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PHASE II REPORT

Cell 9 Vertical Expansion
Application For Permit Modification
MDE Refuse Disposal Permit 2022-WMF-0240
Millersville Municipal Landfill And Resource Recovery Facility
389 Burns Crossing Road
Severn, Maryland

Prepared for

Anne Arundel County

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Prepared by

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Project ME1418A

September 2024

Geosyntec consultants

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Professional Certification: I hereby certify that this document was approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland.

License No. 57584

Expiration Date: April 29, 2025.

STATE OF MARYLAND
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Project Number: ME1418A

September 2024

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ACRONYMS AND ABBREVIATIONS

%	percent
ARM	ARM Group, LLC
ASTM	ASTM International
CFR	Code of Federal Regulations
cm/s	centimeter(s) per second
EMP	Environmental Monitoring Plan
ERM	Environmental Resources Management
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
ft/ft	feet per foot
Geosyntec	Geosyntec Consultants, Inc.
GWPS	groundwater protection standard
HDPE	high-density polyethylene
LFG	landfill gas
MDE	Maryland Department of the Environment
µg/L	microgram(s) per liter
µS/cm	micro siemens per centimeter
mg/L	milligram(s) per liter
MLFRRF	Millersville Municipal Landfill and Resource Recovery Facility
NGVD29	National Geodetic Vertical Datum of 1929
NTU	Nephelometric turbidity units
SCS	SCS Engineering
SVOC	semivolatile organic compound
TDS	total dissolved solids
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
VOC	volatile organic compound

1 INTRODUCTION

1.1 Organization and Terms of Reference

Maryland Regulation of Water Supply, Sewage Disposal, and Solid Waste, COMAR 26.04.07, establishes the Maryland Department of the Environment (MDE) as the permitting authority for sanitary landfills within the state and the process for submittal, review, and approval of such permits. As described in COMAR 26.04.07.07, following the submittal and approval of a Phase I report and a request for permit, the second step to permit a new or expanded sanitary landfill is submitting a Phase II report describing the soils, geology, meteorology, and hydrogeology of the proposed site. In accordance with this requirement, this Phase II report has been prepared for a refuse disposal permit modification for the vertical expansion of Cell 9 with no increase in footprint at the Millersville Municipal Landfill and Resource Recovery Facility (MLFRRF), located at 389 Burns Crossing Road, Severn, Maryland. The MLFRRF operates under MDE refuse disposal permit number 2022-WMF-0240 (MDE 2022). This Phase II report is prepared by Geosyntec Consultants, Inc., (Geosyntec) on behalf of the Anne Arundel County Department of Public Works (the County), the owner and operator of MLFRRF.

Geosyntec submitted Phase I of the permit application (Phase I report) to MDE in October 2023. In November 2023, Geosyntec submitted a revised Phase I report (Geosyntec 2023) to MDE. As part of the Phase I process, MDE held a Public Informational Meeting at the Arundel High School (1001 Annapolis Road, Gambrills, Maryland 21054) on Thursday, May 23, 2024, at 5:30 p.m. On June 6, 2024, MDE notified the County that the Phase I report satisfied the minimum requirements under COMAR 26.04.07.06 such that the County could proceed with submission of the Phase II report, as described herein.

This Phase II report is organized in a manner consistent with the format and conditions of COMAR 26.04.07.07.

- Section 1 provides a Statement of Professional Qualifications as required under COMAR 26.04.07.07(B) and an overview description of existing conditions at the site.
- Section 2 explains the way this report will address and comply with the regulatory requirements of COMAR 26.04.07.07(C) for a Phase II report.
- Section 3 describes the previous investigative and monitoring programs used to characterize the site.
- Section 4 provides a detailed characterization of the site, including descriptions of climatic, topographic, geologic, and hydrogeologic conditions.
- Section 5 outlines the conceptual design for the proposed vertical expansion area that will be used as the basis for the design that will be submitted for approval by MDE under the Phase III report as required under COMAR 26.04.07.08.
- References are listed in Section 6.

1.2 Statement of Professional Qualifications

This Phase II report was prepared by Geosyntec of Columbia, Maryland, by Mr. Daniel Espinoza, Mr. Muaath Alsayyedahmad, and Mr. Ted Wilson and was reviewed by Mr. Mark Bauer and Ms. Meena Viswanath, PE (MD) in accordance with Geosyntec's internal review policy.

In compliance with COMAR 26.04.07.07(B), this Phase II report was prepared under the direction of and reviewed by Mr. Mark Bauer, a licensed Professional Geologist in Delaware (S4-0011428). Mr. Bauer has a bachelor's degree in geology from State University of New York - Oswego and has over 19 years of experience performing hydrogeologic investigations. Through his signature below, Mr. Bauer certifies that the information presented in this report is accurate and true to the best of his knowledge. This report was also reviewed and approved for submission to MDE by Ms. Meena Viswanath, PE, a licensed Professional Engineer in Maryland.

STATE OF DELAWARE
MARK BAUER
No. S4-0011428
LICENSED PROFESSIONAL GEOLOGIST

27 September 2024

Mark Bauer

1.3 Overview of the Facility

1.3.1 Facility Location

MLFRRF is located on a 567.66-acre parcel of land at 389 Burns Crossing Road in Severn, Maryland, as shown in the area map provided in **Figure 1**. MLFRRF is owned and operated by Anne Arundel County Department of Public Works. MLFRRF began operating in 1975 and has 269 acres permitted for waste disposal.

1.3.2 Facility Description

MLFRRF consists of nine waste disposal cells (**Figure 2**). Cell 1-East, Cell 2, Cell 4, Cells 5 through 7 (henceforth referred to as Cell 567), and Cell 8 are all separate fill areas that have been closed and have received a final cover system that includes a geomembrane cap and landfill gas (LFG) collection system. Waste in Cell 3 and Cell 1-West was excavated and relocated into Cell 8 in 1994 and 1997, respectively.

Cell 9, as shown in **Figure 2**, is an 84-acre disposal area currently subdivided into five subcells (Subcells 9.1 through 9.5) and is currently the only remaining permitted cell available for waste disposal at MLFRRF. The Cell 9 design was first developed as part of the Phase II Permit Modification Application (Geosyntec 1989; included as **Attachment 1**) and the Phase III Permit Application (Geosyntec 1994) for Cell 9, prepared by Geosyntec and permitted by MDE. Several revisions to the Cell 9 disposal area were subsequently repermitted as part of the Subcell 9.1 project (SCS Engineering [SCS] 2014). Construction of Subcell 9.1 was completed in late 2016, and construction of Subcell 9.2 was completed in March 2021. Both are currently receiving waste. Subcell 9.3 is currently under construction.

LFG is being collected from Cells 1-East, 2, 4, 567, 8, and 9 at MLFRRF. The existing LFG collection system at the landfill consists of horizontal gas collection trenches, vertical gas extraction wells, transmission headers and lateral pipes, monitoring probes, condensate controls, blowers, and flares. Currently, LFG that is collected is being supplied to an on-site LFG-to-electricity plant that generates electricity under a long-term contract with the County. As a result, collected LFG is only flared when the LFG-to-energy plant is off-line.

The current topography in the vicinity of Cell 9 is based on an aerial survey conducted on January 2, 2024 (**Figure 3**). Cell 9 is located parallel to the southern property boundary and is the southern-most waste disposal cell. To the north of Cell 9 lie Joel Saline Way (a road), the Cell 9 stormwater management pond (Pond 9-2), Wells Branch (an intermittent stream), the other disposal cells, and the LFG infrastructure (LFG-to-energy plant and blower/flare station). To the west of Cell 9 lie the landfill facility entrance, residential recycling center, and various buildings. To the south and east of Cell 9 lie forested areas to the property boundary. The natural topography of the site in the vicinity of Cell 9 ranges from 88 to 230 feet above mean sea level as measured by the National Geodetic Vertical Datum of 1929 (ft-NGVD29), with the higher elevations near the southern property boundary and generally sloping down to the north.

Although all five subcells have been permitted as Cell 9, Subcells 9.1 and 9.2 are currently the only active subcells. Subcell 9.3 is under construction, and Subcells 9.4 and 9.5 have yet to be constructed. The northern half of the future Subcells 9.3 and 9.4 has previously been cleared of vegetation and developed as a soil borrow area, while the northeast corner of the future Subcell 9.5 has been cleared of vegetation and developed as a recycling area. As part of Subcell 9.3 construction, the remainder of Subcell 9.4 and the southern half of Subcell 9.5 are being cleared and developed as a soil stockpile and soil borrow area. The remaining northern portion of Subcell 9.5 is currently forested.

1.3.3 Proposed Vertical Expansion

As explained in the previous section, Cell 9 is currently the only active cell accepting waste at MLFRRF. The Cell 9 footprint covers approximately 84 acres and is being developed in phased subcells, with Subcells 9.1 and 9.2 currently constructed and accepting waste and Subcell 9.3 under construction. The current Cell 9 permitted disposal capacity is approximately 8.5 million cubic yards, while the currently permitted maximum landfill elevation at Cell 9 is 244 ft-NGVD29. The proposed vertical expansion will raise the maximum landfill elevation to 285 ft-NGVD29 as well as modify the geometry of the base grades and final cover grades, increasing the disposal capacity to approximately 13.5 million cubic yards. The landfill, which is intended to serve only the residents and businesses of Anne Arundel County, will continue to

accept residential and commercial solid waste (household refuse and waste from businesses, stores, and offices) and construction and demolition debris.

The increase in airspace from the proposed vertical expansion is anticipated to result from five design modifications:

- Steepening base grade interior side slopes on future subcells from 4 horizontal to 1 vertical (4H:1V) to 3H:1V
- Steepening final cover exterior side slopes from 3.5H:1V to 3H:1V
- Using tack-on stormwater diversion benches in place of incised benches along the exterior side slopes
- Increasing the landfill maximum elevation from 244 ft-NGVD29 to 285 ft-NGVD29
- Using an exposed geomembrane cover in place of the currently approved final capping system

Cell 9 is currently expected to run out of available permitted disposal capacity in 2048 (based on a fill rate of 140,000 ton per year and 1 percent [%] annual growth). Using the same metrics, the expansion will allow the landfill to operate and accept municipal solid waste until approximately 2060.

2 REQUIREMENTS FOR THE PHASE II REPORT

2.1 COMAR Requirements

COMAR 26.04.07.07(C) requires that a Phase II report include information on 12 specific issues in sufficient detail to permit a comprehensive review of a proposed project. In this section, each issue is reproduced in italic type, followed by a brief description of how and where that requirement is met and/or addressed in the remainder of this report. For ease of report review, a checklist is provided in **Table 1a**.

(1) *An up-to-date site-specific topographic map using a contour interval which is practical for that site. The following items shall be shown on the map: (a) Surface waters and natural drainage features; (b) 100-year flood plain; (c) Property lines; (d) On-site buildings and structures; (e) Forested and other vegetated areas; and (f) The location of any buried or overhead power transmission lines, utility pipelines, or storage tanks on the property.*

The topography of the proposed expansion area is described in **Section 4.2**. A site-specific topographic map showing these required features is provided as **Figure 3**. The Federal Emergency Management Agency (FEMA) flood map for the area is presented in **Figure 4** and shows that Cell 9 is not located within the 100-year floodplain.

(2) *A discussion of the geologic formations directly underlying and in close proximity to the site, the present and projected use of these formations as a source of ground water and minerals, and the hydrogeologic relationship between the formations.*

The geologic formations underlying the proposed expansion area and their hydrogeologic relationships are discussed in **Sections 4.3** and **4.4**, respectively. The regional and local geology and hydrogeology are shown in **Figures 5, 6,** and **7**.

(3) *A survey of all production wells within ½ mile of the site boundary. Each well shall be located on the topographic map and a table shall be developed which specifies all the available pertinent information such as well depth, screen type, productivity, materials encountered, and water level.*

A discussion of the groundwater production wells within 0.5 miles of MLFRRF property boundary is presented in **Section 4.4.5**. Specific production well data are presented in **Table 2**. Well locations are shown on the production well location map provided as **Figure 8**.

(4) *Ground water contour maps to show the occurrence and direction of ground water flow beneath the site superimposed on the current topographic map. Three separate ground water contour maps as specified below shall be constructed for each distinct water-bearing formation occurring within 50 feet of the anticipated lowest elevation of the refuse cell floor, using monthly ground water elevation data collected from piezometers on the site over a period of not less than 12 months, or derived using a hydrologic simulation or prediction technique approved by the Department. Three ground water contour maps shall be constructed from a set of: (a) Water elevations measured or predicted during the month that represents the most: (i) Elevated ground water condition, (ii) Depressed ground water condition; and (b) The highest observed or predicted ground water elevations.*

A site-specific hydrogeologic model has been developed based on historical investigation data and recent groundwater monitoring data reviewed for this Phase II report. The occurrence and direction of groundwater flow is discussed in **Section 4.4.3**. Contours of elevated and depressed groundwater conditions and highest observed groundwater elevations for the hydrostratigraphic unit encountered in the vicinity of Cell 9 are presented in **Figures 9, 10,** and **11**, respectively. Groundwater elevation data are tabulated in **Table 3**.

(5) *Geologic cross sections in sufficient detail, orientation, and number to clearly identify subsurface conditions at the site.*

A geologic cross section key map is shown in **Figure 12**, and geologic cross sections of the Cell 9 area are provided in **Figures 13** and **14**.

(6) *A bedrock map, except in the coastal plain outside the fall zone, to show the contours of the bedrock surface beneath the site.*

A bedrock map is not required because MLFRRF is in the coastal plain outside the fall zone, where the depth to bedrock is many thousands of feet.

(7) *An isopachous map to show the minimum thickness of soil and other unconsolidated sediments above the elevation of ground water as determined in §C(4), or bedrock as determined in §C(6), whichever is the higher.*

Based on the interpreted geology from the subsurface investigation, an isopachous map showing the thickness of soils above the groundwater table as determined in §C(4) is included as **Figure 15**. The figure shows the thickness of soils between the groundwater table and the proposed base of the liner system.

(8) *A discussion of the chemical quality of ground water in the aquifers beneath the site as determined in §C(2) of this regulation. The list of chemical parameters shall include pH,*

alkalinity, hardness, chloride, specific conductance, nitrate, chemical oxygen demand, arsenic, barium, cadmium, chromium, zinc, lead, mercury, the volatile priority pollutants, and any other pollutants specified by the Department.

Characterization of groundwater quality has been conducted by the County and its consultants since 1993. Groundwater quality around Cell 9 is discussed in **Section 4.4.4** and tabulated in **Tables 4** through **7**.

(9) *A discussion of the potential for the vertical and horizontal movement of pollutants into the waters of this State.*

The potential for pollution of State waters because of the proposed vertical expansion is very low, as discussed in **Section 4.5**.

(10) *The results of a fracture trace or aerial photographic lineament analysis (except in the coastal plain) which identifies the relationship between these features and the local ground water hydrology*.

MLFRRF is in the coastal plain, where the depth to bedrock is thousands of feet (i.e., near-surface faults and fractures are not present and bear no relationship with local groundwater hydrology). A fracture trace or aerial photographic lineament analysis is therefore not required.

(11) *Test boring logs, well completion reports, piezometric measurements, chemical and physical soil/sediment analyses, and all accompanying geotechnical analyses. All laboratory and field methodologies and procedures shall be included*.

Many geotechnical and hydrogeologic investigations have been conducted at MLFRRF in the vicinity of Cell 9. These investigations are discussed in **Section 3.2.1**. Geotechnical laboratory data are discussed in **Section 4.3.3**.

(12) *A preliminary conceptual design of the proposed municipal landfill based on the geotechnical information gathered in §C(1)-(11) of this regulation.*

Conceptual base grades and final grades for the proposed vertical expansion are presented in **Figures 16** and **17**, respectively. Details of the proposed liner system are shown on **Figure 18**. The way the landfill design will comply with the specific regulatory requirements of §C(12)(a) through §C(12)(c) is described in **Section 5**.

2.2 Siting Considerations 40 CFR 258

United States Environmental Protection Agency (USEPA) regulations contained in the Code of Federal Regulations (CFR) Title 40 – Protection of the Environment, Part 258 – Solid Waste Disposal Facility Criteria, Final Rule entitled "Criteria for Municipal Solid Waste Landfills" (i.e., 40 CFR 258) present the location restrictions for municipal solid waste landfills. The restrictions address both the potential effects that a municipal landfill may have on the surrounding environment and the effects that the environment may have on the performance of the landfill. The seven location restrictions of 40 CFR 258 that must be addressed are (i) airport safety, (ii) floodplains, (iii) wetlands, (iv) fault areas, (v) seismic impact zones, (vi) unstable areas, and (vii) habitat for rare, threatened, or endangered species. These restrictions are discussed in the remainder of this section.

Airport Safety: In 40 CFR 258.10, the proximity of landfills to airports is restricted to prevent creating a bird hazard to aircraft. Cell 9 is not located within 10,000 feet of any airport. As part of the Phase I Report, Geosyntec submitted seven online notifications to the Federal Aviation Administration (FAA) using FAA Form 7460-1 notifying FAA of the intention to vertically expand Cell 9 to a final elevation not to exceed 285 ft-NGVD29. These notifications were processed by FAA under Aeronautical Study Numbers 2023-AEA-13766-OE through 2023-AEA-13772-OE. On December 6, 2023, the FAA issued letters of "Determination of No Hazard to Air Navigation" for all seven points. These letters of determination were included in the Phase I Report.

Floodplains: Landfill units are restricted from being in an area inundated by the 100-year flood by 40 CFR 258.11. Cell 9 is outside of the 100-year floodplain and lies within an area with a minimal risk of flooding, as mapped by FEMA. The FEMA map for Cell 9 is presented as **Figure 4**. Cell 9 is outside the 1,000-foot buffer zone required by the State of Maryland's Critical Areas Law.

Wetlands: 40 CFR 258.12 governs the siting of landfills in wetlands. In November 2007, Gannett Fleming prepared a wetland identification and delineation report prior to construction of the initial Cell 9 support infrastructure. Gannett Fleming identified two wetlands and one intermittent stream (Wells Branch) within the study area. They found that a portion of the Cell 9 perimeter road and Pond 9-2 impinged on wetlands and the 25-foot wetland buffer. In January 2008, Gannett Fleming prepared a Joint Federal/State Application for the Alteration of Any Floodplain Waterway, Tidal, or Nontidal Wetland in Maryland. Pond 9-2 was constructed in 2011–2012. The 2007 wetland identification and delineation report and the 2008 application are included in **Appendix A**.

In October 2013, the Joint Federal/State Application was modified prior to construction of Subcell 9.1 and the borrow area to reflect the final design of Subcell 9.1 and in response to state agency comments. This modified application also included a summary of an alternatives analysis that was originally prepared in August 1994. The application was approved on September 10, 2014, by the Maryland Water Management Administration and on December 14, 2014, by the Baltimore District of the US Army Corps of Engineers. The design of wetlands mitigation efforts was approved on June 5, 2014, by the Maryland Water Management Administration. The modified application and all three approval letters, are included in **Appendix A**. Since no increase to the footprint of Cell 9 is included as a part of this permit application, there will be no new impacts to wetlands, and a new wetland study is not needed for this permit application.

Fault Areas: In accordance with the requirements of 40 CFR 258.13, new landfill units shall not be located within 200 feet of a fault that has had displacement in Holocene time. Based on "*Preliminary Map of Young Faults in the United States as a Guide to Possible Fault Activity"* (Howard et al. 1978), there are no faults known to have had displacement in Holocene time in the entire state of Maryland.

Seismic Impact Zones: According to 40 CFR 258.14, a seismic impact zone is identified as an area with a 10% or greater probability that the maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth's gravitational pull (g), will exceed 0.10g in 250 years. The maximum horizontal acceleration in bedrock for the landfill is estimated to be between 0.06g and 0.08g, based on the United States Geological Survey (USGS) seismic hazard

map shown in **Figure 19** with contours of peak acceleration with 2% probability of exceedance in 50 years. A 2% probability of exceedance in 50 years is approximately equivalent to a 10% probability of exceedance in 250 years. Cell 9 is therefore not considered to be in a seismic impact zone.

Unstable Areas: Landfill units are restricted by 40 CFR 258.15 from being in unstable areas (e.g., poor foundation conditions, areas susceptible to mass movements, and karst terranes). Based on recent and historical subsurface explorations performed at MLFRRF, no unstable areas have been identified that will be impacted by this vertical expansion.

Rare, Threatened, or Endangered Species: 40 CFR 258.12 requires that the proposed development area shall not jeopardize the continued existence of rare, threatened, or endangered species. As this is a vertical expansion, there will be no change to the footprint of Cell 9. This expansion will not encroach on any territory or wetland that has not already been permitted in the past.

2.3 MDE Checklist

In addition to the regulatory requirements presented in Sections 2.1 and 2.2, MDE has provided informal guidance regarding the information that is expected to be included in Phase II Permit Application documents. This information was provided in the form of a checklist, which is reproduced in **Table 1b**, along with the location in this permit application where the information is provided.

3 INVESTIGATION AND MONITORING

3.1 Overview and Purpose

This section describes the types of soils and groundwater conditions observed during field investigations conducted in the vicinity of Cell 9. Subsurface investigations that have been conducted to evaluate the geologic, hydrogeologic, and geotechnical conditions in the vicinity of Cell 9 are discussed to provide a basis for planning, designing, operating, and monitoring Cell 9. Subsurface investigations that are described in this section include drilling, soil sample collection, and laboratory tests that have been performed to explore the geotechnical and geologic conditions at Cell 9. Installation and development of monitoring wells to investigate the groundwater conditions beneath Cell 9, as well as groundwater sampling and analytical testing, are also discussed herein.

3.2 Subsurface Investigations

3.2.1 Historical Facility Investigations

Many field investigations have been completed in the vicinity of Cell 9 to assess the characteristics of subsurface soils. A summary of notable field investigations is presented below in chronological order. All boring logs are presented in **Appendix B**.

<u>Green Associates, Inc./Century Engineering, Inc. (1969)</u>: In 1969, Green Associates (which later became Century Engineering, Inc.) conducted a geotechnical exploration and advanced nine borings (X-series) at MLFRRF, of which one 25-foot-deep boring (X-4) was in the vicinity of

Cell 9. The boring showed primarily silty and clayey sands at the ground surface, underlain by low plasticity clays and silts. The location of the boring is shown in **Figure 20**, and the boring log is included in **Appendix B.1**.

Green Associates, Inc./Century Engineering, Inc. (1971): Green Associates conducted a geotechnical exploration and advanced 11 borings (B-series) at MLFRRF, of which 2 borings (25 feet deep and 69.4 feet deep) were in the vicinity of Cell 9. The borings showed primarily silty and clayey sands at the ground surface, underlain by low-plasticity clays and silts. The locations of the borings are shown in **Figure 20**, and the boring logs are included in **Appendix B.2.**

Green Associates, Inc./Century Engineering, Inc. (1972): Green Associates conducted a geotechnical exploration and advanced 34 borings (F-series) at MLFRRF, of which 11 borings with depths ranging from 16.5 to 51.5 feet were in the vicinity of Cell 9. The borings showed primarily silty and clayey sands at the ground surface, underlain by low-plasticity clays and silts. The locations of the borings are shown in **Figure 20**, and the boring logs are included in **Appendix B.3.**

Geoservices Inc./Geosyntec Consultants, Inc. and others (1975 to 2012): Geoservices (which later became Geosyntec Consultants) installed a series of groundwater monitoring wells (TW-series) between 1989 and 2012 at MLFRRF to supplement a series of groundwater monitoring wells (TW-series) that had previously been installed in 1975 by others. Three of these wells (TW-2, TW-3, and TW-4; all installed in 1975), ranging in depth from 100 to 180 feet, are in the vicinity of Cell 9. The borings showed primarily silty and clayey sands at the ground surface, underlain by low-plasticity clays and silts. The locations of the borings are shown in **Figure 20**, and the boring logs are included in **Appendix B.4.**

Geoservices Inc./Geosyntec Consultants, Inc. and Gershman, Brickner and Bratton, Inc. (1989): Geoservices et al. conducted a field investigation as part of the Phase II Permit Modification Application for the redesign of Cells 8 and 9 at MLFRRF. The field investigation included advancing 12 geotechnical borings (G-series), of which 3 borings (G-1, G-2, and G-3), ranging in depth from 45 to 180 feet, were in the vicinity of Cell 9. The borings were consistent with others and showed primarily silty and clayey sands at the ground surface, underlain by low-plasticity clays and silts. The locations of the borings are shown in **Figure 20**, and the boring logs are included in **Appendix B.5.**

SCS (2011): SCS conducted a field investigation to support the design and construction of Subcell 9.1. The field investigation included advancing six geotechnical borings (SCS-1 through SCS-6). The borings were advanced to depths ranging between 17 and 55 feet. The borings were consistent with others and showed primarily silty and clayey sands at the ground surface, underlain by low-plasticity clays and silts. The locations of the boring are shown in **Figure 20**, and the boring logs are included in **Appendix B.6.**

Geosyntec (2017): Geosyntec conducted a field investigation to support the design and construction of Subcell 9.2. The field investigation included advancing five geotechnical borings (B-1 through B-5) and eight temporary piezometers (P-1 through P-8). Two of the borings were collocated with piezometers. The borings were advanced to depths ranging between 60 and 75 feet. The borings were consistent with others and showed primarily silty and clayey sands at the

ground surface, underlain by low-plasticity clays and silts. The locations of the borings are shown in **Figure 20**, and the boring logs are included in **Appendix B.7.**

SCS (2017): SCS completed a southern boundary groundwater investigation at MLFRRF that included advancing nine new monitoring wells, of which seven (TW-series, Well N, and Well W) were in the vicinity of Subcells 9.4 and 9.5. The wells were advanced to depths ranging between 132 and 328 feet. The locations of the borings are shown in **Figure 20**, and the boring logs are included in **Appendix B.8.**

Froehling & Robertson, Inc. (2022): Froehling & Robertson conducted a geotechnical investigation at MLFRRF in support of the West County Road Ops Yard project. During this investigation, 26 borings were advanced, of which 2 (B-11 and B-12), ranging in depth from 30 to 40 feet, were in the vicinity of Cell 9. All borings encountered a silty sand, occasionally underlain by a sandy silt. The locations of the borings are shown in **Figure 20**, and the boring logs are included in **Appendix B.9.**

Geosyntec (2022): Geosyntec conducted a field investigation in support of the design and construction of Subcell 9.3. The field investigation consisted of seven geotechnical borings (B-1 through B-7), six temporary standpipe piezometers (P1 through P6), and four test pits (TP-1 through TP-4) within the footprint of Subcell 9.3, four geotechnical borings (B4-1 through B4-4) within the footprint of Subcell 9.4, and five geotechnical borings (B5-1 through B5-5) within the footprint of Subcell 9.5. The borings were advanced to depths varying from 25 to 88.5 feet. The locations of the boring are shown in **Figure 20**, and the boring logs are included in **Appendix B.10.**

According to the site investigations and laboratory tests, the subsurface at Cell 9 consists of up to 70 feet of sand (Sand I; Magothy Formation), underlain by approximately 10 to 50 feet of clay (Clay I; Upper Patapsco Formation), which is underlain by another sand layer (Sand II; Upper Patapsco Formation). The Sand I layer primarily consists of an orange-brown to tan, poorly graded sand with interbedded gravel, silt, and clay, while Clay I is a reddish-brown to grayish-brown lean clay with purple staining. Under Sand II is up to 80 feet of clay (Clay II; Lower Patapsco Formation), which is underlain by another sand layer (Sand III; Lower Patapsco Formation).

3.2.2 Groundwater Monitoring

Groundwater monitoring at the existing MLFRRF, including monthly groundwater level measurements and semiannual groundwater quality monitoring, is consistent with the monitoring requirements detailed in the MDE approved Environmental Monitoring Plan (EMP) (Environmental Resources Management [ERM] 2009) and MDE refuse disposal permit number 2022-WMF-0240.

3.2.2.1 Groundwater Level Measurements

Monthly groundwater level measurements at MLFRRF are collected by the ARM Group, LLC, (ARM) of Columbia, Maryland. Depth to groundwater level for each monitoring well and piezometer were measured to the nearest 0.01 inch using an electronic water level meter. **Table 3** presents the monthly groundwater elevation at each location from January 2022 to December 2023. Monitoring well locations are shown on **Figure 21**. The groundwater measurements were

used in the preparation of the elevated, depressed, and highest observed groundwater condition maps for the hydrostratigraphic unit (surficial aquifer) encountered in the vicinity of Cell 9. A discussion of the groundwater elevations and flow is presented in **Section 4.4.3**.

3.2.2.2 Groundwater Sampling

Six semiannual groundwater monitoring events were completed by ARM during the spring and fall of 2021 through 2023. Groundwater samples were collected from 22 regulated on-site monitoring wells (Subtitle D), 15 regulated on-site monitoring wells (COMAR), 13 on-site nonregulated monitoring wells[1], and 12 off-site monitoring wells. Copies of the semiannual monitoring reports from the spring of 2021 through the fall of 2023 are included as **Appendix C.**

4 CELL 9 AREA CHARACTERIZATION

4.1 Climate

Anne Arundel County has a temperate humid climate with warm summers and relatively mild winters. Temperatures in the county are heavily influenced by the moderating effects of the Chesapeake Bay and other nearby water bodies.

According to the National Oceanic and Atmospheric Administration National Weather Service, in the last 10 years (2013 to 2023), average temperatures have varied from approximately 80 degrees Fahrenheit in July and August to approximately 35 degrees Fahrenheit in January and February. Average precipitation is evenly distributed throughout the year. The average annual precipitation has been approximately 48 inches with an average monthly rainfall of 6 inches in the wettest months (June and July) and 3 inches in the winter months. Average annual snowfall has been about 3 inches, although this has varied significantly with some years recording no snowfall and others recording more snowfall.

4.2 Topography

Natural topography in Anne Arundel County consists of low rolling hills in the western portion of the county, which gradually become flatter from west to east. The current topography in the vicinity of MLFRRF is based on an aerial survey conducted on January 2, 2024 (**Figure 3**). Cell 9 is located parallel to the southern property boundary and is the southern-most waste disposal cell.

Based on the USGS topographic map for the area (**Figure 1**) and various site inspections, no springs, seeps, rock outcrops, or sinkholes are present on or near Cell 9. There are wooded areas surrounding MLFRRF on every side, and there is an intermittent stream (Wells Branch) running north of Cell 9 and south of Cell 8 and Cell 567 that is a tributary of the Severn Run River.

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[1] The groundwater monitoring program includes 13 on-site nonregulated monitoring wells during the spring monitoring event. Six of those 13 monitoring wells are sampled on an annual basis during the spring event. Seven nonregulated monitoring wells are also sampled during the fall monitoring event.

4.3 Geologic Condition

4.3.1 Regional and Local Geology

MLFRRF is in the Coastal Plain Physiographic Province about 10 miles east of the fall zone (**Figure 5**). Anne Arundel County is underlain by a southeastward thickening wedge of unconsolidated sediments overlying consolidated crystalline basement rocks of Precambrian or Early Cambrian age. The unconsolidated sediments consist of stratified layers of sand, gravel, silt, and clay. The unconsolidated sediment wedge thins to a few tens of feet near the fall zone to the northwest and is approximately 2,000 feet thick in the southeastern part of the county.

The Potomac Group comprises the entire thickness of unconsolidated sediments in the northern part of the county. It is overlapped by younger deposits ranging in age from Late Cretaceous to Holocene in the central part of the county (**Figure 6**). The stratigraphy of the Potomac Group is very complex. Formations of the group were deposited in fluvial and lacustrine environments. Sand, silt, and clay layers are commonly limited in areal extent. Sand lenses 25 feet thick at a specific location have been found to be thicker, thinner, or absent at distances of 25 to 100 feet from that location (Mack and Achmad 1986).

The Potomac Group comprises three separate formations in Anne Arundel County; these are, from the base upward, the Patuxent Formation, the Arundel Clay, and the Patapsco Formation. The Patapsco Formation can be regionally divided into an upper and lower unit each consisting of a clay overlying a predominantly sand sequence. The Patapsco Formation includes all the lithologies from the base of the overlying upper Cretaceous Magothy Formation to the top of the underlying Arundel Clay. The total thickness of the Patapsco Formation in Anne Arundel County is approximately 500 feet (Mack and Achmad, 1986) and dips toward the southeast.

4.3.2 Geology

Surface geologic mapping in the vicinity of MLFRRF (see **Figure 6**) indicates the predominance of the silt-clay facies of the Potomac Group in the northeastern part of MLFRRF and the sand-gravel facies of the Potomac Group in the central portion of MLFRRF, including in the vicinity of Cell 9. The Magothy Formation, a predominantly sandy unit, outcrops along the southern boundary of MLFRRF just north of Dicus Mill Road and in the vicinity of Cell 9. Ferruginous cementation is common in the fluvial facies of the Magothy Formation. Blocks of ironstone conglomerate outcrop in this area.

Groundwater studies by Mack (1962) and Mack and Achmad (1986) suggest that the silt-clay facies of the Potomac Group at MLFRRF is part of a clay confining layer separating the overlying Magothy Formation from the underlying upper Patapsco Formation (**Figure 7**). The discontinuous silt clay facies (upper confining layer) at MLFRRF occurs at the ground surface under Cells 1 and 567 and at or near the ground surface under Cell 4. The sand-gravel facies of the Potomac Group occurs at the center of MLFRRF, roughly paralleling the existing surface drainage; this facies probably represents an old stream channel. The southern half of MLFRRF is capped by the sands of the Magothy Formation. Sand lenses occur within the silt-clay facies (i.e., within the upper confining layer) underlying the entire MLFRRF.

Historical boring and monitoring well installation logs are included as **Appendix B**. **Figure 12** presents a plan view showing the locations of the geologic sections (**Figure 13** and **14**). The geologic sections were developed using the site subsurface investigation boring logs discussed in **Section 3.2.1**.

4.3.3 Soil Property Testing

Many field investigation programs have been completed in the vicinity of Cell 9 to assess the soil properties, as discussion in **Section 3.2.1**. A summary of notable soil property testing performed during the investigations is presented below in chronological order and are shown in **Table 8.**

Geoservices Inc./Geosyntec Consultants, Inc. and Gershman, Brickner and Bratton, Inc. (1989): As part of the 1989 field investigation described in **Section 3.2.1**, laboratory testing was performed on selected disturbed soil samples. This testing included particle size analysis (ASTM International [ASTM] D422), water content (ASTM D2216), soil classification (ASTM D2487), and Atterberg Limits (ASTM D4318). A summary of results of the laboratory tests is presented in **Table 8.** The laboratory test data are presented in **Appendix D**.

Geosyntec (2015): During the construction of Subcell 9.1, the contractor conducted prequalification testing on 2 samples from on-site stockpiled clay material that was excavated from the Cell 9 footprint. These tests were done to ensure that the clay material would be acceptable for use as subbase. Laboratory testing was performed by Engineering Consulting Services (ECS) and Hillis-Carnes. The tests included hydraulic conductivity (ASTM D5084), particle size analysis (ASTM D422), soil classification (ASTM D2487), water content (ASTM D2216), Standard Proctor (ASTM D698-12), and Atterberg limits (ASTM D4318). A summary of results of the laboratory tests is presented in **Table 8.** The laboratory test data are presented in **Appendix D**.

Geosyntec (2019): Geosyntec conducted a subsurface investigation to characterize soil properties within the footprint of Subcell 9.2, as discussed in **Section 3.2.1**. Geosyntec conducted 10 laboratory tests on samples collected from borings and test pits. Laboratory testing was performed by Hillis-Carnes Engineering Associates, Inc. The tests included hydraulic conductivity (ASTM D5084 and ASTM D2434), particle size analysis (ASTM D422), soil classification (ASTM D2487), water content (ASTM D2216), Standard Proctor (ASTM D698-12), and Atterberg limits (ASTM D4318). A summary of results of the laboratory tests is presented in **Table 8.** The laboratory test data are presented in **Appendix D**.

SCS (2020): While performing construction quality assurance during the construction of Subcell 9.2, SCS conducted conformance testing on 12 samples from on-site stockpiled clay material and structural fill that was excavated from the Cell 9 footprint. These tests were done to ensure that the clay material would be acceptable for use as subbase and the structural fill material would be acceptable for use as structural fill. Laboratory testing was performed by the Robert B. Balter Company. This testing included particle size analysis (ASTM D422), soil classification (ASTM D2487), water content (ASTM D2216), Standard Proctor (ASTM D698-12), and Atterberg limits (ASTM D4318). A summary of results of the laboratory tests is presented in **Table 8.** The laboratory test data are presented in **Appendix D**.

Geosyntec (2023): Geosyntec conducted a subsurface investigation to characterize soil properties within the footprint of Subcell 9.2, as discussed in **Section 3.2.1**. Geosyntec conducted eight

laboratory tests on samples taken from borings and test pits. Laboratory testing was performed by Hillis-Carnes Engineering Associates, Inc., on all eight samples. The tests included are hydraulic conductivity (ASTM D5084), particle size analysis (ASTM D422), soil classification (ASTM D2487), water content (ASTM D2216), Standard Proctor (ASTM D698-12), and Atterberg limits (ASTM D4318). A summary of results of the laboratory tests is presented in **Table 8.** The laboratory test data are presented in **Appendix D**.

4.4 Groundwater Conditions

4.4.1 Regional and Local Hydrogeology

As discussed in **Section 4.3.1**, MLFRRF is in the Coastal Plain Physiographic Province, which is characterized by unconsolidated sediments consisting of stratified layers of sand, gravel, silt, and clay. The sand and gravel strata comprise the major water-bearing aquifers of the county, as shown on the hydrologic cross section (**Figure 7**). Within the county, the slope or dip of the aquifers vary. The deepest aquifer, the Patuxent Formation, dips to the southeast at 85 to 90 feet per mile, whereas the shallowest aquifer, the upper Patapsco, dips to the southeast at only 15 to 20 feet per mile.

The Potomac Group contains three distinct aquifers in Anne Arundel County: the Patuxent, lower Patapsco, and upper Patapsco. All three aquifers are confined, except in the outcrop areas where water table or unconfined conditions exist. Confining layers separate the aquifers in most places. Water level records from clusters of wells that tap the different aquifers indicate that the sands are hydrologically separated from one another. The water level records show that pumping water from one of the aquifers at a specific site commonly has no immediate effect on water levels in the other aquifers (Mack and Achmad 1986).

The Magothy Formation overlies the Potomac Group. According to Mack (1962), this aquifer is hydrologically connected in varying degrees with the underlying Patapsco aquifer. The Magothy Formation dips to the southeast at about 30 feet per mile and is used for water supply in the Annapolis area.

4.4.2 Hydrogeology

There are several water-bearing zones beneath Cell 9. The uppermost zone (Sand I; Magothy Formation) is in the fluvial sands of the Magothy Formation. Groundwater in this zone is unconfined and perched. This water-bearing zone is restricted to the southern and southwestern boundaries of MLFRRF, north of Dicus Mill Road, and along Burns Crossing Road, respectively. During all or part of the year, this zone may be dry in some areas. Most of Sand I has been or will be excavated and removed as part of the construction of Cell 9. Small portions of Sand I remain adjacent to Cell 9.

A second minor water-bearing zone occurs in a shallow sand zone confined within the silt-clay facies (Clay I; Upper Patapsco Formation) described by Glaser (1976), which is the same as the confining layer described by Mack and Achmad (1986) that separates the overlying Magothy Formation from the underlying upper Patapsco. The shallow sand zone in the silt-clay facies has also been described by Pittman (1982). In the southern part of MLFRRF, this sand zone may be either unconfined or confined and is recharged directly from precipitation or leakage from the

overlying perched aquifer. North of the drainage valley that cuts through the central area of MLFRRF, water levels in the shallow sand zone are similar to those in a deeper sand zone. Both sand zones have been described by Pittman (1982), suggesting some hydrologic interconnection.

The third water-bearing zone (Sand II; Upper Patapsco Formation) is the deep sand zone described by Pittman (1982). This sand zone is located approximately 25 feet below the shallow zone in the southern half of MLFRRF and below the outcropping silt-clay facies in the northern half of MLFRRF. The potentiometric surface for this zone (see **Figures 8, 9,** and **10**) indicates regional easterly flow with component directions to the north and south. Groundwater in this zone is either semiconfined or confined. The hydrostatic heads in this water-bearing zone are lower than the perched or shallow zones, indicating the potential for recharge by leakage from the overlying zones.

Below Sand II (Upper Patapsco Formation) is Sand III (Lower Patapsco Formation), which is confined by approximately 75 feet of clay. Because the bottom elevation of the Cell 9 liner system is greater than 50 feet from Sand III (Lower Patapsco Formation), it is not discussed in this section but is shown on the cross sections and discussed in historical investigations.

Groundwater monitoring wells used to develop the potentiometric surface are shown on **Figure 21**. As required in COMAR 26.04.07.07.C(4), the highest ground water elevations measured in monitoring wells installed in Sand II (Upper Patapsco Formation) for Cell 9 are shown on **Figure 11**. The groundwater elevations in **Figure 11** were considered in the redesign of the base grades in Cell 9.4 and 9.5 so that they meet the 3-foot minimum groundwater separation requirements of COMAR 26.04.07.07.C(l2)(b).

4.4.3 Groundwater Elevations and Flow

As discussed in **Section 3.2.2**, groundwater levels were measured monthly in monitoring wells and piezometers located in the vicinity of Cell 9 from January 2022 to November 2023. For the purposes of this Phase II report, only monitoring wells installed in Sand II (Upper Patapsco Formation) were used to evaluate groundwater elevations and flow direction. Specifically, the data collected from following monitoring wells were used: MW-P417, MW-P440, MW-P9, RW-P441, RW-P584, TW-01, TW-10A, TW-11A, TW-12, TW-13, TW-14, TW-15B, TW-16, TW-17, TW-18, TW-19, TW-02A, TW-20R, TW-21A, TW-22B, TW-24, TW-25, TW-25A, TW-29, TW-32, TW-3, TW-30, TW-04, TW-05, TW-06, TW-07A, TW-08, and TW-09C. Monitoring locations are shown on **Figure 21**.

A summary of calculated groundwater elevations and well construction details are provided in **Tables 3** and **9**, respectively. Those data were used to develop contour maps showing elevated, depressed, and highest observed groundwater elevations for the Sand II aquifer, which are provided as **Figures 9** through **11**. As previously discussed, only contour maps showing elevated, depressed, and highest observed groundwater elevations for the surficial aquifer are required per COMAR 26.04.07.07(C).

According to the monthly groundwater elevations, monitoring variations in any given month ranged from 1.73 feet at monitoring well TW-3A to 37.61 feet at monitoring well TW-5A.

Under the elevated groundwater conditions (**Figure 9**), which were observed in April 2022, the groundwater elevations ranged from a high of 117.63 ft-NGVD29 at TW-32 to a low of 57.79

ft-NGVD29 at RW-P584. The hydraulic gradient between TW-32 and TW-2A in the vicinity of Cell 9 was estimated at approximately 0.009 feet per foot (ft/ft) in Sand II.

Under the depressed groundwater conditions (**Figure 10**), which were observed in November 2023, the groundwater elevations ranged from a high of 116.08 ft-NGVD29 at TW-22B to a low of 56.41 ft-NGVD29 at RW-P584. The hydraulic gradient between TW-32 and TW-2A in the vicinity of Cell 9 was estimated at approximately 0.009 ft/ft in Sand II.

4.4.4 Groundwater Quality

As described in the sections above, MLFRRF and the surrounding region are underlain by alternating units of permeable silty sand units (aquifers) and nonpermeable clay units (aquitards). The permeable nature of the surficial aquifer makes it susceptible to groundwater contamination from infiltration of precipitation through contaminated material. Additionally, aquifers separated from the surficial aquifer by aquitards can be impacted by the infiltration if the aquitard has been excavated. At Cell 9, Clay I (Upper Patapsco Formation) has been partially removed, exposing Sand II (Upper Patapsco Formation) to the surficial aquifer. Below Sand II (Upper Patapsco Formation) is Clay II (Lower Patapsco Formation), which is intact and serves as the aquitard beneath the Site. As reported in the MLFRRF groundwater monitoring reports, groundwater quality below Clay II, Zone 4, is generally good and not impacted by MLFRRF.

As summarized in **Section 3.2.2**, ARM completed six semiannual groundwater monitoring events to evaluate baseline groundwater quality around Cell 9 during the spring and fall of 2021 through 2023. Groundwater samples were collected from 22 regulated on-site monitoring wells (Subtitle D), 15 regulated on-site monitoring wells (COMAR), 13 on-site nonregulated monitoring wells,[2] and 12 off-site monitoring wells, in accordance with the EMP (ERM 2009).

For the purposes of this Phase II report, only monitoring wells installed in Sand II (Upper Patapsco Formation) and Sand III (Lower Patapsco Formation) in the vicinity of Cell 9 were used to evaluate groundwater quality. Specifically, data collected from monitoring wells TW-01, TW-02, TW-02A, TW-03, TW-03A, TW-04, TW-05, TW-10A, TW-19, TW-20R, TW-21A, TW-26R, TW-29, and TW-30 were used to evaluate groundwater quality around Cell 9.

Groundwater analytical results for the above-referenced monitoring wells are presented in **Table 4** through **7**. A copy of the laboratory reports and accompanying chain-of-custody documentation are provided in the semiannual groundwater monitoring reports included as **Appendix C**. A discussion of the findings is presented in the sections below.

4.4.4.1 Volatile Organic Compounds and Semivolatile Organic Compounds

As shown in **Table 4,** only 11 volatile organic compounds (VOCs) were detected in groundwater at the monitoring wells in the vicinity of Cell 9 during at least one of the six semiannual

[2] The groundwater monitoring program includes 13 on-site non-regulated monitoring wells during the spring monitoring event. Six of those 13 monitoring wells are sampled on an annual basis during the spring event. Seven non-regulated monitoring wells are also sampled during the fall monitoring event.

sampling events completed. The VOC compounds detected were 1,1-dichloroethane, cis-1,2-dichloroethene, chloroform, dichlorodifluoromethane, dichlorofluoromethane, methylene chloride, methyl tert-butyl ether (MTBE), tetrachloroethene, trichloroethene, trichlorofluoromethane, and vinyl chloride. The VOC concentrations were relatively low, and only one detection of 1,1-dichloroethane at a concentration of 3.0 micrograms per liter (µg/L) exceeded the groundwater protection standard (GWPS)[3] of 2.8 µg/L in monitoring well TW-04. Repeated detections for the same constituent occurred as follows:

- 1,1-Dichloroethane was detected in monitoring wells TW-01, TW-04, TW-05, TW-19, and TW-29. Detected concentrations ranged from 0.8J (estimated) to 3.0 µg/L. The GWPS for 1,1-dichloroethane is 2.8 µg/L.
- Chloroform was detected in monitoring well TW-01, TW-02, TW-03, TW-05, TW-10A, TW-19, TW-21A, TW-29, and TW-30. Detected concentrations ranged from 0.113J to 0.755J µg/L. The GWPS for chloroform is 80 µg/L.
- cis-1,2-Dichloroethene was detected in monitoring wells TW-01, TW-04, TW-05, TW-19, and TW-29. Detected concentrations ranged from 0.4J to 1.1 µg/L. The GWPS for cis-1,2-dichloroethene is 70 µg/L.
- Dichlorodifluoromethane was detected in monitoring wells TW-01, TW-2A, TW-04, TW-05, and TW-29. Detected concentrations ranged from 0.8J to 13.3 µg/L. The GWPS for dichlorodifluoromethane is 4,000 µg/L.
- Dichlorofluoromethane was detected in monitoring wells TW-01, TW-2A, TW-04, TW-05, TW-19, and TW-29. Detected concentrations ranged from 0.344J to 4.77 J µg/L. There is no GWPS for dichlorofluoromethane.
- Methylene chloride was detected in monitoring wells TW-01, TW-05, TW-19, TW-20R, and TW-29. Detected concentrations ranged from 0.46JB to 0.653JB µg/L. The GWPS for methylene chloride is 5 µg/L. The detected concentrations were all estimated, and "B" flagged, which indicates the constituent was measured in the laboratory blanks.
- MTBE was detected in monitoring wells TW-01 and TW-29. Detected concentrations ranged from 0.274J to 0.6 J µg/L. The GWPS for MTBE is 2 µg/L.
- Tetrachloroethene was detected in monitoring wells TW-01, TW-19, and TW-29. Detected concentrations ranged from 0.5J to 1.36 µg/L. The GWPS for tetrachloroethene is 5 µg/L.
- Trichloroethene was detected in monitoring wells TW-01 and TW-29. Detected concentrations ranged from 0.326J to 0.9J µg/L. The GWPS for trichloroethene is 5 µg/L.

[3] Groundwater protection standards listed in this report are based on MDE (2018).

- Trichlorofluoromethane was only detected once in monitoring well TW-29 at a concentration of 0.277 J µg/L. The GWPS for trichlorofluoromethane is 6,000 µg/L.

- Vinyl chloride was only detected once in monitoring well TW-03A at a concentration of 0.278 J µg/L. The GWPS for trichlorofluoromethane is 2 µg/L.

VOC concentrations are summarized in **Table 4**.

SVOCs were only sampled from monitoring well TW-26R. No SVOCs were detected in monitoring well TW-26R during the six semiannual sampling events completed at the proposed vertical expansion area. SVOC results are summarized in **Table 5**.

Given the fact that many of the detected VOCs were measured in the upgradient monitoring wells (TW-01, TW-02, TW-02A, TW-03, TW-3A, and TW-30) and the low concentration of the detected VOCs, the source of the VOC detections is likely not from landfill operations in the active portion of Cell 9.

4.4.4.2 Metals

As summarized on **Table 6**, several metals were detected in groundwater samples collected during the six semiannual sampling events completed in the vicinity of Cell 9, but only iron, manganese, and lead were detected above their respective GWPS. There was one lead exceedance at TW-29 (downgradient monitoring well) during the fall 2022 monitoring event. This was a first-time exceedance, and MDE was notified. When verification resampling was conducted at TW-29 to confirm the detection, the concentration of lead in TW-29 was below detection limits. The initial detection was therefore deemed invalid.

Iron was detected in exceedance of the GWPS (1.4 milligrams per liter [mg/L]) at TW-01, TW-02, TW-02A, TW-03, TW-03A, TW-04, and TW-05 during all six sampling events. Manganese was detected above the GWPS of 0.043 mg/L at downgradient monitoring wells TW-04 and TW-05; at upgradient monitoring wells TW-01, TW-02, TW-02A, TW-03, and TW-03A; and at side-gradient monitoring well TW-10A during each monitoring event. Side-gradient monitoring well TW-21A also had manganese detected above the GWPS during two of six monitoring events.

Given the consistency of the concentrations and location of the exceedances (upgradient, downgradient, and side-gradient), the sampling results suggests that iron and manganese concentrations are naturally occurring and not thought to be a result of a release from the facility waste disposal area.

4.4.4.3 General Chemistry

General chemistry analyses results are summarized in **Table 7**. Several of those constituents, including alkalinity, ammonia, chloride, nitrate, specific conductivity (lab), sulfate, and total dissolved solids (TDS), are considered leachate indicator parameters. Elevated concentrations of these analytes can be indicative of leachate impacts in groundwater. General chemistry results were similar to background groundwater quality at the MLFRRF and do not represent a significant groundwater quality concern. A discussion of the frequency of detection and

distribution for the indicator parameters in groundwater samples collected during the six semiannual sampling events completed in the vicinity of Cell 9 is provided below.

- Alkalinity was measured at all monitoring wells during the six monitoring events. Alkalinity concentrations were relatively low, ranging from 1J to 64 mg/L. There is no GWPS for alkalinity.
- Ammonia was only detected one time in monitoring wells TW-04 and TW-30. Measured ammonia concentrations were 0.064J mg/L at TW-04 and 0.047J mg/L at TW-30. There is no GWPS for ammonia.
- Chloride was detected in all groundwater quality samples with varied concentrations during the six monitoring events. Concentrations of chloride were relatively low, ranging from 2.7J mg/L to 68.4 mg/L. There is no GWPS for chloride.
- Nitrate was detected at least once at all monitoring wells during the six monitoring events. Nitrate detected nitrate concentrations ranged from 0.044 to 2.4 mg/L. The GWPS for nitrate is 10 mg/L.
- Specific conductivity measurements were relatively low, ranging from 50.9 micro siemens per centimeter (µS/cm) to 804 µS/cm. There is no GWPS for specific conductivity.
- Sulfate was detected in 5 of the 14 monitoring wells sampled during the six monitoring events with varied concentrations. Concentrations of sulfate were relatively low, ranging from 8.1J to 60.5 mg/L. There is no GWPS for sulfate.
- TDS concentrations ranged from 13 to 349 mg/L. There is no GWPS for TDS.

Laboratory measured turbidity was less than 50 Nephelometric turbidity units (NTU) in all groundwater quality samples, except two events at TW-04 (fall 2022 and spring 2023) and one event at TW-03 (fall 2022). The highest laboratory turbidity (103.2 NTU) was measured at downgradient monitoring well TW-04 during the fall 2022 event.

General chemistry parameters monitoring wells upgradient and downgradient of Cell 9 are relatively similar and do not indicate impacts to groundwater related to landfill operations.

4.4.4.4 Summary of Findings

The significant findings from the semiannual sampling events completed in the vicinity of Cell 9 may be summarized as follows:

- Sampling results for most constituents were similar to background groundwater quality measured at the MLFRRF.
- Relatively low concentrations of VOCs were detected in groundwater, and only one VOC constituent exceedance of the GWPS was measured.
- Iron was detected in groundwater above the GWPS at downgradient monitoring wells TW-04 and TW-05 as well as at upgradient monitoring wells TW-01, TW-02, TW-02A, TW-03, and TW-03A during each monitoring event. The sampling results suggest the iron concentrations are naturally occurring and not thought to be a result of a release from the facility waste disposal area.

- Manganese was detected in groundwater above the GWPS at downgradient monitoring wells TW-04 and TW-05, at upgradient monitoring wells TW-01, TW-02, TW-02A, TW-03, and TW-03A, and at side-gradient monitoring well TW-10A during each monitoring event. Side-gradient monitoring well TW-21A also had manganese detected above the GWPS during two of six monitoring events. The sampling results suggest the manganese concentrations are naturally occurring and not thought to be a result of a release from the facility waste disposal area.
- Lead was detected above the GWPS once at downgradient monitoring well TW-29 and was subsequently resampled. Resampling of the monitoring well did not result in an exceedance of the GWPS.

In conclusion, the groundwater sampling results in the vicinity of Cell 9 at MLFRRF do not appear to represent a groundwater quality concern.

4.4.5 Production Wells

To identify all production wells within 0.5-mile of the Cell 9 boundary, Geosyntec submitted a request to MDE for a survey of production wells within one mile of the MLFRRF property boundary. The data provided by MDE on July 26, 2024, did not include reliable coordinates or addresses for many of the wells. To supplement the MDE data, Geosyntec submitted a request to Anne Arundel County to do a well search within 0.5 miles of Cell 9. The results of that well search were provided by Anne Arundel County on August 24, 2024. Using the data provided by MDE and Anne Arundel County, Geosyntec was able to compile a list of 267 production wells within 0.5 miles of Cell 9 for which location data was available, as shown in **Figure 8** and presented in **Table 2a**. Of these 267 wells, 52 wells have known locations but no well construction data was available. The remaining 215 wells have complete or partial well data available, including total well depth, static water level, water level during pumping, screen type, and screened interval. A list of 67 additional wells whose locations are unknown, but which appear to be in the vicinity of Cell 9, are presented in **Table 2b**.

Of the 334 production wells identified in the search, 279 wells are designated as private drinking water wells, 1 well is designated as industrial, commercial, or dewatering use, 2 wells are designated as agricultural usage (irrigation or livestock watering), 3 wells are designated as closed loop geothermal usage, and 49 wells have no specific designated usage in the records.

Of the 215 production wells whose locations and complete or partial well data are available, 21 production wells are likely screened in the partially confined aquifer, based on the screen interval and/or well depth. The remaining 194 production wells whose locations and complete or partial well data are available are likely screened in the confined aquifer. Due to the variability of the ground elevation in the vicinity of Cell 9, it is not possible to estimate the screen elevation of the 67 wells with no known coordinates. Additionally, it is not possible to estimate the screen elevation for the 52 wells whose locations are known but no well data is available.

Of the 21 production wells screened in the partially confined aquifer, 1 is located downgradient from Cell 9, 2 are located upgradient from Cell 9, and 18 are located cross-gradient from Cell 9. All 21 wells are used for drinking water.

Of the 194 production wells screened in the confined aquifer, 8 are located upgradient from Cell 9, 39 are located cross-gradient from Cell 9, and 147 are located downgradient from Cell 9. Two wells located cross-gradient and one well located downgradient are used as closed loop geothermal wells. While these wells terminate in the confined aquifer, they are not screened and do not interact with the aquifer. The remaining 191 wells are used for drinking water. Of the 191 drinking water wells listed as screened in the confined aquifer, 10 wells had well depth data but no screen data associated with their records. Since drinking water wells are typically screened at the bottom of the well, we assumed that these 10 wells were screened in the confined aquifer.

Of the 52 wells whose locations are known but no well data is available, 2 are located upgradient from Cell 9, 15 are located cross-gradient from Cell 9, and 35 are located downgradient from Cell 9. Due to the lack of well construction data, it is not known in which aquifer these wells are screened.

4.5 Potential Contamination of State Waters

4.5.1 Groundwater

Groundwater contamination from the operation of the landfill has occurred in the past due to historical waste disposal practices (i.e., disposal cells operated between 1975 and 1992, prior to the implementation of Subtitle D of the Resource Conservation and Recovery Act) and has influenced the groundwater quality of Sand I and Sand II and in the confined water-bearing unit in Clay I. Near Cell 9, groundwater contamination could potentially occur because of leachate leakage through the liner (see **Section 5.2**) and will most likely only influence the groundwater in Sand I and Sand II and the confined water bearing unit in Clay I. As required by the MLFRRF solid waste permit, groundwater monitoring at MLFRRF is implemented under the approved EMP (ERM 2009).

Currently, the extent of groundwater contamination in Sand I and Sand II in the vicinity of Cell 9 does not appear to be associated with landfill operations in the active portion of Cell 9. Should any leachate impact reach the monitoring wells located on the perimeter of the MLFRRF property, proper remedial action will be taken to prevent risks to human health and the environment.

Vertical movement of contaminants to the lower confined aquifers would be restricted by the composite liner system (i.e., double geomembrane over clay barrier layer; **Figure 18**) proposed to be constructed below all areas in contact with waste or leachate. Therefore, it is unlikely that leachate generated from the landfill will impact the lower confined aquifers.

4.5.2 Surface Water

Surface water contamination could potentially occur through contact with contaminated groundwater or leakage of leachate from landfill waste disposal activities. As shown in **Figures 9** through **11** and **Figures 13** and **14,** groundwater flowing beneath Cell 9 in Sand II flows beneath Wells Branch, and impacts to surface water from contamination in Sand II are therefore unlikely. As required by the MLFRRF solid waste permit, surface water monitoring at MLFRRF is implemented under the approved EMP (ERM 2009).

Additionally, direct pollution of surface waters could occur via potential seeps and outbreaks of leachate through the side slopes of the Cell 9 waste disposal area. Routine site operations and maintenance would detect any seeps and outbreaks of leachate through the side slopes that might develop. Prompt repair of such seeps and outbreaks are required, as stipulated in the operation and maintenance and post-closure care plans developed for the facility.

5 LANDFILL DESIGN

5.1 Introduction

In the remainder of this section, the specific regulatory requirements of COMAR 26.04.07.07 listed under §C(12)(a) through §C(12)(c) are reproduced in italic type. This is followed by a brief description of the conceptual design of liner system at the proposed Cell 9 vertical expansion, as well as the way the liner system design meets the specific regulatory requirement. The conceptual design for the proposed vertical expansion showing proposed liner base grades and landfill final grades is illustrated on **Figures 16** and **17**, respectively.

5.2 Liner System Design

COMAR 26.04.07.07(C)(12) requires the following:

The landfill design shall satisfy the following minimum design standards:

(a) A liner system that is designed, constructed, and installed to facilitate collection of leachate generated by the landfill to prevent migration of pollutants out of the landfill to the adjacent subsurface soil, ground water, or surface water. The liner may be constructed of natural earthen materials which are excavated from on the site, or which are imported from another location. The liner may also be constructed of a synthetic or manufactured membrane material. The liner system shall be:

(i) Constructed of materials that have sufficient strength and thickness to prevent failure due to pressure gradients, physical contact with the waste or leachate, climatic conditions, the stress of installation, and the stress of daily operation.

(ii) A minimum of 1 foot of clay or other natural material having an in-place permeability of less than or equal to 1 x 10-7th centimeters/second, or one or more unreinforced synthetic membranes with a combined minimum thickness of 50 mil, or a single reinforced synthetic membrane with a minimum thickness of 30 mil, which has a permeability less than or equal to 1 x 10-10th centimeters/second, placed over a prepared subbase with a minimum thickness of 2 feet and a permeability less than or equal to 1 x 10-5th centimeters/second. The Approving Authority may authorize the installation of a liner system with specifications different than those listed in this subparagraph only upon a successful demonstration by the applicant that the alternate system is capable of collecting and managing the leachate generated at the site, and that the liner system provides an equivalent level of protection to public health and the environment.

(iii) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, uplift, puncture, cutting or activities at the landfill.

(iv) Installed to cover all surrounding earth likely to be in contact with the waste or leachate.

(v) Installed with a minimum slope of 2 percent to facilitate movement of leachate towards the leachate collection system and prevent leachate ponding on the landfill floor.

The subsections below will describe how the Cell 9 design will achieve these requirements.

5.2.1 Liner System Performance

The liner system design for the proposed landfill is shown on **Figure 18**. Subcells 9.1 and 9.2 have already been constructed, and Subcell 9.3 is under construction. The liner system for the remaining subcells in Cell 9 (i.e., Subcells 9.4 and 9.5) will be constructed with a minimum grade of 1% along the leachate pipes, while the minimum grade along the liner slope will be 2.9%. The currently permitted liner system for Cell 9 consists of the following seven component layers (from top to bottom):

- 2-foot-thick protective cover with a hydraulic conductivity no less than 5 x 10^{-3} centimeters per second (cm/s)
- Double-sided geocomposite drainage/cushion layer (leachate collection)
- 60-mil-thick textured high-density polyethylene (HDPE) geomembrane liner (primary liner)
- Double-sided geocomposite drainage/cushion layer (leak detection)
- 60-mil-thick textured HDPE geomembrane liner (secondary liner)
- 18-inch compacted clay liner with maximum hydraulic conductivity of 1 x 10^{-5} cm/s (subbase)
- Prepared subgrade with a 3-foot minimum offset from the highest observed groundwater

Subcell 9.1 was designed and built with the permitted double liner described above, except that the minimum hydraulic conductivity for the protective cover was specified at 5.2 x 10^{-2} cm/s. To meet the minimum protective cover permeability, the Subcell 9.1 protective cover consisted of #57 aggregate. Subcell 9.2 was designed and built with the permitted double liner described above, with sand with a minimum hydraulic conductivity of 5.0 x 10^{-3} cm/s used as protective cover along the floor of the cell and crushed #67 aggregate used as protective cover on all slopes greater than 10%. Subcell 9.3 is currently under construction using the same protective cover specification as Subcell 9.2.

The currently permitted liner system for Cell 9, which is not being modified as part of this process, was approved by MDE and USEPA as part of the Phase III Permit Application (Geosyntec 1994) as an alternative to the liner system prescribed in 40 CFR 258. The 1994 liner system performance demonstration report is included as **Appendix E**.

5.2.2 Liner System and Foundation Materials

The liner system materials proposed for the proposed vertical expansion of Cell 9 are unchanged from the currently permitted Cell 9 liner system materials and have been widely used in landfill applications. Based on Geosyntec's considerable previous experience, including for multiple liner system designs installed at MLFRRF, these materials will have sufficient capacity to support the landfill loads to prevent failure due to pressure gradients, physical contact with waste or leachate, climatic conditions, the stress of installation, and/or the stress of daily operation. The soils in the foundation will also have sufficient capacity to support the loads expected during construction and landfill operation. As previously discussed in **Section 4.3**, the foundation material mostly comprises clay with Standard Penetration Test N-values that range from 5 to 50+. The existing Cell 9, constructed over the same soils, has not encountered any foundation problems with excessive settlement or slope instability. The required strength for liner materials and foundation soils will be evaluated fully in the Phase III Report for the permit application.

5.3 Liner System Elevation

COMAR 26.04.07.07(C)(12)(b) requires the following:

The liner system shall be located entirely above the composite high water table as determined in §C(4)(b), of this regulation, and bedrock as determined in §C(6) of this regulation. A minimum buffer distance, including the thickness of the prepared subbase, shall be required between the bedrock elevation and the maximum expected ground water elevation, and the bottom of the liner system, as follows:

> *(i) Except as specified in §C(12)(b)(ii), the minimum buffer distance shall be 3 feet.*
>
> *(ii) In Queen Anne's, Talbot, Caroline, Dorchester, Wicomico, Somerset, and Worcester Counties, the minimum buffer distance shall be 1.5 feet unless the Department determines from the available hydrogeological data that the site can provide an additional buffer. In these instances, the Department shall set a minimum buffer between 1.5 and 3.0 feet.*

COMAR 26.04.07.07.C(12)(b)(i) requires that the buffer distance for the landfill must exceed the minimum requirement of 3 feet. The groundwater table and bottom elevation of the proposed Cell 9 was estimated by comparing the potentiometric map contours of the highest observed groundwater over the past year at Cell 9 and the proposed base grades of Cell 9. As shown on the isopachous map of soils between the highest anticipated groundwater elevation measured below the landfill and the lowest point of the subbase presented as **Figure 15,** the minimum buffer distance between the highest anticipated groundwater elevation and the lowest point of the top of subbase is approximately 9.10 feet, of which 1.5 feet will consist of subbase material. This

exceeds the minimum buffer distance of three feet that is required by COMAR 26.04.07.07.C(12)(b)(i).

5.4 Leachate Collection System

COMAR 26.04.07.07(C)(12)(c) requires that the landfill include the following:

A leachate collection and removal system, located immediately above the liner, that is designed, constructed, maintained, and operated to collect and remove leachate from the landfill. The leachate collection and removal system shall be:

(i) Constructed of materials that are chemically resistant to the waste managed in the landfill and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and by any equipment used at the landfill;

(ii) Designed and operated to function without clogging; and

(iii) Designed and operated to ensure that the leachate depth over the liner does not exceed 30 centimeters (1 foot).

Following the procedures recommended by USEPA (2020), **Appendix F** provides a leachate generation analysis for the proposed landfill using the HELP Model v4.01, which shows that the proposed leachate collection system can limit the maximum leachate depth over the geomembrane liner to less than the 30-centimeter (1-foot) limit specified in COMAR 26.04.07.07.C(12)(c)(iii). The critical condition for the leachate collection system is the open cell condition, shortly after the liner and leachate systems have been constructed and the first 8-foot-thick lift of waste has been placed. The main component of the leachate collection system is a geocomposite drainage layer and protective cover drainage layer over the entire aerial expanse of the liner (**Figure 18**). The proposed geocomposite drainage layer, which has high chemical resistance and was specifically developed for use in landfill and similar applications, consists of a geonet layer sandwiched between two geotextile layers. The latter serve as filters, preventing the migration of fines into the geonet drainage component. Leachate drainage corridors will also be installed to limit the drainage length in the geocomposite to 750 feet.

As shown in the HELP model (**Appendix F**), the leachate collection system has sufficient drainage capacity; the maximum expected leachate depth over the geomembrane liner for the proposed liner and leachate collection system is 9.5 inches in the protective cover/leachate collection zone and 0.18 inches in the leak detection zone during what is anticipated to be the most critical condition for leachate flow. The proposed liner system discussed in **Section 5.2** is therefore expected to be capable of collecting and managing the leachate generated in the expansion such that the liner system provides an equivalent level of protection to public health and the environment afforded by MDE's prescriptive liner.

As part of the Phase III Report that will be submitted to MDE, detailed design calculations will be conducted to evaluate the adequacy of the proposed geocomposite layer's drainage capacity, material strength, and clogging potentials for use as the primary component of the leachate collection system.

6 REFERENCES

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Tables

TABLE 1a
PHASE II REPORT CHECKLIST – COMAR 26.04.07.07C

Phase II Report: Site Geologic Study
Proposed Millersville Landfill and Resource Recovery Facility Vertical Expansion
Severn, Anne Arundel County, Maryland

COMAR 26.04.07.07C	Where Addressed
1. An up-to-date site specific topographic map that includes:	**Figure 3**
a) Surface waters and natural drainage features	**Figure 3**
b) 100-year flood plain	**Figure 4**
c) Property lines	**Figure 3**
d) On-site buildings and structures	**Figure 3**
e) Forested and other vegetated areas	**Figure 3**
f) The location of any buried or overhead power transmission lines, utility pipelines, or storage tanks on the property	**Figure 3**
2. Geologic formation discussion and hydrologic relationship between the formations	**Section 4.3, Section 4.4, Figures 6–7**
3. Production wells within ½ mile of the site boundary	**Section 4.4.5, Tables 2a and 2b, Figure 8**
4. Groundwater maps:	**Section 4.4.3, Table 3, Figures 9–11**
a) Water elevations	**Table 3, Figures 9–11**
i. Elevated groundwater condition	**Figure 9**
ii. Depressed groundwater condition	**Figure 10**
b) Highest observed or predicted groundwater elevations	**Figure 11**
5. Geologic cross sections	**Figure 12–14**
6. Bedrock map showing contours of bedrock surface	**Not Required**
7. Isopachous map showing minimum thickness of soil above groundwater or bedrock elevation	**Figure 15**
8. Discussion of chemical groundwater quality	**Section 4.4.4, Tables 4–7**
9. Discussion of potential for vertical and horizontal movement of pollutants into the waters of the State	**Section 4.5**
10. Results of fracture trace or aerial photographic lineament analysis	**Not Required**
11. Geotechnical analyses	**Section 3.2.1, Section 4.3.3, Table 8, Figure 20**
12. Preliminary conceptual design of landfill satisfying these minimum design standards:	**Section 5, Figures 16–18**
a) A liner system to facilitate collection of leachate and prevent migration of pollutants off-site. The liner system shall be:	**Section 5.2**
i. Constructed of materials with sufficient strength and stiffness to prevent failure due to pressure gradients, physical contact with waste or leachate, climatic conditions, stress of installation, and stress of daily operations	**Section 5.2.2**

TABLE 1a
PHASE II REPORT CHECKLIST – COMAR 26.04.07.07C

Phase II Report: Site Geologic Study
Proposed Millersville Landfill and Resource Recovery Facility Vertical Expansion
Severn, Anne Arundel County, Maryland
(continued)

COMAR 26.04.07.07C	Where Addressed
ii. A minimum of 1 foot of clay or other natural material having in place permeability of less than or equal to 10^{-7} cm/s or a single reinforced synthetic membrane with minimum thickness of 30 mil with permeability less than or equal to 10^{-10} cm/s placed over prepped subbase with a minimum thickness of 2 ft and permeability less than 10^{-5} cm/s. Alternative liner systems may be used after successful demonstration that they are capable of collecting and managing leachate generated at the site and that they provide an equivalent level of protection to public health and the environment	**Section 5.2.1, Figure 18**
iii. Placed upon a foundation providing support to the liner and resistance to pressure gradients to prevent failure of liner due to settlement, compression, uplift, puncture, cutting, or activities at the landfill	**Section 5.2.2**
iv. Installed to cover all surrounding earth likely to contact waste or leachate	**Section 5.2.1, Figure 16**
v. Installed with minimum slope of 2% for drainage	**Section 5.2.1, Figure 16**
b) The liner system shall be located entirely above the composite high water table and bedrock. A minimum buffer distance, including thickness of prepared subbase, between bedrock elevation and maximum expected groundwater elevation, and the bottom of the liner system shall be required as follows:	**Section 5.3**
i. Minimum buffer distance of 3 ft unless otherwise specified (see below)	**Section 5.3, Figure 15**
ii. In Queen Anne's, Talbot, Caroline, Dorchester, Wicomico, Somerset, and Worcester Counties - minimum buffer distance of 1.5 ft. (unless MD DOE determines that site can provide additional buffer – up to 3 ft)	**Not Applicable**
c) A leachate collection and removal system. This system shall be:	**Section 5.4**
i. Constructed of materials that are chemically resistant to the waste managed in the landfill and the leachate to be generated and of sufficient strength and thickness to prevent collapse	**Section 5.4**
ii. Designed and operated to function without clogging	**Section 5.4**
iii. Designed and operated to ensure that leachate depth over liner does not exceed 30 cm (1 ft).	**Section 5.4**

TABLE 1b
PHASE II REPORT CHECKLIST – MDE CHECKLIST

Phase II Report: Site Geologic Study
Proposed Millersville Landfill and Resource Recovery Facility Vertical Expansion
Severn, Anne Arundel County, Maryland

MDE Checklist	Where addressed
1. INTRODUCTION AND CERTIFICATION	
1.1. Introduction	Section 1
1.2. Executive summary	Section 1.1
1.3. Certification by geologist	Section 1.2
1.4. Report organization	Section 2
1.4.1. COMAR requirement checklist	Section 2.1
1.4.2. 40 CFR 258 requirement checklist	Section 2.2
2. SITE DESCRIPTION	
2.1. Report organization	
2.2. Site background	Section 1.3
2.3. Property lines	Section 1.3.2, Figures 2 and 3
2.4. Proposed location of the landfill footprint	Figure 2
2.5. Onsite buildings and structures	Section 1.3.2, Figure 3
2.6. Forested and other vegetated areas defined	Section 1.3.2, Figure 3
2.7. Permit for clearing forest	No expansion in landfill footprint, so no new forest clearing
2.8. Facility description	Section 1.3.2
2.9. Zoning and land	No expansion in landfill footprint, so no change in zoning or land use
2.10. Location of any buried or overhead power transmission lines, utility pipelines, or storage tanks on the property	Figure 3
2.11. Meteorology	Section 4.1
3. DISCUSSION OF THE UNDERLYING GEOLOGIC FORMATIONS	
3.1. Physiography	Section 4.2
3.2. Site specific geology	Section 4.3.2
3.2.1. Surface waters and natural drainage features	Figure 3
3.2.2. Surface soils	Figure 6
3.2.3. Subsurface geology	Section 4.3, Figures 5–7
3.2.4. Present and projected use of the formations as a source of groundwater and mineral resources	Section 4.4.5, Tables 2a and 2b, Figure 8
3.2.5. Hydrologic relationship between the formations	Section 4.4, Figure 7
3.2.6. Geomorphology	Sections 4.3 and 4.4
3.2.7. Survey of all production wells with half a mile of the site boundary	Section 4.4.5, Tables 2a and 2b, Figure 8
3.2.8. Topographic map showing all production wells	Figure 8

TABLE 1b
PHASE II REPORT CHECKLIST – MDE CHECKLIST

Phase II Report: Site Geologic Study
Proposed Millersville Landfill and Resource Recovery Facility Vertical Expansion
Severn, Anne Arundel County, Maryland
(continued)

MDE Checklist	Where addressed
3.2.9. Table showing all pertinent information such as well depth, screen type, productivity, materials encountered, and water level	Tables 2a and 2b
3.2.10. Groundwater contour maps showing the occurrence and direction of groundwater flow beneath the site super imposed on the current topographic Map	Section 4.4.3, Table 3, Figures 9–11
3.2.11. Three separate groundwater contour maps constructed for Each distinct water bearing formation occurring within 50 feet of the anticipated lowest elevation of the refuse cell floor using monthly data no less than 12 months	Figures 9–11
3.2.12. Geologic cross-sections in sufficient detail	Figure 12–14
3.2.13. Bedrock map except in the coastal plain outside the fall zone to show the contours of the bedrock surface beneath the site	Not required
3.2.14. Isopachous map showing the minimum thickness of soil and other unconsolidated sediments above the elevation of groundwater as determined	Figure 15
3.2.15. Discussion of the chemical quality of the groundwater in the aquifers beneath the site	Section 4.4.4, Tables 4–7
3.2.16. Discussion of the potential for the vertical and horizontal movements of pollutants into the waters of the state	Section 4.5
3.2.17. Fracture trace or areal photographic lineament analysis	Not requuired
3.2.18. Test boring logs and reports	Section 3.2.1, Figure 20, Appendix B
3.2.19. Well completion reports	Appendix B
3.2.20. Piezometric measurements and analysis	Section 4.4.3
3.2.21. Chemical and physical soil/sediment analysis	Sections 4.3.3 and 4.4.4, Table 8, Appendix D
3.2.22. All laboratory and field methodology and procedures used	Sections 3.2.1 and 4.3.3, Appendices B and D
3.3. Regional geology	
3.3.1. Stratigraphy	Section 4.3.1
3.3.2. Structure	Section 4.3.1
3.3.3. Mineral resources	Section 4.3.1
3.3.4. Seismic risk	Section 2.2
3.4. Previous site investigation	Section 3.2.1
3.5. Drilling activities	Not applicable
3.6. Preliminary geotechnical assessment	Section 4.3.3, Table 8
4. GROUNDWATER ASSESSMENT HYDROLOGY	
4.1. Regional Groundwater Occurrence	Section 4.4.1
4.2. Local Groundwater Occurrence	Section 4.4.1
4.3. Site specific groundwater Occurrence	Section 4.4.3

TABLE 1b
PHASE II REPORT CHECKLIST – MDE CHECKLIST

Phase II Report: Site Geologic Study
Proposed Millersville Landfill and Resource Recovery Facility Vertical Expansion
Severn, Anne Arundel County, Maryland
(continued)

MDE Checklist	Where addressed
4.3.1. Potentiometric and Isopachous Maps	Figures 9–11 and 15
4.3.2. Aquifer Testing	Not applicable
4.3.3. Groundwater Movement	Section 4.4.3
4.3.4. Potential Pollutant Movement in Groundwater	Section 4.5.1
4.4. Groundwater Quality	
4.4.1. Compilation and Report of Initial Results	Section 4.4.4, Tables 4–7
4.4.2. Determination of Difference between Populations	Section 4.4.4
4.4.3. Discussion of Selected Detected Constituents	Section 4.4.4
4.4.4. Impacts of Previous Activity at the Site	Section 4.4.4
4.4.5. Detections that Exceed Maryland's Groundwater Standard	Section 4.4.4
4.5. Surrounding Groundwater Use	Section 4.4.5, Tables 2a and 2b, Figure 8
5. SURFACE WATER ASSESSMENT HYDROLOGY	
5.1. Surface Water Description	Section 4.2, Figure 3
5.2. Floodplain	Figure 4
5.3. Endangered Species Study	Section 2.2
5.4. Potential Pollutant Movement in Surface Water	Section 4.5.2
6. FINDINGS, DESIGN CONSIDERATION AND CONCLUSION	
6.1. Findings	Section 5
6.2. Design Considerations	Section 5
6.2.1. Preliminary conceptual design of the proposed landfill based on the geotechnical information	Section 5, Figures 16–18
6.3. Conclusion	Section 5
6.4. Recommendations	Section 5

Table 2a. Landfill Area Production Well Data With Known Locations
Phase II Report: Site Geologic Study
Proposed Millersville Landfill and Resource Recovery Facility Vertical Expansion
Severn, Anne Arundel County, Maryland

Well Identification Number	Permit Number	Parcel Number	Location/ Road	Total Depth (feet)	Static Water Level (feet)	Water Level During Pumping (feet)	Screen Type	Screened Interval		Usage Code	Completion Date
								Top (feet)	Bottom (feet)		
1	AA948437	355	1425 DICUS MILL RD	382	75	140	PL	375	382	DW	9/26/2002
2	AA819419		1512 ROMEO LN	210	120	140	PL	203	210	DW	11/23/1987
3	AA818695		1515 ROMEO LN	165	130	150	PL	158	165	DW	7/7/1987
4	AA818529		438 BURNS CROSSING RD	204	90	110	PL	197	204	DW	5/28/1987
5	AA888449		304 CONSTANT AVE	193	115	130	PL	188	193	DW	9/3/1992
6	AA883967		344 CONSTANT AVE	-	-	-	-	-	-	DW	-
7	AA860291		355 MONTECRISTO CT	208	110	130	PL	201	208	DW	5/27/1988
8	AA944714	513	440 GRANADA CT	178	120	130	PL	160	178	DW	12/1/1999
9	AA743792		372 ANNA CT	186	140	150	PL	181	186	DW	1/28/1982
10	AA810447		373 ANNA CT	180	140	150	PL	175	180	DW	6/23/1982
11	AA736700		1376 ANTRIM DR	105	50	60	PL	100	105	DW	12/20/1976
12	AA737952		1382 ANTRIM DR	68	30	35	PL	63	68	DW	9/3/1977
13	AA738155		1398 ANTRIM DR	98	50	60	PL	93	98	DW	10/19/1977
14	AA737138		1390 ANTRIM DR	98	55	60	PL	93	98	DW	4/12/1977
15	AA720168		1327 ASHBURTON DR	112	75	70	PL	107	112	DW	8/30/1971
16	AA740584		323 BURNS CROSSING RD	191	140	150	PL	186	191	DW	6/28/1979
17	AA812389		368 CARRACA CT	170	140	150	PL	150	170	DW	11/17/1983
18	AA812192		374 CARRACA CT	172	140	150	PL	152	172	DW	11/6/1983
19	AA731273		1367 DICUS MILL RD	156	80	85	PL	151	156	DW	6/11/1973
20	AA737888		1353 DICUS MILL RD	155	88	140	PL	148	155	DW	5/10/1978
21	AA720647		1232 DICUS MILL RD	160	20	78	PL	153	160	DW	12/11/1971
22	AA810882		1377 DICUS MILL RD	148	88	105	PL	141	148	DW	3/17/1983
23	AA743716		123 GAMBRILLS RD	65	20	25	PL	60	65	DW	10/1/1981
24	AA743861		96 GAMBRILLS RD	218	42	52	PL	208	218	DW	12/3/1981
25	AA947828	164	89 GAMBRILLS RD	270	60	63	PL	255	270	DW	4/15/2002
26	AA734465		436 GRANADA CT	160	90	95	PL	155	160	DW	6/6/1975
27	AA734341		443 GRANADA CT	181	110	135	PL	176	181	DW	5/3/1975
28	AA812690		365 MONTECRISTO CT	172	145	150	PL	167	172	DW	1/2/1984
29	AA736701		401 VERONA CT	100	50	60	PL	95	100	DW	12/20/1976
30	AA737451		403 VERONA CT	125	70	80	PL	120	125	DW	7/6/1977
31	AA737137		402 VERONA CT	110	60	70	PL	105	110	DW	4/13/1977
32	AA737136		409 VERONA CT	125	65	70	PL	120	125	DW	4/5/1977
33	AA737450		404 VERONA CT	123	55	60	PL	118	123	DW	7/26/1977
34	AA737389		405 VERONA CT	130	70	80	PL	125	130	DW	6/20/1977
35	AA738410		408 VERONA CT	114	65	75	PL	109	114	DW	11/22/1977
36	AA812012		1308 WINNERS CIR	176	70	85	PL	169	176	DW	1/17/1984
37	AA110905	7	1501 CLEARFIELD CIR	200	-	-	-	-	-	C	4/11/2013
38	AA130324	63	OPEN SPACE AREA	400	170	320	ST	370	376	DW	11/20/2013
39	AA130324	37	OPEN SPACE AREA	400	170	320	ST	370	376	DW	11/20/2013
40	AA130648	356	219 PERCHERON CT	267	-	-	-	-	-	C	6/12/2014

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41	AA140006	447	359 MONTECRISTO CT	275	-	-	-	-	-	C	1/27/2015
42	AA140098	33	341 CONSTANT AVE	520	200	270	ST	505	520	DW	5/19/2015
43	AA140160	63	1329 SLEEPY HOLLOW RD	320	53	61	PL	300	320	DW	7/30/2015
44	AA140450	63	1321 ASHBURTON DR	314	78	140	PL	300	314	DW	11/30/2015
45	AA150474	33	1319 ASHBURTON DR	312	80	180	PL	298	312	DW	11/13/2017
46	AA150487		1377 DICUS MILL RD	395	137	148	PL	380	395	DW	6/24/2018
47	AA150488		1367 DICUS MILL RD	408	140	151	PL	398	408	DW	8/30/2018
48	AA710727		386 ACCOTINK CT	-	-	-	-	-	-	DW	-
49	AA720165		427 AYRLAWN DR	-	-	-	-	-	-	DW	-
50	AA720167		432 AYRLAWN DR	-	-	-	-	-	-	DW	-
51	AA731708		1510 SAPPINGTON DR	162	80	85	PL	157	162	DW	9/4/1973
52	AA733471		1324 DICUS MILL RD	135	90	105	PL	128	135	DW	9/11/1974
53	AA733994		422 BURNS CROSSING RD	280	130	152	PL	275	280	DW	1/9/1975
54	AA734033		430 AYRLAWN DR	165	110	122	PL	160	165	DW	1/16/1975
55	AA734085		449 GRANADA CT	172	110	135	PL	167	172	DW	2/18/1976
56	AA734658		437 GRANADA CT	162	98	110	PL	157	162	DW	7/16/1975
57	AA735010		442 GRANADA CT	166	110	130	PL	161	166	DW	11/3/1975
58	AA735118		140 GAMBRILLS RD	157	85	90	PL	152	157	DW	10/14/1975
59	AA736997		1241 DICUS MILL RD	157	96	111	PL	150	157	DW	2/26/1977
60	AA738156		1397 ANTRIM DR	101	60	70	PL	96	101	DW	11/1/1977
61	AA739654		1315 ASHBURTON DR	120	60	80	PL	113	120	DW	9/13/1978
62	AA741116		1232 DICUS MILL RD	165	100	105	PL	160	165	DW	9/5/1979
63	AA742469		269 CONSTANT AVE	74	55	60	PL	69	74	DW	10/23/1980
64	AA810124		374 ANNA CT	184	130	160	PL	179	184	DW	3/2/1982
65	AA810294		345 CONSTANT AVE	213	160	180	PL	208	213	DW	4/9/1982
66	AA810304		375 ANNA CT	181	150	165	PL	176	181	DW	4/15/1982
67	AA811017		371 ANNA CT	180	130	150	PL	175	180	DW	11/12/1982
68	AA811092		349 BURNS CROSSING RD	170	139	160	PL	163	170	DW	11/12/1982
69	AA811575		370 CARRACA CT	180	150	160	PL	175	180	DW	5/26/1983
70	AA811747		371 CARRACA CT	195	150	155	PL	190	195	DW	6/8/1983
71	AA811776		202 MUSTANG CT	151	86	105	PL	144	151	DW	7/22/1983
72	AA811776		202 MUSTANG CT	151	86	105	PL	144	151	DW	7/22/1983
73	AA811952		373 CARRACA CT	170	140	150	PL	150	170	DW	8/23/1983
74	AA811953		372 CARRACA CT	180	140	150	PL	160	180	DW	8/31/1983
75	AA812139		206 MUSTANG CT	127	67	85	PL	120	127	DW	10/7/1983
76	AA812239		259 CONSTANT AVE	75	50	55	PL	55	75	DW	9/19/1983
77	AA812258		203 ARABIAN CT	155	98	115	PL	148	155	DW	3/16/1984
78	AA812277		207 ARABIAN CT	124	63	80	PL	117	124	DW	12/16/1983
79	AA812302		202 ARABIAN CT	146	90	110	PL	139	146	DW	12/16/1983
80	AA812537		204 ARABIAN CT	118	80	95	PL	111	118	DW	3/31/1984

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81	AA812629		206 ARABIAN CT	130	75	95	PL	123	130	DW	4/10/1984
82	AA812873		364 MONTECRISTO CT	170	145	155	PL	165	170	DW	3/27/1984
83	AA812976		439 BURNS CROSSING RD	172	140	150	PL	167	172	DW	5/11/1984
84	AA813466		208 ARABIAN CT	130	70	90	PL	123	130	DW	7/30/1984
85	AA813801		222 PERCHERON CT	167	95	115	PL	160	167	DW	1/23/1985
86	AA813883		200 ARABIAN CT	149	71	90	PL	142	149	DW	10/23/1984
87	AA814071		217 PERCHERON CT	168	115	135	PL	161	168	DW	1/3/1985
88	AA814073		216 PERCHERON CT	162	100	120	PL	155	162	DW	1/29/1986
89	AA815088		1688 PREAKNESS DR	185	118	145	PL	178	185	DW	10/21/1985
90	AA815410		1686 PREAKNESS DR	180	115	135	PL	173	180	DW	10/9/1985
91	AA816025		205 ARABIAN CT	133	75	95	PL	126	133	DW	5/5/1986
92	AA816406		212 PERCHERON CT	166	60	80	PL	159	166	DW	7/15/1986
93	AA816793		215 PERCHERON CT	167	90	110	PL	160	167	DW	12/10/1986
94	AA816895		214 PERCHERON CT	155	65	85	PL	148	155	DW	9/6/1986
95	AA817254		213 PERCHERON CT	165	90	100	PL	155	165	DW	10/21/1986
96	AA817564		201 ARABIAN CT	170	100	120	PL	163	170	DW	12/7/1986
97	AA818202		1682 PREAKNESS DR	170	65	105	PL	163	170	DW	4/7/1987
98	AA818480		1312 WINNERS CIR	175	-	-	-	-	-	DW	-
99	AA818537		89 GAMBRILLS RD	102	50	60	PL	97	102	DW	5/20/1987
100	AA818843		1308 WINNERS CIR	185	135	155	PL	171	185	DW	8/6/1987
101	AA819132		356 MONTECRISTO CT	170	120	140	PL	158	170	DW	10/3/1987
102	AA819195		1513 ROMEO LN	188	125	150	PL	181	188	DW	10/3/1987
103	AA819609		205 MUSTANG CT	125	60	80	PL	118	125	DW	4/22/1988
104	AA819790		128 GAMBRILLS RD	108	40	60	PL	101	108	DW	12/24/1987
105	AA819855		134 GAMBRILLS RD	141	40	60	PL	134	141	DW	12/14/1987
106	AA860289		351 MONTECRISTO CT	190	120	140	PL	183	190	DW	5/16/1988
107	AA860305		1514 ROMEO LN	176	120	140	PL	169	176	DW	5/27/1988
108	AA860493		350 MONTECRISTO CT	220	130	150	PL	213	220	DW	8/3/1988
109	AA860495		1514 VICOLI CT	195	120	140	PL	195	198	DW	7/11/1988
110	AA860496		360 MONTECRISTO CT	207	140	150	PL	200	207	DW	8/3/1988
111	AA860497	49	1516 ROMEO LN	188	130	150	PL	181	188	DW	8/3/1988
112	AA880007		352 MONTECRISTO CT	207	120	140	PL	200	207	DW	8/30/1988
113	AA880198		1512 VICOLI CT	190	130	150	PL	183	190	DW	8/5/1988
114	AA880210		353 MONTECRISTO CT	177	120	140	PL	170	177	DW	8/30/1988
115	AA880363		357 MONTECRISTO CT	204	120	140	PL	197	204	DW	7/11/1988
116	AA880976		361 MONTECRISTO CT	203	130	150	PL	196	203	DW	9/16/1988
117	AA881000		1513 VICOLI CT	172	120	150	PL	165	172	DW	12/8/1988
118	AA881338		348 CONSTANT AVE	169	135	150	PL	164	169	DW	3/3/1989
119	AA882125		1514 SAPPINGTON DR	185	110	125	PL	178	185	DW	8/14/1989
120	AA882244		1238 DICUS MILL RD	165	80	100	PL	158	165	DW	3/10/1989

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121	AA882297		1439 DICUS MILL RD	230	115	130	PL	220	230	DW	4/3/1989
122	AA882868		1437 DICUS MILL RD	180	135	145	PL	173	180	DW	8/4/1989
123	AA883115		SAPPINGTON STATION RD	150	90	120	PL	145	150	DW	10/9/1989
124	AA884566		1716 SADDLE DR	150	110	120	PL	140	150	DW	5/24/1990
125	AA885102		1220 DICUS MILL RD	175	110	140	PL	168	175	DW	9/2/1990
126	AA885384		428 AYRLAWN DR	302	90	110	PL	295	302	DW	11/6/1990
127	AA886037		319 CONSTANT AVE	79	32	40	PL	74	79	DW	5/1/1991
128	AA886407	78	434 AYRLAWN DR	169	84	100	PL	162	169	DW	7/13/1991
129	AA886842		1336 SLEEPY HOLLOW RD	120	60	85	PL	113	120	DW	9/26/1991
130	AA887091		464 VALERY CT	155	90	110	PL	148	155	DW	11/11/1991
131	AA888512		1710 SADDLE DR	103	50	70	PL	96	103	DW	9/15/1992
132	AA889310	78	1700 SADDLE DR	175	65	85	PL	168	175	DW	3/19/1993
133	AA921764	296	319 BURNS CROSSING RD	186	120	130	PL	181	186	DW	7/29/1994
134	AA921977	205	1706 SADDLE DR	147	95	110	PL	140	147	DW	3/30/1995
135	AA930367	501	GAMBRILLS RD	110	50	60	PL	105	110	DW	2/3/1995
136	AA930873	377	1702 SADDLE DR	140	55	90	PL	135	140	DW	7/7/1995
137	AA931249	116	1704 SADDLE DR	145	60	70	PL	138	145	DW	9/28/1995
138	AA941385	78	1714 SADDLE DR	154	90	100	PL	149	154	DW	7/1/1997
139	AA941919	116	1305 ALTA VISTA DR	114	55	80	PL	107	114	DW	9/19/1997
140	AA942838		459 VALERY CT	175	110	130	PL	170	175	DW	7/23/1998
141	AA942948	451	201 SERENITY POINT LN	200	-	-	-	-	-	DW	9/17/1998
142	AA943035	478	200 SERENITY POINT LN	180	95	160	PL	173	180	DW	11/11/1998
143	AA944544	400	1711 SADDLE DR	140	65	130	PL	133	140	DW	1/5/2000
144	AA944789	1057	85 GAMBRILLS RD	100	50	60	PL	95	100	DW	11/29/1999
145	AA944856		1337 SLEEPY HOLLOW RD	-	60	70	PL	195	205	DW	12/16/1999
146	AA945001	270	206 SERENITY POINT LN	150	100	140	PL	143	150	DW	2/8/2000
147	AA945187	478	1311 ASHBURTON DR	320	160	220	PL	313	320	DW	7/12/2000
148	AA947686	353	88 GAMBRILLS RD	256	58	66	PL	241	256	DW	3/26/2002
149	AA947708	353	96 GAMBRILLS RD	261	72	76	ST	211	221	DW	3/2/2002
150	AA947829	451	95 GAMBRILLS RD	257	55	65	PL	242	257	DW	4/19/2002
151	AA947830	233	105 GAMBRILLS RD	272	64	68	PL	257	272	DW	5/8/2002
152	AA947831	468	1342-1346 SLEEPY HLLW RD	293	60	63	PL	278	293	DW	5/1/2002
153	AA947874		1708 SADDLE DR	330	140	200	PL	320	330	DW	5/3/2002
154	AA948098	63	354 MONTECRISTO CT	330	115	135	PL	323	330	DW	6/15/2002
155	AA948249	602	1310 ASHBURTON DR	330	100	140	PL	323	330	DW	8/6/2002
156	AA949372		429 AYRLAWN DR	345	102	122	PL	335	345	DW	10/13/2003
157	AA949415		1729 SADDLE DR	400	72	80	ST	390	400	DW	9/9/2003
158	AA949468		64 GAMBRILLS RD	308	40	75	PL	298	308	DW	9/29/2003
159	AA949498		343 CONSTANT AVE	430	170	190	ST	425	430	DW	10/15/2003
160	AA949604		1345 SLEEPY HOLLOW RD	305	61	64	PL	285	305	DW	11/11/2003

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161	AA950005		205 SERENITY POINT LN	401	150	160	ST	391	401	DW	4/30/2004
162	AA950708		321 CONSTANT AVE	355	100	180	PL	345	355	DW	11/11/2004
163	AA951912		323 CONSTANT AVE	380	100	130	ST	370	380	DW	3/27/2006
164	AA953636		109 GAMBRILLS RD	314	57	64	PL	294	314	DW	4/18/2008
165	AA954472		99 GAMBRILLS RD	332	57	64	PL	322	332	DW	6/11/2009
166	AA882056		115 GAMBRILLS RD	79	45	58	PL	74	79	DW	2/11/1989
167	AA813814		219 PERCHERON CT	167	99	115	PL	160	167	DW	12/19/1984
168	AA860290		359 MONTECRISTO CT	210	120	140	PL	203	210	DW	5/16/1988
169	AA818851		341 CONSTANT AVE	180	152	160	PL	175	180	DW	7/13/1987
170	AA883940		1329 SLEEPY HOLLOW RD	114	50	60	PL	109	114	DW	1/29/1990
171	AA811592		1377 DICUS MILL RD	150	90	100	PL	145	150	DW	5/31/1983
172	AA743259		1367 DICUS MILL RD	150	80	90	PL	145	150	DW	7/23/1981
173	AA941930	33	1373 DICUS MILL RD	127	85	100	PL	120	127	DW	9/30/1997
174	AA720166		433 AYRLAWN DR	164	95	100	PL	115	120	DW	9/3/1971
175	AA816776		1363 DICUS MILL RD	139	60	100	PL	132	139	DW	7/18/1986
176	AA816925		1365 DICUS MILL RD	138	90	101	PL	129	138	DW	9/17/1986
177	AA889665	179	1722 SADDLE DR	150	80	95	PL	143	150	DW	6/11/1993
178	AA922044	180	1730 SADDLE DR	160	85	120	PL	155	165	DW	10/12/1994
179	AA943283	356	1724 SADDLE DR	134	90	110	PL	127	134	DW	11/9/1998
180	AA940931	78	1718 SADDLE DR	140	100	120	PL	133	140	DW	11/15/1996
181	AA731171		452 VALERY CT	156	80	85	PL	151	156	DW	6/10/1973
182	AA889881	128	1728 SADDLE DR	167	115	130	PL	160	167	DW	7/19/1993
183	AA930354	1057	1726 SADDLE DR	160	107	125	PL	153	160	DW	2/22/1995
184	AA815581		1361 DICUS MILL RD	140	90	110	PL	135	140	DW	11/26/1985
185	AA941383	204	1721 SADDLE DR	176	120	130	PL	171	176	DW	4/25/1997
186	AA743713		370 ANNA CT	186	150	180	PL	181	186	DW	9/29/1981
187	AA743997		1369 DICUS MILL RD	155	60	75	PL	150	155	DW	3/4/1982
188	AA811755		370 CARRACA CT	195	150	160	PL	190	195	DW	6/24/1983
189	AA814455		206 ARABIAN CT	130	75	95	PL	123	130	DW	3/22/1985
190	AA816139	1561	216 PERCHERON CT	183	104	125	PL	176	183	DW	3/30/1986
191	AA817333		1688 PREAKNESS DR	182	118	135	PL	175	182	DW	10/17/1986
192	AA817664		215 PERCHERON CT	168	90	110	PL	148	168	DW	12/10/1986
193	AA818568		1312 WINNERS CIR	150	105	125	PL	143	150	DW	5/26/1987
194	AA819133		356 MONTECRISTO CT	204	112	130	PL	193	204	DW	12/7/1987
195	AA819856		134 GAMBRILLS RD	138	40	80	PL	108	138	DW	12/14/1987
196	AA955897		1336 SLEEPY HOLLOW RD	298	52	63	PL	288	298	DW	10/12/2011
197	AA920975	180	1712 SADDLE DR	150	-	-	-	-	-	DW	7/22/1994
198	AA731707		459 VALERY CT	165	80	90	PL	160	165	DW	9/5/1975
199	AA944481	469	201 SERENITY POINT LN	167	120	150	PL	160	167	DW	10/7/1999
200	AA947827		85 GAMBRILLS RD	265	58	66	PL	250	265	DW	4/17/2002

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201	AA951795		105 GAMBRILLS RD	310	62	72	PL	290	310	DW	5/1/2006
202	AA819641		354 MONTECRISTO CT	207	120	150	PL	199	207	DW	11/23/1987
203	AA881308	111	99 GAMBRILLS RD	129	68	75	PL	124	129	DW	10/26/1988
204	AA955615		453 VALERY CT	345	120	144	PL	335	345	DW	1/6/2011
205	AA940819	388	1726 SADDLE DR	160	105	120	PL	153	160	DW	8/30/1996
206	AA816447		206 ARABIAN CT	146	76	95	PL	139	146	DW	5/28/1986
207	AA920976	116	1712 SADDLE DR	150	-	-	-	-	-	DW	7/22/1994
208	AA731706		453 VALERY CT	162	82	84	PL	157	162	DW	9/3/1973
209	AA920977	116	1712 SADDLE DR	150	-	-	-	-	-	DW	7/22/1994
210	AA920978	116	1712 SADDLE DR	150	-	-	-	-	-	DW	9/22/1994
211	AA920979	31	1712 SADDLE DR	150	-	-	-	-	-	DW	7/22/1994
212	AA949217		8404 TERRY LEE WAY	400	200	260	PL	390	400	DW	9/4/2003
213	AA741273		261 CONSTANT AVE	177	61	75	PL	170	177	DW	11/16/1979
214	AA921479	377	122 GAMBRILLS RD	180	60	80	PL	175	180	DW	6/17/1994
215	AA947688		84 GAMBRILLS RD	258	51	57	PL	243	258	DW	4/1/2002
216	AA951342		325 CONSTANT AVE	328	110	136	PL	318	328	DW	8/15/2005
217	AA946836		1324 SLEEPY HOLLOW RD	252	60	70	PL	247	252	DW	8/21/2001
218	AA949218		8402 TERRY LEE WAY	305	80	200	PL	295	305	DW	7/9/2003
219	AA945854		465 VALERY CT	171	110	120	PL	166	171	DW	11/13/2000
220	AA130070		115 GAMBRILLS RD	-	-	-	-	-	-	-	-
221	AA150486		1375 DICUS MILL RD	-	-	-	-	-	-	-	-
222	AA160011		1373 DICUS MILL RD	-	-	-	-	-	-	-	-
223	AA160379		433 AYRLAWN DR	-	-	-	-	-	-	-	-
224	AA160424		1363 DICUS MILL RD	-	-	-	-	-	-	-	-
225	AA160425		1371 DICUS MILL RD	-	-	-	-	-	-	-	-
226	AA180299		1365 DICUS MILL RD	-	-	-	-	-	-	-	-
227	AA180300		1722 SADDLE DR	-	-	-	-	-	-	-	-
228	AA200009		1730 SADDLE DR	-	-	-	-	-	-	-	-
229	AA200032		1724 SADDLE DR	-	-	-	-	-	-	-	-
230	AA200034		1718 SADDLE DR	-	-	-	-	-	-	-	-
231	AA200113		452 VALERY CT	-	-	-	-	-	-	-	-
232	AA200276		1728 SADDLE DR	-	-	-	-	-	-	-	-
233	AA200277		1726 SADDLE DR	-	-	-	-	-	-	-	-
234	AA200729		157 GAMBRILLS RD	-	-	-	-	-	-	-	-
235	AA200888		1361 DICUS MILL RD	-	-	-	-	-	-	-	-
236	AA200893		1721 SADDLE DR	-	-	-	-	-	-	-	-
237	AA210047		370 ANNA CT	-	-	-	-	-	-	-	-
238	AA230168		1369 DICUS MILL RD	-	-	-	-	-	-	-	-
239	AA710420		1327 ASHBURTON DR	-	-	-	-	-	-	-	-
240	AA710871		1325 ASHBURTON DR	-	-	-	-	-	-	-	-

Table 2a. Landfill Area Production Well Data With Known Locations
Phase II Report: Site Geologic Study
Proposed Millersville Landfill and Resource Recovery Facility Vertical Expansion
Severn, Anne Arundel County, Maryland

Well Identification Number	Permit Number	Parcel Number	Location/ Road	Total Depth (feet)	Static Water Level (feet)	Water Level During Pumping (feet)	Screen Type	Screened Interval		Usage Code	Completion Date
								Top (feet)	Bottom (feet)		
241	AA741179		8550 FALES LN	-	-	-	-	-	-	-	-
242	AA810565		369 ANNA CT	-	-	-	-	-	-	-	-
243	AA880340		362 MONTECRISTO CT	-	-	-	-	-	-	-	-
244	AA880341		363 MONTECRISTO CT	-	-	-	-	-	-	-	-
245	AA880373		431 AYRLAWN DR	-	-	-	-	-	-	-	-
246	AA881200		1441 DICUS MILL RD	-	-	-	-	-	-	-	-
247	AA881805		1518 SAPPINGTON DR	-	-	-	-	-	-	-	-
248	AA920974		1712 SADDLE DR	-	-	-	-	-	-	-	-
249	AA921480		267 BURNS CROSSING RD	-	-	-	-	-	-	-	-
250	AA943521		1504 SAPPINGTON DR	-	-	-	-	-	-	-	-
251	AA955215		1304 ALTA VISTA DR	-	-	-	-	-	-	-	-
252	AA955607		453 VALERY CT	-	-	-	-	-	-	-	-
253	AA955645		1329 ASHBURTON DR	-	-	-	-	-	-	-	-
254	AA955810		401 VERONA CT	-	-	-	-	-	-	-	-
255	AA955955		404 COUNT GENERALS WOODS	-	-	-	-	-	-	-	-
256	AA955956		403 COUNT GENERALS WOODS	-	-	-	-	-	-	-	-
257	AA955957		402 COUNT GENERALS WOODS	-	-	-	-	-	-	-	-
258	AA710867		1321 ASHBURTON DR	-	-	-	-	-	-	-	-
259	AA742254		1375 DICUS MILL RD	-	-	-	-	-	-	-	-
260	AA740793		1371 DICUS MILL RD	-	-	-	-	-	-	-	-
261	AA735537		157 GAMBRILLS RD	-	-	-	-	-	-	-	-
262	AA737936		1510 SAPPINGTON DR	-	-	-	-	-	-	-	-
263	AA734379		422 BURNS CROSSING RD	-	-	-	-	-	-	-	-
264	AA950585		319 CONSTANT AVE	-	-	-	-	-	-	-	-
265	AA943545		1504 SAPPINGTON DR	-	-	-	-	-	-	-	-
266	AA710138		1329 ASHBURTON DR	-	-	-	-	-	-	-	-
267	AA921495		1712 SADDLE DR	-	-	-	-	-	-	-	-

Notes:

Source: Maryland Department of the Environment (MDE) Well Permits FOIA Request received July 26, 2024, and Anne Arundel County Well Seach Request received August 21, 2024. Refer to Figure 8 for well locations based on coordinates provided by MDE and Anne Arundel County.

Well locations are plotted on a map in Figure 8, labeled with the well identification number.

-: Well construction data not available

PL: Plastic

ST: Steel

DW: Usage code for residential or public

C: Usage code for closed loop geothermal well

Table 2b. Landfill Area Production Well Data Without Known Locations
Phase II Report: Site Geologic Study
Proposed Millersville Landfill and Resource Recovery Facility Vertical Expansion
Severn, Anne Arundel County, Maryland

Permit Number	Parcel Number	Location/ Road	Total Depth (feet)	Static Water Level (feet)	Water Level During Pumping (feet)	Screen Type	Screened Interval		Usage Code	Completion Date
							Top (feet)	Bottom (feet)		
AA710702		RT 175	200	101	125	PL	190	200	DW	3/25/1971
AA710921		CONSTANT AVE	90	60	65	PL	85	90	DW	6/28/1971
AA720467		DICUS MILL RD	140	80	91	PL	133	140	DW	12/1/1971
AA720468		DICUS MILL RD	-	-	-	-	-	-	DW	-
AA720469		DICUS MILL RD	140	50	80	PL	133	140	DW	12/18/1971
AA720470		DICUS MILL RD	140	20	60	PL	133	140	DW	12/15/1971
AA720471		DICUS MILL	105	50	60	PL	98	105	DW	11/13/1971
AA720472		DICUS MILL RD	120	50	65	PL	113	120	DW	11/9/1971
AA720781		RT 175	72	20	35	PL	65	72	DW	1/20/1972
AA721160		DICUS MILL RD	190	110	120	PL	183	190	DW	5/16/1972
AA721333		DICUS MILL	170	95	99	PL	163	170	DW	7/20/1972
AA730029		DICUSMILL RD	137	84	137	PL	127	137	DW	7/7/1972
AA730099		CONSTANT AVE	74	40	45	PL	69	74	DW	7/26/1972
AA730298		SLEEPY HOLLOW RD	135	73	83	PL	130	135	DW	26562
AA730363		GAMBRILL RD	-	-	-	-	-	-	DW	-
AA731276		SLEEPY HOLLOW RD	84	50	80	PL	79	84	DW	26795
AA731632		RT 3 N&S LANES	196	115	133	PL	189	196	DW	26863
AA732646		DICUS MILL RD	152	130	148	PL	148	152	DW	27090
AA733544		DICUS MILL RD	-	-	-	-	-	-	DW	-
AA733610		GAMBRILLS RD	68	48	55	PL	63	68	DW	27314
AA733863		BURNS CROSSING RD	260	127	147	ST	221	226	I	27430
AA734199		CONSTANT AVE	96	42	54	PL	91	95	DW	5/12/1975
AA734745		DICUS MILL	100	60	80	PL	93	100	DW	7/10/1975
AA734941		SLEEPY HOLLOW	110	61	75	PL	103	110	DW	8/19/1975
AA735646		DICUS MILL RD	205	82	205	PL	195	205	DW	4/1/1976
AA736376		RT 3 SOUTH	110	30	45	PL	105	110	DW	1/18/1977
AA736662		DICUS MILL RD	165	85	95	PL	160	165	F	11/23/1976
AA737576		DICUS MILL RD	87	65	70	PL	82	87	DW	9/16/1977
AA737955		ASHBURTON CT	-	-	-	-	-	-	DW	-
AA738147		ASHBURTON RD	330	104	114	ST	320	330	DW	10/20/1977
AA739176		GAMBRILLS RD	245	50	55	PL	240	245	DW	6/2/1978
AA739511		SLEEPY HOLLOW RD	105	60	85	PL	98	105	DW	10/2/1978
AA740460		DICUS MILL RD	86	77	82	PL	81	86	DW	4/17/1979
AA740982		DICUS MILL RD	172	90	110	PL	122	172	DW	9/20/1979
AA741022		GAMBRILLS RD	79	55	60	PL	74	79	DW	8/27/1979
AA741394		GAMBRILLS	90	50	60	PL	85	90	DW	11/5/1979
AA741442		SLEEPY HOLLOW	125	70	90	PL	118	125	DW	29203
AA741612		DICUS MILL RD	122	30	50	PL	115	122	DW	1/16/1980
AA741897		DICUS MILL RD	86	60	65	PL	81	86	DW	5/5/1980
AA741971		SLEEPY HOLLOW	130	80	100	PL	123	130	DW	6/2/1980

Table 2b. Landfill Area Production Well Data Without Known Locations
Phase II Report: Site Geologic Study
Proposed Millersville Landfill and Resource Recovery Facility Vertical Expansion
Severn, Anne Arundel County, Maryland

Permit Number	Parcel Number	Location/ Road	Total Depth (feet)	Static Water Level (feet)	Water Level During Pumping (feet)	Screen Type	Screened Interval		Usage Code	Completion Date
							Top (feet)	Bottom (feet)		
AA742296		CONSTANT AVE	160	140	150	PL	155	160	DW	9/25/1980
AA742638		GAMBRILLS RD	-	-	-	-	-	-	DW	-
AA743967		DICUS MILL	155	70	90	PL	148	155	DW	12/9/1981
AA810635		CORNER OF DICUS MILL	61	44	55	PL	56	61	DW	7/27/1982
AA810637		300 SW GAMBRILLS RD	150	75	95	PL	143	150	DW	7/27/1982
AA810845		BURNS CROSSING RD	50	37	40	PL	45	50	DW	9/10/1982
AA811161		GAMBRILLS RD	100	75	80	PL	95	100	DW	12/7/1982
AA811661		DICUSS MILL RD	175	90	130	PL	169	175	DW	4/1/1983
AA811718		ARABIAN CT	150	86	95	PL	143	150	DW	6/16/1983
AA811971		SLEEPY HOLLOW RD	-	-	-	-	-	-	DW	-
AA812014		ARABIAN CT	110	50	70	PL	103	110	DW	9/15/1983
AA812049		DICUS MILL RD	40	14	30	PL	33	40	DW	8/13/1983
AA813266		RT 32	220	160	170	PL	215	220	DW	6/13/1984
AA813590		BURNS CROSSING RD	-	-	-	-	-	-	DW	-
AA813651		BURNS CROSSING	190	140	147	PL	170	190	DW	9/6/1984
AA816236		DICUS MILL RD	160	100	110	PL	155	160	DW	4/19/1986
AA817596		PREAKNESS DR	195	100	110	PL	188	195	DW	12/30/1986
AA818073		BURNS CROSSING RD	172	89	105	PL	167	172	DW	3/12/1987
AA819578		1249 DICUS MILL RD	60	40	45	PL	55	60	DW	10/27/1987
AA819590		PREAKNESS DR	155	50	70	PL	145	155	DW	11/4/1987
AA880525		SLEEPY HOLLOW RD	130	60	80	PL	123	130	DW	7/20/1988
AA880934		WINNERS CIR	145	65	90	PL	138	145	F	8/30/1988
AA887637		ASHBURTON DR	138	60	80	PL	131	138	DW	3/23/1992
AA930804		GAMBRILLS RD	178	67	62	PL	163	178	DW	7/18/1995
AA930805		GAMBRILLS ROAD	198	65	67	PL	183	198	DW	34885
AA930806		GAMBRILLS ROAD	197	61	67	PL	182	197	DW	34872
-	565	-	-	-	-	-	-	-	-	-

Notes:

Source: Maryland Department of the Environment (MDE) Well Permits FOIA Request received July 26, 2024.

DW: Usage code for residential or public

F: Usage code for farming (livestock watering & agricultural irrigation)

I: Usage code for industrial, commercial, and dewatering

Table 3. Monthly Groundwater Elevations
Phase II Report: Site Geologic Study
Proposed Millersville Landfill and Resource Recovery Facility Vertical Expansion
Severn, Anne Arundel County, Maryland

Well ID	Reference Elevation (ft-NGVD29)	Top Screen Elevation (ft-NGVD29)	Bottom Screen Elevation (ft-NGVD29)	Easting [1] (ft)	Northing [1] (ft)	Groundwater Elevation (ft-NGVD29)																							
						Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23
MW-P417	112.75	57.75	47.75	897890.57	460934.91	64.20	63.97	64.14	64.49	64.03	64.33	64.34	63.93	63.88	63.64	63.54	63.35	63.12	63.14	63.05	63.08	62.90	63.05	63.04	63.00	62.78	62.33	62.60	62.14
MW-P440	115.25	60.25	50.25	897896.27	461193.00	63.69	63.52	63.63	63.44	63.85	63.49	64.00	63.92	63.78	63.42	63.30	63.18	63.07	62.87	62.83	61.83	62.61	62.39	63.02	62.78	62.69	62.61	62.34	62.13
MW-P9	112.32	42.32	32.32	897836.64	461771.37	60.44	60.42	60.94	61.06	61.58	60.69	60.60	60.48	60.16	60.14	60.10	57.90	59.73	59.84	59.55	59.81	58.73	59.39	58.61	59.44	59.30	59.07	59.27	58.99
RW-P441	117.59	50.59	45.59	898166.45	461475.62	61.53	61.14	61.42	61.87	61.01	61.29	61.23	61.26	61.12	61.03	61.39	60.96	61.00	60.89	61.10	NM	61.01	NM	61.39	61.37	61.85	57.11	57.20	57.00
RW-P584	118.56	48.56	43.56	898430.07	460826.39	57.97	57.79	58.06	57.82	58.65	57.95	57.93	57.95	57.55	57.34	57.21	57.09	56.90	57.18	56.86	56.93	56.61	57.08	56.49	57.17	56.95	56.66	56.41	56.09
TW-1	193.44	36.44	21.44	893924.41	455902.14	89.41	89.50	89.20	89.44	89.68	89.10	89.38	89.00	88.85	89.43	88.28	88.06	88.10	88.13	87.80	88.38	88.02	87.74	87.61	88.03	87.02	87.31	86.57	86.59
TW-10A	194.6	84.6	74.6	892554.01	457191.64	103.89	103.80	103.24	103.16	103.45	103.13	103.28	103.29	102.60	102.74	103.86	100.16	102.39	102.03	102.10	101.71	102.37	102.31	101.40	101.31	101.21	100.97	101.58	101.43
TW-11A	138.59	121.59	106.59	893500.23	458947.27	97.65	97.63	95.38	113.48	98.09	98.31	95.78	98.11	98.18	97.81	97.52	97.47	97.73	97.26	97.57	97.23	112.83	112.13	112.53	112.38	112.61	112.26	112.05	112.47
TW-12	142.14	48.14	33.14	895493.87	460283.41	82.01	84.88	83.97	84.12	84.04	84.25	84.20	84.28	83.73	83.60	83.58	83.83	83.31	83.88	82.98	83.27	83.34	83.23	82.95	83.37	82.54	82.38	82.13	82.05
TW-13	117.54	54.54	39.54	896640.97	460944.06	73.68	73.78	72.70	73.06	72.89	73.18	72.92	72.92	72.66	72.84	72.95	72.34	72.33	72.96	71.95	72.50	72.07	71.99	71.85	71.53	71.39	71.37	71.15	71.12
TW-14	123.19	37.19	22.19	897315.39	459533.90	74.19	74.03	73.30	73.43	73.77	73.87	73.80	73.76	73.62	73.51	72.85	73.11	72.60	72.68	72.58	72.74	72.62	72.39	72.94	72.84	72.66	72.14	72.16	72.11
TW-15B	116.42	64.42	49.42	897406.99	461467.51	67.72	67.65	67.67	66.40	67.42	67.19	67.06	67.76	68.11	65.84	67.93	67.75	67.62	67.58	67.81	67.56	65.21	65.42	67.97	68.09	67.93	67.89	64.65	67.87
TW-16	114.95	61.95	51.95	897298.75	462186.36	62.93	62.96	62.85	63.30	62.62	62.76	62.71	61.95	62.11	62.08	61.35	61.79	61.11	60.91	52.37	52.01	62.28	62.17	50.07	49.89	61.13	61.02	61.43	60.90
TW-17	132.1	82.1	67.1	896200.22	462124.84	76.02	76.20	76.36	75.85	75.77	75.08	75.59	75.58	75.15	75.19	74.68	74.80	74.61	74.47	74.42	74.28	74.48	74.53	74.24	74.15	74.38	73.79	73.86	73.36
TW-18	128.28	96.28	81.28	894678.01	459267.76	92.70	92.23	92.02	93.17	93.48	93.52	93.17	92.64	92.25	92.20	91.98	91.36	91.17	90.62	90.99	91.15	91.38	92.07	91.29	91.03	91.28	90.95	91.11	89.52
TW-19	119.1	92.1	77.1	894792.41	458551.90	88.73	88.62	88.71	92.69	89.53	90.06	90.02	90.24	90.81	91.41	91.42	90.19	90.34	90.71	90.01	90.16	91.17	90.35	89.83	89.68	89.53	89.68	89.62	89.78
TW-2A	197.78	37.78	22.78	895906.67	456720.07	85.23	85.23	84.95	84.86	85.24	84.87	85.13	84.90	84.75	84.73	84.44	84.07	84.00	83.89	84.00	84.00	84.22	83.76	83.68	83.53	83.60	83.11	83.41	82.78
TW-20R	124.95	124.95	124.95	894638.35	458097.67	97.72	97.50	97.60	98.02	97.90	97.88	97.82	97.70	97.32	97.28	97.23	97.03	96.54	96.78	96.61	97.00	96.60	95.83	96.39	96.26	95.97	95.45	95.36	95.50
TW-21A	159.77	109.77	89.77	892836.86	459074.00	114.52	114.64	114.90	114.82	115.47	115.10	116.87	116.35	116.26	116.72	113.78	113.39	112.65	111.22	112.67	112.46	113.13	113.07	113.60	113.72	112.96	112.60	111.75	111.89
TW-22B	189.7	122.7	112.7	894647.90	460929.22	120.22	119.26	119.45	117.04	120.26	119.80	119.47	120.14	119.46	116.78	120.33	118.32	120.18	120.41	120.16	119.79	116.31	116.17	120.41	120.50	121.64	121.41	116.08	120.16
TW-24	109.21	47.21	37.21	897129.54	460730.74	71.54	72.18	70.76	71.28	70.95	71.35	71.42	70.90	70.45	70.85	70.22	70.70	9.87 [3]	9.72 [3]	69.79	69.90	70.08	69.77	69.93	69.85	69.74	69.68	69.31	69.25
TW-25	117.55	36.05	26.05	897316.37	459104.25	74.51	75.79	72.56	75.38	75.58	75.51	75.60	75.43	75.31	75.27	74.68	74.91	74.30	74.16	71.53	71.68	74.41	74.55	74.46	74.28	74.40	74.22	66.58	71.03
TW-25A	117	68	58	897332.86	458985.60	75.81	75.61	74.89	75.47	75.39	75.32	75.36	75.10	74.99	75.38	74.31	74.96	84.11	84.06	74.12	73.94	74.54	74.34	74.26	73.97	74.09	74.35	74.44	73.52
TW-29	143.55	41.55	21.55	893668.96	457229.49	101.18	101.23	100.66	100.60	100.94	100.77	100.93	100.65	99.97	99.62	99.84	100.14	99.43	98.98	99.32	98.98	99.98	99.62	99.02	98.90	98.53	98.68	98.06	98.21
TW-32	190.09	80.09	70.09	892620.75	458243.56	118.06	118.31	117.70	117.63	117.90	117.78	117.71	117.58	116.96	117.13	116.93	116.70	116.85	116.68	116.45	116.38	115.92	116.12	115.68	115.71	115.77	115.33	115.95	115.83
TW-3	180.24	37.24	22.24	896711.90	456498.30	82.06	82.12	82.04	82.11	82.01	81.75	81.97	81.92	81.74	81.91	81.63	81.13	81.27	81.23	81.23	81.30	81.20	81.14	80.91	80.92	80.53	80.89	80.42	80.79
TW-30	220.83	55.83	35.83	893117.41	456402.61	98.55	98.56	98.25	98.39	98.62	98.53	98.03	97.69	97.54	97.28	97.13	97.23	96.83	97.53	96.74	96.62	97.19	96.31	96.19	95.84	95.69	95.41	95.50	95.27
TW-4	112.47	33.47	18.47	896993.36	458100.84	79.19	80.98	80.94	81.04	78.51	79.04	78.31	80.84	80.84	80.67	78.11	77.56	78.86	78.94	80.10	80.29	80.21	80.07	79.95	80.02	79.64	79.52	79.56	82.60
TW-5	104.67	26.67	11.67	897218.08	458576.42	47.67	76.49	75.94	76.82	76.70	74.81	74.71	80.35	75.98	76.27	75.55	75.83	75.39	75.37	75.26	75.18	75.70	75.83	75.40	75.46	42.74 [3]	75.34	74.66	74.41
TW-6	107.44	60.44	45.44	897384.66	460264.19	71.50	71.40	70.68	71.16	70.97	70.93	70.84	70.93	71.42	70.72	70.28	71.30	69.91	69.75	69.78	69.47	69.70	69.81	69.90	69.87	69.98	69.56	69.63	69.22
TW-7A	127.68	73.18	53.18	895292.11	461513.43	85.43	86.00	85.92	84.81	84.60	84.19	84.30	85.10	85.70	84.61	83.71	84.79	83.49	83.69	83.23	83.50	83.39	83.35	83.08	82.95	83.14	83.05	82.78	82.72
TW-8	139.59	50.59	35.59	894404.87	460615.73	91.11	91.06	91.30	90.35	90.62	90.15	90.94	90.71	90.71	90.06	89.78	90.70	89.46	89.65	89.18	89.46	89.16	89.23	89.27	89.38	89.14	88.75	88.34	88.23
TW-9C	133.93	72.93	62.93	893158.65	459687.87	99.44	99.33	99.96	98.56	99.05	98.59	98.48	99.36	99.59	98.53	98.31	98.11	97.99	97.81	97.47	97.24	97.67	97.49	97.58	97.20	97.04	96.71	96.58	96.17

1. Coordinate data in reference to the Maryland State Plane Datum.
2. Groundwater elevations were measured on a monthly basis between January 2022 and December 2023.
3. Data point is inconsistent with previous groundwater elevation is suspected to be erroneous.
ft: feet
ft-NGVD29: National Geodetic Vertical Datum of 1929
NM: not measured

Table 4. Summary of Volatile Organic Compounds in Groundwater
Phase II Report: Site Geologic Study
Proposed Millersville Landfill and Resource Recovery Facility Vertical Expansion
Severn, Anne Arundel County, Maryland

Analyte		1,1-Dichloroethane (µg/L)	1,1-Dichloroethene (µg/L)	1,1,1,2-Tetrachloroethane (µg/L)	1,1,2,2-Tetrachloroethane (µg/L)	1,1,1-Trichloroethane (µg/L)	1,1,2-Trichloroethane (µg/L)	1,2-Dibromo-3-chloropropane (µg/L)	1,2-Dibromoethane (EDB) (µg/L)	1,2-Dichlorobenzene (µg/L)	1,2-Dichloroethane (µg/L)	1,2-Dichloropropane (µg/L)	1,2,3-Trichloropropane (µg/L)
Groundwater Protection Standard		**2.8**	**7**	**600**	**0.076**	**200**	**5**	**0.2**	**0.05**	**600**	**5**	**5**	**100**
Location	**Date**												
TW-01	4/20/2021	**1.75**	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	2.5 U
	10/6/2021	**2.2**	1 U	1 U	1 U	1 U	1 U	0.041 UCH	0.041 U	1 U	1 U	1 U	1 U
	5/4/2022	**1.7**	1 U	1 U	1 U	1 U	1 U	0.041 UCH	0.041 UCH	1 U	1 U	1 U	1 U
	11/2/2022	**1.9**	1 U	1 U	1 U	1 U	1 U	0.041 U	0.041 U	1 U	1 U	1 U	1 U
	5/11/2023	**1.5**	1 U	1 U	1 U	1 U	1 U	0.041 U	0.041 U	1 U	1 U	1 U	1 U
	11/15/2023	**1.6**	1 U	1 U	1 U	1 U	1 U	0.041 UP2L2	0.041 UP2L2	1 U	1 U	1 U	1 U
TW-02	4/27/2021	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	2.5 UL0
	10/6/2021	1 U	1 U	1 U	1 U	1 U	1 U	0.04 UCH	0.04 U	1 U	1 U	1 U	1 U
	5/3/2022	1 U	1 U	1 U	1 U	1 U	1 U	0.041 U	0.041 UCH	1 U	1 U	1 U	1 U
	11/1/2022	1 U	1 U	1 U	1 U	1 U	1 U	0.041 U	0.041 U	1 U	1 U	1 U	1 U
	5/11/2023	1 U	1 U	1 U	1 U	1 U	1 U	0.041 U	0.041 U	1 U	1 U	1 U	1 U
	11/9/2023	1 U	1 U	1 U	1 U	1 U	1 U	0.04 U	0.04 U	1 U	1 U	1 U	1 U
TW-02A	4/27/2021	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	2.5 UL0
	10/6/2021	1 U	1 U	1 U	1 U	1 U	1 U	0.04 UCH	0.04 U	1 U	1 U	1 U	1 U
	5/3/2022	1 U	1 U	1 U	1 U	1 U	1 U	0.041 U	0.041 UCH	1 U	1 U	1 U	1 U
	11/1/2022	1 U	1 U	1 U	1 U	1 U	1 U	0.041 U	0.041 U	1 U	1 U	1 U	1 U
	5/11/2023	1 U	1 U	1 U	1 U	1 U	1 U	0.042 U	0.042 U	1 U	1 U	1 U	1 U
	11/9/2023	1 U	1 U	1 U	1 U	1 U	1 U	0.04 U	0.04 U	1 U	1 U	1 U	1 U
TW-03	4/27/2021	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	2.5 UL0
	10/6/2021	1 U	1 U	1 U	1 U	1 U	1 U	0.04 UCH	0.04 U	1 U	1 U	1 U	1 U
	5/3/2022	1 U	1 U	1 U	1 U	1 U	1 U	0.041 U	0.041 UCH	1 U	1 U	1 U	1 U
	11/1/2022	1 U	1 U	1 U	1 U	1 U	1 U	0.04 U	0.04 U	1 U	1 U	1 U	1 U
	5/11/2023	1 U	1 U	1 U	1 U	1 U	1 U	0.04 U	0.04 U	1 U	1 U	1 U	1 U
	11/20/2023	1 U	1 U	1 U	1 U	1 U	1 U	0.041 U	0.041 U	1 U	1 U	1 U	1 U
TW-03A	4/27/2021	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	2.5 UL0
	10/6/2021	1 U	1 U	1 U	1 U	1 U	1 U	0.04 UCH	0.04 U	1 U	1 U	1 U	1 U
	5/3/2022	1 U	1 U	1 U	1 U	1 U	1 U	0.041 U	0.041 UCH	1 U	1 U	1 U	1 U
	11/1/2022	1 U	1 U	1 U	1 U	1 U	1 U	0.041 U	0.041 U	1 U	1 U	1 U	1 U
	5/11/2023	1 U	1 U	1 U	1 U	1 U	1 U	0.04 U	0.04 U	1 U	1 U	1 U	1 U
	11/9/2023	1 U	1 U	1 U	1 U	1 U	1 U	0.041 U	0.041 U	1 U	1 U	1 U	1 U
TW-04	4/27/2021	**2.35**	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	2.5 UL0
	10/6/2021	**3**	1 U	1 U	1 U	1 U	1 U	0.04 UCH	0.04 U	1 U	1 U	1 U	1 U
	4/28/2022	**2.3**	1 U	1 U	1 U	1 U	1 U	0.041 UCH	0.041 UCH	1 U	1 U	1 U	1 U
	11/2/2022	**2.8**	1 U	1 U	1 U	1 U	1 U	0.04 U	0.04 U	1 U	1 U	1 U	1 U
	5/10/2023	**2.7**	1 U	1 U	1 U	1 U	1 U	0.04 U	0.04 U	1 U	1 U	1 U	1 U
	11/9/2023	**3**	1 U	1 U	1 U	1 U	1 U	0.04 U	0.04 U	1 U	1 U	1 U	1 U
TW-05	4/15/2021	**1.58**	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	2.5 U
	10/5/2021	**2.6**	1 U	1 U	1 U	1 U	1 U	0.04 UCH	0.04 U	1 U	1 U	1 U	1 U
	4/19/2022	**2.5**	1 U	1 U	1 U	1 U	1 U	0.041 UCHH2	0.041 UCHH2	1 U	1 U	1 U	1 U
	10/18/2022	**2.2**	1 U	1 U	1 U	1 U	1 U	0.041 UL1	0.041 U	1 U	1 U	1 U	1 U
	4/27/2023	**1.7**	1 U	1 U	1 U	1 U	1 U	0.041 UCH	0.041 UCH	1 U	1 U	1 U	1 U
	10/30/2023	**2.2**	1 U	1 U	1 U	1 U	1 U	0.041 UCH	0.041 U	1 U	1 U	1 U	1 U

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Severn, Anne Arundel County, Maryland

Analyte		1,1-Dichloroethane (µg/L)	1,1-Dichloroethene (µg/L)	1,1,1,2-Tetrachloroethane (µg/L)	1,1,2,2-Tetrachloroethane (µg/L)	1,1,1-Trichloroethane (µg/L)	1,1,2-Trichloroethane (µg/L)	1,2-Dibromo-3-chloropropane (µg/L)	1,2-Dibromoethane (EDB) (µg/L)	1,2-Dichlorobenzene (µg/L)	1,2-Dichloroethane (µg/L)	1,2-Dichloropropane (µg/L)	1,2,3-Trichloropropane (µg/L)
Groundwater Protection Standard		**2.8**	**7**	**600**	**0.076**	**200**	**5**	**0.2**	**0.05**	**600**	**5**	**5**	**100**
Location	**Date**												
TW-10A	4/20/2021	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	2.5 U
	10/5/2021	1 U	1 U	1 U	1 U	1 U	1 U	0.04 U	0.04 U	1 U	1 U	1 U	1 U
	4/21/2022	1 U	1 U	1 U	1 U	1 U	1 U	0.04 UCH	0.04 UCH	1 U	1 U	1 U	1 U
	10/20/2022	1 U	1 U	1 U	1 U	1 U	1 U	0.041 U	0.041 U	1 U	1 U	1 U	1 U
	5/3/2023	1 U	1 U		1 U	1 U	1 U	0.04 U	0.04 U	1 U	1 U	1 U	1 U
	10/31/2023	1 U	1 U	1 U	1 U	1 U	1 U	0.041 UH22e5c	0.041 UH22e5c	1 U	1 U	1 U	1 U
TW-19	4/21/2021	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	2.5 U
	10/7/2021	**2**	1 U	1 U	1 U	1 U	1 U	0.041 UCH	0.041 U	1 U	1 U	1 U	1 U
	4/26/2022	1 U	1 U	1 U	1 U	1 U	1 U	0.041 UCH	0.041 UCH	1 U	1 U	1 U	1 U
	10/25/2022	**0.8 J**	1 U	1 U	1 U	1 U	1 U	0.041 U	0.041 U	1 U	1 U	1 U	1 U
	5/9/2023	1 U	1 U	1 U	1 U	1 U	1 U	0.041 U	0.041 U	1 U	1 U	1 U	1 U
	11/2/2023	**0.8 J**	1 U	1 U	1 U	1 U	1 U	0.04 UH22c8c	0.04 UH22c8c	1 U	1 U	1 U	1 U
TW-20R	4/21/2021	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	2.5 U
	10/12/2021	1 U	1 U	1 U	1 U	1 U	1 U	0.041 U6c	0.041 U6c	1 U	1 U	1 U	1 U
	4/27/2022	1 U	1 U	1 U	1 U	1 U	1 U	0.04 UCH	0.04 UCH	1 U	1 U	1 U	1 U
	10/26/2022	1 U	1 U	1 U	1 U	1 U	1 U	0.04 UCH	0.04 UCH	1 U	1 U	1 U	1 U
	5/9/2023	1 U	1 U	1 U	1 U	1 U	1 U	0.041 U	0.041 U	1 U	1 U	1 U	1 U
	10/31/2023	1 U	1 U	1 U	1 U	1 U	1 U	0.041 UH22e5c	0.041 UH22e5c	1 U	1 U	1 U	1 U
TW-21A	4/26/2021	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	2.5 UL0
	4/27/2022	1 U	1 U	1 U	1 U	1 U	1 U	0.04 UCH	0.04 UCH	1 U	1 U	1 U	1 U
	5/9/2023	1 U	1 U	1 U	1 U	1 U	1 U	0.041 U	0.041 U	1 U	1 U	1 U	1 U
TW-26R	11/10/2021	1 U	1 U	1 U	1 U	1 U	1 U	0.041 U2c	0.041 U2c	1 U	1 U	1 U	1 U
	12/1/2022	1 U	1 U	1 U	1 U	1 U	1 U	0.041 UP2L2	0.041 UP2L2	1 U	1 U	1 U	1 U
	5/18/2023	1 U	1 U	1 U	1 U	1 U	1 U	0.04 U	0.04 U	1 U	1 U	1 U	1 U
	12/7/2023	1 U	1 U	1 U	1 U	1 U	1 U	0.04 U	0.04 U	1 U	1 U	1 U	1 U
TW-29	4/20/2021	**1.26**	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	2.5 U
	10/14/2021	**1.10**	1 U	1 U	1 U	1 U	1 U	0.041 U	0.041 U	1 U	1 U	1 U	1 U
	5/4/2022	**0.9 J**	1 U	1 U	1 U	1 U	1 U	0.041 UCH	0.041 UCH	1 U	1 U	1 U	1 U
	11/3/2022	**0.9 J**	1 U	1 U	1 U	1 U	1 U	0.041 U	0.041 U	1 U	1 U	1 U	1 U
	5/11/2023	**0.8 J**	1 U	1 U	1 U	1 U	1 U	0.041 U	0.041 U	1 U	1 U	1 U	1 U
	11/15/2023	**0.8 J**	1 U	1 U	1 U	1 U	1 U	0.04 UCH	0.04 U	1 U	1 U	1 U	1 U
TW-30	4/27/2021	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	2.5 UL0
	10/14/2021	1 U	1 U	1 U	1 U	1 U	1 U	0.041 U	0.041 U	1 U	1 U	1 U	1 U
	5/4/2022	1 U	1 U	1 U	1 U	1 U	1 U	0.041 UCH	0.041 UCH	1 U	1 U	1 U	1 U
	11/2/2022	1 U	1 U	1 U	1 U	1 U	1 U	0.041 U	0.041 U	1 U	1 U	1 U	1 U
	5/11/2023	1 U	1 U	1 U	1 U	1 U	1 U	0.041 U	0.041 U	1 U	1 U	1 U	1 U
	11/15/2023	1 U	1 U	1 U	1 U	1 U	1 U	0.041 UCH	0.041 U	1 U	1 U	1 U	1 U

Table 4. Summary of Volatile Organic Compounds in Groundwater
Phase II Report: Site Geologic Study
Proposed Millersville Landfill and Resource Recovery Facility Vertical Expansion
Severn, Anne Arundel County, Maryland

Analyte		1,4-Dichlorobenzene (µg/L)	2-Butanone (MEK) (µg/L)	2-Hexanone (µg/L)	4-Methyl-2-pentanone (MIBK) (µg/L)	Acetone (µg/L)	Acrylonitrile (µg/L)	Benzene (µg/L)	Bromochloro-methane (µg/L)	Bromodichloro-methane (µg/L)	Bromoform (µg/L)	Bromomethane (µg/L)	Carbon disulfide (µg/L)	Carbon tetrachloride (µg/L)
Groundwater Protection Standard		**75**	**560**	**100**	**630**	**1400**	**20**	**5**	**NS**	**80**	**80**	**0.75**	**81**	**5**
Location	**Date**													
TW-01	4/20/2021	1 U	10 U	10 U	10 U	50 U	10 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U
	10/6/2021	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/4/2022	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/2/2022	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/11/2023	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/15/2023	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-02	4/27/2021	1 U	10 U	10 U	10 U	50 UL0	10 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U
	10/6/2021	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/3/2022	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/1/2022	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/11/2023	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/9/2023	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-02A	4/27/2021	1 U	10 U	10 U	10 U	50 UL0	10 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U
	10/6/2021	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/3/2022	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/1/2022	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/11/2023	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/9/2023	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-03	4/27/2021	1 U	10 U	10 U	10 U	50 UL0	10 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U
	10/6/2021	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/3/2022	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/1/2022	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/11/2023	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/20/2023	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-03A	4/27/2021	1 U	10 U	10 U	10 U	50 UL0	10 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U
	10/6/2021	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/3/2022	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/1/2022	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/11/2023	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/9/2023	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-04	4/27/2021	1 U	10 U	10 U	10 U	50 UL0	10 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U
	10/6/2021	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	4/28/2022	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/2/2022	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/10/2023	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/9/2023	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-05	4/15/2021	1 U	10 UR1	10 U	10 U	50 U	10 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U
	10/5/2021	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	4/19/2022	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/18/2022	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	4/27/2023	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/30/2023	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

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Severn, Anne Arundel County, Maryland

Analyte		1,4-Dichlorobenzene (µg/L)	2-Butanone (MEK) (µg/L)	2-Hexanone (µg/L)	4-Methyl-2-pentanone (MIBK) (µg/L)	Acetone (µg/L)	Acrylonitrile (µg/L)	Benzene (µg/L)	Bromochloro-methane (µg/L)	Bromodichloro-methane (µg/L)	Bromoform (µg/L)	Bromomethane (µg/L)	Carbon disulfide (µg/L)	Carbon tetrachloride (µg/L)
Groundwater Protection Standard		**75**	**560**	**100**	**630**	**1400**	**20**	**5**	**NS**	**80**	**80**	**0.75**	**81**	**5**
Location	**Date**													
TW-10A	4/20/2021	1 U	10 U	10 U	10 U	50 U	10 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U
	10/5/2021	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	4/21/2022	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/20/2022	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/3/2023	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/31/2023	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-19	4/21/2021	1 U	10 U	10 U	10 U	50 U	10 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U
	10/7/2021	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	4/26/2022	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/25/2022	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/9/2023	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/2/2023	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-20R	4/21/2021	1 U	10 U	10 U	10 U	50 U	10 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U
	10/12/2021	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	4/27/2022	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/26/2022	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/9/2023	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/31/2023	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-21A	4/26/2021	1 U	10 U	10 U	10 U	50 UL0	10 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U
	4/27/2022	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/9/2023	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-26R	11/10/2021	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	12/1/2022	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/18/2023	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	12/7/2023	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-29	4/20/2021	1 U	10 U	10 U	10 U	50 U	10 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U
	10/14/2021	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/4/2022	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/3/2022	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/11/2023	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/15/2023	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-30	4/27/2021	1 U	10 U	10 U	10 U	50 UL0	10 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U
	10/14/2021	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/4/2022	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/2/2022	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/11/2023	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/15/2023	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 4. Summary of Volatile Organic Compounds in Groundwater
Phase II Report: Site Geologic Study
Proposed Millersville Landfill and Resource Recovery Facility Vertical Expansion
Severn, Anne Arundel County, Maryland

Analyte		Chlorobenzene (µg/L)	Chloroethane (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1,2-Dichloroethene (µg/L)	cis-1,3-Dichloropropene (µg/L)	Dibromochloro-methane (µg/L)	Dibromomethane (µg/L)	Dichlorodifluoro-methane (µg/L)	Dichlorofluoro-methane (µg/L)	Ethylbenzene (µg/L)	Iodomethane (µg/L)
Groundwater Protection Standard		**0.1**	**NS**	**80**	**19**	**70**	**NS**	**80**	**NS**	**4000**	**NS**	**700**	**NS**
Location	**Date**												
TW-01	4/20/2021	1 U	5 U	**0.167 J**	2.5 U	**0.349 J**	1 U	1 U	1 U	**5.48**	**2.94 J**	1 U	10 U
	10/6/2021	1 U	1 U	1 U	1 U	**0.5 J**	1 U	1 U	1 U	**13.3**	**3.5**	1 U	1 U
	5/4/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**10.2**	**2.4**	1 U	1 U
	11/2/2022	1 U	1 U	1 U	1 U	**0.5 J**	1 U	1 U	1 U	**8**	**2.8**	1 U	1 U
	5/11/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**5.4**	**2.6**	1 U	1 U
	11/15/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**6.9**	**2.3**	1 U	1 U
TW-02	4/27/2021	1 U	5 U	**0.164 J**	2.5 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	10 U
	10/6/2021	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/3/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/1/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/11/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/9/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-02A	4/27/2021	1 U	5 U	5 U	2.5 U	1 U	1 U	1 U	1 U	5 U	**0.344J**	1 U	10 U
	10/6/2021	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/3/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1J**	**0.6 J**	1 U	1 U
	11/1/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**0.9J**	**0.8 J**	1 U	1 U
	5/11/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**0.8J**	**1J**	1 U	1 U
	11/9/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.2**	**1.3**	1 U	1 U
TW-03	4/27/2021	1 U	5 U	**0.172 J**	2.5 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	10 U
	10/6/2021	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/3/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/1/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/11/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/20/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-03A	4/27/2021	1 U	5 U	5 U	2.5 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	10 U
	10/6/2021	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/3/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/1/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/11/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/9/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-04	4/27/2021	1 U	5 U	5 U	2.5 U	**0.4 J**	1 U	1 U	1 U	**1.36 J**	**4.77 J**	1 U	10 U
	10/6/2021	1 U	1 U	1 U	1 U	**0.5 J**	1 U	1 U	1 U	**2.6**	**4.4**	1 U	1 U
	4/28/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**2.3**	**3.5**	1 U	1 U
	11/2/2022	1 U	1 U	1 U	1 U	**0.6 J**	1 U	1 U	1 U	**2.1**	**4.5**	1 U	1 U
	5/10/2023	1 U	1 U	1 U	1 U	**0.6 J**	1 U	1 U	1 U	**1.5**	**3.1**	1 U	1 U
	11/9/2023	1 U	1 U	1 U	1 U	**0.6 J**	1 U	1 U	1 U	**1.9**	**4.7**	1 U	1 U
TW-05	4/15/2021	1 U	5 U	**0.113 J**	2.5 U	**0.544 J**	1 U	1 U	1 U	**1.25 J**	**4.18 J**	1 U	10 U
	10/5/2021	1 U	1 U	1 U	1 U	**1 J**	1 U	1 U	1 U	**4**	**4.1**	1 U	1 U
	4/19/2022	1 U	1 U	1 U	1 U	**1.1**	1 U	1 U	1 U	**3.4**	**3.7**	1 U	1 U
	10/18/2022	1 U	1 U	1 U	1 U	**1**	1 U	1 U	1 U	**2.8**	**3.1**	1 U	1 U
	4/27/2023	1 U	1 U	1 U	1 U	**0.7 J**	1 U	1 U	1 U	**1.6**	**2.4**	1 U	1 U
	10/30/2023	1 U	1 U	1 U	1 U	**0.8 J**	1 U	1 U	1 U	**2.1**	**3.1**	1 U	1 U

Table 4. Summary of Volatile Organic Compounds in Groundwater
Phase II Report: Site Geologic Study
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Severn, Anne Arundel County, Maryland

Analyte		Chlorobenzene (µg/L)	Chloroethane (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	cis-1,2-Dichloroethene (µg/L)	cis-1,3-Dichloropropene (µg/L)	Dibromochloro-methane (µg/L)	Dibromomethane (µg/L)	Dichlorodifluoro-methane (µg/L)	Dichlorofluoro-methane (µg/L)	Ethylbenzene (µg/L)	Iodomethane (µg/L)
Groundwater Protection Standard		**0.1**	**NS**	**80**	**19**	**70**	**NS**	**80**	**NS**	**4000**	**NS**	**700**	**NS**
Location	**Date**												
TW-10A	4/20/2021	1 U	5 U	**0.163 J**	2.5 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	10 U
	10/5/2021	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	4/21/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/20/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/3/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/31/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-19	4/21/2021	1 U	5 U	**0.755 J**	2.5 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	10 U
	10/7/2021	1 U	1 U	1 U	1 U	**0.6 J**	1 U	1 U	1 U	1 U	**1.5**	1 U	1 U
	4/26/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/25/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/9/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/2/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**0.6 J**	1 U	1 U
TW-20R	4/21/2021	1 U	5 U	5 U	2.5 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	10 U
	10/12/2021	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	4/27/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/26/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/9/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/31/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-21A	4/26/2021	1 U	5 U	**0.255 J**	2.5 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	10 U
	4/27/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/9/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-26R	11/10/2021	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	12/1/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/18/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	12/7/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-29	4/20/2021	1 U	5 U	**0.571 J**	2.5 U	**0.751 J**	1 U	1 U	1 U	**3.23 J**	**2.34 J**	1 U	10 U
	10/14/2021	1 U	1 U	**0.6 J**	1 U	**0.7 J**	1 U	1 U	1 U	**3.9**	**1.5**	1 U	1 U
	5/4/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**4.2**	**1**	1 U	1 U
	11/3/2022	1 U	1 U	**0.5 J**	1 U	**0.6 J**	1 U	1 U	1 U	**3.1**	**1.1**	1 U	1 U
	5/11/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**2.1**	**1 J**	1 U	1 U
	11/15/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**2.5**	**0.9 J**	1 U	1 U
TW-30	4/27/2021	1 U	5 U	**0.181 J**	2.5 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	10 U
	10/14/2021	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/4/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/2/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/11/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/15/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 4. Summary of Volatile Organic Compounds in Groundwater
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Severn, Anne Arundel County, Maryland

Analyte		m&p-Xylene (µg/L)	Methylene Chloride (µg/L)	Methyl tert-butyl ether (µg/L)	o-Xylene (µg/L)	Styrene (µg/L)	Tetrachloroethene (µg/L)	Toluene (µg/L)	trans-1,2-Dichloroethene (µg/L)	trans-1,3-Dichloropropene (µg/L)	trans-1,4-Dichloro-2-butene (µg/L)	Trichloroethene (µg/L)	Trichlorofluoro methane (µg/L)	Vinyl acetate (µg/L)	Vinyl chloride (µg/L)
Groundwater Protection Standard		**10000**	**5**	**2**	**4000**	**100**	**5**	**1000**	**100**	**NS**	**NS**	**5**	**6000**	**20000**	**2**
Location	**Date**														
TW-01	4/20/2021	2 U	**0.653 JB**	**0.431 J**	1 U	1 U	**0.507 J**	1 U	1 U	1 U	2.5 U	**0.632 J**	5 U	10 U	1 U
	10/6/2021	1 U	1 U	1 U	1 U	1 U	**0.5 J**	1 U	1 U	1 U	1 U	**0.7 J**	1 U	1 U	1 U
	5/4/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**0.7 J**	1 U	1 U	1 U
	11/2/2022	1 U	1 U	**0.5 J**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**0.9 J**	1 U	1 U	1 U
	5/11/2023	1 U	1 U	**0.6 J**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**0.5 J**	1 U	1 U	1 U
	11/15/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**0.6 J**	1 U	1 U	1 U
TW-02	4/27/2021	2 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	5 U	10 U	1 U
	10/6/2021	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/3/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/1/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/11/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/9/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-02A	4/27/2021	2 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	5 U	10 U	1 U
	10/6/2021	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/3/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/1/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/11/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/9/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-03	4/27/2021	2 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	5 U	10 U	1 U
	10/6/2021	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/3/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/1/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/11/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/20/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-03A	4/27/2021	2 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	5 U	10 U	**0.278 J**
	10/6/2021	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/3/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/1/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/11/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/9/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-04	4/27/2021	2 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	5 U	10 U	1 U
	10/6/2021	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	4/28/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/2/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/10/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/9/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-05	4/15/2021	2 U	**0.483 JB**	1 U	1 UL0	1 UL0	1 U	1 U	1 U	1 UL0	2.5 U	1 U	5 U	10 U	1 U
	10/5/2021	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	4/19/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/18/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	4/27/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/30/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 4. Summary of Volatile Organic Compounds in Groundwater
Phase II Report: Site Geologic Study
Proposed Millersville Landfill and Resource Recovery Facility Vertical Expansion
Severn, Anne Arundel County, Maryland

Analyte		m&p-Xylene (µg/L)	Methylene Chloride (µg/L)	Methyl tert-butyl ether (µg/L)	o-Xylene (µg/L)	Styrene (µg/L)	Tetrachloroethene (µg/L)	Toluene (µg/L)	trans-1,2-Dichloroethene (µg/L)	trans-1,3-Dichloropropene (µg/L)	trans-1,4-Dichloro-2-butene (µg/L)	Trichloroethene (µg/L)	Trichlorofluoro methane (µg/L)	Vinyl acetate (µg/L)	Vinyl chloride (µg/L)
Groundwater Protection Standard		**10000**	**5**	**2**	**4000**	**100**	**5**	**1000**	**100**	**NS**	**NS**	**5**	**6000**	**20000**	**2**
Location	**Date**														
TW-10A	4/20/2021	2 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	5 U	10 U	1 U
	10/5/2021	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	4/21/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/20/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/3/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/31/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-19	4/21/2021	2 U	**0.611 JB**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	5 U	10 U	1 U
	10/7/2021	1 U	1 U	1 U	1 U	1 U	**1 J**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	4/26/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/25/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/9/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/2/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-20R	4/21/2021	2 U	**0.516 JB**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	5 U	10 U	1 U
	10/12/2021	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	4/27/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/26/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/9/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	10/31/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-21A	4/26/2021	2 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	5 U	10 U	1 U
	4/27/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/9/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-26R	11/10/2021	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	12/1/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/18/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	12/7/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-29	4/20/2021	2 U	**0.46 JB**	**0.274 J**	1 U	1 U	**1.36**	1 U	1 U	1 U	2.5 U	**0.326 J**	**0.277 J**	10 U	1 U
	10/14/2021	1 U	1 U	1 U	1 U	1 U	**1.3**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/4/2022	1 U	1 U	1 U	1 U	1 U	**1.3**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/3/2022	1 U	1 U	1 U	1 U	1 U	**1.2**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/11/2023	1 U	1 U	1 U	1 U	1 U	**1.1**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/15/2023	1 U	1 U	1 U	1 U	1 U	**0.9 J**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TW-30	4/27/2021	2 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U	1 U	5 U	10 U	1 U
	10/14/2021	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/4/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/2/2022	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	5/11/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/15/2023	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Notes:

Groundwater Protection Standard from State of Maryland Department of the Environmental Cleanup Standards for Soil and Groundwater (MDE 2018)

Bolded: sample concentration detected greater than the method detection limit.

Bolded and highlighted: sample concentration detected greater than GWPS.

B: Analyte was detected in the associated method blank

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

H2: Extraction or preparation conducted outside USEPA method holding time.

U: Analyte not detected above the method detection limit. The result is shown non-detect at the reporting limit.

2c: Alkalinity TV: 0.00 mg/L

5c: pH was adjusted to <2 at bench.

J: Reported concentration is estimated. Result is between the reporting limit and method detection limit.

L1: Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.

L0: Analyte recovered outside of the LCS limit.

µg/L: micrograms per liter

mg/L: milligrams per liter

Table 5. Summary of Semivolatile Organic Compounds in Groundwater
Phase II Report: Site Geologic Study
Proposed Millersville Landfill and Resource Recovery Facility Vertical Expansion
Severn, Anne Arundel County, Maryland

Analyte		2,4-D (µg/L)	2,4-DB (µg/L)	2,4,5-T (µg/L)	2,4,5-TP (µg/L)	4,4'-DDD (µg/L)	4,4'-DDE (µg/L)	4,4'-DDT (µg/L)	Alachlor (µg/L)	Aldrin (µg/L)	alpha-BHC (µg/L)	Atrazine (µg/L)	beta-BHC (µg/L)	Butachor (µg/L)
Groundwater Protection Standard		**70**	**NS**	**200**	**50**	**NS**	**NS**	**NS**	**2**	**0.00092**	**0.0072**	**3**	**0.025**	**NS**
Location	**Date**													
TW-26R	11/10/2021	2 UH3	2 UH3	2 UH3	2 UH3	0.05 UH3	0.05 UH3	0.05 UH3	NA	0.05 UH3	0.05 UH3	NA	0.05 UH3	NA
	12/1/2022	2 U	2 U	2 U	2 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.1 U	0.05 U	0.1 U
	5/18/2023	2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/7/2023	2.1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Analyte		Chlordane (µg/L)	Dalapon (µg/L)	delta-BHC (µg/L)	Dicamba (µg/L)	Dichloroprop (µg/L)	Dieldrin (µg/L)	Dinoseb (µg/L)	Endosulfan I (µg/L)	Endosulfan II (µg/L)	Endosulfan sulfate (µg/L)	Endrin (µg/L)	Endrin aldehyde (µg/L)	Endrin ketone (µg/L)
Groundwater Protection Standard		**2**	**200**	**NS**	**600**	**NS**	**0.0018**	**7**	**NS**	**NS**	**120**	**2**	**NS**	**NS**
Location	**Date**													
TW-26R	11/10/2021	5 UH3	2 UH3	0.05 UH3	2 UH3	2 UH3	0.05 UH3	2 UH3	0.05 UH3	0.05 UH3	0.05 UH3	0.05 UH3	0.05 UH3	0.05 UH3
	12/1/2022	5 U	2 UL0	0.05 U	2 UL0	2 U	0.05 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	5/18/2023	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/7/2023	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Analyte		gamma-BHC (µg/L)	Heptachlor (µg/L)	Heptachlor epoxide (µg/L)	Hexachlorobenzene (µg/L)	MCPA (µg/L)	MCPP (µg/L)	Methoxychlor (µg/L)	Metolachlor (µg/L)	Metribuzin (µg/L)	Simazine (µg/L)	Toxaphene (µg/L)
Groundwater Protection Standard		**0.2**	**0.4**	**0.2**	**1**	**10**	**20**	**40**	**3000**	**500**	**4**	**3**
Location	**Date**											
TW-26R	11/10/2021	0.05 UH3	0.05 UH3	0.05 UH3	0.05 UH3	100 UL0H3	100 UH3	0.05 UH3	NA	NA	0.06 U	0.5 UH3
	12/1/2022	0.05 U	0.05 U	0.05 U	0.05 U	2 U	2 U	0.05 U	0.2 U	0.2 U	0.06 U	0.5 U
	5/18/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.06 U	NA
	12/7/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.06 U	NA

Notes:
Groundwater Protection Standard from State of Maryland Department of the Environmental Cleanup Standards for Soil and Groundwater (MDE 2018)
H3: Sample was received or analysis requested beyond the recognized method holding time
µg/L: micrograms per liter
NA: not analyzed
NS: no applicable GWPS available
U: Analyte not detected above the reporting limit.

Table 6. Summary of Metals
Phase II Report: Site Geologic Study
Proposed Millersville Landfill and Resource Recovery Facility Vertical Expansion
Severn, Anne Arundel County, Maryland

Analyte		Antimony (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Beryllium (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Calcium Dissolved (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Iron (mg/L)	Iron Dissolved (mg/L)	Lead (mg/L)	Magnesium (mg/L)	Magnesium Dissolved (mg/L)
Groundwater Protection Standard		**6**	**0.01**	**2**	**0.004**	**0.005**	**NS**	**NS**	**0.1**	**6**	**1.3**	**1.4**	**NS**	**0.015**	**NS**	**NS**
Location	**Date**															
TW-01	4/20/2021	0.006 U	0.005 U	0.014	0.001 U	0.003 U	17.4	18.1	0.0048 J	0.00089 J	0.005 U	**28**	22.8	0.005 U	1.5	1.6
	10/6/2021	0.000089 JB	0.0025 U	0.015	0.0005 U	0.0005 U	18	17.4	0.0056	0.0016 J	0.00094 J	**35.6**	26.4 M1	0.00004 J	1.6	1.5
	5/4/2022	0.0005 U	0.0025 U	0.016	0.0005 U	0.0005 U	17.1	17.5	0.004	0.00093 J	0.0008 J	**37.3**	29	0.0005 U	1.5	1.7
	11/2/2022	0.0005 U	0.0025 U	0.017	0.0005 U	0.0005 U	16.7	18.9	0.0018 J	0.0025 U	0.0009 J	**39**	28.7	0.0005 U	1.5	1.6
	5/11/2023	0.0005 U	0.00069 J	0.015	0.0005 U	0.0005 U	15.1	14.7	0.0059	0.00085 J	0.0051	**32.1**	28.7	0.0005 U	1.4	1.4
	11/15/2023	0.0005 U	0.0025 U	0.014	0.0005 U	0.0005 U	18.7	17.9	0.0044 B	0.0025 U	0.0025 U	**30.8**	28.6	0.0005 U	1.7	1.7
TW-02	4/27/2021	0.006 U	0.005 U	0.0085 J	0.001 U	0.003 U	0.26 J	0.27 J	0.0017 J	0.00062 J	0.005 U	**11.2**	10.2	0.005 U	0.53	0.53
	10/6/2021	0.000084 JB	0.0025 U	0.0089	0.0005 U	0.0005 U	0.32 J	0.37 J	0.0027	0.00051 J	0.0025 U	**8.2**	7.3	0.0005 U	0.58	0.57
	5/3/2022	0.0005 U	0.0014 JB	0.0085	0.0005 U	0.0005 U	0.29 J	0.43 J	0.0025 J	0.00049 J	0.0025 U	**7.8**	10.2	0.0005 U	0.35 J	0.48 J
	11/1/2022	0.0005 U	0.0025 U	0.0083	0.0005 U	0.0005 U	0.33 J	0.32 J	0.0011 J	0.0025 U	0.0025 U	**13.3**	13.2	0.0005 U	0.48 J	0.48 J
	5/11/2023	0.0005 U	0.0025 U	0.0082	0.0005 U	0.0005 U	0.36 J	0.39 J	0.00076 J	0.0025 U	0.0025 U	**12.4**	10.6	0.0005 U	0.52	0.5 J
	11/9/2023	0.0005 U	0.0025 U	0.0082	0.0005 U	0.0005 U	0.5 U	0.42 J	0.002 J	0.0025 U	0.0025 U	**16.2 M1**	14.7	0.0005 U	0.56	0.56
TW-02A	4/27/2021	0.006U	0.005U	0.063	0.0002J	0.003U	5	5.1	0.0018J	0.0012J	0.0049J	**31.6**	31.1	0.005U	2.8	2.9
	10/6/2021	0.000074JB	0.0025U	0.065	0.0005U	0.0005U	5.4	5.3	0.0025J	0.0018J	0.0027	**35**	33.7	0.0005U	3	3
	5/3/2022	0.0005U	0.0014JB	0.064	0.0005U	0.0005U	5.2	5.5	0.0019J	0.0016J	0.0024J	**32.7**	34.6	0.0005U	2.9	3.1
	11/1/2022	0.001U	0.005U	0.068	0.001U	0.001U	5.7	5.8	0.0023J	0.0019J	0.0027J	**34.6**	32.4	0.001U	3.1	3.1
	5/11/2023	0.0005U	0.0025U	0.071	0.0005U	0.0005U	5.4	5.4	0.0016J	0.0019J	0.0025	**33**	31.3	0.0005U	3	3
	11/9/2023	0.001U	0.005U	0.073	0.001U	0.001U	5.8	6	0.0081	0.0058	0.0042J	**36.2**	36	0.001U	3.1	3.3
TW-03	4/27/2021	0.006 U	0.005 U	0.008 J	0.001 U	0.003 U	1.1	1.1	0.006	0.0013 J	0.005 U	**9.4**	5.3	0.005 U	0.54	0.54
	10/6/2021	0.000055 JB	0.0025 U	0.0076	0.0005 U	0.0005 U	1.2	1.1	0.0018 J	0.00072 J	0.00061 J	**10.6**	7	0.0005 U	0.58	0.56
	5/3/2022	0.0005 U	0.0015 JB	0.0078	0.0005 U	0.0005 U	1.1	1.2	0.0045	0.0016 J	0.0014 J	**7.9**	7.5	0.0005 U	0.56	0.61
	11/1/2022	0.001 U	0.005 U	0.0084	0.001 U	0.001 U	1.3	1.3	0.011	0.0019 J	0.0045 J	**12.9**	9.4	0.001 U	0.66	0.68
	5/11/2023	0.0005 U	0.0025 U	0.008	0.0005 U	0.0005 U	1.2	1.1	0.0042	0.002 J	0.0013 J	**9.9**	8.3	0.0005 U	0.58	0.53
	11/20/2023	0.0005 U	0.0025 U	0.0077	0.0005 U	0.0005 U	1.2	1.1	0.0063	0.0009 J	0.0025 U	**7.2**	6.3	0.0005 U	0.56	0.58
TW-03A	4/27/2021	0.006U	0.005U	0.014	0.001U	0.003U	0.84J	0.88J	0.00071J	0.005U	0.005U	**64**	62.9	0.005U	0.42	0.42
	10/6/2021	0.00007JB	0.0025U	0.011	0.0005U	0.0005U	0.94	0.87	0.00094J	0.00017J	0.0025U	**59.3**	52.9	0.0005U	0.41J	0.38J
	5/3/2022	0.0005U	0.0023JB	0.012	0.0005U	0.0005U	1	1.1	0.00097J	0.00045J	0.001J	**56.3**	59	0.0005U	0.45J	0.48J
	11/1/2022	0.00033JB	0.0025U	0.028	0.0005U	0.0005U	3	3.1	0.00089J	0.0025U	0.00074J	**76.3**	77	0.0005U	1.1	1.2
	5/11/2023	0.001U	0.0012J	0.054	0.001U	0.001U	5.4	5.5	0.0017J	0.005U	0.004J	**74.3**	62.5P6	0.00054J	2	2
	11/9/2023	0.001U	0.005U	0.083	0.001U	0.001U	6.6	6.6	0.0024J	0.005U	0.005U	**74.7**	65.1	0.001U	2.3	2.3
TW-04	4/27/2021	0.006 U	0.005 U	0.028	0.001 U	0.003 U	4.6	4.5	0.0009 J	0.0013 J	0.005 U	**30.4**	21.8	0.005 U	1.2	1.2
	10/6/2021	0.000053 JB	0.0025 U	0.027	0.0005 U	0.0005 U	7.5	7.2	0.0025 U	0.0013 J	0.0014 J	**29.8**	21.5	0.0005 U	1.5	1.4
	4/28/2022	0.0005 U	0.0025 U	0.03	0.0005 U	0.0005 U	4.3	3.9	0.0011 J	0.002 J	0.0017 J	**28.3**	22.7	0.0005 U	1.4	1.3
	11/2/2022	0.00031 JB	0.0025 U	0.029	0.00015 J	0.0005 U	2.6	2.8	0.00078 J	0.0022 J	0.0028	**36**	28	0.0005 U	1.4	1.4
	5/10/2023	0.0003 J	0.0025 U	0.034	0.00025 J	0.0005 U	2.7	2.6	0.00099 J	0.0023 J	0.005	**46.1**	28.6	0.0005 U	1.4	1.4
	11/9/2023	0.001 U	0.005 U	0.037	0.00031 J	0.001 U	2.9	3	0.005 U	0.0024 J	0.014	**79.8**	34.2	0.001 U	1.5	1.5
TW-05	4/15/2021	0.006 U	0.005 U	0.018	0.001 U	0.003 U	2.7	2.8	0.0013 J	0.00054 J	0.005 U	**18.7**	17.9	0.005 U	0.78	0.76
	10/5/2021	0.00006 JB	0.0025 U	0.023	0.0005 U	0.0005 U	3.8	3.6	0.0015 J	0.00088 J	0.00045 J	**27.4**	25.2	0.00015 J	1.1	1
	4/19/2022	0.0005 UM1	0.0025 UM1	0.028 M1	0.0005 UM1	0.0005 U	3.5	3.4	0.0022 JR1M1	0.0011 JR1M1	0.00066 JR1M1	**29.4 M1**	27.3 M1	0.0005 UM1	1.1	1.1
	10/18/2022	0.0005 U	0.0025 U	0.026	0.0005 U	0.0005 U	3.3	3.7	0.0017 J	0.00084 J	0.0025 U	**26.6**	27.7	0.0005 U	1	1.1
	4/27/2023	0.0005 U	0.0025 U	0.023	0.0005 U	0.0005 U	3.3	3.3	0.0031	0.00082 J	0.00074 J	**27.9**	27.2	0.0005 U	1	1
	10/30/2023	0.001 U	0.005 U	0.026	0.001 U	0.001 U	3.4	3.5	0.0031 J	0.005 U	0.005 U	**30**	29.7	0.001 U	1.1	1.1
TW-10A	4/20/2021	0.006 U	0.005 U	0.093	0.00055 J	0.003 U	5.6	5.7	0.003 J	0.012	0.0049 J	0.07 U	0.07 U	0.005 U	3.4	3.6
	10/5/2021	0.0005 U	0.0025 U	0.095	0.00061	0.0005 U	5.6	6.1	0.0032	0.015	0.0057	0.048 J	0.033 J	0.000037 J	3.6	3.8
	4/21/2022	0.0005 U	0.0025 U	0.094	0.00052	0.0005 U	5.6	5.6	0.0042	0.014	0.0054	0.097	0.082	0.0005 U	3.6	3.5
	10/20/2022	0.0005 U	0.0025 U	0.09	0.00058	0.0005 U	5.6	6.2	0.0029	0.013	0.0044	0.093	0.087	0.0005 U	3.5	3.8
	5/3/2023	0.0005 U	0.0025 U	0.09	0.00059	0.0005 U	5.4	5.9	0.0026	0.015	0.005	0.09	0.077	0.0005 U	3.3	3.6
	10/31/2023	0.0005 U	0.0025 U	0.092	0.00053	0.0005 U	6	5.7	0.0018 J	0.015	0.0059 B	0.03 J	0.037 J	0.0005 U	3.6	3.6

Table 6. Summary of Metals
Phase II Report: Site Geologic Study
Proposed Millersville Landfill and Resource Recovery Facility Vertical Expansion
Severn, Anne Arundel County, Maryland

Analyte		Antimony (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Beryllium (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Calcium Dissolved (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Iron (mg/L)	Iron Dissolved (mg/L)	Lead (mg/L)	Magnesium (mg/L)	Magnesium Dissolved (mg/L)
Groundwater Protection Standard		**6**	**0.01**	**2**	**0.004**	**0.005**	**NS**	**NS**	**0.1**	**6**	**1.3**	**1.4**	**NS**	**0.015**	**NS**	**NS**
Location	**Date**															
TW-19	4/21/2021	0.006 U	0.005 U	0.062	0.001 U	0.003 U	22.7	24	0.00088 J	0.00079 J	0.005 U	0.07 U	0.07 U	0.005 U	5.8	6.2
	10/7/2021	0.000065 JB	0.0025 U	0.05	0.0005 U	0.0005 U	15.2	16.5	0.0025 U	0.0033	0.0059	0.05 U	0.05 U	0.0005 U	4.5	4.9
	4/26/2022	0.0005 U	0.0025 U	0.059	0.0005 U	0.0005 U	22.7	24.5	0.00073 J	0.00073 J	0.0018 J	0.05 U	0.05 U	0.0005 U	5.6	6.1
	10/25/2022	0.0005 U	0.0025 U	0.051	0.0005 U	0.0005 U	17.8	18.8	0.0016 J	0.0044	0.0049	0.05 U	0.05 U	0.0005 U	4.7	5
	5/9/2023	0.0005 U	0.0025 U	0.046	0.0005 U	0.0005 U	28.4	27.8	0.0024 J	0.00083 J	0.0021 J	0.05 U	0.05 U	0.0005 U	6.4	6.2
	11/2/2023	0.0005 U	0.0025 U	0.053	0.00017 J	0.0005 U	18.8	18.9	0.0024 J	0.012	0.012	0.014 JB	0.011 J	0.0005 U	5	4.9
TW-20R	4/21/2021	0.006 U	0.005 U	0.035	0.00022 J	0.003 U	25.4	27.2	0.0015 J	0.0017 J	0.0033 J	0.07 U	0.07 U	0.005 U	5.4	5.8
	10/12/2021	0.0005 UM1	0.0025 U	0.031 M1	0.0003 J	0.0005 U	22.9 M1	21.2	0.002 J	0.0042	0.0037 M1	0.041 JM1	0.025 JB	0.000049 JR1M1	5.7 M1	5.3
	4/27/2022	0.0005 UM1	0.0025 U	0.039 M1	0.00021 J	0.0005 U	22.1	24	0.0014 J	0.0033	0.0033	0.05 U	0.05 U	0.0005 U	5.4	5.9
	10/26/2022	0.0005 U	0.0025 U	0.04	0.0003 J	0.0005 U	14.7	15.8	0.0017 J	0.0056	0.0085	0.05 U	0.05 U	0.0005 U	4.3	4.8
	5/9/2023	0.0005 U	0.0025 U	0.037	0.00021 J	0.00014 J	19.2	18.9	0.0044	0.0031	0.006	0.26	0.05 U	0.0005 U	5	4.9
	10/31/2023	0.0005 U	0.0025 U	0.044	0.0004 J	0.0005 U	14.5	14.5	0.0035	0.0028	0.015	0.16	0.0095 J	0.0005 U	3.7	3.8
TW-21A	4/26/2021	0.006 U	0.005 U	0.073	0.00037 J	0.003 U	6.8	7	0.0024 J	0.0056	0.003 J	0.07 U	0.07 U	0.005 U	2	2
	4/27/2022	0.0005 U	0.0025 U	0.068	0.00041 J	0.0005 U	10.9	11.8	0.0034	0.0088	0.0015 J	0.042 J	0.05 U	0.0005 U	3	3.2
	5/9/2023	0.0005 U	0.0007 J	0.068	0.00045 J	0.00029 J	18	16.7	0.0034	0.0069	0.0017 J	0.071	0.05 U	0.0005 U	5	4.6
TW-26R	11/10/2021	0.000093 J	0.0025 U	0.04	0.0005 U	0.000085 J	7.3	6.4	0.0032	0.0016 J	0.0036	0.051 B	0.016 J	0.000071 J	2.9	2.6
	12/1/2022	0.0005 U	0.0025 U	0.041	0.0005 U	0.0005 U	6.1	5.6	0.0021 J	0.0012 J	0.0029	0.044	0.0085 J	0.0005 U	2.3	2.2
	5/18/2023	0.0005 U	0.00047 J	0.057	0.0005 U	0.0005 U	18.2	20	0.0026	0.0025 U	0.0024 J	0.05 U	0.05 U	0.0005 U	5.7	6.3
	12/7/2023	0.0005 U	0.0025 U	0.035	0.0005 U	0.0005 U	7.4	7.3	0.0034	0.0025 U	0.05	0.22	0.05 U	0.0005 U	2.5	2.5
TW-29	4/20/2021	0.006 U	0.005 U	0.029	0.001 U	0.003 U	2	2	0.002 J	0.0015 J	0.005 U	0.07 U	0.07 U	0.005 U	1.1	1.1
	10/14/2021	0.0005 U	0.0025 U	0.031	0.00019 J	0.0005 U	2.2	2.3	0.002 J	0.002 J	0.0016 J	0.015 J	0.05 U	0.000033 J	1.2	1.2
	5/4/2022	0.0005 U	0.0025 U	0.03	0.0005 U	0.0005 U	2.1	2.3	0.0026	0.0019 J	0.0019 J	0.05 U	0.05 U	0.0005 U	1.2	1.3
	11/3/2022	0.0005 U	0.0025 U	0.036	0.0002 J	0.0005 U	2.1	2.3	0.013	0.0019 J	0.0018 J	0.037 J	0.05 U	**0.041 M1**	1.2	1.2
	5/11/2023	0.0005 U	0.0025 U	0.031	0.00014 J	0.0005 U	2.2	2.2	0.004	0.0021 J	0.0022 J	0.05 U	0.05 U	0.0005 U	1.2	1.2
	11/15/2023	0.0005 U	0.0025 U	0.03	0.00014 J	0.0005 U	2.2	2.2	0.0066 B	0.002 J	0.0025 U	0.05 U	0.05 U	0.0005 U	1.2	1.2
TW-30	4/27/2021	0.006 U	0.005 U	0.034	0.001 U	0.003 U	4.7	4.3	0.00081 J	0.0023 J	0.0053	0.07 U	0.07 U	0.005 U	1.9	1.7
	10/14/2021	0.0005 U	0.0025 U	0.036	0.0005 U	0.0005 U	4.6	4.7	0.0019 J	0.0025 J	0.0015 J	0.012 J	0.05 U	0.0005 U	1.8	1.8
	5/4/2022	0.0005 U	0.0025 U	0.036	0.0005 U	0.0005 U	4.8	5.4	0.0018 J	0.0023 J	0.0015 J	0.05 U	0.05 U	0.0005 U	1.9	2.1
	11/2/2022	0.0005 U	0.0025 U	0.035	0.00012 J	0.0005 U	4.8	5.3	0.002 J	0.0025 J	0.0019 J	0.05 U	0.05 U	0.0005 U	1.9	2
	5/11/2023	0.0005 U	0.0025 U	0.037	0.0001 J	0.0005 U	4.8	5	0.0015 J	0.0026	0.0015 J	0.05 U	0.05 U	0.0005 U	1.9	1.9
	11/15/2023	0.0005 U	0.0025 U	0.036	0.00015 J	0.0005 U	4.9	4.9	0.0039 B	0.0026	0.0025 U	0.05 U	0.037 J	0.0005 U	1.9	2

Table 6. Summary of Metals
Phase II Report: Site Geologic Study
Proposed Millersville Landfill and Resource Recovery Facility Vertical Expansion
Severn, Anne Arundel County, Maryland

Analyte		Manganese (mg/L)	Manganese Dissolved (mg/L)	Mercury (mg/L)	Nickel (mg/L)	Potassium (mg/L)	Potassium Dissolved (mg/L)	Selenium (mg/L)	Silver (mg/L)	Sodium (mg/L)	Sodium Dissolved (mg/L)	Thallium (mg/L)	Vanadium (mg/L)	Zinc (mg/L)	Zinc Dissolved (mg/L)
Groundwater Protection Standard		**0.043**	**NS**	**0.002**	**NS**	**NS**	**NS**	**0.05**	**0.0094**	**NS**	**NS**	**0.002**	**0.0086**	**0.6**	**NS**
Location	**Date**														
TW-01	4/20/2021	**0.16**	0.17	0.00005 J	0.0058 J	0.73	0.74	0.008 U	0.006 U	2.8	3	0.01 U	0.005 U	0.01 U	NA
	10/6/2021	**0.18**	0.17	0.0002 U	0.0077	0.71	0.71	0.0025 U	0.0025 U	3.2	3.2	0.0005 U	0.0025 U	0.005 U	NA
	5/4/2022	**0.18**	0.19	0.0002 U	0.0053	0.69	0.8	0.0025 U	0.0025 U	3	3.2	0.0005 U	0.0025 U	0.005 U	NA
	11/2/2022	**0.17**	0.18	0.0002 U	0.0017 J	0.72	0.8	0.0025 U	0.0025 U	3.1	3.6	0.0005 U	0.0025 U	0.005 U	NA
	5/11/2023	**0.2**	0.19	0.0002 U	0.0058	0.8	0.64	0.0025 U	0.0025 U	5.1	3	0.0005 U	0.0025 U	0.005 U	NA
	11/15/2023	**0.18**	0.18	0.0002 U	0.002 JB	0.74	0.75	0.0025 U	0.0025 U	3.4	3.5	0.0005 U	0.0025 U	0.005 U	NA
TW-02	4/27/2021	**0.15**	0.15	0.0002 U	0.0019 J	0.63	0.63	0.008 U	0.006 U	2.1	2	0.01 U	0.005 U	0.01 U	NA
	10/6/2021	**0.12**	0.11	0.0002 U	0.0023 J	0.66	0.65	0.0025 U	0.0025 U	2	2	0.000024 J	0.0025 U	0.005 U	NA
	5/3/2022	**0.13**	0.16	0.0002 U	0.0021 J	0.45 J	0.6	0.0025 U	0.0025 U	1.3	1.9	0.0005 U	0.0025 U	0.005 U	NA
	11/1/2022	**0.18**	0.18	0.0002 U	0.001 J	0.63	0.65	0.0025 U	0.0025 U	1.7	1.6	0.0005 U	0.0025 U	0.005 U	NA
	5/11/2023	**0.17**	0.15	0.0002 U	0.00093 J	0.6	0.5 J	0.0025 U	0.0025 U	1.9	1.4	0.0005 U	0.0025 U	0.005 U	NA
	11/9/2023	**0.2**	0.19	0.0002 U	0.0017 J	0.57	0.58	0.0025 U	0.0025 U	1.5	1.5	0.0005 U	0.0025 U	0.005 U	NA
TW-02A	4/27/2021	**0.21**	0.22	0.0002U	0.0028J	1	1.1	0.008U	0.006U	12.4	13.1	0.01U	0.005U	0.01U	NA
	10/6/2021	**0.23**	0.23	0.0002U	0.0035	1.1	1.1	0.0025U	0.0025U	14.4	14.4	0.0005U	0.0025U	0.0027J	NA
	5/3/2022	**0.23**	0.24	0.0002U	0.0035	1.1	1.1	0.0025U	0.0025U	14.5	16	0.0005U	0.0025U	0.005U	NA
	11/1/2022	**0.23**	0.22	0.0002U	0.0035J	1.2	1.2	0.005U	0.005U	16.5	16.9	0.001U	0.005U	0.01U	NA
	5/11/2023	**0.24**	0.23	0.0002U	0.0032	1.1	1.1	0.0025U	0.0025U	16.4	16.5	0.0005U	0.0025U	0.005U	NA
	11/9/2023	**0.26**	0.27	0.0002U	0.02	1.2	1.2	0.005U	0.005U	18.3	19	0.001U	0.005U	0.01U	NA
TW-03	4/27/2021	**0.11**	0.12	0.0002 U	0.011	0.5	0.52	0.008 U	0.006 U	2.6	2.7	0.01 U	0.005 U	0.01 U	NA
	10/6/2021	**0.14**	0.13	0.0002 U	0.0039	0.51	0.5	0.0025 U	0.0025 U	2.5	2.5	0.0005 U	0.0025 U	0.005 U	NA
	5/3/2022	**0.13**	0.13	0.0002 U	0.01	0.5 J	0.46 J	0.0025 U	0.0025 U	2.4	2.9	0.0005 U	0.0025 U	0.005 U	NA
	11/1/2022	**0.16**	0.18	0.0002 U	0.049	0.58	0.6	0.005 U	0.005 U	3.2	3.3	0.001 U	0.005 U	0.01 U	NA
	5/11/2023	**0.16**	0.16	0.0002 U	0.0077	0.54	0.43 J	0.0025 U	0.0025 U	2.8	2.5	0.0005 U	0.0025 U	0.005 U	NA
	11/20/2023	**0.1**	0.11	0.0002 U	0.0097	0.47 J	0.5	0.0025 U	0.0025 U	2.6	2.5	0.0005 U	0.0025 U	0.005 U	NA
TW-03A	4/27/2021	**0.45**	0.46	0.0002U	0.01U	0.54	0.57	0.008U	0.006U	16	16.8	0.01U	0.005U	0.01U	NA
	10/6/2021	**0.51**	0.47	0.0002U	0.00071J	0.57	0.53	0.0025U	0.0025U	15.4	14.7	0.0005U	0.0025U	0.005U	NA
	5/3/2022	**0.53**	0.55	0.0002U	0.0025J	0.68	0.65	0.0025U	0.0025U	21.6	24	0.0005U	0.0025U	0.005U	NA
	11/1/2022	**0.66**	0.67	0.0002U	0.0009J	1.1	1.2	0.0025U	0.0025U	58.7	61.7	0.0005U	0.0025U	0.0042J	NA
	5/11/2023	**0.75**	0.68	0.0002U	0.011	1.4	1.5	0.005U	0.005U	77.8	79.1P6	0.001U	0.005U	0.01U	NA
	11/9/2023	**0.71**	0.68	0.0002U	0.0081	1.5	1.5	0.005U	0.005U	105	105	0.001U	0.005U	0.01U	NA
TW-04	4/27/2021	**0.16**	0.16	0.0002 U	0.01 U	0.76	0.77	0.008 U	0.006 U	3.7	3.4	0.01 U	0.005 U	0.01 U	NA
	10/6/2021	**0.16**	0.16	0.0002 U	0.0013 J	0.8	0.77	0.0025 U	0.0025 U	3.6	3.6	0.0005 U	0.0025 U	0.005 U	NA
	4/28/2022	**0.16**	0.16	0.0002 U	0.0025 J	0.83	0.8	0.0025 U	0.0025 U	4.3	3.9	0.0005 U	0.0025 U	0.005 U	NA
	11/2/2022	**0.19**	0.19	0.0002 U	0.002 J	0.91	0.89	0.0025 U	0.0025 U	4.7	4.8	0.0005 U	0.0025 U	0.005 U	NA
	5/10/2023	**0.19**	0.18	0.0002 U	0.0027	0.97 B	0.81	0.0025 U	0.0025 U	5.2	4.9	0.0005 U	0.0025 U	0.0045 J	NA
	11/9/2023	**0.21**	0.21	0.0002 U	0.0025 J	0.92	0.93	0.005 U	0.005 U	5.7	5.9	0.001 U	0.005 U	0.01 U	NA
TW-05	4/15/2021	**0.12**	0.12	0.00005 J	0.0021 J	0.72	0.75	0.008 U	0.006 U	2.5	2.5	0.01 U	0.005 U	0.01 U	NA
	10/5/2021	**0.16**	0.16	0.0002 U	0.0023 J	0.94	0.92	0.0025 U	0.0025 U	3.4	3.3	0.0005 U	0.0025 U	0.005 U	NA
	4/19/2022	**0.17**	0.16	0.00033 M1	0.0036 M1	0.99	0.93	0.0025 UM1	0.0025 UM1	3.5	3.4	0.0005 UM1	0.0025 UR1M1	0.005 UM1	NA
	10/18/2022	**0.16**	0.17	0.0002 UM1	0.0023 J	0.8	0.95	0.0025 U	0.0025 U	3.5	3.9	0.0005 U	0.0025 U	0.005 J	NA
	4/27/2023	**0.18**	0.18	0.0002 U	0.003	0.87	0.86	0.0025 U	0.0025 U	3.6	3.5	0.0005 UM1	0.0025 U	0.0064	NA
	10/30/2023	**0.18**	0.19	0.0002 U	0.0032 J	0.82	0.83	0.005 U	0.005 U	3.5	3.6	0.001 U	0.005 U	0.01 U	NA
TW-10A	4/20/2021	**0.059**	0.061	0.00006 J	0.015	2.3	2.3	0.008 U	0.006 U	23.3	24.6	0.01 U	0.005 U	0.021	NA
	10/5/2021	**0.06**	0.064	0.0002 U	0.016	2.1	2.1	0.0012 J	0.0025 U	22.9	24.1	0.000039 J	0.0025 U	0.022	NA
	4/21/2022	**0.064**	0.061	0.0002 U	0.016	2.3	2.3	0.0012 J	0.0025 U	23.9	23.6	0.0005 U	0.0025 U	0.021	NA
	10/20/2022	**0.062**	0.064	0.0002 U	0.016	2.2	2.5	0.0025 U	0.0025 U	24.3	26.4	0.0005 U	0.0025 U	0.024	NA
	5/3/2023	**0.061**	0.064	0.0002 U	0.015	2.2	2.4	0.0015 J	0.0025 U	23.8	26.9	0.0005 U	0.0025 U	0.023	NA
	10/31/2023	**0.068**	0.064	0.0002 U	0.014	2.3	2.4	0.0025 U	0.0025 U	26.3	25.9	0.0005 U	0.0025 U	0.023	NA

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Severn, Anne Arundel County, Maryland

Analyte		Manganese (mg/L)	Manganese Dissolved (mg/L)	Mercury (mg/L)	Nickel (mg/L)	Potassium (mg/L)	Potassium Dissolved (mg/L)	Selenium (mg/L)	Silver (mg/L)	Sodium (mg/L)	Sodium Dissolved (mg/L)	Thallium (mg/L)	Vanadium (mg/L)	Zinc (mg/L)	Zinc Dissolved (mg/L)
Groundwater Protection Standard		**0.043**	**NS**	**0.002**	**NS**	**NS**	**NS**	**0.05**	**0.0094**	**NS**	**NS**	**0.002**	**0.0086**	**0.6**	**NS**
Location	**Date**														
TW-19	4/21/2021	0.0067	0.0062	0.0002 U	0.0024 J	6.1	6.6	0.008 U	0.006 U	10.3	11.1	0.01 U	0.005 U	0.0025 J	NA
	10/7/2021	0.0071	0.0075	0.0002 U	0.0041	4.2	4.6	0.0025 U	0.0025 U	8.9	9.8	0.000028 J	0.00035 J	0.0027 J	0.0033 J
	4/26/2022	0.0037 J	0.0038 J	0.0002 U	0.0024 J	6.4	6.4	0.0025 U	0.0025 U	13	13.2	0.0005 U	0.00054 JB	0.005 U	NA
	10/25/2022	0.007	0.0077	0.0002 U	0.0058	4.9	4.8	0.0025 U	0.0025 U	11.6	11.4	0.0005 U	0.0025 U	0.005 U	NA
	5/9/2023	0.005 U	0.005 U	0.0002 U	0.0022 J	6.6	6.4	0.0013 JB	0.0025 U	11.9	11.6	0.0005 U	0.0025 U	0.005 U	NA
	11/2/2023	0.013	0.013	0.0002 U	0.013	4.5	4.5	0.0025 U	0.0025 U	11.8	11.6	0.0005 U	0.0025 U	0.0066	NA
TW-20R	4/21/2021	0.02	0.02	0.0002 U	0.0017 J	3.1	3.4	0.008 U	0.006 U	12.5	13.6	0.01 U	0.004 J	0.01 U	NA
	10/12/2021	0.033 M1	0.031	0.0002 U	0.0028 M1	3.5 M1	3.3	0.0015 J	0.0025 U	14.6 M1	14.4	0.000032 J	0.0031	0.0022 JR1M1	NA
	4/27/2022	0.028	0.039	0.0002 U	0.0027 M1	3.3	3.3	0.0012 J	0.0025 U	10.7	10.9	0.0005 U	0.0043	0.005 U	NA
	10/26/2022	0.041	0.044	0.0002 U	0.0034	3.3	3.4	0.0022 J	0.0025 U	10.9	11.1	0.0005 U	0.0031	0.0041 J	NA
	5/9/2023	0.031	0.03	0.0002 UM1	0.0036	3.6	3.5	0.0027 B	0.0025 U	11.9	11.6	0.0005 U	0.0049	0.005 U	NA
	10/31/2023	0.037	0.037	0.0002 U	0.0031	3.4	3.5	0.0015 J	0.0025 U	14.2	14.5	0.0005 U	0.0039	0.0053	NA
TW-21A	4/26/2021	**0.069**	0.067	0.0002 U	0.0037 J	1.8	1.8	0.0059 J	0.006 U	21.9	22	0.01 U	0.005 U	0.019	NA
	4/27/2022	**0.062**	0.064	0.0002 U	0.0047	2.3	2.3	0.0017 J	0.0025 U	15.8	16.4	0.0005 U	0.0025 U	0.021	NA
	5/9/2023	**0.071**	0.064	0.0002 U	0.0044	2.9	2.7	0.0042 B	0.0025 U	26.8	24.5	0.0005 U	0.0025 U	0.017	NA
TW-26R	11/10/2021	0.037	0.032	0.0002 U	0.0037	1.7	1.5	0.0014 J	0.0025 U	4.4	4	0.0005 U	0.0025 U	0.0031 J	NA
	12/1/2022	0.025	0.024	0.0002 U	0.0028	1.6	1.4	0.0014 J	0.0025 U	6.5	6.3	0.0005 U	0.0025 U	0.0053	NA
	5/18/2023	0.012	0.013	0.0002 U	0.0025 J	2.3	2.6	0.0027	0.0025 U	33.2	36.5	0.0005 U	0.0025 U	0.005 U	NA
	12/7/2023	0.012	0.015	0.0002 U	0.0069 J	1.6	1.6	0.0025 U	0.0025 U	10.4	10.2	0.0005 U	0.0025 U	0.005 U	NA
TW-29	4/20/2021	0.0089	0.0087	0.00007 J	0.0042 J	0.8	0.75	0.008 U	0.006 U	4.2	4.3	0.01 U	0.005 U	0.01 U	NA
	10/14/2021	0.0095	0.0089	0.0002 U	0.0031	0.79	0.743	0.0025 U	0.0025 U	4.5	4.5	0.0005 U	0.0025 U	0.002 J	NA
	5/4/2022	0.0098	0.011	0.0002 U	0.0032	0.76	0.84	0.0025 U	0.0025 U	4.4	4.8	0.0005 U	0.0025 U	0.005 U	NA
	11/3/2022	0.0097	0.0096	0.0002 U	0.0034	0.79	0.83	0.0025 U	0.0025 U	4.5	5	0.0005 UM1	0.0025 U	0.0054 B	NA
	5/11/2023	0.01	0.0095	0.0002 U	0.0041	0.79	0.77	0.0025 U	0.0025 U	4.6	4.4	0.0005 U	0.0025 U	0.005 U	NA
	11/15/2023	0.01	0.011	0.0002 U	0.0056 B	0.79	0.8	0.0025 U	0.0025 U	4.5	4.6	0.0005 U	0.0025 U	0.0045 J	NA
TW-30	4/27/2021	0.011	0.01	0.0002 U	0.0041 J	1.5	1.4	0.008 U	0.006 U	12.4	11.8	0.01 U	0.005 U	0.0042 J	NA
	10/14/2021	0.011	0.011	0.0002 U	0.0043	1.5	1.41	0.0025 U	0.0025 U	11.8	11.5	0.0005 U	0.0025 U	0.0036 J	NA
	5/4/2022	0.012	0.013	0.0002 U	0.0042	1.4	1.6	0.0025 U	0.0025 U	11.1	12	0.0005 U	0.0025 U	0.005 U	NA
	11/2/2022	0.012	0.012	0.0002 U	0.0047	1.5	1.7	0.0025 U	0.0025 U	11.3	12.9	0.0005 U	0.0025 U	0.0054	NA
	5/11/2023	0.012	0.011	0.0002 U	0.0046	1.5	1.6	0.0025 U	0.0025 U	11	11.3	0.0005 U	0.0025 U	0.0047 J	NA
	11/15/2023	0.012	0.013	0.0002 U	0.005 B	1.6	1.6	0.0025 U	0.0025 U	11.8	11.9	0.0005 UM1	0.0025 U	0.0052	NA

Notes:
Groundwater Protection Standard from State of Maryland Department of the Environmental Cleanup Standards for Soil and Groundwater (MDE 2018)
Bolded and highlighted - Sample concentration detected greater than GWPS
J: Reported concentration is estimated. Result is between the reporting limit and method detection limit.
M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
mg/L: milligrams per liter
NA: not analyzed
NS: no applicable GWPS available
R1: RPD value was outside control limits.
U: Analyte not detected above the reporting limit.

Table 7. Summary of General Chemistry Compounds in Groundwater
Phase II Report: Site Geologic Study
Proposed Millersville Landfill and Resource Recovery Facility Vertical Expansion
Severn, Anne Arundel County, Maryland

Analyte		Alkalinity (mg/L)	Ammonia Distilled (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Fluoride (µg/L)	Nitrate (mg/L)	Nitrate as N (mg/L)	Nitrite as N (mg/L)	Total Nitrogen (mg/L)	pH (SU)	Phosphorus Dissolved (mg/L)	Specific Conductivity (umhos/cm)	Specific Conductivity (uS)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Hardness (mg/L)	Total Hardness Dissolved (mg/L)	Turbidity (NTU)
Groundwater Protection Standard		NS	NS	NS	NS	400	NS	10	1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Location	Date																		
TW-01	4/20/2021	42	0.1 U	6.1 J	7.1	NA	NA	0.048 J	0.01 U	0.048 JM1	7.17	NA	NA	193.3	10 U	53	49.6	NA	77.2
	10/6/2021	50	0.1 U	25 UMH	6.5	NA	NA	0.1 U	0.01 UMLH1	0.1 U	7.09	NA	NA	227.4	10 U	45	51.3	49.7	45.5
	5/4/2022	44 ML	0.1 U	25 U	5.9	NA	NA	0.099 J	0.0066 J	0.11	6.7	NA	NA	205.1	10 U	48	48.9 N3	NA	44.1
	11/2/2022	46	0.1 U	6.1 J	7	NA	NA	0.076 J	0.01 U	0.08 J	6.64	NA	NA	215.4	10 U	47	47.9 N3	NA	61.2
	5/11/2023	48	0.1 U	36.5	7.4	NA	NA	0.1 U	0.01 U	0.1 U	6.79	NA	NA	204.6	10 UML	62	43.7 N3	NA	37.1
	11/15/2023	58	0.1 U	9 JB	7.7	NA	0.05 UO-04	0.011 UO-04	NA	NA	6.7	NA	NA	214.2	10 U	60	53.8 N3	NA	25.2
TW-02	4/27/2021	12	0.1 U	25 U	3.5	NA	NA	0.065 J	0.01 U	0.065 J	6.41	NA	60.8	60.8	10 U	16	2.8 J	NA	14.1
	10/6/2021	8 J3c	0.1 U	25 U	2.8 J	NA	NA	0.1 U	0.01 UH1	0.1 U	6.21	NA	NA	75.4	10 U	10 U	3.17 J	3.26 J	10.1
	5/3/2022	12	0.1 U	25 U	2.7 J	NA	NA	0.1 U	0.01 U	0.1 U	6.23	NA	NA	71.1	10 U	10 U	2.2 JN3	NA	5.49
	11/1/2022	24	0.1 U	6.1 J	3.3	NA	NA	0.056 J	0.01 U	0.056 J	6.36	NA	NA	79.8	10 U	15	2.8 JN3	NA	6.86
	5/11/2023	15	0.1 U	34.2	3.3	NA	NA	0.1 U	0.01 U	0.1 U	6.44	NA	NA	89.2	10 U	30	3 JN3	NA	9.43
	11/9/2023	22	0.1 U	25 U	3.1	NA	0.5 U	0.11 U	NA	NA	6.45	NA	NA	82.9	10 U	26	3.3 JN3	NA	8.21
TW-02A	4/27/2021	20	0.1U	6.1J	35.6	NA	NA	0.075J	0.01U	0.075J	7.02	NA	NA	239.3	10U	92	23.8	NA	7.2
	10/6/2021	22	0.1U	12.6J	32.2	NA	NA	0.15U	0.01UH1	21.7	7.02	NA	NA	273.5	10U	82	25.9	25.5	10.06
	5/3/2022	16	0.1U	25U	31.5	NA	NA	1U	0.051	1UD3	6.76	NA	NA	252	10U	73	24.9N3	NA	4.55
	11/1/2022	32	0.1U	10.7J	40.2	NA	NA	0.13J	0.011	0.14J	6.84	NA	NA	271.3	10U	82	27.1N3	NA	5
	5/11/2023	30	0.1U	36.5	43.8	NA	NA	0.1U	0.01U	0.1U	6.85	NA	NA	282.8	10U	118	26N3	NA	6.3
	11/9/2023	32	0.1U	6.8J	43.2	NA	0.5U	0.11U		NA	6.74	NA	NA	280.8	10U	117	27.3N3	NA	7.45
TW-03	4/27/2021	2 J3c	0.1 U	25 U	4.6	NA	NA	0.059 J	0.01 U	0.059 J	6.22	NA	50.9	50.9	10 U	13	5	NA	59.4
	10/6/2021	6 J2c	0.1 U	25 U	4.1	NA	NA	0.07 J	0.01 UH1	0.07 J	6.34	NA	NA	83.5	10 U	10 U	5.34	5.1	49.4
	5/3/2022	10	0.1 U	25 U	4.3	NA	NA	0.071 J	0.01 U	0.071 J	6.38	NA	NA	79.1	10 U	10 U	5.1 N3	NA	31.2
	11/1/2022	14	0.1 U	6.1 J	6	NA	NA	0.065 J	0.01 U	0.067 J	6.43	NA	NA	83.3	10 U	10 U	6 N3	NA	51.2
	5/11/2023	12	0.1 U	34.2	5.3	NA	NA	0.1 U	0.01 U	0.1 U	6.43	NA	NA	83.9	10 U	29	5.3 N3	NA	31.2
	11/20/2023	14	0.1 U	25	5.2	NA	NA	0.044	NA	NA	6.46	NA	NA	74.1	10 U	30	5.2 N3	NA	20.3
TW-03A	4/27/2021	2J3c	0.1U	10.5J	54.6	NA	NA	0.068J	0.01U	0.1U	7	NA	NA	328.6	10U	102	3.8	NA	13.6
	10/6/2021	10U1c	0.1U	10.5J	40.6	NA	NA	0.1U	0.01UH1	0.15	6.88	NA	NA	309.9	10U	64	4.02	3.74	25.9
	5/3/2022	8J3c	0.1U	12.4J	48.3	NA	NA	0.15	0.008J	0.098J	6.87	NA	NA	322.3	10U	82	4.5N3	NA	21.3
	11/1/2022	22	0.1U	19.8J	171	NA	NA	0.09J	0.0079J	NA	6.77	NA	NA	590.4	10U	204	12.2N3	NA	17.3
	5/11/2023	14	0.1U	52.4	172	NA	NA	0.1U	0.01U	0.1U	6.64	NA	NA	749	10U	314	21.4N3	NA	18.7
	11/9/2023	22	0.1U	15.8J	191	NA	0.5U	0.11U		NA	6.79	NA	NA	804	10U	349	25.9N3	NA	15.9
TW-04	4/27/2021	10	0.064 J	25 U	9.4	NA	NA	0.073 J	0.01 U	0.073 J	6.53	NA	131.1	131.1	10 U	55 D6	16.7	NA	61.2
	10/6/2021	30	0.1 U	8.3 J	8.2	NA	NA	0.063 J	0.01 UH1	0.063 J	6.69	NA	NA	170.9	10 U	41	24.8	23.8	50.8
	4/28/2022	28 ML	0.1 U	25 U	8.7	NA	NA	0.15	0.0073 J	0.16 ML	6.27	NA	NA	154.3	10 UML	64	16.5 N3	NA	37.3
	11/2/2022	32	0.1 U	22.1 J	13.4	NA	NA	0.088 J	0.0075 J	0.088 JML	6.48	NA	NA	163.3	10 U	48	12.3 N3	NA	103.2
	5/10/2023	36	0.1 U	45.6	15.3	NA	NA	0.1	0.01 UMH	0.1	6.47	NA	NA	170.1	10 U	72	12.7 N3	NA	81.2
	11/9/2023	34	0.1 U	6.8 J	16.3	NA	0.5 U	0.11 U	NA	NA	6.47	NA	NA	187.9	10 U	74	13.4 N3	NA	19.7
TW-05	4/15/2021	20	0.1 U	25 U	6.2	NA	NA	0.074 J	0.01 U	0.074 J	6.38	NA	105.1	105.1	10 UML	10 U	10	NA	11.2
	10/5/2021	36	0.1 U	6.1 J	7.2	NA	NA	0.1 U	0.01 UH3	0.1 U	6.59	NA	NA	156.7	10 U	30	14	13.2	15.4
	4/19/2022	26	0.1 U	25 U	7.7	NA	NA	0.1 U	0.01 U	0.1 UML	6.88	NA	NA	208.8	10 UML	42 H1	13.4 N3	NA	16.4
	10/18/2022	38	0.1 U	8.4 J	10.1	NA	NA	0.1 U	0.0067 J	0.1 U	6.52	NA	NA	149.1	10 U	97	12.5 N3	NA	46.2
	4/27/2023	52	0.1 U	25 UMH	7.5	NA	NA	0.1 U	0.01 U	0.1 U	6.58	NA	NA	143.2	10 UML	49	11.5 N3	NA	9.75
	10/30/2023	34 ML	0.1 U	25 U	11.2	NA	NA	0.011 U	NA	NA	6.6	NA	NA	136.9	10 U	59	13 N3	NA	8.52
TW-10A	4/20/2021	2 J5c	0.1 U	25 U	45	NA	NA	2.2	0.01 U	2.2	4.7	NA	213	213	8.6 J	106	28	NA	5.49
	10/5/2021	10 U1c	0.1 U	25 U	43.3	NA	NA	2.2	0.01 U	2.2	4.84	NA	NA	251.8	9.3 J	93	28.9	NA	7.59
	4/21/2022	2 J	0.1 U	25 U	39.2	NA	NA	2	0.01 U	2	4.67	NA	NA	225.6	8.1 J	85	28.9 N3	NA	3.97
	10/20/2022	10 U3c	0.1 U	8.4 J	47.9	NA	NA	2.1	0.01 U	2.1	4.74	NA	NA	228.7	11	100	28.5 N3	NA	1.37
	5/3/2023	10 U1c	0.1 U	25 U	45.9	NA	NA	2.2	0.01 U	2.2	4.78	NA	NA	228	10.1	102	27.2 N3	NA	3.14
	10/31/2023	10 U3c	0.1 U	25 U	49.6	NA	NA	2.17	NA	NA	4.77	NA	NA	228.8	11.4	130	29.6 N3	NA	1.82

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Severn, Anne Arundel County, Maryland

Analyte		Alkalinity (mg/L)	Ammonia Distilled (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Fluoride (µg/L)	Nitrate (mg/L)	Nitrate as N (mg/L)	Nitrite as N (mg/L)	Total Nitrogen (mg/L)	pH (SU)	Phosphorus Dissolved (mg/L)	Specific Conductivity (umhos/cm)	Specific Conductivity (uS)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Hardness (mg/L)	Total Hardness Dissolved (mg/L)	Turbidity (NTU)
Groundwater Protection Standard		NS	NS	NS	NS	400	NS	10	1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Location	Date																		
TW-19	4/21/2021	60	0.1 U	12.6 J	14.4	NA	NA	0.78	0.01 U	0.78	5.9	NA	246.4	246.4	31.9	139	80.6	NA	4.85
	10/7/2021	36	0.1 U	8.3 J	13.5	NA	NA	0.8	0.01 U	0.8	5.7	NA	NA	218.9	19.5	82	56.4	61.5	7.61
	4/26/2022	58	0.1 U	25 U	17.9	NA	NA	0.99	0.01 U	0.99	5.79	NA	NA	266.7	22.2	136	79.8 N3	NA	3.76
	10/25/2022	38	0.1 U	6.1 J	18.4	NA	NA	0.93	0.01 U	0.93	5.64	NA	NA	219.1	22.7	106	63.8 N3	NA	1.79
	5/9/2023	64	0.1 UMH	29.6	14.1	NA	NA	1.5	0.01 U	1.5	6.05	NA	NA	258.7	25.1	124	97.4 N3	NA	3.76
	11/2/2023	28	0.1 U	6.8 J	19.8	NA	4.87 R-01	1.1 R-01	NA	NA	5.72	NA	NA	223.9	24.9	122	67.4 N3	NA	3.05
TW-20R	4/21/2021	44	0.1 U	14.8 J	12.9	NA	NA	0.98	0.01 U	0.98	5.7	NA	270.8	270.8	53.8	157 D6	85.8	NA	5.25
	10/12/2021	30	0.1 U	8.3 J	11	NA	NA	NA	NA	0.91	5.54	NA	NA	277.7	60.5 ML	139	80.7	74.8	7.32
	12/28/2021	NA	NA	NA	NA	NA	NA	0.93	0.01 U	0.93	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/27/2022	36	0.1 U	5.6 J	8.7	NA	NA	0.89	0.01 U	0.89	5.46	NA	NA	238	54.1	135	77.4 N3	NA	3.6
	10/26/2022	4 J5c	0.1 U	19.8 J	12.1	NA	NA	0.91	0.01 U	0.91	4.9	NA	NA	230.1	56.2	123	54.4 N3	NA	1.72
	5/9/2023	14	0.1 U	36.5	12.6	NA	NA	0.92	0.01 U	0.92	5.09	NA	NA	218.1	50.4	114	68.7 N3	NA	4.8
	10/31/2023	10 U3c	0.1 U	13.6 J	16.6	NA	NA	1.32	NA	NA	4.61	NA	NA	219.5	55.2	118	51.5 N3	NA	2.36
TW-21A	4/26/2021	10 U2c	0.1 U	6.1 J	32	NA	NA	1.6	0.01 U	1.6	4.64	NA	186.2	186.2	22.1	87	25.2	NA	6.96
	4/27/2022	4 J4c	0.1 U	25 U	17.3	NA	NA	2.4	0.01 U	2.4	4.72	NA	NA	208.7	33.3	111	39.6 N3	NA	4.24
	5/9/2023	10 U1c	0.1 U	38.7	51.3	NA	NA	2.3	0.01 U	2.3	4.8	NA	NA	297	36.3	148	65.7 N3	NA	5.08
TW-26R	11/10/2021	9 J1c	0.1 U	5.3 J	7.5	132 JB	NA	NA	0.01 UH1	0.67	NA	NA	NA	NA	21.8	50	30.4	NA	NA
	12/1/2022	10	0.1 U	51.8	10.2	0.1 U2c	NA	0.77	0.01 U	0.77	NA	NA	NA	NA	15.1	44	161 N3	NA	NA
	5/18/2023	38	0.1 U	6.9 J	68.4	0.083 J	NA	2.1	0.01 U	2.1	NA	NA	NA	NA	29.4	204	69.1 N3	NA	NA
	12/7/2023	2 J	0.1 U	11.3 J	18.7	150 U	NA	0.885	NA	NA	NA	NA	NA	NA	13.1	68	28.7 N3	NA	NA
TW-29	4/20/2021	1 J3c	0.1 U	25 U	10.7	NA	NA	0.58	0.01 U	0.58	4.73	NA	62.4	62.4	10 U	21	9.5	NA	3.63
	10/14/2021	10 U1c	0.1 U	25 U	9.1	NA	NA	0.66	0.01 U	0.66	4.84	0.5 UN2	NA	89.8	10 U	10 U	10.4	NA	7.18
	5/4/2022	10 U1c	0.1 U	25 U	9.8	NA	NA	0.6	0.01 U	0.6	4.64	NA	NA	80.8	10 U	14	10.2 N3	NA	2.7
	11/3/2022	2 JB3c	0.1 U	25 U	11.3	NA	NA	0.61	0.01 U	0.61	4.74	NA	NA	79.4	10 U	39	10.1 N3	NA	2.52
	5/11/2023	10 U1c	0.1 U	27.4	11.5	NA	NA	0.63	0.01 U	0.66	4.8	NA	NA	84.7	10 U	43	10.4 N3	NA	4.43
	11/15/2023	2 J2c	0.1 U	25 U	11.4	NA	3.06 O-04	0.691 O-04	NA	NA	4.86	NA	NA	140.4	10 U	20	10.5 N3	NA	3.82
TW-30	4/27/2021	4 J4c	0.1 U	25 U	26	NA	NA	2.2	0.01 U	2.2	4.84	NA	NA	121.2	10 U	56	19.3	NA	6.33
	10/14/2021	2 J3c	0.047 J	25 U	22.1	NA	NA	2.3	0.01 U	2.3	4.97	0.5 UN2	NA	151.4	10 U	56	18.9	NA	7.85
	5/4/2022	2 J3c	0.1 U	25 U	22.8	NA	NA	2.1	0.01 U	2.1	4.82	NA	NA	138.6	10 U	61	20 N3	NA	3.35
	11/2/2022	2 J3c	0.1 U	25 U	26.4	NA	NA	2.1	0.01 U	2.1	4.89	NA	NA	140.8	10 U	50	19.9 N3	NA	2.63
	5/11/2023	2 J2c	0.1 U	25.1	27.3	NA	NA	2.2	0.01 U	2.2	4.94	NA	NA	140	10 U	80	19.5 N3	NA	3.77
	11/15/2023	10 U1c	0.1 U	0.9 JMH	27.7	NA	10.1 O-04	2.28 O-04	NA	NA	4.92	NA	NA	140.4	10 U	54	20 N3	NA	3.82

Notes:
Groundwater Protection Standard from State of Maryland Department of the Environmental Cleanup Standards for Soil and Groundwater (MDE 2018)
mg/L: milligrams per Liter
U: Analyte not detected above the reporting limit.
J: Reported concentration is estimated. Result is between the reporting limit and method detection limit.
NA: not analyzed
NS: no applicable GWPS available
SU: standard units
NTU: Nephelometric turbidity units
µS: microSeimens
µmhos/cm: micromhs per centimeter
3c: Alkalinity TV: 3.00 mg/L
2c: Alkalinity TV: 2.00 mg/L
1c: Alkalinity TV: 0.00 mg/L
5c: pH adjusted to <2 in lab at bench prior to analysis
4c: Alkalinity TV: 4.00 mg/L
ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

Table 8. Summary of Soil Index Test Results
Phase II Report: Site Geologic Study
Proposed Millersville Landfill and Resource Recovery Facility Vertical Expansion
Severn, Anne Arundel County, Maryland

Boring/ Material Source/Sample ID	Year Taken	Sample Depth (ft)	MC (%)	Gravel Content (%)	Sand Content (%)	Fines Content (%)	Atterberg Limits			USCS
							LL	PL	PI	
G-1	1989	0-2	NM	0.0	12.0	88.0	38	22	16	CL
		18	NM	10.0	82.0	8.0	NP	NP	NP	SP-SM
		28-30	NM	0.0	51.0	49.0	24	16	8	CL-ML
		33-35	NM	0.0	89.0	11.0	NP	NP	NP	SP-SM
		43	NM	NM	NM	NM	43	25	18	NM
G-2	1989	18	20.0	0.0	27.0	73.0	41	25	16	
G-3	1989	3-5	NM	5.0	69.0	26.0	26.0	22	4	SM
		8	NM	0.0	59.0	41.0	NP	NP	NP	SM
		18-20	NM	0.0	88.0	12.0	NP	NP	NP	SP-SM
		28	NM	0.0	87.0	13.0	NP	NP	NP	SM
		43-45	NM	0.0	92.0	8.0	NP	NP	NP	SP-SM
		58	18.0	0.0	100.0	0.0	44	26	18	NM
		73-75	NM	0.0	5.0	95.0	37	21	16	CL
		88	NM	0.0	17.0	83.0	NM	NM	NM	NM
		98-100	NM	0.0	49.0	51.0	NP	NP	NP	ML
		108-110	NM	0.0	31.0	69.0	24	17	7	CL-ML
		138-140	NM	0.0	99.0	1.0	NP	NP	NP	SP
		158-160	NM	0.0	27.0	73.0	26	17	9	CL
		168	26.0	0.0	NM	NM	61	35	26	NM
		178	22.0	0.0	NM	MN	62	25	37	NM
CF-001	2015	N/A	2.5	6.3	89.8	3.9	NP	NP	NP	SP
CF-002	2015	N/A	22.3	0.2	47.7	52.1	31	20	11	CL
CF-003	2015	N/A	12.6	1.6	54.6	43.8	25	17	8	SC
CF-004	2015	N/A	8.1	0.2	86.1	13.7	NP	NP	NP	SM
CF-005	2015	N/A	7.1	1.4	83.0	15.6	NP	NP	NP	SM
PS-001	2015	N/A	18.2	2.1	15.0	82.9	19	36	17	CL
PS-002	2015	N/A	14.1	0.3	18.0	81.7	26	18	8	CL
PS-003	2015	N/A	8.8	0.3	47.5	52.2	28	16	12	CL
PS-004	2015	N/A	15.9	0.8	35.7	63.5	35	17	18	CL
S-1	2015	N/A	8.2	0.0	90.2	9.8	NP	NP	NP	SP-SM
S-2	2015	N/A	8.5	2.0	84.0	14.0	NP	NP	NP	SM
S-3	2015	N/A	4.5	7.9	89.3	2.8	NP	NP	NP	SP
S-4	2015	N/A	5.6	5.7	81.7	12.6	NP	NP	NP	SM
S-5	2015	N/A	3.0	3.3	93.8	2.9	NP	NP	NP	SP
S-6	2015	N/A	4.7	0.0	93.5	6.5	20	NP	NP	SP-SM
S-7	2015	N/A	7.3	1.2	89.2	9.6	20	NP	NP	SP-SM
S-8	2015	N/A	20.3	0.0	49.2	50.8	18	12	6	CL-ML
S-9	2015	N/A	5.0	7.7	78.6	13.7	NP	NP	NP	SM
S-10	2015	N/A	6.4	10.9	69.0	20.1	NP	NP	NP	SM
S-11	2015	N/A	3.8	4.6	86.4	9.0	NP	NP	NP	SP-SM
S-12	2015	N/A	6.7	13.4	73.2	13.4	NP	NP	NP	SM
S-13	2015	N/A	5.9	8.6	68.5	22.9	NP	NP	NP	SM
S-14	2015	N/A	10.3	1.3	89.1	9.6	NP	NP	NP	SP-SM
S-15	2015	N/A	2.9	0.0	91.4	8.6	NP	NP	NP	SP-SM
S-16	2015	N/A	4.9	7.8	79.4	12.8	15	NP	NP	SM
D4S-2	2015	N/A	19.1	0.0	25.1	74.9	39	14	25	CL
D4S-3[1]	2015	N/A	18.1	0.0	9.8	90.2	34	18	16	CL
D4S-4[1]	2015	N/A	19.3	0.0	82.8	17.2	36	19	17	CL
B3C	2019	N/A	NM	0.0	17.3	82.7	33	20	13	CL
B2B4C	2019	N/A	NM	0.0	13.2	86.8	32	19	13	CL
B1S	2019	N/A	NM	1.5	88.9	9.6	NP	NP	NP	SP-SM
B2S	2019	N/A	NM	0.1	88.1	11.8	NP	NP	NP	SP-SM
B4S	2019	N/A	NM	0.2	90.8	9.0	NP	NP	NP	SP-SM
B2B3CS	2019	N/A	NM	0.0	65.1	34.9	24	22	2	SM
TP-1	2019	N/A	NM	8.5	82.3	9.2	NP	NP	NP	SW-SM
TP-2	2019	N/A	NM	15.2	81.3	3.5	NP	NP	NP	SP

Table 8. Summary of Soil Index Test Results
Phase II Report: Site Geologic Study
Proposed Millersville Landfill and Resource Recovery Facility Vertical Expansion
Severn, Anne Arundel County, Maryland

Boring/ Material Source/Sample ID	Year Taken	Sample Depth (ft)	MC (%)	Gravel Content (%)	Sand Content (%)	Fines Content (%)	Atterberg Limits			USCS
							LL	PL	PI	
TP-3	2019	N/A	NM	0.3	91.5	8.2	NP	NP	NP	SP-SM
TP-4	2019	N/A	NM	1.1	95.7	3.2	NP	NP	NP	SP
B-1[1]	2020	0-5	16.6	0.0	5.6	94.4	45	21	24	CL
B-2[1]	2020	0-5	18.2	0.0	0.4	99.6	53	20	33	CH
B-3[1]	2020	0-5	14.6	0.0	19.2	80.8	29	15	14	CL
CCL-4[1]	2020	0-5	18.1	0.3	24.2	75.5	29	17	12	CL
CCL5[1]	2020	0.1-5	19.2	0.1	18.7	81.2	28	17	11	CL
SF-1[1]	2020	0-5	5.2	0.0	83.6	16.4	NP	NP	NP	SM
SF-2[1]	2020	0-5	14.1	1.1	82.9	16.0	15	13	2	SM
SF-3[1]	2020	0-5	5.2	0.8	87.3	11.9	NP	NP	NP	SW-SM
SF-4[1]	2020	0-5	10.2	1.4	63.3	35.3	16	10	6	SC-SM
SF-5[1]	2020	0.1-5	13.0	1.4	73.4	25.2	NP	NP	NP	SM
SF-6[1]	2020	0.1-5	10.5	0.5	89.3	10.2	NP	NP	NP	SW-SM
SF-7[1]	2020	0.1-5	11.0	0.2	96.1	4.1	NP	NP	NP	SP
BULK SAND[1]	2023	N/A	11.6	0.3	87.6	12.1	NP	NP	NP	SM
B5	2023	5-7	8.9	9.2	83.9	6.9	NP	NP	NP	SP-SM
B3	2023	30-32	13.3	0.9	78.2	20.9	27	18	9	SC
TP-1	2023	N/A	9.3	0.2	76.2	23.6	NM	NM	NM	NM
TP-2	2023	N/A	1.7	0.0	96.1	3.9	NP	NP	NP	SP
TP-3	2023	N/A	3.9	0.0	88.4	11.6	NP	NP	NP	NM
TP-4	2023	N/A	11.2	0.2	48.5	51.3	22	18	4	CL-ML
B-7	2023	9-11	16.4	0.0	47.0	53.0	28	21	7	CL-ML

Notes:

1 Sample taken from on site stockpiled material that was excavated from the Cell 9 footprint

Definitions:

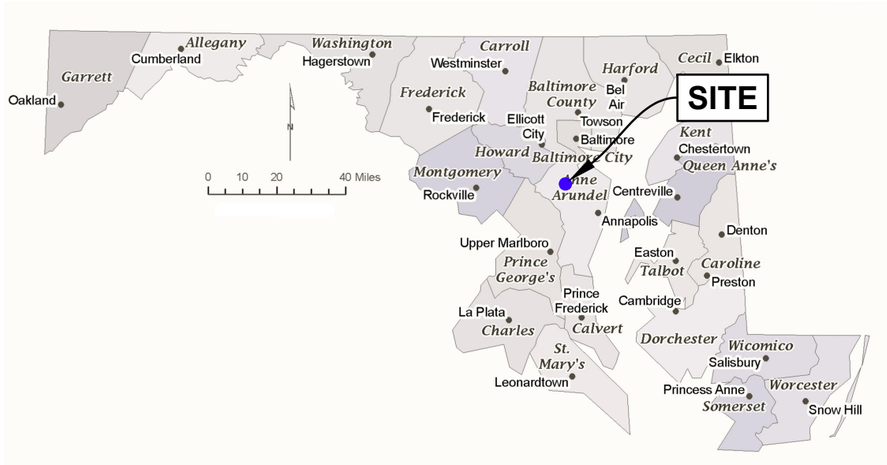
ft: feet
LL: liquid limit
MC: moisture content
NM: not measured
NP: nonplastic
PI: plasticity index
PL: plastic limit
SPT: standard penetration test
ST: Shelby tube
USCS: Unified Soil Classification System

Table 9. Summary of Well/Piezometer Construction
Phase II Report: Site Geologic Study
Proposed Millersville Landfill and Resource Recovery Facility Vertical Expansion
Severn, Anne Arundel County, Maryland

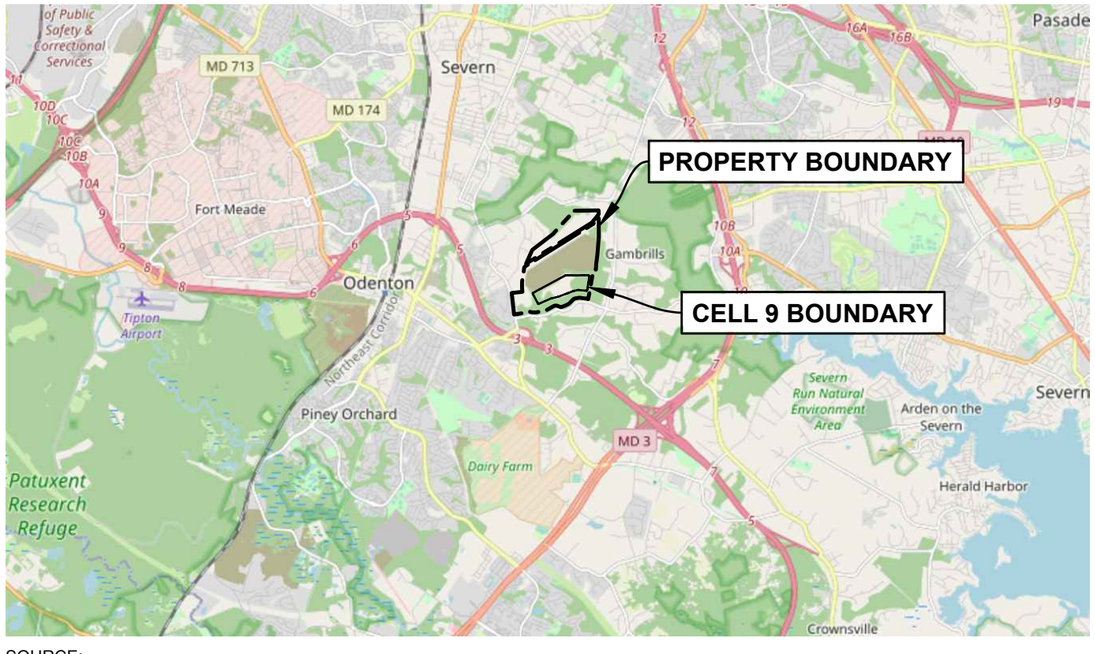
Well ID	Easting [1] (feet)	Northing [1] (feet)	Total Depth (feet)	Ground Surface Elevation (ft-NGVD29)	Top of Casing Elevation (ft-NGVD29)	Top Screen Elevation (ft-NGVD29)	Bottom Screen Elevation (ft-NGVD29)	Diameter (inches)
MW-P417	897890.57	460934.91	65	NM	112.75	57.75	47.75	4
MW-P440	897896.27	461193.00	65	NM	115.25	60.25	50.25	4
MW-P9	897836.64	461771.37	80	NM	112.32	42.32	32.32	4
RW-P441	898166.45	461475.62	72	NM	117.59	50.59	45.59	4
RW-P584	898430.07	460826.39	75	NM	118.56	48.56	43.56	4
TW-1	893924.41	455902.14	174	191.86	193.44	36.44	21.44	6
TW-10A	892554.01	457191.64	120	192.43	194.6	84.6	74.6	4
TW-11A	893500.23	458947.27	32	137.12	138.59	121.59	106.59	4
TW-12	895493.87	460283.41	109	140.68	142.14	48.14	33.14	4
TW-13	896640.97	460944.06	80	116.18	117.54	54.54	39.54	6
TW-14	897315.39	459533.90	101	121.58	123.19	37.19	22.19	4
TW-15B	897406.99	461467.51	67	115.18	116.42	64.42	49.42	4
TW-16	897298.75	462186.36	63	113.27	114.95	61.95	51.95	6
TW-17	896200.22	462124.84	65	130.20	132.1	82.1	67.1	4
TW-18	894678.01	459267.76	47	125.84	128.28	96.28	81.28	4
TW-19	894792.41	458551.90	42	118.19	119.1	92.1	77.1	4
TW-2	895926.78	456714.70	99	195.41	197.7	113.7	98.7	6
TW-2A	895906.67	456720.07	175	195.85	197.78	37.78	22.78	6
TW-20R	894638.35	458097.67	0	123.27	124.95	124.95	124.95	4
TW-21A	892836.86	459074.00	70	157.48	159.77	109.77	89.77	4
TW-22B	894647.90	460929.22	77	187.79	189.7	122.7	112.7	4
TW-24	897129.54	460730.74	72	108.00	109.21	47.21	37.21	4
TW-25	897316.37	459104.25	92	115.70	117.55	36.05	26.05	4
TW-25A	897332.86	458985.60	59	114.55	117	68	58	4
TW-29	893668.96	457229.49	124	141.94	143.55	41.55	21.55	4
TW-32	892620.75	458243.56	122	174.86	175.94	65.94	55.94	4
TW-3	896711.90	456498.30	160	178.70	180.24	37.24	22.24	6
TW-3A	896714.42	456493.76	58	178.42	181.51	128.51	123.51	6
TW-30	893117.41	456402.61	185	218.53	220.83	55.83	35.83	4
TW-4	896993.36	458100.84	94	110.89	112.47	33.47	18.47	6
TW-5	897218.08	458576.42	93	103.20	104.67	26.67	11.67	6
TW-6	897384.66	460264.19	62	105.40	107.44	60.44	45.44	6
TW-7A	895292.11	461513.43	75	126.20	127.68	73.18	53.18	4
TW-8	894404.87	460615.73	104	138.24	139.59	50.59	35.59	6
TW-9C	893158.65	459687.87	71	131.47	133.93	72.93	62.93	4

Notes:
1.Coordinate data in reference to the Maryland State Plane Datum.
ft-NGVD29: feet above mean sea level as measured by the National Geodetic Vertical Datum of 1929

Figures



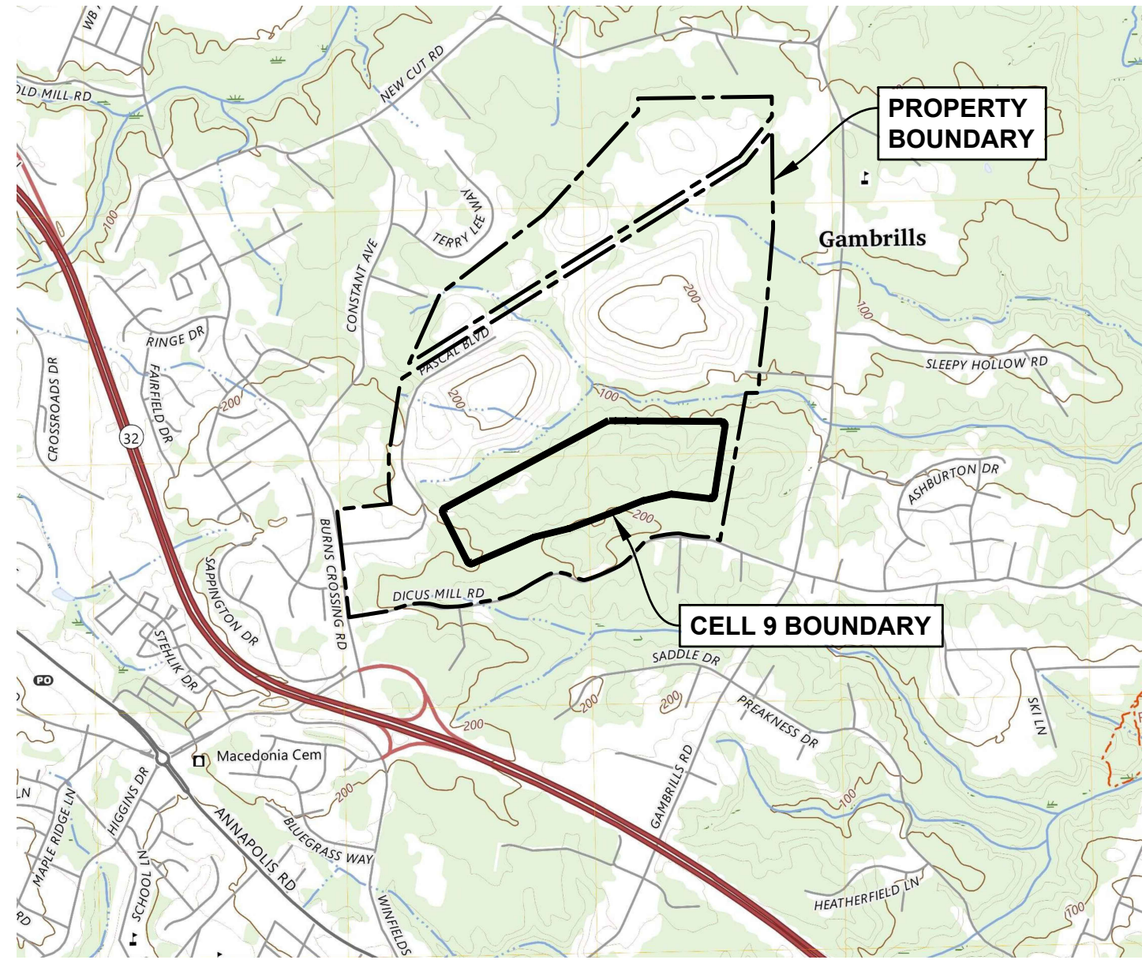
MAP OF MARYLAND



SOURCE:
©OPENSTREETMAP CONTRIBUTORS.

REGION MAP

1"=10,000'



SOURCE:
USGS 7.5 MINUTE SERIES QUAD MAP:
ODENTON, MD (2023)

AREA MAP

1" = 2,000'

AREA MAP

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY
SEVERN, ANNE ARUNDEL COUNTY, MARYLAND

Geosyntec consultants

FIGURE 1

PROJECT NO: ME1418A | SEPTEMBER 2024

C:_GEO-ACC\ACCDOCS\GEOSYNTEC\ANNE ARUNDEL CO_MILLERSVILLE\PROJECT FILES\CADD\01_MDE PERMITTING\FIGURES\PHASE 2 PERMIT REPORT\DWGS\SHEETS\ME1418A.02-G01 - Last Saved by: Teagan.Ringstad on 8/29/24

LEGEND

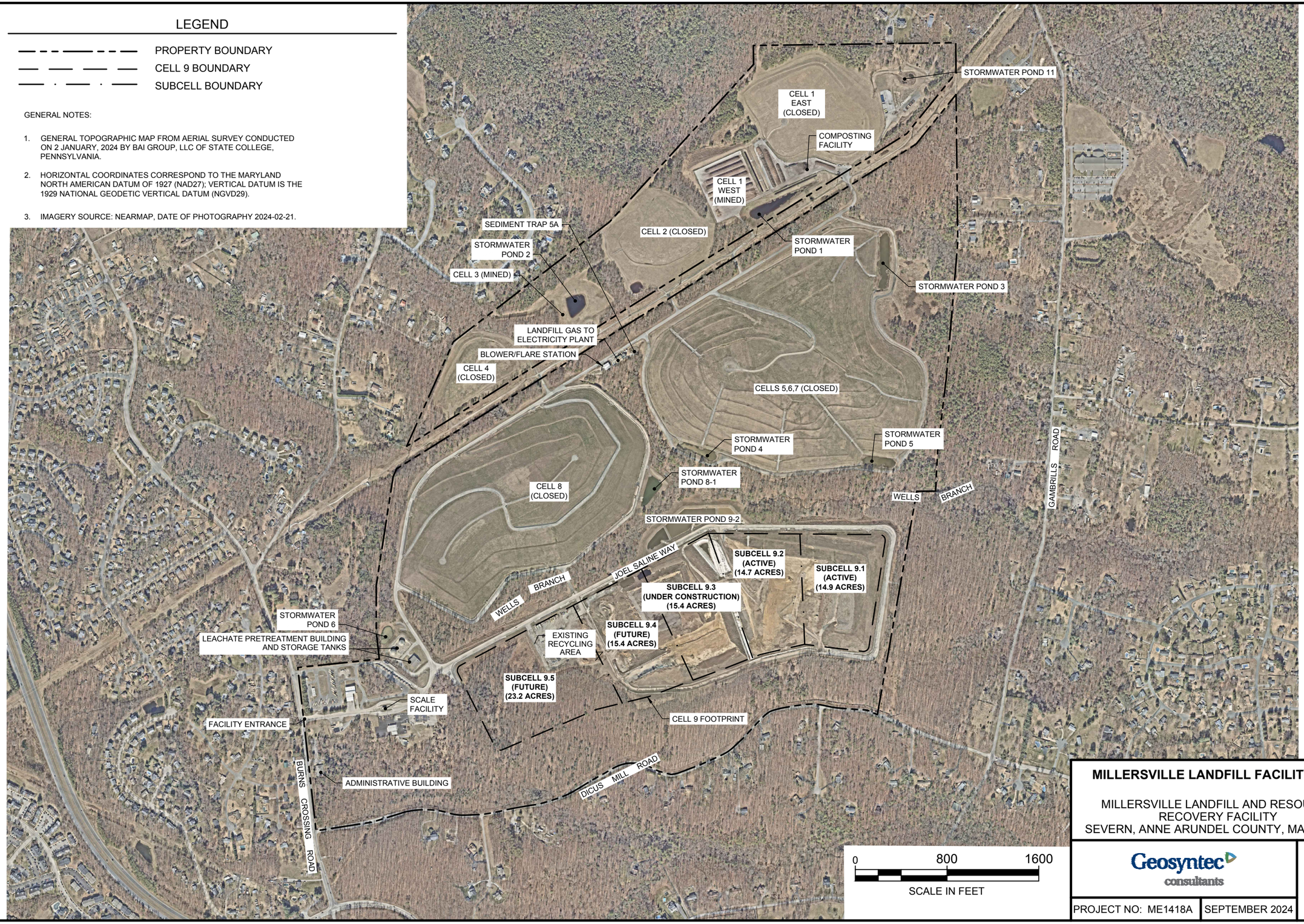
PROPERTY BOUNDARY

CELL 9 BOUNDARY

SUBCELL BOUNDARY

GENERAL NOTES:

1. GENERAL TOPOGRAPHIC MAP FROM AERIAL SURVEY CONDUCTED ON 2 JANUARY, 2024 BY BAI GROUP, LLC OF STATE COLLEGE, PENNSYLVANIA.
2. HORIZONTAL COORDINATES CORRESPOND TO THE MARYLAND NORTH AMERICAN DATUM OF 1927 (NAD27); VERTICAL DATUM IS THE 1929 NATIONAL GEODETIC VERTICAL DATUM (NGVD29).
3. IMAGERY SOURCE: NEARMAP, DATE OF PHOTOGRAPHY 2024-02-21.



MILLERSVILLE LANDFILL FACILITY MAP

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY
SEVERN, ANNE ARUNDEL COUNTY, MARYLAND

Geosyntec consultants

FIGURE 2

PROJECT NO: ME1418A | SEPTEMBER 2024

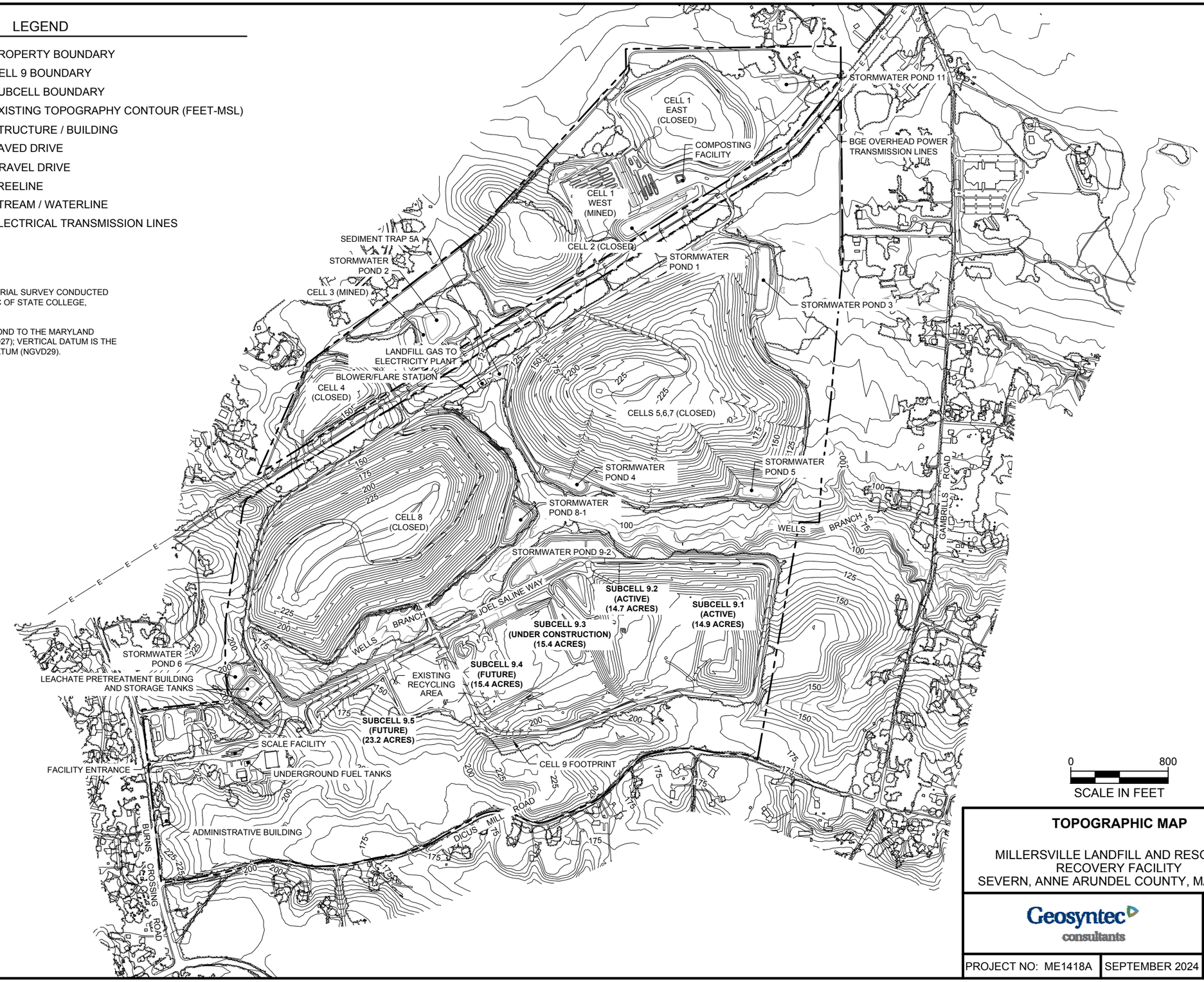
C:_GEO-ACC\ACCDOCS\GEOSYNTEC\ANNE ARUNDEL CO_MILLERSVILLE\PROJECT FILES\CADD\01_MDE PERMITTING\FIGURES\PHASE 2 PERMIT REPORT\DWGS\SHEETS\ME1418A.02-G09 - Last Saved by: Teagan.Ringstad on 8/29/24

LEGEND

- PROPERTY BOUNDARY
- CELL 9 BOUNDARY
- SUBCELL BOUNDARY
- 190 — EXISTING TOPOGRAPHY CONTOUR (FEET-MSL)
- STRUCTURE / BUILDING
- PAVED DRIVE
- GRAVEL DRIVE
- TREELINE
- STREAM / WATERLINE
- E — ELECTRICAL TRANSMISSION LINES

GENERAL NOTES:

1. GENERAL TOPOGRAPHIC MAP FROM AERIAL SURVEY CONDUCTED ON 2 JANUARY, 2024 BY BAI GROUP, LLC OF STATE COLLEGE, PENNSYLVANIA.
2. HORIZONTAL COORDINATES CORRESPOND TO THE MARYLAND NORTH AMERICAN DATUM OF 1927 (NAD27); VERTICAL DATUM IS THE 1929 NATIONAL GEODETIC VERTICAL DATUM (NGVD29).



TOPOGRAPHIC MAP

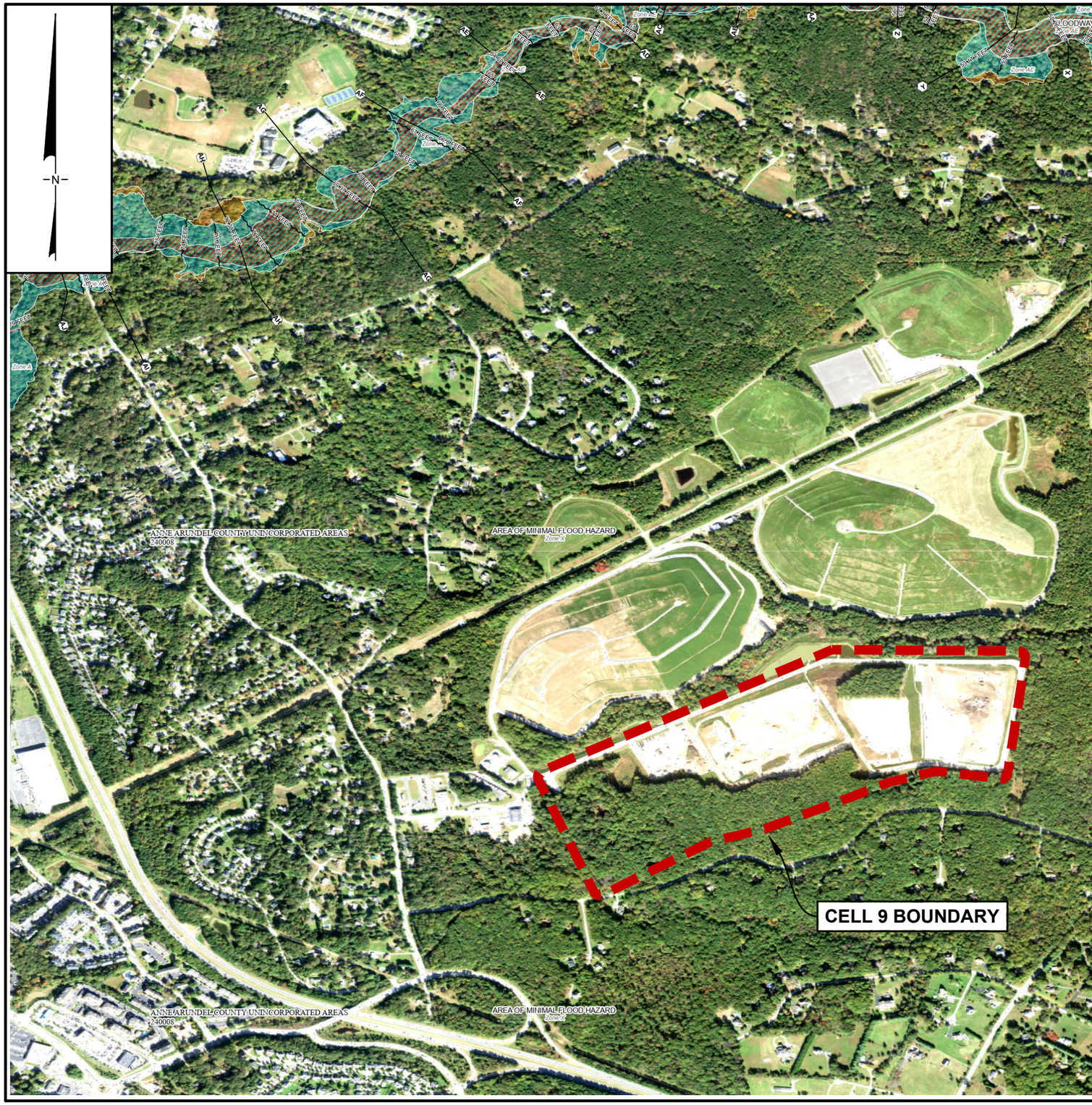
MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY
SEVERN, ANNE ARUNDEL COUNTY, MARYLAND

Geosyntec consultants

FIGURE 3

PROJECT NO: ME1418A | SEPTEMBER 2024

C:_GEO-ACC\ACCDOCS\GEOSYNTEC\ANNE ARUNDEL CO_MILLERSVILLE\PROJECT FILES\CADD\01_MDE PERMITTING\FIGURES\PHASE 2 PERMIT REPORT\DWGS\SHEETS\ME1418A.02-G03 - Last Saved by: Teagan.Ringstad on 8/29/24



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR DRAFT FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS	Without Base Flood Elevation (BFE) *Zone A, V, A99*
	With BFE or Depth *Zone AE, AO, AH, VE, AR*
	Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
	Future Conditions 1% Annual Chance Flood Hazard *Zone X*
	Area with Reduced Flood Risk due to Levee See Notes *Zone X*
	Area with Flood Risk due to Levee *Zone D*
OTHER AREAS	NO SCREEN Area of Minimal Flood Hazard *Zone X*
	Effective LOMRs
	Area of Undetermined Flood Hazard *Zone D*
GENERAL STRUCTURES	Channel, Culvert, or Storm Sewer
	Levee, Dike, or Floodwall
OTHER FEATURES	20.2 Cross Sections with 1% Annual Chance
	17.5 Water Surface Elevation
	8 Coastal Transect
	Coastal Transect Baseline
	Profile Baseline
	Hydrographic Feature
	513 Base Flood Elevation Line (BFE)
	Limit of Study
	Jurisdiction Boundary

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at https://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates, refer to the Flood Insurance Study Report for this jurisdiction.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Basemap information shown on this FIRM was provided in digital format by USDA, Farm Service Agency (FSA). This information was derived from NAIP, dated April 11, 2018.

This map was exported from FEMA's National Flood Hazard Layer (NFHL) on **6/4/2024 6:57 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time. For additional information, please see the Flood Hazard Mapping Updates Overview Fact Sheet at https://www.fema.gov/media-library/assets/documents/118418

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards. This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date.

SOURCE:
https://msc.fema.gov/portal/homeODENTON, MD (2023)
PANELS 131, 133 OF 385 ANNE ARUNDEL COUNTY
ORIGINAL SCALE 1"= 500' / 1:6000
CURRENT SCALE: NONE

FEMA FLOODPLAIN MAP

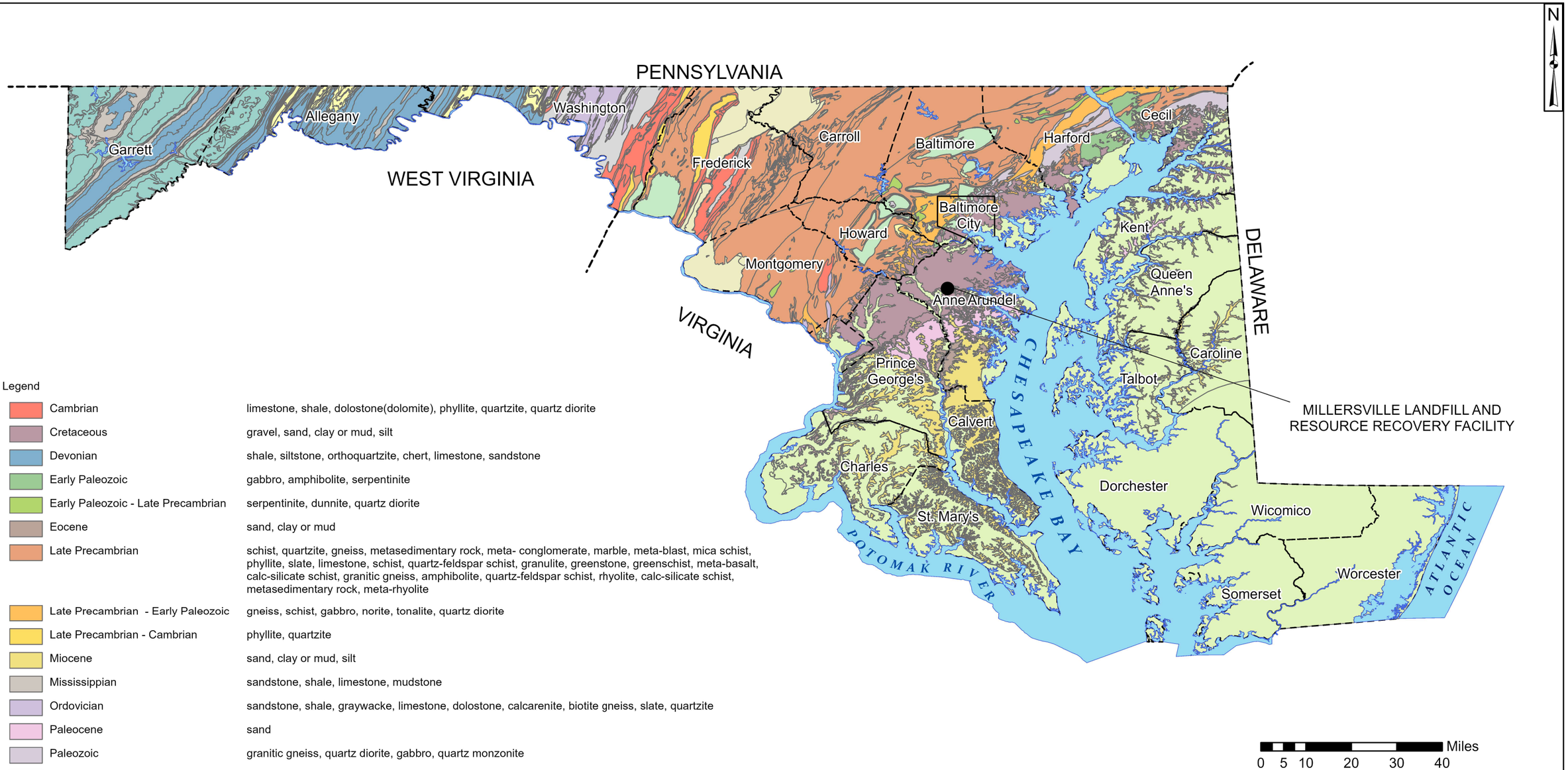
MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY
SEVERN, ANNE ARUNDEL COUNTY, MARYLAND

Geosyntec consultants

FIGURE 4

PROJECT NO: ME1418A | SEPTEMBER 2024

C:_GEO-ACC\ACCDOCS\GEOSYNTEC\ANNE ARUNDEL CO_MILLERSVILLE\PROJECT FILES\CADD\01_MDE PERMITTING\FIGURES\PHASE 2 PERMIT REPORT\DWGS\SHEETS\ME1418A.02-G15 - Last Saved by: Teagan.Ringstad on 8/29/24



Legend

Cambrian	limestone, shale, dolostone(dolomite), phyllite, quartzite, quartz diorite
Cretaceous	gravel, sand, clay or mud, silt
Devonian	shale, siltstone, orthoquartzite, chert, limestone, sandstone
Early Paleozoic	gabbro, amphibolite, serpentinite
Early Paleozoic - Late Precambrian	serpentinite, dunnite, quartz diorite
Eocene	sand, clay or mud
Late Precambrian	schist, quartzite, gneiss, metasedimentary rock, meta- conglomerate, marble, meta-blast, mica schist, phyllite, slate, limestone, schist, quartz-feldspar schist, granulite, greenstone, greenschist, meta-basalt, calc-silicate schist, granitic gneiss, amphibolite, quartz-feldspar schist, rhyolite, calc-silicate schist, metasedimentary rock, meta-rhyolite
Late Precambrian - Early Paleozoic	gneiss, schist, gabbro, norite, tonalite, quartz diorite
Late Precambrian - Cambrian	phyllite, quartzite
Miocene	sand, clay or mud, silt
Mississippian	sandstone, shale, limestone, mudstone
Ordovician	sandstone, shale, graywacke, limestone, dolostone, calcarenite, biotite gneiss, slate, quartzite
Paleocene	sand
Paleozoic	granitic gneiss, quartz diorite, gabbro, quartz monzonite
Pennsylvanian	claystone, shale, sandstone, limestone
Permian	shale, siltstone
Precambrian	granitic gneiss, amphibolite
Quaternary	gravel, sand
Silurian	limestone, shale, mudstone, orthoquartzite, graywacke, quartz monzonite, granodiorite, pegmatite
Triassic	shale, sandstone, diabase, conglomerate
Upper Cambrian to Lower Ordovician	limestone, conglomerate, dolostone

Notes:
Geologic map accessed via ArcGIS Sever and provided by USGS on 5 April 2021.

GENERALIZED GEOLOGIC MAP OF MARYLAND

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY
SEVERN, ANNE ARUNDEL COUNTY, MARYLAND

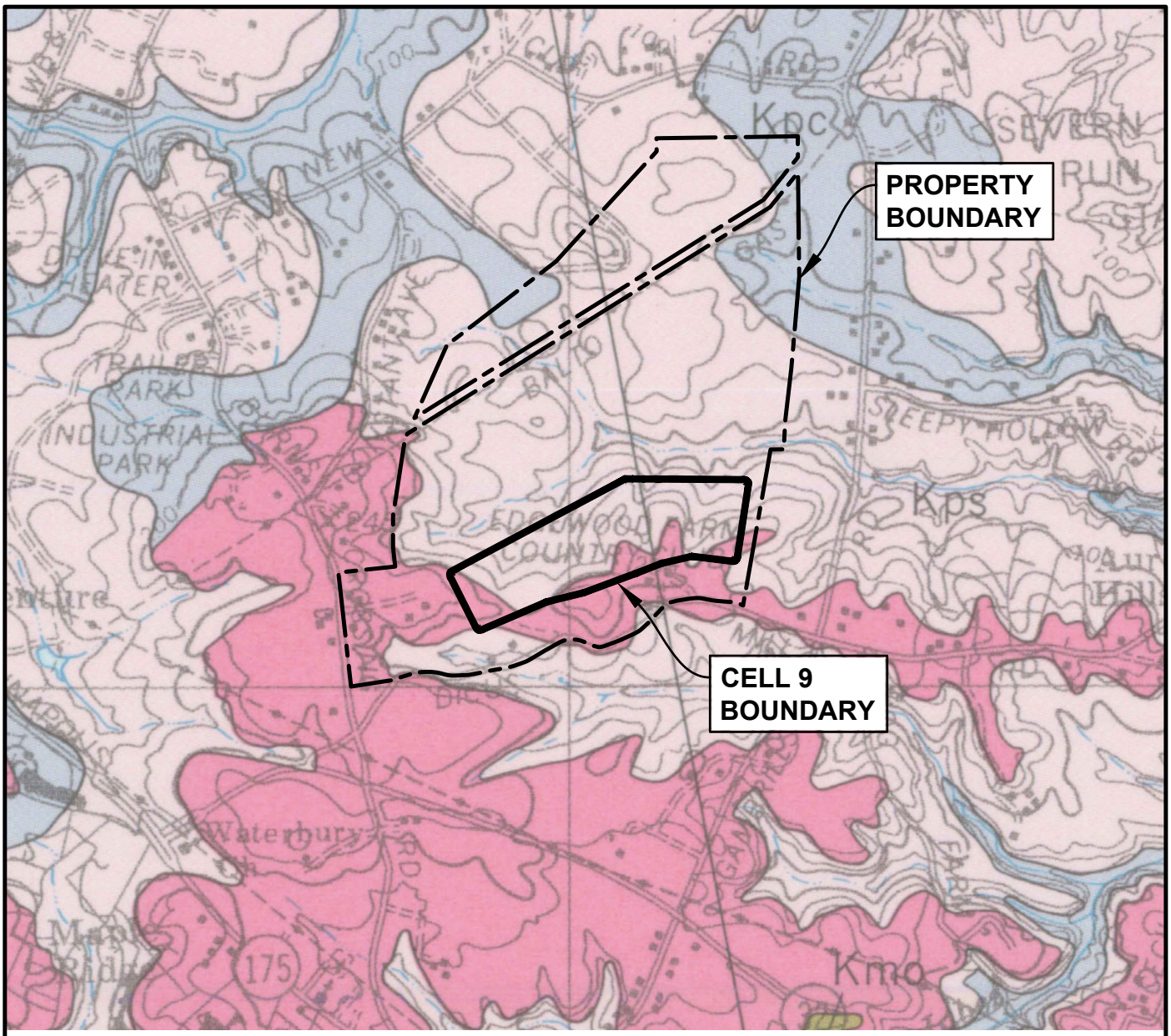
Geosyntec consultants

FIGURE 5

PROJECT NO: ME1418A

SEPTEMBER 2024

C:\Users\HHarris\Desktop\millersville landfill\Millersville_Landfill.aprx; HHarris; 17 September 2024



SOURCE: GEOLOGIC MAP OF ANNE ARUDEL COUNTY, MARYLAND GEOLOGICAL SURVEY, 1976.

N

0 2,000

SCALE IN FEET

LEGEND

Kps	SAND-GRAVEL FACIES OF THE POTOMAC GROUP
Kpc	SILT-CLAY FACIES OF THE POTOMAC GROUP
Km	MAGOTHY FORMATION
Kmo	MONMOUTH FORMATION

SURFICIAL GEOLOGIC MAP OF ANNE ARUNDEL COUNTY

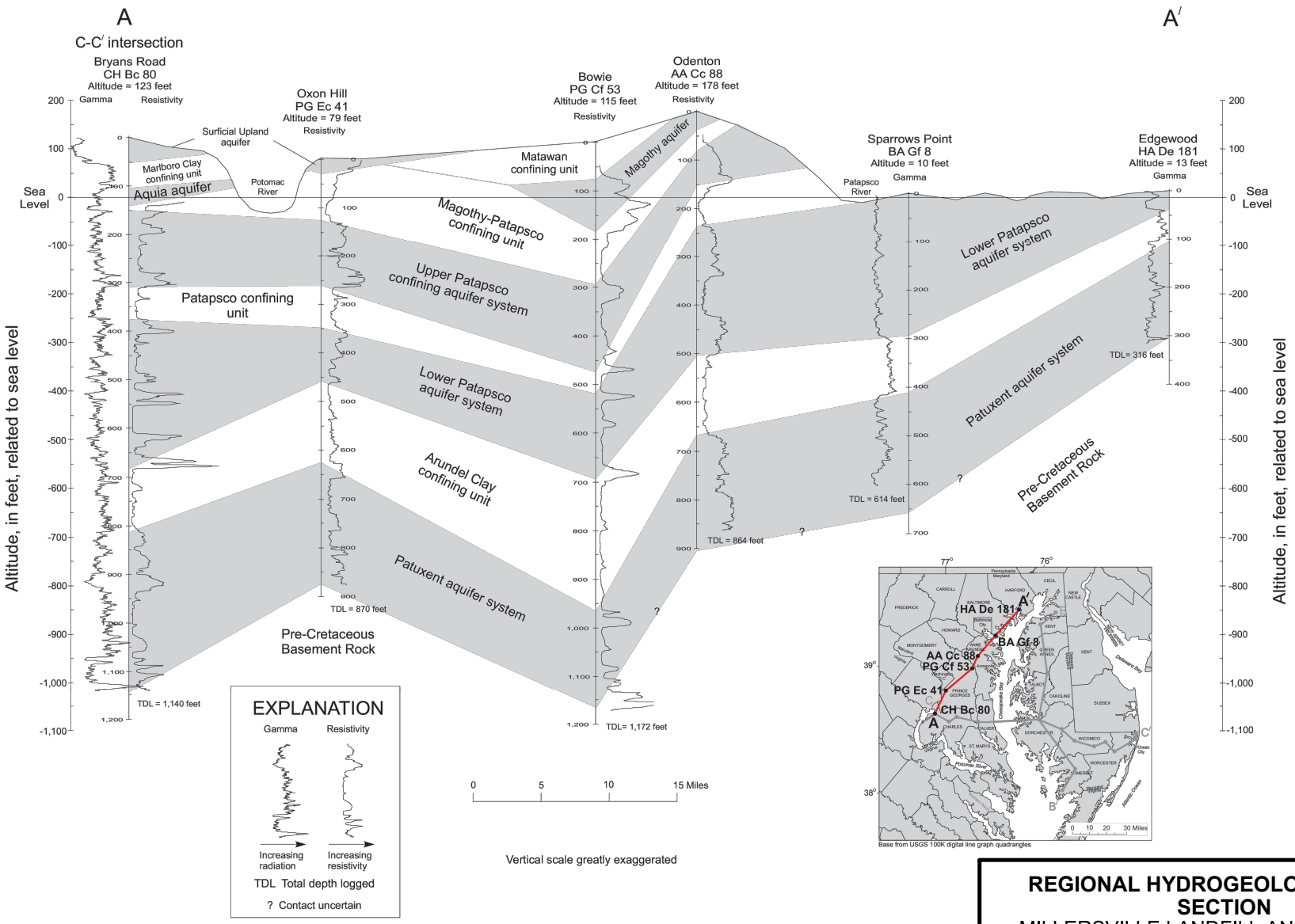
MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY
SEVERN, ANNE ARUNDEL COUNTY, MARYLAND

Geosyntec consultants

FIGURE 6

PROJECT NO: ME1418A | SEPTEMBER 2024

C:_GEO-ACC\ACCDOCS\GEOSYNTEC\ANNE ARUNDEL CO_MILLERSVILLE\PROJECT FILES\CADD\01_MDE PERMITTING\FIGURES\PHASE 2 PERMIT REPORT\DWGS\SHEETS\ME1418A.02-G16 - Last Saved By: Teagan.Ringstad on 6/24/24



SOURCE: MARYLAND DEPARTMENT OF NATURAL RESOURCES (MDNR), 2013. MARYLAND COASTAL PLAIN AQUIFER INFORMATION SYSTEM: HYDROGEOLOGIC FRAMEWORK, OPEN-FILE REPORT NO. 12-02-20, DNR PUBLICATION NO. 12-2272013-628, 2013.

HYDROGEOLOGIC CROSS SECTION A-A' FROM BRYANS ROAD, CHARLES COUNTY TO EDGEWOOD, HARFORD COUNTY MARYLAND

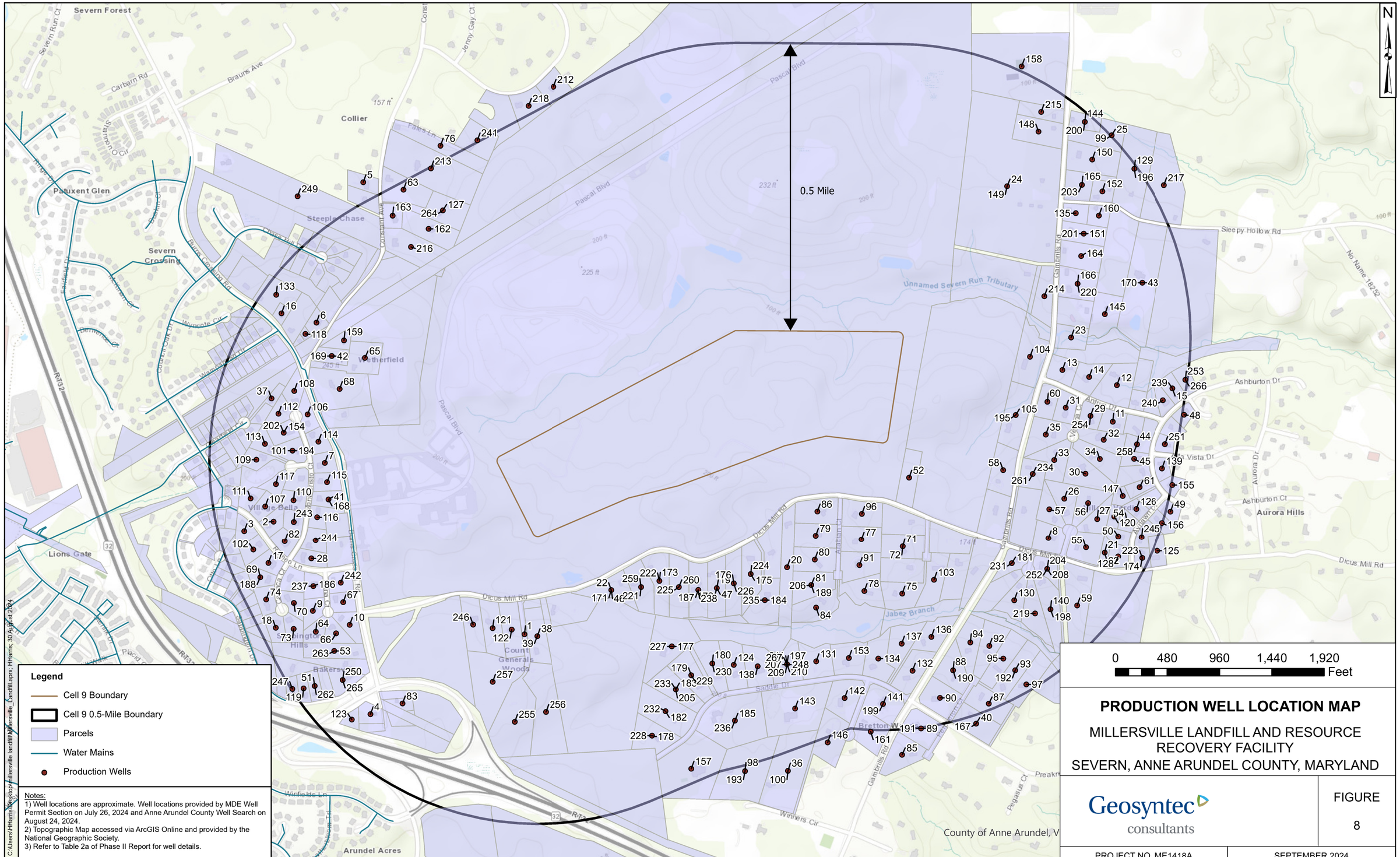
REGIONAL HYDROGEOLOGIC CROSS SECTION
MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY
SEVERN, ANNE ARUNDEL COUNTY, MARYLAND

Geosyntec consultants

FIGURE 7

PROJECT NO: ME1418A | SEPTEMBER 2024

C:_GEO-ACC\ACCDOCS\GEOSYNTEC\ANNE ARUNDEL CO_MILLERSVILLE\PROJECT FILES\CADD\01_MDE PERMITTING\FIGURES\PHASE 2 PERMIT REPORT\DWGS\SHEETS\ME1418A.02-G14 - Last Saved by: Teagan.Ringstad on 8/29/24



PRODUCTION WELL LOCATION MAP

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY
SEVERN, ANNE ARUNDEL COUNTY, MARYLAND

Geosyntec consultants

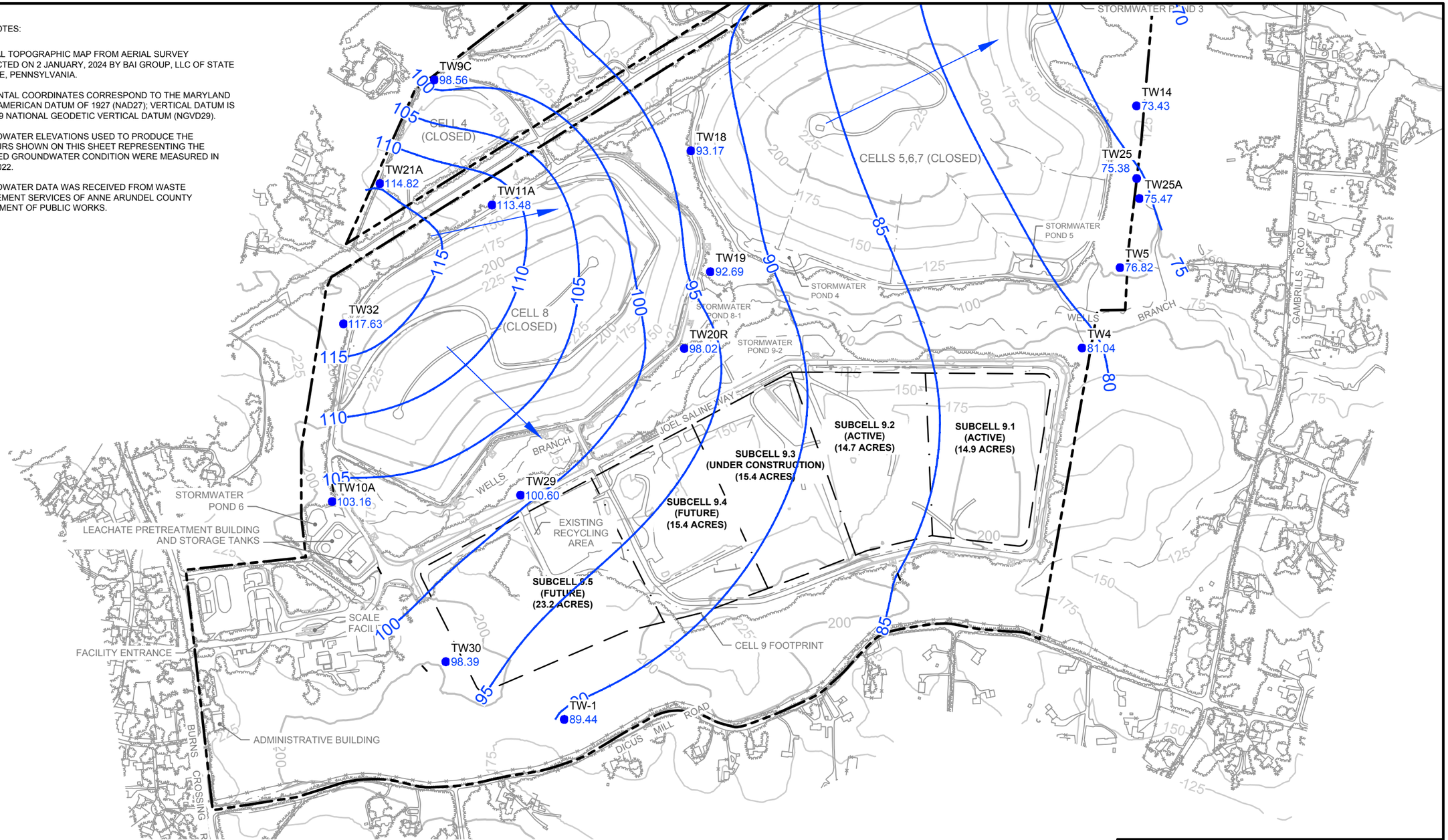
FIGURE 8

PROJECT NO. ME1418A

SEPTEMBER 2024

GENERAL NOTES:

1. GENERAL TOPOGRAPHIC MAP FROM AERIAL SURVEY CONDUCTED ON 2 JANUARY, 2024 BY BAI GROUP, LLC OF STATE COLLEGE, PENNSYLVANIA.
2. HORIZONTAL COORDINATES CORRESPOND TO THE MARYLAND NORTH AMERICAN DATUM OF 1927 (NAD27); VERTICAL DATUM IS THE 1929 NATIONAL GEODETIC VERTICAL DATUM (NGVD29).
3. GROUNDWATER ELEVATIONS USED TO PRODUCE THE CONTOURS SHOWN ON THIS SHEET REPRESENTING THE ELEVATED GROUNDWATER CONDITION WERE MEASURED IN APRIL 2022.
4. GROUNDWATER DATA WAS RECEIVED FROM WASTE MANAGEMENT SERVICES OF ANNE ARUNDEL COUNTY DEPARTMENT OF PUBLIC WORKS.



LEGEND

PROPERTY BOUNDARY	GRAVEL DRIVE
CELL 9 BOUNDARY	TREELINE
SUBCELL BOUNDARY	STREAM / WATERLINE
EXISTING TOPOGRAPHY CONTOUR (FEET-MSL)	GROUNDWATER MONITORING WELL
STRUCTURE / BUILDING	GROUNDWATER CONTOUR
FENCE	GROUNDWATER FLOW DIRECTION
PAVED DRIVE	

0 600 1200
SCALE IN FEET

CONTOUR MAP REPRESENTING ELEVATED GROUNDWATER CONDITION
MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY
SEVERN, ANNE ARUNDEL COUNTY, MARYLAND

Geosyntec consultants

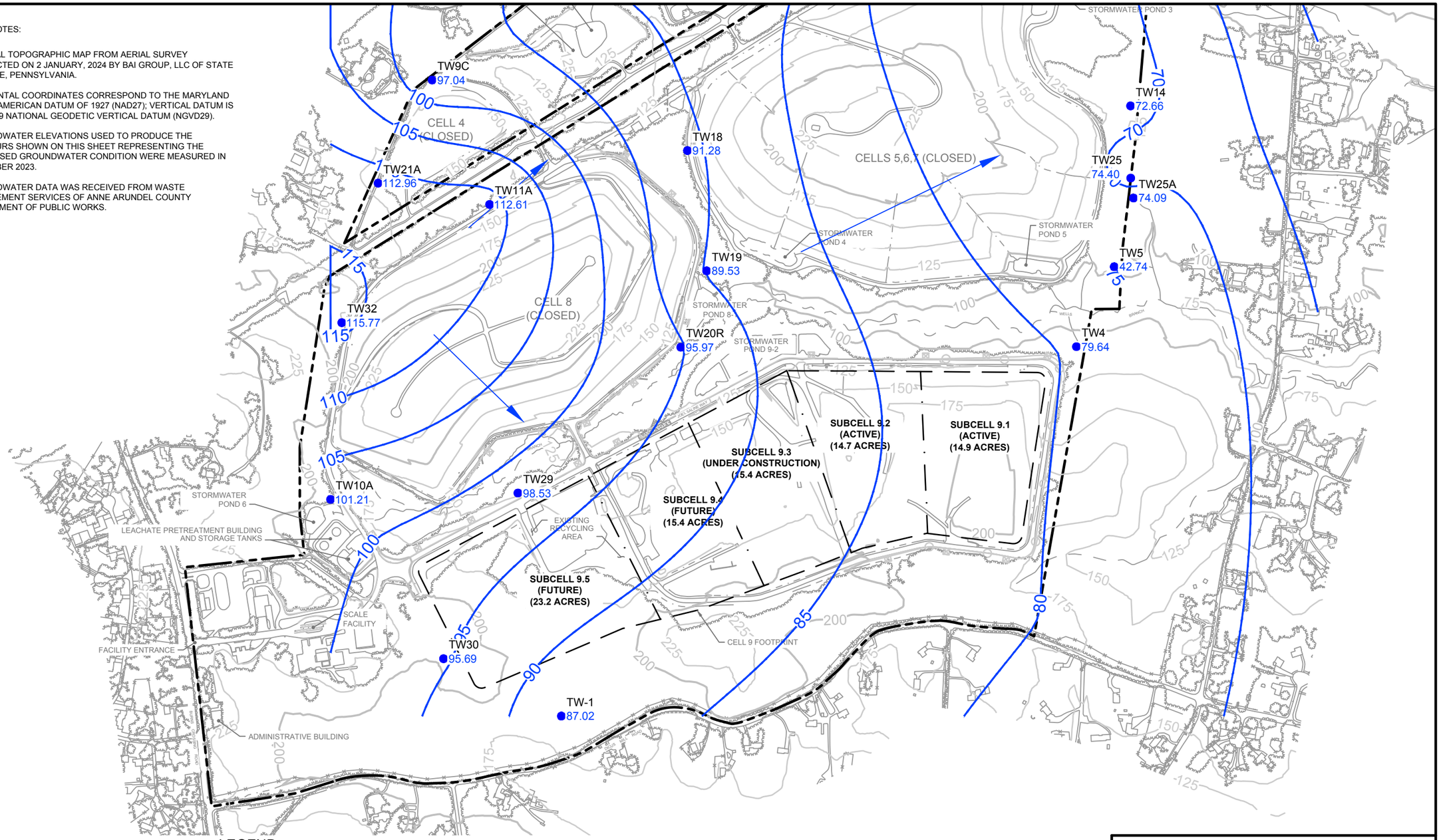
FIGURE 9

PROJECT NO: ME1418A | SEPTEMBER 2024

C:_GEO-ACC\ACCDOCS\GEOSYNTEC\ANNE ARUNDEL CO_MILLERSVILLE\PROJECT FILES\CADD\01_MDE PERMITTING\FIGURES\PHASE 2 PERMIT REPORT\DWGS\SHEETS\ME1418A.02-G06 - Last Saved by: Teagan.Ringstad on 8/29/24

GENERAL NOTES:

1. GENERAL TOPOGRAPHIC MAP FROM AERIAL SURVEY CONDUCTED ON 2 JANUARY, 2024 BY BAI GROUP, LLC OF STATE COLLEGE, PENNSYLVANIA.
2. HORIZONTAL COORDINATES CORRESPOND TO THE MARYLAND NORTH AMERICAN DATUM OF 1927 (NAD27); VERTICAL DATUM IS THE 1929 NATIONAL GEODETIC VERTICAL DATUM (NGVD29).
3. GROUNDWATER ELEVATIONS USED TO PRODUCE THE CONTOURS SHOWN ON THIS SHEET REPRESENTING THE DEPRESSED GROUNDWATER CONDITION WERE MEASURED IN NOVEMBER 2023.
4. GROUNDWATER DATA WAS RECEIVED FROM WASTE MANAGEMENT SERVICES OF ANNE ARUNDEL COUNTY DEPARTMENT OF PUBLIC WORKS.



LEGEND

PROPERTY BOUNDARY	GRAVEL DRIVE
CELL 9 BOUNDARY	TREELINE
SUBCELL BOUNDARY	STREAM / WATERLINE
EXISTING TOPOGRAPHY CONTOUR (FEET-MSL)	GROUNDWATER MONITORING WELL
STRUCTURE / BUILDING	GROUNDWATER CONTOUR
FENCE	GROUNDWATER FLOW DIRECTION
PAVED DRIVE	

0 600 1200
SCALE IN FEET

CONTOUR MAP REPRESENTING DEPRESSED GROUNDWATER CONDITION
MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY
SEVERN, ANNE ARUNDEL COUNTY, MARYLAND

Geosyntec consultants

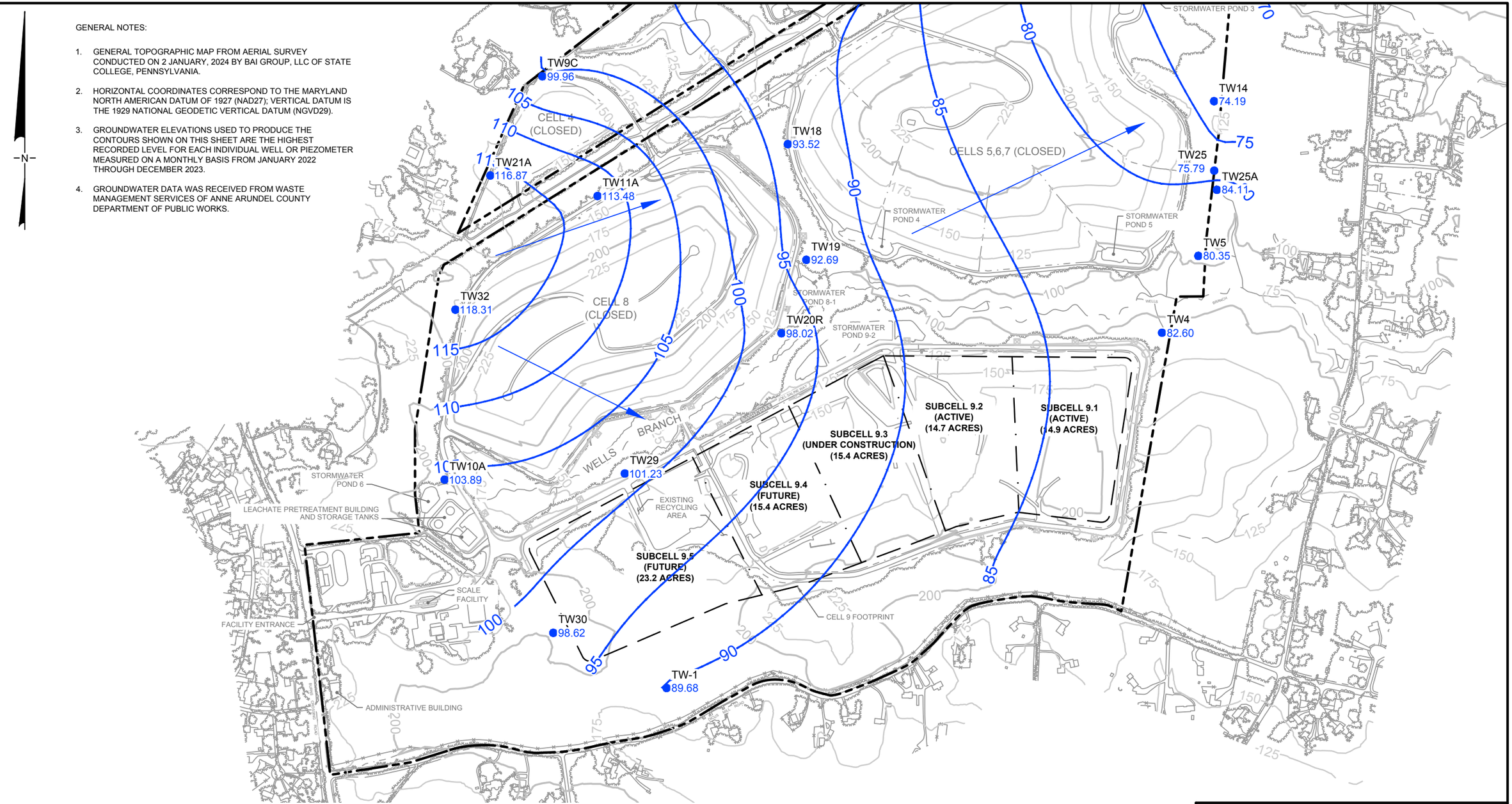
FIGURE 10

PROJECT NO: ME1418A | SEPTEMBER 2024

C:_GEO-ACC\ACCDOCS\GEOSYNTEC\ANNE ARUNDEL CO_MILLERSVILLE\PROJECT FILES\CADD\01_MDE PERMITTING\FIGURES\PHASE 2 PERMIT REPORT\DWGS\SHEETS\ME1418A.02-G07 - Last Saved by: Teagan.Ringstad on 8/29/24

GENERAL NOTES:

1. GENERAL TOPOGRAPHIC MAP FROM AERIAL SURVEY CONDUCTED ON 2 JANUARY, 2024 BY BAI GROUP, LLC OF STATE COLLEGE, PENNSYLVANIA.
2. HORIZONTAL COORDINATES CORRESPOND TO THE MARYLAND NORTH AMERICAN DATUM OF 1927 (NAD27); VERTICAL DATUM IS THE 1929 NATIONAL GEODETIC VERTICAL DATUM (NGVD29).
3. GROUNDWATER ELEVATIONS USED TO PRODUCE THE CONTOURS SHOWN ON THIS SHEET ARE THE HIGHEST RECORDED LEVEL FOR EACH INDIVIDUAL WELL OR PIEZOMETER MEASURED ON A MONTHLY BASIS FROM JANUARY 2022 THROUGH DECEMBER 2023.
4. GROUNDWATER DATA WAS RECEIVED FROM WASTE MANAGEMENT SERVICES OF ANNE ARUNDEL COUNTY DEPARTMENT OF PUBLIC WORKS.



LEGEND

PROPERTY BOUNDARY	GRAVEL DRIVE
CELL 9 BOUNDARY	TREELINE
SUBCELL BOUNDARY	STREAM / WATERLINE
EXISTING TOPOGRAPHY CONTOUR (FEET-MSL)	GROUNDWATER MONITORING WELL
STRUCTURE / BUILDING	GROUNDWATER CONTOUR
FENCE	GROUNDWATER FLOW DIRECTION
PAVED DRIVE	

0 600 1200
SCALE IN FEET

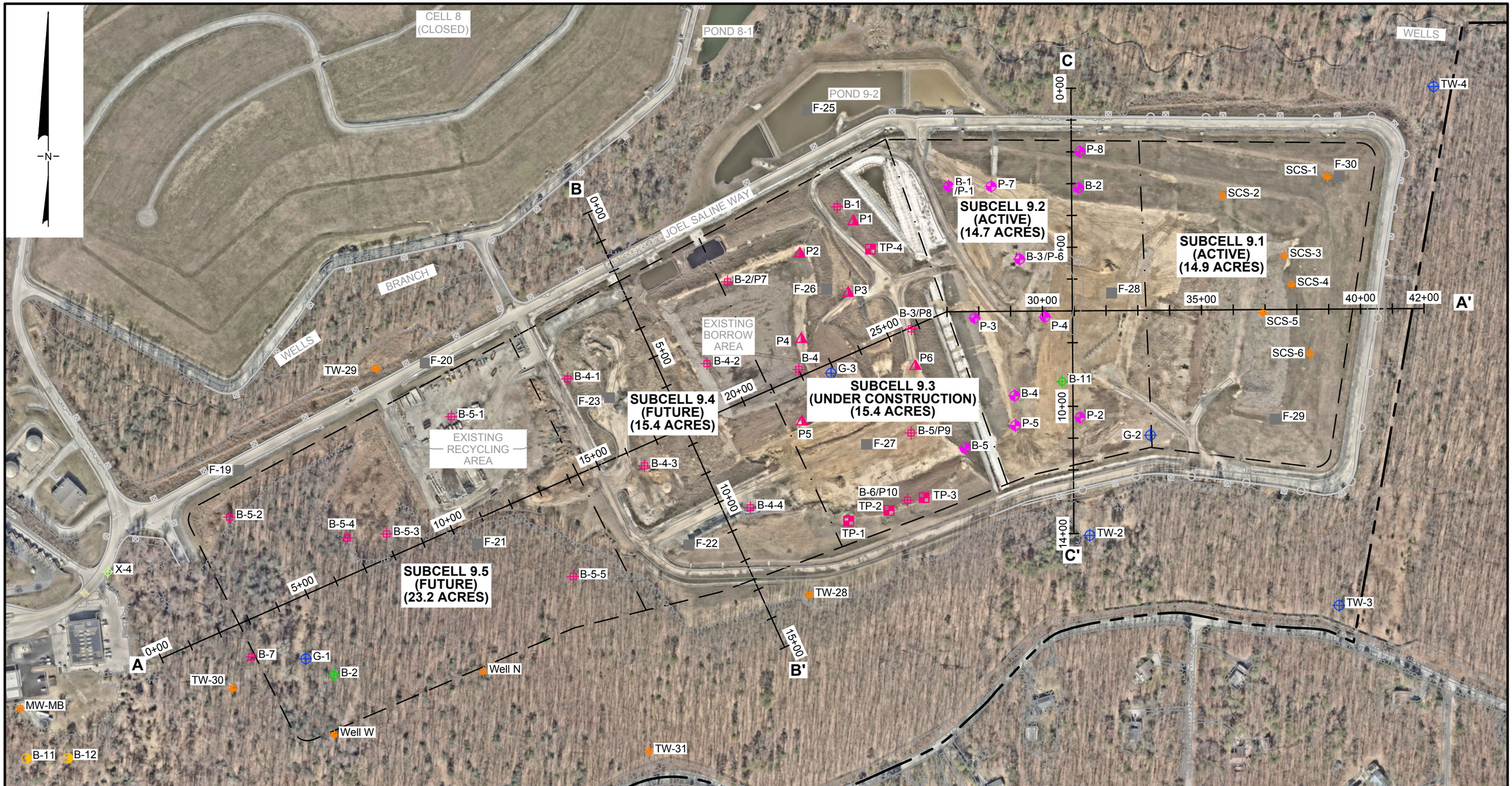
CONTOUR MAP REPRESENTING HIGHEST OBSERVED GROUNDWATER CONDITION
MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY
SEVERN, ANNE ARUNDEL COUNTY, MARYLAND

Geosyntec consultants

FIGURE 11

PROJECT NO: ME1418A | SEPTEMBER 2024

C:_GEO-ACC\ACCDOCS\GEOSYNTEC\ANNE ARUNDEL CO_MILLERSVILLE\PROJECT FILES\CADD\01_MDE PERMITTING\FIGURES\PHASE 2 PERMIT REPORT\DWGS\SHEETS\ME1418A.02-G08 - Last Saved by: Teagan.Ringstad on 8/29/24



LEGEND

- CELL 9 BOUNDARY
- SUBCELL BOUNDARY
- GEOSYNTEC 2022 BOREHOLE
- GEOSYNTEC 2022 PIEZOMETER
- GEOSYNTEC 2022 TEST PIT
- GEOSYNTEC 2017 BOREHOLE
- FROEHLING AND ROBERTSON 2022 BOREHOLE
- SCS 2011-2017 EXPLORATION LOCATION
- GEOSERVICES / GEOSYNTEC 1975-2012 BOREHOLE
- CENTURY 1974 BOREHOLE
- GREEN ASSOCIATES 1971 BOREHOLE
- GREEN ASSOCIATES 1969 BOREHOLE

0 300 600

SCALE IN FEET

IMAGERY SOURCE: NEARMAP, DATE OF PHOTOGRAPHY 2024-02-21.

CROSS SECTION KEY MAP

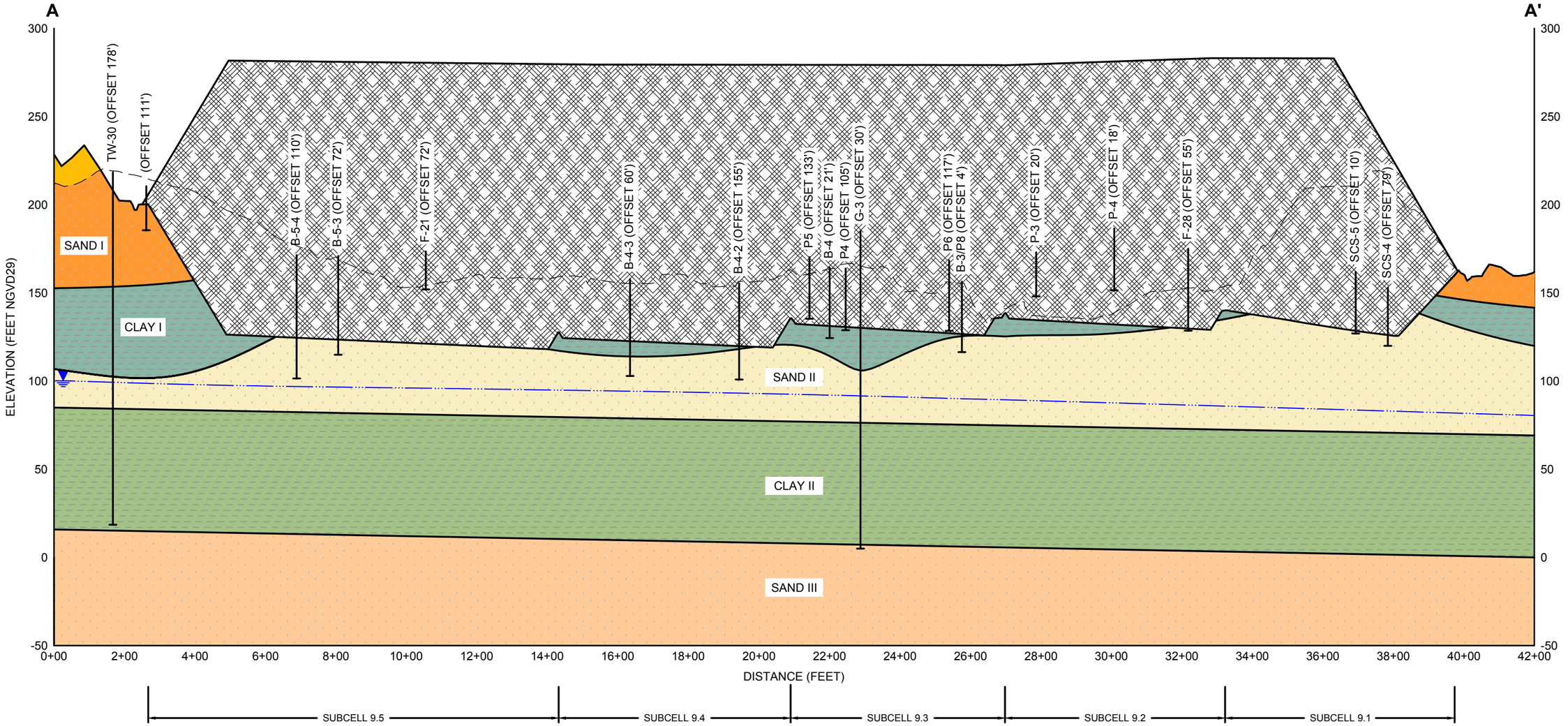
MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY
SEVERN, ANNE ARUNDEL COUNTY, MARYLAND

Geosyntec consultants

FIGURE 12

PROJECT NO: ME1418A | SEPTEMBER 2024

C:_GEO-ACC\ACCDOCS\GEOSYNTEC\ANNE ARUNDEL CO_MILLERSVILLE\PROJECT FILES\CADD\01_MDE PERMITTING\FIGURES\PHASE 2 PERMIT REPORT\DWGS\SHEETS\ME1418A.02-G05 - Last Saved by: Teagan.Ringstad on 8/29/24



NOTES:
1. SOIL PROFILES SHOWN ARE GENERALIZATIONS BASED ON AVAILABLE DRAWINGS, BORING LOGS, AND RELATED INFORMATION.
2. SOIL PROFILES SHOWN BETWEEN BOREHOLES INVOLVE EXTRAPOLATIONS AND INTERPOLATIONS. VARIATIONS FROM THE PROFILE DEPICTED IN THIS SECTION SHOULD BE EXPECTED.
3. GROUNDWATER ELEVATIONS USED TO PRODUCE THE GROUNDWATER PROFILE SHOWN ON THIS SHEET ARE THE HIGHEST RECORDED LEVEL FOR EACH INDIVIDUAL WELL OR PIEZOMETER MEASURED ON A MONTHLY BASIS FROM JANUARY 2022 THROUGH DECEMBER 2023,

LEGEND

- WASTE
- SAND I (SP-SM): LOOSE TO VERY DENSE ORANGE BROWN POORLY GRADED SAND WITH SILT, GRAVEL, AND CLAY LENSES. MAGOTHY FORMATION
- CLAY I (CL): STIFF TO HARD GRAY WITH RED AND BROWN LEAN CLAY WITH SAND. UPPER PATAPSCO FORMATION
- STRUCTURAL FILL
- SAND II (SM): MEDIUM TO VERY DENSE LIGHT TAN WITH BROWN SILTY SAND. UPPER PATAPSCO FORMATION
- CLAY II (CL): LEAN CLAY, HARD, VARIEGATED COLOR. LOWER PATAPSCO FORMATION
- SAND III (SP-SM): SAND, FINE TO MEDIUM, BROWN. LOWER PATAPSCO FORMATION

0 300 600

HORIZONTAL SCALE: 1" = 300'
VERTICAL SCALE: 1" = 60'

GENERALIZED CROSS SECTION A-A'

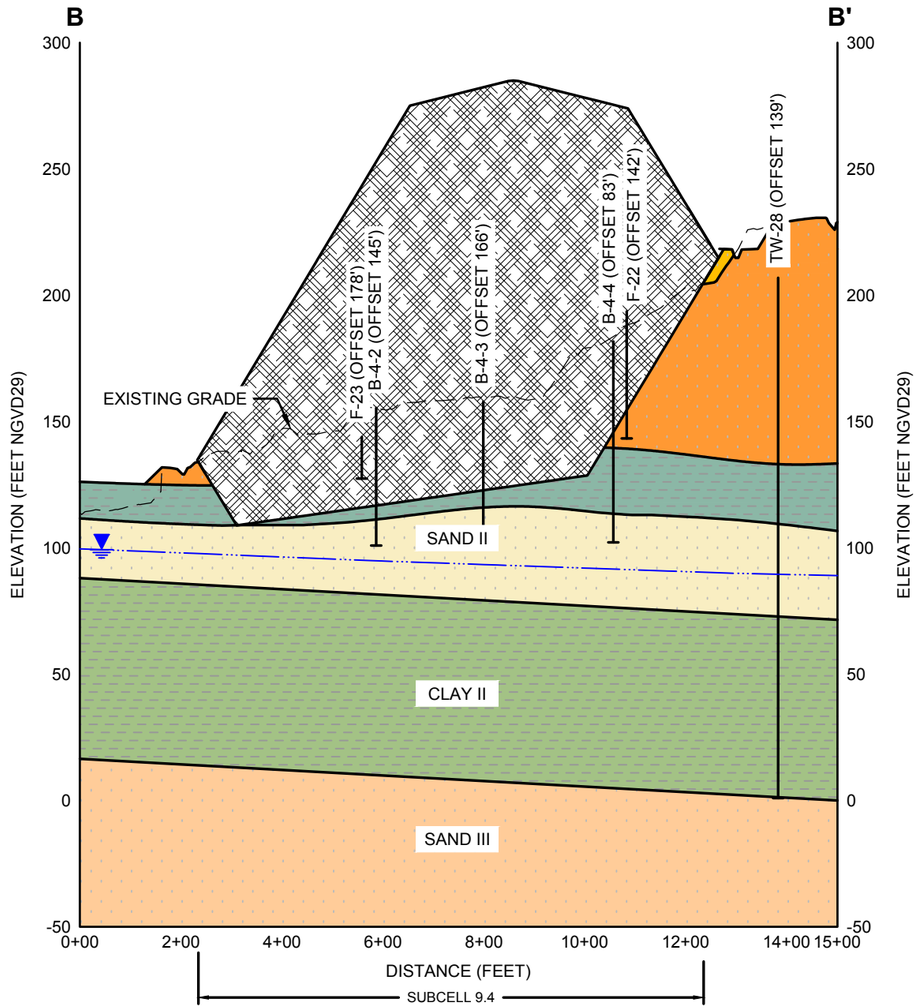
MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY
SEVERN, ANNE ARUNDEL COUNTY, MARYLAND

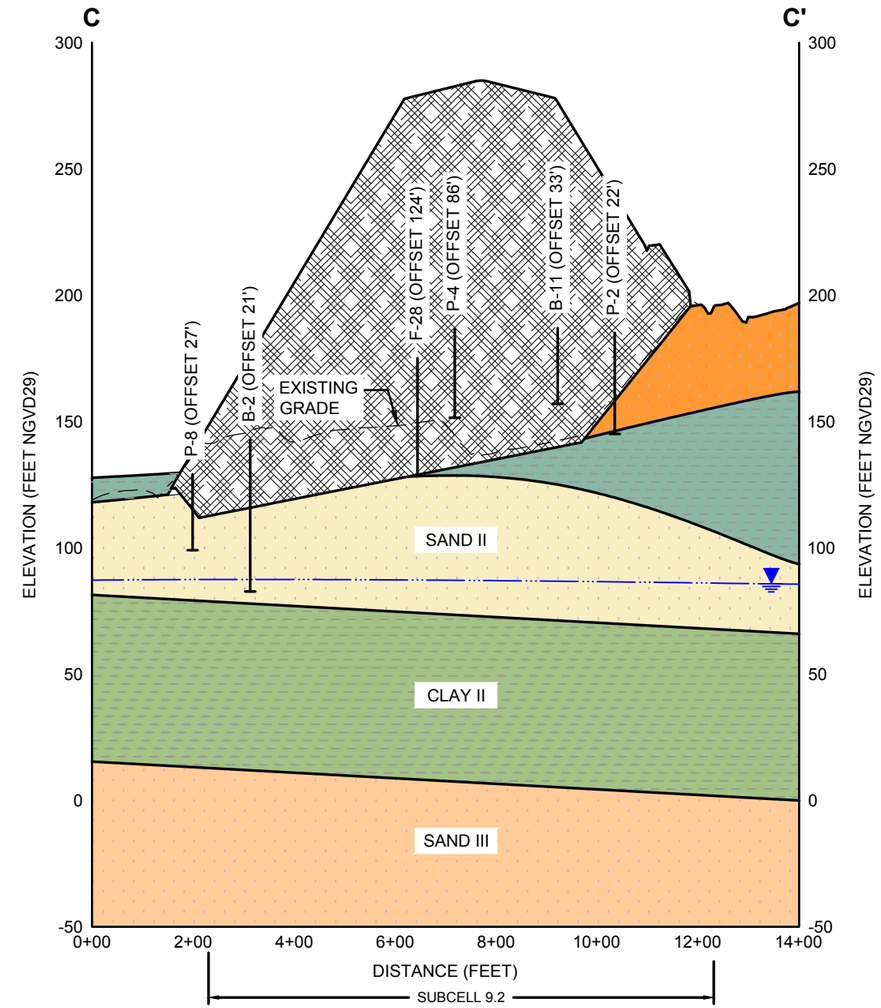
Geosyntec consultants

FIGURE 13

PROJECT NO: ME1418A | SEPTEMBER 2024

C:_GEO-ACC\ACCDOCS\GEOSYNTEC\ANNE ARUNDEL CO_MILLERSVILLE\PROJECT FILES\CADD\01_MDE PERMITTING\FIGURES\PHASE 2 PERMIT REPORT\DWGS\SHEETS\ME1418A.02-G02 - Last Saved by: Teagan.Ringstad on 8/29/24





0 300 600

HORIZONTAL SCALE: 1" = 300'
VERTICAL SCALE: 1" = 60'

NOTES:

1. SOIL PROFILES SHOWN ARE GENERALIZATIONS BASED ON AVAILABLE DRAWINGS, BORING LOGS, AND RELATED INFORMATION.
2. SOIL PROFILES SHOWN BETWEEN BOREHOLES INVOLVE EXTRAPOLATIONS AND INTERPOLATIONS. VARIATIONS FROM THE PROFILE DEPICTED IN THIS SECTION SHOULD BE EXPECTED.
3. GROUNDWATER ELEVATIONS USED TO PRODUCE THE GROUNDWATER PROFILES SHOWN ON THIS SHEET ARE THE HIGHEST RECORDED LEVEL FOR EACH INDIVIDUAL WELL OR PIEZOMETER MEASURED ON A MONTHLY BASIS FROM JANUARY 2022 THROUGH DECEMBER 2023,

LEGEND

- WASTE
- SAND I (SP-SM): LOOSE TO VERY DENSE ORANGE BROWN POORLY GRADED SAND WITH SILT, GRAVEL, AND CLAY LENSES. MAGOTHY FORMATION
- CLAY I (CL): STIFF TO HARD GRAY WITH RED AND BROWN LEAN CLAY WITH SAND. UPPER PATAPSCO FORMATION
- STRUCTURAL FILL
- SAND II (SM): MEDIUM TO VERY DENSE LIGHT TAN WITH BROWN SILTY SAND. UPPER PATAPSCO FORMATION
- CLAY II (CL): LEAN CLAY, HARD, VARIEGATED COLOR. LOWER PATAPSCO FORMATION
- SAND III (SP-SM): SAND, FINE TO MEDIUM, BROWN. LOWER PATAPSCO FORMATION

GENERALIZED CROSS SECTION B-B' & C-C'

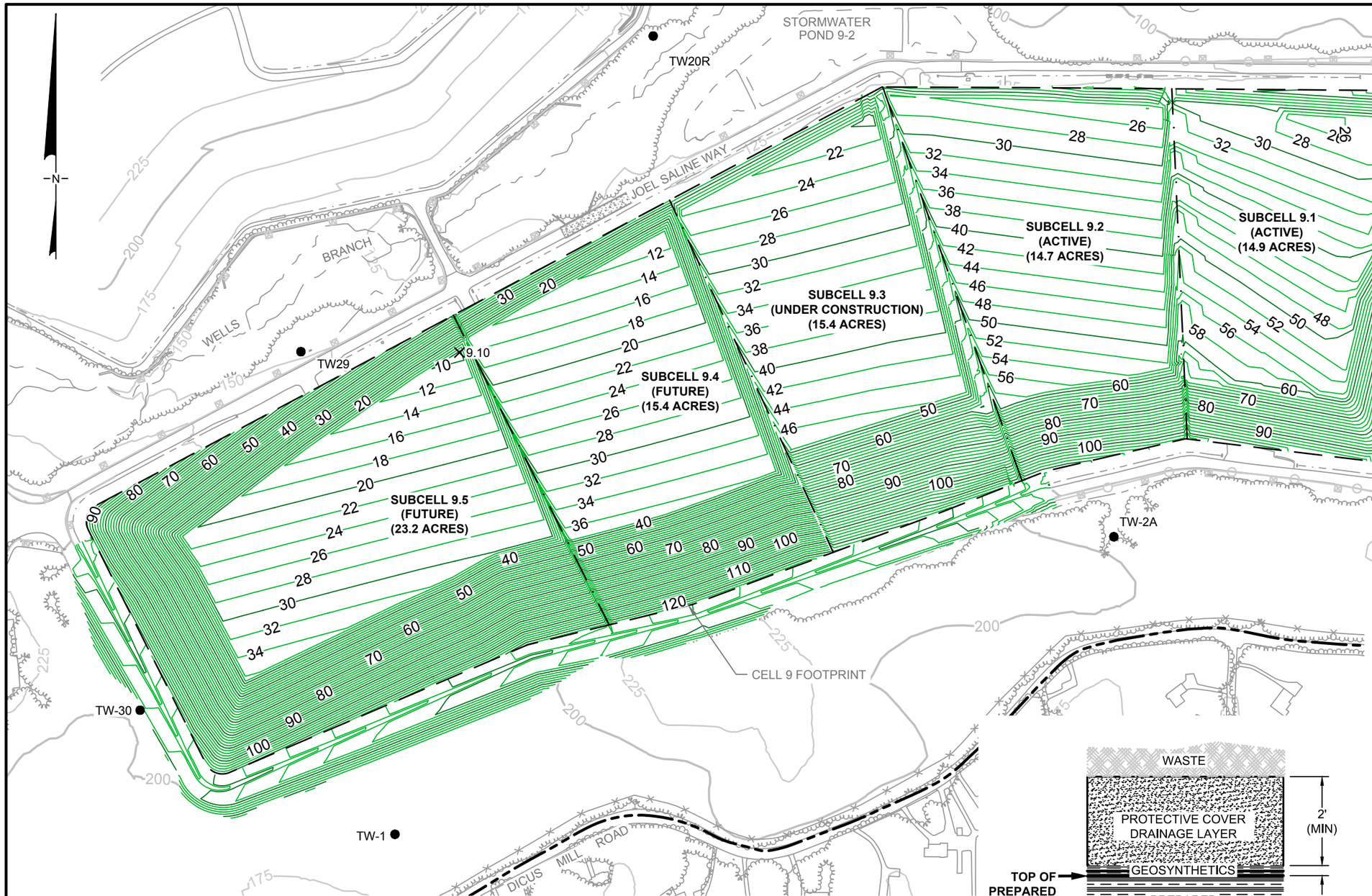
MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY
SEVERN, ANNE ARUNDEL COUNTY, MARYLAND

Geosyntec consultants

FIGURE 14

PROJECT NO: ME1418A | SEPTEMBER 2024

C:_GEO-ACC\ACCDOCS\GEOSYNTEC\ANNE ARUNDEL CO_MILLERSVILLE\PROJECT FILES\CADD\01_MDE PERMITTING\FIGURES\PHASE 2 PERMIT REPORT\DWGS\SHEETS\ME1418A.02-G04 - Last Saved by: Teagan.Ringstad on 8/29/24



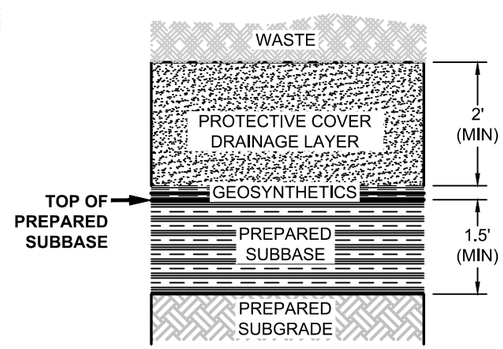
GENERAL NOTES:

1. GENERAL TOPOGRAPHIC MAP FROM AERIAL SURVEY CONDUCTED ON 2 JANUARY, 2024 BY BAI GROUP, LLC OF STATE COLLEGE, PENNSYLVANIA.
2. HORIZONTAL COORDINATES CORRESPOND TO THE MARYLAND NORTH AMERICAN DATUM OF 1927 (NAD27); VERTICAL DATUM IS THE 1929 NATIONAL GEODETIC VERTICAL DATUM (NGVD29).
3. GROUNDWATER ELEVATIONS USED TO PRODUCE THE CONTOURS SHOWN ON THIS SHEET ARE THE HIGHEST RECORDED LEVEL FOR EACH INDIVIDUAL WELL OR PIEZOMETER MEASURED ON A MONTHLY BASIS FROM JANUARY 2022 THROUGH DECEMBER 2023.
4. GROUNDWATER DATA WAS RECEIVED FROM WASTE MANAGEMENT SERVICES OF ANNE ARUNDEL COUNTY DEPARTMENT OF PUBLIC WORKS.

0 600
SCALE IN FEET

LEGEND

- PROPERTY BOUNDARY
- CELL 9 BOUNDARY
- SUBCELL BOUNDARY
- 190 EXISTING TOPOGRAPHY CONTOUR (FEET-MSL)
- STRUCTURE / BUILDING
- FENCE
- PAVED DRIVE
- GRAVEL DRIVE
- TREELINE
- STREAM / WATERLINE
- GROUNDWATER MONITORING WELL
- 6 SOIL THICKNESS BETWEEN GROUNDWATER TABLE (NOTE 3) AND TOP OF PREPARED SUBBASE



1 / - DETAIL
LINER SYSTEM, TYP.
SCALE: NTS

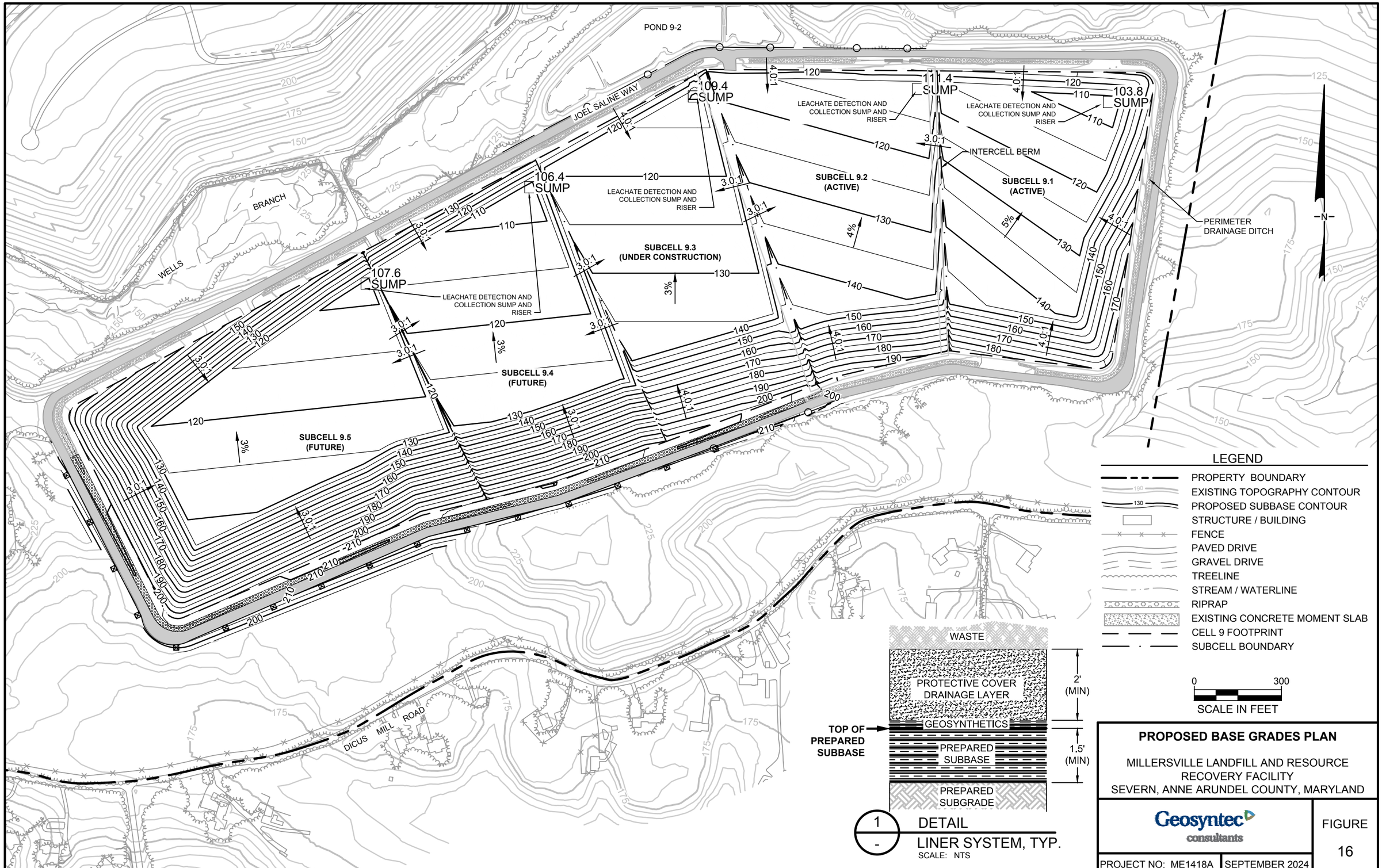
ISOPACHOUS MAP OF SOIL ABOVE GROUNDWATER TABLE
MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY
SEVERN, ANNE ARUNDEL COUNTY, MARYLAND

Geosyntec consultants

FIGURE 15

PROJECT NO: ME1418A | SEPTEMBER 2024

C:_GEO-ACC\ACCDOCS\GEOSYNTEC\ANNE ARUNDEL CO_MILLERSVILLE\PROJECT FILES\CADD\01_MDE PERMITTING\FIGURES\PHASE 2 PERMIT REPORT\DWGS\SHEETS\ME1418A.02-G18 - Last Saved by: Teagan.Ringstad on 8/29/24



PROPOSED BASE GRADES PLAN

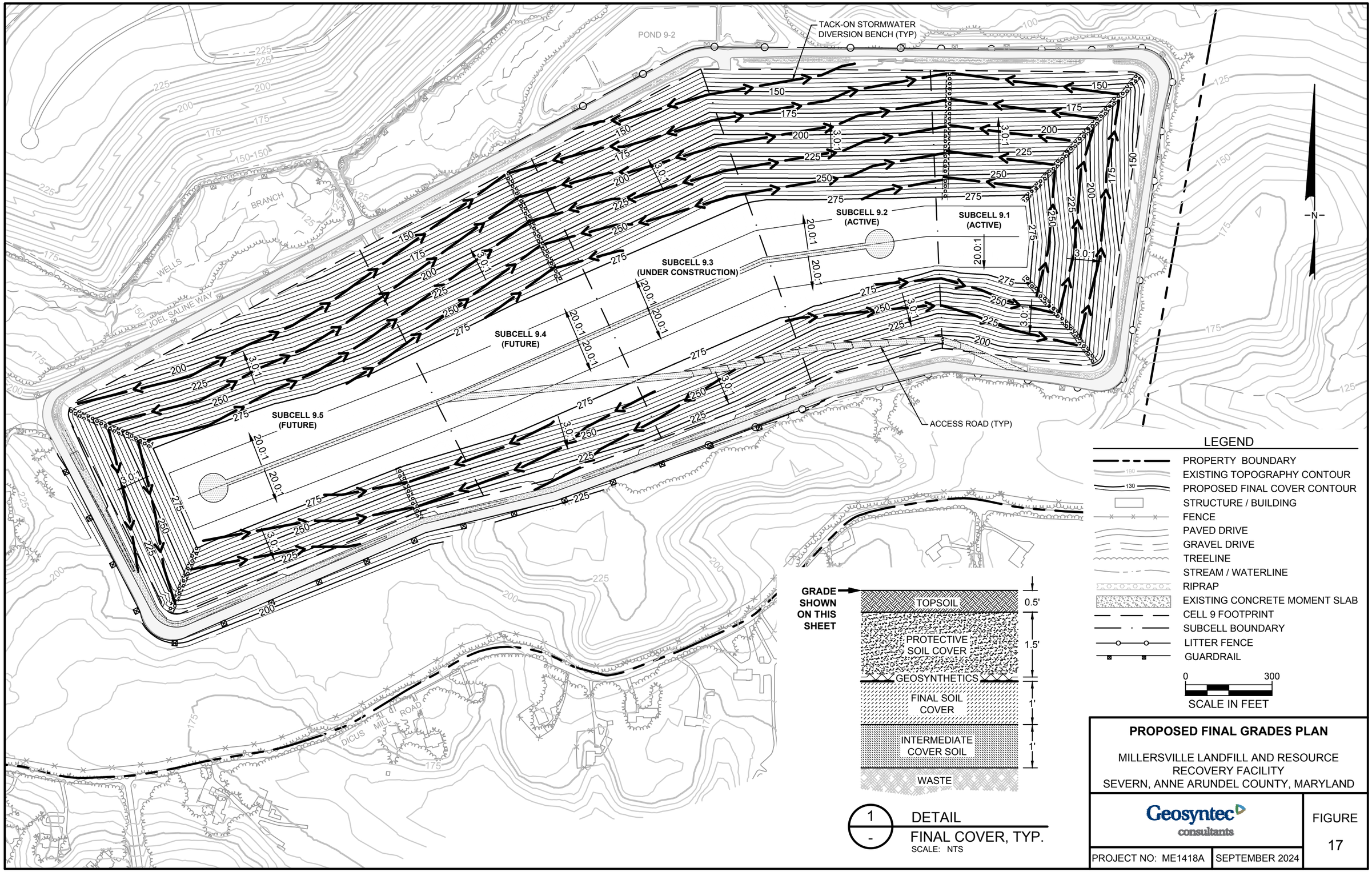
MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY
SEVERN, ANNE ARUNDEL COUNTY, MARYLAND

Geosyntec consultants

FIGURE 16

PROJECT NO: ME1418A | SEPTEMBER 2024

C:_GEO-ACC\ACCDOCS\GEOSYNTEC\ANNE ARUNDEL CO_MILLERSVILLE\PROJECT FILES\CADD\01_MDE PERMITTING\FIGURES\PHASE 2 PERMIT REPORT\DWGS\SHEETS\ME1418A.02-G12 - Last Saved by: Teagan.Ringstad on 8/29/24



PROPOSED FINAL GRADES PLAN

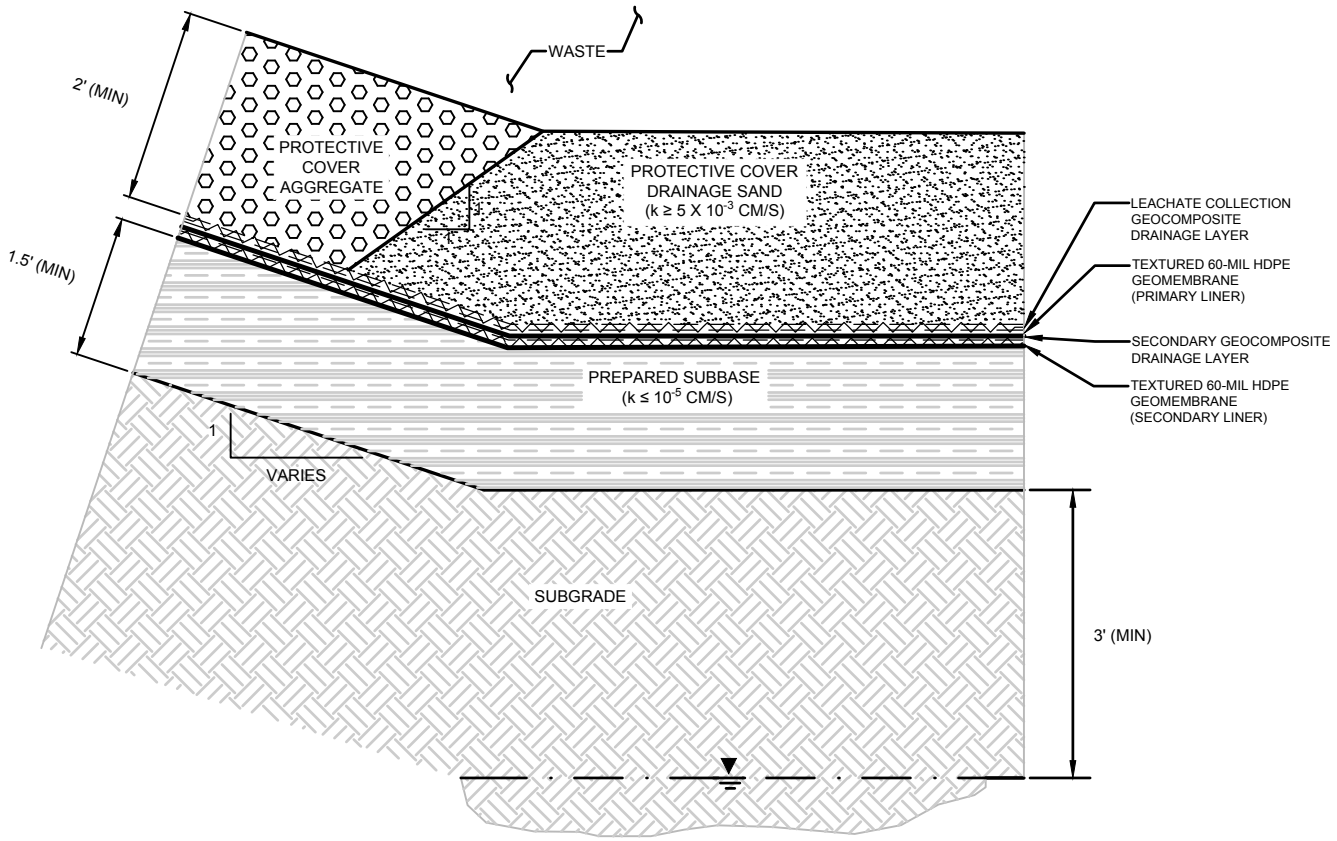
MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY
SEVERN, ANNE ARUNDEL COUNTY, MARYLAND

Geosyntec consultants

FIGURE 17

PROJECT NO: ME1418A | SEPTEMBER 2024

C:_GEO-ACC\ACCDOCS\GEOSYNTEC\ANNE ARUNDEL CO_MILLERSVILLE\PROJECT FILES\CADD\01_MDE PERMITTING\FIGURES\PHASE 2 PERMIT REPORT\DWGS\SHEETS\ME1418A.02-G13 - Last Saved by: MJerome on 9/18/24



ABBREVIATIONS

CM/S	CENTIMETER(S) PER SECOND
HDPE	HIGH-DENSITY POLYETHYLENE
K	HYDRAULIC CONDUCTIVITY
MIN	MINIMUM

LINER SYSTEM DETAILS

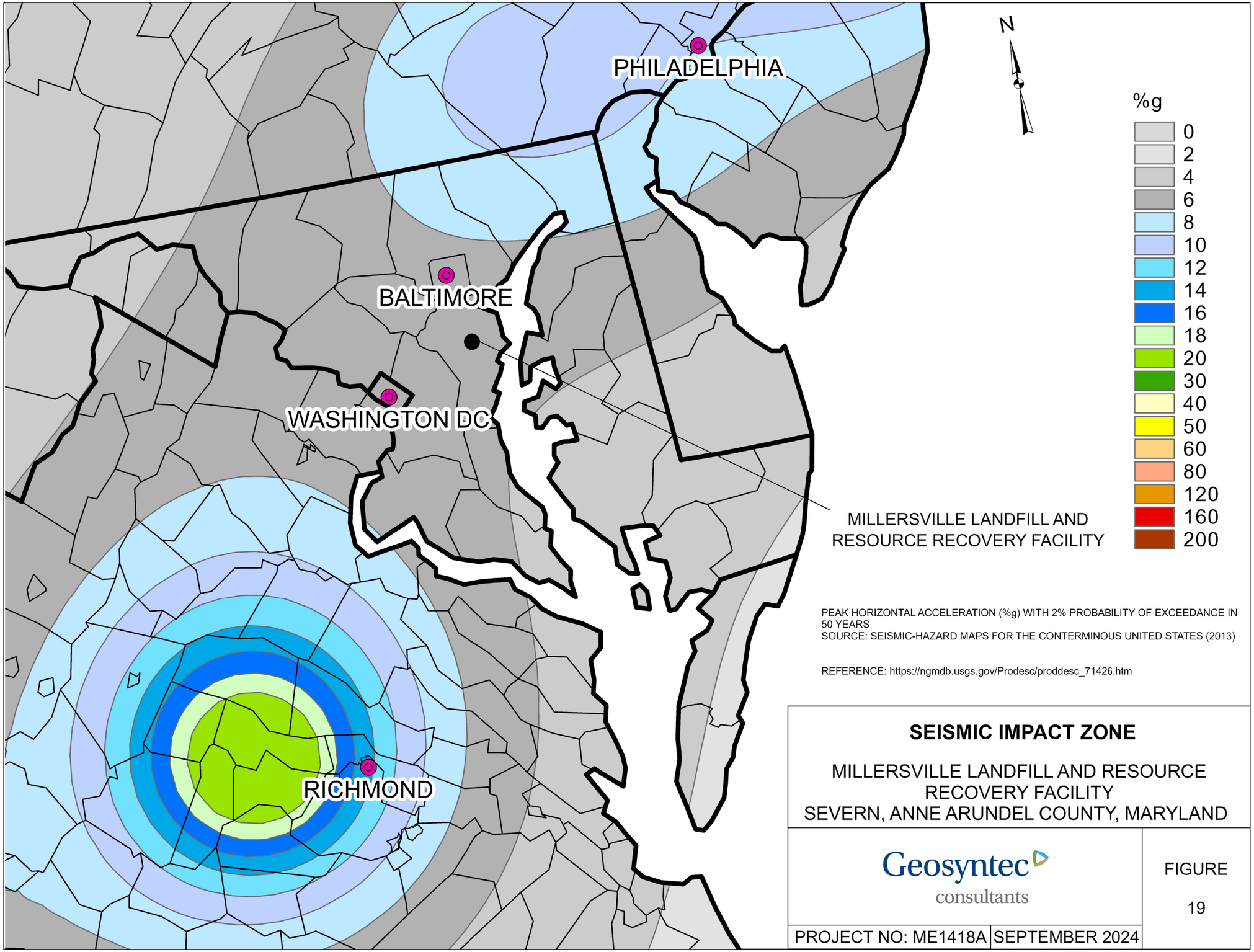
MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY
SEVERN, ANNE ARUNDEL COUNTY, MARYLAND

Geosyntec consultants

FIGURE 18

PROJECT NO: ME1418A | SEPTEMBER 2024

C:_GEO-ACC\ACCDOCS\GEOSYNTEC\ANNE ARUNDEL CO_MILLERSVILLE\PROJECT FILES\CADD\01_MDE PERMITTING\FIGURES\PHASE 2 PERMIT REPORT\DWGS\SHEETS\ME1418A.02-G11 - Last Saved by: Teagan.Ringstad on 8/29/24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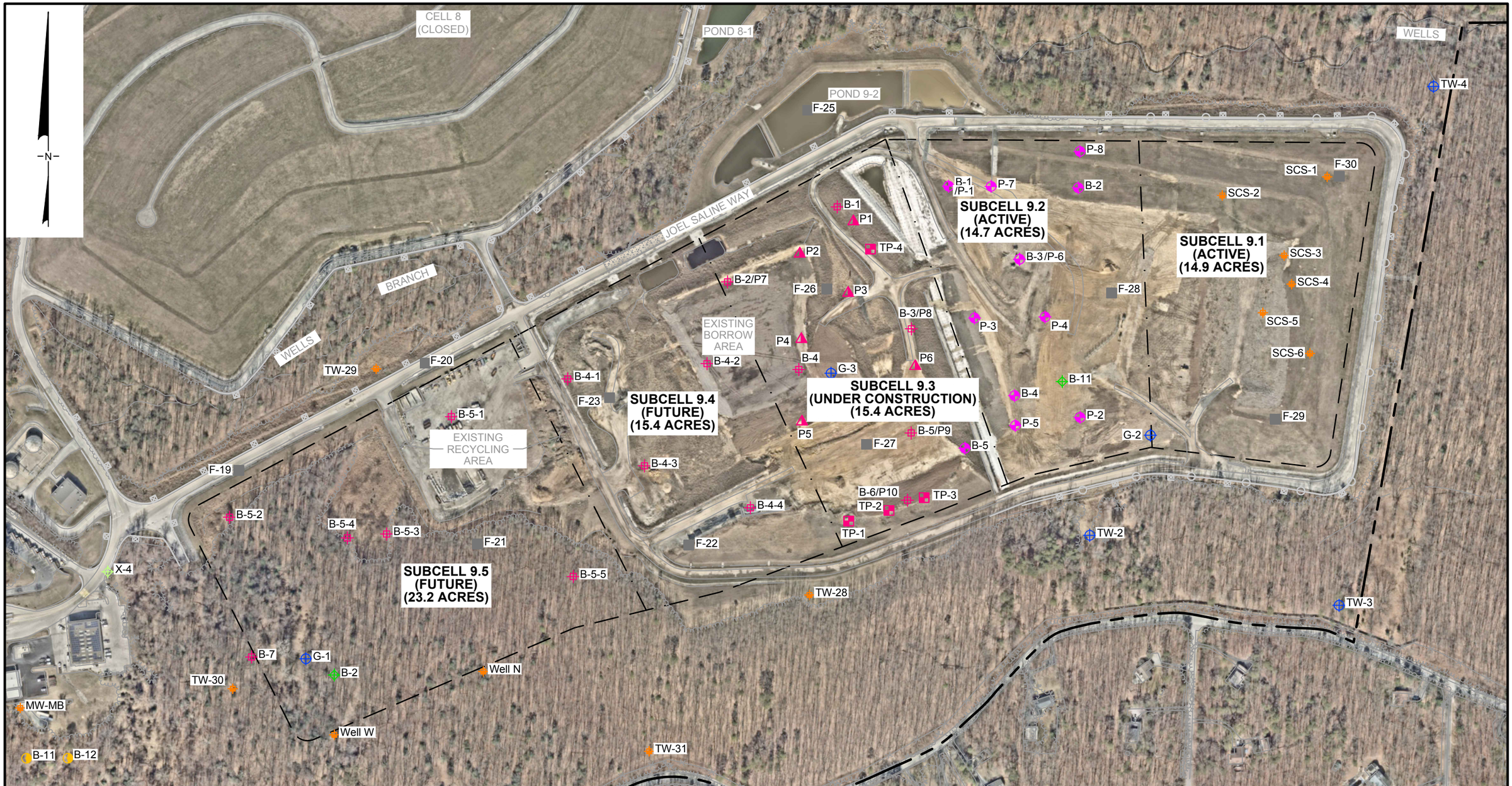
PEAK HORIZONTAL ACCELERATION (%g) WITH 2% PROBABILITY OF EXCEEDANCE IN 50 YEARS
SOURCE: SEISMIC-HAZARD MAPS FOR THE CONTERMINOUS UNITED STATES (2013)
REFERENCE: https://ngmdb.usgs.gov/Prodesc/proddesc_71426.htm
SEISMIC IMPACT ZONE
MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY
SEVERN, ANNE ARUNDEL COUNTY, MARYLAND
Geosyntec consultants
FIGURE
19
PROJECT NO: ME1418A
SEPTEMBER 2024
C:\Users\HHarris\Desktop\millersville landfill\Millersville_Landfill.aprx; HHarris; 30 August 2024



LEGEND

- CELL 9 BOUNDARY
- SUBCELL BOUNDARY
- GEOSYNTEC 2022 BOREHOLE
- GEOSYNTEC 2022 PIEZOMETER
- GEOSYNTEC 2022 TEST PIT
- GEOSYNTEC 2017 BOREHOLE
- FROEHLING AND ROBERTSON 2022 BOREHOLE
- SCS 2011-2017 EXPLORATION LOCATION
- GEOSERVICES / GEOSYNTEC 1975-2012 BOREHOLE
- CENTURY 1974 BOREHOLE
- GREEN ASSOCIATES 1971 BOREHOLE
- GREEN ASSOCIATES 1969 BOREHOLE

0 300 600

SCALE IN FEET

IMAGERY SOURCE: NEARMAP, DATE OF PHOTOGRAPHY 2024-02-21.

BORING LOCATIONS

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY
SEVERN, ANNE ARUNDEL COUNTY, MARYLAND

Geosyntec consultants

FIGURE 20

PROJECT NO: ME1418A | SEPTEMBER 2024

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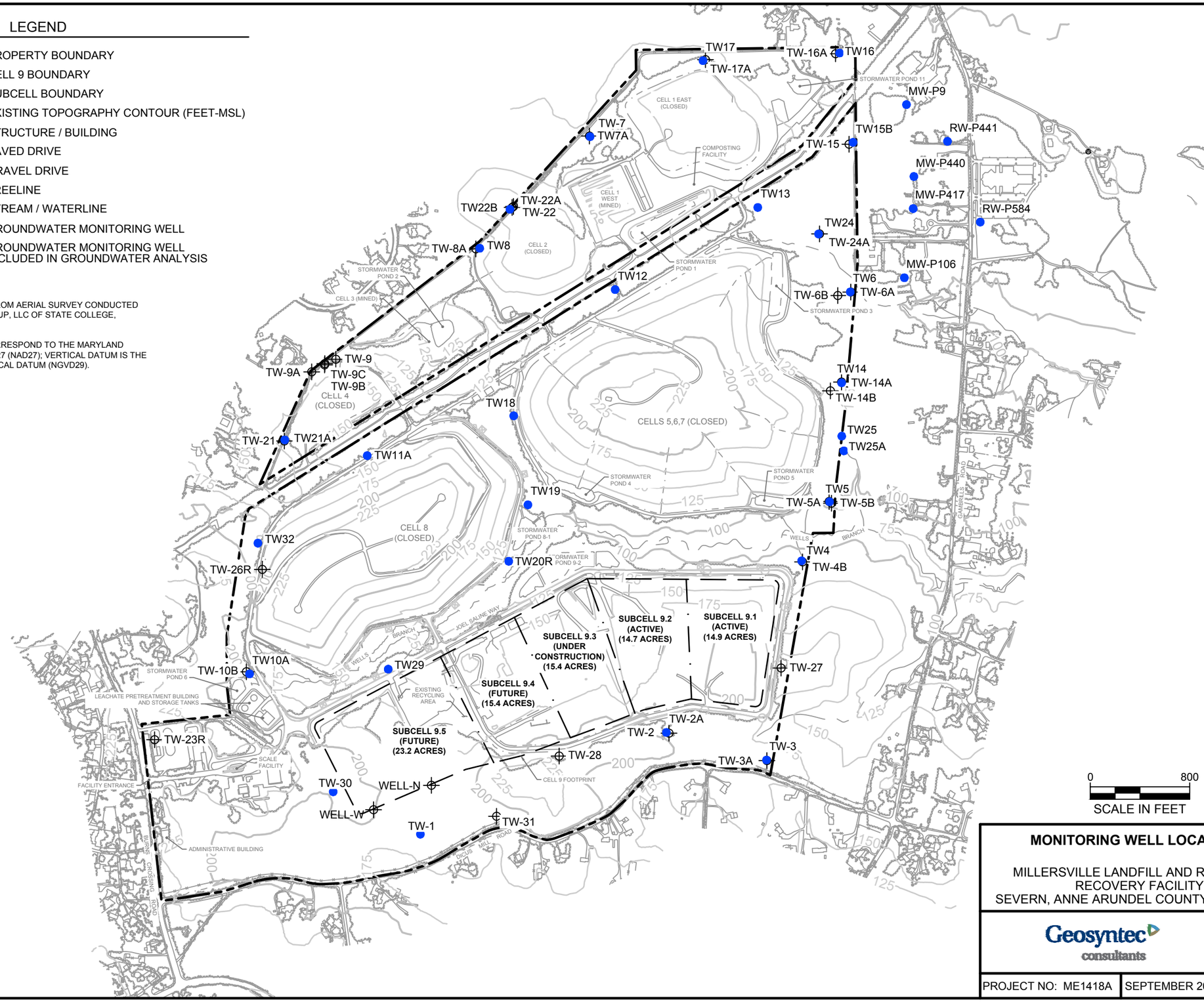
LEGEND

- PROPERTY BOUNDARY
- CELL 9 BOUNDARY
- SUBCELL BOUNDARY
- 190 — EXISTING TOPOGRAPHY CONTOUR (FEET-MSL)
- STRUCTURE / BUILDING
- PAVED DRIVE
- GRAVEL DRIVE
- TREELINE
- STREAM / WATERLINE
- GROUNDWATER MONITORING WELL
- TW-8 — GROUNDWATER MONITORING WELL INCLUDED IN GROUNDWATER ANALYSIS

GENERAL NOTES:

1. GENERAL TOPOGRAPHIC MAP FROM AERIAL SURVEY CONDUCTED ON 2 JANUARY, 2024 BY BAI GROUP, LLC OF STATE COLLEGE, PENNSYLVANIA.
2. HORIZONTAL COORDINATES CORRESPOND TO THE MARYLAND NORTH AMERICAN DATUM OF 1927 (NAD27); VERTICAL DATUM IS THE 1929 NATIONAL GEODETIC VERTICAL DATUM (NGVD29).



MONITORING WELL LOCATIONS

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY
SEVERN, ANNE ARUNDEL COUNTY, MARYLAND

Geosyntec consultants

FIGURE 21

PROJECT NO: ME1418A | SEPTEMBER 2024

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Appendix A
Wetland Delineation Reports

Appendix A.1
Wetlands Identification and Delineation Report, Gannett Fleming (2007)

Wetland Identification and Delineation Report

Millersville Landfill and Resource Recovery Facility
Anne Arundel County, Maryland

Prepared for: ANNE ARUNDEL COUNTY MARYLAND

Department of Public Works
Bureau of Waste Management Services

Prepared By: Gannett Fleming

November 2007

Wetland Identification and Delineation Report

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY

Prepared for:

ANNE ARUNDEL COUNTY
MARYLAND

Department of Public Works
Bureau of Waste Management Services

Prepared by:

Gannett Fleming

NOVEMBER 2007

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY

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Figure 3. National Wetlands Inventory Map 3
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APPENDICES

Appendix A – Wetland and Waterways Mapping
Appendix B – Photographs
Appendix C – Wetland Data Forms
Appendix D – Wetland Function and Value Sheets

Project Description

The Anne Arundel County Department of Public Works has proposed to begin construction of additional facilities that are needed to support Cell 9 at the Millersville Landfill and Resource Recovery Facility (herein referenced as the MLFRRF) on Burns Crossing Road in northern Anne Arundel County, Maryland. The MLFRRF waste disposal Cell 8 was permitted by Maryland Department of the Environment (MDE) in the early 1990's. Landfilling in Cell 8 began in 1992 and based on various waste disposal rate scenarios developed by Anne Arundel County – Waste Management Services (AAC-WMS), the Cell 8 area is expected to reach its permitted capacity sometime between 2014 and 2016.

The MLFRRF waste disposal Cell 9 was permitted by MDE in August, 1997 (WQC 97-NT-0501/199001846) and the U.S. Army Corps of Engineers (USCOE) in June 1997 (CENAB-OP-RW 90-01846-4). Construction activities of Cell 9 performed to date include the Cell 9 bridge crossing over Wells Branch, an access road parallel to Wells Branch, and general grading of wetlands approved under 1997 permits.

Construction of Cell 9 is necessary to accommodate the County's waste disposal as the active landfill cell (Cell 8) reaches capacity. The proposed project will include the construction of Cell 9, a stormwater/sedimentation pond (Pond 9-2) with a discharge into Wells Branch, and a soil stockpile/borrow area. Cell 9 is a double-lined disposal area, approximately 84 acres in size. The Cell 9 area is projected to reach its permitted capacity sometime between 2030 (275,000 tons per year scenario) and 2059 (110,000 tons per year scenario) depending on varied County waste disposal rate scenarios.

Purpose

The purpose of this report is to describe wetland and waterways investigations performed within the proposed project study areas. This report was prepared in part to satisfy the regulatory requirements of the U.S. Army Corps of Engineers (USCOE), which has jurisdictional authority over wetlands and waterways of the United States under the purview of Section 404 of the Clean Water Act, and the Maryland Department of the Environment (MDE) which has authority over wetlands and waterways under the Non-tidal Wetlands Protection Act & Program and the Waterway Construction Statute.

Study Area Description

The project study area is approximately 125 acres dominated by deciduous forest (Figure 1). The proposed Cell 9 area borders existing Cell 8 and combined Cells 5-6-7. The proposed project study area is located in the Western Shore Uplands Region of the Coastal Plain Province of Maryland (MGS, 2001).

One USGS mapped intermittent stream, Wells Branch, is located within the project study area (Figure 2). At the MLFRRF, surface water flows into Wells Branch from stormwater runoff from undeveloped areas, wetland seeps and outfalls from sediment basins, ponds and traps. Upon leaving the MLFRRF property, Wells Branch flows east to the confluence with Severn Run, which, in turn, flows into the Severn River. Topography along the project study area alignment is rolling with elevations ranging between 80 feet above mean sea level along the floodplain of Wells Branch to approximately 240 feet along the southern border of the project study area. Located within the floodplain of Wells Branch, one palustrine forested broad-leaf deciduous, seasonal wetland (PFO1C) is identified on the USFWS National Wetlands Inventory (NWI) mapping (Figure 3).

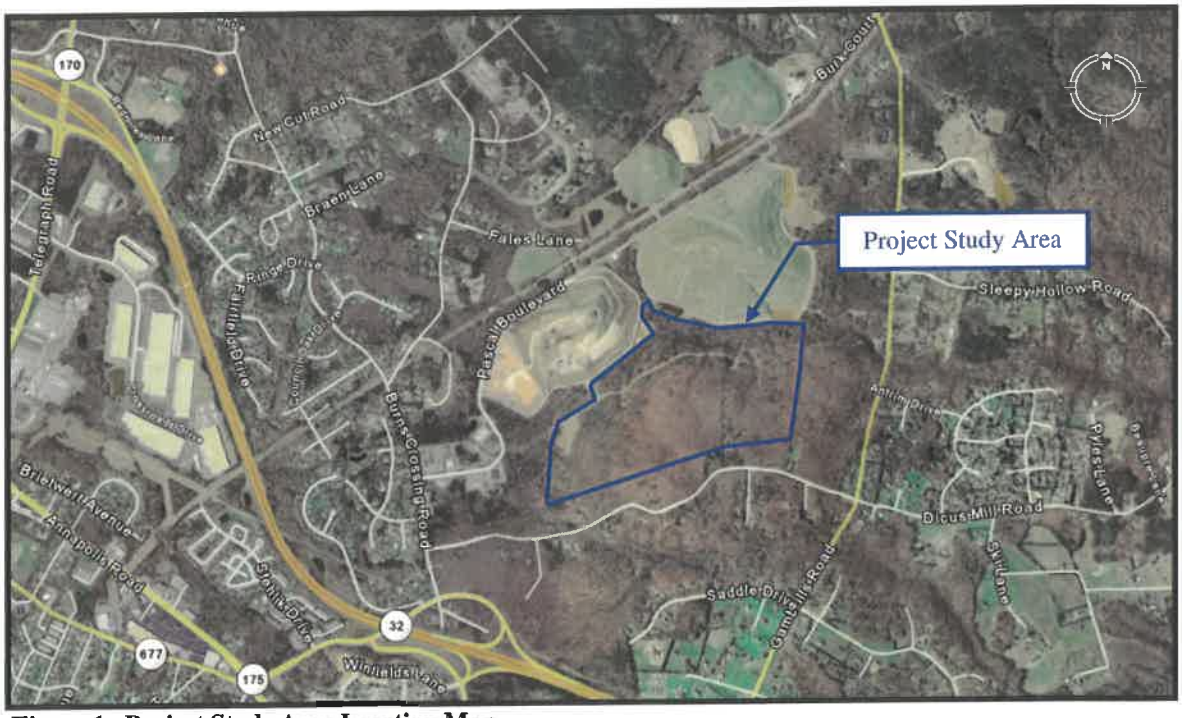

Figure 1. Project Study Area Location Map.
Source: Google Earth. Accessed October 17, 2007. http://earth.google.com
Scale: 1 inch = approximately 2700 feet

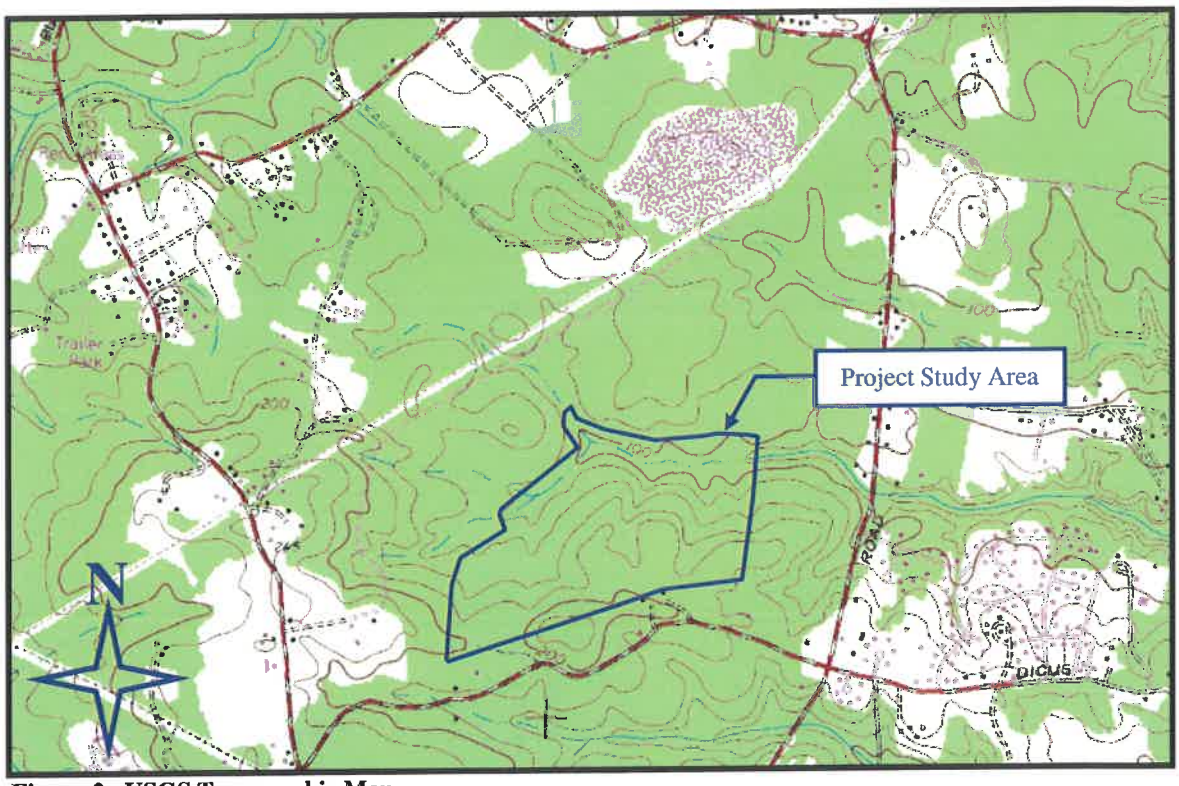

Figure 2. USGS Topographic Map.
Source: USGS Topographic Map 7.5' Quadrangle, (Odenton, MD 1979).
Scale: 1 inch = approximately 2300 feet

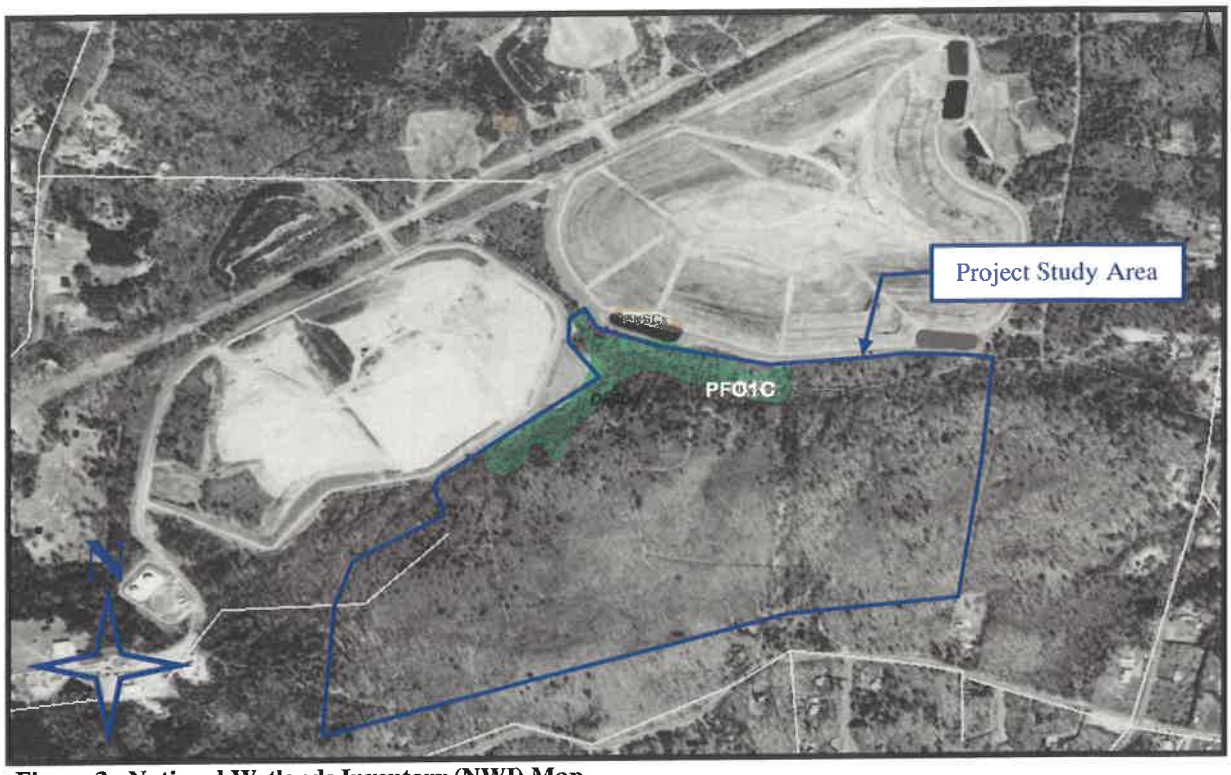

Figure 3. National Wetlands Inventory (NWI) Map.
Source: U.S. Fish and Wildlife Service. NWI Wetlands Online Mapper. Accessed October 17, 2007. http://wetlandsfws.er.usgs.gov/wtlnds/launch.html
Scale: 1 inch = approximately 1000 feet

The floodplain forest along Wells Branch is dominated by red maple (*Acer rubrum*), black gum (*Nyssa sylvatica*), tulip poplar (*Liriodendron tulipifera*), and willow oak (*Quercus phellos*). The shrub layer was dominated by sweet pepperbush (*Clethra alnifolia*), sweetbay magnolia (*Magnolia virginiana*), American holly (*Ilex opaca*), winterberry (*Ilex verticillata*) and highbush blueberry (*Vaccinium corymbosum*). Common greenbrier (*Smilax rotundifolia*), Asiatic tearthumb (*Polygonum perfoliatum*), and microstegium (*Microstegium viminea*) where the common vines and herbs.

The upland forest is dominated by red maple, tulip poplar, pitch pine (*Pinus rigida*), chestnut oak (*Quesrcus prinus*), red oak (*Quercus rubra*), white oak (*Quercus alba*), black oak (*Quercus nigra*) and black cherry (*Prunus serotina*). The shrub layer was dominated by American holly and highbush blueberry. Extensive deer-browse limited the growth of vines and herbs within the upland forest community.

Soil series were identified through a review of the USDA Natural Resources Conservations Service Web Soils Survey for Anne Arundel County (USDA, 2007). Soils mapped within the project study area include Downer-Hammonton complex (DvB, DvC and DvD), Downer-Phalanx complex (DxC and DxD), Evesboro and Galestown soils (EVC), Sassafras fine sandy loam (SaB), Sassafras-Hambrook complex (ShA), Sassafras and Croom soils (SME and SMF), Udorthents, refuse substratum (UfG) and Woodstown sandy loam (WdB). None of soils are listed as hydric soils at the federal, state or local level (Figure 4).

Soil Name	Soil Map Unit	Acres in Study Area	National, State or Local Hydric Soils List
Downer-Hammonton Complex	DvB, DvC, DvD	42.8	Not Listed
Downer-Phalanx Complex	DxC, DxD	18.1	Not Listed
Evesboro and Galestown Soils	EVC	1.9	Not Listed
Sassafras Fine Sandy Loam	SaB	18.7	Not Listed
Sassafras-Hambrook Complex	ShA	<0.1	Not Listed
Sassafras and Croom Soils	SME, SMF	30.6	Not Listed
Udorthents, Refuse Substratum	UfG	0.6	Not Listed
Woodstown Sandy Loam	WdB	1.6	Not Listed
Zekiah and Issue Soils	ZBA	11.1	Not Listed

Figure 4. Soil Survey Map of Study Area.
Source: USDA Natural Resources Conservation Service – Web Soil Survey. Accessed October 18, 2007. http://websoilsurvey.nrcs.usda.gov/app/
Scale: 1 inch = approximately 800 feet

Methods

The study area was investigated for palustrine wetland indicators of vegetative composition, soil development and hydrology. The investigation was conducted in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory, 1987). Due to the size and characteristics of the study area, the Routine-On-Site Determination method was used. If present, wetlands within and directly adjacent to the limits of proposed work were delineated so that their presence could be shown on project mapping to aid in impact avoidance during engineering design.

Soils were characterized by evaluating the upper horizons of the soil profile. Soil pits were dug using a "sharpshooter" spade with a 14-inch blade. Soil horizons were evaluated using normal field protocols for determining texture and nomenclature. The *Munsell Soil Color Charts* (Macbeth Division of Kollmorgen

Instruments Corporation, 1994) were used to determine the colors of horizons and redoximorphic features. Reducing condition determinations in soils were performed in the field using presence/absence of mottles, low chroma colors and presence of concretions.

Data point locations were investigated for primary and secondary wetland hydrology indicators. If present, wetland boundaries were marked using pink wetland flagging. Wetland boundary data points were located using a Trimble ™ ProXR®Global Positioning System (GPS). The Trimble ™ ProXR® is capable of attaining sub-meter accuracy (Trimble, 1997). The GPS data were then transferred onto relevant site mapping using the U.S. State Plane, 1927, Maryland coordinate system. Wetlands were identified on site base mapping to show their proximity to the proposed construction areas. Classifications were assigned to each wetland following the Cowardin et al methods (1979). Color photographs were taken of all relevant features to document site conditions during the time of the investigations.

Vegetation was identified using *A Field Guide to Trees and Shrubs* (Petrides 1986), *Newcomb's Wildflower Guide* (Newcomb 1977) and *Grasses An Identification Guide* (Brown 1979). Plant species were assigned an indicator status [e.g., Upland (UPL), Facultative Upland (FACU), Facultative (FAC), Facultative Wetland (FACW), or Obligate Wetland (OBL) based on the USFWS's *National List of Plant Species that Occur in Wetlands: 1988 National Summary* (Reed 1988).

Wetland function and value assessments were performed at each wetland location (if present) using the methods outlined in *The Highway Methodology Workbook Supplement, Wetland Functions and Values A Descriptive Approach*, USCOE New England Division (NEDEP-360-1-30a 1995). Wetland functions were evaluated and recorded using the standard wetland function-value evaluation form.

Waterways (if present) were identified through a review of available mapping and field investigations. Topographic and engineering maps were reviewed for the presence of streams within the project area. Field investigations for waterways were performed in conjunction with the wetland field investigation and included the field verification of mapped watercourses and the identification and delineation of streams, springs, and seeps that were not shown on existing engineering plans. Waterways were identified by the presence of bed and banks and/or ordinary high water marks. The flow regime of each identified waterway was characterized based upon field indicators of hydrologic, floral, and faunal character at the time of the investigation. All identified waterways were located using GPS and photographed.

Results

Wetlands: The study area was field investigated for palustrine wetland indicators of vegetative composition, soil development, and hydrologic characteristics on October 15th and 16th, 2007. Weather conditions were warm, clear and dry with temperatures ranging between 65 and 80°F. Preliminary precipitation data indicated no rainfall for the Baltimore area 48-hours prior to the investigation.

Two wetlands were identified within the project study area. Wetland 1 (5.70 acres) was a palustrine forested wetland (PFO) located within the floodplain of Wells Branch. The tree canopy was dominated by red maple (*Acer rubrum*), black gum (*Nyssa sylvatica*), tulip poplar (*Liriodendron tulipifera*), and willow oak (*Quercus phellos*). The shrub layer was dominated by sweet pepperbush (*Clethra alnifolia*), sweetbay magnolia (*Magnolia virginiana*), American holly (*Ilex opaca*), winterberry (*Ilex verticillata*) and highbush blueberry (*Vaccinium corymbosum*). Common greenbrier (*Smilax rotundifolia*), Asiatic

tearthumb (*Polygonum perfoliatum*), and microstegium (*Microstegium viminea*) were the common vines and herbs. Primary hydrologic indicators included inundation and saturated soils in places, drainage patterns and drift lines. Secondary indicators included oxidized root channels, water-stained leaves and buttressed tree roots. Soil samples at various locations throughout Wetland 1 were primarily a sandy silt loam with low-chroma and mottling. Soils of Wetland 1 were hydric.

Wetland 2 (0.17 acres) was a small palustrine forested wetland (PFO) located within the floodplain of Wells Branch near the eastern limit of the project study area. The tree canopy was dominated by red maple, black gum, and white oak (*Quercus alba*). The shrub layer was dominated by sweetbay magnolia and American holly. Microstegium dominated the herbaceous layer within Wetland 2. Primary hydrologic indicators included saturated soils and drainage patterns. Soils were primarily a silty sand with low-chroma and mottles. Soils of Wetland 2 were hydric.

Waterways: Wells Branch was confirmed in the field. Wells Branch ranged in width between three and eight feet within the project study area with an average width of five feet. The western half of Wells Branch located within the project study area was poorly defined in places, reverting to overland flow before becoming channelized several hundred feet downstream. With an average width of three feet, the top of bank of the western half of Wells Branch varied between three inches and two feet above the streambed. The stream substrate was predominantly sand. Intermittent flow was only observed within the western half of the study area. Approximately 70% of Wells Branch located within the project study area exhibited no flow and no standing water during the investigation. During the investigation, Wells Branch exhibited no flow east (downstream) of wetland flag W1-101 (See Appendix A).

The eastern half of Wells Branch was highly channelized as the combined discharge of several stormwater ponds (Ponds 3, 4 and 5) increased erosion of the sandy alluvial soils of the floodplain. With an average width of six feet, the top of bank of the eastern half of Wells Branch varied between two feet and four feet above the streambed. The stream substrate was predominantly sand. The streambanks of the eastern half of Wells Branch exhibited considerable erosion and undercutting and exhibited no flow during the investigation.

Several small spring/seeps were identified within the limits of Wetland 1, located between wetland flags W1-13 and W1-27. The small channels created by the spring/seeps were not well defined, were less than two feet wide and the water level averaged less than one inch deep during the investigations. One additional spring/seep, not associated with a wetland, was mapped and photographed.

Summary

Field investigations conducted by Gannett Fleming, Inc. on October 15th and 16th, 2007 to identify and delineate wetlands and waterways within the project study area were conducted in accordance with the 1987 U.S. Army Corps of Engineers Wetlands Delineation Manual. Wells Branch was confirmed in the field. Intermittent flow was only observed within the western half of the study area. Although no flow was observed during the investigations, the eastern half of Wells Branch was highly channelized as the combined discharge of several stormwater ponds (Ponds 3, 4 and 5) increased erosion of the sandy alluvial soils of the floodplain. Two palustrine forested wetlands were identified and mapped adjacent to Wells Branch. Several small spring/seeps were identified within the limits of Wetland 1. The small channels created by the spring/seeps were not well defined. One additional spring/seep, not associated with a wetland, was identified and mapped as part of the investigation.

Wetland ID	Cowardin Classification	Wetland Size (acres)
Wetland 1	PFO	5.70
Wetland 2	PFO	0.17

Stream ID	Flow Regime	Stream Width (feet)
Wells Branch	Intermittent	5.0

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U.S. Geological Survey. 1979. 7.5' Topographic Map Quadrangle, Odenton, MD.

List of Contributors

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Education: B.S. Geoenvironmental Studies

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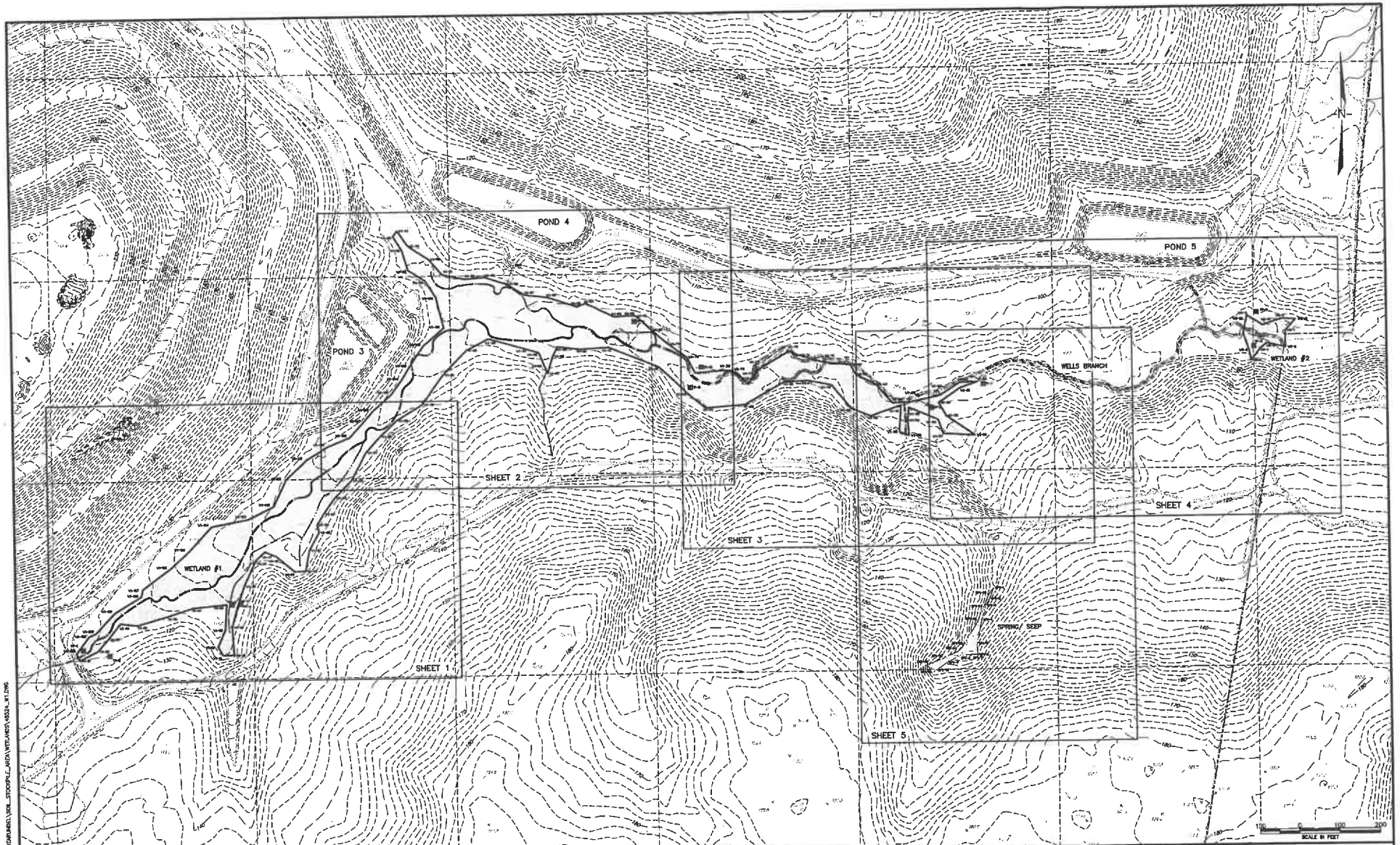
Certified Ecologist (CE), Ecological Society of America
Professional Experience: 9 years
Education: B.S., Environmental Studies
M.A.Ed., Environmental Studies

Holly L. Reynolds
Professional Experience: 3 years
Education: B.S., Environmental Resource Management

Cy R. Whitson
Certified Wetland Delineator, Baltimore District, USCOE; No. WDCP94MD0310145B
Professional Wetland Scientist, PWS No. 1358
Professional Experience: 19 years
Education: B.S., Biology
M.S., Watershed Science / Hydrology

APPENDIX A
WETLAND AND WATERWAYS MAPPING



LEGEND

- WETLAND
- SPRING / SEEP
- WATERWAY
- SOIL TEST PIT
- PHOTO LOCATION AND DIRECTION

Gannett Fleming
2277 Baronis Avenue
Camp Hill, PA 17001

SIGNATURE

DATE

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

REVISED			
DATE	BY		

APPROVED: DATE: APPROVED: DATE:
CHIEF ENGINEER — PROJECT MANAGER
APPROVED: DATE: APPROVED: DATE:
ASSISTANT CHIEF ENGINEER — CHIEF RIGHT-OF-WAY

SCALE: AS NOTED
DRAWN BY: BMC
CHECKED BY: SJK
SHEET NO. 1 OF 8
FILE NO.: 48824_W1
PROJECT NO.: N 630600

PROJECT: WETLAND STUDY FOR CELL 9 SOIL STOCKPILE/BORROW AREA

TITLE: OVERALL STUDY AREA INDEX SHEET

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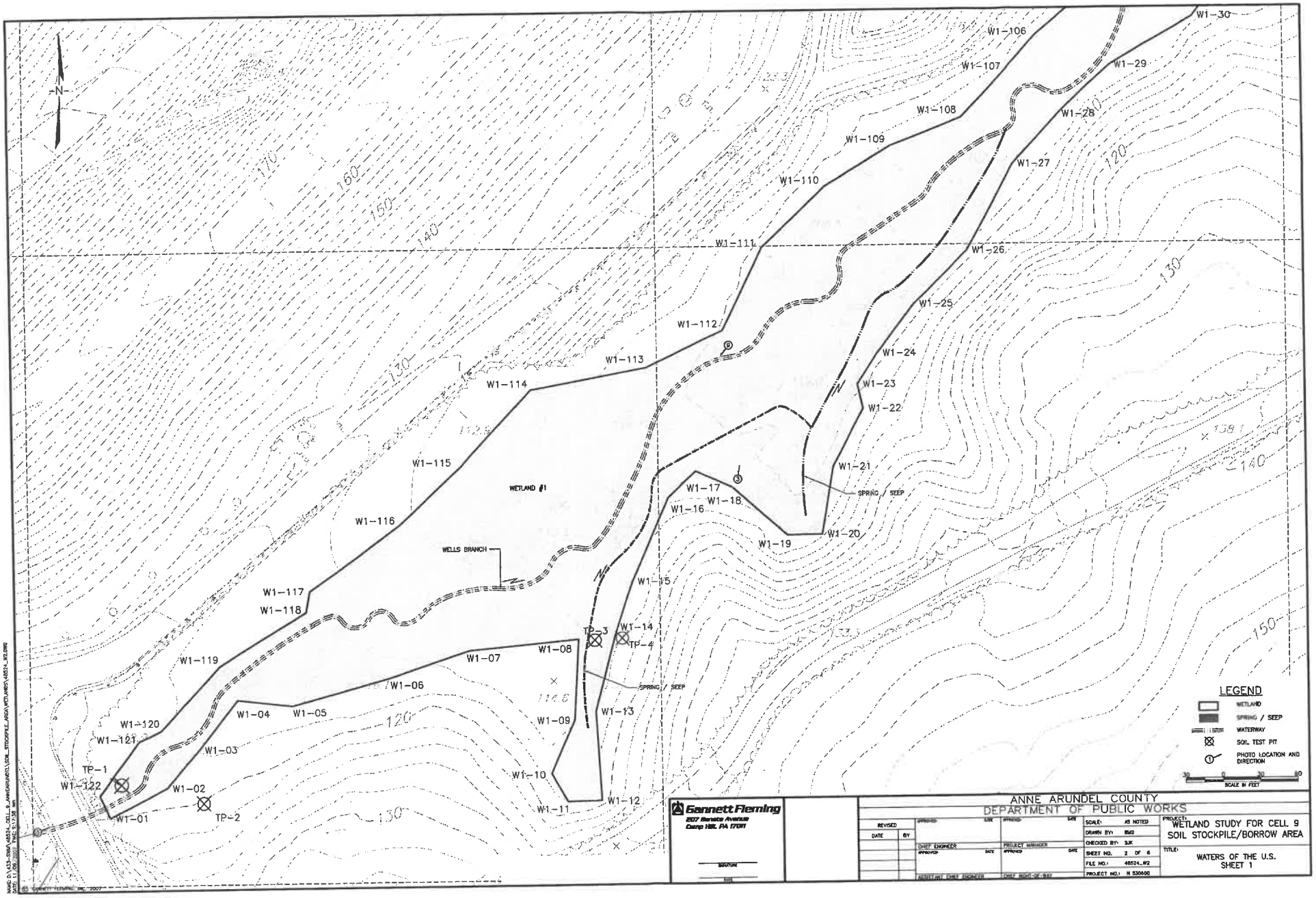
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WETLAND #1
WELLS BRANCH
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SPRING / SEEP
W1-01
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LEGEND
WETLAND
SPRING / SEEP
WATERWAY
SOIL TEST PIT
PHOTO LOCATION AND DIRECTION
SCALE IN FEET
Gannett Fleming
2207 Sanatoga Avenue
Camp Hill, PA 17011
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS
REVISED
DATE
BY
CHIEF ENGINEER
PROJECT MANAGER
ASSISTANT CHIEF ENGINEER
CHIEF RIGHT-OF-WAY
SCALE: AS NOTED
DRAWN BY: BMG
CHECKED BY: SJK
SHEET NO. 2 OF 6
FILE NO.: 46524_W2
PROJECT NO.: N 530600
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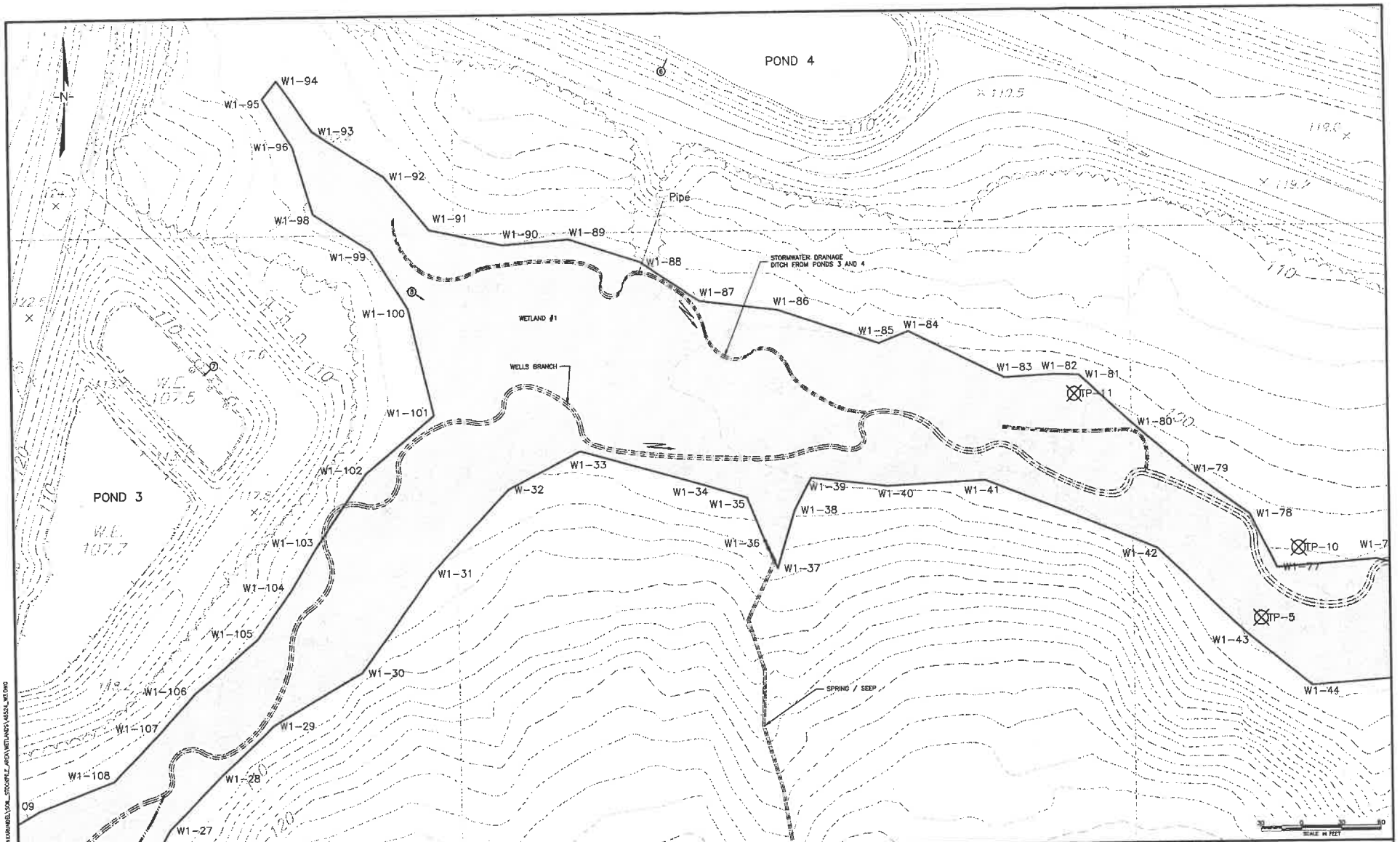
TITLE: WATERS OF THE U.S. SHEET 1



LEGEND

- WETLAND
- SPRING / SEEP
- WATERWAY
- SOIL TEST PIT
- PHOTO LOCATION AND DIRECTION

Gannett Fleming
2007 Sunset Avenue
Camp Hill, PA 17001

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

REVISED			
DATE	BY		

APPROVED: CHIEF ENGINEER — DATE
APPROVED: ASSISTANT CHIEF ENGINEER — DATE
APPROVED: PROJECT MANAGER — DATE
APPROVED: CHIEF BOND OF-BAY — DATE

SCALE: AS NOTED
DRAWN BY: BMG
CHECKED BY: SJK
SHEET NO. 3 OF 8
FILE NO.: 48824.W3
PROJECT NO.: N 530800

PROJECT: WETLAND STUDY FOR CELL 9 SOIL STOCKPILE/BORROW AREA

TITLE: WATER OF THE U.S. SHEET 2

NAME: D:\ASS-SWM\48824-CELL_9_ANN(ORIGINAL)\SOIL_STOCKPILE_AREA\WETLANDS\48824_W3.DWG
DATE: 11/09/2007 TIME: 8:26:51 AM

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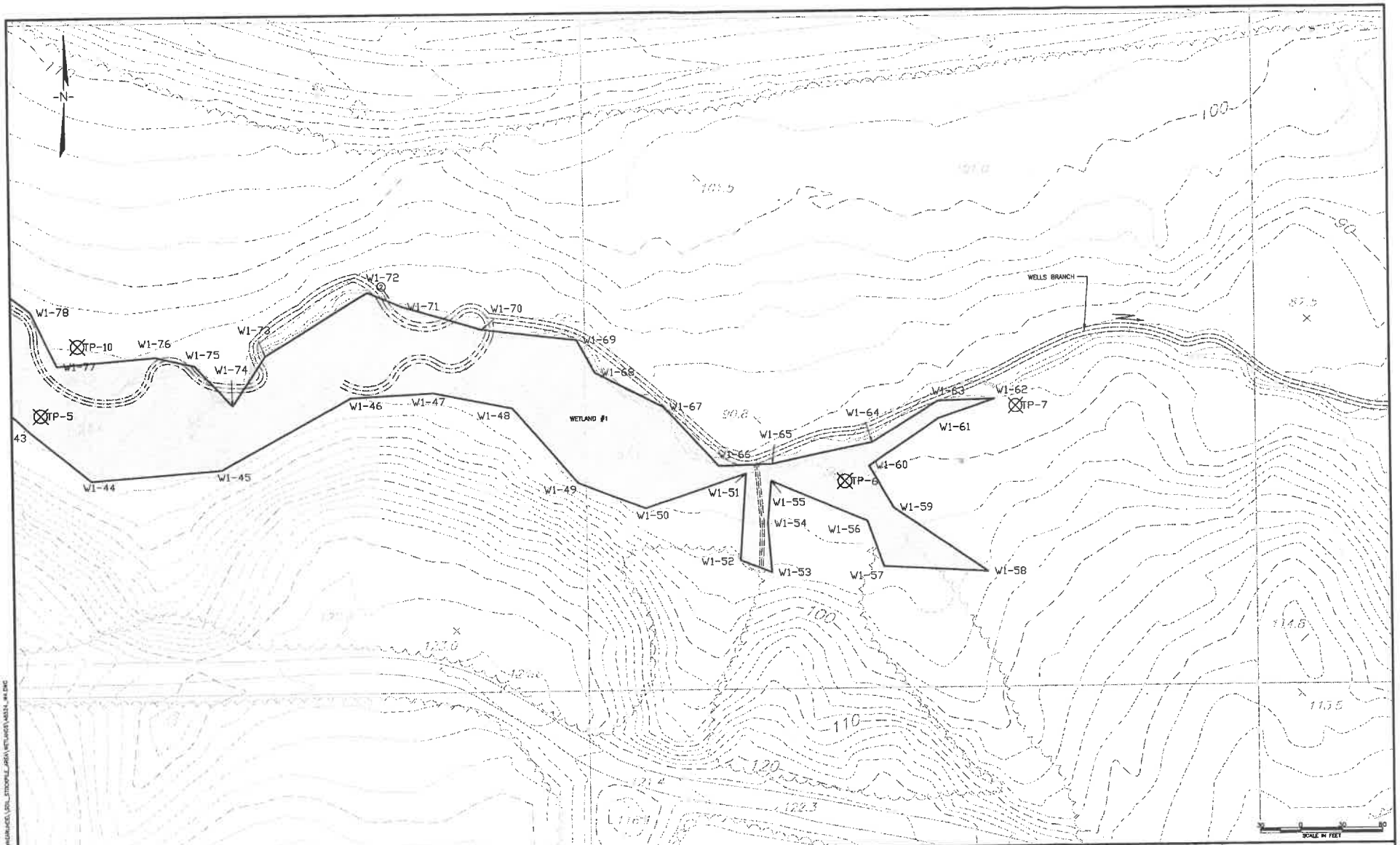

LEGEND

- WETLAND
- SPRING / SEEP
- WATERWAY
- SOIL TEST PIT
- PHOTO LOCATION AND DIRECTION

Gannett Fleming
207 Senate Avenue
Camp Hill, PA 17011

SIGNATURE

DATE

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

REVISED	
DATE	BY

CHIEF ENGINEER — APPROVED — DATE

PROJECT MANAGER — APPROVED — DATE

ASSISTANT CHIEF ENGINEER

CHIEF RIGHT-OF-WAY

SCALE:	AS NOTED
DRAWN BY:	SMG
CHECKED BY:	SJK
SHEET NO.	4 OF 6
FILE NO.:	48824.W4
PROJECT NO.:	N 530600

PROJECT: WETLAND STUDY FOR CELL 9 SOIL STOCKPILE/BORROW AREA

TITLE: WATER OF THE U.S. SHEET 3

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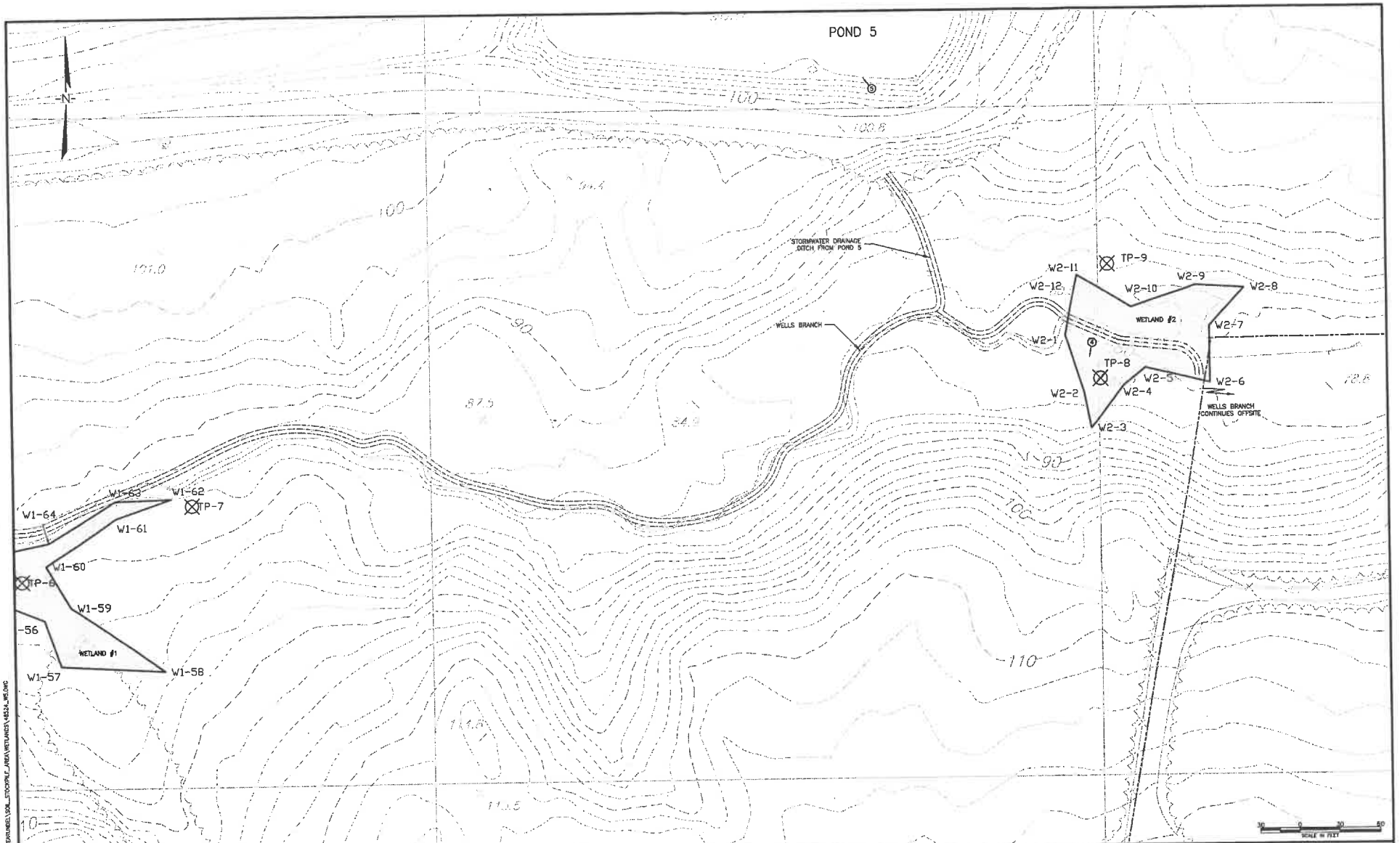

LEGEND

- WETLAND
- SPRING / SEEP
- WATERWAY
- SOIL TEST PIT
- PHOTO LOCATION AND DIRECTION

Gannett Fleming
2007 Sheetz Avenue
Camp Hill, PA 17011

SIGNATURE

DATE

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

REVISED			
DATE	BY		

APPROVED DATE — CHIEF ENGINEER
APPROVED DATE — PROJECT MANAGER
APPROVED DATE — ASSISTANT CHIEF ENGINEER
APPROVED DATE — CHIEF RIGHT-OF-WAY

SCALE:	AS NOTED
DRAWN BY:	GMC
CHECKED BY:	SJK
SHEET NO.	5 OF 6
FILE NO.:	48824_WS
PROJECT NO.:	N 530600

PROJECT: WETLAND STUDY FOR CELL 9 SOIL STOCKPILE/BORROW AREA

TITLE: WATER OF THE U.S. SHEET 4

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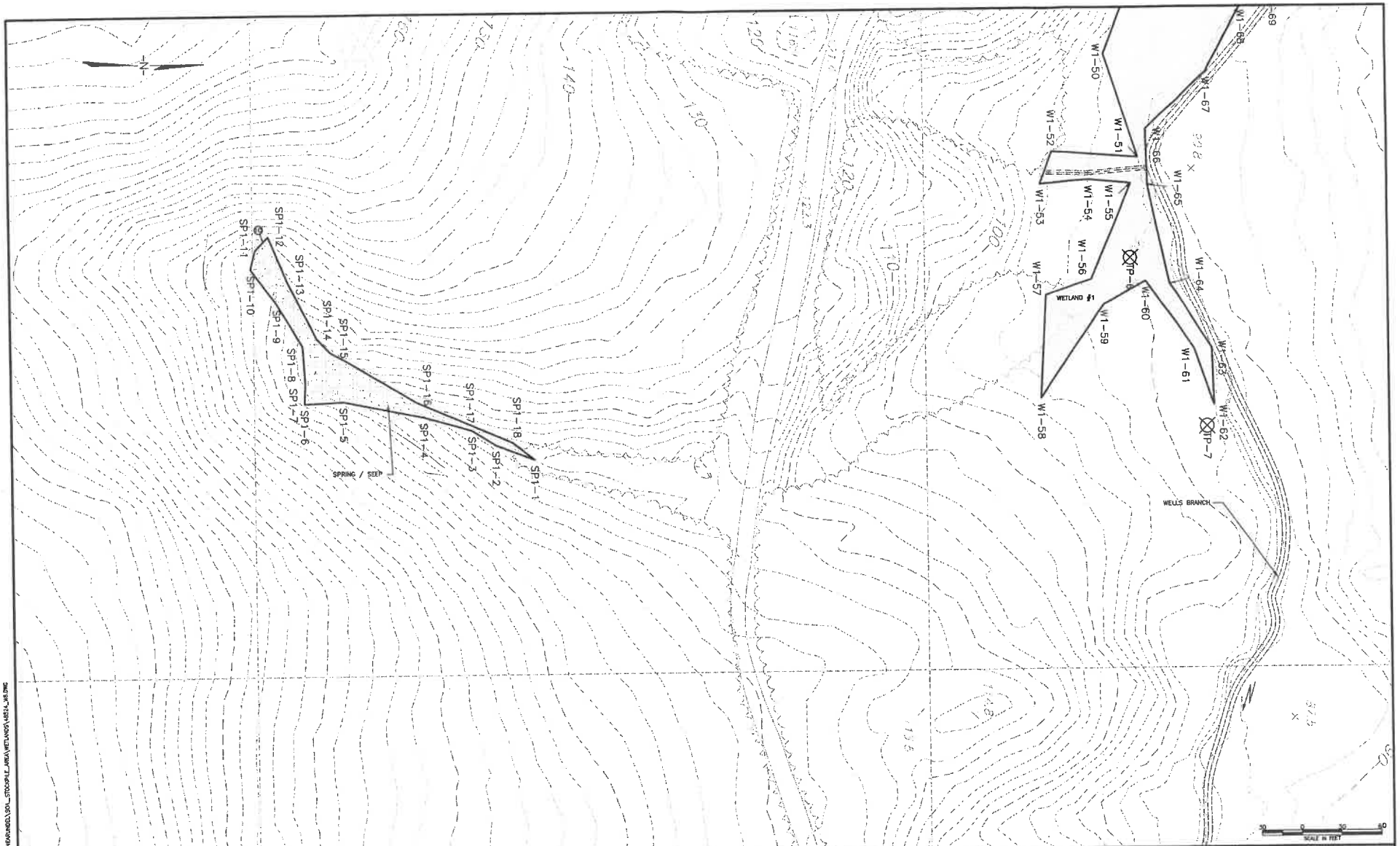
NAME: D:\ACS-PROJ\48824_CELL_9_ANNSRUNDEL\SOIL_STOCKPILE_AREA\WETLANDS\48824_WS.DWG
DATE: 01/17/2007 TIME: 10:19:23 am



LEGEND

- WETLAND
- SPRING / SEEP
- WATERWAY
- SOIL TEST PIT
- PHOTO LOCATION AND DIRECTION

Gannett Fleming
207 Senate Avenue
Camp Hill, PA 17011

SIGNATURE

DATE

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

REVISED	
DATE	BY

CHIEF ENGINEER — APPROVED — DATE
PROJECT MANAGER — APPROVED — DATE
ASSISTANT CHIEF ENGINEER
CHIEF RIGHT-OF-WAY

SCALE:	AS NOTED
DRAWN BY:	BMC
CHECKED BY:	SJK
SHEET NO.	6 OF 6
FILE NO.:	48524_W6
PROJECT NO.:	N 530600

PROJECT: WETLAND STUDY FOR CELL 9 SOIL STOCKPILE/BORROW AREA

TITLE: WATER OF THE U.S. SHEET 5

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NAME: D:\ISA-DWG\48524_CELL 9_ANNEARUNDEL\SPA_STOCKPILE_AREA\WETLANDS\48524_W6.DWG
DATE: 11/07/2007 TIME: 10:36:03 am

APPENDIX B
PHOTOGRAPHS

Photograph 1: Wells Branch looking downstream through the culvert at the western limit of the study area. View is northeast. (10/15/2007)

Photograph 2: Wells Branch looking downstream from wetland flag W1-72. Wells Branch only had surface-flow upstream of wetland flag W1-101. View is southeast. (10/16/2007)

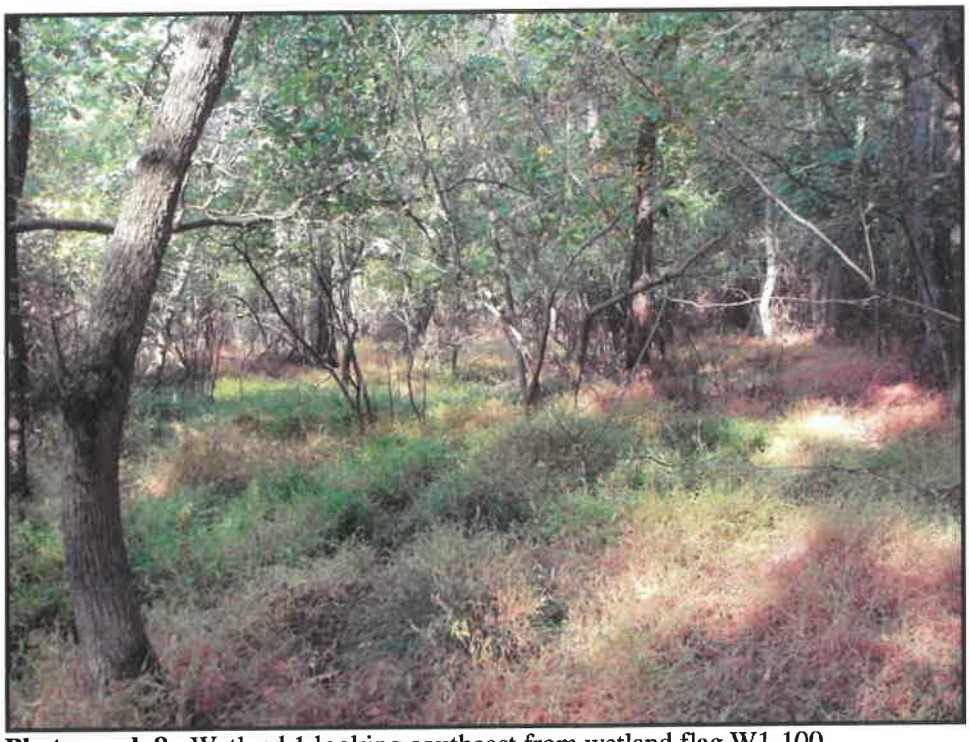
Photograph 3: Wetland 1 looking north from wetland flag W1-18. (10/15/2007)

Photograph 4: Wetland 2 looking south from Wells Branch towards TP-8. (10/15/2007)

Photograph 5: Pond 5, looking northwest from the berm. (10/15/2007)

Photograph 6: Pond 4, looking north from the berm. (10/16/2007)

Photograph 7: Pond 3, looking southwest from the berm. (10/16/2007)



Photograph 8: Wetland 1 looking southeast from wetland flag W1-100. (10/16/2007)

Photograph 9. Wells Branch flowing through Wetland 1. Wells Branch only had surface-flow upstream of wetland flag W1-101. Looking upstream from wetland flag W1-112, view is southwest. (10/16/2007)

Photograph 10: Spring/Seep looking northeast from flag SP1-12. (10/16/2007)

APPENDIX C
WETLAND DATA FORMS

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetland Delineation Manual)

Project Site:	Millersville Landfill and Resource Recovery Facility	**Date:**	15-Oct-07
Applicant/Owner:	Anne Arundel County Department of Public Works	**County:**	Anne Arundel
Investigators:	David H. Graff, Steven C. Smith and Holly L. Reynolds	**State:**	Maryland
Do Normal Circumstances exist at the site?	Yes	**Community ID:**	Wetland 1
Is the site significantly disturbed (Atypical Situation)?	No	**Transect ID:**	--
Is the area a Potential Problem Area? (If yes explain)	No	**Plot ID:**	TP-1

VEGETATION

	Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
1	*Acer rubrum*	T	FAC	9			
2	*Betula nigra*	T	FACW	10			
3	*Microstegium vimineum*	H	FAC	11			
4				12			
5				13			
6				14			
7				15			
8				16			

Percent of Dominant Plant Species that are OBL, FACW+, FACW, FACW-, FAC+, or FAC: 100%

Remarks:

HYDROLOGY

✓	**Recorded Data (Describe in Remarks)**	**WETLAND HYDROLOGY INDICATORS**	
	Stream, Lake or Tide Gauge	***Primary Indicators***	
	Aerial Photographs		**Inundated**
	Other (Describe in Remarks)		**Saturated**
	No Recorded Data Available		**Water Marks**
		✓	**Drift Lines**
Field Observations:		✓	**Sediment Deposits**
0	**Depth of Surface Water (Inches)**	✓	**Drainage Patterns in Wetlands**
0	**Depth of Free Water in Pit (Inches)**	***Secondary Indicators (2 or more required)***	
>18	**Depth of Sautrated Soil (Inches)**	✓	**Oxidized Root Channels (Upper 12")**
		✓	**Water-stained Leaves**
			Local Soil Survey Data
			FAC-Neutral Test
			Other (Explain in Remarks)

Remarks:
Wells Branch is a mapped stream with the channel and floodplain areas visible on aerial photographs. This area was also previously delineated and received a JD within the last 10 years.

Gannett Fleming

SOILS

Map Unit Name (Series & Phase):	Zekiah and Issue Soils (ZBA)
Taxonomy (Subgroup):	Typic Fluvaquents/Fluvaquentic Dystrudepts
Drainage Class:	Poorly drained/Somewhat poorly drained
Field Observations Confirmed Mapped Type?	No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structures, Etc.
0-10	A	2.5Y 3/2	-	-	Sandy silt
10-18	B	10YR 3/1	5YR 4/6	Few / Distinct	Sandy silt loam (moist)

Hydric Soil Indicators

	Histol	✓	**Concretions**
	Histic Epipedon		**High Organic Content in Surface Layer in Sandy Soils**
	Sulfidic Odor		**Organic Streaking in Sandy Soils**
✓	**Aquic Moisture Regime**		**Listed on Local Hydric Soils List**
✓	**Reducing Conditions**		**Listed on National Hydric Soils List**
✓	**Gleyed or Low-chroma Color**		**Other (Explain in Remarks)**

Remarks:

This soil occurs within the floodplain of Wells Branch.

WETLAND DETERMINATION

Is Hydrophytic Vegetation Present?	Yes	**Is The Sampling Point Within A Wetland?**	Yes
Is Wetland Hydrology Present?	Yes		
Are Hydric Soils Present?	Yes		

Remarks:

Location of Sampling Point: Sampling point is located within the floodplain of Wells Branch downstream of the bridge.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetland Delineation Manual)

Project Site:	Millersville Landfill and Resource Recovery Facility	**Date:**	15-Oct-07
Applicant/Owner:	Anne Arundel County Department of Public Works	**County:**	Anne Arundel
Investigators:	David H. Graff, Steven C. Smith and Holly L. Reynolds	**State:**	Maryland
Do Normal Circumstances exist at the site?	Yes	**Community ID:**	Wetland 1
Is the site significantly disturbed (Atypical Situation)?	No	**Transect ID:**	--
Is the area a Potential Problem Area? (If yes explain)	No	**Plot ID:**	TP-2

VEGETATION

	Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
1	*Liriodendron tulipfera*	T	FACU	9			
2	*Acer rubrum*	T	FAC	10			
3	*Quercus prinus*	T	UPL	11			
4	*Vaccinium corymbosum*	S	FACW-	12			
5				13			
6				14			
7				15			
8				16			

Percent of Dominant Plant Species that are OBL, FACW+, FACW, FACW-, FAC+, or FAC: 50%

Remarks:

HYDROLOGY

	Recorded Data (Describe in Remarks)	**WETLAND HYDROLOGY INDICATORS**	
	Stream, Lake or Tide Gauge	***Primary Indicators***	
	Aerial Photographs		**Inundated**
	Other (Describe in Remarks)		**Saturated**
✓	**No Recorded Data Available**		**Water Marks**
			Drift Lines
Field Observations:			**Sediment Deposits**
0	**Depth of Surface Water (Inches)**		**Drainage Patterns in Wetlands**
0	**Depth of Free Water in Pit (Inches)**	***Secondary Indicators (2 or more required)***	
0	**Depth of Sautrated Soil (Inches)**		**Oxidized Root Channels (Upper 12")**
			Water-stained Leaves
			Local Soil Survey Data
			FAC-Neutral Test
			Other (Explain in Remarks)

Remarks:
There was no indication of wetland hydrology at this location.

Gannett Fleming

SOILS

Map Unit Name (Series & Phase):	Zekiah and Issue Soils (ZBA)
Taxonomy (Subgroup):	Typic Fluvaquents/Fluvaquentic Dystrudepts
Drainage Class:	Poorly drained/Somewhat poorly drained
Field Observations Confirmed Mapped Type?	No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structures, Etc.
0-11	A	10YR 5/3	-	-	Dry silty sand
11-18	B	2.5Y 6/6	-	-	Dry, dense, silty sand

Hydric Soil Indicators

	Histol		**Concretions**
	Histic Epipedon		**High Organic Content in Surface Layer in Sandy Soils**
	Sulfidic Odor		**Organic Streaking in Sandy Soils**
✓	**Aquic Moisture Regime**		**Listed on Local Hydric Soils List**
	Reducing Conditions		**Listed on National Hydric Soils List**
	Gleyed or Low-chroma Color		**Other (Explain in Remarks)**

Remarks:

This soil does not exhibit characteristics indicative of a hydric soil.

WETLAND DETERMINATION

Is Hydrophytic Vegetation Present?	No	**Is The Sampling Point Within A Wetland?**	No
Is Wetland Hydrology Present?	No		
Are Hydric Soils Present?	No		

Remarks:

Location of Sampling Point:	This sampling point is located beyond the floodplain boundary of Wells Branch along the upland slope.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetland Delineation Manual)

Project Site:	Millersville Landfill and Resource Recovery Facility	**Date:**	15-Oct-07
Applicant/Owner:	Anne Arundel County Department of Public Works	**County:**	Anne Arundel
Investigators:	David H. Graff, Steven C. Smith and Holly L. Reynolds	**State:**	Maryland
Do Normal Circumstances exist at the site?	Yes	**Community ID:**	Wetland 1
Is the site significantly disturbed (Atypical Situation)?	No	**Transect ID:**	--
Is the area a Potential Problem Area? (If yes explain)	No	**Plot ID:**	TP-3

VEGETATION

	Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
1	*Nyssa sylvatica*	T	FAC	9			
2	*Platanus occidentalis*	T	FACW-	10			
3	*Magnolia virginiana*	S	FACW+	11			
4	*Microstegium vimineum*	H	FAC	12			
5	*Osmunda cinnamomea*	H	FACW	13			
6				14			
7				15			
8				16			
Percent of Dominant Plant Species that are OBL, FACW+, FACW, FACW-, FAC+, or FAC:							100%

Remarks:

HYDROLOGY

✓	**Recorded Data (Describe in Remarks)**	**WETLAND HYDROLOGY INDICATORS**	
	Stream, Lake or Tide Gauge	***Primary Indicators***	
	Aerial Photographs		**Inundated**
	Other (Describe in Remarks)	✓	**Saturated**
	No Recorded Data Available		**Water Marks**
			Drift Lines
Field Observations:			**Sediment Deposits**
0	**Depth of Surface Water (Inches)**	✓	**Drainage Patterns in Wetlands**
<5	**Depth of Free Water in Pit (Inches)**	***Secondary Indicators (2 or more required)***	
<1	**Depth of Sautrated Soil (Inches)**		**Oxidized Root Channels (Upper 12")**
		✓	**Water-stained Leaves**
			Local Soil Survey Data
		✓	**FAC-Neutral Test**
			Other (Explain in Remarks)

Remarks:
This area was previously delineated and received a JD within the last 10 years.

Gannett Fleming

SOILS

Map Unit Name (Series & Phase):	Zekiah and Issue Soils (ZBA)
Taxonomy (Subgroup):	Typic Fluvaquents/Fluvaquentic Dystrudepts
Drainage Class:	Poorly drained/Somewhat poorly drained
Field Observations Confirmed Mapped Type?	No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structures, Etc.
0-12	A/B	2.5Y 3/1	-	-	Gleyed sandy silt loam

Hydric Soil Indicators

	Histol		**Concretions**
	Histic Epipedon		**High Organic Content in Surface Layer in Sandy Soils**
✓	**Sulfidic Odor**		**Organic Streaking in Sandy Soils**
✓	**Aquic Moisture Regime**		**Listed on Local Hydric Soils List**
	Reducing Conditions		**Listed on National Hydric Soils List**
✓	**Gleyed or Low-chroma Color**		**Other (Explain in Remarks)**

Remarks:

WETLAND DETERMINATION

Is Hydrophytic Vegetation Present?	Yes	**Is The Sampling Point Within A Wetland?**	Yes
Is Wetland Hydrology Present?	Yes		
Are Hydric Soils Present?	Yes		

Remarks:

Location of Sampling Point:	Sampling point is located along near a small tributary that feeds into the floodplain area of Wells Branch.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetland Delineation Manual)

Project Site:	Millersville Landfill and Resource Recovery Facility	**Date:**	15-Oct-07
Applicant/Owner:	Anne Arundel County Department of Public Works	**County:**	Anne Arundel
Investigators:	David H. Graff, Steven C. Smith and Holly L. Reynolds	**State:**	Maryland
Do Normal Circumstances exist at the site?	Yes	**Community ID:**	Wetland 1
Is the site significantly disturbed (Atypical Situation)?	No	**Transect ID:**	--
Is the area a Potential Problem Area? (If yes explain)	No	**Plot ID:**	TP-4

VEGETATION

	Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
1	*Quercus prinus*	T	UPL	9			
2	*Pinus rigida*	T	FACU	10			
3	*Ilex opaca*	T	FACU	11			
4	*Vaccinium corymbosum*	S	FACW-	12			
5				13			
6				14			
7				15			
8				16			

Percent of Dominant Plant Species that are OBL, FACW+, FACW, FACW-, FAC+, or FAC: 25%

Remarks:

HYDROLOGY

	Recorded Data (Describe in Remarks)	**WETLAND HYDROLOGY INDICATORS**	
	Stream, Lake or Tide Gauge	***Primary Indicators***	
	Aerial Photographs		**Inundated**
	Other (Describe in Remarks)		**Saturated**
✓	**No Recorded Data Available**		**Water Marks**
			Drift Lines
Field Observations:			**Sediment Deposits**
0	**Depth of Surface Water (Inches)**		**Drainage Patterns in Wetlands**
0	**Depth of Free Water in Pit (Inches)**	***Secondary Indicators (2 or more required)***	
>18	**Depth of Sautrated Soil (Inches)**		**Oxidized Root Channels (Upper 12")**
			Water-stained Leaves
			Local Soil Survey Data
			FAC-Neutral Test
			Other (Explain in Remarks)

Remarks:
This area does not exhibit wetland hydrology.

Gannett Fleming

SOILS	
Map Unit Name (Series & Phase):	Zekiah and Issue Soils (ZBA)
Taxonomy (Subgroup):	Typic Fluvaquents/Fluvaquentic Dystrudepts
Drainage Class:	Poorly drained/Somewhat poorly drained
Field Observations Confirmed Mapped Type?	No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structures, Etc.
2-0	O	2.5Y 2.5/1	-	-	Organic layer of decayed leaves
0-9	A	7.5YR 7/2	-	-	Dry sand
9-18	B	7.5YR 6/8	-	-	Dry sand

Hydric Soil Indicators

	Histol		**Concretions**
	Histic Epipedon		**High Organic Content in Surface Layer in Sandy Soils**
	Sulfidic Odor		**Organic Streaking in Sandy Soils**
✓	**Aquic Moisture Regime**		**Listed on Local Hydric Soils List**
	Reducing Conditions		**Listed on National Hydric Soils List**
	Gleyed or Low-chroma Color		**Other (Explain in Remarks)**

Remarks:

This soil does not exhbit characteristics indicative of wetland soils.

WETLAND DETERMINATION			
Is Hydrophytic Vegetation Present?	No	**Is The Sampling Point Within A Wetland?**	No
Is Wetland Hydrology Present?	No		
Are Hydric Soils Present?	No		

Remarks:

Location of Sampling Point: This sampling point is located along the upland forested section beyond the floodplain boundary of Wells Branch.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetland Delineation Manual)

Project Site:	Millersville Landfill and Resource Recovery Facility	**Date:**	15-Oct-07
Applicant/Owner:	Anne Arundel County Department of Public Works	**County:**	Anne Arundel
Investigators:	David H. Graff, Steven C. Smith and Holly L. Reynolds	**State:**	Maryland
Do Normal Circumstances exist at the site?	Yes	**Community ID:**	Wetland 1
Is the site significantly disturbed (Atypical Situation)?	No	**Transect ID:**	--
Is the area a Potential Problem Area? (If yes explain)	No	**Plot ID:**	TP-5

VEGETATION

	Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
1	*Nyssa sylvatica*	T	FAC	9			
2	*Platanus occidentalis*	T	FACW-	10			
3	*Magnolia virginiana*	S	FACW+	11			
4	*Microstegium vimineum*	H	FAC	12			
5				13			
6				14			
7				15			
8				16			

Percent of Dominant Plant Species that are OBL, FACW+, FACW, FACW-, FAC+, or FAC: 100%

Remarks:

HYDROLOGY

✓	**Recorded Data (Describe in Remarks)**	**WETLAND HYDROLOGY INDICATORS**	
	Stream, Lake or Tide Gauge	***Primary Indicators***	
	Aerial Photographs		**Inundated**
	Other (Describe in Remarks)	✓	**Saturated**
	No Recorded Data Available		**Water Marks**
		✓	**Drift Lines**
Field Observations:			**Sediment Deposits**
0	**Depth of Surface Water (Inches)**	✓	**Drainage Patterns in Wetlands**
0	**Depth of Free Water in Pit (Inches)**	***Secondary Indicators (2 or more required)***	
>18	**Depth of Sautrated Soil (Inches)**		**Oxidized Root Channels (Upper 12")**
		✓	**Water-stained Leaves**
			Local Soil Survey Data
			FAC-Neutral Test
			Other (Explain in Remarks)

Remarks:
This area was previously delineated and received a JD within the last 10 years.

Gannett Fleming

SOILS

Map Unit Name (Series & Phase):	Zekiah and Issue Soils (ZBA)
Taxonomy (Subgroup):	Typic Fluvaquents/Fluvaquentic Dystrudepts
Drainage Class:	Poorly drained/Somewhat poorly drained
Field Observations Confirmed Mapped Type?	No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structures, Etc.
0-18	A/B	10YR 4/1	10YR 5/6	Many / Prominent	Sandy silt loam

Hydric Soil Indicators

	Histol	✓	**Concretions**
	Histic Epipedon		**High Organic Content in Surface Layer in Sandy Soils**
	Sulfidic Odor		**Organic Streaking in Sandy Soils**
✓	**Aquic Moisture Regime**		**Listed on Local Hydric Soils List**
✓	**Reducing Conditions**		**Listed on National Hydric Soils List**
✓	**Gleyed or Low-chroma Color**		**Other (Explain in Remarks)**

Remarks:

WETLAND DETERMINATION

Is Hydrophytic Vegetation Present?	Yes	**Is The Sampling Point Within A Wetland?**	Yes
Is Wetland Hydrology Present?	Yes		
Are Hydric Soils Present?	Yes		

Remarks:
This area meets the criteria for inclusion in a wetlands determination, however drought conditions are present during the time of the field investigation.

Location of Sampling Point: Sample location is within the floodplain of Wells Branch as mapped using the GPS unit.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetland Delineation Manual)

Project Site:	Millersville Landfill and Resource Recovery Facility	**Date:**	15-Oct-07
Applicant/Owner:	Anne Arundel County Department of Public Works	**County:**	Anne Arundel
Investigators:	David H. Graff, Steven C. Smith and Holly L. Reynolds	**State:**	Maryland
Do Normal Circumstances exist at the site?	Yes	**Community ID:**	Wetland 1
Is the site significantly disturbed (Atypical Situation)?	No	**Transect ID:**	--
Is the area a Potential Problem Area? (If yes explain)	No	**Plot ID:**	TP-6

VEGETATION

	Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
1	*Acer rubrum*	T	FAC	9			
2	*Nyssa sylvatica*	T	FAC	10			
3	*Clethra alnifolia*	S	FAC+	11			
4	*Microstegium vimineum*	H	FAC	12			
5				13			
6				14			
7				15			
8				16			

Percent of Dominant Plant Species that are OBL, FACW+, FACW, FACW-, FAC+, or FAC: 100%

Remarks:

HYDROLOGY

✓	**Recorded Data (Describe in Remarks)**	**WETLAND HYDROLOGY INDICATORS**	
	Stream, Lake or Tide Gauge	***Primary Indicators***	
	Aerial Photographs		**Inundated**
	Other (Describe in Remarks)		**Saturated**
	No Recorded Data Available		**Water Marks**
		✓	**Drift Lines**
Field Observations:			**Sediment Deposits**
0	**Depth of Surface Water (Inches)**	✓	**Drainage Patterns in Wetlands**
0	**Depth of Free Water in Pit (Inches)**	***Secondary Indicators (2 or more required)***	
>18	**Depth of Sautrated Soil (Inches)**		**Oxidized Root Channels (Upper 12")**
			Water-stained Leaves
			Local Soil Survey Data
			FAC-Neutral Test
			Other (Explain in Remarks)

Remarks:
This area is experiencing a drought condition, however evidence of weltand hydrology is present to indicate adequate hydrology during most of the year. This area was also previously delineated and received a JD within the last 10 years.

Gannett Fleming

SOILS	
Map Unit Name (Series & Phase):	Zekiah and Issue Soils (ZBA)
Taxonomy (Subgroup):	Typic Fluvaquents/Fluvaquentic Dystrudepts
Drainage Class:	Poorly drained/Somewhat poorly drained
Field Observations Confirmed Mapped Type?	No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structures, Etc.
0-18	A/B	7.5YR 3/1	-	-	Gleyed silty sand

Hydric Soil Indicators

	Histol		**Concretions**
	Histic Epipedon	✓	**High Organic Content in Surface Layer in Sandy Soils**
	Sulfidic Odor		**Organic Streaking in Sandy Soils**
✓	**Aquic Moisture Regime**		**Listed on Local Hydric Soils List**
	Reducing Conditions		**Listed on National Hydric Soils List**
✓	**Gleyed or Low-chroma Color**		**Other (Explain in Remarks)**

Remarks:

WETLAND DETERMINATION			
Is Hydrophytic Vegetation Present?	Yes	**Is The Sampling Point Within A Wetland?**	Yes
Is Wetland Hydrology Present?	Yes		
Are Hydric Soils Present?	Yes		

Remarks:

Location of Sampling Point:	Sampling point is located within the floodplain of Wells Branch in an area that is experiencing a drought condition.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetland Delineation Manual)

Project Site:	Millersville Landfill and Resource Recovery Facility	**Date:**	15-Oct-07
Applicant/Owner:	Anne Arundel County Department of Public Works	**County:**	Anne Arundel
Investigators:	David H. Graff, Steven C. Smith and Holly L. Reynolds	**State:**	Maryland
Do Normal Circumstances exist at the site?	Yes	**Community ID:**	Wetland 1
Is the site significantly disturbed (Atypical Situation)?	No	**Transect ID:**	--
Is the area a Potential Problem Area? (If yes explain)	No	**Plot ID:**	TP-7

VEGETATION

	Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
1	*Quercus alba*	T	FACU-	9			
2	*Acer rubrum*	T	FAC	10			
3	*Hamamelis virginiana*	S	FAC-	11			
4	*Ilex opaca*	S	FACU	12			
5				13			
6				14			
7				15			
8				16			

Percent of Dominant Plant Species that are OBL, FACW+, FACW, FACW-, FAC+, or FAC: 25%

Remarks:

HYDROLOGY

	Recorded Data (Describe in Remarks)	**WETLAND HYDROLOGY INDICATORS**	
	Stream, Lake or Tide Gauge	***Primary Indicators***	
	Aerial Photographs		**Inundated**
	Other (Describe in Remarks)		**Saturated**
✓	**No Recorded Data Available**		**Water Marks**
			Drift Lines
Field Observations:			**Sediment Deposits**
0	**Depth of Surface Water (Inches)**		**Drainage Patterns in Wetlands**
0	**Depth of Free Water in Pit (Inches)**	***Secondary Indicators (2 or more required)***	
>18	**Depth of Sautrated Soil (Inches)**		**Oxidized Root Channels (Upper 12")**
			Water-stained Leaves
			Local Soil Survey Data
			FAC-Neutral Test
			Other (Explain in Remarks)

Remarks:
This area does not exhibit evidence of wetland hydrology.

Gannett Fleming

SOILS

Map Unit Name (Series & Phase):	Zekiah and Issue Soils (ZBA)
Taxonomy (Subgroup):	Typic Fluvaquents/Fluvaquentic Dystrudepts
Drainage Class:	Poorly drained/Somewhat poorly drained
Field Observations Confirmed Mapped Type?	No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structures, Etc.
0-18	A/B	10YR 3/2	-	-	Sandy silt

Hydric Soil Indicators

	Histol		**Concretions**
	Histic Epipedon		**High Organic Content in Surface Layer in Sandy Soils**
	Sulfidic Odor		**Organic Streaking in Sandy Soils**
✓	**Aquic Moisture Regime**		**Listed on Local Hydric Soils List**
	Reducing Conditions		**Listed on National Hydric Soils List**
	Gleyed or Low-chroma Color		**Other (Explain in Remarks)**

Remarks:
This soil does not contain mottles and does not appear to meet the criteria for a hydric soil.

WETLAND DETERMINATION

Is Hydrophytic Vegetation Present?	No	**Is The Sampling Point Within A Wetland?**	No
Is Wetland Hydrology Present?	No		
Are Hydric Soils Present?	No		

Remarks:

Location of Sampling Point: This sample location is near the edge of the floodplain area.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetland Delineation Manual)

Project Site:	Millersville Landfill and Resource Recovery Facility	**Date:**	15-Oct-07
Applicant/Owner:	Anne Arundel County Department of Public Works	**County:**	Anne Arundel
Investigators:	David H. Graff, Steven C. Smith and Holly L. Reynolds	**State:**	Maryland
Do Normal Circumstances exist at the site?	Yes	**Community ID:**	Wetland 2
Is the site significantly disturbed (Atypical Situation)?	No	**Transect ID:**	--
Is the area a Potential Problem Area? (If yes explain)	No	**Plot ID:**	TP-8

VEGETATION

	Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
1	*Nyssa sylvatica*	T	FAC	9			
2	*Acer rubrum*	T	FAC	10			
3	*Magnolia virginiana*	S	FACW+	11			
4	*Microstegium vimineum*	H	FAC	12			
5				13			
6				14			
7				15			
8				16			

Percent of Dominant Plant Species that are OBL, FACW+, FACW, FACW-, FAC+, or FAC: 100%

Remarks:

HYDROLOGY

✓	**Recorded Data (Describe in Remarks)**	**WETLAND HYDROLOGY INDICATORS**	
	Stream, Lake or Tide Gauge	***Primary Indicators***	
	Aerial Photographs		**Inundated**
	Other (Describe in Remarks)	✓	**Saturated**
	No Recorded Data Available		**Water Marks**
		✓	**Drift Lines**
Field Observations:			**Sediment Deposits**
0	**Depth of Surface Water (Inches)**	✓	**Drainage Patterns in Wetlands**
0	**Depth of Free Water in Pit (Inches)**	***Secondary Indicators (2 or more required)***	
<2	**Depth of Sautrated Soil (Inches)**		**Oxidized Root Channels (Upper 12")**
			Water-stained Leaves
			Local Soil Survey Data
			FAC-Neutral Test
			Other (Explain in Remarks)

Remarks:
Wetland delineation fieldwork was performed on this complex within the last 10 years.

Gannett Fleming

SOILS

Map Unit Name (Series & Phase):	Zekiah and Issue Soils (ZBA)
Taxonomy (Subgroup):	Typic Fluvaquents/Fluvaquentic Dystrudepts
Drainage Class:	Poorly drained/Somewhat poorly drained
Field Observations Confirmed Mapped Type?	No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structures, Etc.
0-18	A/B	10YR 3/1	10YR 5/6	Few / Distinct	Sandy silt loam

Hydric Soil Indicators

	Histol	✓	**Concretions**
	Histic Epipedon		**High Organic Content in Surface Layer in Sandy Soils**
	Sulfidic Odor		**Organic Streaking in Sandy Soils**
✓	**Aquic Moisture Regime**		**Listed on Local Hydric Soils List**
✓	**Reducing Conditions**		**Listed on National Hydric Soils List**
✓	**Gleyed or Low-chroma Color**		**Other (Explain in Remarks)**

Remarks:

WETLAND DETERMINATION

Is Hydrophytic Vegetation Present?	Yes	**Is The Sampling Point Within A Wetland?**	Yes
Is Wetland Hydrology Present?	Yes		
Are Hydric Soils Present?	Yes		

Remarks:

Location of Sampling Point: This sample location is within the floodplain area of Wells Branch.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetland Delineation Manual)

Project Site:	Millersville Landfill and Resource Recovery Facility	**Date:**	15-Oct-07
Applicant/Owner:	Anne Arundel County Department of Public Works	**County:**	Anne Arundel
Investigators:	David H. Graff, Steven C. Smith and Holly L. Reynolds	**State:**	Maryland
Do Normal Circumstances exist at the site?	Yes	**Community ID:**	Wetland 2
Is the site significantly disturbed (Atypical Situation)?	No	**Transect ID:**	--
Is the area a Potential Problem Area? (If yes explain)	No	**Plot ID:**	TP-9

VEGETATION

	Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
1	*Quercus alba*	T	FACU	9			
2	*Prunus serotina*	T	FACU	10			
3	*Pinus rigida*	T	FACU	11			
4	*Vaccinium corymbosum*	S	FACW-	12			
5				13			
6				14			
7				15			
8				16			

Percent of Dominant Plant Species that are OBL, FACW+, FACW, FACW-, FAC+, or FAC: 25%

Remarks:

HYDROLOGY

	Recorded Data (Describe in Remarks)	**WETLAND HYDROLOGY INDICATORS**	
	Stream, Lake or Tide Gauge	***Primary Indicators***	
	Aerial Photographs		**Inundated**
	Other (Describe in Remarks)		**Saturated**
✓	**No Recorded Data Available**		**Water Marks**
			Drift Lines
Field Observations:			**Sediment Deposits**
0	**Depth of Surface Water (Inches)**		**Drainage Patterns in Wetlands**
0	**Depth of Free Water in Pit (Inches)**	***Secondary Indicators (2 or more required)***	
>18	**Depth of Sautrated Soil (Inches)**		**Oxidized Root Channels (Upper 12")**
			Water-stained Leaves
			Local Soil Survey Data
			FAC-Neutral Test
			Other (Explain in Remarks)

Remarks:
This area does not exhibit hydrologic indicators.

Gannett Fleming

SOILS

Map Unit Name (Series & Phase):	Zekiah and Issue Soils (ZBA)
Taxonomy (Subgroup):	Typic Fluvaquents/Fluvaquentic Dystrudepts
Drainage Class:	Poorly drained/Somewhat poorly drained
Field Observations Confirmed Mapped Type?	No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structures, Etc.
0-3	A	10YR 3/3	-	-	Dense silt loam
3-15	B	10YR 3/2	-	-	Dense silt loam

Hydric Soil Indicators

	Histol		**Concretions**
	Histic Epipedon		**High Organic Content in Surface Layer in Sandy Soils**
	Sulfidic Odor		**Organic Streaking in Sandy Soils**
✓	**Aquic Moisture Regime**		**Listed on Local Hydric Soils List**
	Reducing Conditions		**Listed on National Hydric Soils List**
	Gleyed or Low-chroma Color		**Other (Explain in Remarks)**

Remarks:

Soils do not exhibit hydric characteristics.

WETLAND DETERMINATION

Is Hydrophytic Vegetation Present?	No	**Is The Sampling Point Within A Wetland?**	No
Is Wetland Hydrology Present?	No		
Are Hydric Soils Present?	No		

Remarks:

Location of Sampling Point: Sampling point was mapped using a GPS unit.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetland Delineation Manual)

Project Site:	Millersville Landfill and Resource Recovery Facility	**Date:**	15-Oct-07
Applicant/Owner:	Anne Arundel County Department of Public Works	**County:**	Anne Arundel
Investigators:	David H. Graff, Steven C. Smith and Holly L. Reynolds	**State:**	Maryland
Do Normal Circumstances exist at the site?	Yes	**Community ID:**	Wetland 1
Is the site significantly disturbed (Atypical Situation)?	No	**Transect ID:**	--
Is the area a Potential Problem Area? (If yes explain)	No	**Plot ID:**	TP-10

VEGETATION

	Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
1	*Acer rubrum*	T	FAC	9			
2	*Quercus alba*	T	FACU-	10			
3	*Quercus rubra*	T	FACU-	11			
4	*Ilex opaca*	S	FACU	12			
5				13			
6				14			
7				15			
8				16			

Percent of Dominant Plant Species that are OBL, FACW+, FACW, FACW-, FAC+, or FAC: 25%

Remarks:

HYDROLOGY

	Recorded Data (Describe in Remarks)	**WETLAND HYDROLOGY INDICATORS**	
	Stream, Lake or Tide Gauge	***Primary Indicators***	
	Aerial Photographs		**Inundated**
	Other (Describe in Remarks)		**Saturated**
✓	**No Recorded Data Available**		**Water Marks**
			Drift Lines
Field Observations:			**Sediment Deposits**
0	**Depth of Surface Water (Inches)**		**Drainage Patterns in Wetlands**
0	**Depth of Free Water in Pit (Inches)**	***Secondary Indicators (2 or more required)***	
>18	**Depth of Sautrated Soil (Inches)**		**Oxidized Root Channels (Upper 12")**
			Water-stained Leaves
			Local Soil Survey Data
			FAC-Neutral Test
			Other (Explain in Remarks)

Remarks:
This area does not exhibit wetland hydrology.

Gannett Fleming

SOILS

Map Unit Name (Series & Phase):	Zekiah and Issue Soils (ZBA)
Taxonomy (Subgroup):	Typic Fluvaquents/Fluvaquentic Dystrudepts
Drainage Class:	Poorly drained/Somewhat poorly drained
Field Observations Confirmed Mapped Type?	No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structures, Etc.
0-18	A/B	7.5YR 3/3	-	-	Dense sandy silt loam

Hydric Soil Indicators

	Histol		**Concretions**
	Histic Epipedon		**High Organic Content in Surface Layer in Sandy Soils**
	Sulfidic Odor		**Organic Streaking in Sandy Soils**
✓	**Aquic Moisture Regime**		**Listed on Local Hydric Soils List**
	Reducing Conditions		**Listed on National Hydric Soils List**
	Gleyed or Low-chroma Color		**Other (Explain in Remarks)**

Remarks:

This area does not exhibit characteristics of wetland soils.

WETLAND DETERMINATION

Is Hydrophytic Vegetation Present?	No	**Is The Sampling Point Within A Wetland?**	No
Is Wetland Hydrology Present?	No		
Are Hydric Soils Present?	No		

Remarks:

Location of Sampling Point: This sample point was located outside of the floodplain of Wells Branch.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetland Delineation Manual)

Project Site:	Millersville Landfill and Resource Recovery Facility	**Date:**	15-Oct-07
Applicant/Owner:	Anne Arundel County Department of Public Works	**County:**	Anne Arundel
Investigators:	David H. Graff, Steven C. Smith and Holly L. Reynolds	**State:**	Maryland
Do Normal Circumstances exist at the site?	Yes	**Community ID:**	Wetland 1
Is the site significantly disturbed (Atypical Situation)?	No	**Transect ID:**	--
Is the area a Potential Problem Area? (If yes explain)	No	**Plot ID:**	TP-11

VEGETATION

	Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
1	*Nyssa sylvatica*	T	FAC	9			
2	*Platanus occidentalis*	T	FACW-	10			
3	*Magnolia virginiana*	S	FACW+	11			
4	*Microstegium vimineum*	H	FAC	12			
5	*Clethra alnifolia*	S	FAC+	13			
6				14			
7				15			
8				16			

Percent of Dominant Plant Species that are OBL, FACW+, FACW, FACW-, FAC+, or FAC: 100%

Remarks:

HYDROLOGY

✓	**Recorded Data (Describe in Remarks)**	**WETLAND HYDROLOGY INDICATORS**	
	Stream, Lake or Tide Gauge	***Primary Indicators***	
	Aerial Photographs		**Inundated**
	Other (Describe in Remarks)		**Saturated**
	No Recorded Data Available		**Water Marks**
		✓	**Drift Lines**
Field Observations:			**Sediment Deposits**
--	**Depth of Surface Water (Inches)**	✓	**Drainage Patterns in Wetlands**
--	**Depth of Free Water in Pit (Inches)**	***Secondary Indicators (2 or more required)***	
--	**Depth of Sautrated Soil (Inches)**	✓	**Oxidized Root Channels (Upper 12")**
			Water-stained Leaves
			Local Soil Survey Data
			FAC-Neutral Test
			Other (Explain in Remarks)

Remarks:
This area was delineated within the last 10 years.

Gannett Fleming

SOILS	
Map Unit Name (Series & Phase):	Zekiah and Issue Soils (ZBA)
Taxonomy (Subgroup):	Typic Fluvaquents/Fluvaquentic Dystrudepts
Drainage Class:	Poorly drained/Somewhat poorly drained
Field Observations Confirmed Mapped Type?	No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structures, Etc.
0-2	A	10YR 3/1	-	-	Sandy silt
2-10	B	10YR 3/1	-	-	Silty clay
10-18	B1	2.5Y 5/1	7.5YR 4/4	Many / Prominent	Dense clay

Hydric Soil Indicators

	Histol	✓	**Concretions**
	Histic Epipedon		**High Organic Content in Surface Layer in Sandy Soils**
	Sulfidic Odor		**Organic Streaking in Sandy Soils**
✓	**Aquic Moisture Regime**		**Listed on Local Hydric Soils List**
✓	**Reducing Conditions**		**Listed on National Hydric Soils List**
✓	**Gleyed or Low-chroma Color**		**Other (Explain in Remarks)**

Remarks:

WETLAND DETERMINATION			
Is Hydrophytic Vegetation Present?	Yes	**Is The Sampling Point Within A Wetland?**	Yes
Is Wetland Hydrology Present?	Yes		
Are Hydric Soils Present?	Yes		

Remarks:

Location of Sampling Point: This sampling point is located within the floodplain of Wells Branch.

Gannett Fleming

APPENDIX D
FUNCTION AND VALUE SHEETS

Wetland 1

Wetland Function-Value Evaluation Form

Total Area of Wetland 5.70 acres Human made? No Is wetland part of a wildlife corridor? Yes Or a "habitat island"? No

Adjacent land use Active Landfill and Deciduous Forest

Distance to nearest road or development is 50 ft

Dominant wetland system present is PFO Is a Contiguous undeveloped buffer zone present? Yes

Is the wetland a separate hydraulic system? No If not, where does the wetland lie in the drainage basin? Middle

How many tributaries contribute to the wetland? One, Wells Branch

Wetland ID: Wetland 1

Prepared by: Steve Smith, GF

Wetland impact:
Type: unknown Area: unknown

Evaluation based on:
Office No Field Yes

Corps manual wetland delineation completed? Yes

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)	Principal F/V	Comments
Groundwater Recharge/Discharge	X		4, 7, 13		Several spring/seeps were observed within the limits of Wetland 1. Groundwater expression observed in the upstream portion of Wells Branch disappeared underground within the limits of Wetland 1 and did not provide enough hydrology to maintain flow throughout the extent of Wells Branch located within the project study area.
Floodflow Alteration	X		5, 6, 8, 9, 10, 13, 14, 18	X	Wetland 1 is a large wetland located within the floodplain of Wells Branch has significant floodflow alteration potential based on its small area.
Fish and Shellfish Habitat		X			Wells Branch provides limited fish habitat in places but Wetland 1 does not.
Sediment/Toxicant Retention	X		1, 2, 10, 16		Wetland along Wells Branch carries runoff from the adjacent landfill. Erosion of the Wells Branch stream channel through portions of Wetland 1 is severe.
Nutrient Removal		X			
Production Export		X			
Sediment/Shoreline Stabilization	X		1, 3, 4, 5 (in places), 6 (in places), 7, 9, 12, 14, 15		Wetland along Wells Branch carries runoff from the adjacent landfill. Erosion of the Wells Branch stream channel through portions of Wetland 1 is severe.
Wildlife Habitat	X		3, 5, 6, 7, 8, 13, 15, 17		Deer and multiple bird species were observed within Wetland 1.
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
ES Endangered Species Habitat		X			
Other		X			

Wetland 2

Wetland Function-Value Evaluation Form

Total Area of Wetland 0.17 acres Human made? No Is wetland part of a wildlife corridor? Yes Or a "habitat island"? No

Adjacent land use Active Landfill and Deciduous Forest

Distance to nearest road or development is 200 ft

Dominant wetland system present is PFO Is a Contiguous undeveloped buffer zone present? Yes

Is the wetland a separate hydraulic system? No If not, where does the wetland lie in the drainage basin? Middle

How many tributaries contribute to the wetland? One, Wells Branch

Wetland ID: Wetland 2

Prepared by: Steve Smith, GF

Wetland impact:
Type: unknown Area: unknown

Evaluation based on:
Office No Field Yes

Corps manual wetland delineation completed? Yes

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)	Principal F/V	Comments
Groundwater Recharge/Discharge		X			
Floodflow Alteration	X		5, 9, 10, 13		Small wetland located within the floodplain of Wells Branch has limited floodflow alteration potential based on its small area.
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 10		Wetland along Wells Branch carries runoff from the adjacent landfill. Erosion of the Wells Branch stream channel adjacent to Wetland 2 is severe. Wetland 2 has limited potential to retain sediment and toxins based on its small size.
Nutrient Removal		X			
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
ES Endangered Species Habitat		X			
Other		X			

Appendix A.2
Joint Federal - State Application, Gannett Fleming (2008)

JOINT FEDERAL/STATE APPLICATION FOR THE ALTERATION OF ANY FLOODPLAIN, WATERWAY, TIDAL OR NONTIDAL WETLAND IN MARYLAND

Millersville Landfill and Resource Recovery Facility

Anne Arundel County, Maryland

Prepared for: ANNE ARUNDEL COUNTY MARYLAND

Department of Public Works
Bureau of Waste Management Services

Prepared By: Gannett Fleming

January 2008

ANNE ARUNDEL COUNTY

Department of Public Works

Inter-Office Correspondence

DATE: February 19, 2008

TO: Steve Krajcsik, Disposal and Maintenance Manager, MS-4190 (2 sets)

FROM: Phil Guyer, Project Manager pdg

SUBJECT: Joint Federal/State Application for the Alteration of Any Floodplain, Waterway, Tidal or Non-tidal Wetland in Maryland, Permit Application
Project Name: Millersville Landfill Cell 9 Soil Stockpile/Borrow Area
Contract Number: N530601

Enclosed for your reference is the subject Wetland Permit Application. This includes the January 28, 2008 transmittal letter to MDE.

Should you have any questions please feel free to contact me on 410-571-0092.

PG/db
Enclosures
cc: File: N530601 (12) wo/e
Diary
J:\PGuyer\N530601\12_permits\WetlandPermitTransmittal_SteveKrajcsik.doc
REVISED 07/07

Phone: 410-571-0092 Mailstop: 5116 Fax: 410-571-0746
Recycled Paper
Web Site: www.aacounty.org/DPW

ANNE ARUNDEL COUNTY
MARYLAND
County Executive John R. Leopold

Heritage Complex
2662 Riva Road, 4th Floor
Annapolis, MD 21401

Ronald E. Bowen, P.E.
Director, Department of Public Works

January 28, 2008

Maryland Department of the Environment
Water Management Administration
Regulatory Services Coordination Office
1800 Washington Boulevard, Suite 430
Baltimore, Maryland 21230

Attention: Ms. Judy Cole

Re: Joint Federal/State Application for the Alteration of Any Floodplain, Waterway, Tidal or Nontidal Wetland in Maryland
Site Name: Millersville Landfill and Resource Recovery Facility Cell 9
Project No.: Anne Arundel County No. N530600
Contract No.: N530601

Dear Ms. Cole:

Anne Arundel County Department of Public Works is submitting one (1) original and four (4) copies of the enclosed *Joint Federal/State Application for the Alteration of Any Floodplain, Waterway, Tidal or Nontidal Wetland in Maryland* for your review and approval.

Anne Arundel County has proposed to begin construction of soil stockpile and borrow area facilities that are needed to support the Cell 9 waste disposal activities at the Millersville Landfill and Resource Recovery Facility (MLFRRF). The construction includes a soil stockpile/borrow area within the Cell 9 area, and a stormwater/sedimentation pond (Pond 9-2) with a Coastal Plains Outfall into Wells Branch a tributary to Severn Run and the Severn River. This project was discussed at our Joint Agency Review Group meeting on November 20, 2007.

Upon receiving your date and time notification for a wetland delineation for the subject project, I will notify our Environmental Consultant and the Owner/Operator of MLFRRF to join you at the site.

Our principal contact for the Millersville Landfill and Resource Recovery Facility, Cell 9, is Stephen Krajcsik, Disposal and Maintenance Manager. His address is 389 Burns Crossing Road, Severn, Maryland 21144.

Thank you for your assistance in this matter. If you have any questions concerning this matter, please contact Mr. Krajcsik at 410-222-6108 or me at 410-571-0092.

Sincerely,

Phillip D. Guyer

Phillip D. Guyer, P.E., PMP
Sr. Project Manager
Engineering Bureau

PG/db
Enclosures
cc: Linda Currier, Solid Waste Operations Administrator, MS-4190
Kenneth B. Fleming, P.E., Assistant Chief Engineer, DPW, MS-7301
Steve Krajcsik, Disposal and Maintenance Manager, MS-4190
Joseph Zorica, Program Manager, Engineering, MS-5116
James A. Leiper, Gannett Fleming, Inc.
File: N530601 (12)
Diary
J:\PGuyer\N530601\12_permits\MDE_WetlandPermitApplication_Ltr_b.doc
Revised 07/07

JOINT FEDERAL/STATE APPLICATION FOR THE ALTERATION OF ANY FLOODPLAIN, WATERWAY, TIDAL OR NONTIDAL WETLAND IN MARYLAND

FOR AGENCY USE ONLY

Application Number _____ **Date Determined Complete** _____

Date Received by State _____ **Date(s) Returned** _____

Date Received by Corps _____

Type of State permit needed _____ **Date of Field Review** _____

Type of Corps permit needed _____ **Agency Performed Field Review** _____

++

- Please submit 1 original and 4 copies of this form, required maps and plans to the Wetlands and Waterways Program as noted on the last page of this form.
- Any application which is not completed in full or is accompanied by poor quality drawings may be considered incomplete and result in a time delay to the applicant.

Please check one of the following:

RESUBMITTAL: ____ **APPLICATION AMENDMENT:** ____ **MODIFICATION TO AN EXISTING PERMIT:** ____

JURISDICTIONAL DETERMINATION ONLY ____ **APPLYING FOR AUTHORIZATION** X

PREVIOUSLY ASSIGNED NUMBER (RESUBMITTALS AND AMENDMENTS) _____

DATE January 24, 2008

1. APPLICANT INFORMATION:

APPLICANT NAME:

A. Name: Stephen J. Krajcsik, P.E. B. Daytime Telephone: 410-222-~~6177~~ 6108

C. Company: Anne Arundel County Department of Public Works

D. Address: 389 Burns Crossing Road

E. City: Severn State: Maryland Zip: 21144

AGENT/ENGINEER INFORMATION:

A. Name: James A Leiper, P.E. B. Telephone: 717-763-7211 ext. 2793

C. Company: Gannett Fleming, Inc.

D. Address: 207 Senate Avenue

E. City: Camp Hill State: Pennsylvania Zip: 17011

ENVIRONMENTAL CONSULTANT:

A. Name: David H. Graff, P.W.S., C.E. B. Telephone: 717-763-7211 ext. 2073

C. Company: Gannett Fleming, Inc.

D. Address: 207 Senate Avenue

E. City: Camp Hill State: Pennsylvania Zip: 17011

CONTRACTOR (If known): **Unknown at this time**

A. Name: _____ B. Telephone: _____

C. Company: _____

D. Address: _____

E. City: _____ State: _____ Zip: _____

PRINCIPAL CONTACT:

A. Name: James A Leiper, P.E. B. Telephone: 717-763-7211 ext. 2793

C. Company: Gannett Fleming, Inc.

D. Address: 207 Senate Avenue

E. City: Camp Hill State: Pennsylvania Zip: 17011

2. PROJECT DESCRIPTION

a. GIVE WRITTEN DESCRIPTION OF PROJECT:

Construction of Cell 9 is necessary to accommodate the County's waste disposal as the active landfill cell (Cell 8) reaches capacity. The proposed project will include the construction of Cell 9, a stormwater/sedimentation pond (Pond 9-2) with a discharge into Wells Branch, and a soil stockpile/borrow area. Cell 9 is a double-lined disposal area, approximately 84 acres in size. The Cell 9 area is projected to reach its permitted capacity sometime between 2030 (275,000 tons per year scenario) and 2059 (110,000 tons per year scenario) depending on varied County waste disposal rate scenarios.

Has any portion of the project been completed? X Yes ____ No If yes, explain

The Millersville site waste disposal Cell 9 was permitted by MDE in August, 1997 (WQC 97-NT-0501/199001846) and the U.S. Army Corps of Engineers (USCOE) in June 1997 (CENAB-OP-RW 90-01846-4). Construction activities of Cell 9 performed to date include the Cell 9 bridge crossing over Wells Branch, an access road parallel to Wells Branch, and general grading of wetlands approved under 1997 permits.

Is this a residential subdivision or commercial development? ____ Yes X No

If yes, total number of acres on property ____ acres

b. ACTIVITY: Check all activities that are proposed in the wetland, waterway, floodplain, and nontidal wetland buffer as appropriate.

A. X filling
B. ____ dredging
C. X excavating
D. ____ flooding or impounding water
E. ____ draining
F. X grading
G. X removing or destroying vegetation
H. ____ building structures

Area for item(s) checked: Wetland 1,906 (sq. ft.) Buffer (Nontidal Wetland Only) 11,732 (sq. ft.)

Expanded Buffer (Nontidal Wetland Only) NA (sq. ft.)

Area of stream impact NA (sq. ft.)

Length of stream affected NA (linear feet)

c. TYPE OF PROJECTS: Project Dimensions

For each activity, give overall length and width (in feet), in columns 1 and 2. For multiple activities, give total area of disturbance in square feet in column 3. For activities in tidal waters, give maximum distance channelward (in feet) in column 4. For dam or small ponds, give average depth (in feet) for the completed project in column 5. Give the volume of fill or dredged material in column 6.

			Length (Ft.) 1	Width (Ft.) 2	Area Sq. Ft. 3	Maximum/Average Channelward Encroachment 4		Pond Depth 5	Volume of fill/dredge material (cubic yards) below MHW or OHW 6
A.		Bulkhead							
B.		Revetment							
C.		Vegetative Stabilization							
D.		Gabions							
E.		Groins							
F.		Jetties							
G.		Boat Ramp							
H.		Pier							
I.		Breakwater							
J.		Repair & Maintenance							
K.		Road Crossing							
L.		Utility Line							
M.	X	Outfall Construction	NA	NA	See W	NA	NA	NA	NA
N.		Small Pond							
O.		Dam							
P.	X	Lot Fill	NA	NA	See W	NA	NA	NA	NA
Q.		Building Structures							
R.		Culvert							
S.		Bridge							
T.		Stream Channelization							
U.		Parking Area							
V.		Dredging							

1. ____ New 2. ____ Maintenance 3. ____ Hydraulic 4. ____ Mechanical

W. Other (explain) Fill of the MDE 25-foot buffer along Wetland 1 associated with the construction of a 30-foot wide perimeter access road around the proposed soil stockpile/borrow area (See Regulated Activities Plan)

- Area of fill in Wetland Buffer = 2,880 square feet

Fill of the MDE 25-foot buffer along Wetland 1 associated with the construction of the proposed sediment basin Pond 9-2 (See Regulated Activities Plan)

- Area of fill in Wetland Buffer = 5,000 square feet

Temporary impacts to Wetland 1 and fill of the MDE 25-foot buffer associated with the construction of the proposed coastal plain outfall from sediment basin Pond 9-2 (See Regulated Activities Plan)

- Area of temporary impacts to Wetland 1 = 1,906 square feet
- Area of fill in Wetland Buffer = 3,852 square feet

d. PROJECT PURPOSE: Give brief written description of the project purpose:

The Anne Arundel County Department of Public Works has proposed to begin construction of additional facilities that are needed to support Cell 9 at the Millersville Landfill and Resource Recovery Facility (herein referenced as the MLFRRF) on Burns Crossing Road in northern Anne Arundel County, Maryland. The MLFRRF waste disposal Cell 8 was permitted by Maryland Department of the Environment (MDE) in the early 1990's. Landfilling in Cell 8 began in 1992 and based on various waste disposal rate scenarios developed by Anne Arundel County – Waste Management Services (AAC-WMS), the Cell 8 area is expected to reach its permitted capacity sometime between 2014 and 2016.

The MLFRRF waste disposal Cell 9 was permitted by MDE in August, 1997 (WQC 97-NT-0501/199001846) and the U.S. Army Corps of Engineers (USCOE) in June 1997 (CENAB-OP-RW 90-01846-4). Construction activities of Cell 9 performed to date include the Cell 9 bridge crossing over Wells Branch, an access road parallel to Wells Branch, and general grading and filling of wetlands approved under 1997 permits. Construction of Cell 9 is necessary to accommodate the County's waste disposal as the active landfill cell (Cell 8) reaches capacity.

3. PROJECT LOCATION:

a. LOCATION INFORMATION:

A. County: Anne Arundel B. City: Severn C. Name of waterway or closest waterway Wells Branch

D. State stream use class designation: Subbasin 02-13-10 – West Chesapeake Bay Area
Severn Run and all Tributaries = Use Designation IV (Recreation Trout Waters)

E. Site Address or Location: Millersville Landfill and Resource Recovery Facility
389 Burns Crossing Road, Severn, MD 21144

F. Directions from nearest intersection of two state roads:
From the I-97/Route 32 interchange, take Route 32 West toward Odenton. Continue on Route 32 for approximately 2 miles and take the first exit to Burns Crossing Road. Turn right onto Burns Crossing Road, the Department of Public Works office is approximately 1000 feet on the right.

G. Is your project located in the Chesapeake Bay Critical Area (generally within 1,000 feet of tidal waters or tidal wetlands)?:
____ Yes X No

H. County Book Map Coordinates (Alexandria Drafting Co.); Excluding Garrett and Somerset Counties:
Map: 13 Letter: C Number: 3 (to the nearest tenth)

I. FEMA Floodplain Map Panel Number (if known): ____

J. 1. 39°05'27" latitude 2. 76°39'51" longitude

b. ACTIVITY LOCATION: Check one or more of the following as appropriate for the type of wetland/waterway where you are proposing an activity:

A. ____ Tidal Waters
B. ____ Tidal Wetlands
C. ____ Special Aquatic Site (e.g., mudflat, vegetated shallows)
D. X Nontidal Wetland
E. X 25-foot buffer (nontidal wetlands only)
F. ____ 100-foot buffer (nontidal wetland of special State concern)
G. ____ In stream channel
1. ____ Tidal 2. ____ Nontidal
H. ____ 100-year floodplain (outside stream channel)
I. ____ River, lake, pond
J. ____ Other (Explain)

c. **LAND USE:**

A. Current Use of Parcel Is: 1. _____ Agriculture: Has SCS designated project site as a prior converted cropland? _____ Yes _____ No 2. X Wooded 3. _____ Marsh/Swamp 4. _____ Developed 5. _____ Other _____

B. Present Zoning Is: 1. ____ Residential 2. ____ Commercial/Industrial 3. X Agriculture 4. ____ Marina 5. ____ Other

C. Project complies with current zoning X Yes _____ No

THE FOLLOWING INFORMATION IS REQUIRED BY THE STATE (blocks 4-7):

4. REDUCTION OF IMPACTS: Explain measures taken or considered to avoid or minimize wetland losses in F. Also check Items A-E if any of these apply to your project.

A. _____ Reduced the area of disturbance

B. _____ Reduced size/scope of project

C. _____ Relocated structures

D. _____ Redesigned project

E. _____ Other _____

F. Explanation The project will result in minor temporary impacts to wetlands and encroachment of the MDE wetland buffers. Original impacts associated with the perimeter access road were previously permitted by MDE in August, 1997 (WQC 97-NT-0501/199001846) and the U.S. Army Corps of Engineers (USCOE) in June 1997 (CENAB-OP-RW 90-01846-4). Improvements to the 30-foot wide access road will result in minimal impacts to the MDE 25-foot wetland buffer.

Stormwater basin Pond 9-2 and the coastal plain outfall were located in the area between the proposed site for Cell 9 and Wetland 1. The proposed Pond 9-2 and coastal plain outfall are located in an area along Wetland 1 that would result in the least amount of impact to Wetland 1. Alternative site locations of Pond 9-2 and the coastal plain outfall would result in greater impacts to Wetland 1 than the preferred alternative.

Describe reasons why impacts were not avoided or reduced in Q. Also check Items G-P that apply to your project.

G. _____ Cost

H. X Extensive wetlands on site

I. X Engineering/design constraints

J. _____ Other natural features

K. _____ Parcel size

L. X Other regulatory requirement

M. X Failure to accomplish project purpose

N. _____ Safety/public welfare issue

O. _____ Inadequate zoning

P. _____ Other _____

Q. Description Minor temporary impacts to wetlands and encroachment of the MDE wetland buffer were unavoidable due to construction requirements of a 3:1 slope within the required stormwater/sedimentation basin (Pond 9-2) and the standard coastal plain outfall design. Based on site topography, the proposed location of the coastal plain outfall was optimal for drainage from Pond 9-2 into Wetland 1 and Wells Branch. The proposed coastal plain outfall will result in less than 2,000 square feet of temporary impacts to non-tidal wetlands (Wetland 1). Wetland 1 is 5.70 acres and the temporary impact to 0.05 acres is considered to be minor. Construction of Cell 9 is necessary to accommodate the County's waste disposal as the active landfill cell (Cell 8) reaches capacity.

5. LETTER OF EXEMPTION: If you are applying for a letter of exemption for activities in nontidal wetlands and/or their buffers, explain why the project qualifies:

A. _____ No significant plant or wildlife value and wetland impact

1. _____ Less than 5,000 square feet

2. _____ In an isolated nontidal wetland less than 1 acre in size

B. _____ Repair existing structure/fill

C. _____ Mitigation Project

D. _____ Utility Line

1. _____ Overhead

2. _____ Underground

E. Other (explain) _____

F. X Check here if you are **not** applying for a letter of exemption.

IF YOU ARE APPLYING FOR A LETTER OF EXEMPTION, PROCEED TO BLOCK 11

6. ALTERNATIVE SITE ANALYSIS: Explain why other sites that were considered for this project were rejected in M. Also check any items in D-L if they apply to your project. **(If you are applying for a letter of exemption, do not complete this block):**

A. X 1 site B. ____ 2 - 4 sites C. ____ 5 or more sites

Alternative sites were rejected/not considered for the following reason(s):

D. ____ Cost
E. ____ Lack of availability
F. X Failure to meet project purpose
G. ____ Located outside general/market area
H. X Greater wetlands impact
I. ____ Water dependency
J. ____ Inadequate zoning
K. X Engineering/design constraints
L. ____ Other ____

M. Explanation: Construction of Cell 9 is necessary to accommodate the County's waste disposal as the active landfill cell (Cell 8) reaches capacity. Stormwater basin Pond 9-2 and the coastal plain outfall were located in the area between the proposed site for Cell 9 and Wetland 1. The proposed Pond 9-2 and coastal plain outfall are located in an area along Wetland 1 that would result in the least amount of impact to Wetland 1. Due to construction requirements of a 3:1 slope within the required stormwater/sedimentation basin (Pond 9-2), the standard coastal plain outfall design and close proximity of Wetland 1 to the existing access road (location approved in the 1997 MDE and USCOE permits), alternative site locations of Pond 9-2 and the coastal plain outfall would result in greater impacts to Wetland 1 than the preferred alternative.

7. PUBLIC NEED: Describe the public need or benefits that the project will provide in F. Also check Items in A-E that apply to your project. **(If you are applying for a letter of exemption, do not complete this block):**

A. X Economic
B. ____ Safety
C. X Health/welfare
D. ____ Does not provide public benefits
E. ____ Other ____

F. Description Landfilling in Cell 8 began in 1992 and, based on various waste disposal rate scenarios, is expected to reach its permitted capacity sometime between 2014 and 2016. Cell 9 was permitted by MDE in August, 1997 (WQC 97-NT-0501/199001846) and the USCOE in June 1997 (CENAB-OP-RW 90-01846-4). Construction of Cell 9 is necessary to accommodate the County's waste disposal as the active landfill cell (Cell 8) reaches capacity. The Cell 9 area is projected to reach its permitted capacity sometime between 2030 (275,000 tons per year scenario) and 2059 (110,000 tons per year scenario) depending on varied County waste disposal rate scenarios.

8. OTHER APPROVALS NEEDED/GRANTED:

A. Agency	B. Date Sought	C. Decision 1. Granted	2. Denied	D. Decision Date	E. Other Status
Anne Arundel County Conservation District	TBD				

9. MITIGATION PLAN: Please provide the following information:

a. Description of a monetary compensation proposal, if applicable (for **state requirements** only). Attach another sheet if necessary. **(Not Applicable)**

b. Give a brief description of the proposed mitigation project.
Not Applicable. The proposed project will result in less than 2,000 square feet (0.046 acre) of non-tidal wetland loss, therefore, no mitigation for impacts is required.

c. Describe why you selected your proposed mitigation site, including what other areas were considered and why they were rejected. **(Not Applicable)**

d. Describe how the mitigation site will be protected in the future. **(Not Applicable)**

10. HAVE ADJACENT PROPERTY OWNERS BEEN NOTIFIED?: A. _____ Yes B. __X__ No

Provide names and mailing addresses below (Use separate sheet, if necessary):

a. SEE ATTACHED LIST b. _____ c. _____

11. HISTORIC PROPERTIES: Is your project located in the vicinity of historic properties? (For example: structures over 50 years old, archeological sites, shell mounds, Indian or Colonial artifacts). Provide any supplemental information in Section 13.

A. _____ Yes B. __X__ No C. _____ Unknown

12. ADDITIONAL INFORMATION: Use this space for detailed responses to any of the previous items. Attach another sheet if necessary:

Check box if data is enclosed for any one or more of the following (see checklist for required information):

A. _____ Soil borings
B. __X__ Wetland data sheets
C. __X__ Photographs
D. __X__ Field surveys
E. _____ Alternate site analysis
F. _____ Market analysis
G. __X__ Site plan
H. _____ Avoidance and minimization analysis

I. X Other (explain) Attachment 1: Project Location and Study Area Map

Attachment 2: Project Drawings

Attachment 3: Wetland Identification and Delineation Report (2007)

Attachment 4: List of Adjacent Property Owners

CERTIFICATION:

I hereby designate and authorize the agent named above to act on my behalf in the processing of this application and to furnish any information that is requested. I certify that the information on this form and on the attached plans and specifications is true and accurate to the best of my knowledge and belief. I understand that any of the agencies involved in authorizing the proposed works may request information in addition to that set forth herein as may be deemed appropriate in considering this proposal. I certify that all Waters of the United States have been identified and delineated on site, and that all jurisdictional wetlands have been delineated in accordance with the Federal Manual for Identifying and Delineating Jurisdictional Wetlands. I grant permission to the agencies responsible for authorization of this work, or their duly authorized representative, to enter the project site for inspection purposes during working hours. I will abide by the conditions of the permit or license if issued and will not begin work without the appropriate authorization. I also certify that the proposed works are consistent with Maryland's Coastal Zone Management Plan. I understand that none of the information contained in the application form is confidential and that I may request that additional required information be considered confidential under applicable laws. I further understand that failure of the landowner to sign the application will result in the application being deemed incomplete.

LANDOWNER MUST SIGN: Stephen J. Kyciski DATE: 1/28/08

WHERE TO MAIL APPLICATION

Maryland Department of the Environment
Water Management Administration
Regulatory Services Coordination Office
1800 Washington Boulevard, Suite 430
Baltimore, Maryland 21230
Telephone: (410) 537-3762
1-800-876-0200

BEFORE YOU MAIL... DON'T FORGET...

- **SIGN AND DATE THE APPLICATION. THE LANDOWNER MUST SIGN.**
- **FIVE (5) COPIES OF ALL DOCUMENTS (APPLICATION, PLANS, MAPS, REPORTS, ETC.) MUST BE RECEIVED TO BEGIN OUR REVIEW.**
- **INCLUDE FIVE COPIES OF A VICINITY MAP (LOCATION MAP) WITH THE PROJECT SITE PINPOINTED.**

SAMPLE PLANS MAY BE OBTAINED BY PHONE (1-800-876-0200)
OR E-MAIL acunabaugh@mde.state.md.us.

SUPPLEMENTARY INFORMATION TO BE INCLUDED ON PLANS, DRAWINGS, OR VICINITY MAPS

In addition to the information indicated on the previous pages, you should include the following on the 8 1/2 x 11 site plans and any blueprints you have submitted:

1. Delineation of any wetland buffers or expanded buffers, clearly marked and differentiated.

2. Location of mitigation area, if proposed on the same site as the project.

Note: If you are proposing a complex project you may wish to submit engineering blueprints of your project with the application form to expedite review.

Mitigation Location Map: If you are proposing that nontidal wetland mitigation be done at a different location than the proposed project, you should submit a map showing the location of the mitigation site in relation to the proposed nontidal wetland losses.

WETLAND DELINEATION

Wetlands should be identified according to methods described in the publication Federal Manual Identifying and Delineating Jurisdictional Wetlands. Copies of the manual may be obtained by calling the U. S. Government Printing Office at 202-783-3238 and requesting document #024-010-00-683-8 at a cost of $7.50. Wetlands must be shown on all plans submitted with the application. All wetlands on site must be delineated and shown on the overall site plan. 8½ x 11 inch plans with topography showing relation of the wetlands and project impacts must be submitted. Copies of the wetland reports and data sheets used in making the determination be included with your application submittal.

Regulatory Agencies

Federal Permits

U.S. Army Corps of Engineers
Baltimore District
Attention: CENAB-OP-R
P. O. Box 1715
Baltimore, MD 21203-1715
Telephone: (410) 962-3670

Coastal Zone Consistency Statement

MD Dept. of the Environment
Water Management Administration
Wetlands and Waterways Program
1800 Washington Blvd, Ste 430
Baltimore, MD 21230
Telephone: (410) 537-3745

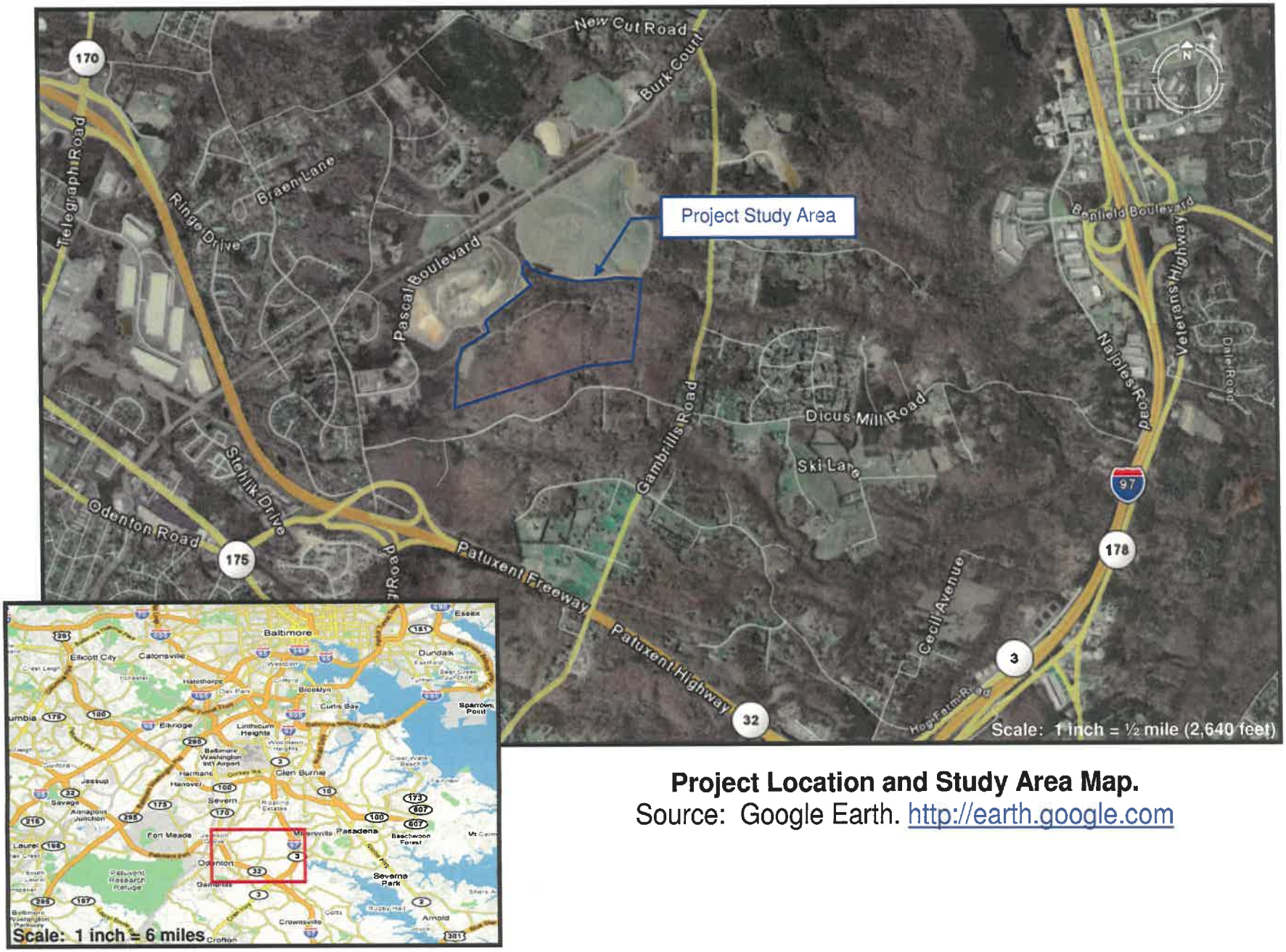
State Authorizations

MD Dept. of the Environment
Water Management Administration
Tidal Wetlands Division
1800 Washington Blvd, Ste 430
Baltimore, MD 21230
Telephone: (410) 537-3837

MD Dept. of the Environment
Water Management Administration
Nontidal Wetlands and Waterways Division
1800 Washington Blvd, Ste 430
Baltimore, MD 21230
Telephone: (410) 537-3768

ATTACHMENT 1

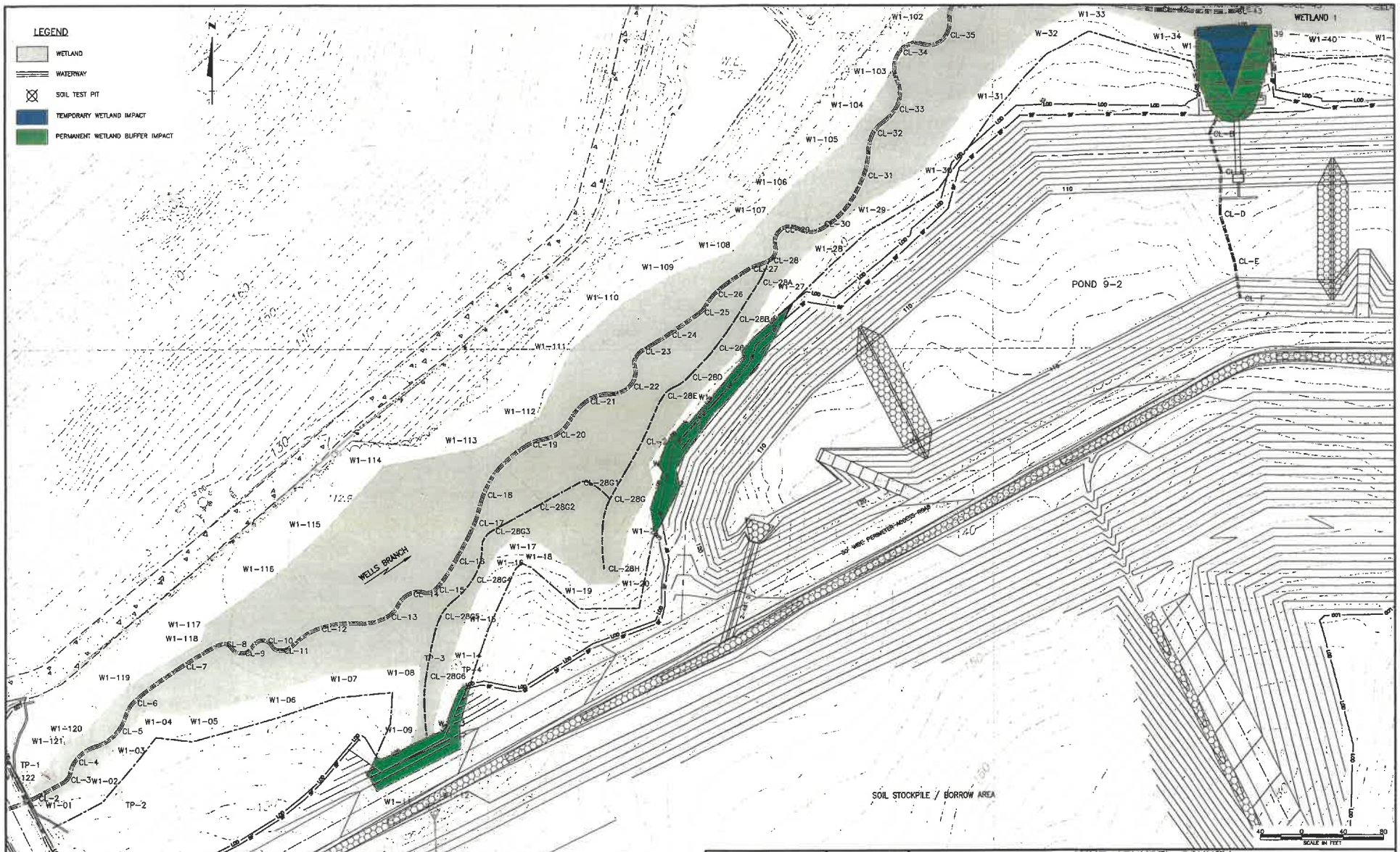
PROJECT LOCATION AND STUDY AREA MAP



Project Location and Study Area Map.
Source: Google Earth. http://earth.google.com

ATTACHMENT 2

PROJECT DRAWINGS



SEDIMENT AND EROSION CONTROL PLAN
ANNE ARUNDEL SOIL CONSERVATION DISTRICT
SHEET NO. ?? OF ??

Gannett Fleming
207 Senate Avenue
Camp Hill, PA 17011

SIGNATURE

DATE

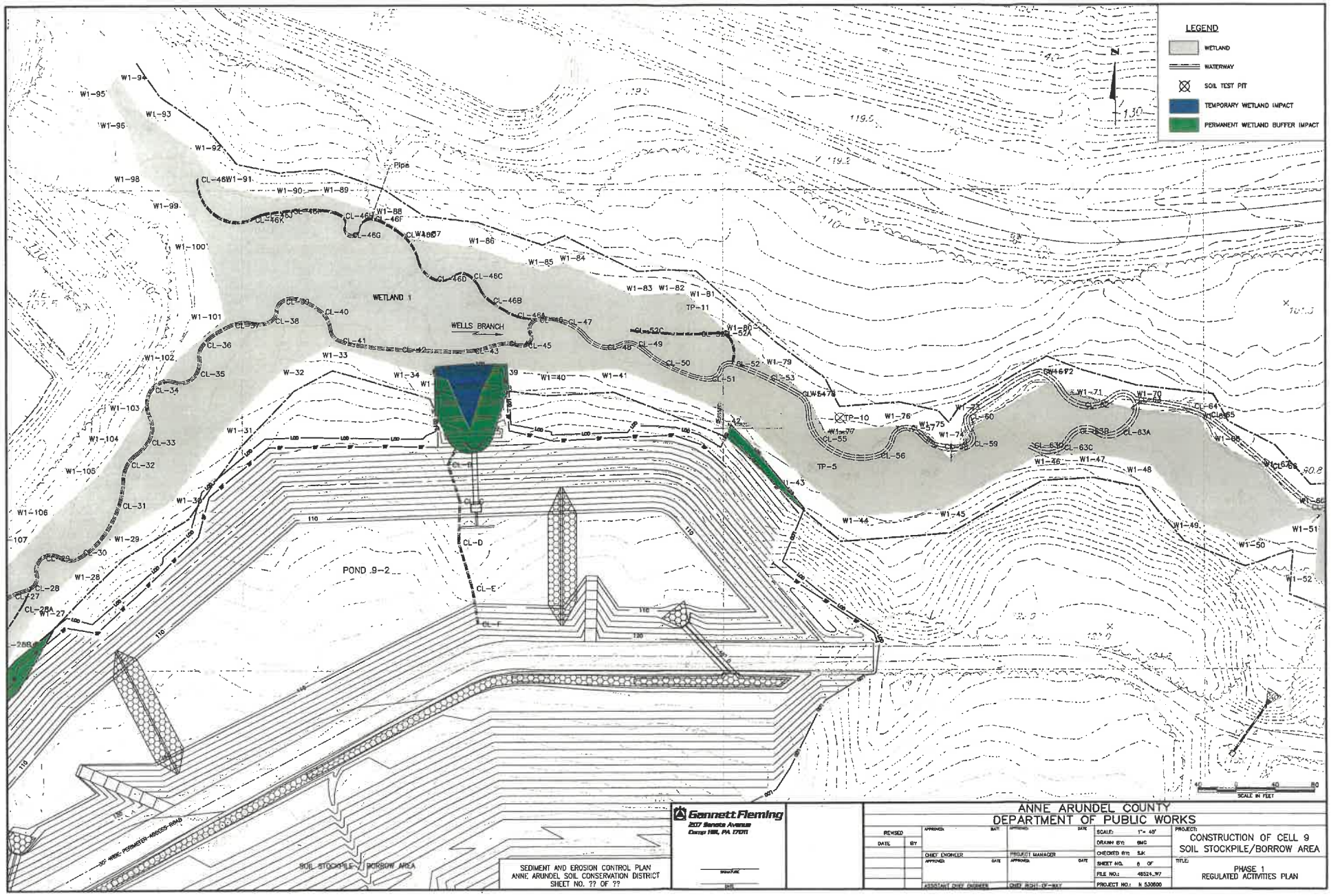
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

REVISED		APPROVED	DATE	APPROVED	DATE
DATE	BY	CHIEF ENGINEER		PROJECT MANAGER	
		APPROVED	DATE	APPROVED	DATE
		ASSISTANT CHIEF ENGINEER		CHIEF BUREAU OF RWA	

SCALE: 1" = 40'
DRAWN BY: BMG
CHECKED BY: SJK
SHEET NO. 7 OF
FILE NO.: 48524_W7
PROJECT NO.: N 530800

PROJECT:
CONSTRUCTION OF CELL 9
SOIL STOCKPILE/BORROW AREA

TITLE:
PHASE 1
REGULATED ACTIVITIES PLAN



SEDIMENT AND EROSION CONTROL PLAN
ANNE ARUNDEL SOIL CONSERVATION DISTRICT
SHEET NO. ?? OF ??

Gannett Fleming
207 Senate Avenue
Camp Hill, PA 17011

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

SCALE:	1" = 40'
DRAWN BY:	BMG
CHECKED BY:	SJK
SHEET NO.	6 OF
FILE NO.:	48524-W7
PROJECT NO.:	N 530600

PROJECT: CONSTRUCTION OF CELL 9 SOIL STOCKPILE/BORROW AREA

TITLE: PHASE 1 REGULATED ACTIVITIES PLAN

ATTACHMENT 3

WETLAND IDENTIFICATION AND DELINEATION REPORT (2007)

Wetland Identification and Delineation Report

Millersville Landfill and Resource Recovery Facility
Anne Arundel County, Maryland

Prepared for: ANNE ARUNDEL COUNTY MARYLAND

Department of Public Works
Bureau of Waste Management Services

Prepared By: Gannett Fleming

November 2007

Wetland Identification and Delineation Report

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY

Prepared for:

ANNE ARUNDEL COUNTY
MARYLAND

Department of Public Works
Bureau of Waste Management Services

Prepared by:

Gannett Fleming

NOVEMBER 2007

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY

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APPENDICES

Appendix A – Wetland and Waterways Mapping
Appendix B – Photographs
Appendix C – Wetland Data Forms
Appendix D – Wetland Function and Value Sheets

Project Description

The Anne Arundel County Department of Public Works has proposed to begin construction of additional facilities that are needed to support Cell 9 at the Millersville Landfill and Resource Recovery Facility (herein referenced as the MLFRRF) on Burns Crossing Road in northern Anne Arundel County, Maryland. The MLFRRF waste disposal Cell 8 was permitted by Maryland Department of the Environment (MDE) in the early 1990's. Landfilling in Cell 8 began in 1992 and based on various waste disposal rate scenarios developed by Anne Arundel County – Waste Management Services (AAC-WMS), the Cell 8 area is expected to reach its permitted capacity sometime between 2014 and 2016.

The MLFRRF waste disposal Cell 9 was permitted by MDE in August, 1997 (WQC 97-NT-0501/199001846) and the U.S. Army Corps of Engineers (USCOE) in June 1997 (CENAB-OP-RW 90-01846-4). Construction activities of Cell 9 performed to date include the Cell 9 bridge crossing over Wells Branch, an access road parallel to Wells Branch, and general grading of wetlands approved under 1997 permits.

Construction of Cell 9 is necessary to accommodate the County's waste disposal as the active landfill cell (Cell 8) reaches capacity. The proposed project will include the construction of Cell 9, a stormwater/sedimentation pond (Pond 9-2) with a discharge into Wells Branch, and a soil stockpile/borrow area. Cell 9 is a double-lined disposal area, approximately 84 acres in size. The Cell 9 area is projected to reach its permitted capacity sometime between 2030 (275,000 tons per year scenario) and 2059 (110,000 tons per year scenario) depending on varied County waste disposal rate scenarios.

Purpose

The purpose of this report is to describe wetland and waterways investigations performed within the proposed project study areas. This report was prepared in part to satisfy the regulatory requirements of the U.S. Army Corps of Engineers (USCOE), which has jurisdictional authority over wetlands and waterways of the United States under the purview of Section 404 of the Clean Water Act, and the Maryland Department of the Environment (MDE) which has authority over wetlands and waterways under the Non-tidal Wetlands Protection Act & Program and the Waterway Construction Statute.

Study Area Description

The project study area is approximately 125 acres dominated by deciduous forest (Figure 1). The proposed Cell 9 area borders existing Cell 8 and combined Cells 5-6-7. The proposed project study area is located in the Western Shore Uplands Region of the Coastal Plain Province of Maryland (MGS, 2001).

One USGS mapped intermittent stream, Wells Branch, is located within the project study area (Figure 2). At the MLFRRF, surface water flows into Wells Branch from stormwater runoff from undeveloped areas, wetland seeps and outfalls from sediment basins, ponds and traps. Upon leaving the MLFRRF property, Wells Branch flows east to the confluence with Severn Run, which, in turn, flows into the Severn River. Topography along the project study area alignment is rolling with elevations ranging between 80 feet above mean sea level along the floodplain of Wells Branch to approximately 240 feet along the southern border of the project study area. Located within the floodplain of Wells Branch, one palustrine forested broad-leaf deciduous, seasonal wetland (PFO1C) is identified on the USFWS National Wetlands Inventory (NWI) mapping (Figure 3).

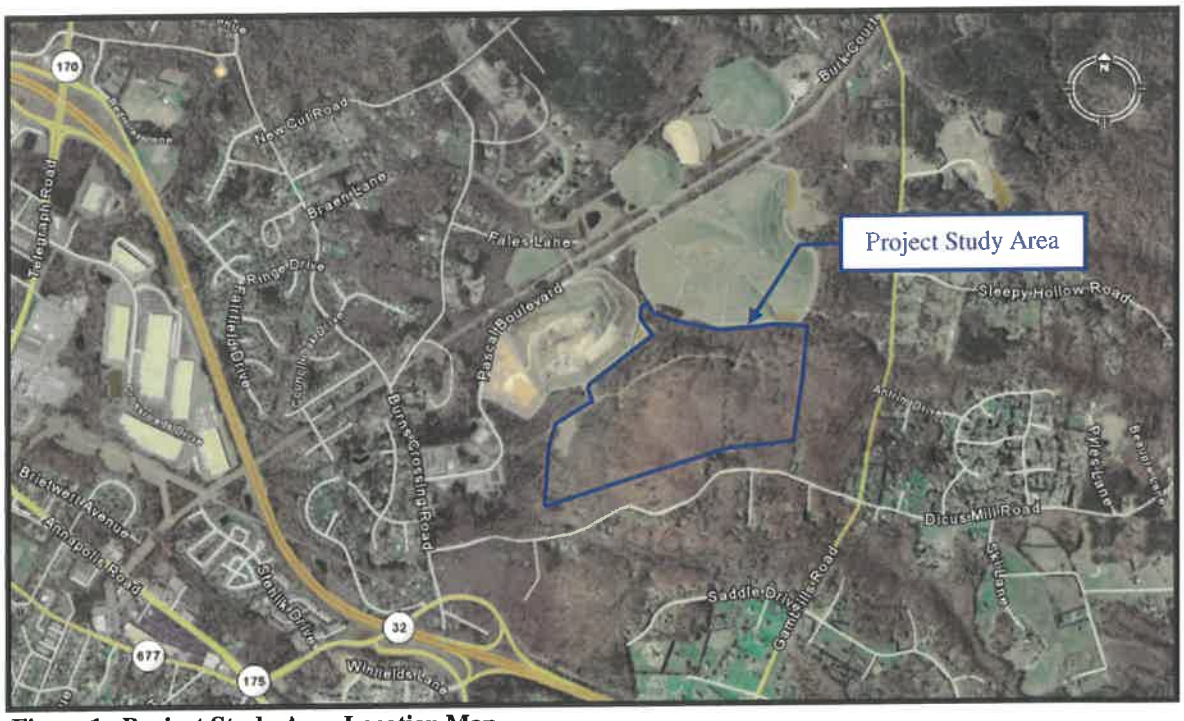

Figure 1. Project Study Area Location Map.
Source: Google Earth. Accessed October 17, 2007. http://earth.google.com
Scale: 1 inch = approximately 2700 feet

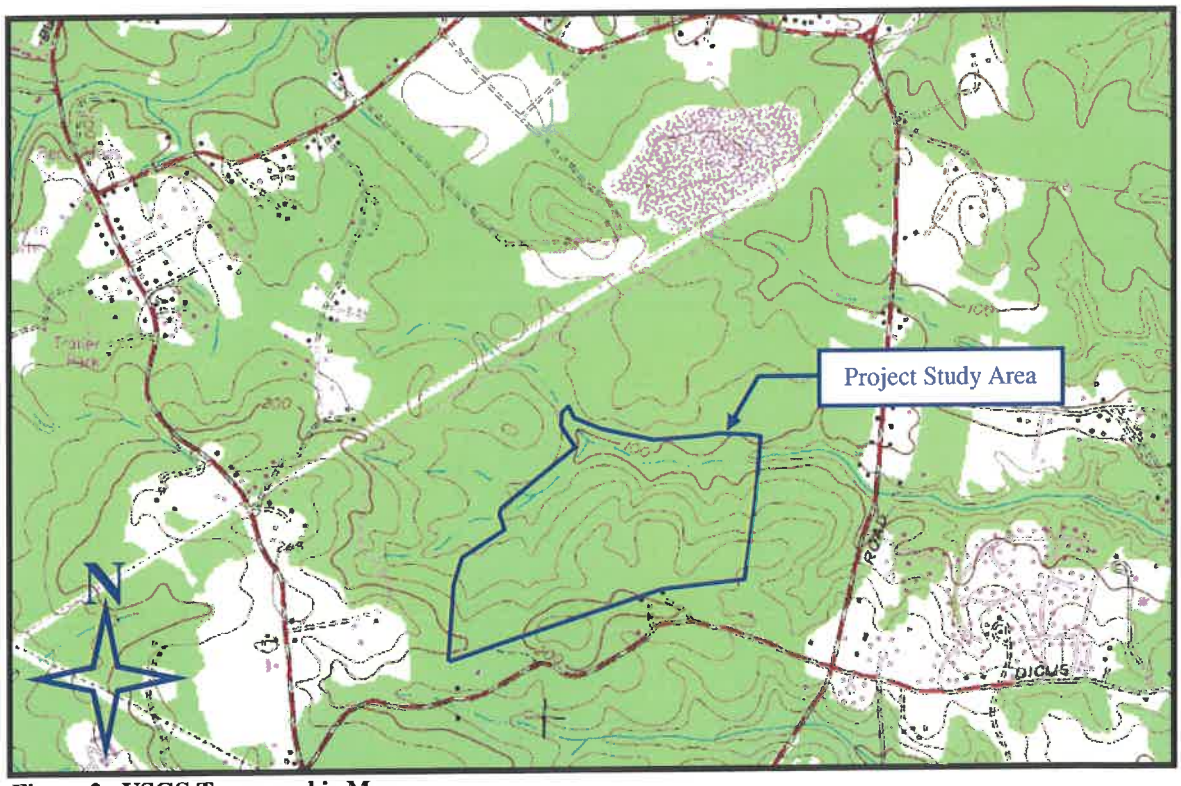

Figure 2. USGS Topographic Map.
Source: USGS Topographic Map 7.5' Quadrangle, (Odenton, MD 1979).
Scale: 1 inch = approximately 2300 feet

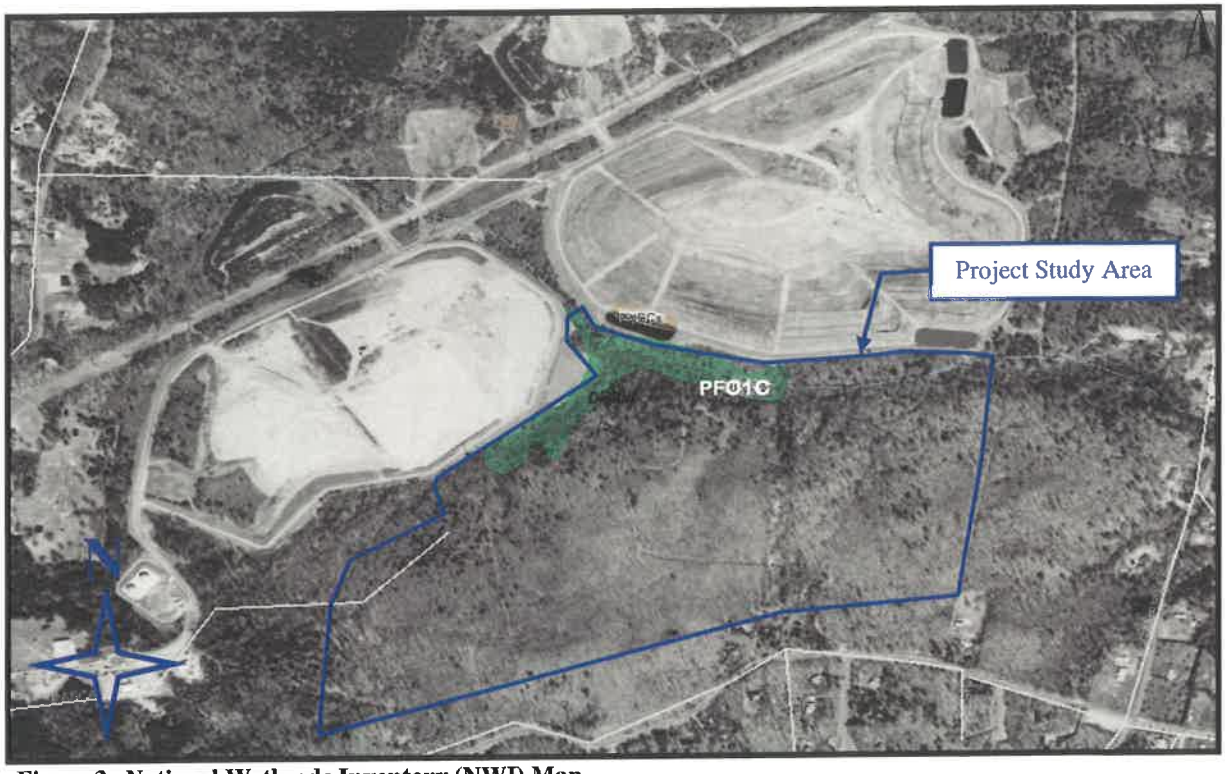

Figure 3. National Wetlands Inventory (NWI) Map.
Source: U.S. Fish and Wildlife Service. NWI Wetlands Online Mapper. Accessed October 17, 2007. http://wetlandsfws.er.usgs.gov/wtlnds/launch.html
Scale: 1 inch = approximately 1000 feet

The floodplain forest along Wells Branch is dominated by red maple (*Acer rubrum*), black gum (*Nyssa sylvatica*), tulip poplar (*Liriodendron tulipifera*), and willow oak (*Quercus phellos*). The shrub layer was dominated by sweet pepperbush (*Clethra alnifolia*), sweetbay magnolia (*Magnolia virginiana*), American holly (*Ilex opaca*), winterberry (*Ilex verticillata*) and highbush blueberry (*Vaccinium corymbosum*). Common greenbrier (*Smilax rotundifolia*), Asiatic tearthumb (*Polygonum perfoliatum*), and microstegium (*Microstegium viminea*) where the common vines and herbs.

The upland forest is dominated by red maple, tulip poplar, pitch pine (*Pinus rigida*), chestnut oak (*Quesrcus prinus*), red oak (*Quercus rubra*), white oak (*Quercus alba*), black oak (*Quercus nigra*) and black cherry (*Prunus serotina*). The shrub layer was dominated by American holly and highbush blueberry. Extensive deer-browse limited the growth of vines and herbs within the upland forest community.

Soil series were identified through a review of the USDA Natural Resources Conservations Service Web Soils Survey for Anne Arundel County (USDA, 2007). Soils mapped within the project study area include Downer-Hammonton complex (DvB, DvC and DvD), Downer-Phalanx complex (DxC and DxD), Evesboro and Galestown soils (EVC), Sassafras fine sandy loam (SaB), Sassafras-Hambrook complex (ShA), Sassafras and Croom soils (SME and SMF), Udorthents, refuse substratum (UfG) and Woodstown sandy loam (WdB). None of soils are listed as hydric soils at the federal, state or local level (Figure 4).

Soil Name	Soil Map Unit	Acres in Study Area	National, State or Local Hydric Soils List
Downer-Hammonton Complex	DvB, DvC, DvD	42.8	Not Listed
Downer-Phalanx Complex	DxC, DxD	18.1	Not Listed
Evesboro and Galestown Soils	EVC	1.9	Not Listed
Sassafras Fine Sandy Loam	SaB	18.7	Not Listed
Sassafras-Hambrook Complex	ShA	<0.1	Not Listed
Sassafras and Croom Soils	SME, SMF	30.6	Not Listed
Udorthents, Refuse Substratum	UfG	0.6	Not Listed
Woodstown Sandy Loam	WdB	1.6	Not Listed
Zekiah and Issue Soils	ZBA	11.1	Not Listed

Figure 4. Soil Survey Map of Study Area.
Source: USDA Natural Resources Conservation Service – Web Soil Survey. Accessed October 18, 2007. http://websoilsurvey.nrcs.usda.gov/app/
Scale: 1 inch = approximately 800 feet

Methods

The study area was investigated for palustrine wetland indicators of vegetative composition, soil development and hydrology. The investigation was conducted in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory, 1987). Due to the size and characteristics of the study area, the Routine-On-Site Determination method was used. If present, wetlands within and directly adjacent to the limits of proposed work were delineated so that their presence could be shown on project mapping to aid in impact avoidance during engineering design.

Soils were characterized by evaluating the upper horizons of the soil profile. Soil pits were dug using a "sharpshooter" spade with a 14-inch blade. Soil horizons were evaluated using normal field protocols for determining texture and nomenclature. The *Munsell Soil Color Charts* (Macbeth Division of Kollmorgen

Instruments Corporation, 1994) were used to determine the colors of horizons and redoximorphic features. Reducing condition determinations in soils were performed in the field using presence/absence of mottles, low chroma colors and presence of concretions.

Data point locations were investigated for primary and secondary wetland hydrology indicators. If present, wetland boundaries were marked using pink wetland flagging. Wetland boundary data points were located using a Trimble ™ ProXR®Global Positioning System (GPS). The Trimble ™ ProXR® is capable of attaining sub-meter accuracy (Trimble, 1997). The GPS data were then transferred onto relevant site mapping using the U.S. State Plane, 1927, Maryland coordinate system. Wetlands were identified on site base mapping to show their proximity to the proposed construction areas. Classifications were assigned to each wetland following the Cowardin et al methods (1979). Color photographs were taken of all relevant features to document site conditions during the time of the investigations.

Vegetation was identified using *A Field Guide to Trees and Shrubs* (Petrides 1986), *Newcomb's Wildflower Guide* (Newcomb 1977) and *Grasses An Identification Guide* (Brown 1979). Plant species were assigned an indicator status [e.g., Upland (UPL), Facultative Upland (FACU), Facultative (FAC), Facultative Wetland (FACW), or Obligate Wetland (OBL) based on the USFWS's *National List of Plant Species that Occur in Wetlands: 1988 National Summary* (Reed 1988).

Wetland function and value assessments were performed at each wetland location (if present) using the methods outlined in *The Highway Methodology Workbook Supplement, Wetland Functions and Values A Descriptive Approach*, USCOE New England Division (NEDEP-360-1-30a 1995). Wetland functions were evaluated and recorded using the standard wetland function-value evaluation form.

Waterways (if present) were identified through a review of available mapping and field investigations. Topographic and engineering maps were reviewed for the presence of streams within the project area. Field investigations for waterways were performed in conjunction with the wetland field investigation and included the field verification of mapped watercourses and the identification and delineation of streams, springs, and seeps that were not shown on existing engineering plans. Waterways were identified by the presence of bed and banks and/or ordinary high water marks. The flow regime of each identified waterway was characterized based upon field indicators of hydrologic, floral, and faunal character at the time of the investigation. All identified waterways were located using GPS and photographed.

Results

Wetlands: The study area was field investigated for palustrine wetland indicators of vegetative composition, soil development, and hydrologic characteristics on October 15th and 16th, 2007. Weather conditions were warm, clear and dry with temperatures ranging between 65 and 80°F. Preliminary precipitation data indicated no rainfall for the Baltimore area 48-hours prior to the investigation.

Two wetlands were identified within the project study area. Wetland 1 (5.70 acres) was a palustrine forested wetland (PFO) located within the floodplain of Wells Branch. The tree canopy was dominated by red maple (*Acer rubrum*), black gum (*Nyssa sylvatica*), tulip poplar (*Liriodendron tulipifera*), and willow oak (*Quercus phellos*). The shrub layer was dominated by sweet pepperbush (*Clethra alnifolia*), sweetbay magnolia (*Magnolia virginiana*), American holly (*Ilex opaca*), winterberry (*Ilex verticillata*) and highbush blueberry (*Vaccinium corymbosum*). Common greenbrier (*Smilax rotundifolia*), Asiatic

tearthumb (*Polygonum perfoliatum*), and microstegium (*Microstegium viminea*) were the common vines and herbs. Primary hydrologic indicators included inundation and saturated soils in places, drainage patterns and drift lines. Secondary indicators included oxidized root channels, water-stained leaves and buttressed tree roots. Soil samples at various locations throughout Wetland 1 were primarily a sandy silt loam with low-chroma and mottling. Soils of Wetland 1 were hydric.

Wetland 2 (0.17 acres) was a small palustrine forested wetland (PFO) located within the floodplain of Wells Branch near the eastern limit of the project study area. The tree canopy was dominated by red maple, black gum, and white oak (*Quercus alba*). The shrub layer was dominated by sweetbay magnolia and American holly. Microstegium dominated the herbaceous layer within Wetland 2. Primary hydrologic indicators included saturated soils and drainage patterns. Soils were primarily a silty sand with low-chroma and mottles. Soils of Wetland 2 were hydric.

Waterways: Wells Branch was confirmed in the field. Wells Branch ranged in width between three and eight feet within the project study area with an average width of five feet. The western half of Wells Branch located within the project study area was poorly defined in places, reverting to overland flow before becoming channelized several hundred feet downstream. With an average width of three feet, the top of bank of the western half of Wells Branch varied between three inches and two feet above the streambed. The stream substrate was predominantly sand. Intermittent flow was only observed within the western half of the study area. Approximately 70% of Wells Branch located within the project study area exhibited no flow and no standing water during the investigation. During the investigation, Wells Branch exhibited no flow east (downstream) of wetland flag W1-101 (See Appendix A).

The eastern half of Wells Branch was highly channelized as the combined discharge of several stormwater ponds (Ponds 3, 4 and 5) increased erosion of the sandy alluvial soils of the floodplain. With an average width of six feet, the top of bank of the eastern half of Wells Branch varied between two feet and four feet above the streambed. The stream substrate was predominantly sand. The streambanks of the eastern half of Wells Branch exhibited considerable erosion and undercutting and exhibited no flow during the investigation.

Several small spring/seeps were identified within the limits of Wetland 1, located between wetland flags W1-13 and W1-27. The small channels created by the spring/seeps were not well defined, were less than two feet wide and the water level averaged less than one inch deep during the investigations. One additional spring/seep, not associated with a wetland, was mapped and photographed.

Summary

Field investigations conducted by Gannett Fleming, Inc. on October 15th and 16th, 2007 to identify and delineate wetlands and waterways within the project study area were conducted in accordance with the 1987 U.S. Army Corps of Engineers Wetlands Delineation Manual. Wells Branch was confirmed in the field. Intermittent flow was only observed within the western half of the study area. Although no flow was observed during the investigations, the eastern half of Wells Branch was highly channelized as the combined discharge of several stormwater ponds (Ponds 3, 4 and 5) increased erosion of the sandy alluvial soils of the floodplain. Two palustrine forested wetlands were identified and mapped adjacent to Wells Branch. Several small spring/seeps were identified within the limits of Wetland 1. The small channels created by the spring/seeps were not well defined. One additional spring/seep, not associated with a wetland, was identified and mapped as part of the investigation.

Wetland ID	Cowardin Classification	Wetland Size (acres)
Wetland 1	PFO	5.70
Wetland 2	PFO	0.17

Stream ID	Flow Regime	Stream Width (feet)
Wells Branch	Intermittent	5.0

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U.S. Geological Survey. 1979. 7.5' Topographic Map Quadrangle, Odenton, MD.

List of Contributors

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Certified Ecologist (CE), Ecological Society of America
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Education: B.S., Environmental Studies
M.A.Ed., Environmental Studies

Holly L. Reynolds
Professional Experience: 3 years
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Cy R. Whitson
Certified Wetland Delineator, Baltimore District, USCOE; No. WDCP94MD0310145B
Professional Wetland Scientist, PWS No. 1358
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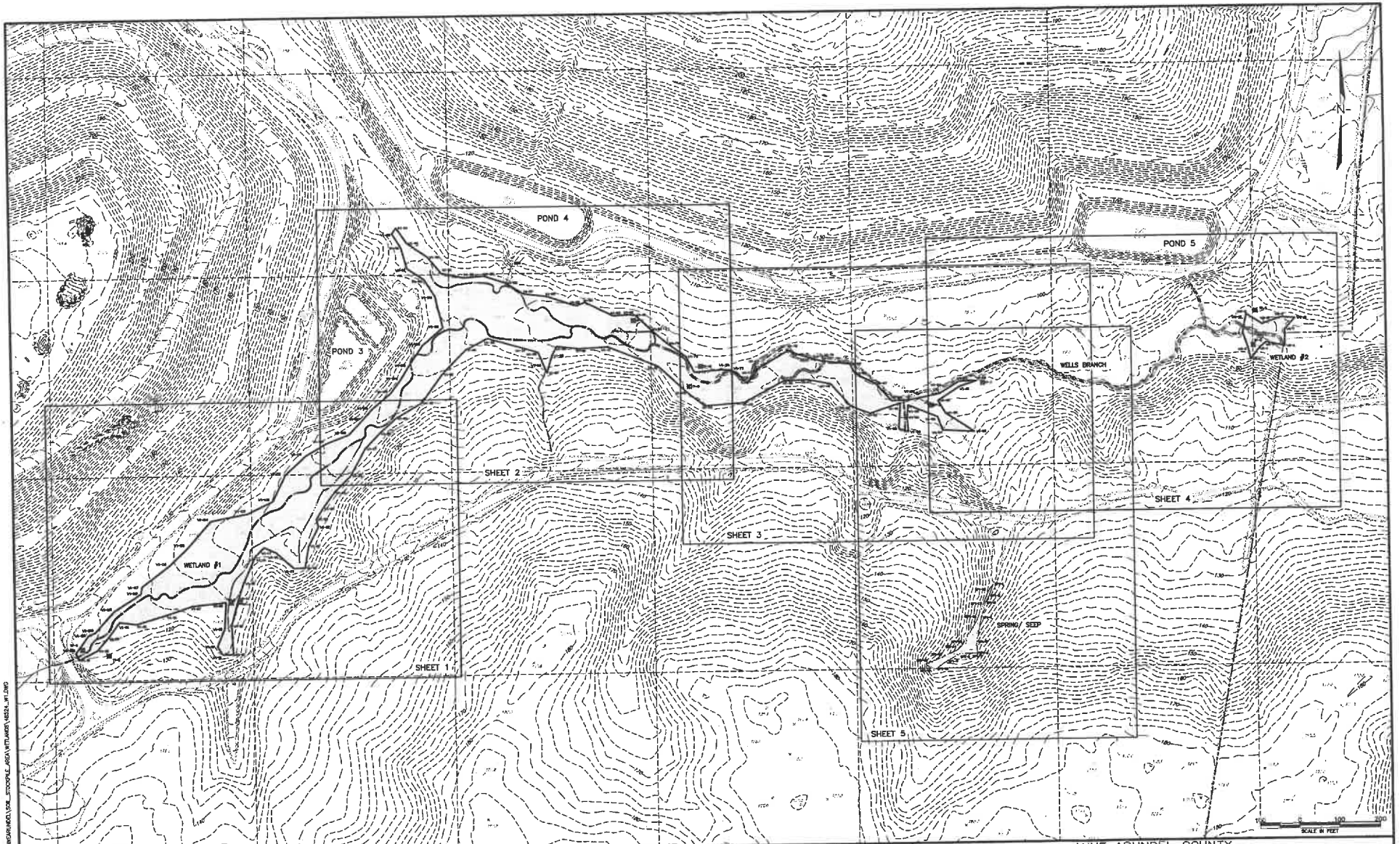
Education: B.S., Biology
M.S., Watershed Science / Hydrology

APPENDIX A
WETLAND AND WATERWAYS MAPPING



LEGEND

- WETLAND
- SPRING / SEEP
- WATERWAY
- SOIL TEST PIT
- PHOTO LOCATION AND DIRECTION

Gannett Fleming
2207 Sixth Avenue
Camp Hill, PA 17011

SIGNATURE

DATE

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

REVISED			
DATE	BY		

CHIEF ENGINEER — APPROVED — DATE
PROJECT MANAGER — APPROVED — DATE
ASSISTANT CHIEF ENGINEER
CHIEF RIGHT-OF-WAY

SCALE:	AS NOTED
DRAWN BY:	BMG
CHECKED BY:	SJK
SHEET NO.	1 OF 6
FILE NO.:	48524_W1
PROJECT NO.:	N 530600

PROJECT: WETLAND STUDY FOR CELL 9
SOIL STOCKPILE/BORROW AREA

TITLE: OVERALL STUDY AREA
INDEX SHEET

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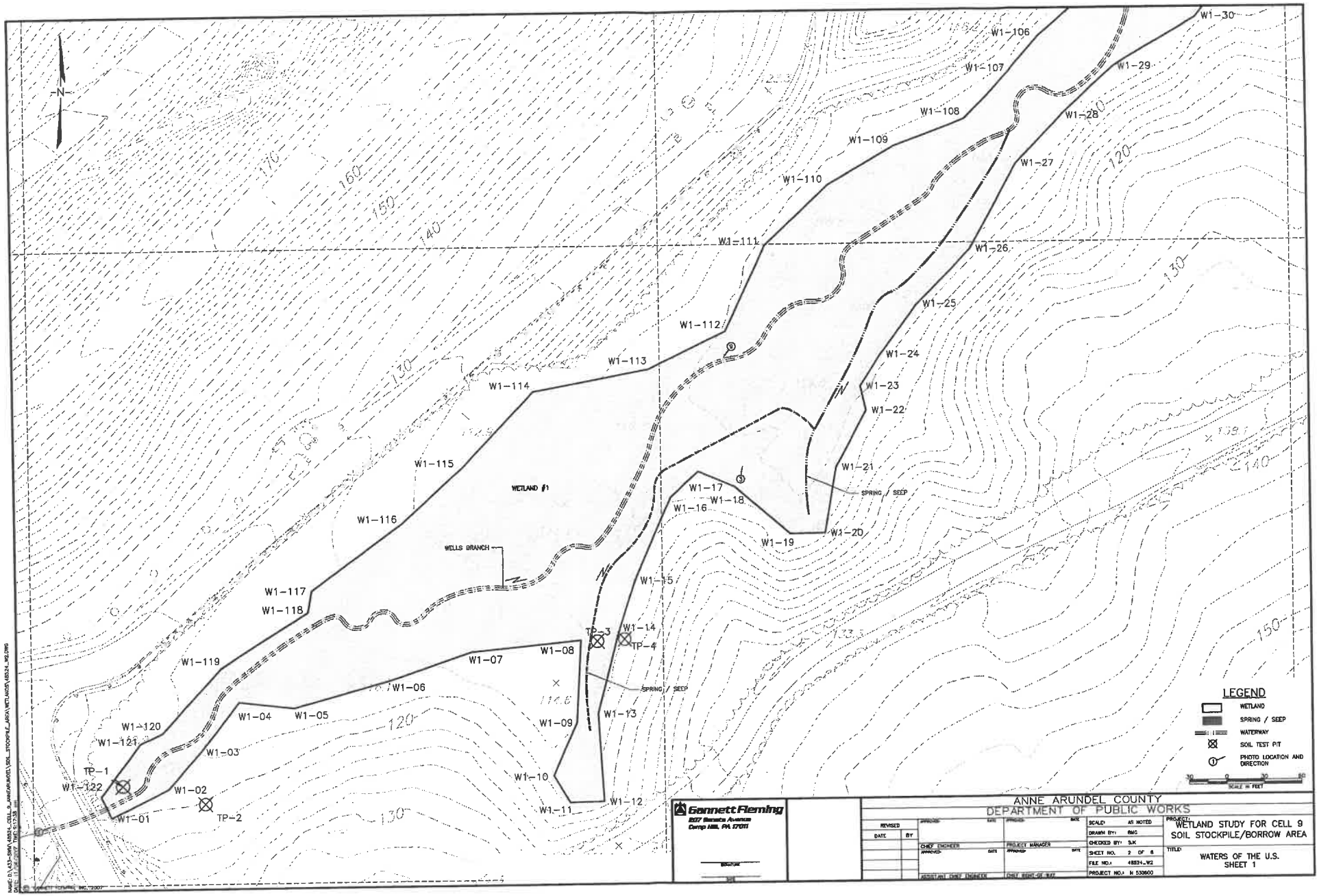
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PHOTO LOCATION AND DIRECTION
SCALE IN FEET
Gannett Fleming
5007 Ronald Avenue
Camp Hill, PA 17011
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS
REVISED
DATE
BY
CHIEF ENGINEER
PROJECT MANAGER
ASSISTANT CHIEF ENGINEER
CHIEF RIGHT-OF-WAY
SCALE: AS NOTED
DRAWN BY: BMC
CHECKED BY: SJK
SHEET NO. 2 OF 6
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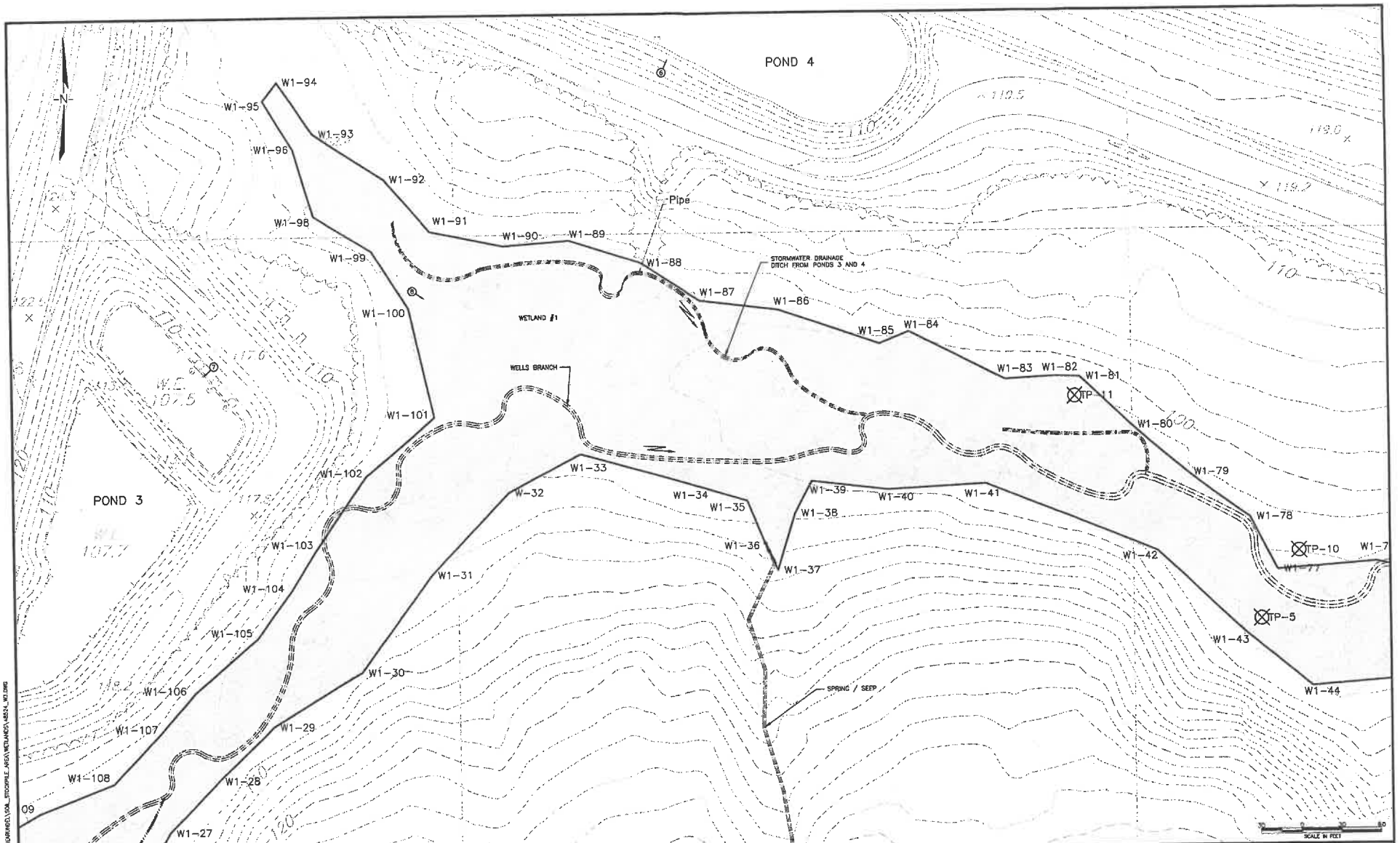

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- WETLAND
- SPRING / SEEP
- WATERWAY
- SOIL TEST PIT
- PHOTO LOCATION AND DIRECTION

Gannett Fleming
207 Senate Avenue
Camp Hill, PA 17011

SIGNATURE

DATE

REVISED	
DATE	BY

APPROVED: DATE — APPROVED: DATE

CHIEF ENGINEER APPROVED: DATE — PROJECT MANAGER APPROVED: DATE

ASSISTANT CHIEF ENGINEER — CHIEF BUREAU OF WAY

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

SCALE: AS NOTED
DRAWN BY: BMG
CHECKED BY: SJK
SHEET NO. 3 OF 8
FILE NO.: 46024_W3
PROJECT NO.: N 530600

PROJECT: WETLAND STUDY FOR CELL 9 SOIL STOCKPILE/BORROW AREA

TITLE: WATER OF THE U.S. SHEET 2

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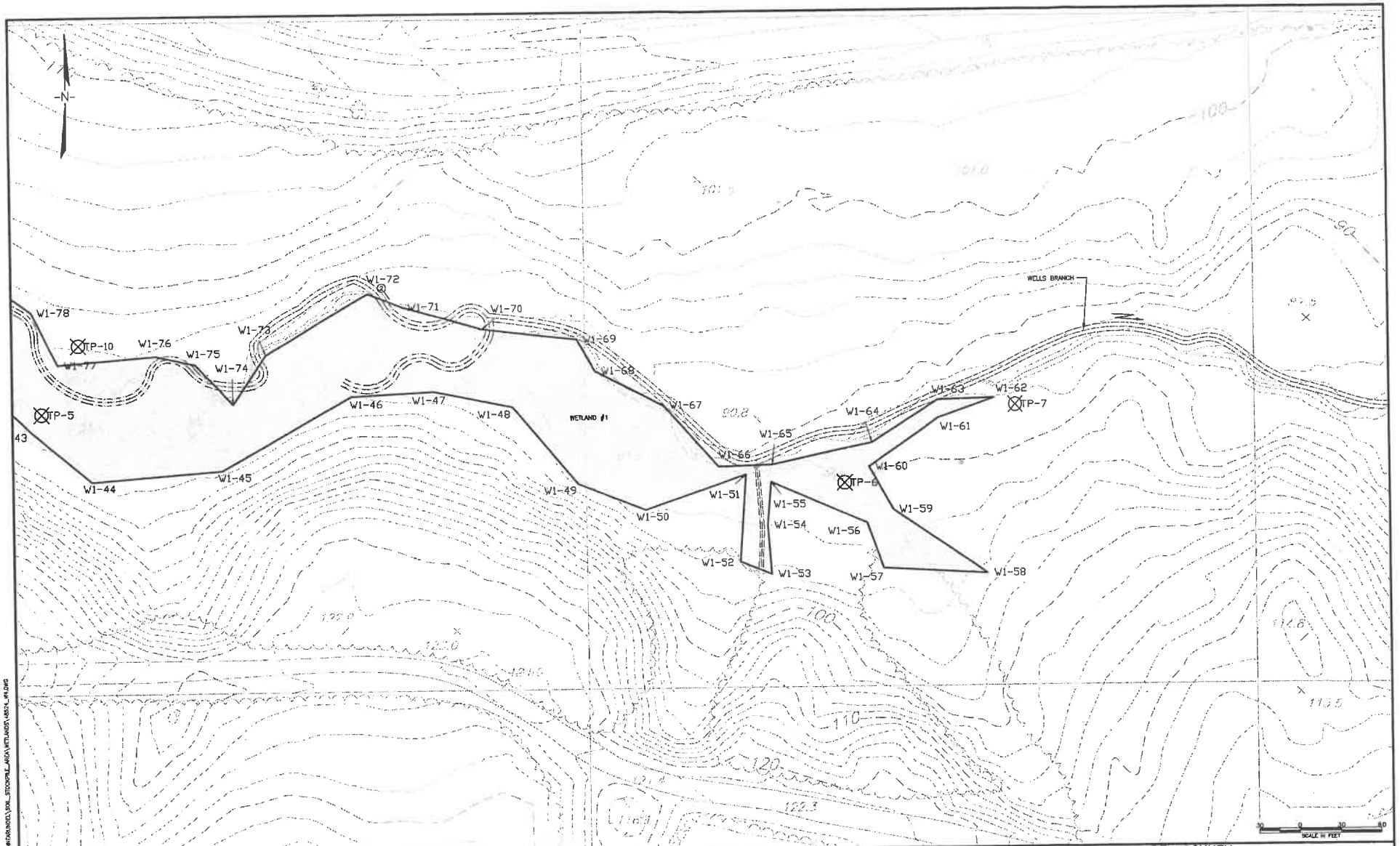

LEGEND

- WETLAND
- SPRING / SEEP
- WATERWAY
- SOIL TEST PIT
- PHOTO LOCATION AND DIRECTION

Gannett Fleming
2007 Sunset Avenue
Camp Hill, PA 17011

SIGNATURE

DATE

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DEPARTMENT OF PUBLIC WORKS

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DATE	BY					DRAWN BY:	BMG
		CHIEF ENGINEER		PROJECT MANAGER		CHECKED BY:	SJK
		APPROVED	DATE	APPROVED	DATE	SHEET NO.	4 OF 8
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PROJECT: WETLAND STUDY FOR CELL 9 SOIL STOCKPILE/BORROW AREA

TITLE: WATER OF THE U.S. SHEET 3

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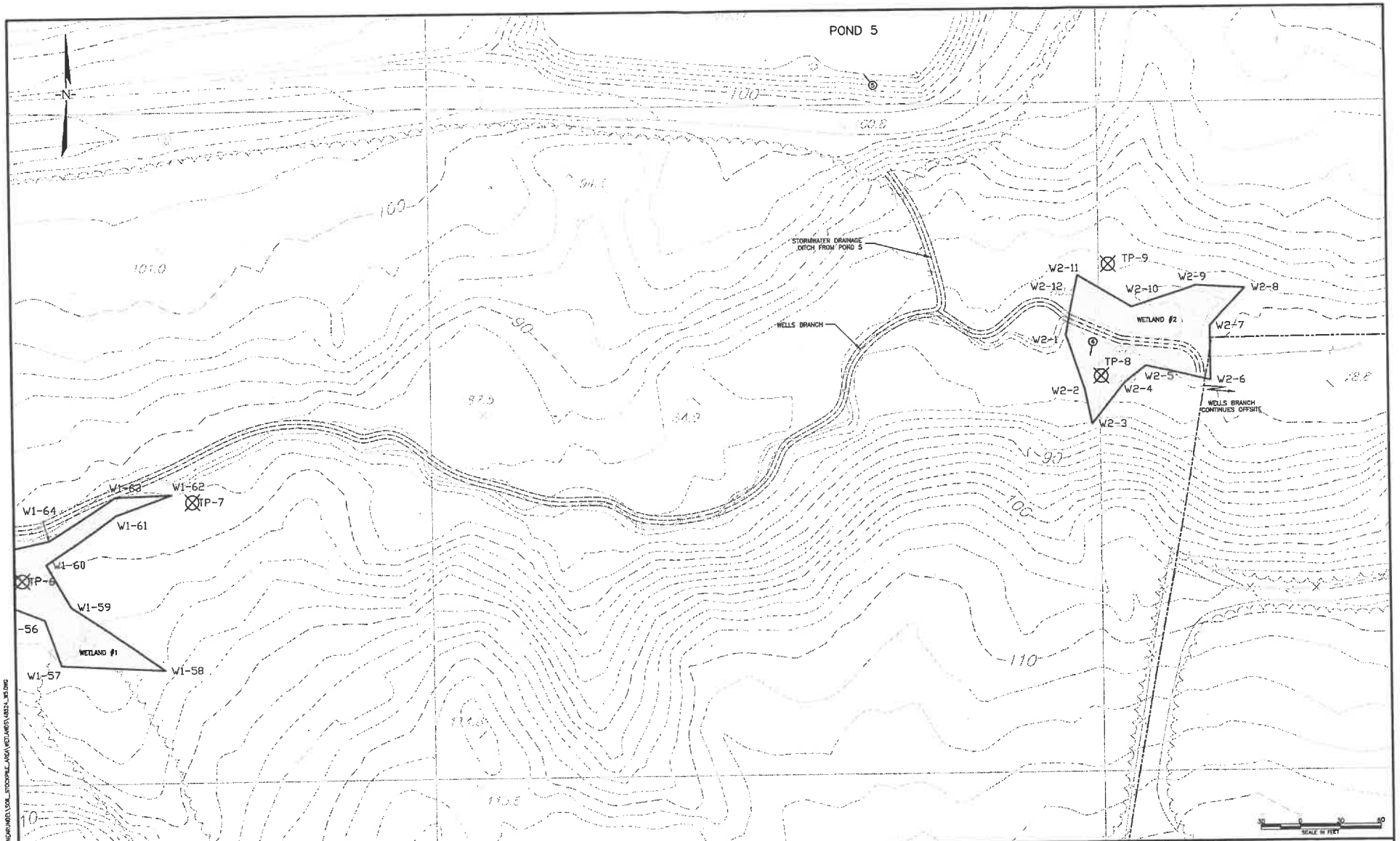

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- WATERWAY
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- PHOTO LOCATION AND DIRECTION

Gannett Fleming
2007 Sunset Avenue
Camp Hill, PA 17011

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DEPARTMENT OF PUBLIC WORKS

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DATE	BY

CHIEF ENGINEER — APPROVED — DATE
PROJECT MANAGER — APPROVED — DATE
ASSISTANT CHIEF ENGINEER
CHIEF RIGHT OF WAY

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TITLE: WATER OF THE U.S. SHEET 4

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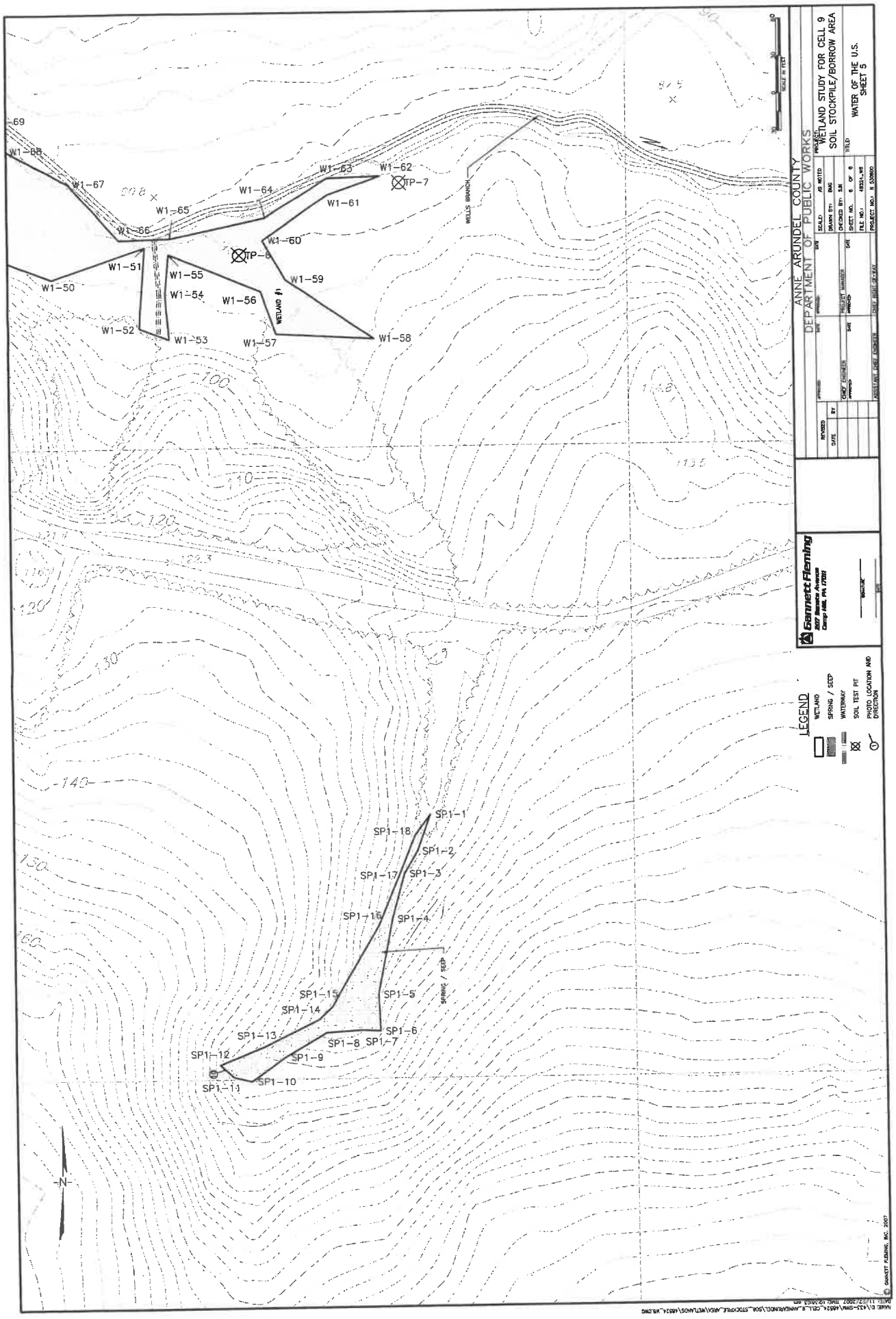
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ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS
WETLAND STUDY FOR CELL 9
SOIL STOCKPILE/BORROW AREA
WATER OF THE U.S.
SHEET 5
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APPENDIX B
PHOTOGRAPHS

Photograph 1: Wells Branch looking downstream through the culvert at the western limit of the study area. View is northeast. (10/15/2007)

Photograph 2: Wells Branch looking downstream from wetland flag W1-72. Wells Branch only had surface-flow upstream of wetland flag W1-101. View is southeast. (10/16/2007)

Photograph 3: Wetland 1 looking north from wetland flag W1-18. (10/15/2007)

Photograph 4: Wetland 2 looking south from Wells Branch towards TP-8. (10/15/2007)

Photograph 5: Pond 5, looking northwest from the berm. (10/15/2007)

Photograph 6: Pond 4, looking north from the berm. (10/16/2007)

Photograph 7: Pond 3, looking southwest from the berm. (10/16/2007)

Photograph 8: Wetland 1 looking southeast from wetland flag W1-100. (10/16/2007)

Photograph 9. Wells Branch flowing through Wetland 1. Wells Branch only had surface-flow upstream of wetland flag W1-101. Looking upstream from wetland flag W1-112, view is southwest. (10/16/2007)

Photograph 10: Spring/Seep looking northeast from flag SP1-12. (10/16/2007)

APPENDIX C
WETLAND DATA FORMS

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetland Delineation Manual)

Project Site:	Millersville Landfill and Resource Recovery Facility	**Date:**	15-Oct-07
Applicant/Owner:	Anne Arundel County Department of Public Works	**County:**	Anne Arundel
Investigators:	David H. Graff, Steven C. Smith and Holly L. Reynolds	**State:**	Maryland
Do Normal Circumstances exist at the site?	Yes	**Community ID:**	Wetland 1
Is the site significantly disturbed (Atypical Situation)?	No	**Transect ID:**	--
Is the area a Potential Problem Area? (If yes explain)	No	**Plot ID:**	TP-1

VEGETATION

	Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
1	*Acer rubrum*	T	FAC	9			
2	*Betula nigra*	T	FACW	10			
3	*Microstegium vimineum*	H	FAC	11			
4				12			
5				13			
6				14			
7				15			
8				16			

Percent of Dominant Plant Species that are OBL, FACW+, FACW, FACW-, FAC+, or FAC: 100%

Remarks:

HYDROLOGY

✓	**Recorded Data (Describe in Remarks)**	**WETLAND HYDROLOGY INDICATORS**	
	Stream, Lake or Tide Gauge	***Primary Indicators***	
	Aerial Photographs		**Inundated**
	Other (Describe in Remarks)		**Saturated**
	No Recorded Data Available		**Water Marks**
		✓	**Drift Lines**
Field Observations:		✓	**Sediment Deposits**
0	**Depth of Surface Water (Inches)**	✓	**Drainage Patterns in Wetlands**
0	**Depth of Free Water in Pit (Inches)**	***Secondary Indicators (2 or more required)***	
>18	**Depth of Sautrated Soil (Inches)**	✓	**Oxidized Root Channels (Upper 12")**
		✓	**Water-stained Leaves**
			Local Soil Survey Data
			FAC-Neutral Test
			Other (Explain in Remarks)

Remarks:
Wells Branch is a mapped stream with the channel and floodplain areas visible on aerial photographs. This area was also previously delineated and received a JD within the last 10 years.

Gannett Fleming

SOILS

Map Unit Name (Series & Phase):	Zekiah and Issue Soils (ZBA)
Taxonomy (Subgroup):	Typic Fluvaquents/Fluvaquentic Dystrudepts
Drainage Class:	Poorly drained/Somewhat poorly drained
Field Observations Confirmed Mapped Type?	No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structures, Etc.
0-10	A	2.5Y 3/2	-	-	Sandy silt
10-18	B	10YR 3/1	5YR 4/6	Few / Distinct	Sandy silt loam (moist)

Hydric Soil Indicators

	Histol	✓	**Concretions**
	Histic Epipedon		**High Organic Content in Surface Layer in Sandy Soils**
	Sulfidic Odor		**Organic Streaking in Sandy Soils**
✓	**Aquic Moisture Regime**		**Listed on Local Hydric Soils List**
✓	**Reducing Conditions**		**Listed on National Hydric Soils List**
✓	**Gleyed or Low-chroma Color**		**Other (Explain in Remarks)**

Remarks:

This soil occurs within the floodplain of Wells Branch.

WETLAND DETERMINATION

Is Hydrophytic Vegetation Present?	Yes	**Is The Sampling Point Within A Wetland?**	Yes
Is Wetland Hydrology Present?	Yes		
Are Hydric Soils Present?	Yes		

Remarks:

Location of Sampling Point: Sampling point is located within the floodplain of Wells Branch downstream of the bridge.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetland Delineation Manual)

Project Site:	Millersville Landfill and Resource Recovery Facility	**Date:**	15-Oct-07
Applicant/Owner:	Anne Arundel County Department of Public Works	**County:**	Anne Arundel
Investigators:	David H. Graff, Steven C. Smith and Holly L. Reynolds	**State:**	Maryland
Do Normal Circumstances exist at the site?	Yes	**Community ID:**	Wetland 1
Is the site significantly disturbed (Atypical Situation)?	No	**Transect ID:**	--
Is the area a Potential Problem Area? (If yes explain)	No	**Plot ID:**	TP-2

VEGETATION

	Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
1	*Liriodendron tulipfera*	T	FACU	9			
2	*Acer rubrum*	T	FAC	10			
3	*Quercus prinus*	T	UPL	11			
4	*Vaccinium corymbosum*	S	FACW-	12			
5				13			
6				14			
7				15			
8				16			

Percent of Dominant Plant Species that are OBL, FACW+, FACW, FACW-, FAC+, or FAC: 50%

Remarks:

HYDROLOGY

	Recorded Data (Describe in Remarks)	**WETLAND HYDROLOGY INDICATORS**	
	Stream, Lake or Tide Gauge	***Primary Indicators***	
	Aerial Photographs		**Inundated**
	Other (Describe in Remarks)		**Saturated**
✓	**No Recorded Data Available**		**Water Marks**
			Drift Lines
Field Observations:			**Sediment Deposits**
0	**Depth of Surface Water (Inches)**		**Drainage Patterns in Wetlands**
0	**Depth of Free Water in Pit (Inches)**	***Secondary Indicators (2 or more required)***	
0	**Depth of Sautrated Soil (Inches)**		**Oxidized Root Channels (Upper 12")**
			Water-stained Leaves
			Local Soil Survey Data
			FAC-Neutral Test
			Other (Explain in Remarks)

Remarks:
There was no indication of wetland hydrology at this location.

Gannett Fleming

SOILS

Map Unit Name (Series & Phase):	Zekiah and Issue Soils (ZBA)
Taxonomy (Subgroup):	Typic Fluvaquents/Fluvaquentic Dystrudepts
Drainage Class:	Poorly drained/Somewhat poorly drained
Field Observations Confirmed Mapped Type?	No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structures, Etc.
0-11	A	10YR 5/3	-	-	Dry silty sand
11-18	B	2.5Y 6/6	-	-	Dry, dense, silty sand

Hydric Soil Indicators

	Histol		**Concretions**
	Histic Epipedon		**High Organic Content in Surface Layer in Sandy Soils**
	Sulfidic Odor		**Organic Streaking in Sandy Soils**
✓	**Aquic Moisture Regime**		**Listed on Local Hydric Soils List**
	Reducing Conditions		**Listed on National Hydric Soils List**
	Gleyed or Low-chroma Color		**Other (Explain in Remarks)**

Remarks:
This soil does not exhibit characteristics indicative of a hydric soil.

WETLAND DETERMINATION

Is Hydrophytic Vegetation Present?	No	**Is The Sampling Point Within A Wetland?**	No
Is Wetland Hydrology Present?	No		
Are Hydric Soils Present?	No		

Remarks:

Location of Sampling Point: This sampling point is located beyond the floodplain boundary of Wells Branch along the upland slope.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetland Delineation Manual)

Project Site:	Millersville Landfill and Resource Recovery Facility	**Date:**	15-Oct-07
Applicant/Owner:	Anne Arundel County Department of Public Works	**County:**	Anne Arundel
Investigators:	David H. Graff, Steven C. Smith and Holly L. Reynolds	**State:**	Maryland
Do Normal Circumstances exist at the site?	Yes	**Community ID:**	Wetland 1
Is the site significantly disturbed (Atypical Situation)?	No	**Transect ID:**	--
Is the area a Potential Problem Area? (If yes explain)	No	**Plot ID:**	TP-3

VEGETATION

	Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
1	*Nyssa sylvatica*	T	FAC	9			
2	*Platanus occidentalis*	T	FACW-	10			
3	*Magnolia virginiana*	S	FACW+	11			
4	*Microstegium vimineum*	H	FAC	12			
5	*Osmunda cinnamomea*	H	FACW	13			
6				14			
7				15			
8				16			

Percent of Dominant Plant Species that are OBL, FACW+, FACW, FACW-, FAC+, or FAC: 100%

Remarks:

HYDROLOGY

✓	**Recorded Data (Describe in Remarks)**	**WETLAND HYDROLOGY INDICATORS**	
	Stream, Lake or Tide Gauge	***Primary Indicators***	
	Aerial Photographs		**Inundated**
	Other (Describe in Remarks)	✓	**Saturated**
	No Recorded Data Available		**Water Marks**
			Drift Lines
Field Observations:			**Sediment Deposits**
0	**Depth of Surface Water (Inches)**	✓	**Drainage Patterns in Wetlands**
<5	**Depth of Free Water in Pit (Inches)**	***Secondary Indicators (2 or more required)***	
<1	**Depth of Sautrated Soil (Inches)**		**Oxidized Root Channels (Upper 12")**
		✓	**Water-stained Leaves**
			Local Soil Survey Data
		✓	**FAC-Neutral Test**
			Other (Explain in Remarks)

Remarks:
This area was previously delineated and received a JD within the last 10 years.

Gannett Fleming

SOILS	
Map Unit Name (Series & Phase):	Zekiah and Issue Soils (ZBA)
Taxonomy (Subgroup):	Typic Fluvaquents/Fluvaquentic Dystrudepts
Drainage Class:	Poorly drained/Somewhat poorly drained
Field Observations Confirmed Mapped Type?	No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structures, Etc.
0-12	A/B	2.5Y 3/1	-	-	Gleyed sandy silt loam

Hydric Soil Indicators

	Histol		**Concretions**
	Histic Epipedon		**High Organic Content in Surface Layer in Sandy Soils**
✓	**Sulfidic Odor**		**Organic Streaking in Sandy Soils**
✓	**Aquic Moisture Regime**		**Listed on Local Hydric Soils List**
	Reducing Conditions		**Listed on National Hydric Soils List**
✓	**Gleyed or Low-chroma Color**		**Other (Explain in Remarks)**

Remarks:

WETLAND DETERMINATION			
Is Hydrophytic Vegetation Present?	Yes	**Is The Sampling Point Within A Wetland?**	Yes
Is Wetland Hydrology Present?	Yes		
Are Hydric Soils Present?	Yes		

Remarks:

Location of Sampling Point:	Sampling point is located along near a small tributary that feeds into the floodplain area of Wells Branch.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetland Delineation Manual)

Project Site:	Millersville Landfill and Resource Recovery Facility	**Date:**	15-Oct-07
Applicant/Owner:	Anne Arundel County Department of Public Works	**County:**	Anne Arundel
Investigators:	David H. Graff, Steven C. Smith and Holly L. Reynolds	**State:**	Maryland
Do Normal Circumstances exist at the site?	Yes	**Community ID:**	Wetland 1
Is the site significantly disturbed (Atypical Situation)?	No	**Transect ID:**	--
Is the area a Potential Problem Area? (If yes explain)	No	**Plot ID:**	TP-4

VEGETATION

	Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
1	*Quercus prinus*	T	UPL	9			
2	*Pinus rigida*	T	FACU	10			
3	*Ilex opaca*	T	FACU	11			
4	*Vaccinium corymbosum*	S	FACW-	12			
5				13			
6				14			
7				15			
8				16			

Percent of Dominant Plant Species that are OBL, FACW+, FACW, FACW-, FAC+, or FAC: 25%

Remarks:

HYDROLOGY

	Recorded Data (Describe in Remarks)	**WETLAND HYDROLOGY INDICATORS**	
	Stream, Lake or Tide Gauge	***Primary Indicators***	
	Aerial Photographs		**Inundated**
	Other (Describe in Remarks)		**Saturated**
✓	**No Recorded Data Available**		**Water Marks**
			Drift Lines
Field Observations:			**Sediment Deposits**
0	**Depth of Surface Water (Inches)**		**Drainage Patterns in Wetlands**
0	**Depth of Free Water in Pit (Inches)**	***Secondary Indicators (2 or more required)***	
>18	**Depth of Sautrated Soil (Inches)**		**Oxidized Root Channels (Upper 12")**
			Water-stained Leaves
			Local Soil Survey Data
			FAC-Neutral Test
			Other (Explain in Remarks)

Remarks:
This area does not exhibit wetland hydrology.

Gannett Fleming

SOILS

Map Unit Name (Series & Phase):	Zekiah and Issue Soils (ZBA)
Taxonomy (Subgroup):	Typic Fluvaquents/Fluvaquentic Dystrudepts
Drainage Class:	Poorly drained/Somewhat poorly drained
Field Observations Confirmed Mapped Type?	No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structures, Etc.
2-0	O	2.5Y 2.5/1	-	-	Organic layer of decayed leaves
0-9	A	7.5YR 7/2	-	-	Dry sand
9-18	B	7.5YR 6/8	-	-	Dry sand

Hydric Soil Indicators

	Histol		**Concretions**
	Histic Epipedon		**High Organic Content in Surface Layer in Sandy Soils**
	Sulfidic Odor		**Organic Streaking in Sandy Soils**
✓	**Aquic Moisture Regime**		**Listed on Local Hydric Soils List**
	Reducing Conditions		**Listed on National Hydric Soils List**
	Gleyed or Low-chroma Color		**Other (Explain in Remarks)**

Remarks:

This soil does not exhbit characteristics indicative of wetland soils.

WETLAND DETERMINATION

Is Hydrophytic Vegetation Present?	No	**Is The Sampling Point Within A Wetland?**	No
Is Wetland Hydrology Present?	No		
Are Hydric Soils Present?	No		

Remarks:

Location of Sampling Point: This sampling point is located along the upland forested section beyond the floodplain boundary of Wells Branch.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetland Delineation Manual)

Project Site:	Millersville Landfill and Resource Recovery Facility	**Date:**	15-Oct-07
Applicant/Owner:	Anne Arundel County Department of Public Works	**County:**	Anne Arundel
Investigators:	David H. Graff, Steven C. Smith and Holly L. Reynolds	**State:**	Maryland
Do Normal Circumstances exist at the site?	Yes	**Community ID:**	Wetland 1
Is the site significantly disturbed (Atypical Situation)?	No	**Transect ID:**	--
Is the area a Potential Problem Area? (If yes explain)	No	**Plot ID:**	TP-5

VEGETATION

	Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
1	*Nyssa sylvatica*	T	FAC	9			
2	*Platanus occidentalis*	T	FACW-	10			
3	*Magnolia virginiana*	S	FACW+	11			
4	*Microstegium vimineum*	H	FAC	12			
5				13			
6				14			
7				15			
8				16			

Percent of Dominant Plant Species that are OBL, FACW+, FACW, FACW-, FAC+, or FAC: 100%

Remarks:

HYDROLOGY

✓	**Recorded Data (Describe in Remarks)**	**WETLAND HYDROLOGY INDICATORS**	
	Stream, Lake or Tide Gauge	***Primary Indicators***	
	Aerial Photographs		**Inundated**
	Other (Describe in Remarks)	✓	**Saturated**
	No Recorded Data Available		**Water Marks**
		✓	**Drift Lines**
Field Observations:			**Sediment Deposits**
0	**Depth of Surface Water (Inches)**	✓	**Drainage Patterns in Wetlands**
0	**Depth of Free Water in Pit (Inches)**	***Secondary Indicators (2 or more required)***	
>18	**Depth of Sautrated Soil (Inches)**		**Oxidized Root Channels (Upper 12")**
		✓	**Water-stained Leaves**
			Local Soil Survey Data
			FAC-Neutral Test
			Other (Explain in Remarks)

Remarks:
This area was previously delineated and received a JD within the last 10 years.

Gannett Fleming

SOILS

Map Unit Name (Series & Phase):	Zekiah and Issue Soils (ZBA)
Taxonomy (Subgroup):	Typic Fluvaquents/Fluvaquentic Dystrudepts
Drainage Class:	Poorly drained/Somewhat poorly drained
Field Observations Confirmed Mapped Type?	No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structures, Etc.
0-18	A/B	10YR 4/1	10YR 5/6	Many / Prominent	Sandy silt loam

Hydric Soil Indicators

	Histol	✓	**Concretions**
	Histic Epipedon		**High Organic Content in Surface Layer in Sandy Soils**
	Sulfidic Odor		**Organic Streaking in Sandy Soils**
✓	**Aquic Moisture Regime**		**Listed on Local Hydric Soils List**
✓	**Reducing Conditions**		**Listed on National Hydric Soils List**
✓	**Gleyed or Low-chroma Color**		**Other (Explain in Remarks)**

Remarks:

WETLAND DETERMINATION

Is Hydrophytic Vegetation Present?	Yes	**Is The Sampling Point Within A Wetland?**	Yes
Is Wetland Hydrology Present?	Yes		
Are Hydric Soils Present?	Yes		

Remarks:
This area meets the criteria for inclusion in a wetlands determination, however drought conditions are present during the time of the field investigation.

Location of Sampling Point: Sample location is within the floodplain of Wells Branch as mapped using the GPS unit.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetland Delineation Manual)

Project Site:	Millersville Landfill and Resource Recovery Facility	**Date:**	15-Oct-07
Applicant/Owner:	Anne Arundel County Department of Public Works	**County:**	Anne Arundel
Investigators:	David H. Graff, Steven C. Smith and Holly L. Reynolds	**State:**	Maryland
Do Normal Circumstances exist at the site?	Yes	**Community ID:**	Wetland 1
Is the site significantly disturbed (Atypical Situation)?	No	**Transect ID:**	--
Is the area a Potential Problem Area? (If yes explain)	No	**Plot ID:**	TP-6

VEGETATION

	Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
1	*Acer rubrum*	T	FAC	9			
2	*Nyssa sylvatica*	T	FAC	10			
3	*Clethra alnifolia*	S	FAC+	11			
4	*Microstegium vimineum*	H	FAC	12			
5				13			
6				14			
7				15			
8				16			

Percent of Dominant Plant Species that are OBL, FACW+, FACW, FACW-, FAC+, or FAC: 100%

Remarks:

HYDROLOGY

✓	**Recorded Data (Describe in Remarks)**	**WETLAND HYDROLOGY INDICATORS**	
	Stream, Lake or Tide Gauge	***Primary Indicators***	
	Aerial Photographs		**Inundated**
	Other (Describe in Remarks)		**Saturated**
	No Recorded Data Available		**Water Marks**
		✓	**Drift Lines**
Field Observations:			**Sediment Deposits**
0	**Depth of Surface Water (Inches)**	✓	**Drainage Patterns in Wetlands**
0	**Depth of Free Water in Pit (Inches)**	***Secondary Indicators (2 or more required)***	
>18	**Depth of Sautrated Soil (Inches)**		**Oxidized Root Channels (Upper 12")**
			Water-stained Leaves
			Local Soil Survey Data
			FAC-Neutral Test
			Other (Explain in Remarks)

Remarks:
This area is experiencing a drought condition, however evidence of weltand hydrology is present to indicate adequate hydrology during most of the year. This area was also previously delineated and received a JD within the last 10 years.

Gannett Fleming

SOILS

Map Unit Name (Series & Phase):	Zekiah and Issue Soils (ZBA)
Taxonomy (Subgroup):	Typic Fluvaquents/Fluvaquentic Dystrudepts
Drainage Class:	Poorly drained/Somewhat poorly drained
Field Observations Confirmed Mapped Type?	No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structures, Etc.
0-18	A/B	7.5YR 3/1	-	-	Gleyed silty sand

Hydric Soil Indicators

	Histol		**Concretions**
	Histic Epipedon	✓	**High Organic Content in Surface Layer in Sandy Soils**
	Sulfidic Odor		**Organic Streaking in Sandy Soils**
✓	**Aquic Moisture Regime**		**Listed on Local Hydric Soils List**
	Reducing Conditions		**Listed on National Hydric Soils List**
✓	**Gleyed or Low-chroma Color**		**Other (Explain in Remarks)**

Remarks:

WETLAND DETERMINATION

Is Hydrophytic Vegetation Present?	Yes	**Is The Sampling Point Within A Wetland?**	Yes
Is Wetland Hydrology Present?	Yes		
Are Hydric Soils Present?	Yes		

Remarks:

Location of Sampling Point:	Sampling point is located within the floodplain of Wells Branch in an area that is experiencing a drought condition.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetland Delineation Manual)

Project Site:	Millersville Landfill and Resource Recovery Facility	**Date:**	15-Oct-07
Applicant/Owner:	Anne Arundel County Department of Public Works	**County:**	Anne Arundel
Investigators:	David H. Graff, Steven C. Smith and Holly L. Reynolds	**State:**	Maryland
Do Normal Circumstances exist at the site?	Yes	**Community ID:**	Wetland 1
Is the site significantly disturbed (Atypical Situation)?	No	**Transect ID:**	--
Is the area a Potential Problem Area? (If yes explain)	No	**Plot ID:**	TP-7

VEGETATION

	Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
1	*Quercus alba*	T	FACU-	9			
2	*Acer rubrum*	T	FAC	10			
3	*Hamamelis virginiana*	S	FAC-	11			
4	*Ilex opaca*	S	FACU	12			
5				13			
6				14			
7				15			
8				16			

Percent of Dominant Plant Species that are OBL, FACW+, FACW, FACW-, FAC+, or FAC: 25%

Remarks:

HYDROLOGY

	Recorded Data (Describe in Remarks)	**WETLAND HYDROLOGY INDICATORS**	
	Stream, Lake or Tide Gauge	***Primary Indicators***	
	Aerial Photographs		**Inundated**
	Other (Describe in Remarks)		**Saturated**
✓	**No Recorded Data Available**		**Water Marks**
			Drift Lines
Field Observations:			**Sediment Deposits**
0	**Depth of Surface Water (Inches)**		**Drainage Patterns in Wetlands**
0	**Depth of Free Water in Pit (Inches)**	***Secondary Indicators (2 or more required)***	
>18	**Depth of Sautrated Soil (Inches)**		**Oxidized Root Channels (Upper 12")**
			Water-stained Leaves
			Local Soil Survey Data
			FAC-Neutral Test
			Other (Explain in Remarks)

Remarks:
This area does not exhibit evidence of wetland hydrology.

Gannett Fleming

SOILS

Map Unit Name (Series & Phase):	Zekiah and Issue Soils (ZBA)
Taxonomy (Subgroup):	Typic Fluvaquents/Fluvaquentic Dystrudepts
Drainage Class:	Poorly drained/Somewhat poorly drained
Field Observations Confirmed Mapped Type?	No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structures, Etc.
0-18	A/B	10YR 3/2	-	-	Sandy silt

Hydric Soil Indicators

	Histol		**Concretions**
	Histic Epipedon		**High Organic Content in Surface Layer in Sandy Soils**
	Sulfidic Odor		**Organic Streaking in Sandy Soils**
✓	**Aquic Moisture Regime**		**Listed on Local Hydric Soils List**
	Reducing Conditions		**Listed on National Hydric Soils List**
	Gleyed or Low-chroma Color		**Other (Explain in Remarks)**

Remarks:
This soil does not contain mottles and does not appear to meet the criteria for a hydric soil.

WETLAND DETERMINATION

Is Hydrophytic Vegetation Present?	No	**Is The Sampling Point Within A Wetland?**	No
Is Wetland Hydrology Present?	No		
Are Hydric Soils Present?	No		

Remarks:

Location of Sampling Point: This sample location is near the edge of the floodplain area.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetland Delineation Manual)

Project Site:	Millersville Landfill and Resource Recovery Facility	**Date:**	15-Oct-07
Applicant/Owner:	Anne Arundel County Department of Public Works	**County:**	Anne Arundel
Investigators:	David H. Graff, Steven C. Smith and Holly L. Reynolds	**State:**	Maryland
Do Normal Circumstances exist at the site?	Yes	**Community ID:**	Wetland 2
Is the site significantly disturbed (Atypical Situation)?	No	**Transect ID:**	--
Is the area a Potential Problem Area? (If yes explain)	No	**Plot ID:**	TP-8

VEGETATION

	Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
1	*Nyssa sylvatica*	T	FAC	9			
2	*Acer rubrum*	T	FAC	10			
3	*Magnolia virginiana*	S	FACW+	11			
4	*Microstegium vimineum*	H	FAC	12			
5				13			
6				14			
7				15			
8				16			

Percent of Dominant Plant Species that are OBL, FACW+, FACW, FACW-, FAC+, or FAC: 100%

Remarks:

HYDROLOGY

✓	**Recorded Data (Describe in Remarks)**	**WETLAND HYDROLOGY INDICATORS**	
	Stream, Lake or Tide Gauge	*Primary Indicators*	
	Aerial Photographs		**Inundated**
	Other (Describe in Remarks)	✓	**Saturated**
	No Recorded Data Available		**Water Marks**
		✓	**Drift Lines**
Field Observations:			**Sediment Deposits**
0	**Depth of Surface Water (Inches)**	✓	**Drainage Patterns in Wetlands**
0	**Depth of Free Water in Pit (Inches)**	*Secondary Indicators (2 or more required)*	
<2	**Depth of Sautrated Soil (Inches)**		**Oxidized Root Channels (Upper 12")**
			Water-stained Leaves
			Local Soil Survey Data
			FAC-Neutral Test
			Other (Explain in Remarks)

Remarks:
Wetland delineation fieldwork was performed on this complex within the last 10 years.

Gannett Fleming

SOILS

Map Unit Name (Series & Phase):	Zekiah and Issue Soils (ZBA)
Taxonomy (Subgroup):	Typic Fluvaquents/Fluvaquentic Dystrudepts
Drainage Class:	Poorly drained/Somewhat poorly drained
Field Observations Confirmed Mapped Type?	No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structures, Etc.
0-18	A/B	10YR 3/1	10YR 5/6	Few / Distinct	Sandy silt loam

Hydric Soil Indicators

	Histol	✓	**Concretions**
	Histic Epipedon		**High Organic Content in Surface Layer in Sandy Soils**
	Sulfidic Odor		**Organic Streaking in Sandy Soils**
✓	**Aquic Moisture Regime**		**Listed on Local Hydric Soils List**
✓	**Reducing Conditions**		**Listed on National Hydric Soils List**
✓	**Gleyed or Low-chroma Color**		**Other (Explain in Remarks)**

Remarks:

WETLAND DETERMINATION

Is Hydrophytic Vegetation Present?	Yes	**Is The Sampling Point Within A Wetland?**	Yes
Is Wetland Hydrology Present?	Yes		
Are Hydric Soils Present?	Yes		

Remarks:

Location of Sampling Point: This sample location is within the floodplain area of Wells Branch.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetland Delineation Manual)

Project Site:	Millersville Landfill and Resource Recovery Facility	**Date:**	15-Oct-07
Applicant/Owner:	Anne Arundel County Department of Public Works	**County:**	Anne Arundel
Investigators:	David H. Graff, Steven C. Smith and Holly L. Reynolds	**State:**	Maryland
Do Normal Circumstances exist at the site?	Yes	**Community ID:**	Wetland 2
Is the site significantly disturbed (Atypical Situation)?	No	**Transect ID:**	--
Is the area a Potential Problem Area? (If yes explain)	No	**Plot ID:**	TP-9

VEGETATION

	Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
1	*Quercus alba*	T	FACU	9			
2	*Prunus serotina*	T	FACU	10			
3	*Pinus rigida*	T	FACU	11			
4	*Vaccinium corymbosum*	S	FACW-	12			
5				13			
6				14			
7				15			
8				16			

Percent of Dominant Plant Species that are OBL, FACW+, FACW, FACW-, FAC+, or FAC: 25%

Remarks:

HYDROLOGY

	Recorded Data (Describe in Remarks)	**WETLAND HYDROLOGY INDICATORS**	
	Stream, Lake or Tide Gauge	***Primary Indicators***	
	Aerial Photographs		**Inundated**
	Other (Describe in Remarks)		**Saturated**
✓	**No Recorded Data Available**		**Water Marks**
			Drift Lines
Field Observations:			**Sediment Deposits**
0	**Depth of Surface Water (Inches)**		**Drainage Patterns in Wetlands**
0	**Depth of Free Water in Pit (Inches)**	***Secondary Indicators (2 or more required)***	
>18	**Depth of Sautrated Soil (Inches)**		**Oxidized Root Channels (Upper 12")**
			Water-stained Leaves
			Local Soil Survey Data
			FAC-Neutral Test
			Other (Explain in Remarks)

Remarks:
This area does not exhibit hydrologic indicators.

Gannett Fleming

SOILS

Map Unit Name (Series & Phase):	Zekiah and Issue Soils (ZBA)
Taxonomy (Subgroup):	Typic Fluvaquents/Fluvaquentic Dystrudepts
Drainage Class:	Poorly drained/Somewhat poorly drained
Field Observations Confirmed Mapped Type?	No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structures, Etc.
0-3	A	10YR 3/3	-	-	Dense silt loam
3-15	B	10YR 3/2	-	-	Dense silt loam

Hydric Soil Indicators

	Histol		**Concretions**
	Histic Epipedon		**High Organic Content in Surface Layer in Sandy Soils**
	Sulfidic Odor		**Organic Streaking in Sandy Soils**
✓	**Aquic Moisture Regime**		**Listed on Local Hydric Soils List**
	Reducing Conditions		**Listed on National Hydric Soils List**
	Gleyed or Low-chroma Color		**Other (Explain in Remarks)**

Remarks:

Soils do not exhibit hydric characteristics.

WETLAND DETERMINATION

Is Hydrophytic Vegetation Present?	No	**Is The Sampling Point Within A Wetland?**	No
Is Wetland Hydrology Present?	No		
Are Hydric Soils Present?	No		

Remarks:

Location of Sampling Point: Sampling point was mapped using a GPS unit.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetland Delineation Manual)

Project Site:	Millersville Landfill and Resource Recovery Facility	**Date:**	15-Oct-07
Applicant/Owner:	Anne Arundel County Department of Public Works	**County:**	Anne Arundel
Investigators:	David H. Graff, Steven C. Smith and Holly L. Reynolds	**State:**	Maryland
Do Normal Circumstances exist at the site?	Yes	**Community ID:**	Wetland 1
Is the site significantly disturbed (Atypical Situation)?	No	**Transect ID:**	--
Is the area a Potential Problem Area? (If yes explain)	No	**Plot ID:**	TP-10

VEGETATION

	Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
1	*Acer rubrum*	T	FAC	9			
2	*Quercus alba*	T	FACU-	10			
3	*Quercus rubra*	T	FACU-	11			
4	*Ilex opaca*	S	FACU	12			
5				13			
6				14			
7				15			
8				16			

Percent of Dominant Plant Species that are OBL, FACW+, FACW, FACW-, FAC+, or FAC: 25%

Remarks:

HYDROLOGY

	Recorded Data (Describe in Remarks)	**WETLAND HYDROLOGY INDICATORS**	
	Stream, Lake or Tide Gauge	***Primary Indicators***	
	Aerial Photographs		**Inundated**
	Other (Describe in Remarks)		**Saturated**
✓	**No Recorded Data Available**		**Water Marks**
			Drift Lines
Field Observations:			**Sediment Deposits**
0	**Depth of Surface Water (Inches)**		**Drainage Patterns in Wetlands**
0	**Depth of Free Water in Pit (Inches)**	***Secondary Indicators (2 or more required)***	
>18	**Depth of Sautrated Soil (Inches)**		**Oxidized Root Channels (Upper 12")**
			Water-stained Leaves
			Local Soil Survey Data
			FAC-Neutral Test
			Other (Explain in Remarks)

Remarks:
This area does not exhibit wetland hydrology.

Gannett Fleming

SOILS

Map Unit Name (Series & Phase):	Zekiah and Issue Soils (ZBA)
Taxonomy (Subgroup):	Typic Fluvaquents/Fluvaquentic Dystrudepts
Drainage Class:	Poorly drained/Somewhat poorly drained
Field Observations Confirmed Mapped Type?	No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structures, Etc.
0-18	A/B	7.5YR 3/3	-	-	Dense sandy silt loam

Hydric Soil Indicators

	Histol		**Concretions**
	Histic Epipedon		**High Organic Content in Surface Layer in Sandy Soils**
	Sulfidic Odor		**Organic Streaking in Sandy Soils**
✓	**Aquic Moisture Regime**		**Listed on Local Hydric Soils List**
	Reducing Conditions		**Listed on National Hydric Soils List**
	Gleyed or Low-chroma Color		**Other (Explain in Remarks)**

Remarks:

This area does not exhibit characteristics of wetland soils.

WETLAND DETERMINATION

Is Hydrophytic Vegetation Present?	No	**Is The Sampling Point Within A Wetland?**	No
Is Wetland Hydrology Present?	No		
Are Hydric Soils Present?	No		

Remarks:

Location of Sampling Point: This sample point was located outside of the floodplain of Wells Branch.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetland Delineation Manual)

Project Site:	Millersville Landfill and Resource Recovery Facility	**Date:**	15-Oct-07
Applicant/Owner:	Anne Arundel County Department of Public Works	**County:**	Anne Arundel
Investigators:	David H. Graff, Steven C. Smith and Holly L. Reynolds	**State:**	Maryland
Do Normal Circumstances exist at the site?	Yes	**Community ID:**	Wetland 1
Is the site significantly disturbed (Atypical Situation)?	No	**Transect ID:**	--
Is the area a Potential Problem Area? (If yes explain)	No	**Plot ID:**	TP-11

VEGETATION

	Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
1	*Nyssa sylvatica*	T	FAC	9			
2	*Platanus occidentalis*	T	FACW-	10			
3	*Magnolia virginiana*	S	FACW+	11			
4	*Microstegium vimineum*	H	FAC	12			
5	*Clethra alnifolia*	S	FAC+	13			
6				14			
7				15			
8				16			

Percent of Dominant Plant Species that are OBL, FACW+, FACW, FACW-, FAC+, or FAC: 100%

Remarks:

HYDROLOGY

✓	**Recorded Data (Describe in Remarks)**	**WETLAND HYDROLOGY INDICATORS**	
	Stream, Lake or Tide Gauge	*Primary Indicators*	
	Aerial Photographs		**Inundated**
	Other (Describe in Remarks)		**Saturated**
	No Recorded Data Available		**Water Marks**
		✓	**Drift Lines**
Field Observations:			**Sediment Deposits**
--	**Depth of Surface Water (Inches)**	✓	**Drainage Patterns in Wetlands**
--	**Depth of Free Water in Pit (Inches)**	*Secondary Indicators (2 or more required)*	
--	**Depth of Sautrated Soil (Inches)**	✓	**Oxidized Root Channels (Upper 12")**
			Water-stained Leaves
			Local Soil Survey Data
			FAC-Neutral Test
			Other (Explain in Remarks)

Remarks:
This area was delineated within the last 10 years.

Gannett Fleming

SOILS	
Map Unit Name (Series & Phase):	Zekiah and Issue Soils (ZBA)
Taxonomy (Subgroup):	Typic Fluvaquents/Fluvaquentic Dystrudepts
Drainage Class:	Poorly drained/Somewhat poorly drained
Field Observations Confirmed Mapped Type?	No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structures, Etc.
0-2	A	10YR 3/1	-	-	Sandy silt
2-10	B	10YR 3/1	-	-	Silty clay
10-18	B1	2.5Y 5/1	7.5YR 4/4	Many / Prominent	Dense clay

Hydric Soil Indicators

	Histol	✓	**Concretions**
	Histic Epipedon		**High Organic Content in Surface Layer in Sandy Soils**
	Sulfidic Odor		**Organic Streaking in Sandy Soils**
✓	**Aquic Moisture Regime**		**Listed on Local Hydric Soils List**
✓	**Reducing Conditions**		**Listed on National Hydric Soils List**
✓	**Gleyed or Low-chroma Color**		**Other (Explain in Remarks)**

Remarks:

WETLAND DETERMINATION			
Is Hydrophytic Vegetation Present?	Yes	**Is The Sampling Point Within A Wetland?**	Yes
Is Wetland Hydrology Present?	Yes		
Are Hydric Soils Present?	Yes		

Remarks:

Location of Sampling Point: This sampling point is located within the floodplain of Wells Branch.

APPENDIX D
FUNCTION AND VALUE SHEETS

Wetland 1

Wetland Function-Value Evaluation Form

Total Area of Wetland 5.70 acres Human made? No Is wetland part of a wildlife corridor? Yes Or a "habitat island"? No

Adjacent land use Active Landfill and Deciduous Forest

Distance to nearest road or development is 50 ft

Dominant wetland system present is PFO Is a Contiguous undeveloped buffer zone present? Yes

Is the wetland a separate hydraulic system? No If not, where does the wetland lie in the drainage basin? Middle

How many tributaries contribute to the wetland? One, Wells Branch

Wetland ID: Wetland 1

Prepared by: Steve Smith, GF

Wetland impact:
Type: unknown Area: unknown

Evaluation based on:
Office No Field Yes

Corps manual wetland delineation completed? Yes

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)	Principal F/V	Comments
Groundwater Recharge/Discharge	X		4, 7, 13		Several spring/seeps were observed within the limits of Wetland 1. Groundwater expression observed in the upstream portion of Wells Branch disappeared underground within the limits of Wetland 1 and did not provide enough hydrology to maintain flow throughout the extent of Wells Branch located within the project study area.
Floodflow Alteration	X		5, 6, 8, 9, 10, 13, 14, 18	X	Wetland 1 is a large wetland located within the floodplain of Wells Branch has significant floodflow alteration potential based on its small area.
Fish and Shellfish Habitat		X			Wells Branch provides limited fish habitat in places but Wetland 1 does not.
Sediment/Toxicant Retention	X		1, 2, 10, 16		Wetland along Wells Branch carries runoff from the adjacent landfill. Erosion of the Wells Branch stream channel through portions of Wetland 1 is severe.
Nutrient Removal		X			
Production Export		X			
Sediment/Shoreline Stabilization	X		1, 3, 4, 5 (in places), 6 (in places), 7, 9, 12, 14, 15		Wetland along Wells Branch carries runoff from the adjacent landfill. Erosion of the Wells Branch stream channel through portions of Wetland 1 is severe.
Wildlife Habitat	X		3, 5, 6, 7, 8, 13, 15, 17		Deer and multiple bird species were observed within Wetland 1.
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
ES Endangered Species Habitat		X			
Other		X			

Wetland 2

Wetland Function-Value Evaluation Form

Total Area of Wetland 0.17 acres Human made? No Is wetland part of a wildlife corridor? Yes Or a "habitat island"? No

Adjacent land use Active Landfill and Deciduous Forest

Distance to nearest road or development is 200 ft

Dominant wetland system present is PFO Is a Contiguous undeveloped buffer zone present? Yes

Is the wetland a separate hydraulic system? No If not, where does the wetland lie in the drainage basin? Middle

How many tributaries contribute to the wetland? One, Wells Branch

Wetland ID: Wetland 2

Prepared by: Steve Smith, GF

Wetland impact:
Type: unknown Area: unknown

Evaluation based on:
Office No Field Yes

Corps manual wetland delineation completed? Yes

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)	Principal F/V	Comments
Groundwater Recharge/Discharge		X			
Floodflow Alteration	X		5, 9, 10, 13		Small wetland located within the floodplain of Wells Branch has limited floodflow alteration potential based on its small area.
Fish and Shellfish Habitat		X			
Sediment/Toxicant Retention	X		1, 2, 10		Wetland along Wells Branch carries runoff from the adjacent landfill. Erosion of the Wells Branch stream channel adjacent to Wetland 2 is severe. Wetland 2 has limited potential to retain sediment and toxins based on its small size.
Nutrient Removal		X			
Production Export		X			
Sediment/Shoreline Stabilization		X			
Wildlife Habitat		X			
Recreation		X			
Educational/Scientific Value		X			
Uniqueness/Heritage		X			
Visual Quality/Aesthetics		X			
ES Endangered Species Habitat		X			
Other		X			

ATTACHMENT 4

LIST OF ADJACENT PROPERTY OWNERS

Millersville Landfill Perimeter Property Owners List		
No.	Owner Name	Address
1	Ralph E. Gregory & Jean Gregory	261 Constant Ave, Severn, MD 21144
2	Lee J. Coates & Melinie J. Coates	323 Constant Ave, Severn, MD 21144
3	Roland E. Lamar, Jr. & Traci E. Lamar	269 Constant Ave, Severn, MD 21144
4	James H. Harris, Jr. & Katherine P. Harris	319 Constant Ave, Severn, MD 21144
5	Frank E. Marion & Steven J. Rzepkowski	321 Constant Ave, Severn, MD 21144
6	Dean A. Funk, Jr. & Lynn D. Funk	325 Constant Ave, Severn, MD 21144
7	Preston Ferrell	343 Constant Ave, Severn, MD 21144
8	Gloria A. Griffin & Nichols B. Constant, ET AL	341 Constant Ave, Severn, MD 21144
9	Rusty R. Gillis & Tabatha L. Napier	345 Constant Ave, Severn, MD 21144
10	Gilbert Meadows & Donna J. Meadows	349 Burns Crossing Rd, Severn, MD 21144
11	Douglas W. Anderson	347 Burns Crossing Rd, Severn, MD 21144
12	State of Maryland Hwy Admin	SHA Burns Crossing Rd, Severn, MD 211144
13	Brian Davila & Robert R. Howerton	1425 Dicus Mill Rd, Gambrills, MD 21054
14	Charles D. Kane & Sonja A. Kane	1441 Dicus Mill Rd, Severn, MD 21144
15	Bruce E. Abare & Susan J. Abare	1439 Dicus Mill Rd, Severn, MD 21144
16	James M. Ogle & Sharon K. Ogle	1437 Dicus Mill Rd, Severn, MD 21144
17	Adam Bielski	401 Count Generals Rd, Gambrills, MD 21054
18	Mark Antoun	1417 Dicus Mill Rd, Severn, MD 21144
19	Charles R. Lewis, Jr. & Elaine M. Lewis	1359 Dicus Mill Rd, Severn, MD 21144
20	Steven M. Majstorovic	1363 Dicus Mill Rd, Severn, MD 21144
21	Randal D. Moran & Angela M. Moran	1365 Dicus Mill Rd, Severn, MD 21144
22	Robert McKay & Joyce McKay	1367 Dicus Mill Rd, Severn, MD 21144
23	Leslie Slezak & Edwin Graves, Jr.	1369 Dicus Mill Rd, Severn, MD 21144
24	Michael E. Soukup & Cynthia Tinder	1371 Dicus Mill Rd, Severn, MD 21144
25	Edwin E. Graves, & Leslie L. Slezak	1373 Dicus Mill Rd, Severn, MD 21144
26	Edwin Davila & Elaine Frisino-Davila	1375 Dicus Mill Rd, Severn, MD 21144
27	William J. Beverley & Karen C. Beverley	1377 Dicus Mill Rd, Severn, MD 21144
28	Matthew D. Dawson & Marie L. Dawson ET AL	1353 Dicus Mill Rd, Severn, MD 21144
29	Thomas J. Fitzmorris & Rebecca A. Fitzmorris	200 Arabian Ct, Gambrills, MD 21054
30	Peter G. Salvatore & Barbara A. Salvatore	202 Arabian Ct, Gambrills, MD 21054
31	Michael S. Karp	203 Arabian Ct, Gambrills, MD 21054
32	Paul S. Vetter & Mary Vetter	201 Arabian Ct, Gambrills, MD 21054
33	William J. McGranahan & Elizabeth N. McGranahan	200 Mustang Ct, Gambrills, MD 21054
34	Frank E. Clark & Susan E. Clark	202 Mustang Ct, Gambrills, MD 21054
35	Jeffrey K. Innis & Janice M. Bindeman	201 Mustang Ct, Gambrills, MD 21054
36	Edwin F. Gottschalk	206 Gambrills Rd, Gambrills, MD 21054
37	David T. Taylor & Kaye R. Taylor, ET AL	1324 Dicus Mill Rd, Gambrills, MD 21054
38	Ronald E. Litchfield	144 Gambrills Rd, Gambrills, MD 21054
39	Charlett B. Sites & John E. Sites, Jr.	140 Gambrills Rd, Gambrills, MD 21054
40	Joseph Pucciarella & Donna Pucciarella	134 Gambrills Rd, Gambrills, MD 21054
41	Donald B. Reed, Sr. & Bettie L. Reed	128 Gambrills Rd, Gambrills, MD 21054
42	Jacob A. Burnopp & Shirley A. Burnopp	120 Gambrills Rd, Severn, MD 21144
43	Dina Kimm	96 Gambrills Rd, Severn, MD 21144
44	Theresa V. Jarmer & William Jarmer	88 Gambrills Rd, Severn, MD 21144
45	Harriet G. Sollers	84 Gambrills Rd, Severn, MD 21144
46	Sarah Wengernuk	64 Gambrills Rd, Severn, MD 21144
47	Rebecca A. Stephens	54 Gambrills Rd, Severn, MD 21144
48	Mark E. Mollohan & Jennifer L. Mollohan	50 Gambrills Rd, Severn, MD 21144
49	Byron J. Baden	48 Gambrills Rd, Severn, MD 21144
50	Frank W. Stein & Patricia A. Stein	Gambrills Rd, Severn, MD 21144
51	Severn Convenant CH, Inc., Board of Elders	20 Gambrills Rd, Severn, MD 21144

Appendix A.3
MDE Wetlands Permit Package Resubmittal (2013)

ANNE ARUNDEL COUNTY
MARYLAND

Department of Public Works

Heritage Office Complex
2662 Riva Road
Annapolis, Maryland 21401
(410) 222-7543 Fax: (410) 222-7589

LETTER OF TRANSMITTAL

DATE	JOB No.
October 18, 2013	N530605

ATTENTION: **Mr. Stephen Krajcsik**

RE: **Millersville Landfill and Resource Recovery Center**
Cell 9 Construction
Nontidal Wetlands and Waterways Application No.
13-NT-0253/201361335

TO: **Ann Arundel County Department of Public Works**
Disposal and Maintenance Manager
Waste Management Services

WE ARE SENDING YOU: **Attached** under separate cover via _____ the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications
☐ Copy of letter ☐ Change order ☐ see below

COPIES	DATE	NO.	DESCRIPTION
1	Oct. 16, 2013	1	Response letter to September 11, 2013 comments by Judy Broersma
1	Oct. 16, 2013	1	Response letter to September 9, 2013 comments by Kelly Flint
1	Oct. 16, 2013	1	Response letter to September 9, 2013 comments by Josh Tiralla
1	Oct. 16, 2013	103	Alternatives Analysis Summary by SCS Engineers
1	Oct. 11, 2013	1	Revised page 2 of Permit Application
1	July 2013	6	Revised Wetland Impact Plates
1	September 2013	2	Draft Grading Plan Sheets
1	Oct. 18, 2013	1	Transmittal to MDE by Gregg Iskra

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved ☐ Resubmit_____copies for approval
☐ For your use ☐ Approved as Noted ☐ Submit_____copies for distribution
☐ As requested ☐ Revise and return ☐ Return_____corrected prints
☐ For review and comment ☐
☐ FOR BIDS DUE ☐ Prints returned after loan to us

REMARKS: Steve,
Attached is a copy of the MDE Resubmittal package which was delivered to MDE on October 18, 2013.
I have not included the Billing Form, Address Labels or CD in this copy, but have provided you
a copy of our Transmittal to MDE listing all information that was provided.

COPY TO: File: N530605 (12), Gregg Iskra

SIGNED: Gregg Iskra

J:\GIskra\N530605 Cell 9 Construction - Wells Branch Restoration\12_Permits\MDE Resubmittal_001L LETTER OF TRANSMITTAL_Steve Krajcsik_10-18-2013.doc
Revised 01/09

ANNE ARUNDEL COUNTY
MARYLAND

Department of Public Works

Heritage Office Complex
2662 Riva Road
Annapolis, Maryland 21401
(410) 222-7543 Fax: (410) 222-7589

LETTER OF TRANSMITTAL

DATE	JOB No.
October 18, 2013	N530605

ATTENTION: Ms. Judy Broersma

RE: Millersville Landfill and Resource Recovery Center
Cell 9 Construction
Nontidal Wetlands and Waterways Application No.
13-NT-0253/201361335

TO: Maryland Department of the Environment
WMA, Regulatory Services Coordination Office
1800 Washington Boulevard, Suite 430
Baltimore, Maryland 21230

WE ARE SENDING YOU: ☐ **Attached** under separate cover via _____ the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications
☐ Copy of letter ☐ Change order ☐ see below

COPIES	DATE	NO.	DESCRIPTION
1	Oct. 16, 2013	1	Response letter to September 11, 2013 comments by Judy Broersma
1	Oct. 16, 2013	1	Response letter to September 9, 2013 comments by Kelly Flint
1	Oct. 16, 2013	1	Response letter to September 9, 2013 comments by Josh Tiralla
1	Oct. 16, 2013	103	Alternatives Analysis Summary by SCS Engineers
7	Oct. 11, 2013	1	Revised page 2 of Permit Application
7	July 2013	6	Revised Wetland Impact Plates
7	September 2013	2	Draft Grading Plan Sheets
1		1	Signed Public Notice Billing Approval Form
2		1	Pre-printed address labels for local government officials
1			CD containing electronic copies of updated documents

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved ☐ Resubmit_____copies for approval
☐ For your use ☐ Approved as Noted ☐ Submit_____copies for distribution
☐ As requested ☐ Revise and return ☐ Return_____corrected prints
☐ For review and comment ☐ _____
☐ FOR BIDS DUE ☐ Prints returned after loan to us

REMARKS:

RECEIVED
OCT 23 2013
MILLERSVILLE LANDFILL
WASTE MANAGEMENT SERVICES

COPY TO: File: N530605 (12), Gregg Iskra

SIGNED: Gregg Iskra

J:\GIskra\N530605 Cell 9 Construction - Wells Branch Restoration\12_Permits\MDE Resubmittal_001L LETTER OF TRANSMITTAL_MDE Resubmittal_10-18-2013.doc
Revised 01/09

Transportation
Land Development
Environmental
Services

VHB imagination | innovation | energy Creating results for our clients and benefits for our communities

Vanasse Hangen Brustlin, Inc.

October 16, 2013

Ref: 33586.00

Ms. Judy Broersma
Natural Resources Planner
Nontidal Wetlands Division
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, MD 21230

Re: AI Number: 19044
Nontidal Wetlands and Waterways Application Number:
13-NT-0253/201361335
Response Due Date: October 31, 2013

Dear Ms. Broersma,

Vanasse Hangen Brustlin, Inc. (VHB) and SCS Engineers submits these responses to the comments we received from your office on September 11, 2013. The comments are provided below, each followed by our responses.

Additional Information Required to Complete the Application

1. There are discrepancies between the nontidal wetlands impact figures on pages two and three of the application. Plan sheets #3 and #4 correlate with the impact figures shown on page three of the application. Please provide a table with the actual, proposed impacts to wetlands, in square feet.

   Response: You are correct in that page two of the application contained inconsistent impact numbers. We have revised this page of the application and it is included as an attachment to this package. Page three of the application and the plan sheets #3 and #4 are correct. The following table is provided to clarify the proposed wetland impacts:

Sheet Number	Impact Description	Area (Sq. ft.) or Linear Feet of Impact
3	PFO wetland	1,204 sq. ft.
3	PFO wetland	4,118 sq. ft.
3	PFO wetland	2,950 sq. ft.
3	PFO wetland	253 sq. ft.

351 McLaws Circle, Suite 3
Williamsburg, Virginia 23185-6316
757.220.0500 ▪ FAX 757.220.8544
email: info@vhb.com
www.vhb.com

3	PFO wetland	783 sq. ft.
3	Wetland buffer	7,044 sq. ft.
3	Wetland buffer	16,415 sq. ft.
3	Wetland buffer	5,202 sq. ft.
3	Wetland buffer	2,664 sq. ft.
3	Wetland buffer	3,945 sq. ft.
3	Stream impact	115 l.f.
3	Stream impact	32 l.f.
3	Stream impact	54 l.f.
4	PFO wetland	852 sq. ft.
4	Wetland buffer	2,905 sq. ft.
Totals	**Stream Impacts**	**201 l.f.**
	Wetland PFO Impacts	**10,160 sq. ft.**
	Wetland Buffer Impacts	**38,175 sq. ft.**

2. The project must be advertised on public notice for the opportunity to comment and/or request a public informational hearing. Please complete, sign and return the enclosed Billing Approval Form.

   Response: We have completed the Billing Approval Form and it is attached for your use.

3. Provide a complete set of the 8 ½ by 11 – inch plans sheets, including a vicinity map, with the project tracking numbers found on page 1 of this letter printed on each sheet. These plan sheets will be used in the public notice.

   Response: The original 8 ½ x 11 –inch plans have been updated to include the tracking numbers per your request.

4. The pre-printed address labels do not include local government officials. Please provide two additional label sets that include the Anne Arundel County Executive, the District Legislators and Senator and the County Council representative.

   Response: Attached please find two address label sets that include the requested government officials.

5. Please provide a list of all adjacent property owners and local government officials in an electronic format for inclusion in our database.

   Response: A CD is enclosed that contains a Word file listing the adjacent property owners and local government officials.

6. It is unclear from the provided plans if the connector road impacts regulated areas at its intersection with the perimeter road, please quantify if applicable.

   Response: We have included an additional plan sheet 3A that shows the area south of the above-mentioned intersection. There are no wetland impacts in this area.

7. Please provide a full sized set of sketch/grading plans if available.

   Response: As discussed, we are submitting one (1) full-size copy of the current grading plan (Sheet 4 of 61) associated with Cell 9.1. We have also placed a PDF of this grading plan on the enclosed CD.

8. What year was pond 9-2 constructed?

   Response: Construction was complete on January 20, 2012.

9. Additional information is required for the alternatives analysis. The Applicant must consider alternative site design(s) that would avoid and/or minimize impacts to regulated areas for the Division to review and include in our final Permit decision. For example, how large is the County landfill property? Will additional land be purchased to increase the size of the property? How much of the property is undeveloped? What is the area of the property that is unsuitable for development? Are additional cells planned in the future? What are the environmental and/or other constraints associated with relocation of Cell #9? This list is not all inclusive and any additional information that you can provide will help in our permitting process.

   Response: Alternative site design analyses for Cell 9 of Millersville were conducted between 1991 and 1994 by various consultants including GeoSyntec Consultants, Greenhorne & O'Mara, and Hogan Environmental. The findings were documented and presented as part of the Phase III Permit Application documents that were submitted to MDE in 1994. MDE reviewed and ultimately approved the Cell 9 design documents in 1994. These reports, along with a summary of the current status of the Cell 9 design, is provided in the attached document entitled "Alternative Analyses Summary for Millersville Landfill and Resource Recovery Facility." This document, and the report attached thereto, provide the information requested in your comment number 9.

We trust that these responses satisfy your original request and permit you to move forward with the advertisement/notification process. Should you have any questions or need additional information, please contact me at 757-220-0500.

Very Truly Yours,

VANASSE HANGEN BRUSTLIN, INC.

Chris Frye
Senior Project Manager

Enclosures: Revised drawings; Revised Page 2 – Application; Full-size grading plan; 2 sets – address labels; Alternatives Analysis Attachment 1; 1 - CD

cc: Mr. Mike Goudreau, PE, SCS Engineers
Mr. Kenneth Fleming, Anne Arundel County
Mr. Greg, Iskra, PE, Heery International

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Vanasse Hangen Brustlin, Inc.

October 16, 2013

Ref: 33586.00

Ms. Kelly Flint, PE
Waterway Construction Division
Wetlands and Waterway Program
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, MD 21230

Re: Tracking #: 201361335/13-NT-0282
AADPW/Millersville Landfill, Cell 9/Repair and Maintenance
Initial Waterway/Floodplain Review Comments

Dear Ms. Flint,

Vanasse Hangen Brustlin, Inc. (VHB) submits these responses to the comments we received from your office on September 9, 2013. The comments are provided below, each followed by our responses.

1. On page 4 of 7 of the Phase I Mitigation Plan, the text states that the site stream restoration project will easily compensate site impacts as well as all stormwater-related requirements. What specific stormwater related requirements will be met by the restoration? Please show the breakdown of what quantity of the stream restoration will meet the mitigation for stream impacts and what quantity of the stream restoration will meet which specific stormwater management requirements.

   Response: Project stormwater management requirements for the construction of Cell 9.1 of the Millersville Landfill were taken from the Stormwater Management Report for Milersville Landfill, Cell 9 developed by McCrone, Inc. in April of 2000. The report identifies 10.2 acres of impervious area that is being treated by stormwater pond 9.2. Under the current design for Cell 9, 9.24 acres of perimeter, connector, interior roads and crossovers are proposed (refer to attached worksheet for Impervious Area calculations for 2013 design). The current design includes an additional 4.6 acres for a recycling pad. Therefore, the total impervious area that needs to be treated is the 3.64 acres (13.84 acres proposed - 10.2 acres treated by pond 9-2) of project requirements that was not previously treated. The stream restoration of 1750 linear feet of degraded stream along Wells Branch has been proposed to provide for the remaining stormwater management requirements, as well as provide mitigation for wetland and stream

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Williamsburg, Virginia 23185-6316
757.220.0500 : FAX 757.220.8544
email: info@vhb.com
www.vhb.com

impacts associated with Cell 9.1 development. Using MDE's June 2011 guidance in Accounting for Stormwater Wasteload Allocations, 100 linear feet of stream restoration can have an equivalent treatment of 1 acre of impervious area. Using this guidance, approximately 364 linear feet of the 1750 linear feet of restored stream would be allocated to meet project stormwater management requirements. 235 feet of restored stream will be allocated as mitigation for the 201 feet of impacts associated with development of Cell 9.1, leaving 1,151 linear feet of restored stream that would be available for other County goals.

2. What will happen to the existing culvert under the existing perimeter road during construction of the new perimeter road alignment and during filling of the Cell 9? If the culvert will remain please provide a profile of the culvert to scale to show the proposed conditions at this crossing.

   Response: Two existing CMP culverts will be removed concurrent with perimeter road construction. A new 24" CMP culvert will be provided under the perimeter road for diversion of clear water from the west side of the proposed recycling area. When landfill development eventually proceeds into this area, the 24" CMP will be removed or abandoned. Attached please find Sheet 6 of 61 of the landfill design plans that identifies the location of the proposed 24" CMP. Inv. In = 142.0' and the Inv. Out = 131.0.

3. Please provide specifications per COMAR 26.17.04.07 (A5&6), which includes a minimum of:
   a. The sequence of construction,
   b. A means for diverting stream flow during construction,
   c. A means for controlling the dewatering discharges,
   d. A means for controlling runoff during the various construction phases.

   Please refer to Maryland's Waterway Construction Guidelines.
   http://www.mde.state.md.us/Programs/WaterPrograms/Wetlands_Waterways/documents_information/guide.asp

   Response: The Phase II mitigation plans will incorporate these specifications.

4. The project has been forwarded to the Maryland Historical Trust due to an application screening "hit" by the Permit Service Center. Any comments received will be forwarded for your consideration.

   Response: Please forward any comments you may receive from MHT.

5. Please submit the Phase II Mitigation Plan as a separate Joint Permit Application for the State.

   Response: We are preparing the Phase II mitigation plan and should be providing that in the near future.

6. Please refer to COMAR 26.17.04.07, Changes in Stream Channels or Floodplains for guidance on some of the documentation that will be required as part of the Phase II Mitigation Plan.

   Response: We will be reviewing the referenced section of COMAR as we develop the Phase II mitigation plan and associated documentation needed.

I trust these responses will satisfy your current comments and we look forward to working with you during the review of the Phase II mitigation plans. Should you have any questions or need additional information, please contact me at 757-220-0500.

Very Truly Yours,

VANASSE HANGEN BRUSTLIN, INC.

Chris Frye
Senior Project Manager

cc: Mr. Mike Goudreau, PE, SCS Engineers
Mr. Kenneth Fleming, Anne Arundel County
Mr. Greg, Iskra, PE, Heery International

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Vanasse Hangen Brustlin, Inc.

October 16, 2013

Ref: 33586.00

Mr. Josh Tiralla
Wetlands and Waterways Program
Mitigation & Technical Assistance Section
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, MD 21230

Re: Tracking #: 13-NT-0282/201361335
AADPW/Millersville Landfill, Cell 9
Initial Nontidal Wetland Mitigation Review Comments

Dear Mr. Tiralla,

Vanasse Hangen Brustlin, Inc. (VHB) submits these responses to the comments we received from your office on September 9, 2013. The comments are provided below, each followed by our responses.

1. On page 4 of 7 of the Plan, the text states that "the on-site stream restoration project…will easily compensate site impacts as well as all stormwater-related requirements." Are any stormwater-related requirements, or any other requirements (e.g. Forest Conservation Act, TMDL, etc.), being satisfied through the proposed wetland restoration/creation? If so please identify the additional requirements and quantify the associated wetland credits being proposed to satisfy them.

   Response: Project stormwater management requirements for the construction of Cell 9.1 of the Millersville Landfill were taken from the Stormwater Management Report for Milersville Landfill, Cell 9 developed by McCrone, Inc. in April of 2000. The report identifies 10.2 acres of impervious area that is being treated by stormwater pond 9.2. Under the current design for Cell 9, 9.24 acres of perimeter, connector, interior roads and crossovers are proposed (refer to attached worksheet for Impervious Area calculations for 2013 design). The current design includes an additional 4.6 acres for a recycling pad. Therefore, the total impervious area that needs to be treated is the 3.64 acres (13.84 acres proposed - 10.2 acres treated by pond 9-2) of project requirements that was not previously treated. The stream restoration of 1750 linear feet of degraded stream along Wells Branch has been proposed to provide for the remaining stormwater

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management requirements, as well as provide mitigation for wetland and stream impacts associated with Cell 9.1 development. Using MDE's June 2011 guidance in Accounting for Stormwater Wasteload Allocations, 100 linear feet of stream restoration can have an equivalent treatment of 1 acre of impervious area. Using this guidance, approximately 364 linear feet of the 1750 linear feet of restored stream would be allocated to meet project stormwater management requirements. 235 feet (includes 17% contingency) of restored stream will be allocated as mitigation for the 201 feet of impacts associated with development of Cell 9.1, leaving 1,151 linear feet of restored stream that would be available for other County goals.

With respect to the wetland impacts and mitigation, using a 2:1 ratio for PFO wetland impacts the wetland mitigation requirement associated with cell 9.1 development is 0.46 acres of wetland creation/restoration. The Wells Branch restoration project will provide wetland creation/restoration in excess of that requirement to insure the success of the site. Excess wetland creation will not be applied towards any other requirement. A final table showing all accounting will be provided in the Phase II plans.

2. On page 4 of 7 of the Plan, the text states that "Of this cumulative 0.986 acres of wetland creation, 0.09 acres will not be applied to the mitigation requirement to compensate for existing wetlands along the corridor that will be converted or otherwise impacted based on site construction." All nontidal wetland impacts associated with the wetland mitigation construction are exempt from MDE permit requirements. However, all permanent nontidal wetland impacts need to be quantified and called out on the plan sheets, along with a breakdown of how much of the wetland restoration/creation credits are being used to offset the impacts.

   Response: All permanent non-tidal impacts associated with landfill expansion and including mitigation are called out on the plan sheets. PFO wetland impacts totaling 0.23 acres will be mitigated for on-site through the creation/restoration of a minimum of 0.46 acres of PFO wetlands adjacent to the Wells Branch restoration reach. The implementation of the stream and wetland restoration will include unavoidable impacts (permanent and temporary) to existing wetlands and stream. These impacts have been minimized to the greatest extent possible through the design process, but are necessary to provide the most stable system for that setting. The permanent wetland impact areas were summed (the 0.09 acres documented in the Phase I Mitigation Plan) and subtracted from the total wetland creation/restoration area as to not constitute "double-dipping" of credits. These areas will be appropriately accounted for and called out on the plan set submitted with the Phase II Mitigation Plan, including all permanent and temporary impacts.

3. The protection mechanism example included in the application as Attachment H appears to be incomplete and/or inadequate. The most current MDE/USACE approved Declaration of Restrictive Covenants should be used as the basis for developing an acceptable protection mechanism. This document can be found on the USACE website at: http://www.nab.usace.army.mil/Portals/63/docs/Regulatory/Mitigation/Permittee_Resp_Mit_Site_Dec.pdf

   Response: The County will provide a protection mechanism covering the proposed project that follows the format of the referenced document. The County is currently conducting a legal review of the referenced document, that was downloaded from the USACE website. Additional information will be submitted with the Phase II Mitigation Plan.

4. The Performance Standards found on page 6 of 7 of the Plan should include, at a minimum, MDE's most recent language for performance standards to be achieved after 5 years from the completion of the mitigation project. The most recent language is as follows: (listed out).

   Response: This language will be included with the Wells Branch Post Construction Monitoring Plan included with the submittal of the Phase II Mitigation Plan.

5. On page 7 of 7 of the Plan, under the Monitoring Requirements, the text states that "A Post construction Monitoring Plan will be submitted for the restoration site to document the full scale of monitoring activities conducted to document site success." The aforementioned, detailed Monitoring Plan should be included as part of the Phase II Wetland Mitigation Plan. MDE's MONITORING PROTOCOL FOR WETLAND MITIGATION PROJECTS has been attached hereto as Exhibit A for your information. It includes minimum monitoring requirements, as well as recommended data collection techniques for meeting the monitoring requirements.

   Response: All monitoring requirements and approved success criteria will be included with the Phase II Mitigation Plan submittal.

I trust these responses will satisfy your current comments and we look forward to working with you during the review of the Phase II mitigation plans. Should you have any questions or need additional information, please contact me at 757-220-0500.

VHB

Very Truly Yours,

VANASSE HANGEN BRUSTLIN, INC.

Chris Frye
Senior Project Manager

cc: Mr. Mike Goudreau, PE, SCS Engineers
Mr. Kenneth Fleming, Anne Arundel County
Mr. Greg, Iskra, PE, Heery International

Appendix A.4

MDE Wetlands Permit Package Resubmittal - Page 2, Plates, Drawings (2013)

2. PROJECT DESCRIPTION **(SECTION B REVISED 10/11/13)**

a. GIVE WRITTEN DESCRIPTION OF PROJECT:

Construction of Cell 9 is necessary to accommodate the County's waste disposal as the active landfill cell (Cell 8) reaches capacity. The proposed project will include the construction of Cell 9, a stormwater/sedimentation pond (Pond 9-2) with a discharge into Wells Branch and a soil stockpile/borrow area. Cell 9 is a double-lined disposal area, approximately 84 acres in size. The Cell 9 area is projected to reach its permitted capacity sometime between 2030 (275,000 tons per year scenario) and 2059 (110,000 tons per year scenario) depending on varied County waste disposal rate scenarios. The revised landfill design includes a permanent connector road at the western end of Cell 9 that links directly with the main entrance and scale house. The existing grades along this alignment are too steep (15-20% slope), so in order to improve safety the perimeter road grades and landfill rim would be raised in elevation to provide more manageable roadway grades (3-8%) through the connector road route. This additional permanent connection provides redundancy in the access to Cell 9 and flexibility in routing landfill traffic.

Has any portion of the project been completed? X Yes ____ No If yes, explain ____

The Millersville site waste disposal Cell 9 was permitted by MDE in August, 1997 (WQC 97-NT-0501/199001846) and the U.S. Army Corps of Engineers (COE) in June 1997 (CENAB-OP-RW 90-01846-4). Construction activities of Cell 9 performed to date include the Cell 9 bridge crossing over Wells Branch, an access road parallel to Wells Branch, general grading of wetlands approved under 1997 permits, and stormwater pond 9-2 approved under 2008 permits (MDE 08-NT-0026/200860367; COE MD SPGP-3).

Is this a residential subdivision or commercial development? ____ Yes X No

If yes, total number of acres on property ____ acres

b. ACTIVITY: Check all activities that are proposed in the wetland, waterway, floodplain, and nontidal wetland buffer as appropriate.

A. X filling
B. ____ dredging
C. X excavating
D. ____ flooding or impounding water
E. ____ draining
F. X grading
G. X removing or destroying vegetation
H. ____ building structures

Area for item(s) checked: Wetland 10,160 (sq. ft.) Buffer (Nontidal Wetland Only) 38,175 (sq. ft.)

Expanded Buffer (Nontidal Wetland Only) N/A (sq. ft.)

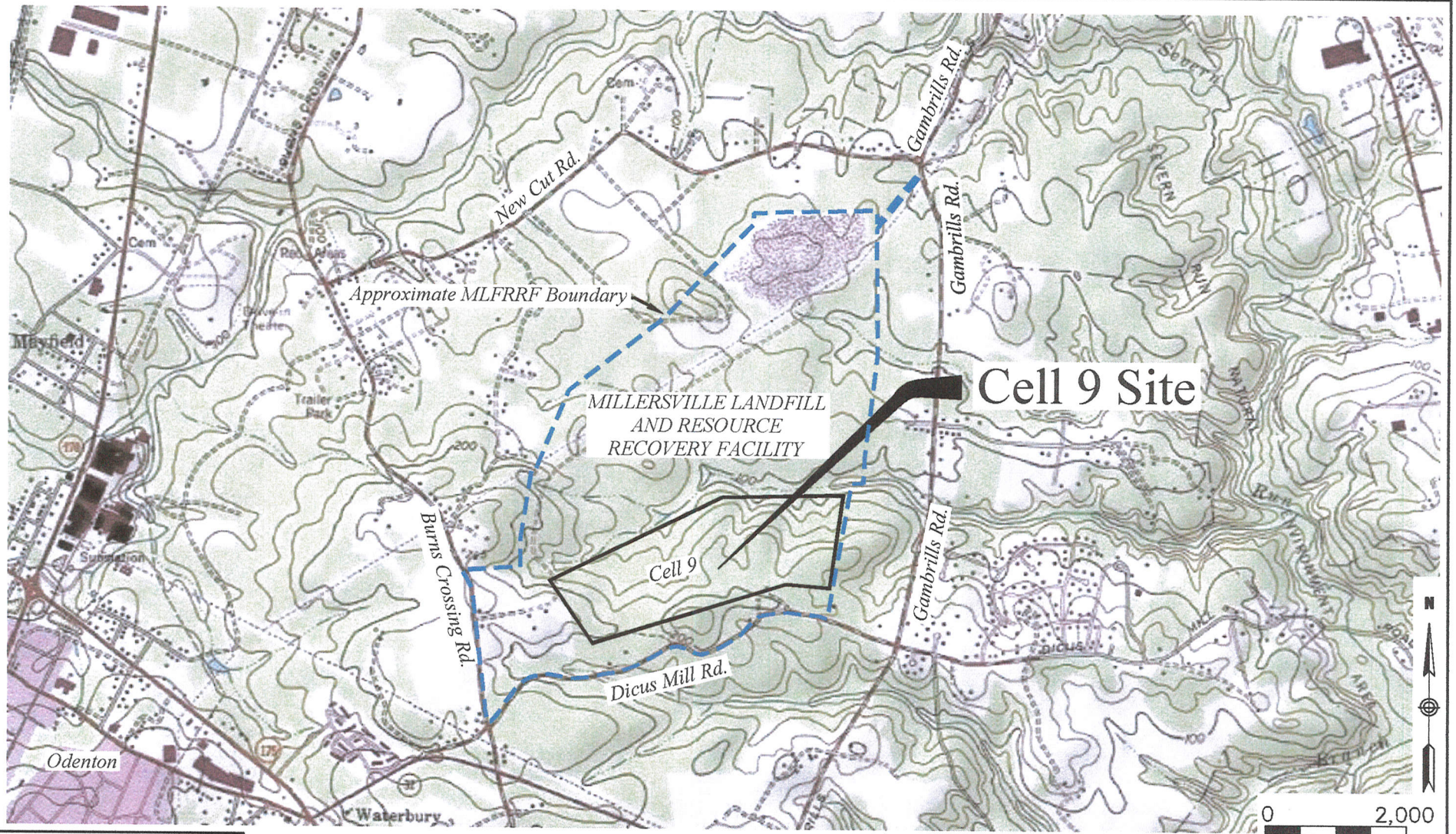
Area of stream impact 402 (sq. ft.)

Length of stream affected 201 (linear feet)

c. TYPE OF PROJECTS: Project Dimensions

For each activity, give overall length and width (in feet), in columns 1 and 2. For multiple activities, give total area of disturbance in square feet in column 3. For activities in tidal waters, give maximum distance channelward (in feet) in column 4. For dam or small ponds, give average depth (in feet) for the completed project in column 5. Give the volume of fill or dredged material in column 6.

			Length (Ft.) 1	Width (Ft.) 2	Area Sq. Ft. 3	Maximum/Average Channelward Encroachment 4		Pond Depth 5	Volume of fill/dredge material (cubic yards) below MHW or OHW 6
A.		Bulkhead							
B.		Revetment							
C.		Vegetative Stabilization							
D.		Gabions							
E.		Groins							
F.		Jetties							
G.		Boat Ramp							
H.		Pier							
I.		Breakwater							
J.		Repair & Maintenance							
K.	X	Road Crossing	NA	NA	See W	NA	NA	NA	NA
L.		Utility Line							
M.		Outfall Construction							
N.		Small Pond							
O.		Dam							
P.		Lot Fill							
Q.		Building Structures							
R.		Culvert							
S.		Bridge							



SOURCE: U.S.G.S. QUADRANGLE ODENTON

ANNE ARUNDEL COUNTY MARYLAND

DPW

Vanasse Hangen Brustlin, Inc.
Environmental Services
(757) 220-0500 • Fax: (757) 220-8544

SCS Engineers

ADJACENT PROPERTY OWNERS:

SEE ATTACHED LIST

DATUM: NGVD 1929

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY CELL 9

SITE MAP

AT: WELLS BRANCH

IN: ANNE ARUNDEL COUNTY, MARYLAND

PURPOSE: CELL 9 LANDFILL REVISIONS

MDE APPLICATION NUMBER: 13-NT-0253 / 201361335

AI NUMBER: 19044

APPLICATION BY:
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

DATE: JULY, 2013

SHEET 1 **OF** 5

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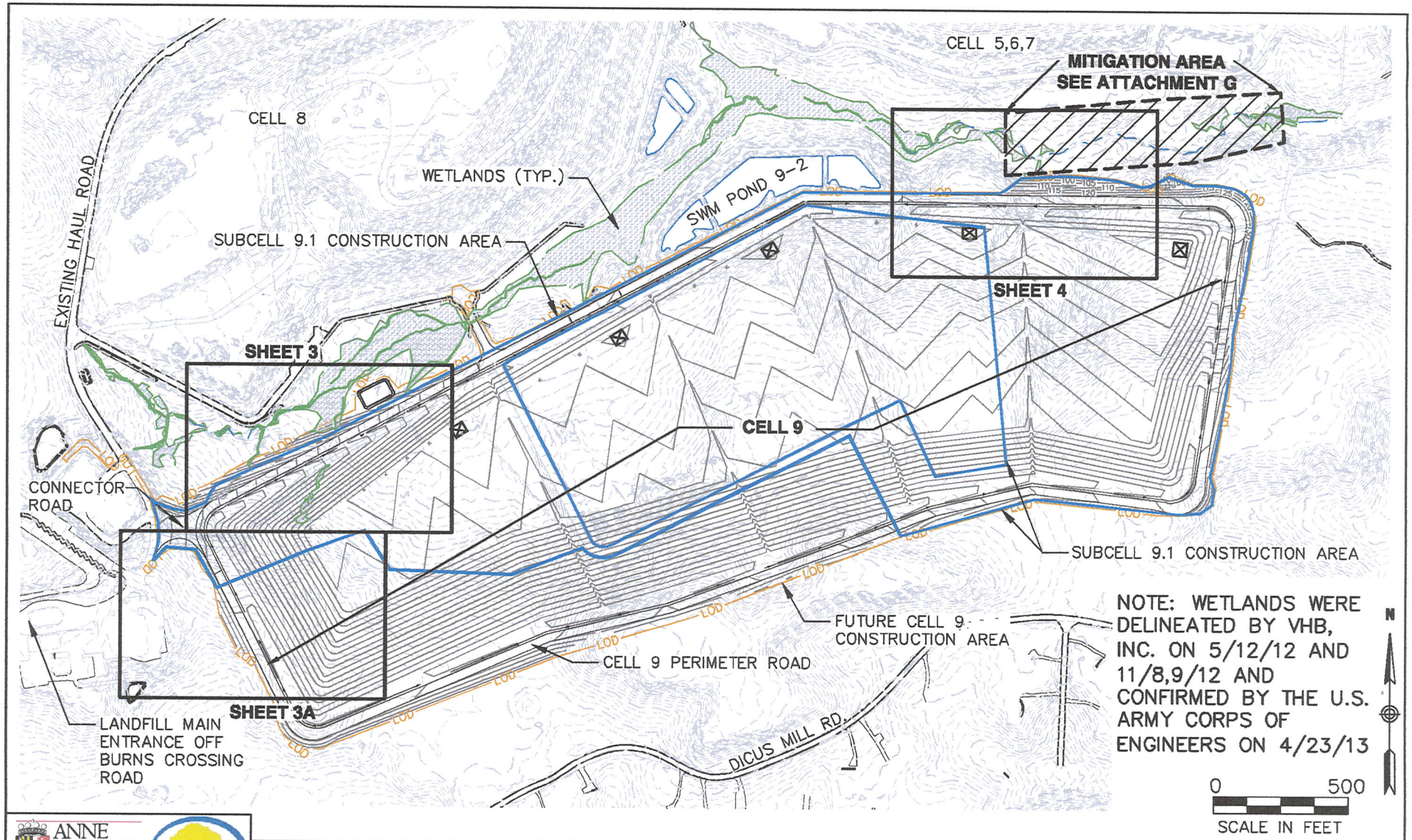

NOTE: WETLANDS WERE DELINEATED BY VHB, INC. ON 5/12/12 AND 11/8,9/12 AND CONFIRMED BY THE U.S. ARMY CORPS OF ENGINEERS ON 4/23/13

ANNE ARUNDEL COUNTY MARYLAND

DPW

Vanasse Hangen Brustlin, Inc.
Environmental Services
(757) 220-0500 • Fax: (757) 220-8544

SCS Engineers

ADJACENT PROPERTY OWNERS:

SEE ATTACHED LIST

DATUM: NGVD 1929

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY CELL 9

SHEET INDEX & OVERALL SITE

AT: WELLS BRANCH

IN: ANNE ARUNDEL COUNTY, MARYLAND

PURPOSE: CELL 9 LANDFILL REVISIONS

MDE APPLICATION NUMBER: 13-NT-0253 / 201361335

AI NUMBER: 19044

APPLICATION BY:
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

DATE: JULY, 2013

SHEET 2 **OF** 5

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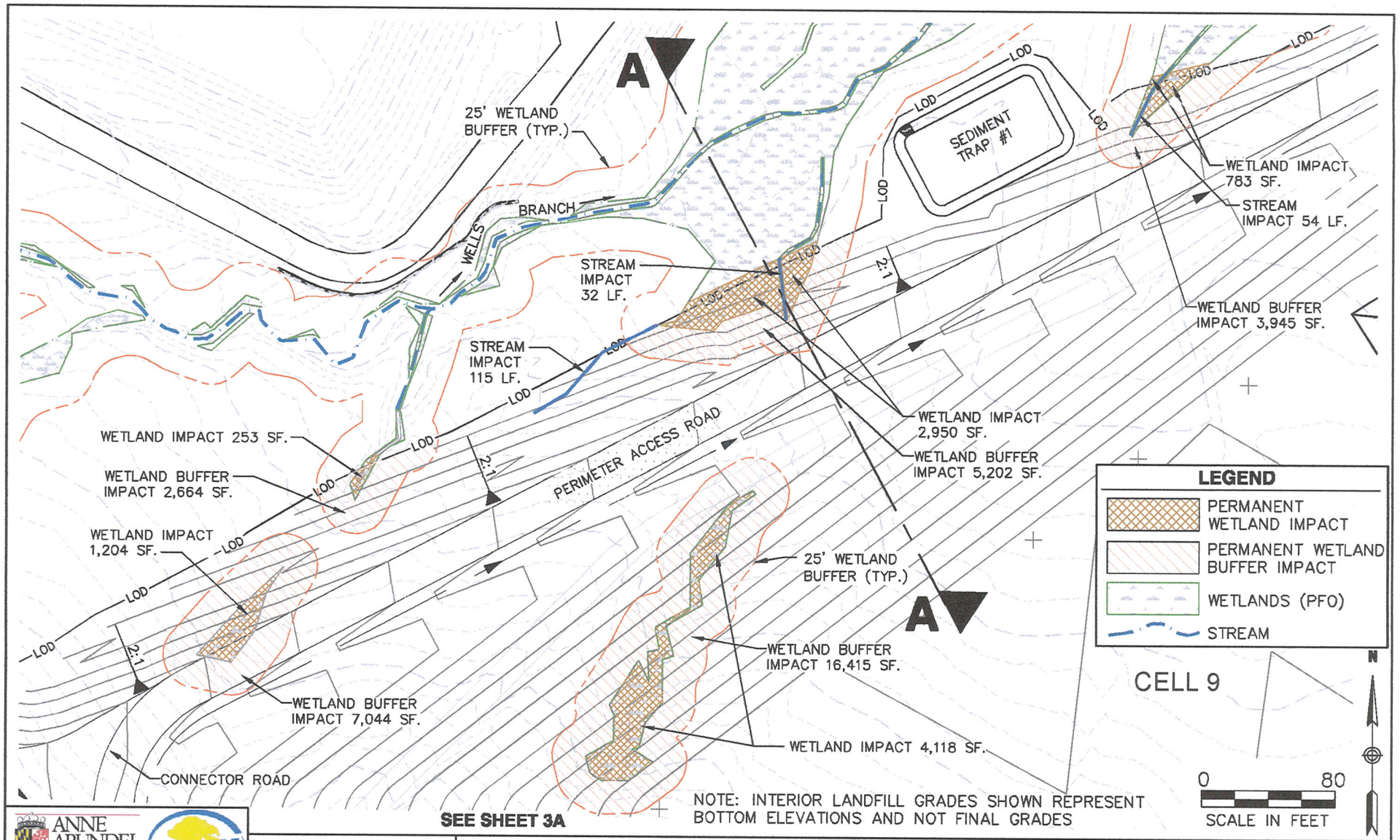

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Environmental Services
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SCS Engineers

ADJACENT PROPERTY OWNERS:

SEE ATTACHED LIST

DATUM: NGVD 1929

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY CELL 9

CONNECTOR ROAD IMPACT AREAS

AT: WELLS BRANCH

IN: ANNE ARUNDEL COUNTY, MARYLAND

PURPOSE: CELL 9 LANDFILL REVISIONS

MDE APPLICATION NUMBER: 13-NT-0253 / 201361335

AI NUMBER: 19044

APPLICATION BY:
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

DATE: JULY, 2013

SHEET 3 **OF** 5

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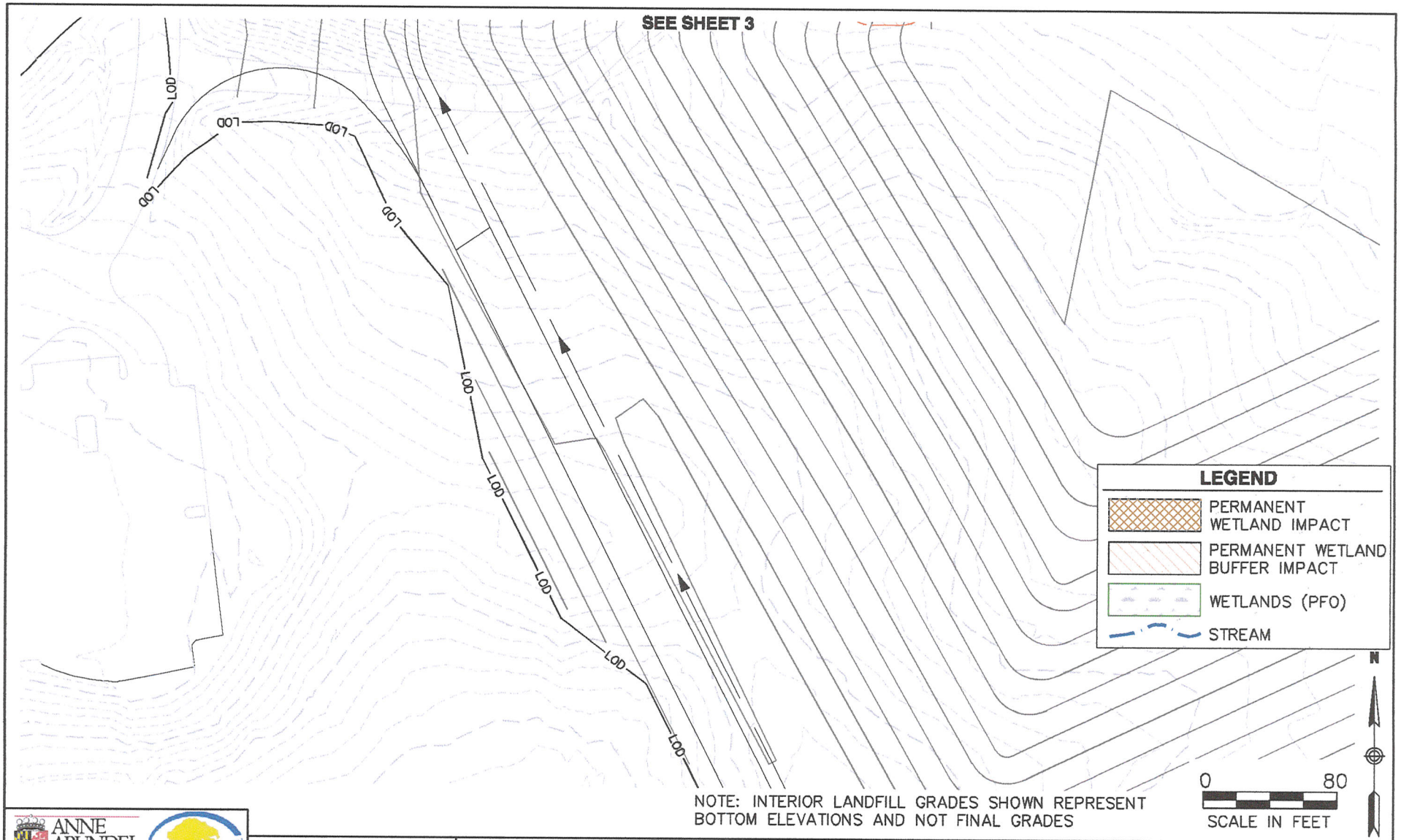

NOTE: INTERIOR LANDFILL GRADES SHOWN REPRESENT BOTTOM ELEVATIONS AND NOT FINAL GRADES

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DPW

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Environmental Services
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DATUM: NGVD 1929

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY CELL 9

CONNECTOR ROAD IMPACT AREAS

AT: WELLS BRANCH

IN: ANNE ARUNDEL COUNTY, MARYLAND

PURPOSE: CELL 9 LANDFILL REVISIONS

MDE APPLICATION NUMBER: 13-NT-0253 / 201361335

AI NUMBER: 19044

APPLICATION BY:
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

DATE: JULY, 2013

SHEET 3A OF 5

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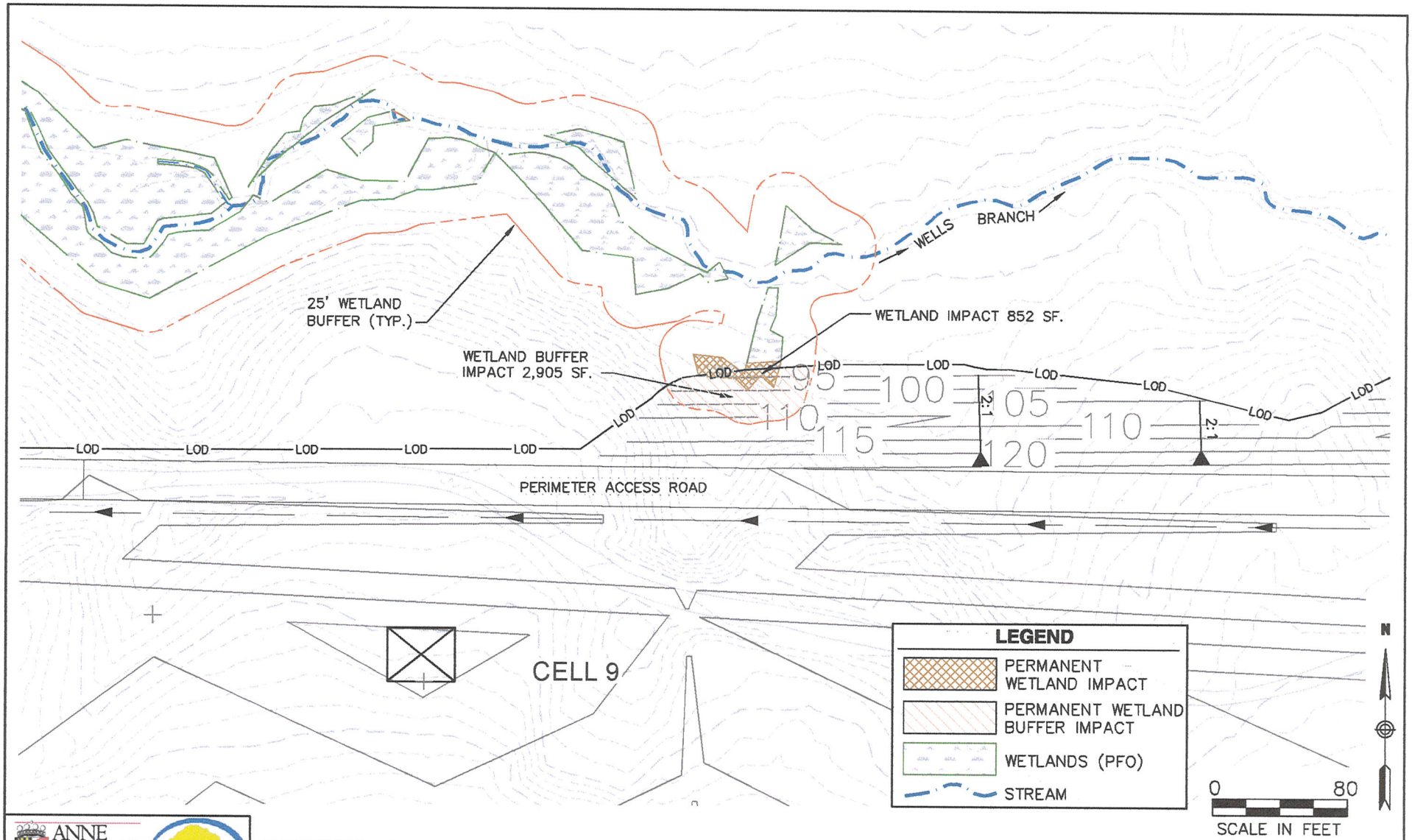

ANNE ARUNDEL COUNTY MARYLAND DPW

Vanasse Hangen Brustlin, Inc.
Environmental Services
(757) 220-0500 • Fax: (757) 220-8544

SCS Engineers

ADJACENT PROPERTY OWNERS:

SEE ATTACHED LIST

DATUM: NGVD 1929

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY CELL 9

IMPACT AREA

AT: WELLS BRANCH

IN: ANNE ARUNDEL COUNTY, MARYLAND

PURPOSE: CELL 9 LANDFILL REVISIONS

MDE APPLICATION NUMBER: 13-NT-0253 / 201361335

AI NUMBER: 19044

APPLICATION BY:
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

DATE: JULY, 2013

SHEET 4 **OF** 5

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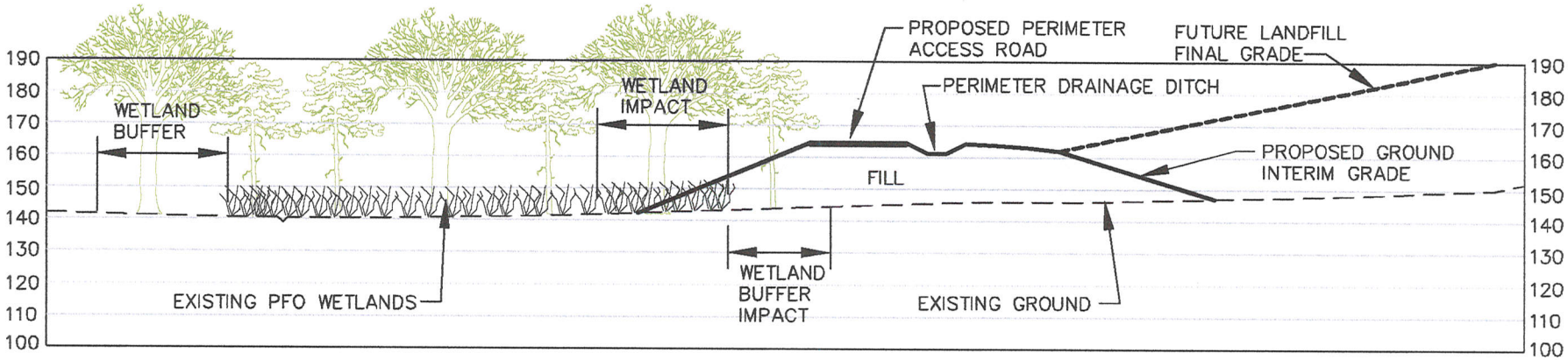

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SCALE IN FEET

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SCS Engineers

ADJACENT PROPERTY OWNERS:

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DATUM: NGVD 1929

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY CELL 9

SECTION A-A

AT: WELLS BRANCH

IN: ANNE ARUNDEL COUNTY, MARYLAND

PURPOSE: CELL 9 LANDFILL REVISIONS

MDE APPLICATION NUMBER: 13-NT-0253 / 201361335

AI NUMBER: 19044

APPLICATION BY:
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

DATE: JULY, 2013

SHEET 5 **OF** 5

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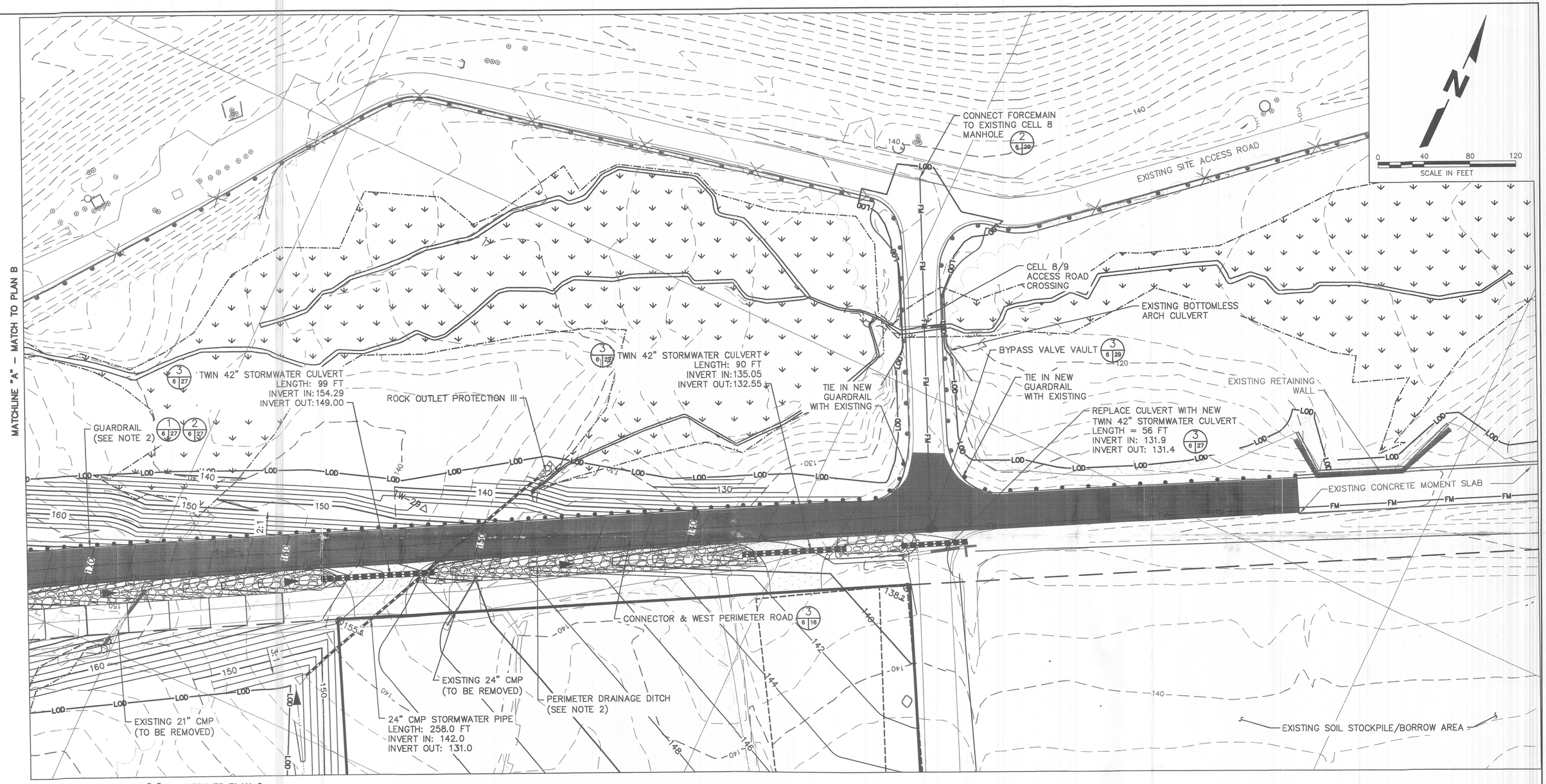

NOTE:

1. FOR GENERAL LEGEND SEE SHEET
2. FOR PERIMETER DRAINAGE DITCH INFORMATION AND LOCATION OF GUARDRAIL SEE PERIMETER ACCESS ROAD DETAIL 3/6/16

DRAFT
SEPTEMBER 2013

SCS ENGINEERS
CONSULTING ENGINEERS
10630 LITTLE PATUXENT PKWY
SUITE 127
COLUMBIA, MD 21044

Professional Certification
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 17850, EXPIRATION DATE: 01/06/14.

SCS PROJECT NO. 02209001.02

SIGNATURE

DATE

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

REVISED DATE	BY	APPROVED: DATE	APPROVED: DATE		
		CHIEF ENGINEER	PROJECT MANAGER		
		APPROVED: DATE	APPROVED: DATE		
		ASSISTANT CHIEF ENGINEER	CHIEF RIGHT-OF-WAY		

SCALE: 1"=40'
DRAWN BY: RJL/SPS
CHECKED BY: MRG
SHEET NO. 6 OF 61
FILE NO.: SHT 04-12
PROJECT NO.: N530605

PROJECT: CONSTRUCTION – SUBCELL 9.1

TITLE: GRADING PLAN B

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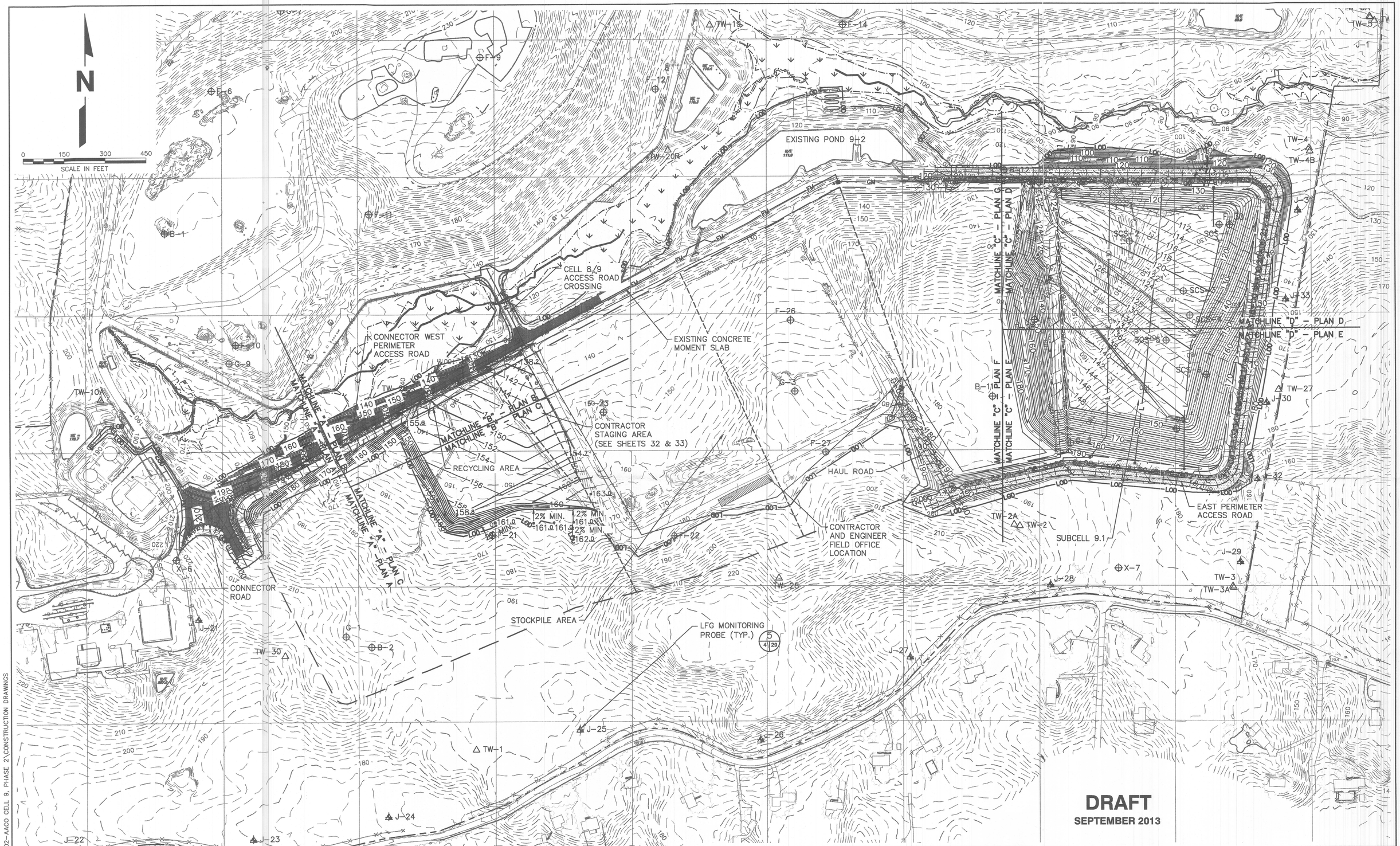

NOTE:

FOR GENERAL LEGEND SEE SHEET 2.

SCS ENGINEERS
CONSULTING ENGINEERS
10630 LITTLE PATUXENT PKWY
SUITE 127
COLUMBIA, MD 21044

Professional Certification

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 17650, EXPIRATION DATE: 01/08/14.

SCS PROJECT NO. 02209001.02

SIGNATURE

DATE

REVISED	
DATE	BY

APPROVED: DATE — CHIEF ENGINEER

APPROVED: DATE — PROJECT MANAGER

APPROVED: DATE — ASSISTANT CHIEF ENGINEER

APPROVED: DATE — CHIEF RIGHT-OF-WAY

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

SCALE: 1"=150'
DRAWN BY: RJL/SPS
CHECKED BY: MRG
SHEET NO. 4 OF 61
FILE NO.: SHT 04-12
PROJECT NO.: N530605

PROJECT: CONSTRUCTION – SUBCELL 9.1

TITLE: SITE GRADING PLAN (KEY SHEET)

M:\ACAD\ACAD4\02209001.02-AACO CELL 9, PHASE 2\CONSTRUCTION DRAWINGS

Appendix A.5

MDE Wetlands Permit Package Resubmittal - Alternatives Analysis (2013)

ALTERNATIVES ANALYSES SUMMARY
FOR
MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY
ANNE ARUNDEL COUNTY, MARYLAND

Prepared by
SCS ENGINEERS

OCTOBER 16, 2013

BACKGROUND

Information provided by Anne Arundel County indicates that the Millersville Landfill and Resource Recovery Facility (previously known as the Millersville Sanitary Landfill) began waste disposal operations in 1975. Waste disposal occurred in unlined permitted Cells 1 through 7 until 1992 when Cell 8 began operations. Cell 8 was the first permitted cell equipped with a COMAR approved bottom liner system and remains active at the present time.

Based on recent projections, Cell 8 will reach its disposal capacity in the next 3 to 4 years. Consequently, the County plans to construct Subcell 9.1 (initial subcell of Cell 9) beginning in 2014 to allow waste disposal operations to continue uninterrupted. Operating under Maryland Refuse Disposal Permit No. 2012-WMF-0240, issued by Maryland Department of the Environment, Cell 9 will be the final waste disposal area proposed for the facility.

The original design configuration for Cell 9 was presented in the Phase III Permit Application-Millersville Sanitary Landfill, Anne Arundel County, Maryland, Volumes I to III, submitted by GeoSyntec Consultants to the Department of the Environment, Bureau of Solid Waste in April 1994. Under Federal and State regulatory requirements, the final cell waste limits and design features considered local and regional site geology/hydrogeology, seasonal high groundwater levels, geotechnical factors, construction aspects, property limits, as well as all siting criteria covered under 40 CFR Part 258 (Subtitle D) which includes: airport safety, floodplains, wetlands, fault areas, seismic impact zones and unstable areas. That original design, including the waste disposal limits, bottom liner and leachate collection system, final cover system and final grades, and overall waste capacity, were approved by MDE in 1994.

ALTERNATIVES ANALYSES

As part of the Phase III Permit Application, wetlands impacts and alternatives were considered and discussed in Volume III, Appendix L, Wetlands Mitigation Project. Two previous studies are presented in that application as summarized below:

Alternatives Evaluation, Millersville Sanitary Landfill, Anne Arundel County, Maryland, prepared by Greenhorne & O'Mara, GBB and GeoSyntec, August 1994.

This report describes six (6) alternatives considered in the overall development of Cells 8 and 9 including one No Build Alternative (No. 1) and five Build Alternatives (Nos. 2 to 6), as listed below on Table 1

Table 1. Alternatives Analysis from August 1994 Report

Alternatives Considered	Description
1	No-Build. Cells 8 and 9 prohibited and no additional cells
2A, 2B	Avoid wetland impacts by locating Cell 8 to the northwest and Cell 9 to the southeast of the main channel to the Severn Run tributary. Same size and shape of cells as in Alternative 4
3	Total wetland avoidance by reducing size of Cells 8 and 9 relative to Alternative 4, as well as modifying their configuration
4D	Location Cells 8 and 9 per ACOE wetland permit application dated February 1991, which are the same as shown in the original footprint for Cells 8, 9 and 10 already under the Refuse Disposal Permit Number 86-02-04-06A.
5	Cell 9 configuration and size is modified relative to Alternative 4 to minimize wetlands impacts, but Cell 8 maintains the size and shape as per Alternative 4.
6	Configuration and size of Cells 8 and 9 are maintained to match Alternative 4, but reinforced soil walls are installed along portions of the perimeter berms.

Alternative 6 was the recommended as it "meets both objectives of minimizing wetland impacts and retaining maximum public benefits."

Wetlands Alternatives for Construction of Cells 8 and 9, Millersville Sanitary Landfill, Supplemental Joint Federal/State Application for Alteration of Any Floodplain, Waterway, Tidal or Non-Tidal Wetland in Maryland, by GeoSyntec Consultants and Hogan Environmental Consultants, April 1991.

This report indicates that avoidance, minimization and compensatory mitigation alternatives were considered, and ultimately 1.8 acres of wetlands will be impacted. Ten (1) alternatives, designated as Alternative A to J were considered as listed on Table 2 below:

Table 2. Alternatives Analysis from April 1994 Report

Alternatives Considered	Description
A	Conversion of Pond 8-1 to infiltration basin
B	Construction of infiltration trenches near Cell 9
C	Environmentally sensitive stream crossing structures between Cells 8 and 9
D	Use of BMPs in Pond 9-2 to attenuate potential temperature impacts to Wells Branch and to maximize potential infiltration through the pond bottom
E	Establishment of a conservation easement in Wells Branch
F	Establishment of a conservation easement in the Jabez Branch watershed
G	Reforestation of the MLF site
H	Removal of MSW from Cell 3 and construction of an infiltration basin in the location of Cell 3
I	Either the creation of forested and scrub-shrub wetlands or stream restoration in Jabez Branch
J	Utilization of a portion of the former Denton property for conservation easement

The final report recommended that all ten alternatives be implemented and "that the mitigation project has a high likelihood of success for replacing the function benefits lost in the filling of 1.8 acre of wetland in the Cell 9 area."

CELL 9 CONFIGURATION

The Cell 9 waste footprint (limits of waste only) covers a total area of 84 acres. It is planned to construct and fill Cell 9 in separate 14 to 15 acre subcells moving from east (Subcell 9.1) to west (Subcell 9.5). The waste disposal footprint, side slopes, final elevation, bottom and final cover systems that were permitted in 1994 have been retained in the current design. Relatively minor design revisions were necessary to update the design to current industry standards, but these changes were consistent with permit and regulatory requirements and have been discussed with MDE.

The Cell 9 limits and overall configuration have not been significantly altered since the 1994 permit issuance; the only changes have been to update the design to current standards and incorporate the additional detail required for a construction level design. However, two relatively small changes to the amount of wetland disturbance have taken place.

First, a more recent wetlands delineation in 2012 identified 0.13 acres of PFO wetlands not previously identified in the 1991 delineation. The 2012 wetland delineation submittal was provided to the Corps of Engineers and confirmed on April 23, 2013 by Richard Kirby (#1013-00773-M18).

Second, the original design for Cell 9 included a total of 1.8 acres of wetland disturbance. This area of disturbance factored in a mechanically stabilized earthen (MSE) wall proposed under Alternative 6. However, due to design and construction considerations for Subcell 9.1, the MSE wall was replaced with a simple earthen slope. This change increased the area of wetland impact for Subcell 9.1 by 0.11 acres for a total of 0.23 acres.

SUMMARY

In summary, from 1991 to the present time, the County has commissioned several wetland impact and landfill design studies regarding the configuration, construction and operations for Cell 9. Minimizing wetland impacts and at the same time providing an environmentally protective waste disposal facility to manage the County waste were of the highest priority.

Previously permitted impacts were mitigated through a variety of approved methods. The additional proposed impacts as part of this Cell 9 permit application are being mitigated for

onsite as part of the Wells Branch Stream Restoration and Wetland Creation project that is currently under review by MDE.

Attachments:

Appendix A: Alternatives Evaluation, Millersville Sanitary Landfill, Anne Arundel County, Maryland By Greenhorne & O'Mara, GBB and GeoSyntec Consultants, August 1994

Appendix B: Wetlands Alternatives for Construction of Cells 8 and 9, Millersville Sanitary Landfill, Supplemental Joint Federal/State Application for Alteration of Any Floodplain, Waterway, Tidal or Non-Tidal Wetland in Maryland, By GeoSyntec Consultants and Hogan Environmental Consultants, April 1991

APPENDIX A

Alternatives Evaluation, Millersville Sanitary Landfill, Anne Arundel County, Maryland

By

Greenhorne & O'Mara, GBB

and

GeoSyntec Consultants,

August 1994

PHASE III PERMIT APPLICATION

MILLERSVILLE SANITARY LANDFILL
ANNE ARUNDEL COUNTY, MARYLAND

VOLUME 3

Submitted to

Secretary of the Environment
Department of the Environment
Bureau of Solid Waste
2500 Broening Highway
Baltimore, Maryland 21224

Submitted by

Anne Arundel County
Department of Public Works
Bureau of Waste Management Services
2662 Riva Road
Annapolis, Maryland 21141

Prepared by

GeoSyntec Consultants
5950 Symphony Woods Road, Suite 510
Columbia, Maryland 21044

April 1994

APPENDIX L

WETLANDS MITIGATION PROJECT

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS
2662 Riva Road
Annapolis, Maryland 21401

WETLAND ALTERNATIVES FOR CONSTRUCTION OF CELLS 8 AND 9 MILLERSVILLE SANITARY LANDFILL

SUPPLEMENTAL JOINT FEDERAL/STATE APPLICATION FOR ALTERATION OF ANY FLOODPLAIN, WATERWAY, TIDAL OR NON-TIDAL WETLAND IN MARYLAND

VOLUME I OF II

Project Number: N-3697
Contract Number: 5321-N
CWA Permit Number: 90-01846-5

Prepared by

GeoSyntec Consultants
5775 Peachtree Dunwoody Road
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109 Worcester Road
Stevensville, Maryland 21666

April 1994

EXECUTIVE SUMMARY

Anne Arundel County (AAC) is in the process of obtaining a Phase III permit to operate the Millersville Sanitary Landfill. As part of the permitting process, it was determined that approximately 1.8 acres of wetlands will be impacted by construction of Cell 9. Impacts to wetlands as a result of construction of Cell 8 have been completely avoided. This report has been prepared to evaluate the minimization and mitigation alternatives for the impact to wetlands during construction of Cell 9.

Section 404 of the Clean Water Act requires that all adverse impacts be evaluated before dredged or fill materials can be discharged into waters of the United States (U.S.), including wetlands. Direct disposal of such materials may destroy or significantly alter natural habitats and decrease the diversity of plant and animal species found in those waters. The decision whether to issue a U.S. Army Corps of Engineers (Corps) permit for placement of fill material in wetlands is based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use in the public interest. In addition, the sequencing of mitigation strategies described below is to be followed.

- **Avoidance.** A Corps permit is to be issued only for the least environmental damaging practicable alternative. No discharge is to be permitted if there is a practicable alternative to the proposed discharge which would have less impact to the aquatic ecosystem, so long as the alternative does not have other significant environmental consequences. Compensatory mitigation may not be used as a method to reduce environmental impacts related to the evaluation of the least damaging alternative.

- **Minimization.** Appropriate and practicable steps to minimize the adverse impacts are required through project modifications and permit conditions.

- **Compensatory Mitigation.** Appropriate and practicable compensatory mitigation is required for unavoidable adverse impacts which remain after all appropriate and practicable minimization has been required. In determining compensatory mitigation, the functional values lost by the resource to be impacted must be considered. Generally, in-kind mitigation is preferable to out-of-kind mitigation. The likelihood of success of the mitigation project must also be considered.

AAC has fully complied with the mitigation sequencing process described above. This report describes the avoidance, minimization, and compensatory mitigation program followed by AAC during the permitting process. The program consists of ten alternatives each comprising one of the following three categories: (i) minimization alternatives; (ii) alternatives for mitigation of direct impacts to wetlands; and (iii) alternatives for mitigation of indirect impacts to wetlands. The ten alternatives considered in this report are:

- *Alternative A:* Alternative A is the conversion of Pond 8-1 to an infiltration basin.

- *Alternative B:* Alternative B consists of the construction of infiltration trenches near Cell 9.

- *Alternative C:* Alternative C involves the use of an environmentally sensitive stream crossing structure between Cells 8 and 9.

- *Alternative D:* Alternative D is the use of best management practices (BMP) in Pond 9-2 to attenuate potential temperature impacts to Wells Branch and to maximize potential infiltration through the pond bottom.

- *Alternative E:* Alternative E consists of the establishment of a conservation easement in Wells Branch.

- *Alternative F:* Alternative F consists of the establishment of a conservation easement in the Jabez Branch watershed.

- *Alternative G:* Alternative G involves reforestation of the MLF site.

- *Alternative H:* Alternative H is the removal of MSW from Cell 3 and the construction of an infiltration basin in the location of Cell 3.

- *Alternative I:* Alternative I consists of either the creation of forested and scrub-shrub wetlands or stream restoration in Jabez Branch.

- *Alternative J:* Alternative J consists of the utilization of a portion of the former Denton property for a conservation easement.

It is anticipated based on existing surface and subsurface data that hydrologic and hydrogeologic conditions are favorable for all of the mitigation alternatives. Based on the hydrologic/hydrogeologic and environmental benefits, cost, and the schedule for implementation, all ten alternatives should be implemented. Upon implementation of these alternatives, the mitigation project has a high likelihood of success in replacing the functional benefits lost in the filling of wetlands in the Cell 9 area.

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1. INTRODUCTION

1.1 Terms of Reference

This report was prepared for the Anne Arundel County (AAC) Department of Public Works by GeoSyntec Consultants (GeoSyntec) and Hogan Environmental Consultants (HEC). The report was prepared by Mr. Harold E. Gill, P.G., Dr. Makram Jaber, P.E., Ms. Molly Davis of GeoSyntec, in association with Mr. Theodore Hogan of HEC, and it was reviewed by Mr. Steven Shugart, P.G., of GeoSyntec and Mr. Richard Parks, P.E., of AAC.

1.2 Overview of the Permitting Process

Section 404 of the Clean Water Act requires that all adverse environmental impacts be evaluated before dredged or fill material can be discharged into waters of the United States (U.S.), including wetlands. Direct disposal of dredged or fill materials into waters of the U.S. may destroy or significantly alter natural habitats and decrease the diversity of plant and animal species found in those waters. The decision whether to issue a U.S. Army Corps of Engineers (Corps) permit for excavation, or filling, of waters of the U.S., is based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use in the public interest. All factors which may be relevant to the proposal must be considered, including conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water temperature impacts, energy needs, safety, food and fiber production, mineral needs, consideration of property ownership, and, in general, the needs and welfare of the people. A permit application must comply with the 404(b)(1) Guidelines (Guidelines) issued by the U.S. Environmental Protection Agency (USEPA).

On 7 February 1990, a Memorandum of Agreement (MOA) between the Corps and the USEPA became effective. The MOA clarifies the procedures to be used in determining the type and level of mitigation necessary to demonstrate compliance with the Guidelines. In determining appropriate and practicable measures to offset unavoidable impacts, such measures should be appropriate to the scope and degree of those impacts and practicable in terms of cost, existing technology, and logistics in light of overall project purposes. The Corps is to give full consideration to the views of the resource agencies when making this determination.

The sequencing of mitigation strategies described below is to be followed in carrying out the intent of the MOA.

- **Avoidance.** A Corps permit is to be issued only for the least environmental damaging practicable alternative. No discharge is to be permitted if there is a practicable alternative to the proposed discharge which would have less impact to the aquatic ecosystem, so long as the alternative does not have other significant environmental consequences. Compensatory mitigation may not be used as a method to reduce environmental impacts related to the evaluation of the least damaging alternative.

- **Minimization.** Appropriate and practicable steps to minimize the adverse impacts are required through project modifications and permit conditions.

- **Compensatory Mitigation.** Appropriate and practicable compensatory mitigation is required for unavoidable adverse impacts which remain after all appropriate and practicable minimization has been required. In determining compensatory mitigation, the functional values lost by the resource to be impacted must be considered. Generally, in-kind mitigation is preferable to out-of-kind mitigation. The likelihood of success of the mitigation project must also be considered.

This report demonstrates that AAC has fully complied with the mitigation sequencing process described above. The report describes the avoidance, minimization, and compensatory mitigation program followed by AAC during this permitting process.

1.3 Purpose of the Report

The purpose of this report is to present the results of an evaluation of the various alternatives for the avoidance, minimization, and mitigation of wetland alterations associated with the construction of Cell 8 and Cell 9 at the Millersville Sanitary Landfill (MLF). The report describes the wetlands that exist on the MLF property and the impacts to wetlands as a result of construction of Cells 8 and 9. The report presents a program developed for wetland avoidance, minimization, and compensatory mitigation at the MLF site, and the mitigation alternatives contained in the wetlands program. This report will be submitted to the following regulatory agencies:

- U.S. Army Corps of Engineers (Corps);
- U.S. Environmental Protection Agency (USEPA);
- U.S. Fish and Wildlife Service (USFWS);
- National Marine Fisheries Service (NMFS);
- Maryland Department of Natural Resources (DNR); and
- Maryland Department of the Environment (MDE).

Authorization to proceed with the alteration of the wetlands associated with the construction of Cell 9 is contingent upon acceptance of AAC's mitigation proposal by the above agencies. Wetland impacts

resulting from construction of Cell 8 have been totally avoided and will be discussed herein.

As stated previously, a Corps permit is required for the placement of dredged or fill material in waters of the United States. Waters of the United States include wetlands and water bodies such as streams, rivers, and lakes, including intermittent streams. Normally, a Maryland Nontidal Wetlands Permit (i.e., State permit) is also required for impacts to nontidal wetlands. In the case of this project, however, the application for a Corps permit predates the requirement for obtaining a State permit, and therefore the impacts resulting from Cell 9 are grandfathered from the Nontidal Wetlands Protection Act.

As part of the Federal permit process, a Coastal Zone Consistency Determination from the Maryland DNR and a Water Quality Certification from the MDE are also required. AAC has worked closely with the Corps and Maryland DNR to develop the wetlands mitigation requirements for the MLF project. AAC has also addressed water temperature impacts issues as related to stormwater management for Cells 8 and 9.

In addition to the Maryland DNR and MDE, the USEPA, USFWS, and NMFS will all submit comments to the Corps through the permit process. The Corps has advised AAC that the wetland impacts for Cell 9 qualify for processing under Nationwide Permit 26 (Corps permit). The Federal and State reviewing agencies will submit comments to the Corps after the Corps issues a Predischarge Notification. The coordination conducted with Maryland DNR and the Corps to date, culminating in this report, is intended to facilitate issuance of the Corps permit. This report demonstrates that wetland impacts have been avoided to the extent practicable, that wetland impacts will be minimized by design modifications, and that compensatory mitigation will be adequately provided for unavoidable impacts to wetlands.

In addition to the agencies listed above, the mitigation proposal will also be presented to the MLF Citizens Advisory Committee. Each of

the preceding organizations has been involved, in varying degrees, in the Joint Federal/State Permit Application process.

1.4 Contents of Report

The report is organized as indicated below.

- Background Information (Section 2).
- Avoidable and Unavoidable Wetland Impacts at the MLF Site (Section 3).
- Formulation of Minimization and Mitigation Alternatives (Section 4).
- Alternatives for Minimization of Impacts to Wetlands (Section 5);
- Alternatives for Mitigation of Direct Impacts to Wetlands (Section 6);
- Alternatives for Mitigation of Indirect Impacts to Wetlands (Section 7);
- Summary and Recommendations (Section 8).
- References (Section 9).

2. BACKGROUND INFORMATION

2.1 Site Location, Description, and Development Plan

The MLF site is located about 1 mile due east of Fort George G. Meade and approximately 1 mile northwest of Millersville in northern Anne Arundel County, Maryland (see Figure 1). The site is located in the Odenton Quadrangle of the United States Geological Survey (USGS) 7.5 minute map at a latitude of approximately N39°5'30" and a longitude of approximately E76°40'00". The site occupies approximately 567 acres.

The MLF site (see Figure 2) is divided into two sections by a 120-ft wide Baltimore Gas and Electric (BG&E) right-of-way that is oriented generally west to east across the northern third of the site. The cells north of the right-of-way have been filled and are scheduled to be capped in accordance with Annotated Code of Maryland, Title 26, Department of the Environment, Subtitle 04, Regulation of Water Supply, Sewage Disposal, and Solid Waste, Chapter 07 Solid Waste Management, Section 21 Sanitary Landfills - Closure (COMAR 26.04.07.21), and as required by the Complaint and Order issued by MDE in April 1992. The specifics regarding the proposed closure of Cells 1 through 4 are described in the closure and remedial action plan (CAPRAP) [GeoSyntec, 1992a].

The middle portion of the site contains Cells 5, 6, 7, and 8. Cells 5, 6, and 7 have been combined into a single cell (i.e., Cell 567), filled, and will be capped by 1997 in accordance with the Cell 567 closure plan [GeoSyntec, 1993].

Cell 8 is currently being used for landfilling activities. It is projected that Cell 8 will be filled by 1999. Cell 8 is being constructed and operated, and will be closed in accordance with Title 40 Code of Federal Regulations (40 CFR) Part 258 (i.e., Subtitle D) [GeoSyntec, 1992b].

The southern third of the site, south of Wells Branch, is undeveloped and either densely wooded or covered with heavy brush. Cell 9 will be constructed in this area of the site. Soil stockpiling activities (see Figure 3) in Cell 9 are anticipated to begin in 1995. Actual landfilling operations are not expected to begin in Cell 9 until 1999.

Elevations at the site range from a low of about 80 ft above mean sea level (MSL) datum at the eastern site boundary along the intermittent stream banks, to a high of just over 240 ft above MSL datum at the southern and western site boundaries.

2.2 Hydrology and Hydrogeology Setting

2.2.1 Site Hydrology

An intermittent stream, Wells Branch, flows across the site, generally from west to east, becoming perennial at the eastern site boundary (see Figure 2). At the MLF site, surface-water flow into Wells Branch is from storm-water runoff from undeveloped areas, wetland seeps (i.e., areas where ground water discharges at the ground surface), and outfalls from sediment basins, ponds, and traps. From the property boundary, Wells Branch continues to flow to the east until merging with the Severn Run, which, in turn, flows into the Severn River. Severn Run is a Maryland Class IV waterway (Recreational Trout Waters) and is the primary source of fresh water to Severn River, a tidal tributary of the Chesapeake Bay. Severn Run is stocked annually with trout for recreational fishing and supports anadromous spawning activities [Massicot, September 1992]. The Severn River is designated as a state scenic river.

Wells Branch is a small headwater stream to the Severn Run. Aquatic biota in headwater streams are important to the overall stream ecosystem. The biota serve as processors of the organic matter in the watershed (e.g., leaves, twigs, and other organic matter present in wetlands) which

provides the basis of the energy and food supply for the higher order downgradient streams (i.e., production export).

2.2.2 Site Hydrogeology

The site geology and hydrogeology are discussed in detail in several reports prepared by GeoSyntec [GeoSyntec, 1990, 1992a] and are summarized herein. The MLF site is underlain by unconsolidated sediments, consisting of stratified layers of sand, gravel, silt, and clay overlying consolidated crystalline basement rocks. Four water-bearing zones, Zone 1 through Zone 4, have been identified in the upper 300 ft of the unconsolidated sediments at the site. Potentiometric surface maps developed for the four zones were presented in a report by GeoSyntec [1992c]. Ground-water monitoring wells or piezometers have been installed within each water-bearing zone in the subsurface beneath the MLF. The water-bearing zones in the vicinity of Cells 8 and 9 are illustrated on Figures 4 and 5 and are generally described as follows:

- In the uppermost zone (i.e., Zone 1) ground water is unconfined in primarily fluvial sands and perched on the upper confining layer. The areal extent of Zone 1 is restricted to the southern and southwestern boundaries of the site, north of Dicus Mill Road, and along Burns Crossing Road, respectively.

- The second water bearing zone (i.e., Zone 2) occurs in a series of disconnected shallow sand zones within the upper confining layer at the site. In the southern part of the site, Zone 2 may be either unconfined or confined, and is recharged directly from the overlying perched aquifer (i.e., Zone 1).

- The third water-bearing zone (i.e., Zone 3) is a deep sand zone within the upper confining layer that may be either semi-confined or confined across the site. Zone 3 is used as a residential water supply by some of the homes within 0.5-mile

of the site. This zone may be recharged by leakage from the overlying zones (i.e., Zones 1 and 2).

- The fourth water-bearing zone, the Patapsco aquifer, (i.e., Zone 4) is the major ground-water aquifer in the vicinity of the MLF. This aquifer is confined at MLF by a basal clay unit in the upper confining layer.

2.3 Existing Wetlands

The construction of Cell 9 will result in the filling of 1.8 acres of palustrine forested wetlands. The wetlands at the MLF site were delineated by Greenhorne & O'Mara, Inc. (Greenhorne & O'Mara) in December 1990 and are shown on Figure 2. The report describing the existing wetlands is included in Appendix A to this report.

The wetlands in the vicinity of Cells 8 and 9 are in the floodplain and ground-water seep areas of Wells Branch. Dominant overstory species include Red Maple (*Acer rubrum*), Sweetgum (*Liquidambar styraciflua*), and Black Willow (*Salix nigra*). Dominant shrub species include Spicebush (*Lindera benzoin*), Sweet Pepperbush (*Clethra alnifolia*), Black Gum (*Nyssa sylvatica*), Highbush Blueberry (*Vaccinium corymbosum*), and Sweetbay Magnolia (*Magnolia virginiana*). Dominant woody vines and herbaceous species include Sensitive Fern (*Onoclea sensibilis*), Japanese Honeysuckle (*Lonicera japonica*), False Nettle (*Boehmeria cylindrica*), Greenbrier (*Smilax rotundifolia*),and blackberry (*Rubus allegheniensis*). A complete list of the wetland species found at the site is included in Appendix A. According to the Cowardin Classification System these wetlands are classified as palustrine forested with broad-leaved, deciduous vegetation and a temporary water regime (PFOIA). In the western portion of the site the wetlands are confined to a channel and are classified as riverine perennial streambed with a mud bottom (R4SB3).

A Wetland Evaluation Technique (WET) function and value assessment was performed on the existing wetlands in the vicinity of Cells 8 and 9. The results of this assessment are presented in Appendix A. A summary of function benefits of the existing wetlands is presented in Table 1. The physical and biological nature of the wetlands and the wetland location in the landscape are important factors used in the WET program for assigning assessment ratings. Although low probability ratings were assigned for effectiveness of the wetlands in providing most functions, WET did assign high probability ratings for floodflow alteration and sediment stabilization. The ratings imply that there exists a high probability that the wetlands near Cells 8 and 9 perform these functions and this value would be loss in the development of Cell 9. High ratings for floodflow alteration and sediment stabilization are representative of floodplain wetlands, because the wetlands provide storage of flood waters (floodflow) and bind sediment (sediment stabilization) that enters the floodplain during storm events. The sediment stabilization function reduces the sediment load carried in the stormwater runoff. The rating of these functions are important for evaluating the likely success of wetland minimization and mitigation alternatives.

2.4 Chronology of Site Development Activity to Date

AAC began landfilling operations at MLF in January 1975. The initial site development plan was prepared by Century Engineering [1974] and included ten distinct landfill cells numbered sequentially from Cell 1 to Cell 10. This plan located Cells 1 through 4 in the northern third of the site (i.e., north of the BG&E right-of-way), Cells 5 through 8 in the middle of the site, and Cells 9 and 10 in the southern third of the site.

During the period from January 1975 to the present, landfilling operations have been accomplished as follows:

- Cell 1 began receiving municipal solid waste (MSW) in January 1975 and the cell was completed in 1977;

- Cell 2 began receiving MSW in 1977 and the cell was completed in 1979;

- Cell 3 began receiving MSW in 1979 and the cell was completed in 1979;

- Cell 4 began receiving MSW in 1979 and the cell was completed in 1981;

- Cells 5, 6, and 7 began receiving MSW in 1981 and filling of the individual cells was completed in mid-1989;

- the areas between Cells 5, 6, and 7 began receiving MSW in 1989 and the combined cell (i.e., Cell 567) was completed in 1992; and

- Cell 8 began receiving MSW in October 1992 and the entire cell is estimated to have a projected life expectancy of about seven years. (NOTE: The life expectancy of Cell 8 is based on an estimated filling rate. This rate may change and Cell 8 could be filled either more quickly or more slowly.)

During the period from 1989 through 1992, GeoSyntec prepared waste disposal permit applications and construction documents for the MLF site [GeoSyntec, 1989a, 1989b, 1990a, 1990b, 1991, and 1992b]. The waste disposal permit applications included Phase II and Phase III reports. A Phase II consists of a geologic and hydrogeologic report, and a conceptual design of the proposed landfill, including the conceptual liner system design. A Phase III consists of a design report and design drawings that present the proposed design for the landfill facility.

The waste disposal permit application documents [GeoSyntec, 1989a and 1991] present a modified site development plan and a modified landfill design that incorporates changes to the original site development plan prepared by Century Engineering [1974] as indicated below.

- The original Century Engineering Cells 9 and 10 are combined into a single cell designated as Cell 9.
- A double-liner system and a geomembrane cover system are incorporated into the design of Cells 8 and 9.
- Cells 5, 6, and 7 are combined into a single cell.
- A geomembrane cover system is incorporated in the closure plan for combined Cells 567.

The Phase II and Phase III waste disposal permit applications have been reviewed and accepted by MDE. However, before the permitting process can continue (i.e., through the public hearing and issuance of a refuse disposal permit), MDE's Waste Management Administration is awaiting confirmation that a Corps permit will be issued for the construction of Cell 9.

In April 1992, AAC was ordered by MDE to start construction of a portion of Cell 8 with the double-liner system. At the present time, AAC is disposing MSW in Subcell 8.1, 8.2, and 8.4 of Cell 8. Subcell 8.3 has been completed and is ready to receive waste upon approval from the MDE. A master schedule illustrating AAC's planned activities for the MLF site is included in Appendix B.

2.5 Cell 9 Construction

As currently planned, Cell 9 is scheduled to begin receiving MSW in 1999. Filling of the subcells is planned from east to west (i.e., Subcell 9.1 to 9.11). During construction of some of the subcells in Cell 9, approximately 1.8 acres of wetlands will be filled. Because of this filling, ten minimization and mitigation alternatives were developed and are described in the report.

The liner for Subcell 9.1 will need to be under construction in 1998 for Subcell 9.1 to be ready for disposal of MSW in 1999. Cell 9 is estimated to have a projected life expectancy of 15 years and will be capped at the end of its useful life.

Prior to the actual landfilling operations in Cell 9, AAC intends to remove soil and construct a soil stockpile area in Subcells 9.4 through 9.6 (see Figure 3). The materials stockpiled therein (i.e., clay, clayey sand, silty sand, and top soil) will be utilized in the liner construction of Subcells 8.5 through 8.8, as daily cover in Subcells 8.1 through 8.8, and as final cover for Cells 1 through 8. Final access to Cell 9 from Cell 8 will be a road over a stream crossing (see Figure 3). The stream crossing will be designed to minimize impacts to wildlife and aquatic species in Wells Branch.

The soil types and quantities available in the Cell 9 area are an important asset. In particular, the clay material which will be used in the construction of the liner for Subcells 8.5 through 8.8 represents a readily available and inexpensive resource. For example, approximately 66,000 yd^3 of clay is needed for Subcells 8.5 through 8.8. The unit cost of trucking in this type material from off-site ranges between \$8.00/yd^3 to \$14.00/yd^3. Utilizing a unit cost of \$8.00/yd^3 and the Cell 8 quantity of 66,000 yd^3, it is estimated that a minimum cost of at least \$528,000 can be avoided. There are, of course, similar avoidable costs associated with the silty sand and top soil resources available from the Cell 9 area.

The clay for Subcells 8.5 through 8.8 will need to be stockpiled no later than the last quarter of 1995 in order to commence liner construction in Subcell 8.5 in mid-1995. Therefore, it will be necessary to disturb some wetlands before construction of the liner in Subcell 9.1 commences in 1998.

3. AVOIDABLE AND UNAVOIDABLE WETLAND IMPACTS AT THE MLF SITE

3.1 Overview

This section of the report discusses avoidable and unavoidable impacts to wetlands at the MLF site as a result of construction of Cells 8 and 9. Section 3.2 discusses avoidable impacts to wetlands and includes a discussion of the no-build alternative. Two types of unavoidable wetland impacts are described in this section of the report: (i) direct impacts (Section 3.3); and (ii) indirect impacts (Section 3.4). Direct impacts to wetlands include the excavation, or filling, of existing wetlands. Indirect impacts to wetlands are secondary impacts that occur as result of filling of wetlands (e.g., impacts on site hydrology, reduction in base flow support, etc.).

3.2 Avoidance of Wetlands Impacts

The original design for Cells 1 through 10 at the MLF site was performed by Century Engineering [1974] and was accomplished in a time period when nontidal wetland impacts were not thoroughly evaluated. After completing a wetlands delineation for the site in association with a proposed site re-design effort, it was learned that as originally designed, the proposed landfill footprint would impact approximately 8 acres of wetlands on the MLF site. Greenhorne & O'Mara and GeoSyntec performed an alternatives evaluation that reduced the impacts as much as practicable, based on design criteria available at that time [Appendix C, Greenhorne and O'Mara and GeoSyntec, August 1991].

On behalf of AAC, Greenhorne & O'Mara and GeoSyntec evaluated seven alternatives to avoid and minimize impacts to wetlands on the site, including a no-build alternative. The no-build alternative for Cells 8 and 9 was not considered feasible for the following reasons: (i) once the remaining active cells at the landfill are filled, there would be no

public facility available for disposal of the solid waste generated by the residents of AAC; and (ii) an undue economic and environmental burden on the residents and government of AAC would occur if the landfill closed and an alternate site was not available within the County.

After a thorough evaluation of the alternatives available, AAC requested that GeoSyntec re-design Cell 8 to totally avoid impacts to wetlands and re-design Cell 9 to minimize the area of wetlands impacted (see Alternative 6A in Appendix C). The re-design concept utilized reinforced soil walls in wetland areas for stabilizing the landfill toe as compared to an embankment with side slopes of 3 horizontal:1 vertical (3H:1V). The reinforced soil walls added over $1,000,000 to the construction cost of the project. The area of wetlands impacted by the re-design of Cells 8 and 9 was reduced from approximately 8 acres to 1.8 acres. It was impossible to avoid all impact to wetlands in designing Cell 9 and still maintain the economic value of the cell.

3.3 Unavoidable Direct Wetland Impacts

Construction of Cell 9 requires the filling of 1.8 acres of palustrine forested wetlands (see Figure 2). Most of the wetlands impact involves the filling of swales that flow into the headwaters of Wells Branch. Ground-water discharge into these swales, or wetland seeps, provides the hydrology to support these wetlands.

Generally, the Corps requires replacement of wetlands on a 2:1 basis. Therefore, as development of Cell 9 will result in the filling of 1.8 acres of wetlands, 3.6 acres of wetlands would normally be developed. In consideration of the functional volume of the lost wetlands, AAC has developed a comprehensive program for minimizing and mitigating wetland impacts. This program consists of ten alternatives. One of the alternatives presented in this report includes the option of either creating new wetlands (i.e., in-kind mitigation alternative) or a stream restoration alternative. AAC prefers the latter alternative as it

provides greater benefits to the overall ecosystem of Severn Run. This alternative is discussed in more detail in Section 7 of this report.

3.4 Unavoidable Indirect Wetland Impacts

Indirect wetland impacts are those impacts that relate to the hydrology of Wells Branch. The loss of wetlands results in a reduction of base flow support to Wells Branch, and other function benefits provided by wetlands including reduction in floodflow alternation, sediment stabilization, sediment/toxicant retention, and production export. To compensate for the lost benefits, infiltration basins and trenches are proposed in several locations at the site where ground water discharge is an important contributor to base flow in Wells Branch.

4. FORMULATION OF MINIMIZATION AND MITIGATION ALTERNATIVES

4.1 Overview

This section of the report discusses the formulation of minimization and mitigation alternatives for Cell 9. Ten alternatives are identified in this report and are separated into the following three categories: (i) minimization alternatives; (ii) alternatives for mitigation of direct impacts; and (iii) alternatives for mitigation of indirect impacts. The ten alternatives considered in this report provide enhancement, restoration, creation, and preservation of wetlands and are as follows:

- Alternative A - converting stormwater management Pond 8-1 to an infiltration basin;
- Alternative B - constructing infiltration trenches adjacent to Cell 9;
- Alternative C - using an environmentally sensitive stream crossing between Cell 8 and Cell 9;
- Alternative D - using best management practices (BMP) associated with Pond 9-2 to maximize infiltration and to minimize adverse impacts;
- Alternative E - dedication of a conservation easement in Wells Branch adjacent to the site;
- Alternative F - dedication of a conservation easement in Jabez Branch;
- Alternative G - reforestation of the MLF site to the maximum extent practicable;

- Alternative H - removal of Cell 3 and construction of an infiltration basin in its location;

- Alternative I - either creation of wetlands on the Devonshire Site (in-kind mitigation alternative) or restoration of a portion of Jabez Branch; and

- Alternative J - dedication of the former Denton property as a conservation easement.

Figure 6 shows the location of some of these alternatives. Table 2 identifies the wetland function benefits that can be replaced with each alternative. Although the primary functions of the lost wetlands in the Cell 9 area are floodflow alteration and base flow support to Wells Branch, the wetlands have other functions including: sediment stabilization (binding soils); sediment/toxicant retention (trapping soil and other pollutants); production export; wildlife habitat; and fisheries habitat. The objective of the ten alternatives presented above is to replace one or more of these functions. The costs associated with each alternative is presented in Table 3. The total cost of implementing all ten alternatives in 1993 dollars is in excess of $1.5 million.

4.2 Minimization of Wetland Impacts

Minimization alternatives are associated with minimizing potential impacts to wetlands through project modification and permit conditions. In addition to the efforts made by AAC to minimize impacts to wetlands on site by re-designing Cells 8 and 9 to incorporate reinforced soils, Alternatives A through D have been developed that further minimize potential impacts to wetlands. These alternatives minimize wetlands impacts by replacing the enhancement and preservation benefits of the lost wetlands. Alternatives A through D are described in detail in Section 5 of this report.

4.3 Mitigation of Wetland Impacts

4.3.1 Overview

Mitigation alternatives are compensatory alternatives for unavoidable adverse impacts to wetlands which remain after all appropriate and practical minimization efforts have been exhausted. In determining compensatory mitigation, the functional values lost by the wetlands must be considered. As discussed in Section 2.3, floodflow alternation and sediment stabilization are the primary functional values lost due to the filling of wetlands in the Cell 9 area. Generally, in-kind mitigation is preferable to out-of-kind mitigation.

4.3.2 Search for In-Kind Mitigation Alternatives

The search for in-kind mitigation sites within the Severn Run watershed was conducted on two occasions. The first search was conducted as part of the wetland alternatives report prepared by Greenhorne & O'Mara and GeoSyntec [August, 1991]. The primary basis of this search was a wetlands mitigation site search conducted by the Maryland State Highway Administration (SHA). The second search was conducted in 1994 by HEC on behalf of AAC and involved a review of aerial photography for the Severn Run watershed and site visits. The locations of the potential in-kind mitigation sites concluded from the two searches are shown on Figure 7. A summary of the two search follows; more detailed information on the site searches is provided in Appendix D.

SHA Search

The SHA conducted a search for wetland mitigation sites within the Severn River watershed and the South River watershed. In an undated report entitled "*Mitigation Areas Search for the South River and Severn*

River Watershed", SHA lists 166 sites that were initially considered potentially feasible as mitigation sites within the Severn River watershed. SHA's search reduced the 166 sites initially considered to five sites which were considered acceptable in varying degrees. The five sites are shown on Figure 7 and are described below.

- Site No. 1 is a small farm pond and adjacent agricultural field. The site is located on a ridge adjacent to the Severn Run floodplain. Any wetland creation attempted at Site No. 1 would not be directly connected to existing wetlands or streams. It does not appear that adequate hydrology could be provided at this site.

- Site No. 2 is located off Old Oak Road, and is the Chesapeake Baptist Church wetland mitigation project recently completed by SHA. It does not appear that any additional area for mitigation exists at this site.

- Site No. 3 is located in the vicinity of Site No. 2 on both sides of Teppers Road. This potential mitigation site is located in and adjacent to a swale that courses through agricultural fields. Wetland creation at the site would involve removal of soil adjacent to, and approximately to, the same elevation as the swale. Hydrology would be provided primarily by agricultural runoff and to an undetermined extent, by ground water. Hydrophytic vegetation in the swale downstream from Teppers Road suggests seasonal saturation which may be a function of high ground-water conditions. It appears that at least three acres, but no more than 3.5 acres of mitigation could be constructed downstream of the road, and that approximately 1.2 acres could be constructed upstream of the road (this assumes a 350-ft long by 150-ft wide wetland buffer would be constructed).

The extent of excavation required to provide adequate hydrology would vary, but should not exceed five feet. An average of 3.5 ft is likely. This project would provide a buffer to direct agricultural runoff, thereby improving water temperature impacts in Severn Run. Additional study of the site, including test borings and monitoring wells, would be required to determine the water budget available. The owner of the property that includes the potential mitigation area is unwilling to sell the property or easement required to implement this alternative.

- Site No. 4 is located in the community of Devonshire near the Millersville Elementary School. It is a relatively flat area previously excavated for construction of a dry stormwater management facility. The site is owned and maintained by AAC. The site is vegetated primarily with herbaceous species, but areas of the site contain sparse stands of virginia pine, red maple, and sweet gum. Two narrow swales were constructed to convey runoff from the cul-de-sac at the end of Isabella Court and from a riprap outfall located approximately 160 ft upstream from the cul-de-sac. These swales contain herbaceous and woody wetland species including common cattail, soft rush, willow (as shrubs), sweet gum (as shrubs), foxtail, and tickseed sunflower.

  Wetland mitigation has been performed on a portion of the site. Plans approved on 1 May 1992, including an "As-Built" date of 22 July 1993, depict a wetlands construction project within the existing split rail fence. Three areas designated as upland plantings are also shown outside the fence. Seasonal flooding occurs within the fenced area. The concrete weir shown on the plans has been installed. The purpose of the weir is to pond runoff to provide wetland hydrology within the mitigation area. This site appears suitable for wetland creation.

- Site No. 5 is an agricultural field separated from Site No. 4 by a hedgerow. Site No. 5 is approximately five ft higher in elevation than Site No. 4 and would require an excessive amount of excavation to produce wetland hydrology.

AAC Search

Not knowing the exact source of information used by SHA in its search for mitigation sites, or SHA's requirements for selecting potential mitigation sites, AAC conducted an independent search in 1994 to determine whether any additional sites within the Severn Run watershed might be suitable for wetland creation. The AAC search consisted of reviewing color infrared, and black and white, aerial photography available at AAC's Planning and Code Enforcement (PACE) office in Annapolis, Maryland. Sites that were non-wooded, met the basic size requirement, and were adjacent to existing streams were considered potential mitigation sites. Five sites met the prescribed requirements and are shown on Figure 6 as Site Nos. 6 through 10. The following is an evaluation of the five sites.

- Site No. 6 is an agricultural field located at the intersection of Maryland Route 175 and Gambrills Road. The area is about 13 acres in size, was cultivated in corn during the last growing season, and appeared wet on the aerial photography. The area is not considered a suitable mitigation area because no surface hydrology could be provided to the site (i.e., no streams exist in the area), the mitigation area would be isolated, with no contiguity with existing streams or wetlands, and adequate ground water is doubtful. The Anne Arundel County Soil Survey classifies this area as Sassafras loam. Sassafras soils are deep well-drained soils on uplands. Therefore, it is unlikely that ground water would be encountered within a reasonable depth to support a created wetland.

- Site No. 7 is an area south of Upton Road near Upton Park. This site lies adjacent to a tributary to Severn Run. This 10-acre area is an agricultural field. There does not appear to be adequate surface- or ground-water hydrology to support created wetlands in this area.

  A ball field in Upton Park was also visited; however, the area would require at least a 10-ft cut to match the elevation of the adjacent stream and wetlands, which would not be desirable, notwithstanding the loss of recreational value of the site. The 3.6 acres of mitigation required could not be provided at this site even if technically feasible.

- Site No. 8 is a ball field opposite Upton Park adjacent to Martin Spaulding High School. The site is adjacent to a stream and wetland complex. Although the area has some potential for wetland creation, it was considered unsuitable because the soils are well-drained even at the depth of the adjacent wetlands. Also, the created wetlands could have an adverse hydrological impact on the existing wetlands by diverting surface water from the existing bottomland hardwood forest to the mitigation area.

- Site No. 9 is Lake Marion, an artificial impoundment located in the Province subdivision near the intersection of Maryland Route 713 and Severn Road. It appears that projects could be undertaken to improve water temperature impacts in this Severn Run headwater area; however, there is not sufficient area for a wetlands creation project. Potential water temperature impacts improvement projects might include removal of a concrete outfall channel and replacing the channel with a shrub-lined swale, and installing fringe wetlands around the perimeter of the lake.

- Site No. 10 is the "Joy Pit", a sand and gravel operation located between Gambrills Road and the Severn Run Environmental

Area. Small wash ponds that exist on the property could potentially be converted to wetlands; however, there does not appear to be adequate area suitable for the wetland mitigation required for the MLF site. In addition, the wetlands would be isolated and not contiguous with adjacent streams or wetlands.

Based on these two searches, there does not appear to be any remaining sites within the Severn Run watershed suitable for in-kind wetland mitigation.

4.3.3 Formulation of Mitigation Alternatives For Direct Impacts

Alternatives E and F have been developed to mitigate direct impacts as a result of the unavoidable filling of 1.8 acres of wetlands. For these alternatives, conservation easements are established in Wells Branch (Alternative E) and Jabez Branch (Alternative F). Conservation easements are important to protect the land adjacent to the streams from development, and thereby, help maintain the integrity of the overall ecosystems of the streams. Alternatives E and F are considered restoration and preservation type mitigation alternatives and are discussed in more detail in Section 6 of this report.

4.3.4 Formulation of Mitigation Alternatives of Indirect Impacts

Alternatives G through J have been developed to provide mitigation of indirect impacts as a result of filling of wetlands in the Cell 9 area. These alternatives provide for wetland enhancement, restoration, creation, and preservation, and are discussed in more detail in Section 7 of this report.

5. ALTERNATIVES FOR MINIMIZATION OF IMPACTS TO WETLANDS

5.1 Introduction

This section of the report discusses four alternatives that have been developed to minimize the potential impacts associated with the filling of wetlands in the Cell 9 area. The four minimization alternatives discussed are:

- Alternative A - converting stormwater management Pond 8-1 to an infiltration basin;
- Alternative B - constructing infiltration trenches adjacent to Cell 9;
- Alternative C - use of an environmentally sensitive stream crossing between Cells 8 and 9; and
- Alternative D - use of best management practices (BMP) associated with Pond 9-2 to maximize infiltration and to minimize adverse impacts.

The purpose, feasibility, beneficial and adverse impacts, costs, and schedule and implementation of each of these alternatives are discussed in this section of the report.

In February 1984, MDE's Sediment and Stormwater Administration published the Maryland Standards and Specifications for Stormwater Management (SWM) and Infiltration Practices [MDE, 1984]. In this document, MDE recommends that a sound and effective stormwater management plan should be diversified and have multiple purposes, and that the plan should address the full range of hydrologic consequences resulting from urban development instead of focusing on control of peak flow. The use of infiltration practices in conjunction with other stormwater management

practices achieve these goals. In addition, the need to apply infiltration practices in conjunction with various flow attenuation practices and detention practices is implied in the Maryland Stormwater Management Act (i.e., Natural Resources Article 8-11A).

The MDE Sediment and Stormwater Administration has developed a list of four practices to be utilized in the overall stormwater management plan at a site. The practices, in MDE's order of preference, are as follows:

- infiltration of runoff;
- flow attenuation by use of open vegetated swales and natural depressions;
- stormwater retention structures; and
- stormwater detention structures.

Often, a combination of one or more of the above practices are used at a site to achieve the intended goal. Infiltration practices are used to reduce volume increases in flow to the maximum extent possible by allowing the stormwater to percolate into the ground-water system. In addition, infiltration practices provide water-quality benefits by reducing the impact of thermal loading into sensitive ecosystems. Retention and detention structures delay the release of the peak discharge to the surface-water system, and typically do not provide water-quality benefits. The infiltration structures proposed in this report have been designed in accordance with the criteria of the MDE Sediment and Stormwater Administration.

5.2 Alternative A - Converting Pond 8-1 to an Infiltration Basin

5.2.1 Overview

Pond 8-1 is an existing stormwater retention pond designed in accordance with current Maryland regulations for erosion and sediment control and stormwater management (i.e., MD-378). Alternative A consists of converting Stormwater Management Pond 8-1 (Pond 8-1) to an infiltration basin. Figure 8 provides the sequence of construction for converting Pond 8-1 from a stormwater management pond to an infiltration basin. Technical information used in the evaluation of Alternative A is provided in Appendix E.

5.2.2 Purpose

Alternative A achieves two important purposes: (i) compliance with MDE's recommendations for the design of sound and effective stormwater management plans; and (ii) minimization of the potential impacts on wetlands associated with the development of Cell 9.

An infiltration basin functions by discharging stormwater through slow percolation into the ground rather than overland discharge through an outlet structure. This results in significant alteration of peak flows from storms, and an increase of base flow support for nearby streams. Infiltration basins also trap sediment thus reducing the sediment load discharged into the stream. Therefore, conversion of Pond 8-1 to an infiltration basin will increase base flow support to Wells Branch, thus minimizing one of the most important potential impacts on the site hydrology. In addition, the slow release of stormwater through infiltration will result in an amelioration of water temperature impacts on Wells Branch.

5.2.3 Feasibility

The feasibility of converting Pond 8-1 to an infiltration basin is discussed in more detail in Appendix E. In summary, it was found, based on the currently available subsurface information, that Pond 8-1 is underlain by sandy soils, which provide the proper media for infiltration of surface-water runoff into the ground-water system. Preliminary design calculations show that the volume of water that can be stored in proposed infiltration basin 8-1 is approximately 1,400,000 gallons. This volume of water only considers storage below the spillway riser crest elevation. Water above this elevation would flow through the spillway outfall and discharge to Wells Branch. Surface-water runoff from the final cover of Cell 8 resulting from the 2-year 24-hour storm is equivalent to a volume of water of approximately 1,400,000 gallons. Therefore, the proposed infiltration basin is adequately sized to allow all of the Cell 8 runoff from the 2-year storm event to recharge water-bearing Zones 2 and 3.

5.2.4 Beneficial and Adverse Impacts

Conversion of Pond 8-1 to an infiltration basin will have the following beneficial impacts:

- the ground-water system in the vicinity of Pond 8-1 will receive recharge from the basin;
- the recharged ground-water system in the vicinity of Pond 8-1 will provide base flow support for Wells Branch; and
- the basin will function as a sediment trapping structure reducing the sediment load discharged into Wells Branch.

Conversion of Pond 8-1 to an infiltration basin should not have any adverse impacts on the ground-water or surface-water system in the vicinity of the pond.

In the past, infiltration structures have had a high rate of premature failure due to the installation of the structures before areas contributing surface-water runoff were stabilized. The end result was the rapid clogging of permeable soil by the high sediment load. Premature failure of infiltration Basin 8-1 will be minimized because the conversion of the pond to an infiltration basin will not occur until Cell 8 is entirely stabilized.

Infiltration basins require more frequent maintenance (i.e., cleanout) than storm-water management ponds. The major reason for the more frequent cleanout requirements associated with infiltration basins is that considerable amounts of sediment, suspended organic matter, and debris accumulate in the small soil pores on the bottom of the basin and reduce infiltration. By comparison, the same materials that can clog the soil surface of an infiltration basin are typically either removed through settling within the detention pond's storage reservoir or are passed through the much larger outlet orifice and out of the pond entirely. Removal of surface clogging in an infiltration basin may require a major cleanout operation involving the removal of the upper layers of the filter media and the replacement of the filter fabric. At a minimum, the infiltration basin will be inspected following at least one major storm event per year. Technical information on the construction and maintenance activities associated with infiltration structures is provided in Appendix F. This information will be included in the MLF Operations and Maintenance guide.

5.2.5 Costs

The construction costs for the conversion of Pond 8-1 to an infiltration basin are estimated to be about $17,450 in 1993 dollars. The estimated engineering costs are about $6,000. Therefore, the total cost of this alternative is $23,450. The breakdown of the proposed construction and engineering costs is shown in Table 4.

5.2.6 Schedule and Implementation

Construction of Pond 8-1 was completed in October 1992. It is proposed to convert Pond 8-1 to an infiltration basin after the final cover system for Cell 8 is stabilized with permanent vegetation and the pond is no longer needed for sediment control. The conversion of Pond 8-1 to an infiltration basin would likely occur during the development of Subcells 9.1 and 9.2 of Cell 9.

During the conversion of Pond 8-1 to an infiltration basin, the low-flow sediment control devices will be removed and the low-flow de-watering orifices located below the riser crest will be plugged. The bottom of the pond will be cleared of low-permeability deposits and replaced with a 6- to 12-in. filter layer of coarse sand to help prevent the soil surface from becoming clogged. The filter layer will be replaced or cleaned when it becomes clogged.

It is anticipated that Cell 8 has an approximate waste disposal life of seven years, and that two additional years would be required for permanent soil stabilization. Therefore, Pond 8-1 could be converted to an infiltration basin after the capping and soil stabilization of Cell 8 (i.e., about 2001, see Appendix B).

5.3 Alternative B - Constructing Infiltration Trenches Adjacent to Cell 9

5.3.1 Overview

Alternative B is the construction of infiltration trenches north of Cell 9 adjacent to Subcells 9.8, 9.10, and 9.11 (see Figure 6). A preliminary evaluation of infiltration basins and trenches for the Cell 9 area indicated that only infiltration trenches in the area adjacent to the southwest tributary of Wells Branch were potentially feasible (see

Appendices D and F). In order to investigate the feasibility of using infiltration trenches in the Cell 9 area, a field investigation program was conducted. A conceptual design of a typical infiltration trench is shown in Figure 9. The technical information used in the evaluation of Alternative B is provided in Appendix E.

5.3.2 Purpose

Alternative B is conceptually similar to Alternative A (i.e., converting Pond 8-1 to an infiltration basin) and achieves the same purposes: (i) compliance with MDE's recommendations for the design of sound and effective stormwater management plans; and (ii) minimization of the potential impacts on wetlands associated with the development of Cell 9.

As shown in Table 2, the purposes of an infiltration trench are to alter the peak flow from a storm and to provide an increase of base flow support for nearby streams. In addition, the infiltration trench will act as a sediment trapping structure and reduce the sediment load discharged into Wells Branch.

5.3.3 Feasibility

Infiltration trenches for the Cell 9 area were evaluated using the following criteria:

- the maximum ponding and storage time as established by the MDE guidelines is for the 2-year, 24-hour storm event in which stored runoff within the structure should be completely drained within a 72-hour period;

- depth to high ground-water table should allow for a minimum 2-ft separation between the bottom of the trench and the seasonally high water table;

- topographic conditions; and

- existing land use (i.e., wetlands).

Based on the information available at the time that the preliminary evaluation was performed, it appeared that much of the area north of Cell 9 along the main channel of Wells Branch (i.e., downstream of Pond 8-1) is underlain by a thick layer of clayey soils (Figure 4). Therefore, the area north of Cell 9 does not provide the proper media for infiltration of surface water into the ground-water system through an infiltration trench. However, existing site soil boring data revealed three potentially suitable areas along the southwestern tributary of Wells Branch (i.e., between Cells 8 and 9). The three areas are shown on Figure 6 and labeled B-1, B-2, and B-3.

In order to investigate the three areas listed above, a soil boring program was completed at the site. Five soil borings were installed and soil samples were collected. The soil borings are provided in Appendix G. The purpose of the five soil borings was to confirm the presence of sand zones that could function as infiltration layers for the infiltration trenches.

Area B-1 is in the upland area of the southwest tributary of Wells Branch between elevations 160 and 190 ft. Soil boring F-19, at an elevation of 170 ft, encountered 8 ft of silty sand above a low-permeability clayey silt layer. An area of standing water near boring F-19 suggests that a perched water table was at the land surface at the time of drilling and that a 2-ft separation between the perched water table in Zone 1 and the base of an infiltration trench may be difficult to achieve in parts of Area B-1. The base of an infiltration trench in

Area B-1 must be at least 2 ft, but preferably 4 ft above the perched water table (i.e., elevation 174 ft and higher).

Area B-2 is near a soil boring F-20 that has a 9-ft layer of silty clay with sand and is underlain by 25 ft of silty sand and sandy silt. The water table was encountered at 35 ft, indicating a 25-ft thick unsaturated Zone 2 sand sequence. An infiltration trench in this area would need to be deep enough to penetrate the base of the surface silty clay layer (i.e., maximum 9 ft) and penetrate at least several ft into the underlying Zone 2 sand.

Area B-3 is the most downstream area between Cell 8 and 9. Based on soil boring F-26, Area B-3 is in the outcrop area of Zone 2 where a surface sand sequence should be encountered.

In summary, the results of the soil boring program reveal that Area B-2 has limited sand zones available for infiltration and B-3 does not have adequate sand zones in order to function as infiltration layers. Adequate sandy material was located in Area B-1 to support the installation of infiltration trenches.

In the preliminary evaluation of the potential feasibility of groundwater recharge using infiltration trenches, it was estimated that the trenches could recharge approximately 70,000 gallons per year. However, based on the soil borings installed in Areas B-1, B-2, and B-3, that quantity of recharge will not be feasible. It appears that the maximum quantity of recharge will be approximately 20,000 gallons per year, or 30 percent of the original estimated recharge.

5.3.4 Beneficial and Adverse Impacts

Construction of infiltration trenches in the vicinity of Pond 9-2 will have the following beneficial impacts:

- the ground-water system in the vicinity of Pond 9-2 will receive recharge from the pond;

- the recharged ground-water system in the vicinity of Pond 9-2 will provide some base flow support to Wells Branch; and

- the infiltration trenches will act as sediment trapping structures and reduce the sediment load discharged into Wells Branch.

Construction of infiltration trenches in the vicinity of Cell 9 should not have any adverse impacts on ground water or surface water. Technical information on the construction and maintenance activities associated with infiltration structures is provided in Appendix E. This information will be included in the Operations and Maintenance Plan for the MLF site.

5.3.5 Costs

The estimated cost to construct an infiltration trench in Area B-1 is approximately $9,470. The estimated engineering costs are approximately $8,000. Therefore, the total cost of this alternative is $17,470. The breakdown of construction costs in 1993 dollars is shown in Table 4.

5.3.6 Schedule and Implementation

Cell 9 will begin receiving MSW in Subcell 1 after the closure of Cell 8. The expected life of Cell 9 is approximately 15 years. Soil stabilization of the final cover will require about two years before infiltration trenches could become operational. Therefore, the installation of the trenches would begin after the capping and soil stabilization of Cell 9 (i.e., 2016, see Appendix B).

5.4 Alternative C - Environmentally Sensitive Stream Crossing Between Cell 8 and Cell 9

5.4.1 Overview

Alternative C involves the construction of an environmentally sensitive stream crossing structure between Cells 8 and 9. As shown in Figure 6, the stream crossing will be located on Wells Branch in the western portion of Cells 8 and 9 where an access road will be constructed. The access road is integral to the operation of the MLF for the reasons presented below.

- The road will provide access to transport large quantities of soil between Cells 8 and 9.

- The soil material that will be excavated from the Cell 9 ft print will be used: (i) for daily cover during the operation of Cell 8; (ii) for construction of Subcells 8-5 through 8-8; (iii) for construction of Cell 9; and (iv) for daily cover during operation of Cell 9.

- The access road between Cells 8 and 9 will provide separate access for vehicular traffic to transport excavated soil from the Cell 9 area to the Cell 8 area. Furthermore, the proposed access road will avoid unsafe traffic conditions that could occur at the site (i.e., trucks and heavy equipment hauling excavated soil and vehicles (commercial and private) bringing solid waste into the landfill using the same road).

It is not practical to avoid construction of an access road and stream crossing structure between Cells 8 and 9. The access road between Cells 8 and 9 is essential to the efficient operations of the landfill because it will significantly reduce traffic congestion on the main landfill access road. A permanent arched stream crossing is preferred

to a temporary crossing due to the potential for excessive damage to the wetlands that may result when the stream crossing is removed. In addition, a permanent stream crossing enables the leachate collection system for Cell 9 to be routed beneath the access road and connected to the leachate collection system for Cell 8, resulting in a cost savings for the County.

Figure 10 illustrates two designs for the stream crossing: (i) a standard culvert and 3H:1V embankment side slope; and (ii) an arched culvert and reinforced soil wall design. One advantage of the arched stream crossing is that the arched culvert does not have a bottom and will not result in any disturbance of Wells Branch or in turbulent flow in Wells Branch. As shown on Figure 10, the area of wetlands impacted for the standard culvert and arched culvert is about 0.3 acres and 0.08 acres, respectively. Therefore, a bottomless arch-type stream crossing is preferred to a standard culvert as the area of wetlands impacted is less for the arch crossing.

5.4.2 Purpose

The purpose of using the arched stream crossing is to minimize the potential impacts to the flow in Wells Branch and to allow free movement of large and small animals, and aquatic species, along the corridor of Wells Branch. The arched stream crossing will be of sufficient size to not impede the flow hydraulics in Wells Branch. As the proposed stream crossing is bottomless, the sediment stabilization functions of the existing wetlands will be preserved.

At some time in the future after Cell 8 is filled, the need for separate access roads will be re-evaluated. If justification exists, and if the stream crossing can be removed without environmental degradation of the Wells Branch wetlands, then the access road to Cell 9 may be moved to a different location. Relocating the access road will also require relocating the leachate collection system pipeline for Cell 9 as the line

is currently designed to tie into the leachate collection system pipeline for Cell 8 on the north side of the access road.

5.4.3 Feasibility

GeoSyntec evaluated the feasibility of constructing a sensitive stream crossing between Cells 8 and 9. In summary, GeoSyntec found that using an arched stream crossing rather than a standard culvert will minimize the overall wetland impacts. If the arched stream crossing is used based on these recommendations, no adverse consequences would occur to the flow in Wells Branch. Additionally, the arched stream crossing will allow free movement of large and small animals, and aquatic species, along the corridor of Wells Branch. If a standard culvert were utilized instead of the arched stream crossing, the wetlands and the stream flow in Wells Branch could potentially be impacted. The standard culvert would be placed in the stream bed of Wells Branch and backfill would be placed around the outside of the culvert, thereby, potentially restricting flow and hindering the movement of fish and wildlife.

The Maryland DNR has been consulted relative to the dimensions of the culvert necessary for the passage of wildlife (i.e., to minimize the "tube effect"). Maryland DNR recommended that the length of the structure be no greater than the value of the cross sectional area of the structure, and that the height of the structures be at least seven ft (i.e., personal communication Mr. C. Brunori, DNR). If an arched stream crossing is practical, AAC will ensure that the Maryland DNR design recommendations are followed.

5.4.4 Beneficial and Adverse Impacts

The arched stream crossing will have beneficial impacts in comparison to using a standard culvert for providing access across Wells Branch between Cells 8 and 9. The beneficial impacts will include the

following: (i) minimizing changes of the flow system in Wells Branch; (ii) freedom of movement through the archway by large and small animals and aquatic species; and (iii) no excessive filling of existing wetlands in the Wells Branch corridor. Furthermore, less wetlands will have to be filled using the reinforced soil wells with the arched stream crossing rather than using a standard culvert stream crossing. No adverse impacts are expected from using the arched stream crossing.

5.4.5 Costs

The estimated construction costs for an arched stream crossing will be approximately $100,000. The estimated engineering costs are approximately $8,000. Therefore, the total estimated cost of this alternative is $108,000.

5.4.6 Schedule and Implementation

Construction of the sensitive stream crossing and access road will begin in mid-1995. Soil stockpiling activities in Cell 9 are scheduled to begin during this period. Soil in the Cell 9 area will be used for daily cover during the operation of Cell 8 and for the construction of the Subcells 8.5 through 8.8 in Cell 8. Actual landfilling operations are not expected to begin in Cell 9 until 1999.

5.5 Alternative D - Best Management Practices For Pond 9-2

5.5.1 Overview

Alternative D incorporates best management practices (BMP) in Pond 9-2 to attenuate potential temperature impacts and to maximize potential infiltration through the pond bottom. The BMP will include the following: (i) use of shading around the pond and along the riprap

discharge channel from the pond to Wells Branch; (ii) operational controls to maximize infiltration through the bottom of the pond; and (iii) other techniques to attenuate potential temperature impacts and to maximize infiltration through the pond bottom.

5.5.2 Purpose

The purpose of using BMP at the Cell 9 pond is to minimize potentially adverse impacts on Wells Branch. The potentially adverse impacts could include the following: (i) changing the temperature regime within Wells Branch; and (ii) reducing the amount of infiltration recharging the ground water in the vicinity of Pond 9-2. As shown in Table 2, the wetland function benefits that are achieved with this mitigation alternative include floodflow alternative and baseflow support to Wells Branch. A detention pond, if properly maintained, will delay the peak discharge from the design storm and slowly release the stormwater into the receiving stream.

5.5.3 Feasibility

The use of BMP at the Cell 9 pond to minimize adverse impacts is feasible. Trees can be planted along the riprap lined discharge channel to provide additional shading in that area. The additional shading will reduce the overall temperature in that area and marginally reduce the temperature of the water discharging through the channel. Furthermore, landfill personnel can implement an operational program for Pond 9-2 that includes frequent maintenance (i.e., removal of low-permeability soil) to increase infiltration through the bottom of the pond. Technical information on maintenance activities associated with infiltration structures is included in Appendix F to this report.

5.5.4 Beneficial and Adverse Impacts

As mentioned previously, the BMP will include activities such as: (i) planting trees around Pond 9-2 and along the riprap discharge channel to increase shading; and (ii) performing operational activities to maximize the infiltration through the bottom of the pond. For example, it may be necessary to drain the pond periodically and remove fine sediment material that can clog the bottom of the pond and reduce infiltration. Direct benefits should result from these types of practices including amelioration of water temperature impacts in Wells Branch and increasing the amount of infiltration through the pond bottom. Water that infiltrates through the bottom of Pond 9-2 and discharges into Wells Branch through wetland seeps will be at a lower temperature as compared to the temperature of the water that discharges through the pond riser structure. Additionally, the infiltrated water will recharge ground water in the vicinity of the pond. Ground water beneath Pond 9-2 eventually discharges into either Wells Branch or Severn Run. Therefore, the base flow in Wells Branch and Severn Run will be augmented by BMP in Pond 9-2.

If properly designed, there should not be any adverse impacts associated with using BMP for Pond 9-2.

5.5.5 Costs

It is estimated that the cost of the alternative will be relatively small compared to the other alternatives. The estimated annual costs of this alternative are about $15,000. The anticipated costs consist mainly of operational and maintenance costs to remove fine sediment from the bottom of Pond 9-2 in order to maximize infiltration. Additionally, there will be minor capital costs for the purchase and installation of shade trees along the corridor of the riprap-lined discharge from the pond into Wells Branch. Engineering costs should also be minimal.

5.5.6 Schedule and Implementation

The use of BMP in the Cell 9 pond area could begin once the pond is constructed. Shade trees could be planted along the riprap outlet channel once the pond embankment and surrounding areas are vegetatively stabilized. During development of Cell 9, Pond 9-2 will have limited infiltration potential due to clogging of the pond bottom from the sediment load carried in the discharge water into the pond. After soil stabilization of the final cover, the pond will be converted to a stormwater management pond (i.e., removal of the low-flow devices), and infiltration through the pond bottom should improve. Soil stabilization of the final cover will require about two years.

6. ALTERNATIVES FOR MITIGATION OF DIRECT IMPACTS TO WETLANDS

6.1 Introduction

As discussed in the previous sections, appropriate and practicable compensatory mitigation is required for unavoidable adverse impacts (either direct or indirect) which remain after all appropriate and practicable minimization actions have been exhausted. In determining compensatory mitigation, the functional values lost by the resource to be impacted must be considered. Generally, in-kind mitigation is preferable to out-of-kind mitigation. No suitable in-kind mitigation other than the Devonshire Site (Alternative I, Section 7.4) has been identified in the Severn Run watershed. However, because alternatives other than in-kind replacement may be preferred, out-of-kind alternatives have also been developed to mitigate direct impacts to wetlands.

Two alternatives for mitigation of direct impacts to wetlands have been identified in the site vicinity and include:

- Alternative E - dedication of a conservation easement in Wells Branch; and

- Alternative F - dedication of a conservation easement in Jabez Branch.

The purpose, feasibility, beneficial and adverse impacts, costs, and schedule and implementation of each of these alternatives are discussed in detail in this section of the report.

6.2 Alternative E - Conservation Easement in Wells Branch

6.2.1 Overview

Alternative E is the establishment of a conservation easement in Wells Branch from the MLF property line to Gambrills Road, a distance of about 1,150 ft. The conservation easement is essentially the establishment of a riparian corridor on both sides of Wells Branch and associated wetlands (see Figure 11). The width of the riparian corridor would be adjusted to exclude existing dwellings. Only property, and not homes, would be included in the easements, and only that property willingly placed into easements would be considered (i.e., there would be no condemnation of property).

Within the proposed riparian corridor along Wells Branch, the topography south of Wells Branch is generally steeper than the topography north of Wells Branch. The steep slopes south of Wells Branch are generally within a 150-ft distance from the upland/wetland boundary. The wetlands along Wells Branch vary in width from about 30 ft to 150 ft. Therefore, a total wetland buffer of 350 to 400 ft would incorporate both the steep slopes and the wetlands. The Maryland Wildlife Administration has been consulted relative to the proposed width of the buffer. Although the exact width of the buffer necessary to protect the stream cannot be determined until that agency has reviewed drawings and conducted a site visit, it appears that the 350 to 400-ft width is a reasonable estimate at this time.

6.2.2 Purpose

The purpose of establishing a riparian corridor in Wells Branch is to provide long-term protection for this valuable natural resource. Such protection would be achieved by establishing a perpetual easement that includes Wells Branch, the wetlands associated with Wells Branch, and slopes adjacent to Wells Branch.

6.2.3 Feasibility

The riparian corridor along Wells Branch from the MLF property boundary to Gambrills Road is feasible if property owners are amenable to granting an easement to AAC. As mentioned previously, AAC will not condemn property to procure the easement, but will work with property owners to establish the conservation easement.

6.2.4 Beneficial and Adverse Impacts

Protection of the slopes adjacent to the stream would maintain the integrity of the stream and wetlands by precluding construction activities in this area. The quantity of pollutants, such as sediment and nutrients, entering the stream would be reduced. The easement would also remove an existing contributor of pollutants (i.e., a small duck pond adjacent to one of the existing dwellings). Approximately three acres of wetlands and six acres of upland would be protected from development pressures as a result of acquiring the easement.

No undesirable consequences are anticipated as a result of establishing the riparian corridor. The slopes adjacent to the stream and wetlands are stable, and therefore, no bank stabilization activities will be required. No construction will be required as part of establishing the easement.

6.2.5 Cost

This mitigation alternative would involve establishing a conservation easement on approximately three acres of wetland and about six acres of upland. AAC would be responsible for negotiating a settlement with the property owners. This process could begin immediately upon approval of the mitigation package by DNR and the Corps. The estimated cost for this alternative is $90,000.

6.2.6 Schedule and Implementation

The negotiation process with the property owners could begin immediately upon approval of this mitigation report. The process could be completed in less than one year. The stream restoration (i.e., removal of the duck pond) could also be performed during this time.

6.3 Alternative F - Dedication of Conservation Easement in Jabez Branch

6.3.1 Overview

Alternative F is similar to Alternative E and involves the establishment of an approximate 20-acre conservation easement (riparian corridor) in the Jabez Branch watershed. The easement would be established to maintain the integrity of the stream from future potential construction activities. The easement would include a portion of the "left fork" of Jabez Branch, and adjacent floodplain and steep slopes (see Figure 12). AAC is currently evaluating the area that could potentially be included in the easement. The easement may include a portion of the Holladay Park property. The use of this property as a mitigation alternative was discussed in a 1992 meeting between Maryland DNR, AAC, GeoSyntec, and Greenhorne & O'Mara. An evaluation of the Holladay Park property is included in Appendix H. The location of the Jabez Branch easement is shown on Figure 12.

6.3.2 Purpose

The purpose of establishing the Jabez Branch conservation easement is to mitigate for the direct impacts of filling the wetlands for construction of Cell 9. This is an appropriate mitigation strategy for the reasons presented below.

- The WET function and value assessment conducted for the existing wetlands at Cell 9 suggests that the wetlands probably perform floodflow alteration and sediment stabilization functions. WET assigned high probability ratings for these functions. Floodflow alteration and sediment stabilization are two important functions of the floodplain of Jabez Branch. These two functions (and other functions such as nutrient retention and production export) are important in maintaining the fisheries values of the stream. These functions directly help maintain the integrity of the stream.

- The conservation easement will protect the stream from physical disturbances that may directly alter the ability of the stream to perform water quantity and quality functions. Although the area of the proposed conservation easement is primarily floodplain and steep slopes, and therefore can not be developed under current environmental laws and regulations, permittable activities such as road crossings and utility installations could potentially be proposed in the future. These activities would directly impact the stream by either an increase in sediment load in the stream, reduction in floodflow alteration capacity, or an increase in water temperature due to reduction of forest cover.

- Jabez Branch is classified as Class IV (Recreational Trout Waters) by Maryland DNR. To protect or restore Jabez Branch for this use classification requires maintenance of overall water temperature impacts criteria, including suspended sediment, dissolved oxygen, turbidity, pH, and temperature. The Maryland DNR is attempting to restore a native population of trout in Jabez Branch, and water temperature in particular is critical to maintain a trout population. The conservation easement is one action that could help maintain the water temperature impacts and thereby to protect the stream for its use classification.

6.3.3 Feasibility

The proposed easement is technically feasible. The easement would place restrictions on the use of the property, and exclude any future development, silviculture, or agricultural activity on the land. The feasibility of establishing the easement is primarily a function of the willingness of the property owners to support such an easement. Much of the proposed easement area is floodplain and steep slopes, which limits any potential future construction activities. However, the easement would also restrict or regulate activities that might otherwise take place in these areas, such as utility installations and road crossings.

6.3.4 Beneficial and Adverse Impacts

Protection of the floodplain and adjacent slopes will protect the stream from construction activities and prevent additional pollutant loadings to the stream. By minimizing water temperature impacts in the stream, it can be protected for recreational trout use classification. Precluding development activities in this area will also minimize water temperature impacts by reducing thermal loading. Not only will the stream remain shaded, but part of the contributing watershed will also remain shaded.

No adverse impacts are anticipated for this alternative.

6.3.5 Costs

This mitigation alternative would involve the placement of conservation easements on approximately 20 acres of forested land, precluding future development activities. AAC does not propose purchasing the land. The land would continue to be privately owned, and establishing the easements would be voluntary (the County will not

condemn land to establish the easements). The cost to establish the easements has not been confirmed, but will be a result of negotiations with the property owners. AAC estimates the cost of the easement to be in the range of $100,000 to $200,000.

6.3.6 Schedule and Implementation

AAC anticipates that the conservation easements could be negotiated with the property owners, and the easements recorded with the deeds, within one year from approval of the Corps permit.

7. ALTERNATIVES FOR MITIGATION OF INDIRECT IMPACTS TO WETLANDS

7.1 Introduction

As discussed in previous sections, appropriate and practicable compensatory mitigation is required for unavoidable adverse impacts (either direct or indirect) which remain after all appropriate and practicable minimization actions have been exhausted. Four alternatives for mitigation of indirect impacts have been identified in the site vicinity and include:

- Alternative G - reforestation of the MLF site to the maximum extent practicable;
- Alternative H - removal of Cell 3 and construction of an infiltration basin;
- Alternative I - either the creation of wetlands at the Devonshire site or restoration of a portion of the Jabez Branch; and
- Alternative J - dedication of the former Denton property as a conservation easement.

The purpose, feasibility, beneficial and adverse impacts, and schedule and implementation of each of the four alternatives are discussed in this section of the report.

7.2 Alternative G - Reforestation of the MLF Site

7.2.1 Overview

Alternative G involves re-forestation of the MLF site. After the MLF is closed, the site will be reforested to the maximum extent possible.

The reforestation will occur in those areas of the landfill where MSW has not been placed. The main areas where reforestation will occur are shown in Figure 7 and include the following: (i) east of Cell 567 and Cell 1; (ii) in the vicinity of Cell 3; and (iii) along access roads throughout the landfill. The total site area is 567 acres and the estimated area where landfilling has not occurred on the site is 300 acres. Approximately 90 percent of this area is already covered with trees and vegetation and will not require additional reforestation. Areas within the MLF property that potentially are available for reforestation are estimated to be 30 acres.

7.2.2 Purpose

The purpose of site reforestation is to increase the amount of vegetative cover at the MLF site. As shown in Table 2, the vegetative cover will serve the following purposes: (i) providing habitat for wildlife; (ii) increasing the potential for recharge on the site; and (iii) increasing sediment stabilization at the site.

7.2.3 Feasibility

The reforestation of the MLF site to the maximum practical extent is a feasible alternative. The only areas that will not be forested after completion of landfilling at the MLF site will be the locations of the refuse cells and roads that will need to remain for maintenance activities. The remaining areas can be reforested through a program of tree and shrub planting. AAC currently has a fund set aside to assist in reforesting sites in the county. Therefore, the funds should be available for reforestation of the MLF site.

7.2.4 Beneficial and Adverse Impacts

Except for the capped landfill cells, the landfill will be reforested to the maximum extent possible when the landfill is closed. A significant ecological benefit to this area will result by restoring habitat for terrestrial wildlife. The area will be enhanced for infiltration of precipitation, and thereby, provide an improved groundwater recharge function. The reforested area will also provide soil stabilization functions, thereby, reducing the sediment load discharged into Wells Branch. The reforestation will minimize the operation and maintenance requirements that AAC will have to perform after the landfill is closed.

No adverse impacts have been identified in reforesting the MLF site.

7.2.5 Costs

The estimated cost of this alternative is $326,700. This cost assumes 30 acres of land are reforested at a cost of $0.25 per square ft. Once the Corps permit is issued, Maryland DNR will be consulted regarding recommendations on plant species and their availability.

7.2.6 Schedule and Implementation

This work will be done after the entire landfill is closed. The exact year is not known at this time; however, a 20-year time frame is a reasonable estimate.

7.3 Alternative H - Removal of MSW from Cell 3 and Construction of an Infiltration Basin

7.3.1 Overview

Alternative H is the removal of MSW from Cell 3 and the construction of an infiltration basin. The quantity of waste that would need to be removed from Cell 3 is approximately 30,000 yd^3. This corresponds to approximately 24,000 tons of material to be moved, based on an assumed in-place unit weight of 1,600 lbs/yd^3. It is assumed in this report that the MSW removed from Cell 3 would be placed in Cell 8.

The sequence of events that will occur at the MLF to support construction of an infiltration basin in the area of Cell 3 are as follows:

- closure of MSW Cells 1, 2, and 4;
- construction of sediment control pond;
- stabilization of final cover system for Cells 1, 2, and 4; and
- design and construction of an infiltration basin.

A conceptual design of the Cell 3 infiltration basin is shown on Figure 13. Additional information on the evaluation of Cell 3 as an infiltration basin and the removal of MSW from Cell 3 is provided in Appendix I.

7.3.2 Purpose

The purpose of the removal of MSW from Cell 3 would be to: (i) eliminate an unlined landfill cell; (ii) eliminate the potential generation of landfill leachate; and (iii) reclaim the area for the

construction of an infiltration basin to recharge the shallow ground-water system (i.e., Zone 2 and Zone 3) in the headwaters of the northwest tributary of Wells Branch. Wetland function benefits that can be replaced from the construction of an infiltration basin in the location of Cell 3 are presented in Table 2.

7.3.3 Feasibility

Mining of MSW is a demonstrated technology that is being performed at many locations throughout the United States. Furthermore, infiltration basins are also a demonstrated and reliable technology. Therefore, Alternative H is a feasible alternative for mitigation of impacts associated with the filling of wetlands during construction of Cell 9.

Approximately 30,000 yd^3 of MSW will be removed from the Cell 3 location. The waste will be selectively mined to remove any recyclable material and the remaining waste will be placed in Cell 8 for disposal. Samples will be collected from the soil beneath the existing unlined cell to characterize the subsurface material in that area. After the subsurface investigation, an infiltration basin will be constructed on that location. The infiltration basin will be designed and constructed in such a way to maximize the amount of surface water that can infiltrate the subsurface. Infiltrated water will recharge the ground-water system in the area of the headwaters of the northwest tributary of Wells Branch. Ground water in this area provides base flow support to Wells Branch.

7.3.4 Beneficial and Adverse Impacts

The potential benefits associated with removal of MSW from Cell 3 are as follows:

- elimination of unlined landfill cells, which can potentially cause ground-water contamination;
- reclamation of land for alternative uses (i.e., mitigation); and
- reduction of solid waste management costs by eliminating landfill closure or post-closure costs.

The potential adverse impacts include the following:

- health and safety concerns;
- nuisance factors; and
- soil contamination beneath Cell 3.

Each of the beneficial and adverse impacts is briefly discussed in the following paragraphs.

Beneficial Impacts

Elimination of Unlined MSW Landfill Cell - Removing MSW from Cell 3 will reduce the total area of unlined landfill cells at the MLF site. The removal of Cell 3 will result in an overall improvement at the site, because unlined landfill facilities have a greater potential to cause ground-water contamination than lined facilities. It should be noted that the current plan is to close Cell 3 by installing a final cover system. (GeoSyntec is currently preparing a Phase III permit application on AAC's behalf that includes removal of MSW from Cell 3. Removal of MSW from Cell 3 is contingent on MDE's approval of the Phase III permit.) The final cover system will consist of the following components:

- cover soil;
- drainage layer;

- geomembrane layer; and
- subgrade soil layer.

The final cover system will significantly reduce the possibility that ground-water contamination will be caused by the unlined landfill cells. However, removal of the MSW will be a more permanent solution for at eliminating the potential source of contamination.

Reclamation of Land for Alternative Uses - Removal of the MSW in Cell 3 will allow the four acres that Cell 3 currently occupies to be utilized for other purposes. In addition to using the land for an infiltration basin, more land will be available for reforestation, with the auxiliary benefit of enhanced infiltration of precipitation. The additional infiltration will recharge the ground-water system and provide base flow support to Wells Branch. Other beneficial uses can also be made for the reclaimed land (e.g., composting).

Reduction of Solid Waste Management Costs - Removal of MSW from Cell 3 will reduce the operation and maintenance costs for the landfill. If a cover system is installed on Cell 3 as currently planned, it will have to be maintained for years. The costs associated with maintaining an infiltration basin are assumed small in comparison with the costs required to maintain a solid waste management cell.

Potential Adverse Impacts

The removal and relocation of MSW from Cell 3 would require removal of approximately 50,000 yd^3 of in-place material; an estimated 20,000 yd^3 may be reclaimed as cover soil, and the remaining 30,000 yd^3 is MSW. It is estimated that removal of the cover soil will take about 7 days (i.e, based on an average removal rate of 3,000 yd^3 per day). It is estimated that removal of MSW from Cell 3 and placement in Cell 8 will take about 20 days (i.e, based on an average removal rate of 1,500 yd^3 per day), depending upon weather conditions.

Health and Safety Risks and Nuisance Factors - An operation of this nature has potential risks and nuisance factors to landfill personnel and the surrounding community. The risks and nuisance factors may include: exposure to odors and other airborne contaminants, such as landfill gases and dust; fumes and particulates from landfill equipment and vehicular traffic; noise as a result of the excavation operation; opening the cell to rainfall and leachate development which may result in ground-water contamination; exposure to vectors such as birds, insects, and rodents; and the possibility of encountering hazardous materials during excavation.

These risks are usually associated with the operation of any landfill, but can be increased by the excavation of previously-disposed solid waste. The potential risks are discussed in greater detail in a report entitled: "*Environmental and Economic Feasibility of Reducing the Elevation of Cells 5, 6, and 7 at Millersville Landfill*" prepared by Gershman, Brickner and Bratton, Inc. (GBB) in May 1992. However, there are several factors that make the removal of MSW from Cell 3 substantially different from the removal of MSW from Cell 567. The reasons that the potential risks and nuisance factors would be greatly minimized for removal of MSW from Cell 3, in comparison to removal of MSW from Cell 567, are listed below:

- Cell 3 is at a lower elevation than Cell 567 (i.e, it is shielded from the winds);

- Cell 3 contains a single lift of waste and Cell 567 contains multiple lifts;

- Cell 3 contains a much smaller volume of waste than would have been removed from Cell 567 (i.e., 30,000 yd^3 compared to 3,000,000 yd^3);

- the Cell 3 removal operation would require less time (i.e., less than one month) in comparison to the Cell 567 removal (i.e., 19 to 52 months);

- the age of waste in Cell 3 will result in less generation of gas (i.e., Cell 3 is 13 years old and the peak gas generation rate has probably already passed) than Cell 567 (i.e., Cell 567 is only 5 years old and the gas generation rates are increasing); and

- Cell 3 is dry (i.e., no potential leachate management problem) and Cell 567 is believed to contain leachate.

Since health and safety precautions are an important factor during the excavation, a formal health and safety plan (HASP) will need to be implemented during the removal operation. The HASP should be prepared in accordance with applicable OSHA regulations contained in 29 CFR 1910.120, and will, at a minimum, include:

- engineering controls (e.g., daily covering requirements for any exposed waste using plastic sheeting or other appropriate material and proper run-off control);

- air quality monitoring (e.g., dust, combustible gas, volatile organic compounds);

- personal protection safety equipment (e.g., dermal protection, respirators if necessary); and

- contingency planning to address potential emergencies or unexpected conditions (e.g., standby of fire department).

Soil Contamination - Another potential risk associated with removal of Cell 3 MSW is soil contamination beneath Cell 3. The potential exists that soils beneath Cell 3 have been contaminated by leachate. However,

the likely potential of soil contamination should not be significant based the following reasons:

- MLF leachate typically contains low levels of volatile organic compounds (VOCs), and VOCs move rapidly through the subsurface;
- VOCs do not attenuate on soils readily, particularly sandy soils; and
- Cell 3 is dry and leachate impacts should be minimal.

To confirm the existence, or absence, of soil contamination, a brief soil sampling program should be implemented prior to excavating MSW from Cell 3.

7.3.5 Costs

The cost estimate for Alternative H is broken down into costs associated with removal of the MSW from Cell 3 and costs associated with construction of the infiltration basins. The construction costs for removing MSW from Cell 3 is about $930,000 (i.e., including lost revenues associated with lost tipping fees) and the engineering costs are about $15,000. The construction costs for the infiltration basins are about $101,700 and the engineering costs are $7,000 (see Table 4).

In addition to the construction and engineering costs associated with design and construction of removal of MSW from Cell 3, and the design and construction of an infiltration basin, there will be a potential savings associated with removal of MSW in Cell 3 including:

- the cost of final grading and stabilization;
- the cost of capping Cell 3 in-place;

- the installation of a gas recovery system; and
- the post-closure costs associated with Cell 3.

The potential cost savings associated with removal of Cell 3 MSW are about $566,400 (see Tables 5 through 8). Therefore, the total estimated cost of this alternative is $487,300.

7.3.6 Schedule and Implementation

The removal of MSW from Cell 3 and the construction of an infiltration basin can be implemented once MDE approves the Phase III permit application, and construction documents are prepared. AAC anticipates that removal of MSW from Cell 3 could being as early as mid-1994.

7.4 Alternative I- Wetland Creation at Devonshire or Stream Restoration in Jabez Branch

7.4.1 Overview

Alternative I will consist of either the creation of forested and scrub-shrub wetland, or stream restoration in Jabez Branch. The wetlands would be established on property owned by AAC, referred to as the Devonshire site, located in the community of Devonshire near the Millersville Elementary School (see Figure 1). If the Devonshire mitigation site is not preferred, Alternative I would consist of stream restoration on the "left fork" of Jabez Branch (see Figure 14). The Jabez Branch project would be an extension of a project proposed by the Maryland State Highway Administration (SHA).

The Devonshire site is the location of a stormwater detention basin constructed in the 1970's. The site was modified in 1992 by the County

for the purpose of establishing wetlands within a portion of the site. This work was funded by a grant from the MDE. The purpose of the retrofit was to improve water-quality benefits of the facility. The project was not related to any wetland mitigation activities that may have been required by the regulatory agencies, and does not appear to be any conflict with regulatory requirements. The proposed wetland creation project would expand on the work performed in 1992.

It is noted that wetland creation at the Devonshire site would mitigate direct wetland impacts and is considered an in-kind mitigation project. However, the Devonshire site is included in this section on indirect wetland impacts as an alternative to the Jabez Branch stream restoration project. Of the two projects, AAC prefers the mitigation of Jabez Branch project, for the reasons discussed herein. Appendix J contains additional background information on the Devonshire mitigation alternative.

The stream restoration of Jabez Branch proposed by the SHA begins west of Maryland Route 3 and extends 1,100 ft downstream. Most of the severe erosion is within this distance. However, the SHA project does not include the removal of an existing deteriorating concrete channel immediately upstream from the SHA stream restoration project (see Figure 14). The concrete channel is within a relocated stream channel presumably constructed by the SHA when Maryland Route 3 was constructed. The concrete channel has been undermined, and sections of the channel have collapsed. This alternative would involve diverting the stream to its natural channel and filling in the artificially-created channel or implementing bioengineering techniques (e.g., root wad) on the existing stream channel.

Of the two alternatives presented in this section of the report, AAC prefers the restoration of the Jabez Branch over the creation of wetlands on the Devonshire site. The reasons are as follows: (i) Jabez Branch has historically supported a naturally reproducing population of trout, the only natural trout stream in the coastal plain of Maryland; (ii) the

Maryland DNR is currently trying to restore the trout population in the "left fork" of Jabez Branch, and the mitigation project will provide improved fisheries habitat by stabilizing a severe bank erosion problem in the headwaters of the stream; (iii) Jabez Branch is a tributary of Severn Run, an anadromous fish spawning stream, particularly for yellow perch, and improvements to the water quality of Jabez Branch will directly improve the water quality of Severn Run; and (iv) although the mitigation at the Devonshire site will improve the wildlife habitat at the mitigation site and will provide an unquantified increase in baseflow to the headwaters of Severn Run, it will not significantly improve water quality downgradient of the site, as the stormwater management facility at the Devonshire site currently performs water quality functions.

7.4.2 Devonshire Site

7.4.2.1 Purpose

The purposes of the Devonshire mitigation project are as follows: (i) to enhance the site's habitat for songbirds, wading birds, amphibians, and invertebrates that utilize or require forested wetland and emergent scrub-shrub habitats; (ii) to improve the site's water quality functions including temperature repression; and (iii) to provide enhancement to the export production function of the wetlands by installing a less constricted outlet. In addition, the Devonshire site would provide AAC with an in-kind mitigation site.

7.4.2.2 Feasibility

This alternative involves the creation and enhancement of wetlands within an existing stormwater management facility, comprising approximately 3.5 acres. To create and enhance wetlands at this site will require increasing the amount of water available to support the

wetlands hydrologically. This will involve creating a ground-water connection and improving the distribution of surface water across the site. To make the ground-water connection will involve the excavation of about 2.5 ft across the existing stormwater management facility, beginning at the toe of the existing slope. This depth would intercept the ground-water flow emanating from the adjacent agricultural field so that it can then be distributed across the site. This depth would also extend to the depth of the fluctuating water table through the site. The exact depth of cut will be evaluated during the design phase of the project and after water-level data are collected during the Winter and Spring of 1994. Figure 15 presents a conceptual design for the Devonshire mitigation site.

To maximize the effectiveness of the available hydrology, it will also be desirable to alter the distribution of the surface-water runoff from the storm drain outfall. It has also been recommended by the Maryland DNR and the Corps that a small stilling basin be constructed at the outfalls to serve as forbays to capture sediment and associated pollutants.

The Maryland DNR has recommended that the downstream end of the site be contiguous with the stream system to the extent practicable. To make this grade connection will require removal of the existing concrete outfall structure and deepening of the existing swale downstream of the facility. Spot elevations downstream of the facility will be required to determine this downstream distance. It does not appear at this time that a significantly amount of additional right-of-way will need to be acquired for these improvements.

For the site to retain its function as a stormwater management facility will require the design and construction of an alternative outlet structure that provides for detention of the runoff while minimizing the effect of truncating the mitigation area from the natural system. An example of this type of design might be a riprap or gabion structure.

The Devonshire site was visited on three occasions in March 1994 to evaluate hydrologic conditions at the site. The site visits revealed that ground water was at or near the surface in two monitoring wells that were installed in December 1993 and that water was flowing over the concrete weir at the downstream end of the site. Flow was estimated to vary from 0.06 cubic ft per second (cfs) to 1.5 cfs. However, it should be noted that rainfall in March was well above the March average. The information obtained from the site visits supports the assumption that adequate hydrology can be provided early in the growing season to support a seasonally saturated/flooded-water regime.

7.4.2.3 Beneficial and Adverse Impacts

The primary benefits of the Devonshire mitigation project are the 3.5 acres of wetlands created and the associated benefits of the wetlands to the overall hydrology of the watershed. Presently, the runoff from the site is conveyed to the concrete outfall structure via a shallow swale. However, water flows over the weir only in late winter, early spring, and during heavy rainfall events. The proposed system hydrology will allow for water to flow out of the facility more regularly, thereby improving base flow conditions downstream. The facility will also provide shading of the runoff entering the site from the storm drain outfall.

No adverse impacts have been identified in making the proposed improvements to the stormwater management facility. The facility will be similar in nature to that which presently exists, albeit wetter and vegetated with trees and shrubs. Periodic maintenance may be required to the outfall structure and stilling basin, to ensure that sediment has not inhibited the proper functioning of the facility.

7.4.2.4 Costs

The estimated cost for grading and planting within the Devonshire site is about $200,000. This cost estimate includes the cost of replacing the outfall structure, the additional grading to tie the mitigation site elevation into the swale downstream from the site, and engineering costs.

7.4.2.5 Schedule and Implementation

This project will require the purchase of additional right-of-way downstream from the site in order to deepen and widen the swale. Therefore, construction of the mitigation project will probably not start for six months to one year after AAC obtains the Corps permit.

7.4.3 Jabez Branch

7.4.3.1 Purpose

The purpose of the Jabez Branch stream restoration is to correct an erosion problem in the stream that has resulted in a large sediment load being discharged into the stream. Stream restoration will involve either the possible relocation of the stream to its natural channel or removal of a portion of a concrete swale and stabilizing the existing stream bank using bioengineering techniques (see Figure 14).

7.4.3.2 Feasibility

Relocating the stream to its natural channel involves the removal of fill material from the natural channel at the upstream end of the project, adjacent to a driveway that crosses the stream, possibly widening the stream to provide the cross-sectional area necessary to

convey storm flows, and clearing of an approximate 50-ft wide area for construction access. However, additional study will be required to determine if any changes to the natural channel geometry are warranted, given changes in land use and additional runoff that now exists in the watershed.

Once the stream has been diverted back to its natural channel there will not be any flow in the stream in the location of the concrete channel except for water that flows down slope from Charles Hall Road and from an existing storm drain outfall. Accordingly, it may be feasible to fill the existing streambed with fill material and to vegetatively stabilize the fill; however, the existing storm drain would have to be extended to the natural channel location, and this may require further study. Material removed from the natural channel could be used as backfill for the existing channel. This would help protect Charles Hall Road and the BG&E transmission line pole from being undermined at the toe of the slope. The concrete in the existing channel could be either broken up and buried in-place, or removed from the site.

If relocation of the existing stream is not preferred, the existing stream banks could be stabilized using bioengineering techniques. This will involve the cutting of trees for use in root-wad construction. A minor amount of clearing will also be required for construction access. In addition, improvements to the downstream sections of the concrete channel will be required. These improvements may include removing the existing concrete section where undermining has occurred and placing riprap to stabilize the streambed and side slopes.

7.4.3.3 Beneficial and Adverse Impacts

Redirecting the stream to its natural channel will restore the natural stream geometry, thereby establishing a more stable hydraulic channel configuration. This will improve downstream conditions as well, and remove the source of the downstream erosion. If the stream is left

in its existing location and the streambed and side slopes are stabilized, erosion of the stream will also be corrected. This project will assist in removing the sediment source resulting from erosion of the streambed and side slopes and, thereby, improve fish habitat.

No adverse impacts have been identified for stream restoration project.

7.4.3.4 Costs

The estimated cost for the Jabez Branch restoration project ranges from about $100,000 to $150,000. This estimate includes costs for construction, revegetation and stabilization materials, and engineering.

7.4.3.5 Schedule and Implementation

AAC anticipates that the design and construction of this project could be completed within one year. The Jabez Branch project could begin immediately upon issuance of the Corps permit, should the Devonshire mitigation site not be preferred. The schedule for the Jabez Branch project will have to be coordinated with the SHA schedule for the downstream improvements to Jabez Branch.

7.5 Alternative J - Dedication of the Former Denton Property as a Conservation Easement

7.5.1 Overview

Alternative J is the dedication of the former Denton property as a conservation easement. The property is contiguous with the existing wooded area of the MLF (see Figure 6). The former Denton property encompasses an area of approximately 16.9 acres. A portion of this area

forms a catchment area which contributes to ground-water seeps which form the headwaters of the southwest tributary of Wells Branch. The drainage area contributing to the headwaters of Wells Branch is approximately 17.7 acres and includes a portion of the area upgradient and downgradient of the former Denton property. The former Denton property contains 10 acres of the 17.7-acre drainage area; the MLF property contains 5 acres. The remaining 2.7 acres is privately owned and is upgradient and adjacent to the former Denton property. Additional information on the former Denton property is provided in Appendix K.

7.5.2 Purpose

The purpose of the dedication of the property to conservation would be: (i) to preserve the infiltration capacity of the recharge area upgradient from the headwaters of the southwest tributary of Wells Branch; (ii) to promote enhancement of wildlife habitat through eventual reforestation of the property; (iii) to promote the production export function of the wetlands; and (iv) to promote enhancement of the sediment stabilization function of the wetlands.

7.5.3 Feasibility

The southern portion of the former Denton property is the catchment area for springs discharging to the wetlands in the southwest tributary of Wells Branch between Cell 8 and Cell 9. The catchment area is about 18 acres in size. Based on the subsurface information, it appears that the former Denton property is underlain by sandy soils which provide the proper media for infiltration of surface-water runoff into the ground-water system. As can be seen from the hydrogeologic section C-C′ (see Figure 5), precipitation falling on the former Denton property will infiltrate the sandy soils and recharge the perched water table (i.e., Zone 1). Ground water from the perched water table in Zone 1 discharges

as seeps, or springs, where the clay confining layer beneath Zone 1 intersects the land surface.

The catchment area, which encompasses the former Denton property, supplies a peak surface-water runoff of 46 cfs and 81 cfs from the two-year and ten-year 24-hour storm events, respectively. A portion of the precipitation infiltrates in Zone 1 on the former Denton property and discharges as seeps, or springs, to the wetlands in the headwaters of the southwest tributary of Wells Branch.

It is estimated, based on regional information, that six inches of rainfall infiltrates into the subsurface annually during an average year. Therefore, the catchment area allows an annual average of approximately 2,900,000 gallons of surface water to infiltrate the subsurface. This quantity contributes to the spring flow and surface-water flow in the southwest tributary of Wells Branch. Therefore, the former Denton property, if maintained as a conservation area, will continue to maintain the existing surface-water and ground-water flow conditions, and wetland conditions on the MLF site.

The quality of the surface water and ground water in the wetlands could potentially be impacted by any significant land use changes on the former Denton property.

7.5.4 Beneficial and Adverse Impacts

The potential hydrogeological benefits of preserving the former Denton property in its current undeveloped state for wetlands mitigation include:

- infiltration of precipitation and surface-water runoff to recharge the ground-water system in Zone 1; and

- maintaining ground-water discharge to the wetland ecological system in the southwest tributary of Wells Branch.

Upon completion of the reforestation of the property, the additional wooded area will extend the forested riparian corridor of the northwest tributary and, thereby, enhance wildlife habitat, sediment stabilization, and production export functions of the wetlands.

Based on information presented in this report, AAC believes that dedicating the former Denton property to preservation in its current undeveloped state would have a positive impact as part of the mitigation plan for the MLF site. If the site is reforested, it will offer additional wildlife habitat and promote the enhancement of other wetland functions as well as preserve the recharge area. Recharge in the catchment area will move through the subsurface and discharge in the headwaters of Wells Branch. The added discharge will serve to maintain the wetlands between Cells 8 and 9 and provide base flow support in Wells Branch.

No adverse impacts have been identified with the dedication of a conservation easement on the former Denton property.

7.5.5 Costs

The former Denton property was purchased by AAC in December 1992 at a cost of $375,000. The purchase was made to expand the landfill perimeter buffer at this particular location. The highest and best use for the property, according to Real Property Consultants, is to subdivide the parcel into eleven lots. In the event that water service is provided to this locale, the feasibility of developing a subdivision is improved and thus the market value of the property could increase. Dedication of the property to conservation would, of course, eliminate it from any possible future development and thereby result in devaluation of the property.

The only additional cost to AAC beyond the original purchase price would be the transaction costs associated with the execution of conservation easements and minor demolition of buildings, fences, and accessory roads. These costs are estimated at $7,500.

With respect to reforestation, it is noteworthy that this property, upon execution of the conservation easement to either the Severn River Land Trust or Maryland Environmental Trust, would be eligible for access to AAC's reforestation funds. There are currently $248,000 available in the fund. The monies therein are allocated at $0.25 per square ft basis. The entire 16.9 acres of the former Denton property, less the BG&E right-of-way and existing dwelling, could be reforested at a cost of $184,000. Therefore, the total estimated cost of the former Denton property mitigation site is about $191,500.

7.5.6 Schedule and Implementation

This alternative could be implemented immediately upon issuance of a Corps permit. If the easement is executed in 1994, demolition and planting could begin in late 1994 and early 1995, respectively.

8. SUMMARY AND RECOMMENDATIONS

8.1 Summary

Anne Arundel County (AAC) is in the process of obtaining a Phase III permit to operate the MLF. As part of the permitting process, it was determined that approximately 1.8 acres of wetlands will be impacted by construction of Cell 9. Wetland impacts as a result of construction of Cell 8 have been completely avoided. Generally, the Corps requires replacement of wetlands on a 2 for 1 basis. Therefore, as Cell 9 will result in the filling of 1.8 acres of wetlands, 3.6 acres of wetlands would normally be developed. This report has been prepared to describe the avoidance, minimization, and mitigation alternatives developed for the site because of wetland impacts during construction of Cell 9.

Section 404 of the Clean Water Act requires that all adverse impacts be evaluated before dredged or fill materials can be discharged into waters of the United States, including wetlands. Direct disposal of dredged on fill materials may destroy or significantly alter natural habitats and decrease the diversity of plant and animal species found in those waters. The decision whether to issue a Corps permit for excavation, or filling, of wetlands is based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use in the public interest. The sequencing of mitigation strategies described below is to be followed in determining the type and level of mitigation necessary to demonstrate compliance with the Guidelines.

- **Avoidance.** A Corps permit is to be issued only for the least environmental damaging practicable alternative. No discharge is to be permitted if there is a practicable alternative to the proposed discharge which would have less impact to the aquatic ecosystem, so long as the alternative does not have other significant environmental consequences. Compensatory mitigation

may not be used as a method to reduce environmental impacts related to the evaluation of the least damaging alternative.

- **Minimization.** Appropriate and practicable steps to minimize the adverse impacts are required through project modifications and permit conditions.

- **Compensatory Mitigation.** Appropriate and practicable compensatory mitigation is required for unavoidable adverse impacts which remain after all appropriate and practicable minimization has been required. In determining compensatory mitigation, the functional values lost by the resource to be impacted must be considered. Generally, in-kind mitigation is preferable to out-of-kind mitigation. The likelihood of success of the mitigation project must also be considered.

AAC has fully complied with the mitigation sequencing process described above. This report describes the avoidance, minimization, and compensatory mitigation program followed by AAC during the permitting process. The program consists of ten alternatives each comprising one the following three categories: (i) minimization alternatives; (ii) alternatives for mitigation of direct impacts to wetlands; and (iii) alternatives for mitigation of indirect impacts to wetlands. The ten alternatives considered in this report are:

- *Alternative A:* Alternative A is the conversion of Pond 8-1 to an infiltration basin.

- *Alternative B:* Alternative B consists of the construction of infiltration trenches near Cell 9.

- *Alternative C:* Alternative C involves the use of an environmentally sensitive stream crossing structure between Cells 8 and 9.

- *Alternative D:* Alternative D is the utilization of best management practices (BMP) in Pond 9-2 to attenuate potential temperature impacts to Wells Branch and to maximize potential infiltration through the pond bottom.

- *Alternative E:* Alternative E consists of the establishment of a conservation easement in Wells Branch.

- *Alternative F:* Alternative F consists of the establishment of a conservation easement in the Jabez Branch watershed.

- *Alternative G:* Alternative G involves reforestation of the MLF site.

- *Alternative H:* Alternative H is the removal of MSW from Cell 3 and the construction of an infiltration basin in the location of Cell 3.

- *Alternative I:* Alternative I consists of either the creation of forested and scrub-shrub wetlands or stream restoration in Jabez Branch.

- *Alternative J:* Alternative J is the utilization of a portion of the former Denton property for a conservation easement.

8.2 Recommendations

It is anticipated based on existing surface and subsurface data that hydrologic and hydrogeologic conditions are favorable for all of the mitigation alternatives. Based on the hydrologic/hydrogeologic and environmental benefits, cost, and the schedule for implementation, all ten alternatives should be implemented. Upon implementation of these alternatives, the mitigation project has a high likelihood of success for replacing the function benefits lost in the filling of 1.8 acres of wetland in the Cell 9 area.

9. REFERENCES

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TABLE 1

SUMMARY OF EVALUATION RESULTS FOR EXISTING WETLANDS

	Social Significance	Effectiveness	Opportunity
Ground-Water Recharge	L	L	*
Ground-Water Discharge	M	L	*
Floodflow Alteration	L	H	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	L	H
Nutrient Removal/Transformation	M	L	H
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Notes: "H" = High, "M" = Moderate, "L" = Low, "U" - Uncertain, and "*"'s identify conditions where functions and values are not evaluated.

TABLE 2

MITIGATION ALTERNATIVES
WETLAND FUNCTION REPLACEMENT
MILLERSVILLE SANITARY LANDFILL

MITIGATION* ALTERNATIVES	WETLAND FUNCTION BENEFITS						
	FLOODFLOW ALTERATION	GROUND-WATER DISCHARGE (baseflow support)	SEDIMENT STABILIZATION (binding soil)	SEDIMENT/ TOXICANT RETENTION (Trapping)	PRODUCTION EXPORT	WILDLIFE HABITAT (Direct Benefits)	FISHERIES HABITAT (Direct Benefits)
A. Pond 8-1 Infiltration Basin (E)	✓	✓		✓			
B. Cell 9 Infiltration Trenches (E)	✓	✓		✓			
C. Environmentally Sensitive Stream Crossing (P)	✓		✓		✓	✓	✓
D. Pond 9-2 BMP (E)	✓	✓					
E. Wells Branch Conservation Easement (R,P)	✓		✓	✓	✓	✓	✓
F. Jabez Branch Conservation Easement (P)	✓		✓	✓	✓	✓	✓
G. MLF Reforestation (R)		✓	✓		✓	✓	
H. Cell 3 Conversion to Infiltration Basin (E)	✓	✓	✓	✓		✓	
I. a) Devonshine Mitigation (C) b) Jabez Branch Restoration (R)	✓ ✓	✓	✓ ✓	✓ ✓	✓	✓	✓
J. Denton Property Conservation Easement (P)		✓	✓		✓	✓	

Note: * - Mitigation Types: (E) = enhancement; (R) = Restoration; (C) = Creation; (P) = Preservation.

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TABLE 3

MINIMIZATION AND MITIGATION ALTERNATIVES COSTS
MILLERSVILLE SANITARY LANDFILL

ALTERNATIVE	COST
A - Conversion of Pond 8-1 to an infiltration basin	$ 23,450
B - Construction of infiltration trenches near Cell 9	17,470
C - Environmentally sensitive stream crossing structure between Cells 8 and 9	108,000
D - Use of BMP in Pond 9-2	15,000(1)
E - Conservation easement in Wells Branch	90,000
F - Conservation easement in Jabez Branch	150,000
G - Reforestation of the MLF site	326,700
H - Removal of MSW from Cell 3 and construction of infiltration basin	487,300
I - (a) Creation of wetlands at Devonshire site (b) Stream restoration in Jabez Branch	200,000 125,000
J - Conservation easement on a portion of Denton property	191,500(2)
ESTIMATED TOTAL COST OF ALL TEN ALTERNATIVES	**$1,534,420(3)**

Notes: (1) Estimated annual cost.

(2) Estimated cost does not include the cost to purchase the property; AAC purchased the property in 1992 for $375,000.

(3) Estimated total cost of all ten alternatives assumes that the Devonshire site alternative will not be implemented and the cost does not include the annual maintenance costs associated with the infiltration structures.

TABLE 4

COST ESTIMATE FOR INFILTRATION ALTERNATIVES MILLERSVILLE SANITARY LANDFILL

Option: Infiltration Basin 8-1

Excavation	(852 cy at $2/cy)	$ 1,704
Filter material	(852 cy at $15/cy)	12,780
Vegetative stabilization	(3333 sy at $0.25/sy)	834
Maintenance	(no additional cost - part of post-closure care)	-
Design Cost	(lump sum)	6,000
Contingency rate (10%)		2,132
		$23,450

Option: Infiltration Trench B-1

Excavation	(290 cy at $2/cy	$ 580
Aggregate	(290 cy at $25/cy)	7,250
Filter fabric	(1200 sf at $0.15/sf)	180
Observation Well	(6.5 ft at $40/lf)	260
Mobilization	(1 rig at $150/rig)	250
Maintenance	(semi-annual removal of 45 cy sediment at $2/cy)	90
Design Cost	(lump sum)	8,000
Contingency rate (10%)		860
		$17,470

Option: Infiltration Trench B-2

Excavation	(445 cy/$2/cy)	$ 90
Aggregate	(445 cy at $25/cy)	11,125
Filter fabric	(167 sf at $0.15/sf)	25
Observation well	(8 ft at $40/lf)	320
Mobilization	1 rig at $250/rig)	250
Maintenance	(semi-annual removal of 56 cy sediment at $2/cy)	110
Contingency Rate (10%)		1,270
		$13,990

TABLE 4 - (Continued)

Option: Infiltration Trench B-3

Excavation	(178 cy/$2/cy)	$ 360
Aggregate	(178 cy at $25/cy)	4,450
Filter fabric	(134 sf at $0.15/sf)	20
Observation well	(4 ft at $40/lf)	160
Mobilization	1 rig at $250/rig)	250
Maintenance	(semi-annual removal of 45 cy sediment at $2/cy)	90
Contingency Rate (10%)		530
		$ 5,860

NOTES:

1. Infiltration basin will be vegetatively stabilized along basin bottom to sides in accordance with Maryland Standards for permanent vegetative stabilization. Assume pond sides are already vegetatively stabilized and only lower 3 ft on pond sides will be disturbed.
2. Filter material for infiltration basin will consist of coarse sand.
3. Cost of excavation includes removal and proper disposal of sediment.
4. Routine inspections are part of post-closure maintenance and no additional costs are included.
5. Aggregate will have a d_{max} = 3 in., d_{min} = 15 in., and void ratio = 0.40. Aggregate will extend to top of infiltration trench.
6. Observation well will be a 4 in. diameter perforated PVC pipe with locking metal cap and foot plate.
7. Cost of observation well includes cost of drilling hole ($15/lf)/ cost of flush-joint casing ($10/lf), and cost of screen ($14/lf).

TABLE 4 - (Continued)

Option: Cell 3 Infiltration Basin

Excavation	(21,300 cy at $2/cy)	$ 42,600
Filter material	(1,130 cy at $15/cy)	16,950
Vegetative stabilization	(5,325 sy at $0.25/sy)	1,330
Engineering (estimate)		5,000
Combined spillway riser structure (estimate)		20,000
Riprap	(200 cy at $30/cy)	6,000
Design Cost	(lump sum)	7,000
Contingency rate (10%)		9,820
		$108,700

NOTES:

1. Combined spillway riser structure cost includes cost of aluminum coated corrugated metal pipe (ACCMP) riser and barrel, cost of installation, and construction of outfall basin. Riser pipe and barrel pipe cost based on using reinforced concrete pipe.

2. Riprap for outfall of combined spillway riser structure is No. 2 stone. Quantity of riprap includes inlet protection along banks of infiltration basin in areas of concentrated flow.

3. Cost of excavation does not include removing waste currently in Cell 3. Excavation cost is based on bottom of cell 3 at elevation 132 ft.

4. Total cost does not include cost associated with mobilization or demobilization.

TABLE 5

FINAL GRADING AND STABILIZATION COSTS
MILLERSVILLE SANITARY LANDFILL

1.	Regrading Cost	
	a. 2 crews ($1,000/day x 10 day)	$ 10,000
	b. Vegetative Stabilization (5,325 sy x $0.25/sy)	1,400
	c. Equipment Maintenance	1,500
2.	Contingency Rate (10%)	1,300
	Total Final Grading and Stabilization Cost	**$ 14,200**

Note: Costs are based on an assumption that county owns the equipment necessary to complete the work and will not have to rent it; maintenance and operations fees are included in the cost estimate.

TABLE 6

CLOSURE COSTS
MILLERSVILLE SANITARY LANDFILL

1.	Construction of Final Cover	
	a. HDPE Composite Geomembrane Cap (4 acres x 43,560 ft^2/acre x \$0.30/ft^2)	\$ 52,300
	b. Geocomposite for drainage Layer and Gas Venting (4 acres x 43,560 ft^2/acre x \$0.60/ft^2)	105,500
	c. Topsoil (4 acres x 2 ft thickness x 1,613 yd^3/acre-ft x \$10/yd^3)	129,000
	d. Vegetation of Final Cover System (4 acres x \$1,300/acre)	5,200
2.	Drainage Control	3,000
3.	Project Surveying (lump sum)	30,000
4.	Mobilization/Demobilization (lump sum)	40,000
5.	Contingency Items (silt fence, temporary seeding, etc.)	5,000
6.	Excavation to Top of Subgrade (\$3/cy x 13,000 cy)	39,000
7.	Contingency Rate (10%)	41,000
8.	Design Cost (lump sum)	25,000
	Total Closure Cost:	**\$475,000**

TABLE 8

POST-CLOSURE CARE COSTS
MILLERSVILLE SANITARY LANDFILL

1.	Water-Quality Monitoring (no additional cost - part of site-wide program)	$ 0
2.	Inspections Final Cover System Inspections (12 inspections x 5 hrs/each x $50/hr)	3,000
3.	Maintenance	
	a. Ground-Water Monitoring (no additional cost - part of site-wide program)	0
	b. Final Cover System Regrading (assume grading can be performed in one week and county owns the equipment)	
	• 1 crew with foreman, 1 laborer ($480/day x 3 days/yr x 10 yr)	14,400
	• equipment maintenance ($200/yr x 10 yr)	2,000
	c. Final Cover System Repair (one foot topsoil over 10% of final cover area) (1 ft x 0.10 x 4 acre x 43,560 ft^2/acre x cy/27 x $10/cy)	6,500
	d. Revegetation - Assume 25% of Site Requires Vegetation (0.25 x 4 acre x $1,300/acre)	1,300
	e. Mowing, Removing Young Trees, and Other Miscellaneous Maintenance (once per year) (4 acre x $150/acre x 10 yr)	6,000
4.	Contingency Rate (10%)	3,300
	Total Post-Closure Care Cost	**$ 36,500**

TABLE 7

INSTALLATION OF GAS RECOVERY SYSTEM COSTS
MILLERSVILLE SANITARY LANDFILL

1.	Mobilization	$ 3,400
2.	Drilling ($8,000/well x 4 wells)	32,000
3.	Well Components	1,600
4.	Contingency Rate (10%)	3,700
	Installation of Gas Recovery System Cost	**$ 40,700**

APPENDIX B

Wetlands Alternatives for Construction of Cells 8 and 9, Millersville Sanitary Landfill, Supplemental Joint Federal/State Application for Alteration of Any Floodplain, Waterway, Tidal or Non-Tidal Wetland in Maryland,

By

GeoSyntec Consultants

and

Hogan Environmental Consultants,

April 1991

APPENDIX A

WETLAND DELINEATION

- Wetland Delineate Report
- Wetland Mitigation Site Assessment and Conceptual Plan

WETLAND DELINEATION REPORT

Wells Branch Wetlands
From Millersville Landfill Property Line
to Gambrills Road

PREPARED FOR:

Geosyntec Consultants
5775 Peachtree-Dunwoody Road
Suite 200F
Atlanta, Georgia 30342

and

Anne Arundel County Department of Public Works
2662 Riva Road
Annapolis, Maryland 21401

PREPARED BY:

Hogan Environmental Consultants
109 Worcester Road
Stevensville, Maryland 21666

January 13, 1994

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EXECUTIVE SUMMARY

A wetlands delineation for the section of Wells Branch that lies between the Millersville Landfill and Gambrills Road was performed by Hogan Environmental Consultants on January 4 and 5, 1994. The Corps of Engineers Wetlands Delineation Manual (1987) was used. This investigation revealed that extensive wetlands are associated with Wells Branch within this stream reach. The wetlands are classified as palustrine scrub-shrub. Based on hydrology indicators present at the time of the investigation, a semipermanently flooded water regime was assigned to these wetlands.

The wetlands vary in width from about 30 feet to about 140 feet. The wetlands extend to the valley walls across the entire width of the floodplain. The stream averages 4 feet wide. Except for the upstream end of the study area, the stream is out of its banks, and braided channels exist throughout the wetland. In some areas more surface water than exposed land surface exists.

A small ponded area exists along the northern stream bank approximately 350 upstream from Gambrills Road in which the property owner has fenced in several domesticated ducks and geese. The natural wetland vegetation has been removed from this area.

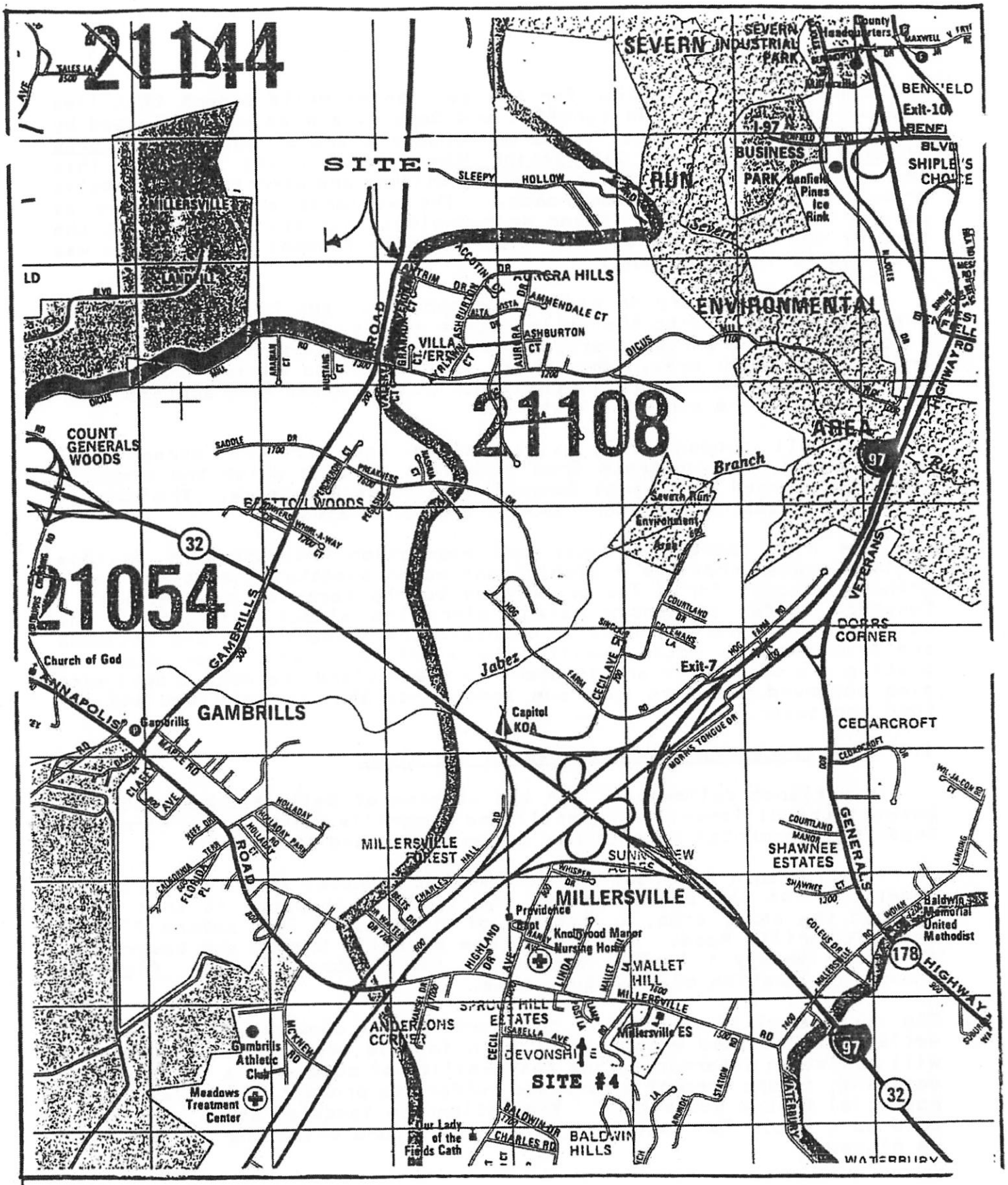
The high degree of water and vegetation interspersion in this wetland system provides a significant water quality benefit for Wells Branch. Except for a few properties to the north of the wetland, a forested buffer presently exists along the slopes adjacent to the wetland. This buffer helps to maintain the integrity of the wetlands and preserve its water quality and wildlife value. Deer scat and grazing was evident in and adjacent to the wetland. Raccoon tracks were also observed, as were numerous song birds that use the wetland for food and cover.

1.0 SITE DESCRIPTION AND PURPOSE OF THE STUDY

A wetlands delineation for the section of Wells Branch that lies between the Millersville Landfill and Gambrills Road was performed by Hogan Environmental Consultants on January 4 and 5, 1994.

Wells Branch is a nontidal stream that emanates at the Millersville Landfill. As the stream leaves the landfill property it then flows through the study area, a distance of about 1,150 feet before flowing under Gambrills Road. The confluence of Wells Branch and Severn Run is approximately 1.1 miles downstream from Gambrills Road. Figure 1 shows the location of the study area.

The purpose of the study is to identify the characteristics of the wetlands associated with Wells Branch in this area. This information will assist in determining the desirability of obtaining a conservation easement, in the form of a forested buffer, to protect the wetlands from potential future activities. The wetland delineation would be also be used as a basis for describing the area around which the buffer would be placed.



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WELLS BRANCH WETLANDS
VICINITY MAP

Scale: 1 inch = 2000 feet

Figure 1

2.0 METHODOLOGY

The wetland delineation was performed in accordance with the Corps of Engineers Wetlands Delineation Manual (1987). The manual follows a three parameter approach to making wetland determinations. The manual generally requires that a minimum of one positive wetland indicator from each parameter (hydrology, soil, and vegetation) be found on the site to make a positive wetland determination.

Wetlands are defined in the Federal regulations as "waters of the United States," a broad term that also includes streams, lakes, ponds, and rivers, among others. Intermittent as well as perennial streams are included as jurisdictional "waters." This wetland delineation report describes all "waters of the United States" that exist on the site, both vegetated wetlands and other waters of the United States.

Although procedures for making the wetland determinations in the field are standardized, wetlands are often transition areas between upland habitats and aquatic systems, and judgments are sometimes required as to the location of the wetland/upland boundary. The wetland delineation that was made for this study was based on use of the 1987 manual and our best professional judgment. The wetland boundary is subject to modification by the regulatory agencies. The final wetland determination is the authority of the Corps of Engineers and the Maryland Department of Natural Resources.

For purposes of mapping and describing the wetlands and other jurisdictional waters, the Classification of Wetlands and Deepwater Habitats of the United States (1979) was used. This is a hierarchial system which provides a uniformity of concepts and terms used to define wetlands according to hydrologic, geomorphologic, chemical and biological factors.

2.1 Vegetation

Plant species observed in the wetlands at the site were identified and the wetland indicator status for each species was determined from the National List of Plant Species that Occur in Wetlands: Northeast (Region 1) (May 1988). The indicator status designates the probability of occurrence of a given plant species in wetlands in the northeast region of the United States. The following is a listing of the indicator status designations:

OBL	=	Obligate Wetland (greater than 99% probability of occurrence)
FACW	=	Facultative Wetland (greater than 66% - less than 99% probability of occurrence)
FAC	=	Facultative (33% - 66% probability of occurrence)
FACU	=	Facultative Upland (1% - less than 33% probability of occurrence)
UPL	=	Obligate Upland (less than 1% probability of occurrence)
NA	=	Has been reviewed, but no agreement has been reached by the Regional Interagency Review Panel as to its indicator status

2.2 Soils

A hydric soil is a soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic vegetation. A hydric soil may either be drained or undrained, although a drained hydric soil may not continue to support hydrophytic vegetation. According to the manual, only when a hydric soil supports hydrophytic vegetation and the area has indicators of wetland hydrology may the soil be referred to as a "wetland" soil.

During this investigation soil cores were taken using a dutch auger to a depth of about 18 inches. As instructed in the manual, the soils were examined at each sample location to compare their characteristics immediately below the A-horizon or 10 inches (whichever was shallower) with the hydric soil indicators described in Part III of the manual. These characteristics include, in order of decreasing reliability, a.) Organic soils (Histosols), b.) Histic epipedons, c.) Sulfidic material, d.) Aquic or peraquic moisture regime, e.) Reducing soil conditions, f.) Soil color, including gleyed soils and soils with bright mottles and/or low matrix chroma, g.) Soil appearing on the hydric soils list, and h.) Iron and manganese concretions. The "Munsell Soil Color Charts" were used for identification of hydric soil color, chroma, and value.

2.3 Hydrologic Indicators

The Corps of engineers wetland delineation manual states that the term "wetland hydrology" encompasses all hydrologic characteristics of areas that are periodically inundated or have soils saturated to the surface at some time during the growing season. Areas with evident characteristics of wetland hydrology are those where the presence of water has an overriding influence on characteristics of vegetation and soils due to anaerobic and reducing conditions, respectively. Such characteristics are usually present in areas that are inundated or have soils that are saturated for sufficient duration to develop hydric soils and support vegetation typically adapted for life in periodically anaerobic conditions. The manual states that it is essential to establish that a wetland area is periodically inundated or has saturated soils during the growing season.

Indicators of wetland hydrology include drainage patterns, drift lines, sediment deposition, watermarks, stream gauge data and flood predictions, historic records, visual observation of saturated soils, and visual observation of inundation. Any of these indicators may be evidence of wetland hydrologic characteristics.

Indicators of wetland hydrology observed on the site were noted during the field investigation.

3.0 RESULTS

Extensive wetlands exist within the floodplain of Wells Branch between the Millersville Landfill property and Gambrills Road, a distance of about 1,140 feet. The wetlands are classified as palustrine scrub-shrub according to the Cowardin Classification System (1979). Based on the degree of flooding that was evident during the field investigation, a semipermanently flooded water regime was assigned to the wetland.

Three sample plots were examined in the wetland for vegetation, soils, and hydrology. Dominant shrub vegetation within the wetland consists of sweet bay, sweet pepperbush, winterberry, smooth alder, and high bush blueberry. Dominant herbaceous vegetation includes cinnamon fern and carex sedges. Vines include climbing hempweed, greenbrier, and halberd-leaved tearthumb. Trees on the edge of the wetland include black gum, overcup oak, sweet bay, swamp chestnut oak, tulip poplar, sweet gum and red maple. Additional nonpersistent species are likely to be observed during the growing season that were not observed during the field investigation. See Table 1 for list of the wetland plant species observed and their indicator status.

Soils within the wetland are classified by Soil Survey of Anne Arundel County as Bibb silt loam. Bibb silt loam is a poorly drained, silty soil that typically has a dark grayish-brown to light olive-brown silt loam surface layer and dark-gray or gray silt loam underlying material. These soils occur on floodplains among many of the major streams and drainageways in the county. The use of Bibb soils is limited by wetness most of the year and by frequent flooding. These soils are rarely used for farming. Residential use is limited by flooding and poor drainage. Figure 2 is the soil survey map that includes the study area.

The soils encountered within the wetland conform to the description given in the soil survey. The soil immediately beneath the A horizon is typically dark grayish brown (10 YR 4/2) or dark gray (10YR 4/1).

The high degree of water and vegetation interspersion in this wetland system provides a significant water quality benefit for Wells Branch. Except for a few properties to the north of the wetland, a forested buffer presently exists along the slopes adjacent to the wetland. This buffer helps to maintain the integrity of the wetlands and preserve its water quality and wildlife value. Deer scat and grazing was evident in and adjacent to the wetland. Raccoon tracks were also observed, as were numerous song birds that use the wetland for food and cover.

The wetlands have been flagged in the field with pink flagging tape labeled "WETLAND DELINEATION." The flags have been numbered to assist in their location if a field survey is performed. Figure 3 is a map at a scale of one inch equals 200 feet that shows the general location of the wetlands within the study area. This map is intended for illustration purposes only and should not be used for other purposes such as describing a conservation easement.

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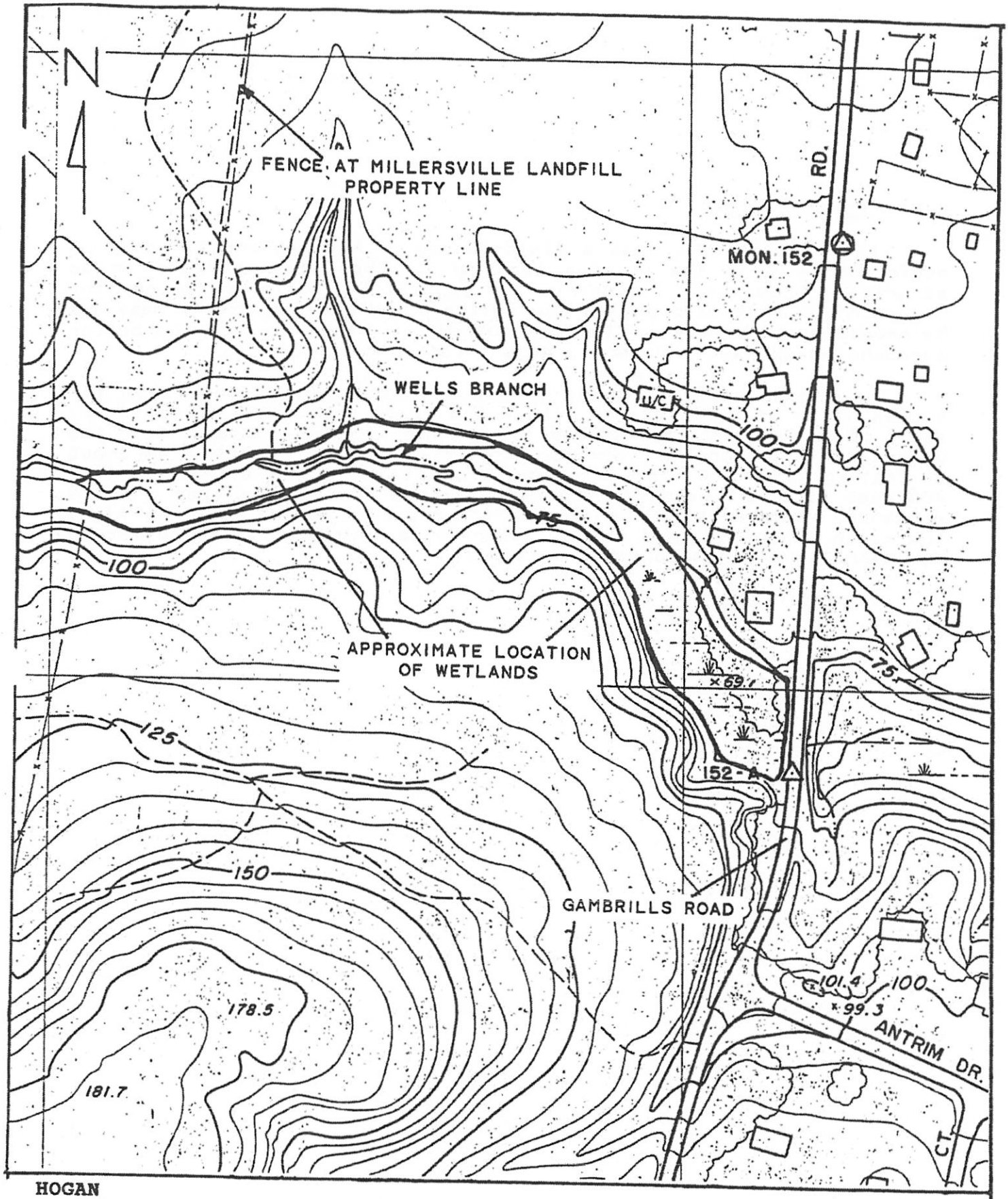
WELLS BRANCH WETLANDS
SOIL SURVEY OF ANNE ARUNDEL COUNTY, MD

Scale: 1 inch = 1667 feet

Figure 2



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WELLS BRANCH WETLANDS
WETLANDS LOCATION MAP

Scale: 1 inch = 200 feet

Figure 3

4.0 RECOMMENDATIONS

It is recommended that a field survey of the wetland flagging be performed only if the precise location of the wetlands needs to be accurately presented. However, if a generalized buffer easement line is described that encompasses the wetlands and steep slopes it may not be necessary to survey the wetland boundary. In such a case the buffer surrounding the wetlands would have a variable width.

The slopes south of Wells Branch are generally steeper than the slopes north of Wells Branch within the study area. The steep slopes south of Wells Branch are generally within a 150-foot distance from the upland/wetland boundary. However, the wetlands vary in width from about 30 feet to about 150 feet. Therefore, a total wetland buffer of 350 to 400 feet would be necessary to capture both the steep slopes and the wetlands. Such a buffer would preclude any development activity along the steep slopes as well as well as provide a water quality buffer to Wells Branch and its adjacent wetlands.

TABLE 1

WETLAND INVENTORY AND INDICATOR STATUS

Wells Branch Between Millersville Landfill and Gambrills Road

Common Name	Scientific Name	Indicator Status
TREES		
Black Gum	*Nyssa sylvatica*	FAC
Sweet Bay	*Magnolia virginiania*	FACW
Swamp Chestnut Oak	*Quercus michauxii*	FACW
Overcup Oak	*Quercus lyrata*	OBL
Tulip Poplar	*Liriodendron tulipifera*	FACU
Red Maple	*Acer rubrum*	FAC
Sweet Gum	*Liquidambar styraciflua*	FAC
SHRUBS		
Sweet Bay	*Magnolia virginiana*	FACW
High Bush Blueberry	*Vaccinium corymbosum*	FACW
Winterberry	*Ilex verticillata*	FACW
Smooth Alder	*Alnus serrulata*	FACW
Sweet Pepperbush	*Clethra alnifolia*	FACW
Staggerbush	*Lyonia mariana*	FAC
Black Gum	*Nyssa sylvatica*	FAC
VINES AND TRAILING PLANTS		
Greenbrier	*Smilax rotundifolia*	FAC
Climbing Hempweed	*Mikania scandens*	FAC
Halberd-leaved Tearthumb	*Polygonum arifolium*	OBL
FERNS AND FERN ALLIES		
Cinnamon Fern	*Osmunda cinnamomea*	FAC
GRASSES, SEDGES, RUSHES		
Wood Reed	*Cinna arundinacea*	FACW
Tussock Sedge	*Carex stricta*	OBL

Note: Includes persistent vegetation only

APPENDIX

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: WELLS BRANCH
Applicant/Owner: ANNE ARUNDEL COUNTY
Investigator: TED HOGAN

Date: 1/5/94
County: AA
State: MD.

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID:
Transect ID:
Plot ID: SP-1

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. SMOOTH ALDER	S	FACW	9.		
2. SWEET BAY	T, S	FACW	10.		
3. HIGHBUSH BLUEBERRY	S	FACW	11.		
4. SWEET PEPPERBUSH	S	FACW	12.		
5. GREENBRIER	V	FAC	13.		
6. CLIMBING HEMPVINE	V	FAC	14.		
7. BLACK GUM	T	FAC	15.		
8. OVERCUP OAK	T	OBL	16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100% 63%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0"-4" (in.)

Depth to Free Water in Pit: 0" (in.)

Depth to Saturated Soil: 0" (in.)

Wetland Hydrology Indicators:
Primary Indicators:
X Inundated
X Saturated in Upper 12 Inches
X Water Marks
X Drift Lines
X Sediment Deposits
X Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
X Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: BRAIDED STREAM CHANNELS THROUGHOUT SAMPLE PLOT 1. MORE THAN 50% OF THE SURFACE AREA WAS INUNDATED

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: WELLS BRANCH
Applicant/Owner: ANNE ARUNDEL COUNTY
Investigator: TED HOGAN

Date: 1/5/94
County: AA
State: MD.

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID:
Transect ID:
Plot ID: SP-2

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. BLACK GUM	T	FAC	9.		
2. TULIP POPLAR	T	FACU	10.		
3. SWAMP CHESTNUT OAK	T	FACW	11.		
4. OVERCUP OAK	T	OBL	12.		
5. SWEET BAY	S	FACW	13.		
6. SWEET PEPPERBUSH	S	FACW	14.		
7. GREENBRIER	V	FAC	15.		
8. CINNAMON FERN	F	FAC-	16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding "FAC-"). 88%
50%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0" (in.)

Depth to Free Water in Pit: 12" (in.)

Depth to Saturated Soil: 12" (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
X Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
X Local Soil Survey Data
___ FAC-Neutral Test
X Other (Explain in Remarks)

Remarks: FLOODPLAIN AREA WITH SANDY SOILS. ORGANIC PAN AT 12 INCHES BELOW SURFACE - SATURATED.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: WELLS BRANCH
Applicant/Owner: ANNE ARUNDEL COUNTY
Investigator: TED HEGAN

Date: 1/5/94
County: AA
State: MD.

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID:
Transect ID:
Plot ID: SP-3

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. SWEET BAY	T,S	FACW	9. HALBERD-LEAVED T.B.	V	OBL
2. BLACK GUM	S	FAC	10. GINNER GRASS	H	FACW
3. HIGH BUSH BLUEBERRY	S	FACW	11.		
4. STAGGER BUSH	S	FAC	12.		
5. SWEET PEPPERBUSH	S	FACW	13.		
6. CLIMBING HEMPWEED	V	FAC	14.		
7. CAREX STRICTA	H	OBL	15.		
8. CINNAMON FERN	H	FAC	16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding "FAC-"). 100 % / 60 %

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0"-4" (in.)
Depth to Free Water in Pit: 0" (in.)
Depth to Saturated Soil: 0" (in.)

Wetland Hydrology Indicators:
Primary Indicators:
X Inundated
X Saturated in Upper 12 Inches
X Water Marks
X Drift Lines
X Sediment Deposits
X Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
X Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: SAME HYDROLOGY AS SP-1

WETLAND MITIGATION SITE ASSESSMENT AND CONCEPTUAL PLAN

May 1992

Millersville Sanitary Landfill

Anne Arundel County, Maryland

Prepared for:

ANNE ARUNDEL COUNTY
MARYLAND

Department of Public Works
Bureau of Solid Waste

Under contract to:
Northeast Maryland Waste Disposal Authority

Prepared by:

Greenhorne & O'Mara, Inc.
9001 Edmonston Road
Greenbelt, Maryland 20770

and

Gershman, Brickner & Bratton, Inc.
2735 Hartland Road
Falls Church, Virginia 22043

and

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MILLERSVILLE LANDFILL: WETLAND FUNCTION AND VALUE ASSESSMENT

INTRODUCTION

The U.S. Army Corps of Engineers' Wetland Evaluation Technique (WET) was used to perform an assessment of the wetland functions and values of a wetland that may be impacted by proposed construction activities and a wetland replacement site. WET is intended to provide an initial, relatively rapid assessment of wetland functions and values. The results provide a qualitative analysis that may be used to compare the two different wetlands, to provide a baseline for determining effects and changes in the wetlands due to project activities, and to aid in developing design criteria for functional equivalence in created or restored wetlands as part of regulatory mitigation requirements.

The existing wetlands within the project area assessed by WET consist of a palustrine forested wetland (PFO) and several drainage swales associated with an unnamed tributary to Severn Run (Figure 1). These wetlands were identified and their boundaries located in a previous investigation. The mitigation site evaluated is located just to the east of Cell 6 and is shown on the accompanying revised mitigation concept plan (Figure 2). The revised plan incorporates a number of features designed to increase the probability of effectively performing functions similar to those of the existing tributary-associated wetlands. These features include construction of an outlet channel to connect with an existing channel which begins near the eastern boundary of the landfill and flows into Severn Run north of the main onsite tributary. Both the existing and proposed channel in the mitigation site are intermittent in the region of confluence, and discharge from the mitigation site could be controlled at the sediment basin inflow point. The existing channel is sufficiently incised such that overflow of banks is not evident, and the addition of water from the mitigation area should not increase erosion of banks or flooding. The present channel terminates in a several hundred foot wide PFO wetland on the west side of Gambrills Road, which could modulate any increased flooding potential from the mitigation site.

WET ASSESSMENT

The WET method evaluates the functions and values of a wetland by characterizing it in terms of predictors. Predictors are simple or integrated variables that are believed to correlate with the physical, chemical, and biological characteristics of the wetland and its surroundings, e.g., soil, climate, vegetation type, etc. Responses to questions concerning the predictors are analyzed in a series of interpretation keys that reflect the relationship between the predictors and the wetland functions as defined in the technical literature. The interpretation keys assign a qualitative probability rating of HIGH, MODERATE, or LOW to each function in terms of social significance, effectiveness, and opportunity.

Social Significance assesses the value of a wetland to society because of its natural features, economic value, official status, and strategic location.

Effectiveness assesses the capability of a wetland to perform a function due to its physical, chemical, or biological characteristics.

Opportunity assesses the degree to which a wetland has the availability to perform a function to its level of capability.

WET assesses several wetland functions and values, including groundwater discharge and recharge, sediment/toxicant retention, nutrient removal/transformation, sediment stabilization, production export, wildlife and aquatic diversity/abundance, and desynchronization of floodwaters. The value of wetlands as defined by WET refers to their worth, desirability or usefulness to humans or to society. Wetland values assessed by WET include uniqueness/heritage and recreation. The definition of each function and value as described in WET are summarized below.

WET Definitions for Functions and Values

Groundwater Recharge: Recharge wetlands are considered to be those where: (a) recharge to underlying materials or groundwater (deep or shallow) exceeds groundwater discharge to the wet depression on a net annual basis, and/or (b) the rate of recharge typically exceeds the rate of recharge from terrestrial environments.

Groundwater Discharge: Groundwater discharge areas are those where the rate of discharge from groundwater (deep or shallow) into the wetland exceeds the rate of recharge to underlying groundwater from the wetland on a net annual basis.

Floodflow Alteration: Floodflow alteration (desynchronization of floodwaters) occurs in those areas where surface water is stored or its velocity is attenuated to a greater degree than typically occurs in terrestrial environments. No judgment is made as to the value of such flow alteration; in fact, there may be situations in which reduction of flow velocity causes increased flooding due to flow synchronization.

Sediment Stabilization: High sediment stabilization areas are those which are more effective for binding soil and dissipating erosive forces than are typical upland environments.

Sediment/Toxicant Retention: High sediment/toxicant retention areas are those which physically (or chemically in the case of toxicant) trap and retain on a net annual basis the inorganic sediments and/or chemical substances generally toxic to aquatic life.

Nutrient Removal/Transformation: High nutrient removal/transformation areas are those which retain or transform inorganic phosphorus and/or nitrogen into their organic forms, or transform nitrogen into its gaseous form on either a net annual basis or during the growing season, and which are generally more effective at doing so than typical upland environments.

Production Export: High production export is the flushing of relatively large amounts of organic plant material from the wetland into downslope waters.

Aquatic Diversity/Abundance: A high aquatic diversity/abundance rating for an area means that, at least seasonally, the assessment area supports a notably high on-site diversity of fish and/or invertebrates.

Wildlife Diversity/Abundance for Breeding: A high rating for a wetland means that during the breeding season, the wetland normally supports a notably high on-site diversity and/or abundance of wetland-dependent birds.

Wildlife Diversity/Abundance for Migration and Wintering: A high rating for a wetland means that during migration or the winter months, the

wetland normally supports a notably high on-site diversity and/or dependance of wetland-dependent birds.

Prior to answering the questions within the WET program, all available published information was reviewed in the office, and a field visit was conducted to collect data. The published information reviewed included the Anne Arundel County Soil Survey, black and white aerial photographs taken in March 1990, and the National Wetland Inventory Maps. During several field visits data collection generally included observations of physical and biological characteristics of the wetland as well as general information on the surrounding land use, cultural resources, and watershed areas. A wetland report previously prepared by Greenhorne & O'Mara, Inc. was also incorporated into the analysis.

The assessment area (AA), watershed area, and input zone of each wetland were determined from and drawn on the Odenton, Maryland National Wetland Inventory map. Each wetland's site documentation form, evaluation answer sheet, and National Wetland Inventory Map is included at the back of this discussion.

RESULTS

The probability ratings assigned by WET to each function and value of the PFO wetlands on the project site and the mitigation site are summarized in Tables 1 and 2 respectively. It is apparent from these Tables that the existing PFO wetland has different ratings for some functions and values than the mitigation site. The reasons for the differences in the probability ratings between the two areas are described below for each function and value. Note that where an asterisk appears in the summary table it indicates that WET does not evaluate those particular functions and values, and it is not due to lack of site specific data.

Groundwater Recharge - The probability ratings for this function are the same for both wetlands. A low probability for social significance and effectiveness are typical ratings for wetlands in the eastern United States.

Groundwater Discharge - Both wetlands have moderate probability ratings for social significance. The mitigation area has a moderate rating for

effectiveness but the wetland is only low for this function. The low rating is primarily due to the lack of permanent inundation, whereas the mitigation site could receive hydrology from the sediment basin in somewhat drier conditions.

Floodflow Alteration - The social significance rating is low and opportunity is moderate for both wetlands. WET assigns a high rating for effectiveness to both wetlands, since there is intermittent flow through their outlets. The moderate rating for opportunity is due primarily to the size of the wetlands in relation to their watersheds.

Sediment Stabilization - A low rating was assigned to both wetlands for social significance, but both received a high rating for effectiveness. The high value is primarily due to the predominance of a forested vegetation class wider than 20 feet.

Sediment/Toxicant Retention - Both wetlands received a moderate rating for social significance. The existing wetland received a low rating for effectiveness; whereas, the mitigation area was rated moderate. In addition, both areas were rated high for opportunity. The difference between the moderate and low rating for effectiveness is due primarily to the mitigation area possessing more than one wetland zone and that the zones are vegetated. The existing wetland lacks shallow seasonal or permanent inundation and diverse vegetative cover. The high rating assigned for opportunity is because both areas can receive some sediment and toxicants from the existing landfill.

Nutrient Removal/Transformation - A moderate rating was assigned to both wetlands for social significance. The mitigation area was rated high for both effectiveness and opportunity, whereas, the existing wetland rated high for opportunity but low for effectiveness. The difference in the ratings is because the mitigation area was rated higher for sediment retention (the program assumes that if the wetland is conducive to sediment trapping it is often, but not always, also conducive to nutrient retention), and that is possesses significant and diverse vegetation and a portion with a permanently or semi-permanently flooded water regime. The existing wetland does not possess these characteristics. Furthermore, the high rating for opportunity is due to the potential non-point source of nutrients from the landfill.

Production Export - Both wetlands were rated moderate for the effectiveness of this function due to more than minimal extent of erect vegetation, potential for high levels of dissolved solids and presence of an outlet.

Wildlife Diversity/Abundance (D/A) - Both areas were rated low for social significance. Although both areas are located in a waterfowl use region of major concern (as shown in Figure 5 of the WET methodology manual) neither wetland has one acre or more of open water.

Wildlife D/A - Breeding - The existing wetland was rated low for effectiveness and the mitigation area rated high. There are many conditions that result in a high rating for this function. A few are: high vegetation interspersion and class diversity and some open water. However, the small size of the mitigation area would seem to reduce its effectiveness for this function.

Wildlife D/A - Migration - The PFO wetland was rated low for this function and the mitigation area was rated high. The latter area has a higher potential for diversity of wildlife during migration primarily because of the high vegetational interspersion. The small amount of acreage would likely limit the actual use by wildlife to small numbers.

Wildlife D/A -Wintering - A low rating was assigned to the existing wetland area and a high rating to the wetland. The differences between the ratings are due to the same characteristics as cited above for migration and breeding.

Aquatic Diversity/Abundance - Both wetlands were rated low for this function. Reasons for this low rating include lack of access.

Recreation and Uniqueness/Heritage - No interpretation keys are presented for assessing opportunity and effectiveness of these values because no scientific basis exists for an objective assessment without considerable site-specific data collection. However, the mitigation area has a higher social significance because monitoring can provide useful data on successful establishment of wetlands.

In summary, the proposed wetland mitigation site, if implemented as shown in the accompanying plan, should replace the functions expected to be lost due to the landfill expansion. A number of functions and values would probably be performed more effectively than the existing wetland.

MITIGATION SITE SUITABILITY

The proposed mitigation site was evaluated as to its potential to support wetlands on an annual basis. The long-term success of this project, like any wetlands creation project, is primarily dependent upon maintaining appropriate hydrology. A water budget was developed for the site to assess the balance between inflows and outflows during the growing season.

Groundwater studies for the Phase III permit modification show a perched water table in the vicinity of the mitigation site. A confining layer of clay exists approximately five feet below the surface. Evidence of this perched condition can be found within the site where patches of saturated soils support hydrophytic vegetation such as cattails. The excavation proposed would likely increase the area where groundwater would be available. Clay is available in nearby locations, and a clay liner would be installed to reduce percolation where necessary.

Despite the potential for groundwater as a hydrology source, a water balance excluding groundwater was developed, since runoff is often the most important source of water for natural as well as created wetlands.[1] Attempts to construct wetlands that rely primarily on groundwaters have not generally been successful to date due to limited knowledge of groundwater fluctuations and movements. The water budget for this site was based on the following inflows and outflows:

1. Runoff input from a 57.5 acre drainage area;
2. Direct precipitation input to the 3.8 acre wetland; and
3. Evapotranspiration output from the wetland.

Assuming that all precipitation will be runoff except for an initial abstraction of 0.2 inches, and that the average summer month has seven storms of 0.5 inches, the monthly runoff volume will be about 10 acre-feet. The high runoff value is based on the relative impermeability of the landfill cells which will eventually be capped. The monthly direct precipitation is 1.1 acre-feet. An evapotranspiration rate of 0.34 inches per day for the mitigation site is expected, and would result in a loss of

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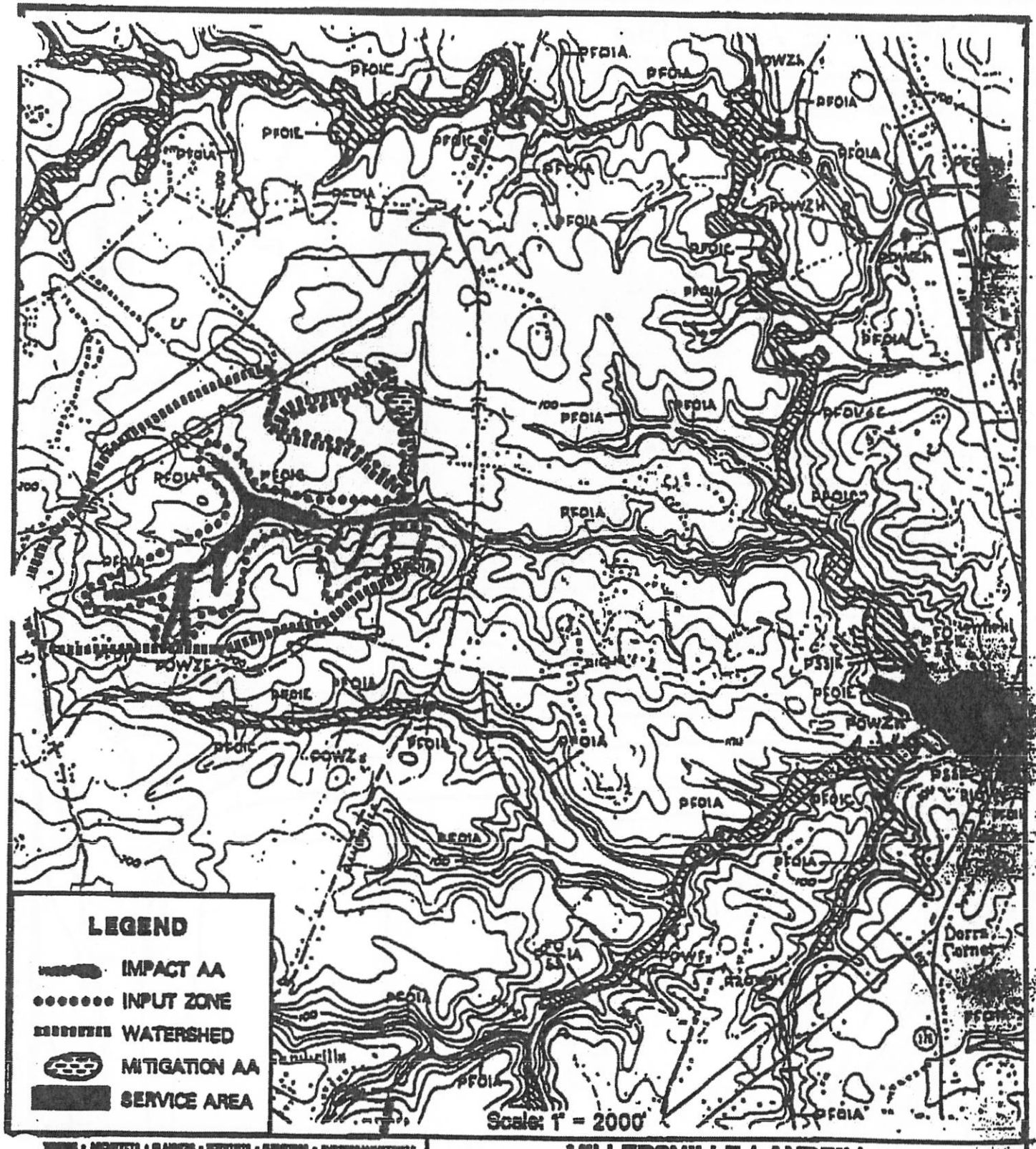
[1]Hammer, Donald. 1992. Creating Freshwater Wetlands. Lewis Publishers, Inc., Chelsea, MI, 298p.

3.2 acre-feet. Thus, the net input to the site, excluding groundwater, would be 7.9 acre-feet per month.

The water available for the mitigation site is expected to be adequate from surface and potential groundwater sources. During extreme dry periods water may be discharged from the sediment basin on a temporary basis. Excess water would be discharged from the mitigation site via the channel proposed to connect with the existing off-site channel. Thus, a connection with an existing tributary to Severn run would be maintained. Presently, runoff sheetflows with occasional erosive force across the landfill property and enters the existing intermittent channel at its headwaters. The proposed channel would minimize this sheetflow scouring and add riparian values.



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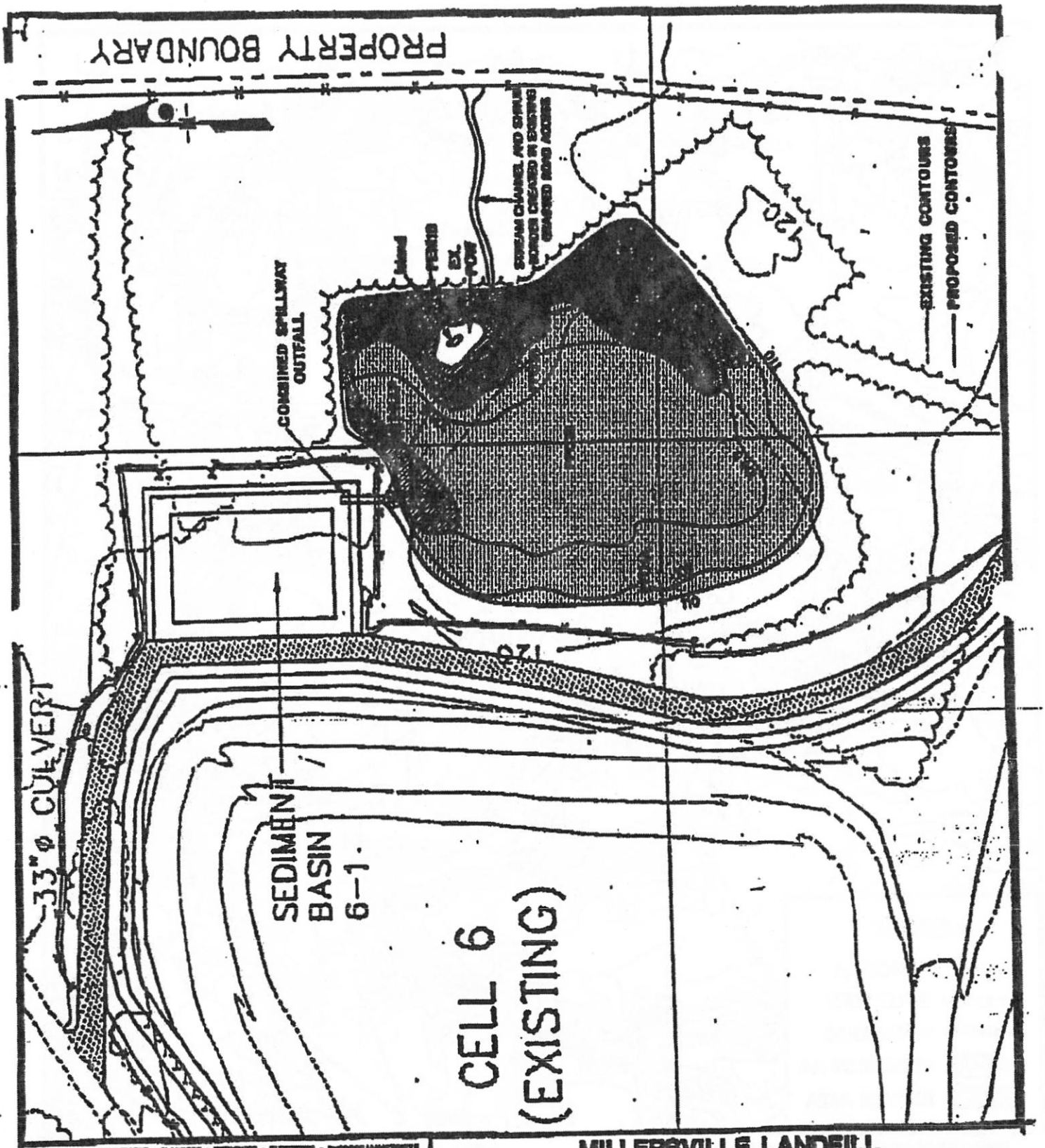
MILLERSVILLE LANDFILL
ANNE ARUNDEL COUNTY, MARYLAND
FIGURE 1: Location of Impact and and Mitigation Assessment Areas



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ANNE ARUNDEL COUNTY, MARYLAND
FIGURE 2: Conceptual Mitigation Plan
Scale: 1" = 150'

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Table 1. Summary of Evaluation Results for **Existing Wetlands**

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	L	H	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	L	H
Nutrient Removal/Transformation	M	L	H
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and "*"'s identify conditions where functions and values are not evaluated.

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Table 2. Summary of Evaluation Results for Mitigation Site

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	M	M	*
Floodflow Alteration	L	H	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	M	H
Nutrient Removal/Transformation	M	H	H
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	H	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	H	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	H	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and "*"'s identify conditions where functions and values are not evaluated.

WET Answer Dataset for EXISTING WETLAND

s1	-	[illegible]
s2	-	[illegible]
s3	-	[illegible]
s4	-	[illegible]
s5	-	[illegible]
s6	-	[illegible]
s7	-	[illegible]
s8	-	[illegible]
s9	-	[illegible]
s10	-	[illegible]
s11	-	[illegible]
s12	-	[illegible]
s13	-	[illegible]
s14	-	[illegible]
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s16	-	[illegible]
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s18	-	[illegible]
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s22	-	[illegible]
s23	-	[illegible]
s24	-	[illegible]
s25	-	[illegible]
s26	-	[illegible]
s27	-	[illegible]
s28	-	n
s29	-	n
s30	-	n
s31	-	[illegible]
1.1	-	[illegible]
1.2	-	n
1.3	-	n
2.1.1	-	y
2.1.2	-	n
2.1.3	-	n
2.2.1	-	n
2.2.2	-	y
3.1	-	y
3.2	-	n
3.3	-	n
4.1	-	y
4.2A	-	y
4.2B	-	n
4.2C	-	n
4.2D	-	n
[illegible]	-	y

6.1	-	n
7	-	n
8.1	-	n
8.2	-	n
8.3	-	n
8.4	-	n
9.1	-	n
9.2	-	n
9.3	-	n
10	-	n
10A	-	n
10B	-	y
10C	-	n
10D	-	n
10E	-	n
10F	-	n
11(x)	-	n
11(w)	-	n
11(d)	-	n
12A(x)	-	y
12A(w)	-	y
12A(d)	-	y
12Aa(x)	-	n
12Aa(w)	-	n
12Aa(d)	-	n
12Ab(x)	-	n
12Ab(w)	-	n
12Ab(d)	-	n
12Ac(x)	-	n
12Ac(w)	-	n
12Ac(d)	-	n
12Ad(x)	-	n
12Ad(w)	-	n
12Ad(d)	-	n
12Ae(x)	-	y
12Ae(w)	-	y
12Ae(d)	-	y
12B(x)	-	n
12B(w)	-	n
12B(d)	-	n
12Ba(x)	-	n
12Ba(w)	-	n
12Ba(d)	-	n
12Bb(x)	-	n
12Bb(w)	-	n
12Bb(d)	-	n
12Bc(x)	-	n
12Bc(w)	-	n
12Bc(d)	-	n

12Be(w)	-	n
12Be(d)	-	n
12C(x)	-	n
12C(w)	-	n
12C(d)	-	n
12Ca(x)	-	n
12Ca(w)	-	n
12Ca(d)	-	n
12Cb(x)	-	n
12Cb(w)	-	n
12Cb(d)	-	n
12Cc(x)	-	n
12Cc(w)	-	n
12Cc(d)	-	n
12Cd(x)	-	n
12Cd(w)	-	n
12Cd(d)	-	n
12D(x)	-	n
12D(w)	-	n
12D(d)	-	n
12Da(x)	-	n
12Da(w)	-	n
12Da(d)	-	n
12Db(x)	-	n
12Db(w)	-	n
12Db(d)	-	n
12E(x)	-	n
12E(w)	-	n
12E(d)	-	n
13A(x)	-	y
13A(w)	-	y
13A(d)	-	y
13Aa(x)	-	n
13Aa(w)	-	n
13Aa(d)	-	n
13Ab(x)	-	n
13Ab(w)	-	n
13Ab(d)	-	n
13Ac(x)	-	n
13Ac(w)	-	n
13Ac(d)	-	n
13Ad(x)	-	n
13Ad(w)	-	n
13Ad(d)	-	n
13Ae(x)	-	y
13Ae(w)	-	y
13Ae(d)	-	y
13B(x)	-	n

13Ba(d)	-	n
13Bb(x)	-	n
13Bb(w)	-	n
13Bb(d)	-	n
13Bc(x)	-	n
13Bc(w)	-	n
13Bc(d)	-	n
13Bd(x)	-	n
13Bd(w)	-	n
13Bd(d)	-	n
13Be(x)	-	n
13Be(w)	-	n
13Be(d)	-	n
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13C(d)	-	n
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13Ca(w)	-	n
13Ca(d)	-	n
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13Cb(d)	-	n
13Cc(x)	-	n
13Cc(w)	-	n
13Cc(d)	-	n
13Cd(x)	-	n
13Cd(w)	-	n
13Cd(d)	-	n
13D(x)	-	n
13D(w)	-	n
13D(d)	-	n
13Da(x)	-	n
13Da(w)	-	n
13Da(d)	-	n
13Db(x)	-	n
13Db(w)	-	n
13Db(d)	-	n
13E(x)	-	n
13E(w)	-	n
13E(d)	-	n
14.1(x)	-	n
14.1(w)	-	n
14.1(d)	-	n
14.2(x)	-	n
14.2(w)	-	n
14.2(d)	-	n
15.1A	-	y
15.1B	-	n

WET Answer Dataset for ~~"[illegible]"~~ Existing Wetland

16A(d) - y
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16B(w) - n
16B(d) - n
16C(x) - n
16C(w) - n
16C(d) - n
17 - n
18 - n
19.1A - n
19.1B - n
19.2 - n
19.3 - n
20.1 - y
20.2 - i
21A - n
21B - n
21C - n
21D - n
21E - y
22.1.1 - y
22.1.2 - y
22.2 - n
22.3 - y
23 - n
24.1 - i
24.2 - y
24.3 - y
24.4 - n
24.5 - n
25.1 - y
25.2A - y
25.2B - n
25.3 - n
26.1 - y
26.2 - y
26.3 - i
27.1 - n
27.2 - i
27.3 - i
28 - y
29.1 - y
29.2 - n
30(x) - n
30(w) - n
30(d) - n
31.1(x) - y
31.1(w) - y
31.3(x) - n
31.3(w) - n
31.3(d) - n
31.4(x) - i
31.4(w) - i
31.4(d) - i
31.5(x) - y
31.5(w) - y
31.5(d) - y
31.6A(x) - n
31.6A(w) - n
31.6A(d) - n
31.6B(x) - y
31.6B(w) - y
31.6B(d) - y
31.6C(x) - n
31.6C(w) - n
31.6C(d) - n
31.6D(x) - n
31.6D(w) - n
31.6D(d) - n
31.6E(x) - y
31.6E(w) - y
31.6E(d) - y
32A - n
32B - n
32C - n
32D - n
32E - y
32F - n
32G - n
32H - n
32I - n
32J - n
32K - n
33A - n
33B - n
33C - n
33D - n
33E - y
33F - n
33G - n
33H - n
33I - n
33J - n
33K - n
34.1 - n
34.2 - n
36.1.1(x) - n
36.1.1(w) - n
36.1.1(d) - n
36.1.2(x) - n
36.1.2(w) - n
36.1.2(d) - n
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36.2.2(w) - n
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38.7 - n
38.8 - i
39 - y
40.1 - i
40.2 - i
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41.2 - i
42.1.1(x) - y
42.1.1(w) - y
42.1.1(d) - y
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42.2.1(d) - y
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42.2.2(d) - n
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42.2.3(w) - n
42.2.3(d) - n
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43C(d) - n
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43E(x) - n
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43E(d) - n
43F(x) - n
43F(w) - n
43F(d) - n
43G(x) - n
43G(w) - n
43G(d) - n
43H(x) - n
43H(w) - n
43H(d) - n
43I(x) - n
43I(w) - n
~~43I(d)~~ - n
44A(x) - y
44A(w) - y
44A(d) - y
44B(x) - n
44B(w) - n
44B(d) - n
44C(x) - n
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44E(d) - n
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44H(w) - n
44H(d) - n
44I(x) - n
44I(w) - n

WET Answer Dataset for ~~Emily~~ Everything Workout

45D - n
45E - n
45F - n
45G - n
46A(x) - y
46A(w) - y
46A(d) - y
46B(x) - n
46B(w) - n
46B(d) - n
46C(x) - n
46C(w) - n
46C(d) - n
47A - y
47B - n
47C - n
48A(x) - y
48A(w) - y
48A(d) - y
48B(x) - n
48B(w) - n
48B(d) - n
48C(x) - n
48C(w) - n
48C(d) - n
48D(x) - n
48D(w) - n
48D(d) - n
48E(x) - n
48E(w) - n
48E(d) - n
48F(x) - n
48F(w) - n
48F(d) - n
49.1.1(x) - n
49.1.1(w) - n
49.1.1(d) - n
49.1.2(x) - n
49.1.2(w) - n
49.1.2(d) - n
49.2(x) - n
49.2(w) - n
49.2(d) - n
49.3(x) - n
49.3(w) - n
49.3(d) - n
50(x) - n
50(w) - n
50(d) - n
51.1 - u
51.2 - u
52.1 - u
52.2 - u
53.1 - u
53.2 - u
54(x) - u
54(w) - u
54(d) - u
55.1 - u
55.2 - u
55.3 - u
55.4 - u
56.1 - u
56.2 - u
57.1 - u
57.2 - u
58 - u
59.1 - u
59.2 - u
60 - u
61 - u
62 - u
63.1 - u
63.2 - u
64 - u
CR - u
1 - u
2 - u
3 - u
4 - u

WET Answer Dataset for ~~"milmi"~~ MITIGATION site

s1 - n
s2 - n
s3 - n
s4 - n
s5 - n
s6 - n
s7 - n
s8 - n
s9 - n
s10 - y
s11 - w
s12 - w
s13 - y
s14 - n
s15 - y
s16 - i
s17 - n
s18 - n
s19 - n
s20 - n
s21 - n
s22 - i
s23 - n
s24 - n
s25 - y
s26 - n
s27 - n
s28 - n
s29 - n
s30 - n
s31 - n
1.1 - n
1.2 - n
1.3 - n
2.1.1 - y
2.1.2 - n
2.1.3 - n
2.2.1 - n
2.2.2 - y
3.1 - y
3.2 - n
3.3 - y
4.1 - y
4.2A - y
4.2B - n
4.2C - n
4.2D - n
[illegible] - n

6.2 - y
7 - y
8.1 - n
8.2 - y
8.3 - n
8.4 - y
9.1 - y
9.2 - n
9.3 - n
10A - n
10B - y
10C - n
10D - n
10E - n
10F - n
11(x) - n
11(w) - n
11(d) - n
12A(x) - y
12A(w) - y
12A(d) - y
12Aa(x) - n
12Aa(w) - n
12Aa(d) - n
12Ab(x) - n
12Ab(w) - n
12Ab(d) - n
12Ac(x) - n
12Ac(w) - n
12Ac(d) - n
12Ad(x) - n
12Ad(w) - n
12Ad(d) - n
12Ae(x) - y
12Ae(w) - y
12Ae(d) - y
12B(x) - y
12B(w) - y
12B(d) - y
12Ba(x) - n
12Ba(w) - n
12Ba(d) - n
12Bb(x) - n
12Bb(w) - n
12Bb(d) - n
12Bc(x) - n
12Bc(w) - n
12Bc(d) - n

12Be(w) - y
12Be(d) - y
12C(x) - n
12C(w) - n
12C(d) - n
12Ca(x) - n
12Ca(w) - n
12Ca(d) - n
12Cb(x) - n
12Cb(w) - n
12Cb(d) - n
12Cc(x) - n
12Cc(w) - n
12Cc(d) - n
12Cd(x) - n
12Cd(w) - n
12Cd(d) - n
12D(x) - y
12D(w) - y
12D(d) - y
12Da(x) - y
12Da(w) - y
12Da(d) - y
12Db(x) - n
12Db(w) - n
12Db(d) - n
12E(x) - n
12E(w) - n
12E(d) - n
13A(x) - y
13A(w) - y
13A(d) - y
13Aa(x) - n
13Aa(w) - n
13Aa(d) - n
13Ab(x) - n
13Ab(w) - n
13Ab(d) - n
13Ac(x) - n
13Ac(w) - n
13Ac(d) - n
13Ad(x) - n
13Ad(w) - n
13Ad(d) - n
13Ae(x) - y
13Ae(w) - y
13Ae(d) - y
13B(x) - y

13Ba(d) - n
13Bb(x) - n
13Bb(w) - n
13Bb(d) - n
13Bc(x) - n
13Bc(w) - n
13Bc(d) - n
13Bd(x) - n
13Bd(w) - n
13Bd(d) - n
13Be(x) - y
13Be(w) - y
13Be(d) - y
13C(x) - n
13C(w) - n
13C(d) - n
13Ca(x) - n
13Ca(w) - n
13Ca(d) - n
13Cb(x) - n
13Cb(w) - n
~~13Cb(d) - n~~
13Cc(x) - n
13Cc(w) - n
13Cc(d) - n
13Cd(x) - n
13Cd(w) - n
13Cd(d) - n
13D(x) - n
13D(w) - n
13D(d) - n
13Da(x) - n
13Da(w) - n
13Da(d) - n
13Db(x) - n
13Db(w) - n
13Db(d) - n
13E(x) - n
13E(w) - n
13E(d) - n
14.1(x) - y
14.1(w) - y
14.1(d) -
14.2(x) - n
14.2(w) - n
14.2(d) - n
15.1A - n
15.1B - y

WET Answer Dataset for ~~"Initial"~~ Mitigation Site

16A(d) - n
16B(x) - y
16B(w) - y
16B(d) - y
16C(x) - n
16C(w) - n
16C(d) - n
17 - n
18 - n
19.1A - n
19.1B - n
19.2 - n
19.3 - n
20.1 - y
20.2 - y
21A - n
21B - n
21C - n
21D - n
21E - y
22.1.1 - y
22.1.2 - y
22.2 - n
22.3 - n
23 - n
24.1 - i
24.2 - y
24.3 - y
24.4 - n
24.5 - n
25.1 - y
25.2A - y
25.2B - n
25.3 - y
26.1 - y
26.2 - y
26.3 - n
27.1 - n
27.2 - i
27.3 - i
28 - n
29.1 - y
29.2 - y
30(x) - n
30(w) - n
30(d) - n
31.1(x) - y
31.1(w) - y
31.1(d) - y
31.2(x) - y
31.2(w) - y
31.2(d) - y
31.3(x) - y
31.3(w) - y
31.3(d) - y
31.4(x) - n
31.4(w) - n
31.4(d) - n
31.5(x) - y
31.5(w) - y
31.5(d) - y
31.6A(x) - n
31.6A(w) - n
31.6A(d) - n
31.6B(x) - y
31.6B(w) - y
31.6B(d) - y
31.6C(x) - n
31.6C(w) - n
31.6C(d) - n
31.6D(x) - n
31.6D(w) - n
31.6D(d) - n
31.6E(x) - n
31.6E(w) - n
31.6E(d) - n
32A - n
32B - n
32C - n
32D - n
32E - y
32F - n
32G - n
32H - n
32I - n
32J - n
32K - n
33A - n
33B - n
33C - n
33D - n
33E - y
33F - n
33G - n
33H - n
33I - n
33J - n
33K - n
34.1 - n
34.2 - n
36.1.1(x) - n
36.1.1(w) - n
36.1.1(d) - n
36.1.2(x) - n
36.1.2(w) - n
36.1.2(d) - n
36.2.1(x) - n
36.2.1(w) - n
36.2.1(d) - n
36.2.2(x) - n
36.2.2(w) - n
36.2.2(d) - n
36.2.3(x) - n
36.2.3(w) - n
36.2.3(d) - n
37 - i
38.1 - n
38.2 - n
38.3 - n
38.4 - n
38.5 - n
38.6 - n
38.7 - n
38.8 - i
39 - y
40.1 - i
40.2 - i
41.1 - i
41.2 - i
42.1.1(x) - y
42.1.1(w) - y
42.1.1(d) - y
42.1.2(x) - n
42.1.2(w) - n
42.1.2(d) - n
42.1.3(x) - n
42.1.3(w) - n
42.1.3(d) - n
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42.2.1(w) - y
42.2.1(d) - y
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42.2.2(w) - n
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42.2.3(w) - n
42.2.3(d) - n
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43A(w) - n
43A(d) - n
43B(x) - n
43B(w) - n
43B(d) - n
43C(x) - n
43C(w) - n
43C(d) - n
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43D(w) - n
43D(d) - n
43E(x) - n
43E(w) - n
43E(d) - n
43F(x) - n
43F(w) - n
43F(d) - n
43G(x) - n
43G(w) - n
43G(d) - n
43H(x) - n
43H(w) - n
43H(d) - n
43I(x) - n
43I(w) - n
43I(d) - n
44A(x) - y
44A(w) - y
44A(d) - y
44B(x) - n
44B(w) - n
44B(d) - n
44C(x) - n
44C(w) - n
44C(d) - n
44D(x) - n
44D(w) - n
44D(d) - n
44E(x) - n
44E(w) - n
44E(d) - n
44F(x) - n
44F(w) - n
44F(d) - n
44G(x) - n
44G(w) - n
44G(d) - n
44H(x) - n
44H(w) - n
44H(d) - n
44I(x) - n
44I(w) - n

WET Answer Dataset for ~~"milmil"~~ Mitigation Site

45D - n	48B(w) - n	49.2(x) - n	55.3 - u
45E - n	48B(d) - n	49.2(w) - n	55.4 - u
45F - n	48C(x) - n	49.2(d) - n	56.1 - u
45G - n	48C(w) - n	49.3(x) - n	56.2 - u
46A(x) - n	48C(d) - n	49.3(w) - n	57.1 - u
46A(w) - n	48D(x) - n	49.3(d) - n	57.2 - u
46A(d) - n	48D(w) - n	50(x) - n	58 - u
46B(x) - y	48D(d) - n	50(w) - n	59.1 - u
46B(w) - y	48E(x) - n	50(d) - n	59.2 - u
46B(d) - y	48E(w) - n	51.1 - u	60 - u
46C(x) - n	48E(d) - n	51.2 - u	61 - u
46C(w) - n	48F(x) - n	52.1 - u	62 - u
46C(d) - n	48F(w) - n	52.2 - u	63.1 - u
47A - y	48F(d) - n	53.1 - u	63.2 - u
47B - n	49.1.1(x) - n	53.2 - u	64 - u
47C - n	49.1.1(w) - n	54(x) - u	CR - u
48A(x) - y	49.1.1(d) - n	54(w) - u	1 - [illegible]
48A(w) - y	49.1.2(x) - n	54(d) - u	2 - [illegible]
48A(d) - y	49.1.2(w) - n	55.1 - u	3 - u
48B(x) - n	49.1.2(d) - n	55.2 - u	4 - u

APPENDIX B

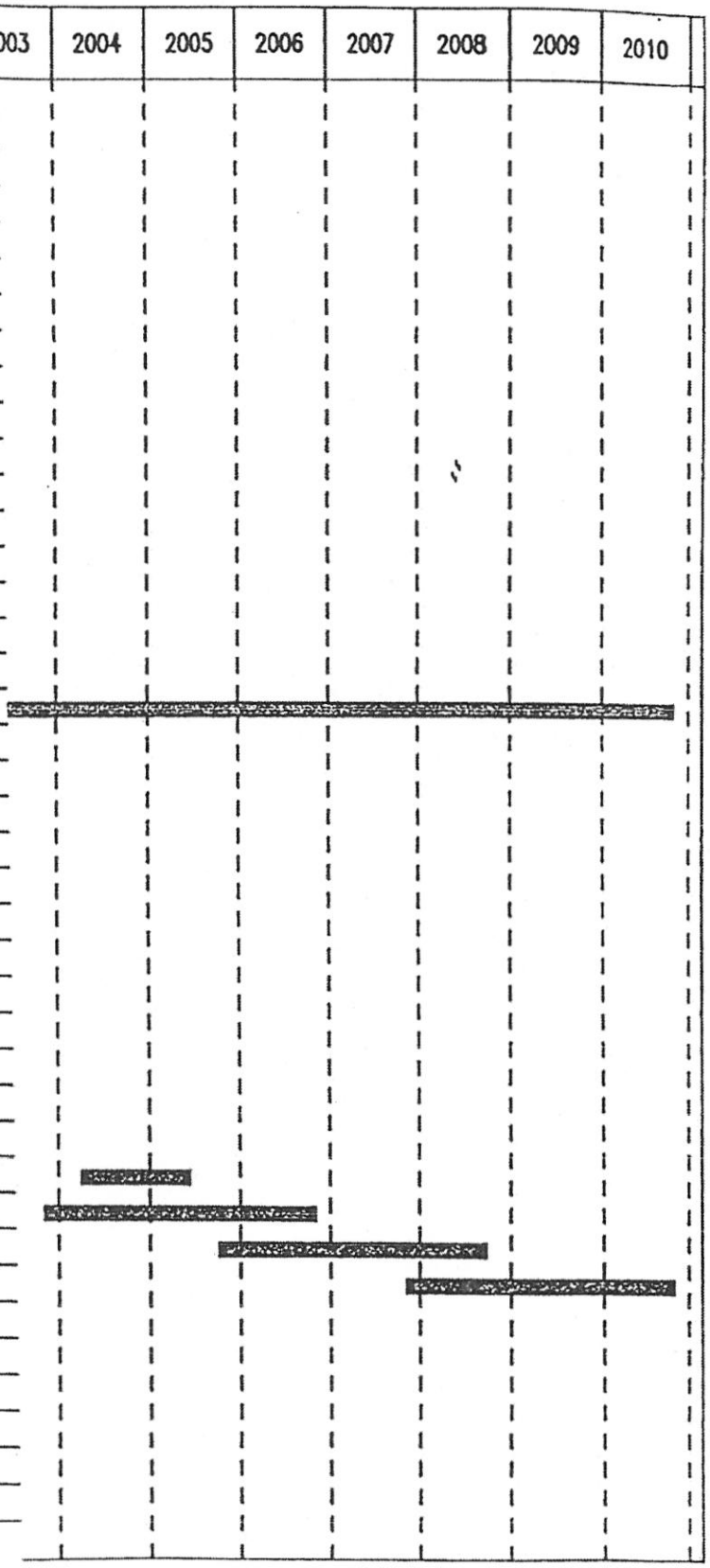
MASTER SCHEDULE

Task Name	3	2004	2005	2006	2007	2008	2009	2010
5388N FACILITY MASTER PLAN								
Consultant Selection								
Master Plan								
Phase I Design								
Phase I Bid/Award								
Phase I Construction								
Phase I Warranty Period								
Phase II Consultant Selection								
Phase II Design								
Phase II Bid/Award								
Phase II Construction								
Phase II Warranty Period								
5326N LEACHATE PRETREAMENT								
Design								
Bid/Award								
Construction								
Warranty Period								
5375N GAS MGMT & LEACH. EXTR								
Wells 8.1–8.4 Bid/Award								
Wells 8.1–8.4 Construction								
Wells 8.5–8.8 Bid/Award								
Wells 8.5–8.8 Construction								
Wells 9.1–9.5								
Wells 9.6–9.11								
CONVEY 8.1–8.4								
CONVEY 8.5–8.8								
5321N CONSTR CELL 8.1–8.4								
Construction								
Warranty Period								
5329N CONSTR CELL 8.5–8.8								
Design Consultant Selection								
Evaluate Fill Rate								
CQA Consultant Selection								
Design								
Cell 8.5 Bid/Award								
Cell 8.5 Construction								
Evaluate Fill Rate								
Cell 8.5 Fill								
Cell 8.6 Bid/Award								
Cell 8.6 Construction								
Evaluate Fill Rate								

Actual

Milestone

Task Name
Cell 8.6 Fill
Cell 8.7 Bid/Award
Cell 8.7 Construction
Evaluate Fill Rate
Cell8.7 Fill
Cell 8.8 Bid/Award
Cell 8.8 Construction
Evaluate Fill Rate
Cell 8.8 Fill
Evaluate Fill Rate
Remaining Cell 8 Fill
CLOSURE 8.1–8.8
Consult Selec/Design 8.1–8.4
Closure 8.1–8.4 Bid/Award
Closure 8.1–8.4 Construction
Closure 8.5–8.8 Bid/Award
Closure 8.5–8.8 Construction
5374N CELL 9
Permitting Design
Wetlands Mitigation Plan
Stormwater Design
Stormwater Bid/Award
Bridge Construction
Stormwater Construction
Borrow Area
Cell 9 Consultant Selection
Cell 9 Design
Cell 9 Bid/Award
Construction 9.1
Construction 9.2–9.4
Construction 9.5–9.8
Closure 9.1–9.3
Closure 9.4–9.8
Closure 9.9–9.11



Actual

Milestone

APPENDIX C

ALTERNATIVES EVALUATION

ALTERNATIVES EVALUATION

MILLERSVILLE SANITARY LANDFILL
ANNE ARUNDEL COUNTY, MARYLAND

PREPARED FOR:

Anne Arundel County
Department of Public Works
Bureau of Solid Waste

under contract to:
Northeast Maryland Waste Disposal Authority

PREPARED BY:

Greenhorne & O'Mara, Inc.
9001 Edmonston Road
Greenbelt, Maryland 20770

and

Gershman, Brickner & Bratton, Inc.
2735 Hartland Road
Falls Church, Virginia 22043

and

GeoSyntec Consultants
5950 Live Oak Parkway, Suite 330
Norcross, Georgia 30093

August, 1991

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APPENDIX

ALTERNATIVES EVALUATION

I. INTRODUCTION

Anne Arundel County, Maryland, currently operates two sanitary landfills: Millersville Sanitary Landfill and Sudley Road Sanitary Landfill. The Millersville Landfill serves the northern portion of the County, and the Sudley Road Landfill serves the southern portion. Spurred by recent developments in landfill technology, special conditions in the landfills' respective operating permits, and the passage of specific environmental regulations governing solid waste disposal in Maryland, Anne Arundel County has undertaken to redesign both landfills. Redesign will allow continued operation and service to the people of Anne Arundel County.

Millersville Landfill currently operates under the State of Maryland Refuse Disposal Permit Number 86-02-04-06A. As part of the effort to redesign this landfill, a Phase III Permit Modification Application has been submitted in partial fulfillment of the municipal solid waste requirements of the code of Maryland Title 26 - Department of the Environment, Subtitle 4 - Regulation of Water Supply, Sewage Disposal, and Solid Waste Chapter 7 - Solid Waste Management, (COMAR 26.04.07) The redesign of the landfill consists of installing cell liners and a drainage system within and around the proposed cells to prevent leachate from contaminating groundwater aquifers and consequently, public drinking water.

The refuse disposal permit allows the construction of 10 landfill cells. Cells 1 through 7 already exist, and construction of cells 8 and 9 is planned for the immediate future (cell 10 was combined with cell 9).

An application for a U.S. Army Corps of Engineers permit to channelize a segment of a stream channel necessary for the construction of cells 8 and 9 was submitted in March of 1990. During review of this application by the U.S. Army Corps of Engineers, it was determined that additional wetlands exist on the site. Consequently, a wetlands investigation was performed and the permit application was resubmitted in February of 1991.

This report describes and evaluates the proposed action to redesign cells 8 and 9 and several alternative options. It is intended to incorporate comments from the joint evaluation meeting and to provide supplemental information for the regulatory agencies during their evaluations of the U.S. Army Corps of Engineers permit application.

II. PURPOSE AND NEED FOR THE PROJECT

The Millersville Landfill serves much of the northern half of Anne Arundel County, accepting solid waste from County contract and commercial haulers, as well as private citizens. The Anne Arundel County population in the northern section alone (excluding the Annapolis area) is expected to reach 393,597 people by the year 2010. This represents an increase of 47,428 over the 1990 population figures of 346,169. More importantly, the

quantity of solid waste refuse generated within the County is projected to increase from 354,835 tons per year in 1991 to 433,669 tons per year (including recycling) in 2017. A more complete discussion and substantiation of these projections is found in Section V.A.2. The purpose of constructing and modifying cells 8 and 9 of the landfill is to provide more environmentally sound waste disposal practices and to accommodate the increasing solid waste disposal needs of northern Anne Arundel County for the next 25 years. Increased development and population growth projected for northern Anne Arundel County will place increased demands on solid waste disposal facilities. Recent environmental regulations require more efficient and environmentally sound disposal practices; therefore, the modified design exceeds MDE requirements and complies with Federal Regulations contained in the proposed EPA Subtitle D.

III. DESCRIPTION OF THE PROPOSED ACTION

A. Site Location and Description

The Millersville Landfill site is located about one mile due east of Fort George G. Meade and approximately one mile northwest of Millersville in northern Anne Arundel County, Maryland (see Figure 1). The site is located in the Odenton Quadrangle of the United States Geological Survey (USGS) 7.5 minute map at a latitude of approximately N39°5'30" and a longitude of approximately E76°40'00". An intermittent stream traverses the site, generally from west to east, becoming perennial at the eastern site boundary. The stream continues to the east until it meets Severn Run, which, in turn, eventually flows into the Severn River.

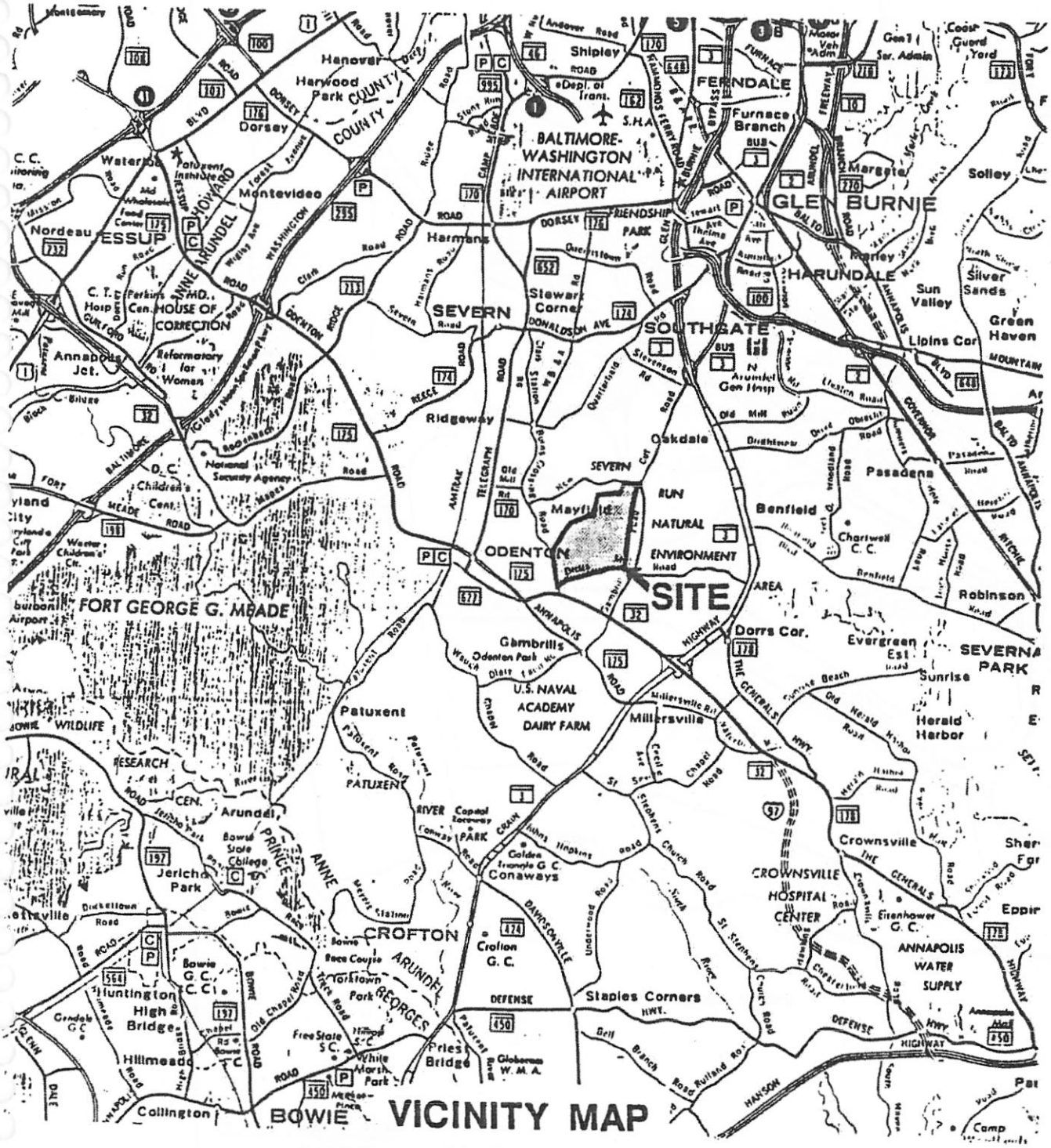
The site is divided into two sections by a 120-foot wide Baltimore Gas and Electric right-of-way trending generally west to east in the northern third of the site. The northern third of the site has been developed, and prior landfilling activities there are completed. The remaining southern portion of the site is the location of current landfilling activities. A large portion of the southern part of the site is undeveloped and densely wooded or covered with heavy brush.

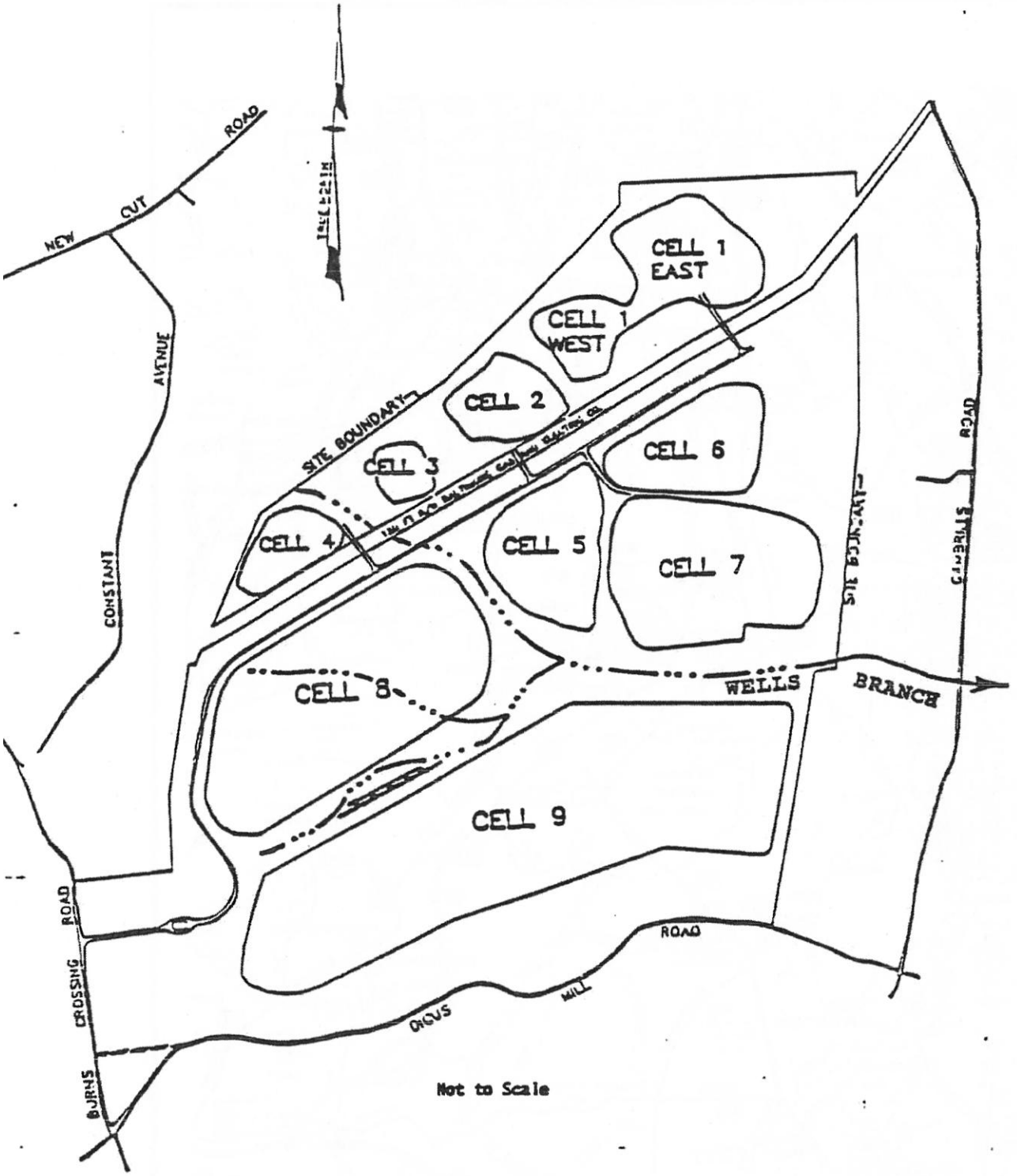
Elevations at the site range from a low of about 100 feet above sea level at the center of the site along the intermittent stream banks, to a high of about 240 feet above sea level at the southern and western site boundaries.

B. Site History and Redesign Plan

Anne Arundel County began operations at the Millersville Landfill in January of 1975. The initial site development plan was prepared in 1974 and included 10 separate landfill cells numbered sequentially from cell 1 to cell 10. Cells 1 through 4 are located in the northern portion of the site (north of the Baltimore Gas and Electric right-of-way), cells 5 through 8 are located in the center of the site, and cells 9 and 10 are located in the southern portion of the site (see Figure 2).

Waste disposal at the Millersville Landfill has generally proceeded along guidelines and operating procedures described in the Millersville


VICINITY MAP
SITE
BALTIMORE-WASHINGTON INTERNATIONAL AIRPORT
FERNDALE
GLEN BURNIE
HARUNDALE
SOUTHGATE
SEVERN
ODENTON
Millersville
Crofton
Bowie
Annapolis Jct.
Hanover
Dorsey
Montevideo
Harmans
Stewart Corner
Ridgeway
Oakdale
Mayfield
Gambrills
Patuxent
Arundel
Jericho Park
Conaways
Crownsville
Staples Corners
Priest Bridge
Huntington
Hillmeade
Collington
Pasadena
Benfield
Dorrs Cor.
Sunrise
Herald Harbor
Solley
Sun Valley
Silver Sands
Green Haven
Lipins Cor
Robinson
Evergreen Est.
SEVERNA PARK
Eppin
Shipley
Furnace Branch
Marsh Market
Nordeau
Waterbo
FORT GEORGE G. MEADE
U.S. NAVAL ACADEMY DAIRY FARM
NATURAL ENVIRONMENT AREA
CROWNSVILLE HOSPITAL CENTER
ANNAPOLIS WATER SUPPLY
HOUSE OF CORRECTION
Reformatory for Women
Eisenhower G.C.
Crofton G.C.
Bowie G.C.
Free State S.C.
White Marsh Park
Globerson W.M.A.
Chartwell C.C.
Cost Guard Yard
Gen'l Ser. Admin
Dept. of Trans.
S.H.A.
Nat'l Security Agency
Children's Cen.
Bowie State College
Golden Triangle G.C.
Tolstown Park
Race Course
Dickellsville
Hanover Park
Harwood Park
Mid Wholesale Food Center
Patuxent Institute
Perkins Cen.
C.T. Hosp.
Annapolis
Baltimore
Washington
Ft. Meade
Laurel
Columbia
Glen Burnie
Severn Run
Severn River
Patuxent River
Chesapeake Bay
Furnace Branch
Stony Run
Sawmill Creek
Deep Run
Cabin Branch
Little Patuxent River
Tilghman Creek
Rockenbach Creek
Cypress Creek
Cox Creek
Bacon Ridge Branch
Bell Branch
Rutland Branch
Cheston Creek
Cattail Creek
Hawkins Creek
Sawmill Creek
Furnace Branch
Severn Run
Severn River
Patuxent River
Chesapeake Bay
Ft. Meade
Laurel
Columbia
Glen Burnie
Annapolis
Baltimore
Washington
Dorsey
Hanover



MILLERSVILLE
SANITARY LANDFILL
PLAN VIEW

Intermittent Stream

Perennial Stream

Stream Diversion

Figure 2

Landfill operational plan, prepared in 1976. Cells 1 through 4 have been completed as designed. Cells 5 through 7 also have been filled. However, until approvals and permits are obtained to begin construction of cell 8, filling has continued in the areas between cells 5 through 7 to accommodate the continuous influx of refuse and minimize the area of waste disposal on unlined earth. As a result, there will be an attendant increase in height of the final landfill mound.

The Phase III Permit Modification Application addresses the redesign of previously permitted cells 8, 9, and 10 at the Millersville Landfill site. The redesign includes the following changes:

- Cell 8, a 57-acre landfill cell, will be double-lined with provisions for leachate collection above the top liner and leakage detection between the top and bottom liners;
- Cells 9 and 10 from the existing refuse disposal permit will be incorporated into a single cell, now referred to as cell 9;
- Cell 9 (newly designated) will be an 84-acre double-lined landfill cell with provisions for leachate collection above the top liner and leakage detection between the top and bottom liners; and
- the new cells will have basically the same footprints as those in the existing permit, but the final cover slopes and the final heights are different from those originally designed.
- trash from cells 2, 3 and 4 will be excavated and relocated to cells 5, 6 and 7 because of leachate problems in the former cells. The plan for cells 5, 6 and 7 are shown in Figure 3. Cells 2-4 will then be converted to a yard waste and composting site as shown in Figure 4. No wetlands would be impacted by these activities.

As indicated, each cell will have a double-liner system with a leachate collection system located above the top liner and a leakage detection system located above the bottom liner. This modification is in compliance with special conditions number I.B.1.a of the existing refuse disposal permit and exceeds the requirements of COMAR 26.04.07.07.C(12)(a). The new cells also will incorporate engineered final cover systems to minimize leachate generation after cell closure.

1. <u>Existing and Proposed Structures</u>

Existing structures at the Millersville Landfill include:

- access roads to existing cells;
- an administration building;
- a maintenance building;

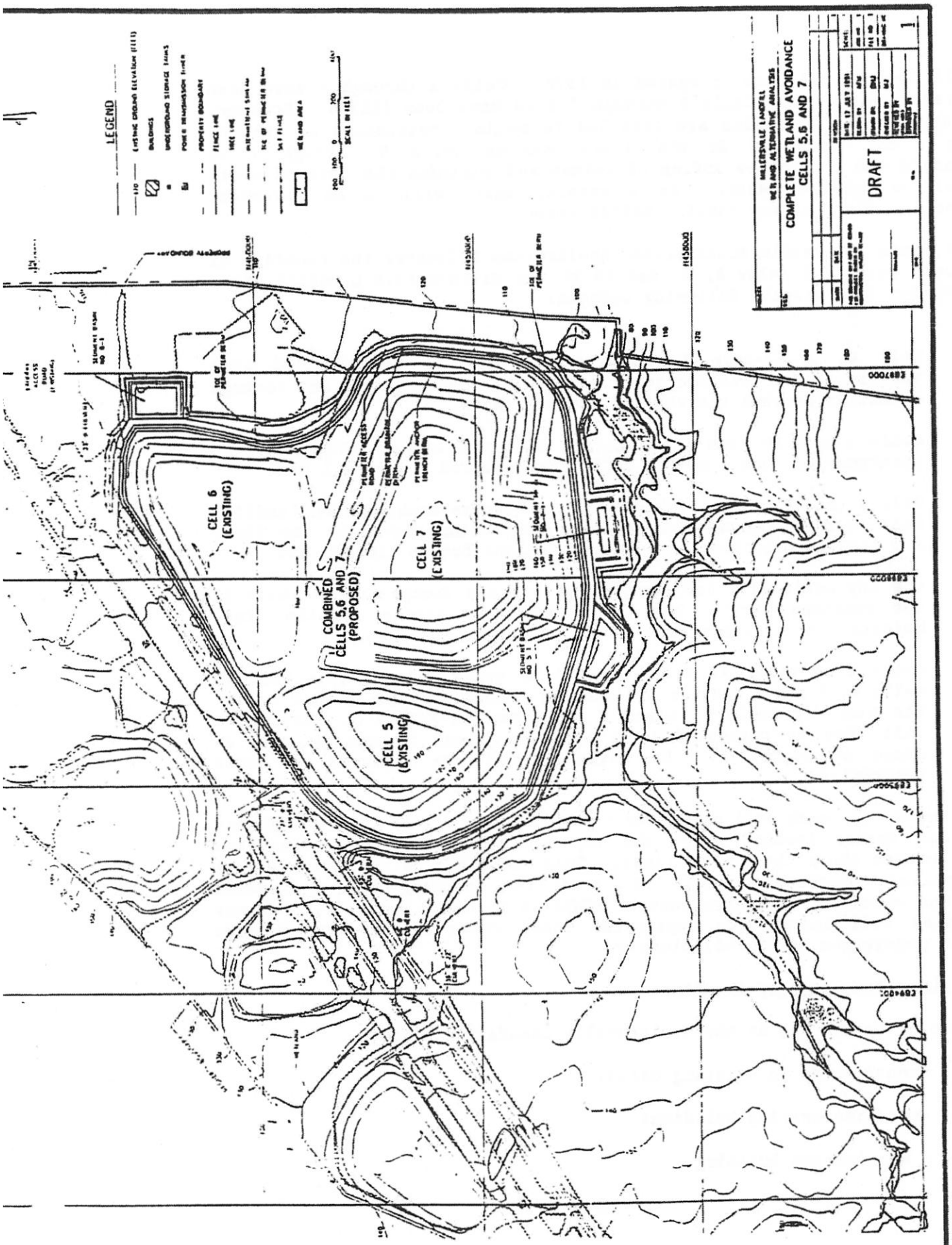
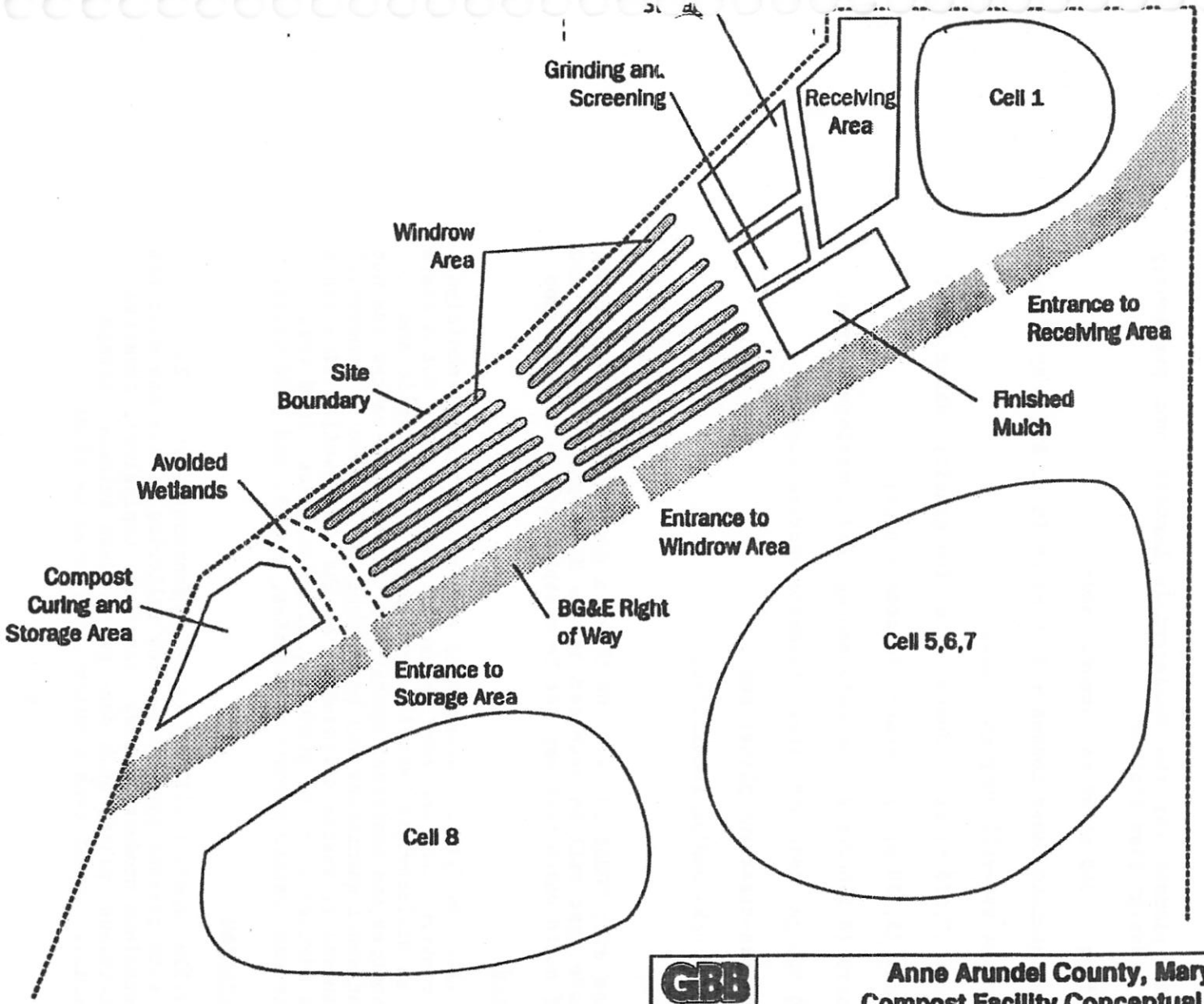

LEGEND
CELL 6 (EXISTING)
CELL 7 (EXISTING)
COMBINED CELLS 5,6 AND 7 (PROPOSED)
CELL 5 (EXISTING)
COMPLETE WETLAND AVOIDANCE CELLS 5,6 AND 7
DRAFT

Figure 3



GBB SOLID WASTE MANAGEMENT CONSULTANTS

Anne Arundel County, Maryland
Compost Facility Conceptual Layout

DRAFT

Figure 4

- two materials recycling buildings;
- a scale house and scale; and
- a perimeter fence.

New structures planned for the Millersville Landfill not previously mentioned in the redesign plan include:

- 14,000 feet (4,300 m) of new access roads;
- nineteen leachate riser houses (10 ft by 18 ft or 3.0 m by 5.5 m)
- two leachate wet-well pump stations;
- 8,580 feet (2,620 m) of leachate collection gravity header pipe;
- 5,160 feet (1,570 m) of leachate forcemain pipe;
- a 0.5-acre (0.2-hectare) leachate storage and containment area;
- two 250,000-gal (950,000-liter) leachate storage tanks;
- leachate pre-treatment plant; and
- leachate truck-loading facilities.

2. Waste Types

In accordance with COMAR 26.04.07.08.B(4), a description of the types of solid waste that will be accepted at the Millersville Landfill and the types of solid waste that may not be accepted are described below.

Waste Accepted

The Millersville Landfill is designed to accept nonhazardous municipal, commercial, construction, and some industrial solid waste. Solid waste disposed of at Millersville Landfill is brought from domestic and commercial sources and municipal operations. Industrial wastes are not expected, but small quantities may be brought to the site by commercial haulers. Generally, wastes disposed of at the Millersville site are a heterogenous mixture of paper products, plastics, cars, food waste, glass, rubber and leather products, textiles, metals, and yard waste.

Waste Not Accepted

The Millersville Landfill will not accept hazardous waste. In conjunction with current operations, the following wastes are also not accepted: petroleum products, acids, caustics, explosives, chemical wastes, anti-freeze, paint, bulk detergents, dead animals, sewage solids or liquids, septic tank pumpings, and sewerage sludge.

IV. ALTERNATIVES CONSIDERED

The No-Build Alternative and five Build Alternatives including two complete wetland avoidance schemes, were studied for the proposed modification and construction of cells 8 and 9 of the Millersville Landfill. The five Build Alternatives have the same number of sub-cells and the same leakage detection and leachate collection removal systems.

The proposed activity consists of modifying and constructing an already existing, active and permitted landfill. The proposed activity does not require locating a new landfill site. For this reason, this evaluation does not address alternative landfill sites within the county. A complete discussion on landfill site evaluations in Anne Arundel County can be found in the Final Site Evaluation Report, (1972).

A. Alternative I - No-Build

This alternative does not implement any modifications to the design of cells 8 and 9, such as cell liners and leachate collection and removal systems. Consequently, as a result of recent environmental regulations, construction of cells 8 and 9 would be prohibited and no additional cells would be provided.

B. Alternative 2

Alternative 2 would completely avoid wetland impacts by locating cell 8 to the northwest and cell 9 to the southeast of the main channel to the Severn Run tributary and all subtributaries. The size and shape of the cells would remain the same as in Alternative 4.

C. Alternative 3

Alternative 3 would accomplish total wetland avoidance by reducing the size of cells 8 and 9 relative to Alternative 4, as well as modifying their configuration (see Figure 5).

D. Alternative 4

Alternative 4 consists of locating cells 8 and 9 as shown in the U.S. Army Corps of Engineers wetland permit application dated February, 1991 (Figure 6). The size, shape, and location of the cells are the same as those shown in the original footprint for cells 8, 9, and 10 already approved under Refuse Disposal Permit Number 86-02-04-06A. A berm would be constructed around the perimeter of each cell to accommodate the leachate collection and removal system.

E. Alternative 5

In Alternative 5 the configuration and size of Cell 9 is modified relative to alternative 4 in order to minimize wetland impacts. Cell 8 maintains the size and shape of Alternative 4 (see Figure 7).

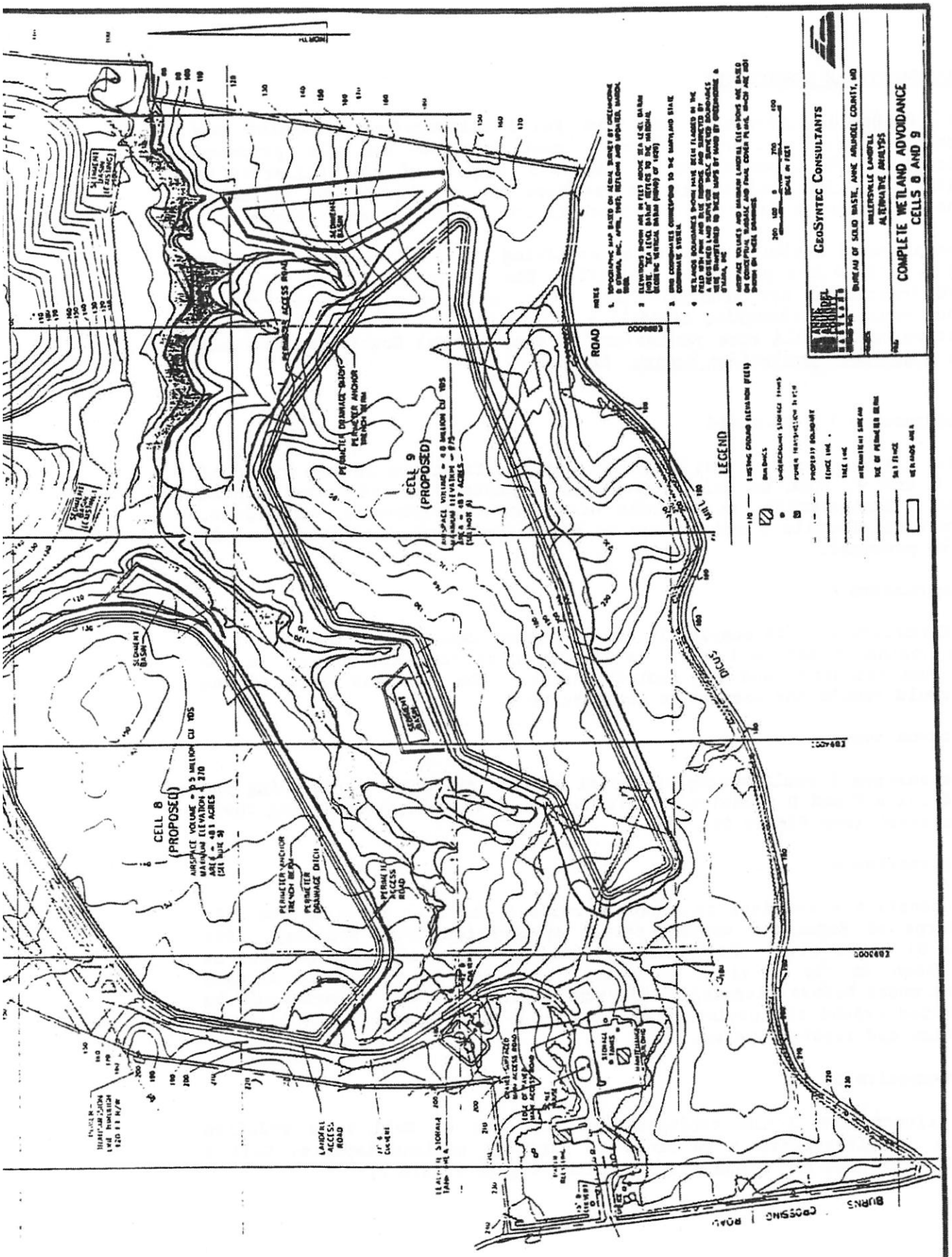

CELL 8
(PROPOSED)
CELL 9
(PROPOSED)
PERIMETER ANCHOR TRENCH BERM
PERIMETER DRAINAGE DITCH
PERIMETER ACCESS ROAD
LANDFILL ACCESS ROAD
SEDIMENT BASIN
ROAD
LEGEND
GeoSyntec Consultants
BUREAU OF SOLID WASTE, ANNE ARUNDEL COUNTY, MD
MILLERSVILLE LANDFILL
ALTERNATIVE ANALYSIS
COMPLETE WETLAND ADVOIDANCE
CELLS 8 AND 9

Figure 5

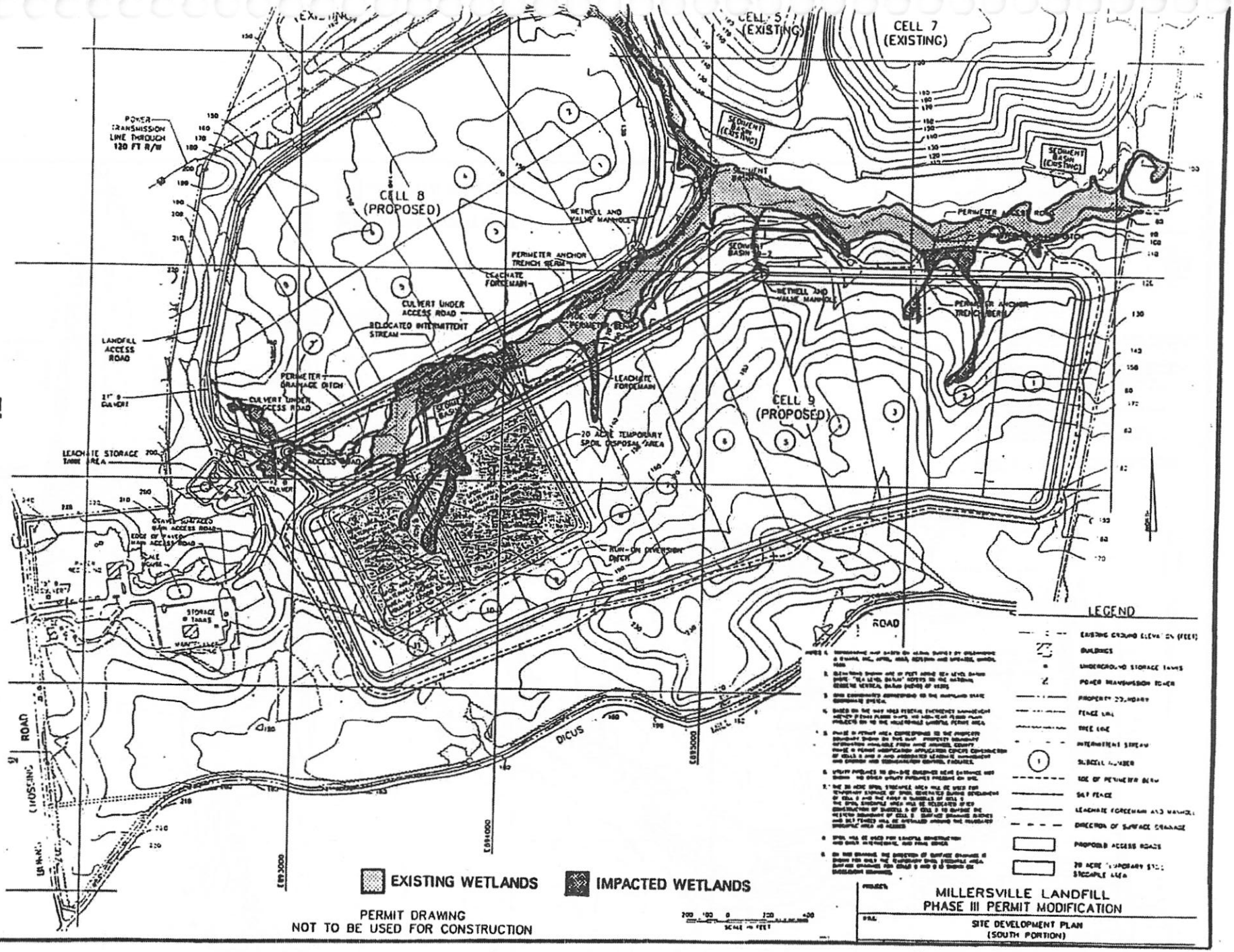

CELL 5 (EXISTING)
CELL 7 (EXISTING)
CELL 8 (PROPOSED)
CELL 9 (PROPOSED)
POWER TRANSMISSION LINE THROUGH 120 FT R/W
LANDFILL ACCESS ROAD
PERIMETER DRAINAGE DITCH
CULVERT UNDER ACCESS ROAD
RELOCATED INTERMITTENT STREAM
PERIMETER ANCHOR TRENCH BERM
LEACHATE FORCEMAIN
METHOD AND VALVE MANHOLE
SEDIMENT BASIN (EXISTING)
SEDIMENT BASIN 2
PERIMETER ACCESS ROAD
20 ACRE TEMPORARY SPOIL DISPOSAL AREA
RUN-ON DIVERSION DITCH
LEACHATE STORAGE TANK AREA
STORAGE TANKS
DICUS ROAD
CHOSCING ROAD
LEGEND
EXISTING WETLANDS
IMPACTED WETLANDS
PERMIT DRAWING
NOT TO BE USED FOR CONSTRUCTION
MILLERSVILLE LANDFILL
PHASE III PERMIT MODIFICATION
SITE DEVELOPMENT PLAN
(SOUTH PORTION)

Figure 6

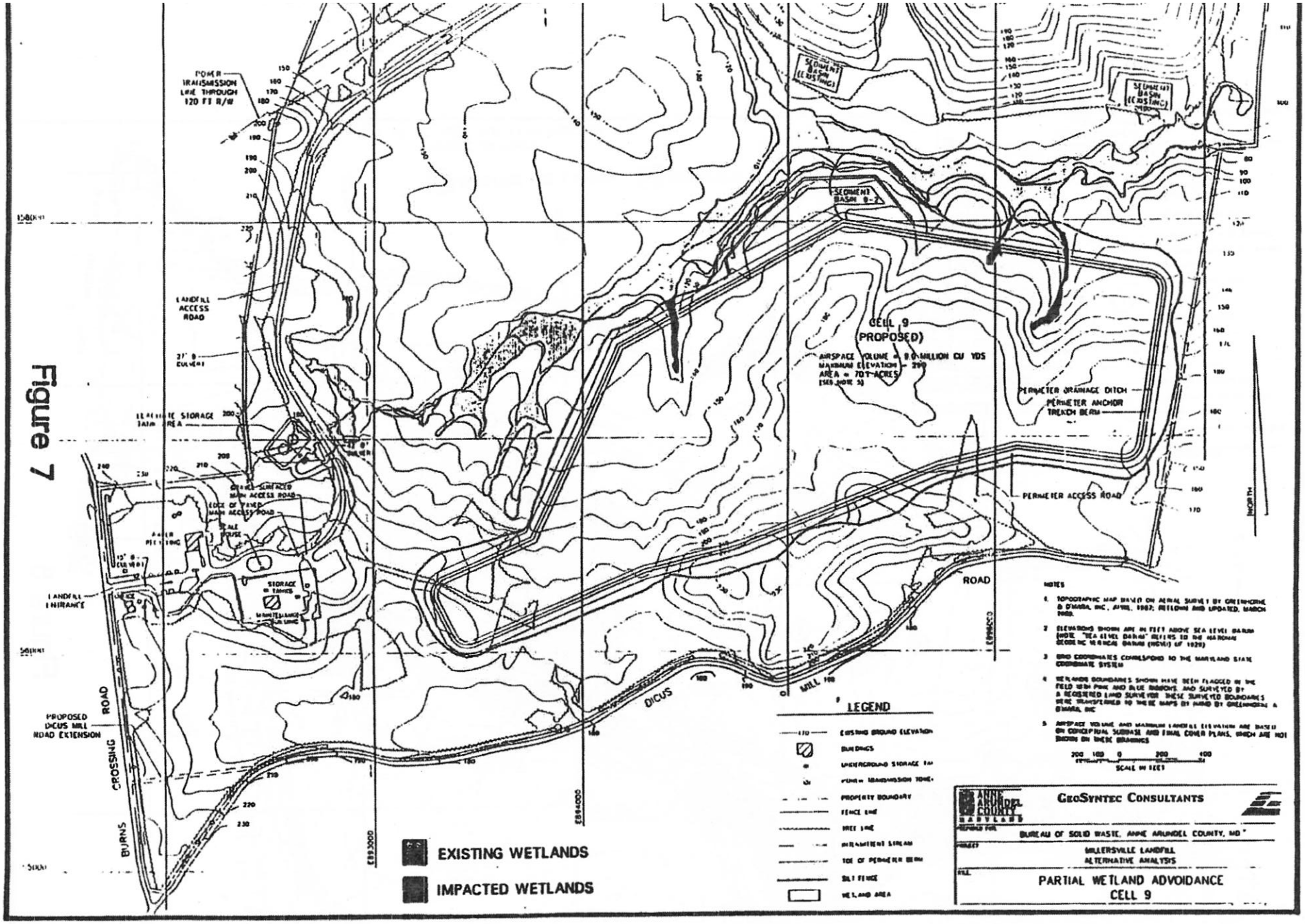

POWER TRANSMISSION LINE THROUGH 120 FT R/W
LANDFILL ACCESS ROAD
27" Ø CULVERT
LEACHATE STORAGE TANK AREA
GRAVEL SURFACED MAIN ACCESS ROAD
EDGE OF PAVED MAIN ACCESS ROAD
SCALE HOUSE
WATER METERING
15" Ø CULVERT
STORAGE TANKS
LANDFILL ENTRANCE
PROPOSED DICUS MILL ROAD EXTENSION
BURNS CROSSING ROAD
SEDIMENT BASIN (EXISTING)
SEDIMENT BASIN (EXISTING)
SEDIMENT BASIN B-2
CELL 9 (PROPOSED)
AIRSPACE VOLUME = 8.0 MILLION CU YDS
MAXIMUM ELEVATION = 290
AREA = 70.7 ACRES
(SEE NOTE 5)
PERIMETER DRAINAGE DITCH
PERIMETER ANCHOR TRENCH BERM
PERIMETER ACCESS ROAD
DICUS MILL ROAD
EXISTING WETLANDS
IMPACTED WETLANDS
LEGEND
EXISTING GROUND ELEVATION
BUILDINGS
UNDERGROUND STORAGE TANK
POWER TRANSMISSION TOWER
PROPERTY BOUNDARY
FENCE LINE
TREE LINE
INTERMITTENT STREAM
TOE OF PERIMETER BERM
SILT FENCE
WETLAND AREA
NOTES
1. TOPOGRAPHIC MAP BASED ON AERIAL SURVEY BY GREENHORNE & O'MARA, INC., APRIL 1987; REVISED AND UPDATED, MARCH 1989.
2. ELEVATIONS SHOWN ARE IN FEET ABOVE SEA LEVEL DATUM (NOTE: "SEA LEVEL DATUM" REFERS TO THE NATIONAL GEODETIC VERTICAL DATUM (NGVD) OF 1929)
3. GRID COORDINATES CORRESPOND TO THE MARYLAND STATE COORDINATE SYSTEM
4. WETLANDS BOUNDARIES SHOWN HAVE BEEN FLAGGED IN THE FIELD WITH PINK AND BLUE RIBBONS AND SURVEYED BY A REGISTERED LAND SURVEYOR. THESE SURVEYED BOUNDARIES WERE TRANSFERRED TO THESE MAPS BY HAND BY GREENHORNE & O'MARA, INC.
5. AIRSPACE VOLUME AND MAXIMUM LANDFILL ELEVATION ARE BASED ON CONCEPTUAL SUBBASE AND FINAL COVER PLANS, WHICH ARE NOT SHOWN ON THESE DRAWINGS
200 100 0 200 400
SCALE IN FEET
NORTH
ANNE ARUNDEL COUNTY MARYLAND
GEOSYNTEC CONSULTANTS
PREPARED FOR:
BUREAU OF SOLID WASTE, ANNE ARUNDEL COUNTY, MD
PROJECT:
MILLERSVILLE LANDFILL
ALTERNATIVE ANALYSIS
TITLE:
PARTIAL WETLAND AVOIDANCE
CELL 9

Figure 7

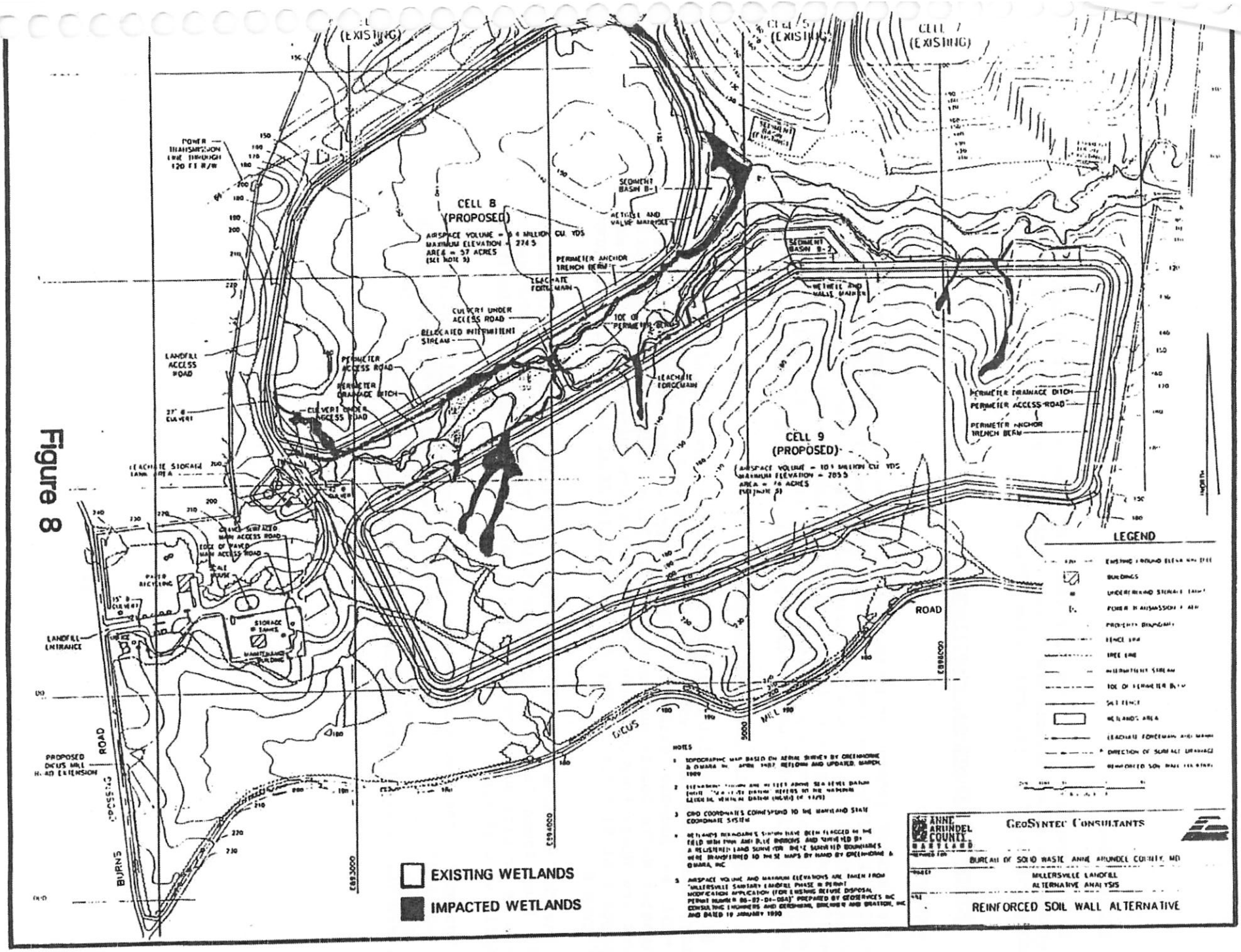

CELL 6 (EXISTING)
CELL 5 (EXISTING)
CELL 7 (EXISTING)
CELL 8 (PROPOSED)
CELL 9 (PROPOSED)
SEDIMENT BASIN B-1
SEDIMENT BASIN B-2
PERIMETER ANCHOR TRENCH BERM
LEACHATE FORCEMAIN
CULVERT UNDER ACCESS ROAD
PERIMETER ACCESS ROAD
PERIMETER DRAINAGE DITCH
LANDFILL ACCESS ROAD
LANDFILL ENTRANCE
LEACHATE STORAGE TANK AREA
PROPOSED DICUS MILL ROAD EXTENSION
BURNS ROAD
DICUS MILL ROAD
ROAD
EXISTING WETLANDS
IMPACTED WETLANDS
LEGEND
NOTES
GEOSYNTEC CONSULTANTS
ANNE ARUNDEL COUNTY MARYLAND
BUREAU OF SOLID WASTE ANNE ARUNDEL COUNTY, MD
MILLERSVILLE LANDFILL
ALTERNATIVE ANALYSIS
REINFORCED SOIL WALL ALTERNATIVE

Figure 8

F. Alternative 6

In Alternative 6 the configuration and size of Cells 8 and 9 are maintained to match Alternative 4, but reinforced soil walls are installed along portions of the perimeter berms (Figure 8).

V. EXISTING ENVIRONMENTAL CONDITIONS

A. Socioeconomic

The lack of general acceptance by the public of sanitary landfills is probably caused by the many nuisances perceived to be associated with landfill operations. Some of these nuisances include roadside litter, offensive odors, aesthetic impact, dust and smoke, traffic and noise, and disease vectors (rodents, insects, birds, etc.). In reality, these nuisances are virtually absent from a properly operated landfill.

1. Service Area and Population Projections

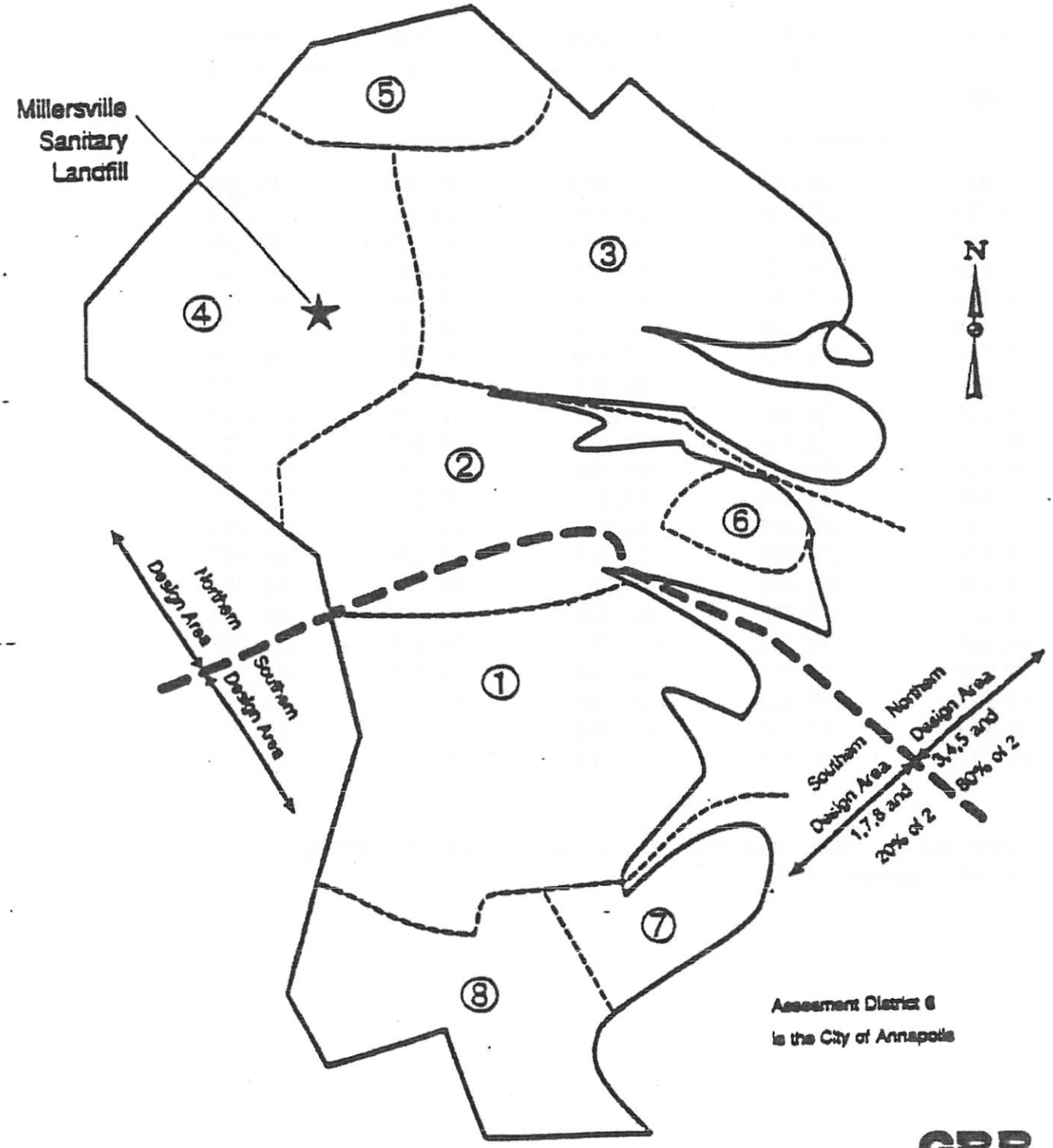
Millersville Landfill serves much of the northern half of Anne Arundel County, accepting solid waste from County contract and commercial haulers as well as private citizens. The County is divided into two areas designated North County and South County. Millersville Landfill generally serves the North County, which includes Assessment Districts 3, 4, 5, and 80 percent of District 2. The Millersville Landfill service area is shown in Figure 9.

The Millersville Landfill will start accepting municipal solid waste (MSW) from South County in the year 2011. This increase in the waste stream is predicated on the projected closure of the Sudley Road Sanitary Landfill at that time.

Currently, the population within the Millersville Landfill service area approaches 350,000 people, and is expected to exceed 390,000 people during the design life of the project. Population projections for the Millersville Landfill service area are shown in Table 1.

Millersville Sanitary Landfill Service Area

Assesment District Outline and Disposal Site Location



GBB

Figure 9

Table 1

POPULATION PROJECTIONS FOR MILLERSVILLE
LANDFILL SERVICE AREA

YEAR	DISTRICT 2 (80%)	DISTRICT 3	DISTRICT 4	DISTRICT 5	TOTAL POPULATION
1990	42,217	167,122	77,025	59,805	346,169
1991	42,725	168,298	78,494	59,998	349,515
1992	43,253	169,511	80,104	60,195	353,064
1993	43,803	170,763	81,874	60,397	356,836
1994	44,374	172,055	83,825	60,602	360,857
1995	44,970	173,390	85,981	60,812	365,153
1996	45,344	173,415	87,489	60,733	366,980
1997	45,727	173,487	89,087	60,655	368,955
1998	46,118	173,601	90,781	60,578	371,078
1999	46,519	173,755	92,578	60,502	373,354
2000	46,929	173,944	94,488	60,427	375,788
2001	47,208	174,281	95,541	60,341	377,371
2002	47,491	174,628	96,620	60,255	378,993
2003	47,776	174,985	97,727	60,169	380,657
2004	48,065	175,353	98,862	60,084	382,364
2005	48,357	175,733	100,026	59,999	384,115
2006	48,652	176,126	101,219	59,915	385,912
2007	48,950	176,532	102,444	59,832	387,757
2008	49,251	176,952	103,700	59,748	389,651
2009	49,556	177,386	104,990	59,665	391,597
2010	49,864	177,837	106,313	59,583	393,597

Source: Demographics 1988, Anne Arundel County, Office of Planning and Zoning, January, 1988.

2. Anticipated Solid Waste Quantities and Facility Life Projections

The Anne Arundel County Department of Public Works Bureau of Solid Waste has estimated existing and future quantities of waste expected to be received at the Millersville Landfill. These estimates have been submitted in annual reports to Maryland Department of the Environment. It is assumed that the waste stream quantities projected represent all of the eligible waste generated in the Millersville service area. The Anne Arundel County Draft Recycling Plan (GBB, 1989) estimated the quantity of recyclable material salvaged from the landfilled waste. This quantity is subtracted from the potential waste stream to give an actual quantity of solid waste to be landfilled. The projected annual solid waste quantities generated, recycled, and landfilled for the Millersville service area is provided in Table 2. The County estimates that recycling will gradually increase over the next four years until a maximum of 20 percent is achieved in 1995. It is unlikely that more than 20 percent per year would be recycled under present social and technological conditions. Thus, while the rate of landfillable solid waste will moderate over the next four years, the long-term projections indicate an accelerated rate despite recycling due to population increases in the County and expected industrial and commercial growth.

The Millersville Sanitary Landfill is projected to have a useful(design) life of approximately 25 years. The yearly projections are shown in Table 3.

B. Natural Environment

1. Wetlands and Waterways

Wetland determinations were made in accordance with the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1989). This manual generally follows a three-parameter approach to making wetland determinations: hydrophytic vegetation, hydric soils, and hydrologic indicators. All three parameters normally must be present for an area to be considered a wetland under Section 404 of the Clean Water Act. Exceptions to the requirements that all three parameters be present include open-water and riverine systems and disturbed areas.

Wetlands within the study area are associated with an unnamed tributary to Severn Run. Several drainage swales that flow into the unnamed tributary were also identified and delineated. Severn Run and all its tributaries are classified as Class IV surface waters according to COMAR 10.50.01.02I. Class IV designates Severn Run and its tributaries as recreational trout waters.

Wetland acreages were determined by planimetering wetland areas from 200-scale site development plans. Based on these computations, there are approximately 19 acres of palustrine, forested and riverine wetlands on the project site.

Table 2

PROJECTIONS OF ANNUAL WASTE ACCEPTANCE
MILLERSVILLE SANITARY LANDFILL SERVICE AREA
(TONS PER YEAR)

	WASTE SOURCE TYPES[1]			POTENTIAL[1] WASTE TOTAL	WASTE[2] RECYCLED	ACTUAL WASTE TOTAL
EAR	RESIDENTIAL	COMMERCIAL	OTHER			
991	179,080	162,730	52,650	394,460	39,625	354,835
992	184,100	160,000	53,300	397,400	72,203	325,197
993	187,450	158,600	53,900	399,950	81,835	318,115
994	190,260	158,000	54,650	402,910	88,747	314,163
995	193,100	157,400	55,300	405,800	89,756	316,044
996	196,000	156,700	56,030	408,730	90,650	318,080
997	198,350	156,100	56,730	411,180	91,408	319,772
998	200,730	156,400	57,440	414,570	92,306	322,264
999	202,700	156,730	58,160	417,590	93,111	324,479
000	204,119	157,827	58,567	420,513	93,890	326,623
001	205,365	148,791	58,925	423,081	94,664	328,417
002	206,751	159,862	59,322	425,935	95,303	330,632
003	208,136	160,933	59,720	428,789	95,941	332,847
004	209,521	162,004	60,117	431,643	96,580	335,063
005	210,906	163,075	60,515	434,496	97,219	337,278
0C	212,292	164,146	60,912	437,350	97,857	339,493
00,	213,677	165,217	61,310	440,204	98,496	341,708
008	215,062	166,289	61,707	443,058	99,134	343,924
009	216,447	167,360	62,104	445,912	99,773	346,139
010	217,833	168,431	62,502	448,765	100,411	348,354
011[3]	237,123	175,693	72,438	485,254	108,576	376,678
012	265,425	186,070	87,174	538,669	120,527	418,142
013	267,421	187,352	87,897	542,670	121,422	421,248
014	269,417	188,634	88,620	546,671	122,318	424,353
015	271,413	189,917	89,342	550,672	123,213	427,459
016	273,408	191,199	90,065	554,671	124,108	430,564
017	275,404	192,481	90,788	558,672	125,003	433,669

1990 to 2000, Annual Report, Millersville Landfill, Anne Arundel County Department of Public Works, Bureau of Solid Waste, April 19, 1989. 2000 to 2015, Linear Regression Equation y = ax + b using data provided in years 1990 to 2000, Gershman, Brickner & Bratton, Inc. December 1989.

Anne Arundel County, Draft Recycling Plan, Gershman, Brickner & Bratton, Inc., November, 1989.

dition of solid waste quantities from Sudley Road landfill to Millersville landfill.

TABLE 3

MILLERSVILLE SANITARY LANDFILL FACILITY LIFE ESTIMATE

YEAR	WASTE QUANTITY TPY	WASTE VOLUME[1] YD^3	COVER MATERIAL[2] YD^3	TOTAL VOLUME USED[3] YD^3	AVAILABLE LANDFILL VOL. YD^3	REMAINING LANDFILL VOL. YD^3
1991	354,835	506,908	120,692	627,600	16,500,000	15,872,400
1992	325,197	464,568	110,611	575,179	15,872,400	15,297,221
1993	318,115	454,450	108,202	562,653	15,297,221	14,734,568
1994	314,163	448,805	106,858	555,663	14,734,568	14,178,906
1995	316,044	451,492	107,498	558,990	14,178,906	13,619,916
1996	318,080	454,400	108,191	562,591	13,619,916	13,057,325
1997	319,772	456,818	108,766	565,584	13,057,325	12,491,741
1998	322,264	460,376	109,613	569,990	12,491,741	11,921,751
1999	324,479	463,541	110,367	573,908	11,921,751	11,347,843
2000	326,623	466,604	111,096	577,700	11,347,843	10,770,143
2001	328,417	469,167	111,706	580,873	10,770,143	10,189,270
2002	330,632	472,331	112,460	584,791	10,189,270	9,604,478
2003	332,847	475,496	113,213	588,709	9,604,478	9,015,769
2004	335,063	478,661	113,967	592,628	9,015,769	8,423,141
2005	337,278	481,825	114,720	596,546	8,423,141	7,826,596
2006	339,493	484,990	115,474	600,464	7,826,596	7,226,132
2007	341,708	488,155	116,227	604,382	7,226,132	6,621,750
2008	343,924	491,319	116,981	608,300	6,621,750	6,013,449
2009	346,139	494,484	117,734	612,218	6,013,449	5,401,231
2010	348,354	497,649	118,488	616,137	5,401,231	4,785,094
2011[4]	376,678	538,111	128,122	657,860	4,785,094	4,127,235
2012	418,142	597,346	142,225	740,682	4,127,235	3,386,552
2013	421,248	601,783	143,282	746,190	3,386,552	2,640,362
2014	424,353	606,219	144,338	751,699	2,640,362	1,888,663
2015	427,459	610,656	145,394	757,207	1,888,663	1,131,456
2016	430,564	615,091	146,450	762,713	1,131,456	368,743
2017	433,669	619,527	147,056	768,221	368,743	(399,478)

1 Density of in-place refuse (1,400 lbs/yd^3)

2 [illegible] waste to cover material ratio 4.2:1

3 [illegible]ne of solid waste plus cover material

The surveyed wetland boundaries were drafted onto 200-scale site development plans and are included in the appendix.

2. Site Geology and Hydrogeology

A site subsurface investigation was conducted in the early 1970s when Anne Arundel County purchased the Edgewood Farm Country Club for the purpose of constructing the Millersville Landfill. Twenty-five test holes were drilled as part of a routine subsurface investigation and observation wells were installed and screened in various subsurface water bearing zones.

Surface geologic mapping in the vicinity of the Millersville Landfill site indicates the predominance of the silt-clay facies of the Potomac Group in the northeastern part of the site and the sand-gravel facies of the Potomac Group in the central portion of the site. The Magothy Formation, a predominately sandy unit, outcrops along the southern boundary of the site just north of Dicus Mill Road. Ferruginous cementation is common in the fluvial facies of the Magothy Formation. Blocks of ironstone conglomerate outcrop in this area.

Groundwater studies by Mack (1962) and Mack and Achmad (1986) suggest that the silt-clay facies of the Potomac Group at Millersville Landfill is part of a clay confining layer separating the overlying Magothy Formation from the underlying upper Patapsco Formation. The discontinuous silt-clay facies (upper confining layer) at Millersville occurs at the ground surface under cells 1, 6, 7, and part of cell 5, and at or near the ground surface under cell 4. The sand-gravel facies of the Potomac Group occurs at the center of the landfill, roughly paralleling the existing surface drainage; this facies probably represents an old stream channel. The southern half of the site is capped by the sands of the Magothy Formation. Sand lenses occur within the clay facies (i.e., within the upper confining layer) underlying the entire site.

From all of the available information reviewed for the preparation of this evaluation, it appears that four water-bearing zones occur in the upper 300 feet (90 m) beneath Millersville Landfill to a depth of approximately 135 feet (40.5 m) below sea level. The uppermost zone is in the fluvial sands of the Magothy Formation. Groundwater in this zone is unconfined and perched. This water-bearing zone is restricted to the southern and southwestern boundaries of the site, north of Dicus Mill Road, and along Burns Crossing Road, respectively. During all or part of the year, this zone may be dry in some areas.

The second water-bearing zone occurs in a shallow sand zone within the silt-clay facies described by Glaser (1976). (Notes: The silt-clay facies described by Glaser is the same as the confining layer described by Mack and Achmad (1986) that separates the overlying Magothy Formation from the underlying upper Patapsco. The shallow sand zone in the silt-clay facies has also been described by Pittman (1982). In the southern part of the site, this sand zone may be either unconfined or confined, and is recharged directly from precipitation or leakage from the overlying perched aquifer.

The third water-bearing zone is the deep sand zone described by Pittman (1982). This sand zone is located approximately 25 feet (7.5 m) below the shallow zone in the southern half of the site, and below the outcropping silt-clay facies in the northern half of the site. Groundwater in this zone is either semi-confined or confined. The hydrostatic heads in the water-bearing zone are lower than the perched or shallow zones indicating the potential for recharge by leakage from the overlying zones.

The fourth water-bearing zone is the upper Patapsco aquifer, which is the major ground water aquifer in the vicinity of the Millersville Landfill. The upper Patapsco aquifer is confined by clays of the upper confining layer (Mack and Achmad, 1986) the silt-clay facies described by Glaser, (1976) separating the Magothy Formation from the upper Patapsco sands.

As required under COMAR 26.04-07.07.C(4), the maximum groundwater elevations have been predicted for Millersville Landfill. These groundwater elevations will be used to design landfill cells 8 and 9 so that they meet the 3-foot (1 m) minimum groundwater separation requirements of COMAR 26.04.07.07.C(12)(b).

3. Groundwater Quality

In order to monitor groundwater quality at the Millersville Landfill, wells were installed in 1975 and groundwater samples have been collected and analyzed on a regular basis since landfilling began.

Groundwater samples from wells at Millersville Landfill have been collected generally two or three times per year since 1975. Samples were collected and analyzed by the Maryland Department of the Environment (MDE) for the parameters listed below. In order to characterize water quality at the landfill, GeoSyntec evaluated generally accepted key indicator parameters from the results of MDE's analytical program. Key indicator parameters used by GeoSyntec are pH, nitrate, chloride, specific conductance, alkalinity, hardness, arsenic, barium, cadmium, chromium, lead, mercury, selenium, chemical oxygen demand (COD), and volatile organics. An evaluation of these parameters meets the requirements of COMAR 26.04.07.07.C(8)..

4. Soils

The Millersville Landfill lies within the physiographic province known as the Atlantic Coastal Plain. Specifically, the landfill is located in the uplands of the Coastal Plain. Soils on the Millersville Landfill site are a part of the Evesboro-Rumford-Sassafras Association. This association is characterized by a gently sloping to moderately steep topography with well-drained, sandy and loamy soils that developed in sediments containing glauconite.

Soils in the wetland areas on the landfill site consist of Rumford sandy loam and Woodstown sandy loam.

The Rumford series consist of deep, somewhat excessively drained soils that formed in sandy material containing some clay but little silt. The surface layer generally contains a considerable amount of medium and coarse sand. The Rumford series is not listed on the National Hydric Soils List.

The Woodstown Series consist of deep, moderately well-drained soils with a sandy or silty material in the surface layer and a subsoil of sandy clay loam with some gray mottles in the lower part. Surface water drains away readily. The Woodstown sandy loam is not listed on the National Hydric Soils List. However, this series may have hydric inclusions of Fallsington in depressions and along drainageways.

EVALUATION OF ALTERNATIVES

If the No-Build Alternative is selected, the existing active cells of the landfill will be filled within 2 years. After that time, no public facility to dispose of the solid waste generated by the people of northern Anne Arundel County will be available. Upon closure of the existing landfill cells, the No-Build Alternative would result in no fill discharge to the existing wetlands on the site. Potential public nuisances such as roadside litter, odors, dust and smoke, traffic and noise sometimes associated with a landfill operation will be diminished. Several health and environmental parameters would, however, be adversely affected by the No-Build Alternative. With a projected increase in the tonnage of solid waste generated as a result of the increased population growth and no proper disposal sites, an undue economic and environmental burden on the people and government of Anne Arundel County would occur. The No-Build Alternative is not compatible with the future public needs of Anne Arundel County.

Alternative 2 consists of relocating cells 8 and 9 away from the wetlands associated with the main stream channel while maintaining the proposed cell volume and shape. The location of cell 8 is controlled to the northwest by the Baltimore Gas and Electric Company right-of-way, to the northeast by the existing cell 5 and to the west by the existing landfill access road.

Two subalternatives were considered. Subalternative 2A involves constructing Cell 8 into the BG&E right-of-way and under the power lines. Several towers would need to be relocated and their height increased to allow fill to be placed underneath the transmission line. As Federal Aviation Administration (FAA) regulations limit the height of the towers, 150 feet is the maximum tower height recommended at this location. After allowing for safety clearance of 30 feet from the lowest point of sag for the bottom wire, only 30 feet of airspace remains for landfilling activity. This decreases the economic advantage of constructing a liner in this area since the full capacity of the cell could not be achieved.

BG&E has been contacted regarding this proposal, and they decided to rule out this plan in a letter dated July 3, 1991. Reasons stated include the fact that this would limit access to their facilities and preclude them from potentially laying underground gas lines in this right-of-way in the future.

Subalternative 2B involves relocating the Baltimore Gas & Electric company's (BG&E) existing overhead transmission lines and Right-of-Way (ROW) to the northern edge of the landfill property allowing proposed Cell 8 to be shifted north away from the impacted wetlands.

In order to accomplish this ROW relocation, the Public Service Commission (PSC) must grant its approval. This approval process requires an application be prepared by BG&E to be reviewed by the PSC. Also, BG&E must obtain "tree rights" from all abutting property owners to allow BG&E the ability to trim all trees which might potentially impact the safe and continuous operation of the power lines. If there were no opposition and all parties moved expeditiously through this process, it is estimated that at least 12 months would be required to obtain final PSC approval.

If opposition is encountered, as it usually is, the PSC would require an environmental assessment and public hearing of the proposed activity. Generally, opposition is encountered from adjacent and impacted property owners who do not desire the ROW be located on or near their property. Such property owners can refuse to grant "tree rights". They can object to the visual impacts of the overhead transmission lines. And, they may object on grounds that such proximity to these size lines subjects themselves to electro-magnetic force (EMF) radiation.

This type of opposition has caused the PSC to require environmental assessments and full public hearings of proposed projects. The estimated time frame to pursue this course is over 2 years. The end result is either the opposition rescinds, or the PSC grants approval which may even include allowing the utility to take, by condemnation, property for a project.

Relocating this ROW would involve moving the 230 kV, double circuit overhead power transmission lines. Eight towers would have to be moved and/or replaced at an estimated cost of nearly $2 million. In addition, each of the following would require about one year to complete: PSC permission, zoning and building permit, and construction. During these time delays the existing capacity of the landfill will be reached before the planned expansion could be completed. The same consequences might be realized as discussed in Alternative 1 - No Build.

Similarly, the relocation of cell 9 is restricted due to the existing recycling and storage facilities to the west, the site property boundary to the east and the required 500-foot buffer to Dicus Mill Road to the south. Zoning regulations for Anne Arundel County allow sanitary landfills as a special exception. Anne Arundel County zoning regulations Title 12-242 permit a sanitary landfill provided certain specific criteria are met, such as: the landfill must be operated by the County, the minimum land area is 100 acres; the facility is surrounded by 6 ft. high fencing; only waste

generated in the County be accepted; and that the facility meet the requirements of the County Health Ordinances as contained in Article 14, Title 4 of the County Code.

The County Health Ordinances under Title 4 address sanitary landfills:

1. Section 4-108(b) requires all landfills, regardless of type of refuse to be deposited, to be at least 1000 feet from any residential institutional, or industrial building;

2. Section 4-108(c) prohibits landfill encroachment into a natural 50-year floodplain and any landfill activity that would hinder the natural drainage pattern of the "general vicinity" of the site; and

3. Section 4-106 prohibits deposit of refuse within 500 feet of a public roadway, building, or neighborhood dwelling.

Only the County Zoning Ordinances allow for variances. The zoning ordinances contain no specific setback requirements for a sanitary landfill but the health ordinances specifically call for 500 feet from a public roadway. Further, if a variance were sought, it would need to be demonstrated that reducing the buffer would not be detrimental to the public welfare. In reality, reducing the buffer is potentially detrimental to the public welfare. As the landfilling activity occurs closer to the public road and neighborhood dwellings, the impacts from noise, dust, odor, and vectors is increased. Also, the visual impacts and potential groundwater impacts are greater as the landfilling activity is brought closer to the public domain.

It is highly unlikely that the public would allow such a variance. In fact, last year the City of Annapolis attempted to expand their existing landfill by rezoning an adjacent parcel of property. The measure was defeated as a direct result of public opposition which focused on visual impacts and potential groundwater contamination.

Therefore, the possibility of obtaining a variance to reduce the 500 foot buffer along Dicus Mill Road is considered untenable and not an acceptable option. Both Alternatives 2A and 2B are not considered acceptable options.

Alternative 3 would achieve total wetland impact avoidance by altering the size and shape of Cells 8 and 9 relative to that of Alternative 4. While wetland impacts would be avoided, this alternative would not achieve the objectives of the project. Rather than a useful life approaching 25 years, Cell 8 would achieve capacity in 8 years and Cell 9 in 6.9 (see Table 4). In addition, the social, political and economic problems of locating, gaining approval and purchasing additional sites within that short of a period make this option untenable. Making improvements and expanding the existing site with today's valued dollars would be much more economically feasible than using inflated dollars to purchase scarce sites in the future.

Alternative 4 would construct the cells in the same location as the .ootprints shown in the approved permit and include the modifications required by the Maryland Department of the Environment Office of Solid Waste. Cell life for Cell 8 is projected to be 10.2 years and is 16 years for Cell 9. This alternative would impact approximately 7.8 acres of nontidal wetlands and requires channelizing 340 feet of stream channel. This alternative is not expected to have a detrimental effect upon water quality. Erosion and sedimentation will be controlled during the project construction through the use of appropriate erosion and sediment control practices. Cells 8 and 9 will have 5 feet of a protective liner system and state-of-the-art leachate collection and removal systems. All leachate will be transported to a treatment facility prior to its discharge back into the environment. In addition, groundwater monitoring wells are already in place and routinely monitor the quality of the groundwater in order to detect any leakage or potential contamination to the groundwater. If leakage is detected, measures to rectify the problem will be completed prior to the leakage getting offsite. The daily covering of the refuse with soil would minimize spreading of litter, and presence of odors and disease vectors.

Alternative 4 provides the maximum public benefit available. With the projected population growth in Anne Arundel County and the planned closing of the Sudley Road Landfill, it is necessary for the Millersville Landfill to meet the solid waste disposal needs of Anne Arundel County. Alternative 4 accomplishes these needs.

Alternative 5 contains the same size and shape for Cell 8 as in Alternative 4, but in an effort to reduce wetland impacts the size and shape of Cell 9 would be modified. Sediment basin 9-1 would be relocated and the impacts due to the access road between Cells 8 and 9 would be reduced. Total wetland impacts would be approximately 3.9 acres, but cell life would be 13.4 years for Cell 9 and only 10.2 years for Cell 8.

TABL

ALTERNATIVES ANALYSIS

Alternative	Cell	Wetland Impact	Available Waste Volume[1] (million cu yd)	Cell Life Projection[2] (yrs)	Total Cell Life Projection
1	8&9	0	1.2	2	2
2A + 2B	8&9	0	*	*	*
3	8 9	0	5.0 4.3	8 6.9	14.9
4	8 9	7.8	6.4 10.1	10.2 16	26.2
5	8 9	3.9	6.4 8.4	10.2 13.4	23.6
6	8 9	3.7	6.4 10.1	10.2 16	26.2

Notes: [1]Available waste volume is computed as total airspace volume less the volume of liner cover soil, final soil cover over the waste, and protective cover soil over the cap (i.e., 6 ft x cell area).

[2]Cell life projection is based on an assumed in-place density of the waste of 0.7 ton/cu yd and a daily weight of waste of 1,200 tons.

*Alternative not practicable.

Alternative 6 retains the configuration and size of Cells 8 and 9 relative to Alternative 4, and incorporates the sediment basin relocation and road crossing improvements of Alternative 5. It utilizes reinforced soil walls in order to achieve a reduction of wetland impacts to 3.7 acres, the lowest of the practicable alternatives. Cell life remains at 16 years for Cell 9 and 10.2 years for Cell 8, as in Alternative 4. Public benefits are maximized as in Alternative 4 also.

As illustrated in Figure 10, the use of vertical reinforced soil walls (or possibly steep reinforced embankments) at the outside edge of the cell perimeter access roads, instead of the unreinforced berms originally proposed, results in significant minimization of the impact of new construction on wetlands at the Millersville Landfill site.

The basic concept behind soil reinforcement is the use of tension-carrying reinforcing members to improve the mechanical properties of a soil mass. Reinforcements, through adherence to the surrounding soil, enable development of a coherent material that has the capacity to both stand unsupported and to resist externally applied loading. Reinforced soil walls are widely used as earth retaining structures and as highway bridge abutments.

Various types of reinforced soil walls are shown in Figure 11. Reinforced soil walls are made of three components: (i) backfill material, (ii) reinforcements, and (iii) facing. The backfill material commonly used for reinforced soil walls is granular soil (i.e., sand). Other types of soils can also be used. The following is a partial list of reinforcement materials currently available:

- steel strips;
- steel bar mats;
- welded wire mesh;
- geotextiles; and
- geogrids

The facing of reinforced soil walls is not structural, i.e. it is not a critical factor for the overall stability of the structure. Its primary function is to prevent the loss of backfill material between reinforcements at the face of the structure. For this reason, a large number of facing systems have been used, including custom facing elements designed for specific projects to match environmental requirements and to blend aesthetically into the environment. The most commonly used facing systems are:

- segmental precast concrete panels;
- cast-in-place concrete, shotcrete, or full height precast panels;
- masonry blocks;
- concrete blocks;
- timber;
- gabions; and

ILLUSTATION OF REINFORCED SOIL WALL ALTERNATIVE

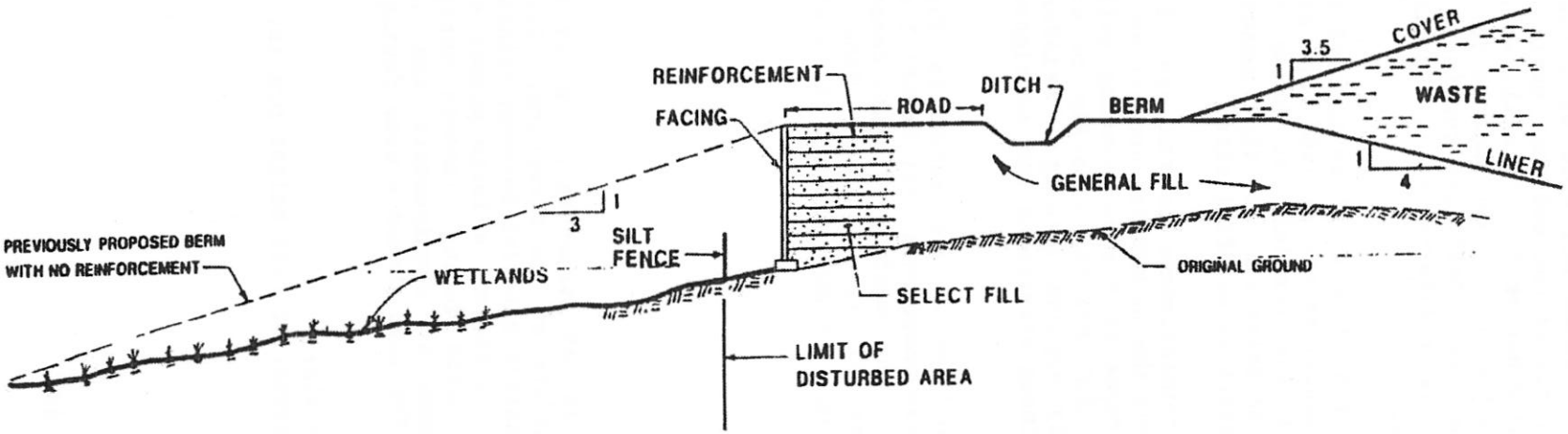
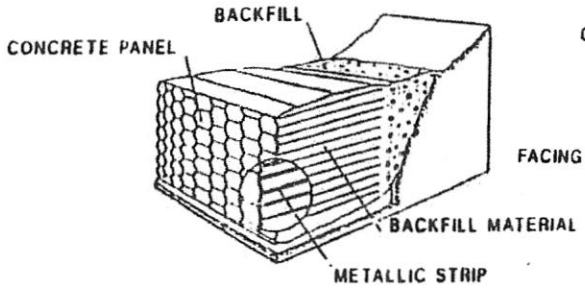
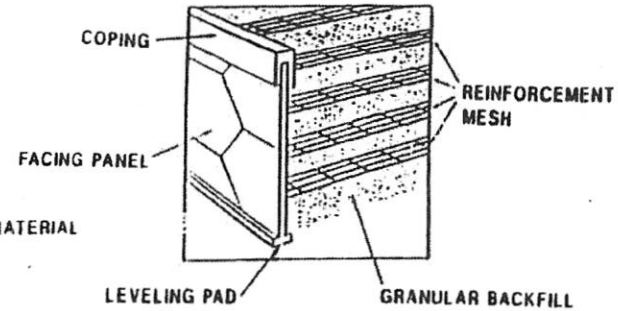


Figure 10

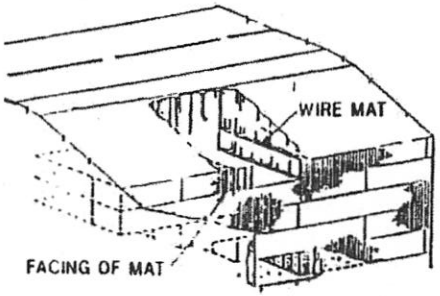
REINFORCED SOIL WALLS



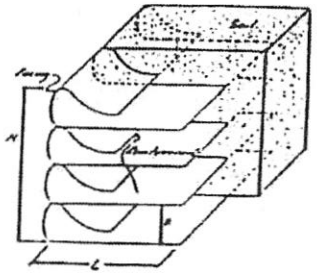
(A) REINFORCED EARTH



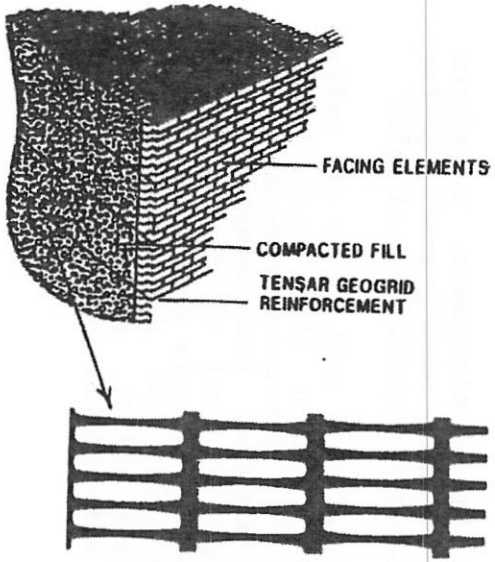
(B) VSL BAR MAT



(C) WELDED WIRE WALL



(D) GEOTEXTILE



(E) GEOGRID

NOTE: THIS FIGURE IS TAKEN FROM NCHRP REPORT 290, "REINFORCEMENT OF EARTH SLOPES AND EMBANKMENTS"

Figure 11

- wrap-around reinforcement (i.e., the reinforcement is wrapped around to form the face of the wall; typically available for welded wire mesh, geotextile, and geogrid reinforced soil walls

From a construction point of view, reinforced soil walls are well-suited for the application considered for this project: the construction of reinforced soil structures is rapid, simple, and requires neither large and special equipment, nor specially skilled craftsmen. More importantly for this application, little space is needed in front of the wall for construction, as the walls can be built almost entirely from the backfill side. Reinforced soil walls generally cost less than conventional retaining walls (e.g., reinforced concrete walls), and are flexible structures that can tolerate both internal and external ground movements.

VII. CONCLUSIONS

Seven alternatives (including two subalternatives) for the construction and modification of cells 8 and 9 of the Millersville Landfill were considered.

The No-Build Alternative (Alternative 1), is not considered feasible because it provides no public benefit and would require locating a new landfill site within the county in less than two years. Public opposition to a new landfill site is anticipated to be considerable; therefore, this alternative is not considered to be practical.

Alternative 2A is not practicable because BG&E has rejected the concept of permitting landfill activities within their right-of-way.

Similarly, Alternative 2B requires significant coordination and permission from BG&E as well as the PSC, zoning and building permits. These issues plus construction delays of at least one year and an additional $2 million in costs make this alternative not practicable. Also, the ability to obtain a variance and reduce the 500 foot buffer along Dicus Mill Road is considered untenable and not an option.

Alternative 3, decreasing the overall size of cells 8 and 9, would decrease impacts to wetlands along the main channel. However, this alternative would reduce the cell volume and air space, thereby substantially reducing the total cell 8 and 9 life expectancy to less than 15 years. A decrease in the life expectancy of the facility would necessitate finding a new facility within the county at an earlier date. This action would increase the environmental risk to other locations within the county and would likely result in strong public opposition.

Alternative 4 has already been approved under permit 86-02-04-06A. This alternative provides maximum public benefits, reduces the potential for adverse environmental impacts, represents state-of-the-art technology for sanitary landfill operations, and satisfies the County's waste disposal needs for 26 years, until the year 2017. However, 7.8 acres of wetlands would be impacted.

Alternative 5 reduces wetland impacts to 3.9 acres while significantly decreasing cell life to about 23 years, which does not meet the project objectives.

Alternative 6 meets both objectives of minimizing wetland impacts and retaining maximum public benefits. This alternative adds approximately $500,000 to the construction cost of the project. Despite the additional costs, this is the preferred alternative since, of the practicable alternatives, it provides for the least impact to wetlands yet maintains project objectives. Total life for cells 8 and 9 would be over 26 years. Thus, Alternative 6 is the best solution for this project. It represents a reasonable compromise between minimizing wetland impacts, increased project costs, longevity of cell life, maintaining project construction schedule, and compliance with County health, safety and zoning requirements.

APPENDIX

Appendix A.6
MDE Letter of Authorization - Subcell 9.1 Wetlands (2014)

MDE

MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard • Baltimore MD 21230
410-537-3000 • 1-800-633-6101

Martin O'Malley
Governor

Anthony G. Brown
Lieutenant Governor

Robert M. Summers, Ph.D.
Secretary

September 10, 2014

Re: Notice of Permit Decision
Nontidal Wetlands and Waterways Permit Application
Tracking Number: 13-NT-0282/201361335

Dear Property Owner, Public Official, or Interested Person:

After examination and consideration of the documents received and evidence in the application file and record for Millersville Landfill and Resource Recovery Facility, construction of Cell # 9 at 389 Burns Crossing Road in Severn, 21144, Anne Arundel County, the Water Management Administration has determined that the application meets the statutory and regulatory criteria necessary for issuance of a Wetlands and Waterway Permit. Copies of the permit and the Summary of the Basis for Decision are enclosed with this permit decision.

This is a final agency determination; there is no further opportunity for administrative review. Any person with standing, who is either the applicant or who participated in the public participation process through the submission or written or oral comments may petition for judicial review in the Circuit Court in the County where the permitted activity is to occur. The petition for judicial review must be filed within 30 days of the publication of the permit decision. Please see the attached Fact Sheet for additional information about the judicial review process.

If you have any questions or need any additional information, please do not hesitate to contact me at 410-537-3766.

Sincerely,

Amanda Sigillito, Chief
Nontidal Wetlands Division

/AS

Enclosures

FACT SHEET
NEW JUDICIAL REVIEW PROCESS

Legislation passed by the 2009 General Assembly changes procedures for certain permits issued by the Department, including wetlands and waterways permits. The new judicial review procedures take effect on January 1, 2010 and will apply to final permit decisions issued on and after January 1, 2010.

Under pre-existing procedures, permit applicants and third parties with standing under Maryland law could challenge the issuance of a permit or the conditions of a permit through a request for a "contested case" adjudicatory hearing conducted by the Office of Administrative Hearings.
Effective January 1, 2010, the "contested case" process no longer applies to final decisions on applications for these permits. Rather, permits can be challenged through a request for direct judicial review in the Circuit Court for the county where the activity authorized by the permit will occur. Applicants, and persons who meet standing requirements under federal law and who participated in a public comment process by submitting written or oral comments (where an opportunity for public comment was provided), may seek judicial review. Judicial review will be based on the administrative record for the permit compiled by the Department and limited to issues raised in the public comment process (unless no public comment process was provided, in which case the review will be limited to issues that are germane to the permit).

Who Has Standing?
Anyone who meets the threshold standing requirements under federal law and is either the applicant or someone who participated in the public participation process through the submission of written or oral comments, as provided in Environment Article § 5-204, Annotated Code of Maryland. The three traditional criteria for establishing standing under federal law are injury, causation, and redressability, although how each criterion is applied is highly fact-specific and varies from case to case. Further, an association has standing under federal law to bring suit on behalf of its members when its members would otherwise have standing to sue in their own right, the interests at stake are germane to the organization's purpose, and neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit.

What is the Procedure for Seeking Judicial Review?
Petitions for judicial review of a final determination or permit decision subject to judicial review must be filed in accordance with § 1-605 of the Environment Article no later than 30 days following publication by the Department of a notice of final determination or final permit decision and must be filed in the circuit court of the county where the permit application states that the proposed activity will occur. Petitions for judicial review must conform to the applicable Maryland Rules of Civil Procedure.

To review the legislation follow the link below:
http://mlis.state.md.us/2009rs/chapters_noln/Ch_650_sb1065T.pdf

For a complete list of permits that these procedures apply to follow the link below:
http://www.mde.state.md.us/programs/ResearchCenter/LawsandRegulations/Pages/ResearchCener/laws_regs/jrproc.aspx

SUMMARY BASIS FOR DECISION

Anne Arundel County Department of Public Works Name of Applicant	13-NT-0282/201361335 Application Number
Judy Broersma /Kelly Flint Project Manager	September 10, 2014 Date of Decision

The Environment Article, Annotated Code of Maryland and the Code of Maryland Regulations establish criteria for the Maryland Department of the Environment (Department or MDE) to consider when evaluating projects that propose to change the course, current or cross section of a nontidal stream or other body of water or to impact a nontidal wetland. If the criteria are satisfied, the Department may issue a permit for the proposed activity. The Department may deny a permit for a waterway construction activity that it believes is inadequate, wasteful, dangerous, impracticable or detrimental to the best public interest. The Department may not issue a nontidal wetland permit for a regulated activity unless it finds that the applicant has demonstrated that a regulated activity, which is not water-dependent, has no practicable alternative, will minimize alteration or impairment of the nontidal wetlands, and will not cause or contribute to a degradation of ground or surface waters.

In the case of the proposed construction of Cell # 9 at the existing Millersville Landfill and Resource Recovery Facility, the question for the Department to address is whether or not the proposed project impacts are acceptable under the regulations as they pertain to such construction activities.

PUBLIC NOTICE

Adjoining property owners, local government officials and other interested persons must be notified of proposed impacts to nontidal wetlands and waterways. In addition, an opportunity to comment and request a public informational hearing must be provided via a local newspaper. The public notice on this application was published in *The Maryland Gazette* on December 4, 2013. No comments were received during the public notice period, nor was a public informational hearing requested.

PROJECT PURPOSE AND NEED

In order for the Department to authorize impacts to nontidal wetlands and their regulated buffers, regulated activities must be determined to be necessary and unavoidable to meet the basic project purpose. It is also important to note that the orderly development and use of land is regulated through planning and zoning controls implemented by the local government. In this particular instance, Anne Arundel County makes the decision about appropriate land use of the property.

The project's purpose is to provide additional landfill capacity for refuse and waste generated by the residents of Anne Arundel County when existing Cell # 8 has been filled, as described on page 5 of the July 31, 2014 *Joint Federal/State Application for the Alteration of Any Floodplain, Waterway, Tidal or Nontidal Wetland in Maryland* (Application).

ALTERNATIVES ANALYSIS

For projects that are not water-dependent, the applicant must conduct an alternatives analysis to demonstrate that the project has no practicable alternative. The factors to be considered are whether the project purpose can be accomplished using one or more alternative sites in the general area; a reduction in the size, scope, configuration or density would result in less impact; the applicant made a good faith effort to accommodate the site constraints that caused the alternative sites to be rejected; and that the regulated activity is necessary for the project to meet a demonstrated public need.

The Millersville Landfill and Resource Recovery Facility (MLF) began waste disposal operations in 1975. Cells # 1 through # 7 were in operation until 1992 when Cell 8 began operation. Cell 8 is expected to reach its disposal capacity in the next three to four years at which time disposal operations will begin in Cell 9. Cell 9 is the last cell available for waste disposal at the MLF site. The process of locating, purchasing and permitting a landfill site that can achieve social, political and economic approval is a long and difficult process. Finding an alternative site to begin waste disposal without utilizing Cell 9 does not maximize the public benefit of the existing MLF site. In permitting Cell 9, alternative designs on the existing MLF site were explored rather than alternative sites. Under the Water Quality Certification (WQC) Number 97-NT-0581/199001846 which became effective August 4, 1997, 1.8 acres of nontidal wetland and waterway impacts were authorized for the construction of Cell 9. The 1.8 acres of permanent nontidal wetland impact authorized under WQC 97-NT-0581 have been filled in construction of the perimeter road for Cell 9, the connector road between Cell 8 and Cell 9 and the construction of Stormwater Management Pond Number 9. The impacts for the shape and size of Cell 9 have been authorized and completed. For more information on the alternatives analysis completed to reach the decision under WQC 97-NT-0581, please refer to 'Alternatives Evaluation, Millersville Sanitary Landfill, Anne Arundel County, Maryland' that was prepared by Greenhorne & O'Mara, Inc., Gershman, Brickner & Bratton, Inc. and GeoSyntec Consultants in August of 1991.

This authorization is requested for impacts that would be the result of changes to a portion of the connector/perimeter road of Cell 9. Approximately, the first 500 feet of the connector road on the northern boundary of Cell 9 has a slope greater than 15 percent and has a significant curve in its horizontal alignment. Both of these existing design aspects do not meet the current standards for safe travel along the connector road. The county needs to revise the road design to remove the curve and flatten the road slope prior to beginning disposal activities in Cell 9. The proposed road bed will be raised and tied into the existing ground at stable 2:1 side slopes. In addition, the new horizontal alignment will be shifted to the north to provide a direct route to the main entrance and scale house. The fill necessary to provide a safe road slope and the revised horizontal alignment needed for direct access to the main entrance and scale house create

unavoidable impacts to nontidal wetland and waterways that were not permitted under WQC 97-NT-0581. Due to the shape and size of Cell 9, an alternative that avoids and/or minimizes impacts to nontidal wetlands and waterways is not available, as described in the "Alternatives Analysis Summary for Millersville Landfill and Resource Recovery Facility, Anne Arundel County, Maryland", Appendix A, Prepared by SCS Engineers, October 16, 2013.

AVOIDANCE AND MINIMIZATION

If the alternative site analysis is accepted, the applicant must demonstrate that adverse impacts to nontidal wetlands, their regulated buffers, and the 100-year frequency floodplain are necessary and unavoidable.

In the case of the Millersville Landfill and Resource Recovery Facility, Cell # 9, impacts to nontidal wetlands and their regulated buffers are unavoidable due to hillside seepage areas that drain to Well's Branch located within the proposed Cell. Per page 4 of the Application, the location and configuration of the Cell was approved in 1997 and cannot be changed without the loss of significant volume and capacity for waste disposal. However, impacts to the Well's Branch riparian nontidal wetlands were minimized through the use of steepened embankment slopes. Total avoidance is not possible due to the severe steepness of the existing roadway grades and the need to raise the approach elevations to achieve a safer, maximum gradient of 3% to 8%.

WATER QUALITY

Erosion and sediment control measures and stormwater management practices are designed to prevent the degradation of ground and surface water quality. Sediment pollution is addressed under Maryland's Erosion and Sediment Control Act. The law mandates local Soil Conservation Districts to review and approve erosion and sediment control plans developed in accordance with State standards. The Department's programmatic responsibilities are limited to promulgating regulations, and developing standards, ordinances and other criteria necessary to administer an erosion and sediment control program, including program oversight and delegation of enforcement authority to local governments. As a result, the Anne Arundel Soil Conservation District is responsible for the review and approval of an erosion and sediment control plan for the proposed project.

Stormwater discharges are addressed under Maryland's Stormwater Management Act. The law requires counties and municipalities to "adopt ordinances necessary to implement a stormwater management program." The Department's programmatic responsibilities are limited to promulgating regulations defining the minimum features of a stormwater ordinance and program oversight. The Department also reviews the stormwater management program of the counties and municipalities and their field implementation and requires corrective action where a program is found deficient. For most projects, compliance with the County-issued stormwater management approval ensures that the project will not degrade water quality, but for projects affecting Tier II waters, the Department will require a separate anti-degradation analysis. In this

particular case, however, the Anne Arundel County Office of Planning and Zoning is responsible for the review and approval of the project's stormwater management plan.

During the application review process, the Department verifies that appropriate best management practices are incorporated into the sediment and erosion control plans and the stormwater management plans to protect the State's water resources. In order to insure that these practices are contained in the project's final design plans, the applicant will submit approved sediment and erosion control plans and stormwater management plans to the Department prior to the commencement of construction activities authorized by the Permit.

ENDANGERED SPECIES AND FOREST INTERIOR DWELLING SPECIES

Once the application is received, it goes through a screening process. This screening process uses Geographical Information System (GIS) to determine the proposed site location and whether or not there are designated resources in the area such as rare, threatened or endangered species. If there are resources identified, the Division sends copies of the proposed plan to the appropriate agencies to review and send comments.

In a January 30, 2014 letter to the Department, the Maryland Department of Natural Resources has determined that there are no State or federal records for rare, threatened or endangered species on the project site. The wetlands and streams are in the Severn Run watershed and no instream work can be conducted between February 15 through June 15, inclusive, of any year.

HISTORIC PRESERVATION

The application was also screened using GIS for historical and archeological resources. The application was also screened using GIS for historical and archeological resources. That screening resulted in identification of a potential historic property issue. The project was referred to the Maryland Historical Trust (MHT) for further review. In a memorandum, dated September 15, 2013, MHT determined that the project would have no impact on archeological or historical resources.

MITIGATION

Mitigation is only a consideration in a permit decision after steps have been taken to avoid and minimize impacts to nontidal wetlands. In a July 9, 2014 memorandum, the Department's Mitigation and Technical Assistance Section of the Wetlands and Waterways Program, approved the Phase I Mitigation Plan for the Millersville Landfill and Resource Recovery Facility, Cell # 9.

STATE OF MARYLAND
DEPARTMENT OF THE ENVIRONMENT
WATER MANAGEMENT ADMINISTRATION
NONTIDAL WETLANDS AND WATERWAYS PERMIT

PERMIT NUMBER: 13-NT-0282/201361335

EFFECTIVE DATE: September 10, 2014

EXPIRATION DATE: September 10, 2017

PERMITTEE: Kenneth B. Flemming
Anne Arundel County Department of Public Works
2662 Riva Road
Annapolis, Maryland 21401

IN ACCORDANCE WITH ENVIRONMENT ARTICLE §5-503(a) AND §5-906(b), ANNOTATED CODE OF MARYLAND (2007 REPLACEMENT VOLUME), COMAR 26.17.04 AND 26.23.01, AND 26.08.02 AND THE ATTACHED CONDITIONS, Anne Arundel County Department of Public Works ("PERMITTEE"), IS HEREBY AUTHORIZED BY THE WATER MANAGEMENT ADMINISTRATION ("ADMINISTRATION") TO CONDUCT A REGULATED ACTIVITY IN A NONTIDAL WETLAND, BUFFER, OR EXPANDED BUFFER, AND/OR TO CHANGE THE COURSE, CURRENT OR CROSS-SECTION OF WATERS OF THE STATE, IN ACCORDANCE WITH THE ATTACHED PLANS APPROVED BY THE ADMINISTRATION ON August 13, 2014 ("APPROVED PLAN") AND PREPARED BY SCS Engineers AND INCORPORATED HEREIN, AS DESCRIBED BELOW:

The construction of Cell # 9, approximately 84 acres in size, at the existing Millersville Landfill and Resource Recovery Facility located at 389 Burns Crossing Road in Severn, Anne Arundel County. The project also includes the conversion of the existing sediment pond 9-2 (approved by the Maryland Department of the Environment, Letter of Authorization 08-NT-0026/200860367) to a stormwater management pond that will outfall into Well's Branch. Pond 9-2 will be used for sediment control during the construction of Cell # 9. The project will permanently impact 10,190 square feet of forested nontidal wetlands, 38,175 square feet of the 25-foot regulated nontidal wetlands buffer and 86 linear feet of stream channel. The nontidal wetlands drain to Severn Run, Use IV waters of the State.

MD Grid Coordinates N 158147 E 429051

Amanda Sigillito, Chief
Nontidal Wetlands Division

Attachments: Conditions of Permit
Best Management Practices
Approved Plan Views

cc: WMA Compliance Program (Central Division)
US Army Corps of Engineers (Northern Section)
SCS Engineering (Michael Goudreau)
Waterway Construction Division (Kelly Flint)
Mitigation and Technical Assistance Section (Joshua Tiralla)

1. **Validity:** Permit is valid only for use by Permittee. Permit may be transferred only with prior written approval of the Administration. In the event of transfer, transferee agrees to comply with all terms and conditions of Permit.
2. **Initiation of Work, Modifications and Extension of Term**: Permittee shall initiate authorized activities with two (2) years of the Effective Date of this Permit or the Permit shall expire. Permittee may submit written requests to the Administration for (a) extension of the period for initiation of work, (b) modification of Permit, including the Approved Plan, or, (c) not later than 45 days prior to Expiration Date, an extension of the term. Requests for modification shall be in accordance with applicable regulations and shall state reasons for changes, and shall indicate the impacts on nontidal wetlands, streams, and the floodplain, as applicable. The Administration may grant a request at its sole discretion.
3. **Responsibility and Compliance**: Permittee is fully responsible for all work performed and activities authorized by this Permit shall be performed in compliance with this Permit and Approved Plan. Permittee agrees that a copy of the Permit and Approved Plan shall be kept at the construction site and provided to its employees, agents and contractors. A person (including Permittee, its employees, agents or contractors) who violates or fails to comply with the terms and conditions of this Permit, Approved Plan or an administrative order may be subject to penalties in accordance with §5-514 and §5-911, Department of the Environment Article, Annotated Code of Maryland (2007 Replacement Volume).
4. **Failure to Comply**: If Permittee, its employees, agents or contractors fail to comply with this Permit or Approved Plan, the Administration may, in its discretion, issue an administrative order requiring Permittee, its employees, agents and contractors to cease and desist any activities which violate this Permit, or the Administration may take any other enforcement action available to it by law, including filing civil or criminal charges.
5. **Suspension or Revocation**: Permit may be suspended or revoked by the Administration, after notice of opportunity for a hearing, if Permittee: (a) submits false or inaccurate information in Permit application or subsequently required submittals; (b) deviates from the Approved Plan, specifications, terms and conditions; (c) violates, or is about to violate terms and conditions of this Permit; (d) violates, or is about to violate, any regulation promulgated pursuant to Title 5, Department of the Environment Article, Annotated Code of Maryland as amended; (e) fails to allow authorized representatives of the Administration to enter the site of authorized activities at any reasonable time to conduct inspections and evaluations; (f) fails to comply with the requirements of an administrative action or order issued by the Administration; or (g) does not have vested rights under this Permit and new information, changes in site conditions, or amended regulatory requirements necessitate revocation or suspension.
6. **Other Approvals**: Permit does not authorize any injury to private property, any invasion of rights, or any infringement of federal, State or local laws or regulations, nor does it obviate the need to obtain required authorizations or approvals from other State, federal or local agencies as required by law.
7. **Site Access:** Permittee shall allow authorized representatives of the Administration access to the site of authorized activities during normal business hours to conduct inspections and evaluations necessary to assure compliance with this Authorization. Permittee shall provide necessary assistance to effectively and safely conduct such inspections and evaluations.
8. **Inspection Notification:** Permittee shall notify the Administration's Compliance Program at least five (5) days before starting authorized activities and five (5) days after completion. For Allegany, Garrett, and Washington Counties, Permittee shall call 301-689-1480. For Carroll, Frederick, Howard, Montgomery and Prince George's Counties, Permittee shall call 301-665-2850. For Baltimore City, Anne Arundel, Baltimore, Calvert, Charles, and St. Mary's Counties, Permittee shall call 410-537-3510. For Caroline, Cecil, Dorchester, Harford, Kent, Queen Anne's, Somerset, Talbot, Wicomico and Worcester Counties, Permittee shall call 410-901-4020. If Permit is for a project that is part of a mining site, please contact the Land Management Administration's Mining Program at 410-537-3557 at least five (5) days before starting authorized activities and five (5) days after completion.
9. **Sediment Control:** Permittee shall obtain approval from the Anne Arundel Soil Conservation District for a grading and sediment control plan specifying soil erosion control measures. The approved grading and sediment control plan shall be included in the Approved Plan, and shall be available at the construction site.
10. **Federally Mandated State Authorizations:**

   X **Water Quality Certification**: Water Quality Certification is granted for this project provided that all work is performed in accordance with the authorized project description and associated conditions.

   X **Coastal Zone Consistency:** This Permit constitutes official notification that authorized activities are consistent with the Maryland Coastal Zone Management Program, as required by Section 307 of the Federal Coastal Zone Management Act of 1972, as amended. Activities within the following counties are not subject to this requirement: Allegany, Carroll, Frederick, Garrett, Howard, Montgomery, and Washington.

11. **Best Management Practices During Construction:** Permittee, its employees, agents and contractors shall conduct authorized activities in a manner consistent with the Best Management Practices specified by the Administration.
12. **Disposal of Excess:** Unless otherwise shown on the Approved Plan, all excess fill, spoil material, debris, and construction material shall be disposed of outside of nontidal wetlands, nontidal wetlands buffers, and the 100-year floodplain, and in a location and manner which does not adversely impact surface or subsurface water flow into or out of nontidal wetlands.
13. **Temporary Staging Areas:** Temporary construction trailers or structures, staging areas and stockpiles shall not be located within nontidal wetlands, nontidal wetlands buffers, or the 100-year floodplain unless specifically included on the Approved Plan.
14. **Temporary Stream Access Crossings:** Temporary stream access crossings shall not be constructed or utilized unless shown on the Approved Plan. If temporary stream access crossings are determined necessary prior to initiation of work or at any time during construction, Permittee, its employees, agents or contractors shall submit a written request to the Administration and secure the necessary permits or approvals for such crossings before installation of the crossings. Temporary stream access crossings shall be removed and the disturbance stabilized prior to completion of authorized activity or within one (1) year of installation.
15. **Discharge:** Runoff or accumulated water containing sediment or other suspended materials shall not be discharged into waters of the State unless treated by an approved sediment control device or structure.
16. **Instream Construction Prohibition:** To protect important aquatic species, motor driven construction equipment shall not be allowed within stream channels unless on authorized ford crossings. Activities within stream channels are prohibited as determined by the classification of the stream (COMAR 26.08.02.08): Severn Run is a Use IV waterway; in-stream work may not be conducted from February 15 through June 15 inclusive, of any year.
17. **Instream Blasting:** Permittee shall obtain prior written approval from the Administration before blasting or using explosives in the stream channel.
18. **Minimum Disturbance:** Any disturbance of stream banks, channel bottom, wetlands, and wetlands buffer authorized by Permit or Approved Plan shall be the minimum necessary to conduct permitted activities. All disturbed areas shall be stabilized vegetatively no later than seven (7) days after construction is completed or in accordance with the approved grading or sediment and erosion control plan.
19. **Restoration of Construction Site:** Permittee shall restore the construction site upon completion of authorized activities. Undercutting, meandering or degradation of the stream banks or channel bottom, any deposition of sediment or other materials, and any alteration of wetland vegetation, soils, or hydrology, resulting directly or indirectly from construction or authorized activities, shall be corrected by Permittee as directed by the Administration.
20. **Mitigation**: Permittee shall mitigate for the loss of 10,190 square feet of forested nontidal wetland by creating the equivalent of at least 20,380 square feet of forested nontidal wetland, in accordance with an approved Phase I conceptual mitigation plan, as may be modified by a Phase II Mitigation Plan approved by the Mitigation and Technical Assistance Section ("Section") of the Department, pursuant to COMAR 26.23.04. A Phase II Mitigation Plan shall be submitted to the Section no later than 90 days after the issuance of this Permit, unless an extension has been granted in writing by the Section. The Phase II Mitigation Plan must be approved by the Section, through the Phase II Mitigation Plan Approval Letter and its associated exhibits ("Approval Letter"), prior to commencing the impacts authorized in this Permit. The Permittee shall successfully construct the mitigation site and meet project standards and other requirements, as specified in the Approval Letter and COMAR 26.23.04, in advance or concurrently with the activities authorized in this Permit. In the event of discrepancy with the mitigation requirements found in this Condition, the standards and requirements set forth in Approval Letter shall govern. The Permittee is required to notify the Section upon the start of grading and the completion of planting of the mitigation project. The Permittee shall submit monitoring reports for the mitigation project to the Section as specified in the Approval Letter. If the Permittee as stated in the Permit, changes, the Permittee must notify the Section. If the mitigation obligation is to be transferred to another party, the Permittee must notify the Section.

U.S. ARMY CORPS OF ENGINEERS AUTHORIZATION

The U.S. Army Corps of Engineers has reviewed this activity and has granted authorization under the Maryland State Programmatic General Permit (MDSPGP-4), as a Category B Activity. The terms and conditions of the MDSPGP-4, should be followed when performing the authorized work.

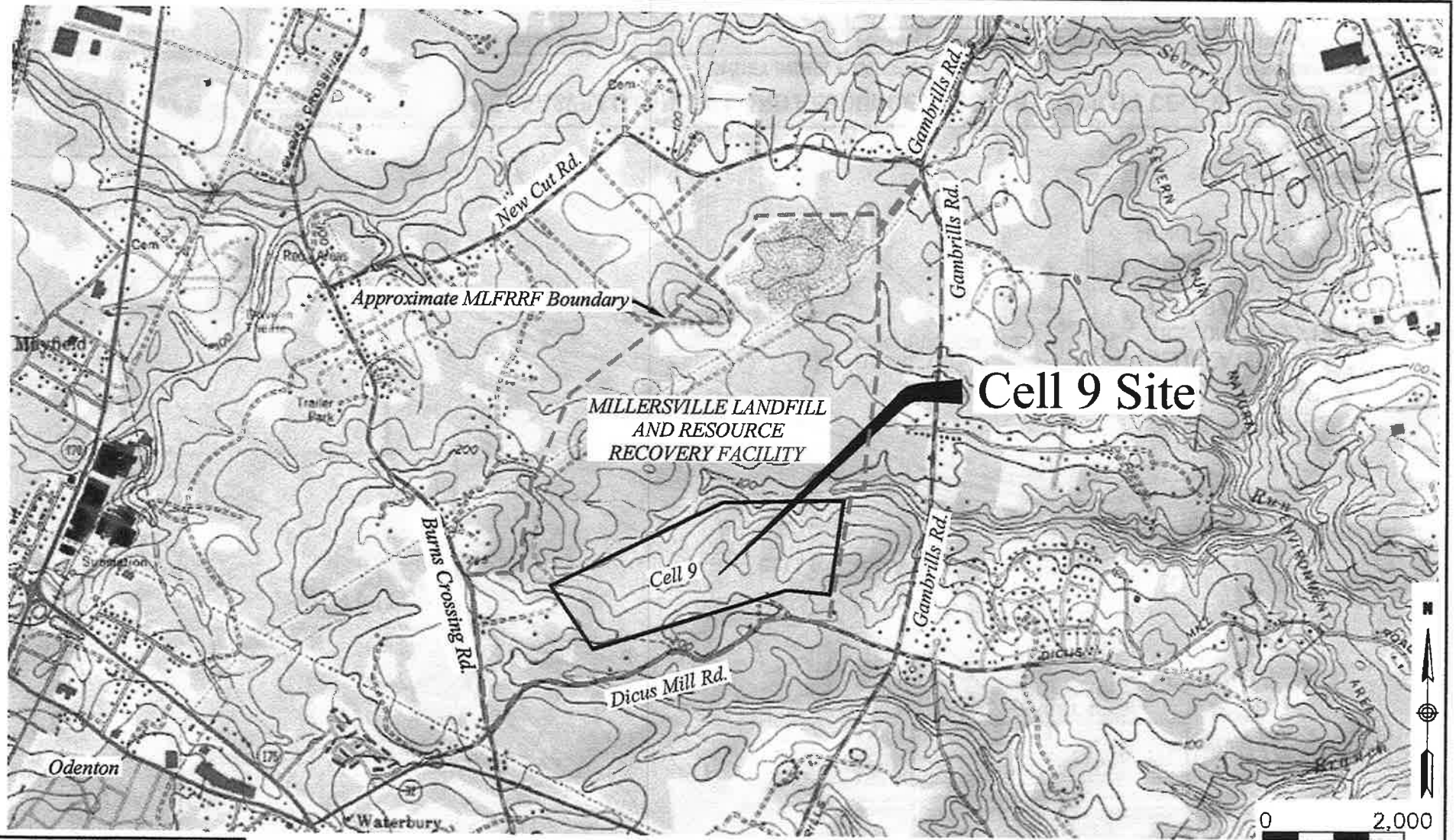
PERMIT NO.: 13-NT-0282/201361335
Attachment

BEST MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS, AND 100-YEAR FLOODPLAINS

1) No excess fill, construction material, or debris shall be stockpiled or stored in nontidal wetlands, nontidal wetland buffers, waterways, or the 100-year floodplain.
2) Place materials in a location and manner which does not adversely impact surface or subsurface water flow into or out of nontidal wetlands, nontidal wetland buffers, waterways, or the 100-year floodplain.
3) Do not use the excavated material as backfill if it contains waste metal products, unsightly debris, toxic material, or any other deleterious substance. If additional backfill is required, use clean material free of waste metal products, unsightly debris, toxic material, or any other deleterious substance.
4) Place heavy equipment on mats or suitably operate the equipment to prevent damage to nontidal wetlands, nontidal wetland buffers, waterways, or the 100-year floodplain.
5) Repair and maintain any serviceable structure or fill so there is no permanent loss of nontidal wetlands, nontidal wetland buffers, or waterways, or permanent modification of the 100-year floodplain in excess of that lost under the originally authorized structure or fill.
6) Rectify any nontidal wetlands, wetland buffers, waterways, or 100-year floodplain temporarily impacted by any construction.
7) All stabilization in the nontidal wetland and nontidal wetland buffer shall consist of the following species: Annual Ryegrass (Lolium multiflorum), Millet (Setaria italica), Barley (Hordeum sp.), Oats (Uniola sp.), and/or Rye (Secale cereale). These species will allow for the stabilization of the site while also allowing for the voluntary revegetation of natural wetland species. Other non-persistent vegetation may be acceptable, but must be approved by the Nontidal Wetlands and Waterways Division. **Kentucky 31 fescue shall not be utilized in wetland or buffer areas.** The area should be seeded and mulched to reduce erosion after construction activities have been completed.
8) After installation has been completed, make post-construction grades and elevations the same as the original grades and elevations in temporarily impacted areas.
9) To protect aquatic species, in-stream work is prohibited as determined by the classification of the stream:

   Use I waters: In-stream work shall not be conducted during the period February 15 through June 15, inclusive, during any year.

10) Stormwater runoff from impervious surfaces shall be controlled to prevent the washing of debris into the waterway.
11) Culverts shall be constructed and any riprap placed so as not to obstruct the movement of aquatic species, unless the purpose of the activity is to impound water.



SOURCE: U.S.G.S. QUADRANGLE ODENTON

ANNE ARUNDEL COUNTY MARYLAND

DPW

Vanasse Hangen Brustlin, Inc.
Environmental Services
(757) 220-0600 • Fax: (757) 220-8544

SCS Engineers

ADJACENT PROPERTY OWNERS:

SEE ATTACHED LIST

DATUM: NGVD 1929

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY CELL 9

SITE MAP

AT: WELLS BRANCH

IN: ANNE ARUNDEL COUNTY, MARYLAND

PURPOSE: CELL 9 LANDFILL REVISIONS

MDE APPLICATION NUMBER: 13-NT-0262 / 201361335

AI NUMBER: 19044

APPLICATION BY:
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

DATE: JULY, 2013

SHEET 1 **OF** 5

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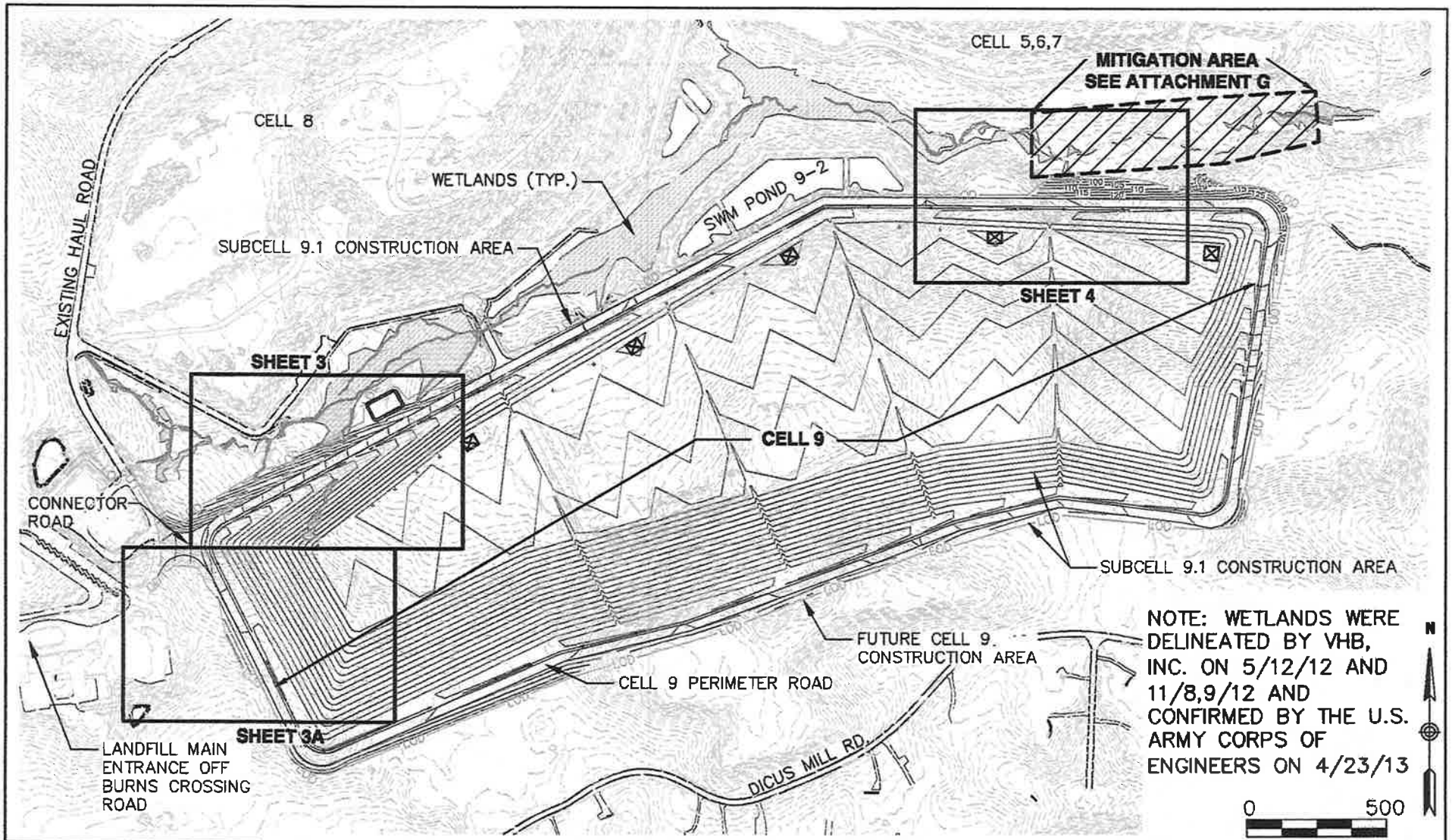

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MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY CELL 9

SHEET INDEX & OVERALL SITE

AT: WELLS BRANCH

IN: ANNE ARUNDEL COUNTY, MARYLAND

PURPOSE: CELL 9 LANDFILL REVISIONS

MDE APPLICATION NUMBER: 13-NT-0282 / 201361335

AI NUMBER: 19044

APPLICATION BY:
ANNE ARUNDEL COUNTY DEPARTMENT OF PUBLIC WORKS

DATE: JULY, 2013

SHEET 2 OF 5

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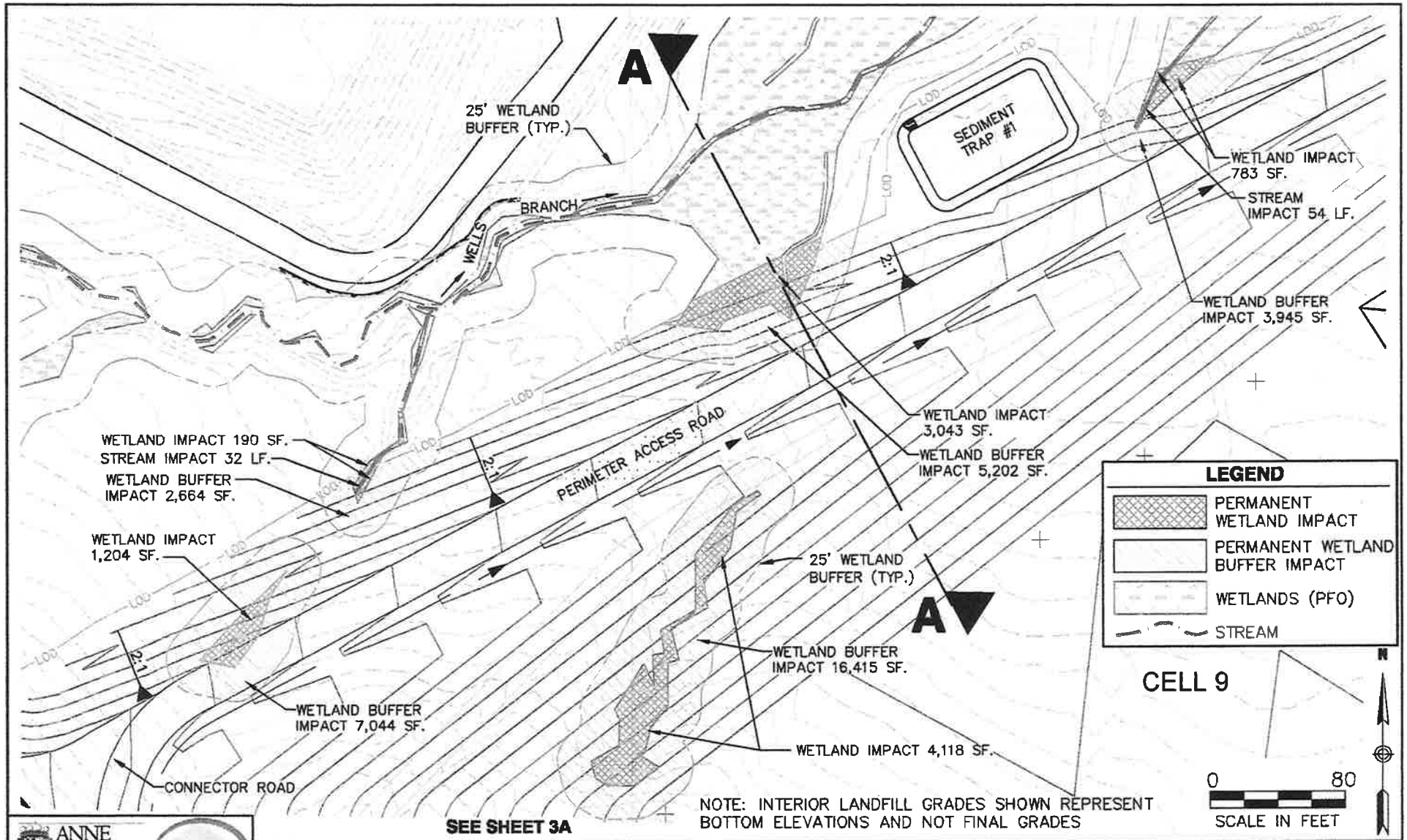

ANNE ARUNDEL COUNTY MARYLAND DPW

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SCS Engineers

ADJACENT PROPERTY OWNERS:

SEE ATTACHED LIST

DATUM: NGVD 1929

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY CELL 9

CONNECTOR ROAD IMPACT AREAS

AT: WELLS BRANCH

IN: ANNE ARUNDEL COUNTY, MARYLAND

PURPOSE: CELL 9 LANDFILL REVISIONS

MDE APPLICATION NUMBER: 13-NT-0282 / 201361338

AI NUMBER: 19044

APPLICATION BY:
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

DATE: JULY, 2013
REVISED: NOV. 15, 2013

SHEET 3 **OF** 5

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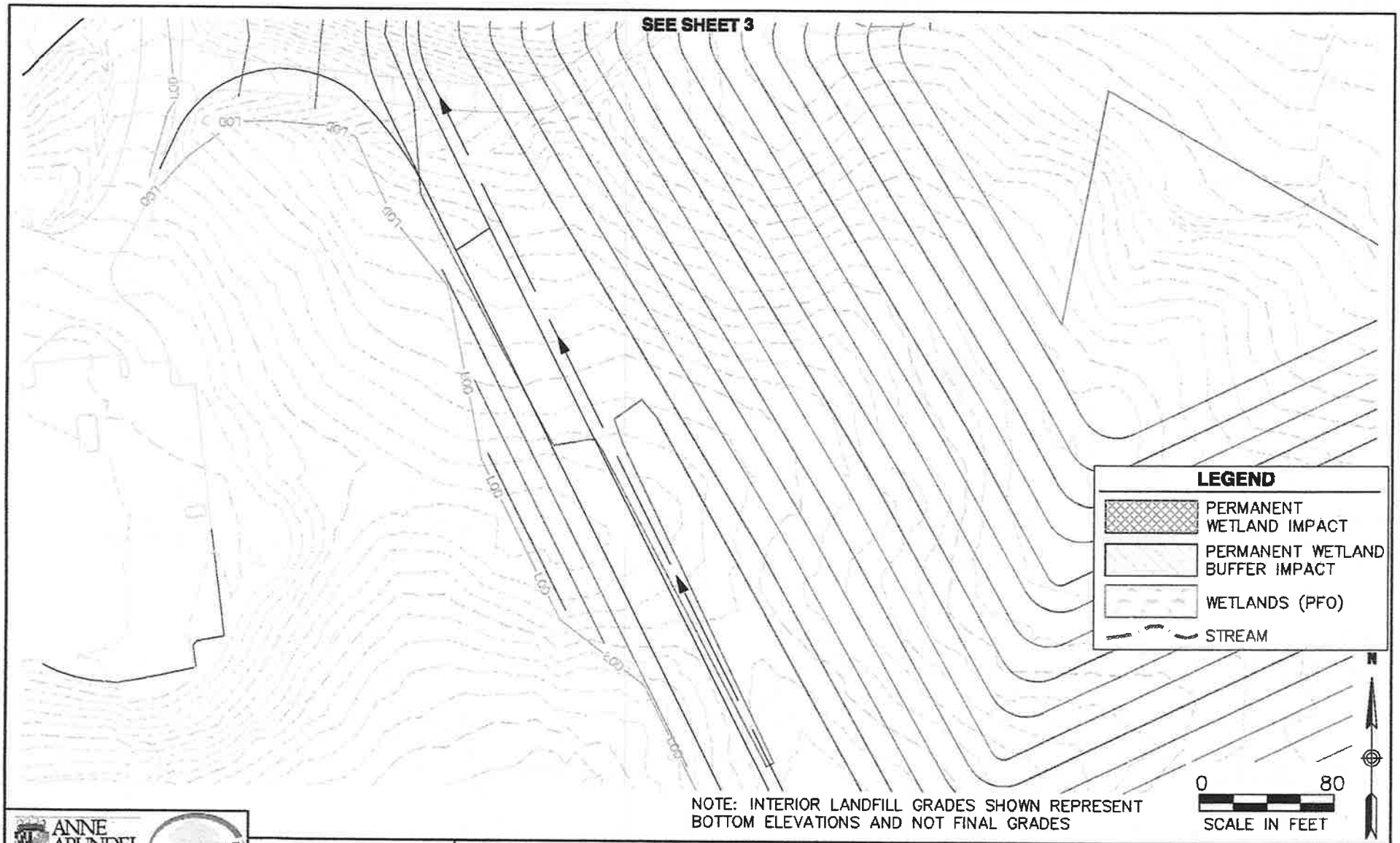

NOTE: INTERIOR LANDFILL GRADES SHOWN REPRESENT BOTTOM ELEVATIONS AND NOT FINAL GRADES

ANNE ARUNDEL COUNTY MARYLAND DPW

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Environmental Services
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SCS Engineers

ADJACENT PROPERTY OWNERS:

SEE ATTACHED LIST

DATUM: NGVD 1929

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY CELL 9

CONNECTOR ROAD IMPACT AREAS

AT: WELLS BRANCH

IN: ANNE ARUNDEL COUNTY, MARYLAND

PURPOSE: CELL 9 LANDFILL REVISIONS

MDE APPLICATION NUMBER: 13-NT-0282 / 201361335

AI NUMBER: 19044

APPLICATION BY:
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

DATE: JULY, 2013

SHEET 3A OF 5

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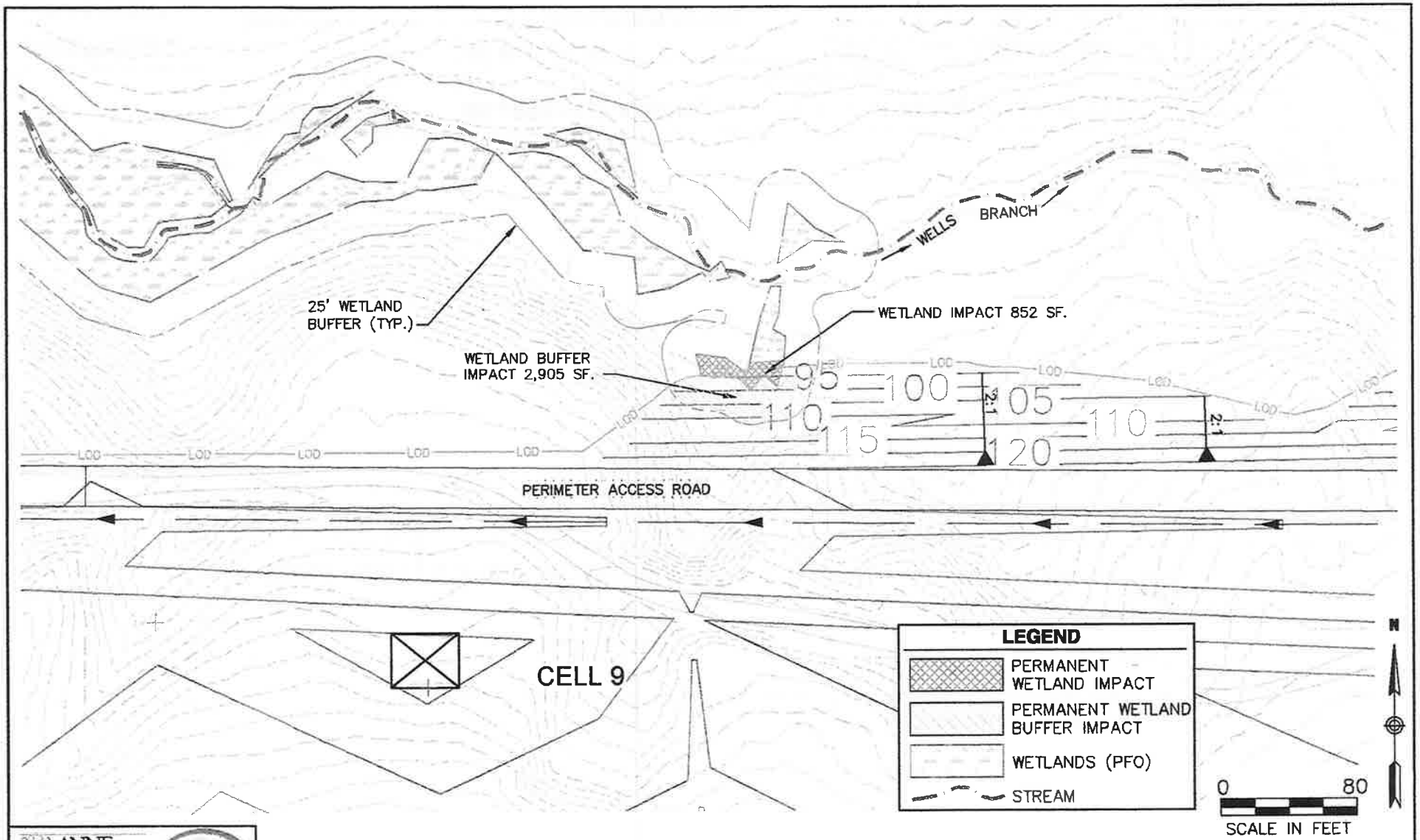

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Environmental Services
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SCS Engineers

ADJACENT PROPERTY OWNERS:

SEE ATTACHED LIST

DATUM: NGVD 1929

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY CELL 9

IMPACT AREA

AT: WELLS BRANCH

IN: ANNE ARUNDEL COUNTY, MARYLAND

PURPOSE: CELL 9 LANDFILL REVISIONS

MDE APPLICATION NUMBER: 13-NT-0262 / 201361338

AI NUMBER: 19044

APPLICATION BY:
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

DATE: JULY, 2013

SHEET 4 **OF** 5

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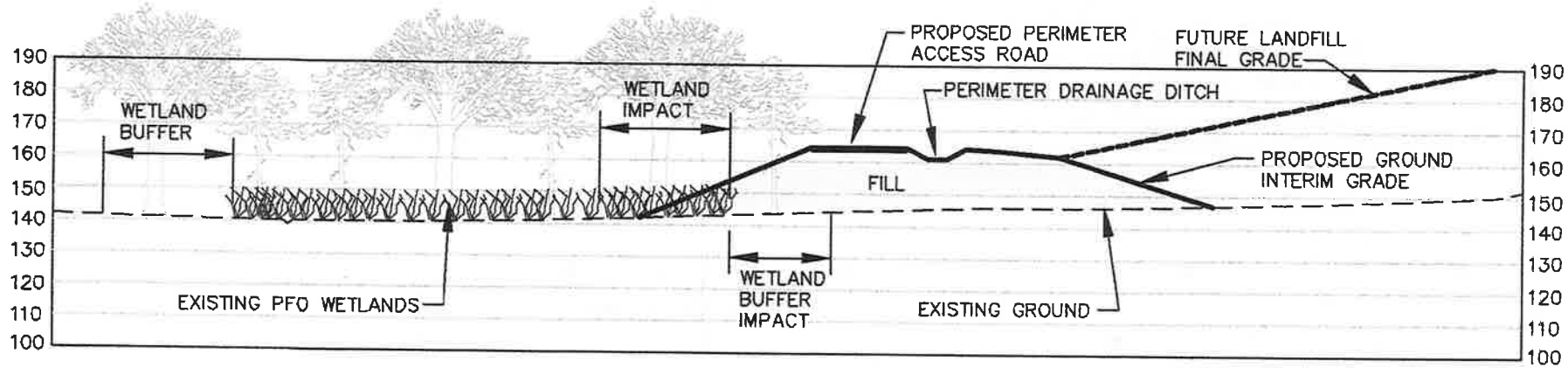

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SCALE IN FEET

ANNE ARUNDEL COUNTY MARYLAND DPW

Vanasse Hangen Brustlin, Inc.
Environmental Services
(757) 220-0500 • Fax: (757) 220-9544

SCS Engineers

ADJACENT PROPERTY OWNERS:

SEE ATTACHED LIST

DATUM: NGVD 1929

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY CELL 9

SECTION A-A

AT: WELLS BRANCH

IN: ANNE ARUNDEL COUNTY, MARYLAND

PURPOSE: CELL 9 LANDFILL REVISIONS

MDE APPLICATION NUMBER: 13-NT-0262 / 201361335

AI NUMBER: 19044

APPLICATION BY:
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

DATE: JULY, 2013

SHEET 5 **OF** 5

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Appendix A.7

USACE Baltimore District Authorization - Millersville Landfill Cell 9 Stream Restoration (2014)

DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS
P.O. BOX 1715
BALTIMORE, MD 21203-1715

DEC 0 2 2014

RECEIVED
DEC 4 2014
BY:

Operations Division

SUBJECT: **CENAB-OP-RMN (Anne Arundel County DPW/ Millersville Landfill Cell 9/Stream Restoration) 2013-61335-M18**

Mr. Kenneth B. Fleming, P.E.
Anne Arundel County Department of Public Works
2664 Riva Road
Annapolis, Maryland 21401

Dear Mr. Fleming:

This is in reference to your application dated August 2013 wherein you requested Department of the Army (DA) authorization to construct Cell 9, at the existing Millersville Landfill and Resource Recovery Facility at 389 Burns Crossing Road in Severn, Anne Arundel County, Maryland. The construction of Cell 9 will impact approximately 10,190 square feet of forested nontidal wetlands and approximately 86 linear feet of an unnamed, non-tidal tributary to Wells Branch. Also authorized are associated impacts for the proposed restoration of approximately 1,600 linear feet of stream and approximately 39,000 square feet of forested nontidal wetlands of Wells Branch, a perennial stream located on the landfill property. The construction of Cell 9 will be performed in accordance with the enclosed revised plans dated July 2013, and the associated stream restoration work will be performed in accordance with the enclosed revised plans dated November 2013.

The U. S. Army Corps of Engineers, Baltimore District, has determined that the proposed work, if accomplished in accordance with the enclosed plan(s), is authorized as a Category B, Activity e(9) *"Residential, Commercial, and Institutional Development"* under the Maryland State Programmatic General Permit-4 (MDSPGP-4). This general permit was published in the Corps Special Public Notice #11-77 issued on September 28, 2011. This MDSPGP-4 verification is provided pursuant to Section 404 of the Clean Water Act. If any of the information contained in your application and/or plans is later found to be in error, the MDSPGP-4 authorization for your project may be modified, suspended, or revoked.

The enclosed list of activity-specific impact limits and requirements and general conditions must be followed for purposes of the MDSPGP-4 in performing the work. In addition to the enclosed list of conditions, you must also comply with the following special conditions:

1. To protect aquatic species in-stream work is prohibited during the period February 15 through June 15, inclusive, during any year.

2. The permittee must have a copy of this permit available on site during construction.

3. The permittee must allow representatives of the Corps to enter the project area to inspect the ongoing or completed work.

4. Best management practices must be employed to minimize impacts to wetlands and waterways. Construction material must not be stockpiled in or stored in a manner that

would impact waters of the U.S., including jurisdictional wetlands. Temporary disturbance to wetlands and waterways must be restored to preconstruction

As a condition of the MDSPGP-4 authorization, you are required to complete and sign the enclosed **Compliance Self-Certification Form** regarding the completed work and any required mitigation. The signed form should be returned to the Regulatory Branch at the above address within 60 days following completion of the authorized work. Your signature on the self-certification form verifies your understanding that the work was completed in accordance with the terms and conditions associated with your DA permit.

This permit verification, including the computation of impacts and any required compensatory mitigation requirements, is based on a preliminary jurisdictional determination (JD). This preliminary JD finds that there "may be" waters of the United States within the review area shown on the project plans dated July 2013 and November 2013, a copy of which is enclosed, and identifies all potential jurisdictional waters and wetlands within the review area that could be affected by the proposed activity. This preliminary JD is not appealable.

If you do not agree with the extent of waters or wetlands and this preliminary JD upon which this permit verification was based, you are hereby advised of your option to request and obtain an approved JD from this office before accepting the terms and conditions of this permit verification. An approved JD is an official, written Corps determination stating the presence or absence of jurisdictional waters of the United States and identifies the limits of waters of the United States on a project site. An approved JD can be relied upon for a period of five years and can be appealed through the Corps' administrative appeal process (33 CFR Part 331).

Undertaking any activity in reliance on a Corps permit authorization based on a preliminary JD means that you accept the permit in entirety, and waive all rights to appeal the permit, including its terms and conditions and the preliminary JD associated with this permit.

Please be aware that the terms and conditions of this permit will continue to be binding on the new property owner(s) if structures or work authorized by this permit exist at the time of ownership transfer of the associated property. Although the construction period for work authorized by this MDSPGP-4 is finite, the permit itself, with its limitations, does not expire. To validate the transfer of this permit and the legal responsibility to comply with its terms and conditions, the transferee (new owner) must provide a mailing address and telephone number along with their signature and date in the space provided below and mail a copy to the above address.

Your MDSPGP-4 authorization is valid until September 30, 2016 unless the permit is modified, reissued, or revoked. You must remain informed of the changes to the MDSPGP-4. When changes to the MDSPGP-4 occur, a public notice announcing the changes will be issued.

Be advised that you have 12 months from the effective date of the MDSPGP-4's expiration, modification or revocation to complete the work under the present terms and conditions provided you have commenced construction or are under contract to commence construction of the authorized work.

In order for this authorization to be valid, you must obtain all required Federal, State, and local permits. If you have any questions concerning this letter, please contact Mr. Richard Kibby at (410) 962-0694 or *richard.kibby@usace.army.mil*.

Sincerely,

Richard Kibby

Richard Kibby
Project Manager
Maryland Section Northern

Enclosures

Cc:
Ms. Kelly Flint, MDE Non-tidal Waterways Division
Mr. Michael Goudreau, P.E., SCS Engineers

TRANSFEREE SIGNATURE	DATE	AREA CODE / TELEPHONE NO.
PRINTED NAME	ADDRESS	

To identify how we can better serve you, we need your help. Please take the time to fill out our new customer service survey at: http://www.nab.usace.army.mil/Missions/Regulatory.aspx

DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS
P.O. BOX 1715
BALTIMORE, MD 21203-1715

REPLY TO
ATTENTION OF

Effective October 1, 2011

2013-61335-M18
Corps Permit Number

CENAB-OP-R-MDSPGP-4 (MARYLAND STATE PROGRAMMATIC GENERAL PERMIT-4)

TO WHOM IT MAY CONCERN:

Upon the recommendation of the Chief of Engineers, and under the provisions of Section 404 of the Clean Water Act, as amended, and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403), the Secretary of the Army hereby authorizes the discharge of dredged or fill material or the placement of structures into Waters of the United States, including wetlands and navigable waters. These discharges and structures must comply with all the terms and conditions identified in this MDSPGP-4. It has been determined that the project qualifies for the MDSPGP-4. Accordingly, you are authorized to undertake the activity pursuant to:

1. Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403); and/or
2. Section 404 of the Clean Water Act (33 U.S.C. 1344).

You are authorized to perform work in accordance with the terms and conditions specified in Section VII of the MDSPGP-4 effective on October 1, 2011.

VII. General Conditions: To qualify for MDSPGP-4 authorization, the prospective permittee must comply with the following general conditions, as appropriate, in addition to any activity-specific conditions in the MDSPGP-4 category list and any case-specific special conditions imposed by the Corps.

A. General Requirements:

1. **Other Permits:** Authorization under the MDSPGP-4 does not obviate the need to obtain other Federal, State, or local authorizations required by law.

2. **Geographic Jurisdiction:** This MDSPGP-4 will authorize work undertaken within the geographic limits of the State of Maryland under the regulatory jurisdiction of the Baltimore District.

3. **Applicability:** Applicability of the MDSPGP-4 shall be reviewed with reference to the Corps definition of waters of the United States, including wetlands, and navigable waters of the United States. Applicants are responsible for delineating boundaries of all waters of the United States, including wetland boundaries. The delineation of wetland boundaries shall be accomplished in accordance with the current Federal manual for identifying jurisdictional wetlands and appropriate guidance issued by the Corps of Engineers.

4. **Minimal Effects:** Projects authorized by the MDSPGP-4 shall have no more than minimal individual and cumulative adverse environmental effects.

5. **Discretionary Authority:** Notwithstanding compliance with the terms and conditions of the MDSPGP-4, the Corps retains discretionary authority to require an alternate Corps permit review for any project under all categories of the MDSPGP-4 based on concerns for the aquatic environment or for any other factor of the public interest. This authority may be invoked on a case-by-case basis during the review process for Category B activities whenever the Corps determines that, based on the concerns stated above, the potential consequences of the proposed project warrant individual review. In some rare instances, the Corps may have concerns for the aquatic environment or for any other public interest factor pertaining to a specific proposed project, which has already received a case-specific verification as a Category A activity. In order to evaluate this project under an alternate Corps permit review, the verification must be suspended in accordance with Section VIII.E of the MDSPGP-4.

Whenever the Corps notifies an applicant that an alternate Corps permit may be required, authorization under the MDSPGP-4 is voided. No work may be conducted until the individual Corps permit is obtained, or until the Corps notifies the applicant that further review has demonstrated that the work may proceed under the MDSPGP-4.

6. **Single and Complete Projects:** The MDSPGP-4 shall not be used for piecemeal work and shall be applied to single and complete projects, including maintenance activities. For purposes of this MDSPGP-4, a single and complete project means the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers and which has independent utility. All components of a project, including all attendant features both temporary and permanent, shall be reviewed together as constituting one single and complete project. All planned phases of multi-phased projects (e.g., subdivisions should include all work such as roads, utilities, and lot development) shall be applied for and reviewed together as constituting one single and complete project. The MDSPGP-4 shall not be used for any activity or portion of a project (e.g., a pier or boat ramp), that is part of, or dependent on, an overall project (e.g., the dredging of a main navigation channel or a spur channel), for which an individual permit or some other alternate Corps permit is required.

7. **Use of Multiple MDSPGP-4 Activities:** More than one MDSPGP-4 activity may be used to authorize a single and complete project. However, the specific requirements, including all activity-specific requirements and impact thresholds, must be met for each MDSPGP-4 activity and the total extent of project impacts must not exceed the acreage and/or linear foot limit of the MDSPGP-4 activity with the highest specified acreage and/or linear foot limit. For example, if a road crossing is authorized under Category A of Section IV.B.1.(d)(1) with an associated nontidal bank stabilization authorized under Section IV.B.1.f.(4)(a), the maximum total impact limits to nontidal waters of the United States for the single and complete project may not exceed 10,000 square feet in total area and/or 500 linear feet in total length. The road crossing and nontidal bank stabilization activities must still meet all Category A activity-specific requirements and impact thresholds.

A single and complete project with multiple impacts, that may be eligible for authorization under a Category A and a Category B activity, requires an application submittal to the Corps and review under the MDSPGP-4 Category B verification procedures. All specific requirements, including the activity-specific requirements and impact thresholds of the Category A activity and the Category B activity must be met and the total extent of project impacts must not exceed to total acreage and/or linear foot limit of the MDSPGP-4 activity with the highest specified acreage and/or linear foot limit. For example, if a road crossing is authorized under Category A of Section IV.B.1.(d)(1) with an associated nontidal bank stabilization authorized under Section IV.B.f.(4)(b), the maximum total impact limits to waters of the United States for the single and complete project may not exceed 1/2 acre (21,780 square feet) in total area and/or 2,000 linear feet in total length. The road crossing activity must meet the Category A activity-specific requirements and impact thresholds, and the nontidal bank stabilization activity must meet the Category B activity-specific requirements and impact thresholds.

8. **Permit On-Site:** The permittee shall ensure that a copy of the MDSPGP-4 and the accompanying authorization letter are at the work site at all times. These copies must be made available to any regulatory representative upon request. Although the permittee may assign various aspects of the work to different contractors or sub-contractors, all contractors and sub-contractors shall be expected to comply with all conditions of any general permit authorization.

9. **Authorized Activities in Navigable Waters Subject to Section 10 of the Rivers and Harbors Act of 1899:**

a. If future operations by the United States require removal, relocation, or other alteration of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable water, the permittee will be required, upon due notice from the Corps, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

b. The permittee acknowledges the possibility that the structure permitted herein may be subject to damage by wave wash from passing vessels and/or ice flows within the waterway. The issuance of this permit does not relieve the permittee from taking all proper steps to ensure the integrity of the structure permitted herein and the safety of vessels moored thereto from damage by wave wash and/or ice flows, and the permittee shall not hold the United States liable for such damage.

c. The permittee must install and maintain, at his/her expense any safety lights, markers, and/or signals prescribed by the USCG, through regulations or otherwise, on the authorized facilities and/or structures. The permittee must contact the Commander (AOWW), Fifth Coast Guard District, Federal Building, 431 Crawford

Street, Portsmouth, Virginia, 23704, to ascertain the need for obstruction lights. Prior to commencing the construction or installation of an authorized structure in navigable waters of the United States, the permittee must submit a "Private Aids to Navigation Application" to the Commander of the USCG.

d. The permittee must provide location coordinates of the authorized structures, including minimum depth and other pertinent information to the USCG and request that a Local Notice to Mariners is issued regarding the authorized work.

10. For Aerial Transmission Lines Across Navigable Waters: The following minimum clearances are required for aerial electric power transmission lines crossing navigable waters of the United States. These clearances are related to the clearances over the navigable channel provided by existing fixed bridges, or the clearances which would be required by the USCG for new fixed bridges, in the vicinity of the proposed aerial transmission line. These clearances are based on the low point of the line under conditions producing the greatest sag, taking into consideration temperature, load, wind, length of span, and type of supports as outlined in the National Electrical Safety Code:

NOMINAL SYSTEM VOLTAGE (kV)	Minimum additional clearance (ft.) above clearance required for bridges.
115 and below	20
138	22
161	24
230	26
350	30
500	35
700	42
750-765	45

a. Clearances for communication lines, stream gauging cables, ferry cables, and other aerial crossings must be a minimum of ten feet above clearances required for bridges, unless specifically authorized otherwise by the District Engineer.

b. Corps Regulation ER 1110-2-4401 prescribes minimum vertical clearances for power communication lines over Corps lake projects. In instances where both the National Electrical Safety Code requirements and ER 1110-2-4401 apply, the greater minimum clearance is required.

A. **National Concern:**

1. **Historic Properties:** Any activity authorized by the MDSPGP-4 shall comply with Section 106 of the National Historic Preservation Act. Maryland Department of the Environment, in cooperation with the Maryland Historic Preservation Office, shall conduct an initial review and notify the Corps if any archaeological or other cultural resources are in the vicinity of the project. The Corps may require applicants to perform a survey of archaeological and historical resources in the project area. The Corps shall determine whether National Historic Preservation Act Section 106 consultation is required. The applicant must notify the Corps if they have knowledge that the activity may affect any historic properties listed or eligible for listing, or that the applicant has reason to believe may be eligible for listing on the National Register of Historic Places. If the permittee discovers any previously unknown archaeological or other cultural resource while accomplishing the work authorized by the MDSPGP-4, the permittee shall immediately notify the Corps of what has been found and stop work in the permit area until the required coordination has been completed. The permittee shall not begin or continue work until notified by the District Engineer that the requirements of the National Historic Preservation Act have been satisfied

and that the activity may proceed. Information on the location and existence of historical resources can be obtained from the MHT, Office of Preservation Services, and the National Register of Historic Places.

2. **Tribal Rights:** No activity or its operation may impair reserved tribal rights, including but not limited to, reserved water rights and treaty fishing and hunting rights.

3. **National Lands:** Activities authorized by the MDSPGP-4 shall not impinge upon the value of any Federal land, including but not limited to, National Wildlife Refuges, National Forests, National Parks, National Marine Sanctuaries, or any area administered by the FWS, U.S. Forest Service, or National Park Service (e.g., Assateague Island National Seashore).

4. **Endangered Species:** The MDSPGP-4 does not authorize any activity that may directly or indirectly affect a threatened or endangered species or a species proposed for such designation, as identified under the Federal ESA; or which may directly or indirectly destroy or adversely modify the critical habitat of such species unless and until appropriate coordination with the applicable resource agency(s) is complete and all such issues are resolved in accordance with the applicable regulations and procedures. MDE, in cooperation with MD DNR, shall conduct an initial review and notify the Corps and FWS or NMFS if any Federally listed species or critical habitat is likely to be in the vicinity of the project. The Corps shall determine if consultation with FWS or NMFS is required under Section 7 of the ESA. If consultation is required, the applicant, after notification, shall not begin or continue work until notified by the Corps that the requirements of the ESA have been satisfied and that the activity is eligible for authorization. Information on the location of threatened and endangered species and their critical habitat can be obtained from FWS and NMFS. The Corps will be initiating consultation under the Endangered Species Act on this MDSPGP-4 and any conditions from that consultation will be inserted into the MDSPGP-4.

National Marine Fisheries Service – Endangered Species Act Requirements:

a. **Interactions with National Marine Fisheries Service Federally Threatened or Endangered Species:** Any interaction between a sea turtle or any species listed now or in the future under Federal law as a threatened or endangered species ("listed species") (e.g., North Atlantic right whale, humpback whale, shortnose sturgeon) and the vessels associated with the project must be reported to the NMFS as follows: If the animal appears alive and uninjured (i.e., breathing normally, no visible wounds, movement uninhibited), the permittee or its representative must report the incident to the NMFS Northeast Region Marine Mammal and Sea Turtle Stranding and Entanglement Hotline at (866) 755-6622 within 24 hours of returning from the trip on which they made the discovery. If the animal requires assistance, the call to the hotline must be made immediately. If the animal appears to be injured (i.e. bleeding, gasping for air, etc.) or dead, the permittee or its representative must also immediately call the hotline so the appropriate rehabilitation or stranding network representative can be contacted. The applicant shall also notify the Corps of all correspondence and interaction with the NMFS within two calendar days. Additional information about any Federally threatened or endangered species may be obtained from the attached fact sheet or online at: http://www.nero.noaa.gov/prot_res/stranding/SpeciesOverview.html and at: http://www.nero.noaa.gov/prot_res/esp/. An interaction is defined as an entanglement or capture of a listed species or a strike/direct contact between vessels or equipment used for the project and a listed species.

b. **Vessel Buffer:** When listed species are sighted, vessels must attempt to maintain a distance of 50 yards (150 feet) or greater between the animal and the vessel whenever possible. State and Federal regulations prohibit approaching a right whale within a 500 yard (1,500 foot) buffer zone. Any vessel finding itself within the 500 yard (1,500 foot) buffer zone created by a surfacing right whale must depart immediately at a safe, slow speed. If other listed species are detected, vessels will reduce their speeds to 10 knots or to the maximum extent practicable to ensure human safety. If listed species are sighted off of a moving dredge, intentional approaches within 100 yards (300 feet) of the animal must be avoided. Vessels must reduce speeds to 4 knots or the lowest speed practicable to ensure human safety. Any interactions must be reported to the NMFS.

c. **Best Management Practices Applicable to Category A Activities Within Tidal Waters Having Salinity Levels Less Than 6 Parts Per Thousand (ppt) (See Appendix B):**

(i) Pile Driving: For the protection of listed species within all tidal waters of the Chesapeake Bay in Maryland and its tidal tributaries with salinity levels <6 ppt, pile driving methods must maintain noise level thresholds not to exceed 187dB SEL re 1μPa or 206dB peak re 1μPa at a distance of >10m from the pile being installed; and for levels >155dB peak re 1μPa must not exceed 12 consecutive hours on any given day and a 12 hour

recovery period (i.e., in-water noise levels below 155dB peak re 1μPa) must be provided between work days. Pile driving construction must adhere to one of the following methods: (a) piles must be installed in-the-dry during low water; or (b) piles must be drilled and pinned to ledge; or (c) vibratory hammers must be used to install any size and quantity of wood, concrete, or steel pilings; or (d) impact hammers must be limited to one hammer and <50 piles installed per day with the following: wood piles of any size; concrete piles <18-inches diameter; steel piles <12-inch diameter if the hammer is <3,000 pounds and a wood cushion is used between the hammer and steel pile; or (e) approved pile driving methods that will allow noise level thresholds to be met.

(ii) Sediment Disturbing Activities Time-of-Year Restriction: Sediment disturbing activities, which includes pile driving activities, are prohibited during the period April 1 through June 30 within all tidal waters of the Chesapeake Bay in Maryland and its tidal tributaries with salinity levels <6 ppt for the protection of shortnose sturgeon and early life stages in these waters.

5. **Essential Fish Habitat (EFH) and Fish and Wildlife Coordination Act:** Section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act requires an EFH consultation with the NMFS for any action or proposed action authorized, funded, or undertaken by a Federal agency that may adversely affect EFH. Essential Fish Habitat has been defined by Congress as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." The designation and conservation of EFH seeks to minimize adverse effects on habitat caused by fishing and non-fishing activities. NMFS has determined that many of the MDSPGP-4 Category A activities are eligible for EFH general or programmatic concurrence and require no further EFH consultation. National Marine Fisheries Service, in consultation with the District, has determined that individual EFH consultation is needed for some projects potentially eligible for authorization under Category A of the MDSPGP-4 that may adversely affect EFH. The Corps will coordinate with NMFS as part of the Category B review procedures. EFH conservation recommendations made by NMFS will normally be included as a permit requirement by the Corps. If the EFH coordination and consultation requirements cannot be resolved under the MDSPGP-4 process, an alternate Corps permit review process is required for the project. The Corps will be initiating consultation under these authorities on this MDSPGP-4, and any conditions from that consultation to protect NOAA trust resources will be inserted into this MDSPGP-4.

6. **Wild and Scenic Rivers:** No activity is authorized under the MDSPGP-4 that occurs in a component of the National Wild and Scenic River System, including rivers officially designated by Congress as study rivers for possible inclusion in the system, while such rivers are in an official study status, unless the appropriate Federal agency, with direct management responsibility for the river, has determined in writing that the proposed activity will not adversely affect any National Wild and Scenic River, including study rivers. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U. S. Forest Service, Bureau of Land Management, or FWS).

7. **Federally Authorized Civil Works Projects:**

a. **Federal Navigation Projects:** The MDSPGP-4 does not authorize interference with any existing or proposed Federal navigation projects. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration. (See VII.A.9.a.)

b. **Federal Navigation Channel Setbacks:** All activities must comply with the Baltimore District Minimum Setback Guidance for Structures Along Federally Authorized Channels. Please see the Baltimore District's Regulatory webpage to view this guidance: http://www.nab.usace.army.mil/Wetlands%20Permits/publications.htm.

c. **Other Federally Authorized Civil Work Projects (e.g., flood control, dams, and reservoirs):** The MDSPGP-4 does not authorize interference with any proposed or existing Federally authorized civil works project.

8. **Federal Liability:** In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project, or uses thereof, as a result of other permitted or unpermitted activities or from natural causes;

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest;

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit;

d. Design or construction deficiencies associated with the permitted work; and

e. Damage claims associated with any future modification, suspension or revocation of the MDSPGP-4 or any specific MDSPGP-4 verification.

9. **Navigation:** Projects authorized under the MDSPGP-4 shall not cause interference with navigation, and no attempt shall be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to projects authorized under the MDSPGP-4. Nothing in the MDSPGP-4 shall in any way restrict the District Engineer, U.S. Army Engineer District, Baltimore, from exercising his legal authority to protect the public interest in navigation or from exercising his authority under the Navigation Servitude of the United States. (See VII.B.8.)

10. **Fills Within 100-Year Floodplain:** The activity must comply with applicable Federal Emergency Management Agency approved State or local floodplain management requirements.

11. **Safety of Impoundment Structures:** To ensure that all impoundment structures are safely designed, the Corps may require non-Federal applicants to demonstrate that the structures comply with established State dam safety criteria or have been designed by qualified persons. The Corps may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

B. **Minimization of Environmental Impacts:**

1. **Avoidance and Minimization:** Discharges of dredged or fill material into waters of the United States and adverse impacts of such discharges on the aquatic ecosystem shall be avoided and minimized to the maximum extent practicable at the project site (i.e., on-site).

2. **Mitigation Standards:** A proposed compensatory mitigation proposal may be submitted with the application to expedite the process. The Corps will determine if the project is eligible for authorization under the MDSPGP-4 subject to the applicant's submittal of a compensatory mitigation proposal for stream and wetland impacts. Compensatory mitigation plans will generally include a requirement for the establishment, performance, maintenance, legal protection (e.g., conservation easements), and long-term management of the mitigation area. Applicants may propose the use of mitigation banks, in-lieu-fee programs, or separate permittee-responsible mitigation. In general, maintenance of previously authorized activities typically does not require mitigation. All mitigation must be in compliance with the 2008 Mitigation Rule (73 FR 70).

a. Wetland mitigation will generally be required for all permanent tidal or nontidal wetland losses either through the use of the State's tidal or nontidal programmatic wetland compensation, mitigation banks, in-lieu-fee programs, and/or by the permittee as required by special condition of the MDSPGP-4 or the State authorization. Generally, the minimum required wetland mitigation ratios will be as follows: 2:1 for forested and scrub-shrub wetlands; 1:1 for herbaceous emergent wetlands, and 1:1 for permanent conversion of forested wetlands to herbaceous emergent wetlands. Wetland mitigation can include wetland restoration, establishment, enhancement (including restoration or enhancement of upland forested buffers), and/or wetland preservation, unless the Corps determines in writing that some other form of mitigation would be more appropriate and provides a project-specific waiver of this requirement. Since the likelihood of success is greater and the impacts are reduced, wetland restoration should be the first compensatory mitigation option considered.

b. Stream mitigation, focusing on functional replacement, will generally be required for any project that involves losses of more than 200 linear feet to stream channels and rivers through the use of mitigation banks, in-lieu-fee programs, or by the permittee as required by special condition of the MDSPGP-4 and/or the State authorization. Stream mitigation can include stream restoration, establishment, enhancement (including enhancement of riparian buffers), and stream preservation. Riparian buffer areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat impact concerns. The need to require mitigation for impacts to open waters will be determined on a case-by-case basis.

c. For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu-fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee.

d. For permittee-responsible mitigation, the special conditions of the MDSPGP-4 verification must clearly indicate the party or parties responsible for the implementation, performance, and long-term management of the compensatory mitigation project.

3. **Work in Wetlands:** Heavy equipment working in wetlands shall be avoided if possible and, if required, soil and vegetation disturbance shall be minimized by using techniques such as timber mats, geotextile fabric, and vehicles with low-pressure tires. Disturbed areas in wetlands shall be restored to preconstruction contours and elevations upon completion of the work.

4. **Temporary Fill and Mats**: Temporary fill and the use of mats are both considered a discharge of fill material and must be included in the quantification of impact area authorized by the MDSPGP-4. Temporary fill (e.g., access roads, cofferdams) in waters and wetlands authorized by the MDSPGP-4 shall be properly stabilized during use to prevent erosion. Temporary fill in wetlands shall be placed on geotextile fabric laid on the existing wetland grade. Upon completion of the work, all temporary fills shall be disposed of at an upland site, suitably contained to prevent erosion and transport to a waterway or wetland. Temporary fill areas shall be restored to their original, pre-construction contours and revegetated with native wetland species.

5. **Erosion and Sediment Control:** Adequate erosion and sediment control measures, practices, and devices, such as turbidity curtains in tidal waters, vegetated filter strips, geotextile silt fences, phased construction, or other devices or methods, shall be used to reduce erosion and retain sediment on-site during and after construction. These devices and methods shall be capable of (a) preventing erosion, (b) collecting sediment and suspended and floating materials, and (c) filtering fine sediment. Erosion and sediment control devices shall be removed when the work is complete and the site has been successfully stabilized. The sediment collected by these devices shall be removed and placed at an upland location, in a manner that will prevent its later erosion into a waterway or wetland. All exposed soil and other fills shall be permanently stabilized at the earliest practicable date. In-stream work shall be conducted "in the dry" whenever practicable. This should be accomplished using stream diversion devices, other than earthen or stone cofferdams. In addition, work in waters of the United States should be performed during periods of low-flow or no-flow, whenever practicable.

6. **Aquatic Life Movements:** No activity may substantially disrupt the necessary life-cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through, or spawn/nursery within the area (e.g., anadromous/catadromous fish); unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions. A low flow channel must be maintained through any discharges placed for armoring across the channel so as to not impede flow in the waterway and/or not to block or impede the movements of anadromous, estuarine, and resident fish. Permanent culvert or pipes placed in streams must be depressed in accordance with the State of Maryland regulations. If depression of the culvert is not practicable, the applicant must submit a narrative, along with their application, documenting measures evaluated to minimize disruption of the movement of aquatic life, as well as specific documentation concerning site conditions and limitations on depressing the culvert, cost, and engineering factors that prohibit depressing the pipe/culvert. Options that need to be considered include the use of a bridge, bottomless pipe, partial depression, or other measures to provide for the movement of aquatic organisms. The documentation must also include photographs documenting site conditions. The applicant may find it helpful to contact their regional fishery agency for recommendations about the measures to be taken to allow for fish passage

7. **Water Crossings:**

a. All temporary and permanent crossings of waterbodies shall be suitably bridged, culverted, or otherwise constructed to withstand and to prevent the restriction of high flows and tidal flows; to maintain existing low flows; and to prevent the obstruction of movement by aquatic life indigenous to the water body, including anadromous, estuarine, and resident fish species.

b. All water crossings (e.g., utility lines and road crossings) must be constructed roughly perpendicular to waters of the United States, including streams and wetlands. Where a utility line or access road is constructed parallel to a stream corridor, an undisturbed buffer shall be maintained between the utility line/access road and the waterway to avoid or minimize potential future impacts to waters of the United States. These potential impacts would include such issues as sewer line leaks or failures, future stream channel meandering, stream bank instability and failure, and right-of-way maintenance.

c. Water crossings must be constructed "in the dry" whenever practicable. This should be accomplished by using stream diversion devices other than earthen or stone cofferdams.

d. Equipment shall cross streams only at suitably constructed permanent or temporary crossings.

e. Temporary structures and fills shall be removed and the area restored to its original contours and elevations, or to the conditions specified in the approved plans. The temporary structures and the areas of fill associated with these structures must be included in the total waterway/wetlands impacts.

8. **Discharge of Pollutants:** All activities that are authorized under the MDSPGP-4 and that involve any discharge or relocation of pollutants into waters of the United States shall be consistent with applicable water quality standards, effluent limitations, standards of performance, prohibitions, and pretreatment standards and management practices established pursuant to the CWA (33 U.S.C. 1251 et. Seq.), and applicable State and local laws and regulations. No discharge of dredged or fill material in association with this authorization may consist of unsuitable material such as trash, debris, car bodies, asphalt, etc.

9. **Spawning Areas:** Activities, including structures and work in navigable waters of the United States or discharges of dredged or fill materials in fish and shellfish spawning or nursery areas during spawning seasons, shall be avoided. Impacts to these areas shall be avoided or minimized to the maximum extent practicable during all other times of year. Activities that result in the physical destruction (e.g., through excavation, dredging, mining, fill, or significant downstream sedimentation by substantial turbidity) of an important spawning/nursery area are not authorized by this MDSPGP-4.

10. **Waterfowl Breeding and Wintering Areas:** Discharges into breeding and wintering areas for migratory waterfowl shall be avoided to the maximum extent practicable.

11. **Environmental Values:** The permittee shall make every reasonable effort to construct or operate the work authorized under the MDSPGP-4 in a manner that maintains as many environmental values as practicable, and that avoids or minimizes any adverse impacts on existing fish, wildlife, and natural environmental values.

12. **Management of Water Flows:** To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

13. **Water Supply Intakes:** No discharge of dredged or fill material may occur in the proximity of a public water supply intake.

D. **Procedural Conditions:**

1. **Inspections:** The permittee shall permit the District Engineer or his authorized representative(s) to make periodic inspections at any time deemed necessary to ensure that the work is being performed in accordance with the terms and conditions of the MDSPGP-4. The District Engineer may also require post-construction engineering drawings (as-built plans) for completed work, and post-dredging survey drawings for any dredging work.

2. **Compliance Certification:** Every permittee who receives a written MDSPGP-4 verification shall submit a signed Compliance Certification Form within 60 days following completion of the authorized work and any required mitigation (but not mitigation monitoring, which requires separate submittals). Failure to submit the Compliance Certification Form by the permittee could result in the Corps taking appropriate non-compliance enforcement action against the permit holder. The Corps will provide a blank copy of the Compliance Certification Form to the permittee with the MDSPGP-4 verification. The completed form will include the following:

a. A statement that the authorized work either was or was not done in accordance with the MDSPGP-4 verification, including any general and/or specific conditions. If the activity was not done in accordance with the MDSPGP-4 verification, including any general and/or specific conditions and requirements, the permittee shall describe the specifics of the deviation from the authorized activity.

b. A statement that any required mitigation was or was not completed in accordance with the permit conditions. If the mitigation was not completed in accordance with the permit conditions, the permittee shall describe the specifics of the deviation from the permit conditions.

c. The signature of the permittee, certifying the completion of the work and compensatory mitigation.

After the project is completed, the certification shall be sent to the Baltimore District at the following address:

U. S. Army Corps of Engineers
Baltimore District
Attn: CENAB-OP-R
P. O. Box 1715
Baltimore, Maryland 21203-1715

3. **Transfer of MDSPGP-4 Verifications:** If the permittee sells the property associated with a MDSPGP-4 verification, the permittee may transfer the MDSPGP-4 verification to the new owner by submitting a letter to the Baltimore District Corps of Engineers office to validate the transfer. A copy of the MDSPGP-4 verification must be attached to the letter, and the letter must contain the following statement and signature:

"When the structures or work authorized by this MDSPGP-4 are still in existence at the time the property is transferred, the terms and conditions of this MDSPGP-4, including special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this MDSPGP-4 permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

_____ _____
(Transferee) (Date)

4. **Maintenance:** The permittee shall properly maintain the work or structure authorized by the MDSPGP-4 in good condition and in compliance with the terms and conditions of the MDSPGP-4, including maintenance to ensure public safety.

5. **Property Rights:** The MDSPGP-4 does not convey any property rights, either in real estate or material, or any exclusive privileges, nor does it authorize any injury to property or invasion of rights or any infringement of Federal, State, or local laws or regulations.

6. **Modification, Suspension and Revocation:** The MDSPGP-4, or any verification under it, may be either modified, suspended, or revoked, in whole or in part, pursuant to DA policies and procedures and any such action shall not be the basis for any claim for damages against the United States.

7. **Restoration:** The permittee, upon receipt of a notice of revocation of authorization under the MDSPGP-4, shall restore the wetland or waterway to its former condition, without expense to the United States and as directed by the Secretary of the Army or his authorized representative. If the permittee fails to comply with such a directive, the Secretary or his designee may restore the wetland or waterway to its former condition, by contract or otherwise, and recover the cost from the permittee.

8. **Special Conditions:** The Corps may impose special conditions on any project authorized under the MDSPGP-4, in cases where the Corps determines that special conditions are necessary to avoid or minimize adverse effects on the environment or on any other factor of the public interest. Failure to comply with all conditions of the authorization/ verification, including special conditions, will constitute a permit violation/unauthorized work and may subject the permittee to criminal, civil, or administrative penalties, and/or restoration.

9. **False or Incomplete Information:** In granting authorization pursuant to this permit, the Baltimore District will rely upon information and data provided by the permittee. If the project is verified by the Corps or MDE under the MDSPGP-4 and subsequently discovers that it has relied on false, incomplete, or inaccurate information provided by the permittee, the MDSPGP-4 verification may be revoked, in whole or in part, and/or the United States may institute appropriate legal proceedings.

10. **Compliance:** Any activity performed in waters of the United States, including wetlands and navigable waters, that is not in compliance with all the terms and conditions of the MDSPGP-4, which includes the MDSPGP-4 authorized activity activity-specific requirements, constitutes unauthorized work and is subject to an enforcement action by the Corps or the EPA. Furthermore, the MDSPGP-4 does not delegate any Section 404 enforcement or regulatory authority. Unauthorized work in waters of the United States, including wetlands and navigable waters, is subject to one or more of the following responses by EPA and/or the Corps:

a. A Cease and Desist order and/or an administrative compliance order requiring remedial action.

b. Initiation and assessment of a Class I administrative penalty order pursuant to Section 309(g) of the CWA.

c. Initiation and assessment of a Class II administrative penalty for continuing violation pursuant to Section 309(g) of the CWA.

d. Referral of the case to the U. S. Attorney with a recommendation for a civil or criminal action.

e. If the Corps determines that an after-the-fact application is appropriate, it will be reviewed following the appropriate procedures.

f. Any other appropriate response.

DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS
P.O. BOX 1715
BALTIMORE, MD 21203-1715

REPLY TO
ATTENTION OF

2013-61335-M18

Corps Permit Tracking Number

MDSPGP-4
ACTIVITY (e-(9))
Residential, Commercial, and Institutional Development Activities

The authorized Residential, Commercial, and Institutional Development activities must comply with the following applicable activity-specific conditions indicated by an "X" in the boxes below, all general conditions of this general permit, and any project-specific special conditions.

This activity authorizes the discharges of dredged or fill material into nontidal waters of the United States associated with residential, commercial, and institutional development activities, including the construction or expansion of residential, commercial, or institutional building foundations, building pads, and attendant features that are necessary for the use and maintenance of the structures. Attendant features may include, but are not limited to, roads, parking lots, garages, yards, sidewalks, utility lines, stormwater management facilities, and recreational facilities such as playgrounds, playing fields, trails, and golf courses (provided the golf course is an integral part of the residential development). Residential developments include a single residence, multiple and single unit developments, and/or a residential subdivision. Examples of commercial developments include retail stores, industrial facilities, restaurants, business parks, and shopping centers. Examples of institutional developments include schools, libraries, hospitals, and places of worship. The construction of new golf courses (unless an integral part of a residential development), new ski areas, or oil and gas wells are not authorized by this activity (Sections 10 and 404, limited to nontidal waters of the United States, including navigable nontidal Section 10 waters, e.g., Potomac and Susquehanna Rivers, etc.).

New crossings of all waters of the United States will be reviewed based on the following order of preference: (a) bridge, (b) bottomless arch culvert, and (c) pipe or box culvert. Written documentation may be required to support the preferred crossing method.

☐ **Category A Impact Limits and Requirements:**

i. The total temporary and permanent impacts to nontidal waters of the United States, which includes nontidal wetlands, streams, rivers, navigable waters, and other open waters, are not to exceed 5,000 square feet of waters of the United States and/or 200 linear feet of nontidal streams, rivers, or other open waters.

ii. Category A does not authorize the discharge of fill into streams for the construction of berms for in-line (i.e., in-stream) stormwater management facilities, permanent dikes, dams, water withdrawals, or water diversions. It also does not authorize the construction of any kind of pond that would impound water into a stream or wetland. Category B or alternate Corps permit review procedures are required for construction of these ponds or stormwater management facilities.

iii. Limit-of-disturbance easements for the construction of utility lines within nontidal waters of the United States, including wetlands, must be limited to the minimum width necessary and not to exceed 30 feet in width.

iv. The utility line must make a direct or perpendicular crossing of any stream channel.

v. Open-cut pipeline installation within adjacent jurisdictional wetlands must not parallel a stream channel for more than 100 feet along the ordinary high water mark.

vi. The top of the cable, encasement, or pipeline shall be located a minimum of 3 feet below the existing bottom elevation of the streambed and generally does not require any riprap protection in-stream. When the utility is placed in bedrock, a minimum depth of 1 foot from the lowest point in the natural contour of the streambed shall be maintained.

vii. This Category A activity does not authorize discharges into nontidal wetlands adjacent to tidal waters. It must be reviewed under Category B or alternate Corps permit review procedures, as appropriate.

viii. Any temporary crossing that must remain in place for over one year after the installation date requires review under Category B or alternate Corps permit review procedures, as appropriate.

ix. The following conditions are applicable to Coastal Plain streams, and Harford and Cecil County Piedmont streams:

(1) Permanent culvert pipes that are greater than 24 inches in diameter and bridge/arch footers must be countersunk a minimum of 12 inches below the natural stream invert.

(2) Permanent culvert pipes and bridge/arch footers placed in streams on bedrock or over buried utility lines are exempt from these countersinking (i.e., depressing) requirements and must be constructed in accordance with the State of Maryland regulations. Permanent culvert pipes and bridge/arch footers placed in streams on bedrock or over buried utility lines are eligible for Category A review with specific documentation concerning site conditions and limitations on depressing the culvert, cost, and engineering factors that prohibit depressing the pipes/culvert.

(3) All permanent culvert pipes greater than 24 inches in diameter and bridge/arch footers (except those placed in streams on bedrock or over buried utility lines) that cannot be countersunk in accordance with condition *(1)* above are not eligible for Category A and must be reviewed under Category B or alternate Corps permit review procedures, as appropriate.

☒ **Category B Impact Limits and Requirements:**

i. The total temporary and permanent impacts to nontidal waters of the United States, which includes nontidal wetlands, streams, rivers, navigable waters, and other open waters, are not to exceed 1/2 acre (21,780 square feet) of waters of the United States and/or 2,000 linear feet of nontidal streams, rivers, or other open waters.

ii. For all submerged utility lines across navigable waters of the United States, the cross-sectional view drawing submitted with the application shall show the utility line crossing from bank to bank in relationship to the waterway bottom. In addition, the location and depth of the Federal navigation channel shall be shown in relation to the proposed utility line.

iii. The following conditions are applicable to Coastal Plain streams, and Harford and Cecil County Piedmont streams:

(1) Permanent culvert pipes that are greater than 24 inches in diameter and bridge/arch footers must be countersunk a minimum of 12 inches below the natural stream invert.

(2) Permanent culvert pipes and bridge/arch footers placed in streams on bedrock or over buried utility lines are exempt from these countersinking (i.e., depressing) requirements and must be constructed in accordance with the State of Maryland regulations.

(3) All permanent culvert pipes greater than 24 inches in diameter and bridge/arch footers placed in streams must be countersunk in accordance with condition *(1)* above (except those placed in streams on bedrock or over buried utility lines), unless the Corps and MDE waives the countersinking (i.e., depressing) requirement by making a written determination concluding that countersinking is not practicable and will result in minimal adverse effects.

(4) If countersinking of the culvert or footer is not practicable in accordance with requirement *(1)* above (except those placed in streams on bedrock or over buried utility lines), the applicant must submit a narrative, along with their application, documenting measures evaluated to minimize disruption of the movement of aquatic life, as well as specific documentation concerning site conditions and limitations on depressing the culvert/footer, cost, and engineering factors that prohibit depressing the culvert/footer. Preferred alternative options that must be considered include the use of a bridge or bottomless pipe. Other alternative options may include partial depression or other measures to provide for the movement of aquatic organisms. This documentation must also include photographs documenting site conditions. The applicant may find it helpful to contact their regional fishery agency for recommendations about the measures to be taken to allow for migratory fish passage.

☒ **Requirements Applicable to Both Category A and Category B Activities:**

i. Application must be submitted to MDE for Corps authorization.

ii. The construction of new golf courses (unless an integral part of a residential development), new ski areas, or oil and gas wells are not authorized by this activity.

iii. Impacts shall be minimized by selection of a utility alignment that avoids and minimizes wetland and waterway impacts to the maximum extent practicable. Directional drilling, jack and bore, missile, or similar methods are the preferred method of installation.

iv. Clearing of wetlands and fragmentation of large tracts of forested wetlands shall be minimized by routing utility lines outside forested tracts or on the edges of forested tracts.

v. When underground utility lines are installed in streams and wetlands, the trench cannot be constructed or backfilled in such a manner as to drain waters of the United States (e.g., backfilling with extensive gravel layers; creating a French drain effect). Clay plugs, impervious membranes, or other materials may be placed in the trenches to ensure that the trench does not drain the waters of the United States through which the utility line is installed.

vi. Utility lines installed below the plane of the ordinary high water mark of any stream or waterway shall be constructed under dry conditions, using stream diversions other than earthen cofferdams.

vii. In wetlands, the top 6 to 12 inches of the trench must be backfilled with the top 6 to 12 inches of topsoil removed from the trench.

viii. Excavated material must not be stockpiled in wetlands for longer than 14 days. Excavated material must be stabilized with straw bales, silt fence, or other erosion and sediment control measures to prevent reentry of soil into waters of the United States.

ix. Immediately after completion of construction of the utility line through the wetlands area, excess excavated material must be disposed of in an upland area and stabilized with straw bales, silt fence or other erosion and sediment control devices to prevent its reentry into waters of the United States, including wetlands.

x. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations and revegetated with native wetland species.

xi. Extensions of existing pipes or culverts that are not depressed below the stream invert are exempt from the requirement to depress the culvert.

xii. Any temporary road crossing must be removed within 14 calendar days after the structure is no longer needed, subject to any time of year restrictions.

xiii. Exposed slopes and stream banks must be stabilized and revegetated, preferably with native, woody species, immediately after construction of the utility line is completed.

xiv. When mechanized landclearing results in the permanent removal or conversion of a forested or scrub-shrub wetland to an herbaceous wetland in the permanently maintained utility right-of-way, compensatory mitigation is required to reduce the adverse effects of the project to the minimal level. This is in addition to the requirement to mitigate for other permanent wetland and nontidal stream impacts resulting from the discharge of dredged or fill material. Stream relocation using natural stream design is considered to be self-mitigating.

☒ **Project-Specific Special Conditions apply (See Corps verification letter for these conditions)**

DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS
P.O. BOX 1715
BALTIMORE, MD 21203-1715

REPLY TO
ATTENTION OF

Operations Division

MDSPGP-4 PERMIT COMPLIANCE CERTIFICATION FORM (10/1/11)

Corps Permit Tracking No. 2013-61335-M18 Category & Activity Number Cat B; Activity e(9)

Project Name AA DPW Millersville Landfill Cell 9 Applicant Name Anne Arundel County DPW

Waterway Wells Branch County Anne Arundel County

Dear Permittee:

In accordance with the compliance certification condition of your MDSPGP-4 authorization, you are required upon completion of all permitted work, or if mitigation/compensation is required, within 60 days following completion of the authorized work and any required mitigation (but not the mitigation monitoring, which requires separate submittals), to complete and sign this certification form and return it to the Corps of Engineers, Baltimore District, ATTN: CENAB-OP-R, P.O. Box 1715, Baltimore, Maryland 21203-1715.

Please note that the permitted activity is subject to compliance inspections by U.S. Army Corps of Engineers representatives. As a condition of this permit, failure to return this notification form, provide the required information below, or to perform the authorized work in compliance with the permit, can result in suspension, modification or revocation of your authorization in accordance with 33 CFR Part 325.7 and/or administrative, civil, and/or criminal penalties, in accordance with 33 CFR part 326.

Please provide the following information:

1. Date authorized work commenced: _____ 2. Date authorized work completed: _____

3. Was all work and any required mitigation, completed in accordance with your MDSPGP-4 authorization, including all general and/or specific conditions? YES___ NO ___

4. For Category A projects involving pile driving activities that are within all tidal waters of the Chesapeake Bay in Maryland and its tidal tributaries with salinity levels less than 6 parts per thousand (See Appendix B of the MDSPGP-4), please indicate the pile driving method that was used for the authorized work:

_____(a) Piles must be installed in-the-dry during low water;
_____(b) Piles must be drilled and pinned to ledge;
_____(c) Vibratory hammers must be used to install any size and quantity of wood, concrete, or steel pilings;
_____(d) Impact hammers must be limited to one hammer and <50 piles installed per day with the following: wood piles of any size; concrete piles <18-inches diameter; steel piles <12-inch diameter if the hammer is <3,000 pounds and a wood cushion is used between the hammer and steel pile;
_____(e) Approved pile driving methods that will allow noise level thresholds to be met.
Describe: _____

5. Explain in detail any deviations to the authorized work and/or mitigation (use additional sheets if necessary)

_____

_____

6. Was mitigation accomplished through a contribution to the Maryland Nontidal Wetlands Compensation Fund? YES_____NO_____ (if NO, please complete Nos. 6 and 7 below).

7. Wetland Mitigation: Required? YES____ NO_____ Required Completion Date _____
Wetland Mitigation Completed? YES_____ NO____ Mitigation Monitoring Reports Required? YES____ NO____

8. Please attach labeled photographs showing completed work including mitigation area(s).

I hereby certify that, except as noted above, that all work, including mitigation, has been completed in accordance with the terms and conditions, including special conditions of the above referenced permit.

_____
Signature of Permittee Date

Address: _____

_____

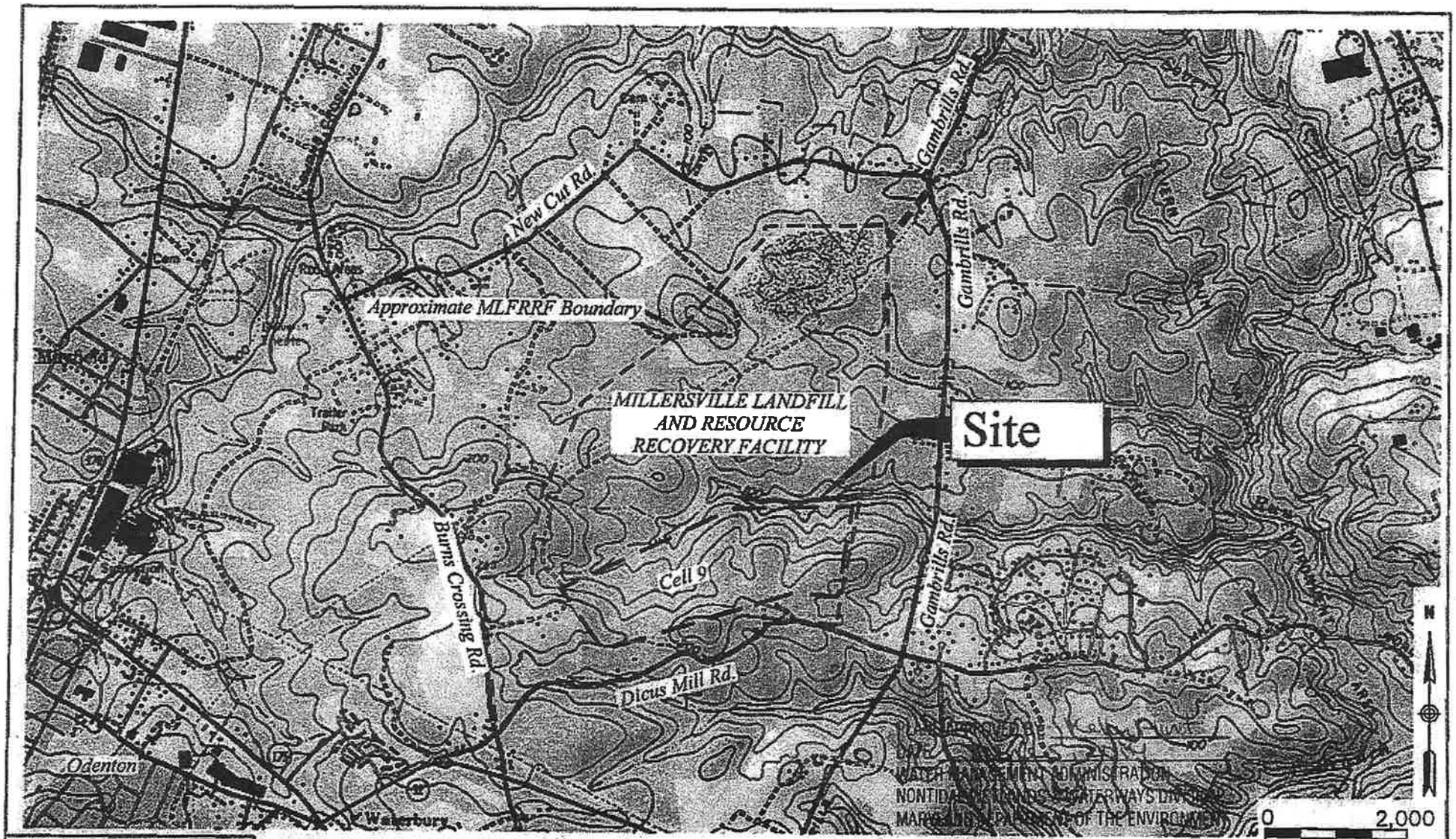
Telephone: _____

_____
Signature of Contractor/Agent Date

Address: _____

_____

Telephone: _____



SOURCE: U.S.G.S. QUADRANGLE ODENTON

13-NT-0487/201562102

ANNE ARUNDEL COUNTY MARYLAND DPW

Vanasse Hangen Brustlin, Inc.
Environmental Services
(757) 220-0500 • Fax: (757) 220-8644

SCS Engineers

ADJACENT PROPERTY OWNERS:

SEE ATTACHED LIST

DATUM: NGVD 1929

WELLS BRANCH STREAM RESTORATION

SITE MAP

AT: WELLS BRANCH

IN: ANNE ARUNDEL COUNTY, MARYLAND

PURPOSE: STREAM RESTORATION

MDE APPLICATION NUMBER:

AI NUMBER:

APPLICATION BY:
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

DATE: ~~OCTOBER~~ November, 2013

SHEET 1 OF 10

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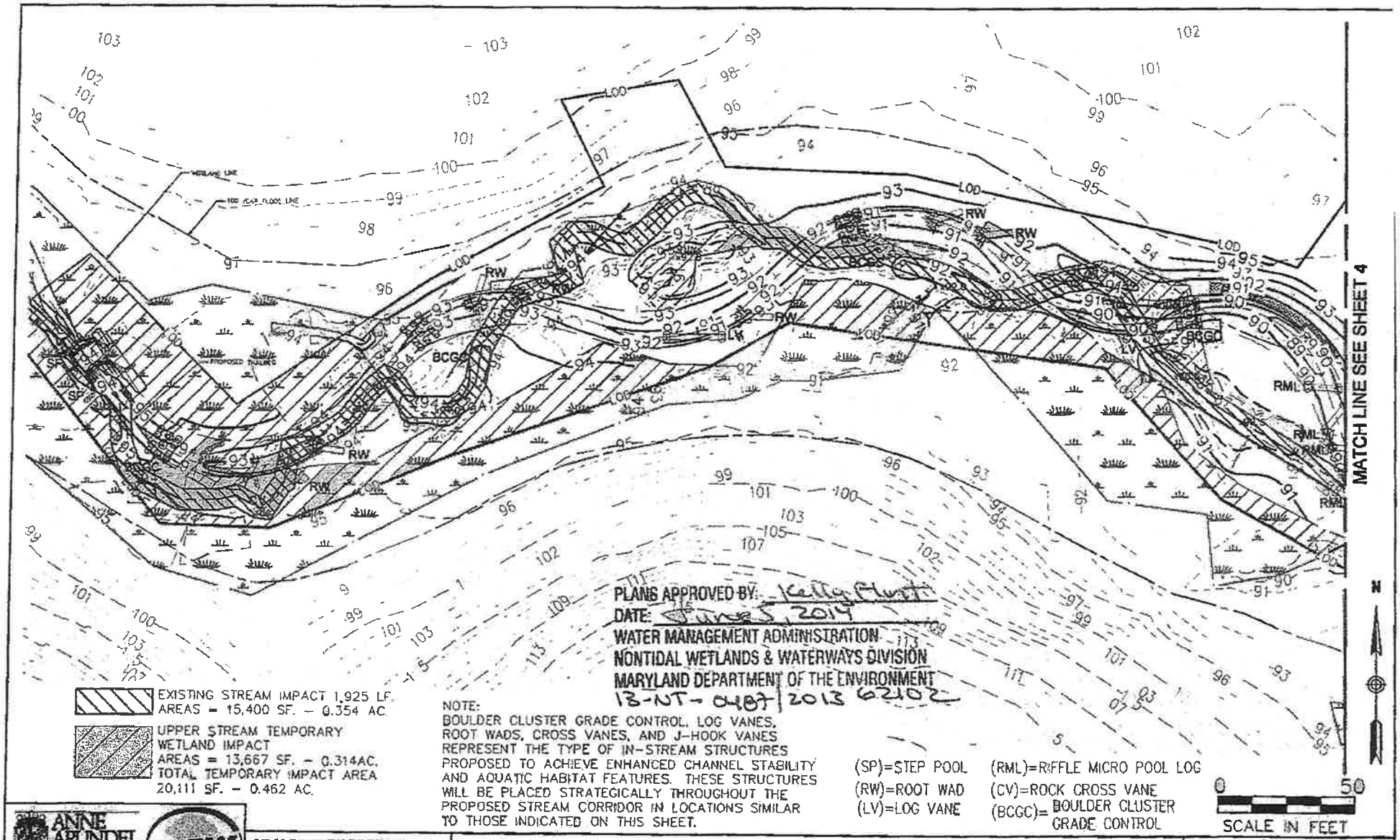
CORPS: R. KIBBY



PLANS APPROVED BY: Kelly Fluit
DATE: June 5, 2014
WATER MANAGEMENT ADMINISTRATION
NONTIDAL WETLANDS & WATERWAYS DIVISION
MARYLAND DEPARTMENT OF THE ENVIRONMENT
13-NT-0487 | 2013 62102

EXISTING STREAM IMPACT 1,925 LF.
AREAS = 15,400 SF. – 0.354 AC.

UPPER STREAM TEMPORARY WETLAND IMPACT
AREAS = 13,667 SF. – 0.314AC.
TOTAL TEMPORARY IMPACT AREA
20,111 SF. – 0.462 AC.

NOTE:
BOULDER CLUSTER GRADE CONTROL, LOG VANES, ROOT WADS, CROSS VANES, AND J-HOOK VANES REPRESENT THE TYPE OF IN-STREAM STRUCTURES PROPOSED TO ACHIEVE ENHANCED CHANNEL STABILITY AND AQUATIC HABITAT FEATURES. THESE STRUCTURES WILL BE PLACED STRATEGICALLY THROUGHOUT THE PROPOSED STREAM CORRIDOR IN LOCATIONS SIMILAR TO THOSE INDICATED ON THIS SHEET.

(SP)=STEP POOL
(RW)=ROOT WAD
(LV)=LOG VANE
(RML)=RIFFLE MICRO POOL LOG
(CV)=ROCK CROSS VANE
(BCGC)= BOULDER CLUSTER GRADE CONTROL

ANNE ARUNDEL COUNTY MARYLAND
DPW

Vanasse Hangen Brustlin, Inc.
Environmental Services
(757) 220-0500 • Fax: (757) 220-8644

SCS Engineers

ADJACENT PROPERTY OWNERS:
SEE ATTACHED LIST

DATUM: NGVD 1929

WELLS BRANCH STREAM RESTORATION

PROPOSED GRADING & LAYOUT

AT: WELLS BRANCH
IN: ANNE ARUNDEL COUNTY, MARYLAND

PURPOSE: STREAM RESTORATION
MDE APPLICATION NUMBER:
AI NUMBER:

APPLICATION BY:
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

DATE: OCTOBER, 2013
REVISED: NOV. 15 2013

SHEET 3 OF 10

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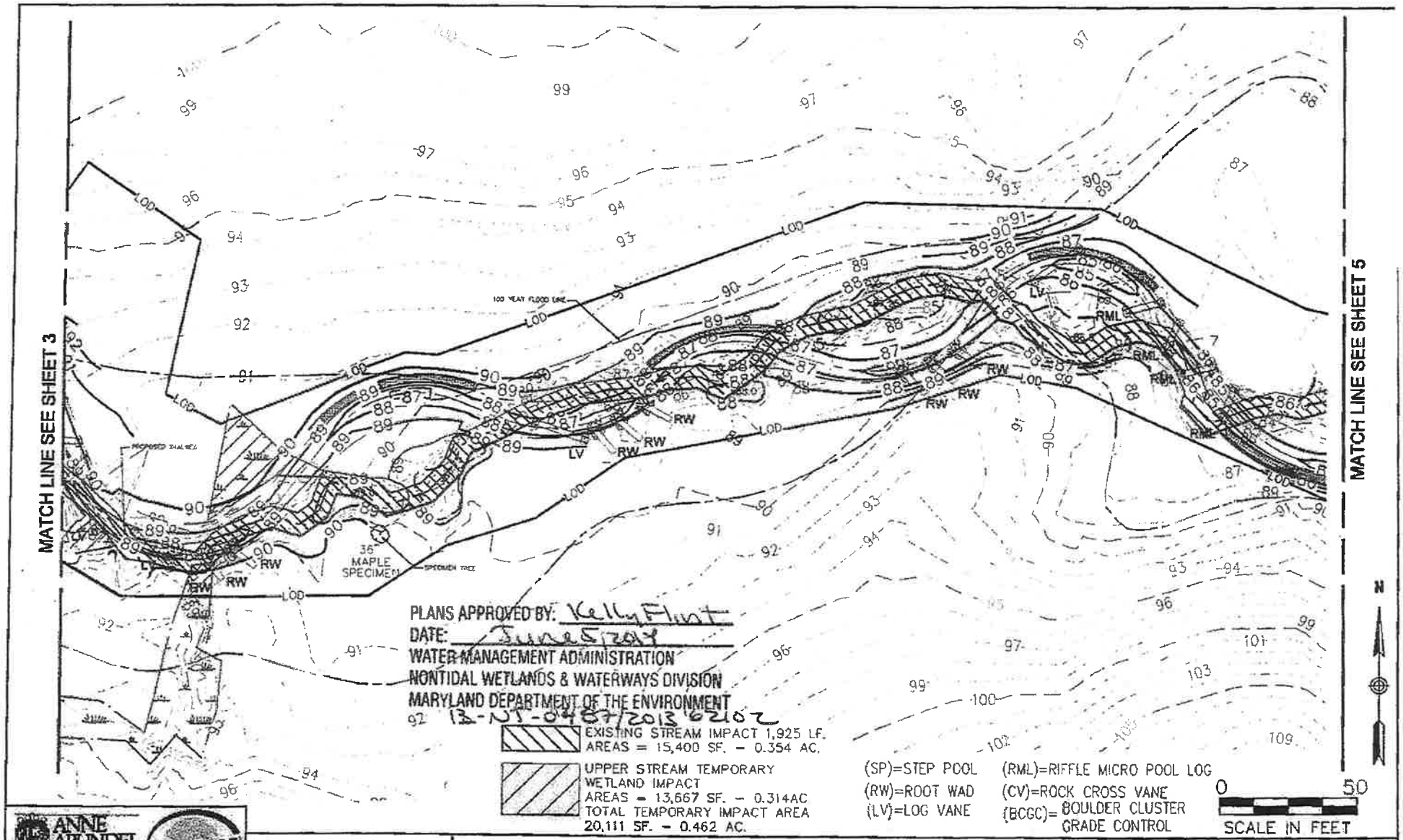
CORPS / R. KIBBY



PLANS APPROVED BY: Kelly Flint
DATE: June 5, 2014
WATER MANAGEMENT ADMINISTRATION
NONTIDAL WETLANDS & WATERWAYS DIVISION
MARYLAND DEPARTMENT OF THE ENVIRONMENT
13-NT-0487/2013 62102

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ANNE ARUNDEL COUNTY MARYLAND
DPW

Vanasse Hangen Brustlin, Inc.
Environmental Services
(757) 220-0500 • Fax: (757) 220-6544

SCS Engineers

ADJACENT PROPERTY OWNERS:
SEE ATTACHED LIST

DATUM: NGVD 1929

WELLS BRANCH STREAM RESTORATION

PROPOSED GRADING & LAYOUT

AT: WELLS BRANCH
IN: ANNE ARUNDEL COUNTY, MARYLAND

PURPOSE: STREAM RESTORATION
MDE APPLICATION NUMBER:
AI NUMBER:

APPLICATION BY:
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

DATE: OCTOBER, 2013
REVISED: NOV. 15 2013

SHEET 4 **OF** 10

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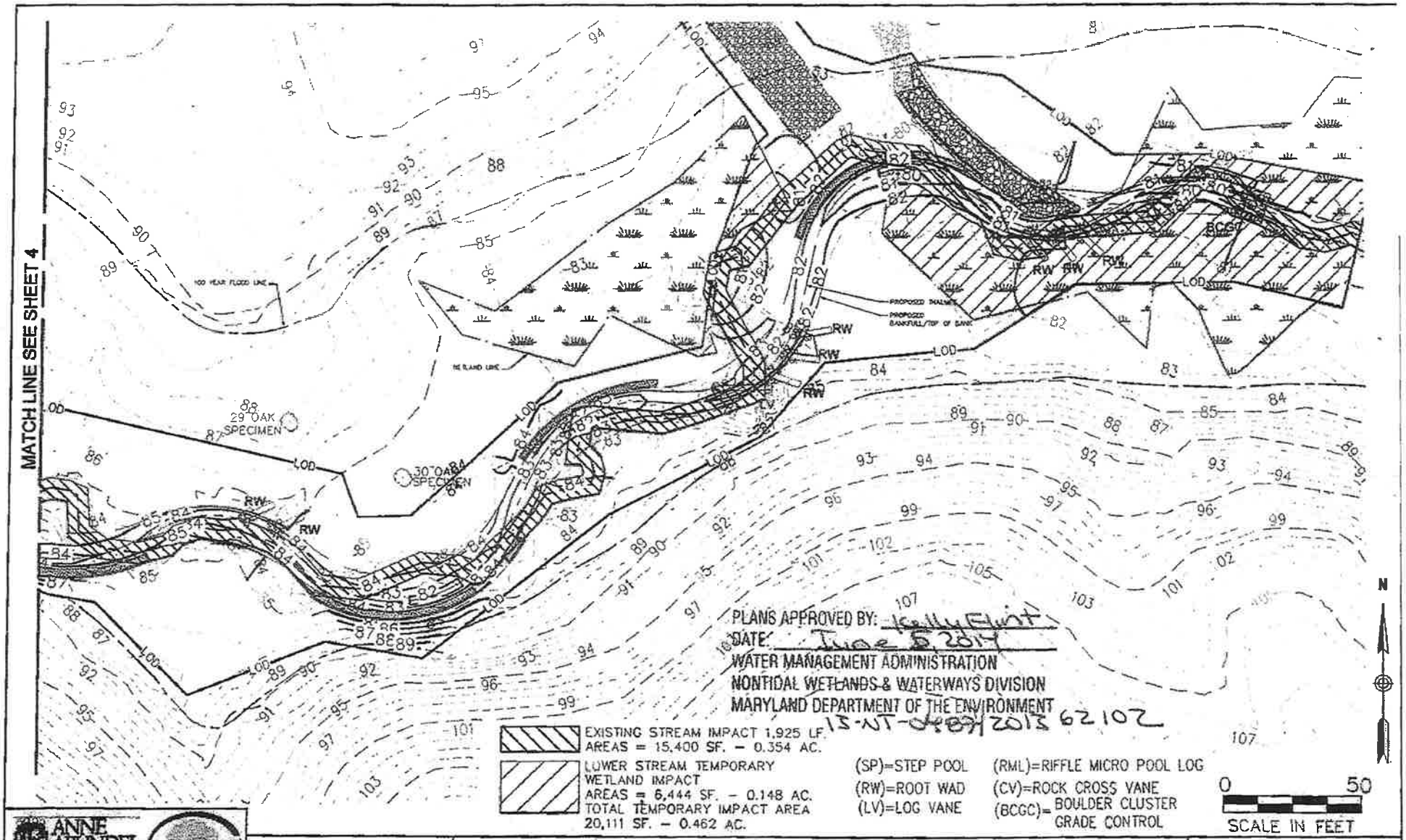

ANNE ARUNDEL COUNTY MARYLAND DPW

Vanasse Hangen Brustlin, Inc.
Environmental Services
(757) 220-0500 • Fax: (757) 220-8544

SCS Engineers

ADJACENT PROPERTY OWNERS:

SEE ATTACHED LIST

DATUM: NGVD 1929

WELLS BRANCH STREAM RESTORATION

PROPOSED GRADING & LAYOUT

AT: WELLS BRANCH

IN: ANNE ARUNDEL COUNTY, MARYLAND

PURPOSE: STREAM RESTORATION

MDE APPLICATION NUMBER:

AI NUMBER:

APPLICATION BY:
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

DATE: OCTOBER, 2013
REVISED: NOV. 15 2013

SHEET 5 OF 10

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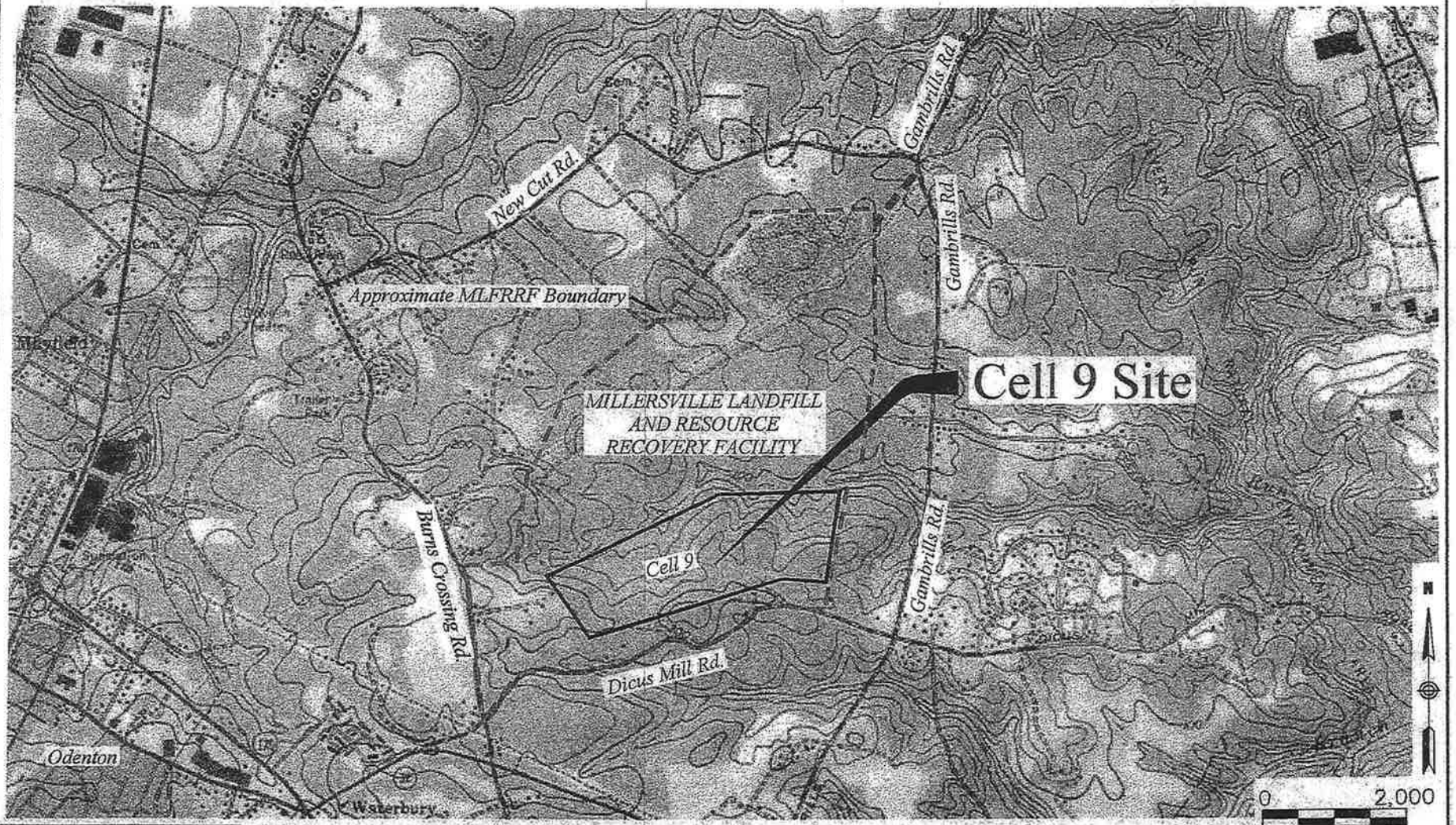
CORPS: RKIBBY



SOURCE: U.S.G.S. QUADRANGLE ODENTON

ANNE ARUNDEL COUNTY MARYLAND DPW

Vanasse Hangen Brustlin, Inc.
Environmental Services
(757) 220-0500 • Fax (757) 220-8544

SCS Engineers

ADJACENT PROPERTY OWNERS:

SEE ATTACHED LIST

DATUM: NGVD 1929

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY CELL 9

SITE MAP

AT: WELLS BRANCH

IN: ANNE ARUNDEL COUNTY, MARYLAND

PURPOSE: CELL 9 LANDFILL REVISIONS

MDE APPLICATION NUMBER: 13-NT-0262 / 201361335

AI NUMBER: 19044

APPLICATION BY:
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

DATE: JULY, 2013

SHEET 1 **OF** 5

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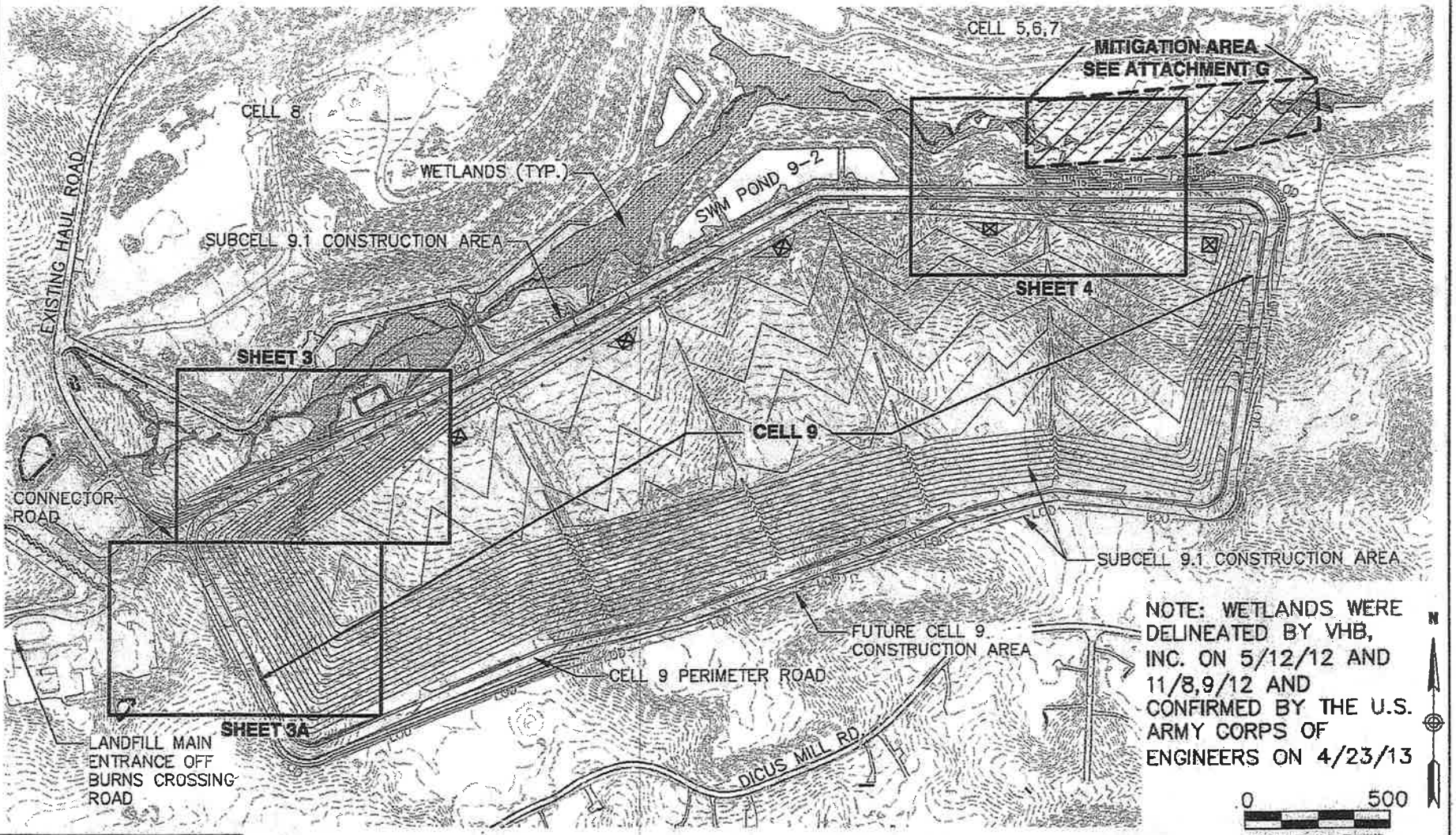
COMPS - R. KIRBY



ANNE ARUNDEL COUNTY MARYLAND DPW

Vanasse Hangen Brustlin, Inc.
Environmental Services
(757) 220-0500 • Fax: (757) 220-8544

SCS Engineers

ADJACENT PROPERTY OWNERS:

SEE ATTACHED LIST

DATUM: NGVD 1929

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY CELL 9

SHEET INDEX & OVERALL SITE

AT: WELLS BRANCH

IN: ANNE ARUNDEL COUNTY, MARYLAND

PURPOSE: CELL 9 LANDFILL REVISIONS

MDE APPLICATION NUMBER: 13-NT-0282 / 201361335

AI NUMBER: 19044

APPLICATION BY:
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

DATE: JULY, 2013

SHEET 2 **OF** 5

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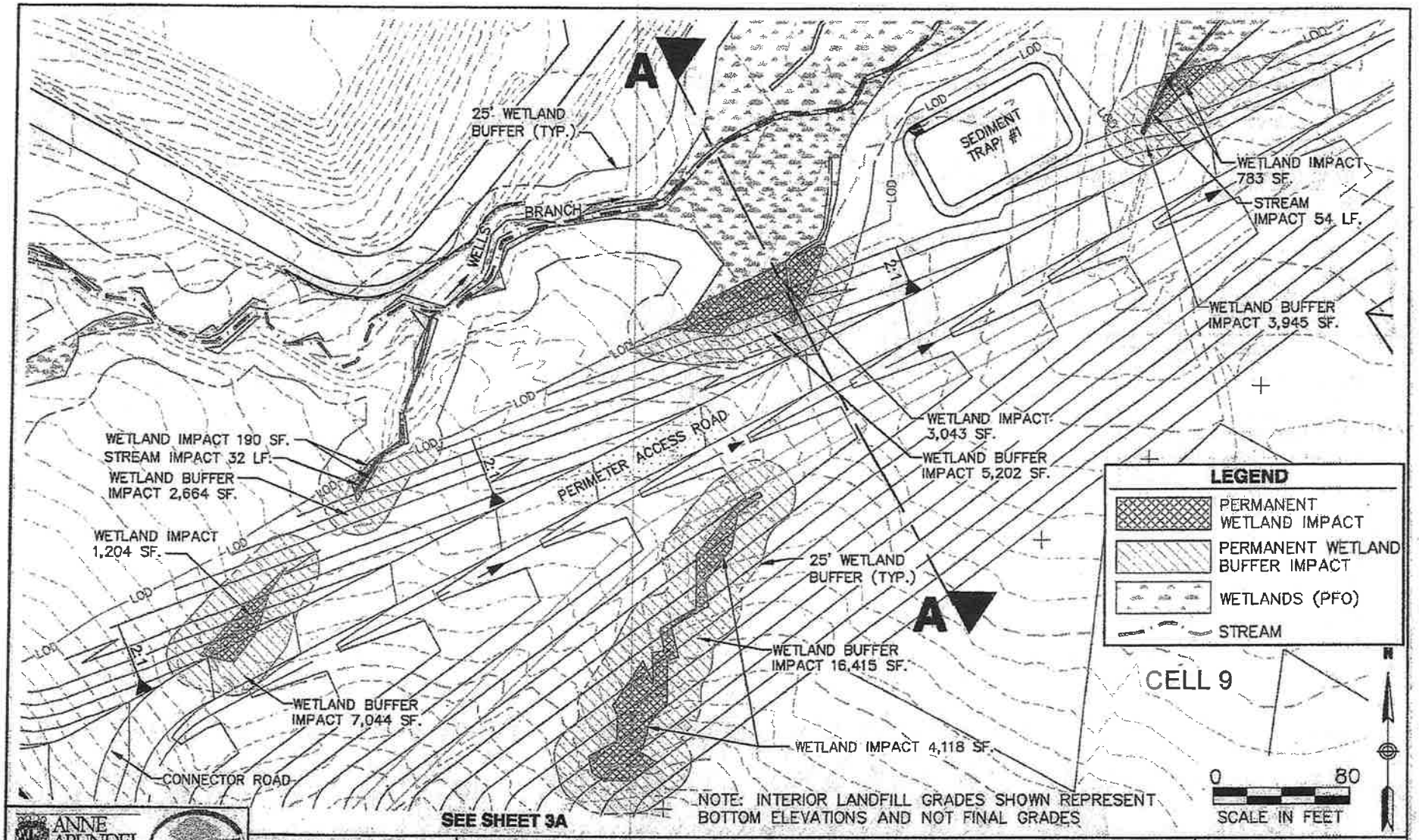

NOTE: INTERIOR LANDFILL GRADES SHOWN REPRESENT BOTTOM ELEVATIONS AND NOT FINAL GRADES

SEE SHEET 3A

ANNE ARUNDEL COUNTY MARYLAND DPW

Vanasse Hangen Brustlin, Inc.
Environmental Services
(757) 220-0500 • Fax (757) 220-8544

SCS Engineers

ADJACENT PROPERTY OWNERS:
SEE ATTACHED LIST

DATUM: NGVD 1929

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY CELL 9

CONNECTOR ROAD IMPACT AREAS

AT: WELLS BRANCH

IN: ANNE ARUNDEL COUNTY, MARYLAND

PURPOSE: CELL 9 LANDFILL REVISIONS

MDE APPLICATION NUMBER: 13-NT-0282 / 201361335

AI NUMBER: 19044

APPLICATION BY:
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

DATE: JULY, 2013
REVISED: NOV. 15, 2013

SHEET 3 OF 5

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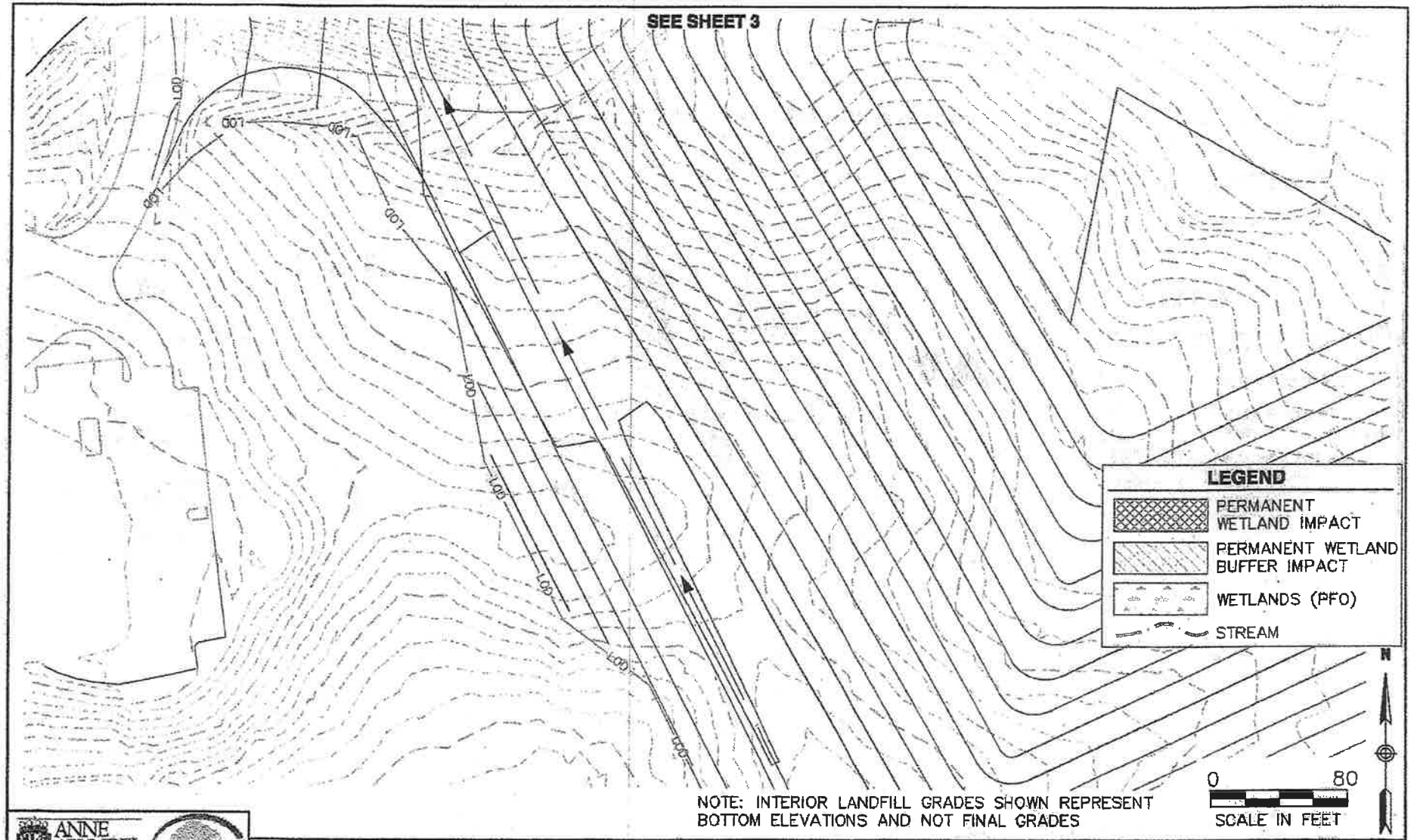

NOTE: INTERIOR LANDFILL GRADES SHOWN REPRESENT BOTTOM ELEVATIONS AND NOT FINAL GRADES

ANNE ARUNDEL COUNTY MARYLAND

DPW

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SCS Engineers

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DATUM: NGVD 1929

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY CELL 9

CONNECTOR ROAD IMPACT AREAS

AT: WELLS BRANCH

IN: ANNE ARUNDEL COUNTY, MARYLAND

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APPLICATION BY:
ANNE ARUNDEL COUNTY
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DATE: JULY, 2013

SHEET 3A OF 5

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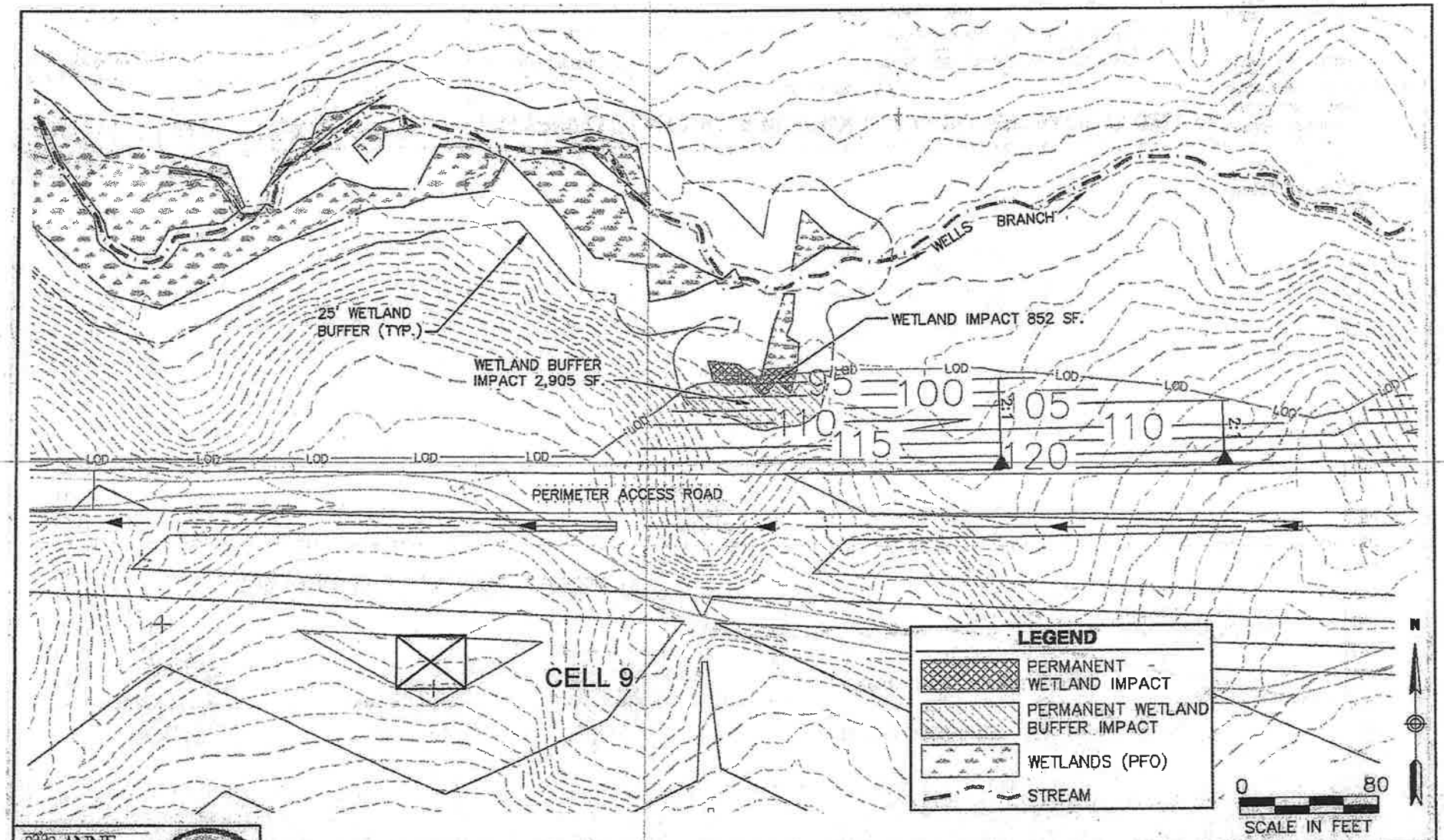

ANNE ARUNDEL COUNTY MARYLAND DPW

Vanasse Hangen Brustlin, Inc.
Environmental Services
(757) 220-0500 • Fax (757) 220-8544

SCS Engineers

ADJACENT PROPERTY OWNERS:
SEE ATTACHED LIST

DATUM: NGVD 1929

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY CELL 9

IMPACT AREA

AT: WELLS BRANCH

IN: ANNE ARUNDEL COUNTY, MARYLAND

PURPOSE: CELL 9 LANDFILL REVISIONS

MDE APPLICATION NUMBER: 13-NT-0262 / 201361335
AI NUMBER: 19044

APPLICATION BY:
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

DATE: JULY, 2013

SHEET 4 OF 5

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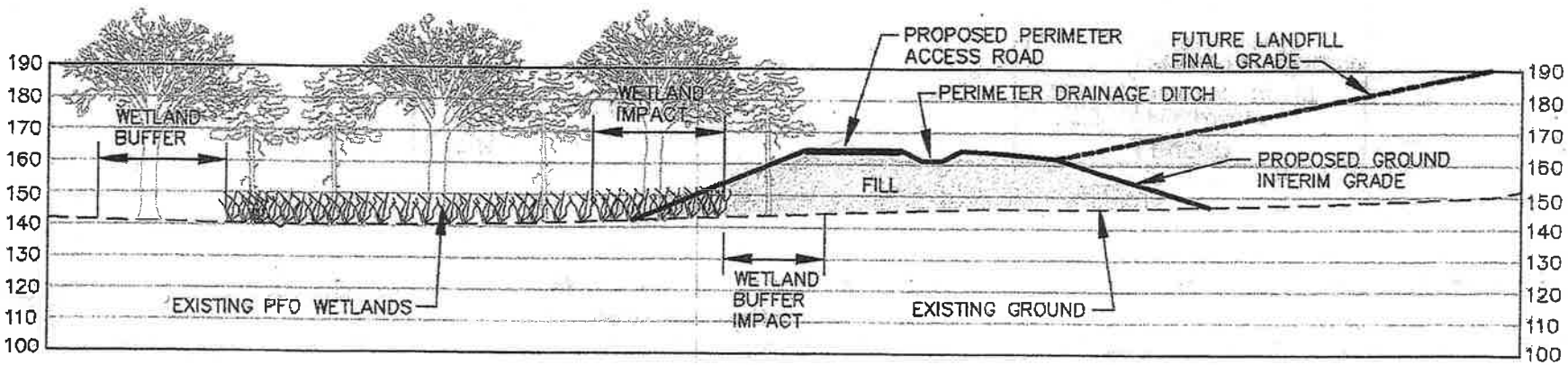

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SCALE IN FEET

ANNE ARUNDEL COUNTY MARYLAND DPW

Vanasse Hangen Brustlin, Inc.
Environmental Services
(757) 229-0600 • Fax: (757) 229-0644

SCS Engineers

ADJACENT PROPERTY OWNERS:
SEE ATTACHED LIST

DATUM: NGVD 1929

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY CELL 9

SECTION A-A

AT: WELLS BRANCH

IN: ANNE ARUNDEL COUNTY, MARYLAND

PURPOSE: CELL 9 LANDFILL REVISIONS

MDE APPLICATION NUMBER: 13-NT-0262 / 201361335
AI NUMBER: 19044

APPLICATION BY:
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

DATE: JULY, 2013

SHEET 5 **OF** 5

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Appendix A.8
MDE Letter of Authorization - Wetlands and Stream (2014)

STATE OF MARYLAND
DEPARTMENT OF THE ENVIRONMENT
WATER MANAGEMENT ADMINISTRATION
LETTER OF AUTHORIZATION

AUTHORIZATION NUMBER: **13-NT-0487/201362102**

EFFECTIVE DATE: June 5, 2014

EXPIRATION DATE: June 5, 2017

AUTHORIZED PERSON: **Anne Arundel County Department of Public Works**
2662 Riva Road, 3RD Floor
Annapolis, Maryland 21401
Attention: Kenneth B. Fleming, P.E.

IN ACCORDANCE WITH ENVIRONMENT ARTICLE §5-503(a) AND §5-906(b), ANNOTATED CODE OF MARYLAND (2007 REPLACEMENT VOLUME), COMAR 26.17.04 AND 26.23.01, AND 26.08.02 AND THE ATTACHED CONDITIONS OF AUTHORIZATIONS, **Anne Arundel County Department of Public Works** (AUTHORIZED PERSON"), IS HEREBY AUTHORIZED BY THE WATER MANAGEMENT ADMINISTRATION ("ADMINISTRATION") TO CONDUCT A REGULATED ACTIVITY IN A NONTIDAL WETLAND, BUFFER, OR EXPANDED BUFFER, AND/OR TO CHANGE THE COURSE, CURRENT OR CROSS-SECTION OF WATERS OF THE STATE, IN ACCORDANCE WITH THE ATTACHED PLANS APPROVED BY THE ADMINISTRATION ON **June 5, 2014** ("APPROVED PLAN") AND PREPARED BY **SCS Engineers and Vanasse Hangen Brustlin, Inc.** AND INCORPORATED HEREIN, AS DESCRIBED BELOW:

The project includes stream restoration of Wells Branch to mitigate for impacts associated with creation of Cell 9 of the Millersville Landfill. The project will temporarily impact 20,111 sq-ft of forested nontidal wetland, 30,000 sq-ft of nontidal wetland buffer and 1925 lf or 15,400 sq-ft of perennial stream. The project is located at 389 Burns Crossing Road, Severn, in Anne Arundel County.

MD Grid Coordinates: N158147/E429049

William Seiger

William Seiger, Chief
Waterway Construction Division

Attachments: Conditions of Authorization
Best Management Practices
8 ½ x 11 Plan Views

cc: WMA Compliance Division Anne Arundel County w/ file
Judy Broersma, MDE Nontidal Wetlands Division
Josh Tiralla, MDE Regulatory Services Division
Rich Kibby, USACE Northern Section
Michael Goudreau, SCS Engineers

1. **Validity:** Authorization is valid only for use by Authorized Person. Authorization may be transferred only with prior written approval of the Administration. In the event of transfer, transferee agrees to comply with all terms and conditions of Authorization.
2. **Initiation of Work, Modifications and Extension of Term**: Authorized Person shall initiate authorized activities with two (2) years of the Effective Date of this Authorization or the Authorization shall expire. Authorized Person may submit written requests to the Administration for (a) extension of the period for initiation of work, (b) modification of Authorization, including the Approved Plan, or, (c) not later than 45 days prior to Expiration Date, an extension of the term. Requests for modification shall be in accordance with applicable regulations and shall state reasons for changes, and shall indicate the impacts on nontidal wetlands, streams, and the floodplain, as applicable. The Administration may grant a request at its sole discretion.
3. **Responsibility and Compliance**: Authorized Person is fully responsible for all work performed and activities authorized by this Authorization shall be performed in compliance with this Authorization and Approved Plan. Authorized Person agrees that a copy of the Authorization and Approved Plan shall be kept at the construction site and provided to its employees, agents and contractors. A person (including Authorized Person, its employees, agents or contractors) who violates or fails to comply with the terms and conditions of this Authorization, Approved Plan or an administrative order may be subject to penalties in accordance with §5-514 and §5-911, Department of the Environment Article, Annotated Code of Maryland (2007 Replacement Volume).
4. **Failure to Comply**: If Authorized Person, its employees, agents or contractors fail to comply with this Authorization or Approved Plan, the Administration may, in its discretion, issue an administrative order requiring Authorized Person, its employees, agents and contractors to cease and desist any activities which violate this Authorization, or the Administration may take any other enforcement action available to it by law, including filing civil or criminal charges.
5. **Suspension or Revocation**: Authorization may be suspended or revoked by the Administration, after notice of opportunity for a hearing, if Authorized Person: (a) submits false or inaccurate information in Permit application or subsequently required submittals; (b) deviates from the Approved Plan, specifications, terms and conditions; (c) violates, or is about to violate terms and conditions of this Authorization; (d) violates, or is about to violate, any regulation promulgated pursuant to Title 5, Department of the Environment Article, Annotated Code of Maryland as amended; (e) fails to allow authorized representatives of the Administration to enter the site of authorized activities at any reasonable time to conduct inspections and evaluations; (f) fails to comply with the requirements of an administrative action or order issued by the Administration; or (g) does not have vested rights under this Authorization and new information, changes in site conditions, or amended regulatory requirements necessitate revocation or suspension.
6. **Other Approvals**: Authorization does not authorize any injury to private property, any invasion of rights, or any infringement of federal, State or local laws or regulations, nor does it obviate the need to obtain required authorizations or approvals from other State, federal or local agencies as required by law.
7. **Site Access:** Authorized Person shall allow authorized representatives of the Administration access to the site of authorized activities during normal business hours to conduct inspections and evaluations necessary to assure compliance with this Authorization. Authorized Person shall provide necessary assistance to effectively and safely conduct such inspections and evaluations.
8. **Inspection Notification:** Authorized Person shall notify the Administration's Compliance Program at least five (5) days before starting authorized activities and five (5) days after completion. For Allegany, Garrett, and Washington Counties, Authorized Person shall call 301-689-1480. For Carroll, Frederick, Howard, Montgomery and Prince George's Counties, Authorized Person shall call 301-665-2850. For Baltimore City, Anne Arundel, Baltimore, Calvert, Charles, and St. Mary's Counties, Authorized Person shall call 410-537-3510. For Caroline, Cecil, Dorchester, Harford, Kent, Queen Anne's, Somerset, Talbot, Wicomico and Worcester Counties, Authorized Person shall call 410-901-4020. If Authorization is for a project that is part of a mining site, please contact the Land Management Administration's Mining Program at 410-537-3557 at least five (5) days before starting authorized activities and five (5) days after completion.
9. **Sediment Control:** Authorized Person shall obtain approval from the **Anne Arundel** County Soil Conservation District for a grading and sediment control plan specifying soil erosion control measures. The approved grading and sediment control plan shall be included in the Approved Plan, and shall be available at the construction site.
10. **Federally Mandated State Authorizations:**
    X **Water Quality Certification**: Water Quality Certification is granted for this project provided that all work is performed in accordance with the authorized project description and associated conditions.
    X **Coastal Zone Consistency:** This Authorization constitutes official notification that authorized activities are consistent with the Maryland Coastal Zone Management Program, as required by Section 307 of the Federal Coastal Zone Management Act of 1972, as amended. Activities within the following counties are not subject to this requirement:
    Allegany, Carroll, Frederick, Garrett, Howard, Montgomery, and Washington.

11. **Best Management Practices During Construction:** Authorized Person, its employees, agents and contractors shall conduct authorized activities in a manner consistent with the Best Management Practices specified by the Administration.
12. **Disposal of Excess:** Unless otherwise shown on the Approved Plan, all excess fill, spoil material, debris, and construction material shall be disposed of outside of nontidal wetlands, nontidal wetlands buffers, and the 100-year floodplain, and in a location and manner which does not adversely impact surface or subsurface water flow into or out of nontidal wetlands.
13. **Temporary Staging Areas:** Temporary construction trailers or structures, staging areas and stockpiles shall not be located within nontidal wetlands, nontidal wetlands buffers, or the 100-year floodplain unless specifically included on the Approved Plan.
14. **Temporary Stream Access Crossings:** Temporary stream access crossings shall not be constructed or utilized unless shown on the Approved Plan. If temporary stream access crossings are determined necessary prior to initiation of work or at any time during construction, Authorized Person, its employees, agents or contractors shall submit a written request to the Administration and secure the necessary permits or approvals for such crossings before installation of the crossings. Temporary stream access crossings shall be removed and the disturbance stabilized prior to completion of authorized activity or within one (1) year of installation.
15. **Discharge:** Runoff or accumulated water containing sediment or other suspended materials shall not be discharged into waters of the State unless treated by an approved sediment control device or structure.
16. **Instream Construction Prohibition:** To protect important aquatic species, motor driven construction equipment shall not be allowed within stream channels unless on authorized ford crossings. Activities within stream channels are prohibited as determined by the classification of the stream (COMAR 26.08.02.08): **Wells Branch** is a **Use I** waterway; in-stream work may not be conducted from **March 1st** through **June 15th**, inclusive, of any year.
17. **Instream Blasting:** Authorized Person shall obtain prior written approval from the Administration before blasting or using explosives in the stream channel.
18. **Minimum Disturbance:** Any disturbance of stream banks, channel bottom, wetlands, and wetlands buffer authorized by this Authorization or Approved Plan shall be the minimum necessary to conduct permitted activities. All disturbed areas shall be stabilized vegetatively no later than seven (7) days after construction is completed or in accordance with the approved grading or sediment and erosion control plan.
19. **Restoration of Construction Site:** Authorized Person shall restore the construction site upon completion of authorized activities. Undercutting, meandering or degradation of the stream banks or channel bottom, any deposition of sediment or other materials, and any alteration of wetland vegetation, soils, or hydrology, resulting directly or indirectly from construction or authorized activities, shall be corrected by Authorized Person as directed by the Administration.

U.S. ARMY CORPS OF ENGINEERS AUTHORIZATION

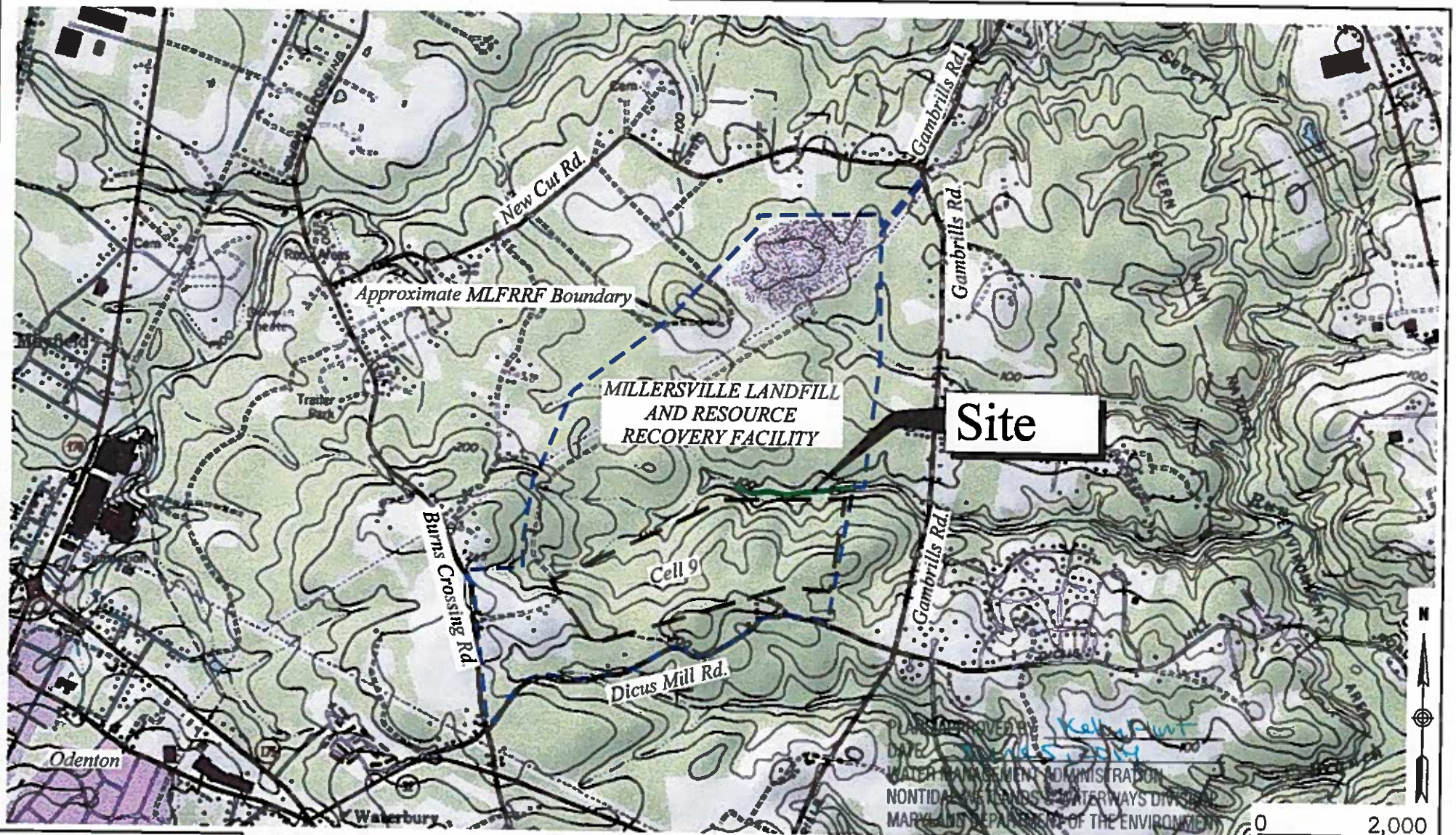
The U.S. Army Corps of Engineers has reviewed this activity and has granted authorization under an Individual Permit. The terms and conditions of the Individual Permit, as sent to the applicant directly from USACE, should be followed when performing the authorized work.

BEST MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS, AND 100-YEAR FLOODPLAINS

1) No excess fill, construction material, or debris shall be stockpiled or stored in nontidal wetlands, nontidal wetland buffers, waterways, or the 100-year floodplain.
2) Place materials in a location and manner which does not adversely impact surface or subsurface water flow into or out of nontidal wetlands, nontidal wetland buffers, waterways, or the 100-year floodplain.
3) Do not use the excavated material as backfill if it contains waste metal products, unsightly debris, toxic material, or any other deleterious substance. If additional backfill is required, use clean material free of waste metal products, unsightly debris, toxic material, or any other deleterious substance.
4) Place heavy equipment on mats or suitably operate the equipment to prevent damage to nontidal wetlands, nontidal wetland buffers, waterways, or the 100-year floodplain.
5) Repair and maintain any serviceable structure or fill so there is no permanent loss of nontidal wetlands, nontidal wetland buffers, or waterways, or permanent modification of the 100-year floodplain in excess of that lost under the originally authorized structure or fill.
6) Rectify any nontidal wetlands, wetland buffers, waterways, or 100-year floodplain temporarily impacted by any construction.
7) All stabilization in the nontidal wetland and nontidal wetland buffer shall consist of the following species: Annual Ryegrass (Lolium multiflorum), Millet (Setaria italica), Barley (Hordeum sp.), Oats (Uniola sp.), and/or Rye (Secale cereale). These species will allow for the stabilization of the site while also allowing for the voluntary revegetation of natural wetland species. Other non-persistent vegetation may be acceptable, but must be approved by the Nontidal Wetlands and Waterways Division. **Kentucky 31 fescue shall not be utilized in wetland or buffer areas.** The area should be seeded and mulched to reduce erosion after construction activities have been completed.
8) After installation has been completed, make post-construction grades and elevations the same as the original grades and elevations in temporarily impacted areas.
9) To protect aquatic species, in-stream work is prohibited as determined by the classification of the stream:

   Use I waters: In-stream work shall not be conducted during the period March 1 through June 15, inclusive, during any year.

10) Stormwater runoff from impervious surfaces shall be controlled to prevent the washing of debris into the waterway.
11) Culverts shall be constructed and any riprap placed so as not to obstruct the movement of aquatic species, unless the purpose of the activity is to impound water.



PLANS APPROVED BY Kelly Hunt
DATE 10/16/2014
WATER MANAGEMENT ADMINISTRATION
NONTIDAL WETLANDS & WATERWAYS DIVISION
MARYLAND DEPARTMENT OF THE ENVIRONMENT

13-NT-0487/201362102

SOURCE: U.S.G.S. QUADRANGLE ODENTON

ANNE ARUNDEL COUNTY MARYLAND

DPW

Vanasse Hangen Brustlin, Inc.
Environmental Services
(757) 220-0500 • Fax: (757) 220-8544

SCS Engineers

ADJACENT PROPERTY OWNERS:

SEE ATTACHED LIST

DATUM: NGVD 1929

WELLS BRANCH STREAM RESTORATION

SITE MAP

AT: WELLS BRANCH

IN: ANNE ARUNDEL COUNTY, MARYLAND

PURPOSE: STREAM RESTORATION

MDE APPLICATION NUMBER:

AI NUMBER:

APPLICATION BY:
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

DATE: OCTOBER, 2013

SHEET 1 OF 10

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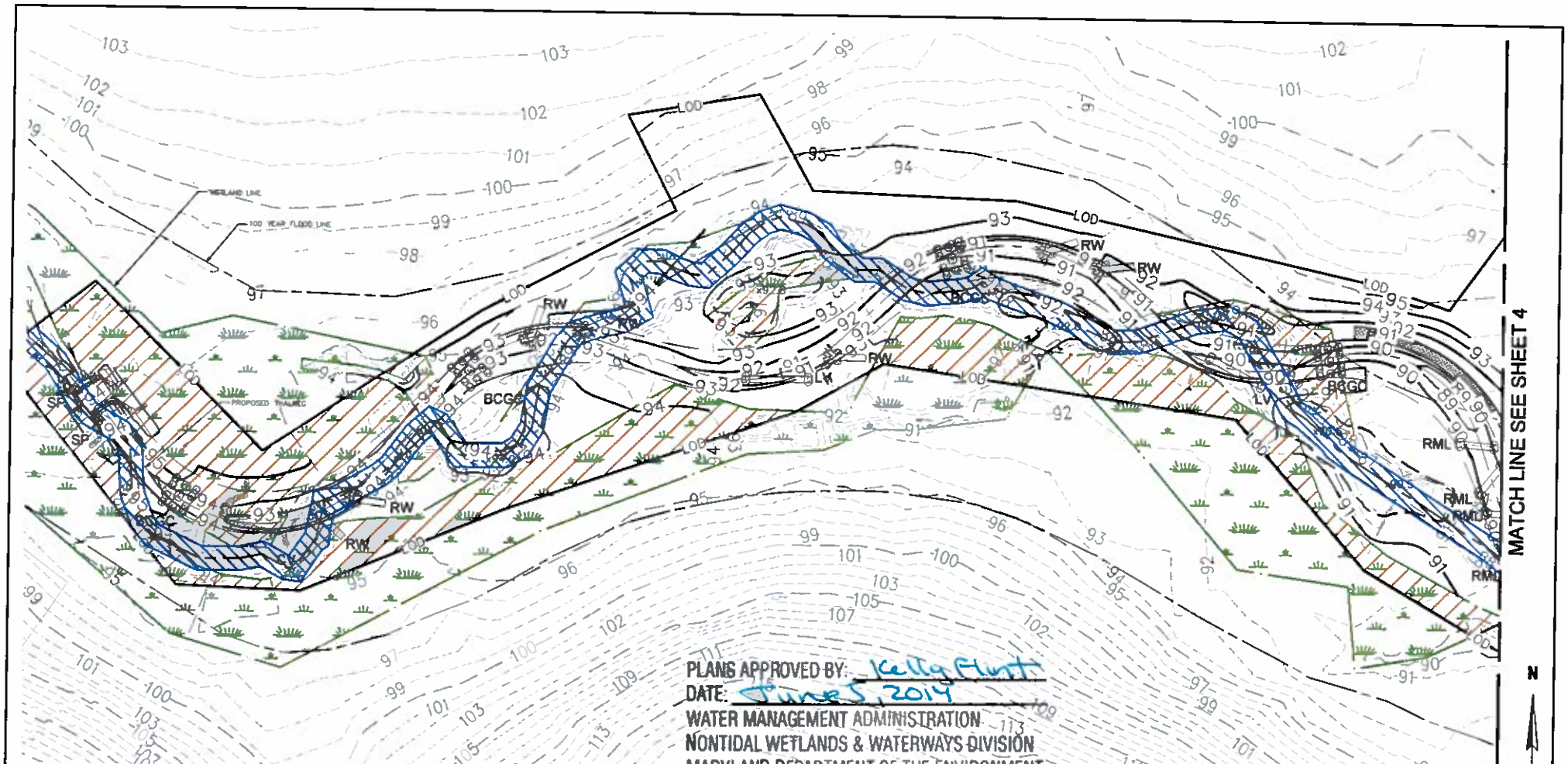

PLANS APPROVED BY: Kelly Hunt
DATE: June 5, 2014
WATER MANAGEMENT ADMINISTRATION
NONTIDAL WETLANDS & WATERWAYS DIVISION
MARYLAND DEPARTMENT OF THE ENVIRONMENT
13-NT-0487/2013 62102

EXISTING STREAM IMPACT 1,925 LF.
AREAS = 15,400 SF. – 0.354 AC.

UPPER STREAM TEMPORARY WETLAND IMPACT
AREAS = 13,667 SF. – 0.314AC.
TOTAL TEMPORARY IMPACT AREA
20,111 SF. – 0.462 AC.

NOTE:
BOULDER CLUSTER GRADE CONTROL, LOG VANES, ROOT WADS, CROSS VANES, AND J-HOOK VANES REPRESENT THE TYPE OF IN-STREAM STRUCTURES PROPOSED TO ACHIEVE ENHANCED CHANNEL STABILITY AND AQUATIC HABITAT FEATURES. THESE STRUCTURES WILL BE PLACED STRATEGICALLY THROUGHOUT THE PROPOSED STREAM CORRIDOR IN LOCATIONS SIMILAR TO THOSE INDICATED ON THIS SHEET.

(SP)=STEP POOL
(RW)=ROOT WAD
(LV)=LOG VANE
(RML)=RIFFLE MICRO POOL LOG
(CV)=ROCK CROSS VANE
(BCGC)= BOULDER CLUSTER GRADE CONTROL

ANNE ARUNDEL COUNTY MARYLAND
DPW

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(757) 220-0500 • Fax (757) 220-8544

SCS Engineers

ADJACENT PROPERTY OWNERS:
SEE ATTACHED LIST

DATUM: NGVD 1929

WELLS BRANCH STREAM RESTORATION

PROPOSED GRADING & LAYOUT

AT: WELLS BRANCH
IN: ANNE ARUNDEL COUNTY, MARYLAND

PURPOSE: STREAM RESTORATION
MDE APPLICATION NUMBER:
AI NUMBER:

APPLICATION BY:
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

DATE: OCTOBER, 2013
REVISED: NOV. 15 2013

SHEET 3 OF 10

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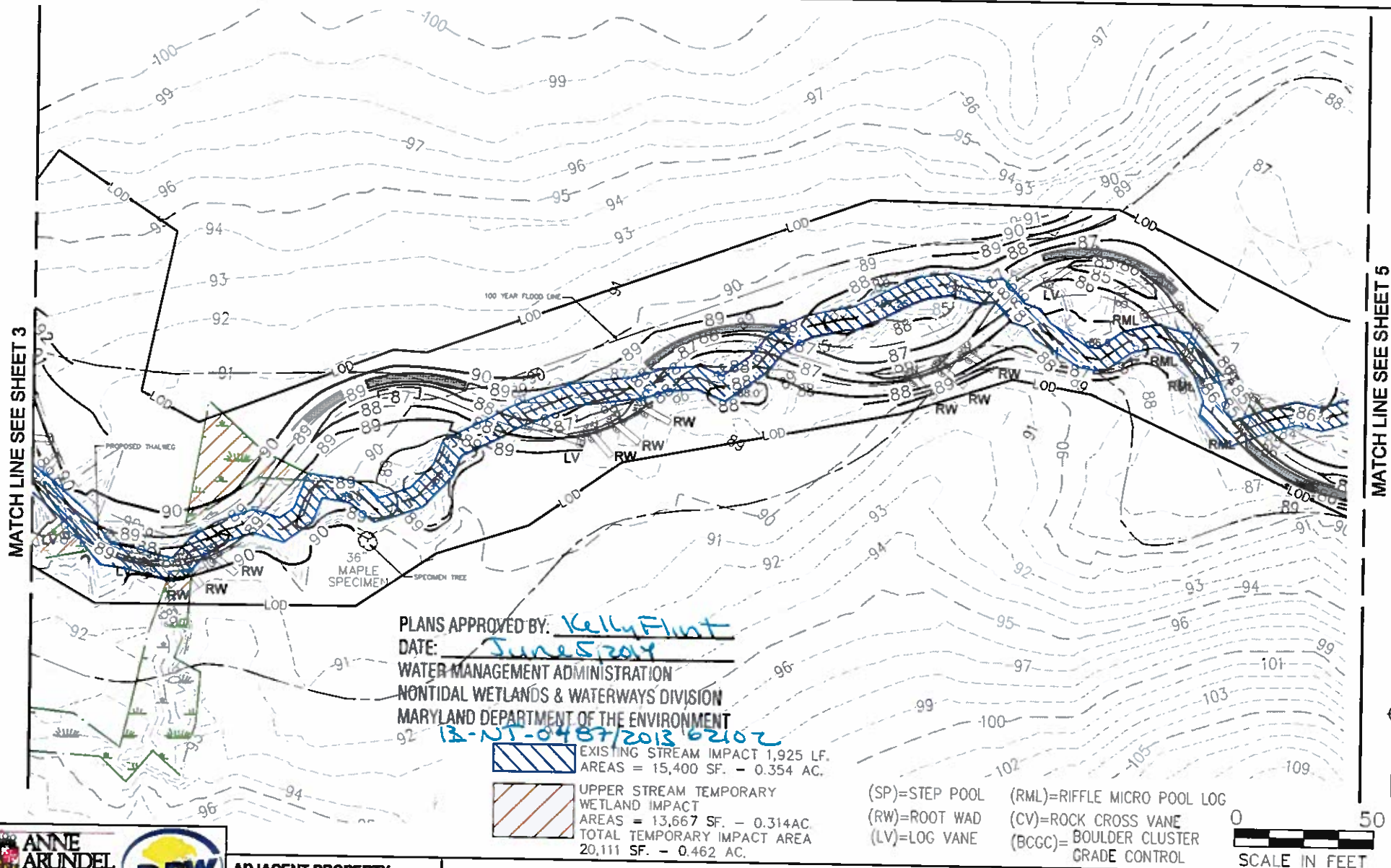

PLANS APPROVED BY: Kelly Flint
DATE: June 5, 2014
WATER MANAGEMENT ADMINISTRATION
NONTIDAL WETLANDS & WATERWAYS DIVISION
MARYLAND DEPARTMENT OF THE ENVIRONMENT
13-NT-0487/2013 62102

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DATUM: NGVD 1929

WELLS BRANCH STREAM RESTORATION

PROPOSED GRADING & LAYOUT

AT: WELLS BRANCH
IN: ANNE ARUNDEL COUNTY, MARYLAND

PURPOSE: STREAM RESTORATION
MDE APPLICATION NUMBER:
AI NUMBER:

APPLICATION BY:
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

DATE: OCTOBER, 2013
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SHEET 4 OF 10

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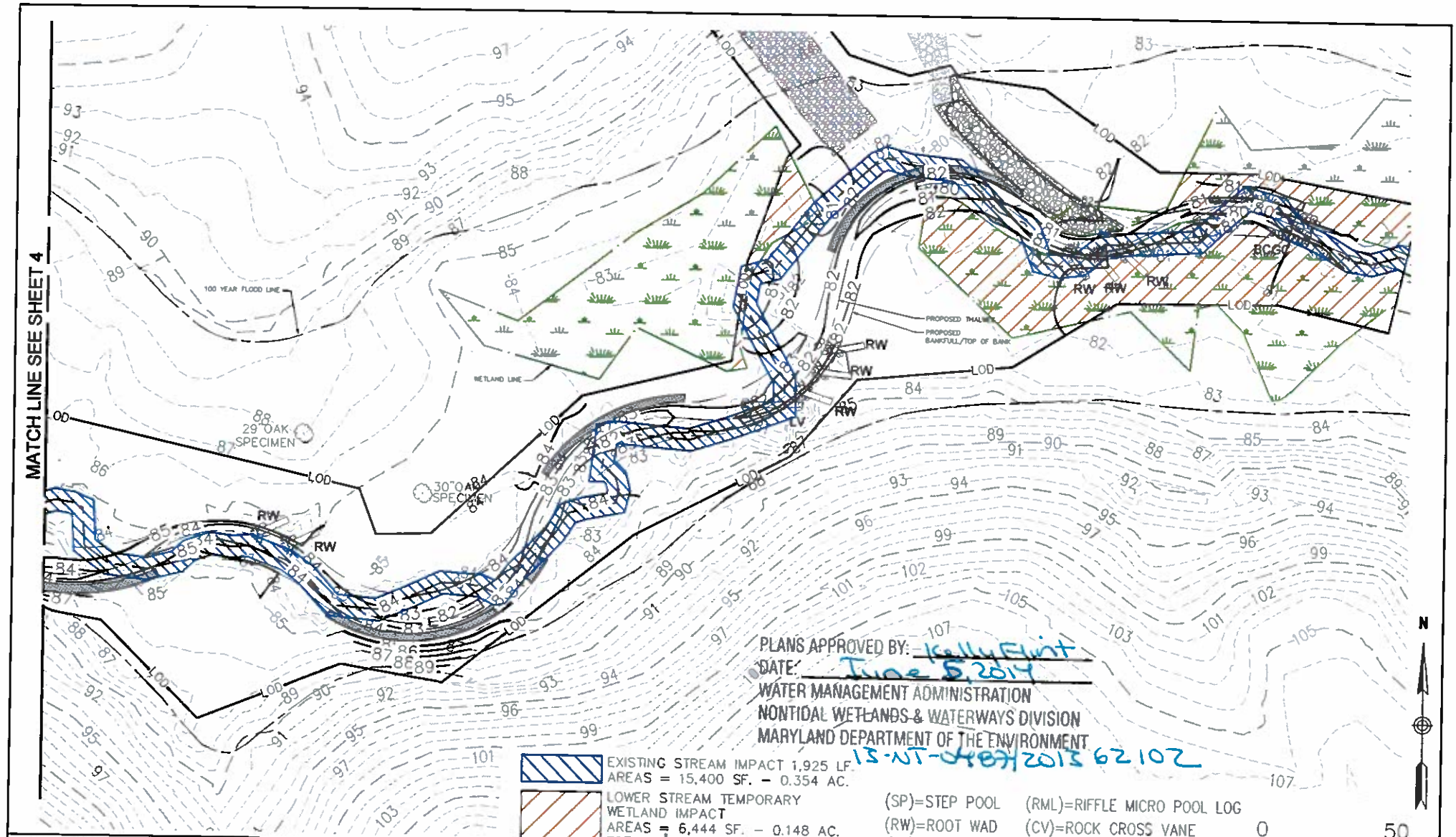

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DATUM: NGVD 1929

WELLS BRANCH STREAM RESTORATION

PROPOSED GRADING & LAYOUT

AT: WELLS BRANCH

IN: ANNE ARUNDEL COUNTY, MARYLAND

PURPOSE: STREAM RESTORATION

MDE APPLICATION NUMBER:

AI NUMBER:

APPLICATION BY:
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

DATE: OCTOBER, 2013
REVISED: NOV. 15 2013

SHEET 5 **OF** 10

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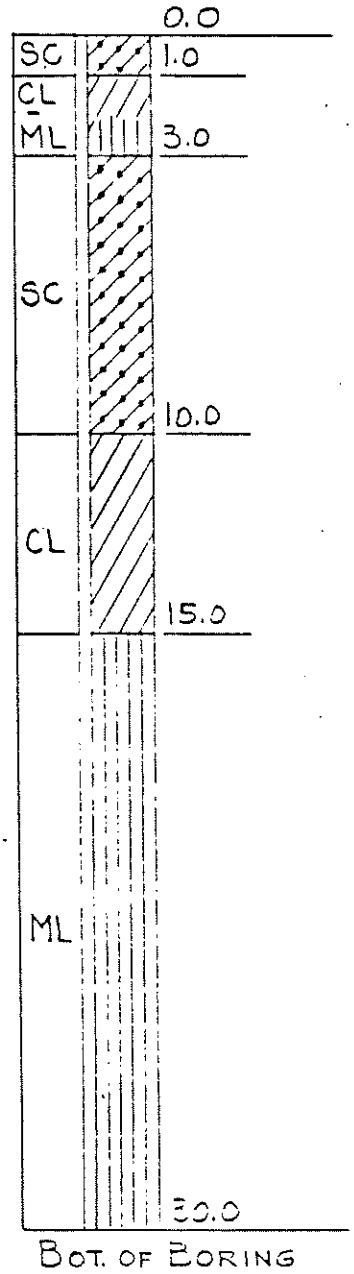
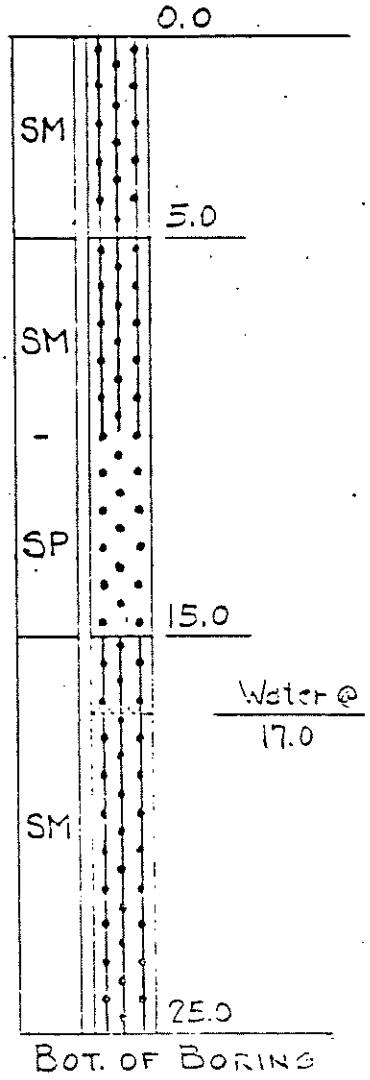
Appendix B
Historical Boring Logs

Appendix B.1
Green Associates, Inc./Century Engineering, Inc. (1969)

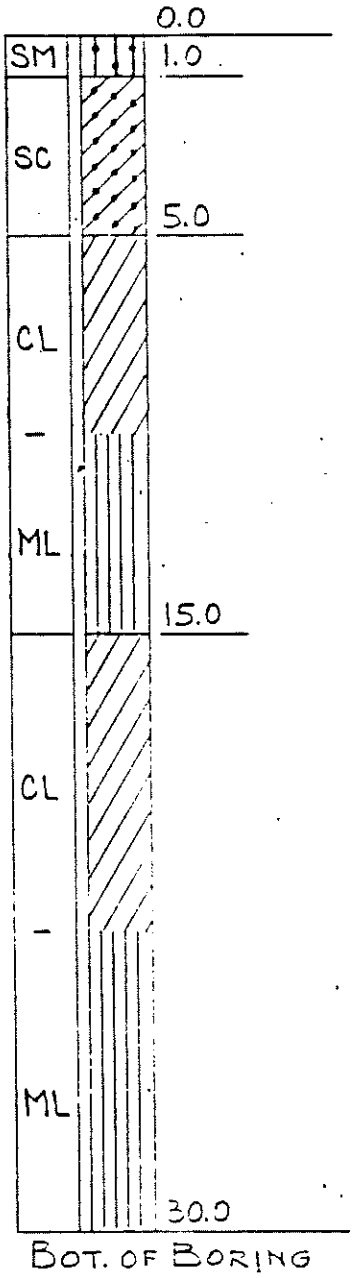
BORING No. X1
Date 8-20-69
Surface Elev. 107.0'



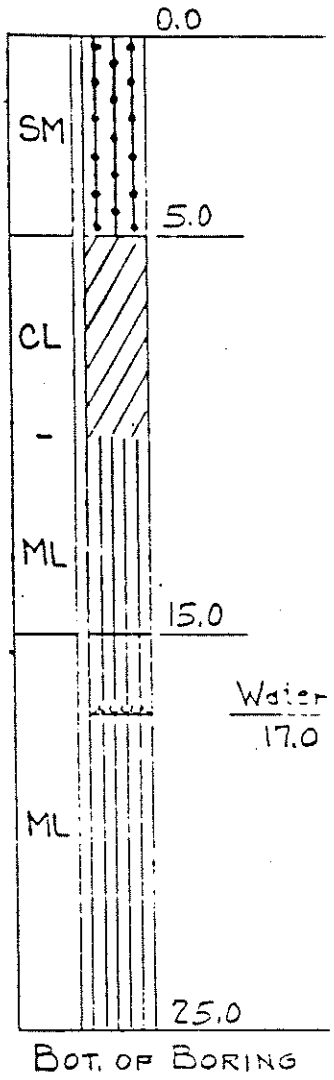
BORING No. X2
Date 8-21-69
Surface Elev. 110.0'



BORING No. X3
Date 8-20-69
Surface Elev. 127.0'



BORING No. X4
Date 8-20-69
Surface Elev. 152.50'



NOTATION per U.S.E.P.A. REPORT
SW-65ts, 1971

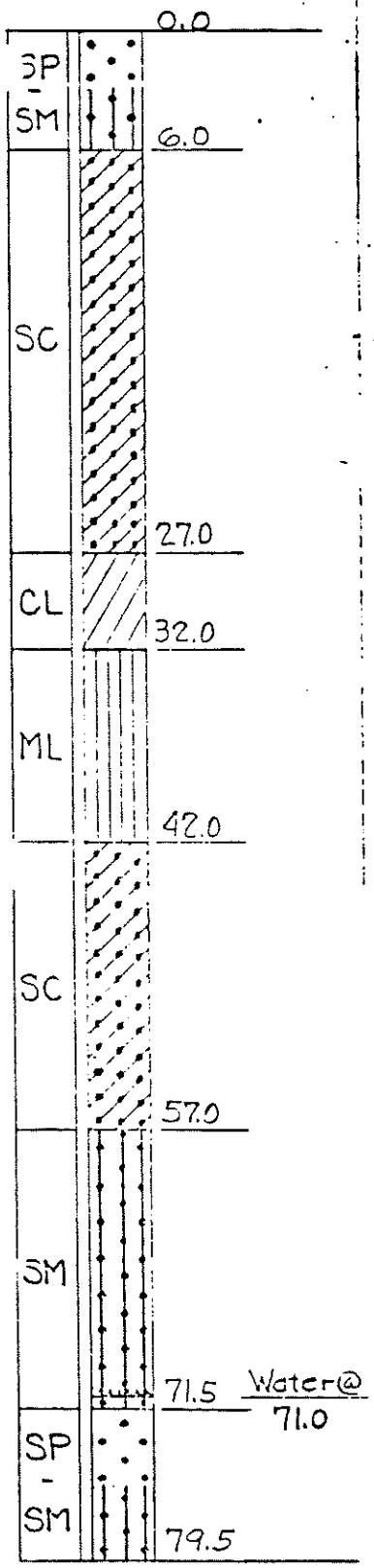
ANNE ARUNDEL COUNTY
SANITARY LANDFILL STUDY
MILLERSVILLE AREA

BORING LOG

GREEN ASSOCIATES INC.
Consulting Engineers

Appendix B.2
Green Associates, Inc./Century Engineering, Inc. (1971)

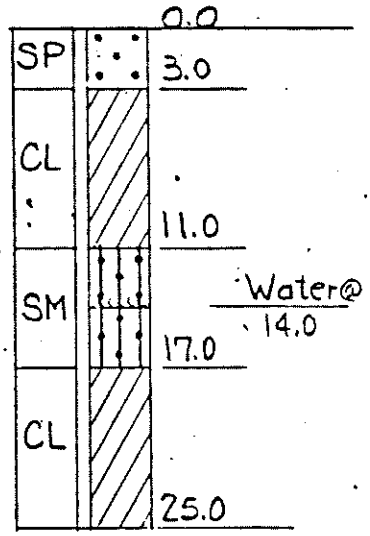
BORING No. B1
Date 9-9-71
Surface Elev. 188.0'



Bot. of Boring

Grd. Water Obser.
9-17-71 - 73.5'
10-8-71 - 73.5'

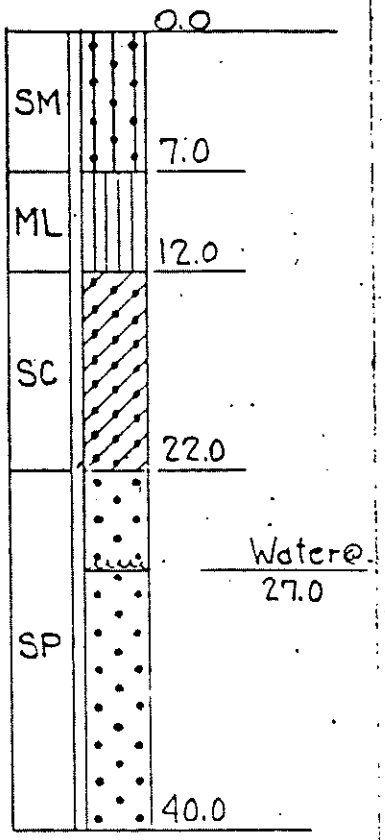
BORING No. B2
Date 9-3-71
Surface Elev. 198.0'



Bot. of Boring

Grd. Water Obser.
9-9-71 - 23.8'
9-10-71 - 23.7'
9-17-71 - 23.3'
10-8-71 - 23.1'

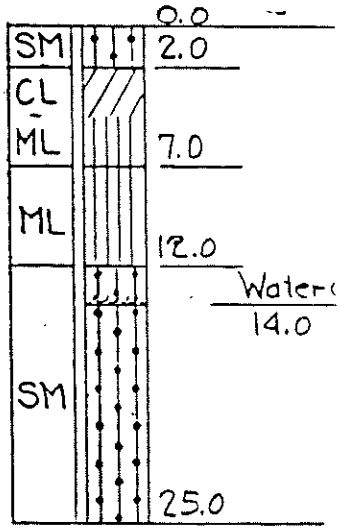
BORING No. B4
Date 9-1-71
Surface Elev. 137.0'



Bot. of Boring

Grd. Water Obser.
9-7-71 - 19.5'
9-7-71 - 18.6'
9-8-71 - 17.8'
9-9-71 - 19.3'

BORING No. B6
Date 9-2-71
Surface Elev. 154.0'



Bot. of Boring

Grd. Water Obser.
9-7-71 - 7.0'
9-9-71 - 7.3'
9-10-71 - 7.2'
9-17-71 - 6.2'
10-8-71 - 6.7'

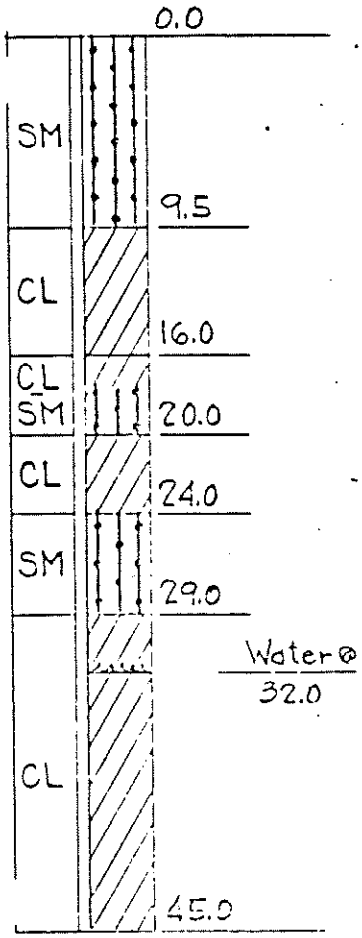
Notation per U.S.E.P.A. Report SW-65ts, 1971

ANNE ARUNDEL COUNTY
SANITARY LANDFILL STUDY
MILLERSVILLE AREA

BORING LOG

GREEN ASSOCIATES INC.
Consulting Engineers

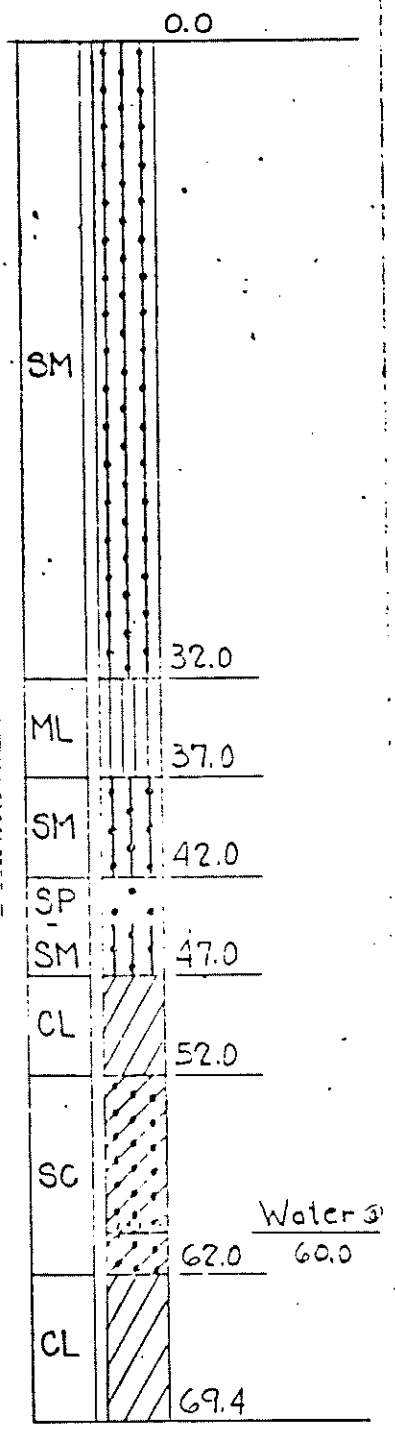
BORING No. B7
Date 9-1-71
Surface Elev. 132.0'



BOT. OF BORING

GRD. WATER OBSER.
9-9-71 - 35.3'
9-9-71 - 35.0'
9-10-71 - 34.9'
9-17-71 - 34.5'

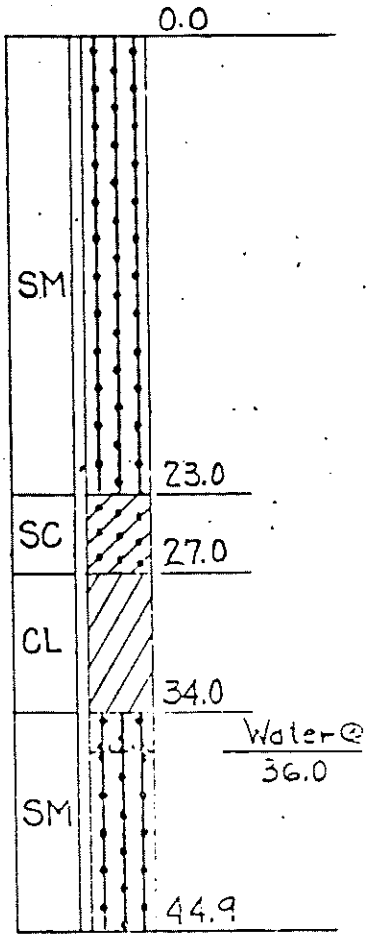
BORING No. B11
Date 9-7-71
Surface Elev. 187.0'



BOT. OF BORING

GRD. WATER OBSER.
9-10-71 - 46.5'
9-17-71 - 46.5'
10-8-71 - 45.8'

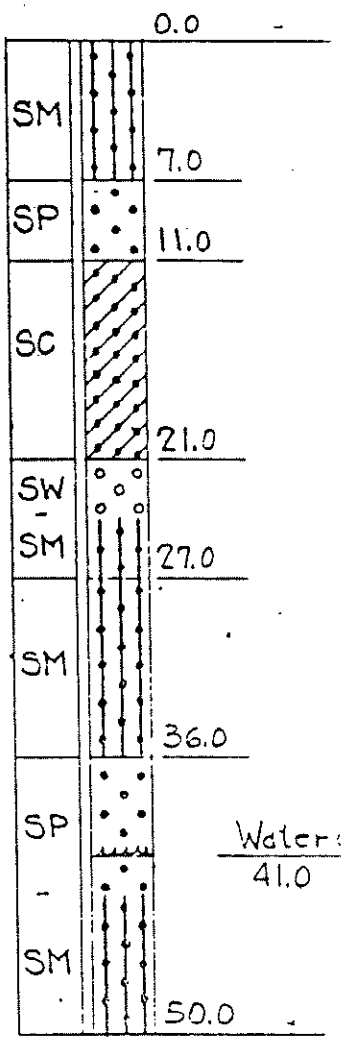
BORING No. B12
Date 9-8-71
Surface Elev. 125.0'



BOT. OF BORING

GRD. WATER OBSER.
9-9-71 - 38.0
9-10-71 - 37.2'
9-17-71 - 36.2'
10-8-71 - 36.0'

BORING No. B15
Date 8-31-71
Surface Elev. 125.0'



BOT. OF BORING

GRD. WATER OBSER
9-3-71 - 38.5'
9-9-71 - 39.0'
9-10-71 - 38.5'
9-17-71 - 38.1'
10-8-71 - 37.8'

NOTATION per U.S.E.P.A. REPORT SW-65ts, 1971

ANNE ARUNDEL COUNTY
SANITARY LANDFILL STUDY
MILLERSVILLE AREA

BORING LOG

GREEN ASSOCIATES INC.
Consulting Engineers

Appendix B.3
Green Associates, Inc./Century Engineering, Inc. (1972)

SOILS & FOUNDATIONS

RECORD OF SOIL EXPLORATION

Contracted With: Anne Arundel County — Boring #: E-19
Project Name: Millersville Tunnel — Job #: 5170
Location: Millersville, Maryland

SAMPLER

Datum: ____ — Hammer Wt.: 140 Lbs. — Hole Diameter: 9" — Foreman: C. Turner
Grd. Elev.: 171.4 Ft. — Hammer Drop: 30 In. — Rock Core Dia.: ____ — Inspector: D. Vangelo
Date Started: 10-25-72 — Pipe Size: AW-2 In. — Boring Method: HSA — Date Completed: 10-25-72

ELEV.	SOIL DESCRIPTION (Color, Moisture, Density, Consistency, Soil Formations)	STRATA DEPTH	DEPTH SCALE	SAMPLE (Blows/6")	No.	TYPE	REC	BORING & SAMPLING NOTES
	SURFACE	0.0						Large area of standing water where boring drilled
	Yellow - brown silty SAND SM		5	9 11-13	1	DS		
163.4		8.0						
	White clayey SILT, trace of sand CL		10	10 19-27	2	DS		
158.4		13.0						
	Yellow - brown silty SAND SM		15	12 12-18	3	DS		
153.4		18.0						
	Tan sandy clayey SILT CL-ML		20	7 11-13	4	DS		
149.9		21.5						
	Bottom of Boring		25					

SAMPLER TYPE
DS - DRIVEN SPLIT SPOON
PT - PRESSED SHELBY TUBE
CA - CONTINUOUS FLIGHT AUGER
RC - ROCK CORE

SAMPLE CONDITIONS
D - DISINTEGRATED
I - INTACT
U - UNDISTURBED
L - LOST

GROUND WATER DEPTH
AT COMPLETION 17.2 FT.
AFTER ____ HRS. ____ FT.
AFTER 24 HRS. ____ FT.

BORING METHOD
HSA - HOLLOW STEM AUGERS
CFA - CONTINUOUS FLIGHT AUGERS
DC - DRIVING CASING
MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTERVA

SOILS & FOUNDATIONS DIVISION

RECORD OF SOIL EXPLORATION

Contracted With: Anne Arundel County — Boring #: F-20

Project Name: Millersville Landfill — Job #: 5170

Location: Millersville, Maryland

SAMPLER

Datum: _____

Grd. Elev.: _____ Ft.

Date Started: 10-31-72

Hammer Wt.: 140 Lbs. — Hole Diameter: 10" — Foreman: W. Stephens

Hammer Drop: 30 In. — Rock Core Dia: _____ — Inspector: W. Stephens

Pipe Size: NW 2 In. — Boring Method: HSA — Date Completed: 10-31-72

ELEV.	SOIL DESCRIPTION (Color, Moisture, Density, Consistency, Size, Plasticity)	STRATA DEPTH	DEPTH	SAMPLE					BORING & SAMPLING NOTES
					BLOWS	SAMPLE	TYPE	REC	
	SURFACE	0.0							
	Brown silty CLAY with SAND CL		5	I	9 12-15	S1	DS	8	
131.9		9.0							
	White, silty SAND and sandy SILT with occassional layers of clay		10	I	12-17	S2	DS	12	
			15	I	7-9-[illegible]	S3	DS	12	
			20	I	5-8-8	S4	DS	18	
			25	I	8 3-12	S5	DS	18	
			30	I	14-13	S6	DS	15	
			35	I	0-2-9	S7	DS	15	Encountered water @ 35'

SAMPLER TYPE

DS - DRIVEN SPLIT SPOON
PT - PRESSED SHELBY TUBE
CA - CONTINUOUS FLIGHT AUGER
RC - ROCK CORE

SAMPLE CONDITIONS

D - DISINTEGRATED
I - INTACT
U - UNDISTURBED
L - LOST

GROUND WATER DEPTH

AT COMPLETION _____ FT.
AFTER _____ HRS. _____ FT.
AFTER 24 HRS. _____ FT.

BORING METHOD

HSA - HOLLOW STEM AUGERS
CFA - CONTINUOUS FLIGHT AUGERS
DC - DRIVING CASING
MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTERVALS

RECORD OF SOIL EXPLORATION

Project With: Anne Arundel County — Boring #: E-21
Project Name: Millersville Landfill — Job #: 5170
Location: Millersville, Maryland

SAMPLER

Datum: ____ — Hammer Wt.: 140 Lbs. — Hole Diameter: 9" — Foreman: C. Walker
Surf. Elev.: 173.5 Ft. — Hammer Drop: 30 In. — Rock Core Dia: ____ — Inspector: D. Wanagle
Date Started: 10-26-72 — Pipe Size: AW-2 In. — Boring Method: HSA — Date Completed: 10-26-72

ELEV.	SOIL DESCRIPTION (Color, Moisture, Density, Consistency, Soil Classification)	STRATA DEPTH	DEPTH SCALE	SAMPLE CONDITIONS	BLOWS	NO.	TYPE	REC.	BORING & SAMPLING NOTES
	SURFACE	0.0							
	Brown silty SAND, with pockets of silty clay SM		5		8 16-16	1	DS		
			10		9 10-14	2	DS		
160.5		13.0							
	White-brown silty CLAY with sand CL-ML		15		4-3-4	3	DS		
155.5		18.0							
	Brown SAND, trace of silt		20						Installed well point @20'
152.0		21.5			3-7-8	4	DS		
	Bottom of Boring								

SAMPLER TYPE
DS - DRIVEN SPLIT SPOON
PT - PRESSED SHELBY TUBE
CA - CONTINUOUS FLIGHT AUGER
RC - ROCK CORE

SAMPLE CONDITIONS
D - DISINTEGRATED
I - INTACT
U - UNDISTURBED
L - LOST

GROUND WATER DEPTH
AT COMPLETION 15.0 FT.
AFTER ____ HRS. ____ FT.
AFTER 24 HRS. ____ FT.

BORING METHOD
HSA - HOLLOW STEM AUGERS
CFA - CONTINUOUS FLIGHT AUGER
DC - DRIVING CASING
MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTERV.

SOILS & FOUNDATIONS [illegible]

RECORD OF SOIL EXPLORATION

Connected With: Anne Arundel County — Boring # F-22

Projects Name: [illegible] — Job # 5170

Location: Millersville, Md.

SAMPLER

Datum: [illegible] — Hammer Wt. 140 Lbs. — Hole Diameter 8" — Foreman C. Turner

Grd. Elev. [illegible] Ft. — Hammer Drop 30 In. — Rock Core Dia. — Inspector D. Mangele

Date Started 10-26-72 — Pipe Size [illegible] In. — Boring Method HSA — Date Completed 10-26-72

ELEV.	SOIL DESCRIPTION (Color, Moisture, Density, Texture, Size, Formation)	STRATA DEPTH	DEPTH SCALE	SAMPLE BLOWS/6"	NO.	TYPE	REC.	BORING & SAMPLING NOTES
	SURFACE	0.0						
	Brown SAND, with pockets of silty sand and silty clay SP		5	37 / 51/2[illegible]	1	DS		
			10	21 / 21-18	2	DS		
			15	14 / 14-18	3	DS		
			20	42-42 / 51/5		DS		
			25	22 / 51/3	5	DS		
			30	48 / 51/4	6	DS		
			35	53 / 51/4	7	DS		
			40					

SAMPLER TYPE
- DS - DRIVEN SPLIT SPOON
- PT - PRESSED SHELBY TUBE
- CA - CONTINUOUS FLIGHT AUGER
- RC - ROCK CORE

SAMPLE CONDITIONS
- D - DISINTEGRATED
- I - INTACT
- U - UNDISTURBED
- L - LOST

GROUND WATER DEPTH
- AT COMPLETION [illegible] FT.
- AFTER ____ HRS. ____ FT.
- AFTER 24 HRS. ____ FT.

BORING METHOD
- HSA - HOLLOW STEM AUGERS
- CFA - CONTINUOUS FLIGHT AUGERS
- DC - DRIVING CASING
- MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTERVALS

RECORD OF SOIL EXPLORATION

Contracted With: Anne Arundel County
Boring #: F-22
Project Name: Millersville Landfill Area
Job #: 5170
Location: Millersville, Maryland

SAMPLER

Datum: _____
Surf. Elev.: 193.0 Ft.
Date Started: 10-26-72

Hammer Wt.: 140 Lbs.
Hammer Drop: 30 In.
Pipe Size: AW In.

Hole Diameter: 9"
Rock Core Dia.: _____
Boring Method: HSA

Foreman: C. Turner
Inspector: D. Mangolo
Date Completed: 10-28-72

ELEV.	SOIL DESCRIPTION (Color, Moisture, Density, Consistency, Soil Classification)	STRATA DEPTH	DEPTH SCALE	SAMPLE (Blows/6")	NO.	TYPE	REC.	BORING & SAMPLING NOTES
	SURFACE	0.0	40	65				
	Brown SAND with pockets of silty sand and silty clay SP			51/3	8	DS		Encountered water @ 45'
			45	31 29-30	9	DS		
143.3		50.3	50	51/3	10	DS		
	Bottom of Boring		55					

SAMPLER TYPE
DS - DRIVEN SPLIT SPOON
PT - PRESSED SHELBY TUBE
CA - CONTINUOUS FLIGHT AUGER
RC - ROCK CORE

SAMPLE CONDITIONS
D - DISINTEGRATED
I - INTACT
U - UNDISTURBED
L - LOST

GROUND WATER DEPTH
AT COMPLETION _____ FT.
AFTER _____ HRS. _____ FT.
AFTER 24 HRS. _____ FT.

BORING METHOD
HSA - HOLLOW STEM AUGERS
CFA - CONTINUOUS FLIGHT AUGER
DC - DRIVING CASING
MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTERV

SOILS & FOUNDATIONS DIVISION

RECORD OF SOIL EXPLORATION

Contracted With: Anne Arundel County — Boring #: F-23

Projects Name: Millersville Landfill Area — Job #: 5170

Location: Millersville, Maryland

SAMPLER

Datum: _____ Hammer Wt.: 140 Lbs. Hole Diameter: 10" Foreman: W. Stephens

Surf. Elev.: 143.9 Ft. Hammer Drop: 30 In. Rock Core Dia: _____ Inspector: H. Sprague

Date Started: 10-26-72 Pipe Size: AW-2 In. Boring Method: HSA Date Completed: _____

ELEV.	SOIL DESCRIPTION (Color, Moisture, Density, Consistency, Size, Proportions)	STRATA DEPTH	DEPTH SCALE	SAMPLE: Type	Blows 0"	NO	Type	REC	BORING & SAMPLING NOTES
	SURFACE	0.0							
	Brown SAND, trace of silt				NOT TAKEN				
			5	I	11 18-24	S-2	DS		
			10	I	6 12-17	S-3	DS		
			15	I	12 10-21	S-4	DS		
127.4		16.5							
	Bottom of Boring								

SAMPLER TYPE

DS - DRIVEN SPLIT SPOON
PT - PRESSED SHELBY TUBE
CA - CONTINUOUS FLIGHT AUGER
RC - ROCK CORE

SAMPLE CONDITIONS

D - DISINTEGRATED
I - INTACT
U - UNDISTURBED
L - LOST

GROUND WATER DEPTH

AT COMPLETION: 120 Hr. 0 FT. Inside Auger 4:00 10/26
AFTER _____ HRS. _____ FT.
AFTER 24 HRS. _____ FT.

BORING METHOD

HSA - HOLLOW STEM AUGERS
CFA - CONTINUOUS FLIGHT AUGERS
DC - DRIVING CASING
MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTERVA

SOILS & FOUNDATIONS DIVISION
RECORD OF SOIL EXPLORATION

ected With: Anne Arundel County — Boring #: E-25
Project Name: Millersville Landfill — Job #: 5170
Location: Millersville, Md.

SAMPLER

Datum: ____ Hammer Wt.: 140 Lbs. Hole Diameter: 9" Foreman: C. Turner
Surf. Elev.: 129.4 Ft. Hammer Drop: 30 In. Rock Core Dia: ____ Inspector: D. Mangelo
Date Started: 10-27-72 Pipe Size: 2½ In. Boring Method: HSA Date Completed: 10-27-72

ELEV.	SOIL DESCRIPTION (Color, Moisture, Density, Texture, Soil Consistency)	STRATA DEPTH	DEPTH SCALE	SAMPLE BLOWS	SAMPLE NO.	TYPE	RECOVERY	BORING & SAMPLING NOTES
	SURFACE	0.0						
	White-purple clayey silty SAND SC		5	5-7-8	1	DS		
121.4		8.0						
	Black silty CLAY, trace of sand CL		10	14-18	2	DS		
			15	5-6-11	3	DS		
			20	14-18	4	DS		
			25	10-14	5	DS		
			30	11-16	6	DS		
			35	18-24	7	DS		

SAMPLER TYPE
DS - DRIVEN SPLIT SPOON
PT - PRESSED SHELBY TUBE
CA - CONTINUOUS FLIGHT AUGER
RC - ROCK CORE

SAMPLE CONDITIONS
D - DISINTEGRATED
I - INTACT
U - UNDISTURBED
L - LOST

GROUND WATER DEPTH
AT COMPLETION 37.5 FT.
AFTER ____ HRS. ____ FT.
AFTER 24 HRS. ____ FT.

BORING METHOD
HSA - HOLLOW STEM AUGERS
CFA - CONTINUOUS FLIGHT AUGERS
DC - DRIVING CASING
MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTERVALS

SOILS & FOUNDATIONS DIVISION
RECORD OF SOIL EXPLORATION

Contracted With: Anne Arundel County — Boring # F-25
Projects Name: Millersville Landfill — Job # 5170
Location: Millersville, Md.

SAMPLER

Datum: _____ Hammer Wt. _____ Lbs. Hole Diameter _____ Foreman _____
Surf. Elev. 129.4 Ft. Hammer Drop _____ In. Rock Core Dia _____ Inspector _____
Date Started _____ Pipe Size _____ In. Boring Method _____ Date Completed _____

ELEV.	SOIL DESCRIPTION (Color, Moisture, Density, Plasticity, Soil Formation)	STRATA DEPTH	DEPTH SCALE	SAMPLE COUNTS/6"	NO.	TYPE	REC.	BORING & SAMPLING NOTES
	SURFACE	0.0		32-54				
88.2	Black silty CLAY	41.2		51/2	8	DS		
	Bottom of Boring		45					

SAMPLER TYPE
DS - DRIVEN SPLIT SPOON
PT - PRESSED SHELBY TUBE
CA - CONTINUOUS FLIGHT AUGER
RC - ROCK CORE

SAMPLE CONDITIONS
D - DISINTEGRATED
I - INTACT
U - UNDISTURBED
L - LOST

GROUND WATER DEPTH
AT COMPLETION _____ FT.
AFTER _____ HRS. _____ FT.
AFTER 24 HRS. _____ FT.

BORING METHOD
HSA - HOLLOW STEM AUGERS
CFA - CONTINUOUS FLIGHT AUGERS
DC - DRIVING CASING
MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTERVALS

RECORD OF SOIL EXPLORATION

Contracted With: Anne Arundel County
Projects Name: [illegible] Landfill
Location: Millersville, Md.

Boring # F-26
Job # 5170

SAMPLER
Hammer Wt. 140 Lbs.
Hammer Drop 30 In.
Pipe Size AW-2 In.

Hole Diameter 9"
Rock Core Dia
Boring Method HSA

Foreman C. Turner
Inspector D. Menzele
Date Completed 10-26-72

Datum
Surf. Elev. 179.6 Ft.
Date Started 10-26-72

ELEV.	SOIL DESCRIPTION (Color, Moisture, Density, Consistency, Soil Classification)	STRATA DEPTH SCALE	SAMPLE (Blows/6")	NO.	TYPE	REC.	BORING & SAMPLING NOTES
	SURFACE	0.0					
	Brown SAND, trace of silt SP	5	6 9-11	1	DS		
		10	38 18-21	2	DS		
165.6		14.0					
	Purple-white silty CLAY CL	15	11 20-22	3	DS		
162.6		17.0					
	Tan SAND, trace of silt SP	20	15 13-25	4	DS		No water encountered during drilling
158.1		21.5					
	Bottom of Boring	25					

SAMPLER TYPE
DS - DRIVEN SPLIT SPOON
PT - PRESSED SHELBY TUBE
CA - CONTINUOUS FLIGHT AUGER
RC - ROCK CORE

SAMPLE CONDITIONS
D - DISINTEGRATED
I - INTACT
U - UNDISTURBED
L - LOST

GROUND WATER DEPTH
AT COMPLETION dry FT.
AFTER ____ HRS. ____ FT.
AFTER 24 HRS. ____ FT.

BORING METHOD
HSA - HOLLOW STEM AUGERS
CFA - CONTINUOUS FLIGHT AUGE
DC - DRIVING CASING
MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTER

RECORD OF SOIL EXPLORATION

Contracted With: Anne Arundel County
Projects Name: Millersville Landfill
Location: Millersville, Md.
Boring # F-27
Job # 5170

SAMPLER

Datum:
Surf. Elev. 189.7 Ft.
Date Started 10-26-72
Hammer Wt. 140 Lbs.
Hammer Drop 30 In.
Pipe Size AW-2 In.
Hole Diameter 9"
Rock Core Dia.:
Boring Method HSA
Foreman C. Walker
Inspector D. Menzie
Date Completed 10-27-72

ELEV.	SOIL DESCRIPTION (Color, Moisture, Consist., Structure, Size, Proportions)	STRATA DEPTH	DEPTH SCALE	SAMPLE (Blows/6" / N)			BORING & SAMPLING NOTES
	SURFACE	0.0					
	Light brown silty SAND SM		5	8 14-14	1	DS	
			10	24 38-45	2	DS	
			15	6-6-6	3	DS	
172.7	Tan silty SAND SM	18.0	20	23 28-33	4	DS	
			25	24 41-43	5	DS	
			30	51/3	6	DS	
157.7	Brown silty SAND SM	33.0	35	38 51/4	7	DS	
			40				

SAMPLER TYPE
DS - DRIVEN SPLIT SPOON
PT - PRESSED SHELBY TUBE
CA - CONTINUOUS FLIGHT AUGER
RC - ROCK CORE

SAMPLE CONDITIONS
D - DISINTEGRATED
I - INTACT
U - UNDISTURBED
L - LOST

GROUND WATER DEPTH
AT COMPLETION 20.5 FT.
AFTER ____ HRS. ____ FT.
AFTER 24 HRS. ____ FT.

BORING METHOD
HSA - HOLLOW STEM AUGERS
CFA - CONTINUOUS FLIGHT AUGER
DC - DRIVING CASING
MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTER

RECORD OF SOIL EXPLORATION

Contracted With: Anne Arundel County
Boring #: F-27
Job #: 5170
Project Name: Millersville Landfill
Location: Millersville, Md.

SAMPLER

Datum:
Surf. Elev.: 190.7 Ft.
Date Started: 10-26-72

Hammer Wt.: 140 Lbs.
Hammer Drop: 30 In.
Pipe Size: NW-2 In.

Hole Diameter: 9"
Rock Core Dia:
Boring Method: HSA

Foreman: C. Walker
Inspector: D. Mengele
Date Completed: 10-27-72

ELEV.	SOIL DESCRIPTION (Color, Moisture, Density, Consistency, Soil Classification)	STRATA DEPTH	DEPTH SCALE	SAMPLE FOND	Blows/6"	NO	TYPE	REC	BORING & SAMPLING NOTES
	SURFACE	0.0	40	I	51/1	9	DS	1	
	Brown silty SAND SM								
147.7		43.0	45	I	51/5	9	DS	5	Encountered water @ 45'
	Yellow silty SAND SM								
			50		25				Installed well point @ 50'
139.2		51.5		I	45-50	10	DS	16	
	Bottom of boring								

SAMPLER TYPE
DS - DRIVEN SPLIT SPOON
PT - PRESSED THIN WALL TUBE
CA - CONTINUOUS FLIGHT AUGER
RC - ROCK CORE

SAMPLE CONDITIONS
D - DISINTEGRATED
I - INTACT
U - UNDISTURBED
L - LOST

GROUND WATER DEPTH
AT COMPLETION _____ FT.
AFTER _____ HRS. _____ FT.
AFTER 24 HRS. _____ FT.

BORING METHOD
HSA - HOLLOW STEM AUGERS
CFA - CONTINUOUS FLIGHT AUGER
DC - DRIVING CASING
MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTERV

SOILS & FOUNDATIONS DIVISION
RECORD OF SOIL EXPLORATION

Contracted With: Anne Arundel County — Boring # B-28
Projects Name: Millersville Landfill — Job # 5170
Location: Millersville, Maryland

SAMPLER
Hammer Wt. 140 Lbs. — Hole Diameter 6.0" I.D. — Foreman C. Turner
Datum — Rock Core Dia — Inspector T. Hunt
Surf. Elev. 175.1 Ft. — Hammer Drop 30 In. — Boring Method HSA — Date Completed 10-16-72
Date Started 10-16-72 — Pipe Size 2.0 In.

ELEV.	SOIL DESCRIPTION (Color, Moisture, Density, Consistency, Soil, Geology)	STRATA DEPTH	SAMPLE DEPTH	SAMPLE CONDITION	BLOWS/6"	NO.	TYPE	REC	BORING & SAMPLING NOTES
	SURFACE	0.0							
	Brown silty SAND SM			I	1-8-9	S-1	DS	8	
			5	I	15 37-22	S-2	DS	2	
167.1		8.0							
	Light brown SAND, trace of silt SM-SP		10	I	6-8-11	S-3	DS	14	
			15	I	12 16-16	S-4	DS	10	
158.1		17.0							
	Tan clayey silty SAND SC		20	I	13 16-20	S-5	DS	5	
			25	I	7 10-10	S-6	DS	8	
148.1		27.0							
	Light brown SAND, trace of silt SM-SP		30	I	9 13-15	S-7	DS	16	
			35	I	13 15-14	S-8	DS	10	

SAMPLER TYPE
DS - DRIVEN SPLIT SPOON
PT - PRESSED SHELBY TUBE
CA - CONTINUOUS FLIGHT AUGER
RC - ROCK CORE

SAMPLE CONDITIONS
D - DISINTEGRATED
I - INTACT
U - UNDISTURBED
L - LOST

GROUND WATER DEPTH
AT COMPLETION 27.0 FT.
AFTER ____ HRS. ____ FT.
AFTER 24 HRS. ____ FT.

DORING METHOD
HSA - HOLLOW STEM AUGERS
CFA - CONTINUOUS FLIGHT AUGERS
DC - DRIVING CASING
MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTERVAL

SOILS & FOUNDATIONS DIVISION
RECORD OF SOIL EXPLORATION

Contracted With: Anne Arundel County
Projects Name: Millersville Sanitary Landfill
Location: Millersville, Maryland
Boring #: F-28
Job #: 5170

SAMPLER

Datum: _____
Surf. Elev.: 175.1 Ft.
Date Started: 10-16-72

Hammer Wt.: 140 Lbs.
Hammer Drop: 30 In.
Pipe Size: 2.0 In.

Hole Diameter: 6.0" I.D.
Rock Core Dia: _____
Boring Method: HSA

Foreman: C. Turner
Inspector: J. Hunt
Date Completed: 10-16-72

ELEV.	SOIL DESCRIPTION (Color, Texture, Density, Moisture, Soil, Formation)	STRATA DEPTH	DEPTH SCALE	SAMPLE CONDITION	BLOWS/6"	NO.	TYPE	REC.	BORING & SAMPLING NOTES
	SURFACE	0.0	40						Water encountered @ 42'
132.1	Light brown SAND, trace of silt SM-SP	43.0		I	5 7-11	S-9	DS	18	
128.6	White silty clay CL	46.5	45	I	27 40-50	S-10	DS	16	
	Bottom of boring								

SAMPLER TYPE
- DS - DRIVEN SPLIT SPOON
- PT - PRESSED SHELBY TUBE
- CA - CONTINUOUS FLIGHT AUGER
- RC - ROCK CORE

SAMPLE CONDITIONS
- D - DISINTEGRATED
- I - INTACT
- U - UNDISTURBED
- L - LOST

GROUND WATER DEPTH
- AT COMPLETION _____ FT.
- AFTER _____ HRS. _____ FT.
- AFTER 24 HRS. _____ FT.

BORING METHOD
- HSA - HOLLOW STEM AUGERS
- CFA - CONTINUOUS FLIGHT AUGERS
- DC - DRIVING CASING
- MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTERVA

RECORD OF SOIL EXPLORATION

Contracted With: Anne Arundel County — Boring # F-22
Project Name: Millersville Sanitary Landfill — Job # 5170
Location: Millersville, Maryland

SAMPLER

Datum: ____ Hammer Wt. 140 Lbs. Hole Diameter 6" I.D. Foreman C. Turner
Surf. Elev. 182.5 Ft. Hammer Drop 30 In. Rock Core Dia ____ Inspector [illegible]
Date Started 10-13-72 Pipe Size 2.0 In. Boring Method HSA Date Completed 10-13-72

ELEV.	SOIL DESCRIPTION (Color, Moisture, Density, Consistency, Soil Properties)	STRATA DEPTH	DEPTH SCALE	SAMPLE TYPE	BLOWS/6"	ID	DEPTH	REC	BORING & SAMPLING NOTES
	SURFACE	0.0							
179.0	Brown sandy SILT ML	3.0		I	1-2-4	S-1	DS	4	
	Brown silty SAND SM		5	I	15 10-9	S-2	DS	4	
171.0		11.0	10	I	100/1	S-3	DS	5	
	Purple and brown SAND, trace of silt SM-SP		15	I	25 26-24	S-4	DS	12	
160.5		21.5	20	I	51 51/3"	S-5	DS	10	No water encountered during drilling
	Bottom of Boring								

SAMPLER TYPE
DS - DRIVEN SPLIT SPOON
PT - PRESSED SHELBY TUBE
CA - CONTINUOUS FLIGHT AUGER
RC - ROCK CORE

SAMPLE CONDITIONS
D - DISINTEGRATED
I - INTACT
U - UNDISTURBED
L - LOST

GROUND WATER DEPTH
AT COMPLETION ____ FT.
AFTER ____ HRS. ____ FT.
AFTER 24 HRS. ____ FT.

BORING METHOD
HSA - HOLLOW STEM AUGERS
CFA - CONTINUOUS FLIGHT AUGERS
DC - DRIVING CASING
MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTERVALS

RECORD OF SOIL EXPLORATION

Contracted With: Anne Arundel County — Boring #: F-30
Project Name: Millersville Sanitary Landfill — Job #: 5170
Location: Millersville, Maryland

SAMPLER
Hammer Wt. 140 Lbs. — Hole Diameter 6.0" I.D. — Foreman C. Turner
Datum — Hammer Drop 30 In. — Rock Core Dia — Inspector T. Hung
Surf. Elev. 134.3 Ft — Pipe Size 2.0 In. — Boring Method HSA — Date Completed 10-17-72
Date Started 10-17-72

ELEV.	SOIL DESCRIPTION		DEPTH	SAMPLE					BORING & SAMPLING NOTES
							TYPE	REC	
	SURFACE		0.0						
	Brown and gray silty SAND	SM		I	1-2-2	S-1	DS	5	
			5	I	7 17-28	S-2	DS	12	
126.3			8.0						
	Mottled, white silty CLAY	CL	10	I	12 19-22	S-3	DS	9	
			15	I	7 12-17	S-4	DS	14	
116.3			18.0						
	White, sandy clayey SILT	ML	20	I	7 15-15	S-5	DS	9	
111.3			23.0						
	Tan and white silty SAND	SM	25	I	7 8-18	S-6	DS	13	
			30	I	11 16-17	S-7	DS	11	
			35	I	13 12-14	S-8	DS	12	
96.3			38.0						

SAMPLER TYPE
SP - DRIVEN SPLIT SPOON
PT - PRESSED SHELBY TUBE
CA - CONTINUOUS FLIGHT AUGER
RC - ROCK CORE

SAMPLE CONDITIONS
D - DISINTEGRATED
I - INTACT
U - UNDISTURBED
L - LOST

GROUND WATER DEPTH
AT COMPLETION 42.0 FT.
AFTER ___ HRS. ___ FT.
AFTER 24 HRS. 41.0 FT.

BORING METHOD
HSA - HOLLOW STEM AUGERS
CFA - CONTINUOUS FLIGHT AUGERS
DC - DRIVING CASING
MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTERVAL

SOILS & FOUNDATIONS DIVISION
RECORD OF SOIL EXPLORATION

Contracted With: Anne Arundel County — Boring #: F-30
Projects Name: Millersville Sanitary Landfill — Job #: 5170
Location: Millersville, Maryland

SAMPLER

Datum: ____ — Hammer Wt. 140 Lbs. — Hole Diameter 6.0" I.D. — Foreman C. Turner
Surf. Elev. 134.3 Ft. — Hammer Drop 30 In. — Rock Core Dia ____ — Inspector T. Moore
Date Started 10-17-72 — Pipe Size 2.0 In. — Boring Method HSA — Date Completed 10-17-72

ELEV.	SOIL DESCRIPTION (Soil Name, Color, Consistency, Soil Structure)	STRATA DEPTH	DEPTH SCALE	SAMPLE INCH	BLOWS	PENETRATION	RECOVERY	BORING & SAMPLING NOTES
	SURFACE	0.0	50					
	Light brown, clayey silty SAND SC			I	4-8-14	S9	DS	8
			45		9			Encountered water @ 45'
				I	15-16	S10	DS	8
			50		6			Installed well point @ 51'
82.8		51.5		I	12-16	S11	DS	17
	Bottom of Boring							

SAMPLER TYPE
- DS - DRIVEN SPLIT SPOON
- PT - PRESSED SHELBY TUBE
- CA - CONTINUOUS FLIGHT AUGER
- RC - ROCK CORE

SAMPLE CONDITIONS
- D - DISINTEGRATED
- I - INTACT
- U - UNDISTURBED
- L - LOST

GROUND WATER DEPTH
- AT COMPLETION ____ FT.
- AFTER ____ HRS. ____ FT.
- AFTER 24 HRS. 11.0 FT.

BORING METHOD
- HSA - HOLLOW STEM AUGERS
- CFA - CONTINUOUS FLIGHT AUGERS
- DC - DRIVING CASING
- MD - MUD DRILLING

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTERVAL.

Appendix B.4
Geoservices Inc./Geosyntec Consultants, Inc. and Others (1975 to 2012)

C 1 2365

(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WATER RESOURCES ADMINISTRATION
TAWES STATE OFFICE BLDG., ANNAPOLIS, MD. 21401
WELL COMPLETION REPORT

THIS REPORT MUST BE MONTHLY WITHIN 10 DAYS AFTER WELL COMPLETION

FILL IN THIS FORM COMPLETELY

COUNTY NUMBER

DATE RECEIVED (WRA USE ONLY): 830675

DATE WELL COMPLETED: Jan. 24, 1975 — 012475

DEPTH OF WELL (TO NEAREST FOOT): 99

PERMIT NO. FROM "PERMIT TO DRILL WELL": AA-723-3786

DRILLERS IDENTIFICATION NO.: 26

OWNER: Anne Arundel County

STREET OR RFD: Millersville Sanitary Landfill

POST OFFICE: Gambrills, Md.

WELL DESCRIPTION

WELL LOG — STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (USE ADDITIONAL SHEETS IF NECESSARY)	FEET FROM	FEET TO	CAPABLE WATER BEARING
yellow clay	0	5	
gray clay	5	16	
sand stone & gravel	16	18	
course gravel	18	25	
course brown sand	25	31	
white clay	31	41	
med course tan sand	41	59	
white clay	59	61	
brown sand	61	99	x
white clay	99	105	
white & yellow clay	105	113	
brown sand	113	122	
white clay	122	134	
sand	134	137	
white clay & streaks sand	137	165	
fine tan sand	165	170	
red & white clay	170	176	
hard red clay	176	180	

GROUTING RECORD

WELL HAS BEEN GROUTED (CIRCLE APPROPRIATE BOX): YES (V) NO (N)

TYPE OF GROUTING MATERIAL (CIRCLE BOXES): CEMENT (C M) BENTONITE CLAY (B C)

NO. OF BAGS: 40 NO. OF POUNDS: 3760

GALLONS OF WATER: 200

DEPTH OF GROUT SEAL (TO NEAREST FOOT): FROM 0 FT. TO 80 FT. (ENTER 0 IF FROM SURFACE)

CASING RECORD

CASING TYPE (INSERT APPROPRIATE CODE BELOW): STEEL (S T), CONCRETE (C O), PLASTIC (P L), OTHER (O T)

MAIN CASING TYPE: S T — NOMINAL DIAMETER TOP MAIN CASING (NEAREST INCH): 6 — TOTAL DEPTH OF MAIN CASING (NEAREST FOOT): 84

OTHER CASING (IF USED) — EACH CASING: DIAMETER (INCHES), DEPTH (FEET) FROM

SCREEN RECORD

SCREEN TYPE OR OPEN HOLE (INSERT APPROPRIATE CODE BELOW): STEEL (S T), BRASS OR BRONZE (B R), OPEN HOLE (H O), PLASTIC (P L), OTHER (O T)

C 2

EACH SCREEN — DEPTH (NEAREST WHOLE FOOT): 1. S T FROM 84 TO 99; 2. ; 3.

SLOT SIZE IF 026 S.

DIAMETER OF SCREEN: 6 (NEAREST INCH)

GRAVEL PACK: FROM 69 TO 101

IF WELL DRILLED WAS A FLOWING WELL (CIRCLE BOX): F

WRA USE ONLY (NOT TO BE FILLED IN BY DRILLER): (C.O.G.G.) HOLE OPE CASING; LOG INDICATOR; OTHER DATA AVAILABLE

C 3

PUMPING TEST

HOURS PUMPED (TO NEAREST HOUR): 3

PUMPING RATE GALLONS PER MINUTE (TO NEAREST GALLON): 2

METHOD USED TO MEASURE PUMPING RATE: estimated

WATER LEVEL (DISTANCE FROM LAND SURFACE)

BEFORE PUMPING: 60 (NEAREST FOOT)

WHEN PUMPING: 2 (NEAREST FOOT)

TYPE OF PUMP USED (CIRCLE APPROPRIATE BOX IF PUMPING TEST): ALL (A), PISTON (P), TURBINE (T), CENTRIFUGAL (C), ROTARY (R), OTHER (DESCRIBE BELOW), JET (J), SUBMERSIBLE (S)

PUMP INSTALLED

TYPE OF PUMP (WRITE APPROPRIATE LETTER IN BOX — SEE ABOVE): A, C, J, P, R, S, T, O

DRILLER WILL INSTALL PUMP (CIRCLE APPROPRIATE BOX): YES (Y) NO (N)

CAPACITY: GALLONS PER MINUTE (TO NEAREST GALLON)

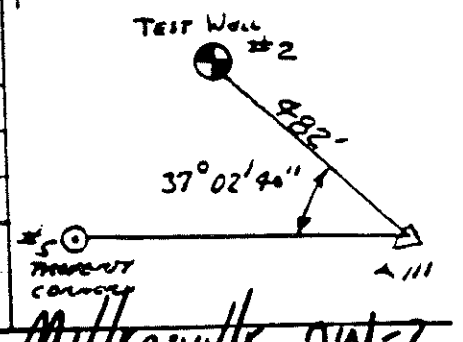
PUMP HORSE POWER

PUMP COLUMN LENGTH (NEAREST FOOT)

CASING HEIGHT (CIRCLE APPROPRIATE BOX AND ENTER CASING HEIGHT): ABOVE (+), BELOW (−) LAND SURFACE: 2 (NEAREST FOOT)

LOCATION OF WELL ON LOT

SHOW PERMANENT STRUCTURE SUCH AS BUILDINGS, SEPTIC TANKS, AND/OR OTHER LAND MARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL).



Millersville OW-2

CIRCLE APPROPRIATE BOXES

(A) A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED

(E) ELECTRIC LOG OBTAINED

(P) TEST WELL CONVERTED TO PRODUCTION WELL — TEST

I HEREBY CERTIFY THAT I HAVE COMPLIED WITH ALL CONDITIONS STATED ON THE ABOVE-CAPTIONED "PERMIT TO DRILL WELL", AND THAT INFORMATION CONTAINED IN THIS REPORT IS TRUE, ACCURATE, AND COMPLETE TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF.

DRILLERS NAME (PLEASE PRINT): Conrad J. Zittinger

SIGNATURE: Conrad J. Zittinger

ORIGINAL

C 1 5618

STATE OF MARYLAND
WATER RESOURCES ADMINISTRATION
TAWES STATE OFFICE BLDG., ANNAPOLIS, MD. 21401
WELL COMPLETION REPORT

FILL IN THIS FORM COMPLETELY

COUNTY NUMBER

DATE RECEIVED (WRA USE ONLY): March 25, 1975

DATE WELL COMPLETED: 03 25 75

DEPTH OF WELL (TO NEAREST FOOT): 175

PERMIT NO. FROM PERMIT TO DRILL WELL: AA-83-4911

DRILLERS IDENTIFICATION NO.: 26

OWNER: Anne Arundel county

STREET OR RFD: Millersville, Sanitary Landfill

POST OFFICE: Millersville, Md. 21108

WELL DESCRIPTION

WELL LOG — STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION	FEET FROM	FEET TO
Yellow silty clay	0	5
gray clay	5	16
sandstone gravl	16	19
gravel & sand	19	21
gravel & clay	21	40
pink, whiteclay	40	44
fine sand & streaks of clay	44	55
course tan sand streaks clay	55	60
med. course tan sand	60	75
white clay	75	81
med tan sand	81	84
white clay	84	88
fine tan sand	88	91
white clay	91	103
fine tan sand & streaks wh. clay	103	125
wh. clay & red streaks	125	137
fine tan sand	137	140
white clay	140	147
clean tan sand	147	159
white clay	159	161
clean fine to med. course tan sand	161	175 x
red & white clay	175	178

GROUTING RECORD

WELL HAS BEEN GROUTED (CIRCLE APPROPRIATE BOX): YES (Y) NO (N)

TYPE OF GROUTING MATERIAL (CIRCLE BOX): CEMENT (C) BENTONITE CLAY (B C)

NO. OF PACKS: 60 NO. OF POUNDS: 5640

GALLONS OF WATER: 300

DEPTH OF GROUT SEAL (TO NEAREST FOOT): FROM 0 FT. TO 150 FT. (WITH RESPECT TO SURFACE)

CASING RECORD

CASING TYPE — INSERT APPROPRIATE CODE BELOW: STEEL (S T), CONCRETE (C O), PLASTIC (P L), OTHER (O T)

MAIN CASING TYPE	NOMINAL DIAMETER OF MAIN CASING (NEAREST INCH)	TOTAL DEPTH OF MAIN CASING (NEAREST FOOT)
S T	6	160

OTHER CASING (IF USED)

DIAMETER (INCHES)	DEPTH (FEET) FROM	TO

SCREEN RECORD

SCREEN TYPE OR OPEN HOLE — INSERT APPROPRIATE CODE BELOW: STEEL (S T), BRASS OR BRONZE (B R), OPEN HOLE (H O), PLASTIC (P L), OTHER (O T)

C 2

DEPTH (NEAREST WHOLE FOOT)

EACH SCREEN	TYPE	FROM	TO
1	S T	160	175
2			
3			

SLOT SIZE: .020

DIAMETER OF SCREEN (NEAREST INCH): 6

GRAVEL PACK: FROM 154 TO 178

IF WELL DRILLED WAS A FLOWING WELL (CIRCLE BOX): FLOWING (F)

WRA USE ONLY (NOT TO BE FILLED IN BY DRILLER): TELESCOPE SEAL; CIRCULATOR; OTHER DATA AVAILABLE

C 3

PUMPING TEST

HOURS PUMPED (TO NEAREST HOUR): 5

PUMPING RATE (GALLONS PER MINUTE TO NEAREST GALLON): 15

METHOD USED TO MEASURE PUMPING RATE: estimated

WATER LEVEL (DISTANCE FROM LAND SURFACE)

BEFORE PUMPING: 107 (NEAREST FOOT)

WHEN PUMPING: 140 of air line.... (NEAREST FOOT)

TYPE OF PUMPED USED (CIRCLE APPROPRIATE BOX UNDER PUMPING TEST): AIR (A), PISTON (P), TURBINE (T), CENTRIFUGAL (C), ROTARY (R), OTHER (DESCRIBE BELOW), JET (J), SUBMERSIBLE (S)

PUMP INSTALLED

TYPE OF PUMP INSTALLED (CIRCLE APPROPRIATE BOX OR DESCRIBE ABOVE): YES (Y), NO (N)

CAPACITY: GALLONS PER MINUTE (TO NEAREST GALLON)

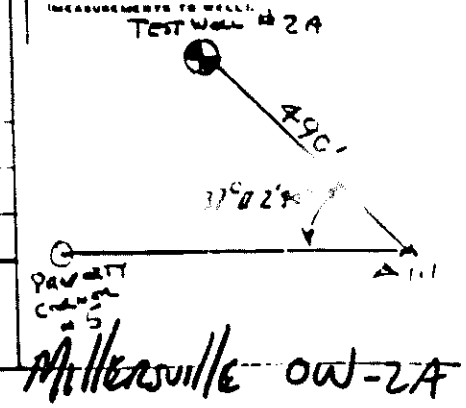
PUMP MODEL POWER

PUMP COLUMN LENGTH (NEAREST FOOT)

CASING HEIGHT (CIRCLE APPROPRIATE BOX AND ENTER CASING HEIGHT): ABOVE (+), BELOW (−) LAND SURFACE 2 (NEAREST FOOT)

LOCATION OF WELL ON LOT

SHOW PERMANENT STRUCTURE SUCH AS BUILDINGS, SEPTIC TANKS, AND/OR OTHER LAND MARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL).



CIRCLE APPROPRIATE BOXES

A — WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED

E — ELECTRIC LOG OBTAINED

P — TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT I HAVE COMPLIED WITH ALL REGULATIONS GOVERNING THE ABOVE-CAPTIONED PERMIT, AND THAT INFORMATION CONTAINED HEREIN IS TRUE, ACCURATE, AND COMPLETE TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF.

DRILLER'S NAME: Conrad J. Zittinger

SIGNATURE: [signature]

ORIGINAL

C 1 2363

(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-8 ON ALL CARDS)

STATE OF MARYLAND
WATER RESOURCES ADMINISTRATION
TAWES STATE OFFICE BLDG., ANNAPOLIS, MD. 21401
WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED WITHIN 30 DAYS AFTER WELL COMPLETION

FILL IN THIS FORM COMPLETELY

COUNTY NUMBER

DATE RECEIVED (WRA USE ONLY) 07 24 84

DATE WELL COMPLETED: 6-18-75 (06/18/75)

DEPTH OF WELL: 94 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL": AA-73-3787

DRILLERS IDENTIFICATION NO.: 26

OWNER: Anne Arundel County (LAST NAME / FIRST NAME)

STREET OR RFD: Millersville Sanitary Landfill POST OFFICE: Millersville, Md.

WELL LOG

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (USE ADDITIONAL SHEETS IF NECESSARY)	FEET FROM	FEET TO	CHECK IF WATER BEARING
fine silty br.sand	0	11	
coarse br. sand, gravel & streaks sandstone	11	18	
white clay	18	19	
clean med. tan sand	19	24	
white clay	24	25	
clean coarse tan sand	25	35	
white clay	35	36	
coarse tan sand	36	39	
white clay	39	41	
sand	41	44	
white clay & few strks. sand	44	51	
fine tan sand	51	70	
white clay	70	72	
fine tan sand	72	74	
white clay	74	75	
fine tan sand	75	76	
white clay	76	80	
fine to med. tan sand	80	90	X
white clay	90	92	
fine tan sand	92	94	X
hard white clay	94	100	

GROUTING RECORD

WELL HAS BEEN GROUTED (CIRCLE APPROPRIATE BOX): Y N

TYPE OF GROUTING MATERIAL (CIRCLE BOX): CEMENT (C M) BENTONITE CLAY (B C)

NO. OF BAGS 43 NO. OF POUNDS 4042

GALLONS OF WATER 215

DEPTH OF GROUT SEAL (TO NEAREST FOOT): FROM 0 FT. TO 72 FT. (ENTER 0 IF FROM SURFACE)

CASING RECORD

CASING TYPE (INSERT APPROPRIATE CODE BELOW): ST STEEL, CO CONCRETE, PL PLASTIC, OT OTHER

MAIN CASING TYPE: S T. NOMINAL DIAMETER TOP (MAIN) CASING (NEAREST INCH): 6 TOTAL DEPTH OF MAIN CASING (NEAREST FOOT): 79

OTHER CASING (IF USED)

EACH CASING: DIAMETER (INCH) / DEPTH (FEET) FROM / TO

SCREEN RECORD

SCREEN TYPE OR OPEN HOLE (INSERT APPROPRIATE CODE BELOW): ST STEEL, BR BRASS OR BRONZE, HO OPEN HOLE, PL PLASTIC, OT OTHER

C 2

EACH SCREEN: S T DEPTH (NEAREST WHOLE FOOT) FROM 79 TO 94

SLOT SIZE 1. 020 2. 3.

DIAMETER OF SCREEN 6 (NEAREST INCH)

GRAVEL PACK FROM 76 TO 96

IF WELL DRILLED WAS A FLOWING WELL CIRCLE BOX: F

WRA USE ONLY (NOT TO BE FILLED IN BY DRILLER): TELESCOPE CASING / LOG INDICATOR / OTHER DATA AVAILABLE

C 3

PUMPING TEST

HOURS PUMPED (TO NEAREST HOUR): 0

PUMPING RATE (GALLONS PER MINUTE TO NEAREST GALLON): 0

METHOD USED TO MEASURE PUMPING RATE: 0

WATER LEVEL (DISTANCE FROM LAND SURFACE): BEFORE PUMPING 24 (NEAREST FOOT); WHEN PUMPING None (NEAREST FOOT)

TYPE OF PUMPED USED (CIRCLE APPROPRIATE BOX) (FOR PUMPING TEST): None

A AIR, P PISTON, T TURBINE, C CENTRIFUGAL, R ROTARY, O OTHER (DESCRIBE BELOW), J JET, S SUBMERSIBLE

PUMP INSTALLED

TYPE OF PUMP (WRITE APPROPRIATE LETTER IN BOX – SEE ABOVE): A, C, J, P, R, S, T, O

DRILLER WILL INSTALL PUMP (CIRCLE APPROPRIATE BOX): Y N

CAPACITY: GALLONS PER MINUTE TO NEAREST GALLON

PUMP HORSE POWER

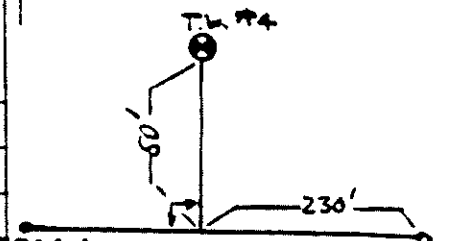
PUMP COLUMN LENGTH (NEAREST FOOT)

CASING HEIGHT

(CIRCLE APPROPRIATE BOX AND ENTER CASING HEIGHT): + ABOVE, − BELOW LAND SURFACE 2 (NEAREST FOOT)

LOCATION OF WELL ON LOT

SHOW PERMANENT STRUCTURE SUCH AS BUILDINGS, SEPTIC TANKS, AND/OR STREET LAND MARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL).



CIRCLE APPROPRIATE BOXES

A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED

E ELECTRIC LOG OBTAINED

T TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT I HAVE COMPLIED WITH ALL CONDITIONS STATED ON THE ABOVE-CAPTIONED "PERMIT TO DRILL WELL", AND THAT INFORMATION CONTAINED IN THIS REPORT IS TRUE, ACCURATE, AND COMPLETE TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF.

DRILLER'S NAME (PLEASE PRINT): Conrad J. Zittinger

SIGNATURE: [signature]

Millersville OW-4

ORIGINAL

Appendix B.5

Geoservices Inc./Geosyntec Consultants, Inc. and Gershman, Brickner and Bratton, Inc. (1989)

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G1	SHEET 1 OF 2

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 203' (estimated)
DRILLING METHOD AND EQUIPMENT 6-in. HSA, Mobil B-61
DATES: START 13 May 89 FINISH 13 May 89 WATER LEVEL 176' W.L. DATE 25 May 89 LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
203	0	0–2	S-1	1.4	4-6-6-9 (12)	SILT WITH SAND, strong brown, moist, stiff, (ML)		8:15a started drilling
198	5	3–5	S-2	1.8	6-9-20-25 (29)	POORLY-GRADED SAND WITH SILT, reddish-yellow, moist, medium dense, SP-SM		
193	10	8–10	S-3	1.6	6-7-10-12 (17)	SANDY SILT, brownish-yellow, dry to moist, very stiff, (ML)		
188	15	13–15	S-4	0.9	15-21-13-9 (34)	POORLY-GRADED SAND WITH GRAVEL, pale yellow, dry, dense, (SP)		
183	20	18–20	S-5	1.0	7-7-9-9 (16)	POORLY-GRADED SAND WITH SILT AND GRAVEL, fine, pale yellow, dry, dense, gravel subangular - 1/8", SP-SM		
178	25	23–25	S-6	1.3	6-8-14-17 (22)	SILTY CLAY, multicolored white and purple, dry, very stiff, (CL-ML) AND POORLY-GRADED SAND, medium, multicolored white and purple, dry, medium dense, (SP)		
173	30	28–30	S-7	1.8	6-7-9-15 (16)	POORLY-GRADED SAND, fine to medium, multicolored white and purple, moist to wet, medium		

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G1	SHEET 2 OF 2

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 203' (estimated)
DRILLING METHOD AND EQUIPMENT 6-in. HSA, Mobil B-61
DATES: START 13 May 89 FINISH 13 May 89 WATER LEVEL 176' W.L. DATE 25 May 89 LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
173	30							
168	35	33 / 35	S-8	1.0	9-13-17-19 (30)	POORLY-GRADED SAND, coarse, brownish-yellow, wet, medium dense, (SP)		driller encountered water at 35' depth
3	40	38 / 40	S-9	1.5	15-22-19-15 (41)	POORLY-GRADED SAND, very fine, brownish-yellow, wet, dense, (SP)		
158	45	43 / 45	S-10	n.a.	6-12-14-17 (26)	LEAN CLAY, brownish-yellow, dry to moist, very stiff, CL		PP = 3.0, 4.0, 4.1 tsf TV = 0.9, 0.9 tsf
						end of boring at 45'		11:00a finished drilling

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G2	SHEET 1 OF 2

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 182' (estimated)
DRILLING METHOD AND EQUIPMENT 6-in. HSA, Mobil B-61
DATES: START 31 May 89 FINISH 31 May 89 WATER LEVEL n.a. W.L. DATE n.a. LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
182	0	0–2	S-1	0.8	1-1-2-3 (3)	POORLY-GRADED SAND WITH SILT, light yellowish-brown, moist, very loose, trace of organics, (SP-SM)		8:30a started drilling
		3–5	S-2	1.6	7-14-15-24 (29)	POORLY-GRADED SAND, medium, yellow, dry, medium dense, (SP)		
177	5							
								very difficult drilling, rock or boulder
172	10							end of difficult drilling
		13–15	S-3	1.4	25-38-50/6" (88)	POORLY-GRADED SAND, fine, pink, dry, very dense, (SP)		
167	15							
		18–20	S-4	1.5	4-4-8-14 (12)	LEAN CLAY, white, moist, stiff, CL		driller encountered water at 18.5' depth PP = 2.8, 2.9, 2.1tsf TV = 0.5, 0.5, tsf
162	20							
		23–25	ST-1	n.a.	n.a.			attempted shelby tube at 23', pushed 6" before refusal, tube mostly sand when brought up, v. small portion of clay at top of tube
157	25							
		28–30	S-5	1.[illegible]	30-50/5½" (80+)	POORLY-GRADED SAND, fine, reddish-yellow, dry, very dense, (SP)		
152	30							

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER
P1160	G2

SHEET 2 OF 2

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 182' (estimated)
DRILLING METHOD AND EQUIPMENT 6-in. HSA, Mobil B-61
DATES: START 31 May 89 FINISH 31 May 89 WATER LEVEL n.a. W.L. DATE n.a. LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
152	30							
147	35	33 / 35	S-6	1.3	24-26-28-25 (54)	WELL-GRADED SAND, yellow, dry, very dense, trace of clay, (SW)		
142	40	38 / 40	S-7	1.3	26-50/5½" (76+)	WELL-GRADED SAND, yellow, moist, very dense, trace of clay, (SW)		
137	45	43 / 45	S-8	1.1	36-50/4" (86+)	POORLY-GRADED SAND, fine, white, dry to moist, very dense, (SP)		
132	50	48 / 50	S-9	2.0	29-34-33-48 (67)	WELL-GRADED SAND, multicolored, wet, very dense, trace of clay, (SW)		
27	55	53 / 55	S-10	2.0	9-29-50/5½" (79+)	POORLY-GRADED SAND, fine, multicolored, wet, very dense, with a clay seam, (SP)		
						end of boring at 55'		11:30a finished drilling

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G3	SHEET 1 OF 6

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 185.0'
DRILLING METHOD AND EQUIPMENT Mud Rotary, Mobil B-61
DATES: START 18 May 89 FINISH 22 May 89 WATER LEVEL n.a. W.L. DATE n.a. LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
185.0	0	0–2	S-1	1.0	2-1-1-1 (2)	POORLY-GRADED SAND, fine, brownish-yellow, wet, very loose, trace of organics, (SP)		8:45a started drilling PID = 1.0 ppm
180.0	5	3–5	S-2	1.2	8-10-25-26 (35)	POORLY-GRADED SAND, fine, reddish-yellow, moist, dense, (SP)		CGI = 0% of LEL
175.0	10	8–10	S-3	1.4	13-13-16-18 (29)	SILTY SAND, white, moist, medium dense, SM		PID = 0 ppm
170.0	15	13–15	S-4	1.3	9-12-9-13 (21)	(A, top 0.9') POORLY-GRADED SAND WITH GRAVEL, fine sand, reddish-yellow, moist, medium dense, (SP) (B, bottom 0.4') ELASTIC SILT, white, dry, very stiff, (MH)		
165.0	20	18–20	S-5	1.7	12-20-26-33 (46)	POORLY-GRADED SAND, fine, reddish-yellow, dry to moist, dense, (SP)		PID = 0 ppm
160.0	25	23–25	S-6	1.8	15-20-29-32 (49)	POORLY-GRADED SAND, fine, pinkish-white, dry to moist, dense, (SP)		
155.0	30	28–30	S-7	1.5	18-39-50/5" (89+)	SILTY SAND, fine, very pale brown, dry, very dense, SM		

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G3	SHEET 2 OF 6

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 185.0'
DRILLING METHOD AND EQUIPMENT Mud Rotary, Mobil B-61
DATES: START 18 May 89 FINISH 22 May 89 WATER LEVEL n.a. W.L. DATE n.a. LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
155.0	30					(A, top 0.5') POORLY-GRADED SAND, coarse, reddish-yellow, wet, medium dense, (SP) (B, middle 1') SILT WITH GRAVEL, white and reddish-yellow, dry, very stiff, gravel subangular - ½ - 1", (ML) (C, bottom 0.3') ELASTIC SILT, white, dry, very stiff, (MH)		PID = 0 ppm
		33 / 35	S-8	1.8	3-8-12-18 (20)			
150.0	35					(A, top 1') WELL-GRADED SAND WITH GRAVEL, reddish-yellow, dry, very dense, gravel subangular - 1/8", (SW) (B, bottom 1') POORLY-GRADED SAND WITH GRAVEL, fine sand, pinkish-white, dry, very dense, gravel subangular - 1/8", (SP)		
		38 / 40	S-9	2.0	19-36-38-35 (74)			
145.0	40					POORLY -GRADED SAND, fine, reddish-yellow, dry to moist, very dense, with a 2" silt seam, (SP)		
		43 / 45	S-10	1.2	41-50/½" (91+)			
140.0	45					POORLY-GRADED SAND, medium, reddish-brown, wet, very dense, with a 1" clay seam, (SP)		PID = 0 ppm water level measured at 46'3" depth (11:45a)
		48 / 50	S-11	2.0	19-28-35-38 (63)			
135.0	50					SILT, brownish-yellow, wet, hard, (ML)		PP = 4.5+, 4.5+ tsf TV = 1.5, 1.5 tsf
		53 / 55	S-12	2.0	19-22-23-30 (45)			
130.0	55					LEAN CLAY, brown and yellow, dry, hard, CL		PP = 4.5+, 4.5+ tsf TV = 1.5, 1.5 tsf
		58 / 60	S-13	2.0	18-29-50/5½" (79+)			
125.0	60							

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G3	SHEET 3 OF 6

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 185.0'
DRILLING METHOD AND EQUIPMENT Mud Rotary, Mobil B-61
DATES: START 18 May 89 FINISH 22 May 89 WATER LEVEL n.a. W.L. DATE n.a. LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
125.0	60							
120.0	65	63 / 65	S-14	1.5	50/5" (≈100+)	ELASTIC SILT, red, dry, hard, (MH)		
115.0	70	68 / 70	S-15	2.0	33-50/5" (83+)	SILT, white, dry, hard, (ML)		PP = 4.5+ tsf
110.0	75	73 / 75	S-16	2.0	19-21-30-51 (51)	LEAN CLAY, reddish-brown and white, dry, hard, (CL)		PP = 4.5+ tsf
105.0	80	78 / 80	S-17	2.0	10-15-24-36 (39)	SILT, white, moist, hard, (ML)		
100.0	85	83 / 85	S-18	2.0	26-29-39-50 (68)	SILT, red, dry, hard, (ML)		PP = 4.5+, 4.5+ tsf
95.0	90	88 / 90	S-19	1.9	16-24-34-50/5" (58)	SILT, light olive gray, moist, dense, (ML)		water level measured at 32' depth (3:45p)

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G3	SHEET 4 OF 6

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 185.0'
DRILLING METHOD AND EQUIPMENT Mud Rotary, Mobil B-61
DATES: START 18 May 89 FINISH 22 May 89 WATER LEVEL n.a. W.L. DATE n.a. LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
95.0	90							
90.0	95	93 / 95	S-20	1.4	26-50/5" (76+)	SILT WITH SAND, gray, dry, hard, (ML)		
		98 / 100	S-21	2.0	19-24-36-50/5" (60)	SILT WITH SAND, gray, wet, hard, (ML)		
85.0	100							
80.0	105							
75.0	110	108 / 110	S-22	1.4	35-56-50/3" (106+)	SILT, red and white, dry, hard, (ML)		19 May 89 water level measured at 70' depth (5:30p)
70.0	115							
65.0	120	118 / 120	S-23	0.4	93/6" (≈100+)	POORLY-GRADED SAND, fine, pinkish-gray, moist, very dense, (SP)		20 May 89 water level measured at 73' depth (10:30a)

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G3	SHEET 5 OF 6

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 185.0'
DRILLING METHOD AND EQUIPMENT Mud Rotary, Mobil B-61
DATES: START 18 May 89 FINISH 22 May 89 WATER LEVEL n.a. W.L. DATE n.a. LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
65.0	120							
60.0	125							
55.0	130	128 / 130	S-24	0.2	83-50/3" (133+)	WELL-GRADED SAND WITH SILT AND GRAVEL, white, moist to wet, very dense, gravel subangular - 3/8", (SW-SM)		
50.0	135							
45.0	140	138 / 140	S-25	0	150/6" (150+)			no sample recovered, fine sand in washings
40.0	145							
35.0	150	148 / 150	S-26	0	81-50/4" (131+)			no sample recovered, fine sand in washings

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G3	SHEET 6 OF 6

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 185.0'
DRILLING METHOD AND EQUIPMENT Mud Rotary, Mobil B-61
DATES: START 18 May 89 FINISH 22 May 89 WATER LEVEL n.a. W.L. DATE n.a. LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
35.0	150							
30.0	155							
		158 / 160	S-27	0.4	150/4" (150+)	LEAN CLAY, white, dry, hard, (CL)		22 May 89 PP = 3.5 tsf TV = 1.9 tsf
25.0	160							
20.0	165							
		168 / 170	S-28	1.3	42-50/5" (92+)	ELASTIC SILT, red, dry, hard, MH		difficult drilling from 168'-169' PP = 4.5+, 4.5+ tsf TV = 2.0 tsf
15.0	170							
10.0	175							
		178 / 180	S-29	1.3	25-50/5" (75+)	FAT CLAY, red and white, dry, hard, CH		PP = 4.5+, 4.5+ tsf TV = 2.0, 2.3 tsf 6:15p finished drilling
5.0	180							

end of boring at 180'

Appendix B.6
SCS (2011)

Hardin-Kight Associates, Inc.
7524 WB&A Road, Suite 100
Glen Burnie, Maryland 21061

Office: (410) 553-0802
Fax #: (410) 553-0808

Record of Soil Exploration

Project Name: Millersville Landfill
Contracted With: SCS Engineers
Project Location: Anne Arundel County, Maryland
Boring Location: N: E:

BORING NO. **SCS-1**
JOB NO. 11199

Surf. Elev.:
Elev. from(4):
Offset Elev:
Offset Dist.:

Hammer Wt. 140 lbs.
Hammer Drop: 30"
Sampler Size: 2"
Offset Direction:

Rock Core Dia.: ----
Hole Diameter: 6"
Boring Method: HSA

Foreman: Summit
Inspector: MC
Date Started: 08/25/11
Date Finished: 08/25/11

Elev.	Soil Description (Color, Moisture, Density, Plasticity, Size Proportions)	Depth	Sample Data: Type	Blow Counts	#	Recovery	Condition	Boring & Sample Notes
	0.0 Light gray, moist, very loose, non-plastic, silty SAND, trace organics USC: (SM)*	0		1 1 2	1	10	I	
	3.0 Orange brown, slightly moist, medium dense, non-plastic, SAND with silt USC: (SP-SM)*	5		10 13 15	2	16	I	
	8.0 Light brown, slightly moist, medium dense, non-plastic, SAND with silt USC: (SP-SM)*	10		5 10 11	3	14	I	
	13.0 Light gray, moist, very stiff, slightly plastic to low plastic, sandy SILT USC: (ML)*	15		7 12 15	4	16	I	
	18.0 Light gray, moist, medium dense, non-plastic, silty SAND USC: (SM)*	20		4 7 8 10	5	18	I	
				7 7 9	6	6	I	
	23.5 Boring Terminated at 23.5 Ft.	25						
		30						

* Visual Description - in general accordance with ASTM D 2488

Notes:

	Water	Caved
Encountered		
Completion		
On	at	
On 08/27 at 48 hrs.	Dry	Pipe

Hardin-Kight Associates, Inc.
7524 WB&A Road, Suite 100
Glen Burnie, Maryland 21061

Office: (410) 553-0802
Fax #: (410) 553-0808

Record of Soil Exploration

Project Name: Millersville Landfill
Contracted With: SCS Engineers
Project Location: Anne Arundel County, Maryland
Boring Location: N: E:

BORING NO. **SCS-2**
JOB NO. 11199

Surf. Elev.:
Elev. from(4):
Offset Elev:
Offset Dist.:

Hammer Wt. 140 lbs.
Hammer Drop: 30"
Sampler Size: 2"
Offset Direction:

Rock Core Dia.: ---
Hole Diameter: 6"
Boring Method: HSA

Foreman: Summit
Inspector: MC
Date Started: 08/25/11
Date Finished: 08/25/11

Elev.	Soil Description (Color, Moisture, Density, Plasticity, Size Proportions)	Depth	Sample Data: Type	Blow Counts	#	Recovery	Condition	Boring & Sample Notes
	0.0 Medium brown, slightly moist, very loose, non-plastic, SAND with silt USC: (SP-SM)*	0		1 1 1	1	12	I	
	3.0 Brown, wet, loose, non-plastic, SAND with silt USC: (SM)*	5		2 2 3	2	16	I	
	8.0 Gray, moist, dense, non-plastic, silty SAND with gravel USC: (SM)*	10		6 13 17	3	12	I	
	14.0 Orange brown, very moist, medium dense, non-plastic, silty SAND USC: (SM)*	15		3 6 10 13	4	14	I	
	17.0 Boring Terminated at 17 Ft.	20						
		25						
		30						

* Visual Description - in general accordance with ASTM D 2488

Notes:

	Water	Caved
Encountered		
Completion		
On	at	
On 08/27 at 48 hrs.	4.6'	Pipe

Hardin-Kight Associates, Inc.
7524 WB&A Road, Suite 100
Glen Burnie, Maryland 21061

Office: (410) 553-0802
Fax #: (410) 553-0808

Record of Soil Exploration

Project Name: Millersville Landfill
Contracted With: SCS Engineers
Project Location: Anne Arundel County, Maryland
Boring Location: N: E:

BORING NO. **SCS-3**
JOB NO. 11199

Surf. Elev.:
Elev. from(4):
Offset Elev:
Offset Dist.:

Hammer Wt. 140 lbs.
Hammer Drop: 30"
Sampler Size: 2"
Offset Direction:

Rock Core Dia.: ---
Hole Diameter: 6"
Boring Method: HSA

Foreman: Summit
Inspector: MC
Date Started: 08/26/11
Date Finished: 08/26/11

Elev.	Soil Description (Color, Moisture, Density, Plasticity, Size Proportions)	Depth	Type	Blow Counts	#	Recovery	Condition	Boring & Sample Notes
	0.0 Brown, slightly moist, very loose, non-plastic, SAND with silt USC: (SP-SM)*	0		1 1 2	1	12	I	
	---, loose	5		3 4 4	2	15	I	
	8.0 Light brown, slightly moist, loose, non- plastic, SAND with gravel USC: (SP)*	10		3 3 4	3	9	I	
	13.0 Orange brown, wet, loose, non-plastic, SAND with silt USC: (SP-SM)*	15		3 3 4	4	16	I	
	18.0 Gray, moist, stiff, medium plastic, lean CLAY with sand USC: (CL)*	20		4 5 5	5	12	I	
				3 4 5 5	6	20	I	
	24.0 Boring Terminated at 24 Ft.	25						
		30						

* Visual Description - in general accordance with ASTM D 2488

Notes:

	Water	Caved
Encountered		
Completion		
On at		
On 08/28 at 48 hrs.	14.6'	Pipe

Hardin-Kight Associates, Inc.
7524 WB&A Road, Suite 100
Glen Burnie, Maryland 21061

Office: (410) 553-0802
Fax #: (410) 553-0808

Record of Soil Exploration

Project Name: Millersville Landfill
Contracted With: SCS Engineers
Project Location: Anne Arundel County, Maryland
Boring Location: N: E:

BORING NO. **SCS-4**
JOB NO. 11199

Surf. Elev.:	Hammer Wt. 140 lbs.	Rock Core Dia.: ---	Foreman: Summit
Elev. from(4):	Hammer Drop: 30"	Hole Diameter: 6"	Inspector: MC
Offset Elev:	Sampler Size: 2"	Boring Method: HSA	Date Started: 08/26/11
Offset Dist.:	Offset Direction:		Date Finished: 08/26/11

Elev.	Soil Description (Color, Moisture, Density, Plasticity, Size Proportions)	Depth	Sample Data: Type	Blow Counts	#	Recovery	Condition	Boring & Sample Notes
	0.0 Brown, moist, very loose, non-plastic, SAND with silt USC: (SP-SM)*	0		1 1 2	1	16	I	
	---, loose	5		4 5 5	2	12	I	
		10		4 4 5	3	12	I	
	---, medium dense	15		5 5 6	4	14	I	
	18.0 Light brown, slightly moist, medium dense, non-plastic, SAND, trace gravel USC: (SP)*	20		5 6 8	5	12	I	
	23.0 Red, mottled gray, moist, medium plastic, lean CLAY with sand USC: (CL)*	25		3 5 8	6	14	I	
		30		3 5 7	7	12	I	
	33.0			3 5 8	8	10	I	

* Visual Description - in general accordance with ASTM D 2488

Notes:

	Water	Caved
Encountered		
Completion		
On	at	
On 08/28 at 48 hrs.	23.2'	Pipe

Hardin-Kight Associates, Inc.
7524 WB&A Road, Suite 100
Glen Burnie, Maryland 21061

Office: (410) 553-0802
Fax #: (410) 553-0808

Record of Soil Exploration

Project Name: Millersville Landfill
Contracted With: SCS Engineers
Project Location: Anne Arundel County, Maryland

BORING NO. **SCS-4**
JOB NO. 11199

Elev.	Soil Description Color, Moisture, Density Plasticity, Size Proportions	Depth	Sample Data: Type	Blow Counts	#	Recovery	Condition	Boring & Sample Notes
	Boring Terminated at 33 Ft.							
		35						
		40						
		45						
		50						
		55						
		60						
		65						
		70						
		75						

* Visual Description - in general accordance with ASTM D 2488

Hardin-Kight Associates, Inc.
7524 WB&A Road, Suite 100
Glen Burnie, Maryland 21061

Office: (410) 553-0802
Fax #: (410) 553-0808

Record of Soil Exploration

Project Name: Millersville Landfill
Contracted With: SCS Engineers
Project Location: Anne Arundel County, Maryland
Boring Location: N: E:

BORING NO. **SCS-5**
JOB NO. 11199

Surf. Elev.:	Hammer Wt. 140 lbs.	Rock Core Dia.: ---	Foreman: Summit
Elev. from(4):	Hammer Drop: 30"	Hole Diameter: 6"	Inspector: MC
Offset Elev:	Sampler Size: 2"	Boring Method: HSA	Date Started: 08/26/11
Offset Dist.:	Offset Direction:		Date Finished: 08/26/11

Elev.	Soil Description (Color, Moisture, Density, Plasticity, Size Proportions)	Depth	Sample Data: Type	Blow Counts	#	Recovery	Condition	Boring & Sample Notes
	0.0 Medium brown, slightly moist, loose, non-plastic, silty SAND with rock fragments USC: (SM)*	0		2 4 4	1	9	I	
	3.0 Brown, gray, moist, very dense, low plastic, clayey SAND USC: (CL)*	5		15 23 31	2	14	I	
	8.0 Light gray, slightly moist, medium dense, silty SAND USC: (SM)*	10		3 6 7	3	9	I	
	13.0 Light gray, slightly moist, medium dense, non-plastic, SAND USC: (SP)*	15		8 6 9	4	12	I	
		20		15 9 9	5	14	I	
	24.0 Violet, slightly moist, medium dense, non-plastic, SAND with silt USC: (SP-SM)*	25		6 10 15	6	14	I	
	28.0 Light brown, slightly moist, medium dense, non-plastic, SAND with silt USC: (SP-SM)*	30		6 7 9	7	11	I	
	32.5 Light gray, slightly moist, medium							

* Visual Description - in general accordance with ASTM D 2488

Notes:

	Water	Caved
Encountered		
Completion		
On	at	
On 08/28 at 48 hrs.	Dry	32.0'

Hardin-Kight Associates, Inc.
7524 WB&A Road, Suite 100
Glen Burnie, Maryland 21061

Office: (410) 553-0802
Fax #: (410) 553-0808

Record of Soil Exploration

Project Name: Millersville Landfill
Contracted With: SCS Engineers
Project Location: Anne Arundel County, Maryland

BORING NO. **SCS-5**
JOB NO. 11199

Elev.	Soil Description (Color, Moisture, Density, Plasticity, Size Proportions)	Depth	Sample Data: Type	Blow Counts	#	Recovery	Condition	Boring & Sample Notes
	dense, non-plastic, silty SAND USC: (SM)*			6 9 11	8	12	I	
	35.0 Boring Terminated at 35 Ft.	35						
		40						
		45						
		50						
		55						
		60						
		65						
		70						
		75						

* Visual Description - in general accordance with ASTM D 2488

Hardin-Kight Associates, Inc.
7524 WB&A Road, Suite 100
Glen Burnie, Maryland 21061

Office: (410) 553-0802
Fax #: (410) 553-0808

Record of Soil Exploration

Project Name: Millersville Landfill
Contracted With: SCS Engineers
Project Location: Anne Arundel County, Maryland
Boring Location: N: E:

BORING NO. **SCS-6**
JOB NO. 11199

Surf. Elev.:
Elev. from(4):
Offset Elev:
Offset Dist.:

Hammer Wt. 140 lbs.
Hammer Drop: 30"
Sampler Size: 2"
Offset Direction:

Rock Core Dia.: ---
Hole Diameter: 6"
Boring Method: HSA

Foreman: Summit
Inspector: MC
Date Started: 08/29/11
Date Finished: 08/29/11

Elev.	Soil Description (Color, Moisture, Density, Plasticity, Size Proportions)	Depth	Sample Data: Type	Blow Counts	#	Recovery	Condition	Boring & Sample Notes
	0.0 Medium brown, very moist, soft, low plastic, sandy SILT USC: (ML)*	0		1 1 2	1	16	I	
	5.0 Light orange brown, moist, dense, non-plastic, SAND with silt and rock fragments USC: (SP-SM)*	5		10 16 24	2	15	I	
	8.0 Light gray, slightly moist, medium dense, non-plastic, SAND with silt USC: (SP-SM)*	10		8 10 15	3	15	I	
	14.0 Light gray, mottled orange, moist, loose, slightly plastic to low plastic, silty SAND USC: (SM)*	15		3 5 5	4	15	I	
	18.0 Light brown, moist, medium dense, non-plastic, SAND with silt USC: (SP-SM)*	20		6 10 8	5	16	U	
	23.0 Light orange brown, moist, very dense, non-plastic, SAND with silt USC: (SP-SM)*	25		12 22 32	6	16	I	
	---, medium dense	30		10 12 12	7	16	I	

* Visual Description - in general accordance with ASTM D 2488

Notes:

	Water	Caved
Encountered		
Completion		
On	at	
On 08/31	at 48 hrs. 51.9'	Pipe

Hardin-Kight Associates, Inc.
7524 WB&A Road, Suite 100
Glen Burnie, Maryland 21061

Office: (410) 553-0802
Fax #: (410) 553-0808

Record of Soil Exploration

Project Name: Millersville Landfill
Contracted With: SCS Engineers
Project Location: Anne Arundel County, Maryland

BORING NO. **SCS-6**
JOB NO. 11199

Elev.	Soil Description (Color, Moisture, Density, Plasticity, Size Proportions)	Depth	Sample Data: Type	Blow Counts	#	Recovery	Condition	Boring & Sample Notes
	---, very moist	35		12 8 9	8	18	I	
	38.0 Violet, moist, medium dense, non-plastic, SAND USC: (SP)*	40		4 12 11	9	15	I	
	43.0 Light gray, moist, very stiff, slightly plastic, sandy SILT USC: (ML)*	45		8 10 9	10	15	I	
	48.0 Light gray, mottled violet, very stiff, medium plastic, lean CLAY with sand USC: (CL)*	50		8 8 10	11	16	I	
				18 9 9	12	16	I	
	55.0 Boring Terminated at 55 Ft.	55						
		60						
		65						
		70						
		75						

* Visual Description - in general accordance with ASTM D 2488

KEY TO SYMBOLS

Symbol Description

Strata symbols

Silty sand

Poorly graded sand with silt

Silt

Poorly graded sand

Low plasticity clay

Misc. Symbols

Water table at 24 hrs.

C Depth to caving

Soil Samplers

Standard penetration test

Notes:

1. Borings were completed on 08/25/11, 08/26/11, and 08/29/11.

2. Water readings are listed on logs.

Appendix B.7
Geosyntec (2017)

BORING/WELL CONSTRUCTION LOG

Geosyntec consultants

Boring ID	B1/Pz-1				
Project No.	ME1418	Geologist	MLS	Ground Elev	155.45 ft
Project Name	Subcell 9.2 Geotechnical Investigation	Drilling Method	HSA	Top of Casing	157.35 ft
Location	Millersville Landfill	Borehole Dia.	6"	Depth to Water	Dry ft
Drilling Co.	Eichelberger	Hammer/drop	Auto/140 lbs/30"	Date	1/10/17
Driller/helper(s)	Mike and Will	Northing	457810.798		
Rig type	D50	Easting	895468.107		
Completion	N/A				

Reviewed by: AS

Progress	Depth (ft)	Blows/6-inches	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
910		2 0 0 1	Organics from 0-3" Well graded sand. Yellow Orange to Brown. Very loose, fine to coarse, moist.	SW		24	15					
		0 1 1 2	Same as above, Trace gravel <5%	SW		24	17					
	5	1 1 2 2	Same as above, distinct light brown layers, very loose to loose	SW		24	19					5
		2 2 3 3	Same as above, becoming more gravelly (10-15%), loose	SW		24	19					
	10	5 6 5 5	Well graded Sand with gravel, medium dense. Brown to yellow orange. Fine to coarse grained, moist.	SW		24	20					10

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Geosyntec consultants

BORING LOG

Boring ID B1/Pz-1 Project No. ME1418 Geologist MLS Date 1/10/17

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
		5	Same as above, trace gravel, loose	SW		24	20					
		3										
		4										
		4										
		3	Same as above, medium dense	SW		24	16					
		5										
		6										
		6										
		5	Same as above									
		3										
		4										
	15	4										15
			Loose	SW		24	16					
			Brown, Medium dense	SW								
		4	Stiff, lean Clay at 10-14". Gray with some purple staining,			24	18					
		4	low Plasitcity, dry to moist.	CL								
		7										
		10		SW-SC								
		7	Very stiff, lean Clay. Low plasticity with some purple staining,	CL		24	16					
		7	dry to moist									
		10										
		11										
	20											20
		5	Well graded Sand with trace gravel 0-6". Yellow orange, medium	SW								
		5	fine to coarse grained.			24	21					
		9	Lean Clay. Red gray and stiff. Low Plasitcity and dry to moist.	CL								
		11										
		8	Same as above, red, hard	CL		24	18					
		11										
		22										
		23										
		7	Red-gray, lean Clay	CL		24	24					
		12										
		15										
	25	19										25

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Geosyntec consultants

BORING LOG

Boring ID B1/Pz-1 Project No. ME1418 Geologist MLS Date 1/10/17

Progress	Depth (ft)	Strata	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
		14 18 18 24	Same as above, hard	CL		24	15					
		12 17 21 26	Red gray lean Clay, hard	CL		24	24					
	30	7 17 16 23	Same as above	CL		24	24					30
		15 21 27 28	Same as above	CL		24	24					
		11 14 19 20	Same as above Some brown color	Cl		24	22					
	35											35
		17 22 25 31	lean Clay with some very fine to fine sands	CL		24	24					
		8 8 12 15	Clayey Sand. Poorly graded, fine to medium grained, medium dense, moist Sandy Clay. Gray, very stiff, mosit, Low plastiscity.	SP-SC CL		24	23					
	40											40

Geosyntec consultants

BORING LOG

Boring ID B1/Pz-1 Project No. ME1418 Geologist MLS Date 1/10/17

Progress	Depth (ft)	Strata	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
		10 10 12 11	Same as above	CL		24	23					
			Clayey Sand 19-24". Poorly graded, medium dense, yellow-tan	SP-SC								
		9 9 11 20	Sandy Clay. Gray with fine sands, very stiff, low plastiscity, moist	CL		24	20					
1130 1300		8 9 10 15	Poorly graded fine grained Sand. Medium dense, trace clays, tan to white, dry to moist.	SP		24	24					
	45											45
		8 12 15 19	Lean sandy Clay. Gray with some purple staining. Very stiff, low plastiscity, dry to moist.	CL		24	24					
		15 22 25 34	Poorly graded Sand. Fine to medium grained. Tan with some purple stains, dense, dry to moist	SP		24	20					
	50											50
		13 18 17 16	Same as above	SP		24	19					
			Clay with fine sands. Gray, low plastiscity, lean, hard, dry to moist.	CL								
			Same as above	CL								
			Poorly graded Sands. Find to medium grained. Yellow-orange to tan-white. Very dense, dry to moist, little fines.	SP		24	18					
		21 24 29 31	Same as above, no fines	SP		24	13					
	55											55

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Geosyntec consultants

BORING LOG

Boring ID B1/Pz-1 Project No. ME1418 Geologist MLS Date 1/10/17

Progress	Depth (ft)	Strata	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
		15 16 28 33	Same as above, tan with some purple staining	SP		24	15					
		36 39 41 50/3	Same as above Sandy lean Clay. Gray, low plastiscity, very hard.	SP CL		21	21					
	60		End of borehole. Well Construction Backfilled with bentonite to 50' Screen interval: 40-50' Sandpack: 38-50' Bentonite: 31-38' Backfilled with cuttings to Surface Guaged at 51.5' from Top of Casing									60
	65											65
	70											70

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BORING/WELL CONSTRUCTION LOG

Geosyntec consultants

Boring ID	B2				
Project No.	ME1418	Geologist	MLS	Ground Elev	142.74 ft
Project Name	Subcell 9.2 Geotechnical Investigation	Drilling Method	HSA	Top of Casing	N/A ft
Location	Millersville Landfill	Borehole Dia.	6"	Depth to Water	Dry ft
Drilling Co.	Eichelberger	Hammer/drop	Auto/140lbs/30"	Date	1/5/17
Driller/helper(s)	Mike and Will	Northing	457805.703		
Rig type	D50	Easting	895875.783		
Completion	N/A				

Reviewed by: AS

Progress	Depth (ft)	Blows/6-inches	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
1400		WOH	Organics									
		1	Poorly graded Sand with some silt. Fine to medium grained, brown,	SP-SM		24	21					
		1	moist. Very loose									
		1										
		1	Same as above, some clay	SP								
		1				24	14					
		3										
		24										
			Poorly graded Sand. Some fines, very loose, brown, moist.	SP-SC								
			Fine to medium grained, Trace gravel.	SP								
		2	Same as above, some clay.									
		3										
		3										
	5	5										5
		3	Same as above	SP		24	12					
		3										
		5										
		5										
		5	Same as above, yellow orange to brown.	SP		24	14					
		6										
		6										
		7										
	10											10

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Geosyntec consultants

BORING LOG

Boring ID B2 Project No. ME1418 Geologist MLS Date 1/5/17

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
		3 9 10 12	Lean, very stiff Clay. Gray with purple staining. Medium dense, dry, low plasticity.	SP CL		24	23					
		7 19 16 20	Same as above	CL		24	12					
		6 10 13 16	Same as above, some very fine sands	CL		24	20					
1500	15											15
		13 14 6 11	Same as above Very fine Sand with some clay. Loose, dry, white to tan.	CL SP-SC		24	24					
		10 8 19 14	clayey Sand. Very fine, medium dense, dry	SP-SC		24	24					
	20											20
		19 13 19 24	Same as above, some purple staining, dense	SP-SC		24	22					
		9 22 23 29	Same as above, some lean clay. yellow-orange	SP-SC		24	22					
		12 16 28 30	clayey Sand. Yellow orange to light brown. Very fine, dense, dry, slight purple staining, poorly graded.	SP-SC		24	23					
	25											25

Geosyntec consultants

BORING LOG

Boring ID B2 Project No. ME1418 Geologist MLS Date 1/6/17

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
				SP-SC								
		13 26 27 25	Same as above lean, firm Clay. Gray with trace sand, damp. Medium Plasticity.	CL		24	24					
		12 21 22 23	poorly graded Sand with little clay. Off white, dense, dry, fine grained.	SP-SC		24	24					
1630 830	30	13 16 18 20	Same as above light brown to yellow orange trace clay	SP-SC		24	24					30
		11 21 22 18	Same as above	SP-SC		24	24					
	35	10 14 24 26	Same as above hard, lean Clay with very fine sand. Dense, gray, moist, low plasticity. Some silt.	SP-SC CL		24	23					35
		16 27 26 31	sandy lean Clay. Very dense, very hard, low plasticity, gray. Dry to moist.	CL		24	23					
	40	27 28 29 44	Same as above, slightly more dry	CL		24	16					40

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BORING LOG

Boring ID B2 Project No. ME1418 Geologist MLS Date 1/6/17

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
		23 31 37 50/3	Same as above Silty sand lense. Some light brown to purple staining.	CL SP-SM CL		21	21					
		29 36 49 60/3	poorly graded silty Sand. Light brown to tan, very dense, moist. Fine to medium grained.	SP-SM		21	9					
	45	19 22 31 39	poorly graded Sand. Yellow-orange, very dense, moist. Fine to medium grained. Trace to no fines.	SP		24	21					45
		10 18 15 21	Same as above, dense	SP SP		24 24	18 24					
		10 12 16 22	firm, lean Clay with little sand. Gray, moist, low plasticity. sandy Clay silty sand.	CL SP-SM								
1000	50		End of borehole. Borehole abandoned with 1/2 bag of bentonite at bottom, followed by 2 bags of Portland Type I/II, then 1/2 bag of bentonite on top of that. Hydrated and backfilled to surface with cuttings.									50
	55											55

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BORING/WELL CONSTRUCTION LOG

Geosyntec consultants

Boring ID	B3/Pz-6				
Project No.	ME1418	Geologist	MLS	Ground Elev	173.38 ft
Project Name	Subcell 9.2 Geotechnical Investigation	Drilling Method	HSA	Top of Casing	175.07 ft
Location	Millersville Landfill	Borehole Dia.	6"	Depth to Water	Dry ft
Drilling Co.	Eichelberger	Hammer/drop	Auto/140lbs/30"	Date	1/6/17
Driller/helper(s)	Mike and Will	Northing	457581.222		
Rig type	D50	Easting	895690.961		
Completion	Stick up				

Reviewed by: AS

Progress	Depth (ft)	Blows/6-inches	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
1145		WOH/24"	black soil and organics moist silty Sand. Fine grained, very loose, brown, poorly graded.	SP-SM		24	14					
		8 7 5 5	well graded Sand. Fine to coarse. Yellow-orange, very loose, dry, some gravel	SW		24	21					
		3 7 8 10	Same as above	SW		24	15					
	5		poorly graded Sand with some fines. Tan, very fine, little gravel, dry, medium dense	SP-SC								5
		8 9 12 12	poorly graded Sand. Fine to medium grained, dry to moist, yellow-orange, loose to dense. Trace gravel and ironstone.	SP		24	20					
		4 5 8 9	silty Sand. Very loose with some organics, moist, fine grained.	SP		24	18					
			lean, firm Clay. Gray with purple staining.	CL								
	10											10

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BORING LOG

Boring ID B3/Pz-6 Project No. ME1418 Geologist MLS Date 1/6/17

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
		4 4 5 6	well graded Sand. Fine to coarse grained, dry, loose, trace gravel yellow orange to reddish brown	SW		24	15					
		4 5 5 8	Same as above, some tan layers, no gravel	SW		24	16					
		5 4 7 7	Same as above	SW		24	20					
	15											15
		4 5 6 8	stiff, lean Clay with some intervals of coarse sands. Purple staining, low plasticity, dry	CL		24	21					
		5 3 4 9	well graded Sand. Loose, moist to dry, yellow, trace gravel, fine to coarse grained. lean Clay poorly graded Sand, trace gravel, fine to medium grained, red to brown, loose, moist	SW CL SP		24	21					
	20											20
		2 3 2 2	Same as above, medium grained. Some ironstones (gravel size) yellow orange to light brown	SP		24	14					
		3 3 4 3	Same as above, some fine grains	SP		24	18					
		3 4 8 10	well graded Sand. Fine to coarse grained, loose, dry to moist.	SW		24	17					
	25											25

Geosyntec consultants

BORING LOG

Boring ID B3 Project No. ME1418 Geologist MLS Date 1/6/17

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
		5 10 8 7	Same as above, yellow orange to red brown, medium dense trace clay	SW		24	16					
		5 6 7 8	Same as above trace clay	SW		24	18					
1245	30	4 4 6 7	some gravel stiff, lean Clay with some sands. Purple staining, well graded	CL SW		24	20					30
		5 6 7 9	lean Clay with fine sands. Low plasticity, dry to moist, gray with purple staining.	CL		24	21					
	35	5 5 8 9	well graded Sand. Yellow-orange, medium dense, fine to coarse grained, dry	SW		24	18					35
		6 10 11 14	Same as above	SW		24	15					
	40	4 9 8 8	Same as above clayey Sand. Moist to wet	SW SW-SC		24	16					40

Geosyntec consultants

BORING LOG

Boring ID B3/Pz-6 Project No. ME1418 Geologist MLS Date 1/9/16

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
		3 4 4 8	well graded Sand. Yellow-orange, loose, fine to coarse grained, moist	SW		24	21					
			lean, firm Clay. Purple staining, low plasticity, gray	CL								
		4 7 12 16	Same as above			24	23					
			clayey Sand	SW-SC								
				CL								
		7 5 8 15	well graded Sand. Fine to coarse grained, medium dense, yellow-orange, moist	SW		24	17					
	45		stiff, lean Clay. Gray with reddish purple coloring, low plasticity	CL								45
		4 6 16 13	Same as above	CL		24	15					
		10 13 10 15	sandy Clay. Very stiff	CL		24	24					
	50	7 7 11 12	Same as above	CL		24	15					50
		12 11 13 14	poorly graded Sand with clay. Fine to medium grained, medium dense, moist, off white	SP-SC		24	24					
		8 8 5 9	Same as above	SP-SC		24	20					
	55											55

Geosyntec consultants

BORING LOG

Boring ID B3/Pz-6 Project No. ME1418 Geologist MLS Date 1/9/17

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
		7 8 12 15	Same as above	SP-SC		24	16					
		9 9 10 11	Same as above	SP-SC		24	23					
			sandy lean Clay. Low plasticity, moist, very stiff, gray	CL								
	60	8 7 9 14	clayey Sand. Poorly graded	SP-SC		24	24					60
			Clay with some fine to medium grained sand	CL								
		16 14 12 24	Same as above, becoming less sandy, dry to moist	CL		24	16					
		4 7 9 15	Same as above			24	24					
	65		clayey Sand. Poorly graded	SP-SC								65
			Clay with sand. Lean, very stiff, gray, moist to dry	CL								
		11 14 14 19	Same as above, becoming less sandy	CL		24	23					
		10 9 11 24	clayey Sand. Poorly graded, medium dense, fine to medium grained, moist, white to gray	SP-SC		24	7					
	70											70

Geosyntec consultants

BORING LOG

Boring ID B3/Pz-6 Project No. ME1418 Geologist MLS Date 1/9/17

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
		7	Same as above	SP-SC		24	23					
		9										
		10	Clay with some sand. Lean, very stiff, dry to moist, gray	CL								
		15										
		10	well graded Sand with clay. Fine to coarse grained, medium	SW-SC		24	16					
		13	dense, moist, yellow-orange									
		15										
		19	sandy Clay. Lean, Low plasticity, dry to moist, very stiff, gray	CL								
		21	Same as above	CL		12	12					
		26										
			End of borehole.									
1530	75											75
	80											80
	85											85

Well construction
Backfilled with cuttings to 52'
Screen Interval: 42-52'
Sandpack: 40-52'
Bentonite: 35-40'

Gauged at 53.24' from Top of Casing
5 bags of sand and 3 bags of bentonite used
Backfilled with cuttings to surface

Privileged and Confidential
Attorney-Client Work Product

BORING/WELL CONSTRUCTION LOG

Geosyntec consultants

Boring ID	B4				
Project No.	ME1418	Geologist	MLS	Ground Elev	180.82 ft
Project Name	Subcell 9.2 Geotechnical Investigation	Drilling Method	HSA	Top of Casing	N/A ft
Location	Millersville Landfill	Borehole Dia.	6"	Depth to Water	47 ft
Drilling Co.	Eichelberger	Hammer/drop	Auto/140lbs/30"	Date	1/4/17
Driller/helper(s)	Mike and Will	Northing	457152.520		
Rig type	D50	Easting	895675.375		
Completion	N/A				

Reviewed by: AS

Progress	Depth (ft)	Blows/6-inches	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
1500		WOH/18" 1	fine to medium grained Sand. Moist, poorly graded, very loose light brown	SP		24	20					
			Same as above, some gravel									
		1 1 2 2		SP		24	16					
		6 7 5 7	well graded Sand. Dry with some staining, medium dense, fine to coarse grained, light brown to tan, some gravel	SW		24	16					
	5											5
		8 8 11 13	fine Sand	SW		24	12					
		5 8 12 11	fine to coarse Sand. Dry to moist	SW		24	18					
	10											10

Geosyntec consultants

BORING LOG

Boring ID B4 Project No. ME1418 Geologist MLS Date 1/4/17

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
		6 8 12 11	Same as above	SW		24	18					
		8 14 15 12	Same as above some gravel lean Clay. Medium dense, low plastiscity, gray, moist	SW CL		24	21					
	15	8 13 13 23	well graded Sand with some clay. Medium dense, light brown to tan with purple staining. Fine to coarse grained	SW-SC		24	20					15
		20 16 19 24	Same as above, trace clay becoming more fine grained	SW		24	24					
		10 17 19 20	well graded Sand. Fine to coarse grained, medium dense, moist, yellow-orange to tan	SW		24	15					
1600 815	20	7 13 22 35	Same as above lean Clay. Medium dense, low plastiscity, gray, moist	 CL		24	22					20
		12 13 34 44	poorly graded Sand. Moist, dense, fine to medium grained, yellow-orange to purple lean Clay well graded Sand. Moist, dense, gray to tan, fine to medium grained	SP CL SW		24	22					
		8 20 35 39	Same as above lean Clay	SW CL		24	21					
	25											25

Geosyntec consultants

BORING LOG

Boring ID B4 Project No. ME1418 Geologist MLS Date 1/5/17

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
			well graded Sand. Fine to medium grained, dense, moist, trace clay	SW								
		30 40 38 41	fine to coarse Sand. Yellow-orange	SW		24	12					
		27 34 44 46	poorly graded Sand. Fine grained, tan, dense, moist	SP		24	22					
	30	20 31 37 40	well graded Sand. Fine to medium grained, dense, moist, some coarse grains, yellow-orange	SW		24	21					30
		22 39 41 44	Same as above	SW		24	19					
	35	24 37 44 46	well graded Sand. Fine to coarse grained, moist, yellow-orange, trace staining	SW		24	16					35
		29 40 45 43	Same as above trace gravel	SW		24	18					
1000		28 36 38 41	Same as above little clay dry	SW		24	24					
	40											40

Geosyntec consultants

BORING LOG

Boring ID B4 Project No. ME1418 Geologist MLS Date 1/5/17

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
		30 33 38 45	Same as above	SW		24	6					
		32 38 48 50	fine to coarse Sand. Yellow-orange to rusty orange	SW		24	20					
		20 22 30 40	Same as above, trace gravel, moist	SW		24	15					
	45		lean Clay. Low plastiscity, mosit	CL								45
			clayey Sand. Fine grained	SW-SC								
		33 31 43 48	well graded Sand. Moist to wet, dense, fine to coarse grained, tan to yellow-orange, trace clay	SW		24	16					
		12 17 24 28	Same as above, medium dense, wet	SW		24	17					
	50	10 12 32 34	well graded Sand. Fine to coarse grained, medium dense, wet, yellow-orange, trace gravel	SW		24	23					50
		28 34 39 41	Same as above, dense becoming more coarse	SW		24	24					
		15 22 26 30	Same as above, some gravel	SW		24	24					
	55											55

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Geosyntec consultants

BORING LOG

Boring ID B4 Project No. ME1418 Geologist MLS Date 1/5/17

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
			clayey Sand	SW-SC								
		26 33 39 44	well graded Sand with some gravel	SW		24	24					
		29 34 38 46	well graded Sand. Fine to coarse grained, dense, wet, yellow-orange	SW		24	24					
			some clay with purple staining	SW-SC								
1110	60		End of Borehole.									60
			Borehole abandoned with 1/2 bag of bentonite on bottom followed by 3 bags of Portland type I/II and then 1/2 bag of bentonite. Hydrated and backfilled to surface with cuttings.									
	65											65
	70											70

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Attorney-Client Work Product

BORING/WELL CONSTRUCTION LOG

Geosyntec consultants

Boring ID	B5				
Project No.	ME1418	Geologist	MLS	Ground Elev	186.15 ft
Project Name	Subcell 9.2 Geotechnical Investigation	Drilling Method	HSA	Top of Casing	N/A ft
Location	Millersville Landfill	Borehole Dia.	6"	Depth to Water	8, 28 ft
Drilling Co.	Eichelberger	Hammer/drop	Auto/140lbs/30"	Date	1/4/17
Driller/helper(s)	Mike and Will	Northing	456987.536		
Rig type	D50	Easting	895519.289		
Completion	N/A				

Reviewed by: AS

Progress	Depth (ft)	Blows/6-inches	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
1030		WOH/18"	organics			24	21					
		1	poorly graded, fine Sand, moist, very loose, brown, trace gravel	SP								
		2	Same as above, some gravel, loose	SP		24	21					
		3										
		6										
		10										
		9	fine Sand with gravel. Yellow brown, dry to moist, dense	SW		24	18					
		20										
		23										
	5	21										5
		16	well graded Sand with gravel. Dry to moist, dense, light brown to brown	SW		24	18					
		25										
		21										
		27										
		17	well graded, light brown Sand with trace clay. Dense, wet	SW		24	20					
		23										
		21										
		24	clayey Sand	SC								
			gravelly Sand	SW								
	10											10

Geosyntec consultants

BORING LOG

Boring ID B5 Project No. ME1418 Geologist MLS Date 1/4/17

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
		13 13 27 25	well graded Sand. Medium to coarse grained, wet, dense, yellow brown	SW		24	24					
		9 17 22 26	Same as above very fine to fine Sand with some layering. Dry to moist, poorly graded, dense	SW		24	16					
		8 7 14 22	fine to medium Sand. Yellow brown	SW		16	12					
	15											15
		7 7 14 21	well graded Sand. Medium grained, dry to moist, yellow brown	SW		24	10					
		12 15 17 22	well graded fine to coarse Sand. Reddish yellow with some layering, moist	SW		24	14					
	20											20
		9 11 15 20	Same as above, medium dense trace clay	SW		24	10					
		18 24 28 33	Same as above	SW		24	16					
		14 31 42 47	poorly graded, fine to medium grained Sand with some layering. moist, dense, red to yellow	SP		24	20					
	25											25

Geosyntec consultants

BORING LOG

Boring ID B5 Project No. ME1418 Geologist MLS Date 1/4/17

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
		22 34 48 50/1	Same as above	SP		24	19					
		10 26 28 31	Same as above, brown, wet, very dense	SP		24	20					
	30		lean Clay	CL								30
		23 26 32 31	lean Clay. Low plasticity, moist, purple to gray,	CL		24	14					
			poorly graded, fine to medium grained Sand with some layering. moist, dense, brown	SP								
		17 14 23 29	Same as above trace clay	SP		24	6					
		9 11 19 28	Same as above lean Clay. Low plasticity, dense, moist to dry, gray with some purple redox features	SP CL		24	24					
	35											35
		32 45 50/3"	poorly graded, fine to medium grained Sand. Moist, medium dense, red to yellow	SP		15	8					
		21 49 50/3"	Same as above	SP		15	15					
			Refusal. End of borehole. Borehole abandoned with 1/2 bag of bentonite at bottom and 4 bags of Portland type I/II to surface.									
	40											40

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Attorney-Client Work Product

BORING/WELL CONSTRUCTION LOG

Geosyntec consultants

Boring ID	Pz-2				
Project No.	ME1418	Geologist	MLS	Ground Elev	185.1 ft
Project Name	Subcell 9.2 Geotechnical Investigation	Drilling Method	HSA	Top of Casing	188.1 ft
Location	Millersville Landfill	Borehole Dia.	6"	Depth to Water	Dry ft
Drilling Co.	Eichelberger	Hammer/drop	Auto/140lbs/30"	Date	1/17/17
Driller/helper(s)	Mike and Will	Northing	457084.023		
Rig type	D50	Easting	895881.380		
Completion	Stick up				

Reviewed by: AS

Progress	Depth (ft)	Blows/6-inches	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
		WOH/18" 1	poorly graded silty Sand with trace gravel. Fine grained, very loose, moist, some organics, light brown to brown	SP-SM		24	18					
	5	10 15 17 22	well graded Gravel with medium to coarse grained sand Dense, yellow-orange, moist	GW		24	18					5
	10											10

Geosyntec consultants

BORING LOG

Boring ID Pz-2 Project No. ME1418 Geologist MLS Date 1/17/17

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
		8 12 16 18	poorly graded Sand. Medium dense, moist, red brown, fine to medium grained	SP		24	21					
	15	7 19 23 27	Same as above	SP		24	22					15
			sandy lean Clay. Stiff, low plasticity	CL								
			well graded Sand. Fine to coarse grained, medium dense, moist to dry	SW								
	20	17 23 33 41	dense, with some light brown banding, moist	SW		24	20					20
	25											25

Geosyntec consultants

BORING LOG

Boring ID Pz-2 Project No. ME1418 Geologist MLS Date 1/17/17

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
		10 19 32 31	Same as above	SW		24	19					
		11 24 33 40	poorly graded Sand. Fine to medium grained, moist, dense, red brown to yellow-orange	SP		24	18					
		6 27 31 48	Same as above	SP		24	19					
	30											30
		48 14 50 55/2	Same as above	SP		22	11					
		30 37 41 46	well graded Sand, fine to coarse grained, moist, very dense, yellow-orange	SW		24	22					
	35											35
			End of borehole.									
	40											40

Well Construction

Screen Interval: 25-35'
Sandpack: 23-35'
Bentonite: 19-23'
Backfilled with cuttings to surface

Gauged at 37.83' from Top of Casing
5 bags of sand used and 1 bag of bentonite

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Attorney-Client Work Product

BORING/WELL CONSTRUCTION LOG

Geosyntec consultants

Boring ID	Pz-3				
Project No.	ME1418	Geologist	MLS	Ground Elev	173.02 ft
Project Name	Subcell 9.2 Geotechnical Investigation	Drilling Method	HAS	Top of Casing	175.6 ft
Location	Millersville Landfill	Borehole Dia.	6"	Depth to Water	35 ft
Drilling Co.	Eichelberger	Hammer/drop	Auto/140lbs/30"	Date	1/18/17
Driller/helper(s)	Mike and Will	Northing	457396.397		
Rig type	D50	Easting	895549.48		
Completion	Stick up				

Reviewed by: AS

Progress	Depth (ft)	Blows/6-inches	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
1115		WOH	organics									
			poorly graded Sand with some fines. Fine to medium grained, very loose, moist, light brown	SP		24	20					
	5	2 3 3 9	Same as above, becoming less fines	SP		24	21					5
	10											10

Geosyntec consultants

BORING LOG

Boring ID Pz-3 Project No. ME1418 Geologist MLS Date 1/18/17

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
		15 30 24 20	well graded Sand. Fine to coarse grained, moist, very dense, yellow-orange to tan	SW		24	18					
	15	16 37 32 27	Same as above	SW		24	19					15
	20	19 28 31 29	Same as above, some clay and gravel becoming more coarser grained	SW		24	19					20
	25											25

Geosyntec consultants

BORING LOG

Boring ID Pz-3 Project No. ME1418 Geologist MLS Date 1/18/17

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
		7 13 29 36	well graded Sand. Medium to coarse grained, some fines, moist to wet	SW		24	23					
			clayey Sand	SW-SC								
	30	14 16 28 34	poorly graded clayey Sand. Coarse grained, moist to wet well graded Sand. Fine to coarse grained, moist, medium dense, yellow-orange with tan and purple lines	SP-SC		24	22					30
	35	6 12 17 12	wet, well graded Sand and Gravel. Fine to coarse grained, medium dense, some clay, yellow-orange	SW		24	20					35
		5 6 14 15	poorly graded, clayey Sand. Fine to coarse grained, medium dense, wet with purple staining.	SP-SC		24	24					
			lean, very stiff Clay. Low plasticity, moist, gray with purple staining	CL								
	40	6 18 24 32	hard, red/gray Clay	CL		24	19					40

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Geosyntec consultants

BORING LOG

Boring ID Pz-3 Project No. ME1418 Geologist MLS Date 1/18/17

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
		10 12 17 20	Same as above, very stiff	CL		24	21					
		7 15 23 18	Same as above	CL		24	24					
	45	10 14 18 29	Same as above	CL		24	24					45
1430			End of borehole.									
	50		Well Construction Screen Interval: 37-47' Sandpack: 33-47' Bentonite: 30-33' Backfilled with cuttings to surface Gauged at 48.06' from Top of Casing 4 bags of sand used and 1 bag of bentonite									50
	55											55

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Attorney-Client Work Product

BORING/WELL CONSTRUCTION LOG

Geosyntec consultants

Boring ID	Pz-4				
Project No.	ME1418	Geologist	MLS	Ground Elev	186.47 ft
Project Name	Subcell 9.2 Geotechnical Investigation	Drilling Method	HSA	Top of Casing	188.09 ft
Location	Millersville Landfill	Borehole Dia.	6"	Depth to Water	Dry ft
Drilling Co.	Eichelberger	Hammer/drop	Auto/140lbs/30"	Date	1/12/17
Driller/helper(s)	Mike and Will	Northing	457400.04		
Rig type	D50	Easting	895771.034		
Completion	Stick up				

Reviewed by: AS

Progress	Depth (ft)	Blows/6-inches	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
1530		WOH/24"	organics, soil									
			Well graded silty Sand. Very loose, moist, yellow brown to brown	SW-SC		24	18					
	5	7	sandy Clay. Moist, low plasticity, stiff, brown	SW-SM	21	19						5
		12										
		28										
		50/3"	well graded Sand with gravel. Fine to coarse, loose, dry									
	10											10

Geosyntec consultants

BORING LOG

Boring ID Pz-4 Project No. ME1418 Geologist MLS Date 1/12/17

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
		9		SW-SM								
		14	pebble sized ironstones			24	17					
		16	some clay									
		29										
			poorly graded Sand. Medium to coarse grained, medium dense, dry to moist, yellow-orange	SP								
	15											15
830		15	well graded Sand. Medium to coarse grained, loose, brown, dry	SW		24	2					
		18										
		20										
		20										
	20											20
		2	lean, firm Clay. Moist, low plasticity, gray	CL		24	16					
		4										
		4	some sandy clay									
		4										
	25											25

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Attorney-Client Work Product

Geosyntec consultants

BORING LOG

Boring ID Pz-4 Project No. ME1418 Geologist MLS Date 1/13/17

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
		3										
		4	poorly graded Sand. Fine grained, loose, moist, tan to white	SP		24	24					
		4										
		4	well graded sand with some fines. Fine to coarse grained, loose, yellow-orange	SW-SC								
			lean Clay. Firm, moist, low plasticity	CL								
	30											30
		2	Same as above	CL		24	18					
		6										
		6	poorly graded Sand. Fine to coarse grained, moist, medium dense, yellow-orange to light yellow	SP								
		4										
	35											35
		7										
		7	Same as above	SW		24	18					
		7										
		10										
	40											40

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Geosyntec consultants

BORING LOG

Boring ID Pz-4 Project No. ME1418 Geologist MLS Date 1/13/17

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
		4 6 5 9	Same as above	SW		24	24					
			trace gravel									
	45		trace fines	SW								45
		4 9 17 20	lean, very stiff, Clay. Low plasticity, moist, gray some coarse grained sands	CL		24	24					
			well graded Sand. Fine to coarse grained, dry to moist	SW								
		3 4 8 19	lean, very stiff, Clay. Moist, gray with red staining	CL		24	21					
	50	11 14 23 29	well sorted Sand with some gravel. Moist to wet, fine to coarse grained, trace pebbles lean Clay. Low plasticity, moist	SW CL		24	21					50
		12 19 21 24	Same as above, some fine Sands, moist	CL		24	22					
	55	5 13 17 22	Same as above			24	24					55

Geosyntec consultants

BORING LOG

Boring ID Pz-4 Project No. ME1418 Geologist MLS Date 1/13/17

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
			Same as above	CL								
		11 10 22 32	lean, red gray Clay	CL		24	24					
1020			End of borehole.									
	60		Well Construction Screen Interval: 48-58' Sandpack: 46-58' Bentonite: 41-46' Backfilled with cuttings to surface Gauged at 59.3' from Top of Casing 6 bags of sand used and 1 bag of bentonite									60
	65											65
	70											70

Privileged and Confidential
Attorney-Client Work Product

BORING/WELL CONSTRUCTION LOG

Geosyntec consultants

Boring ID	Pz-5				
Project No.	ME1418	Geologist	MLS	Ground Elev	183.16 ft
Project Name	Subcell 9.2 Geotechnical Investigation	Drilling Method	HAS	Top of Casing	185.55 ft
Location	Millersville Landfill	Borehole Dia.	6"	Depth to Water	Dry ft
Drilling Co.	Eichelberger	Hammer/drop	Auto/140lbs/30"	Date	1/17/17
Driller/helper(s)	Mike and Will	Northing	457058.551		
Rig type	D50	Easting	895677.805		
Completion	Stick up				

Reviewed by: AS

Progress	Depth (ft)	Blows/6-inches	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
1405		WOH WOH 1 1	well graded Sand with some gravel and organics. Moist, very loose, fine to coarse grained	SW		24	14					
	5	7 12 21 27	Same as above, tan to yellow-orange	SW		24	15					5
	10											10

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Attorney-Client Work Product

Geosyntec consultants

BORING LOG

Boring ID Pz-5 Project No. ME1418 Geologist MLS Date 1/17/17

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
		7	poorly graded Sand with clay. Fine grained, medium dense	SP-SC								
		12				24	22					
		12	poorly graded Sand. Fine grained	SP								
		12										
			poorly grade Sand with clay	SP-SC								
	15	12	well graded Sand. Fine to coarse grained, medium dense, moist, tan and yellow	SW		24	20					15
		21										
		23										
		26										
	20	7	Same as above, trace ironstone, yellow-orange	SW		24	23					20
		18										
		23										
		27										
		9	Same as above	SW								
		18										
		29										
		38										
		18	poorly graded Sand. Fine to medium grained, moist, dense	SP		24	18					
		27										
		29										
	25	36										25

Privileged and Confidential
Attorney-Client Work Product

Geosyntec consultants

BORING LOG

Boring ID Pz-5 Project No. ME1418 Geologist MLS Date 1/17/17

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
			Same as above light yellow-orange color	SP								
		17 35 39 41	well graded Sand. Fine to coarse grained, moist, dense, ironstones present, brown to light brown	SW		24	20					
		27 39 50 50/2	Same as above	SW		22	15					
	30		End of borehole.									30
			Well Construction Screen Interval: 20-30' Sandpack: 18-30' Bentonite: 15-18' Backfilled with cuttings to surface Gauged at 31.83' from Top of Casing 5 bags of sand used and 1 bag of bentonite									
	35											35
	40											40

BORING/WELL CONSTRUCTION LOG

Geosyntec consultants

Boring ID	Pz-7				
Project No.	ME1418	Geologist	MLS	Ground Elev	132.38 ft
Project Name	Subcell 9.2 Geotechnical Investigation	Drilling Method	HSA	Top of Casing	135.11 ft
Location	Millersville Landfill	Borehole Dia.	6"	Depth to Water	12 ft
Drilling Co.	Eichelberger	Hammer/drop	Auto/140lbs/30"	Date	1/11/17
Driller/helper(s)	Mike and Will	Northing	457810.066		
Rig type	D50	Easting	895601.491		
Completion	Stick up				

Reviewed by: AS

Progress	Depth (ft)	Blows/6-inches	Lithologic Description	USCS Classification	Run (inches)	Recovery (inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
1030		2 2 3 3	Organics well sorted Sand with some clay. Fine to coarse, very loose, moist gray to yellow-orange	SW-SC	24	22					
		3 5 7 9	Same as above lean, firm Clay. Low plastiscity, moist, red/gray	SW CL	24	22					
	5	4 6 9 12	stiff Clay with fine sands	CL	24	19					5
		5 5 9 9	Same as above	CL	24	16					
		6 6 8 9	Same as above		24	21					
	10		fine to medium grained sandy Clay. Moist	CL							10

Privileged and Confidential
Attorney-Client Work Product

Geosyntec consultants

BORING LOG

Boring ID Pz-7 Project No. ME1418 MLS Date 1/11/17

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
		7 7 11 14	Same as above	CL	22	24					
			poorly graded Sand. Fine to medium grained, medium dense, moist to wet, yellow-orange to tan	SP-SC							
		7 7 9 15	Same as above lean Clay, moist, gray, stiff	SP-SC CL	24	20					
	15	7 8 7 9	fine grained sandy Clay. Moist to wet, dark gray	CL	24	24					15
		7 10 10 12	Same as above, very stiff	CL	24	16					
		4 7 9 11	Same as above	CL	24	24					
1120	20		End of borehole.								20
	25										25

Well Construction

Screen Interval: 10-20'
Sandpack: 8-20'
Bentonite: 4-8'
Back filled with cuttings to surface

Gauged at 21.62' from Top of Casing
4 bags of sand and 1 bag of bentonite used

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Attorney-Client Work Product

BORING/WELL CONSTRUCTION LOG

Geosyntec consultants

Boring ID	Pz-8				
Project No.	ME1418	Geologist	MLS	Ground Elev	129.05 ft
Project Name	Subcell 9.2 Geotechnical Investigation	Drilling Method	HSA	Top of Casing	131.59 ft
Location	Millersville Landfill	Borehole Dia.	6"	Depth to Water	Dry ft
Drilling Co.	Eichelberger	Hammer/drop	Auto/140lbs/30"	Date	1/11/17
Driller/helper(s)	Mike and Will	Northing	457919.820		
Rig type	D50	Easting	895880.802		
Completion	Stick up				

Reviewed by: AS

Progress	Depth (ft)	Blows/6-inches	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
1450		3/24"	organics well sorted Sand. Light brown, very loose, moist, fine to coarse grained	SW		24	24					
		1 1 1 2	Same as above, trace gravel, light brown to yellow-orange	SW		24	16					
	5	2 3 2 4	Same as above, loose	SW		24	19					5
		3 3 5 6	Same as above	SW		24	19					
	10	4 7 7 7	Same as above, trace silt	SW		24	22					10

Geosyntec consultants

BORING LOG

Boring ID Pz-8 Project No. ME1418 Geologist MLS Date 1/11/17

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
		6 6 9 10	well graded Sand. Fine to coarse grained, moist, medium dense, yellow-orange, trace gravel	SW		24	17					
		6 10 10 10	poorly graded Sand. Fine to medium grained, medium dense, moist, yellow-orange	SP		24	20					
		7 11 13 12	well graded Sand	SW		24	18					
	15											15
		6 9 11 13	Same as above	SW		18	15					
		3 6 7 10	Same as above, trace gravel	SW		24	19					
			clayey Sand	SW-SC								
	20											20
		9 11 11 13	well graded Sand with trace clay. Fine to coarse grained, medium dense, moist, yellow-orange	SW		24	12					
		14 15 10 24	Clay with some fine sand. Lean, very stiff, low plastiscity, moist	CL		24	18					
			well graded Sand, weathered	SW								
		6 9 12 15	Same as above, fresh	SW		24	20					
	25		lean Clay	CL								25

Geosyntec consultants

BORING LOG

Boring ID Pz-8 Project No. ME1418 Geologist MLS Date 1/11/17

Progress	Depth (ft)	Blows	Lithologic Description	USCS Classification	Color	Run (inches)	Recovery (Inches)	PID (ppm)	Annulus	Well	Well/Annulus materials	Depth (ft)
			well graded Sand with trace gravel and clay	SW								
		7 7 9 9	sandy lean Clay. Some gravel inclusions, very stiff, low plasticity, reddish gray, moist	CL		24	23					
		7 9 11 13	Same as above	CL		24	24					
	30		End of borehole.									30
	35											35
	40											40

Well Construction
Screen Interval: 19-29'
Sandpack: 17-29'
Bentonite: 14-17'
Backfilled with cuttings from 14' to surface

Gauged at 31.5' from Top of Casing
*1ft of sand from 29-30'
3 bags of sand and 1 bag of bentonite used

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Attorney-Client Work Product

Appendix B.8
SCS (2017)

C 1 05335

SEQUENCE NO. (MDE USE ONLY)

1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT

FILL IN THIS FORM COMPLETELY
PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER 02

ST/CO USE ONLY
DATE Received MM DD YY 13

DATE WELL COMPLETED MM 9 DD 12 YY 12 (15–20)

Depth of Well 22 195 26 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" AA - 11 - 0413 (28–37)

OWNER Anne Arundel County (last name first name)

WELL SITE ADDRESS Burns Crossing Rd. TOWN Millersville

SUBDIVISION Landfill SECTION TM 22 PL 2C LOT PAR 1057

WELL LOG

Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
top soil	0	1	
tan clay some sand	1	15	
gravel & sand	15	34	
tan & white clay w/ gravel	34	41	
iron stone hard layers	41	46	
gravel & sand	46	78	
red & white clay w/sand layers	78	144	
sand	144	154	
clay	154	156	
sand	156	179	
clay	179	180	
sand	180	195	
red clay	195	198	
rock	198	199	
clay	199	203	
rock	203	204	
clay	204	206	

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED yes [Y] no [N]

CIRCLE APPROPRIATE LETTER

A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED

E ELECTRIC LOG OBTAINED

P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO. M W D 517

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. D

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD

WELL HAS BEEN GROUTED (Circle Appropriate Box) yes [Y] 44 no [N] 44

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT [C M] 45 46 BENTONITE CLAY [B C] 45 46

NO. OF BAGS 9 NO. OF POUNDS 450

GALLONS OF WATER 225

DEPTH OF GROUT SEAL (to nearest foot)

from 0 (48 TOP 52) ft. to 165 (54 BOTTOM 58) ft.

(enter 0 if from surface)

CASING RECORD

casing types insert appropriate code below

[S T] STEEL [C O] CONCRETE [P L] PLASTIC [O T] OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)!	Total depth of main casing (nearest foot)
PL (60 61)	4 (63 64)	175 (66 70)

OTHER CASING (if used)

EACH CASING	diameter inch	depth (feet) from	to

SCREEN RECORD

screen type or open hole insert appropriate code below

[S T] STEEL [B R] BRASS BRONZE [H O] OPEN HOLE [P L] PLASTIC [O T] OTHER

C 2 (1 2)

EACH SCREEN		DEPTH (nearest ft.)	
1	PL (8 9)	175 (11 15)	195 (17 21)
2	(23 24)	(26 30)	(32 36)
3	(38 39)	(41 45)	(47 51)

SLOT SIZE 1 .020 2 3

DIAMETER OF SCREEN 4 (56 60) (NEAREST INCH)

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68: from 165 to 200 (68)

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T (70) (E.R.O.S.) (72) W Q (74 75 76)

TELESCOPE CASING 9 LOG INDICATOR 225 OTHER DATA

C 3 (1 2)

PUMPING TEST

HOURS PUMPED (nearest hour) 3 (8 9)

PUMPING RATE (gal. per min.) 20 (11 15)

METHOD USED TO MEASURE PUMPING RATE 5 gal

WATER LEVEL (distance from land surface)

BEFORE PUMPING 118 (17 20) ft.

WHEN PUMPING 128 (22 25) ft.

TYPE OF PUMP USED (for test)

[A] air (27) [P] piston (27) [T] turbine (27)

[C] centrifugal (27) [R] rotary (27) [O] other (describe below) (27)

[J] jet (27) [S] submersible (27)

PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. (29)

CAPACITY: GALLONS PER MINUTE (to nearest gallon) (31 35)

PUMPING HORSE POWER (37 41)

PUMPING COLUMN LENGTH (nearest ft.) (43 47)

CASING HEIGHT (circle appropriate box and enter casing height)

[+] above (49) [–] below (49) LAND SURFACE 2 (50 51) (nearest foot)

LATITUDE 39.086417

LONGITUDE 76.665700

(DEFAULT COORD. WGS 84)

NOTES: TW-28 T 20 600 5 gal Discus M, 11 N

Test (TW-28)

MDE/WMA/PER 071

OWNER

C 1 05337

SEQUENCE NO. (MDE USE ONLY)

1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER 02

ST/CO USE ONLY
DATE Received MM DD YY 13

DATE WELL COMPLETED MM 9 DD 19 YY 12 (15–20)

Depth of Well 22 122 26 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" AA - 11 - 0775 (28–37)

OWNER Anne Arundel County (last name, first name)

WELL SITE ADDRESS 389 Burns Crossing Rd. TOWN Millersville

SUBDIVISION Landfill SECTION TM 22 PL 2C LOT PAR 1057

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
top soil	0	1	
sand & clay layers	1	12	
white clay	12	16	
sand	16	17	
white clay	17	32	
sand & clay	32	42	
red, white, & gray clay	42	79	
sand & clay	79	82	
sand	82	94	
clay & sand	94	102	
sand	102	122	
rock	122	123	
hard red & white clay	123	132	

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED yes Y / no N

CIRCLE APPROPRIATE LETTER
- A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E ELECTRIC LOG OBTAINED
- P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO. M W D 517

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. D

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box) yes Y (44) / no N (44)

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT CM (45 46) BENTONITE CLAY BC (45 46)

NO. OF BAGS 10 NO. OF POUNDS 50

GALLONS OF WATER 250

DEPTH OF GROUT SEAL (to nearest foot)

from 0 (48 TOP 52) ft. to 97 (54 BOTTOM 58) ft.

(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below

ST STEEL / CO CONCRETE / PL PLASTIC / OT OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)!	Total depth of main casing (nearest foot)
PL (60 61)	4 (63 64)	102 (66–70)

OTHER CASING (if used) — EACH CASING

diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole insert appropriate code below

ST STEEL / BR BRASS BRONZE / HO OPEN HOLE / PL PLASTIC / OT OTHER

C 2 — DEPTH (nearest ft.)

EACH SCREEN			
1	PL (8 9)	102 (11–15)	122 (17–21)
2	(23 24)	(26–30)	(32–36)
3	(38 39)	(41–45)	(47–51)

SLOT SIZE 1 .020 2 3

DIAMETER OF SCREEN 4 (56–60) (NEAREST INCH)

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68: from 97 to 127 (68)

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T (70) TELESCOPE CASING; (E.R.O.S.) (72) LOG INDICATOR; W Q (74 75 76) OTHER DATA

C 3 — PUMPING TEST
HOURS PUMPED (nearest hour) 1.5 (8 9)

PUMPING RATE (gal. per min.) 30 (11–15)

METHOD USED TO MEASURE PUMPING RATE 5 gal

WATER LEVEL (distance from land surface)

BEFORE PUMPING 40 (17–20) ft.

WHEN PUMPING 70 (22–25) ft.

TYPE OF PUMP USED (for test)

A air (27) / P piston (27) / T turbine (27) / C centrifugal (27) / R rotary (27) / O other (describe below) (27) / J jet (27) / S submersible (27)

PUMP INSTALLED
DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES / NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. (29)

CAPACITY: GALLONS PER MINUTE (to nearest gallon) (31–35)

PUMP HORSE POWER (37–41)

PUMP COLUMN LENGTH (nearest ft.) (43–47)

CASING HEIGHT (circle appropriate box and enter casing height)

+ above (49) / – below (49)

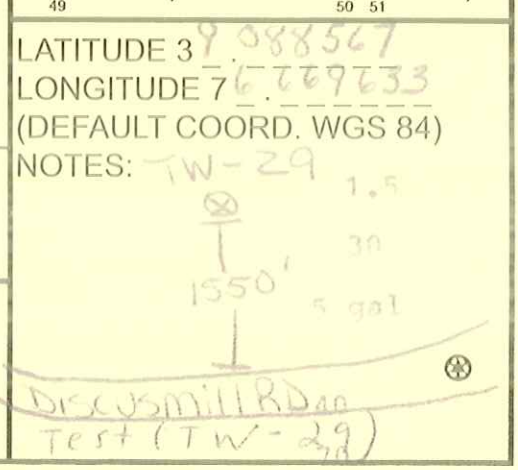
LAND SURFACE 2 (50 51) (nearest foot)

LATITUDE 39.088567

LONGITUDE 76.669633

(DEFAULT COORD. WGS 84)

NOTES: TW-29



MDE/WMA/PER.071

OWNER

C 1 | 91739 (1 2 3 6)
(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER 02

ST/CO USE ONLY
DATE Received DD YY (13)

DATE WELL COMPLETED MM DD YY: 03 25 13 (15–20)

Depth of Well (22–26): 185 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL": AA-11-0806 (28–37)

OWNER Anne Arundel County (last name, first name)
WELL SITE ADDRESS 389 Sums Crossing Rd TOWN Millersville
SUBDIVISION Millersville Landfill SECTION TM 22 BK 2C LOT Par 1057

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
Top Soil	0	5	
Clay	5	12	
Coarse Gravel	12	60	
Clay	60	81	
Clay Sand	81	130	
Hard & Red Clay	130	147	
Sound & Clay Streaks	147	200	

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED yes [Y] no [N]

CIRCLE APPROPRIATE LETTER
A — A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
E — ELECTRIC LOG OBTAINED
P — TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO. M D 517

DRILLERS SIGNATURE
(MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. D

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box) yes [Y] (44) no [N] (44)

TYPE OF GROUTING MATERIAL (Circle one)
CEMENT [CM] (45 46) BENTONITE CLAY [BC] (45 46)

NO. OF BAGS 11 NO. OF POUNDS 650
GALLONS OF WATER 325
DEPTH OF GROUT SEAL (to nearest foot)
from 0 (48) TOP (52) ft. to 160 (54) BOTTOM (58) ft.
(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below
[ST] STEEL [CO] CONCRETE [PL] PLASTIC [OT] OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)	Total depth of main casing (nearest foot)
PL (60 61)	4 (63 64)	165 (66–70)

OTHER CASING (if used)

EACH CASING	diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole — insert appropriate code below
[ST] STEEL [BR] BRASS BRONZE [HO] OPEN HOLE [PL] PLASTIC [OT] OTHER

C 2 (1 2)

DEPTH (nearest ft.)

EACH SCREEN			
1	PL (8 9)	165 (11–15)	185 (17–21)
2	(23 24)	(26–30)	(32–36)
3	(38 39)	(41–45)	(47–51)

SLOT SIZE 1 ____ 2 ____ 3 ____

DIAMETER OF SCREEN ____ (56–60) (NEAREST INCH)

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68: from 160 to 200 (68)

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)
T (70) (E.R.O.S.) (72) W Q (74 75 76)
TELESCOPE CASING — LOG INDICATOR — OTHER DATA

C 3 (1 2)

PUMPING TEST
HOURS PUMPED (nearest hour) 6 (8 9)
PUMPING RATE (gal. per min.) 20 (11–15)
METHOD USED TO MEASURE PUMPING RATE 5 Gal.
WATER LEVEL (distance from land surface)
BEFORE PUMPING 122 (17–20) ft.
WHEN PUMPING 142 (22–25) ft.

TYPE OF PUMP USED (for test)
[A] air (27) [P] piston (27) [T] turbine (27)
[C] centrifugal (27) [R] rotary (27) [O] other (describe below) (27)
[J] jet (27) [S] submersible (27)

PUMP INSTALLED
DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. S (29)
CAPACITY: GALLONS PER MINUTE (to nearest gallon) 1 (31–35)
PUMP HORSE POWER 1/4 (37–41)
PUMP COLUMN LENGTH (nearest ft.) 175 (43–47)
CASING HEIGHT (circle appropriate box and enter casing height)
[+] above (49) / [–] below (49) LAND SURFACE 2 (50 51) (nearest foot)

LATITUDE 39.086217
LONGITUDE 76.671700
(DEFAULT COORD: WGS 84)
NOTES:

TW-30

650

Dixon Mill Rd

Rep (Tot)

MDE/WMA/PER 071

OWNER

SCS ENGINEERS
Environmental Consultants
11260 Roger Bacon Drive
Reston, Virginia 20190-5282
703 471-6150 FAX 703 471-6676

Millersville Landfill &
Resource Recovery Facility
Severn, Maryland
Project No. 02211047.08

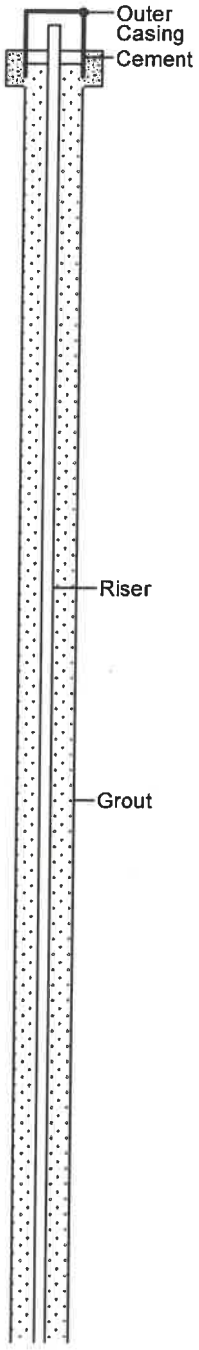
WELL CONSTRUCTION

Date Start/Complete	: 07-19-16/07-25-16
Hole Diameter	: 8.0 inch
Drilling Method	: Mud Rotary
WELL CASING	
Material	: Sch. 40 PVC
Diameter	: 4" ID
Joints	: threaded
Screen Opening	: 0.020" slot
Sand Pack	: #1 silica

TW-31

Log Prepared By	: SCS Engineers
Drilling Contractor	: A.C. Schultes
Latitude	: 39.085086
Longitude	: 76.666331

Well: TW-31



Depth in Feet	Sample	USCS	DESCRIPTION
0			Topsoil
	1	SP	orange-brown SAND, fine grained
10			
	2	SW	brown and black SAND, medium to fine grained dark red, quartzose layer to 19' white, tan, and orange SAND, fine to coarse grained
20			
	3	SC	white CLAYEY SAND
		SW	white, tan, and orange SAND, fine to coarse grained
30			
	4	SC	white, tan, and orange CLAYEY SAND, fine to coarse grained, traces of dark red gravel, white clay
40			
	5	CH	red CLAY, trace white, cohesive
50			
	6	CH	increasing white clay, cohesive
60			
	7	CH	dense red and white CLAY, traces of sand in red clay, cohesive
70			
	8	CS	red, white SANDY CLAY, fine grained, cohesive, less dense
80			
	9	CS	
90			
	10	CH	red, white, some orange-brown striated CLAY, trace very fine grained sand, cohesive
100			

REMARKS

CH = Fat Clay
CS = Sandy Clay
SC = Clayey Sand
SP = Poorly Graded Sand
SW = Well Graded Sand

Borehole drilled using 8" bit to a depth of 184' below grade. Well installed to a depth of 170' below grade using 20' of screen. Samples collected every 10'.

Well development was conducted on the following dates and times via the air jetting method with the following observances:
07-21-16, 8:05-8:50: dark red and turbid. 8:50-11:00: clearing up, less red; 11:00-12:00: mostly clear, slightly cloudy, no color, no sand; 12:00-12:05: clear, no sand, no color.
07-22-16, Well development performed for 2 hours by A.C. Schultes, not overseen by SCS.

SCS ENGINEERS
Environmental Consultants
11260 Roger Bacon Drive
Reston, Virginia 20190-5282
703 471-6150 FAX 703 471-6676

Millersville Landfill &
Resource Recovery Facility
Severn, Maryland
Project No. 02211047.08

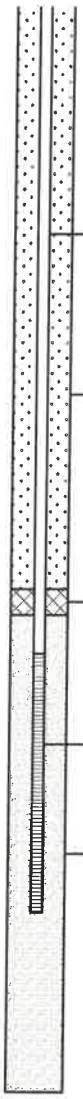
WELL CONSTRUCTION

Date Start/Complete	: 07-19-16/07-25-16
Hole Diameter	: 8.0 inch
Drilling Method	: Mud Rotary
WELL CASING	
Material	: Sch. 40 PVC
Diameter	: 4" ID
Joints	: threaded
Screen Opening	: 0.020" slot
Sand Pack	: #1 silica

TW-31

Log Prepared By	: SCS Engineers
Drilling Contractor	: A.C. Schultes
Latitude	: 39.085086
Longitude	: 76.666331

Well: TW-31



Depth in Feet	Sample	USCS	DESCRIPTION	REMARKS
100				
110	11	CH	no sand	
	12			
120		CS	red, white, and orange-brown striated SANDY CLAY, very fine grained sand	
130	13		more fine grained sand	
	14			
140			fine to medium grained sand, traces of gravel dense layer 142-142.5' dense layer 143-143.5'	
	15			
150			fine to medium grained sand	
	16			
160			trace dark red sandstone gravel	
	17			
170			red, some white and orange-brown clay, very fine grained sands, trace gravel	
180	18	CH	red clay, very dense	
	19			
190			END OF BORING 184'	
200				

08-22-2016 W:\Projects\LF\Anne Arundel Co MD_GW\Data\Boring Logs\TW-31.bor

DNR 214 8/71

C 1 2133

STATE OF MARYLAND
WATER RESOURCES ADMINISTRATION
TAWES STATE OFFICE BLDG., ANNAPOLIS, MD. 21401
WELL COMPLETION REPORT

FILL IN THIS FORM COMPLETELY

DATE RECEIVED (WRA USE ONLY): 03 04 75

DATE WELL COMPLETED: FEB. 5, 1975 — 04 15 75

DEPTH OF WELL (TO NEAREST FOOT): 260

PERMIT NO. FROM "PERMIT TO DRILL WELL": AA-173-3663

DRILLER'S IDENTIFICATION NO.: 26

MW-MB

OWNER: Anne Arundel County

STREET OR RFD: Millersville Sanitary Landfill — POST OFFICE: Gambrills, Md.

WELL LOG

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (USE ADDITIONAL SHEETS IF NECESSARY)	FEET FROM	FEET TO	CHECK IF WATER BEARING
Med. course brown sand	0	15	
med. course white sand	15	31	
med. course yellow sand	31	38	
fine yellow sand (silty)	38	54	
course tan sand	54	69	
gr. tan sand & streaks white clay	69	83	
white clay	83	94	
red clay	94	108	
pea gravel	108	123	
fine tan sand	123	140	
red & white clay mixed	140	154	
fine tan sand	154	169	
med. course to fine sand	169	189	
red clay	189	196	
sand & gravel	196	201	x
med. course sand, gravel & few streaks white clay	201	229	
clay	229	238	
white clay	238	248	
gravel	248	259	x

GROUTING RECORD

WELL HAS BEEN GROUTED (CIRCLE APPROPRIATE BOX): YES / NO

TYPE OF GROUTING MATERIAL (CIRCLE BOX): CEMENT (C M) — BENTONITE CLAY (B C)

NO. OF BAGS: 40 — NO. OF POUNDS: 3760

GALLONS OF WATER: 200

DEPTH OF GROUT SEAL (TO NEAREST FOOT): FROM 0 FT. TO 80 FT. (ENTER 0 IF FROM SURFACE)

CASING RECORD

CASING TYPES (INSERT APPROPRIATE CODE BELOW): STEEL (S T) — CONCRETE (C O) — PLASTIC (P L) — OTHER (O T)

MAIN CASING TYPE	NOMINAL DIAMETER TOP MAIN CASING (NEAREST INCH)	TOTAL DEPTH OF MAIN CASING (NEAREST FOOT)
S S	6	221

OTHER CASING (IF USED)

EACH CASING	TYPE	DIAMETER (INCH)	DEPTH (FEET) FROM	TO
1	S T	6	226	250
2				

SCREEN RECORD

SCREEN TYPE OR OPEN HOLE (INSERT APPROPRIATE CODE BELOW): STEEL (S T) — BRASS OR BRONZE (B R) — OPEN HOLE (H O) — PLASTIC (P L) — OTHER (O T)

stainless

EACH SCREEN	TYPE	DEPTH (NEAREST WHOLE FOOT) FROM	TO
1	S T	221	226
2	S T	250	260
3			

SLOT SIZE: 030 , 030

DIAMETER OF SCREEN: 6 (NEAREST INCH)

GRAVEL PACK: FROM 209 TO 270

IF WELL DRILLED WAS A FLOWING WELL CIRCLE BOX: F

WRA USE ONLY (NOT TO BE FILLED IN BY DRILLER): T — TELESCOPE CASING; 72 — LEG INDICATOR; E — OTHER DATA AVAILABLE

PUMPING TEST

HOURS PUMPED (TO NEAREST HOUR): 48

PUMPING RATE GALLONS PER MINUTE (TO NEAREST GALLON): 43

METHOD USED TO MEASURE PUMPING RATE: meter

WATER LEVEL (DISTANCE FROM LAND SURFACE)

BEFORE PUMPING: 127 (NEAREST FOOT)

WHEN PUMPING: 147 (NEAREST FOOT)

TYPE OF PUMPED USED (CIRCLE APPROPRIATE BOX FOR PUMPING TEST): AIR (A) — PISTON (P) — TURBINE (T) — CENTRIFUGAL (C) — ROTARY (R) — OTHER (INCLUDE DETAILS) (O) — JET (J) — SUBMERSIBLE (S)

PUMP INSTALLED

TYPE OF PUMP (WRITE APPROPRIATE LETTER IN BOX — SEE ABOVE): S

DRILLER WILL INSTALL PUMP (CIRCLE APPROPRIATE BOX): YES / NO

CAPACITY: GALLONS PER MINUTE (TO NEAREST GALLON): 40

PUMP HORSE POWER: 7.5

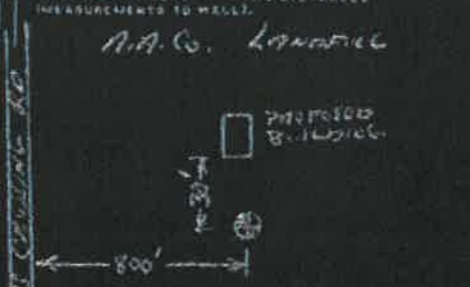
PUMP COLUMN LENGTH (NEAREST FOOT): 180

CASING HEIGHT

(CIRCLE APPROPRIATE BOX AND ENTER CASING HEIGHT): ABOVE / BELOW LAND SURFACE: 2 (NEAREST FOOT)

LOCATION OF WELL ON LOT

SHOW PERMANENT STRUCTURE SUCH AS BUILDINGS, SEPTIC TANKS, AND/OR OTHER LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL).



CIRCLE APPROPRIATE BOXES

A — WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED

E — ELECTRIC LOG OBTAINED

P — TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT I HAVE COMPLIED WITH ALL CONDITIONS STATED ON THE ABOVE-MENTIONED "PERMIT TO DRILL WELL", AND THAT INFORMATION CONTAINED IN THIS REPORT IS TRUE, ACCURATE, AND COMPLETE TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF.

DRILLER'S NAME: Conrad J. Zittinger

SIGNATURE: Conrad J. Zittinger

ORIGINAL

C 1 2134

STATE OF MARYLAND
WATER RESOURCES ADMINISTRATION
TAWES STATE OFFICE BLDG., ANNAPOLIS, MD. 21401
WELL COMPLETION REPORT

FILE IN THIS FORM COMPLETELY

COUNTY NUMBER

DATE RECEIVED (FOR USE ONLY): 03 06 75

DATE WELL COMPLETED: FEB. 5, 1975

DEPTH OF WELL (TO NEAREST FOOT): 260

PERMIT NO. (PREFIX & NUMBER): WW-173-3863

ORDERED IDENTIFICATION NO.: 26

(CONT)

MW-MB

COUNTY: Anne Arundel County

STREET OR RFD: Millersville Sanitary Landfill

POST OFFICE:

WELL DESCRIPTION

WELL LOG

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, IN CLEANS AND IF WATER BEARING

DESCRIPTION (USE ADDITIONAL SHEETS IF NECESSARY)	FEET FROM	FEET TO	CHECK IF WATER BEARING
hard red & white clay	259	271	
white clay	271	288	
med. Course sand	288	306	x
red and white clay	306	320	

GROUTING RECORD

WELL HAS BEEN GROUTED (CIRCLE APPROPRIATE BOX): YES Y / NO N

TYPE OF GROUTING MATERIAL (CIRCLE BOXES): CEMENT C M / BENTONITE CLAY B C

NO. OF BAGS ____ NO. OF GALLONS ____

GALLONS OF WATER ____

DEPTH OF GROUT SEAL (TO NEAREST FOOT): FROM ____ FT. TO ____ FT. (BELOW GROUND SURFACE)

CASING RECORD

CASING TYPE (INSERT APPROPRIATE CODE BELOW): STEEL S T / CONCRETE C O / PLASTIC P L / OTHER O T

MAIN CASING TYPE | NOMINAL DIAMETER TOP MAIN CASING (NEAREST INCH) | TOTAL DEPTH OF MAIN CASING (NEAREST FOOT)

OTHER CASING (IF USED)

DIAMETER (INCHES) | DEPTH (FEET) FROM | TO

SCREEN RECORD

SCREEN TYPE OR OPEN HOLE (INSERT APPROPRIATE CODE BELOW): STEEL S T / BRASS OR BRONZE B H / OPEN HOLE H O / PLASTIC P L / OTHER O T

C 2

DEPTH (NEAREST WHOLE FOOT)

BLANK SCREEN: FROM ____ TO ____

SLOT SIZE 1. ____ 2. ____ 3. ____

DIAMETER OF SCREEN ____ (NEAREST INCH)

GRAVEL PACK ____ FROM ____ TO ____

IF WELL DRILLED WAS A FLOWING WELL CIRCLE BOX: F

MWA USE ONLY (NOT TO BE FILLED IN BY DRILLER)

TELESCOPE CASING | LOG INDICATOR | OTHER DATA AVAILABLE

C 3

PUMPING TEST

HOURS PUMPED (TO NEAREST HOUR) ____

PUMPING RATE GALLONS PER MINUTE (TO NEAREST GALLON) ____

METHOD USED TO MEASURE PUMPING RATE ____

WATER LEVEL (DISTANCE FROM LAND SURFACE)

BEFORE PUMPING ____ (NEAREST FOOT)

WHEN PUMPED ____ (NEAREST FOOT)

TYPE OF PUMPER USED (CIRCLE APPROPRIATE BOX) (FOR PUMPING TEST)

AIR A | PISTON P | TURBINE T | CENTRIFUGAL C | ROTARY R | OTHER (DESCRIBE BELOW) O | JET J | SUBMERGIBLE S

PUMP INSTALLED

TYPE OF PUMP (WRITE APPROPRIATE LETTER IN BOX - SEE ABOVE): A, C, J, P, R, S, T, O

DRILLER WILL INSTALL PUMP (CIRCLE APPROPRIATE BOX): YES Y / NO N

CAPACITY:

GALLONS PER MINUTE (TO NEAREST GALLON) ____

PUMP HORSE POWER ____

PUMP COLUMN LENGTH (NEAREST FOOT) ____

CASING HEIGHT (CIRCLE APPROPRIATE BOX AND ENTER CASING HEIGHT)

ABOVE + / BELOW − LAND SURFACE ____ (NEAREST FOOT)

LOCATION OF WELL ON LOT

SHOW PERMANENT STRUCTURE (LIKE BUILDINGS, SEPTIC TANKS, AND/OR OTHER LAND MARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL).

CIRCLE APPROPRIATE BOXES

A — WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED

E — ELECTRIC LOG OBTAINED

P — WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT I HAVE COMPLIED WITH ALL CONDITIONS OF THE ABOVE-LISTED "PERMIT TO DRILL WELL" AND THAT INFORMATION CONTAINED IN THIS REPORT IS TRUE, ACCURATE, AND COMPLETE TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF.

DRILLER'S NAME: Carroll Construction

SIGNATURE: [signature]

ORIGINAL

Well-N

A.C. SCHULTES OF MARYLAND, INC.

24 Old South River Road Edgewater, MD 21037

Telephone 410-841-6710
Fax # 410-841-6711

Driller's Log

Water Well Contractors

CUSTOMER: A.A. County JOB: H5122

ADDRESS: Burns Crossing Rd. Severn MD DATE: 9/12/07

LOCATION: Millersville Landfill PERMIT NO. AA-95-3080

		FEET FROM GROUND SURFACE	WELL LOG
GROUND		0-10	Medium to coarse sand
	CASING	10-14	Medium to coarse sand w/small gravel
		14-20	Hard cemented sand w/some white clay
		20-68	Medium to coarse sand w/multi colored clay
		68-80	Fine to medium sand w/clay
		80-130	Fine to medium sand w/ clay layers
		130-155	Fine to medium sand
		155-170	Clay
130" TOTAL DEPTH			
	SCREEN		
	20		

WELL NO.	2	DIAMETER OF WELL	4"	DEPT. OF WELL	150'
HOURS PUMPED	6	SLOT SIZE	.020	TYPE OF CASING	PVC
CAPACITY GPM	5	DRILLING MACHINE NO.		LENGTH OF CASING	130'
STATIC LEVEL	114'	DRILLER	T. Schultes	DISTANCE TO TOP OF SCREEN	130'
PUMPING LEVEL	124'	GRAVEL	#2 29 bags	TYPE SCREEN	PVC
SPECIFIC CAPACITY	.2	4 BAGS OF	Bensen/Grout	SIZE OF SCREEN	4"
PUMPED WITH	Air	DATE WELL COMPLETED	9/12/07	OUTER CASING SIZE	
DEPTH OF GROUT	125-0	DRILLER'S HELPER		OUTER CASING DEPTH	
DEPTH GRAVEL PACKED	165-125				

Well-W

A.C. SCHULTES OF MARYLAND, INC.
24 Old South River Road Edgewater, MD 21037

Telephone 410-841-6710
Fax # 410-841-6711

Driller's Log

Water Well Contractors

CUSTOMER: A.A. County JOB: H5122

ADDRESS: Burns Crossing Rd. Severn MD DATE: 9/14/07

LOCATION: Millersville Landfill PERMIT NO. AA-95-3072

		FEET FROM GROUND SURFACE	WELL LOG
GROUND		0-11	Small to medium gravel to medium sand
	CASING	11-40	Medium to coarse sand w/ some clay
		40-55	Fine Sand w/multi colored clay
		55-100	Fine to medium sand w/red clay
		100-130	Clay w/some sand layers
		130-145	Red clay some sand
		145-155	Medium to coarse sand
		155-162	Clay
135' TOTAL DEPTH			
	SCREEN		
	20		

WELL NO. 1	DIAMETER OF WELL 4"	DEPT. OF WELL 155'
HOURS PUMPED 6	SLOT SIZE .020	TYPE OF CASING PVC
CAPACITY GPM 5	DRILLING MACHINE NO.	LENGTH OF CASING 135'
STATIC LEVEL 104'	DRILLER T. Schultes	DISTANCE TO TOP OF SCREEN 135'
PUMPING LEVEL 114'	GRAVEL #2 20 Bags	TYPE SCREEN PVC
SPECIFIC CAPACITY .2	4 BAGS OF Bensen/Grout	SIZE OF SCREEN 4"
PUMPED WITH Air	DATE WELL COMPLETED 9/13/07	OUTER CASING SIZE
DEPTH OF GROUT 130-0	DRILLER'S HELPER Barnett	OUTER CASING DEPTH
DEPTH GRAVEL PACKED 162-130		

Appendix B.9
Froehling & Robertson, Inc. (2022)

Froehling & Robertson, Inc.

Boring LOG

Boring: B-11 (1 of 1)

Project No: 75A-0079
Client: GBA Architects
Project: West County Road Ops Yard
City/State: Severn, Maryland

Elevation: 213.42 ±
Total Depth: 30.0'
Location: See Boring Location Plan

Drilling Method: 2.25" I.D. HSA
Hammer Type: Automatic
Date Drilled: 6/22/22
Driller: E. Pozos

Elevation	Depth	Description of Materials (Classification)	* Sample Blows	Sample Depth (feet)	N-Value (blows/ft)	Remarks
213.1	0.3	4 inches of Surface organic matter	1-1-1 REC=78%	0.0	2	**Subsurface Water Data**
		Tan to orange brown, moist, loose to medium dense, Silty Fine SAND, trace gravel (SM)		1.5		Boring Dry while drilling
			2-2-2 REC=100%	2.0	4	Boring dry upon completion
			2-3-2 REC=100%	3.5	5	Cave in at 27 feet upon completion
				5.0		
			3-2-2 REC=100%	6.5	4	
				8.0		
			4-6-6 REC=100%	8.5	12	
				10.0		
			8-11-12 REC=100%	13.5	23	
				15.0		
			7-7-7 REC=100%	18.5	14	
				20.0		
			8-7-8 REC=100%	23.5	15	
				25.0		
			11-11-9 REC=100%	28.5	20	
183.4	30.0	Boring terminated at 30 feet		30.0		

*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the second and third increments of penetration is termed the standard penetration resistance, N-Value.

Froehling & Robertson, Inc.

Boring LOG

Boring: B-12 (1 of 1)

Project No: 75A-0079
Client: GBA Architects
Project: West County Road Ops Yard
City/State: Severn, Maryland

Elevation: 211.35 ±
Total Depth: 40.0'
Location: See Boring Location Plan

Drilling Method: 2.25" I.D. HSA
Hammer Type: Automatic
Date Drilled: 6/22/22
Driller: E. Pozos

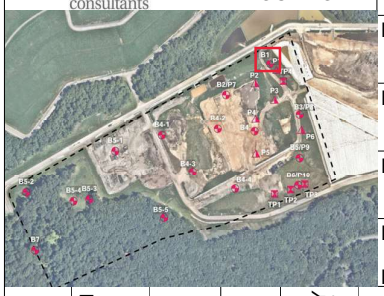
Elevation	Depth	Description of Materials (Classification)	* Sample Blows	Sample Depth (feet)	N-Value (blows/ft)	Remarks
211.0	0.3	4 inches of Surface organic matter	2-2-3 REC=89%	0.0	5	**Subsurface Water Data**
		Tan to orange brown, moist, loose to medium dense, Silty Fine SAND, trace gravel (SM)		1.5		Boring Dry while drilling
			2-2-2 REC=83%	2.0	4	Boring dry upon completion
			2-2-2 REC=100%	3.5	4	Cave in at 35.6 feet upon completion
				5.0		
			2-2-2 REC=100%	6.5	4	
				8.0		
			2-3-4 REC=100%	8.5	7	
				10.0		
			4-4-6 REC=100%	13.5	10	
				15.0		
			6-7-9 REC=100%	18.5	16	
				20.0		
187.9	23.5	Tan, moist, medium dense, Very Sandy SILT (ML-SM)	7-7-8 REC=56%	23.5	15	
				25.0		
			15-10-16 REC=56%	28.5	26	
				30.0		
			6-8-8 REC=100%	33.5	16	
				35.0		
			9-7-9 REC=100%	38.5	16	
171.4	40.0	Boring terminated at 40 feet		40.0		

*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the second and third increments of penetration is termed the standard penetration resistance, N-Value.

Appendix B.10
Geosyntec (2022)

Geosyntec consultants

PLAN VIEW LOCATION:

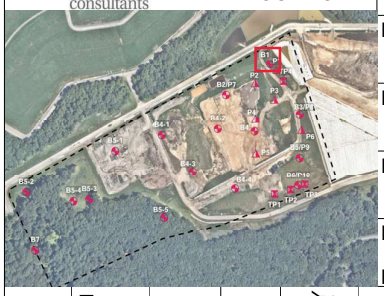


PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457745.98 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B1
EASTING: 895117.77 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 1 of 4
ELEVATION: 142.80 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 28 September 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 15 ft	TOTAL BORING DEPTH: 75.5 ft-bgs	DATE COMPLETED: 29 September 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
0	142.3	SPT	24	100	S-1	5-6-5-7		Sandy Lean Clay (CL), dark reddish brown, moist, medium stiff, low to medium plasticity, includes fine grained gravels and organics (Fill)	
4	137.3	SPT	24	100	S-2	6-7-7-8		Silty Sand (SM), light brown, wet, medium dense, fine grained sand, includes trace fine grained gravel (Fill)	
8									
	132.3	SPT	24	100	S-3	5-9-11-7		Same As Above	
12									
	127.3	SPT	24	100	S-4	WH-2-3-4		Lean Clay (CL), grayish brown mottled with reddish brown, moist to wet, medium stiff, low to medium plasticity	
16									
20								Same As Above, grades to reddish	

Geosyntec consultants

PLAN VIEW LOCATION:

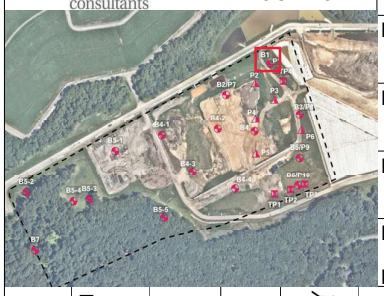


PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457745.98 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B1
EASTING: 895117.77 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 2 of 4
ELEVATION: 142.80 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 28 September 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 15 ft	TOTAL BORING DEPTH: 75.5 ft-bgs	DATE COMPLETED: 29 September 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
20	122.3	SPT	24	100	S-5	3-5-7-10		brown, very stiff	
24	117.3	SPT	24	100	S-6	3-2-5-10		Same As Above, increased fine grained sand content to 25', grades grayish brown, wet, hard	
28	112.3	SPT	24	100	S-7	4-10-14-18		Same As Above, grades to dark gray	
32	107.3	SPT	24	100	S-8	2-4-5-6		Sandy Lean Clay (CL), gray-brown, moist, very stiff, low plasticity, fine grained sand	
36									
40								Lean Clay (CL), dark gray-brown, moist,	

Geosyntec consultants

PLAN VIEW LOCATION:

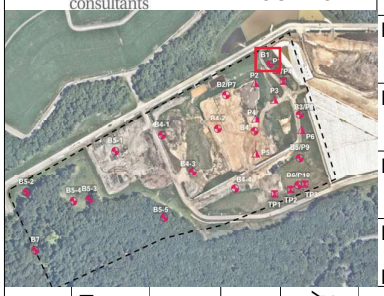


PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457745.98 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B1
EASTING: 895117.77 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 3 of 4
ELEVATION: 142.80 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 28 September 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 15 ft	TOTAL BORING DEPTH: 75.5 ft-bgs	DATE COMPLETED: 29 September 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
40	102.3	SPT	24	100	S-9	8-12-13-18		hard, low plasticity, trace fine grained sand	
44	97.3	SPT	24	100	S-10	8-12-14-18		Same As Above, increased fine grained sand with depth	
48	92.3	SPT	24	100	S-11	10-18-24-36		Same As Above	
52	87.3	SPT	24	100	S-12	18-28-36-40		Same As Above	
56									
60									

Geosyntec consultants

PLAN VIEW LOCATION:



PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457745.98 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B1
EASTING: 895117.77 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 4 of 4
ELEVATION: 142.80 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 28 September 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 15 ft	TOTAL BORING DEPTH: 75.5 ft-bgs	DATE COMPLETED: 29 September 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
60	82.3	SPT	24	100	S-13	10-20-28-30		Same As Above	
64		SPT	17	100	S-14	8-24-80/5"		Clayey Sand (SC), light grayish brown mottled with red, moist, very dense, fine grained sand, includes lenses of sandy silt	
	77.3								
68		SPT	21	100	S-15	18-28-38-50/3"		Lean Clay (CL), reddish brown, moist, hard, low plasticity	
	72.3							Clayey Sand (SC), light yellowish brown mottled with red, moist, very dense, includes lenses of lean clay	
72		SPT	15	100	S-16	25-30-50/3"		Poorly graded Sand (SP), reddish brown, wet, very dense	
	67.3							Clayey Sand (SC), light yellowish brown, moist to wet, very dense	

Lithology Legend

Fill | SC | SP | CL | SPT - Standard Penetration Test

NOTES: Boring backfilled with 1/2 bag of bentonite at bottom, followed by 2 bags of Portland Type I/II, then 1/2 bag of bentonite on top of that. Hydrated and backfilled to surface with cuttings.

Geosyntec consultants

PLAN VIEW LOCATION:

PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457510.17 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B2-P7
EASTING: 894773.07 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 1 of 3
ELEVATION: 156.80 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 11 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: Not encountered	TOTAL BORING DEPTH: 60 ft-bgs	DATE COMPLETED: 11 October 2022

DEPTH (FT)	ELEVATION (FT NGVD88)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	WELL CONSTRUCTION
0	156.8	SPT	24	100	S-1	WH-WH-2-2		Poorly graded Sand (SP), light brown, moist, very loose, fine grained sand, includes some lean clay seams and clusters (Fill)	Cuttings
4	152.8	SPT	24	100	S-2	2-3-4-4		Same As Above, grades to loose (Fill)	
8	148.8	SPT	24	100	S-3	2-6-6-11		Sandy Lean Clay (CL), light grayish brown, moist, hard, fine grained to medium grained sand, low to medium plasticity (Fill)	
12	144.8	SPT	24	100	S-4	2-6-6-9		Same As Above, grades to stiff, intermittent layering continues, includes coarse grained sand (Fill)	
16	140.8	SPT	24	100	S-5	5-12-13-11		Clayey Sand (SC), dark brown, moist to wet, medium dense, fine grained to medium grained sand (Fill)	
20	136.8								

Geosyntec consultants

PLAN VIEW LOCATION:

PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457510.17 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B2-P7
EASTING: 894773.07 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 2 of 3
ELEVATION: 156.80 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 11 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: Not encountered	TOTAL BORING DEPTH: 60 ft-bgs	DATE COMPLETED: 11 October 2022

DEPTH (FT)	ELEVATION (FT NGVD88)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	WELL CONSTRUCTION
24	132.8	SPT	24	100	S-6	3-7-12-14		Same As Above, includes coarse grained sand (Fill)	Cuttings
28	128.8	SPT	24	100	S-7	2-4-6-10		Lean Clay (CL), grayish brown mottled with reddish and yellowish brown, moist, very stiff, low to medium plasticity	
32	124.8	SPT	24	100	S-8	2-5-8-9		Same As Above	
36	120.8	SPT	24	100	S-9	2-4-8-11		Same As Above	3/8-inch Bentonite Pellets
40	116.8	SPT	24	100	S-10	4-9-11-10		Same As Above, grades to hard	
44	112.8								

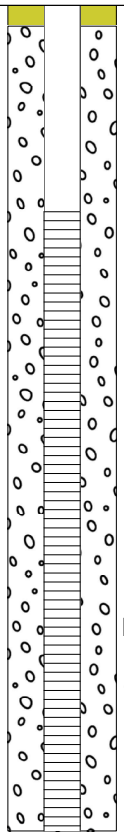
Geosyntec consultants

PLAN VIEW LOCATION:

PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457510.17 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B2-P7
EASTING: 894773.07 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 3 of 3
ELEVATION: 156.80 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 11 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: Not encountered	TOTAL BORING DEPTH: 60 ft-bgs	DATE COMPLETED: 11 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION
48	108.8							
		SPT	24	100	S-11	5-5-6-7		Clayey Sand (SC), light gray, moist, medium dense, intermixed with seams of reddish brown lean clay
52	104.8							
		SPT	24	100	S-12	2-4-9-15		Poorly graded Sand (SP), light gray, moist, medium dense, fine grained sand
56	100.8							
		SPT	24	100	S-13	8-17-26-49		Clayey Sand (SC), light gray, moist, dense, fine grained sand
60	96.8							

WELL CONSTRUCTION



#4 Morie Sand

0.010-inch Pre-Slotted Schedule 40 Screen

Lithology Legend

Fill | SC | SP | CL | #4 Morie Sand | Cuttings | Bentonite pellets

SPT - Standard Penetration Test

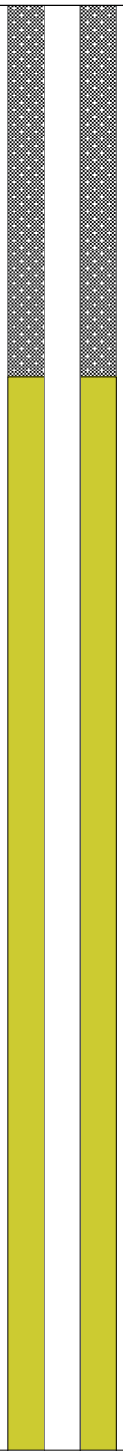
Geosyntec consultants

PLAN VIEW LOCATION:

PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457362.57 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B3-P8
EASTING: 895350.94 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 1 of 2
ELEVATION: 156.41 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 29 September 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 32 ft	TOTAL BORING DEPTH: 40 ft-bgs	DATE COMPLETED: 29 September 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION
0	156.41	SPT	24	100	S-1	5-13-14-12		Poorly graded Sand (SP), light brown, dry to moist, medium dense, fine grained to medium grained sand, includes fine grained gravel (Fill)
4	152.41							
		SPT	24	100	S-2	2-17-26-38		Poorly graded Sand (SP), light brown, grading to dark brown then yellowish brown, moist, dense, fine grained to medium grained sand (Fill)
8	148.41							
		SPT	24	100	S-3	2-5-16-30		Same As Above, grades to light yellowish brown, moist, stiff, includes seam of lean clay from 10-10.5' (Fill)
12	144.41							
16	140.41	SPT	24	100	S-4	5-10-16-18		Sandy Lean Clay (CL), orange-brown grading to gray-brown, moist to wet, very stiff, low plasticity, medium grained sand
20	136.41	SPT	24	100	S-5	7-9-11-13		Poorly graded Sand with clay (SP-SC), orange-brown, wet, medium dense, medium grained sand

WELL CONSTRUCTION



Cuttings

3/8-inch Bentonite Pellets

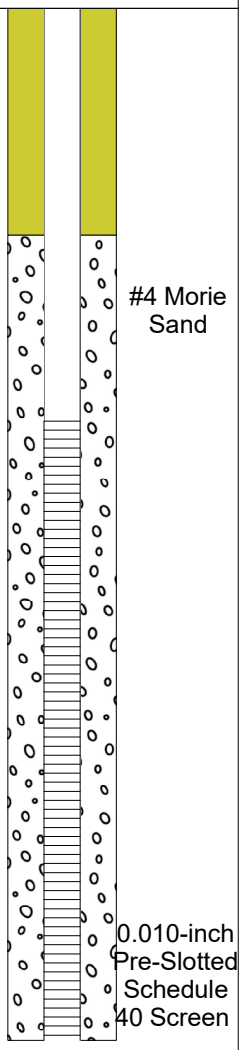
Geosyntec consultants

PLAN VIEW LOCATION:

PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457362.57 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B3-P8
EASTING: 895350.94 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 2 of 2
ELEVATION: 156.41 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 29 September 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 32 ft	TOTAL BORING DEPTH: 40 ft-bgs	DATE COMPLETED: 29 September 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION
24	132.41							
		SPT	24	100	S-6	8-17-26-22		Clayey Sand (SC), yellowish-brown and gray brown, moist, dense, fine grained sand
								Lean Clay with sand (CL), yellowish-brown, moist, very stiff, low plasticity, fine grained sand
28	128.41							
		SPT	24	100	S-7	15-16-20-27		Clayey Sand (SC), light grayish-brown, moist, dense, fine grained sand
32	124.41							
36	120.41	SPT	24	100	S-8	11-17-21-25		Lean Clay (CL), light gray-brown with red, moist, hard, low plasticity
		SPT	24	100	S-9	9-11-15-20		Same As Above, increased fine grained sand content
40	116.41							

WELL CONSTRUCTION



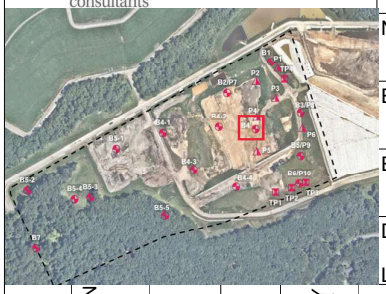
Lithology Legend

Fill | SC | CL | SP-SC | Cuttings | #4 Morie Sand | Bentonite pellets

SPT - Standard Penetration Test

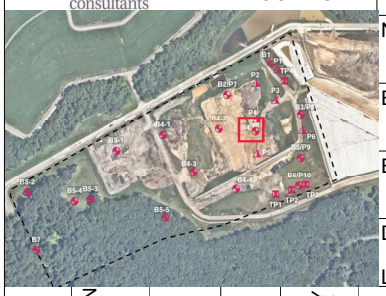
Geosyntec consultants

PLAN VIEW LOCATION:



PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457234.75 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B4
EASTING: 894997.12 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 1 of 2
ELEVATION: 164.40 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 10 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 10 ft	TOTAL BORING DEPTH: 40 ft-bgs	DATE COMPLETED: 10 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
0	164.4	SPT	24	100	S-1	WH-2-2-3		Silty Sand (SM), light golden brown, moist, trace gravel, fine grained sand (Fill) At 2': Lean Clay (CL), grayish brown, moist, stiff, low plasticity (Fill)	
4	160.4								
		SPT	24	100	S-2	2-5-7-11		Same As Above, Increasing sand content from 6-6.5' At 6.5': Silty Sand (SM), light grayish brown, wet, fine grained sand, includes lenses of lean clay (Fill)	
8	156.4								
		SPT	24	50	S-3	3-4-5-5		Lean Clay (CL), light grayish brown with light brown mottling, moist to wet, very stiff, low to medium plasticity (Fill)	
12	152.4								
16	148.4	SPT	24	100	S-4	8-10-11-9		Silty Sand (SM), light brown, wet, medium dense, fine grained sand, includes lenses of lean clay (Fill)	
20	144.4	SPT	24	100	S-5	5-11-16-15		Sandy Lean Clay (CL), light brown, moist to wet, medium stiff, fine grained sand, includes seams of sandy silt (Fill) Silty Sand (SM), light brown, moist, fine grained sand (Fill)	

Geosyntec consultants	PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
PLAN VIEW LOCATION: 	NORTHING: 457234.75 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B4
	EASTING: 894997.12 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 2 of 2
	ELEVATION: 164.40 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 10 October 2022
	DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 10 ft	TOTAL BORING DEPTH: 40 ft-bgs	DATE COMPLETED: 10 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
24	140.4								
		SPT	24	100	S-6	9-11-5-5		Lean Clay (CL), very dark brown, moist, medium plasticity, includes trace gravels, includes trace fibers, roots and organic material (Fill)	
28	136.4								
		SPT	24	100	S-7	3-6-8-16		Lean Clay (CL), grayish brown mottled with reddish brown, moist to wet, hard, low to medium plasticity	
32	132.4								
36	128.4	SPT	24	100	S-8	10-23-37-44		Same As Above, grades to purplish brown mottled with gray and light brown	
		SPT	24	100	S-9	12-22-24-40		Same As Above	
40	124.4								

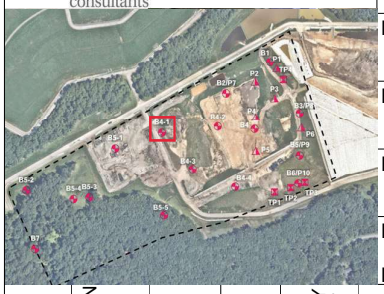
Lithology Legend

Fill CL SPT - Standard Penetration Test

NOTES: Boring backfilled with 1/2 bag of bentonite at bottom, followed by 2 bags of Portland Type I/II, then 1/2 bag of bentonite on top of that. Hydrated and backfilled to surface with cuttings.

Geosyntec consultants

PLAN VIEW LOCATION:

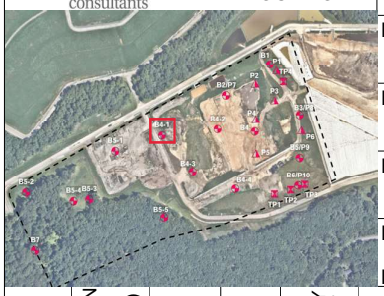


PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457205.09 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B4-1
EASTING: 894270.20 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 1 of 3
ELEVATION: 145.30 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 12 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 15.5 ft	TOTAL BORING DEPTH: 45 ft-bgs	DATE COMPLETED: 12 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
0	145.3	SPT	24	100	S-1	2-10-8-7		Lean Clay (CL), grayish brown mottled with yellowish brown, moist, hard, low plasticity (Fill)	
4	140.3	SPT	24	100	S-2	11-10-9-12		Sandy Lean Clay (CL), dark grayish brown, moist, very stiff, fine grained sand, low to medium plasticity, includes trace roots and organics (Fill)	
8									
	135.3	SPT	24	100	S-3	7-14-14-20		Same As Above, includes fine grained gravel, asphalt, and organic material (Fill)	
12									
	130.3	SPT	24	100	S-4	10-12-16-15		Silty Sand (SM), reddish brown, moist, medium dense, fine grained sand, includes clusters of lean clay	
16									
20	125.3							Same As Above, grades to light gray,	

Geosyntec consultants

PLAN VIEW LOCATION:

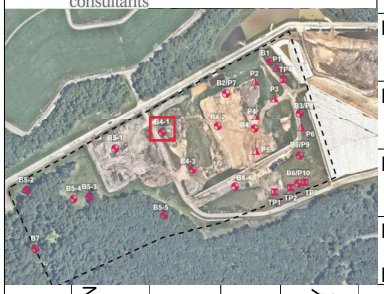


PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457205.09 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B4-1
EASTING: 894270.20 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 2 of 3
ELEVATION: 145.30 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 12 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 15.5 ft	TOTAL BORING DEPTH: 45 ft-bgs	DATE COMPLETED: 12 October 2022

DEPTH (FT)	ELEVATION (FT) (NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
20	125.3	SPT	24	100	S-5	3-4-7-4		lean clay clusters decrease	
24	120.3	SPT	24	100	S-6	4-10-7-14		Lean Clay (CL), reddish brown, moist, very stiff, low plasticity	
28	115.3	SPT	24	100	S-7	9-8-7-13		Same As Above, includes seams of light gray clayey sand from 29-29.5', 30.5-31'	
32	110.3	SPT	24	100	S-8	5-8-7-9		Same As Above, grades to light gray, seams of interbedded sandy clay continue (roughly 3-4"), highly variable	
36	105.3							Silty Sand (SM), light gray, moist, dense,	
40									

Geosyntec consultants

PLAN VIEW LOCATION:



PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457205.09 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B4-1
EASTING: 894270.20 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 3 of 3
ELEVATION: 145.30 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 12 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 15.5 ft	TOTAL BORING DEPTH: 45 ft-bgs	DATE COMPLETED: 12 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
40	105.3	SPT	24	100	S-9	12-19-27-37		fine grained sand, trace lean clay lenses	
44	100.3	SPT	24	100	S-10	7-10-10-10		Same As Above, grades medium dense	

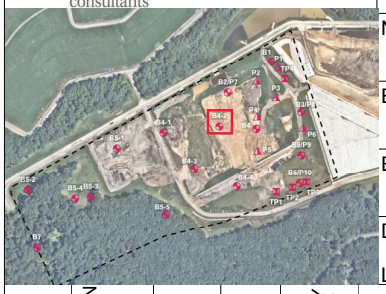
Lithology Legend

SM Fill CL SPT - Standard Penetration Test

NOTES: Boring backfilled with 1/2 bag of bentonite at bottom, followed by 2 bags of Portland Type I/II, then 1/2 bag of bentonite on top of that. Hydrated and backfilled to surface with cuttings.

Geosyntec consultants

PLAN VIEW LOCATION:

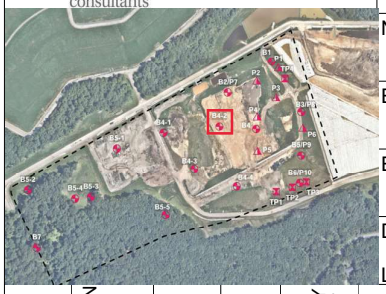


PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457253.06 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B4-2
EASTING: 894708.51 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 1 of 3
ELEVATION: 155.39 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 10 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 21 ft	TOTAL BORING DEPTH: 54.5 ft-bgs	DATE COMPLETED: 10 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
0		SPT	24	100	S-1	1-1-2-2		Poorly graded Sand with silt (SP-SM), light brown, moist, very loose, fine grained sand, includes trace lean clay lenses (Fill)	
	152.89								
4									
		SPT	24	100	S-2	4-6-13-13		Silty Sand (SM), light brown, moist to wet, medium dense, fine grained to medium grained sand, includes clusters of lean clay (Fill)	
	148.89								
8									
	144.89	SPT	24	100	S-3	10-11-13-16		Same As Above, slight decrease in silt content (Fill)	
12									
	140.89								
16		SPT	24	100	S-4	5-6-5-5		Same As Above, increases in lean clay clusters and lenses (Fill)	
	136.89								
20									

Geosyntec consultants

PLAN VIEW LOCATION:

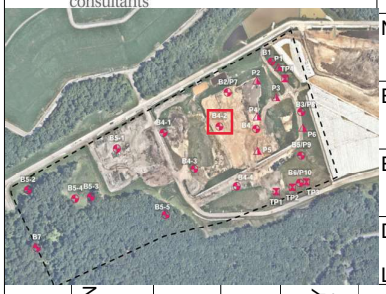


PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457253.06 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B4-2
EASTING: 894708.51 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 2 of 3
ELEVATION: 155.39 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 10 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 21 ft	TOTAL BORING DEPTH: 54.5 ft-bgs	DATE COMPLETED: 10 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
20		SPT	24	100	S-5	4-6-9-11		Same As Above, decreases in lean clay clusters, piece of wood in the top of the sampler (Fill)	
	132.89								
24									
		SPT	24	100	S-6	4-4-9-12		Lean Clay (CL), grayish brown mottled with light brown, moist, hard, low plasticity	
	128.89								
28									
	124.89	SPT	24	100	S-7	4-5-7-8		Same As Above, grades to reddish brown, very stiff	
32									
	120.89								
36		SPT	24	100	S-8	3-6-10-11		Clayey Sand (SC), light grayish brown, moist, medium dense, fine grained sand, includes seams of lean clay	
	116.89								
40									

Geosyntec consultants

PLAN VIEW LOCATION:



PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457253.06 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B4-2
EASTING: 894708.51 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 3 of 3
ELEVATION: 155.39 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 10 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 21 ft	TOTAL BORING DEPTH: 54.5 ft-bgs	DATE COMPLETED: 10 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
40		SPT	24	100	S-9	6-10-15-12		Same As Above, slight decrease in lean clay seams	
								Lean Clay (CL), reddish brown, moist, very stiff, low plasticity	
	112.89								
44		SPT	24	39.6	S-10	5-11-16-18		Poorly graded Sand (SP), light grayish brown, wet, medium dense, fine grained sand, includes trace lean clay lenses	
	108.89								
48									
	104.89	SPT	24	100	S-11	10-15-16-18		Clayey Sand (SC), light grayish brown, moist, medium dense, fine grained sand	
52									
		SPT	17	100	S-12	17-37-50/5"		Poorly graded Sand (SP), light grayish brown, moist, very dense, fine grained sand	
	100.89								

Lithology Legend

Fill SC SP CL

SPT - Standard Penetration Test

NOTES: Boring backfilled with 1/2 bag of bentonite at bottom, followed by 2 bags of Portland Type I/II, then 1/2 bag of bentonite on top of that. Hydrated and backfilled to surface with cuttings.

Geosyntec consultants

PLAN VIEW LOCATION:

PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 456932.04 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B4-3
EASTING: 894511.88 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 1 of 3
ELEVATION: 157.87 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 12 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 17.5 ft	TOTAL BORING DEPTH: 55 ft-bgs	DATE COMPLETED: 13 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
0	157.87	SPT	24	100	S-1	3-6-10-11		Poorly graded Sand (SP), brown to dark brown, dry to moist, medium dense, fine grained to medium grained sand, includes fine gravels (Fill)	
4	152.87	SPT	24	100	S-2	3-13-24-23		Same As Above, increase in gravel content, grades dense	
8	147.87	SPT	24	50	S-3	5-7-7-10		Poorly graded Sand (SP), reddish brown, moist to wet, medium dense, fine grained sand, includes fine grained gravel	
12	142.87	SPT	24	100	S-4	8-16-22-26		Grades to light brown, dense, no gravel	
16									
20	137.87							Clayey Sand (SC), reddish brown, moist,	

Geosyntec consultants

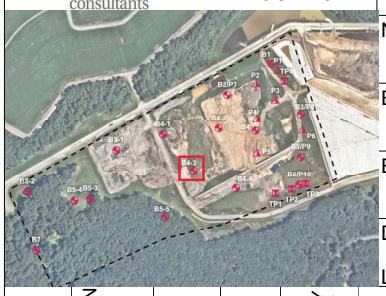
PLAN VIEW LOCATION:

PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 456932.04 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B4-3
EASTING: 894511.88 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 2 of 3
ELEVATION: 157.87 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 12 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 17.5 ft	TOTAL BORING DEPTH: 55 ft-bgs	DATE COMPLETED: 13 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
20	137.87	SPT	24	100	S-5	6-12-10-9		medium dense, fine grained sand, includes clusters of lean clay	
24	132.87	SPT	24	100	S-6	4-7-710		Same As Above, decrease in lean clay content	
28	127.87	SPT	24	100	S-7	3-5-3-3		Same As Above, grades loose, thin seam of gray lean clay in top of sampler	
32	122.87	SPT	24	100	S-8	3-4-8-9		Same As Above, grades medium dense, increase in fine grained gravel content	
36									
40	117.87							Sandy Lean Clay (CL), reddish brown,	

Geosyntec consultants

PLAN VIEW LOCATION:



PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 456932.04 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B4-3
EASTING: 894511.88 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 3 of 3
ELEVATION: 157.87 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 12 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 17.5 ft	TOTAL BORING DEPTH: 55 ft-bgs	DATE COMPLETED: 13 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
40	117.87	SPT	24	100	S-9	4-5-9-20		moist to wet, stiff, low medium plasticity, fine grained to medium grained sand	
44	112.87	SPT	24	100	S-10	10-14-17-25		Clayey Sand (SC), reddish brown, moist, dense, fine grained to medium grained sand	
48	107.87	SPT	24	100	S-11	9-15-12-15		Same As Above, grades to fine grained sand	
52	102.87	SPT	24	100	S-12	5-10-17-29		Same As Above, trace lean clay, gray, moist, hard	

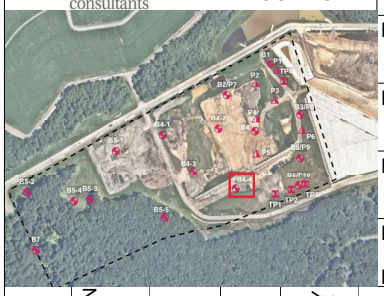
Lithology Legend

Fill SC SP CL SPT - Standard Penetration Test

NOTES: Boring backfilled with 1/2 bag of bentonite at bottom, followed by 2 bags of Portland Type I/II, then 1/2 bag of bentonite on top of that. Hydrated and backfilled to surface with cuttings.

Geosyntec consultants

PLAN VIEW LOCATION:

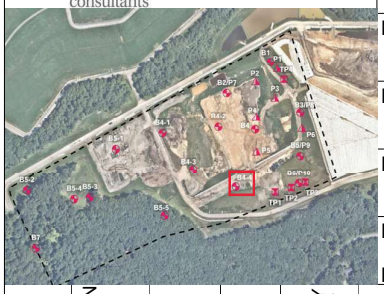


PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 456799.88 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B4-4
EASTING: 894844.86 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 1 of 4
ELEVATION: 181.70 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 11 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 20.5 ft	TOTAL BORING DEPTH: 79.5 ft-bgs	DATE COMPLETED: 11 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
0		SPT	24	100	S-1	3-16-12-7		Poorly graded Sand (SP), light brown, moist, medium dense, includes fine grained gravel, fine grained sand (Fill)	
	178.2								
4		SPT	24	50	S-2	2-4-6-9		Lean Clay (CL), grayish brown mottled with red and yellowish brown, moist, hard, low plasticity (Fill)	
	174.2								
8		SPT	24	50	S-3	3-13-9-10		Silty Sand Sand (SM), light brown, moist to wet, medium dense, fine grained sand (Fill)	
	170.2								
12		SPT	24	10	S-4	WH-1/18"		Poorly graded sand (SP), light brown, medium grained to coarse grained sand, moist, loose, trace fine grained gravels (Fill)	
	166.2								
16		SPT	24	100	S-5	4-7-10-12		Poorly graded Sand (SP), light brown, moist to wet, medium dense, fine grained to medium grained sand	
	162.2								
20									

Geosyntec consultants

PLAN VIEW LOCATION:

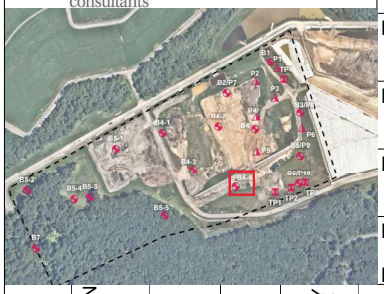


PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 456799.88 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B4-4
EASTING: 894844.86 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 2 of 4
ELEVATION: 181.70 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 11 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 20.5 ft	TOTAL BORING DEPTH: 79.5 ft-bgs	DATE COMPLETED: 11 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
	158.2								
24		SPT	24	100	S-6	4-6-6-8		Poorly graded Sand with silt (SP-SM), light brown, moist to wet, medium dense, fine grained sand	
	154.2								
28		SPT	24	100	S-7	4-7-12-15		Lean Clay (CL), light gray, moist to wet, very stiff, low to medium plasticity	
	150.2								
32		SPT	24	100	S-8	2-4-21-32		Poorly graded Sand (SP), light brown, wet, medium dense, medium grained sand	
	146.2							Silty Sand (SM), golden brown, wet, medium dense, fine grained sand	
36		SPT	24	100	S-9	4-8-9-7		Poorly graded Sand (SP), light brown, wet, medium dense, fine grained sand, includes trace fine grained gravel, trace clusters of lean clay	
	142.2								
40									
	138.2								
44		SPT	24	100	S-10	6-10-12-16		Lean Clay (CL), light gray mottled with reddish brown and yellowish brown, moist, hard, low plasticity	

Geosyntec consultants

PLAN VIEW LOCATION:

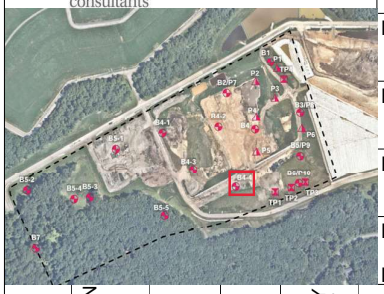


PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 456799.88 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B4-4
EASTING: 894844.86 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 3 of 4
ELEVATION: 181.70 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 11 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 20.5 ft	TOTAL BORING DEPTH: 79.5 ft-bgs	DATE COMPLETED: 11 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
48	134.2								
		SPT	24	100	S-11	5-11-19-27		Same As Above	
52	130.2								
		SPT	20	100	S-12	19-29-40-50/2"		Same As Above, grades to reddish brown	
56	126.2								
60	122.2	SPT	24	100	S-13	8-15-19-24		Lean Clay (CL) with sand, gray, moist, hard, fine grained sand, low plasticity	
64	118.2	SPT	15	100	S-14	10-22-50/3"		Same As Above	
68	114.2	SPT	9	26.7	S-15	36-50/3"		Silty Sand (SM), light gray, moist, very dense, fine grained sand	

Geosyntec consultants

PLAN VIEW LOCATION:



PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 456799.88 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B4-4
EASTING: 894844.86 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 4 of 4
ELEVATION: 181.70 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 11 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 20.5 ft	TOTAL BORING DEPTH: 79.5 ft-bgs	DATE COMPLETED: 11 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
72	110.2								
76	106.2								
	102.2	SPT	18	33.3	S-16	23-23-50/3"		Lean Clay (CL), gray mottled with yellowish brown, moist, hard, low plasticity	

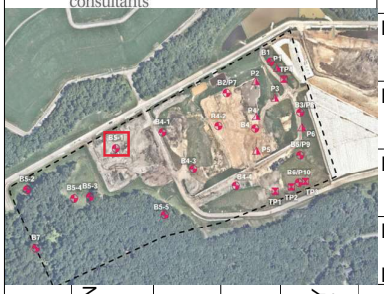
Lithology Legend

SM Fill SP SP-SM CL SPT - Standard Penetration Test

NOTES: Boring backfilled with 1/2 bag of bentonite at bottom, followed by 2 bags of Portland Type I/II, then 1/2 bag of bentonite on top of that. Hydrated and backfilled to surface with cuttings.

Geosyntec consultants

PLAN VIEW LOCATION:

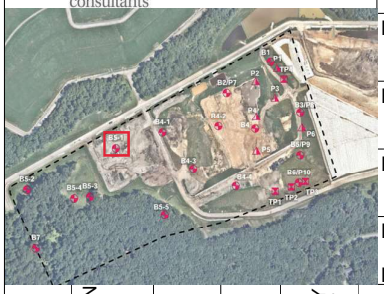


PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457086.42 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B5-1
EASTING: 893904.85 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 1 of 3
ELEVATION: 150.89 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 12 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 16 ft	TOTAL BORING DEPTH: 50 ft-bgs	DATE COMPLETED: 12 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
0	150.89							Upper 3' removed by site personnel contained asphalt, concrete, gravels	
4		SPT	24	100	S-1	8-10-9-8		Silty Sand (SM), grayish brown to dark brown, moist, medium dense, includes trace fine grained gravels, fine grained sand (Fill)	
	145.89								
8		SPT	24	100	S-2	5-13-15-18		Same As Above, includes seam of dark sandy lean clay from 8.5' to 9.5', moist, low plasticity changes to silty sand at 9.5' (Fill)	
	140.89								
12		SPT	24	100	S-3	4-9-13-13		Same As Above, includes thin lean clay seam from 13.5-14' that includes organic fibers (Fill)	
								Silty Sand (SM), reddish brown, moist, medium dense, fine grained sand	
	135.89								
16									
20	130.89	SPT	24	100	S-4	5-11-15-15		Same As Above, grades to light reddish brown	

Geosyntec consultants

PLAN VIEW LOCATION:

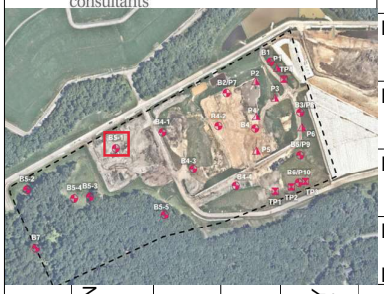


PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457086.42 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B5-1
EASTING: 893904.85 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 2 of 3
ELEVATION: 150.89 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 12 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 16 ft	TOTAL BORING DEPTH: 50 ft-bgs	DATE COMPLETED: 12 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
20	130.89								
24		SPT	24	100	S-5	3-5-6-6		Lean Clay (CL), reddish brown, moist, very stiff, low plasticity, trace fine grained sand	
	125.89								
28		SPT	24	100	S-6	2-5-11-14		Poorly graded Sand (SP), light brown, moist, medium dense, fine grained sand	
	120.89								
32		SPT	24	100	S-7	3-6-10-11		Clayey Sand (SC), light gray, moist, medium dense, fine grained sand Lean Clay (CL), light gray, moist, very stiff, includes fine grained sand	
	115.89								
36		SPT	24	100	S-8	6-11-12-9		Clayey Sand (SC), light gray, moist, medium dense, fine grained sand, includes some clusters of lean clay	
40	110.89								

Geosyntec consultants

PLAN VIEW LOCATION:



PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457086.42 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B5-1
EASTING: 893904.85 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 3 of 3
ELEVATION: 150.89 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 12 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 16 ft	TOTAL BORING DEPTH: 50 ft-bgs	DATE COMPLETED: 12 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
40	110.89								
44		SPT	24	100	S-9	8-11-12-12		Same As Above	
	105.89								
48		SPT	24	100	S-10	8-12-15-22		Same As Above	
	100.89								

Lithology Legend

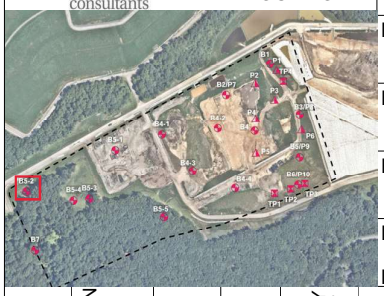
SM Fill SC SP CL

SPT - Standard Penetration Test

NOTES: Boring backfilled with 1/2 bag of bentonite at bottom, followed by 2 bags of Portland Type I/II, then 1/2 bag of bentonite on top of that. Hydrated and backfilled to surface with cuttings.

Geosyntec consultants

PLAN VIEW LOCATION:



PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 456757.78 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B5-2
EASTING: 893268.79 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 1 of 5
ELEVATION: 179.54 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 13 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 10 ft	TOTAL BORING DEPTH: 88.5 ft-bgs	DATE COMPLETED: 14 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
0	179.04	SPT	24	100	S-1	2-5-8-9		Poorly graded sand with gravel (SP), light brown, moist, medium dense, fine grained to coarse grained sand, fine grained gravel (Fill)	
4	175.04	SPT	24	100	S-2	3-3-3-5		Poorly graded Sand (SP), light brown, moist, loose, fine grained to medium grained sand	
8	171.04	SPT	24	100	S-3	2-5-3-4		Same As Above, includes clusters of lean clay grades to fine grained sand	
12	167.04								
		SPT	24	100	S-4	2-3-4-5		Same As Above, no lean clay clusters	
16	163.04								
20		SPT	24	75	S-5	4-7-8-7		Same As Above, grades medium dense	

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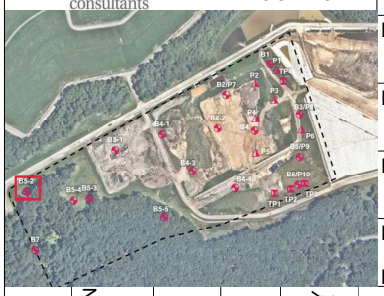
PLAN VIEW LOCATION:

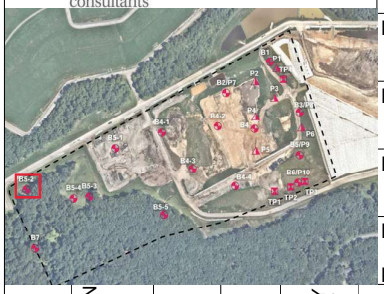


PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 456757.78 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B5-2
EASTING: 893268.79 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 2 of 5
ELEVATION: 179.54 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 13 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 10 ft	TOTAL BORING DEPTH: 88.5 ft-bgs	DATE COMPLETED: 14 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
20	159.04								
24	155.04	SPT	24	75	S-6	2-3-4-5		Lean Clay (CL), gray mottled with reddish brown, moist, stiff, low to medium plasticity, includes trace fine grained sand	
28	151.04	SPT	24	75	S-7	4-8-11-12		Poorly graded Sand with clay (SP-SC), light gray, moist to wet, medium dense, fine grained sand	
32	147.04	SPT	24	100	S-8	2-6-9-14		Poorly graded Sand (SP), light gray, wet, medium dense, fine grained sand	
36	143.04	SPT	24	100	S-9	6-10-16-23		Lean Clay (CL), grayish brown mottled with red, moist, hard, low plasticity	
40									

Geosyntec consultants

PLAN VIEW LOCATION:

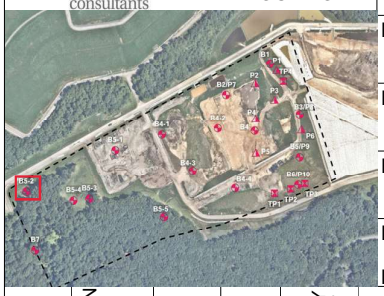


PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 456757.78 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B5-2
EASTING: 893268.79 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 3 of 5
ELEVATION: 179.54 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 13 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 10 ft	TOTAL BORING DEPTH: 88.5 ft-bgs	DATE COMPLETED: 14 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
40	139.04								
44	135.04	SPT	22	100	S-10	12-26-41-50/4"		Same As Above	
48	131.04	SPT	9	27.8	S-11	24-50/3"		Same As Above, increased sand content in bottom of sampler	
52	127.04	SPT	24	100	S-12	6-17-25-32		Same As Above, includes thin (2-3") seams of fine grained sand	
56	123.04	SPT	22	54.5	S-13	12-19-34-50/4"		Same As Above, grades to very stiff, includes fine grained, white sand in bottom of sample	
60									

Geosyntec consultants

PLAN VIEW LOCATION:

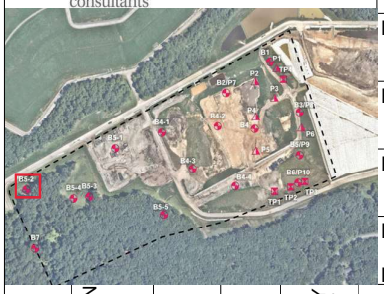


PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 456757.78 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B5-2
EASTING: 893268.79 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 4 of 5
ELEVATION: 179.54 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 13 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 10 ft	TOTAL BORING DEPTH: 88.5 ft-bgs	DATE COMPLETED: 14 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
60	119.04								
64	115.04	SPT	21	100	S-14	13-23-46-50/3"		Sandy Lean Clay (CL), reddish brown transitions to light gray, moist, hard, fine grained sand, low plasticity	
68	111.04	SPT	21	100	S-15	17-33-38-50/3"		Clayey Sand (SC), reddish brown, moist, very dense, fine grained sand, includes clusters of hard lean clay	
72	107.04	SPT	21	100	S-16	21-38-43-50/3"		Same As Above, grades to light gray	
76	103.04	SPT	15	100	S-17	20-26-50/3"		Same As Above, includes interbedded lean clay, light gray, moist, hard	
80									

Geosyntec consultants

PLAN VIEW LOCATION:



PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 456757.78 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B5-2
EASTING: 893268.79 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 5 of 5
ELEVATION: 179.54 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 13 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: 10 ft	TOTAL BORING DEPTH: 88.5 ft-bgs	DATE COMPLETED: 14 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
80	99.04								
84	95.04	SPT	15	100	S-18	12-25-50/3"		Lean Clay with sand (CL), light gray, moist, hard, low plasticity, fine grai	
88	91.04	SPT	4	100	S-19	50/4"		Clayey Sand (SC), light gray, moist to wet, very dense, fine grained sand	

Lithology Legend

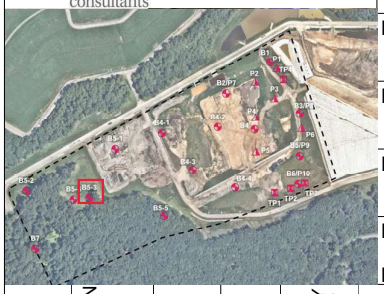
Fill | SC | SP | CL | SP-SC

SPT - Standard Penetration Test

NOTES: Boring backfilled with 1/2 bag of bentonite at bottom, followed by 2 bags of Portland Type I/II, then 1/2 bag of bentonite on top of that. Hydrated and backfilled to surface with cuttings.

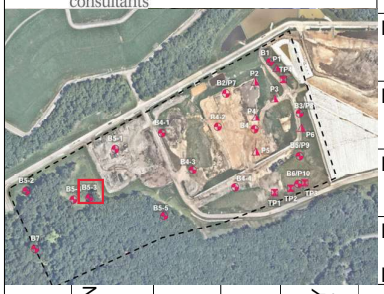
Geosyntec consultants

PLAN VIEW LOCATION:



PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 456752.57 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B5-3
EASTING: 893679.03 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 1 of 3
ELEVATION: 170.94 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 14 October 2022
DRILLER: Will Deininger LOGGED BY: JB/LS	DEPTH TO WATER: Not encoutered	TOTAL BORING DEPTH: 56 ft-bgs	DATE COMPLETED: 17 October 2022

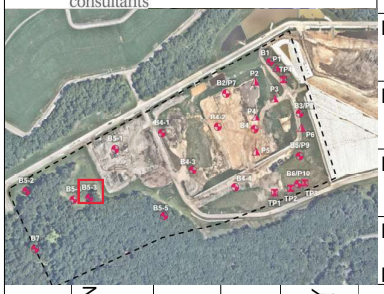
DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	BORING COMPLETION	SOIL GRAPH	DESCRIPTION	REMARKS
0	170.94	SPT	24	100	S-1	1-3-4-6		Clayey Sand (SC), light brown, wet, loose, fine grained sand, includes fine gravel and organic material	
4	166.94	SPT	24	100	S-2	3-4-6-7		Lean Clay (CL), grayish brown, moist, very stiff, low plasticity, includes seams of fine sand	
8	162.94	SPT	24	100	S-3	4-8-12-15		Same As Above, grades to grayish brown mottled with red, hard	
12	158.94	SPT	24	100	S-4	4-8-12-18		Same As Above	
16	154.94	SPT	24	100	S-5	5-9-15-16		Same As Above, grades to very stiff, includes thin seams of sand	
20	150.94								

Geosyntec consultants	PLAN VIEW LOCATION:	PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
		NORTHING: 456752.57 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B5-3
		EASTING: 893679.03 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 2 of 3
		ELEVATION: 170.94 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 14 October 2022
		DRILLER: Will Deininger LOGGED BY: JB/LS	DEPTH TO WATER: Not encoutered	TOTAL BORING DEPTH: 56 ft-bgs	DATE COMPLETED: 17 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	BORING COMPLETION	SOIL GRAPH	DESCRIPTION	REMARKS
24	146.94	SPT	24	100	S-6	6-9-11-8		Clayey Sand (SC), light gray, moist, medium dense, fine grained sand, includes seams of lean clay	
28	142.94	SPT	24	50	S-7	4-7-10-12		Poorly graded Sand (SP), white, moist, medium dense, fine grained sand	
32	138.94	SPT	24	50	S-8	5-5-5-7		Clayey Sand (SC), grayish white, moist, loose, 1" seam of red lean clay, fine grained sand	
36	134.94	SPT	24	60.4	S-9	7-9-12-16		Same As Above, grades to medium dense	
40	130.94	SPT	24	60.4	S-10	6-11-12-19		Poorly graded Sand (SP), white to gray, moist to wet, medium dense, fine grained sand	
44	126.94								

Geosyntec consultants

PLAN VIEW LOCATION:



PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 456752.57 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B5-3
EASTING: 893679.03 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 3 of 3
ELEVATION: 170.94 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 14 October 2022
DRILLER: Will Deininger LOGGED BY: JB/LS	DEPTH TO WATER: Not encoutered	TOTAL BORING DEPTH: 56 ft-bgs	DATE COMPLETED: 17 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	BORING COMPLETION	SOIL GRAPH	DESCRIPTION	REMARKS
48	122.94								
		SPT	24	60.4	S-11	6-10-15-24		Clayey Sand (SC), white to gray, moist, medium dense, fine grained sand, clay content varies throughout the sample	
52	118.94								
		SPT	24	100	S-12	7-15-21-25		Poorly graded Sand (SP), white with purple strikes, moist, dense, fine grained sand, 2" lean clay (CL) seam	
56	114.94								

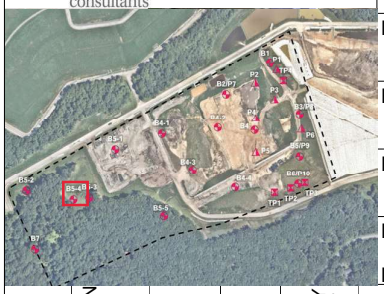
Lithology Legend

SC SP CL SPT - Standard Penetration Test

NOTES: Boring backfilled with 1/2 bag of bentonite at bottom, followed by 2 bags of Portland Type I/II, then 1/2 bag of bentonite on top of that. Hydrated and backfilled to surface with cuttings.

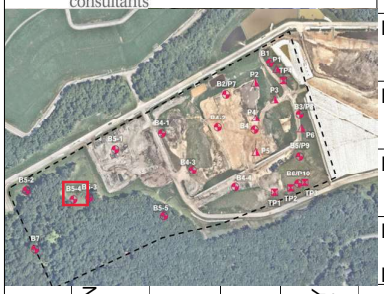
Geosyntec consultants

PLAN VIEW LOCATION:

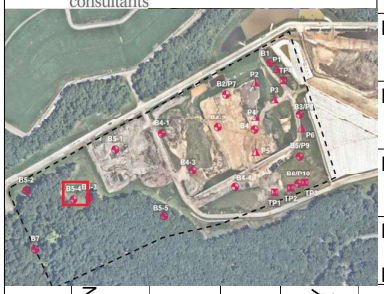


PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 456705.42 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B5-4
EASTING: 893577.79 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 1 of 4
ELEVATION: 171.50 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 17 October 2022
DRILLER: Will Deininger LOGGED BY: JB/LS	DEPTH TO WATER: 27 ft	TOTAL BORING DEPTH: 70 ft-bgs	DATE COMPLETED: 18 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	BORING COMPLETION	SOIL GRAPH	DESCRIPTION	REMARKS
0	171.5	SPT	24	100	S-1	1-1-2-2		Poorly graded Sand (SP), dark brown grades to tan brown, moist, very loose, some organics, 2" seam of orange clay right below top soil	
4									
	166.5	SPT	24	100	S-2	5-6-7-6		Clayey Sand (SC), orange brown, medium dense, moist, medium grained sand Poorly graded Sand (SP), light brown, moist, medium dense, fine grained sand	
8									
	161.5	SPT	24	100	S-3	2-3-5-6		Lean Clay (CL), light gray, moist, very stiff, low plasticity	
12									
	156.5	SPT	24	100	S-4	3-4-6-8		Same As Above, grades to red with medium plasticity	
16									
20	151.5							Sandy Lean Clay (CL), white with purple,	

Geosyntec consultants	PLAN VIEW LOCATION:	PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
		NORTHING: 456705.42 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B5-4
		EASTING: 893577.79 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 2 of 4
		ELEVATION: 171.50 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 17 October 2022
		DRILLER: Will Deininger LOGGED BY: JB/LS	DEPTH TO WATER: 27 ft	TOTAL BORING DEPTH: 70 ft-bgs	DATE COMPLETED: 18 October 2022

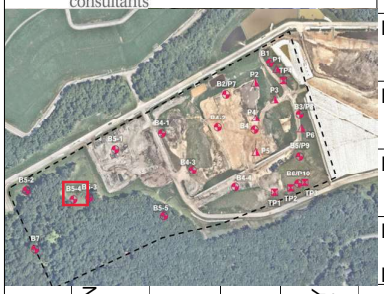
DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	BORING COMPLETION	SOIL GRAPH	DESCRIPTION	REMARKS
20	151.5	SPT	24	100	S-5	2-3-2-6		moist to wet, stiff, fine grained sand, 2" clayey sand seam	
24		SPT	24	100	S-6	2-4-6-5		Same As Above	
	146.5							Clayey Sand (SC), white with purple, moist to wet, loose, fine grained sand	
28									
	141.5	SPT	24	100	S-7	7-9-12-17		Lean Clay (CL), gray, moist, hard, low plasticity	
32									
	136.5	SPT	24	100	S-8	6-8-12-20		Sandy Lean Clay (CL), white to red brown, moist, hard, sand content varies	
36									
40	131.5							Lean Clay (CL) with sand, reddish	

Geosyntec consultants	PLAN VIEW LOCATION:	PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
		NORTHING: 456705.42 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B5-4
		EASTING: 893577.79 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 3 of 4
		ELEVATION: 171.50 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 17 October 2022
		DRILLER: Will Deininger LOGGED BY: JB/LS	DEPTH TO WATER: 27 ft	TOTAL BORING DEPTH: 70 ft-bgs	DATE COMPLETED: 18 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	BORING COMPLETION	SOIL GRAPH	DESCRIPTION	REMARKS
40	131.5	SPT	24	100	S-9	7-9-12-20		brown, moist, stiff to very stiff, 1" fine grained sand seam	
44	126.5	SPT	24	100	S-10	5-7-9-12		Sandy Lean Clay (CL), white to gray, moist, stiff	
48	121.5	SPT	22	100	S-11	9-17-25-50/4"		Lean Clay (CL), grayish brown mottled with yellowish and purplish brown, moist, hard, low plasticity	
52	116.5	SPT	24	100	S-12	15-25-15-16		Poorly graded Sand with clay (SP-SC), light grayish brown, moist, dense, fine grained sand, includes 1" seam of light gray lean clay	
56	111.5	SPT	24	100	S-13	5-5-6-10		Same As Above, grades to medium dense, stiff, includes 1" seam lean clay	
60									

Geosyntec consultants

PLAN VIEW LOCATION:



PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 456705.42 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B5-4
EASTING: 893577.79 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 4 of 4
ELEVATION: 171.50 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 17 October 2022
DRILLER: Will Deininger LOGGED BY: JB/LS	DEPTH TO WATER: 27 ft	TOTAL BORING DEPTH: 70 ft-bgs	DATE COMPLETED: 18 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	BORING COMPLETION	SOIL GRAPH	DESCRIPTION	REMARKS
60	111.5								
64		SPT	24	100	S-14	12-8-20-30		Same As Above, grades to dense	
	106.5								
68		SPT	24	100	S-15	4-6-11-13		Poorly graded sand (SP), light gray, moist to wet, medium dense, fine grained sand	
	101.5								

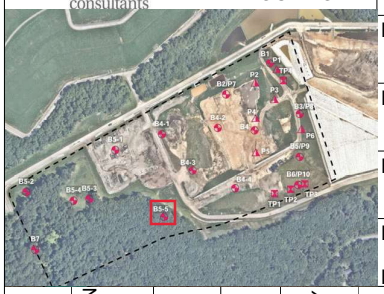
Lithology Legend

SC SP CL SP-SC SPT - Standard Penetration Test

NOTES: Boring backfilled with 1/2 bag of bentonite at bottom, followed by 2 bags of Portland Type I/II, then 1/2 bag of bentonite on top of that. Hydrated and backfilled to surface with cuttings.

Geosyntec consultants

PLAN VIEW LOCATION:

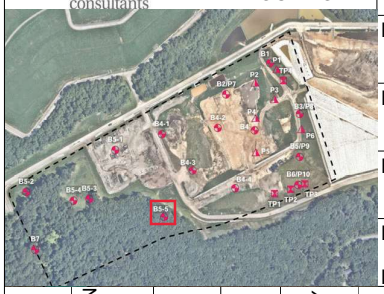


PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 456665.90 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B5-5
EASTING: 894198.42 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 1 of 4
ELEVATION: 166.82 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 18 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: Not encountered	TOTAL BORING DEPTH: 69.5 ft-bgs	DATE COMPLETED: 19 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
0	165.32	SPT	24	100	S-1	WH-2-1-4		Silty Sand (SM), dark golden brown, moist, very loose, with organic material, fine grained to medium grained sand	
4		SPT	24	50	S-2	2-3-7-4		Poorly graded Sand with silt (SP-SM), golden brown, moist, loose, includes trace fine gravel, fine grained sand	
	161.32								
8	157.32	SPT	24	100	S-3	7-15-23-28		Same As Above, grades to dense	
12									
	153.32	SPT	24	100	S-4	5-9-13-15		Poorly graded Sand (SP), light brown, moist to wet, medium dense, fine grained to medium grained sand	
16	149.32								
20		SPT	24	100	S-5	4-6-5-6		Same As Above, grades to reddish brown, wet	

Geosyntec consultants

PLAN VIEW LOCATION:

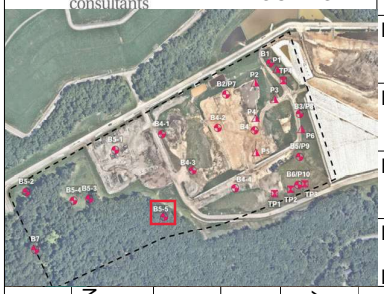


PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 456665.90 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B5-5
EASTING: 894198.42 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 2 of 4
ELEVATION: 166.82 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 18 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: Not encountered	TOTAL BORING DEPTH: 69.5 ft-bgs	DATE COMPLETED: 19 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
20	145.32								
24		SPT	24	100	S-6	3-6-7-12		Lean Clay (CL), grayish brown mottled with red, moist, hard, low plasticity	
	141.32								
28		SPT	24	100	S-7	4-9-11-15		Same As Above, grades to very stiff	
	137.32								
32									
	133.32	SPT	24	100	S-8	4-8-10-16		Same As Above, grades to light gray, slight increase in silt content	
36									
	129.32								
40		SPT	24	100	S-9	3-8-12-19		Same As Above, grades back to reddish brown	

Geosyntec consultants

PLAN VIEW LOCATION:

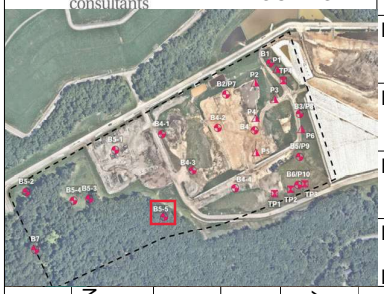


PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 456665.90 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B5-5
EASTING: 894198.42 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 3 of 4
ELEVATION: 166.82 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 18 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: Not encountered	TOTAL BORING DEPTH: 69.5 ft-bgs	DATE COMPLETED: 19 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
40	125.32								
44		SPT	24	100	S-10	5-12-16-17		Silty Sand (SM), light gray, moist, dense, fine grained sand	
48	121.32								
	117.32	SPT	24	100	S-11	4-22-20-22		Clayey Sand (SC), reddish brown, moist, dense, fine grained sand, trace reddish brown lean clay	
52									
	113.32	SPT	24	100	S-12	9-30-24-21		Same As Above, very dense, includes 2-3" seams of hard lean clay	
56	109.32								
60		SPT	24	100	S-13	9-17-42-35		Lean Clay (CL), reddish brown, moist, very stiff, low plasticity, includes seam of reddish brown, fine grained clayey sand	

Geosyntec consultants

PLAN VIEW LOCATION:



PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 456665.90 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B5-5
EASTING: 894198.42 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 4 of 4
ELEVATION: 166.82 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 18 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: Not encountered	TOTAL BORING DEPTH: 69.5 ft-bgs	DATE COMPLETED: 19 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
60	105.32								
		SPT	16	100	S-14	11-29-50/4"		Same As Above, grades to hard	
64								Clayey Sand (SC), light gray, moist, very dense, fine grained sand	
	101.32								
68		SPT	16	37.5	S-15	17-35-50/4"		Lean Clay with sand (CL), light gray, moist, hard, low plasticity, fine grained sand	
	97.32								

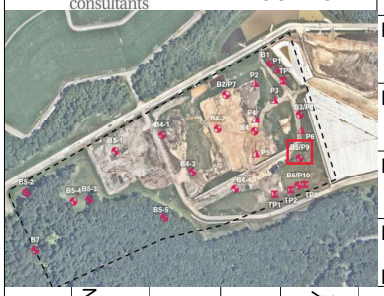
Lithology Legend

SM SC SP SP-SM CL SPT - Standard Penetration Test

NOTES: Boring backfilled with 1/2 bag of bentonite at bottom, followed by 2 bags of Portland Type I/II, then 1/2 bag of bentonite on top of that. Hydrated and backfilled to surface with cuttings.

Geosyntec consultants

PLAN VIEW LOCATION:

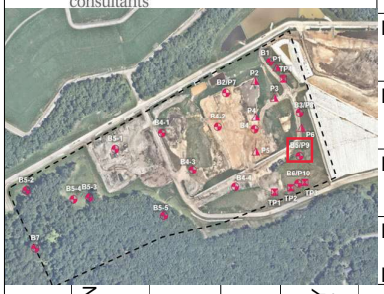


PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457035.24 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B5-P9
EASTING: 895350.29 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 1 of 2
ELEVATION: 186.20 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 30 September 2022
DRILLER: Will Deininger LOGGED BY: LS	DEPTH TO WATER: 31 ft	TOTAL BORING DEPTH: 40 ft-bgs	DATE COMPLETED: 30 September 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	WELL CONSTRUCTION
0	186.2	SPT	24	100	S-1	5-8-12-18		Poorly graded Sand (SP), brown to white, moist, medium dense, medium grained sand, includes organics (Fill)	Cuttings
4	182.2								
		SPT	24	60.4	S-2	4-10-18-11		Poorly graded Sand with silt (SP-SM), tan-brown to orange-brown, moist, medium dense, medium grained to coarse grained sand (Fill)	
8	178.2								
		SPT	24	75	S-3	12-15-14-10		Clayey Sand (SC), orange- brown, moist, medium dense, 3" seam of lean clay at 11.5', medium grained sand	3/8-inch Bentonite Pellets
12	174.2								
16	170.2	SPT	24	80.4	S-4	9-10-10-9		Poorly graded Sand (SP), tan brown to white, moist, medium dense, medium grained sand	
20	166.2	SPT	24	80.4	S-5	10-12-14-12		Same As Above, grades to brown	

Geosyntec consultants

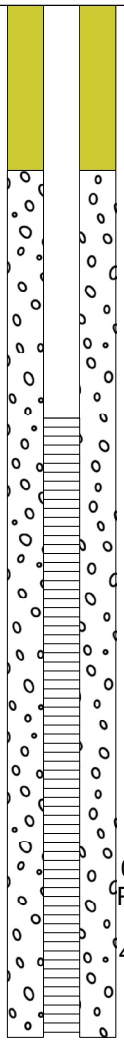
PLAN VIEW LOCATION:



PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457035.24 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B5-P9
EASTING: 895350.29 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 2 of 2
ELEVATION: 186.20 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 30 September 2022
DRILLER: Will Deininger LOGGED BY: LS	DEPTH TO WATER: 31 ft	TOTAL BORING DEPTH: 40 ft-bgs	DATE COMPLETED: 30 September 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION
24	162.2							
		SPT	24	50	S-6	4-10-15-20		Poorly graded Sand (SP), orange -brown, moist, medium dense, medium grained sand
28	158.2							
		SPT	24	80.4	S-7	14-22-24-37		Same As Above, color grades lighter, dense
32	154.2							
36	150.2	SPT	24	80.4	S-8	17-24-30-3		Same As Above, increase fines content, grades to orange brown, very dense
		SPT	24	80.4	S-9	10-7-9-10		Same As Above, grades to moist to wet, medium dense
								Lean Clay (CL), white-gray, moist, stiff, low plasticity
40	146.2							

WELL CONSTRUCTION



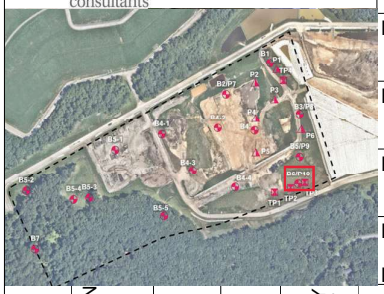
Lithology Legend

Fill | SC | SP | CL | Sand | Cuttings | Bentonite pellets

SPT - Standard Penetration Test

Geosyntec consultants

PLAN VIEW LOCATION:

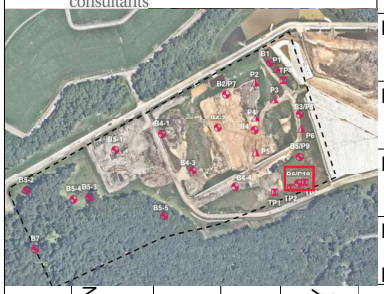


PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 456823.82 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B6-P10
EASTING: 895338.86 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 1 of 2
ELEVATION: 202.48 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 30 September 2022
DRILLER: Will Deininger LOGGED BY: LS	DEPTH TO WATER: Not encountered	TOTAL BORING DEPTH: 40 ft-bgs	DATE COMPLETED: 30 September 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	WELL CONSTRUCTION
0	202.48	SPT	24	100	S-1	3-7-4-3		Poorly graded Sand (SP), orange-brown, dry to moist, medium dense, medium grained sand, includes organic material (Fill)	
4	198.48								
		SPT	24	50	S-2	1-1-2-4		Lean Clay (CL), orange-brown and tan-brown, moist, stiff, low plasticity, trace organic material	
8	194.48								Cuttings
		SPT	24	100	S-3	3-4-4-5		Clayey Sand (SC), gray, moist, loose, medium grained sand, sand content decreases with depth	
12	190.48							Sandy Lean Clay (CL), gray brown, moist, medium stiff, low plasticity	
16	186.48	SPT	24	60.4	S-4	2-4-4-5		Clayey Sand (SC), gray with orange streaks, moist, loose, fine grained to medium grained sand, sand content increases with depth	
20	182.48	SPT	24	60.4	S-5	3-3-11-13		Poorly graded Sand (SP), gray, medium dense, fine grained to medium grained sand	3/8-inch Bentonite Pellets

Geosyntec consultants

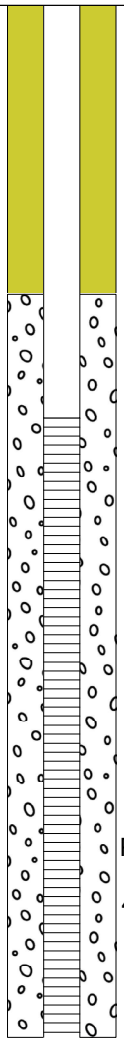
PLAN VIEW LOCATION:



PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 456823.82 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B6-P10
EASTING: 895338.86 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 2 of 2
ELEVATION: 202.48 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 30 September 2022
DRILLER: Will Deininger LOGGED BY: LS	DEPTH TO WATER: Not encountered	TOTAL BORING DEPTH: 40 ft-bgs	DATE COMPLETED: 30 September 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION
24	178.48							
		SPT	24	50	S-6	8-4-6-7		Poorly graded Sand (SP), white-gray, moist, loose, fine grained sand to medium grained sand, trace orange lean clay
28	174.48							
		SPT	24	100	S-7	4-5-8-12		Silty Clay (CL-ML), light gray with orange streaks, moist, very stiff, low plasticity
32	170.48							
36	166.48	SPT	24	50	S-8	24-30-40-38		Poorly graded Sand (SP), purple, moist, very dense, medium grained sand
		SPT	24	60.4	S-9	5-10-18-25		Poorly graded Sand (SP), orange, moist, medium dense, medium grained sand
40	162.48							

WELL CONSTRUCTION



3/8-inch Bentonite Pellets

#4 Morie Sand

0.010-inch Pre-Slotted Schedule 40 Screen

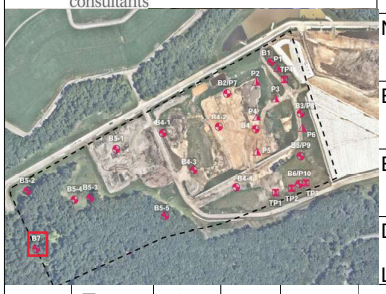
Lithology Legend

CL-ML | Fill | SC | SP | CL | #4 Morie Sand | Cuttings | Bentonite pellets

SPT - Standard Penetration Test

Geosyntec consultants

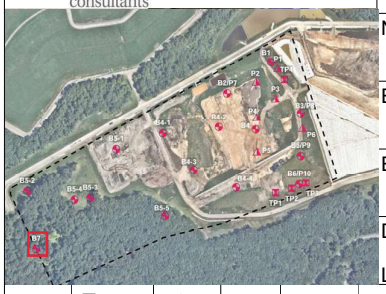
PLAN VIEW LOCATION:



PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 456330.96 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B7
EASTING: 893276.83 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 1 of 2
ELEVATION: 210.54 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 19 October 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: Not encountered	TOTAL BORING DEPTH: 25 ft-bgs	DATE COMPLETED: 19 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
0	210.54	SPT	24	100	S-1	WH-3-4-6		Lean Clay with sand (CL), light brown, dry to moist, very stiff, low plasticity, fine grained sand	
4	205.54	SPT	24	100	S-2	3-7-12-16		Silty Clay with sand (CL-ML), light yellowish brown, moist, medium dense, fine grained sand	
8	201.54	SPT	24	100	S-3	6-10-7-14		Same As Above	
12	197.54	SPT	24	100	S-4	6-7-10-11		Same As Above, slight increase in clay content	
16	193.54								
20								Poorly graded Sand (SP), light grayish	

Geosyntec consultants	PLAN VIEW LOCATION:	PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
		NORTHING: 456330.96 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: B7
		EASTING: 893276.83 ft (NAD27)	DRILLING METHOD: HSA		PAGE: 2 of 2
		ELEVATION: 210.54 ft (NGVD29)	SAMPLING METHOD: Split Spoon		DATE STARTED: 19 October 2022
		DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: Not encountered	TOTAL BORING DEPTH: 25 ft-bgs	DATE COMPLETED: 19 October 2022



DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
20		SPT	24	10.4	S-5	2-3-3-4		brown, moist, loose, medium grained to coarse grained sand	
	189.54								
24		SPT	24	100	S-6	5-8-8-8		Silty Sand (SM), dark brown, moist, medium dense, fine to medium grained sand	
	185.54								

Lithology Legend

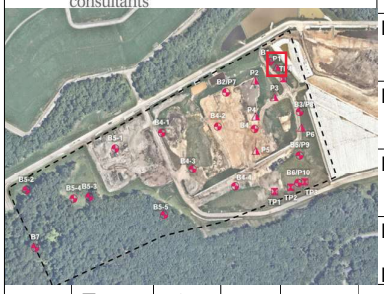
SM CL-ML SP CL

SPT - Standard Penetration Test

NOTES: Boring backfilled with 1/2 bag of bentonite at bottom, followed by 2 bags of Portland Type I/II, then 1/2 bag of bentonite on top of that. Hydrated and backfilled to surface with cuttings.

Geosyntec consultants

PLAN VIEW LOCATION:

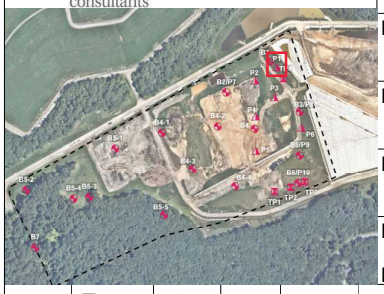


PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457700.02 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: P1
EASTING: 895168.71 ft (NAD27)	DRILLING METHOD: Direct Push		PAGE: 1 of 2
ELEVATION: 141.33 ft (NGVD29)	SAMPLING METHOD: Dual Tube		DATE STARTED: 27 September 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH OF WATER: NOT encountered	TOTAL BORING DEPTH: 25 ft-bgs	DATE COMPLETED: 27 September 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
0	141.33	DP	60	100	S-1			Silty Sand (SM), light brown, dry, fine grained sand, includes trace fine grained gravel and organics (Fill)	
4								Lean Clay with sand (CL), light reddish brown, low plasticity, fine grained sand, includes trace fine grained gravel (Fill)	
	136.33	DP	60	100	S-2			Same As Above, grades to reddish brown at 6' (Fill)	
8								Lean Clay (CL), reddish brown, moist to wet, hard, low plasticity, includes trace fine grained sand	
	131.33	DP	60	100	S-3			Silty Sand (SM), grayish brown, dry, fine grained sand	
12								At 12': Lean Clay (CL), grayish brown to reddish brown, moist, low to medium plasticity	
	126.33	DP	60	100	S-4			Same As Above, increased fine grained sand content from 17-18', slightly wet at 18-20'	
16									
20	121.33								

Geosyntec consultants

PLAN VIEW LOCATION:



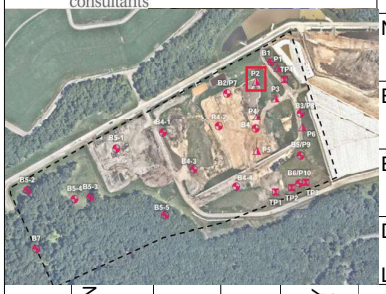
PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457700.02 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: P1
EASTING: 895168.71 ft (NAD27)	DRILLING METHOD: Direct Push		PAGE: 2 of 2
ELEVATION: 141.33 ft (NGVD29)	SAMPLING METHOD: Dual Tube		DATE STARTED: 27 September 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH OF WATER: NOT encountered	TOTAL BORING DEPTH: 25 ft-bgs	DATE COMPLETED: 27 September 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
20	121.33	DP	60	100	S-5			Same As Above, includes trace fine grained gravel from 20-21'	
24	116.33								

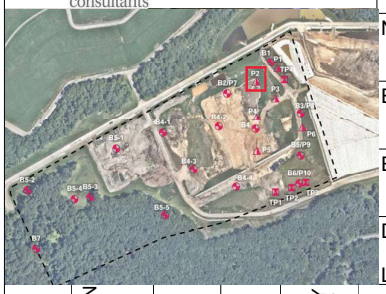
Lithology Legend

SM Fill CL SPT - Standard Penetration Test DP - Direct Push

NOTES: Screen Interval: 15 to 25 feet.

Geosyntec consultants	PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
PLAN VIEW LOCATION: 	NORTHING: 457598.52 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: P2
	EASTING: 895000.18 ft (NAD27)	DRILLING METHOD: Direct Push		PAGE: 1 of 2
	ELEVATION: 162.23 ft (NGVD29)	SAMPLING METHOD: Dual Tube		DATE STARTED: 28 September 2022
	DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: Not encountered	TOTAL BORING DEPTH: 40 ft-bgs	DATE COMPLETED: 28 September 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
0	162.23	DP	60	100	S-1			Silty Sand (SM), light brown, moist, fine grained sand with fine grained gravel (Fill)	
4	157.23	DP	60	100	S-2				
8	152.23	DP	60	100	S-3			Lean Clay (CL), grayish brown, moist, low to medium plasticity, includes trace fine grained sand	
12	147.23	DP	60	100	S-4			Silty Sand (SM), light brown, moist, includes trace fine grained gravel and lean clay lenses	
16	142.23	DP	60	100	S-5			Same As Above	
20								Same As Above. At 23' grades to dark	

Geosyntec consultants	PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
PLAN VIEW LOCATION: 	NORTHING: 457598.52 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: P2
	EASTING: 895000.18 ft (NAD27)	DRILLING METHOD: Direct Push		PAGE: 2 of 2
	ELEVATION: 162.23 ft (NGVD29)	SAMPLING METHOD: Dual Tube		DATE STARTED: 28 September 2022
	DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: Not encountered	TOTAL BORING DEPTH: 40 ft-bgs	DATE COMPLETED: 28 September 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
24								golden brown, slight increase in gravel content	
	137.23								
28		DP	60	100	S-6			Clayey Sand (SC), wet, grayish brown, with trace fine gravels	
	132.23								
32		DP	60	100	S-7			Lean Clay (CL), grayish brown mottled with reddish brown, moist, medium stiff to stiff, low to medium plasticity	
	127.23								
36		DP	60	80	S-8			Same As Above, includes seam of silty sand, light brown, wet, fine-medium grained sand	36-38' bag sample collected
40	122.23								

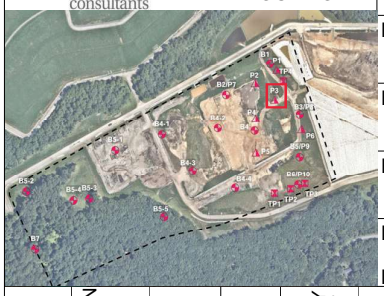
Lithology Legend

SM Fill SC CL SPT - Standard Penetration Test DP - Direct Push

NOTES: Screen Interval: 35 to 45 feet

Geosyntec consultants

PLAN VIEW LOCATION:

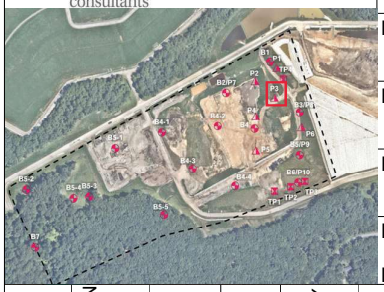


PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457474.90 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: P3
EASTING: 895152.37 ft (NAD27)	DRILLING METHOD: Direct Push		PAGE: 1 of 2
ELEVATION: 144.10 ft (NGVD29)	SAMPLING METHOD: Dual Tube		DATE STARTED: 27 September 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: Not encountered	TOTAL BORING DEPTH: 25 ft-bgs	DATE COMPLETED: 27 September 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
0	144.1	DP	60	100	S-1			Silty Sand (SM), yellowish brown, dry to moist, fine grained sand (Fill)	With fine grained gravels and organics in upper 2'
4	139.1	DP	60	100	S-2			Same As Above, grades wet at 7' (Fill)	
8	134.1	DP	60	40	S-3			Same As Above (Fill)	limited recovery from 10'-15'
12								Lean Clay (CL), grayish brown mottled with reddish brown, dry to moist, hard, includes fine grained sand	
16	129.1	DP	60	100	S-4			Same As Above, grades to reddish brown	
20	124.1	DP	60	0	S-5			Same As Above, grades grayish brown, hard	

Geosyntec consultants

PLAN VIEW LOCATION:



PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457474.90 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: P3
EASTING: 895152.37 ft (NAD27)	DRILLING METHOD: Direct Push		PAGE: 2 of 2
ELEVATION: 144.10 ft (NGVD29)	SAMPLING METHOD: Dual Tube		DATE STARTED: 27 September 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: Not encountered	TOTAL BORING DEPTH: 25 ft-bgs	DATE COMPLETED: 27 September 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
24	119.1								

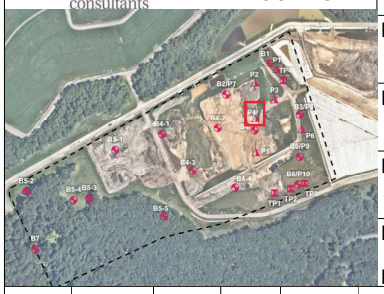
Lithology Legend

Fill CL SPT - Standard Penetration Test DP - Direct Push

NOTES: Screen Interval: 15 to 25 feet

Geosyntec consultants

PLAN VIEW LOCATION:

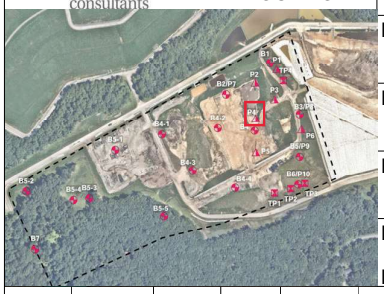


PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457329.86 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: P4
EASTING: 895004.99 ft (NAD27)	DRILLING METHOD: Direct Push		PAGE: 1 of 2
ELEVATION: 163.84 ft (NGVD29)	SAMPLING METHOD: Dual Tube		DATE STARTED: 27 September 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: Not encountered	TOTAL BORING DEPTH: 35 ft-bgs	DATE COMPLETED: 27 September 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
0	163.84	DP	60	80	S-1			Silty Sand (SM), light brown, moist, fine-medium grained sand, trace gravels (Fill)	
4	158.84	DP	60	80	S-2			Same As Above	
8	153.84	DP	60	100	S-3			Same As Above	
12	148.84	DP	60	80	S-4			Same As Above	
16									
20	143.84								

Geosyntec consultants

PLAN VIEW LOCATION:



PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457329.86 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: P4
EASTING: 895004.99 ft (NAD27)	DRILLING METHOD: Direct Push		PAGE: 2 of 2
ELEVATION: 163.84 ft (NGVD29)	SAMPLING METHOD: Dual Tube		DATE STARTED: 27 September 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: Not encountered	TOTAL BORING DEPTH: 35 ft-bgs	DATE COMPLETED: 27 September 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
20	143.84	DP	60	100	S-5			Lean Clay (CL) with sand, light reddish brown, moist, hard, low plasticity, fine grained sand	
24	138.84	DP	60	100	S-6			Same As Above, Increased fine grained sand content	
28	133.84	DP	60	100	S-7			Silty Sand (SM), light golden brown, moist to wet, fine grained to medium grained sand	
32	128.84							Lean Clay (CL), grayish brown mottled with reddish brown, moist, fine grained sand, low plasticity	

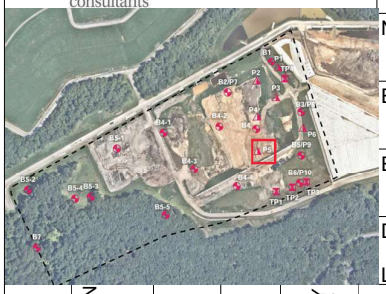
Lithology Legend

SM Fill CL SPT - Standard Penetration Test DP - Direct Push

NOTES: Screen Interval: 25 to 35 feet

Geosyntec consultants

PLAN VIEW LOCATION:

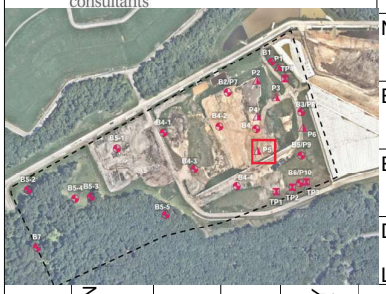


PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457070.68 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: P5
EASTING: 895007.00 ft (NAD27)	DRILLING METHOD: Direct Push		PAGE: 1 of 2
ELEVATION: 170.33 ft (NGVD29)	SAMPLING METHOD: Dual Tube		DATE STARTED: 27 September 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: Not encountered	TOTAL BORING DEPTH: 35 ft-bgs	DATE COMPLETED: 27 September 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
0	170.33	DP	60	100	S-1			Silty Sand (SM), light brown, moist, with gravel, fine grained sand (Fill)	
4	165.33	DP	60	80	S-2			Same As Above	
8	160.33	DP	60	100	S-3			Same As Above, includes thin seam of lean clay from 10-11' (Fill)	
12	155.33							Lean Clay (CL), reddish brown, moist, includes fine grained sand, low to medium plasticity	
16		DP	60	80	S-4			Silty Sand (SM), reddish brown, moist, fine grained gravel, fine grained sand, moist	
20	150.33								

Geosyntec consultants

PLAN VIEW LOCATION:



PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457070.68 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: P5
EASTING: 895007.00 ft (NAD27)	DRILLING METHOD: Direct Push		PAGE: 2 of 2
ELEVATION: 170.33 ft (NGVD29)	SAMPLING METHOD: Dual Tube		DATE STARTED: 27 September 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: Not encountered	TOTAL BORING DEPTH: 35 ft-bgs	DATE COMPLETED: 27 September 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
20	150.33	DP	60	100	S-5			Same As Above	
24	145.33	DP	48	100	S-6			Lean Clay (CL), grayish brown, moist, hard, low plasticity	
28	140.33	DP	60	50	S-7			Silty Sand (SM), light brown, wet, fine grained sand, trace fine grained gravel	
32	135.33								

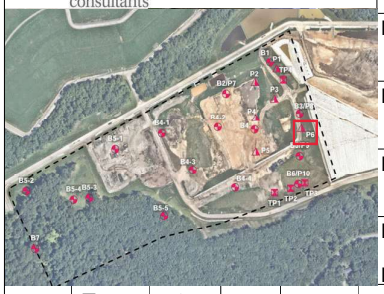
Lithology Legend

SM Fill CL SPT - Standard Penetration Test DP - Direct Push

NOTES: Screen Interval: 25 to 35 feet

Geosyntec consultants

PLAN VIEW LOCATION:

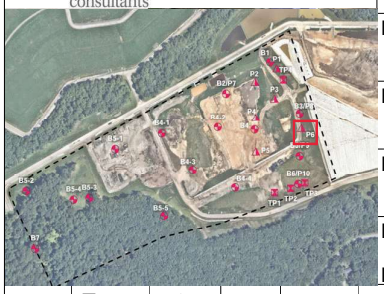


PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457244.76 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: P6
EASTING: 895363.20 ft (NAD27)	DRILLING METHOD: Direct Push		PAGE: 1 of 2
ELEVATION: 168.50 ft (NGVD29)	SAMPLING METHOD: Dual Tube		DATE STARTED: 28 September 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: Not encountered	TOTAL BORING DEPTH: 40 ft-bgs	DATE COMPLETED: 28 September 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
0	168.5	DP	60	100	S-1			Silty Sand (SM), light brown, moist, fine grained sand (Fill)	
4	164.5	DP	60	100	S-2			Same As Above, grades dark reddish brown, includes trace fine grained gravels (Fill)	
8	160.5	DP	60	100	S-3			Lean Clay (CL), grayish brown mottled with red brown, moist, hard, low plasticity	
12	156.5	DP	60	100	S-4			Same As Above	
16	152.5	DP	60	100	S-5			Silty Sand (SM), light brown, moist, fine grained sand, trace fine grained gravel	
20	148.5								

Geosyntec consultants

PLAN VIEW LOCATION:



PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457244.76 ft (NAD27)	DRILLER CONTRACTOR: Eichelbergers, Inc.		BORING NUMBER: P6
EASTING: 895363.20 ft (NAD27)	DRILLING METHOD: Direct Push		PAGE: 2 of 2
ELEVATION: 168.50 ft (NGVD29)	SAMPLING METHOD: Dual Tube		DATE STARTED: 28 September 2022
DRILLER: Will Deininger LOGGED BY: JB	DEPTH TO WATER: Not encountered	TOTAL BORING DEPTH: 40 ft-bgs	DATE COMPLETED: 28 September 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
24	144.5								
28	140.5	DP	60	100	S-6			Lean Clay (CL), grayish brown mottled with reddish brown, moist, low plasticity	
32	136.5	DP	60	100	S-7			Silty Sand (SM), light brown, wet, trace fine grained gravel and fine grained sand	
36	132.5	DP	60	100	S-8			Same As Above	
40	128.5								

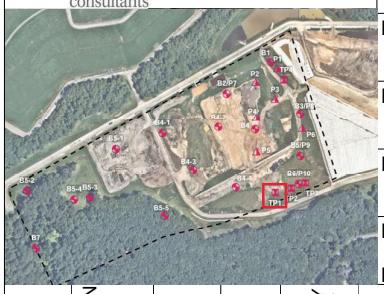
Lithology Legend

SM Fill CL SPT - Standard Penetration Test DP - Direct Push

NOTES: Screen Interval: 30 to 40 feet

Geosyntec consultants

PLAN VIEW LOCATION:



PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 456758.52 ft (NAD27)	DRILLER CONTRACTOR: MLRRF		BORING NUMBER: TP-1
EASTING: 895154.23 ft (NAD27)	DRILLING METHOD: Test Pits		PAGE: 1 of 1
ELEVATION: 192.86 ft (NGVD29)	SAMPLING METHOD: Grab Sampling		DATE STARTED: 10 October 2022
DRILLER: Bill Shinski LOGGED BY: JB	DEPTH TO WATER: Not encountered	TOTAL BORING DEPTH: 10 ft-bgs	DATE COMPLETED: 10 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
0	192.86	Baggie						Silty Sand (SM), light brown, moist, includes trace gravels (Fill)	
1									
2								Mulch (organics), fill material	
3									
4		Baggie						Silty Sand (SM), light brown, moist, includes clusters of lean clay	
5	187.86								
6									
7		Bucket						Same As Above, grades to light grayish brown at 6'	
8		Baggie						Same As Above, Includes cobbles and gravels	
9								Same As Above, grades to light grayish brown at 9.5', decrease in gravel content	
10	182.86								

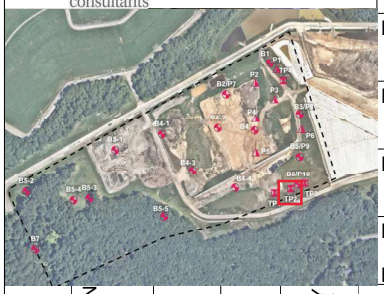
Lithology Legend

SM Fill SPT - Standard Penetration Test

NOTES: Test Pit backfilled with spoils.

Geosyntec consultants

PLAN VIEW LOCATION:



PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 456791.69 ft (NAD27)	DRILLER CONTRACTOR: MLRRF		BORING NUMBER: TP-2
EASTING: 895280.52 ft (NAD27)	DRILLING METHOD: Test Pits		PAGE: 1 of 1
ELEVATION: 204.94 ft (NGVD29)	SAMPLING METHOD: Grab Sampling		DATE STARTED: 20 October 2022
DRILLER: Bill Shinski LOGGED BY: JB	DEPTH TO WATER: 8 ft	TOTAL BORING DEPTH: 9 ft-bgs	DATE COMPLETED: 20 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
0	204.94	Baggie						Clayey Sand (SC), light reddish brown, moist, with gravels and cobbles, includes organics, high boulder content	
4	200.94	Bucket						Poorly graded Sand with silt (SP-SM), light grayish brown, moist, fine grained to medium grained sand	
7		Baggie						Sandy Silt (ML), light brown, moist, fine grained sand	Free water observed at 8'
9	195.94								

Lithology Legend

SC SP-SM ML

SPT - Standard Penetration Test

NOTES: Test Pit backfilled with spoils.

Geosyntec consultants

PLAN VIEW LOCATION:

PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 456832.03 ft (NAD27)	DRILLER CONTRACTOR: MLRRF		BORING NUMBER: TP-3
EASTING: 895390.78 ft (NAD27)	DRILLING METHOD: Test Pits		PAGE: 1 of 1
ELEVATION: 201.33 ft (NGVD29)	SAMPLING METHOD: Grab Sampling		DATE STARTED: 20 October 2022
DRILLER: Bill Shinski LOGGED BY: JB	DEPTH TO WATER: Not encountered	TOTAL BORING DEPTH: 11 ft-bgs	DATE COMPLETED: 20 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
0	201.33	Baggie						Silty Sand (SM), golden brown, moist, includes gravel	
1	200.33								
2		Bucket							
3		Baggie						Sandy Silt (ML), light brown, moist, fine grained sand	
4									
5									
6	195.33								
7									
8		Baggie						Grades to Silty Sand (SM), light gray, moist, fine grained sand, includes big clusters of silt	
9									
10									
11	190.33								

Lithology Legend

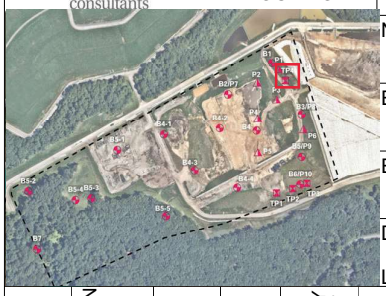
SM ML

SPT - Standard Penetration Test

NOTES: Test Pit backfilled with spoils.

Geosyntec consultants

PLAN VIEW LOCATION:



PROJECT NAME: Millersville Subcell 9.3	PROJECT NUMBER: ME2241	CLIENT: Anne Arundel County	LOCATION: Severn, MD
NORTHING: 457613.23 ft (NAD27)	DRILLER CONTRACTOR: MLRRF		BORING NUMBER: TP-4
EASTING: 895222.24 ft (NAD27)	DRILLING METHOD: Test Pits		PAGE: 1 of 1
ELEVATION: 142.36 ft (NGVD29)	SAMPLING METHOD: Grab Sampling		DATE STARTED: 20 October 2022
DRILLER: Bill Shinski LOGGED BY: JB	DEPTH TO WATER: Not encountered	TOTAL BORING DEPTH: 13 ft-bgs	DATE COMPLETED: 20 October 2022

DEPTH (FT)	ELEVATION (FT NGVD29)	SAMPLER TYPE	INCHES DRIVEN	SOIL RECOVERY PERCENT	SAMPLE NUMBER	SPT Blows	SOIL GRAPH	DESCRIPTION	REMARKS
0	142.36	Baggie						Poorly graded Sand (SP), dark brown to golden brown, moist, includes organics	
1		Bucket						Silty Clay (CL-ML), very light gray mottled with yellow and red, moist, hard Includes seam of medium grain sand at 2.5' Includes seam of fine grained clayey sand at 3.5'	
2									
3	139.36								
4									
5		Baggie						Silty Sand (SM), dark brown mottled with purple, moist to wet	
6		Baggie						Lean Clay (CL), light gray with yellow to red, moist, hard	
7									
8	134.36								
9									
10									
11									
12		Baggie						Same As Above, grades sandier	
13	129.36								

Lithology Legend

CL-ML SM SP CL

SPT - Standard Penetration Test

NOTES: Test Pit backfilled with spoils.

Appendix C
Historical Semiannual Groundwater Monitoring Reports

Appendix C.1
Spring 2021

Bureau of Waste Management Services
389 Burns Crossing Road
Severn, Maryland 21144
Phone (410) 222-6108

July 31, 2021

Mr. Andrew Grenzer, Chief
Solid Waste Operations Division
Land and Materials Administration
Maryland Department of the Environment
1800 Washington Blvd., Suite 605
Baltimore, MD 21230-1720

RE: Semi-Annual Groundwater and Surface Water Reports, January 1 – June 30, 2021, Millersville Landfill and Resource Recovery Facility and Sudley Closed Landfill

Dear Mr. Grenzer:

Enclosed are the Semi-Annual Groundwater and Surface Water Data Evaluation Reports for the Millersville Landfill and Resource Recovery Facility and the Sudley Landfill. The analytical results (raw data reports) for the monitoring events are also enclosed. The text, tables, and appendices are included as hard copies. The appendix containing the raw analytical data results is included electronically on the accompanying CDs.

Should you have any questions regarding the information covered in this document, please contact me or Mark Morris on (410) 222-6108.

Sincerely,

Stephen J. Krajcsik
Solid Waste Operations Administrator

Enclosure

bcc: Bill Dehn, AACo. Health Department (Mail Stop 3101), w/enclosures
Rhody Holthaus, w/enclosures
Michael Porath, w/enclosures
Mark Morris, w/enclosures
Stewart Kabis, ARM Group (cover letter only)
File# OR-O-MLF-551E w/enclosures; OR-O-MCC/MLF-506 (cover letter only) for Millersville
File# OR-O-SLF-651C w/enclosures; OR-O-SCC/SLF-606 (cover letter only) for Sudley

ANNE ARUNDEL COUNTY

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY

GROUNDWATER MONITORING REPORT
1st SEMI-ANNUAL 2021

ARM Project 20010434

Prepared for:

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS
WASTE MANAGEMENT SERVICES
389 Burns Crossing Road
Severn, Maryland 21144

Prepared by:

ARM Group LLC
9175 Guilford Road
Suite 310
Columbia, MD 21046

July 2021

ANNE ARUNDEL COUNTY

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY

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July 2021

Stewart Kabis, P.G.
Project Geologist II

T. Neil Peters, P.E.
Sr. Vice President/Q.A. Reviewer

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EXECUTIVE SUMMARY

The Maryland Department of Environment (MDE) has developed groundwater and surface water monitoring requirements to detect pollutant releases from landfills that could have adverse impacts on public health and the environment. To fulfill these requirements, landfills must be monitored to address three issues: (i) whether a release of chemicals from the landfill has occurred; (ii) whether conditions potentially adverse to public health and the environment were created as a result of a release; and (iii) whether the results of a statistical evaluation of groundwater data require that additional sampling and/or corrective measures be implemented. This executive summary presents the findings of the 1st semi-annual 2021 (Spring 2021) groundwater sampling event, performed at the Millersville Landfill and Resource Recovery Facility (MLFRRF) located in Anne Arundel County. The findings are summarized with respect to these three issues.

The sampling results are evaluated for compliance with regulatory standards, including: (i) U.S. Environmental Protection Agency (USEPA) maximum contaminant levels (MCLs) and secondary maximum contaminant levels (SMCLs); (ii) Maryland health-based standards; and (iii) groundwater protection standards (GWPS) established for the site. MCLs and groundwater protection standards are established based on health concerns, whereas SMCLs are based on aesthetic concerns, such as taste, color, and odor.

The groundwater and surface water monitoring strategy for the MLFRRF was first identified in the Environmental Monitoring Plan (EMP), prepared for the Anne Arundel County Department of Public Works (the County) by Stearns & Wheeler [June 1995, Revised June 1996]. An updated EMP for MLFRRF prepared by ERM, dated November 5, 2002, was conditionally approved by MDE with their June 7, 2004 letter, contingent upon the County adding methyl tertiary butyl ether (MTBE) analysis to the monitoring program. The EMP was updated by ERM and approved by MDE in a letter dated March 25, 2010. The EMP defines two separate portions of the MLFRRF. Closed portions (Cells 1 East, 2, and 4) that stopped receiving waste prior to October 9, 1991, are subject to the requirements of the Code of Maryland (COMAR). The closed portions (Cells 5, 6, and 7) that stopped receiving waste prior to October 9, 1993, are subject to the provisions of 40 CFR Part 258 related to final cover requirements only. The recently-closed Cell 8 and currently active Cell 9 are subject to 40 CFR Part 258. However, for the purposes of monitoring, the closed portion (Cells 5, 6, and 7) are included in the monitoring and analysis requirements pursuant to 40 CFR Part 258 along with Cell 8 and Cell 9. Each of these portions of the MLFRRF are monitored by a comprehensive monitoring network, on-site regulated monitoring wells (Subtitle D), on-site regulated monitoring wells (COMAR), on-site non-regulated monitoring wells, off-site non-regulated monitoring wells, and other off-site monitoring locations. The monitoring networks were defined according to strategies that comply with the applicable regulatory requirements.

At the request of MDE, additional monitoring was performed for a select list of parameters from the Appendix II list in 40 CFR Part 258 for the on-site Subtitle D regulated monitoring wells.

OVERVIEW OF FINDINGS

Overall, the sampling event did not reveal substantial changes in groundwater quality and the results for inorganic parameters are consistent with historical results. Given the data for the MLFRRF, the site-specific hydrogeology, and the corrective actions implemented by the County, the potential for adverse effects to human health and the environment continues to be minimal.

Of all samples collected for the Spring 2021 sampling event, there were four MCL exceedances, shown on **Table 3.** One of these was a first-time MCL exceedance, that of the concentration of thallium in well TW-13. It should be noted that the thallium analysis was performed using EPA Method 6010 rather than Method 6020 as specified in the EMP. However, a confirmation sample was collected in which the concentration of thallium was measured to be below the MCL. All four MCL exceedances are discussed below in **Section 3.3.1**.

The groundwater elevations and flow directions observed in the Zone 3 aquifer during this sampling event are generally consistent with historical data and seasonal variations.

The following summarizes the results of the Spring 2021 groundwater sampling event.

On-Site Regulated Monitoring Wells (Subtitle D)

All of the Appendix I VOC detections above the reporting limit (RL) are listed in **Table 4.** The Appendix II VOC detections are listed in **Table 5**. The concentration of methylene chloride in TW-25A exceeded its applicable MCL, as is typical. There were no first-time MCL or GWPS exceedances.

In general, concentrations of Appendix I and Appendix II VOCs in the on-site Subtitle D regulated wells are consistent with historical concentrations. All VOC results for Subtitle D wells are discussed below in **Section 3.3.2**.

While iron and manganese continue to exceed SMCLs and pH is below the SMCL range in several wells, concentrations are generally consistent with historical levels.

On-site Regulated Monitoring Wells (COMAR)

Detections of Appendix I VOCs above the RL in COMAR wells are listed in **Table 6.** Appendix II VOC detections above the RL are typically listed in **Table 7;** however, there were no detections above the RL during the Spring 2021 sampling event**.** There were no GWPS or MCL exceedances for VOCs. The concentrations measured for Appendix I VOCs in the on-site COMAR-regulated wells are generally consistent with historical records.

While iron and manganese continue to exceed SMCLs and pH is below the SMCL range in several wells, concentrations are generally consistent with historical levels.

On-site Non-regulated Monitoring Wells

Appendix I VOC detections above the RL are listed in **Table 8.** Appendix II VOC detections above the RL are typically listed in **Table 9;** however, there were no detections of any Appendix II VOCs in on-site non-regulated wells during this sampling event**.** There was one MCL exceedance for VOCs—the concentration of trichloroethene (TCE) exceeded its MCL in well TW-13, as has been observed during previous events. The concentrations measured for Appendix I VOCs in the on-site non-regulated wells are generally consistent with historical records.

While iron and manganese continue to exceed SMCLs and pH is below the SMCL range in several wells, concentrations are generally consistent with historical levels. Concentrations of inorganic parameters measured in on-site non-regulated monitoring wells during the Spring 2021 sampling event—including those of iron, manganese, and pH—are generally consistent with the historical record. The only exception is the aforementioned MCL exceedance for thallium in well TW-13, which was not repeated in the subsequent confirmation sample.

Off-site Non-regulated Monitoring Wells

Appendix I VOC detections above the RL are listed in **Table 10.** Appendix II VOC detections above the RL are listed in **Table 11.** There were no MCL or GWPS exceedances. Appendix I and Appendix II VOC concentrations in these wells are generally consistent with historical concentrations. Mercury concentrations in the off-site non-regulated monitoring wells are generally consistent with the historical record.

Off-site Residential Zone 4 Water Supply Wells

As shown on **Table 12** and **Table 13**, there were no Zone 4 residential water supply wells sampled during the Spring 2021 event.

Surface Water Sampling Locations

Appendix I VOC detections above the RL are typically listed in **Table 14,** but there were no detections above the RL during the Spring 2021 sampling event**.** Appendix II VOC detections above the RL are typically listed in **Table 15**, but there were no detections above the RL at surface water locations during this sampling event. As such, there were no MCL or GWPS exceedances.

Concentrations of inorganic parameters were generally consistent with the historical record for surface water sampling locations.

Statistical Evaluation

The results of the statistical evaluation of the Spring 2021 groundwater data are generally consistent with historical results. The findings indicate that downgradient samples show constituent

concentrations that are statistically significant increases (SSIs) above background levels for several VOCs and inorganic parameters. There were two new SSIs for parameters detected above the RL during the Spring 2021 sampling event that were not identified during the Fall 2020 event. These new SSIs consist of 1,4-dichlorobenzene in TW-25A and pH in TW-02A. Concentrations of most parameters that exhibited SSIs have generally been consistent with their historical data set; that is, no trend is apparent in the concentrations.

1 INTRODUCTION

1.1 BACKGROUND

In accordance with the requirements of the Solid Waste Management Regulations provided in Title 40 of the Code of Federal Regulations, Part 258 (40 CFR Part 258) and the Maryland Department of the Environment (MDE), the Anne Arundel County Department of Public Works (County) monitors groundwater and surface water at the Millersville Landfill and Resource Recovery Facility (MLFRRF), located in Anne Arundel County, Maryland. The monitoring requirements are provided in the Environmental Monitoring Plan (EMP), prepared by Stearns & Wheeler [June 1995, Revised June 1996]. An updated EMP for MLFRRF prepared by ERM, dated November 5, 2002, was conditionally approved by MDE with their June 7, 2004 letter, contingent upon the County adding methyl tertiary butyl ether (MTBE) analysis to the monitoring program. The EMP was revised by ERM and approved by MDE in a letter dated March 25, 2010. The primary objectives of the compliance monitoring program for the MLFRRF are: (i) to determine if leachate from the landfill affects groundwater quality; (ii) to evaluate whether or not conditions that are potentially adverse to public health and the environment have been caused in groundwater or surface water by the operation of the landfill; and (iii) to determine whether the results of a statistical evaluation of the sampling data indicate that the County needs to perform additional groundwater sampling or implement corrective measures.

This semi-annual report summarizes the findings of the evaluation performed on the data obtained during the Spring 2021 groundwater sampling event. The sampling performed during this event was conducted to fulfill the monitoring requirements of 40 CFR Part 258 and the approved EMP. This report also provides an overview of groundwater quality based on current and historical data.

The sampling data were evaluated through: (i) data validation; (ii) an evaluation of the ion balances of the samples that were collected, and an evaluation of the relative percent differences (RPDs) between sampling locations and corresponding duplicates (**Appendix D**); (iii) a statistical comparison of laboratory data between designated upgradient and downgradient groundwater on-site Subtitle D regulated monitoring wells; (iv) a comparison of laboratory results for each groundwater monitoring well with historical groundwater quality information; and (v) a comparison of laboratory results for each groundwater monitoring well with United States Environmental Protection Agency (USEPA) and MDE regulatory criteria, as well as with site-specific groundwater protection standards (GWPS).

There are three sets of rules that govern how the MLFRRF monitoring data are evaluated: 40 CFR Part 258 regulations apply to those portions of the MLFRRF that continued to receive waste after October 9th, 1993; 40 CFR Part 258 regulations related to final cover requirements apply to those portions of the MLFRRF that stopped receiving waste prior to October 9, 1993; and State Code of Maryland (COMAR) regulations apply to those closed portions of the MLFRRF that stopped

receiving waste before October 9, 1991. Closed disposal Cells 1 East, 2, and 4 are monitored in compliance with COMAR standards. The closed Cells 5, 6, and 7 that stopped receiving waste prior to October 9, 1993, are subject to the provisions of 40 CFR Part 258 related to final cover requirements only. Recently-closed Cell 8 and currently active Cell 9 are subject to 40 CFR Part 258. However, for the purposes of monitoring, the closed Cells 5, 6, and 7 are included in the monitoring and analysis requirements pursuant to 40 CFR Part 258 along with Cell 8 and Cell 9.

Table 1 provides a summary of the groundwater monitoring network for the MLFRRF. As shown in **Table 1**, the wells are designated according to whether they are used to monitor the older (Cells 1 East, 2, and 4) or newer (combined Cells 5, 6, and 7, Cell 8, and Cell 9) portions of the MLFRRF. The groundwater and surface water monitoring network for the MLFRRF is illustrated in **Figure C-1** in **Appendix C**. In general, the older and newer portions are separated by the Baltimore Gas Electric right-of-way.

In accordance with the EMP and in conformance with applicable regulations, 22 of the 50 on-site monitoring wells at the MLFRRF are classified as on-site regulated monitoring wells (Subtitle D). Eleven are located along the Eastern Boundary, two are near Cell 8, two are near the facility entrance serving as background wells, and seven are near Cell 9. Additionally, another 15 of the 50 on-site monitoring wells are classified as on-site regulated monitoring wells (COMAR). These monitoring wells are governed by COMAR for the closed portion of the MLFRRF. One monitoring well, TW-26R, is regulated by the facility's refuse disposal permit and is not covered by this semi-annual report. The remaining 13 on-site monitoring wells are classified as non-regulated. In conjunction with the regulated wells, numerous off-site monitoring locations have been established by the County to take proactive measures that comply with 40 CFR Part 258 groundwater monitoring requirements.

The regulated monitoring wells (Subtitle D) consist of the wells at the site that provide information on the quality of groundwater passing the relevant point of compliance and that are downgradient of combined Cells 5, 6, and 7, Cell 8 and Cell 9. **Table 1** summarizes the sampling locations used to monitor these cells. The on-site monitoring wells are designated as "TW". Wells designated as "MW" are off-site monitoring wells installed by the County to monitor off-site chemical concentrations in the groundwater. Wells designated as "RW" are also off-site monitoring wells and were converted from drinking water supply wells to monitoring wells by the County. Off-site residential water supply wells drilled into either the Zone 3 or Zone 4 aquifer are designated by the County parcel number with the prefix "P". Off-site residential water supply wells which have been drilled into the Zone 4 aquifer by the County have the suffix "Z4". Zone 4 residential wells are sampled biennially, with the exception of well P-417-Z4. This well is sampled annually as a conservative measure because there is no sentry monitoring point between the landfill and Parcel 417. **Table 2** lists the residential water supply wells. The residential water supply wells were not sampled during the Spring 2021 sampling event.

Regulated monitoring well (Subtitle D) TW-20 was abandoned on April 8, 2010, by a licensed well driller in accordance with COMAR 26.04.04.11. The well was placed to monitor groundwater downgradient of Cell 8 but was placed where a stormwater management pond was designated for Cell 9. Zone 3 monitoring well TW-20R was installed February 3-5, 2010, adjacent to Cell 8 as a replacement for abandoned monitoring well TW-20 per the approved EMP.

In addition to TW-20R, two non-regulated on-site Zone 4 monitoring wells were installed prior to the Spring 2010 sampling event. The installation of non-regulated on-site Zone 4 monitoring wells TW-14B and TW-6B were completed per the approved EMP on January 21, 2010 and February 2, 2010, respectively.

In accordance with the EMP, four on-site Zone 3 monitoring wells, TW-27, TW-28, TW-29, and TW-30, were installed prior to the Spring 2013 sampling event for incorporation into the regulatory monitoring well network for Cell 9. Additionally, existing monitoring wells TW-01, TW-02A, and TW-03, located south of Cell 9, are now considered part of the regulatory monitoring well network. Two years of background monitoring were completed prior to Cell 9 becoming operational in January 2017.

During the Fall 2020, construction activity for Cell 9 of the landfill involved significant earthwork in the immediate vicinity of TW-28, including raising the ground surface by 10-12 feet. As a result, new sections of well pipe were added to the top of TW-28 in order to vertically extend the well.

1.2 GROUNDWATER SAMPLING AND LABORATORY ANALYSIS

1.2.1 Groundwater Sampling

The County contracted with Environmental Monitoring and Assessment, LLC (EMA) of Lititz, Pennsylvania, to conduct the semi-annual groundwater sampling at the MLFRRF for the Spring 2021 sampling event. The sampling event included the collection of samples from 22 regulated on-site monitoring wells (Subtitle D), 15 regulated on-site monitoring wells (COMAR), 13 on-site non-regulated monitoring wells, and 12 off-site monitoring wells. The sampling locations are listed in **Table 1.**

Prior to collecting the groundwater samples, the depth to the water table was measured at each well. Once the water table measurement was recorded, the monitoring wells were purged and sampled in accordance with 40 CFR Part 258, MDE requirements, and the EMP. As the monitoring wells were purged, measurements of groundwater dissolved oxygen, pH, conductivity, temperature, oxidation-reduction potential, turbidity, and appearance were recorded.

1.2.2 Groundwater Sample Analysis

The groundwater analytical program for the MLFRRF includes the analysis of samples for parameters used to monitor both the existing and closed portion of the MLFRRF. For the purpose of uniformity and ease of implementation, the samples that are collected from the wells used to monitor the closed portion of the MLFRRF are analyzed in accordance with the detection monitoring requirements (defined by 40 CFR Part 258) for the existing portion of the MLFRRF, as specified in the EMP. In accordance with these detection monitoring requirements, the samples are analyzed for the parameters listed in Appendix I of 40 CFR Part 258 (Appendix I parameters). The Appendix I parameters include inorganic constituents (metals) and organic constituents (volatile organic compounds or VOCs).

In addition to these analytical requirements, the samples collected at the site are also analyzed for parameters historically monitored at the site. These parameters include dichlorodifluoromethane and dichlorofluoromethane, which are listed in Appendix II of 40 CFR Part 258 (Appendix II parameters), methyl tertiary butyl ether (MTBE), and general chemistry parameters such as chloride and total dissolved solids that can sometimes be indicators of landfill leachate (indicator parameters).

In accordance with this analytical program described above, the groundwater samples were analyzed for VOCs, total and dissolved metals, and general chemistry indicator parameters. The methods used to analyze the samples included USEPA Methods 524.2 and 8260 for VOCs; USEPA Methods 6010 and 7470A for metals; and 40 CFR Part 136 methods for the indicator parameters. The full laboratory analytical results and data packages are presented as **Appendix E.**

1.3 SURFACE WATER SAMPLING AND LABORATORY ANALYSIS

1.3.1 Surface Water Sampling

During the Spring 2021 sampling event, three surface water samples, SW-1, SW-2, and SW-3 were collected by EMA from Wells Branch, which flows west to east across the site (see Figure C-1). The surface water samples were collected from the stream locations that are representative of upgradient and downgradient conditions. Sample location SW-1 is an upgradient location between Cell 8 and the leachate pretreatment plant, approximately 200 feet downgradient of monitoring well TW-10A. Sample location SW-2 is a downgradient location near the TW-4 well cluster. Surface water collected at this location is representative of surface water conditions prior to discharging off-site. Sample location SW-3 is a mid-stream location that is downgradient of Stormwater Pond 8-1 and is located between combined Cells 5-7, Cell 8, and Cell 9. This location is approximately equal distance from sample locations SW-1 and SW-2.

1.3.2 Surface Water Sample Analysis

The surface water samples were analyzed for VOCs, total metals, and indicator parameters. The methods used to analyze the samples included USEPA Method 8260 for VOCs; USEPA Methods 6010 and 7470A for metals; and 40 CFR Part 136 methods for the indicator parameters.

1.4 QUALITY ASSURANCE/QUALITY CONTROL SAMPLING AND ANALYSIS

1.4.1 Quality Assurance/Quality Control Sampling (QA/QC)

Field and laboratory QA/QC protocols were employed during the sampling event to ensure that QA/QC criteria were met. The field QA/QC protocols included the collection and analysis of two blind duplicate samples from wells TW-24A and TW-25. In addition, one field blank and seven trip blanks were prepared and analyzed. The laboratory QA/QC protocols included the analysis of method blanks and matrix spike (MS) and matrix spike duplicate (MSD) samples for GC/MS runs. These protocols help identify possible sources of VOC contamination that may cause elevated or false positive parameter levels to be reported.

1.4.2 Quality Assurance/Quality Control Sample Analysis

To ensure that the field QC criteria were met, blind duplicate samples were analyzed for all parameters for which the groundwater samples were analyzed. These parameters include VOCs by USEPA Method 8260; total and dissolved metals by USEPA Methods 6010 and 7470A; and the indicator parameters by 40 CFR Part 136 methods. The field blank was also analyzed for all parameters for which the Subtitle D regulated monitoring wells were analyzed. These parameters include VOCs by USEPA Method 8260; total and dissolved metals by USEPA Methods 6010 and 7470A; and indicator parameters by 40 CFR Part 136 methods. The trip blanks were analyzed for VOCs according to USEPA Method 8260.

To ensure that the laboratory QA criteria were met, project-specific MS and MSD samples were analyzed at the rate of one MS/MSD sample for every 20 field samples, as specified in the EMP. The MS and MSD samples were used by the laboratory to evaluate possible matrix effects that could have interfered with the analytical method, and to estimate the method precision. The analysis of laboratory method blanks was performed to identify possible sources of contamination that may have caused elevated or false positive parameter levels to be reported.

1.5 DATA ANALYSIS METHODOLOGY

The analysis of the data obtained during this sampling event included: validation of the laboratory data, determination of USEPA National Primary Drinking Water Standards (MCLs) exceedances,

statistical evaluation of upgradient versus downgradient parameter concentrations, identification of GWPS exceedances, and assessment of groundwater elevations.

The laboratory sample data and QA/QC data were validated to verify proper analytical procedures and checks were performed by the analytical laboratory. The laboratory data validation is discussed further in **Appendix D** of this report. The laboratory analytical data packages are presented as **Appendix E** of this report.

The data were evaluated to determine whether or not concentrations exceeded MCLs and National Secondary Drinking Water Standards (SMCLs), state health-based standards, and site-specific GWPS. The GWPS for the site were established in 1997. This evaluation is included in **Section 3** of this report.

The data analysis included a statistical evaluation of the detection monitoring data obtained from the on-site regulated monitoring wells (Subtitle D). This evaluation was used to determine if there is a statistically significant change in groundwater quality for the portions of the site subject to 40 CFR Part 258.54 that may be attributed to the MLFRRF. The historical concentrations of the parameters detected in the groundwater samples from each on-site regulated monitoring well (Subtitle D) were compared to the historical background data using statistical methods described in the EMP and 40 CFR Part 258.53(g). The statistical analysis is discussed further in **Section 4** of this report.

2 SUMMARY OF SAMPLING EVENT

2.1 OVERVIEW

The County contracted with EMA to conduct the Spring 2021 sampling event at the MLFRRF. Laboratory sample analysis was performed by Pace Analytical Service (Pace), of Greensburg, Pennsylvania.

The groundwater monitoring wells were purged and sampled in accordance with the EMP and 40 CFR Part 258. **Figure C-1** shows the locations of the sampling points and the corresponding sampling classifications. Quality control blanks and blind duplicates were obtained, as discussed in **Section 1.4.1** of this report. The groundwater samples were submitted to the laboratory for analyses of total and specific dissolved metals, Appendix I VOCs, and inorganic indicators of leachate (chloride, ammonia, nitrite and nitrate-nitrogen, chemical oxygen demand, total alkalinity, sulfate, dissolved solids, and hardness).

2.2 DATA ANALYSIS

The methods used to collect and analyze the groundwater, surface water and QA/QC samples for this sampling event were evaluated to determine compliance with the EMP for the site and 40 CFR Part 258. The following procedures were followed to evaluate the compliance of the field sampling activities and the laboratory methods:

- Review of the appropriateness of the analytical methods;
- Review of the appropriateness of sample bottle types, preservatives, and holding times for each analytical method;
- Review of reports and analytical data for trip blanks, field blanks, duplicate samples, and laboratory method blanks to identify possible evidence of contamination;
- Review of Chain-of-Custody documentation for accuracy and completeness; and
- Review of field methods described in the field sampling reports.

The field and laboratory results were also evaluated to determine the validity of the data. The following procedures were followed to assess the validity of the data:

- Calculation of charge balance errors on the samples collected in the field;
- Review of MS and MSD samples to evaluate possible matrix effects that may interfere with the analytical method;

- Review of MS, MSD, and blind duplicate samples to calculate the relative percent difference (RPD) of duplicate samples in obtaining an estimate of laboratory method precision;

- Review of laboratory reports on instrument tuning, instrument calibration, and recoveries of spiked samples for each analytical method; and

- Comparison of the analytical data and groundwater elevations to historical values at each sampling location.

The results obtained from this evaluation satisfy the project QA/QC objectives. The results of the evaluation of the analytical data are provided in **Appendix D.** The full laboratory analytical data packages are presented as **Appendix E** of this report.

A comparison of the analytical data to MCLs, SMCLs, State standards, and established GWPS, as well as to historical data, is discussed in **Section 3.**

3 SUMMARY OF ANALYTICAL RESULTS

3.1 INTRODUCTION

Groundwater elevations were measured by the County on a monthly basis and are included in this report in **Appendix C**. The field and laboratory analytical results were evaluated by comparing the current data to historical data. The laboratory results were also evaluated for compliance with regulatory standards. In assessing the laboratory data, each parameter was evaluated for compliance with: (i) MCLs and SMCLs; (ii) Maryland health-based standards; and (iii) GWPS established for the site. MCLs and GWPS are established based on health concerns, whereas SMCLs are based on aesthetic concerns, such as taste, color, and odor. A statistical evaluation of the laboratory results is presented in **Section 4**.

3.2 GROUNDWATER ELEVATION DATA

The monthly water table measurements recorded during April 2021 are provided in **Appendix C.** The groundwater elevations are generally consistent with historical data.

Potentiometric surface contours for groundwater levels measured in wells screened within the Zone 3 aquifer during Spring 2021 are illustrated on **Figure C-1** in **Appendix C**. As shown on the drawing, the general direction of groundwater flow in the Zone 3 aquifer at the MLFRRF is toward the northeast. Groundwater flow direction is consistent with historical data.

3.3 ANALYTICAL RESULTS

The results of the comparison of the analytical data to regulatory standards and to historical trends are discussed below for the volatile organic and inorganic data. In assessing the data, each parameter was evaluated for compliance with the MCLs and SMCLs, with Maryland health-based standards, and with GWPS established for the site.

The current analytical data and the historical analytical data are included in tables in **Appendix A.** The tables present the concentrations over time for organic and inorganic parameters. They provide a simple means of evaluating trends in the concentrations. The "J" qualifier associated with a concentration indicates the compound was detected at a trace concentration below the laboratory RL but above the MDL and as such is an estimated value. The "U" qualifier associated with a concentration indicates the compound was not detected. The "B" qualifier indicates possible laboratory contamination due to the compound being detected in the method or field blank sample analysis.

3.3.1 **MCL Exceedances**

Table 3 lists the MCL exceedances at the site for this sampling event. As shown in **Table 3**, there were four parameters that exceeded their applicable MCLs. Time-series plots for parameter concentrations with historic MCL exceedances for on-site monitoring wells have been constructed to identify potential trends in concentrations over time. These plots are included in **Appendix B**.

Three of the MCL exceedances were consistent with the historical record. There was one first-time MCL exceedance during the Spring 2021 sampling event. The concentration of thallium, 0.0044 J mg/L, in on-site non-regulated well TW-13 exceeded the applicable MCL of 0.002 mg/L. It should be noted that the thallium analysis was performed using EPA Method 6010 rather than Method 6020 as specified in the EMP. TW-13 was re-sampled on June 24th, 2021 and analyzed for thallium using Method 6020. The result of this analysis, using the correct method, yielded a non-detect concentration of thallium (0.001 U mg/L).

3.3.2 **On-site Regulated Monitoring Wells (Subtitle D)**

Appendix I Volatile Organic Compounds

As shown on **Table 4,** nine different VOCs were detected above the RL across 11 different monitoring locations. The concentration of methylene chloride in TW-25A exceeded its applicable MCL, as it has done over the past several years.

All detections of VOCs above the RL were generally consistent with the historical record. No Appendix I VOCs were detected above the RL in the following Subtitle D wells during the Spring 2021 sampling event: TW-02A, TW-03, TW-04B, TW-10A, TW-14A, TW-19, TW-20R, TW-23, TW-24A, TW-27, and TW-30.

Appendix II Volatile Organic Compounds and MTBE

As shown in **Table 5**, detections above the RL of dichlorodifluoromethane, dichlorofluoromethane, and MTBE were noted for four different locations. There were no GWPS or Maryland State Action Level exceedances. In general, concentrations of these parameters are consistent with concentrations measured over the past 10 years.

No Appendix II VOCs were detected above the reporting limit in the following Subtitle D wells during the Spring 2021 sampling event: TW-02A, TW-03, TW-04, TW-04B, TW-05, TW-05A, TW-06 TW-10A, TW-14A, TW-19, TW-20R, TW-23, TW-24, TW-24A, TW-25, TW-27, TW-29, and TW-30.

Inorganics

Mercury was detected at concentrations above the RL only in Subtitle D wells TW-06, TW-24 and TW-24A. Concentrations in all three of these wells were below the applicable MCL.

Iron (total and dissolved), manganese (total and dissolved), and turbidity were detected in many of the regulated monitoring wells (Subtitle D) at concentrations that exceeded the applicable SMCLs. Iron and manganese are typical naturally occurring metals found in groundwater and are not necessarily indicative of contamination from the landfill. Measurements of pH were below the SMCL range for most on-site Subtitle D regulated monitoring wells. Low pH is also typical of groundwater and is believed to be a natural property of groundwater at the MLFRRF. Furthermore, pH concentrations in the downgradient monitoring wells are consistent with those measured in upgradient background groundwater.

Concentrations of inorganic parameters measured during the Spring 2021 sampling event—including those of iron, manganese, and pH—are generally consistent with the historical record.

3.3.3 **On-site Regulated Monitoring Wells (COMAR)**

Appendix I Volatile Organic Compounds

As shown on **Table 6,** there were only two Appendix I VOCs detected above the RL across all COMAR regulated on-site monitoring wells. There were no MCL or GWPS exceedances. These detections are consistent with the historical record. There were no Appendix I VOCs detected above the RL in COMAR regulated wells TW-07, TW-07A, TW-08, TW-08A, TW-09B, TW-09C, TW-15, TW-16, TW-17, TW-17A, TW-21, TW-22, TW-22A, and TW-22B.

Appendix II Volatile Organic Compounds and MTBE

Although they are typically listed in **Table 7**, there were no Appendix II VOCs detected above the RL in COMAR regulated wells during the Spring 2021 monitoring event.

Inorganics

Mercury was detected at a concentration above the RL in one COMAR regulated well (TW-15B). The concentration was below the applicable MCL. Iron (total and dissolved), manganese (total and dissolved), and turbidity were detected in several of the COMAR regulated monitoring wells at concentrations that exceeded their applicable SMCLs. Iron and manganese are typical naturally occurring metals found in groundwater and are not necessarily indicative of contamination from the landfill. Measurements of pH were below the SMCL range for all on-site COMAR regulated monitoring wells. Low pH is also typical of groundwater and is believed to be a natural property of groundwater at the MLFRRF. Furthermore, pH concentrations measured in the downgradient wells are comparable to upgradient background concentrations.

Concentrations of inorganic parameters measured in COMAR regulated monitoring wells during the Spring 2021 sampling event—including those of iron, manganese, and pH—were consistent with the historical record.

3.3.4 **On-site Non-regulated Monitoring Wells**

Volatile Organic Compounds

As shown on **Table 8**, there were four different Appendix I VOCs detected above the RL across two on-site non-regulated monitoring wells during the Spring 2021 sampling event. There was one MCL exceedance—the concentration of TCE exceeded its applicable MCL in well TW-13, as it has done during some previous events. These detections are consistent with the historical record. There were no Appendix I VOCs detected above the RL in the following on-site non-regulated wells: TW-02, TW-03A, TW-05B, TW-06A, TW-06B, TW-09, TW-11A, TW-14B, TW-16A, TW-18, and TW-21A.

Appendix II VOCs detected above the RL are typically shown on **Table 9** but there were no detections above the RL in on-site non-regulated monitoring wells during the Spring 2021 sampling event.

Inorganics

As previously mentioned, the concentration of thallium in on-site non-regulated well TW-13 exceeded the applicable MCL of 0.002 mg/L. However, TW-13 was re-sampled and the resulting concentration was below the MCL.

Mercury was not detected above the RL in any on-site non-regulated monitoring wells. Iron (total and dissolved), manganese (total and dissolved), and turbidity were detected in a few of the on-site non-regulated monitoring wells at concentrations that exceeded their applicable SMCLs. Iron and manganese are typical naturally-occurring metals found in groundwater and are not necessarily indicative of contamination from the landfill. Measurements of pH were below the SMCL range for most on-site non-regulated monitoring wells. Low pH is also typical of groundwater and is believed to be a natural property of groundwater at the MLFRRF. Furthermore, pH concentrations measured in the downgradient wells are comparable to upgradient background concentrations.

Concentrations of inorganic parameters measured in on-site non-regulated monitoring wells during the Spring 2021 sampling event—including those of iron, manganese, and pH—are consistent with the historical record.

3.3.5 **Off-site Non-regulated Monitoring Wells**

Appendix I Volatile Organic Compounds

As shown on **Table 10,** three different Appendix I VOCs were detected above the RL across six different off-site non-regulated monitoring well locations. There were no MCL or GWPS exceedances. In general, VOC concentrations detected above the RL in these wells are consistent with historical concentrations.

Appendix II Volatile Organic Compounds and MTBE

As shown in **Table 11**, detections of dichlorofluoromethane above the RL were observed at two off-site non-regulated monitoring wells. There were no detections of dichlorodifluoromethane or MTBE above the RL. There were no GWPS or Maryland State Action Level exceedances. The detected concentrations of dichlorofluoromethane are generally consistent with the historical record. There were no Appendix II VOCs detected above the RL in well MW-P106, MW-P4, MW-P417, MW-P440, MW-P9, RW-P109, RW-P171-1, RW-P440, RW-P441, and RW-P584.

Inorganics

All off-site non-regulated monitoring wells were analyzed for mercury. Concentrations above the RL were detected in four of these wells. These concentrations were below the MCL and consistent with historical values.

3.3.6 **Off-site Residential Zone 4 Water Supply Wells**

As shown on **Table 12** and **Table 13**, there were no off-site residential Zone 4 water supply wells sampled during the Spring 2021 event.

3.3.7 **Surface Water Sampling Locations**

Appendix I and Appendix II Volatile Organic Compounds

As shown on **Table 14** and **Table 15**, there were no Appendix I or Appendix II VOCs detected above the RL at any surface water monitoring locations during the Spring 2021 sampling event.

Inorganics

There were no MCL exceedances of inorganic parameters at the surface water sampling locations. SMCL exceedances were observed for iron at SW-2 and SW-3, while turbidity exceeded its SMCL at all three locations. In SW-3, the pH was measured above the SMCL range. Concentrations of all detected inorganic parameters at surface water locations were consistent with historical values.

4 STATISTICAL EVALUATION

4.1 INTRODUCTION

In accordance with the EMP and 40 CFR Part 258.53, groundwater sampling and analysis requirements, the groundwater parameters at the MLFRRF have been statistically analyzed. Listed below are the objective of the analysis, the procedures used, and the summary of results. The detailed results of the statistical analysis are included after the text.

4.2 OBJECTIVE

According to the Code of Federal Regulations (40 CFR Part 258), groundwater monitoring data must be statistically analyzed to determine if parameter levels are exceeding background groundwater quality levels at each downgradient well. This goal is met by statistically analyzing the groundwater data that have been collected on the site since 1993. The analyses will determine if the land use may be contributing to groundwater contamination.

4.3 PROCEDURE

Samples have been collected since 1993 and tested for the constituents specified in the EMP. The concentrations observed in the downgradient wells are compared to the concentrations observed in the upgradient wells. If the downgradient samples show significantly higher concentrations than the upgradient samples statistically, it indicates that land use practices are likely affecting the groundwater quality.

The groundwater data were analyzed using the Mann-Whitney Test (Wilcoxon Rank Sum Test) to determine whether the downgradient data differed from the upgradient data with statistical significance. The Mann-Whitney analysis is nonparametric, that is, it assumes no underlying distribution (like the normal distribution) and compares two groups of data and determines whether both groups come from the same population with a certain confidence.

Individual statistical tests have a certain amount of uncertainty associated with them. When multiple tests are combined (from different wells and different constituents), that uncertainty is compounded. An overall network-wide Type I error rate of 5% is required by 40 CFR Part 258.53(h)(2); however, an error rate no less than 1% shall be applied to any single test. A 5% Type I error rate means 5% of the recognized exceedances are in reality not actually elevated above background levels; that is, they represent false positives.

Statistical analyses are performed for all parameters detected over the RL during the Spring 2021 sampling event at downgradient wells. Using the Bonferroni adjustment to account for multiple

statistical comparisons, a Type I error rate of much less than 1% per analysis would result, so a Type I error rate of 1% was used as the minimum allowable under 40 CFR Part 258.52(h)(2).

For each sampling event, an average concentration from the upgradient wells was calculated. The collection of average concentrations for all sampling events was then compared to the concentrations for all sampling events at each of the downgradient wells. For each downgradient well, the upgradient and downgradient concentrations are combined and ranked (the lowest concentration is assigned a rank of 1). Tied concentrations are ranked equally by averaging the ranks that would be assigned to the tied group if they were not tied.

The sum of the ranks, the number of upgradient observations, and the number of downgradient observations are used to calculate the Mann-Whitney Test Statistic (U). The calculated U for each well/parameter pair is compared to a critical U value which is published in tables in statistical texts. Critical U values are based on the number of samples in the upgradient group and at each downgradient well. Therefore, the critical U values vary from parameter-to-parameter and from well-to-well. If the calculated U is greater than the critical U, there is no exceedance at 99% confidence (a 1% Type I error rate for each analysis). Likewise, if the calculated U is less than the critical U, there is an exceedance.

Because the upgradient (background) condition is compared to each downgradient well separately, each well/parameter combination is tested. The results of all of the tests are included following the report text. There may be exceedances in some downgradient wells for a particular parameter, but not in other downgradient wells.

4.4 SUMMARY OF RESULTS

The results of the statistical analysis are shown on **Table 16.** The findings indicated that downgradient samples show constituent concentrations that are statistically significant increases (SSIs) above background levels in all 20 of the downgradient on-site regulated wells. While there were a few new SSIs identified during the Spring 2021 sampling event for which concentrations are below the RL, these are not of major concern because the parameters were detected at trace levels.

There were two new SSIs identified for which parameters were detected above the RL during this sampling event that were not identified during the previous sampling event. These new SSIs consist of 1,4-dichlorobenzene in TW-25A and pH in TW-02A. The SSI for 1,4-dichlorobenzene in TW-25A was not identified during the previous sampling event because statistical tests were not run for this parameter, as it was not detected above the RL in any Subtitle D wells during the Fall 2020 sampling event. However, it is typically detected at low level concentrations in TW-25A, as was the case during the Spring 2021 sampling event. As such, this new SSI is not of major concern. The new SSI identified for pH in well TW-02A is not a concern because although the pH

is elevated compared to the pH values of both background wells, it is more neutral (7.02) than either of the background wells (4.7 and 4.95).

The statistical exceedances are generally consistent with historical exceedances. Concentrations of most parameters that exhibited SSIs have generally been consistent with their historical data set; that is, no trend is apparent in the concentrations.

5 RECOMMENDATIONS

The results of the Spring 2021 groundwater sampling event indicate that overall, groundwater conditions are generally consistent with historical data for the MLFRRF. Many monitoring wells continue to show VOC concentrations lower than historical data. While the data and statistical evaluations indicate that a release of landfill constituents to groundwater may have occurred, the site-specific hydrogeology and the corrective measures already implemented by the County have limited the potential for any adverse effects on human health and the environment. It is recommended that regular groundwater monitoring be continued in accordance with the EMP.

TABLES

Table 1 - MLFRRF SAMPLING LOCATIONS						
Sampling Locations Used to Monitor Cells 5, 6, 7, 8, and 9				**Sampling Locations Used to Monitor Cells 1 east, 2, and 4**		
On Site Regulated Monitoring Wells (Subtitle D)	Off-Site Non-Regulated Monitoring Wells	On-Site Non-Regulated Monitoring Wells	Surface Water Sampling Locations	On-Site Regulated Monitoring Wells (COMAR)	On-Site Non-Regulated Monitoring Wells	Surface Water Sampling Locations
TW-01	MW-P4	TW-02	SW-1	TW-07	TW-09	SW-1
TW-02A	MW-P9	TW-03A	SW-2	TW-07A	TW-16A	SW-2
TW-03	MW-P106	TW-05B	SW-3	TW-08		SW-3
TW-04	MW-P417	TW-06A*		TW-08A		
TW-04B	MW-P440	TW-06B		TW-09B		
TW-05	RW-P109	TW-11A*		TW-09C		
TW-05A	RW-P165	TW-12*		TW-15		
TW-06	RW-P171-1	TW-13*		TW-15B		
TW-10A	RW-P264	TW-14B		TW-16		
TW-14	RW-P440	TW-18*		TW-17		
TW-14A	RW-P441	TW-21A*		TW-17A		
TW-19	RW-P584			TW-21		
TW-20R				TW-22		
TW-23				TW-22A		
TW-24				TW-22B		
TW-24A						
TW-25						
TW-25A						
TW-27						
TW-28						
TW-29						
TW-30						

*Note: As specified in the EMP, the wells with an * are sampled annually only during the spring events.*

Table 2 - RESIDENTIAL SUPPLY WELL SAMPLING LOCATIONS			
Sampling Location	Aquifer	Sampling Location	Aquifer
P-109-Z4	Zone 4	P-417-Z4	Zone 4
P-145-Z4	Zone 4	P-261-Z4	Zone 4
P-160-Z4	Zone 4	P-264-Z4	Zone 4
P-161-Z4	Zone 4	P-277-Z4	Zone 4
P-162-Z4	Zone 4	P-323-Z4	Zone 4
P-164-Z4	Zone 4	P-359-Z4	Zone 4
P-165-Z4	Zone 4	P-383-Z4	Zone 4
P-166-Z4	Zone 4	P-412-Z4	Zone 4
P-168-Z4	Zone 4	P-440-Z4	Zone 4
P-169-Z4	Zone 4	P-441-Z4R	Zone 4
P-257-Z4	Zone 4	P-478-Z4	Zone 4

None of these wells were sampled during the Spring 2021 sampling event.

Table 3 - Current MCL Exceedances						
Well Group	Location	Parameter	Result	Qualifier	MCL	Units
OnSite NonReg	**TW-11A**	Arsenic	0.022		0.01	mg/L
	TW-13	Trichloroethene	5.59		5	µg/L
Subtitle D	**TW-25A**	Methylene Chloride	19.5		5	µg/L

Exceedances Below Laboratory Quantitation Limits						
Well Group	Location	Parameter	Result	Qualifier	MCL	Units
OnSite NonReg	**TW-13**	Thallium*	0.0044	J	0.002	mg/L

**First-time MCL exceedance.*

Note that original thallium analysis was run by EPA Method 6010 rather than Method 6020 as specified in EMP.

Confirmation Samples for First-Time Exceedances						
Well Group	Location	Parameter	Result	Qualifier	Exceeds MCL	Units
OnSite NonReg	**TW-13**	Thallium	0.001	U	No	mg/L

Confirmation sample analyzed via Method 6020.

Table 4 - APPENDIX I VOC DETECTIONS IN REGULATED WELLS (SUBTITLE D)					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
TW-01	1,1-Dichloroethane	1.75		1370	µg/L
TW-04	1,1-Dichloroethane	2.35		1370	µg/L
TW-05	1,1-Dichloroethane	1.58		1370	µg/L
TW-05A	1,1-Dichloroethane	1.15		1370	µg/L
TW-06	1,1-Dichloroethane	4.74		1370	µg/L
	cis-1,2-Dichloroethene	2.19		70	µg/L
	Tetrachloroethene	1.43		5	µg/L
	Trichloroethene	1.07		5	µg/L
TW-14	1,1-Dichloroethane	3.48		1370	µg/L
	Tetrachloroethene	4.19		5	µg/L
TW-24	1,1-Dichloroethane	2.07		1370	µg/L
TW-25	1,1-Dichloroethane	2.07		1370	µg/L
	Tetrachloroethene	1.41		5	µg/L
TW-25A	1,1-Dichloroethane	28		1370	µg/L
	1,2-Dichloroethane	1.95		5	µg/L
	1,2-Dichloropropane	1.02		5	µg/L
	1,4-Dichlorobenzene	1.01		75	µg/L
	Benzene	1.88		5	µg/L
	cis-1,2-Dichloroethene	4.75		70	µg/L
	Methylene Chloride	**19.5**		**5**	**µg/L**
	Tetrachloroethene	2.62		5	µg/L
	Trichloroethene	3.84		5	µg/L
TW-28	1,1-Dichloroethane	1.63		1370	µg/L
TW-29	1,1-Dichloroethane	1.26		1370	µg/L
	Tetrachloroethene	1.36		5	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 5 - APPENDIX II VOC DETECTIONS IN REGULATED WELLS (SUBTITLE D)					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
TW-01	Dichlorodifluoromethane	5.48		1000	µg/L
TW-14	Dichlorofluoromethane	6.33		550	µg/L
TW-25A	Dichlorodifluoromethane	6.82		1000	µg/L
	Dichlorofluoromethane	35.8		550	µg/L
	Methyl-tert-butyl ether	3.98		20	µg/L
TW-28	Dichlorofluoromethane	5.5		550	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 6 - APPENDIX I VOC DETECTIONS IN REGULATED WELLS (COMAR)					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
TW-15B	1,1-Dichloroethane	1.23		1370	µg/L
	Tetrachloroethene	1.02		5	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 7 - APPENDIX II VOC DETECTIONS IN REGULATED WELLS (COMAR)					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
No Appendix II VOCs detected above the RL.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 8 - APPENDIX I VOC DETECTIONS IN ON-SITE NON-REGULATED WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
TW-12	1,1-Dichloroethane	1.74		1370	µg/L
	Trichloroethene	1.59		5	µg/L
TW-13	1,1-Dichloroethane	3.99		1370	µg/L
	cis-1,2-Dichloroethene	3.82		70	µg/L
	Tetrachloroethene	2.72		5	µg/L
	Trichloroethene	**5.59**		**5**	**µg/L**

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 9 - APPENDIX II VOC DETECTIONS IN ON-SITE NON-REGULATED WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
No Appendix II VOCs detected above the RL.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 10 - APPENDIX I VOC DETECTIONS IN OFF-SITE NON-REGULATED WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
MW-P106	1,1-Dichloroethane	1.64		1370	µg/L
MW-P9	Tetrachloroethene	1.13		5	µg/L
RW-P109	Trichloroethene	1.2		5	µg/L
RW-P165	1,1-Dichloroethane	3.16		1370	µg/L
	Tetrachloroethene	2.39		5	µg/L
RW-P264	1,1-Dichloroethane	3.02		1370	µg/L
	Tetrachloroethene	2.27		5	µg/L
RW-P584	1,1-Dichloroethane	2.64		1370	µg/L
	Tetrachloroethene	2.34		5	µg/L
	Trichloroethene	1.23		5	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 11 - APPENDIX II VOC DETECTIONS IN OFF-SITE NON-REGULATED WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
RW-P165	Dichlorofluoromethane	5.51		550	µg/L
RW-P264	Dichlorofluoromethane	5.38		550	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 12 - APPENDIX I VOC DETECTIONS IN RESIDENTIAL SUPPLY WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
No Residential Supply Wells were sampled during the Spring 2021 event.					

Table 13 - APPENDIX II VOC DETECTIONS IN RESIDENTIAL SUPPLY WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
No Residential Supply Wells were sampled during the Spring 2021 event.					

Table 14 - APPENDIX I VOC DETECTIONS AT SURFACE WATER LOCATIONS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
No Appendix I VOCs detected above the RL.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 15 - APPENDIX II VOC DETECTIONS AT SURFACE WATER LOCATIONS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
No Appendix II VOCs detected above the RL.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 16 - STATISTICAL EXCEEDANCES OF BACKGROUND CONCENTRATIONS																					
		Regulated Wells (Subtitle D)																			
	Parameter	TW-01	TW-02A	TW-03	TW-04	TW-04B	TW-05	TW-05A	TW-06	TW-14	TW-14A	TW-19	TW-20R	TW-24	TW-24A	TW-25	TW-25A	TW-27	TW-28	TW-29	TW-30
Volatile Organic Compounds (VOCs)	1,1-Dichloroethane	X			X		X	X	X	X	‡	‡		X	‡	X	X		X	X	
	1,2-Dichloroethane													‡	‡		X				
	1,2-Dichloropropane								‡		‡			‡			X				
	1,4-Dichlorobenzene								**‡**		**‡**			*	**‡**		**X**				
	Benzene								‡		‡			‡	‡		X				
	cis-1,2-Dichloroethene	*			*			*	X	*	‡	‡		*	‡	*	X		*	*	
	Dichlorodifluoromethane	X	‡		*		*	‡	*	*	‡	‡		*	‡	*	X		*	*	
	Dichlorofluoromethane	*	*		*		*	*	*	X	‡	‡		*	‡	*	X		X	*	
	Methylene Chloride								*		*			*	‡		X			*	
	Methyl tert-butyl ether										‡						X				
	Tetrachloroethene	*			‡			‡	X	X	‡	‡		*	‡	X	X		*	X	
	Trichloroethene	*			‡			‡	X	*	‡	‡		*	‡	*	X		*	*	
Inorganics	Barium, total											X			X						
	Calcium, total	X										X	X		X						X
	Chromium, total																	X	X		
	Cobalt, total												*		*				X	*	
	Copper, total			‡						X	X	‡	*		‡		X	X			
	Iron, total	X	X	X	X		X	X	X	X	X				*						
	Magnesium, total											X	X		X						
	Manganese, total	X		X					X	X	X		X		X						
	Mercury, total							*	X	*	*		‡	X	X		*				
	Potassium, total											X	X		X						
	Sodium, total											X	X								
General Chemistry	Alkalinity	X			X				X	*		X			X		X				
	Ammonia								X		‡				‡						
	Chloride											X	X								
	Nitrate																				X
	Nitrite	‡	‡	‡	‡		‡	‡	*	‡	‡						X				‡
	pH	X	**X**	X	X		X	X		X	X	X									
	Specific Conductivity											X	X		X						
	Sulfate					*						X	X		X						
	Total Dissolved Solids											X	X								
	Total Hardness	X										X	X		X						
	Turbidity	X	X	X	X	X	X	X		X	X					X					

An X indicates an SSI over background. A ‡ indicates an SSI was identified during this event, but the parameter was not detected during this event. An asterisk (*) indicates an SSI was identified during this event, but the parameter was detected below the reporting limit or was flagged with a B qualifier during this event. A bold character indicates an SSI that was not identified during the previous event.

APPENDIX A
Historical Data Tables

HISTORICAL TABLES –
Subtitle D Wells

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-01***											
Nov-1993	36	36	ND	ND	2.6	0.2	ND	5.71	76.8	3.7	76	29.9	12
Apr-1994	34	34	0.1	42.3	2.5	ND	ND	6.15	62.5	3.9	57	23.37	64.4
Apr-1995	22.7	22.7	ND	ND	2.4	ND	ND	6.6	56.5	3.6	31	18.2	41.5
Apr-1997	ND	26	ND	ND	1.5	0.09	ND	NA	NA	ND	59	33	34
Apr-1998	25	25	0.27	ND	2.56	ND	ND	7.29	53.1	2.36	44	35	430
Apr-1999	21	21	0.13	ND	3.11	0.07	ND	7	61.6	1.84	63	26	45
Apr-2000	23	23	ND	ND	2.4	0.101	ND	7.07	52	3.92	32	25	12
Apr-2001	20	NA	ND	ND	2.57	ND	ND	NA	NA	67.1	30	21.5	70
Mar-2002	16	16	ND	ND	2.36	ND	ND	6.2	55.4	ND	43	22.3	39
Mar-2003	18	18	ND	ND	17.7	ND	ND	6.3	56.5	ND	34	20.7	32
Apr-2004	21	21	ND	ND	2.84	ND	ND	6.3	54.5	ND	49	24.6	151
Apr-2005	29	29	ND	ND	2.74	0.08	ND	6.5	66.3	2.38	120	33.5	467
Mar-2006	28	28	ND	ND	3.44	0.13	ND	6.4	64.1	2	69	30.5	297
Mar-2007	24	24	0.61	ND	4.15	0.18	ND	6.3	56.8	1.64	53	27.2	13
Mar-2008	24	24	ND	ND	4.32	0.2	ND	6.1	62.7	1.75	42	26.7	46
Mar-2009	23	23	ND	ND	4.4	0.16	ND	5.7	61.6	ND	56	23.9	7.9
Mar-2010	65	65	ND	ND	4.22	ND	ND	7.26	170	4.34	62	70.4	353
Apr-2011	21	21	ND	ND	4.49	0.16	ND	5.6	56.9	1.1	57	23.5	22
Mar-2012	18	18	ND	ND	4.81	0.17	ND	4.8	56.4	ND	62	20	3.2
Sep-2012	19.7	19.7	ND	ND	4.84	0.175	ND	6.2	54.6	ND	66	23.4	6.51
Mar-2013	20.4	20.4	0.123 J	ND	5.36	0.2	ND	6.4	58.2	1.14	31	21.4	4.5
Oct-2013	21.3	21.3	ND	ND	5.51	0.2	ND	6.1	62.7	1.5	41	25	9.54
Mar-2014	22.7	22.7	ND	ND	5.27	0.157	ND	6.1	58.7	0.915 J	50	23.1	6
Oct-2014	33	33	ND	ND	5.71	0.198	ND	5.9	55.6	ND	49	24.1	6.4
Apr-2015	21.6	21.6	ND	ND	5.71	0.206	ND	5.1	60.7	ND	51	26.8	7.18
Nov-2015	25.6	25.6	ND	ND	5.77	0.223	ND	6.4	105.4	ND	44	26.9	8.72
May-2016	21.7	21.7	ND	ND	6.02	0.227	ND	6.4	79.9	ND	40	27.8	5.1
Oct-2016	23.6	23.6	ND	ND	6.46	NA	NA	6.2	110.6	2.07	48	27.8	6.18
May-2017	20.1	20.1	ND	ND	6.17	0.231	ND	6.1	100.7	0.71 J	35	23.6	4.16
Oct-2017	27	27	ND	5 J	6.37	0.224	ND	6.3	113.3	ND	36	22.4	12.2
May-2018	30	30	ND	5.7 J	6.1	0.17	0.007 J	5.6	111.8	ND	55	25.7	18.3
Nov-2018	40	40	ND	ND	6.6	ND	0.018	6.77	149.5	ND	46	47.6	45
May-2019	52	NA	ND	ND	7.3	ND	ND	6.39	114.8	ND	68	50.3	57.1
Oct-2019	48 H1	NA	ND	ND	5.7	0.056 JB	0.028	6.22	153.3	48.2	82	49.3	94.3
May-2020	50	NA	ND	9.1 J	6.6	ND	0.0087 JMH	5.9	148.9	ND	51	53.7	72.1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-01***											
Oct-2020	40	*NA*	*ND*	*4.8 J*	6.2	*ND*	*ND*	5.85	147.7	*ND*	132	49.9	87
Apr-2021	42	*NA*	*ND*	*6.1 J*	7.1	*0.048 J*	*ND*	7.17	193.3	*ND*	53	49.6	77.2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-01***													
Nov-1993	*NA*	*ND*	*ND*	*NA*	*ND*	11.3	*NA*	*ND*	*NA*	*ND*	0.08	0.12	*ND*	0.42	*NA*
Apr-1994	*NA*	*ND*	*ND*	*NA*	*ND*	9.3	*NA*	*ND*	*NA*	*ND*	0.64	*ND*	*ND*	*ND*	*NA*
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	6.6	*NA*	*ND*	*ND*	0.02	0.65	*ND*	*ND*	0.41	*NA*
Apr-1997	0.006	*ND*	0.016	*ND*	*ND*	13	9	*ND*	*ND*	*ND*	1.1	0.43	0.003	0.6	0.63
Apr-1998	*ND*	*ND*	0.041	*ND*	*ND*	12.5	9.96	0.052	*ND*	0.01	14.2	0.259	*ND*	1.04	0.456
Apr-1999	*ND*	*ND*	*ND*	*ND*	*ND*	9.67	9.79	*ND*	*ND*	*ND*	1.49	0.197	*ND*	0.564	0.491
Apr-2000	*ND*	*ND*	*ND*	*ND*	*ND*	9.04	7.45	0.018	*ND*	0.035	3.35	0.183	*ND*	0.601	0.442
Apr-2001	*ND*	*ND*	0.014	*ND*	*ND*	7.62	*NA*	*ND*	*ND*	*ND*	4.21	*NA*	*ND*	0.61	*NA*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	8	8.82	*ND*	*ND*	*ND*	3.62	0.64	*ND*	0.577	0.548
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	7.43	7.85	*ND*	*ND*	*ND*	0.716	*ND*	*ND*	0.504	0.466
Apr-2004	*ND*	0.002	0.014	*ND*	*ND*	8.52	11.1	*ND*	*ND*	*ND*	2.75	0.378	0.002	0.839	0.578
Apr-2005	*ND*	0.004	0.017	*ND*	*ND*	11.8	10.2	0.029	*ND*	0.011	7.16	0.279	0.006	1.01	0.504
Mar-2006	*ND*	0.003	0.015	*ND*	*ND*	10.8	9.72	*ND*	*ND*	*ND*	3.86	0.077	0.003	0.827	0.507
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	9.95	8.75	*ND*	*ND*	*ND*	0.916	0.346	*ND*	0.574	0.51
Mar-2008	*ND*	0.003	0.012	*ND*	*ND*	9.61	8.12	*ND*	*ND*	*ND*	12.8	0.358	*ND*	0.655	0.559
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	8.67	7.75	*ND*	*ND*	*ND*	3.36	0.541	*ND*	0.554	0.521
Mar-2010	*ND*	0.006	0.019	*ND*	*ND*	26.4	24.8	0.033	*ND*	0.017	44.1	1.58	0.01	1.09	0.65
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	8.29	8.23	*ND*	*ND*	*ND*	2.43	1.64	*ND*	0.688	0.678
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	6.77	6.84	*ND*	*ND*	*ND*	1.56	1.2	*ND*	0.753	0.749
Sep-2012	*ND*	*ND*	0.0101	*0.000181 J*	*ND*	8.15	7.91	*0.0025 J*	*0.000625 J*	*ND*	2.48	2.29	*0.000533 J*	0.749	0.707
Mar-2013	*ND*	*ND*	*0.0098 J*	*ND*	*ND*	7.39	7.3	*0.0026 J*	*0.000621 J*	*0.000478 J*	1.6	1.39	*ND*	0.724	0.753

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-01***													
Oct-2013	ND	ND	0.0113	ND	ND	8.7	8.9	0.0017 J	0.000632 J	ND	1.68	1.68	ND	0.794	0.824
Mar-2014	ND	ND	0.0103	ND	ND	8.09	9.7	0.0064 J	0.00061 J	0.000338 J	2.32	2.51	ND	0.712	0.86
Oct-2014	0.000689 J	ND	0.0116	ND	ND	8.35	8.86	0.0014 J	0.000654 J	ND	2.43	2.76	ND	0.796	0.826
Apr-2015	0.000671 J	ND	0.0128	ND	ND	9.14	9.46	0.0046 J	0.000818 J	0.000868 J	4.77	3.89	ND	0.962	0.952
Nov-2015	ND	ND	0.0121	ND	ND	9.24	8.94	0.0024 J	0.000698 J	ND	3.97	3.58	ND	0.928	0.927
May-2016	ND	ND	0.0126	ND	ND	9.47	9.13	0.0019 J	0.00072 J	0.00068 J	3.53	3.37	ND	1.01	0.989
Oct-2016	ND	ND	0.0121	ND	ND	9.44	9.71	0.00087 J	0.00071 J	ND	3.95	3.67	ND	1.03	1.02
May-2017	ND	ND	0.012	ND	ND	7.74	7.2	0.00096 J,B	0.0011	0.00054 J,B	4.07	3.43	ND	1.03	0.999
Oct-2017	ND	ND	0.0155	ND	ND	7.45	6.97	0.0017 J	0.00087 J	ND	8.05	7.72	ND	0.919	0.961
May-2018	0.000048 J	ND	0.016	0.000027 J	ND	8.7	8.6	0.0027 J	0.00072	0.00089 JB	11.5	10.5	ND	0.97 J	0.98 J
Nov-2018	ND	ND	0.012	ND	ND	16.7	15.7	0.002 J	0.00018 J	0.00043 J	31.8	25.7	0.000039 J	1.4	1.3
May-2019	ND	ND	0.011	ND	ND	17.9	17.7	ND	0.00058	ND	22.9	18	ND	1.4	1.4
Oct-2019	0.00012 JB	ND	0.013	ND	0.00018 JB	17.5	17	0.0043 J	0.0013	0.0043	31.9	18.4	0.00012 JB	1.4	1.3
May-2020	0.00016 J	ND	0.015	ND	ND	19	18.3	0.0087	0.00072	0.0032	39	20.9	0.00021 J	1.5	1.4
Oct-2020	0.00044 J	ND	0.013	ND	ND	17.5	16.5	0.0082 JB	0.0006 J	ND	25.6	23.5	ND	1.5	1.4
Apr-2021	ND	ND	0.014	ND	ND	17.4	18.1	0.0048 J	0.00089 J	ND	28	22.8	ND	1.5	1.6

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-01*												
Nov-1993	0.05	NA	ND	NA	0.49	NA	ND	NA	1.3	NA	NA	NA	ND
Apr-1994	0.019	NA	ND	NA	0.55	NA	ND	NA	1.7	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.65	NA	ND	ND	0.94	NA	ND	ND	0.06
Apr-1997	0.06	0.043	ND	ND	2.5	2.2	ND	ND	1.2	1.4	0.002	ND	0.028
Apr-1998	0.226	0.02	NA	0.019	2.16	0.95	ND	ND	1.22	1.16	ND	0.023	0.1
Apr-1999	0.028	0.019	NA	ND	ND	0.722	ND	ND	1.24	1.22	ND	ND	0.027
Apr-2000	0.037	0.017	NA	0.015	1.47	0.759	ND	ND	2.06	1.19	ND	ND	0.321
Apr-2001	0.059	NA	NA	ND	1.39	NA	ND	ND	2.65	NA	ND	ND	0.131
Mar-2002	0.037	0.028	NA	ND	1.24	ND	ND	ND	1.82	1.27	ND	ND	0.05
Mar-2003	0.022	0.019	NA	ND	ND	0.706	ND	ND	1.29	1.33	ND	ND	0.023
Apr-2004	0.069	0.026	ND	ND	0.534	ND	ND	ND	1.72	1.34	ND	ND	0.038
Apr-2005	0.163	0.019	ND	0.018	1.07	0.66	ND	ND	1.78	1.4	ND	0.014	0.112
Mar-2006	ND	ND	ND	ND	0.828	ND	ND	ND	1.59	1.14	ND	ND	0.014
Mar-2007	0.018	0.015	ND	ND	ND	ND	ND	ND	1.43	1.36	ND	ND	0.033
Mar-2008	0.031	0.013	ND	ND	0.809	0.663	ND	ND	2.11	1.61	ND	ND	0.038
Mar-2009	0.019	0.014	ND	ND	ND	ND	ND	ND	1.62	1.84	ND	ND	0.024
Mar-2010	0.134	0.078	ND	0.031	0.809	0.596	ND	ND	1.25	1.38	ND	0.019	0.033
Apr-2011	0.038	0.037	ND	ND	0.608	0.621	ND	ND	1.75	1.8	ND	ND	ND
Mar-2012	0.028	0.027	ND	ND	0.573	0.537	ND	ND	1.89	1.84	ND	ND	ND
Sep-2012	0.0426	0.0427	ND	0.0018 J	0.553	0.531	ND	ND	2.02	1.98	0.0014 J	ND	ND
Mar-2013	0.0247	0.0248	0.000109 J	0.0033 J	0.554	0.543	ND	ND	1.83	1.84	0.000233 J	ND	0.0116
Oct-2013	0.0387	0.0397	ND	0.0022	0.563	0.579	ND	ND	2.12	2.22	0.000271 J	0.0014 J	0.0111

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-01***												
Mar-2014	0.0351	0.0331	*ND*	*0.0029 J*	0.518	0.645	*ND*	*ND*	1.77	2.12	*0.000265 J*	*0.006 J*	*0.0043 J*
Oct-2014	0.0314	0.0384	*ND*	*0.0025 J*	0.599	0.618	*0.0012 J*	*ND*	2.16	2.25	*ND*	*ND*	*ND*
Apr-2015	0.0436	0.0494	*ND*	*0.0045 J*	0.674	0.669	*ND*	*ND*	2.37	2.37	*ND*	*ND*	*ND*
Nov-2015	0.0469	0.0454	*ND*	*0.0039 J*	0.647	0.63	*ND*	*ND*	2.55	2.54	*ND*	*ND*	*0.0033 J*
May-2016	0.0394	0.0391	*ND*	*0.0026 J*	0.676	0.643	*ND*	*ND*	2.49	2.41	*ND*	*ND*	*ND*
Oct-2016	0.0558	0.056	*ND*	*0.0016 J*	0.647	0.68	*ND*	*ND*	2.49	2.51	*ND*	*ND*	*ND*
May-2017	0.0382	0.0419	*ND*	0.0043	0.62	0.629	*ND*	*ND*	2.52	2.4	*ND*	*0.00023 J*	*ND*
Oct-2017	0.0676	0.0715	*ND*	*0.0024 JB*	0.628	0.663	*ND*	*ND*	2.63	2.68	*ND*	*ND*	*ND*
May-2018	0.079	0.079	*ND*	0.0024	*ND*	*ND*	*0.00028 JB*	*ND*	*2.8 J*	*2.9 J*	*ND*	0.0028	*0.003 JB*
Nov-2018	0.18	0.17	*ND*	0.0011	*ND*	*ND*	*ND*	*ND*	*3 J*	*2.9 J*	*ND*	*ND*	*0.0033 J*
May-2019	0.18	0.17	*ND*	0.001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	0.16	0.15	*ND*	0.0038	*ND*	*ND*	*ND*	*ND*	*2.8 J*	*3.3 J*	*ND*	*0.0009 J*	0.01 B
May-2020	0.17	0.15	*ND*	0.0064	*ND*	*ND*	*ND*	*ND*	*2.9 J*	*2.9 J*	*ND*	0.0018	0.0061
Oct-2020	0.18	0.16	*ND*	*ND*	*ND*	*ND*	*0.0017 J*	*ND*	*3.2 J*	*2.6 J*	*ND*	*0.0024 JB*	*ND*
Apr-2021	0.16	0.17	*0.00005 J*	*0.0058 J*	0.73	0.74	*ND*	*ND*	2.8	3	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-01***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.63 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-01*																
Mar-2013	*ND*	*ND*	*ND*	*ND*	*0.73 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*0.63 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*0.81 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	1.04	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	1.1	*0.22 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*0.2 J*	*ND*	*ND*	1.2	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*0.2 J*	*ND*	*ND*	1.5	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*0.2 J*	*ND*	*ND*	1.4	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*0.1 J*	*ND*	*ND*	1.5	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.8 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	1.3 M1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	1.75	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-01***															
Nov-1993	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	3.7
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	0.7 J
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	1.7
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2	1.1
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.5	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	14.1	2.3
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.45 J	ND	ND	ND	ND	ND	4.38	1.68

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-01***															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.56 J	ND	ND	ND	ND	ND	8.81	2.83
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.49 J	ND	ND	ND	ND	ND	7.27	2.41
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.56 J	ND	ND	ND	ND	ND	8.99	2.7
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.55 J	ND	ND	ND	ND	ND	7.38	3.83
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.53 J	ND	ND	ND	ND	ND	6.99	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J,B	ND	ND	ND	ND	ND	15.6 J	3.4
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	6.5	3.7
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	0.1 J	ND	ND	ND	8.4	4.5
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J,B	ND	0.1 J	ND	ND	ND	7.7	4.3
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	0.2 J	ND	ND	ND	8.4	5.1
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.5	4.7
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.9 CL	3.7 N3
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5 CL	3.6 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.2	2.5
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.9	2.5
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.2	2.8
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.167 J	ND	0.349 J	ND	ND	ND	5.48	2.94 J

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-01***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	1	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-01***															
Sep-2012	ND	ND	ND	ND	ND	ND	ND	2.96	ND	ND	ND	ND	0.28 J	0.71 J	ND	ND	ND
Mar-2013	ND	ND	ND	0.15 J	ND	ND	ND	3.44	ND	ND	ND	ND	0.41 J	1 J	ND	ND	ND
Oct-2013	ND	ND	ND	0.21 J	ND	ND	ND	2.81	ND	ND	ND	ND	0.38 J	0.97 J	ND	ND	ND
Mar-2014	ND	ND	ND	0.17 J	ND	ND	ND	3.73	ND	ND	ND	ND	0.46 J	1	ND	ND	ND
Oct-2014	ND	ND	ND	0.21 J	ND	ND	ND	4.14	ND	ND	ND	ND	0.5 J	0.73 J	ND	ND	ND
Apr-2015	ND	ND	ND	0.18 J	ND	ND	ND	3.57 J	ND	ND	ND	ND	0.43 J	0.95 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	ND	0.5 J	0.9 J	ND	ND	ND
May-2016	ND	ND	ND	0.1 J	0.2 J	ND	ND	4.3	ND	ND	ND	ND	0.5 J	0.8 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	0.2 J	ND	ND	4.4	ND	ND	ND	ND	0.4 J	0.9 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	4.7	ND	ND	ND	ND	0.5 J	0.4 J	ND	ND	ND
Oct-2017	ND	ND	ND	0.1 J	0.2 J	ND	ND	3.7	ND	ND	ND	ND	0.4 J	0.7 J	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	1.2 B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Apr-2021	ND	ND	ND	0.431 J	0.653 JB	ND	ND	0.507 J	ND	ND	ND	ND	0.632 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-02A***											
Nov-1993	ND	ND	ND	ND	3.8	ND	ND	4.93	22.5	ND	90	3.52	65
Apr-1994	ND	ND	ND	23.4	3.6	ND	ND	4.94	22.2	ND	17	0.9	14.2
Apr-1995	10.3	10.3	ND	ND	5.5	0.2	0.3	5.6	30.9	2.2	38	4.7	14.5
Apr-1997	ND	2	ND	ND	7	0.08	ND	NA	NA	ND	28	6	5.2
Apr-1998	ND	ND	0.27	ND	8.76	0.22	ND	6.33	36.8	ND	21	5.8	9.6
Apr-1999	ND	ND	0.16	ND	6.58	ND	ND	5.04	35.5	ND	35	5.7	10
Apr-2000	2	2	ND	ND	6.4	ND	ND	5.28	29	ND	36	5.7	13
Apr-2001	ND	NA	ND	ND	5.43	1.65	ND	NA	NA	ND	11	6.47	1.47
Mar-2002	2.4	2.4	ND	ND	7	ND	ND	5.4	42.9	ND	30	6.94	25
Mar-2003	2.7	2.7	ND	ND	14.6	ND	ND	5.3	41.7	ND	25	6.69	13
Apr-2004	2.8	2.8	ND	ND	7.95	0.08	ND	5.3	40.5	1.31	40	9.39	16
Apr-2005	3.1	3.1	ND	ND	7.57	ND	ND	5.1	20.9	1.26	56	8.76	1.6
Mar-2006	7.8	7.8	ND	ND	9.04	0.1	ND	5.3	48.5	1.26	57	8.76	158
Mar-2007	3.8	3.8	ND	ND	9.84	0.11	ND	5.1	45.7	1.89	37	8.57	7
Mar-2008	5.3	5.3	ND	ND	9.58	0.09	ND	4.9	57.9	2.52	41	8.56	29
Mar-2009	4.9	4.9	ND	ND	9.98	0.07	ND	4.5	51.1	1.25	45	9.24	407
Apr-2010	3.7	3.7	ND	ND	10.1	0.08	ND	4.6	48.4	2.66	31	9.5	100
Apr-2011	5.2	5.2	ND	ND	10.4	0.08	ND	4.6	46.4	2.34	29	9.74	24
Mar-2012	4	4	ND	ND	11.6	ND	ND	4.5	51.2	2.34	12	11.2	27
Sep-2012	4.4	4.4	ND	ND	12.8	ND	ND	5.4	53.4	2.85	69	11.8	296
Mar-2013	6	6	0.106 J	ND	13.9	0.0653	ND	6.1	62.1	3	20	12.4	84
Oct-2013	5.72	5.72	ND	ND	14	0.0613	ND	5.7	62.3	3.15	31	13.6	23.5
Mar-2014	5.6	5.6	ND	ND	14.9	0.0668	ND	5.3	62.5	3.19	36	13.1	113
Oct-2014	4.4	4.4	ND	10	17.1	0.094	ND	5	68.2	2.88	64	15.6	139
Apr-2015	5.56	5.56	ND	5 J	17.3	0.061	ND	4.5	67.5	3.26	54	16.5	30.3
Nov-2015	4.4	4.4	ND	ND	19.1	0.0607	ND	5.9	136.2	2.63	55	18.4	122
May-2016	2.8	2.8	0.129 J	21	22.3	ND	ND	5.8	112.3	1.91	90	19.2	68.4
Oct-2016	3.4	3.4	ND	21	16.9	NA	NA	5.5	105.1	3.01	71	14.8	34.6
May-2017	4.48	4.48	ND	7 J	15.3	0.0687	ND	5.4	101.7	2.09	50	14.9	6.5
Oct-2017	30.9	30.9	ND	13	14.7	0.0511	ND	5.8	129.4	0.67 J	38	15.8	30.5
May-2018	16	16	ND	7.9 J	16.2	ND	ND	5	96	ND	26	15.1	24.2
Nov-2018	22	22	ND	7.9 J	19.5	ND	0.015	6.54	136.9	ND	55	18.6	27.6
May-2019	46	NA	ND	ND	21.8	ND	ND	6.43	123.6	ND	58	19.2	24.9
Oct-2019	16 H1	NA	ND	ND	22.6	0.083 J	0.0093 J	5.99	168.1	ND	90	19.6	25.1
May-2020	20	NA	ND	9.1 J	25.8	ND	0.074	5.93	168.3	ND	74	23.5	26.9
Oct-2020	20	NA	ND	7 J	27.2	ND	ND	6.52	172.1	ND	113	23.2	6.35

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-02A***											
Apr-2021	20	*NA*	*ND*	*6.1 J*	35.6	*0.075 J*	*ND*	7.02	239.3	*ND*	92	23.8	7.2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-02A***													
Nov-1993	NA	ND	ND	NA	ND	0.7	NA	ND	NA	ND	4.4	0.69	ND	0.43	NA
Apr-1994	NA	ND	ND	NA	ND	0.3	NA	ND	NA	ND	1.8	0.059	ND	0.35	NA
Apr-1995	ND	ND	ND	ND	ND	0.88	NA	ND	ND	ND	3.2	0.31	ND	0.6	NA
Apr-1997	ND	ND	0.02	ND	ND	1.3	1.3	ND	ND	ND	0.5	ND	0.002	0.54	0.54
Apr-1998	ND	ND	0.016	ND	ND	1.23	1.18	ND	ND	ND	1.58	0.101	ND	0.651	0.626
Apr-1999	ND	ND	0.015	ND	ND	1.21	1.27	ND	ND	ND	1.13	0.121	ND	0.646	0.667
Apr-2000	ND	ND	0.014	ND	ND	1.21	1.19	ND	ND	ND	3.54	0.08	ND	0.65	0.626
Apr-2001	ND	ND	0.016	ND	ND	1.45	NA	ND	ND	ND	3.08	NA	ND	0.695	NA
Mar-2002	ND	ND	0.019	ND	ND	1.47	1.53	ND	ND	ND	8.67	1.81	ND	0.795	0.798
Mar-2003	ND	ND	0.018	ND	ND	1.44	1.53	ND	ND	ND	6.22	0.282	ND	0.754	0.804
Apr-2004	ND	ND	0.023	ND	ND	2.06	1.82	ND	ND	ND	1.91	0.124	ND	1.03	0.943
Apr-2005	ND	ND	0.021	ND	ND	1.9	1.94	ND	ND	ND	4.1	0.2	ND	0.973	0.983
Mar-2006	ND	0.003	0.025	ND	ND	2.02	1.52	ND	ND	0.022	11.4	3.53	0.005	0.902	0.783
Mar-2007	ND	ND	0.025	ND	ND	1.93	1.9	ND	ND	ND	1.49	1.03	ND	0.911	0.876
Mar-2008	ND	ND	0.021	ND	ND	1.86	1.95	ND	ND	ND	2	1.62	ND	0.952	0.995
Mar-2009	ND	ND	0.025	ND	ND	2.11	2.32	ND	ND	ND	20.1	2.18	ND	0.964	0.967
Apr-2010	ND	ND	0.025	ND	ND	2.13	1.97	ND	ND	ND	25.9	2.03	ND	1.02	0.925
Apr-2011	ND	ND	0.027	ND	ND	2.12	2.15	ND	ND	0.02	41.9	1.51	ND	1.08	1.1
Mar-2012	ND	ND	0.027	ND	ND	2.36	2.3	ND	ND	ND	4.29	0.7	ND	1.3	1.26
Sep-2012	ND	ND	0.0298	0.000292 J	ND	2.58	2.49	0.0026 J	0.0027 J	0.0136	16.7	1.5	0.0016 J	1.31	1.31
Mar-2013	ND	ND	0.0316	0.000205 J	ND	2.78	2.7	0.0019 J	0.0026 J	0.0078 J	6.93	2.41	0.000514 J	1.33	1.24

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-02A***													
Oct-2013	ND	ND	0.0347	ND	ND	2.96	2.94	0.0018 J	0.0026	0.0067	3.49	2	0.000652 J	1.5	1.52
Mar-2014	0.000337 J	0.00014 J	0.028	0.00015 J	ND	2.8	2.85	0.0014 J	0.0025 J	0.0059 J	4.47	1.46	0.000364 J	1.49	1.5
Oct-2014	0.000589 J	0.000473 J	0.04	0.000176 J	0.000095 J	3.51	3.51	0.0023 J	0.0042 J	0.0087 J	9.19	2.4	0.000763 J	1.65	1.72
Apr-2015	0.000574 J	ND	0.0405	ND	ND	3.64	3.65	0.0017 J	0.0039 J	0.007 J	5.1	2	ND	1.8	1.8
Nov-2015	0.000674 J	0.000571 J	0.0442	0.000294 J	0.000111 J	3.97	3.8	0.0035 J	0.0047 J	0.0157	14.4	2.05	0.0012 J	2.07	1.93
May-2016	ND	ND	0.0709	ND	ND	4.72	4.64	0.0022 J	0.0014	0.0059	10.8	5.19	0.00095 J	1.8	1.84
Oct-2016	0.00068 J	0.0025 J	0.0372	0.00012 J	0.0002 J	3.09	3.25	0.0103 J+	0.0063	0.0368 J+	9.84	3.1	0.0016 J	1.73 J+	1.72
May-2017	ND	0.0012 J	0.0357	ND	ND	3.17	3.17	0.0037 J	0.0047	0.0181	14	9.1	0.0012 J	1.68	1.7
Oct-2017	ND	ND	0.0357	ND	ND	3.55	3	0.003 J	0.0036	0.012	21.1	16.6	0.002	1.69	1.57
May-2018	0.00045	0.0013	0.035	0.00011 J	0.00015 J	3.3	3.2	0.0046 JB	0.0054	0.02	12.1	5.6	0.0014	1.6	1.6
Nov-2018	ND	ND	0.045	0.000024 J	0.000029 J	4	3.9	0.004 J	0.00095	0.0028	28	27.4	0.00046 J	2.1	2
May-2019	ND	ND	0.05	ND	ND	4.1	4	ND	0.00093	0.004	30.4	28.5	ND	2.2	2.1
Oct-2019	0.00018 JB	ND	0.05	0.000052 J	0.00042 JB	4.2	4.1	0.0061 J	0.0017	0.0055	28.8	27.1	0.00018 JB	2.2	2.2
May-2020	0.00014 J	ND	0.055	0.000063 J	0.0001 J	5	4.6	0.0054 J	0.0014	0.0055	33.6	29.7	ND	2.7	2.5
Oct-2020	0.00056 J	ND	0.063	ND	ND	4.9	4.6	0.011 JB	0.0018 J	ND	32.3	29.5	ND	2.7	2.5
Apr-2021	ND	ND	0.063	0.0002 J	ND	5	5.1	0.0018 J	0.0012 J	0.0049 J	31.6	31.1	ND	2.8	2.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-02A*												
Nov-1993	0.06	NA	ND	NA	0.44	NA	ND	NA	1.5	NA	NA	NA	ND
Apr-1994	0.07	NA	ND	NA	ND	NA	ND	NA	2.4	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.59	NA	ND	ND	1.7	NA	ND	ND	0.07
Apr-1997	0.01	0.013	ND	ND	1.7	1.6	ND	ND	2.1	2.6	ND	ND	ND
Apr-1998	0.01	0.024	NA	ND	1.06	1.53	ND	ND	2.28	2.31	ND	ND	0.034
Apr-1999	ND	ND	NA	ND	ND	ND	ND	ND	2.46	2.52	ND	ND	ND
Apr-2000	0.011	0.01	NA	ND	ND	0.83	ND	ND	2.46	2.41	ND	ND	ND
Apr-2001	0.011	NA	NA	ND	0.981	NA	ND	ND	3.65	NA	ND	ND	0.01
Mar-2002	0.019	0.025	NA	ND	ND	0.975	ND	ND	2.5	2.34	ND	ND	0.016
Mar-2003	0.018	0.011	NA	ND	1.48	ND	ND	ND	2.49	2.53	ND	ND	ND
Apr-2004	0.016	0.012	ND	ND	1.76	0.597	ND	ND	3.87	3.29	ND	ND	0.014
Apr-2005	0.02	0.015	ND	ND	0.81	0.77	ND	ND	3.58	3.91	ND	ND	ND
Mar-2006	ND	ND	ND	0.018	0.889	0.523	ND	ND	3.88	3.26	ND	ND	0.013
Mar-2007	0.016	0.016	ND	ND	ND	ND	ND	ND	3.57	3.44	ND	ND	0.019
Mar-2008	0.016	0.02	ND	ND	0.702	0.783	ND	ND	3.52	3.8	ND	ND	0.016
Mar-2009	0.019	0.024	ND	ND	0.596	0.636	ND	ND	3.79	3.93	ND	ND	0.03
Apr-2010	0.024	0.021	ND	ND	0.708	0.653	ND	ND	3.94	3.86	ND	ND	0.027
Apr-2011	0.025	0.023	ND	ND	0.716	0.694	ND	ND	4.34	4.33	ND	ND	0.036
Mar-2012	0.025	0.018	ND	ND	0.687	0.622	ND	ND	5.08	4.9	ND	ND	0.027
Sep-2012	0.0259	0.0243	ND	0.0042 J	0.717	0.68	0.000797 J	ND	5.33	5.26	0.000232 J	ND	0.0305
Mar-2013	0.0322	0.0295	0.000113 J	0.004 J	0.761	0.724	0.000652 J	ND	5.44	5.24	ND	ND	0.0434
Oct-2013	0.0299	0.0301	ND	0.0041	0.78	0.755	0.000848 J	ND	5.88	6.06	ND	0.0014 J	0.0452

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-02A***												
Mar-2014	0.0246	0.0247	ND	0.0042 J	0.77	0.792	ND	ND	5.7	5.82	ND	ND	0.0394
Oct-2014	0.0372	0.0346	0.000034 J	0.0065 J	0.866	0.876	0.0019 J	ND	6.43	6.55	ND	ND	0.0465
Apr-2015	0.0353	0.0334	ND	0.0058 J	0.917	0.923	0.0014 J	ND	6.77	6.88	ND	ND	0.0404
Nov-2015	0.048	0.0369	ND	0.008 J	0.988	0.931	0.0013 J	ND	7.94	7.9	ND	0.000203 J	0.045
May-2016	0.246	0.26	ND	0.0101	1.01	1.1	ND	ND	7.41	6.97	ND	ND	0.0868
Oct-2016	0.107 R	0.0689	ND	0.037 J+	0.944	0.887	0.00071 J-	ND	6.71 J+	6.72	ND	0.0013	0.076
May-2017	0.122	0.0983	ND	0.0205	0.946	0.931	ND	ND	6.8	6.41	ND	0.0003 J	0.0455
Oct-2017	0.169	0.152	ND	0.0184	0.92	0.857	ND	ND	6.33	6.08	ND	ND	0.0516
May-2018	0.12	0.074	ND	0.027	ND	ND	0.00065 J	ND	6.8	6.3	ND	0.002	0.032
Nov-2018	0.18	0.18	ND	0.0038	0.93 J	ND	0.00009 J	ND	7.6	7.8	ND	ND	0.0044 J
May-2019	0.22	0.2	ND	0.0025	ND	ND	ND	ND	8.1	7.4	ND	ND	ND
Oct-2019	0.19	0.18	ND	0.0052	1.1 J	1.1 J	ND	ND	8.4	8.7	ND	0.0021 D6	0.012 B
May-2020	0.21	0.2	ND	0.0042	ND	1.1 J	ND	ND	10.1	9.4	ND	0.0023	0.0065
Oct-2020	0.23	0.2	ND	0.0042	ND	ND	ND	ND	11.4	9.6	ND	0.0029 JB	ND
Apr-2021	0.21	0.22	ND	0.0028 J	1	1.1	ND	ND	12.4	13.1	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-02A***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-02A*																
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7 J	200	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.8 B	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-02A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-02A***															
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.42 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*0.66 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*0.2 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.344 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-02A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.2 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-02A***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-03***											
Nov-1993	7	7	ND	ND	3.7	ND	ND	3.47	24.8	2.6	106	3.21	49
Apr-1994	5	5	ND	161	2.8	ND	ND	5.36	29.2	ND	25	2.12	81.6
Apr-1995	9.3	9.3	ND	ND	2.8	ND	ND	6.6	26.3	2	9	4	220
Apr-1997	ND	5	ND	ND	3.5	0.09	ND	NA	NA	ND	57	25	40
Apr-1998	2	2	0.95	ND	3.1	ND	ND	7.06	32	ND	23	4.7	130
Apr-1999	4	4	0.16	ND	3.94	ND	ND	5.41	38.6	ND	31	5.1	34
Apr-2000	3	3	ND	ND	3.67	0.16	ND	5.68	45	ND	25	5.7	490
Apr-2001	3.5	NA	0.28	ND	3.11	ND	ND	NA	NA	ND	ND	5.86	609
Mar-2002	2	2	ND	ND	4.01	ND	ND	5.6	62.7	ND	40	6.05	602
Mar-2003	3.4	3.4	ND	ND	13.7	ND	ND	5.6	31.8	ND	12	5.14	348
Apr-2004	6.5	6.5	ND	ND	4.53	ND	ND	5.6	26.9	ND	28	6.35	482
Apr-2005	4	4	ND	ND	4.92	0.08	ND	6.1	43.5	1.65	49	5.25	586
Mar-2006	6.4	6.4	ND	ND	5.27	0.12	ND	5.6	36.7	ND	13	4.72	235
Mar-2007	3.7	3.7	ND	ND	5.47	ND	ND	5.6	42.7	ND	39	6.21	228
Mar-2008	5.4	5.4	ND	ND	5.45	0.11	ND	5.2	33.1	ND	17	4.81	37
Mar-2009	14	14	ND	ND	6.19	0.06	ND	5.3	34.8	14.3	18	5.01	14
Apr-2010	11.1	11.1	ND	ND	6.96	ND	ND	4.8	34.2	ND	40	7.3	47.8
Apr-2011	6.2	6.2	ND	ND	6.95	0.08	ND	4.6	33.2	ND	39	6.57	70
Mar-2012	7.6	7.6	ND	ND	6.59	0.1	ND	4.4	34.9	ND	14	7.58	60
Sep-2012	7.64	7.64	ND	ND	6.11	ND	ND	5.4	34.4	ND	43	6.36	73.2
Mar-2013	15.3	15.3	0.236 J	ND	7.05	0.0585	ND	6	38.2	0.415 J	24	6.96	104
Oct-2013	14.2	14.2	ND	ND	7.85	0.0937	ND	5.3	39.4	ND	29	7.08	41.5
Mar-2014	13.6	13.6	ND	6 J	6.84	ND	ND	5.3	36	ND	ND	6.49	129
Oct-2014	35.2	35.2	ND	8 J	7.49	ND	ND	5	38.5	ND	ND	7.66	113
Apr-2015	4.72	4.72	ND	ND	8.49	0.16	ND	4.5	30.3	ND	ND	7.56	58.5
Nov-2015	3.52	3.52	ND	ND	8.33	0.127	ND	5.6	66.5	ND	34	7.43	413
May-2016	4.6	4.6	ND	6 J	5.74 B	ND	ND	5.5	44.6	ND	96	5.7	86.4
Oct-2016	4.6	4.6	ND	11	6.14	NA	NA	5.5	49.3	0.678 J	41	5.5	168
May-2017	3.52	3.52	ND	18	5.38	ND	ND	5.3	46.2	ND	ND	5.1	26.3
Oct-2017	14	14	ND	7 J	5.54	ND	ND	5.5	54.1	ND	16 J	5.5	43.3
May-2018	14	14	ND	12.2 J	5.5	ND	0.015	5.1	52	ND	ND	5.7	64
Nov-2018	6 JB	ND	ND	ND	5.4	0.041 J	0.0084 J	5.2	26.1	ND	10	5.2	76.3
May-2019	ND	NA	ND	ND	5.3	ND	ND	4.87	22.3	ND	17	5	1316
Oct-2019	4 JH1	NA	ND	ND	4.7	0.11	ND	5.01	28.9	ND	25	4.6	NA
May-2020	ND	NA	ND	ND	5.3	ND	0.02	5.51	39.6	ND	12	5.6	50
Oct-2020	4 J	NA	ND	ND	4.9	0.049 JB	ND	5.69	45.7	ND	37	5.5	16.5

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-03***											
Apr-2021	*2 J3c*	*NA*	*ND*	*ND*	4.6	*0.059 J*	*ND*	6.22	50.9	*ND*	13	5	59.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-03***													
Nov-1993	NA	ND	ND	NA	ND	0.61	NA	ND	NA	ND	4.2	1.9	ND	0.41	NA
Apr-1994	NA	ND	ND	NA	ND	0.79	NA	ND	NA	ND	ND	0.66	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	0.94	NA	ND	ND	ND	1.6	1.6	ND	0.41	NA
Apr-1997	ND	ND	0.019	ND	ND	1.8	0.8	ND	ND	ND	4.5	1.6	0.003	0.63	ND
Apr-1998	ND	ND	0.016	ND	ND	1.04	1.01	ND	ND	ND	1.28	0.593	ND	0.517	0.455
Apr-1999	ND	ND	ND	ND	ND	1.14	0.977	ND	ND	ND	6.94	1.18	ND	0.555	0.444
Apr-2000	ND	ND	ND	ND	ND	1.36	1.06	ND	ND	ND	13.6	1.09	ND	0.56	0.497
Apr-2001	ND	ND	0.016	ND	ND	1.36	NA	0.012	ND	ND	34.5	NA	0.009	0.597	NA
Mar-2002	ND	ND	0.013	ND	ND	1.46	1.17	ND	ND	ND	53.8	0.367	0.007	0.586	0.543
Mar-2003	ND	ND	ND	ND	ND	1.16	1.21	ND	ND	0.012	7.65	1.54	0.005	0.545	0.558
Apr-2004	ND	ND	0.015	ND	ND	1.47	1.25	ND	ND	0.012	141	7.86	0.009	0.654	0.596
Apr-2005	ND	ND	0.02	ND	ND	1.56	1.31	ND	ND	ND	92.8	1.3	0.013	0.627	0.589
Mar-2006	ND	ND	ND	ND	ND	1.13	0.987	ND	ND	0.011	20.5	1.04	0.006	0.458	0.442
Mar-2007	ND	ND	0.017	ND	ND	1.48	1.3	ND	ND	ND	19.1	7.55	0.007	0.609	0.524
Mar-2008	ND	0.002	ND	ND	ND	1.11	1.15	ND	ND	ND	9.41	0.532	ND	0.496	0.509
Mar-2009	ND	ND	ND	ND	ND	1.2	1.23	ND	ND	0.1	7.56	5.53	ND	0.487	0.504
Apr-2010	ND	ND	ND	ND	ND	1.92	1.75	ND	ND	0.01	10.4	7.4	ND	0.618	0.585
Apr-2011	ND	ND	ND	ND	ND	1.55	1.55	ND	ND	0.041	15.3	8.29	ND	0.655	0.65
Mar-2012	ND	ND	0.01	ND	ND	1.66	1.61	ND	ND	ND	11.4	3.66	ND	0.832	0.807
Sep-2012	ND	0.003	0.0074 J	ND	ND	1.45	1.39	0.0189	0.0026 J	0.0368	23.1	12.2	ND	0.666	0.632
Mar-2013	0.000835 J	0.0036	0.0104	ND	0.000273 J	1.62	1.58	0.0296	0.0056 J	0.0555	26.9	7.99	0.000874 J	0.709	0.678

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-03***													
Oct-2013	*ND*	*ND*	0.0127	*ND*	*0.000247 J*	1.61	1.46	0.0053	0.0024	0.0154	8.54	7.41	*0.000425 J*	0.742	0.693
Mar-2014	*0.000669 J*	0.0023	*0.0075 J*	*ND*	*0.000144 J*	1.75	1.64	0.019	*0.0032 J*	0.0282	26.8	16	*0.000588 J*	0.516	0.609
Oct-2014	0.0023	0.005	0.0112	*ND*	*0.000642 J*	1.81	1.6	0.0266	*0.0057 J*	0.0498	37.3	14.1	0.002	0.766	0.72
Apr-2015	0.002	0.0031	0.013	*ND*	*0.000276 J*	1.75	1.6	0.0133	*0.004 J*	0.0253	19.2	1.14	*0.0014 J*	0.775	0.718
Nov-2015	0.0036	**0.021 R,C**	0.0143	*0.000084 J*	*0.000979 J*	1.72	1.56	**0.133 R,C**	0.0252	0.245	75.4	2.2	0.0031	0.76	0.698
Dec-2015	*NA*	0.0052	*NA*	*NA*	*NA*	*NA*	*NA*	0.0261	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
May-2016	*ND*	*0.0022 J*	0.0076	*ND*	*0.00022 J*	1.32	1.23	0.0133	0.003	0.04	15.7	14.6	0.0036	0.59	0.599
Oct-2016	*0.00093 J*	*0.0033 J*	0.0075	*ND*	*0.00022 J*	1.22	1.2	*0.0245 J+*	0.0058	*0.0495 J+*	32.8	15.8	*0.0013 J*	*0.588 J+*	0.598
May-2017	*ND*	0.0045	0.0075	*ND*	*0.00036 J*	1.11	1.17	0.0304	0.0058	0.0716	23.9	13.6	0.002	0.575	0.55
Oct-2017	*ND*	*0.0034 J*	0.0091	*ND*	*0.00019 J*	1.31	1.07	0.0196	0.0048	0.0499	35.6	10.8	0.0024	0.535	0.507
May-2018	0.001	0.0052	0.0071	*0.000029 J*	*0.00032 J*	1.3	1.2	0.03	0.0071	0.065	26.8	11.9	0.002	*0.59 J*	*0.55 J*
Nov-2018	*ND*	*ND*	0.0096	*0.000053 J*	*0.00013 J*	1.1	1.1	*0.0037 J*	0.001	0.0034	20.6	0.84	*0.00056 J*	*0.59 J*	*0.54 J*
May-2019	*ND*	*ND*	0.011	*ND*	*ND*	1.1	1.1	*ND*	0.0011	0.0021	22.6	0.5	*ND*	*ND*	*ND*
Oct-2019	*0.0003 JB*	*ND*	0.03	*0.00045 J*	*0.0012 J*	1.1	1.1	*0.017 J*	*0.002 J*	0.015	195	1.7	*0.0027 J*	0.46	*0.54 J*
May-2020	0.00056	0.0011	0.0099	*ND*	*0.00013 J*	1.2	1.2	0.022	0.0042	0.0088	19.2	5.1	0.0019	0.61	*0.6 J*
Oct-2020	*0.00044 J*	*ND*	*0.0098 J*	*ND*	*ND*	1.2	1.1	*0.017 JB*	0.0038	*ND*	7.4	5.5	*ND*	0.63	*0.54 J*
Apr-2021	*ND*	*ND*	*0.008 J*	*ND*	*ND*	1.1	1.1	0.006	*0.0013 J*	*ND*	9.4	5.3	*ND*	0.54	0.54

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-03*												
Nov-1993	0.12	NA	ND	NA	0.58	NA	ND	NA	1.5	NA	NA	NA	ND
Apr-1994	ND	NA	ND	NA	ND	NA	ND	NA	1.1	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.52	NA	ND	ND	1.4	NA	ND	ND	0.02
Apr-1997	0.066	0.026	ND	ND	2	2	ND	ND	1.8	1.7	ND	ND	0.066
Apr-1998	0.031	0.031	NA	ND	1.2	0.97	ND	ND	1.56	1.59	ND	ND	0.011
Apr-1999	0.043	0.023	NA	ND	1.49	0.644	ND	ND	2.03	1.56	ND	ND	ND
Apr-2000	0.023	0.03	NA	ND	0.653	ND	ND	ND	2.55	1.61	0.002	ND	0.011
Apr-2001	0.015	NA	NA	ND	1.51	NA	ND	ND	2.89	NA	ND	0.011	0.015
Mar-2002	0.015	0.015	NA	ND	0.806	1.14	ND	ND	2.48	1.76	ND	ND	0.026
Mar-2003	0.012	0.039	NA	ND	1.73	ND	ND	ND	1.92	1.96	ND	ND	0.026
Apr-2004	0.138	0.15	ND	ND	0.898	ND	ND	ND	2.6	2.23	ND	ND	0.028
Apr-2005	0.046	0.029	ND	ND	0.86	0.64	ND	ND	2.42	2.21	ND	ND	0.018
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	1.85	1.83	ND	ND	ND
Mar-2007	0.077	0.082	ND	ND	ND	ND	ND	ND	2.25	2	ND	ND	0.018
Mar-2008	0.033	0.012	ND	ND	0.575	0.598	ND	ND	2.17	2.22	ND	ND	ND
Mar-2009	0.097	0.088	ND	ND	ND	ND	ND	ND	2.41	2.72	ND	ND	ND
Apr-2010	0.146	0.116	ND	ND	0.638	0.623	ND	ND	2.83	2.79	ND	ND	ND
Apr-2011	0.156	0.162	ND	0.029	0.606	0.625	ND	ND	2.9	2.92	ND	ND	0.01
Mar-2012	0.12	0.1	ND	ND	0.735	0.708	ND	ND	3.68	3.55	ND	ND	ND
Sep-2012	0.249	0.217	ND	0.0133	0.796	0.764	ND	ND	3.52	3.48	ND	ND	0.0035 J
Mar-2013	0.152	0.101	0.000134 J	0.0242	0.812	0.748	ND	0.000022 J	3.48	3.28	ND	ND	0.019
Oct-2013	0.102	0.0916	ND	0.0073	0.646	0.592	ND	ND	3.52	3.41	0.000098 J	0.001 J	0.0166

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-03***												
Mar-2014	0.206	0.192	ND	0.0131	0.726	0.682	ND	0.000041 J	2.64	3.27	0.000185 J	0.0042 J	0.01
Oct-2014	0.38	0.247	0.00003 J	0.0253	0.864	0.816	ND	0.000086 J	3.85	3.83	ND	ND	0.0121
Apr-2015	0.0779	0.0368	ND	0.0164	0.765	0.736	0.000801 J	0.000033 J	3.95	4.01	ND	ND	0.0092 J
Nov-2015	0.278	0.0454	ND	0.111	0.804	0.714	0.000367 J	0.000192 J	4.19	4.09	0.000278 J	ND	0.0273
May-2016	0.24	0.234	ND	0.0191	0.874	0.828	ND	ND	3.33	3.09	ND	ND	0.0309
Oct-2016	0.272 R	0.217	ND	0.0249 J+	0.727	0.715	ND	ND	2.75 J+	2.77	ND	0.00032 J	0.0173 J
May-2017	0.242	0.217	ND	0.0324	0.766	0.729	ND	ND	2.73	2.68	ND	0.0003 J	0.0154 J
Oct-2017	0.269	0.186	ND	0.0217	0.628	0.603	ND	ND	2.57	2.39	ND	0.00025 J	0.0403
May-2018	0.27	0.21	ND	0.034	ND	ND	0.00027 J	ND	2.8 J	2.4 J	ND	0.0026	0.025
Nov-2018	0.018	0.019	ND	0.0045	ND	ND	ND	ND	2.2 J	2.3 J	ND	ND	0.0058
May-2019	0.02	0.016	ND	0.004	ND	ND	ND	ND	ND	ND	ND	ND	0.0057
Oct-2019	0.15	0.054	ND	0.012	ND	ND	ND	ND	2 J	2.4 J	ND	ND	0.065
May-2020	0.1	0.078	ND	0.028	ND	ND	ND	ND	2.3 J	2.3 J	ND	0.0013	0.0068
Oct-2020	0.093	0.08	ND	0.015	ND	ND	ND	ND	2.5 J	1.9 J	ND	0.0043 JB	ND
Apr-2021	0.11	0.12	ND	0.011	0.5	0.52	ND	ND	2.6	2.7	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-03*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.5	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.8	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.23	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.06 J	ND	ND	4.68 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-03*																
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.63 J,B	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.84 J	ND	ND	7.02	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.19 J	ND	ND	5.12	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.41 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.1	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3 J	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.1	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.1	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.4	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-03*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-03***															
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.172 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-03***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-03***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-04***											
Nov-1993	6	6	0.5	ND	21.6	ND	ND	5.25	21.8	4.2	34	5.14	6.8
Apr-1994	6	6	ND	ND	2.2	ND	ND	5.3	21	ND	18	4.39	10.5
Apr-1995	8.2	8.2	ND	ND	2.3	ND	ND	6.1	20.7	1.9	ND	4.2	2.6
Apr-1997	ND	4	ND	ND	2	0.09	ND	NA	NA	ND	50	11	9.3
Oct-1997	4	4	0.5	ND	1.51	0.28	ND	8.07	21.5	ND	ND	16	190
Apr-1998	3	3	ND	ND	2.03	ND	ND	6.81	19.53	ND	ND	5	170
Apr-1999	ND	ND	0.24	ND	2.61	ND	ND	5.26	22.5	ND	32	5.7	170
Oct-1999	ND	ND	0.08	ND	2.88	ND	ND	5.6	20.1	ND	18	5.3	304
Apr-2000	4	4	ND	ND	3.25	ND	ND	5.7	17	ND	23	5.9	58
Oct-2000	6.4	NA	ND	ND	1.96	ND	ND	5.6	17.05	ND	19	5.63	58
Apr-2001	5.5	NA	ND	ND	1.96	ND	ND	NA	NA	ND	ND	7	186
Sep-2001	4.9	4.9	ND	ND	5.92	ND	ND	5.6	21	ND	22	6.2	92
Mar-2002	3.2	3.2	ND	ND	1.71	ND	ND	4.5	16	ND	20	5.03	69
Sep-2002	5.8	5.8	ND	ND	1.99	ND	ND	5.5	20.1	ND	22	6.44	387
Mar-2003	5.4	5.4	ND	ND	12	ND	ND	5.3	21.6	ND	12	5.53	87
Oct-2003	5.2	5.2	ND	ND	7.09	ND	ND	4.1	21.6	ND	48	7.6	237
Apr-2004	4.2	4.2	ND	ND	2.28	0.1	ND	5.5	16.6	ND	21	9.54	198
Oct-2004	5.4	5.4	ND	ND	2.39	0.12	ND	5.6	16.6	ND	13	9.5	267
Apr-2005	4.9	4.9	ND	ND	2.45	0.1	ND	5.3	15.4	1.58	35	5.33	2.1
Oct-2005	6.4	6.4	ND	ND	2.42	0.11	ND	4.6	13.7	ND	27	5.76	13
Mar-2006	7.5	7.5	ND	ND	2.27	ND	ND	5.3	17.6	ND	ND	4.15	172
Sep-2006	6.1	6.1	ND	ND	2.6	0.12	ND	5.5	17.9	ND	15	5.94	254
Mar-2007	6.2	6.2	ND	ND	2.72	ND	ND	5.7	20	ND	27	5.01	351
Sep-2007	4.9	4.9	0.39	ND	8.92	ND	ND	5.5	18.3	ND	29	4.52	86
Mar-2008	6.5	6.5	ND	ND	2.62	0.1	ND	5.5	18.8	ND	ND	4.66	455
Sep-2008	6.5	6.5	0.2	ND	2.77	0.06	ND	5.5	18.1	ND	19	5.6	220
Mar-2009	6	6	ND	ND	2.71	0.08	ND	5.2	23.2	ND	22	4.7	345
Oct-2009	5.9	5.9	ND	ND	2.58	0.09	ND	5	18	ND	37	5.25	168
Mar-2010	6	6	ND	ND	2.64	ND	ND	5.48	27	ND	32	5.19	33
Oct-2010	5.5	5.5	ND	ND	3.16	0.06	ND	5	18.8	ND	ND	4.93	148
Apr-2011	7	7	ND	ND	2.92	0.09	ND	5.3	15.7	ND	13	4.72	891
Sep-2011	7.5	7.5	ND	ND	7.53	0.38	ND	5.5	20.6	ND	36	5.78	859
Mar-2012	5.3	5.3	ND	ND	3.12	0.08	ND	4.8	18.9	ND	ND	5.87	92
Sep-2012	6.12	6.12	ND	ND	3.38	0.11	ND	4.3	21.4	ND	53	6.25	760
Mar-2013	5.84	5.84	0.055 J	ND	3.76	0.0899	ND	5.6	21.2	0.359 J	25	6.49	182
Oct-2013	6.2	6.2	ND	ND	3.87	0.0901	ND	5.9	24.7	ND	ND	6.18	151

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-04***											
Mar-2014	6.24	6.24	*ND*	*ND*	4.1	0.0804	*ND*	5.6	24.8	*ND*	38	7.94	183
Oct-2014	*ND*	*ND*	*ND*	*5 J*	4.42	0.119	*ND*	5.2	24.4	*ND*	*ND*	6.5	141
Apr-2015	4.68	4.68	*ND*	*ND*	4.59	0.091	*ND*	4.4	23.7	*ND*	*ND*	5.68	167
Nov-2015	5.4	5.4	*ND*	*ND*	4.6	0.111	*ND*	5.7	45.6	*ND*	25	7.79	62.6
May-2016	4.64	4.64	*ND*	*ND*	4.99	0.103	*ND*	5.7	33.9	*ND*	46	7.6	266
Oct-2016	3.76	3.76	*ND*	*ND*	5.4	*NA*	*NA*	5.6	43.5	*0.708 J*	44	7.2	48.7
May-2017	4.28	4.28	*ND*	*ND*	6.43	0.137	*ND*	5.5	53.6	*ND*	27	6.5	28.8
Oct-2017	6.36	6.36	*ND*	*6 J+*	7.26	0.114	*ND*	6.1	59	*ND*	*16 J*	7.4	40.2
May-2018	10	10	*ND*	*18.6 J*	8.2	0.1	*ND*	5.9	54.3	*ND*	*ND*	8.4	47.7
Nov-2018	18	18	*ND*	*ND*	8.2	*ND*	*0.0075 J*	6.2	79.3	*ND*	77	8.6	88.1
May-2019	24	*NA*	*ND*	*ND*	9.1	*ND*	*ND*	5.9	62.7	*ND*	38	9.2	52.1
Oct-2019	10 H1	*NA*	*ND*	*ND*	7.1	*0.084 J*	0.017	5.84	87.3	*ND*	47	13	775
May-2020	26	*NA*	*ND*	*6.9 J*	9.9	*ND*	*ND*	5.64	94.7	*ND*	40	17.7	45.9
Oct-2020	26	*NA*	*ND*	*ND*	7.8	*ND*	*0.0072 J*	5.66	108	*ND*	68	27	25.7
Apr-2021	10	*NA*	*0.064 J*	*ND*	9.4	*0.073 J*	*ND*	6.53	131.1	*ND*	55 D6	16.7	61.2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-04*													
Nov-1993	NA	ND	ND	NA	ND	1.4	NA	ND	NA	ND	1.1	0.13	ND	0.4	NA
Apr-1994	NA	ND	ND	NA	ND	1.7	NA	ND	NA	ND	0.072	ND	ND	0.45	NA
Apr-1995	ND	ND	ND	ND	ND	1.1	NA	ND	ND	ND	0.49	ND	ND	0.36	NA
Oct-1996	ND	ND	0.008	ND	ND	1.6	1.6	ND	ND	ND	0.82	0.22	ND	ND	ND
Apr-1997	ND	ND	0.021	ND	ND	2.5	0.86	ND	ND	ND	0.82	0.25	ND	0.55	ND
Oct-1997	ND	ND	ND	ND	ND	1.39	1.29	ND	ND	ND	20.7	0.786	ND	0.349	0.33
Apr-1998	ND	ND	0.01	ND	ND	1.37	1.29	ND	ND	ND	25.9	0.456	ND	0.374	0.366
Apr-1999	ND	ND	0.011	ND	ND	1.58	1.43	ND	ND	ND	19.3	0.422	ND	0.418	0.398
Oct-1999	ND	ND	ND	ND	ND	1.46	1.33	ND	ND	ND	15	0.465	ND	0.421	0.38
Apr-2000	ND	ND	ND	ND	ND	1.64	1.65	ND	ND	ND	5.3	0.212	ND	0.445	0.429
Oct-2000	ND	ND	ND	ND	ND	1.57	1.56	ND	ND	0.004	12	0.477	ND	0.415	0.416
Apr-2001	ND	ND	0.012	ND	ND	2	NA	ND	ND	ND	34.9	NA	ND	0.485	NA
Sep-2001	ND	ND	ND	ND	ND	1.65	1.58	ND	ND	ND	10.9	0.145	ND	0.5	0.422
Mar-2002	ND	ND	0.011	ND	ND	1.35	1.37	ND	ND	ND	29.7	0.607	ND	0.403	0.422
Sep-2002	ND	ND	0.011	ND	ND	1.82	1.35	ND	ND	ND	59.6	0.703	ND	0.462	0.414
Mar-2003	ND	ND	ND	ND	ND	1.49	1.41	ND	ND	ND	7.57	0.379	ND	0.441	0.412
Oct-2003	ND	ND	0.013	ND	ND	2.09	1.36	ND	ND	0.011	55.9	0.527	ND	0.579	0.402
Apr-2004	0.004	0.003	0.014	0.003	ND	1.89	1.04	ND	ND	ND	30.5	0.142	0.004	1.17	0.4
Oct-2004	ND	ND	0.01	ND	ND	2.86	1.45	ND	ND	0.014	36.3	0.288	ND	0.571	0.426
Apr-2005	ND	ND	0.013	ND	ND	1.41	1.38	ND	ND	ND	81.5	0.537	ND	0.437	0.424
Oct-2005	ND	ND	0.01	ND	ND	1.58	1.23	ND	ND	ND	39.4	0.379	ND	0.449	0.414

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-04***													
Mar-2006	ND	ND	ND	ND	ND	1.08	0.996	ND	ND	ND	43.7	0.372	ND	0.352	0.338
Sep-2006	ND	ND	ND	ND	ND	1.61	1.36	ND	ND	ND	38.2	0.206	ND	0.467	0.431
Mar-2007	ND	ND	0.014	ND	ND	1.33	1.22	ND	ND	ND	41.8	0.151	ND	0.41	0.376
Sep-2007	ND	ND	ND	ND	ND	1.14	1.11	ND	ND	ND	17.1	0.705	ND	0.406	0.372
Mar-2008	ND	ND	0.011	ND	ND	1.17	1.14	ND	ND	ND	40.9	0.576	ND	0.423	0.416
Sep-2008	ND	ND	ND	ND	ND	1.41	1.19	ND	ND	ND	23.6	0.24	ND	0.501	0.454
Mar-2009	ND	ND	ND	ND	ND	1.25	1.31	ND	ND	ND	26.9	0.4	ND	0.383	0.41
Oct-2009	ND	ND	ND	ND	ND	1.32	1.27	ND	ND	ND	10	0.243	ND	0.474	0.467
Mar-2010	ND	ND	ND	ND	ND	1.37	1.27	ND	ND	ND	2.48	0.155	ND	0.429	0.407
Oct-2010	ND	ND	ND	ND	ND	1.17	1.13	ND	ND	ND	11.3	0.91	ND	0.488	0.458
Apr-2011	ND	ND	0.012	ND	ND	1.11	1.1	ND	ND	ND	57.8	0.317	ND	0.473	0.462
Sep-2011	ND	ND	0.015	ND	ND	1.44	1.48	ND	ND	ND	90.5	0.469	ND	0.53	0.47
Mar-2012	ND	ND	0.01	ND	ND	1.36	1.33	ND	ND	ND	8.58	0.191	ND	0.599	0.576
Sep-2012	ND	ND	0.014	0.000181 J	ND	1.62	1.5	ND	0.00098 J	0.0044 J	68.2	0.274	0.000594 J	0.536	0.551
Mar-2013	ND	ND	0.0133	0.000126 J	ND	1.66	1.49	0.0021 J	0.0012 J	0.0025 J	20.2	0.251	ND	0.57	0.534
Oct-2013	ND	ND	0.0128	ND	ND	1.56	1.58	ND	0.000945 J	0.0018 J	9.53	0.335	ND	0.555	0.585
Mar-2014	ND	ND	0.0123	ND	ND	2.34	2.3	0.0049 J	0.000947 J	0.0026 J	17.5	0.389	ND	0.509	0.652
Oct-2014	0.000253 J	ND	0.0139	ND	ND	1.58	1.66	0.00074 J	0.001 J	0.0027 J	17.7	0.275	ND	0.621	0.62
Apr-2015	0.0012 J	ND	0.0148	ND	ND	1.27	1.31	0.000412 J	0.0012 J	0.0028 J	13.6	0.382	ND	0.611	0.631
Nov-2015	ND	ND	0.0144	ND	ND	1.94	1.82	0.000332 J	0.0012 J	0.002 J	5.46	0.512	0.000478 J	0.717	0.67
May-2016	ND	ND	0.0162	0.00019 J	ND	1.83	1.91	0.00071 J	0.0013	0.0032 J	25.4	0.285	0.00015 J	0.741	0.734
Oct-2016	ND	ND	0.0166	ND	ND	1.62	1.64	0.00071 J	0.0013	0.0021 J	1.62	0.824	0.00011 J	0.763	0.784
May-2017	ND	ND	0.0185	0.00019 J	ND	1.37	1.58	0.00083 JB	0.0016	0.0038 J	14.4	1.64	0.00018 J	0.745	0.751
Oct-2017	ND	ND	0.0183	0.00015 J	ND	1.62	1.62	ND	0.0016	0.0035 J	11.2	2.68	0.00019 J	0.811	0.844

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-04***													
May-2018	*0.00013 J*	*ND*	0.023	*0.00021 J*	*0.000078 J*	1.8	1.7	*0.0022 J*	0.0018	0.014	14.1	2.4	*0.00023 J*	*0.94 J*	*0.91 J*
Nov-2018	*ND*	*ND*	0.023	*0.00018 J*	*0.000032 J*	1.9	1.9	*0.0024 J*	0.0015	0.0041	44	17.7 M1	*0.000076 J*	*0.96 J*	*0.99 J*
May-2019	*ND*	*ND*	0.023	*ND*	*ND*	2.1	2.2	*ND*	0.0015	0.0028	23.4	14.1	*ND*	*ND*	1
Oct-2019	*ND*	*ND*	0.038	*0.00086 J*	*0.00076 J*	3.6	3.5	*0.0036 J*	0.0026	0.017	152	11.6	*0.00037 J*	1	1
May-2020	*0.00032 J*	*ND*	0.025	*0.00015 J*	*0.00016 J*	5.2	5.4	*0.003 J*	0.0026	0.0063	27.5	17.5	*ND*	1.2	1.2
Oct-2020	*0.00072 J*	*ND*	0.028	*ND*	*ND*	8.8	8.4	*0.01 J*	*0.0018 J*	*ND*	22.4 M1	19.5	*ND*	1.2	1.2
Apr-2021	*ND*	*ND*	0.028	*ND*	*ND*	4.6	4.5	*0.0009 J*	*0.0013 J*	*ND*	30.4	21.8	*ND*	1.2	1.2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-04*												
Nov-1993	0.07	NA	ND	NA	0.36	NA	ND	NA	1.1	NA	NA	NA	ND
Apr-1994	0.012	NA	ND	NA	ND	NA	ND	NA	1.9	NA	NA	NA	0.014
Apr-1995	0.01	NA	ND	ND	0.46	NA	ND	ND	1	NA	ND	ND	0.02
Oct-1996	0.019	0.016	NA	ND	ND	ND	ND	ND	2.1	2.5	ND	ND	ND
Apr-1997	0.025	ND	ND	ND	2	1.8	ND	ND	1.3	1.2	ND	ND	0.044
Oct-1997	0.011	0.015	ND	ND	ND	0.552	ND	ND	1.08	1.02	ND	ND	0.01
Apr-1998	ND	0.033	ND	ND	ND	ND	ND	ND	1.09	1.18	ND	ND	ND
Apr-1999	0.01	0.015	NA	ND	0.875	ND	ND	ND	1.18	1.12	ND	ND	ND
Oct-1999	0.01	0.015	NA	ND	ND	ND	ND	ND	1.1	1.01	ND	ND	ND
Apr-2000	0.011	0.012	NA	ND	0.547	ND	ND	ND	1.12	1.04	ND	ND	ND
Oct-2000	0.012	0.015	NA	ND	0.514	ND	ND	ND	1.05	1.16	ND	ND	ND
Apr-2001	ND	NA	NA	ND	1.11	NA	ND	ND	2.15	NA	ND	ND	ND
Sep-2001	ND	ND	NA	ND	ND	0.641	ND	ND	1.18	1.1	ND	ND	ND
Mar-2002	0.015	0.017	NA	ND	1.03	0.901	ND	ND	1.16	1.15	ND	ND	ND
Sep-2002	ND	0.017	NA	ND	0.843	0.821	ND	ND	1.43	1.11	ND	ND	ND
Mar-2003	0.013	0.012	NA	ND	0.646	ND	ND	ND	1.18	1.13	ND	ND	ND
Oct-2003	ND	0.017	NA	ND	1.18	1.53	ND	ND	2.74	1.13	ND	0.044	ND
Apr-2004	ND	ND	ND	ND	1.48	ND	ND	ND	2.17	1.13	**0.003**	ND	0.021
Oct-2004	ND	0.011	ND	ND	ND	ND	ND	ND	1.56	0.833	ND	ND	0.073
Apr-2005	0.017	0.014	ND	ND	ND	ND	ND	ND	1.21	1.15	ND	ND	ND
Oct-2005	0.016	0.011	ND	ND	0.58	ND	ND	ND	1.97	1.06	ND	ND	0.012
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	0.919	0.81	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-04*												
Sep-2006	0.01	ND	ND	ND	0.514	ND	ND	ND	1.27	0.989	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	1.09	0.925	ND	ND	ND
Sep-2007	0.022	0.019	ND	ND	ND	ND	ND	ND	1.1	1.05	ND	ND	0.015
Mar-2008	0.019	0.014	ND	ND	ND	ND	ND	ND	1.18	1.13	ND	ND	ND
Sep-2008	0.01	ND	ND	ND	ND	ND	ND	ND	1.13	1.02	ND	ND	0.021
Mar-2009	ND	ND	**0.0072 R,C**	ND	ND	ND	ND	ND	1.14	1.17	ND	ND	0.011
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Jul-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.14	1.14	ND	ND	ND
Mar-2010	ND	ND	ND	ND	0.562	0.512	ND	ND	1.07	1.04	ND	ND	ND
Oct-2010	0.028	0.021	ND	ND	ND	ND	ND	ND	1.22	1.17	ND	ND	ND
Apr-2011	0.015	0.012	ND	ND	ND	ND	ND	ND	1.32	1.26	ND	ND	ND
Sep-2011	0.021	0.012	ND	ND	ND	ND	ND	ND	1.34	1.31	ND	ND	0.012
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	1.34	1.34	ND	ND	ND
Sep-2012	0.0153	0.011	ND	0.0019 J	0.45 J	0.54	ND	ND	1.38	1.39	ND	ND	0.006 J
Mar-2013	0.0122	0.0103	0.00018 J	0.0029 J	0.524	0.467 J	ND	ND	1.56	1.45	0.000555 J	ND	0.0128
Oct-2013	0.0132	0.0121	ND	0.0017 J	0.427	0.44	ND	ND	1.46	1.57	ND	0.000803 J	0.0114
Mar-2014	0.0108	0.0101	ND	0.0019 J	0.558	0.539	ND	ND	1.27	1.61	ND	0.0048 J	0.0098 J
Oct-2014	0.0144	0.012	0.000022 J	0.0018 J	0.518	0.529	0.0013 J	ND	1.69	1.71	ND	ND	ND
Apr-2015	0.0165	0.0146	ND	0.0017 J	0.545	0.548	0.000983 J	ND	1.83	1.88	ND	ND	0.0098 J
Nov-2015	0.0184	0.0167	ND	0.0017 J	0.557	0.516	ND	ND	2.03	1.92	0.000116 J	ND	0.0095 J
May-2016	0.0186	0.0122	ND	0.002 J	0.57	0.562	ND	ND	1.95	1.93	ND	ND	ND
Oct-2016	0.0193	0.0195	ND	0.002 J	0.546	0.582	ND	ND	2	2.1	ND	ND	ND
May-2017	0.0472	0.0279	0.00023	0.0021 J	0.575	0.588	ND	ND	2.25	2.24	ND	ND	0.0036 JB

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-04***												
Oct-2017	0.0403	0.0357	*0.00015 J*	*0.002 JB*	0.626	0.625	*ND*	*ND*	2.5	2.64	*ND*	*ND*	*ND*
May-2018	0.032	0.029	*0.00015 J*	0.0027	*ND*	*ND*	*0.00013 J*	*ND*	*2.9 J*	*2.7 J*	*0.000076 J*	*ND*	0.0065
Nov-2018	0.15	0.15	0.00032	0.0036	*ND*	*ND*	*0.0002 J*	*ND*	*3.5 J*	*3 J*	*ND*	*ND*	0.0057
May-2019	0.18	0.16	*ND*	0.0026	7.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	0.17	0.11	0.0006	0.0042	*ND*	*ND*	*ND*	*ND*	*2.6 J*	*3 J*	*ND*	*ND*	0.025
May-2020	0.1	0.16	*ND*	0.0032	*ND*	*ND*	*ND*	*ND*	*3.1 J*	*3.2 J*	*ND*	0.003	0.01
Oct-2020	0.15	0.12	*ND*	0.0042	*ND*	*ND*	*0.0017 J*	*ND*	*1.8 J*	*2.5 J*	*ND*	*0.0025 J*	*ND*
Apr-2021	0.16	0.16	*ND*	*ND*	0.76	0.77	*ND*	*ND*	3.7	3.4	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.5	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04*																
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*0.21 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*0.24 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*0.25 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04*																
May-2017	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.9 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	2.35	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.48 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.62 J	0.4 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.18 J	ND	ND	ND	ND	ND	0.71 J	0.47 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.18 J	ND	ND	ND	ND	ND	0.81 J	0.33 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	0.64 J	0.45 J
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8 J	0.9 J
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	0.8 J	1.3
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.1 J	ND	ND	ND	1.3	2.3

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	1.2	3
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	1.5	4.1
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	4.7
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.3 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1 CL	4 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	2.9
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	3
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2	3.1
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*1.36 J*	*4.77 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-04B***											
Nov-1993	ND	ND	ND	30	3.1	ND	ND	4.82	25.8	4.2	42	3.93	60
Apr-1994	4.27	ND	ND	21.1	2.7	ND	ND	5.2	28.6	3.6	17	3.93	24.9
Apr-1995	ND	ND	ND	ND	3	ND	ND	5.4	27.5	8	16	5.6	60.1
Apr-1997	ND	5	ND	ND	2.5	0.03	ND	NA	NA	ND	54	5.7	24
Oct-1997	ND	ND	0.6	ND	1.54	ND	ND	8.34	51.6	2.5	18	ND	17
Apr-1998	ND	ND	0.34	ND	2.67	ND	ND	6.57	29.4	7.4	16	9.3	39
Apr-1999	ND	ND	0.13	ND	3.66	ND	ND	4.87	29.3	4.79	39	7.8	140
Oct-1999	ND	ND	0.07	ND	2.52	ND	ND	5.13	29.4	5.33	29	8.4	140
Apr-2000	1	1	ND	ND	2.8	ND	ND	5.47	25	4.27	42	9	31
Oct-2000	1	NA	ND	ND	3.58	ND	ND	5.06	34.2	11.7	364	7.72	13
Apr-2001	1.3	NA	ND	ND	2.33	ND	ND	NA	NA	8.7	37	8.47	30.8
Sep-2001	ND	ND	ND	ND	11.7	1.25	ND	4.9	48	11.4	33	10.5	44
Mar-2002	1	1	ND	ND	3.75	ND	ND	4.6	30	5.04	35	9.56	22
Sep-2002	1.4	1.4	ND	ND	3.03	ND	ND	5	41.1	7.73	83	10.8	306
Mar-2003	1.9	1.9	ND	ND	12.5	ND	ND	4.8	38.2	14.2	33	9.6	72
Oct-2003	2.1	2.1	ND	ND	2.72	ND	ND	3.8	39.9	7.67	55	10.5	39
Apr-2004	1.7	1.7	ND	ND	2.23	ND	ND	5.1	35.6	11.1	31	11.8	35
Oct-2004	1.9	1.9	ND	ND	3.14	ND	ND	4.9	37.6	8.58	28	10.1	23
Apr-2005	1.6	1.6	ND	ND	2.43	ND	ND	4.8	33	9.86	70	11.6	65
Oct-2005	2.7	2.7	0.22	ND	2.3	ND	ND	4.1	29.7	8.56	46	8.69	13
Mar-2006	3	3	ND	ND	2.16	0.08	ND	5	32.3	9.06	15	7.49	20
Sep-2006	2.8	2.8	ND	ND	2.6	ND	ND	4.8	33.5	8.32	34	9.31	29
Mar-2007	2.8	2.8	ND	ND	3.02	0.08	ND	5.1	35.1	8.73	41	8.47	29
Sep-2007	2.6	2.6	0.36	ND	2.57	ND	ND	5.5	35.9	7.63	45	9.1	8.7
Mar-2008	3	3	ND	ND	2.77	0.08	ND	5	36	9.24	29	9.43	43
Sep-2008	3.2	3.2	ND	43	2.86	ND	ND	5.1	33.6	9.75	37	10.2	320
Mar-2009	3.1	3.1	ND	ND	2.71	ND	ND	4.5	35.4	7.43	47	9.18	65
Oct-2009	3	3	ND	ND	2.73	ND	ND	4.5	31.7	10.3	60	10.4	218
Apr-2010	3.3	3.3	ND	ND	2.59	ND	ND	4.2	37.7	11.5	54	9.5	40
Oct-2010	2.6	2.6	ND	ND	3.08	ND	ND	4.4	34.9	8.6	29	11.1	13
Apr-2011	3.5	3.5	ND	ND	2.62	ND	ND	4.5	36.2	8.96	42	10.3	19
Sep-2011	3.6	3.6	ND	ND	3.02	ND	ND	4.7	36.6	7.53	19	10.7	3.1
Mar-2012	2.7	2.7	ND	ND	2.55	ND	ND	4.4	35.8	10	ND	11.1	2.2
Sep-2012	2.88	2.88	ND	ND	3.14	0.0613	ND	3.8	36.4	9.39	34	10.9	9.71
Mar-2013	3.4	3.4	ND	ND	3.44	0.0421 J	ND	5.1	39.1	9.35	28	11.4	2.83
Oct-2013	3.48	3.48	ND	ND	3.56	0.0428 J	ND	5.2	40.3	9.26	ND	11.1	1.81

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-04B***											
Mar-2014	3	3	*ND*	*ND*	3.05	*ND*	*ND*	5	37.2	11.2	*ND*	10.9	0.572
Oct-2014	*ND*	*ND*	*ND*	*5 J*	3.14	*ND*	*ND*	4.6	35.9	8.82	*ND*	11.2	2.21
Apr-2015	3.76	3.76	*ND*	*ND*	2.84	*ND*	*ND*	4.7	35.1	11.2	32	11.7	1.42
Nov-2015	2.64	2.64	*ND*	*ND*	2.72	*ND*	*ND*	5.1	60.9	10.8	27	11.7	1.14
May-2016	*ND*	*ND*	*ND*	*ND*	2.82	*ND*	*ND*	4.9	47.4	9.84	*19 J*	11.2	3.45
Oct-2016	*ND*	*ND*	*ND*	*ND*	3.03	*NA*	*NA*	5.1	53.1	9.28	41	10.9	27.7
May-2017	2.6	2.6	*ND*	*ND*	3.83	0.181	*ND*	4.9	66.7	8.3	*24 J*	12.4	2.97
Oct-2017	*ND*	*ND*	*ND*	*ND*	3.67	0.159	*ND*	5.1	65.4	9.23	35	12.3	8.42
May-2018	*4 J*	*ND*	*ND*	*ND*	3.3	0.16	*ND*	5.8	52.4	*7 J*	*ND*	11.6	2.9
Nov-2018	*6 JB*	*ND*	*ND*	*ND*	*2.8 J*	*0.076 J*	*ND*	4.63	40.9	*9.7 J*	93	11.6	4.03
May-2019	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	4.53	32.5	11.3	23	10.9	4.29
Oct-2019	*1 JH1*	*NA*	*ND*	*ND*	*2.7 J*	0.19	*ND*	4.32	46.2	*8.7 J*	231	11.9	2.67
May-2020	*ND*	*NA*	*ND*	*ND*	5.8	0.16	*ND*	4.41	55.9	*9.1 J*	46	16.2	3.1
Oct-2020	*ND*	*NA*	*ND*	*ND*	4.2	0.15	*ND*	4.41	50.3	10.4	27	14.9	1.8
Apr-2021	*ND*	*NA*	*ND*	*ND*	*2.3 J*	0.11	*ND*	4.82	47.3	*9.6 J*	34	11.3	6.58

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-04B*													
Nov-1993	NA	ND	ND	NA	ND	0.37	NA	0.007	NA	ND	2.2	0.04	ND	0.73	NA
Apr-1994	NA	ND	ND	NA	ND	1.1	NA	ND	NA	ND	ND	ND	ND	0.37	NA
Apr-1995	ND	ND	ND	ND	ND	0.66	NA	ND	ND	ND	ND	ND	ND	0.95	NA
Oct-1996	ND	ND	0.026	ND	ND	1.4	1.5	ND	ND	ND	ND	ND	0.002	1.4	1.4
Apr-1997	ND	ND	0.042	ND	ND	2.7	1.6	ND	ND	ND	0.26	ND	ND	1.9	1.1
Oct-1997	ND	ND	0.022	ND	ND	0.982	0.948	ND	ND	ND	0.418	ND	ND	0.961	0.918
Apr-1998	ND	ND	0.03	ND	ND	1.72	1.59	ND	ND	ND	1.16	ND	ND	1.22	1.11
Apr-1999	ND	ND	0.039	ND	ND	1.2	1.18	ND	ND	ND	2.96	ND	ND	1.17	1.01
Oct-1999	ND	ND	0.022	ND	ND	1.27	0.964	ND	ND	ND	0.678	ND	ND	1.01	0.832
Apr-2000	ND	ND	0.023	ND	ND	1.54	1.22	ND	ND	ND	0.503	ND	ND	1.26	1.16
Oct-2000	ND	ND	0.022	ND	ND	1.26	1.27	ND	ND	ND	0.286	ND	ND	1.11	1.09
Apr-2001	ND	ND	0.024	ND	ND	1.48	NA	ND	ND	ND	0.556	NA	ND	1.16	NA
Sep-2001	ND	ND	0.027	ND	ND	1.83	1.38	ND	ND	ND	0.623	ND	ND	1.45	1.26
Mar-2002	ND	ND	0.026	ND	ND	1.67	1.53	ND	ND	ND	0.352	ND	ND	1.31	1.34
Sep-2002	ND	ND	0.035	ND	ND	1.95	1.44	ND	ND	0.013	4.57	ND	ND	1.45	1.33
Mar-2003	ND	ND	0.029	ND	ND	1.45	1.33	ND	ND	ND	0.257	ND	ND	1.46	1.28
Oct-2003	ND	ND	0.029	ND	ND	1.81	1.4	ND	ND	ND	0.68	ND	ND	1.46	1.36
Apr-2004	ND	ND	0.032	ND	ND	1.85	1.59	ND	ND	ND	0.599	ND	ND	1.74	1.67
Oct-2004	ND	ND	0.031	ND	ND	1.51	1.51	ND	ND	ND	0.609	ND	ND	1.53	1.52
Apr-2005	ND	ND	0.033	ND	ND	1.98	1.54	ND	ND	ND	0.998	ND	ND	1.62	1.58
Oct-2005	ND	ND	0.024	ND	ND	1.45	1.17	ND	ND	ND	0.491	ND	ND	1.32	1.23

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-04B***													
Mar-2006	ND	ND	0.019	ND	ND	1.19	1.07	ND	ND	ND	0.295	ND	ND	1.1	1.16
Sep-2006	ND	ND	0.023	ND	ND	1.57	1.39	ND	ND	ND	0.375	ND	ND	1.31	1.3
Mar-2007	ND	ND	0.031	ND	ND	1.36	1.28	ND	ND	ND	0.299	ND	ND	1.23	1.16
Sep-2007	ND	ND	0.027	ND	ND	1.4	1.4	ND	ND	ND	0.312	ND	ND	1.36	1.33
Mar-2008	ND	0.002	0.028	ND	ND	1.55	1.37	ND	ND	ND	0.63	ND	ND	1.35	1.24
Sep-2008	ND	ND	0.035	ND	ND	1.6	1.3	0.012	ND	ND	4.91	ND	ND	1.5	1.38
Mar-2009	ND	ND	0.029	ND	ND	1.58	1.5	ND	ND	ND	0.627	ND	ND	1.27	1.31
Oct-2009	ND	ND	0.031	ND	ND	1.79	1.44	ND	ND	ND	1.82	0.051	ND	1.44	1.46
Apr-2010	ND	ND	0.026	ND	ND	1.72	1.6	ND	ND	ND	0.816	ND	ND	1.27	1.52
Oct-2010	ND	ND	0.036	ND	ND	1.7	1.65	ND	ND	ND	0.659	ND	ND	1.67	1.64
Apr-2011	ND	ND	0.031	ND	ND	1.52	1.39	ND	ND	ND	0.543	ND	ND	1.59	1.41
Sep-2011	ND	ND	0.033	ND	ND	1.6	1.55	ND	ND	ND	ND	ND	ND	1.63	1.6
Mar-2012	ND	ND	0.032	ND	ND	1.55	1.57	ND	ND	ND	0.053	ND	ND	1.76	1.77
Sep-2012	ND	ND	0.0355	0.000114 J	ND	1.73	1.6	0.0018 J	0.0041 J	0.0015 J	0.108	0.0208 J	ND	1.61	1.57
Mar-2013	ND	ND	0.0368	0.000116 J	ND	1.81	1.8	0.002 J	0.004 J	0.0015 J	0.0309 J	0.0064 J	ND	1.66	1.66
Oct-2013	ND	ND	0.0404	ND	0.000097 J	1.77	1.69	0.0018 J	0.0042	0.0025	ND	ND	ND	1.62	1.64
Mar-2014	ND	ND	0.0319	ND	ND	2.2	2.06	0.0063 J	0.0035 J	0.0025 J	0.076	0.0586	ND	1.32	1.58
Oct-2014	0.000469 J	ND	0.0403	ND	0.000087 J	1.76	1.83	0.0025 J	0.0042 J	0.0021 J	0.0811	0.0111 J	ND	1.66	1.68
Apr-2015	0.0011 J	ND	0.0397	0.000169 J	0.000106 J	1.82	1.79	0.0016 J	0.0042 J	0.0019 J	0.0405 J	0.0639	ND	1.74	1.68
Nov-2015	ND	ND	0.0399	0.000126 J	0.000113 J	1.82	1.77	0.000929 J	0.0044 J	0.0017 J	0.0292 J	ND	0.000337 J	1.74	1.74
May-2016	ND	ND	0.0385	0.00013 J	ND	1.7	1.72	0.0019 J	0.004	0.0014 J	0.04 J	ND	ND	1.69	1.73
Oct-2016	ND	ND	0.0464	0.00015 J	ND	1.68	1.65	0.0022 J	0.0053	0.0019 J	0.035 J	ND	ND	1.63	1.65
May-2017	ND	ND	0.0528	0.00015 J	ND	2.08	1.83	0.0016 J	0.0055	0.002 J	ND	ND	ND	1.75	1.84
Oct-2017	ND	ND	0.0521	0.00013 J	0.00019 J	2.04	1.98	0.0015 J	0.0056	0.0021 J	0.0858 J	ND	ND	1.75	1.87

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-04B***													
May-2018	*ND*	*ND*	0.044	*0.00016 J*	*0.00012 J*	1.8	1.8	*0.0027 J*	0.0039	0.0064	*0.016 J*	*ND*	*0.000021 JB*	1.7	1.7
Nov-2018	*ND*	*ND*	0.036	*0.00013 J*	*0.000092 J*	1.8	1.8	*0.0034 J*	0.0031	*0.0013 J*	*0.017 J*	*ND*	*0.00021 J*	1.7	1.7
May-2019	*ND*	*ND*	0.034	*ND*	*ND*	1.8	1.8	*ND*	0.0036	*ND*	*ND*	*ND*	*ND*	1.6	1.6
Oct-2019	*0.00011 JB*	*ND*	0.038	*0.00015 J*	*0.00034 JB*	1.8	1.7	*0.0034 J*	0.0041	0.0022	*0.037 J*	*0.014 J*	*0.000079 JB*	1.8	1.8
May-2020	*0.000093 J*	*ND*	0.054	*0.00018 J*	*0.00025 J*	2.4	2.4	*0.0045 J*	0.0058	0.0031	*0.024 J*	*0.013 J*	*ND*	2.5	2.5
Oct-2020	*0.00049 J*	*ND*	0.055	*ND*	*ND*	2.4	2.2	*0.012 J*	0.006	*ND*	*0.024 J*	*0.013 J*	*ND*	2.2	2.1
Apr-2021	*ND*	*ND*	0.036	*ND*	*ND*	1.8	1.8	*0.0021 J*	*0.0037 J*	*ND*	*ND*	*ND*	*ND*	1.7	1.6

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-04B*												
Nov-1993	0.07	NA	ND	NA	1.2	NA	ND	NA	1.6	NA	NA	NA	0.02
Apr-1994	0.008	NA	ND	NA	1.2	NA	ND	NA	2.6	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	1	NA	ND	ND	1.4	NA	ND	ND	0.02
Oct-1996	0.016	0.014	NA	ND	ND	ND	ND	ND	2.5	3.1	ND	ND	0.043
Apr-1997	0.019	0.01	ND	ND	2.9	2.5	ND	ND	1.6	1.7	ND	ND	0.045
Oct-1997	0.012	0.012	ND	ND	0.711	0.907	ND	ND	1.52	1.49	ND	ND	0.018
Apr-1998	0.017	0.014	ND	ND	1.59	0.81	ND	ND	1.57	2.88	ND	ND	ND
Apr-1999	0.027	0.013	NA	ND	1.6	1.27	ND	ND	1.63	1.47	ND	0.014	ND
Oct-1999	0.018	0.011	NA	ND	1.65	1.05	ND	ND	1.84	1.31	ND	ND	ND
Apr-2000	0.017	0.014	NA	ND	1.44	1.17	ND	ND	2.42	1.52	ND	ND	ND
Oct-2000	0.018	0.015	NA	ND	0.911	0.926	ND	ND	1.8	1.86	ND	ND	ND
Apr-2001	0.025	NA	NA	ND	1.77	NA	ND	ND	2.62	NA	ND	ND	ND
Sep-2001	0.027	0.016	NA	0.013	1.02	0.835	ND	ND	2.29	1.49	ND	ND	0.012
Mar-2002	0.021	0.019	NA	ND	0.839	0.869	ND	ND	2.03	1.56	ND	ND	0.013
Sep-2002	0.048	0.019	NA	ND	1.62	1.01	ND	ND	2.09	1.72	ND	ND	ND
Mar-2003	0.022	0.017	NA	ND	1.79	ND	ND	ND	1.74	1.73	ND	ND	ND
Oct-2003	0.023	0.018	NA	ND	1.81	1.88	ND	ND	2.25	1.54	ND	ND	ND
Apr-2004	0.025	0.023	ND	ND	1.41	1.48	ND	ND	1.81	1.43	ND	ND	0.038
Oct-2004	0.022	0.022	ND	ND	1.07	0.963	ND	ND	1.46	1.4	ND	ND	ND
Apr-2005	0.028	0.022	ND	ND	1.23	1.05	ND	ND	1.9	1.52	ND	ND	0.04
Oct-2005	0.018	0.015	ND	ND	0.937	0.81	ND	ND	1.96	1.15	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.574	0.567	ND	ND	0.949	0.942	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-04B***												
Sep-2006	0.019	0.018	*ND*	*ND*	0.985	0.957	*ND*	*ND*	1.031	1.12	*ND*	*ND*	*ND*
Mar-2007	0.018	0.016	*ND*	*ND*	0.676	0.589	*ND*	*ND*	1.29	1.21	*ND*	*ND*	*ND*
Sep-2007	0.022	0.021	*ND*	*ND*	0.894	0.796	*ND*	*ND*	1.39	1.35	*ND*	*ND*	*ND*
Mar-2008	0.023	0.02	*ND*	*ND*	1.01	0.862	*ND*	*ND*	1.64	1.42	*ND*	*ND*	*ND*
Sep-2008	0.057	0.023	*ND*	*ND*	1.1	0.806	*ND*	*ND*	1.41	1.29	*ND*	*ND*	0.024
Mar-2009	0.027	0.024	*ND*	*ND*	0.856	0.823	*ND*	*ND*	1.51	1.47	*ND*	*ND*	0.011
Oct-2009	0.051	0.026	*ND*	*ND*	0.835	0.757	*ND*	*ND*	1.45	1.7	*ND*	*ND*	0.03
Apr-2010	0.021	0.019	*ND*	*ND*	1.18	1.33	*ND*	*ND*	1.91	1.52	*ND*	*ND*	0.022
Oct-2010	0.033	0.029	*ND*	*ND*	1.11	0.936	*ND*	*ND*	1.46	1.43	*ND*	*ND*	*ND*
Apr-2011	0.025	0.021	*ND*	*ND*	1.16	1.07	*ND*	*ND*	1.58	1.58	*ND*	*ND*	*ND*
Sep-2011	0.03	0.029	*ND*	*ND*	0.867	0.955	*ND*	*ND*	1.65	1.65	*ND*	*ND*	*ND*
Mar-2012	0.025	0.025	*ND*	*ND*	0.93	0.913	*ND*	*ND*	1.49	1.5	*ND*	*ND*	*ND*
Sep-2012	0.0364	0.0344	*ND*	*0.0035 J*	0.959	0.884	*ND*	*ND*	1.69	1.69	*ND*	*ND*	*0.007 J*
Mar-2013	0.0368	0.0358	*0.000061 J*	*0.0035 J*	0.938	0.971	*ND*	*ND*	1.82	1.86	*ND*	*ND*	0.0131
Oct-2013	0.0419	0.041	*ND*	0.0036	0.881	0.862	*ND*	*ND*	1.94	1.96	*ND*	*0.0012 J*	0.0168
Mar-2014	0.0319	0.0323	*ND*	*0.0028 J*	1.16	1.12	*ND*	*ND*	1.36	1.89	*ND*	*0.0037 J*	*0.006 J*
Oct-2014	0.0461	0.0462	*ND*	*0.004 J*	0.991	0.984	*ND*	*ND*	1.8	1.82	*ND*	*ND*	*0.0086 J*
Apr-2015	0.0426	0.0405	*ND*	*0.0036 J*	1.08	1.02	*0.0011 J*	*ND*	1.83	1.73	*0.00079 J*	*ND*	0.0117
Nov-2015	0.0465	0.0458	*ND*	*0.0033 J*	0.907	0.891	*ND*	*ND*	1.73	1.74	*0.000083 J*	*ND*	0.0107
May-2016	0.0428	0.0456	*ND*	*0.0035 J*	0.943	0.954	*ND*	*ND*	1.64	1.74	*ND*	*ND*	*ND*
Oct-2016	0.0638	0.0613	*ND*	0.0044	0.935	0.949	*ND*	*ND*	1.7	1.76	*ND*	*ND*	*0.0059 J*
May-2017	0.0649	0.0629	*ND*	*0.0035 J*	0.9	0.936	*ND*	*ND*	1.81	1.92	*ND*	*ND*	*0.0068 JB*
Oct-2017	0.0662	0.0713	*0.00012 J*	*0.0039 JB*	0.913	0.999	*ND*	*ND*	1.78	1.89	*ND*	*ND*	*0.0057 J*
May-2018	0.057	0.045	**0.0025**	0.003	*0.95 J*	*0.98 J*	*0.00057 J*	*ND*	*1.7 J*	*1.7 J*	*0.00025 J*	*ND*	0.029

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-04B***												
Nov-2018	0.036	0.036	*ND*	0.0034	*1.2 J*	*ND*	*0.00024 J*	*ND*	*2 JB*	*1.6 J*	*ND*	*ND*	0.0063
May-2019	0.049	0.032	*ND*	0.0039	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0029	0.0051
Oct-2019	0.043	0.041	*ND*	0.0034	*ND*	*ND*	*ND*	*ND*	*ND*	*1.9 J*	*ND*	*ND*	0.013 B
May-2020	0.063	0.061	0.0002 B	0.0049	*ND*	*1.1 J*	*ND*	*ND*	*2.4 J*	*2.3 J*	*ND*	0.0031	0.012
Oct-2020	0.064	0.058	*ND*	0.006	*ND*	*ND*	*ND*	*ND*	*ND*	*1.7 J*	*ND*	*0.0024 J*	*ND*
Apr-2021	0.039	0.04	*ND*	*0.0037 J*	1.1	1.1	*ND*	*ND*	1.7	1.7	*ND*	*ND*	*0.0043 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04B*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.9	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04B*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04B*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.9 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04B***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04B***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04B***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-04B*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04B***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		*TW-05*											
Nov-1993	ND	ND	0.1	ND	2.2	ND	ND	5.24	18	ND	ND	2.86	270
Apr-1994	ND	ND	0.1	ND	2.4	ND	ND	5.03	18.2	ND	44	0.92	71.8
Aug-1994	7.5	7.5	ND	ND	2.2	0.3	ND	5.7	17.8	ND	ND	2.92	625
Sep-1994	ND	ND	ND	ND	2.5	0.2	ND	5.3	16.2	2.8	12	3.4	51.4
Nov-1994	ND	ND	ND	ND	2.2	ND	ND	5	16.5	1.9	40	3.3	179
Apr-1995	ND	ND	ND	43.7	2.2	ND	ND	5.3	17.2	ND	16	2.6	73.8
Apr-1997	ND	3	ND	ND	1.5	0.08	ND	NA	NA	ND	42	3.8	9
Oct-1997	ND	ND	0.53	ND	1.83	0.138	ND	5.56	18.62	ND	ND	7.5	49
Apr-1998	2	2	0.27	ND	1.91	0.15	ND	6.93	18.02	0.68	ND	3.2	120
Apr-1999	ND	ND	0.28	ND	2.69	ND	ND	5.43	18.79	ND	32	3.1	210
Oct-1999	ND	ND	0.08	ND	3.2	0.159	ND	5.38	18.07	ND	23	3.5	320
Apr-2000	4	4	ND	ND	1.86	ND	ND	6.76	14	ND	ND	4.2	150
Oct-2000	3.7	NA	ND	ND	2.43	0.8	ND	5.43	19.68	1.72	22	3.31	270
Apr-2001	2.8	NA	ND	ND	1.58	ND	ND	NA	NA	ND	13	3.97	79
Mar-2002	ND	ND	ND	ND	4.46	0.337	ND	5.5	19	1.58	33	3.8	310
Sep-2002	3	3	ND	ND	2.31	ND	ND	5.6	20.7	ND	33	4.36	250
Mar-2003	3.3	3.3	ND	ND	2.79	ND	ND	5.6	23.4	ND	20	3.23	229
Oct-2003	3.4	3.4	ND	11	2.24	0.122	ND	4.5	21	ND	51	4.28	149
Apr-2004	3.6	3.6	ND	ND	2.83	0.12	ND	5.5	19.9	ND	16	4.79	226
Oct-2004	3.4	3.4	ND	ND	2.83	0.1	ND	5.6	20	ND	13	6.17	89
Apr-2005	ND	ND	ND	ND	1.56	0.11	ND	4.6	15.7	4.59	46	1.79	0.56
Oct-2005	4.8	4.8	ND	ND	2.79	0.1	ND	5.5	15.3	ND	22	3.81	119
Mar-2006	4.6	4.6	ND	10	2.43	0.12	ND	4.8	17.7	ND	17	2.81	86
Sep-2006	4	4	ND	ND	2.29	0.11	ND	5.2	15.4	ND	20	3.49	447
Mar-2007	3.8	3.8	ND	ND	2.42	0.12	ND	5.2	15.8	ND	ND	2.65	192
Sep-2007	3.8	3.8	0.38	ND	2.16	ND	ND	5.3	18.6	ND	10	2.98	107
Mar-2008	5.1	5.1	ND	ND	2.57	0.1	ND	5.2	16.6	ND	20	2.7	132
Sep-2008	4.4	4.4	0.27	ND	2.33	0.07	ND	5.3	15.3	ND	33	3	130
Mar-2009	5.2	5.2	ND	ND	2.25	ND	ND	5	19	ND	20	3.31	422
Oct-2009	5.1	5.1	ND	ND	2.67	0.11	ND	5.4	19.5	ND	26	4.41	140
Apr-2010	4.2	4.2	ND	ND	2.77	0.1	ND	4.7	19.1	ND	31	3	197
Oct-2010	4.7	4.7	ND	ND	3.32	ND	ND	4.7	19.4	ND	10	3.77	61
Apr-2011	6	6	ND	ND	3.13	0.1	ND	5	17.6	ND	36	3.7	84
Sep-2011	5.8	5.8	0.23	ND	2.54	0.08	ND	4.8	17.2	ND	17	3.31	92
Mar-2012	4.7	4.7	ND	ND	2.81	0.07	ND	4.7	17.2	ND	ND	3.83	66
Sep-2012	4.88	4.88	ND	ND	2.76	0.1	ND	4.3	18.1	ND	ND	3.83	255

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-05***											
Mar-2013	6.4	6.4	*0.061 J*	*ND*	2.82	0.0898	*ND*	5.7	17.5	*0.268 J*	*ND*	3.84	70
Oct-2013	6.68	6.68	*ND*	*ND*	2.72	0.0764	*ND*	5.4	17.8	*ND*	*ND*	3.63	17.3
Mar-2014	5.76	5.76	*ND*	*6 J*	3.21	0.068	*ND*	5.6	18.8	*ND*	30	4.53	48.8
Oct-2014	2.2	2.2	*ND*	13	3.74	0.102	*ND*	5.1	22.7	*ND*	*ND*	4.45	20.7
Apr-2015	9.8	9.8	*ND*	*ND*	3.83	0.0738	*ND*	4.2	24.9	*ND*	*ND*	4.39	51.2
Nov-2015	4.64	4.64	*ND*	*ND*	3.84	0.0896	*ND*	5.9	35.9	*ND*	*18 J*	4.41	10.7
May-2016	4.48	4.48	*ND*	10	3.73	0.0895	*ND*	5.7	31	*ND*	*16 J*	4.3	47.9
Oct-2016	3.88	3.88	*ND*	*ND*	3.33	*NA*	*NA*	5.6	31.6	*0.593 J*	*23 J*	4	64.9
May-2017	5.32	5.32	*ND*	*ND*	3.7	0.103	*ND*	5.8	43.5	*ND*	*12 J*	4.4	6.74
Oct-2017	10.1	10.1	*ND*	*ND*	3.83	0.0896	*ND*	5.9	48.9	*ND*	34	5	12.3
May-2018	16	16	*ND*	*5.7 J*	4.8	*0.093 J*	*ND*	5.9	50.2	*ND*	*ND*	6.4	10.22
Nov-2018	24 ML	24	*ND*	*ND*	6.8	*ND*	*0.0079 J*	6.46	105.2	*ND*	36	14.7	837
May-2019	36	*NA*	*ND*	*ND*	10.2	*ND*	0.012	6.36	99.3	*ND*	77	15.6	49.6
Oct-2019	*2.5 JH1*	*NA*	*ND*	*ND*	7.3	0.11	*0.0071 J*	6.27	85	*ND*	56	9.1	52.5
May-2020	22	*NA*	*ND*	*ND*	7.5	*ND*	*ND*	5.69	91.9	*ND*	33	12.3	14
Oct-2020	24	*NA*	*ND*	*7 J*	6.7	*0.048 J*	*ND*	5.76	86.8	*ND*	47	11.3	6.07
Apr-2021	20	*NA*	*ND*	*ND*	6.2	*0.074 J*	*ND*	6.38	105.1	*ND*	*ND*	10	11.2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-05*													
Nov-1993	NA	ND	ND	NA	ND	0.6	NA	ND	NA	ND	14.6	9.6	ND	0.33	NA
Apr-1994	NA	ND	ND	NA	ND	0.31	NA	ND	NA	ND	1.5	0.16	ND	1.1	NA
Aug-1994	NA	ND	ND	NA	ND	0.74	NA	ND	NA	ND	10.2	0.73	**0.016**	0.26	NA
Sep-1994	NA	ND	ND	NA	ND	0.85	NA	ND	NA	ND	0.84	0.17	ND	0.3	NA
Nov-1994	NA	ND	ND	NA	ND	0.75	NA	ND	NA	0.02	2.7	0.18	0.009	0.35	NA
Apr-1995	ND	ND	0.9	ND	ND	0.53	NA	ND	ND	ND	2.8	0.2	0.005	0.32	NA
Oct-1996	ND	ND	0.019	ND	ND	0.73	0.72	ND	ND	ND	14	1.5	ND	ND	ND
Apr-1997	ND	ND	0.01	ND	ND	0.83	0.8	ND	ND	ND	2.6	0.22	0.005	ND	ND
Oct-1997	ND	ND	0.01	ND	0.004	0.642	1.5	ND	ND	ND	6.76	2.38	ND	0.293	0.456
Apr-1998	ND	ND	ND	ND	ND	0.798	0.794	ND	ND	ND	27.9	0.544	ND	0.291	0.287
Apr-1999	ND	ND	0.01	ND	ND	0.762	0.728	ND	ND	ND	46.2	0.622	ND	0.296	0.278
Oct-1999	ND	ND	0.011	ND	ND	1.06	0.711	ND	ND	ND	29	0.62	ND	0.338	0.262
Apr-2000	ND	ND	0.012	ND	ND	1.07	0.658	ND	ND	ND	37.3	0.475	ND	0.368	0.271
Oct-2000	ND	ND	ND	ND	ND	0.793	0.747	ND	ND	ND	41.1	0.618	ND	0.322	0.3
Apr-2001	ND	ND	0.011	ND	ND	1.02	NA	ND	ND	ND	28.1	NA	0.006	0.346	NA
Mar-2002	ND	ND	ND	ND	ND	0.973	0.79	0.014	ND	0.039	50.1	0.789	0.011	0.333	0.317
Sep-2002	ND	ND	0.011	ND	ND	1.16	0.722	ND	ND	0.022	31.9	0.816	0.007	0.356	0.309
Mar-2003	ND	ND	ND	ND	ND	0.767	0.723	ND	ND	0.017	5.11	0.967	0.01	0.321	0.297
Oct-2003	ND	ND	0.01	ND	ND	1.11	0.757	ND	ND	ND	22.3	0.901	0.007	0.367	0.317
Apr-2004	ND	ND	0.013	ND	ND	1.21	0.761	ND	ND	0.012	31.7	0.889	0.006	0.43	0.326
Oct-2004	ND	ND	0.01	ND	ND	1.76	0.797	ND	ND	ND	24.2	0.924	0.006	0.431	0.338

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05***													
Apr-2005	ND	ND	ND	ND	ND	0.454	0.491	ND	ND	ND	ND	ND	ND	0.16	0.174
Oct-2005	ND	ND	0.01	ND	ND	1.03	0.719	ND	ND	0.022	45.5	0.602	0.009	0.312	0.292
Mar-2006	ND	ND	ND	ND	ND	0.695	0.504	ND	ND	0.01	105	0.819	0.011	0.26	0.208
Sep-2006	ND	ND	0.01	ND	ND	0.908	0.612	ND	ND	0.013	68.8	0.899	0.011	0.296	0.266
Mar-2007	ND	ND	0.012	ND	ND	0.642	0.554	ND	ND	ND	34.1	0.622	0.009	0.256	0.226
Sep-2007	ND	ND	ND	ND	ND	0.739	0.64	ND	ND	ND	21.1	0.7	0.006	0.275	0.236
Mar-2008	ND	ND	ND	ND	ND	0.631	0.631	ND	ND	ND	11.5	0.735	0.004	0.271	0.275
Sep-2008	ND	ND	0.007	ND	ND	0.699	0.509	ND	ND	ND	22.4	0.601	0.004	0.314	0.278
Mar-2009	ND	ND	0.011	ND	ND	0.787	0.697	ND	ND	ND	81.6	0.914	0.012	0.326	0.288
Oct-2009	ND	ND	ND	ND	ND	1.15	0.839	ND	ND	ND	26.3	2.54	0.003	0.374	0.344
Apr-2010	ND	ND	ND	ND	ND	0.671	0.584	ND	ND	ND	34.9	0.762	0.004	0.304	0.292
Oct-2010	ND	ND	ND	ND	ND	0.859	0.811	ND	ND	ND	51.6	1.05	0.008	0.396	0.374
Apr-2011	ND	ND	ND	ND	ND	0.889	0.803	ND	ND	ND	13.9	1.2	0.005	0.36	0.334
Sep-2011	ND	ND	ND	ND	ND	0.82	0.82	ND	ND	ND	15.2	1.72	0.005	0.306	0.327
Mar-2012	ND	ND	ND	ND	ND	0.829	0.824	ND	ND	ND	11.4	1.36	0.005	0.428	0.415
Sep-2012	ND	ND	0.0083 J	ND	ND	0.971	0.958	ND	0.000838 J	0.0011 J	2.43	1.42	0.0036	0.341	0.311
Mar-2013	ND	ND	0.0087 J	ND	ND	1	0.961	0.0018 J	0.000789 J	0.002 J	6.24	1.95	0.003	0.326	0.283
Oct-2013	ND	ND	0.0091	ND	ND	0.904	0.885	0.0011 J	0.000728 J	0.000891 J	1.58	1.48	0.0044	0.334	0.333
Mar-2014	ND	ND	0.0081 J	ND	ND	1.33	1.31	0.0064 J	0.000768 J	0.0011 J	5.65	1.83	0.0047	0.294	0.372
Oct-2014	0.000461 J	ND	0.0104	ND	ND	1.12	1.13	0.000704 J	0.000804 J	0.000686 J	4.25	2.54	0.0029	0.401	0.406
Apr-2015	0.0011 J	ND	0.0113	ND	ND	1.06	1.13	0.0014 J	0.000967 J	0.0018 J	11.2	2.16	0.0044	0.425	0.442
Nov-2015	ND	ND	0.0109	ND	ND	1.05	1.02	0.000637 J	0.000944 J	ND	2.53	1.76	0.002	0.432	0.425
May-2016	ND	ND	0.0108	ND	ND	1.02	1.1	0.00084 J	0.00086 J	0.00054 J	2.93	2.42	0.0022	0.43	0.442
Oct-2016	ND	ND	0.0118	ND	ND	0.922	0.91	0.0014 J	0.00088 J	0.0012 J	5.81	2.24	0.0028	0.407	0.409

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05***													
May-2017	*ND*	*ND*	0.011	*ND*	*ND*	1.1	1.13	*0.002 J*	*0.00093 J*	*ND*	2.76	2.59	*0.0018 J*	0.398	0.427
Oct-2017	*ND*	*ND*	0.0123	*ND*	*ND*	1.26	1.22	*ND*	*0.00087 J*	*ND*	4.82	4.01	*0.0014 J*	0.452	0.44
May-2018	*ND*	*ND*	0.015	*0.000077 J*	*0.000046 J*	1.6	1.5	*0.0025 J*	0.0011	0.0056	7.7	5.3	0.0012	*0.55 J*	*0.52 J*
Nov-2018	*ND*	*ND*	0.025	*0.00015 J*	*ND*	4.4	4.2	*0.0059 J*	0.00098	0.0026	49.7 M1	22.3 M1	*0.0009 J*	*0.92 J*	*0.92 J*
May-2019	*ND*	*ND*	0.027	*ND*	*ND*	4.6	4.6	*ND*	0.0013	0.0028	34.5 M1	25.8 M1	*ND*	1	1
Oct-2019	*0.000056 J*	*ND*	0.021	*0.000073 J*	*0.00018 J*	2.4	2.5	*0.0042 J*	0.0014	*0.0014 J*	23	13.5	*0.00086 J*	0.73	*0.7 J*
May-2020	*ND*	*ND*	0.024	*ND*	*ND*	3.6	3.6	**0.01 D6**	*0.0015 J*	0.012	29 ML	19.7	*ND*	0.82	0.85
Oct-2020	*0.00048 J*	*ND*	0.021	*ND*	*ND*	3.2	3.3	*0.011 J*	*0.0013 J*	*ND*	19.3	18.2	*ND*	0.79	*0.81 J*
Apr-2021	*ND*	*ND*	0.018	*ND*	*ND*	2.7	2.8	*0.0013 J*	*0.00054 J*	*ND*	18.7	17.9	*ND*	0.78	0.76

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-05*												
Nov-1993	0.06	NA	ND	NA	0.37	NA	ND	NA	1.2	NA	NA	NA	ND
Apr-1994	0.18	NA	ND	NA	ND	NA	ND	NA	1.6	NA	NA	NA	ND
Aug-1994	0.02	NA	ND	NA	0.48	NA	ND	NA	0.88	NA	NA	NA	ND
Sep-1994	0.01	NA	ND	NA	0.38	NA	ND	NA	1.1	NA	NA	NA	0.03
Nov-1994	0.03	NA	ND	NA	0.53	NA	ND	NA	1.1	NA	NA	NA	0.01
Apr-1995	ND	NA	ND	ND	0.53	NA	ND	0.01	0.96	NA	ND	ND	0.02
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	1.2	1.3	ND	ND	0.026
Apr-1997	0.011	0.01	ND	ND	ND	ND	ND	ND	1.6	1.4	ND	ND	0.024
Oct-1997	0.026	0.03	0.0005	ND	ND	ND	ND	ND	1.35	1.35	ND	ND	0.016
Apr-1998	0.015	0.016	ND	ND	ND	ND	ND	ND	1.11	1.11	ND	ND	ND
Apr-1999	0.01	0.017	NA	ND	ND	ND	ND	ND	1.09	1.02	ND	ND	ND
Oct-1999	0.014	0.016	NA	ND	0.879	0.631	ND	ND	1.38	0.952	ND	ND	ND
Apr-2000	0.019	0.014	NA	ND	ND	ND	ND	ND	3.38	1.03	ND	ND	0.018
Oct-2000	ND	0.018	NA	ND	0.455	0.217	ND	ND	1.06	1.06	ND	ND	ND
Apr-2001	0.015	NA	NA	ND	1.16	NA	ND	ND	2.31	NA	ND	ND	ND
Mar-2002	0.015	0.018	NA	0.012	0.651	0.751	ND	ND	1.78	1.17	ND	ND	0.016
Sep-2002	0.016	0.019	NA	ND	1.43	ND	ND	ND	1.7	1.12	ND	ND	ND
Mar-2003	0.02	0.018	NA	ND	0.792	ND	ND	ND	1.18	1.16	ND	ND	ND
Oct-2003	0.014	0.018	NA	ND	0.663	0.638	ND	ND	1.52	1.16	ND	ND	ND
Apr-2004	0.015	0.019	ND	ND	0.753	ND	ND	ND	1.74	1.24	ND	ND	0.044
Oct-2004	0.02	0.018	ND	ND	1.15	ND	ND	ND	1.83	0.991	ND	ND	0.055
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	0.949	0.955	ND	ND	0.019

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05***												
Oct-2005	0.02	0.013	ND	ND	ND	ND	ND	ND	1.76	1.08	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	0.973	0.827	ND	ND	ND
Sep-2006	0.021	0.016	ND	ND	0.508	ND	ND	ND	1.14	0.883	ND	ND	ND
Mar-2007	0.019	0.012	ND	ND	ND	ND	ND	ND	0.981	0.81	ND	ND	ND
Sep-2007	0.023	0.015	ND	ND	ND	ND	ND	ND	0.967	0.953	ND	ND	ND
Mar-2008	0.017	0.014	ND	ND	ND	ND	ND	ND	0.963	0.976	ND	ND	ND
Sep-2008	0.017	0.013	ND	ND	ND	ND	ND	ND	0.964	0.899	ND	ND	0.016
Mar-2009	0.026	0.015	ND	ND	ND	ND	ND	ND	1.14	1.08	ND	ND	0.016
Oct-2009	0.04	0.036	ND	ND	ND	ND	ND	ND	1.24	1.17	ND	ND	0.027
Apr-2010	0.023	0.013	ND	ND	ND	ND	ND	ND	1.24	1.22	ND	ND	ND
Oct-2010	0.03	0.018	ND	ND	ND	ND	ND	ND	1.27	1.22	ND	ND	ND
Apr-2011	0.025	0.02	ND	ND	ND	ND	ND	ND	1.32	1.37	ND	ND	0.01
Sep-2011	0.03	0.027	ND	ND	ND	ND	ND	ND	1.27	1.28	ND	ND	ND
Mar-2012	0.024	0.022	ND	ND	ND	ND	ND	ND	1.29	1.26	ND	ND	0.011
Sep-2012	0.0343	0.0323	ND	0.0016 J	0.458 J	0.551	ND	ND	1.21	1.14	ND	ND	0.0043 J
Mar-2013	0.0306	0.0327	0.000055 J	0.0015 J	0.505	0.459 J	ND	ND	1.25	1.12	ND	ND	0.0624
Oct-2013	0.0274	0.0285	ND	0.0019 J	0.427	0.427	ND	ND	1.19	1.22	ND	0.0011 J	0.0121
Mar-2014	0.0224	0.0243	ND	0.0015 J	0.529	0.515	ND	ND	1.01	1.32	ND	0.0026 J	0.0041 J
Oct-2014	0.0369	0.0387	ND	0.0016 J	0.518	0.53	0.001 J	ND	1.53	1.56	ND	ND	0.0053 J
Apr-2015	0.0303	0.0323	ND	0.0019 J	0.506	0.542	ND	ND	1.57	1.66	ND	ND	0.0069 J
Nov-2015	0.0303	0.0265	ND	0.0015 J	0.508	0.487 J	ND	ND	1.75	1.74	0.000064 J	ND	0.0027 J
May-2016	0.0294	0.0324	ND	0.0016 J	0.528	0.512	ND	ND	1.58	1.6	ND	ND	0.0078 J
Oct-2016	0.0278	0.0271	ND	0.0024 J	0.5	0.489	ND	ND	1.48	1.52	ND	ND	ND
May-2017	0.0298	0.0294	ND	0.0021 J	0.495	0.495	ND	ND	1.45	1.55	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05***												
Oct-2017	0.0416	0.0396	*ND*	*0.0013 J*	0.516	0.538	*ND*	*ND*	1.63	1.65	*ND*	*ND*	*ND*
May-2018	0.049	0.04	*ND*	0.0022	*ND*	*ND*	*ND*	*ND*	*1.9 J*	*1.8 J*	*0.000077 J*	*ND*	*0.0047 J*
Nov-2018	0.18	0.17	*ND*	0.0049	*ND*	*1 J*	*ND*	*ND*	*2.8 J*	*2.7 J*	*ND*	*ND*	0.0065
May-2019	0.17	0.16	*ND*	0.0032	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0075
Oct-2019	0.085	0.085	*ND*	0.003	*ND*	*ND*	*ND*	*ND*	*2.8 J*	*2.8 J*	*ND*	0.0056	0.015
May-2020	0.11	0.11	*ND*	*0.009 J*	1	0.89	*ND*	*ND*	3	3.1	*ND*	*ND*	*ND*
Oct-2020	0.14	0.12	*ND*	0.0037	*ND*	*ND*	*0.0017 J*	*ND*	*2.4 J*	*2.2 J*	*ND*	*0.0031 J*	*ND*
Apr-2021	0.12	0.12	*0.00005 J*	*0.0021 J*	0.72	0.75	*ND*	*ND*	2.5	2.5	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.8	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4 J	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.6 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.4 L2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.2 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	1.58	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-05*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05***															
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.46 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.39 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.51 J*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*0.6 J*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*0.5 J*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*0.7 J*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.9 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	1.9
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	3.1 CLN3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	4.9 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	2.3
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	2.3
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	2.5	2.5
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.113 J*	*ND*	*0.544 J*	*ND*	*ND*	*ND*	*1.25 J*	*4.18 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	1.2	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05***															
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.5 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.483 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:	***TW-05A***												
Nov-1993	6	6	ND	ND	2.5	ND	ND	5.43	18.1	ND	26	1.98	15
Apr-1994	ND	ND	0.1	ND	2.4	ND	ND	5	19.3	ND	48	0.75	26.1
Apr-1995	5	5	0.2	ND	2.9	ND	ND	5.4	21.8	2.3	ND	2.4	47.2
Apr-1997	ND	2	ND	ND	3	0.09	ND	NA	NA	ND	ND	7.8	42
Oct-1997	4	4	0.28	ND	ND	ND	ND	5.93	19.8	ND	ND	5	150
Apr-1998	ND	ND	ND	ND	2.24	ND	ND	6	62.1	ND	ND	3.1	39
Apr-1999	ND	ND	0.19	ND	4.41	ND	ND	5.32	19.8	ND	23	2.9	19
Oct-1999	20	20	0.08	ND	3.24	ND	ND	5.16	19.5	ND	18	3.1	38
Apr-2000	1	1	ND	ND	3.12	ND	ND	5.61	17	ND	19	3	10
Oct-2000	2.7	NA	ND	ND	5.19	ND	ND	5.26	21.8	5.48	25	3.12	21.2
Apr-2001	1.9	NA	ND	ND	3.51	0.498	ND	NA	NA	ND	ND	3.23	13.3
Sep-2001	1.9	1.9	ND	ND	4.28	ND	ND	5.49	25	ND	27	3.27	40
Mar-2002	ND	ND	ND	ND	3.28	ND	ND	5.5	22	ND	36	2.99	26
Sep-2002	3	3	ND	ND	2.96	ND	ND	5.5	24.5	ND	38	4.99	82
Mar-2003	4.2	4.2	ND	ND	3.59	ND	ND	5.3	25.1	ND	25	3.06	19
Oct-2003	3.6	3.6	ND	ND	3.23	0.093	ND	4.8	28.5	ND	62	10.3	50
Apr-2004	3.8	3.8	ND	ND	3.46	0.07	ND	5.5	23.5	ND	20	4.72	34
Oct-2004	3.6	3.6	ND	ND	36	0.74	ND	5.2	22.8	4.56	36	3.8	35
Apr-2005	3.6	3.6	ND	ND	3.27	0.08	ND	5.3	22.4	ND	62	4.39	74
Oct-2005	3.7	3.7	ND	ND	3.95	0.09	ND	5.3	18	ND	33	4.04	25
Mar-2006	4.7	4.7	ND	ND	3.83	0.11	ND	4.6	24.2	ND	36	3.64	35
Sep-2006	4.4	4.4	ND	ND	3.88	0.1	ND	5.2	24.1	ND	31	3.44	12
Mar-2007	4.7	4.7	0.38	ND	4.05	0.14	ND	5.4	25.5	ND	27	3.21	15
Sep-2007	3.4	3.4	0.35	ND	3.86	0.16	ND	5.3	26.6	ND	94	3.53	7.7
Mar-2008	4	4	ND	ND	4.03	0.15	ND	5.7	28.1	ND	18	3.4	13
Sep-2008	4	4	ND	14	4.22	0.1	ND	5.3	27.1	ND	23	3.7	18
Mar-2009	13	13	ND	ND	4.14	0.11	ND	4.5	26.6	ND	31	3.51	41
Oct-2009	3.9	3.9	ND	ND	4.08	0.13	ND	4.7	24	ND	44	4.3	44
Apr-2010	4.5	4.5	ND	ND	3.61	0.13	ND	5.2	25.8	ND	25	3	19
Oct-2010	3.2	3.2	ND	ND	4.2	0.09	ND	4.5	25.6	ND	ND	3.45	17
Apr-2011	4.4	4.4	ND	ND	3.88	0.11	ND	4.7	25.6	ND	30	3.65	53
Sep-2011	4.8	4.8	ND	ND	4.25	0.1	ND	5.5	20.1	ND	25	3.67	27
Mar-2012	3.8	3.8	ND	ND	4.14	0.12	ND	4.5	22.3	ND	ND	3.77	11
Sep-2012	3.32	3.32	ND	ND	4.24	0.142	ND	4.2	23.3	ND	27	3.74	13.7
Mar-2013	4.68	4.68	0.096 J	ND	4.58	0.127	ND	5.3	26	0.562 J	25	4.07	7.93
Oct-2013	5.12	5.12	ND	ND	4.66	0.119	ND	5.8	28.8	0.581 J	ND	4.29	13.3

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-05A***											
Mar-2014	4.88	4.88	*ND*	*ND*	4.77	0.103	*ND*	5.3	26.6	*0.869 J*	*ND*	5.22	13.1
Oct-2014	*ND*	*ND*	*ND*	10	4.92	0.148	*ND*	4.6	27.3	*ND*	*ND*	5.18	8.8
Apr-2015	4.84	4.84	*ND*	*ND*	5.04	0.171	*ND*	4.2	27.2	*0.515 J*	*ND*	5.43	22.7
Nov-2015	3.48	3.48	*ND*	*ND*	5.05	0.236	*ND*	5.4	53.6	*ND*	*12 J*	5.52	11.5
May-2016	4.44	4.44	*ND*	*ND*	4.92	0.263	*ND*	5.6	36.6	*ND*	27	5.1	16.2
Oct-2016	2.8	2.8	*ND*	*ND*	5.3	*NA*	*NA*	5.2	43	1.42	31	5.5	10.6
May-2017	2.64	2.64	*ND*	*7 J*	5.1	0.314	*ND*	5.3	50.2	1.08	*22 J*	6.2	7.9
Oct-2017	5.76	5.76	*ND*	*ND*	5.13	0.354	*ND*	5.6	53.7	*0.753 J*	34	5.8	11.2
May-2018	22	22	*ND*	*ND*	4.3	0.32	*0.0063 J*	6.1	61.4	*ND*	10	6.1	45
Nov-2018	22	22	*ND*	*5.7 J*	5.4	*ND*	0.013	6.58	149.6	*ND*	32	6.3	34
May-2019	14	*NA*	*ND*	*ND*	4.9	*ND*	0.033	6.69	98.8	*ND*	45	7.8	11.7
Oct-2019	*2.5 JH1*	*NA*	*ND*	*10.4 JMH*	4.6	*0.079 J*	0.016	6.19	153.5	*ND*	65	7.1	19.5
May-2020	*6 J*	*NA*	*ND*	*9.1 J*	4.9	*ND*	*0.0071 J*	5.83	157.7	*ND*	18	6.2	25.7
Oct-2020	*8 J*	*NA*	*ND*	*9.3 J*	5	*ND*	0.014	5.8	142.4	*ND*	44	7.5	18.7
Apr-2021	14	*NA*	*ND*	*8.3 J*	5.7	*0.077 J*	*ND*	7.02	187.8	*ND*	*ND*	7.35	16.5

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05A***													
Nov-1993	NA	ND	ND	NA	ND	0.38	NA	ND	NA	ND	1.5	1	ND	0.25	NA
Apr-1994	NA	ND	ND	NA	ND	0.24	NA	ND	NA	ND	1.7	0.84	ND	4.3	NA
Apr-1995	ND	ND	0.6	ND	ND	0.5	NA	ND	ND	ND	3	1.3	ND	0.29	NA
Oct-1996	ND	ND	0.021	ND	ND	0.73	0.93	ND	ND	ND	8.2	3.7	ND	ND	ND
Apr-1997	ND	ND	0.016	ND	ND	1.6	0.84	ND	ND	ND	2.4	2.1	0.002	ND	ND
Oct-1997	ND	ND	0.011	ND	0.004	1.01	0.743	ND	ND	ND	19.9	0.371	ND	0.343	0.257
Apr-1998	ND	ND	0.012	ND	ND	0.696	0.751	ND	ND	ND	4.85	1.28	ND	0.331	0.306
Apr-1999	ND	ND	0.011	ND	ND	0.629	0.615	ND	ND	ND	1.93	0.436	ND	0.328	0.303
Oct-1999	ND	ND	0.011	ND	ND	0.666	0.601	ND	ND	ND	2.21	0.506	ND	0.338	0.295
Apr-2000	ND	ND	ND	ND	ND	0.657	0.647	ND	ND	ND	1.49	0.663	ND	0.332	0.311
Oct-2000	ND	ND	ND	ND	ND	0.678	0.653	ND	ND	ND	2.22	0.79	ND	0.347	0.329
Apr-2001	ND	ND	ND	ND	ND	0.698	NA	ND	ND	ND	1.15	NA	ND	0.361	NA
Sep-2001	ND	ND	ND	ND	ND	0.714	0.654	ND	ND	ND	5.08	1.46	ND	0.361	0.326
Mar-2002	ND	ND	0.012	ND	ND	0.638	0.684	ND	ND	ND	2.39	0.628	ND	0.338	0.343
Sep-2002	ND	ND	0.011	ND	ND	1.36	0.63	ND	ND	ND	11.3	1.35	ND	0.385	0.32
Mar-2003	ND	ND	ND	ND	ND	0.681	0.641	ND	ND	ND	1.36	0.966	ND	0.33	0.315
Oct-2003	ND	ND	0.013	ND	ND	1.06	0.668	ND	ND	ND	4.65	1.01	ND	0.419	0.357
Apr-2004	ND	ND	0.012	ND	ND	1.13	0.736	ND	ND	ND	2.63	0.712	ND	0.46	0.379
Oct-2004	ND	ND	0.013	ND	ND	0.788	0.708	ND	ND	ND	4.33	1.61	ND	0.443	0.398
Apr-2005	ND	ND	0.016	ND	ND	1.03	0.57	ND	ND	ND	4.97	0.373	0.003	0.444	0.294
Oct-2005	ND	ND	0.011	ND	ND	0.93	0.718	ND	ND	ND	1.82	0.515	ND	0.418	0.384

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05A***													
Mar-2006	ND	ND	ND	ND	ND	0.917	0.544	ND	ND	ND	1.9	0.34	ND	0.329	0.324
Sep-2006	ND	ND	0.011	ND	ND	0.723	0.741	ND	ND	ND	1.26	1.45	ND	0.395	0.402
Mar-2007	ND	ND	0.015	ND	ND	0.701	0.684	ND	ND	ND	1.11	0.338	ND	0.355	0.34
Sep-2007	ND	ND	0.011	ND	ND	0.741	0.72	ND	ND	ND	1.46	0.548	ND	0.408	0.408
Mar-2008	ND	ND	0.011	ND	ND	0.708	0.728	ND	ND	ND	1.27	1.51	ND	0.396	0.395
Sep-2008	ND	ND	0.012	ND	ND	0.721	0.585	ND	ND	ND	2.18	1.19	ND	0.453	0.416
Mar-2009	ND	ND	0.01	ND	ND	0.815	0.87	ND	ND	ND	6.91	6.48	ND	0.356	0.394
Oct-2009	ND	ND	0.011	ND	ND	0.974	0.648	ND	ND	ND	3.48	0.517	ND	0.455	0.416
Apr-2010	ND	ND	0.011	ND	ND	0.614	0.578	ND	ND	ND	3.23	0.768	ND	0.353	0.342
Oct-2010	ND	ND	0.011	ND	ND	0.698	0.698	ND	ND	ND	2.54	0.739	ND	0.416	0.431
Apr-2011	ND	ND	0.013	ND	ND	0.776	0.685	ND	ND	ND	8.66	1.94	ND	0.416	0.367
Sep-2011	ND	ND	0.013	ND	ND	0.788	0.792	ND	ND	ND	4.34	0.979	0.002	0.412	0.424
Mar-2012	ND	ND	0.012	ND	ND	0.703	0.695	ND	ND	ND	1.65	0.712	ND	0.488	0.488
Sep-2012	ND	ND	0.0124	0.000105 J	ND	0.779	0.703	0.0016 J	0.0013 J	0.0021 J	1.67	0.756	0.000612 J	0.436	0.425
Mar-2013	ND	ND	0.0131	0.000106 J	ND	0.889	0.969	0.0062 J	0.0017 J	0.0035 J	1.29	0.617	ND	0.449	0.457
Oct-2013	ND	ND	0.0156	ND	ND	0.864	0.886	0.0018 J	0.0015 J	0.0019 J	1.54	1.24	0.000467 J	0.517	0.554
Mar-2014	ND	ND	0.0151	ND	ND	1.33	1.37	0.0072 J	0.0016 J	0.0018 J	2.12	1.18	0.000372 J	0.46	0.587
Oct-2014	0.000634 J	ND	0.0181	ND	ND	1.07	1.03	0.000965 J	0.0019 J	0.0021 J	1.76	0.824	ND	0.609	0.588
Apr-2015	0.0011 J	ND	0.0192	ND	0.000076 J	1.08	1.02	0.0011 J	0.002 J	0.0022 J	3.18	0.994	ND	0.663	0.616
Nov-2015	ND	ND	0.019	0.000121 J	ND	1.09	1.06	0.000455 J	0.002 J	0.0019 J	1.73	0.715	0.000719 J	0.681	0.671
May-2016	ND	ND	0.0191	0.00012 J	ND	0.929	1.05	ND	0.002	0.0019 J	1.71	1.02	0.00031 J	0.674	0.669
Oct-2016	ND	ND	0.02	0.00012 J	ND	1.1	0.969	ND	0.0022	0.0017 J	1.13	0.861	0.00032 J	0.657	0.708
May-2017	ND	ND	0.0212	0.00012 J	ND	1.28	1.1	0.0017 J	0.0022	0.0017 J	1.07	0.809	0.00026 J	0.721	0.69
Oct-2017	ND	ND	0.02	0.00012 J	ND	1.1	1.03	ND	0.0018	0.0017 J	2.31	1.8	0.00024 J	0.743	0.721

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05A***													
May-2018	*0.000044 J*	*ND*	0.018	*0.00011 J*	*0.000033 J*	1.3	1.3	*0.0028 J*	0.0016	0.0065	16.5	8.8	*0.00034 J*	*0.69 J*	*0.67 J*
Nov-2018	*ND*	*0.00028 J*	0.014	*0.00002 J*	*0.00018 J*	1.4	1.4	*0.0026 J*	*0.0004 J*	*0.0016 J*	41.1	41.8 M1	*0.000085 J*	*0.67 J*	*0.67 J*
May-2019	*ND*	*ND*	0.015	*ND*	*ND*	1.8	1.9	*ND*	*ND*	**0.0033 D6**	31.7	32.1	*ND*	*ND*	*ND*
Oct-2019	*0.000052 J*	*ND*	0.016	*ND*	*0.00015 J*	1.6	1.6	*0.0027 J*	*0.00036 J*	*ND*	42.9	40.6	*0.000057 J*	0.73	*0.67 J*
May-2020	*ND*	*ND*	0.018	*ND*	*0.00035 J*	1.4	1.5	*ND*	*ND*	*0.0024 J*	53.6	43.7	*ND*	0.68	0.76
Oct-2020	*0.00046 J*	*ND*	0.018	*ND*	*ND*	1.8	1.7	*0.0087 J*	*0.0007 J*	*ND*	50.6	45.8	*ND*	0.72	*0.71 J*
Apr-2021	*ND*	*ND*	0.018	*0.00018 J*	*ND*	1.7	1.7	*ND*	*ND*	*ND*	47.6	45.9	*ND*	0.78	0.76

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-05A*												
Nov-1993	0.05	NA	ND	NA	0.34	NA	ND	NA	1.2	NA	NA	NA	ND
Apr-1994	0.36	NA	ND	NA	0.7	NA	ND	NA	1.9	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.65	NA	ND	ND	1.1	NA	ND	ND	0.03
Oct-1996	0.031	0.026	NA	ND	ND	ND	ND	ND	1.8	1.7	ND	ND	0.021
Apr-1997	0.034	0.023	ND	ND	2	2.1	ND	ND	1.9	1.7	ND	ND	0.075
Oct-1997	0.014	0.016	ND	0.012	ND	1.14	ND	ND	1.23	1.1	ND	ND	0.032
Apr-1998	0.023	0.023	ND	ND	0.927	ND	ND	ND	1.45	1.46	ND	ND	ND
Apr-1999	0.014	0.012	NA	ND	0.575	0.847	ND	ND	1.48	1.39	ND	ND	ND
Oct-1999	0.014	0.011	NA	ND	ND	0.601	ND	ND	1.46	1.29	ND	ND	ND
Apr-2000	0.015	0.014	NA	ND	ND	ND	ND	ND	1.58	1.53	ND	ND	ND
Oct-2000	0.016	0.016	NA	ND	0.409	0.71	ND	ND	1.56	1.55	ND	ND	0.01
Apr-2001	0.015	NA	NA	ND	1.4	NA	ND	ND	1.69	NA	ND	ND	ND
Sep-2001	0.043	0.028	NA	ND	0.682	0.896	ND	ND	1.65	1.63	ND	ND	ND
Mar-2002	0.015	0.014	NA	ND	1.75	1.72	ND	ND	1.72	1.69	ND	ND	ND
Sep-2002	0.046	0.022	NA	ND	0.951	0.789	ND	ND	1.98	1.71	ND	ND	ND
Mar-2003	0.018	0.016	NA	ND	2.85	ND	ND	ND	1.86	1.79	ND	ND	ND
Oct-2003	0.023	0.02	NA	0.658	1.86	1.21	ND	ND	2.72	1.83	ND	ND	0.012
Apr-2004	0.019	0.021	ND	ND	2.08	1.12	ND	ND	2.43	1.94	ND	ND	0.091
Oct-2004	0.039	0.04	ND	ND	1.25	0.517	ND	ND	1.98	1.6	ND	ND	ND
Apr-2005	0.023	0.014	ND	ND	1.46	1.52	ND	ND	2.32	1.76	ND	ND	0.021
Oct-2005	0.017	0.015	ND	ND	0.699	0.664	ND	ND	2.27	1.62	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.789	0.718	ND	ND	1.69	1.66	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05A***												
Sep-2006	0.014	0.025	0.0003	ND	1.15	1.11	ND	ND	1.85	1.82	ND	ND	ND
Mar-2007	0.014	0.012	0.0003	ND	0.703	0.641	ND	ND	1.75	1.67	ND	ND	ND
Sep-2007	0.017	0.016	0.0003	ND	0.641	0.604	ND	ND	1.83	1.82	ND	ND	0.012
Mar-2008	0.016	0.019	0.0003	ND	0.757	0.734	ND	ND	1.94	1.99	ND	ND	ND
Sep-2008	0.018	0.018	0.0003	ND	0.691	0.67	ND	ND	1.86	1.82	ND	ND	0.014
Mar-2009	0.037	0.043	ND	ND	0.659	0.719	ND	ND	1.91	2.04	ND	ND	ND
Oct-2009	0.017	0.014	ND	ND	0.692	0.701	ND	ND	2.02	2	ND	ND	0.022
Apr-2010	0.017	0.014	ND	ND	0.9	0.794	ND	ND	1.92	1.86	ND	ND	ND
Oct-2010	0.014	0.014	ND	ND	0.611	0.574	ND	ND	1.91	1.87	ND	ND	ND
Apr-2011	0.04	0.028	ND	0.033	0.841	0.798	ND	ND	2.1	2.11	ND	ND	ND
Sep-2011	0.019	0.015	ND	ND	0.858	0.826	ND	ND	2.32	2.27	ND	ND	ND
Mar-2012	0.015	0.015	ND	ND	0.602	0.658	ND	ND	2.1	2.13	ND	ND	ND
Sep-2012	0.0173	0.0155	0.000106 J	0.0025 J	0.601	0.639	ND	ND	2.04	2.12	ND	ND	0.0037 J
Mar-2013	0.0171	0.0164	0.000226	0.008 J	0.713	0.745	ND	ND	2.01	2.11	ND	ND	0.011
Oct-2013	0.0197	0.0213	0.000268	0.003	0.65	0.688	ND	ND	2.21	2.37	ND	0.0013 J	0.0214
Mar-2014	0.0185	0.0184	0.000251	0.0027 J	0.904	0.916	ND	ND	1.88	2.44	ND	0.0043 J	0.0054 J
Oct-2014	0.0219	0.0206	0.000253	0.01 J	0.934	0.895	0.0014 J	ND	2.47	2.37	ND	ND	0.0079 J
Apr-2015	0.0235	0.0216	0.000245	0.0039 J	0.971	0.86	0.000772 J	ND	2.75	2.52	ND	ND	0.008 J
Nov-2015	0.0224	0.0218	0.000413	0.003 J	0.788	0.756	ND	ND	2.71	2.69	0.000065 J	ND	0.0034 J
May-2016	0.0233	0.0216	0.0003	0.003 J	0.807	0.8	ND	ND	2.47	2.48	ND	ND	ND
Oct-2016	0.0213	0.0242	0.00032	0.0039 J	0.77	0.83	ND	ND	2.35	2.59	ND	ND	ND
May-2017	0.022	0.0235	0.00046	0.0043	0.784	0.818	ND	ND	2.43	2.5	ND	ND	0.0038 JB
Oct-2017	0.0275	0.0278	0.00054	0.0024 J	0.823	0.8	ND	ND	2.57	2.56	ND	ND	ND
May-2018	0.093	0.075	0.00088	0.0037	0.91 J	ND	0.00036 J	ND	2.4 J	2.2 J	ND	ND	0.005 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05A***												
Nov-2018	0.22	0.23	*ND*	0.002	*ND*	*0.96 J*	*ND*	*ND*	*2.4 J*	*2.5 J*	*ND*	*ND*	*0.0036 J*
May-2019	0.31 M1	0.3	*ND*	0.0013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0054 D6
Oct-2019	0.32	0.31	*ND*	0.0013	*ND*	*ND*	*0.00039 J*	*ND*	*2.7 J*	*2.4 J*	*ND*	0.0049	0.012
May-2020	0.24	0.24	*ND*	*ND*	0.78	0.73	*ND*	*ND*	2.2	2.6	*ND*	*ND*	*ND*
Oct-2020	0.25	0.22	*ND*	0.0028	*ND*	*ND*	*ND*	*ND*	*1.2 J*	*1.9 J*	*ND*	*0.0026 J*	*ND*
Apr-2021	0.24	0.23	*0.00006 J*	*ND*	0.67	0.69	*ND*	*ND*	2.6	2.4	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	42	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05A*																
Mar-2006	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.87 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.47	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05A*																
May-2017	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 J	ND
Nov-2018	ND	ND	ND	ND	1.1 L2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*0.5 J*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05A***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	0.9 J
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	1.4
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	2.1
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	2.2
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	1.1
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.94 J
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.52 J	1.41
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.21 J	ND	ND	ND	ND	ND	0.87 J	2.38
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	0.73 J	1.31
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	0.25 J	ND	ND	ND	0.62 J	2.1
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.16 J	ND	0.22 J	ND	ND	ND	0.58 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4 J	2.2
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	0.6 J	2.3
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.2 J	ND	ND	ND	0.7 J	2.7

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*0.7 J*	2.7
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*0.8 J*	2.8
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	3
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3 CLN3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.128 J*	*ND*	*ND*	*ND*	*ND*	*1.58 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	1.2	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05A***															
Oct-2005	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1.7 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*0.14 J*	*ND*	*ND*	*ND*	*0.23 J*	*ND*	*ND*	*ND*	*ND*	*0.22 J*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*0.13 J*	*ND*	*ND*	*ND*	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.1 J*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05A***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.132 J*	*0.83 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-06***											
Nov-1993	6	6	0.2	ND	12.6	0.2	ND	5.44	49.9	2.6	60	8.1	9.6
Apr-1994	ND	ND	ND	ND	11.9	ND	ND	4.82	50.3	ND	45	5.34	2.5
Aug-1994	ND	ND	ND	ND	11.7	0.4	0.4	4.5	49.5	3.2	57	7.9	7.7
Sep-1994	ND	ND	ND	ND	12.2	0.3	ND	5.1	52.8	2.8	35	8.7	3.4
Nov-1994	ND	ND	ND	ND	13.2	0.2	ND	5.2	53.6	2.6	33	12	2.6
Apr-1995	8.2	8.2	ND	ND	14.1	ND	ND	5.4	62.8	2.2	9	10	2.2
Apr-1997	ND	16	ND	ND	11	0.06	ND	NA	NA	ND	52	12	6
Apr-1997	ND	8	ND	ND	9.5	0.06	ND	NA	NA	ND	36	6.1	1.6
Oct-1997	14	14	0.21	ND	10.9	ND	ND	6.65	75.3	ND	32	17	11
Apr-1998	17	17	ND	ND	8.13	ND	ND	6.32	64.9	ND	27	7.7	12
Apr-1999	11	11	0.31	ND	8.56	ND	ND	5.71	75.1	ND	65	12	9.6
Oct-1999	16	16	0.13	ND	7.73	0.172	ND	5.39	72.8	ND	52	8.4	9.4
Apr-2000	14	14	ND	ND	16.5	ND	ND	5.63	65	ND	31	11	1.3
Oct-2000	14	NA	ND	ND	14.9	ND	ND	5.39	78.4	3.52	55	12.8	2.27
Apr-2001	11	NA	ND	ND	12.2	ND	ND	NA	NA	ND	43	14.3	9
Sep-2001	8.7	8.7	ND	ND	16.5	ND	ND	5.04	89	ND	65	15.7	1.5
Mar-2002	17	17	ND	ND	24.6	ND	ND	6	143	ND	74	19.9	25
Sep-2002	14	14	ND	ND	19.3	ND	ND	5.9	141.3	ND	73	19.6	9.5
Mar-2003	13	13	ND	ND	16.4	ND	ND	5.4	112.1	ND	46	15.2	2.6
Oct-2003	11	11	ND	ND	18.1	0.122	ND	4.1	118.9	ND	101	18.7	3.4
Apr-2004	21	21	ND	ND	17.6	0.08	ND	5.6	102.9	ND	96	18.6	11
Oct-2004	7.2	7.2	ND	ND	13.4	0.11	ND	5.7	79.4	ND	60	13.8	2.1
Apr-2005	6.9	6.9	ND	ND	11.6	0.1	ND	5.2	63.8	1.44	69	12.5	1.7
Oct-2005	13	13	ND	ND	15.2	0.1	ND	4.8	82.1	2.83	67	12.9	1.4
Mar-2006	9.2	9.2	ND	ND	14.7	0.13	ND	4.8	92.4	4.02	49	13.7	22
Sep-2006	14	14	ND	ND	12.2	0.16	ND	5.6	91.7	1.55	74	12	23
Mar-2007	20	20	ND	ND	12.9	0.14	ND	6	97.8	1.59	52	11.5	1.3
Sep-2007	7.2	7.2	0.4	ND	12.9	0.15	ND	4.9	66.8	2.67	103	11.9	0.18
Mar-2008	7.8	7.8	0.35	ND	16.1	ND	ND	5	69.6	ND	55	11.5	0.74
Sep-2008	9.1	9.1	0.32	ND	14.2	0.28	ND	4.7	67.9	ND	60	11.8	0.12
Mar-2009	7.5	7.5	ND	ND	14.3	0.32	ND	4.9	71.9	1.1	49	10.2	1.2
Oct-2009	9	9	ND	ND	15.5	0.26	ND	4.6	69.5	1.64	53	12.1	0.14
Mar-2010	9.8	9.8	ND	ND	17.1	0.22	ND	5	93	2.53	37	11.8	0.13
Oct-2010	9.6	9.6	ND	ND	14.2	0.28	ND	4.5	69.8	2.47	38	13.7	0.28
Apr-2011	9.1	9.1	ND	ND	15.8	0.35	0.02	4.6	69.2	2.57	50	13.5	0.62
Sep-2011	5.5	5.5	ND	ND	14	0.41	ND	4.8	70.3	2.14	61	13.2	0.71

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-06***											
Mar-2012	6.4	6.4	*ND*	*ND*	14.8	0.42	*ND*	4.6	60.3	2.8	46	13.4	0.31
Sep-2012	7.72	7.72	*ND*	*ND*	14.6	0.389	*ND*	3.8	72.6	2.83	59	13.9	0.241
Mar-2013	10.6	10.6	0.258	*ND*	15.7	0.297	*ND*	5.1	85.7	4.27	44	14.7	0.2
Oct-2013	8.96	8.96	0.212	*ND*	15	0.418	*ND*	5.7	76.3	3.92	46	14	0.296
Mar-2014	9.2	9.2	*0.197 J*	*ND*	15.8	0.362	*ND*	5.3	74.6	4.95	54	16.9	0.278
Oct-2014	*ND*	*ND*	0.23	14	15.4	0.4	*ND*	4.8	73.2	3.96	39	16.5	0.214
Apr-2015	8.36	8.36	0.231	*ND*	15.6	0.427	*ND*	4.1	74.7	4.56	47	15.6	1.56
Nov-2015	7.8	7.8	0.216	*ND*	15.2	0.412	*ND*	5.5	131.2	2.08	50	18.5	2.22
May-2016	17.7	17.7	*0.186 J*	*ND*	16.3	0.195	0.0897	5.6	97.2	6.32	68	16.9	0.683
Oct-2016	5.56	5.56	*ND*	*ND*	14.7	*NA*	*NA*	5.6	101.1	4.1	44	16.4	0.333
May-2017	6.2	6.2	*0.182 J*	*ND*	14.5	0.419	*ND*	5.1	117.2	4.67	49	16.7	2.46
Oct-2017	7.36	7.36	*0.196 J*	13	14.2	0.453	*ND*	5.2	124.3	3.7	60	16.1	5.67
May-2018	14	14	0.21	*ND*	13.7	*0.077 J*	*ND*	5.84	147	*6.6 J*	*ND*	16.9	*NA*
Nov-2018	70	70	0.29	*ND*	17.1	*ND*	0.024	5.88	183.2	*5.8 J*	70	19.2	4.08
May-2019	72	*NA*	0.35	*ND*	19.4	*ND*	0.024	5.96	155.6	*ND*	127	18.1	4.71
Oct-2019	25 H1	*NA*	0.26	*8.2 J*	12.9	*0.067 J*	0.044	5.8	194.2	*ND*	111	18.4	1.77
May-2020	30	*NA*	0.46	*6.9 J*	11.5	*ND*	0.054	5.66	164.7	*ND*	84	15	3.25
Oct-2020	40	*NA*	0.17	*11.6 J*	10.9	*ND*	0.055	5.67	156.1	4.9	105	17.8	3.16
Apr-2021	*8 J6c*	*NA*	0.16	*ND*	12.4	1.2	*0.0063 J*	5.27	120.5	10	66	21.2	8.19

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-06*													
Nov-1993	NA	ND	ND	NA	ND	1.1	NA	ND	NA	ND	8	2.7	ND	1.3	NA
Apr-1994	NA	ND	0.012	NA	ND	1.1	NA	ND	NA	ND	0.37	2.7	ND	0.63	NA
Aug-1994	NA	ND	ND	NA	ND	1.2	NA	ND	NA	ND	1.2	0.7	ND	1.2	NA
Sep-1994	NA	ND	ND	NA	ND	1	NA	ND	NA	ND	0.53	0.1	ND	1.5	NA
Nov-1994	NA	ND	ND	NA	ND	2	NA	ND	NA	0.04	6.8	0.69	ND	1.7	NA
Apr-1995	ND	ND	ND	ND	ND	1.7	NA	ND	ND	ND	3.4	3.4	ND	1.4	NA
Oct-1996	ND	ND	0.076	ND	ND	1.9	1.8	ND	ND	ND	11	10	ND	1.8	1.8
Apr-1997	ND	ND	0.058	ND	ND	1.6	1.5	ND	ND	ND	7.2	5.8	0.004	1.4	1.4
Apr-1997	ND	ND	0.054	ND	ND	1.5	1.5	ND	ND	ND	5.1	3.2	ND	1.1	1.2
Oct-1997	ND	ND	0.053	ND	ND	1.24	1.26	ND	ND	ND	13	11.9	ND	1.22	1.23
Apr-1998	ND	ND	0.049	ND	ND	1.2	1.21	ND	ND	ND	17.6	9.85	ND	1.15	1.17
Apr-1999	ND	ND	0.075	ND	ND	1.8	1.61	ND	ND	0.016	10.5	8.17	ND	1.69	1.54
Oct-1999	ND	ND	0.06	ND	ND	1.65	1.47	ND	ND	ND	9.57	8.57	ND	1.52	1.38
Apr-2000	ND	ND	0.061	ND	ND	1.71	1.62	ND	ND	ND	9.73	9.18	ND	1.68	1.58
Oct-2000	ND	ND	0.069	ND	ND	1.95	1.95	ND	ND	ND	10.7	8.59	ND	1.93	1.95
Apr-2001	ND	ND	0.076	ND	ND	2.12	NA	ND	0.012	0.022	11.5	NA	0.002	2.19	NA
Sep-2001	ND	ND	0.086	ND	ND	2.26	2.18	ND	0.011	0.014	6.46	6.78	0.004	2.45	2.34
Mar-2002	ND	ND	0.099	ND	ND	2.71	2.67	ND	0.023	0.048	19.6	12.4	0.005	3.19	3.15
Sep-2002	ND	ND	0.091	ND	ND	2.82	2.27	ND	0.011	0.028	17.3	14.5	0.004	3.04	2.85
Mar-2003	ND	ND	0.072	ND	ND	2.01	1.89	ND	0.011	0.018	11.5	8.47	0.006	2.48	2.31
Oct-2003	ND	ND	0.084	ND	ND	2.33	2.28	ND	0.012	0.02	10.3	9.31	0.004	3.13	3.1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06***													
Apr-2004	ND	ND	ND	ND	ND	2.23	2.06	ND	0.016	0.037	19.7	16.6	0.003	3.17	2.98
Oct-2004	ND	ND	0.055	ND	ND	1.65	1.69	ND	ND	0.017	8.42	7.62	0.004	2.35	2.44
Apr-2005	ND	ND	0.047	ND	ND	1.63	1.62	ND	ND	0.01	5.5	4.89	0.007	2.05	2.02
Oct-2005	ND	ND	0.046	ND	0.004	1.74	1.74	ND	ND	0.043	9.53	7.71	0.004	2.07	2.08
Mar-2006	ND	ND	0.043	ND	ND	2.29	1.55	0.017	0.03	0.062	12.5	6.7	0.005	1.93	1.93
Sep-2006	0.002	ND	0.037	ND	ND	1.74	1.56	0.044	0.024	0.146	24.4	14.7	0.007	1.87	1.83
Mar-2007	ND	ND	0.039	ND	ND	1.6	1.62	ND	ND	ND	14.1	14.6	ND	1.83	1.84
Sep-2007	ND	0.002	0.035	ND	ND	2.12	2.17	ND	ND	ND	2.61	2.61	ND	1.61	1.65
Mar-2008	ND	0.003	0.034	ND	ND	1.94	1.78	ND	ND	0.01	2.78	2.9	0.006	1.61	1.62
Sep-2008	ND	ND	0.036	ND	ND	1.96	1.99	ND	ND	ND	2.53	2.53	0.003	1.67	1.76
Mar-2009	ND	ND	0.029	ND	ND	1.88	1.92	ND	ND	ND	1.75	2.1	0.003	1.35	1.44
Oct-2009	ND	ND	0.036	ND	ND	1.91	1.81	ND	ND	ND	2.77	2.59	ND	1.78	1.63
Mar-2010	ND	ND	0.043	ND	ND	1.89	1.83	ND	ND	ND	3.26	3.01	ND	1.72	1.68
Oct-2010	ND	ND	0.044	ND	ND	2.19	2.12	ND	ND	ND	2.77	2.58	ND	2	1.95
Apr-2011	ND	ND	0.044	ND	ND	2.09	2.02	ND	ND	ND	2.69	2.44	ND	2.01	1.92
Sep-2011	ND	ND	0.04	ND	ND	2.3	2.33	ND	ND	ND	1.28	1.41	0.002	1.82	1.98
Mar-2012	ND	ND	0.04	ND	ND	2.13	2.09	ND	ND	ND	1.92	1.93	ND	1.97	2.02
Sep-2012	ND	ND	0.0404	0.00056 J	0.00049 J	2.3	2.39	0.0022 J	0.0071 J	0.0047 J	2.37	2.61	0.0018 J	1.99	2.14
Mar-2013	ND	ND	0.0425	0.000544 J	0.000483 J	2.49	2.46	0.0041 J	0.0078 J	0.0035 J	3.1	3.07	0.0013 J	2.07	2
Oct-2013	0.000242 J	ND	0.0454	0.000534 J	0.000554 J	2.57	2.52	0.0096 J	0.0091 J	0.0029 J	2.3	2.28	0.0024	1.85	1.8
Mar-2014	ND	ND	0.0427	0.000407 J	0.000494 J	3.47	3.31	0.0086 J	0.01	0.0027 J	2.38	2.92	0.0013 J	2	2.53
Oct-2014	0.000382 J	0.000409 J	0.0535	0.000408 J	0.000392 J	2.57	2.57	0.0017 J	0.0105	0.0029 J	2.46	2.35	0.00099 J	2.46	2.41
Apr-2015	0.000488 J	0.000426 J	0.0502	0.000489 J	0.000465 J	2.59	2.63	0.0019 J	0.0114	0.0027 J	2.17	2.08	0.00085 J	2.21	2.22
Nov-2015	ND	0.000534 J	0.0582	0.000527 J	0.000548 J	2.96	2.86	0.0024 J	0.014	0.0032 J	4.66	4.32	0.001 J	2.7	2.58

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06***													
May-2016	*ND*	*ND*	0.0532	*0.00033 J*	*0.00032 J*	2.76	2.67	*0.0036 J*	0.0122	*0.0024 J*	1.97	1.95	*0.00098 J*	2.43	2.41
Oct-2016	*ND*	*ND*	0.054	*0.00036 J*	*0.00029 J*	2.73	2.82	*0.0017 J*	0.0131	*0.0028 J*	2.01	2.07	*0.00074 J*	2.32	2.18
May-2017	*ND*	*0.001 J*	0.0609	*0.00038 J*	*0.0006 J*	2.61	2.76	*0.0025 J*	0.0131	*0.0027 J*	2.55	2.41	*0.00081 J*	2.48	2.44
Oct-2017	*ND*	*ND*	0.0581	*0.00043 J*	*0.00054 J*	2.8	2.72	*0.0024 J*	0.0117	*0.0027 J*	2.39	2.38	*0.0011 J*	2.21	2.23
May-2018	*0.000091 J*	*ND*	0.069	0.00039	*0.00048 J*	2.9	2.6	*0.0041 J*	0.006	*0.0015 JB*	2.5	2.4	*0.00075 J*	2.3	2.2
Nov-2018	*ND*	*ND*	0.095	*0.00014 J*	*0.00027 J*	3.2	3.1	*0.0039 J*	0.0092	0.0037	39.2	36.7	*0.000026 J*	2.7	2.7
May-2019	*ND*	*ND*	0.091	*ND*	*ND*	3	3.5	*ND*	0.0087	0.0036	40.3	41.2	*ND*	2.6	2.6
Oct-2019	*0.000069 J*	*ND*	0.09	*0.00013 J*	*0.00021 J*	3.2	3	*0.0044 J*	0.0075	*ND*	42.1	39.7	*0.000085 J*	2.6	2.4
May-2020	*ND*	*ND*	0.096	*ND*	*0.00056 J*	2.3	2.3	*0.0027 J*	0.0073	0.007	38.1	36	*ND*	2.2	2.3
Oct-2020	*0.00034 J*	*ND*	0.087	*0.00032 J*	*ND*	3	2.7	*0.0035 J*	0.0079	*ND*	36.5	34	*ND*	2.5	2.4
Apr-2021	*ND*	*ND*	0.11	*0.00026 J*	*0.0017 J*	3.4	3.5	*0.0033 J*	0.022	0.02	6.2	6	*ND*	3.1	3.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-06*												
Nov-1993	0.08	NA	ND	NA	1.4	NA	ND	NA	2.7	NA	NA	NA	ND
Apr-1994	0.023	NA	ND	NA	0.93	NA	ND	NA	2.8	NA	NA	NA	ND
Aug-1994	0.03	NA	ND	NA	2.3	NA	ND	NA	2.2	NA	NA	NA	0.02
Sep-1994	0.03	NA	ND	NA	1.4	NA	ND	NA	2.6	NA	NA	NA	0.04
Nov-1994	0.15	NA	ND	NA	1.5	NA	ND	NA	2.7	NA	NA	NA	0.03
Apr-1995	0.03	NA	ND	ND	1.8	NA	ND	ND	2.7	NA	ND	ND	0.02
Oct-1996	0.074	0.073	NA	ND	ND	ND	ND	ND	3.7	3.8	ND	ND	0.037
Apr-1997	0.089	0.084	**0.005**	ND	1.5	1.2	ND	ND	3.5	3.2	ND	ND	0.024
Apr-1997	0.05	0.052	0.0016	ND	2.7	2.4	ND	ND	4.2	3	ND	ND	0.036
Oct-1997	0.067	0.068	0.0012	ND	1.73	1.32	ND	ND	2.6	2.61	ND	ND	0.014
Apr-1998	0.06	0.062	0.0015	ND	0.683	1.08	ND	ND	2.36	2.38	ND	ND	0.01
Apr-1999	0.06	0.051	NA	ND	0.856	ND	ND	ND	3.31	3.06	ND	ND	0.016
Oct-1999	0.056	0.053	NA	ND	1.79	1.14	ND	ND	3	2.78	ND	ND	ND
Apr-2000	0.053	0.051	NA	ND	1.04	1.02	ND	ND	3.3	3.14	ND	ND	ND
Oct-2000	0.048	0.047	NA	ND	1.38	1.06	ND	ND	3.57	3.58	ND	ND	ND
Apr-2001	0.06	NA	NA	ND	1.98	NA	ND	ND	4.1	NA	ND	ND	0.018
Sep-2001	0.049	0.046	NA	0.022	1.58	0.692	ND	ND	4.51	4.27	ND	ND	0.016
Mar-2002	0.078	0.073	NA	0.044	2.11	1.13	ND	ND	5.59	5.41	ND	ND	0.041
Sep-2002	0.083	0.071	NA	0.018	1.23	1.11	ND	ND	5.04	4.6	ND	ND	0.021
Mar-2003	0.054	0.054	NA	0.013	2.4	0.954	ND	ND	4.29	4.11	ND	ND	0.012
Oct-2003	0.068	0.066	NA	0.013	2.55	2.47	ND	ND	5.16	4.96	ND	ND	0.014
Apr-2004	0.11	0.099	0.0009	0.037	2.23	1.49	ND	ND	5.43	5.17	ND	ND	0.02

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-06*												
Oct-2004	0.054	0.054	0.0006	ND	1.88	1.65	ND	ND	4.47	4.37	ND	ND	ND
Apr-2005	0.052	0.051	0.0003	ND	1.17	1.12	ND	ND	4.35	4.32	ND	ND	ND
Oct-2005	0.069	0.062	0.0003	0.027	1.23	1.24	ND	ND	4.81	4.73	ND	ND	ND
Mar-2006	0.03	0.015	0.00097	0.123	0.952	0.955	ND	ND	4.83	4.79	ND	ND	0.052
Sep-2006	0.11	0.092	**0.0025**	0.084	1.29	1.29	ND	ND	5.14	4.91	ND	ND	0.043
Mar-2007	0.08	0.083	ND	ND	1.24	1.3	ND	ND	4.89	4.91	ND	ND	ND
Sep-2007	0.036	0.038	ND	ND	1.02	0.953	ND	ND	5.04	5.16	ND	ND	0.011
Mar-2008	0.037	0.036	ND	ND	0.997	1.28	ND	ND	5.14	5.16	ND	ND	ND
Sep-2008	0.038	0.044	ND	0.005	1.07	1.08	ND	ND	5.39	6.11	ND	ND	ND
Mar-2009	0.032	0.037	ND	ND	1.13	1.19	ND	ND	5.46	5.93	ND	ND	ND
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	0.046	0.042	ND	ND	1.07	0.965	ND	ND	6.95	6.27	ND	ND	ND
Mar-2010	0.05	0.049	ND	ND	1.28	1.17	ND	ND	6.45	6.09	ND	ND	ND
Oct-2010	0.054	0.052	ND	ND	1.38	1.27	ND	ND	6.22	6.03	ND	ND	ND
Apr-2011	0.062	0.057	ND	ND	1.39	1.32	ND	ND	6.49	5.99	ND	ND	ND
Sep-2011	0.052	0.056	ND	ND	1.25	1.34	ND	ND	5.43	5.57	ND	ND	ND
Mar-2012	0.062	0.065	ND	ND	1.33	1.3	ND	ND	5.77	5.79	ND	ND	ND
Sep-2012	0.0717	0.0771	ND	0.0073 J	1.35	1.43	ND	ND	5.96	6.31	ND	ND	0.0075 J
Mar-2013	0.0785	0.0727	0.000119 J	0.0082 J	1.33	1.33	ND	ND	6.68	6.44	ND	ND	0.0171
Oct-2013	0.0901	0.0902	ND	0.0072 J	1.16	1.15	ND	ND	5.22	5.06	0.000745 J	0.0088 J	0.0158
Mar-2014	0.0864	0.0903	ND	0.0081 J	1.61	1.56	ND	ND	5.28	6.77	ND	0.0067 J	0.0085 J
Oct-2014	0.107	0.104	ND	0.0083 J	1.4	1.39	0.0016 J	ND	6	5.95	ND	ND	0.0107
Apr-2015	0.0949	0.0914	0.000032 J	0.0098 J	1.31	1.33	0.0012 J	ND	5.83	5.88	ND	ND	0.0119
Nov-2015	0.132	0.125	ND	0.0107	1.51	1.45	0.0017 J	ND	6.82	6.51	ND	ND	0.013

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-06***												
May-2016	0.0965	0.0994	*ND*	0.0108	1.45	1.39	*ND*	*ND*	6.23	6.1	*ND*	*ND*	*0.0087 J*
Oct-2016	0.0951	0.0881	*ND*	0.0089	1.44	1.4	*ND*	*ND*	5.9	5.6	*ND*	*ND*	*0.0087 J*
May-2017	0.103	0.103	*ND*	0.0101	1.48	1.55	*ND*	*ND*	6.08	5.73	*ND*	*ND*	*0.01 J*
Oct-2017	0.0965	0.0976	*ND*	0.0104	1.39	1.47	*ND*	*ND*	5.55	5.59	*ND*	*ND*	*0.0108 J*
May-2018	0.098	0.089	*ND*	0.0049	*0.97 J*	*0.94 J*	*0.00022 JB*	*ND*	6.4	5.9	*ND*	0.0047	0.0059 B
Nov-2018	0.27	0.26	*ND*	0.0047	*1.3 J*	*2 J*	*0.0004 J*	*ND*	7.2	8.1	*ND*	*ND*	0.0068
May-2019	0.33	0.32	*ND*	0.0049	*ND*	*ND*	*ND*	*ND*	6.9	7.1	*ND*	0.0029	0.0083
Oct-2019	0.31	0.31	*ND*	0.0039	*ND*	*1.6 J*	*0.00047 J*	*ND*	6.8	5.9	*ND*	0.005	0.011
May-2020	0.29	0.29	*ND*	*0.0047 J*	1.7	1.5	*ND*	*ND*	6.1	5.9	*ND*	*ND*	0.012
Oct-2020	0.3	0.29	*ND*	0.0043	*1.5 J*	*1.4 J*	*ND*	*ND*	5.6	5.1	*0.00084 J*	*0.00079 J*	*ND*
Apr-2021	0.22	0.23	0.0002	0.015	1.7	1.6	*ND*	*ND*	6	6.2	*ND*	*ND*	0.049

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06*																
Nov-1993	ND	1.6	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	1.8	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	ND
Aug-1994	ND	1.5	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	2.1	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	2.9	ND	ND	2.4	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	9.2	ND	ND	8.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	1	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	1	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	1.2	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	0.9 J	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	0.9 J	NA	NA	5.3	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	4.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	0.7 J	NA	NA	5.2	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	1.5	ND	ND	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	1.1	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	1.2	ND	ND	14	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Mar-2002	ND	1.4	ND	ND	18	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Sep-2002	ND	2.3	ND	ND	23	1.2	ND	ND	ND	ND	ND	1	1.5	ND	ND	ND	ND	ND
Mar-2003	ND	1	ND	ND	13	0.5 J	ND	ND	ND	ND	ND	0.6 J	0.8 J	ND	ND	ND	ND	ND
Oct-2003	ND	1.2	ND	ND	20	0.8 J	ND	ND	ND	ND	ND	1	1.3	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06*																
Apr-2004	ND	0.9 J	ND	ND	16	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	7.2	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	8.5	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	5.8	0.6 J	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Sep-2006	ND	1.7	ND	ND	7.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	7.5	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2007	ND	0.6 J	ND	ND	11.2	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	5.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	8	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	6.9	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	7.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	8.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	8.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	4.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	6.54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	9.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	6.98	0.31 J	ND	ND	ND	ND	ND	0.25 J	0.36 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	6.42	0.21 J	ND	ND	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	7.14	ND	ND	ND	ND	ND	ND	ND	0.28 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06*																
Apr-2015	*ND*	*ND*	*ND*	*ND*	5.67	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	5.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	4.8	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	5.7	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	4.8	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	5.6	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	3.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	8.5 L2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.4 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	6.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	6.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	4.74	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-06*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	3.2
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	5.2
Aug-1994	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	7	4.8
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	4.9
Nov-1994	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.4	6
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	49	22
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	22	4
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	ND	2	ND	ND	ND	13	9
Oct-1997	ND	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	1.1	ND	ND	ND	10	12
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	20	5.6
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	0.7 J	ND	NA	3.8	NA	NA	NA	6	9.3
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND	ND	ND	4.3	6.3
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	0.8 J	ND	NA	2.9	NA	ND	NA	5.1	7.4
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	6	ND	ND	ND	38	15
Apr-2001	0.6 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	5.7	ND	ND	ND	22	14
Sep-2001	0.8 J	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	6.9	ND	ND	ND	24	18
Mar-2002	0.6 J	ND	ND	ND	ND	2.4	ND	ND	1.5	ND	0.8 J	5.8	ND	ND	ND	16	21
Sep-2002	1.3	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	9.6	ND	ND	ND	74	52
Mar-2003	0.6 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	7	ND	ND	ND	33	22
Oct-2003	1.3	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	12	ND	ND	ND	41	36

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-06***															
Apr-2004	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	9.8	*ND*	*ND*	*ND*	40	28
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	4.9	*ND*	*ND*	*ND*	24	23
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	15	14
Oct-2005	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	5.1	*ND*	*ND*	*ND*	13.6	15.9
Mar-2006	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	12.1	26.3
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.5	*ND*	*ND*	*ND*	17.8	21.9
Mar-2007	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	11.7	14.9
Sep-2007	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	4.5	*ND*	*ND*	*ND*	16.3	11.2
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	12.1	15.7
Sep-2008	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	14.5	13
Mar-2009	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	10.8	10.1
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	9.4	11.9
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*11.8 J*	13.5
Oct-2010	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	11.7	9.3
Apr-2011	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	14.4	11.9
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7	*ND*	*ND*	*ND*	15	6.6
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7	*ND*	*ND*	*ND*	11.5	6.4
Sep-2012	*0.42 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.81	*ND*	*ND*	*ND*	5.56	7.44
Mar-2013	*0.58 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.44 J*	*ND*	*ND*	7.25	*ND*	*ND*	*ND*	8.15	12.6
Oct-2013	*0.29 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.59 J*	*0.22 J*	*ND*	4.34	*ND*	*ND*	*ND*	8.76	13.6
Mar-2014	*0.28 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	3.85	*ND*	*ND*	*ND*	9.56	9.22
Oct-2014	*0.28 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.23 J*	*ND*	4.45	*ND*	*ND*	*ND*	7.33	9.85

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-06***															
Apr-2015	*0.25 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	3.26	*ND*	*ND*	*ND*	6	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.1	*ND*	*ND*	*ND*	*12.6 J*	6.3
May-2016	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	3.3	*ND*	*ND*	*ND*	4.7	5.5
Oct-2016	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	2.9	*ND*	*ND*	*ND*	6.3	7.7
May-2017	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J,B*	*ND*	3	*ND*	*ND*	*ND*	5.1	5.7
Oct-2017	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	3.9	*ND*	*ND*	*ND*	6.8	8
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.2	*ND*	*ND*	*ND*	6.5	4.5
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.3	*ND*	*ND*	*ND*	11.5	9.2 CLN3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	6.9	8.3 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	7.5	4.6
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	3.4	2.3
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	4.3	2.1
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.19	*ND*	*ND*	*ND*	*1.48 J*	*3.62 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-06***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*NA*
Aug-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	2.8	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*0.5 J*	3	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	**7.4**	*ND*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	3	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	4	*ND*	*ND*	*ND*	*ND*	1	3	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*0.7 J*	2.3	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*0.9 J*	1.9	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	2	*ND*	*NA*	3.7	*ND*	*ND*	*NA*	*NA*	1.5	1.4	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	1.7	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*0.9 J*	1.2	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	1.3	*ND*	*NA*	2.9	*ND*	*ND*	*NA*	*NA*	*1 J*	1.4	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	3.2	*ND*	*ND*	**5.8**	*ND*	*ND*	*ND*	*ND*	2.1	2.6	*ND*	1.1	*NA*
Apr-2001	*ND*	*ND*	*0.5 J*	*NA*	3.3	*0.5 J*	*ND*	**5.2**	*ND*	*ND*	*ND*	*ND*	1.9	2.1	*ND*	1.1	*NA*
Sep-2001	*ND*	*ND*	*0.7 J*	*NA*	**7.3**	*0.8 J*	*ND*	**8.1**	*ND*	*ND*	*ND*	*ND*	2.8	2.5	*ND*	1.3	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	**6.9**	*ND*	*ND*	4.2	*ND*	*ND*	*ND*	*ND*	1.8	2.1	*ND*	1	*NA*
Sep-2002	*ND*	*ND*	1.5	*NA*	**24**	3.5	*ND*	**18**	*ND*	*ND*	*ND*	*ND*	**5.1**	6.9	*ND*	**2.5**	*NA*
Mar-2003	*ND*	*ND*	*0.6 J*	*NA*	**9.9**	*0.7 J*	*ND*	**9.9**	*ND*	*ND*	*ND*	*ND*	3	2.5	*ND*	1.2	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-06***															
Oct-2003	ND	ND	1.1	NA	**17**	1.2	ND	**15**	ND	ND	ND	ND	4.5	3.6	ND	**2.7**	NA
Apr-2004	ND	ND	0.6 J	NA	0.6 J	0.6 J	ND	**12**	ND	ND	ND	ND	3.5	2.5	ND	1.9	NA
Oct-2004	ND	ND	ND	NA	4.9	ND	ND	**5.7**	ND	ND	ND	ND	2.1	2.5	ND	1	NA
Apr-2005	ND	ND	ND	ND	2.9	ND	ND	**5.5**	ND	ND	ND	ND	1.7	1.1	ND	0.7 J	NA
Oct-2005	ND	ND	ND	ND	2.2	ND	ND	**6.9**	ND	ND	ND	ND	2.3	1.1	ND	1	NA
Mar-2006	ND	ND	ND	ND	2.6	1	ND	**6.4**	ND	ND	ND	ND	2.1	1.5	ND	1.1	NA
Sep-2006	ND	ND	ND	ND	1.7	ND	ND	**7.9**	ND	ND	ND	ND	2.9	0.7 J	ND	ND	NA
Mar-2007	ND	ND	ND	ND	4.1 R	ND	ND	**5.6**	ND	ND	ND	ND	2.2	1.3	ND	ND	NA
Sep-2007	ND	ND	0.5 J	ND	4.7	ND	ND	**6.9**	ND	ND	ND	ND	3.1	2	ND	1.1	NA
Mar-2008	ND	ND	ND	ND	2	ND	ND	**5.4**	ND	ND	ND	ND	2.3	1.4	ND	ND	NA
Sep-2008	ND	ND	ND	ND	3.9	ND	ND	**5.7**	ND	ND	ND	ND	2.3	1.2	ND	0.7 J	NA
Mar-2009	ND	ND	ND	ND	4.5	ND	ND	5	ND	ND	ND	ND	2	0.8 J	ND	0.5 J	NA
Oct-2009	ND	ND	ND	ND	**5.5**	ND	ND	4.8	ND	ND	ND	ND	2.1	0.8 J	ND	ND	NA
Mar-2010	ND	ND	ND	ND	**6.2**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	4.3	ND	ND	4.7	ND	ND	ND	ND	ND	0.7 J	ND	ND	NA
Apr-2011	ND	ND	ND	ND	**6.6**	ND	ND	**5.6**	ND	ND	ND	ND	2.2	ND	ND	0.6 J	NA
Sep-2011	ND	ND	ND	ND	2.1	ND	ND	3.7	ND	ND	ND	ND	1.5	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	2	ND	ND	4.3	ND	ND	ND	ND	1.6	0.5 J	ND	0.9 J	NA
Sep-2012	ND	ND	ND	ND	3.52	ND	ND	**5.6**	ND	ND	ND	ND	2.5	0.63 J	ND	0.48 J	ND
Mar-2013	ND	0.58 J,B	ND	ND	4.91	ND	ND	**6.59**	ND	ND	ND	ND	3.32	ND	ND	0.93 J	ND
Oct-2013	ND	ND	ND	ND	2.79	0.19 J	ND	4.43	ND	ND	ND	ND	2.73	1.25	ND	0.41 J	ND
Mar-2014	ND	ND	ND	ND	2.49	ND	ND	**5.1**	ND	ND	ND	ND	2.43	1.04	ND	0.35 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-06***															
Oct-2014	ND	ND	ND	ND	2.61	ND	ND	4.99	ND	ND	ND	ND	2.43	0.76 J	ND	0.24 J	ND
Apr-2015	ND	ND	ND	ND	2.5	ND	ND	3.81	ND	ND	ND	ND	1.96	0.66 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.7	ND	ND	3.9	ND	ND	ND	ND	2.1	0.7 J	ND	ND	ND
May-2016	ND	ND	ND	ND	2.2	ND	ND	3.5	ND	ND	ND	ND	1.9	ND	ND	0.2 J	ND
Oct-2016	ND	ND	ND	ND	2.6	ND	ND	3.8	ND	ND	ND	ND	1.8	0.8 J	ND	0.3 J	ND
May-2017	ND	ND	ND	ND	NA	ND	ND	3.9	ND	ND	ND	ND	1.7	0.3 J	ND	0.2 J	ND
Oct-2017	ND	ND	ND	ND	1.8	ND	ND	4.2	ND	ND	ND	ND	2	0.8 J	ND	0.2 J	ND
May-2018	ND	ND	ND	ND	2.4 B	ND	ND	1.7	ND	ND	ND	ND	1.4	0.61 J	ND	ND	NA
Nov-2018	ND	ND	ND	ND	3.6	ND	ND	3	ND	ND	ND	ND	1.9	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	2.5	ND	ND	1.9	ND	ND	ND	ND	1.3	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	2.4	ND	ND	1.5	ND	ND	ND	ND	1.2	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.722 J	ND	ND	1.43	ND	ND	ND	ND	1.07	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-10A***											
Nov-1993	11	11	0.3	ND	18.8	2.6	ND	5.54	108	4.2	18	16.7	8.5
Apr-1994	7	7	0.2	ND	19.9	2.8	ND	5.26	112	3.1	91	21.05	7
Apr-1995	ND	ND	ND	ND	21.1	3.3	ND	5.1	120	5.1	44	18.8	6
Apr-1997	ND	10	ND	ND	27	2.5	ND	NA	NA	12	79	24	2
Oct-1997	5	5	0.21	ND	20.6	3.11	ND	7.8	149.8	3.17	51	22	8.8
Apr-1998	4	4	ND	ND	19.8	2.41	ND	5.26	162.2	5.6	62	27	4.7
Apr-1999	1	1	0.19	ND	18.2	2.34	ND	5.15	142.8	4	81	25	3.8
Oct-1999	6	6	0.11	ND	19.2	2.95	ND	5.68	148.1	5.86	98	25	4.2
Apr-2000	4	ND	ND	ND	26.2	3.28	ND	5.62	115	5.79	86	24	3.3
Oct-2000	6.6	NA	ND	ND	26.2	2.76	ND	5.63	141.8	4.79	93	28.9	11.7
Apr-2001	4.1	NA	ND	ND	25	2.9	ND	NA	NA	15.3	85	28.1	7
Sep-2001	5.7	5.7	ND	ND	24.1	3.18	ND	5.35	131	10.2	91	26.1	8.7
Mar-2002	4.6	4.6	ND	ND	41.7	3.23	ND	5.2	159.5	8.1	99	27.5	3
Sep-2002	4.2	4.2	ND	ND	32.1	2.73	ND	5.2	157.3	6.23	80	25.4	5
Mar-2003	4.4	4.4	ND	ND	29.2	2.27	ND	5.2	164.5	10.7	101	25	1.2
Oct-2003	5.1	5.1	ND	ND	26.9	2.62	ND	5.2	169.1	5.07	73	24.4	1.4
Apr-2004	5.9	5.9	ND	ND	24.2	2.61	ND	5.1	141.6	5.56	134	25.8	5.4
Oct-2004	5.9	5.9	ND	ND	22.5	2.47	ND	5.2	142	6.46	79	15.4	1.5
Apr-2005	6.1	6.1	ND	ND	22.3	2.41	ND	5.1	136.2	7.48	94	25.9	4
Oct-2005	6.1	6.1	0.21	ND	31.2	1.92	ND	4.7	126.6	8.34	112	21.1	4.5
Mar-2006	5.7	5.7	ND	ND	29.7	1.99	ND	5.3	136.2	8.1	79	20.8	0.69
Sep-2006	5.5	5.5	ND	ND	29.7	1.8	ND	5.1	129.4	8.63	105	21.5	0.93
Mar-2007	5.9	5.9	ND	ND	31.2	2.35	ND	5	123.9	6.69	72	20.8	0.38
Sep-2007	6.1	6.1	ND	ND	28.4	2	ND	5.2	113.2	10.7	90	21.6	0.77
Mar-2008	5.7	5.7	ND	ND	31	1.6	ND	5.2	128.2	9	107	21.3	0.36
Sep-2008	6.5	6.5	ND	ND	32.1	1.76	ND	4.8	116.7	6.1	112	21.6	0.15
Mar-2009	7	7	ND	ND	35.8	1.53	ND	4.9	138.9	5.17	101	22.5	0.81
Oct-2009	5.7	5.7	ND	ND	39.8	1.44	ND	4.9	138.7	5.45	95	24.3	ND
Apr-2010	5.4	5.4	ND	ND	45.1	1.41	ND	4.5	139.1	6.43	73	24.6	0.16
Oct-2010	6	6	ND	ND	46	1.46	ND	4.8	143	5.77	117	26.7	0.68
Apr-2011	4.5	4.5	ND	ND	48	1.38	ND	4.7	154.6	5.68	117	26	1.7
Sep-2011	4.7	4.7	0.25	ND	47.6	1.51	ND	5.3	162.7	5.5	120	25.8	1.1
Mar-2012	4.6	4.6	ND	ND	45.7	1.48	ND	4.2	160.8	6.59	94	25.3	0.22
Sep-2012	4.96	4.96	ND	ND	48.5	1.48	ND	4.1	175.1	8.12	121	26.7	0.68
Mar-2013	4.64	4.64	ND	ND	42.2	1.7	ND	4.3	155.9	6.58	102	25.2	0.444
Oct-2013	4.8	4.8	ND	ND	43.2	1.65	ND	4.1	158	7.02	94	24.8	0.76

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-10A***											
Mar-2014	3.84	3.84	*ND*	*ND*	48.8	1.49	*ND*	5.2	155.3	8.62	114	22.6	0.802
Oct-2014	*ND*	*ND*	*ND*	*ND*	45.7	1.81	*ND*	4.8	148.1	6.76	102	25.5	0.265
Apr-2015	4.64	4.64	*ND*	*ND*	44.3	1.93	*ND*	4.6	175.1	8.7	104	25.9	1.17
Nov-2015	3.76	3.76	*ND*	*ND*	44.6	1.99	*ND*	5.1	199	8.64	109	28.6	0.503
May-2016	2.88	2.88	*ND*	*ND*	44.1	1.83	*ND*	5.2	259	9.58	113	28.3	0.315
Oct-2016	2.84	2.84	*ND*	*ND*	42.3	*NA*	*NA*	5.3	254	7.49	115	25.8	2.24
May-2017	2.64	2.64	*ND*	*ND*	43	1.93	*ND*	5	275	8.4	102	25.3	1.54
Oct-2017	2.04	2.04	*ND*	*ND*	44.5	1.98	*ND*	5.5	247	8.93	103	25.6	4.52
May-2018	*2 JB*	*ND*	*ND*	*5.8 J*	45.9	0.33	*ND*	4.8	253	*9 J*	112	27.4	*NA*
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	42.6	1.9	*ND*	4.72	178.6	*9.3 J*	98	26.3	4.72
May-2019	*ND*	*NA*	*ND*	*ND*	44.3	2	*ND*	4.57	152.2	*ND*	90	26.5	2.9
Oct-2019	*ND*	*NA*	*ND*	*8.2 J*	44.9	2	*ND*	4.51	203.9	12.1	85	28.3	1.69
May-2020	*1 J*	*NA*	*ND*	*ND*	43.5	2.4	*ND*	4.43	189.7	10.8	118	28.2	2.37
Oct-2020	*ND*	*NA*	*ND*	*ND*	41.5	2.3	*ND*	4.34	177.9	10.7	95	29.8	3.31
Apr-2021	*2 J5c*	*NA*	*ND*	*ND*	45	2.2	*ND*	4.7	213	*8.6 J*	106	28	5.49

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-10A***													
Nov-1993	NA	ND	ND	NA	ND	3.4	NA	0.006	NA	ND	0.18	0.28	ND	2	NA
Apr-1994	NA	ND	ND	NA	ND	3.6	NA	ND	NA	ND	0.63	0.09	ND	2.93	NA
Apr-1995	ND	ND	0.6	ND	ND	2.9	NA	ND	0.02	ND	0.3	0.06	ND	2.8	NA
Oct-1996	ND	ND	0.066	ND	ND	5.9	5.6	ND	ND	ND	ND	ND	ND	2.8	2.9
Apr-1997	ND	ND	0.065	ND	ND	7	6	ND	ND	ND	ND	ND	0.002	3	2.6
Oct-1997	ND	ND	0.056	ND	ND	4.98	4.82	ND	ND	ND	0.226	ND	ND	3.08	3.03
Apr-1998	ND	ND	0.057	ND	ND	5.45	4.88	ND	ND	ND	0.248	ND	ND	3.25	3.18
Apr-1999	ND	ND	0.061	ND	ND	4.86	4.81	ND	ND	ND	0.099	ND	ND	3.04	2.92
Oct-1999	ND	ND	0.074	ND	ND	5.75	5.02	ND	ND	ND	0.164	ND	ND	3.14	2.84
Apr-2000	ND	ND	0.068	ND	ND	4.57	4.34	ND	ND	ND	ND	ND	ND	3.14	2.96
Oct-2000	ND	ND	0.075	ND	ND	6.1	5.79	ND	0.011	ND	0.389	ND	ND	3.31	3.11
Apr-2001	ND	ND	0.077	ND	ND	5.39	NA	ND	0.012	ND	0.184	NA	ND	3.57	NA
Sep-2001	ND	ND	0.074	ND	ND	5.23	5.11	ND	ND	ND	0.159	ND	ND	3.17	3.12
Mar-2002	ND	ND	0.073	ND	ND	5.76	5.44	ND	ND	ND	0.068	ND	ND	3.18	3.13
Sep-2002	ND	ND	0.075	ND	ND	5.09	4.53	ND	ND	0.016	0.073	ND	ND	3.1	3.04
Mar-2003	ND	ND	0.081	ND	ND	4.64	4.35	ND	ND	ND	ND	ND	ND	3.27	3.07
Oct-2003	ND	ND	0.078	ND	ND	4.47	4.05	ND	ND	0.012	0.074	ND	ND	3.2	3.12
Apr-2004	ND	0.002	0.081	ND	ND	4.79	4.68	ND	0.012	ND	0.125	ND	ND	3.38	3.25
Oct-2004	ND	ND	0.085	ND	ND	4.7	4.55	ND	0.01	ND	ND	ND	ND	3.46	3.34
Apr-2005	ND	0.002	0.084	ND	ND	4.98	5.09	ND	ND	ND	0.14	ND	ND	3.26	3.28
Oct-2005	ND	ND	0.066	ND	ND	4.44	3.96	ND	ND	ND	0.18	ND	ND	2.44	2.26

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-10A***													
Mar-2006	ND	ND	0.061	ND	ND	4.23	4.14	ND	ND	ND	ND	ND	ND	2.49	2.5
Sep-2006	ND	ND	0.057	ND	ND	4.68	4.8	ND	ND	ND	ND	ND	ND	2.38	2.58
Mar-2007	ND	ND	0.06	ND	ND	4.6	4.73	ND	ND	ND	ND	ND	ND	2.27	2.44
Sep-2007	ND	ND	0.061	ND	ND	4.86	4.71	ND	ND	ND	ND	ND	ND	2.31	2.32
Mar-2008	ND	0.002	0.063	ND	ND	4.73	4.47	ND	ND	ND	ND	ND	ND	2.31	2.19
Sep-2008	ND	ND	0.06	ND	ND	4.73	4.43	ND	ND	ND	ND	ND	ND	2.37	2.22
Mar-2009	ND	ND	0.061	ND	ND	5.15	4.92	ND	ND	ND	ND	ND	ND	2.32	2.25
Oct-2009	ND	ND	0.072	ND	ND	5.24	5.03	ND	ND	ND	0.065	ND	ND	2.72	2.62
Apr-2010	ND	ND	0.076	ND	ND	5.33	5.13	ND	ND	ND	ND	ND	ND	2.75	2.67
Oct-2010	ND	ND	0.072	ND	ND	5.56	5.48	ND	0.011	ND	ND	ND	ND	3.11	3.03
Apr-2011	ND	ND	0.087	ND	ND	5.41	4.57	ND	0.01	ND	0.059	ND	ND	3.3	2.66
Sep-2011	ND	ND	0.083	ND	ND	5.36	5.33	ND	ND	ND	0.053	ND	ND	3.01	2.99
Mar-2012	ND	ND	0.081	ND	ND	4.97	5.1	ND	ND	ND	ND	ND	ND	3.14	3.24
Sep-2012	ND	ND	0.0803	0.000438 J	ND	5.04	4.89	0.0019 J	0.01	0.0034 J	0.0379 J	0.051	ND	3.43	3.26
Mar-2013	ND	ND	0.0846	0.000432 J	ND	4.96	4.78	0.0033 J	0.0101	0.0042 J	0.0142 J	0.0094 J	ND	3.11	2.94
Oct-2013	ND	ND	0.0847	0.000355 J	0.000148 J	4.66	4.35	0.0037 J	0.0105	0.0046 J	ND	ND	ND	3.19	2.88
Mar-2014	0.00033 J	ND	0.0719	0.000412 J	0.000127 J	4.6	4.43	0.0025 J	0.0097 J	0.0024 J	0.0374 J	0.01 J	ND	2.71	2.69
Oct-2014	0.000857 J	ND	0.0862	0.000448 J	0.00013 J	4.96	5.08	0.000907 J	0.0106	0.0047 J	ND	ND	ND	3.19	3.27
Apr-2015	0.000433 J	ND	0.0874	0.000393 J	0.000126 J	4.99	4.9	0.0015 J	0.0116	0.0044 J	0.0426 J	0.0169 J	ND	3.26	3.21
Nov-2015	0.000357 J	ND	0.093	0.000553 J	0.000155 J	5.87	5.7	0.0011 J	0.0118	0.0038 J	ND	0.0514	0.000188 J	3.39	3.34
May-2016	ND	ND	0.0921	0.00041 J	0.00022 J	5.45	4.52	0.0016 J	0.0118	0.0035 J	ND	ND	ND	3.56	3.17
Oct-2016	ND	ND	0.095	0.00038 J	ND	5.06	5.21 J+	0.0029 J	0.0135	0.0032 J	0.0705 J	ND	0.00013 J	3.2	3.47 J+
May-2017	ND	ND	0.0907	0.00042 J	ND	4.7	5.32	0.0035 J	0.0239	0.004 J	0.102 J	ND	0.0003 J	3.28	3.31
Oct-2017	ND	ND	0.0849	0.00046 J	0.0002 J	5.27	5.07	ND	0.0117	0.0036 J	ND	ND	ND	3.02	3.15

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-10A***													
May-2018	*ND*	*ND*	*0.0891 J*	*ND*	*0.0002 J*	5.4	5.2	*0.0054 J*	*0.0126 J*	*ND*	0.03	*ND*	*ND*	3.4	3.3
Nov-2018	*ND*	*ND*	0.085	0.00062	*0.00019 J*	5.3	5.2	*0.0064 J*	0.011	0.0047	0.085	0.07	*0.000068 J*	3.2	3.1
May-2019	*ND*	*ND*	0.081	0.00055	*ND*	5.4	5.5	*ND*	0.01	0.004	*ND*	0.037	*ND*	3.2	3.3
Oct-2019	*0.00012 J*	*0.00021 J*	0.089	0.00052	*0.0003 J*	5.8	5.5	0.0078	0.01	0.0047	*0.05 J*	0.049	*0.000069 J*	3.4	3.3
May-2020	*ND*	*ND*	0.087	0.00052	*0.00016 J*	5.7	5.6	*0.005 J*	0.012	0.0045	*0.028 J*	*0.02 J*	*ND*	3.4	3.3
Oct-2020	*ND*	*ND*	0.087	*0.0006 J*	*ND*	5.9	5.4	*0.0034 J*	0.012	*0.0074 J*	*0.038 J*	0.027	*ND*	3.6	3.2
Apr-2021	*ND*	*ND*	0.093	*0.00055 J*	*ND*	5.6	5.7	*0.003 J*	0.012	*0.0049 J*	*ND*	*ND*	*ND*	3.4	3.6

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-10A*												
Nov-1993	0.05	NA	ND	NA	2.7	NA	ND	NA	9.5	NA	NA	NA	0.02
Apr-1994	0.04	NA	ND	NA	2.39	NA	ND	NA	10.8	NA	NA	NA	0.07
Apr-1995	0.02	NA	ND	ND	2	NA	ND	ND	10.8	NA	ND	0.2	0.06
Oct-1996	0.028	0.026	NA	ND	ND	ND	ND	ND	13	13	ND	ND	0.53
Apr-1997	0.035	0.026	ND	ND	3.4	3.5	ND	ND	16	14	ND	ND	0.048
Oct-1997	0.041	0.03	0.0004	ND	2.43	1.52	ND	ND	12.7	12.7	ND	ND	0.021
Apr-1998	0.038	0.032	ND	ND	2.52	2.3	ND	ND	12.5	12.3	ND	ND	0.016
Apr-1999	0.035	0.03	NA	ND	2.29	2.18	ND	ND	12.6	12.2	ND	ND	0.013
Oct-1999	0.046	0.031	NA	0.02	2.61	2.37	ND	ND	14.1	12.7	ND	ND	0.013
Apr-2000	0.037	0.033	NA	ND	1.16	1.68	ND	ND	13.6	12.9	ND	ND	0.01
Oct-2000	0.06	0.035	NA	ND	2.44	2.27	ND	ND	14.8	14.1	ND	ND	0.013
Apr-2001	0.05	NA	NA	ND	2.48	NA	ND	ND	15.4	NA	ND	ND	0.015
Sep-2001	0.044	0.034	NA	0.011	2.17	2.11	ND	ND	14.7	14.2	ND	ND	0.014
Mar-2002	0.04	0.036	NA	0.012	3.27	2.47	ND	ND	17.8	17	ND	ND	0.02
Sep-2002	0.045	0.039	NA	0.012	3.36	2.92	ND	ND	16.4	16	ND	ND	0.016
Mar-2003	0.045	0.04	NA	ND	1.99	2.32	ND	ND	16.9	15.6	ND	ND	0.011
Oct-2003	0.049	0.047	NA	ND	4.57	2.88	ND	ND	15.8	15	ND	ND	0.011
Apr-2004	0.062	0.047	ND	ND	2.71	2.53	ND	ND	14.2	14.5	ND	ND	ND
Oct-2004	0.057	0.054	ND	ND	2.54	2.47	ND	ND	14.4	13.6	ND	ND	ND
Apr-2005	0.05	0.046	ND	ND	2.19	2.17	ND	ND	14.6	15.5	ND	ND	ND
Oct-2005	0.037	0.028	ND	ND	2.26	2.04	ND	ND	15.9	14.2	ND	ND	0.012
Mar-2006	ND	ND	ND	ND	2.14	2.17	ND	ND	16.8	15.9	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-10A***												
Sep-2006	0.027	0.034	*ND*	*ND*	2.3	2.33	*ND*	*ND*	16.5	14.9	*ND*	*ND*	*ND*
Mar-2007	0.024	0.029	*ND*	*ND*	2.18	2.15	*ND*	*ND*	16.8	15.6	*ND*	*ND*	0.011
Sep-2007	0.025	0.027	*ND*	*ND*	2.07	1.89	*ND*	*ND*	17.1	15.7	*ND*	*ND*	0.011
Mar-2008	0.025	0.024	*ND*	*ND*	2.19	2.04	*ND*	*ND*	18.6	16.6	*ND*	*ND*	0.011
Sep-2008	0.025	0.024	*ND*	*ND*	2.04	1.93	*ND*	*ND*	16.5	15.5	*ND*	*ND*	0.01
Mar-2009	0.026	0.025	*ND*	*ND*	2.14	2.09	*ND*	*ND*	17.4	17	*ND*	0.012	*ND*
Oct-2009	0.03	0.029	*ND*	*ND*	2.13	2.04	*ND*	*ND*	19.7	19.1	*ND*	*ND*	0.014
Apr-2010	0.032	0.029	*ND*	0.011	2.48	2.33	*ND*	*ND*	21.5	20.5	*ND*	*ND*	0.014
Oct-2010	0.038	0.037	*ND*	0.014	2.46	2.36	*ND*	*ND*	22.3	21.9	*ND*	*ND*	0.018
Apr-2011	0.042	0.04	*ND*	0.014	2.41	2.06	*ND*	*ND*	22.3	19	*ND*	*ND*	0.014
Sep-2011	0.041	0.039	*ND*	0.012	2.48	2.41	*ND*	*ND*	22.3	22	*ND*	*ND*	0.015
Mar-2012	0.041	0.043	*ND*	*ND*	2.34	2.41	*ND*	*ND*	22.3	22.9	*ND*	*ND*	0.015
Sep-2012	0.0422	0.0415	*0.000024 J*	0.0117	2.58	2.43	*ND*	*ND*	25.8	24.9	*0.0011 J*	*ND*	0.0128
Mar-2013	0.0507	0.0489	*0.000052 J*	0.0113	2.25	2.2	*0.000642 J*	*ND*	20.8	19.5	*ND*	*ND*	0.0218
Oct-2013	0.0521	0.0442	*ND*	0.0115	2.46	2.25	*0.000744 J*	*ND*	22.5	21.6	*0.000099 J*	*0.0016 J*	0.0246
Mar-2014	0.0489	0.0513	*ND*	*0.0108 J*	2.18	2.13	*ND*	*ND*	20.2	18.9	*ND*	*ND*	0.0163
Oct-2014	0.053	0.0518	*0.000023 J*	0.0111	2.37	2.48	*0.0018 J*	*ND*	22.9	24.1	*0.0017 J*	*ND*	0.018
Apr-2015	0.0569	0.0564	*0.000043 J*	0.0121	2.38	2.33	*0.0017 J*	*ND*	23.7	23.4	*ND*	*ND*	0.0197
Nov-2015	0.0577	0.0559	*ND*	0.0124	2.63	2.56	*0.001 J*	*ND*	26.3	25.6	*0.000146 J*	*ND*	0.0165
May-2016	0.0622	0.0596	*ND*	0.0119	2.62	2.45	*0.00079 J*	*ND*	26.9	23.9	*ND*	*ND*	*0.016 J,B*
Oct-2016	*0.0707 J+*	*0.0636 J+*	*ND*	0.0139	2.53	2.62	0.0008	*ND*	22.2	23.6	*ND*	*ND*	*0.015 J*
May-2017	0.135	0.0595	*ND*	0.0133	2.38	2.42	*0.00073 J*	*ND*	22.5	23.2	*ND*	*ND*	*0.0157 J*
Oct-2017	0.0555	0.0538	*ND*	0.0122 B	2.15	2.27	*0.00051 J*	*ND*	21.1	22.8	*ND*	*ND*	*0.0173 J*
May-2018	0.063	0.0558	*ND*	*0.022 J*	*2.5 J*	*2 J*	*ND*	*ND*	26.9	25.7	*ND*	*ND*	0.0227

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-10A***												
Nov-2018	0.053	0.05	*ND*	0.015	*2.3 J*	*2.2 J*	*0.00074 J*	*ND*	23	22.8	*ND*	*ND*	0.021
May-2019	0.058	0.055	*ND*	0.012	*ND*	*ND*	*ND*	*ND*	22.5	21.5	*ND*	0.0033	0.018
Oct-2019	0.073	0.06	*ND*	0.013	*2.2 J*	*ND*	*0.00055 J*	*ND*	24.5	24.7	*ND*	*ND*	0.024
May-2020	0.06	0.056	*ND*	0.013	*2.6 J*	*1.8 J*	*0.00082 J*	*ND*	25	22.3	*ND*	*ND*	0.02
Oct-2020	0.058	0.055	*ND*	0.013	*ND*	*2.1 J*	*ND*	*ND*	23.6	21.9	*ND*	*0.001 J*	*0.025 J*
Apr-2021	0.059	0.061	*0.00006 J*	0.015	2.3	2.3	*ND*	*ND*	23.3	24.6	*ND*	*ND*	0.021

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-10A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	28	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-10A*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-10A*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.9 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.9 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-10A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-10A***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	0.63 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.32 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.27 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.21 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.22 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-10A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.163 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-10A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-10A***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.14 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-10A***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.3 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		*TW-14*											
Nov-1993	7	7	ND	ND	2.3	ND	ND	5.2	20.2	ND	10	1.41	4.5
Apr-1994	ND	ND	ND	ND	2	ND	ND	4.99	16.5	ND	38	ND	2
Aug-1994	9.5	9.5	ND	ND	2.2	0.3	ND	4.9	25.2	2.6	ND	1.69	6.4
Sep-1994	10	10	ND	ND	2.3	0.2	ND	5.9	25.6	2.4	18	1.6	4.1
Nov-1994	ND	ND	ND	ND	2.2	ND	ND	5.4	18.4	ND	ND	1.5	7.6
Apr-1995	ND	ND	0.3	ND	2.1	ND	ND	5.3	20.3	ND	22	1.4	6.4
Apr-1997	ND	5	ND	ND	3	0.06	ND	NA	NA	ND	32	5.8	1
Oct-1997	3	3	0.23	ND	1	ND	ND	7.68	21.1	ND	ND	11	57
Apr-1998	2	2	0.52	ND	1.92	0.12	ND	6.51	20.1	ND	16	1.7	43
Apr-1999	9	9	0.28	ND	3.77	ND	ND	6.11	35.1	ND	38	2.6	34
Oct-1999	4	4	0.21	ND	2.56	ND	ND	5.62	28.2	ND	29	2	4.1
Apr-2000	13	13	ND	ND	4.29	ND	ND	7.28	28	ND	20	3.7	21
Oct-2000	4	NA	ND	11	3.01	ND	ND	6.16	45.9	5.5	26	2.77	440
Apr-2001	2	NA	ND	ND	2.4	ND	ND	NA	NA	ND	28	3.43	250
Sep-2001	32	32	1.1	109	3.88	ND	ND	6.09	43	ND	45	2.52	586
Mar-2002	ND	ND	ND	ND	3.44	ND	ND	6	42	ND	ND	3.81	310
Sep-2002	2.8	2.8	ND	60	2.99	ND	ND	5.9	40.2	1.15	24	3.82	66
Mar-2003	3.5	3.5	ND	ND	31.9	ND	ND	5.8	34.2	7.67	22	2.43	580
Oct-2003	3.1	3	ND	ND	2.48	ND	ND	5.6	35.2	ND	15	2.86	658
Apr-2004	2.8	2.8	ND	ND	2.58	ND	ND	5.7	26.6	ND	37	3.02	312
Oct-2004	2.8	2.8	ND	ND	2.38	ND	ND	5.9	28.2	ND	31	3.22	159
Apr-2005	2.7	2.7	ND	ND	2.62	ND	ND	5.6	24.6	ND	33	2.1	113
Oct-2005	3.2	3.2	0.23	ND	3.47	0.08	ND	4.7	16.8	ND	40	3.14	19
Mar-2006	4.2	4.2	ND	ND	3.49	0.1	ND	6.7	19.8	ND	30	2.18	1.68
Sep-2006	4.4	4.4	ND	ND	3.79	ND	ND	5.2	23.7	ND	ND	2.66	6.6
Mar-2007	9.7	9.7	0.6	ND	3.47	1.9	ND	5.6	32.1	ND	ND	2.55	4.5
Sep-2007	8.5	8.5	0.29	ND	10.3	ND	ND	6.3	38.9	ND	40	2.47	17
Mar-2008	8.9	8.9	ND	ND	4.4	ND	ND	5.9	46.2	ND	18	1.36	76
Sep-2008	3.2	3.2	ND	19	5.01	ND	ND	5.6	37.5	ND	15	2.9	170
Mar-2009	21	21	ND	ND	5.18	ND	ND	5.8	56.9	ND	15	3.76	78
Oct-2009	13	13	ND	ND	5.95	ND	ND	5.5	50.9	ND	39	5.29	309
Apr-2010	18.9	18.9	ND	ND	6.5	ND	ND	5.1	57.6	ND	46	27.2	150
Oct-2010	19	19	ND	ND	7.52	ND	ND	4.9	46.4	ND	59	5.99	141
Apr-2011	6.7	6.7	ND	ND	6.4	ND	ND	4.6	34.7	ND	25	4.7	90
Sep-2011	8.9	8.9	ND	ND	6.57	ND	ND	5.8	47.8	ND	43	5.24	74
Mar-2012	7.7	7.7	ND	ND	5.75	ND	ND	4.7	33.8	ND	ND	6.78	176

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-14***											
Sep-2012	7.76	7.76	*ND*	*ND*	5.16	0.115	*ND*	4.5	31.8	*ND*	19	3.53	51.2
Mar-2013	9.68	9.68	*ND*	*ND*	5.46	0.107	*ND*	4.1	37.1	*0.385 J*	16	3.62	75.5
Oct-2013	9.6	9.6	*ND*	*ND*	5.5	0.101	*ND*	4.2	40.5	*ND*	*ND*	3.04	18.6
Mar-2014	10.7	10.7	*ND*	*ND*	5.75	0.113	*ND*	5.8	35.9	*ND*	32	3.23	110
Oct-2014	5.5	5.5	*ND*	*ND*	6.06	0.136	*ND*	5.3	38.3	*ND*	*ND*	3.86	171
Apr-2015	7.52	7.52	*ND*	*ND*	5.98	0.105	*ND*	5.2	48.2	*ND*	30	4.07	72.7
Nov-2015	6.68	6.68	*ND*	*ND*	5.88	0.129	*ND*	5.8	55.3	*ND*	*19 J*	4.08	157
May-2016	7.24	7.24	*ND*	*ND*	6.39	0.12	*ND*	6	67.4	*ND*	*21 J*	4.1	10.2
Oct-2016	7.68	7.68	*ND*	*5 J*	6.46	*NA*	*NA*	5.9	73.2	*ND*	31	4	37.9
May-2017	7.28	7.28	*ND*	*ND*	7.17	0.131	*ND*	5	68.5	*ND*	*24 J*	4.2	12
Oct-2017	14	14	*ND*	*ND*	7.41	0.118	*ND*	6.1	92.5	*ND*	*21 J*	4.5	5.91
May-2018	34	34	*ND*	*ND*	8.6	0.1	*ND*	6.2	96.8	*ND*	*ND*	6.8	15.3
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	9.8	*ND*	0.02	5.96	100.7	*ND*	16	6.7	32.9
May-2019	*ND*	*NA*	*ND*	*ND*	10.1	*ND*	0.016 H1	5.89	71.3	*ND*	24	6.2	42.6
Oct-2019	*2.5 JH1*	*NA*	*ND*	*10.4 J*	6.9	*0.053 J*	0.053 H1	6.09	81.5	*ND*	*ND*	5.7	2142
May-2020	12	*NA*	*ND*	*ND*	8.1	*ND*	*0.0067 J*	5.3	71.1	*ND*	48	7.3	19.4
Oct-2020	*ND*	*NA*	*ND*	*ND*	8.4	*ND*	0.019 H1	5.26	74.7	*ND*	*ND*	7.1	50.1
Apr-2021	*1 J4c*	*NA*	*ND*	*ND*	8.8	*0.074 J*	*ND*	5.59	67.7	*ND*	30	6.9	90.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-14*													
Nov-1993	NA	ND	ND	NA	ND	0.2	NA	ND	NA	ND	8.8	2.7	ND	0.22	NA
Apr-1994	NA	ND	ND	NA	ND	ND	NA	ND	NA	ND	1.6	1	ND	ND	NA
Aug-1994	NA	ND	ND	NA	ND	0.33	NA	ND	NA	ND	5	3.9	ND	0.21	NA
Sep-1994	NA	ND	ND	NA	ND	0.22	NA	ND	NA	ND	6.2	4.9	ND	0.25	NA
Nov-1994	NA	ND	ND	NA	ND	0.25	NA	ND	NA	0.04	2.5	2.7	ND	0.2	NA
Apr-1995	ND	ND	0.7	ND	ND	0.2	NA	ND	ND	ND	2.4	1.3	ND	0.23	NA
Oct-1996	ND	ND	0.011	ND	ND	0.43	0.33	ND	ND	ND	5	0.48	ND	ND	ND
Apr-1997	ND	ND	0.014	ND	ND	0.32	0.48	ND	ND	ND	3.6	2.8	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	0.274	0.289	ND	ND	ND	10.2	3.66	ND	0.211	0.216
Apr-1998	ND	ND	ND	ND	ND	0.298	0.391	ND	ND	ND	16.2	2.8	ND	0.237	0.237
Apr-1999	ND	ND	0.012	ND	ND	0.447	0.436	ND	ND	ND	19.1	7.85	ND	0.364	0.345
Oct-1999	ND	ND	0.013	ND	ND	0.498	0.438	ND	ND	ND	12.7	9.24	ND	0.383	0.34
Apr-2000	ND	ND	0.013	ND	ND	0.747	0.442	ND	ND	0.008	15.1	8.34	ND	0.437	0.351
Oct-2000	ND	ND	0.018	ND	ND	0.5	0.458	ND	ND	ND	122	12.3	ND	0.369	0.35
Apr-2001	ND	ND	0.018	ND	ND	0.704	NA	ND	ND	ND	87	NA	0.003	0.405	NA
Sep-2001	ND	ND	0.106	ND	ND	1.01	0.5	0.02	ND	0.121	1140	10.3	**0.046**	0.543	0.371
Mar-2002	ND	ND	0.022	ND	ND	0.816	0.478	0.014	ND	0.015	118	9.94	0.007	0.431	0.368
Sep-2002	ND	ND	0.024	ND	ND	0.867	0.415	ND	ND	0.044	43.9	8.96	0.005	0.404	0.341
Mar-2003	ND	ND	0.017	ND	ND	0.427	0.429	ND	ND	0.017	48.7	3.58	0.004	0.331	0.311
Oct-2003	ND	ND	0.024	ND	ND	0.648	0.316	ND	ND	0.043	195	6.42	0.004	0.302	0.24
Apr-2004	ND	ND	0.014	ND	ND	0.603	0.311	ND	ND	ND	80.4	7.38	0.002	0.37	0.236

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14***													
Oct-2004	ND	ND	0.014	ND	ND	0.788	0.286	ND	ND	0.043	59.3	6.44	0.002	0.303	0.232
Apr-2005	ND	ND	0.012	ND	ND	0.36	0.363	ND	ND	ND	14.3	5.68	ND	0.287	0.267
Oct-2005	ND	ND	0.011	ND	ND	0.659	0.47	ND	ND	0.014	3.11	0.264	ND	0.363	0.321
Mar-2006	ND	ND	ND	ND	ND	0.269	0.231	ND	ND	ND	5.84	0.262	ND	0.367	0.357
Sep-2006	ND	ND	ND	ND	ND	0.454	0.448	ND	ND	ND	1.96	1.22	ND	0.371	0.369
Mar-2007	ND	ND	0.01	ND	ND	0.459	0.421	ND	ND	ND	21.9	6.27	ND	0.341	0.331
Sep-2007	ND	0.002	ND	ND	ND	0.421	0.394	ND	ND	ND	14.3	11.3	ND	0.346	0.33
Mar-2008	ND	ND	0.016	ND	ND	0.547	0.49	ND	ND	0.013	45.6	7.07	ND	0.435	0.382
Sep-2008	ND	ND	0.016	0.002	ND	0.495	0.292	0.012	ND	0.029	70.7	10.4	ND	0.393	0.306
Mar-2009	ND	ND	0.012	ND	ND	0.72	0.612	ND	ND	0.013	27.7	16.4	ND	0.477	0.494
Oct-2009	ND	ND	0.017	ND	ND	0.957	0.624	0.043	ND	0.066	39	10.2	ND	0.705	0.585
Apr-2010	ND	ND	0.018	ND	ND	0.974	0.76	ND	ND	ND	22	19.8	ND	0.707	0.568
Oct-2010	ND	0.003	0.016	ND	ND	0.985	0.927	0.02	ND	0.039	39.9	28.2	ND	0.857	0.82
Apr-2011	ND	ND	0.018	ND	ND	0.787	0.779	ND	ND	ND	23.3	18.5	ND	0.666	0.655
Sep-2011	ND	0.005	0.02	ND	ND	0.851	0.903	0.047	0.012	0.09	54.1	22.1	ND	0.741	0.728
Mar-2012	ND	ND	0.017	ND	ND	1.09	0.917	0.015	ND	0.032	29.6	20.4	ND	0.987	0.86
Sep-2012	ND	ND	0.0156	0.00008 J	ND	0.608	0.614	0.0021 J	0.0024 J	0.0028 J	5	4.43	ND	0.488	0.511
Mar-2013	ND	ND	0.0158	0.000123 J	ND	0.691	0.695	0.0026 J	0.0026 J	0.0038 J	13.7	5	ND	0.46	0.457
Oct-2013	ND	ND	0.0143	ND	ND	0.544	0.533	0.0024 J	0.0023 J	0.0016 J	5.94	6	ND	0.409	0.431
Mar-2014	0.000447 J	ND	0.0139	ND	ND	0.572	0.583	0.0021 J	0.0025 J	0.0065 J	16.8	5.61	ND	0.438	0.435
Oct-2014	0.000554 J	ND	0.0185	0.000226 J	0.000111 J	0.716	0.679	0.000749 J	0.003 J	0.0047 J	19.3	6.29	ND	0.504	0.493
Apr-2015	0.0011 J	ND	0.0186	ND	0.000104 J	0.726	0.767	0.0031 J	0.0034 J	0.0041 J	21.3	8.53	ND	0.547	0.586
Nov-2015	ND	0.004	0.0216	0.000682 J	0.000281 J	0.783	0.782	0.0016 J	0.0037 J	0.0171	69.1	7.37	0.00054 J	0.516	0.506
May-2016	ND	ND	0.0169	0.00011 J	ND	0.709	0.715	0.0012 J	0.003	0.0024 J	10.9	7.06	ND	0.564	0.512

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14***													
Oct-2016	*ND*	*ND*	0.0199	*0.00032 J*	*ND*	0.701	*0.727 J+*	*0.0013 J*	0.0036	0.0084	40.9	10.1	*0.00015 J*	0.544	*0.55 J+*
May-2017	*ND*	*ND*	0.0221	*0.00012 J*	*ND*	0.731	0.807	*0.00073 J*	0.0038	*0.0018 J*	8.84	9.11	*ND*	0.576	0.594
Oct-2017	*ND*	*ND*	0.0207	*0.00012 J*	*ND*	0.713	0.948	*ND*	0.0054	*0.0015 J*	10.4	11.4	*ND*	0.664	0.698
May-2018	*ND*	*ND*	0.026	*0.000097 J*	*0.000043 J*	1.2	1.1	*0.0018 J*	0.0077	0.006	21.4	18.3	*0.000044 JB*	*0.95 J*	*0.89 J*
Nov-2018	*ND*	*ND*	0.025	*0.000065 J*	*0.000045 J*	1.1	1.1	*0.002 J*	0.0075	0.0022	22.4	20	*0.00012 J*	*0.93 J*	*0.94 J*
May-2019	*ND*	*ND*	0.024	*ND*	*ND*	1.1	1.1	*ND*	0.0079	*ND*	21.2	16.6	*ND*	*ND*	*ND*
Oct-2019	0.00059	0.0034	0.053	0.0021	*0.00033 J*	1.1	1.1	0.016	0.011	0.065	251	15.7	*0.00051 J*	0.74	*0.84 J*
May-2020	*ND*	*ND*	0.027	*0.000072 J*	*ND*	1.3	1.2	*0.0041 J*	0.0061	*0.0015 J*	12.2	11.4	*ND*	1	*0.95 J*
Oct-2020	*ND*	*ND*	0.026	*ND*	*ND*	1.2	1.3	*0.006 J*	0.0052	*ND*	23	13.4	*ND*	0.99	1
Apr-2021	*ND*	*ND*	0.026	*0.00018 J*	*ND*	1.2	1.3	*0.0017 J*	0.0062	0.0052	20.4	7.9	*ND*	0.96	1.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-14*												
Nov-1993	0.09	NA	ND	NA	0.29	NA	ND	NA	1.2	NA	NA	NA	ND
Apr-1994	0.029	NA	ND	NA	ND	NA	ND	NA	1.4	NA	NA	NA	ND
Aug-1994	0.06	NA	ND	NA	0.39	NA	ND	NA	0.94	NA	NA	NA	0.01
Sep-1994	0.08	NA	ND	NA	0.26	NA	ND	NA	1.1	NA	NA	NA	0.04
Nov-1994	0.07	NA	ND	NA	0.22	NA	ND	NA	0.91	NA	NA	NA	0.01
Apr-1995	0.02	NA	ND	ND	0.42	NA	ND	0.01	0.92	NA	ND	ND	0.03
Oct-1996	0.034	0.038	NA	ND	ND	ND	ND	ND	1.7	1.6	ND	ND	0.087
Apr-1997	0.062	0.055	**0.0045**	ND	1.8	ND	ND	ND	1.1	1.7	ND	ND	ND
Oct-1997	0.063	0.065	ND	ND	0.711	0.711	ND	ND	1.12	1.16	ND	ND	ND
Apr-1998	0.043	0.043	ND	ND	ND	0.566	ND	ND	1.16	1.16	ND	ND	ND
Apr-1999	0.091	0.091	NA	ND	ND	0.711	ND	ND	1.45	1.43	ND	ND	ND
Oct-1999	0.091	0.087	NA	ND	ND	0.594	ND	ND	1.53	1.37	ND	ND	ND
Apr-2000	0.078	0.071	NA	ND	ND	ND	ND	ND	3.04	1.63	ND	ND	0.011
Oct-2000	0.071	0.096	NA	ND	0.607	0.517	ND	ND	1.53	1.52	ND	ND	ND
Apr-2001	0.075	NA	NA	ND	0.514	NA	ND	ND	3.27	NA	ND	ND	ND
Sep-2001	ND	0.087	NA	0.016	ND	ND	ND	ND	2.94	1.57	ND	ND	0.183
Mar-2002	0.058	0.084	NA	ND	2.48	1.35	ND	ND	2.66	1.51	ND	ND	ND
Sep-2002	0.075	0.077	NA	ND	1.15	ND	ND	ND	1.8	1.44	ND	ND	0.012
Mar-2003	0.042	0.05	NA	ND	1.19	ND	ND	ND	1.57	1.48	ND	ND	0.019
Oct-2003	0.022	0.069	NA	ND	1.47	1.21	ND	ND	2.28	1.29	ND	ND	ND
Apr-2004	0.063	0.074	0.0002	ND	0.63	ND	ND	ND	1.95	1.26	ND	ND	0.03
Oct-2004	0.071	0.071	0.0004	ND	0.875	ND	ND	ND	1.86	1.33	ND	ND	0.016

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14***												
Apr-2005	0.067	0.064	*ND*	*ND*	0.59	0.51	*ND*	*ND*	1.31	1.27	*ND*	*ND*	*ND*
Oct-2005	0.045	0.041	*ND*	*ND*	0.63	0.558	*ND*	*ND*	2.06	1.43	*ND*	*ND*	*ND*
Mar-2006	0.047	0.04	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.57	1.57	*ND*	*ND*	*ND*
Sep-2006	0.054	0.053	*ND*	*ND*	*ND*	0.502	*ND*	*ND*	1.88	1.9	*ND*	*ND*	*ND*
Mar-2007	0.065	0.059	0.0002	*ND*	*ND*	*ND*	*ND*	*ND*	1.81	1.72	*ND*	*ND*	*ND*
Sep-2007	0.091	0.087	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.96	1.82	*ND*	*ND*	*ND*
Mar-2008	0.074	0.067	0.0004	*ND*	0.586	*ND*	*ND*	*ND*	2.29	2.05	*ND*	*ND*	0.014
Sep-2008	0.082	0.068	0.0005	*ND*	*ND*	*ND*	*ND*	*ND*	2.45	2.04	*ND*	*ND*	0.011
Mar-2009	0.137	0.136	*ND*	0.011	0.527	0.555	*ND*	*ND*	2.41	2.65	*ND*	*ND*	0.019
Oct-2009	0.247	0.079	0.0002	0.063	*ND*	*ND*	*ND*	*ND*	3.11	2.63	*ND*	*ND*	0.032
Apr-2010	0.28	0.152	*ND*	*ND*	0.648	0.541	*ND*	*ND*	3.26	3.08	*ND*	*ND*	0.013
Oct-2010	0.244	0.218	*ND*	0.029	0.515	0.524	*ND*	*ND*	3.55	3.45	*ND*	*ND*	0.011
Apr-2011	0.171	0.166	*ND*	0.012	*ND*	*ND*	*ND*	*ND*	2.91	2.9	*ND*	*ND*	*ND*
Sep-2011	0.227	0.17	*ND*	0.057	0.515	0.533	*ND*	*ND*	2.99	2.89	*ND*	*ND*	0.02
Mar-2012	0.203	0.188	*ND*	0.017	0.707	0.575	*ND*	*ND*	3.97	3.39	*ND*	*ND*	0.011
Sep-2012	0.049	0.0501	*ND*	*0.0023 J*	*0.491 J*	0.501	*ND*	*ND*	2.45	2.47	*0.000477 J*	*ND*	*ND*
Mar-2013	0.0575	0.0526	*0.000145 J*	*0.0027 J*	*0.491 J*	*0.48 J*	*ND*	*ND*	2.3	2.3	*ND*	*ND*	0.0101
Oct-2013	0.056	0.0606	*ND*	*0.0021 J*	*0.427 J*	*0.452 J*	*ND*	*ND*	2.02	2.17	*0.000108 J*	*ND*	0.0105
Mar-2014	0.0556	0.0557	*ND*	*0.0031 J*	*0.456 J*	*0.458 J*	*ND*	*ND*	2.17	2.18	*ND*	*ND*	*0.0027 J*
Oct-2014	0.062	0.0581	*0.000081 J*	*0.0028 J*	0.506	*0.499 J*	*0.000906 J*	*ND*	2.58	2.55	*0.000972 J*	*ND*	*0.0091 J*
Apr-2015	0.0748	0.0748	*ND*	*0.0037 J*	0.546	0.584	*0.000938 J*	*ND*	2.67	2.84	*ND*	*ND*	*0.0067 J*
Nov-2015	0.0735	0.0661	*0.000137 J*	*0.004 J*	0.567	0.56	0.004	*ND*	2.57	2.55	**0.0025 R,C**	*ND*	0.0101
Dec-2015	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*0.000588 J*	*NA*	*NA*
May-2016	0.0651	0.0658	*ND*	*0.0028 J*	0.584	0.509	*ND*	*ND*	2.64	2.37	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14***												
Oct-2016	*0.0756 J+*	*0.0811 J+*	*ND*	*0.0034 J*	0.579	0.557	*ND*	*ND*	2.57	2.6	*ND*	*ND*	*0.0062 J*
May-2017	0.0645	0.0693	*ND*	*0.0028 J*	0.561	0.596	*ND*	*ND*	2.59	2.64	*ND*	*ND*	*ND*
Oct-2017	0.0768	0.0811	*ND*	*0.0036 J*	0.58	0.616	*ND*	*ND*	3.06	3.16	*ND*	*ND*	*ND*
May-2018	0.13	0.12	*ND*	0.0066	*ND*	*ND*	*0.00038 J*	*ND*	*4 J*	*3.6 J*	*ND*	*ND*	0.006
Nov-2018	0.17	0.16	*ND*	0.0071	*ND*	*ND*	*0.00016 J*	*ND*	*4.3 J*	*4.4 J*	*ND*	*ND*	0.011
May-2019	0.2	0.24 M1	*ND*	0.0068	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0056
Oct-2019	0.22	0.17	*0.00017 J*	0.019	*1.3 J*	*ND*	*ND*	*ND*	*3.3 J*	*3.5 J*	*ND*	0.0057	0.03
May-2020	0.098	0.092	*ND*	0.0053	*ND*	*ND*	*ND*	*ND*	*4 J*	*2.8 J*	*ND*	*ND*	*0.0045 J*
Oct-2020	0.16	0.15	*ND*	0.0084	*ND*	*ND*	*ND*	*ND*	*3.7 J*	*3.3 J*	*ND*	0.0065	*ND*
Apr-2021	0.14	0.15	*0.00007 J*	*0.0069 J*	0.71	0.68	*ND*	*ND*	3.5	3.3	*ND*	*ND*	*0.0035 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7 J	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	2.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	2.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	3.1	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	3.5	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	3.8	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	4.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.4 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	4.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	2.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	3.48	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Aug-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	1.6	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*0.6 J*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14***															
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	0.6 J
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	1.2
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	1.4
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	1.1
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	1.6
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	2
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	1.9
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.69	2
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.34 J	ND	ND	ND	ND	ND	4.61	3.3
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.36 J	ND	ND	ND	ND	ND	6.33	4.38
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND	ND	6.94	4.58
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.27	4.48
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.8	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*12.9 J*	5.1
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	6.4	6.3
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	6.6	7.6
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J,B*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	6.3	7.4
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	6	6.8
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	11.4	7.5
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.8	9.4 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.3 CL	6.5 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.1	4.5
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.6	3.8
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	7.8	4.3
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.29 J*	*ND*	*0.912 J*	*ND*	*ND*	*ND*	*4.73 J*	6.33

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Aug-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14***															
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	1.52	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.56	ND	ND	ND	ND	0.37 J	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	1.86	ND	ND	ND	ND	0.5 J	0.47 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	2.87	ND	ND	ND	ND	0.6 J	0.51 J	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	0.54 J	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.64	*ND*	*ND*	*ND*	*ND*	*0.54 J*	*0.42 J*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.5	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	4.1	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.5 J*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.9	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*0.6 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	4.8	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.5 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	4.4	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.9	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.494 J*	*ND*	*ND*	4.19	*ND*	*ND*	*ND*	*ND*	*0.91 J*	*0.35 J*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-14A***											
Nov-1993	ND	ND	0.2	ND	3.1	ND	ND	5.07	15.8	2.3	ND	1.31	118
Apr-1994	ND	ND	0.1	ND	2.5	ND	ND	4.84	17.8	ND	12	ND	26.3
Apr-1995	10.3	10.3	ND	ND	3.3	ND	ND	5.3	28.5	2.4	18	2.1	44.7
Apr-1997	ND	4	ND	ND	3	0.03	ND	NA	NA	ND	40	4.8	27
Oct-1997	ND	ND	0.27	ND	2.16	ND	ND	7.1	18.21	ND	ND	ND	110
Apr-1998	ND	ND	0.22	ND	2.6	0.1	ND	6.78	126.4	0.69	15	3.2	130
Apr-1999	ND	ND	0.29	ND	4.77	ND	ND	5.74	29.6	ND	46	2.9	52
Oct-1999	12	12	0.14	ND	4.26	ND	ND	4.85	26.2	ND	36	2.9	82
Apr-2000	3	3	ND	ND	6.79	ND	ND	6.99	52	ND	24	4.7	31
Oct-2000	2.5	NA	ND	ND	4.66	ND	ND	6.08	28.8	15	16	4.46	48
Apr-2001	2.8	NA	ND	ND	4.67	ND	ND	NA	NA	ND	29	3.92	26
Sep-2001	3.4	3.4	ND	ND	5.92	ND	ND	5.59	35	ND	26	3.58	13
Mar-2002	2	2	ND	ND	7.48	ND	ND	5.8	37	ND	14	4.37	9.5
Sep-2002	4	4	ND	ND	6.88	ND	ND	6.3	42.9	ND	27	3.38	14
Mar-2003	6.5	6.5	ND	ND	60.7	ND	ND	6.5	54.4	7.43	59	3.79	16
Oct-2003	4.6	4.6	ND	ND	4.89	ND	ND	5.7	38.3	ND	34	4.24	58.3
Apr-2004	2.1	2.1	ND	11	4.01	ND	ND	6.2	22.8	ND	32	2.71	47
Oct-2004	1.9	1.9	ND	ND	5.22	ND	ND	4.8	30.1	ND	47	4.51	57
Apr-2005	2.6	2.6	ND	ND	5.11	ND	ND	4.8	26.1	ND	37	4	49
Oct-2005	4.2	4.2	0.21	ND	6.87	ND	ND	4.4	33.1	ND	48	4.36	77
Mar-2006	6.7	6.7	ND	ND	6.89	ND	ND	6.8	40.7	1.15	34	2.69	75.8
Sep-2006	6.4	6.4	ND	ND	7.87	ND	ND	5	45	ND	31	4.51	44
Mar-2007	4.7	4.7	ND	ND	6.58	ND	ND	5.5	47.2	ND	ND	3.4	30
Sep-2007	3.8	3.8	0.31	ND	89.5	ND	ND	5.8	43.5	29.9	24	4.47	93
Mar-2008	16	16	ND	ND	13.9	ND	ND	5.2	62.4	1.93	37	4.15	36
Sep-2008	13	13	ND	27	9.82	ND	ND	5.1	55.7	ND	39	4.9	170
Mar-2009	12	12	ND	ND	9.92	ND	ND	5	74.6	ND	31	4.64	272
Oct-2009	9.9	9.9	ND	ND	10.1	ND	ND	5.1	66.7	ND	19	5.84	279
Mar-2010	11	11	ND	10.1	8.05	ND	ND	5.31	71	0.97	ND	3.26	7
Oct-2010	9.3	9.3	ND	ND	8.46	ND	ND	4.2	46.8	ND	32	3.83	5.4
Apr-2011	13	13	ND	ND	9.4	ND	0.02	5	51.9	ND	40	4.1	10
Sep-2011	15	15	0.22	ND	8.85	ND	ND	5.3	56.7	ND	47	7.08	34
Mar-2012	5.9	5.9	0.26	ND	9.58	0.06	ND	4.4	44.7	ND	18	4.53	13
Sep-2012	11.2	11.2	ND	ND	10.7	ND	ND	4.1	58.1	ND	46	3.24	2.63
Mar-2013	10.6	10.6	ND	ND	11.8	0.0417 J	ND	3.9	65.1	0.595 J	38	5.14	2.12
Oct-2013	20.5	20.5	ND	ND	12.7	0.0382 J	ND	4.4	115.8	ND	47	4.31	14.1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-14A***											
Mar-2014	15	15	*ND*	23	13.7	*0.0274 J*	*ND*	5.3	65	*ND*	54	4.82	3.58
Oct-2014	2.2	2.2	*ND*	*ND*	10.7	0.0948	*ND*	4.9	51	*ND*	*ND*	4	3.38
Apr-2015	4.44	4.44	*ND*	*8 J*	11.1	0.0572	*ND*	4.4	51.9	*ND*	44	4.34	22.6
Nov-2015	*ND*	*ND*	*ND*	13	9.08	*ND*	*ND*	5.3	71.1	3.34	45	5.31	107
May-2016	3.72	3.72	*ND*	*5 J*	10.3	*ND*	*ND*	5.5	105.6	5.35	60	10.6	71.5
Oct-2016	1.92	1.92	*ND*	*6 J*	14.8	*NA*	*NA*	5.8	130.3	8.02	66	7.1	142
May-2017	7.2	7.2	*0.154 J*	10	15.6	*ND*	*ND*	5.2	157.9	11.7	66	18.4	3.86
Oct-2017	16.5	16.5	0.228	*8 J+*	17	*ND*	*ND*	5.5	165.2	15.5	135	22.6	4.45
May-2018	56	56	0.35	*16.5 J*	18.8	*0.064 J*	*ND*	5.75	207.6	*ND*	104	39.1	*NA*
Nov-2018	74	74	0.2	*16.5 J*	14.1	*ND*	*0.007 J*	6.07	257.7	*ND*	149	28.4	11.7
May-2019	12 H1	*NA*	*ND*	*ND*	4.5	*ND*	*ND*	6.04	57.2	*ND*	31	*ND*	14.8
Oct-2019	*ND*	*NA*	*ND*	*ND*	4	*0.039 J*	0.034	5.99	59.4	*ND*	28	2.1	40.5
May-2020	30	*NA*	*0.074 J*	*6.9 J*	10.6	*ND*	0.02	5.58	235.7	*ND*	109	21.5	41.7
Oct-2020	*2 J*	*NA*	*ND*	*4.8 J*	9.5	*ND*	0.068 H1	5.62	134.9	1.2	10	8.5	26.7
Apr-2021	*ND*	*NA*	*ND*	*ND*	4.9	*0.058 J*	*ND*	6.49	97	*ND*	16	*1.8 J*	*76.9*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14A***													
Nov-1993	NA	ND	ND	NA	ND	0.03	NA	0.007	NA	ND	6.9	0.34	ND	0.3	NA
Apr-1994	NA	ND	ND	NA	ND	ND	NA	ND	NA	ND	0.89	0.29	ND	ND	NA
Apr-1995	ND	ND	1	ND	ND	0.3	NA	ND	ND	ND	5.7	2.3	ND	0.32	NA
Oct-1996	ND	ND	0.014	ND	ND	0.81	0.53	ND	ND	ND	3.3	3.7	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	0.64	0.66	ND	ND	ND	2.7	0.71	ND	ND	ND
Oct-1997	ND	ND	0.031	ND	ND	0.514	0.403	ND	ND	ND	4.32	0.628	ND	0.354	0.217
Apr-1998	ND	ND	0.044	ND	ND	0.497	0.424	0.012	ND	0.016	9.35	1.6	ND	0.48	0.263
Apr-1999	ND	ND	0.023	ND	ND	0.485	0.52	ND	ND	0.011	6.6	4.72	ND	0.405	0.359
Oct-1999	ND	ND	0.025	ND	ND	0.652	0.62	ND	ND	0.01	3.6	2.31	ND	0.52	0.472
Apr-2000	ND	ND	0.019	ND	ND	0.951	0.619	ND	ND	0.012	4.08	1.94	ND	0.564	0.449
Oct-2000	ND	ND	0.02	ND	ND	0.935	0.543	ND	ND	0.013	4.02	3.19	ND	0.516	0.4
Apr-2001	ND	ND	0.019	ND	ND	0.743	NA	ND	ND	ND	4.46	NA	ND	0.502	NA
Sep-2001	ND	ND	0.017	ND	ND	0.696	0.519	ND	ND	0.01	3.47	2.12	ND	0.446	0.397
Mar-2002	ND	ND	0.018	ND	ND	0.883	0.574	ND	ND	0.012	4.28	3.52	ND	0.527	0.465
Sep-2002	ND	ND	0.019	ND	ND	0.569	0.594	ND	ND	ND	5.86	5.07	ND	0.477	0.479
Mar-2003	ND	ND	0.018	ND	ND	0.655	0.608	ND	ND	ND	3.65	3.01	ND	0.523	0.501
Oct-2003	ND	ND	0.021	ND	ND	0.867	0.546	ND	ND	0.014	7.09	3.56	ND	0.504	0.452
Apr-2004	ND	ND	0.021	ND	ND	0.552	0.542	ND	ND	0.012	4.52	1.08	ND	0.322	0.268
Oct-2004	ND	ND	0.02	ND	ND	1.09	0.662	ND	ND	0.018	5.17	0.752	ND	0.434	0.359
Apr-2005	ND	ND	0.016	ND	ND	1.04	0.703	ND	ND	0.019	5.87	2.26	ND	0.347	0.282
Oct-2005	ND	ND	0.02	ND	ND	1.04	0.799	ND	ND	0.014	5.53	1.6	ND	0.427	0.389

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14A***													
Mar-2006	ND	ND	0.016	ND	ND	0.429	0.333	ND	ND	ND	5.67	2.51	ND	0.394	0.393
Sep-2006	ND	ND	0.021	ND	ND	0.886	0.689	ND	ND	0.014	6.2	4.04	ND	0.559	0.535
Mar-2007	ND	ND	0.017	ND	ND	0.746	0.728	ND	ND	0.013	2.78	1.63	ND	0.374	0.368
Sep-2007	ND	0.002	0.015	ND	ND	1.18	0.586	0.034	ND	0.017	10.7	4.72	0.002	0.37	0.292
Mar-2008	ND	ND	0.029	ND	ND	0.701	0.648	ND	ND	ND	10	8.37	ND	0.583	0.524
Sep-2008	ND	ND	0.033	ND	ND	0.835	0.565	ND	ND	0.013	12.6	7.3	0.002	0.685	0.58
Mar-2009	ND	ND	0.032	ND	ND	0.84	0.691	ND	ND	0.024	17	9.93	ND	0.616	0.599
Oct-2009	ND	ND	0.035	ND	ND	1.14	0.711	ND	ND	0.017	15.5	10.5	ND	0.727	0.68
Mar-2010	ND	ND	0.029	ND	ND	0.572	0.568	ND	ND	0.012	11.6	12.1	ND	0.445	0.43
Oct-2010	ND	ND	0.02	ND	ND	0.681	0.655	ND	ND	0.016	5.71	5.21	ND	0.518	0.519
Apr-2011	ND	ND	0.029	ND	ND	0.722	0.691	ND	ND	0.013	6.77	5.66	ND	0.559	0.549
Sep-2011	ND	ND	0.03	ND	ND	1.59	0.82	ND	ND	0.023	9.09	7.51	ND	0.756	0.583
Mar-2012	ND	ND	0.026	ND	ND	0.726	0.729	ND	ND	0.011	3.33	4.84	ND	0.661	0.668
Sep-2012	ND	ND	0.0188	0.000445 J	ND	0.543	0.53	0.0021 J	0.0051 J	0.0068 J	5.3	4.6	ND	0.457	0.438
Mar-2013	ND	ND	0.0358	0.000832 J	ND	0.906	0.92	0.0029 J	0.0086 J	0.0114	6.88	6.75	ND	0.699	0.666
Oct-2013	ND	ND	0.0292	0.000643 J	0.000239 J	0.702	0.599	0.0092 J	0.0079 J	0.0138	27.5	24	ND	0.621	0.568
Mar-2014	0.000526 J	ND	0.0293	0.000653 J	0.000211 J	0.771	0.758	0.0021 J	0.0083 J	0.0143	7.53	7.79	ND	0.703	0.68
Oct-2014	0.000546 J	ND	0.0281	0.000749 J	0.000238 J	0.713	0.708	0.000747 J	0.0068 J	0.0183	5.65	5.31	ND	0.539	0.541
Apr-2015	0.001 J	0.0019 J	0.0358	0.000875 J	0.000381 J	0.752	0.754	0.0137	0.0179	0.0435	6.62	4.29	ND	0.597	0.589
Nov-2015	0.0012 J	0.0023	0.0333	0.0013 J	0.000551 J	0.918	0.944	0.0254	0.0155	0.0883	13.9	3.29	0.000848 J	0.734	0.733
May-2016	ND	0.0015 J	0.0638	0.00082 J	0.00052 J	1.66	1.63	0.0107	0.0202	0.0387	9.96	6.77	0.00051 J	1.56	1.64
Oct-2016	0.00075 J	0.0022 J	0.0399	0.00064 J	0.00039 J	1.16	1.88	0.0148 J+	0.0167	0.0511 J+	12.7	5.76	0.00087 J	1.02 J+	1.85
May-2017	0.0011 J	0.0065	0.107	0.00091 J	0.00047 J	2.73	2.64	0.0456	0.0505	0.106	14	7.92	0.0003 J	2.82	2.71
Oct-2017	0.00051 J	0.0016 J	0.119	0.00086 J	0.00086 J	3.48	3.51	0.0079	0.0358	0.0291	9.45	8.96	ND	3.37	3.58

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14A***													
May-2018	*0.00039 J*	0.0012	0.2	0.00093	0.0019	6	5.8	*0.0065 J*	0.042	0.045	27.4	24.7	*0.00026 J*	5.9	5.7
Nov-2018	*0.000045 J*	*0.00073 J*	0.16	0.00057	*0.00054 J*	4.3	4.6	*0.0052 J*	0.02	0.012	52.1	50.1	*0.00016 J*	4.3	4.5
May-2019	*ND*	*ND*	0.019	0.00036	0.0022	*ND*	*ND*	0.012	0.0027	0.026	14.2	12.9	*ND*	*ND*	*ND*
Oct-2019	*0.00015 J*	*0.0003 J*	0.014	*0.00029 J*	*0.00043 J*	0.46	*0.43 J*	0.0085	0.0017	0.0094	13.2	10.4	*0.00011 J*	0.22	*0.23 J*
May-2020	*0.000095 J*	0.0014	0.086	*0.00025 J*	*0.00035 J*	3.3	3.2	0.011	0.012	0.0071	50.8	46.7	*ND*	3.2	3.1
Oct-2020	*ND*	*ND*	0.042	*ND*	*ND*	1.4	1.4	*0.0024 J*	0.0035	*ND*	32.3	26.3	*ND*	1.2	1.3
Apr-2021	*ND*	*0.0028 J*	0.016	*0.00043 J*	*ND*	*0.4 J*	*0.38 J*	0.0051	*0.0009 J*	0.0098	23.3	17.3	*ND*	*0.19 J*	0.22

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-14A*												
Nov-1993	0.07	NA	ND	NA	1.1	NA	ND	NA	1.4	NA	NA	NA	ND
Apr-1994	0.036	NA	ND	NA	ND	NA	ND	NA	1.9	NA	NA	NA	ND
Apr-1995	0.02	NA	ND	ND	0.61	NA	ND	0.01	1.6	NA	ND	ND	0.03
Oct-1996	0.053	0.05	NA	ND	ND	ND	ND	ND	2.3	2.3	ND	ND	0.18
Apr-1997	0.084	0.029	ND	ND	ND	ND	ND	ND	2.3	2.1	ND	ND	0.021
Oct-1997	0.025	0.026	ND	ND	1.57	ND	ND	ND	1.67	1.61	ND	0.01	0.02
Apr-1998	0.03	0.033	0.0005	ND	1.68	ND	ND	ND	2.03	1.93	ND	0.013	0.012
Apr-1999	0.043	0.043	NA	ND	1.16	0.659	ND	ND	2.36	2.32	ND	ND	0.01
Oct-1999	0.02	0.024	NA	ND	ND	0.541	ND	ND	2.57	2.42	ND	ND	ND
Apr-2000	0.029	0.024	NA	ND	ND	ND	ND	ND	4.08	2.53	ND	ND	0.015
Oct-2000	0.023	0.03	NA	ND	0.572	0.95	ND	ND	3.57	2.53	ND	ND	0.015
Apr-2001	0.03	NA	NA	ND	ND	NA	ND	ND	3.58	NA	ND	ND	0.015
Sep-2001	0.019	0.019	NA	0.012	0.722	ND	ND	ND	3.97	2.61	ND	ND	0.01
Mar-2002	0.039	0.037	NA	ND	1.32	0.388	ND	ND	4.13	2.98	ND	ND	0.012
Sep-2002	0.054	0.056	NA	ND	0.696	ND	ND	ND	3.26	3.27	ND	ND	ND
Mar-2003	0.073	0.067	NA	0.012	1.2	ND	ND	ND	3.54	3.37	ND	ND	ND
Oct-2003	0.083	0.075	NA	0.014	0.986	0.533	ND	ND	3.85	2.98	ND	ND	0.011
Apr-2004	0.025	0.023	0.0008	ND	1.21	1.28	ND	ND	3.3	2.31	ND	ND	ND
Oct-2004	0.037	0.031	0.0006	ND	1.17	ND	ND	ND	3.45	2.92	ND	ND	0.018
Apr-2005	0.046	0.045	0.0003	ND	0.95	0.69	ND	ND	3.47	2.95	ND	ND	0.026
Oct-2005	0.032	0.034	0.0006	ND	0.823	0.675	ND	ND	3.86	3	ND	ND	0.01
Mar-2006	ND	ND	0.0004	ND	ND	ND	ND	ND	3.94	3.3	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14A***												
Sep-2006	0.027	0.023	0.0002	0.013	0.692	0.6	ND	ND	3.99	3.87	ND	ND	0.015
Mar-2007	0.014	0.013	0.0004	ND	0.57	0.529	ND	ND	3.17	3.17	ND	ND	ND
Sep-2007	0.059	0.043	0.0004	0.022	0.518	ND	ND	ND	3.22	3.19	ND	ND	0.034
Mar-2008	0.052	0.047	ND	ND	0.802	0.577	ND	ND	4.14	3.88	ND	ND	0.012
Sep-2008	0.05	0.043	ND	ND	0.798	0.503	ND	ND	4.26	3.9	ND	ND	0.025
Mar-2009	0.054	0.056	ND	0.014	0.839	0.668	ND	ND	4.4	4.45	ND	ND	0.027
Oct-2009	0.061	0.06	ND	0.014	0.777	0.526	ND	ND	4.72	4.81	ND	ND	0.041
Mar-2010	0.069	0.067	ND	ND	0.715	0.622	ND	ND	3.71	4.15	ND	ND	ND
Oct-2010	0.047	0.044	ND	0.011	0.526	0.525	ND	ND	4.61	4.58	ND	ND	0.019
Apr-2011	0.037	0.033	ND	ND	ND	ND	ND	ND	4.13	3.96	ND	ND	0.014
Sep-2011	0.042	0.249	ND	0.023	1.36	0.832	ND	ND	4.96	4.7	ND	ND	0.026
Mar-2012	0.028	0.035	ND	ND	0.536	0.525	ND	ND	4.44	4.61	ND	ND	0.012
Sep-2012	0.0341	0.0312	ND	0.0056 J	0.573	0.556	ND	ND	7.85	7.89	0.000238 J	ND	0.0055 J
Mar-2013	0.0391	0.0391	0.000072 J	0.0102 J	0.66	0.645	ND	ND	6.06	6.03	ND	ND	0.0219
Oct-2013	0.121	0.111	0.000061 J	0.0084 J	0.634	0.56	ND	ND	7	6.52	0.000189 J	0.0021 J	0.0168
Mar-2014	0.0448	0.0469	ND	0.0084 J	0.606	0.582	ND	ND	6.34	6.27	ND	ND	0.0132
Oct-2014	0.032	0.0313	0.000073 J	0.0072 J	0.601	0.597	0.000986 J	ND	5.62	5.55	0.000758 J	ND	0.013
Apr-2015	0.0648	0.0478	0.000064 J	0.0724	0.794	0.732	ND	ND	5.24	5.45	ND	0.000833 J	0.0203
Nov-2015	0.125	0.104	0.000039 J	0.0332	0.996	0.908	0.000688 J	ND	4.76	4.85	ND	0.0011 J	0.0265
May-2016	0.0836	0.0492	0.00011 J	0.0365	1.11	1.14	0.00051 J	ND	5.37	5.13	0.00018 J	0.00067 J	0.0443
Oct-2016	0.0642 R	0.0627	0.000056 J	0.0329 J+	0.833	1.25	ND	ND	3.45 J+	6.37	0.00017 J	0.0032	0.0322
May-2017	0.133	0.0909	ND	0.109	1.57	1.51	0.00067 J	ND	7.75	7.42	0.00025 J	0.00046 J	0.0535
Oct-2017	0.106	0.0998	ND	0.0436	1.61	1.67	0.00057 J	ND	7.65	8.26	0.0002 J	ND	0.0431
May-2018	0.17	0.078	ND	0.046	2.2 J	1.6 J	0.00079 J	ND	10.1	10.1	0.00031	0.0031 B	0.0528

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14A***												
Nov-2018	0.27	0.25	*ND*	0.023	*1.7 J*	*1.8 J*	*0.00024 J*	*ND*	7.5	7.9	*0.00008 J*	*ND*	0.029
May-2019	0.13	0.12	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.00031	*ND*	0.022
Oct-2019	0.23	0.21	*ND*	0.0055	*ND*	*ND*	*ND*	*ND*	*2.9 J*	*3 J*	*ND*	0.0062	0.012
May-2020	0.28	0.26	*0.00016 J*	0.015	*1.5 J*	*1.1 J*	*ND*	*ND*	7.3	6.1	*ND*	0.0047	0.017
Oct-2020	0.17	0.16	*ND*	0.0058	*ND*	*ND*	*ND*	*ND*	*4.2 J*	*3.9 J*	*ND*	*0.0014 J*	*ND*
Apr-2021	0.2	0.19	*0.00008 J*	*0.0062 J*	0.54	*0.47 J*	*ND*	*ND*	3	2.8	*ND*	*ND*	*0.0062 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-14A***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	0.8 J	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	0.8 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	0.7 J	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	1.2	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	0.5 J	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14A*																
Mar-2006	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2007	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	6.2	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	10	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	9.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	7.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	4.72	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	9.59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	9.97	0.32 J	ND	ND	ND	ND	ND	0.39 J	0.37 J	ND	ND	ND	1.09 J,B	ND
Mar-2014	ND	ND	ND	ND	8.29	0.24 J	ND	ND	ND	ND	ND	0.28 J	0.43 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	3.77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	3.82	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	0.1 J	0.2 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14A*																
Oct-2016	*ND*	*ND*	*ND*	*ND*	5.1	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*1.4 J*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	8.5	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.3 J*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	7.8	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.3 J*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	6.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.1 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	10.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.7 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	4.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	2.9
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	4.1
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	7.1	4
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.3	7.2
Apr-2000	ND	NA	NA	ND	NA	2.4	NA	ND	ND	ND	NA	ND	NA	ND	NA	1.4	4
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	6
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	8.3
Sep-2001	ND	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.7	5.1
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	3.4
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	6.2
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	3.5
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.8	5.6
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.2	3.5
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	8.3
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.3	7.2
Oct-2005	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	13.2	10.5

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14A***															
Mar-2006	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	22.8	11.9
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	22.6	13.3
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	9.8	9.9
May-2007	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	7.5	10.8
Sep-2007	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	12.5	5.2
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	22.5	16.9
Sep-2008	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	14.2	19.4
Mar-2009	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	16.5	20.8
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	14.7	19.9
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*10.9 J*	11.4
Oct-2010	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	8.5	7.8
Apr-2011	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	10.6	10.5
Sep-2011	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	17.8	11.7
Mar-2012	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	7.6	6.7
Sep-2012	*0.76 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.86 J*	*ND*	*ND*	*ND*	3.17	4.82
Mar-2013	1.39	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.84	*ND*	*ND*	*ND*	6.7	12
Oct-2013	2.01	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.98	*ND*	*ND*	*ND*	5.13	12.4
Mar-2014	1.68	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.95	*ND*	*ND*	*ND*	5.67	10
Oct-2014	*0.92 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.01	*ND*	*ND*	*ND*	1.88	4.45
Apr-2015	*0.88 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.89 J*	*ND*	*ND*	*ND*	1.95	4.21
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*2.7 J*	2.9
May-2016	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	1.3	3.5

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14A***															
Oct-2016	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	2	6.3
May-2017	2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	3.7	10
Oct-2017	2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	2.5	*ND*	*ND*	*ND*	3.7	11
May-2018	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	4.5	6.5
Nov-2018	2.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	6.3	14.9 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	2.4	3.7
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	1.1	1.6
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	2.5	NA	ND	NA
Oct-1999	ND	ND	ND	NA	3.3	ND	ND	1.7	ND	ND	ND	ND	1.1	4.4	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	1	ND	ND	NA
Oct-2000	ND	ND	ND	NA	2.8	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	NA
Apr-2001	ND	ND	ND	NA	4	ND	ND	1.1	ND	ND	ND	ND	0.7 J	3.5	ND	ND	NA
Sep-2001	ND	ND	ND	NA	2.9	ND	ND	0.5 J	ND	ND	ND	ND	ND	1.7	ND	ND	NA
Mar-2002	ND	ND	ND	NA	3.9	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	NA
Sep-2002	ND	ND	ND	NA	**6.4**	ND	ND	0.6 J	ND	ND	ND	ND	0.5 J	1.1	ND	ND	NA
Mar-2003	ND	ND	ND	NA	**5.3**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	2.7	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	NA
Apr-2004	ND	ND	ND	NA	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	4.9	ND	ND	0.7 J	ND	ND	ND	ND	ND	2.3	ND	ND	NA
Apr-2005	ND	ND	ND	ND	**5.9**	ND	ND	0.9 J	ND	ND	ND	ND	0.6 J	1.5	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-14A*															
Oct-2005	ND	ND	0.7 J	ND	**9.5**	0.5 J	ND	1.7	ND	ND	ND	ND	1.3	2.3	ND	0.7 J	NA
Mar-2006	ND	ND	0.9 J	ND	**11.6**	0.6 J	ND	1.9	ND	ND	ND	ND	1.6	3.1	ND	0.5 J	NA
Sep-2006	ND	ND	ND	ND	**7.6**	ND	ND	2.1	ND	ND	ND	ND	1.6	1.7	ND	ND	NA
Mar-2007	ND	ND	0.5 J	ND	**6.5 R**	ND	ND	1.3	ND	ND	ND	ND	0.9 J	1.5	ND	ND	NA
May-2007	ND	ND	0.6 J	1.7	5	ND	ND	1.5	ND	ND	ND	ND	0.9 J	1.3	ND	0.7 J	NA
Sep-2007	ND	ND	0.6 J	0.6 J	**7.7**	ND	ND	1.4	ND	ND	ND	ND	1.1	2	ND	ND	NA
Mar-2008	ND	ND	0.9 J	ND	**8.9**	0.7 J	ND	2.3	ND	ND	ND	ND	2	3.6	ND	ND	NA
Sep-2008	ND	ND	0.7 J	ND	**12**	0.7 J	ND	2.4	ND	ND	ND	ND	1.8	6.5	ND	1.5	NA
Mar-2009	ND	ND	1.1	ND	**16.3**	1.1	ND	2.6	ND	ND	ND	ND	2.5 J	0.5 J	ND	0.8 J	NA
Oct-2009	ND	ND	0.7 J	ND	**14.2**	0.8 J	ND	2.6	ND	ND	ND	ND	2.3	2.1	ND	0.6 J	NA
Mar-2010	ND	ND	ND	ND	**8.4**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	**6.5**	ND	ND	1.3	ND	ND	ND	ND	ND	0.9 J	ND	ND	NA
Apr-2011	ND	ND	ND	ND	**8.1**	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	0.7 J	ND	**7.4**	0.5 J	ND	2	ND	ND	ND	ND	1.4	1.3	ND	ND	NA
Mar-2012	ND	ND	ND	ND	3.9	ND	ND	1.3	ND	ND	ND	ND	0.9 J	0.6 J	ND	0.7 J	NA
Sep-2012	ND	ND	0.81 J	0.28 J	3.95	0.36 J	ND	1.48	ND	ND	ND	ND	1.05	0.48 J	ND	ND	1.17
Mar-2013	0.5 J	ND	1 J	0.37 J	**8.69**	0.68 J	ND	2.09	ND	ND	ND	ND	1.77	ND	ND	0.34 J	1.68
Oct-2013	ND	ND	0.7 J	ND	**5.94**	0.53 J	ND	2.02	ND	ND	ND	ND	1.67	0.7 J	ND	ND	1.23
Mar-2014	ND	ND	1.08	0.53 J	**6.26**	0.41 J	ND	2.75	ND	ND	ND	ND	1.89	0.74 J	ND	0.34 J	1.49
Oct-2014	ND	ND	0.52 J	0.29 J	2.35	ND	ND	1.34	ND	ND	ND	ND	0.83 J	ND	ND	ND	0.52 J
Apr-2015	ND	ND	0.59 J	0.28 J	2.66	ND	ND	1.32	ND	ND	ND	ND	0.93 J	ND	ND	ND	0.59 J
Nov-2015	ND	ND	ND	ND	2	ND	ND	0.7 J	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14A***															
May-2016	*ND*	*ND*	*0.3 J*	*0.2 J*	2	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*0.1 J*	*ND*	*0.1 J*	*0.3 J*
Oct-2016	*ND*	*ND*	*0.4 J*	*0.3 J*	3.1	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	1	*0.4 J*	*ND*	*0.3 J*	*0.4 J*
May-2017	*ND*	*ND*	*0.7 J*	*0.7 J*	4.9	*0.2 J*	*ND*	2.5	*ND*	*ND*	*ND*	*ND*	1.8	*0.2 J*	*ND*	*0.4 J*	*0.9 J*
Oct-2017	*ND*	*ND*	*0.5 J*	*0.6 J*	4.4	*0.1 J*	*ND*	2.5	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*0.5 J*	*0.6 J*
May-2018	*ND*	*ND*	*ND*	*ND*	2.3 B	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	1.1	2.9 CH	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.46 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-19***											
Nov-1993	ND	ND	0.1	ND	7.6	0.9	ND	4.68	74.7	12.4	50	13	68
Apr-1994	ND	ND	0.2	ND	17.3	2.7	ND	4.5	201	45.6	181	52.2	98
Apr-1995	ND	ND	0.2	ND	19.5	2.2	ND	4.7	176	40.2	112	38.6	134
Apr-1997	ND	3	ND	ND	12	0.46	ND	NA	NA	32	80	21	15
Apr-1998	ND	ND	1.1	ND	14.6	0.196	ND	6.19	156.4	16.2	96	51	1.7
Apr-1999	ND	ND	0.13	ND	13.5	0.68	ND	4.49	204	52.8	110	63	120
Apr-2000	12	12	ND	ND	29.6	1.48	ND	5.64	252	71.8	196	102	270
Apr-2001	16	NA	ND	ND	26.4	ND	ND	NA	NA	45.1	119	86	907
Mar-2002	6.8	6.8	ND	40	11	0.29	ND	5.4	87.6	15.7	88	34.3	677
Mar-2003	22	22	ND	ND	25.8	0.75	ND	6	206	35.8	143	65.3	290
Apr-2004	13	13	ND	ND	22.4	ND	ND	5.3	160.1	19.3	90	47.2	143
Apr-2005	11	11	ND	ND	26.8	0.45	ND	5.3	154.9	30	108	56.1	93
Mar-2006	9.8	9.8	ND	ND	21.4	0.72	ND	5.3	142.8	27.3	112	40.8	110
Mar-2007	13	13	0.46	ND	25.5	0.78	ND	5.4	158.3	41.9	142	56.5	218
Mar-2008	13	13	ND	ND	22.8	0.91	ND	5.5	145.3	27.8	114	49	0.39
Mar-2009	14	14	ND	ND	18.2	0.34	ND	4.9	118.3	15.7	86	32.5	0.51
Mar-2010	45	45	ND	ND	56.9	0.42	ND	5.84	390	51.8	183	96.2	3.3
Oct-2010	28	28	ND	ND	31.8	0.64	ND	5.3	189.9	34.9	154	72	0.81
Apr-2011	43	43	ND	ND	38.5	0.67	ND	5.6	312	46.5	207	89.2	1.3
Sep-2011	39	39	ND	ND	54	0.52	ND	6	321	45.6	229	99.1	0.69
Mar-2012	33	33	ND	ND	43.2	0.46	ND	5.3	354	44.4	164	78.1	0.35
Sep-2012	40.6	40.6	ND	ND	29.8	0.733	ND	5.5	199.6	37.3	156	76.4	1.26
Mar-2013	32.6	32.6	ND	ND	32.8	0.829	ND	5.8	201	36	145	68.3	0.817
Oct-2013	19.5	19.5	ND	ND	21.1	0.462	ND	4.8	138.9	22.3	105	44.3	0.388
Mar-2014	51.4	51.4	ND	30	62.1	1.07	ND	6.2	429	58.5	253	106	1.7
Oct-2014	35.2	35.2	ND	6 J	73	0.581	ND	5.9	404	29.1	220	83.4	0.197
Apr-2015	89.2	89.2	ND	8 J	80.4	0.763	ND	5.9	532	44.7	299	116	3.42
Nov-2015	37.6	37.6	ND	6 J	44.9	0.573	ND	6	329	25.8	152	73.5	0.21
May-2016	51.2	51.2	ND	12	41.4	0.701	ND	6.3	410	30.8	178	77.7	1.07
Oct-2016	50.4	50.4	ND	ND	34.1	NA	NA	6.4	340	30	170	74.4	1.05
May-2017	74.5	74.5	ND	ND	49.1	0.847	ND	6.3	510	40.4	225	104	1.75
Oct-2017	55.8	55.8	ND	9 J	35.4	0.699	ND	6.1	426	29.5	172	88.5	7.13
May-2018	28	28	ND	ND	22.8	0.082 J	ND	5.4	174.5	16.6	149	52	NA
Nov-2018	66	66	ND	ND	30.5	0.84	ND	5.94	283	41.4	163	96.5	5.52
May-2019	22 H1	NA	0.19	ND	27.7	1.4	ND	5.27	159.3	31.9	129	60.7	2.14
Oct-2019	7.5 J	NA	ND	ND	22.7	1	0.0086 J	5.03	165.3	23.9	290	44.7	2.03

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-19***											
May-2020	12	*NA*	*ND*	*9.1 J*	8.7	2.3	*ND*	5.26	205.8	40.3	123	84.6	2.77
Oct-2020	40	*NA*	*ND*	*9.3 J*	12.3	1.8	*0.0099 J*	5.38	190.4	33.2	126	79.6	5.59
Apr-2021	60	*NA*	*ND*	*12.6 J*	14.4	0.78	*ND*	5.9	246.4	31.9	139	80.6	4.85

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-19***													
Nov-1993	NA	ND	ND	NA	ND	1.6	NA	ND	NA	ND	1.9	0.07	ND	2.2	NA
Apr-1994	NA	ND	0.19	NA	ND	12	NA	ND	NA	0.02	ND	ND	ND	5.4	NA
Apr-1995	ND	ND	1.3	ND	ND	8.2	NA	ND	ND	ND	0.29	ND	ND	4.4	NA
Apr-1997	ND	ND	0.068	ND	ND	9.7	9.8	ND	ND	ND	1.9	0.33	ND	2.9	2.9
Apr-1998	ND	ND	0.103	ND	ND	13.8	13.5	0.01	0.012	0.021	3.35	ND	ND	3.96	3.84
Apr-1999	ND	ND	0.1	ND	0.004	17.9	17.1	ND	0.01	0.022	3.36	ND	ND	4.52	4.29
Apr-2000	ND	ND	0.076	ND	ND	31.8	29.3	0.012	ND	0.033	10	ND	ND	5.51	5.02
Apr-2001	ND	ND	0.081	ND	ND	25.7	NA	0.05	ND	0.086	40.5	NA	0.005	5.23	NA
Mar-2002	ND	ND	0.043	ND	ND	9.42	8.88	0.02	ND	0.045	14.6	ND	ND	2.63	2.49
Mar-2003	ND	ND	0.051	ND	ND	20.1	19.4	ND	ND	ND	0.799	ND	ND	3.68	3.52
Apr-2004	ND	0.003	0.068	ND	ND	12.1	11.6	ND	ND	0.018	4.63	ND	0.002	4.1	3.88
Apr-2005	ND	ND	0.09	ND	ND	14.3	14	ND	ND	0.02	2.98	ND	ND	4.96	4.86
Mar-2006	ND	ND	0.067	ND	ND	10.1	10.5	ND	ND	ND	2.41	ND	ND	3.79	3.91
Mar-2007	ND	0.007	0.072	ND	ND	15.5	15.6	ND	ND	0.019	7.26	ND	ND	4.33	4.32
Mar-2008	ND	ND	0.058	ND	ND	13.5	12.5	ND	ND	ND	ND	ND	ND	3.71	3.34
Mar-2009	ND	ND	0.035	ND	ND	9.17	9.05	ND	ND	0.014	0.104	ND	ND	2.34	2.31
Mar-2010	ND	ND	0.073	ND	ND	28.2	26.7	ND	ND	ND	0.101	ND	ND	6.26	6.02
Oct-2010	ND	ND	0.067	ND	ND	19.9	18.3	ND	ND	0.006	ND	ND	ND	5.42	5.28
Apr-2011	ND	ND	0.075	ND	ND	26	25	ND	ND	ND	0.189	ND	ND	5.91	5.69
Sep-2011	ND	ND	0.078	ND	ND	29.1	28.7	ND	ND	ND	ND	ND	ND	6.42	6.3
Mar-2012	ND	ND	0.069	ND	ND	22.2	21.6	ND	ND	ND	ND	ND	ND	5.52	5.41

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-19***													
Sep-2012	*ND*	*ND*	0.0644	*0.000086 J*	*ND*	21.3	20.9	*0.002 J*	*0.0022 J*	*0.0051 J*	*0.0256 J*	0.0777	*ND*	5.64	5.69
Mar-2013	*ND*	*ND*	0.0634	*ND*	*ND*	19.9	18.1	*0.0014 J*	*0.0025 J*	*0.0055 J*	*0.0275 J*	*0.0053 J*	*0.0016 J*	4.51	4.06
Oct-2013	*ND*	*ND*	0.0482	*0.000147 J*	*ND*	12.7	12.4	*0.0082 J*	*0.0063 J*	0.0122	*ND*	*ND*	*ND*	3.05	3.04
Mar-2014	*0.000279 J*	*ND*	0.0654	*ND*	*ND*	31.6	32.2	*0.0011 J*	*0.0012 J*	*0.0037 J*	0.0845	*0.0447 J*	*ND*	6.47	6.6
Oct-2014	*0.000873 J*	*ND*	0.0629	*ND*	*ND*	24.5	24.3	*0.000605 J*	*0.0025 J*	*0.0056 J*	*0.0105 J*	*0.0212 J*	*ND*	5.4	5.29
Apr-2015	*0.000587 J*	*ND*	0.0642	*ND*	*ND*	35.4	35.9	*0.000881 J*	*0.000674 J*	*0.0023 J*	*0.0386 J*	*0.0145 J*	*ND*	6.73	6.77
Nov-2015	*ND*	*ND*	0.0547	*ND*	*0.000073 J*	21.6	20.8	*0.000527 J*	*0.0026 J*	*0.0058 J*	*ND*	*ND*	*ND*	4.78	4.76
May-2016	*ND*	*ND*	0.0483	*ND*	*ND*	22.9	24.1	*0.00078 J*	0.0019	*0.0039 J*	*ND*	*ND*	*ND*	4.96	5.09
Oct-2016	*ND*	*ND*	0.0469	*ND*	*ND*	22.1	21.9	*0.00074 J*	0.0024	0.0066	*ND*	*ND*	*0.00011 J*	4.66	*4.85 J+*
May-2017	*ND*	*ND*	0.0502	*ND*	*ND*	31.1	33.3	*0.0011 J*	0.0024	0.0046	*0.0414 J*	*ND*	*ND*	6.52	6.15
Oct-2017	*ND*	*ND*	0.0456	*0.00011 J*	*ND*	27.2	24.8	*ND*	0.0046	0.0098	*0.0378 J*	*ND*	*0.00075 J*	4.97	4.86
May-2018	*0.000062 J*	*ND*	0.047	*0.00024 J*	*0.00019 J*	14.6	13.4	*0.0008 J*	0.0103	0.017	0.11	*ND*	*0.00013 JB*	3.8	3.4
Nov-2018	*ND*	*ND*	0.042	*0.000022 J*	*0.000051 J*	29.8	30.6	*0.0029 J*	0.0013	0.0033	0.034	*ND*	*0.000086 J*	5.4	5.5
May-2019	*ND*	*ND*	0.071	*ND*	*ND*	15.9	16.7	*ND*	0.0013	0.0021	*ND*	*ND*	*ND*	5.1	5.2
Oct-2019	*0.00011 J*	*ND*	0.051	*0.000072 J*	*0.00018 J*	11.3	10.7	*0.0048 J*	0.0023	0.004	*0.007 J*	*ND*	*ND*	4	3.8
May-2020	*0.000075 J*	*ND*	0.061	*ND*	*ND*	22.9	22.9	*0.0049 J*	*0.00049 J*	0.0026	*ND*	*ND*	*ND*	6.7	6.6
Oct-2020	*ND*	*ND*	0.038	*ND*	*ND*	21.8	21.4	*0.0025 J*	*0.00056 J*	*ND*	*ND*	*ND*	*ND*	6.1	5.9
Apr-2021	*ND*	*ND*	0.062	*ND*	*ND*	22.7	24	*0.00088 J*	*0.00079 J*	*ND*	*ND*	*ND*	*ND*	5.8	6.2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-19*												
Nov-1993	0.12	NA	ND	NA	1.1	NA	ND	NA	2.3	NA	NA	NA	0.01
Apr-1994	0.05	NA	ND	NA	2.1	NA	ND	NA	7.4	NA	NA	NA	0.037
Apr-1995	0.12	NA	ND	1.1	2.8	NA	ND	ND	5.5	NA	ND	ND	0.04
Apr-1997	0.082	0.087	**0.003**	ND	3.5	3.4	ND	ND	4.9	5.6	ND	ND	0.025
Apr-1998	0.095	0.115	NA	ND	4.38	3.11	ND	ND	6.97	6.97	ND	0.012	0.024
Apr-1999	0.091	0.084	NA	ND	3.93	3.1	ND	ND	6.12	5.85	ND	ND	0.015
Apr-2000	0.065	0.049	NA	ND	6.11	5.89	ND	ND	15.5	13	ND	0.029	0.02
Apr-2001	0.083	NA	NA	ND	6.53	NA	ND	ND	12.2	NA	ND	0.141	0.035
Mar-2002	0.039	0.026	NA	ND	3.14	3.05	ND	ND	6.41	5.25	ND	0.055	0.016
Mar-2003	0.018	0.011	NA	ND	6.64	6.93	ND	ND	11	10.5	ND	ND	ND
Apr-2004	0.05	0.04	ND	ND	4.03	3.83	ND	ND	11	10.3	ND	0.014	0.068
Apr-2005	0.048	0.044	ND	ND	3.85	3.62	ND	ND	11.9	11.6	ND	ND	0.029
Mar-2006	0.021	0.017	ND	ND	2.49	2.49	ND	ND	8.93	8.97	ND	ND	ND
Mar-2007	0.035	0.025	ND	ND	4.15	4.11	ND	ND	11.1	11.2	ND	0.02	0.01
Mar-2008	0.018	0.016	ND	ND	3.76	3.47	ND	ND	10.2	9.4	ND	ND	ND
Mar-2009	0.01	ND	ND	ND	2.33	2.28	ND	ND	7.65	7.48	ND	ND	ND
Mar-2010	ND	ND	ND	ND	6.71	6.35	ND	ND	26.8	27.9	ND	ND	ND
Oct-2010	0.017	0.014	ND	ND	4.55	4.32	ND	ND	17.6	17.4	ND	ND	ND
Apr-2011	0.01	ND	ND	ND	5.85	5.61	ND	ND	22.8	21.9	ND	ND	ND
Sep-2011	ND	ND	ND	ND	6.14	6	ND	ND	24.6	24.2	ND	ND	ND
Mar-2012	0.011	0.011	ND	ND	5.36	5.21	ND	ND	23.1	22.2	ND	ND	0.014
Sep-2012	0.0091 J	0.01 J	0.000032 J	0.0049 J	4.53	4.62	ND	ND	21.5	20.7	0.00054 J	ND	0.0026 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-19***												
Mar-2013	*0.01 J*	*0.0088 J*	*0.000031 J*	*0.0044 J*	4.85	4.33	*ND*	*ND*	18.9	17	*ND*	*ND*	0.0145
Oct-2013	0.0146	0.0141	*ND*	*0.0059 J*	2.87	2.79	*ND*	*ND*	10.6	10.8	*ND*	*0.0033 J*	0.0127
Mar-2014	*0.0054 J*	*0.0051 J*	*ND*	*0.0024 J*	7.14	7.25	*ND*	*ND*	32.4	33.1	*ND*	*ND*	*0.0028 J*
Oct-2014	*0.0097 J*	*0.0096 J*	*0.000023 J*	*0.004 J*	5.08	4.97	*0.0016 J*	*ND*	31.9	31.5	*ND*	*ND*	*0.007 J*
Apr-2015	*0.0046 J*	*0.0036 J*	*ND*	*0.002 J*	9.82	9.94	*0.000992 J*	*ND*	55.7	56.4	*ND*	*ND*	*ND*
Nov-2015	*0.0086 J*	*0.0083 J*	*ND*	*0.0042 J*	5.31	5.22	*0.001 J*	*ND*	27.5	26.9	*ND*	*0.000161 J*	*0.0035 J*
May-2016	0.0071	0.0057	*ND*	*0.0031 J*	6.27	6.31	*ND*	*ND*	26.2	26.6	*ND*	*0.00034 J*	*ND*
Oct-2016	0.0044	0.0061 B	*ND*	*0.0039 J*	5.75	5.86	*ND*	*ND*	20.4	21.2	*ND*	*0.00035 J*	*ND*
May-2017	0.0049	0.0042	*ND*	*0.0037 J*	9.06	9.41	*ND*	*ND*	30.2	30	*ND*	*0.00037 J*	*ND*
Oct-2017	0.0067	0.0054	*ND*	0.0049	6.24	6.29	*ND*	*ND*	19.6	18.4	*ND*	*0.00031 J*	*ND*
May-2018	0.021	0.019	*0.00018 JB*	0.011	*3.5 J*	*2.9 J*	*0.00032 J*	*ND*	13.7	11.7	*ND*	0.0037	0.0091 B
Nov-2018	0.004	0.0026	*ND*	0.0028	7.1	7.3	*0.00017 J*	*ND*	19.5	20.2	*ND*	0.0022	*0.0047 J*
May-2019	0.039	0.037	*ND*	0.0059	*ND*	*ND*	*ND*	*ND*	15.6	15.5	*ND*	0.0035 B	0.0072
Oct-2019	0.016	0.015	*ND*	0.0045	*3.7 J*	*3.5 J*	*0.00051 J*	*ND*	14.7	12.1	*ND*	0.0088	0.0075
May-2020	0.0057	0.005	*ND*	0.0023	6.5	6.8	*ND*	*ND*	9.1	9.2	*ND*	0.01	*0.0034 J*
Oct-2020	0.0045	0.0042	*ND*	*ND*	5.7	5.8	*ND*	*ND*	9.1	8.4	*ND*	*0.0012 J*	*ND*
Apr-2021	0.0067	0.0062	*ND*	*0.0024 J*	6.1	6.6	*ND*	*ND*	10.3	11.1	*ND*	*ND*	*0.0025 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-19*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	6.5	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2002	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2002	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	7.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-19*																
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.93 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.81 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	7.73	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	2.73	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-19***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.2	10
Jul-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	1.2
Jul-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	1.9
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	13	15
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5	8.3
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-19***															
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.97 J
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.96 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	3.39	ND	ND	ND	2.84	9.26
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.89 J	ND	ND	ND	0.75 J	3.18
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	2.3 J	3.5
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	0.5 J	ND	ND	ND	0.8 J	2.9
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.6 J	ND	ND	ND	0.7 J	3.4
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	0.3 J
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.8 J	ND	ND	ND	0.9 J	3.2
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	4.4	7
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.755 J	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-19***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	4.8	ND	ND	ND	ND	1.9	ND	ND	ND	NA
Jul-2002	ND	ND	ND	NA	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Jul-2002	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	**6.4**	ND	ND	ND	ND	2.7	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.2 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	3.3	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-19***															
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	0.95 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	0.46 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	3.48	ND	ND	ND	ND	1.06	0.47 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	1.73	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	0.3 J	0.2 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.6 B	ND	ND	3.1	ND	ND	ND	ND	1.1	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	1.2 BCH	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.611 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-20R***											
Apr-2010	3.2	3.2	*ND*	*ND*	105	0.81	*ND*	4.3	604	211	352	143	3.8
Oct-2010	*ND*	*ND*	*ND*	*ND*	102	0.87	*ND*	4.1	556	153	349	128	3.5
Apr-2011	*ND*	*ND*	*ND*	13	119	0.86	*ND*	4	573	115	386	123	25
Sep-2011	*ND*	*ND*	*ND*	*ND*	94.8	0.79	*ND*	4.3	520	115	363	124	25
Mar-2012	*ND*	*ND*	*ND*	10	121	0.86	*ND*	3.6	660	204	391	138	5.5
Sep-2012	*ND*	*ND*	*ND*	10.3	107	0.794	*ND*	3.9	511	177	365	135	12.4
Mar-2013	*ND*	*ND*	*ND*	14.6	108	0.902	*ND*	4.1	633	124	358	104	5.71
Oct-2013	*ND*	*ND*	*ND*	15.7	106	0.874	*ND*	3.6	658	161	401	109	7.56
Mar-2014	*ND*	*ND*	*ND*	22	104	0.902	*ND*	4.5	578	179	371	105	140
Oct-2014	*ND*	*ND*	*ND*	*9 J*	96.9	0.831	*ND*	4.3	633	209	326	119	97.5
Apr-2015	0.96	0.96	*ND*	*5 J*	91.1	1.04	*ND*	3.9	548	180	346	112	5.1
Nov-2015	*ND*	*ND*	*ND*	*9 J*	96.4	0.979	*ND*	4.4	650	214	343	87	2.14
May-2016	*ND*	*ND*	*ND*	14	82.6	1.25	*ND*	4.5	767	163	341	114	0.341
Oct-2016	*ND*	*ND*	*ND*	11	75.4	*NA*	*NA*	4.3	670	186	376	114	1.98
May-2017	*ND*	*ND*	*ND*	*ND*	81.9	1.27	*ND*	4.2	714	189	341	114	84.7
Oct-2017	*ND*	*ND*	*0.078 J*	*6 J*	75.7	1.82	*ND*	4.4	785	204	330	94.3	17.3
May-2018	*ND*	*ND*	*ND*	*18.7 J*	65.4	0.58	0.013	4	603	133	311	110	30.9
Nov-2018	*ND*	*ND*	*ND*	*14.3 J*	59.4	1.8	*ND*	4.15	473.8	144	272	110	6.36
May-2019	16 H1	*NA*	*ND*	*ND*	44	1.2	*ND*	5.13	355	139	284	139	4.11
Oct-2019	*2.5 J*	*NA*	*ND*	*14.8 J*	48.1	1.5	*ND*	4.56	472.6	126	276	115	1.82
May-2020	*ND*	*NA*	*ND*	*13.5 J*	32.2	1.1	*ND*	4.83	320.4	84.4	197	106	3.16
Oct-2020	*4 J*	*NA*	*ND*	*11.6 J*	20.3	0.98	*ND*	5.05	246.8	79.6	158	67.2	13.3
Apr-2021	44	*NA*	*ND*	*14.8 J*	12.9	0.98	*ND*	5.7	270.8	53.8	157 D6	85.8	5.25

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-20R*													
Apr-2010	ND	ND	0.04	ND	ND	37.3	36.5	ND	0.017	0.018	0.076	ND	ND	12.1	11.8
Oct-2010	ND	ND	0.032	0.002	ND	29.9	29	ND	0.025	0.027	0.062	ND	ND	13	12.8
Apr-2011	ND	ND	0.036	0.002	ND	30.1	29.7	ND	0.02	0.022	0.357	0.031	ND	11.6	11.3
Sep-2011	ND	ND	0.041	ND	ND	27	25.2	ND	0.027	0.035	0.436	ND	ND	13.7	13.1
Mar-2012	ND	ND	0.035	0.003	ND	33.4	32.3	ND	0.019	0.025	0.122	ND	ND	13.2	12.7
Sep-2012	ND	ND	0.0383	0.0027	0.000685 J	31.6	31.7	0.0064 J	0.0225	0.0301	0.155	0.0323 J	ND	13.7	13.2
Mar-2013	ND	ND	0.0307	0.0017 J	0.000583 J	25.1	29.2	ND	0.0197 J	0.0259	0.0963	0.0261 J	0.0014 J	10.1	11.9
Oct-2013	ND	0.000794 J	0.0358	0.0019 J	0.0012 J	28	29.3	0.0085 J	0.0188 J	0.0266	ND	ND	0.000426 J	9.6	10.4
Mar-2014	0.00044 J	ND	0.0478 J	ND	ND	25.7	26	0.0094 J	0.0159 J	0.0249 J	2.02	0.0426 J	ND	10	10.3
Oct-2014	0.0013 J	0.0043 J	0.0574	0.0025 J	0.000866 J	28.9	28.9	0.0117 J	0.0229 J	0.0263 J	1.87	ND	0.003	11.4	11.6
Apr-2015	0.000541 J	0.0018 J	0.0334	0.0014 J	0.000605 J	27.3	26.8	ND	0.0173 J	0.0209	0.0507 J	ND	ND	10.7	10.6
Nov-2015	ND	0.0041	0.0364	0.0019 J	0.00099 J	20.6	20.7	0.0011 J	0.0158	0.0314	0.0486 J	0.0265 J	ND	8.67	8.66
May-2016	ND	0.0012 J	0.0342	0.0019	0.00046 J	28.1	28.6	0.0022 J	0.0229	0.0257	ND	ND	ND	10.6	10.7
Oct-2016	ND	0.0028 J	0.0216	0.0021	0.00052 J	26	28.2	0.0022 J	0.0276	0.0282	ND	0.0395 J	0.00013 J	11.8	13
May-2017	ND	0.0024 J	0.0342	0.0023	0.00062 J	23.4	24.5	0.0032 J	0.0323	0.0294	0.263	ND	0.00035 J	13.6	13.2
Oct-2017	ND	0.0013 J	0.0293	0.0018	0.00057 J	19.7	20.3	0.0044	0.0304	0.0263	0.147 J	0.0387 J	0.00021 J	11	11.4
May-2018	0.000035 J	ND	0.027	0.0021	0.0019	25.7	22.1	0.0036 JB	0.0223	0.018	0.24	0.022	0.00045 J	11.1	9.8
Nov-2018	0.000054 J	ND	0.024	0.00092	0.00084 J	31.1	31.5	0.0068 J	0.0072 J	0.025 J	0.07	0.018 J	0.00049 J	7.9	8
May-2019	ND	ND	0.025	0.00071	ND	40.2	41.1	ND	ND	ND	ND	ND	ND	9.5	9.6
Oct-2019	0.00011 J	ND	0.022	0.001	0.00082 J	32.1	31.2	0.0064 J	0.008	0.013	0.021 J	0.014 J	ND	8.4	8.2
May-2020	0.000086 J	ND	0.026	0.00043	0.00027 J	31.1	30.5	0.0064 J	0.0034	ND	0.055 J	0.015 J	ND	6.8	6.7

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-20R***													
Oct-2020	*ND*	*ND*	0.018	*0.00035 J*	*ND*	18.9	18.5	*0.0043 J*	*0.0021 J*	*ND*	0.13	*ND*	*ND*	4.9	4.6
Apr-2021	*ND*	*ND*	0.035	*0.00022 J*	*ND*	25.4	27.2	*0.0015 J*	*0.0017 J*	*0.0033 J*	*ND*	*ND*	*ND*	5.4	5.8

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-20R*												
Apr-2010	0.298	0.292	ND	0.013	3.77	3.74	ND	ND	35.4	34.9	ND	ND	0.019
Oct-2010	0.269	0.263	ND	0.019	3.4	3.36	ND	ND	37.7	37.1	ND	ND	0.024
Apr-2011	0.238	0.232	ND	0.015	3.53	3.43	ND	ND	44.6	44	ND	ND	0.019
Sep-2011	0.291	0.278	0.0002	0.028	3.84	3.18	ND	ND	41.7	39.2	ND	ND	0.037
Mar-2012	0.239	0.233	0.0003	0.014	3.87	3.77	ND	ND	50.1	48.7	ND	ND	0.019
Sep-2012	0.227	0.228	0.000349	0.0195	3.67	3.67	0.0026	ND	56.1	55.3	0.000296 J	ND	0.022
Mar-2013	0.229	0.261	0.000199 J	0.015	2.56 J	3.06 J	0.002 J	ND	42	49.6	ND	ND	0.0264
Oct-2013	0.239	0.265	ND	0.0124	3.47 J	3.16 J	0.0023	0.000025 J	53.5	57	ND	0.0135 J	0.0252
Mar-2014	0.198	0.195	ND	0.0128 J	3.48 J	3.14	ND	ND	48.6	48.9	ND	0.0147 J	0.0738 J
Oct-2014	0.233	0.234	0.000118 J	0.0194 J	3.62 J	3.18 J	0.0184 J	0.000032 J	48.5	50.4	ND	0.0141 J	ND
Apr-2015	0.186	0.192	0.000095 J	0.0128	3.09	3.08	0.0118	ND	41.8	41.5	ND	ND	0.0245
Nov-2015	0.167	0.166	0.000325	0.0154	2.51	2.52	0.0267	ND	36.8	37.5	ND	0.0018 J	0.0235
May-2016	0.18	0.175	0.00024	0.0136	3.46	3.37	0.0011 J	ND	44.3	44.2	ND	0.0022	0.0195 J
Oct-2016	0.19	0.215	0.00016 J	0.0177	3.09	3.51	0.00058 J	ND	39	45.3	ND	0.0025	0.0254 J
May-2017	0.246	0.248	0.00039	0.0208	3.14	3.08	0.00063 J	ND	47	45.3	ND	0.0059	0.0309
Oct-2017	0.205	0.206	0.000077 J	0.0179	2.99	2.96	0.00057 J	ND	50.7 J-	50.4	ND	0.0044	0.0227 J
May-2018	0.19	0.22	0.00015 J	0.011 B	2.5 J	2.6 J	0.0033	ND	55.1	45.8	ND	0.0032 J	0.0016 JB
Nov-2018	0.11	0.13	ND	0.0052 J	4 J	4 J	ND	ND	40.3	41.5	ND	0.0014 J	ND
May-2019	0.055	0.057	ND	ND	ND	ND	ND	ND	26.8	27	ND	ND	ND
Oct-2019	0.063	0.022	ND	0.0055	4.3 J	4.3 J	0.0021	ND	36.4	34.5	ND	0.01	0.01
May-2020	0.028	0.03	ND	0.0032	3.7 J	3.7 J	ND	ND	23.6	23.4	ND	0.0054	ND
Oct-2020	0.055	0.03	ND	ND	2.9 J	3 J	ND	ND	22.7	20.3	ND	0.0028 J	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-20R***												
Apr-2021	0.02	0.02	*ND*	*0.0017 J*	3.1	3.4	*ND*	*ND*	12.5	13.6	*ND*	*0.004 J*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-20R*																
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-20R*																
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-20R*															
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-20R***															
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-20R***															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.56 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*0.31 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-20R***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.516 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-23***											
Apr-1995	10.3	10.3	ND	34.7	3.4	0.6	ND	5.8	40.6	5.3	34	8.5	22.7
Apr-1997	ND	2	ND	ND	4	0.42	ND	NA	NA	ND	57	12	36
Oct-1997	2	2	ND	ND	3.52	0.695	ND	8.92	34.2	ND	ND	ND	3.8
Apr-1998	ND	ND	0.21	ND	2.44	0.36	ND	6.73	20.3	ND	12	4.6	3
Apr-1999	ND	ND	0.25	ND	13.9	0.24	ND	5.36	68.4	ND	33	4.7	11
Oct-1999	ND	ND	0.16	ND	3.42	0.38	ND	5.6	23.2	0.93	33	4.5	32
Apr-2000	10	10	ND	ND	2.75	0.32	ND	6.02	20	ND	29	7.3	51
Oct-2000	9.5	NA	ND	14	3.06	0.31	ND	6.06	23.4	ND	27	5.76	29.5
Apr-2001	2.2	NA	ND	ND	2.57	0.44	ND	NA	NA	ND	31	4.8	7.7
Sep-2001	1.6	1.6	ND	ND	3.87	1.4	ND	5.22	19	ND	25	4.81	6.1
Mar-2002	ND	ND	ND	27	4.35	0.522	ND	5.2	15.6	ND	36	5	51
Sep-2002	2	2	ND	ND	3.9	0.56	ND	5.2	26.2	ND	ND	5	5.9
Mar-2003	4.4	4.4	ND	ND	16	ND	ND	5.4	35.5	ND	42	6.69	32
Oct-2003	4.2	4.2	ND	11	3.33	0.384	ND	4.5	27.8	ND	ND	7.79	65
Apr-2004	7.8	7.8	ND	10	14.9	0.435	ND	5.6	75.3	ND	96	6.26	889
Oct-2004	3.7	3.7	ND	14	3.68	0.48	ND	5.2	24.7	ND	31	8.08	200
Apr-2005	4.1	4.1	ND	ND	8.81	0.48	ND	5.4	40.4	ND	ND	5.1	41
Oct-2005	3.8	3.8	ND	ND	3.51	0.4	ND	5.1	19.6	ND	34	5.22	40
Mar-2006	4.7	4.7	ND	ND	8.69	0.41	ND	5.3	42.1	ND	19	2.45	71
Sep-2006	3.5	3.5	ND	43	3.52	0.39	ND	5.2	26.1	ND	30	5.88	18
Mar-2007	6.1	6.1	ND	ND	32.6	0.45	ND	5.4	99.8	ND	52	3.24	195
Sep-2007	3	3	ND	ND	8.75	0.94	ND	5.1	21.2	ND	37	4.27	34
Mar-2008	2.9	2.9	ND	15	13	1.39	ND	5	26	4.86	18	5.05	6.2
Sep-2008	3.9	3.9	ND	11	3.44	0.42	ND	4.7	19.1	ND	22	5.1	16
Mar-2009	4.6	4.6	ND	37	4.22	0.45	ND	4.8	27.3	ND	26	3.81	9.5
Oct-2009	3.7	3.7	ND	13	3.88	0.58	ND	4.7	24.4	ND	30	9.1	8.9
Apr-2010	7	7	ND	ND	6.3	0.67	ND	4.9	40	ND	27	3.9	160
Oct-2010	4.4	4.4	ND	ND	3.81	0.57	ND	4.6	21.6	1.31	39	6.87	23
Apr-2011	10	10	ND	22	15.9	0.76	ND	5.6	73.2	ND	89	5.9	389
Sep-2011	14	14	ND	ND	1.98	0.36	ND	6	31.4	ND	34	15.4	54
Mar-2012	14	14	ND	ND	10	0.6	ND	5.3	58	ND	37	10.7	200
Sep-2012	10.4	10.4	ND	ND	3.42	0.562	ND	5	30.4	ND	43	12.6	54.8
Mar-2013	20.7	20.7	ND	11.7	38.1	0.717	ND	6.1	148.4	0.922 J	99	15.5	44.9
Oct-2013	17	17	0.101 J	50.6	1.89	0.277	ND	6	29.8	1.45	ND	16.8	116
Mar-2014	7.56	7.56	ND	ND	3.88	0.596	ND	6.1	33.7	0.498 J	ND	9.85	84
Oct-2014	ND	ND	ND	ND	7.73	1.2	ND	5.1	44.6	2	50	8.03	5.3

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-23***											
Apr-2015	6.52	6.52	*ND*	*ND*	7.01	1.34	*ND*	4.4	42.5	*0.879 J*	60	10.8	72.6
Nov-2015	4.28	4.28	*ND*	*ND*	6.66	1.35	*ND*	5.5	68.1	*ND*	112	17.6	224
May-2016	2.68	2.68	*ND*	*8 J*	6.53	*ND*	*ND*	5.3	56.2	*ND*	27	8.2	7.38
Oct-2016	3.68	3.68	*ND*	*ND*	6.72	*NA*	*NA*	5.2	57.5	*0.895 J*	35	8.7	3.25
May-2017	*ND*	*ND*	*ND*	*ND*	7.43	1.41	*ND*	5.2	60.9	*0.749 J*	*15 J*	8.3	2.23
Oct-2017	3.56	3.56	*ND*	*ND*	7.17	1.55	*ND*	5	72	*0.567 J*	*20 J*	8.8	3.77
May-2018	*4 J*	*ND*	*ND*	*ND*	6.7	1.5	*ND*	5.8	51.1	*ND*	31	9.5	2.28
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	6.3	1.4	*ND*	4.79	47.4	*ND*	11	9.5	5.69
May-2019	*ND*	*NA*	*ND*	*ND*	6.3	1.2	*ND*	4.84	33	*ND*	16	8.6	3.71
Oct-2019	*ND*	*NA*	*ND*	*ND*	5.3	1.5	*ND*	4.56	4.14	*ND*	18	9.7	2.37
May-2020	*ND*	*NA*	*ND*	*ND*	6.7	1.4	*ND*	5.23	55.1	*ND*	*ND*	9.6	4.03
Oct-2020	*ND*	*NA*	*ND*	*ND*	6.5	1.5	*ND*	5.01	44.3	*ND*	39	10	3.31
Apr-2021	*ND*	*NA*	*ND*	*ND*	6.9	1.6	*ND*	4.95	51.4	*ND*	23	10.1	7.33

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-23***													
Apr-1995	ND	ND	ND	ND	ND	2.2	NA	ND	ND	ND	0.57	0.05	ND	0.72	NA
Oct-1996	ND	ND	0.019	ND	ND	1.4	1.5	0.026	ND	ND	0.91	0.5	ND	ND	ND
Apr-1997	ND	ND	0.024	ND	ND	2.6	1.3	ND	ND	ND	0.26	ND	0.005	0.76	ND
Oct-1997	ND	ND	ND	ND	ND	1.08	1.06	ND	ND	ND	0.092	ND	ND	0.387	0.377
Apr-1998	ND	ND	ND	ND	ND	1.15	1.15	ND	ND	ND	0.13	ND	ND	0.421	0.396
Apr-1999	ND	ND	ND	ND	ND	1.25	1.32	ND	ND	ND	0.164	ND	ND	0.394	0.385
Oct-1999	ND	ND	ND	ND	ND	1.24	1.15	ND	ND	ND	0.113	ND	ND	0.406	0.352
Apr-2000	ND	ND	ND	ND	ND	1.42	1.26	ND	ND	0.017	0.795	ND	ND	0.91	0.389
Oct-2000	ND	ND	ND	ND	ND	1.48	1.46	ND	ND	ND	0.285	ND	ND	0.499	0.428
Apr-2001	ND	ND	ND	ND	ND	1.17	NA	ND	ND	ND	0.199	NA	ND	0.447	NA
Sep-2001	ND	ND	ND	ND	ND	1.19	1.29	ND	ND	ND	0.4	0.128	ND	0.448	0.436
Mar-2002	ND	ND	ND	ND	ND	1.27	1.11	ND	ND	ND	0.156	ND	ND	0.443	0.403
Sep-2002	ND	ND	ND	ND	ND	1.26	1.19	ND	ND	ND	0.565	ND	ND	0.482	0.4
Mar-2003	ND	ND	ND	ND	ND	1.81	1.28	ND	ND	ND	0.173	ND	ND	0.53	0.391
Oct-2003	ND	ND	0.011	ND	ND	2.04	1.56	ND	ND	ND	1.59	ND	0.003	0.656	0.434
Apr-2004	ND	ND	0.033	ND	ND	1.29	0.335	0.034	ND	0.024	13.6	ND	0.01	0.737	0.166
Oct-2004	ND	ND	0.011	ND	ND	2.22	1.22	0.011	ND	0.015	3.11	0.122	0.005	0.617	0.375
Apr-2005	ND	ND	ND	ND	ND	1.29	0.986	ND	ND	0.011	0.829	ND	ND	0.464	0.374
Oct-2005	ND	ND	ND	ND	ND	1.33	1.04	ND	ND	ND	0.527	ND	ND	0.46	0.372
Mar-2006	ND	ND	ND	ND	ND	0.683	0.497	ND	ND	ND	0.523	ND	ND	0.18	0.14
Sep-2006	ND	ND	ND	ND	ND	1.42	1.12	0.021	ND	ND	0.758	ND	0.004	0.565	0.383

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-23***													
Mar-2007	ND	ND	ND	ND	ND	0.708	0.573	0.014	ND	ND	2.05	ND	0.004	0.356	0.211
Sep-2007	ND	ND	ND	ND	ND	1.03	0.921	ND	ND	ND	0.628	ND	ND	0.414	0.358
Mar-2008	ND	ND	ND	ND	ND	1.19	0.977	0.046	ND	0.026	1.35	ND	0.006	0.505	0.349
Sep-2008	ND	ND	ND	ND	ND	1.25	1.08	ND	ND	ND	0.427	ND	ND	0.484	0.396
Mar-2009	ND	ND	ND	ND	ND	0.931	0.826	ND	ND	ND	0.243	ND	ND	0.363	0.299
Oct-2009	ND	ND	0.015	ND	ND	1.83	1.12	0.021	ND	0.014	2.17	0.19	0.011	1.1	0.382
Apr-2010	ND	ND	ND	ND	ND	1.33	1.52	ND	ND	ND	3.62	0.182	ND	0.395	0.247
Oct-2010	ND	ND	ND	ND	ND	1.89	1.8	ND	ND	ND	0.508	ND	ND	0.523	0.437
Apr-2011	ND	ND	0.02	ND	ND	1.24	0.396	0.014	ND	ND	4.31	0.121	0.007	0.689	0.135
Sep-2011	ND	ND	0.012	ND	ND	4.88	3.75	ND	ND	0.011	0.959	ND	0.002	0.771	0.469
Mar-2012	ND	ND	0.012	ND	ND	3.02	2.25	ND	ND	ND	2	0.088	0.003	0.764	0.411
Sep-2012	ND	ND	0.0158	ND	ND	3.9	3.58	0.0072 J	0.000829 J	0.003 J	1.07	0.163	0.0018 J	0.706	0.568
Mar-2013	ND	ND	0.0101	ND	ND	4.83	4.79	0.0107	0.000515 J	0.0043 J	1.31	0.365	0.0035	0.829	0.624
Oct-2013	0.001 J	0.0011 J	0.0255	0.000179 J	0.000162 J	4.9	4.8	0.0189	0.000838 J	0.0101	5.28	0.112	0.0083	1.11	0.552
Mar-2014	0.00041 J	0.001 J	0.0144	0.000128 J	ND	2.9	2.76	0.0058 J	0.0022 J	0.0049 J	3.69	0.161	0.0016 J	0.631	0.535
Oct-2014	0.000466 J	ND	0.0207	ND	ND	1.88	1.84	0.0012 J	0.0035 J	0.0023 J	0.0652	0.012 J	ND	0.811	0.775
Apr-2015	0.000661 J	0.000492 J	0.0376	0.000279 J	0.000075 J	2.33	1.49	0.0056 J	0.0027 J	0.0041 J	2.26	0.0177 J	0.0022	1.21	0.505
Nov-2015	ND	0.00087 J	0.0601	0.000503 J	0.000116 J	3.56	1.5	0.0071 J	0.0032 J	0.0077 J	5.46	0.031 J	0.0049	2.11	0.539
May-2016	ND	ND	0.0135	0.000088 J	ND	2	1.98	0.0013 J	0.0022	0.0024 J	0.0559 J	ND	ND	0.77	0.721
Oct-2016	ND	ND	0.0137	ND	ND	2.22	2.11	0.00082 J	0.0022	0.0021 J	ND	ND	ND	0.775	0.795
May-2017	ND	ND	0.0143	ND	ND	2.02	2.14	0.00095 J	0.0023	0.0026 J	ND	ND	ND	0.787	0.857
Oct-2017	ND	ND	0.0134	0.000084 J	ND	2.17	2.3	ND	0.0025	0.004	ND	ND	ND	0.824	0.893
May-2018	0.000055 J	ND	0.015	0.0001 J	0.000053 J	2.3	2.2	0.0072	0.005	0.0079	0.078	0.023	0.00004 J	0.91 J	0.85 J
Nov-2018	ND	ND	0.011	0.000097 J	0.000061 J	2.4	2.4	0.0047 J	0.0028	0.0052	0.13	0.022	0.00011 JB	0.86 J	0.88 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-23***													
May-2019	*ND*	*ND*	0.01	*ND*	*ND*	2.2	2.2	0.016	0.0068	0.0092	0.26	0.19	*ND*	*ND*	*ND*
Oct-2019	*0.00011 J*	*ND*	0.01	*0.00011 J*	*0.00026 J*	2.4	2.4	*0.0069 J*	0.0032	0.014	*0.059 J*	0.023	*0.000074 J*	0.88	*0.87 J*
May-2020	*0.00007 J*	*ND*	0.012	*0.000059 J*	*ND*	2.4	2.3	0.046	0.0055	0.015	0.39	0.16	*ND*	0.86	*0.85 J*
Oct-2020	*0.00032 J*	*ND*	0.015	*ND*	*ND*	2.5	2.5	*0.017 J*	0.0042	*ND*	0.12	0.055	*ND*	0.91	*0.91 J*
Apr-2021	*ND*	*ND*	0.014	*ND*	*ND*	2.5	2.4	0.006	*0.0036 J*	0.0096	0.076	*0.062 J*	*ND*	0.93	0.97

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-23*												
Apr-1995	0.03	NA	ND	ND	1.2	NA	ND	0.02	3.1	NA	ND	ND	0.07
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	1.7	1.8	ND	ND	0.099
Apr-1997	0.011	ND	ND	ND	2.1	2.3	ND	ND	1.2	1.9	ND	ND	0.073
Oct-1997	ND	ND	ND	ND	0.907	1.32	ND	ND	1.33	1.38	ND	ND	0.015
Apr-1998	ND	ND	ND	0.016	ND	ND	ND	ND	1.61	1.4	ND	ND	0.013
Apr-1999	ND	ND	NA	ND	ND	1.12	ND	ND	8.54	8.47	ND	ND	0.027
Oct-1999	ND	0.01	NA	ND	0.759	ND	ND	ND	1.51	1.37	ND	ND	0.016
Apr-2000	ND	ND	NA	ND	ND	ND	ND	ND	2.26	2.21	ND	ND	0.044
Oct-2000	ND	ND	NA	ND	0.712	0.577	ND	ND	1.42	1.37	ND	ND	0.023
Apr-2001	ND	NA	NA	ND	1.66	NA	ND	ND	1.53	NA	ND	ND	0.016
Sep-2001	ND	ND	NA	ND	0.9	1.09	ND	ND	1.72	1.67	ND	ND	0.019
Mar-2002	ND	ND	NA	ND	0.948	0.868	ND	ND	2.74	1.78	ND	ND	0.02
Sep-2002	ND	ND	NA	ND	0.833	ND	ND	ND	1.68	1.65	ND	ND	0.022
Mar-2003	ND	ND	NA	ND	1.42	0.569	ND	ND	3.83	3.32	ND	ND	0.035
Oct-2003	ND	0.012	NA	0.012	ND	ND	ND	ND	2.35	1.61	ND	ND	0.122
Apr-2004	0.01	ND	ND	0.017	1.35	0.73	ND	ND	15.1	16	ND	0.034	0.081
Oct-2004	ND	ND	ND	ND	1.55	0.598	ND	ND	2.9	2.08	ND	ND	0.064
Apr-2005	ND	ND	ND	ND	0.83	0.69	ND	ND	6.96	6.52	ND	ND	0.082
Oct-2005	ND	ND	ND	ND	0.686	0.545	ND	ND	2.05	1.3	ND	ND	0.039
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	6.12	7.09	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.75	0.694	ND	ND	1.7	1.43	ND	ND	0.039
Mar-2007	ND	ND	ND	ND	0.74	0.512	ND	ND	21.4	21.3	ND	ND	0.037

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-23***												
Sep-2007	ND	ND	ND	ND	0.873	0.671	ND	ND	1.82	1.79	ND	ND	0.016
Mar-2008	ND	ND	ND	ND	0.915	0.793	ND	ND	1.84	1.58	ND	ND	0.058
Sep-2008	ND	ND	ND	ND	0.706	0.652	ND	ND	1.49	1.4	ND	ND	0.026
Mar-2009	ND	ND	ND	ND	0.775	0.721	ND	ND	2.38	2.36	ND	ND	0.023
Oct-2009	0.016	ND	ND	ND	0.722	ND	ND	ND	1.67	1.51	ND	ND	0.12
Apr-2010	ND	ND	ND	ND	0.752	0.579	ND	ND	5.28	5.44	ND	ND	0.036
Oct-2010	ND	ND	ND	ND	0.735	0.653	ND	ND	2.03	1.97	ND	ND	0.041
Apr-2011	0.011	ND	ND	ND	0.801	ND	ND	ND	13.3	12.4	ND	0.013	0.066
Sep-2011	0.013	ND	ND	0.013	0.985	0.574	ND	ND	2.52	2.06	ND	ND	0.042
Mar-2012	0.014	ND	ND	ND	0.68	ND	ND	ND	10.5	10.5	ND	ND	0.057
Sep-2012	0.0157	0.0131	ND	0.0032 J	1	0.679	ND	ND	1.84	1.85	ND	ND	0.0594
Mar-2013	0.024	0.0208	0.000095 J	0.0051 J	1.57	1.58	ND	0.000036 J	26	26.8	ND	ND	0.111
Oct-2013	0.0286	0.0171	ND	0.0058 J	0.933	0.397 J	ND	ND	1.32	1.55	0.000312 J	0.0149	0.134
Mar-2014	0.026	0.0181	ND	0.0101 J	0.856	0.752	ND	0.000044 J	1.57	1.65	ND	0.0063 J	0.0335
Oct-2014	0.0115	0.0125	ND	0.0051 J	0.936	0.923	ND	ND	5	5.16	ND	ND	0.0084 J
Apr-2015	0.0492	0.029	ND	0.0055 J	1.25	1.02	ND	ND	6.82	6.98	ND	0.0034 J	0.014
Nov-2015	0.0908	0.0381	ND	0.0062 J	1.65	0.943	0.0014 J	ND	7.18	7.04	ND	0.0088 J	0.0284
May-2016	0.0427	0.0402	ND	0.0036 J	0.987	1	ND	ND	4.26	4.26	ND	ND	0.0144 J
Oct-2016	0.0339	0.0342	ND	0.0038 J	0.988	1.02	ND	ND	3.95	4.07	ND	ND	0.0099 J
May-2017	0.0212	0.0215	ND	0.0037 J	0.923	1.02	ND	ND	3.98	4.11	ND	ND	0.0089 J
Oct-2017	0.0189	0.0193	ND	0.0035 J	0.971	1.06	ND	ND	4.17 J-	4.32	ND	ND	0.0101 J
May-2018	0.019	0.017	ND	0.0092	1.1 J	ND	0.0006 JB	ND	4.2 J	4.2 J	ND	0.0035	0.011
Nov-2018	0.02	0.017	ND	0.0069	1.2 J	1.6 J	0.00012 J	ND	2.4 J	4 JB	ND	0.0026	0.011
May-2019	0.024	0.021	ND	0.022	ND	ND	ND	ND	ND	ND	ND	0.0034	0.012

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-23***												
Oct-2019	0.019	0.016	*ND*	0.0094	*1.1 J*	*1.1 J*	*ND*	*ND*	*3.2 J*	*3.2 J*	*ND*	*ND*	0.022
May-2020	0.032	0.028	*ND*	0.055	*ND*	*1.4 J*	*ND*	*ND*	*3.3 J*	*3.1 J*	*ND*	0.012	0.0097
Oct-2020	0.019	0.016	*ND*	0.026	*ND*	*ND*	*ND*	*ND*	*2.5 J*	*2.9 J*	*ND*	*0.0025 J*	*ND*
Apr-2021	0.014	0.012	*0.00006 J*	0.014	1.1	0.96	*ND*	*ND*	3.9	3.4	*ND*	*ND*	*0.0068 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-23*																
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-23*																
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1 J	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-23*																
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-23***															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-23***															
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.44 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-23***															
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.189 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-23***															
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Feb-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-23***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*0.66 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*0.26 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-23***															
May-2017	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.292 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-24***											
Apr-1995	47.4	31	ND	30.1	9.4	ND	ND	8.8	125	7	77	17.9	83.9
Apr-1997	ND	2	ND	ND	7	0.17	ND	NA	NA	0.1	51	12	26
Oct-1997	3	3	0.26	ND	7.44	ND	ND	5.58	40.5	ND	16	ND	23
Apr-1998	ND	ND	0.23	ND	5.44	0.14	ND	5.65	47.7	ND	10	7.4	9.8
Apr-1999	ND	ND	0.46	ND	24.7	0.125	ND	5.03	39.3	ND	37	6	3.7
Oct-1999	ND	ND	0.08	ND	6.98	0.299	ND	5.39	36.8	ND	32	7.2	6.7
Apr-2000	5	5	0.61	ND	7.27	0.227	ND	5.84	33	ND	28	10	1.6
Oct-2000	7.9	NA	ND	ND	5.45	ND	ND	5.18	29.1	5	28	6.34	1.13
Apr-2001	4.1	NA	0.26	ND	6.18	ND	ND	NA	NA	ND	25	8.5	0.46
Sep-2001	2	2	ND	ND	9.87	1.38	ND	4.81	42	38.6	38	6.77	1
Mar-2002	3.6	3.6	ND	ND	9.49	ND	ND	5.1	49	ND	37	7.42	0.73
Sep-2002	4	4	ND	ND	9.42	ND	ND	6.1	46.1	ND	24	8.25	2.6
Mar-2003	3.6	3.6	ND	ND	7.39	0.256	ND	5.1	45	ND	50	8.22	1.8
Oct-2003	4.2	4.2	ND	ND	7.42	0.24	ND	4.6	51.7	ND	17	9.13	0.79
Apr-2004	4.2	4.2	ND	ND	8.28	0.174	ND	4.7	51.2	ND	45	13.1	1.1
Oct-2004	4.2	4.2	ND	ND	9.13	0.223	ND	4.85	47.8	ND	42	9.83	0.73
Apr-2005	18	18	ND	ND	10.2	0.25	ND	5.5	66.4	ND	65	13.6	2.6
Oct-2005	5	5	ND	ND	6.25	0.28	ND	4.4	38.4	ND	38	6.16	0.5
Mar-2006	4.9	4.9	ND	ND	7.6	0.28	ND	5.6	60.3	1.16	42	5.83	1
Sep-2006	4.3	4.3	ND	ND	6.63	0.25	ND	4.9	43	1.07	37	6.71	0.26
Mar-2007	4.7	4.7	ND	ND	8.12	0.2	ND	4.7	45.9	ND	ND	7.64	0.18
Sep-2007	5.3	5.3	ND	ND	8.37	0.14	ND	5.6	41.8	ND	57	7.71	0.95
Mar-2008	16	16	ND	ND	21.1	1.01	ND	4.8	44.6	6.71	37	11.9	0.85
Sep-2008	6.3	6.3	ND	ND	9.79	0.09	ND	4.8	45.9	1.15	34	8.4	0.81
Mar-2009	5.8	5.8	ND	ND	15.8	0.07	ND	4.7	73.6	1.67	43	13.4	1.8
Oct-2009	7	7	ND	ND	12.5	0.08	ND	4.7	60.3	2.3	64	11.7	0.73
Mar-2010	7.5	7.5	0.44	11.8	13.9	0.07	ND	4.82	75	4.01	62	12	2.8
Oct-2010	6	6	ND	ND	12.2	ND	ND	4.6	59.2	4.05	37	11.6	0.57
Apr-2011	7.1	7.1	ND	ND	11.4	0.07	ND	4.5	62.6	3.6	66	10.4	0.48
Sep-2011	7.1	7.1	ND	ND	11.7	0.08	ND	4.7	57.6	3.44	52	12	0.59
Mar-2012	6.8	6.8	ND	ND	12	0.09	ND	4.1	61.4	3.98	46	12.3	0.44
Sep-2012	6	6	ND	ND	11.9	0.125	ND	3.6	59.3	3.23	46	12.1	0.157
Mar-2013	5.84	5.84	ND	ND	12.1	0.135	ND	4.9	60.9	3.23	51	9.7	0.075 J
Oct-2013	6.76	6.76	ND	ND	13	0.109	ND	5.7	62.3	3.7	46	13.5	1.15
Mar-2014	6.52	6.52	ND	ND	13.5	0.138	ND	5	66.7	3.68	460	13.4	0.127
Oct-2014	ND	ND	ND	ND	13.3	0.137	ND	4.9	67.8	4.81	34	14.7	0.356

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-24***											
Apr-2015	7.44	7.44	*ND*	*ND*	14.7	0.0722	*ND*	3.9	66	4.46	48	15.2	0.093 J
Nov-2015	4.52	4.52	*ND*	*6 J*	14.7	0.0738	*ND*	5	94.1	5.42	55	14.9	0.09 J
May-2016	4.4	4.4	*ND*	*ND*	13.7	0.0732	*ND*	5	89.7	4.15	47	14.7	0.474
Oct-2016	5.48	5.48	*ND*	*ND*	14.9	*NA*	*NA*	4.9	97.2	4.7	51	14.2	0.263
May-2017	3.56	3.56	*ND*	*ND*	14.7	0.334	*ND*	4.9	105.5	5.01	*21 J*	15.5	0.94
Oct-2017	2	2	*0.144 J*	*ND*	15.2	0.408	*ND*	5.1	110.4	3.28	53	16.2	4.36
May-2018	*4 J*	*ND*	*ND*	*7.9 J*	14.5	0.41	*ND*	5.3	97.5	*5.5 J*	43	17.4	1.82
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	16.5	0.73	*ND*	4.58	86.7	*7.1 J*	47	19.4	3.6
May-2019	*ND*	*NA*	*ND*	*ND*	19.8	0.61	*ND*	4.56	78.3	*ND*	61	21.2	3.54
Oct-2019	*4 J*	*NA*	*ND*	*ND*	18.2	0.63	*ND*	4.21	102.8	*8.4 J*	104	23.9	1.51
May-2020	*ND*	*NA*	*ND*	*ND*	16.1	0.25	*ND*	4.29	89.6	*9.2 J*	30	19.2	2.62
Oct-2020	*2 J*	*NA*	*ND*	*ND*	15.8	0.28	*ND*	4.47	82.2	8.2	38	19.8	1.8
Apr-2021	*ND*	*NA*	*ND*	*ND*	24.4	1.1	*ND*	4.61	129.3	*ND*	72	22.2	5.99

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24***													
Apr-1995	ND	ND	ND	ND	ND	43.2	NA	0.01	ND	ND	1.7	0.07	ND	2.4	NA
Oct-1996	ND	ND	0.026	ND	ND	1.9	1.6	ND	ND	ND	0.22	ND	ND	0.87	0.71
Apr-1997	ND	ND	0.018	ND	ND	1.4	1.8	ND	ND	ND	ND	ND	ND	0.85	1.1
Oct-1997	ND	ND	0.019	ND	ND	1.36	1.39	ND	ND	ND	0.201	ND	ND	0.886	0.897
Apr-1998	ND	ND	0.021	ND	ND	1.44	1.41	ND	ND	ND	0.198	ND	ND	0.918	0.908
Apr-1999	ND	ND	0.015	ND	ND	1.16	1.19	ND	ND	ND	ND	ND	ND	0.747	0.759
Oct-1999	ND	ND	0.018	ND	ND	1.28	1.2	ND	ND	ND	0.085	0.058	ND	0.836	0.776
Apr-2000	ND	ND	0.018	ND	ND	2.77	1.23	0.021	ND	ND	3.87	0.571	ND	0.828	0.694
Oct-2000	ND	ND	0.014	ND	ND	1.23	1.23	ND	ND	ND	0.053	ND	ND	0.792	0.81
Apr-2001	ND	ND	0.017	ND	ND	2.03	NA	ND	ND	ND	1.27	NA	ND	0.842	NA
Sep-2001	ND	ND	0.016	ND	ND	1.29	1.41	ND	ND	ND	0.175	0.111	ND	0.863	0.9
Mar-2002	ND	ND	0.02	ND	ND	1.44	1.44	ND	ND	ND	0.132	0.121	ND	0.929	0.919
Sep-2002	ND	ND	0.022	ND	ND	1.68	1.58	ND	ND	ND	0.251	0.189	ND	0.987	0.97
Mar-2003	ND	ND	0.02	ND	ND	1.73	1.41	ND	ND	ND	0.185	0.083	ND	0.945	0.943
Oct-2003	ND	ND	0.022	ND	ND	1.87	1.47	ND	ND	ND	0.161	0.089	ND	1.08	1.01
Apr-2004	ND	ND	0.027	ND	ND	3.01	1.85	ND	ND	ND	1.65	0.177	ND	1.36	1.25
Oct-2004	ND	ND	0.025	ND	ND	1.85	1.84	ND	ND	ND	0.379	0.275	ND	1.27	1.26
Apr-2005	ND	ND	0.024	ND	ND	3.6	1.85	ND	ND	ND	4.47	1.07	ND	1.12	0.975
Oct-2005	ND	ND	0.017	ND	ND	1.15	1.11	ND	ND	ND	0.199	0.112	ND	0.801	0.773
Mar-2006	ND	ND	0.015	ND	ND	1.08	0.969	ND	ND	ND	ND	ND	ND	0.765	0.723
Sep-2006	ND	ND	0.017	ND	ND	1.24	1.23	ND	ND	ND	0.077	0.051	ND	0.876	0.921

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24***													
Mar-2007	ND	ND	0.022	ND	ND	1.33	1.36	ND	ND	0.118 J	ND	ND	ND	1.05	1.06
Sep-2007	ND	ND	0.02	ND	ND	1.42	1.29	ND	ND	ND	0.066	0.052	ND	1.01	0.956
Mar-2008	ND	0.002	0.024	ND	ND	2.9	1.93	ND	ND	ND	3.09	1.41	ND	1.13	0.988
Sep-2008	ND	ND	0.022	ND	ND	1.43	1.37	ND	ND	ND	0.128	0.096	ND	1.17	1.13
Mar-2009	ND	ND	0.036	ND	ND	2.39	2.32	ND	ND	ND	0.103	0.074	ND	1.8	1.76
Oct-2009	ND	ND	0.033	ND	ND	2.1	1.93	ND	ND	ND	0.189	0.137	ND	1.56	1.45
Mar-2010	ND	ND	0.04	ND	ND	2.08	1.85	ND	ND	ND	0.079	ND	ND	1.66	1.47
Oct-2010	ND	ND	0.027	ND	ND	1.99	1.98	ND	ND	ND	ND	ND	ND	1.62	1.63
Apr-2011	ND	ND	0.033	ND	ND	1.78	1.74	ND	ND	ND	0.064	ND	ND	1.45	1.42
Sep-2011	ND	ND	0.034	ND	ND	2.07	2.03	ND	ND	ND	ND	ND	ND	1.66	1.61
Mar-2012	ND	ND	0.039	ND	ND	1.95	1.86	ND	ND	ND	ND	ND	ND	1.8	1.73
Sep-2012	ND	ND	0.0356	0.000072 J	ND	2.02	2.16	ND	0.0038 J	0.0027 J	0.0281 J	0.0308 J	ND	1.71	1.79
Mar-2013	ND	ND	0.0295	ND	ND	1.69	2.07	ND	0.0031 J	0.002 J	0.0085 J	0.007 J	0.0013 J	1.33	1.65
Oct-2013	ND	ND	0.0423	ND	ND	2.28	2.19	0.0025 J	0.0045 J	0.0021 J	ND	ND	ND	1.9	1.79
Mar-2014	ND	ND	0.0438	ND	0.000104 J	2.35	2.36	0.0012 J	0.0039 J	0.0021 J	0.041 J	0.0637	ND	1.84	1.82
Oct-2014	0.000819 J	ND	0.0449	ND	0.000131 J	2.43	2.4	ND	0.0047 J	0.0033 J	0.0107 J	0.0112 J	ND	2.1	2.07
Apr-2015	0.000837 J	ND	0.0467	ND	0.000153 J	2.5	2.56	ND	0.0049 J	0.0027 J	0.371	0.101	ND	2.19	2.21
Nov-2015	ND	ND	0.0444	ND	0.000201 J	2.45	2.52	ND	0.0049 J	0.0022 J	ND	ND	ND	2.13	2.2
May-2016	ND	ND	0.0444	0.000079 J	ND	2.34	2.37	ND	0.0052	0.002 J	ND	ND	ND	2.15	2.17
Oct-2016	ND	ND	0.0422	ND	ND	2.44	2.37	ND	0.0051	0.0022 J	ND	ND	ND	1.98	2.16
May-2017	ND	ND	0.0461	ND	ND	2.42	2.49	0.00069 J	0.0054	0.0022 J	ND	ND	ND	2.29	2.39
Oct-2017	ND	ND	0.0494	0.000072 J	ND	2.64	2.59	ND	0.0058	0.0024 J	ND	ND	ND	2.34	2.34
May-2018	0.000084 J	ND	0.053	0.000074 J	0.00015 J	2.8	2.6	0.0025 J	0.0056	0.003 B	ND	ND	0.000018 J	2.5	2.3
Nov-2018	ND	ND	0.06	0.000089 J	0.00017 J	3.1	3	0.0024 J	0.0062	0.0038	ND	ND	0.00014 JB	2.8	2.9

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24***													
May-2019	*ND*	*ND*	0.068	*ND*	*ND*	3.4	3.6	*ND*	0.0075	0.0031	*ND*	*ND*	*ND*	3.1	3.3
Oct-2019	*0.00011 J*	*ND*	0.072	*0.00012 J*	*0.00044 J*	3.8	3.7	*0.0034 J*	0.0082	0.0067	*ND*	*ND*	*0.000058 J*	3.5	3.4
May-2020	*0.000059 J*	*ND*	0.059	*ND*	*ND*	3.4	3.1	*0.0054 J*	0.0069	0.0027	*ND*	*ND*	*ND*	3.2	3
Oct-2020	*ND*	*ND*	0.045	*ND*	*ND*	3.2	3.1	*0.0034 J*	0.0054	*ND*	*ND*	*ND*	*ND*	2.9	2.9
Apr-2021	*ND*	*ND*	0.074	*ND*	*ND*	3.5	3.5	*ND*	0.0086	*0.0049 J*	*ND*	*ND*	*ND*	3.3	3.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-24*												
Apr-1995	0.1	NA	ND	ND	4.6	NA	ND	ND	2.8	NA	ND	ND	0.07
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	2.6	2.7	ND	ND	0.023
Apr-1997	ND	0.011	**0.0023**	ND	ND	1.3	ND	ND	2.5	2.6	ND	ND	ND
Oct-1997	ND	ND	0.0007	ND	1.47	1.28	ND	ND	2.09	2.09	ND	ND	0.013
Apr-1998	0.01	0.011	0.0006	ND	1.13	ND	ND	ND	2.19	2.18	ND	ND	0.011
Apr-1999	ND	ND	NA	ND	ND	1.44	ND	ND	1.94	1.9	ND	ND	ND
Oct-1999	ND	ND	NA	ND	1.03	1.26	ND	ND	2.14	1.97	ND	ND	ND
Apr-2000	0.032	0.011	NA	ND	0.764	ND	ND	ND	2.49	2.14	ND	ND	ND
Oct-2000	ND	ND	NA	ND	0.887	0.986	ND	ND	2.27	2.33	ND	ND	ND
Apr-2001	0.017	NA	NA	ND	1.51	NA	ND	ND	2.57	NA	ND	ND	ND
Sep-2001	0.011	0.01	NA	ND	0.638	2.07	ND	ND	2.97	2.99	ND	ND	ND
Mar-2002	0.011	0.011	NA	ND	1.65	1.54	ND	ND	3.09	2.93	ND	ND	ND
Sep-2002	0.012	0.011	NA	ND	1.06	1.12	ND	ND	3.57	3.34	ND	ND	ND
Mar-2003	0.011	0.01	NA	ND	2.14	1.47	ND	ND	3.11	3.07	ND	ND	ND
Oct-2003	0.012	ND	NA	ND	0.645	0.609	ND	ND	4.39	3.25	ND	ND	0.015
Apr-2004	0.026	0.015	0.0012	ND	2.08	1.14	ND	ND	3.57	3.42	ND	ND	ND
Oct-2004	0.016	0.015	0.0007	ND	1.48	1.3	ND	ND	3.6	3.55	ND	ND	ND
Apr-2005	0.036	0.016	0.0002	ND	1.17	1.08	ND	ND	3.72	3.35	ND	ND	ND
Oct-2005	ND	ND	0.0002	ND	0.827	0.771	ND	ND	2.84	2.96	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.774	0.75	ND	ND	3.4	3.19	ND	ND	ND
Sep-2006	ND	ND	0.0002	ND	0.908	1.02	ND	ND	3.02	3.22	ND	ND	ND
Mar-2007	ND	ND	0.0012	0.057 J	1.02	1.04	ND	ND	3.14	3.36	ND	ND	0.102 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-24*												
Sep-2007	ND	ND	0.0016	ND	1.09	1.03	ND	ND	3.73	3.74	ND	ND	ND
Mar-2008	0.027	0.017	0.0008	ND	1.2	1.12	ND	ND	3.85	3.24	ND	ND	ND
Sep-2008	0.012	0.012	0.0003	ND	0.999	0.976	ND	ND	3.75	3.75	ND	ND	ND
Mar-2009	0.02	0.019	0.0008	ND	1.47	1.42	ND	ND	5.32	5.22	ND	ND	ND
Oct-2009	0.018	0.016	0.0002	ND	1.15	1.04	ND	ND	4.82	4.62	ND	ND	ND
Mar-2010	0.018	0.016	ND	ND	1.44	1.31	ND	ND	5.88	6.35	ND	ND	ND
Oct-2010	0.018	0.019	ND	ND	1.3	1.3	ND	ND	7.13	7.13	ND	ND	ND
Apr-2011	0.016	0.016	0.0002	ND	1.03	0.997	ND	ND	6.32	6.2	ND	ND	ND
Sep-2011	0.018	0.018	ND	ND	1.25	1.22	ND	ND	6.48	6.42	ND	ND	ND
Mar-2012	0.02	0.019	ND	ND	1.25	1.2	ND	ND	6	5.87	ND	ND	ND
Sep-2012	0.0197	0.0208	ND	0.0044 J	1.14	1.23	ND	ND	5.64	5.82	ND	ND	0.0074 J
Mar-2013	0.0165	0.0195	0.000081 J	0.0035 J	0.848	1.07	ND	ND	4.31	5.26	ND	ND	0.0123
Oct-2013	0.0225	0.0215	ND	0.0049 J	1.15	1.09	ND	ND	6.2	5.73	0.0004 J	0.000639 J	0.0189
Mar-2014	0.0238	0.0219	ND	0.0049 J	1.15	1.15	ND	ND	5.94	5.79	0.000109 J	0.000843 J	0.0051 J
Oct-2014	0.0236	0.0234	0.000564	0.0054 J	1.31	1.29	ND	ND	7.18	7.14	ND	ND	0.0085 J
Apr-2015	0.025	0.0252	0.000477	0.0055 J	1.24	1.27	ND	ND	7.05	7.19	ND	ND	0.0112
Nov-2015	0.0252	0.0259	0.000072 J	0.0056 J	1.26	1.31	ND	ND	7.23	7.46	ND	ND	0.0126
May-2016	0.0243	0.024	0.00015 J	0.005	1.24	1.22	ND	ND	7.02	7.03	ND	ND	0.0076 J
Oct-2016	0.0232	0.0284	0.00036	0.0059	1.15	1.25	ND	ND	6.59	7.01	ND	ND	0.0064 J
May-2017	0.0264	0.0264	0.00046	0.0061	1.18	1.24	ND	ND	6.51	6.79	ND	ND	0.008 J
Oct-2017	0.0278	0.0283	0.00089	0.0051	1.27	1.33	ND	ND	6.67 J-	6.66	ND	ND	0.0078 J
May-2018	0.026	0.027	0.00076	0.0066	ND	ND	0.0012 JB	ND	7.9	7.3	ND	0.0044	0.01
Nov-2018	0.038	0.032	0.00057	0.0071	1.4 J	1.9 J	0.00019 J	ND	6.5	8.1 B	ND	0.003	0.011
May-2019	0.041	0.041	**0.0023**	0.0084	ND	ND	ND	ND	7.9	8.2	ND	0.0042 B	0.011

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-24***												
Oct-2019	0.041	0.04	0.0019 M1	0.0083	*1.5 J*	*1.5 J*	*ND*	*ND*	8.8	8.7	*ND*	*ND*	0.02
May-2020	0.038	0.35	0.00039	0.0074	*ND*	*ND*	*0.00036 J*	*ND*	7.7	7.4	*ND*	0.011	0.0082
Oct-2020	0.038	0.037	0.00042	0.0056	*ND*	*1.1 J*	*ND*	*ND*	7.3	6.7	*ND*	*0.00082 J*	*ND*
Apr-2021	0.044	0.045	0.00057	0.01	1.3	1.2	*ND*	*ND*	10.1	9.9	*ND*	*ND*	0.01

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24*																
Oct-1996	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	0.6 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	1.5	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7 J	ND
Apr-2004	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24*																
Mar-2007	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	5.8	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Jun-2009	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.8	ND
Mar-2010	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	6.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	6.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	4.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	5.59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	6.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	7.35	ND	ND	ND	ND	ND	ND	0.27 J	0.55 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	6.96	ND	ND	ND	ND	ND	ND	0.27 J	0.47 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	6.14	ND	ND	ND	ND	ND	ND	0.25 J	0.44 J	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	7.87	ND	ND	ND	ND	ND	ND	0.29 J	0.32 J	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	6.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	6.7	0.1 J	ND	ND	ND	ND	0.1 J	0.3 J	0.3 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	7	0.1 J	ND	ND	ND	ND	0.1 J	0.2 J	0.3 J	1.4 J	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	0.1 J	0.2 J	0.3 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24*																
Oct-2017	*ND*	*ND*	*ND*	*ND*	4.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.3 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	3.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	5.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	5.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	2.07	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.126 J*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24***															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	9.5	4.4
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	9	1
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	5	6.5
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	5	2.4
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	0.9 J	NA	NA	NA	ND	0.8 J
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	1.3	1
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	1.9	NA	ND	NA	2	2
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	7.1	1.6
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	4.8	2
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	5.8	2.4
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	5.7	2.3
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	9.7	5.3
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	4.8	2.8
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	12	7.4
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3	ND	ND	ND	15	7.8
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	6.2	6.4
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2	ND	ND	ND	6.6	7.4
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	6	2.1
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	7.6	2.4
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	7.6	1.6

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24***															
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	7.2	2.5
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	15.2	2.3
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	7.2	2.9
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	10.7	7.4
Mar-2009	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	ND	ND	ND	17.6	10.4
Jun-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	17.4	8
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	9.7	6.1
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4 J	12.2
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND	ND	ND	24.1	10
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	ND	ND	ND	ND	10
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	24	12.3
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	20.1	11.3
Sep-2012	0.27 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.39	ND	ND	ND	10.4	6.77
Mar-2013	0.28 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	12.4	9.38
Oct-2013	0.49 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.41 J,B	4.95	ND	ND	ND	11.8	10.7
Mar-2014	0.47 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	ND	ND	ND	14.9 J	10.1
Oct-2014	0.37 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.59 J,B	3.92	ND	ND	ND	9.73	7.49
Apr-2015	0.61 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.68	ND	ND	ND	9.67	9.41
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.4	ND	ND	ND	20.3 J	8.2
May-2016	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	3.5	ND	ND	ND	9.4	9.3
Oct-2016	0.3 J	ND	ND	ND	ND	ND	ND	ND	0.1 J	0.2 J	0.8 J	2.3	ND	ND	ND	9.2	9.9
May-2017	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J,B	ND	1.7	ND	ND	ND	5.8	5.6

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24***															
Oct-2017	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	1.5	*ND*	*ND*	*ND*	5.1	4.9
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	9.2	4.7
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*0.86 JN3*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2 CL	2.2 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.7	2.1
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	7.3	4.5
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	9	4.7
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.282 J*	*ND*	*ND*	*ND*	*1.54 J*	*1.49 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24***															
Oct-1996	ND	ND	NA	NA	ND	NA	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	2.5	ND	ND	ND	ND	0.9 J	0.7 J	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	1.9	ND	ND	ND	ND	0.8 J	0.7 J	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	0.7 J	ND	ND	NA	NA	ND	0.5 J	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	0.6 J	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	1.6	ND	ND	NA	NA	0.6 J	0.9 J	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	2.1	ND	ND	ND	ND	0.6 J	0.6 J	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	2.8	ND	ND	ND	ND	0.7 J	0.7 J	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	2.7	ND	ND	ND	ND	0.6 J	0.6 J	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	4.4	ND	ND	ND	ND	1.2	1.2	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	2.8	ND	ND	ND	ND	0.6 J	0.6 J	ND	ND	NA
Oct-2003	ND	ND	ND	NA	1.1	ND	ND	4.6	ND	ND	ND	ND	1.6	1.1	ND	ND	NA
Apr-2004	ND	ND	ND	NA	2.3	ND	ND	5	ND	ND	ND	ND	1.8	1.1	ND	0.9 J	NA
Oct-2004	ND	ND	ND	NA	1.6	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	0.6 J	ND	ND	4.2	ND	ND	ND	ND	1.5	1.1	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	3.4	ND	ND	ND	ND	0.8 J	0.7 J	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	ND	0.8 J	0.9 J	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-24*															
Sep-2006	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	3.6	ND	ND	ND	ND	1.2	0.9 J	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	3.7	ND	ND	ND	ND	1.5	1.9	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	1.1	1.1	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	5	ND	ND	ND	ND	3.1	5.1	ND	1.1	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	**9.2 C**	ND	ND	ND	ND	**8.4 C**	ND	ND	ND	NA
Jun-2009	ND	ND	ND	ND	ND	ND	ND	**8**	ND	ND	ND	ND	**5.9**	1.1	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	**6**	ND	ND	ND	ND	4.1	1 J	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	**11.7**	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	**11**	ND	ND	ND	ND	ND	1.5	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	**11.8**	ND	ND	ND	ND	**7.2**	1.3	ND	1.4	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	**11.8**	ND	ND	ND	ND	**7.8**	1.4	ND	ND	NA
Mar-2012	ND	ND	ND	ND	0.5 J	ND	ND	**11**	ND	ND	ND	ND	**7.1**	1.3	ND	0.8 J	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	**8.9**	ND	ND	ND	ND	**5.44**	1.04	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	**7.14**	ND	ND	ND	ND	**5.73**	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.16 J	ND	ND	ND	**8.91**	ND	ND	ND	ND	**8.32**	1.08	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	**7.46**	ND	ND	ND	ND	**7.33**	0.88 J	ND	ND	ND
Oct-2014	ND	ND	ND	0.13 J	ND	ND	ND	**6.5**	ND	ND	ND	ND	**5.75**	0.76 J	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	**6.29**	ND	ND	ND	ND	**6.48**	0.69 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	**5.1**	ND	ND	ND	ND	**5.2**	0.6 J	ND	ND	ND
May-2016	ND	ND	ND	0.1 J	0.3 J	ND	ND	4.6	ND	ND	ND	ND	4.2	0.6 J	ND	0.2 J	ND
Oct-2016	ND	ND	ND	0.1 J	0.3 J	ND	ND	3.6	ND	ND	ND	ND	3.1	0.6 J	ND	0.2 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24***															
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	1.9	*0.1 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	1.7	*0.3 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2 B	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	2.2	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*0.98 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.106 J*	*ND*	*ND*	*ND*	*0.434 J*	*ND*	*ND*	*ND*	*ND*	*0.326 J*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-24A***											
Apr-1995	33	33	ND	94.6	5	ND	ND	5.4	472	137	278	19.3	136
Apr-1997	ND	4	ND	ND	16	ND	ND	NA	NA	16	79	21	10
Oct-1997	ND	ND	0.51	ND	18	ND	ND	5.1	125.9	9.64	70	26	6.2
Apr-1998	ND	ND	0.3	ND	11.1	0.19	ND	4.71	119.6	21.7	55	24	4
Apr-1999	ND	ND	1.3	ND	12	ND	ND	4.29	264	47.6	170	68	3
Oct-1999	ND	ND	0.43	ND	19.6	ND	ND	4.67	174	43.3	120	46	3.5
Apr-2000	ND	ND	0.92	ND	16.4	ND	ND	4.55	143	55.3	82	35	1.4
Oct-2000	ND	NA	0.75	15	13.1	ND	ND	4.27	154	43.4	102	30.6	0.91
Apr-2001	ND	NA	0.9	13	11	ND	ND	NA	NA	40	96	32	2
Sep-2001	ND	ND	0.48	ND	13.8	ND	ND	4.06	159	35.5	91	23.5	0.64
Mar-2002	ND	ND	0.64	ND	14.6	ND	ND	4.5	180	44.4	116	26.1	2.7
Sep-2002	ND	ND	0.69	ND	11.1	ND	ND	4.4	155.6	43.6	101	25.7	0.9
Mar-2003	ND	ND	0.78	ND	17.9	ND	ND	4.3	163.9	43.5	100	30	1.4
Oct-2003	ND	ND	0.31	12	12.2	0.086	ND	4.3	133.3	26.3	45	20.8	0.8
Apr-2004	1.2	1.2	0.41	14	11.8	ND	ND	4.4	106.5	29.6	96	18.2	1.8
Oct-2004	2	2	0.34	19	10.4	ND	ND	4.56	96.9	25.9	110	18.6	1.7
Apr-2005	4.3	4.3	0.55	17	8.3	ND	ND	4.7	107.4	36.4	90	26.3	2.1
Oct-2005	9.5	9.5	0.48	ND	9.29	ND	ND	4.4	108.9	32.9	76	25.4	2.7
Mar-2006	13	13	ND	ND	8.34	ND	ND	4.8	124.6	38.8	92	31.9	2.8
Sep-2006	4.8	4.8	0.46	ND	8.04	ND	ND	4.7	104.9	31.9	78	29.1	1.6
Mar-2007	7.6	7.6	ND	ND	8.51	ND	ND	4.7	92.7	25.8	71	26.2	1.3
Sep-2007	8.6	8.6	0.21	13	7.69	ND	ND	5.5	102.1	24.3	95	31.2	1.4
Mar-2008	23	23	0.56	16	11.4	ND	ND	5.2	117	35.2	78	38.7	2.8
Sep-2008	26	26	0.63	ND	7.48	ND	ND	5.3	109.6	23.2	97	40.6	2
Mar-2009	35	35	0.88	ND	6.32	ND	ND	5	133.6	27.1	82	45.9	5.1
Oct-2009	31	31	0.64	ND	6.74	ND	ND	5	119.3	23.4	86	42.2	3.5
Mar-2010	28	28	0.6	11.4	6.85	ND	ND	5.4	144	21.4	82	38.8	2.6
Oct-2010	31	31	0.46	ND	6.6	ND	ND	4.9	102.6	18.7	76	40.5	0.65
Apr-2011	28	28	0.72	ND	5.81	ND	ND	5	113.1	20.2	95	35.3	1.7
Sep-2011	18	18	0.26	ND	6.49	0.08	ND	5.1	92.1	15.3	75	29.7	2.3
Mar-2012	14	14	0.42	ND	5.81	0.27	ND	4.5	88.7	18.1	55	27.6	0.66
Sep-2012	14.7	14.7	0.29	ND	5.31	0.251	ND	4	108.9	32.9	84	47.1	0.552
Mar-2013	12	12	ND	ND	5.39	0.993	ND	5.2	98.8	26.1	74	36	0.289
Oct-2013	17	17	0.187 J	12	5.7	0.88	ND	5.7	103.4	27.5	80	45.1	0.204
Mar-2014	28	28	ND	6 J	5.32	0.992	ND	5.6	118.5	24.7	57	54.2	0.244
Oct-2014	37.4	37.4	ND	5 J	5.17	1.29	ND	5.7	115	18.2	78	58.2	0.698

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-24A***											
Apr-2015	43.2	43.2	*ND*	*ND*	4.84	1.32	*ND*	5	121.9	18.5	80	72.7	0.242
Nov-2015	33.2	33.2	*0.108 J*	*9 J*	5.49	1.41	*ND*	5.8	143	16.7	89	57.5	0.295
May-2016	43	43	*ND*	*6 J*	4.61	1.31	*ND*	6	168.5	16.2	84	62.2	0.76
Oct-2016	44.8	44.8	*ND*	*ND*	4.63	*NA*	*NA*	5.9	183.7	14	141	62.6	1.32
May-2017	50.2	50.2	*ND*	*5 J*	4.55	1.22	*ND*	5.9	214	15.3	75	63.2	1.47
Oct-2017	46.2	46.2	*0.125 J*	*ND*	4.83	1.35	*ND*	6.1	196	14.3	93	60.3	5.07
May-2018	42	42	*ND*	*ND*	6	1.5	*ND*	5.2	141.5	13.1	30	63	2.74
Nov-2018	26	26	*ND*	*7.9 J*	10	0.95	*ND*	5.43	116.4	10.7	72	46.4	18.7
May-2019	22 H1	*NA*	*ND*	*ND*	11.5	1.3	*ND*	5.34	96.9	14.7	91	42	5.68
Oct-2019	20	*NA*	*ND*	*6 J*	9	1	0.018	4.85	118.3	16.3	25	40.1	13.9
May-2020	36	*NA*	*ND*	*ND*	6.8	1.5	*ND*	5.12	132	15.2	66	56.3	4.68
Oct-2020	36	*NA*	*ND*	*ND*	7	1.6	*ND*	5.23	132.1	17.6	71	63.7	21.7
Apr-2021	40	*NA*	*ND*	*12.6 J*	6.4	1.9	*ND*	5.79	163	12.3	91	61.8	14.3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24A***													
Apr-1995	ND	ND	ND	ND	ND	4.6	NA	**0.156**	ND	ND	1.7	1.4	ND	1.9	NA
Oct-1996	ND	ND	0.14	ND	ND	3.3	3.2	ND	ND	ND	ND	ND	ND	2.4	2.3
Apr-1997	ND	ND	0.13	ND	ND	3.7	3.5	ND	ND	0.033	1.5	0.38	ND	2.6	2.4
Oct-1997	ND	ND	0.128	ND	ND	3.14	3.21	ND	0.012	0.019	4.55	4.5	ND	2.61	2.6
Apr-1998	ND	ND	0.144	ND	ND	4.11	4.09	ND	0.019	0.013	2.07	2.08	ND	3.45	3.42
Apr-1999	ND	ND	0.222	ND	ND	12.5	11.6	ND	0.079	0.017	3.29	3.04	ND	8.85	8.24
Oct-1999	ND	ND	0.139	ND	0.004	12.7	11.8	ND	0.066	0.032	1.83	1.71	ND	6.61	6.15
Apr-2000	ND	ND	0.114	ND	ND	8.15	7.71	ND	0.033	0.027	1.25	1.22	ND	3.61	3.42
Oct-2000	ND	ND	0.105	0.003	ND	7.02	6.68	ND	0.025	0.1	3.7	3.61	ND	3.16	3.04
Apr-2001	ND	ND	0.086	**0.005**	ND	7.41	NA	ND	0.024	0.111	4.67	NA	ND	3.26	NA
Sep-2001	ND	ND	0.075	ND	ND	5.4	6.14	ND	0.021	0.065	4.79	5.02	ND	2.44	2.61
Mar-2002	ND	ND	0.063	ND	ND	6.07	6.01	ND	0.02	0.069	5.4	5.53	ND	2.66	2.7
Sep-2002	ND	ND	0.061	ND	ND	5.94	5.94	ND	0.019	0.071	5.24	5.19	ND	2.64	2.64
Mar-2003	ND	ND	0.067	ND	ND	6.92	7.04	ND	0.019	0.052	5.66	5.67	ND	3.09	3.09
Oct-2003	ND	ND	0.079	ND	ND	4.5	3.99	ND	0.014	0.045	5.75	5.55	ND	2.33	2.23
Apr-2004	ND	ND	0.079	ND	ND	3.6	3.29	ND	0.015	0.045	8.23	7.57	ND	2.23	2.06
Oct-2004	ND	ND	0.088	ND	ND	3.56	3.5	ND	0.013	0.032	8.94	8.7	ND	2.36	2.31
Apr-2005	ND	ND	0.082	ND	ND	6.09	5.65	ND	0.013	0.072	7.77	7.8	ND	2.69	2.5
Oct-2005	ND	ND	0.075	ND	ND	5.94	5.6	ND	0.014	0.061	8.83	8.31	ND	2.56	2.42
Mar-2006	ND	ND	0.064	ND	ND	8	7.68	ND	ND	0.03	6.43	6.12	ND	2.89	2.78
Sep-2006	ND	ND	0.051	ND	ND	7.39	6.99	ND	ND	0.04	5.16	4.92	ND	2.58	2.46

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24A***													
Mar-2007	ND	ND	0.046	ND	ND	6.97	6.76	ND	ND	0.051	4.1	3.98	ND	2.13	2.08
Sep-2007	ND	ND	0.053	ND	ND	8.51	7.65	ND	ND	0.031	4.5	4.23	ND	2.44	2.27
Mar-2008	ND	ND	0.04	ND	ND	10.8	10.3	ND	ND	0.012	4.73	4.57	ND	2.83	2.74
Sep-2008	ND	ND	0.035	ND	ND	11.3	10.7	ND	ND	0.023	4.65	4.41	ND	3	2.84
Mar-2009	ND	ND	0.038	ND	ND	13	13.6	ND	ND	0.018	5.66	5.47	ND	3.26	3.2
Oct-2009	ND	ND	0.042	ND	ND	12.1	11.4	ND	ND	0.033	5.54	4.9	ND	2.91	2.68
Mar-2010	ND	ND	0.053	ND	ND	10.9	10.2	ND	ND	ND	4.81	4.91	ND	2.82	2.69
Oct-2010	ND	ND	0.053	ND	ND	11.4	11.3	ND	ND	ND	5.71	5.89	ND	2.91	2.9
Apr-2011	ND	ND	0.051	ND	ND	10.4	10.1	ND	ND	ND	6.16	5.92	ND	2.27	2.21
Sep-2011	ND	ND	0.057	ND	ND	8.4	8.51	ND	ND	ND	4.29	4.25	ND	2.11	2.1
Mar-2012	ND	ND	0.048	ND	ND	7.73	7.53	ND	ND	ND	4	3.8	ND	2.01	2
Sep-2012	ND	ND	0.0636	0.00011 J	ND	13.3	13.1	ND	0.0047 J	0.0081 J	0.498	0.509	ND	3.37	3.26
Mar-2013	ND	ND	0.0452	ND	0.000734 J	10.2	10.5	0.0023 J	0.0054 J	0.0141	0.546	0.531	0.0015 J	2.56	2.54
Oct-2013	ND	ND	0.0562	ND	0.000263 J	12.5	12.3	0.0034 J	0.0049 J	0.0172	ND	ND	ND	3.38	3.35
Mar-2014	ND	ND	0.048	ND	0.000148 J	15.7	15.6	0.0013 J	0.0023 J	0.0049 J	0.0821	0.0516	ND	3.65	3.67
Oct-2014	ND	ND	0.0448	ND	0.000135 J	17.2	17.5	ND	0.0016 J	0.0069 J	0.0096 J	0.008 J	ND	3.7	3.74
Apr-2015	0.000526 J	ND	0.0497	ND	ND	21.7	21.3	0.000514 J	0.0015 J	0.011	0.0228 J	0.0095 J	ND	4.5	4.4
Nov-2015	ND	ND	0.0481	ND	0.000106 J	17.2	16.7	0.000487 J	0.0021 J	0.0168	0.0671	ND	ND	3.52	3.45
May-2016	ND	ND	0.0506	ND	ND	18.3	18.6	0.00085 J	0.0018	0.0151	ND	ND	ND	3.99	3.95
Oct-2016	ND	ND	0.0425	ND	ND	18.9	18.3	0.00098 J	0.0015	0.0097	ND	ND	ND	3.74	3.78
May-2017	ND	ND	0.0383	ND	ND	19.1	19.9	0.00099 J	0.00092 J	0.0053	ND	ND	ND	3.77	4.06
Oct-2017	ND	ND	0.0364	ND	ND	18.6	20.8	ND	0.0015	0.0033 J	ND	ND	ND	3.34	3.6
May-2018	0.000079 J	ND	0.047	ND	0.000085 J	19.5	17.4	0.0035 J	0.002	0.0037 B	0.014 J	ND	ND	3.4	3.13
Nov-2018	ND	ND	0.042	ND	0.000096 J	14.4	14.3	0.0037 J	0.0024	0.0032	0.023	0.076	0.00008 JB	2.5	2.7

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24A***													
May-2019	*ND*	*ND*	0.065	*ND*	*ND*	12.7	13.4	0.0088	0.0061	0.0062	*ND*	*ND*	*ND*	2.5	2.6
Oct-2019	*0.00012 J*	*ND*	0.064	*0.0002 J*	*0.00047 J*	12	11.9	*0.0067 J*	0.0061	0.0086	*0.077 J*	*0.017 J*	*0.000096 J*	2.5	2.4
May-2020	*0.000074 J*	*ND*	0.059	*0.00011 J*	*ND*	16.4	16.6	*0.0064 J*	0.006	0.004	*0.02 J*	*ND*	*ND*	3.7	3.7
Oct-2020	*ND*	*ND*	0.073	*ND*	*ND*	18.9	18.2	*0.011 J*	0.0072	*ND*	0.16	*0.016 J*	*ND*	4	3.8
Apr-2021	*ND*	*ND*	0.064	*ND*	*ND*	19.2	19.3	*0.0027 J*	*0.0034 J*	*ND*	*0.067 J*	*ND*	*ND*	3.4	3.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-24A***												
Apr-1995	0.13	NA	ND	ND	135	NA	ND	0.02	18.1	NA	ND	ND	0.08
Oct-1996	0.1	0.096	NA	ND	ND	ND	ND	ND	3.4	5.1	ND	ND	0.074
Apr-1997	0.11	0.1	0.0005	ND	2	2	ND	ND	5.7	5.3	ND	ND	0.057
Oct-1997	0.13	0.131	ND	0.013	1.72	2.39	ND	ND	6.64	6.66	ND	ND	0.032
Apr-1998	0.14	0.156	0.0002	0.03	1.23	2.17	ND	ND	3.95	3.96	ND	ND	0.037
Apr-1999	0.804	0.746	NA	0.064	2.99	3.55	ND	ND	6.23	5.86	ND	ND	0.088
Oct-1999	0.862	0.805	NA	0.04	2.84	2.98	ND	ND	5.07	4.66	ND	ND	0.097
Apr-2000	0.442	0.424	NA	ND	2.65	1.56	ND	ND	4.89	4.64	ND	ND	0.061
Oct-2000	0.348	0.334	NA	ND	2.06	2.35	ND	ND	5.08	5.03	ND	ND	0.043
Apr-2001	0.357	NA	NA	0.013	2.61	NA	ND	ND	4.85	NA	ND	ND	0.038
Sep-2001	0.251	0.261	NA	0.02	1.65	2.26	ND	ND	4.65	4.61	ND	ND	0.028
Mar-2002	0.26	0.267	NA	ND	3.09	1.51	ND	ND	5.2	4.49	ND	ND	0.028
Sep-2002	0.252	0.25	NA	ND	2.85	2.46	ND	ND	4.53	4.51	ND	ND	0.023
Mar-2003	0.289	0.292	NA	ND	2.21	2.01	ND	ND	4.18	4.17	ND	ND	0.026
Oct-2003	0.211	0.202	NA	ND	1.18	1.42	ND	ND	5.56	4.31	ND	ND	0.047
Apr-2004	0.188	0.174	ND	ND	3.21	1.86	ND	ND	4.71	4.33	ND	ND	0.019
Oct-2004	0.179	0.173	0.0002	ND	2.61	1.55	ND	ND	4.64	4.36	ND	ND	0.017
Apr-2005	0.215	0.199	ND	ND	2.12	2.03	ND	ND	3.79	3.69	ND	ND	0.016
Oct-2005	0.21	0.2	0.0002	ND	2.23	2.02	ND	ND	3.62	3.38	ND	ND	0.016
Mar-2006	0.217	0.207	ND	ND	2.03	1.96	ND	ND	3.3	3.16	ND	ND	ND
Sep-2006	0.179	0.17	ND	ND	2.01	1.89	ND	ND	3.29	3.07	ND	ND	ND
Mar-2007	0.147	0.143	0.0003	ND	1.89	1.89	ND	ND	3.32	3.21	ND	ND	0.014

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-24A***												
Sep-2007	0.166	0.153	0.0006	ND	2.05	1.81	ND	ND	3.16	3.05	ND	ND	ND
Mar-2008	0.185	0.178	0.0007	ND	2.21	2.14	ND	ND	2.48	2.39	ND	ND	ND
Sep-2008	0.189	0.179	**0.0041 C**	ND	1.97	1.87	ND	ND	2.87	2.71	ND	ND	0.01
Dec-2008	NA	NA	**0.0031**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mar-2009	0.212	0.209	**0.0034**	ND	2.21	2.14	ND	ND	2.78	2.7	ND	ND	0.012
Oct-2009	0.194	0.181	**0.0144**	ND	2.16	1.97	ND	ND	2.71	2.65	ND	ND	ND
Mar-2010	0.196	0.189	0.0011	ND	2.36	2.13	ND	ND	2.8	3.1	ND	ND	ND
Oct-2010	0.187	0.183	0.0002	ND	2.76	2.68	ND	ND	2.83	2.8	ND	ND	0.012
Apr-2011	0.153	0.147	0.0008	ND	2	1.96	ND	ND	2.76	2.67	ND	ND	ND
Sep-2011	0.155	0.157	0.0004	ND	2.3	2.29	ND	ND	3.28	3.29	ND	ND	ND
Mar-2012	0.131	0.13	0.0004	ND	2.4	2.35	ND	ND	3.19	3.14	ND	ND	ND
Sep-2012	0.192	0.19	0.000044 J	0.0043 J	2.65	2.63	ND	ND	2.9	2.82	ND	ND	0.0042 J
Mar-2013	0.15	0.155	0.000091 J	0.0044 J	2.25	2.28	ND	0.000025 J	2.3	2.35	0.00035 J	ND	0.0163
Oct-2013	0.155	0.152	ND	0.0034 J	2.26	2.19	ND	ND	2.94	2.88	0.000199 J	0.000806 J	0.0133
Mar-2014	0.155	0.158	ND	0.002 J	2.26	2.22	ND	ND	2.38	2.39	0.000203 J	0.000563 J	ND
Oct-2014	0.151	0.154	0.000071 J	0.00099 J	2.61	2.64	ND	ND	2.53	2.55	ND	ND	ND
Apr-2015	0.172	0.169	0.000063 J	0.0011 J	2.95	2.93	ND	ND	2.75	2.69	ND	ND	0.0051 J
Nov-2015	0.17	0.162	0.000063 J	0.0014 J	2.77	2.74	0.000746 J	ND	2.85	2.84	ND	ND	0.0038 J
May-2016	0.16	0.153	0.000065 J	ND	2.73	2.78	ND	ND	2.51	2.47	ND	ND	ND
Oct-2016	0.142	0.148	0.00014 J	0.0012 J	2.71	2.82	ND	ND	2.34	2.34	ND	ND	ND
May-2017	0.128	0.134	0.00022	0.00099 J	2.84	3.06	ND	ND	2.32	2.37	ND	ND	ND
Oct-2017	0.117	0.126	ND	ND	3.05	3.33	ND	ND	2.55 J-	2.6	ND	ND	ND
May-2018	0.11	0.1	0.00026	0.0024	2.6 J	2.51 J	0.00076 JB	ND	3.6 J	3.34 J	ND	0.0037	0.0035 JB
Nov-2018	0.091	0.094	ND	0.0038	3.2 J	3.7 J	0.00033 J	ND	2.6 J	4.3 JB	0.000092 J	0.003	0.004 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-24A***												
May-2019	0.13	0.13	0.0008	0.0068	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0036 B	0.0089
Oct-2019	0.13	0.14	**0.0023**	0.0051	*3.8 J*	*3.7 J*	*0.00035 J*	*ND*	*4.1 J*	*4 J*	*ND*	*ND*	0.019
May-2020	0.16	0.1	0.00022	0.0033	*3 J*	*2.9 J*	*0.00056 J*	*ND*	*2.9 J*	*2.8 J*	*ND*	0.0098	*0.0045 J*
Oct-2020	0.14	0.13	**0.0026**	0.007	*3.4 J*	*3 J*	*ND*	*ND*	*3.9 J*	*3.2 J*	*ND*	*0.0014 J*	*ND*
Apr-2021	0.11	0.1	0.001	*0.0028 J*	3	3.1	*ND*	*ND*	3.2	3.3	*ND*	*ND*	*0.0034 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-24A***																
Oct-1996	ND	3.3	ND	ND	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	1	ND	ND	28	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	3	ND
Oct-1997	ND	1.8	ND	ND	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	1.2 J	ND	ND	35	ND	ND	ND	ND	ND	1.7	0.8 J	1.3 J	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	22	ND	NA	NA	NA	NA	1	ND	1.7	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	12	ND	ND	ND	ND	ND	0.6 J	ND	0.9 J	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	5.3	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	4.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24A*																
Mar-2007	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.45	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.93 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.56 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.58 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	0.33 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24A*																
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.3 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-24A*															
Oct-1996	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	39
Apr-1997	3	ND	ND	ND	ND	ND	ND	ND	13	ND	ND	2	ND	ND	ND	17	15
Oct-1997	2.6	ND	ND	ND	ND	ND	ND	ND	8.1	ND	ND	2.8	ND	ND	ND	6.7	47
Apr-1998	2.9	ND	ND	ND	ND	1.7	ND	ND	8.8	ND	ND	5.4	ND	ND	ND	15	35
Apr-1999	1.9	NA	NA	NA	NA	ND	NA	ND	4.3	ND	NA	3.4	NA	NA	NA	4	18
Oct-1999	1.1	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	1.8	ND	ND	ND	4	12
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	1	ND	NA	0.7 J	NA	ND	NA	2.5	5.4
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	5.1
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	5.5	5
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	2.1
Mar-2002	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	7.5	3
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	0.7 J	ND	ND	ND	8.6	4.1
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	0.6 J	ND	ND	ND	5.9	3.2
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	8.3	2.1
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	0.9 J	ND	ND	ND	12	3.1
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	0.6 J	ND	ND	ND	8.9	3.5
Apr-2005	0.5 J	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	1.1	ND	ND	ND	8.4	4.7
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	0.9 J	ND	ND	ND	8.3	3.1
Mar-2006	0.7 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.2	ND	ND	ND	8	5.2
Sep-2006	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	9.5	3.5

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24A***															
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	1.5
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.6	1.2
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	3
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	0.9 J
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.9 J
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.29 J	ND	ND	ND	0.6 J	1.17
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.47 J	0.86 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43 J	0.5 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.36 J	0.43 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.41 J,B	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	0.2 J	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J,B	ND	ND	ND	ND	ND	0.2 J	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	0.2 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24A***															
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.444 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24A***															
Oct-1996	*ND*	*ND*	*NA*	*NA*	**24**	*NA*	*ND*	3.2	*ND*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	2.4
Apr-1997	*ND*	*ND*	*NA*	*NA*	**38**	*NA*	*ND*	4	*ND*	*ND*	*ND*	*ND*	5	*ND*	*ND*	**7**	4
Oct-1997	*ND*	*ND*	3.4	*NA*	**44**	3.5	*ND*	**8.3**	*ND*	*ND*	*ND*	*ND*	**7.5**	*ND*	*ND*	**4.8**	*NA*
Apr-1998	*ND*	*ND*	2.6	*NA*	**46**	4.3	*ND*	**8.8**	*ND*	*ND*	*ND*	*ND*	**6.2**	*1.1 J*	*ND*	**4.9**	*NA*
Apr-1999	*ND*	*NA*	*0.7 J*	*NA*	**15**	1	*NA*	3.1	*ND*	*ND*	*NA*	*NA*	3.2	*ND*	*NA*	**2.8**	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	**9.3**	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	*ND*	1.7	*0.5 J*	*ND*	1.4	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	4.1	*ND*	*NA*	1.2	*ND*	*ND*	*NA*	*NA*	*0.7 J*	*ND*	*ND*	*0.7 J*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	3.3	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	4.9	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*0.7 J*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	1.8	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	2.7	*ND*	*ND*	*0.8 J*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	2.8	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	**2.4**	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	2.2	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	**2.2**	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	1.1	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	**2.8**	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	1.9	*0.6 J*	*ND*	3.6	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	**5.1**	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	1.1	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	**7.7**	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	2.2	*ND*	*ND*	4.4	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	**8.1**	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	4.5	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	**5.4**	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	**6.3**	*ND*	*ND*	**5.7**	*ND*	*ND*	*ND*	*ND*	2	*ND*	*ND*	**4.7**	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-24A*															
Sep-2006	ND	ND	ND	ND	5	ND	ND	3.1	ND	ND	ND	ND	1.2	ND	ND	**3.7**	NA
Mar-2007	ND	ND	ND	ND	2.1 R	ND	ND	1.5	ND	ND	ND	ND	0.7 J	ND	ND	1.3	NA
Sep-2007	ND	ND	ND	ND	2.3	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	1.4	NA
Mar-2008	ND	ND	ND	ND	0.7 J	ND	ND	2.6	ND	ND	ND	ND	0.9 J	ND	ND	1.1	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	1.5	NA
Mar-2009	ND	ND	ND	ND	1.9	ND	ND	0.9 J	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	1.79	ND	ND	0.69 J	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.81 J	ND	ND	0.26 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.69 J	ND	ND	0.22 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24A***															
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-25***											
Apr-1995	13.4	13.4	ND	ND	2.6	0.4	ND	5.8	37.3	2.5	15	11.6	50.8
Apr-1997	ND	40	ND	ND	2	0.06	ND	NA	NA	ND	51	1.9	12
Oct-1997	1	1	0.47	ND	1.7	ND	ND	6.83	13.71	ND	14	ND	330
Apr-1998	ND	ND	0.27	ND	1.86	0.1	ND	5.87	23.9	0.76	29	5.6	440
Apr-1999	ND	ND	0.35	ND	1.86	ND	ND	5.29	16.52	ND	ND	7	390
Oct-1999	ND	ND	0.11	ND	2.33	ND	ND	5.24	16.1	ND	29	5.6	290
Apr-2000	2	2	ND	ND	2.03	0.147	ND	5.17	12	ND	17	4.9	220
Oct-2000	3	NA	ND	ND	1.76	ND	ND	5.34	12.9	ND	47	4.89	117
Apr-2001	2.2	NA	0.2	ND	1.6	ND	ND	NA	NA	ND	28	4.4	41.4
Sep-2001	2.6	2.6	ND	ND	3.74	ND	ND	5.03	17	ND	51	4.67	330
Mar-2002	5.8	5.8	ND	28	3.08	ND	ND	5.1	15	ND	38	4.39	250
Sep-2002	2.8	2.8	ND	ND	2.15	ND	ND	5	17.3	ND	115	5.12	392
Mar-2003	2.8	2.8	ND	ND	2.67	0.099	ND	5.1	16.8	ND	36	4.47	270
Oct-2003	2.4	2.4	ND	ND	7.17	ND	ND	4.8	16.5	ND	ND	4.87	713
Apr-2004	2.5	2.5	ND	ND	2.18	ND	ND	4.9	13.7	ND	46	3.2	313
Oct-2004	2.4	2.4	ND	11	2.29	0.13	ND	4.8	14.1	ND	20	2.66	11
Apr-2005	2.5	2.5	ND	ND	2.36	0.13	ND	5	12.5	2.02	23	4.2	284
Oct-2005	3.6	3.6	0.21	ND	2.34	0.12	ND	4.7	13.9	ND	21	4.21	407
Mar-2006	3.6	3.6	ND	ND	2.38	0.14	ND	5	16.4	1.04	52	3.21	849
Sep-2006	3.4	3.4	ND	ND	2.5	0.13	ND	5	14.2	ND	48	2.9	55
Mar-2007	3.5	3.5	ND	ND	2.63	0.15	ND	4.9	12	ND	36	2.87	79
Sep-2007	3.3	3.3	ND	ND	7.59	ND	ND	6.5	13.7	ND	69	4.77	65
Mar-2008	3.5	3.5	ND	29	14.9	ND	ND	4.9	13.9	ND	15	3.23	176
Sep-2008	3.5	3.5	ND	25	3.03	0.09	ND	5.4	15.3	ND	22	4.2	370
Mar-2009	3.6	3.6	ND	ND	2.72	0.11	ND	4.5	15.5	ND	19	2.88	62
Oct-2009	3.4	3.4	ND	ND	2.71	0.13	ND	4.5	15	ND	62	3.51	319
Apr-2010	3.3	3.3	ND	11	2.75	0.15	ND	4.6	14.6	ND	ND	4.1	398
Oct-2010	3	3	ND	ND	3.31	0.12	ND	4.3	14.9	ND	24	4.16	308
Apr-2011	5.2	5.2	ND	ND	2.93	0.15	ND	4.7	16.5	ND	16	4.6	16
Sep-2011	3.5	3.5	0.22	ND	3.06	0.13	ND	4.7	16.6	ND	35	3.61	0.69
Mar-2012	3.4	3.4	ND	ND	3.26	0.13	ND	3.5	43.2	ND	19	2.85	0.31
Sep-2012	ND	ND	ND	12.2	3.39	0.15	ND	4.3	17.2	ND	16	3.57	0.61
Mar-2013	3.56	3.56	ND	ND	3.5	0.137	ND	5.1	18.1	0.482 J	14	3.65	0.541
Oct-2013	3.64	3.64	ND	ND	3.58	0.156	ND	5.8	17	0.487 J	ND	3.75	0.247
Mar-2014	3.44	3.44	ND	ND	3.75	0.154	ND	5.2	20.3	ND	ND	4.32	0.623
Oct-2014	ND	ND	ND	ND	3.96	0.126	ND	5	22.9	0.324 J	ND	4.29	0.46

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-25***											
Apr-2015	3.8	3.8	*ND*	*ND*	4.06	0.177	*ND*	4.2	20	*ND*	*ND*	4.64	0.278
Nov-2015	*ND*	*ND*	*ND*	*ND*	4.2	0.189	*ND*	5.2	27.7	*ND*	29	4.73	0.166
May-2016	*ND*	*ND*	*ND*	*5 J*	4.27	0.2	*ND*	5.2	28.4	*ND*	*ND*	4.3	0.52
Oct-2016	*ND*	*ND*	*ND*	*ND*	4.46	*NA*	*NA*	5.4	31.8	*0.627 J*	26	4.7	0.338
May-2017	2.4	2.4	*ND*	*ND*	4.73	0.21	*ND*	4.9	34.6	*ND*	*9 J*	4.9	2.63
Oct-2017	2	2	*ND*	*ND*	4.88	0.229	*ND*	5	40	*ND*	*21 J*	5.2	4.32
May-2018	*2 J*	*ND*	*0.052 J*	*ND*	4.9	0.22	*ND*	5.1	46.3	*ND*	*ND*	5.7	2.69
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	5.6	0.22	*ND*	4.64	29.5	*ND*	73	6.2	4.83
May-2019	*ND*	*NA*	*ND*	*ND*	6.2	0.18	*ND*	4.56	23.4	*ND*	*ND*	5.7	3.43
Oct-2019	*ND*	*NA*	*ND*	*ND*	4.8	0.23	*ND*	4.34	29.5	*ND*	14	5.8	1.9
May-2020	*ND*	*NA*	*ND*	*ND*	6.3	0.22	*ND*	4.28	33.7	*ND*	26	6.5	2.51
Oct-2020	*ND*	*NA*	*ND*	*ND*	6.2	0.23	*ND*	4.44	31.4	*ND*	11	6.9	1.3
Apr-2021	*ND*	*NA*	*ND*	*6.1 J*	7.3	0.26	*ND*	4.81	40.7	*ND*	14	7.3	6.06

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25***													
Apr-1995	ND	ND	ND	ND	ND	3.6	NA	ND	ND	ND	0.46	0.33	ND	0.63	NA
Oct-1996	ND	ND	0.03	ND	ND	1.6	2.2	0.041	ND	ND	5.5	0.52	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	0.7	0.69	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	0.034	ND	ND	0.921	0.827	ND	ND	ND	3.92	0.075	ND	0.487	0.309
Apr-1998	ND	ND	0.055	ND	ND	1.18	1.07	0.019	ND	ND	8.41	ND	ND	0.649	0.334
Apr-1999	ND	ND	0.04	ND	ND	1.63	0.995	0.019	ND	0.013	7.21	ND	ND	0.706	0.32
Oct-1999	ND	ND	0.023	ND	ND	1.21	0.802	0.012	ND	0.011	4.98	ND	ND	0.505	0.303
Apr-2000	ND	ND	0.018	ND	ND	1.18	0.708	ND	ND	ND	3.2	ND	ND	0.481	0.288
Oct-2000	ND	ND	0.012	ND	ND	1.25	0.778	ND	ND	0.012	1.39	ND	ND	0.432	0.312
Apr-2001	ND	ND	0.012	ND	ND	1.13	NA	ND	ND	0.011	0.753	NA	ND	0.381	NA
Sep-2001	ND	ND	0.02	ND	ND	1.04	0.703	0.011	ND	ND	4.31	ND	0.003	0.504	0.293
Mar-2002	ND	ND	0.016	ND	ND	1.04	0.78	ND	ND	ND	2.44	ND	0.002	0.436	0.308
Sep-2002	ND	ND	0.02	ND	ND	1.28	0.724	ND	ND	ND	3.66	0.073	0.003	0.468	0.294
Mar-2003	ND	ND	0.012	ND	ND	1.14	0.609	ND	ND	ND	0.374	ND	ND	0.397	0.303
Oct-2003	ND	ND	0.022	ND	ND	1.1	0.607	0.012	ND	ND	5.65	ND	0.004	0.518	0.299
Apr-2004	ND	ND	0.011	ND	ND	0.704	0.608	ND	ND	ND	0.408	ND	ND	0.351	0.298
Oct-2004	ND	ND	ND	ND	ND	0.543	0.531	ND	ND	ND	0.231	ND	ND	0.319	0.31
Apr-2005	ND	ND	0.018	ND	ND	0.963	0.614	ND	ND	ND	3.85	ND	ND	0.446	0.302
Oct-2005	ND	ND	0.021	ND	ND	0.94	0.602	0.012	ND	0.011	4.8	ND	0.003	0.452	0.273
Mar-2006	ND	ND	0.022	ND	ND	0.668	0.373	ND	ND	ND	6.83	ND	0.005	0.374	0.179
Sep-2006	ND	ND	ND	ND	ND	0.633	0.505	ND	ND	ND	0.496	ND	ND	0.321	0.292

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25***													
Mar-2007	ND	ND	0.012	ND	ND	0.586	0.543	ND	ND	ND	1.17	ND	ND	0.343	0.296
Sep-2007	ND	0.004	0.012	ND	ND	1.16	0.531	ND	ND	ND	1.08	ND	ND	0.455	0.302
Mar-2008	ND	ND	0.014	ND	ND	0.726	0.615	ND	ND	ND	2.29	ND	ND	0.344	0.291
Sep-2008	ND	ND	0.021	0.002 R	ND	0.814	0.49	0.018	ND	ND	5.7	ND	0.003	0.536	0.337
Mar-2009	ND	ND	ND	ND	ND	0.629	0.538	ND	ND	ND	0.268	ND	ND	0.318	0.326
Oct-2009	ND	ND	0.016	ND	ND	0.712	0.561	ND	ND	ND	2.95	ND	ND	0.419	0.319
Apr-2010	ND	ND	0.02	ND	ND	0.806	0.527	0.014	ND	ND	7.96	ND	0.003	0.521	0.306
Oct-2010	ND	0.003	0.017	ND	ND	0.757	0.676	0.014	ND	ND	5.19	ND	0.003	0.551	0.385
Apr-2011	ND	ND	0.011	ND	ND	1.25	0.907	ND	ND	ND	0.355	ND	ND	0.357	0.294
Sep-2011	ND	ND	ND	ND	ND	0.781	0.797	ND	ND	ND	ND	ND	ND	0.402	0.426
Mar-2012	ND	ND	0.011	ND	ND	0.485	0.477	ND	ND	ND	ND	ND	ND	0.399	0.385
Sep-2012	ND	ND	0.0103	ND	ND	0.736	0.698	ND	0.0015 J	0.0018 J	0.0253 J	0.0118 J	ND	0.421	0.411
Mar-2013	ND	ND	0.0103	ND	ND	0.829	0.792	0.0034 J	0.0015 J	0.0022 J	0.0107 J	0.0049 J	0.0017 J	0.384	0.367
Oct-2013	ND	ND	0.0119	ND	ND	0.777	0.857	0.0012 J	0.0016 J	0.0016 J	ND	ND	ND	0.439	0.453
Mar-2014	ND	ND	0.011	ND	ND	1.02	0.921	0.0013 J	0.0012 J	0.0016 J	0.0546	0.041 J	ND	0.431	0.388
Oct-2014	0.001 J	ND	0.0136	ND	ND	0.932	0.924	0.000551 J	0.0019 J	0.0017 J	ND	0.0119 J	ND	0.482	0.488
Apr-2015	0.000883 J	ND	0.0135	ND	ND	0.986	0.959	0.000597 J	0.0019 J	0.0018 J	ND	ND	ND	0.53	0.528
Nov-2015	ND	ND	0.0127	ND	0.000095 J	1.06	0.908	0.000538 J	0.0018 J	0.0015 J	ND	ND	ND	0.506	0.521
May-2016	ND	ND	0.0168	0.000072 J	ND	0.86	0.85	0.0013 J	0.0021	0.0016 J	ND	ND	ND	0.53	0.553
Oct-2016	ND	ND	0.0131	ND	ND	0.985	0.841	0.00085 J	0.002	0.0021 J	ND	ND	ND	0.533	0.567
May-2017	ND	ND	0.0159	ND	ND	0.946	1.02	0.0014 J	0.002	0.0018 J	ND	ND	ND	0.606	0.609
Oct-2017	ND	ND	0.0159	0.000081 J	ND	1.01	1.12	ND	0.0023	0.0018 J	ND	ND	ND	0.648	0.674
May-2018	0.000052 J	ND	0.017	0.000075 J	0.000042 J	1.2	1.07	0.0027 J	0.0022	0.0052 B	ND	ND	0.000068 J	0.67 J	0.644 J
Nov-2018	ND	ND	0.016	0.000086 J	0.000056 J	1.3	1.2	0.0027 JB	0.0022	0.0065	ND	ND	0.00019 JB	0.72 J	0.7 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25***													
May-2019	*ND*	*ND*	0.017	*ND*	*ND*	1.2	1.2	*ND*	0.0046	0.0068	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*0.00011 J*	*ND*	0.017	*0.000096 J*	*0.00027 J*	1.2	1.2	*0.0045 J*	0.0029	0.0058	*0.0085 J*	*ND*	*0.0001 J*	0.68	*0.67 J*
May-2020	*0.000052 J*	*ND*	0.018	*ND*	*ND*	1.4	1.3	*0.0054 J*	0.0028	0.0056	*ND*	*0.0098 J*	*ND*	0.76	*0.72 J*
Oct-2020	*ND*	*ND*	0.015	*ND*	*ND*	1.4	1.4	*0.0056 J*	0.0038	*ND*	*0.016 J*	*ND*	*ND*	0.8	*0.74 J*
Apr-2021	*ND*	*ND*	0.024	*ND*	*ND*	1.5	1.6	*0.0025 J*	0.0051	*ND*	*ND*	*ND*	*ND*	0.85	0.93

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-25*												
Apr-1995	0.03	NA	ND	ND	0.1	NA	ND	0.01	1.5	NA	ND	ND	0.1
Oct-1996	0.017	0.023	NA	ND	ND	ND	ND	ND	2	1.7	ND	ND	0.32
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	1.8	1.6	ND	ND	0.035
Oct-1997	0.014	ND	ND	ND	1.08	0.735	ND	ND	1.16	1.09	ND	0.016	0.01
Apr-1998	0.019	0.012	ND	ND	2.34	ND	ND	ND	1.21	1.11	ND	0.03	0.013
Apr-1999	0.017	0.01	NA	0.013	1.25	ND	ND	ND	1.49	1.09	ND	0.022	0.032
Oct-1999	0.015	0.01	NA	ND	1.38	0.661	ND	ND	1.52	1.05	ND	0.019	0.013
Apr-2000	0.012	ND	NA	ND	0.957	ND	ND	ND	2.46	1.02	ND	0.012	0.011
Oct-2000	0.013	ND	NA	ND	0.642	ND	ND	ND	1.73	1.14	ND	ND	0.011
Apr-2001	ND	NA	NA	ND	1.23	NA	ND	ND	1.92	NA	ND	ND	0.017
Sep-2001	0.012	ND	NA	ND	0.652	ND	ND	ND	2.5	1.1	ND	0.016	ND
Mar-2002	0.01	ND	NA	ND	1.14	0.988	ND	ND	2.27	1.23	ND	0.01	ND
Sep-2002	0.014	ND	NA	ND	0.738	ND	ND	ND	1.44	1.16	ND	0.017	ND
Mar-2003	ND	ND	NA	ND	0.517	ND	ND	ND	1.6	1.14	ND	ND	ND
Oct-2003	0.011	ND	NA	ND	ND	ND	ND	ND	2.43	1.09	ND	0.022	0.014
Apr-2004	ND	ND	ND	ND	1.22	ND	ND	ND	1.23	1.17	ND	ND	ND
Oct-2004	ND	ND	ND	ND	1.07	ND	ND	ND	1.03	0.936	ND	ND	ND
Apr-2005	0.011	ND	ND	ND	0.83	0.43	ND	ND	2	1.09	ND	0.016	0.011
Oct-2005	0.013	ND	ND	ND	0.757	ND	ND	ND	1.94	0.997	ND	0.02	0.012
Mar-2006	ND	ND	ND	ND	0.699	ND	ND	ND	1.19	0.939	ND	0.015	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	1.44	1.08	ND	ND	ND
Mar-2007	ND	ND	ND	ND	0.559	ND	ND	ND	1.17	1.13	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-25***												
Sep-2007	ND	ND	ND	0.014	0.547	ND	ND	ND	1.41	1.12	ND	ND	0.028
Mar-2008	ND	ND	0.0004	ND	0.798	0.536	ND	ND	1.29	1.05	ND	ND	ND
Sep-2008	0.013	ND	ND	ND	0.754	ND	ND	ND	1.25	1.11	ND	ND	0.022
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.17	1.17	ND	ND	0.016
Oct-2009	ND	ND	ND	ND	0.665	ND	ND	ND	1.33	1.06	ND	0.012	0.012
Apr-2010	0.013	ND	ND	ND	0.896	ND	ND	ND	1.53	1.25	ND	0.023	0.013
Oct-2010	0.016	ND	ND	ND	0.995	ND	ND	ND	1.44	1.4	ND	0.023	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.46	1.45	ND	ND	0.014
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.58	1.58	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	1.44	1.41	ND	ND	ND
Sep-2012	0.0085 J	0.008 J	ND	0.0016 J	0.41 J	0.387 J	ND	ND	1.48	1.48	ND	ND	0.005 J
Mar-2013	0.0083 J	0.0081 J	0.000044 J	0.0019 J	0.412 J	0.392 J	ND	0.000026 J	1.42	1.36	ND	ND	0.0153
Oct-2013	0.0089 J	0.0089 J	ND	0.0017 J	0.399 J	0.398 J	ND	ND	1.56	1.61	0.0001525 J	0.000873 J	0.013
Mar-2014	0.0084 J	0.0082 J	ND	0.0018 J	0.452 J	0.412 J	ND	ND	1.53	1.4	ND	ND	ND
Oct-2014	0.0102	0.0103	ND	0.002 J	0.535	0.536	0.0021	ND	1.92	1.92	ND	ND	0.0069 J
Apr-2015	0.0106	0.0104	ND	0.0024 J	0.503	0.496 J	ND	ND	1.94	1.93	ND	ND	0.0096 J
Nov-2015	0.0102	0.0106	ND	0.0021 J	0.51	0.523	ND	ND	1.88	1.93	ND	ND	0.0064 J
May-2016	0.0091	0.0111	ND	0.003 J	0.483	0.483	ND	ND	1.83	1.85	ND	ND	ND
Oct-2016	0.01	0.0131	ND	0.0026 J	0.478	0.499	ND	ND	1.76	1.89	ND	ND	ND
May-2017	0.0118	0.0119	ND	0.0026 J	0.528	0.529	ND	ND	1.94	1.9	ND	ND	0.0036 JB
Oct-2017	0.0117	0.0126	ND	0.0016 J	0.543	0.607	ND	ND	1.99 J-	2.13	ND	ND	0.0058 J
May-2018	0.011	0.01	ND	0.0027	ND	ND	0.00028 JB	ND	2.5 J	2.24 J	ND	0.0034	0.0053 B
Nov-2018	0.013	0.012	ND	0.0028	ND	1.3 J	0.00013 JB	ND	0.95 J	2.7 JB	ND	0.0034 B	0.0077
May-2019	0.014	0.013	ND	0.0037	ND	ND	ND	ND	ND	ND	ND	0.0039 B	0.0072

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-25***												
Oct-2019	0.014	0.012	*ND*	0.0031	*ND*	*ND*	*ND*	*ND*	*2.2 J*	*2.1 J*	*ND*	*ND*	0.015
May-2020	0.014	0.013	*ND*	0.0027	*ND*	*ND*	*ND*	*ND*	*2.3 J*	*2.2 J*	*ND*	0.0084	0.0051
Oct-2020	0.015	0.015	*ND*	0.0045	*ND*	*ND*	*ND*	*ND*	*2.4 J*	*2.1 J*	*ND*	*0.001 J*	*ND*
Apr-2021	0.017	0.017	*ND*	*0.0036 J*	0.64	0.68	*ND*	*ND*	2.6	3.1	*ND*	*ND*	*0.0051 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25*																
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25*																
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	1 R	1 R	1 R	1 R	7.4 R	1 R	1 R	**1 R**	**1 R**	1 R	0.7 R	1 R	1 R	5 R	5 R	5 R	5 R	5 R
Dec-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*0.42 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*0.45 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*0.42 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*0.66 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-25***																
Oct-2017	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.7 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*0.94 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	2.07	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25***															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25***															
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	0.9 R	1 R	1 R	1 R	1 R	11.4 R
Dec-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.6 J
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.7 J
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.05	0.46 J
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.11	0.62 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	1.25	0.84 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.19 J	ND	ND	ND	ND	ND	1.83 J	0.77 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	0.5 J,B	ND	ND	ND	ND	1.67	0.83 J
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	1.11
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8 J	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	2.7	1.9
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	3	2.4
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J,B	ND	ND	ND	ND	ND	2.7	2

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25***															
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	3	2.2
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.5	2.5
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	**3 D6**	2.2 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3 CL	2.2 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	1.4
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.8	1.7
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	5.8	2.5
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.235 J*	*ND*	*0.674 J*	*ND*	*ND*	*ND*	*3.6 J*	*3.7 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25***															
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25***															
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	1 R	1 R	1 R	1.5 R	**9 R**	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1.1 R	1 R	1 R	1 R	*NA*
Dec-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.27 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.31 J*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.27 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.36 J*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.34 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.34 J*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.39 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.4 J*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.5 J*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.4 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.4 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.41	*ND*	*ND*	*ND*	*ND*	*0.343 J*	*0.446 J*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-25A***											
Apr-1995	52.5	52.5	ND	59.7	2.7	ND	ND	8.9	100	3.2	70	99.7	490
Apr-1997	ND	36	ND	ND	3	0.06	ND	NA	NA	ND	82	33	3.7
Oct-1997	21	21	ND	ND	2.33	ND	ND	8.38	50.7	ND	ND	18	5
Apr-1998	37	37	ND	ND	2.64	0.22	ND	6.65	110.9	2.25	50	41	0.61
Apr-1999	25	25	0.8	ND	2.64	ND	ND	5.89	91.2	1.44	35	32	3.2
Oct-1999	32	32	0.07	ND	4.37	ND	ND	5.72	44.9	2.75	35	18	2.4
Apr-2000	16	16	ND	ND	3	ND	ND	6.32	43	2.16	45	19	1.3
Oct-2000	16	NA	ND	ND	2.03	ND	ND	5.77	42.4	4.37	33	21.7	1.97
Apr-2001	20	NA	ND	ND	2.85	ND	ND	NA	NA	1.57	33	23	1.95
Sep-2001	5.9	5.9	0.32	ND	5.01	ND	ND	5.71	43	7.52	28	15	4.3
Mar-2002	8	8	ND	ND	3.88	ND	ND	5.5	36	2.16	13	12	2.5
Sep-2002	5.2	5.2	ND	ND	3.55	ND	ND	5.4	34	3.13	20	8.49	4.5
Mar-2003	22	22	ND	ND	14.4	ND	ND	5.8	59.9	5.65	30	22.6	2.5
Oct-2003	14	14	ND	ND	4.24	0.118	ND	5.2	56.1	1.43	11	98.6	1.8
Apr-2004	12	12	ND	ND	4.85	ND	ND	5.5	48.6	1.34	50	17.5	2.6
Oct-2004	15	15	ND	ND	5.7	ND	ND	3.2	50.8	1.43	41	19.6	0.15
Apr-2005	18	18	ND	ND	5.64	ND	ND	5.2	49.8	3.51	ND	22.6	2
Oct-2005	11	11	0.22	ND	5.94	ND	ND	4.7	42.8	2.62	43	13.5	0.72
Mar-2006	11	11	ND	ND	6.33	ND	ND	5.3	51.5	2.99	26	13	1.1
Sep-2006	7.1	7.1	ND	ND	6.05	ND	ND	4.9	37.7	2.83	42	10.7	0.68
Mar-2007	6.9	6.9	ND	ND	5.9	ND	ND	4.9	37.5	2.17	42	9.64	0.35
Sep-2007	11	11	0.23	ND	5.45	ND	ND	6.2	42.6	1.87	38	14.1	0.24
Mar-2008	17	17	ND	11	17.5	ND	ND	6.2	52.7	5.13	53	18.2	0.34
Sep-2008	7.5	7.5	0.27	ND	5.59	ND	ND	5.7	33.5	2.25	30	9.2	0.52
Mar-2009	6	6	ND	ND	5.78	ND	ND	5.1	35.8	1.52	ND	8.57	0.19
Oct-2009	5.2	5.2	ND	ND	5.98	ND	ND	4.9	31.8	1.6	34	7.53	1.7
Mar-2010	8.8	8.8	ND	ND	6.41	ND	ND	4.59	45	2.01	14	9.74	1.1
Oct-2010	1.8	1.8	ND	ND	6.58	ND	ND	3.6	37.8	2.54	22	7.13	0.4
Apr-2011	3	3	ND	ND	6.57	ND	0.04	4.1	41.5	1.8	42	6.4	1.4
Sep-2011	4.7	4.7	0.22	ND	7.04	ND	0.03	4.3	40.7	1.56	44	8.48	0.25
Mar-2012	4.3	4.3	ND	ND	7.23	0.06	0.04	3.6	41	1.98	24	8.01	0.14
Sep-2012	4.2	4.2	ND	ND	7.96	0.104	ND	3.5	42.8	2.47	28	8.53	0.106
Mar-2013	3.8	3.8	ND	ND	8.59	0.103	0.0377 J	4.5	48.8	1.79	31	8.47	0.192
Oct-2013	3.64	3.64	ND	ND	8.62	0.127	0.134	5.3	46.9	2.29	ND	9.02	0.093 J
Mar-2014	3.52	3.52	ND	ND	8.88	0.131	ND	4.6	48.2	2.66	26	8.9	0.104
Oct-2014	ND	ND	ND	ND	9.57	0.106	ND	4.5	46	3.2	25	9.8	0.272

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-25A***											
Apr-2015	3.72	3.72	*ND*	*ND*	8.62	0.116	*ND*	3.6	46	1.75	*ND*	8.86	0.926
Nov-2015	*ND*	*ND*	*ND*	*5 J*	9.48	0.125	0.0657	4.7	60.8	1.9	*22 J*	9.15	0.131
May-2016	*ND*	*ND*	*ND*	*ND*	8.67	0.132	0.0891	4.5	61.3	3.23	*13 J*	8.7	0.313
Oct-2016	*ND*	*ND*	*ND*	*ND*	9.05	*NA*	*NA*	4.6	69.9	2.81	42	9.7	0.163
May-2017	*ND*	*ND*	*ND*	13	9.61	0.235	0.106	4.5	76.2	3.52	*13 J*	9.8	2.17
Oct-2017	*ND*	*ND*	*ND*	*ND*	8.92	0.244	0.0755	4.6	84.6	2.31	33	11.3	4.08
May-2018	*ND*	*ND*	*ND*	*5.8 J*	8.4	0.24	0.023	4.8	67.3	*ND*	23	11.2	2.13
Nov-2018	18	18	*ND*	*ND*	10.1	0.16	0.04	5.03	87.7	*6.2 J*	90	30.8	4
May-2019	*ND*	*NA*	*ND*	*ND*	10.4	0.23	0.066	4.67	53.8	*ND*	48	18.3	4.03
Oct-2019	*6 J*	*NA*	*ND*	*6 J*	62.8	0.58	0.093	4.33	70.1	*ND*	44	17.2	1.81
May-2020	*4 J*	*NA*	*ND*	*ND*	11.2	0.77	0.11	4.32	76.5	*5 J*	46	19.4	2.84
Oct-2020	*2 J*	*NA*	*ND*	*ND*	10.5	0.76	0.096	4.62	74.3	4	35	21.4	1.54
Apr-2021	20	*NA*	*ND*	*ND*	10.7	0.71	0.12	5.29	113.9	*ND*	55	36.5	5.62

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25A***													
Apr-1995	ND	ND	ND	ND	ND	38.8	NA	ND	ND	ND	0.82	0.05	ND	0.68	NA
Oct-1996	ND	ND	0.041	ND	ND	8	7.7	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	0.048	ND	ND	12	NA	ND	ND	ND	ND	NA	ND	ND	ND
Oct-1997	ND	ND	0.028	ND	ND	7.09	6.38	ND	ND	ND	0.108	ND	ND	0.491	0.47
Apr-1998	ND	ND	0.06	ND	ND	15	15.7	ND	ND	ND	ND	ND	ND	0.743	0.732
Apr-1999	ND	ND	0.048	ND	ND	11.6	11.1	ND	ND	ND	0.104	ND	ND	0.629	0.567
Oct-1999	ND	ND	0.028	ND	ND	1.23	1.09	ND	ND	0.017	0.057	ND	ND	0.643	0.589
Apr-2000	ND	ND	0.043	ND	ND	6.43	5.88	ND	ND	ND	ND	ND	ND	0.729	0.691
Oct-2000	ND	ND	0.029	ND	ND	7.46	7.78	ND	ND	0.02	0.065	ND	ND	0.758	0.614
Apr-2001	ND	ND	0.044	ND	ND	7.78	NA	ND	ND	0.012	ND	NA	ND	0.812	NA
Sep-2001	ND	ND	0.029	ND	ND	4.89	4.23	ND	ND	0.014	0.067	ND	ND	0.679	0.585
Mar-2002	ND	ND	0.031	ND	ND	3.67	3.47	ND	ND	0.019	0.051	ND	ND	0.702	0.678
Sep-2002	ND	ND	0.034	ND	ND	2.2	2.05	ND	ND	0.013	0.097	ND	ND	0.728	0.715
Mar-2003	ND	ND	0.051	ND	ND	7.8	5.8	ND	ND	0.012	0.08	ND	ND	0.753	0.708
Oct-2003	ND	ND	0.213	ND	0.005	32.3	5.95	ND	0.02	0.094	0.252	ND	ND	4.37	0.762
Apr-2004	ND	ND	0.047	ND	ND	5.54	4.82	ND	ND	0.02	ND	ND	ND	0.901	0.887
Oct-2004	ND	ND	0.053	ND	ND	6.17	5.84	ND	ND	0.021	ND	ND	ND	1.03	1.03
Apr-2005	ND	ND	0.055	ND	ND	7.35	6.71	ND	ND	0.017	ND	ND	ND	1.04	0.995
Oct-2005	ND	ND	0.052	ND	ND	3.81	3.58	ND	ND	0.024	ND	ND	ND	0.97	0.913
Mar-2006	ND	ND	0.047	ND	ND	3.85	3.77	ND	ND	0.013	ND	ND	ND	0.812	0.778
Sep-2006	ND	ND	0.049	ND	ND	2.7	2.69	ND	ND	0.021	ND	ND	ND	0.964	0.915

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25A***													
Mar-2007	ND	ND	0.046	ND	ND	2.35	2.36	ND	ND	0.023	ND	ND	ND	0.916	0.878
Sep-2007	ND	ND	0.045	ND	ND	4.12	3.41	ND	ND	0.022	ND	ND	ND	0.932	0.873
Mar-2008	ND	ND	0.048	ND	ND	5.75	5	ND	ND	0.02	ND	ND	ND	0.922	0.87
Sep-2008	ND	ND	0.047	0.002	ND	2.03	2.02	ND	ND	0.023	ND	ND	0.003	1.01	0.977
Mar-2009	ND	ND	0.05	ND	ND	1.65	1.34	ND	ND	0.025	ND	ND	ND	1.08	0.968
Oct-2009	ND	ND	0.048	ND	ND	1.35	1.24	ND	ND	0.025	0.052	ND	ND	1.01	0.997
Mar-2010	ND	ND	0.054	ND	ND	2.25	2.4	ND	ND	0.021	0.069	ND	ND	1	0.981
Oct-2010	ND	ND	0.049	ND	ND	0.845	0.803	ND	ND	0.024	ND	ND	ND	1.22	1.2
Apr-2011	ND	ND	0.058	ND	ND	0.744	0.756	ND	ND	0.016	ND	ND	ND	1.09	1.16
Sep-2011	ND	ND	0.056	ND	ND	1.3	1.32	ND	ND	0.022	ND	ND	ND	1.27	1.28
Mar-2012	ND	ND	0.062	ND	ND	1.08	1.19	ND	ND	0.024	ND	ND	ND	1.29	1.26
Sep-2012	ND	ND	0.0669	0.0011 J	ND	0.993	1.18	ND	0.007 J	0.0276	0.0538	0.0413 J	ND	1.47	1.41
Mar-2013	ND	ND	0.0556	0.000842 J	0.000248 J	1.33	1.46	0.0017 J	0.0065 J	0.0231	0.0754	0.0186 J	0.0015 J	1.25	1.3
Oct-2013	ND	ND	0.0704	ND	0.000199 J	1.19	1.16	0.004 J	0.0075 J	0.0262	ND	ND	ND	1.47	1.43
Mar-2014	ND	ND	0.0629	0.000979 J	0.000205 J	1.32	1.4	0.0013 J	0.0056 J	0.0243	0.0595	0.0542	ND	1.36	1.43
Oct-2014	0.000772 J	ND	0.078	0.0011 J	0.000284 J	1.47	1.47	0.000361 J	0.0075 J	0.0309	0.0403 J	0.0371 J	0.0011 J	1.49	1.49
Apr-2015	0.00058 J	ND	0.0698	0.0011 J	0.000246 J	1.12	1.13	0.000575 J	0.0071 J	0.0328	0.239	0.0264 J	ND	1.47	1.5
Nov-2015	ND	ND	0.0647	0.0011 J	0.000276 J	1.18	1.21	0.000316 J	0.0071 J	0.0265	0.0234 J	ND	ND	1.5	1.57
May-2016	ND	ND	0.0645	0.001 J	0.0002 J	1.05	1.24	ND	0.0067	0.0232	ND	ND	ND	1.49	1.48
Oct-2016	ND	ND	0.0683	0.001	ND	1.27	1.28	ND	0.0075	0.0248	ND	ND	ND	1.58	1.68
May-2017	ND	ND	0.0625	0.00092 J	0.00022 J	1.15	1.1	ND	0.0073	0.0225	ND	ND	ND	1.67	1.71
Oct-2017	ND	ND	0.0661	0.00097 J	0.00026 J	1.73	1.66	ND	0.0078	0.0258	0.0551 J	ND	0.00028 J	1.71	1.77
May-2018	0.000062 J	ND	0.072	0.00099	0.00027 J	1.3	1.21	0.002 J	0.0065	0.02	0.012 J	ND	0.000018 J	1.9	1.76
Nov-2018	ND	ND	0.063	0.00074	0.00023 J	9.9	9.9	0.0019 JB	0.0056	0.046	0.017 J	ND	0.000088 JB	1.5	1.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25A***													
May-2019	*ND*	*ND*	0.066	0.001	*ND*	4.7	4.8	*ND*	0.0059	0.035	*ND*	*ND*	*ND*	1.6	1.6
Oct-2019	*0.0002 J*	*0.00016 J*	0.066	0.0012	*0.00049 J*	4	3.8	*0.0029 J*	0.0059	0.039	*0.015 J*	*0.013 J*	*0.000086 J*	1.8	1.7
May-2020	*0.000059 J*	*ND*	0.067	0.00086	*0.00014 J*	4.8	4.6	*0.0049 J*	0.0076	0.048	*0.017 J*	*0.016 J*	*ND*	1.8	1.8
Oct-2020	*ND*	*ND*	0.058	*0.00068 J*	*ND*	5.5	5.2	*0.0035 J*	0.0063	0.03	*ND*	*ND*	*ND*	1.9	1.8
Apr-2021	*ND*	*ND*	0.073	*0.00061 J*	*ND*	11.8	11.8	*0.00036 J*	0.0073	0.026	*ND*	*ND*	*ND*	1.7	1.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-25A*												
Apr-1995	0.01	NA	ND	ND	2.8	NA	ND	0.02	2.1	NA	ND	ND	0.05
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	1.6	1.8	ND	ND	0.04
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	2	2	ND	ND	0.03
Oct-1997	ND	ND	ND	ND	0.821	ND	ND	ND	1.37	1.35	ND	ND	0.013
Apr-1998	ND	ND	ND	0.015	0.799	0.749	ND	ND	1.48	1.46	ND	ND	0.024
Apr-1999	ND	ND	NA	ND	ND	ND	ND	ND	1.5	1.39	ND	ND	ND
Oct-1999	ND	ND	NA	ND	1.04	ND	ND	ND	1.37	1.29	ND	ND	0.01
Apr-2000	ND	ND	NA	ND	1.02	0.621	ND	ND	1.47	1.34	ND	ND	ND
Oct-2000	ND	ND	NA	ND	0.759	0.625	ND	ND	2.35	1.47	ND	ND	0.011
Apr-2001	NA	NA	NA	ND	1.23	NA	ND	ND	1.6	NA	ND	ND	ND
Sep-2001	ND	ND	NA	ND	0.504	0.935	ND	ND	1.55	1.42	ND	ND	ND
Mar-2002	ND	ND	NA	ND	1.61	0.754	ND	ND	1.65	1.5	ND	ND	ND
Sep-2002	ND	ND	NA	ND	0.682	ND	ND	ND	1.6	1.57	ND	ND	ND
Mar-2003	ND	ND	NA	ND	0.768	ND	ND	ND	1.65	1.62	ND	ND	ND
Oct-2003	0.039	ND	NA	0.032	ND	ND	ND	ND	13.7	1.84	ND	ND	0.074
Apr-2004	0.011	0.011	**0.0036**	ND	0.833	0.931	ND	ND	2.19	2.1	ND	ND	ND
Oct-2004	0.012	0.011	0.002	ND	1.62	1.11	ND	ND	2.39	2.12	ND	ND	0.012
Apr-2005	0.011	ND	ND	ND	0.75	0.68	ND	ND	2.23	2.11	ND	ND	ND
Oct-2005	0.011	0.01	**0.0037**	ND	0.521	ND	ND	ND	2.25	2.11	ND	ND	0.012
Mar-2006	ND	ND	**0.0033**	ND	ND	ND	ND	ND	2.19	2.12	ND	ND	ND
Sep-2006	0.011	0.01	**0.0042**	ND	0.657	0.666	ND	ND	2.3	2.17	ND	ND	ND
Mar-2007	ND	ND	**0.0065**	ND	0.671	0.646	ND	ND	2.26	2.19	ND	ND	0.011

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-25A***												
Sep-2007	0.01	ND	**0.0089**	ND	0.632	0.545	ND	ND	2.1	2.07	ND	ND	0.01
Mar-2008	0.012	0.011	**0.0065**	ND	0.815	0.778	ND	ND	2.06	1.94	ND	ND	ND
Sep-2008	0.013	0.013	**0.0036**	ND	0.617	0.62	ND	ND	2.12	2.05	ND	ND	0.015
Mar-2009	0.014	0.012	**0.0021**	ND	0.652	0.646	ND	ND	2.29	2.4	ND	ND	ND
Oct-2009	0.013	0.013	**0.0024**	ND	0.516	ND	ND	ND	1.96	2.1	ND	ND	ND
Mar-2010	0.013	0.013	0.0019	ND	0.742	0.695	ND	ND	2.07	2.36	ND	ND	0.011
Oct-2010	0.017	0.017	0.0012	ND	0.71	0.689	ND	ND	2.53	2.5	ND	ND	ND
Apr-2011	0.016	0.016	0.0011	ND	0.513	ND	ND	ND	2.26	2.24	ND	ND	ND
Sep-2011	0.018	0.018	0.0011	ND	0.848	0.872	ND	ND	2.69	2.69	ND	ND	ND
Mar-2012	0.019	0.019	0.0011	ND	0.719	0.726	ND	ND	2.57	2.56	ND	ND	ND
Sep-2012	0.0236	0.0231	0.00087	0.0067 J	0.835	0.793	ND	ND	2.88	2.94	0.000481 J	ND	0.0105
Mar-2013	0.0224	0.0223	0.000742	0.0065 J	0.748	0.754	ND	0.000028 J	2.52	2.58	ND	ND	0.0192
Oct-2013	0.0257	0.0241	0.000652	0.007 J	0.833	0.776	0.00058 J	ND	3.02	2.95	0.000124 J	0.00095 J	0.02
Mar-2014	0.024	0.0269	0.000517	0.006 J	0.851	0.897	0.000457 J	ND	2.72	2.86	0.000144 J	0.000758 J	0.0056 J
Oct-2014	0.0284	0.0285	0.000379	0.0075 J	0.996	0.991	0.0019 J	0.003 J	3.37	3.37	ND	ND	0.0112
Apr-2015	0.0277	0.0283	0.000377	0.0071 J	0.937	0.934	ND	ND	3.29	3.22	ND	ND	0.0107
Nov-2015	0.0284	0.0298	0.000269	0.007 J	1.02	1.06	0.000731 J	ND	3.34	3.48	ND	ND	0.0083 J
May-2016	0.0294	0.0284	0.00023	0.0064	0.969	0.966	ND	ND	3.1	3.09	ND	ND	0.0094 J
Oct-2016	0.0319	0.0365	0.00015 J	0.0071	1.02	1.09	ND	ND	3.15	3.32	ND	ND	0.007 J
May-2017	0.0343	0.0346	0.00016 J	0.0065	1.02	1.04	ND	ND	3.2	3.13	ND	ND	0.0085 J
Oct-2017	0.0335	0.0408	0.000059 J	0.0056	1.06	1.13	ND	ND	3.2 J-	3.36	0.00013 J	ND	0.0105 J
May-2018	0.032	0.031	0.00018 J	0.0061	ND	ND	0.00094 JB	ND	3.9 J	3.54 J	0.00008 J	0.0036	0.0082 B
Nov-2018	0.028	0.028	0.00027	0.0061	1.1 J	1.4 J	0.00066 J	ND	1.7 J	3.7 JB	0.000078 J	0.0029 B	0.0091
May-2019	0.034	0.034	ND	0.0062	ND	ND	ND	ND	ND	ND	ND	0.0041 B	0.0086

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-25A***												
Oct-2019	0.032	0.036	*ND*	0.0053	*1.2 J*	*1.2 J*	*0.00053 J*	*ND*	*4.1 J*	*4 J*	*ND*	*ND*	0.064
May-2020	0.041	0.04	*ND*	0.0077	*ND*	*1.1 J*	*0.00064 J*	*ND*	*4.4 J*	*3.9 J*	*ND*	0.01	0.011
Oct-2020	0.043	0.042	*ND*	0.0059	*ND*	*ND*	*ND*	*ND*	*4.1 J*	*3.7 J*	*ND*	*0.00092 J*	*ND*
Apr-2021	0.041	0.042	*0.00011 J*	*0.0078 J*	1	1	*ND*	*ND*	3.9	4	*ND*	*ND*	*0.0093 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25A*																
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	0.5 J	NA	NA	0.7 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	1	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	0.7 J	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	0.7 J	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	0.9 J	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	0.5 J	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	0.7 J	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	0.9 J	ND	ND	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	0.8 J	ND	ND	4.4	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	1	ND	ND	5.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	0.9 J	ND	ND	6.4	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	0.7 J	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	1.2	ND	ND	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25A*																
Mar-2007	ND	1.1	ND	ND	13.1	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	2	ND	ND	20	0.7 J	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	0.6 J	ND	ND	6.8	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Sep-2008	1 R	1 R	1 R	1 R	1 R	1 R	1 R	**1 R**	**1 R**	1 R	1 R	1 R	1 R	5 R	5 R	5 R	5 R	5 R
Dec-2008	ND	ND	ND	ND	12.5	ND	ND	ND	ND	ND	1.1	ND	0.6 J	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	7.4	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	9.6	ND	ND	ND	ND	ND	0.9 J	ND	0.6 J	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	21.3	ND	ND	ND	ND	ND	ND	ND	0.97 J	ND	ND	ND	ND	ND
Oct-2010	ND	1.4	ND	ND	27.5	ND	ND	ND	ND	ND	1.4	0.8 J	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	14.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	34.1	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	24.8	1.1	ND	ND	ND	ND	2.4	1	1.6	ND	ND	ND	ND	ND
Sep-2012	ND	1.16	ND	ND	35	0.95 J	ND	ND	ND	ND	2.01	1.16	1.69	ND	ND	ND	ND	ND
Mar-2013	ND	1.14	ND	ND	42.1	1.28	ND	ND	ND	ND	2.9	1.12	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	41.9	1.14	ND	ND	ND	ND	2.5	1.34	2.17	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	39.7	1.2	ND	ND	ND	ND	2.47	1.1	2.13	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	40.1	1.16	ND	ND	ND	ND	2.35	1.36	2.17	ND	ND	ND	ND	ND
Apr-2015	ND	0.94 J	ND	ND	37.3	1.17	ND	ND	ND	ND	2.28	1.26	1.7	ND	ND	ND	ND	ND
Nov-2015	ND	1 J	ND	ND	35.1	1.4	ND	ND	ND	ND	2.3	1.3	1.9	ND	ND	ND	ND	ND
May-2016	ND	0.8 J	ND	ND	27	1.2	ND	ND	ND	ND	2	1.2	1.8	ND	ND	ND	ND	ND
Oct-2016	ND	0.8 J	ND	ND	32	1	ND	ND	ND	ND	2.4	1.2	1.9	ND	ND	ND	ND	ND
May-2017	ND	0.6 J	ND	ND	33	1 J	ND	ND	ND	ND	2.2	1	1.7	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25A*																
Oct-2017	ND	0.6 J	ND	ND	28	1.2	ND	ND	ND	ND	2	1.2	1.7	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	37.4	1.3	ND	ND	ND	ND	2.4	1.4	2.2	ND	ND	ND	2.5 JB	ND
Nov-2018	ND	0.59 J	ND	ND	30.3	1 J	ND	ND	ND	ND	1.8	1.1	1.3	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	19.5	ND	ND	ND	ND	ND	1.2	ND	1.4	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	23.3	ND	ND	ND	ND	ND	1.4	ND	1.3	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	18.4	ND	ND	ND	ND	ND	1.4	ND	1.4	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	24.2	0.7 J	ND	ND	ND	ND	1.5	1	ND	ND	ND	ND	ND	ND
Apr-2021	ND	0.295 J	ND	ND	28	0.718 J	ND	ND	ND	ND	1.95	1.02	1.01	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25A***															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	1.4
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	2.6
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	1.4	2.8
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.2	5.7
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.4	5.3
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	4.3
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	5.5
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	9.8
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19	5.4
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	28	12
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	61	11
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	24	14
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	36	18
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	32.3	22.2
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21.9	16.9
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	22.1	21.9

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25A***															
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	0.8 J	ND	ND	ND	16.1	31.7
Sep-2007	0.5 J	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	1	ND	ND	ND	24.2	23.6
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	1	15.4
Sep-2008	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1.8 R	3 R
Dec-2008	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	1	16.2
Mar-2009	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	7.5
Oct-2009	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	12.8	2.5
Mar-2010	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	30.5 J	46.9
Oct-2010	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	ND	ND	ND	33.5	47.9
Apr-2011	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7	ND	ND	ND	43.7	42.7
Sep-2011	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	28.8	57.6
Mar-2012	3	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	ND	ND	ND	25.6	59.1
Sep-2012	3.57	ND	ND	ND	ND	ND	ND	ND	0.83 J	ND	ND	5.6	ND	ND	ND	15.2	42
Mar-2013	3.82	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.5	ND	ND	ND	19.6	60.8
Oct-2013	4.24	0.24 J	ND	ND	ND	ND	ND	ND	0.94 J	0.23 J	ND	6.43	ND	ND	ND	16.7	61.4
Mar-2014	3.79	ND	ND	ND	ND	ND	ND	ND	0.8 J	0.24 J	ND	5.87	ND	ND	ND	22 J	62.3
Oct-2014	3.98	ND	ND	ND	ND	ND	ND	ND	0.53 J	0.24 J	ND	6.16	ND	ND	ND	19.3	57.7
Apr-2015	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.79	ND	ND	ND	16.9	51.4
Nov-2015	3.4	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	6.4	ND	ND	ND	32.3 J	48.4
May-2016	3.3	ND	ND	ND	ND	ND	ND	ND	0.5 J	0.2 J	ND	6.1	ND	ND	ND	17	41
Oct-2016	3.3	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.3 J	ND	5.5	ND	ND	ND	16	53
May-2017	3	ND	ND	ND	ND	ND	ND	ND	0.4 J	0.2 J,B	ND	5.5	ND	ND	ND	13	47

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25A***															
Oct-2017	3.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*0.2 J*	*ND*	5.9	*ND*	*ND*	*ND*	13	48
May-2018	3.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.2	*ND*	*ND*	*ND*	26.9	52.3
Nov-2018	2.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.1	*ND*	*ND*	*ND*	11.7	44.3 N3
May-2019	1.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	8.5 CL	32 N3
Oct-2019	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.9	*ND*	*ND*	*ND*	12.2	20.4
May-2020	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	7.6	15.5
Oct-2020	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.1	*ND*	*ND*	*ND*	12.9	21.4
Apr-2021	1.88	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.233 J*	*0.187 J*	*ND*	4.75	*ND*	*ND*	*ND*	6.82	35.8

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25A***															
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	1.4	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	1.6	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	NA
Apr-2000	ND	NA	ND	NA	1.6	ND	NA	ND	ND	ND	NA	NA	ND	0.7 J	ND	ND	NA
Oct-2000	ND	ND	ND	NA	2	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	NA
Apr-2001	ND	ND	ND	NA	1.4	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	NA
Sep-2001	ND	ND	ND	NA	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	NA
Mar-2002	ND	ND	ND	NA	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	NA
Sep-2002	ND	ND	ND	NA	1.2	ND	ND	ND	ND	ND	ND	ND	0.7 J	1.8	ND	ND	NA
Mar-2003	ND	ND	ND	NA	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	NA
Oct-2003	ND	ND	ND	NA	1.1	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	NA
Apr-2004	ND	ND	ND	NA	1	ND	ND	0.6 J	ND	ND	ND	ND	0.8 J	2.3	ND	ND	NA
Oct-2004	ND	ND	ND	NA	2.4	ND	ND	ND	ND	ND	ND	ND	ND	3.1	ND	ND	NA
Apr-2005	ND	ND	ND	ND	2.3	ND	ND	0.9 J	ND	ND	ND	ND	1.2	2.7	ND	ND	NA
Oct-2005	ND	ND	ND	ND	3.3	ND	ND	1.6	ND	ND	ND	ND	1.4	2.5	ND	ND	NA
Mar-2006	ND	ND	ND	ND	2.5	ND	ND	1.4	ND	ND	ND	ND	1.1	1.8	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-25A*															
Sep-2006	ND	ND	ND	ND	**5.4**	ND	ND	1.4	ND	ND	ND	ND	1.7	3.9	ND	ND	NA
Mar-2007	ND	ND	ND	1	6.1 J	ND	ND	1.9	ND	ND	ND	ND	2.6	3	ND	ND	NA
Sep-2007	ND	ND	ND	1.5	**12.1**	ND	ND	2.1	ND	ND	ND	ND	3.6	3.9	ND	ND	NA
Mar-2008	ND	ND	ND	1.6	**9**	ND	ND	1.1	ND	ND	ND	ND	1.8	ND	ND	0.6 J	NA
Sep-2008	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	NA
Dec-2008	ND	ND	0.6 J	2.2	**14.1**	ND	ND	0.9 J	0.5 J	ND	ND	ND	2	ND	ND	ND	NA
Mar-2009	ND	ND	ND	2.4	**11.4**	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA
Oct-2009	ND	ND	0.7 J	ND	**12.1**	0.6 J	ND	0.8 J	ND	ND	ND	ND	1.8	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	**20.7**	ND	ND	ND	ND	ND	ND	ND	ND	3.6	ND	ND	NA
Oct-2010	ND	ND	1.1	3.4	**25.9**	1.2	ND	3.5	ND	ND	ND	ND	ND	3.6	ND	1.2	NA
Apr-2011	ND	ND	1.1	2.8	**22.9**	1.2	ND	3.7	ND	ND	ND	ND	**5.4 C**	3	ND	**5.5 R,C**	NA
May-2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**5.5**	NA	NA	1	NA
Sep-2011	ND	ND	1.1	5.3	**30.9**	1.2	ND	4.7	ND	ND	ND	ND	**6.8**	4	ND	1.4	NA
Mar-2012	ND	ND	1.2	4.8	**34.3**	1.4	ND	4.5	ND	ND	ND	ND	**6.5**	3.6	ND	**4.3 R,C**	NA
May-2012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5	NA
Sep-2012	ND	ND	1.9	5.97	**36.1**	1.88	ND	**5.06 C**	ND	ND	ND	ND	**6.71**	3.53	ND	1.36	3.78
Nov-2012	NA	NA	NA	NA	NA	NA	NA	**5.44**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mar-2013	ND	ND	1.73	6.33	**44**	1.94	ND	**5.14**	ND	ND	ND	ND	**7.31**	ND	ND	1.55	3.67
Oct-2013	ND	ND	2.07	6.05	**43**	2.28	ND	**6.05**	ND	0.18 J	ND	ND	**7.97**	3.34	ND	1.66	4.35
Mar-2014	ND	ND	1.9	6.01	**40.8**	2.26	ND	**5.68**	ND	ND	ND	ND	**7.69**	3.2	ND	1.52	4.16
Oct-2014	ND	ND	0.94 J	5.65	**41.7**	2.17	ND	**6.1**	ND	ND	ND	ND	**8.14**	3.64	ND	1.45	3.11
Apr-2015	0.28 J	ND	ND	5.65	**41.1**	1.94	ND	**5.08**	ND	ND	ND	ND	**7.43**	3.61	ND	1.42	1.94

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25A***															
Nov-2015	*ND*	*ND*	*ND*	5.5	**40.8**	1.8	*ND*	4.9	*ND*	*ND*	*ND*	*ND*	**7.5**	3.3	*ND*	2	1.8
May-2016	*ND*	*ND*	*0.1 J*	4.6	**33**	1.7	*ND*	5	*ND*	*0.1 J*	*ND*	*ND*	**7.1**	3.7	*ND*	1.3	1.8
Oct-2016	*ND*	*ND*	*ND*	4	**35**	1.2	*ND*	4.3	*ND*	*0.2 J*	*ND*	*ND*	**6.4**	4	*ND*	1.5	1.2
May-2017	*ND*	*ND*	*ND*	4.6	**37**	1.6	*ND*	4.3	*ND*	*0.1 J*	*ND*	*ND*	**6**	1.5	*ND*	1.2	1.6
Oct-2017	*ND*	*ND*	*ND*	4.6	**32**	1.6	*ND*	4.5	*ND*	*0.1 J*	*ND*	*ND*	**6.4**	3.4	*ND*	1.3	1.6
May-2018	*ND*	*ND*	*ND*	5.2	**42.1**	2.1	*ND*	**5.6**	*ND*	*ND*	*ND*	*ND*	**8.9**	4.4	*ND*	1.7	*NA*
Nov-2018	*ND*	*ND*	*ND*	4.4	**26.3**	1	*ND*	2.6 CL	*ND*	*ND*	*ND*	*ND*	**5.7**	3.4	*ND*	*0.98 J*	*NA*
May-2019	*ND*	*ND*	*ND*	2.8	**16.7**	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	3.8	2.2	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	2.9	**18.8**	*ND*	*ND*	3.1	*ND*	*ND*	*ND*	*ND*	4	1.6	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	2.2	**15.2**	*ND*	*ND*	2.7	*ND*	*ND*	*ND*	*ND*	2.9	1.2	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	3.1	**16.4**	*0.6 J*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	3.2	1.7	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	3.98	**19.5**	*0.526 J*	*ND*	2.62	*ND*	*ND*	*ND*	*ND*	3.84	*2.1 J*	*ND*	*0.693 J*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-27***											
Mar-2013	4.24	4.24	*0.0847 J*	*ND*	3.16	0.0583	*ND*	6.2	17.5	*0.63 J*	*ND*	3.43	6.9
Oct-2013	4.36	4.36	*ND*	*ND*	3.03	0.0804	*ND*	5.8	18.4	*0.615 J*	32	3.37	11.7
Mar-2014	4.28	4.28	*ND*	*ND*	2.96	0.0592	*ND*	5.5	20.1	*ND*	*ND*	3.56	13
Oct-2014	24.2	24.2	*ND*	*ND*	3.09	0.0724	*ND*	5.8	18.2	*ND*	*ND*	3.72	33.1
Apr-2015	4.48	4.48	*ND*	*5 J*	2.92	0.0554	*ND*	3.9	18.6	*ND*	31	3.57	14.1
Nov-2015	*ND*	*ND*	*ND*	*ND*	3.16	0.053	*ND*	5.4	23.2	*ND*	32	4.25	4.22
May-2016	3.6	3.6	*ND*	*ND*	3.93	0.0614	*ND*	5.3	22.9	*ND*	*20 J*	3.6	2.97
Oct-2016	*ND*	*ND*	*ND*	*ND*	3.72	*NA*	*NA*	5.2	26.9	*0.701 J*	*23 J*	3.3	2.93
May-2017	*ND*	*ND*	*ND*	*ND*	3.1	0.0707	*ND*	5.1	37.8	*ND*	*ND*	3.6	3.49
Oct-2017	*ND*	*ND*	*ND*	*ND*	3.63	0.0788	*ND*	5.3	31.3	*ND*	*21 J*	3.5	4.61
May-2018	*6 J*	*ND*	*ND*	*ND*	3.3	*0.063 J*	*ND*	6.5	225	*ND*	15	*3.4 J*	*3.03*
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	4.7	*0.076 J*	*ND*	4.7	24	*ND*	80	*3.7 J*	*5.15*
May-2019	*ND*	*NA*	*ND*	*ND*	4.7	*ND*	*ND*	4.45	19.7	*ND*	*ND*	*ND*	5.42
Oct-2019	*2.5 J*	*NA*	*ND*	*ND*	4	*0.095 J*	*ND*	4.5	25.3	*ND*	24	3.5	3.01
May-2020	*ND*	*NA*	*ND*	*ND*	4.7	*0.056 J*	*ND*	4.5	22	*ND*	25	3.5	3.41
Oct-2020	*ND*	*NA*	*ND*	*ND*	4.4	*0.068 J*	*ND*	4.69	22.1	*ND*	20	3.8	3.95
Apr-2021	20	*NA*	*ND*	*ND*	4.3	*0.089 J*	*ND*	6.08	25.1	*ND*	*ND*	3.7	13.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-27***													
Mar-2013	ND	ND	0.006 J	ND	ND	0.877	0.928	0.0074 J	0.000939 J	0.0023 J	0.0538	0.0056	ND	0.302	0.311
Oct-2013	ND	ND	0.006 J	ND	ND	0.835	0.803	0.0034 J	0.00098 J	0.0019 J	0.0606	ND	0.000286 J	0.313	0.307
Mar-2014	0.0017 J	0.000343 J	0.007 J	ND	ND	0.869	0.872	0.0039 J	0.000823 J	0.0025 J	0.287	0.0077 J	ND	0.337	0.328
Oct-2014	0.0012 J	0.000421 J	0.0173	ND	ND	0.915	0.82	0.0062 J	0.000869 J	0.0024 J	0.737	ND	0.0012 J	0.348	0.273
Apr-2015	0.000396 J	ND	0.0065 J	ND	ND	0.899	0.887	0.0015 J	0.000804 J	0.0019 J	0.0623	ND	ND	0.323	0.326
Nov-2015	ND	ND	0.0065 J	ND	0.00008 J	1.13	0.872	0.0014 J	0.000764 J	0.0023 J	0.0973	ND	ND	0.346	0.337
May-2016	ND	ND	0.0065	ND	ND	0.875	0.926	0.0024 J	0.00078 J	0.0023 J	0.385	ND	ND	0.34	0.34
Oct-2016	ND	ND	0.0073	ND	ND	0.77	0.8	0.00062 J	0.0008 J	0.0022 J	ND	ND	ND	0.332	0.35
May-2017	ND	ND	0.0064	ND	ND	0.902	0.721	0.0015 J	0.00084 J	0.0025 J	0.0661 J	ND	ND	0.338	0.327
Oct-2017	ND	ND	0.006	ND	ND	0.8	0.764	0.00092 J	0.00075 J	0.0023 J	ND	ND	ND	0.358	0.305
May-2018	0.000039 J	ND	0.0065	ND	0.000025 J	0.8 J	0.76 J	0.0027 J	0.00077	0.0048 B	ND	ND	ND	0.34 J	0.32 J
Nov-2018	ND	ND	0.0064	0.000027 J	0.000046 J	0.88 J	0.86 J	0.0033 J	0.00082	0.0068	0.026	ND	0.00018 J	0.37 J	0.34 J
May-2019	ND	ND	0.0069	ND	ND	ND	ND	ND	0.00091	0.0074	ND	ND	ND	ND	ND
Oct-2019	0.00011 J	ND	0.0067	ND	0.00025 J	0.8	0.79 J	0.0055 J	0.00093	0.021	0.035 J	0.0088 J	0.000054 J	0.36	0.34 J
May-2020	0.000078 J	ND	0.0064	ND	0.0001 J	0.8	0.82 J	0.0068 J	0.00097	0.022	0.039 J	0.014 J	ND	0.36	0.36 J
Oct-2020	0.00052 J	ND	0.028	ND	ND	0.92	0.78 J	0.054	0.0084	ND	4.2	0.06	ND	0.38	0.36 J
Apr-2021	ND	ND	0.011	ND	ND	0.85 J	0.72 J	0.013	0.0018 J	0.02	0.76	ND	ND	0.38	0.33

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-27*												
Mar-2013	0.0078 J	0.0079 J	0.000098 J	0.0045 J	0.437 J	0.45	ND	ND	1.41	1.46	ND	ND	0.0177
Oct-2013	0.0079 J	0.0073 J	ND	0.0031 J	0.377 J	0.344 J	ND	ND	1.45	1.43	ND	0.000916 J	0.0184
Mar-2014	0.0078 J	0.0071 J	ND	0.0028 J	0.491 J	0.441 J	ND	ND	1.53	1.63	0.000579 J	0.0011 J	0.0086 J
Oct-2014	0.0111	0.0087 J	ND	0.0035 J	0.58	0.372 J	ND	ND	1.62	1.65	ND	0.003 J	0.0089 J
Apr-2015	0.0078 J	0.0078 J	ND	0.0018 J	0.377 J	0.389 J	ND	ND	1.51	1.6	ND	ND	0.0094 J
Nov-2015	0.0074 J	0.007 J	ND	0.0017 J	0.444 J	0.422 J	ND	ND	1.64	1.64	ND	0.000256 J	0.0086 J
May-2016	0.007	0.0067	ND	0.0022 J	0.383 J	0.363 J	ND	ND	1.49	1.48	ND	0.00039 J	0.008 J
Oct-2016	0.0067	0.006	ND	0.0013 J	0.427	0.415	ND	ND	1.71	1.76	ND	ND	0.0037 J
May-2017	0.0073	0.0054	ND	0.005	0.418	0.38 J	ND	ND	1.52	1.36	ND	0.00024 J	0.0049 JB
Oct-2017	0.0062	0.0056	ND	0.0016 J	0.444	0.416	ND	ND	1.82	1.86	ND	ND	0.0051 J
May-2018	0.0053	0.0049	ND	0.0024	ND	ND	0.00045 JB	ND	1.7 J	1.9 J	ND	0.0041	0.0061 B
Nov-2018	0.0073	0.0054	ND	0.0028	ND	ND	0.00013 J	ND	2.5 JB	2.2 J	ND	0.0028	0.0069
May-2019	0.0062	0.0051	ND	0.0028	ND	ND	ND	ND	ND	ND	ND	0.0038	0.0053
Oct-2019	0.0051	0.0046	ND	0.0033	ND	ND	ND	ND	2.2 J	2 J	ND	0.0008 J	0.014
May-2020	0.005	0.0045	ND	0.0044	ND	ND	ND	ND	2.1 J	2.1 J	ND	0.003	0.0077
Oct-2020	0.024	0.012	ND	0.045	ND	ND	ND	ND	ND	ND	ND	0.0065	ND
Apr-2021	0.0077	0.0058	ND	0.013	0.53	0.41 J	ND	ND	2.4	2.3	ND	0.0012 J	0.0033 J

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-27***																
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.8 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-27***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.18 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.206 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-27***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Millersville Landfill and Resource Recovery Facility

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-28***											
Mar-2013	4.52	4.52	*0.0847 J*	*ND*	4.04	0.0805	*ND*	6.2	20	*0.533 J*	*ND*	4.82	0.446
Oct-2013	4.4	4.4	*ND*	*ND*	3.95	0.112	*ND*	5.6	21.4	*0.517 J*	46	4.9	0.435
Mar-2014	4.32	4.32	*ND*	*ND*	4.19	0.0818	*ND*	5.4	23.5	*ND*	*ND*	5.44	0.723
Oct-2014	*ND*	*ND*	*0.106 J*	*ND*	4.85	0.0941	*ND*	4.7	28.3	*ND*	36	5.31	0.732
Apr-2015	4.64	4.64	*ND*	*ND*	5.29	0.0508	*ND*	4.1	25.7	*ND*	*ND*	6	0.258
Nov-2015	3.72	3.72	*ND*	*ND*	6.06	0.0781	*ND*	5.2	47.9	*ND*	*12 J*	6.59	0.123
May-2016	2.24	2.24	*ND*	*ND*	6.46	0.0791	*ND*	5.2	39	*ND*	27	6.4	0.996
Oct-2016	*ND*	*ND*	*ND*	*ND*	7.83	*NA*	*NA*	5.3	47.6	*0.717 J*	31	6.8	14.5
May-2017	2.68	2.68	*ND*	*5 J*	9.52	0.16	*ND*	5	58.6	*0.545 J*	*22 J*	7.7	1.5
Oct-2017	*ND*	*ND*	*ND*	*ND*	12.3	0.101	*ND*	5	79.6	*0.542 J*	29	9.6	3.83
May-2018	*2 JB*	*ND*	*0.066 J*	*ND*	14.6	*0.086 J*	*ND*	5.4	79.2	*ND*	37	10.7	2.64
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	19.5	*0.079 J*	*ND*	4.68	70.1	*ND*	83	13.2	4.95
May-2019	*ND*	*NA*	*ND*	*ND*	28.6	*ND*	*ND*	4.28	78.8	*ND*	67	16.8	5.34
Oct-2019	*2.5 J*	*NA*	*ND*	*ND*	40.6	*0.098 J*	*ND*	4.29	139.3	*ND*	85	22.3	2.27
May-2020	*ND*	*NA*	*ND*	*ND*	45.1	*0.087 J*	*ND*	4.44	141.9	*ND*	94	20.3	3.66
Oct-2020	*ND*	*NA*	*ND*	*6.1 J*	43.5	*0.058 J*	*ND*	5.03	170.4	*ND*	90	23.8	19.4
Apr-2021	*1 J3c*	*NA*	*ND*	*ND*	54.5	*0.076 J*	*ND*	4.63	204.2	*ND*	80	25	8.71

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-28***													
Mar-2013	*ND*	*ND*	0.0103	*ND*	*ND*	1.16	1.27	*0.0017 J*	*0.0025 J*	*0.0013 J*	*0.0052 J*	*0.0051 J*	*ND*	0.466	0.522
Oct-2013	*ND*	*ND*	0.0118	*ND*	*ND*	1.16	1.14	*0.0013 J*	*0.0027 J*	*0.000921 J*	*ND*	*ND*	*ND*	0.487	0.485
Mar-2014	*0.000945 J*	*ND*	0.0116	*ND*	*ND*	1.26	1.23	*0.000968 J*	*0.0028 J*	*0.0013 J*	*0.0131 J*	*0.0044 J*	*ND*	0.56	0.549
Oct-2014	*0.000718 J*	*ND*	0.0125	*ND*	*ND*	1.28	1.29	*0.0021 J*	*0.0027 J*	*0.000985 J*	*0.0179 J*	*ND*	*ND*	0.515	0.499
Apr-2015	*0.000611 J*	*ND*	0.0142	*ND*	*ND*	1.41	1.42	*0.0027 J*	*0.0028 J*	*0.0013 J*	*0.0482 J*	*ND*	*ND*	0.602	0.611
Nov-2015	*ND*	*0.000252 J*	0.0154	*ND*	*ND*	1.51	1.51	*0.000811 J*	*0.0029 J*	*0.0011 J*	*ND*	*ND*	*0.000474 J*	0.683	0.695
May-2016	*ND*	*ND*	0.0181	*0.000071 J*	*ND*	1.4	1.59	*0.002 J*	0.0026	*0.0011 J*	*ND*	*ND*	*ND*	0.695	0.716
Oct-2016	*ND*	*ND*	0.0175	*ND*	*ND*	1.54	1.54	*0.003 J*	0.0029	*0.0013 J*	*0.0662 J*	*ND*	*ND*	0.726	0.756
May-2017	*ND*	*ND*	0.0172	*ND*	*ND*	1.71	1.7	*0.0018 J*	0.003	*0.0013 J*	*ND*	*ND*	*ND*	0.829	0.832
Oct-2017	*ND*	*ND*	0.0216	*0.000092 J*	*ND*	2.19	1.9	*0.0014 J*	0.003	*0.001 J*	*ND*	*ND*	*ND*	1.01	0.986
May-2018	*0.000045 J*	*ND*	0.028	*0.0001 J*	*0.000029 J*	2.4	2.4	*0.0039 J*	0.003	0.0025 B	0.044	*ND*	*ND*	1.1	1.1
Nov-2018	*ND*	*ND*	0.029	*0.00012 J*	*0.000039 J*	3	2.9	0.0098	0.0028	*0.0015 J*	0.072	0.029	*0.00014 J*	1.4	1.4
May-2019	*ND*	*ND*	0.041	*ND*	*ND*	3.8	3.9	0.0087	0.0038	0.0025	*ND*	0.021	*ND*	1.8	1.8
Oct-2019	*0.000099 J*	*ND*	0.052	*0.00021 J*	*0.00026 J*	5.1	5	0.011	0.0045	0.0057	*0.098 J*	0.048	*0.000073 J*	2.3	2.3
May-2020	*0.000088 J*	*ND*	0.05	*0.00018 J*	*ND*	4.6	3.2	0.0071	0.0045	0.0026	*0.062 J*	*ND*	*ND*	2.2	3
Oct-2020	*ND*	*ND*	0.068	*0.00029 J*	*ND*	5.3	5.1	0.081	0.013	0.0062	2.2	0.29	*ND*	2.6	2.5
Apr-2021	*ND*	*ND*	0.064	*0.00018 J*	*ND*	5.6	5.8	0.0085	0.006	*ND*	0.11	*0.06 J*	*ND*	2.7	2.8

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-28*												
Mar-2013	0.0077 J	0.0086 J	0.000105 J	0.0014 J	0.39 J	0.412 J	ND	ND	1.47	1.7	ND	ND	0.0154
Oct-2013	0.0074 J	0.0071 J	ND	0.0019 J	0.36 J	0.349 J	ND	ND	1.7	1.71	ND	0.001 J	0.0136
Mar-2014	0.0072 J	0.0072 J	ND	0.0018 J	0.477 J	0.469 J	ND	ND	1.86	1.81	ND	ND	0.0087 J
Oct-2014	0.0072 J	0.0069 J	ND	0.0028 J	0.431 J	0.43 J	ND	ND	1.98	1.97	ND	ND	0.0093 J
Apr-2015	0.013	0.0077 J	ND	0.0032 J	0.452 J	0.464 J	ND	ND	2.19	2.24	ND	ND	0.0079 J
Nov-2015	0.0085 J	0.0087 J	ND	0.0023 J	0.497 J	0.497 J	ND	ND	2.6	2.69	0.000168 J	ND	0.0065 J
May-2016	0.0087	0.0089	ND	0.0027 J	0.465	0.454	ND	ND	2.62	2.69	ND	ND	0.0075 J
Oct-2016	0.0091	0.0083	ND	0.0036 J	0.504	0.533	ND	ND	3.2	3.24	ND	ND	ND
May-2017	0.0098	0.0092	ND	0.0033 J	0.537	0.577	ND	ND	3.8	3.62	ND	ND	0.0045 JB
Oct-2017	0.0096	0.0107	ND	0.003 J	0.613	0.641	ND	ND	4.85	4.65	ND	ND	0.0049 J
May-2018	0.012	0.011	ND	0.0047	ND	ND	0.00018 JB	ND	5.9	6.2	ND	0.0036	0.007 B
Nov-2018	0.015	0.014	ND	0.0087	0.84 J	ND	0.00012 J	ND	8	7.5	ND	0.0024	0.0081
May-2019	0.02	0.019	ND	0.0079	ND	ND	ND	ND	9.5	9.2	ND	0.0056	0.0092
Oct-2019	0.03	0.024	ND	0.011	ND	1.1 J	ND	ND	16.7	16.2	ND	ND	0.017
May-2020	0.026	0.023	ND	0.0084	ND	1.2 J	ND	ND	15.3	7.3	ND	0.0029	0.011
Oct-2020	0.037	0.032	ND	0.072	1.5	1.1	ND	ND	20	19.1	ND	0.007	0.02
Apr-2021	0.027	0.028	0.00006 J	0.015	1.1	1.1	ND	ND	23.2	24.2	ND	ND	0.009 J

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-28***																
Mar-2013	ND	ND	ND	ND	1.08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	2.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	0.1 J	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	0.1 J	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	0.1 J	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2 JB	ND
Nov-2018	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.63	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-28*															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.42 J	ND	ND	ND	ND	ND	8.46	6.37
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.41 J	ND	ND	ND	ND	ND	5.9	6.23
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43 J	ND	ND	ND	ND	ND	9.82 J	7.38
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.39 J	ND	ND	ND	ND	ND	6.82	7.55
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.37 J	ND	ND	ND	ND	ND	8.14	8.59
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18.1 J	9
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	4.2	4.5
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	4.5	4.7
May-2017	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	3.8	4.6
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	4	4.8
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.3	5.1
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4 CL	4.4 N3
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7 CL	4.6 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	3.6
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	3.4
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	2.3
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.22 J	ND	0.213 J	ND	ND	ND	3.49 J	5.5

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-28***															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.3	0.16 J	ND	ND	ND	0.29 J	3.88	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	1.58	ND	ND	ND	ND	0.33 J	3.32	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.56	ND	ND	ND	ND	0.34 J	4.15	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	0.33 J	3.09	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	2.04	ND	ND	ND	ND	0.43 J	3.43	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	0.5 J	3.9	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	0.2 J	1.8	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	0.8 J	0.1 J	ND	ND	ND	0.2 J	1.9	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	0.2 J	1.8	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	0.2 J	1.6	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	2.3	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	1.4	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	0.6 J	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.481 JB	ND	ND	0.849 J	0.563 J	ND	ND	ND	0.227 J	1.31 J	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Millersville Landfill and Resource Recovery Facility

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-29***											
Mar-2013	3.68	3.68	*0.0847 J*	*ND*	7.45	0.345	*ND*	6.1	39.4	1.38	19	7.56	10.3
Oct-2013	3.84	3.84	*ND*	*ND*	7.1	0.338	*ND*	5.8	39.2	*0.95 J*	44	8.02	2.6
Mar-2014	3.64	3.64	*0.108 J*	*ND*	7.5	0.378	*ND*	5.1	40	*0.635 J*	*ND*	8.99	8.95
Oct-2014	*ND*	*ND*	*ND*	*ND*	7.85	0.352	*ND*	4.5	37.1	*ND*	32	8.22	2.77
Apr-2015	4.76	4.76	*ND*	*ND*	7.91	0.401	*ND*	4.9	39.6	*ND*	27	8.83	3.12
Nov-2015	*ND*	*ND*	*ND*	*ND*	8.47	0.453	*ND*	5.1	66.3	*ND*	28	10	1.43
May-2016	*ND*	*ND*	*ND*	*ND*	9.01	0.442	*ND*	5	57.4	*0.644 J*	29	9	1.32
Oct-2016	*ND*	*ND*	*ND*	*ND*	8.1	*NA*	*NA*	4.9	57.9	*0.951 J*	28	7.9	4.72
May-2017	*ND*	*ND*	*ND*	*ND*	8.33	0.438	*ND*	4.9	59.4	*0.855 J*	25	8.3	6.04
Oct-2017	*ND*	*ND*	*ND*	*ND*	9.03	0.498	*ND*	5.3	69.4	*0.69 J*	26	8.6	4.3
May-2018	*2 JB*	*ND*	*ND*	*ND*	8.6	0.49	*ND*	5.7	59.2	*ND*	27	9.1	3
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	9.8	0.51	*ND*	4.64	43.1	*ND*	33	10.1	6.16
May-2019	*ND*	*NA*	*ND*	*ND*	9.4	0.54	*ND*	4.44	38.1	*ND*	81	9.3	4.25
Oct-2019	*ND*	*NA*	*ND*	161 ML	10.1	0.58	*ND*	4.35	48.8	*ND*	44	9.2	1.69
May-2020	*ND*	*NA*	*ND*	*ND*	10.5	0.57	*ND*	4.4	49.7	*ND*	30	9.8	3.04
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	9.4	0.55	*ND*	4.83	48.3	*ND*	39	9.9	1.84
Apr-2021	*1 J3c*	*NA*	*ND*	*ND*	10.7	0.58	*ND*	4.73	62.4	*ND*	21	9.5	3.63

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-29***													
Mar-2013	*ND*	*ND*	0.0168	*0.000171 J*	*ND*	1.73	2.1	*0.0039 J*	0.0172	*0.004 J*	*0.0493 J*	*0.0085 J*	*ND*	0.786	0.903
Oct-2013	*ND*	*ND*	0.0214	*ND*	*ND*	1.77	1.86	*0.0018 J*	0.0117	*0.0024 J*	*ND*	*ND*	*ND*	0.874	0.936
Mar-2014	*0.000625 J*	*0.00023 J*	0.0219	*ND*	*ND*	1.96	1.99	*0.0044 J*	*0.0078 J*	*0.0026 J*	0.11	*0.0084 J*	*ND*	0.992	0.996
Oct-2014	*0.000547 J*	*ND*	0.0225	*ND*	*ND*	1.86	1.88	*0.000879 J*	*0.0057 J*	*0.0018 J*	*0.0223 J*	*ND*	*ND*	0.867	0.869
Apr-2015	*0.000537 J*	*ND*	0.0258	*0.000165 J*	*ND*	1.96	1.98	*0.000867 J*	*0.0047 J*	*0.0019 J*	*0.0169 J*	*ND*	*ND*	0.955	0.983
Nov-2015	*ND*	*ND*	0.0276	*0.000158 J*	*ND*	2.14	1.96	*0.00074 J*	*0.0051 J*	*0.0022 J*	*0.0248 J*	*0.0151 J*	*0.000367 J*	1.13	1.07
May-2016	*ND*	*ND*	0.0237	*0.00014 J*	*ND*	1.99	1.87	*0.0015 J*	0.0035	*0.0018 J*	*ND*	*ND*	*0.00025 J*	0.985	0.93
Oct-2016	*ND*	*ND*	0.0209	*0.00013 J*	*ND*	1.66	1.71	*0.00068 J*	0.0032	*0.0015 J*	*ND*	*ND*	*ND*	0.919	0.971
May-2017	*ND*	*ND*	0.0228	*0.00013 J*	*ND*	1.7	1.74	*0.0017 J*	0.0024	*0.0017 J*	*0.0474 J*	*ND*	*0.000095 J*	0.975	0.988
Oct-2017	*ND*	*ND*	0.0241	*0.00016 J*	*ND*	1.68	1.84	*ND*	0.0024	*0.0016 J*	*ND*	*ND*	*ND*	1.07	1.04
May-2018	*0.000048 J*	*ND*	0.028	*0.00014 J*	*0.000033 J*	2	1.9	*0.0022 J*	0.0018	0.0024 B	*ND*	*ND*	*0.000018 J*	1	1
Nov-2018	*ND*	*ND*	0.028	*0.00017 J*	*0.000042 J*	2.1	2.1	*0.0057 J*	0.0019	0.0071	0.041	*0.019 J*	*0.00009 J*	1.2	1.1
May-2019	*ND*	*ND*	0.027	*ND*	*ND*	2	2	*ND*	0.0018	0.0045	*ND*	*ND*	*ND*	1	1.1
Oct-2019	*0.00009 J*	*ND*	0.026	*0.00016 J*	*0.00022 J*	2	2	*0.0047 J*	0.0018	0.009	*0.013 J*	*0.0068 J*	*0.000065 J*	1	1.1
May-2020	*0.000068 J*	*ND*	0.027	*0.00014 J*	*ND*	2.1	1.4	*0.0047 J*	0.0018	0.0072	*0.015 J*	*ND*	*ND*	1.1	*0.75 J*
Oct-2020	*ND*	*ND*	0.028	*ND*	*ND*	2.1	2	*0.012 J*	*0.0019 J*	*0.0076 J*	*0.02 J*	*0.0063 J*	*ND*	1.2	1.1
Apr-2021	*ND*	*ND*	0.029	*ND*	*ND*	2	2	*0.002 J*	*0.0015 J*	*ND*	*ND*	*ND*	*ND*	1.1	1.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-29*												
Mar-2013	0.0086 J	0.0094 J	0.000099 J	0.0165	0.594	0.681	ND	ND	2.65	3.01	ND	ND	0.0155
Oct-2013	0.0075 J	0.0078 J	ND	0.0081 J	0.569	0.588	ND	ND	2.93	3.13	ND	ND	0.0127
Mar-2014	0.0073 J	0.0072 J	ND	0.0079 J	0.775	0.729	ND	ND	3.09	3.18	ND	ND	0.006 J
Oct-2014	0.0072 J	0.0072 J	ND	0.0041 J	0.672	0.653	0.00076 J	ND	3.14	3.14	ND	ND	ND
Apr-2015	0.0078 J	0.008 J	ND	0.0037 J	0.683	0.703	ND	ND	3.63	3.73	ND	ND	0.0072 J
Nov-2015	0.0085 J	0.0082 J	ND	0.0041 J	0.744	0.686	ND	ND	3.98	3.76	ND	ND	0.0111
May-2016	0.0075	0.0067	ND	0.0032 J	0.688	0.655	ND	ND	3.29	3.28	ND	ND	ND
Oct-2016	0.0069	0.0068	ND	0.0027 J	0.655	0.688	ND	ND	3.23	3.34	ND	ND	ND
May-2017	0.0074	0.0069	ND	0.0032 J	0.731	0.711	ND	ND	3.38	3.18	ND	0.00044 J	ND
Oct-2017	0.0068	0.0074	ND	0.0025 J	0.716	0.741	ND	ND	3.79	3.68	ND	ND	ND
May-2018	0.0071	0.007	ND	0.0031	ND	ND	0.00037 JB	ND	3.7 J	3.9 J	ND	0.0033	0.0044 JB
Nov-2018	0.0097	0.009	ND	0.0054	ND	ND	0.00022 J	ND	4.2 J	4.2 J	ND	0.0024	0.0049 J
May-2019	0.0085	0.008	ND	0.0034	ND	ND	ND	ND	ND	ND	ND	0.0054	ND
Oct-2019	0.008	0.0079	ND	0.003	ND	ND	ND	ND	3.8 J	3.9 J	ND	ND	0.011
May-2020	0.0092	0.0079	ND	0.0036	1.1 J	ND	ND	ND	3.2 J	2.2 J	ND	0.0032	0.0053
Oct-2020	0.0089	0.0085	ND	0.0038	ND	ND	ND	ND	4.2 J	3.7 J	ND	0.0039 J	ND
Apr-2021	0.0089	0.0087	0.00007 J	0.0042 J	0.8	0.75	ND	ND	4.2	4.3	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-29***																
Mar-2013	ND	ND	ND	ND	1.48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.96	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.68	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.51	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.6	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	0.1 J	ND	ND	1.7	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	0.1 J	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8 J	ND
Nov-2018	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-29***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.88 J*	*ND*	*0.45 J*	*ND*	*ND*	*ND*	9.31	4.23
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.99 J*	*ND*	*0.66 J*	*ND*	*ND*	*ND*	6.72	4.54
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.97 J*	*0.45 J,B*	*0.54 J*	*ND*	*ND*	*ND*	*9.34 J*	4.81
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.86 J*	*ND*	*0.51 J*	*ND*	*ND*	*ND*	6.19	3.62
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.72 J*	*ND*	*0.53 J*	*ND*	*ND*	*ND*	5.59	3.13
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J,B*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*12.1 J*	3.4
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	5.6	3.7
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	6.4	3.9
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	5.3	3.7
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	5	3.5
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	9.1	3.2
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.54 J*	*ND*	*0.71 J*	*ND*	*ND*	*ND*	4.3 CL	2.3 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3 CL	2.4 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5	1.9
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.8	1.4
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	5.1	1.6
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.571 J*	*ND*	*0.751 J*	*ND*	*ND*	*ND*	*3.23 J*	*2.34 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-29***															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	3.78	0.36 J	ND	ND	ND	0.5 J	0.92 J	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	4.65	ND	ND	ND	ND	0.6 J	0.79 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	4.04	ND	ND	ND	ND	0.57 J	0.94 J	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	3.8	ND	ND	ND	ND	0.51 J	0.48 J	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	3.29	ND	ND	ND	ND	0.44 J	0.45 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND
May-2016	ND	ND	ND	0.1 J	ND	ND	ND	3.1	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	0.5 J	0.6 J	ND	ND	ND
May-2017	ND	ND	ND	0.1 J	ND	ND	ND	2.9	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
Oct-2017	ND	ND	ND	0.2 J	ND	ND	ND	2.5	ND	ND	ND	ND	0.4 J	0.4 J	ND	ND	ND
May-2018	ND	ND	ND	ND	1.2	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	0.75 J	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	**1.9 D6**	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	0.274 J	0.46 JB	ND	ND	1.36	ND	ND	ND	ND	0.326 J	0.277 J	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-30***											
Mar-2013	13.4	13.4	*0.107 J*	*ND*	20.6	1.75	*ND*	6.2	108.6	4.07	71	25.2	33
Oct-2013	12.5	12.5	*ND*	*ND*	21	1.71	*ND*	6.6	99.2	1.24	72	25.2	4.32
Mar-2014	8.92	8.92	*ND*	*ND*	21.8	1.8	*ND*	5.8	94.7	*0.863 J*	58	24.2	2.41
Oct-2014	3.3	3.3	*ND*	*ND*	21.3	1.82	*ND*	5.5	83	*ND*	70	21.4	1.47
Apr-2015	6.52	6.52	*ND*	*ND*	21.5	1.88	*ND*	4.6	84.5	*ND*	68	20.9	0.954
Nov-2015	2.84	2.84	*ND*	*ND*	20.9	1.93	*ND*	5.4	129.7	*ND*	45	18.4	0.94
May-2016	2.72	2.72	*ND*	*ND*	22.8	1.86	*ND*	5	114.9	*ND*	77	18.9	0.735
Oct-2016	*ND*	*ND*	*ND*	*ND*	22.9	*NA*	*NA*	5.3	126.3	1.03	88	17.4	0.353
May-2017	*ND*	*ND*	*ND*	*6 J*	23.5	1.84	*ND*	5.1	133.9	*0.765 J*	50	17.3	2.07
Oct-2017	*ND*	*ND*	*ND*	*7 J*	23.1	2.02	*ND*	5.3	146.2	*0.73 J*	73	17.5	4.75
May-2018	*2 JB*	*ND*	*ND*	*ND*	21.5	2	*ND*	5	131.8	28.6	*ND*	18	2.47
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	23.5	2.1	*ND*	4.78	98.3	*ND*	69	18.8	3.41
May-2019	*ND*	*NA*	*ND*	*ND*	23.2	2.2	*ND*	4.77	75.9	*ND*	55	18.3	3.11
Oct-2019	*2 JH1*	*NA*	*ND*	*ND*	22.7	2.1	*ND*	4.76	100.1	*ND*	72	19.7	2.87
May-2020	*2 J*	*NA*	*ND*	*ND*	25.6	2.2	0.01	4.42	99.5	*ND*	73	19.6	2.8
Oct-2020	*ND*	*NA*	*ND*	*ND*	23.6	1.9	*ND*	4.77	102.4	*ND*	86	18.3	2.13
Apr-2021	*4 J4c*	*NA*	*ND*	*ND*	26	2.2	*ND*	4.84	121.2	*ND*	56	19.3	6.33

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-30***													
Mar-2013	ND	ND	0.026	ND	ND	7.64	7.6	0.007 J	0.0023 J	0.0013 J	0.29	0.0067 J	ND	1.48	1.48
Oct-2013	ND	ND	0.0302	ND	ND	7.39	7.55	0.0022 J	0.0019 J	0.000525 J	0.0226 J	ND	ND	1.63	1.69
Mar-2014	0.000575 J	0.000086 J	0.0279	ND	ND	7	7.06	0.0013 J	0.0017 J	0.0013 J	0.0734	0.0057 J	ND	1.64	1.63
Oct-2014	0.0004 J	ND	0.0289	ND	ND	5.96	5.94	0.0011 J	0.0018 J	0.000821 J	0.0747	ND	ND	1.57	1.4
Apr-2015	0.000927 J	ND	0.031	ND	ND	5.79	5.78	0.000877 J	0.0019 J	0.0015 J	0.0312 J	0.0135 J	ND	1.57	1.57
Nov-2015	ND	ND	0.0284	0.000066 J	0.000064 J	4.82	4.68	0.000609 J	0.0017 J	0.0016 J	0.0353 J	ND	0.00038 J	1.55	1.53
May-2016	ND	ND	0.0307	0.00012 J	ND	4.89	4.64	0.0015 J	0.002	0.002 J	ND	ND	ND	1.61	1.58
Oct-2016	ND	ND	0.0274	ND	ND	4.41	4.47	0.0017 J	0.002	0.0014 J	ND	ND	ND	1.55	1.54
May-2017	ND	ND	0.0317	0.00011 J	ND	4.28	4.33	0.00079 J	0.002	0.002 J	ND	ND	ND	1.61	1.6
Oct-2017	ND	ND	0.0263	0.00011 J	ND	4.27	4.48	ND	0.0018	0.0014 J	ND	ND	ND	1.66	1.58
May-2018	0.000036 JB	ND	0.032	0.0001 J	0.000058 J	4.5	4.5	0.0027 JB	0.0019	0.0026 B	0.013 J	ND	ND	1.6	1.7
Nov-2018	ND	ND	0.032	0.00012 J	0.000064 J	4.6	4.6	0.0032 J	0.002	0.0018 J	0.016 J	ND	0.000033 J	1.8	1.7
May-2019	ND	ND	0.032	ND	ND	4.5	4.5	ND	0.0021	0.0033	ND	ND	ND	1.7	1.7
Oct-2019	0.000094 JB	ND	0.031	0.000099 J	0.00028 JB	4.9	4.5	0.0042 J	0.0021	0.0039	0.021 J	0.018 J	0.000075 JB	1.8	1.7
May-2020	0.000061 J	ND	0.033	0.0001 J	ND	4.8	4.8	0.0047 J	0.0022	0.014	0.024 J	0.011 J	ND	1.8	1.8
Oct-2020	ND	ND	0.033	ND	ND	4.5	4.5	0.0073 JB	0.0025 J	ND	0.0093 J	ND	ND	1.7	1.8
Apr-2021	ND	ND	0.034	ND	ND	4.7	4.3	0.00081 J	0.0023 J	0.0053	ND	ND	ND	1.9	1.7

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-30*												
Mar-2013	0.0145	0.0146	*0.000097 J*	*0.0055 J*	1.45	1.35	*ND*	*ND*	12.1	12.3	*0.000257 J*	*ND*	0.019
Oct-2013	0.0106	0.0108	*ND*	*0.0032 J*	1.18	1.2	*ND*	*ND*	10.4	10.6	*ND*	*ND*	0.0156
Mar-2014	*0.0087 J*	*0.0085 J*	*ND*	*0.0031 J*	1.39	1.4	*ND*	*ND*	10.3	10.4	*0.000698 J*	*ND*	*0.0077 J*
Oct-2014	*0.0086 J*	*0.0083 J*	*ND*	*0.003 J*	1.38	1.37	*ND*	*ND*	10.2	10.1	*ND*	*ND*	*0.0073 J*
Apr-2015	*0.009 J*	*0.0092 J*	*ND*	*0.0031 J*	1.35	1.35	*ND*	*ND*	10.8	10.8	*ND*	*ND*	0.0106
Nov-2015	*0.0086 J*	*0.0088 J*	*ND*	*0.0029 J*	1.32	1.31	*ND*	*ND*	10.6	10.5	*ND*	*ND*	*0.0071 J*
May-2016	0.0097	0.0096	*ND*	*0.0035 J*	1.26	1.25	*ND*	*ND*	10.8	10.5	*ND*	*ND*	*ND*
Oct-2016	0.0114	0.0087	*ND*	0.0042	1.35	1.34	*ND*	*ND*	10.5	10.7	*ND*	*ND*	*0.0049 J*
May-2017	0.0096	0.0092	*ND*	*0.0032 J*	1.37	1.36	*ND*	*ND*	10.5	10.4	*ND*	*ND*	*0.0051 JB*
Oct-2017	0.0089	0.0095	*ND*	*0.0032 J*	1.34	1.38	*ND*	*ND*	10.9	10.4	*ND*	*ND*	*ND*
May-2018	0.009	0.0093	*ND*	0.004	*1.4 J*	*0.88 J*	*ND*	*ND*	10.2	10.7	*0.00023 J*	0.0032 B	0.0061
Nov-2018	0.01	0.0099	*ND*	0.0043	*1.5 J*	*1 J*	*0.00016 J*	*ND*	9.9	10.7	*ND*	0.0025	0.0062
May-2019	0.01	0.01	*ND*	0.006	*ND*	*ND*	*ND*	*ND*	9.6	9	*ND*	0.0051	0.0057
Oct-2019	0.011	0.01	*ND*	0.005	*1.6 J*	*1.6 J*	*ND*	*ND*	10.9	10.5	*ND*	*ND*	0.011 B
May-2020	0.012	0.01	*ND*	0.0054	*1.6 J*	*1.4 J*	*ND*	*ND*	9.8	10.6	*ND*	0.0033	0.007
Oct-2020	0.01	0.01	*ND*	0.004	*1.4 J*	*1.3 J*	*ND*	*ND*	10.2	10.3	*ND*	*0.0032 JB*	*ND*
Apr-2021	0.011	0.01	*ND*	*0.0041 J*	1.5	1.4	*ND*	*ND*	12.4	11.8	*ND*	*ND*	*0.0042 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-30*																
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-30***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.34 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*0.39 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.181 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-30***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*0.89 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Millersville Landfill and Resource Recovery Facility

HISTORICAL TABLES –
COMAR Wells

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		*TW-07*											
Nov-1993	10	10	0.1	ND	2.9	0.3	ND	5.75	31.5	ND	ND	3.38	205
Apr-1994	10	10	0.1	ND	3	0.3	ND	5.61	22.3	3	20	3.4	102
Apr-1995	ND	ND	ND	ND	2.7	0.3	ND	5.2	21.6	2.1	33	2.3	110
Apr-1997	ND	8	ND	ND	2.5	0.17	ND	NA	NA	ND	80	9.6	60
Oct-1997	2	2	0.23	ND	ND	ND	ND	6.17	39.7	ND	40	6.5	160
Apr-1998	ND	ND	0.21	ND	2.17	0.38	ND	6.37	41.9	0.65	12	3.1	140
Apr-1999	ND	ND	0.74	ND	3.88	0.34	ND	5.32	25.7	ND	28	3.7	240
Oct-1999	ND	ND	0.08	ND	3.12	0.433	ND	5.12	23.1	ND	47	3.1	110
Apr-2000	2	2	ND	ND	2.3	0.4	ND	5.85	20	ND	19	4.2	270
Oct-2000	3	NA	ND	ND	2.61	ND	ND	5.41	27.5	ND	ND	3.45	214
Apr-2001	3.3	NA	ND	ND	1.49	ND	ND	NA	NA	ND	22	3.49	180
Sep-2001	6	6	ND	ND	4.04	1.3	ND	5.17	24	ND	25	4.7	884
Mar-2002	4	4	ND	ND	1.49	0.282	ND	5.6	28.1	ND	21	3.79	197
Sep-2002	5	5	ND	ND	3.19	ND	ND	5.6	28.3	ND	32	5.2	622
Mar-2003	5	5	ND	ND	3.37	ND	ND	5.5	31.2	ND	21	5.64	216
Oct-2003	4.3	4.3	ND	ND	2.69	0.289	ND	5.3	25.7	ND	42	4.97	135
Apr-2004	3.2	3.2	ND	ND	2.69	0.27	ND	5.5	22.3	ND	41	3.71	62
Oct-2004	8.1	8.1	ND	ND	2.94	0.32	ND	5.7	22.4	ND	19	11	831
Apr-2005	3.6	3.6	ND	ND	2.63	0.32	ND	5.7	22.4	ND	36	4.3	352
Oct-2005	11	11	ND	ND	3.06	0.3	ND	4.8	34.5	ND	34	10	4.2
Mar-2006	7.1	7.1	ND	ND	2.84	0.32	ND	5.1	28.9	0.58	22	5.45	115
Sep-2006	4.3	4.3	ND	ND	2.9	0.41	ND	5.5	25.5	ND	27	3.85	46
Mar-2007	5.1	5.1	ND	ND	3.03	0.38	ND	5.2	23.3	ND	ND	3.98	13
Sep-2007	6.3	6.3	ND	ND	7.78	ND	ND	5.2	25.6	ND	21	5.54	3.7
Mar-2008	6.3	6.3	ND	ND	7.05	ND	ND	5.4	27.1	ND	31	5.67	101
Sep-2008	7.3	7.3	ND	ND	3.16	ND	ND	5.2	24.2	ND	31	4.4	33
Mar-2009	20	20	ND	ND	2.44	0.11	ND	5.6	31.9	ND	11	13.9	32
Oct-2009	35	35	ND	ND	2.29	0.08	ND	5.1	26	ND	49	24.9	164
Apr-2010	22.5	22.5	ND	ND	3.07	0.08	ND	4.8	21.7	ND	39	18.2	148
Oct-2010	30	30	ND	ND	2.91	ND	ND	4.5	25.4	ND	27	27.6	95
Apr-2011	24	24	ND	ND	2.82	0.1	ND	4.3	26.6	ND	34	27.4	75
Sep-2011	26	26	ND	ND	2.58	ND	ND	5.7	24.9	ND	28	18.8	62
Mar-2012	32	32	ND	ND	2.51	ND	ND	4.7	24.8	ND	42	22.4	52
Sep-2012	7.04	7.04	ND	ND	2.93	0.285	ND	4.1	24.4	ND	20	4.27	258
Mar-2013	11.4	11.4	0.159 J	79.5	3.17	0.245	ND	4.8	38.7	0.983 J	42	7.08	18188
Oct-2013	7.2	7.2	ND	ND	3.38	0.278	ND	6.2	29.8	0.521 J	ND	4.86	1236

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-07***											
Mar-2014	8.8	8.8	*ND*	*ND*	3.88	0.193	*ND*	5.9	30.5	*ND*	32	4.85	30.7
Oct-2014	*ND*	*ND*	*ND*	*5 J*	4.4	0.261	*ND*	5.3	27.1	*ND*	*ND*	4.89	99.8
Apr-2015	7.56	7.56	*ND*	*ND*	3.93	0.33	*ND*	4.5	31.5	*ND*	*ND*	5.34	40.9
Nov-2015	5.56	5.56	*ND*	10	5.09	0.342	*ND*	5.9	55.3	*ND*	*20 J*	5.1	42.3
May-2016	8.16	8.16	*ND*	*ND*	6.53	*ND*	*ND*	5.9	68.3	*ND*	28	7.2	70.7
Oct-2016	5.6	5.6	*ND*	*ND*	6.47	*NA*	*NA*	5.7	61.3	*0.538 J*	30	7.2	75.6
May-2017	17.3	17.3	*ND*	*ND*	4.48	0.0902	*ND*	5.9	84.5	*0.515 J*	30	19.1	130
Oct-2017	8.2	8.2	*0.0707 J*	*ND*	11.2	0.378	*ND*	6.1	89.2	*ND*	35	9.3	44.7
May-2018	10 B	10	*ND*	*ND*	14	*ND*	0.029	5.8	95.4	*ND*	53	10.7	*NA*
Nov-2018	10 B	10	*ND*	*ND*	14.4	*ND*	0.1	6.09	92.5	*ND*	*ND*	10.1	107
May-2019	*ND*	*NA*	*ND*	*ND*	11.2	*ND*	0.16	5.72	59	*ND*	18	11.4	*NA*
Oct-2019	*2.5 JH1*	*NA*	*ND*	*6 J*	10.5	0.25	0.032 H1	5.86	78.4	*ND*	68	11.4	625
May-2020	24	*NA*	*ND*	*6.9 J*	11.1	*ND*	0.012	5.57	111.6	*ND*	57	14.2	81
Oct-2020	28	*NA*	*ND*	*4.8 J*	11.2	0.16	*0.0094 J*	5.61	99.7	*ND*	65	18	33.1
Apr-2021	20	*NA*	*ND*	*ND*	12.3	0.17	*ND*	6.19	123	*ND*	*ND*	17.2	68.3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-07*													
Nov-1993	NA	ND	ND	NA	ND	0.94	NA	ND	NA	ND	25.5	0.82	ND	0.25	NA
Apr-1994	NA	ND	ND	NA	ND	0.9	NA	ND	NA	ND	1.79	0.26	ND	0.28	NA
Apr-1995	ND	ND	0.7	ND	ND	0.54	NA	ND	ND	ND	5.3	0.41	ND	0.24	NA
Oct-1996	ND	ND	0.011	ND	ND	0.7	0.7	ND	ND	ND	0.55	0.22	ND	ND	0.17
Apr-1997	ND	ND	0.034	ND	ND	3	1.4	ND	ND	ND	4.3	2.1	ND	0.56	ND
Oct-1997	ND	ND	0.014	ND	ND	0.842	0.83	ND	ND	ND	23.9	0.846	ND	0.239	0.234
Apr-1998	ND	ND	0.014	ND	ND	0.841	0.821	ND	ND	ND	23.1	0.767	ND	0.249	0.246
Apr-1999	ND	ND	0.014	ND	ND	1.03	1.01	ND	ND	ND	22	0.77	ND	0.268	0.26
Oct-1999	ND	ND	0.017	ND	ND	1.35	0.995	ND	ND	ND	45	0.831	ND	0.323	0.251
Apr-2000	ND	ND	0.015	ND	ND	1.11	0.823	ND	ND	0.011	33.1	0.885	ND	0.357	0.262
Oct-2000	ND	ND	0.014	ND	ND	0.911	0.869	ND	ND	ND	24.3	0.718	ND	0.284	0.286
Apr-2001	ND	ND	0.014	ND	ND	0.916	NA	ND	ND	ND	20.7	NA	ND	0.292	NA
Sep-2001	ND	ND	0.027	ND	ND	1.38	0.964	ND	ND	ND	97.5	0.65	0.003	0.305	0.276
Mar-2002	ND	ND	0.015	ND	ND	1.11	1.04	ND	ND	ND	22.5	1.11	ND	0.249	0.26
Sep-2002	ND	ND	0.021	ND	ND	1.6	1.11	ND	ND	ND	59.5	1.35	0.002	0.296	0.244
Mar-2003	ND	ND	0.019	ND	ND	1.81	0.994	ND	ND	ND	23.3	0.984	0.002	0.275	0.242
Oct-2003	ND	ND	0.018	ND	ND	1.47	1.08	ND	ND	0.012	10.8	0.173	0.003	0.314	0.267
Apr-2004	ND	ND	0.014	ND	ND	1.01	0.894	ND	ND	ND	8.44	0.651	ND	0.286	0.266
Oct-2004	ND	ND	0.051	ND	ND	3.81	0.928	ND	ND	ND	152	0.561	0.011	0.349	0.267
Apr-2005	ND	ND	0.022	ND	ND	1.29	1.04	ND	ND	ND	30.6	1.14	0.004	0.271	0.258
Oct-2005	ND	ND	0.013	ND	ND	3.47	3.53	ND	ND	ND	1.25	0.248	ND	0.333	0.306

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-07***													
Mar-2006	ND	ND	0.01	ND	ND	1.86	1.86	ND	ND	ND	0.886	0.886	ND	0.2	0.2
Sep-2006	ND	ND	0.012	ND	ND	1.13	1.37	ND	ND	ND	6.85	0.43	ND	0.249	0.257
Mar-2007	ND	ND	0.016	ND	ND	1.16	1.37	ND	ND	ND	12.6	0.521	ND	0.261	0.252
Sep-2007	ND	0.003	0.013	ND	ND	1.79	1.71	ND	ND	ND	0.933	0.662	ND	0.261	0.258
Mar-2008	ND	ND	0.015	ND	ND	1.85	1.78	ND	ND	ND	9.16	0.848	ND	0.255	0.23
Sep-2008	ND	ND	0.013	ND	ND	1.35	1.25	ND	ND	ND	4.05	0.759	ND	0.251	0.247
Mar-2009	ND	ND	0.012	ND	ND	5.02	4.37	ND	ND	ND	8.26	4.53	ND	0.33	0.298
Oct-2009	ND	ND	0.018	ND	ND	9.1	1.41	ND	ND	ND	14.3	1.06	ND	0.532	0.259
Apr-2010	ND	ND	0.024	ND	ND	6.56	5.83	ND	ND	ND	10.4	7.39	ND	0.444	0.396
Oct-2010	ND	0.002	0.018	ND	ND	9.96	9.5	ND	ND	0.018	11.4	9.55	ND	0.644	0.573
Apr-2011	ND	ND	0.016	ND	ND	6.14	5.15	ND	ND	ND	8.2	6.96	ND	0.516	0.4
Sep-2011	ND	ND	0.017	ND	ND	6.66	5.28	ND	ND	ND	10.3	8.49	ND	0.526	0.424
Mar-2012	ND	ND	0.019	ND	ND	7.91	8.26	ND	ND	ND	7.03	6.67	ND	0.634	0.652
Sep-2012	ND	ND	0.0161	0.000286 J	ND	1.24	1.39	ND	0.0018 J	0.0045 J	16.6	1.6	0.000551 J	0.285	0.29
Mar-2013	ND	ND	0.243	**0.0092 R,C**	0.0025 J	2.41	2.33	0.0533	0.0095 J	0.146	1940	2.71	0.0067	0.259	0.338
Jun-2013	NA	NA	NA	0.00015 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2013	0.000272 J	ND	0.0273	0.000789 J	0.000091 J	1.53	1.31	0.0069 J	0.0022 J	0.0085 J	103	1.37	0.000725 J	0.253	0.228
Mar-2014	0.000677 J	ND	0.0137	0.000208 J	ND	1.49	1.22	0.0013 J	0.0015 J	0.000861 J	3.46	1.62	ND	0.273	0.275
Oct-2014	0.00029 J	ND	0.0199	0.000316 J	ND	1.36	1.55	0.000384 J	0.0019 J	0.0035 J	8.18	1.76	ND	0.364	0.34
Apr-2015	0.000734 J	ND	0.0175	0.000333 J	ND	1.59	1.52	0.000813 J	0.0017 J	0.0026 J	5.64	1.98	ND	0.33	0.326
Nov-2015	0.000416 J	ND	0.0193	0.000401 J	0.000074 J	1.37	1.3	0.000686 J	0.0026 J	0.0039 J	3.67	1.07	0.000705 J	0.406	0.405
May-2016	ND	ND	0.0228	0.00034 J	ND	2.07	2	0.0011 J	0.0026	0.0038 J	6.63	2.68	0.00032 J	0.499	0.449
Oct-2016	ND	ND	0.0228	0.00039 J	ND	2.14	2.17 J+	0.0012 J	0.0022	0.004 J	9.41	2.92 J+	0.00052 J	0.44	0.44 J+
May-2017	ND	ND	0.0384	0.00043 J	ND	6.49	6.38	0.0151	0.0018	0.0216	30.2	10.3	0.00051 J	0.692	0.608

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-07***													
Oct-2017	*ND*	*ND*	0.0387	*0.00049 J*	*ND*	2.56	3.06	0.0334	0.0048	0.0255	10.3	5.47	*0.00033 J*	0.704	0.695
May-2018	*ND*	*ND*	*0.0439 J*	*0.00063 J*	*ND*	2.8	2.7	*0.0021 J*	*0.0023 J*	*ND*	25.8	5.1	*ND*	*0.89 J*	*0.93 J*
Nov-2018	*ND*	*ND*	0.051	0.001	*0.0001 J*	2.6	2.5	*0.0024 J*	0.0033	0.0082	70.1	6	*0.00038 J*	*0.91 J*	*0.98 J*
May-2019	*ND*	*ND*	0.046	0.00044	*ND*	3.3	3.3	*ND*	0.0029	0.0068	82.2	7.7	*ND*	*ND*	*ND*
Oct-2019	*0.00033 J*	*0.0005 J*	0.042	0.00074	*0.00038 J*	3.3	3.3	0.0072	0.0039	0.0077	42.7	5.4	*0.00058 J*	0.79	*0.78 J*
May-2020	*ND*	*ND*	0.046	*0.00038 J*	*0.00046 J*	4.2	4.5	0.014	*0.0026 J*	0.0088	32.9	17.4	*ND*	0.91	1
Oct-2020	*ND*	*ND*	0.038	*ND*	*ND*	5.6	5.5	*0.0021 J*	0.0025	*ND*	11.6	11.4	*ND*	0.98	*0.96 J*
Apr-2021	*ND*	*ND*	0.043	*0.00018 J*	*ND*	5.2	4.9	*0.0015 J*	*0.0023 J*	*0.0033 J*	16.1	12.3	*ND*	1	0.94

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-07*												
Nov-1993	0.06	NA	ND	NA	1.2	NA	ND	NA	1.5	NA	NA	NA	0.05
Apr-1994	0.03	NA	ND	NA	1.46	NA	ND	NA	1.69	NA	NA	NA	0.05
Apr-1995	ND	NA	ND	ND	1.3	NA	ND	ND	1.3	NA	ND	ND	0.03
Oct-1996	0.015	0.011	NA	ND	ND	ND	ND	ND	2.2	2.4	ND	ND	0.035
Apr-1997	0.099	0.048	ND	ND	4.4	3	ND	ND	2.3	2.3	ND	ND	0.082
Oct-1997	0.024	0.024	NA	0.011	1.3	0.83	ND	ND	1.36	1.37	ND	ND	ND
Apr-1998	0.025	0.04	NA	ND	1.15	1.06	ND	ND	1.56	1.58	ND	ND	0.03
Apr-1999	0.027	0.029	NA	ND	1.82	1.09	ND	ND	1.65	1.61	ND	ND	ND
Oct-1999	0.029	0.026	NA	ND	0.847	1.17	ND	ND	2.14	1.51	ND	ND	0.011
Apr-2000	0.019	0.025	NA	ND	1.2	1.22	ND	ND	2.42	1.56	ND	ND	0.031
Oct-2000	0.022	0.02	NA	ND	1.64	1.23	ND	ND	1.69	1.65	ND	ND	ND
Apr-2001	0.022	NA	NA	ND	1.09	NA	ND	ND	1.61	NA	ND	ND	ND
Sep-2001	0.016	0.02	NA	ND	1.1	1.19	ND	ND	1.59	1.57	ND	ND	ND
Mar-2002	0.03	0.027	NA	ND	1.51	1.66	ND	ND	1.63	1.6	ND	ND	ND
Sep-2002	0.024	0.031	NA	ND	1.74	1.77	ND	ND	2.06	1.47	ND	ND	ND
Mar-2003	0.029	0.021	NA	ND	1.99	0.928	ND	ND	1.54	1.46	ND	ND	ND
Oct-2003	0.014	0.013	NA	ND	2.58	1.25	ND	ND	2.16	1.54	ND	ND	ND
Apr-2004	0.019	0.017	ND	1.58	1.89	1.09	ND	ND	1.58	1.48	ND	ND	ND
Oct-2004	0.082	0.018	ND	ND	1.35	1.13	ND	ND	1.97	1.23	ND	ND	0.023
Apr-2005	0.046	0.022	ND	ND	0.92	0.9	ND	ND	1.6	1.58	ND	ND	ND
Oct-2005	0.032	0.033	ND	ND	0.731	0.761	ND	ND	1.34	1.3	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.662	0.662	ND	ND	1.18	1.18	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-07***												
Sep-2006	0.014	0.015	ND	ND	0.953	1.01	ND	ND	1.31	1.34	ND	ND	ND
Mar-2007	0.014	0.015	ND	ND	0.945	1	ND	ND	1.36	1.37	ND	ND	0.011
Sep-2007	0.02	0.02	ND	ND	0.97	0.977	ND	ND	1.31	1.32	ND	ND	0.018
Mar-2008	0.025	0.022	ND	ND	1.17	1.01	ND	ND	1.47	1.27	ND	ND	ND
Sep-2008	0.023	0.021	ND	ND	1.04	1	ND	ND	1.29	1.25	ND	ND	0.014
Mar-2009	0.125	0.1	ND	ND	1.98	1.76	ND	ND	1.69	1.64	ND	ND	ND
Oct-2009	0.177	0.024	ND	0.012	3.98	0.878	ND	ND	2.62	1.23	ND	ND	ND
Apr-2010	0.321	0.247	ND	ND	2.21	2.08	ND	ND	1.77	1.75	ND	ND	ND
Oct-2010	0.142	0.155	ND	0.019	3.26	3.13	ND	ND	2.19	1.96	ND	ND	ND
Apr-2011	0.119	0.125	ND	ND	3.54	2.78	ND	ND	2.09	1.8	ND	ND	ND
Sep-2011	0.146	0.138	ND	ND	3.59	2.62	ND	ND	2.43	1.92	ND	ND	ND
Mar-2012	0.109	0.092	ND	ND	4.12	4.26	ND	ND	2.51	2.63	ND	ND	ND
Sep-2012	0.0289	0.0286	0.000023 J	0.0032 J	0.949	1.03	ND	ND	1.31	1.35	ND	ND	0.0044 J
Mar-2013	0.32	0.0668	0.00014 J	0.04 J	1.09	1.38	ND	0.000269 J	1.16	1.66	ND	ND	0.109
Oct-2013	0.0542	0.0314	0.000077 J	0.0043 J	0.955	0.85	ND	0.0022 J	1.27	1.15	0.00018 J	0.006 J	0.0175 J
Mar-2014	0.0393	0.0307	ND	0.0027 J	1.28	1.2	ND	0.000154 J	1.79	1.82	ND	ND	0.0071 J
Oct-2014	0.0309	0.0354	0.000025 J	0.0032 J	1.38	1.42	ND	ND	1.95	1.88	ND	ND	0.0118
Apr-2015	0.0384	0.0367	0.000029 J	0.003 J	1.3	1.28	0.000802 J	0.000065 J	1.99	1.98	ND	ND	0.0068 J
Nov-2015	0.0277	0.0259	ND	0.0047 J	1.22	1.21	ND	ND	2.44	2.46	0.000251 J	ND	0.0073 J
May-2016	0.0571	0.0497	ND	0.0049	1.54	1.23	ND	0.00012 J	3.33	3.09	ND	ND	ND
Oct-2016	0.0502 J+	0.0477 J+	ND	0.0051	1.43	1.43	ND	0.00025 J	3.18	3.13	ND	ND	0.0046 J
May-2017	0.184	0.171	ND	0.0518	2.44	2.42	ND	0.0117	2.59	2.41	ND	ND	0.0181 J
Oct-2017	0.0857	0.0849	ND	0.0889	1.72	1.77	ND	0.0312	5.21	5.09	ND	ND	0.0289 J
May-2018	0.0801	0.0711	ND	0.0139 J	2.2 J	1.7 J	ND	ND	7 B	6.7	ND	ND	0.009 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-07***												
Nov-2018	0.09	0.083	*ND*	0.0069	*1.6 J*	*2.5 J*	*0.00011 J*	*ND*	6.8	7.8	*ND*	*ND*	0.014
May-2019	0.12	0.14 M1	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	6.6	5.5	*ND*	*ND*	0.01
Oct-2019	0.099	0.096	*ND*	0.0086	*1.8 J*	*ND*	*0.00043 J*	*0.00046 J*	5.8	6.1	*0.00015 J*	0.0073	0.023
May-2020	0.15	0.16	*ND*	0.028	1.7	1.6	*ND*	0.0077	5.8	6	*ND*	*ND*	*0.01 J*
Oct-2020	0.11	0.11	*ND*	0.0061	*1.6 J*	*1.6 J*	*ND*	*ND*	6	5.8	*ND*	*0.00083 J*	*ND*
Apr-2021	0.14	0.12	*0.00005 J*	*0.0059 J*	1.8	1.7	*ND*	*ND*	6.5	6.2	*ND*	*ND*	*0.0037 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.7 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.5 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-07*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-07***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.37 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-07***															
May-2017	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-07***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-07*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	4.3 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-07***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.583 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-07A***											
Nov-1993	ND	ND	ND	ND	3.3	ND	ND	4.43	51	7.4	ND	5.54	18
Apr-1994	5	5	0.1	ND	3	ND	ND	5.11	34.7	5.1	27	3.18	12.6
Apr-1995	ND	ND	ND	ND	3.8	ND	ND	4.7	46.1	9.1	45	8.8	7.9
Apr-1997	ND	ND	ND	ND	4	0.04	ND	NA	NA	12	58	23	2
Oct-1997	2	2	0.24	ND	2.73	ND	ND	5.66	46.6	13.7	33	12	3.5
Apr-1998	ND	ND	0.21	ND	4.39	ND	ND	6.07	40.7	9.48	16	11	2.4
Apr-1999	ND	ND	0.2	ND	4.49	ND	ND	4.47	47.3	6.03	43	12	2.8
Oct-1999	ND	ND	0.08	ND	5.12	0.128	ND	4.45	53.6	9.36	40	14	2.8
Apr-2000	2	2	ND	ND	3.34	ND	ND	5.01	37	7.01	38	10	1.9
Oct-2000	3	NA	ND	ND	3.37	ND	ND	4.74	41.9	6.71	38	10.6	0.65
Apr-2001	1.4	NA	ND	ND	3.54	ND	ND	NA	NA	5.02	45	10.1	1.6
Sep-2001	ND	ND	0.33	ND	6.41	1.19	ND	4.1	46	12.8	35	9.4	2.7
Mar-2002	2.2	2.2	ND	ND	3.85	ND	ND	4.9	44.3	7.58	31	9.01	1.1
Sep-2002	1.8	1.8	ND	ND	3.2	ND	ND	4.8	44.1	8.01	26	9.24	0.75
Mar-2003	2.3	2.3	ND	ND	3.57	ND	ND	4.8	47.2	6.71	27	9.41	0.65
Oct-2003	2	2	ND	ND	2.73	0.135	ND	5.4	54.5	8.97	64	11.8	0.75
Apr-2004	2.1	2.1	ND	ND	3.21	0.11	ND	4.9	44.2	11.2	54	14	2.8
Oct-2004	2.4	2.4	ND	14	3.49	0.15	ND	4.6	46	9.99	35	13.5	0.73
Apr-2005	1.9	1.9	ND	10	3.24	0.17	ND	4.6	46	11.2	54	12.5	0.89
Oct-2005	3.3	3.3	ND	ND	3.78	0.3	ND	4.3	41.4	13.3	45	11.7	0.98
Mar-2006	3.5	3.5	ND	ND	3.57	0.3	ND	4.3	51.8	11.4	36	11.3	0.41
Sep-2006	3	3	ND	ND	3.6	0.3	ND	4.6	40.8	9.94	32	11.4	1.2
Mar-2007	2.6	2.6	ND	ND	3.67	0.21	ND	4.8	44.3	9.24	16	9.95	0.39
Sep-2007	2.4	2.4	0.21	ND	7.81	ND	ND	4.7	42.4	10.9	43	11.1	1.2
Mar-2008	3	3	0.24	ND	8.04	ND	ND	4.7	43.9	8.72	29	10.4	0.71
Sep-2008	2.6	2.6	ND	ND	3.48	ND	ND	4.8	38	6.93	61	9.7	0.92
Mar-2009	2.5	2.5	ND	ND	3.2	0.15	ND	4.3	40.5	8.29	35	9.12	1
Oct-2009	2.4	2.4	ND	ND	3.2	0.16	ND	4.3	40.6	11.8	38	10.4	2.6
Apr-2010	2.6	2.6	ND	ND	3.5	0.31	ND	4	41	10.6	12	12	1.6
Oct-2010	1.6	1.6	ND	ND	3.76	0.52	ND	4.1	41.3	8.51	30	13.3	1.1
Apr-2011	14	14	ND	ND	3.3	0.2	ND	4.4	40.6	7.49	65	26	12
Sep-2011	2	2	0.23	ND	3.45	0.38	ND	4.7	41.8	8.03	48	11.6	0.56
Mar-2012	2.1	2.1	ND	ND	3.7	0.58	ND	3.8	44.2	10.3	18	12.8	0.29
Sep-2012	2.04	2.04	ND	ND	3.69	0.58	ND	3.8	41.6	11.1	60	12.4	0.403
Mar-2013	2.56	2.56	0.07 J	ND	4.28	0.458	ND	4.1	48	12.1	24	12.3	0.123
Oct-2013	2.64	2.64	ND	ND	5	0.3	ND	5.6	46.4	9.52	ND	11.5	0.361

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-07A***											
Mar-2014	2.28	2.28	*ND*	*ND*	5.67	0.234	*ND*	4.8	43.6	9.91	47	9.82	0.382
Oct-2014	*ND*	*ND*	*ND*	*6 J*	4.67	0.428	*ND*	4.3	42.5	9.81	37	12	0.403
Apr-2015	2.84	2.84	*ND*	*ND*	5.25	0.336	*ND*	3.8	48.2	8.7	*ND*	11.8	0.334
Nov-2015	2.64	2.64	*ND*	11	4.8	0.397	*ND*	4.8	59.7	11.2	*16 J*	13.3	1.04
May-2016	*ND*	*ND*	*ND*	*ND*	6.04	*ND*	*ND*	4.8	80.1	10.9	28	13.3	0.413
Oct-2016	*ND*	*ND*	*ND*	*7 J*	7.07	*NA*	*NA*	5	79.7	9.27	28	12.1	1.08
May-2017	*ND*	*ND*	*ND*	*ND*	7.33	0.348	*ND*	4.7	823	8.89	36	13	6.51
Oct-2017	*ND*	*ND*	*ND*	*ND*	8.52	0.369	*ND*	4.8	87	9.63	30	12.7	4.79
May-2018	*2 JB*	*ND*	*ND*	*ND*	8.2	*0.06 J*	*ND*	4.6	81.6	*8.6 J*	42	13.3	*NA*
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	3.9	0.33	*ND*	4.39	47.4	*9.9 J*	*ND*	12.9	4.49
May-2019	*ND*	*NA*	*ND*	*ND*	3.6	0.24	*ND*	4.46	39.5	*ND*	15	13.2	2.75
Oct-2019	*2.5 JH1*	*NA*	*ND*	*ND*	3.5	0.29	*ND*	4.3	48.1	*6.8 J*	24	11.7	1.69
May-2020	*ND*	*NA*	*ND*	*ND*	4.5	0.31	*ND*	4.32	48.1	*9.9 J*	21	11.7	2.46
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	4.3	0.31	*ND*	4.26	48	9.9	46	12.1	3.34
Apr-2021	*ND*	*NA*	*ND*	*ND*	3.4	0.24	*ND*	4.51	54.2	*8.5 J*	*ND*	11.9	5.72

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-07A*													
Nov-1993	NA	ND	ND	NA	ND	0.46	NA	0.009	NA	ND	3.7	0.09	ND	1.2	NA
Apr-1994	NA	ND	ND	NA	ND	1.24	NA	ND	NA	ND	0.34	0.1	ND	1.09	NA
Apr-1995	ND	ND	0.8	ND	ND	1.2	NA	ND	ND	ND	0.16	0.09	ND	1.4	NA
Oct-1996	ND	ND	0.048	ND	ND	2	2	ND	ND	ND	ND	ND	ND	1.7	1.7
Apr-1997	ND	ND	0.055	ND	ND	2.4	2.6	ND	ND	ND	ND	ND	0.003	1.7	1.9
Oct-1997	ND	ND	0.057	ND	ND	2.49	2.44	ND	ND	ND	ND	ND	ND	1.7	1.71
Apr-1998	ND	ND	0.046	ND	ND	1.88	1.92	ND	ND	ND	ND	ND	ND	1.46	1.48
Apr-1999	ND	ND	0.053	ND	ND	2.14	1.92	ND	ND	ND	ND	ND	ND	1.72	1.55
Oct-1999	ND	ND	0.05	ND	ND	1.8	1.61	ND	ND	ND	ND	ND	ND	1.54	1.38
Apr-2000	ND	ND	0.044	ND	ND	1.7	1.68	ND	ND	ND	ND	ND	ND	1.44	1.42
Oct-2000	ND	ND	0.043	ND	ND	1.88	1.86	ND	ND	ND	ND	ND	ND	1.45	1.46
Apr-2001	ND	ND	0.044	ND	ND	1.63	NA	ND	ND	ND	ND	NA	ND	1.47	NA
Sep-2001	ND	ND	0.037	ND	ND	1.46	1.36	ND	ND	ND	0.037	ND	ND	1.39	1.26
Mar-2002	ND	ND	0.037	ND	ND	1.57	1.36	ND	ND	0.011	ND	ND	ND	1.23	1.2
Sep-2002	ND	ND	0.043	ND	ND	1.43	1.47	ND	ND	ND	0.055	ND	ND	1.38	1.36
Mar-2003	ND	ND	0.041	ND	ND	1.56	1.42	ND	ND	ND	ND	ND	ND	1.34	1.25
Oct-2003	ND	ND	0.05	ND	ND	2.06	2.02	ND	ND	ND	ND	ND	ND	1.61	1.54
Apr-2004	ND	ND	0.056	ND	ND	2.81	2.58	ND	ND	ND	0.121	ND	ND	1.7	1.62
Oct-2004	ND	ND	0.056	ND	ND	2.75	2.64	ND	ND	ND	ND	ND	ND	1.61	1.57
Apr-2005	ND	ND	0.054	ND	ND	2.49	2.24	ND	ND	ND	ND	ND	ND	1.52	1.39
Oct-2005	ND	ND	0.048	ND	ND	2.36	2.27	ND	ND	ND	ND	ND	ND	1.42	1.34

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-07A***													
Mar-2006	ND	ND	0.047	ND	ND	2.14	2.02	ND	ND	ND	ND	ND	ND	1.45	1.39
Sep-2006	ND	ND	0.045	ND	ND	2.12	2.11	ND	ND	ND	ND	ND	ND	1.48	1.45
Mar-2007	ND	ND	0.044	ND	ND	1.78	1.77	ND	ND	ND	ND	ND	ND	1.34	1.31
Sep-2007	ND	ND	0.048	ND	ND	2.15	2.16	ND	ND	ND	ND	ND	ND	1.39	1.4
Mar-2008	ND	ND	0.046	ND	ND	1.62	1.56	ND	ND	ND	ND	ND	ND	1.55	1.47
Sep-2008	ND	ND	0.04	ND	ND	1.41	1.35	ND	ND	ND	0.062	ND	ND	1.5	1.49
Mar-2009	ND	ND	0.037	ND	ND	1.31	1.3	ND	ND	ND	ND	ND	ND	1.42	1.38
Oct-2009	ND	ND	0.04	ND	ND	1.36	1.33	ND	ND	ND	0.069	ND	ND	1.71	1.67
Apr-2010	ND	ND	0.052	ND	ND	2.22	2.14	ND	ND	ND	ND	ND	ND	1.59	1.5
Oct-2010	ND	ND	0.054	ND	ND	2.66	2.58	ND	ND	ND	0.067	ND	ND	1.62	1.59
Apr-2011	ND	ND	0.046	ND	ND	7.67	4.47	ND	ND	ND	0.283	ND	ND	1.65	1.58
Sep-2011	ND	ND	0.049	ND	ND	2.26	2.22	ND	ND	ND	ND	ND	ND	1.44	1.44
Mar-2012	ND	ND	0.055	ND	ND	2.46	2.55	ND	ND	ND	0.15	ND	ND	1.62	1.66
Sep-2012	ND	ND	0.0542	0.000101 J	ND	2.49	2.47	ND	0.0037 J	0.0038 J	0.023 J	0.0225 J	ND	1.5	1.49
Mar-2013	ND	ND	0.0477	0.000121 J	ND	2.27	2.42	0.0012 J	0.003 J	0.003 J	0.0153 J	ND	ND	1.6	1.71
Oct-2013	ND	ND	0.0501	0.00013 J	0.000118 J	2.32	2.13	0.0072 J	0.0031 J	0.0028 J	0.0514	0.0672	ND	1.39	1.15
Mar-2014	0.000707 J	ND	0.039	0.000209 J	ND	1.85	1.97	0.0019 J	0.0026 J	0.0012 J	0.0071 J	0.0049 J	ND	1.26	1.35
Oct-2014	0.000751 J	ND	0.0542	ND	0.000186 J	2.4	2.49	0.0014 J	0.0036 J	0.0036 J	0.0178 J	ND	ND	1.47	1.52
Apr-2015	0.000315 J	ND	0.0521	ND	0.000144 J	2.29	2.43	0.0014 J	0.0036 J	0.0037 J	0.014 J	0.0178 J	ND	1.47	1.53
Nov-2015	0.000487 J	ND	0.056	0.000112 J	0.000199 J	2.85	2.85	0.000928 J	0.0041 J	0.0041 J	0.0983	0.04 J	0.000348 J	1.5	1.51
May-2016	ND	ND	0.0543	0.00014 J	0.0002 J	2.63	2.17	0.0016 J	0.0036	0.0036 J	ND	ND	ND	1.64	1.51
Oct-2016	ND	ND	0.0553	0.00012 J	ND	2.28	2.54 J+	0.0021 J	0.0032	0.0032 J	ND	ND	ND	1.57	1.77 J+
May-2017	ND	ND	0.0512	0.00013 J	ND	2.28	2.47	0.0015 J	0.003	0.0034 J	ND	ND	ND	1.77	1.83
Oct-2017	ND	ND	0.0491	0.000096 J	0.00015 J	2.28	2.26	ND	0.0032	0.0031 J	ND	ND	ND	1.71	1.68

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-07A***													
May-2018	*ND*	*ND*	*0.0524 J*	*ND*	*ND*	2.5	2.5	*0.0018 J*	*0.0029 J*	*0.0026 J*	*0.012 J*	*ND*	*ND*	1.7	1.7
Nov-2018	*ND*	*ND*	0.052	*0.00018 J*	*0.00021 J*	2.8	2.6	*0.0038 J*	0.0038	0.004	*0.016 J*	*ND*	*0.000016 J*	1.5	1.5
May-2019	*ND*	*ND*	0.055	*ND*	*ND*	2.8	2.6	*ND*	0.0041	0.0053	*ND*	*ND*	*ND*	1.5	1.4
Oct-2019	*0.00019 J*	*0.00047 J*	0.052	*0.00018 J*	*0.00041 J*	2.6	2.6	*0.0065 J*	0.0039	0.0051	*0.015 J*	*0.0096 J*	*0.00009 J*	1.3	1.3
May-2020	*ND*	*ND*	0.058	*ND*	*ND*	2.5	2.5	*0.0036 J*	*0.004 J*	0.0056	*ND*	*ND*	*ND*	1.3	1.4
Oct-2020	*ND*	*ND*	0.049	*ND*	*ND*	2.5	2.5	*0.0031 J*	0.0041	*ND*	*0.014 J*	*0.018 J*	*ND*	1.4	1.4
Apr-2021	*ND*	*ND*	0.053	*ND*	*0.00041 J*	2.5	2.4	*0.0024 J*	*0.0045 J*	*0.0045 J*	*ND*	*ND*	*ND*	1.4	1.3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-07A*												
Nov-1993	ND	NA	ND	NA	1.6	NA	ND	NA	1.5	NA	NA	NA	0.01
Apr-1994	0.02	NA	ND	NA	1.26	NA	ND	NA	1.67	NA	NA	NA	0.03
Apr-1995	ND	NA	ND	ND	1.4	NA	ND	ND	1.3	NA	ND	ND	0.02
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	2.3	2.6	ND	ND	0.13
Apr-1997	0.015	0.014	0.0011	ND	1.1	2.5	ND	ND	2	1.5	ND	ND	ND
Oct-1997	0.017	0.017	NA	ND	0.733	0.589	ND	ND	1.51	1.47	ND	ND	0.01
Apr-1998	0.012	0.012	NA	0.011	0.918	0.928	ND	ND	1.52	1.51	ND	ND	ND
Apr-1999	0.013	0.013	NA	ND	1.51	0.878	ND	ND	1.86	1.68	ND	ND	ND
Oct-1999	0.011	0.012	NA	ND	0.597	0.869	ND	ND	1.88	1.63	ND	ND	ND
Apr-2000	0.011	0.011	NA	0.014	1.74	1.21	ND	ND	1.77	1.75	ND	ND	ND
Oct-2000	0.01	0.011	NA	ND	1.26	1.07	ND	ND	1.89	1.81	ND	ND	ND
Apr-2001	0.011	NA	NA	ND	1.1	NA	ND	ND	1.76	NA	ND	ND	ND
Sep-2001	0.011	0.01	NA	ND	1.32	0.875	ND	ND	1.72	1.53	ND	ND	ND
Mar-2002	0.011	ND	NA	ND	2.68	1.5	ND	ND	2.48	1.51	ND	ND	ND
Sep-2002	0.01	0.011	NA	ND	1.05	1.04	ND	ND	1.63	1.6	ND	ND	ND
Mar-2003	ND	ND	NA	ND	0.707	0.588	ND	ND	1.47	1.44	ND	ND	ND
Oct-2003	0.011	0.015	NA	ND	1.52	1.53	ND	ND	1.52	1.45	ND	ND	ND
Apr-2004	0.021	0.021	0.0005	ND	1.26	1.23	ND	ND	1.61	1.51	ND	ND	ND
Oct-2004	0.022	0.021	0.0007	ND	1.01	0.89	ND	ND	1.57	1.27	ND	ND	ND
Apr-2005	0.019	0.016	0.0006	ND	0.82	0.71	ND	ND	1.67	1.55	ND	ND	ND
Oct-2005	0.017	0.016	0.0008	ND	0.83	0.912	ND	ND	1.41	1.38	ND	ND	ND
Mar-2006	ND	ND	0.00093	ND	0.801	0.779	ND	ND	1.28	1.18	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-07A*												
Sep-2006	0.014	0.015	0.0009	ND	1.19	1.2	ND	ND	1.39	1.35	ND	ND	ND
Mar-2007	0.011	0.011	0.0004	ND	1.05	1.03	ND	ND	1.36	1.34	ND	ND	0.03
Sep-2007	0.017	0.017	0.0007	ND	0.989	0.951	ND	ND	1.37	1.37	ND	ND	0.011
Mar-2008	0.016	0.015	0.0004	ND	1.11	0.958	ND	ND	1.49	1.3	ND	ND	ND
Sep-2008	0.016	0.016	ND	ND	0.92	0.941	ND	ND	1.31	1.28	ND	ND	ND
Mar-2009	0.016	0.015	ND	ND	1.05	1.04	ND	ND	1.32	1.3	ND	ND	ND
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	0.019	0.018	ND	ND	0.834	0.801	ND	ND	1.33	1.3	ND	ND	ND
Apr-2010	0.017	0.016	ND	ND	0.85	0.792	ND	ND	1.57	1.53	ND	ND	ND
Oct-2010	0.021	0.021	0.0002	ND	0.784	0.75	ND	ND	1.43	1.45	ND	ND	ND
Apr-2011	0.022	0.02	ND	ND	1.69	1.6	ND	ND	1.97	1.87	ND	ND	0.016
Sep-2011	0.02	0.02	ND	ND	0.84	0.785	ND	ND	1.66	1.63	ND	ND	ND
Mar-2012	0.024	0.024	ND	ND	0.74	0.727	ND	ND	1.57	1.57	ND	ND	ND
Sep-2012	0.0227	0.0228	0.000199 J	0.0037 J	0.8	0.795	ND	ND	1.41	1.44	ND	ND	0.006 J
Mar-2013	0.0217	0.0225	0.000197 J	0.0028 J	0.892	0.95	0.000665 J	ND	1.8	1.93	ND	ND	0.0139
Oct-2013	0.0226	0.0217	ND	0.0029 J	0.775	0.695	0.000413 J	ND	1.79	1.49	0.000154 J	0.0062 J	0.0146
Mar-2014	0.02	0.0214	ND	0.0031 J	0.894	0.94	ND	ND	2.27	2.4	ND	ND	0.0077 J
Oct-2014	0.0229	0.0241	0.000077 J	0.0041 J	0.833	0.839	0.0013 J	ND	1.81	1.83	ND	ND	0.0069 J
Apr-2015	0.0241	0.0252	0.000047 J	0.004 J	0.898	0.906	0.0014 J	ND	2.26	2.29	ND	ND	0.0113
Nov-2015	0.0261	0.0264	ND	0.004 J	0.824	0.811	0.00099 J	ND	2.11	2.04	0.000247 J	ND	0.0124
May-2016	0.0267	0.0243	ND	0.004	0.936	0.772	ND	ND	3.03	2.75	ND	ND	ND
Oct-2016	0.0258 J+	0.0285 J+	ND	0.0044	0.935	0.979	0.00057	ND	3.56	3.63	ND	ND	0.0052 J
May-2017	0.0272	0.0289	ND	0.0034 J	0.981	1	0.00054 J	ND	3.5	3.38	ND	ND	0.0051 J
Oct-2017	0.0265	0.0286	ND	0.0031 J	0.932	0.919	0.00057 J	ND	4.1	4.17	ND	ND	0.0041 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-07A***												
May-2018	0.0284	0.0273	*0.00012 JB*	*0.0102 J*	*1.2 J*	*ND*	*ND*	*ND*	5.1 B	*4.5 J*	*0.0061 J*	*ND*	*0.0061 J*
Nov-2018	0.026	0.028	*ND*	0.005	*ND*	*1.1 J*	*0.00058 J*	*ND*	*1.8 J*	*2.6 JB*	*ND*	*0.00005 J*	0.0095
May-2019	0.025	0.025	*ND*	0.006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.01
Oct-2019	0.028	0.028	*ND*	0.0057	*ND*	*ND*	*0.00079 J*	*ND*	*1.8 J*	*2 J*	*ND*	0.0074 D6	0.017
May-2020	0.025	0.026	*ND*	*0.0064 J*	0.82	0.71	*ND*	*ND*	1.9	2.2	*ND*	*ND*	*0.0094 J*
Oct-2020	0.026	0.027	*ND*	0.0052	*ND*	*ND*	*ND*	*ND*	*2.3 J*	*2.1 J*	*ND*	*0.00068 J*	*ND*
Apr-2021	0.029	0.027	*0.00006 J*	*0.0055 J*	0.65	0.65	*ND*	*ND*	1.7	1.5	*ND*	*ND*	*0.008 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Oct-1996	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	3.9	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	4.6	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07A*																
Mar-2006	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.32 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.82 J	ND	ND	1.63 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07A*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.8 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.7 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-07A*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	4.7
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	14
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	2.2
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	1 J	NA	NA	NA	1.5	5.9
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	1.1	5.5
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	1.3	NA	ND	NA	1.3	6.6
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	4.8	6.7
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	2.7	5.8
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	1.7	4.3
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.7 J
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	3
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	1.7
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	1.9
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	2.5
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.4	4.5
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	1.8
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.1	2.5

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-07A***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	1.9
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	0.6 J
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	0.9 J
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	1.3
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.68 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	ND	ND	ND	ND	0.77 J	0.37 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	ND	ND	ND	ND	0.41 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.24 J	ND	ND	ND	ND	ND	0.42 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.34 J	ND	ND	ND	ND	ND	0.6 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	0.34 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J,B	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	0.4 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	0.3 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-07A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.13 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.481 J*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-07A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	**6.6**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	**5.1**	ND	ND	ND	ND	1.5	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	3.6	ND	ND	NA	NA	1.1	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	3.5	ND	ND	ND	ND	1.3	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	4.7	ND	ND	NA	NA	1.5	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	4.6	ND	ND	ND	ND	1.4	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	3.9	ND	ND	ND	ND	1.2	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	0.6 J	ND	ND	2.9	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	2.5	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	2.2	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-07A***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	2.4	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.8 R	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	0.38 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	0.22 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-07A***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.507 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-08***											
Nov-1993	8	8	ND	33.8	6.2	0.4	ND	6.34	49	5.4	ND	6.55	24
Apr-1994	9	9	0.1	ND	6.5	0.4	ND	5.57	20.4	5.4	28	48.2	8.6
Apr-1995	5	5	ND	ND	7.1	0.5	ND	5.3	49.6	5.7	26	7.8	37.3
Apr-1997	ND	2	ND	ND	6	0.35	ND	NA	NA	5.7	42	7.6	2
Oct-1997	4	4	0.44	ND	5.05	0.195	ND	5.55	83.2	4.4	34	11	2
Apr-1998	4	4	0.2	ND	4.82	0.3	ND	6.14	45.7	3.58	31	9.5	6.1
Apr-1999	4	4	0.17	ND	10.1	ND	ND	5.05	45.6	5.74	64	12	6.1
Oct-1999	5	5	0.1	ND	5.83	0.334	ND	5.25	47.1	5.12	36	11	12
Apr-2000	7	7	ND	ND	3.92	0.39	ND	5.99	39	5.81	33	11	4.7
Oct-2000	7	NA	ND	ND	4.11	ND	ND	5.83	51.8	6.75	17	11.6	3.39
Apr-2001	5.2	NA	ND	ND	4.59	ND	ND	NA	NA	6.13	35	12.1	19
Sep-2001	5.3	5.3	ND	ND	5.67	ND	ND	5.16	52	11	37	11.9	0.97
Mar-2002	6.9	6.9	ND	ND	6.38	0.317	ND	5.3	46.3	6.43	35	13	8.4
Sep-2002	5.2	5.2	ND	ND	4.5	0.49	ND	5.4	46.8	8.3	36	11.2	5.8
Mar-2003	7.5	7.5	ND	ND	46.9	0.881	ND	5.3	55.2	46	ND	12.1	2.8
Oct-2003	6.1	6.1	ND	ND	4.33	0.168	ND	5.5	54.3	5.5	59	13.5	4
Apr-2004	7.8	7.8	ND	ND	4.12	0.17	ND	5.4	45	5.7	56	13	1.2
Oct-2004	6.6	6.6	ND	10	4.44	0.23	ND	5.5	45.8	5.08	37	16.9	12
Apr-2005	5.9	5.9	ND	ND	4.42	0.3	ND	5.1	40.6	4.95	66	12.1	17
Oct-2005	8.3	8.3	ND	ND	4.98	0.29	ND	4.9	38.3	4.73	40	10.2	1.4
Mar-2006	7	7	ND	ND	4.89	0.2	ND	4.7	41	5.72	40	10	0.56
Sep-2006	6.8	6.8	ND	ND	4.87	0.34	ND	5.2	42.6	4.57	27	10.8	6.1
Mar-2007	7.3	7.3	ND	ND	4.74	0.22	ND	5.2	46.7	5.12	18	10.7	7.1
Sep-2007	6.6	6.6	ND	ND	9.98	ND	ND	5.9	48.3	8.74	38	10.9	3.7
Mar-2008	9.5	9.5	ND	ND	9.91	0.79	ND	5.2	43.9	4.42	36	11.2	4
Sep-2008	11	11	ND	ND	5.84	0.32	ND	5.1	45.3	4.54	39	10.8	5.2
Mar-2009	12	12	ND	ND	6.71	0.35	ND	4.8	47.1	3.21	41	10.8	3.9
Oct-2009	8.2	8.2	ND	ND	5.79	0.21	ND	4.8	47.1	4.48	37	13	14
Apr-2010	10	10	ND	ND	6.69	0.29	ND	4.3	56.9	4.16	ND	13.1	5.7
Oct-2010	14	14	ND	ND	8.15	0.43	ND	4.2	50.3	3.63	35	14.8	1.6
Apr-2011	7.2	7.2	ND	ND	9.96	0.53	ND	5	61.9	7.95	63	16.7	40
Sep-2011	6.3	6.3	ND	ND	10.4	0.6	ND	5.1	64.9	7.82	58	17.6	88
Mar-2012	6.8	6.8	ND	ND	16	0.93	ND	4.6	82.4	10.5	52	20.2	4.7
Sep-2012	11.7	11.7	ND	ND	16.6	0.931	ND	4.9	83.9	11.3	64	21.4	9.39
Mar-2013	11.8	11.8	0.128 J	ND	16.6	1.05	ND	4.5	100.2	10.9	58	22.2	10.4
Oct-2013	9.24	9.24	ND	ND	19.6	1.29	ND	6.1	105.1	10.8	59	21.3	8.24

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-08***											
Mar-2014	10.4	10.4	*ND*	*ND*	17.9	1.24	*ND*	5.7	105	12.5	85	21.6	7.36
Oct-2014	37.4	37.4	*0.141 J*	14	17.3	0.07	*ND*	5.7	107.9	1.82	56	30.8	268
Apr-2015	22.9	22.9	0.33	12	16.6	*ND*	*ND*	4.7	115.1	*ND*	28	21.2	117
Nov-2015	11.4	11.4	*ND*	10	24.7	1.13	*ND*	5.7	174.3	6.94	72	27.3	18.1
May-2016	8.92	8.92	1.17	*ND*	22.3	*ND*	*ND*	5.7	205	*ND*	66	12	23.3
Oct-2016	11.2	11.2	1.09	13	22.4	*NA*	*NA*	5.7	228	*0.93 J*	69	14.1	64.7
May-2017	15.8	15.8	0.852	24	21.3	*ND*	*ND*	5.5	233	*0.612 J*	52	18.3	14.3
Oct-2017	16	16	0.699	16	25.7	*ND*	*ND*	5.9	275	*ND*	58	16.8	17.7
May-2018	30	30	0.34	27.2	34.8	*ND*	0.035	5.4	243	*ND*	49	24.6	*NA*
Nov-2018	46	46	0.12	*ND*	44.6	*0.038 J*	0.028	6.21	257.7	*ND*	88	34	18.8
May-2019	50	*NA*	*ND*	*ND*	50.5	0.13	0.03	6.14	224.3	*ND*	146	37.4	15.3
Oct-2019	20 H1	*NA*	*0.08 J*	*14.8 J*	47.2	0.18	0.028	6.15	282.5	*ND*	97	34.8	15.9
May-2020	36	*NA*	0.2	*11.3 J*	43.5	*ND*	0.023	5.64	257.4	*ND*	137	31.5	25.4
Oct-2020	110	*NA*	0.14	*11.6 J*	43.5	*0.084 J*	0.021	5.9	249.7	3.8	147	32.8	27.3
Apr-2021	14	*NA*	0.18	*10.5 J*	47.3	0.22	*ND*	6.37	325.7	*ND*	93	35.7	36.5

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-08*													
Nov-1993	NA	ND	ND	NA	ND	0.81	NA	ND	NA	ND	14.2	2.2	ND	1.1	NA
Apr-1994	NA	ND	ND	NA	ND	1.17	NA	ND	NA	ND	3.23	2.24	ND	1.49	NA
Apr-1995	ND	ND	0.7	ND	ND	0.82	NA	ND	0.03	ND	2.2	2	ND	1.4	NA
Oct-1996	ND	ND	0.053	ND	ND	1.7	1.6	ND	ND	ND	3.7	1.8	ND	1.2	1.2
Apr-1997	ND	ND	0.059	ND	ND	2.1	1.8	ND	ND	ND	0.89	0.63	ND	1.5	1.2
Oct-1997	ND	ND	0.047	ND	ND	1.68	1.73	ND	ND	ND	3.91	1.3	ND	1.39	1.4
Apr-1998	ND	ND	0.049	ND	ND	1.62	1.68	ND	ND	0.014	19	1.33	ND	1.32	1.38
Apr-1999	ND	ND	0.052	ND	ND	1.97	1.93	ND	ND	ND	6.45	4.05	ND	1.64	1.59
Oct-1999	ND	ND	0.059	ND	ND	1.87	1.7	ND	ND	ND	9.14	1.44	ND	1.56	1.42
Apr-2000	ND	ND	0.055	ND	ND	1.89	1.84	ND	ND	ND	4.64	1.94	ND	1.56	1.49
Oct-2000	ND	ND	0.057	ND	ND	1.99	2.01	ND	ND	ND	6.68	2.52	ND	1.62	1.63
Apr-2001	ND	ND	0.066	ND	ND	2.02	NA	ND	ND	ND	11.3	NA	ND	1.7	NA
Sep-2001	ND	ND	0.065	ND	ND	1.98	1.89	ND	ND	ND	4.89	3.36	ND	1.7	1.6
Mar-2002	ND	ND	0.065	ND	ND	2.3	1.93	ND	ND	0.016	10.5	2.21	ND	1.77	1.7
Sep-2002	ND	ND	0.066	ND	ND	1.83	1.88	ND	ND	0.013	13.4	2.13	ND	1.61	1.67
Mar-2003	ND	ND	0.067	ND	ND	2.02	1.96	ND	ND	ND	3.26	2.24	ND	1.72	1.63
Oct-2003	ND	ND	0.07	ND	ND	2.39	2.06	ND	ND	0.011	7.7	2.2	ND	1.84	1.79
Apr-2004	ND	ND	0.068	ND	ND	2.16	2.11	ND	ND	ND	3.16	1.75	ND	1.84	1.83
Oct-2004	ND	ND	0.073	ND	ND	3.5	2.13	ND	ND	0.015	13.1	2.67	ND	1.98	1.84
Apr-2005	ND	ND	0.076	ND	ND	2.11	1.95	ND	ND	ND	13.2	1.82	ND	1.67	1.55
Oct-2005	ND	ND	0.064	ND	ND	1.8	1.7	ND	ND	ND	4.74	1.86	ND	1.38	1.31

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-08***													
Mar-2006	ND	ND	0.054	ND	ND	1.91	1.6	ND	ND	ND	11.7	2.29	ND	1.28	1.31
Sep-2006	ND	ND	0.059	ND	ND	1.97	1.89	ND	ND	0.021	19.1	1.92	ND	1.43	1.45
Mar-2007	ND	ND	0.064	ND	ND	1.91	1.87	ND	ND	ND	4.12	2.64	ND	1.45	1.45
Sep-2007	ND	0.003	0.068	ND	ND	1.91	1.86	ND	ND	ND	10.2	2.06	ND	1.49	1.44
Mar-2008	ND	ND	0.074	ND	ND	1.93	1.82	ND	ND	ND	3.68	1.89	ND	1.54	1.42
Sep-2008	ND	ND	0.068	ND	ND	1.9	1.79	ND	ND	ND	5.49	2.41	ND	1.48	1.47
Mar-2009	ND	ND	0.073	ND	ND	2	1.84	ND	ND	ND	4.88	2.66	ND	1.41	1.38
Oct-2009	ND	ND	0.08	ND	ND	2.19	2.06	ND	ND	ND	11.7	4.86	ND	1.84	1.72
Apr-2010	ND	ND	0.089	ND	ND	2.49	2.31	ND	ND	ND	9.78	5.06	ND	1.68	1.65
Oct-2010	ND	ND	0.102	ND	ND	2.58	2.47	ND	ND	ND	7.8	5.13	ND	2.04	1.94
Apr-2011	ND	ND	0.108	ND	ND	2.89	2.69	ND	0.015	0.023	19.6	2.12	ND	2.3	2.1
Sep-2011	ND	ND	0.106	ND	ND	3.01	2.91	0.013	0.016	0.028	26.1	2.12	ND	2.44	2.34
Mar-2012	ND	0.005	0.132	ND	ND	3.41	3.57	0.076	0.041	0.168	132	2	ND	2.83	3.08
Sep-2012	ND	ND	0.116	0.000371 J	0.000301 J	3.67	3.81	0.0031 J	0.0146	0.007 J	5.82	4.27	ND	2.98	3.1
Mar-2013	ND	ND	0.144	0.00032 J	ND	3.93	3.93	0.0023 J	0.01	0.0067 J	8.35	7.68	ND	3.01	3.03
Oct-2013	ND	ND	0.155	0.00045 J	0.000277 J	4.02	4.06	0.0108	0.0128	0.0094 J	11.5	6.37	ND	2.73	2.59
Mar-2014	0.000428 J	0.000546 J	0.135	ND	0.000305 J	3.91	3.9	0.0049 J	0.0141	0.0165	15.1	8.32	ND	2.87	2.8
Oct-2014	0.000647 J	0.0013 J	0.147	ND	0.000338 J	5.49	5.45	0.0056 J	0.0111	0.0102	48.1	27.9	0.0012 J	4.16	4.14
Apr-2015	0.000966 J	0.0016 J	0.0912	0.000178 J	0.000209 J	3.74	3.87	0.0031 J	0.0064 J	0.0176	48.9	19.2	0.0011 J	2.87	3.08
Nov-2015	0.000355 J	0.000813 J	0.175	0.000355 J	0.000252 J	5.16	5.3	0.0016 J	0.0123	0.0089 J	15	10.6	0.000386 J	3.51	3.65
May-2016	ND	0.00064 J	0.0467	ND	ND	2.18	2.12	0.0024 J	0.0018	0.0028 J,B	3.81	0.392	0.00056 J	1.59	1.67
Oct-2016	0.00058 J	0.004	0.0573	ND	ND	2.57	2.44	0.0035 J+	0.0035	0.0125 J+	23.5	2.98	0.00084 J	1.85 J+	1.85
May-2017	ND	0.0023 J	0.0693	ND	ND	3.8	3.41	0.0036 J	0.0049	0.0098	17.9	10.2	0.0008 J	2.13	2.27
Oct-2017	ND	0.001 J	0.0619	ND	0.00032 J	3.23	3.22	0.0028 J	0.0039	0.0027 J	13.6	9.96	0.0005 J	2.11	2.17

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-08***													
May-2018	0.00068	0.0028	0.1	*0.00012 J*	*0.00044 J*	4.9	4.8	*0.0044 JB*	0.0059	0.012	27.7	23	0.0014	3	3
Nov-2018	*0.000056 J*	*0.00011 J*	0.19	*0.00022 J*	*0.00012 J*	6.3	6.2	*0.0029 J*	0.0047	0.0068	33.2	31.4	*0.00004 J*	4.4	4.6
May-2019	*ND*	*ND*	0.23	0.00038	*ND*	7	6.6	*ND*	0.0068	0.0087	35.6	31.2	*ND*	4.9	4.6
Oct-2019	*0.00021 J*	*0.00042 J*	0.22	*0.00023 J*	*0.00026 J*	6.6	6.7	*0.0054 J*	0.0053	0.0041	36.1	35.3	*0.000081 J*	4.4	4.5
May-2020	*ND*	*ND*	0.22	*0.00032 J*	*0.00037 J*	5.9	6.1	*0.0021 J*	*0.0048 J*	0.0098	40.5	36.4	*ND*	4.1	4.5
Oct-2020	*ND*	*ND*	0.19	*0.00028 J*	*ND*	6.3	6.2	*0.0033 J*	0.0047	*0.0072 J*	36.1	32	*ND*	4.2	4.2
Apr-2021	*ND*	*ND*	0.2	*0.00024 J*	*ND*	6.7	6.4	*ND*	0.0056	*0.0049 J*	36	30.1	*ND*	4.6	4.3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-08*												
Nov-1993	0.08	NA	ND	NA	0.73	NA	ND	NA	2.5	NA	NA	NA	ND
Apr-1994	0.1	NA	ND	NA	0.9	NA	ND	NA	3.28	NA	NA	NA	0.06
Apr-1995	ND	NA	ND	ND	1.1	NA	ND	ND	2.7	NA	ND	ND	0.03
Oct-1996	0.075	0.068	NA	ND	ND	ND	ND	ND	3.2	3.3	ND	ND	0.082
Apr-1997	0.054	0.053	ND	ND	2.4	ND	ND	ND	2.5	2.9	ND	ND	0.037
Oct-1997	0.087	0.087	NA	ND	ND	0.748	ND	ND	2.65	2.77	ND	ND	0.014
Apr-1998	0.101	0.081	NA	0.013	ND	0.719	ND	ND	2.68	2.44	ND	ND	0.017
Apr-1999	0.148	0.143	NA	ND	0.763	0.544	ND	ND	2.21	2.13	ND	ND	ND
Oct-1999	0.099	0.092	NA	0.013	0.564	0.714	ND	ND	2.85	2.53	ND	ND	0.011
Apr-2000	0.138	0.132	NA	ND	1.53	1.13	ND	ND	2.69	2.63	ND	ND	ND
Oct-2000	0.136	0.133	NA	ND	0.887	1.05	ND	ND	2.67	2.6	ND	ND	ND
Apr-2001	0.148	NA	NA	ND	0.545	NA	ND	ND	2.67	NA	ND	ND	ND
Sep-2001	0.133	0.143	NA	0.01	0.639	0.947	ND	ND	2.66	2.62	ND	ND	ND
Mar-2002	0.119	0.116	NA	ND	1.64	ND	ND	ND	3.74	2.66	ND	ND	0.012
Sep-2002	0.113	0.109	NA	ND	1.81	1.43	ND	ND	2.34	2.35	ND	ND	ND
Mar-2003	0.128	0.119	NA	ND	1.2	1.28	ND	ND	2.5	2.36	ND	ND	ND
Oct-2003	0.134	0.131	NA	ND	1.95	2	ND	ND	2.82	2.22	ND	ND	0.01
Apr-2004	0.13	0.12	ND	ND	0.636	ND	ND	ND	2.36	2.25	ND	ND	ND
Oct-2004	0.142	0.138	ND	ND	0.94	0.81	ND	ND	3.22	2.32	ND	ND	0.073
Apr-2005	0.127	0.116	ND	ND	0.7	0.62	ND	ND	2.83	2.7	ND	ND	0.01
Oct-2005	0.111	0.104	ND	ND	0.833	0.717	ND	ND	2.4	2.27	ND	ND	ND
Mar-2006	0.104	0.088	ND	ND	ND	ND	ND	ND	2.05	2.11	ND	ND	0.019

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-08***												
Sep-2006	0.127	0.117	ND	0.011	0.84	0.839	ND	ND	2.48	2.34	ND	ND	0.017
Mar-2007	0.137	0.13	ND	ND	0.782	0.785	ND	ND	2.33	2.33	ND	ND	0.011
Sep-2007	0.144	0.121	ND	ND	0.744	0.683	ND	ND	2.67	2.76	ND	ND	0.015
Mar-2008	0.123	0.111	ND	ND	0.781	0.703	ND	ND	2.84	2.5	ND	ND	0.01
Sep-2008	0.125	0.121	ND	ND	0.758	0.734	ND	ND	2.71	2.6	ND	ND	0.034
Mar-2009	0.127	0.12	ND	ND	0.943	0.853	ND	ND	3.17	3.11	ND	ND	0.021
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	0.21	0.181	ND	ND	0.632	0.642	ND	ND	2.74	2.76	ND	ND	0.016
Apr-2010	0.163	0.162	ND	ND	0.765	0.747	ND	ND	3.29	3.17	ND	ND	0.019
Oct-2010	0.178	0.169	ND	ND	0.789	0.77	ND	ND	3.66	3.66	ND	ND	0.015
Apr-2011	0.143	0.123	ND	0.016	0.742	0.691	ND	ND	4.44	4.34	ND	ND	0.052
Sep-2011	0.15	0.132	ND	0.019	0.86	0.777	ND	ND	4.63	4.51	ND	ND	0.051
Mar-2012	0.24	0.152	0.0003	0.088	0.824	0.855	ND	ND	7.75	8.15	ND	ND	0.141
Sep-2012	0.173	0.178	0.000044 J	0.0146	0.875	0.931	0.000466 J	ND	7.63	7.82	ND	ND	0.0343
Mar-2013	0.193	0.191	0.000079 J	0.0108 J	0.933	0.919	ND	ND	7.9	7.86	ND	ND	0.0408
Oct-2013	0.195	0.189	ND	0.0112	0.812	0.798	ND	ND	7.68	7.21	0.000106 J	0.0082 J	0.0383
Mar-2014	0.202	0.213	ND	0.0139	0.952	0.962	ND	ND	7.38	7.52	ND	ND	0.0488
Oct-2014	0.715	0.58	0.000082 J	0.0217	1.18	1.22	0.000855 J	ND	10.9	11.2	ND	ND	0.0362
Apr-2015	0.396	0.348	0.000074 J	0.0146	1.19	1.21	ND	0.000058 J	10.7	10.7	ND	ND	0.0262
Nov-2015	0.306	0.31	ND	0.0111	1.14	1.2	0.000756 J	ND	12.1	12.6	0.000181 J	ND	0.0366
May-2016	0.152	0.102	ND	0.0066	1.13	1.09	ND	ND	11.7	11.9	ND	ND	0.0162 J
Oct-2016	0.231 R	0.152	ND	0.008 J+	1.17	1.14	ND	ND	11.9 J+	11	ND	ND	0.0131 J
May-2017	0.363	0.337	ND	0.0112	1.17	1.16	ND	ND	12.7	12.7	ND	ND	0.0177 J
Oct-2017	0.305	0.289	ND	0.0075	1.15	1.17	ND	ND	13.1	12.9	ND	ND	0.0175 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-08***												
May-2018	0.58	0.52	*ND*	0.011	*ND*	*0.86 J*	*0.00045 J*	*ND*	17.1	16.1	*ND*	0.002	0.03
Nov-2018	0.53	0.52	*ND*	0.0049	*1.1 J*	*1.6 J*	*0.0002 J*	*ND*	22.2	23.8	*ND*	*ND*	0.015
May-2019	0.61	0.62	*ND*	0.005	*ND*	*ND*	*ND*	*ND*	24.4	23.9	*ND*	*ND*	0.02
Oct-2019	0.64	0.63	*ND*	0.0044	*1.5 J*	*ND*	*ND*	*ND*	25	26.4	*ND*	0.0088	0.019
May-2020	0.59	0.62	*ND*	*0.0068 J*	1.5	1.4	*ND*	*ND*	22.6	22.1	*ND*	*ND*	0.016
Oct-2020	0.62	0.57	*ND*	0.0045	*1.3 J*	*1.3 J*	*ND*	*ND*	21.6	21.6	*ND*	*0.00092 J*	*0.014 J*
Apr-2021	0.72	0.66	*0.00006 J*	*0.0042 J*	1.4	1.4	*ND*	*ND*	25.9	24.3	*ND*	*ND*	0.014

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	23	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.59 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.94 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7 J	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.2 J*	*ND*	*ND*	5.2	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.5 B	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.8 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-08*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-08***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	0.58 J	ND	ND	ND	ND	0.64 J,B	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	0.45 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-08***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-08***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-08*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-08***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.551 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-08A***											
Nov-1993	ND	ND	ND	ND	3.5	ND	ND	4.61	51.3	11.8	18	10.4	31
Apr-1994	10	10	0.1	67.6	3.5	ND	ND	4.74	50.5	12.1	34	13.46	76.8
Apr-1995	ND	ND	ND	ND	4.2	ND	ND	4.4	54.9	13.1	ND	10.2	130
Apr-1997	ND	2	ND	ND	4.5	0.07	ND	NA	NA	13	96	29	60
Oct-1997	ND	ND	0.24	ND	2.76	ND	ND	5.62	50.7	11.7	45	15	51
Apr-1998	ND	ND	ND	ND	3.8	ND	ND	5.38	47.9	11.9	26	14	200
Apr-1999	ND	ND	0.19	ND	3.8	ND	ND	4.16	54.1	9.69	67	15	73
Oct-1999	ND	ND	0.2	ND	3.98	ND	ND	4.82	78.5	11	38	15	350
Apr-2000	ND	ND	ND	ND	2.42	ND	ND	5.39	44	11	45	13	2.6
Oct-2000	2.8	NA	ND	ND	4.56	ND	ND	5.29	59.2	14.6	45	14.5	142
Apr-2001	ND	NA	ND	ND	3.62	ND	ND	NA	NA	12.1	20	15.1	23
Sep-2001	ND	ND	ND	ND	4.78	ND	ND	4.32	60	17.1	41	15.4	78
Mar-2002	ND	ND	ND	ND	4.39	ND	ND	4.7	57	17.8	58	16.3	34
Sep-2002	ND	ND	ND	ND	4	ND	ND	4.8	56.5	17.9	27	16.2	138
Mar-2003	ND	ND	ND	ND	39.5	ND	ND	4.7	64.8	128	23	14.9	44
Oct-2003	ND	ND	ND	ND	3.93	0.086	ND	4.7	79.2	18.3	72	18.8	11
Apr-2004	ND	ND	ND	ND	3.32	ND	ND	4.8	53.9	16.6	66	19.4	127
Oct-2004	1.1	1.1	ND	ND	2.78	ND	ND	4.7	42.5	11.6	41	17	37
Apr-2005	ND	ND	ND	ND	3.92	0.1	ND	4.6	42.6	16.3	81	17.4	73
Oct-2005	1.7	1.7	ND	ND	3.74	0.09	ND	4.6	41.9	15.8	51	13.3	10
Mar-2006	1.8	1.8	ND	ND	5.66	0.16	ND	4.1	54.8	18.8	40	14.9	148
Sep-2006	1.7	1.7	ND	ND	4.79	0.23	ND	4.5	53.5	16.7	49	16.6	99
Mar-2007	1.1	1.1	0.3	ND	17.6	2.22	ND	4.6	93.6	15.8	47	26.8	25
Sep-2007	ND	ND	0.23	ND	10	ND	ND	4.8	63.1	19	51	16.3	120
Mar-2008	ND	ND	ND	ND	24.2	3.29	ND	4.4	77.1	19	73	22.8	118
Sep-2008	1.5	1.5	ND	12	8.63	0.83	ND	4.4	77.3	21.4	54	18.2	170
Mar-2009	1.1	1.1	ND	ND	11.8	0.57	ND	4.2	77	18	60	18.1	75
Oct-2009	1	1	ND	ND	27.5	1.14	ND	4.1	119.2	18.4	87	25.3	492
Apr-2010	1.2	1.2	ND	ND	34.6	1.18	ND	3.9	129.1	19.7	58	27.6	156
Oct-2010	ND	ND	ND	ND	56.8	2.15	ND	4	121.8	19.1	166	37.4	30
Apr-2011	1.4	1.4	ND	ND	23	2	ND	4.3	130	20.8	109	21	72
Sep-2011	ND	ND	0.21	ND	45.6	4.16	ND	4.5	179.2	20.4	142	37.1	16
Mar-2012	ND	ND	ND	ND	43.7	2.89	ND	3.5	183.8	27.1	101	36.4	14
Sep-2012	ND	ND	ND	ND	18.9	0.982	ND	3.9	95.4	23.3	62	21.7	0.336
Mar-2013	1.16	1.16	0.167 J	ND	42.1	2.72	ND	3.7	177.1	25	108	33.7	1.59
Oct-2013	1.16 J	1.16 J	ND	ND	62	4.01	ND	5.3	352	25.1	176	36.6	0.972

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-08A***											
Mar-2014	*ND*	*ND*	*ND*	*6 J*	66.7	3.38	*ND*	4.5	308	30.3	173	31.1	0.983
Oct-2014	*ND*	*ND*	*ND*	*6 J*	63	3.52	*ND*	4.3	353	30.7	152	35.7	0.481
Apr-2015	1.92	1.92	*ND*	*7 J*	33.8	2.36	*ND*	3.9	157.2	24.7	90	26.6	2.03
Nov-2015	*ND*	*ND*	*ND*	*5 J*	55.6	3.65	*ND*	4.6	292	24.6	132	38.8	0.966
May-2016	*ND*	*ND*	*ND*	*ND*	57.3	2.11	*ND*	4.6	383	27	160	32.8	1.48
Oct-2016	*ND*	*ND*	*ND*	*ND*	83.9	*NA*	*NA*	4.5	416	20.9	177	44.7	3.11
May-2017	*ND*	*ND*	*ND*	*5 J*	109	4.81	*ND*	4.4	590	33.1	237	47.1	3.19
Oct-2017	*ND*	*ND*	*0.103 J*	*5 J+*	181	5.05	*ND*	4.7	625	27.9	271	47.6	4.55
May-2018	*4 JB*	*ND*	0.12	*5.8 J*	94	1.5	*ND*	4.2	494	25.4	190	44.5	*NA*
Nov-2018	*1 JB*	*ND*	*ND*	*ND*	76.1	5.3	*ND*	4.3	342.1	24.4	157	42.8	5.11
May-2019	*ND*	*NA*	*ND*	*ND*	30.6	0.58	*ND*	4.25	116.4	14.9	73	31.1	5.8
Oct-2019	*2.5 JH1*	*NA*	*ND*	*6 J*	15.5	0.62	*ND*	4.31	97	10.9	33	19.5	1.79
May-2020	*ND*	*NA*	*ND*	*6.9 J*	63	1.5	*ND*	4.24	261.7	18.4	143	28.7	4.49
Oct-2020	240	*NA*	*ND*	*ND*	58.8	3.1	*ND*	4.36	246.4	19.4	160	39.1	3.46
Apr-2021	*ND*	*NA*	*ND*	*ND*	46.1	2.7	*ND*	4.34	271.6	26.3	132	35.9	5.56

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-08A*													
Nov-1993	NA	ND	ND	NA	ND	1.7	NA	0.005	NA	ND	0.99	0.06	ND	1.5	NA
Apr-1994	NA	ND	ND	NA	ND	2.8	NA	ND	NA	ND	1.15	0.15	ND	1.57	NA
Apr-1995	ND	ND	ND	ND	0.005	1.3	NA	ND	0.02	ND	0.84	0.06	0.006	1.7	NA
Oct-1996	ND	ND	0.055	ND	ND	2.3	2.6	ND	ND	ND	0.31	ND	ND	1.5	1.4
Apr-1997	ND	ND	0.074	ND	ND	5.4	4	ND	ND	ND	ND	ND	0.006	2	1.7
Oct-1997	ND	ND	0.06	ND	ND	3.15	3.19	ND	ND	0.015	1.31	ND	ND	1.72	1.67
Apr-1998	ND	ND	0.066	ND	ND	2.61	2.56	0.011	ND	0.017	4.87	ND	ND	1.93	1.76
Apr-1999	ND	ND	0.063	ND	ND	2.79	2.65	ND	ND	0.01	1.47	ND	ND	1.95	1.8
Oct-1999	ND	ND	0.06	ND	ND	2.84	2.5	ND	ND	0.011	0.894	ND	ND	1.96	1.77
Apr-2000	ND	ND	0.056	ND	ND	2.57	2.43	ND	ND	ND	ND	ND	ND	1.7	1.6
Oct-2000	ND	ND	0.049	ND	ND	2.79	2.6	ND	ND	0.018	2.39	ND	ND	1.84	1.74
Apr-2001	ND	ND	0.055	ND	ND	2.91	NA	ND	ND	ND	0.562	NA	ND	1.89	NA
Sep-2001	ND	ND	0.054	ND	ND	2.85	2.54	ND	ND	ND	0.924	ND	ND	2.01	1.97
Mar-2002	ND	ND	0.053	ND	ND	3.06	2.68	ND	ND	0.011	0.434	ND	ND	2.11	1.96
Sep-2002	ND	ND	0.057	ND	ND	3.18	2.53	ND	ND	0.015	2.22	ND	ND	1.99	1.86
Mar-2003	ND	ND	0.054	ND	ND	2.58	2.49	ND	ND	ND	0.094	ND	ND	2.05	1.94
Oct-2003	ND	ND	0.066	ND	ND	3.53	3.12	ND	ND	0.012	0.305	ND	ND	2.42	2.28
Apr-2004	ND	0.002	0.067	ND	ND	3.59	3.04	ND	ND	0.015	2.43	ND	ND	2.54	2.26
Oct-2004	ND	ND	0.055	ND	ND	3.77	2.53	ND	ND	ND	0.797	0.365	ND	1.83	1.67
Apr-2005	ND	ND	0.067	ND	ND	3.69	3.14	ND	ND	0.014	1.01	ND	ND	1.99	1.87
Oct-2005	ND	ND	0.054	ND	ND	2.69	2.34	ND	ND	0.011	0.57	ND	ND	1.59	1.48

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-08A***													
Mar-2006	ND	ND	0.058	ND	ND	2.91	2.89	ND	ND	ND	1.43	ND	ND	1.86	1.95
Sep-2006	ND	ND	0.063	ND	ND	3.29	3.27	ND	ND	ND	0.834	ND	ND	2.03	2.04
Mar-2007	ND	ND	0.106	ND	ND	5.05	4.62	ND	0.011	ND	0.384	ND	ND	3.46	2.92
Sep-2007	ND	0.002	0.068	ND	ND	3.18	3.24	ND	ND	0.011	1.89	ND	ND	2.04	2.07
Mar-2008	ND	ND	0.095	ND	ND	4.15	4.18	ND	ND	0.01	1.05	ND	ND	3.02	3.03
Sep-2008	ND	0.003	0.071	ND	ND	3.3	3.22	ND	ND	ND	1.33	ND	ND	2.41	2.37
Mar-2009	ND	ND	0.071	ND	ND	3.36	3.3	ND	ND	0.011	0.553	ND	ND	2.35	2.32
Oct-2009	ND	ND	0.097	ND	ND	4.58	4.51	ND	ND	ND	2.32	0.053	ND	3.38	3.58
Apr-2010	ND	ND	0.117	ND	ND	5.07	4.86	ND	0.01	0.013	2.89	ND	ND	3.62	3.53
Oct-2010	ND	ND	0.142	ND	ND	6.65	6.27	ND	0.013	ND	1.17	ND	ND	5.05	4.78
Apr-2011	ND	ND	0.112	ND	ND	5.25	5.16	ND	ND	0.01	1.71	ND	ND	4	3.85
Sep-2011	ND	ND	0.15	ND	ND	6.9	6.93	ND	0.012	0.015	0.292	ND	ND	4.84	4.87
Mar-2012	ND	ND	0.145	ND	ND	6.61	6.6	ND	0.011	0.015	0.319	ND	ND	4.84	4.85
Sep-2012	ND	ND	0.0894	0.00034 J	0.000282 J	3.9	3.86	0.0013 J	0.0071 J	0.0144	0.0248 J	0.0324 J	ND	2.91	2.84
Mar-2013	ND	ND	0.127	0.000413 J	0.0003 J	6.11	5.96	0.0091 J	0.0099 J	0.0132	0.0782	0.0589	ND	4.48	4.44
Oct-2013	ND	ND	0.16	0.000546 J	0.000533 J	7.32	7.19	0.0176	0.0113	0.0125	0.133	0.0672	ND	4.45	4.03
Mar-2014	0.000446 J	ND	0.124	0.000413 J	0.000432 J	6.16	6.15	0.0028 J	0.0092 J	0.01	0.0305 J	0.0142 J	ND	3.83	3.82
Oct-2014	0.000379 J	0.000519 J	0.15	0.000413 J	0.000427 J	6.79	6.68	0.0026 J	0.0099 J	0.013	0.0319 J	0.0146 J	ND	4.55	4.47
Apr-2015	0.000529 J	0.000397 J	0.096	0.000215 J	0.000305 J	4.91	5.3	0.003 J	0.0078 J	0.0086 J	0.0457 J	0.018 J	ND	3.48	3.76
Nov-2015	0.000371 J	0.000482 J	0.145	0.000405 J	0.000439 J	7.77	7.73	0.002 J	0.0111	0.0124	0.0202 J	0.0164 J	0.000371 J	4.72	4.75
May-2016	ND	ND	0.117	0.0003 J	0.0003 J	6.21	5.79	0.0019 J	0.0102	0.009	ND	ND	ND	4.2	4
Oct-2016	ND	0.0017 J	0.167	0.00044 J	0.00055 J	8.84	8.77 J+	0.0044	0.0135	0.0146	0.058 J	ND	ND	5.5	5.77 J+
May-2017	ND	0.0012 J	0.159	0.00039 J	0.00045 J	9.1	8.72	0.0084	0.0147	0.0156	0.379	ND	0.00026 J	5.93	5.98
Oct-2017	ND	ND	0.166	0.00033 J	0.00059 J	9.29	8.97	0.0021 J	0.0151	0.0119	ND	ND	ND	5.92	6.25

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-08A***													
May-2018	*ND*	*ND*	*0.157 J*	*ND*	*0.00052 J*	8.7	8.8	*0.0026 J*	*0.0129 J*	*0.0106 J*	0.024	*0.011 J*	*ND*	5.5	5.6
Nov-2018	*ND*	*ND*	0.13	0.00041	*0.00058 J*	8.3	8.1	0.0076	0.011	0.009	0.052	0.032	*0.000046 J*	5.3	5.5
May-2019	*ND*	*ND*	0.099	0.00032	*ND*	6.1	5.7	0.0081	0.0076	0.015	*ND*	*ND*	*ND*	3.8	3.6
Oct-2019	*0.00016 J*	*ND*	0.074	*0.00027 J*	*0.00041 J*	3.7	3.8	0.0094	0.0064	0.012	*0.034 J*	*0.015 J*	*0.00007 J*	2.5	2.5
May-2020	*ND*	*ND*	0.11	*0.00031 J*	*0.00051 J*	5.6	5.9	0.0079	0.0089	0.0091	0.086	*ND*	*ND*	3.6	3.9
Oct-2020	*ND*	*ND*	0.13	*0.0003 J*	*ND*	7.4	7.3	*0.0066 J*	0.011	*0.0099 J*	*0.059 J*	0.029	*ND*	5	4.9
Apr-2021	*ND*	*ND*	0.14	*0.00028 J*	*0.00067 J*	6.8	6.6	*0.0036 J*	0.011	0.0096	*ND*	*ND*	*ND*	4.6	4.2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-08A*												
Nov-1993	0.1	NA	ND	NA	0.87	NA	ND	NA	2.1	NA	NA	NA	ND
Apr-1994	0.07	NA	ND	NA	0.78	NA	ND	NA	1.51	NA	NA	NA	0.03
Apr-1995	0.03	NA	ND	ND	0.89	NA	ND	ND	1.5	NA	ND	ND	0.06
Oct-1996	0.054	0.056	NA	ND	ND	ND	ND	ND	2.2	2	ND	ND	0.034
Apr-1997	0.081	0.064	0.0009	ND	2.3	1.6	ND	ND	2.1	2.6	ND	ND	0.032
Oct-1997	0.066	0.063	NA	ND	ND	ND	ND	ND	1.47	1.54	ND	ND	0.021
Apr-1998	0.055	0.055	NA	0.016	2.17	ND	ND	ND	1.73	1.63	ND	0.015	0.031
Apr-1999	0.069	0.068	NA	ND	1.43	1.06	ND	ND	2.02	1.75	ND	ND	0.018
Oct-1999	0.062	0.06	NA	ND	0.97	1.05	ND	ND	2.16	1.72	ND	ND	0.021
Apr-2000	0.068	0.064	NA	ND	ND	ND	ND	ND	1.82	1.7	ND	ND	0.014
Oct-2000	0.056	0.06	NA	ND	1.18	1.24	ND	ND	4.19	2.8	ND	ND	0.016
Apr-2001	0.068	NA	NA	ND	1.32	NA	ND	ND	3.02	NA	ND	ND	0.016
Sep-2001	0.058	0.055	NA	0.018	1.06	0.662	ND	ND	2.62	1.81	ND	ND	0.019
Mar-2002	0.066	0.066	NA	ND	1.43	1.7	ND	ND	2.51	1.61	ND	ND	0.015
Sep-2002	0.072	0.062	NA	ND	1.21	ND	ND	ND	2.14	1.75	ND	ND	0.015
Mar-2003	0.055	0.054	NA	ND	1.52	ND	ND	ND	1.89	1.8	ND	ND	0.01
Oct-2003	0.086	0.081	NA	ND	1.64	1.56	ND	ND	3.23	2.72	ND	ND	0.019
Apr-2004	0.082	0.078	ND	ND	1.81	0.922	ND	ND	2.26	1.77	ND	ND	0.044
Oct-2004	0.091	0.083	ND	ND	0.817	ND	ND	ND	1.78	1.25	ND	ND	0.063
Apr-2005	0.1	0.093	ND	ND	0.72	0.62	ND	ND	2.26	1.86	ND	ND	0.046
Oct-2005	0.066	0.058	ND	ND	0.979	0.922	ND	ND	2.38	1.47	ND	ND	0.015
Mar-2006	0.041	0.038	ND	ND	0.672	0.637	ND	ND	1.75	1.7	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-08A***												
Sep-2006	0.091	0.091	ND	ND	0.991	0.975	ND	ND	2.13	2.09	ND	ND	0.021
Mar-2007	0.134	0.124	ND	ND	1.26	1.13	ND	ND	8.06	6.5	ND	ND	0.032
Sep-2007	0.091	0.091	ND	ND	0.922	0.759	ND	ND	2.61	2.71	ND	ND	0.024
Mar-2008	0.105	0.106	ND	ND	1.13	1.02	ND	ND	7.26	6.57	ND	ND	0.023
Sep-2008	0.088	0.09	ND	ND	1	0.896	ND	ND	3.38	3.57	ND	ND	0.035
Mar-2009	0.084	0.085	ND	ND	1.13	1.02	ND	ND	4.71	4.77	ND	ND	0.022
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	0.105	0.11	ND	ND	1.12	1	ND	ND	11.2	12.1	ND	ND	0.049
Apr-2010	0.119	0.116	ND	ND	1.3	1.08	ND	ND	16.3	15.4	ND	ND	0.036
Oct-2010	0.16	0.153	ND	ND	1.54	1.29	ND	ND	29.3	27.7	ND	ND	0.032
Apr-2011	0.131	0.118	ND	ND	1.16	0.97	ND	ND	13.3	13	ND	ND	0.024
Sep-2011	0.182	0.183	ND	ND	1.5	1.4	ND	ND	22.8	22.8	ND	ND	0.036
Mar-2012	0.181	0.18	ND	0.012	1.38	1.34	ND	ND	22.9	23	ND	ND	0.033
Sep-2012	0.1	0.0963	0.000033 J	0.006 J	1.06	1.07	0.000578 J	ND	9.79	9.35	ND	ND	0.0168
Mar-2013	0.161	0.155	0.000077 J	0.0119	1.3	1.32	0.000678 J	ND	23	22.6	ND	ND	0.0394
Oct-2013	0.186	0.184	ND	0.0086 J	1.3	1.25	ND	ND	33.2	33	0.000098 J	ND	0.0371
Mar-2014	0.173	0.174	ND	0.0072 J	1.27	1.25	ND	ND	28.8	28.8	ND	ND	0.0272
Oct-2014	0.166	0.163	ND	0.0088 J	1.51	1.49	0.0038	ND	33	31.9	ND	ND	0.0289
Apr-2015	0.129	0.139	0.000032 J	0.0068 J	1.19	1.28	0.0021	ND	18.5	19.8	ND	ND	0.0201
Nov-2015	0.194	0.197	ND	0.0088 J	1.53	1.52	0.0036	ND	34.3	34.2	0.000192 J	ND	0.0356
May-2016	0.185	0.177	ND	0.0071	1.4	1.44	ND	ND	38.9	36.8	ND	ND	0.024 J,B
Oct-2016	0.252 J+	0.254 J+	ND	0.0117	1.75	1.84	ND	ND	45.8	46.6	ND	ND	0.0382
May-2017	0.259	0.265	ND	0.0135	1.9	1.84	0.00058 J	ND	65	64.1	ND	0.0011	0.0329
Oct-2017	0.275	0.273	ND	0.0099	1.74	1.88	ND	ND	65.9	72.2	ND	ND	0.0335

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-08A***												
May-2018	0.248	0.25	*ND*	*0.0163 J*	*2 J*	*1.7 J*	*ND*	*ND*	53.3	54.3	*0.0038 J*	*ND*	0.0395
Nov-2018	0.19	0.26	*ND*	0.0098	*1.6 J*	*2.5 J*	*0.00077 J*	*ND*	46.2	46.7	*ND*	0.0014	0.029
May-2019	0.077	0.081	*ND*	0.0098	*ND*	*ND*	*ND*	*ND*	15	14.5	*ND*	*ND*	0.014
Oct-2019	0.083	0.082	*ND*	0.008	*1.4 J*	*ND*	*0.0005 J*	*ND*	7.2	7.8	*ND*	0.0081	0.023
May-2020	0.15	0.16	*ND*	0.011	1.7	1.6	*ND*	*ND*	37.1	36.2	*ND*	*ND*	0.026
Oct-2020	0.17	0.17	*ND*	0.0095	*1.8 J*	*1.7 J*	*ND*	*ND*	30.8	30.5	*ND*	*0.00091 J*	0.033
Apr-2021	0.18	0.17	*0.00005 J*	*0.009 J*	1.7	1.7	*ND*	*ND*	29.7	27.2	*ND*	*ND*	0.03

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	33	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5 J	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08A*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08A*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.7 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-08A*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.1	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	63	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	1
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	2.3	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	25	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.3	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.4	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-08A***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.23	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.63	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.16 J	ND	ND	ND	ND	ND	1.83	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.21	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.38 J,B	ND	ND	ND	ND	1.45	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.19 J	ND	ND	ND	ND	ND	1.13	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	0.56 J	ND	ND	ND	ND	ND	ND	0.64 J	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.9 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-08A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.518 J*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-08A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-08A***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	0.7 J,B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.16 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	0.13 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-08A***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.4 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.538 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-09B***											
Nov-1993	ND	ND	ND	26.8	17.3	2	ND	4.61	78.9	2.8	ND	7.38	240
Apr-1994	ND	ND	ND	74.5	1.4	2	ND	4.88	81.2	2.5	41	10.47	70.8
Apr-1995	ND	ND	ND	ND	17.9	2.2	ND	4.6	87.2	2.4	37	2.7	452
Apr-1997	ND	13	ND	24	13	1.7	ND	NA	NA	ND	74	11	9.4
Oct-1997	ND	ND	0.6	ND	22.5	2.48	ND	5.62	95.1	ND	85	11	240
Apr-1998	ND	ND	0.21	ND	20.1	2	ND	5.91	86.2	ND	67	13	53
Apr-1999	ND	ND	0.24	ND	22.4	2.07	ND	4.52	89.2	ND	74	20	1000
Oct-1999	ND	ND	0.14	ND	17.7	1.97	ND	4.99	94.2	0.883	390	17	930
Apr-2000	ND	3	ND	ND	19.3	1.9	ND	5.62	73	ND	71	14	540
Oct-2000	ND	NA	ND	32	21.9	2.52	ND	4.86	91.2	ND	92	15.1	630
Apr-2001	ND	NA	ND	ND	18.9	1.96	ND	NA	NA	ND	62	13.4	210
Sep-2001	ND	ND	ND	ND	18.7	2.59	ND	6.78	103	ND	166	12	1068
Mar-2002	ND	ND	ND	45	20.9	2.32	ND	4.9	97.3	ND	356	16.6	1060
Sep-2002	1	1	ND	11	23.3	2.11	ND	4.9	139.3	ND	124	15.4	966
Mar-2003	1.3	1.3	ND	ND	23.1	2.18	ND	4.9	114.3	ND	114	14.5	805
Oct-2003	1.9	1.9	ND	ND	22.6	2.25	ND	5.1	115.1	1.06	114	15.6	875
Apr-2004	1.6	1.6	ND	ND	21	1.98	ND	4.8	94.9	1.38	116	15.1	614
Oct-2004	1.6	1.6	ND	ND	21	2.01	ND	4.9	90.5	ND	72	12.9	159
Apr-2005	ND	ND	ND	39	22.7	2.1	ND	4.8	91.3	2.12	212	18.3	2810
Oct-2005	2	2	ND	54	24	2.15	ND	5	92.5	1.65	155	18.1	38
Mar-2006	3	3	ND	ND	21.8	2.2	ND	6	95.1	2.01	96	11	80.4
Sep-2006	2	2	ND	ND	19.7	2.31	ND	4.8	88.4	1.66	152	16.3	1520
Mar-2007	3.3	3.3	ND	ND	19.3	2.36	ND	5.4	90	1.58	71	14.1	995
Sep-2007	2.1	2.1	ND	ND	21.8	2.77	ND	5	89.6	ND	101	12.4	234
Mar-2008	2.1	2.1	ND	ND	25.1	3.26	ND	4.9	87.1	1.19	155	12.4	1049
Sep-2008	3.1	3.1	ND	34	20.4	2.55	ND	4.7	81.6	2.03	109	12.5	810
Mar-2009	2.6	2.6	ND	ND	19.6	2.56	ND	4.7	87.5	2.01	42	11.3	496
Oct-2009	2.4	2.4	ND	23	20.1	2.34	ND	4.6	80.8	1.35	173	15.1	1058
Apr-2010	2.9	2.9	ND	35	19.7	2.26	ND	4.3	80.1	1.97	200	16.7	3340
Oct-2010	3	3	ND	ND	17.8	2.06	ND	4.3	76.2	2.3	72	11.4	102
Apr-2011	10	10	ND	ND	17.2	1.72	ND	4.5	79.7	2.65	73	18.3	27
Sep-2011	3.4	3.4	ND	ND	20.6	2.36	ND	5	68.1	ND	60	12.1	24
Mar-2012	3.2	3.2	ND	ND	14.7	1.54	ND	4	79.5	10.6	24	17.4	0.76
Sep-2012	3.4	3.4	ND	ND	19.7	2.23	ND	3.7	84.1	1.79	66	12.1	4.35
Mar-2013	3.56	3.56	ND	ND	19.3	2.39	ND	4.1	87.8	1.6	44	11.9	4.21
Oct-2013	3.8	3.8	ND	ND	19.7	2.43	ND	3.6	89.8	1.51	54	12	4.22

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-09B***											
Mar-2014	3.44	3.44	*ND*	*6 J*	20.3	2.4	*ND*	5	81.3	1.56	75	14.4	15
Oct-2014	*ND*	*ND*	*ND*	*ND*	21.3	2.39	*ND*	4.8	85.7	2.11	72	13.7	11.6
Apr-2015	3.76	3.76	*ND*	*ND*	21.1	2.53	*ND*	4.4	89.8	*0.855 J*	42	13.6	8.44
Nov-2015	*ND*	*ND*	*ND*	*ND*	20.8	2.37	*ND*	5.1	134.8	3	33	14.2	5.99
May-2016	3.16	3.16	*ND*	*ND*	19.7	2.23	*ND*	5.1	145.9	3.53	62	14.7	1.06
Oct-2016	3.72	3.72	*ND*	*ND*	21.3	*NA*	*NA*	5.1	140.5	2.91	82	14.5	9.47
May-2017	2.24	2.24	*ND*	*7 J*	22.3	2.69	*ND*	5.1	143.8	2.85	76	21	4.56
Oct-2017	*ND*	*ND*	*ND*	*ND*	22	2.96	*ND*	5.1	139.9	2.84	52	14.7	4.01
May-2018	*3 JB*	*ND*	*ND*	*ND*	23	0.52	*ND*	4.8	143.8	*ND*	62	17.2	*NA*
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	21.4	2.5	*ND*	4.85	106.3	*ND*	57	16.2	4.56
May-2019	*ND*	*NA*	*ND*	*ND*	22.6	2.4	*ND*	4.75	86	*ND*	53	17.5	4.99
Oct-2019	*ND*	*NA*	*ND*	*6 J*	18.7	2.3	*ND*	4.66	103.2	*5.3 J*	67	16.4	4.69
May-2020	*6 J*	*NA*	*ND*	*ND*	20.2	2.2	*ND*	5.36	107.7	*5.2 J*	64	18.3	5.79
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	20.5	2.1	*ND*	5.24	110.2	6.4	86	22.5	4.98
Apr-2021	*2 J3c*	*NA*	*ND*	*6.1 J*	23.7	2.5	*ND*	6.43	136.2	*ND*	62	23.3	11.8

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-09B*													
Nov-1993	NA	0.005	ND	NA	ND	0.15	NA	0.018	NA	ND	4.6	0.13	ND	1.7	NA
Apr-1994	NA	ND	ND	NA	ND	1.72	NA	ND	NA	ND	0.27	ND	ND	1.5	NA
Apr-1995	ND	ND	0.7	ND	ND	1	NA	ND	ND	ND	0.25	ND	ND	1.5	NA
Oct-1996	ND	ND	0.09	0.001	ND	2.5	2.3	ND	0.021	ND	3.3	0.46	ND	1.7	1.6
Apr-1997	ND	ND	0.05	ND	ND	5.4	6.9	ND	ND	ND	ND	ND	0.003	1.5	1.6
Oct-1997	ND	ND	0.063	ND	ND	2.21	2.08	ND	0.01	ND	1.58	ND	ND	1.92	1.69
Apr-1998	ND	ND	0.057	ND	ND	2.21	2.12	ND	ND	ND	1.1	ND	ND	1.74	1.56
Apr-1999	ND	ND	0.182	ND	ND	3	2.07	0.047	0.02	0.052	9.09	ND	ND	2.97	1.52
Oct-1999	ND	ND	0.087	ND	ND	2.73	1.93	0.028	0.017	0.056	5.02	ND	ND	1.91	1.38
Apr-2000	ND	ND	0.055	ND	ND	2.54	1.92	ND	0.012	0.022	1.6	0.219	ND	1.77	1.52
Oct-2000	ND	ND	0.067	ND	ND	2.77	2.22	0.014	0.015	0.028	2.54	ND	ND	1.98	1.67
Apr-2001	ND	ND	0.046	ND	ND	2.49	NA	ND	0.012	ND	0.856	NA	ND	1.75	NA
Sep-2001	ND	ND	0.097	ND	ND	2.92	2.21	0.031	0.015	0.053	7.62	ND	0.013	2.19	1.65
Mar-2002	ND	ND	0.079	ND	ND	3.01	2.23	0.023	0.017	0.043	4.51	0.059	0.009	2.2	1.71
Sep-2002	ND	ND	0.073	ND	ND	2.9	2.14	0.015	0.012	0.038	3.78	ND	0.007	1.98	1.63
Mar-2003	ND	0.002	0.051	ND	ND	2.63	2.3	ND	0.017	0.039	0.907	0.118	0.003	1.92	1.67
Oct-2003	ND	0.004	0.074	ND	ND	2.85	2.19	0.015	0.012	0.066	3.45	ND	0.008	2.07	1.7
Apr-2004	ND	0.004	0.069	ND	ND	2.74	2.03	0.014	0.01	0.024	3.02	ND	0.006	2.01	1.65
Oct-2004	ND	ND	0.042	ND	ND	2.31	1.86	ND	ND	ND	0.71	ND	ND	1.73	1.62
Apr-2005	ND	0.009	0.123	0.002	ND	3.35	2.22	0.047	0.02	0.085	9.19	ND	**0.018**	2.41	1.78
Oct-2005	ND	**0.014**	0.149	ND	0.004	3.09	1.86	0.064	0.025	0.116	11.5	ND	**0.028**	2.52	1.49

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09B***													
Mar-2006	ND	ND	0.031	ND	ND	2.07	1.93	ND	ND	ND	0.277	ND	ND	1.42	1.49
Sep-2006	ND	ND	0.081	ND	ND	3.1	2.21	0.039	0.019	0.079	7.79	ND	**0.016**	2.05	1.55
Mar-2007	ND	0.003	0.058	ND	ND	2.66	2.48	ND	0.012	0.021	1.4	ND	0.003	1.81	1.59
Sep-2007	ND	ND	0.046	ND	ND	2.26	2.2	ND	ND	ND	0.88	ND	0.003	1.65	1.56
Mar-2008	ND	0.004	0.062	ND	ND	2.27	2.1	0.013	0.011	0.023	2.38	ND	0.006	1.64	1.5
Sep-2008	ND	0.003	0.063	ND	ND	2.17	1.92	0.018	0.014	0.02	2.31	ND	0.005	1.71	1.48
Mar-2009	ND	ND	0.046	ND	ND	2.09	1.88	ND	ND	0.017	1.51	ND	0.003	1.48	1.35
Oct-2009	ND	0.005	0.09	ND	ND	2.82	1.93	0.031	0.016	0.061	4.87	0.052	0.011	1.96	1.52
Apr-2010	ND	0.006	0.094	ND	ND	3.34	2.45	0.039	0.017	0.066	11	ND	0.014	2.05	1.38
Oct-2010	ND	ND	0.037	ND	ND	1.94	1.97	ND	ND	ND	0.516	ND	ND	1.59	1.59
Apr-2011	ND	ND	0.034	ND	ND	4.56	4.07	ND	0.022	ND	4.41	ND	ND	1.67	1.53
Sep-2011	ND	ND	0.04	ND	ND	2.12	2.05	ND	ND	ND	0.211	ND	ND	1.65	1.61
Mar-2012	ND	ND	0.066	ND	ND	2.82	2.86	ND	ND	ND	ND	ND	ND	2.51	2.54
Sep-2012	ND	ND	0.0335	0.000191 J	ND	2.09	2.03	ND	0.0068 J	0.0015 J	0.0749	0.0223 J	ND	1.66	1.67
Mar-2013	ND	ND	0.0379	0.000152 J	ND	2.13	2.19	0.0029 J	0.0069 J	0.0016 J	0.0186 J	0.0078 J	ND	1.61	1.62
Oct-2013	ND	ND	0.0414	0.000199 J	ND	2.39	2.43	0.0095 J	0.0074 J	0.0012 J	0.101	0.0559	0.000275 J	1.47	1.42
Mar-2014	0.000599 J	ND	0.0436	0.000386 J	ND	2.67	2.23	0.0046 J	0.0069 J	0.00041 J	0.194	0.003 J	ND	1.87	1.58
Oct-2014	0.000623 J	ND	0.0454	0.00016 J	0.000098 J	2.39	2.4	0.0025 J	0.0074 J	0.0017 J	0.0974	ND	ND	1.89	1.89
Apr-2015	0.000723 J	ND	0.0449	0.00016 J	0.000093 J	2.42	2.49	0.002 J	0.0079 J	0.0022 J	0.137	ND	0.00099 J	1.83	1.9
Nov-2015	0.000329 J	ND	0.041	0.000183 J	0.0001 J	2.56	2.52	0.000845 J	0.0068 J	0.0023 J	0.054	ND	0.000315 J	1.89	1.95
May-2016	ND	ND	0.0411	0.00021 J	ND	2.43	2.18	0.0014 J	0.0065	0.003 J	0.265	ND	ND	2.11	1.89
Oct-2016	ND	ND	0.0474	0.00017 J	ND	2.5	2.55 J+	0.0021 J	0.0066	0.0022 J	0.128 J	ND	0.00017 J	2	2.23 J+
May-2017	ND	ND	0.0508	0.0002 J	ND	2.83	2.32	0.0024 J	0.0085	0.0068	0.177 J	ND	0.00054 J	3.39	2.14
Oct-2017	ND	ND	0.0464	0.00014 J	ND	2.47	2.45	ND	0.0075	0.0017 J	ND	ND	ND	2.07	2.14

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09B***													
May-2018	*ND*	*ND*	*0.0507 J*	*ND*	*ND*	2.9	2.9	*ND*	*0.0078 J*	*ND*	*0.017 J*	*ND*	*ND*	2.4	2.4
Nov-2018	*ND*	*ND*	0.043	*0.00014 JM1*	*0.000091 J*	2.9	2.8	*0.0041 J*	0.0057	0.0029	*0.014 J*	*ND*	*0.000081 J*	2.2	2.2
May-2019	*ND*	*ND*	0.048	*ND*	*ND*	2.8	2.6	*ND*	0.0058	0.0035	*ND*	*ND*	*ND*	2.6	2.4
Oct-2019	*0.00014 J*	*0.00044 J*	0.05	*0.00012 J*	*0.0002 J*	2.5	2.5	*0.0056 J*	0.0056	0.0022	*0.017 J*	*ND*	*ND*	2.5	2.5
May-2020	*0.000061 J*	*ND*	0.047	*0.000093 J*	*ND*	3.1	3	*0.0041 J*	0.0046	0.0023	*0.017 J*	*0.013 J*	*ND*	2.5	2.4
Oct-2020	*ND*	*ND*	0.045	*ND*	*ND*	4.6	4.3	*0.0031 J*	0.0045	*ND*	*0.021 J*	*0.01 J*	*ND*	2.7	2.5
Apr-2021	*ND*	*ND*	0.052	*ND*	*ND*	4.9	4.8	*0.0014 J*	*0.0046 J*	*ND*	*0.053 J*	*ND*	*ND*	2.7	2.8

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-09B*												
Nov-1993	0.05	NA	ND	NA	4.7	NA	ND	NA	8	NA	NA	NA	0.04
Apr-1994	0.03	NA	ND	NA	1.2	NA	ND	NA	8.28	NA	NA	NA	0.08
Apr-1995	ND	NA	ND	ND	1.7	NA	ND	ND	7.2	NA	ND	ND	0.03
Oct-1996	0.019	0.017	NA	ND	ND	ND	ND	ND	8.9	9.1	ND	0.026	0.16
Apr-1997	0.019	0.017	ND	ND	2.3	4.4	ND	ND	8.4	9.2	ND	ND	0.031
Oct-1997	0.02	0.018	NA	0.018	1.49	ND	ND	ND	11.1	10.9	ND	0.012	0.025
Apr-1998	0.019	0.017	NA	0.018	2.09	1.85	ND	ND	10.2	10.2	ND	ND	0.026
Apr-1999	0.03	0.018	NA	0.025	8.15	1.24	ND	ND	11.8	10.5	ND	0.079	0.056
Oct-1999	0.02	0.017	NA	0.035	2.97	1.29	ND	ND	10.3	9.04	ND	0.055	0.06
Apr-2000	0.02	0.017	NA	0.018	1.88	1.31	ND	ND	10.9	9.63	ND	0.017	0.033
Oct-2000	0.021	0.017	NA	0.025	2.6	1.53	ND	ND	12.6	11.1	ND	0.025	0.036
Apr-2001	0.02	NA	NA	0.012	1.92	NA	ND	ND	12.3	NA	ND	ND	0.015
Sep-2001	0.026	0.018	NA	0.036	3.42	1.42	ND	ND	13.2	11.7	ND	0.061	0.038
Mar-2002	0.025	0.02	NA	0.019	3.42	2.01	ND	ND	14.3	12.2	ND	0.047	0.038
Sep-2002	0.025	0.018	NA	0.015	2.03	1.56	ND	ND	13.2	12.3	ND	0.034	0.028
Mar-2003	0.021	0.018	NA	0.019	2.98	1.45	ND	ND	13.4	12.5	ND	0.025	0.027
Oct-2003	0.028	0.02	NA	0.016	3.2	2.95	ND	ND	14.1	12.9	ND	0.036	0.047
Apr-2004	0.026	0.02	ND	0.016	3.46	2.34	ND	ND	13.3	12.8	ND	0.028	0.108
Oct-2004	0.021	0.02	ND	ND	2.49	ND	ND	ND	13.6	13.1	ND	ND	0.02
Apr-2005	0.03	0.019	ND	0.033	3.31	1.33	ND	ND	15.2	15.1	ND	0.086	0.1
Oct-2005	0.031	0.016	ND	0.034	4.29	1.35	ND	ND	14.3	11.9	ND	0.12	0.069
Mar-2006	ND	ND	ND	ND	1.25	1.15	ND	ND	11	11.8	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09B***												
Sep-2006	0.027	0.017	0.0002	0.024	2.93	1.41	ND	ND	11.4	10.9	ND	0.07	0.046
Mar-2007	0.02	0.016	ND	0.014	2.3	1.48	ND	ND	10.5	10.7	ND	0.019	0.02
Sep-2007	0.02	0.019	ND	0.012	1.66	1.23	ND	ND	11.5	11.6	ND	ND	0.017
Mar-2008	0.021	0.017	ND	0.015	2.29	1.26	ND	ND	11.9	11.4	ND	0.019	0.023
Sep-2008	0.022	0.017	ND	0.019	2.63	1.24	ND	ND	10.2	10.1	ND	0.016	0.049
Mar-2009	0.019	0.016	ND	ND	2.08	1.36	ND	ND	10.6	10.3	ND	ND	0.018
Oct-2009	0.031	0.017	ND	0.023	2.9	1.16	ND	ND	10.7	11	ND	0.058	0.062
Apr-2010	0.029	0.014	ND	0.023	3.54	1.37	ND	ND	11	10.9	ND	0.08	0.043
Oct-2010	0.024	0.02	ND	ND	1.91	1.49	ND	ND	11.1	11.3	ND	ND	0.015
Apr-2011	0.239	0.012	ND	0.011	1.56	1.42	ND	ND	10.6	10.2	ND	ND	0.022
Sep-2011	0.019	0.018	ND	ND	1.71	1.52	ND	ND	11.7	11.3	ND	ND	0.01
Mar-2012	0.045	0.045	ND	ND	1.5	1.51	ND	ND	8.98	9.28	ND	ND	ND
Sep-2012	0.0202	0.02	ND	0.0083 J	1.47	1.37	ND	ND	11.6	11.5	ND	ND	0.0074 J
Mar-2013	0.0199	0.0206	0.000063 J	0.0091 J	1.33	1.36	ND	ND	11	10.9	ND	ND	0.0167
Oct-2013	0.0238	0.0241	ND	0.0081 J	1.24	1.21	ND	ND	9.63	9.33	0.000127 J	0.0052 J	0.0169
Mar-2014	0.0211	0.0218	ND	0.0091 J	1.85	1.44	ND	ND	12.7	10.6	ND	0.000972 J	0.0119
Oct-2014	0.0233	0.0232	0.000034 J	0.0099 J	1.65	1.6	0.00081 J	ND	12.6	12.6	ND	ND	0.0117
Apr-2015	0.0251	0.0248	ND	0.0097 J	1.66	1.61	0.0014 J	ND	12.9	13.2	0.000871 J	ND	0.0152
Nov-2015	0.0223	0.0226	ND	0.0087 J	1.68	1.71	0.000537 J	ND	12.5	12.7	0.00018 J	ND	0.0133
May-2016	0.0235	0.0224	ND	0.0081	1.84	1.65	ND	ND	14.9	12.3	ND	ND	0.0088 J,B
Oct-2016	0.0236 J+	0.0256 J+	ND	0.0099	1.83	1.79	ND	ND	13.1	14.1	ND	0.00068 J	0.0122 J
May-2017	0.0309	0.0254	ND	0.0127	2.25	1.69	ND	ND	50.3	13.2	ND	0.00067 J	0.0208 J
Oct-2017	0.0261	0.0267	ND	0.0084	1.56	1.63	ND	ND	12.9	13.3	ND	ND	0.0092 J
May-2018	0.0293	0.0279	ND	0.0178 J	1.9 J	1.4 J	ND	ND	14.8	14	ND	ND	0.0124 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09B***												
Nov-2018	0.022	0.02	*ND*	0.0093	*1.9 J*	*1.7 J*	*0.0004 J*	*ND*	13.4	13.4	*ND*	0.002	0.011 D6
May-2019	0.026	0.024	*ND*	0.008	*ND*	*ND*	*ND*	*ND*	13.3	12.8	*ND*	*ND*	0.0086
Oct-2019	0.029	0.03	*ND*	0.0073	*1.9 J*	*ND*	*0.00065 J*	*ND*	12.5	13	*ND*	0.0087	0.015
May-2020	0.021	0.02	*ND*	0.0098	*2.2 J*	*1.3 J*	*0.00043 J*	*ND*	15.2	11.8	*ND*	0.0044	0.01
Oct-2020	0.023	0.022	*ND*	0.0084	*ND*	*1.5 J*	*ND*	*ND*	13	12.9	*ND*	*0.0012 J*	*0.015 J*
Apr-2021	0.026	0.029	*ND*	*0.0084 J*	1.7	1.8	*ND*	*ND*	14.5	15.1	*ND*	*0.00073 J*	*0.0078 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09B*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	6	5	4	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	17	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09B*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09B*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.6 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-09B*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	2.1	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	0.6 J	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.1	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.3	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09B***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.49 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	0.39 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.32 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.4 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.3 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09B***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	5.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09B***															
Oct-2005	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	0.5 J	0.5 J	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.44 J	ND	ND	ND	0.18 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	0.34 J	ND	ND	ND	0.21 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	0.38 J	ND	ND	ND	0.19 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	0.29 J	ND	ND	ND	0.19 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	0.3 J	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09B***															
Oct-2016	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.455 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-09C***											
Nov-1993	9	9	ND	ND	13.3	1.6	ND	5.05	78.9	3.5	38	14.7	415
Apr-1994	57	31	0.2	ND	14.1	1.5	ND	8.94	143	3.3	71	91.14	56.8
Apr-1995	19.6	19.6	ND	17.6	17.6	2.1	ND	5.6	114	3	68	28	58.4
Apr-1997	ND	1	ND	ND	18	2.1	ND	NA	NA	ND	68	8	33
Oct-1997	6	6	0.42	ND	17.2	1.74	ND	5.8	94.5	1.1	59	17	46
Apr-1998	15	15	0.23	ND	15	1.45	ND	6.66	86.2	1.26	63	25	22
Apr-1999	ND	ND	0.17	ND	18.2	1.52	ND	5.07	87.3	2.12	88	17	80
Oct-1999	5	5	0.1	ND	15.6	1.73	ND	5.37	111.2	2.12	110	21	170
Apr-2000	3	4	ND	ND	17.1	1.8	ND	5.73	79	4.23	83	20	300
Oct-2000	10.2	NA	ND	ND	17	1.94	ND	5.49	98	5.69	91	26.1	135
Apr-2001	3.1	NA	ND	ND	15.2	1.36	ND	NA	NA	6.39	68	18.7	34
Sep-2001	5.1	5.1	ND	ND	16.9	2.63	ND	6.91	100	10.5	90	20.5	90
Mar-2002	2.8	2.8	ND	ND	17	2.16	ND	5.2	88.3	4.78	95	17.5	119
Sep-2002	2.8	2.8	ND	ND	17.3	1.85	ND	5.1	99.2	6.62	197	17.8	532
Mar-2003	5.7	5.7	ND	ND	20.8	1.82	ND	5.4	111.5	11.2	94	18.9	196
Oct-2003	29	29	ND	ND	17.9	1.98	ND	5.9	113.3	4.71	105	42.5	129
Apr-2004	7.2	7.2	ND	ND	18.4	1.91	ND	5.4	95.1	2.6	112	18.9	29
Oct-2004	9.6	9.6	ND	ND	17.9	1.83	ND	5.3	86.8	2.45	74	26.9	123
Apr-2005	23	23	ND	ND	17.1	1.84	ND	5	92.8	2.97	120	30.5	106
Oct-2005	5.4	5.4	ND	ND	19.3	1.96	ND	5.4	82.8	4.26	78	14.6	130
Mar-2006	4.8	4.8	ND	ND	15.5	1.6	ND	5.2	97.9	8.46	72	16.3	158
Sep-2006	3.8	3.8	ND	ND	16.5	1.83	ND	4.9	92.6	8.75	91	17.6	110
Mar-2007	4	4	ND	ND	17.2	1.97	ND	5.2	94.1	7.75	73	17.6	237
Sep-2007	3.2	3.2	ND	ND	18.4	2.35	ND	5.1	85	10.8	80	16.2	105
Mar-2008	3.5	3.5	ND	ND	19.9	2.49	ND	5.2	84.3	9.06	88	15.3	129
Sep-2008	4.2	4.2	ND	ND	15.2	1.76	ND	4.9	82.5	9.79	67	15.1	110
Mar-2009	3.5	3.5	ND	ND	14.4	1.87	ND	4.8	83.5	10	35	14.2	370
Oct-2009	3.4	3.4	ND	ND	15	1.66	ND	4.9	79.7	9.35	86	16.2	303
Apr-2010	6.1	6.1	ND	ND	17.5	2.2	ND	4.6	81.1	5.77	62	18.9	342
Oct-2010	3	3	ND	ND	15.9	2.11	ND	4.2	608	5.13	131	14.5	29
Apr-2011	33	33	ND	ND	16.1	1.88	0.03	4.5	81.2	5.33	110	38	15
Sep-2011	2.7	2.7	0.29	ND	16.7	1.77	ND	4.9	72.6	6.5	59	15.4	8.9
Mar-2012	3.1	3.1	ND	ND	19.5	2.25	ND	15.4	80.7	ND	76	12	1.4
Sep-2012	3.04	3.04	ND	ND	14.3	1.46	ND	4.1	86.3	12.8	72	18	14
Mar-2013	2.84	2.84	ND	ND	16.7	1.54	ND	3.9	97.1	11.9	65	16.4	0.736
Oct-2013	3.32	3.32	ND	ND	16.2	1.6	ND	3.6	94.3	12.5	65	18.1	1.35

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-09C***											
Mar-2014	2.68	2.68	*ND*	*ND*	16.6	1.55	*ND*	5	91.3	13.5	63	17.1	8.85
Oct-2014	*ND*	*ND*	*ND*	11	17	1.57	*ND*	4.7	90.7	12.4	62	20.6	4.62
Apr-2015	2.84	2.84	*ND*	*ND*	18.1	2.11	*ND*	4.2	95.2	11.2	50	19.3	1.84
Nov-2015	*ND*	*ND*	*ND*	*8 J*	19.6	2.29	*ND*	5	129.4	10.2	58	18.7	8.75
May-2016	*ND*	*ND*	*ND*	*ND*	18.1	2.15	*ND*	5	151	9.71	66	18.4	2.23
Oct-2016	*ND*	*ND*	*ND*	*ND*	19.3	*NA*	*NA*	4.9	149.5	8.32	64	17.5	4.04
May-2017	*ND*	*ND*	*ND*	*7 J*	18.7	2.23	*ND*	4.9	147.7	10.4	64	24.3	3.57
Oct-2017	*ND*	*ND*	*ND*	*7 J+*	16.7	2.14	*ND*	4.9	138.3	11.9	50	20	3.87
May-2018	*4 JB*	*ND*	*0.088 J*	*ND*	17.4	0.39	*ND*	4.6	139.4	12.7	68	22.1	*NA*
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	22.5	2.8	*ND*	4.69	125.1	12	31	23.6	4.69
May-2019	20	*NA*	*ND*	*ND*	19.9	2.6	*ND*	5.6	112.6	11.7	84	39.4	5.6
Oct-2019	*ND*	*NA*	*ND*	*8.2 J*	16.7	2.3	*ND*	4.77	121.8	15.4	60	25.3	1.81
May-2020	*ND*	*NA*	*ND*	*ND*	19.4	2.6	*ND*	4.56	123	13.1	89	25.5	2.71
Oct-2020	*ND*	*NA*	*ND*	*ND*	20	2.7	*ND*	4.53	124.4	13.4	93	27.5	3.61
Apr-2021	22	*NA*	*ND*	*6.1 J*	23.3	2.9	*ND*	4.88	155.3	12.9	80	27.4	6.3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-09C*													
Nov-1993	NA	ND	ND	NA	ND	2.6	NA	0.015	NA	ND	6.4	0.14	ND	2	NA
Apr-1994	NA	ND	ND	NA	ND	33.5	NA	ND	NA	ND	0.25	1.59	ND	1.82	NA
Apr-1995	ND	ND	ND	ND	ND	7.9	NA	ND	ND	ND	ND	ND	ND	2	NA
Oct-1996	ND	ND	0.065	ND	ND	10	6.4	ND	ND	ND	ND	ND	ND	1.7	1.8
Apr-1997	ND	ND	0.042	ND	ND	2.3	2.2	ND	ND	ND	0.22	ND	0.002	1.5	1.5
Oct-1997	ND	ND	0.049	ND	ND	4.65	3.92	ND	0.013	ND	0.49	ND	ND	1.59	1.48
Apr-1998	ND	ND	0.053	ND	ND	7.37	6.97	ND	ND	ND	0.338	ND	ND	1.6	1.48
Apr-1999	ND	ND	0.06	ND	ND	3.68	3	ND	0.016	0.016	0.881	ND	ND	1.99	1.59
Oct-1999	ND	ND	0.061	ND	ND	3.2	2.57	ND	0.013	0.015	0.387	ND	ND	2.24	2.19
Apr-2000	ND	ND	0.072	ND	ND	3.92	3.13	ND	0.015	0.017	1.27	0.11	ND	2.37	2.11
Oct-2000	ND	ND	0.071	ND	ND	6.62	5.77	ND	0.012	0.013	0.777	ND	ND	2.32	2.08
Apr-2001	ND	ND	0.067	ND	ND	3.39	NA	ND	0.012	ND	0.154	NA	ND	2.5	NA
Sep-2001	ND	ND	0.071	ND	ND	4.36	3.13	ND	0.011	0.012	0.366	ND	ND	2.33	2.19
Mar-2002	ND	ND	0.063	ND	ND	3.27	2.67	ND	0.01	ND	0.54	ND	ND	2.26	2.16
Sep-2002	ND	ND	0.072	ND	ND	3.47	2.66	ND	ND	0.017	1.42	0.329	0.002	2.23	2.1
Mar-2003	ND	ND	0.061	ND	ND	4.11	3.51	ND	0.013	ND	0.059	ND	ND	2.09	2.14
Oct-2003	ND	ND	0.07	ND	ND	13.5	8.39	ND	ND	0.012	0.43	ND	ND	2.13	2.09
Apr-2004	ND	0.002	0.059	ND	ND	4.28	3.25	ND	ND	ND	0.312	ND	ND	1.98	1.86
Oct-2004	ND	ND	0.054	ND	ND	7.84	3.16	ND	0.016	0.016	0.676	ND	0.002	1.76	1.61
Apr-2005	ND	0.005	0.091	ND	ND	8.6	3.38	0.023	0.035	0.049	5.71	ND	0.011	2.18	1.56
Oct-2005	ND	ND	0.047	ND	ND	3.15	2.53	ND	0.011	0.012	0.965	ND	0.002	1.65	1.55

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09C***													
Mar-2006	ND	ND	0.053	ND	ND	3.13	3.08	ND	0.011	ND	0.608	ND	ND	2.06	2.12
Sep-2006	ND	ND	0.059	ND	ND	3.21	2.94	ND	0.011	ND	0.373	ND	ND	2.32	2.31
Mar-2007	ND	0.003	0.076	ND	ND	3.32	2.92	ND	0.016	0.014	1.44	ND	0.002	2.25	2.13
Sep-2007	ND	ND	0.066	ND	ND	2.87	2.71	ND	0.011	ND	0.377	ND	ND	2.2	2.18
Mar-2008	ND	0.002	0.066	ND	ND	2.74	2.6	ND	0.01	ND	0.477	ND	ND	2.05	2.1
Sep-2008	ND	0.002	0.06	ND	ND	2.68	2.46	ND	ND	ND	0.492	ND	ND	2.04	2.12
Mar-2009	ND	ND	0.062	ND	ND	2.53	2.35	ND	ND	0.015	1.53	ND	ND	1.91	1.87
Oct-2009	ND	ND	0.063	ND	ND	3.08	2.62	ND	0.012	0.013	1.35	ND	ND	2.06	2.22
Apr-2010	ND	ND	0.069	ND	ND	4	3.41	ND	0.014	0.012	2.1	ND	ND	2.15	1.91
Oct-2010	ND	ND	0.056	ND	ND	2.49	2.42	ND	ND	ND	0.207	ND	ND	2.01	1.91
Apr-2011	ND	ND	0.061	ND	ND	11.3	8.91	ND	0.019	0.014	0.202	ND	ND	2.38	1.85
Sep-2011	ND	ND	0.064	ND	ND	2.56	2.56	ND	ND	ND	0.177	ND	ND	2.18	2.15
Mar-2012	ND	ND	0.036	ND	ND	1.93	1.93	ND	ND	ND	ND	ND	ND	1.75	1.75
Sep-2012	ND	ND	0.0637	0.000327 J	ND	2.89	2.96	0.0023 J	0.0081 J	0.0042 J	0.227	0.0343 J	ND	2.62	2.65
Mar-2013	ND	ND	0.0686	0.00029 J	ND	2.6	3.15	0.0023 J	0.0071 J	0.0027 J	0.0286 J	0.0103 J	ND	2.41	2.82
Oct-2013	ND	ND	0.0751	0.000345 J	0.00013 J	2.72	2.76	0.0028 J	0.008 J	0.0031 J	ND	ND	ND	2.75	2.73
Mar-2014	0.000518 J	ND	0.0717	0.000333 J	0.000115 J	2.95	3.05	0.0025 J	0.008 J	0.0015 J	0.241	0.0045 J	ND	2.37	2.44
Oct-2014	0.001 J	ND	0.0893	0.000437 J	0.000143 J	3.42	3.31	0.0011 J	0.0086 J	0.0042 J	0.102	ND	ND	2.94	2.86
Apr-2015	0.000486 J	ND	0.0873	0.000482 J	0.000129 J	3.26	3.17	0.0016 J	0.0089 J	0.0034 J	0.0461 J	0.009 J	ND	2.72	2.67
Nov-2015	0.000371 J	0.000239 J	0.0776	0.00042 J	0.000141 J	3.3	3.29	0.0013 J	0.0082 J	0.0042 J	0.17	ND	0.000519 J	2.53	2.55
May-2016	ND	ND	0.0732	0.00041 J	ND	3.11	2.77	0.0013 J	0.0081	0.0034 J	0.036 J	ND	ND	2.59	2.32
Oct-2016	ND	ND	0.0711	0.00041 J	ND	3.03	2.97 J+	0.0017 J	0.0084	0.0036 J	0.0493 J	ND	ND	2.4	2.55 J+
May-2017	ND	ND	0.085	0.00039 J	ND	3.62	3.25	0.0017 J	0.01	0.0079	0.159 J	ND	0.00054 J	3.7	2.73
Oct-2017	ND	ND	0.0807	0.00033 J	ND	3.46	3.31	ND	0.0096	0.0031 J	ND	ND	ND	2.76	2.93

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09C***													
May-2018	*ND*	*ND*	*0.0871 J*	*ND*	*0.00014 J*	3.8	3.7	*0.0022 J*	*0.0097 J*	*0.0032 J*	*0.02 J*	*ND*	*ND*	3.1	3
Nov-2018	*ND*	*ND*	0.086	0.0004	*0.00017 J*	4.2	4.1	*0.0064 J*	0.0086	0.0043	0.026	*0.014 J*	*0.000046 J*	3.2	3.2
May-2019	*ND*	*ND*	0.075	*ND*	*ND*	10.3	9.4	*ND*	0.0071	0.0031	*ND*	*ND*	*ND*	3.3	3.1
Oct-2019	*0.00013 J*	*ND*	0.083	*0.00029 J*	*0.00028 J*	4.5	4.7	0.0074	0.0082	0.0033	*0.018 J*	*0.011 J*	*ND*	3.4	3.4
May-2020	*0.000054 J*	*ND*	0.089	*0.0003 J*	*0.00017 J*	4.2	4.2	0.0094	0.011	0.0037	*0.06 J*	*0.019 J*	*ND*	3.7	3.6
Oct-2020	*0.00026 J*	*ND*	0.11	*0.00038 J*	*0.0007 J*	4.5	4.3	0.099	0.0098	0.57	*0.028 J*	*0.014 J*	*0.0014 J*	4	3.7
Apr-2021	*ND*	*0.0029 J*	0.1	*0.00028 J*	*0.00035 J*	4.8	5	*0.0035 J*	0.011	*0.0044 J*	*ND*	*ND*	*ND*	3.7	3.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-09C*												
Nov-1993	0.06	NA	ND	NA	4.3	NA	ND	NA	6.5	NA	NA	NA	0.04
Apr-1994	0.03	NA	ND	NA	3.26	NA	ND	NA	8.87	NA	NA	NA	0.05
Apr-1995	0.01	NA	ND	ND	7.8	NA	ND	ND	7.3	NA	ND	ND	0.02
Oct-1996	0.024	0.023	NA	ND	ND	ND	ND	ND	8	8.1	ND	ND	0.096
Apr-1997	0.018	0.015	ND	ND	2.6	2.3	ND	ND	9.5	10	ND	ND	0.043
Oct-1997	0.023	0.02	NA	0.016	1.74	0.969	ND	ND	9.14	8.95	ND	ND	0.02
Apr-1998	0.019	0.015	NA	ND	1.99	1.61	ND	ND	9.25	8.96	ND	ND	0.017
Apr-1999	0.029	0.02	NA	ND	3.16	1.65	ND	ND	10	9.15	ND	ND	0.028
Oct-1999	0.032	0.031	NA	0.025	1.91	1.78	ND	ND	9.38	8.42	ND	ND	0.033
Apr-2000	0.039	0.035	NA	0.017	1.39	0.689	ND	ND	10.6	9.28	ND	ND	0.032
Oct-2000	0.041	0.032	NA	ND	1.94	1.58	ND	ND	11.5	9.91	ND	ND	0.024
Apr-2001	0.045	NA	NA	ND	1.86	NA	ND	ND	10.7	NA	ND	ND	0.012
Sep-2001	0.042	0.036	NA	0.02	1.79	1.44	ND	ND	11.5	9.26	ND	ND	0.023
Mar-2002	0.039	0.036	NA	ND	1.98	1.34	ND	ND	10.4	9.3	ND	ND	0.019
Sep-2002	0.041	0.034	NA	ND	2.08	1.79	ND	ND	9.83	9.67	ND	ND	0.021
Mar-2003	0.032	0.034	NA	0.012	2.47	1.03	ND	ND	10.1	9.64	ND	ND	0.017
Oct-2003	0.036	0.029	NA	ND	2.86	1.49	ND	ND	12.7	11.9	ND	ND	0.018
Apr-2004	0.032	0.03	ND	ND	2.5	1.95	ND	ND	12.2	12.4	ND	ND	0.01
Oct-2004	0.027	0.022	ND	0.045	3.34	2.15	ND	ND	12.9	11.5	ND	ND	0.086
Apr-2005	0.045	0.018	ND	0.044	3.36	1.23	ND	ND	13.5	11.9	ND	0.035	0.096
Oct-2005	0.023	0.019	ND	0.013	1.79	1.45	ND	ND	11.1	9.58	ND	ND	0.022
Mar-2006	ND	ND	ND	0.012	1.69	1.42	ND	ND	8.26	8.69	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09C***												
Sep-2006	0.047	0.044	ND	ND	1.83	1.69	ND	ND	9.88	9.84	ND	ND	0.017
Mar-2007	0.045	0.042	ND	0.016	2.37	1.51	ND	ND	10.3	9.87	ND	0.012	0.029
Sep-2007	0.046	0.047	ND	ND	1.61	1.41	ND	ND	9.72	9.14	ND	ND	0.018
Mar-2008	0.043	0.044	ND	ND	1.64	1.43	ND	ND	9.61	8.98	ND	ND	0.022
Sep-2008	0.041	0.043	ND	0.012	1.54	1.43	ND	ND	7.7	7.86	ND	ND	0.038
Mar-2009	0.04	0.039	ND	ND	2.02	1.57	ND	ND	8	7.76	ND	ND	0.02
Oct-2009	0.044	0.043	ND	0.017	1.6	1.42	ND	ND	8.01	8.5	ND	ND	0.055
Apr-2010	0.039	0.031	ND	0.016	1.9	1.47	ND	ND	10.5	10	ND	ND	0.03
Oct-2010	0.038	0.035	ND	ND	1.68	1.51	ND	ND	10.1	10.3	ND	ND	0.014
Apr-2011	0.076	0.032	ND	0.014	1.62	1.46	ND	ND	10.2	9.47	ND	ND	0.033
Sep-2011	0.041	0.04	ND	ND	1.77	1.66	ND	ND	9.56	9.44	ND	ND	ND
Mar-2012	0.018	0.019	ND	ND	1.35	1.34	ND	ND	11.8	11.8	ND	ND	ND
Sep-2012	0.0536	0.0546	0.000045 J	0.0081 J	1.6	1.65	ND	ND	8.42	8.5	ND	ND	0.0075 J
Mar-2013	0.0558	0.0621	0.000083 J	0.0074 J	1.38	1.68	0.000739 J	ND	8.32	9.93	ND	ND	0.0144
Oct-2013	0.0658	0.066	ND	0.0076 J	1.6	1.62	0.000585 J	ND	9.71	9.88	0.00019 J	0.0016 J	0.018
Mar-2014	0.0707	0.0719	ND	0.0074 J	1.59	1.57	ND	ND	8.71	8.98	ND	0.000889 J	0.0108
Oct-2014	0.0739	0.0722	ND	0.0079 J	1.76	1.72	0.0016 J	ND	10.2	10.2	ND	ND	0.0176
Apr-2015	0.0757	0.0749	0.000028 J	0.0085 J	1.66	1.61	0.0013 J	ND	10.8	10.6	ND	ND	0.0286
Nov-2015	0.0616	0.0611	ND	0.0079 J	1.75	1.71	0.0012 J	ND	11.5	11.9	0.000156 J	0.000737 J	0.018
May-2016	0.0629	0.0571	ND	0.0084	1.81	1.76	ND	ND	13.3	11.2	ND	ND	0.0099 J,B
Oct-2016	0.0504 J+	0.0559 J+	ND	0.0096	1.81	1.86	ND	ND	12.2	12.7	ND	0.0002 J	0.0108 J
May-2017	0.0644	0.064	ND	0.0112	2.21	1.73	0.00046 J	ND	43	11	ND	0.0005 J	0.0211 J
Oct-2017	0.0721	0.0727	ND	0.0093	1.74	1.82	ND	ND	9.91	10.3	ND	ND	0.0104 J
May-2018	0.0804	0.0772	ND	0.0163 J	2 J	1.4 J	ND	ND	11.2	10.4	ND	ND	0.0128 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09C***												
Nov-2018	0.067	0.065	*ND*	0.011	*1.8 J*	*2.4 J*	*0.00065 J*	*ND*	13.5	14.4	*ND*	0.0021	0.012
May-2019	0.055	0.058	*ND*	0.01	*ND*	*ND*	*ND*	*ND*	12.2	11.9	*ND*	0.01	0.0097
Oct-2019	0.068	0.065	*ND*	0.0095	*2 J*	*ND*	*0.00086 J*	*ND*	11.2	12.1	*ND*	0.0044	0.015
May-2020	0.074	0.069	*ND*	0.013	*2.5 J*	*1.6 J*	*0.00086 J*	*ND*	13.7	11.3	*ND*	*ND*	0.012
Oct-2020	0.6	0.068	*ND*	0.1	*ND*	*2 J*	*ND*	*ND*	11.6	11.9	*ND*	*ND*	0.93
Apr-2021	0.078	0.08	*ND*	0.012	2.1	2.2	*ND*	*ND*	13.8	14.7	*ND*	*ND*	*0.009 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09C*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	1	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09C*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09C*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.1 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-09C*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.1	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.6	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.4	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	2.9	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	2	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.5	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.6	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.9	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.5	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.2	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.2	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.6	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09C***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.77 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.44 J	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	0.61 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.21 J	ND	ND	ND	ND	ND	0.34 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	0.34 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.16 J	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	0.3 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	0.2 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09C***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.324 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09C***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-09C*															
Oct-2005	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	4.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	1.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	0.89 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.78 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	0.55 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	0.69 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	0.37 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	0.48 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	0.4 J	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09C***															
Oct-2016	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.51 J*	*0.561 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		*TW-15*											
Nov-1993	7	7	0.2	ND	3	ND	ND	5.12	24.4	ND	34	2.43	640
Apr-1994	ND	ND	0.1	ND	3.1	ND	ND	4.89	20.5	1.8	ND	0.33	153
Aug-1994	ND	ND	ND	ND	2.9	0.3	ND	4.7	21.8	2.6	ND	2.51	526
Sep-1994	ND	ND	ND	ND	3.2	0.3	ND	5.4	21.8	3.9	46	2.4	490
Nov-1994	ND	ND	ND	ND	3.1	0.2	ND	5.1	21.6	1.8	27	2.6	182
Apr-1995	ND	ND	ND	ND	2.9	0.4	ND	5.1	19.3	2.9	7	2.3	223
Apr-1997	ND	ND	ND	ND	2	0.15	ND	NA	NA	ND	26	1.8	26
Oct-1997	ND	ND	0.26	ND	2.75	ND	ND	5.68	22.8	7.77	18	ND	41
Apr-1998	ND	ND	0.24	ND	1.71	0.133	ND	7.32	20	ND	ND	2.6	170
Apr-1999	ND	ND	0.14	ND	3.45	ND	ND	4.94	19.59	ND	13	2.9	55
Oct-1999	ND	ND	0.07	ND	3.03	ND	ND	4.85	24.3	ND	29	2.9	64
Apr-2000	2	2	ND	ND	3.31	ND	ND	5.29	17	ND	ND	3.3	81
Oct-2000	24	NA	ND	13	2.48	ND	ND	5.17	20.6	ND	41	3.59	175
Apr-2001	2.2	NA	ND	ND	2.51	ND	ND	NA	NA	ND	26	3.2	63
Sep-2001	2.2	2.2	ND	ND	11.7	ND	ND	5.07	22	ND	29	3.61	274
Mar-2002	2	2	ND	ND	2.72	ND	ND	5.3	173.6	ND	42	3.38	200
Sep-2002	2.8	2.8	ND	ND	3.05	ND	ND	5.2	19.4	ND	16	2.87	64
Mar-2003	2.5	2.5	ND	ND	31.7	ND	ND	5.1	24.3	8.11	58	2.94	63
Oct-2003	4	4	ND	ND	3	0.124	ND	5.3	25.7	ND	30	4.33	66
Apr-2004	2.7	2.7	ND	ND	2.71	0.148	ND	5.1	20.2	ND	28	3.59	33
Oct-2004	2.7	2.7	ND	ND	2.69	0.113	ND	5.3	17.2	ND	25	4.2	155
Apr-2005	2.5	2.5	ND	ND	2.86	0.16	ND	5	16.7	ND	32	3	89
Oct-2005	4.4	4.4	0.21	ND	3.08	0.14	ND	4.4	17.8	ND	37	3.33	51
Mar-2006	4.2	4.2	ND	ND	2.85	0.16	ND	7.2	21	1.05	83	1.85	60.1
Sep-2006	3.4	3.4	ND	ND	2.97	0.16	ND	5	20.7	ND	22	2.8	92
Mar-2007	4.4	4.4	0.62	ND	3.07	0.16	ND	4.9	18.6	ND	ND	2.82	117
Sep-2007	4.2	4.2	0.33	ND	9.64	ND	ND	5.6	21.2	ND	33	2.96	139
Mar-2008	6.7	6.7	0.47	ND	8.02	0.48	ND	4.9	24.8	1.69	56	3.33	374
Sep-2008	4.4	4.4	ND	ND	3.11	ND	ND	4.9	20.2	ND	22	2.9	150
Mar-2009	5.2	5.2	ND	ND	3.11	0.11	ND	4.5	21.9	ND	ND	3.16	541
Oct-2009	5.2	5.2	ND	ND	2.85	0.1	ND	4.6	20.1	ND	37	3.31	247
Mar-2010	5.5	5.5	ND	ND	2.85	0.1	ND	5.54	42	ND	28	2.81	260
Oct-2010	4.8	4.8	ND	ND	3.4	0.07	ND	4.8	19.4	ND	18	3.11	49
Apr-2011	4	4	ND	ND	2.98	0.14	ND	4.8	19.5	ND	49	2.9	57
Sep-2011	3.9	3.9	0.24	ND	2.97	0.13	ND	4.8	31.9	ND	14	3.32	92
Mar-2012	3.4	3.4	ND	ND	3.05	0.16	ND	4.8	21.9	ND	ND	3.27	35

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-15***											
Sep-2012	3.48	3.48	*ND*	*ND*	3.07	0.157	*ND*	3.9	19.6	*ND*	*ND*	3.16	25
Mar-2013	4.36	4.36	*ND*	*ND*	3.38	0.193	*ND*	3.8	16.8	*0.601 J*	23	2.59	23.9
Oct-2013	3.8	3.8	*ND*	*ND*	3.25	0.165	*ND*	3.1	18.9	*ND*	*ND*	2.92	53
Mar-2014	3.64	3.64	*ND*	22	3.3	0.174	*ND*	5.4	23.8	*ND*	*ND*	2.74	93.5
Oct-2014	*ND*	*ND*	*ND*	*7 J*	3.59	0.158	*ND*	4.9	19.6	*ND*	*ND*	3.32	32.7
Apr-2015	4.64	4.64	*ND*	*ND*	3.25	0.168	*ND*	4.2	21.5	*ND*	*ND*	3.24	43.1
Nov-2015	3.48	3.48	*ND*	*ND*	3.48	0.169	*ND*	5.3	27.6	*ND*	*ND*	3.68	133
May-2016	*ND*	*ND*	*ND*	*ND*	3.37	0.197	*ND*	5.3	33.8	*ND*	*15 J*	3.3	64.6
Oct-2016	*ND*	*ND*	*ND*	*ND*	3.27	*NA*	*NA*	5.7	30.3	*0.742 J*	32	3.2	77.6
May-2017	2.68	2.68	*ND*	*ND*	3.18	0.192	*ND*	5.2	81.3	*0.512 J*	*ND*	3.2	10
Oct-2017	3.88	3.88	*ND*	*7 J*	3.23	0.209	*ND*	5.5	36.8	*ND*	*15 J*	3	5.97
May-2018	*8 J*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	4.3	97.4	*ND*	39	*3.6 J*	*2.86*
Nov-2018	24	24	*0.052 J*	*ND*	3.4	*0.038 J*	*ND*	6.01	65.5	*ND*	39	*3.7 J*	*17.9*
May-2019	40	*NA*	*ND*	*ND*	3.4	*ND*	*ND*	6.14	72.3	*ND*	20	*ND*	20.1
Oct-2019	*2.5 JH1*	*NA*	*ND*	*14.8 J*	3.1	0.13	0.011	5.83	67.3	*ND*	34	3.8	50.9
May-2020	12	*NA*	*ND*	*ND*	3.4	*ND*	*ND*	5.98	74.1	*ND*	*ND*	4.1	731
Oct-2020	*ND*	*NA*	*ND*	*ND*	3.4	*ND*	0.07	6.07	66.2	*ND*	21	3.9	948
Apr-2021	*ND*	*NA*	*ND*	*10.5 J*	3.5	0.14	*ND*	6.32	106.8	*ND*	25	3.8	16.8

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15***													
Nov-1993	NA	ND	ND	NA	ND	0.38	NA	ND	NA	ND	67	3	ND	0.36	NA
Apr-1994	NA	ND	ND	NA	ND	0.38	NA	ND	NA	ND	1.5	1	ND	0.25	NA
Aug-1994	NA	ND	ND	NA	ND	0.46	NA	ND	NA	ND	7.1	0.31	ND	0.33	NA
Sep-1994	NA	ND	ND	NA	ND	0.34	NA	ND	NA	ND	6.5	1.7	ND	0.37	NA
Nov-1994	NA	ND	ND	NA	ND	0.45	NA	ND	NA	0.02	4.8	1.6	ND	0.35	NA
Apr-1995	ND	ND	0.7	ND	ND	0.36	NA	ND	ND	ND	8.1	ND	ND	0.35	NA
Oct-1996	ND	ND	0.015	ND	ND	0.55	0.62	ND	ND	ND	26	0.94	0.002	ND	ND
Apr-1997	ND	ND	ND	ND	ND	0.6	0.69	ND	ND	ND	0.6	0.45	ND	ND	ND
Oct-1997	ND	ND	0.011	ND	ND	0.495	0.587	ND	ND	ND	5.37	0.273	ND	0.328	0.322
Apr-1998	ND	ND	0.01	ND	ND	0.5	0.491	ND	ND	ND	26.2	0.201	ND	0.331	0.326
Apr-1999	ND	ND	0.011	ND	ND	0.551	0.543	ND	ND	ND	7.77	0.245	ND	0.372	0.355
Oct-1999	ND	ND	ND	ND	ND	0.508	0.471	ND	ND	ND	12.1	0.396	ND	0.345	0.318
Apr-2000	ND	ND	ND	ND	ND	0.716	0.452	ND	ND	ND	9.48	0.476	ND	0.378	0.304
Oct-2000	ND	ND	ND	ND	ND	0.728	0.667	ND	ND	ND	23.5	16.8	ND	0.43	0.425
Apr-2001	ND	ND	0.012	ND	ND	0.602	NA	ND	ND	ND	7.97	NA	ND	0.401	NA
Sep-2001	ND	ND	0.012	ND	ND	0.738	0.569	ND	ND	ND	24	0.88	ND	0.431	0.386
Mar-2002	ND	ND	0.012	ND	ND	0.713	0.552	ND	ND	ND	15.3	1.81	ND	0.388	0.376
Sep-2002	ND	ND	0.011	ND	ND	0.544	0.513	ND	ND	ND	12.2	0.425	ND	0.366	0.351
Mar-2003	ND	ND	0.012	ND	ND	0.565	0.528	ND	ND	ND	7.18	0.178	ND	0.373	0.349
Oct-2003	ND	ND	0.013	ND	ND	0.956	0.603	ND	ND	0.012	21.5	1.12	ND	0.47	0.408
Apr-2004	ND	ND	ND	ND	ND	0.754	0.548	ND	ND	ND	11.4	0.306	ND	0.415	0.359

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15***													
Oct-2004	*ND*	*ND*	0.013	*ND*	*ND*	0.978	0.536	*ND*	*ND*	*ND*	50.2	0.81	*ND*	0.426	0.366
Apr-2005	*ND*	*ND*	0.012	*ND*	*ND*	0.574	0.566	*ND*	*ND*	*ND*	13.1	0.214	*ND*	0.384	0.371
Oct-2005	*ND*	*ND*	0.012	*ND*	*ND*	0.758	0.559	*ND*	*ND*	*ND*	18.4	0.378	*ND*	0.35	0.324
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	0.271	0.26	*ND*	*ND*	*ND*	10.8	0.27	*ND*	0.285	0.302
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	0.542	0.532	*ND*	*ND*	*ND*	6.1	0.274	*ND*	0.353	0.351
Mar-2007	*ND*	*ND*	0.011	*ND*	*ND*	0.543	0.512	*ND*	*ND*	*ND*	14.6	1.12	*ND*	0.354	0.345
Sep-2007	*ND*	*ND*	0.011	*ND*	*ND*	0.563	0.527	*ND*	*ND*	*ND*	19.1	0.483	*ND*	0.379	0.364
Mar-2008	*ND*	*ND*	0.015	*ND*	*ND*	0.649	0.626	*ND*	*ND*	*ND*	28.5	3.92	*ND*	0.416	0.393
Sep-2008	*ND*	*ND*	0.011	*ND*	*ND*	0.507	0.466	*ND*	*ND*	*ND*	16.8	0.914	*ND*	0.386	0.389
Mar-2009	*ND*	*ND*	0.013	*ND*	*ND*	0.655	0.562	*ND*	*ND*	*ND*	44	2.06	*ND*	0.37	0.352
Oct-2009	*ND*	*ND*	0.012	*ND*	*ND*	0.605	0.558	*ND*	*ND*	*ND*	29.2	12	*ND*	0.436	0.385
Mar-2010	*ND*	*ND*	0.013	*ND*	*ND*	0.541	0.504	*ND*	*ND*	0.011	28	4.21	*ND*	0.354	0.335
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	0.581	0.526	*ND*	*ND*	*ND*	5.14	1.88	*ND*	0.404	0.391
Apr-2011	*ND*	*ND*	0.012	*ND*	*ND*	0.543	0.528	*ND*	*ND*	*ND*	8.19	0.312	*ND*	0.362	0.369
Sep-2011	*ND*	*ND*	0.012	*ND*	*ND*	0.693	0.692	*ND*	*ND*	*ND*	20.6	0.252	*ND*	0.387	0.383
Mar-2012	*ND*	*ND*	0.011	*ND*	*ND*	0.574	0.567	*ND*	*ND*	*ND*	7.42	0.296	*ND*	0.448	0.434
Sep-2012	*ND*	*ND*	0.0117	*0.000263 J*	*ND*	0.636	0.606	*ND*	*0.0042 J*	*0.0053 J*	10.3	0.217	*ND*	0.381	0.372
Mar-2013	*ND*	*ND*	0.0114	*0.000278 J*	*ND*	0.537	0.614	*ND*	*0.004 J*	*0.0076 J*	27.6	0.115	*0.0014 J*	0.303	0.335
Oct-2013	*ND*	*ND*	0.0115	*0.000213 J*	*ND*	0.573	0.508	*0.0025 J*	*0.0044 J*	*0.0033 J*	0.449	0.118	*ND*	0.362	0.345
Mar-2014	*0.000418 J*	*ND*	0.0109	*ND*	*ND*	0.534	0.538	*0.0017 J*	*0.0044 J*	*0.0074 J*	28.4	0.123	*ND*	0.341	0.343
Oct-2014	*0.00056 J*	*ND*	0.0125	*0.000239 J*	*ND*	0.672	0.69	*0.000523 J*	*0.0043 J*	*0.0044 J*	6.7	0.216	*ND*	0.399	0.412
Apr-2015	*0.000993 J*	*ND*	0.0126	*0.000209 J*	*0.000102 J*	0.638	0.648	*0.001 J*	*0.0047 J*	*0.0044 J*	11.6	0.175	*ND*	0.4	0.412
Nov-2015	*ND*	*ND*	0.0132	*0.000321 J*	*0.000099 J*	0.781	0.752	*0.00054 J*	*0.0044 J*	0.0124	26.7	0.234	*0.000304 J*	0.421	0.446
May-2016	*ND*	*ND*	0.0114	*0.00021 J*	*ND*	0.613	0.6	*0.001 J*	0.0042	0.0045	15.5	*0.151 J*	*ND*	0.424	0.381

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15***													
Oct-2016	*ND*	*ND*	0.0129	*0.00022 J*	*ND*	0.644	0.573	*0.0011 J*	0.0041	0.0044	10.6	*0.19 J+*	*ND*	0.378	0.409
May-2017	*ND*	*ND*	0.0124	*0.00019 J*	*ND*	0.58	0.711	*0.0006 J*	0.0044	*0.0032 J*	1.08	0.892	*ND*	0.415	0.428
Oct-2017	*ND*	*ND*	0.0116	*0.00018 J*	*ND*	0.527	0.648	*ND*	0.0042	*0.003 J*	1.43	1.08	*ND*	0.414	0.426
May-2018	*0.000047 J*	*ND*	0.013	*0.0002 J*	*0.000068 J*	*0.73 J*	*0.68 J*	*0.00059 J*	0.0039	0.0056	1.8	1.6	*0.000031 JB*	*0.44 J*	*0.43 J*
Nov-2018	*ND*	*ND*	0.012	*0.000097 J*	*0.000034 J*	*0.71 J*	*0.74 J*	*0.0018 J*	0.0028	0.0022	15.3	13.6	*0.000079 J*	*0.46 J*	*0.46 J*
May-2019	*ND*	*ND*	0.014	*ND*	*ND*	*ND*	*ND*	*ND*	0.0037	*ND*	22	21	*ND*	*ND*	*ND*
Oct-2019	*0.00012 J*	*ND*	0.014	*0.0002 J*	*0.00015 J*	0.75	*0.78 J*	0.0074	0.0031	0.0028	24.1	13.8	*0.000074 J*	0.48	*0.49 J*
May-2020	*0.00022 J*	*0.00032 J*	0.017	0.00034	*0.00011 J*	0.78	*0.78 J*	*0.0046 J*	0.0032	0.0066	52.2	16.9	*ND*	0.51	*0.52 J*
Oct-2020	*0.00046 J*	*ND*	0.019	*0.00062 J*	*ND*	0.76	*0.72 J*	*0.0048 J*	0.0044	0.012	60.9	9.5	*ND*	0.49	*0.47 J*
Apr-2021	*ND*	*ND*	0.016	*ND*	*ND*	*0.73 J*	*0.72 J*	*0.00041 J*	*0.0029 J*	*ND*	25	24.9	*ND*	0.48	0.5

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-15*												
Nov-1993	0.08	NA	ND	NA	0.58	NA	ND	NA	1.6	NA	NA	NA	ND
Apr-1994	0.05	NA	ND	NA	0.34	NA	ND	NA	1.2	NA	NA	NA	ND
Aug-1994	0.01	NA	ND	NA	0.49	NA	ND	NA	1.1	NA	NA	NA	ND
Sep-1994	0.02	NA	ND	NA	0.4	NA	ND	NA	1.3	NA	NA	NA	0.03
Nov-1994	0.04	NA	ND	NA	0.47	NA	ND	NA	1.2	NA	NA	NA	0.02
Apr-1995	0.04	NA	ND	ND	0.06	NA	ND	ND	1.2	NA	ND	ND	0.02
Oct-1996	0.02	0.01	NA	ND	ND	ND	ND	ND	1.9	1.8	ND	ND	0.049
Apr-1997	0.011	ND	ND	ND	ND	2	ND	ND	1.9	1.4	ND	ND	ND
Oct-1997	ND	0.011	NA	ND	0.922	ND	ND	ND	1.29	1.36	ND	ND	ND
Apr-1998	ND	0.011	NA	ND	1.64	ND	ND	ND	1.4	1.33	ND	ND	0.03
Apr-1999	ND	ND	NA	ND	0.972	0.732	ND	ND	1.52	1.45	ND	ND	ND
Oct-1999	ND	ND	NA	ND	ND	0.831	ND	ND	1.43	1.32	ND	ND	ND
Apr-2000	0.012	0.01	NA	ND	ND	ND	ND	ND	2.95	1.33	ND	ND	ND
Oct-2000	0.184	0.176	NA	ND	0.782	0.661	ND	ND	1.69	1.69	ND	ND	ND
Apr-2001	0.014	NA	NA	ND	1.08	NA	ND	ND	1.62	NA	ND	ND	ND
Sep-2001	0.01	0.013	NA	ND	0.816	0.478	ND	ND	2.38	1.5	ND	ND	ND
Mar-2002	0.022	0.024	NA	ND	1.95	1.06	ND	ND	2.33	1.47	ND	ND	ND
Sep-2002	ND	ND	NA	ND	0.583	0.568	ND	ND	1.48	1.44	ND	ND	ND
Mar-2003	ND	ND	NA	ND	1.16	1.1	ND	ND	1.5	1.4	ND	ND	ND
Oct-2003	0.016	0.015	NA	ND	2.54	1	ND	ND	2.4	1.52	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.67	1	ND	ND	1.33	1.43	ND	ND	ND
Oct-2004	ND	0.014	0.0002	ND	1.26	0.739	ND	ND	2	1.52	ND	ND	0.014

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-15***												
Apr-2005	ND	ND	ND	ND	0.74	0.74	ND	ND	1.46	1.43	ND	ND	ND
Oct-2005	0.01	ND	ND	ND	0.712	0.665	ND	ND	1.85	1.23	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	1.14	1.11	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.633	0.694	ND	ND	1.29	1.27	ND	ND	ND
Mar-2007	0.016	0.013	ND	ND	0.621	0.563	ND	ND	1.3	1.24	ND	ND	ND
Sep-2007	ND	ND	ND	ND	0.574	ND	ND	ND	1.48	1.38	ND	ND	ND
Mar-2008	0.031	0.041	ND	ND	0.809	0.745	ND	ND	1.59	1.43	ND	ND	ND
Sep-2008	ND	ND	ND	ND	0.567	0.557	ND	ND	1.32	1.3	ND	ND	0.023
Mar-2009	0.018	0.019	ND	ND	0.665	0.684	ND	ND	1.48	1.36	ND	ND	0.047
Oct-2009	0.152	0.135	ND	ND	0.576	0.573	ND	ND	1.47	1.57	ND	ND	ND
Mar-2010	0.086	0.052	0.0002	0.018	0.806	0.714	ND	ND	1.21	1.47	ND	ND	ND
Oct-2010	0.017	0.023	ND	ND	0.592	0.542	ND	ND	1.42	1.38	ND	ND	0.014
Apr-2011	0.01	ND	ND	ND	ND	ND	ND	ND	1.33	1.28	ND	ND	ND
Sep-2011	0.013	ND	ND	ND	0.753	0.735	ND	ND	1.64	1.58	ND	ND	0.012
Mar-2012	ND	ND	ND	ND	0.65	0.63	ND	ND	1.45	1.39	ND	ND	ND
Sep-2012	0.01 J	0.0077 J	ND	0.0062 J	0.692	0.666	ND	ND	1.43	1.37	ND	ND	0.0068 J
Mar-2013	0.0122	0.0069 J	0.000141 J	0.0059 J	0.546	0.605	ND	ND	1.18	1.27	ND	ND	0.0155
Oct-2013	0.0074 J	0.0068 J	ND	0.0065 J	0.686	0.644	ND	ND	1.36	1.31	0.000103 J	0.0011 J	0.014
Mar-2014	0.0137	0.007 J	ND	0.0066 J	0.646	0.666	ND	ND	1.35	1.39	ND	ND	0.0084 J
Oct-2014	0.0095 J	0.008 J	0.000027 J	0.0061 J	0.711	0.721	ND	ND	1.65	1.69	ND	ND	0.009 J
Apr-2015	0.0101	0.0079 J	ND	0.0067 J	0.764	0.774	0.001 J	ND	1.59	1.63	ND	ND	0.0125
Nov-2015	0.0151	0.009 J	ND	0.0065 J	0.739	0.779	ND	ND	1.61	1.67	0.000123 J	ND	0.0148
May-2016	0.0109	0.0071	ND	0.0067	0.901	0.764	ND	ND	1.57	1.38	ND	ND	0.0075 J,B
Oct-2016	0.0101	0.0083 J+	ND	0.0061	0.688	0.757	ND	ND	1.44	1.57	ND	ND	0.009 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-15***												
May-2017	0.0119	0.0149	*ND*	0.006	0.794	0.801	*ND*	*ND*	1.48	1.5	*ND*	*ND*	*0.006 J*
Oct-2017	0.0175	0.0191	*ND*	0.006	0.81	0.815	*ND*	*ND*	1.53	1.57	*ND*	*ND*	*0.006 J*
May-2018	0.022	0.023	*ND*	0.007	*0.94 J*	*ND*	*0.00012 J*	*0.0008 J*	*1.8 J*	*1.5 J*	*ND*	0.0025	0.012
Nov-2018	0.16	0.16	*ND*	0.005	*ND*	*ND*	*0.00014 J*	*ND*	*1.5 J*	*1.6 J*	*ND*	*ND*	0.012
May-2019	0.17	0.16	*ND*	0.0052	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.011
Oct-2019	0.19	0.16	*ND*	0.0057	*ND*	*ND*	*ND*	*ND*	*ND*	*2 J*	*ND*	0.006	0.011
May-2020	0.25	0.22	*ND*	0.0053	*ND*	*ND*	*ND*	*ND*	*1.7 J*	*1.8 J*	0.00059	0.0034	0.0099
Oct-2020	0.18	0.15	*ND*	0.0074	*ND*	*ND*	*ND*	*ND*	*1.8 J*	*ND*	*ND*	*0.00064 J*	*0.013 J*
Apr-2021	0.17	0.18	*ND*	*0.0027 J*	0.79	0.88	*ND*	*ND*	2	2	*ND*	*0.00061 J*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-15***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.7	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.7	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	5.1	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	7.2	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	37	ND
Apr-2005	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7	ND
Mar-2006	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.48 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.51 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.51 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	0.67 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*0.74 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.368 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-15*															
Nov-1993	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	1.5	NA	1.2	NA	ND	ND	ND	NA	ND	NA	0.7 J	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	0.7 J
Sep-2001	ND	ND	ND	0.9 J	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.5 J
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15***															
Oct-2004	ND	ND	ND	1.5	ND	1.4	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	0.8 J	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	1.3
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	1
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.9 J
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	1.1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	0.8 J
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	1.4
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	1.9
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	1.1
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	1.2
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	0.9 J
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.68 J	0.44 J
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.77 J	0.58 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	0.73 J	0.59 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.85 J	0.57 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.73 J	0.76 J
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.69 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*0.78 J*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.6 J*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.6 J*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.6 J*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.6 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.1	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	1.3 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.1	2.1 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.463 J*	*0.419 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15***															
Nov-1993	ND	ND	3.7	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	0.5 J	ND	3.1	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	0.8 J	NA	ND	0.9 J	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15***															
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1.7 R	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	2	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.74 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.52 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.68 J*	*ND*	*ND*	*ND*	*ND*	*0.22 J*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.84 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.61 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.611 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-15B***											
Nov-1993	ND	ND	0.3	75.6	5.3	ND	ND	4.53	39.5	6.6	46	5.78	31
Apr-1994	ND	ND	ND	ND	5.1	ND	ND	4.8	30.3	1.6	7	0.8	16.2
Aug-1994	ND	ND	0.1	ND	6.3	0.3	ND	4.5	42.7	5.8	40	5.9	10.9
Sep-1994	ND	ND	ND	ND	5.5	0.3	ND	4.9	32.6	5.1	36	4.4	1
Nov-1994	ND	ND	ND	ND	6.1	ND	ND	4.6	43.3	6.6	12	5.6	1.5
Apr-1995	ND	ND	0.2	ND	6.2	ND	ND	4.7	37.3	4.4	5	4.8	13.8
Apr-1997	ND	5	ND	ND	5	0.06	ND	NA	NA	6.7	51	7.7	24
Oct-1997	ND	ND	0.92	ND	4.17	ND	ND	5.48	50.3	7.77	37	7.5	2.6
Apr-1998	ND	ND	ND	ND	4.2	ND	ND	6.72	51.3	1.35	29	5.7	1.4
Apr-1999	ND	ND	0.17	ND	7.53	ND	ND	4.38	40.2	1.18	41	6.8	4.8
Oct-1999	ND	ND	0.14	ND	5.43	ND	ND	4.32	44.8	5.53	33	6.1	0.8
Apr-2000	2	2	ND	ND	8.41	ND	ND	5.55	38	ND	35	7.9	1.7
Oct-2000	30	NA	ND	ND	8.09	ND	ND	4.69	40.5	4.93	36	7.36	0.38
Apr-2001	2.6	NA	ND	ND	9.2	ND	ND	NA	NA	ND	39	9.4	1.2
Sep-2001	2.2	2.2	ND	ND	16	ND	ND	4.89	71	7.37	53	13.1	1.3
Mar-2002	ND	ND	ND	ND	20.6	ND	ND	4.9	72.8	1.15	35	13.9	0.8
Sep-2002	3.2	3.2	ND	ND	16	ND	ND	5.5	64.1	1.57	57	12	0.69
Mar-2003	5.4	5.4	ND	ND	161	ND	ND	5.8	74.9	14.5	73	12.3	2.9
Oct-2003	2.9	2.9	ND	ND	10.4	ND	ND	5.4	54.8	1.98	14	9.25	0.81
Apr-2004	3.3	3.3	ND	ND	7.79	ND	ND	4.6	46.3	1.97	37	6.99	0.6
Oct-2004	2	2	ND	ND	7.13	ND	ND	4.8	46.1	5	47	7.2	2.5
Apr-2005	4.1	4.1	ND	ND	9.37	ND	ND	4.4	50.1	5.11	59	9.2	0.55
Oct-2005	3.7	3.7	ND	ND	8.61	ND	ND	4.2	41.9	2.79	48	6.13	0.31
Mar-2006	5.2	5.2	ND	ND	12.3	ND	ND	7.1	51.7	4.13	47	8.93	0.84
Sep-2006	4.4	4.4	ND	ND	10.2	ND	ND	7.1	51.7	4.11	26	8.95	0.35
Mar-2007	4.5	4.5	ND	ND	9.49	ND	ND	4.3	49.6	3.44	14	8.09	2.6
Sep-2007	1.3	1.3	0.31	ND	9.97	ND	ND	5.3	45.8	8.48	41	6.17	2.6
Mar-2008	3.9	3.9	0.47	ND	11.7	ND	ND	4.2	51.2	14.4	20	8.23	0.7
Sep-2008	3.8	3.8	ND	ND	8.06	ND	ND	4.3	52.7	8.14	40	8.1	3.6
Mar-2009	4.6	4.6	ND	ND	10	ND	ND	4.2	57.5	8.04	ND	7.71	7.7
Oct-2009	2.8	2.8	ND	ND	11.2	ND	ND	4.3	60.7	4.44	35	9.12	1.77
Mar-2010	2.8	2.8	ND	ND	14.8	ND	ND	4.42	83	5.87	53	9.44	0.5
Oct-2010	1.6	1.6	ND	ND	9.94	ND	ND	4.2	58.9	8.79	30	9.04	1.1
Apr-2011	3.2	3.2	ND	ND	7.25	0.18	0.08	4	51.3	5.24	31	8	0.95
Sep-2011	3.1	3.1	ND	ND	11.9	ND	ND	4.1	58.7	4.46	46	8.71	0.71
Mar-2012	1.9	1.9	ND	ND	13.5	ND	ND	3.5	71.4	7.38	38	8.96	0.63

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-15B***											
Sep-2012	1.4	1.4	*ND*	*ND*	10.7	*ND*	*ND*	3.2	57.5	5.83	42	8.62	2.24
Mar-2013	3.8	3.8	*ND*	*ND*	8.6	0.731	*0.0348 J*	3.1	46.3	3	37	7.63	0.207
Oct-2013	3.56	3.56	*ND*	*ND*	14.8	0.072	*ND*	3	66.4	3.33	*ND*	10.9	0.773
Mar-2014	3.6	3.6	*ND*	21	13	0.119	*ND*	4.8	77.2	3.59	46	9.57	1.12
Oct-2014	*ND*	*ND*	*ND*	*ND*	9.14	*ND*	*ND*	4.3	47.3	6.05	*ND*	7.47	0.527
Apr-2015	1	1	*ND*	*ND*	13.3	0.0959	*ND*	3.5	65.7	7.62	37	8.89	0.262
Nov-2015	*ND*	*ND*	*ND*	*8 J*	15.5	*ND*	*ND*	4.6	90.5	7.22	26	10.4	2.05
May-2016	*ND*	*ND*	*ND*	*ND*	14	0.107	*ND*	4.6	105	7.39	44	9.9	0.258
Oct-2016	*ND*	*ND*	*ND*	*ND*	16.8	*NA*	*NA*	4.6	109.3	4.72	48	10.7	1.26
May-2017	*ND*	*ND*	*ND*	*ND*	14.9	0.157	*ND*	4.5	111.2	5.24	38	11.2	5.7
Oct-2017	*ND*	*ND*	*0.0868 J*	*ND*	15.8	0.0769	*ND*	4.7	118.5	6.26	46	13.4	4.8
May-2018	*1 J*	*ND*	*0.086 J*	*ND*	15.7	*ND*	*ND*	5	33.9	*5.1 J*	60	13.6	2.04
Nov-2018	*2 JB*	*ND*	*0.071 J*	*7.9 J*	15.5	*0.083 J*	*ND*	4.31	76.9	*ND*	44	10.4	4.72
May-2019	*ND*	*NA*	*ND*	*ND*	17.2	*ND*	*ND*	4.21	62.6	*ND*	20	9	2.29
Oct-2019	*ND*	*NA*	*ND*	*6 J*	12.8	0.2	*0.0074 J*	4.11	74.2	*5.5 J*	42	8.9	1.68
May-2020	*ND*	*NA*	*ND*	*6.9 J*	30.5	0.56	*ND*	3.97	126	*ND*	48	20.8	3.86
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	23.7	0.25	*0.0065 J*	3.99	107.1	5.4	66	16.7	6.59
Apr-2021	*ND*	*NA*	*ND*	*6.1 J*	14.7	0.34	*ND*	4.36	90	*ND*	19	9.9	5.25

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15B***													
Nov-1993	NA	ND	ND	NA	ND	0.5	NA	ND	NA	ND	1.3	0.08	ND	1.1	NA
Apr-1994	NA	ND	ND	NA	ND	0.6	NA	ND	NA	ND	ND	ND	ND	ND	NA
Aug-1994	NA	ND	ND	NA	ND	0.75	NA	ND	NA	ND	ND	ND	ND	0.97	NA
Sep-1994	NA	ND	ND	NA	ND	0.51	NA	ND	NA	ND	ND	ND	ND	0.75	NA
Nov-1994	NA	ND	ND	NA	ND	0.61	NA	ND	NA	0.03	ND	ND	ND	1	NA
Apr-1995	ND	ND	0.8	ND	ND	0.36	NA	ND	ND	ND	0.23	ND	ND	0.95	NA
Oct-1996	ND	ND	0.13	0.002	ND	1.2	1.2	ND	ND	ND	ND	ND	ND	0.87	0.87
Apr-1997	ND	ND	0.086	0.002	ND	1.4	1	ND	ND	ND	ND	ND	ND	0.96	0.75
Oct-1997	ND	ND	0.157	0.004	ND	1.19	1.21	ND	0.013	0.015	ND	ND	ND	1.26	1.26
Apr-1998	ND	ND	0.031	ND	ND	1.09	1.09	ND	ND	ND	0.124	0.226	ND	0.72	0.831
Apr-1999	ND	ND	0.032	ND	ND	1.22	1.2	ND	ND	0.018	0.303	0.3	ND	0.913	0.891
Oct-1999	ND	ND	0.028	ND	ND	0.906	0.902	ND	ND	0.012	0.445	0.263	ND	0.849	0.817
Apr-2000	ND	ND	0.027	ND	ND	1.77	1.57	ND	ND	0.012	0.054	0.053	ND	0.835	0.906
Oct-2000	ND	ND	0.052	ND	ND	1.13	1.12	ND	ND	0.123	0.083	0.077	ND	1.1	1.06
Apr-2001	ND	ND	0.038	ND	ND	1.64	NA	ND	0.01	ND	0.234	NA	ND	1.28	NA
Sep-2001	ND	ND	0.051	ND	ND	2.16	1.96	ND	0.013	0.011	0.556	0.326	ND	1.86	1.76
Mar-2002	ND	ND	0.052	ND	ND	2.3	2.21	ND	0.019	0.013	0.48	0.469	ND	1.99	1.91
Sep-2002	ND	ND	0.045	ND	ND	2.01	1.97	ND	0.015	ND	0.505	0.447	ND	1.69	1.69
Mar-2003	ND	ND	0.046	ND	ND	2.19	2.18	ND	0.015	0.01	0.24	0.245	ND	1.65	1.72
Oct-2003	ND	ND	0.038	ND	ND	1.69	1.41	ND	0.011	0.011	0.242	0.171	ND	1.22	1.21
Apr-2004	ND	ND	0.041	ND	ND	1.15	1.12	ND	ND	0.013	0.088	0.075	ND	1	1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15B***													
Oct-2004	ND	ND	0.061	ND	ND	1.13	1.06	ND	0.01	ND	0.089	ND	ND	1.06	1.05
Apr-2005	ND	ND	0.056	ND	ND	1.54	1.48	ND	0.011	ND	0.126	0.108	ND	1.3	1.26
Oct-2005	ND	ND	0.034	ND	ND	1.01	0.974	ND	ND	ND	0.098	0.095	ND	0.874	0.819
Mar-2006	ND	ND	0.037	ND	ND	1.34	1.22	ND	0.01	ND	ND	ND	ND	1.35	1.29
Sep-2006	ND	ND	0.034	ND	ND	1.44	1.39	ND	0.013	ND	0.214	0.214	ND	1.3	1.29
Mar-2007	ND	ND	0.042	ND	ND	1.31	1.27	ND	0.012	0.012	0.174	0.17	ND	1.17	1.17
Sep-2007	ND	ND	0.035	ND	ND	0.839	0.801	0.012	ND	ND	0.561	0.498	ND	0.991	0.967
Mar-2008	ND	ND	0.034	ND	ND	1.2	1.1	ND	0.011	ND	0.943	0.85	ND	1.27	1.16
Sep-2008	ND	ND	0.037	ND	ND	1.18	1.04	ND	0.01	ND	1.49	1.36	ND	1.26	1.22
Mar-2009	ND	ND	0.032	ND	ND	1.19	1.17	ND	ND	0.013	1.52	1.58	ND	1.15	1.24
Oct-2009	ND	ND	0.037	ND	ND	1.23	1.2	ND	0.01	ND	1.87	1.74	ND	1.47	1.43
Mar-2010	ND	ND	0.059	ND	ND	1.34	1.3	ND	0.012	0.019	1.82	1.54	ND	1.48	1.43
Oct-2010	ND	ND	0.069	0.002	ND	1.23	1.16	ND	0.011	0.012	1.44	1.38	ND	1.45	1.36
Apr-2011	ND	ND	0.05	ND	ND	1.16	1.15	ND	0.011	ND	1.16	1.17	ND	1.24	1.26
Sep-2011	ND	ND	0.057	ND	ND	1.33	1.35	ND	0.012	ND	1.58	1.54	ND	1.31	1.35
Mar-2012	ND	ND	0.08	0.003	ND	1.13	1.16	ND	0.012	0.011	1.22	1.22	ND	1.49	1.5
Sep-2012	ND	ND	0.0504	0.0018 J	ND	1.21	1.19	0.0012 J	0.0122	0.0087 J	1.29	1.3	ND	1.36	1.38
Mar-2013	ND	ND	0.039	0.000838 J	ND	1.11	1.21	ND	0.0114	0.0078 J	0.125	0.126	0.0013 J	1.18	1.24
Oct-2013	ND	ND	0.0564	0.000901 J	0.000222 J	1.35	1.3	0.0115	0.0157	0.0089 J	0.104	0.0962	ND	1.83	1.76
Mar-2014	0.000563 J	ND	0.0422	ND	0.000177 J	1.27	1.32	0.0013 J	0.0143	0.0103	0.116	0.108	ND	1.55	1.59
Oct-2014	0.000751 J	ND	0.0443	0.000845 J	0.000166 J	1.07	1.04	0.000391 J	0.0109	0.0084 J	0.55	0.551	ND	1.17	1.16
Apr-2015	0.0011 J	ND	0.0609	0.0013 J	0.000297 J	1.25	1.25	0.000321 J	0.0144	0.0095 J	1.13	1.16	ND	1.4	1.45
Nov-2015	0.000315 J	ND	0.0639	0.0018 J	0.000282 J	1.48	1.46	0.000671 J	0.0158	0.0109	1.35	1.34	0.000298 J	1.63	1.63
May-2016	ND	ND	0.0709	0.0017	0.00024 J	1.41	1.24	ND	0.0165	0.0093	1.21	1.18	ND	1.56	1.51

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15B***													
Oct-2016	*ND*	*ND*	0.0517	*0.00095 J*	*0.00025 J*	1.47	1.37	*0.00062 J*	0.0178	0.0082	0.731	*0.738 J+*	*ND*	1.71	1.76
May-2017	*ND*	*ND*	0.0556	*0.00068 J*	*0.00026 J*	1.38	1.67	*0.0017 J*	0.0181	0.0075	*0.116 J*	*0.103 J*	*ND*	1.89	1.87
Oct-2017	*ND*	*ND*	0.0613	*0.00069 J*	*0.00025 J*	1.69	1.67	*ND*	0.0187	0.0075	*ND*	*ND*	*ND*	2.22	2.2
May-2018	*0.00011 J*	*ND*	0.06	0.00065	*0.00029 J*	1.9	1.8	*0.00051 J*	0.0136	0.0068	*0.013 J*	*ND*	*0.00014 JB*	2.1	2
Nov-2018	*ND*	*ND*	0.052	0.00073	*0.00022 J*	1.3	1.4	*0.0018 J*	0.013	0.0049	0.022	*0.018 J*	*0.000077 J*	1.7	1.8
May-2019	*ND*	*ND*	0.045	0.00088	*ND*	1.3	1.4	*ND*	0.011	0.0056	*ND*	0.042	*ND*	1.4	1.4
Oct-2019	*0.0001 J*	*ND*	0.046	0.00091	*0.00032 J*	1.3	1.3	*0.0049 J*	0.01	0.007	*0.02 J*	*0.011 J*	*0.000095 J*	1.4	1.3
May-2020	*0.000085 J*	*ND*	0.078	0.0011	*0.00037 J*	2.8	2.7	*0.0055 J*	0.024	0.011	*0.015 J*	0.063	*ND*	3.4	3.2
Oct-2020	*ND*	*ND*	0.087	*0.0011 JM1*	*ND*	2.2	2.1	*0.0034 JM1*	0.021	*0.0095 J*	*0.017 JB*	*0.02 J*	*ND*	2.7	2.6
Apr-2021	*ND*	*ND*	0.054	*0.00056 J*	*ND*	1.2	1.3	*0.00054 J*	0.013	0.0052	*ND*	*ND*	*ND*	1.7	1.7

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-15B*												
Nov-1993	0.18	NA	ND	NA	0.82	NA	ND	NA	2.1	NA	NA	NA	0.03
Apr-1994	0.06	NA	ND	NA	0.85	NA	ND	NA	2.9	NA	NA	NA	0.01
Aug-1994	0.1	NA	ND	NA	0.98	NA	ND	NA	2.3	NA	NA	NA	0.06
Sep-1994	0.11	NA	ND	NA	0.67	NA	ND	NA	2.2	NA	NA	NA	0.05
Nov-1994	0.14	NA	ND	NA	0.72	NA	ND	NA	2.1	NA	NA	NA	0.05
Apr-1995	ND	NA	ND	ND	1	NA	ND	ND	2	NA	ND	ND	0.05
Oct-1996	0.25	0.23	NA	ND	ND	ND	ND	ND	2.5	2.4	ND	ND	0.082
Apr-1997	0.095	0.079	ND	ND	ND	ND	ND	ND	3.1	2.3	ND	ND	0.05
Oct-1997	0.271	0.272	NA	0.011	ND	ND	ND	ND	1.96	1.9	ND	ND	0.079
Apr-1998	0.013	0.033	NA	0.013	0.811	1.07	ND	ND	2.54	2.55	ND	ND	0.023
Apr-1999	0.015	0.018	NA	ND	1.07	1.59	ND	ND	3.18	2.92	ND	ND	0.016
Oct-1999	ND	0.01	NA	ND	ND	0.839	ND	ND	3.1	2.89	ND	ND	0.019
Apr-2000	ND	ND	NA	ND	0.814	0.739	ND	ND	3.15	3.18	ND	ND	0.012
Oct-2000	0.041	0.039	NA	ND	1.37	1.26	ND	ND	3.58	3.38	ND	ND	0.027
Apr-2001	0.012	NA	NA	ND	1.18	NA	ND	ND	4.07	NA	ND	ND	0.021
Sep-2001	0.021	0.018	NA	0.025	1.4	1.14	ND	ND	7.22	5.84	ND	ND	0.028
Mar-2002	0.02	0.019	NA	0.023	1.69	1.17	ND	ND	7.55	7.17	ND	ND	0.034
Sep-2002	0.017	0.017	NA	0.02	1.23	1.12	ND	ND	7.03	6.93	ND	ND	0.025
Mar-2003	0.018	0.018	NA	0.018	1.27	1.41	ND	ND	7.33	7.02	ND	ND	0.026
Oct-2003	0.018	0.015	NA	ND	2.98	1.34	ND	ND	6.29	5.35	ND	ND	0.024
Apr-2004	0.034	0.044	ND	ND	1.57	1.55	ND	ND	4.37	4.11	ND	ND	0.019
Oct-2004	0.095	0.108	0.0003	ND	1.5	1.43	ND	ND	3.97	3.44	ND	ND	0.033

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-15B***												
Apr-2005	0.054	0.074	ND	ND	1.21	1.16	ND	ND	4.38	4.11	ND	ND	0.027
Oct-2005	0.02	0.031	ND	ND	0.945	0.886	ND	ND	3.35	3.04	ND	ND	0.017
Mar-2006	ND	ND	ND	0.014	0.917	0.9	ND	ND	5	4.67	ND	ND	ND
Sep-2006	0.018	0.019	ND	0.015	1.04	1.03	ND	ND	4.26	4.19	ND	ND	0.018
Mar-2007	0.025	0.029	ND	0.014	0.933	0.866	ND	ND	3.9	3.78	ND	ND	0.025
Sep-2007	0.035	0.034	ND	ND	0.564	0.521	ND	ND	2.6	2.52	ND	ND	0.022
Mar-2008	0.024	0.022	0.0004	ND	0.877	0.808	ND	ND	3	2.74	ND	ND	0.023
Sep-2008	0.03	0.029	ND	0.013	0.678	0.678	ND	ND	3.02	2.95	ND	ND	0.031
Mar-2009	0.017	0.018	0.0008	ND	0.799	0.807	ND	ND	3.36	3.59	ND	ND	0.029
Oct-2009	0.035	0.032	ND	0.011	0.618	0.641	ND	ND	4.09	3.99	ND	ND	0.026
Mar-2010	0.052	0.049	ND	0.014	0.912	0.839	ND	ND	4.64	4.99	ND	ND	0.033
Oct-2010	0.128	0.126	ND	0.017	0.628	0.549	ND	ND	4.3	4.05	ND	ND	0.049
Apr-2011	0.049	0.049	ND	0.011	0.552	0.536	ND	ND	3.05	3.09	ND	ND	0.028
Sep-2011	0.051	0.05	ND	0.012	0.82	0.796	ND	ND	4.91	4.99	ND	ND	0.033
Mar-2012	0.07	0.071	ND	0.013	0.728	0.707	ND	ND	5.61	5.52	ND	ND	0.037
Sep-2012	0.0504	0.0502	ND	0.0129	0.757	0.733	ND	ND	4.49	4.55	ND	ND	0.032
Mar-2013	0.0289	0.0296	0.000082 J	0.012	0.649	0.672	ND	ND	2.93	3.15	ND	ND	0.0331
Oct-2013	0.0302	0.0294	ND	0.0167	0.862	0.828	ND	ND	5.82	5.49	0.000162 J	0.004 J	0.0442
Mar-2014	0.0259	0.0257	ND	0.0144	0.765	0.789	ND	ND	4.44	4.48	ND	ND	0.0281
Oct-2014	0.0562	0.0563	0.00004 J	0.012	0.663	0.649	0.0012 J	ND	3.91	3.89	ND	ND	0.0331
Apr-2015	0.0585	0.0623	ND	0.0141	0.788	0.811	0.0013 J	ND	4.81	4.97	ND	ND	0.0382
Nov-2015	0.0561	0.0561	0.00007 J	0.0146	0.84	0.82	0.000647 J	ND	5.71	5.55	0.000173 J	ND	0.0375
May-2016	0.0698	0.0652	ND	0.0134	0.893	0.892	ND	ND	5.76	5.46	ND	ND	0.0361
Oct-2016	0.0398	0.0409 J+	0.000073 J	0.0156	0.898	1.01	ND	ND	6.46	6.52	ND	ND	0.0299 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-15B***												
May-2017	0.0311	0.033	*0.00012 J*	0.0155	0.989	1.03	*ND*	*ND*	6.21	6.24	*ND*	*ND*	*0.0286 J*
Oct-2017	0.0336	0.0361	*ND*	0.0161	1.05	1.1	*ND*	*ND*	6.86	6.73	*ND*	*ND*	*0.0288 J*
May-2018	0.028	0.026	*0.00017 JB*	0.014	*1.2 J*	*ND*	*0.0005 J*	*ND*	7.5	6.6	*0.000073 J*	0.0032	0.024
Nov-2018	0.028	0.025	*0.00016 J*	0.011	*1 J*	*1 J*	*0.00021 J*	*ND*	6.5	6.8	*ND*	*ND*	0.02
May-2019	0.027	0.028	*ND*	0.0087	*ND*	*ND*	*ND*	*ND*	7.1	6.8	*ND*	*ND*	0.039
Oct-2019	0.04	0.036	0.00046	0.012	*ND*	*ND*	*0.00039 J*	*ND*	5.8	6	*ND*	0.0061	0.024
May-2020	0.053	0.049	0.00045	0.022	*1.4 J*	*1.4 J*	*0.00041 J*	*ND*	11.6	11.2	*ND*	0.004	0.035
Oct-2020	0.052	0.043	0.0003	0.019	*ND*	*1.1 J*	*ND*	*ND*	10	9	*ND*	*0.00052 JM1*	0.04 M1
Apr-2021	0.026	0.029	0.00086	0.012	1.1	1.1	*ND*	*ND*	7.3	7.6	*ND*	*ND*	0.016

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-15B***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	3.3	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	1.8	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	6.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	9.2	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	9.9	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	6.7	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	6.3	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	5.3	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15B*																
Oct-2004	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	7	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2007	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	5.7	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	3.4	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	2.71	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.92	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	4.79	ND	ND	ND	ND	ND	ND	0.72 J	0.81 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	2.87	ND	ND	ND	ND	ND	ND	0.34 J	0.52 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15B*																
Apr-2015	ND	ND	ND	ND	1.71	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.23	ND	ND	ND	ND	ND	ND	0.26 J	0.31 J	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	0.2 J	0.3 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4 JB	ND
Nov-2018	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9 JBIH	ND
May-2019	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.23	ND	ND	ND	ND	ND	ND	ND	0.131 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.7
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	2.4
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	0.6 J	ND	ND	ND	ND	ND	3.2	4.2
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	3.4
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	4.8	16
Apr-1998	0.8 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	4.1	4.8
Apr-1999	0.8 J	NA	NA	NA	NA	ND	NA	ND	0.8 J	ND	NA	ND	NA	NA	NA	2.7	4.3
Oct-1999	2.3	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	1.5	ND	ND	ND	2	6.3
Apr-2000	0.5 J	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	1.2	1.9
Oct-2000	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	4
Apr-2001	2	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	4.6	6.5
Sep-2001	3.2	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	1.1	ND	ND	ND	6.9	8.3
Mar-2002	4.3	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	1.5	ND	ND	ND	8.9	9
Sep-2002	2.8	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	1.2	ND	ND	ND	11	8.9
Mar-2003	2.7	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.3	ND	ND	ND	8.4	6.7
Oct-2003	2	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	0.6 J	0.8 J	ND	ND	ND	2.8	5.2
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3	2.7

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15B***															
Oct-2004	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	0.7 J	ND	ND	ND	4.7	3.3
Apr-2005	2.4	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.5	ND	ND	ND	7.9	7.1
Oct-2005	0.6 J	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	2.9
Mar-2006	3.3	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.7	ND	ND	ND	8.4	7
Sep-2006	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	8.4	6.2
Mar-2007	2.5	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	1.8	ND	ND	ND	5.9	6.3
May-2007	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	5.8	6.1
Sep-2007	2.8	ND	ND	ND	ND	ND	ND	ND	0.7 J	1.2	ND	1.8	ND	ND	ND	5.8	2.2
Mar-2008	2.2	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	5.2	7
Sep-2008	3.7	ND	ND	ND	ND	ND	ND	ND	1.5	1	ND	2.5	ND	ND	ND	6.6	6.9
Mar-2009	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND	ND	3.2	3.5
Oct-2009	3	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	2.1	ND	ND	ND	6.1	6.2
Mar-2010	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	1.5	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	1.1	ND	ND	ND	4.6	2.6
Apr-2011	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	1.9	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	1.5	ND	ND	ND	9.5	3.5
Mar-2012	1.9	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	1.7	ND	ND	ND	7.4	3.7
Sep-2012	1.45	ND	ND	ND	ND	ND	ND	ND	ND	0.81 J	ND	1.16	ND	ND	ND	3.04	2.08
Mar-2013	1.04	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	0.74 J	ND	ND	ND	3.04	2.01
Oct-2013	2.39	ND	ND	ND	ND	ND	ND	ND	0.51 J	0.33 J	ND	1.89	ND	ND	ND	3.83	3.94
Mar-2014	1.34	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	1.02	ND	ND	ND	4.14	2.7
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	1.87	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15B***															
Apr-2015	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.38 J*	*ND*	*0.55 J*	*ND*	*ND*	*ND*	2.42	*ND*
Nov-2015	*0.82 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.47 B	*ND*	*0.61 J*	*ND*	*ND*	*ND*	1.48	1.87
May-2016	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.6 J*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	2.2	1.6
Oct-2016	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.5 J*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	2.8	2.4
May-2017	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	2.5	1.8
Oct-2017	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	2.5	1.6
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5	1.6
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.1	1.9 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.9	1.9 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.8	*0.7 J*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.123 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.76 J*	*0.881 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	**6**	ND	ND	3	ND	ND	ND	ND	1.1	0.6 J	ND	1.3	NA
Apr-1998	ND	ND	0.5 J	NA	**7.6**	ND	ND	2.3	ND	ND	ND	ND	1	ND	ND	1.1	NA
Apr-1999	ND	NA	0.6 J	NA	**8.5**	ND	NA	2	ND	ND	NA	NA	0.9 J	ND	NA	1	NA
Oct-1999	ND	ND	0.6 J	NA	**22**	1	ND	4.1	ND	ND	ND	ND	2.1	ND	ND	1.5	NA
Apr-2000	ND	NA	ND	NA	2.6	ND	NA	1.2	ND	ND	NA	NA	0.7 J	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	**6.3**	ND	ND	3.1	ND	ND	ND	ND	1.4	ND	ND	1.1	NA
Apr-2001	ND	ND	1.2	NA	**5.6**	0.6 J	ND	4.9	ND	ND	ND	ND	2.4	ND	ND	1.7	NA
Sep-2001	ND	ND	0.9 J	NA	**12**	1.3	ND	**8.9**	ND	ND	ND	ND	3.9	0.6 J	ND	**3.3**	NA
Mar-2002	ND	ND	1.1	NA	**18**	2	ND	**9.1**	ND	ND	ND	ND	4.2	0.6 J	ND	**3.8**	NA
Sep-2002	ND	ND	ND	NA	**12**	2.2	ND	**7.2**	ND	ND	ND	ND	3	0.7 J	ND	**3.4**	NA
Mar-2003	ND	ND	ND	NA	**12**	0.8 J	ND	**6.3**	ND	ND	ND	ND	2.8	ND	ND	**2.4**	NA
Oct-2003	ND	ND	1.6	NA	**8.5**	2	ND	3.8	ND	ND	ND	ND	1.9	ND	ND	1.1	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-15B*															
Apr-2004	ND	ND	ND	NA	2.6	ND	ND	2.5	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	3.6	ND	ND	2.8	ND	ND	ND	ND	1.1	ND	ND	0.8 J	NA
Apr-2005	ND	ND	ND	ND	**12**	0.6 J	ND	4.9	ND	ND	ND	ND	2.4	ND	ND	**2.6**	NA
Oct-2005	ND	ND	ND	ND	2.2	ND	ND	3	ND	ND	ND	ND	1	ND	ND	0.9 J	NA
Mar-2006	ND	ND	ND	ND	**15**	0.8 J	ND	**6.8**	ND	ND	ND	ND	2.8	0.5 J	ND	**3.3**	NA
Sep-2006	ND	ND	ND	ND	**18.7**	0.6 J	ND	**5.8**	ND	ND	ND	ND	2.4	ND	ND	**3.9**	NA
Mar-2007	ND	ND	ND	ND	**13.3 R**	0.7 J	ND	**5.3**	ND	ND	ND	ND	2.4	ND	ND	**2.3**	NA
May-2007	ND	ND	ND	ND	**11.4**	0.7 J	ND	**5.7**	ND	ND	ND	ND	2.2	ND	ND	**2.3**	NA
Sep-2007	ND	ND	ND	ND	**12.1**	1.1	ND	4.3	ND	ND	ND	ND	2.2	ND	ND	1.9	NA
Mar-2008	ND	ND	ND	ND	**15.4**	1.3	ND	**6.6**	ND	ND	ND	ND	3.1	0.5 J	ND	ND	NA
Sep-2008	ND	ND	ND	ND	**17.6**	3.7	ND	**7.8**	ND	ND	ND	ND	3.4	4.5	ND	**3.7**	NA
Mar-2009	ND	ND	ND	ND	**14.6**	1.3	ND	**5.6**	ND	ND	ND	ND	2.8	ND	ND	**2.9**	NA
Oct-2009	ND	ND	ND	ND	**12.7**	1.1	ND	**5.3**	ND	ND	ND	ND	2.5	ND	ND	**3.2**	NA
Mar-2010	ND	ND	ND	ND	**12.5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**3**	NA
Oct-2010	ND	ND	ND	ND	**5.3**	0.8 J	ND	3.3	ND	ND	ND	ND	ND	ND	ND	1.5	NA
Apr-2011	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	NA
Sep-2011	ND	ND	ND	ND	**5.3**	0.8 J	ND	3.9	ND	ND	ND	ND	1.5	ND	ND	**2.1**	NA
Mar-2012	ND	ND	ND	ND	**5.2**	1 J	ND	4.3	ND	ND	ND	ND	1.9	ND	ND	2	NA
Sep-2012	ND	ND	ND	ND	3.86	ND	ND	3.35	ND	ND	ND	ND	1.39	ND	ND	1.08	ND
Mar-2013	ND	ND	ND	ND	2.65	0.43 J	ND	1.57	ND	ND	ND	ND	0.8 J	ND	ND	0.66 J	ND
Oct-2013	ND	ND	0.48 J	ND	**5.49**	1.52	ND	3.65	ND	ND	ND	ND	2.01	ND	ND	1.75	2
Mar-2014	ND	ND	ND	ND	3.24	0.8 J	ND	3.53	ND	ND	ND	ND	1.34	ND	ND	1.05	0.8 J

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15B***															
Oct-2014	ND	ND	ND	ND	ND	ND	ND	1.01	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.97	0.33 J	ND	1.76	ND	ND	ND	ND	0.71 J	ND	ND	0.55 J	ND
Nov-2015	ND	ND	ND	ND	1.68	0.46 J	ND	2.25	ND	ND	ND	ND	0.88 J	ND	ND	0.46 J	0.46 J
May-2016	ND	ND	ND	ND	1.6	0.2 J	ND	1.8	ND	ND	ND	ND	0.7 J	ND	ND	0.5 J	0.2 J
Oct-2016	ND	ND	ND	ND	1.6	0.2 J	ND	2	ND	ND	ND	ND	0.7 J	0.1 J	ND	0.6 J	0.2 J
May-2017	ND	ND	ND	ND	1.4	0.1 J	ND	1.9	ND	ND	ND	ND	0.6 J	ND	ND	0.5 J	0.1 J
Oct-2017	ND	ND	ND	ND	1.1	0.2 J	ND	1.8	ND	ND	ND	ND	0.6 J	ND	ND	0.4 J	0.2 J
May-2018	ND	ND	ND	ND	1.9 B	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	1.6 CH	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	1	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.641 JB	ND	ND	1.02	ND	ND	ND	ND	0.254 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		*TW-16*											
Nov-1993	ND	ND	0.2	31.5	18.3	0.4	0.3	3.7	20.4	74.6	60	37.9	11
Apr-1994	ND	ND	0.1	ND	14.9	ND	ND	3.6	311	64.9	128	32.56	9.2
Aug-1994	ND	ND	0.2	ND	13.6	0.3	ND	3.4	252	59.1	163	25.6	5.4
Sep-1994	ND	ND	ND	ND	11.2	0.3	ND	3.7	233	53.5	93	22.5	7.7
Nov-1994	ND	ND	0.2	ND	19.5	ND	ND	3.6	326	87.3	148	27.5	2
Apr-1995	ND	ND	ND	ND	16.6	0.3	ND	3.6	298	74.9	ND	27.7	31
Apr-1997	ND	ND	ND	ND	18	0.05	ND	NA	NA	78	172	52	1
Oct-1997	ND	ND	0.49	ND	14.5	ND	ND	5.62	285	60.4	128	47	16
Apr-1998	ND	ND	ND	ND	14.2	0.114	ND	5.79	229	68.3	120	36	22
Apr-1999	ND	ND	0.25	ND	14.7	ND	ND	3.4	287	67.1	150	42	16
Oct-1999	ND	ND	0.12	ND	18	ND	ND	3.52	284	75.1	141	42	20
Apr-2000	ND	ND	ND	ND	22.2	ND	ND	3.6	315	96.7	211	66	6.3
Oct-2000	ND	NA	ND	ND	14.9	ND	ND	3.64	326	80	162	56.7	5.36
Apr-2001	ND	NA	ND	ND	16	ND	ND	NA	NA	74	148	54	17
Sep-2001	ND	ND	0.24	ND	16.4	1.28	ND	3.47	330	72.7	146	46.4	26
Mar-2002	ND	ND	ND	ND	16	ND	ND	3.8	308	75.7	155	54.1	16
Sep-2002	ND	ND	ND	ND	20.2	ND	ND	3.8	364	97.7	176	58.9	36
Mar-2003	ND	ND	ND	ND	25.8	ND	ND	3.7	413	90.4	215	71.6	4.6
Oct-2003	ND	ND	ND	ND	12.8	0.146	ND	4.2	295	69.1	97	41.3	9.6
Apr-2004	ND	ND	ND	ND	15.8	ND	ND	3.7	395	91.5	149	53.2	3.2
Oct-2004	ND	ND	ND	ND	11.2	0.111	ND	3.7	246	63.2	112	38.7	2
Apr-2005	ND	ND	ND	ND	13.1	0.13	ND	3.7	295	58.4	133	36.6	3.8
Oct-2005	ND	ND	0.21	ND	6.61	0.13	ND	3.4	116.1	26.4	84	20.8	180
Mar-2006	5.1	5.1	ND	ND	6.63	0.16	ND	5.1	83.1	25.4	61	18.1	28
Sep-2006	4.1	4.1	ND	ND	6.41	0.16	ND	5.1	83.1	22.8	68	20	25
Mar-2007	2.8	2.8	ND	ND	9.81	0.14	ND	4.7	114.8	43.4	109	30.4	66
Sep-2007	3.1	3.1	0.3	ND	12.5	ND	ND	5.9	86.2	24.1	57	21.1	8.6
Mar-2008	5.2	5.2	ND	ND	5.76	0.16	ND	5.2	72.8	15.6	55	15.4	19
Sep-2008	4.7	4.7	ND	ND	6.5	0.13	ND	4.8	65.4	20.7	69	19.8	14
Mar-2009	5.5	5.5	ND	ND	6.25	0.12	ND	4.4	89.3	19.1	65	17.4	13
Oct-2009	5	5	ND	ND	5.77	0.11	ND	4.6	66	16.6	54	19.9	17.9
Apr-2010	5	5	ND	ND	7.36	0.1	ND	4.1	734	25.8	102	22.8	49
Oct-2010	2.8	2.8	ND	ND	8.61	0.08	ND	4.6	90.7	30.1	77	25.5	6.8
Apr-2011	5.5	5.5	ND	ND	6	0.13	ND	4.7	88.4	15.1	61	16.9	43
Sep-2011	6.1	6.1	0.27	ND	5.61	0.13	ND	4.8	57.6	11.9	40	15	54
Mar-2012	5.3	5.3	ND	ND	8.01	0.11	ND	4.5	111.4	25	106	27.1	31

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-16***											
Sep-2012	6.08	6.08	*ND*	*ND*	5.34	0.115	*ND*	4.6	68.9	11.1	55	14.7	47.4
Mar-2013	6.72	6.72	*ND*	*ND*	7.78	0.122	*ND*	3.9	78.7	22.4	78	20.6	44.1
Oct-2013	6.92	6.92	*ND*	*ND*	5.55	0.122	*ND*	3.9	69.6	12.2	36	17.4	7.8
Mar-2014	7.68	7.68	*ND*	21	5.95	0.114	*ND*	5.6	73.3	14.3	44	17.6	13.1
Oct-2014	2.2	2.2	*ND*	*6 J*	6.01	0.134	*ND*	5.1	57.4	13.4	29	16.9	15.8
Apr-2015	4.64	4.64	*ND*	*ND*	9.61	0.0957	*ND*	4.1	115.7	36.5	76	31.4	7.27
Nov-2015	3.48	3.48	*ND*	*ND*	9.77	0.0997	*ND*	5.2	124.9	35	77	31.9	12.4
May-2016	4.44	4.44	*ND*	*ND*	7.85	0.104	*ND*	5.3	157.7	23.8	59	23.8	13.7
Oct-2016	4.56	4.56	*ND*	*ND*	6.98	*NA*	*NA*	5.6	98.3	16.9	78	18.5	26.1
May-2017	4.52	4.52	*ND*	*ND*	6.67	0.126	*ND*	5.2	102.4	15.5	38	20.3	12.8
Oct-2017	4.64	4.64	*ND*	*ND*	7	0.127	*ND*	5.5	119.3	18.8	68	21.4	6.61
May-2018	*4 J*	*ND*	*ND*	*ND*	10.4	*ND*	*0.0062 J*	4.8	248	40.2	114	37.4	10.36
Nov-2018	*ND*	*ND*	*ND*	*5.7 J*	23.4	*0.044 J*	*ND*	4.05	275.7	87.6	193	67.2	6.67
May-2019	*ND*	*NA*	*ND*	*ND*	24.8	*ND*	*ND*	4.1	227.9	84.4	153	66.7	15.5
Oct-2019	*ND*	*NA*	*ND*	*8.2 J*	23.4	*0.045 J*	*ND*	4.07	326.3	158	224	74.5	10.17
May-2020	*ND*	*NA*	*ND*	*9.1 J*	24	*ND*	*ND*	3.82	294.7	92.5	182	75.5	19.9
Oct-2020	*ND*	*NA*	*ND*	*9.3 J*	22.2	*0.055 J*	*ND*	3.94	283.7	95.2	182	72.4	12.7
Apr-2021	*ND*	*NA*	*ND*	*6.1 J*	25.7	*0.026 J*	*ND*	3.99	348.7	81.5 MH	190	72.2	22.8

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-16*													
Nov-1993	NA	ND	ND	NA	ND	4.8	NA	0.008	NA	ND	1.2	1.3	ND	6.3	NA
Apr-1994	NA	ND	ND	NA	ND	2.98	NA	ND	NA	ND	0.46	0.14	ND	6.1	NA
Aug-1994	NA	ND	ND	NA	ND	3	NA	ND	NA	ND	0.21	0.04	ND	4.4	NA
Sep-1994	NA	ND	ND	NA	ND	2.1	NA	ND	NA	ND	0.86	0.08	ND	4.2	NA
Nov-1994	NA	ND	ND	NA	ND	3.1	NA	ND	NA	ND	ND	1	ND	4.8	NA
Apr-1995	ND	ND	0.8	ND	ND	2.2	NA	ND	ND	ND	0.11	0.03	ND	5.4	NA
Oct-1996	ND	ND	0.013	ND	ND	4.1	4.2	ND	ND	ND	0.23	0.21	ND	4	4.2
Apr-1997	ND	ND	0.013	ND	ND	7	6.7	ND	0.18	ND	8.3	7.4	ND	6.9	6.6
Oct-1997	ND	ND	0.012	ND	ND	6.43	5.58	ND	0.163	ND	9.98	7.88	ND	6.56	5.64
Apr-1998	ND	ND	0.01	ND	ND	5.54	5.49	ND	0.13	ND	8.98	2.65	ND	5.5	5.42
Apr-1999	ND	ND	0.014	ND	ND	6.45	6.64	ND	0.143	ND	1.99	0.075	ND	6.2	6.29
Oct-1999	ND	ND	0.01	ND	ND	5.53	5	ND	0.125	ND	0.589	0.077	ND	5.55	5.01
Apr-2000	ND	ND	0.017	ND	ND	9.8	9.27	ND	0.236	ND	0.881	0.078	ND	10	9.46
Oct-2000	ND	ND	0.014	ND	ND	8.67	8.03	ND	0.2	ND	1.02	0.125	ND	8.51	7.91
Apr-2001	ND	ND	0.016	ND	ND	8.09	NA	ND	0.187	ND	2.89	NA	ND	8.12	NA
Sep-2001	ND	ND	0.013	ND	ND	7.02	6.93	ND	0.163	ND	1.6	0.051	ND	7.03	7.06
Mar-2002	ND	ND	0.016	ND	ND	8.37	8.21	ND	0.183	0.01	0.337	0.076	ND	8.05	8.09
Sep-2002	ND	ND	0.021	ND	ND	9.1	8.56	ND	0.199	ND	5.45	0.1	ND	8.79	8.64
Mar-2003	ND	ND	0.023	ND	ND	10.8	10.6	ND	0.256	ND	0.816	0.126	ND	10.8	10.6
Oct-2003	ND	ND	0.015	ND	ND	6.46	6.24	ND	0.142	ND	6.58	0.185	0.003	6.12	6.16
Apr-2004	ND	0.002	0.017	ND	ND	8.41	8.92	ND	0.182	ND	1.29	0.081	ND	7.82	8.29

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-16***													
Oct-2004	*ND*	*ND*	0.014	*ND*	*ND*	6.13	5.54	*ND*	0.14	*ND*	1.48	0.267	*ND*	5.69	5.18
Apr-2005	*ND*	*ND*	0.014	*ND*	*ND*	5.83	5.59	*ND*	0.134	*ND*	1.53	0.203	*ND*	5.36	5.11
Oct-2005	*ND*	*ND*	0.016	*ND*	*ND*	4.03	3.17	0.022	0.08	*ND*	10.7	0.421	0.003	2.61	1.99
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	3.87	4.26	*ND*	0.045	*ND*	0.706	*ND*	*ND*	2.04	2.43
Sep-2006	*ND*	*ND*	0.011	*ND*	*ND*	4.91	4.79	*ND*	0.044	*ND*	0.6	*ND*	*ND*	1.86	2.59
Mar-2007	*ND*	*ND*	0.016	*ND*	*ND*	6.47	5.73	*ND*	0.078	*ND*	2.12	0.066	*ND*	3.46	3.16
Sep-2007	*ND*	*ND*	0.012	*ND*	*ND*	4.49	4.16	*ND*	0.053	*ND*	0.535	0.066	*ND*	2.4	2.08
Mar-2008	*ND*	*ND*	0.014	*ND*	*ND*	3.88	3.75	*ND*	0.028	*ND*	0.721	*ND*	*ND*	1.39	1.52
Sep-2008	*ND*	*ND*	0.015	*ND*	*ND*	4.28	4.02	*ND*	0.048	*ND*	1.09	*ND*	*ND*	2.21	1.89
Mar-2009	*ND*	*ND*	0.013	*ND*	*ND*	4.18	4.09	*ND*	0.037	*ND*	0.806	0.101	*ND*	1.71	1.8
Oct-2009	*ND*	*ND*	0.015	*ND*	*ND*	4.49	4.18	*ND*	0.045	*ND*	1.23	0.232	*ND*	2.12	2.13
Apr-2010	*ND*	*ND*	0.015	*ND*	*ND*	5.49	5.41	*ND*	0.046	*ND*	1.86	0.184	*ND*	2.22	2.34
Oct-2010	*ND*	*ND*	0.01	*ND*	*ND*	5.59	5.83	*ND*	0.058	*ND*	0.998	0.853	*ND*	2.8	2.93
Apr-2011	*ND*	*ND*	0.017	*ND*	*ND*	4.16	3.84	*ND*	0.031	*ND*	1.96	0.487	*ND*	1.57	1.28
Sep-2011	*ND*	*ND*	0.019	*ND*	*ND*	3.93	3.47	*ND*	0.023	*ND*	2.41	0.192	*ND*	1.27	1.03
Mar-2012	*ND*	*ND*	0.019	*ND*	*ND*	5.79	5.15	*ND*	0.061	*ND*	1.99	0.475	*ND*	3.07	2.41
Sep-2012	*ND*	*ND*	0.0168	*0.000142 J*	*ND*	3.82	3.97	*0.0066 J*	0.0228	*0.0012 J*	1.94	0.593	*0.000893 J*	1.26	1.21
Mar-2013	*ND*	*ND*	0.0183	*0.000163 J*	*ND*	4.91	4.69	*0.0075 J*	0.0469	*0.0021 J*	1.97	0.542	*0.002 J*	2.03	1.83
Oct-2013	*ND*	*ND*	0.0174	*0.000136 J*	*ND*	4	3.89	*0.0047 J*	0.0341	*ND*	1.38	1.2	*0.000314 J*	1.81	1.77
Mar-2014	*0.000507 J*	*0.0001 J*	0.0158	*ND*	*ND*	4.23	3.97	*0.0034 J*	0.0311	*0.0027 J*	1.1	0.765	*ND*	1.71	1.5
Oct-2014	*0.000763 J*	*0.000465 J*	0.0185	*0.000205 J*	*ND*	4.29	4.34	*0.0032 J*	0.0265	*0.000607 J*	1.52	0.604	*ND*	1.51	1.53
Apr-2015	*0.000937 J*	*ND*	0.0205	*0.000285 J*	*ND*	6.36	6.7	*0.0021 J*	0.0749	*0.000363 J*	1.21	0.91	*ND*	3.77	3.91
Nov-2015	*0.000322 J*	*ND*	0.0214	*0.000315 J*	*ND*	6.8	6.75	*0.0024 J*	0.0721	*0.00064 J*	0.889	0.43	*0.000521 J*	3.61	3.38
May-2016	*ND*	*ND*	0.0201	*0.00025 J*	*ND*	5.29	5.21	0.0045	0.0439	*0.0007 J*	1.27	0.546	*0.00032 J*	2.58	2.42

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-16***													
Oct-2016	*ND*	*ND*	0.0207	*0.00022 J*	*ND*	4.29	4.92	0.0077	0.0309	*0.00059 J*	2.1	*1.07 J+*	*0.00025 J*	1.89	2.19
May-2017	*ND*	*ND*	0.0195	*0.0002 J*	*ND*	4.6	5.47	*0.003 J*	0.0319	*ND*	0.769	0.473	*ND*	2.13	2.01
Oct-2017	*ND*	*ND*	0.0184	*0.00025 J*	*ND*	4.79	4.7	0.0179	0.0343	*ND*	0.767	0.519	*ND*	2.29	2.3
May-2018	*0.000091 J*	*ND*	0.019	0.00033	*0.00007 J*	7.2	6.6	*0.0026 J*	0.0685	*0.0013 J*	1.3	0.14	*0.00021 J*	4.7	4.2
Nov-2018	*ND*	*ND*	0.022	*0.00058 J*	*0.000038 J*	11.5	11.4	0.024	0.18	*0.001 J*	1.3	0.81	*0.000064 J*	9.4	9.3
May-2019	*ND*	*ND*	0.028	0.00035	*ND*	11.9	11.9	0.0073	0.19	*ND*	3.7	0.9	*ND*	9	9
Oct-2019	*0.0001 J*	*ND*	0.028	0.00046	*0.00013 J*	13	12.2	*0.0053 J*	0.21	*ND*	2.7	1	*ND*	10.2	9.3
May-2020	*0.000091 J*	*ND*	0.027	0.00057	*ND*	13.1	12.4	0.0075	0.2	0.0025	3.6	0.67	*ND*	10.4	9.8
Oct-2020	*ND*	*ND*	0.028	*0.00078 J*	*ND*	12.3	11.7	*0.011 J*	0.22	*ND*	2.3	0.68	*ND*	10.1	9.5
Apr-2021	*ND*	*ND*	0.028	*0.0009 J*	*ND*	12.3	12.1	*0.0034 J*	0.21	*ND*	4.3	1.2	*ND*	10.1	10

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-16*												
Nov-1993	1.4	NA	ND	NA	6.7	NA	ND	NA	21.8	NA	NA	NA	0.42
Apr-1994	0.8	NA	ND	NA	4.22	NA	ND	NA	11.37	NA	NA	NA	0.28
Aug-1994	0.68	NA	ND	NA	4.7	NA	ND	NA	8.8	NA	NA	NA	0.26
Sep-1994	0.66	NA	ND	NA	3.6	NA	ND	NA	8.7	NA	NA	NA	0.24
Nov-1994	0.97	NA	ND	NA	5.5	NA	ND	NA	10.7	NA	NA	NA	0.24
Apr-1995	0.08	NA	ND	0.06	4.9	NA	ND	0.01	9.5	NA	ND	ND	0.28
Oct-1996	0.56	0.57	NA	0.085	ND	ND	ND	ND	8.7	8.5	ND	ND	0.2
Apr-1997	1.2	1.1	ND	0.31	5.3	5.1	ND	ND	14	14	ND	ND	0.29
Oct-1997	1.04	0.91	NA	0.157	4.16	3.04	ND	ND	13.3	11.4	ND	ND	0.267
Apr-1998	0.804	0.811	NA	0.125	5.25	5.07	ND	ND	10.7	10.6	ND	ND	0.337
Apr-1999	0.858	0.871	NA	0.142	4.23	4.05	ND	ND	11.8	12.1	ND	ND	0.286
Oct-1999	0.751	0.677	NA	0.116	4.88	3.62	ND	ND	10.4	9.32	ND	ND	0.242
Apr-2000	1.42	1.34	NA	0.222	5.86	6.21	ND	ND	20.2	19.2	ND	ND	0.454
Oct-2000	1.2	1.11	NA	0.188	6	5.56	ND	ND	16.4	15.1	ND	ND	0.403
Apr-2001	1.12	NA	NA	0.183	6.01	NA	ND	ND	15.6	NA	ND	ND	0.365
Sep-2001	0.962	0.963	NA	0.161	5.66	5.25	ND	ND	14.6	13.3	ND	ND	0.313
Mar-2002	1.09	1.1	NA	0.173	7.03	6.6	ND	ND	16.4	15.4	ND	ND	0.34
Sep-2002	1.19	1.17	NA	0.198	5.89	6.09	ND	ND	18.1	17.9	ND	ND	0.382
Mar-2003	1.52	1.49	NA	0.251	6.94	7.24	ND	ND	21.5	20.9	ND	ND	0.491
Oct-2003	0.84	0.841	NA	0.143	5.97	5.21	ND	ND	12.5	11.8	ND	ND	0.314
Apr-2004	1.09	1.16	ND	0.188	6.55	5.88	ND	ND	15	16.3	ND	ND	0.322
Oct-2004	0.823	0.756	ND	0.141	5.11	4.74	ND	ND	11	9.79	ND	ND	0.241

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-16***												
Apr-2005	0.785	0.749	*ND*	0.132	4.43	4.01	*ND*	*ND*	10.1	9.66	*ND*	*ND*	0.225
Oct-2005	0.466	0.338	*ND*	0.072	2.51	1.93	*ND*	*ND*	5.64	3.89	*ND*	*ND*	0.132
Mar-2006	0.26	0.308	*ND*	0.053	1.84	2.04	*ND*	*ND*	4.3	4.88	*ND*	*ND*	0.058
Sep-2006	0.241	0.358	*ND*	0.048	1.92	2.4	*ND*	*ND*	4.15	5.25	*ND*	*ND*	0.123
Mar-2007	0.458	0.419	*ND*	0.082	2.97	2.71	*ND*	*ND*	6.86	6.32	*ND*	*ND*	0.154
Sep-2007	0.316	0.267	*ND*	0.054	2.02	1.7	*ND*	*ND*	5.22	4.59	*ND*	*ND*	0.1
Mar-2008	0.158	0.174	*ND*	0.034	1.64	1.6	*ND*	*ND*	3.19	3.47	*ND*	*ND*	0.067
Sep-2008	0.259	0.22	*ND*	0.057	1.82	1.63	*ND*	*ND*	4.49	3.98	*ND*	*ND*	0.091
Mar-2009	0.204	0.222	*ND*	0.043	1.77	1.74	*ND*	*ND*	3.97	4.18	*ND*	*ND*	0.075
Oct-2009	0.25	0.254	*ND*	0.052	1.79	1.63	*ND*	*ND*	4.5	4.42	*ND*	*ND*	0.088
Apr-2010	0.258	0.279	*ND*	0.053	2	1.99	*ND*	*ND*	4.88	5.04	*ND*	*ND*	0.09
Oct-2010	0.326	0.343	*ND*	0.061	2.15	2.2	*ND*	*ND*	5.88	6.18	*ND*	*ND*	0.092
Apr-2011	0.174	0.135	*ND*	0.039	1.49	1.16	*ND*	*ND*	3.55	3.06	*ND*	*ND*	0.06
Sep-2011	0.118	0.096	*ND*	0.038	1.69	1.04	*ND*	*ND*	3.13	2.87	*ND*	*ND*	0.055
Mar-2012	0.367	0.275	*ND*	0.068	2.46	1.94	*ND*	*ND*	6.41	5.25	*ND*	*ND*	0.104
Sep-2012	0.121	0.12	*ND*	0.0333	1.34	1.27	*ND*	*ND*	3.06	3.02	*0.0015 J*	*ND*	0.0492
Mar-2013	0.272	0.224	*0.000048 J*	0.0554	1.73	1.52	*ND*	*ND*	4.33	3.89	*ND*	*ND*	0.0989
Oct-2013	0.177	0.174	*ND*	0.0424	1.72	1.54	*ND*	*ND*	3.97	3.86	*0.000104 J*	*0.0028 J*	0.0741
Mar-2014	0.181	0.154	*ND*	0.0407	1.55	1.33	*ND*	*ND*	3.59	3.27	*ND*	*0.000622 J*	0.0629
Oct-2014	0.152	0.155	*ND*	0.0353	1.59	1.47	*ND*	*ND*	3.62	3.78	*ND*	*0.0013 J*	0.063
Apr-2015	0.435	0.458	*ND*	0.0863	2.79	2.84	*0.000895 J*	*ND*	7.45	7.8	*ND*	*ND*	0.139
Nov-2015	0.407	0.378	*ND*	0.0833	2.72	2.51	*ND*	*ND*	7.24	6.83	*0.00011 J*	*0.000842 J*	0.133
May-2016	0.258	0.257	*ND*	0.0549	2.19	1.92	*ND*	*ND*	5.36	4.96	*ND*	0.0012	0.0855
Oct-2016	0.191	0.223	*ND*	0.0439	1.62	1.86	*ND*	*ND*	4.42	4.9	*ND*	0.0011	0.0652

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-16***												
May-2017	0.176	0.169	*ND*	0.048	1.72	1.75	*ND*	*ND*	4.39	4.28	*ND*	*0.00034 J*	0.0754
Oct-2017	0.19	0.196	*ND*	0.0503	1.84	1.87	*ND*	*ND*	4.63	4.67	*ND*	*0.00037 J*	0.0795
May-2018	0.34	0.33	*ND*	0.099	*3.3 J*	*2.6 J*	*0.000095 J*	*ND*	9.4	7.8	*ND*	0.0036	0.17
Nov-2018	1.2	0.93	*ND*	0.21	6	6	*0.00012 J*	*ND*	18.5	18.6	*ND*	0.0056	0.34
May-2019	1.3	1.2	*ND*	0.21	5.9	5.4	*ND*	*ND*	17.6	17.2	*ND*	*ND*	0.34
Oct-2019	1.5	1.3	*ND*	0.22	6	5.9	*ND*	*ND*	19.3	18.6	*ND*	0.0068	0.34
May-2020	1.3	1.3	*ND*	0.21	6.4	6.4	*ND*	*ND*	19.6	18.8	*ND*	*ND*	0.35
Oct-2020	1.3	1.2	*ND*	0.23	6.1	6	*ND*	*ND*	19.6	18.1	*ND*	*0.00092 J*	0.37
Apr-2021	1.4	1.4	*ND*	0.24	6.3	6.2	*0.0055 J*	*ND*	19.6	19.5	*ND*	*ND*	0.35

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-16***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	33	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.3 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.4 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-16***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-16***															
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-16***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16***															
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.1 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-17***											
Nov-1993	62	62	0.2	24.8	6.7	ND	ND	5.94	172	15.4	45	63.1	105
Apr-1994	64	64	0.1	62.3	6.1	ND	ND	5.96	183	18.9	103	58.75	250
Apr-1995	58.7	58.7	ND	74.7	7.1	ND	ND	6	186	22.5	88	43.9	702
Apr-1997	ND	20	ND	ND	5	0.04	ND	NA	NA	14	88	15	19
Oct-1997	35	35	0.24	ND	4.39	ND	ND	6.48	170.5	14.3	107	46	760
Apr-1998	32	32	0.26	ND	4.22	ND	ND	7.6	164.7	19	64	39	720
Apr-1999	28	28	0.82	16	5.33	ND	ND	5.61	143.1	19.5	110	48	820
Oct-1999	38	38	0.08	ND	7.13	ND	ND	5.68	132	17.1	140	32	160
Apr-2000	31	31	ND	ND	3.42	ND	ND	6.01	74	29	117	48	410
Oct-2000	23	NA	0.22	56	6.06	ND	ND	5.88	137.9	27.3	87	37.8	689
Apr-2001	29	NA	ND	10	6	ND	ND	NA	NA	28.4	108	45	770
Sep-2001	26	26	ND	ND	8.69	ND	ND	5.74	165	34.4	105	36.7	666
Mar-2002	25	25	ND	38	4.51	ND	ND	5.8	68.5	27.1	122	37	395
Sep-2002	17	17	ND	ND	5.88	ND	ND	5.7	167.5	43.5	108	36.2	780
Mar-2003	22	22	ND	ND	15.2	ND	ND	5.8	157.9	33.9	110	42	160
Oct-2003	27	27	ND	ND	5.19	ND	ND	5.6	164.7	34.6	106	46.2	748
Apr-2004	31	31	ND	27	5.06	ND	ND	5.6	151.5	28.1	106	51.8	797
Oct-2004	45	45	ND	ND	5.21	0.08	ND	5.6	164.6	30.7	123	51.7	5.2
Apr-2005	33	33	ND	ND	5.68	ND	ND	5.7	127.4	26.3	113	41.8	579
Oct-2005	29	29	ND	ND	1.03	ND	ND	5.5	296	2.32	92	35.2	52
Mar-2006	27	27	ND	ND	5.6	ND	ND	7.7	104.8	21.9	105	26.3	470
Sep-2006	13	13	ND	ND	5.22	ND	ND	7.7	104.8	20.3	210	33.3	731
Mar-2007	8.2	8.2	0.6	ND	5.44	ND	ND	5.5	107.9	20	58	17.6	774
Sep-2007	6.1	6.1	ND	82	9.89	ND	ND	6.1	104.6	20.5	87	14	1038
Mar-2008	13	13	0.25	ND	10.1	ND	ND	5.3	107.2	33.7	39	17.2	326
Sep-2008	13	13	ND	36	9.93	ND	ND	5.3	101.1	15	67	18	320
Mar-2009	10	10	ND	ND	5.52	ND	ND	5	113.4	31.4	85	19.4	980
Oct-2009	7	7	ND	ND	5.35	ND	ND	5.1	97.3	23.2	62	12.7	916
Apr-2010	6.2	6.2	ND	ND	5.67	ND	ND	4.8	119.7	25.7	133	13.6	849
Oct-2010	14	14	ND	ND	5.7	ND	ND	5.2	89.3	24.9	73	24.3	310
Apr-2011	106	106	ND	ND	5.38	ND	ND	5.1	103.4	22.5	70	16.7	24
Sep-2011	9.2	9.2	ND	ND	5.65	ND	ND	5.1	95.5	20.7	59	14.7	218
Mar-2012	15	15	ND	ND	5.53	ND	ND	5	111.4	26.6	72	27.4	187
Sep-2012	8.44	8.44	ND	ND	5.83	ND	ND	4.5	100.4	24.1	95	16.6	177
Mar-2013	8.72	8.72	ND	10.2	5.86	ND	ND	5.3	113	23	83	11.2	830
Oct-2013	14	14	ND	10.3	5.78	ND	ND	4.1	110.6	28.6	77	24.3	58.5

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-17***											
Mar-2014	6.8	6.8	*ND*	19	5.56	*ND*	*ND*	5.5	108.5	27.1	58	13.6	227
Oct-2014	2.2	2.2	*ND*	33	5.75	*ND*	*ND*	5.3	100.3	26.5	108	22.3	203
Apr-2015	13.2	13.2	*ND*	13	5.52	*ND*	*ND*	4.5	102.1	28.7	71	21.1	760
Nov-2015	5.56	5.56	*ND*	*ND*	5.95	0.0536	*ND*	5.5	122.9	25.5	53	14.9	635
May-2016	12.6	12.6	0.274	*7 J*	5.87	0.0852	*ND*	5.6	182.9	28.9	81	24.1	1090
Oct-2016	18.3	18.3	*0.185 J*	45	5.86	*NA*	*NA*	5.5	190.5	34.1	140	29.6	1012
May-2017	2.6	2.6	*ND*	*ND*	5.56	0.076	*ND*	5.2	162.4	30.6	64	17	412
Oct-2017	*ND*	*ND*	*0.0838 J*	*ND*	5.58	*ND*	*ND*	5.1	160.4	34.5	96	17.3	14.7
May-2018	*ND*	*ND*	*ND*	*ND*	5.9	*ND*	0.024	4.4	191.5	62.5	139	38.2	77
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	5.9	*0.038 J*	*ND*	4.63	169.6	63.6	95	39.3	20.6
May-2019	*ND*	*NA*	*ND*	*ND*	4.8	*ND*	*ND*	5.06	128.2	50.6	82	34.2	30.8
Oct-2019	*ND*	*NA*	*ND*	*ND*	5.4	*0.047 J*	*ND*	5.05	164	52.5	108	30	44.1
May-2020	*1 J*	*NA*	*ND*	*ND*	5.7	*ND*	*ND*	4.69	143.9	45.2	68	26.9	65
Oct-2020	*8 J*	*NA*	*ND*	*ND*	5.4	*ND*	*0.0064 J*	4.79	143.4	43.3	75	25.4	53.6
Apr-2021	*2 J3c*	*NA*	*ND*	38.6	5.7	*0.025 J*	*ND*	5.29	166.1	36.9	87	25.9	45.2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17***													
Nov-1993	*NA*	*ND*	*ND*	*NA*	*ND*	22.5	*NA*	0.012	*NA*	*ND*	10	6.7	*ND*	1.7	*NA*
Apr-1994	*NA*	*ND*	*ND*	*NA*	*ND*	20.4	*NA*	*ND*	*NA*	*ND*	8.53	3.14	*ND*	1.89	*NA*
Apr-1995	*ND*	*ND*	1	*ND*	*ND*	14.6	*NA*	*ND*	*ND*	*ND*	7.6	7.6	*ND*	1.8	*NA*
Oct-1996	*ND*	*ND*	0.035	*ND*	*ND*	8.8	8.4	*ND*	*ND*	*ND*	6	8	*ND*	1.4	1.3
Apr-1997	*ND*	*ND*	0.016	*ND*	*ND*	8.4	8.7	*ND*	*ND*	*ND*	4.2	2.1	0.003	1.1	1.1
Oct-1997	*ND*	*ND*	0.053	*ND*	*ND*	12.2	10.9	0.014	0.019	0.053	14.3	7.52	*ND*	1.9	1.55
Apr-1998	*ND*	*ND*	0.116	*ND*	*ND*	11.5	2.12	0.031	0.018	0.033	23.9	4.46	*ND*	2.45	0.453
Apr-1999	*ND*	*ND*	0.179	*ND*	*ND*	13.7	10.1	0.054	0.026	0.042	38.5	7.9	*ND*	3.41	1.65
Oct-1999	*ND*	*ND*	0.025	*ND*	*ND*	6.94	6.54	*ND*	*ND*	0.011	6.29	1.08	*ND*	1.51	1.38
Apr-2000	*ND*	*ND*	0.034	*ND*	*ND*	15.9	15	*ND*	0.012	0.012	11.6	4.76	*ND*	2.04	1.89
Oct-2000	*ND*	*ND*	0.031	*ND*	*ND*	12	9.46	*ND*	0.011	0.018	17.2	6.64	*ND*	1.91	1.6
Apr-2001	*ND*	*ND*	0.084	*ND*	*ND*	14	*NA*	0.02	0.019	0.02	35.7	*NA*	0.004	2.32	*NA*
Sep-2001	*ND*	*ND*	0.04	*ND*	*ND*	11.5	10.4	0.011	0.011	0.012	24.1	6.29	0.003	1.91	1.61
Mar-2002	*ND*	*ND*	0.037	*ND*	*ND*	11.4	10.1	0.01	0.018	0.011	16.2	5.94	*ND*	2.08	1.85
Sep-2002	*ND*	*ND*	0.044	*ND*	*ND*	11.2	10.6	*ND*	0.027	0.014	22.6	15	0.003	1.98	1.8
Mar-2003	*ND*	*ND*	0.045	*ND*	*ND*	13.5	11.8	*ND*	0.05	0.01	47.7	3.79	0.002	2.02	1.85
Oct-2003	*ND*	0.005	0.05	*ND*	*ND*	14.9	12	0.016	0.04	0.025	24.7	4.81	0.006	2.15	1.69
Apr-2004	*ND*	**0.011**	0.088	*ND*	*ND*	16.8	14.2	0.041	0.056	0.045	45.1	3.94	0.01	2.37	1.9
Oct-2004	*ND*	0.003	0.041	*ND*	*ND*	17.2	15.7	0.012	0.037	0.017	16.3	3.7	0.004	2.11	1.94
Apr-2005	*ND*	0.002	0.04	*ND*	*ND*	13.6	12.8	0.012	0.03	0.02	12.4	4.46	0.002	1.9	1.74
Oct-2005	*ND*	*ND*	0.019	*ND*	*ND*	11.6	10.7	*ND*	0.011	*ND*	0.798	1.86	*ND*	1.54	1.49

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17***													
Mar-2006	*ND*	*ND*	0.016	*ND*	*ND*	8.36	8.68	*ND*	0.01	*ND*	2.02	3.39	*ND*	1.3	1.37
Sep-2006	*ND*	*ND*	0.042	*ND*	*ND*	10.8	9.11	*ND*	0.019	0.016	9.22	4.96	0.003	1.54	1.43
Mar-2007	*ND*	0.005	0.043	*ND*	*ND*	4.73	6.14	0.04	0.033	0.029	18.5	4.58	0.007	1.4	1.37
Sep-2007	*ND*	0.009	0.045	*ND*	*ND*	3.5	3.39	0.045	0.034	0.031	21.4	5.09	0.008	1.28	1.11
Mar-2008	*ND*	0.003	0.026	*ND*	*ND*	4.7	4.37	0.013	0.012	*ND*	8.65	3.43	0.002	1.33	1.28
Sep-2008	*ND*	0.003	0.03	*ND*	*ND*	4.66	4.35	0.013	0.01	*ND*	8.02	3.63	*ND*	1.56	1.41
Mar-2009	*ND*	0.005	0.051	*ND*	*ND*	5.16	3.43	0.049	0.038	0.029	38.5	4.56	0.008	1.57	1.25
Oct-2009	*ND*	0.003	0.03	*ND*	*ND*	3.16	3.27	0.023	0.014	0.016	17.6	4.26	0.003	1.16	1.21
Apr-2010	*ND*	0.006	0.034	*ND*	*ND*	3.26	2.33	0.023	0.022	0.018	20	5.97	0.005	1.33	1.07
Oct-2010	*ND*	0.003	0.031	*ND*	*ND*	6.87	6.32	0.02	0.02	0.012	12.3	3.91	0.003	1.73	1.54
Apr-2011	*ND*	*ND*	0.019	*ND*	*ND*	4.46	4.49	*ND*	*ND*	*ND*	3.83	4.49	*ND*	1.36	1.39
Sep-2011	*ND*	0.002	0.034	*ND*	*ND*	3.55	2.45	0.016	*ND*	0.014	11.5	5.9	0.003	1.42	1.16
Mar-2012	*ND*	0.002	0.038	*ND*	*ND*	7.74	5.95	0.014	*ND*	0.017	11.1	4.72	0.003	1.96	1.61
Sep-2012	*ND*	0.0036	0.035	*0.000401 J*	*ND*	4.15	4.04	0.0266	0.0172	0.0152	26.3	4.65	0.0042	1.52	1.47
Mar-2013	*ND*	*ND*	0.0298	*0.000333 J*	*ND*	2.73	3.13	0.0217	0.0158	0.0148	30.9	4.77	0.0052	1.07	1.19
Oct-2013	*ND*	*0.0018 J*	0.0414	*0.000309 J*	*0.000155 J*	6.69	5.28	*0.0154 J*	*0.0081 J*	*0.0089 J*	16	4.38	0.0025	1.84	1.65
Jan-2014	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	0.0252	*NA*	*NA*	*NA*	*NA*	0.0059	*NA*	*NA*
Mar-2014	*0.000701 J*	*0.0015 J*	0.0326	*0.000238 J*	*ND*	3.06	3.26	*0.0074 J*	*0.0048 J*	*0.0005 J*	8.91	4.5	*0.0018 J*	1.45	1.46
Oct-2014	*0.0012 J*	*0.0261 J*	0.166	*ND*	*0.000168 J*	5.24	4.81	*0.112 J*	*0.0474 J*	*0.0591 J*	78.3	4.4	**0.0239**	2.25	1.57
Apr-2015	*0.0013 J*	**0.013**	0.133	*0.000895 J*	*0.000127 J*	5.13	5.14	0.075	*0.0326 J*	*0.0353 J*	55.6	4.01	**0.0181**	2	1.63
Nov-2015	*0.00073 J*	0.0042	0.0658	*0.000416 J*	*0.000064 J*	3.51	4.08	0.022	0.0111	0.0124	16.4	5.09	0.0061	1.5	1.56
May-2016	*ND*	0.0099	0.064	*0.00059 J*	*ND*	6.17	5.41	0.0461	0.0247	0.0239	39.9	8.98	0.0082	2.11	1.83
Oct-2016	*ND*	*0.0024 J*	0.0367	*0.00028 J*	*ND*	8.2	7.35	0.0168	0.0074	0.0063	11.9	7.49	0.0021	2.23	2.19
May-2017	*ND*	*0.001 J*	0.0263	*0.00015 J*	*ND*	4.03	4.4	0.0067	0.0041	*0.0026 J*	8.35	4.65	*0.00079 J*	1.67	1.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17***													
Oct-2017	*ND*	*0.0016 J*	0.0297	*0.00017 J*	*ND*	4.22	3.55	0.0068	0.0057	*0.0022 J*	14.2	4.78	*0.00065 J*	1.65	1.64
May-2018	*0.00011 J*	*0.00026 J*	0.053	0.00086	*0.00049 J*	10.1	9.9	0.025	0.0433	0.0023	9.6	0.96	*0.00024 J*	3.1	3.1
Nov-2018	*ND*	*0.0007 J*	0.032	0.00044	*0.00025 J*	11.5	11.3	0.038	0.021	0.0029	7	0.79	*0.0006 J*	2.6	2.6
May-2019	*ND*	*ND*	0.026	*ND*	*ND*	9.8	9.9	0.049	0.029	*ND*	9.2	6.1	*ND*	2.4	2.4
Oct-2019	*0.00011 J*	*0.0005 J*	0.025	*0.000094 J*	*0.0002 J*	8.3	7.7	0.024	0.041	*ND*	8	6.3	*0.00014 J*	2.2	2
May-2020	*0.000083 J*	*0.0005 J*	0.024	*0.00014 J*	*ND*	7.2	7	0.063	0.036	0.003	13.5	3.6	*0.00024 J*	2.2	2.1
Oct-2020	*ND*	*ND*	0.021	*ND*	*ND*	6.8	6.8	*0.03 J*	0.022	*ND*	9.8	3.7	*ND*	2	2
Apr-2021	*ND*	*ND*	0.023	*ND*	*ND*	7	7	0.0088	0.019	*ND*	10	7.3	*ND*	2.1	2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-17*												
Nov-1993	0.27	NA	ND	NA	2	NA	ND	NA	11	NA	NA	NA	0.01
Apr-1994	0.31	NA	ND	NA	1.69	NA	ND	NA	12.97	NA	NA	NA	0.06
Apr-1995	0.28	NA	ND	ND	2.1	NA	ND	ND	8.4	NA	ND	ND	0.03
Oct-1996	0.21	0.19	NA	ND	ND	ND	ND	ND	9	8.4	ND	ND	0.27
Apr-1997	0.18	0.19	ND	ND	1.8	1.8	ND	ND	7.2	7.3	ND	ND	0.025
Oct-1997	0.259	0.244	NA	0.064	3.88	0.695	ND	ND	10.2	9.61	ND	0.018	0.08
Apr-1998	0.262	0.048	NA	0.1	6.8	1.61	ND	ND	10.6	1.99	ND	0.051	0.076
Apr-1999	0.348	0.243	NA	0.03	8.91	ND	ND	ND	13.1	10.6	ND	0.088	0.106
Oct-1999	0.214	0.204	NA	ND	1.78	1.28	ND	ND	10.8	10.2	ND	ND	0.032
Apr-2000	0.231	0.225	NA	ND	1.89	1.25	ND	ND	12.8	11.2	ND	ND	0.037
Oct-2000	0.237	0.21	NA	0.018	2.16	1.5	ND	ND	13.1	10.8	ND	0.011	0.041
Apr-2001	0.25	NA	NA	0.015	4.25	NA	ND	ND	12.5	NA	ND	0.037	0.059
Sep-2001	0.212	0.199	NA	0.022	2.82	1.91	ND	ND	13.4	10.4	ND	0.015	0.048
Mar-2002	0.255	0.236	NA	0.018	2.87	1.53	ND	ND	12	11.1	ND	0.014	0.046
Sep-2002	0.249	0.234	NA	0.029	2.39	2.13	ND	ND	12.4	11.6	ND	0.018	0.064
Mar-2003	0.236	0.233	NA	0.046	2.32	1.33	ND	ND	12.4	11.5	ND	ND	0.084
Oct-2003	0.22	0.209	NA	0.041	2.74	1.76	ND	ND	12.9	10.8	ND	0.03	0.08
Apr-2004	0.234	0.211	ND	0.055	4.63	2.15	ND	ND	12.6	11.9	ND	0.065	0.226
Oct-2004	0.244	0.232	ND	0.025	2.76	1.76	ND	ND	12.7	12	ND	0.017	0.079
Apr-2005	0.263	0.253	ND	0.03	2.66	1.68	ND	ND	11.9	11.5	ND	0.02	0.061
Oct-2005	0.216	0.216	ND	0.017	1.58	1.43	ND	ND	9.66	8.61	ND	ND	0.04
Mar-2006	0.174	0.194	ND	0.015	1.34	1.29	ND	ND	9.53	9.45	ND	ND	0.015

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-17***												
Sep-2006	0.244	0.221	ND	0.027	1.92	1.49	ND	ND	9.55	9.87	ND	0.01	0.096
Mar-2007	0.218	0.205	ND	0.04	2.2	1.36	ND	ND	9.08	9.56	ND	0.033	0.085
Sep-2007	0.183	0.172	ND	0.039	1.96	1.1	ND	ND	8.21	8.9	ND	0.038	0.088
Mar-2008	0.196	0.183	ND	0.019	1.69	1.36	ND	ND	9.11	9.26	ND	ND	0.052
Sep-2008	0.202	0.186	ND	0.017	1.84	1.32	ND	ND	9.74	9.32	ND	ND	0.043
Mar-2009	0.201	0.175	ND	0.045	2.36	1.38	ND	ND	9.67	9.75	ND	0.036	0.1
Oct-2009	0.157	0.176	ND	0.018	1.56	1.13	ND	ND	8.17	8.59	ND	0.019	0.05
Apr-2010	0.174	0.155	ND	0.022	2.05	1.18	ND	ND	8.91	8.64	ND	0.033	0.064
Oct-2010	0.224	0.204	ND	0.026	2.2	1.44	ND	ND	11.7	11.6	ND	0.013	0.052
Apr-2011	0.171	0.17	ND	0.016	1.26	1.24	ND	ND	10.4	10.3	ND	ND	0.032
Sep-2011	0.181	0.166	ND	0.017	2.44	1.28	ND	ND	9.96	9.42	ND	0.011	0.044
Mar-2012	0.276	0.252	0.0002	0.024	2.87	1.52	ND	ND	12.2	11.1	ND	0.012	0.065
Sep-2012	0.196	0.184	ND	0.0238	1.9	1.44	ND	ND	10.4	10.8	0.000409 J	0.0179	0.0513
Mar-2013	0.153	0.174	0.000142 J	0.0182	1.37	1.15	ND	0.000022 J	7.37	8.92	ND	0.0191	0.0512
Oct-2013	0.227	0.192	ND	0.015	2.27 J	1.52	ND	0.000018 J	10.8	11.4	0.000198 J	0.0205 J	0.0491
Mar-2014	0.157	0.17	ND	0.0106 J	1.8	1.37	ND	ND	9.13	10.1	0.000637 J	0.0083 J	0.0257
Oct-2014	0.203	0.17	0.000121 J	0.0665 J	5.72 J	1.61	ND	0.000089 J	9.92 J	11.6	ND	0.0981 J	0.104
Apr-2015	0.187	0.182	ND	0.0425 J	4.91	1.57	ND	0.00008 J	10.2	11.8	ND	0.0674	0.0674
Nov-2015	0.158	0.184	ND	0.0161	2.82	1.56	0.000942 J	ND	8.92	11.2	0.000327 J	0.0234	0.0383
May-2016	0.2	0.188	ND	0.0294	3.22	1.8	ND	ND	12.3	12	0.00017 J	0.0438	0.0732
Oct-2016	0.265	0.262	ND	0.019	2.11	1.94	ND	ND	13.7	13.8	ND	0.0106	0.0647
May-2017	0.2	0.191	ND	0.0091	1.67	1.62	ND	ND	11.3	11.2	ND	0.0044	0.039
Oct-2017	0.213	0.203	ND	0.0104	1.58	1.56	ND	ND	11	11	ND	0.0033	0.0382
May-2018	0.33	0.34	ND	0.062	2.1 J	1.7 J	0.00046 J	ND	15.1	13.8	0.000071 J	0.0041	0.15

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-17***												
Nov-2018	0.22	0.23	*ND*	0.048	*2.1 J*	*2 J*	*0.00019 J*	*ND*	13.8	13.9	*ND*	0.0055	0.089
May-2019	0.5	0.47	*ND*	0.04	*ND*	*ND*	*ND*	*ND*	13.5	13.4	*ND*	*ND*	0.077
Oct-2019	0.7	0.63	*ND*	0.034	*1.4 J*	*ND*	*ND*	*ND*	13.4	13.1	*ND*	0.0073	0.066
May-2020	0.57	0.58	*ND*	0.026	*1.8 J*	*1.8 J*	*ND*	*ND*	13.4	13.1	*ND*	*ND*	0.048
Oct-2020	0.42	0.4	*ND*	0.02	*ND*	*1.7 J*	*ND*	*ND*	13.4	12.9	*ND*	*0.0015 J*	0.041
Apr-2021	0.43	0.42	*ND*	0.016	1.8	1.7	*0.0056 J*	*ND*	13.6	13.4	*ND*	*0.00068 J*	0.034

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	35	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.96 J	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 J	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 J	ND	11	22 J+	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.4 J*	7.9	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.4 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.6 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.5 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:	***TW-17A***												
Nov-1993	ND	ND	ND	21.3	2.6	0.3	ND	4.76	19.2	2.5	ND	2.47	4.7
Apr-1994	5	5	0.2	ND	2.4	0.3	ND	5	19	ND	20	3.79	2.9
Apr-1995	ND	ND	0.4	ND	2.7	0.3	ND	4.8	19.1	2.3	18	2	ND
Apr-1997	ND	2	ND	ND	1.5	0.29	ND	NA	NA	ND	66	4.1	5
Oct-1997	2	2	0.33	30	2.6	0.294	ND	5.99	19.7	ND	22	ND	5.1
Apr-1998	3	ND	ND	ND	1.79	0.301	ND	7.35	18.75	ND	ND	3	2.7
Apr-1999	ND	ND	0.45	ND	2.04	0.18	ND	4.95	48.5	ND	20	3.2	4.3
Oct-1999	ND	ND	0.07	ND	2.76	0.563	ND	4.69	20.8	1.35	19	3.1	4.2
Apr-2000	ND	ND	ND	ND	1.62	0.26	ND	6.88	103	0.87	24	3.2	16
Oct-2000	1	NA	ND	ND	2.03	ND	ND	6.08	29.8	ND	33	3.31	4.09
Apr-2001	1.3	NA	ND	ND	2.23	0.292	ND	NA	NA	ND	25	3.3	2
Sep-2001	ND	ND	ND	ND	3.42	1.27	ND	5.04	19	ND	21	3.16	0.93
Mar-2002	ND	ND	ND	ND	3.6	0.426	ND	5.1	14.2	0.821	21	3.08	0.5
Sep-2002	1.8	1.8	ND	ND	2.62	0.3	ND	5	20.8	ND	16	2.97	0.6
Mar-2003	1.6	1.6	ND	ND	1.34	ND	ND	5.2	16.2	ND	36	3.15	5.5
Oct-2003	1.5	1.5	ND	ND	4.03	0.214	ND	4.8	20.9	ND	19	4.09	4.8
Apr-2004	1.7	1.7	ND	ND	2.44	0.189	ND	4.8	17.9	ND	21	3.39	4.3
Oct-2004	1.5	1.5	ND	ND	2.45	0.266	ND	4.8	15.7	ND	30	3.05	0.64
Apr-2005	1.8	1.8	ND	ND	2.63	0.3	ND	4.8	15.5	1.45	38	3.2	1.9
Oct-2005	2.7	2.7	ND	ND	2.68	0.27	ND	4.1	15.9	1.21	35	3.07	1.9
Mar-2006	2.8	2.8	ND	ND	2.51	0.29	ND	4.9	17.5	1.51	24	2.14	0.29
Sep-2006	2.7	2.7	ND	ND	2.54	0.3	ND	4.9	17.5	1.2	20	2.92	0.49
Mar-2007	2.8	2.8	ND	ND	2.73	0.29	ND	4.7	15.2	ND	ND	2.89	0.13
Sep-2007	2.4	2.4	ND	ND	2.5	0.3	ND	6.4	16.6	ND	17	2.7	4.6
Mar-2008	2.2	2.2	ND	ND	7.48	ND	ND	4.8	14.8	2.92	11	2.8	0.22
Sep-2008	2.9	2.9	0.22	ND	2.61	0.26	ND	4.5	14.6	ND	23	3	0.27
Mar-2009	2.6	2.6	ND	ND	2.69	0.3	ND	4.3	16.7	2.38	ND	2.97	7
Oct-2009	2.6	2.6	ND	ND	2.59	0.24	ND	4.5	15.5	ND	14	2.66	1.99
Apr-2010	2.5	2.5	ND	ND	2.98	0.22	ND	3.7	16.4	ND	54	3.1	1.6
Oct-2010	2.3	2.3	ND	ND	2.97	0.2	ND	4.8	12.2	ND	16	3.24	0.67
Apr-2011	2.6	2.6	ND	ND	2.55	0.26	ND	4.4	16.2	ND	16	2.8	0.34
Sep-2011	2.8	2.8	ND	ND	2.59	0.26	ND	4.6	16.2	ND	ND	3.57	0.56
Mar-2012	2.6	2.6	ND	ND	2.77	0.26	ND	4.5	21.3	ND	ND	2.68	0.73
Sep-2012	2.28	2.28	ND	ND	2.81	0.246	ND	3.9	16.3	ND	36	3.26	0.154
Mar-2013	3.08	3.08	0.0641	ND	2.94	0.253	ND	5	16.1	0.742 J	16	3.25	0.218
Oct-2013	2.76	2.76	ND	ND	2.89	0.246	ND	3.1	15.8	0.63 J	ND	3.12	0.633

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-17A***											
Mar-2014	2.72	2.72	*ND*	18	2.89	0.251	*ND*	5.2	16.6	*0.725 J*	*ND*	3.08	0.292
Oct-2014	*ND*	*ND*	*ND*	*ND*	3.23	0.197	*ND*	4.7	16	*ND*	*ND*	3.14	0.357
Apr-2015	3.72	3.72	*ND*	*ND*	2.93	0.214	*ND*	3.8	16.6	*ND*	*ND*	3.26	0.351
Nov-2015	*ND*	*ND*	*ND*	*7 J*	2.99	0.223	*ND*	5.2	56.1	*ND*	*23 J*	3.73	0.226
May-2016	*ND*	*ND*	*ND*	*ND*	2.97	0.233	*ND*	5.3	26.6	*ND*	*12 J*	3.4	0.455
Oct-2016	*ND*	*ND*	*ND*	*6 J*	2.87	*NA*	*NA*	5.3	24.2	*0.922 J*	*23 J*	3	0.474
May-2017	*ND*	*ND*	*ND*	*ND*	2.75	0.255	*ND*	4.9	26.9	*ND*	*ND*	3.1	0.63
Oct-2017	*ND*	*ND*	*0.0677 J*	*ND*	2.84	0.221	*ND*	4.9	30.4	*ND*	*15 J*	3.1	4.85
May-2018	*2 J*	*ND*	*ND*	*ND*	3.1	*ND*	*ND*	4.4	24.4	*ND*	60	*3.2 J*	*2.5*
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	3	0.18	*ND*	4.64	19.4	*ND*	*ND*	*3.2 J*	*5.7*
May-2019	*ND*	*NA*	*ND*	*ND*	*ND*	0.17	*ND*	4.63	15.4	*ND*	*ND*	*ND*	4.78
Oct-2019	*2.5 JH1*	*NA*	*ND*	*ND*	*2.6 J*	0.2	*ND*	4.53	20.6	*ND*	38	3.5	2.1
May-2020	*ND*	*NA*	*ND*	*ND*	*2.7 J*	0.19	*ND*	4.4	20.7	*ND*	*ND*	3.5	3.22
Oct-2020	*ND*	*NA*	*ND*	*ND*	*2.8 J*	0.21	*ND*	4.48	19.4	*ND*	*ND*	3.4	3.96
Apr-2021	*ND*	*NA*	*ND*	*ND*	*2.9 J*	0.17	*ND*	4.86	22.4	*ND*	*ND*	3.4	5.94

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17A***													
Nov-1993	NA	ND	ND	NA	ND	0.46	NA	ND	NA	ND	0.37	0.08	ND	0.32	NA
Apr-1994	NA	ND	ND	NA	ND	0.76	NA	ND	NA	ND	0.24	0.93	ND	0.46	NA
Apr-1995	ND	ND	0.8	ND	ND	0.27	NA	ND	ND	ND	0.03	ND	ND	0.33	NA
Oct-1996	ND	ND	0.013	ND	ND	0.65	0.61	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	**0.007**	ND	0.025	ND	ND	1.4	0.55	ND	ND	ND	ND	ND	ND	0.66	ND
Oct-1997	ND	ND	0.011	ND	ND	0.646	0.542	ND	ND	ND	0.115	ND	ND	0.338	0.279
Apr-1998	ND	ND	0.01	ND	ND	0.648	0.608	ND	ND	ND	0.097	ND	ND	0.341	0.315
Apr-1999	ND	ND	0.01	ND	ND	0.686	0.638	ND	ND	ND	0.196	ND	ND	0.369	0.34
Oct-1999	ND	ND	0.01	ND	ND	0.668	0.619	ND	ND	ND	ND	ND	ND	0.36	0.335
Apr-2000	ND	ND	ND	ND	ND	0.699	0.628	ND	ND	ND	0.361	ND	ND	0.346	0.317
Oct-2000	ND	ND	ND	ND	ND	0.722	0.682	ND	ND	ND	ND	ND	ND	0.366	0.347
Apr-2001	ND	ND	ND	ND	ND	0.699	NA	ND	ND	ND	ND	NA	ND	0.366	NA
Sep-2001	ND	ND	ND	ND	ND	0.675	0.677	ND	ND	ND	0.092	ND	ND	0.358	0.347
Mar-2002	ND	ND	0.011	ND	ND	0.661	0.662	ND	ND	ND	ND	ND	ND	0.348	0.349
Sep-2002	ND	ND	0.011	ND	ND	0.631	0.619	ND	ND	ND	0.067	ND	ND	0.341	0.337
Mar-2003	ND	ND	ND	ND	ND	0.657	0.621	ND	ND	ND	ND	ND	ND	0.368	0.341
Oct-2003	ND	ND	0.011	ND	ND	0.979	0.622	ND	ND	ND	0.086	ND	ND	0.401	0.349
Apr-2004	ND	ND	ND	ND	ND	0.723	0.711	ND	ND	ND	0.166	ND	ND	0.385	0.369
Oct-2004	ND	ND	ND	ND	ND	0.649	0.643	ND	ND	ND	ND	ND	ND	0.347	0.354
Apr-2005	ND	ND	0.011	ND	ND	0.674	0.664	ND	ND	ND	ND	ND	ND	0.367	0.36
Oct-2005	ND	ND	0.011	ND	ND	0.676	0.645	ND	ND	ND	ND	ND	ND	0.334	0.319

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17A***													
Mar-2006	ND	ND	ND	ND	ND	0.373	0.356	ND	ND	ND	ND	ND	ND	0.293	0.291
Sep-2006	ND	ND	ND	ND	ND	0.619	0.614	ND	ND	ND	ND	ND	ND	0.333	0.327
Mar-2007	ND	ND	ND	ND	ND	0.617	0.599	ND	ND	ND	ND	ND	ND	0.327	0.323
Sep-2007	ND	ND	ND	ND	ND	0.568	0.55	ND	ND	ND	ND	ND	ND	0.312	0.308
Mar-2008	ND	ND	0.01	ND	ND	0.603	0.606	ND	ND	ND	ND	ND	ND	0.313	0.316
Sep-2008	ND	ND	0.011	ND	ND	0.629	0.62	ND	ND	ND	ND	ND	ND	0.35	0.334
Mar-2009	ND	ND	ND	ND	ND	0.663	0.594	ND	ND	ND	ND	ND	ND	0.317	0.306
Oct-2009	ND	ND	ND	ND	ND	0.566	0.564	ND	ND	ND	ND	ND	ND	0.303	0.325
Apr-2010	ND	ND	ND	ND	ND	0.695	0.49	ND	ND	ND	ND	ND	ND	0.341	0.298
Oct-2010	ND	ND	ND	ND	ND	0.681	0.61	ND	ND	ND	ND	0.11	ND	0.373	0.349
Apr-2011	ND	ND	0.01	ND	ND	0.619	0.578	ND	ND	ND	ND	ND	ND	0.326	0.323
Sep-2011	ND	ND	ND	ND	ND	0.756	0.745	ND	ND	ND	ND	ND	ND	0.408	0.364
Mar-2012	ND	ND	0.011	ND	0.004	0.476	0.456	ND	0.016	0.029	ND	ND	ND	0.363	0.327
Sep-2012	ND	ND	0.0106	0.00024 J	ND	0.714	0.707	0.0012 J	0.0033 J	0.0019 J	0.0251 J	0.0327 J	ND	0.358	0.354
Mar-2013	ND	ND	0.0105	0.000213 J	ND	0.77	0.725	0.0017 J	0.0034 J	0.0018 J	0.0127 J	0.0068 J	0.0016 J	0.323	0.294
Oct-2013	ND	ND	0.0106	ND	ND	0.755	0.729	0.0024 J	0.0029 J	0.0017 J	ND	ND	ND	0.3	0.317
Mar-2014	0.000468 J	ND	0.0096 J	0.000304 J	ND	0.642	0.537	0.0012 J	0.0028 J	0.0025 J	0.0127 J	0.0046 J	ND	0.358	0.286
Oct-2014	0.000907 J	ND	0.0105	0.000251 J	ND	0.689	0.703	0.000956 J	0.0031 J	0.0017 J	0.0108 J	ND	ND	0.345	0.351
Apr-2015	0.000929 J	ND	0.0108	0.000254 J	ND	0.705	0.702	0.000605 J	0.0033 J	0.0017 J	0.011 J	0.0739	ND	0.365	0.357
Nov-2015	0.000479 J	ND	0.0113	0.000303 J	ND	0.854	0.817	0.000597 J	0.0033 J	0.0017 J	ND	0.0179 J	ND	0.389	0.389
May-2016	ND	ND	0.0108	0.00027 J	ND	0.725	0.626	0.0011 J	0.0029	0.0016 J	ND	ND	ND	0.381	0.347
Oct-2016	ND	ND	0.0097	0.00026 J	ND	0.653	0.688	ND	0.0028	0.0015 J	ND	ND	ND	0.335	0.356
May-2017	ND	ND	0.0108	0.00027 J	ND	0.666	0.649	0.0017 J	0.0031	0.0016 J	ND	ND	ND	0.354	0.35
Oct-2017	ND	ND	0.0095	0.00024 J	ND	0.673	0.699	0.0013 J	0.003	0.0016 J	ND	ND	ND	0.339	0.327

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17A***													
May-2018	*0.00004 J*	*ND*	0.011	*0.00027 J*	*0.000032 J*	*0.71 J*	*0.74 J*	*0.0025 J*	0.0035	*0.002 J*	0.028	*0.011 J*	*0.000043 JB*	*0.35 J*	*0.38 J*
Nov-2018	*ND*	*ND*	0.011	0.0003	*0.000034 J*	*0.7 J*	*0.7 J*	0.015	0.0065	0.0024	0.13	0.11	*0.000027 J*	*0.36 J*	*0.36 J*
May-2019	*ND*	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	0.017	0.0068	0.0022	0.13	0.094	*ND*	*ND*	*ND*
Oct-2019	*0.00011 J*	*ND*	0.01	*0.00027 J*	*0.00014 J*	0.76	*0.72 J*	*0.0062 J*	0.0032	*0.0019 J*	*0.03 J*	0.022	*ND*	0.39	*0.37 J*
May-2020	*0.000053 J*	*ND*	0.01	*0.00022 J*	*ND*	0.75	*0.72 J*	0.01	0.0043	0.0036	*0.055 J*	0.035	*ND*	0.39	*0.38 JB*
Oct-2020	*ND*	*ND*	*0.0087 J*	*ND*	*ND*	0.75	*0.72 J*	*0.0058 J*	0.0033	*ND*	*0.07 JB*	0.022	*ND*	0.37	*0.38 J*
Apr-2021	*ND*	*ND*	0.012	*0.00028 J*	*ND*	*0.75 J*	*0.72 J*	*0.0033 J*	*0.0035 J*	*0.0032 J*	*ND*	*ND*	*ND*	0.38	0.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-17A*												
Nov-1993	ND	NA	ND	NA	0.49	NA	ND	NA	1.2	NA	NA	NA	ND
Apr-1994	0.01	NA	ND	NA	0.57	NA	ND	NA	1.39	NA	NA	NA	0.19
Apr-1995	ND	NA	ND	ND	0.59	NA	ND	ND	0.96	NA	ND	ND	0.02
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	1.8	1.7	ND	ND	0.054
Apr-1997	0.011	ND	ND	0.044	1.9	1.4	ND	ND	1.2	1.6	ND	ND	0.065
Oct-1997	ND	ND	NA	ND	ND	ND	ND	ND	0.99	0.658	ND	ND	0.012
Apr-1998	ND	0.023	NA	ND	0.889	0.711	ND	ND	1.13	1.17	ND	ND	ND
Apr-1999	ND	ND	NA	ND	ND	ND	ND	ND	1.22	1.1	ND	ND	ND
Oct-1999	ND	ND	NA	ND	ND	ND	ND	ND	1.21	1.13	ND	ND	ND
Apr-2000	ND	ND	NA	ND	ND	ND	ND	ND	1.11	1.07	ND	ND	0.011
Oct-2000	ND	ND	NA	ND	0.771	0.842	ND	ND	1.35	1.15	ND	ND	ND
Apr-2001	ND	NA	NA	ND	1.05	NA	ND	ND	1.19	NA	ND	ND	ND
Sep-2001	ND	ND	NA	ND	ND	ND	ND	ND	1.16	1.14	ND	ND	ND
Mar-2002	ND	ND	NA	ND	ND	ND	ND	ND	1.2	1.15	ND	ND	ND
Sep-2002	ND	ND	NA	ND	0.837	ND	ND	ND	1.17	1.15	ND	ND	ND
Mar-2003	ND	ND	NA	ND	ND	ND	ND	ND	1.16	1.1	ND	ND	ND
Oct-2003	ND	ND	NA	ND	1.3	ND	ND	ND	2.06	1.12	ND	ND	0.012
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	1.18	1.22	ND	ND	ND
Oct-2004	ND	ND	ND	ND	0.83	ND	ND	ND	1.28	1.24	ND	ND	ND
Apr-2005	ND	ND	ND	ND	0.65	0.59	ND	ND	1.18	1.14	ND	ND	ND
Oct-2005	ND	ND	ND	ND	0.602	0.607	ND	ND	1.09	1.03	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	0.859	0.818	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-17A***												
Sep-2006	ND	ND	ND	ND	0.526	0.514	ND	ND	1.03	1.03	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	1.01	0.996	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	0.355	ND	ND	1.08	1.01	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.53	0.549	ND	ND	1.07	1.07	ND	ND	ND
Sep-2008	ND	ND	ND	ND	0.525	ND	ND	ND	1.13	1.08	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.07	1.04	ND	ND	0.018
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	0.995	0.944	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.2	1.04	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.2	1.08	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.03	1.01	ND	ND	ND
Sep-2011	ND	ND	ND	ND	0.517	ND	ND	ND	1.3	1.27	ND	ND	ND
Mar-2012	0.016	ND	ND	0.024	0.521	ND	ND	ND	1.18	1.12	ND	0.03	0.011
Sep-2012	0.0064 J	0.006 J	ND	0.0052 J	0.481 J	0.474 J	ND	ND	1.16	1.15	0.000259 J	ND	0.0074 J
Mar-2013	0.0065 J	0.0057 J	0.000048 J	0.0053 J	0.421 J	0.394 J	ND	ND	1.05	0.984	ND	ND	0.0197
Oct-2013	0.0057 J	0.0058 J	ND	0.0052 J	0.427 J	0.454 J	ND	ND	1.05	1.13	ND	ND	0.0169
Mar-2014	0.0056 J	0.0047 J	ND	0.0046 J	0.494 J	0.512	ND	ND	1.05	1.1	0.000376 J	ND	0.0071 J
Oct-2014	0.0059 J	0.0061 J	ND	0.0051 J	0.468 J	0.474 J	ND	ND	1.26	1.29	0.0012 J	ND	0.0088 J
Apr-2015	0.0063 J	0.0065 J	ND	0.0052 J	0.507	0.492 J	0.000917 J	ND	1.29	1.28	ND	ND	0.0093 J
Nov-2015	0.0065 J	0.0068 J	ND	0.0052 J	0.526	0.527	ND	ND	1.34	1.39	0.000182 J	ND	0.0081 J
May-2016	0.0058	0.0057	ND	0.0049	0.504	0.465	ND	ND	1.26	1.13	ND	ND	0.0083 J,B
Oct-2016	0.0056	0.0062 J+	ND	0.0048	0.439	0.507	ND	ND	1.13	1.22	ND	ND	0.0063 J
May-2017	0.0059	0.006	ND	0.0054	0.486	0.49	ND	ND	1.1	1.12	ND	ND	0.0066 J
Oct-2017	0.0062	0.0053	ND	0.0057	0.444	0.464	ND	ND	1.05	1.09	ND	ND	0.0059 J
May-2018	0.0064	0.0056	ND	0.0086	ND	ND	ND	ND	1.5 J	1.2 J	ND	0.0039	0.0077 B

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-17A***												
Nov-2018	0.0083	0.0069	*ND*	0.025	*ND*	*ND*	*0.00012 J*	*ND*	*1.1 J*	*1.2 J*	*ND*	0.0023	0.0098
May-2019	0.013	0.0073	*ND*	0.027	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.014
Oct-2019	0.0073	0.0065	*ND*	0.0074	*ND*	*ND*	*ND*	*ND*	*ND*	*1.4 J*	*ND*	0.0073	0.012
May-2020	0.009	0.0063	*ND*	0.013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0099	0.0073
Oct-2020	0.0068	0.0062	*ND*	0.008	*ND*	*ND*	*ND*	*ND*	*1.3 J*	*ND*	*ND*	*0.00063 J*	*ND*
Apr-2021	0.0068	0.006	*ND*	*0.0081 J*	*0.49 J*	0.5	*ND*	*ND*	1.2	1.2	*ND*	*ND*	*0.0058 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	22	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17A*																
Feb-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17A*																
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.2 J*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.5 B	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17A***															
Feb-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17A***															
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17A***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Feb-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17A***															
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.5 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1 BCH	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-21***											
Nov-1993	ND	ND	0.2	ND	14.9	0.8	0.2	4.76	116.2	19.6	34	12.8	ND
Apr-1994	ND	ND	0.2	ND	14.5	1	ND	4.47	126	21.9	50	17.15	4
Apr-1995	ND	ND	ND	ND	17.4	0.9	ND	4.4	125	23.9	44	14.5	4.4
Apr-1997	ND	ND	ND	22	15	0.62	ND	NA	NA	22	71	11	7
Oct-1997	ND	ND	0.2	ND	15	0.382	ND	5.58	117.4	24.5	80	20	0.9
Apr-1998	ND	ND	ND	ND	14.8	0.52	ND	4.61	124.2	19.8	69	31	27
Apr-1999	ND	ND	0.19	ND	17.9	0.392	ND	4.03	125.6	23.3	83	22	14
Oct-1999	ND	ND	0.06	ND	14.4	0.374	ND	4.5	152.3	19.5	79	19	4.3
Apr-2000	ND	ND	ND	ND	19.3	0.95	ND	5.01	113	32.8	82	21	2.2
Oct-2000	ND	NA	ND	ND	12.1	0.37	ND	6.12	136.3	23.2	83	21.3	8.24
Apr-2001	ND	NA	ND	ND	15.4	0.785	ND	NA	NA	27.4	84	23	7.9
Sep-2001	ND	ND	ND	ND	16.8	1.83	ND	4.45	150	28.5	87	23.9	3.7
Mar-2002	ND	ND	ND	ND	19.1	0.896	ND	4.5	155	28.4	89	24.4	1.8
Sep-2002	ND	ND	ND	ND	20	1.04	ND	4.5	152.3	31.1	73	21.1	2.3
Mar-2003	ND	ND	ND	ND	22.8	1.01	ND	4.4	153.8	29.4	103	23.7	4.5
Oct-2003	ND	ND	ND	ND	12.8	1.69	ND	4.3	128.3	20.8	78	20.2	5.2
Apr-2004	ND	ND	ND	ND	16.1	0.575	ND	4.3	120.1	28.4	77	22.9	8.8
Oct-2004	ND	ND	ND	ND	11.3	0.504	ND	3.7	107.7	25.9	71	19	5.2
Apr-2005	ND	ND	ND	11	16.8	0.74	ND	4.4	108.9	24.1	85	21.2	8.3
Oct-2005	ND	ND	ND	ND	13.4	0.48	ND	3.9	103.8	32.5	74	17.3	363
Mar-2006	ND	ND	ND	ND	16	0.53	ND	4.5	125.8	36.2	71	19.4	3.9
Sep-2006	ND	ND	ND	ND	16	0.46	ND	4.3	119.1	28.6	75	20.1	2.1
Mar-2007	ND	ND	0.46	ND	16.5	0.51	ND	4.2	111.2	30.5	83	19.4	2.1
Sep-2007	ND	ND	ND	ND	16.4	0.96	ND	4.5	103.7	30.4	94	17.4	1.1
Mar-2008	ND	ND	0.47	ND	23.1	ND	ND	4.1	118.5	33.3	91	20.7	5.7
Sep-2008	ND	ND	ND	ND	21.8	0.74	ND	4.3	121.5	34.9	88	19	4.7
Mar-2009	ND	ND	ND	ND	23.7	0.89	ND	4	132.3	33.8	97	20.8	4.9
Oct-2009	ND	ND	ND	ND	29.7	0.83	ND	4.1	133	32.4	115	19.5	51
Apr-2010	ND	ND	ND	ND	30.5	1	ND	3.6	142.7	33	58	20.8	9.8
Oct-2010	ND	ND	ND	ND	21.4	0.88	ND	3.6	114.2	26.4	77	20.2	51
Apr-2011	2.9	2.9	ND	ND	23.9	0.75	ND	3.9	144.2	21	89	19.5	5.1
Sep-2011	ND	ND	0.26	ND	26.3	1.05	ND	4.5	126.1	27.2	95	20.7	0.28
Mar-2012	ND	ND	ND	ND	22	0.68	ND	3.6	125.4	30	100	20.3	0.2
Sep-2012	ND	ND	ND	ND	19.2	0.654	ND	4.2	115.1	29.6	97	20.1	0.149
Mar-2013	0.52 J	0.52 J	ND	ND	29.9	0.931	ND	4.3	147.6	26.8	102	18.5	0.112
Oct-2013	0.4	0.4	ND	ND	22.1	0.731	ND	3.2	103.7	26.6	86	19.6	0.667

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-21***											
Mar-2014	*ND*	*ND*	*ND*	10	24.4	0.754	*ND*	4.5	146.1	33.8	92	20.8	0.196
Oct-2014	*ND*	*ND*	*ND*	*ND*	17.2	0.523	*ND*	4.3	113.2	28.7	50	19.2	0.727
Apr-2015	0.96	0.96	*ND*	*ND*	23.7	0.887	*ND*	3.9	123.8	29.6	78	22.5	0.284
Nov-2015	*ND*	*ND*	*ND*	*8 J*	19.1	0.769	*ND*	4.5	156.8	27.4	62	22.8	0.283
May-2016	*ND*	*ND*	*ND*	*6 J*	22	1	*ND*	4.5	216	30.8	78	22.5	0.156
Oct-2016	*ND*	*ND*	*ND*	*ND*	21.7	*NA*	*NA*	4.5	181.9	24.2	93	21.1	2.34
May-2017	*ND*	*ND*	*ND*	*5 J*	24	1.27	*ND*	4.4	227	27	98	22	1.71
Oct-2017	*ND*	*ND*	*ND*	*7 J*	26.9	1.63	*ND*	4.5	262	30.4	89	23.8	4.81
May-2018	*ND*	*ND*	*ND*	*7.9 J*	32	0.46	*ND*	4.2	246	26.9	80	28.9	2.86
Nov-2018	*ND*	*ND*	*ND*	*ND*	32	2.2	*ND*	4.26	170.1	24.9	98	27.4	4.76
May-2019	*ND*	*NA*	*ND*	*ND*	22.8	1.6	*ND*	3.96	116.5	23.7	96	25.3	5.4
Oct-2019	*ND*	*NA*	*ND*	*6 J*	17.5	1.4	*ND*	4.06	138.7	24.3	73	22.8	1.81
May-2020	*ND*	*NA*	*ND*	*ND*	28.2	1.9	*ND*	4.1	158.5	26.6	74	27	3.41
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	28.1	2	*ND*	4.13	163.4	29.2	81	26.3	1.35
Apr-2021	*ND*	*NA*	*ND*	*ND*	23	1.9	*ND*	4.33	184.6	26.7	78	25.6	5.71

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-21***													
Nov-1993	NA	ND	ND	NA	ND	2	NA	ND	NA	ND	0.03	0.12	ND	1.9	NA
Apr-1994	NA	ND	ND	NA	ND	2.91	NA	ND	NA	ND	0.24	ND	ND	2.4	NA
Apr-1995	ND	ND	0.6	ND	ND	2	NA	ND	ND	ND	0.35	0.05	ND	2.3	NA
Oct-1996	ND	ND	0.12	ND	ND	4.5	4.9	ND	ND	ND	ND	ND	ND	2	2
Apr-1997	0.006	ND	0.11	ND	ND	4	4.1	ND	ND	ND	ND	ND	ND	1.8	2.1
Oct-1997	ND	ND	0.114	ND	ND	3.99	4.02	ND	0.014	ND	ND	ND	ND	2.07	2.09
Apr-1998	ND	ND	0.194	ND	ND	6.7	4.7	ND	0.019	ND	0.246	ND	ND	3.43	2.38
Apr-1999	ND	ND	0.13	ND	ND	4.66	4.35	ND	0.012	ND	0.179	ND	ND	2.39	2.24
Oct-1999	ND	ND	0.127	ND	ND	4.3	3.98	ND	0.014	0.031	0.068	ND	ND	2.25	2.08
Apr-2000	ND	ND	0.115	ND	ND	4.75	4.55	ND	0.012	ND	ND	ND	ND	2.3	2.2
Oct-2000	ND	ND	0.106	ND	ND	4.9	4.83	ND	0.012	ND	0.101	ND	ND	2.21	2.18
Apr-2001	ND	ND	0.115	ND	ND	5.22	NA	ND	0.014	ND	0.166	NA	ND	2.39	NA
Sep-2001	ND	ND	0.121	ND	ND	5.4	5.39	ND	0.012	ND	0.079	ND	ND	2.52	2.45
Mar-2002	ND	ND	0.11	ND	ND	5.71	5.39	ND	0.013	ND	0.078	ND	ND	2.47	2.43
Sep-2002	ND	ND	0.119	ND	ND	4.72	4.76	ND	0.01	ND	0.091	ND	ND	2.26	2.27
Mar-2003	ND	ND	0.123	ND	ND	5.42	5.3	ND	0.012	ND	ND	ND	ND	2.49	2.41
Oct-2003	ND	ND	0.105	ND	ND	4.72	4.45	ND	ND	ND	0.065	ND	ND	2.04	2
Apr-2004	ND	ND	0.105	ND	ND	5.53	5.53	ND	ND	ND	0.123	ND	ND	2.21	2.19
Oct-2004	ND	ND	0.102	ND	ND	4.2	4.19	ND	0.011	ND	0.128	ND	ND	2.06	2.05
Apr-2005	ND	ND	0.112	ND	ND	4.84	4.6	ND	ND	ND	0.122	ND	ND	2.21	2.17
Oct-2005	ND	0.002	0.099	ND	ND	4.04	3.74	ND	ND	ND	2.38	ND	ND	1.74	1.66

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-21***													
Mar-2006	ND	ND	0.103	ND	ND	4.46	4.36	ND	ND	ND	ND	ND	ND	2.01	1.94
Sep-2006	ND	ND	0.097	ND	ND	4.77	4.76	ND	0.011	ND	ND	ND	ND	1.98	1.99
Mar-2007	ND	ND	0.092	ND	ND	4.68	4.76	ND	0.012	ND	ND	ND	ND	1.86	1.87
Sep-2007	ND	0.002	0.084	ND	ND	4.13	4.07	ND	ND	ND	ND	ND	ND	1.72	1.71
Mar-2008	ND	ND	0.101	ND	ND	4.85	4.35	ND	0.012	ND	0.074	ND	ND	2.09	1.84
Sep-2008	ND	ND	0.086	ND	ND	4.38	4.37	ND	0.011	ND	0.067	ND	ND	1.97	1.96
Mar-2009	ND	ND	0.096	ND	ND	4.95	4.8	ND	ND	ND	0.078	ND	ND	2.05	2.01
Oct-2009	ND	ND	0.089	ND	ND	4.65	4.9	ND	ND	ND	0.898	ND	ND	1.91	2.01
Apr-2010	ND	ND	0.087	ND	ND	5.06	4.92	ND	0.01	ND	0.11	ND	ND	1.99	1.98
Oct-2010	ND	ND	0.086	ND	ND	4.73	4.72	ND	0.013	ND	1.28	ND	ND	2.03	2
Apr-2011	ND	ND	0.09	ND	ND	4.79	4.7	ND	ND	ND	0.165	ND	ND	1.83	1.82
Sep-2011	ND	ND	0.092	ND	ND	4.9	4.86	ND	ND	ND	ND	ND	ND	2.07	2.02
Mar-2012	ND	ND	0.088	ND	ND	4.69	4.62	ND	ND	ND	ND	ND	ND	2.08	2.05
Sep-2012	ND	ND	0.0898	0.000585 J	0.000276 J	4.72	4.71	0.0024 J	0.0096 J	0.0024 J	0.0469 J	0.0228 J	ND	2.03	1.98
Mar-2013	ND	ND	0.0813	0.000462 J	0.000305 J	4.47	5.23	0.0017 J	0.009 J	0.0025 J	0.0121 J	0.007 J	0.0013 J	1.78	2.01
Oct-2013	ND	ND	0.0899	0.000545 J	0.000395 J	4.8	4.87	0.0048 J	0.0098 J	0.0024 J	ND	ND	ND	1.85	1.94
Mar-2014	0.000344 J	0.00009 J	0.0884	0.000622 J	0.000346 J	4.93	4.93	0.0011 J	0.0089 J	0.0024 J	0.009 J	0.0072 J	ND	2.06	2.11
Oct-2014	0.000961 J	0.000473 J	0.0834	0.000457 J	0.000301 J	4.62	4.63	0.0016 J	0.0089 J	0.0023 J	0.0101 J	0.0082 J	ND	1.86	1.86
Apr-2015	0.000744 J	ND	0.0981	0.000598 J	0.000275 J	5.42	5.47	0.000653 J	0.0102	0.0025 J	ND	0.0108 J	ND	2.19	2.25
Nov-2015	0.000487 J	0.000599 J	0.0931	0.000635 J	0.000341 J	5.65	5.69	0.000609 J	0.0091 J	0.0024 J	ND	ND	ND	2.12	2.14
May-2016	ND	0.00086 J	0.0875	0.00053 J	0.00037 J	5.47	5.38	0.00086 J	0.0103	0.0025 J	ND	ND	ND	2.15	2.18
Oct-2016	ND	0.0016 J	0.0821	0.00049 J	0.00031 J	5.02	4.84	0.00085 J	0.01	0.0028 J	ND	ND	ND	2.08	2.04
May-2017	ND	0.0013 J	0.0866	0.0005 J	0.00024 J	5.27	5.76	0.0015 J	0.0088	0.0026 J	ND	ND	ND	2.14	2.26
Oct-2017	ND	0.00099 J	0.087	0.00053 J	0.00031 J	5.68	6.29	0.0014 J	0.0103	0.0026 J	ND	ND	ND	2.34	2.53

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-21***													
May-2018	*0.000059 J*	*ND*	0.076	0.00053	*0.00053 J*	7.2	6.8	*0.0019 JB*	0.0092	*0.00069 J*	*ND*	*ND*	*0.00011 JB*	2.7	2.5
Nov-2018	*ND*	*ND*	0.071	0.00054	*0.00042 J*	6.8	6.8	*0.0054 J*	0.0076	0.0024	0.04	*0.016 J*	*0.000092 J*	2.5	2.5
May-2019	*ND*	*ND*	0.068	0.00046	*ND*	6.3	6.1	*ND*	0.004	*ND*	*ND*	*ND*	*ND*	2.4	2.2
Oct-2019	*0.00011 J*	*ND*	0.074	0.00043	*0.00048 J*	5.6	5.4	*0.0058 J*	0.0084	0.0024	*0.014 J*	*0.0098 J*	*0.000069 J*	2.1	2
May-2020	*0.000068 J*	*ND*	0.084	0.00053	*0.00038 J*	6.6	6.4	*0.0052 J*	0.0093	*ND*	*0.015 J*	*0.012 J*	*ND*	2.6	2.5
Oct-2020	*ND*	*ND*	0.068	*0.00041 J*	*ND*	6.5	6.3	*0.0049 J*	0.0077	*ND*	*ND*	*ND*	*ND*	2.5	2.4
Apr-2021	*ND*	*ND*	0.077	*0.00054 J*	*ND*	6.4	6.5	*0.0011 J*	0.0083	*0.0035 J*	*ND*	*ND*	*ND*	2.3	2.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-21***												
Nov-1993	0.17	NA	ND	NA	2	NA	ND	NA	3	NA	NA	NA	0.04
Apr-1994	0.17	NA	ND	NA	2.59	NA	ND	NA	11.2	NA	NA	NA	0.09
Apr-1995	0.16	NA	ND	ND	2.2	NA	ND	ND	9.3	NA	ND	ND	0.08
Oct-1996	0.12	0.13	NA	ND	ND	ND	ND	ND	9.8	9.9	ND	ND	0.18
Apr-1997	0.13	0.13	ND	ND	3.7	3.1	ND	ND	8	9.1	0.002	ND	0.23
Oct-1997	0.149	0.151	NA	0.013	1.81	2.46	ND	ND	8.32	8.35	ND	ND	0.051
Apr-1998	0.22	0.153	NA	0.011	3.52	2.33	ND	ND	16	10.9	ND	ND	0.084
Apr-1999	0.158	0.149	NA	ND	1.58	2.01	ND	ND	11.5	10.8	ND	ND	0.05
Oct-1999	0.155	0.146	NA	0.018	2.71	2.75	ND	ND	10.8	9.99	ND	ND	0.062
Apr-2000	0.133	0.128	NA	ND	1.91	2.1	ND	ND	10.9	10.4	ND	ND	0.041
Oct-2000	0.134	0.131	NA	ND	2.3	1.94	ND	ND	10	9.79	ND	ND	0.039
Apr-2001	0.147	NA	NA	ND	3.52	NA	ND	ND	11.3	NA	ND	ND	0.044
Sep-2001	0.145	0.146	NA	ND	3.01	2.66	ND	ND	13.1	12.1	ND	ND	0.044
Mar-2002	0.137	0.139	NA	ND	3.65	3.48	ND	ND	14.2	13.1	ND	ND	0.047
Sep-2002	0.139	0.141	NA	ND	2.12	2.07	ND	ND	12.8	12.7	ND	ND	0.044
Mar-2003	0.147	0.145	NA	ND	2.47	2.14	ND	ND	13.4	12.7	ND	ND	0.045
Oct-2003	0.16	0.164	NA	ND	2.24	2.76	ND	ND	8.91	8.29	ND	ND	0.045
Apr-2004	0.154	0.152	ND	ND	2.12	2.14	ND	ND	10.3	10.7	ND	ND	0.043
Oct-2004	0.188	0.187	ND	ND	1.88	1.87	ND	ND	7.81	7.63	ND	ND	0.048
Apr-2005	0.175	0.176	ND	ND	2.21	1.86	ND	ND	10.5	9.96	ND	ND	0.053
Oct-2005	0.148	0.142	ND	ND	1.83	1.59	ND	ND	8.39	7.29	ND	0.013	0.044
Mar-2006	0.141	0.138	ND	ND	1.64	1.58	ND	ND	9.97	9.69	ND	ND	0.02

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-21***												
Sep-2006	0.154	0.156	ND	ND	1.79	1.82	ND	ND	9.83	9.95	ND	ND	0.039
Mar-2007	0.139	0.139	ND	ND	1.68	1.69	ND	ND	9.37	9.39	ND	ND	0.043
Sep-2007	0.137	0.137	ND	ND	1.42	1.33	ND	ND	8.11	8.01	ND	ND	0.05
Mar-2008	0.154	0.136	ND	ND	1.95	1.66	ND	ND	11.6	10.3	ND	ND	0.047
Sep-2008	0.137	0.136	ND	ND	1.63	1.6	ND	ND	11.7	11.6	ND	ND	0.038
Mar-2009	0.146	0.144	ND	ND	1.81	1.72	ND	ND	13.7	13.3	ND	ND	0.043
Oct-2009	0.135	0.141	ND	ND	1.56	1.5	ND	ND	14.6	14.9	ND	ND	ND
Apr-2010	0.132	0.131	ND	ND	1.71	1.66	ND	ND	17	16.8	ND	ND	0.038
Oct-2010	0.143	0.142	ND	ND	1.63	1.61	ND	ND	13	13.1	ND	ND	0.047
Apr-2011	0.127	0.124	ND	ND	1.35	1.29	ND	ND	14.2	14	ND	ND	0.049
Sep-2011	0.137	0.136	ND	ND	1.73	1.73	ND	ND	15.9	16	ND	ND	0.037
Mar-2012	0.13	0.128	ND	ND	1.6	1.57	ND	ND	13.3	13.3	ND	ND	0.036
Sep-2012	0.125	0.126	0.000024 J	0.0057 J	1.57	1.6	0.000692 J	ND	13.8	13.5	ND	ND	0.0393
Mar-2013	0.12	0.138	0.000061 J	0.0049 J	1.46	1.65	0.000602 J	ND	14.8	16.3	ND	ND	0.0415
Oct-2013	0.127	0.128	ND	0.0052 J	1.57	1.59	0.000675 J	ND	12.3	12.9	ND	0.002 J	0.0484
Mar-2014	0.111	0.113	ND	0.0043 J	1.66	1.69	ND	ND	13.1	13.4	ND	ND	0.033
Oct-2014	0.112	0.112	0.000023 J	0.0056 J	1.59	1.58	0.0028	ND	9.32	9.39	ND	ND	0.035
Apr-2015	0.133	0.135	ND	0.0051 J	1.71	1.77	0.0029	ND	12.9	13.2	ND	ND	0.0376
Nov-2015	0.124	0.127	ND	0.0048 J	1.73	1.74	0.0039	ND	11.1	11.2	0.000151 J	ND	0.0369
May-2016	0.123	0.125	ND	0.0048	1.75	1.75	ND	ND	13.4	14	ND	ND	0.04
Oct-2016	0.118	0.124	ND	0.0054	1.67	1.7	ND	ND	12.6	12.9	ND	ND	0.0371
May-2017	0.116	0.118	ND	0.0049	1.76	1.86	ND	ND	14.5	14.6	ND	ND	0.0347
Oct-2017	0.117	0.123	ND	0.005	1.9	2.07	ND	ND	13.3 J-	16.9	ND	ND	0.0361
May-2018	0.1	0.1	ND	0.00071 B	1.5 J	1.6 J	0.0013 J	ND	21.6	19.5	ND	0.0023	0.0066

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-21***												
Nov-2018	0.094	0.095	*ND*	0.0062	*2.1 J*	*2.1 J*	*0.00064 J*	*ND*	19.6	19.9	*ND*	0.002	0.026
May-2019	0.098	0.095	*ND*	0.0031	*ND*	*ND*	*ND*	*ND*	14.8	14.1	*ND*	*ND*	0.013
Oct-2019	0.11	0.1	*ND*	0.0054	*2.2 J*	*2 J*	*0.00062 J*	*ND*	14.2	12.6	*ND*	0.0075	0.036
May-2020	0.13	0.12	*ND*	0.0052	*2 J*	*2.1 J*	*ND*	*ND*	18	18	*ND*	0.0098	0.032
Oct-2020	0.13	0.11	*ND*	0.0039	*ND*	*1.9 J*	*ND*	*ND*	18.8	17.3	*ND*	0.016	0.025
Apr-2021	0.1	0.1	*ND*	*0.0036 J*	1.9	1.9	*ND*	*ND*	15.6	15.8	*ND*	*0.0008 J*	0.024

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-21***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	25	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-21*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 J	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-21*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.5 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-21***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.5	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*0.6 J*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-21***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.44 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.37 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.39 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*0.49 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.36 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-21***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.416 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-21***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	1.4	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	0.7 J	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-21***															
Oct-2005	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*0.29 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.29 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-21***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.1 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.4 BCH	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:	***TW-22***												
Nov-1993	5	5	0.2	ND	7.1	0.8	ND	5.44	40.4	2.6	ND	5.18	84
Apr-1994	ND	ND	0.1	ND	4.6	0.8	ND	5.28	172	ND	22	63.1	14.3
Apr-1995	ND	ND	ND	4	4	0.7	ND	4.6	29.3	2.6	15	2.9	9.3
Apr-1997	ND	ND	ND	ND	5	0.79	ND	NA	NA	ND	78	6.2	16
Oct-1997	ND	ND	0.2	ND	4.85	0.733	ND	5.98	51.3	ND	30	5	76
Apr-1998	ND	ND	ND	ND	5.12	0.93	ND	6.28	28.3	0.7	28	5.1	58
Apr-1999	ND	ND	0.5	ND	3.51	0.591	ND	4.62	29.6	ND	14	4.6	11
Oct-1999	ND	ND	0.09	ND	4.81	0.987	ND	4.86	39.5	ND	32	4.5	6.1
Apr-2000	ND	ND	ND	ND	2.96	ND	ND	5.11	29	ND	30	4.2	1.7
Oct-2000	ND	NA	ND	ND	5.77	1.08	ND	5.3	24.1	ND	32	6.57	15.4
Apr-2001	1.2	NA	ND	ND	5.47	0.561	ND	NA	NA	ND	35	6.5	220
Sep-2001	ND	ND	ND	ND	7.55	1.84	ND	4.93	28	ND	32	6.77	301
Mar-2002	2.1	2.1	ND	13	6.11	1.15	ND	4.9	36.5	ND	54	6.65	139
Sep-2002	ND	ND	ND	ND	6.2	0.93	ND	4.9	35.3	ND	62	6.75	163
Mar-2003	ND	ND	ND	ND	15.6	1.07	ND	4.8	38.1	ND	48	5.84	150
Oct-2003	ND	ND	ND	ND	5.15	0.783	ND	5	44.3	ND	17	6.29	222
Apr-2004	ND	ND	ND	ND	4.93	0.709	ND	4.6	31.5	1.54	31	4.98	138
Oct-2004	ND	ND	ND	ND	4.68	0.71	ND	4.9	32.6	ND	23	4.81	5.3
Apr-2005	ND	ND	ND	ND	5.01	0.76	ND	4.6	29.4	3.61	45	5.7	284
Oct-2005	1.7	1.7	ND	ND	5.4	0.78	ND	4.6	28.7	1.77	43	4.51	0.18
Mar-2006	1.9	1.9	ND	ND	5.16	0.77	ND	5.1	33.3	3.93	18	3.88	0.42
Sep-2006	1.7	1.7	ND	ND	5.05	0.75	ND	5.1	33.3	1.78	21	5.56	0.23
Mar-2007	1.7	1.7	ND	ND	5.32	0.81	ND	4.8	32.3	1.33	ND	5.04	0.21
Sep-2007	1.6	1.6	ND	ND	5.14	0.81	ND	6.1	32.7	1.28	47	4.9	ND
Mar-2008	1.4	1.4	ND	ND	16.6	1.72	ND	4.4	33.5	4.72	13	4.84	0.29
Sep-2008	1.6	1.6	0.25	ND	5.79	0.86	ND	4.5	35.6	ND	23	5.3	0.2
Mar-2009	1.9	1.9	ND	ND	5.91	0.85	ND	4.5	36.7	1.58	31	5.11	0.39
Oct-2009	2	2	ND	ND	5.94	0.76	ND	4.1	34.8	1.38	14	5.39	0.28
Apr-2010	1.8	1.8	ND	ND	6.68	0.81	ND	3.7	38.4	2.68	70	5	ND
Oct-2010	1.8	1.8	ND	ND	7.32	0.82	ND	4.2	38.7	1.61	23	6.5	1.2
Apr-2011	1.8	1.8	ND	ND	7.03	0.81	ND	4.3	41	1.66	42	5.8	0.52
Sep-2011	1.6	1.6	ND	ND	7.71	0.86	ND	4.5	39	1.24	23	6.37	0.23
Mar-2012	1.6	1.6	ND	ND	8.18	0.86	ND	3.9	42.8	2.3	53	6.54	0.24
Sep-2012	1.32	1.32	ND	ND	8.79	0.849	ND	4.1	43.1	3.6	29	6.8	0.149
Mar-2013	1.92	1.92	ND	ND	9.97	1.03	ND	4.7	49.4	1.19	31	7.32	0.113
Oct-2013	1.96 J	1.96 J	0.134 J	ND	9.55	0.986	ND	5.8	48.3	1.19	37	7.05	0.19

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-22***											
Mar-2014	1.88	1.88	*ND*	*ND*	10.2	0.904	*ND*	4.9	54.1	2.71	29	7.67	0.4
Oct-2014	*ND*	*ND*	*ND*	*ND*	12.3	0.952	*ND*	4.8	54.5	2.86	29	8.6	1.08
Apr-2015	1.92	1.92	*ND*	*ND*	14.3	1.21	*ND*	3.7	61.4	2.75	32	10.3	0.533
Nov-2015	*ND*	*ND*	*ND*	*6 J*	14.6	1.19	*ND*	4.8	98.9	3.48	37	10.4	0.165
May-2016	*ND*	*ND*	*ND*	*ND*	13.9	1.14	*ND*	4.9	102.6	2.63	36	9.2	0.09 J
Oct-2016	*ND*	*ND*	*ND*	*ND*	14.2	*NA*	*NA*	4.7	95.7	1.88	41	8.4	0.382
May-2017	*ND*	*ND*	*ND*	*ND*	14.9	1.11	*ND*	4.6	98.6	2.56	29	8.9	0.93
Oct-2017	2.8	2.8	*ND*	*7 J*	16.2	1.2	*ND*	4.7	116.5	4.97	50	11.8	7.83
May-2018	16 B	16	*ND*	*10.1 J*	15.2	0.48	*ND*	4.6	94.6	29.8	79	54.2	2.72
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	14.7	0.97	*ND*	4.56	70.6	*5.6 J*	*ND*	9.1	6.96
May-2019	*ND*	*NA*	*ND*	*ND*	21.6	1.2	*ND*	4.47	74.7	*ND*	57	12.7	6.91
Oct-2019	*ND*	*NA*	*ND*	*6 J*	22.4	1.3	*ND*	4.16	113.4	*ND*	53	14.9	3.93
May-2020	*ND*	*NA*	*ND*	*ND*	22	1.2	*ND*	4.11	98.1	*ND*	48	13	4.17
Oct-2020	*ND*	*NA*	*ND*	*ND*	21.1	1	*ND*	4.36	91.7	2.8	38	11.9	8.87
Apr-2021	*ND*	*NA*	*0.072 J*	*ND*	21.5	1.1	*ND*	4.59	103.4	*ND*	35	12.1	8.71

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22***													
Nov-1993	NA	ND	ND	NA	ND	0.82	NA	0.009	NA	ND	3.8	0.29	ND	0.76	NA
Apr-1994	NA	ND	ND	NA	ND	1.64	NA	ND	NA	ND	0.16	0.12	ND	0.68	NA
Apr-1995	ND	ND	0.9	ND	ND	0.41	NA	ND	ND	ND	ND	ND	ND	0.45	NA
Oct-1996	ND	ND	0.011	ND	ND	0.79	0.83	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	0.041	ND	ND	2.2	0.72	ND	0.023	ND	0.43	ND	ND	0.79	ND
Oct-1997	ND	ND	0.013	ND	ND	0.877	0.806	ND	ND	ND	0.656	ND	ND	0.49	0.465
Apr-1998	ND	ND	0.029	ND	ND	1.01	0.956	ND	ND	ND	1.7	ND	ND	0.613	0.506
Apr-1999	ND	ND	0.015	ND	ND	0.947	0.807	ND	ND	ND	0.482	ND	ND	0.546	0.502
Oct-1999	ND	ND	0.013	ND	ND	0.907	0.833	ND	ND	ND	ND	ND	ND	0.541	0.502
Apr-2000	ND	ND	0.011	ND	ND	0.81	0.773	ND	ND	ND	ND	ND	ND	0.529	0.495
Oct-2000	ND	ND	0.013	ND	ND	1.54	1.09	ND	ND	0.011	0.268	ND	ND	0.662	0.594
Apr-2001	ND	ND	0.02	ND	ND	1.46	NA	ND	ND	ND	2.25	NA	ND	0.686	NA
Sep-2001	ND	ND	0.014	ND	ND	1.42	1.11	ND	ND	ND	0.575	ND	ND	0.782	0.607
Mar-2002	ND	ND	0.016	ND	ND	1.49	1.09	ND	ND	ND	0.624	ND	ND	0.71	0.629
Sep-2002	ND	ND	0.016	ND	ND	1.59	1.08	ND	ND	ND	0.408	ND	ND	0.675	0.598
Mar-2003	ND	ND	0.015	ND	ND	1.21	1.1	ND	ND	ND	ND	ND	ND	0.686	0.636
Oct-2003	ND	ND	0.02	ND	ND	1.42	0.984	ND	ND	ND	1.14	ND	ND	0.668	0.612
Apr-2004	ND	ND	0.013	ND	ND	0.95	0.958	ND	ND	ND	ND	ND	ND	0.633	0.606
Oct-2004	ND	ND	0.013	ND	ND	0.878	0.886	ND	ND	ND	0.067	ND	ND	0.636	0.62
Apr-2005	ND	ND	0.018	ND	ND	1.22	0.874	ND	ND	ND	1.47	ND	ND	0.645	0.594
Oct-2005	ND	ND	0.013	ND	ND	0.911	0.862	ND	ND	ND	ND	ND	ND	0.544	0.534

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22***													
Mar-2006	ND	ND	0.01	ND	ND	0.736	0.66	ND	ND	ND	ND	ND	ND	0.496	0.486
Sep-2006	ND	ND	0.013	ND	ND	1.2	0.88	ND	ND	ND	ND	ND	ND	0.622	0.658
Mar-2007	ND	ND	0.015	ND	ND	0.931	0.874	ND	ND	ND	ND	ND	ND	0.661	0.64
Sep-2007	ND	ND	0.014	ND	ND	0.863	0.825	ND	ND	ND	ND	ND	ND	0.668	0.648
Mar-2008	ND	ND	0.015	ND	ND	0.936	0.846	ND	ND	ND	ND	ND	ND	0.608	0.617
Sep-2008	ND	ND	0.016	ND	ND	0.934	0.926	ND	ND	ND	ND	ND	ND	0.722	0.704
Mar-2009	ND	ND	0.014	ND	ND	0.913	0.893	ND	ND	ND	ND	ND	ND	0.688	0.666
Oct-2009	ND	ND	0.016	ND	ND	0.938	0.916	ND	ND	ND	ND	ND	ND	0.741	0.726
Apr-2010	ND	ND	0.014	ND	ND	0.878	0.881	ND	ND	ND	ND	ND	ND	0.684	0.688
Oct-2010	ND	ND	0.014	ND	ND	1.15	1.12	ND	ND	ND	ND	ND	ND	0.881	0.878
Apr-2011	ND	ND	0.018	ND	ND	1.04	1.01	ND	ND	ND	ND	ND	ND	0.768	0.754
Sep-2011	ND	ND	0.018	ND	ND	1.24	1.25	ND	ND	ND	ND	ND	ND	0.794	0.788
Mar-2012	ND	ND	0.019	ND	ND	1.12	1.13	ND	ND	ND	ND	ND	ND	0.908	0.902
Sep-2012	ND	ND	0.0187	0.000215 J	ND	1.23	1.26	ND	0.008 J	0.0037 J	0.0364 J	0.0396 J	ND	0.906	0.997
Mar-2013	ND	ND	0.0202	0.000232 J	ND	1.41	1.32	0.003 J	0.0088 J	0.0071 J	0.0383 J	0.0062 J	0.0016 J	0.923	0.759
Oct-2013	ND	ND	0.0223	0.000213 J	ND	1.4	1.46	0.0016 J	0.0087 J	0.004 J	ND	ND	ND	0.863	0.943
Mar-2014	ND	ND	0.0235	0.00026 J	0.000094 J	1.52	1.7	0.0027 J	0.0073 J	0.0054 J	0.073	0.0562	ND	0.94	1.08
Oct-2014	0.000768 J	ND	0.0281	0.000346 J	0.000097 J	1.55	1.62	0.0013 J	0.01	0.0051 J	0.0143 J	ND	ND	1.15	1.18
Apr-2015	0.000774 J	ND	0.0332	0.00028 J	0.00012 J	1.86	1.79	0.0012 J	0.0109	0.0058 J	0.0177 J	0.0262 J	ND	1.37	1.34
Nov-2015	0.000428 J	ND	0.0325	0.00035 J	0.000131 J	1.86	2.04	0.000665 J	0.0104	0.005 J	ND	ND	0.000458 J	1.41	1.38
May-2016	ND	ND	0.0304	0.0003 J	ND	1.56	1.78	ND	0.011	0.0051	ND	ND	ND	1.28	1.3
Oct-2016	ND	ND	0.0291	0.00026 J	ND	1.5	1.49	0.00075 J	0.0101	0.0052	ND	ND	ND	1.13	1.18
May-2017	ND	ND	0.0285	0.00025 J	ND	1.46	1.64	0.00087 J	0.0087	0.0044	ND	ND	ND	1.27	1.35
Oct-2017	ND	ND	0.0267	0.00026 J	0.00024 J	2.4	2.05	0.0013 J	0.0094	0.0191	0.539	0.0811 J	0.0044	1.41	1.37

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22***													
May-2018	*0.0001 J*	*ND*	0.036	*ND*	*0.0001 J*	15.9	1.6	*0.0066 JB*	0.0029	0.0043	0.24	*0.015 J*	*0.000079 JB*	3.5	1.4
Nov-2018	*ND*	*ND*	0.03	*0.00028 J*	*0.00011 J*	1.5	1.7	0.022	0.007	0.0037	0.13	0.079	*0.0001 J*	1.3	1.4
May-2019	*ND*	*ND*	0.04	0.00038	*ND*	2.1	2.1	0.017	0.0098	0.0051	*ND*	0.054	*ND*	1.8	1.8
Oct-2019	*0.00019 J*	*ND*	0.049	0.00037	*0.00063 J*	2.3	2.3	0.0094	0.0094	0.011	*0.046 J*	0.032	*0.00017 J*	2.2	2.1
May-2020	*0.000058 J*	*ND*	0.041	*0.00028 J*	*ND*	2.1	2.1	0.021	0.011	0.0066	0.11	0.042	*ND*	1.9	1.8
Oct-2020	*ND*	*ND*	0.032	*0.00027 J*	*ND*	2.1	2	*0.031 J*	0.01	*0.0098 J*	0.19	0.099	*ND*	1.6	1.6
Apr-2021	*ND*	*ND*	0.043	*0.00038 J*	*ND*	2	2	0.015	0.01	0.014	0.088	*0.05 J*	*ND*	1.7	1.7

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-22*												
Nov-1993	ND	NA	ND	NA	1.6	NA	ND	NA	3.3	NA	NA	NA	0.01
Apr-1994	0.02	NA	ND	NA	0.85	NA	ND	NA	2.6	NA	NA	NA	0.04
Apr-1995	ND	NA	ND	ND	1	NA	ND	ND	1.8	NA	ND	ND	0.01
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	3.2	3.3	ND	ND	0.068
Apr-1997	0.012	ND	0.0014	ND	2.4	1.6	ND	ND	2.7	2.6	ND	ND	0.084
Oct-1997	ND	ND	NA	ND	0.802	0.886	ND	ND	2	1.98	ND	ND	0.014
Apr-1998	ND	0.018	NA	ND	2	0.939	ND	ND	2.23	2.25	ND	ND	0.014
Apr-1999	ND	ND	NA	ND	0.588	0.71	ND	ND	2.19	2.09	ND	ND	0.015
Oct-1999	ND	ND	NA	0.012	0.947	1.66	ND	ND	2.41	2.16	ND	ND	0.011
Apr-2000	ND	ND	NA	ND	0.605	ND	ND	ND	2.4	2.28	ND	ND	0.01
Oct-2000	ND	ND	NA	ND	1.2	0.734	ND	ND	3.23	2.67	ND	ND	0.019
Apr-2001	ND	NA	NA	ND	1.81	NA	ND	ND	3.35	NA	ND	ND	0.017
Sep-2001	ND	ND	NA	0.014	1.1	0.794	ND	ND	3.83	2.64	ND	ND	0.023
Mar-2002	ND	ND	NA	ND	0.932	0.822	ND	ND	4.13	2.84	ND	ND	0.017
Sep-2002	0.01	ND	NA	0.011	0.434	1.02	ND	ND	3.12	2.76	ND	ND	0.019
Mar-2003	ND	ND	NA	ND	0.908	0.713	ND	ND	3.04	2.88	ND	ND	0.013
Oct-2003	ND	ND	NA	0.014	0.771	ND	ND	ND	3.63	2.68	ND	ND	0.023
Apr-2004	ND	ND	ND	ND	1.4	1.28	ND	ND	2.5	2.47	ND	ND	ND
Oct-2004	ND	ND	ND	ND	1.23	0.7	ND	ND	2.41	2.24	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.26	1.03	ND	ND	3.27	2.38	ND	ND	0.015
Oct-2005	ND	ND	ND	0.011	0.933	0.89	ND	ND	2.43	2.25	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.644	0.584	ND	ND	2.54	2.36	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22***												
Sep-2006	ND	ND	ND	ND	0.893	0.959	ND	ND	2.31	2.4	ND	ND	0.042
Mar-2007	ND	ND	ND	ND	0.874	0.852	ND	ND	2.43	2.39	ND	ND	0.019
Sep-2007	ND	ND	ND	ND	0.778	0.729	ND	ND	2.57	2.44	ND	ND	ND
Mar-2008	ND	ND	ND	ND	1.06	1.02	ND	ND	2.57	2.21	ND	ND	ND
Sep-2008	ND	ND	ND	ND	0.847	0.819	ND	ND	2.66	2.53	ND	ND	ND
Mar-2009	ND	ND	ND	ND	0.951	0.933	ND	ND	2.73	2.68	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.705	0.627	ND	ND	2.69	2.52	ND	ND	ND
Apr-2010	ND	ND	ND	ND	0.79	0.783	ND	ND	3.02	2.96	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.907	0.926	ND	ND	3.43	3.64	ND	ND	0.012
Apr-2011	ND	ND	ND	ND	0.673	0.645	ND	ND	3.27	3.17	ND	ND	0.012
Sep-2011	ND	ND	ND	ND	0.909	0.928	ND	ND	3.9	3.84	ND	ND	0.011
Mar-2012	ND	ND	ND	ND	0.876	0.851	ND	ND	3.96	3.86	ND	ND	0.01
Sep-2012	0.0318	0.0101	0.000022 J	0.0099 J	0.877	0.879	ND	ND	3.96	4.02	ND	ND	0.009 J
Mar-2013	0.0101	0.0089 J	0.00003 J	0.0123	0.9	0.878	ND	0.000033 J	4.54	4.54	0.00046 J	ND	0.0264
Oct-2013	0.01 J	0.0111	ND	0.0109 J	0.881	0.908	ND	ND	4.39	4.49	ND	0.0014 J	0.0199
Mar-2014	0.0111	0.0117	ND	0.0136	0.923	0.966	ND	0.000054 J	4.34	4.81	0.000268 J	0.000699 J	0.0103
Oct-2014	0.0131	0.0136	ND	0.0138	1.03	1.02	ND	ND	6.03	5.97	ND	ND	0.0169
Apr-2015	0.0156	0.0153	ND	0.015	1.13	1.09	ND	ND	7.58	7.28	ND	ND	0.0202
Nov-2015	0.0153	0.015	ND	0.0137	1.19	1.17	0.000479 J	ND	7.46	7.24	0.000174 J	ND	0.0177
May-2016	0.0146	0.0158	ND	0.0145	1.07	1.15	ND	ND	7.28	7	ND	ND	0.0164 J
Oct-2016	0.0122	0.0146	ND	0.0133	1.03	1.06	ND	ND	6.75	6.99	ND	ND	0.0143 J
May-2017	0.0152	0.0157	ND	0.0121	1.06	1.09	ND	ND	7.54	7.91	ND	ND	0.0122 J
Oct-2017	0.0211	0.0231	0.000051 J	0.0229	1.09	1.09	ND	ND	9.27	9.11	ND	ND	0.134
May-2018	0.041	0.017	ND	0.0056	3.4 J	ND	0.0014 J	ND	11.9	8	ND	0.0021	0.0043 JB

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22***												
Nov-2018	0.018	0.017	*ND*	0.023	*0.99 J*	*1.2 J*	*0.00028 J*	*ND*	7.5	7.7	*ND*	0.0029	0.012
May-2019	0.024	0.024	*ND*	0.022	*ND*	*ND*	*ND*	*ND*	10.5	10	*ND*	*ND*	0.014
Oct-2019	0.026	0.029	*ND*	0.016	*1.7 J*	*1.5 J*	*0.00062 J*	*ND*	13.4	12.1	*ND*	0.0029	0.03
May-2020	0.028	0.027	*ND*	0.024	*ND*	*1.3 J*	*0.00062 JM1*	*ND*	11.6	10.1	*ND*	0.013 D6M1	0.015
Oct-2020	0.024	0.025	*ND*	0.031	*ND*	*1.1 J*	*ND*	*ND*	10.7	9.4	*ND*	*0.0023 J*	*0.015 J*
Apr-2021	0.027	0.025	*ND*	0.024	1.2	1.1	*ND*	*ND*	11.3	11	*ND*	*ND*	0.013

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-22***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5 J	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.9 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.3 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.25 J*	*0.37 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.6 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.401 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.23 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-22A***											
Nov-1993	50	50	0.2	ND	30	ND	ND	5.25	217	9.3	90	15.9	8.3
Apr-1994	69	69	2.2	20.2	61.7	ND	ND	5.62	341	7.5	182	30.36	4.2
Apr-1995	99.9	99.9	1.4	ND	44.4	ND	ND	5.5	379	16.6	ND	28.6	4.4
Apr-1997	ND	10	ND	ND	6	0.14	ND	NA	NA	5.6	113	15	3
Oct-1997	47	47	0.59	ND	7.36	0.228	ND	6.37	96.9	7.1	80	26	5
Apr-1998	92	92	1.2	15	16.8	ND	ND	6.24	75.2	7.17	150	28	21
Apr-1999	67	67	1.5	ND	15.2	ND	ND	5.14	57.1	4.99	96	17	30
Oct-1999	57	57	1.2	ND	21.3	ND	ND	5.89	92.7	8.3	140	21	27
Apr-2000	21	21	1.7	ND	32.3	ND	ND	6.31	131	10.4	102	17	2.2
Oct-2000	23	NA	2.8	16	31.8	ND	ND	6.07	98	10.1	108	17	3.05
Apr-2001	14	NA	1.9	ND	14.6	ND	ND	NA	NA	2.59	91	14	7.9
Sep-2001	11	11	4.8	14	83.3	1.21	ND	5.27	209	29.4	205	28.8	58
Mar-2002	12	12	2.6	ND	50.6	0.264	ND	5	58.7	25.2	137	21.4	26
Sep-2002	7	7	2	ND	42.4	0.76	ND	5	48.1	22.6	112	16.6	12
Mar-2003	2.5	2.5	ND	ND	14	ND	ND	4.9	52.1	12.7	52	14.1	15
Oct-2003	2.2	2.2	0.55	15	4.38	0.49	ND	5.4	66.4	8.49	17	15.3	6.9
Apr-2004	5.3	5.3	0.43	19	28.3	ND	ND	6	71.2	8.39	84	18.1	12
Oct-2004	4.8	4.8	0.55	ND	21.9	0.11	ND	4.3	67.4	10.4	72	14.1	1.4
Apr-2005	2.2	2.2	ND	ND	10.1	0.55	ND	4.6	78.8	11.6	55	13.6	2.2
Oct-2005	2.6	2.6	ND	ND	6	0.67	ND	4.9	46.6	10.4	55	12.2	5.2
Mar-2006	3	3	ND	ND	5.48	0.65	ND	5.1	48.1	11.4	31	11.2	0.65
Sep-2006	3	3	ND	ND	4.61	0.35	ND	4.7	44.5	8.85	31	11.7	4.6
Mar-2007	3.1	3.1	ND	ND	4.54	0.35	ND	4.5	38.9	8.38	19	10.8	1
Sep-2007	2.8	2.8	ND	ND	4.22	0.28	ND	6.1	40.5	7.67	55	10.8	0.68
Mar-2008	3.2	3.2	ND	ND	16.2	1.12	ND	4.5	43.5	16	22	10.5	5.9
Sep-2008	3.2	3.2	ND	ND	4.75	0.21	ND	4.6	41.9	10.7	25	11.2	0.88
Mar-2009	3.4	3.4	ND	ND	5.57	0.35	ND	4.4	46	7.32	36	11.5	0.73
Oct-2009	3.4	3.4	ND	ND	10.4	0.8	ND	4.3	61.1	7.43	43	14	1.7
Apr-2010	2.8	2.8	ND	ND	19.5	1.33	ND	3.9	86.7	8.81	113	16.9	2.7
Oct-2010	2.7	2.7	ND	ND	29.8	1.66	ND	4.6	113.5	7.86	84	21.2	0.13
Apr-2011	2.4	2.4	ND	ND	32.5	1.48	ND	4.3	129.1	8.18	94	18.9	2.7
Sep-2011	2.6	2.6	ND	ND	30.6	1.31	ND	4.4	115.3	10.1	83	21	1.8
Mar-2012	2.6	2.6	ND	ND	16.6	0.73	ND	3.6	80.8	10.5	84	18.4	4
Sep-2012	2.12	2.12	ND	ND	18.8	0.747	ND	4.1	79.8	11.1	62	18.9	3.1
Mar-2013	2.96	2.96	ND	ND	31.2	1.1	ND	4.7	121	8.15	77	18.5	0.707
Oct-2013	2.8	2.8	ND	ND	27.3	0.953	ND	6	110.7	9.18	67	19.5	4.29

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-22A***											
Mar-2014	2.68	2.68	*ND*	*ND*	31.1	1.08	*ND*	4.9	129.8	9.94	91	22.3	1.24
Oct-2014	*ND*	*ND*	*ND*	*ND*	44.4	1.37	*ND*	4.8	146.5	11.9	88	25	2.83
Apr-2015	2.84	2.84	*ND*	*ND*	49.8	1.68	*ND*	3.9	157.1	12.7	106	27.9	0.611
Nov-2015	*ND*	*ND*	*ND*	*6 J*	45.2	1.55	*ND*	4.9	205	13.1	96	26.2	10.7
May-2016	*ND*	*ND*	*ND*	*ND*	32.5	1.16	*ND*	4.8	203	12.6	74	21.9	0.759
Oct-2016	*ND*	*ND*	*ND*	*ND*	40.4	*NA*	*NA*	4.6	221	9.36	97	22.8	2.52
May-2017	*ND*	*ND*	*ND*	10	40.5	1.17	*ND*	4.7	240	10.8	76	24.4	1.04
Oct-2017	*ND*	*ND*	*ND*	*ND*	45.4	1.36	*ND*	4.8	264	11.1	96	27	6
May-2018	*2 JB*	*ND*	*ND*	*ND*	42.6	0.24	*ND*	4.4	228	10.4	78	27.1	2.64
Nov-2018	*1 JB*	*ND*	*ND*	*5.7 J*	57.2	1.6	*ND*	4.44	232.1	*9.3 J*	99	27.4	6.69
May-2019	*ND*	*NA*	*ND*	*ND*	56.8	1.7	*ND*	4.48	213.4	*ND*	135	32.7	8.34
Oct-2019	*ND*	*NA*	*ND*	*6 J*	61.4	1.9	*ND*	4.16	260.8	12.9	142	32.2	4.12
May-2020	*ND*	*NA*	*ND*	*6.9 J*	95.5	2.3	*ND*	4.03	350	12.6	182	33.8	5.82
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	94.5	2.4	*ND*	4.19	350.2	19	178	39.7	6.97
Apr-2021	*ND*	*NA*	*ND*	*8.3 J*	82.2	1.8	*ND*	4.42	339.7	15.7	160	34.8	11.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-22A*													
Nov-1993	NA	ND	ND	NA	ND	3.4	NA	ND	NA	ND	18.4	18.3	ND	1.8	NA
Apr-1994	NA	ND	ND	NA	ND	5.89	NA	ND	NA	ND	27.7	22.7	ND	3.8	NA
Apr-1995	ND	ND	0.6	ND	ND	5.2	NA	ND	ND	ND	50.1	47	ND	3.8	NA
Oct-1996	ND	**0.12**	0.054	ND	ND	8.1	8.6	ND	ND	ND	40	37	ND	3.6	3.7
Apr-1997	ND	ND	0.055	ND	ND	3.4	2.4	ND	ND	ND	16	11	ND	2	1.5
Oct-1997	ND	**0.065**	0.043	ND	ND	2.76	2.44	ND	ND	ND	20	15	ND	1.69	1.61
Apr-1998	ND	ND	0.058	ND	ND	6.16	6.1	ND	ND	ND	57	56	ND	3.06	3.05
Apr-1999	ND	ND	0.04	ND	ND	3.66	3.55	ND	ND	ND	38.5	36.7	ND	1.82	1.78
Oct-1999	ND	ND	0.033	ND	ND	2.82	2.44	ND	ND	ND	0.597	0.083	ND	1.5	1.36
Apr-2000	ND	ND	0.042	ND	ND	3.55	3.3	ND	ND	ND	0.894	0.472	ND	1.95	1.81
Oct-2000	ND	ND	0.041	ND	ND	3.65	3.68	ND	ND	ND	4.38	4.02	ND	1.92	1.92
Apr-2001	ND	ND	0.039	ND	ND	2.83	NA	ND	ND	ND	1.01	NA	ND	1.77	NA
Sep-2001	ND	ND	0.069	ND	ND	5.81	6.18	ND	ND	ND	8.81	1.55	ND	3.47	3.64
Mar-2002	ND	ND	0.054	ND	ND	4.35	2.24	ND	ND	ND	3.46	ND	ND	2.55	1.83
Sep-2002	ND	ND	0.056	ND	ND	3.09	2.14	ND	ND	ND	1.44	ND	ND	2.15	1.78
Mar-2003	ND	ND	0.073	ND	ND	2.23	2.1	ND	ND	ND	1.58	ND	ND	2.08	1.97
Oct-2003	ND	ND	0.07	ND	ND	2.78	3.28	ND	ND	ND	1.13	1.71	ND	2.04	1.95
Apr-2004	ND	ND	0.066	ND	ND	3.66	3.05	ND	ND	ND	1.61	2.01	ND	2.18	1.95
Oct-2004	ND	ND	0.062	ND	ND	2.76	2.55	ND	ND	ND	1.6	0.842	ND	1.75	1.72
Apr-2005	ND	ND	0.073	ND	ND	2.26	2.12	ND	ND	ND	0.366	0.118	ND	1.93	1.88
Oct-2005	ND	ND	0.066	ND	ND	2.04	1.77	ND	ND	ND	0.222	ND	ND	1.72	1.63

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22A***													
Mar-2006	ND	ND	0.065	ND	ND	1.69	1.66	ND	ND	ND	ND	ND	ND	1.7	1.68
Sep-2006	ND	ND	0.062	ND	ND	1.85	1.87	ND	ND	ND	0.113	ND	ND	1.71	1.72
Mar-2007	ND	ND	0.059	ND	ND	1.68	1.66	ND	ND	ND	ND	ND	ND	1.61	1.6
Sep-2007	ND	0.002	0.058	ND	ND	1.62	1.57	ND	ND	ND	0.14	ND	ND	1.63	1.58
Mar-2008	ND	ND	0.061	ND	ND	1.65	1.56	ND	ND	ND	0.232	ND	ND	1.55	1.46
Sep-2008	ND	ND	0.061	ND	ND	1.65	1.58	ND	ND	ND	ND	ND	ND	1.72	1.62
Mar-2009	ND	ND	0.064	ND	ND	1.77	1.7	ND	ND	ND	ND	ND	ND	1.73	1.67
Oct-2009	ND	ND	0.81	ND	ND	2.18	2.11	ND	ND	ND	ND	ND	ND	2.08	2.02
Apr-2010	ND	ND	0.095	ND	ND	2.8	2.67	ND	ND	ND	0.051	ND	ND	2.41	2.33
Oct-2010	ND	ND	0.116	ND	ND	3.45	3.25	ND	ND	ND	ND	ND	ND	3.06	2.93
Apr-2011	ND	ND	0.125	ND	ND	3.13	3.09	ND	ND	ND	0.171	ND	ND	2.7	2.67
Sep-2011	ND	ND	0.131	ND	ND	3.59	3.54	ND	ND	ND	0.083	ND	ND	2.93	2.91
Mar-2012	ND	ND	0.118	ND	ND	3.12	3.05	ND	ND	ND	0.22	0.132	ND	2.57	2.5
Sep-2012	ND	ND	0.115	0.00023 J	0.000299 J	3.24	3.24	0.002 J	0.0069 J	0.0031 J	0.0642	0.0258 J	ND	2.62	2.52
Mar-2013	ND	ND	0.113	0.000199 J	0.00036 J	3.22	3.78	0.0041 J	0.0073 J	0.004 J	0.0516	0.0259 J	0.0014 J	2.54	3.03
Oct-2013	ND	ND	0.132	0.00029 J	0.000255 J	3.38	3.34	0.0099 J	0.008 J	0.0036 J	0.0763	0.0189 J	ND	2.69	2.8
Mar-2014	ND	ND	0.148	0.00036 J	0.00034 J	3.8	3.81	0.0017 J	0.0073 J	0.0043 J	0.0757	0.0336 J	ND	3.1	3.16
Oct-2014	0.000489 J	ND	0.155	0.000342 J	0.000317 J	4.03	4.11	0.000798 J	0.0094 J	0.0044 J	0.04 J	ND	ND	3.63	3.67
Apr-2015	0.000647 J	ND	0.171	0.000472 J	0.000416 J	4.42	4.28	0.0013 J	0.01	0.0061 J	0.0228 J	0.0465 J	ND	4.09	4.04
Nov-2015	0.000376 J	0.000221 J	0.17	0.000477 J	0.000345 J	4.75	5.01	0.0052 J	0.01	0.006 J	0.331	0.0372 J	0.000558 J	3.48	3.57
May-2016	ND	ND	0.136	0.00044 J	0.0003 J	3.67	3.91	0.0015 J	0.0087	0.0056	ND	ND	ND	3.1	3.17
Oct-2016	ND	ND	0.144	0.00041 J	0.00032 J	3.65	4.08	0.0011 J	0.0098	0.0056	0.038 J	ND	ND	3.32	3.49
May-2017	ND	ND	0.14	0.00038 J	0.00029 J	3.65	3.45	0.0012 J	0.009	0.0052	ND	ND	ND	3.71	3.59
Oct-2017	ND	ND	0.148	0.00035 J	0.0003 J	3.97	4.13	0.0027 J	0.0105	0.0049	0.372	ND	0.00016 J	4.15	4.28

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22A***													
May-2018	*0.00005 J*	*ND*	0.13	0.00045	*0.00036 J*	3.9	3.7	*0.0013 JB*	0.0084	0.0055	*ND*	*ND*	*0.000069 JB*	4.2	4
Nov-2018	*ND*	*ND*	0.15	0.00066	*0.00043 J*	4.2	4.2	*0.0058 J*	0.0094	0.0065	0.22	0.07	*0.000079 J*	4.1	4.2
May-2019	*ND*	*ND*	0.18	0.00067	*ND*	5.5	5.2	0.0071	0.0078	0.0048	0.16	0.095	*ND*	4.6	4.2
Oct-2019	*0.00014 J*	*ND*	0.17	0.00069	*0.00084 J*	5.4	5.2	*0.0065 J*	0.012	0.012	0.1	0.084	*0.00012 J*	4.5	4.3
May-2020	*0.000075 J*	*ND*	0.18	0.00071	*0.00055 J*	5.9	5.7	0.0091	0.013	*0.0095 J*	0.32	0.078	*ND*	4.6	4.4
Oct-2020	*ND*	*ND*	0.15	*0.00052 J*	*ND*	6.7	6.2	*0.0062 J*	0.013	*0.0077 J*	0.12	0.077	*ND*	5.6	5.2
Apr-2021	*ND*	*ND*	0.17	*0.00067 J*	*0.00034 J*	5.9	5.7	0.0067	0.017	0.011	0.19	0.11	*ND*	4.9	4.7

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22A***												
Nov-1993	0.08	NA	ND	NA	3.3	NA	ND	NA	35.8	NA	NA	NA	ND
Apr-1994	0.15	NA	ND	NA	3.69	NA	ND	NA	50.2	NA	NA	NA	0.06
Apr-1995	0.11	NA	ND	ND	3.7	NA	ND	ND	19.4	NA	ND	ND	0.02
Oct-1996	0.085	0.09	NA	ND	ND	ND	ND	ND	23	24	ND	ND	0.035
Apr-1997	0.053	0.037	ND	ND	3	2.1	ND	ND	4.2	4.1	ND	ND	0.16
Oct-1997	0.04	0.04	NA	ND	0.955	0.623	ND	ND	3.31	2.89	ND	ND	ND
Apr-1998	0.075	0.095	NA	ND	2.15	2.62	ND	ND	9.73	9.68	ND	ND	ND
Apr-1999	0.04	0.039	NA	ND	1.94	1.84	ND	ND	10.7	10.4	ND	ND	ND
Oct-1999	0.043	0.039	NA	ND	2.17	2.61	ND	ND	11.1	8.85	ND	ND	ND
Apr-2000	0.062	0.058	NA	ND	2.67	2.18	ND	ND	24.7	22.7	ND	ND	ND
Oct-2000	0.077	0.083	NA	ND	4.34	4.61	ND	ND	23	23.5	ND	ND	ND
Apr-2001	0.066	NA	NA	ND	4	NA	ND	ND	17.8	NA	ND	ND	ND
Sep-2001	0.159	0.172	NA	ND	6.76	7.11	ND	ND	70.2	68.7	ND	ND	ND
Mar-2002	0.103	0.061	NA	ND	4.88	1.97	ND	ND	30.2	7.09	ND	ND	ND
Sep-2002	0.079	0.061	NA	ND	2.91	2.05	ND	ND	20.4	6.92	ND	ND	ND
Mar-2003	0.065	0.062	NA	ND	1.46	0.736	ND	ND	2.74	2.41	ND	ND	ND
Oct-2003	0.07	0.084	NA	ND	0.914	2.92	ND	ND	6.56	16.5	ND	ND	0.021
Apr-2004	0.081	0.079	ND	ND	3.84	2.04	ND	ND	18.1	14.8	ND	ND	ND
Oct-2004	0.052	0.051	ND	ND	1.66	1.55	ND	ND	16.7	13.9	ND	ND	ND
Apr-2005	0.059	0.057	ND	ND	1.09	1.04	ND	ND	5.98	4.73	ND	ND	0.012
Oct-2005	0.052	0.049	ND	ND	1.01	0.935	ND	ND	3.18	2.44	ND	ND	0.012
Mar-2006	0.04	0.039	ND	ND	0.526	0.548	ND	ND	2.51	2.47	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22A***												
Sep-2006	0.054	0.056	ND	ND	0.808	0.82	ND	ND	2.14	2.1	ND	ND	ND
Mar-2007	0.044	0.043	ND	0.012	0.809	0.804	ND	ND	2.06	2.02	ND	ND	0.018
Sep-2007	0.044	0.043	ND	ND	0.743	0.604	ND	ND	2	1.94	ND	ND	0.01
Mar-2008	0.042	0.04	ND	ND	1	0.935	ND	ND	1.84	1.73	ND	ND	0.011
Sep-2008	0.044	0.041	ND	ND	0.843	0.804	ND	ND	2.08	1.96	ND	ND	0.01
Mar-2009	0.046	0.044	ND	ND	0.947	0.908	ND	ND	2.49	2.37	ND	ND	0.011
Oct-2009	0.055	0.053	ND	ND	0.736	0.703	ND	ND	4.58	4.31	ND	ND	0.012
Apr-2010	0.066	0.064	ND	ND	1	0.973	ND	ND	9.49	9.43	ND	ND	0.019
Oct-2010	0.1	0.094	ND	ND	1.1	1.12	ND	ND	16	16	ND	ND	0.029
Apr-2011	0.096	0.094	ND	ND	0.87	0.878	ND	ND	16.9	16.6	ND	ND	0.029
Sep-2011	0.119	0.117	ND	ND	1.07	1.13	ND	ND	16	15.7	ND	ND	0.034
Mar-2012	0.107	0.103	0.0002	0.026	1.02	1.01	ND	ND	7.66	7.5	ND	ND	0.029
Sep-2012	0.106	0.104	0.00005 J	0.0078 J	1.01	1.01	0.000507 J	ND	8.23	8.19	ND	ND	0.0338
Mar-2013	0.1	0.117	0.00009 J	0.0103 J	0.997	1.13	ND	0.000027 J	12.3	14.5	ND	ND	0.0439
Oct-2013	0.101	0.102	ND	0.012	1.19	1.16	0.000502 J	ND	12.4	12.9	ND	0.0024 J	0.0388
Mar-2014	0.117	0.11	ND	0.0083 J	1.26	1.28	0.000771 J	ND	13.4	13.6	0.000178 J	0.000816 J	0.0331
Oct-2014	0.116	0.117	0.000127 J	0.0092 J	1.42	1.43	0.0016 J	ND	20.2	20.5	ND	ND	0.0393
Apr-2015	0.126	0.124	0.000219	0.0107 J	1.36	1.36	0.0021	ND	26.2	25.7	ND	ND	0.0529
Nov-2015	0.129	0.131	0.000393	0.014	1.42	1.46	0.0021	ND	22.8	23.2	0.000133 J	ND	0.0427
May-2016	0.117	0.117	0.0001 J	0.009	1.24	1.3	ND	ND	15.6	15.8	ND	ND	0.0467
Oct-2016	0.115	0.127	0.000051 J	0.0095	1.28	1.34	0.00044 J	ND	18	19.2	ND	ND	0.0445
May-2017	0.114	0.109	ND	0.0082	1.52	1.43	0.00048 J	ND	21.5	20.3	ND	ND	0.0379
Oct-2017	0.117	0.119	ND	0.009	1.62	1.66	0.00057 J	ND	18.6 J-	22.9	ND	0.00038 J	0.0376
May-2018	0.078	0.078	0.00014 J	0.0069	0.97 J	1 J	0.00078 J	ND	23.4	21.8	ND	0.0022	0.016

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22A***												
Nov-2018	0.12	0.12	0.00054	0.011	*1.4 J*	*1.7 J*	*0.00071 J*	*ND*	27.5	28.3	*ND*	0.003	0.034
May-2019	0.13	0.15	0.00062	0.0095	*ND*	*ND*	*ND*	*ND*	33.9	31.1	*ND*	0.0017	0.03
Oct-2019	0.14	0.11	0.00046	0.012	*2 J*	*2 J*	*0.00097 J*	*ND*	34.3	32.6	*ND*	0.0025	0.056
May-2020	0.15	0.15	0.00056	0.014	*ND*	*1.9 J*	*0.0019 JM1*	*ND*	47.6	40.7	*ND*	0.0099	0.047
Oct-2020	0.18	0.15	*0.00013 J*	0.012	*ND*	*1.8 J*	*ND*	*ND*	52.6	45.6	*ND*	*0.0012 J*	0.037
Apr-2021	0.14	0.13	*0.00018 J*	0.017	1.8	1.7	*ND*	*ND*	41	40.8	*ND*	*ND*	0.038

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-22A***																
Nov-1993	ND	ND	ND	ND	39	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	33	ND
Apr-1994	ND	ND	ND	ND	21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	54	ND
Oct-1996	ND	ND	ND	ND	86	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	57	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	34	ND	ND	ND	ND	ND	ND	0.7 J	0.9 J	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	27	ND	ND	ND	ND	ND	ND	0.5 J	0.6 J	2.3 J	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	31	ND	NA	NA	NA	NA	ND	0.7 J	0.6 J	ND	NA	NA	7.6	NA
Oct-1999	ND	ND	ND	ND	19	ND	ND	ND	ND	0.6 J	ND	0.6 J	1.1	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	8.3	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	12	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	6.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	6.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	6.4	ND
Apr-2005	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22A*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22A*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.6 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-22A*															
Nov-1993	**9.6**	ND	ND	ND	ND	1.2	ND	ND	4.4	ND	ND	15	ND	ND	ND	8	33
Apr-1994	3.9	ND	ND	ND	ND	ND	ND	ND	1.9 J	ND	ND	6.8	ND	ND	ND	3.5	18
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	ND	ND	ND	9	51
Apr-1997	**17**	ND	ND	ND	2	ND	ND	ND	4	ND	2	ND	15	ND	ND	54	28
Oct-1997	**8.3**	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	7.5	ND	ND	ND	6.1	42
Apr-1998	**6.4**	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	6.6	ND	ND	ND	5.4	16
Apr-1999	4.4	NA	NA	NA	NA	ND	NA	ND	1 J	ND	NA	5.8	NA	NA	NA	1.7	17
Oct-1999	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	ND	ND	ND	1.4	8.9
Apr-2000	1.4	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	1.5	NA	ND	NA	0.9 J	4
Oct-2000	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.1	5.7
Apr-2001	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	5.1	4.9
Sep-2001	0.8 J	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	1.1	ND	ND	ND	1.6	2.5
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	1
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	1
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.3
Oct-2004	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	3.9	6.7
Apr-2005	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	2.7	3.5
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22A***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.9 J
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.37 J	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	0.52 J,B	ND	ND	ND	ND	0.4 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.36 J	0.4 J,B	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	0.2 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	0.2 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*0.2 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.252 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22A***															
Nov-1993	ND	ND	5.2	ND	ND	ND	ND	**9**	ND	ND	ND	ND	**7.5**	ND	ND	**2.2**	NA
Apr-1994	ND	ND	1.3 J	ND	ND	ND	ND	3.2	ND	ND	ND	ND	5	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	**11**	ND	1.5	ND	ND	**11**	ND	ND	**3.8**	ND
Apr-1997	ND	ND	NA	NA	1	NA	ND	**8**	ND	ND	1	ND	**11**	ND	ND	**7**	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	3.7	ND	0.9 J	ND	ND	**7.9**	ND	ND	2	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	4.5	ND	0.7 J	ND	ND	**6.7**	ND	ND	1.9	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	3.8	ND	0.6 J	NA	NA	**6**	ND	NA	1.2	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	3	ND	ND	ND	ND	3.7	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	2.8	ND	ND	NA	NA	2.3	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	4.6	ND	ND	ND	ND	4.2	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	4.3	ND	ND	ND	ND	1.8	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	3.5	ND	ND	ND	ND	2.4	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	1.4	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	0.7 J	ND	ND	3.4	ND	ND	ND	ND	2.1	ND	ND	0.8 J	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22A***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*0.45 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.21 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*0.14 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22A***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-22B***											
Nov-1993	69	69	1.5	ND	20	ND	ND	5.31	227	9.6	142	15.2	2.7
Apr-1994	367	367	19.6	109.6	524	ND	ND	6.06	2.1	5.6	948	125.86	430
Apr-1995	216	216	10.8	27.1	133	ND	ND	5.8	823	8.9	376	35.6	150
Apr-1997	ND	26	ND	ND	4.5	0.02	ND	NA	NA	9.1	141	16	2
Oct-1997	95	95	0.87	ND	5.06	ND	ND	6.07	208	7.36	114	42	3.4
Apr-1998	102	102	6.7	14	28.6	ND	ND	5.96	319	7.08	160	30	4.9
Apr-1999	80	80	5.1	20	81.4	0.61	ND	6.32	545	30	560	36	270
Oct-1999	52	58	0.88	ND	4.35	ND	ND	5.18	152.1	9.13	91	13	2.5
Apr-2000	65	65	5.2	ND	1.05	ND	ND	6.27	253	12.7	131	29	38
Oct-2000	33	NA	4.4	15	47.4	ND	ND	5.34	425	15	148	25.9	161
Apr-2001	25	NA	11	55	239	ND	ND	NA	NA	75.4	631	78	390
Sep-2001	39	39	8.4	24	77.1	ND	ND	5.86	657	45.3	247	31.8	212
Mar-2002	38	38	6.3	16	30.4	ND	ND	5.9	419	24.6	242	30	33
Sep-2002	8.2	8.2	2.3	13	54.4	ND	ND	5.9	310	22	146	12.3	7.1
Mar-2003	11	11	1.1	ND	36.2	ND	ND	5.7	253	13.5	111	13.2	6.1
Oct-2003	2	2	ND	13	30	1.15	ND	4.8	168.3	12.2	63	16.5	3.5
Apr-2004	7.8	7.8	ND	16	22.3	2.81	ND	4.8	120.8	7.45	97	31.7	1.3
Oct-2004	21	21	ND	ND	8.79	2.27	ND	5.1	69.6	6.68	76	27.1	1.6
Apr-2005	4	4	ND	ND	5.31	0.48	ND	5	65.8	7.66	50	10.3	3.3
Oct-2005	2.7	2.7	ND	ND	3.91	3.04	ND	4.8	47.8	3.43	47	12.1	141
Mar-2006	4.5	4.5	ND	ND	4.14	0.42	ND	5.2	36.4	6.42	28	4.87	20
Sep-2006	4.8	4.8	0.54	ND	12.8	1.21	ND	4.6	71.7	9.5	74	10.6	3.5
Mar-2007	8.7	8.7	0.97	ND	20.1	0.21	ND	3.1	674	18.6	69	15.4	20
Sep-2007	1.7	1.7	ND	ND	4.76	6.67	ND	6	80.1	2.82	87	20.4	3
Mar-2008	5.3	5.3	0.52	ND	28.3	2.82	ND	4.6	102	22.9	63	17.5	5.5
Sep-2008	4.1	4.1	0.72	13	18.4	1.61	ND	4.7	108.1	20.1	79	17	24
Mar-2009	5.3	5.3	0.99	ND	16.4	0.12	ND	4.7	133.7	34.9	95	17	14
Oct-2009	4.3	4.3	0.41	10	17.9	0.21	ND	4.6	112.9	27.5	87	14.9	3.2
Apr-2010	1.6	1.6	ND	ND	9.26	6.17	ND	4.1	98.2	10.9	113	22.8	38
Oct-2010	2.8	2.8	0.22	ND	6.07	6.15	ND	5.3	84.1	5.63	71	25	17
Apr-2011	3.5	3.5	ND	ND	9.27	2.43	ND	4.4	97.8	17.3	77	23.3	28
Sep-2011	2.2	2.2	ND	ND	14.4	2.09	ND	4.4	95.3	20.2	74	23.4	58
Mar-2012	1.4	1.4	ND	ND	8.89	5.28	ND	3.5	93.6	10.3	80	22.9	16
Sep-2012	1.24	1.24	ND	ND	8.83	4.42	ND	4.1	88.9	15.9	80	22.8	37.9
Mar-2013	2.96	2.96	ND	ND	12.6	1.43	ND	4.8	115.4	28	84	26.5	30.6
Oct-2013	3.2	3.2	ND	13.1	13	0.803	ND	5.3	104.6	25.2	69	21.9	10

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-22B***											
Mar-2014	3.8	3.8	*ND*	*8 J*	18.5	1.17	*ND*	5	123.9	25.6	76	23.8	11.3
Oct-2014	*ND*	*ND*	*ND*	*ND*	9.18	4.44	*ND*	4.5	96.3	16.2	58	22.2	86.5
Apr-2015	2.8	2.8	*ND*	*ND*	8.54	1.66	*ND*	4	103	33.8	63	28.6	54.6
Nov-2015	*ND*	*ND*	*ND*	*6 J*	7.57	3.95	*ND*	4.2	110	18.9	58	25.7	45.1
May-2016	*ND*	*ND*	*ND*	*ND*	8.05	2.18	*ND*	4.9	166.3	25.6	67	22.3	56.2
Oct-2016	*ND*	*ND*	*ND*	*ND*	7.44	*NA*	*NA*	4.9	144.3	26.2	80	26	48.3
May-2017	10	10	*ND*	13	7.53	1.39	*ND*	5.4	174.5	29.3	61	40.5	3.9
Oct-2017	14	14	*ND*	*ND*	13.7	2.63	*ND*	5.7	194.1	27.1	97	48.6	5.8
May-2018	*1 JB*	*ND*	*ND*	*10.1 J*	15.8	0.19	*ND*	4.9	87.1	*ND*	*ND*	10	3.55
Nov-2018	28	28	*ND*	*14.3 J*	7.9	1.8	*ND*	5.47	163.7	33.8	88	57.7	6.67
May-2019	*ND*	*NA*	*ND*	*ND*	10	3.5	*ND*	4.78	118.9	33.2	103	50.1	8.81
Oct-2019	*ND*	*NA*	*ND*	*6 J*	5.2	3.6	*ND*	4.71	100.1	14.6	54	28.7	4.59
May-2020	*4 J*	*NA*	*ND*	*6.9 J*	8.9	2.4	*ND*	4.54	123.2	23.9	63	32.6	7.75
Oct-2020	*4 J*	*NA*	*ND*	*7 J*	21.7	4.4	*ND*	4.87	165.7	18	93	49.5	15.1
Apr-2021	*ND*	*NA*	*ND*	*8.3 J*	9.3	5.1	*ND*	4.88	3.26	15.4	64	34.3	24.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22B***													
Nov-1993	NA	**0.018**	ND	NA	0.001	2.3	NA	ND	NA	ND	31.8	28.2	ND	2.3	NA
Apr-1994	NA	**0.014**	ND	NA	ND	20.7	NA	ND	NA	ND	125	126	ND	18	NA
Apr-1995	ND	ND	ND	ND	ND	5.7	NA	ND	ND	0.03	69.6	60.7	ND	5.2	NA
Oct-1996	ND	ND	0.032	ND	ND	3.5	3.2	ND	ND	ND	23	20	ND	1.9	1.7
Apr-1997	ND	ND	0.051	ND	ND	3.9	2.9	ND	0.021	ND	27	20	ND	2	1.7
Oct-1997	ND	ND	0.049	ND	ND	6.18	6.26	ND	ND	ND	43.1	43.6	ND	3.23	3.27
Apr-1998	ND	ND	0.056	ND	ND	6.96	6.64	ND	ND	ND	45.3	45.5	ND	3.05	3.05
Apr-1999	ND	ND	0.073	ND	ND	7.26	6.71	ND	ND	ND	70	67.2	ND	4.25	4.04
Oct-1999	ND	ND	0.073	ND	ND	8.7	8.09	ND	ND	ND	66.7	41.7	ND	4.27	3.92
Apr-2000	ND	ND	0.04	ND	ND	8.02	6.3	ND	ND	ND	34.9	29.9	ND	2.17	1.98
Oct-2000	ND	ND	0.049	ND	ND	5.84	5.26	ND	ND	ND	58.1	55.2	ND	2.75	2.65
Apr-2001	ND	ND	0.128	ND	ND	18.4	NA	ND	ND	ND	88.2	NA	ND	7.73	NA
Sep-2001	ND	ND	0.062	ND	ND	6.28	6.29	ND	ND	ND	52.2	52.1	ND	3.89	3.94
Mar-2002	ND	ND	0.054	ND	ND	6.76	6.05	ND	ND	ND	44.9	43.2	ND	3.18	3.21
Sep-2002	ND	ND	0.031	ND	ND	2.73	3.56	ND	ND	ND	25.8	23.4	ND	1.34	1.3
Mar-2003	ND	ND	0.021	ND	ND	3.84	6.09	ND	ND	ND	4.82	1.51	ND	0.867	0.812
Oct-2003	ND	ND	0.038	ND	ND	3.57	3.12	ND	ND	ND	0.742	ND	ND	1.83	1.72
Apr-2004	ND	ND	0.059	ND	ND	9.48	3.68	ND	ND	ND	0.233	ND	ND	1.95	1.87
Oct-2004	ND	ND	0.049	ND	ND	8.19	5.74	ND	ND	ND	0.343	ND	ND	1.6	1.5
Apr-2005	ND	ND	0.031	ND	ND	2.42	2.37	ND	ND	ND	0.99	0.05	ND	1.04	0.989
Oct-2005	ND	ND	0.041	ND	ND	2.71	2.31	0.03	ND	0.013	1.23	0.073	ND	1.29	1.19

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22B***													
Mar-2006	ND	ND	0.017	ND	ND	1.09	1.04	ND	ND	ND	0.34	ND	ND	0.519	0.487
Sep-2006	ND	ND	0.031	ND	ND	2.63	2.79	ND	ND	ND	0.27	0.219	ND	0.987	1.06
Mar-2007	ND	0.002	0.042	ND	ND	3.97	3.58	0.011	ND	ND	1.91	1.09	ND	1.33	1.28
Sep-2007	ND	0.003	0.063	ND	ND	4.49	4.06	0.017	0.011	0.012	1.38	0.054	ND	2.24	2.12
Mar-2008	ND	ND	0.055	ND	ND	4.12	3.83	ND	ND	0.013	0.161	ND	ND	1.74	1.63
Sep-2008	ND	0.002	0.058	ND	ND	3.68	3.45	0.014	ND	ND	1.92	1.04	ND	1.89	1.8
Mar-2009	ND	0.002	0.048	ND	ND	4.19	3.88	0.019	ND	ND	5.94	2.84	ND	1.57	1.49
Oct-2009	ND	ND	0.041	ND	ND	3.45	3.34	ND	ND	ND	3.17	2.83	ND	1.53	1.48
Apr-2010	ND	ND	0.062	ND	ND	5.13	4.97	0.017	ND	ND	1.46	0.063	ND	2.44	2.39
Oct-2010	ND	ND	0.068	ND	ND	5.83	5.81	0.01	0.011	0.025	0.615	ND	ND	2.52	2.53
Apr-2011	ND	ND	0.078	ND	ND	5.5	5.39	0.021	0.011	0.029	1.5	ND	ND	2.33	2.3
Sep-2011	ND	ND	0.082	ND	ND	5.14	5.04	0.025	0.013	0.042	2.64	ND	ND	2.57	2.53
Mar-2012	ND	ND	0.077	ND	ND	4.95	4.82	ND	0.011	0.043	0.909	ND	ND	2.55	2.46
Sep-2012	ND	ND	0.0823	0.000583 J	0.000553 J	5.05	4.81	0.0218	0.0129	0.0585	2.34	0.0587	0.000532 J	2.48	2.68
Mar-2013	ND	ND	0.0858	0.000419 J	0.000611 J	6.08	6.07	0.0213	0.016	0.0655	1.7	0.0317 J	0.0018 J	2.76	2.76
Oct-2013	ND	0.000692 J	0.0652	0.000203 J	0.000316 J	5.35	5.48	0.0081 J	0.0131	0.0273	0.323	ND	0.000304 J	2.07	2.11
Mar-2014	ND	ND	0.0552	0.000163 J	0.000285 J	5.99	6.09	0.012	0.0171	0.0324	1.59	0.103	ND	2.15	2.13
Oct-2014	0.00035 J	0.0011 J	0.0743	0.000259 J	0.000421 J	5.15	5.41	0.0149	0.0092 J	0.0221	1.75	0.0281 J	0.000845 J	2.28	2.34
Apr-2015	0.000643 J	0.000575 J	0.0723	0.000279 J	0.000368 J	7.01	6.97	0.0121	0.0102	0.0245	0.887	0.129	ND	2.68	2.62
Nov-2015	0.000394 J	0.0012 J	0.0753	0.000384 J	0.000372 J	6.29	6.92	0.0098 J	0.009 J	0.024	1.37	0.0313 J	0.001 J	2.44	2.6
May-2016	ND	ND	0.0561	0.00032 J	0.00038 J	5.43	5.63	0.0037 J	0.0088	0.0241	0.3	0.0419 J	ND	2.12	2.16
Oct-2016	ND	0.00094 J	0.0501	0.00018 J	0.00022 J	6.58	6.7	0.0039 J	0.0062	0.0102	0.654	0.0793 J	0.00017 J	2.32	2.46
May-2017	ND	0.0009 J	0.0418	ND	ND	11.2	10.4	0.0089	0.0036	0.0066	0.887	ND	0.00026 J	3.04	3.01
Oct-2017	ND	ND	0.0407	ND	ND	13.9	15.7	0.0024 J	0.0086	0.0045	0.0558 J	1.7	ND	3.35	3.75

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22B***													
May-2018	*0.000038 J*	*ND*	0.036	*0.00026 J*	*0.00011 J*	1.6	14.5	*0.0049 JB*	0.009	0.0042	0.044	*ND*	*0.000037 JB*	1.5	3.2
Nov-2018	*0.000032 J*	*0.0002 J*	0.037	*ND*	*0.0001 J*	16.8	16.6	0.042	0.004	0.0048	0.67	0.076	*0.00012 J*	3.8	3.8
May-2019	*ND*	*ND*	0.051	*ND*	*ND*	13.6	12.8	0.014	0.0044	0.0088	0.28	0.04	*ND*	3.9	3.6
Oct-2019	0.00054	*0.00042 J*	0.044	*0.00017 J*	*0.00053 J*	7.5	7	0.013	0.0053	0.016	0.38	0.026	*0.00039 J*	2.4	2.3
May-2020	*0.000094 J*	*ND*	0.042	*0.000095 J*	*0.0001 J*	8.7	7.8	0.016	0.014	0.0074	0.46	0.026	*ND*	2.6	2.4
Oct-2020	*ND*	*ND*	0.038	*ND*	*ND*	13.8	12.7	*0.022 J*	0.0094	*ND*	0.73	0.05	*ND*	3.6	3.4
Apr-2021	*ND*	*ND*	0.044	*0.00022 J*	*ND*	9.7	9.8	0.011	0.0084	0.018	0.42	*ND*	*ND*	2.5	2.6

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-22B*												
Nov-1993	0.13	NA	ND	NA	2.5	NA	ND	NA	18.2	NA	NA	NA	ND
Apr-1994	0.66	NA	ND	NA	17.95	NA	ND	NA	375	NA	NA	NA	0.03
Apr-1995	0.27	NA	ND	ND	10.1	NA	ND	ND	75.2	NA	ND	ND	0.04
Oct-1996	0.077	0.068	NA	ND	ND	ND	ND	ND	5.1	5	ND	ND	0.19
Apr-1997	0.064	0.047	**0.0031**	ND	3.2	2.5	ND	ND	3.1	3.2	ND	ND	0.027
Oct-1997	0.065	0.064	NA	ND	2.49	2.42	ND	ND	2.76	2.84	ND	ND	ND
Apr-1998	0.147	0.145	NA	ND	7.13	6.77	ND	ND	20.2	19.9	ND	ND	ND
Apr-1999	0.231	0.218	NA	ND	6.9	6.16	ND	ND	48.2	46	ND	ND	ND
Oct-1999	0.29	0.267	NA	ND	11.9	11.2	ND	ND	52.8	49.1	ND	ND	ND
Apr-2000	0.144	0.132	NA	ND	6.73	6.12	ND	ND	17.9	16.2	ND	ND	0.015
Oct-2000	0.208	0.202	NA	ND	5.69	5.34	ND	ND	30.9	30.1	ND	ND	ND
Apr-2001	0.481	NA	NA	ND	12.5	NA	ND	ND	199	NA	ND	ND	0.029
Sep-2001	0.202	0.206	NA	ND	9.37	8.75	ND	ND	58.1	54.3	ND	ND	ND
Mar-2002	0.178	0.181	NA	ND	8.72	9.26	ND	ND	39.6	39.6	ND	ND	ND
Sep-2002	0.098	0.094	NA	ND	3.93	5.05	ND	ND	30.9	30.8	ND	ND	ND
Mar-2003	0.072	0.067	NA	ND	4.66	3.82	ND	ND	26.9	24.9	ND	ND	0.013
Oct-2003	0.12	0.123	NA	ND	2.92	3.27	ND	ND	20.9	18.9	ND	ND	0.022
Apr-2004	0.129	0.126	ND	ND	3.66	2.91	ND	ND	16.2	15.9	ND	ND	0.019
Oct-2004	0.115	0.109	ND	ND	2.69	2.43	ND	ND	6.47	5.89	ND	ND	0.013
Apr-2005	0.072	0.065	ND	ND	1.9	1.77	ND	ND	3.32	3.52	ND	ND	ND
Oct-2005	0.06	0.054	ND	0.029	1.62	1.33	ND	ND	3.34	2.43	ND	ND	0.014
Mar-2006	0.012	0.01	ND	ND	0.981	0.85	ND	ND	2.34	2.23	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22B***												
Sep-2006	0.051	0.055	ND	ND	1.56	1.75	ND	ND	8.01	8.42	ND	ND	ND
Mar-2007	0.075	0.071	ND	0.016	2.84	2.7	ND	ND	13.9	13.4	ND	ND	0.015
Sep-2007	0.085	0.079	ND	0.021	2.16	1.95	ND	ND	3.58	3.55	ND	ND	0.016
Mar-2008	0.067	0.067	ND	ND	2.29	2.09	ND	ND	8.64	8.12	ND	ND	0.015
Sep-2008	0.081	0.078	ND	0.016	2.48	2.43	ND	ND	11.5	11.1	ND	ND	0.018
Mar-2009	0.105	0.102	ND	ND	3.41	3.39	ND	ND	12.9	12.8	ND	ND	0.012
Oct-2009	0.112	0.108	ND	ND	3.32	3.24	ND	ND	12.3	11.7	ND	ND	ND
Apr-2010	0.137	0.134	ND	0.017	3.16	3.05	ND	ND	6.23	6.02	ND	ND	0.014
Oct-2010	0.088	0.087	ND	0.014	2.04	2.16	ND	ND	4.27	4.55	ND	ND	0.016
Apr-2011	0.106	0.104	ND	0.018	2.26	2.16	ND	ND	6.75	6.67	ND	ND	0.013
Sep-2011	0.12	0.117	ND	0.02	2.76	2.54	ND	ND	10.4	10.3	ND	ND	0.015
Mar-2012	0.093	0.09	0.0002	0.014	2.34	2.24	ND	ND	6.23	5.9	ND	ND	0.013
Sep-2012	0.0894	0.0852	0.000076 J	0.0185	2.32	2.19	0.000538 J	ND	6.34	6.97	ND	ND	0.0138
Mar-2013	0.131	0.133	0.000096 J	0.0176	3.12	3.08	ND	0.000087 J	8.97	9.08	ND	ND	0.0275
Oct-2013	0.132	0.136	ND	0.0086 J	3.71	3.69	ND	0.000069 J	9.02	9.25	0.000169 J	0.0026 J	0.0152
Mar-2014	0.127	0.128	ND	0.0095 J	3.88	3.93	ND	0.00019 J	10.6	10.8	0.000166 J	0.0012 J	0.0048 J
Oct-2014	0.0756	0.0787	0.000077 J	0.0141	2.6	2.55	0.000825 J	ND	6.02	6.25	ND	0.003 J	0.0125
Apr-2015	0.113	0.112	0.000027 J	0.0153	3.81	3.79	0.000966 J	ND	8.21	8.08	ND	0.0012 J	0.0194
Nov-2015	0.0686	0.0749	ND	0.0111	2.87	2.92	0.0012 J	ND	5.56	5.95	0.00017 J	0.0039 J	0.0099 J
May-2016	0.0743	0.0756	0.000053 J	0.0089	3.1	2.97	ND	ND	6.96	6.43	ND	0.00071 J	0.0095 J
Oct-2016	0.0725	0.0807	ND	0.007	3.41	3.73	ND	ND	6.19	6.52	ND	0.00093 J	0.0054 J
May-2017	0.0811	0.0733	ND	0.005	4.28	4.09	0.00052 J	ND	6.01	5.56	ND	0.0014	0.0047 JB
Oct-2017	0.0631	0.0706	ND	0.0084	4.09	4.76	0.00052 J	ND	7.57 J-	8.44	ND	ND	0.0045 J
May-2018	0.019	0.042	ND	0.015	0.93 J	3.5 J	0.00088 J	ND	8.6	10.9	ND	0.0022	0.013

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22B***												
Nov-2018	0.037	0.034	*ND*	0.028	*4 J*	*4 J*	*0.00091 J*	*ND*	7.4	7.6	*ND*	0.0034	*0.0049 J*
May-2019	0.029	0.033	*ND*	0.0093	*ND*	*ND*	*ND*	*ND*	8	7.7	*ND*	0.0043	*ND*
Oct-2019	0.026	0.028	*ND*	0.0096	*2.5 J*	*2.2 J*	*0.00069 J*	*0.00045 J*	*4.8 J*	*4 J*	0.00051	0.0023	0.016
May-2020	0.046	0.044	*ND*	0.0097	*2.8 J*	*3.2 J*	*0.00062 J*	*ND*	7.5	6.4	*ND*	0.01	*0.0038 J*
Oct-2020	0.037	0.037	*ND*	0.013	*3.7 J*	*3.3 J*	*ND*	*ND*	12.8	11.5	*ND*	*0.0017 J*	*ND*
Apr-2021	0.021	0.022	*ND*	*0.0097 J*	2.2	2.2	*ND*	*ND*	6.8	7.6	*ND*	*0.00063 J*	*0.0037 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-22B***																
Nov-1993	ND	ND	ND	ND	75	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	72	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	47	ND
Oct-1996	ND	ND	ND	ND	97	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND
Apr-1997	ND	ND	9	ND	66	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	39	ND	ND	ND	ND	ND	ND	ND	1.1 J	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	80	ND	ND	ND	ND	ND	ND	1.8 J	1.9 J	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	24	ND	NA	NA	NA	NA	ND	ND	1	ND	NA	NA	7.3	NA
Oct-1999	ND	ND	ND	ND	21	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	6.7	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	20	ND	ND	ND	ND	ND	ND	0.7 J	1.7	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	16	ND	ND	ND	ND	ND	ND	0.5 J	0.8 J	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	15	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	7.1	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	8.4	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22B*																
Feb-2006	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2006	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	ND	NA	0.8 J	NA	NA	NA	ND	NA
Dec-2006	NA	ND	NA	NA	3.1	NA	NA	NA	NA	NA	ND	NA	ND	NA	NA	NA	ND	NA
Mar-2007	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.62 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.86 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	0.42 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.11 J	ND
Apr-2015	ND	ND	ND	ND	0.34 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22B*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.9 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.152 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-22B*															
Nov-1993	**19**	ND	ND	ND	ND	ND	ND	ND	7.7	ND	ND	28	ND	ND	ND	9.9	70
Apr-1994	**43**	ND	ND	ND	ND	ND	ND	ND	10	ND	ND	18	ND	ND	ND	5.9	47
Oct-1996	**49**	ND	ND	ND	ND	ND	ND	ND	3.4	ND	ND	18	ND	ND	ND	8	58
Apr-1997	**21**	ND	ND	ND	ND	ND	ND	ND	5	ND	ND	13	ND	ND	ND	39	33
Oct-1997	**12**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10	ND	ND	ND	4.9	56
Apr-1998	**45**	ND	ND	ND	ND	ND	ND	ND	4.1	ND	ND	16	ND	ND	ND	10	35
Apr-1999	**9.2**	NA	NA	NA	NA	ND	NA	0.5 J	ND	ND	NA	5	NA	NA	NA	3.3	17
Oct-1999	**5.5**	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	4.8	ND	ND	ND	2.6	15
Apr-2000	1.8	NA	NA	ND	NA	ND	NA	ND	0.5 J	ND	NA	1.2	NA	ND	NA	1.5	4.6
Oct-2000	4.2	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	2.4	ND	ND	ND	7	9.2
Apr-2001	**15**	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	2.7	ND	ND	ND	2.3	8
Sep-2001	**7.2**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	2.5	5.8
Mar-2002	**7.3**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	3.6	5.8
Sep-2002	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	1.5	2.7
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.6 J
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	1.6	2.1
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	1.1	1.4
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.6 J
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22B***															
Feb-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.2
Dec-2006	ND	NA	NA	ND	NA	NA	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND
Dec-2006	ND	NA	NA	ND	NA	NA	NA	ND	NA	ND	NA	ND	NA	ND	NA	1.3	1.4
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.9 J
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.9 J
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.6 J
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.32 J	0.27 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22B***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.129 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22B***															
Nov-1993	*ND*	*ND*	7.2	*ND*	**6.3**	*ND*	*ND*	**18**	*ND*	*ND*	*ND*	*ND*	**16**	*ND*	*ND*	**4.2**	*NA*
Apr-1994	13	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	4.5	*ND*	*ND*	*ND*	*ND*	**6.6**	*ND*	*ND*	**3**	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	**16**	*ND*	1.7	*ND*	*ND*	**12**	*ND*	*ND*	**4**	2.1
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	9	*ND*	**6**	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	**7.8**	*ND*	*ND*	*ND*	*ND*	**7.7**	*ND*	*ND*	*1.9 J*	*NA*
Apr-1998	*ND*	*ND*	1.5	*NA*	*ND*	*ND*	*ND*	**6.7**	*ND*	*1.9 J*	*ND*	*ND*	**7.3**	*ND*	*ND*	**2.9**	*NA*
Apr-1999	*0.6 J*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	1.3	*ND*	*0.8 J*	*NA*	*NA*	1.6	*ND*	*NA*	1.6	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	1.3	*ND*	*0.7 J*	*ND*	*ND*	1.9	*ND*	*ND*	1.4	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	1.4	*ND*	*ND*	*NA*	*NA*	1	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	1.1	*NA*
Apr-2001	1.1	*ND*	*0.5 J*	*NA*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*0.5 J*	*ND*	*ND*	2.3	*ND*	*ND*	*0.8 J*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*0.6 J*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*0.7 J*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22B***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	34.7	ND	ND	ND	ND	ND	ND	ND	NA
Feb-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Dec-2006	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Dec-2006	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	0.6 J	ND	NA	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22B***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.9 BCH	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.438 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

HISTORICAL TABLES –
On-site Non-regulated Wells

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-02***											
Nov-1993	ND	ND	ND	ND	2.5	ND	ND	4.9	14.8	ND	18	1.36	11
Apr-1994	13	13	ND	ND	2.2	0.9	ND	4.68	16.9	ND	19	ND	8.3
Apr-1995	ND	ND	ND	ND	2.3	ND	ND	4.9	17.2	1.9	12	1.3	21
Apr-1997	ND	2	ND	24	2	0.02	ND	NA	NA	ND	82	4	0.4
Apr-1998	5	5	0.24	ND	1.69	ND	ND	6.56	51.6	ND	ND	1.8	14
Apr-1999	ND	ND	0.14	ND	2.64	ND	ND	4.99	17.57	ND	18	1.8	52
Apr-2001	ND	NA	ND	ND	33.5	ND	ND	NA	NA	ND	ND	2.3	63
Mar-2002	ND	ND	ND	16	3.79	ND	ND	6.1	34.8	1.62	22	1.91	170
Mar-2003	1.9	1.9	ND	ND	12.8	ND	ND	5.3	16	ND	42	1.36	6.2
Apr-2004	2	2	ND	ND	2.1	ND	ND	5.5	13.3	ND	ND	2.19	36
Apr-2005	2.2	2.2	ND	ND	2.18	ND	ND	5.9	22.9	ND	45	3.12	25
Mar-2006	4.3	4.3	ND	ND	2.45	ND	ND	5.3	14.4	ND	29	2.01	712
Mar-2007	3.4	3.4	ND	ND	2.83	ND	ND	5	12.9	ND	26	1.69	40
Mar-2008	2.8	2.8	ND	ND	2.63	ND	ND	4.6	16	ND	14	2.6	97
Mar-2009	3.5	3.5	ND	ND	2.65	ND	ND	4.8	15.2	ND	29	2.4	61
Apr-2010	4.3	4.3	ND	ND	2.28	ND	ND	4.5	14.5	ND	18	1.6	285
Apr-2011	4.2	4.2	ND	ND	2.4	ND	ND	4.8	12.4	ND	ND	2.25	41
Mar-2012	3.3	3.3	ND	ND	2.46	ND	ND	4.1	12.1	ND	ND	2.38	53
Sep-2012	3.52	3.52	ND	ND	2.73	ND	ND	5.4	14.6	ND	35	2.73	8.38
Mar-2013	3.76	3.76	0.0847 J	ND	2.95	0.0243 J	ND	6	15.7	0.72 J	ND	2.84	18.3
Oct-2013	4.84	4.84	ND	ND	2.9	0.0353 J	ND	5.8	15.4	0.577 J	ND	2.28	3.89
Mar-2014	4.68	4.68	ND	ND	3.04	ND	ND	5.8	21.3	0.56 J	ND	2.33	7.48
Oct-2014	ND	ND	ND	ND	3.15	ND	ND	5	17.4	ND	ND	2.32	24.2
Apr-2015	7.8	7.8	ND	5 J	2.76	ND	ND	5	25.1	ND	ND	2.26	19.9
Nov-2015	2.76	2.76	ND	ND	2.54	ND	ND	5.8	28.6	ND	29	2.54	222
May-2016	4.8	4.8	ND	198	3.03 B	ND	ND	5.3	24.3	ND	93	3.5	89.7
Oct-2016	3.36	3.36	ND	8 J	3.2	NA	NA	5.4	27.1	1.03	37	3	19.9
May-2017	4.64	4.64	ND	ND	3.38	ND	ND	5.3	28.9	0.703 J	14 J	3.7	8.49
Oct-2017	22.6	22.6	ND	13	2.97	ND	ND	5.6	31.7	ND	30	3.2	14.4
May-2018	6 JB	ND	ND	5.8 J	3.7	0.063 J	ND	4.9	39.1	ND	ND	4.7	4.15
Nov-2018	18	18	0.099 J	ND	3.9	0.093 J	ND	6.05	42.6	ND	14	4.9	11.1
May-2019	ND	NA	ND	ND	ND	0.22	ND	5.72	26.5	ND	63	ND	5.87
Oct-2019	10 H1	NA	ND	ND	3.6	0.18	ND	5.79	51.7	ND	40	4.1	12.1
May-2020	14	NA	ND	6.9 J	4.6	ND	0.01	5.8	62.2	ND	11	4.1	46.8
Oct-2020	12	NA	ND	7 J	3.3	ND	ND	5.92	50.8	ND	46	3.3	14.1
Apr-2021	12	NA	ND	ND	3.5	0.065 J	ND	6.41	60.8	ND	16	2.8 J	14.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-02***													
Nov-1993	NA	ND	ND	NA	ND	0.15	NA	ND	NA	ND	0.55	0.25	ND	0.24	NA
Apr-1994	NA	ND	ND	NA	ND	ND	NA	ND	NA	ND	0.11	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	0.14	NA	ND	ND	ND	0.62	1.8	ND	0.24	NA
Apr-1997	ND	ND	0.015	ND	ND	0.7	0.54	ND	ND	ND	0.26	0.24	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	0.296	0.317	ND	ND	ND	5.76	2.06	ND	0.266	0.266
Apr-1999	ND	ND	ND	ND	ND	0.263	0.285	ND	ND	ND	9.7	0.976	ND	0.268	0.276
Apr-2001	ND	ND	0.011	ND	ND	0.407	NA	0.019	ND	0.055	11.2	NA	0.002	0.311	NA
Mar-2002	ND	ND	0.011	ND	ND	0.455	0.17	ND	ND	0.015	20.2	1.69	ND	0.309	0.266
Mar-2003	ND	ND	ND	ND	ND	0.175	0.15	ND	ND	ND	0.609	0.421	ND	0.225	0.19
Apr-2004	ND	ND	ND	ND	ND	0.402	0.158	ND	ND	ND	3.89	0.572	ND	0.289	0.195
Apr-2005	ND	ND	0.011	ND	ND	0.695	0.247	ND	ND	ND	5.82	0.502	0.002	0.335	0.278
Mar-2006	ND	0.002	0.012	ND	ND	0.259	0.14	0.01	ND	0.013	18.5	ND	0.003	0.332	0.269
Mar-2007	ND	ND	0.013	ND	ND	0.165	0.158	ND	ND	0.02	3.08	0.175	ND	0.311	0.293
Mar-2008	ND	0.004	0.011	ND	ND	0.377	0.224	ND	ND	ND	2.93	0.165	ND	0.403	0.31
Mar-2009	ND	ND	ND	ND	ND	0.367	0.256	ND	ND	ND	4.14	0.325	ND	0.36	0.273
Apr-2010	ND	ND	ND	ND	ND	0.12	ND	ND	ND	ND	23.9	0.187	ND	0.32	0.213
Apr-2011	ND	ND	ND	ND	ND	0.257	0.227	ND	ND	ND	19.9	0.145	ND	0.391	0.264
Mar-2012	ND	ND	ND	ND	ND	0.226	0.223	ND	ND	ND	14.3	0.236	ND	0.441	0.411
Sep-2012	ND	ND	0.009 J	ND	ND	0.35	0.33	0.0016 J	0.000481 J	0.0028 J	5.6	0.278	0.000853 J	0.45	0.453
Mar-2013	ND	ND	0.0093 J	ND	ND	0.418	0.281	0.0017 J	0.000427 J	0.0031 J	5.84	0.18	ND	0.436	0.314
Oct-2013	ND	ND	0.0093	ND	ND	0.265	0.27	ND	0.000352 J	ND	1.11	0.371	ND	0.393	0.412

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-02***													
Mar-2014	0.000324 J	ND	0.0081 J	ND	ND	0.222	0.188	0.000473 J	0.000339 J	0.000538 J	1.18	0.422	ND	0.431	0.347
Oct-2014	0.000908 J	0.000509 J	0.0099 J	ND	ND	0.287	0.257	0.0024 J	0.000575 J	0.0077 J	11.2	0.255	ND	0.39	0.321
Apr-2015	0.000544 J	ND	0.0105	ND	ND	0.275	0.247	0.0022 J	0.000408 J	0.0024 J	8.26	0.743	ND	0.382	0.337
Nov-2015	0.000654 J	0.000454 J	0.0108	ND	ND	0.321	0.35	0.0048 J	0.000604 J	0.0047 J	11.9	0.395	0.000883 J	0.423	0.34
May-2016	0.0004 J	0.0017 J	0.0114	ND	ND	0.588	0.584	0.0046	0.003	0.0203	11.6	3.49	0.00099 J	0.49	0.498
Oct-2016	0.00058 J	0.0023 J	0.0095	ND	ND	0.382 J	0.368 J	0.008 J+	0.0029	0.035 J+	19.7	1.73	0.00036 J	0.498 J+	0.475
May-2017	ND	0.002 J	0.0088	ND	ND	0.546	0.42	0.0105	0.0025	0.0459	15	10.4	0.0006 J	0.568	0.555
Oct-2017	0.00059 J	0.0035 J	0.007	ND	ND	0.433	0.418	0.0161	0.0035	0.0677	19.8	12.2	0.00068 J	0.504	0.466
May-2018	0.00011 J	ND	0.014	0.000038 J	0.00005 J	0.51 J	0.52 J	0.0016 JB	0.00054	0.003	1.2	1.2	0.000091 JB	0.83 J	0.85 J
Nov-2018	ND	ND	0.011	ND	ND	0.52 J	0.49 J	0.0041 J	0.00049 J	0.00078 J	8.8	7.8	0.00016 J	0.87 J	0.82 J
May-2019	ND	ND	0.011	ND	ND	ND	ND	ND	0.00052	ND	4.4	3.9	ND	ND	ND
Oct-2019	0.000089 JB	ND	0.012	ND	0.00018 JB	0.41	0.41 J	0.0029 J	0.00056	0.0035	9.7	8.3	0.00014 JB	0.75	0.77 J
May-2020	0.000067 J	ND	0.01	ND	ND	0.51	0.51 J	0.0032 J	0.00064	0.002 J	16.2	13.9	ND	0.7	0.69 J
Oct-2020	0.00039 J	ND	0.011	ND	ND	0.36	0.31 J	0.01 JB	0.00064 J	ND	12.2	9.9	ND	0.59	0.53 J
Apr-2021	ND	ND	0.0085 J	ND	ND	0.26 J	0.27 J	0.0017 J	0.00062 J	ND	11.2	10.2	ND	0.53	0.53

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-02*												
Nov-1993	0.06	NA	ND	NA	0.62	NA	ND	NA	1.3	NA	NA	NA	ND
Apr-1994	0.007	NA	ND	NA	0.8	NA	ND	NA	1.6	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.73	NA	ND	ND	1.2	NA	ND	ND	0.01
Apr-1997	ND	0.012	ND	ND	2.1	1.8	ND	ND	1.1	1.9	ND	ND	0.039
Apr-1998	0.066	0.083	NA	ND	1.2	0.689	ND	ND	1.21	1.27	ND	ND	0.012
Apr-1999	0.036	0.037	NA	ND	ND	ND	ND	ND	1.19	1.21	ND	ND	ND
Apr-2001	0.039	NA	NA	0.026	1.57	NA	ND	ND	2.73	NA	ND	ND	0.031
Mar-2002	0.059	0.036	NA	ND	0.702	0.507	ND	ND	1.8	1.22	ND	ND	0.026
Mar-2003	0.015	0.017	NA	ND	1.09	ND	ND	ND	1.28	1.27	ND	ND	0.106
Apr-2004	0.044	0.024	ND	ND	0.983	ND	ND	ND	1.74	1.19	ND	ND	0.042
Apr-2005	0.028	0.013	ND	ND	0.8	0.72	ND	ND	1.52	1.29	ND	ND	0.064
Mar-2006	ND	ND	ND	ND	0.687	0.509	ND	ND	1.42	0.923	ND	ND	ND
Mar-2007	0.016	ND	ND	ND	ND	ND	ND	ND	1.13	1.06	ND	ND	0.019
Mar-2008	0.015	0.011	ND	ND	0.808	0.673	ND	ND	1.38	1.23	ND	ND	0.025
Mar-2009	0.017	ND	ND	ND	0.552	0.599	ND	ND	1.41	1.61	ND	ND	0.019
Apr-2010	0.021	ND	ND	ND	0.706	0.627	ND	ND	1.23	1.29	ND	ND	0.02
Apr-2011	0.018	ND	ND	ND	0.706	0.653	ND	ND	1.33	1.38	ND	ND	0.019
Mar-2012	0.018	ND	ND	ND	0.564	0.581	ND	ND	1.26	1.26	ND	ND	0.017
Sep-2012	0.0103	0.0076 J	ND	0.0016 J	0.656	0.635	ND	ND	1.33	1.3	0.000582 J	ND	0.0142
Mar-2013	0.0082 J	0.0054 J	0.000085 J	0.0014 J	0.66	0.591	ND	ND	1.33	1.25	ND	ND	0.0303
Oct-2013	0.0158	0.0143	ND	0.0014 J	0.616	0.619	ND	ND	1.38	1.44	0.000112 J	0.000996 J	0.0216
Mar-2014	0.0154	0.0099 J	ND	0.00098 J	0.652	0.703	ND	ND	1.38	1.46	ND	ND	0.0151

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-02***												
Oct-2014	0.0176	0.0112	*0.00005 J*	*0.0028 J*	0.691	0.717	*0.0013 J*	*ND*	1.41	1.48	*ND*	*ND*	0.0234
Apr-2015	0.0283	0.0204	*ND*	*0.0017 J*	0.76	0.721	*0.00072 J*	*ND*	1.42	1.46	*ND*	*0.000969 J*	0.0236
Nov-2015	0.0355	0.0112	*ND*	*0.004 J*	0.792	0.736	*0.000487 J*	*ND*	1.5	1.72	*ND*	*0.0011 J*	0.0201
May-2016	0.0867	0.0433	*ND*	0.0273	0.827	0.766	*ND*	*ND*	1.5	1.41	*ND*	0.001	0.13
Oct-2016	0.0331 R	0.0178	*ND*	*0.031 J+*	0.745	0.73	*ND*	*ND*	*1.63 J+*	1.59	*ND*	*0.00022 J*	*0.0191 J*
May-2017	0.109	0.0891	*ND*	0.029	0.755	0.763	*ND*	*ND*	1.38	1.63	*ND*	*ND*	*0.0162 J*
Oct-2017	0.14	0.117	*ND*	0.0432	0.739	0.685	*ND*	*ND*	1.32	1.27	*ND*	*ND*	*0.0241 J*
May-2018	0.016	0.017	*ND*	0.0023	*ND*	*ND*	*0.00046 J*	*ND*	*1.8 J*	*1.7 JB*	*ND*	0.0021	0.013
Nov-2018	0.15	0.18	*ND*	0.0043	*1.2 J*	*ND*	*0.00014 J*	*ND*	*1.8 J*	*1.8 J*	*ND*	*ND*	*0.0033 J*
May-2019	0.093	0.083	*ND*	0.0047	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	0.15	0.14	*ND*	0.0027	*ND*	*1.1 J*	*ND*	*ND*	*1.8 J*	*2.2 J*	*ND*	*ND*	0.0091 B
May-2020	0.19	0.19	*ND*	0.0031	*ND*	*ND*	*ND*	*ND*	*2.2 J*	*2.2 J*	*ND*	*0.00027 J*	*0.0047 J*
Oct-2020	0.17	0.15	*ND*	0.0032	*ND*	*ND*	*ND*	*ND*	*2.2 J*	*1.7 J*	*ND*	*0.0029 JB*	*ND*
Apr-2021	0.15	0.15	*ND*	*0.0019 J*	0.63	0.63	*ND*	*ND*	2.1	2	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-02*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.21 J	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.99 J,B	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-02*																
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.24 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.6 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.7 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-02***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.76 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.68 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-02***															
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.89 J*	*0.41 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.35 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.28 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.164 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-02***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-02***															
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	1 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-03A***											
Nov-1993	ND	ND	0.5	ND	21.6	ND	ND	5.15	88.3	4.2	64	2.75	6.8
Apr-1994	ND	18	0.1	31.9	5.5	ND	ND	5.12	28.7	1.1	22	ND	4.9
Apr-1995	5.2	5.2	ND	ND	13.8	ND	ND	6	49.3	3.5	ND	2.8	11.3
Apr-1997	ND	5	ND	ND	38	0.07	ND	NA	NA	ND	91	12	7
Apr-1998	4	4	0.22	ND	14	0.15	ND	6.85	52.7	ND	43	2.5	22
Apr-1999	ND	ND	0.16	ND	8.58	0.13	ND	4.97	44.1	ND	44	3	12
Apr-2000	1	1	0.76	ND	190	0.28	ND	5.1	298	4.99	379	37	13
Apr-2001	ND	NA	ND	ND	22.8	ND	ND	NA	NA	4.16	42	6.97	86.4
Mar-2002	1.2	1.2	0.34	ND	219	ND	ND	5	711	9.53	353	31.8	17
Mar-2003	ND	ND	ND	ND	189	ND	ND	4.9	970	13.2	191	40.7	13
Apr-2004	3	3	ND	ND	32.7	0.07	ND	5.7	120.2	2.07	67	8.7	42
Apr-2005	2.3	2.3	ND	16	35.6	0.08	ND	5.1	114.5	3.25	88	5.45	24
Mar-2006	3.8	3.8	ND	ND	17.2	0.1	ND	5.1	74.3	3.54	ND	3.72	71
Mar-2007	1.1	1.1	ND	ND	233	0.17	ND	5.1	845	8.42	373	34.3	36
Mar-2008	4.8	4.8	ND	ND	12.8	0.09	ND	5.2	64.7	2.96	29	3.84	12
Mar-2009	17	17	0.23	ND	20.1	ND	ND	5.1	90.7	3.22	53	4.42	30
Apr-2010	11.4	11.4	ND	ND	45.5	ND	ND	4.8	188.5	1.11	91	10.3	106
Apr-2011	8.3	8.3	ND	ND	19.6	ND	ND	4.7	60	1.58	55	3.69	19
Mar-2012	8.3	8.3	ND	ND	42	ND	ND	4.8	134.7	2.09	78	9.69	38
Sep-2012	11.1	11.1	ND	ND	30.3	ND	ND	5.9	111.2	3.08	93	6.68	14.3
Mar-2013	4.72	4.72	0.0887 J	ND	7.13	0.0421 J	ND	5.7	38.9	2.13	ND	3.36	15.3
Oct-2013	17.1	17.1	ND	10.1	45.6	0.0428 J	ND	5.5	159.8	6.59	96	8.13	21.7
Mar-2014	6.32	6.32	ND	ND	56.8	0.0633	ND	5.4	166.3	10.5	115	9.28	86.5
Oct-2014	26.4	26.4	ND	9 J	51.8	0.0908	ND	5.5	176.8	4.91	104	8.6	95
Apr-2015	4.68	4.68	0.155 J	ND	6.83	0.0594	ND	4	41.9	3.66	25	3.93	8.65
Nov-2015	ND	ND	ND	5 J	62.5	ND	ND	5.7	328	2.14	112	11.5	71.1
May-2016	ND	ND	ND	6 J	168	0.0605	ND	5.1	491	2.36	254	19.6	158
Oct-2016	1.88	1.88	ND	17	155	NA	NA	6.1	524	1.92	254	16.9	260
May-2017	ND	ND	ND	ND	105	0.103	ND	5.1	487	5.61	185	15.6	4.68
Oct-2017	3.72	3.72	ND	ND	207	0.0842	ND	6	663	8.01	257	20.8	9.77
May-2018	8 JB	ND	ND	7.9 J	119	ND	ND	NA	NA	9 J	184	18.2	NA
Nov-2018	8 JB	ND	ND	12.2 J	101	ND	0.046	6.7	386.2	ND	161	15.6	17.9
May-2019	14	NA	0.31 ML	ND	61.7	ND	0.019	6.14	229.1	ND	121	6.5	11.8
Oct-2019	4 JH1	NA	ND	8.2 J	45.8	0.064 J	0.012	6.1	260.6	ND	100	5.4	43.6
May-2020	2 J	NA	ND	11.3 J	39.6	ND	0.027	5.97	197.3	ND	61	4.4	16.2
Oct-2020	2 J	NA	ND	9.3 J	48.6	ND	ND	5.98	228.1	ND	113	4.6	22.8

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-03A***											
Apr-2021	*2 J3c*	*NA*	*ND*	*10.5 J*	54.6	*0.068 J*	*ND*	7	328.6	*ND*	102	3.8	13.6

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-03A***													
Nov-1993	NA	ND	ND	NA	ND	0.36	NA	ND	NA	ND	3.7	2.4	ND	0.45	NA
Apr-1994	NA	ND	ND	NA	ND	ND	NA	ND	NA	ND	0.32	0.08	ND	7.3	NA
Apr-1995	ND	ND	ND	ND	ND	0.45	NA	ND	ND	ND	0.6	0.56	ND	0.4	NA
Apr-1997	ND	ND	0.057	ND	ND	1.8	1.3	ND	ND	ND	4.5	2.8	ND	1.4	1.2
Apr-1998	ND	ND	0.016	ND	ND	0.46	0.465	ND	ND	ND	7.02	3.87	ND	0.34	0.339
Apr-1999	ND	ND	0.014	ND	ND	0.587	0.591	ND	ND	ND	4.69	1.27	ND	0.361	0.334
Apr-2000	ND	ND	0.195	ND	ND	8.12	7.98	ND	ND	ND	4.54	3	ND	3.96	3.89
Apr-2001	ND	ND	0.039	ND	ND	1.47	NA	ND	ND	ND	8.19	NA	ND	0.802	NA
Mar-2002	ND	ND	0.183	ND	ND	7.3	7.51	ND	ND	ND	3.22	1.4	ND	3.3	3.33
Mar-2003	ND	ND	0.31	ND	ND	8.68	8.46	ND	ND	ND	2.32	1.61	ND	4.61	4.43
Apr-2004	ND	ND	0.038	ND	ND	1.83	1.62	ND	ND	ND	3.39	1.07	ND	1.01	0.924
Apr-2005	ND	ND	0.036	ND	ND	1.02	1.02	ND	ND	ND	5.4	2.96	ND	0.704	0.685
Mar-2006	ND	ND	0.014	ND	ND	0.898	0.683	ND	ND	ND	6.28	0.653	ND	0.36	0.343
Mar-2007	ND	ND	0.176	ND	ND	9.17	8.74	ND	ND	ND	3.13	1.55	ND	2.78	2.62
Mar-2008	ND	ND	0.017	ND	ND	0.878	0.84	ND	ND	ND	2.98	1.72	ND	0.399	0.377
Mar-2009	ND	ND	0.018	ND	ND	1.04	0.964	ND	ND	ND	14.6	7.91	ND	0.443	0.419
Apr-2010	ND	ND	0.031	ND	ND	0.654	1.77	ND	ND	ND	13.7	9.24	ND	1.02	0.971
Apr-2011	ND	ND	0.015	ND	ND	0.812	0.751	ND	ND	ND	15.9	14	ND	0.402	0.377
Mar-2012	ND	ND	0.033	ND	ND	2.13	1.97	ND	ND	ND	11.1	2.3	ND	1.06	0.98
Sep-2012	ND	ND	0.0218	0.000066 J	ND	1.6	1.49	0.0018 J	0.0012 J	0.0019 J	7.83	3.83	ND	0.651	0.6
Mar-2013	ND	ND	0.0133	0.000107 J	ND	0.784	0.638	0.0015 J	0.0011 J	0.0014 J	3.34	1.27	ND	0.34	0.278

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-03A***													
Oct-2013	ND	ND	0.0286	ND	ND	1.95	1.91	0.000793 J	0.0025	0.0014 J	16.3	17.6	0.000568 J	0.791	0.747
Mar-2014	ND	0.001 J	0.0289	ND	0.000177 J	2.63	2.43	0.0051 J	0.0021 J	0.0041 J	14.9	2.44	0.0024	0.658	0.799
Oct-2014	0.000393 J	0.0013 J	0.0271	ND	0.00013 J	2.02	1.97	0.000888 J	0.0014 J	0.0033 J	27.7	14.9	0.0011 J	0.865	0.848
Apr-2015	0.0016 J	0.000766 J	0.0135	ND	0.000106 J	0.858	0.839	0.000666 J	0.0013 J	0.0033 J	5.19	1.13	ND	0.434	0.393
Nov-2015	0.000548 J	0.000437 J	0.0321	ND	0.000323 J	2.79	2.71	0.000539 J	0.0015 J	0.0027 J	28.6	24.5	0.00049 J	1.1	1.06
May-2016	ND	0.00058 J	0.0897	0.00024 J,B	0.00024 J	4.38	4.07	0.00088 J	0.0043	0.0015 J,B	3.55	2.24	0.0011 J	2.1	2.09
Oct-2016	ND	0.0021 J	0.0614	ND	ND	4.02	4.19	0.0027 J+	0.0034	0.0093 J+	55.5	34.8	0.0022	1.68 J+	1.68
May-2017	ND	0.00098 J	0.0824	0.00016 J	ND	3.66	3.71	0.0013 J	0.0061	0.0046	7.74	2.93	0.00075 J	1.57	1.63
Oct-2017	ND	ND	0.0982	0.00014 J	ND	5.44	5.13	0.0046	0.0025	0.00065 J	3.11	2.21	0.00021 J	1.75	1.89
May-2018	0.000066 J	ND	0.079	0.00012 J	0.000094 J	4.5	4.4	0.0026 JB	0.0018	0.0017 J	2.7	2.8	0.00018 J	1.7	1.6
Nov-2018	ND	0.00017 J	0.056	ND	0.000022 J	3.5	3.4	0.0026 J	0.00044 J	0.0019 J	52	48.2	0.00013 J	1.6	1.5
May-2019	ND	ND	0.025	ND	ND	1.4	1.6	ND	ND	ND	54.2	53.4	ND	ND	ND
Oct-2019	0.00011 JB	ND	0.014	ND	0.00025 JB	1.2	1.2	0.002 JB	0.0002 J	0.0016 J	52	47.4	0.000067 JB	0.58	0.59 J
May-2020	0.00025 J	ND	0.011	ND	ND	1	1	0.0027 J	0.0002 J	0.0014 J	29.5	27.6	ND	0.44	0.44 J
Oct-2020	0.00042 J	ND	0.011	ND	ND	1.1	0.97 J	0.0078 JB	ND	ND	36.8	33	ND	0.46	0.4 J
Apr-2021	ND	ND	0.014	ND	ND	0.84 J	0.88 J	0.00071 J	ND	ND	64	62.9	ND	0.42	0.42

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-03A*												
Nov-1993	0.12	NA	ND	NA	1.1	NA	ND	NA	26.1	NA	NA	NA	0.02
Apr-1994	0.038	NA	ND	NA	0.79	NA	ND	NA	4.1	NA	NA	NA	0.009
Apr-1995	0.02	NA	ND	ND	0.99	NA	ND	ND	5.7	NA	ND	ND	0.03
Apr-1997	0.13	0.095	ND	ND	2.8	2.8	ND	ND	26	26	ND	ND	ND
Apr-1998	0.099	0.099	NA	ND	0.643	1.57	ND	ND	6.95	7.43	ND	ND	0.01
Apr-1999	0.064	0.063	NA	ND	ND	1.09	ND	ND	4.03	4.01	ND	ND	ND
Apr-2000	0.195	0.201	NA	ND	2	2.15	ND	ND	114	112	ND	ND	0.01
Apr-2001	0.92	NA	NA	ND	1.35	NA	ND	ND	19.2	NA	ND	ND	ND
Mar-2002	0.134	0.131	NA	ND	2.72	2.54	ND	ND	108	103	ND	ND	0.015
Mar-2003	0.192	0.184	NA	ND	2.02	1.02	ND	ND	161	154	ND	ND	0.015
Apr-2004	0.061	0.057	ND	ND	1.31	ND	ND	ND	20.8	19.7	ND	ND	0.011
Apr-2005	0.09	0.084	ND	ND	1.19	1.19	ND	ND	21	20.2	ND	ND	ND
Mar-2006	0.01	ND	ND	ND	0.552	0.565	ND	ND	9.06	8.7	ND	ND	ND
Mar-2007	0.103	0.099	ND	ND	1.27	1.18	ND	ND	100	107	ND	ND	0.032
Mar-2008	0.046	0.037	ND	ND	0.776	0.728	ND	ND	8.12	7.66	ND	ND	ND
Mar-2009	0.125	0.104	ND	0.015	0.649	0.69	ND	ND	10.9	11.4	ND	ND	0.012
Apr-2010	0.736	0.233	ND	ND	1.35	1.16	ND	ND	26.4	37.7	ND	ND	ND
Apr-2011	0.184	0.157	ND	ND	0.895	0.887	ND	ND	12.6	12.4	ND	ND	0.013
Mar-2012	0.178	0.076	ND	ND	1.06	0.933	ND	ND	26.7	25.3	ND	ND	ND
Sep-2012	0.0886	0.0681	ND	0.0027 J	0.789	0.738	ND	ND	20	18.9	ND	ND	0.0048 J
Mar-2013	0.0367	0.0268	0.000069 J	0.0071 J	0.674	0.541	ND	ND	4.59	3.96	ND	ND	0.0143
Oct-2013	0.162	0.164	ND	0.0124	0.886	0.806	ND	ND	31.9	34.2	ND	0.0011 J	0.0143

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-03A***												
Mar-2014	0.0648	0.0499	ND	0.0078 J	1.07	0.939	ND	ND	38.7	38.3	ND	0.0122	0.0105
Oct-2014	0.24	0.193	ND	0.0045 J	1.17	1.14	0.0018 J	ND	32.8	32.5	ND	ND	0.0107
Apr-2015	0.0551	0.0339	ND	0.007 J	0.763	0.771	ND	ND	5.44	5.33	ND	ND	0.0076 J
Nov-2015	0.359	0.312	ND	0.0048 J	1.06	1.07	ND	ND	35.6	35.5	ND	ND	0.0084 J
May-2016	0.124	0.103	ND	0.0109	1.52	1.36	ND	ND	71.1	67.1	ND	0.00041 J	0.0163 J
Oct-2016	0.382 R	0.304	ND	0.0199 J+	1.22	1.23	ND	ND	68.1	62.4	ND	0.00053 J	0.0124 J
May-2017	0.111	0.0807	ND	0.0373	1.21	1.23	ND	ND	57.9	58.4	ND	ND	0.0075 J
Oct-2017	0.102	0.093	ND	0.0057 B	1.26	1.38	ND	ND	72.9	82	ND	ND	ND
May-2018	0.079	0.081	ND	0.0034	ND	0.95 J	0.00098 J	ND	81.7	74.2	0.00018 J	0.002	0.0073
Nov-2018	0.76	0.75	ND	0.0025	ND	ND	0.00012 J	ND	47.2	47.9	ND	ND	0.0032 J
May-2019	0.64	0.61	ND	0.00082	ND	ND	ND	ND	21	22.2	ND	ND	ND
Oct-2019	0.49	0.48	ND	0.00068	ND	ND	ND	ND	19.4	19.6	ND	ND	0.0088 B
May-2020	0.36	0.34	ND	0.0012	ND	ND	ND	ND	19.5	19.6	ND	ND	0.0044 J
Oct-2020	0.39	0.35	ND	ND	ND	ND	ND	ND	23	19	ND	0.0039 JB	ND
Apr-2021	0.45	0.46	ND	ND	0.54	0.57	ND	ND	16	16.8	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-03A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	18	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	5.8	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.14 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-03A*																
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.03 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.26 J*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.4 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-03A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*0.6 J*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.55 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.51 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-03A***															
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.76 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.68 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.36 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.48 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.22 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-03A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-03A***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.278 J*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-05B***											
Nov-1993	ND	ND	0.1	ND	1.6	0.2	ND	3.73	44.6	3.8	32	1.54	1.4
Apr-1994	ND	ND	ND	ND	1.3	ND	ND	4.95	24.4	2.7	ND	ND	4.9
Aug-1994	ND	ND	ND	ND	1.6	0.4	ND	4.9	20.4	4.3	ND	2.61	17.6
Sep-1994	ND	ND	ND	ND	1.6	0.3	ND	4.8	19.3	4.8	10	2.8	2
Nov-1994	ND	ND	ND	ND	1.5	0.2	ND	4.5	19.5	4.3	42	1.7	17
Apr-1995	ND	ND	ND	ND	1.4	ND	ND	4.7	18.7	4.2	ND	1.3	5.8
Apr-1997	ND	ND	ND	ND	ND	0.15	ND	NA	NA	ND	35	3.8	2
Oct-1997	ND	ND	0.2	ND	1.06	ND	ND	5.58	19.8	1.86	21	ND	2.7
Apr-1998	3	3	0.22	ND	1.42	ND	ND	5.71	17.86	3.05	15	3.4	26
Apr-1999	ND	ND	0.27	ND	2.2	ND	ND	4.52	19.24	1.52	32	1.7	3
Oct-1999	ND	ND	0.06	ND	1.69	ND	ND	4.79	18.92	1.83	32	1.8	3.9
Apr-2000	ND	ND	ND	ND	2.52	0.15	ND	4.99	15	1.13	23	1.8	0.46
Oct-2000	ND	NA	ND	ND	1.54	ND	ND	4.57	15.62	5.31	14	2.71	4.67
Apr-2001	ND	NA	ND	ND	1.2	ND	ND	NA	NA	ND	10	1.92	3.04
Sep-2001	ND	ND	ND	ND	2.62	ND	ND	4.61	20	7.5	26	1.99	86
Mar-2002	ND	ND	ND	ND	1.34	ND	ND	4.7	18	1.9	ND	1.55	0.9
Sep-2002	ND	ND	ND	ND	1.34	ND	ND	4.4	19.8	3.95	27	2.95	2.8
Mar-2003	ND	ND	ND	ND	2.17	ND	ND	4.8	18.2	2.69	17	2.53	1.9
Oct-2003	ND	ND	ND	ND	1.51	0.142	ND	3.8	19.4	2.74	49	10.5	2.4
Apr-2004	ND	ND	ND	ND	1.7	0.12	ND	5	15.2	3.17	ND	3.01	7
Oct-2004	ND	ND	ND	15	1.61	0.11	ND	4.5	19.9	2.56	31	1.77	1.5
Apr-2005	3.2	3.2	ND	ND	2.53	0.09	ND	5.2	18.4	ND	44	3.32	144
Oct-2005	1.1	1.1	ND	ND	1.83	0.12	ND	4.7	14.7	4.29	33	1.76	0.37
Mar-2006	1.4	1.4	ND	ND	1.68	0.13	ND	4	16.1	4.73	ND	0.971	0.25
Sep-2006	1.2	1.2	ND	ND	1.78	0.12	ND	4.6	16.2	4.13	18	1.42	4.5
Mar-2007	1.8	1.8	ND	ND	1.91	0.14	ND	4.8	15.4	3.74	12	1.61	2.4
Sep-2007	ND	ND	0.31	ND	1.68	0.13	ND	4.2	14.6	3.39	28	1.33	0.35
Mar-2008	ND	ND	ND	10	1.9	0.12	ND	4.4	15.6	4.55	28	1.51	3.7
Sep-2008	1.8	1.8	ND	ND	1.74	0.06	ND	4.7	15	5.72	21	1.7	2
Mar-2009	1.2	1.2	ND	ND	1.65	0.1	ND	4.7	16.8	6.58	16	1.96	4.2
Oct-2009	1.4	1.4	ND	ND	1.58	0.14	ND	3.9	15.5	2.74	19	1.47	10
Apr-2010	1.5	1.5	ND	ND	1.53	0.12	ND	4.6	17.2	2.94	22	1.2	3.2
Oct-2010	ND	ND	ND	ND	1.95	0.08	ND	3.8	15.6	2.67	ND	1.62	2.3
Apr-2011	1.1	1.1	ND	ND	1.84	0.13	ND	4.1	16.8	2.11	27	1.54	5.1
Sep-2011	1.3	1.3	0.21	ND	1.62	0.1	ND	4.5	15.8	2.25	32	1.44	5.6
Mar-2012	1.2	1.2	ND	ND	1.82	0.1	ND	3.8	15.8	3.4	ND	1.72	3.8

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-05B***											
Sep-2012	1	1	*ND*	*ND*	1.84	0.12	*ND*	3.8	16.4	1.9	22	1.59	6.35
Mar-2013	1.6	1.6	*ND*	*ND*	2.02	0.117	*ND*	4.8	16.6	2.39	12	1.75	22
Oct-2013	1.72	1.72	*ND*	*ND*	1.88	0.12	*ND*	4.8	16.4	2.52	*ND*	2.23	6.46
Mar-2014	1.4	1.4	*ND*	*ND*	1.87	0.115	*ND*	5.1	16.2	2.72	*ND*	1.59	6.63
Oct-2014	*ND*	*ND*	*ND*	*9 J*	2.1	0.129	*ND*	4.1	16.1	2.36	*ND*	1.61	12.1
Apr-2015	1.92	1.92	*ND*	*ND*	1.94	0.122	*ND*	4.4	15.3	2.86	*ND*	1.89	5.71
Nov-2015	*ND*	*ND*	*ND*	*ND*	1.93	0.144	*ND*	4.9	27.7	2.94	*ND*	1.52	3.09
May-2016	2.76	2.76	*ND*	*ND*	2.13 B	0.158	*ND*	4.7	26	3.66	57	3	8.24
Oct-2016	1.04	1.04	*ND*	*ND*	1.99	*NA*	*NA*	4.8	28.4	4.36	28	2.8	5.31
May-2017	2.6	2.6	*ND*	35	2.29	0.211	*ND*	4.5	32.1	4.68	*22 J*	3.5	3.6
Oct-2017	*ND*	*ND*	*ND*	*ND*	1.91	0.182	*ND*	4.9	33.5	2.97	*ND*	1.5	3.85
May-2018	*1 JB*	*ND*	*ND*	*7.9 J*	*2 J*	*ND*	*ND*	4.5	26.8	*ND*	*ND*	*1.8 J*	*3.5*
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	*1.8 J*	0.17	*ND*	4.27	18.5	*ND*	*ND*	*1.6 J*	*4.03*
May-2019	*ND*	*NA*	*ND*	*ND*	*ND*	0.18	*ND*	4.23	14.5	*ND*	27	*ND*	4.78
Oct-2019	*ND*	*NA*	*ND*	*ND*	*1.5 J*	0.19	*ND*	4.34	19.5	*ND*	20	1.2	1.95
May-2020	*ND*	*NA*	*ND*	*ND*	*1.7 J*	0.17	*ND*	4.4	18.9	*ND*	19	*1.8 J*	*3.57*
Oct-2020	*ND*	*NA*	*ND*	*ND*	*1.6 J*	0.18	*ND*	4.26	17.6	*ND*	11	1.6	1.85
Apr-2021	14	*NA*	*ND*	*ND*	*1.8 J*	0.2	*ND*	4.96	22.7	*ND*	*ND*	3.45	4.8

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-05B*													
Nov-1993	NA	ND	ND	NA	ND	0.32	NA	ND	NA	ND	0.03	ND	ND	0.18	NA
Apr-1994	NA	ND	ND	NA	ND	0.011	NA	ND	NA	ND	67	3	ND	0.036	NA
Aug-1994	NA	ND	ND	NA	ND	0.78	NA	ND	NA	ND	ND	ND	ND	0.16	NA
Sep-1994	NA	ND	ND	NA	ND	0.82	NA	ND	NA	ND	0.11	0.04	**0.038**	0.19	NA
Nov-1994	NA	ND	ND	NA	ND	0.4	NA	ND	NA	0.03	ND	ND	ND	0.17	NA
Apr-1995	ND	ND	0.8	ND	ND	0.24	NA	ND	ND	ND	3.2	ND	ND	0.18	NA
Oct-1996	ND	ND	0.006	ND	ND	0.58	0.49	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	0.72	0.48	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	0.572	0.507	ND	ND	0.013	0.652	ND	ND	0.208	0.166
Apr-1998	ND	ND	ND	ND	ND	1.01	3.15	ND	ND	ND	0.378	0.019	ND	0.213	0.545
Apr-1999	ND	ND	ND	ND	ND	0.441	0.495	ND	ND	ND	ND	ND	ND	0.169	0.163
Oct-1999	ND	ND	ND	ND	ND	0.48	0.497	ND	ND	ND	0.11	ND	ND	0.176	0.168
Apr-2000	ND	ND	ND	ND	ND	0.451	0.457	ND	ND	ND	ND	ND	ND	0.169	0.157
Oct-2000	ND	ND	ND	ND	ND	0.716	0.417	ND	ND	0.015	0.104	ND	ND	0.224	0.16
Apr-2001	ND	ND	ND	ND	ND	0.471	NA	ND	ND	ND	0.075	NA	ND	0.18	NA
Sep-2001	ND	ND	ND	ND	ND	0.476	0.432	ND	ND	0.023	58.1	0.079	**0.02**	0.193	0.157
Mar-2002	ND	ND	ND	ND	ND	0.363	0.442	ND	ND	ND	0.144	ND	ND	0.157	0.168
Sep-2002	ND	ND	ND	ND	ND	0.829	0.368	ND	ND	0.014	0.136	ND	ND	0.214	0.159
Mar-2003	ND	ND	ND	ND	ND	0.699	0.673	ND	ND	ND	ND	ND	ND	0.192	0.178
Oct-2003	ND	ND	ND	ND	ND	0.807	0.504	ND	ND	0.028	0.194	ND	0.01	0.204	0.168
Apr-2004	ND	ND	ND	ND	ND	0.808	0.591	ND	ND	0.012	0.103	ND	ND	0.239	0.177

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05B***													
Oct-2004	ND	ND	ND	ND	ND	0.429	0.423	ND	ND	ND	0.094	ND	ND	0.169	0.157
Apr-2005	ND	ND	0.011	ND	ND	0.78	0.816	ND	ND	ND	30.5	0.897	0.007	0.333	0.342
Oct-2005	ND	ND	ND	ND	ND	0.431	0.428	ND	ND	ND	0.286	ND	ND	0.166	0.167
Mar-2006	ND	ND	ND	ND	ND	0.233	0.226	ND	ND	ND	ND	ND	ND	0.095	0.099
Sep-2006	ND	ND	ND	ND	ND	0.332	0.338	ND	ND	ND	0.158	ND	ND	0.144	0.138
Mar-2007	ND	ND	ND	ND	ND	0.417	0.409	ND	ND	ND	0.058	ND	ND	0.138	0.165
Sep-2007	ND	0.002	ND	ND	ND	0.319	0.327	ND	ND	ND	ND	ND	ND	0.13	0.126
Mar-2008	ND	0.003	ND	ND	ND	0.363	0.391	ND	ND	ND	0.082	ND	ND	0.147	0.153
Sep-2008	ND	ND	ND	ND	ND	0.42	0.263	ND	ND	ND	0.176	ND	ND	0.163	0.152
Mar-2009	ND	ND	ND	ND	ND	0.497	0.31	ND	ND	ND	0.175	ND	ND	0.175	0.125
Oct-2009	ND	ND	ND	ND	ND	0.323	0.35	ND	ND	ND	0.157	ND	ND	0.16	0.161
Apr-2010	ND	ND	ND	ND	ND	0.296	0.212	ND	ND	ND	0.165	ND	ND	0.113	0.094
Oct-2010	ND	ND	ND	ND	ND	0.392	0.289	ND	ND	ND	0.213	ND	ND	0.156	0.1
Apr-2011	ND	ND	ND	ND	ND	0.362	0.302	ND	ND	ND	0.101	ND	ND	1.55	0.123
Sep-2011	ND	ND	ND	ND	ND	0.356	0.381	ND	ND	ND	0.148	ND	ND	0.133	0.165
Mar-2012	ND	ND	ND	ND	ND	0.323	0.337	ND	ND	ND	0.062	ND	ND	0.222	0.216
Sep-2012	ND	ND	0.0043 J	0.000281 J	ND	0.381	0.372	ND	0.0035 J	0.0077 J	0.0666	0.0131 J	0.000497 J	0.154	0.16
Mar-2013	ND	ND	0.0059 J	0.000283 J	ND	0.468	0.464	0.0049 J	0.0034 J	0.0107	0.947	0.0082 J	0.0014 J	0.141	0.115
Oct-2013	0.000873 J	ND	0.0049 J	0.000283 J	ND	0.684	0.602	0.0084 J	0.0035 J	0.0072 J	0.253	0.0668	0.000971 J	0.126	0.11
Mar-2014	0.000335 J	ND	0.0036 J	0.000313 J	ND	0.371	0.336	0.000381 J	0.0031 J	0.0064 J	0.0871 J	0.0073 J	0.000355 J	0.161	0.142
Oct-2014	0.000609 J	ND	0.0077 J	0.00036 J	ND	0.374	0.308	0.0029 J	0.0033 J	0.008 J	0.828	0.0991	0.0011 J	0.165	0.101
Apr-2015	0.0013 J	ND	0.0047 J	0.00023 J	0.000094 J	0.479	0.324	0.000635 J	0.0035 J	0.0075 J	0.157	0.0084 J	ND	0.169	0.105
Nov-2015	0.000506 J	ND	0.0042 J	0.000288 J	ND	0.357	0.221	0.00062 J	0.0037 J	0.0093 J	0.0924	ND	0.000591 J	0.153	0.0846
May-2016	0.00052 J	ND	0.0051	0.00026 J,B	ND	0.857	0.608	0.0011 J	0.0031	0.0058	0.557	ND	0.0025	0.201	0.185 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05B***													
Oct-2016	*0.00069 J*	*ND*	0.0059	*0.00025 J*	*0.00074 J*	0.767	0.658	*0.0014 J+*	0.0033	*0.0044 J+*	0.734	*ND*	0.0027	*0.216 J+*	*0.191 J*
May-2017	*0.00076 J*	*ND*	0.0055	*0.00023 J*	*ND*	0.976	0.705	*0.0011 J*	0.0031	0.0043	0.423	*ND*	0.0027	0.264	0.209
Oct-2017	*ND*	*ND*	0.0045	*0.00023 J*	*ND*	*0.366 J*	*0.37 J*	*0.0015 J*	0.0035	*0.0031 J*	*ND*	*ND*	*ND*	*0.15 J*	*0.164 J*
May-2018	*0.000066 J*	*ND*	0.0044	*0.00022 J*	*0.000056 J*	*0.38 J*	*0.36 J*	*0.0047 J*	0.0033	0.0034 B	*0.017 J*	*ND*	*0.000041 J*	*0.22 J*	*0.17 J*
Nov-2018	*ND*	*0.000041 J*	0.0039	*0.00024 J*	*0.000062 J*	*0.47 J*	1.6	0.011	0.0034	**0.0037 D6**	0.086	0.026	*0.00014 J*	*0.11 J*	*0.19 J*
May-2019	*ND*	*ND*	0.0042	*ND*	*ND*	*ND*	*ND*	0.011	0.0041	0.004	*ND*	0.033	*ND*	*ND*	*ND*
Oct-2019	*0.000052 J*	*ND*	0.0041	*0.00022 J*	*0.0002 J*	0.31	*0.75 J*	0.017	0.0052	0.0086	0.11	0.058	*0.00011 J*	*0.11 J*	*0.17 J*
May-2020	*ND*	*ND*	*0.0049 J*	*0.00028 J*	*ND*	*0.49 J*	*0.68 J*	0.0073	*0.0034 J*	0.0085	0.072	*ND*	*ND*	*0.15 J*	*0.17 J*
Oct-2020	*0.0005 J*	*ND*	*0.0045 J*	*ND*	*ND*	0.48	*0.65 J*	*0.013 J*	0.0042	*ND*	*0.061 J*	0.03	*ND*	*0.11 J*	*0.18 J*
Apr-2021	*ND*	*ND*	*0.0043 J*	*0.00023 J*	*ND*	1	1.1	*0.0049 J*	*0.0034 J*	0.0059	*0.053 J*	*ND*	*ND*	0.23	0.23

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-05B*												
Nov-1993	0.05	NA	ND	NA	0.47	NA	ND	NA	1.1	NA	NA	NA	0.01
Apr-1994	0.08	NA	ND	NA	0.58	NA	ND	NA	1.6	NA	NA	NA	ND
Aug-1994	0.01	NA	ND	NA	0.58	NA	ND	NA	0.76	NA	NA	NA	0.05
Sep-1994	0.01	NA	ND	NA	0.37	NA	ND	NA	0.85	NA	NA	NA	1.1
Nov-1994	ND	NA	ND	NA	0.3	NA	ND	NA	0.75	NA	NA	NA	0.02
Apr-1995	ND	NA	ND	ND	0.53	NA	ND	0.01	0.82	NA	ND	ND	0.04
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	2.2	1.7	ND	ND	0.13
Apr-1997	ND	ND	0.0018	ND	1.1	1.8	ND	ND	1.9	1	ND	ND	0.039
Oct-1997	ND	ND	NA	0.015	ND	ND	ND	ND	0.971	0.907	ND	ND	0.049
Apr-1998	ND	0.012	NA	0.022	1.16	ND	ND	ND	0.898	1.11	ND	ND	0.107
Apr-1999	ND	ND	NA	ND	ND	1.05	ND	ND	0.93	0.926	ND	ND	0.024
Oct-1999	ND	ND	NA	ND	ND	ND	ND	ND	0.95	0.91	ND	ND	0.027
Apr-2000	ND	ND	NA	ND	ND	ND	ND	ND	0.96	0.974	ND	ND	0.019
Oct-2000	ND	ND	NA	ND	0.712	0.457	ND	ND	1.74	0.939	ND	ND	0.023
Apr-2001	ND	NA	NA	ND	1.28	NA	ND	ND	0.993	NA	ND	ND	0.018
Sep-2001	0.125	ND	NA	ND	0.573	0.733	ND	ND	0.963	0.909	ND	ND	2.11
Mar-2002	ND	ND	NA	ND	0.773	ND	ND	ND	0.936	0.975	ND	ND	0.022
Sep-2002	ND	ND	NA	ND	1.26	ND	ND	ND	1.58	0.873	ND	ND	0.023
Mar-2003	ND	ND	NA	ND	ND	ND	ND	ND	0.92	0.941	ND	ND	0.033
Oct-2003	ND	ND	NA	ND	1.93	1.06	ND	ND	1.54	0.922	ND	ND	0.025
Apr-2004	ND	ND	ND	ND	0.668	ND	ND	ND	1.37	0.976	ND	ND	0.058
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	0.914	0.604	ND	ND	0.024

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05B***												
Apr-2005	0.018	0.016	ND	ND	ND	0.54	ND	ND	1.36	1.35	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	0.845	0.812	ND	ND	0.013
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	0.63	0.588	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.52	0.51	ND	ND	0.783	0.777	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	0.764	0.695	ND	ND	0.02
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	0.804	0.778	ND	ND	0.015
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	0.834	0.829	ND	ND	0.01
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	0.831	0.753	ND	ND	0.057
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.12	0.887	ND	ND	0.02
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	0.81	0.791	ND	ND	0.015
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	0.847	0.841	ND	ND	0.021
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	0.857	0.87	ND	ND	0.018
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	0.907	0.899	ND	ND	0.02
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	0.983	0.947	ND	ND	0.013
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	0.9	0.901	ND	ND	0.013
Sep-2012	0.0039 J	0.0036 J	ND	0.0055 J	0.39 J	0.321 J	ND	ND	0.948	0.903	ND	ND	0.0168
Mar-2013	0.0044 J	0.0027 J	0.000072 J	0.0068 J	0.48 J	0.435 J	ND	ND	0.909	1.02	ND	ND	0.0321
Oct-2013	0.0043 J	0.0035 J	ND	0.005 J	0.347 J	0.302 J	ND	ND	0.753	0.744	0.000122 J	0.0084 J	0.0276
Mar-2014	0.0032 J	0.003 J	ND	0.0052 J	0.396 J	0.401 J	ND	ND	0.903	0.932	ND	ND	0.02
Oct-2014	0.0046 J	0.0027 J	ND	0.0064 J	0.551	0.443 J	0.0012 J	ND	0.984	1.1	ND	0.0018 J	0.0197
Apr-2015	0.0039 J	0.0021 J	ND	0.0059 J	0.47 J	0.453 J	ND	ND	1.05	1.09	ND	ND	0.023
Nov-2015	0.004 J	0.002 J	ND	0.0062 J	0.414 J	0.42 J	ND	ND	1.09	1.15	ND	ND	0.0205
May-2016	0.0064	0.0043 B	ND	0.0062	0.464	0.451	ND	ND	2.4	1.98	ND	0.0003 J	0.809
Oct-2016	0.0079 R	0.0042	ND	0.0057 J+	0.515	0.52	ND	ND	2.49 J+	2.44	ND	0.00037 J	0.55

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05B***												
May-2017	0.008	*0.004 J*	*ND*	0.0055	0.488	0.477	*ND*	*ND*	4	3.23	*ND*	*0.00028 J*	0.835
Oct-2017	0.0042	*0.0035 J*	*ND*	0.0074	0.427	*0.395 J*	*ND*	*ND*	1.01	1.04	*ND*	*ND*	*0.0091 J*
May-2018	0.0036 B	0.0031	*ND*	0.008	*ND*	*ND*	*0.00048 JB*	*ND*	*1.5 J*	*1.2 J*	*ND*	*ND*	0.0088 B
Nov-2018	0.0037	0.0041	*ND*	0.015	*ND*	*ND*	*0.00013 J*	*ND*	*1.2 J*	*1.2 J*	*0.000076 J*	*0.00045 J*	0.0086 D6
May-2019	0.0048	0.0057	*ND*	0.013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0026	0.023
Oct-2019	0.006	0.0064	*ND*	0.018	*ND*	*ND*	*0.00054 J*	*0.00049 J*	*ND*	*ND*	*ND*	0.005	0.034
May-2020	*0.0041 J*	*0.0045 JB*	*ND*	0.011	*0.5 J*	*0.45 J*	*ND*	*ND*	1.2	1.3	*ND*	*ND*	0.017
Oct-2020	0.0049	0.0034	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.0035 J*	*ND*
Apr-2021	*0.0045 J*	*0.0042 J*	*0.00005 J*	*0.0092 J*	*0.47 J*	*0.49 J*	*ND*	*ND*	1.1	*0.98 J*	*ND*	*ND*	0.051

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05B*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05B*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05B*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.8 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05B***															
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.18 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05B***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05B***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Aug-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05B***															
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.1 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05B***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.705 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-06A***											
Nov-1993	18	18	0.5	288	17.2	0.6	ND	5.42	381	136	246	144	8200
Apr-1994	46	46	0.3	31	12.4	ND	ND	5.62	302	71.6	187	98.05	74.2
Apr-1995	55.6	55.6	ND	40.6	14.2	ND	ND	6.5	349	66.5	203	129	250
Apr-1997	ND	70	ND	27	6	ND	ND	NA	NA	30	166	98	70
Apr-1998	101	101	0.34	28	3.76	0.141	ND	6.93	230	28.7	170	118	34
Apr-1999	77	77	0.75	24	5.94	ND	ND	6.29	366	67.8	130	143	110
Apr-2000	96	96	ND	27	5.99	ND	ND	8.36	219	46	181	133	25
Apr-2001	98	NA	ND	24	2.58	ND	ND	NA	NA	18.8	186	140	30
Mar-2002	109	109	ND	28	1.77	1.55	ND	7.9	391	80.5	276	194	11
Mar-2003	82	82	ND	19	5.12	ND	ND	7	243	27.3	146	110	31
Apr-2004	94	94	ND	14	2.4	ND	ND	7.1	207	30.7	215	132	42
Apr-2005	88	88	ND	28	2.4	ND	ND	6.8	241	34.6	175	128	91
Mar-2006	62	62	ND	10	3.07	0.22	ND	5.7	258	50.4	170	115	43.8
Mar-2007	72	72	0.5	21	11.3	ND	ND	6.4	187.6	34.8	135	111	1013
Mar-2008	91	91	ND	ND	7.34	ND	ND	7	192.8	29.3	190	54.2	309
Mar-2009	136	136	ND	ND	3.82	0.7	ND	6.9	315	47.5	237	177	9.5
Apr-2010	107	107	ND	18	4.68	ND	ND	6.3	207	27.5	220	142	269
Apr-2011	99	99	ND	16	4.6	ND	ND	6.2	201	22.3	159	119	12
Mar-2012	64	64	0.27	13	4.08	ND	ND	5.9	174.9	35.5	149	95.7	2.7
Mar-2013	57.9	57.9	ND	18.3	3.87	0.304	ND	6.5	178.3	46.3	150	110	114
Mar-2014	55.3	55.3	ND	ND	2.91	0.882	ND	6.2	179.9	49.8	148	122	111
Apr-2015	82.4	82.4	ND	9 J	4.07	0.531	ND	5.8	211	40.9	200	122	60.3
May-2016	70.5	70.5	ND	6 J	3.99	0.526	ND	7	276	43	159	126	48.6
May-2017	68.5	68.5	ND	17	6.15	0.734	0.0762	6.4	352	42.1	168	112	9.79
May-2018	82	82	ND	33.7	7	0.1	ND	NA	NA	42	78	136	NA
May-2019	112	NA	ND	ND	3.8	0.1	ND	6.62	195.2	34.7	179	139	8.21
May-2020	100	NA	ND	13.5 J	3.1	1.1	ND	5.94	219.2	36	151	130	38
Apr-2021	120	NA	ND	12.6 J	2.7 J	0.1	ND	7.12	294.2	30.1 ML	170	141	22.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06A***													
Nov-1993	NA	ND	ND	NA	ND	46	NA	ND	NA	ND	47.3	0.08	ND	7.3	NA
Apr-1994	NA	ND	0.019	NA	ND	33	NA	ND	NA	ND	13	8.9	ND	3.8	NA
Apr-1995	ND	ND	ND	ND	ND	43	NA	ND	ND	ND	15.1	ND	ND	5.3	NA
Apr-1997	ND	ND	0.02	ND	ND	29	32	ND	ND	ND	6.2	6.2	ND	3.6	3.9
Apr-1998	ND	ND	0.02	ND	ND	39.7	40	ND	ND	ND	3.05	0.84	ND	4.63	4.65
Apr-1999	ND	ND	0.02	ND	ND	47.5	48.9	ND	ND	ND	13	0.07	ND	5.99	6.18
Apr-2000	ND	ND	0.019	ND	ND	44.8	43.5	ND	ND	ND	5.16	0.908	ND	5.13	4.98
Apr-2001	ND	ND	0.017	ND	ND	47.2	NA	ND	ND	ND	2.56	NA	ND	5.34	NA
Mar-2002	ND	ND	0.034	ND	ND	64.7	67.3	ND	ND	ND	1.02	ND	ND	7.98	8.32
Mar-2003	ND	ND	0.017	ND	ND	37.1	35.6	ND	ND	ND	3.59	0.217	ND	4.23	3.98
Apr-2004	ND	ND	0.03	ND	ND	45.3	43.3	ND	ND	ND	5.38	0.766	ND	4.73	4.46
Apr-2005	ND	ND	0.027	ND	ND	43.8	40.2	ND	ND	ND	9.29	1.68	ND	4.6	4.2
Mar-2006	ND	ND	0.038	ND	ND	38.7	37.8	ND	ND	ND	2.26	ND	ND	4.44	4.32
Mar-2007	ND	ND	0.038	ND	ND	37.9	34.1	ND	ND	0.01	62.1	3.6	ND	3.95	3.44
Mar-2008	ND	ND	0.021	ND	ND	36.7	37.9	ND	ND	ND	15	0.105	ND	4.06	4.2
Mar-2009	ND	ND	0.025	ND	ND	60.4	57.3	ND	ND	0.013	0.865	ND	ND	6.36	6.03
Apr-2010	ND	ND	0.027	ND	ND	49	44.6	ND	ND	ND	5.95	2.17	ND	4.81	4.36
Apr-2011	ND	ND	0.024	ND	ND	40.5	39.3	ND	ND	0.014	2.14	0.952	ND	4.49	4.21
Mar-2012	ND	ND	0.029	ND	ND	32.4	31.6	ND	ND	0.011	1.28	0.362	ND	3.59	3.43
Mar-2013	ND	ND	0.0466	0.000079 J	ND	36.9	33.3	0.0036 J	0.0026 J	0.128	26.8	0.393	0.0013 J	4.29	3.71
Mar-2014	ND	ND	0.0305	ND	ND	43	41.1	0.0044 J	0.0021 J	0.0092 J	1.8	0.0827	ND	3.45	4.27

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06A***													
Apr-2015	*0.000223 J*	*ND*	0.0298	*ND*	*ND*	41.4	42.9	*0.000762 J*	*0.000611 J*	*0.0055 J*	2.11	0.244	*ND*	4.63	4.84
May-2016	*0.00042 J*	*0.00073 J*	0.0483	*0.00015 J*	*ND*	42.8	41.8	0.0111	0.0051	0.0826	67.2	*0.0234 J*	*0.0018 J*	4.68	4.57
May-2017	*ND*	*ND*	0.0346	*ND*	*ND*	37.4	38.9	*0.0019 J*	0.0026	0.0079	3.38	*0.059 J*	*0.00021 J*	4.46	4.67
May-2018	0.0012	*ND*	0.06	0.00075	*0.00079 J*	46.3	38.1	0.01	0.0015	0.022	110	0.099	0.013	4.9	4.2
May-2019	*ND*	*ND*	0.026	*ND*	*ND*	47.2	46.4	*ND*	0.003	*ND*	0.66	0.02	*ND*	5	5
May-2020	*ND*	*ND*	0.032	*ND*	*ND*	44.5	43.6	*0.0047 J*	*0.0047 J*	*0.0045 J*	3.8	*ND*	*ND*	4.6	4.8
Apr-2021	*ND*	*ND*	0.027	*ND*	*ND*	48.2 ML	48.4 MH	*0.0015 J*	*0.0015 J*	*ND*	0.67	*ND*	*ND*	5.1	5

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-06A*												
Nov-1993	0.78	NA	ND	NA	7.4	NA	ND	NA	9.3	NA	NA	NA	0.16
Apr-1994	0.27	NA	ND	NA	5.2	NA	ND	NA	5.3	NA	NA	NA	ND
Apr-1995	0.23	NA	ND	ND	5.6	NA	ND	ND	2.8	NA	ND	ND	0.04
Apr-1997	0.1	0.1	ND	ND	4.4	5	ND	ND	2.3	2.6	ND	ND	ND
Apr-1998	0.04	0.035	NA	ND	4.93	4.13	ND	ND	1.89	1.94	ND	ND	0.016
Apr-1999	0.087	0.079	NA	ND	4.97	4.93	ND	ND	2.29	2.36	ND	ND	ND
Apr-2000	0.063	0.059	NA	ND	4.27	3.89	ND	ND	1.9	1.82	ND	ND	ND
Apr-2001	0.014	NA	NA	ND	4.5	NA	ND	ND	1.63	NA	ND	ND	ND
Mar-2002	0.011	ND	NA	ND	5.16	5.13	ND	ND	1.35	1.4	ND	ND	0.015
Mar-2003	ND	ND	NA	ND	3.44	3.78	ND	ND	1.62	1.6	ND	ND	0.011
Apr-2004	0.087	0.067	ND	ND	4.24	3.99	ND	ND	1.38	1.37	ND	ND	ND
Apr-2005	0.077	0.059	ND	ND	3.67	3.18	ND	ND	1.54	1.3	ND	ND	0.026
Mar-2006	0.026	0.018	ND	ND	3.6	3.49	ND	ND	1.22	1.17	ND	ND	ND
Mar-2007	0.165	0.103	ND	ND	4.09	3.78	ND	ND	1.4	1.28	ND	ND	0.02
Mar-2008	0.065	0.023	ND	ND	3.69	3.71	ND	ND	1.82	1.41	ND	ND	0.01
Mar-2009	ND	ND	ND	ND	4.84	4.57	ND	ND	1.49	1.38	ND	ND	ND
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apr-2010	0.073	0.079	ND	ND	4.82	4.43	ND	ND	1.83	1.77	ND	ND	ND
Apr-2011	0.037	0.031	ND	ND	4.41	4.25	ND	ND	2.43	2.39	ND	ND	ND
Mar-2012	0.069	0.06	ND	ND	4.08	4.03	ND	ND	1.99	1.95	ND	ND	ND
Mar-2013	0.184	0.1	0.000113 J	0.0056 J	3.92	3.61	0.000429 J	0.000023 J	2.19	2.06	ND	ND	0.0211
Mar-2014	0.0308	0.029	ND	0.0017 J	4.3	4.05	ND	0.000079 J	1.53	1.95	ND	0.0041 J	0.0074 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-06A***												
Apr-2015	0.0163	0.0131	*ND*	*0.0014 J*	4.12	4.3	*0.00088 J*	*ND*	2.33	2.44	*ND*	*ND*	*0.0059 J*
May-2016	0.216	0.039	*ND*	0.0108	4.01	3.86	*ND*	*0.00016 J*	1.95	1.97	*ND*	0.0032	*0.0237 J*
May-2017	0.0408	0.034	*ND*	*0.0017 J*	4.78	4.89	*ND*	*ND*	2.55	2.49	*ND*	*0.00041 J*	*0.0036 J*
May-2018	0.24	0.0081	*ND*	0.005	*3.9 J*	*3.5 J*	*0.00018 JB*	*ND*	*2.8 J*	*2.4 J*	*ND*	0.012	0.017
May-2019	0.006	0.017	*ND*	0.0014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.002	*ND*
May-2020	0.013	0.0077 B	*ND*	*0.0038 J*	5.4	4.7	*ND*	*ND*	2.3	2.7	*ND*	*ND*	*ND*
Apr-2021	*0.005 J*	*ND*	*ND*	*ND*	5	5	*ND*	*ND*	2.3	2.4	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06A*																
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-06A*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-06A***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-06A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	2.6 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2013	*ND*	*0.53 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-06A***															
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-06B***											
Apr-2010	1.3	1.3	ND	ND	2.76	0.33	ND	3.8	22.1	3.09	26	1.9	2.3
Oct-2010	1.2	1.2	ND	ND	2.81	0.32	ND	3.6	22.4	3.58	10	2.24	0.46
Apr-2011	ND	ND	ND	ND	2.82	0.35	ND	4	24.1	1.7	17	2	0.25
Sep-2011	ND	ND	0.21	ND	2.69	0.34	ND	4.5	23.5	2.22	28	2.4	ND
Mar-2012	ND	ND	ND	ND	3.17	0.35	ND	3.8	20.8	3.55	14	2.51	0.42
Sep-2012	ND	ND	ND	ND	2.95	0.335	ND	3.1	23.6	3.24	20	2.23	0.273
Mar-2013	0.92 J	0.92 J	ND	ND	3.22	0.341	ND	3.9	25.7	1.98	15	2.52	0.11
Oct-2013	1.56	1.56	ND	ND	3.09	0.324	ND	5.4	24.9	2.33	ND	2.77	0.117
Mar-2014	ND	ND	ND	ND	3.32	0.291	ND	4.6	24.1	2.84	ND	2.02	0.092 J
Oct-2014	ND	ND	ND	11	3.31	0.314	ND	4.4	23	2.8	ND	2.26	0.083 J
Apr-2015	0.96	0.96	ND	ND	3.16	0.357	ND	4.2	23.3	3.1	ND	2.28	0.078 J
Nov-2015	ND	ND	ND	ND	3.06	0.352	ND	4.8	37.5	1.95	20 J	2.2	0.612
May-2016	ND	ND	ND	ND	3.19	ND	ND	4.6	40.8	3.11	15 J	2.3	0.575
Oct-2016	ND	ND	ND	ND	3.36	NA	NA	4.8	36.1	2.17	31	2.1	0.142
May-2017	2.64	2.64	ND	ND	2.99	0.336	ND	4.5	43.8	2.15	13 J,B	3	3.15
Oct-2017	ND	ND	0.0676 J	ND	3.3	0.399	ND	4.4	44.2	2.88	25	2.3	4.71
May-2018	1 JB	ND	ND	5.8 J	2.7 J	0.073 J	ND	4.4	34.7	ND	ND	2.3 J	2.07
Nov-2018	1 JB	ND	ND	ND	2.9 J	0.31	ND	4.1	24.8	ND	ND	2.2 J	33.2
May-2019	ND	NA	ND	ND	ND	0.35	ND	3.86	20.3	ND	21	ND	6.59
Oct-2019	ND	NA	ND	ND	2.6 J	0.35	ND	4.14	24.6	ND	10	2.2	1.56
May-2020	ND	NA	ND	ND	2.9 J	0.33	ND	4.17	24.6	ND	ND	2.2 J	2.77
Oct-2020	ND	NA	ND	ND	3.2	0.35	ND	5.01	24.4	1.2	35	2.3	3.59
Apr-2021	ND	NA	ND	ND	3.1	0.34	ND	4.51	29.1	ND	17	2.3 J	5.58

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06B***													
Apr-2010	ND	ND	ND	ND	ND	0.431	0.353	ND	ND	ND	ND	ND	ND	0.188	0.157
Oct-2010	ND	ND	ND	ND	ND	0.521	0.514	ND	ND	ND	0.052	ND	ND	0.229	0.226
Apr-2011	ND	ND	ND	ND	ND	0.446	0.484	ND	ND	ND	ND	ND	ND	0.216	0.236
Sep-2011	ND	ND	ND	ND	ND	0.578	0.606	ND	ND	ND	ND	ND	ND	0.233	0.233
Mar-2012	ND	ND	ND	ND	ND	0.507	0.501	ND	ND	ND	ND	ND	ND	0.301	0.299
Sep-2012	ND	ND	0.0065 J	0.000303 J	ND	0.522	0.602	0.0011 J	0.005 J	0.0032 J	0.0367 J	0.0319 J	ND	0.225	0.245
Mar-2013	ND	ND	0.0069 J	0.000275 J	ND	0.613	0.481	0.0016 J	0.0052 J	0.0028 J	0.011 J	0.0147 J	ND	0.241	0.195
Oct-2013	ND	ND	0.0066 J	0.000312 J	ND	0.801	0.791	0.0124 J	0.0049 J	0.0022 J	0.0756	0.0724	0.000335 J	0.186	0.215
Mar-2014	0.0025	ND	0.0056 J	0.000252 J	ND	0.481	0.501	0.0015 J	0.0044 J	0.0015 J	ND	ND	ND	0.199	0.207
Oct-2014	0.0012 J	ND	0.0067 J	0.000301 J	0.000074 J	0.526	0.553	0.000384 J	0.0048 J	0.003 J	ND	ND	ND	0.231	0.244
Apr-2015	0.000346 J	ND	0.0066 J	0.000287 J	0.000071 J	0.523	0.551	0.000417 J	0.0049 J	0.0029 J	0.143	0.0882	ND	0.237	0.241
Nov-2015	ND	ND	0.0062 J	0.000327 J	0.000108 J	0.504	0.567	0.000703 J	0.0049 J	0.0028 J	ND	ND	0.000426 J	0.229	0.238
May-2016	ND	ND	0.0068	0.00029 J	ND	0.522	0.455	0.00096 J	0.0048	0.0025 J	ND	ND	ND	0.249	0.227
Oct-2016	ND	ND	0.0069	0.00028 J	ND	0.439	0.451	0.00095 J	0.0053	0.0028 J	ND	ND	0.00011 J	0.236	0.244
May-2017	ND	0.00077 J	0.0053 B	0.00027 J	ND	0.738	0.78	0.00084 J,B	0.0053	0.0051	0.134 J	ND	0.001 J	0.283	0.256
Oct-2017	ND	ND	0.0067	0.0003 J	ND	0.512	0.509	ND	0.0051	0.0027 J	ND	ND	0.00012 J	0.24	0.247
May-2018	0.000054 J	ND	0.0068	0.00025 J	0.000078 J	0.51 J	0.49 J	0.0022 J	0.0048	0.0034 B	0.028	ND	0.00012 J	0.24 J	0.25 J
Nov-2018	ND	ND	0.0062	0.00028 J	0.00011 J	0.5 J	0.85 J	0.0018 J	0.0049	0.0087	ND	0.014 J	0.00039 J	0.24 J	0.24 J
May-2019	ND	ND	0.0063	ND	ND	ND	ND	ND	0.005	0.011	ND	ND	ND	ND	ND
Oct-2019	0.000055 J	ND	0.0065	0.00027 J	0.00022 J	0.52	0.5 J	0.0046 J	0.0054	0.0098	0.016 J	0.015 J	0.00017 J	0.23	0.23 J
May-2020	ND	ND	0.0067 J	0.00029 J	ND	0.5 J	0.5 J	0.004 J	0.0045 J	0.02	ND	ND	ND	0.22	0.23

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06B***													
Oct-2020	*ND*	*ND*	*0.0064 J*	*0.00031 J*	*ND*	0.52	*0.5 J*	*0.0039 J*	0.0066	0.016	*0.023 J*	0.03 D6	*ND*	0.24	*0.24 J*
Apr-2021	*ND*	*ND*	*0.007 J*	*0.00039 J*	*ND*	*0.52 J*	*0.54 J*	*0.0033 J*	0.0055	0.018	*ND*	*ND*	*ND*	0.24	0.24

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-06B*												
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.27	1.23	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.17	1.15	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.28	1.25	ND	ND	ND
Sep-2011	ND	ND	ND	ND	0.534	ND	ND	ND	1.4	1.42	ND	ND	ND
Mar-2012	ND	ND	ND	ND	0.533	0.514	ND	ND	1.36	1.3	ND	ND	ND
Sep-2012	0.006 J	0.0065 J	ND	0.0076 J	0.465 J	0.493 J	ND	ND	1.32	1.32	ND	ND	0.0088 J
Mar-2013	0.0061 J	0.0047 J	0.000106 J	0.0075 J	0.53	0.521	ND	ND	1.53	1.57	ND	ND	0.018
Oct-2013	0.0064 J	0.0072 J	ND	0.0069 J	0.405 J	0.407 J	ND	ND	1.04	1.12	0.000409 J	0.004 J	0.0202
Mar-2014	0.0056	0.0058	ND	0.0069 J	0.556	0.545	ND	ND	1.68	1.64	0.000593 J	ND	0.0104
Oct-2014	0.0057 J	0.0061 J	ND	0.0077 J	0.529	0.516	0.0015 J	ND	1.45	1.41	ND	ND	0.0104
Apr-2015	0.0061 J	0.0064 J	ND	0.0076 J	0.523	0.502	0.000966 J	ND	1.47	1.49	ND	ND	0.0133
Nov-2015	0.0057 J	0.0061 J	ND	0.0082 J	0.517	0.496 J	0.000419 J	ND	1.55	1.53	0.000183 J	ND	0.01
May-2016	0.01	0.0053	ND	0.008	0.651	0.439	ND	ND	1.53	1.35	ND	ND	0.0091 J,B
Oct-2016	0.0055	0.006	ND	0.0086	0.529	0.535	ND	ND	1.49	1.55	ND	ND	0.0073 J
May-2017	0.0072	0.0068	ND	0.0095	0.564	0.599	ND	ND	2.54	2.45	ND	ND	0.0156 JB
Oct-2017	0.0063	0.0057	ND	0.0079	0.516	0.539	ND	ND	1.54	1.56	ND	ND	0.0076 J
May-2018	0.0058	0.0051	ND	0.0088	ND	ND	0.00044 JB	ND	1.8 J	1.6 J	ND	0.003	0.0092 B
Nov-2018	0.0091	0.0099	ND	0.0072	ND	ND	0.00019 J	ND	1.5 J	1.5 J	0.000069 J	0.0019	0.011
May-2019	0.0061	0.0058	ND	0.0096	ND	ND	ND	ND	ND	ND	ND	0.0049	0.01
Oct-2019	0.011	0.0078	ND	0.0099	ND	ND	0.00041 J	ND	1.5 J	ND	ND	0.0056	0.018
May-2020	0.0058	0.0061 B	ND	0.012	0.56	0.49 J	ND	ND	1.4	1.6	ND	ND	0.0094 J
Oct-2020	0.0095	0.0088	ND	0.0093	ND	ND	ND	ND	ND	ND	ND	0.00081 J	0.011 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-06B***												
Apr-2021	0.0067	0.0061	*ND*	*0.0094 J*	0.52	0.53	*ND*	*ND*	1.5	1.8	*ND*	*ND*	*0.0078 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06B*																
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06B*																
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-06B*															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-06B***															
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-06B***															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-06B***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-09***											
Nov-1993	ND	ND	ND	22.8	2.1	ND	ND	4.73	36.8	11.9	44	2.72	8.7
Apr-1994	10	10	ND	ND	1.6	ND	ND	6.8	39.4	8.6	43	2.3	1.64
Apr-1995	ND	ND	ND	ND	1.8	ND	ND	4.5	38.8	11.3	19	1.8	8.3
Apr-1997	ND	2	ND	ND	1.5	0.02	ND	NA	NA	7.3	88	7.7	18
Apr-1998	7	7	0.21	ND	1.35	ND	ND	6.41	79.7	7.32	40	2.6	9.1
Apr-1999	ND	ND	0.15	ND	2.09	ND	ND	5.56	49.3	7.28	39	2.8	4
Apr-2000	ND	ND	ND	ND	ND	ND	ND	6.24	38	9.45	36	2.4	4
Apr-2001	ND	NA	ND	ND	1.12	ND	ND	NA	NA	10.2	33	2.59	5.5
Mar-2002	7.1	7.1	ND	ND	2.12	ND	ND	5.9	44.5	11.6	54	3.28	4.5
Mar-2003	ND	ND	ND	ND	14.8	0.961	ND	5.5	52.3	14.9	49	2.47	6.2
Apr-2004	ND	ND	ND	ND	1.47	ND	ND	5.8	43.7	11.4	58	2.5	7.2
Apr-2005	5.3	5.3	ND	ND	1.42	ND	ND	5.5	39.8	7.73	68	4.6	21
Mar-2006	ND	ND	ND	ND	1.58	ND	ND	5.7	41.8	16.2	23	1.84	10
Mar-2007	9.2	9.2	ND	ND	1.76	ND	ND	5.9	41.1	7.1	ND	2.25	6.6
Mar-2008	1.3	1.3	ND	ND	5.71	ND	ND	5.7	39.5	20.2	29	2.28	2.4
Mar-2009	1.2	1.2	ND	ND	1.47	ND	ND	5.8	40.7	18.2	19	2.56	7.6
Oct-2009	2.5	2.5	ND	ND	1.41	ND	ND	5.4	40.8	8.11	49	1.04	7
Apr-2010	1.8	1.8	ND	ND	1.35	ND	ND	5	39.1	11.7	ND	1.7	5.2
Oct-2010	11	11	ND	ND	1.76	ND	ND	5	38	7.69	40	2.47	3.4
Apr-2011	8.4	8.4	ND	ND	1.64	ND	ND	5.3	37.8	6.64	42	2.2	2.5
Sep-2011	4.7	4.7	ND	ND	1.42	ND	ND	5.8	39.2	6.7	29	2.26	4
Mar-2012	5.2	5.2	ND	ND	1.61	ND	ND	5	37.2	7.33	17	2.55	3.4
Sep-2012	6.16	6.16	ND	ND	1.6	ND	ND	4.9	37.9	6.8	28	2.33	7.33
Mar-2013	11.5	11.5	0.0707	ND	1.8	ND	ND	4.8	41.1	7.24	ND	2.53	2.6
Oct-2013	8.52	8.52	ND	ND	1.66	ND	ND	6.7	39.8	6.81	ND	2.68	3.91
Mar-2014	14.4	14.4	ND	ND	1.72	ND	ND	6	39.1	7.15	ND	2.21	4.36
Oct-2014	22	ND	ND	10	1.84	ND	ND	5.8	37.4	6.72	29	2.25	5.96
Apr-2015	9.4	9.4	ND	8 J	1.77	ND	ND	5	38.9	6.21	ND	2.33	5.69
Nov-2015	4	4	ND	ND	1.64	ND	ND	6.2	69.6	6.03	21 J	2.36	2.09
May-2016	4.64	4.64	ND	13	1.67 B	ND	ND	6	60.8	0.832 J	85	6.1	41
Oct-2016	ND	ND	ND	16	1.65	NA	NA	6.1	65.6	4.4	33	3.7	15.3
May-2017	5.32	5.32	ND	14	1.64	ND	ND	6.4	88.9	4.49	17 J	8	2.63
Oct-2017	27.3	27.3	ND	15	1.57	ND	ND	6.5	119.4	1.66	29	2.4	5.91
May-2018	4 J	ND	ND	18.7 J	3.2	ND	ND	5.7	59.2	ND	10	2.9 J	4.97
Nov-2018	18	18	ND	7.9 J	1.4 J	ND	ND	6.33	76.6	ND	12	2.1 J	6.01
May-2019	22	NA	ND	ND	ND	ND	0.017	5.87	62	ND	22	ND	5.49

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-09***											
Oct-2019	*2.5 JH1*	*NA*	*ND*	*8.2 J*	*1.3 J*	*0.34 J*	0.014	6.15	81.9	*ND*	13	2.1	3.45
May-2020	12	*NA*	*ND*	*6.9 J*	*1.5 J*	*ND*	*ND*	5.76	75.2	*ND*	41	2.2	3.35
Oct-2020	*4 J*	*NA*	*ND*	*7 J*	*1.6 J*	*ND*	*ND*	5.32	74.2	1.4	59	2	3.51
Apr-2021	*8 J4c*	*NA*	*ND*	*17 J*	*1.6 J*	*0.14 J*	*ND*	6.77	94.5	*ND*	17	*2 J*	*6.25*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-09*													
Nov-1993	NA	ND	ND	NA	ND	0.58	NA	ND	NA	ND	8.2	4	ND	0.31	NA
Apr-1994	NA	ND	0.56	NA	ND	0.51	NA	ND	NA	ND	3	9.22	ND	0.25	NA
Apr-1995	ND	ND	0.7	0.003	ND	0.19	NA	ND	ND	ND	3.4	2.7	ND	0.32	NA
Apr-1997	ND	ND	0.023	0.002	ND	0.68	0.79	ND	ND	ND	14	12	ND	ND	ND
Apr-1998	ND	ND	0.016	ND	ND	0.516	0.571	ND	ND	ND	8.83	7.96	ND	0.3	0.293
Apr-1999	ND	ND	0.016	ND	ND	0.615	0.637	ND	ND	ND	3.24	2.74	ND	0.295	0.27
Apr-2000	ND	ND	0.014	0.003	ND	0.522	0.506	ND	ND	ND	2.37	2.35	ND	0.271	0.257
Apr-2001	ND	ND	0.013	ND	ND	0.555	NA	ND	ND	ND	3.14	NA	ND	0.292	NA
Mar-2002	ND	ND	0.015	0.002	ND	0.774	1.41	ND	ND	ND	10.3	8.16	ND	0.327	0.38
Mar-2003	ND	ND	0.015	ND	ND	0.537	0.511	ND	ND	ND	3.16	2.67	ND	0.274	0.259
Apr-2004	ND	0.002	0.013	0.004	ND	0.55	0.542	ND	ND	ND	4.38	2.8	ND	0.276	0.272
Apr-2005	ND	ND	0.015	ND	ND	1.34	0.685	ND	ND	ND	9.81	8.11	ND	0.316	0.398
Mar-2006	ND	ND	0.012	ND	ND	0.385	0.358	ND	ND	ND	3.01	1.96	ND	0.214	0.183
Mar-2007	ND	ND	0.013	ND	ND	0.488	0.508	ND	ND	ND	11.7	9.23	ND	0.249	0.26
Mar-2008	ND	ND	0.013	0.003	ND	0.501	0.501	ND	ND	ND	4.74	4.29	ND	0.251	0.233
Mar-2009	ND	ND	0.012	ND	ND	0.617	0.434	ND	ND	ND	5.2	3.49	ND	0.248	0.215
Oct-2009	ND	ND	0.013	ND	ND	ND	ND	ND	ND	ND	9.66	8.16	ND	2.53	0.243
Apr-2010	ND	ND	0.012	ND	ND	0.351	0.374	ND	ND	ND	3.29	2.28	ND	0.203	0.205
Oct-2010	ND	ND	ND	ND	ND	0.538	0.495	ND	ND	ND	9.58	7.81	ND	0.274	0.264
Apr-2011	ND	ND	0.014	ND	ND	0.464	0.5	ND	ND	ND	9.56	8.44	ND	0.252	0.286
Sep-2011	ND	ND	0.014	0.002	ND	0.491	0.483	ND	ND	ND	10.4	7.33	ND	0.25	0.237

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09***													
Mar-2012	ND	ND	0.014	0.002	ND	0.47	0.467	ND	ND	ND	9.88	8.15	ND	0.336	0.323
Sep-2012	ND	ND	0.0141	0.0017 J	ND	0.52	0.472	ND	0.0058 J	0.000562 J	9.77	8.43	0.000735 J	0.25	0.251
Mar-2013	ND	ND	0.0132	0.002	ND	0.569	0.565	0.0018 J	0.0067 J	ND	11.4	8.56	ND	0.269	0.255
Oct-2013	ND	ND	0.0149	0.0021	ND	0.695	0.681	0.0068 J	0.0062 J	ND	10	8.6	0.000338 J	0.229	0.207
Mar-2014	0.000232 J	0.00068 J	0.0122	0.0021	0.000096 J	0.456	0.455	0.000821 J	0.0061 J	0.000268 J	10.9	8.75	0.000593 J	0.261	0.261
Oct-2014	0.000345 J	0.000869 J	0.0146	0.0021	ND	0.507	0.556	0.00094 J	0.0059 J	0.0011 J	10.8	9.4	ND	0.24	0.249
Apr-2015	0.000374 J	0.000603 J	0.0146	0.0018 J	0.000074 J	0.512	0.571	0.000714 J	0.0058 J	0.000342 J	11.5	10.7	ND	0.256	0.259
Nov-2015	0.00038 J	0.000334 J	0.0139	0.0016 J	ND	0.515	0.544	0.000373 J	0.0042 J	0.000839 J	11.6	11.9	ND	0.261	0.263
May-2016	ND	0.0007 J	0.0147	0.0019	0.00033 J	1.24	1.23	0.0012 J	0.0066	0.00068 J,B	27.6	14.3	0.0011 J	0.734	0.724
Oct-2016	ND	0.0069	0.0174	0.0027	0.00031 J	0.989	0.616	0.0031 J+	0.0156	0.0064 J+	38.3	14.2	0.002 J	0.291 J+	0.253
May-2017	ND	0.0031 J	0.0145	0.0022	0.00024 J	0.866	0.62	0.003 J	0.0085	0.0076	29.1	16.6	0.0053	1.42	0.268
Oct-2017	ND	0.001 J	0.0163	0.0022	ND	0.531	0.421	0.0014 J	0.0031	ND	33.6	22.5	0.00054 J	0.256	0.234
May-2018	0.00053	0.0043	0.013	0.0019	0.00016 J	0.79 J	0.63 J	0.0034 JB	0.0081	0.0061	41.5	24.4	0.0017	0.23 J	0.26 J
Nov-2018	ND	0.00045 J	0.012	0.0016	0.000048 J	0.47 J	0.47 J	0.0046 J	0.0024	0.0009 J	24.2	22.7	0.00012 JM1	0.23 J	0.24 J
May-2019	ND	ND	0.012	0.0012	ND	ND	ND	ND	0.0016	ND	27.2	24.8	ND	ND	ND
Oct-2019	0.00014 J	0.00065 J	0.013	0.0015	0.00018 J	0.47	0.49 J	0.0068 J	0.0015	ND	25.6	24.9	0.000099 J	0.23	0.23 J
May-2020	0.00023 J	0.00092 J	0.012	0.0015	0.00014 J	0.49	0.46 JB	0.0058 J	0.014	ND	38.8	23.9	ND	0.25	0.22 JB
Oct-2020	ND	ND	0.012	0.0014 J	ND	0.45	0.43 J	0.0033 J	0.0017 J	ND	24.9	23.6	ND	0.22	0.22 J
Apr-2021	ND	ND	0.013	0.0011	ND	0.43 J	0.38 J	0.00092 J	0.0014 J	ND	25.2	24.8	ND	0.23	0.21

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-09*												
Nov-1993	0.07	NA	ND	NA	0.59	NA	ND	NA	0.95	NA	NA	NA	ND
Apr-1994	0.01	NA	ND	NA	0.29	NA	ND	NA	0.74	NA	NA	NA	ND
Apr-1995	0.09	NA	ND	ND	0.75	NA	ND	ND	0.98	NA	ND	ND	0.04
Apr-1997	0.073	0.064	ND	ND	1.9	1.4	ND	ND	1	1.3	ND	ND	0.034
Apr-1998	0.049	0.048	NA	ND	0.847	0.796	ND	ND	0.833	0.825	ND	ND	0.042
Apr-1999	0.02	0.019	NA	ND	0.677	0.81	ND	ND	0.995	0.831	ND	ND	0.041
Apr-2000	0.02	0.019	NA	0.016	ND	ND	ND	ND	0.788	0.746	ND	ND	0.039
Apr-2001	0.019	NA	NA	0.014	ND	NA	ND	ND	0.905	NA	ND	ND	0.03
Mar-2002	0.055	0.051	NA	0.012	1.16	0.947	ND	ND	1.81	0.891	ND	ND	0.055
Mar-2003	0.017	0.016	NA	0.015	ND	ND	ND	ND	0.888	0.861	ND	ND	0.04
Apr-2004	0.019	0.019	ND	0.022	1.33	1.08	ND	ND	0.889	0.87	ND	ND	0.081
Apr-2005	0.056	0.051	ND	0.018	0.52	ND	ND	ND	1.33	0.984	ND	ND	0.305
Mar-2006	ND	ND	ND	0.019	ND	ND	ND	ND	0.613	0.547	ND	ND	0.043
Mar-2007	0.061	0.056	ND	0.015	0.582	0.576	ND	ND	0.748	0.738	ND	ND	0.059
Mar-2008	0.025	0.025	ND	0.017	0.561	ND	ND	ND	0.792	0.677	ND	ND	0.026
Mar-2009	0.027	0.022	ND	0.016	0.819	0.618	ND	ND	1.2	0.803	ND	ND	0.039
Oct-2009	0.057	0.058	ND	0.015	ND	ND	ND	ND	0.749	0.672	ND	ND	0.031
Apr-2010	0.017	0.014	ND	0.013	ND	ND	ND	ND	0.806	0.758	ND	ND	0.025
Oct-2010	0.054	0.05	ND	0.018	ND	ND	ND	ND	0.784	0.72	ND	ND	0.032
Apr-2011	0.058	0.056	ND	0.01	ND	ND	ND	ND	0.766	0.792	ND	ND	0.026
Sep-2011	0.052	0.046	ND	0.016	0.53	ND	ND	ND	0.91	0.873	ND	ND	0.03
Mar-2012	0.054	0.053	ND	0.016	ND	ND	ND	ND	0.855	0.846	ND	ND	0.034

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09***												
Sep-2012	0.0572	0.0538	*ND*	0.0137	0.504	*0.446 J*	*ND*	*ND*	0.836	0.827	*ND*	*ND*	0.0362
Mar-2013	0.0543	0.0505	*0.00009 J*	0.0157	0.51	*0.49 J*	*ND*	*ND*	0.932	0.945	*ND*	*ND*	0.0424
Oct-2013	0.0597	0.0587	*ND*	0.0132	*0.436 J*	*0.406 J*	*ND*	*ND*	0.726	0.672	*0.000144 J*	*0.0056 J*	0.0406
Mar-2014	0.0552	0.0545	*ND*	0.0159	0.516	0.511	*ND*	*ND*	0.826	0.836	*ND*	*0.0011 J*	0.0372
Oct-2014	0.0531	0.055	*ND*	0.0153	0.528	0.522	*0.000836 J*	*ND*	0.9	0.938	*ND*	*0.0013 J*	0.0363
Apr-2015	0.0626	0.0655	*0.000032 J*	0.0137	0.558	0.54	*ND*	*ND*	0.899	0.917	*ND*	*0.0013 J*	0.0355
Nov-2015	0.0713	0.0691	*ND*	0.0102	0.568	0.569	*ND*	*ND*	1.11	1.01	*ND*	*0.000282 J*	0.0408
May-2016	0.398	0.358	*ND*	0.0285	0.887	0.845	*ND*	*ND*	1.3	1.2	*ND*	0.0014	0.0547
Oct-2016	0.226 R	0.116	*ND*	*0.045 J+*	0.739	0.6	*ND*	*ND*	*1.05 J+*	0.919	*ND*	0.0021	0.0587
May-2017	0.145	0.104	*ND*	0.0294	0.955	0.59	*ND*	*ND*	33.9	0.915	*ND*	0.002	0.0505
Oct-2017	0.144	0.132	*ND*	0.0162	0.526	0.516	*ND*	*ND*	0.84	0.84	*ND*	0.0013	*0.0255 J*
May-2018	0.22	0.15	*ND*	0.023	*ND*	*ND*	*0.00042 J*	*ND*	*1.3 J*	*1 JB*	*ND*	0.0029	0.028
Nov-2018	0.12	0.12	*ND*	0.0072	*ND*	*ND*	*0.0001 JM1*	*ND*	*0.84 J*	*0.88 J*	*ND*	0.0017	0.013 D6
May-2019	0.14	0.14	*ND*	0.004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0068
Oct-2019	0.13	0.13	*ND*	0.0054	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0096	0.018
May-2020	0.14	0.14	*ND*	0.036	*1.3 J*	*ND*	*ND*	*ND*	*4.4 J*	*ND*	0.00043	0.0059	0.02
Oct-2020	0.13	0.13	*ND*	0.0042	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.0018 J*	*0.012 J*
Apr-2021	0.13	0.13	*ND*	*0.0031 J*	0.5	0.51	*ND*	*ND*	*0.85 J*	*0.99 J*	*ND*	*0.0011 J*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	22	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09*																
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-09*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09***															
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.5 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-09*															
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.578 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-11A***											
Nov-1993	118	118	0.5	46.3	1	*ND*	*ND*	4.95	32.8	5	192	27	660
Apr-1994	153	153	0.4	35.8	13.2	*ND*	*ND*	5.77	358	11.8	102	35.43	24.5
Apr-1995	134	134	0.3	28.5	7.4	*ND*	*ND*	5.9	295	13.9	101	17.5	124
Apr-1997	*ND*	27	*ND*	39	19	0.05	*ND*	*NA*	*NA*	6	17600	28	480
Apr-1998	120	120	2.9	53	43	0.15	*ND*	6.81	737	1.93	160	39	540
Apr-1999	95	95	2.9	81	39.7	*ND*	*ND*	6.74	749	*ND*	246	50	500
Apr-2000	57	57	3.6	*ND*	63.9	*ND*	*ND*	6.76	450	5.03	156	43	400
Apr-2001	22	*NA*	2	24	24.8	*ND*	*ND*	*NA*	*NA*	18.6	82	34.3	504
Mar-2002	20	20	1.8	25	22.6	*ND*	*ND*	6.1	352	27.3	111	31.3	480
Mar-2003	12	12	8.8	10	25	*ND*	*ND*	6.6	393	29	109	29.4	365
Apr-2004	6.4	6.4	0.89	20	13.7	*ND*	*ND*	6.5	284	22	93	20	250
Apr-2005	4.6	4.6	0.65	13	16.6	*ND*	*ND*	6.2	264	27.4	105	18.8	358
Mar-2006	29	29	0.98	*ND*	19.5	0.1	*ND*	6	207	24.2	91	19.1	322
Mar-2007	15	15	0.71	*ND*	18.9	0.83	*ND*	6.2	181.6	22.4	79	17.5	47
Mar-2008	50	50	0.54	16	17.2	0.11	*ND*	6.1	175.6	26.3	87	16.5	92
Mar-2009	21	21	0.79	*ND*	38.4	0.08	*ND*	5.7	340	21.2	113	17.6	3.7
Apr-2010	8.9	8.9	1	*ND*	65.5	0.09	*ND*	5.6	406	27.7	125	23.8	2.5
Apr-2011	16	16	0.54	*ND*	40.7	0.14	*ND*	5.8	210	22.5	183	20.3	0.97
Mar-2012	17	17	0.53	*ND*	40.5	0.16	*ND*	5.2	312	31.7	132	22.9	0.77
Mar-2013	25.4	25.4	0.357	12.1	34.5	0.128	*ND*	4.9	305	27	113	20.8	1.06
Mar-2014	48.6	48.6	0.465	*ND*	28.2	0.0816	*ND*	6.1	152.6	26.5	112	17.4	0.752
Apr-2015	20.8	20.8	0.332	*9 J*	21.4	0.474	*ND*	5.6	168.3	25	106	19.6	3.32
May-2016	15	15	0.39	*ND*	24.5	0.544	*ND*	6	275	24.1	119	24.5	2.52
May-2017	15.8	15.8	0.255	*ND*	19.7	0.877	*ND*	5.9	279	24.3	99	22.6	4.32
May-2018	40	40	0.3	*7.9 J*	20.3	*0.074 J*	*ND*	5.9	266	22.5	118	24.3	*NA*
May-2019	50	*NA*	0.36	*ND*	18.6	*ND*	*ND*	5.87	167.3	23.6	113	19.2	4.83
May-2020	28	*NA*	*0.071 J*	*13.5 J*	18	*ND*	*ND*	5.39	234	23.4	145	23.5	3.13
Apr-2021	*ND*	*NA*	0.21	*17 J*	30.2	0.1	*ND*	6.03	295.9	25.5	139	26.5	5.85

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-11A*													
Nov-1993	*NA*	**0.025**	*ND*	*NA*	*ND*	3.7	*NA*	*ND*	*NA*	*ND*	154	139	*ND*	4.3	*NA*
Apr-1994	*NA*	*ND*	*ND*	*NA*	*ND*	4.13	*NA*	*ND*	*NA*	*ND*	176	122	*ND*	6.1	*NA*
Apr-1995	*ND*	**0.02**	0.6	*ND*	*ND*	1.9	*NA*	*ND*	*ND*	*ND*	126	88.2	*ND*	3.1	*NA*
Apr-1997	0.006	**0.23**	0.038	*ND*	*ND*	3.7	4	*ND*	*ND*	*ND*	110	12	0.003	2.8	2.8
Apr-1998	*ND*	*ND*	0.055	*ND*	*ND*	7.19	7.21	*ND*	*ND*	*ND*	200	192	*ND*	5.08	5.07
Apr-1999	*ND*	*ND*	0.052	*ND*	*ND*	9.53	9.53	*ND*	*ND*	*ND*	191	192	*ND*	6.4	6.41
Apr-2000	*ND*	*ND*	0.046	*ND*	*ND*	8.94	8.44	*ND*	*ND*	*ND*	124	118	*ND*	4.99	4.72
Apr-2001	*ND*	*ND*	0.039	*ND*	*ND*	7.53	*NA*	*ND*	*ND*	*ND*	96	*NA*	*ND*	3.75	*NA*
Mar-2002	*ND*	*ND*	0.044	*ND*	*ND*	6.41	6.19	*ND*	*ND*	*ND*	107	104	*ND*	3.71	3.65
Mar-2003	*ND*	**0.027**	0.057	*ND*	*ND*	6.02	5.62	*ND*	*ND*	*ND*	77.6	73.3	*ND*	3.5	3.27
Apr-2004	*ND*	**0.029**	0.032	*ND*	*ND*	4.56	4.36	*ND*	*ND*	*ND*	57	54.8	*ND*	2.09	2.02
Apr-2005	*ND*	**0.064**	0.042	*ND*	*ND*	3.93	3.84	*ND*	*ND*	*ND*	67.7	56.2	*ND*	2.38	2.34
Mar-2006	*ND*	**0.037**	0.043	*ND*	*ND*	3.88	3.53	*ND*	*ND*	*ND*	58	46.4	*ND*	2.28	2.16
Mar-2007	*ND*	**0.026**	0.049	*ND*	*ND*	3.58	3.6	*ND*	*ND*	*ND*	40.9	41.1	*ND*	2.08	2.09
Mar-2008	*ND*	**0.018**	0.064	*ND*	*ND*	3.02	3.01	*ND*	*ND*	*ND*	34.1	36.8	*ND*	2.17	2.07
Mar-2009	*ND*	**0.018**	0.048	*ND*	*ND*	3.65	3.63	*ND*	*ND*	*ND*	41	40.3	*ND*	2.05	2.04
Apr-2010	*ND*	**0.019**	0.068	*ND*	*ND*	5.26	5.11	*ND*	*ND*	*ND*	45.9	41	*ND*	2.61	2.66
Apr-2011	*ND*	**0.019**	0.077	*ND*	*ND*	4.22	4.1	*ND*	*ND*	*ND*	30.7	30.3	*ND*	2.37	2.32
Mar-2012	*ND*	**0.017**	0.075	*ND*	*ND*	4.61	4.61	*ND*	*ND*	*ND*	34.3	34.6	*ND*	2.77	2.78
Mar-2013	*ND*	**0.0202**	0.071	*0.000191 J*	*0.000291 J*	4.37	4.54	*0.0013 J*	*0.0046 J*	*0.0026 J*	32.2	30.7	*ND*	2.39	2.54
Mar-2014	*0.000209 J*	**0.0192**	0.0483	*0.000393 J*	*0.000149 J*	3.89	3.97	*0.0014 J*	*0.003 J*	*0.00897 J*	31.1	28.8	*ND*	1.87	2.07

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-11A***													
Apr-2015	*0.000273 J*	**0.0185**	0.0688	*0.000274 J*	*0.000278 J*	4.21	4.19	*0.000745 J*	*0.0052 J*	*0.0035 J*	26.7	25.2	*ND*	2.2	2.24
May-2016	*ND*	**0.0204**	0.0757	*0.00021 J*	*ND*	5.17	4.72	*0.0013 J*	0.0061	0.005	31	29.7	*ND*	2.81	2.61
May-2017	*ND*	**0.0198**	0.0678	*0.00022 J*	*0.00028 J*	4.65	4.94	*0.00099 J*	0.0065	0.0052	29.1	28.8	*ND*	2.67	2.49
May-2018	*ND*	**0.0174**	*0.0754 J*	*ND*	*ND*	5.2	5.2	*ND*	*0.0068 J*	*ND*	25	24.5	*ND*	2.7	2.7
May-2019	*ND*	**0.024**	0.041	*ND*	*ND*	4.6	4.7	*ND*	0.0014	*ND*	37.3	37.3	*ND*	1.9	2
May-2020	*0.000057 J*	**0.024**	0.048	*ND*	*ND*	5.5	5.4	*0.0047 J*	0.0016	*ND*	47	43.2	*ND*	2.4	2.3
Apr-2021	*ND*	**0.022**	0.072	*ND*	*ND*	6.2	6.2	*0.00037 J*	0.0081	*ND*	42.9	43.2	*ND*	2.7	2.7

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-11A*												
Nov-1993	0.36	NA	ND	NA	1.2	NA	ND	NA	9	NA	NA	NA	ND
Apr-1994	0.4	NA	ND	NA	1.41	NA	ND	NA	8.4	NA	NA	NA	0.06
Apr-1995	0.23	NA	ND	ND	1.3	NA	ND	0.01	5.4	NA	ND	ND	0.02
Apr-1997	0.22	0.23	ND	ND	2.7	2	ND	ND	8.7	10	ND	ND	0.023
Apr-1998	0.312	0.331	NA	ND	2.27	1.46	ND	ND	22.9	23	ND	ND	ND
Apr-1999	0.348	0.354	NA	ND	2.81	3.5	ND	ND	25.1	25.2	ND	ND	ND
Apr-2000	0.228	0.218	NA	ND	2.44	2.36	ND	ND	25.4	23.9	ND	ND	ND
Apr-2001	0.247	NA	NA	ND	2.45	NA	ND	ND	16.4	NA	ND	ND	ND
Mar-2002	0.385	0.373	NA	ND	3.13	2.12	ND	ND	15.4	15.2	ND	ND	ND
Mar-2003	0.4	0.387	NA	ND	2.21	2.7	ND	ND	14.2	13.1	ND	ND	ND
Apr-2004	0.332	0.331	ND	ND	2.07	1.95	ND	ND	10.1	9.94	ND	ND	ND
Apr-2005	0.384	0.383	ND	ND	1.82	1.62	ND	ND	12.2	12.3	ND	ND	ND
Mar-2006	0.38	0.373	ND	ND	2.07	1.94	ND	ND	11.9	11.3	ND	ND	ND
Mar-2007	0.41	0.418	ND	ND	2.52	2.59	ND	ND	11.4	11.5	ND	ND	ND
Mar-2008	0.428	0.422	ND	ND	2.43	2.22	ND	ND	11.9	10.8	ND	ND	ND
Mar-2009	0.523	0.51	ND	ND	2.36	2.4	ND	ND	15.3	15.1	ND	ND	ND
Apr-2010	0.606	0.599	ND	ND	2.61	2.59	ND	ND	33.7	32.4	ND	ND	ND
Apr-2011	0.542	0.507	ND	ND	2	1.96	ND	ND	23.2	22.7	ND	ND	0.012
Mar-2012	0.683	0.68	0.0004	ND	2.54	2.5	ND	ND	24.3	24.3	ND	ND	0.014
Mar-2013	0.561	0.593	0.00011 J	0.0035 J	2.13	2.16	ND	ND	19.1	19.3	ND	ND	0.017
Mar-2014	0.467	0.486	ND	0.0021 J	1.91	1.94	ND	ND	14.6	16	ND	ND	0.0088 J
Apr-2015	0.51	0.505	0.00006 J	0.0034 J	1.75	1.76	0.0012 J	ND	14.1	13.8	ND	ND	0.0375

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-11A***												
May-2016	0.594	0.572	*ND*	*0.0034 J*	2.13	2.05	*ND*	*ND*	18.1	16.8	*ND*	*ND*	*0.0098 J,B*
May-2017	0.508	0.497	*ND*	*0.0036 J*	1.98	2	*ND*	*ND*	13	12.8	*ND*	*0.00021 J*	*0.0097 J*
May-2018	0.484	0.476	*ND*	*0.0093 J*	*2.1 J*	*1.6 J*	*ND*	*ND*	14.1	13.2	*ND*	*ND*	*0.0141 J*
May-2019	0.4	0.4	*ND*	0.0017	*ND*	*ND*	*ND*	*ND*	13.2	13.1	*ND*	*ND*	*ND*
May-2020	0.53	0.53	*ND*	0.0011	*2.8 J*	*2.3 J*	*ND*	*ND*	11.9	10.3	*ND*	0.0042	*ND*
Apr-2021	0.57	0.58	*ND*	*ND*	2	2.1	*ND*	*ND*	17.1	17.5	*ND*	*0.0011 J*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-11A***																
Nov-1993	ND	ND	ND	ND	55	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	40	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19	ND
Apr-1997	ND	ND	ND	ND	38	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	56	ND	ND	ND	ND	ND	ND	ND	ND	16	ND	ND	19	ND
Apr-1999	NA	ND	NA	NA	52	ND	NA	NA	NA	NA	ND	ND	ND	34	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	27	ND	NA	NA	NA	NA	ND	0.6 J	0.6 J	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	15	ND	ND	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	13	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-11A***																
Apr-2015	*ND*	*ND*	*ND*	*ND*	*0.82 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.2 JB*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.976 J*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*0.449 J*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-11A*															
Nov-1993	3.4	ND	ND	ND	ND	ND	ND	ND	6.5	ND	ND	5.8	ND	ND	ND	39	94
Apr-1994	2.6	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	4.5	ND	ND	ND	30	70
Apr-1997	4	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	16	ND	ND	ND	10	56
Apr-1998	**6.9**	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	25	ND	ND	ND	15	65
Apr-1999	**5.2**	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	3.7	NA	NA	NA	6.3	62
Apr-2000	3.3	NA	NA	ND	NA	ND	NA	ND	0.7 J	ND	NA	ND	NA	ND	NA	2.4	32
Apr-2001	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.1	18
Mar-2002	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.2	16
Mar-2003	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	6
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	7.2
Apr-2005	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	2.4	6.5
Mar-2006	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	5.9
Mar-2007	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	5.4
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	4.6
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	2.6
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	3.5
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	2.2
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND	ND	0.65 J	1.77
Mar-2014	0.17 J	ND	ND	ND	ND	ND	ND	ND	ND	0.16 J	ND	ND	ND	ND	ND	0.71 J	1.15

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-11A***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*0.3 J*	*0.8 J*
May-2017	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*0.6 J*	1.6
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	1.9
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3 N3
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	1.4
Apr-2021	*0.137 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.741 J*	*ND*	*ND*	*ND*	*0.506 J*	*1.22 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-11A***															
Nov-1993	6.8	*ND*	14	*ND*	*ND*	4.8	*ND*	**10**	25	*ND*	*ND*	*ND*	**6.1**	*ND*	*ND*	*ND*	*NA*
Apr-1994	4	*ND*	7.9	*ND*	*ND*	3.1	*ND*	**16**	9.2	*ND*	*ND*	*ND*	4.7	*ND*	*ND*	*ND*	*NA*
Apr-1997	4	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	2	5	*ND*	*ND*	*ND*	3	*ND*	*ND*	2	5
Apr-1998	5.9	*ND*	7.9	*NA*	2.6	2.3	*ND*	*ND*	28	*ND*	*ND*	*ND*	2.6	*ND*	*ND*	*ND*	*NA*
Apr-1999	3.5	*NA*	5.2	*NA*	*ND*	*1.6 J*	*NA*	*ND*	23	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	1	*NA*
Apr-2000	2.4	*NA*	2.3	*NA*	*ND*	1	*NA*	*ND*	5.7	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	1.1	*ND*	1	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*0.8 J*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*0.7 J*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.83 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-11A***															
Mar-2014	*ND*	*ND*	*ND*	*0.14 J*	*ND*	*ND*	*ND*	*0.28 J*	*ND*	*ND*	*ND*	*ND*	*0.28 J*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.24 J*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.717 J*	*ND*	*ND*	*ND*	*ND*	*0.551 J*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-12***											
Nov-1993	ND	ND	0.3	ND	3.2	0.3	ND	4.98	22.9	2.5	38	3.28	520
Apr-1994	5	5	0.1	ND	3.3	ND	ND	5.1	27.4	ND	8	1.07	238
Apr-1995	17.5	17.5	0.3	ND	4	0.2	ND	5.5	439	2	ND	3.8	450
Apr-1997	ND	3	ND	ND	3.5	0.13	ND	NA	NA	ND	86	6.2	80
Apr-1998	13	13	0.28	ND	3.72	0.18	ND	5.87	46.7	35.5	32	5.9	250
Apr-1999	ND	ND	0.17	ND	6.05	0.15	ND	5.62	69.8	ND	32	8.1	1000
Apr-2000	4	4	ND	ND	6.34	0.22	ND	5.42	47	ND	21	9.1	320
Apr-2001	5.5	NA	ND	ND	7.7	ND	ND	NA	NA	ND	43	10.6	466
Mar-2002	5	5	ND	ND	9.07	ND	ND	5.4	72.7	1.42	47	12.1	450
Mar-2003	7.6	7.6	ND	ND	19.6	ND	ND	5.6	116.1	8.65	43	14	306
Apr-2004	22.1	22.1	ND	13	14.3	ND	ND	5.8	121.3	ND	133	12.7	244
Apr-2005	8.4	8.4	ND	ND	14.1	0.21	ND	5.3	88	1.39	68	12.4	486
Mar-2006	11	11	ND	ND	12.4	0.34	ND	5.8	103.8	3.66	40	11.6	1029
Mar-2007	11	11	ND	ND	13.1	0.2	ND	5.6	91.8	3.43	41	13.9	667
Mar-2008	14	14	ND	ND	16.2	ND	ND	5.6	96.3	3.66	66	11.8	591
Mar-2009	34	34	ND	ND	10.6	0.1	ND	5.2	96.9	2.18	48	11.4	404
Mar-2010	14	14	ND	ND	12.6	0.26	ND	5.25	86	5.1	54	12.3	19
Apr-2011	15	15	ND	ND	8.27	0.28	0.03	5.2	74.6	2.39	61	9.1	59
Mar-2012	19	19	ND	ND	9.15	0.34	ND	4.9	78.3	3.7	35	11.7	42
Mar-2013	20.9	20.9	ND	ND	8.75	0.407	ND	4.6	81.9	4.8	49	13.5	16.9
Mar-2014	24	24	ND	ND	8.95	0.331	ND	6	79.1	4.41	54	12.5	12.5
Apr-2015	17	17	ND	ND	8.94	0.344	ND	5.1	79.4	4.05	42	11.6	70.9
May-2016	15.9	15.9	ND	ND	8.62	0.398	ND	6	120.6	2.68	48	12.6	2.84
May-2017	13.8	13.8	ND	ND	8.12	0.386	ND	5.9	124.7	4.68	24 J	12.1	18.3
May-2018	34	34	0.21	ND	7.8	ND	ND	5.8	119.4	ND	53	12.7	NA
May-2019	20	NA	ND	ND	8.4	ND	ND	6.27	135.6	ND	51	15.7	5.21
May-2020	14	NA	ND	ND	7	ND	0.02	5.93	151.1	ND	61	15.8	3.34
Apr-2021	26	NA	ND	10.5 J	7.4	0.1	ND	6.84	178	ND	29	14.8	6.56

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-12***													
Nov-1993	*NA*	*ND*	*ND*	*NA*	*ND*	0.52	*NA*	*ND*	*NA*	*ND*	17.2	0.41	*ND*	0.48	*NA*
Apr-1994	*NA*	*ND*	*ND*	*NA*	*ND*	0.37	*NA*	*ND*	*NA*	*ND*	3.9	0.38	*ND*	*ND*	*NA*
Apr-1995	*ND*	*ND*	0.6	*ND*	*ND*	0.6	*NA*	*ND*	*ND*	*ND*	19.8	9.3	*ND*	0.55	*NA*
Apr-1997	*ND*	*ND*	0.034	*ND*	*ND*	1.6	0.93	*ND*	*ND*	*ND*	9.1	2.6	0.006	1	*ND*
Apr-1998	*ND*	*ND*	0.023	*ND*	*ND*	1.16	1.18	*ND*	*ND*	*ND*	34.9	11.7	*ND*	0.728	0.724
Apr-1999	*ND*	*ND*	0.032	*ND*	*ND*	1.49	1.36	*ND*	*ND*	0.021	84.2	1.39	*ND*	1.07	0.973
Apr-2000	*ND*	*ND*	0.025	*ND*	*ND*	1.75	1.4	*ND*	*ND*	0.01	38.2	1.06	*ND*	1.16	1.05
Apr-2001	*ND*	*ND*	0.035	*ND*	*ND*	1.98	*NA*	*ND*	*ND*	*ND*	50.2	*NA*	0.012	1.38	*NA*
Mar-2002	*ND*	*ND*	0.039	*ND*	*ND*	2.24	1.91	*ND*	*ND*	0.013	60.7	2.3	0.015	1.57	1.44
Mar-2003	*ND*	*ND*	0.049	*ND*	*ND*	2.46	2.24	*ND*	*ND*	0.013	11.9	2.53	0.015	1.9	1.74
Apr-2004	*ND*	*ND*	0.04	*ND*	*ND*	2.3	2.22	*ND*	*ND*	*ND*	39.8	13.3	0.008	1.69	1.65
Apr-2005	*ND*	*ND*	0.039	*ND*	*ND*	2.43	2.07	*ND*	*ND*	0.01	58.9	6.39	**0.023**	1.53	1.51
Mar-2006	*ND*	*ND*	0.035	*ND*	*ND*	2.23	1.92	*ND*	*ND*	0.013	112	4.16	**0.043**	1.48	1.48
Mar-2007	*ND*	*ND*	0.04	*ND*	*ND*	2.61	2.45	*ND*	*ND*	0.018	80.1	12.9	**0.034**	1.78	1.68
Mar-2008	*ND*	*ND*	0.039	*ND*	*ND*	2.14	1.95	*ND*	*ND*	0.017	87.7	4.93	**0.042**	1.58	1.48
Mar-2009	*ND*	*ND*	0.031	*ND*	*ND*	2.21	2.26	*ND*	*ND*	*ND*	41.9	19.1	0.003	1.42	1.43
Mar-2010	*ND*	*ND*	0.041	*ND*	*ND*	2.25	2.16	*ND*	*ND*	*ND*	7.94	5.22	0.002	1.62	1.57
Apr-2011	*ND*	*ND*	0.029	*ND*	*ND*	1.66	1.61	*ND*	*ND*	*ND*	14.8	7.72	0.004	1.21	1.15
Mar-2012	*ND*	*ND*	0.034	*ND*	*ND*	2.03	2	*ND*	*ND*	*ND*	12.7	10.2	0.002	1.6	1.58
Mar-2013	*ND*	*ND*	0.0378	*0.0001 J*	*ND*	2.52	2.31	*0.0021 J*	*0.0032 J*	*0.0019 J*	9.7	8.06	0.0038	1.74	1.59
Mar-2014	*0.0019 J*	*0.000176 J*	0.0325	*ND*	*ND*	2.28	2.15	*0.0023 J*	*0.0029 J*	*0.0038 J*	11.2	9.3	*0.0013 J*	1.64	1.55

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-12***													
Apr-2015	*0.000157 J*	*ND*	0.0373	*ND*	*ND*	2.1	2.29	*0.003 J*	*0.0036 J*	*0.0031 J*	13.8	11.4	0.0042	1.55	1.59
May-2016	*ND*	*ND*	0.0358	*0.00014 J*	*ND*	2.27	1.9	*0.0011 J*	0.0027	*0.0015 J*	12.2	11.6	*0.00063 J*	1.69	1.54
May-2017	*ND*	*ND*	0.0385	*0.00012 J*	*ND*	2.08	2.31	*0.0014 J*	0.0033	*0.0019 J*	8.38	8.25	*0.0018 J*	1.67	1.57
May-2018	*0.0032 J*	*ND*	*0.0353 J*	*ND*	*ND*	2.4	2.3	*0.0026 J*	*0.0021 J*	*ND*	14.1	13.8	*0.0013 J*	1.6	1.6
May-2019	*ND*	*ND*	0.04	*ND*	*ND*	3.4	3.3	*ND*	0.00058	*ND*	43.5	42.2	*ND*	1.8	1.8
May-2020	*ND*	*ND*	0.039	*ND*	*ND*	3.3	3.4	*0.0039 J*	*0.00043 J*	*ND*	39.3	38.5	*ND*	1.8	1.8
Apr-2021	*ND*	*0.0027 J*	0.041	*ND*	*ND*	3.1	3.2	*0.00094 J*	*ND*	*ND*	36.4	37.8	*ND*	1.7	1.8

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-12***												
Nov-1993	0.06	*NA*	*ND*	*NA*	0.59	*NA*	*ND*	*NA*	1.8	*NA*	*NA*	*NA*	*ND*
Apr-1994	0.01	*NA*	*ND*	*NA*	0.62	*NA*	*ND*	*NA*	2.1	*NA*	*NA*	*NA*	0.018
Apr-1995	0.02	*NA*	*ND*	*ND*	0.62	*NA*	*ND*	*ND*	1.5	*NA*	*ND*	*ND*	0.02
Apr-1997	0.05	0.026	*ND*	*ND*	2.1	2.1	*ND*	*ND*	2.2	2.6	*ND*	*ND*	0.085
Apr-1998	0.063	0.071	*NA*	*ND*	1	*ND*	*ND*	*ND*	1.99	2.01	*ND*	*ND*	0.017
Apr-1999	*ND*	0.019	*NA*	0.069	0.733	*ND*	*ND*	*ND*	2.67	2.5	*ND*	*ND*	0.012
Apr-2000	0.019	0.022	*NA*	*ND*	1.14	*ND*	*ND*	*ND*	4.27	2.8	*ND*	*ND*	0.021
Apr-2001	0.021	*NA*	*NA*	*ND*	1.33	*NA*	*ND*	*ND*	4.38	*NA*	*ND*	*ND*	0.042
Mar-2002	0.017	0.03	*NA*	*ND*	1.98	1.94	*ND*	*ND*	5.18	4.46	*ND*	*ND*	0.037
Mar-2003	0.038	0.034	*NA*	*ND*	2.31	1.6	*ND*	*ND*	6.13	5.69	*ND*	*ND*	0.018
Apr-2004	0.068	0.072	0.0002	*ND*	1.81	0.973	*ND*	*ND*	7.03	7.01	*ND*	*ND*	*ND*
Apr-2005	0.054	0.058	0.0007	*ND*	0.93	0.85	*ND*	*ND*	8.28	8.83	*ND*	*ND*	0.045
Mar-2006	0.015	*ND*	0.0015	*ND*	0.947	0.85	*ND*	*ND*	5.51	5.4	*ND*	*ND*	0.038
Mar-2007	0.106	0.077	0.0011	*ND*	1.28	1.12	*ND*	*ND*	5.46	5.12	*ND*	*ND*	0.038
Mar-2008	0.06	0.043	0.0013	*ND*	1.13	0.976	*ND*	*ND*	6.52	5.45	*ND*	*ND*	0.013
Mar-2009	0.138	0.139	*ND*	*ND*	1.16	1.16	*ND*	*ND*	4.83	4.96	*ND*	*ND*	*ND*
Mar-2010	0.051	0.045	0.0002	*ND*	1.16	1.07	*ND*	*ND*	4.88	4.5	*ND*	*ND*	0.012
Apr-2011	0.066	0.057	0.0002	*ND*	0.723	0.654	*ND*	*ND*	4.57	4.34	*ND*	*ND*	*ND*
Mar-2012	0.076	0.078	0.0003	*ND*	0.994	1	*ND*	*ND*	4.84	4.89	*ND*	*ND*	*ND*
Mar-2013	0.081	0.0818	*0.000172 J*	*0.0037 J*	1.02	1.05	*ND*	*ND*	4	4.58	*ND*	*ND*	0.0122
Mar-2014	0.0906	0.0834	0.000249	*0.0034 J*	0.982	0.978	*ND*	*ND*	4.09	4.14	*ND*	*0.000446 J*	*0.0047 J*
Apr-2015	0.0792	0.095	*0.000183 J*	*0.0043 J*	1.11	1.04	*0.000857 J*	*ND*	4.54	4.66	*ND*	*0.0014 J*	*0.0088 J*

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-12***												
May-2016	0.0924	0.096	*ND*	*0.0033 J*	1.28	1	*ND*	*ND*	4.9	4.4	*ND*	*ND*	*ND*
May-2017	0.0757	0.0783	*0.000058 J*	*0.0037 J*	1.13	1.05	*ND*	*ND*	4.36	4.18	*ND*	*0.00024 J*	*0.0042 J*
May-2018	0.114	0.112	*0.00013 JB*	*0.0109 J*	*1.2 J*	*ND*	*ND*	*ND*	*4.9 JB*	*4.3 J*	*0.004 J*	*ND*	*0.0056 J*
May-2019	0.26	0.26	*ND*	0.0014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	0.27	0.25	*0.00011 J*	0.0012	*1.4 J*	*ND*	*ND*	*ND*	5.7	*4.5 J*	*ND*	0.0038	*ND*
Apr-2021	0.22	0.23	*ND*	*ND*	1.2	1.3	*ND*	*ND*	5.3	5.6	*ND*	*0.00069 J*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-12*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	ND
Apr-1997	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	0.6 J	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Apr-1999	NA	ND	NA	NA	10	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	10	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	0.7 J	ND	ND	15	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND
Mar-2002	ND	0.5 J	ND	ND	15	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	11	ND
Mar-2003	ND	ND	ND	ND	13	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Apr-2004	ND	0.6 J	ND	ND	23	ND	ND	ND	ND	ND	ND	1.1	0.6 J	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	8.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	5.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	4.39	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	4.36	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-12*																
Apr-2015	*ND*	*ND*	*ND*	*ND*	2.84	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	2.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.7 JB*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	1.74	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-12***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	2.7
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.6	ND
Apr-1997	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	94	8
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	2.5	ND	ND	ND	11	14
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	23	NA	NA	NA	8.6	18
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	26	NA	ND	NA	5.8	17
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	42	ND	ND	ND	12	24
Mar-2002	ND	ND	ND	ND	ND	1	ND	ND	0.6 J	ND	ND	26	ND	ND	ND	11	22
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	35	ND	ND	ND	19	18
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	59	ND	ND	ND	49	36
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	ND	ND	ND	30	14
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.9	ND	ND	ND	18	6.3
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.1	ND	ND	ND	20.7	10.2
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12.9	6.2
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.7	ND	ND	ND	10.3	4.5
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.3 J	7.5
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	ND	4.4
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	15.2	4.7
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.44	ND	ND	ND	6.27	3.38
Mar-2014	0.24 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.47	ND	ND	ND	6.73	3.46

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-12***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.84 J*	*ND*	*ND*	*ND*	4.62	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	3.9	2.1
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	4	2.3
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.1	2.1
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	4.7 CL	3.3 N3
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.2	1
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.776 J*	*ND*	*ND*	*ND*	*1.78 J*	*1.32 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-12***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	**40**	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*NA*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	**18**	*ND*	*ND*	*ND*	*ND*	**6**	2	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	2.2	*NA*	1.4	2.9	*ND*	**13**	*ND*	*ND*	*ND*	*ND*	**15**	*0.9 J*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	**19**	*ND*	*ND*	*NA*	*NA*	**51**	*1.3 J*	*NA*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*1.4 J*	*ND*	*NA*	**19**	*ND*	*ND*	*NA*	*NA*	**40**	*1.4 J*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	1.2	*ND*	*ND*	**25**	*ND*	*ND*	*ND*	*ND*	**31**	2.1	*ND*	*ND*	*NA*
Mar-2002	*0.6 J*	*ND*	3.1	*NA*	1.1	4.3	*ND*	**7.9**	*ND*	*ND*	*ND*	*ND*	**15**	*0.9 J*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*0.9 J*	*ND*	*ND*	4.9	*ND*	*ND*	*ND*	*ND*	**12**	*ND*	*ND*	*0.6 J*	*NA*
Apr-2004	*ND*	*ND*	*0.6 J*	*NA*	1.5	*0.5 J*	*ND*	**36**	*ND*	*ND*	*ND*	*ND*	**61**	1.8	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	**11**	*ND*	*ND*	*ND*	*ND*	**13**	1.3	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	**5.7**	*ND*	*ND*	*ND*	*ND*	4.7	*0.8 J*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1.9 R	*ND*	*ND*	**9.4**	*ND*	*ND*	*ND*	*ND*	**11.2**	*0.6 J*	*ND*	*0.9 J*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	**5.6**	*ND*	*ND*	*ND*	*ND*	4	*0.6 J*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	*NA*
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.8	*ND*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	1.2	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.8	*ND*	*ND*	*ND*	*ND*	2.5	*ND*	*ND*	*1 J*	*NA*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.97	*ND*	*ND*	*ND*	*ND*	2.23	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-12***															
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.2	*ND*	*ND*	*ND*	*ND*	1.65	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.65	*ND*	*ND*	*ND*	*ND*	*0.96 J*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	1.2	*0.1 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.257 J*	*0.508 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.59	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-13***											
Nov-1993	7	7	0.2	ND	3	ND	ND	5.31	24.4	2.6	54	3.2	280
Apr-1994	9	9	ND	ND	2.5	ND	ND	5.19	19.6	ND	ND	3.15	14.5
Apr-1995	12.4	12.4	0.2	46.2	3.2	ND	ND	5.7	34.7	2.8	13	3	390
Apr-1997	ND	4	ND	ND	5	0.08	ND	NA	NA	ND	92	12	15
Apr-1998	5	5	0.26	ND	5.36	ND	ND	6.04	35.1	0.84	29	6.9	57
Apr-1999	ND	ND	0.14	ND	5.34	ND	ND	5.46	37.7	ND	38	4.3	160
Apr-2000	12	12	ND	ND	4.46	0.17	ND	5.29	28	ND	ND	3.9	550
Apr-2001	ND	NA	ND	30	1.22	ND	ND	NA	NA	ND	33	4.87	449
Mar-2002	2.8	2.8	ND	19	5.04	ND	ND	5.4	36.4	ND	33	6.77	300
Mar-2003	2.7	2.7	ND	ND	15.1	ND	ND	5.4	39.7	7.67	23	5.55	283
Apr-2004	2.5	2.5	ND	14	4.36	0.19	ND	5.8	40.6	ND	59	5.72	149
Apr-2005	ND	ND	ND	ND	5.03	0.25	ND	5.6	38.7	ND	42	5.8	356
Mar-2006	11	11	ND	ND	7.24	0.18	ND	5.9	62.7	1.18	41	5.01	135
Mar-2007	3.6	3.6	ND	ND	8.07	0.18	ND	5.9	75.6	1.26	11	5.81	245
Mar-2008	22	22	ND	ND	13.9	ND	ND	5.9	88.8	ND	58	6.79	117
Mar-2009	14	14	ND	ND	9.62	0.08	ND	5.5	92	1.55	37	11.5	88
Mar-2010	3.8	3.8	ND	18.2	10.3	0.22	ND	5.46	69	1.49	33	6.17	58
Apr-2011	5	5	ND	ND	9.76	0.23	0.03	5.4	70	ND	62	6.7	57
Mar-2012	3.7	3.7	ND	ND	11.1	0.23	ND	5	64.5	ND	14	7.57	121
Mar-2013	5.08	5.08	ND	ND	11.8	0.224	ND	4.3	72.7	1.18	24	8.5	208
Mar-2014	23	23	ND	8 J	11.9	0.259	ND	5.9	77.2	0.873 J	43	7.21	146
Apr-2015	16.7	16.7	ND	ND	12.1	0.236	ND	5	82.5	ND	58	9.23	25.1
May-2016	15.4	15.4	ND	ND	12.6	0.176	ND	6.2	135.4	ND	57	11.2	10.3
May-2017	8.96	8.96	ND	ND	12.5	0.297	ND	5.8	126.5	1.37	41	9.2	93.2
May-2018	22	22	ND	5.7 J	15.8	0.2	0.0056 J	5.7	137.7	ND	59	15.3	11.2
May-2019	22	NA	ND	ND	13.2	ND	ND	5.94	105	ND	28	11.9	17.7
May-2020	10	NA	ND	ND	15.4	0.11	0.0097 J	5.35	101.9	ND	68	15.1	17.5
Apr-2021	ND	NA	ND	6.1 J	14.3	0.18	ND	5.9	123.6	ND	43	14.3	31.2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-13***													
Nov-1993	*NA*	*ND*	*ND*	*NA*	*ND*	0.44	*NA*	*ND*	*NA*	*ND*	105	2.4	*ND*	0.51	*NA*
Apr-1994	*NA*	*ND*	*ND*	*NA*	*ND*	0.62	*NA*	*ND*	*NA*	*ND*	1.75	0.87	*ND*	0.39	*NA*
Apr-1995	*ND*	*ND*	0.7	*ND*	*ND*	0.43	*NA*	0.032	*ND*	*ND*	22.8	0.88	*ND*	0.48	*NA*
Apr-1997	*ND*	*ND*	0.038	*ND*	*ND*	2	1.5	*ND*	*ND*	*ND*	4.9	2.7	*ND*	1.1	0.83
Apr-1998	*ND*	*ND*	0.027	*ND*	*ND*	1.28	1.27	*ND*	*ND*	0.034	51	5.28	*ND*	0.89	0.871
Apr-1999	*ND*	*ND*	0.016	*ND*	*ND*	0.832	0.882	*ND*	*ND*	0.018	24.7	3.02	*ND*	0.546	0.538
Apr-2000	*ND*	*ND*	0.02	0.002	*ND*	0.868	0.498	0.042	*ND*	0.179	214	0.978	*ND*	0.42	0.328
Apr-2001	0.004	*ND*	0.023	*ND*	*ND*	1.04	*NA*	**0.211**	0.082	0.614	141	*NA*	0.003	0.555	*NA*
Mar-2002	0.005	*ND*	0.027	0.002	*ND*	1.46	1.03	**0.199**	0.06	0.668	154	3.85	0.003	0.759	0.66
Mar-2003	*ND*	*ND*	0.019	*ND*	*ND*	1.09	0.988	0.035	0.022	0.265	48.6	1.35	*ND*	0.688	0.626
Apr-2004	*ND*	0.007	0.015	*ND*	*ND*	1.4	0.862	0.06	0.017	0.182	52.1	6.71	*ND*	0.541	0.44
Apr-2005	0.004	0.01	0.019	*ND*	*ND*	1.62	0.672	**0.12**	0.028	0.386	80.9	5.02	0.003	0.433	0.36
Mar-2006	0.003	0.006	0.016	*ND*	*ND*	1.08	0.98	0.067	0.022	0.257	70.3	11.9	*ND*	0.559	0.56
Mar-2007	*ND*	0.003	0.023	*ND*	*ND*	1.3	1.11	0.067	*ND*	0.235	79.7	13.7	0.002	0.622	0.536
Mar-2008	*ND*	0.004	0.025	*ND*	*ND*	1.52	1.43	0.017	*ND*	0.064	26	17.7	*ND*	0.727	0.669
Mar-2009	*ND*	0.003	0.029	*ND*	*ND*	2.55	2.19	0.042	0.016	0.137	62.7	5.04	*ND*	1.24	1.05
Mar-2010	0.003	0.01	0.022	*ND*	*ND*	1.38	1.32	0.07	0.013	0.209	15	6.83	*ND*	0.66	0.638
Apr-2011	0.002	0.006	0.02	*ND*	*ND*	1.48	1.45	0.053	*ND*	0.166	22.6	8.96	*ND*	0.74	0.716
Mar-2012	*ND*	0.002	0.022	*ND*	*ND*	1.54	1.5	0.019	*ND*	0.064	29.1	10.1	*ND*	0.904	0.875
Mar-2013	*ND*	*0.0014 J*	0.0265	*0.000359 J*	*ND*	1.82	1.74	0.0203	*0.0066 J*	0.071	33.6	10.8	*ND*	0.96	0.863
Mar-2014	0.0021	0.0052	0.0211	*ND*	*0.000196 J*	1.56	1.56	0.0535	0.0124	0.172	35	13.6	*0.000968 J*	0.803	0.805

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-13***													
Apr-2015	*0.000337 J*	*0.001 J*	0.0266	*0.000171 J*	*ND*	2.03	2.08	*0.0085 J*	*0.0041 J*	0.0269	22.7	18	*ND*	1.01	1.04
May-2016	*ND*	*ND*	0.0275	*0.000096 J*	*ND*	2.43	2.24	*0.003 J*	0.0033	0.0073	19.6	16.3	*ND*	1.25	1.17
May-2017	*ND*	*0.0016 J*	0.0273	*0.00031 J*	*0.00021 J*	1.87	1.86	0.0097	0.0053	0.037	23.3	13.4	*0.00032 J*	1.11	1.02
May-2018	*0.000064 J*	*ND*	0.035	*0.00014 J*	*0.000053 J*	3.3	3.2	*0.0024 J*	0.0048	0.0044 B	13	11.6	*0.000031 J*	1.7	1.7
May-2019	*ND*	*ND*	0.023	*ND*	*ND*	2.8	2.8	*ND*	0.0056	0.013	23.3 M1	21.3	*ND*	1.2	1.2
May-2020	*ND*	*ND*	0.033	*0.00013 J*	*0.00014 J*	3.2	3.1	*0.0048 J*	0.006	0.0027	9.2	7.6	*ND*	1.8	1.7
Apr-2021	*ND*	*ND*	0.046	*ND*	*ND*	3.1	3.1	*0.0012 J*	*0.0043 J*	*ND*	15.9	12.5	*ND*	1.6	1.6

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-13*												
Nov-1993	0.19	NA	ND	NA	0.64	NA	ND	NA	1.5	NA	NA	NA	0.01
Apr-1994	0.05	NA	ND	NA	0.97	NA	ND	NA	1.49	NA	NA	NA	0.04
Apr-1995	0.2	NA	ND	ND	0.73	NA	ND	ND	1.3	NA	ND	ND	0.03
Apr-1997	0.11	0.07	0.0014	ND	2.4	1.8	ND	ND	2.4	2.7	ND	ND	ND
Apr-1998	0.053	0.074	NA	ND	1.37	0.735	ND	ND	2.44	2.47	ND	ND	0.041
Apr-1999	0.044	0.049	NA	ND	ND	1.02	ND	ND	2.36	2.23	ND	ND	0.056
Apr-2000	ND	0.045	NA	0.013	0.705	ND	ND	ND	5	2.03	ND	ND	0.051
Apr-2001	0.252	NA	NA	0.265	1.07	NA	ND	ND	3.28	NA	ND	ND	0.101
Mar-2002	0.166	0.047	NA	0.224	1.94	0.48	ND	ND	3.81	2.53	ND	ND	0.09
Mar-2003	0.078	0.054	NA	0.098	0.655	0.83	ND	ND	2.5	2.45	ND	ND	0.05
Apr-2004	0.121	0.076	0.0012	0.072	1.47	1.31	ND	ND	2.96	2.47	ND	ND	0.076
Apr-2005	0.149	0.052	**0.0047**	0.133	0.66	0.54	ND	ND	3.33	2.89	ND	ND	0.162
Mar-2006	0.11	0.045	**0.0032**	0.073	0.528	0.556	ND	ND	3.13	3.05	ND	ND	0.018
Mar-2007	0.125	0.075	**0.0051**	0.046	0.846	0.761	ND	ND	3.87	3.6	ND	ND	0.019
Mar-2008	0.113	0.085	0.0005	0.029	0.904	0.817	ND	ND	4.94	4.23	ND	ND	ND
Mar-2009	0.118	0.074	0.0004	0.05	1.18	1.03	ND	ND	4.48	3.8	ND	ND	0.066
Mar-2010	0.155	0.088	0.0004	0.096	1.03	0.96	ND	ND	4.25	4.01	ND	ND	0.022
Apr-2011	0.112	0.06	0.0004	0.046	0.714	0.658	ND	ND	4.36	4.17	ND	ND	0.018
Mar-2012	0.096	0.084	0.0004	0.023	0.866	0.924	ND	ND	4.9	5.08	ND	ND	0.012
Mar-2013	0.111	0.0863	0.000377	0.0233	0.852	0.785	ND	ND	5.07	4.57	ND	ND	0.0159
Mar-2014	0.127	0.0813	0.000762	0.0559	0.849	0.84	ND	0.00007 J	5.07	5.1	ND	ND	0.0164
Apr-2015	0.0996	0.0988	0.000078 J	0.0097 J	0.94	0.989	ND	ND	5.73	5.98	ND	ND	0.011

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-13***												
May-2016	0.102	0.107	*ND*	0.0052	1.11	0.978	*ND*	*ND*	6.28	5.79	*ND*	*ND*	*ND*
May-2017	0.0982	0.089	0.00036	0.0152	0.963	0.947	*ND*	*ND*	5.82	5.78	*ND*	*ND*	*0.0074 J*
May-2018	0.088	0.086	*ND*	0.0064	*1.2 J*	*ND*	*0.00054 JB*	*ND*	7.5	7.8	*ND*	0.0029	0.007 B
May-2019	0.18	0.16	*ND*	0.0055	*ND*	*ND*	*ND*	*ND*	5.4	5.2	*ND*	*ND*	0.013
May-2020	0.076	0.072	*0.00016 J*	0.0075	*1.2 J*	*ND*	*0.00036 J*	*ND*	8.1	6.6	*ND*	*0.00053 J*	0.0077
Apr-2021	0.11	0.11	*ND*	*0.0055 J*	1	1.1	*ND*	*ND*	7.2	7.5	*0.0044 J*	*ND*	*0.0031 J*
Jun-2021	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*NA*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-13*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	43	ND
Apr-1997	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	1.1	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	4.39	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-13*																
Mar-2014	*ND*	*ND*	*ND*	*ND*	4.71	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.34 J*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	4.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	4.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	4.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.9 JB*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	4.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	3.99	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-13***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	10	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	1.2
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	1.4	1.4
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	1.5
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	1.1
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	1
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	7.2	3.1
Mar-2006	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	4.6	ND	ND	ND	8.4	4.7
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	5.4	2.8
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.5	ND	ND	ND	10.5	7.9
May-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND	ND	ND	10.5	2.9
Mar-2009	ND	ND	ND	ND	ND	2.2 B	ND	ND	ND	ND	ND	1.3	ND	ND	ND	5.4	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.6 J	4.5
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	11.9	4.3
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	11.1	3.5
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.95	ND	ND	ND	6.21	3.63

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-13***															
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.04	ND	ND	ND	8.47	4.03
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.37	ND	ND	ND	5.96	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	5.6	4.3
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	ND	ND	ND	5.9	4.1
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.2	ND	ND	ND	11.4	5.2
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.1	ND	ND	ND	8.2	6.4 N3
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2	ND	ND	ND	5.1	2.2
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.82	ND	ND	ND	4.95 J	4.41 J

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-13***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	2.1	ND	ND	NA	NA	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	ND	2.9	0.5 J	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	4.1	ND	ND	ND	ND	**5.3**	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	3.6	ND	ND	ND	ND	3.7	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	**7 C**	ND	ND	ND	ND	**10.4**	0.5 J	ND	ND	NA
May-2008	ND	ND	ND	ND	ND	ND	ND	**6.3**	ND	ND	ND	ND	5	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	4.1	ND	ND	ND	ND	2.1	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	3.7	ND	ND	ND	ND	2.5	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	ND	2.3	ND	ND	0.5 J	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-13***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.37	*ND*	*ND*	*ND*	*ND*	2.45	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.53	*ND*	*ND*	*ND*	*ND*	3.3	*0.34 J*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.34	*ND*	*ND*	*ND*	*ND*	4.15	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.9	*ND*	*ND*	*ND*	*ND*	**5.1**	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.8	*ND*	*ND*	*ND*	*ND*	4.6	*0.1 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	**6**	*ND*	*ND*	*ND*	*ND*	**9.6**	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	**8.4**	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.6	*ND*	*ND*	*ND*	*ND*	4.7	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.872 JB*	*ND*	*ND*	2.72	*ND*	*ND*	*ND*	*ND*	**5.59**	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-14B***											
Apr-2010	ND	ND	ND	ND	1.71	0.17	ND	4	27.7	6.92	11	2.8	0.16
Oct-2010	ND	ND	ND	ND	1.82	0.18	ND	3.5	21.6	4.72	11	2.62	ND
Apr-2011	ND	ND	ND	ND	1.61	0.2	ND	4	21	3.35	18	1.9	0.9
Sep-2011	ND	ND	ND	ND	1.56	0.2	ND	4.4	20.5	4.28	22	2.41	0.49
Mar-2012	ND	ND	ND	ND	1.74	0.21	ND	3.5	20.7	5.11	ND	2.36	0.49
Sep-2012	ND	ND	ND	ND	1.69	0.193	ND	3.4	21	5.08	ND	1.96	0.251
Mar-2013	0.92 J	0.92 J	ND	ND	1.88	0.202	ND	3.1	20.8	3.24	15	2.11	0.141
Oct-2013	1.72 J	1.72 J	ND	ND	1.8	0.196	ND	2.9	20.1	3.64	ND	2.16	0.209
Mar-2014	0.72	0.72	ND	24	1.75	0.208	ND	5.4	27.3	3.75	ND	1.85	0.137
Oct-2014	ND	ND	ND	ND	1.9	0.212	ND	4.1	20.7	4.02	ND	2.2	0.205
Apr-2015	5.64	5.64	ND	ND	1.92	0.234	ND	3.9	21.4	4.35	36	4.51	5.93
Nov-2015	1.92	1.92	ND	ND	1.78	0.221	ND	4.8	33.2	4.39	21 J	2.79	5.27
May-2016	ND	ND	ND	5 J	1.89 B	0.187	ND	4.7	28.3	3.78	73	2.9	2.43
Oct-2016	1.8	1.8	ND	5 J	1.77	NA	NA	4.6	34.4	3.98	133	2.6	2.77
May-2017	2.56	2.56	ND	12	1.72	0.227	ND	4.5	34.7	3.56	13 J	3.1	2.69
Oct-2017	ND	ND	ND	ND	1.71	0.243	ND	4.7	35.7	4.29	11 J	2.1	3.85
May-2018	ND	ND	ND	ND	1.5 J	0.24	ND	6.1	29.3	ND	ND	2.3 J	2.86
Nov-2018	ND	ND	ND	ND	1.5 J	0.25	ND	4.28	22.3	ND	ND	2.3 J	4.73
May-2019	ND	NA	ND	ND	ND	0.25	ND	4.31	17.8	ND	16	ND	6.12
Oct-2019	ND	NA	ND	ND	1.4 J	0.29	ND	3.6	23.9	ND	ND	2.3	1.94
May-2020	ND	NA	ND	ND	1.5 J	0.28	ND	4.02	22.8	ND	20	2.4	2.55
Oct-2020	ND	NA	ND	ND	1.9 J	0.27	ND	3.98	22.3	2.2	ND	2.3	3.25
Apr-2021	ND	NA	ND	ND	1.7 J	0.32	ND	4.43	26.4	ND	26	2.2 J	6.06

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14B***													
Apr-2010	ND	ND	ND	ND	ND	0.674	0.553	ND	0.022	0.01	ND	ND	ND	0.271	0.225
Oct-2010	ND	ND	ND	ND	ND	0.62	0.551	ND	0.015	ND	ND	ND	ND	0.26	0.235
Apr-2011	ND	ND	ND	ND	ND	0.445	0.466	ND	0.011	ND	ND	ND	ND	0.205	0.23
Sep-2011	ND	ND	ND	ND	ND	0.608	0.61	ND	ND	ND	ND	ND	ND	0.216	0.262
Mar-2012	ND	ND	ND	ND	ND	0.462	0.445	ND	ND	ND	0.064	ND	ND	0.295	0.283
Sep-2012	ND	ND	0.0054 J	0.000317 J	ND	0.44	0.591	0.0023 J	0.0082 J	0.0051 J	0.0352 J	0.0702	ND	0.21	0.245
Mar-2013	ND	ND	0.0055 J	0.000399 J	ND	0.518	0.516	0.0022 J	0.008 J	0.0047 J	0.0052 J	0.0174 J	ND	0.199	0.202
Oct-2013	ND	ND	0.0053 J	0.000313 J	0.000151 J	0.586	0.483	0.0072 J	0.0071 J	0.0036 J	0.0542	ND	ND	0.169	0.225
Mar-2014	0.000742 J	ND	0.0047 J	ND	0.00012 J	0.428	0.342	0.0018 J	0.0071 J	0.0063 J	ND	ND	ND	0.19	0.133
Oct-2014	0.00092 J	0.000584 J	0.0055 J	0.000383 J	0.000144 J	0.531	0.523	0.000633 J	0.0071 J	0.0048 J	0.0109 J	0.0173 J	ND	0.213	0.224
Apr-2015	0.0026	0.000676 J	0.0083 J	0.000399 J	0.000295 J	1.27	0.831	0.000584 J	0.0089 J	0.0422	0.317	0.0251 J	0.0037	0.323	0.227
Nov-2015	0.000636 J	0.000194 J	0.0067 J	0.000425 J	0.000178 J	0.688	0.907	0.000423 J	0.0079 J	0.008 J	0.18	ND	0.000607 J	0.26	0.282
May-2016	ND	ND	0.007	0.00034 J,B	0.00021 J	0.762	0.654	ND	0.0071	0.0062	0.114 J	0.0412 J	0.0015 J	0.25	0.248
Oct-2016	ND	0.00075 J	0.0066	0.00036 J	ND	0.62	0.606	0.00086 J+	0.0069	0.0068 J+	0.176 J	ND	0.0016 J	0.26 J+	0.241
May-2017	0.0015 J	0.00076 J	0.006	0.00035 J	ND	0.766	0.732	0.00074 J	0.0068	0.007	0.107 J	ND	0.0012 J	0.279	0.25
Oct-2017	ND	ND	0.0052	0.00026 J	0.00021 J	0.48	0.465	0.0011 J	0.0058	0.0034 J	ND	ND	ND	0.209	0.221
May-2018	ND	ND	0.0055	0.00032	0.00017 J	0.5 J	0.48 J	0.0029 J	0.0052	0.0069	0.02 J	ND	0.000047 JB	0.24 J	0.23 J
Nov-2018	ND	ND	0.0056	0.00031	0.00016 J	0.52 J	0.5 J	0.0064 J	0.0049	0.005	0.035	0.02 J	0.00011 J	0.23 J	0.23 J
May-2019	ND	ND	0.0058	ND	ND	ND	ND	0.009	0.0052	0.0063	ND	0.026	ND	ND	ND
Oct-2019	0.0001 J	ND	0.0058	0.00029 J	0.00026 J	0.52	0.5 J	0.007 J	0.0051	0.0087	0.025 J	0.019 J	0.000056 J	0.25	0.2 J
May-2020	ND	ND	0.0055	0.00026 J	0.00013 J	0.53	0.49 JB	0.0065 J	0.0054	0.0047	0.02 J	0.016 J	ND	0.25	0.22 JB

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14B***													
Oct-2020	*ND*	*ND*	*0.0061 J*	*0.00029 J*	*ND*	0.5	*0.48 J*	*0.0063 J*	0.0057	0.013	*0.034 JB*	*0.019 J*	*ND*	0.25	*0.24 J*
Apr-2021	*ND*	*ND*	*0.0091 J*	*0.00026 J*	*ND*	*0.49 J*	*0.48 J*	*0.0029 J*	0.0055	*0.005 J*	*ND*	*ND*	*ND*	0.23	0.24

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-14B*												
Apr-2010	0.013	0.012	ND	0.028	ND	ND	ND	ND	0.89	0.777	ND	ND	0.071
Oct-2010	ND	ND	ND	0.019	ND	ND	ND	ND	0.835	0.817	ND	ND	0.037
Apr-2011	ND	ND	ND	0.015	ND	ND	ND	ND	0.758	0.741	ND	ND	0.025
Sep-2011	ND	ND	ND	0.015	0.51	ND	ND	ND	1.07	1.03	ND	ND	0.021
Mar-2012	ND	ND	ND	0.012	ND	ND	ND	ND	0.907	0.862	ND	ND	0.016
Sep-2012	0.0072 J	0.0086 J	ND	0.0128	0.387 J	0.419 J	ND	ND	0.861	0.908	ND	ND	0.0148
Mar-2013	0.0068 J	0.007 J	0.00006 J	0.0115	0.385 J	0.345 J	ND	ND	0.799	0.755	ND	ND	0.025
Oct-2013	0.0065 J	0.0073 J	ND	0.0089 J	0.351 J	0.412 J	ND	0.000036 J	0.653	0.851	0.000443 J	0.002 J	0.0563
Mar-2014	0.0064 J	0.0039 J	ND	0.0111	0.382 J	0.41 J	ND	ND	0.859	1.03	ND	ND	0.0151
Oct-2014	0.007 J	0.0073 J	ND	0.0108 J	0.423 J	0.409 J	0.0012 J	ND	0.958	0.942	0.00071 J	ND	0.0206
Apr-2015	0.0118	0.0068 J	ND	0.0135	0.59	0.58	ND	ND	3.48	3.31	ND	ND	0.0647
Nov-2015	0.0088 J	0.0097 J	ND	0.0125	0.524	0.618	ND	ND	1.75	2.98	ND	ND	0.0276
May-2016	0.0093	0.0093 B	ND	0.0117	0.496	0.516	ND	ND	1.63	1.37	ND	ND	0.0262 J
Oct-2016	0.0082 R	0.0069	ND	0.0112 J+	0.508	0.519	ND	ND	2.09 J+	1.82	ND	ND	0.045
May-2017	0.0094	0.0088	ND	0.0107	0.528	0.477	ND	ND	1.96	1.47	ND	ND	0.0591
Oct-2017	0.0061	0.0059	ND	0.0093	0.401	0.455	ND	ND	0.859	0.876	ND	ND	0.0104 J
May-2018	0.0059	0.0053	ND	0.0091	ND	ND	0.00012 J	ND	0.84 J	0.81 J	ND	ND	0.013
Nov-2018	0.015	0.0061	ND	0.012	ND	ND	0.00022 J	ND	0.81 J	0.91 J	ND	ND	0.014
May-2019	0.0073	0.0084	ND	0.013	ND	ND	ND	ND	ND	ND	ND	0.0024	0.013
Oct-2019	0.0078	0.0068	ND	0.011	ND	ND	ND	ND	ND	ND	ND	0.0068	0.016
May-2020	0.0077	0.0071	ND	0.01	ND	ND	ND	ND	ND	ND	ND	ND	0.011
Oct-2020	0.0079	0.0071	ND	0.012	ND	ND	ND	ND	ND	ND	ND	0.0014 J	0.013 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14B***												
Apr-2021	0.0074	0.0073	*ND*	0.01	*0.42 J*	*0.41 J*	*ND*	*ND*	*0.86 J*	1.1	*ND*	*ND*	0.01

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-14B***																
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14B*																
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-14B*															
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14B***															
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14B***															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14B***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-16A***											
Oct-2009	2.9	2.9	ND	ND	2.93	0.2	ND	4.6	18.3	0.81	16	3.39	ND
Apr-2010	2.9	2.9	ND	ND	3.33	0.2	ND	4.1	18.4	ND	44	3.1	1
Oct-2010	2.5	2.5	ND	ND	3.27	0.16	ND	4.6	18.2	ND	14	3.86	0.24
Apr-2011	2.9	2.9	ND	ND	3.06	0.2	ND	4.6	17	ND	12	3.5	1
Sep-2011	3.1	3.1	ND	ND	3.05	0.19	ND	4.6	17.5	ND	13	4	0.9
Mar-2012	3	3	ND	ND	3.13	0.2	ND	4.2	23.3	ND	39	3.9	0.38
Sep-2012	2.64	2.64	ND	ND	3.27	0.174	ND	3.8	18.3	ND	49	3.67	0.182
Mar-2013	3.32	3.32	ND	ND	3.44	0.19	ND	3.7	417.6	0.868 J	19	3.74	0.627
Oct-2013	3.72	3.72	ND	ND	3.38	0.169	ND	3.4	18.9	0.747 J	28	3.62	0.43
Mar-2014	3.08	3.08	ND	17	3.27	0.178	ND	5.4	20.5	0.581 J	ND	3.41	0.18
Oct-2014	ND	ND	ND	8 J	3.44	0.186	ND	5.1	17.9	0.224 J	ND	3.86	0.207
Apr-2015	3.76	3.76	ND	ND	3.3	0.173	ND	4.3	20.9	ND	ND	3.88	0.255
Nov-2015	2.56	2.56	ND	6 J	3.4	0.19	ND	5.1	44.9	1.08	ND	3.99	1.27
May-2016	2.56	2.56	ND	ND	3.37	0.187	ND	5.2	30.7	ND	14 J	4	0.289
Oct-2016	ND	ND	ND	ND	3.2	NA	NA	5.1	32.7	1.06	31	3.4	0.811
May-2017	ND	ND	ND	ND	3.07	0.19	ND	5	28.6	0.899 J	ND	3.3	0.371
Oct-2017	ND	ND	0.0787 J	ND	3.05	0.203	ND	5.2	34.5	0.501 J	33	3.8	6.72
May-2018	2 J	ND	0.056 J	ND	3.1	ND	ND	4.8	33.9	ND	45	4 J	2.47
Nov-2018	2 JB	ND	ND	ND	2.9 J	0.18	ND	4.66	20.4	ND	17	59.7	4.7
May-2019	ND	NA	ND	ND	ND	0.19	ND	4.7	14.9	ND	ND	ND	2.47
Oct-2019	ND	NA	ND	ND	2.6 J	0.19	ND	4.59	20.8	ND	21	3.9	1.71
May-2020	ND	NA	ND	ND	2.8 J	0.15	ND	4.38	19.2	ND	ND	4.1	2.98
Oct-2020	ND	NA	ND	ND	2.9 J	0.17	ND	4.45	20	ND	ND	4	4.28
Apr-2021	ND	NA	ND	ND	3 J	0.18	ND	4.91	25.6	ND	12	4	5.93

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-16A***													
Oct-2009	ND	ND	ND	ND	ND	0.828	0.795	ND	ND	ND	ND	ND	ND	0.32	0.329
Apr-2010	ND	ND	ND	ND	ND	0.746	0.735	ND	ND	ND	0.152	ND	ND	0.299	0.296
Oct-2010	ND	ND	ND	ND	ND	0.92	0.864	ND	ND	ND	ND	ND	ND	0.378	0.359
Apr-2011	ND	ND	ND	ND	ND	0.833	0.811	ND	ND	ND	ND	ND	ND	0.348	0.329
Sep-2011	ND	ND	ND	ND	ND	0.973	0.98	ND	ND	ND	ND	ND	ND	0.381	0.382
Mar-2012	ND	ND	ND	ND	ND	0.86	0.85	ND	ND	ND	ND	ND	ND	0.424	0.409
Sep-2012	ND	ND	0.0064 J	0.000091 J	ND	0.889	0.905	ND	0.0034 J	0.0012 J	0.024 J	0.0281 J	ND	0.351	0.356
Mar-2013	ND	ND	0.0066 J	0.000067 J	ND	0.981	0.898	0.0021 J	0.0038 J	0.000806 J	0.0113 J	0.0061 J	0.0014 J	0.313	0.291
Oct-2013	ND	ND	0.0067 J	ND	ND	0.991	0.878	0.0088 J	0.0037 J	0.000741 J	0.062	ND	ND	0.279	0.35
Mar-2014	0.00052 J	ND	0.0057 J	ND	ND	0.845	0.875	0.0018 J	0.0034 J	0.0022 J	ND	ND	ND	0.315	0.319
Oct-2014	0.000784 J	ND	0.0069 J	ND	ND	0.966	0.975	0.000635 J	0.003 J	0.000772 J	ND	ND	ND	0.351	0.348
Apr-2015	0.0011 J	0.000376 J	0.007 J	ND	ND	0.945	0.93	0.00071 J	0.0038 J	0.001 J	ND	0.0106 J	ND	0.369	0.363
Nov-2015	0.000344 J	ND	0.0065 J	0.000083 J	0.000101 J	0.999	1.01	0.000304 J	0.0031 J	0.0012 J	0.0175 J	ND	0.000283 J	0.362	0.371
May-2016	ND	ND	0.0067	ND	ND	0.982	0.825	0.00082 J	0.0032	0.00098 J	ND	ND	ND	0.37	0.34
Oct-2016	ND	ND	0.0068	ND	ND	0.816	0.904	ND	0.003	0.00098 J	ND	ND	ND	0.339	0.366
May-2017	ND	ND	0.0074	ND	ND	0.749	0.796	0.001 J	0.003	0.00088 J	ND	ND	ND	0.35	0.344
Oct-2017	ND	ND	0.0055	0.000077 J	ND	0.944	0.901	0.00091 J	0.0041	0.0018 J	ND	ND	ND	0.352	0.344
May-2018	0.000063 J	ND	0.0067	0.0001 J	0.000079 J	0.97 J	0.96 J	0.00085 J	0.0053	0.0017 J	0.011 J	ND	0.000068 JB	0.38 J	0.37 J
Nov-2018	ND	ND	0.0058	0.000055 J	0.000072 J	13.4	1.1	0.0087	0.026	0.0061	0.31	0.04	0.00026 J	6.4	0.46 J
May-2019	ND	ND	0.0058	ND	ND	ND	1.4	0.0099	0.029	0.0024	ND	0.04	ND	ND	ND
Oct-2019	0.000096 J	ND	0.0059	0.000078 J	0.00016 J	0.96	0.93 J	0.012	0.032	0.0031	0.068 J	0.041	ND	0.37	0.37 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-16A***													
May-2020	*0.000058 J*	*ND*	0.006	*ND*	*ND*	1	*0.97 J*	0.014	0.045	0.0032	*0.095 J*	0.054	*ND*	0.38	*0.37 JB*
Oct-2020	*ND*	*ND*	*0.0065 J*	*ND*	*ND*	0.97	*0.93 J*	*0.0094 J*	0.034	*ND*	*0.057 JB*	0.042	*ND*	0.37	*0.36 J*
Apr-2021	*ND*	*ND*	*0.0071 J*	*0.00021 J*	*ND*	*0.98 J*	*0.93 J*	0.0061	0.028	*0.0045 J*	*0.051 J*	*ND*	*ND*	0.38	0.37

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-16A*												
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.1	1.04	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.17	1.16	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.52	ND	ND	ND	1.28	1.21	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.21	1.16	ND	ND	ND
Sep-2011	ND	ND	ND	ND	0.525	0.536	ND	ND	1.48	1.45	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	1.3	1.27	ND	ND	ND
Sep-2012	0.0042 J	0.0043 J	ND	0.0046 J	0.472 J	0.464 J	ND	ND	1.28	1.33	0.000679 J	ND	0.0065 J
Mar-2013	0.0045 J	0.0042 J	0.000054 J	0.0048 J	0.424 J	0.376 J	ND	ND	1.19	1.12	ND	ND	0.0163
Oct-2013	0.0047 J	0.0045 J	ND	0.0038 J	0.409 J	0.489 J	ND	ND	1.01	1.32	0.001 J	0.0022 J	0.0123
Mar-2014	0.0036 J	0.0037 J	ND	0.0046 J	0.45 J	0.423 J	ND	ND	1.26	1.23	ND	ND	0.0064 J
Oct-2014	0.0039 J	0.0041 J	0.000024 J	0.0052 J	0.502	0.489 J	0.000965 J	ND	1.47	1.41	ND	ND	0.0095 J
Apr-2015	0.0045 J	0.0045 J	ND	0.005 J	0.529	0.516	0.0013 J	0.000034 J	1.51	1.48	0.000888 J	ND	0.0118
Nov-2015	0.004 J	0.0041 J	ND	0.0046 J	0.508	0.521	ND	ND	1.39	1.43	0.000103 J	ND	0.0044 J
May-2016	0.0046	0.0041	ND	0.0046	0.529	0.492	ND	ND	1.43	1.26	ND	ND	0.0076 J,B
Oct-2016	0.003 J	0.0038 J+	ND	0.0043	0.446	0.49	ND	ND	1.29	1.36	ND	ND	0.006 J
May-2017	0.0042	0.0032 J	ND	0.0051	0.484	0.485	ND	ND	1.21	1.23	ND	ND	0.0055 J
Oct-2017	0.0046	0.004	ND	0.0044	0.482	0.506	ND	ND	1.25	1.29	ND	ND	0.006 J
May-2018	0.0048	0.0034	ND	0.0062	ND	ND	ND	ND	1.6 J	1.2 J	ND	0.0039	0.0084 B
Nov-2018	0.0098	0.015	ND	0.009	2.3 J	ND	0.0002 J	ND	22.4	1.4 J	ND	ND	0.021
May-2019	0.025	0.064	ND	0.01	ND	ND	ND	ND	ND	ND	ND	ND	0.015
Oct-2019	0.0074	0.0091	ND	0.01	ND	ND	ND	ND	ND	1.4 J	ND	0.0072	0.011
May-2020	0.0093	0.0074	ND	0.011	ND	ND	ND	ND	ND	ND	ND	0.0081	0.0075

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-16A***												
Oct-2020	0.0071	0.0067	*ND*	0.01	*ND*	*ND*	*ND*	*ND*	*1.3 J*	*ND*	*ND*	*0.00089 J*	*ND*
Apr-2021	0.0066	0.0058	*ND*	*0.0095 J*	0.51	*0.5 J*	*0.0058 J*	*ND*	1.3	1.1	*ND*	*ND*	*0.005 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16A*																
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16A*																
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-16A*															
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-16A***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.123 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-16A*															
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.2 B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16A***															
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-18***											
Nov-1993	ND	ND	0.2	ND	16	ND	ND	4	184.1	48.4	112	26.5	ND
Apr-1994	ND	ND	0.1	ND	14.8	ND	ND	4.44	189	51.8	108	37.42	1.2
Apr-1995	ND	ND	0.3	22.6	14.2	ND	ND	4.3	183	55.5	96	25.9	2
Apr-1997	ND	11	ND	ND	14	ND	ND	NA	NA	37	108	18.3	3.2
Apr-1998	ND	ND	1.1	ND	10.9	8.44	ND	5	199.8	23.9	93	42	0.94
Apr-1999	ND	ND	0.65	ND	14.3	5.01	ND	4.28	175.7	29.6	102	42	3
Apr-2000	ND	ND	2.4	ND	10.9	**38.6**	ND	4.05	353	9.27	205	83	0.71
Apr-2001	ND	NA	1.3	ND	9.89	**28.8**	ND	NA	NA	20.6	147	78	0.9
Mar-2002	ND	ND	ND	ND	8.8	3.78	ND	3.9	135	23.3	74	35.6	0.2
Mar-2003	ND	ND	0.8	13	16.8	**11.5**	ND	4	222	31.9	145	52.7	1.1
Apr-2004	ND	ND	0.38	ND	6.95	6.47	ND	4.2	166.4	42.4	102	44.6	1.3
Apr-2005	ND	ND	ND	ND	10.5	5.93	ND	4.4	136.3	29.4	72	43	ND
Mar-2006	ND	ND	ND	ND	9.69	7.16	ND	4.5	162.9	42.9	118	43.3	ND
Mar-2007	ND	ND	ND	ND	5.17	**12.6**	ND	4.2	168	45.6	128	52.1	0.7
Mar-2008	ND	ND	ND	ND	5.89	**14.9**	ND	4	183.3	38.3	143	54.5	0.99
Mar-2009	ND	ND	ND	ND	6.59	9.29	ND	3.8	166.2	47.9	114	42	1.4
Mar-2010	ND	ND	ND	10.8	7.05	7.06	ND	4.16	178	35.6	104	36.3	3
Apr-2011	ND	ND	ND	ND	5.12	5.67	ND	3.9	134	31.3	114	35.2	4.4
Mar-2012	ND	ND	ND	ND	8.46	4.25	ND	3.6	115.3	38.1	67	34	1.9
Mar-2013	ND	ND	ND	ND	7.18	2.97	ND	4.4	116.4	31.2	89	28.9	2.11
Mar-2014	ND	ND	ND	17	7.46	2.06	ND	4.5	110.7	32.5	56	27.5	1.63
Apr-2015	ND	ND	ND	ND	6.9	2.05	ND	3.7	101	33.5	68	27.8	1.27
May-2016	ND	ND	ND	ND	9.36	1.7	ND	4.5	186.9	37.3	66	31.6	2.68
May-2017	ND	ND	ND	ND	9.75	1.23	ND	4.5	157	27.5	51	29.4	3.34
May-2018	ND	ND	0.12	5.8 J	6.3	0.46	ND	4.3	147.2	34.2	126	32.6	2.62
May-2019	ND	NA	ND	ND	8.6	1.5	ND	4.33	89.7	27.5	79	30.7	5.89
May-2020	ND	NA	ND	ND	5.5	1.8	ND	3.94	114.9	33.2	60	33.3	4.84
Apr-2021	ND	NA	ND	12.6 J	7.2	1.4	ND	4.25	122	27.1	55	22.5	6.84

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-18***													
Nov-1993	*NA*	*ND*	*ND*	*NA*	*ND*	3.7	*NA*	*ND*	*NA*	*ND*	4.2	3.7	*ND*	4.2	*NA*
Apr-1994	*NA*	*ND*	*ND*	*NA*	*ND*	4.1	*NA*	*ND*	*NA*	*ND*	3.9	4.34	*ND*	6.6	*NA*
Apr-1995	*ND*	*ND*	1	*ND*	*ND*	3.1	*NA*	*ND*	0.06	*ND*	9.4	9.2	*ND*	4.4	*NA*
Apr-1997	*ND*	*ND*	0.07	*ND*	**0.012**	4.6	4.9	*ND*	0.14	*ND*	12	9.7	*ND*	3.2	3.4
Apr-1998	*ND*	*ND*	0.145	*ND*	*ND*	7.7	7.78	*ND*	0.223	0.013	1.43	1.36	*ND*	5.65	5.67
Apr-1999	*ND*	*ND*	0.111	*ND*	*ND*	7.87	7.3	*ND*	0.153	0.01	0.261	*ND*	*ND*	5.51	5.04
Apr-2000	*ND*	*ND*	0.531	0.003	0.004	16.7	15.3	*ND*	0.657	0.019	0.211	0.071	*ND*	10	9.24
Apr-2001	*ND*	*ND*	0.388	0.004	0.005	16.4	*NA*	*ND*	0.488	0.018	0.135	*NA*	*ND*	9.03	*NA*
Mar-2002	*ND*	*ND*	0.085	*ND*	*ND*	6.6	6.61	*ND*	0.121	*ND*	0.262	0.138	*ND*	4.64	4.61
Mar-2003	*ND*	*ND*	0.225	*ND*	*ND*	11.7	10.8	*ND*	0.365	*ND*	0.333	*ND*	*ND*	5.74	5.32
Apr-2004	*ND*	*ND*	0.105	*ND*	*ND*	10.1	10.2	*ND*	0.256	*ND*	0.302	*ND*	*ND*	4.73	4.78
Apr-2005	*ND*	*ND*	0.111	*ND*	*ND*	9.29	9	*ND*	0.17	*ND*	*ND*	*ND*	*ND*	4.81	4.66
Mar-2006	*ND*	*ND*	0.091	*ND*	*ND*	9.75	9.47	*ND*	0.177	*ND*	*ND*	*ND*	*ND*	4.62	4.5
Mar-2007	*ND*	*ND*	0.112	*ND*	*ND*	13.1	12.5	*ND*	0.253	*ND*	0.08	*ND*	*ND*	4.72	4.54
Mar-2008	*ND*	*ND*	0.1	*ND*	*ND*	13.4	13.4	*ND*	0.25	*ND*	*ND*	*ND*	*ND*	5.1	5.03
Mar-2009	*ND*	*ND*	0.074	*ND*	*ND*	10.1	9.97	*ND*	0.201	0.01	0.05	*ND*	*ND*	4.08	4.02
Mar-2010	*ND*	*ND*	0.102	*ND*	*ND*	7.95	7.66	*ND*	0.163	*ND*	0.061	*ND*	*ND*	3.98	3.91
Apr-2011	*ND*	*ND*	0.093	*ND*	*ND*	8.38	8.21	*ND*	0.163	*ND*	0.077	*ND*	*ND*	3.46	3.41
Mar-2012	*ND*	*ND*	0.101	*ND*	*ND*	7.32	7.12	*ND*	0.151	*ND*	*ND*	*ND*	*ND*	3.82	3.73
Mar-2013	*ND*	*ND*	0.0717	*0.000707 J*	*0.0015 J*	6.76	6.92	*0.0047 J*	0.139	*0.0056 J*	*0.0466 J*	*0.0183 J*	*0.0015 J*	2.93	2.88
Mar-2014	*0.000269 J*	*ND*	0.0749	*0.000812 J*	*0.000947 J*	5.41	5.44	*0.0013 J*	0.0955	*0.0043 J*	*0.0209 J*	*0.0092 J*	*ND*	3.4	3.4

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-18***													
Apr-2015	*0.00061 J*	*ND*	0.0783	*0.00072 J*	*0.0011 J*	5.91	6.1	*0.001 J*	0.107	*0.0043 J*	*0.0148 J*	*ND*	*ND*	3.16	3.26
May-2016	*ND*	*ND*	0.0806	*0.00064 J*	0.001	6.58	6.03	*0.0022 J*	0.106	0.0041	*0.0541 J*	*ND*	*0.00018 J*	3.7	3.54
May-2017	*ND*	*ND*	0.0911	*0.00043 J*	*0.00067 J*	5.14	5.56	*0.0034 J*	0.0662	*0.0031 J*	*0.0381 J*	*ND*	*ND*	4.02	3.75
May-2018	*0.000049 J*	*ND*	0.053	0.00072	0.0014	7.9	7.8	*0.0014 J*	0.106	0.0041	*0.019 J*	*0.014 J*	*0.000087 JB*	3.1	3
May-2019	*ND*	*ND*	0.077	0.00076	0.0013	6.6	6.3	0.0082	0.066	0.0024	*ND*	0.033	*ND*	3.4	3.2
May-2020	*0.000087 J*	*ND*	0.055	0.00064	0.0012	8.2	7.9	0.022	0.1	0.0046	0.11	0.076	*ND*	3.1	3
Apr-2021	*ND*	*ND*	0.073	*0.00057 J*	*0.00087 J*	4.9	5.6	0.005	0.085	*0.0032 J*	*0.068 J*	*ND*	*ND*	2.5	2.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-18*												
Nov-1993	1.8	NA	ND	NA	2.4	NA	ND	NA	4.9	NA	NA	NA	0.48
Apr-1994	2.25	NA	ND	NA	2.31	NA	ND	NA	3.87	NA	NA	NA	0.06
Apr-1995	2.1	NA	ND	0.17	2.9	NA	ND	ND	3	NA	ND	ND	0.58
Apr-1997	1.6	1.8	ND	0.1	3.7	3.6	ND	ND	4.3	5	ND	ND	0.18
Apr-1998	3.02	3.06	NA	0.137	3.06	3.67	ND	ND	4.3	4.31	ND	ND	0.332
Apr-1999	1.81	1.67	NA	0.094	3.46	3.33	ND	ND	5.5	4.98	ND	ND	0.229
Apr-2000	10.3	9.41	NA	0.38	5	4.8	ND	ND	2.67	2.48	ND	ND	0.933
Apr-2001	7.14	NA	NA	0.294	5.85	NA	ND	ND	2.85	NA	ND	ND	0.74
Mar-2002	1.49	1.46	NA	0.073	2.81	2.47	ND	ND	3.7	3.7	ND	ND	0.175
Mar-2003	4.21	3.88	NA	0.244	4.6	3.46	ND	ND	2.51	2.32	ND	ND	0.638
Apr-2004	2.32	2.32	ND	0.179	3.72	3.8	ND	ND	2.85	2.88	ND	ND	0.465
Apr-2005	1.52	1.48	ND	0.116	3.23	3.17	ND	ND	3.75	3.61	ND	ND	0.307
Mar-2006	1.46	1.41	ND	0.132	2.81	2.76	ND	ND	3.74	3.64	ND	ND	0.368
Mar-2007	1.58	1.52	ND	0.201	3.18	2.98	ND	ND	2.62	2.55	ND	ND	0.611
Mar-2008	1.71	1.7	ND	0.2	3.23	3.26	ND	ND	2.67	2.69	ND	ND	0.611
Mar-2009	1.29	1.27	ND	0.157	2.63	2.6	ND	ND	3.01	2.98	ND	ND	0.47
Mar-2010	1.18	1.17	ND	0.134	2.42	2.25	ND	ND	2.73	3.03	ND	ND	0.35
Apr-2011	0.895	0.868	ND	0.133	1.96	1.92	ND	ND	2.58	2.6	ND	ND	0.418
Mar-2012	0.898	0.88	ND	0.122	2.1	2.08	ND	ND	3.32	3.33	ND	ND	0.354
Mar-2013	0.738	0.721	0.000065 J	0.111	1.64	1.62	0.000574 J	ND	2.65	2.64	ND	ND	0.37
Mar-2014	0.607	0.616	ND	0.0714	1.93	1.95	ND	ND	3.57	3.61	0.000548 J	ND	0.226
Apr-2015	0.648	0.65	ND	0.088	1.81	1.88	0.0017 J	ND	3.15	3.28	ND	ND	0.273

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-18***												
May-2016	0.673	0.634	*ND*	0.084	2.19	2.26	*ND*	*ND*	4.44	4.22	*ND*	*ND*	0.267
May-2017	0.61	0.603	*ND*	0.0484	2.32	2.43	*ND*	*ND*	4.77	4.94	*ND*	*ND*	0.0967
May-2018	0.46	0.46	*0.00013 JB*	0.092	*1.8 J*	*1.6 J*	*0.00086 J*	*ND*	*3.5 J*	*3.1 J*	*ND*	0.0033	0.32
May-2019	0.5	0.51	*ND*	0.057	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.16
May-2020	0.49	0.46	*ND*	0.11	*1.6 J*	*1.5 J*	*0.00068 J*	*ND*	*3 J*	*2.9 J*	*ND*	0.0098	0.32
Apr-2021	0.37	0.41	*ND*	0.074	1.3	1.5	*ND*	*ND*	3.2	3.7	*ND*	*ND*	0.21

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-18*																
Nov-1993	ND	ND	ND	ND	103	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	204	ND	ND	ND	ND	ND	ND	**6.1**	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	84	ND	ND	ND	ND	ND	3	**7**	4	30	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	21	ND	ND	ND	ND	ND	ND	1.7 J	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	2.3	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	0.9 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	35	ND	ND	ND	ND	ND	0.5 J	1.7	2.1	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	15	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-18*																
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.9 JB*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-18*															
Nov-1993	**11**	ND	ND	ND	ND	ND	ND	ND	23	ND	ND	ND	ND	ND	ND	23	190
Apr-1994	**23**	ND	ND	ND	ND	ND	ND	ND	29	ND	ND	10	ND	ND	ND	16	306
Apr-1997	**10**	ND	1	ND	ND	ND	ND	ND	9	9	ND	**250**	ND	ND	ND	6	75
Apr-1998	2.3 J	ND	ND	ND	ND	ND	ND	ND	2 J	ND	ND	65	ND	ND	ND	5.8	18
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	4.7	NA	NA	NA	1	2.6
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	1.2	NA	ND	NA	0.5 J	0.9 J
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	0.7 J	3
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	1.9	ND	ND	ND	2.2	3.8
Mar-2003	2.3	ND	ND	ND	ND	ND	ND	ND	4.6	ND	ND	5.9	ND	ND	ND	6.2	21
Apr-2004	0.9 J	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	2.8	ND	ND	ND	6.1	9.7
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	0.8 J	ND	ND	ND	4.7	4
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	1.5
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-18***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-18***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	**77**	*ND*	*ND*	**124**	*ND*	*ND*	*ND*	*ND*	**52**	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	28	*ND*	**114**	34	*ND*	**200**	*ND*	*ND*	*ND*	*ND*	**104**	*ND*	*ND*	*ND*	*NA*
Apr-1997	*ND*	*ND*	*NA*	*NA*	**10**	*NA*	*ND*	**18**	*ND*	2	*ND*	*ND*	**16**	1	*ND*	**4**	3
Apr-1998	*ND*	*ND*	*1.6 J*	*NA*	3.3	*ND*	*ND*	**5.9**	*ND*	*ND*	*ND*	*ND*	4.5	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	1.3	*ND*	*NA*	2.7	*ND*	*ND*	*NA*	*NA*	1	*ND*	*NA*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*0.8 J*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	4.6	*ND*	*ND*	**17**	*ND*	*ND*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	4.3	*ND*	*ND*	**18**	*ND*	*ND*	*ND*	*ND*	3.8	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	3.1	*NA*	**39**	3.3	*ND*	**142**	*ND*	1.9	*ND*	*ND*	**33**	*ND*	*ND*	**3.2**	*NA*
Apr-2004	*ND*	*ND*	1.6	*NA*	**16**	*0.9 J*	*ND*	**63**	*ND*	*ND*	*ND*	*ND*	**14**	*ND*	*ND*	1.5	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	4.1	*ND*	*ND*	**21**	*ND*	*ND*	*ND*	*ND*	3.9	*ND*	*ND*	*0.7 J*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	**7.5**	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1.2 R	*ND*	*ND*	2.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.52 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-18***															
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.86 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.1 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.513 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***TW-21A***											
Nov-1993	ND	ND	0.2	ND	19.5	1.3	ND	4.41	144.7	22	36	12.7	2.8
Apr-1994	ND	ND	0.1	21.1	16.1	1.1	ND	4.43	135	23.1	71	15.64	3.8
Apr-1995	ND	ND	ND	ND	19	0.8	ND	4.3	140	26	83	13.8	4.1
Apr-1997	ND	ND	ND	ND	15	0.26	ND	NA	NA	20	ND	8	6.2
Apr-1998	ND	ND	0.26	ND	7.43	0.25	ND	5.17	80.1	14.2	36	12	5.4
Apr-1999	ND	ND	0.27	ND	22.3	0.364	ND	4.1	150.4	24.9	89	19	2.3
Apr-2000	ND	ND	ND	ND	18.5	0.97	ND	4.66	116	28.9	84	21	11
Apr-2001	ND	NA	ND	ND	14.4	0.818	ND	NA	NA	27.3	86	23	2.2
Mar-2002	ND	ND	ND	ND	27.2	1.49	ND	4.5	160.7	46.3	105	24.7	1.1
Mar-2003	ND	ND	ND	ND	23.3	1.22	ND	4.4	158.9	30.7	120	29.4	3.1
Apr-2004	ND	ND	ND	ND	12.1	0.462	ND	4.2	108.3	28.6	60	20.3	4
Apr-2005	ND	ND	ND	ND	23.8	0.44	ND	4.4	124.5	24.5	110	22	4.9
Mar-2006	ND	ND	ND	ND	15.8	0.58	ND	4.9	141.6	50.1	86	28.9	2.5
Mar-2007	ND	ND	ND	ND	19.6	0.67	ND	4.2	127.6	36	90	25.4	4.9
Mar-2008	ND	ND	0.51	ND	23.4	ND	ND	4.1	137.7	50.8	105	27.2	1.4
Mar-2009	ND	ND	ND	ND	21.5	1.13	ND	4	148.5	43.3	106	28.5	0.93
Apr-2010	2.5	2.5	ND	ND	24.2	1.58	ND	3.9	129.4	32.6	72	24.3	3.5
Apr-2011	2.5	2.5	ND	ND	31.7	1.4	ND	4	213	25.5	111	25.6	15
Mar-2012	ND	ND	ND	ND	19.2	0.99	ND	3.4	124.2	34	111	23.4	2.1
Mar-2013	0.68 J	0.68 J	ND	ND	61.6	2.47	ND	4.3	358	38.3	169	36.2	0.824
Mar-2014	0.72	0.72	ND	7 J	30.9	1.53	ND	4.5	175.4	42.6	118	32.6	0.36
Apr-2015	3.76	3.76	ND	ND	30.6	1.43	ND	3.9	144.4	31.5	99	35.2	0.86
May-2016	ND	ND	ND	ND	32.2	1.11	ND	4.6	264	32.7	105	28.8	0.596
May-2017	ND	ND	ND	7 J	31.7	1.59	ND	4.9	288	44.7	113	42.3	1.85
May-2018	10 B	10	0.049 J	22.9 J	38.7	0.7	ND	5	307	35.3	131	65.6	6.92
May-2019	ND	NA	ND	ND	20	0.99	ND	4.32	90.5	17.9	80	21.8	7.28
May-2020	36	NA	ND	9.1 J	18.5	1.5	ND	5.28	192	18.7	103	70	8.83
Apr-2021	ND	NA	ND	6.1 J	32	1.6	ND	4.64	186.2	22.1	87	25.2	6.96

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-21A***													
Nov-1993	*NA*	*ND*	*ND*	*NA*	*ND*	2.3	*NA*	*ND*	*NA*	*ND*	*ND*	0.18	*ND*	1.7	*NA*
Apr-1994	*NA*	*ND*	*ND*	*NA*	*ND*	2.67	*NA*	*ND*	*NA*	*ND*	0.31	*ND*	*ND*	2.18	*NA*
Apr-1995	*ND*	*ND*	0.6	*ND*	*ND*	2.4	*NA*	*ND*	0.02	*ND*	0.14	0.05	*ND*	1.9	*NA*
Apr-1997	*ND*	*ND*	0.093	*ND*	*ND*	3.2	3.6	*ND*	*ND*	*ND*	*ND*	*ND*	0.003	1.5	1.6
Apr-1998	*ND*	*ND*	0.094	*ND*	*ND*	2.61	2.63	*ND*	*ND*	*ND*	0.105	*ND*	*ND*	1.45	1.45
Apr-1999	*ND*	*ND*	0.101	*ND*	*ND*	4.6	4.49	*ND*	0.012	*ND*	*ND*	*ND*	*ND*	1.81	1.77
Apr-2000	*ND*	*ND*	0.108	*ND*	*ND*	5.13	4.95	*ND*	0.01	*ND*	0.241	*ND*	*ND*	1.96	1.83
Apr-2001	*ND*	*ND*	0.099	*ND*	*ND*	5.77	*NA*	*ND*	0.01	*ND*	*ND*	*NA*	**0.024**	2	*NA*
Mar-2002	*ND*	*ND*	0.088	*ND*	*ND*	6.51	6.5	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	2.04	2.07
Mar-2003	*ND*	*ND*	0.107	*ND*	*ND*	7.43	6.84	*ND*	0.01	*ND*	*ND*	*ND*	*ND*	2.61	2.39
Apr-2004	*ND*	0.003	0.106	*ND*	*ND*	4.59	4.49	*ND*	0.013	*ND*	0.059	*ND*	*ND*	2.14	2.1
Apr-2005	*ND*	*ND*	0.109	*ND*	*ND*	5.52	5.22	*ND*	*ND*	0.01	0.078	*ND*	*ND*	1.99	1.92
Mar-2006	*ND*	*ND*	0.091	*ND*	*ND*	7.84	8.03	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.33	2.95
Mar-2007	*ND*	*ND*	0.085	*ND*	*ND*	6.88	6.75	*ND*	0.016	*ND*	*ND*	*ND*	*ND*	1.98	1.96
Mar-2008	*ND*	*ND*	0.077	*ND*	*ND*	7.08	6.59	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	2.31	2.1
Mar-2009	*ND*	*ND*	0.076	*ND*	*ND*	7.27	7.06	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.49	2.42
Apr-2010	*ND*	*ND*	0.068	*ND*	*ND*	6.72	6.58	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.81	1.78
Apr-2011	*ND*	*ND*	0.076	*ND*	*ND*	6.92	6.79	*ND*	0.01	*ND*	0.214	*ND*	*ND*	2.01	1.98
Mar-2012	*ND*	*ND*	0.07	*ND*	*ND*	6.02	5.67	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.03	1.94
Mar-2013	*ND*	*ND*	0.072	*0.000599 J*	*0.000306 J*	9.49	8.74	*0.0045 J*	*0.0092 J*	*0.0035 J*	0.0928	0.0519	*0.0016 J*	3.04	2.77
Mar-2014	*ND*	*ND*	0.0633	*0.000432 J*	*0.000365 J*	8.48	7.39	*0.0017 J*	*0.0077 J*	*0.0027 J*	*0.0422 J*	*ND*	*ND*	2.78	2.58

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-21A***													
Apr-2015	*0.000855 J*	*0.000423 J*	0.0835	*0.000523 J*	*0.000222 J*	9.43	9.38	*0.0013 J*	*0.0093 J*	*0.0026 J*	*0.0271 J*	*0.0111 J*	*ND*	2.84	2.84
May-2016	*ND*	*0.00072 J*	0.0712	*0.00045 J*	*ND*	7.74	7.61	*0.00094 J*	0.0083	*0.0022 J*	*ND*	*ND*	*ND*	2.3	2.37
May-2017	*ND*	*0.0021 J*	0.0701	*0.00048 J*	*ND*	10.9	11.1	*0.0023 J*	0.0067	*0.0017 J*	*ND*	*ND*	*ND*	3.65	3.56
May-2018	*0.000094 J*	*ND*	0.067	*0.00021 J*	*0.00032 J*	18.4	17	*0.0017 JB*	0.0069	*0.00082 J*	0.027	*ND*	*0.00014 J*	4.8	4.5
May-2019	*ND*	*ND*	0.053	*ND*	*ND*	5.9	5.8	*ND*	0.0032	*ND*	*ND*	*ND*	*ND*	1.7	1.7
May-2020	0.00066	*0.00078 J*	0.051	*0.0002 J*	*0.00018 J*	23.1	22.5	0.0073	0.0039	*ND*	*0.066 J*	0.027	*ND*	3	2.9
Apr-2021	*ND*	*ND*	0.073	*0.00037 J*	*ND*	6.8	7	*0.0024 J*	0.0056	*0.003 J*	*ND*	*ND*	*ND*	2	2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-21A***												
Nov-1993	0.16	*NA*	*ND*	*NA*	2	*NA*	*ND*	*NA*	12.4	*NA*	*NA*	*NA*	0.05
Apr-1994	0.17	*NA*	*ND*	*NA*	2.26	*NA*	*ND*	*NA*	12.8	*NA*	*NA*	*NA*	0.19
Apr-1995	0.12	*NA*	*ND*	*ND*	1.9	*NA*	*ND*	*ND*	10.2	*NA*	*ND*	*ND*	0.08
Apr-1997	0.14	0.15	*ND*	*ND*	2.8	2.7	*ND*	*ND*	7.4	8.7	*ND*	*ND*	0.061
Apr-1998	0.22	0.223	*NA*	*ND*	1.03	1.55	*ND*	*ND*	4.83	4.83	*ND*	*ND*	0.052
Apr-1999	0.124	0.123	*NA*	*ND*	2.19	1.48	*ND*	*ND*	12.4	12.2	*ND*	*ND*	0.052
Apr-2000	0.132	0.125	*NA*	*ND*	1.39	1.17	*ND*	*ND*	12.3	11.5	*ND*	*ND*	0.05
Apr-2001	0.125	*NA*	*NA*	*ND*	2.83	*NA*	*ND*	*ND*	12.2	*NA*	*ND*	*ND*	0.052
Mar-2002	0.103	0.107	*NA*	*ND*	3.01	2.71	*ND*	*ND*	13.1	12.9	*ND*	*ND*	0.051
Mar-2003	0.126	0.116	*NA*	*ND*	2.51	2.12	*ND*	*ND*	14.4	13	*ND*	*ND*	0.04
Apr-2004	0.179	0.179	*ND*	*ND*	2.85	2.13	*ND*	*ND*	8.72	8.41	*ND*	*ND*	0.044
Apr-2005	0.143	0.14	*ND*	*ND*	2.2	1.76	*ND*	*ND*	14.7	14.2	*ND*	*ND*	0.053
Mar-2006	0.08	0.101	*ND*	*ND*	1.86	2.34	*ND*	*ND*	10.8	11.1	*ND*	*ND*	0.016
Mar-2007	0.18	0.179	*ND*	*ND*	1.65	1.65	*ND*	*ND*	11.9	11.7	*ND*	*ND*	0.058
Mar-2008	0.108	0.099	*ND*	*ND*	2.02	1.75	*ND*	*ND*	11.4	10.5	*ND*	*ND*	0.032
Mar-2009	0.106	0.104	*ND*	*ND*	1.98	1.93	*ND*	*ND*	11.9	11.6	*ND*	*ND*	0.027
Apr-2010	0.118	0.115	*ND*	*ND*	1.63	1.57	*ND*	*ND*	14.5	14.1	*ND*	*ND*	0.031
Apr-2011	0.103	0.101	*ND*	*ND*	1.84	1.76	*ND*	*ND*	19	18.5	*ND*	*ND*	0.038
Mar-2012	0.106	0.1	*ND*	*ND*	1.7	1.63	*ND*	*ND*	12.7	12.2	*ND*	*ND*	0.027
Mar-2013	0.104	0.0972	*0.000082 J*	*0.0055 J*	2.46	2.27	*0.000622 J*	*0.000037 J*	31.2	31	*0.0015 J*	*ND*	0.0342
Mar-2014	0.0923	0.0908	*ND*	*0.0039 J*	2.35	2.02	*0.00063 J*	*ND*	19.7	19	*0.000454 J*	*0.001 J*	0.0192
Apr-2015	0.0966	0.0958	*ND*	*0.0042 J*	2.29	2.26	0.0036	*ND*	17	16.8	*ND*	*ND*	0.0296

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-21A***												
May-2016	0.073	0.0746	*ND*	*0.0031 J*	1.86	1.94	*ND*	*ND*	19.3	20.1	*ND*	*ND*	*0.027 J*
May-2017	0.0752	0.0775	*ND*	0.0041	2.7	2.6	*ND*	*ND*	22.2	21.3	*ND*	*ND*	*0.0214 J*
May-2018	0.08	0.097	*ND*	0.001 B	*2.4 J*	*2.6 J*	*0.00071 J*	*ND*	26.7	24.2	*ND*	0.0025	0.0052 B
May-2019	0.048	0.054	*ND*	0.0031	*ND*	*ND*	*ND*	*ND*	13.1	12.5	*ND*	*ND*	0.012
May-2020	0.039	0.036	*ND*	0.004	*2.4 J*	*2.5 J*	*ND*	*ND*	13.5	13.3	*ND*	0.006	0.04
Apr-2021	0.069	0.067	*ND*	*0.0037 J*	1.8	1.8	*0.0059 J*	*ND*	21.9	22	*ND*	*ND*	0.019

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-21A***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	3	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-21A*																
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.3 JB*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-21A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	2
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	1.2
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	0.7 J	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	0.5 J	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.69 J	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.54 J	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-21A***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.15	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.255 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-21A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	**6.1**	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	1.4	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	1.2	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*0.8 J*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-21A***															
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.1 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

HISTORICAL TABLES –
Off-site Non-regulated Wells

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P4*																
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P4*																
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.8 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P4***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.27 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.28 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.26 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.36 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P4***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.23 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.404 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*MW-P4*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P4***															
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***MW-P4***
Nov-2005	*ND*
Mar-2009	*ND*
Oct-2009	*ND*
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000031 J*
Mar-2013	*0.000056 J*
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*ND*
Apr-2015	*ND*
Nov-2015	*ND*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.000058 J*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00005 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***MW-P9***																
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	35	91	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	139	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	1 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	1 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P9*																
Oct-2004	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.45	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.53	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.36	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P9*																
Nov-2015	ND	ND	ND	ND	1.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	0.818 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P9***															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	1 J	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND
Sep-1994	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	3
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	2.2
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	1.4
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	0.7 J	2.2
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	1.8
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	0.6 J	1.8
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	2.5
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	2
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	2.1
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	2.2
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	3.5
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	2
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	3
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	3.2

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P9***															
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	3
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	2.6
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	2
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	3.1
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	2.3
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	2.1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	1.3
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	1.8
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	2.4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	2
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	2.1
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	2.3
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	2.8
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	2	ND	ND	ND	6.3	3.2
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.9	0.8 J
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	0.38 J	ND	ND	ND	1.14	1.56
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31 J	ND	0.32 J	ND	ND	ND	1.8	1.62
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.29 J	0.37 J,B	0.34 J	ND	ND	ND	2.09	1.86
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	0.25 J	ND	ND	ND	2.3	1.65
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	0.24 J	ND	ND	ND	2.09	1.73
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.22 J	ND	0.25 J	ND	ND	ND	2	1.26

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P9***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.47	1.47
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	1.9	1.8
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	1.5	1.5
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	1.5	1.3
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	1.7	1.6
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	1.6
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	1.4 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*0.9 J*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.806 J*	*0.982 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P9***															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	0.5 J	ND	0.6 J	ND	ND	0.6 J	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	0.8 J	ND	2.1	ND	ND	1	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	1	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	1.5	ND	NA	0.6 J	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	1.5	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	1.5	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	1.6	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	1.4	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	1.1	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	0.8 J	ND	ND	1.4	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P9***															
Apr-2004	ND	ND	ND	NA	0.9 J	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	1.1	ND	ND	1.7	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	0.9 J	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	0.9 J	ND	ND	1.8	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	0.5 J	ND	ND	1.3	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	1	ND	ND	2.7	ND	ND	ND	ND	1.8	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	0.86 J	ND	ND	2.44	ND	ND	ND	ND	0.68 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.66 J	ND	ND	1.75	ND	ND	ND	ND	0.59 J	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.71 J	ND	ND	1.62	ND	ND	ND	ND	0.62 J	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	0.61 J	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P9***															
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.06	*ND*	*ND*	*ND*	*ND*	*0.58 J*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.51	*ND*	*ND*	*ND*	*ND*	*0.46 J*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.43	*ND*	*ND*	*ND*	*ND*	*0.51 J*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*0.2 J*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*0.1 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.13	*ND*	*ND*	*ND*	*ND*	*0.284 J*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***MW-P9***
Jun-1994	*ND*
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	0.0013
Apr-1997	*ND*
Apr-2004	*ND*
Oct-2004	*ND*
Mar-2009	0.0012
Oct-2009	*ND*
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	0.0002
Sep-2012	0.00024
Mar-2013	0.000223
Oct-2013	0.000384
Mar-2014	0.000259
Oct-2014	0.00022
Apr-2015	*0.000126 J*
Nov-2015	*0.000117 J*
May-2016	*0.00013 J*
Oct-2016	*0.00016 J*
May-2017	0.00033
Oct-2017	*0.00013 J*
May-2018	0.00041 B
Nov-2018	0.00038
May-2019	0.00024
Oct-2019	*0.0002 J*
May-2020	0.00026
Oct-2020	*ND*
Apr-2021	0.00022

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***MW-P106***																
Oct-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	0.7 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	1.5	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	1.7	NA	NA	6.5	0.5 J	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	1.4	ND	ND	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	1.3	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	0.5 J	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	0.6 J	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	0.6 J	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	0.7 J	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	0.6 J	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P106*																
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.78	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	0.23 J	ND	ND	7.16	ND	ND	ND	ND	ND	ND	ND	0.44 J	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	11.1	0.34 J	ND	ND	ND	ND	ND	0.34 J	0.56 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	9	0.27 J	ND	ND	ND	ND	ND	ND	0.54 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	0.58 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	3.43	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	0.1 J	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P106*																
Oct-2016	*ND*	*0.1 J*	*ND*	*ND*	5.1	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	4.5	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*0.1 J*	*ND*	*ND*	5	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.7 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	2.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	1.64	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*MW-P106*															
Oct-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	0.6 J	NA	NA	NA	2.5	1.2
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	5.7	ND	ND	ND	11	10
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	1 J	ND	NA	6.5	NA	ND	NA	10	11
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.9	ND	ND	ND	34	9.6
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	3.3	ND	ND	ND	16	6.9
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	6.3	1.8
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.7	1.4
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.7	1.8
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	14	3.3
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	6.3	3.1
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	8.6	2.1
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	0.9 J
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P106***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	6.4	4.7
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	7	8.1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	2.4	3.3
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	3.4	4.7
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	5.3
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.4	7.2
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.9	5
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	2.1
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.58 J	ND	ND	ND	1.81	1.93
Mar-2013	0.34 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.01	ND	ND	ND	6.99	8.26
Oct-2013	0.66 J	ND	ND	ND	ND	ND	ND	ND	0.7 J	0.28 J	ND	4.75	ND	ND	ND	8.57	13.1
Mar-2014	0.41 J	ND	ND	ND	ND	ND	ND	ND	0.36 J	ND	ND	3.44	ND	ND	ND	8.47	11.6
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.21 J	ND	ND	ND	0.51 J	0.76 J
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.16	ND	ND	ND	3.11	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.68 J	ND	ND	ND	1.17	2.59
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	3.8	4.7

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P106***															
Oct-2016	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.1 J*	*ND*	1.6	*ND*	*ND*	*ND*	5.5	6.6
May-2017	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.1 J*	*ND*	1.5	*ND*	*ND*	*ND*	4.4	5.4
Oct-2017	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	1.6	*ND*	*ND*	*ND*	6.4	6.3
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	6.4	3.8
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.5	1.3
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	3.3	2.3
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.588 J*	*ND*	*ND*	*ND*	*1.35 J*	*1.71 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P106***															
Oct-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	1 J	ND	ND	NA	NA	ND	0.8 J	NA	ND	NA
Oct-1999	ND	ND	ND	NA	1.1	ND	ND	**5.4**	ND	ND	ND	ND	2	2.8	ND	ND	NA
Apr-2000	ND	NA	ND	NA	1.9	ND	NA	**5.3**	ND	ND	NA	NA	2	2.9	ND	0.7 J	NA
Oct-2000	ND	ND	ND	NA	1.5	ND	ND	3.4	ND	ND	ND	ND	1.2	2.6	ND	ND	NA
Apr-2001	ND	ND	ND	NA	1.3	ND	ND	3	ND	ND	ND	ND	1	1.9	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	1.1	ND	ND	ND	ND	ND	0.9 J	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	1	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	1	ND	ND	NA
Mar-2003	ND	ND	ND	NA	0.9 J	ND	ND	1.5	ND	ND	ND	ND	ND	1.2	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	0.9 J	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	0.7 J	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P106***															
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	0.6 J	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.9 R	ND	ND	3.9	ND	ND	ND	ND	1.3	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	1.5	ND	ND	1.8	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	1	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	ND	1.5	1 J	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	1.1	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	0.51 J	ND	ND	1.11	ND	ND	ND	ND	0.93 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	2.45	ND	ND	3.21	ND	ND	ND	ND	2.58	ND	ND	ND	ND
Oct-2013	ND	ND	0.42 J	ND	**5.11**	0.24 J	ND	3.68	ND	ND	ND	ND	2.56	1.07	ND	0.42 J	0.66 J
Mar-2014	ND	ND	0.31 J	ND	3.21	ND	ND	4.64	ND	ND	ND	ND	2.81	0.92 J	ND	ND	0.31 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	0.78 J	ND	ND	1.81	ND	ND	ND	ND	1.36	0.51 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	1.11	ND	ND	ND	ND	0.91 J	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P106***															
May-2016	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	1.5	*0.6 J*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	2.2	*ND*	*ND*	*ND*	*ND*	1.5	*0.7 J*	*ND*	*0.1 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*1.8 J+*	*ND*	*ND*	*ND*	*ND*	1.2	*0.5 J*	*ND*	*0.1 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	1.5	*0.8 J*	*ND*	*0.1 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.608 JB*	*ND*	*ND*	*0.622 J*	*ND*	*ND*	*ND*	*ND*	*0.515 J*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***MW-P106***
Sep-1994	*ND*
Oct-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	**0.0027**
Apr-1997	0.0009
Apr-2004	0.001
Oct-2004	0.0005
Apr-2005	0.0005
Mar-2009	0.0003
Oct-2009	0.0002
Mar-2010	*ND*
Oct-2010	0.0004
Apr-2011	0.0002
Sep-2011	0.0004
Mar-2012	0.0002
Sep-2012	0.00029
Mar-2013	*0.000178 J*
Oct-2013	*0.000097 J*
Mar-2014	*0.000064 J*
Oct-2014	*0.000109 J*
Apr-2015	*0.000152 J*
Nov-2015	0.00043
May-2016	0.00024
Oct-2016	*0.00012 J*
May-2017	*0.00015 J*
Oct-2017	*0.00011 J*
May-2018	*0.00018 JB*
Nov-2018	*0.00016 J*
May-2019	*ND*
Oct-2019	*ND*
May-2020	0.00071
Oct-2020	0.0004
Apr-2021	0.00021

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P417*																
Aug-1994	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	31	4.9 J	ND
Sep-1994	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	75	109	ND
Nov-1994	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	43	203 E	ND
Apr-1995	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	66	ND
Oct-1996	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	0.5 J	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	5.2	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	8.3	ND	NA	NA	NA	NA	ND	ND	0.5 J	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	4.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P417*																
Apr-2005	ND	ND	ND	ND	6.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	7.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	9.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	7.2	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
May-2007	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	7.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	5.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	5.86	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	7.47	ND	ND	ND	ND	ND	ND	ND	0.53 J	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	5.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	4.08	ND	ND	ND	ND	ND	ND	ND	0.29 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	4.15	ND	ND	ND	ND	ND	ND	ND	0.28 J	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	3.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P417*																
Nov-2015	ND	ND	ND	ND	3.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.6 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	0.309 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P417***															
Aug-1994	*0.6 J*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	18	*ND*	*ND*	*ND*	*ND*	*ND*	2.9	3.2
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	3.3	2.9
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	3.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.4	2.7
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	2
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.1	3
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	6	5
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.7	8.9
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	9.8	7.1
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	1.1	*ND*	*NA*	1.4	*NA*	*NA*	*NA*	5.9	10
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	1	*ND*	*ND*	*ND*	2.9	8.6
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	1.5	*ND*	*NA*	1.6	*NA*	*ND*	*NA*	2.9	13
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	16	16
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	1	*ND*	*ND*	*ND*	6.9	7
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	1	*ND*	*ND*	*ND*	8.9	5.2
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	6.5	3.8
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	7.1	4.6
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	8.7	4.3
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.2	6
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	9.1	6.7
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	11	7.2

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P417***															
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	1.7	ND	ND	ND	12	12
Oct-2005	ND	0.9 J	ND	ND	ND	ND	ND	ND	3	ND	ND	1.7	ND	ND	ND	7.4	8.4
Mar-2006	0.7 J	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	1.6	ND	ND	ND	8.9	19.7
Sep-2006	0.8 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.9	ND	ND	ND	11.2	12
Mar-2007	0.7 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.8	ND	ND	ND	7.5	9.6
May-2007	0.9 J	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	2	ND	ND	ND	9.7	12
Sep-2007	0.8 J	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	1.9	ND	ND	ND	10.5	7
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	10.8	8.4
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	1.4	ND	ND	ND	12.9	8.6
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.1	5.9
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	11.7	7.5
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.8 J	6.4
Oct-2010	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	21.7	7.2
Apr-2011	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND	ND	ND	17.5	8.4
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5	ND	ND	ND	15.5	9.9
Mar-2012	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	18.7	7.6
Sep-2012	0.64 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.75	ND	ND	ND	7.99	6.5
Mar-2013	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.15	ND	ND	ND	9.09	9.12
Oct-2013	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.84	ND	ND	ND	6.28	6.28
Mar-2014	0.32 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.89	ND	ND	ND	5.88	5.01
Oct-2014	0.31 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.94	ND	ND	ND	3.11	4.78
Apr-2015	0.23 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	3.5	3.08

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P417***															
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.27	ND	ND	ND	1.72	2.86
May-2016	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	2.2	2.7
Oct-2016	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	2.1	2.2
May-2017	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	1.8	2.2
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	1.3	1.2
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	1.2
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	1.4
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.229 J

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P417***															
Aug-1994	ND	ND	1.1	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	1	NA	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND
Oct-1997	ND	ND	ND	NA	1.5	ND	ND	1.2	ND	ND	ND	ND	0.6 J	0.8 J	ND	ND	NA
Apr-1998	ND	ND	ND	NA	2.9	ND	ND	1.6	ND	ND	ND	ND	0.9 J	1.2	ND	ND	NA
Apr-1999	ND	NA	ND	NA	3.4	ND	NA	2.6	ND	ND	NA	NA	1.3	0.9 J	NA	ND	NA
Oct-1999	ND	ND	ND	NA	2.7	ND	ND	3.3	ND	ND	ND	ND	1.2	0.6 J	ND	ND	NA
Apr-2000	ND	NA	ND	NA	**5.3**	ND	NA	3.9	ND	ND	NA	NA	1.7	0.8 J	ND	0.5 J	NA
Oct-2000	ND	ND	ND	NA	**9.6**	ND	ND	4.6	ND	ND	ND	ND	2	1.5	ND	1.2	NA
Apr-2001	ND	ND	ND	NA	3.9	ND	ND	2.7	ND	ND	ND	ND	1	0.8 J	ND	ND	NA
Sep-2001	ND	ND	ND	NA	2.6	ND	ND	2.3	ND	ND	ND	ND	0.9 J	0.8 J	ND	ND	NA
Mar-2002	ND	ND	ND	NA	1.8	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	1.5	ND	ND	1.5	ND	ND	ND	ND	0.6 J	0.6 J	ND	ND	NA
Mar-2003	ND	ND	ND	NA	4.1	ND	ND	1.3	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	3.7	ND	ND	1.5	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	2.6	ND	3.2	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*MW-P417*															
Oct-2004	ND	ND	ND	NA	2.9	ND	ND	4	ND	ND	ND	ND	1.4	0.7 J	ND	ND	NA
Apr-2005	ND	ND	ND	ND	4.7	ND	ND	**6.7**	ND	ND	ND	ND	2.3	1.1	ND	0.9 J	NA
Oct-2005	ND	ND	ND	ND	**6.2**	ND	ND	**10.3**	ND	ND	ND	ND	3.1	0.7 J	ND	1.5	NA
Mar-2006	ND	ND	ND	ND	**9.7**	1.2	ND	**14**	ND	ND	ND	ND	4.1	0.9 J	ND	**2.7**	NA
Sep-2006	ND	ND	ND	ND	**10.9**	ND	ND	**15.3**	ND	ND	ND	ND	5	ND	ND	**3.2**	NA
Mar-2007	ND	ND	ND	ND	**7.1 R**	ND	ND	**10.8**	ND	ND	ND	ND	3.6	ND	ND	**3**	NA
May-2007	ND	ND	ND	0.9 J	**6.5**	ND	ND	**11.3**	ND	ND	ND	ND	3.2	0.7 J	ND	**3.6**	NA
Sep-2007	ND	ND	ND	ND	**9.2**	ND	ND	**8.6**	ND	ND	ND	ND	3.5	0.8 J	ND	**2.8**	NA
Mar-2008	ND	ND	ND	ND	4.1	ND	ND	**7.6**	ND	ND	ND	ND	2.3	1 J	ND	1.7	NA
Sep-2008	ND	ND	ND	ND	**6**	ND	ND	**5.1**	ND	ND	ND	ND	2	1.1	ND	1.5	NA
Mar-2009	ND	ND	ND	ND	4.4	ND	ND	5	ND	ND	ND	ND	1.7	0.7 J	ND	ND	NA
Oct-2009	ND	ND	ND	ND	4	ND	ND	4	ND	ND	ND	ND	1.9	0.9 J	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	3.3	ND	ND	4.9	ND	ND	ND	ND	ND	0.6 J	ND	0.7 J	NA
Apr-2011	ND	ND	ND	ND	3	ND	ND	**5.6**	ND	ND	ND	ND	**6.4 C**	ND	ND	0.6 J	NA
May-2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**8.5**	NA	NA	NA	NA
Sep-2011	ND	ND	ND	ND	4.1	ND	ND	3.5	ND	ND	ND	ND	**5.9**	ND	ND	0.8 J	NA
Mar-2012	ND	ND	ND	ND	2.6	ND	ND	3.9	ND	ND	ND	ND	4.9	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	2.27	ND	ND	**6.84**	ND	ND	ND	ND	**7.36**	0.63 J	ND	0.3 J	ND
Mar-2013	ND	ND	ND	ND	1.95	0.26 J	ND	**7.97**	ND	ND	ND	ND	**9.29**	ND	ND	0.34 J	ND
Oct-2013	ND	ND	ND	0.17 J	2.64	ND	ND	3.17	ND	ND	ND	ND	4.37	0.42 J	ND	0.36 J	ND
Mar-2014	ND	ND	ND	0.16 J	2.02	ND	ND	3.17	ND	ND	ND	ND	3.31	0.26 J	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P417***															
Oct-2014	*ND*	*ND*	*ND*	*0.13 J*	2.03	*ND*	*ND*	3.24	*ND*	*ND*	*ND*	*ND*	3.37	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	1.74	*ND*	*ND*	2.04	*ND*	*ND*	*ND*	*ND*	2.35	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	1.49	*ND*	*ND*	*ND*	*ND*	1.78	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.1 J*	1.5	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	1.4	*0.1 J*	*ND*	*0.1 J*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	1.3	*0.1 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*1.1 J+*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*0.1 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***MW-P417***
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	*ND*
Apr-1997	0.0012
Apr-2004	*ND*
Oct-2004	*ND*
Mar-2009	*ND*
Oct-2009	*ND*
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000035 J*
Mar-2013	*0.000077 J*
Oct-2013	*0.000173 J*
Mar-2014	*0.000171 J*
Oct-2014	*0.000136 J*
Apr-2015	*0.00014 J*
Nov-2015	0.000344
May-2016	0.00026
Oct-2016	0.00054
May-2017	0.00055
Oct-2017	0.00081
May-2018	0.0018
Nov-2018	0.001
May-2019	0.0011
Oct-2019	0.00021
May-2020	*0.00018 J*
Oct-2020	0.00035
Apr-2021	0.00023

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P440*																
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	36	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	0.7 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P440*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.43 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.32 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P440*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.1 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.1 L2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P440***															
Aug-1994	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*0.8 J*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*0.7 J*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	1.2
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	1.3	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	3.8	7
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	20	9.4
Feb-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.7	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	13	10
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	4.1	4.5
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.9	5.3
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	5.9	3.7
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	2.4	1.8
Mar-2003	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	9	5.9
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.7	*0.6 J*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P440***															
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	3.2	0.9 J
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	5	1.6
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3	0.9 J
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.7	1.3
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	4.1	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	0.7 J
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	0.8 J
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	0.5 J
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.6	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.79 J	ND	ND	ND	ND	ND	1.21	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	0.54 J	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	ND	ND	ND	ND	1.62	0.56 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND	ND	1.48	0.29 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.91 J	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.71 J	ND	0.44 J	ND	ND	ND	2.3	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P440***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*0.4 J*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.96 JN3*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.383 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P440***															
Aug-1994	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	3.9	*ND*	*ND*	*NA*	*NA*	*0.6 J*	*0.9 J*	*ND*	**2.8**	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.7	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	**4.4**	*NA*
Feb-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	**6.4**	*ND*	*ND*	*ND*	*ND*	1.4	1.1	*ND*	**3.6**	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*0.5 J*	*ND*	1.1	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*0.6 J*	*ND*	1.6	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*0.9 J*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.4	*ND*	*ND*	*ND*	*ND*	1.3	*0.6 J*	*ND*	**2.4**	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P440***															
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.42 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.37 J*	*ND*	*ND*	*ND*	*ND*	*0.21 J*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.31 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P440***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.77 J*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*0.37 J*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.96 J*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***MW-P440***
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	*ND*
Apr-1997	*ND*
Apr-2004	*ND*
Oct-2004	*ND*
Mar-2009	*ND*
Oct-2009	*ND*
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000092 J*
Mar-2013	*0.000085 J*
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*ND*
Apr-2015	*ND*
Nov-2015	*ND*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.000065 J*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00006 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***RW-P109***																
Jan-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Feb-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	2.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	2.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P109*																
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	2.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.91	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	0.1 J	0.1 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9 J	ND
Nov-2018	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P109*																
Apr-2021	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P109*															
Jan-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.5 J
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	0.6 J
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	1.1
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	0.9 J
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.1	2.2
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	3.7
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	6.3	4.5
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	5.6	3.7
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	3.2	4.1
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	7.8	4
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	3.8	2.9
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	5.8	2.1
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P109***															
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	1.8
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	0.7 J
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	0.5 J	ND	ND	ND	2.87	1.85
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	0.56 J	ND	ND	ND	2.89	2.11
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	0.83 J	ND	ND	ND	3.54	2.55
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.28 J	ND	0.8 J	ND	ND	ND	3.84	2.52
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.32 J	ND	0.9 J	ND	ND	ND	2.95	2.61
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	0.84 J	ND	ND	ND	2.86	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.28	ND	ND	ND	1.8	2.21
May-2016	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	1.6	ND	ND	ND	3	2.9
Oct-2016	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	1.9	ND	ND	ND	3.4	3.2
May-2017	0.2 J	ND	ND	ND	ND	ND	ND	ND	0.1 J	0.3 J	ND	1.7	ND	ND	ND	3.2	3.5
Oct-2017	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	2	ND	ND	ND	3.3	3.3
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	5.5	2.7
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5 CL	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	1.3 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	0.7 J

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P109*															
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.302 J*	*ND*	*ND*	*ND*	*1.27 J*	*1.01 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P109***															
Jan-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Feb-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	0.8 J	2.1	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	0.5 J	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P109***															
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.09	*ND*	*ND*	*ND*	*ND*	1.42	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.86	*ND*	*ND*	*ND*	*ND*	1.56	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.45	*ND*	*ND*	*ND*	*ND*	1.73	*0.36 J*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	2.16	*0.29 J*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.05	*ND*	*ND*	*ND*	*ND*	2.57	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.41	*ND*	*ND*	*ND*	*ND*	2.46	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.41	*ND*	*ND*	*ND*	*ND*	2.99	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	3.7	*0.3 J*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*ND*	4.2	*0.3 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.7 J+*	*ND*	*ND*	*ND*	*ND*	4	*0.3 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	4	*0.3 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P109***															
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.823 J*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P109***
Apr-2004	0.0003
Oct-2004	0.0006
Mar-2009	0.0003
Oct-2009	0.0005
Mar-2010	0.0003
Oct-2010	*ND*
Apr-2011	0.0005
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000086 J*
Mar-2013	*0.000088 J*
Oct-2013	*0.000084 J*
Mar-2014	*0.000066 J*
Oct-2014	*0.000101 J*
Apr-2015	*0.000071 J*
Nov-2015	*0.000081 J*
May-2016	*0.000051 J*
Oct-2016	*ND*
May-2017	*0.00013 J*
Oct-2017	*ND*
May-2018	0.00021 B
Nov-2018	*0.00013 J*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00007 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P165*																
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.46	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.76	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3 J	ND
Nov-2018	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P165*																
Oct-2019	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	3.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P165*															
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.7 J
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	0.9 J
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.57	1.34
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	ND	ND	ND	ND	2.17	1.97
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	2.48	2.33
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	3.11	2.41
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.29 J	ND	ND	ND	ND	ND	2.5	2.7
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.23 J	ND	ND	ND	2.72	2.47
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.64	2.81
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	2.9	3.3
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	3.4	3.6
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	0.3 J
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	0.3 J	ND	ND	ND	4.8	4.2
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8	5
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8 CL	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	4.1 N3

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P165***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.4	3.2
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.3	2.9
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	6.4	3.8
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.292 J*	*ND*	*0.728 J*	*ND*	*ND*	*ND*	*3.94 J*	5.51

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P165***															
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	0.46 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.16 J	ND	ND	ND	0.42 J	ND	ND	ND	ND	0.22 J	0.43 J	ND	ND	ND
Mar-2014	ND	ND	ND	0.17 J	ND	ND	ND	0.61 J	ND	ND	ND	ND	0.24 J	0.4 J	ND	ND	ND
Oct-2014	ND	ND	ND	0.21 J	ND	ND	ND	0.78 J	ND	ND	ND	ND	0.32 J	0.38 J	ND	ND	ND
Apr-2015	ND	ND	ND	0.17 J	ND	ND	ND	0.75 J	ND	ND	ND	ND	0.28 J	0.36 J	ND	ND	ND
Nov-2015	ND	ND	ND	0.26 J	ND	ND	ND	0.66 J	ND	ND	ND	ND	0.29 J	0.36 J	ND	ND	ND
May-2016	ND	ND	ND	0.2 J	ND	ND	ND	0.8 J	ND	ND	ND	ND	0.3 J	0.4 J	ND	ND	ND
Oct-2016	ND	ND	ND	0.2 J	ND	ND	ND	1 J	ND	ND	ND	ND	0.4 J	0.5 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	0.2 J	ND	ND	ND	1.1	ND	ND	ND	ND	0.4 J	0.6 J	ND	ND	ND
May-2018	ND	ND	ND	ND	1.3	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P165***															
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.202 J*	*ND*	*ND*	*ND*	2.39	*ND*	*ND*	*ND*	*ND*	*0.719 J*	*0.429 J*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P165***
Oct-2009	*ND*
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000047 J*
Mar-2013	*0.000073 J*
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*0.000033 J*
Apr-2015	*ND*
Nov-2015	*0.00003 J*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.0001 J*
Oct-2017	*0.000064 J*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00007 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P171-1*																
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P171-1*																
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P171-1***															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.54 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.47 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.48 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.51 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P171-1***															
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.405 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P171-1***															
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P171-1***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P171-1***
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000071 J*
Mar-2013	*0.000076 J*
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*0.000025 J*
Apr-2015	*ND*
Nov-2015	*ND*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.00015 J*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00005 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***RW-P264***																
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.91 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.55	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P264*																
Mar-2014	ND	ND	ND	ND	1.61	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	1.85	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 J	ND
Nov-2018	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	3.02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P264*															
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	0.7 J
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	0.8 J
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.8 J
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	1.1
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	1.1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	0.7
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	1.1
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	3.8
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	1
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.3
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	1.3
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	0.6 J
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.76	1.57
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	ND	ND	ND	ND	2.33	2.28
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	0.22 J	ND	ND	ND	2.69	2.79

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P264***															
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	0.22 J	ND	ND	ND	3.3	3.41
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.24 J	ND	0.22 J	ND	ND	ND	2.27	3.23
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.24 J	ND	0.22 J	ND	ND	ND	2.64	2.76
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.61	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	2.6	3.4
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	3	3.8
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	0.3 J	0.2 J	ND	ND	ND	3	4.2
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	3.2	4.3
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.3	5
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 CL	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	4.9 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	3.6
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	2.5
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	6	3.5
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.464 J	ND	0.343 J	ND	ND	ND	4.29 J	5.38

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P264***															
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.61 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.44 J*	*ND*	*ND*	*ND*	*ND*	*0.28 J*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*RW-P264*															
Oct-2013	ND	ND	ND	ND	ND	ND	ND	0.55 J	ND	ND	ND	ND	0.35 J	0.37 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	0.74 J	ND	ND	ND	ND	0.39 J	0.43 J	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	0.91 J	ND	ND	ND	ND	0.47 J	0.36 J	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	0.65 J	ND	ND	ND	ND	0.37 J	0.31 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	0.74 J	ND	ND	ND	ND	0.36 J	0.28 J	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	0.4 J	0.4 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	1 J+	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
May-2018	ND	ND	ND	ND	1.2	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	NA
Apr-2021	ND	ND	ND	0.164 J	0.543 JB	ND	ND	2.27	ND	ND	ND	ND	0.789 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P264***
Apr-2004	0.0003
Oct-2004	0.0003
Mar-2009	*ND*
Oct-2009	*ND*
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000109 J*
Mar-2013	*0.000094 J*
Oct-2013	*0.000065 J*
Mar-2014	*0.000056 J*
Oct-2014	*0.000083 J*
Apr-2015	*ND*
Nov-2015	*0.000059 J*
May-2016	*0.000068 J*
Oct-2016	*0.000059 J*
May-2017	0.00021
Oct-2017	*0.00013 J*
May-2018	*0.00019 JB*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00007 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P440*																
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	ND
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	0.7 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jan-2001	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2 J	ND
Apr-2001	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P440*																
Mar-2003	ND	ND	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	*1.6 J*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	*0.7 J*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	*0.98 J*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P440*																
Mar-2014	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	1.56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	0.512 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P440*															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	1.2	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	1 J	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	1.3	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	1.5	NA	ND	NA	NA	NA	1.1	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	1.3	0.7 J
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	1	NA	ND	NA	ND	NA	1.9	2.4
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	12	7.5
Jan-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.67 J	ND	ND	ND	ND	14	9
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.3	0.5 J	ND	ND	ND	ND	ND	10	7.7
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	7.4	7
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.1	0.7 J	ND	ND	ND	ND	ND	9.5	6.4
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	1	1.6	ND	ND	ND	ND	ND	8.6	6.2
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	0.7 J	ND	ND	ND	ND	ND	8.7	5.3

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P440***															
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	0.6 J	ND	ND	ND	ND	ND	7.3	5.2
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	5.5	4.4
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	8.1	4.8
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	4.3	3.4
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	4.1	2.8
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	2.6	1.6
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	4.5	4.8
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	6.3	2.7
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	4.5 J	3 J
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	5.3	1.7
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	3.4	2.2
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	6.3	4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	2.6
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	4.8	3.8
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	6.7	1.9
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	6.1	3
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND	ND	ND	ND	ND	ND	2.9
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.88 J	ND	ND	ND	ND	ND	2.14	1.1
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.95 J	ND	0.45 J	ND	ND	ND	3.92	2.15
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.22	ND	0.36 J	ND	ND	ND	3.25	1.54

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P440***															
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.85 J	ND	0.31 J	ND	ND	ND	4.18 J	1.92
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.91 J	ND	0.34 J	ND	ND	ND	2.39	1.52
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.86 J	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.89 J,B	ND	0.78 J	ND	ND	ND	1.42	1.57
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	0.5 J	ND	ND	ND	1.4	0.9 J
Oct-2016	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	0.9 J	ND	ND	ND	2.3	1.6
May-2017	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	0.9 J	ND	ND	ND	2.2	1.7
Oct-2017	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	0.8 J	ND	ND	ND	2	1.4
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	1.2	ND	ND	ND	3.6	1.6
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.2 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	0.7 J	ND	ND	ND	2	0.8 J
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.09 J	ND	0.134 J	ND	ND	ND	0.433 J	0.398 J

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P440***															
Jun-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jun-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Aug-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	1.2	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	**2.3**	*NA*
Jan-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	*ND*	1.1	*0.78 J*	*ND*	**3.2**	*NA*
Feb-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.2	*ND*	*ND*	*ND*	*ND*	1	*0.7 J*	*ND*	**2.6**	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.4	*ND*	*ND*	*ND*	*ND*	1	*0.7 J*	*ND*	**2.3**	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.8	*ND*	*ND*	*ND*	*ND*	1	*0.8 J*	*ND*	**2.2**	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*0.6 J*	*ND*	1.7	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*RW-P440*															
Sep-2002	ND	ND	ND	NA	ND	ND	ND	2.9	ND	ND	ND	ND	0.9 J	ND	ND	1.5	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	3.1	ND	ND	ND	ND	0.9 J	0.5 J	ND	1.4	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	2.2	ND	ND	ND	ND	0.7 J	ND	ND	1	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	1.3	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	0.7 J	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	0.6 J	ND	ND	0.9 J	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	2.2 J	ND	ND	ND	ND	0.7 J	ND	ND	0.8 J	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.5 J	ND	ND	1.1	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	0.5 J	ND	ND	2.4	ND	ND	ND	ND	0.6 J	ND	ND	1.6	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	0.6 J	ND	ND	**2.1**	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	1.8	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	1.1	ND	ND	1.3	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	0.7 J	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	1.13	ND	ND	ND	ND	0.6 J	ND	ND	0.51 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.28	ND	ND	ND	ND	0.93 J	ND	ND	0.55 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P440***															
Oct-2013	ND	ND	ND	ND	ND	ND	ND	0.92 J	ND	ND	ND	ND	0.73 J	0.24 J	ND	0.54 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.23	ND	ND	ND	ND	0.55 J	0.23 J	ND	0.32 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	1.17	ND	ND	ND	ND	0.65 J	ND	ND	0.46 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	1.05	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.6 J	ND	ND	0.1 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	1.2	ND	ND	0.2 J	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	1.3	0.1 J	ND	0.3 J	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	1	ND	ND	0.2 J	ND
May-2018	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	1.9	NA
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.272 J	ND	ND	0.867 J	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P440***
Jun-1994	*ND*
Jun-1994	*ND*
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	0.001
Apr-1997	*ND*
Apr-2004	0.001
Oct-2004	0.0005
Mar-2009	*ND*
Oct-2009	*ND*
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000056 J*
Mar-2013	0.000101
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*0.000051 J*
Apr-2015	*ND*
Nov-2015	*0.000036 J*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.00012 J*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00006 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P441*																
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	0.9 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P441*																
Oct-2004	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	1.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.44	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.58	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	2.14	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	2.12	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	2.01	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.74	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P441*																
Nov-2015	ND	ND	ND	ND	2.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	0.332 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P441*															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	1	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	0.6 J	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	0.7 J	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	4.1	1.5
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	2	1
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	1.4	1.8
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	1.6	0.9 J
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	0.5 J	NA	ND	NA	NA	NA	0.9 J	1
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	1.7
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	2.7	3.1
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	2.9
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	1.9
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.7	2.8
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.4	2.2
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.6	3.2
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	3.1
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	7.3	5.5
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.1	3.2

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P441***															
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.1	3.6
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.7	1.7
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	4.6	2
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	5.6	4.4
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.5	1.9
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*5.6 J*	*3.3 J*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.6	1.6
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.6	1.8
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	8.7	3
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.3	1.8
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.6	3
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.1	2.2
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	10.6	1.6
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.5	1.9
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	11.3	1.7
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.4	1.8
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.06	1.02
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.34 J*	*ND*	*ND*	*ND*	*ND*	*ND*	3.54	1.31
Oct-2013	*0.28 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.27 J*	*ND*	*ND*	*ND*	4.49	1.8
Mar-2014	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.17 J*	*ND*	*0.33 J*	*ND*	*ND*	*ND*	*5.54 J*	1.91
Oct-2014	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	3.67	1.8
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*0.34 J*	*ND*	*ND*	*ND*	3.41	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P441***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.35 J*	*ND*	*ND*	*ND*	2.18	1.32
May-2016	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	2.7	1.3
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	3.5	1.5
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	2.9	1.3
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	3.7	1.5
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.4	1.4
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6 CL	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.8	1.1 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.6	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.412 J*	*0.223 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P441***															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	1.3	ND	ND	NA	NA	ND	0.7 J	ND	0.5 J	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	0.5 J	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	1	ND	ND	1.5	ND	ND	ND	ND	0.5 J	0.5 J	ND	0.5 J	NA
Mar-2002	ND	ND	ND	NA	0.7 J	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	1.3	ND	ND	1.9	ND	ND	ND	ND	0.6 J	ND	ND	1.1	NA
Mar-2003	ND	ND	ND	NA	1.3	ND	ND	2.1	ND	ND	ND	ND	0.7 J	ND	ND	1.2	NA
Oct-2003	ND	ND	ND	NA	2.4	ND	ND	3.3	ND	ND	ND	ND	1.1	ND	ND	1.9	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P441***															
Apr-2004	ND	ND	ND	NA	1.4	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	1.1	ND	ND	2.2	ND	ND	ND	ND	0.7 J	ND	ND	0.9 J	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	1.5	0.8 J	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.3 R	ND	ND	2.3 J	ND	ND	ND	ND	0.7 J	ND	ND	1.2 J	NA
Sep-2007	ND	ND	ND	ND	1.3	ND	ND	2	ND	ND	ND	ND	0.6 J	ND	ND	0.9 J	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	0.9 J	ND	ND	2.5	ND	ND	ND	ND	0.5 J	ND	ND	1.3	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	1.3	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	0.6 J	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.5 J	ND	ND	0.6 J	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	1.69	ND	ND	ND	ND	0.54 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.07	ND	ND	ND	ND	0.36 J	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	0.5 J	0.26 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	0.6 J	0.35 J	ND	0.33 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	2.22	ND	ND	ND	ND	0.91 J	ND	ND	0.28 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P441***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.32	*ND*	*ND*	*ND*	*ND*	*0.63 J*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.34	*ND*	*ND*	*ND*	*ND*	*0.69 J*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.2 J*	*ND*	*0.1 J*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.1 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P441***
Jun-1994	*ND*
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	0.0017
Apr-1997	0.0008
Apr-2004	0.0018
Oct-2004	0.0007
Mar-2009	0.0003
Oct-2009	0.0003
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	0.0005
Sep-2011	0.0002
Mar-2012	0.0006
Sep-2012	0.00086
Mar-2013	0.0013
Oct-2013	*0.000198 J*
Mar-2014	*ND*
Oct-2014	*0.00006 J*
Apr-2015	*0.000081 J*
Nov-2015	0.000206
May-2016	*ND*
Oct-2016	*0.000071 J*
May-2017	0.00032
Oct-2017	*0.000061 J*
May-2018	0.00042 B
Nov-2018	0.00022
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00014 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P584*																
Apr-1995	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	0.6 J	NA	NA	3.2	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	0.7 J	NA	NA	4	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	9.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jan-2001	ND	0.76 J	ND	ND	9.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	0.9 J	ND	ND	13	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND
Apr-2001	ND	1	ND	ND	16	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2001	ND	0.7 J	ND	ND	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	0.7 J	ND	ND	15	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2002	ND	0.6 J	ND	ND	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	ND
Mar-2003	ND	ND	ND	ND	9.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	7.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	5.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P584*																
Oct-2005	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	4.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	5.49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	6.76	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	6.59	0.24 J	ND	ND	ND	ND	ND	ND	0.38 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	5.01	ND	ND	ND	ND	ND	ND	ND	0.32 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	4.26	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	3.91	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	4.74	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	4.2	0.1 J	ND	ND	ND	ND	ND	0.1 J	0.2 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P584*																
Oct-2016	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J+*	*0.1 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	3.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.2 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.7 L2M0	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	2.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	2.64	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P584*															
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	2.1
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	4
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	4.7
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	2.3
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	0.9 J	NA	NA	NA	1.3	6.7
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	1.6	4.4
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	0.8 J	ND	NA	0.8 J	NA	ND	NA	4.5	11
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	1.7	ND	ND	ND	22	20
Jan-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	1.7	ND	ND	ND	ND	21
Feb-2001	0.7 J	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND	2.2	ND	ND	ND	18	23
Apr-2001	1	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	2.6	ND	ND	ND	12	25
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	1.9	ND	ND	ND	8.8	16
Mar-2002	0.9 J	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	3.1	ND	ND	ND	12	20
Sep-2002	0.7 J	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	2.7	ND	ND	ND	13	18
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	2.1	ND	ND	ND	7.9	12
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	1.2	ND	ND	ND	12	11
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	15	9.2
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	14	8.4
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	15	9

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P584***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	12.4	5.5
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	9	5.8
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	13.2	5.3
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 J	ND	ND	ND	10 J	6.8 J
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	1.4	ND	ND	ND	11.8	3.9
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	9.4	5.2
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	9.9	5.4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	9.4	5.5
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	11.6	6.5
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.9 J	6.3
Oct-2010	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	18.7	7.2
Apr-2011	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.1	ND	ND	ND	20.7	9.4
Sep-2011	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5	ND	ND	ND	25.4	9.1
Mar-2012	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND	ND	ND	22.7	9.3
Sep-2012	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.59	ND	ND	ND	8.55	5.98
Mar-2013	0.55 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.11	ND	ND	ND	10.7	8.85
Oct-2013	0.58 J	ND	ND	ND	ND	ND	ND	ND	0.34 J	ND	ND	4.36	ND	ND	ND	10.4	8.15
Mar-2014	0.37 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.16	ND	ND	ND	10.6	8.31
Oct-2014	0.34 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.55	ND	ND	ND	7.23	6.15
Apr-2015	0.32 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.36	ND	ND	ND	6.98	4.91
Nov-2015	0.31 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.74	ND	ND	ND	3.83	5.33
May-2016	0.3 J	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	3	ND	ND	ND	6.4	5.7

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P584***															
Oct-2016	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	4.9	4.6
May-2017	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	2.3	*ND*	*ND*	*ND*	5.6	4.6
Oct-2017	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	2.1	*ND*	*ND*	*ND*	5.1	4.4
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	9	4.5
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3 CL	2.1 N3M1
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	5	3.8 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	5.7	2.5
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	4.8	2.2
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	6.2	2.6
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.886 J*	*ND*	*ND*	*ND*	*2.74 J*	*2.5 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P584***															
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	1.1	*ND*	*NA*	2	*ND*	*ND*	*NA*	*NA*	*0.8 J*	1.3	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	1.8	*ND*	*NA*	4.4	*ND*	*ND*	*NA*	*NA*	1.2	1.4	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	**8.3**	*ND*	*ND*	**10**	*ND*	*ND*	*ND*	*ND*	3.1	2.1	*ND*	*ND*	*NA*
Jan-2001	*ND*	*ND*	*ND*	*NA*	**9.8**	*ND*	*ND*	**6.3**	*ND*	*ND*	*ND*	*ND*	2.5	1.6	*ND*	*0.73 J*	*NA*
Feb-2001	*0.6 J*	*ND*	*0.9 J*	*NA*	**14**	*1 J*	*ND*	**15**	*ND*	*ND*	*ND*	*ND*	4.7	1.8	*ND*	1.4	*NA*
Apr-2001	*ND*	*ND*	1.2	*NA*	**19**	1.4	*ND*	**18**	*ND*	*ND*	*ND*	*ND*	**5.8**	1.6	*ND*	1.5	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	**12**	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	2.2	1.2	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*0.8 J*	*NA*	**16**	*0.9 J*	*ND*	**15**	*ND*	*ND*	*ND*	*ND*	4.9	1.3	*ND*	1.7	*NA*
Sep-2002	*ND*	*ND*	*0.5 J*	*NA*	**11**	*ND*	*ND*	**11**	*ND*	*ND*	*ND*	*ND*	3.5	1.2	*ND*	1.2	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	**7**	*ND*	*ND*	4.7	*ND*	*ND*	*ND*	*ND*	2.5	1	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	**7.1**	*ND*	*ND*	4.8	*ND*	*ND*	*ND*	*ND*	1.7	1	*ND*	*0.6 J*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	4.8	*ND*	*ND*	4.9	*ND*	*ND*	*ND*	*ND*	1.8	1.1	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	4.4	*ND*	*ND*	2.8	*ND*	*ND*	*ND*	*ND*	1.4	1.4	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*RW-P584*															
Apr-2005	ND	ND	ND	ND	3.9	ND	ND	4.6	ND	ND	ND	ND	1.7	1.5	ND	ND	NA
Oct-2005	ND	ND	ND	ND	1.6	ND	ND	3.9	ND	ND	ND	ND	1.8	1	ND	0.6 J	NA
Mar-2006	ND	ND	ND	ND	1.8	ND	ND	**5.4**	ND	ND	ND	ND	2.1	1.1	ND	ND	NA
Sep-2006	ND	ND	ND	ND	0.6 J	ND	ND	4.9	ND	ND	ND	ND	2.4	1.9	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.6 R	ND	ND	6.8 J	ND	ND	ND	ND	3 J	ND	ND	0.7 J	NA
Sep-2007	ND	ND	ND	ND	2.5	ND	ND	**8.6**	0.5 J	ND	ND	ND	2.9	1.2	ND	1.5	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	**9.5**	ND	ND	ND	ND	2.5	0.9 J	ND	1.8	NA
Sep-2008	ND	ND	ND	ND	1.8	ND	ND	**7.7**	ND	ND	ND	ND	2.6	1.1	ND	1.7	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	**7.6**	ND	ND	ND	ND	2.7	0.9 J	ND	ND	NA
Oct-2009	ND	ND	ND	ND	1.6	ND	ND	**7.2**	ND	ND	ND	ND	3.7	0.9 J	ND	1.3	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	NA
Oct-2010	ND	ND	ND	ND	2.5	ND	ND	**5.5**	ND	ND	ND	ND	ND	ND	ND	0.9 J	NA
Apr-2011	ND	ND	ND	ND	2.5	ND	ND	**5.4**	ND	ND	ND	ND	**5.6**	ND	ND	0.8 J	NA
Sep-2011	ND	ND	ND	ND	2.3	ND	ND	**5.1**	ND	ND	ND	ND	**6.6**	ND	ND	0.7 J	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	**5.1**	ND	ND	ND	ND	**7.2**	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	1.33	ND	ND	**6.13**	ND	ND	ND	ND	**7.44**	0.85 J	ND	0.29 J	ND
Mar-2013	ND	ND	ND	ND	1.02	ND	ND	**6.48**	ND	ND	ND	ND	**8.3**	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.84 J	ND	ND	**5.5**	ND	ND	ND	ND	**7.22**	0.88 J	ND	0.32 J	ND
Mar-2014	ND	ND	ND	ND	0.58 J	ND	ND	**6.17**	ND	ND	ND	ND	**5.89**	0.74 J	ND	0.23 J	ND
Oct-2014	ND	ND	ND	0.13 J	ND	ND	ND	**6.23**	ND	ND	ND	ND	4.83	0.6 J	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	ND	3.56	0.53 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	ND	3.54	0.42 J	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P584***															
May-2016	*ND*	*ND*	*ND*	*0.1 J*	*0.4 J*	*ND*	*ND*	4.5	*ND*	*ND*	*ND*	*ND*	3.9	*0.5 J*	*ND*	*0.2 J*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*0.1 J*	*0.3 J*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	2.8	*0.4 J*	*ND*	*0.1 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	*ND*	3	*0.2 J*	*ND*	*0.1 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	2.6	*0.4 J*	*ND*	*0.1 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	2.7	*ND*	*ND*	*ND*	*ND*	2.6	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3 M1	*ND*	*ND*	*ND*	*ND*	*0.99 JM1*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.5	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.2	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.6	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.34	*ND*	*ND*	*ND*	*ND*	1.23	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P584***
Apr-1995	*ND*
Oct-1996	0.0013
Apr-1997	0.0017
Apr-2004	*ND*
Oct-2004	*ND*
Mar-2009	*ND*
Oct-2009	*ND*
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000119 J*
Mar-2013	0.000103
Oct-2013	*0.000073 J*
Mar-2014	*ND*
Oct-2014	*0.000041 J*
Apr-2015	*ND*
Nov-2015	*0.000043 J*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*ND*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	0.00028

MCLs and Results are in mg/L unless indicated otherwise

HISTORICAL TABLES –
Surface Water Monitoring Locations

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***SW-1***											
Nov-1993	17	17	0.2	30.9	21.7	8.3	ND	NA	192	15.8	146	58	2.4
Apr-1994	42	42	0.1	ND	25.3	3.6	ND	5.9	233	28.8	135	71.77	19.8
Apr-1995	12.4	12.4	ND	ND	18	3.1	ND	6	157	17.2	95	36.2	3.1
Apr-1997	ND	84	ND	ND	32	0.63	ND	NA	NA	37	229	120	20
Oct-1997	10	10	0.64	ND	8.4	0.255	ND	6.76	146	ND	80	33	2.7
Apr-1998	ND	ND	0.2	ND	2	ND	ND	6.4	242	4.71	22	1.8	5.9
Apr-1999	21	21	0.16	ND	125	0.901	ND	5.92	573	27.6	340	111	6.5
Oct-1999	30	30	0.1	32	13.6	2.34	ND	5.92	150.3	23.6	99	49	49
Oct-2000	13	NA	ND	10	67.6	2.21	ND	6.32	302	27.2	184	50.5	4.32
Apr-2001	7.5	NA	ND	ND	90.3	1.9	ND	NA	NA	15.3	206	60	2.5
Sep-2001	6	6	0.35	ND	63.4	3.51	ND	5.8	176	21.9	156	44.2	52
Mar-2002	8.5	8.5	ND	26	32.7	ND	ND	5.8	302	21.1	254	46.4	10
Sep-2002	15	15	ND	ND	55	2.09	ND	5.9	355	14.1	165	46.1	1.3
Mar-2003	18	18	ND	ND	93.9	2.02	ND	5.8	469	19.6	244	73.6	1
Oct-2003	22	22	ND	16	168	1.7	ND	6	691	20.8	378	101	3.8
Apr-2004	26	26	ND	ND	130	1.28	ND	6.6	619	18.9	350	73.4	6.6
Oct-2004	45	45	ND	19	37.6	1.03	ND	6.8	256	15.5	147	69.8	24
Apr-2005	23	23	ND	10	102	1.85	ND	6.2	399	15.6	274	65.8	14
Mar-2006	11	11	ND	ND	109	1.94	ND	5.7	421	17.4	224	51.9	2.4
Mar-2007	21	21	ND	ND	133	2.11	ND	6.2	606	18.3	298	59.4	2.6
Mar-2008	11	11	ND	12	126	2.23	ND	6	586	16.6	280	55.3	1.2
Mar-2009	12	12	ND	ND	118	1.16	ND	5.7	489	13.6	257	42.5	2.4
Apr-2010	27	27	ND	ND	115	1.5	ND	7.6	523	27.8	279	64.3	1.4
Oct-2010	43	43	0.27	11	42.4	0.55	ND	7	271	16.9	151	51	0.81
Apr-2011	24	24	ND	17	167	1.73	ND	7.2	532	16.2	311	57.4	4.2
Sep-2011	27	27	0.22	ND	15.1	0.57	ND	7.2	89.8	3.49	75	33.5	12
Mar-2012	21	21	ND	16	95.9	1.48	ND	6.1	417	18.1	213	50.9	0.79
Sep-2012	12.8	12.8	ND	ND	90.3	1.79	ND	5.6	412	13.2	191	41	1.15
Mar-2013	14.8	14.8	ND	ND	82.2	1.81	ND	7.1	386	15.1	188	43.1	2.94
Oct-2013	14.5	14.5	ND	ND	99.2	1.52	ND	6.7	459	15.4	238	44.5	0.301
Mar-2014	25.7	25.7	ND	18	489	1.62	ND	6.1	1139	19	710	60.5	2.17
Oct-2014	37.4	37.4	ND	14	187	1.58	ND	6.3	514	16	307	61.9	1.36
Apr-2015	21.9	21.9	ND	13	157	1.59	ND	6.5	501	17.1	263	61.3	6.24
Nov-2015	23.8	23.8	ND	ND	158	1.36	ND	6.5	482	15.4	285	63.3	1.08
May-2016	25.3	25.3	ND	19	109	1.32	ND	6.9	558	14.8	250	51.9	6.36
Oct-2016	13.2	13.2	ND	8 J	108	NA	NA	6.9	540	14.1	242	42.4	2.82

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***SW-1***											
May-2017	11.7	11.7	*ND*	*9 J*	136	1.78	*ND*	6.8	650	13.3	286	50.4	4.49
Oct-2017	14.9	14.9	*ND*	*6 J*	106	2.12	*ND*	6.5	521	13.2	223	42	6.33
May-2018	20	20	*ND*	*20.8 J*	109	0.33	*ND*	6.9	474	15.2	187	53.5	2.6
Nov-2018	30	30	*ND*	*7.9 J*	120	1.3	*ND*	6.37	610	17.9	270	63.7	8.77
May-2019	60	*NA*	*ND*	28.4	35.8	0.2	*ND*	7.2	393	10.3	157	73.3	7.81
Oct-2019	16	*NA*	*ND*	*19.3 J*	143	1.3	*ND*	6.92	631	21.8	296	60.5	4.69
May-2020	12	12	*ND*	31.4	63.6	1.9	*ND*	6.8	406	11.6	185	48.3	7.16
Oct-2020	26	*NA*	*ND*	*ND*	61.7	1.9	*ND*	6.21	375	14.7	146	43.6	3.24
Apr-2021	40	*NA*	*ND*	*6.1 J*	69.3	1.6	*ND*	6.61	321	16.4	152	59.8	8.18

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-1***													
Nov-1993	NA	ND	ND	NA	0.002	14	NA	ND	NA	ND	1.2	NA	**0.034**	5.6	NA
Apr-1994	NA	ND	ND	NA	ND	20	NA	ND	NA	ND	0.42	NA	**0.034**	5.3	NA
Apr-1995	ND	ND	0.5	ND	ND	9.4	NA	ND	ND	ND	0.31	NA	ND	3.1	NA
Oct-1996	ND	ND	0.1	ND	ND	66	58	ND	ND	ND	6.5	1.1	ND	12	11
Apr-1997	ND	ND	0.038	ND	ND	36	35	ND	ND	ND	0.74	0.52	ND	8.8	8.4
Oct-1997	ND	ND	0.041	ND	ND	8.89	NA	ND	ND	ND	0.292	NA	ND	2.77	NA
Apr-1998	ND	ND	0.044	ND	ND	23.7	NA	ND	ND	ND	1.04	NA	ND	6.21	NA
Apr-1999	ND	ND	0.086	ND	ND	31.3	NA	ND	ND	ND	0.345	NA	ND	7.97	NA
Oct-1999	ND	ND	0.067	ND	ND	11.9	NA	ND	ND	ND	0.337	NA	ND	3.67	NA
Oct-2000	ND	ND	0.043	ND	ND	14.2	NA	ND	ND	ND	0.366	NA	ND	3.65	NA
Apr-2001	ND	ND	0.084	ND	ND	16.1	NA	ND	ND	ND	0.546	NA	ND	4.78	NA
Sep-2001	ND	ND	0.056	ND	ND	10.1	NA	ND	ND	ND	1.82	NA	0.003	4.59	NA
Mar-2002	ND	ND	0.044	ND	ND	12.8	NA	ND	ND	ND	0.573	NA	ND	3.51	NA
Sep-2002	ND	ND	0.052	ND	ND	13.2	NA	ND	ND	ND	0.171	NA	ND	3.19	NA
Mar-2003	ND	ND	0.094	ND	ND	19.9	NA	ND	ND	ND	0.258	NA	ND	5.8	NA
Oct-2003	ND	ND	0.126	ND	ND	28.1	NA	ND	ND	ND	0.594	NA	ND	7.54	NA
Apr-2004	ND	ND	0.072	ND	ND	21	NA	ND	ND	ND	0.701	NA	ND	5.11	NA
Oct-2004	ND	ND	0.032	ND	ND	20.1	NA	ND	ND	ND	1.23	NA	0.003	4.73	NA
Apr-2005	ND	0.004	0.058	ND	ND	18.6	NA	ND	ND	ND	1.12	NA	ND	4.69	NA
Mar-2006	ND	ND	0.056	ND	ND	14.4	NA	ND	ND	ND	0.471	NA	ND	3.84	NA
Mar-2007	ND	ND	0.055	ND	ND	17.7	NA	ND	ND	ND	0.116	NA	ND	3.68	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-1***													
Mar-2008	ND	0.002	0.071	ND	ND	15.4	NA	ND	ND	ND	0.208	NA	ND	4.07	NA
Mar-2009	ND	ND	0.055	ND	ND	11.7	NA	ND	ND	ND	0.496	NA	ND	3.22	NA
Apr-2010	ND	ND	0.049	ND	ND	18.7	NA	ND	ND	ND	ND	NA	ND	4.27	NA
Oct-2010	ND	ND	0.02	ND	ND	15	NA	ND	ND	ND	0.339	NA	ND	3.5	NA
Apr-2011	ND	ND	0.054	ND	ND	16.8	NA	ND	ND	ND	0.657	NA	ND	3.77	NA
Sep-2011	ND	ND	0.014	ND	ND	10.4	NA	ND	ND	ND	0.519	NA	ND	1.82	NA
Mar-2012	ND	ND	0.044	ND	ND	14.2	NA	ND	ND	ND	ND	NA	ND	3.74	NA
Sep-2012	ND	ND	0.0428	0.000066 J	ND	11.3	NA	ND	0.000981 J	ND	0.0847	NA	ND	3.1	NA
Mar-2013	ND	ND	0.0436	ND	ND	11.8	NA	0.0022 J	0.0011 J	0.00083 J	0.0408 J	NA	0.0012 J	3.31	NA
Oct-2013	0.000594 J	ND	0.0516	ND	ND	13.1	NA	0.0065 J	0.0012 J	0.00074 J	0.142	NA	0.000333 J	2.86	NA
Mar-2014	0.000455 J	0.000116 J	0.0655	ND	ND	18.1	NA	0.0009 J	0.001 J	0.0012 J	0.185	NA	0.000482 J	3.73	NA
Oct-2014	0.000432 J	0.000397 J	0.0661	ND	ND	17.5	NA	0.000625 J	0.0008 J	0.000969 J	0.169	NA	ND	4.41	NA
Apr-2015	0.000634 J	0.000521 J	0.0611	ND	ND	17.3	NA	0.0013 J	0.0017 J	0.0013 J	0.496	NA	0.0012 J	4.4	NA
Nov-2015	0.000471 J	0.000477 J	0.0549	ND	ND	18.7	NA	0.0012 J	0.0013 J	0.000996 J	0.682	NA	0.000705 J	4.02	NA
May-2016	ND	0.00074 J	0.0542	ND	ND	14.5	NA	0.00081 J	0.00063 J	0.0014 J	0.19 J	NA	0.00055 J	3.81	NA
Oct-2016	ND	ND	0.0552	ND	ND	11.5	NA	0.00074 J	0.0021	0.00078 J	0.34	NA	0.001 J	3.31	NA
May-2017	ND	ND	0.0641	ND	ND	13.8	NA	0.0018 J	0.002	0.0012 J,B	0.248	NA	0.00094 J	3.88	NA
Oct-2017	ND	ND	0.0482	ND	ND	11.8	NA	ND	0.00081 J	ND	ND	NA	ND	3.02	NA
May-2018	0.0001 J	ND	0.057	0.000038 J	0.000065 J	15.1	NA	0.0052 J	0.001	0.003 B	0.42	NA	0.00071 J	3.8	NA
Nov-2018	0.00033 J	0.000072 J	0.04	0.000047 J	0.000054 J	18.3	NA	0.0035 J	0.0016	0.0033	0.91	NA	0.0013	4.4	NA
May-2019	ND	ND	0.021	ND	ND	24.6	NA	ND	0.00069	0.0024	2.5	NA	0.0018	2.9	NA
Oct-2019	0.00016 J	0.00018 J	0.056	0.000096 J	0.00032 J	16.9	NA	0.004 J	0.0016	0.0039	0.92	NA	0.0018	4.4	NA
May-2020	0.00036 J	0.00034 J	0.044	0.00011 J	0.00012 J	13.4	NA	0.0079	0.0022	**0.0026 D6**	0.84	NA	0.0021	3.6	NA
Oct-2020	ND	ND	0.037	ND	ND	12.4	NA	0.0095 J	0.00053 J	ND	0.037 J	NA	ND	3.1	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-1***													
Apr-2021	*ND*	*ND*	0.038	*ND*	*ND*	17.7	*NA*	*0.00043 J*	*ND*	*ND*	0.2	*NA*	*ND*	3.8	*NA*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-1***												
Nov-1993	0.2	NA	ND	NA	4.1	NA	ND	NA	16.9	NA	NA	NA	0.02
Apr-1994	0.064	NA	ND	NA	2.7	NA	ND	NA	11	NA	NA	NA	0.022
Apr-1995	0.05	NA	ND	ND	1.7	NA	ND	ND	7.1	NA	ND	ND	0.04
Oct-1996	0.57	0.076	NA	ND	ND	ND	ND	ND	7.7	8.7	ND	ND	0.43
Apr-1997	0.14	0.13	ND	ND	4.2	4	ND	ND	19	18	ND	ND	0.047
Oct-1997	0.049	NA	NA	ND	1.98	NA	ND	ND	13.6	NA	ND	ND	ND
Apr-1998	0.041	NA	ND	3.09	ND	NA	ND	17.5	ND	NA	ND	0.025	NA
Apr-1999	0.07	NA	NA	ND	3.91	NA	ND	ND	67.9	NA	ND	ND	0.01
Oct-1999	0.076	NA	NA	ND	2.93	NA	ND	ND	44.8	NA	ND	ND	ND
Oct-2000	0.036	NA	NA	ND	3.15	NA	ND	ND	40.6	NA	ND	ND	ND
Apr-2001	0.1	NA	NA	ND	2.48	NA	ND	ND	46.3	NA	ND	ND	ND
Sep-2001	0.052	NA	NA	0.023	3.79	NA	ND	ND	37.4	NA	ND	ND	0.015
Mar-2002	0.025	NA	NA	ND	2.64	NA	ND	ND	66.9	NA	ND	ND	0.012
Sep-2002	0.059	NA	NA	ND	2.4	NA	ND	ND	35.1	NA	ND	ND	0.012
Mar-2003	0.116	NA	NA	ND	2.77	NA	ND	ND	62.9	NA	ND	ND	ND
Oct-2003	0.182	NA	NA	ND	2.28	NA	ND	ND	91.7	NA	ND	ND	0.021
Apr-2004	0.116	NA	ND	ND	2.42	NA	ND	ND	103	NA	ND	ND	0.035
Oct-2004	0.042	NA	ND	ND	3.49	NA	ND	ND	28.5	NA	ND	ND	0.048
Apr-2005	0.063	NA	ND	ND	3.17	NA	ND	ND	66.4	NA	ND	ND	0.011
Mar-2006	0.026	NA	ND	ND	2.28	NA	ND	ND	52.1	NA	ND	ND	0.048
Mar-2007	0.039	NA	ND	ND	2.78	NA	ND	ND	73	NA	ND	ND	ND
Mar-2008	0.051	NA	ND	ND	2.96	NA	ND	ND	79.3	NA	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-1***												
Mar-2009	0.06	NA	0.0002	ND	2.26	NA	ND	ND	63	NA	ND	ND	0.01
Apr-2010	0.038	NA	ND	ND	2.52	NA	ND	ND	62	NA	ND	ND	ND
Oct-2010	0.014	NA	ND	ND	2.74	NA	ND	ND	29.2	NA	ND	ND	ND
Apr-2011	0.049	NA	ND	ND	2.46	NA	ND	ND	76.7	NA	ND	ND	ND
Sep-2011	0.015	NA	ND	ND	1.16	NA	ND	ND	10.1	NA	ND	ND	ND
Mar-2012	0.038	NA	ND	ND	2.41	NA	ND	ND	55.8	NA	ND	ND	ND
Sep-2012	0.0339	NA	ND	0.0014 J	2.43	NA	0.000504 J	ND	51.5	NA	ND	ND	0.0053 J
Mar-2013	0.0335	NA	0.000055 J	0.0015 J	2.4	NA	0.000445 J	0.00002 J	41.3	NA	ND	ND	0.0172
Oct-2013	0.0329	NA	ND	0.0017 J	2.19	NA	ND	0.000026 J	58.8	NA	0.000724 J	ND	0.0162
Mar-2014	0.0326	NA	ND	0.0016 J	2.34	NA	0.0011 J	ND	216	NA	ND	0.000342 J	0.0106
Oct-2014	0.0244	NA	0.00004 J	0.0033 J	2.62	NA	0.0014 J	ND	82.5	NA	ND	ND	0.0073 J
Apr-2015	0.0572	NA	ND	0.0034 J	2.76	NA	0.0013 J	ND	76.8	NA	ND	0.0011 J	0.0153
Nov-2015	0.0414	NA	ND	0.0027 J	2.95	NA	0.0012 J	ND	74.5	NA	0.000195 J	0.00091 J	0.0067 J
May-2016	0.0216	NA	ND	0.0021 J	2.66	NA	0.0006 J	ND	64.3	NA	ND	0.00049 J	0.0123 J
Oct-2016	0.0512	NA	ND	0.0025 J	2.34	NA	0.0006 J	ND	66.7	NA	ND	0.00064 J	0.0079 J
May-2017	0.0382	NA	ND	0.0019 J,B	2.47	NA	0.00068 J	ND	76	NA	ND	0.00047 J	0.0144 JB
Oct-2017	0.0203	NA	ND	0.0013 JB	2.31	NA	0.00059 J	ND	59.6	NA	ND	ND	0.0062 J
May-2018	0.043	NA	ND	0.0034	2.2 J	NA	0.0013 JB	ND	73.2	NA	ND	ND	0.0092 B
Nov-2018	0.057	NA	ND	0.0035	1.9 J	NA	0.00075 J	ND	80.2	NA	0.000095 J	0.0041	0.01
May-2019	0.063	NA	ND	0.0035	ND	NA	ND	ND	24.1	NA	ND	0.0059	0.019
Oct-2019	0.05	NA	ND	0.0037	2.6 J	NA	0.0013 J	ND	96.3	NA	ND	ND	0.015
May-2020	0.056	NA	ND	0.0054	2.3 J	NA	0.001 J	ND	38.6	NA	ND	0.0012 D6	0.011 D6
Oct-2020	0.011	NA	ND	ND	2.3 J	NA	ND	ND	39.7	NA	ND	0.0027 J	ND
Apr-2021	0.013	NA	ND	ND	2.3	NA	ND	ND	43.4	NA	ND	ND	0.0066 J

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***SW-1***																
Nov-1993	NA	ND	ND	ND	ND	ND	NA	NA	NA	NA	ND	ND	NA	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	23	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.5	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-1*																
Jun-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.46 J	ND	ND	4.84 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.09 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.25 J,B	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***SW-1***																
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.4 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-1***															
Nov-1993	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA	NA	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-1***															
Jun-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-1***															
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-1***															
Nov-1993	ND	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-1***															
May-2005	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Jun-2005	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	1.7	2.1 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.19 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 R	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-1***															
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***SW-2***											
Nov-1993	28	28	ND	39.3	18.4	1.3	ND	5.8	306	80	200	104	3.5
Apr-1994	30	30	0.2	22.7	8.6	0.5	ND	6.15	164	26.1	107	61.88	18.5
Apr-1995	23.7	23.7	ND	ND	13.7	0.7	ND	6.5	140	23.7	70	47	15.5
Apr-1997	ND	24	ND	ND	11	0.21	ND	NA	NA	32	192	54	18
Apr-1997	ND	17	ND	ND	14	0.22	ND	NA	NA	27	164	21	6.2
Oct-1997	23	23	0.39	ND	25.8	2.54	ND	6.83	92.2	15.1	17	36	8.5
Apr-1998	13	13	0.33	11	6.7	0.2	ND	6.29	164.7	18.4	72	37	15
Apr-1999	31	31	0.29	14	20.4	0.503	ND	5.99	296	46.6	480	89	770
Oct-1999	4	4	0.2	ND	4.95	ND	ND	5.62	62.2	13.8	40	15	8.3
Oct-2000	30	NA	ND	16	18.1	ND	ND	6.69	130.4	10.5	90	50.3	1.5
Apr-2001	36	NA	ND	17	14.9	ND	ND	NA	NA	15.5	151	77.2	4.8
Sep-2001	45	45	0.25	22	16.2	ND	ND	7.2	202	22.2	121	70.5	5.7
Mar-2002	46	46	ND	28	13.7	ND	ND	7.1	388	116	256	104	19
Sep-2002	80	80	ND	21	10.3	ND	ND	7.4	327	49.2	206	140	15
Mar-2003	45	45	ND	25	19	0.254	ND	7.1	212	23.6	133	71.6	23
Oct-2003	39	39	ND	23	29.4	0.358	ND	6.7	233	10.3	174	59.6	47
Apr-2004	110	110	ND	46	30	1.63	ND	7.7	372	31	248	143	15
Oct-2004	35	35	ND	26	23.1	0.53	ND	6.95	160.2	15.7	121	60.4	14
Apr-2005	42	42	ND	21	13.9	0.36	ND	6.5	131.7	14.2	185	61.9	132
Mar-2006	30	30	ND	ND	31.7	0.42	ND	6.9	192.3	24.6	146	58.6	3.6
Mar-2007	49	49	ND	19	54.6	0.44	ND	6.9	401	20.1	165	72.8	31
Mar-2008	43	43	ND	26	60.8	0.29	ND	7.1	392	25.3	199	74.3	9
Mar-2009	28	28	ND	ND	45.5	0.26	ND	6	320	19.3	160	51	6.3
Apr-2010	32	32	ND	23	42.9	0.39	ND	7	188.5	16.9	132	50.6	2.8
Oct-2010	59	59	ND	26	45.7	0.15	ND	7.6	309	26.2	214	96.1	4.1
Apr-2011	37	37	ND	20	53.7	0.47	ND	6.8	210	19.8	160	59.4	15
Sep-2011	89	89	ND	43	26	0.44	0.03	7.2	279	21.3	208	109	36
Mar-2012	23	23	ND	ND	56.6	0.43	0.02	6.1	202	12.9	140	45.7	6.2
Sep-2012	32.8	32.8	ND	81.1	24.5	0.212	ND	5.7	146.9	11.4	116	50.3	14.8
Mar-2013	31.9	31.9	ND	19.5	43.9	0.229	ND	6.9	310	19.7	162	52.6	11.5
Oct-2013	48.6	48.6	ND	42.8	11.4	0.293	ND	7.2	174.5	29.7	161	74.3	26.2
Mar-2014	33.2	33.2	ND	37	73.9	0.246	ND	6.5	354	22.7	204	62.1	8.5
Oct-2014	44	44	ND	23	45.2	0.0948	ND	6.9	177.5	11.7	131	49.9	4.69
Apr-2015	108	108	0.195 J	53	81.9	0.987	ND	6.4	528	25.1	338	137	18.6
Nov-2015	60	60	ND	33	37.5	0.362	ND	7.4	310	27.7	250	95.2	280
May-2016	53.8	53.8	ND	21	56.4	0.104	ND	6.2	354	12.8	194	77.4	7.69

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***SW-2***											
Oct-2016	112	112	*ND*	97	32.6	*NA*	*NA*	7.1	565	55	356	154	21.3
May-2017	51.8	51.8	*ND*	20	37.4	0.504	*ND*	6.9	368	15	151	74	19.4
Oct-2017	63.2	63.2	*ND*	30	4.97	*ND*	*ND*	6.9	238	9.23	102	71.5	12.9
May-2018	60	60	0.16	42.3	33.2	*ND*	0.021	6	234	13.7	68	81.7	11.9
Nov-2018	88	88	*0.052 J*	*20.8 J*	24.2	0.21	*0.0069 J*	7.99	328	17.1	147	104	13.4
May-2019	78	*NA*	*ND*	*ND*	53.6	0.38	0.013	7.49	374	15.8	206	93.8	8.74
Oct-2019	122	*NA*	*ND*	*12.6 J*	8.9	0.29	*ND*	7.24	872	*5.1 J*	122	134	7.26
May-2020	68	68	*ND*	55.9	46.9	0.46	*0.0057 J*	7.25	530	10.9	199	84.5	7.1
Oct-2020	92	*NA*	*ND*	29.6	15.1	0.21	*ND*	6.93	327	16.1	146	121	27.1
Apr-2021	80	*NA*	*ND*	*14.8 J*	41	0.44	*ND*	8.19	304	16.6	150	97.8	14

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-2***													
Nov-1993	NA	ND	ND	NA	ND	32.3	NA	ND	NA	ND	0.2	NA	ND	5.8	NA
Apr-1994	NA	ND	0.008	NA	ND	20	NA	ND	NA	ND	0.37	NA	ND	2.9	NA
Apr-1995	ND	ND	ND	ND	ND	14.7	NA	ND	ND	ND	0.6	NA	0.006	2.5	NA
Oct-1996	ND	ND	0.028	ND	ND	15	14	ND	ND	ND	1.1	1.1	ND	3.1	2.8
Apr-1997	ND	ND	0.029	ND	ND	15	16	ND	ND	ND	0.71	0.7	ND	3.2	3.5
Apr-1997	ND	ND	0.035	ND	ND	11	12	ND	ND	ND	0.79	0.56	ND	3	3.1
Oct-1997	ND	ND	0.031	ND	ND	9.35	NA	ND	ND	ND	1.46	NA	ND	2.19	NA
Apr-1998	ND	ND	0.03	ND	ND	10.4	NA	ND	ND	ND	1.01	NA	ND	2.63	NA
Apr-1999	ND	ND	0.066	ND	ND	25.4	NA	0.03	0.013	0.015	12.5	NA	ND	6.09	NA
Oct-1999	ND	ND	0.045	ND	ND	22.5	NA	ND	ND	ND	1.03	NA	ND	5.03	NA
Oct-2000	ND	ND	0.036	ND	ND	14.4	NA	ND	ND	ND	0.311	NA	ND	3.48	NA
Apr-2001	ND	ND	0.03	ND	ND	22.7	NA	ND	ND	ND	0.326	NA	ND	4.98	NA
Sep-2001	ND	ND	0.031	ND	ND	21.1	NA	ND	ND	ND	0.502	NA	ND	4.35	NA
Mar-2002	ND	ND	0.039	ND	ND	31	NA	ND	ND	ND	0.68	NA	ND	6.53	NA
Sep-2002	ND	ND	0.025	ND	ND	43.8	NA	ND	ND	ND	0.286	NA	ND	7.55	NA
Mar-2003	ND	ND	0.026	ND	ND	21.9	NA	ND	ND	0.01	0.257	NA	ND	4.11	NA
Oct-2003	ND	ND	0.04	ND	ND	17.2	NA	ND	ND	ND	0.8	NA	ND	4.06	NA
Apr-2004	ND	0.002	0.034	ND	ND	44.5	NA	ND	ND	0.012	0.378	NA	0.003	7.88	NA
Oct-2004	ND	ND	0.041	ND	ND	17.5	NA	ND	ND	ND	0.271	NA	ND	4.06	NA
Apr-2005	ND	0.003	0.03	ND	ND	18.9	NA	ND	ND	ND	1.69	NA	0.003	3.57	NA
Mar-2006	ND	ND	0.038	ND	ND	16.2	NA	ND	ND	ND	0.071	NA	ND	4.41	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-2***													
Mar-2007	ND	ND	0.029	ND	ND	23.7	NA	ND	ND	ND	0.478	NA	ND	4.1	NA
Mar-2008	ND	0.003	0.032	ND	ND	22	NA	ND	ND	ND	0.399	NA	ND	4.7	NA
Mar-2009	ND	ND	0.028	ND	ND	14.5	NA	ND	ND	ND	0.391	NA	ND	3.59	NA
Apr-2010	ND	ND	0.039	ND	ND	14.8	NA	ND	ND	ND	0.329	NA	ND	3.31	NA
Oct-2010	ND	ND	0.038	ND	ND	29	NA	ND	ND	ND	0.311	NA	ND	6.09	NA
Apr-2011	ND	ND	0.041	ND	ND	17.5	NA	ND	ND	ND	0.436	NA	ND	3.82	NA
Sep-2011	ND	0.003	0.035	ND	ND	33.8	NA	ND	ND	ND	1.18	NA	ND	5.94	NA
Mar-2012	ND	ND	0.046	ND	ND	12.5	NA	ND	ND	ND	0.727	NA	ND	3.51	NA
Sep-2012	ND	0.0013 J	0.0369	0.00007 J	ND	14.3	NA	ND	0.0016 J	0.0013 J	1.13	NA	ND	3.55	NA
Mar-2013	ND	ND	0.0303	ND	ND	15.1	NA	0.0027 J	0.0017 J	0.0018 J	0.671	NA	0.0014 J	3.62	NA
Oct-2013	0.000546 J	ND	0.033	ND	0.000306 J	23.5	NA	0.0066 J	0.0013 J	0.0045 J	1.03	NA	0.004	3.79	NA
Mar-2014	0.000427 J	0.000355 J	0.0333	ND	ND	18.2	NA	0.0014 J	0.0017 J	0.002 J	0.43	NA	ND	4.04	NA
Oct-2014	0.00048 J	0.000872 J	0.0412	ND	ND	13.6	NA	0.001 J	0.000988 J	0.000866 J	0.549	NA	ND	3.88	NA
Apr-2015	0.000938 J	0.0022	0.039	ND	0.000074 J	42.4	NA	0.002 J	0.0015 J	0.0053 J	0.66	NA	0.0012 J	7.44	NA
Nov-2015	0.000754 J	0.0036	0.0675	0.000225 J	0.000081 J	30.1	NA	0.0201	0.0017 J	0.0051 J	6.97	NA	0.0079	4.86	NA
May-2016	ND	0.0011 J	0.0403	ND	ND	22.7	NA	0.0015 J	0.0014	0.00071 J	1.93	NA	0.00028 J	5.06	NA
Oct-2016	0.00066 J	0.0036 J	0.0535	ND	ND	41.8	NA	0.0021 J	0.0009 J	0.0042	1.14	NA	0.00083 J	12.1	NA
May-2017	ND	0.0013 J	0.0195	ND	ND	22.5	NA	0.0017 J	0.00081 J	0.0016 J	1.44	NA	0.00055 J	4.3	NA
Oct-2017	ND	0.0017 J	0.0128	ND	ND	21.6	NA	0.0012 J	0.00043 J	0.0012 J	0.619	NA	0.00046 J	4.28	NA
May-2018	0.0003 J	0.00094 JB	0.02	ND	0.000022 J	24.4	NA	0.0042 J	0.0012	0.0038 B	1.3	NA	0.00042 J	5.1	NA
Nov-2018	0.00015 J	0.00032 J	0.026	0.00003 J	ND	32	NA	0.0025 J	0.00058	0.0027	0.93	NA	0.00032 J	5.8	NA
May-2019	ND	ND	0.035	ND	ND	28.2	NA	ND	0.0011	ND	1.2	NA	ND	5.7	NA
Oct-2019	0.00014 J	0.00036 J	0.033	ND	0.00019 J	38.1	NA	0.0018 J	0.0004 J	0.0062	0.84	NA	0.0002 J	9.4	NA
May-2020	0.00013 J	ND	0.033	ND	ND	24.8	NA	0.0043 J	0.00092	0.0017 J	0.9	NA	ND	5.5	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-2***													
Oct-2020	*0.00031 J*	*ND*	0.032	*ND*	*ND*	37.5	*NA*	*0.0092 J*	*0.00061 J*	*ND*	0.84	*NA*	*ND*	6.6	*NA*
Apr-2021	*ND*	*ND*	0.035	*ND*	*ND*	29.2	*NA*	*0.0011 J*	*0.00087 J*	*ND*	1.1	*NA*	*ND*	6	*NA*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-2***												
Nov-1993	0.1	NA	ND	NA	6.2	NA	ND	NA	6.7	NA	NA	NA	ND
Apr-1994	0.061	NA	ND	NA	3.3	NA	ND	NA	4.8	NA	NA	NA	0.014
Apr-1995	0.02	NA	ND	ND	3.6	NA	ND	ND	4.7	NA	ND	ND	0.03
Oct-1996	0.062	0.047	NA	ND	ND	ND	ND	ND	4.9	4.7	ND	ND	0.04
Apr-1997	0.062	0.065	ND	ND	3.1	3.6	ND	ND	5.7	6.3	ND	ND	0.037
Apr-1997	0.059	0.065	ND	ND	3.4	3.5	ND	ND	6.1	7.2	ND	ND	ND
Oct-1997	0.105	NA	NA	ND	2.16	NA	ND	ND	1.65	NA	ND	ND	0.017
Apr-1998	0.069	NA	ND	2.16	ND	NA	ND	3.59	ND	NA	ND	0.05	NA
Apr-1999	0.141	NA	NA	0.047	5.54	NA	ND	ND	11.7	NA	ND	0.046	0.11
Oct-1999	0.138	NA	NA	0.016	11.3	NA	ND	ND	8.72	NA	ND	ND	0.011
Oct-2000	0.057	NA	NA	ND	3.63	NA	ND	ND	8.6	NA	ND	ND	ND
Apr-2001	0.071	NA	NA	0.011	4.57	NA	ND	ND	17.6	NA	ND	ND	0.015
Sep-2001	0.059	NA	NA	ND	4.39	NA	ND	ND	11.1	NA	ND	ND	0.012
Mar-2002	0.054	NA	NA	ND	5.48	NA	ND	ND	37.7	NA	ND	ND	0.012
Sep-2002	0.023	NA	NA	0.022	6.52	NA	ND	ND	5.22	NA	ND	ND	0.032
Mar-2003	0.063	NA	NA	0.014	5.32	NA	ND	ND	14	NA	ND	ND	0.023
Oct-2003	0.052	NA	NA	ND	4.41	NA	ND	ND	17	NA	ND	ND	0.012
Apr-2004	0.029	NA	ND	ND	14	NA	ND	ND	25.6	NA	ND	ND	0.023
Oct-2004	0.028	NA	ND	ND	7.12	NA	ND	ND	14.8	NA	ND	ND	ND
Apr-2005	0.048	NA	ND	ND	3.92	NA	ND	ND	10.2	NA	ND	ND	0.039
Mar-2006	ND	NA	ND	ND	2.75	NA	ND	ND	17	NA	ND	ND	ND
Mar-2007	0.039	NA	ND	ND	3.53	NA	ND	ND	27.7	NA	ND	ND	0.014

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-2***												
Mar-2008	0.048	NA	ND	ND	3.57	NA	ND	ND	34.8	NA	ND	ND	ND
Mar-2009	0.052	NA	ND	ND	2.57	NA	ND	ND	21.4	NA	ND	ND	ND
Apr-2010	0.03	NA	ND	ND	3.25	NA	ND	ND	23.2	NA	ND	ND	0.011
Oct-2010	0.026	NA	ND	ND	6.05	NA	ND	ND	25.2	NA	ND	ND	ND
Apr-2011	0.044	NA	ND	ND	2.7	NA	ND	ND	26.1	NA	ND	ND	ND
Sep-2011	0.037	NA	ND	ND	9.74	NA	ND	ND	16.3	NA	ND	ND	ND
Mar-2012	0.043	NA	ND	ND	3.2	NA	ND	ND	29.9	NA	ND	ND	ND
Sep-2012	0.06	NA	ND	0.0027 J	5.93	NA	0.000415 J	ND	14.2	NA	ND	ND	0.0057 J
Mar-2013	0.0394	NA	0.000056 J	0.0039 J	3.39	NA	ND	ND	22.6	NA	ND	ND	0.0193
Oct-2013	0.0259	NA	ND	0.0071 J	8.3	NA	ND	0.000018 J	6.88	NA	ND	0.0079 J	0.0186
Mar-2014	0.0396	NA	ND	0.0036 J	3.26	NA	ND	ND	38.9	NA	ND	0.0021 J	0.0106
Oct-2014	0.0312	NA	0.000022 J	0.0019 J	4.19	NA	ND	ND	23.2	NA	ND	0.0011 J	0.0051 J
Apr-2015	0.0453	NA	ND	0.0067 J	12.1	NA	ND	ND	58.6	NA	ND	0.0043 J	0.0131
Nov-2015	0.0381	NA	ND	0.0051 J	6.95	NA	0.0013 J	ND	19.4	NA	0.000222 J	0.0234	0.0103
May-2016	0.058	NA	ND	0.0018 J	2.7	NA	ND	ND	30.6	NA	ND	0.0011	0.0129 J
Oct-2016	0.0327	NA	ND	0.0061	23.1	NA	ND	ND	19.4	NA	ND	0.0033	0.0059 J
May-2017	0.0309	NA	ND	0.0019 J,B	3.42	NA	ND	ND	21.6	NA	ND	0.0018	0.0072 JB
Oct-2017	0.0125	NA	ND	0.0012 JB	4.86	NA	ND	ND	3.68	NA	ND	0.0021	ND
May-2018	0.062	NA	ND	0.005	3.9 J	NA	0.0011 JB	ND	19.7	NA	ND	0.00034 J	0.007 B
Nov-2018	0.026	NA	ND	0.0039	4 J	NA	0.00019 J	ND	14.8	NA	ND	0.0048	0.0052
May-2019	0.067	NA	ND	0.0021	ND	NA	ND	ND	29.4	NA	ND	0.0045	0.0051
Oct-2019	0.026	NA	ND	0.00074	2.4 J	NA	ND	ND	5.9	NA	ND	0.0032	0.011
May-2020	0.042	NA	ND	0.0016	2.8 J	NA	ND	ND	25.5	NA	ND	0.0027	0.0029 J
Oct-2020	0.019	NA	ND	0.0029	4.8 J	NA	ND	ND	9.9	NA	ND	0.0051	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-2***												
Apr-2021	0.032	*NA*	*ND*	*0.0016 J*	4	*NA*	*ND*	*ND*	24.6	*NA*	*ND*	*0.0021 J*	*0.0043 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-2*																
Nov-1993	NA	ND	ND	ND	ND	ND	NA	NA	NA	NA	ND	ND	NA	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5 J	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2002	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jan-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-2*																
Apr-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.93 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.72 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.67 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.47 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.36 J,B	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-2*																
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.7	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.5	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.3	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.2 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*SW-2*															
Nov-1993	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA	NA	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jan-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-2***															
Apr-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-2***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-2***															
Nov-1993	*ND*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jul-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jun-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Dec-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jan-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-2***															
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.1 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 R	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-2***															
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***SW-3***											
Apr-1995	10.3	10.3	ND	ND	14.4	0.8	ND	6.2	157	18.5	66	19.2	4.1
Apr-1997	ND	15	ND	ND	22	0.35	ND	NA	NA	13	109	35	15
Oct-1997	12	12	0.44	17	4.53	ND	ND	6.7	121	15.4	41	28	10
Apr-1998	43	43	0.25	26	3.22	ND	ND	7.23	212	36.3	140	88	28
Apr-1999	20	20	0.14	ND	103	0.416	ND	6.18	369	13.6	260	51	54
Oct-2000	23	NA	ND	27	39.4	ND	ND	7.2	170.6	21	105	42.5	6.1
Apr-2001	15	NA	ND	12	18.9	0.395	ND	NA	NA	6.13	131	40	3.6
Sep-2001	28	28	0.26	33	35.3	1.38	ND	7.1	318	13.3	123	48	4.3
Mar-2002	88	88	ND	29	187	3.74	ND	7.1	444	61.7	353	210	160
Sep-2002	14	14	ND	ND	29.8	ND	ND	6.4	231	14.6	111	44.1	0.97
Mar-2003	13	13	ND	14	49.1	0.239	ND	5.8	209	14.1	118	34.7	1.6
Oct-2003	26	26	ND	21	47.4	0.398	ND	6.3	268	9	131	51.5	5.5
Apr-2004	15	15	ND	11	53.7	0.49	ND	7.1	252	11.3	130	40.1	3.1
Oct-2004	20	20	ND	18	45.4	0.61	ND	7	179.6	8.04	128	45	3.2
Apr-2005	13	13	ND	12	45.4	0.48	ND	6.5	176	11.5	150	39.1	4.2
Mar-2006	13	13	ND	ND	59.5	0.65	ND	6.7	209	12.1	148	38.2	2.3
Mar-2007	14	14	0.51	11	131	0.56	ND	5.9	544	13.3	220	45.9	2.4
Mar-2008	15	15	0.38	12	104	0.35	ND	6.5	445	12.6	210	40.2	2.2
Mar-2009	13	13	ND	ND	85.8	0.26	ND	6.1	387	9.7	206	39.7	1.1
Apr-2010	21	21	ND	17	62.4	0.44	ND	7.4	359	14.8	157	39.6	2.2
Oct-2010	116	116	ND	45	22.7	0.26	ND	7.4	375	56.3	294	174	7.2
Apr-2011	104	104	ND	38	6.96	ND	ND	8.1	301	46.7	244	65.5	29
Sep-2011	130	130	ND	57	18.4	0.51	0.05	7.3	311	27.5	277	139	17
Mar-2012	20	20	ND	ND	90.2	0.45	0.03	6.3	400	13.8	206	48.1	4.9
Sep-2012	131	131	ND	32.9	17.7	0.304	ND	6.4	440	27.6	258	167	59
Mar-2013	94.2	94.2	ND	93.1	1.78	ND	ND	8.4	323	45.1	196	126	62
Oct-2013	55.2	55.2	0.113 J	46.7	4.53	0.522	ND	7.4	151.7	23.1	172	77	14
Mar-2014	15	15	ND	25	162	0.415	ND	6.2	543	22.2	274	48.3	0.961
Oct-2014	30.8	30.8	ND	21	88.6	0.123	ND	6.9	356	14	201	59.3	4.77
Apr-2015	24.6	24.6	ND	12	107	0.332	ND	6.1	404	17	250	56.5	13
Nov-2015	46.3	46.3	ND	18	108	0.299	ND	7.4	510	15.6	275	98	8.71
May-2016	50.6	50.6	ND	15	100	0.323	ND	6.8	515	18.7	258	87.4	3.36
Oct-2016	81.3	81.3	ND	47	7.37	NA	NA	7.1	332	25.8	213	107	4.26
May-2017	43.8	43.8	ND	14	80.8	0.357	0.132	7	547	23.5	218	82.1	9.94
Oct-2017	30.2	30.2	ND	13	12.2	0.063	ND	6.5	167.7	14.1	74	41.8	10.46
May-2018	30	30	0.045 J	27.2	49.1	ND	ND	5.3	275	25.6	68	62.4	3.76

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness	Turbidity
MCL/GWPS						10	1						
Location ID:		***SW-3***											
Nov-2018	114	114	*ND*	31.5	3	*0.063 J*	*ND*	8.58	313	19.8	63	124	14.8
May-2019	70	*NA*	*ND*	*ND*	71.3	*ND*	*ND*	7.06	433	18.4	228	93.1	10.83
Oct-2019	100	*NA*	*ND*	30.3	53.5	0.11	0.014	7.35	439	17.2	226	131	16.6
May-2020	98	98	*ND*	29.1	4.9	1.2	**0.017 D6D8**	7.61	354	17.4	181	120	8.09
Oct-2020	140	*NA*	*ND*	36.4	*1.8 J*	0.1	*ND*	7.96	380	20.6	146	138	17.1
Apr-2021	100	*NA*	*ND*	27.8	4.1	0.42	*0.0095 J*	9.55	232	12	119	111	9.93

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*SW-3*													
Apr-1995	ND	ND	ND	ND	ND	4.4	NA	ND	ND	ND	0.44	NA	ND	2	NA
Oct-1996	ND	ND	0.037	ND	ND	9.5	8.8	ND	ND	ND	0.7	0.42	ND	2.8	2.8
Apr-1997	ND	ND	0.049	ND	ND	9.1	7.9	ND	ND	ND	1.6	0.34	0.008	2.8	2.5
Oct-1997	ND	ND	0.04	ND	ND	7.1	NA	ND	ND	ND	0.784	NA	ND	2.63	NA
Apr-1998	ND	ND	0.017	ND	ND	27	NA	ND	0.041	ND	1.2	NA	ND	4.94	NA
Apr-1999	ND	ND	0.052	ND	ND	14.3	NA	ND	ND	ND	1.64	NA	ND	3.68	NA
Oct-1999	ND	ND	0.059	ND	ND	11.9	NA	ND	ND	ND	1.18	NA	ND	3.71	NA
Oct-2000	ND	ND	0.038	ND	ND	11.3	NA	ND	ND	ND	0.687	NA	ND	3.49	NA
Apr-2001	ND	ND	0.044	ND	ND	10.4	NA	ND	ND	ND	0.287	NA	ND	3.41	NA
Sep-2001	ND	ND	0.044	ND	ND	13.1	NA	ND	ND	ND	0.495	NA	ND	3.7	NA
Mar-2002	ND	ND	0.043	ND	ND	63.2	NA	ND	ND	ND	0.974	NA	ND	12.7	NA
Sep-2002	ND	ND	0.046	ND	ND	11.8	NA	ND	ND	ND	0.141	NA	ND	3.58	NA
Mar-2003	ND	ND	0.038	ND	ND	9.34	NA	ND	ND	ND	0.171	NA	ND	2.78	NA
Oct-2003	ND	ND	0.049	ND	ND	13.9	NA	ND	ND	ND	1.5	NA	ND	4.04	NA
Apr-2004	ND	ND	0.047	ND	ND	10.5	NA	ND	ND	ND	0.536	NA	ND	3.35	NA
Oct-2004	ND	ND	0.045	ND	ND	11.7	NA	ND	ND	ND	0.28	NA	ND	3.8	NA
Apr-2005	ND	0.003	0.043	ND	ND	10.2	NA	ND	ND	ND	0.411	NA	ND	3.3	NA
Mar-2006	ND	ND	0.051	ND	ND	9.61	NA	ND	ND	ND	0.145	NA	ND	3.46	NA
Mar-2007	ND	ND	0.056	ND	ND	13.2	NA	ND	ND	ND	0.139	NA	ND	3.62	NA
Mar-2008	ND	ND	0.046	ND	ND	10.5	NA	ND	ND	ND	0.161	NA	ND	3.39	NA
Mar-2009	ND	ND	0.045	ND	ND	10.3	NA	ND	ND	ND	0.124	NA	ND	3.4	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-3***													
Apr-2010	ND	ND	0.044	ND	ND	10.8	NA	ND	ND	ND	0.39	NA	ND	3.05	NA
Oct-2010	ND	ND	0.023	ND	ND	55.6	NA	ND	ND	ND	0.251	NA	ND	8.88	NA
Apr-2011	ND	ND	ND	ND	ND	43.2	NA	ND	ND	ND	0.695	NA	ND	6.06	NA
Sep-2011	ND	0.003	0.026	ND	ND	44	NA	ND	ND	ND	0.298	NA	ND	7.07	NA
Mar-2012	ND	ND	0.061	ND	ND	12.5	NA	ND	ND	ND	0.639	NA	ND	4.11	NA
Sep-2012	ND	ND	0.0583 J	ND	ND	53.8	NA	0.0111 J	0.011 J	0.009 J	2.96	NA	ND	8.01	NA
Mar-2013	ND	0.0012 J	0.293	0.000214 J	ND	40.5	NA	0.0029 J	0.0112	0.0044 J	0.811	NA	0.0022	5.97	NA
Oct-2013	0.000514 J	ND	0.0183	ND	ND	25.6	NA	0.0053 J	0.0024 J	0.0056 J	0.67	NA	0.000659 J	3.17	NA
Mar-2014	0.000334 J	ND	0.0506	ND	ND	12.4	NA	0.000922 J	0.0029 J	0.000955 J	0.116	NA	ND	4.23	NA
Oct-2014	0.000416 J	0.000399 J	0.0703	ND	ND	15.5	NA	0.000492 J	0.0042 J	0.000492 J	0.469	NA	ND	5.02	NA
Apr-2015	0.000671 J	0.0004 J	0.0576	ND	ND	15.2	NA	0.000947 J	0.0028 J	0.0014 J	0.557	NA	0.000675 J	4.48	NA
Nov-2015	0.000352 J	0.000599 J	0.0701	ND	ND	28.8	NA	0.000715 J	0.0065 J	0.000868 J	0.758	NA	0.000331 J	6.3	NA
May-2016	ND	0.0006 J	0.059	ND	ND	25	NA	ND	0.0006 J	0.0005 J	0.255	NA	0.00017 J	6.09	NA
Oct-2016	ND	0.0012 J	0.0232	ND	ND	35.3	NA	0.00086 J	0.0012	0.0052	0.395	NA	0.00022 J	4.56	NA
May-2017	ND	ND	0.0512	ND	ND	23.2	NA	0.0012 J,B	0.0061	ND	0.773	NA	0.00012 J	5.88	NA
Oct-2017	ND	ND	0.0392	ND	ND	11	NA	ND	0.0044	ND	1.14	NA	0.00027 J	3.46	NA
May-2018	0.00011 J	ND	0.045	ND	ND	16.8	NA	0.0029 J	0.0017	0.0018 JB	0.39	NA	0.000067 J	4.9	NA
Nov-2018	0.00036 J	ND	0.02	0.00011 J	0.000033 J	41.4	NA	0.0025 J	0.0011	0.0048	0.35	NA	0.00035 J	5	NA
May-2019	ND	ND	0.027	ND	ND	28.1	NA	ND	0.0018	0.0021	0.38	NA	ND	5.6	NA
Oct-2019	0.00018 J	0.00054 J	0.063	ND	0.00023 J	39.9	NA	0.0023 J	0.0021	0.0051	0.85	NA	0.00082 J	7.6	NA
May-2020	0.00017 J	0.00019 J	0.028	ND	ND	35.4	NA	0.0042 J	0.00057	0.0039	0.2	NA	ND	7.7	NA
Oct-2020	0.00026 J	ND	0.033	ND	ND	42.9	NA	0.0092 J	0.00046 J	ND	0.26	NA	ND	7.6	NA
Apr-2021	ND	ND	0.023	0.00018 J	ND	31.7	NA	0.00079 J	ND	0.0027 J	0.33	NA	ND	7.7	NA

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*SW-3*												
Apr-1995	0.1	NA	ND	ND	1.2	NA	ND	ND	4.6	NA	ND	ND	0.04
Oct-1996	0.045	0.027	NA	ND	ND	ND	ND	ND	7.8	8	ND	ND	0.23
Apr-1997	0.047	ND	ND	ND	2.3	2.3	ND	ND	11	11	ND	ND	0.028
Oct-1997	0.038	NA	NA	ND	1.85	NA	ND	ND	10.4	NA	ND	ND	ND
Apr-1998	0.295	NA	**0.102**	3.58	ND	NA	ND	2.21	ND	NA	ND	0.248	NA
Apr-1999	0.028	NA	NA	ND	4.72	NA	ND	ND	49.2	NA	ND	ND	0.014
Oct-1999	0.083	NA	NA	0.013	3.49	NA	ND	ND	15.2	NA	ND	ND	ND
Oct-2000	0.026	NA	NA	ND	2.76	NA	ND	ND	19.9	NA	ND	ND	ND
Apr-2001	0.022	NA	NA	ND	2.5	NA	ND	ND	24.9	NA	ND	ND	ND
Sep-2001	0.03	NA	NA	ND	2.7	NA	ND	ND	21.5	NA	ND	ND	ND
Mar-2002	0.128	NA	NA	0.028	10.8	NA	ND	ND	7.24	NA	ND	ND	0.045
Sep-2002	0.011	NA	NA	ND	3.09	NA	ND	ND	19.4	NA	ND	ND	ND
Mar-2003	ND	NA	NA	ND	2.84	NA	ND	ND	31.3	NA	ND	ND	0.013
Oct-2003	0.075	NA	NA	ND	2.35	NA	ND	ND	26.4	NA	ND	ND	0.014
Apr-2004	0.025	NA	ND	ND	2.26	NA	ND	ND	33.2	NA	ND	ND	0.016
Oct-2004	0.011	NA	ND	ND	3.49	NA	ND	ND	27.4	NA	ND	ND	ND
Apr-2005	0.028	NA	ND	ND	2.15	NA	ND	ND	28.9	NA	ND	ND	ND
Mar-2006	ND	NA	ND	ND	1.94	NA	ND	ND	29.4	NA	ND	ND	ND
Mar-2007	0.018	NA	ND	ND	2.15	NA	ND	ND	67.7	NA	ND	ND	ND
Mar-2008	0.012	NA	ND	ND	2.18	NA	ND	ND	54.1	NA	ND	ND	ND
Mar-2009	ND	NA	ND	ND	2.21	NA	ND	ND	46.4	NA	ND	ND	ND
Apr-2010	0.022	NA	ND	ND	2.32	NA	ND	ND	31	NA	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-3***												
Oct-2010	0.021	NA	ND	ND	13.1	NA	ND	ND	14	NA	ND	ND	ND
Apr-2011	0.125	NA	ND	0.026	3.67	NA	ND	ND	4.63	NA	ND	ND	0.023
Sep-2011	0.029	NA	ND	ND	13.4	NA	ND	ND	13.8	NA	ND	0.01	ND
Mar-2012	0.042	NA	ND	ND	3.44	NA	ND	ND	48.2	NA	ND	ND	ND
Sep-2012	0.237	NA	ND	0.0209 J	18.5	NA	ND	ND	13.2	NA	ND	ND	0.0519 J
Mar-2013	0.0573	NA	0.000088 J	0.0265	3.23	NA	ND	0.000031 J	2.2	NA	ND	0.0043 J	0.0718
Oct-2013	0.0343	NA	ND	0.0114	6.69	NA	ND	0.000019 J	2.15	NA	ND	0.00094 J	0.0261
Mar-2014	0.115	NA	ND	0.0015 J	2.81	NA	ND	ND	74.8	NA	ND	ND	0.0064 J
Oct-2014	0.219	NA	ND	0.0022 J	4.18	NA	0.000787 J	ND	44.4	NA	ND	ND	0.0051 J
Apr-2015	0.136	NA	ND	0.0022 J	3.19	NA	ND	ND	61.8	NA	ND	0.0011 J	0.0093 J
Nov-2015	0.333	NA	ND	0.0024 J	4.25	NA	0.000606 J	ND	61.7	NA	0.000161 J	0.000718 J	0.0035 J
May-2016	0.0913	NA	ND	0.0015 J	3.04	NA	ND	ND	55.5	NA	ND	0.00025 J	0.0152 J
Oct-2016	0.0153	NA	ND	0.0162	9.17	NA	ND	ND	4.53	NA	ND	0.002	0.0073 J
May-2017	0.532	NA	ND	0.0011 J,B	2.76	NA	ND	ND	42.5	NA	ND	ND	ND
Oct-2017	0.45	NA	ND	ND	2.67	NA	ND	ND	8.68	NA	ND	0.00042 J	ND
May-2018	0.35	NA	ND	0.0019	2.1 J	NA	0.00066 JB	ND	27.6	NA	ND	0.0048	0.0035 JB
Nov-2018	0.015	NA	ND	0.014	2.9 J	NA	0.00014 J	ND	1.6 J	NA	ND	0.0047	0.013
May-2019	0.08	NA	ND	0.0044	ND	NA	ND	ND	40.1	NA	ND	0.0068	0.0067
Oct-2019	0.37	NA	ND	0.003	5.8	NA	0.00055 J	ND	31.4	NA	ND	0.0046	0.013
May-2020	0.015	NA	ND	0.0022	5.5	NA	ND	ND	5.1	NA	ND	0.0014	0.003 J
Oct-2020	0.01	NA	ND	0.0043	5.5	NA	ND	ND	2.6 J	NA	ND	0.0056	ND
Apr-2021	0.0095	NA	ND	0.0018 J	4.4	NA	ND	ND	4.2	NA	ND	0.0021 J	0.0033 J

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-3*																
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7 J	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-3*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.15 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.65 J	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.47 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.14 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.25 J,B	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3 J	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.4	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6 J	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.1 JBIH	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-3*																
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	10	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*SW-3*															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-3***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-3***															
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-3***															
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jul-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jun-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Dec-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

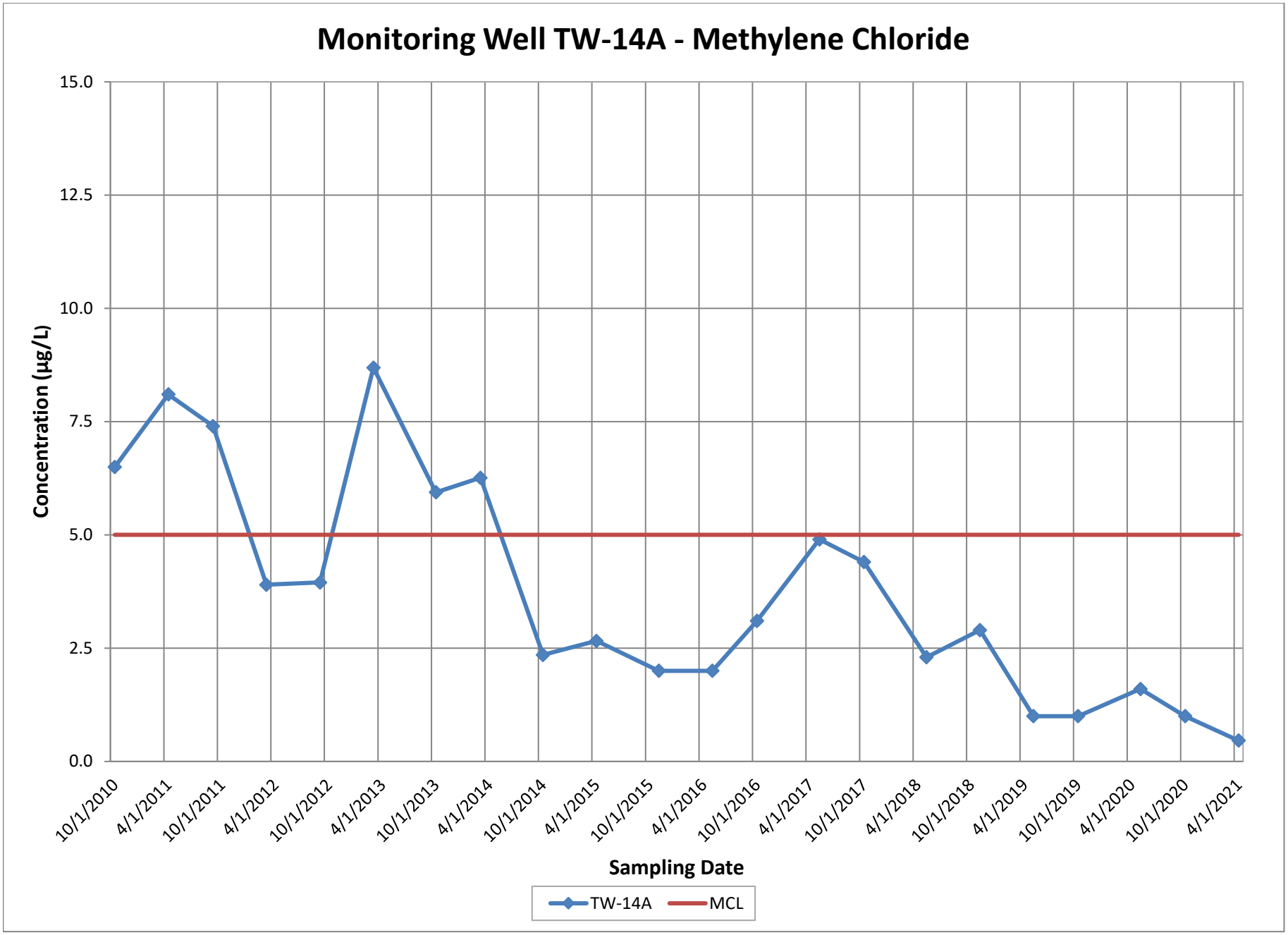
Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-3***															
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.5 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 R	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

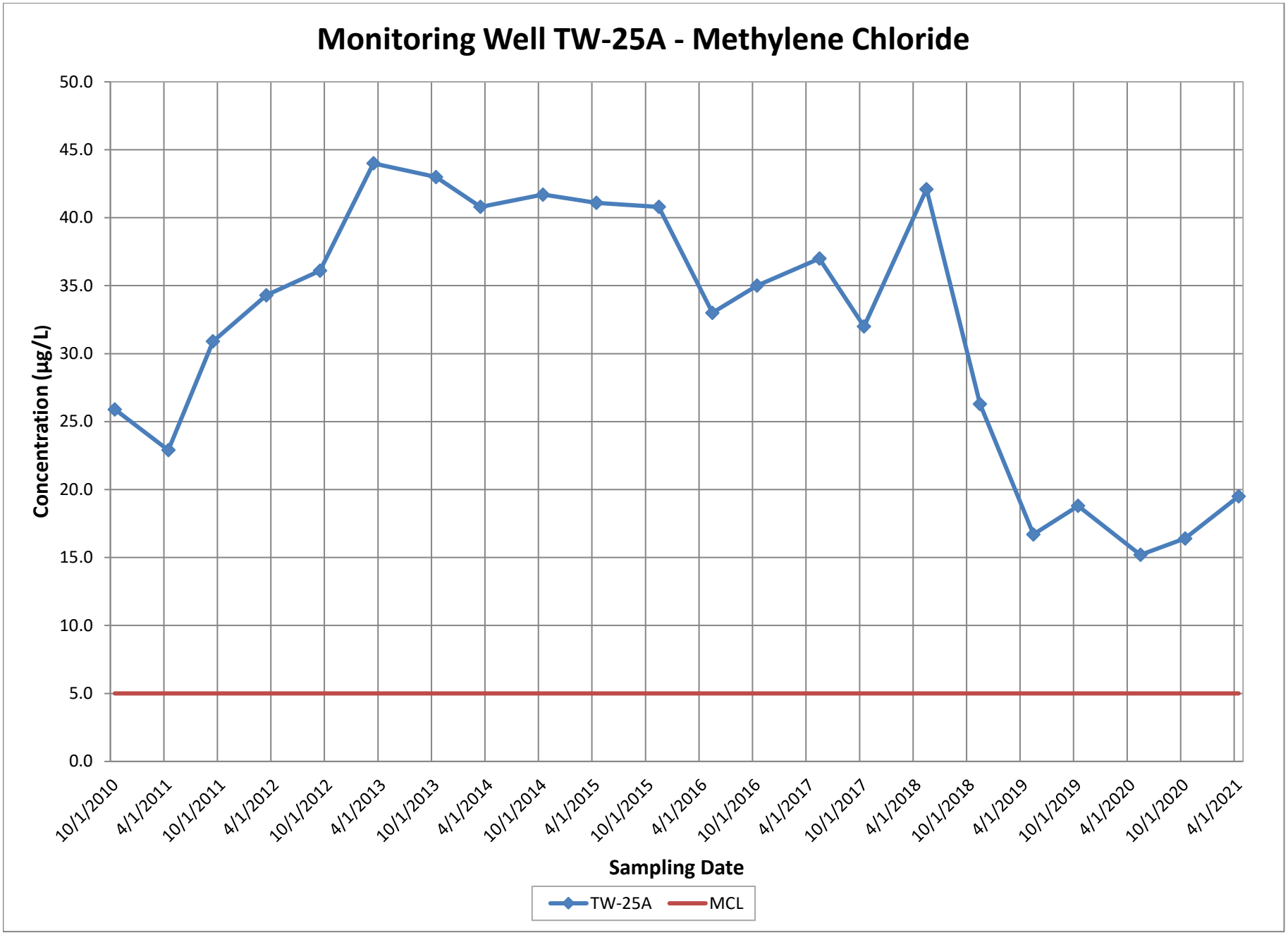
MCLs and Results are in ug/L unless indicated otherwise

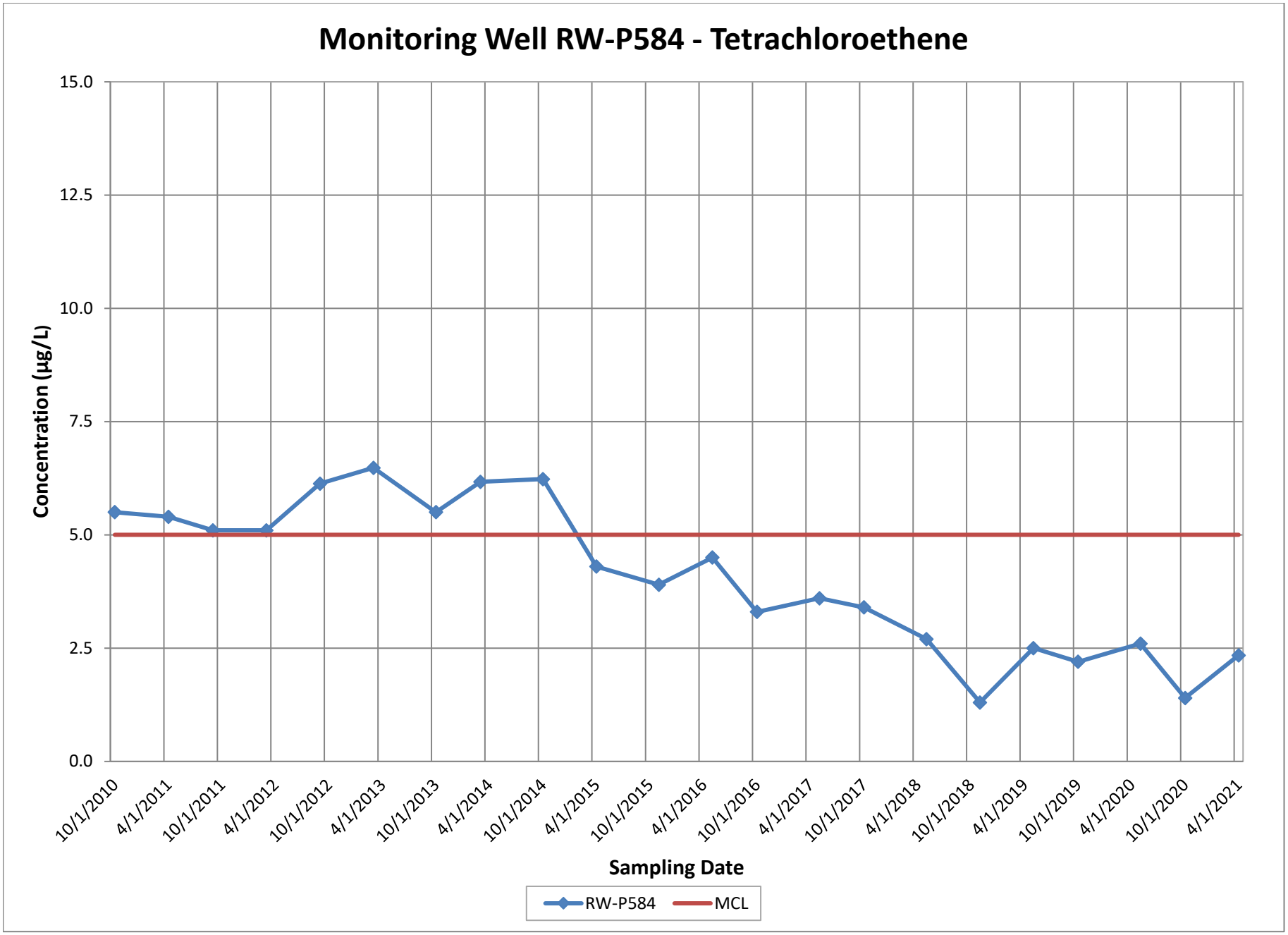
Event Date	Ethyl Benzene	Iodomethane	mp-Xylene	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-3***															
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

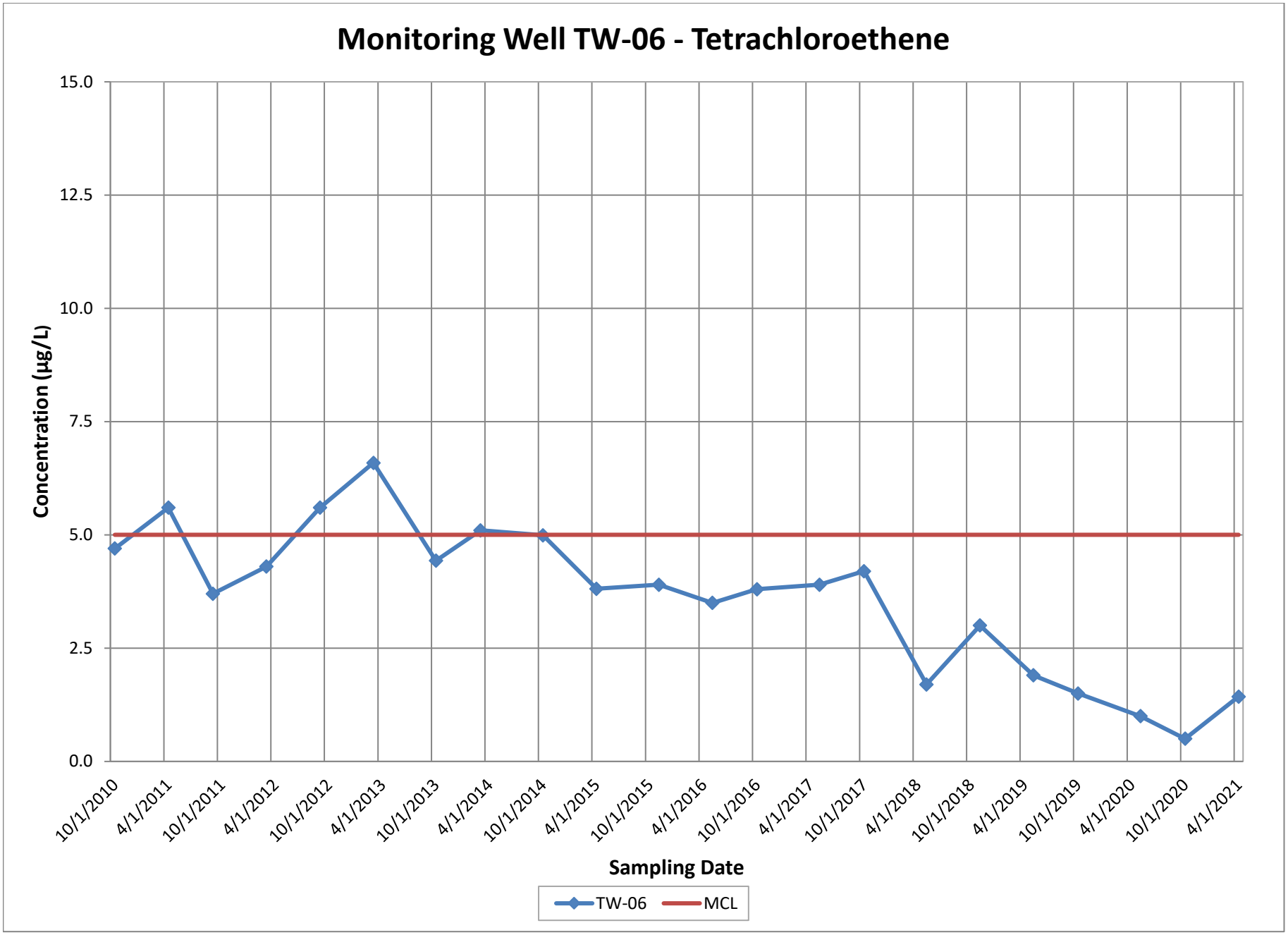
MCLs and Results are in ug/L unless indicated otherwise

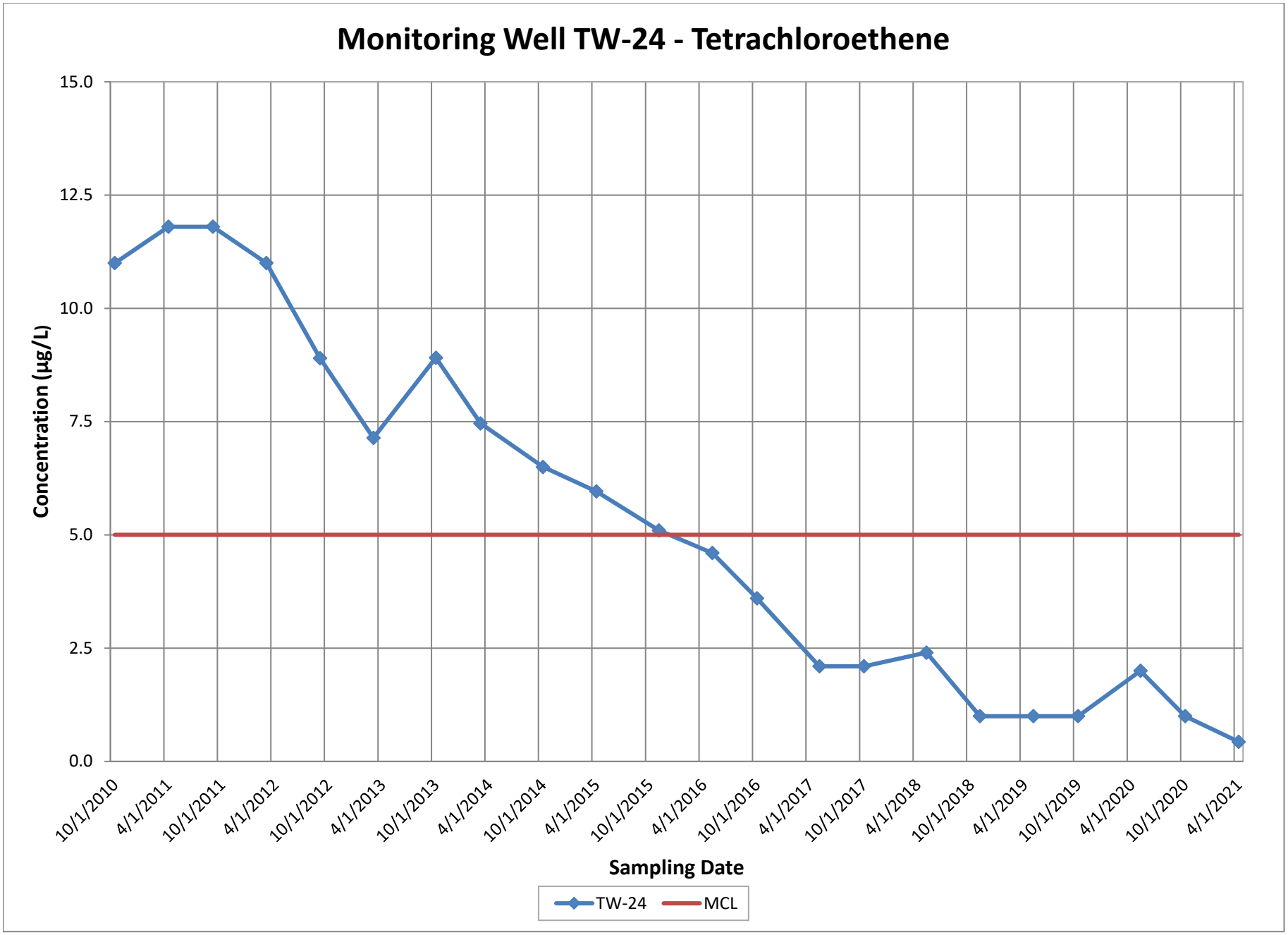
APPENDIX B
Historical MCL Exceedance
Time-Series Plots

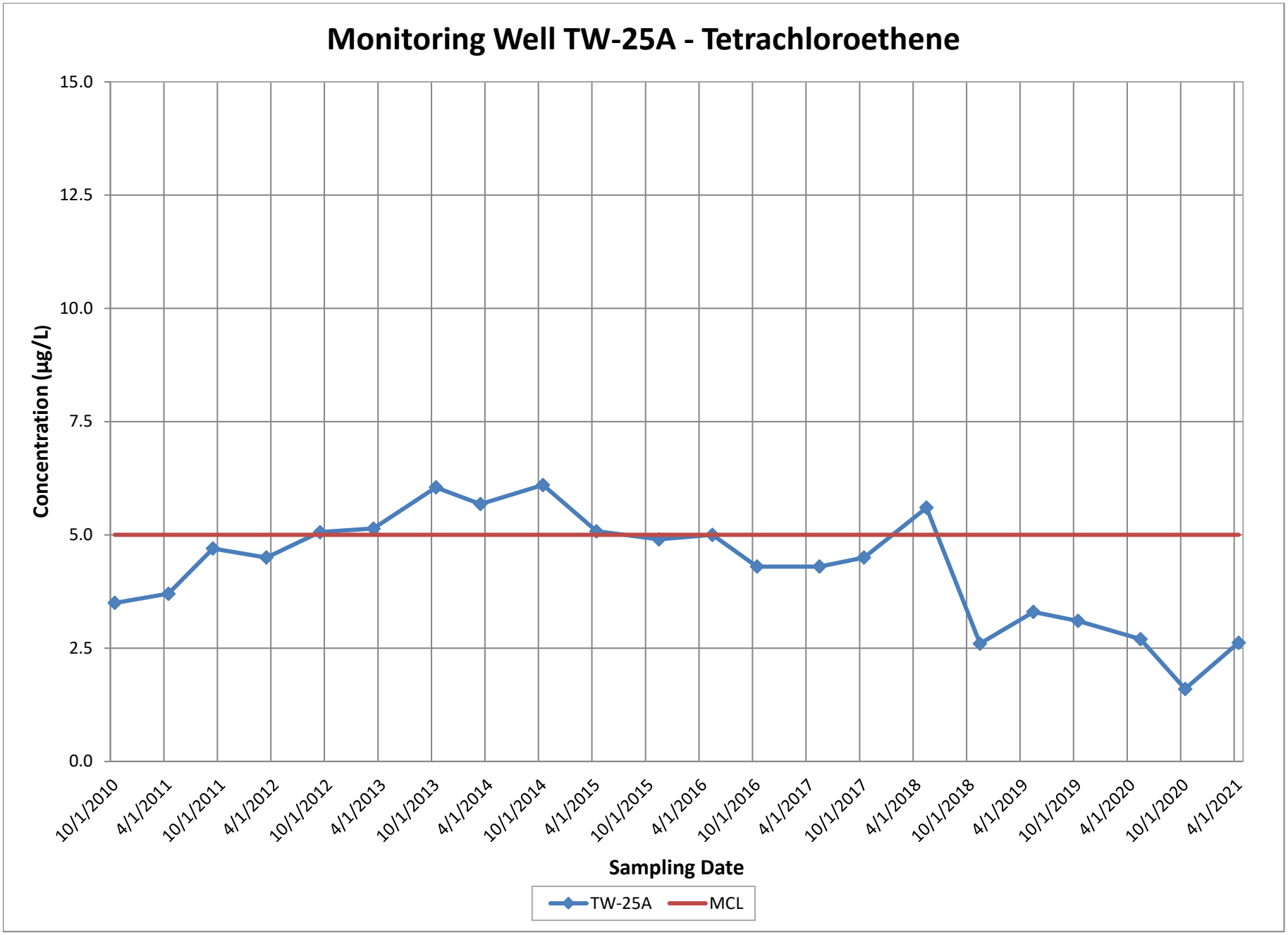

Monitoring Well TW-14A - Methylene Chloride
15.0
12.5
10.0
7.5
5.0
2.5
0.0
Concentration (µg/L)
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
Sampling Date
TW-14A
MCL

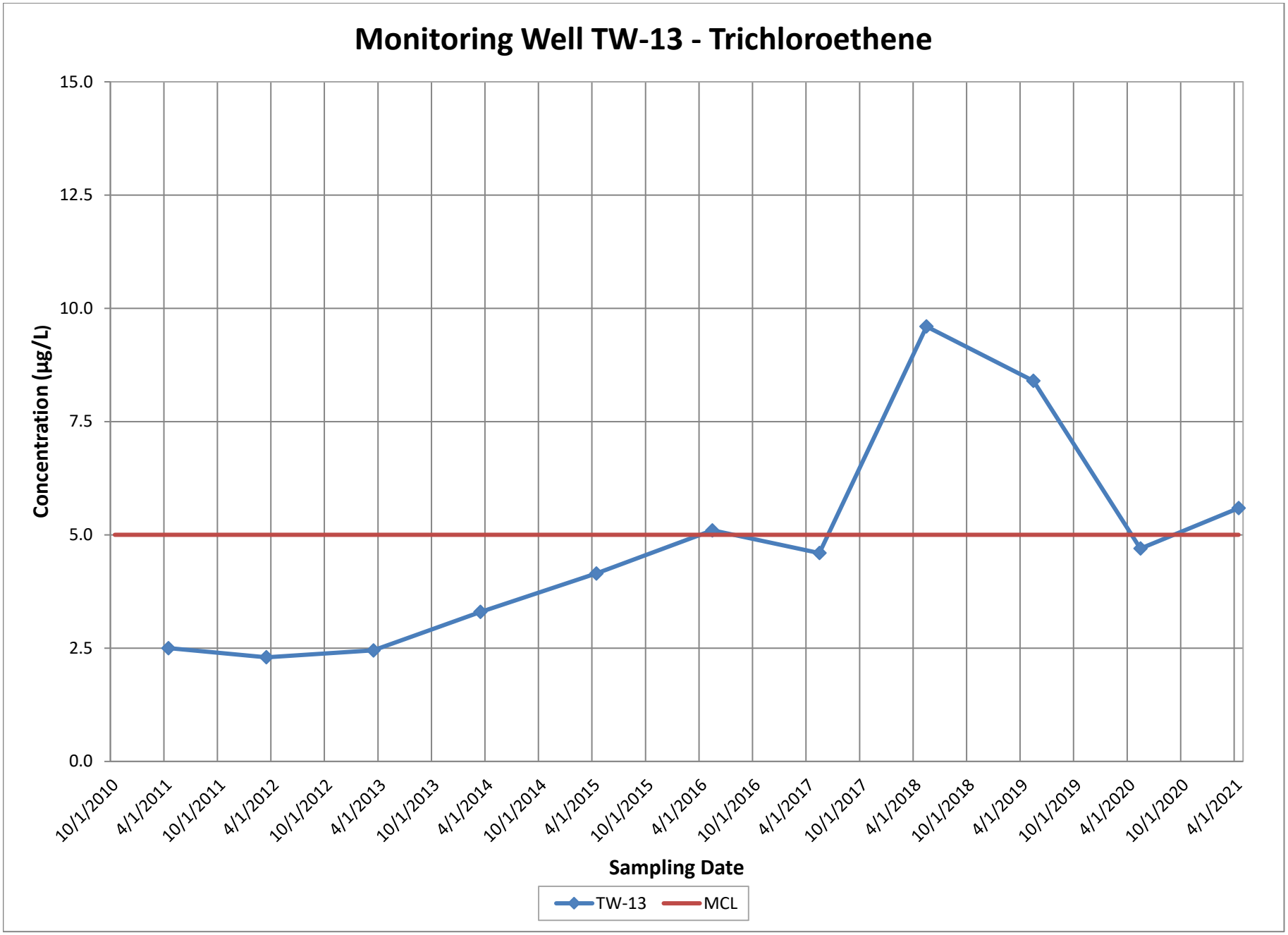

Monitoring Well TW-25A - Methylene Chloride
Concentration (µg/L)
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
Sampling Date
TW-25A
MCL

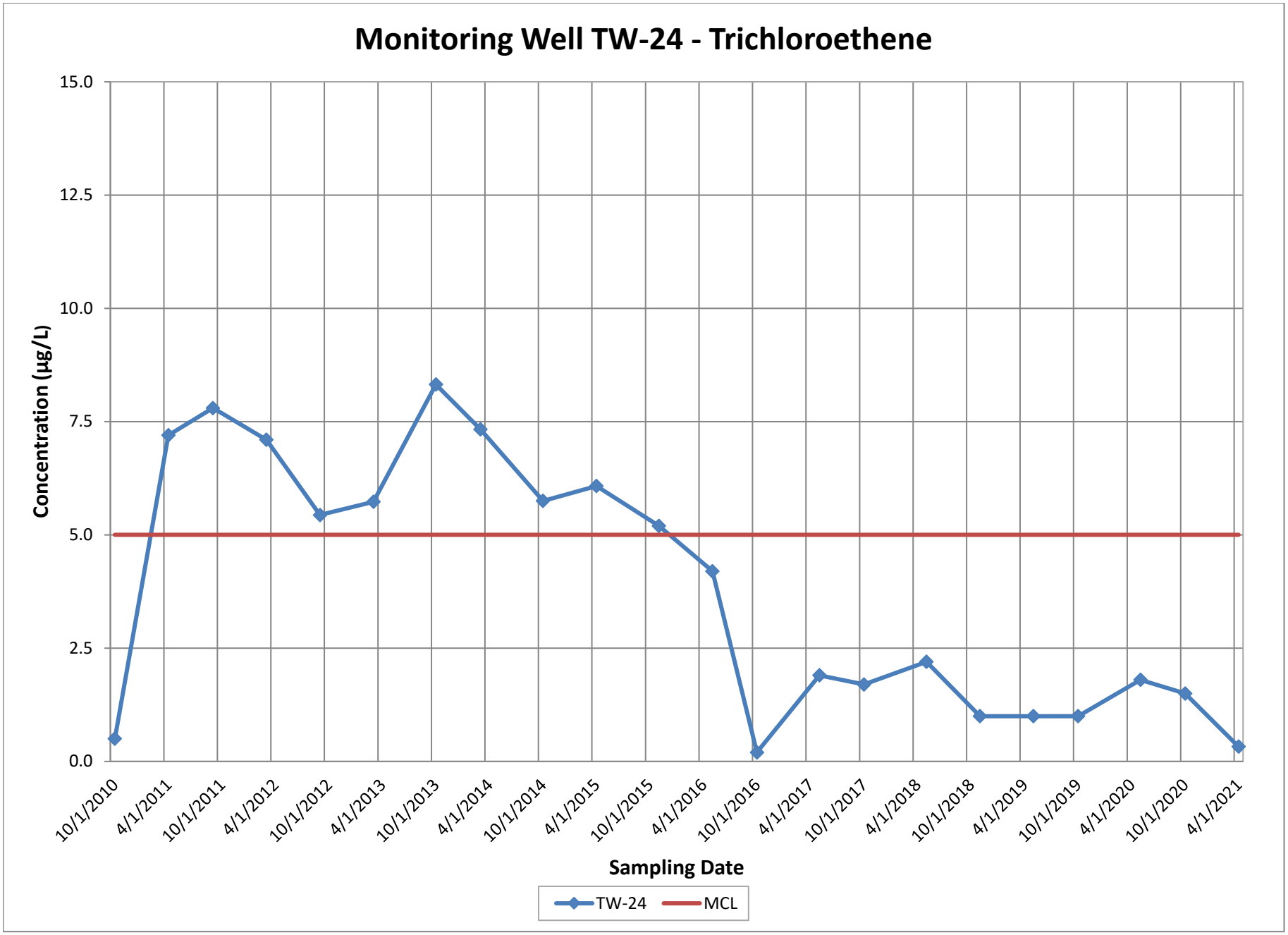

Monitoring Well RW-P584 - Tetrachloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
Sampling Date
RW-P584
MCL

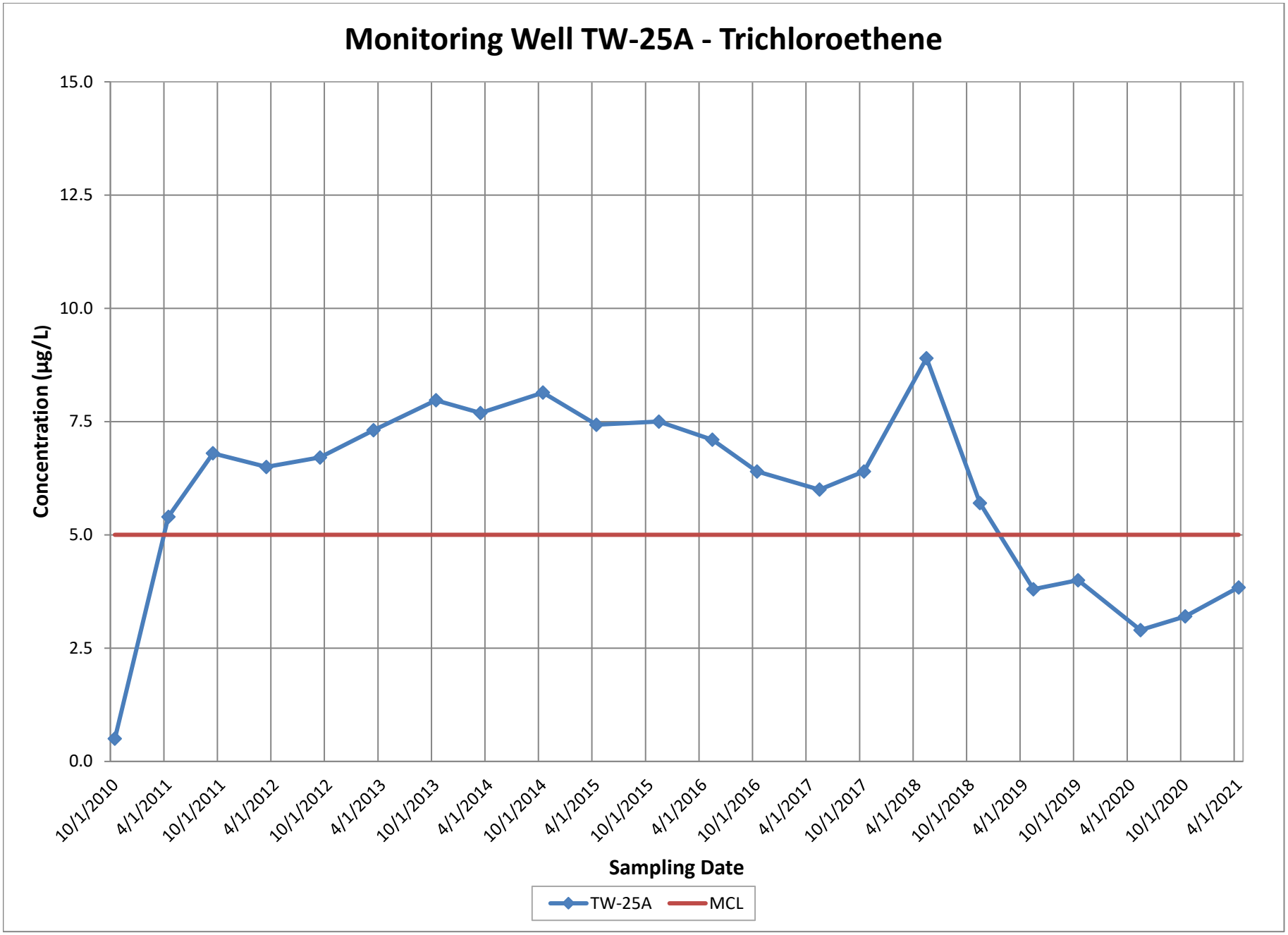

Monitoring Well TW-06 - Tetrachloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
Sampling Date
TW-06
MCL

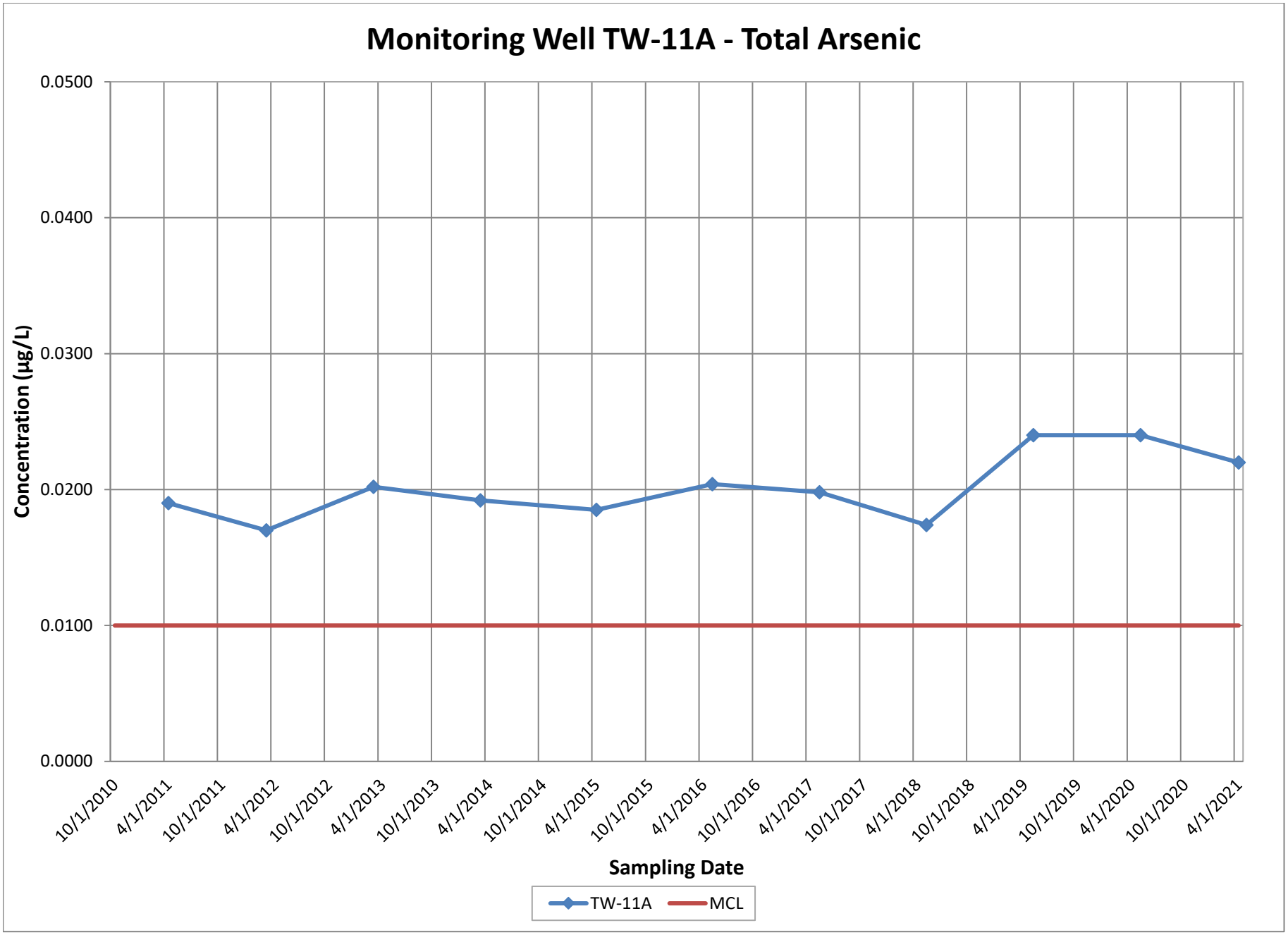

Monitoring Well TW-24 - Tetrachloroethene
15.0
12.5
10.0
7.5
5.0
2.5
0.0
Concentration (µg/L)
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
Sampling Date
TW-24
MCL

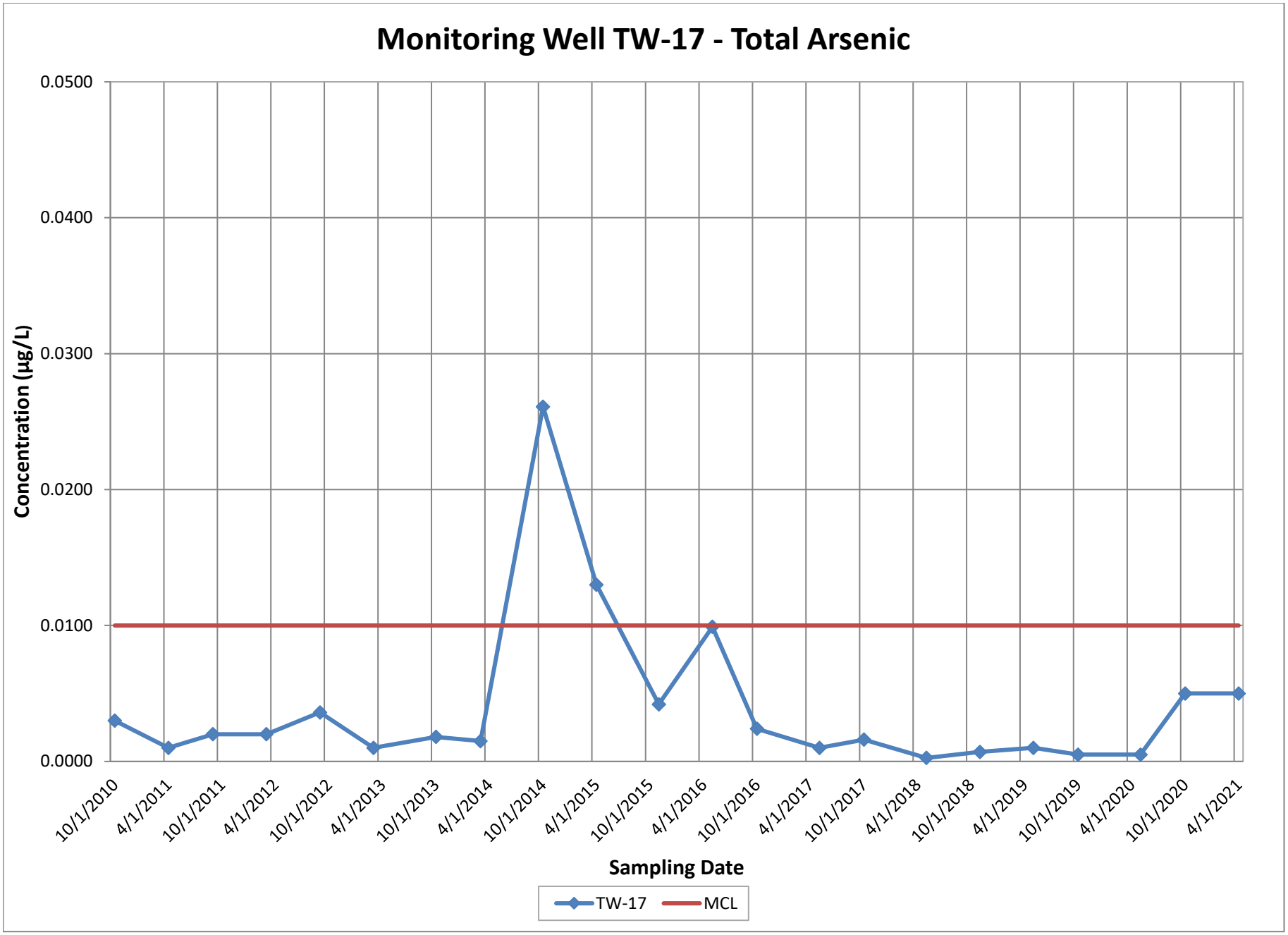

Monitoring Well TW-25A - Tetrachloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
Sampling Date
TW-25A
MCL

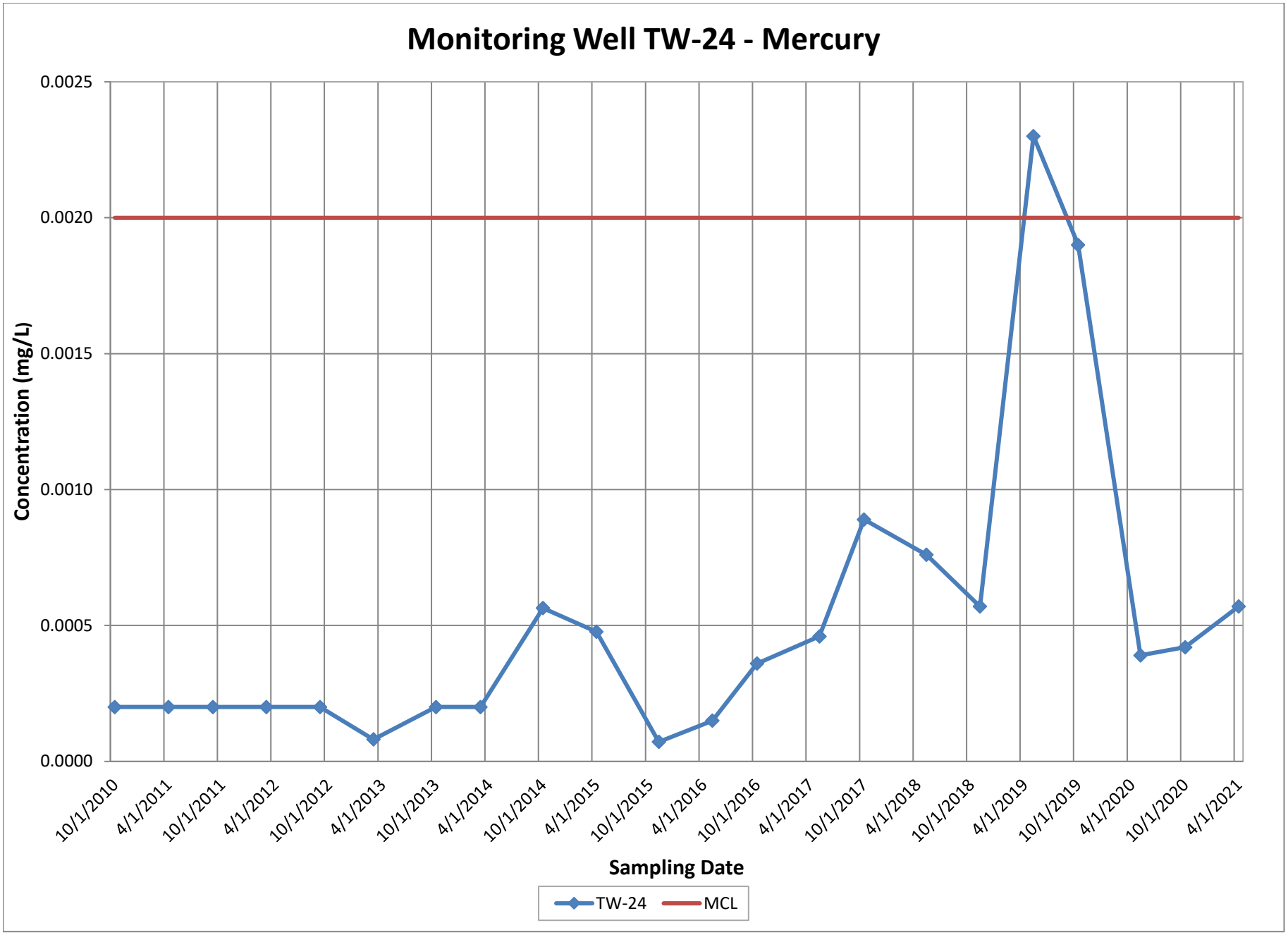

Monitoring Well TW-13 - Trichloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
Sampling Date
TW-13
MCL

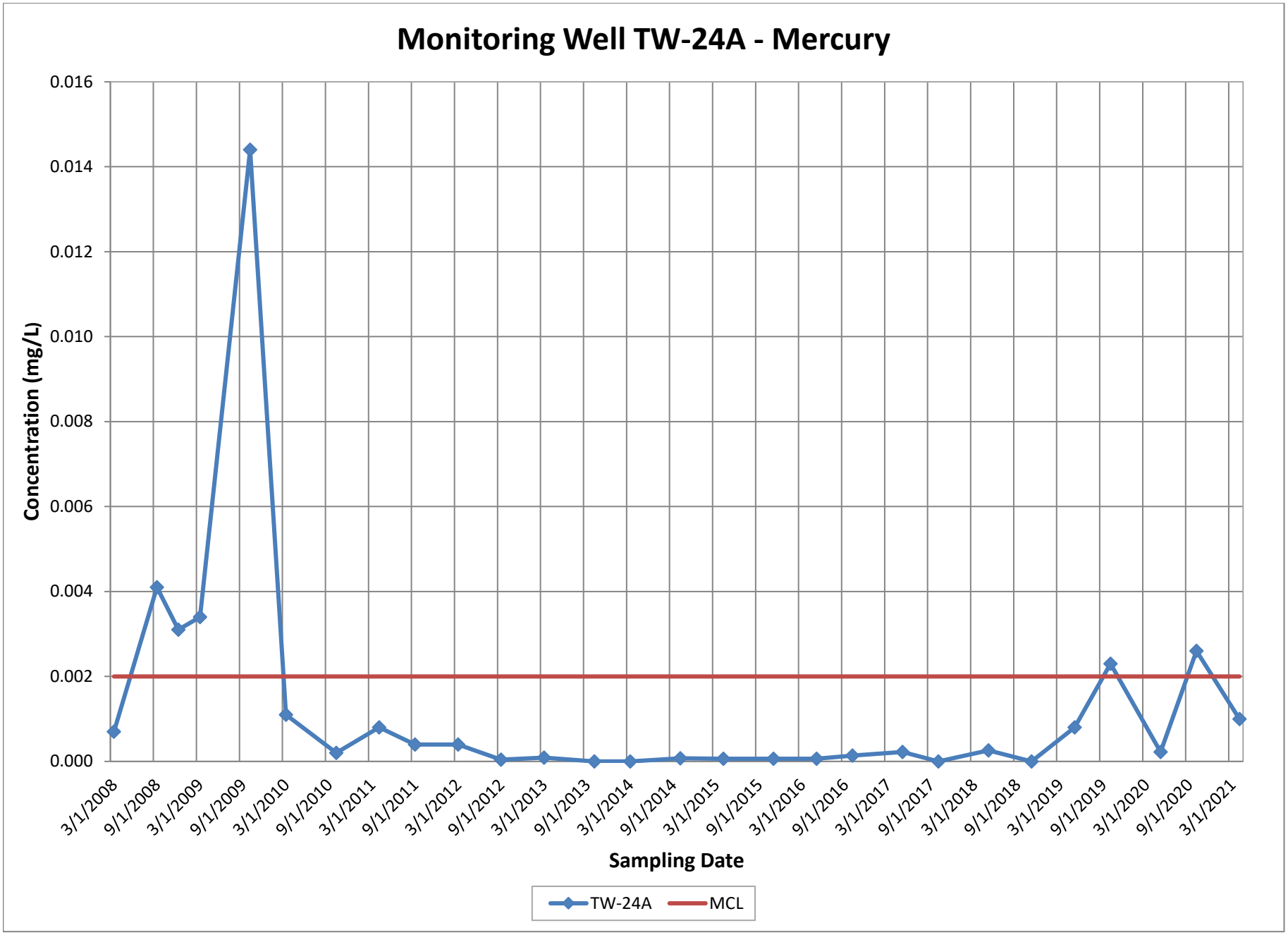

Monitoring Well TW-24 - Trichloroethene
15.0
12.5
10.0
7.5
5.0
2.5
0.0
Concentration (µg/L)
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
Sampling Date
TW-24
MCL

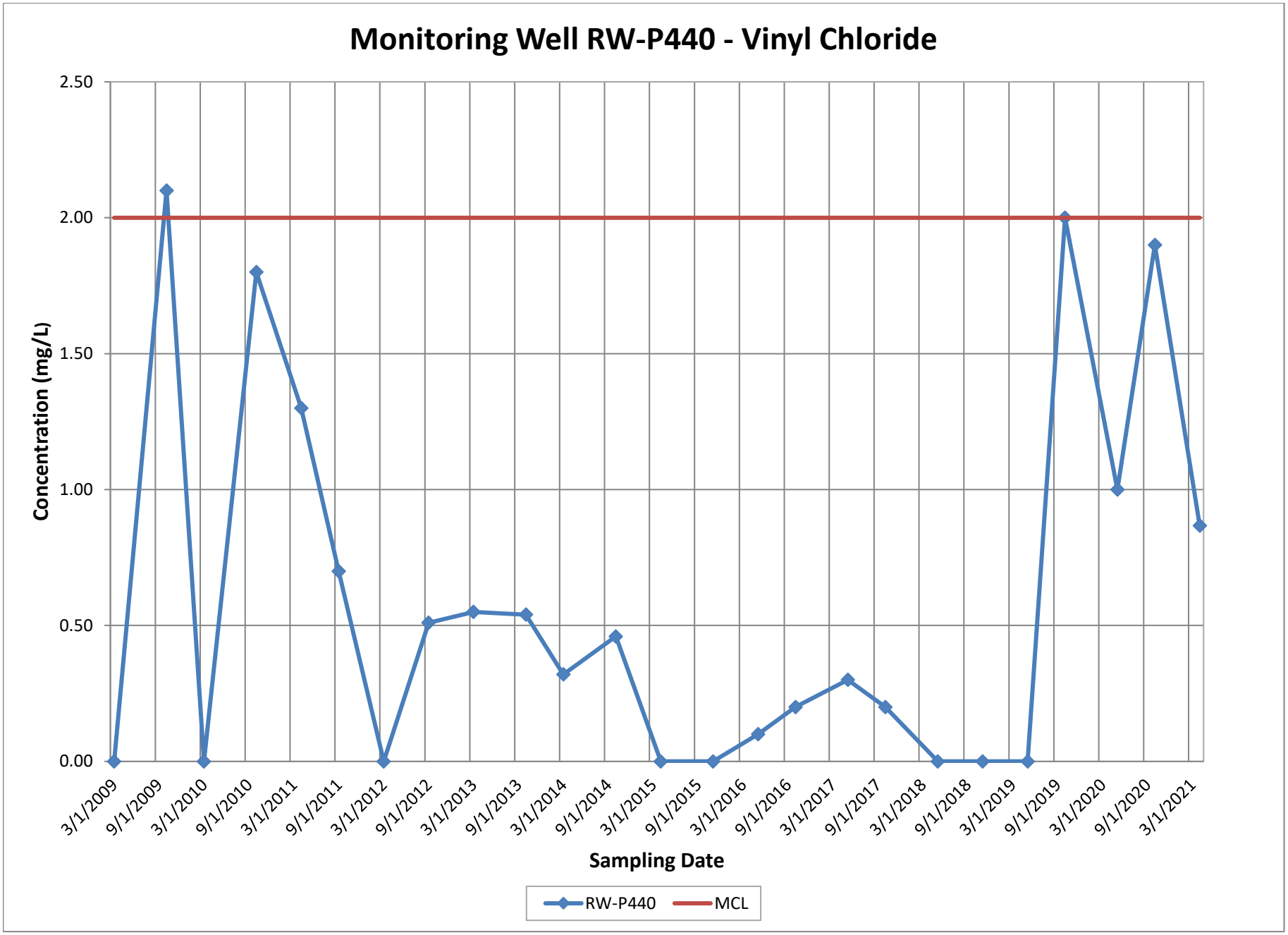

Monitoring Well TW-25A - Trichloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
Sampling Date
TW-25A
MCL

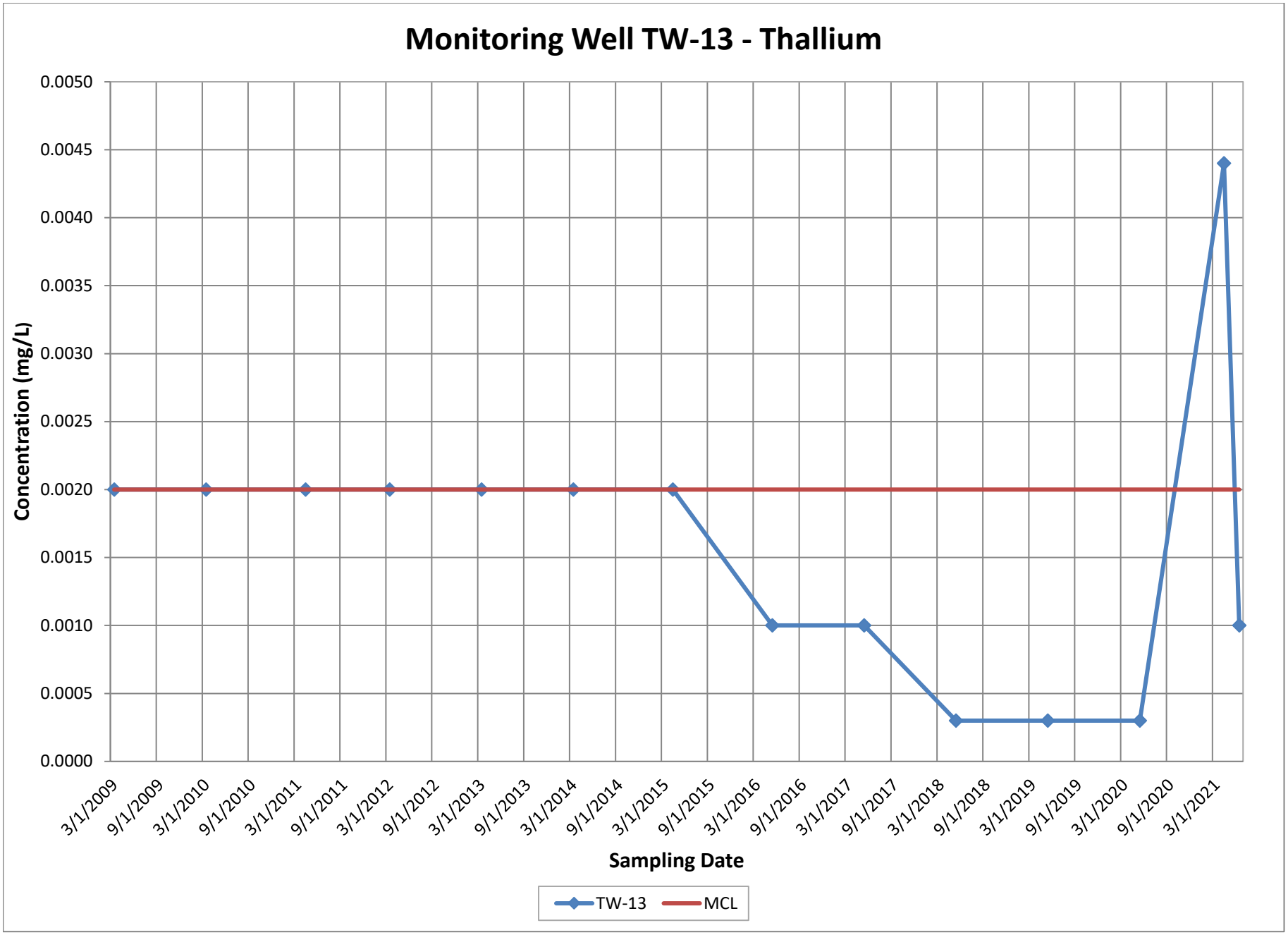

Monitoring Well TW-11A - Total Arsenic
Concentration (µg/L)
0.0500
0.0400
0.0300
0.0200
0.0100
0.0000
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
Sampling Date
TW-11A
MCL


Monitoring Well TW-17 - Total Arsenic
Concentration (µg/L)
0.0500
0.0400
0.0300
0.0200
0.0100
0.0000
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
Sampling Date
TW-17
MCL

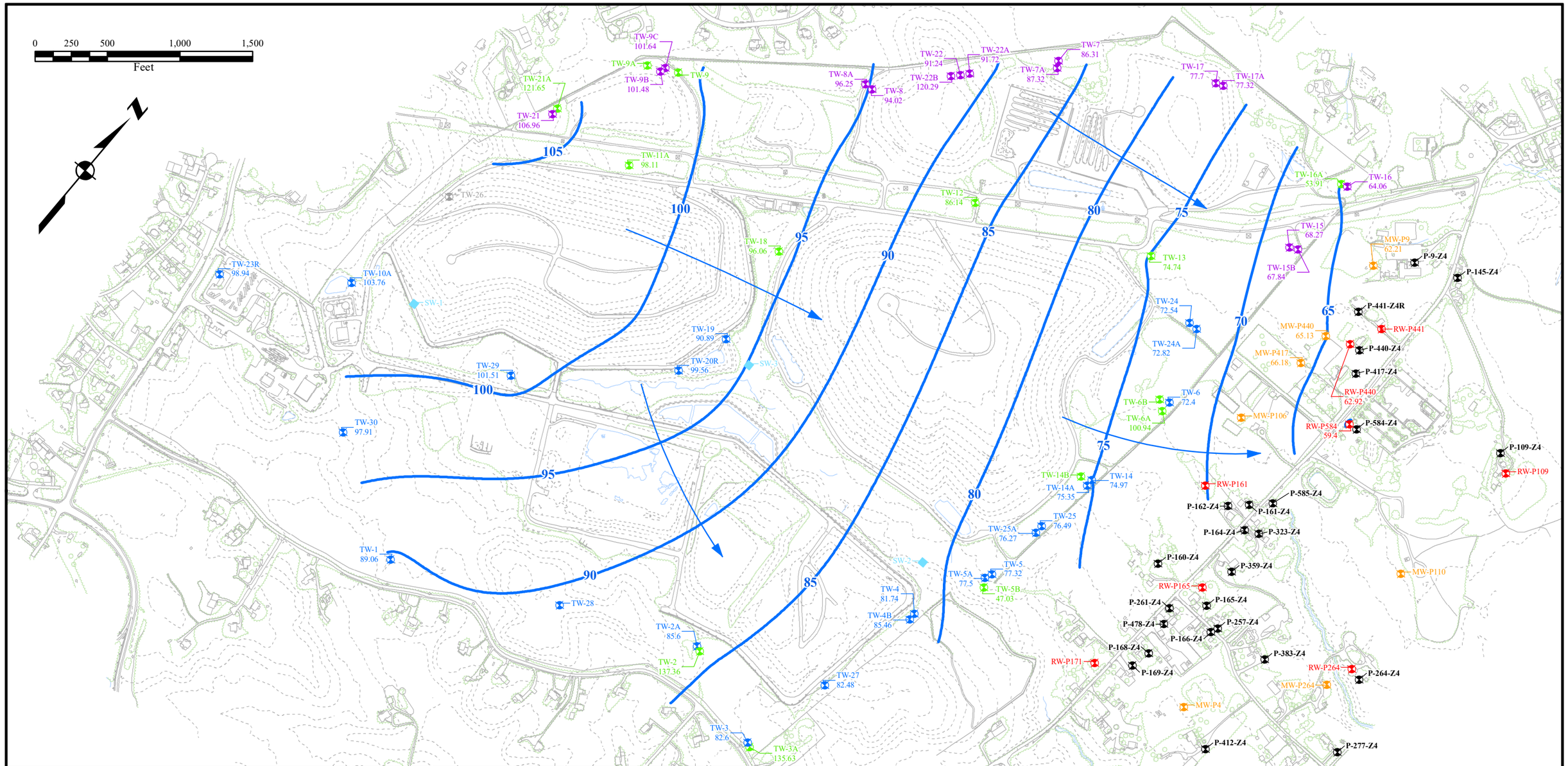

Monitoring Well TW-24 - Mercury
Concentration (mg/L)
0.0025
0.0020
0.0015
0.0010
0.0005
0.0000
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
Sampling Date
TW-24
MCL


Monitoring Well TW-24A - Mercury
Concentration (mg/L)
0.016
0.014
0.012
0.010
0.008
0.006
0.004
0.002
0.000
3/1/2008
9/1/2008
3/1/2009
9/1/2009
3/1/2010
9/1/2010
3/1/2011
9/1/2011
3/1/2012
9/1/2012
3/1/2013
9/1/2013
3/1/2014
9/1/2014
3/1/2015
9/1/2015
3/1/2016
9/1/2016
3/1/2017
9/1/2017
3/1/2018
9/1/2018
3/1/2019
9/1/2019
3/1/2020
9/1/2020
3/1/2021
Sampling Date
TW-24A
MCL


Monitoring Well RW-P440 - Vinyl Chloride
Concentration (mg/L)
2.50
2.00
1.50
1.00
0.50
0.00
3/1/2009
9/1/2009
3/1/2010
9/1/2010
3/1/2011
9/1/2011
3/1/2012
9/1/2012
3/1/2013
9/1/2013
3/1/2014
9/1/2014
3/1/2015
9/1/2015
3/1/2016
9/1/2016
3/1/2017
9/1/2017
3/1/2018
9/1/2018
3/1/2019
9/1/2019
3/1/2020
9/1/2020
3/1/2021
Sampling Date
RW-P440
MCL


Monitoring Well TW-13 - Thallium
Concentration (mg/L)
0.0050
0.0045
0.0040
0.0035
0.0030
0.0025
0.0020
0.0015
0.0010
0.0005
0.0000
3/1/2009
9/1/2009
3/1/2010
9/1/2010
3/1/2011
9/1/2011
3/1/2012
9/1/2012
3/1/2013
9/1/2013
3/1/2014
9/1/2014
3/1/2015
9/1/2015
3/1/2016
9/1/2016
3/1/2017
9/1/2017
3/1/2018
9/1/2018
3/1/2019
9/1/2019
3/1/2020
9/1/2020
3/1/2021
Sampling Date
TW-13
MCL

APPENDIX C
Groundwater Elevations



LEGEND

TW-1 89.06	WELL NAME, GROUNDWATER ELEVATION (FT AMSL)
TW-30	ONSITE REGULATED MONITORING WELL (SUBTITLE D)
SW-1	SURFACE WATER SAMPLE LOCATION
TW-26	ONSITE REGULATED MONITORING WELL (RPD)
TW-06	ONSITE REGULATED MONITORING WELL (COMAR)
TW-02	ONSITE NON-REGULATED MONITORING WELL
MW-417	OFFSITE NON-REGULATED MONITORING WELL
RW-P165	OFFSITE RESIDENTIAL WATER SUPPLY WELL
P-277-Z4	OFFSITE RESIDENTIAL ZONE 4 WELL
90	GROUNDWATER ELEVATION CONTOUR (FT AMSL)
	GROUNDWATER FLOW DIRECTION

GROUNDWATER ELEVATIONS MEASURED APRIL 2021

CONTOURS DEVELOPED BASED ON ZONE 3 WELL GROUND-WATER ELEVATIONS

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ARM Group LLC
Engineers and Scientists

GROUNDWATER CONTOUR MAP

MILLERSVILLE LANDFILL
ANNE ARUNDEL COUNTY, MD

July 2021

20010434

Figure
C-1

P:\Anne Arundel County\20010434 GW & SW Reporting and Consulting\Spring 2021 Reports\GIS\MLF GW Contour Map.mxd

APPENDIX C - MILLERSVILLE LANDFILL GROUNDWATER LEVEL MEASUREMENTS (April 2021)

WELL ID	DATE	MEASURING POINT ELEV. (FEET)	DEPTH TO WATER (FEET)	ELEV. (FEET)
MW-MB	4/29	236.81	138.72	98.09
MW-P106	4/14	107.62	40.78	66.84
MW-P417	4/13	112.75	47.20	65.55
MW-P440	4/13	115.25	49.90	65.35
MW-P9	4/20	112.32	50.40	61.92
N	4/29	195.48	105.25	90.23
P-564	4/29	176.31	98.55	77.76
RW-P440	4/13	117.11	54.47	62.64
RW-P441	4/20	117.58	55.71	61.87
RW-P584	4/13	118.56	59.73	58.83
TW1	4/20	193.42	103.70	89.72
TW10A	4/20	194.52	90.83	103.69
TW10B	4/29	195.96	94.17	101.79
TW11A	4/22	138.52	23.00	115.52
TW12	4/22	141.99	56.09	85.90
TW13	4/22	117.71	43.21	74.50
TW14	4/19	123.07	48.20	74.87
TW14A	4/19	123.26	48.07	75.19
TW15	4/22	116.98	48.66	68.32
TW15B	4/22	116.30	48.44	67.86
TW16	4/26	115.07	50.78	64.29
TW16A	4/26	115.44	60.61	54.83
TW17	4/26	131.99	54.37	77.62
TW17A	4/26	131.55	54.12	77.43
TW18	4/21	128.09	30.74	97.35
TW19	4/21	116.19	21.48	94.71
TW2	4/27	197.71	60.45	137.26
TW20R	4/21	129.97	30.17	99.80
TW21	4/26	158.75	51.83	106.92
TW21A	4/26	158.83	36.71	122.12
TW22	4/26	189.15	98.18	90.97
TW22A	4/26	188.24	97.05	91.19
TW22B	4/26	189.58	71.36	118.22
TW23R	4/20	236.64	138.13	98.51
TW24	4/19	109.19	36.48	72.71
TW24A	4/21	108.69	35.27	73.42
TW25	4/21	117.42	40.58	76.84
TW25A	4/19	117.05	40.32	76.73
TW27	4/27	182.90	99.77	83.13
TW28	4/20	211.73	129.33	82.40

APPENDIX C - MILLERSVILLE LANDFILL GROUNDWATER LEVEL MEASUREMENTS (April 2021)

WELL ID	DATE	MEASURING POINT ELEV. (FEET)	DEPTH TO WATER (FEET)	ELEV. (FEET)
TW29	4/20	143.89	42.40	101.49
TW2A	4/27	197.92	111.87	86.05
TW3	4/27	180.75	97.87	82.88
TW30	4/27	221.00	122.48	98.52
TW31	4/29	186.47	99.96	86.51
TW32	4/20	190.09	71.18	118.91
TW3A	4/27	181.45	45.57	135.88
TW4	4/27	112.56	30.31	82.25
TW4B	4/27	113.60	29.73	83.87
TW5	4/15	104.77	26.83	77.94
TW5A	4/15	105.31	27.03	78.28
TW5B	4/15	103.98	55.64	48.34
TW6	4/19	107.41	34.94	72.47
TW6A	4/21	106.29	8.58	97.71
TW7	4/15	126.85	40.35	86.50
TW7A	4/15	127.56	39.84	87.72
TW8	4/15	139.49	45.54	93.95
TW8A	4/15	139.67	45.48	94.19
TW9	4/22	131.24	72.25	58.99
TW9A	4/29	134.68	5.48	129.20
TW9B	4/22	133.81	32.39	101.42
TW9C	4/22	133.95	32.51	101.44
W	4/29	203.57	113.31	90.26

APPENDIX D
Data Validation

APPENDIX D
LABORATORY DATA VALIDATION

1.1 INTRODUCTION

This document presents the summary of data validation performed on the laboratory analytical data associated with the 1st semi-annual 2021 groundwater monitoring event at the Millersville Landfill and Resource Recovery Facility (MLFRRF) in Anne Arundel County, Maryland. Groundwater samples were collected pursuant to the Annotated Code of Maryland (COMAR) Title 26, Chapter 4; the Code of Federal Regulations (CFR) Title 40, Chapter Part 258; and the MLFRRF Environmental Monitoring Plan (EMP).

Groundwater and surface water sampling for the 1st semi-annual 2021 event was performed on April 13-15, April 19-22, and April 26-27, 2021. Environmental Monitoring and Assessment (EMA), LLC of Lititz, Pennsylvania conducted the sampling. Laboratory analysis for volatile organic compounds (VOCs) and inorganic compounds was performed by Pace Analytical Service (Pace) of Greensburg, Pennsylvania.

Quality Assurance/Quality Control (QA/QC) protocols employed during this event included the analysis of matrix spike (MS) and matrix spike duplicate (MSD) samples, laboratory control samples (LCS), laboratory method blanks, and laboratory preparation blanks. These protocols also included the analysis of two blind duplicate samples obtained from TW-24A (DUP-1) and TW-25 (DUP-2). In addition, the QA/QC protocols included the preparation of seven trip blanks and one field blank.

Samples were analyzed for VOCs, total and dissolved metals, and general chemistry parameters.

1.2 SAMPLE PACKAGE COMPLETENESS AND DELIVERABLES

Chains of custody were present in the data packages for all samples, along with statements from the laboratory attesting to the validity of the data. All requested analyses were accounted for in the data report. Sample receipt forms were present for all samples.

1.3 VOLATILE ORGANIC COMPOUND ANALYSES

1.3.1 General Information

<u>Groundwater Sampling Locations (62):</u>

TW-01, TW-02, TW-02A, TW-03, TW-03A, TW-04, TW-04B, TW-05, TW-05A, TW-05B, TW-06, TW-06A, TW-06B, TW-07, TW-07A, TW-08, TW-08A, TW-09, TW-09B, TW-09C, TW-10A, TW-11A, TW-12, TW-13, TW-14, TW-14A, TW-14B, TW-15, TW-15B, TW-16, TW-16A, TW-17, TW-17A, TW-18, TW-19, TW-20R, TW-21, TW-21A, TW-22, TW-22A,

TW-22B, TW-23R, TW-24, TW-24A, TW-25, TW-25A, TW-27, TW-28, TW-29, TW-30, MW-P-4, MW-P9, MW-P106, MW-P417, MW-P440, RW-P109, RW-P165, RW-P171-1, RW-P264, RW-P440, RW-P441, and RW-P584.

Surface Water Sampling Locations (3):

SW-1, SW-2, and SW-3.

QA/QC Samples:

Field blank, all trip blanks, laboratory control samples, laboratory method blanks, and laboratory MS/MSDs.

1.3.2 **Analytical Method**

The samples were analyzed for VOCs following the United States Environmental Protection Agency (USEPA) Methods 8260B. The target analyte list was that established as Appendix I by 40 CFR Part 258, "Constituents for Detection Monitoring" and Appendix II (40 CFR Part 258) parameters – dichlorodifluoromethane and dichlorofluoromethane, and methyl tertiary-butyl ether (MTBE).

Field and Trip Blanks

One field blank and seven trip blanks were prepared and analyzed for this sampling event. Methylene chloride was detected in the trip blanks for the following work orders: 30415474, 30415797, 30416534, 30417011, 30417486, and 30416762. Concentrations of methylene chloride were flagged with a "B" qualifier in 22 samples (MW-P106, RW-P264, TW-05, TW-05A, TW-05B, TW-07, TW-07A, TW-08, TW-08A, TW-01, TW-28, TW-29, TW-09, TW-09C, TW-12, TW-13, TW-15, TW-15B, TW-18, TW-19, TW-20R, TW-22B) because they had comparable concentrations to the associated trip blank.

Blind Duplicate Samples

The blind duplicate samples were collected from wells TW-24A (DUP-1) and TW-25 (DUP-2). Analyses were performed to calculate the RPD of duplicate samples in obtaining an estimate of laboratory method precision. Table D-1 summarizes the RPD of constituents detected above the RL. The agreement between the detected VOCs in the duplicate and corresponding sample was within QC standards.

Quality Control Sample Review

Quality Control samples for each laboratory report were reviewed to verify proper documentation of any analysis issues. Notable observations from the quality control samples are summarized below.

- Surrogates: For all projects, all surrogates were within quality control limits.
- Method Blanks: For all projects, there were no analytes detected in method blanks.
- Laboratory Control Spike: For all projects, recoveries in the laboratory control samples were within quality control limits, with a few exceptions. For the following projects, recoveries in the laboratory control samples were outside quality control limits: 30415797, 30417486, and 30417711. Proper qualification was added by the laboratory for the associated sample results..
- Matrix Spikes: For all projects, recoveries in matrix spikes and matrix spike duplicates were within quality control limits, with one exception. Project 30415797had matrix spike or matrix spike duplicate recoveries that were outside control limits. Proper qualification was added by the laboratory for the associated sample results.
- Laboratory Duplicate: For all projects, the precision between the sample and laboratory sample duplicate was within control limits. No additional qualification was necessary.

1.4 INORGANIC ANALYSIS

1.4.1 General Information

Groundwater Sampling Locations (62):

TW-01, TW-02, TW-02A, TW-03, TW-03A, TW-04, TW-04B, TW-05, TW-05A, TW-05B, TW-06, TW-06A, TW-06B, TW-07, TW-07A, TW-08, TW-08A, TW-09, TW-09B, TW-09C, TW-10A, TW-11A, TW-12, TW-13, TW-14, TW-14A, TW-14B, TW-15, TW-15B, TW-16, TW-16A, TW-17, TW-17A, TW-18, TW-19, TW-20R, TW-21, TW-21A, TW-22, TW-22A, TW-22B, TW-23R, TW-24, TW-24A, TW-25, TW-25A, TW-27, TW-28, TW-29, TW-30, MW-P106, MW-P4, MW-P417, MW-P440, MW-P9, RW-P109, RW-P165, RW-P171-1, RW-P264, RW-P440, RW-P441, and RW-P584.

Surface Water Sampling Locations (3):

SW-1, SW-2, and SW-3.

QA/QC Samples:

Field Blank, laboratory control samples, laboratory method blanks, laboratory duplicates, and laboratory MS/MSDs.

1.4.2 **Analytical Methods**

On-site samples were analyzed for antimony, arsenic, barium, beryllium, cadmium, calcium (total and dissolved), chromium, cobalt, copper, iron (total and dissolved), lead, magnesium (total and dissolved), manganese (total and dissolved), mercury, nickel, potassium (total and dissolved), selenium, silver, sodium (total and dissolved), thallium, vanadium, and zinc using the Inductively Coupled Plasma Optical Emission Spectrometry/Mass Spectrometer (ICP/MS) (USEPA Method 6010B). Mercury was analyzed using the Cold Vapor Atomic Absorption Spectrometry method (CVAA) (USEPA Method 7470A).

Additionally, samples were analyzed for chloride (Standard Method [SM]4500CIE), nitrate and nitrite (SM4500NO3-F and SM4500NO2-B), ammonia (USEPA Method 350.1), chemical oxygen demand (USEPA Method 410.4), hardness (SM2340B), alkalinity (SM2320B), sulfate (USEPA Method 9038), total dissolved solids (SM2540C), and turbidity (SM2130B).

Off-site samples (MW and RW) were analyzed for mercury (total) only. All QC data were compared with quality control criteria for drinking water analysis in the USEPA Analytical Procedures for Determination of Metals under 40 CFR Part 136.

Field Blank

One field blank was prepared and analyzed for this sampling event as part of work order 30417711. There were no inorganic parameters detected in the field blank. No additional qualification was necessary.

Blind Duplicate Samples

Table D1 summarizes the RPD of the detected inorganic constituents in duplicate samples. RPD's were generally within control limits. The highest RPD was 64.0% for concentrations of iron in TW-24A and DUP-1. There were three other parameters with RPD over 20%: alkalinity at 22.2% and mercury at 26.1% for TW-24A and DUP-1, and chemical oxygen demand at 30.6% for TW-25 and DUP-2. The RPD for most analytes was less than 5%.

Charge-Balance Error

The charge-balance error of samples collected in the field can be used to evaluate whether all ionic species that exist in the groundwater sample have been identified. Table D2 provides a summary of the calculated charge-balance errors. Ten out of 53 samples had a charge-balance error greater than the 20%. Charge-balance errors greater than 20% may indicate that ions are present in the groundwater sample that were not used in the calculations.

Project Narrative Review

Project narratives for each data package were reviewed to verify proper documentation of any analysis issues. Notable observations from the project narratives are summarized below.

- Holding Time: All samples in all projects were analyzed within the method required holding times, except for a few analyses using method SM2320B in project 30416762.
- Initial Calibration: For all projects, all criteria were within method requirements.
- Continuing Calibration: For all projects, all criteria were within method requirements.
- Internal Standards: For all projects, all internal standards were within quality control limits.
- Method Blanks: For all projects, there were no analytes detected in method blanks.
- Laboratory Control Spike: All laboratory control spike compounds were within quality control limits.
- Matrix Spikes: For the following projects, at least one analyte in a matrix spike or matrix spike duplicate was recovered outside the quality control limits: 30415797, 30416534, 30417011, 30417486, 30417711, and 30416762. The associated batch was either accepted based on LCS recovery or proper qualification was added for the associated sample results.
- Laboratory Duplicate: For the following projects, the precision between a sample its laboratory sample duplicate was outside control limits: 30416534, 30417486, 30417711, and 30416762. Proper qualification was added by the laboratory for the associated sample results.
- Dilutions: For the following projects, at least one sample was diluted due to the presence of high levels of non-target analytes, high levels of target analytes, or other matrix interferences: 30415797, 30417011, and 30417711. The results were flagged with a "D3" qualifier if the sample was diluted due to presence of high levels of non-target analytes or other matrix interference. The results were flagged with a "D4" qualifier if the dilution was run for the presence of high levels of target analytes.
- Volume reduction: For the following projects, at least one sample was reduced in volume to be within an acceptable range: 30417011, 30417486, 30417711, and 30416762. Proper qualification was added by the laboratory for the associated sample results.

TABLE D1
MLFRRF LABORATORY DATA VALIDATION - SPRING 2021
Duplicate Comparison - Detected Parameters

Parameter	Unit	TW-24A Result	Dup 1 Result	Relative Percent Difference	TW-25 Result	Dup 2 Result	Relative Percent Difference
Tetrachloroethene	µg/L	1 U	1 U	NA	1.41	1.47	4.2%
Alkalinity	mg/L	40	50	**22.2%**	10 U	10 U	NA
Barium	mg/L	0.064	0.064	0.0%	0.024	0.024	0.0%
Calcium	mg/L	19.2	19.2	0.0%	1.5	1.5	0.0%
Calcium, Dissolved	mg/L	19.3	20.2	4.6%	1.6	1.6	0.0%
Chloride	mg/L	6.4	6.3	1.6%	7.3	7.2	1.4%
Magnesium	mg/L	3.4	3.4	0.0%	0.85	0.85	0.0%
Magnesium, Dissolved	mg/L	3.4	3.5	2.9%	0.93	0.92	1.1%
Manganese	mg/L	0.11	0.11	0.0%	0.017	0.017	0.0%
Manganese, Dissolved	mg/L	0.1	0.11	9.5%	0.017	0.017	0.0%
Mercury	mg/L	0.001	0.0013	**26.1%**	0.0002 U	0.0002 U	NA
Nickel	mg/L	0.0028 J	0.0029 J	NA	0.0036	0.0033	8.7%
Nitrate as N	mg/L	1.9	1.9	0.0%	0.26	0.26	0.0%
Nitrogen, NO2 plus NO3	mg/L	1.9	1.9	0.0%	0.26	0.26	0.0%
Potassium	mg/L	3	3.1	3.3%	0.64	0.64	0.0%
Potassium, Dissolved	mg/L	3.1	3.3	6.2%	0.68	0.68	0.0%
Sodium	mg/L	3.2	3.3	3.1%	2.6	2.7	3.8%
Sodium, Dissolved	mg/L	3.3	3.5	5.9%	3.1	3	3.3%
Sulfate	mg/L	12.3	12.3	0.0%	10 U	10 U	NA
Total Dissolved Solids	mg/L	91	87	4.5%	14	14	0.0%
Total Hardness	mg/L	61.8	61.8	0.0%	7.3	7.3	0.0%

TABLE D2
MLFRRF DATA EVALUATION - SPRING 2021
Cation/Anion Balance Worksheet

	ION	M.W. (g/mol)	*Subtite D Regulated Wells* Concentration (mg/L)														
			TW-01	TW-02A	TW-03	TW-04	TW-04B	TW-05	TW-05A	TW-06	TW-10A	TW-14	TW-14A	TW-19	TW-20R	TW-23R	TW-24
CATIONS	Ca^{2+}	40.08	18.1	5.1	1.1	4.5	1.8	2.8	1.7	3.5	5.7	1.3	0.38	24	27.2	2.4	3.5
	Mg^{2+}	24.31	1.6	2.9	0.54	1.2	1.6	0.76	0.76	3.4	3.6	1.1	0.22	6.2	5.8	0.97	3.4
	K^{+}	39.10	0.74	1.1	0.52	0.77	1.1	0.75	0.69	1.6	2.3	0.68	0.47	6.6	3.4	0.96	1.2
	Na^{+}	22.99	3	13.1	2.7	3.4	1.7	2.5	2.4	6.2	24.6	3.3	2.8	11.1	13.6	3.4	9.9
Cations (meq/L)			**1.18**	**1.09**	**0.23**	**0.49**	**0.32**	**0.33**	**0.27**	**0.76**	**1.71**	**0.32**	**0.17**	**2.36**	**2.51**	**0.37**	**0.92**
ANIONS	HCO_3^-	61.01	25.6	12.2	1.2	6.1	0	12.2	8.5	4.9	1.2	0.6	0	36.6	26.8	0	0
	Cl^-	35.45	7.1	35.6	4.6	9.4	2.3	6.2	5.7	12.4	45	8.8	4.9	14.4	12.9	6.9	24.4
	NO_3^-	62.00	0.21	0.33	0.26	0.32	0.49	0.33	0.34	5.3	9.7	0.33	0.26	3.5	4.3	7.1	4.9
	SO_4^{2-}	96.06	0	0	0	0	9.6	0	0	10	8.6	0	0	31.9	53.8	0	0
Anions (meq/L)			**0.62**	**1.21**	**0.15**	**0.37**	**0.27**	**0.38**	**0.31**	**0.72**	**1.63**	**0.26**	**0.14**	**1.73**	**1.99**	**0.31**	**0.77**
CBE (%)			***31.0***	*5.2*	*19.8*	*14.0*	*8.5*	*7.0*	*6.4*	*2.8*	*2.5*	*9.1*	*9.1*	*15.5*	*11.5*	*9.3*	*8.8*

	ION	M.W. (g/mol)	*Subtite D Regulated Wells* Concentration (mg/L)							*Surface Water*		
			TW-24A	TW-25	TW-25A	TW-27	TW-28	TW-29	TW-30	SW-1	SW-2	SW-3
CATIONS	Ca^{2+}	40.08	19.3	1.6	11.8	0.72	5.8	2	4.3	17.7	29.2	31.7
	Mg^{2+}	24.31	3.4	0.93	1.9	0.33	2.8	1.1	1.7	3.8	6	7.7
	K^{+}	39.10	3.1	0.68	1	0.41	1.1	0.75	1.4	2.3	4	4.4
	Na^{+}	22.99	3.3	3.1	4	2.3	24.2	4.3	11.8	43.4	24.6	4.2
Cations (meq/L)			**1.47**	**0.31**	**0.94**	**0.17**	**1.60**	**0.40**	**0.90**	**3.14**	**3.12**	**2.51**
ANIONS	HCO_3^-	61.01	24.4	0	12.2	12.2	0.61	0.61	2.4	24.4	48.8	61
	Cl^-	35.45	6.4	7.3	10.7	4.3	54.5	10.7	26	69.3	41	4.1
	NO_3^-	62.00	8.4	1.2	3.1	0.39	0.34	2.6	9.7	7.1	1.9	1.9
	SO_4^{2-}	96.06	12.3	0	0	0	0	0	0	16.4	16.6	12
Anions (meq/L)			**0.97**	**0.22**	**0.55**	**0.33**	**1.55**	**0.35**	**0.93**	**2.81**	**2.33**	**1.40**
CBE (%)			***20.2***	*15.8*	***26.2***	***30.7***	*1.5*	*5.8*	*1.5*	*5.6*	*14.5*	***28.6***

TABLE D2
MLFRRF DATA EVALUATION - SPRING 2021
Cation/Anion Balance Worksheet

	ION	M.W. (g/mol)	*COMAR Regulated Wells* Concentration (mg/L)														
			TW-07	TW-07A	TW-08	TW-08A	TW-09B	TW-09C	TW-15	TW-15B	TW-16	TW-17	TW-17A	TW-21	TW-22	TW-22A	TW-22B
CATIONS	Ca^{2+}	40.08	4.9	2.4	6.4	6.6	4.8	5	0.72	1.3	12.1	7	0.72	6.5	2	5.7	9.8
	Mg^{2+}	24.31	0.94	1.3	4.3	4.2	2.8	3.9	0.5	1.7	10	2	0.4	2.4	1.7	4.7	2.6
	K^{+}	39.10	1.7	0.65	1.4	1.7	1.8	2.2	0.88	1.1	6.2	1.7	0.5	1.9	1.1	1.7	2.2
	Na^{+}	22.99	6.2	1.5	24.3	27.2	15.1	14.7	2	7.6	19.5	13.4	1.2	15.8	11	40.8	7.6
Cations (meq/L)			0.64	0.31	1.77	1.90	1.17	1.27	0.19	0.56	2.43	1.14	0.13	1.26	0.75	2.49	1.09
ANIONS	HCO_3^-	61.01	12.2	0	8.5	0	1.2	13.4	0	0	0	1.2	0	0	0	0	0.0
	Cl^-	35.45	12.3	3.4	47.3	46.1	23.7	23.3	3.5	14.7	25.7	5.7	2.9	23	21.5	82.2	9.3
	NO_3^-	62.00	0.75	1.1	0.97	12.0	11.1	12.8	0.62	1.5	0.12	0.11	0.8	8.4	4.9	8.0	22.6
	SO_4^{2-}	96.06	0	8.5	0	26.3	0	12.9	0	0	81.5	36.9	0	26.7	0	15.7	15.4
Anions (meq/L)			0.56	0.29	1.49	2.04	0.87	1.35	0.11	0.44	2.42	0.95	0.09	1.34	0.69	2.77	0.95
CBE (%)			*6.4*	*3.1*	*8.5*	*3.5*	*15.0*	*3.3*	***26.4***	*12.4*	*0.2*	*9.1*	*17.5*	*3.2*	*4.3*	*5.4*	*7.0*

	ION	M.W. (g/mol)	*On-site Non-Regulated Wells* Concentration (mg/L)												
			TW-02	TW-03A	TW-05B	TW-06A	TW-06B	TW-09	TW-11A	TW-12	TW-13	TW-14B	TW-16A	TW-18	TW-21A
CATIONS	Ca^{2+}	40.08	0.27	0.88	1.1	48.4	0.54	0.38	6.2	3.2	3.1	0.48	0.93	5.6	7
	Mg^{2+}	24.31	0.53	0.42	0.23	5	0.24	0.23	2.7	1.8	1.6	0.24	0.37	2.9	2
	K^{+}	39.10	0.63	0.57	0.49	5	0.53	0.51	2.1	1.3	1.1	0.41	0.5	1.5	1.8
	Na^{+}	22.99	2	16.8	0.98	2.4	1.8	0.99	17.5	5.6	7.5	1.1	1.1	3.7	22
Cations (meq/L)			0.16	0.82	0.13	3.06	0.14	0.09	1.35	0.58	0.64	0.10	0.14	0.72	1.52
ANIONS	HCO_3^-	61.01	7.3	1.2	8.5	73.2	0	4.9	0	15.9	0	0	0	0	0
	Cl^-	35.45	3.5	54.6	1.8	2.7	3.1	1.6	30.2	7.4	14.3	1.7	3	7.2	32
	NO_3^-	62.00	0.29	0.30	0.89	0.44	1.5	0.62	0.44	0.44	0.80	1.42	0.80	6.2	7.1
	SO_4^{2-}	96.06	0	0	0	30.1	0	0	25.5	0	0	0	0	27.1	22.1
Anions (meq/L)			0.22	1.57	0.21	1.91	0.11	0.14	1.39	0.48	0.42	0.07	0.10	0.87	1.48
CBE (%)			*16.5*	***31.0***	***22.8***	***23.1***	*10.7*	*18.0*	*1.6*	*10.3*	***21.2***	*18.1*	*17.0*	*9.5*	*1.3*

APPENDIX E
Laboratory Analytical Data Packages

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

April 28, 2021

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-SPRING 2021
Pace Project No.: 30415474

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on April 14, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace National - Mt. Juliet
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Samantha Bayura

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: MLF-SPRING 2021
Pace Project No.: 30415474

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services National

12065 Lebanon Road, Mt. Juliet, TN 37122
Alabama Certification #: 40660
Alaska Certification 17-026
Arizona Certification #: AZ0612
Arkansas Certification #: 88-0469
California Certification #: 2932
Canada Certification #: 1461.01
Colorado Certification #: TN00003
Connecticut Certification #: PH-0197
DOD Certification: #1461.01
EPA# TN00003
Florida Certification #: E87487
Georgia DW Certification #: 923
Georgia Certification: NELAP
Idaho Certification #: TN00003
Illinois Certification #: 200008
Indiana Certification #: C-TN-01
Iowa Certification #: 364
Kansas Certification #: E-10277
Kentucky UST Certification #: 16
Kentucky Certification #: 90010
Louisiana Certification #: AI30792
Louisiana DW Certification #: LA180010
Maine Certification #: TN0002
Maryland Certification #: 324
Massachusetts Certification #: M-TN003
Michigan Certification #: 9958
Minnesota Certification #: 047-999-395
Mississippi Certification #: TN00003
Missouri Certification #: 340
Montana Certification #: CERT0086
Nebraska Certification #: NE-OS-15-05
Nevada Certification #: TN-03-2002-34
New Hampshire Certification #: 2975
New Jersey Certification #: TN002
New Mexico DW Certification
New York Certification #: 11742
North Carolina Aquatic Toxicity Certification #: 41
North Carolina Drinking Water Certification #: 21704
North Carolina Environmental Certificate #: 375

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Greensburg, PA 15601
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CERTIFICATIONS

Project: MLF-SPRING 2021
Pace Project No.: 30415474

Pace Analytical Services National

North Dakota Certification #: R-140
Ohio VAP Certification #: CL0069
Oklahoma Certification #: 9915
Oregon Certification #: TN200002
Pennsylvania Certification #: 68-02979
Rhode Island Certification #: LAO00356
South Carolina Certification #: 84004
South Dakota Certification
Tennessee DW/Chem/Micro Certification #: 2006
Texas Mold Certification #: LAB0152
Texas Certification #: T 104704245-17-14
USDA Soil Permit #: P330-15-00234
Utah Certification #: TN00003
Vermont Dept. of Health: ID# VT-2006
Virginia Certification #: VT2006
Virginia Certification #: 460132
Washington Certification #: C847
West Virginia Certification #: 233
Wisconsin Certification #: 998093910
Wyoming UST Certification #: via A2LA 2926.01
A2LA-ISO 17025 Certification #: 1461.01
A2LA-ISO 17025 Certification #: 1461.02
AIHA-LAP/LLC EMLAP Certification #:100789

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Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: MLF-SPRING 2021
Pace Project No.: 30415474

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30415474001	**MW-P4**	Water	04/14/21 10:45	04/14/21 22:15
30415474002	**MW-P9**	Water	04/13/21 11:30	04/14/21 22:15
30415474003	**MW-P106**	Water	04/14/21 10:00	04/14/21 22:15
30415474004	**MW-P417**	Water	04/13/21 13:20	04/14/21 22:15
30415474005	**MW-P440**	Water	04/13/21 14:00	04/14/21 22:15
30415474006	**RW-P109**	Water	04/13/21 12:30	04/14/21 22:15
30415474007	**RW-P165**	Water	04/14/21 11:30	04/14/21 22:15
30415474008	**RW-P171-1**	Water	04/13/21 17:45	04/14/21 22:15
30415474009	**RW-P264**	Water	04/14/21 12:15	04/14/21 22:15
30415474010	**RW-P440**	Water	04/13/21 17:00	04/14/21 22:15
30415474011	**RW-P441**	Water	04/13/21 16:10	04/14/21 22:15
30415474012	**RW-P584**	Water	04/13/21 14:45	04/14/21 22:15
30415474013	**TRIP BLANK**	Water	04/14/21 00:01	04/14/21 22:15

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2021
Pace Project No.: 30415474

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30415474001	**MW-P4**	EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JHH	54	PAN
30415474002	**MW-P9**	EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JHH	54	PAN
30415474003	**MW-P106**	EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JHH	54	PAN
30415474004	**MW-P417**	EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JHH	54	PAN
30415474005	**MW-P440**	EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JHH	54	PAN
30415474006	**RW-P109**	EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JHH	54	PAN
30415474007	**RW-P165**	EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JHH	54	PAN
30415474008	**RW-P171-1**	EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JHH	54	PAN
30415474009	**RW-P264**	EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JHH	54	PAN
30415474010	**RW-P440**	EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JHH	54	PAN
30415474011	**RW-P441**	EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JHH	54	PAN
30415474012	**RW-P584**	EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JHH	54	PAN
30415474013	**TRIP BLANK**	EPA 8260B	JHH	54	PAN

PAN = Pace National - Mt. Juliet
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30415474

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: April 28, 2021

General Information:
12 samples were analyzed for EPA 7470A by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 444974

- MW-P106 (Lab ID: 30415474003)
  - Mercury
- MW-P4 (Lab ID: 30415474001)
  - Mercury
- MW-P417 (Lab ID: 30415474004)
  - Mercury
- MW-P440 (Lab ID: 30415474005)
  - Mercury
- MW-P9 (Lab ID: 30415474002)
  - Mercury

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30415474

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: April 28, 2021

Analyte Comments:

QC Batch: 444974

- RW-P109 (Lab ID: 30415474006)
  - Mercury
- RW-P165 (Lab ID: 30415474007)
  - Mercury
- RW-P171-1 (Lab ID: 30415474008)
  - Mercury
- RW-P264 (Lab ID: 30415474009)
  - Mercury
- RW-P440 (Lab ID: 30415474010)
  - Mercury
- RW-P441 (Lab ID: 30415474011)
  - Mercury
- RW-P584 (Lab ID: 30415474012)
  - Mercury

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30415474

Method: **EPA 8260B**
Description: VOA (GC/MS) 8260B
Client: Environmental Monitoring and Assessment LLC
Date: April 28, 2021

General Information:
13 samples were analyzed for EPA 8260B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415474

Sample: MW-P4 **Lab ID: 30415474001** Collected: 04/14/21 10:45 Received: 04/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.000050J**	mg/L	0.00020	0.000030	1	04/26/21 13:50	04/27/21 16:40	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/19/21 13:21	04/19/21 13:21	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/19/21 13:21	04/19/21 13:21	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/19/21 13:21	04/19/21 13:21	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/19/21 13:21	04/19/21 13:21	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/19/21 13:21	04/19/21 13:21	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/19/21 13:21	04/19/21 13:21	75-25-2	
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/19/21 13:21	04/19/21 13:21	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/19/21 13:21	04/19/21 13:21	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/19/21 13:21	04/19/21 13:21	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/19/21 13:21	04/19/21 13:21	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/19/21 13:21	04/19/21 13:21	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/19/21 13:21	04/19/21 13:21	75-00-3	
Chloroform	**0.404J**	ug/L	5.00	0.111	1	04/19/21 13:21	04/19/21 13:21	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/19/21 13:21	04/19/21 13:21	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/19/21 13:21	04/19/21 13:21	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/19/21 13:21	04/19/21 13:21	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/19/21 13:21	04/19/21 13:21	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/19/21 13:21	04/19/21 13:21	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/19/21 13:21	04/19/21 13:21	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/19/21 13:21	04/19/21 13:21	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	04/19/21 13:21	04/19/21 13:21	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	04/19/21 13:21	04/19/21 13:21	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	04/19/21 13:21	04/19/21 13:21	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/19/21 13:21	04/19/21 13:21	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/19/21 13:21	04/19/21 13:21	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/19/21 13:21	04/19/21 13:21	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 13:21	04/19/21 13:21	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 13:21	04/19/21 13:21	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/19/21 13:21	04/19/21 13:21	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/19/21 13:21	04/19/21 13:21	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/19/21 13:21	04/19/21 13:21	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/19/21 13:21	04/19/21 13:21	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/19/21 13:21	04/19/21 13:21	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/19/21 13:21	04/19/21 13:21	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	04/19/21 13:21	04/19/21 13:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/19/21 13:21	04/19/21 13:21	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/19/21 13:21	04/19/21 13:21	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/19/21 13:21	04/19/21 13:21	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/19/21 13:21	04/19/21 13:21	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/19/21 13:21	04/19/21 13:21	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/19/21 13:21	04/19/21 13:21	127-18-4	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415474

Sample: MW-P4 **Lab ID: 30415474001** Collected: 04/14/21 10:45 Received: 04/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/19/21 13:21	04/19/21 13:21	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 13:21	04/19/21 13:21	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/19/21 13:21	04/19/21 13:21	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/19/21 13:21	04/19/21 13:21	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/19/21 13:21	04/19/21 13:21	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/19/21 13:21	04/19/21 13:21	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/19/21 13:21	04/19/21 13:21	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/19/21 13:21	04/19/21 13:21	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/19/21 13:21	04/19/21 13:21	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/19/21 13:21	04/19/21 13:21	179601-23-1	
Surrogates									
Toluene-d8 (S)	113	%	80.0-120		1	04/19/21 13:21	04/19/21 13:21	2037-26-5	
4-Bromofluorobenzene (S)	104	%	77.0-126		1	04/19/21 13:21	04/19/21 13:21	460-00-4	
1,2-Dichloroethane-d4 (S)	99.5	%	70.0-130		1	04/19/21 13:21	04/19/21 13:21	17060-07-0	

Sample: MW-P9 **Lab ID: 30415474002** Collected: 04/13/21 11:30 Received: 04/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00022**	mg/L	0.00020	0.000030	1	04/26/21 13:50	04/27/21 16:45	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/19/21 13:42	04/19/21 13:42	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/19/21 13:42	04/19/21 13:42	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/19/21 13:42	04/19/21 13:42	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/19/21 13:42	04/19/21 13:42	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/19/21 13:42	04/19/21 13:42	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/19/21 13:42	04/19/21 13:42	75-25-2	
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/19/21 13:42	04/19/21 13:42	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/19/21 13:42	04/19/21 13:42	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/19/21 13:42	04/19/21 13:42	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/19/21 13:42	04/19/21 13:42	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/19/21 13:42	04/19/21 13:42	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/19/21 13:42	04/19/21 13:42	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	04/19/21 13:42	04/19/21 13:42	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/19/21 13:42	04/19/21 13:42	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/19/21 13:42	04/19/21 13:42	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/19/21 13:42	04/19/21 13:42	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/19/21 13:42	04/19/21 13:42	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/19/21 13:42	04/19/21 13:42	95-50-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415474

Sample: MW-P9 **Lab ID: 30415474002** Collected: 04/13/21 11:30 Received: 04/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/19/21 13:42	04/19/21 13:42	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/19/21 13:42	04/19/21 13:42	110-57-6	
Dichlorofluoromethane	**0.982J**	ug/L	5.00	0.130	1	04/19/21 13:42	04/19/21 13:42	75-43-4	J
Dichlorodifluoromethane	**0.806J**	ug/L	5.00	0.374	1	04/19/21 13:42	04/19/21 13:42	75-71-8	J
1,1-Dichloroethane	**0.818J**	ug/L	1.00	0.100	1	04/19/21 13:42	04/19/21 13:42	75-34-3	J
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/19/21 13:42	04/19/21 13:42	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/19/21 13:42	04/19/21 13:42	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/19/21 13:42	04/19/21 13:42	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 13:42	04/19/21 13:42	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 13:42	04/19/21 13:42	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/19/21 13:42	04/19/21 13:42	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/19/21 13:42	04/19/21 13:42	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/19/21 13:42	04/19/21 13:42	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/19/21 13:42	04/19/21 13:42	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/19/21 13:42	04/19/21 13:42	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/19/21 13:42	04/19/21 13:42	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	04/19/21 13:42	04/19/21 13:42	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/19/21 13:42	04/19/21 13:42	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/19/21 13:42	04/19/21 13:42	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/19/21 13:42	04/19/21 13:42	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/19/21 13:42	04/19/21 13:42	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/19/21 13:42	04/19/21 13:42	79-34-5	
Tetrachloroethene	**1.13**	ug/L	1.00	0.300	1	04/19/21 13:42	04/19/21 13:42	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/19/21 13:42	04/19/21 13:42	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 13:42	04/19/21 13:42	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/19/21 13:42	04/19/21 13:42	79-00-5	
Trichloroethene	**0.284J**	ug/L	1.00	0.190	1	04/19/21 13:42	04/19/21 13:42	79-01-6	J
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/19/21 13:42	04/19/21 13:42	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/19/21 13:42	04/19/21 13:42	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/19/21 13:42	04/19/21 13:42	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/19/21 13:42	04/19/21 13:42	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/19/21 13:42	04/19/21 13:42	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/19/21 13:42	04/19/21 13:42	179601-23-1	
Surrogates									
Toluene-d8 (S)	109	%	80.0-120		1	04/19/21 13:42	04/19/21 13:42	2037-26-5	
4-Bromofluorobenzene (S)	99.5	%	77.0-126		1	04/19/21 13:42	04/19/21 13:42	460-00-4	
1,2-Dichloroethane-d4 (S)	98.4	%	70.0-130		1	04/19/21 13:42	04/19/21 13:42	17060-07-0	

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Greensburg, PA 15601
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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415474

Sample: MW-P106 **Lab ID: 30415474003** Collected: 04/14/21 10:00 Received: 04/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00021**	mg/L	0.00020	0.000030	1	04/26/21 13:50	04/27/21 16:47	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/19/21 14:03	04/19/21 14:03	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/19/21 14:03	04/19/21 14:03	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/19/21 14:03	04/19/21 14:03	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/19/21 14:03	04/19/21 14:03	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/19/21 14:03	04/19/21 14:03	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/19/21 14:03	04/19/21 14:03	75-25-2	
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/19/21 14:03	04/19/21 14:03	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/19/21 14:03	04/19/21 14:03	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/19/21 14:03	04/19/21 14:03	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/19/21 14:03	04/19/21 14:03	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/19/21 14:03	04/19/21 14:03	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/19/21 14:03	04/19/21 14:03	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	04/19/21 14:03	04/19/21 14:03	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/19/21 14:03	04/19/21 14:03	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/19/21 14:03	04/19/21 14:03	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/19/21 14:03	04/19/21 14:03	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/19/21 14:03	04/19/21 14:03	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/19/21 14:03	04/19/21 14:03	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/19/21 14:03	04/19/21 14:03	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/19/21 14:03	04/19/21 14:03	110-57-6	
Dichlorofluoromethane	**1.71J**	ug/L	5.00	0.130	1	04/19/21 14:03	04/19/21 14:03	75-43-4	J
Dichlorodifluoromethane	**1.35J**	ug/L	5.00	0.374	1	04/19/21 14:03	04/19/21 14:03	75-71-8	J
1,1-Dichloroethane	**1.64**	ug/L	1.00	0.100	1	04/19/21 14:03	04/19/21 14:03	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/19/21 14:03	04/19/21 14:03	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/19/21 14:03	04/19/21 14:03	75-35-4	
cis-1,2-Dichloroethene	**0.588J**	ug/L	1.00	0.126	1	04/19/21 14:03	04/19/21 14:03	156-59-2	J
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 14:03	04/19/21 14:03	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 14:03	04/19/21 14:03	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/19/21 14:03	04/19/21 14:03	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/19/21 14:03	04/19/21 14:03	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/19/21 14:03	04/19/21 14:03	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/19/21 14:03	04/19/21 14:03	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/19/21 14:03	04/19/21 14:03	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/19/21 14:03	04/19/21 14:03	78-93-3	
Methylene Chloride	**0.608J**	ug/L	5.00	0.430	1	04/19/21 14:03	04/19/21 14:03	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/19/21 14:03	04/19/21 14:03	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/19/21 14:03	04/19/21 14:03	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/19/21 14:03	04/19/21 14:03	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/19/21 14:03	04/19/21 14:03	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/19/21 14:03	04/19/21 14:03	79-34-5	
Tetrachloroethene	**0.622J**	ug/L	1.00	0.300	1	04/19/21 14:03	04/19/21 14:03	127-18-4	J

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415474

Sample: MW-P106 **Lab ID: 30415474003** Collected: 04/14/21 10:00 Received: 04/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/19/21 14:03	04/19/21 14:03	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 14:03	04/19/21 14:03	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/19/21 14:03	04/19/21 14:03	79-00-5	
Trichloroethene	**0.515J**	ug/L	1.00	0.190	1	04/19/21 14:03	04/19/21 14:03	79-01-6	J
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/19/21 14:03	04/19/21 14:03	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/19/21 14:03	04/19/21 14:03	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/19/21 14:03	04/19/21 14:03	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/19/21 14:03	04/19/21 14:03	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/19/21 14:03	04/19/21 14:03	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/19/21 14:03	04/19/21 14:03	179601-23-1	
Surrogates									
Toluene-d8 (S)	109	%	80.0-120		1	04/19/21 14:03	04/19/21 14:03	2037-26-5	
4-Bromofluorobenzene (S)	99.4	%	77.0-126		1	04/19/21 14:03	04/19/21 14:03	460-00-4	
1,2-Dichloroethane-d4 (S)	98.7	%	70.0-130		1	04/19/21 14:03	04/19/21 14:03	17060-07-0	

Sample: MW-P417 **Lab ID: 30415474004** Collected: 04/13/21 13:20 Received: 04/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00023**	mg/L	0.00020	0.000030	1	04/26/21 13:50	04/27/21 16:49	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/19/21 14:23	04/19/21 14:23	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/19/21 14:23	04/19/21 14:23	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/19/21 14:23	04/19/21 14:23	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/19/21 14:23	04/19/21 14:23	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/19/21 14:23	04/19/21 14:23	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/19/21 14:23	04/19/21 14:23	75-25-2	
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/19/21 14:23	04/19/21 14:23	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/19/21 14:23	04/19/21 14:23	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/19/21 14:23	04/19/21 14:23	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/19/21 14:23	04/19/21 14:23	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/19/21 14:23	04/19/21 14:23	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/19/21 14:23	04/19/21 14:23	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	04/19/21 14:23	04/19/21 14:23	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/19/21 14:23	04/19/21 14:23	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/19/21 14:23	04/19/21 14:23	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/19/21 14:23	04/19/21 14:23	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/19/21 14:23	04/19/21 14:23	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/19/21 14:23	04/19/21 14:23	95-50-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415474

Sample: MW-P417 **Lab ID: 30415474004** Collected: 04/13/21 13:20 Received: 04/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/19/21 14:23	04/19/21 14:23	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/19/21 14:23	04/19/21 14:23	110-57-6	
Dichlorofluoromethane	**0.229J**	ug/L	5.00	0.130	1	04/19/21 14:23	04/19/21 14:23	75-43-4	J
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	04/19/21 14:23	04/19/21 14:23	75-71-8	
1,1-Dichloroethane	**0.309J**	ug/L	1.00	0.100	1	04/19/21 14:23	04/19/21 14:23	75-34-3	J
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/19/21 14:23	04/19/21 14:23	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/19/21 14:23	04/19/21 14:23	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/19/21 14:23	04/19/21 14:23	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 14:23	04/19/21 14:23	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 14:23	04/19/21 14:23	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/19/21 14:23	04/19/21 14:23	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/19/21 14:23	04/19/21 14:23	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/19/21 14:23	04/19/21 14:23	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/19/21 14:23	04/19/21 14:23	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/19/21 14:23	04/19/21 14:23	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/19/21 14:23	04/19/21 14:23	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	04/19/21 14:23	04/19/21 14:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/19/21 14:23	04/19/21 14:23	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/19/21 14:23	04/19/21 14:23	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/19/21 14:23	04/19/21 14:23	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/19/21 14:23	04/19/21 14:23	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/19/21 14:23	04/19/21 14:23	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/19/21 14:23	04/19/21 14:23	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/19/21 14:23	04/19/21 14:23	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 14:23	04/19/21 14:23	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/19/21 14:23	04/19/21 14:23	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/19/21 14:23	04/19/21 14:23	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/19/21 14:23	04/19/21 14:23	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/19/21 14:23	04/19/21 14:23	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/19/21 14:23	04/19/21 14:23	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/19/21 14:23	04/19/21 14:23	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/19/21 14:23	04/19/21 14:23	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/19/21 14:23	04/19/21 14:23	179601-23-1	
Surrogates									
Toluene-d8 (S)	110	%	80.0-120		1	04/19/21 14:23	04/19/21 14:23	2037-26-5	
4-Bromofluorobenzene (S)	101	%	77.0-126		1	04/19/21 14:23	04/19/21 14:23	460-00-4	
1,2-Dichloroethane-d4 (S)	97.8	%	70.0-130		1	04/19/21 14:23	04/19/21 14:23	17060-07-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415474

Sample: MW-P440 **Lab ID: 30415474005** Collected: 04/13/21 14:00 Received: 04/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.000060J**	mg/L	0.00020	0.000030	1	04/26/21 13:50	04/27/21 16:50	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/19/21 14:44	04/19/21 14:44	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/19/21 14:44	04/19/21 14:44	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/19/21 14:44	04/19/21 14:44	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/19/21 14:44	04/19/21 14:44	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/19/21 14:44	04/19/21 14:44	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/19/21 14:44	04/19/21 14:44	75-25-2	
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/19/21 14:44	04/19/21 14:44	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/19/21 14:44	04/19/21 14:44	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/19/21 14:44	04/19/21 14:44	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/19/21 14:44	04/19/21 14:44	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/19/21 14:44	04/19/21 14:44	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/19/21 14:44	04/19/21 14:44	75-00-3	
Chloroform	**0.383J**	ug/L	5.00	0.111	1	04/19/21 14:44	04/19/21 14:44	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/19/21 14:44	04/19/21 14:44	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/19/21 14:44	04/19/21 14:44	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/19/21 14:44	04/19/21 14:44	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/19/21 14:44	04/19/21 14:44	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/19/21 14:44	04/19/21 14:44	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/19/21 14:44	04/19/21 14:44	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/19/21 14:44	04/19/21 14:44	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	04/19/21 14:44	04/19/21 14:44	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	04/19/21 14:44	04/19/21 14:44	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	04/19/21 14:44	04/19/21 14:44	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/19/21 14:44	04/19/21 14:44	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/19/21 14:44	04/19/21 14:44	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/19/21 14:44	04/19/21 14:44	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 14:44	04/19/21 14:44	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 14:44	04/19/21 14:44	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/19/21 14:44	04/19/21 14:44	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/19/21 14:44	04/19/21 14:44	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/19/21 14:44	04/19/21 14:44	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/19/21 14:44	04/19/21 14:44	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/19/21 14:44	04/19/21 14:44	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/19/21 14:44	04/19/21 14:44	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	04/19/21 14:44	04/19/21 14:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/19/21 14:44	04/19/21 14:44	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/19/21 14:44	04/19/21 14:44	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/19/21 14:44	04/19/21 14:44	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/19/21 14:44	04/19/21 14:44	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/19/21 14:44	04/19/21 14:44	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/19/21 14:44	04/19/21 14:44	127-18-4	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415474

Sample: MW-P440 **Lab ID: 30415474005** Collected: 04/13/21 14:00 Received: 04/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/19/21 14:44	04/19/21 14:44	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 14:44	04/19/21 14:44	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/19/21 14:44	04/19/21 14:44	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/19/21 14:44	04/19/21 14:44	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/19/21 14:44	04/19/21 14:44	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/19/21 14:44	04/19/21 14:44	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/19/21 14:44	04/19/21 14:44	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/19/21 14:44	04/19/21 14:44	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/19/21 14:44	04/19/21 14:44	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/19/21 14:44	04/19/21 14:44	179601-23-1	
Surrogates									
Toluene-d8 (S)	110	%	80.0-120		1	04/19/21 14:44	04/19/21 14:44	2037-26-5	
4-Bromofluorobenzene (S)	100	%	77.0-126		1	04/19/21 14:44	04/19/21 14:44	460-00-4	
1,2-Dichloroethane-d4 (S)	94.9	%	70.0-130		1	04/19/21 14:44	04/19/21 14:44	17060-07-0	

Sample: RW-P109 **Lab ID: 30415474006** Collected: 04/13/21 12:30 Received: 04/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.000070J**	mg/L	0.00020	0.000030	1	04/26/21 13:50	04/27/21 16:52	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/19/21 15:05	04/19/21 15:05	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/19/21 15:05	04/19/21 15:05	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/19/21 15:05	04/19/21 15:05	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/19/21 15:05	04/19/21 15:05	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/19/21 15:05	04/19/21 15:05	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/19/21 15:05	04/19/21 15:05	75-25-2	
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/19/21 15:05	04/19/21 15:05	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/19/21 15:05	04/19/21 15:05	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/19/21 15:05	04/19/21 15:05	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/19/21 15:05	04/19/21 15:05	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/19/21 15:05	04/19/21 15:05	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/19/21 15:05	04/19/21 15:05	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	04/19/21 15:05	04/19/21 15:05	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/19/21 15:05	04/19/21 15:05	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/19/21 15:05	04/19/21 15:05	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/19/21 15:05	04/19/21 15:05	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/19/21 15:05	04/19/21 15:05	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/19/21 15:05	04/19/21 15:05	95-50-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415474

Sample: RW-P109 **Lab ID: 30415474006** Collected: 04/13/21 12:30 Received: 04/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/19/21 15:05	04/19/21 15:05	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/19/21 15:05	04/19/21 15:05	110-57-6	
Dichlorofluoromethane	**1.01J**	ug/L	5.00	0.130	1	04/19/21 15:05	04/19/21 15:05	75-43-4	J
Dichlorodifluoromethane	**1.27J**	ug/L	5.00	0.374	1	04/19/21 15:05	04/19/21 15:05	75-71-8	J
1,1-Dichloroethane	**1.00J**	ug/L	1.00	0.100	1	04/19/21 15:05	04/19/21 15:05	75-34-3	J
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/19/21 15:05	04/19/21 15:05	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/19/21 15:05	04/19/21 15:05	75-35-4	
cis-1,2-Dichloroethene	**0.302J**	ug/L	1.00	0.126	1	04/19/21 15:05	04/19/21 15:05	156-59-2	J
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 15:05	04/19/21 15:05	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 15:05	04/19/21 15:05	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/19/21 15:05	04/19/21 15:05	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/19/21 15:05	04/19/21 15:05	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/19/21 15:05	04/19/21 15:05	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/19/21 15:05	04/19/21 15:05	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/19/21 15:05	04/19/21 15:05	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/19/21 15:05	04/19/21 15:05	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	04/19/21 15:05	04/19/21 15:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/19/21 15:05	04/19/21 15:05	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/19/21 15:05	04/19/21 15:05	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/19/21 15:05	04/19/21 15:05	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/19/21 15:05	04/19/21 15:05	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/19/21 15:05	04/19/21 15:05	79-34-5	
Tetrachloroethene	**0.823J**	ug/L	1.00	0.300	1	04/19/21 15:05	04/19/21 15:05	127-18-4	J
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/19/21 15:05	04/19/21 15:05	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 15:05	04/19/21 15:05	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/19/21 15:05	04/19/21 15:05	79-00-5	
Trichloroethene	**1.20**	ug/L	1.00	0.190	1	04/19/21 15:05	04/19/21 15:05	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/19/21 15:05	04/19/21 15:05	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/19/21 15:05	04/19/21 15:05	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/19/21 15:05	04/19/21 15:05	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/19/21 15:05	04/19/21 15:05	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/19/21 15:05	04/19/21 15:05	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/19/21 15:05	04/19/21 15:05	179601-23-1	
Surrogates									
Toluene-d8 (S)	111	%	80.0-120		1	04/19/21 15:05	04/19/21 15:05	2037-26-5	
4-Bromofluorobenzene (S)	99.4	%	77.0-126		1	04/19/21 15:05	04/19/21 15:05	460-00-4	
1,2-Dichloroethane-d4 (S)	92.8	%	70.0-130		1	04/19/21 15:05	04/19/21 15:05	17060-07-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415474

Sample: RW-P165 **Lab ID: 30415474007** Collected: 04/14/21 11:30 Received: 04/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.000070J**	mg/L	0.00020	0.000030	1	04/26/21 13:50	04/27/21 16:58	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/19/21 15:26	04/19/21 15:26	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/19/21 15:26	04/19/21 15:26	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/19/21 15:26	04/19/21 15:26	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/19/21 15:26	04/19/21 15:26	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/19/21 15:26	04/19/21 15:26	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/19/21 15:26	04/19/21 15:26	75-25-2	
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/19/21 15:26	04/19/21 15:26	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/19/21 15:26	04/19/21 15:26	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/19/21 15:26	04/19/21 15:26	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/19/21 15:26	04/19/21 15:26	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/19/21 15:26	04/19/21 15:26	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/19/21 15:26	04/19/21 15:26	75-00-3	
Chloroform	**0.292J**	ug/L	5.00	0.111	1	04/19/21 15:26	04/19/21 15:26	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/19/21 15:26	04/19/21 15:26	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/19/21 15:26	04/19/21 15:26	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/19/21 15:26	04/19/21 15:26	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/19/21 15:26	04/19/21 15:26	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/19/21 15:26	04/19/21 15:26	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/19/21 15:26	04/19/21 15:26	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/19/21 15:26	04/19/21 15:26	110-57-6	
Dichlorofluoromethane	**5.51**	ug/L	5.00	0.130	1	04/19/21 15:26	04/19/21 15:26	75-43-4	
Dichlorodifluoromethane	**3.94J**	ug/L	5.00	0.374	1	04/19/21 15:26	04/19/21 15:26	75-71-8	J
1,1-Dichloroethane	**3.16**	ug/L	1.00	0.100	1	04/19/21 15:26	04/19/21 15:26	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/19/21 15:26	04/19/21 15:26	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/19/21 15:26	04/19/21 15:26	75-35-4	
cis-1,2-Dichloroethene	**0.728J**	ug/L	1.00	0.126	1	04/19/21 15:26	04/19/21 15:26	156-59-2	J
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 15:26	04/19/21 15:26	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 15:26	04/19/21 15:26	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/19/21 15:26	04/19/21 15:26	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/19/21 15:26	04/19/21 15:26	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/19/21 15:26	04/19/21 15:26	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/19/21 15:26	04/19/21 15:26	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/19/21 15:26	04/19/21 15:26	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/19/21 15:26	04/19/21 15:26	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	04/19/21 15:26	04/19/21 15:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/19/21 15:26	04/19/21 15:26	108-10-1	
Methyl-tert-butyl ether	**0.202J**	ug/L	1.00	0.101	1	04/19/21 15:26	04/19/21 15:26	1634-04-4	J
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/19/21 15:26	04/19/21 15:26	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/19/21 15:26	04/19/21 15:26	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/19/21 15:26	04/19/21 15:26	79-34-5	
Tetrachloroethene	**2.39**	ug/L	1.00	0.300	1	04/19/21 15:26	04/19/21 15:26	127-18-4	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415474

Sample: RW-P165 **Lab ID: 30415474007** Collected: 04/14/21 11:30 Received: 04/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/19/21 15:26	04/19/21 15:26	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 15:26	04/19/21 15:26	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/19/21 15:26	04/19/21 15:26	79-00-5	
Trichloroethene	**0.719J**	ug/L	1.00	0.190	1	04/19/21 15:26	04/19/21 15:26	79-01-6	J
Trichlorofluoromethane	**0.429J**	ug/L	5.00	0.160	1	04/19/21 15:26	04/19/21 15:26	75-69-4	J
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/19/21 15:26	04/19/21 15:26	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/19/21 15:26	04/19/21 15:26	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/19/21 15:26	04/19/21 15:26	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/19/21 15:26	04/19/21 15:26	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/19/21 15:26	04/19/21 15:26	179601-23-1	
Surrogates									
Toluene-d8 (S)	111	%	80.0-120		1	04/19/21 15:26	04/19/21 15:26	2037-26-5	
4-Bromofluorobenzene (S)	97.1	%	77.0-126		1	04/19/21 15:26	04/19/21 15:26	460-00-4	
1,2-Dichloroethane-d4 (S)	93.4	%	70.0-130		1	04/19/21 15:26	04/19/21 15:26	17060-07-0	

Sample: RW-P171-1 **Lab ID: 30415474008** Collected: 04/13/21 17:45 Received: 04/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.000050J**	mg/L	0.00020	0.000030	1	04/26/21 13:50	04/27/21 17:00	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/19/21 15:46	04/19/21 15:46	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/19/21 15:46	04/19/21 15:46	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/19/21 15:46	04/19/21 15:46	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/19/21 15:46	04/19/21 15:46	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/19/21 15:46	04/19/21 15:46	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/19/21 15:46	04/19/21 15:46	75-25-2	
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/19/21 15:46	04/19/21 15:46	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/19/21 15:46	04/19/21 15:46	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/19/21 15:46	04/19/21 15:46	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/19/21 15:46	04/19/21 15:46	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/19/21 15:46	04/19/21 15:46	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/19/21 15:46	04/19/21 15:46	75-00-3	
Chloroform	**0.405J**	ug/L	5.00	0.111	1	04/19/21 15:46	04/19/21 15:46	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/19/21 15:46	04/19/21 15:46	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/19/21 15:46	04/19/21 15:46	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/19/21 15:46	04/19/21 15:46	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/19/21 15:46	04/19/21 15:46	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/19/21 15:46	04/19/21 15:46	95-50-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415474

Sample: RW-P171-1 **Lab ID: 30415474008** Collected: 04/13/21 17:45 Received: 04/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/19/21 15:46	04/19/21 15:46	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/19/21 15:46	04/19/21 15:46	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	04/19/21 15:46	04/19/21 15:46	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	04/19/21 15:46	04/19/21 15:46	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	04/19/21 15:46	04/19/21 15:46	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/19/21 15:46	04/19/21 15:46	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/19/21 15:46	04/19/21 15:46	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/19/21 15:46	04/19/21 15:46	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 15:46	04/19/21 15:46	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 15:46	04/19/21 15:46	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/19/21 15:46	04/19/21 15:46	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/19/21 15:46	04/19/21 15:46	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/19/21 15:46	04/19/21 15:46	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/19/21 15:46	04/19/21 15:46	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/19/21 15:46	04/19/21 15:46	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/19/21 15:46	04/19/21 15:46	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	04/19/21 15:46	04/19/21 15:46	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/19/21 15:46	04/19/21 15:46	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/19/21 15:46	04/19/21 15:46	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/19/21 15:46	04/19/21 15:46	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/19/21 15:46	04/19/21 15:46	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/19/21 15:46	04/19/21 15:46	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/19/21 15:46	04/19/21 15:46	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/19/21 15:46	04/19/21 15:46	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 15:46	04/19/21 15:46	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/19/21 15:46	04/19/21 15:46	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/19/21 15:46	04/19/21 15:46	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/19/21 15:46	04/19/21 15:46	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/19/21 15:46	04/19/21 15:46	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/19/21 15:46	04/19/21 15:46	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/19/21 15:46	04/19/21 15:46	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/19/21 15:46	04/19/21 15:46	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/19/21 15:46	04/19/21 15:46	179601-23-1	
Surrogates									
Toluene-d8 (S)	115	%	80.0-120		1	04/19/21 15:46	04/19/21 15:46	2037-26-5	
4-Bromofluorobenzene (S)	98.7	%	77.0-126		1	04/19/21 15:46	04/19/21 15:46	460-00-4	
1,2-Dichloroethane-d4 (S)	98.8	%	70.0-130		1	04/19/21 15:46	04/19/21 15:46	17060-07-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415474

Sample: RW-P264 **Lab ID: 30415474009** Collected: 04/14/21 12:15 Received: 04/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.000070J**	mg/L	0.00020	0.000030	1	04/26/21 13:50	04/27/21 17:01	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/19/21 16:07	04/19/21 16:07	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/19/21 16:07	04/19/21 16:07	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/19/21 16:07	04/19/21 16:07	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/19/21 16:07	04/19/21 16:07	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/19/21 16:07	04/19/21 16:07	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/19/21 16:07	04/19/21 16:07	75-25-2	
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/19/21 16:07	04/19/21 16:07	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/19/21 16:07	04/19/21 16:07	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/19/21 16:07	04/19/21 16:07	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/19/21 16:07	04/19/21 16:07	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/19/21 16:07	04/19/21 16:07	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/19/21 16:07	04/19/21 16:07	75-00-3	
Chloroform	**0.464J**	ug/L	5.00	0.111	1	04/19/21 16:07	04/19/21 16:07	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/19/21 16:07	04/19/21 16:07	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/19/21 16:07	04/19/21 16:07	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/19/21 16:07	04/19/21 16:07	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/19/21 16:07	04/19/21 16:07	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/19/21 16:07	04/19/21 16:07	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/19/21 16:07	04/19/21 16:07	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/19/21 16:07	04/19/21 16:07	110-57-6	
Dichlorofluoromethane	**5.38**	ug/L	5.00	0.130	1	04/19/21 16:07	04/19/21 16:07	75-43-4	
Dichlorodifluoromethane	**4.29J**	ug/L	5.00	0.374	1	04/19/21 16:07	04/19/21 16:07	75-71-8	J
1,1-Dichloroethane	**3.02**	ug/L	1.00	0.100	1	04/19/21 16:07	04/19/21 16:07	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/19/21 16:07	04/19/21 16:07	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/19/21 16:07	04/19/21 16:07	75-35-4	
cis-1,2-Dichloroethene	**0.343J**	ug/L	1.00	0.126	1	04/19/21 16:07	04/19/21 16:07	156-59-2	J
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 16:07	04/19/21 16:07	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 16:07	04/19/21 16:07	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/19/21 16:07	04/19/21 16:07	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/19/21 16:07	04/19/21 16:07	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/19/21 16:07	04/19/21 16:07	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/19/21 16:07	04/19/21 16:07	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/19/21 16:07	04/19/21 16:07	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/19/21 16:07	04/19/21 16:07	78-93-3	
Methylene Chloride	**0.543J**	ug/L	5.00	0.430	1	04/19/21 16:07	04/19/21 16:07	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/19/21 16:07	04/19/21 16:07	108-10-1	
Methyl-tert-butyl ether	**0.164J**	ug/L	1.00	0.101	1	04/19/21 16:07	04/19/21 16:07	1634-04-4	J
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/19/21 16:07	04/19/21 16:07	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/19/21 16:07	04/19/21 16:07	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/19/21 16:07	04/19/21 16:07	79-34-5	
Tetrachloroethene	**2.27**	ug/L	1.00	0.300	1	04/19/21 16:07	04/19/21 16:07	127-18-4	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415474

Sample: RW-P264 **Lab ID: 30415474009** Collected: 04/14/21 12:15 Received: 04/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/19/21 16:07	04/19/21 16:07	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 16:07	04/19/21 16:07	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/19/21 16:07	04/19/21 16:07	79-00-5	
Trichloroethene	**0.789J**	ug/L	1.00	0.190	1	04/19/21 16:07	04/19/21 16:07	79-01-6	J
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/19/21 16:07	04/19/21 16:07	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/19/21 16:07	04/19/21 16:07	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/19/21 16:07	04/19/21 16:07	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/19/21 16:07	04/19/21 16:07	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/19/21 16:07	04/19/21 16:07	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/19/21 16:07	04/19/21 16:07	179601-23-1	
Surrogates									
Toluene-d8 (S)	115	%	80.0-120		1	04/19/21 16:07	04/19/21 16:07	2037-26-5	
4-Bromofluorobenzene (S)	101	%	77.0-126		1	04/19/21 16:07	04/19/21 16:07	460-00-4	
1,2-Dichloroethane-d4 (S)	94.3	%	70.0-130		1	04/19/21 16:07	04/19/21 16:07	17060-07-0	

Sample: RW-P440 **Lab ID: 30415474010** Collected: 04/13/21 17:00 Received: 04/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.000060J**	mg/L	0.00020	0.000030	1	04/26/21 13:50	04/27/21 17:03	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/19/21 16:28	04/19/21 16:28	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/19/21 16:28	04/19/21 16:28	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/19/21 16:28	04/19/21 16:28	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/19/21 16:28	04/19/21 16:28	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/19/21 16:28	04/19/21 16:28	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/19/21 16:28	04/19/21 16:28	75-25-2	
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/19/21 16:28	04/19/21 16:28	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/19/21 16:28	04/19/21 16:28	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/19/21 16:28	04/19/21 16:28	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/19/21 16:28	04/19/21 16:28	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/19/21 16:28	04/19/21 16:28	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/19/21 16:28	04/19/21 16:28	75-00-3	
Chloroform	**1.09J**	ug/L	5.00	0.111	1	04/19/21 16:28	04/19/21 16:28	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/19/21 16:28	04/19/21 16:28	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/19/21 16:28	04/19/21 16:28	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/19/21 16:28	04/19/21 16:28	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/19/21 16:28	04/19/21 16:28	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/19/21 16:28	04/19/21 16:28	95-50-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415474

Sample: RW-P440 **Lab ID: 30415474010** Collected: 04/13/21 17:00 Received: 04/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/19/21 16:28	04/19/21 16:28	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/19/21 16:28	04/19/21 16:28	110-57-6	
Dichlorofluoromethane	**0.398J**	ug/L	5.00	0.130	1	04/19/21 16:28	04/19/21 16:28	75-43-4	J
Dichlorodifluoromethane	**0.433J**	ug/L	5.00	0.374	1	04/19/21 16:28	04/19/21 16:28	75-71-8	J
1,1-Dichloroethane	**0.512J**	ug/L	1.00	0.100	1	04/19/21 16:28	04/19/21 16:28	75-34-3	J
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/19/21 16:28	04/19/21 16:28	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/19/21 16:28	04/19/21 16:28	75-35-4	
cis-1,2-Dichloroethene	**0.134J**	ug/L	1.00	0.126	1	04/19/21 16:28	04/19/21 16:28	156-59-2	J
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 16:28	04/19/21 16:28	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 16:28	04/19/21 16:28	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/19/21 16:28	04/19/21 16:28	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/19/21 16:28	04/19/21 16:28	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/19/21 16:28	04/19/21 16:28	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/19/21 16:28	04/19/21 16:28	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/19/21 16:28	04/19/21 16:28	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/19/21 16:28	04/19/21 16:28	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	04/19/21 16:28	04/19/21 16:28	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/19/21 16:28	04/19/21 16:28	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/19/21 16:28	04/19/21 16:28	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/19/21 16:28	04/19/21 16:28	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/19/21 16:28	04/19/21 16:28	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/19/21 16:28	04/19/21 16:28	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/19/21 16:28	04/19/21 16:28	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/19/21 16:28	04/19/21 16:28	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 16:28	04/19/21 16:28	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/19/21 16:28	04/19/21 16:28	79-00-5	
Trichloroethene	**0.272J**	ug/L	1.00	0.190	1	04/19/21 16:28	04/19/21 16:28	79-01-6	J
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/19/21 16:28	04/19/21 16:28	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/19/21 16:28	04/19/21 16:28	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/19/21 16:28	04/19/21 16:28	108-05-4	
Vinyl chloride	**0.867J**	ug/L	1.00	0.234	1	04/19/21 16:28	04/19/21 16:28	75-01-4	J
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/19/21 16:28	04/19/21 16:28	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/19/21 16:28	04/19/21 16:28	179601-23-1	
Surrogates									
Toluene-d8 (S)	114	%	80.0-120		1	04/19/21 16:28	04/19/21 16:28	2037-26-5	
4-Bromofluorobenzene (S)	94.3	%	77.0-126		1	04/19/21 16:28	04/19/21 16:28	460-00-4	
1,2-Dichloroethane-d4 (S)	91.5	%	70.0-130		1	04/19/21 16:28	04/19/21 16:28	17060-07-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415474

Sample: RW-P441 **Lab ID: 30415474011** Collected: 04/13/21 16:10 Received: 04/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00014J**	mg/L	0.00020	0.000030	1	04/26/21 13:50	04/27/21 17:05	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/19/21 20:16	04/19/21 20:16	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/19/21 20:16	04/19/21 20:16	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/19/21 20:16	04/19/21 20:16	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/19/21 20:16	04/19/21 20:16	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/19/21 20:16	04/19/21 20:16	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/19/21 20:16	04/19/21 20:16	75-25-2	
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/19/21 20:16	04/19/21 20:16	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/19/21 20:16	04/19/21 20:16	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/19/21 20:16	04/19/21 20:16	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/19/21 20:16	04/19/21 20:16	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/19/21 20:16	04/19/21 20:16	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/19/21 20:16	04/19/21 20:16	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	04/19/21 20:16	04/19/21 20:16	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/19/21 20:16	04/19/21 20:16	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/19/21 20:16	04/19/21 20:16	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/19/21 20:16	04/19/21 20:16	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/19/21 20:16	04/19/21 20:16	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/19/21 20:16	04/19/21 20:16	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/19/21 20:16	04/19/21 20:16	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/19/21 20:16	04/19/21 20:16	110-57-6	
Dichlorofluoromethane	**0.223J**	ug/L	5.00	0.130	1	04/19/21 20:16	04/19/21 20:16	75-43-4	J
Dichlorodifluoromethane	**0.412J**	ug/L	5.00	0.374	1	04/19/21 20:16	04/19/21 20:16	75-71-8	J
1,1-Dichloroethane	**0.332J**	ug/L	1.00	0.100	1	04/19/21 20:16	04/19/21 20:16	75-34-3	J
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/19/21 20:16	04/19/21 20:16	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/19/21 20:16	04/19/21 20:16	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/19/21 20:16	04/19/21 20:16	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 20:16	04/19/21 20:16	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 20:16	04/19/21 20:16	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/19/21 20:16	04/19/21 20:16	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/19/21 20:16	04/19/21 20:16	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/19/21 20:16	04/19/21 20:16	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/19/21 20:16	04/19/21 20:16	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/19/21 20:16	04/19/21 20:16	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/19/21 20:16	04/19/21 20:16	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	04/19/21 20:16	04/19/21 20:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/19/21 20:16	04/19/21 20:16	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/19/21 20:16	04/19/21 20:16	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/19/21 20:16	04/19/21 20:16	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/19/21 20:16	04/19/21 20:16	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/19/21 20:16	04/19/21 20:16	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/19/21 20:16	04/19/21 20:16	127-18-4	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415474

Sample: RW-P441 **Lab ID: 30415474011** Collected: 04/13/21 16:10 Received: 04/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/19/21 20:16	04/19/21 20:16	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 20:16	04/19/21 20:16	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/19/21 20:16	04/19/21 20:16	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/19/21 20:16	04/19/21 20:16	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/19/21 20:16	04/19/21 20:16	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/19/21 20:16	04/19/21 20:16	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/19/21 20:16	04/19/21 20:16	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/19/21 20:16	04/19/21 20:16	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/19/21 20:16	04/19/21 20:16	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/19/21 20:16	04/19/21 20:16	179601-23-1	
Surrogates									
Toluene-d8 (S)	115	%	80.0-120		1	04/19/21 20:16	04/19/21 20:16	2037-26-5	
4-Bromofluorobenzene (S)	99.9	%	77.0-126		1	04/19/21 20:16	04/19/21 20:16	460-00-4	
1,2-Dichloroethane-d4 (S)	92.4	%	70.0-130		1	04/19/21 20:16	04/19/21 20:16	17060-07-0	

Sample: RW-P584 **Lab ID: 30415474012** Collected: 04/13/21 14:45 Received: 04/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00028**	mg/L	0.00020	0.000030	1	04/26/21 13:50	04/27/21 17:10	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/19/21 20:36	04/19/21 20:36	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/19/21 20:36	04/19/21 20:36	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/19/21 20:36	04/19/21 20:36	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/19/21 20:36	04/19/21 20:36	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/19/21 20:36	04/19/21 20:36	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/19/21 20:36	04/19/21 20:36	75-25-2	
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/19/21 20:36	04/19/21 20:36	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/19/21 20:36	04/19/21 20:36	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/19/21 20:36	04/19/21 20:36	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/19/21 20:36	04/19/21 20:36	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/19/21 20:36	04/19/21 20:36	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/19/21 20:36	04/19/21 20:36	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	04/19/21 20:36	04/19/21 20:36	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/19/21 20:36	04/19/21 20:36	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/19/21 20:36	04/19/21 20:36	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/19/21 20:36	04/19/21 20:36	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/19/21 20:36	04/19/21 20:36	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/19/21 20:36	04/19/21 20:36	95-50-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415474

Sample: RW-P584 **Lab ID: 30415474012** Collected: 04/13/21 14:45 Received: 04/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/19/21 20:36	04/19/21 20:36	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/19/21 20:36	04/19/21 20:36	110-57-6	
Dichlorofluoromethane	**2.50J**	ug/L	5.00	0.130	1	04/19/21 20:36	04/19/21 20:36	75-43-4	J
Dichlorodifluoromethane	**2.74J**	ug/L	5.00	0.374	1	04/19/21 20:36	04/19/21 20:36	75-71-8	J
1,1-Dichloroethane	**2.64**	ug/L	1.00	0.100	1	04/19/21 20:36	04/19/21 20:36	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/19/21 20:36	04/19/21 20:36	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/19/21 20:36	04/19/21 20:36	75-35-4	
cis-1,2-Dichloroethene	**0.886J**	ug/L	1.00	0.126	1	04/19/21 20:36	04/19/21 20:36	156-59-2	J
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 20:36	04/19/21 20:36	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 20:36	04/19/21 20:36	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/19/21 20:36	04/19/21 20:36	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/19/21 20:36	04/19/21 20:36	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/19/21 20:36	04/19/21 20:36	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/19/21 20:36	04/19/21 20:36	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/19/21 20:36	04/19/21 20:36	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/19/21 20:36	04/19/21 20:36	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	04/19/21 20:36	04/19/21 20:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/19/21 20:36	04/19/21 20:36	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/19/21 20:36	04/19/21 20:36	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/19/21 20:36	04/19/21 20:36	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/19/21 20:36	04/19/21 20:36	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/19/21 20:36	04/19/21 20:36	79-34-5	
Tetrachloroethene	**2.34**	ug/L	1.00	0.300	1	04/19/21 20:36	04/19/21 20:36	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/19/21 20:36	04/19/21 20:36	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 20:36	04/19/21 20:36	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/19/21 20:36	04/19/21 20:36	79-00-5	
Trichloroethene	**1.23**	ug/L	1.00	0.190	1	04/19/21 20:36	04/19/21 20:36	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/19/21 20:36	04/19/21 20:36	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/19/21 20:36	04/19/21 20:36	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/19/21 20:36	04/19/21 20:36	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/19/21 20:36	04/19/21 20:36	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/19/21 20:36	04/19/21 20:36	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/19/21 20:36	04/19/21 20:36	179601-23-1	
Surrogates									
Toluene-d8 (S)	109	%	80.0-120		1	04/19/21 20:36	04/19/21 20:36	2037-26-5	
4-Bromofluorobenzene (S)	101	%	77.0-126		1	04/19/21 20:36	04/19/21 20:36	460-00-4	
1,2-Dichloroethane-d4 (S)	93.3	%	70.0-130		1	04/19/21 20:36	04/19/21 20:36	17060-07-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415474

Sample: TRIP BLANK **Lab ID: 30415474013** Collected: 04/14/21 00:01 Received: 04/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/19/21 19:34	04/19/21 19:34	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/19/21 19:34	04/19/21 19:34	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/19/21 19:34	04/19/21 19:34	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/19/21 19:34	04/19/21 19:34	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/19/21 19:34	04/19/21 19:34	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/19/21 19:34	04/19/21 19:34	75-25-2	
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/19/21 19:34	04/19/21 19:34	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/19/21 19:34	04/19/21 19:34	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/19/21 19:34	04/19/21 19:34	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/19/21 19:34	04/19/21 19:34	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/19/21 19:34	04/19/21 19:34	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/19/21 19:34	04/19/21 19:34	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	04/19/21 19:34	04/19/21 19:34	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/19/21 19:34	04/19/21 19:34	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/19/21 19:34	04/19/21 19:34	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/19/21 19:34	04/19/21 19:34	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/19/21 19:34	04/19/21 19:34	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/19/21 19:34	04/19/21 19:34	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/19/21 19:34	04/19/21 19:34	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/19/21 19:34	04/19/21 19:34	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	04/19/21 19:34	04/19/21 19:34	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	04/19/21 19:34	04/19/21 19:34	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	04/19/21 19:34	04/19/21 19:34	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/19/21 19:34	04/19/21 19:34	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/19/21 19:34	04/19/21 19:34	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/19/21 19:34	04/19/21 19:34	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 19:34	04/19/21 19:34	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 19:34	04/19/21 19:34	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/19/21 19:34	04/19/21 19:34	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/19/21 19:34	04/19/21 19:34	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/19/21 19:34	04/19/21 19:34	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/19/21 19:34	04/19/21 19:34	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/19/21 19:34	04/19/21 19:34	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/19/21 19:34	04/19/21 19:34	78-93-3	
Methylene Chloride	**0.714J**	ug/L	5.00	0.430	1	04/19/21 19:34	04/19/21 19:34	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/19/21 19:34	04/19/21 19:34	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/19/21 19:34	04/19/21 19:34	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/19/21 19:34	04/19/21 19:34	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/19/21 19:34	04/19/21 19:34	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/19/21 19:34	04/19/21 19:34	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/19/21 19:34	04/19/21 19:34	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/19/21 19:34	04/19/21 19:34	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/19/21 19:34	04/19/21 19:34	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/19/21 19:34	04/19/21 19:34	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/19/21 19:34	04/19/21 19:34	79-01-6	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415474

Sample: TRIP BLANK **Lab ID: 30415474013** Collected: 04/14/21 00:01 Received: 04/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/19/21 19:34	04/19/21 19:34	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/19/21 19:34	04/19/21 19:34	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/19/21 19:34	04/19/21 19:34	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/19/21 19:34	04/19/21 19:34	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/19/21 19:34	04/19/21 19:34	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/19/21 19:34	04/19/21 19:34	179601-23-1	
Surrogates									
Toluene-d8 (S)	113	%	80.0-120		1	04/19/21 19:34	04/19/21 19:34	2037-26-5	
4-Bromofluorobenzene (S)	95.1	%	77.0-126		1	04/19/21 19:34	04/19/21 19:34	460-00-4	
1,2-Dichloroethane-d4 (S)	91.8	%	70.0-130		1	04/19/21 19:34	04/19/21 19:34	17060-07-0	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415474

QC Batch: 444974 | Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A | Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30415474001, 30415474002, 30415474003, 30415474004, 30415474005, 30415474006, 30415474007, 30415474008, 30415474009, 30415474010, 30415474011, 30415474012

METHOD BLANK: 2148121 | Matrix: Water

Associated Lab Samples: 30415474001, 30415474002, 30415474003, 30415474004, 30415474005, 30415474006, 30415474007, 30415474008, 30415474009, 30415474010, 30415474011, 30415474012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.000050J	0.00020	0.000030	04/27/21 16:37	

LABORATORY CONTROL SAMPLE: 2148122

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.001	0.0010	102	80-120	

MATRIX SPIKE SAMPLE: 2148124

Parameter	Units	30415474001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.000050J	0.0025	0.0024	96	75-125	

MATRIX SPIKE SAMPLE: 2148126

Parameter	Units	30415474011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.00014J	0.0025	0.0025	94	75-125	

SAMPLE DUPLICATE: 2148123

Parameter	Units	30415474001 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	0.000050J	0.000050J		20	

SAMPLE DUPLICATE: 2148125

Parameter	Units	30415474011 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	0.00014J	0.00013J		20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415474

QC Batch: 1654378
QC Batch Method: 8260B
Analysis Method: EPA 8260B
Analysis Description: VOA (GC/MS) 8260B
Laboratory: Pace National - Mt. Juliet
Associated Lab Samples: 30415474001, 30415474002, 30415474003, 30415474004, 30415474005, 30415474006, 30415474007, 30415474008, 30415474009, 30415474010

METHOD BLANK: R3644833-2
Matrix: Water
Associated Lab Samples: 30415474001, 30415474002, 30415474003, 30415474004, 30415474005, 30415474006, 30415474007, 30415474008, 30415474009, 30415474010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acetone	ug/L	50.0 U	50.0	11.3	04/19/21 09:57	
Acrylonitrile	ug/L	10.0 U	10.0	0.671	04/19/21 09:57	
Benzene	ug/L	1.00 U	1.00	0.0941	04/19/21 09:57	
Bromodichloromethane	ug/L	1.00 U	1.00	0.136	04/19/21 09:57	
Bromochloromethane	ug/L	1.00 U	1.00	0.128	04/19/21 09:57	
Bromoform	ug/L	1.00 U	1.00	0.129	04/19/21 09:57	
Bromomethane	ug/L	5.00 U	5.00	0.605	04/19/21 09:57	
Carbon disulfide	ug/L	1.00 U	1.00	0.0962	04/19/21 09:57	
Carbon tetrachloride	ug/L	1.00 U	1.00	0.128	04/19/21 09:57	
Chlorobenzene	ug/L	1.00 U	1.00	0.116	04/19/21 09:57	
Dibromochloromethane	ug/L	1.00 U	1.00	0.140	04/19/21 09:57	
Chloroethane	ug/L	5.00 U	5.00	0.192	04/19/21 09:57	
Chloroform	ug/L	5.00 U	5.00	0.111	04/19/21 09:57	
Chloromethane	ug/L	2.50 U	2.50	0.960	04/19/21 09:57	
1,2-Dibromo-3-chloropropane	ug/L	5.00 U	5.00	0.276	04/19/21 09:57	
1,2-Dibromoethane (EDB)	ug/L	1.00 U	1.00	0.126	04/19/21 09:57	
Dibromomethane	ug/L	1.00 U	1.00	0.122	04/19/21 09:57	
1,2-Dichlorobenzene	ug/L	1.00 U	1.00	0.107	04/19/21 09:57	
1,4-Dichlorobenzene	ug/L	1.00 U	1.00	0.120	04/19/21 09:57	
trans-1,4-Dichloro-2-butene	ug/L	2.50 U	2.50	0.467	04/19/21 09:57	
Dichlorodifluoromethane	ug/L	5.00 U	5.00	0.374	04/19/21 09:57	
Dichlorofluoromethane	ug/L	5.00 U	5.00	0.130	04/19/21 09:57	
1,1-Dichloroethane	ug/L	1.00 U	1.00	0.100	04/19/21 09:57	
1,2-Dichloroethane	ug/L	1.00 U	1.00	0.0819	04/19/21 09:57	
1,1-Dichloroethene	ug/L	1.00 U	1.00	0.188	04/19/21 09:57	
cis-1,2-Dichloroethene	ug/L	1.00 U	1.00	0.126	04/19/21 09:57	
trans-1,2-Dichloroethene	ug/L	1.00 U	1.00	0.149	04/19/21 09:57	
1,2-Dichloropropane	ug/L	1.00 U	1.00	0.149	04/19/21 09:57	
cis-1,3-Dichloropropene	ug/L	1.00 U	1.00	0.111	04/19/21 09:57	
trans-1,3-Dichloropropene	ug/L	1.00 U	1.00	0.118	04/19/21 09:57	
Ethylbenzene	ug/L	1.00 U	1.00	0.137	04/19/21 09:57	
2-Hexanone	ug/L	10.0 U	10.0	0.787	04/19/21 09:57	
Iodomethane	ug/L	10.0 U	10.0	6.00	04/19/21 09:57	
2-Butanone (MEK)	ug/L	10.0 U	10.0	1.19	04/19/21 09:57	
Methylene Chloride	ug/L	5.00 U	5.00	0.430	04/19/21 09:57	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.478	04/19/21 09:57	
Methyl-tert-butyl ether	ug/L	1.00 U	1.00	0.101	04/19/21 09:57	
Styrene	ug/L	1.00 U	1.00	0.118	04/19/21 09:57	
1,1,1,2-Tetrachloroethane	ug/L	1.00 U	1.00	0.147	04/19/21 09:57	

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415474

METHOD BLANK: R3644833-2 Matrix: Water

Associated Lab Samples: 30415474001, 30415474002, 30415474003, 30415474004, 30415474005, 30415474006, 30415474007, 30415474008, 30415474009, 30415474010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L	1.00 U	1.00	0.133	04/19/21 09:57	
Tetrachloroethene	ug/L	1.00 U	1.00	0.300	04/19/21 09:57	
Toluene	ug/L	1.00 U	1.00	0.278	04/19/21 09:57	
1,1,1-Trichloroethane	ug/L	1.00 U	1.00	0.149	04/19/21 09:57	
1,1,2-Trichloroethane	ug/L	1.00 U	1.00	0.158	04/19/21 09:57	
Trichloroethene	ug/L	1.00 U	1.00	0.190	04/19/21 09:57	
Trichlorofluoromethane	ug/L	5.00 U	5.00	0.160	04/19/21 09:57	
1,2,3-Trichloropropane	ug/L	2.50 U	2.50	0.237	04/19/21 09:57	
Vinyl acetate	ug/L	10.0 U	10.0	0.692	04/19/21 09:57	
Vinyl chloride	ug/L	1.00 U	1.00	0.234	04/19/21 09:57	
o-Xylene	ug/L	1.00 U	1.00	0.174	04/19/21 09:57	
m&p-Xylene	ug/L	2.00 U	2.00	0.430	04/19/21 09:57	
Toluene-d8 (S)	%	117	80.0-120		04/19/21 09:57	
4-Bromofluorobenzene (S)	%	103	77.0-126		04/19/21 09:57	
1,2-Dichloroethane-d4 (S)	%	92.6	70.0-130		04/19/21 09:57	

LABORATORY CONTROL SAMPLE: R3644833-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acetone	ug/L	25.0	24.6	98.4	19.0-160	
Acrylonitrile	ug/L	25.0	25.4	102	55.0-149	
Benzene	ug/L	5.00	5.11	102	70.0-123	
Bromodichloromethane	ug/L	5.00	4.77	95.4	75.0-120	
Bromochloromethane	ug/L	5.00	5.69	114	76.0-122	
Bromoform	ug/L	5.00	5.20	104	68.0-132	
Bromomethane	ug/L	5.00	4.84	96.8	10.0-160	
Carbon disulfide	ug/L	5.00	5.23	105	61.0-128	
Carbon tetrachloride	ug/L	5.00	5.07	101	68.0-126	
Chlorobenzene	ug/L	5.00	5.48	110	80.0-121	
Dibromochloromethane	ug/L	5.00	5.33	107	77.0-125	
Chloroethane	ug/L	5.00	4.76	95.2	47.0-150	
Chloroform	ug/L	5.00	4.96	99.2	73.0-120	
Chloromethane	ug/L	5.00	4.31	86.2	41.0-142	
1,2-Dibromo-3-chloropropane	ug/L	5.00	4.60	92.0	58.0-134	
1,2-Dibromoethane (EDB)	ug/L	5.00	5.59	112	80.0-122	
Dibromomethane	ug/L	5.00	5.53	111	80.0-120	
1,2-Dichlorobenzene	ug/L	5.00	4.97	99.4	79.0-121	
1,4-Dichlorobenzene	ug/L	5.00	5.00	100	79.0-120	
trans-1,4-Dichloro-2-butene	ug/L	5.00	3.77	75.4	33.0-144	
Dichlorodifluoromethane	ug/L	5.00	4.74	94.8	51.0-149	
Dichlorofluoromethane	ug/L	5.00	4.69	93.8	65.0-133	
1,1-Dichloroethane	ug/L	5.00	5.03	101	70.0-126	
1,2-Dichloroethane	ug/L	5.00	4.56	91.2	70.0-128	

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(724)850-5600

QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415474

LABORATORY CONTROL SAMPLE: R3644833-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	5.00	4.78	95.6	71.0-124	
cis-1,2-Dichloroethene	ug/L	5.00	4.84	96.8	73.0-120	
trans-1,2-Dichloroethene	ug/L	5.00	5.13	103	73.0-120	
1,2-Dichloropropane	ug/L	5.00	5.05	101	77.0-125	
cis-1,3-Dichloropropene	ug/L	5.00	5.17	103	80.0-123	
trans-1,3-Dichloropropene	ug/L	5.00	4.99	99.8	78.0-124	
Ethylbenzene	ug/L	5.00	5.17	103	79.0-123	
2-Hexanone	ug/L	25.0	26.7	107	67.0-149	
Iodomethane	ug/L	25.0	26.7	107	33.0-147	
2-Butanone (MEK)	ug/L	25.0	25.7	103	44.0-160	
Methylene Chloride	ug/L	5.00	4.61	92.2	67.0-120	
4-Methyl-2-pentanone (MIBK)	ug/L	25.0	26.6	106	68.0-142	
Methyl-tert-butyl ether	ug/L	5.00	4.66	93.2	68.0-125	
Styrene	ug/L	5.00	5.63	113	73.0-130	
1,1,1,2-Tetrachloroethane	ug/L	5.00	4.93	98.6	75.0-125	
1,1,2,2-Tetrachloroethane	ug/L	5.00	5.33	107	65.0-130	
Tetrachloroethene	ug/L	5.00	5.39	108	72.0-132	
Toluene	ug/L	5.00	5.29	106	79.0-120	
1,1,1-Trichloroethane	ug/L	5.00	4.92	98.4	73.0-124	
1,1,2-Trichloroethane	ug/L	5.00	5.33	107	80.0-120	
Trichloroethene	ug/L	5.00	5.51	110	78.0-124	
Trichlorofluoromethane	ug/L	5.00	4.45	89.0	59.0-147	
1,2,3-Trichloropropane	ug/L	5.00	5.52	110	73.0-130	
Vinyl acetate	ug/L	25.0	23.9	95.6	11.0-160	
Vinyl chloride	ug/L	5.00	4.87	97.4	67.0-131	
o-Xylene	ug/L	5.00	5.19	104	80.0-122	
m&p-Xylene	ug/L	10.0	10.9	109	80.0-122	
Toluene-d8 (S)	%			112	80.0-120	
4-Bromofluorobenzene (S)	%			97.7	77.0-126	
1,2-Dichloroethane-d4 (S)	%			94.9	70.0-130	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415474

QC Batch: 1654383
QC Batch Method: 8260B
Analysis Method: EPA 8260B
Analysis Description: VOA (GC/MS) 8260B
Laboratory: Pace National - Mt. Juliet
Associated Lab Samples: 30415474011, 30415474012, 30415474013

METHOD BLANK: R3644834-2
Matrix: Water
Associated Lab Samples: 30415474011, 30415474012, 30415474013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acetone	ug/L	50.0 U	50.0	11.3	04/19/21 19:14	
Acrylonitrile	ug/L	10.0 U	10.0	0.671	04/19/21 19:14	
Benzene	ug/L	1.00 U	1.00	0.0941	04/19/21 19:14	
Bromodichloromethane	ug/L	1.00 U	1.00	0.136	04/19/21 19:14	
Bromochloromethane	ug/L	1.00 U	1.00	0.128	04/19/21 19:14	
Bromoform	ug/L	1.00 U	1.00	0.129	04/19/21 19:14	
Bromomethane	ug/L	5.00 U	5.00	0.605	04/19/21 19:14	
Carbon disulfide	ug/L	1.00 U	1.00	0.0962	04/19/21 19:14	
Carbon tetrachloride	ug/L	1.00 U	1.00	0.128	04/19/21 19:14	
Chlorobenzene	ug/L	1.00 U	1.00	0.116	04/19/21 19:14	
Dibromochloromethane	ug/L	1.00 U	1.00	0.140	04/19/21 19:14	
Chloroethane	ug/L	5.00 U	5.00	0.192	04/19/21 19:14	
Chloroform	ug/L	5.00 U	5.00	0.111	04/19/21 19:14	
Chloromethane	ug/L	2.50 U	2.50	0.960	04/19/21 19:14	
1,2-Dibromo-3-chloropropane	ug/L	5.00 U	5.00	0.276	04/19/21 19:14	
1,2-Dibromoethane (EDB)	ug/L	1.00 U	1.00	0.126	04/19/21 19:14	
Dibromomethane	ug/L	1.00 U	1.00	0.122	04/19/21 19:14	
1,2-Dichlorobenzene	ug/L	1.00 U	1.00	0.107	04/19/21 19:14	
1,4-Dichlorobenzene	ug/L	1.00 U	1.00	0.120	04/19/21 19:14	
trans-1,4-Dichloro-2-butene	ug/L	2.50 U	2.50	0.467	04/19/21 19:14	
Dichlorodifluoromethane	ug/L	5.00 U	5.00	0.374	04/19/21 19:14	
Dichlorofluoromethane	ug/L	5.00 U	5.00	0.130	04/19/21 19:14	
1,1-Dichloroethane	ug/L	1.00 U	1.00	0.100	04/19/21 19:14	
1,2-Dichloroethane	ug/L	1.00 U	1.00	0.0819	04/19/21 19:14	
1,1-Dichloroethene	ug/L	1.00 U	1.00	0.188	04/19/21 19:14	
cis-1,2-Dichloroethene	ug/L	1.00 U	1.00	0.126	04/19/21 19:14	
trans-1,2-Dichloroethene	ug/L	1.00 U	1.00	0.149	04/19/21 19:14	
1,2-Dichloropropane	ug/L	1.00 U	1.00	0.149	04/19/21 19:14	
cis-1,3-Dichloropropene	ug/L	1.00 U	1.00	0.111	04/19/21 19:14	
trans-1,3-Dichloropropene	ug/L	1.00 U	1.00	0.118	04/19/21 19:14	
Ethylbenzene	ug/L	1.00 U	1.00	0.137	04/19/21 19:14	
2-Hexanone	ug/L	10.0 U	10.0	0.787	04/19/21 19:14	
Iodomethane	ug/L	10.0 U	10.0	6.00	04/19/21 19:14	
2-Butanone (MEK)	ug/L	10.0 U	10.0	1.19	04/19/21 19:14	
Methylene Chloride	ug/L	5.00 U	5.00	0.430	04/19/21 19:14	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.478	04/19/21 19:14	
Methyl-tert-butyl ether	ug/L	1.00 U	1.00	0.101	04/19/21 19:14	
Styrene	ug/L	1.00 U	1.00	0.118	04/19/21 19:14	
1,1,1,2-Tetrachloroethane	ug/L	1.00 U	1.00	0.147	04/19/21 19:14	
1,1,2,2-Tetrachloroethane	ug/L	1.00 U	1.00	0.133	04/19/21 19:14	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415474

METHOD BLANK: R3644834-2 Matrix: Water
Associated Lab Samples: 30415474011, 30415474012, 30415474013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Tetrachloroethene	ug/L	1.00 U	1.00	0.300	04/19/21 19:14	
Toluene	ug/L	1.00 U	1.00	0.278	04/19/21 19:14	
1,1,1-Trichloroethane	ug/L	1.00 U	1.00	0.149	04/19/21 19:14	
1,1,2-Trichloroethane	ug/L	1.00 U	1.00	0.158	04/19/21 19:14	
Trichloroethene	ug/L	1.00 U	1.00	0.190	04/19/21 19:14	
Trichlorofluoromethane	ug/L	5.00 U	5.00	0.160	04/19/21 19:14	
1,2,3-Trichloropropane	ug/L	2.50 U	2.50	0.237	04/19/21 19:14	
Vinyl acetate	ug/L	10.0 U	10.0	0.692	04/19/21 19:14	
Vinyl chloride	ug/L	1.00 U	1.00	0.234	04/19/21 19:14	
o-Xylene	ug/L	1.00 U	1.00	0.174	04/19/21 19:14	
m&p-Xylene	ug/L	2.00 U	2.00	0.430	04/19/21 19:14	
Toluene-d8 (S)	%	116	80.0-120		04/19/21 19:14	
4-Bromofluorobenzene (S)	%	93.1	77.0-126		04/19/21 19:14	
1,2-Dichloroethane-d4 (S)	%	93	70.0-130		04/19/21 19:14	

LABORATORY CONTROL SAMPLE: R3644834-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acetone	ug/L	25.0	21.8	87.2	19.0-160	
Acrylonitrile	ug/L	25.0	23.7	94.8	55.0-149	
Benzene	ug/L	5.00	5.13	103	70.0-123	
Bromodichloromethane	ug/L	5.00	4.83	96.6	75.0-120	
Bromochloromethane	ug/L	5.00	5.03	101	76.0-122	
Bromoform	ug/L	5.00	4.99	99.8	68.0-132	
Bromomethane	ug/L	5.00	5.55	111	10.0-160	
Carbon disulfide	ug/L	5.00	5.37	107	61.0-128	
Carbon tetrachloride	ug/L	5.00	5.46	109	68.0-126	
Chlorobenzene	ug/L	5.00	5.47	109	80.0-121	
Dibromochloromethane	ug/L	5.00	4.82	96.4	77.0-125	
Chloroethane	ug/L	5.00	5.22	104	47.0-150	
Chloroform	ug/L	5.00	5.40	108	73.0-120	
Chloromethane	ug/L	5.00	5.21	104	41.0-142	
1,2-Dibromo-3-chloropropane	ug/L	5.00	3.97	79.4	58.0-134	
1,2-Dibromoethane (EDB)	ug/L	5.00	5.19	104	80.0-122	
Dibromomethane	ug/L	5.00	4.93	98.6	80.0-120	
1,2-Dichlorobenzene	ug/L	5.00	5.08	102	79.0-121	
1,4-Dichlorobenzene	ug/L	5.00	5.21	104	79.0-120	
trans-1,4-Dichloro-2-butene	ug/L	5.00	3.51	70.2	33.0-144	
Dichlorodifluoromethane	ug/L	5.00	5.49	110	51.0-149	
Dichlorofluoromethane	ug/L	5.00	5.30	106	65.0-133	
1,1-Dichloroethane	ug/L	5.00	5.33	107	70.0-126	
1,2-Dichloroethane	ug/L	5.00	4.99	99.8	70.0-128	
1,1-Dichloroethene	ug/L	5.00	4.89	97.8	71.0-124	
cis-1,2-Dichloroethene	ug/L	5.00	4.81	96.2	73.0-120	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415474

LABORATORY CONTROL SAMPLE: R3644834-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,2-Dichloroethene	ug/L	5.00	5.11	102	73.0-120	
1,2-Dichloropropane	ug/L	5.00	5.16	103	77.0-125	
cis-1,3-Dichloropropene	ug/L	5.00	4.84	96.8	80.0-123	
trans-1,3-Dichloropropene	ug/L	5.00	4.74	94.8	78.0-124	
Ethylbenzene	ug/L	5.00	5.41	108	79.0-123	
2-Hexanone	ug/L	25.0	24.9	99.6	67.0-149	
Iodomethane	ug/L	25.0	27.4	110	33.0-147	
2-Butanone (MEK)	ug/L	25.0	23.8	95.2	44.0-160	
Methylene Chloride	ug/L	5.00	4.54	90.8	67.0-120	
4-Methyl-2-pentanone (MIBK)	ug/L	25.0	25.4	102	68.0-142	
Methyl-tert-butyl ether	ug/L	5.00	4.88	97.6	68.0-125	
Styrene	ug/L	5.00	5.35	107	73.0-130	
1,1,1,2-Tetrachloroethane	ug/L	5.00	4.92	98.4	75.0-125	
1,1,2,2-Tetrachloroethane	ug/L	5.00	5.47	109	65.0-130	
Tetrachloroethene	ug/L	5.00	6.09	122	72.0-132	
Toluene	ug/L	5.00	5.42	108	79.0-120	
1,1,1-Trichloroethane	ug/L	5.00	5.01	100	73.0-124	
1,1,2-Trichloroethane	ug/L	5.00	5.18	104	80.0-120	
Trichloroethene	ug/L	5.00	5.70	114	78.0-124	
Trichlorofluoromethane	ug/L	5.00	5.23	105	59.0-147	
1,2,3-Trichloropropane	ug/L	5.00	5.32	106	73.0-130	
Vinyl acetate	ug/L	25.0	18.4	73.6	11.0-160	
Vinyl chloride	ug/L	5.00	5.71	114	67.0-131	
o-Xylene	ug/L	5.00	5.19	104	80.0-122	
m&p-Xylene	ug/L	10.0	11.1	111	80.0-122	
Toluene-d8 (S)	%			108	80.0-120	
4-Bromofluorobenzene (S)	%			98.1	77.0-126	
1,2-Dichloroethane-d4 (S)	%			97.6	70.0-130	

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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: MLF-SPRING 2021
Pace Project No.: 30415474

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

J Analyte detected below the reporting limit, therefore result is an estimate. This qualifier is also used for all TICs.

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2021
Pace Project No.: 30415474

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30415474001	**MW-P4**	EPA 7470A	444974	EPA 7470A	445047
30415474002	**MW-P9**	EPA 7470A	444974	EPA 7470A	445047
30415474003	**MW-P106**	EPA 7470A	444974	EPA 7470A	445047
30415474004	**MW-P417**	EPA 7470A	444974	EPA 7470A	445047
30415474005	**MW-P440**	EPA 7470A	444974	EPA 7470A	445047
30415474006	**RW-P109**	EPA 7470A	444974	EPA 7470A	445047
30415474007	**RW-P165**	EPA 7470A	444974	EPA 7470A	445047
30415474008	**RW-P171-1**	EPA 7470A	444974	EPA 7470A	445047
30415474009	**RW-P264**	EPA 7470A	444974	EPA 7470A	445047
30415474010	**RW-P440**	EPA 7470A	444974	EPA 7470A	445047
30415474011	**RW-P441**	EPA 7470A	444974	EPA 7470A	445047
30415474012	**RW-P584**	EPA 7470A	444974	EPA 7470A	445047
30415474001	**MW-P4**	8260B	1654378	EPA 8260B	1654378
30415474002	**MW-P9**	8260B	1654378	EPA 8260B	1654378
30415474003	**MW-P106**	8260B	1654378	EPA 8260B	1654378
30415474004	**MW-P417**	8260B	1654378	EPA 8260B	1654378
30415474005	**MW-P440**	8260B	1654378	EPA 8260B	1654378
30415474006	**RW-P109**	8260B	1654378	EPA 8260B	1654378
30415474007	**RW-P165**	8260B	1654378	EPA 8260B	1654378
30415474008	**RW-P171-1**	8260B	1654378	EPA 8260B	1654378
30415474009	**RW-P264**	8260B	1654378	EPA 8260B	1654378
30415474010	**RW-P440**	8260B	1654378	EPA 8260B	1654378
30415474011	**RW-P441**	8260B	1654383	EPA 8260B	1654383
30415474012	**RW-P584**	8260B	1654383	EPA 8260B	1654383
30415474013	**TRIP BLANK**	8260B	1654383	EPA 8260B	1654383

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - SPRING 2021	Turnaround Time	☒ Normal ☐ Rush

WO#: 30415474

30415474

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260 (1)	TOTAL MERCURY										
1	MW-P4	4	4.14.21	1045	✓		GW	✓	✓										001
2	MW-P9		4.13.21	1130															002
3	MW-P106		4.14.21	1000															003
4	MW-P417		4.13.21	1320															004
5	MW-P440			1400															005
6	RW-P109			1230															006
7	RW-P165		4.14.21	1130															007
8	RW-P171-1		4.13.21	1745															008
9	RW-P264		4.14.21	1215															009
10	RW-P440		4.13.21	1700															010
11	RW-P441			1610															011
12	RW-P584			1445															012

	Signature	Date	Time	Comments
Relinquished by	DABrown	4.14.21	14:00	(1) VOCs - SEE ATTACHED LIST
Received by	PACE	4-14-21	1400	
Relinquished by	PACE	4-14-21	18:15	PACE-G-BURG - MERCURY
Received by	RDS PACE	4-14-21	1830	PACE-NAT'L - VOCs
Relinquished by	RDS PACE	4-14-21	2215	
Received by	Marcus J Ulery	4/14/21	2215	LEVEL 2 REPORT

Cooler Temp on Arrival: 1.4 Deg. C

Rev. Aug. 2018

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF-SPMNL 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

WO#: 30415474
PM: SMB Due Date: 04/29/21
CLIENT: ENV MONITOR

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260D
1	TRIP BLANK	2	4.14.21	—	✓		QA	✓
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

013

	Signature	Date	Time	Comments
Relinquished by	[signature]	4.14.21	14:00	(1) VOCs - SEE ATTACHED LIST
Received by	[signature] / Pace	4.14.21	14:00	
Relinquished by	[signature] / Pace	4-14-21	18:15	PACE - NAT'L - VOCs
Received by	RDS PACE	4-14-21	1830	
Relinquished by	RDS PACE	4-14-21	2215	LEVEL 2 REPORT
Received by	Marcus Illari	4-14-2021	2215	

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

TABLE 2-2

APPENDIX I
EPA METHOD 8260 - VOLATILE ORGANIC COMPOUNDS AND DETECTION LIMITS

Millersville Landfill, Anne Arundel County, MD

Parameter	PQL (ppb)	Parameter	PQL (ppb)
Acetone	5.0	cis-1,2-Dichloroethene	1.0
Acrylonitrile	5.0	trans-1,2-Dichloroethene	1.0
Benzene	1.0	Dichlorofluoromethane*	1.0
Bromochloromethane	1.0	Methylene chloride	1.0
Bromodichloromethane	1.0	1,2-Dichloropropane	1.0
Bromoform	1.0	trans-1,3-Dichloropropene	1.0
Bromomethane	1.0	cis-1,3-Dichloropropene	1.0
2-Butanone	5.0	Ethylbenzene	1.0
Carbon disulfide	1.0	2-Hexanone	5.0
Carbon tetrachloride	1.0	Iodomethane	1.0
Chlorobenzene	1.0	4-Methyl-2-pentanone	5.0
Chloroethane	1.0	Styrene	1.0
Chloroform	1.0	1,1,1,2-Tetrachloroethane	1.0
Chloromethane	1.0	1,1,2,2-Tetrachloroethane	1.0
Dibromochloromethane	1.0	Tetrachloroethene	1.0
1,2-Dibromo-3-chloropropane (DBCP)	1.0	Toluene	1.0
1,2 - Dibromoethane (EDB)	1.0	1,1,1-Trichloroethane	1.0
Dibromomethane	1.0	1,1,2-Trichloroethane	1.0
1,2 - Dichlorobenzene	1.0	Trichloroethene	1.0
1,4 - Dichlorobenzene	1.0	Trichloroflouromethane	1.0
trans-1,4-dichloro-2-butene	1.0	1,2,3-Trichloropropane	1.0
Dichlorodifluoromethane*	1.0	Vinyl acetate	1.0
1,1-Dichloroethane	1.0	Vinyl chloride	1.0
1,2-Dichloroethane	1.0	o-Xylene	1.0
1,1-Dichloroethene	1.0	m+p-Xylenes	1.0

NOTES: 1) PQL = Practical quantitation limit d: 8260-1dl.doc
2) * = Additional compounds not included on Appendix I list.

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EMA

Project # 30415474

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label MLL
LIMS Login MLL

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 12 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 1.3 °C Correction Factor: +.1 °C Final Temp: 1.4 °C

Temp should be above freezing to 6°C

pH paper Lot# 10D1101

Date and Initials of person examining contents: MLL 4/15/2021

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4. no signature on COC
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: (VOA) coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.
All containers meet method preservation requirements.	✓			Initial when completed MLL / Date/time of preservation / Lot # of added preservative
Headspace in VOA Vials (>6mm):		✓		17.
Trip Blank Present:	✓			18.
Trip Blank Custody Seals Present	✓			
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: / Date: / Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Internal Transfer Chain of Custody

☐ Samples Pre-Logged into eCOC.

State Of Origin: MD
Cert. Needed: ☒ Yes ☐ No

Pace Analytical®
www.pacelabs.com

Workorder: 30415474 **Workorder Name:** MLF-SPRING 2021
Owner Received Date: 4/14/2021 **Results Requested By:** 4/29/2021

Report To

Samantha Bayura
Pace Analytical Pittsburgh
1638 Roseytown Road
Suites 2,3,4
Greensburg, PA 15601
Phone (724)850-5622

Subcontract To

Pace National
12065 Lebanon Rd
Mt. Juliet, TN 37122
Phone (615) 758-5858

Requested Analysis

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HCL	VOC by 8260	LAB USE ONLY (L1340015)
1	MW-P4	PS	4/14/2021 10:45	30415474001	Water	1	X	-01
2	MW-P9	PS	4/13/2021 11:30	30415474002	Water	1	X	-02
3	MW-P106	PS	4/14/2021 10:00	30415474003	Water	1	X	-03
4	MW-P417	PS	4/13/2021 13:20	30415474004	Water	1	X	-04
5	MW-P440	PS	4/13/2021 14:00	30415474005	Water	1	X	-05
6	RW-P109	PS	4/13/2021 12:30	30415474006	Water	1	X	-06
7	RW-P165	PS	4/14/2021 11:30	30415474007	Water	1	X	-07
8	RW-P171-1	PS	4/13/2021 17:45	30415474008	Water	1	X	-08
9	RW-P264	PS	4/14/2021 12:15	30415474009	Water	1	X	-09
10	RW-P440	PS	4/13/2021 17:00	30415474010	Water	1	X	-10
11	RW-P441	PS	4/13/2021 16:10	30415474011	Water	1	X	-11
12	RW-P584	PS	4/13/2021 14:45	30415474012	Water	1	X	-12
13	TRIP BLANK	PS	4/14/2021 00:01	30415474013	Water	1	X	-13

Sample Receipt Checklist

COC Seal Present/Intact: ✓Y N
COC Signed/Accurate: ✓Y N
Bottles arrive intact: ✓Y N
Correct bottles used: ✓Y N
Sufficient volume sent: ✓Y N
RAD Screen <0.5 mR/hr: ✓Y N

If Applicable
VOA Zero Headspace: ✓Y N
Pres.Correct/Check: Y N

A220

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	[illegible]	4/15/21 1700	Janet Patton	4-16-21	0930 See list attached to COC L1340015 Report in ug/L
2					
3					

Cooler Temperature on Receipt _____ °C	Custody Seal (Y) or N	Received on Ice (Y) or N	Samples Intact (Y) or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.
This chain of custody is considered complete as is since this information is available in the owner laboratory.

1.8+1=1.9 TRK# 9242 2961 3713

A6 ~~01~~

U340015 1 of 2

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - SPRING 2021	Turnaround Time	☒ Normal ☐ Rush

WO#: 30415474

30415474

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260 (1)	TOTAL MERCURY										
1	MW-P4	4	4.14.21	1045	✓		GW	✓	✓										001
2	MW-P9		4.13.21	1130															002
3	MW-P106		4.14.21	1000															003
4	MW-P417		4.13.21	1320															004
5	MW-P440		↓	1400															005
6	RW-P109		↓	1230															006
7	RW-P165		4.14.21	1130															007
8	RW-P171-1		4.13.21	1745															008
9	RW-P264		4.14.21	1215															009
10	RW-P440		4.13.21	1700															010
11	RW-P441		↓	1610															011
12	RW-P584	↓	↓	1445	↓		↓	↓	↓										012

	Signature	Date	Time	Comments
Relinquished by	DABrown	4.14.21	14:00	(1) VOCs - SEE ATTACHED LIST
Received by	PACE	4.14.21	1400	
Relinquished by	PACE	4-14-21	18:15	PACE-G-BURL - MERCURY
Received by	RDS PACE	4-14-21	1820	PACE-NAT'L - VOCs
Relinquished by	RDS PACE	4/14/21	2215	
Received by	Marvin L Usry	4/14/2021	2215	LEVEL 2 REPORT

Cooler Temp on Arrival: 1.4 Deg. C

Rev. Aug. 2018

L1340015 2 of 2

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - SPRING 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

WO#: 30415474
PM: SMB Due Date: 04/29/21
CLIENT: ENV MONITOR

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260											
1	TRIP BLANK	2	4.14.21	—	✓		QA	✓											
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

013

	Signature	Date	Time	Comments
Relinquished by	[signature]	4.14.21	14:00	(1) VOCs - SEE ATTACHED LIST
Received by	[signature] / PACE	4.14.21	14:00	
Relinquished by	[signature] / PACE	4-14-21	18:15	PACE - NAT'L - VOCs
Received by	RDS PACE	4-14-21	1830	
Relinquished by	RDS PACE	4-14-21	2215	LEVEL 2 REPORT
Received by	Marrow Illan	4-14-2021	2215	

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

L1340015

TABLE 2-2

APPENDIX I
EPA METHOD 8260 - VOLATILE ORGANIC COMPOUNDS AND DETECTION LIMITS

Millersville Landfill, Anne Arundel County, MD

Parameter	PQL (ppb)	Parameter	PQL (ppb)
Acetone	5.0	cis-1,2-Dichloroethene	1.0
Acrylonitrile	5.0	trans-1,2-Dichloroethene	1.0
Benzene	1.0	Dichlorofluoromethane*	1.0
Bromochloromethane	1.0	Methylene chloride	1.0
Bromodichloromethane	1.0	1,2-Dichloropropane	1.0
Bromoform	1.0	trans-1,3-Dichloropropene	1.0
Bromomethane	1.0	cis-1,3-Dichloropropene	1.0
2-Butanone	5.0	Ethylbenzene	1.0
Carbon disulfide	1.0	2-Hexanone	5.0
Carbon tetrachloride	1.0	Iodomethane	1.0
Chlorobenzene	1.0	4-Methyl-2-pentanone	5.0
Chloroethane	1.0	Styrene	1.0
Chloroform	1.0	1,1,1,2-Tetrachloroethane	1.0
Chloromethane	1.0	1,1,2,2-Tetrachloroethane	1.0
Dibromochloromethane	1.0	Tetrachloroethene	1.0
1,2-Dibromo-3-chloropropane (DBCP)	1.0	Toluene	1.0
1,2 - Dibromoethane (EDB)	1.0	1,1,1-Trichloroethane	1.0
Dibromomethane	1.0	1,1,2-Trichloroethane	1.0
1,2 - Dichlorobenzene	1.0	Trichloroethene	1.0
1,4 - Dichlorobenzene	1.0	Trichloroflouromethane	1.0
trans-1,4-dichloro-2-butene	1.0	1,2,3-Trichloropropane	1.0
Dichlorodifluoromethane*	1.0	Vinyl acetate	1.0
1,1-Dichloroethane	1.0	Vinyl chloride	1.0
1,2-Dichloroethane	1.0	o-Xylene	1.0
1,1-Dichloroethene	1.0	m+p-Xylenes	1.0

NOTES: 1) PQL = Practical quantitation limit

2) * = Additional compounds not included on Appendix I list.

d: 8260-1dl.doc

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EMA

Project # 30415474

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label MLL
LIMS Login MLL

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 12 Type of Ice: Wet Blue None

L1340015

Cooler Temperature Observed Temp 1.3 °C Correction Factor: +.1 °C Final Temp: 1.4 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# 10D1101	Date and Initials of person examining contents: MLL 4/15/2021
Chain of Custody Present:	✓			1.	
Chain of Custody Filled Out:	✓			2.	
Chain of Custody Relinquished:	✓			3.	
Sampler Name & Signature on COC:		✓		4. no signature on COC	
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.	
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):		✓		7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.	
Containers Intact:	✓			11.	
Orthophosphate field filtered			✓	12.	
Hex Cr Aqueous sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: VOA coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.	
All containers meet method preservation requirements.	✓			Initial when completed MLL	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:	✓			18.	
Trip Blank Custody Seals Present	✓				
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed:	Date: / Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

April 29, 2021

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-SPRING 2021
Pace Project No.: 30415797

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on April 15, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace National - Mt. Juliet
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

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without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services National

12065 Lebanon Road, Mt. Juliet, TN 37122
Alabama Certification #: 40660
Alaska Certification 17-026
Arizona Certification #: AZ0612
Arkansas Certification #: 88-0469
California Certification #: 2932
Canada Certification #: 1461.01
Colorado Certification #: TN00003
Connecticut Certification #: PH-0197
DOD Certification: #1461.01
EPA# TN00003
Florida Certification #: E87487
Georgia DW Certification #: 923
Georgia Certification: NELAP
Idaho Certification #: TN00003
Illinois Certification #: 200008
Indiana Certification #: C-TN-01
Iowa Certification #: 364
Kansas Certification #: E-10277
Kentucky UST Certification #: 16
Kentucky Certification #: 90010
Louisiana Certification #: AI30792
Louisiana DW Certification #: LA180010
Maine Certification #: TN0002
Maryland Certification #: 324
Massachusetts Certification #: M-TN003
Michigan Certification #: 9958
Minnesota Certification #: 047-999-395
Mississippi Certification #: TN00003
Missouri Certification #: 340
Montana Certification #: CERT0086
Nebraska Certification #: NE-OS-15-05
Nevada Certification #: TN-03-2002-34
New Hampshire Certification #: 2975
New Jersey Certification #: TN002
New Mexico DW Certification
New York Certification #: 11742
North Carolina Aquatic Toxicity Certification #: 41
North Carolina Drinking Water Certification #: 21704
North Carolina Environmental Certificate #: 375

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CERTIFICATIONS

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Pace Analytical Services National

North Dakota Certification #: R-140
Ohio VAP Certification #: CL0069
Oklahoma Certification #: 9915
Oregon Certification #: TN200002
Pennsylvania Certification #: 68-02979
Rhode Island Certification #: LAO00356
South Carolina Certification #: 84004
South Dakota Certification
Tennessee DW/Chem/Micro Certification #: 2006
Texas Mold Certification #: LAB0152
Texas Certification #: T 104704245-17-14
USDA Soil Permit #: P330-15-00234
Utah Certification #: TN00003
Vermont Dept. of Health: ID# VT-2006
Virginia Certification #: VT2006
Virginia Certification #: 460132
Washington Certification #: C847
West Virginia Certification #: 233
Wisconsin Certification #: 998093910
Wyoming UST Certification #: via A2LA 2926.01
A2LA-ISO 17025 Certification #: 1461.01
A2LA-ISO 17025 Certification #: 1461.02
AIHA-LAP/LLC EMLAP Certification #:100789

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SAMPLE SUMMARY

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30415797001	**TW-5**	Water	04/15/21 10:40	04/15/21 21:45
30415797002	**TW-5A**	Water	04/15/21 10:05	04/15/21 21:45
30415797003	**TW-5B**	Water	04/15/21 09:30	04/15/21 21:45
30415797004	**TW-7**	Water	04/15/21 12:35	04/15/21 21:45
30415797005	**TW-7A**	Water	04/15/21 12:00	04/15/21 21:45
30415797006	**TW-8**	Water	04/15/21 13:20	04/15/21 21:45
30415797007	**TW-8A**	Water	04/15/21 14:00	04/15/21 21:45
30415797008	**TRIP BLANK**	Water	04/15/21 00:01	04/15/21 21:45

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30415797001	**TW-5**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	BMB	54	PAN
		SM 2320B-2011	BWC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30415797002	**TW-5A**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	BMB	54	PAN
		SM 2320B-2011	BWC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30415797003	**TW-5B**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	BMB	54	PAN
		SM 2320B-2011	BWC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30415797004	**TW-7**	EPA 6010B	CTS	22	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	BMB	54	PAN
		SM 2320B-2011	BWC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30415797005	**TW-7A**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	BMB	54	PAN
		SM 2320B-2011	BWC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30415797006	**TW-8**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	BMB	54	PAN
		SM 2320B-2011	BWC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30415797007	**TW-8A**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	TJJ	54	PAN
		SM 2320B-2011	BWC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500ClE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30415797008	**TRIP BLANK**	EPA 8260B	TJJ	54	PAN

PAN = Pace National - Mt. Juliet
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Method: **EPA 6010B**
Description: 6010 MET ICP
Client: Environmental Monitoring and Assessment LLC
Date: April 29, 2021

General Information:
7 samples were analyzed for EPA 6010B by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 444118

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30415797001,30415853004

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2143898)
  - Calcium
  - Magnesium
  - Manganese
  - Sodium

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Method: **EPA 6010B**
Description: 6010 MET ICP, Dissolved
Client: Environmental Monitoring and Assessment LLC
Date: April 29, 2021

General Information:
7 samples were analyzed for EPA 6010B by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 444114

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30414805001,30415797005

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2143882)
  - Calcium, Dissolved
  - Sodium, Dissolved

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: April 29, 2021

General Information:
7 samples were analyzed for EPA 7470A by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 444974

- TW-5 (Lab ID: 30415797001)
  - Mercury
- TW-5A (Lab ID: 30415797002)
  - Mercury
- TW-5B (Lab ID: 30415797003)
  - Mercury
- TW-7 (Lab ID: 30415797004)
  - Mercury
- TW-7A (Lab ID: 30415797005)
  - Mercury

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: April 29, 2021

Analyte Comments:

QC Batch: 444974

- TW-8 (Lab ID: 30415797006)
  - Mercury
- TW-8A (Lab ID: 30415797007)
  - Mercury

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Method: **EPA 8260B**
Description: VOA (GC/MS) 8260B
Client: Environmental Monitoring and Assessment LLC
Date: April 29, 2021

General Information:
8 samples were analyzed for EPA 8260B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 1655294

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
- LCS (Lab ID: R3646795-1)
  - trans-1,3-Dichloropropene
- LCSD (Lab ID: R3646795-2)
  - Styrene
  - o-Xylene
  - trans-1,3-Dichloropropene

R1: RPD value was outside control limits.
- LCSD (Lab ID: R3646795-2)
  - 2-Butanone (MEK)

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Method: **EPA 8260B**
Description: VOA (GC/MS) 8260B
Client: Environmental Monitoring and Assessment LLC
Date: April 29, 2021

QC Batch: 1655294

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): L1340386-02

R1: RPD value was outside control limits.

- MSD (Lab ID: R3646795-5)
  - 2-Butanone (MEK)

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: April 29, 2021

General Information:
7 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 445497

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30416750001

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2150446)
  - Alkalinity,Total (CaCO3 pH4.5)
- MSD (Lab ID: 2150447)
  - Alkalinity,Total (CaCO3 pH4.5)

Additional Comments:

Analyte Comments:

QC Batch: 445497

1c: ALKALINITY TV= 0

- TW-7A (Lab ID: 30415797005)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-8A (Lab ID: 30415797007)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Method: **SM 2540C-2011**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: April 29, 2021

General Information:
7 samples were analyzed for SM 2540C-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: April 29, 2021

General Information:
7 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: April 29, 2021

General Information:
7 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 444485

D4: Sample was diluted due to the presence of high levels of target analytes.

- MS (Lab ID: 2145779)
  - Chemical Oxygen Demand
- MSD (Lab ID: 2145780)
  - Chemical Oxygen Demand

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Method: **SM 4500ClE-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: April 29, 2021

General Information:
7 samples were analyzed for SM 4500ClE-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Method: **SM 4500NO3F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: April 29, 2021

General Information:
7 samples were analyzed for SM 4500NO3F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: April 29, 2021

General Information:
7 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 445015

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30415797001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2148286)
  - Sulfate

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Method: **SM 4500NO2B-2011**
Description: SM4500NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: April 29, 2021

General Information:
7 samples were analyzed for SM 4500NO2B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 443747

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30415853001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2141918)
  - Nitrite as N

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Sample: TW-5 **Lab ID: 30415797001** Collected: 04/15/21 10:40 Received: 04/15/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/20/21 15:02	04/21/21 07:51	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/20/21 15:02	04/21/21 07:51	7440-38-2	
Barium	**0.018**	mg/L	0.010	0.00068	1	04/20/21 15:02	04/21/21 07:51	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00017	1	04/20/21 15:02	04/21/21 07:51	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/20/21 15:02	04/21/21 07:51	7440-43-9	
Calcium	**2.7**	mg/L	1.0	0.10	1	04/20/21 15:02	04/21/21 07:51	7440-70-2	
Chromium	**0.0013J**	mg/L	0.0050	0.00035	1	04/20/21 15:02	04/21/21 07:51	7440-47-3	
Cobalt	**0.00054J**	mg/L	0.0050	0.00053	1	04/20/21 15:02	04/21/21 07:51	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0027	1	04/20/21 15:02	04/21/21 07:51	7440-50-8	
Iron	**18.7**	mg/L	0.070	0.041	1	04/20/21 15:02	04/21/21 07:51	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/20/21 15:02	04/21/21 07:51	7439-92-1	
Magnesium	**0.78**	mg/L	0.20	0.028	1	04/20/21 15:02	04/21/21 07:51	7439-95-4	
Manganese	**0.12**	mg/L	0.0050	0.0012	1	04/20/21 15:02	04/21/21 07:51	7439-96-5	
Nickel	**0.0021J**	mg/L	0.010	0.0015	1	04/20/21 15:02	04/21/21 07:51	7440-02-0	
Potassium	**0.72**	mg/L	0.50	0.072	1	04/20/21 15:02	04/21/21 07:51	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/20/21 15:02	04/21/21 07:51	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/20/21 15:02	04/21/21 07:51	7440-22-4	
Sodium	**2.5**	mg/L	1.0	0.42	1	04/20/21 15:02	04/21/21 07:51	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/20/21 15:02	04/21/21 07:51	7440-28-0	
Total Hardness by SM2340B-2011	**10000**	ug/L	3300	368	1	04/20/21 15:02	04/21/21 07:51		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/20/21 15:02	04/21/21 07:51	7440-62-2	
Zinc	**0.010 U**	mg/L	0.010	0.0024	1	04/20/21 15:02	04/21/21 07:51	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**2.8**	mg/L	1.0	0.10	1	04/20/21 15:00	04/26/21 12:37	7440-70-2	
Iron, Dissolved	**17.9**	mg/L	0.070	0.041	1	04/20/21 15:00	04/26/21 12:37	7439-89-6	
Magnesium, Dissolved	**0.76**	mg/L	0.20	0.028	1	04/20/21 15:00	04/26/21 12:37	7439-95-4	
Manganese, Dissolved	**0.12**	mg/L	0.0050	0.0012	1	04/20/21 15:00	04/26/21 12:37	7439-96-5	
Potassium, Dissolved	**0.75**	mg/L	0.50	0.072	1	04/20/21 15:00	04/26/21 12:37	7440-09-7	
Sodium, Dissolved	**2.5**	mg/L	1.0	0.42	1	04/20/21 15:00	04/26/21 12:37	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.000050J**	mg/L	0.00020	0.000030	1	04/26/21 13:50	04/27/21 17:13	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/21/21 01:43	04/21/21 01:43	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/21/21 01:43	04/21/21 01:43	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/21/21 01:43	04/21/21 01:43	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/21/21 01:43	04/21/21 01:43	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/21/21 01:43	04/21/21 01:43	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/21/21 01:43	04/21/21 01:43	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Sample: TW-5 **Lab ID: 30415797001** Collected: 04/15/21 10:40 Received: 04/15/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/21/21 01:43	04/21/21 01:43	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/21/21 01:43	04/21/21 01:43	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/21/21 01:43	04/21/21 01:43	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/21/21 01:43	04/21/21 01:43	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/21/21 01:43	04/21/21 01:43	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/21/21 01:43	04/21/21 01:43	75-00-3	
Chloroform	**0.113J**	ug/L	5.00	0.111	1	04/21/21 01:43	04/21/21 01:43	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/21/21 01:43	04/21/21 01:43	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/21/21 01:43	04/21/21 01:43	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/21/21 01:43	04/21/21 01:43	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/21/21 01:43	04/21/21 01:43	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/21/21 01:43	04/21/21 01:43	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/21/21 01:43	04/21/21 01:43	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/21/21 01:43	04/21/21 01:43	110-57-6	
Dichlorofluoromethane	**4.18J**	ug/L	5.00	0.130	1	04/21/21 01:43	04/21/21 01:43	75-43-4	J
Dichlorodifluoromethane	**1.25J**	ug/L	5.00	0.374	1	04/21/21 01:43	04/21/21 01:43	75-71-8	J
1,1-Dichloroethane	**1.58**	ug/L	1.00	0.100	1	04/21/21 01:43	04/21/21 01:43	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/21/21 01:43	04/21/21 01:43	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/21/21 01:43	04/21/21 01:43	75-35-4	
cis-1,2-Dichloroethene	**0.544J**	ug/L	1.00	0.126	1	04/21/21 01:43	04/21/21 01:43	156-59-2	J
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/21/21 01:43	04/21/21 01:43	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/21/21 01:43	04/21/21 01:43	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/21/21 01:43	04/21/21 01:43	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/21/21 01:43	04/21/21 01:43	10061-02-6	L0
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/21/21 01:43	04/21/21 01:43	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/21/21 01:43	04/21/21 01:43	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/21/21 01:43	04/21/21 01:43	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/21/21 01:43	04/21/21 01:43	78-93-3	R1
Methylene Chloride	**0.483J**	ug/L	5.00	0.430	1	04/21/21 01:43	04/21/21 01:43	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/21/21 01:43	04/21/21 01:43	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/21/21 01:43	04/21/21 01:43	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/21/21 01:43	04/21/21 01:43	100-42-5	L0
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/21/21 01:43	04/21/21 01:43	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/21/21 01:43	04/21/21 01:43	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/21/21 01:43	04/21/21 01:43	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/21/21 01:43	04/21/21 01:43	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/21/21 01:43	04/21/21 01:43	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/21/21 01:43	04/21/21 01:43	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/21/21 01:43	04/21/21 01:43	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/21/21 01:43	04/21/21 01:43	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/21/21 01:43	04/21/21 01:43	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/21/21 01:43	04/21/21 01:43	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/21/21 01:43	04/21/21 01:43	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/21/21 01:43	04/21/21 01:43	95-47-6	L0
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/21/21 01:43	04/21/21 01:43	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Sample: TW-5 **Lab ID: 30415797001** Collected: 04/15/21 10:40 Received: 04/15/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	108	%	80.0-120		1	04/21/21 01:43	04/21/21 01:43	2037-26-5	
4-Bromofluorobenzene (S)	89.0	%	77.0-126		1	04/21/21 01:43	04/21/21 01:43	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%	70.0-130		1	04/21/21 01:43	04/21/21 01:43	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**20.0**	mg/L	10.0	1.0	1		04/28/21 20:06		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		04/20/21 14:27		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	04/27/21 17:03	04/28/21 13:36		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/22/21 12:58	04/22/21 16:01		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**6.2**	mg/L	3.0	0.67	1		04/20/21 16:48	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.074J**	mg/L	0.10	0.024	1		04/29/21 12:07	14797-55-8	
Nitrogen, NO2 plus NO3	**0.074J**	mg/L	0.10	0.024	1		04/29/21 12:07		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/26/21 21:03	14808-79-8	ML
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/16/21 21:17	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Sample: TW-5A **Lab ID: 30415797002** Collected: 04/15/21 10:05 Received: 04/15/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/20/21 15:02	04/21/21 08:00	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/20/21 15:02	04/21/21 08:00	7440-38-2	
Barium	**0.018**	mg/L	0.010	0.00068	1	04/20/21 15:02	04/21/21 08:00	7440-39-3	
Beryllium	**0.00018J**	mg/L	0.0010	0.00017	1	04/20/21 15:02	04/21/21 08:00	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/20/21 15:02	04/21/21 08:00	7440-43-9	
Calcium	**1.7**	mg/L	1.0	0.10	1	04/20/21 15:02	04/21/21 08:00	7440-70-2	
Chromium	**0.0050 U**	mg/L	0.0050	0.00035	1	04/20/21 15:02	04/21/21 08:00	7440-47-3	
Cobalt	**0.0050 U**	mg/L	0.0050	0.00053	1	04/20/21 15:02	04/21/21 08:00	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0027	1	04/20/21 15:02	04/21/21 08:00	7440-50-8	
Iron	**47.6**	mg/L	0.070	0.041	1	04/20/21 15:02	04/21/21 08:00	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/20/21 15:02	04/21/21 08:00	7439-92-1	
Magnesium	**0.78**	mg/L	0.20	0.028	1	04/20/21 15:02	04/21/21 08:00	7439-95-4	
Manganese	**0.24**	mg/L	0.0050	0.0012	1	04/20/21 15:02	04/21/21 08:00	7439-96-5	
Nickel	**0.010 U**	mg/L	0.010	0.0015	1	04/20/21 15:02	04/21/21 08:00	7440-02-0	
Potassium	**0.67**	mg/L	0.50	0.072	1	04/20/21 15:02	04/21/21 08:00	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/20/21 15:02	04/21/21 08:00	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/20/21 15:02	04/21/21 08:00	7440-22-4	
Sodium	**2.6**	mg/L	1.0	0.42	1	04/20/21 15:02	04/21/21 08:00	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/20/21 15:02	04/21/21 08:00	7440-28-0	
Total Hardness by SM2340B-2011	**7350**	ug/L	3300	368	1	04/20/21 15:02	04/21/21 08:00		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/20/21 15:02	04/21/21 08:00	7440-62-2	
Zinc	**0.010 U**	mg/L	0.010	0.0024	1	04/20/21 15:02	04/21/21 08:00	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**1.7**	mg/L	1.0	0.10	1	04/20/21 15:00	04/26/21 12:40	7440-70-2	
Iron, Dissolved	**45.9**	mg/L	0.070	0.041	1	04/20/21 15:00	04/26/21 12:40	7439-89-6	
Magnesium, Dissolved	**0.76**	mg/L	0.20	0.028	1	04/20/21 15:00	04/26/21 12:40	7439-95-4	
Manganese, Dissolved	**0.23**	mg/L	0.0050	0.0012	1	04/20/21 15:00	04/26/21 12:40	7439-96-5	
Potassium, Dissolved	**0.69**	mg/L	0.50	0.072	1	04/20/21 15:00	04/26/21 12:40	7440-09-7	
Sodium, Dissolved	**2.4**	mg/L	1.0	0.42	1	04/20/21 15:00	04/26/21 12:40	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.000060J**	mg/L	0.00020	0.000030	1	04/26/21 13:50	04/27/21 17:19	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/21/21 02:04	04/21/21 02:04	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/21/21 02:04	04/21/21 02:04	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/21/21 02:04	04/21/21 02:04	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/21/21 02:04	04/21/21 02:04	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/21/21 02:04	04/21/21 02:04	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/21/21 02:04	04/21/21 02:04	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Sample: TW-5A **Lab ID: 30415797002** Collected: 04/15/21 10:05 Received: 04/15/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/21/21 02:04	04/21/21 02:04	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/21/21 02:04	04/21/21 02:04	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/21/21 02:04	04/21/21 02:04	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/21/21 02:04	04/21/21 02:04	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/21/21 02:04	04/21/21 02:04	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/21/21 02:04	04/21/21 02:04	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	04/21/21 02:04	04/21/21 02:04	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/21/21 02:04	04/21/21 02:04	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/21/21 02:04	04/21/21 02:04	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/21/21 02:04	04/21/21 02:04	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/21/21 02:04	04/21/21 02:04	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/21/21 02:04	04/21/21 02:04	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/21/21 02:04	04/21/21 02:04	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/21/21 02:04	04/21/21 02:04	110-57-6	
Dichlorofluoromethane	**1.58J**	ug/L	5.00	0.130	1	04/21/21 02:04	04/21/21 02:04	75-43-4	J
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	04/21/21 02:04	04/21/21 02:04	75-71-8	
1,1-Dichloroethane	**1.15**	ug/L	1.00	0.100	1	04/21/21 02:04	04/21/21 02:04	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/21/21 02:04	04/21/21 02:04	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/21/21 02:04	04/21/21 02:04	75-35-4	
cis-1,2-Dichloroethene	**0.128J**	ug/L	1.00	0.126	1	04/21/21 02:04	04/21/21 02:04	156-59-2	J
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/21/21 02:04	04/21/21 02:04	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/21/21 02:04	04/21/21 02:04	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/21/21 02:04	04/21/21 02:04	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/21/21 02:04	04/21/21 02:04	10061-02-6	L0
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/21/21 02:04	04/21/21 02:04	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/21/21 02:04	04/21/21 02:04	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/21/21 02:04	04/21/21 02:04	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/21/21 02:04	04/21/21 02:04	78-93-3	R1
Methylene Chloride	**0.830J**	ug/L	5.00	0.430	1	04/21/21 02:04	04/21/21 02:04	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/21/21 02:04	04/21/21 02:04	108-10-1	
Methyl-tert-butyl ether	**0.132J**	ug/L	1.00	0.101	1	04/21/21 02:04	04/21/21 02:04	1634-04-4	J
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/21/21 02:04	04/21/21 02:04	100-42-5	L0
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/21/21 02:04	04/21/21 02:04	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/21/21 02:04	04/21/21 02:04	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/21/21 02:04	04/21/21 02:04	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/21/21 02:04	04/21/21 02:04	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/21/21 02:04	04/21/21 02:04	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/21/21 02:04	04/21/21 02:04	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/21/21 02:04	04/21/21 02:04	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/21/21 02:04	04/21/21 02:04	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/21/21 02:04	04/21/21 02:04	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/21/21 02:04	04/21/21 02:04	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/21/21 02:04	04/21/21 02:04	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/21/21 02:04	04/21/21 02:04	95-47-6	L0
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/21/21 02:04	04/21/21 02:04	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Sample: TW-5A **Lab ID: 30415797002** Collected: 04/15/21 10:05 Received: 04/15/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	109	%	80.0-120		1	04/21/21 02:04	04/21/21 02:04	2037-26-5	
4-Bromofluorobenzene (S)	87.6	%	77.0-126		1	04/21/21 02:04	04/21/21 02:04	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%	70.0-130		1	04/21/21 02:04	04/21/21 02:04	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**14.0**	mg/L	10.0	1.0	1		04/28/21 20:07		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		04/20/21 14:28		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	04/27/21 17:03	04/28/21 13:42		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**8.3J**	mg/L	25.0	4.7	1	04/22/21 12:58	04/22/21 16:01		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**5.7**	mg/L	3.0	0.67	1		04/20/21 16:49	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.077J**	mg/L	0.10	0.024	1		04/29/21 12:09	14797-55-8	
Nitrogen, NO2 plus NO3	**0.077J**	mg/L	0.10	0.024	1		04/29/21 12:09		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/26/21 21:10	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/16/21 21:19	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Sample: TW-5B **Lab ID: 30415797003** Collected: 04/15/21 09:30 Received: 04/15/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/20/21 15:02	04/21/21 08:02	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/20/21 15:02	04/21/21 08:02	7440-38-2	
Barium	**0.0043J**	mg/L	0.010	0.00068	1	04/20/21 15:02	04/21/21 08:02	7440-39-3	
Beryllium	**0.00023J**	mg/L	0.0010	0.00017	1	04/20/21 15:02	04/21/21 08:02	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/20/21 15:02	04/21/21 08:02	7440-43-9	
Calcium	**1.0**	mg/L	1.0	0.10	1	04/20/21 15:02	04/21/21 08:02	7440-70-2	
Chromium	**0.0049J**	mg/L	0.0050	0.00035	1	04/20/21 15:02	04/21/21 08:02	7440-47-3	
Cobalt	**0.0034J**	mg/L	0.0050	0.00053	1	04/20/21 15:02	04/21/21 08:02	7440-48-4	
Copper	**0.0059**	mg/L	0.0050	0.0027	1	04/20/21 15:02	04/21/21 08:02	7440-50-8	
Iron	**0.053J**	mg/L	0.070	0.041	1	04/20/21 15:02	04/21/21 08:02	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/20/21 15:02	04/21/21 08:02	7439-92-1	
Magnesium	**0.23**	mg/L	0.20	0.028	1	04/20/21 15:02	04/21/21 08:02	7439-95-4	
Manganese	**0.0045J**	mg/L	0.0050	0.0012	1	04/20/21 15:02	04/21/21 08:02	7439-96-5	
Nickel	**0.0092J**	mg/L	0.010	0.0015	1	04/20/21 15:02	04/21/21 08:02	7440-02-0	
Potassium	**0.47J**	mg/L	0.50	0.072	1	04/20/21 15:02	04/21/21 08:02	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/20/21 15:02	04/21/21 08:02	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/20/21 15:02	04/21/21 08:02	7440-22-4	
Sodium	**1.1**	mg/L	1.0	0.42	1	04/20/21 15:02	04/21/21 08:02	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/20/21 15:02	04/21/21 08:02	7440-28-0	
Total Hardness by SM2340B-2011	**3450**	ug/L	3300	368	1	04/20/21 15:02	04/21/21 08:02		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/20/21 15:02	04/21/21 08:02	7440-62-2	
Zinc	**0.051**	mg/L	0.010	0.0024	1	04/20/21 15:02	04/21/21 08:02	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**1.1**	mg/L	1.0	0.10	1	04/20/21 15:00	04/26/21 12:42	7440-70-2	
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	04/20/21 15:00	04/26/21 12:42	7439-89-6	
Magnesium, Dissolved	**0.23**	mg/L	0.20	0.028	1	04/20/21 15:00	04/26/21 12:42	7439-95-4	
Manganese, Dissolved	**0.0042J**	mg/L	0.0050	0.0012	1	04/20/21 15:00	04/26/21 12:42	7439-96-5	
Potassium, Dissolved	**0.49J**	mg/L	0.50	0.072	1	04/20/21 15:00	04/26/21 12:42	7440-09-7	
Sodium, Dissolved	**0.98J**	mg/L	1.0	0.42	1	04/20/21 15:00	04/26/21 12:42	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.000050J**	mg/L	0.00020	0.000030	1	04/26/21 13:50	04/27/21 17:21	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/21/21 02:24	04/21/21 02:24	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/21/21 02:24	04/21/21 02:24	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/21/21 02:24	04/21/21 02:24	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/21/21 02:24	04/21/21 02:24	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/21/21 02:24	04/21/21 02:24	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/21/21 02:24	04/21/21 02:24	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Sample: TW-5B **Lab ID: 30415797003** Collected: 04/15/21 09:30 Received: 04/15/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/21/21 02:24	04/21/21 02:24	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/21/21 02:24	04/21/21 02:24	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/21/21 02:24	04/21/21 02:24	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/21/21 02:24	04/21/21 02:24	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/21/21 02:24	04/21/21 02:24	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/21/21 02:24	04/21/21 02:24	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	04/21/21 02:24	04/21/21 02:24	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/21/21 02:24	04/21/21 02:24	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/21/21 02:24	04/21/21 02:24	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/21/21 02:24	04/21/21 02:24	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/21/21 02:24	04/21/21 02:24	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/21/21 02:24	04/21/21 02:24	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/21/21 02:24	04/21/21 02:24	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/21/21 02:24	04/21/21 02:24	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	04/21/21 02:24	04/21/21 02:24	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	04/21/21 02:24	04/21/21 02:24	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	04/21/21 02:24	04/21/21 02:24	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/21/21 02:24	04/21/21 02:24	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/21/21 02:24	04/21/21 02:24	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/21/21 02:24	04/21/21 02:24	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/21/21 02:24	04/21/21 02:24	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/21/21 02:24	04/21/21 02:24	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/21/21 02:24	04/21/21 02:24	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/21/21 02:24	04/21/21 02:24	10061-02-6	L0
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/21/21 02:24	04/21/21 02:24	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/21/21 02:24	04/21/21 02:24	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/21/21 02:24	04/21/21 02:24	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/21/21 02:24	04/21/21 02:24	78-93-3	R1
Methylene Chloride	**0.705J**	ug/L	5.00	0.430	1	04/21/21 02:24	04/21/21 02:24	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/21/21 02:24	04/21/21 02:24	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/21/21 02:24	04/21/21 02:24	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/21/21 02:24	04/21/21 02:24	100-42-5	L0
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/21/21 02:24	04/21/21 02:24	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/21/21 02:24	04/21/21 02:24	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/21/21 02:24	04/21/21 02:24	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/21/21 02:24	04/21/21 02:24	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/21/21 02:24	04/21/21 02:24	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/21/21 02:24	04/21/21 02:24	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/21/21 02:24	04/21/21 02:24	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/21/21 02:24	04/21/21 02:24	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/21/21 02:24	04/21/21 02:24	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/21/21 02:24	04/21/21 02:24	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/21/21 02:24	04/21/21 02:24	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/21/21 02:24	04/21/21 02:24	95-47-6	L0
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/21/21 02:24	04/21/21 02:24	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Sample: TW-5B **Lab ID: 30415797003** Collected: 04/15/21 09:30 Received: 04/15/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	112	%	80.0-120		1	04/21/21 02:24	04/21/21 02:24	2037-26-5	
4-Bromofluorobenzene (S)	88.7	%	77.0-126		1	04/21/21 02:24	04/21/21 02:24	460-00-4	
1,2-Dichloroethane-d4 (S)	118	%	70.0-130		1	04/21/21 02:24	04/21/21 02:24	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**14.0**	mg/L	10.0	1.0	1		04/28/21 20:08		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		04/20/21 14:28		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	04/27/21 17:03	04/28/21 13:44		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/22/21 12:58	04/22/21 16:01		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**1.8J**	mg/L	3.0	0.67	1		04/20/21 16:50	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.20**	mg/L	0.10	0.024	1		04/29/21 12:10	14797-55-8	
Nitrogen, NO2 plus NO3	**0.20**	mg/L	0.10	0.024	1		04/29/21 12:10		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/26/21 21:10	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/16/21 21:19	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Sample: TW-7 **Lab ID: 30415797004** Collected: 04/15/21 12:35 Received: 04/15/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/20/21 15:02	04/21/21 08:04	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/20/21 15:02	04/21/21 08:04	7440-38-2	
Barium	**0.043**	mg/L	0.010	0.00068	1	04/20/21 15:02	04/21/21 08:04	7440-39-3	
Beryllium	**0.00018J**	mg/L	0.0010	0.00017	1	04/20/21 15:02	04/21/21 08:04	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/20/21 15:02	04/21/21 08:04	7440-43-9	
Calcium	**5.2**	mg/L	1.0	0.10	1	04/20/21 15:02	04/21/21 08:04	7440-70-2	
Chromium	**0.0015J**	mg/L	0.0050	0.00035	1	04/20/21 15:02	04/21/21 08:04	7440-47-3	
Cobalt	**0.0023J**	mg/L	0.0050	0.00053	1	04/20/21 15:02	04/21/21 08:04	7440-48-4	
Copper	**0.0033J**	mg/L	0.0050	0.0027	1	04/20/21 15:02	04/21/21 08:04	7440-50-8	
Iron	**16.1**	mg/L	0.070	0.041	1	04/20/21 15:02	04/21/21 08:04	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/20/21 15:02	04/21/21 08:04	7439-92-1	
Magnesium	**1.0**	mg/L	0.20	0.028	1	04/20/21 15:02	04/21/21 08:04	7439-95-4	
Manganese	**0.14**	mg/L	0.0050	0.0012	1	04/20/21 15:02	04/21/21 08:04	7439-96-5	
Nickel	**0.0059J**	mg/L	0.010	0.0015	1	04/20/21 15:02	04/21/21 08:04	7440-02-0	
Potassium	**1.8**	mg/L	0.50	0.072	1	04/20/21 15:02	04/21/21 08:04	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/20/21 15:02	04/21/21 08:04	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/20/21 15:02	04/21/21 08:04	7440-22-4	
Sodium	**6.5**	mg/L	1.0	0.42	1	04/20/21 15:02	04/21/21 08:04	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/20/21 15:02	04/21/21 08:04	7440-28-0	
Total Hardness by SM2340B-2011	**17200**	ug/L	3300	368	1	04/20/21 15:02	04/21/21 08:04		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/20/21 15:02	04/21/21 08:04	7440-62-2	
Zinc	**0.0037J**	mg/L	0.010	0.0024	1	04/20/21 15:02	04/21/21 08:04	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**4.9**	mg/L	1.0	0.10	1	04/20/21 15:00	04/26/21 12:44	7440-70-2	
Iron, Dissolved	**12.3**	mg/L	0.070	0.041	1	04/20/21 15:00	04/26/21 12:44	7439-89-6	
Magnesium, Dissolved	**0.94**	mg/L	0.20	0.028	1	04/20/21 15:00	04/26/21 12:44	7439-95-4	
Manganese, Dissolved	**0.12**	mg/L	0.0050	0.0012	1	04/20/21 15:00	04/26/21 12:44	7439-96-5	
Potassium, Dissolved	**1.7**	mg/L	0.50	0.072	1	04/20/21 15:00	04/26/21 12:44	7440-09-7	
Sodium, Dissolved	**6.2**	mg/L	1.0	0.42	1	04/20/21 15:00	04/26/21 12:44	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.000050J**	mg/L	0.00020	0.000030	1	04/26/21 13:50	04/27/21 17:23	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/21/21 02:44	04/21/21 02:44	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/21/21 02:44	04/21/21 02:44	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/21/21 02:44	04/21/21 02:44	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/21/21 02:44	04/21/21 02:44	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/21/21 02:44	04/21/21 02:44	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/21/21 02:44	04/21/21 02:44	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Sample: TW-7 **Lab ID: 30415797004** Collected: 04/15/21 12:35 Received: 04/15/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/21/21 02:44	04/21/21 02:44	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/21/21 02:44	04/21/21 02:44	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/21/21 02:44	04/21/21 02:44	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/21/21 02:44	04/21/21 02:44	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/21/21 02:44	04/21/21 02:44	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/21/21 02:44	04/21/21 02:44	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	04/21/21 02:44	04/21/21 02:44	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/21/21 02:44	04/21/21 02:44	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/21/21 02:44	04/21/21 02:44	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/21/21 02:44	04/21/21 02:44	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/21/21 02:44	04/21/21 02:44	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/21/21 02:44	04/21/21 02:44	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/21/21 02:44	04/21/21 02:44	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/21/21 02:44	04/21/21 02:44	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	04/21/21 02:44	04/21/21 02:44	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	04/21/21 02:44	04/21/21 02:44	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	04/21/21 02:44	04/21/21 02:44	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/21/21 02:44	04/21/21 02:44	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/21/21 02:44	04/21/21 02:44	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/21/21 02:44	04/21/21 02:44	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/21/21 02:44	04/21/21 02:44	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/21/21 02:44	04/21/21 02:44	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/21/21 02:44	04/21/21 02:44	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/21/21 02:44	04/21/21 02:44	10061-02-6	L0
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/21/21 02:44	04/21/21 02:44	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/21/21 02:44	04/21/21 02:44	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/21/21 02:44	04/21/21 02:44	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/21/21 02:44	04/21/21 02:44	78-93-3	R1
Methylene Chloride	**0.583J**	ug/L	5.00	0.430	1	04/21/21 02:44	04/21/21 02:44	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/21/21 02:44	04/21/21 02:44	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/21/21 02:44	04/21/21 02:44	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/21/21 02:44	04/21/21 02:44	100-42-5	L0
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/21/21 02:44	04/21/21 02:44	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/21/21 02:44	04/21/21 02:44	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/21/21 02:44	04/21/21 02:44	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/21/21 02:44	04/21/21 02:44	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/21/21 02:44	04/21/21 02:44	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/21/21 02:44	04/21/21 02:44	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/21/21 02:44	04/21/21 02:44	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/21/21 02:44	04/21/21 02:44	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/21/21 02:44	04/21/21 02:44	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/21/21 02:44	04/21/21 02:44	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/21/21 02:44	04/21/21 02:44	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/21/21 02:44	04/21/21 02:44	95-47-6	L0
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/21/21 02:44	04/21/21 02:44	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Sample: TW-7 **Lab ID: 30415797004** Collected: 04/15/21 12:35 Received: 04/15/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	115	%	80.0-120		1	04/21/21 02:44	04/21/21 02:44	2037-26-5	
4-Bromofluorobenzene (S)	84.0	%	77.0-126		1	04/21/21 02:44	04/21/21 02:44	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%	70.0-130		1	04/21/21 02:44	04/21/21 02:44	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**20.0**	mg/L	10.0	1.0	1		04/28/21 20:09		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		04/20/21 14:28		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	04/27/21 17:03	04/28/21 13:46		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/22/21 12:58	04/22/21 16:01		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**12.3**	mg/L	3.0	0.67	1		04/20/21 16:51	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.17**	mg/L	0.10	0.024	1		04/29/21 12:11	14797-55-8	
Nitrogen, NO2 plus NO3	**0.17**	mg/L	0.10	0.024	1		04/29/21 12:11		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/26/21 21:12	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/16/21 21:20	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Sample: TW-7A **Lab ID: 30415797005** Collected: 04/15/21 12:00 Received: 04/15/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/20/21 15:02	04/21/21 08:06	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/20/21 15:02	04/21/21 08:06	7440-38-2	
Barium	**0.053**	mg/L	0.010	0.00068	1	04/20/21 15:02	04/21/21 08:06	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00017	1	04/20/21 15:02	04/21/21 08:06	7440-41-7	
Cadmium	**0.00041J**	mg/L	0.0030	0.00034	1	04/20/21 15:02	04/21/21 08:06	7440-43-9	
Calcium	**2.5**	mg/L	1.0	0.10	1	04/20/21 15:02	04/21/21 08:06	7440-70-2	
Chromium	**0.0024J**	mg/L	0.0050	0.00035	1	04/20/21 15:02	04/21/21 08:06	7440-47-3	
Cobalt	**0.0045J**	mg/L	0.0050	0.00053	1	04/20/21 15:02	04/21/21 08:06	7440-48-4	
Copper	**0.0045J**	mg/L	0.0050	0.0027	1	04/20/21 15:02	04/21/21 08:06	7440-50-8	
Iron	**0.070 U**	mg/L	0.070	0.041	1	04/20/21 15:02	04/21/21 08:06	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/20/21 15:02	04/21/21 08:06	7439-92-1	
Magnesium	**1.4**	mg/L	0.20	0.028	1	04/20/21 15:02	04/21/21 08:06	7439-95-4	
Manganese	**0.029**	mg/L	0.0050	0.0012	1	04/20/21 15:02	04/21/21 08:06	7439-96-5	
Nickel	**0.0055J**	mg/L	0.010	0.0015	1	04/20/21 15:02	04/21/21 08:06	7440-02-0	
Potassium	**0.65**	mg/L	0.50	0.072	1	04/20/21 15:02	04/21/21 08:06	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/20/21 15:02	04/21/21 08:06	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/20/21 15:02	04/21/21 08:06	7440-22-4	
Sodium	**1.7**	mg/L	1.0	0.42	1	04/20/21 15:02	04/21/21 08:06	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/20/21 15:02	04/21/21 08:06	7440-28-0	
Total Hardness by SM2340B-2011	**11900**	ug/L	3300	368	1	04/20/21 15:02	04/21/21 08:06		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/20/21 15:02	04/21/21 08:06	7440-62-2	
Zinc	**0.0080J**	mg/L	0.010	0.0024	1	04/20/21 15:02	04/21/21 08:06	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**2.4**	mg/L	1.0	0.10	1	04/20/21 15:00	04/26/21 12:46	7440-70-2	
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	04/20/21 15:00	04/26/21 12:46	7439-89-6	
Magnesium, Dissolved	**1.3**	mg/L	0.20	0.028	1	04/20/21 15:00	04/26/21 12:46	7439-95-4	
Manganese, Dissolved	**0.027**	mg/L	0.0050	0.0012	1	04/20/21 15:00	04/26/21 12:46	7439-96-5	
Potassium, Dissolved	**0.65**	mg/L	0.50	0.072	1	04/20/21 15:00	04/26/21 12:46	7440-09-7	
Sodium, Dissolved	**1.5**	mg/L	1.0	0.42	1	04/20/21 15:00	04/26/21 12:46	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.000060J**	mg/L	0.00020	0.000030	1	04/26/21 13:50	04/27/21 17:24	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/21/21 03:04	04/21/21 03:04	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/21/21 03:04	04/21/21 03:04	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/21/21 03:04	04/21/21 03:04	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/21/21 03:04	04/21/21 03:04	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/21/21 03:04	04/21/21 03:04	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/21/21 03:04	04/21/21 03:04	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Sample: TW-7A **Lab ID: 30415797005** Collected: 04/15/21 12:00 Received: 04/15/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/21/21 03:04	04/21/21 03:04	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/21/21 03:04	04/21/21 03:04	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/21/21 03:04	04/21/21 03:04	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/21/21 03:04	04/21/21 03:04	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/21/21 03:04	04/21/21 03:04	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/21/21 03:04	04/21/21 03:04	75-00-3	
Chloroform	**0.130J**	ug/L	5.00	0.111	1	04/21/21 03:04	04/21/21 03:04	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/21/21 03:04	04/21/21 03:04	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/21/21 03:04	04/21/21 03:04	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/21/21 03:04	04/21/21 03:04	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/21/21 03:04	04/21/21 03:04	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/21/21 03:04	04/21/21 03:04	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/21/21 03:04	04/21/21 03:04	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/21/21 03:04	04/21/21 03:04	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	04/21/21 03:04	04/21/21 03:04	75-43-4	
Dichlorodifluoromethane	**0.481J**	ug/L	5.00	0.374	1	04/21/21 03:04	04/21/21 03:04	75-71-8	J
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	04/21/21 03:04	04/21/21 03:04	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/21/21 03:04	04/21/21 03:04	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/21/21 03:04	04/21/21 03:04	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/21/21 03:04	04/21/21 03:04	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/21/21 03:04	04/21/21 03:04	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/21/21 03:04	04/21/21 03:04	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/21/21 03:04	04/21/21 03:04	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/21/21 03:04	04/21/21 03:04	10061-02-6	L0
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/21/21 03:04	04/21/21 03:04	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/21/21 03:04	04/21/21 03:04	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/21/21 03:04	04/21/21 03:04	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/21/21 03:04	04/21/21 03:04	78-93-3	R1
Methylene Chloride	**0.507J**	ug/L	5.00	0.430	1	04/21/21 03:04	04/21/21 03:04	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/21/21 03:04	04/21/21 03:04	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/21/21 03:04	04/21/21 03:04	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/21/21 03:04	04/21/21 03:04	100-42-5	L0
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/21/21 03:04	04/21/21 03:04	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/21/21 03:04	04/21/21 03:04	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/21/21 03:04	04/21/21 03:04	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/21/21 03:04	04/21/21 03:04	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/21/21 03:04	04/21/21 03:04	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/21/21 03:04	04/21/21 03:04	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/21/21 03:04	04/21/21 03:04	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/21/21 03:04	04/21/21 03:04	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/21/21 03:04	04/21/21 03:04	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/21/21 03:04	04/21/21 03:04	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/21/21 03:04	04/21/21 03:04	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/21/21 03:04	04/21/21 03:04	95-47-6	L0
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/21/21 03:04	04/21/21 03:04	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Sample: TW-7A **Lab ID: 30415797005** Collected: 04/15/21 12:00 Received: 04/15/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	112	%	80.0-120		1	04/21/21 03:04	04/21/21 03:04	2037-26-5	
4-Bromofluorobenzene (S)	91.0	%	77.0-126		1	04/21/21 03:04	04/21/21 03:04	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%	70.0-130		1	04/21/21 03:04	04/21/21 03:04	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		04/28/21 20:10		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		04/20/21 14:29		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	04/27/21 17:03	04/28/21 13:48		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/22/21 12:58	04/22/21 16:01		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**3.4**	mg/L	3.0	0.67	1		04/20/21 16:51	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.24**	mg/L	0.10	0.024	1		04/29/21 12:13	14797-55-8	
Nitrogen, NO2 plus NO3	**0.24**	mg/L	0.10	0.024	1		04/29/21 12:13		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**8.5J**	mg/L	10.0	4.7	1		04/26/21 21:13	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/16/21 21:20	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Sample: TW-8 **Lab ID: 30415797006** Collected: 04/15/21 13:20 Received: 04/15/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/20/21 15:02	04/21/21 08:13	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/20/21 15:02	04/21/21 08:13	7440-38-2	
Barium	**0.20**	mg/L	0.010	0.00068	1	04/20/21 15:02	04/21/21 08:13	7440-39-3	
Beryllium	**0.00024J**	mg/L	0.0010	0.00017	1	04/20/21 15:02	04/21/21 08:13	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/20/21 15:02	04/21/21 08:13	7440-43-9	
Calcium	**6.7**	mg/L	1.0	0.10	1	04/20/21 15:02	04/21/21 08:13	7440-70-2	
Chromium	**0.0050 U**	mg/L	0.0050	0.00035	1	04/20/21 15:02	04/21/21 08:13	7440-47-3	
Cobalt	**0.0056**	mg/L	0.0050	0.00053	1	04/20/21 15:02	04/21/21 08:13	7440-48-4	
Copper	**0.0049J**	mg/L	0.0050	0.0027	1	04/20/21 15:02	04/21/21 08:13	7440-50-8	
Iron	**36.0**	mg/L	0.070	0.041	1	04/20/21 15:02	04/21/21 08:13	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/20/21 15:02	04/21/21 08:13	7439-92-1	
Magnesium	**4.6**	mg/L	0.20	0.028	1	04/20/21 15:02	04/21/21 08:13	7439-95-4	
Manganese	**0.72**	mg/L	0.0050	0.0012	1	04/20/21 15:02	04/21/21 08:13	7439-96-5	
Nickel	**0.0042J**	mg/L	0.010	0.0015	1	04/20/21 15:02	04/21/21 08:13	7440-02-0	
Potassium	**1.4**	mg/L	0.50	0.072	1	04/20/21 15:02	04/21/21 08:13	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/20/21 15:02	04/21/21 08:13	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/20/21 15:02	04/21/21 08:13	7440-22-4	
Sodium	**25.9**	mg/L	1.0	0.42	1	04/20/21 15:02	04/21/21 08:13	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/20/21 15:02	04/21/21 08:13	7440-28-0	
Total Hardness by SM2340B-2011	**35700**	ug/L	3300	368	1	04/20/21 15:02	04/21/21 08:13		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/20/21 15:02	04/21/21 08:13	7440-62-2	
Zinc	**0.014**	mg/L	0.010	0.0024	1	04/20/21 15:02	04/21/21 08:13	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**6.4**	mg/L	1.0	0.10	1	04/20/21 15:00	04/26/21 12:53	7440-70-2	
Iron, Dissolved	**30.1**	mg/L	0.070	0.041	1	04/20/21 15:00	04/26/21 12:53	7439-89-6	
Magnesium, Dissolved	**4.3**	mg/L	0.20	0.028	1	04/20/21 15:00	04/26/21 12:53	7439-95-4	
Manganese, Dissolved	**0.66**	mg/L	0.0050	0.0012	1	04/20/21 15:00	04/26/21 12:53	7439-96-5	
Potassium, Dissolved	**1.4**	mg/L	0.50	0.072	1	04/20/21 15:00	04/26/21 12:53	7440-09-7	
Sodium, Dissolved	**24.3**	mg/L	1.0	0.42	1	04/20/21 15:00	04/26/21 12:53	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.000060J**	mg/L	0.00020	0.000030	1	04/26/21 13:50	04/27/21 17:26	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/21/21 03:24	04/21/21 03:24	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/21/21 03:24	04/21/21 03:24	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/21/21 03:24	04/21/21 03:24	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/21/21 03:24	04/21/21 03:24	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/21/21 03:24	04/21/21 03:24	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/21/21 03:24	04/21/21 03:24	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Sample: TW-8 **Lab ID: 30415797006** Collected: 04/15/21 13:20 Received: 04/15/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/21/21 03:24	04/21/21 03:24	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/21/21 03:24	04/21/21 03:24	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/21/21 03:24	04/21/21 03:24	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/21/21 03:24	04/21/21 03:24	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/21/21 03:24	04/21/21 03:24	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/21/21 03:24	04/21/21 03:24	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	04/21/21 03:24	04/21/21 03:24	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/21/21 03:24	04/21/21 03:24	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/21/21 03:24	04/21/21 03:24	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/21/21 03:24	04/21/21 03:24	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/21/21 03:24	04/21/21 03:24	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/21/21 03:24	04/21/21 03:24	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/21/21 03:24	04/21/21 03:24	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/21/21 03:24	04/21/21 03:24	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	04/21/21 03:24	04/21/21 03:24	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	04/21/21 03:24	04/21/21 03:24	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	04/21/21 03:24	04/21/21 03:24	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/21/21 03:24	04/21/21 03:24	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/21/21 03:24	04/21/21 03:24	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/21/21 03:24	04/21/21 03:24	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/21/21 03:24	04/21/21 03:24	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/21/21 03:24	04/21/21 03:24	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/21/21 03:24	04/21/21 03:24	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/21/21 03:24	04/21/21 03:24	10061-02-6	L0
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/21/21 03:24	04/21/21 03:24	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/21/21 03:24	04/21/21 03:24	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/21/21 03:24	04/21/21 03:24	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/21/21 03:24	04/21/21 03:24	78-93-3	R1
Methylene Chloride	**0.551J**	ug/L	5.00	0.430	1	04/21/21 03:24	04/21/21 03:24	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/21/21 03:24	04/21/21 03:24	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/21/21 03:24	04/21/21 03:24	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/21/21 03:24	04/21/21 03:24	100-42-5	L0
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/21/21 03:24	04/21/21 03:24	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/21/21 03:24	04/21/21 03:24	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/21/21 03:24	04/21/21 03:24	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/21/21 03:24	04/21/21 03:24	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/21/21 03:24	04/21/21 03:24	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/21/21 03:24	04/21/21 03:24	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/21/21 03:24	04/21/21 03:24	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/21/21 03:24	04/21/21 03:24	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/21/21 03:24	04/21/21 03:24	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/21/21 03:24	04/21/21 03:24	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/21/21 03:24	04/21/21 03:24	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/21/21 03:24	04/21/21 03:24	95-47-6	L0
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/21/21 03:24	04/21/21 03:24	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Sample: TW-8 **Lab ID: 30415797006** Collected: 04/15/21 13:20 Received: 04/15/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	107	%	80.0-120		1	04/21/21 03:24	04/21/21 03:24	2037-26-5	
4-Bromofluorobenzene (S)	93.2	%	77.0-126		1	04/21/21 03:24	04/21/21 03:24	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%	70.0-130		1	04/21/21 03:24	04/21/21 03:24	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**14.0**	mg/L	10.0	1.0	1		04/28/21 20:12		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**93.0**	mg/L	10.0	10.0	1		04/20/21 14:29		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.18**	mg/L	0.10	0.044	1	04/27/21 17:03	04/28/21 13:50		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**10.5J**	mg/L	25.0	4.7	1	04/22/21 12:58	04/22/21 16:01		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**47.3**	mg/L	3.0	0.67	1		04/23/21 14:06	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.22**	mg/L	0.10	0.024	1		04/29/21 12:17	14797-55-8	
Nitrogen, NO2 plus NO3	**0.22**	mg/L	0.10	0.024	1		04/29/21 12:17		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/26/21 21:15	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/16/21 21:20	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Sample: TW-8A **Lab ID: 30415797007** Collected: 04/15/21 14:00 Received: 04/15/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/20/21 15:02	04/21/21 08:15	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/20/21 15:02	04/21/21 08:15	7440-38-2	
Barium	**0.14**	mg/L	0.010	0.00068	1	04/20/21 15:02	04/21/21 08:15	7440-39-3	
Beryllium	**0.00028J**	mg/L	0.0010	0.00017	1	04/20/21 15:02	04/21/21 08:15	7440-41-7	
Cadmium	**0.00067J**	mg/L	0.0030	0.00034	1	04/20/21 15:02	04/21/21 08:15	7440-43-9	
Calcium	**6.8**	mg/L	1.0	0.10	1	04/20/21 15:02	04/21/21 08:15	7440-70-2	
Chromium	**0.0036J**	mg/L	0.0050	0.00035	1	04/20/21 15:02	04/21/21 08:15	7440-47-3	
Cobalt	**0.011**	mg/L	0.0050	0.00053	1	04/20/21 15:02	04/21/21 08:15	7440-48-4	
Copper	**0.0096**	mg/L	0.0050	0.0027	1	04/20/21 15:02	04/21/21 08:15	7440-50-8	
Iron	**0.070 U**	mg/L	0.070	0.041	1	04/20/21 15:02	04/21/21 08:15	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/20/21 15:02	04/21/21 08:15	7439-92-1	
Magnesium	**4.6**	mg/L	0.20	0.028	1	04/20/21 15:02	04/21/21 08:15	7439-95-4	
Manganese	**0.18**	mg/L	0.0050	0.0012	1	04/20/21 15:02	04/21/21 08:15	7439-96-5	
Nickel	**0.0090J**	mg/L	0.010	0.0015	1	04/20/21 15:02	04/21/21 08:15	7440-02-0	
Potassium	**1.7**	mg/L	0.50	0.072	1	04/20/21 15:02	04/21/21 08:15	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/20/21 15:02	04/21/21 08:15	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/20/21 15:02	04/21/21 08:15	7440-22-4	
Sodium	**29.7**	mg/L	1.0	0.42	1	04/20/21 15:02	04/21/21 08:15	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/20/21 15:02	04/21/21 08:15	7440-28-0	
Total Hardness by SM2340B-2011	**35900**	ug/L	3300	368	1	04/20/21 15:02	04/21/21 08:15		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/20/21 15:02	04/21/21 08:15	7440-62-2	
Zinc	**0.030**	mg/L	0.010	0.0024	1	04/20/21 15:02	04/21/21 08:15	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**6.6**	mg/L	1.0	0.10	1	04/20/21 15:00	04/26/21 12:55	7440-70-2	
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	04/20/21 15:00	04/26/21 12:55	7439-89-6	
Magnesium, Dissolved	**4.2**	mg/L	0.20	0.028	1	04/20/21 15:00	04/26/21 12:55	7439-95-4	
Manganese, Dissolved	**0.17**	mg/L	0.0050	0.0012	1	04/20/21 15:00	04/26/21 12:55	7439-96-5	
Potassium, Dissolved	**1.7**	mg/L	0.50	0.072	1	04/20/21 15:00	04/26/21 12:55	7440-09-7	
Sodium, Dissolved	**27.2**	mg/L	1.0	0.42	1	04/20/21 15:00	04/26/21 12:55	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.000050J**	mg/L	0.00020	0.000030	1	04/26/21 13:50	04/27/21 17:28	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/21/21 03:16	04/21/21 03:16	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/21/21 03:16	04/21/21 03:16	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/21/21 03:16	04/21/21 03:16	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/21/21 03:16	04/21/21 03:16	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/21/21 03:16	04/21/21 03:16	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/21/21 03:16	04/21/21 03:16	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Sample: TW-8A **Lab ID: 30415797007** Collected: 04/15/21 14:00 Received: 04/15/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/21/21 03:16	04/21/21 03:16	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/21/21 03:16	04/21/21 03:16	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/21/21 03:16	04/21/21 03:16	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/21/21 03:16	04/21/21 03:16	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/21/21 03:16	04/21/21 03:16	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/21/21 03:16	04/21/21 03:16	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	04/21/21 03:16	04/21/21 03:16	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/21/21 03:16	04/21/21 03:16	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/21/21 03:16	04/21/21 03:16	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/21/21 03:16	04/21/21 03:16	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/21/21 03:16	04/21/21 03:16	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/21/21 03:16	04/21/21 03:16	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/21/21 03:16	04/21/21 03:16	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/21/21 03:16	04/21/21 03:16	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	04/21/21 03:16	04/21/21 03:16	75-43-4	
Dichlorodifluoromethane	**0.518J**	ug/L	5.00	0.374	1	04/21/21 03:16	04/21/21 03:16	75-71-8	J
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	04/21/21 03:16	04/21/21 03:16	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/21/21 03:16	04/21/21 03:16	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/21/21 03:16	04/21/21 03:16	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/21/21 03:16	04/21/21 03:16	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/21/21 03:16	04/21/21 03:16	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/21/21 03:16	04/21/21 03:16	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/21/21 03:16	04/21/21 03:16	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/21/21 03:16	04/21/21 03:16	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/21/21 03:16	04/21/21 03:16	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/21/21 03:16	04/21/21 03:16	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/21/21 03:16	04/21/21 03:16	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/21/21 03:16	04/21/21 03:16	78-93-3	
Methylene Chloride	**0.538J**	ug/L	5.00	0.430	1	04/21/21 03:16	04/21/21 03:16	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/21/21 03:16	04/21/21 03:16	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/21/21 03:16	04/21/21 03:16	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/21/21 03:16	04/21/21 03:16	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/21/21 03:16	04/21/21 03:16	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/21/21 03:16	04/21/21 03:16	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/21/21 03:16	04/21/21 03:16	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/21/21 03:16	04/21/21 03:16	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/21/21 03:16	04/21/21 03:16	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/21/21 03:16	04/21/21 03:16	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/21/21 03:16	04/21/21 03:16	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/21/21 03:16	04/21/21 03:16	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/21/21 03:16	04/21/21 03:16	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/21/21 03:16	04/21/21 03:16	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/21/21 03:16	04/21/21 03:16	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/21/21 03:16	04/21/21 03:16	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/21/21 03:16	04/21/21 03:16	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Sample: TW-8A **Lab ID: 30415797007** Collected: 04/15/21 14:00 Received: 04/15/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	111	%	80.0-120		1	04/21/21 03:16	04/21/21 03:16	2037-26-5	
4-Bromofluorobenzene (S)	99.2	%	77.0-126		1	04/21/21 03:16	04/21/21 03:16	460-00-4	
1,2-Dichloroethane-d4 (S)	93.6	%	70.0-130		1	04/21/21 03:16	04/21/21 03:16	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		04/28/21 20:13		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**132**	mg/L	10.0	10.0	1		04/20/21 14:29		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	04/27/21 17:03	04/28/21 13:52		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/22/21 12:58	04/22/21 16:01		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**46.1**	mg/L	3.0	0.67	1		04/23/21 14:09	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**2.7**	mg/L	0.10	0.024	1		04/29/21 12:18	14797-55-8	
Nitrogen, NO2 plus NO3	**2.7**	mg/L	0.10	0.024	1		04/29/21 12:18		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**26.3**	mg/L	10.0	4.7	1		04/26/21 21:15	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/16/21 21:21	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Sample: TRIP BLANK **Lab ID: 30415797008** Collected: 04/15/21 00:01 Received: 04/15/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/21/21 01:55	04/21/21 01:55	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/21/21 01:55	04/21/21 01:55	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/21/21 01:55	04/21/21 01:55	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/21/21 01:55	04/21/21 01:55	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/21/21 01:55	04/21/21 01:55	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/21/21 01:55	04/21/21 01:55	75-25-2	
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/21/21 01:55	04/21/21 01:55	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/21/21 01:55	04/21/21 01:55	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/21/21 01:55	04/21/21 01:55	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/21/21 01:55	04/21/21 01:55	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/21/21 01:55	04/21/21 01:55	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/21/21 01:55	04/21/21 01:55	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	04/21/21 01:55	04/21/21 01:55	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/21/21 01:55	04/21/21 01:55	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/21/21 01:55	04/21/21 01:55	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/21/21 01:55	04/21/21 01:55	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/21/21 01:55	04/21/21 01:55	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/21/21 01:55	04/21/21 01:55	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/21/21 01:55	04/21/21 01:55	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/21/21 01:55	04/21/21 01:55	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	04/21/21 01:55	04/21/21 01:55	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	04/21/21 01:55	04/21/21 01:55	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	04/21/21 01:55	04/21/21 01:55	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/21/21 01:55	04/21/21 01:55	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/21/21 01:55	04/21/21 01:55	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/21/21 01:55	04/21/21 01:55	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/21/21 01:55	04/21/21 01:55	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/21/21 01:55	04/21/21 01:55	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/21/21 01:55	04/21/21 01:55	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/21/21 01:55	04/21/21 01:55	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/21/21 01:55	04/21/21 01:55	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/21/21 01:55	04/21/21 01:55	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/21/21 01:55	04/21/21 01:55	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/21/21 01:55	04/21/21 01:55	78-93-3	
Methylene Chloride	**0.696J**	ug/L	5.00	0.430	1	04/21/21 01:55	04/21/21 01:55	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/21/21 01:55	04/21/21 01:55	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/21/21 01:55	04/21/21 01:55	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/21/21 01:55	04/21/21 01:55	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/21/21 01:55	04/21/21 01:55	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/21/21 01:55	04/21/21 01:55	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/21/21 01:55	04/21/21 01:55	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/21/21 01:55	04/21/21 01:55	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/21/21 01:55	04/21/21 01:55	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/21/21 01:55	04/21/21 01:55	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/21/21 01:55	04/21/21 01:55	79-01-6	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Sample: TRIP BLANK **Lab ID: 30415797008** Collected: 04/15/21 00:01 Received: 04/15/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/21/21 01:55	04/21/21 01:55	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/21/21 01:55	04/21/21 01:55	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/21/21 01:55	04/21/21 01:55	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/21/21 01:55	04/21/21 01:55	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/21/21 01:55	04/21/21 01:55	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/21/21 01:55	04/21/21 01:55	179601-23-1	
Surrogates									
Toluene-d8 (S)	109	%	80.0-120		1	04/21/21 01:55	04/21/21 01:55	2037-26-5	
4-Bromofluorobenzene (S)	89.1	%	77.0-126		1	04/21/21 01:55	04/21/21 01:55	460-00-4	
1,2-Dichloroethane-d4 (S)	94.9	%	70.0-130		1	04/21/21 01:55	04/21/21 01:55	17060-07-0	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415797

QC Batch: 444974
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30415797001, 30415797002, 30415797003, 30415797004, 30415797005, 30415797006, 30415797007

METHOD BLANK: 2148121 Matrix: Water
Associated Lab Samples: 30415797001, 30415797002, 30415797003, 30415797004, 30415797005, 30415797006, 30415797007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.000050J	0.00020	0.000030	04/27/21 16:37	

LABORATORY CONTROL SAMPLE: 2148122

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.001	0.0010	102	80-120	

MATRIX SPIKE SAMPLE: 2148124

Parameter	Units	30415474001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.000050J	0.0025	0.0024	96	75-125	

MATRIX SPIKE SAMPLE: 2148126

Parameter	Units	30415474011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.00014J	0.0025	0.0025	94	75-125	

SAMPLE DUPLICATE: 2148123

Parameter	Units	30415474001 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	0.000050J	0.000050J		20	

SAMPLE DUPLICATE: 2148125

Parameter	Units	30415474011 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	0.00014J	0.00013J		20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415797

QC Batch: 444118
QC Batch Method: EPA 3005A
Analysis Method: EPA 6010B
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30415797001, 30415797002, 30415797003, 30415797004, 30415797005, 30415797006, 30415797007

METHOD BLANK: 2143892
Matrix: Water
Associated Lab Samples: 30415797001, 30415797002, 30415797003, 30415797004, 30415797005, 30415797006, 30415797007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.0060 U	0.0060	0.0033	04/21/21 07:47	
Arsenic	mg/L	0.0050 U	0.0050	0.0020	04/21/21 07:47	
Barium	mg/L	0.010 U	0.010	0.00068	04/21/21 07:47	
Beryllium	mg/L	0.0010 U	0.0010	0.00017	04/21/21 07:47	
Cadmium	mg/L	0.0030 U	0.0030	0.00034	04/21/21 07:47	
Calcium	mg/L	1.0 U	1.0	0.10	04/21/21 07:47	
Chromium	mg/L	0.0050 U	0.0050	0.00035	04/21/21 07:47	
Cobalt	mg/L	0.0050 U	0.0050	0.00053	04/21/21 07:47	
Copper	mg/L	0.0050 U	0.0050	0.0027	04/21/21 07:47	
Iron	mg/L	0.070 U	0.070	0.041	04/21/21 07:47	
Lead	mg/L	0.0050 U	0.0050	0.0049	04/21/21 07:47	
Magnesium	mg/L	0.20 U	0.20	0.028	04/21/21 07:47	
Manganese	mg/L	0.0050 U	0.0050	0.0012	04/21/21 07:47	
Nickel	mg/L	0.010 U	0.010	0.0015	04/21/21 07:47	
Potassium	mg/L	0.50 U	0.50	0.072	04/21/21 07:47	
Selenium	mg/L	0.0080 U	0.0080	0.0055	04/21/21 07:47	
Silver	mg/L	0.0060 U	0.0060	0.0014	04/21/21 07:47	
Sodium	mg/L	1.0 U	1.0	0.42	04/21/21 07:47	
Thallium	mg/L	0.010 U	0.010	0.0040	04/21/21 07:47	
Total Hardness by SM2340B-2011	ug/L	3300 U	3300	368	04/21/21 07:47	
Vanadium	mg/L	0.0050 U	0.0050	0.00057	04/21/21 07:47	
Zinc	mg/L	0.010 U	0.010	0.0024	04/21/21 07:47	

LABORATORY CONTROL SAMPLE: 2143893

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.5	0.51	101	80-120	
Arsenic	mg/L	0.5	0.50	100	80-120	
Barium	mg/L	0.5	0.48	95	80-120	
Beryllium	mg/L	0.5	0.49	98	80-120	
Cadmium	mg/L	0.5	0.50	100	80-120	
Calcium	mg/L	5	4.8	95	80-120	
Chromium	mg/L	0.5	0.49	99	80-120	
Cobalt	mg/L	0.5	0.50	100	80-120	
Copper	mg/L	0.5	0.48	97	80-120	
Iron	mg/L	5	4.8	97	80-120	
Lead	mg/L	0.5	0.48	96	80-120	
Magnesium	mg/L	5	4.9	98	80-120	
Manganese	mg/L	0.5	0.48	97	80-120	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415797

LABORATORY CONTROL SAMPLE: 2143893

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nickel	mg/L	0.5	0.51	101	80-120	
Potassium	mg/L	5	4.6	91	80-120	
Selenium	mg/L	0.5	0.50	100	80-120	
Silver	mg/L	0.25	0.24	96	80-120	
Sodium	mg/L	5	5.1	101	80-120	
Thallium	mg/L	0.5	0.47	95	80-120	
Total Hardness by SM2340B-2011	ug/L		32100			
Vanadium	mg/L	0.5	0.50	100	80-120	
Zinc	mg/L	0.5	0.49	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2143895 2143896

Parameter	Units	30415797001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.0060 U	0.5	0.5	0.50	0.50	99	100	75-125	1	20	
Arsenic	mg/L	0.0050 U	0.5	0.5	0.49	0.50	98	99	75-125	1	20	
Barium	mg/L	0.018	0.5	0.5	0.50	0.52	96	101	75-125	5	20	
Beryllium	mg/L	0.0010 U	0.5	0.5	0.50	0.52	99	103	75-125	4	20	
Cadmium	mg/L	0.0030 U	0.5	0.5	0.49	0.50	99	100	75-125	1	20	
Calcium	mg/L	2.7	5	5	7.5	7.8	96	102	75-125	4	20	
Chromium	mg/L	0.0013J	0.5	0.5	0.49	0.50	97	100	75-125	3	20	
Cobalt	mg/L	0.00054J	0.5	0.5	0.49	0.50	98	99	75-125	1	20	
Copper	mg/L	0.0050 U	0.5	0.5	0.49	0.51	97	102	75-125	4	20	
Iron	mg/L	18.7	5	5	23.5	24.2	96	110	75-125	3	20	
Lead	mg/L	0.0050 U	0.5	0.5	0.47	0.48	94	95	75-125	1	20	
Magnesium	mg/L	0.78	5	5	5.8	6.0	100	103	75-125	3	20	
Manganese	mg/L	0.12	0.5	0.5	0.61	0.63	98	102	75-125	4	20	
Nickel	mg/L	0.0021J	0.5	0.5	0.50	0.51	100	101	75-125	1	20	
Potassium	mg/L	0.72	5	5	5.3	5.7	92	99	75-125	6	20	
Selenium	mg/L	0.0080 U	0.5	0.5	0.50	0.50	99	100	75-125	1	20	
Silver	mg/L	0.0060 U	0.25	0.25	0.24	0.25	94	98	75-125	4	20	
Sodium	mg/L	2.5	5	5	7.6	7.7	102	105	75-125	2	20	
Thallium	mg/L	0.010 U	0.5	0.5	0.47	0.48	93	95	75-125	2	20	
Total Hardness by SM2340B-2011	ug/L	10000			42600	44000				3		
Vanadium	mg/L	0.0050 U	0.5	0.5	0.49	0.51	98	101	75-125	3	20	
Zinc	mg/L	0.010 U	0.5	0.5	0.49	0.49	98	99	75-125	1	20	

MATRIX SPIKE SAMPLE: 2143898

Parameter	Units	30415853004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	6.0 U ug/L	0.5	0.51	101	75-125	
Arsenic	mg/L	5.0 U ug/L	0.5	0.50	100	75-125	
Barium	mg/L	7.6J ug/L	0.5	0.53	104	75-125	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415797

MATRIX SPIKE SAMPLE: 2143898

Parameter	Units	30415853004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Beryllium	mg/L	1.0 U ug/L	0.5	0.53	106	75-125	
Cadmium	mg/L	0.66J ug/L	0.5	0.51	101	75-125	
Calcium	mg/L	57500 ug/L	5	68.3	217	75-125	MH
Chromium	mg/L	5.0 U ug/L	0.5	0.50	100	75-125	
Cobalt	mg/L	5.0 U ug/L	0.5	0.49	99	75-125	
Copper	mg/L	5.0 U ug/L	0.5	0.52	104	75-125	
Iron	mg/L	67.6J ug/L	5	5.3	105	75-125	
Lead	mg/L	5.0 U ug/L	0.5	0.49	97	75-125	
Magnesium	mg/L	34400 ug/L	5	43.0	172	75-125	MH
Manganese	mg/L	4480 ug/L	0.5	5.4	190	75-125	MH
Nickel	mg/L	10.0 U ug/L	0.5	0.50	100	75-125	
Potassium	mg/L	1090 ug/L	5	6.5	107	75-125	
Selenium	mg/L	8.0 U ug/L	0.5	0.50	99	75-125	
Silver	mg/L	6.0 U ug/L	0.25	0.25	100	75-125	
Sodium	mg/L	27500 ug/L	5	35.7	164	75-125	MH
Thallium	mg/L	10.0 U ug/L	0.5	0.49	97	75-125	
Total Hardness by SM2340B-2011	ug/L	285000		348000			
Vanadium	mg/L	1.2J ug/L	0.5	0.51	102	75-125	
Zinc	mg/L	10.0 U ug/L	0.5	0.49	99	75-125	

SAMPLE DUPLICATE: 2143894

Parameter	Units	30415797001 Result	Dup Result	RPD	Max RPD	Qualifiers
Antimony	mg/L	0.0060 U	0.0060 U		20	
Arsenic	mg/L	0.0050 U	0.0050 U		20	
Barium	mg/L	0.018	0.019	5	20	
Beryllium	mg/L	0.0010 U	0.0010 U		20	
Cadmium	mg/L	0.0030 U	0.0030 U		20	
Calcium	mg/L	2.7	2.9	5	20	
Chromium	mg/L	0.0013J	0.0012J		20	
Cobalt	mg/L	0.00054J	0.00059J		20	
Copper	mg/L	0.0050 U	0.0050 U		20	
Iron	mg/L	18.7	19.8	5	20	
Lead	mg/L	0.0050 U	0.0050 U		20	
Magnesium	mg/L	0.78	0.82	5	20	
Manganese	mg/L	0.12	0.13	6	20	
Nickel	mg/L	0.0021J	0.0022J		20	
Potassium	mg/L	0.72	0.76	6	20	
Selenium	mg/L	0.0080 U	0.0080 U		20	
Silver	mg/L	0.0060 U	0.0060 U		20	
Sodium	mg/L	2.5	2.8	11	20	
Thallium	mg/L	0.010 U	0.010 U		20	
Total Hardness by SM2340B-2011	ug/L	10000	10500	5		
Vanadium	mg/L	0.0050 U	0.0050 U		20	
Zinc	mg/L	0.010 U	0.010 U		20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415797

SAMPLE DUPLICATE: 2143897

Parameter	Units	30415853004 Result	Dup Result	RPD	Max RPD	Qualifiers
Antimony	mg/L	6.0 U ug/L	0.0060 U		20	
Arsenic	mg/L	5.0 U ug/L	0.0050 U		20	
Barium	mg/L	7.6J ug/L	0.0078J		20	
Beryllium	mg/L	1.0 U ug/L	0.0010 U		20	
Cadmium	mg/L	0.66J ug/L	0.00049J		20	
Calcium	mg/L	57500 ug/L	59.0	3	20	
Chromium	mg/L	5.0 U ug/L	0.0050 U		20	
Cobalt	mg/L	5.0 U ug/L	0.0050 U		20	
Copper	mg/L	5.0 U ug/L	0.0050 U		20	
Iron	mg/L	67.6J ug/L	0.070J		20	
Lead	mg/L	5.0 U ug/L	0.0050 U		20	
Magnesium	mg/L	34400 ug/L	35.2	2	20	
Manganese	mg/L	4480 ug/L	4.6	2	20	
Nickel	mg/L	10.0 U ug/L	0.010 U		20	
Potassium	mg/L	1090 ug/L	1.2	6	20	
Selenium	mg/L	8.0 U ug/L	0.0080 U		20	
Silver	mg/L	6.0 U ug/L	0.0060 U		20	
Sodium	mg/L	27500 ug/L	28.0	2	20	
Thallium	mg/L	10.0 U ug/L	0.010 U		20	
Total Hardness by SM2340B-2011	ug/L	285000	292000	2		
Vanadium	mg/L	1.2J ug/L	0.0013J		20	
Zinc	mg/L	10.0 U ug/L	0.010 U		20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415797

QC Batch: 444114
QC Batch Method: EPA 3005A
Analysis Method: EPA 6010B
Analysis Description: 6010 MET Dissolved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30415797001, 30415797002, 30415797003, 30415797004, 30415797005, 30415797006, 30415797007

METHOD BLANK: 2143879 Matrix: Water
Associated Lab Samples: 30415797001, 30415797002, 30415797003, 30415797004, 30415797005, 30415797006, 30415797007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	1.0 U	1.0	0.10	04/26/21 12:10	
Iron, Dissolved	mg/L	0.070 U	0.070	0.041	04/26/21 12:10	
Magnesium, Dissolved	mg/L	0.20 U	0.20	0.028	04/26/21 12:10	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0012	04/26/21 12:10	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.072	04/26/21 12:10	
Sodium, Dissolved	mg/L	1.0 U	1.0	0.42	04/26/21 12:10	

LABORATORY CONTROL SAMPLE: 2143880

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	5	4.7	93	80-120	
Iron, Dissolved	mg/L	5	4.7	94	80-120	
Magnesium, Dissolved	mg/L	5	4.6	93	80-120	
Manganese, Dissolved	mg/L	0.5	0.46	93	80-120	
Potassium, Dissolved	mg/L	5	4.6	92	80-120	
Sodium, Dissolved	mg/L	5	4.6	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2143882 2143883

Parameter	Units	30414805001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	118000 ug/L	5	5	118	121	10	78	75-125	3	20	ML
Iron, Dissolved	mg/L	1.0	5	5	5.8	6.0	96	100	75-125	3	20	
Magnesium, Dissolved	mg/L	22100 ug/L	5	5	26.0	26.7	78	92	75-125	3	20	
Manganese, Dissolved	mg/L	0.31	0.5	0.5	0.77	0.78	92	95	75-125	2	20	
Potassium, Dissolved	mg/L	1940 ug/L	5	5	6.8	7.0	97	101	75-125	3	20	
Sodium, Dissolved	mg/L	32300 ug/L	5	5	35.9	36.6	71	84	75-125	2	20	ML

MATRIX SPIKE SAMPLE: 2143885

Parameter	Units	30415797005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	2.4	5	7.4	100	75-125	
Iron, Dissolved	mg/L	0.070 U	5	5.0	99	75-125	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415797

MATRIX SPIKE SAMPLE: 2143885

Parameter	Units	30415797005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Magnesium, Dissolved	mg/L	1.3	5	6.3	101	75-125	
Manganese, Dissolved	mg/L	0.027	0.5	0.52	98	75-125	
Potassium, Dissolved	mg/L	0.65	5	5.6	100	75-125	
Sodium, Dissolved	mg/L	1.5	5	6.8	105	75-125	

SAMPLE DUPLICATE: 2143881

Parameter	Units	30414805001 Result	Dup Result	RPD	Max RPD	Qualifiers
Calcium, Dissolved	mg/L	118000 ug/L	115	2	20	
Iron, Dissolved	mg/L	1.0	0.96	4	20	
Magnesium, Dissolved	mg/L	22100 ug/L	21.6	3	20	
Manganese, Dissolved	mg/L	0.31	0.30	3	20	
Potassium, Dissolved	mg/L	1940 ug/L	1.9	3	20	
Sodium, Dissolved	mg/L	32300 ug/L	31.4	3	20	

SAMPLE DUPLICATE: 2143884

Parameter	Units	30415797005 Result	Dup Result	RPD	Max RPD	Qualifiers
Calcium, Dissolved	mg/L	2.4	2.5	3	20	
Iron, Dissolved	mg/L	0.070 U	0.070 U		20	
Magnesium, Dissolved	mg/L	1.3	1.3	4	20	
Manganese, Dissolved	mg/L	0.027	0.027	2	20	
Potassium, Dissolved	mg/L	0.65	0.68	5	20	
Sodium, Dissolved	mg/L	1.5	1.7	12	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415797

QC Batch: 1655294
QC Batch Method: 8260B
Analysis Method: EPA 8260B
Analysis Description: VOA (GC/MS) 8260B
Laboratory: Pace National - Mt. Juliet
Associated Lab Samples: 30415797001, 30415797002, 30415797003, 30415797004, 30415797005, 30415797006

METHOD BLANK: R3646795-3
Matrix: Water
Associated Lab Samples: 30415797001, 30415797002, 30415797003, 30415797004, 30415797005, 30415797006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acetone	ug/L	50.0 U	50.0	11.3	04/20/21 20:39	
Acrylonitrile	ug/L	10.0 U	10.0	0.671	04/20/21 20:39	
Benzene	ug/L	1.00 U	1.00	0.0941	04/20/21 20:39	
Bromodichloromethane	ug/L	1.00 U	1.00	0.136	04/20/21 20:39	
Bromochloromethane	ug/L	1.00 U	1.00	0.128	04/20/21 20:39	
Bromoform	ug/L	1.00 U	1.00	0.129	04/20/21 20:39	
Bromomethane	ug/L	5.00 U	5.00	0.605	04/20/21 20:39	
Carbon disulfide	ug/L	1.00 U	1.00	0.0962	04/20/21 20:39	
Carbon tetrachloride	ug/L	1.00 U	1.00	0.128	04/20/21 20:39	
Chlorobenzene	ug/L	1.00 U	1.00	0.116	04/20/21 20:39	
Dibromochloromethane	ug/L	1.00 U	1.00	0.140	04/20/21 20:39	
Chloroethane	ug/L	5.00 U	5.00	0.192	04/20/21 20:39	
Chloroform	ug/L	5.00 U	5.00	0.111	04/20/21 20:39	
Chloromethane	ug/L	2.50 U	2.50	0.960	04/20/21 20:39	
1,2-Dibromo-3-chloropropane	ug/L	5.00 U	5.00	0.276	04/20/21 20:39	
1,2-Dibromoethane (EDB)	ug/L	1.00 U	1.00	0.126	04/20/21 20:39	
Dibromomethane	ug/L	1.00 U	1.00	0.122	04/20/21 20:39	
1,2-Dichlorobenzene	ug/L	1.00 U	1.00	0.107	04/20/21 20:39	
1,4-Dichlorobenzene	ug/L	1.00 U	1.00	0.120	04/20/21 20:39	
trans-1,4-Dichloro-2-butene	ug/L	2.50 U	2.50	0.467	04/20/21 20:39	
Dichlorodifluoromethane	ug/L	5.00 U	5.00	0.374	04/20/21 20:39	
Dichlorofluoromethane	ug/L	5.00 U	5.00	0.130	04/20/21 20:39	
1,1-Dichloroethane	ug/L	1.00 U	1.00	0.100	04/20/21 20:39	
1,2-Dichloroethane	ug/L	1.00 U	1.00	0.0819	04/20/21 20:39	
1,1-Dichloroethene	ug/L	1.00 U	1.00	0.188	04/20/21 20:39	
cis-1,2-Dichloroethene	ug/L	1.00 U	1.00	0.126	04/20/21 20:39	
trans-1,2-Dichloroethene	ug/L	1.00 U	1.00	0.149	04/20/21 20:39	
1,2-Dichloropropane	ug/L	1.00 U	1.00	0.149	04/20/21 20:39	
cis-1,3-Dichloropropene	ug/L	1.00 U	1.00	0.111	04/20/21 20:39	
trans-1,3-Dichloropropene	ug/L	1.00 U	1.00	0.118	04/20/21 20:39	
Ethylbenzene	ug/L	1.00 U	1.00	0.137	04/20/21 20:39	
2-Hexanone	ug/L	10.0 U	10.0	0.787	04/20/21 20:39	
Iodomethane	ug/L	10.0 U	10.0	6.00	04/20/21 20:39	
2-Butanone (MEK)	ug/L	10.0 U	10.0	1.19	04/20/21 20:39	
Methylene Chloride	ug/L	5.00 U	5.00	0.430	04/20/21 20:39	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.478	04/20/21 20:39	
Methyl-tert-butyl ether	ug/L	1.00 U	1.00	0.101	04/20/21 20:39	
Styrene	ug/L	1.00 U	1.00	0.118	04/20/21 20:39	
1,1,1,2-Tetrachloroethane	ug/L	1.00 U	1.00	0.147	04/20/21 20:39	
1,1,2,2-Tetrachloroethane	ug/L	1.00 U	1.00	0.133	04/20/21 20:39	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415797

METHOD BLANK: R3646795-3 Matrix: Water
Associated Lab Samples: 30415797001, 30415797002, 30415797003, 30415797004, 30415797005, 30415797006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Tetrachloroethene	ug/L	1.00 U	1.00	0.300	04/20/21 20:39	
Toluene	ug/L	1.00 U	1.00	0.278	04/20/21 20:39	
1,1,1-Trichloroethane	ug/L	1.00 U	1.00	0.149	04/20/21 20:39	
1,1,2-Trichloroethane	ug/L	1.00 U	1.00	0.158	04/20/21 20:39	
Trichloroethene	ug/L	1.00 U	1.00	0.190	04/20/21 20:39	
Trichlorofluoromethane	ug/L	5.00 U	5.00	0.160	04/20/21 20:39	
1,2,3-Trichloropropane	ug/L	2.50 U	2.50	0.237	04/20/21 20:39	
Vinyl acetate	ug/L	10.0 U	10.0	0.692	04/20/21 20:39	
Vinyl chloride	ug/L	1.00 U	1.00	0.234	04/20/21 20:39	
o-Xylene	ug/L	1.00 U	1.00	0.174	04/20/21 20:39	
m&p-Xylene	ug/L	2.00 U	2.00	0.430	04/20/21 20:39	
Toluene-d8 (S)	%	113	80.0-120		04/20/21 20:39	
4-Bromofluorobenzene (S)	%	91.2	77.0-126		04/20/21 20:39	
1,2-Dichloroethane-d4 (S)	%	108	70.0-130		04/20/21 20:39	

LABORATORY CONTROL SAMPLE & LCSD: R3646795-1 R3646795-2

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Acetone	ug/L	25.0	25.0	21.9	100	87.6	19.0-160	13.2	27	
Acrylonitrile	ug/L	25.0	21.7	22.1	86.8	88.4	55.0-149	1.83	20	
Benzene	ug/L	5.00	4.86	4.71	97.2	94.2	70.0-123	3.13	20	
Bromodichloromethane	ug/L	5.00	5.05	4.87	101	97.4	75.0-120	3.63	20	
Bromochloromethane	ug/L	5.00	5.95	5.81	119	116	76.0-122	2.38	20	
Bromoform	ug/L	5.00	3.92	3.78	78.4	75.6	68.0-132	3.64	20	
Bromomethane	ug/L	5.00	3.02	3.27	60.4	65.4	10.0-160	7.95	25	
Carbon disulfide	ug/L	5.00	4.48	4.51	89.6	90.2	61.0-128	0.667	20	
Carbon tetrachloride	ug/L	5.00	5.08	5.15	102	103	68.0-126	1.37	20	
Chlorobenzene	ug/L	5.00	4.37	4.45	87.4	89.0	80.0-121	1.81	20	
Dibromochloromethane	ug/L	5.00	4.32	4.23	86.4	84.6	77.0-125	2.11	20	
Chloroethane	ug/L	5.00	5.98	5.93	120	119	47.0-150	0.840	20	
Chloroform	ug/L	5.00	5.08	5.16	102	103	73.0-120	1.56	20	
Chloromethane	ug/L	5.00	2.93	2.95	58.6	59.0	41.0-142	0.680	20	
1,2-Dibromo-3-chloropropane	ug/L	5.00	3.82	4.34	76.4	86.8	58.0-134	12.7	20	
1,2-Dibromoethane (EDB)	ug/L	5.00	4.40	4.17	88.0	83.4	80.0-122	5.37	20	
Dibromomethane	ug/L	5.00	4.82	5.07	96.4	101	80.0-120	5.06	20	
1,2-Dichlorobenzene	ug/L	5.00	4.62	4.93	92.4	98.6	79.0-121	6.49	20	
1,4-Dichlorobenzene	ug/L	5.00	4.59	4.35	91.8	87.0	79.0-120	5.37	20	
trans-1,4-Dichloro-2-butene	ug/L	5.00	4.33	4.20	86.6	84.0	33.0-144	3.05	20	
Dichlorodifluoromethane	ug/L	5.00	5.24	4.99	105	99.8	51.0-149	4.89	20	
Dichlorofluoromethane	ug/L	5.00	5.69	5.70	114	114	65.0-133	0.176	20	
1,1-Dichloroethane	ug/L	5.00	5.20	5.36	104	107	70.0-126	3.03	20	
1,2-Dichloroethane	ug/L	5.00	5.13	5.11	103	102	70.0-128	0.391	20	
1,1-Dichloroethene	ug/L	5.00	4.76	5.06	95.2	101	71.0-124	6.11	20	
cis-1,2-Dichloroethene	ug/L	5.00	4.78	4.72	95.6	94.4	73.0-120	1.26	20	

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415797

LABORATORY CONTROL SAMPLE & LCSD: R3646795-1 R3646795-2

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
trans-1,2-Dichloroethene	ug/L	5.00	4.62	4.99	92.4	99.8	73.0-120	7.70	20	
1,2-Dichloropropane	ug/L	5.00	4.90	4.52	98.0	90.4	77.0-125	8.07	20	
cis-1,3-Dichloropropene	ug/L	5.00	4.32	4.37	86.4	87.4	80.0-123	1.15	20	
trans-1,3-Dichloropropene	ug/L	5.00	3.74	3.67	74.8	73.4	78.0-124	1.89	20	L0
Ethylbenzene	ug/L	5.00	4.31	4.17	86.2	83.4	79.0-123	3.30	20	
2-Hexanone	ug/L	25.0	18.8	19.6	75.2	78.4	67.0-149	4.17	20	
Iodomethane	ug/L	25.0	17.0	18.0	68.0	72.0	33.0-147	5.71	26	
2-Butanone (MEK)	ug/L	25.0	23.1	16.5	92.4	66.0	44.0-160	33.3	20	R1
Methylene Chloride	ug/L	5.00	4.81	4.57	96.2	91.4	67.0-120	5.12	20	
4-Methyl-2-pentanone (MIBK)	ug/L	25.0	22.0	21.8	88.0	87.2	68.0-142	0.913	20	
Methyl-tert-butyl ether	ug/L	5.00	4.74	4.73	94.8	94.6	68.0-125	0.211	20	
Styrene	ug/L	5.00	3.67	3.64	73.4	72.8	73.0-130	0.821	20	L0
1,1,1,2-Tetrachloroethane	ug/L	5.00	4.34	4.30	86.8	86.0	75.0-125	0.926	20	
1,1,2,2-Tetrachloroethane	ug/L	5.00	5.13	5.23	103	105	65.0-130	1.93	20	
Tetrachloroethene	ug/L	5.00	4.57	4.34	91.4	86.8	72.0-132	5.16	20	
Toluene	ug/L	5.00	4.46	4.56	89.2	91.2	79.0-120	2.22	20	
1,1,1-Trichloroethane	ug/L	5.00	5.01	5.16	100	103	73.0-124	2.95	20	
1,1,2-Trichloroethane	ug/L	5.00	4.72	4.38	94.4	87.6	80.0-120	7.47	20	
Trichloroethene	ug/L	5.00	4.70	4.67	94.0	93.4	78.0-124	0.640	20	
Trichlorofluoromethane	ug/L	5.00	5.54	5.87	111	117	59.0-147	5.78	20	
1,2,3-Trichloropropane	ug/L	5.00	5.12	5.16	102	103	73.0-130	0.778	20	
Vinyl acetate	ug/L	25.0	17.5	19.3	70.0	77.2	11.0-160	9.78	20	
Vinyl chloride	ug/L	5.00	5.01	5.13	100	103	67.0-131	2.37	20	
o-Xylene	ug/L	5.00	4.14	3.95	82.8	79.0	80.0-122	4.70	20	L0
m&p-Xylene	ug/L	10.0	8.56	8.54	85.6	85.4	80.0-122	0.234	20	
Toluene-d8 (S)	%				99.4	97.4	80.0-120			
4-Bromofluorobenzene (S)	%				88.2	89.8	77.0-126			
1,2-Dichloroethane-d4 (S)	%				108	105	70.0-130			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R3646795-4 R3646795-5

Parameter	Units	L1340386-02 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Bromochloromethane	ug/L	ND	5.00	5.00	5.55	5.59	111	112	38.0-142	0.718	26	
Acetone	ug/L	ND	25.0	25.0	18.1	17.2	72.4	68.8	10.0-160	5.10	35	
Acrylonitrile	ug/L	ND	25.0	25.0	19.5	19.4	78.0	77.6	21.0-160	0.514	32	
Benzene	ug/L	ND	5.00	5.00	4.50	4.24	90.0	84.8	17.0-158	5.95	27	
Bromodichloromethane	ug/L	ND	5.00	5.00	4.77	4.47	95.4	89.4	31.0-150	6.49	27	
Bromoform	ug/L	ND	5.00	5.00	3.36	3.53	67.2	70.6	29.0-150	4.93	29	
Bromomethane	ug/L	ND	5.00	5.00	3.29	3.13	65.8	62.6	10.0-160	4.98	38	
trans-1,4-Dichloro-2-butene	ug/L	ND	5.00	5.00	3.72	2.88	74.4	57.6	10.0-157	25.5	37	
Carbon disulfide	ug/L	ND	5.00	5.00	4.15	4.06	83.0	81.2	10.0-156	2.19	28	
Carbon tetrachloride	ug/L	ND	5.00	5.00	4.97	4.51	99.4	90.2	23.0-159	9.70	28	
Chlorobenzene	ug/L	ND	5.00	5.00	3.88	3.58	77.6	71.6	33.0-152	8.04	27	
Dibromochloromethane	ug/L	ND	5.00	5.00	3.83	3.75	76.6	75.0	37.0-149	2.11	27	

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REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415797

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R3646795-4 R3646795-5

Parameter	Units	L1340386-02 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloroethane	ug/L	ND	5.00	5.00	7.06	7.14	141	143	10.0-160	1.13	30	
Chloroform	ug/L	ND	5.00	5.00	5.00	4.96	100	99.2	29.0-154	0.803	28	
Chloromethane	ug/L	ND	5.00	5.00	3.17	3.08	63.4	61.6	10.0-160	2.88	29	
1,2-Dibromo-3-chloropropane	ug/L	ND	5.00	5.00	3.59	3.22	71.8	64.4	22.0-151	10.9	34	
1,2-Dibromoethane (EDB)	ug/L	ND	5.00	5.00	3.77	3.66	75.4	73.2	34.0-147	2.96	27	
Dibromomethane	ug/L	ND	5.00	5.00	4.40	4.21	88.0	84.2	30.0-151	4.41	27	
1,2-Dichlorobenzene	ug/L	ND	5.00	5.00	3.99	3.59	79.8	71.8	34.0-149	10.6	28	
2-Hexanone	ug/L	ND	25.0	25.0	14.5	15.0	58.0	60.0	21.0-160	3.39	29	
1,4-Dichlorobenzene	ug/L	ND	5.00	5.00	3.74	3.20	74.8	64.0	35.0-142	15.6	27	
Iodomethane	ug/L	ND	25.0	25.0	12.9	14.8	51.6	59.2	10.0-160	13.7	40	
Dichlorodifluoromethane	ug/L	ND	5.00	5.00	5.18	4.39	104	87.8	10.0-160	16.5	29	
Dichlorofluoromethane	ug/L	ND	5.00	5.00	5.84	5.86	117	117	59.0-143	0.342	33	
1,1-Dichloroethane	ug/L	ND	5.00	5.00	5.15	5.13	103	103	25.0-158	0.389	27	
1,2-Dichloroethane	ug/L	ND	5.00	5.00	5.19	4.70	104	94.0	29.0-151	9.91	27	
1,1-Dichloroethene	ug/L	ND	5.00	5.00	4.50	4.51	90.0	90.2	11.0-160	0.222	29	
cis-1,2-Dichloroethene	ug/L	ND	5.00	5.00	4.37	4.45	87.4	89.0	10.0-160	1.81	27	
trans-1,2-Dichloroethene	ug/L	ND	5.00	5.00	4.49	4.24	89.8	84.8	17.0-153	5.73	27	
1,2-Dichloropropane	ug/L	ND	5.00	5.00	4.88	4.30	97.6	86.0	30.0-156	12.6	27	
cis-1,3-Dichloropropene	ug/L	ND	5.00	5.00	3.10	3.20	62.0	64.0	34.0-149	3.17	28	
trans-1,3-Dichloropropene	ug/L	ND	5.00	5.00	2.89	2.74	57.8	54.8	32.0-149	5.33	28	
Ethylbenzene	ug/L	ND	5.00	5.00	3.57	3.14	71.4	62.8	30.0-155	12.8	27	
2-Butanone (MEK)	ug/L	ND	25.0	25.0	12.4	18.6	49.6	74.4	10.0-160	40.0	32	R1
Methylene Chloride	ug/L	ND	5.00	5.00	4.38	4.32	87.6	86.4	23.0-144	1.38	28	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	25.0	18.4	17.1	73.6	68.4	29.0-160	7.32	29	
Methyl-tert-butyl ether	ug/L	5.79	5.00	5.00	10.1	9.52	86.2	74.6	28.0-150	5.91	29	
Vinyl acetate	ug/L	ND	25.0	25.0	19.3	18.7	77.2	74.8	12.0-160	3.16	31	
Styrene	ug/L	ND	5.00	5.00	3.02	2.77	60.4	55.4	33.0-155	8.64	28	
1,1,1,2-Tetrachloroethane	ug/L	ND	5.00	5.00	3.96	3.72	79.2	74.4	36.0-151	6.25	29	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.00	5.00	4.75	4.49	95.0	89.8	33.0-150	5.63	28	
Tetrachloroethene	ug/L	ND	5.00	5.00	3.60	3.01	72.0	60.2	10.0-160	17.9	27	
Toluene	ug/L	ND	5.00	5.00	3.98	3.73	79.6	74.6	26.0-154	6.49	28	
1,1,1-Trichloroethane	ug/L	ND	5.00	5.00	4.84	4.64	96.8	92.8	23.0-160	4.22	28	
1,1,2-Trichloroethane	ug/L	ND	5.00	5.00	4.27	4.14	85.4	82.8	35.0-147	3.09	27	
Trichloroethene	ug/L	ND	5.00	5.00	4.29	3.90	85.8	78.0	10.0-160	9.52	25	
Trichlorofluoromethane	ug/L	ND	5.00	5.00	5.90	5.27	118	105	17.0-160	11.3	31	
1,2,3-Trichloropropane	ug/L	ND	5.00	5.00	4.39	4.37	87.8	87.4	34.0-151	0.457	29	
Vinyl chloride	ug/L	ND	5.00	5.00	5.34	5.19	107	104	10.0-160	2.85	27	
o-Xylene	ug/L	ND	5.00	5.00	3.30	3.12	66.0	62.4	45.0-144	5.61	26	
m&p-Xylene	ug/L	ND	10.0	10.0	6.85	6.57	68.5	65.7	43.0-146	4.17	26	
Toluene-d8 (S)	%						97.5	95.3	80.0-120			
4-Bromofluorobenzene (S)	%						85.2	87.1	77.0-126			
1,2-Dichloroethane-d4 (S)	%						114	114	70.0-130			

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REPORT OF LABORATORY ANALYSIS

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415797

QC Batch: 1655582
QC Batch Method: 8260B
Analysis Method: EPA 8260B
Analysis Description: VOA (GC/MS) 8260B
Laboratory: Pace National - Mt. Juliet
Associated Lab Samples: 30415797007, 30415797008

METHOD BLANK: R3645470-2
Matrix: Water
Associated Lab Samples: 30415797007, 30415797008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acetone	ug/L	50.0 U	50.0	11.3	04/21/21 01:34	
Acrylonitrile	ug/L	10.0 U	10.0	0.671	04/21/21 01:34	
Benzene	ug/L	1.00 U	1.00	0.0941	04/21/21 01:34	
Bromodichloromethane	ug/L	1.00 U	1.00	0.136	04/21/21 01:34	
Bromochloromethane	ug/L	1.00 U	1.00	0.128	04/21/21 01:34	
Bromoform	ug/L	1.00 U	1.00	0.129	04/21/21 01:34	
Bromomethane	ug/L	5.00 U	5.00	0.605	04/21/21 01:34	
Carbon disulfide	ug/L	1.00 U	1.00	0.0962	04/21/21 01:34	
Carbon tetrachloride	ug/L	1.00 U	1.00	0.128	04/21/21 01:34	
Chlorobenzene	ug/L	1.00 U	1.00	0.116	04/21/21 01:34	
Dibromochloromethane	ug/L	1.00 U	1.00	0.140	04/21/21 01:34	
Chloroethane	ug/L	5.00 U	5.00	0.192	04/21/21 01:34	
Chloroform	ug/L	5.00 U	5.00	0.111	04/21/21 01:34	
Chloromethane	ug/L	2.50 U	2.50	0.960	04/21/21 01:34	
1,2-Dibromo-3-chloropropane	ug/L	5.00 U	5.00	0.276	04/21/21 01:34	
1,2-Dibromoethane (EDB)	ug/L	1.00 U	1.00	0.126	04/21/21 01:34	
Dibromomethane	ug/L	1.00 U	1.00	0.122	04/21/21 01:34	
1,2-Dichlorobenzene	ug/L	1.00 U	1.00	0.107	04/21/21 01:34	
1,4-Dichlorobenzene	ug/L	1.00 U	1.00	0.120	04/21/21 01:34	
trans-1,4-Dichloro-2-butene	ug/L	2.50 U	2.50	0.467	04/21/21 01:34	
Dichlorodifluoromethane	ug/L	5.00 U	5.00	0.374	04/21/21 01:34	
Dichlorofluoromethane	ug/L	5.00 U	5.00	0.130	04/21/21 01:34	
1,1-Dichloroethane	ug/L	1.00 U	1.00	0.100	04/21/21 01:34	
1,2-Dichloroethane	ug/L	1.00 U	1.00	0.0819	04/21/21 01:34	
1,1-Dichloroethene	ug/L	1.00 U	1.00	0.188	04/21/21 01:34	
cis-1,2-Dichloroethene	ug/L	1.00 U	1.00	0.126	04/21/21 01:34	
trans-1,2-Dichloroethene	ug/L	1.00 U	1.00	0.149	04/21/21 01:34	
1,2-Dichloropropane	ug/L	1.00 U	1.00	0.149	04/21/21 01:34	
cis-1,3-Dichloropropene	ug/L	1.00 U	1.00	0.111	04/21/21 01:34	
trans-1,3-Dichloropropene	ug/L	1.00 U	1.00	0.118	04/21/21 01:34	
Ethylbenzene	ug/L	1.00 U	1.00	0.137	04/21/21 01:34	
2-Hexanone	ug/L	10.0 U	10.0	0.787	04/21/21 01:34	
Iodomethane	ug/L	10.0 U	10.0	6.00	04/21/21 01:34	
2-Butanone (MEK)	ug/L	10.0 U	10.0	1.19	04/21/21 01:34	
Methylene Chloride	ug/L	5.00 U	5.00	0.430	04/21/21 01:34	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.478	04/21/21 01:34	
Methyl-tert-butyl ether	ug/L	1.00 U	1.00	0.101	04/21/21 01:34	
Styrene	ug/L	1.00 U	1.00	0.118	04/21/21 01:34	
1,1,1,2-Tetrachloroethane	ug/L	1.00 U	1.00	0.147	04/21/21 01:34	
1,1,2,2-Tetrachloroethane	ug/L	1.00 U	1.00	0.133	04/21/21 01:34	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415797

METHOD BLANK: R3645470-2 Matrix: Water
Associated Lab Samples: 30415797007, 30415797008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Tetrachloroethene	ug/L	1.00 U	1.00	0.300	04/21/21 01:34	
Toluene	ug/L	1.00 U	1.00	0.278	04/21/21 01:34	
1,1,1-Trichloroethane	ug/L	1.00 U	1.00	0.149	04/21/21 01:34	
1,1,2-Trichloroethane	ug/L	1.00 U	1.00	0.158	04/21/21 01:34	
Trichloroethene	ug/L	1.00 U	1.00	0.190	04/21/21 01:34	
Trichlorofluoromethane	ug/L	5.00 U	5.00	0.160	04/21/21 01:34	
1,2,3-Trichloropropane	ug/L	2.50 U	2.50	0.237	04/21/21 01:34	
Vinyl acetate	ug/L	10.0 U	10.0	0.692	04/21/21 01:34	
Vinyl chloride	ug/L	1.00 U	1.00	0.234	04/21/21 01:34	
o-Xylene	ug/L	1.00 U	1.00	0.174	04/21/21 01:34	
m&p-Xylene	ug/L	2.00 U	2.00	0.430	04/21/21 01:34	
Toluene-d8 (S)	%	112	80.0-120		04/21/21 01:34	
4-Bromofluorobenzene (S)	%	96.1	77.0-126		04/21/21 01:34	
1,2-Dichloroethane-d4 (S)	%	93	70.0-130		04/21/21 01:34	

LABORATORY CONTROL SAMPLE: R3645470-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acetone	ug/L	25.0	20.5	82.0	19.0-160	
Acrylonitrile	ug/L	25.0	25.2	101	55.0-149	
Benzene	ug/L	5.00	4.61	92.2	70.0-123	
Bromodichloromethane	ug/L	5.00	4.62	92.4	75.0-120	
Bromochloromethane	ug/L	5.00	4.94	98.8	76.0-122	
Bromoform	ug/L	5.00	4.62	92.4	68.0-132	
Bromomethane	ug/L	5.00	4.72	94.4	10.0-160	
Carbon disulfide	ug/L	5.00	4.14	82.8	61.0-128	
Carbon tetrachloride	ug/L	5.00	4.85	97.0	68.0-126	
Chlorobenzene	ug/L	5.00	5.09	102	80.0-121	
Dibromochloromethane	ug/L	5.00	4.91	98.2	77.0-125	
Chloroethane	ug/L	5.00	4.29	85.8	47.0-150	
Chloroform	ug/L	5.00	4.77	95.4	73.0-120	
Chloromethane	ug/L	5.00	4.65	93.0	41.0-142	
1,2-Dibromo-3-chloropropane	ug/L	5.00	4.39	87.8	58.0-134	
1,2-Dibromoethane (EDB)	ug/L	5.00	5.11	102	80.0-122	
Dibromomethane	ug/L	5.00	4.88	97.6	80.0-120	
1,2-Dichlorobenzene	ug/L	5.00	4.71	94.2	79.0-121	
1,4-Dichlorobenzene	ug/L	5.00	4.28	85.6	79.0-120	
trans-1,4-Dichloro-2-butene	ug/L	5.00	4.24	84.8	33.0-144	
Dichlorodifluoromethane	ug/L	5.00	4.55	91.0	51.0-149	
Dichlorofluoromethane	ug/L	5.00	4.85	97.0	65.0-133	
1,1-Dichloroethane	ug/L	5.00	4.78	95.6	70.0-126	
1,2-Dichloroethane	ug/L	5.00	4.82	96.4	70.0-128	
1,1-Dichloroethene	ug/L	5.00	4.23	84.6	71.0-124	
cis-1,2-Dichloroethene	ug/L	5.00	4.62	92.4	73.0-120	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415797

LABORATORY CONTROL SAMPLE: R3645470-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,2-Dichloroethene	ug/L	5.00	4.49	89.8	73.0-120	
1,2-Dichloropropane	ug/L	5.00	4.84	96.8	77.0-125	
cis-1,3-Dichloropropene	ug/L	5.00	4.63	92.6	80.0-123	
trans-1,3-Dichloropropene	ug/L	5.00	4.86	97.2	78.0-124	
Ethylbenzene	ug/L	5.00	4.74	94.8	79.0-123	
2-Hexanone	ug/L	25.0	25.5	102	67.0-149	
Iodomethane	ug/L	25.0	24.5	98.0	33.0-147	
2-Butanone (MEK)	ug/L	25.0	24.9	99.6	44.0-160	
Methylene Chloride	ug/L	5.00	4.55	91.0	67.0-120	
4-Methyl-2-pentanone (MIBK)	ug/L	25.0	25.8	103	68.0-142	
Methyl-tert-butyl ether	ug/L	5.00	4.69	93.8	68.0-125	
Styrene	ug/L	5.00	4.99	99.8	73.0-130	
1,1,1,2-Tetrachloroethane	ug/L	5.00	4.88	97.6	75.0-125	
1,1,2,2-Tetrachloroethane	ug/L	5.00	4.93	98.6	65.0-130	
Tetrachloroethene	ug/L	5.00	5.26	105	72.0-132	
Toluene	ug/L	5.00	4.78	95.6	79.0-120	
1,1,1-Trichloroethane	ug/L	5.00	4.55	91.0	73.0-124	
1,1,2-Trichloroethane	ug/L	5.00	4.93	98.6	80.0-120	
Trichloroethene	ug/L	5.00	5.36	107	78.0-124	
Trichlorofluoromethane	ug/L	5.00	4.66	93.2	59.0-147	
1,2,3-Trichloropropane	ug/L	5.00	5.55	111	73.0-130	
Vinyl acetate	ug/L	25.0	19.1	76.4	11.0-160	
Vinyl chloride	ug/L	5.00	4.64	92.8	67.0-131	
o-Xylene	ug/L	5.00	4.77	95.4	80.0-122	
m&p-Xylene	ug/L	10.0	10.2	102	80.0-122	
Toluene-d8 (S)	%			111	80.0-120	
4-Bromofluorobenzene (S)	%			98.9	77.0-126	
1,2-Dichloroethane-d4 (S)	%			99.1	70.0-130	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415797

QC Batch: 445497
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30415797001, 30415797002, 30415797003, 30415797004, 30415797005, 30415797006, 30415797007

METHOD BLANK: 2150444
Matrix: Water
Associated Lab Samples: 30415797001, 30415797002, 30415797003, 30415797004, 30415797005, 30415797006, 30415797007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	04/28/21 19:57	

LABORATORY CONTROL SAMPLE: 2150445

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2150446 2150447

Parameter	Units	30416750001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	118	50	50	186	184	136	132	85-115	1	20	MH

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415797

QC Batch: 444031 | Analysis Method: SM 2540C-2011
QC Batch Method: SM 2540C-2011 | Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30415797001, 30415797002, 30415797003, 30415797004, 30415797005, 30415797006, 30415797007

METHOD BLANK: 2143362 | Matrix: Water
Associated Lab Samples: 30415797001, 30415797002, 30415797003, 30415797004, 30415797005, 30415797006, 30415797007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	04/20/21 14:26	

LABORATORY CONTROL SAMPLE: 2143363

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	945	94	85-115	

SAMPLE DUPLICATE: 2143364

Parameter	Units	30415797001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0 U		5	

SAMPLE DUPLICATE: 2143365

Parameter	Units	30415944008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	376	367	2	5	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415797

QC Batch: 445230
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30415797001, 30415797002, 30415797003, 30415797004, 30415797005, 30415797006, 30415797007

METHOD BLANK: 2149378
Matrix: Water
Associated Lab Samples: 30415797001, 30415797002, 30415797003, 30415797004, 30415797005, 30415797006, 30415797007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.044	04/28/21 13:32	

LABORATORY CONTROL SAMPLE: 2149379

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.2	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2149380 2149381

Parameter	Units	30415797001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.1	4.1	102	102	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2149382 2149383

Parameter	Units	30416312002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.11	4	4	4.2	4.2	102	102	90-110	0	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415797

QC Batch: 444485
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30415797001, 30415797002, 30415797003, 30415797004, 30415797005, 30415797006, 30415797007

METHOD BLANK: 2145775
Matrix: Water
Associated Lab Samples: 30415797001, 30415797002, 30415797003, 30415797004, 30415797005, 30415797006, 30415797007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	04/22/21 15:56	

LABORATORY CONTROL SAMPLE: 2145776

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	301	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2145777 2145778

Parameter	Units	30415796015 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	14.8J	150	150	162	156	98	94	90-110	4	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2145779 2145780

Parameter	Units	30416374001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	26300	30000	30000	54500	54500	94	94	90-110	0	10	D4

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415797

QC Batch: 443975
QC Batch Method: SM 4500CIE-2011
Analysis Method: SM 4500CIE-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30415797001, 30415797002, 30415797003, 30415797004, 30415797005

METHOD BLANK: 2143163 Matrix: Water
Associated Lab Samples: 30415797001, 30415797002, 30415797003, 30415797004, 30415797005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	04/20/21 16:31	

LABORATORY CONTROL SAMPLE: 2143164

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.1	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2143165 2143166

Parameter	Units	30415885005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	11.8	20	20	33.5	32.1	108	101	85-115	4	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415797

QC Batch: 444713
QC Batch Method: SM 4500CIE-2011
Analysis Method: SM 4500CIE-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30415797006, 30415797007

METHOD BLANK: 2146835 Matrix: Water
Associated Lab Samples: 30415797006, 30415797007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	04/23/21 13:55	

METHOD BLANK: 2146837 Matrix: Water
Associated Lab Samples: 30415797006, 30415797007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	04/23/21 13:57	

METHOD BLANK: 2146838 Matrix: Water
Associated Lab Samples: 30415797006, 30415797007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	04/23/21 13:58	

METHOD BLANK: 2146839 Matrix: Water
Associated Lab Samples: 30415797006, 30415797007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	04/23/21 13:59	

METHOD BLANK: 2147114 Matrix: Water
Associated Lab Samples: 30415797006, 30415797007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	04/23/21 13:58	

LABORATORY CONTROL SAMPLE: 2146836

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	19.0	95	90-110	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415797

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2146840 2146841

Parameter	Units	30415797006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	47.3	20	20	64.8	64.7	88	87	85-115	0	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415797

QC Batch: 445569 | Analysis Method: SM 4500NO3F-2011
QC Batch Method: SM 4500NO3F-2011 | Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30415797001, 30415797002, 30415797003, 30415797004, 30415797005, 30415797006, 30415797007

METHOD BLANK: 2150734 Matrix: Water
Associated Lab Samples: 30415797001, 30415797002, 30415797003, 30415797004, 30415797005, 30415797006, 30415797007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.024	04/29/21 11:53	

METHOD BLANK: 2150736 Matrix: Water
Associated Lab Samples: 30415797001, 30415797002, 30415797003, 30415797004, 30415797005, 30415797006, 30415797007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.024	04/29/21 11:56	

LABORATORY CONTROL SAMPLE: 2150735

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	3.6	91	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2150737 2150738

Parameter	Units	30416750002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	5.4	5	5	10.3	10.2	99	96	85-115	2	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415797

QC Batch: 445015
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30415797001, 30415797002, 30415797003, 30415797004, 30415797005, 30415797006, 30415797007

METHOD BLANK: 2148284
Matrix: Water
Associated Lab Samples: 30415797001, 30415797002, 30415797003, 30415797004, 30415797005, 30415797006, 30415797007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	04/26/21 21:01	

LABORATORY CONTROL SAMPLE: 2148285

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	31.7	106	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2148286 2148287

Parameter	Units	30415797001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.0 U	20	20	16.8	18.6	84	93	85-115	11	20	ML

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30415797

QC Batch: 443747 | Analysis Method: SM 4500NO2B-2011
QC Batch Method: SM 4500NO2B-2011 | Analysis Description: SM4500NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30415797001, 30415797002, 30415797003, 30415797004, 30415797005, 30415797006, 30415797007

METHOD BLANK: 2141915 Matrix: Water
Associated Lab Samples: 30415797001, 30415797002, 30415797003, 30415797004, 30415797005, 30415797006, 30415797007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	04/16/21 21:10	

LABORATORY CONTROL SAMPLE: 2141916

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.099	99	90-110	

MATRIX SPIKE SAMPLE: 2141918

Parameter	Units	30415853001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.010 U	0.1	0.010 U	0	85-115	ML

SAMPLE DUPLICATE: 2141917

Parameter	Units	30415853001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010 U		20	

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QUALIFIERS

Project: MLF-SPRING 2021
Pace Project No.: 30415797

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

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TNI - The NELAC Institute.

ANALYTE QUALIFIERS

1c	ALKALINITY TV= 0
D4	Sample was diluted due to the presence of high levels of target analytes.
J	Analyte detected below the reporting limit, therefore result is an estimate. This qualifier is also used for all TICs.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30415797001	**TW-5**	EPA 3005A	444118	EPA 6010B	444186
30415797002	**TW-5A**	EPA 3005A	444118	EPA 6010B	444186
30415797003	**TW-5B**	EPA 3005A	444118	EPA 6010B	444186
30415797004	**TW-7**	EPA 3005A	444118	EPA 6010B	444186
30415797005	**TW-7A**	EPA 3005A	444118	EPA 6010B	444186
30415797006	**TW-8**	EPA 3005A	444118	EPA 6010B	444186
30415797007	**TW-8A**	EPA 3005A	444118	EPA 6010B	444186
30415797001	**TW-5**	EPA 3005A	444114	EPA 6010B	444185
30415797002	**TW-5A**	EPA 3005A	444114	EPA 6010B	444185
30415797003	**TW-5B**	EPA 3005A	444114	EPA 6010B	444185
30415797004	**TW-7**	EPA 3005A	444114	EPA 6010B	444185
30415797005	**TW-7A**	EPA 3005A	444114	EPA 6010B	444185
30415797006	**TW-8**	EPA 3005A	444114	EPA 6010B	444185
30415797007	**TW-8A**	EPA 3005A	444114	EPA 6010B	444185
30415797001	**TW-5**	EPA 7470A	444974	EPA 7470A	445047
30415797002	**TW-5A**	EPA 7470A	444974	EPA 7470A	445047
30415797003	**TW-5B**	EPA 7470A	444974	EPA 7470A	445047
30415797004	**TW-7**	EPA 7470A	444974	EPA 7470A	445047
30415797005	**TW-7A**	EPA 7470A	444974	EPA 7470A	445047
30415797006	**TW-8**	EPA 7470A	444974	EPA 7470A	445047
30415797007	**TW-8A**	EPA 7470A	444974	EPA 7470A	445047
30415797001	**TW-5**	8260B	1655294	EPA 8260B	1655294
30415797002	**TW-5A**	8260B	1655294	EPA 8260B	1655294
30415797003	**TW-5B**	8260B	1655294	EPA 8260B	1655294
30415797004	**TW-7**	8260B	1655294	EPA 8260B	1655294
30415797005	**TW-7A**	8260B	1655294	EPA 8260B	1655294
30415797006	**TW-8**	8260B	1655294	EPA 8260B	1655294
30415797007	**TW-8A**	8260B	1655582	EPA 8260B	1655582
30415797008	**TRIP BLANK**	8260B	1655582	EPA 8260B	1655582
30415797001	**TW-5**	SM 2320B-2011	445497		
30415797002	**TW-5A**	SM 2320B-2011	445497		
30415797003	**TW-5B**	SM 2320B-2011	445497		
30415797004	**TW-7**	SM 2320B-2011	445497		
30415797005	**TW-7A**	SM 2320B-2011	445497		
30415797006	**TW-8**	SM 2320B-2011	445497		
30415797007	**TW-8A**	SM 2320B-2011	445497		
30415797001	**TW-5**	SM 2540C-2011	444031		
30415797002	**TW-5A**	SM 2540C-2011	444031		
30415797003	**TW-5B**	SM 2540C-2011	444031		
30415797004	**TW-7**	SM 2540C-2011	444031		
30415797005	**TW-7A**	SM 2540C-2011	444031		
30415797006	**TW-8**	SM 2540C-2011	444031		
30415797007	**TW-8A**	SM 2540C-2011	444031		
30415797001	**TW-5**	EPA 350.1	445230	EPA 350.1	445237
30415797002	**TW-5A**	EPA 350.1	445230	EPA 350.1	445237

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2021
Pace Project No.: 30415797

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30415797003	**TW-5B**	EPA 350.1	445230	EPA 350.1	445237
30415797004	**TW-7**	EPA 350.1	445230	EPA 350.1	445237
30415797005	**TW-7A**	EPA 350.1	445230	EPA 350.1	445237
30415797006	**TW-8**	EPA 350.1	445230	EPA 350.1	445237
30415797007	**TW-8A**	EPA 350.1	445230	EPA 350.1	445237
30415797001	**TW-5**	EPA 410.4	444485	EPA 410.4	444606
30415797002	**TW-5A**	EPA 410.4	444485	EPA 410.4	444606
30415797003	**TW-5B**	EPA 410.4	444485	EPA 410.4	444606
30415797004	**TW-7**	EPA 410.4	444485	EPA 410.4	444606
30415797005	**TW-7A**	EPA 410.4	444485	EPA 410.4	444606
30415797006	**TW-8**	EPA 410.4	444485	EPA 410.4	444606
30415797007	**TW-8A**	EPA 410.4	444485	EPA 410.4	444606
30415797001	**TW-5**	SM 4500CIE-2011	443975		
30415797002	**TW-5A**	SM 4500CIE-2011	443975		
30415797003	**TW-5B**	SM 4500CIE-2011	443975		
30415797004	**TW-7**	SM 4500CIE-2011	443975		
30415797005	**TW-7A**	SM 4500CIE-2011	443975		
30415797006	**TW-8**	SM 4500CIE-2011	444713		
30415797007	**TW-8A**	SM 4500CIE-2011	444713		
30415797001	**TW-5**	SM 4500NO3F-2011	445569		
30415797002	**TW-5A**	SM 4500NO3F-2011	445569		
30415797003	**TW-5B**	SM 4500NO3F-2011	445569		
30415797004	**TW-7**	SM 4500NO3F-2011	445569		
30415797005	**TW-7A**	SM 4500NO3F-2011	445569		
30415797006	**TW-8**	SM 4500NO3F-2011	445569		
30415797007	**TW-8A**	SM 4500NO3F-2011	445569		
30415797001	**TW-5**	EPA 9038	445015		
30415797002	**TW-5A**	EPA 9038	445015		
30415797003	**TW-5B**	EPA 9038	445015		
30415797004	**TW-7**	EPA 9038	445015		
30415797005	**TW-7A**	EPA 9038	445015		
30415797006	**TW-8**	EPA 9038	445015		
30415797007	**TW-8A**	EPA 9038	445015		
30415797001	**TW-5**	SM 4500NO2B-2011	443747		
30415797002	**TW-5A**	SM 4500NO2B-2011	443747		
30415797003	**TW-5B**	SM 4500NO2B-2011	443747		
30415797004	**TW-7**	SM 4500NO2B-2011	443747		
30415797005	**TW-7A**	SM 4500NO2B-2011	443747		
30415797006	**TW-8**	SM 4500NO2B-2011	443747		
30415797007	**TW-8A**	SM 4500NO2B-2011	443747		

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - SPRING 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals ①	Total + Diss. Metals ②	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO4, COD		VOCs - Method 8260 ③				
1	TW-5	7	4.15.21	1040	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓				001
2	TW-5A	↓	↓	1005	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				002
3	TW-5B	↓	↓	930	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				003
4	TW-7	↓	↓	1235	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				004
5	TW-7A	↓	↓	1200	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				005
6	TW-8	↓	↓	1320	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				006
7	TW-8A	↓	↓	1400	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				007
8	TRIP BLANK	2	↓	—	—		QA									↓				008
9																				
10																				
11																				
12																				

WO# : 30415797

30415797

	Signature	Date	Time	Comments
Relinquished by	DA Brown	4.15.21	1410	① Sb, As, Ba, Be, Cd, Cr, Co, Cu, Hg, Pb, Ni, Se, Ag, Tl, V, Zn
Received by	[illegible] / Pace	4.15.21	1410	② Ca, Fe, Mg, Mn, K, Na
Relinquished by	[illegible] / Pace	4-15-21	1720	
Received by	RDS PACE	4-15-21	1805	PACE - G-BUILD - METALS + WET CHEM
Relinquished by	RDS PACE	4-15-21	2145	PACE - NAT'L - VOCs - SEE ATTACHED LIST ③
Received by				LEVEL 2 REPORT

Cooler Temp on Arrival: 3.1 Deg. C

Rev. Aug. 2018

TABLE 2-2

APPENDIX I
EPA METHOD 8260 - VOLATILE ORGANIC COMPOUNDS AND DETECTION LIMITS

Millersville Landfill, Anne Arundel County, MD

Parameter	PQL (ppb)	Parameter	PQL (ppb)
Acetone	5.0	cis-1,2-Dichloroethene	1.0
Acrylonitrile	5.0	trans-1,2-Dichloroethene	1.0
Benzene	1.0	Dichlorofluoromethane*	1.0
Bromochloromethane	1.0	Methylene chloride	1.0
Bromodichloromethane	1.0	1,2-Dichloropropane	1.0
Bromoform	1.0	trans-1,3-Dichloropropene	1.0
Bromomethane	1.0	cis-1,3-Dichloropropene	1.0
2-Butanone	5.0	Ethylbenzene	1.0
Carbon disulfide	1.0	2-Hexanone	5.0
Carbon tetrachloride	1.0	Iodomethane	1.0
Chlorobenzene	1.0	4-Methyl-2-pentanone	5.0
Chloroethane	1.0	Styrene	1.0
Chloroform	1.0	1,1,1,2-Tetrachloroethane	1.0
Chloromethane	1.0	1,1,2,2-Tetrachloroethane	1.0
Dibromochloromethane	1.0	Tetrachloroethene	1.0
1,2-Dibromo-3-chloropropane (DBCP)	1.0	Toluene	1.0
1,2 - Dibromoethane (EDB)	1.0	1,1,1-Trichloroethane	1.0
Dibromomethane	1.0	1,1,2-Trichloroethane	1.0
1,2 - Dichlorobenzene	1.0	Trichloroethene	1.0
1,4 - Dichlorobenzene	1.0	Trichloroflouromethane	1.0
trans-1,4-dichloro-2-butene	1.0	1,2,3-Trichloropropane	1.0
Dichlorodifluoromethane*	1.0	Vinyl acetate	1.0
1,1-Dichloroethane	1.0	Vinyl chloride	1.0
1,2-Dichloroethane	1.0	o-Xylene	1.0
1,1-Dichloroethene	1.0	m+p-Xylenes	1.0

NOTES: 1) PQL = Practical quantitation limit d: 8260-1dl.doc
2) * = Additional compounds not included on Appendix I list.

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EMA

Project # #-30415797

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Tracking #: N/A

Label	MC
LIMS Login	MC

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 11 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 31/2.9 °C Correction Factor: 0 °C Final Temp: 31/2.9 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# 10D1101	Date and Initials of person examining contents: MC 4/16/2021
Chain of Custody Present:	✓			1.	
Chain of Custody Filled Out:	✓			2.	
Chain of Custody Relinquished:	✓			3.	
Sampler Name & Signature on COC:		✓		4. no signature on coc	
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.	
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):	✓			7.	
Rush Turn Around Time Requested:	✓			8.	
Sufficient Volume:	✓			9.	
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.	
Containers Intact:	✓			11.	
Orthophosphate field filtered			✓	12.	
Hex Cr Aqueous sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: (VOA) coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.	
All containers meet method preservation requirements.	✓			Initial when completed MC	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:	✓			18.	
Trip Blank Custody Seals Present	✓				
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed:	Date: / Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Internal Transfer Chain of Custody

☐ Samples Pre-Logged into eCOC.

State Of Origin: MD
Cert. Needed: [x] Yes ☐ No

Pace Analytical®
www.pacelabs.com

Workorder: 30415797 **Workorder Name:** MLF-SPRING 2021 **Owner Received Date:** 4/15/2021 **Results Requested By:** 4/30/2021

Report To

Samantha Bayura
Pace Analytical Pittsburgh
1638 Roseytown Road
Suites 2,3,4
Greensburg, PA 15601
Phone (724)850-5622

Subcontract To

Pace National
12065 Lebanon Rd
Mt. Juliet, TN 37122
Phone (615) 758-5858

Requested Analysis

L1340457

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HNO3	Preserved Containers: HCL					VOC by 8260												LAB USE ONLY
1	TW-5	PS	4/15/2021 10:40	30415797001	Water	1						X												-01
2	TW-5A	PS	4/15/2021 10:05	30415797002	Water	1						X												-02
3	TW-5B	PS	4/15/2021 09:30	30415797003	Water	1						X												-03
4	TW-7	PS	4/15/2021 12:35	30415797004	Water	1						X												-04
5	TW-7A	PS	4/15/2021 12:00	30415797005	Water	1						X												-05
6	TW-8	PS	4/15/2021 13:20	30415797006	Water	1						X												-06
7	TW-8A	PS	4/15/2021 14:00	30415797007	Water	1						X												-07
8	TRIP BLANK	PS	4/15/2021 00:01	30415797008	Water		1					X												-08

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature]	4/17/21 1700	B. Barnes	4/17/21 0930
2				
3				

Comments

List attached to COC
Report in ug/L

Cooler Temperature on Receipt _____ °C | **Custody Seal** Y or N | **Received on Ice** Y or N | **Samples Intact** Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.
This chain of custody is considered complete as is since this information is available in the owner laboratory.

2.3t.2-2.5
A3OT

B027

Sample Receipt Checklist

COC Seal Present/Intact:	✓ Y __ N		If Applicable
COC Signed/Accurate:	✓ Y __ N	VOA Zero Headspace:	✓ Y __ N
Bottles arrive intact:	✓ Y __ N	Pres.Correct/Check:	__ Y __ N
Correct bottles used:	✓ Y __ N		
Sufficient volume sent:	✓ Y __ N		
RAD Screen <0.5 mR/hr:	Y N		

9242 2961 4087

L1340457

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - SPRING 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals (1)	Total + Diss. Metals (2)	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO4, COD		VOCs - Method 8260 (3)				
1	TW-5	7	4.15.21	1040	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓				001
2	TW-5A	↓	↓	1005	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				002
3	TW-5B	↓	↓	930	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				003
4	TW-7	↓	↓	1235	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				004
5	TW-7A	↓	↓	1200	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				005
6	TW-8	↓	↓	1320	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				006
7	TW-8A	↓	↓	1400	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				007
8	TRIP BLANK	2	↓	—	—		QA									↓				008
9																				
10																				
11																				
12																				

WO#: 30415797

30415797

	Signature	Date	Time	Comments
Relinquished by	DA Brown	4.15.21	1410	(1) Sb, As, Ba, Be, Cd, Cr, Co, Cu, Hg, Pb, Ni, Se, Ag, Tl, V, Zn
Received by	~ / Pace	4.15.21	1410	(2) Ca, Fe, Mg, Mn, K, Na
Relinquished by	~ / Pace	4-15-21	1720	
Received by	RDS PACE	4-15-21	1805	PACE - G-BUCK - METALS + WET CHEM
Relinquished by	RDS PACE	4-15-21	2145	PACE - NAT'L - VOCs - SEE ATTACHED LIST (3)
Received by				LEVEL 2 REPORT

Cooler Temp on Arrival: 3.1 Deg. C

Rev. Aug. 2018

TABLE 2-2

APPENDIX I
EPA METHOD 8260 - VOLATILE ORGANIC COMPOUNDS AND DETECTION LIMITS

Millersville Landfill, Anne Arundel County, MD

Parameter	PQL (ppb)	Parameter	PQL (ppb)
Acetone	5.0	cis-1,2-Dichloroethene	1.0
Acrylonitrile	5.0	trans-1,2-Dichloroethene	1.0
Benzene	1.0	Dichlorofluoromethane*	1.0
Bromochloromethane	1.0	Methylene chloride	1.0
Bromodichloromethane	1.0	1,2-Dichloropropane	1.0
Bromoform	1.0	trans-1,3-Dichloropropene	1.0
Bromomethane	1.0	cis-1,3-Dichloropropene	1.0
2-Butanone	5.0	Ethylbenzene	1.0
Carbon disulfide	1.0	2-Hexanone	5.0
Carbon tetrachloride	1.0	Iodomethane	1.0
Chlorobenzene	1.0	4-Methyl-2-pentanone	5.0
Chloroethane	1.0	Styrene	1.0
Chloroform	1.0	1,1,1,2-Tetrachloroethane	1.0
Chloromethane	1.0	1,1,2,2-Tetrachloroethane	1.0
Dibromochloromethane	1.0	Tetrachloroethene	1.0
1,2-Dibromo-3-chloropropane (DBCP)	1.0	Toluene	1.0
1,2 - Dibromoethane (EDB)	1.0	1,1,1-Trichloroethane	1.0
Dibromomethane	1.0	1,1,2-Trichloroethane	1.0
1,2 - Dichlorobenzene	1.0	Trichloroethene	1.0
1,4 - Dichlorobenzene	1.0	Trichloroflouromethane	1.0
trans-1,4-dichloro-2-butene	1.0	1,2,3-Trichloropropane	1.0
Dichlorodifluoromethane*	1.0	Vinyl acetate	1.0
1,1-Dichloroethane	1.0	Vinyl chloride	1.0
1,2-Dichloroethane	1.0	o-Xylene	1.0
1,1-Dichloroethene	1.0	m+p-Xylenes	1.0

NOTES: 1) PQL = Practical quantitation limit
2) * = Additional compounds not included on Appendix I list.

d: 8260-1dl.doc

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EMA

Project # #_30415797

Label MLC
LIMS Login MLC

L1340457

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 11 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 31/2.9 °C Correction Factor: 0 °C Final Temp: 31/2.9 °C

Temp should be above freezing to 6°C

pH paper Lot# 10D1101 Date and Initials of person examining contents: MLC 4/16/2021

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4. no signature on coc
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):	✓			7.
Rush Turn Around Time Requested:	✓			8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: (VOA) coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.
All containers meet method preservation requirements.	✓			Initial when completed MLC Date/time of preservation Lot # of added preservative
Headspace in VOA Vials (>6mm):		✓		17.
Trip Blank Present: Trip Blank Custody Seals Present	✓ ✓			18.
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: Date: Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

May 07, 2021

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-SPRING 2021
Pace Project No.: 30416534

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on April 20, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace National - Mt. Juliet
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alexis E. Ozoroski for
Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

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without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services National

12065 Lebanon Road, Mt. Juliet, TN 37122
Alabama Certification #: 40660
Alaska Certification 17-026
Arizona Certification #: AZ0612
Arkansas Certification #: 88-0469
California Certification #: 2932
Canada Certification #: 1461.01
Colorado Certification #: TN00003
Connecticut Certification #: PH-0197
DOD Certification: #1461.01
EPA# TN00003
Florida Certification #: E87487
Georgia DW Certification #: 923
Georgia Certification: NELAP
Idaho Certification #: TN00003
Illinois Certification #: 200008
Indiana Certification #: C-TN-01
Iowa Certification #: 364
Kansas Certification #: E-10277
Kentucky UST Certification #: 16
Kentucky Certification #: 90010
Louisiana Certification #: AI30792
Louisiana DW Certification #: LA180010
Maine Certification #: TN0002
Maryland Certification #: 324
Massachusetts Certification #: M-TN003
Michigan Certification #: 9958
Minnesota Certification #: 047-999-395
Mississippi Certification #: TN00003
Missouri Certification #: 340
Montana Certification #: CERT0086
Nebraska Certification #: NE-OS-15-05
Nevada Certification #: TN-03-2002-34
New Hampshire Certification #: 2975
New Jersey Certification #: TN002
New Mexico DW Certification
New York Certification #: 11742
North Carolina Aquatic Toxicity Certification #: 41
North Carolina Drinking Water Certification #: 21704
North Carolina Environmental Certificate #: 375

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CERTIFICATIONS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Pace Analytical Services National

North Dakota Certification #: R-140
Ohio VAP Certification #: CL0069
Oklahoma Certification #: 9915
Oregon Certification #: TN200002
Pennsylvania Certification #: 68-02979
Rhode Island Certification #: LAO00356
South Carolina Certification #: 84004
South Dakota Certification
Tennessee DW/Chem/Micro Certification #: 2006
Texas Mold Certification #: LAB0152
Texas Certification #: T 104704245-17-14
USDA Soil Permit #: P330-15-00234
Utah Certification #: TN00003
Vermont Dept. of Health: ID# VT-2006
Virginia Certification #: VT2006
Virginia Certification #: 460132
Washington Certification #: C847
West Virginia Certification #: 233
Wisconsin Certification #: 998093910
Wyoming UST Certification #: via A2LA 2926.01
A2LA-ISO 17025 Certification #: 1461.01
A2LA-ISO 17025 Certification #: 1461.02
AIHA-LAP/LLC EMLAP Certification #:100789

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SAMPLE SUMMARY

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30416534001	**TW-1**	Water	04/20/21 13:30	04/20/21 22:15
30416534002	**TW-6**	Water	04/19/21 14:10	04/20/21 22:15
30416534003	**TW-10A**	Water	04/20/21 11:20	04/20/21 22:15
30416534004	**TW-14**	Water	04/19/21 15:30	04/20/21 22:15
30416534005	**TW-14A**	Water	04/19/21 14:50	04/20/21 22:15
30416534006	**TW-23R**	Water	04/20/21 12:30	04/20/21 22:15
30416534007	**TW-24**	Water	04/19/21 13:20	04/20/21 22:15
30416534008	**TW-25A**	Water	04/19/21 16:30	04/20/21 22:15
30416534009	**TW-28**	Water	04/20/21 09:30	04/20/21 22:15
30416534010	**TW-29**	Water	04/20/21 08:30	04/20/21 22:15
30416534011	**TRIP BLANK**	Water	04/20/21 00:01	04/20/21 22:15

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30416534001	**TW-1**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	ACG	54	PAN
		SM 2320B-2011	BWC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30416534002	**TW-6**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	ACG	54	PAN
		SM 2320B-2011	BWC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30416534003	**TW-10A**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	ACG	54	PAN
		SM 2320B-2011	BWC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30416534004	**TW-14**	EPA 6010B	CTS	22	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	BWC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30416534005	**TW-14A**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	BWC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30416534006	**TW-23R**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	BWC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30416534007	**TW-24**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	BWC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500ClE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30416534008	**TW-25A**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	BWC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500ClE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30416534009	**TW-28**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	BWC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500ClE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30416534010	**TW-29**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	BWC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500ClE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30416534011	**TRIP BLANK**	EPA 8260B	JAH	54	PAN

PAN = Pace National - Mt. Juliet
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Method: **EPA 6010B**
Description: 6010 MET ICP
Client: Environmental Monitoring and Assessment LLC
Date: May 07, 2021

General Information:
10 samples were analyzed for EPA 6010B by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 444676

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30416534003,30416546001

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2146762)
  - Calcium
- MSD (Lab ID: 2146763)
  - Calcium

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Method: **EPA 6010B**
Description: 6010 MET ICP, Dissolved
Client: Environmental Monitoring and Assessment LLC
Date: May 07, 2021

General Information:
10 samples were analyzed for EPA 6010B by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 444457

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30416534004,30416540001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2145651)
  - Calcium, Dissolved
- MSD (Lab ID: 2145652)
  - Calcium, Dissolved
  - Magnesium, Dissolved

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: May 07, 2021

General Information:
10 samples were analyzed for EPA 7470A by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 444975

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30416534001,30416687002

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2148130)
  - Mercury

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: 444975

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 2148129)
  - Mercury

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Method: **EPA 8260B**
Description: VOA (GC/MS) 8260B
Client: Environmental Monitoring and Assessment LLC
Date: May 07, 2021

General Information:
11 samples were analyzed for EPA 8260B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: May 07, 2021

General Information:
10 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 446152

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30417342001

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2153236)
  - Alkalinity,Total (CaCO3 pH4.5)
- MSD (Lab ID: 2153237)
  - Alkalinity,Total (CaCO3 pH4.5)

Additional Comments:

Analyte Comments:

QC Batch: 446152

2c: ALKALINITY TV = 0 MG/l

- TW-14A (Lab ID: 30416534005)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-24 (Lab ID: 30416534007)
  - Alkalinity,Total (CaCO3 pH4.5)

4c: ALKALINITY TV = 1 MG/l

- TW-14 (Lab ID: 30416534004)
  - Alkalinity,Total (CaCO3 pH4.5)

6c: ALKALINITY TV = 8 MG/l

- TW-6 (Lab ID: 30416534002)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: May 07, 2021

Analyte Comments:

QC Batch: 446391

1c: ALKALINITY TV = 0
- TW-23R (Lab ID: 30416534006)
  - Alkalinity,Total (CaCO3 pH4.5)

3c: ALKALINITY TV = 1
- TW-28 (Lab ID: 30416534009)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-29 (Lab ID: 30416534010)
  - Alkalinity,Total (CaCO3 pH4.5)

5c: ALKALINITY TV = 2
- TW-10A (Lab ID: 30416534003)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Method: **SM 2540C-2011**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: May 07, 2021

General Information:
10 samples were analyzed for SM 2540C-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: 444899

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 2147743)
  - Total Dissolved Solids

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: May 07, 2021

General Information:
10 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: May 07, 2021

General Information:
10 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 444907

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30416524001,30416534003

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2147776)
  - Chemical Oxygen Demand

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Method: **SM 4500ClE-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: May 07, 2021

General Information:
10 samples were analyzed for SM 4500ClE-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Method: **SM 4500NO3F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: May 07, 2021

General Information:
10 samples were analyzed for SM 4500NO3F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 445574

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30416534001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2150754)
  - Nitrogen, NO2 plus NO3
- MSD (Lab ID: 2150755)
  - Nitrogen, NO2 plus NO3

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: May 07, 2021

General Information:
10 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 445663

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30416534001,30416762001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2151179)
  - Sulfate
- MSD (Lab ID: 2151180)
  - Sulfate

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Method: **SM 4500NO2B-2011**
Description: SM4500NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: May 07, 2021

General Information:
10 samples were analyzed for SM 4500NO2B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-1 **Lab ID: 30416534001** Collected: 04/20/21 13:30 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/23/21 07:58	05/04/21 10:19	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/23/21 07:58	05/04/21 10:19	7440-38-2	
Barium	**0.014**	mg/L	0.010	0.00068	1	04/23/21 07:58	05/04/21 10:19	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00017	1	04/23/21 07:58	05/04/21 10:19	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/23/21 07:58	05/04/21 10:19	7440-43-9	
Calcium	**17.4**	mg/L	1.0	0.10	1	04/23/21 07:58	05/04/21 10:19	7440-70-2	
Chromium	**0.0048J**	mg/L	0.0050	0.00035	1	04/23/21 07:58	05/04/21 10:19	7440-47-3	
Cobalt	**0.00089J**	mg/L	0.0050	0.00053	1	04/23/21 07:58	05/04/21 10:19	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0027	1	04/23/21 07:58	05/04/21 10:19	7440-50-8	
Iron	**28.0**	mg/L	0.070	0.041	1	04/23/21 07:58	05/04/21 10:19	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/23/21 07:58	05/04/21 10:19	7439-92-1	
Magnesium	**1.5**	mg/L	0.20	0.028	1	04/23/21 07:58	05/04/21 10:19	7439-95-4	
Manganese	**0.16**	mg/L	0.0050	0.0012	1	04/23/21 07:58	05/04/21 10:19	7439-96-5	
Nickel	**0.0058J**	mg/L	0.010	0.0015	1	04/23/21 07:58	05/04/21 10:19	7440-02-0	
Potassium	**0.73**	mg/L	0.50	0.072	1	04/23/21 07:58	05/04/21 10:19	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/23/21 07:58	05/04/21 10:19	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/23/21 07:58	05/04/21 10:19	7440-22-4	
Sodium	**2.8**	mg/L	1.0	0.42	1	04/23/21 07:58	05/04/21 10:19	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/23/21 07:58	05/04/21 10:19	7440-28-0	
Total Hardness by SM2340B-2011	**49.6**	mg/L	3.3	0.37	1	04/23/21 07:58	05/04/21 10:19		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/23/21 07:58	05/04/21 10:19	7440-62-2	
Zinc	**0.010 U**	mg/L	0.010	0.0024	1	04/23/21 07:58	05/04/21 10:19	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**18.1**	mg/L	1.0	0.10	1	04/22/21 06:41	04/23/21 06:18	7440-70-2	
Iron, Dissolved	**22.8**	mg/L	0.070	0.041	1	04/22/21 06:41	04/23/21 06:18	7439-89-6	
Magnesium, Dissolved	**1.6**	mg/L	0.20	0.028	1	04/22/21 06:41	04/23/21 06:18	7439-95-4	
Manganese, Dissolved	**0.17**	mg/L	0.0050	0.0012	1	04/22/21 06:41	04/23/21 06:18	7439-96-5	
Potassium, Dissolved	**0.74**	mg/L	0.50	0.072	1	04/22/21 06:41	04/23/21 06:18	7440-09-7	
Sodium, Dissolved	**3.0**	mg/L	1.0	0.42	1	04/22/21 06:41	04/23/21 06:18	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.000050J**	mg/L	0.00020	0.000030	1	04/26/21 13:52	04/27/21 17:33	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/29/21 16:39	04/29/21 16:39	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/29/21 16:39	04/29/21 16:39	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/29/21 16:39	04/29/21 16:39	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/29/21 16:39	04/29/21 16:39	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/29/21 16:39	04/29/21 16:39	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/29/21 16:39	04/29/21 16:39	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-1 **Lab ID: 30416534001** Collected: 04/20/21 13:30 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/29/21 16:39	04/29/21 16:39	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/29/21 16:39	04/29/21 16:39	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/29/21 16:39	04/29/21 16:39	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/29/21 16:39	04/29/21 16:39	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/29/21 16:39	04/29/21 16:39	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/29/21 16:39	04/29/21 16:39	75-00-3	
Chloroform	**0.167J**	ug/L	5.00	0.111	1	04/29/21 16:39	04/29/21 16:39	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/29/21 16:39	04/29/21 16:39	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/29/21 16:39	04/29/21 16:39	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/29/21 16:39	04/29/21 16:39	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/29/21 16:39	04/29/21 16:39	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/29/21 16:39	04/29/21 16:39	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/29/21 16:39	04/29/21 16:39	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/29/21 16:39	04/29/21 16:39	110-57-6	
Dichlorofluoromethane	**2.94J**	ug/L	5.00	0.130	1	04/29/21 16:39	04/29/21 16:39	75-43-4	J
Dichlorodifluoromethane	**5.48**	ug/L	5.00	0.374	1	04/29/21 16:39	04/29/21 16:39	75-71-8	
1,1-Dichloroethane	**1.75**	ug/L	1.00	0.100	1	04/29/21 16:39	04/29/21 16:39	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/29/21 16:39	04/29/21 16:39	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/29/21 16:39	04/29/21 16:39	75-35-4	
cis-1,2-Dichloroethene	**0.349J**	ug/L	1.00	0.126	1	04/29/21 16:39	04/29/21 16:39	156-59-2	J
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/29/21 16:39	04/29/21 16:39	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/29/21 16:39	04/29/21 16:39	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/29/21 16:39	04/29/21 16:39	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/29/21 16:39	04/29/21 16:39	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/29/21 16:39	04/29/21 16:39	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/29/21 16:39	04/29/21 16:39	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/29/21 16:39	04/29/21 16:39	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/29/21 16:39	04/29/21 16:39	78-93-3	
Methylene Chloride	**0.653J**	ug/L	5.00	0.430	1	04/29/21 16:39	04/29/21 16:39	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/29/21 16:39	04/29/21 16:39	108-10-1	
Methyl-tert-butyl ether	**0.431J**	ug/L	1.00	0.101	1	04/29/21 16:39	04/29/21 16:39	1634-04-4	J
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/29/21 16:39	04/29/21 16:39	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/29/21 16:39	04/29/21 16:39	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/29/21 16:39	04/29/21 16:39	79-34-5	
Tetrachloroethene	**0.507J**	ug/L	1.00	0.300	1	04/29/21 16:39	04/29/21 16:39	127-18-4	J
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/29/21 16:39	04/29/21 16:39	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/29/21 16:39	04/29/21 16:39	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/29/21 16:39	04/29/21 16:39	79-00-5	
Trichloroethene	**0.632J**	ug/L	1.00	0.190	1	04/29/21 16:39	04/29/21 16:39	79-01-6	J
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/29/21 16:39	04/29/21 16:39	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/29/21 16:39	04/29/21 16:39	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/29/21 16:39	04/29/21 16:39	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/29/21 16:39	04/29/21 16:39	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/29/21 16:39	04/29/21 16:39	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/29/21 16:39	04/29/21 16:39	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-1 **Lab ID: 30416534001** Collected: 04/20/21 13:30 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	107	%	80.0-120		1	04/29/21 16:39	04/29/21 16:39	2037-26-5	
4-Bromofluorobenzene (S)	96.3	%	77.0-126		1	04/29/21 16:39	04/29/21 16:39	460-00-4	
1,2-Dichloroethane-d4 (S)	94.3	%	70.0-130		1	04/29/21 16:39	04/29/21 16:39	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**42.0**	mg/L	10.0	1.0	1		05/04/21 16:22		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**53.0**	mg/L	10.0	10.0	1		04/26/21 14:49		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/03/21 17:08	05/04/21 10:13		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.1J**	mg/L	25.0	4.7	1	04/26/21 13:11	04/26/21 16:45		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**7.1**	mg/L	3.0	0.67	1		05/05/21 13:18	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.048J**	mg/L	0.10	0.024	1		04/29/21 15:02	14797-55-8	
Nitrogen, NO2 plus NO3	**0.048J**	mg/L	0.10	0.024	1		04/29/21 15:02		M1
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/30/21 16:37	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/21/21 21:31	14797-65-0	

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-6 **Lab ID: 30416534002** Collected: 04/19/21 14:10 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/23/21 07:58	05/04/21 10:21	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/23/21 07:58	05/04/21 10:21	7440-38-2	
Barium	**0.11**	mg/L	0.010	0.00068	1	04/23/21 07:58	05/04/21 10:21	7440-39-3	
Beryllium	**0.00026J**	mg/L	0.0010	0.00017	1	04/23/21 07:58	05/04/21 10:21	7440-41-7	
Cadmium	**0.0017J**	mg/L	0.0030	0.00034	1	04/23/21 07:58	05/04/21 10:21	7440-43-9	
Calcium	**3.4**	mg/L	1.0	0.10	1	04/23/21 07:58	05/04/21 10:21	7440-70-2	
Chromium	**0.0033J**	mg/L	0.0050	0.00035	1	04/23/21 07:58	05/04/21 10:21	7440-47-3	
Cobalt	**0.022**	mg/L	0.0050	0.00053	1	04/23/21 07:58	05/04/21 10:21	7440-48-4	
Copper	**0.020**	mg/L	0.0050	0.0027	1	04/23/21 07:58	05/04/21 10:21	7440-50-8	
Iron	**6.2**	mg/L	0.070	0.041	1	04/23/21 07:58	05/04/21 10:21	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/23/21 07:58	05/04/21 10:21	7439-92-1	
Magnesium	**3.1**	mg/L	0.20	0.028	1	04/23/21 07:58	05/04/21 10:21	7439-95-4	
Manganese	**0.22**	mg/L	0.0050	0.0012	1	04/23/21 07:58	05/04/21 10:21	7439-96-5	
Nickel	**0.015**	mg/L	0.010	0.0015	1	04/23/21 07:58	05/04/21 10:21	7440-02-0	
Potassium	**1.7**	mg/L	0.50	0.072	1	04/23/21 07:58	05/04/21 10:21	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/23/21 07:58	05/04/21 10:21	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/23/21 07:58	05/04/21 10:21	7440-22-4	
Sodium	**6.0**	mg/L	1.0	0.42	1	04/23/21 07:58	05/04/21 10:21	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/23/21 07:58	05/04/21 10:21	7440-28-0	
Total Hardness by SM2340B-2011	**21.2**	mg/L	3.3	0.37	1	04/23/21 07:58	05/04/21 10:21		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/23/21 07:58	05/04/21 10:21	7440-62-2	
Zinc	**0.049**	mg/L	0.010	0.0024	1	04/23/21 07:58	05/04/21 10:21	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**3.5**	mg/L	1.0	0.10	1	04/22/21 06:41	04/23/21 06:20	7440-70-2	
Iron, Dissolved	**6.0**	mg/L	0.070	0.041	1	04/22/21 06:41	04/23/21 06:20	7439-89-6	
Magnesium, Dissolved	**3.4**	mg/L	0.20	0.028	1	04/22/21 06:41	04/23/21 06:20	7439-95-4	
Manganese, Dissolved	**0.23**	mg/L	0.0050	0.0012	1	04/22/21 06:41	04/23/21 06:20	7439-96-5	
Potassium, Dissolved	**1.6**	mg/L	0.50	0.072	1	04/22/21 06:41	04/23/21 06:20	7440-09-7	
Sodium, Dissolved	**6.2**	mg/L	1.0	0.42	1	04/22/21 06:41	04/23/21 06:20	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020**	mg/L	0.00020	0.000030	1	04/26/21 13:52	04/27/21 17:42	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/29/21 17:00	04/29/21 17:00	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/29/21 17:00	04/29/21 17:00	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/29/21 17:00	04/29/21 17:00	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/29/21 17:00	04/29/21 17:00	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/29/21 17:00	04/29/21 17:00	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/29/21 17:00	04/29/21 17:00	75-25-2	

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-6 **Lab ID: 30416534002** Collected: 04/19/21 14:10 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/29/21 17:00	04/29/21 17:00	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/29/21 17:00	04/29/21 17:00	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/29/21 17:00	04/29/21 17:00	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/29/21 17:00	04/29/21 17:00	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/29/21 17:00	04/29/21 17:00	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/29/21 17:00	04/29/21 17:00	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	04/29/21 17:00	04/29/21 17:00	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/29/21 17:00	04/29/21 17:00	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/29/21 17:00	04/29/21 17:00	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/29/21 17:00	04/29/21 17:00	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/29/21 17:00	04/29/21 17:00	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/29/21 17:00	04/29/21 17:00	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/29/21 17:00	04/29/21 17:00	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/29/21 17:00	04/29/21 17:00	110-57-6	
Dichlorofluoromethane	**3.62J**	ug/L	5.00	0.130	1	04/29/21 17:00	04/29/21 17:00	75-43-4	J
Dichlorodifluoromethane	**1.48J**	ug/L	5.00	0.374	1	04/29/21 17:00	04/29/21 17:00	75-71-8	J
1,1-Dichloroethane	**4.74**	ug/L	1.00	0.100	1	04/29/21 17:00	04/29/21 17:00	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/29/21 17:00	04/29/21 17:00	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/29/21 17:00	04/29/21 17:00	75-35-4	
cis-1,2-Dichloroethene	**2.19**	ug/L	1.00	0.126	1	04/29/21 17:00	04/29/21 17:00	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/29/21 17:00	04/29/21 17:00	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/29/21 17:00	04/29/21 17:00	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/29/21 17:00	04/29/21 17:00	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/29/21 17:00	04/29/21 17:00	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/29/21 17:00	04/29/21 17:00	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/29/21 17:00	04/29/21 17:00	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/29/21 17:00	04/29/21 17:00	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/29/21 17:00	04/29/21 17:00	78-93-3	
Methylene Chloride	**0.722J**	ug/L	5.00	0.430	1	04/29/21 17:00	04/29/21 17:00	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/29/21 17:00	04/29/21 17:00	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/29/21 17:00	04/29/21 17:00	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/29/21 17:00	04/29/21 17:00	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/29/21 17:00	04/29/21 17:00	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/29/21 17:00	04/29/21 17:00	79-34-5	
Tetrachloroethene	**1.43**	ug/L	1.00	0.300	1	04/29/21 17:00	04/29/21 17:00	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/29/21 17:00	04/29/21 17:00	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/29/21 17:00	04/29/21 17:00	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/29/21 17:00	04/29/21 17:00	79-00-5	
Trichloroethene	**1.07**	ug/L	1.00	0.190	1	04/29/21 17:00	04/29/21 17:00	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/29/21 17:00	04/29/21 17:00	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/29/21 17:00	04/29/21 17:00	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/29/21 17:00	04/29/21 17:00	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/29/21 17:00	04/29/21 17:00	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/29/21 17:00	04/29/21 17:00	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/29/21 17:00	04/29/21 17:00	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-6 **Lab ID: 30416534002** Collected: 04/19/21 14:10 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	109	%	80.0-120		1	04/29/21 17:00	04/29/21 17:00	2037-26-5	
4-Bromofluorobenzene (S)	95.4	%	77.0-126		1	04/29/21 17:00	04/29/21 17:00	460-00-4	
1,2-Dichloroethane-d4 (S)	99.1	%	70.0-130		1	04/29/21 17:00	04/29/21 17:00	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**8.0J**	mg/L	10.0	1.0	1		05/03/21 15:16		6c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**66.0**	mg/L	10.0	10.0	1		04/22/21 16:47		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.16**	mg/L	0.10	0.044	1	05/03/21 17:08	05/04/21 10:19		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/26/21 13:11	04/26/21 16:45		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**12.4**	mg/L	3.0	0.67	1		05/05/21 13:20	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.2**	mg/L	0.10	0.024	1		04/29/21 15:06	14797-55-8	
Nitrogen, NO2 plus NO3	**1.2**	mg/L	0.10	0.024	1		04/29/21 15:06		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0**	mg/L	10.0	4.7	1		04/30/21 16:42	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.0063J**	mg/L	0.010	0.0055	1		04/21/21 10:33	14797-65-0	

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Greensburg, PA 15601
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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-10A **Lab ID: 30416534003** Collected: 04/20/21 11:20 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/23/21 07:58	05/04/21 10:23	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/23/21 07:58	05/04/21 10:23	7440-38-2	
Barium	**0.093**	mg/L	0.010	0.00068	1	04/23/21 07:58	05/04/21 10:23	7440-39-3	
Beryllium	**0.00055J**	mg/L	0.0010	0.00017	1	04/23/21 07:58	05/04/21 10:23	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/23/21 07:58	05/04/21 10:23	7440-43-9	
Calcium	**5.6**	mg/L	1.0	0.10	1	04/23/21 07:58	05/04/21 10:23	7440-70-2	
Chromium	**0.0030J**	mg/L	0.0050	0.00035	1	04/23/21 07:58	05/04/21 10:23	7440-47-3	
Cobalt	**0.012**	mg/L	0.0050	0.00053	1	04/23/21 07:58	05/04/21 10:23	7440-48-4	
Copper	**0.0049J**	mg/L	0.0050	0.0027	1	04/23/21 07:58	05/04/21 10:23	7440-50-8	
Iron	**0.070 U**	mg/L	0.070	0.041	1	04/23/21 07:58	05/04/21 10:23	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/23/21 07:58	05/04/21 10:23	7439-92-1	
Magnesium	**3.4**	mg/L	0.20	0.028	1	04/23/21 07:58	05/04/21 10:23	7439-95-4	
Manganese	**0.059**	mg/L	0.0050	0.0012	1	04/23/21 07:58	05/04/21 10:23	7439-96-5	
Nickel	**0.015**	mg/L	0.010	0.0015	1	04/23/21 07:58	05/04/21 10:23	7440-02-0	
Potassium	**2.3**	mg/L	0.50	0.072	1	04/23/21 07:58	05/04/21 10:23	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/23/21 07:58	05/04/21 10:23	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/23/21 07:58	05/04/21 10:23	7440-22-4	
Sodium	**23.3**	mg/L	1.0	0.42	1	04/23/21 07:58	05/04/21 10:23	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/23/21 07:58	05/04/21 10:23	7440-28-0	
Total Hardness by SM2340B-2011	**28.0**	mg/L	3.3	0.37	1	04/23/21 07:58	05/04/21 10:23		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/23/21 07:58	05/04/21 10:23	7440-62-2	
Zinc	**0.021**	mg/L	0.010	0.0024	1	04/23/21 07:58	05/04/21 10:23	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**5.7**	mg/L	1.0	0.10	1	04/22/21 06:41	04/23/21 06:23	7440-70-2	
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	04/22/21 06:41	04/23/21 06:23	7439-89-6	
Magnesium, Dissolved	**3.6**	mg/L	0.20	0.028	1	04/22/21 06:41	04/23/21 06:23	7439-95-4	
Manganese, Dissolved	**0.061**	mg/L	0.0050	0.0012	1	04/22/21 06:41	04/23/21 06:23	7439-96-5	
Potassium, Dissolved	**2.3**	mg/L	0.50	0.072	1	04/22/21 06:41	04/23/21 06:23	7440-09-7	
Sodium, Dissolved	**24.6**	mg/L	1.0	0.42	1	04/22/21 06:41	04/23/21 06:23	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.000060J**	mg/L	0.00020	0.000030	1	04/26/21 13:52	04/27/21 17:44	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/29/21 17:22	04/29/21 17:22	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/29/21 17:22	04/29/21 17:22	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/29/21 17:22	04/29/21 17:22	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/29/21 17:22	04/29/21 17:22	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/29/21 17:22	04/29/21 17:22	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/29/21 17:22	04/29/21 17:22	75-25-2	

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Greensburg, PA 15601
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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-10A **Lab ID: 30416534003** Collected: 04/20/21 11:20 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/29/21 17:22	04/29/21 17:22	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/29/21 17:22	04/29/21 17:22	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/29/21 17:22	04/29/21 17:22	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/29/21 17:22	04/29/21 17:22	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/29/21 17:22	04/29/21 17:22	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/29/21 17:22	04/29/21 17:22	75-00-3	
Chloroform	**0.163J**	ug/L	5.00	0.111	1	04/29/21 17:22	04/29/21 17:22	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/29/21 17:22	04/29/21 17:22	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/29/21 17:22	04/29/21 17:22	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/29/21 17:22	04/29/21 17:22	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/29/21 17:22	04/29/21 17:22	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/29/21 17:22	04/29/21 17:22	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/29/21 17:22	04/29/21 17:22	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/29/21 17:22	04/29/21 17:22	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	04/29/21 17:22	04/29/21 17:22	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	04/29/21 17:22	04/29/21 17:22	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	04/29/21 17:22	04/29/21 17:22	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/29/21 17:22	04/29/21 17:22	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/29/21 17:22	04/29/21 17:22	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/29/21 17:22	04/29/21 17:22	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/29/21 17:22	04/29/21 17:22	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/29/21 17:22	04/29/21 17:22	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/29/21 17:22	04/29/21 17:22	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/29/21 17:22	04/29/21 17:22	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/29/21 17:22	04/29/21 17:22	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/29/21 17:22	04/29/21 17:22	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/29/21 17:22	04/29/21 17:22	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/29/21 17:22	04/29/21 17:22	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	04/29/21 17:22	04/29/21 17:22	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/29/21 17:22	04/29/21 17:22	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/29/21 17:22	04/29/21 17:22	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/29/21 17:22	04/29/21 17:22	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/29/21 17:22	04/29/21 17:22	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/29/21 17:22	04/29/21 17:22	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/29/21 17:22	04/29/21 17:22	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/29/21 17:22	04/29/21 17:22	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/29/21 17:22	04/29/21 17:22	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/29/21 17:22	04/29/21 17:22	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/29/21 17:22	04/29/21 17:22	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/29/21 17:22	04/29/21 17:22	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/29/21 17:22	04/29/21 17:22	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/29/21 17:22	04/29/21 17:22	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/29/21 17:22	04/29/21 17:22	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/29/21 17:22	04/29/21 17:22	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/29/21 17:22	04/29/21 17:22	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-10A **Lab ID: 30416534003** Collected: 04/20/21 11:20 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	107	%	80.0-120		1	04/29/21 17:22	04/29/21 17:22	2037-26-5	
4-Bromofluorobenzene (S)	99.7	%	77.0-126		1	04/29/21 17:22	04/29/21 17:22	460-00-4	
1,2-Dichloroethane-d4 (S)	93.0	%	70.0-130		1	04/29/21 17:22	04/29/21 17:22	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		05/04/21 16:26		5c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**106**	mg/L	10.0	10.0	1		04/26/21 14:50		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/03/21 17:08	05/04/21 10:21		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/26/21 13:11	04/26/21 16:45		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**45.0**	mg/L	3.0	0.67	1		05/05/21 13:21	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**2.2**	mg/L	0.10	0.024	1		04/29/21 15:07	14797-55-8	
Nitrogen, NO2 plus NO3	**2.2**	mg/L	0.10	0.024	1		04/29/21 15:07		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**8.6J**	mg/L	10.0	4.7	1		04/30/21 16:44	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/21/21 21:33	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-14 **Lab ID: 30416534004** Collected: 04/19/21 15:30 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/23/21 07:58	05/04/21 10:29	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/23/21 07:58	05/04/21 10:29	7440-38-2	
Barium	**0.026**	mg/L	0.010	0.00068	1	04/23/21 07:58	05/04/21 10:29	7440-39-3	
Beryllium	**0.00018J**	mg/L	0.0010	0.00017	1	04/23/21 07:58	05/04/21 10:29	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/23/21 07:58	05/04/21 10:29	7440-43-9	
Calcium	**1.2**	mg/L	1.0	0.10	1	04/23/21 07:58	05/04/21 10:29	7440-70-2	
Chromium	**0.0017J**	mg/L	0.0050	0.00035	1	04/23/21 07:58	05/04/21 10:29	7440-47-3	
Cobalt	**0.0062**	mg/L	0.0050	0.00053	1	04/23/21 07:58	05/04/21 10:29	7440-48-4	
Copper	**0.0052**	mg/L	0.0050	0.0027	1	04/23/21 07:58	05/04/21 10:29	7440-50-8	
Iron	**20.4**	mg/L	0.070	0.041	1	04/23/21 07:58	05/04/21 10:29	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/23/21 07:58	05/04/21 10:29	7439-92-1	
Magnesium	**0.96**	mg/L	0.20	0.028	1	04/23/21 07:58	05/04/21 10:29	7439-95-4	
Manganese	**0.14**	mg/L	0.0050	0.0012	1	04/23/21 07:58	05/04/21 10:29	7439-96-5	
Nickel	**0.0069J**	mg/L	0.010	0.0015	1	04/23/21 07:58	05/04/21 10:29	7440-02-0	
Potassium	**0.71**	mg/L	0.50	0.072	1	04/23/21 07:58	05/04/21 10:29	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/23/21 07:58	05/04/21 10:29	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/23/21 07:58	05/04/21 10:29	7440-22-4	
Sodium	**3.5**	mg/L	1.0	0.42	1	04/23/21 07:58	05/04/21 10:29	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/23/21 07:58	05/04/21 10:29	7440-28-0	
Total Hardness by SM2340B-2011	**6.9**	mg/L	3.3	0.37	1	04/23/21 07:58	05/04/21 10:29		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/23/21 07:58	05/04/21 10:29	7440-62-2	
Zinc	**0.0035J**	mg/L	0.010	0.0024	1	04/23/21 07:58	05/04/21 10:29	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**1.3**	mg/L	1.0	0.10	1	04/22/21 06:41	04/23/21 06:25	7440-70-2	
Iron, Dissolved	**7.9**	mg/L	0.070	0.041	1	04/22/21 06:41	04/23/21 06:25	7439-89-6	
Magnesium, Dissolved	**1.1**	mg/L	0.20	0.028	1	04/22/21 06:41	04/23/21 06:25	7439-95-4	
Manganese, Dissolved	**0.15**	mg/L	0.0050	0.0012	1	04/22/21 06:41	04/23/21 06:25	7439-96-5	
Potassium, Dissolved	**0.68**	mg/L	0.50	0.072	1	04/22/21 06:41	04/23/21 06:25	7440-09-7	
Sodium, Dissolved	**3.3**	mg/L	1.0	0.42	1	04/22/21 06:41	04/23/21 06:25	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.000070J**	mg/L	0.00020	0.000030	1	04/26/21 13:52	04/27/21 17:46	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/26/21 02:29	04/26/21 02:29	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/26/21 02:29	04/26/21 02:29	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/26/21 02:29	04/26/21 02:29	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/26/21 02:29	04/26/21 02:29	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/26/21 02:29	04/26/21 02:29	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/26/21 02:29	04/26/21 02:29	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-14 **Lab ID: 30416534004** Collected: 04/19/21 15:30 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/26/21 02:29	04/26/21 02:29	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/26/21 02:29	04/26/21 02:29	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/26/21 02:29	04/26/21 02:29	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/26/21 02:29	04/26/21 02:29	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/26/21 02:29	04/26/21 02:29	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/26/21 02:29	04/26/21 02:29	75-00-3	
Chloroform	**0.290J**	ug/L	5.00	0.111	1	04/26/21 02:29	04/26/21 02:29	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/26/21 02:29	04/26/21 02:29	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/26/21 02:29	04/26/21 02:29	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/26/21 02:29	04/26/21 02:29	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/26/21 02:29	04/26/21 02:29	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/26/21 02:29	04/26/21 02:29	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/26/21 02:29	04/26/21 02:29	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/26/21 02:29	04/26/21 02:29	110-57-6	
Dichlorofluoromethane	**6.33**	ug/L	5.00	0.130	1	04/26/21 02:29	04/26/21 02:29	75-43-4	
Dichlorodifluoromethane	**4.73J**	ug/L	5.00	0.374	1	04/26/21 02:29	04/26/21 02:29	75-71-8	J
1,1-Dichloroethane	**3.48**	ug/L	1.00	0.100	1	04/26/21 02:29	04/26/21 02:29	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/26/21 02:29	04/26/21 02:29	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/26/21 02:29	04/26/21 02:29	75-35-4	
cis-1,2-Dichloroethene	**0.912J**	ug/L	1.00	0.126	1	04/26/21 02:29	04/26/21 02:29	156-59-2	J
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/26/21 02:29	04/26/21 02:29	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/26/21 02:29	04/26/21 02:29	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/26/21 02:29	04/26/21 02:29	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/26/21 02:29	04/26/21 02:29	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/26/21 02:29	04/26/21 02:29	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/26/21 02:29	04/26/21 02:29	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/26/21 02:29	04/26/21 02:29	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/26/21 02:29	04/26/21 02:29	78-93-3	
Methylene Chloride	**0.494J**	ug/L	5.00	0.430	1	04/26/21 02:29	04/26/21 02:29	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/26/21 02:29	04/26/21 02:29	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/26/21 02:29	04/26/21 02:29	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/26/21 02:29	04/26/21 02:29	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/26/21 02:29	04/26/21 02:29	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/26/21 02:29	04/26/21 02:29	79-34-5	
Tetrachloroethene	**4.19**	ug/L	1.00	0.300	1	04/26/21 02:29	04/26/21 02:29	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/26/21 02:29	04/26/21 02:29	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/26/21 02:29	04/26/21 02:29	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/26/21 02:29	04/26/21 02:29	79-00-5	
Trichloroethene	**0.910J**	ug/L	1.00	0.190	1	04/26/21 02:29	04/26/21 02:29	79-01-6	J
Trichlorofluoromethane	**0.350J**	ug/L	5.00	0.160	1	04/26/21 02:29	04/26/21 02:29	75-69-4	J
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/26/21 02:29	04/26/21 02:29	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/26/21 02:29	04/26/21 02:29	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/26/21 02:29	04/26/21 02:29	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/26/21 02:29	04/26/21 02:29	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/26/21 02:29	04/26/21 02:29	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-14 **Lab ID: 30416534004** Collected: 04/19/21 15:30 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	103	%	80.0-120		1	04/26/21 02:29	04/26/21 02:29	2037-26-5	
4-Bromofluorobenzene (S)	91.4	%	77.0-126		1	04/26/21 02:29	04/26/21 02:29	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%	70.0-130		1	04/26/21 02:29	04/26/21 02:29	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**1.0J**	mg/L	10.0	1.0	1		05/03/21 15:17		4c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**30.0**	mg/L	10.0	10.0	1		04/22/21 16:48		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/03/21 17:08	05/04/21 10:23		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/26/21 13:11	04/26/21 16:46		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**8.8**	mg/L	3.0	0.67	1		05/05/21 13:22	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.074J**	mg/L	0.10	0.024	1		04/29/21 15:09	14797-55-8	
Nitrogen, NO2 plus NO3	**0.074J**	mg/L	0.10	0.024	1		04/29/21 15:09		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/30/21 16:45	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/21/21 10:35	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-14A **Lab ID: 30416534005** Collected: 04/19/21 14:50 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/23/21 07:58	05/04/21 10:32	7440-36-0	
Arsenic	**0.0028J**	mg/L	0.0050	0.0020	1	04/23/21 07:58	05/04/21 10:32	7440-38-2	
Barium	**0.016**	mg/L	0.010	0.00068	1	04/23/21 07:58	05/04/21 10:32	7440-39-3	
Beryllium	**0.00043J**	mg/L	0.0010	0.00017	1	04/23/21 07:58	05/04/21 10:32	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/23/21 07:58	05/04/21 10:32	7440-43-9	
Calcium	**0.40J**	mg/L	1.0	0.10	1	04/23/21 07:58	05/04/21 10:32	7440-70-2	
Chromium	**0.0051**	mg/L	0.0050	0.00035	1	04/23/21 07:58	05/04/21 10:32	7440-47-3	
Cobalt	**0.00090J**	mg/L	0.0050	0.00053	1	04/23/21 07:58	05/04/21 10:32	7440-48-4	
Copper	**0.0098**	mg/L	0.0050	0.0027	1	04/23/21 07:58	05/04/21 10:32	7440-50-8	
Iron	**23.3**	mg/L	0.070	0.041	1	04/23/21 07:58	05/04/21 10:32	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/23/21 07:58	05/04/21 10:32	7439-92-1	
Magnesium	**0.19J**	mg/L	0.20	0.028	1	04/23/21 07:58	05/04/21 10:32	7439-95-4	
Manganese	**0.20**	mg/L	0.0050	0.0012	1	04/23/21 07:58	05/04/21 10:32	7439-96-5	
Nickel	**0.0062J**	mg/L	0.010	0.0015	1	04/23/21 07:58	05/04/21 10:32	7440-02-0	
Potassium	**0.54**	mg/L	0.50	0.072	1	04/23/21 07:58	05/04/21 10:32	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/23/21 07:58	05/04/21 10:32	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/23/21 07:58	05/04/21 10:32	7440-22-4	
Sodium	**3.0**	mg/L	1.0	0.42	1	04/23/21 07:58	05/04/21 10:32	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/23/21 07:58	05/04/21 10:32	7440-28-0	
Total Hardness by SM2340B-2011	**1.8J**	mg/L	3.3	0.37	1	04/23/21 07:58	05/04/21 10:32		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/23/21 07:58	05/04/21 10:32	7440-62-2	
Zinc	**0.0062J**	mg/L	0.010	0.0024	1	04/23/21 07:58	05/04/21 10:32	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**0.38J**	mg/L	1.0	0.10	1	04/22/21 06:41	04/23/21 06:31	7440-70-2	
Iron, Dissolved	**17.3**	mg/L	0.070	0.041	1	04/22/21 06:41	04/23/21 06:31	7439-89-6	
Magnesium, Dissolved	**0.22**	mg/L	0.20	0.028	1	04/22/21 06:41	04/23/21 06:31	7439-95-4	
Manganese, Dissolved	**0.19**	mg/L	0.0050	0.0012	1	04/22/21 06:41	04/23/21 06:31	7439-96-5	
Potassium, Dissolved	**0.47J**	mg/L	0.50	0.072	1	04/22/21 06:41	04/23/21 06:31	7440-09-7	
Sodium, Dissolved	**2.8**	mg/L	1.0	0.42	1	04/22/21 06:41	04/23/21 06:31	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.000080J**	mg/L	0.00020	0.000030	1	04/26/21 13:52	04/27/21 17:47	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/26/21 02:48	04/26/21 02:48	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/26/21 02:48	04/26/21 02:48	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/26/21 02:48	04/26/21 02:48	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/26/21 02:48	04/26/21 02:48	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/26/21 02:48	04/26/21 02:48	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/26/21 02:48	04/26/21 02:48	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-14A **Lab ID: 30416534005** Collected: 04/19/21 14:50 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/26/21 02:48	04/26/21 02:48	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/26/21 02:48	04/26/21 02:48	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/26/21 02:48	04/26/21 02:48	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/26/21 02:48	04/26/21 02:48	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/26/21 02:48	04/26/21 02:48	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/26/21 02:48	04/26/21 02:48	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	04/26/21 02:48	04/26/21 02:48	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/26/21 02:48	04/26/21 02:48	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/26/21 02:48	04/26/21 02:48	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/26/21 02:48	04/26/21 02:48	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/26/21 02:48	04/26/21 02:48	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/26/21 02:48	04/26/21 02:48	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/26/21 02:48	04/26/21 02:48	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/26/21 02:48	04/26/21 02:48	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	04/26/21 02:48	04/26/21 02:48	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	04/26/21 02:48	04/26/21 02:48	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	04/26/21 02:48	04/26/21 02:48	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/26/21 02:48	04/26/21 02:48	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/26/21 02:48	04/26/21 02:48	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/26/21 02:48	04/26/21 02:48	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/26/21 02:48	04/26/21 02:48	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/26/21 02:48	04/26/21 02:48	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/26/21 02:48	04/26/21 02:48	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/26/21 02:48	04/26/21 02:48	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/26/21 02:48	04/26/21 02:48	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/26/21 02:48	04/26/21 02:48	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/26/21 02:48	04/26/21 02:48	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/26/21 02:48	04/26/21 02:48	78-93-3	
Methylene Chloride	**0.460J**	ug/L	5.00	0.430	1	04/26/21 02:48	04/26/21 02:48	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/26/21 02:48	04/26/21 02:48	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/26/21 02:48	04/26/21 02:48	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/26/21 02:48	04/26/21 02:48	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/26/21 02:48	04/26/21 02:48	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/26/21 02:48	04/26/21 02:48	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/26/21 02:48	04/26/21 02:48	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/26/21 02:48	04/26/21 02:48	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/26/21 02:48	04/26/21 02:48	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/26/21 02:48	04/26/21 02:48	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/26/21 02:48	04/26/21 02:48	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/26/21 02:48	04/26/21 02:48	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/26/21 02:48	04/26/21 02:48	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/26/21 02:48	04/26/21 02:48	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/26/21 02:48	04/26/21 02:48	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/26/21 02:48	04/26/21 02:48	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/26/21 02:48	04/26/21 02:48	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-14A **Lab ID: 30416534005** Collected: 04/19/21 14:50 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	104	%	80.0-120		1	04/26/21 02:48	04/26/21 02:48	2037-26-5	
4-Bromofluorobenzene (S)	97.6	%	77.0-126		1	04/26/21 02:48	04/26/21 02:48	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%	70.0-130		1	04/26/21 02:48	04/26/21 02:48	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/03/21 15:18		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**16.0**	mg/L	10.0	10.0	1		04/22/21 16:48		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/03/21 17:08	05/04/21 10:25		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/26/21 13:11	04/26/21 16:46		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**4.9**	mg/L	3.0	0.67	1		05/05/21 13:23	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.058J**	mg/L	0.10	0.024	1		04/29/21 15:10	14797-55-8	
Nitrogen, NO2 plus NO3	**0.058J**	mg/L	0.10	0.024	1		04/29/21 15:10		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/30/21 16:47	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/21/21 10:35	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-23R **Lab ID: 30416534006** Collected: 04/20/21 12:30 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/23/21 07:58	05/04/21 10:38	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/23/21 07:58	05/04/21 10:38	7440-38-2	
Barium	**0.014**	mg/L	0.010	0.00068	1	04/23/21 07:58	05/04/21 10:38	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00017	1	04/23/21 07:58	05/04/21 10:38	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/23/21 07:58	05/04/21 10:38	7440-43-9	
Calcium	**2.5**	mg/L	1.0	0.10	1	04/23/21 07:58	05/04/21 10:38	7440-70-2	
Chromium	**0.0060**	mg/L	0.0050	0.00035	1	04/23/21 07:58	05/04/21 10:38	7440-47-3	
Cobalt	**0.0036J**	mg/L	0.0050	0.00053	1	04/23/21 07:58	05/04/21 10:38	7440-48-4	
Copper	**0.0096**	mg/L	0.0050	0.0027	1	04/23/21 07:58	05/04/21 10:38	7440-50-8	
Iron	**0.076**	mg/L	0.070	0.041	1	04/23/21 07:58	05/04/21 10:38	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/23/21 07:58	05/04/21 10:38	7439-92-1	
Magnesium	**0.93**	mg/L	0.20	0.028	1	04/23/21 07:58	05/04/21 10:38	7439-95-4	
Manganese	**0.014**	mg/L	0.0050	0.0012	1	04/23/21 07:58	05/04/21 10:38	7439-96-5	
Nickel	**0.014**	mg/L	0.010	0.0015	1	04/23/21 07:58	05/04/21 10:38	7440-02-0	
Potassium	**1.1**	mg/L	0.50	0.072	1	04/23/21 07:58	05/04/21 10:38	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/23/21 07:58	05/04/21 10:38	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/23/21 07:58	05/04/21 10:38	7440-22-4	
Sodium	**3.9**	mg/L	1.0	0.42	1	04/23/21 07:58	05/04/21 10:38	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/23/21 07:58	05/04/21 10:38	7440-28-0	
Total Hardness by SM2340B-2011	**10.1**	mg/L	3.3	0.37	1	04/23/21 07:58	05/04/21 10:38		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/23/21 07:58	05/04/21 10:38	7440-62-2	
Zinc	**0.0068J**	mg/L	0.010	0.0024	1	04/23/21 07:58	05/04/21 10:38	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**2.4**	mg/L	1.0	0.10	1	04/22/21 06:41	04/23/21 06:33	7440-70-2	
Iron, Dissolved	**0.062J**	mg/L	0.070	0.041	1	04/22/21 06:41	04/23/21 06:33	7439-89-6	
Magnesium, Dissolved	**0.97**	mg/L	0.20	0.028	1	04/22/21 06:41	04/23/21 06:33	7439-95-4	
Manganese, Dissolved	**0.012**	mg/L	0.0050	0.0012	1	04/22/21 06:41	04/23/21 06:33	7439-96-5	
Potassium, Dissolved	**0.96**	mg/L	0.50	0.072	1	04/22/21 06:41	04/23/21 06:33	7440-09-7	
Sodium, Dissolved	**3.4**	mg/L	1.0	0.42	1	04/22/21 06:41	04/23/21 06:33	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.000060J**	mg/L	0.00020	0.000030	1	04/26/21 13:52	04/27/21 17:49	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/26/21 03:07	04/26/21 03:07	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/26/21 03:07	04/26/21 03:07	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/26/21 03:07	04/26/21 03:07	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/26/21 03:07	04/26/21 03:07	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/26/21 03:07	04/26/21 03:07	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/26/21 03:07	04/26/21 03:07	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-23R **Lab ID: 30416534006** Collected: 04/20/21 12:30 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/26/21 03:07	04/26/21 03:07	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/26/21 03:07	04/26/21 03:07	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/26/21 03:07	04/26/21 03:07	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/26/21 03:07	04/26/21 03:07	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/26/21 03:07	04/26/21 03:07	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/26/21 03:07	04/26/21 03:07	75-00-3	
Chloroform	**0.189J**	ug/L	5.00	0.111	1	04/26/21 03:07	04/26/21 03:07	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/26/21 03:07	04/26/21 03:07	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/26/21 03:07	04/26/21 03:07	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/26/21 03:07	04/26/21 03:07	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/26/21 03:07	04/26/21 03:07	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/26/21 03:07	04/26/21 03:07	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/26/21 03:07	04/26/21 03:07	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/26/21 03:07	04/26/21 03:07	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	04/26/21 03:07	04/26/21 03:07	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	04/26/21 03:07	04/26/21 03:07	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	04/26/21 03:07	04/26/21 03:07	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/26/21 03:07	04/26/21 03:07	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/26/21 03:07	04/26/21 03:07	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/26/21 03:07	04/26/21 03:07	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/26/21 03:07	04/26/21 03:07	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/26/21 03:07	04/26/21 03:07	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/26/21 03:07	04/26/21 03:07	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/26/21 03:07	04/26/21 03:07	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/26/21 03:07	04/26/21 03:07	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/26/21 03:07	04/26/21 03:07	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/26/21 03:07	04/26/21 03:07	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/26/21 03:07	04/26/21 03:07	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	04/26/21 03:07	04/26/21 03:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/26/21 03:07	04/26/21 03:07	108-10-1	
Methyl-tert-butyl ether	**0.292J**	ug/L	1.00	0.101	1	04/26/21 03:07	04/26/21 03:07	1634-04-4	J
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/26/21 03:07	04/26/21 03:07	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/26/21 03:07	04/26/21 03:07	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/26/21 03:07	04/26/21 03:07	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/26/21 03:07	04/26/21 03:07	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/26/21 03:07	04/26/21 03:07	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/26/21 03:07	04/26/21 03:07	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/26/21 03:07	04/26/21 03:07	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/26/21 03:07	04/26/21 03:07	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/26/21 03:07	04/26/21 03:07	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/26/21 03:07	04/26/21 03:07	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/26/21 03:07	04/26/21 03:07	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/26/21 03:07	04/26/21 03:07	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/26/21 03:07	04/26/21 03:07	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/26/21 03:07	04/26/21 03:07	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-23R **Lab ID: 30416534006** Collected: 04/20/21 12:30 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	100	%	80.0-120		1	04/26/21 03:07	04/26/21 03:07	2037-26-5	
4-Bromofluorobenzene (S)	97.5	%	77.0-126		1	04/26/21 03:07	04/26/21 03:07	460-00-4	
1,2-Dichloroethane-d4 (S)	116	%	70.0-130		1	04/26/21 03:07	04/26/21 03:07	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/04/21 16:27		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**23.0**	mg/L	10.0	10.0	1		04/26/21 14:50		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/03/21 17:08	05/04/21 10:27		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/26/21 13:11	04/26/21 16:46		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**6.9**	mg/L	3.0	0.67	1		05/05/21 13:24	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.6**	mg/L	0.10	0.024	1		04/29/21 15:11	14797-55-8	
Nitrogen, NO2 plus NO3	**1.6**	mg/L	0.10	0.024	1		04/29/21 15:11		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/30/21 16:47	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/21/21 21:33	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-24 **Lab ID: 30416534007** Collected: 04/19/21 13:20 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/23/21 07:58	05/04/21 10:40	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/23/21 07:58	05/04/21 10:40	7440-38-2	
Barium	**0.074**	mg/L	0.010	0.00068	1	04/23/21 07:58	05/04/21 10:40	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00017	1	04/23/21 07:58	05/04/21 10:40	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/23/21 07:58	05/04/21 10:40	7440-43-9	
Calcium	**3.5**	mg/L	1.0	0.10	1	04/23/21 07:58	05/04/21 10:40	7440-70-2	
Chromium	**0.0050 U**	mg/L	0.0050	0.00035	1	04/23/21 07:58	05/04/21 10:40	7440-47-3	
Cobalt	**0.0086**	mg/L	0.0050	0.00053	1	04/23/21 07:58	05/04/21 10:40	7440-48-4	
Copper	**0.0049J**	mg/L	0.0050	0.0027	1	04/23/21 07:58	05/04/21 10:40	7440-50-8	
Iron	**0.070 U**	mg/L	0.070	0.041	1	04/23/21 07:58	05/04/21 10:40	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/23/21 07:58	05/04/21 10:40	7439-92-1	
Magnesium	**3.3**	mg/L	0.20	0.028	1	04/23/21 07:58	05/04/21 10:40	7439-95-4	
Manganese	**0.044**	mg/L	0.0050	0.0012	1	04/23/21 07:58	05/04/21 10:40	7439-96-5	
Nickel	**0.010**	mg/L	0.010	0.0015	1	04/23/21 07:58	05/04/21 10:40	7440-02-0	
Potassium	**1.3**	mg/L	0.50	0.072	1	04/23/21 07:58	05/04/21 10:40	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/23/21 07:58	05/04/21 10:40	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/23/21 07:58	05/04/21 10:40	7440-22-4	
Sodium	**10.1**	mg/L	1.0	0.42	1	04/23/21 07:58	05/04/21 10:40	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/23/21 07:58	05/04/21 10:40	7440-28-0	
Total Hardness by SM2340B-2011	**22.2**	mg/L	3.3	0.37	1	04/23/21 07:58	05/04/21 10:40		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/23/21 07:58	05/04/21 10:40	7440-62-2	
Zinc	**0.010**	mg/L	0.010	0.0024	1	04/23/21 07:58	05/04/21 10:40	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**3.5**	mg/L	1.0	0.10	1	04/22/21 06:41	04/23/21 06:40	7440-70-2	
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	04/22/21 06:41	04/23/21 06:40	7439-89-6	
Magnesium, Dissolved	**3.4**	mg/L	0.20	0.028	1	04/22/21 06:41	04/23/21 06:40	7439-95-4	
Manganese, Dissolved	**0.045**	mg/L	0.0050	0.0012	1	04/22/21 06:41	04/23/21 06:40	7439-96-5	
Potassium, Dissolved	**1.2**	mg/L	0.50	0.072	1	04/22/21 06:41	04/23/21 06:40	7440-09-7	
Sodium, Dissolved	**9.9**	mg/L	1.0	0.42	1	04/22/21 06:41	04/23/21 06:40	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00057**	mg/L	0.00020	0.000030	1	04/26/21 13:52	04/27/21 17:51	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/26/21 03:26	04/26/21 03:26	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/26/21 03:26	04/26/21 03:26	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/26/21 03:26	04/26/21 03:26	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/26/21 03:26	04/26/21 03:26	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/26/21 03:26	04/26/21 03:26	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/26/21 03:26	04/26/21 03:26	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-24 **Lab ID: 30416534007** Collected: 04/19/21 13:20 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/26/21 03:26	04/26/21 03:26	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/26/21 03:26	04/26/21 03:26	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/26/21 03:26	04/26/21 03:26	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/26/21 03:26	04/26/21 03:26	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/26/21 03:26	04/26/21 03:26	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/26/21 03:26	04/26/21 03:26	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	04/26/21 03:26	04/26/21 03:26	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/26/21 03:26	04/26/21 03:26	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/26/21 03:26	04/26/21 03:26	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/26/21 03:26	04/26/21 03:26	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/26/21 03:26	04/26/21 03:26	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/26/21 03:26	04/26/21 03:26	95-50-1	
1,4-Dichlorobenzene	**0.126J**	ug/L	1.00	0.120	1	04/26/21 03:26	04/26/21 03:26	106-46-7	J
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/26/21 03:26	04/26/21 03:26	110-57-6	
Dichlorofluoromethane	**1.49J**	ug/L	5.00	0.130	1	04/26/21 03:26	04/26/21 03:26	75-43-4	J
Dichlorodifluoromethane	**1.54J**	ug/L	5.00	0.374	1	04/26/21 03:26	04/26/21 03:26	75-71-8	J
1,1-Dichloroethane	**2.07**	ug/L	1.00	0.100	1	04/26/21 03:26	04/26/21 03:26	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/26/21 03:26	04/26/21 03:26	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/26/21 03:26	04/26/21 03:26	75-35-4	
cis-1,2-Dichloroethene	**0.282J**	ug/L	1.00	0.126	1	04/26/21 03:26	04/26/21 03:26	156-59-2	J
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/26/21 03:26	04/26/21 03:26	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/26/21 03:26	04/26/21 03:26	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/26/21 03:26	04/26/21 03:26	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/26/21 03:26	04/26/21 03:26	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/26/21 03:26	04/26/21 03:26	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/26/21 03:26	04/26/21 03:26	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/26/21 03:26	04/26/21 03:26	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/26/21 03:26	04/26/21 03:26	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	04/26/21 03:26	04/26/21 03:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/26/21 03:26	04/26/21 03:26	108-10-1	
Methyl-tert-butyl ether	**0.106J**	ug/L	1.00	0.101	1	04/26/21 03:26	04/26/21 03:26	1634-04-4	J
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/26/21 03:26	04/26/21 03:26	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/26/21 03:26	04/26/21 03:26	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/26/21 03:26	04/26/21 03:26	79-34-5	
Tetrachloroethene	**0.434J**	ug/L	1.00	0.300	1	04/26/21 03:26	04/26/21 03:26	127-18-4	J
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/26/21 03:26	04/26/21 03:26	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/26/21 03:26	04/26/21 03:26	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/26/21 03:26	04/26/21 03:26	79-00-5	
Trichloroethene	**0.326J**	ug/L	1.00	0.190	1	04/26/21 03:26	04/26/21 03:26	79-01-6	J
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/26/21 03:26	04/26/21 03:26	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/26/21 03:26	04/26/21 03:26	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/26/21 03:26	04/26/21 03:26	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/26/21 03:26	04/26/21 03:26	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/26/21 03:26	04/26/21 03:26	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/26/21 03:26	04/26/21 03:26	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-24 **Lab ID: 30416534007** Collected: 04/19/21 13:20 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	98.3	%	80.0-120		1	04/26/21 03:26	04/26/21 03:26	2037-26-5	
4-Bromofluorobenzene (S)	102	%	77.0-126		1	04/26/21 03:26	04/26/21 03:26	460-00-4	
1,2-Dichloroethane-d4 (S)	116	%	70.0-130		1	04/26/21 03:26	04/26/21 03:26	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/03/21 15:19		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**72.0**	mg/L	10.0	10.0	1		04/22/21 16:49		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/03/21 17:08	05/04/21 10:29		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/26/21 13:11	04/26/21 16:46		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**24.4**	mg/L	3.0	0.67	1		05/05/21 13:25	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.1**	mg/L	0.10	0.024	1		04/29/21 15:13	14797-55-8	
Nitrogen, NO2 plus NO3	**1.1**	mg/L	0.10	0.024	1		04/29/21 15:13		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/30/21 16:49	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/21/21 10:32	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-25A **Lab ID: 30416534008** Collected: 04/19/21 16:30 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/23/21 07:58	05/04/21 10:43	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/23/21 07:58	05/04/21 10:43	7440-38-2	
Barium	**0.073**	mg/L	0.010	0.00068	1	04/23/21 07:58	05/04/21 10:43	7440-39-3	
Beryllium	**0.00061J**	mg/L	0.0010	0.00017	1	04/23/21 07:58	05/04/21 10:43	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/23/21 07:58	05/04/21 10:43	7440-43-9	
Calcium	**11.8**	mg/L	1.0	0.10	1	04/23/21 07:58	05/04/21 10:43	7440-70-2	
Chromium	**0.00036J**	mg/L	0.0050	0.00035	1	04/23/21 07:58	05/04/21 10:43	7440-47-3	
Cobalt	**0.0073**	mg/L	0.0050	0.00053	1	04/23/21 07:58	05/04/21 10:43	7440-48-4	
Copper	**0.026**	mg/L	0.0050	0.0027	1	04/23/21 07:58	05/04/21 10:43	7440-50-8	
Iron	**0.070 U**	mg/L	0.070	0.041	1	04/23/21 07:58	05/04/21 10:43	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/23/21 07:58	05/04/21 10:43	7439-92-1	
Magnesium	**1.7**	mg/L	0.20	0.028	1	04/23/21 07:58	05/04/21 10:43	7439-95-4	
Manganese	**0.041**	mg/L	0.0050	0.0012	1	04/23/21 07:58	05/04/21 10:43	7439-96-5	
Nickel	**0.0078J**	mg/L	0.010	0.0015	1	04/23/21 07:58	05/04/21 10:43	7440-02-0	
Potassium	**1.0**	mg/L	0.50	0.072	1	04/23/21 07:58	05/04/21 10:43	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/23/21 07:58	05/04/21 10:43	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/23/21 07:58	05/04/21 10:43	7440-22-4	
Sodium	**3.9**	mg/L	1.0	0.42	1	04/23/21 07:58	05/04/21 10:43	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/23/21 07:58	05/04/21 10:43	7440-28-0	
Total Hardness by SM2340B-2011	**36.5**	mg/L	3.3	0.37	1	04/23/21 07:58	05/04/21 10:43		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/23/21 07:58	05/04/21 10:43	7440-62-2	
Zinc	**0.0093J**	mg/L	0.010	0.0024	1	04/23/21 07:58	05/04/21 10:43	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**11.8**	mg/L	1.0	0.10	1	04/22/21 06:41	04/23/21 06:42	7440-70-2	
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	04/22/21 06:41	04/23/21 06:42	7439-89-6	
Magnesium, Dissolved	**1.9**	mg/L	0.20	0.028	1	04/22/21 06:41	04/23/21 06:42	7439-95-4	
Manganese, Dissolved	**0.042**	mg/L	0.0050	0.0012	1	04/22/21 06:41	04/23/21 06:42	7439-96-5	
Potassium, Dissolved	**1.0**	mg/L	0.50	0.072	1	04/22/21 06:41	04/23/21 06:42	7440-09-7	
Sodium, Dissolved	**4.0**	mg/L	1.0	0.42	1	04/22/21 06:41	04/23/21 06:42	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00011J**	mg/L	0.00020	0.000030	1	04/26/21 13:52	04/27/21 17:52	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/26/21 03:45	04/26/21 03:45	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/26/21 03:45	04/26/21 03:45	107-13-1	
Benzene	**1.88**	ug/L	1.00	0.0941	1	04/26/21 03:45	04/26/21 03:45	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/26/21 03:45	04/26/21 03:45	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/26/21 03:45	04/26/21 03:45	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/26/21 03:45	04/26/21 03:45	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-25A **Lab ID: 30416534008** Collected: 04/19/21 16:30 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/26/21 03:45	04/26/21 03:45	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/26/21 03:45	04/26/21 03:45	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/26/21 03:45	04/26/21 03:45	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/26/21 03:45	04/26/21 03:45	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/26/21 03:45	04/26/21 03:45	124-48-1	
Chloroethane	**0.233J**	ug/L	5.00	0.192	1	04/26/21 03:45	04/26/21 03:45	75-00-3	J
Chloroform	**0.187J**	ug/L	5.00	0.111	1	04/26/21 03:45	04/26/21 03:45	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/26/21 03:45	04/26/21 03:45	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/26/21 03:45	04/26/21 03:45	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/26/21 03:45	04/26/21 03:45	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/26/21 03:45	04/26/21 03:45	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/26/21 03:45	04/26/21 03:45	95-50-1	
1,4-Dichlorobenzene	**1.01**	ug/L	1.00	0.120	1	04/26/21 03:45	04/26/21 03:45	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/26/21 03:45	04/26/21 03:45	110-57-6	
Dichlorofluoromethane	**35.8**	ug/L	5.00	0.130	1	04/26/21 03:45	04/26/21 03:45	75-43-4	
Dichlorodifluoromethane	**6.82**	ug/L	5.00	0.374	1	04/26/21 03:45	04/26/21 03:45	75-71-8	
1,1-Dichloroethane	**28.0**	ug/L	1.00	0.100	1	04/26/21 03:45	04/26/21 03:45	75-34-3	
1,2-Dichloroethane	**1.95**	ug/L	1.00	0.0819	1	04/26/21 03:45	04/26/21 03:45	107-06-2	
1,1-Dichloroethene	**0.718J**	ug/L	1.00	0.188	1	04/26/21 03:45	04/26/21 03:45	75-35-4	J
cis-1,2-Dichloroethene	**4.75**	ug/L	1.00	0.126	1	04/26/21 03:45	04/26/21 03:45	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/26/21 03:45	04/26/21 03:45	156-60-5	
1,2-Dichloropropane	**1.02**	ug/L	1.00	0.149	1	04/26/21 03:45	04/26/21 03:45	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/26/21 03:45	04/26/21 03:45	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/26/21 03:45	04/26/21 03:45	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/26/21 03:45	04/26/21 03:45	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/26/21 03:45	04/26/21 03:45	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/26/21 03:45	04/26/21 03:45	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/26/21 03:45	04/26/21 03:45	78-93-3	
Methylene Chloride	**19.5**	ug/L	5.00	0.430	1	04/26/21 03:45	04/26/21 03:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/26/21 03:45	04/26/21 03:45	108-10-1	
Methyl-tert-butyl ether	**3.98**	ug/L	1.00	0.101	1	04/26/21 03:45	04/26/21 03:45	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/26/21 03:45	04/26/21 03:45	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/26/21 03:45	04/26/21 03:45	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/26/21 03:45	04/26/21 03:45	79-34-5	
Tetrachloroethene	**2.62**	ug/L	1.00	0.300	1	04/26/21 03:45	04/26/21 03:45	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/26/21 03:45	04/26/21 03:45	108-88-3	
1,1,1-Trichloroethane	**0.295J**	ug/L	1.00	0.149	1	04/26/21 03:45	04/26/21 03:45	71-55-6	J
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/26/21 03:45	04/26/21 03:45	79-00-5	
Trichloroethene	**3.84**	ug/L	1.00	0.190	1	04/26/21 03:45	04/26/21 03:45	79-01-6	
Trichlorofluoromethane	**2.10J**	ug/L	5.00	0.160	1	04/26/21 03:45	04/26/21 03:45	75-69-4	J
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/26/21 03:45	04/26/21 03:45	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/26/21 03:45	04/26/21 03:45	108-05-4	
Vinyl chloride	**0.693J**	ug/L	1.00	0.234	1	04/26/21 03:45	04/26/21 03:45	75-01-4	J
o-Xylene	**0.526J**	ug/L	1.00	0.174	1	04/26/21 03:45	04/26/21 03:45	95-47-6	J
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/26/21 03:45	04/26/21 03:45	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-25A **Lab ID: 30416534008** Collected: 04/19/21 16:30 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	101	%	80.0-120		1	04/26/21 03:45	04/26/21 03:45	2037-26-5	
4-Bromofluorobenzene (S)	97.4	%	77.0-126		1	04/26/21 03:45	04/26/21 03:45	460-00-4	
1,2-Dichloroethane-d4 (S)	116	%	70.0-130		1	04/26/21 03:45	04/26/21 03:45	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**20.0**	mg/L	10.0	1.0	1		05/03/21 15:20		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**55.0**	mg/L	10.0	10.0	1		04/22/21 16:49		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/03/21 17:08	05/04/21 10:31		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/26/21 13:11	04/26/21 16:46		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**10.7**	mg/L	3.0	0.67	1		05/05/21 13:26	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.71**	mg/L	0.10	0.024	1		04/29/21 15:14	14797-55-8	
Nitrogen, NO2 plus NO3	**0.82**	mg/L	0.10	0.024	1		04/29/21 15:14		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/30/21 16:50	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.12**	mg/L	0.010	0.0055	1		04/21/21 10:35	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-28 **Lab ID: 30416534009** Collected: 04/20/21 09:30 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/23/21 07:58	05/04/21 10:45	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/23/21 07:58	05/04/21 10:45	7440-38-2	
Barium	**0.064**	mg/L	0.010	0.00068	1	04/23/21 07:58	05/04/21 10:45	7440-39-3	
Beryllium	**0.00018J**	mg/L	0.0010	0.00017	1	04/23/21 07:58	05/04/21 10:45	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/23/21 07:58	05/04/21 10:45	7440-43-9	
Calcium	**5.6**	mg/L	1.0	0.10	1	04/23/21 07:58	05/04/21 10:45	7440-70-2	
Chromium	**0.0085**	mg/L	0.0050	0.00035	1	04/23/21 07:58	05/04/21 10:45	7440-47-3	
Cobalt	**0.0060**	mg/L	0.0050	0.00053	1	04/23/21 07:58	05/04/21 10:45	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0027	1	04/23/21 07:58	05/04/21 10:45	7440-50-8	
Iron	**0.11**	mg/L	0.070	0.041	1	04/23/21 07:58	05/04/21 10:45	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/23/21 07:58	05/04/21 10:45	7439-92-1	
Magnesium	**2.7**	mg/L	0.20	0.028	1	04/23/21 07:58	05/04/21 10:45	7439-95-4	
Manganese	**0.027**	mg/L	0.0050	0.0012	1	04/23/21 07:58	05/04/21 10:45	7439-96-5	
Nickel	**0.015**	mg/L	0.010	0.0015	1	04/23/21 07:58	05/04/21 10:45	7440-02-0	
Potassium	**1.1**	mg/L	0.50	0.072	1	04/23/21 07:58	05/04/21 10:45	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/23/21 07:58	05/04/21 10:45	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/23/21 07:58	05/04/21 10:45	7440-22-4	
Sodium	**23.2**	mg/L	1.0	0.42	1	04/23/21 07:58	05/04/21 10:45	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/23/21 07:58	05/04/21 10:45	7440-28-0	
Total Hardness by SM2340B-2011	**25.0**	mg/L	3.3	0.37	1	04/23/21 07:58	05/04/21 10:45		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/23/21 07:58	05/04/21 10:45	7440-62-2	
Zinc	**0.0090J**	mg/L	0.010	0.0024	1	04/23/21 07:58	05/04/21 10:45	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**5.8**	mg/L	1.0	0.10	1	04/22/21 06:41	04/23/21 06:44	7440-70-2	
Iron, Dissolved	**0.060J**	mg/L	0.070	0.041	1	04/22/21 06:41	04/23/21 06:44	7439-89-6	
Magnesium, Dissolved	**2.8**	mg/L	0.20	0.028	1	04/22/21 06:41	04/23/21 06:44	7439-95-4	
Manganese, Dissolved	**0.028**	mg/L	0.0050	0.0012	1	04/22/21 06:41	04/23/21 06:44	7439-96-5	
Potassium, Dissolved	**1.1**	mg/L	0.50	0.072	1	04/22/21 06:41	04/23/21 06:44	7440-09-7	
Sodium, Dissolved	**24.2**	mg/L	1.0	0.42	1	04/22/21 06:41	04/23/21 06:44	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.000060J**	mg/L	0.00020	0.000030	1	04/26/21 13:52	04/27/21 17:54	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/26/21 04:04	04/26/21 04:04	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/26/21 04:04	04/26/21 04:04	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/26/21 04:04	04/26/21 04:04	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/26/21 04:04	04/26/21 04:04	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/26/21 04:04	04/26/21 04:04	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/26/21 04:04	04/26/21 04:04	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-28 **Lab ID: 30416534009** Collected: 04/20/21 09:30 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/26/21 04:04	04/26/21 04:04	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/26/21 04:04	04/26/21 04:04	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/26/21 04:04	04/26/21 04:04	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/26/21 04:04	04/26/21 04:04	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/26/21 04:04	04/26/21 04:04	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/26/21 04:04	04/26/21 04:04	75-00-3	
Chloroform	**0.220J**	ug/L	5.00	0.111	1	04/26/21 04:04	04/26/21 04:04	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/26/21 04:04	04/26/21 04:04	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/26/21 04:04	04/26/21 04:04	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/26/21 04:04	04/26/21 04:04	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/26/21 04:04	04/26/21 04:04	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/26/21 04:04	04/26/21 04:04	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/26/21 04:04	04/26/21 04:04	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/26/21 04:04	04/26/21 04:04	110-57-6	
Dichlorofluoromethane	**5.50**	ug/L	5.00	0.130	1	04/26/21 04:04	04/26/21 04:04	75-43-4	
Dichlorodifluoromethane	**3.49J**	ug/L	5.00	0.374	1	04/26/21 04:04	04/26/21 04:04	75-71-8	J
1,1-Dichloroethane	**1.63**	ug/L	1.00	0.100	1	04/26/21 04:04	04/26/21 04:04	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/26/21 04:04	04/26/21 04:04	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/26/21 04:04	04/26/21 04:04	75-35-4	
cis-1,2-Dichloroethene	**0.213J**	ug/L	1.00	0.126	1	04/26/21 04:04	04/26/21 04:04	156-59-2	J
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/26/21 04:04	04/26/21 04:04	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/26/21 04:04	04/26/21 04:04	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/26/21 04:04	04/26/21 04:04	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/26/21 04:04	04/26/21 04:04	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/26/21 04:04	04/26/21 04:04	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/26/21 04:04	04/26/21 04:04	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/26/21 04:04	04/26/21 04:04	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/26/21 04:04	04/26/21 04:04	78-93-3	
Methylene Chloride	**0.481J**	ug/L	5.00	0.430	1	04/26/21 04:04	04/26/21 04:04	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/26/21 04:04	04/26/21 04:04	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/26/21 04:04	04/26/21 04:04	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/26/21 04:04	04/26/21 04:04	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/26/21 04:04	04/26/21 04:04	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/26/21 04:04	04/26/21 04:04	79-34-5	
Tetrachloroethene	**0.849J**	ug/L	1.00	0.300	1	04/26/21 04:04	04/26/21 04:04	127-18-4	J
Toluene	**0.563J**	ug/L	1.00	0.278	1	04/26/21 04:04	04/26/21 04:04	108-88-3	J
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/26/21 04:04	04/26/21 04:04	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/26/21 04:04	04/26/21 04:04	79-00-5	
Trichloroethene	**0.227J**	ug/L	1.00	0.190	1	04/26/21 04:04	04/26/21 04:04	79-01-6	J
Trichlorofluoromethane	**1.31J**	ug/L	5.00	0.160	1	04/26/21 04:04	04/26/21 04:04	75-69-4	J
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/26/21 04:04	04/26/21 04:04	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/26/21 04:04	04/26/21 04:04	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/26/21 04:04	04/26/21 04:04	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/26/21 04:04	04/26/21 04:04	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/26/21 04:04	04/26/21 04:04	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-28 **Lab ID: 30416534009** Collected: 04/20/21 09:30 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	103	%	80.0-120		1	04/26/21 04:04	04/26/21 04:04	2037-26-5	
4-Bromofluorobenzene (S)	92.0	%	77.0-126		1	04/26/21 04:04	04/26/21 04:04	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%	70.0-130		1	04/26/21 04:04	04/26/21 04:04	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**1.0J**	mg/L	10.0	1.0	1		05/04/21 16:27		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**80.0**	mg/L	10.0	10.0	1		04/26/21 14:50		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/03/21 17:08	05/04/21 10:33		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/26/21 13:11	04/26/21 16:47		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**54.5**	mg/L	3.0	0.67	1		05/05/21 13:26	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.076J**	mg/L	0.10	0.024	1		04/29/21 15:15	14797-55-8	
Nitrogen, NO2 plus NO3	**0.076J**	mg/L	0.10	0.024	1		04/29/21 15:15		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/30/21 16:52	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/21/21 10:36	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-29 **Lab ID: 30416534010** Collected: 04/20/21 08:30 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/23/21 07:58	05/04/21 10:47	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/23/21 07:58	05/04/21 10:47	7440-38-2	
Barium	**0.029**	mg/L	0.010	0.00068	1	04/23/21 07:58	05/04/21 10:47	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00017	1	04/23/21 07:58	05/04/21 10:47	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/23/21 07:58	05/04/21 10:47	7440-43-9	
Calcium	**2.0**	mg/L	1.0	0.10	1	04/23/21 07:58	05/04/21 10:47	7440-70-2	
Chromium	**0.0020J**	mg/L	0.0050	0.00035	1	04/23/21 07:58	05/04/21 10:47	7440-47-3	
Cobalt	**0.0015J**	mg/L	0.0050	0.00053	1	04/23/21 07:58	05/04/21 10:47	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0027	1	04/23/21 07:58	05/04/21 10:47	7440-50-8	
Iron	**0.070 U**	mg/L	0.070	0.041	1	04/23/21 07:58	05/04/21 10:47	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/23/21 07:58	05/04/21 10:47	7439-92-1	
Magnesium	**1.1**	mg/L	0.20	0.028	1	04/23/21 07:58	05/04/21 10:47	7439-95-4	
Manganese	**0.0089**	mg/L	0.0050	0.0012	1	04/23/21 07:58	05/04/21 10:47	7439-96-5	
Nickel	**0.0042J**	mg/L	0.010	0.0015	1	04/23/21 07:58	05/04/21 10:47	7440-02-0	
Potassium	**0.80**	mg/L	0.50	0.072	1	04/23/21 07:58	05/04/21 10:47	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/23/21 07:58	05/04/21 10:47	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/23/21 07:58	05/04/21 10:47	7440-22-4	
Sodium	**4.2**	mg/L	1.0	0.42	1	04/23/21 07:58	05/04/21 10:47	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/23/21 07:58	05/04/21 10:47	7440-28-0	
Total Hardness by SM2340B-2011	**9.5**	mg/L	3.3	0.37	1	04/23/21 07:58	05/04/21 10:47		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/23/21 07:58	05/04/21 10:47	7440-62-2	
Zinc	**0.010 U**	mg/L	0.010	0.0024	1	04/23/21 07:58	05/04/21 10:47	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**2.0**	mg/L	1.0	0.10	1	04/22/21 06:41	04/23/21 06:46	7440-70-2	
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	04/22/21 06:41	04/23/21 06:46	7439-89-6	
Magnesium, Dissolved	**1.1**	mg/L	0.20	0.028	1	04/22/21 06:41	04/23/21 06:46	7439-95-4	
Manganese, Dissolved	**0.0087**	mg/L	0.0050	0.0012	1	04/22/21 06:41	04/23/21 06:46	7439-96-5	
Potassium, Dissolved	**0.75**	mg/L	0.50	0.072	1	04/22/21 06:41	04/23/21 06:46	7440-09-7	
Sodium, Dissolved	**4.3**	mg/L	1.0	0.42	1	04/22/21 06:41	04/23/21 06:46	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.000070J**	mg/L	0.00020	0.000030	1	04/26/21 13:52	04/27/21 17:56	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/26/21 04:23	04/26/21 04:23	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/26/21 04:23	04/26/21 04:23	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/26/21 04:23	04/26/21 04:23	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/26/21 04:23	04/26/21 04:23	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/26/21 04:23	04/26/21 04:23	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/26/21 04:23	04/26/21 04:23	75-25-2	

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-29 **Lab ID: 30416534010** Collected: 04/20/21 08:30 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/26/21 04:23	04/26/21 04:23	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/26/21 04:23	04/26/21 04:23	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/26/21 04:23	04/26/21 04:23	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/26/21 04:23	04/26/21 04:23	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/26/21 04:23	04/26/21 04:23	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/26/21 04:23	04/26/21 04:23	75-00-3	
Chloroform	**0.571J**	ug/L	5.00	0.111	1	04/26/21 04:23	04/26/21 04:23	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/26/21 04:23	04/26/21 04:23	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/26/21 04:23	04/26/21 04:23	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/26/21 04:23	04/26/21 04:23	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/26/21 04:23	04/26/21 04:23	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/26/21 04:23	04/26/21 04:23	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/26/21 04:23	04/26/21 04:23	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/26/21 04:23	04/26/21 04:23	110-57-6	
Dichlorofluoromethane	**2.34J**	ug/L	5.00	0.130	1	04/26/21 04:23	04/26/21 04:23	75-43-4	J
Dichlorodifluoromethane	**3.23J**	ug/L	5.00	0.374	1	04/26/21 04:23	04/26/21 04:23	75-71-8	J
1,1-Dichloroethane	**1.26**	ug/L	1.00	0.100	1	04/26/21 04:23	04/26/21 04:23	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/26/21 04:23	04/26/21 04:23	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/26/21 04:23	04/26/21 04:23	75-35-4	
cis-1,2-Dichloroethene	**0.751J**	ug/L	1.00	0.126	1	04/26/21 04:23	04/26/21 04:23	156-59-2	J
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/26/21 04:23	04/26/21 04:23	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/26/21 04:23	04/26/21 04:23	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/26/21 04:23	04/26/21 04:23	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/26/21 04:23	04/26/21 04:23	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/26/21 04:23	04/26/21 04:23	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/26/21 04:23	04/26/21 04:23	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/26/21 04:23	04/26/21 04:23	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/26/21 04:23	04/26/21 04:23	78-93-3	
Methylene Chloride	**0.460J**	ug/L	5.00	0.430	1	04/26/21 04:23	04/26/21 04:23	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/26/21 04:23	04/26/21 04:23	108-10-1	
Methyl-tert-butyl ether	**0.274J**	ug/L	1.00	0.101	1	04/26/21 04:23	04/26/21 04:23	1634-04-4	J
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/26/21 04:23	04/26/21 04:23	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/26/21 04:23	04/26/21 04:23	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/26/21 04:23	04/26/21 04:23	79-34-5	
Tetrachloroethene	**1.36**	ug/L	1.00	0.300	1	04/26/21 04:23	04/26/21 04:23	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/26/21 04:23	04/26/21 04:23	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/26/21 04:23	04/26/21 04:23	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/26/21 04:23	04/26/21 04:23	79-00-5	
Trichloroethene	**0.326J**	ug/L	1.00	0.190	1	04/26/21 04:23	04/26/21 04:23	79-01-6	J
Trichlorofluoromethane	**0.277J**	ug/L	5.00	0.160	1	04/26/21 04:23	04/26/21 04:23	75-69-4	J
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/26/21 04:23	04/26/21 04:23	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/26/21 04:23	04/26/21 04:23	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/26/21 04:23	04/26/21 04:23	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/26/21 04:23	04/26/21 04:23	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/26/21 04:23	04/26/21 04:23	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TW-29 **Lab ID: 30416534010** Collected: 04/20/21 08:30 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	101	%	80.0-120		1	04/26/21 04:23	04/26/21 04:23	2037-26-5	
4-Bromofluorobenzene (S)	94.7	%	77.0-126		1	04/26/21 04:23	04/26/21 04:23	460-00-4	
1,2-Dichloroethane-d4 (S)	115	%	70.0-130		1	04/26/21 04:23	04/26/21 04:23	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**1.0J**	mg/L	10.0	1.0	1		05/04/21 16:28		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**21.0**	mg/L	10.0	10.0	1		04/26/21 14:50		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/03/21 17:08	05/04/21 10:35		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/26/21 13:11	04/26/21 16:47		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**10.7**	mg/L	3.0	0.67	1		05/05/21 13:27	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.58**	mg/L	0.10	0.024	1		04/29/21 15:17	14797-55-8	
Nitrogen, NO2 plus NO3	**0.58**	mg/L	0.10	0.024	1		04/29/21 15:17		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/30/21 16:52	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/21/21 10:36	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TRIP BLANK **Lab ID: 30416534011** Collected: 04/20/21 00:01 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/26/21 22:38	04/26/21 22:38	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/26/21 22:38	04/26/21 22:38	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/26/21 22:38	04/26/21 22:38	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/26/21 22:38	04/26/21 22:38	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/26/21 22:38	04/26/21 22:38	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/26/21 22:38	04/26/21 22:38	75-25-2	
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/26/21 22:38	04/26/21 22:38	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/26/21 22:38	04/26/21 22:38	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/26/21 22:38	04/26/21 22:38	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/26/21 22:38	04/26/21 22:38	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/26/21 22:38	04/26/21 22:38	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/26/21 22:38	04/26/21 22:38	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	04/26/21 22:38	04/26/21 22:38	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/26/21 22:38	04/26/21 22:38	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/26/21 22:38	04/26/21 22:38	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/26/21 22:38	04/26/21 22:38	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/26/21 22:38	04/26/21 22:38	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/26/21 22:38	04/26/21 22:38	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/26/21 22:38	04/26/21 22:38	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/26/21 22:38	04/26/21 22:38	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	04/26/21 22:38	04/26/21 22:38	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	04/26/21 22:38	04/26/21 22:38	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	04/26/21 22:38	04/26/21 22:38	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/26/21 22:38	04/26/21 22:38	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/26/21 22:38	04/26/21 22:38	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/26/21 22:38	04/26/21 22:38	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/26/21 22:38	04/26/21 22:38	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/26/21 22:38	04/26/21 22:38	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/26/21 22:38	04/26/21 22:38	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/26/21 22:38	04/26/21 22:38	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/26/21 22:38	04/26/21 22:38	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/26/21 22:38	04/26/21 22:38	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/26/21 22:38	04/26/21 22:38	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/26/21 22:38	04/26/21 22:38	78-93-3	
Methylene Chloride	**1.07J**	ug/L	5.00	0.430	1	04/26/21 22:38	04/26/21 22:38	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/26/21 22:38	04/26/21 22:38	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/26/21 22:38	04/26/21 22:38	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/26/21 22:38	04/26/21 22:38	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/26/21 22:38	04/26/21 22:38	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/26/21 22:38	04/26/21 22:38	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/26/21 22:38	04/26/21 22:38	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/26/21 22:38	04/26/21 22:38	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/26/21 22:38	04/26/21 22:38	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/26/21 22:38	04/26/21 22:38	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/26/21 22:38	04/26/21 22:38	79-01-6	

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Greensburg, PA 15601
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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Sample: TRIP BLANK **Lab ID: 30416534011** Collected: 04/20/21 00:01 Received: 04/20/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/26/21 22:38	04/26/21 22:38	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/26/21 22:38	04/26/21 22:38	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/26/21 22:38	04/26/21 22:38	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/26/21 22:38	04/26/21 22:38	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/26/21 22:38	04/26/21 22:38	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/26/21 22:38	04/26/21 22:38	179601-23-1	
Surrogates									
Toluene-d8 (S)	106	%	80.0-120		1	04/26/21 22:38	04/26/21 22:38	2037-26-5	
4-Bromofluorobenzene (S)	108	%	77.0-126		1	04/26/21 22:38	04/26/21 22:38	460-00-4	
1,2-Dichloroethane-d4 (S)	124	%	70.0-130		1	04/26/21 22:38	04/26/21 22:38	17060-07-0	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30416534

QC Batch: 444975
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416534001, 30416534002, 30416534003, 30416534004, 30416534005, 30416534006, 30416534007, 30416534008, 30416534009, 30416534010

METHOD BLANK: 2148127
Matrix: Water
Associated Lab Samples: 30416534001, 30416534002, 30416534003, 30416534004, 30416534005, 30416534006, 30416534007, 30416534008, 30416534009, 30416534010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.000050J	0.00020	0.000030	04/27/21 17:29	

LABORATORY CONTROL SAMPLE: 2148128

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.001	0.00097	97	80-120	

MATRIX SPIKE SAMPLE: 2148130

Parameter	Units	30416687002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.93 ug/L	0.0025	0.0025	62	75-125	ML

MATRIX SPIKE SAMPLE: 2148132

Parameter	Units	30416534001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.000050J	0.0025	0.0024	94	75-125	

SAMPLE DUPLICATE: 2148129

Parameter	Units	30416687002 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	0.93 ug/L	0.00030	102	20	D6

SAMPLE DUPLICATE: 2148131

Parameter	Units	30416534001 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	0.000050J	0.000050J		20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30416534

QC Batch: 444676
QC Batch Method: EPA 3005A
Analysis Method: EPA 6010B
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416534001, 30416534002, 30416534003, 30416534004, 30416534005, 30416534006, 30416534007, 30416534008, 30416534009, 30416534010

METHOD BLANK: 2146757
Matrix: Water
Associated Lab Samples: 30416534001, 30416534002, 30416534003, 30416534004, 30416534005, 30416534006, 30416534007, 30416534008, 30416534009, 30416534010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.0060 U	0.0060	0.0033	05/04/21 09:46	
Arsenic	mg/L	0.0050 U	0.0050	0.0020	05/04/21 09:46	
Barium	mg/L	0.010 U	0.010	0.00068	05/04/21 09:46	
Beryllium	mg/L	0.0010 U	0.0010	0.00017	05/04/21 09:46	
Cadmium	mg/L	0.0030 U	0.0030	0.00034	05/04/21 09:46	
Calcium	mg/L	1.0 U	1.0	0.10	05/04/21 09:46	
Chromium	mg/L	0.0050 U	0.0050	0.00035	05/04/21 09:46	
Cobalt	mg/L	0.0050 U	0.0050	0.00053	05/04/21 09:46	
Copper	mg/L	0.0050 U	0.0050	0.0027	05/04/21 09:46	
Iron	mg/L	0.070 U	0.070	0.041	05/04/21 09:46	
Lead	mg/L	0.0050 U	0.0050	0.0049	05/04/21 09:46	
Magnesium	mg/L	0.20 U	0.20	0.028	05/04/21 09:46	
Manganese	mg/L	0.0050 U	0.0050	0.0012	05/04/21 09:46	
Nickel	mg/L	0.010 U	0.010	0.0015	05/04/21 09:46	
Potassium	mg/L	0.50 U	0.50	0.072	05/04/21 09:46	
Selenium	mg/L	0.0080 U	0.0080	0.0055	05/04/21 09:46	
Silver	mg/L	0.0060 U	0.0060	0.0014	05/04/21 09:46	
Sodium	mg/L	1.0 U	1.0	0.42	05/04/21 09:46	
Thallium	mg/L	0.010 U	0.010	0.0040	05/04/21 09:46	
Total Hardness by SM2340B-2011	mg/L	3.3 U	3.3	0.37	05/04/21 09:46	
Vanadium	mg/L	0.0050 U	0.0050	0.00057	05/04/21 09:46	
Zinc	mg/L	0.010 U	0.010	0.0024	05/04/21 09:46	

LABORATORY CONTROL SAMPLE: 2146758

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.5	0.54	108	80-120	
Arsenic	mg/L	0.5	0.53	106	80-120	
Barium	mg/L	0.5	0.51	102	80-120	
Beryllium	mg/L	0.5	0.52	103	80-120	
Cadmium	mg/L	0.5	0.55	109	80-120	
Calcium	mg/L	5	5.0	101	80-120	
Chromium	mg/L	0.5	0.53	105	80-120	
Cobalt	mg/L	0.5	0.52	105	80-120	
Copper	mg/L	0.5	0.52	103	80-120	
Iron	mg/L	5	5.1	102	80-120	
Lead	mg/L	0.5	0.52	103	80-120	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30416534

LABORATORY CONTROL SAMPLE: 2146758

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Magnesium	mg/L	5	5.0	100	80-120	
Manganese	mg/L	0.5	0.51	101	80-120	
Nickel	mg/L	0.5	0.55	110	80-120	
Potassium	mg/L	5	5.1	101	80-120	
Selenium	mg/L	0.5	0.54	108	80-120	
Silver	mg/L	0.25	0.26	106	80-120	
Sodium	mg/L	5	5.1	103	80-120	
Thallium	mg/L	0.5	0.52	104	80-120	
Total Hardness by SM2340B-2011	mg/L		33.2			
Vanadium	mg/L	0.5	0.53	107	80-120	
Zinc	mg/L	0.5	0.54	107	80-120	

MATRIX SPIKE SAMPLE: 2146760

Parameter	Units	30416534003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.0060 U	0.5	0.53	105	75-125	
Arsenic	mg/L	0.0050 U	0.5	0.51	102	75-125	
Barium	mg/L	0.093	0.5	0.61	103	75-125	
Beryllium	mg/L	0.00055J	0.5	0.52	104	75-125	
Cadmium	mg/L	0.0030 U	0.5	0.52	105	75-125	
Calcium	mg/L	5.6	5	10.7	103	75-125	
Chromium	mg/L	0.0030J	0.5	0.52	104	75-125	
Cobalt	mg/L	0.012	0.5	0.52	102	75-125	
Copper	mg/L	0.0049J	0.5	0.53	105	75-125	
Iron	mg/L	0.070 U	5	5.1	102	75-125	
Lead	mg/L	0.0050 U	0.5	0.50	100	75-125	
Magnesium	mg/L	3.4	5	8.4	100	75-125	
Manganese	mg/L	0.059	0.5	0.57	101	75-125	
Nickel	mg/L	0.015	0.5	0.54	105	75-125	
Potassium	mg/L	2.3	5	7.4	102	75-125	
Selenium	mg/L	0.0080 U	0.5	0.52	103	75-125	
Silver	mg/L	0.0060 U	0.25	0.26	104	75-125	
Sodium	mg/L	23.3	5	28.6	106	75-125	
Thallium	mg/L	0.010 U	0.5	0.51	101	75-125	
Total Hardness by SM2340B-2011	mg/L	28.0		61.5			
Vanadium	mg/L	0.0050 U	0.5	0.53	106	75-125	
Zinc	mg/L	0.021	0.5	0.53	102	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2146762 2146763

Parameter	Units	30416546001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	6.0 U ug/L	0.5	0.5	0.55	0.54	109	107	75-125	2	20	
Arsenic	mg/L	5.0 U ug/L	0.5	0.5	0.53	0.52	106	104	75-125	2	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30416534

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2146762 2146763

Parameter	Units	30416546001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.11	0.5	0.5	0.65	0.64	107	106	75-125	1	20	
Beryllium	mg/L	1.0 U ug/L	0.5	0.5	0.54	0.53	108	107	75-125	1	20	
Cadmium	mg/L	3.0 U ug/L	0.5	0.5	0.54	0.53	109	106	75-125	2	20	
Calcium	mg/L	131000 ug/L	5	5	141	143	194	236	75-125	1	20	MH
Chromium	mg/L	0.92J ug/L	0.5	0.5	0.52	0.51	104	103	75-125	1	20	
Cobalt	mg/L	5.0 U ug/L	0.5	0.5	0.52	0.51	105	102	75-125	2	20	
Copper	mg/L	5.0 U ug/L	0.5	0.5	0.54	0.54	107	107	75-125	0	20	
Iron	mg/L	0.15	5	5	5.4	5.4	105	104	75-125	1	20	
Lead	mg/L	5.0 U ug/L	0.5	0.5	0.52	0.51	103	102	75-125	2	20	
Magnesium	mg/L	11200 ug/L	5	5	16.7	17.0	110	115	75-125	1	20	
Manganese	mg/L	0.0056	0.5	0.5	0.52	0.52	103	102	75-125	1	20	
Nickel	mg/L	1.9J ug/L	0.5	0.5	0.52	0.52	104	103	75-125	2	20	
Potassium	mg/L	1350 ug/L	5	5	6.8	6.8	109	108	75-125	1	20	
Selenium	mg/L	0.0080 U	0.5	0.5	0.53	0.53	107	106	75-125	1	20	
Silver	mg/L	6.0 U ug/L	0.25	0.25	0.27	0.26	108	106	75-125	2	20	
Sodium	mg/L	19500 ug/L	5	5	25.4	25.7	118	123	75-125	1	20	
Thallium	mg/L	10.0 U ug/L	0.5	0.5	0.51	0.51	103	101	75-125	1	20	
Total Hardness by SM2340B-2011	mg/L	374000 ug/L			421	427				1		
Vanadium	mg/L	0.0050 U	0.5	0.5	0.54	0.53	107	106	75-125	1	20	
Zinc	mg/L	0.0059J	0.5	0.5	0.52	0.51	103	102	75-125	2	20	

SAMPLE DUPLICATE: 2146759

Parameter	Units	30416534003 Result	Dup Result	RPD	Max RPD	Qualifiers
Antimony	mg/L	0.0060 U	0.0060 U		20	
Arsenic	mg/L	0.0050 U	0.0050 U		20	
Barium	mg/L	0.093	0.092	1	20	
Beryllium	mg/L	0.00055J	0.00059J		20	
Cadmium	mg/L	0.0030 U	0.0030 U		20	
Calcium	mg/L	5.6	5.6	0	20	
Chromium	mg/L	0.0030J	0.0026J		20	
Cobalt	mg/L	0.012	0.013	2	20	
Copper	mg/L	0.0049J	0.0069		20	
Iron	mg/L	0.070 U	0.070 U		20	
Lead	mg/L	0.0050 U	0.0050 U		20	
Magnesium	mg/L	3.4	3.3	1	20	
Manganese	mg/L	0.059	0.059	0	20	
Nickel	mg/L	0.015	0.015	4	20	
Potassium	mg/L	2.3	2.3	0	20	
Selenium	mg/L	0.0080 U	0.0080 U		20	
Silver	mg/L	0.0060 U	0.0060 U		20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30416534

SAMPLE DUPLICATE: 2146759

Parameter	Units	30416534003 Result	Dup Result	RPD	Max RPD	Qualifiers
Sodium	mg/L	23.3	23.3	0	20	
Thallium	mg/L	0.010 U	0.010 U		20	
Total Hardness by SM2340B-2011	mg/L	28.0	27.7	1		
Vanadium	mg/L	0.0050 U	0.0050 U		20	
Zinc	mg/L	0.021	0.020	2	20	

SAMPLE DUPLICATE: 2146761

Parameter	Units	30416546001 Result	Dup Result	RPD	Max RPD	Qualifiers
Antimony	mg/L	6.0 U ug/L	0.0060 U		20	
Arsenic	mg/L	5.0 U ug/L	0.0050 U		20	
Barium	mg/L	0.11	0.12	1	20	
Beryllium	mg/L	1.0 U ug/L	0.0010 U		20	
Cadmium	mg/L	3.0 U ug/L	0.0030 U		20	
Calcium	mg/L	131000 ug/L	133	1	20	
Chromium	mg/L	0.92J ug/L	0.0050 U		20	
Cobalt	mg/L	5.0 U ug/L	0.0050 U		20	
Copper	mg/L	5.0 U ug/L	0.0050 U		20	
Iron	mg/L	0.15	0.18	18	20	
Lead	mg/L	5.0 U ug/L	0.0050 U		20	
Magnesium	mg/L	11200 ug/L	11.3	1	20	
Manganese	mg/L	0.0056	0.0059	6	20	
Nickel	mg/L	1.9J ug/L	0.0020J		20	
Potassium	mg/L	1350 ug/L	1.3	1	20	
Selenium	mg/L	0.0080 U	0.0080 U		20	
Silver	mg/L	6.0 U ug/L	0.0060 U		20	
Sodium	mg/L	19500 ug/L	19.6	1	20	
Thallium	mg/L	10.0 U ug/L	0.010 U		20	
Total Hardness by SM2340B-2011	mg/L	374000 ug/L	378	1		
Vanadium	mg/L	0.0050 U	0.0050 U		20	
Zinc	mg/L	0.0059J	0.0060J		20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30416534

QC Batch: 444457
QC Batch Method: EPA 3005A
Analysis Method: EPA 6010B
Analysis Description: 6010 MET Dissolved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416534001, 30416534002, 30416534003, 30416534004, 30416534005, 30416534006, 30416534007, 30416534008, 30416534009, 30416534010

METHOD BLANK: 2145646
Matrix: Water
Associated Lab Samples: 30416534001, 30416534002, 30416534003, 30416534004, 30416534005, 30416534006, 30416534007, 30416534008, 30416534009, 30416534010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	1.0 U	1.0	0.10	04/23/21 05:48	
Iron, Dissolved	mg/L	0.070 U	0.070	0.041	04/23/21 05:48	
Magnesium, Dissolved	mg/L	0.20 U	0.20	0.028	04/23/21 05:48	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0012	04/23/21 05:48	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.072	04/23/21 05:48	
Sodium, Dissolved	mg/L	1.0 U	1.0	0.42	04/23/21 05:48	

LABORATORY CONTROL SAMPLE: 2145647

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	5	4.9	99	80-120	
Iron, Dissolved	mg/L	5	4.9	98	80-120	
Magnesium, Dissolved	mg/L	5	5.2	104	80-120	
Manganese, Dissolved	mg/L	0.5	0.49	99	80-120	
Potassium, Dissolved	mg/L	5	4.7	94	80-120	
Sodium, Dissolved	mg/L	5	4.9	97	80-120	

MATRIX SPIKE SAMPLE: 2145649

Parameter	Units	30416534004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	1.3	5	6.1	97	75-125	
Iron, Dissolved	mg/L	7.9	5	12.7	94	75-125	
Magnesium, Dissolved	mg/L	1.1	5	6.1	101	75-125	
Manganese, Dissolved	mg/L	0.15	0.5	0.64	99	75-125	
Potassium, Dissolved	mg/L	0.68	5	5.4	95	75-125	
Sodium, Dissolved	mg/L	3.3	5	8.4	103	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2145651 2145652

Parameter	Units	30416540001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	121000 ug/L	5	5	124	120	46	-18	75-125	3	20	ML
Iron, Dissolved	mg/L	0.070 U	5	5	5.1	5.0	103	100	75-125	3	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30416534

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2145651 2145652

Parameter	Units	30416540001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Magnesium, Dissolved	mg/L	24100 ug/L	5	5	28.2	27.6	81	69	75-125	2	20	ML
Manganese, Dissolved	mg/L	0.0039J	0.5	0.5	0.52	0.50	102	99	75-125	3	20	
Potassium, Dissolved	mg/L	1100 ug/L	5	5	6.2	6.0	102	97	75-125	4	20	
Sodium, Dissolved	mg/L	12400 ug/L	5	5	17.4	16.9	99	89	75-125	3	20	

SAMPLE DUPLICATE: 2145648

Parameter	Units	30416534004 Result	Dup Result	RPD	Max RPD	Qualifiers
Calcium, Dissolved	mg/L	1.3	1.2	4	20	
Iron, Dissolved	mg/L	7.9	7.7	3	20	
Magnesium, Dissolved	mg/L	1.1	1.1	2	20	
Manganese, Dissolved	mg/L	0.15	0.14	3	20	
Potassium, Dissolved	mg/L	0.68	0.67	1	20	
Sodium, Dissolved	mg/L	3.3	3.3	1	20	

SAMPLE DUPLICATE: 2145650

Parameter	Units	30416540001 Result	Dup Result	RPD	Max RPD	Qualifiers
Calcium, Dissolved	mg/L	121000 ug/L	114	6	20	
Iron, Dissolved	mg/L	0.070 U	0.070 U		20	
Magnesium, Dissolved	mg/L	24100 ug/L	22.5	7	20	
Manganese, Dissolved	mg/L	0.0039J	0.0013J		20	
Potassium, Dissolved	mg/L	1100 ug/L	1.0	8	20	
Sodium, Dissolved	mg/L	12400 ug/L	11.9	5	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30416534

QC Batch: 1658684
QC Batch Method: 8260B
Analysis Method: EPA 8260B
Analysis Description: VOA (GC/MS) 8260B
Laboratory: Pace National - Mt. Juliet
Associated Lab Samples: 30416534004, 30416534005, 30416534006, 30416534007, 30416534008, 30416534009, 30416534010

METHOD BLANK: R3648588-2
Matrix: Water
Associated Lab Samples: 30416534004, 30416534005, 30416534006, 30416534007, 30416534008, 30416534009, 30416534010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acetone	ug/L	50.0 U	50.0	11.3	04/26/21 01:13	
Acrylonitrile	ug/L	10.0 U	10.0	0.671	04/26/21 01:13	
Benzene	ug/L	1.00 U	1.00	0.0941	04/26/21 01:13	
Bromodichloromethane	ug/L	1.00 U	1.00	0.136	04/26/21 01:13	
Bromochloromethane	ug/L	1.00 U	1.00	0.128	04/26/21 01:13	
Bromoform	ug/L	1.00 U	1.00	0.129	04/26/21 01:13	
Bromomethane	ug/L	5.00 U	5.00	0.605	04/26/21 01:13	
Carbon disulfide	ug/L	1.00 U	1.00	0.0962	04/26/21 01:13	
Carbon tetrachloride	ug/L	1.00 U	1.00	0.128	04/26/21 01:13	
Chlorobenzene	ug/L	1.00 U	1.00	0.116	04/26/21 01:13	
Dibromochloromethane	ug/L	1.00 U	1.00	0.140	04/26/21 01:13	
Chloroethane	ug/L	5.00 U	5.00	0.192	04/26/21 01:13	
Chloroform	ug/L	5.00 U	5.00	0.111	04/26/21 01:13	
Chloromethane	ug/L	2.50 U	2.50	0.960	04/26/21 01:13	
1,2-Dibromo-3-chloropropane	ug/L	5.00 U	5.00	0.276	04/26/21 01:13	
1,2-Dibromoethane (EDB)	ug/L	1.00 U	1.00	0.126	04/26/21 01:13	
Dibromomethane	ug/L	1.00 U	1.00	0.122	04/26/21 01:13	
1,2-Dichlorobenzene	ug/L	1.00 U	1.00	0.107	04/26/21 01:13	
1,4-Dichlorobenzene	ug/L	1.00 U	1.00	0.120	04/26/21 01:13	
trans-1,4-Dichloro-2-butene	ug/L	2.50 U	2.50	0.467	04/26/21 01:13	
Dichlorodifluoromethane	ug/L	5.00 U	5.00	0.374	04/26/21 01:13	
Dichlorofluoromethane	ug/L	5.00 U	5.00	0.130	04/26/21 01:13	
1,1-Dichloroethane	ug/L	1.00 U	1.00	0.100	04/26/21 01:13	
1,2-Dichloroethane	ug/L	1.00 U	1.00	0.0819	04/26/21 01:13	
1,1-Dichloroethene	ug/L	1.00 U	1.00	0.188	04/26/21 01:13	
cis-1,2-Dichloroethene	ug/L	1.00 U	1.00	0.126	04/26/21 01:13	
trans-1,2-Dichloroethene	ug/L	1.00 U	1.00	0.149	04/26/21 01:13	
1,2-Dichloropropane	ug/L	1.00 U	1.00	0.149	04/26/21 01:13	
cis-1,3-Dichloropropene	ug/L	1.00 U	1.00	0.111	04/26/21 01:13	
trans-1,3-Dichloropropene	ug/L	1.00 U	1.00	0.118	04/26/21 01:13	
Ethylbenzene	ug/L	1.00 U	1.00	0.137	04/26/21 01:13	
2-Hexanone	ug/L	10.0 U	10.0	0.787	04/26/21 01:13	
Iodomethane	ug/L	10.0 U	10.0	6.00	04/26/21 01:13	
2-Butanone (MEK)	ug/L	10.0 U	10.0	1.19	04/26/21 01:13	
Methylene Chloride	ug/L	5.00 U	5.00	0.430	04/26/21 01:13	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.478	04/26/21 01:13	
Methyl-tert-butyl ether	ug/L	1.00 U	1.00	0.101	04/26/21 01:13	
Styrene	ug/L	1.00 U	1.00	0.118	04/26/21 01:13	
1,1,1,2-Tetrachloroethane	ug/L	1.00 U	1.00	0.147	04/26/21 01:13	
1,1,2,2-Tetrachloroethane	ug/L	1.00 U	1.00	0.133	04/26/21 01:13	

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REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30416534

METHOD BLANK: R3648588-2 Matrix: Water
Associated Lab Samples: 30416534004, 30416534005, 30416534006, 30416534007, 30416534008, 30416534009, 30416534010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Tetrachloroethene	ug/L	1.00 U	1.00	0.300	04/26/21 01:13	
Toluene	ug/L	1.00 U	1.00	0.278	04/26/21 01:13	
1,1,1-Trichloroethane	ug/L	1.00 U	1.00	0.149	04/26/21 01:13	
1,1,2-Trichloroethane	ug/L	1.00 U	1.00	0.158	04/26/21 01:13	
Trichloroethene	ug/L	1.00 U	1.00	0.190	04/26/21 01:13	
Trichlorofluoromethane	ug/L	5.00 U	5.00	0.160	04/26/21 01:13	
1,2,3-Trichloropropane	ug/L	2.50 U	2.50	0.237	04/26/21 01:13	
Vinyl acetate	ug/L	10.0 U	10.0	0.692	04/26/21 01:13	
Vinyl chloride	ug/L	1.00 U	1.00	0.234	04/26/21 01:13	
o-Xylene	ug/L	1.00 U	1.00	0.174	04/26/21 01:13	
m&p-Xylene	ug/L	2.00 U	2.00	0.430	04/26/21 01:13	
Toluene-d8 (S)	%	103	80.0-120		04/26/21 01:13	
4-Bromofluorobenzene (S)	%	96.9	77.0-126		04/26/21 01:13	
1,2-Dichloroethane-d4 (S)	%	112	70.0-130		04/26/21 01:13	

LABORATORY CONTROL SAMPLE: R3648588-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acetone	ug/L	25.0	20.9	83.6	19.0-160	
Acrylonitrile	ug/L	25.0	23.4	93.6	55.0-149	
Benzene	ug/L	5.00	5.00	100	70.0-123	
Bromodichloromethane	ug/L	5.00	5.74	115	75.0-120	
Bromochloromethane	ug/L	5.00	4.73	94.6	76.0-122	
Bromoform	ug/L	5.00	4.78	95.6	68.0-132	
Bromomethane	ug/L	5.00	4.75	95.0	10.0-160	
Carbon disulfide	ug/L	5.00	4.48	89.6	61.0-128	
Carbon tetrachloride	ug/L	5.00	5.26	105	68.0-126	
Chlorobenzene	ug/L	5.00	4.36	87.2	80.0-121	
Dibromochloromethane	ug/L	5.00	4.49	89.8	77.0-125	
Chloroethane	ug/L	5.00	4.62	92.4	47.0-150	
Chloroform	ug/L	5.00	5.09	102	73.0-120	
Chloromethane	ug/L	5.00	4.46	89.2	41.0-142	
1,2-Dibromo-3-chloropropane	ug/L	5.00	4.13	82.6	58.0-134	
1,2-Dibromoethane (EDB)	ug/L	5.00	4.26	85.2	80.0-122	
Dibromomethane	ug/L	5.00	4.87	97.4	80.0-120	
1,2-Dichlorobenzene	ug/L	5.00	4.50	90.0	79.0-121	
1,4-Dichlorobenzene	ug/L	5.00	4.43	88.6	79.0-120	
trans-1,4-Dichloro-2-butene	ug/L	5.00	4.44	88.8	33.0-144	
Dichlorodifluoromethane	ug/L	5.00	5.70	114	51.0-149	
Dichlorofluoromethane	ug/L	5.00	5.62	112	65.0-133	
1,1-Dichloroethane	ug/L	5.00	5.21	104	70.0-126	
1,2-Dichloroethane	ug/L	5.00	6.04	121	70.0-128	
1,1-Dichloroethene	ug/L	5.00	5.07	101	71.0-124	
cis-1,2-Dichloroethene	ug/L	5.00	5.10	102	73.0-120	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30416534

LABORATORY CONTROL SAMPLE: R3648588-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,2-Dichloroethene	ug/L	5.00	4.94	98.8	73.0-120	
1,2-Dichloropropane	ug/L	5.00	4.99	99.8	77.0-125	
cis-1,3-Dichloropropene	ug/L	5.00	5.08	102	80.0-123	
trans-1,3-Dichloropropene	ug/L	5.00	4.68	93.6	78.0-124	
Ethylbenzene	ug/L	5.00	4.42	88.4	79.0-123	
2-Hexanone	ug/L	25.0	22.9	91.6	67.0-149	
Iodomethane	ug/L	25.0	23.6	94.4	33.0-147	
2-Butanone (MEK)	ug/L	25.0	25.8	103	44.0-160	
Methylene Chloride	ug/L	5.00	4.79	95.8	67.0-120	
4-Methyl-2-pentanone (MIBK)	ug/L	25.0	21.9	87.6	68.0-142	
Methyl-tert-butyl ether	ug/L	5.00	4.94	98.8	68.0-125	
Styrene	ug/L	5.00	4.33	86.6	73.0-130	
1,1,1,2-Tetrachloroethane	ug/L	5.00	4.71	94.2	75.0-125	
1,1,2,2-Tetrachloroethane	ug/L	5.00	4.20	84.0	65.0-130	
Tetrachloroethene	ug/L	5.00	4.68	93.6	72.0-132	
Toluene	ug/L	5.00	4.66	93.2	79.0-120	
1,1,1-Trichloroethane	ug/L	5.00	5.47	109	73.0-124	
1,1,2-Trichloroethane	ug/L	5.00	4.41	88.2	80.0-120	
Trichloroethene	ug/L	5.00	5.26	105	78.0-124	
Trichlorofluoromethane	ug/L	5.00	5.40	108	59.0-147	
1,2,3-Trichloropropane	ug/L	5.00	4.62	92.4	73.0-130	
Vinyl acetate	ug/L	25.0	19.7	78.8	11.0-160	
Vinyl chloride	ug/L	5.00	4.48	89.6	67.0-131	
o-Xylene	ug/L	5.00	4.41	88.2	80.0-122	
m&p-Xylene	ug/L	10.0	9.14	91.4	80.0-122	
Toluene-d8 (S)	%			96.3	80.0-120	
4-Bromofluorobenzene (S)	%			103	77.0-126	
1,2-Dichloroethane-d4 (S)	%			114	70.0-130	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30416534

QC Batch: 1659042
QC Batch Method: 8260B
Analysis Method: EPA 8260B
Analysis Description: VOA (GC/MS) 8260B
Laboratory: Pace National - Mt. Juliet
Associated Lab Samples: 30416534011

METHOD BLANK: R3647700-3
Matrix: Water
Associated Lab Samples: 30416534011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acetone	ug/L	50.0 U	50.0	11.3	04/26/21 20:32	
Acrylonitrile	ug/L	10.0 U	10.0	0.671	04/26/21 20:32	
Benzene	ug/L	1.00 U	1.00	0.0941	04/26/21 20:32	
Bromodichloromethane	ug/L	1.00 U	1.00	0.136	04/26/21 20:32	
Bromochloromethane	ug/L	1.00 U	1.00	0.128	04/26/21 20:32	
Bromoform	ug/L	1.00 U	1.00	0.129	04/26/21 20:32	
Bromomethane	ug/L	5.00 U	5.00	0.605	04/26/21 20:32	
Carbon disulfide	ug/L	1.00 U	1.00	0.0962	04/26/21 20:32	
Carbon tetrachloride	ug/L	1.00 U	1.00	0.128	04/26/21 20:32	
Chlorobenzene	ug/L	1.00 U	1.00	0.116	04/26/21 20:32	
Dibromochloromethane	ug/L	1.00 U	1.00	0.140	04/26/21 20:32	
Chloroethane	ug/L	5.00 U	5.00	0.192	04/26/21 20:32	
Chloroform	ug/L	5.00 U	5.00	0.111	04/26/21 20:32	
Chloromethane	ug/L	2.50 U	2.50	0.960	04/26/21 20:32	
1,2-Dibromo-3-chloropropane	ug/L	5.00 U	5.00	0.276	04/26/21 20:32	
1,2-Dibromoethane (EDB)	ug/L	1.00 U	1.00	0.126	04/26/21 20:32	
Dibromomethane	ug/L	1.00 U	1.00	0.122	04/26/21 20:32	
1,2-Dichlorobenzene	ug/L	1.00 U	1.00	0.107	04/26/21 20:32	
1,4-Dichlorobenzene	ug/L	1.00 U	1.00	0.120	04/26/21 20:32	
trans-1,4-Dichloro-2-butene	ug/L	2.50 U	2.50	0.467	04/26/21 20:32	
Dichlorodifluoromethane	ug/L	5.00 U	5.00	0.374	04/26/21 20:32	
Dichlorofluoromethane	ug/L	5.00 U	5.00	0.130	04/26/21 20:32	
1,1-Dichloroethane	ug/L	1.00 U	1.00	0.100	04/26/21 20:32	
1,2-Dichloroethane	ug/L	1.00 U	1.00	0.0819	04/26/21 20:32	
1,1-Dichloroethene	ug/L	1.00 U	1.00	0.188	04/26/21 20:32	
cis-1,2-Dichloroethene	ug/L	1.00 U	1.00	0.126	04/26/21 20:32	
trans-1,2-Dichloroethene	ug/L	1.00 U	1.00	0.149	04/26/21 20:32	
1,2-Dichloropropane	ug/L	1.00 U	1.00	0.149	04/26/21 20:32	
cis-1,3-Dichloropropene	ug/L	1.00 U	1.00	0.111	04/26/21 20:32	
trans-1,3-Dichloropropene	ug/L	1.00 U	1.00	0.118	04/26/21 20:32	
Ethylbenzene	ug/L	1.00 U	1.00	0.137	04/26/21 20:32	
2-Hexanone	ug/L	10.0 U	10.0	0.787	04/26/21 20:32	
Iodomethane	ug/L	10.0 U	10.0	6.00	04/26/21 20:32	
2-Butanone (MEK)	ug/L	10.0 U	10.0	1.19	04/26/21 20:32	
Methylene Chloride	ug/L	5.00 U	5.00	0.430	04/26/21 20:32	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.478	04/26/21 20:32	
Methyl-tert-butyl ether	ug/L	1.00 U	1.00	0.101	04/26/21 20:32	
Styrene	ug/L	1.00 U	1.00	0.118	04/26/21 20:32	
1,1,1,2-Tetrachloroethane	ug/L	1.00 U	1.00	0.147	04/26/21 20:32	
1,1,2,2-Tetrachloroethane	ug/L	1.00 U	1.00	0.133	04/26/21 20:32	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30416534

METHOD BLANK: R3647700-3 Matrix: Water
Associated Lab Samples: 30416534011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Tetrachloroethene	ug/L	1.00 U	1.00	0.300	04/26/21 20:32	
Toluene	ug/L	1.00 U	1.00	0.278	04/26/21 20:32	
1,1,1-Trichloroethane	ug/L	1.00 U	1.00	0.149	04/26/21 20:32	
1,1,2-Trichloroethane	ug/L	1.00 U	1.00	0.158	04/26/21 20:32	
Trichloroethene	ug/L	1.00 U	1.00	0.190	04/26/21 20:32	
Trichlorofluoromethane	ug/L	5.00 U	5.00	0.160	04/26/21 20:32	
1,2,3-Trichloropropane	ug/L	2.50 U	2.50	0.237	04/26/21 20:32	
Vinyl acetate	ug/L	10.0 U	10.0	0.692	04/26/21 20:32	
Vinyl chloride	ug/L	1.00 U	1.00	0.234	04/26/21 20:32	
o-Xylene	ug/L	1.00 U	1.00	0.174	04/26/21 20:32	
m&p-Xylene	ug/L	2.00 U	2.00	0.430	04/26/21 20:32	
Toluene-d8 (S)	%	101	80.0-120		04/26/21 20:32	
4-Bromofluorobenzene (S)	%	108	77.0-126		04/26/21 20:32	
1,2-Dichloroethane-d4 (S)	%	122	70.0-130		04/26/21 20:32	

LABORATORY CONTROL SAMPLE: R3647700-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acetone	ug/L	25.0	26.0	104	19.0-160	
Acrylonitrile	ug/L	25.0	28.6	114	55.0-149	
Benzene	ug/L	5.00	5.34	107	70.0-123	
Bromodichloromethane	ug/L	5.00	5.49	110	75.0-120	
Bromochloromethane	ug/L	5.00	5.83	117	76.0-122	
Bromoform	ug/L	5.00	5.08	102	68.0-132	
Bromomethane	ug/L	5.00	4.60	92.0	10.0-160	
Carbon disulfide	ug/L	5.00	4.61	92.2	61.0-128	
Carbon tetrachloride	ug/L	5.00	4.35	87.0	68.0-126	
Chlorobenzene	ug/L	5.00	4.86	97.2	80.0-121	
Dibromochloromethane	ug/L	5.00	5.49	110	77.0-125	
Chloroethane	ug/L	5.00	5.70	114	47.0-150	
Chloroform	ug/L	5.00	5.47	109	73.0-120	
Chloromethane	ug/L	5.00	3.98	79.6	41.0-142	
1,2-Dibromo-3-chloropropane	ug/L	5.00	4.90	98.0	58.0-134	
1,2-Dibromoethane (EDB)	ug/L	5.00	5.48	110	80.0-122	
Dibromomethane	ug/L	5.00	5.16	103	80.0-120	
1,2-Dichlorobenzene	ug/L	5.00	4.82	96.4	79.0-121	
1,4-Dichlorobenzene	ug/L	5.00	4.82	96.4	79.0-120	
trans-1,4-Dichloro-2-butene	ug/L	5.00	4.02	80.4	33.0-144	
Dichlorodifluoromethane	ug/L	5.00	4.55	91.0	51.0-149	
Dichlorofluoromethane	ug/L	5.00	5.42	108	65.0-133	
1,1-Dichloroethane	ug/L	5.00	4.46	89.2	70.0-126	
1,2-Dichloroethane	ug/L	5.00	5.87	117	70.0-128	
1,1-Dichloroethene	ug/L	5.00	5.00	100	71.0-124	
cis-1,2-Dichloroethene	ug/L	5.00	5.13	103	73.0-120	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30416534

LABORATORY CONTROL SAMPLE: R3647700-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,2-Dichloroethene	ug/L	5.00	4.81	96.2	73.0-120	
1,2-Dichloropropane	ug/L	5.00	5.79	116	77.0-125	
cis-1,3-Dichloropropene	ug/L	5.00	5.94	119	80.0-123	
trans-1,3-Dichloropropene	ug/L	5.00	5.44	109	78.0-124	
Ethylbenzene	ug/L	5.00	4.28	85.6	79.0-123	
2-Hexanone	ug/L	25.0	25.4	102	67.0-149	
Iodomethane	ug/L	25.0	20.4	81.6	33.0-147	
2-Butanone (MEK)	ug/L	25.0	29.3	117	44.0-160	
Methylene Chloride	ug/L	5.00	5.93	119	67.0-120	
4-Methyl-2-pentanone (MIBK)	ug/L	25.0	27.7	111	68.0-142	
Methyl-tert-butyl ether	ug/L	5.00	5.82	116	68.0-125	
Styrene	ug/L	5.00	4.87	97.4	73.0-130	
1,1,1,2-Tetrachloroethane	ug/L	5.00	5.82	116	75.0-125	
1,1,2,2-Tetrachloroethane	ug/L	5.00	4.82	96.4	65.0-130	
Tetrachloroethene	ug/L	5.00	4.74	94.8	72.0-132	
Toluene	ug/L	5.00	4.75	95.0	79.0-120	
1,1,1-Trichloroethane	ug/L	5.00	4.88	97.6	73.0-124	
1,1,2-Trichloroethane	ug/L	5.00	5.64	113	80.0-120	
Trichloroethene	ug/L	5.00	5.39	108	78.0-124	
Trichlorofluoromethane	ug/L	5.00	4.89	97.8	59.0-147	
1,2,3-Trichloropropane	ug/L	5.00	5.22	104	73.0-130	
Vinyl acetate	ug/L	25.0	36.2	145	11.0-160	
Vinyl chloride	ug/L	5.00	4.73	94.6	67.0-131	
o-Xylene	ug/L	5.00	4.79	95.8	80.0-122	
m&p-Xylene	ug/L	10.0	9.02	90.2	80.0-122	
Toluene-d8 (S)	%			104	80.0-120	
4-Bromofluorobenzene (S)	%			103	77.0-126	
1,2-Dichloroethane-d4 (S)	%			123	70.0-130	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30416534

QC Batch: 1661295
QC Batch Method: 8260B
Analysis Method: EPA 8260B
Analysis Description: VOA (GC/MS) 8260B
Laboratory: Pace National - Mt. Juliet
Associated Lab Samples: 30416534001, 30416534002, 30416534003

METHOD BLANK: R3649588-2
Matrix: Water
Associated Lab Samples: 30416534001, 30416534002, 30416534003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acetone	ug/L	50.0 U	50.0	11.3	04/29/21 11:30	
Acrylonitrile	ug/L	10.0 U	10.0	0.671	04/29/21 11:30	
Benzene	ug/L	1.00 U	1.00	0.0941	04/29/21 11:30	
Bromodichloromethane	ug/L	1.00 U	1.00	0.136	04/29/21 11:30	
Bromochloromethane	ug/L	1.00 U	1.00	0.128	04/29/21 11:30	
Bromoform	ug/L	1.00 U	1.00	0.129	04/29/21 11:30	
Bromomethane	ug/L	5.00 U	5.00	0.605	04/29/21 11:30	
Carbon disulfide	ug/L	1.00 U	1.00	0.0962	04/29/21 11:30	
Carbon tetrachloride	ug/L	1.00 U	1.00	0.128	04/29/21 11:30	
Chlorobenzene	ug/L	1.00 U	1.00	0.116	04/29/21 11:30	
Dibromochloromethane	ug/L	1.00 U	1.00	0.140	04/29/21 11:30	
Chloroethane	ug/L	5.00 U	5.00	0.192	04/29/21 11:30	
Chloroform	ug/L	5.00 U	5.00	0.111	04/29/21 11:30	
Chloromethane	ug/L	2.50 U	2.50	0.960	04/29/21 11:30	
1,2-Dibromo-3-chloropropane	ug/L	5.00 U	5.00	0.276	04/29/21 11:30	
1,2-Dibromoethane (EDB)	ug/L	1.00 U	1.00	0.126	04/29/21 11:30	
Dibromomethane	ug/L	1.00 U	1.00	0.122	04/29/21 11:30	
1,2-Dichlorobenzene	ug/L	1.00 U	1.00	0.107	04/29/21 11:30	
1,4-Dichlorobenzene	ug/L	1.00 U	1.00	0.120	04/29/21 11:30	
trans-1,4-Dichloro-2-butene	ug/L	2.50 U	2.50	0.467	04/29/21 11:30	
Dichlorodifluoromethane	ug/L	5.00 U	5.00	0.374	04/29/21 11:30	
Dichlorofluoromethane	ug/L	5.00 U	5.00	0.130	04/29/21 11:30	
1,1-Dichloroethane	ug/L	1.00 U	1.00	0.100	04/29/21 11:30	
1,2-Dichloroethane	ug/L	1.00 U	1.00	0.0819	04/29/21 11:30	
1,1-Dichloroethene	ug/L	1.00 U	1.00	0.188	04/29/21 11:30	
cis-1,2-Dichloroethene	ug/L	1.00 U	1.00	0.126	04/29/21 11:30	
trans-1,2-Dichloroethene	ug/L	1.00 U	1.00	0.149	04/29/21 11:30	
1,2-Dichloropropane	ug/L	1.00 U	1.00	0.149	04/29/21 11:30	
cis-1,3-Dichloropropene	ug/L	1.00 U	1.00	0.111	04/29/21 11:30	
trans-1,3-Dichloropropene	ug/L	1.00 U	1.00	0.118	04/29/21 11:30	
Ethylbenzene	ug/L	1.00 U	1.00	0.137	04/29/21 11:30	
2-Hexanone	ug/L	10.0 U	10.0	0.787	04/29/21 11:30	
Iodomethane	ug/L	10.0 U	10.0	6.00	04/29/21 11:30	
2-Butanone (MEK)	ug/L	10.0 U	10.0	1.19	04/29/21 11:30	
Methylene Chloride	ug/L	5.00 U	5.00	0.430	04/29/21 11:30	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.478	04/29/21 11:30	
Methyl-tert-butyl ether	ug/L	1.00 U	1.00	0.101	04/29/21 11:30	
Styrene	ug/L	1.00 U	1.00	0.118	04/29/21 11:30	
1,1,1,2-Tetrachloroethane	ug/L	1.00 U	1.00	0.147	04/29/21 11:30	
1,1,2,2-Tetrachloroethane	ug/L	1.00 U	1.00	0.133	04/29/21 11:30	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30416534

METHOD BLANK: R3649588-2 Matrix: Water
Associated Lab Samples: 30416534001, 30416534002, 30416534003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Tetrachloroethene	ug/L	1.00 U	1.00	0.300	04/29/21 11:30	
Toluene	ug/L	1.00 U	1.00	0.278	04/29/21 11:30	
1,1,1-Trichloroethane	ug/L	1.00 U	1.00	0.149	04/29/21 11:30	
1,1,2-Trichloroethane	ug/L	1.00 U	1.00	0.158	04/29/21 11:30	
Trichloroethene	ug/L	1.00 U	1.00	0.190	04/29/21 11:30	
Trichlorofluoromethane	ug/L	5.00 U	5.00	0.160	04/29/21 11:30	
1,2,3-Trichloropropane	ug/L	2.50 U	2.50	0.237	04/29/21 11:30	
Vinyl acetate	ug/L	10.0 U	10.0	0.692	04/29/21 11:30	
Vinyl chloride	ug/L	1.00 U	1.00	0.234	04/29/21 11:30	
o-Xylene	ug/L	1.00 U	1.00	0.174	04/29/21 11:30	
m&p-Xylene	ug/L	2.00 U	2.00	0.430	04/29/21 11:30	
Toluene-d8 (S)	%	109	80.0-120		04/29/21 11:30	
4-Bromofluorobenzene (S)	%	96.1	77.0-126		04/29/21 11:30	
1,2-Dichloroethane-d4 (S)	%	97.1	70.0-130		04/29/21 11:30	

LABORATORY CONTROL SAMPLE: R3649588-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acetone	ug/L	25.0	20.7	82.8	19.0-160	
Acrylonitrile	ug/L	25.0	27.9	112	55.0-149	
Benzene	ug/L	5.00	5.04	101	70.0-123	
Bromodichloromethane	ug/L	5.00	4.50	90.0	75.0-120	
Bromochloromethane	ug/L	5.00	5.43	109	76.0-122	
Bromoform	ug/L	5.00	4.38	87.6	68.0-132	
Bromomethane	ug/L	5.00	4.43	88.6	10.0-160	
Carbon disulfide	ug/L	5.00	4.92	98.4	61.0-128	
Carbon tetrachloride	ug/L	5.00	4.44	88.8	68.0-126	
Chlorobenzene	ug/L	5.00	5.24	105	80.0-121	
Dibromochloromethane	ug/L	5.00	4.58	91.6	77.0-125	
Chloroethane	ug/L	5.00	4.65	93.0	47.0-150	
Chloroform	ug/L	5.00	5.36	107	73.0-120	
Chloromethane	ug/L	5.00	5.68	114	41.0-142	
1,2-Dibromo-3-chloropropane	ug/L	5.00	5.00	100	58.0-134	
1,2-Dibromoethane (EDB)	ug/L	5.00	5.01	100	80.0-122	
Dibromomethane	ug/L	5.00	4.96	99.2	80.0-120	
1,2-Dichlorobenzene	ug/L	5.00	4.83	96.6	79.0-121	
1,4-Dichlorobenzene	ug/L	5.00	4.92	98.4	79.0-120	
trans-1,4-Dichloro-2-butene	ug/L	5.00	3.64	72.8	33.0-144	
Dichlorodifluoromethane	ug/L	5.00	5.14	103	51.0-149	
Dichlorofluoromethane	ug/L	5.00	4.99	99.8	65.0-133	
1,1-Dichloroethane	ug/L	5.00	5.27	105	70.0-126	
1,2-Dichloroethane	ug/L	5.00	5.22	104	70.0-128	
1,1-Dichloroethene	ug/L	5.00	4.48	89.6	71.0-124	
cis-1,2-Dichloroethene	ug/L	5.00	4.63	92.6	73.0-120	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30416534

LABORATORY CONTROL SAMPLE: R3649588-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,2-Dichloroethene	ug/L	5.00	5.23	105	73.0-120	
1,2-Dichloropropane	ug/L	5.00	5.16	103	77.0-125	
cis-1,3-Dichloropropene	ug/L	5.00	4.86	97.2	80.0-123	
trans-1,3-Dichloropropene	ug/L	5.00	4.47	89.4	78.0-124	
Ethylbenzene	ug/L	5.00	5.15	103	79.0-123	
2-Hexanone	ug/L	25.0	27.8	111	67.0-149	
Iodomethane	ug/L	25.0	25.0	100	33.0-147	
2-Butanone (MEK)	ug/L	25.0	28.5	114	44.0-160	
Methylene Chloride	ug/L	5.00	4.56	91.2	67.0-120	
4-Methyl-2-pentanone (MIBK)	ug/L	25.0	28.6	114	68.0-142	
Methyl-tert-butyl ether	ug/L	5.00	4.65	93.0	68.0-125	
Styrene	ug/L	5.00	5.09	102	73.0-130	
1,1,1,2-Tetrachloroethane	ug/L	5.00	4.60	92.0	75.0-125	
1,1,2,2-Tetrachloroethane	ug/L	5.00	5.75	115	65.0-130	
Tetrachloroethene	ug/L	5.00	5.61	112	72.0-132	
Toluene	ug/L	5.00	4.90	98.0	79.0-120	
1,1,1-Trichloroethane	ug/L	5.00	4.85	97.0	73.0-124	
1,1,2-Trichloroethane	ug/L	5.00	5.32	106	80.0-120	
Trichloroethene	ug/L	5.00	5.64	113	78.0-124	
Trichlorofluoromethane	ug/L	5.00	4.60	92.0	59.0-147	
1,2,3-Trichloropropane	ug/L	5.00	6.22	124	73.0-130	
Vinyl acetate	ug/L	25.0	19.5	78.0	11.0-160	
Vinyl chloride	ug/L	5.00	5.32	106	67.0-131	
o-Xylene	ug/L	5.00	4.70	94.0	80.0-122	
m&p-Xylene	ug/L	10.0	10.3	103	80.0-122	
Toluene-d8 (S)	%			107	80.0-120	
4-Bromofluorobenzene (S)	%			95.2	77.0-126	
1,2-Dichloroethane-d4 (S)	%			95.4	70.0-130	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30416534

QC Batch: 446152
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416534002, 30416534004, 30416534005, 30416534007, 30416534008

METHOD BLANK: 2153234 Matrix: Water
Associated Lab Samples: 30416534002, 30416534004, 30416534005, 30416534007, 30416534008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	05/03/21 14:51	

LABORATORY CONTROL SAMPLE: 2153235

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2153236 2153237

Parameter	Units	30417342001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	ND	50	50	63.0	60.0	116	110	85-115	5	20	MH

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30416534

QC Batch: 446391
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416534001, 30416534003, 30416534006, 30416534009, 30416534010

METHOD BLANK: 2154250 Matrix: Water
Associated Lab Samples: 30416534001, 30416534003, 30416534006, 30416534009, 30416534010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	1.0J	10.0	1.0	05/04/21 16:21	

LABORATORY CONTROL SAMPLE: 2154251

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2154252 2154253

Parameter	Units	30416534001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	42.0	50	50	96.0	94.0	108	104	85-115	2	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30416534

QC Batch: 444463
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416534002, 30416534004, 30416534005, 30416534007, 30416534008

METHOD BLANK: 2145677 Matrix: Water
Associated Lab Samples: 30416534002, 30416534004, 30416534005, 30416534007, 30416534008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	04/22/21 16:42	

LABORATORY CONTROL SAMPLE: 2145678

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	973	97	85-115	

SAMPLE DUPLICATE: 2145679

Parameter	Units	30416250001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	205	201	2	5	

SAMPLE DUPLICATE: 2145680

Parameter	Units	30416452001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	355	352	1	5	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30416534

QC Batch: 444899
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416534001, 30416534003, 30416534006, 30416534009, 30416534010

METHOD BLANK: 2147741 Matrix: Water
Associated Lab Samples: 30416534001, 30416534003, 30416534006, 30416534009, 30416534010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	04/26/21 14:48	

LABORATORY CONTROL SAMPLE: 2147742

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	943	94	85-115	

SAMPLE DUPLICATE: 2147743

Parameter	Units	30416534001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	53.0	48.0	10	5	D6

SAMPLE DUPLICATE: 2147744

Parameter	Units	30416762005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	139	146	5	5	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30416534

QC Batch: 446213
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416534001, 30416534002, 30416534003, 30416534004, 30416534005, 30416534006, 30416534007, 30416534008, 30416534009, 30416534010

METHOD BLANK: 2153513
Matrix: Water
Associated Lab Samples: 30416534001, 30416534002, 30416534003, 30416534004, 30416534005, 30416534006, 30416534007, 30416534008, 30416534009, 30416534010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.044	05/04/21 10:09	

LABORATORY CONTROL SAMPLE: 2153514

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.1	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2153515 2153516

Parameter	Units	30416534001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	3.8	3.8	95	95	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2153517 2153518

Parameter	Units	30416699001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.19	4	4	4.1	4.2	98	99	90-110	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30416534

QC Batch: 444907
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416534001, 30416534002, 30416534003, 30416534004, 30416534005, 30416534006, 30416534007, 30416534008, 30416534009, 30416534010

METHOD BLANK: 2147774
Matrix: Water
Associated Lab Samples: 30416534001, 30416534002, 30416534003, 30416534004, 30416534005, 30416534006, 30416534007, 30416534008, 30416534009, 30416534010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	04/26/21 16:42	

LABORATORY CONTROL SAMPLE: 2147775

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	309	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2147776 2147777

Parameter	Units	30416524001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	94.8	150	150	222	244	85	100	90-110	9	10	ML

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2147778 2147779

Parameter	Units	30416534003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	25.0 U	150	150	151	149	98	97	90-110	1	10	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30416534

QC Batch: 446461
QC Batch Method: SM 4500ClE-2011
Analysis Method: SM 4500ClE-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416534001, 30416534002, 30416534003, 30416534004, 30416534005, 30416534006, 30416534007, 30416534008, 30416534009, 30416534010

METHOD BLANK: 2154623
Matrix: Water
Associated Lab Samples: 30416534001, 30416534002, 30416534003, 30416534004, 30416534005, 30416534006, 30416534007, 30416534008, 30416534009, 30416534010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/05/21 13:16	

LABORATORY CONTROL SAMPLE: 2154624

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	19.6	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2154625 2154626

Parameter	Units	30416534001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	7.1	20	20	28.2	27.7	106	103	85-115	2	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30416534

QC Batch: 445574 | Analysis Method: SM 4500NO3F-2011
QC Batch Method: SM 4500NO3F-2011 | Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416534001, 30416534002, 30416534003, 30416534004, 30416534005, 30416534006, 30416534007, 30416534008, 30416534009, 30416534010

METHOD BLANK: 2150752 | Matrix: Water
Associated Lab Samples: 30416534001, 30416534002, 30416534003, 30416534004, 30416534005, 30416534006, 30416534007, 30416534008, 30416534009, 30416534010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.024	04/29/21 14:59	

LABORATORY CONTROL SAMPLE: 2150753

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	3.8	95	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2150754 2150755

Parameter	Units	30416534001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.048J	5	5	3.8	3.8	76	75	85-115	1	20	ML

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30416534

QC Batch: 445663
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416534001, 30416534002, 30416534003, 30416534004, 30416534005, 30416534006, 30416534007, 30416534008, 30416534009, 30416534010

METHOD BLANK: 2151175
Matrix: Water
Associated Lab Samples: 30416534001, 30416534002, 30416534003, 30416534004, 30416534005, 30416534006, 30416534007, 30416534008, 30416534009, 30416534010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	04/30/21 16:35	

LABORATORY CONTROL SAMPLE: 2151176

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	28.3	94	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2151177 2151178

Parameter	Units	30416534001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.0 U	20	20	18.3	17.5	91	88	85-115	4	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2151179 2151180

Parameter	Units	30416762001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	30.1	20	20	46.7	45.9	83	79	85-115	2	20	ML

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30416534

QC Batch: 444268
QC Batch Method: SM 4500NO2B-2011
Analysis Method: SM 4500NO2B-2011
Analysis Description: SM4500NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416534002, 30416534004, 30416534005, 30416534007, 30416534008, 30416534009, 30416534010

METHOD BLANK: 2144666 Matrix: Water
Associated Lab Samples: 30416534002, 30416534004, 30416534005, 30416534007, 30416534008, 30416534009, 30416534010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	04/21/21 10:31	

LABORATORY CONTROL SAMPLE: 2144667

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.099	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2144668 2144669

Parameter	Units	30416534007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrite as N	mg/L	0.010 U	0.1	0.1	0.098	0.097	98	97	85-115	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30416534

QC Batch: 444426
QC Batch Method: SM 4500NO2B-2011
Analysis Method: SM 4500NO2B-2011
Analysis Description: SM4500NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416534001, 30416534003, 30416534006

METHOD BLANK: 2145432 Matrix: Water
Associated Lab Samples: 30416534001, 30416534003, 30416534006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	04/21/21 21:24	

LABORATORY CONTROL SAMPLE: 2145433

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.10	100	90-110	

MATRIX SPIKE SAMPLE: 2145435

Parameter	Units	30416534006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.010 U	0.1	0.10	100	85-115	

SAMPLE DUPLICATE: 2145434

Parameter	Units	30416534006 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010 U		20	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: MLF-SPRING 2021
Pace Project No.: 30416534

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

1c	ALKALINITY TV = 0
2c	ALKALINITY TV = 0 MG/l
3c	ALKALINITY TV = 1
4c	ALKALINITY TV = 1 MG/l
5c	ALKALINITY TV = 2
6c	ALKALINITY TV = 8 MG/l
D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
J	Analyte detected below the reporting limit, therefore result is an estimate. This qualifier is also used for all TICs.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30416534001	**TW-1**	EPA 3005A	444676	EPA 6010B	444759
30416534002	**TW-6**	EPA 3005A	444676	EPA 6010B	444759
30416534003	**TW-10A**	EPA 3005A	444676	EPA 6010B	444759
30416534004	**TW-14**	EPA 3005A	444676	EPA 6010B	444759
30416534005	**TW-14A**	EPA 3005A	444676	EPA 6010B	444759
30416534006	**TW-23R**	EPA 3005A	444676	EPA 6010B	444759
30416534007	**TW-24**	EPA 3005A	444676	EPA 6010B	444759
30416534008	**TW-25A**	EPA 3005A	444676	EPA 6010B	444759
30416534009	**TW-28**	EPA 3005A	444676	EPA 6010B	444759
30416534010	**TW-29**	EPA 3005A	444676	EPA 6010B	444759
30416534001	**TW-1**	EPA 3005A	444457	EPA 6010B	444538
30416534002	**TW-6**	EPA 3005A	444457	EPA 6010B	444538
30416534003	**TW-10A**	EPA 3005A	444457	EPA 6010B	444538
30416534004	**TW-14**	EPA 3005A	444457	EPA 6010B	444538
30416534005	**TW-14A**	EPA 3005A	444457	EPA 6010B	444538
30416534006	**TW-23R**	EPA 3005A	444457	EPA 6010B	444538
30416534007	**TW-24**	EPA 3005A	444457	EPA 6010B	444538
30416534008	**TW-25A**	EPA 3005A	444457	EPA 6010B	444538
30416534009	**TW-28**	EPA 3005A	444457	EPA 6010B	444538
30416534010	**TW-29**	EPA 3005A	444457	EPA 6010B	444538
30416534001	**TW-1**	EPA 7470A	444975	EPA 7470A	445048
30416534002	**TW-6**	EPA 7470A	444975	EPA 7470A	445048
30416534003	**TW-10A**	EPA 7470A	444975	EPA 7470A	445048
30416534004	**TW-14**	EPA 7470A	444975	EPA 7470A	445048
30416534005	**TW-14A**	EPA 7470A	444975	EPA 7470A	445048
30416534006	**TW-23R**	EPA 7470A	444975	EPA 7470A	445048
30416534007	**TW-24**	EPA 7470A	444975	EPA 7470A	445048
30416534008	**TW-25A**	EPA 7470A	444975	EPA 7470A	445048
30416534009	**TW-28**	EPA 7470A	444975	EPA 7470A	445048
30416534010	**TW-29**	EPA 7470A	444975	EPA 7470A	445048
30416534001	**TW-1**	8260B	1661295	EPA 8260B	1661295
30416534002	**TW-6**	8260B	1661295	EPA 8260B	1661295
30416534003	**TW-10A**	8260B	1661295	EPA 8260B	1661295
30416534004	**TW-14**	8260B	1658684	EPA 8260B	1658684
30416534005	**TW-14A**	8260B	1658684	EPA 8260B	1658684
30416534006	**TW-23R**	8260B	1658684	EPA 8260B	1658684
30416534007	**TW-24**	8260B	1658684	EPA 8260B	1658684
30416534008	**TW-25A**	8260B	1658684	EPA 8260B	1658684
30416534009	**TW-28**	8260B	1658684	EPA 8260B	1658684
30416534010	**TW-29**	8260B	1658684	EPA 8260B	1658684
30416534011	**TRIP BLANK**	8260B	1659042	EPA 8260B	1659042
30416534001	**TW-1**	SM 2320B-2011	446391		
30416534002	**TW-6**	SM 2320B-2011	446152		
30416534003	**TW-10A**	SM 2320B-2011	446391		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30416534004	**TW-14**	SM 2320B-2011	446152		
30416534005	**TW-14A**	SM 2320B-2011	446152		
30416534006	**TW-23R**	SM 2320B-2011	446391		
30416534007	**TW-24**	SM 2320B-2011	446152		
30416534008	**TW-25A**	SM 2320B-2011	446152		
30416534009	**TW-28**	SM 2320B-2011	446391		
30416534010	**TW-29**	SM 2320B-2011	446391		
30416534001	**TW-1**	SM 2540C-2011	444899		
30416534002	**TW-6**	SM 2540C-2011	444463		
30416534003	**TW-10A**	SM 2540C-2011	444899		
30416534004	**TW-14**	SM 2540C-2011	444463		
30416534005	**TW-14A**	SM 2540C-2011	444463		
30416534006	**TW-23R**	SM 2540C-2011	444899		
30416534007	**TW-24**	SM 2540C-2011	444463		
30416534008	**TW-25A**	SM 2540C-2011	444463		
30416534009	**TW-28**	SM 2540C-2011	444899		
30416534010	**TW-29**	SM 2540C-2011	444899		
30416534001	**TW-1**	EPA 350.1	446213	EPA 350.1	446216
30416534002	**TW-6**	EPA 350.1	446213	EPA 350.1	446216
30416534003	**TW-10A**	EPA 350.1	446213	EPA 350.1	446216
30416534004	**TW-14**	EPA 350.1	446213	EPA 350.1	446216
30416534005	**TW-14A**	EPA 350.1	446213	EPA 350.1	446216
30416534006	**TW-23R**	EPA 350.1	446213	EPA 350.1	446216
30416534007	**TW-24**	EPA 350.1	446213	EPA 350.1	446216
30416534008	**TW-25A**	EPA 350.1	446213	EPA 350.1	446216
30416534009	**TW-28**	EPA 350.1	446213	EPA 350.1	446216
30416534010	**TW-29**	EPA 350.1	446213	EPA 350.1	446216
30416534001	**TW-1**	EPA 410.4	444907	EPA 410.4	445031
30416534002	**TW-6**	EPA 410.4	444907	EPA 410.4	445031
30416534003	**TW-10A**	EPA 410.4	444907	EPA 410.4	445031
30416534004	**TW-14**	EPA 410.4	444907	EPA 410.4	445031
30416534005	**TW-14A**	EPA 410.4	444907	EPA 410.4	445031
30416534006	**TW-23R**	EPA 410.4	444907	EPA 410.4	445031
30416534007	**TW-24**	EPA 410.4	444907	EPA 410.4	445031
30416534008	**TW-25A**	EPA 410.4	444907	EPA 410.4	445031
30416534009	**TW-28**	EPA 410.4	444907	EPA 410.4	445031
30416534010	**TW-29**	EPA 410.4	444907	EPA 410.4	445031
30416534001	**TW-1**	SM 4500CIE-2011	446461		
30416534002	**TW-6**	SM 4500CIE-2011	446461		
30416534003	**TW-10A**	SM 4500CIE-2011	446461		
30416534004	**TW-14**	SM 4500CIE-2011	446461		
30416534005	**TW-14A**	SM 4500CIE-2011	446461		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2021
Pace Project No.: 30416534

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30416534006	**TW-23R**	SM 4500CIE-2011	446461		
30416534007	**TW-24**	SM 4500CIE-2011	446461		
30416534008	**TW-25A**	SM 4500CIE-2011	446461		
30416534009	**TW-28**	SM 4500CIE-2011	446461		
30416534010	**TW-29**	SM 4500CIE-2011	446461		
30416534001	**TW-1**	SM 4500NO3F-2011	445574		
30416534002	**TW-6**	SM 4500NO3F-2011	445574		
30416534003	**TW-10A**	SM 4500NO3F-2011	445574		
30416534004	**TW-14**	SM 4500NO3F-2011	445574		
30416534005	**TW-14A**	SM 4500NO3F-2011	445574		
30416534006	**TW-23R**	SM 4500NO3F-2011	445574		
30416534007	**TW-24**	SM 4500NO3F-2011	445574		
30416534008	**TW-25A**	SM 4500NO3F-2011	445574		
30416534009	**TW-28**	SM 4500NO3F-2011	445574		
30416534010	**TW-29**	SM 4500NO3F-2011	445574		
30416534001	**TW-1**	EPA 9038	445663		
30416534002	**TW-6**	EPA 9038	445663		
30416534003	**TW-10A**	EPA 9038	445663		
30416534004	**TW-14**	EPA 9038	445663		
30416534005	**TW-14A**	EPA 9038	445663		
30416534006	**TW-23R**	EPA 9038	445663		
30416534007	**TW-24**	EPA 9038	445663		
30416534008	**TW-25A**	EPA 9038	445663		
30416534009	**TW-28**	EPA 9038	445663		
30416534010	**TW-29**	EPA 9038	445663		
30416534001	**TW-1**	SM 4500NO2B-2011	444426		
30416534002	**TW-6**	SM 4500NO2B-2011	444268		
30416534003	**TW-10A**	SM 4500NO2B-2011	444426		
30416534004	**TW-14**	SM 4500NO2B-2011	444268		
30416534005	**TW-14A**	SM 4500NO2B-2011	444268		
30416534006	**TW-23R**	SM 4500NO2B-2011	444426		
30416534007	**TW-24**	SM 4500NO2B-2011	444268		
30416534008	**TW-25A**	SM 4500NO2B-2011	444268		
30416534009	**TW-28**	SM 4500NO2B-2011	444268		
30416534010	**TW-29**	SM 4500NO2B-2011	444268		

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WO# : 30416534

30416534

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - SPMNL 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals (1)	Total + Diss. Metals (2)	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO_4, COD		VOCs - Method 8260				
1	TW-1	7	4.20.21	1330	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓				001
2	TW-6	↓	4.19.21	1410	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				002
3	TW-10A	↓	4.20.21	1120	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				003
4	TW-14	↓	4.19.21	1530	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				004
5	TW-14A	↓	4.19.21	1450	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				005
6	TW-23R	↓	4.20.21	1230	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				006
7	TW-24	↓	4.19.21	1320	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				007
8	TW-25A	↓	4.19.21	1630	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				008
9	TW-28	↓	4.20.21	930	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				009
10	TW-29	↓	4.20.21	830	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				010
11	TRIP BLANK	2	4.20.21	—	—		QC									↓				011
12																				

	Signature	Date	Time	Comments
Relinquished by	[signature]	4-20-21	1515	(1) Sb, As, Ba, Be, Cd, Cr, Co, Cu, Hg, Pb, Ni, Se, Ag, Tl, V, Zn
Received by	[signature] / PACE	4-20-21	1515	(2) Ca, Fe, Mg, Mn, K, Na
Relinquished by	[signature] / PACE	4-20-21	1845	
Received by	RDS PACE	4-20-21	1900	PACE - G - BURG - METALS + WET CHEM
Relinquished by	RDS PACE	4-20-21	2215	PACE NAT'L - VOCs - SEE ATTACHED LIST (3)
Received by	Marvin J Hand	4-20-2021	2215	LEVEL 2 REPORT

Cooler Temp on Arrival: 3.4 | 2.9 Deg. C

Rev. Aug. 2018

TABLE 2-2

APPENDIX I
EPA METHOD 8260 - VOLATILE ORGANIC COMPOUNDS AND DETECTION LIMITS

Millersville Landfill, Anne Arundel County, MD

Parameter	PQL (ppb)	Parameter	PQL (ppb)
Acetone	5.0	cis-1,2-Dichloroethene	1.0
Acrylonitrile	5.0	trans-1,2-Dichloroethene	1.0
Benzene	1.0	Dichlorofluoromethane*	1.0
Bromochloromethane	1.0	Methylene chloride	1.0
Bromodichloromethane	1.0	1,2-Dichloropropane	1.0
Bromoform	1.0	trans-1,3-Dichloropropene	1.0
Bromomethane	1.0	cis-1,3-Dichloropropene	1.0
2-Butanone	5.0	Ethylbenzene	1.0
Carbon disulfide	1.0	2-Hexanone	5.0
Carbon tetrachloride	1.0	Iodomethane	1.0
Chlorobenzene	1.0	4-Methyl-2-pentanone	5.0
Chloroethane	1.0	Styrene	1.0
Chloroform	1.0	1,1,1,2-Tetrachloroethane	1.0
Chloromethane	1.0	1,1,2,2-Tetrachloroethane	1.0
Dibromochloromethane	1.0	Tetrachloroethene	1.0
1,2-Dibromo-3-chloropropane (DBCP)	1.0	Toluene	1.0
1,2 - Dibromoethane (EDB)	1.0	1,1,1-Trichloroethane	1.0
Dibromomethane	1.0	1,1,2-Trichloroethane	1.0
1,2 - Dichlorobenzene	1.0	Trichloroethene	1.0
1,4 - Dichlorobenzene	1.0	Trichloroflouromethane	1.0
trans-1,4-dichloro-2-butene	1.0	1,2,3-Trichloropropane	1.0
Dichlorodifluoromethane*	1.0	Vinyl acetate	1.0
1,1-Dichloroethane	1.0	Vinyl chloride	1.0
1,2-Dichloroethane	1.0	o-Xylene	1.0
1,1-Dichloroethene	1.0	m+p-Xylenes	1.0

NOTES: 1) PQL = Practical quantitation limit d: 8260-1dl.doc
2) * = Additional compounds not included on Appendix I list.

Pittsburgh Lab Sample Condition Upon Receipt

30416534

Pace Analytical

Client Name: EMA Project # _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label MC
LIMS Login MC

Tracking #: VIA

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 9 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 3.5/3.0 °C Correction Factor: -.1 °C Final Temp: 3.4/2.9 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# 10D1101	Date and Initials of person examining contents: MC 4/21/2021
Chain of Custody Present:	✓			1.	
Chain of Custody Filled Out:	✓			2.	
Chain of Custody Relinquished:	✓			3.	
Sampler Name & Signature on COC:		✓		4. No Signature on COC	
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.	
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):	✓			7.	
Rush Turn Around Time Requested:	✓			8.	
Sufficient Volume:	✓			9.	
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.	
Containers Intact:	✓			11.	
Orthophosphate field filtered			✓	12.	
Hex Cr Aqueous sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.	
All containers meet method preservation requirements.	✓			Initial when completed MC	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:	✓			18.	
Trip Blank Custody Seals Present	✓				
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed:	Date: / Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

F018

Internal Transfer Chain of Custody

☐ Samples Pre-Logged into eCOC.

Pace Analytical®
www.pacelabs.com

State Of Origin: MD
Cert. Needed: [X] Yes ☐ No

Workorder: 30416534 **Workorder Name:** MLF-SPRING 2021 **Owner Received Date:** 4/20/2021 **Results Requested By:** 5/5/2021

Report To

Samantha Bayura
Pace Analytical Pittsburgh
1638 Roseytown Road
Suites 2,3,4
Greensburg, PA 15601
Phone (724)850-5622

Subcontract To

Pace National
12065 Lebanon Rd
Mt. Juliet, TN 37122
Phone (615) 758-5858

Requested Analysis

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HCL	VOC by 8260	LAB USE ONLY
1	TW-1	PS	4/20/2021 13:30	30416534001	Water	10	X	L1343069
2	TW-6	PS	4/19/2021 14:10	30416534002	Water	11	X	
3	TW-10A	PS	4/20/2021 11:20	30416534003	Water	12	X	
4	TW-14	PS	4/19/2021 15:30	30416534004	Water	13	X	-01
5	TW-14A	PS	4/19/2021 14:50	30416534005	Water	1	X	-02
6	TW-23R	PS	4/20/2021 12:30	30416534006	Water	1	X	-03
7	TW-24	PS	4/19/2021 13:20	30416534007	Water	1	X	-04
8	TW-25A	PS	4/19/2021 16:30	30416534008	Water	1	X	-05
9	TW-28	PS	4/20/2021 09:30	30416534009	Water	1	X	-06
10	TW-29	PS	4/20/2021 08:30	30416534010	Water	1	X	-07
11	TRIP BLANK	PS	4/20/2021 00:01	30416534011	Water	1	X	-08

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature]	4/20/21 1700	Olivia [illegible]	4/23/21 915
2				
3				

Comments

List attached to COC
Report in ug/L

Cooler Temperature on Receipt ____ °C | **Custody Seal** Y or N | **Received on Ice** Y or N | **Samples Intact** Y or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.*
This chain of custody is considered complete as is since this information is available in the owner laboratory. Fedex: 9242 2961 5668

1.7 + 0 = 1.7
A2 B8

Sample Receipt Checklist
COC Seal Present/Intact: ✓Y__N
COC Signed/Accurate: ✓Y__N
Bottles arrive intact: ✓Y__N
Correct bottles used: ✓Y__N
Sufficient volume sent: ✓Y__N
RAD Screen <0.5 mR/hr: ✓Y__N
If Applicable
VOA Zero Headspace: ✓Y__N
Pres.Correct/Check: __Y__N

WO# : 30416534

30416534

L1343069

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - SPMNL 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater
SW = Surface Water
SO = Soil
LE = Leachate
DW = Drinking Water
Other
QC = Quality Control

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals (1)	Total + Diss. Metals (2)	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO_4, COD		VOCs - Method 8260				
1	TW-1	7	4.20.21	1330	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓				001
2	TW-6		4.19.21	1410																002
3	TW-10A		4.20.21	1120																003
4	TW-14		4.19.21	1530																004
5	TW-14A		4.19.21	1450																005
6	TW-23R		4.20.21	1230																006
7	TW-24		4.19.21	1320																007
8	TW-25A		4.19.21	1630																008
9	TW-28		4.20.21	930																009
10	TW-29		4.20.21	830																010
11	TRIP BLANK	2	4.20.21	—	—		QC													011
12																				

	Signature	Date	Time
Relinquished by	[illegible]	4-20-21	1515
Received by	[illegible] PACE	4-20-21	1515
Relinquished by	[illegible] PACE	4-20-21	1845
Received by	RDS PACE	4-20-21	1800
Relinquished by	RDS PACE	4-20-21	2215
Received by	Maria L Ulano	4-20-2021	2215

Comments

(1) Sb, As, Ba, Be, Cd, Cr, Co, Cu, Hg, Pb, Ni, Se, Ag, Tl, V, Zn
(2) Ca, Fe, Mg, Mn, K, Na

PACE - G - BURG - METALS + WET CHEM
PACE NAT'L - VOCs - SEE ATTACHED LIST (3)
LEVEL 2 REPORT

Rev. Aug. 2018

Cooler Temp on Arrival: 3.4 | 2.9 Deg. C

L1343069

TABLE 2-2

APPENDIX I
EPA METHOD 8260 - VOLATILE ORGANIC COMPOUNDS AND DETECTION LIMITS

Millersville Landfill, Anne Arundel County, MD

Parameter	PQL (ppb)	Parameter	PQL (ppb)
Acetone	5.0	cis-1,2-Dichloroethene	1.0
Acrylonitrile	5.0	trans-1,2-Dichloroethene	1.0
Benzene	1.0	Dichlorofluoromethane*	1.0
Bromochloromethane	1.0	Methylene chloride	1.0
Bromodichloromethane	1.0	1,2-Dichloropropane	1.0
Bromoform	1.0	trans-1,3-Dichloropropene	1.0
Bromomethane	1.0	cis-1,3-Dichloropropene	1.0
2-Butanone	5.0	Ethylbenzene	1.0
Carbon disulfide	1.0	2-Hexanone	5.0
Carbon tetrachloride	1.0	Iodomethane	1.0
Chlorobenzene	1.0	4-Methyl-2-pentanone	5.0
Chloroethane	1.0	Styrene	1.0
Chloroform	1.0	1,1,1,2-Tetrachloroethane	1.0
Chloromethane	1.0	1,1,2,2-Tetrachloroethane	1.0
Dibromochloromethane	1.0	Tetrachloroethene	1.0
1,2-Dibromo-3-chloropropane (DBCP)	1.0	Toluene	1.0
1,2 - Dibromoethane (EDB)	1.0	1,1,1-Trichloroethane	1.0
Dibromomethane	1.0	1,1,2-Trichloroethane	1.0
1,2 - Dichlorobenzene	1.0	Trichloroethene	1.0
1,4 - Dichlorobenzene	1.0	Trichloroflouromethane	1.0
trans-1,4-dichloro-2-butene	1.0	1,2,3-Trichloropropane	1.0
Dichlorodifluoromethane*	1.0	Vinyl acetate	1.0
1,1-Dichloroethane	1.0	Vinyl chloride	1.0
1,2-Dichloroethane	1.0	o-Xylene	1.0
1,1-Dichloroethene	1.0	m+p-Xylenes	1.0

d: 8260-1dl.doc

NOTES: 1) PQL = Practical quantitation limit
2) * = Additional compounds not included on Appendix I list.

Pittsburgh Lab Sample Condition Upon Receipt

30416534

Pace Analytical

Client Name: EMA

Project # _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label MLC
LIMS Login MLC

L1343069

Tracking #: UIA

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 9 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 3.5/3.0 °C Correction Factor: -.1 °C Final Temp: 3.4/2.9 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# 10D1101	Date and Initials of person examining contents: MLC 4/21/2021
Chain of Custody Present:	✓			1.	
Chain of Custody Filled Out:	✓			2.	
Chain of Custody Relinquished:	✓			3.	
Sampler Name & Signature on COC:		✓		4. no Signature on COC	
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.	
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):	✓			7.	
Rush Turn Around Time Requested:	✓			8.	
Sufficient Volume:	✓			9.	
Correct Containers Used:	✓			10.	
-Pace Containers Used:	✓				
Containers Intact:	✓			11.	
Orthophosphate field filtered			✓	12.	
Hex Cr Aqueous sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: (VOA) coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.	
All containers meet method preservation requirements.	✓			Initial when completed MLC	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:	✓			18.	
Trip Blank Custody Seals Present	✓				
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed:	Date: / Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

L1343069 PACEGPA NCF PM

R5

Time estimate: oh **Time spent:** oh

Members

Paul Minnich (responsible) NM Nancy McLain

- [x] Missing samples
- [ ] Parameter(s) past holding time
- [ ] Temperature not in range
- [ ] Improper container type
- [ ] pH not in range
- [ ] Insufficient sample volume
- [ ] Sample is biphasic
- [ ] Vials received with headspace
- [ ] Broken container
- [ ] Sufficient sample remains
- [ ] If broken container: Insufficient packing material around container
- [ ] If broken container: Insufficient packing material inside cooler
- [ ] If broken container: Improper handling by carrier:_____
- [ ] If broken container: Sample was frozen
- [ ] If broken container: Container lid not intact
- [ ] Client informed by Call
- [ ] Client informed by Email
- [ ] Client informed by Voicemail
- [ ] Date/Time:_____
- [ ] PM initials:_____
- [ ] Client Contact:_____

Comments

Paul Minnich *23 April 2021 2:58 PM*

Did not receive the first three samples

Nancy McLain *26 April 2021 7:07 AM*

missing containers should arrive 4/27

F104

Internal Transfer Chain of Custody

Pace Analytical®
www.pacelabs.com

☐ Samples Pre-Logged into eCOC.

State Of Origin: MD
Cert. Needed: [X] Yes ☐ No
Owner Received Date: 4/20/2021 Results Requested By: 5/5/2021

Workorder: 30416534 **Workorder Name:** MLF-SPRING 2021

Report To

Samantha Bayura
Pace Analytical Pittsburgh
1638 Roseytown Road
Suites 2,3,4
Greensburg, PA 15601
Phone (724)850-5622

Subcontract To

Pace National
12065 Lebanon Rd
Mt. Juliet, TN 37122
Phone (615) 758-5858

Requested Analysis

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HCL	VOC by 8260	LAB USE ONLY
1	TW-1	PS	4/20/2021 13:30	30416534001	Water	3	X	L1343069 ~~L1344561~~
2	TW-6	PS	4/19/2021 14:10	30416534002	Water	3	X	
3	TW-10A	PS	4/20/2021 11:20	30416534003	Water	3	X	
4	TW-14	PS	4/19/2021 15:30	30416534004	Water	1	X	
5	TW-14A	PS	4/19/2021 14:50	30416534005	Water	1	X	
6	TW-23R	PS	4/20/2021 12:30	30416534006	Water	1	X	
7	TW-24	PS	4/19/2021 13:20	30416534007	Water	1	X	
8	TW-25A	PS	4/19/2021 16:30	30416534008	Water	1	X	
9	TW-28	PS	4/20/2021 09:30	30416534009	Water	1	X	
10	TW-29	PS	4/20/2021 08:30	30416534010	Water	1	X	
11	TRIP BLANK	PS	4/20/2021 00:01	30416534011	Water	1	X	

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature]	4/20/21 1700	[signature]	4/21/21 9:15
2				
3				

Comments

List attached to COC
Report in ug/L

Cooler Temperature on Receipt ____ °C | **Custody Seal** Y or N | **Received on Ice** Y or N | **Samples Intact** Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.
This chain of custody is considered complete as is since this information is available in the owner laboratory. Fedex: 9242 2961 6138

-9.2=.7
A6 8°C

Sample Receipt Checklist

COC Seal Present/Intact: Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
RAD Screen <0.5 mR/hr: Y N

If Applicable
VOA Zero Headspace: Y N
Pres.Correct/Check: Y N

WO#: 30416534

30416534

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - SPMNL 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals ①	Total + Diss. Metals ②	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO_4, COD		VOCs - Method 8260				
1	TW-1	7	4.20.21	1330	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓				001
2	TW-6		4.19.21	1410																002
3	TW-10A		4.20.21	1120																003
4	TW-14		4.19.21	1530																004
5	TW-14A		4.19.21	1450																005
6	TW-23R		4.20.21	1230																006
7	TW-24		4.19.21	1320																007
8	TW-25A		4.19.21	1630																008
9	TW-28		4.20.21	930																009
10	TW-29	↓	4.20.21	830	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				010
11	TRIP BLANK	2	4.20.21	—	—		QC									↓				011
12																				

	Signature	Date	Time	Comments
Relinquished by	[signature]	4-20-21	1515	① Sb, As, Ba, Be, Cd, Cr, Co, Cu, Hg, Pb, Ni, Se, Ag, Tl, V, Zn
Received by	[signature] / PACE	4-20-21	1515	② Ca, Fe, Mg, Mn, K, Na
Relinquished by	[signature] / PACE	4-20-21	1845	
Received by	RDS PACE	4-20-21	1800	PACE - E-BURG - METALS + WET CHEM
Relinquished by	RDS PACE	4-20-21	2215	PACE NAT'L - VOCs - SEE ATTACHED LIST ③
Received by	Marina J Ulano	4-20-2021	2215	LEVEL 2 REPORT

Cooler Temp on Arrival: 3.4 / 2.9 Deg. C

Rev. Aug. 2018

TABLE 2-2

APPENDIX I
EPA METHOD 8260 - VOLATILE ORGANIC COMPOUNDS AND DETECTION LIMITS

Millersville Landfill, Anne Arundel County, MD

Parameter	PQL (ppb)	Parameter	PQL (ppb)
Acetone	5.0	cis-1,2-Dichloroethene	1.0
Acrylonitrile	5.0	trans-1,2-Dichloroethene	1.0
Benzene	1.0	Dichlorofluoromethane*	1.0
Bromochloromethane	1.0	Methylene chloride	1.0
Bromodichloromethane	1.0	1,2-Dichloropropane	1.0
Bromoform	1.0	trans-1,3-Dichloropropene	1.0
Bromomethane	1.0	cis-1,3-Dichloropropene	1.0
2-Butanone	5.0	Ethylbenzene	1.0
Carbon disulfide	1.0	2-Hexanone	5.0
Carbon tetrachloride	1.0	Iodomethane	1.0
Chlorobenzene	1.0	4-Methyl-2-pentanone	5.0
Chloroethane	1.0	Styrene	1.0
Chloroform	1.0	1,1,1,2-Tetrachloroethane	1.0
Chloromethane	1.0	1,1,2,2-Tetrachloroethane	1.0
Dibromochloromethane	1.0	Tetrachloroethene	1.0
1,2-Dibromo-3-chloropropane (DBCP)	1.0	Toluene	1.0
1,2 - Dibromoethane (EDB)	1.0	1,1,1-Trichloroethane	1.0
Dibromomethane	1.0	1,1,2-Trichloroethane	1.0
1,2 - Dichlorobenzene	1.0	Trichloroethene	1.0
1,4 - Dichlorobenzene	1.0	Trichloroflouromethane	1.0
trans-1,4-dichloro-2-butene	1.0	1,2,3-Trichloropropane	1.0
Dichlorodifluoromethane*	1.0	Vinyl acetate	1.0
1,1-Dichloroethane	1.0	Vinyl chloride	1.0
1,2-Dichloroethane	1.0	o-Xylene	1.0
1,1-Dichloroethene	1.0	m+p-Xylenes	1.0

NOTES: 1) PQL = Practical quantitation limit d: 8260-1dl.doc
2) * = Additional compounds not included on Appendix I list.

30416534

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EMA

Project #

Label: MLC
LIMS Login: MLC

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other

Tracking #: VIA

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used: G Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp: 3.5/3.0 °C Correction Factor: -.1 °C Final Temp: 3.4/2.9 °C

Temp should be above freezing to 6°C

pH paper Lot#: 100110 1 Date and Initials of person examining contents: MLC 4/12/2021

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4. no signature on coc
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):	✓			7.
Rush Turn Around Time Requested:	✓			8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: (VOA) coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.
All containers meet method preservation requirements.	✓			Initial when completed: MLC Date/time of preservation: Lot # of added preservative:
Headspace in VOA Vials (>6mm):		✓		17.
Trip Blank Present:	✓			18.
Trip Blank Custody Seals Present	✓			
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: Date: Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: Date/Time: Contacted By:

Comments/ Resolution:

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

L1344561 PACEGPA NCF

R5

Time estimate: oh **Time spent:** oh **Grouping date:** 28 April 2021

Members

Cole Medley (responsible) NM Nancy McLain

- [x] Login Clarification needed
- [ ] Chain of custody is incomplete
- [ ] Please specify Metals requested
- [ ] Please specify TCLP requested
- [ ] Received additional samples not listed on COC
- [ ] Sample IDs on containers do not match IDs on COC
- [ ] Client did not "X" analysis
- [ ] Chain of Custody is missing
- [ ] If no COC: Received by:_____
- [ ] If no COC: Date/Time:_____
- [ ] If no COC: Temp./Cont.Rec./pH:_____
- [ ] If no COC: Carrier:_____
- [ ] If no COC: Tracking #:_____
- [ ] Client informed by call
- [ ] Client informed by Email
- [ ] Client informed by Voicemail
- [ ] Date/Time:_____
- [ ] PM initials:_____
- [ ] Client Contact:_____

Comments

Cole Medley *27 April 2021 8:57 PM*

Only received IDs: TW-1, TW-6, and TW-10A.

Nancy McLain *27 April 2021 9:27 PM*

These are the missing containers for L1343069's NCF. They can be moved to L1343069 and this SDG number deleted.

Cole Medley *28 April 2021 8:27 AM*

Done.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

May 10, 2021

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-SPRING 2021
Pace Project No.: 30417011

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on April 22, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace National - Mt. Juliet
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

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CERTIFICATIONS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services National

12065 Lebanon Road, Mt. Juliet, TN 37122
Alabama Certification #: 40660
Alaska Certification 17-026
Arizona Certification #: AZ0612
Arkansas Certification #: 88-0469
California Certification #: 2932
Canada Certification #: 1461.01
Colorado Certification #: TN00003
Connecticut Certification #: PH-0197
DOD Certification: #1461.01
EPA# TN00003
Florida Certification #: E87487
Georgia DW Certification #: 923
Georgia Certification: NELAP
Idaho Certification #: TN00003
Illinois Certification #: 200008
Indiana Certification #: C-TN-01
Iowa Certification #: 364
Kansas Certification #: E-10277
Kentucky UST Certification #: 16
Kentucky Certification #: 90010
Louisiana Certification #: AI30792
Louisiana DW Certification #: LA180010
Maine Certification #: TN0002
Maryland Certification #: 324
Massachusetts Certification #: M-TN003
Michigan Certification #: 9958
Minnesota Certification #: 047-999-395
Mississippi Certification #: TN00003
Missouri Certification #: 340
Montana Certification #: CERT0086
Nebraska Certification #: NE-OS-15-05
Nevada Certification #: TN-03-2002-34
New Hampshire Certification #: 2975
New Jersey Certification #: TN002
New Mexico DW Certification
New York Certification #: 11742
North Carolina Aquatic Toxicity Certification #: 41
North Carolina Drinking Water Certification #: 21704
North Carolina Environmental Certificate #: 375

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CERTIFICATIONS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Pace Analytical Services National

North Dakota Certification #: R-140
Ohio VAP Certification #: CL0069
Oklahoma Certification #: 9915
Oregon Certification #: TN200002
Pennsylvania Certification #: 68-02979
Rhode Island Certification #: LAO00356
South Carolina Certification #: 84004
South Dakota Certification
Tennessee DW/Chem/Micro Certification #: 2006
Texas Mold Certification #: LAB0152
Texas Certification #: T 104704245-17-14
USDA Soil Permit #: P330-15-00234
Utah Certification #: TN00003
Vermont Dept. of Health: ID# VT-2006
Virginia Certification #: VT2006
Virginia Certification #: 460132
Washington Certification #: C847
West Virginia Certification #: 233
Wisconsin Certification #: 998093910
Wyoming UST Certification #: via A2LA 2926.01
A2LA-ISO 17025 Certification #: 1461.01
A2LA-ISO 17025 Certification #: 1461.02
AIHA-LAP/LLC EMLAP Certification #:100789

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SAMPLE SUMMARY

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30417011001	**TW-9**	Water	04/22/21 12:00	04/22/21 22:15
30417011002	**TW-9B**	Water	04/22/21 10:40	04/22/21 22:15
30417011003	**TW-9C**	Water	04/22/21 11:15	04/22/21 22:15
30417011004	**TW-11A**	Water	04/22/21 12:45	04/22/21 22:15
30417011005	**TW-12**	Water	04/22/21 13:35	04/22/21 22:15
30417011006	**TW-13**	Water	04/22/21 14:20	04/22/21 22:15
30417011007	**TW-15**	Water	04/22/21 15:00	04/22/21 22:15
30417011008	**TW-15B**	Water	04/22/21 15:40	04/22/21 22:15
30417011009	**TRIP BLANK**	Water	04/22/21 00:01	04/22/21 22:15

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30417011001	**TW-9**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JHH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	JWL	1	PASI-PA
30417011002	**TW-9B**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JHH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	JWL	1	PASI-PA
30417011003	**TW-9C**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	JWL	1	PASI-PA
30417011004	**TW-11A**	EPA 6010B	CTS	22	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	JWL	1	PASI-PA
30417011005	**TW-12**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	JWL	1	PASI-PA
30417011006	**TW-13**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	JWL	1	PASI-PA
30417011007	**TW-15**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500ClE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	JWL	1	PASI-PA
30417011008	**TW-15B**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500ClE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	JWL	1	PASI-PA
30417011009	**TRIP BLANK**	EPA 8260B	JAH	54	PAN

PAN = Pace National - Mt. Juliet
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Method: **EPA 6010B**
Description: 6010 MET ICP
Client: Environmental Monitoring and Assessment LLC
Date: May 10, 2021

General Information:
8 samples were analyzed for EPA 6010B by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 445456

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30416856001,30417011001

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2150226)
  - Antimony
  - Arsenic
  - Barium
  - Cadmium
  - Calcium
  - Cobalt
  - Potassium
  - Silver
  - Sodium

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2150226)
  - Lead

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Method: **EPA 6010B**
Description: 6010 MET ICP
Client: Environmental Monitoring and Assessment LLC
Date: May 10, 2021

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 445456

- TW-12 (Lab ID: 30417011005)
  - Barium
- TW-13 (Lab ID: 30417011006)
  - Barium
- TW-15 (Lab ID: 30417011007)
  - Barium
- TW-9 (Lab ID: 30417011001)
  - Barium
- TW-9B (Lab ID: 30417011002)
  - Barium

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Method: **EPA 6010B**
Description: 6010 MET ICP, Dissolved
Client: Environmental Monitoring and Assessment LLC
Date: May 10, 2021

General Information:
8 samples were analyzed for EPA 6010B by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 445201

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30416762001,30417011001

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2149260)
  - Calcium, Dissolved

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: May 10, 2021

General Information:
8 samples were analyzed for EPA 7470A by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Method: **EPA 8260B**
Description: VOA (GC/MS) 8260B
Client: Environmental Monitoring and Assessment LLC
Date: May 10, 2021

General Information:
9 samples were analyzed for EPA 8260B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: May 10, 2021

General Information:
8 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 446804

1c: ALK TV: -2 mg/L
- TW-13 (Lab ID: 30417011006)
  - Alkalinity,Total (CaCO3 pH4.5)

2c: ALK TV: 0 mg/L
- TW-11A (Lab ID: 30417011004)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-15 (Lab ID: 30417011007)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-15B (Lab ID: 30417011008)
  - Alkalinity,Total (CaCO3 pH4.5)

3c: ALK TV: 2 mg/L
- TW-9B (Lab ID: 30417011002)
  - Alkalinity,Total (CaCO3 pH4.5)

4c: ALK TV: 8 mg/L
- TW-9 (Lab ID: 30417011001)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Method: **SM 2540C-2011**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: May 10, 2021

General Information:
8 samples were analyzed for SM 2540C-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 445284

5c: Sample volume was reduced so the sample could be within an acceptable range

- DUP (Lab ID: 2149619)
  - Total Dissolved Solids
- DUP (Lab ID: 2149620)
  - Total Dissolved Solids

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: May 10, 2021

General Information:
8 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: May 10, 2021

General Information:
8 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 445323

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30417011005,30417708001

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2149701)
  - Chemical Oxygen Demand

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Method: **SM 4500ClE-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: May 10, 2021

General Information:
8 samples were analyzed for SM 4500ClE-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Method: **SM 4500NO3F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: May 10, 2021

General Information:
8 samples were analyzed for SM 4500NO3F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 445576

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- TW-9 (Lab ID: 30417011001)
  - Nitrogen, NO2 plus NO3

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: May 10, 2021

General Information:
8 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Method: **SM 4500NO2B-2011**
Description: SM4500NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: May 10, 2021

General Information:
8 samples were analyzed for SM 4500NO2B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Sample: TW-9 **Lab ID: 30417011001** Collected: 04/22/21 12:00 Received: 04/22/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/28/21 16:26	05/06/21 11:07	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/28/21 16:26	05/06/21 11:07	7440-38-2	
Barium	**0.013**	mg/L	0.010	0.00068	1	04/28/21 16:26	05/06/21 11:07	7440-39-3	
Beryllium	**0.0011**	mg/L	0.0010	0.00017	1	04/28/21 16:26	05/06/21 11:07	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/28/21 16:26	05/06/21 11:07	7440-43-9	
Calcium	**0.43J**	mg/L	1.0	0.10	1	04/28/21 16:26	05/06/21 11:07	7440-70-2	
Chromium	**0.00092J**	mg/L	0.0050	0.00035	1	04/28/21 16:26	05/06/21 11:07	7440-47-3	
Cobalt	**0.0014J**	mg/L	0.0050	0.00053	1	04/28/21 16:26	05/06/21 11:07	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0027	1	04/28/21 16:26	05/06/21 11:07	7440-50-8	
Iron	**25.2**	mg/L	0.070	0.041	1	04/28/21 16:26	05/06/21 11:07	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/28/21 16:26	05/06/21 11:07	7439-92-1	
Magnesium	**0.23**	mg/L	0.20	0.028	1	04/28/21 16:26	05/06/21 11:07	7439-95-4	
Manganese	**0.13**	mg/L	0.0050	0.0012	1	04/28/21 16:26	05/06/21 11:07	7439-96-5	
Nickel	**0.0031J**	mg/L	0.010	0.0015	1	04/28/21 16:26	05/06/21 11:07	7440-02-0	
Potassium	**0.50**	mg/L	0.50	0.072	1	04/28/21 16:26	05/06/21 11:07	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/28/21 16:26	05/06/21 11:07	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/28/21 16:26	05/06/21 11:07	7440-22-4	
Sodium	**0.85J**	mg/L	1.0	0.42	1	04/28/21 16:26	05/06/21 11:07	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/28/21 16:26	05/06/21 11:07	7440-28-0	
Total Hardness by SM2340B-2011	**2.0J**	mg/L	3.3	0.37	1	04/28/21 16:26	05/06/21 11:07		
Vanadium	**0.0011J**	mg/L	0.0050	0.00057	1	04/28/21 16:26	05/06/21 11:07	7440-62-2	
Zinc	**0.010 U**	mg/L	0.010	0.0024	1	04/28/21 16:26	05/06/21 11:07	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**0.38J**	mg/L	1.0	0.10	1	04/27/21 15:58	04/29/21 16:22	7440-70-2	
Iron, Dissolved	**24.8**	mg/L	0.070	0.041	1	04/27/21 15:58	04/29/21 16:22	7439-89-6	
Magnesium, Dissolved	**0.21**	mg/L	0.20	0.028	1	04/27/21 15:58	04/29/21 16:22	7439-95-4	
Manganese, Dissolved	**0.13**	mg/L	0.0050	0.0012	1	04/27/21 15:58	04/29/21 16:22	7439-96-5	
Potassium, Dissolved	**0.51**	mg/L	0.50	0.072	1	04/27/21 15:58	04/29/21 16:22	7440-09-7	
Sodium, Dissolved	**0.99J**	mg/L	1.0	0.42	1	04/27/21 15:58	04/29/21 16:22	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	04/27/21 12:37	04/28/21 21:36	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/30/21 07:38	04/30/21 07:38	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/30/21 07:38	04/30/21 07:38	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/30/21 07:38	04/30/21 07:38	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/30/21 07:38	04/30/21 07:38	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/30/21 07:38	04/30/21 07:38	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/30/21 07:38	04/30/21 07:38	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Sample: TW-9 **Lab ID: 30417011001** Collected: 04/22/21 12:00 Received: 04/22/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/30/21 07:38	04/30/21 07:38	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/30/21 07:38	04/30/21 07:38	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/30/21 07:38	04/30/21 07:38	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/30/21 07:38	04/30/21 07:38	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/30/21 07:38	04/30/21 07:38	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/30/21 07:38	04/30/21 07:38	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	04/30/21 07:38	04/30/21 07:38	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/30/21 07:38	04/30/21 07:38	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/30/21 07:38	04/30/21 07:38	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/30/21 07:38	04/30/21 07:38	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/30/21 07:38	04/30/21 07:38	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/30/21 07:38	04/30/21 07:38	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/30/21 07:38	04/30/21 07:38	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/30/21 07:38	04/30/21 07:38	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	04/30/21 07:38	04/30/21 07:38	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	04/30/21 07:38	04/30/21 07:38	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	04/30/21 07:38	04/30/21 07:38	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/30/21 07:38	04/30/21 07:38	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/30/21 07:38	04/30/21 07:38	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/30/21 07:38	04/30/21 07:38	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/30/21 07:38	04/30/21 07:38	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/30/21 07:38	04/30/21 07:38	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/30/21 07:38	04/30/21 07:38	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/30/21 07:38	04/30/21 07:38	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/30/21 07:38	04/30/21 07:38	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/30/21 07:38	04/30/21 07:38	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/30/21 07:38	04/30/21 07:38	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/30/21 07:38	04/30/21 07:38	78-93-3	
Methylene Chloride	**0.578J**	ug/L	5.00	0.430	1	04/30/21 07:38	04/30/21 07:38	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/30/21 07:38	04/30/21 07:38	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/30/21 07:38	04/30/21 07:38	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/30/21 07:38	04/30/21 07:38	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/30/21 07:38	04/30/21 07:38	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/30/21 07:38	04/30/21 07:38	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/30/21 07:38	04/30/21 07:38	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/30/21 07:38	04/30/21 07:38	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/30/21 07:38	04/30/21 07:38	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/30/21 07:38	04/30/21 07:38	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/30/21 07:38	04/30/21 07:38	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/30/21 07:38	04/30/21 07:38	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/30/21 07:38	04/30/21 07:38	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/30/21 07:38	04/30/21 07:38	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/30/21 07:38	04/30/21 07:38	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/30/21 07:38	04/30/21 07:38	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/30/21 07:38	04/30/21 07:38	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Sample: TW-9 **Lab ID: 30417011001** Collected: 04/22/21 12:00 Received: 04/22/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	104	%	80.0-120		1	04/30/21 07:38	04/30/21 07:38	2037-26-5	
4-Bromofluorobenzene (S)	99.3	%	77.0-126		1	04/30/21 07:38	04/30/21 07:38	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%	70.0-130		1	04/30/21 07:38	04/30/21 07:38	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**8.0J**	mg/L	10.0	1.0	1		05/06/21 19:59		4c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**17.0**	mg/L	10.0	10.0	1		04/28/21 15:22		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/06/21 08:55	05/06/21 12:33		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**17.0J**	mg/L	25.0	4.7	1	04/28/21 13:00	04/28/21 16:19		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**1.6J**	mg/L	3.0	0.67	1		05/05/21 14:15	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.14J**	mg/L	0.50	0.12	5		04/29/21 16:40	14797-55-8	
Nitrogen, NO2 plus NO3	**0.14J**	mg/L	0.50	0.12	5		04/29/21 16:40		D3
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/06/21 20:07	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/23/21 09:23	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Sample: TW-9B **Lab ID: 30417011002** Collected: 04/22/21 10:40 Received: 04/22/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/28/21 16:26	05/06/21 11:16	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/28/21 16:26	05/06/21 11:16	7440-38-2	
Barium	**0.052**	mg/L	0.010	0.00068	1	04/28/21 16:26	05/06/21 11:16	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00017	1	04/28/21 16:26	05/06/21 11:16	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/28/21 16:26	05/06/21 11:16	7440-43-9	
Calcium	**4.9**	mg/L	1.0	0.10	1	04/28/21 16:26	05/06/21 11:16	7440-70-2	
Chromium	**0.0014J**	mg/L	0.0050	0.00035	1	04/28/21 16:26	05/06/21 11:16	7440-47-3	
Cobalt	**0.0046J**	mg/L	0.0050	0.00053	1	04/28/21 16:26	05/06/21 11:16	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0027	1	04/28/21 16:26	05/06/21 11:16	7440-50-8	
Iron	**0.053J**	mg/L	0.070	0.041	1	04/28/21 16:26	05/06/21 11:16	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/28/21 16:26	05/06/21 11:16	7439-92-1	
Magnesium	**2.7**	mg/L	0.20	0.028	1	04/28/21 16:26	05/06/21 11:16	7439-95-4	
Manganese	**0.026**	mg/L	0.0050	0.0012	1	04/28/21 16:26	05/06/21 11:16	7439-96-5	
Nickel	**0.0084J**	mg/L	0.010	0.0015	1	04/28/21 16:26	05/06/21 11:16	7440-02-0	
Potassium	**1.7**	mg/L	0.50	0.072	1	04/28/21 16:26	05/06/21 11:16	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/28/21 16:26	05/06/21 11:16	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/28/21 16:26	05/06/21 11:16	7440-22-4	
Sodium	**14.5**	mg/L	1.0	0.42	1	04/28/21 16:26	05/06/21 11:16	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/28/21 16:26	05/06/21 11:16	7440-28-0	
Total Hardness by SM2340B-2011	**23.3**	mg/L	3.3	0.37	1	04/28/21 16:26	05/06/21 11:16		
Vanadium	**0.00073J**	mg/L	0.0050	0.00057	1	04/28/21 16:26	05/06/21 11:16	7440-62-2	
Zinc	**0.0078J**	mg/L	0.010	0.0024	1	04/28/21 16:26	05/06/21 11:16	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**4.8**	mg/L	1.0	0.10	1	04/27/21 15:58	04/29/21 16:28	7440-70-2	
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	04/27/21 15:58	04/29/21 16:28	7439-89-6	
Magnesium, Dissolved	**2.8**	mg/L	0.20	0.028	1	04/27/21 15:58	04/29/21 16:28	7439-95-4	
Manganese, Dissolved	**0.029**	mg/L	0.0050	0.0012	1	04/27/21 15:58	04/29/21 16:28	7439-96-5	
Potassium, Dissolved	**1.8**	mg/L	0.50	0.072	1	04/27/21 15:58	04/29/21 16:28	7440-09-7	
Sodium, Dissolved	**15.1**	mg/L	1.0	0.42	1	04/27/21 15:58	04/29/21 16:28	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	04/27/21 12:37	04/28/21 21:41	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/30/21 07:58	04/30/21 07:58	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/30/21 07:58	04/30/21 07:58	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/30/21 07:58	04/30/21 07:58	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/30/21 07:58	04/30/21 07:58	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/30/21 07:58	04/30/21 07:58	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/30/21 07:58	04/30/21 07:58	75-25-2	

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Sample: TW-9B **Lab ID: 30417011002** Collected: 04/22/21 10:40 Received: 04/22/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/30/21 07:58	04/30/21 07:58	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/30/21 07:58	04/30/21 07:58	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/30/21 07:58	04/30/21 07:58	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/30/21 07:58	04/30/21 07:58	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/30/21 07:58	04/30/21 07:58	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/30/21 07:58	04/30/21 07:58	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	04/30/21 07:58	04/30/21 07:58	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/30/21 07:58	04/30/21 07:58	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/30/21 07:58	04/30/21 07:58	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/30/21 07:58	04/30/21 07:58	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/30/21 07:58	04/30/21 07:58	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/30/21 07:58	04/30/21 07:58	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/30/21 07:58	04/30/21 07:58	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/30/21 07:58	04/30/21 07:58	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	04/30/21 07:58	04/30/21 07:58	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	04/30/21 07:58	04/30/21 07:58	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	04/30/21 07:58	04/30/21 07:58	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/30/21 07:58	04/30/21 07:58	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/30/21 07:58	04/30/21 07:58	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/30/21 07:58	04/30/21 07:58	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/30/21 07:58	04/30/21 07:58	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/30/21 07:58	04/30/21 07:58	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/30/21 07:58	04/30/21 07:58	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/30/21 07:58	04/30/21 07:58	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/30/21 07:58	04/30/21 07:58	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/30/21 07:58	04/30/21 07:58	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/30/21 07:58	04/30/21 07:58	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/30/21 07:58	04/30/21 07:58	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	04/30/21 07:58	04/30/21 07:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/30/21 07:58	04/30/21 07:58	108-10-1	
Methyl-tert-butyl ether	**0.455J**	ug/L	1.00	0.101	1	04/30/21 07:58	04/30/21 07:58	1634-04-4	J
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/30/21 07:58	04/30/21 07:58	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/30/21 07:58	04/30/21 07:58	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/30/21 07:58	04/30/21 07:58	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/30/21 07:58	04/30/21 07:58	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/30/21 07:58	04/30/21 07:58	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/30/21 07:58	04/30/21 07:58	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/30/21 07:58	04/30/21 07:58	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/30/21 07:58	04/30/21 07:58	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/30/21 07:58	04/30/21 07:58	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/30/21 07:58	04/30/21 07:58	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/30/21 07:58	04/30/21 07:58	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/30/21 07:58	04/30/21 07:58	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/30/21 07:58	04/30/21 07:58	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/30/21 07:58	04/30/21 07:58	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Sample: TW-9B **Lab ID: 30417011002** Collected: 04/22/21 10:40 Received: 04/22/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	102	%	80.0-120		1	04/30/21 07:58	04/30/21 07:58	2037-26-5	
4-Bromofluorobenzene (S)	97.2	%	77.0-126		1	04/30/21 07:58	04/30/21 07:58	460-00-4	
1,2-Dichloroethane-d4 (S)	116	%	70.0-130		1	04/30/21 07:58	04/30/21 07:58	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		05/06/21 20:03		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**62.0**	mg/L	10.0	10.0	1		04/28/21 15:22		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/06/21 08:55	05/06/21 12:35		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.1J**	mg/L	25.0	4.7	1	04/28/21 13:00	04/28/21 16:19		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**23.7**	mg/L	3.0	0.67	1		05/05/21 14:16	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**2.5**	mg/L	0.10	0.024	1		04/29/21 16:41	14797-55-8	
Nitrogen, NO2 plus NO3	**2.5**	mg/L	0.10	0.024	1		04/29/21 16:41		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/06/21 20:12	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/23/21 09:19	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Sample: TW-9C **Lab ID: 30417011003** Collected: 04/22/21 11:15 Received: 04/22/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/28/21 16:26	05/06/21 11:18	7440-36-0	
Arsenic	**0.0029J**	mg/L	0.0050	0.0020	1	04/28/21 16:26	05/06/21 11:18	7440-38-2	
Barium	**0.10**	mg/L	0.010	0.00068	1	04/28/21 16:26	05/06/21 11:18	7440-39-3	
Beryllium	**0.00028J**	mg/L	0.0010	0.00017	1	04/28/21 16:26	05/06/21 11:18	7440-41-7	
Cadmium	**0.00035J**	mg/L	0.0030	0.00034	1	04/28/21 16:26	05/06/21 11:18	7440-43-9	
Calcium	**4.8**	mg/L	1.0	0.10	1	04/28/21 16:26	05/06/21 11:18	7440-70-2	
Chromium	**0.0035J**	mg/L	0.0050	0.00035	1	04/28/21 16:26	05/06/21 11:18	7440-47-3	
Cobalt	**0.011**	mg/L	0.0050	0.00053	1	04/28/21 16:26	05/06/21 11:18	7440-48-4	
Copper	**0.0044J**	mg/L	0.0050	0.0027	1	04/28/21 16:26	05/06/21 11:18	7440-50-8	
Iron	**0.070 U**	mg/L	0.070	0.041	1	04/28/21 16:26	05/06/21 11:18	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/28/21 16:26	05/06/21 11:18	7439-92-1	
Magnesium	**3.7**	mg/L	0.20	0.028	1	04/28/21 16:26	05/06/21 11:18	7439-95-4	
Manganese	**0.078**	mg/L	0.0050	0.0012	1	04/28/21 16:26	05/06/21 11:18	7439-96-5	
Nickel	**0.012**	mg/L	0.010	0.0015	1	04/28/21 16:26	05/06/21 11:18	7440-02-0	
Potassium	**2.1**	mg/L	0.50	0.072	1	04/28/21 16:26	05/06/21 11:18	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/28/21 16:26	05/06/21 11:18	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/28/21 16:26	05/06/21 11:18	7440-22-4	
Sodium	**13.8**	mg/L	1.0	0.42	1	04/28/21 16:26	05/06/21 11:18	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/28/21 16:26	05/06/21 11:18	7440-28-0	
Total Hardness by SM2340B-2011	**27.4**	mg/L	3.3	0.37	1	04/28/21 16:26	05/06/21 11:18		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/28/21 16:26	05/06/21 11:18	7440-62-2	
Zinc	**0.0090J**	mg/L	0.010	0.0024	1	04/28/21 16:26	05/06/21 11:18	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**5.0**	mg/L	1.0	0.10	1	04/27/21 15:58	04/29/21 16:31	7440-70-2	
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	04/27/21 15:58	04/29/21 16:31	7439-89-6	
Magnesium, Dissolved	**3.9**	mg/L	0.20	0.028	1	04/27/21 15:58	04/29/21 16:31	7439-95-4	
Manganese, Dissolved	**0.080**	mg/L	0.0050	0.0012	1	04/27/21 15:58	04/29/21 16:31	7439-96-5	
Potassium, Dissolved	**2.2**	mg/L	0.50	0.072	1	04/27/21 15:58	04/29/21 16:31	7440-09-7	
Sodium, Dissolved	**14.7**	mg/L	1.0	0.42	1	04/27/21 15:58	04/29/21 16:31	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	04/27/21 12:37	04/28/21 21:43	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/30/21 22:25	04/30/21 22:25	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/30/21 22:25	04/30/21 22:25	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/30/21 22:25	04/30/21 22:25	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/30/21 22:25	04/30/21 22:25	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/30/21 22:25	04/30/21 22:25	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/30/21 22:25	04/30/21 22:25	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Sample: TW-9C **Lab ID: 30417011003** Collected: 04/22/21 11:15 Received: 04/22/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/30/21 22:25	04/30/21 22:25	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/30/21 22:25	04/30/21 22:25	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/30/21 22:25	04/30/21 22:25	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/30/21 22:25	04/30/21 22:25	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/30/21 22:25	04/30/21 22:25	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/30/21 22:25	04/30/21 22:25	75-00-3	
Chloroform	**0.324J**	ug/L	5.00	0.111	1	04/30/21 22:25	04/30/21 22:25	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/30/21 22:25	04/30/21 22:25	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/30/21 22:25	04/30/21 22:25	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/30/21 22:25	04/30/21 22:25	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/30/21 22:25	04/30/21 22:25	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/30/21 22:25	04/30/21 22:25	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/30/21 22:25	04/30/21 22:25	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/30/21 22:25	04/30/21 22:25	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	04/30/21 22:25	04/30/21 22:25	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	04/30/21 22:25	04/30/21 22:25	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	04/30/21 22:25	04/30/21 22:25	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/30/21 22:25	04/30/21 22:25	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/30/21 22:25	04/30/21 22:25	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/30/21 22:25	04/30/21 22:25	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/30/21 22:25	04/30/21 22:25	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/30/21 22:25	04/30/21 22:25	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/30/21 22:25	04/30/21 22:25	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/30/21 22:25	04/30/21 22:25	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/30/21 22:25	04/30/21 22:25	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/30/21 22:25	04/30/21 22:25	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/30/21 22:25	04/30/21 22:25	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/30/21 22:25	04/30/21 22:25	78-93-3	
Methylene Chloride	**0.561J**	ug/L	5.00	0.430	1	04/30/21 22:25	04/30/21 22:25	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/30/21 22:25	04/30/21 22:25	108-10-1	
Methyl-tert-butyl ether	**0.510J**	ug/L	1.00	0.101	1	04/30/21 22:25	04/30/21 22:25	1634-04-4	J
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/30/21 22:25	04/30/21 22:25	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/30/21 22:25	04/30/21 22:25	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/30/21 22:25	04/30/21 22:25	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/30/21 22:25	04/30/21 22:25	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/30/21 22:25	04/30/21 22:25	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/30/21 22:25	04/30/21 22:25	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/30/21 22:25	04/30/21 22:25	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/30/21 22:25	04/30/21 22:25	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/30/21 22:25	04/30/21 22:25	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/30/21 22:25	04/30/21 22:25	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/30/21 22:25	04/30/21 22:25	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/30/21 22:25	04/30/21 22:25	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/30/21 22:25	04/30/21 22:25	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/30/21 22:25	04/30/21 22:25	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Sample: TW-9C **Lab ID: 30417011003** Collected: 04/22/21 11:15 Received: 04/22/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	112	%	80.0-120		1	04/30/21 22:25	04/30/21 22:25	2037-26-5	
4-Bromofluorobenzene (S)	97.0	%	77.0-126		1	04/30/21 22:25	04/30/21 22:25	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	70.0-130		1	04/30/21 22:25	04/30/21 22:25	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**22.0**	mg/L	10.0	1.0	1		05/06/21 20:02		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**80.0**	mg/L	10.0	10.0	1		04/28/21 15:23		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/06/21 08:55	05/06/21 12:37		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.1J**	mg/L	25.0	4.7	1	04/28/21 13:00	04/28/21 16:19		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**23.3**	mg/L	3.0	0.67	1		05/05/21 14:17	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**2.9**	mg/L	0.10	0.024	1		04/29/21 16:42	14797-55-8	
Nitrogen, NO2 plus NO3	**2.9**	mg/L	0.10	0.024	1		04/29/21 16:42		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**12.9**	mg/L	10.0	4.7	1		05/06/21 20:14	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/23/21 09:20	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Sample: TW-11A **Lab ID: 30417011004** Collected: 04/22/21 12:45 Received: 04/22/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/28/21 16:26	05/06/21 11:20	7440-36-0	
Arsenic	**0.022**	mg/L	0.0050	0.0020	1	04/28/21 16:26	05/06/21 11:20	7440-38-2	
Barium	**0.072**	mg/L	0.010	0.00068	1	04/28/21 16:26	05/06/21 11:20	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00017	1	04/28/21 16:26	05/06/21 11:20	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/28/21 16:26	05/06/21 11:20	7440-43-9	
Calcium	**6.2**	mg/L	1.0	0.10	1	04/28/21 16:26	05/06/21 11:20	7440-70-2	
Chromium	**0.00037J**	mg/L	0.0050	0.00035	1	04/28/21 16:26	05/06/21 11:20	7440-47-3	
Cobalt	**0.0081**	mg/L	0.0050	0.00053	1	04/28/21 16:26	05/06/21 11:20	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0027	1	04/28/21 16:26	05/06/21 11:20	7440-50-8	
Iron	**42.9**	mg/L	0.070	0.041	1	04/28/21 16:26	05/06/21 11:20	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/28/21 16:26	05/06/21 11:20	7439-92-1	
Magnesium	**2.7**	mg/L	0.20	0.028	1	04/28/21 16:26	05/06/21 11:20	7439-95-4	
Manganese	**0.57**	mg/L	0.0050	0.0012	1	04/28/21 16:26	05/06/21 11:20	7439-96-5	
Nickel	**0.010 U**	mg/L	0.010	0.0015	1	04/28/21 16:26	05/06/21 11:20	7440-02-0	
Potassium	**2.0**	mg/L	0.50	0.072	1	04/28/21 16:26	05/06/21 11:20	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/28/21 16:26	05/06/21 11:20	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/28/21 16:26	05/06/21 11:20	7440-22-4	
Sodium	**17.1**	mg/L	1.0	0.42	1	04/28/21 16:26	05/06/21 11:20	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/28/21 16:26	05/06/21 11:20	7440-28-0	
Total Hardness by SM2340B-2011	**26.5**	mg/L	3.3	0.37	1	04/28/21 16:26	05/06/21 11:20		
Vanadium	**0.0011J**	mg/L	0.0050	0.00057	1	04/28/21 16:26	05/06/21 11:20	7440-62-2	
Zinc	**0.010 U**	mg/L	0.010	0.0024	1	04/28/21 16:26	05/06/21 11:20	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**6.2**	mg/L	1.0	0.10	1	04/27/21 15:58	04/29/21 16:37	7440-70-2	
Iron, Dissolved	**43.2**	mg/L	0.070	0.041	1	04/27/21 15:58	04/29/21 16:37	7439-89-6	
Magnesium, Dissolved	**2.7**	mg/L	0.20	0.028	1	04/27/21 15:58	04/29/21 16:37	7439-95-4	
Manganese, Dissolved	**0.58**	mg/L	0.0050	0.0012	1	04/27/21 15:58	04/29/21 16:37	7439-96-5	
Potassium, Dissolved	**2.1**	mg/L	0.50	0.072	1	04/27/21 15:58	04/29/21 16:37	7440-09-7	
Sodium, Dissolved	**17.5**	mg/L	1.0	0.42	1	04/27/21 15:58	04/29/21 16:37	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	04/27/21 12:37	04/28/21 21:44	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/30/21 22:48	04/30/21 22:48	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/30/21 22:48	04/30/21 22:48	107-13-1	
Benzene	**0.137J**	ug/L	1.00	0.0941	1	04/30/21 22:48	04/30/21 22:48	71-43-2	J
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/30/21 22:48	04/30/21 22:48	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/30/21 22:48	04/30/21 22:48	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/30/21 22:48	04/30/21 22:48	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Sample: TW-11A **Lab ID: 30417011004** Collected: 04/22/21 12:45 Received: 04/22/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/30/21 22:48	04/30/21 22:48	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/30/21 22:48	04/30/21 22:48	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/30/21 22:48	04/30/21 22:48	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/30/21 22:48	04/30/21 22:48	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/30/21 22:48	04/30/21 22:48	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/30/21 22:48	04/30/21 22:48	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	04/30/21 22:48	04/30/21 22:48	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/30/21 22:48	04/30/21 22:48	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/30/21 22:48	04/30/21 22:48	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/30/21 22:48	04/30/21 22:48	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/30/21 22:48	04/30/21 22:48	74-95-3	
1,2-Dichlorobenzene	**0.150J**	ug/L	1.00	0.107	1	04/30/21 22:48	04/30/21 22:48	95-50-1	J
1,4-Dichlorobenzene	**0.449J**	ug/L	1.00	0.120	1	04/30/21 22:48	04/30/21 22:48	106-46-7	J
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/30/21 22:48	04/30/21 22:48	110-57-6	
Dichlorofluoromethane	**1.22J**	ug/L	5.00	0.130	1	04/30/21 22:48	04/30/21 22:48	75-43-4	J
Dichlorodifluoromethane	**0.506J**	ug/L	5.00	0.374	1	04/30/21 22:48	04/30/21 22:48	75-71-8	J
1,1-Dichloroethane	**0.976J**	ug/L	1.00	0.100	1	04/30/21 22:48	04/30/21 22:48	75-34-3	J
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/30/21 22:48	04/30/21 22:48	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/30/21 22:48	04/30/21 22:48	75-35-4	
cis-1,2-Dichloroethene	**0.741J**	ug/L	1.00	0.126	1	04/30/21 22:48	04/30/21 22:48	156-59-2	J
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/30/21 22:48	04/30/21 22:48	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/30/21 22:48	04/30/21 22:48	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/30/21 22:48	04/30/21 22:48	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/30/21 22:48	04/30/21 22:48	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/30/21 22:48	04/30/21 22:48	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/30/21 22:48	04/30/21 22:48	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/30/21 22:48	04/30/21 22:48	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/30/21 22:48	04/30/21 22:48	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	04/30/21 22:48	04/30/21 22:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/30/21 22:48	04/30/21 22:48	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/30/21 22:48	04/30/21 22:48	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/30/21 22:48	04/30/21 22:48	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/30/21 22:48	04/30/21 22:48	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/30/21 22:48	04/30/21 22:48	79-34-5	
Tetrachloroethene	**0.717J**	ug/L	1.00	0.300	1	04/30/21 22:48	04/30/21 22:48	127-18-4	J
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/30/21 22:48	04/30/21 22:48	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/30/21 22:48	04/30/21 22:48	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/30/21 22:48	04/30/21 22:48	79-00-5	
Trichloroethene	**0.551J**	ug/L	1.00	0.190	1	04/30/21 22:48	04/30/21 22:48	79-01-6	J
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/30/21 22:48	04/30/21 22:48	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/30/21 22:48	04/30/21 22:48	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/30/21 22:48	04/30/21 22:48	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/30/21 22:48	04/30/21 22:48	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/30/21 22:48	04/30/21 22:48	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/30/21 22:48	04/30/21 22:48	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Sample: TW-11A **Lab ID: 30417011004** Collected: 04/22/21 12:45 Received: 04/22/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	114	%	80.0-120		1	04/30/21 22:48	04/30/21 22:48	2037-26-5	
4-Bromofluorobenzene (S)	95.2	%	77.0-126		1	04/30/21 22:48	04/30/21 22:48	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	70.0-130		1	04/30/21 22:48	04/30/21 22:48	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/06/21 20:03		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**139**	mg/L	10.0	10.0	1		04/28/21 15:23		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.21**	mg/L	0.10	0.044	1	05/06/21 08:55	05/06/21 12:39		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**17.0J**	mg/L	25.0	4.7	1	04/28/21 13:00	04/28/21 16:19		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**30.2**	mg/L	3.0	0.67	1		05/05/21 14:17	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10**	mg/L	0.10	0.024	1		04/29/21 16:44	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10**	mg/L	0.10	0.024	1		04/29/21 16:44		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**25.5**	mg/L	10.0	4.7	1		05/06/21 20:17	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/23/21 09:23	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Sample: TW-12 **Lab ID: 30417011005** Collected: 04/22/21 13:35 Received: 04/22/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/28/21 16:26	05/06/21 11:22	7440-36-0	
Arsenic	**0.0027J**	mg/L	0.0050	0.0020	1	04/28/21 16:26	05/06/21 11:22	7440-38-2	
Barium	**0.041**	mg/L	0.010	0.00068	1	04/28/21 16:26	05/06/21 11:22	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00017	1	04/28/21 16:26	05/06/21 11:22	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/28/21 16:26	05/06/21 11:22	7440-43-9	
Calcium	**3.1**	mg/L	1.0	0.10	1	04/28/21 16:26	05/06/21 11:22	7440-70-2	
Chromium	**0.00094J**	mg/L	0.0050	0.00035	1	04/28/21 16:26	05/06/21 11:22	7440-47-3	
Cobalt	**0.0050 U**	mg/L	0.0050	0.00053	1	04/28/21 16:26	05/06/21 11:22	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0027	1	04/28/21 16:26	05/06/21 11:22	7440-50-8	
Iron	**36.4**	mg/L	0.070	0.041	1	04/28/21 16:26	05/06/21 11:22	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/28/21 16:26	05/06/21 11:22	7439-92-1	
Magnesium	**1.7**	mg/L	0.20	0.028	1	04/28/21 16:26	05/06/21 11:22	7439-95-4	
Manganese	**0.22**	mg/L	0.0050	0.0012	1	04/28/21 16:26	05/06/21 11:22	7439-96-5	
Nickel	**0.010 U**	mg/L	0.010	0.0015	1	04/28/21 16:26	05/06/21 11:22	7440-02-0	
Potassium	**1.2**	mg/L	0.50	0.072	1	04/28/21 16:26	05/06/21 11:22	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/28/21 16:26	05/06/21 11:22	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/28/21 16:26	05/06/21 11:22	7440-22-4	
Sodium	**5.3**	mg/L	1.0	0.42	1	04/28/21 16:26	05/06/21 11:22	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/28/21 16:26	05/06/21 11:22	7440-28-0	
Total Hardness by SM2340B-2011	**14.8**	mg/L	3.3	0.37	1	04/28/21 16:26	05/06/21 11:22		
Vanadium	**0.00069J**	mg/L	0.0050	0.00057	1	04/28/21 16:26	05/06/21 11:22	7440-62-2	
Zinc	**0.010 U**	mg/L	0.010	0.0024	1	04/28/21 16:26	05/06/21 11:22	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**3.2**	mg/L	1.0	0.10	1	04/27/21 15:58	04/29/21 16:39	7440-70-2	
Iron, Dissolved	**37.8**	mg/L	0.070	0.041	1	04/27/21 15:58	04/29/21 16:39	7439-89-6	
Magnesium, Dissolved	**1.8**	mg/L	0.20	0.028	1	04/27/21 15:58	04/29/21 16:39	7439-95-4	
Manganese, Dissolved	**0.23**	mg/L	0.0050	0.0012	1	04/27/21 15:58	04/29/21 16:39	7439-96-5	
Potassium, Dissolved	**1.3**	mg/L	0.50	0.072	1	04/27/21 15:58	04/29/21 16:39	7440-09-7	
Sodium, Dissolved	**5.6**	mg/L	1.0	0.42	1	04/27/21 15:58	04/29/21 16:39	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	04/27/21 12:37	04/28/21 21:46	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/30/21 23:11	04/30/21 23:11	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/30/21 23:11	04/30/21 23:11	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/30/21 23:11	04/30/21 23:11	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/30/21 23:11	04/30/21 23:11	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/30/21 23:11	04/30/21 23:11	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/30/21 23:11	04/30/21 23:11	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Sample: TW-12 **Lab ID: 30417011005** Collected: 04/22/21 13:35 Received: 04/22/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/30/21 23:11	04/30/21 23:11	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/30/21 23:11	04/30/21 23:11	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/30/21 23:11	04/30/21 23:11	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/30/21 23:11	04/30/21 23:11	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/30/21 23:11	04/30/21 23:11	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/30/21 23:11	04/30/21 23:11	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	04/30/21 23:11	04/30/21 23:11	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/30/21 23:11	04/30/21 23:11	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/30/21 23:11	04/30/21 23:11	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/30/21 23:11	04/30/21 23:11	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/30/21 23:11	04/30/21 23:11	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/30/21 23:11	04/30/21 23:11	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/30/21 23:11	04/30/21 23:11	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/30/21 23:11	04/30/21 23:11	110-57-6	
Dichlorofluoromethane	**1.32J**	ug/L	5.00	0.130	1	04/30/21 23:11	04/30/21 23:11	75-43-4	J
Dichlorodifluoromethane	**1.78J**	ug/L	5.00	0.374	1	04/30/21 23:11	04/30/21 23:11	75-71-8	J
1,1-Dichloroethane	**1.74**	ug/L	1.00	0.100	1	04/30/21 23:11	04/30/21 23:11	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/30/21 23:11	04/30/21 23:11	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/30/21 23:11	04/30/21 23:11	75-35-4	
cis-1,2-Dichloroethene	**0.776J**	ug/L	1.00	0.126	1	04/30/21 23:11	04/30/21 23:11	156-59-2	J
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/30/21 23:11	04/30/21 23:11	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/30/21 23:11	04/30/21 23:11	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/30/21 23:11	04/30/21 23:11	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/30/21 23:11	04/30/21 23:11	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/30/21 23:11	04/30/21 23:11	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/30/21 23:11	04/30/21 23:11	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/30/21 23:11	04/30/21 23:11	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/30/21 23:11	04/30/21 23:11	78-93-3	
Methylene Chloride	**0.508J**	ug/L	5.00	0.430	1	04/30/21 23:11	04/30/21 23:11	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/30/21 23:11	04/30/21 23:11	108-10-1	
Methyl-tert-butyl ether	**0.257J**	ug/L	1.00	0.101	1	04/30/21 23:11	04/30/21 23:11	1634-04-4	J
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/30/21 23:11	04/30/21 23:11	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/30/21 23:11	04/30/21 23:11	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/30/21 23:11	04/30/21 23:11	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/30/21 23:11	04/30/21 23:11	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/30/21 23:11	04/30/21 23:11	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/30/21 23:11	04/30/21 23:11	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/30/21 23:11	04/30/21 23:11	79-00-5	
Trichloroethene	**1.59**	ug/L	1.00	0.190	1	04/30/21 23:11	04/30/21 23:11	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/30/21 23:11	04/30/21 23:11	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/30/21 23:11	04/30/21 23:11	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/30/21 23:11	04/30/21 23:11	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/30/21 23:11	04/30/21 23:11	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/30/21 23:11	04/30/21 23:11	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/30/21 23:11	04/30/21 23:11	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Sample: TW-12 **Lab ID: 30417011005** Collected: 04/22/21 13:35 Received: 04/22/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	114	%	80.0-120		1	04/30/21 23:11	04/30/21 23:11	2037-26-5	
4-Bromofluorobenzene (S)	98.7	%	77.0-126		1	04/30/21 23:11	04/30/21 23:11	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	70.0-130		1	04/30/21 23:11	04/30/21 23:11	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**26.0**	mg/L	10.0	1.0	1		05/06/21 20:04		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**29.0**	mg/L	10.0	10.0	1		04/28/21 15:23		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/06/21 08:55	05/06/21 12:41		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**10.5J**	mg/L	25.0	4.7	1	04/28/21 13:00	04/28/21 16:20		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**7.4**	mg/L	3.0	0.67	1		05/05/21 14:20	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10**	mg/L	0.10	0.024	1		04/29/21 16:45	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10**	mg/L	0.10	0.024	1		04/29/21 16:45		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/06/21 20:17	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/23/21 09:24	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Sample: TW-13 **Lab ID: 30417011006** Collected: 04/22/21 14:20 Received: 04/22/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/28/21 16:26	05/06/21 11:29	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/28/21 16:26	05/06/21 11:29	7440-38-2	
Barium	**0.046**	mg/L	0.010	0.00068	1	04/28/21 16:26	05/06/21 11:29	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00017	1	04/28/21 16:26	05/06/21 11:29	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/28/21 16:26	05/06/21 11:29	7440-43-9	
Calcium	**3.1**	mg/L	1.0	0.10	1	04/28/21 16:26	05/06/21 11:29	7440-70-2	
Chromium	**0.0012J**	mg/L	0.0050	0.00035	1	04/28/21 16:26	05/06/21 11:29	7440-47-3	
Cobalt	**0.0043J**	mg/L	0.0050	0.00053	1	04/28/21 16:26	05/06/21 11:29	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0027	1	04/28/21 16:26	05/06/21 11:29	7440-50-8	
Iron	**15.9**	mg/L	0.070	0.041	1	04/28/21 16:26	05/06/21 11:29	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/28/21 16:26	05/06/21 11:29	7439-92-1	
Magnesium	**1.6**	mg/L	0.20	0.028	1	04/28/21 16:26	05/06/21 11:29	7439-95-4	
Manganese	**0.11**	mg/L	0.0050	0.0012	1	04/28/21 16:26	05/06/21 11:29	7439-96-5	
Nickel	**0.0055J**	mg/L	0.010	0.0015	1	04/28/21 16:26	05/06/21 11:29	7440-02-0	
Potassium	**1.0**	mg/L	0.50	0.072	1	04/28/21 16:26	05/06/21 11:29	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/28/21 16:26	05/06/21 11:29	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/28/21 16:26	05/06/21 11:29	7440-22-4	
Sodium	**7.2**	mg/L	1.0	0.42	1	04/28/21 16:26	05/06/21 11:29	7440-23-5	
Thallium	**0.0044J**	mg/L	0.010	0.0040	1	04/28/21 16:26	05/06/21 11:29	7440-28-0	
Total Hardness by SM2340B-2011	**14.3**	mg/L	3.3	0.37	1	04/28/21 16:26	05/06/21 11:29		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/28/21 16:26	05/06/21 11:29	7440-62-2	
Zinc	**0.0031J**	mg/L	0.010	0.0024	1	04/28/21 16:26	05/06/21 11:29	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**3.1**	mg/L	1.0	0.10	1	04/27/21 15:58	04/29/21 16:42	7440-70-2	
Iron, Dissolved	**12.5**	mg/L	0.070	0.041	1	04/27/21 15:58	04/29/21 16:42	7439-89-6	
Magnesium, Dissolved	**1.6**	mg/L	0.20	0.028	1	04/27/21 15:58	04/29/21 16:42	7439-95-4	
Manganese, Dissolved	**0.11**	mg/L	0.0050	0.0012	1	04/27/21 15:58	04/29/21 16:42	7439-96-5	
Potassium, Dissolved	**1.1**	mg/L	0.50	0.072	1	04/27/21 15:58	04/29/21 16:42	7440-09-7	
Sodium, Dissolved	**7.5**	mg/L	1.0	0.42	1	04/27/21 15:58	04/29/21 16:42	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	04/27/21 12:37	04/28/21 21:48	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	05/01/21 01:06	05/01/21 01:06	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	05/01/21 01:06	05/01/21 01:06	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	05/01/21 01:06	05/01/21 01:06	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	05/01/21 01:06	05/01/21 01:06	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	05/01/21 01:06	05/01/21 01:06	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	05/01/21 01:06	05/01/21 01:06	75-25-2	

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Greensburg, PA 15601
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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Sample: TW-13 **Lab ID: 30417011006** Collected: 04/22/21 14:20 Received: 04/22/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	05/01/21 01:06	05/01/21 01:06	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	05/01/21 01:06	05/01/21 01:06	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	05/01/21 01:06	05/01/21 01:06	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	05/01/21 01:06	05/01/21 01:06	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	05/01/21 01:06	05/01/21 01:06	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	05/01/21 01:06	05/01/21 01:06	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	05/01/21 01:06	05/01/21 01:06	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	05/01/21 01:06	05/01/21 01:06	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	05/01/21 01:06	05/01/21 01:06	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	05/01/21 01:06	05/01/21 01:06	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	05/01/21 01:06	05/01/21 01:06	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	05/01/21 01:06	05/01/21 01:06	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	05/01/21 01:06	05/01/21 01:06	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	05/01/21 01:06	05/01/21 01:06	110-57-6	
Dichlorofluoromethane	**4.41J**	ug/L	5.00	0.130	1	05/01/21 01:06	05/01/21 01:06	75-43-4	J
Dichlorodifluoromethane	**4.95J**	ug/L	5.00	0.374	1	05/01/21 01:06	05/01/21 01:06	75-71-8	J
1,1-Dichloroethane	**3.99**	ug/L	1.00	0.100	1	05/01/21 01:06	05/01/21 01:06	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	05/01/21 01:06	05/01/21 01:06	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	05/01/21 01:06	05/01/21 01:06	75-35-4	
cis-1,2-Dichloroethene	**3.82**	ug/L	1.00	0.126	1	05/01/21 01:06	05/01/21 01:06	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	05/01/21 01:06	05/01/21 01:06	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	05/01/21 01:06	05/01/21 01:06	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	05/01/21 01:06	05/01/21 01:06	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	05/01/21 01:06	05/01/21 01:06	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	05/01/21 01:06	05/01/21 01:06	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	05/01/21 01:06	05/01/21 01:06	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	05/01/21 01:06	05/01/21 01:06	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	05/01/21 01:06	05/01/21 01:06	78-93-3	
Methylene Chloride	**0.872J**	ug/L	5.00	0.430	1	05/01/21 01:06	05/01/21 01:06	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	05/01/21 01:06	05/01/21 01:06	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	05/01/21 01:06	05/01/21 01:06	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	05/01/21 01:06	05/01/21 01:06	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	05/01/21 01:06	05/01/21 01:06	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	05/01/21 01:06	05/01/21 01:06	79-34-5	
Tetrachloroethene	**2.72**	ug/L	1.00	0.300	1	05/01/21 01:06	05/01/21 01:06	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	05/01/21 01:06	05/01/21 01:06	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	05/01/21 01:06	05/01/21 01:06	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	05/01/21 01:06	05/01/21 01:06	79-00-5	
Trichloroethene	**5.59**	ug/L	1.00	0.190	1	05/01/21 01:06	05/01/21 01:06	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	05/01/21 01:06	05/01/21 01:06	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	05/01/21 01:06	05/01/21 01:06	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	05/01/21 01:06	05/01/21 01:06	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	05/01/21 01:06	05/01/21 01:06	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	05/01/21 01:06	05/01/21 01:06	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	05/01/21 01:06	05/01/21 01:06	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Sample: TW-13 **Lab ID: 30417011006** Collected: 04/22/21 14:20 Received: 04/22/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	114	%	80.0-120		1	05/01/21 01:06	05/01/21 01:06	2037-26-5	
4-Bromofluorobenzene (S)	99.9	%	77.0-126		1	05/01/21 01:06	05/01/21 01:06	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	70.0-130		1	05/01/21 01:06	05/01/21 01:06	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/06/21 20:05		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**43.0**	mg/L	10.0	10.0	1		04/28/21 15:24		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/06/21 08:55	05/06/21 12:43		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.1J**	mg/L	25.0	4.7	1	04/28/21 13:00	04/28/21 16:20		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**14.3**	mg/L	3.0	0.67	1		05/05/21 14:21	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.18**	mg/L	0.10	0.024	1		04/29/21 16:47	14797-55-8	
Nitrogen, NO2 plus NO3	**0.18**	mg/L	0.10	0.024	1		04/29/21 16:47		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/06/21 20:19	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/23/21 09:26	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Sample: TW-15 **Lab ID: 30417011007** Collected: 04/22/21 15:00 Received: 04/22/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/28/21 16:26	05/06/21 11:31	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/28/21 16:26	05/06/21 11:31	7440-38-2	
Barium	**0.016**	mg/L	0.010	0.00068	1	04/28/21 16:26	05/06/21 11:31	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00017	1	04/28/21 16:26	05/06/21 11:31	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/28/21 16:26	05/06/21 11:31	7440-43-9	
Calcium	**0.73J**	mg/L	1.0	0.10	1	04/28/21 16:26	05/06/21 11:31	7440-70-2	
Chromium	**0.00041J**	mg/L	0.0050	0.00035	1	04/28/21 16:26	05/06/21 11:31	7440-47-3	
Cobalt	**0.0029J**	mg/L	0.0050	0.00053	1	04/28/21 16:26	05/06/21 11:31	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0027	1	04/28/21 16:26	05/06/21 11:31	7440-50-8	
Iron	**25.0**	mg/L	0.070	0.041	1	04/28/21 16:26	05/06/21 11:31	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/28/21 16:26	05/06/21 11:31	7439-92-1	
Magnesium	**0.48**	mg/L	0.20	0.028	1	04/28/21 16:26	05/06/21 11:31	7439-95-4	
Manganese	**0.17**	mg/L	0.0050	0.0012	1	04/28/21 16:26	05/06/21 11:31	7439-96-5	
Nickel	**0.0027J**	mg/L	0.010	0.0015	1	04/28/21 16:26	05/06/21 11:31	7440-02-0	
Potassium	**0.79**	mg/L	0.50	0.072	1	04/28/21 16:26	05/06/21 11:31	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/28/21 16:26	05/06/21 11:31	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/28/21 16:26	05/06/21 11:31	7440-22-4	
Sodium	**2.0**	mg/L	1.0	0.42	1	04/28/21 16:26	05/06/21 11:31	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/28/21 16:26	05/06/21 11:31	7440-28-0	
Total Hardness by SM2340B-2011	**3.8**	mg/L	3.3	0.37	1	04/28/21 16:26	05/06/21 11:31		
Vanadium	**0.00061J**	mg/L	0.0050	0.00057	1	04/28/21 16:26	05/06/21 11:31	7440-62-2	
Zinc	**0.010 U**	mg/L	0.010	0.0024	1	04/28/21 16:26	05/06/21 11:31	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**0.72J**	mg/L	1.0	0.10	1	04/27/21 15:58	04/29/21 16:44	7440-70-2	
Iron, Dissolved	**24.9**	mg/L	0.070	0.041	1	04/27/21 15:58	04/29/21 16:44	7439-89-6	
Magnesium, Dissolved	**0.50**	mg/L	0.20	0.028	1	04/27/21 15:58	04/29/21 16:44	7439-95-4	
Manganese, Dissolved	**0.18**	mg/L	0.0050	0.0012	1	04/27/21 15:58	04/29/21 16:44	7439-96-5	
Potassium, Dissolved	**0.88**	mg/L	0.50	0.072	1	04/27/21 15:58	04/29/21 16:44	7440-09-7	
Sodium, Dissolved	**2.0**	mg/L	1.0	0.42	1	04/27/21 15:58	04/29/21 16:44	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	04/27/21 12:37	04/28/21 21:54	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	05/01/21 01:29	05/01/21 01:29	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	05/01/21 01:29	05/01/21 01:29	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	05/01/21 01:29	05/01/21 01:29	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	05/01/21 01:29	05/01/21 01:29	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	05/01/21 01:29	05/01/21 01:29	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	05/01/21 01:29	05/01/21 01:29	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Sample: TW-15 **Lab ID: 30417011007** Collected: 04/22/21 15:00 Received: 04/22/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	05/01/21 01:29	05/01/21 01:29	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	05/01/21 01:29	05/01/21 01:29	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	05/01/21 01:29	05/01/21 01:29	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	05/01/21 01:29	05/01/21 01:29	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	05/01/21 01:29	05/01/21 01:29	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	05/01/21 01:29	05/01/21 01:29	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	05/01/21 01:29	05/01/21 01:29	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	05/01/21 01:29	05/01/21 01:29	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	05/01/21 01:29	05/01/21 01:29	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	05/01/21 01:29	05/01/21 01:29	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	05/01/21 01:29	05/01/21 01:29	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	05/01/21 01:29	05/01/21 01:29	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	05/01/21 01:29	05/01/21 01:29	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	05/01/21 01:29	05/01/21 01:29	110-57-6	
Dichlorofluoromethane	**0.419J**	ug/L	5.00	0.130	1	05/01/21 01:29	05/01/21 01:29	75-43-4	J
Dichlorodifluoromethane	**0.463J**	ug/L	5.00	0.374	1	05/01/21 01:29	05/01/21 01:29	75-71-8	J
1,1-Dichloroethane	**0.368J**	ug/L	1.00	0.100	1	05/01/21 01:29	05/01/21 01:29	75-34-3	J
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	05/01/21 01:29	05/01/21 01:29	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	05/01/21 01:29	05/01/21 01:29	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	05/01/21 01:29	05/01/21 01:29	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	05/01/21 01:29	05/01/21 01:29	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	05/01/21 01:29	05/01/21 01:29	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	05/01/21 01:29	05/01/21 01:29	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	05/01/21 01:29	05/01/21 01:29	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	05/01/21 01:29	05/01/21 01:29	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	05/01/21 01:29	05/01/21 01:29	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	05/01/21 01:29	05/01/21 01:29	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	05/01/21 01:29	05/01/21 01:29	78-93-3	
Methylene Chloride	**0.611J**	ug/L	5.00	0.430	1	05/01/21 01:29	05/01/21 01:29	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	05/01/21 01:29	05/01/21 01:29	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	05/01/21 01:29	05/01/21 01:29	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	05/01/21 01:29	05/01/21 01:29	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	05/01/21 01:29	05/01/21 01:29	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	05/01/21 01:29	05/01/21 01:29	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	05/01/21 01:29	05/01/21 01:29	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	05/01/21 01:29	05/01/21 01:29	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	05/01/21 01:29	05/01/21 01:29	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	05/01/21 01:29	05/01/21 01:29	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	05/01/21 01:29	05/01/21 01:29	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	05/01/21 01:29	05/01/21 01:29	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	05/01/21 01:29	05/01/21 01:29	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	05/01/21 01:29	05/01/21 01:29	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	05/01/21 01:29	05/01/21 01:29	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	05/01/21 01:29	05/01/21 01:29	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	05/01/21 01:29	05/01/21 01:29	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Sample: TW-15 **Lab ID: 30417011007** Collected: 04/22/21 15:00 Received: 04/22/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	112	%	80.0-120		1	05/01/21 01:29	05/01/21 01:29	2037-26-5	
4-Bromofluorobenzene (S)	98.7	%	77.0-126		1	05/01/21 01:29	05/01/21 01:29	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	70.0-130		1	05/01/21 01:29	05/01/21 01:29	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/06/21 20:05		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**25.0**	mg/L	10.0	10.0	1		04/28/21 15:24		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/06/21 08:55	05/06/21 12:45		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**10.5J**	mg/L	25.0	4.7	1	04/28/21 13:00	04/28/21 16:20		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**3.5**	mg/L	3.0	0.67	1		05/05/21 14:22	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.14**	mg/L	0.10	0.024	1		04/29/21 16:48	14797-55-8	
Nitrogen, NO2 plus NO3	**0.14**	mg/L	0.10	0.024	1		04/29/21 16:48		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/06/21 20:19	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/23/21 09:26	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Sample: TW-15B **Lab ID: 30417011008** Collected: 04/22/21 15:40 Received: 04/22/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/28/21 16:26	05/06/21 11:33	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/28/21 16:26	05/06/21 11:33	7440-38-2	
Barium	**0.054**	mg/L	0.010	0.00068	1	04/28/21 16:26	05/06/21 11:33	7440-39-3	
Beryllium	**0.00056J**	mg/L	0.0010	0.00017	1	04/28/21 16:26	05/06/21 11:33	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/28/21 16:26	05/06/21 11:33	7440-43-9	
Calcium	**1.2**	mg/L	1.0	0.10	1	04/28/21 16:26	05/06/21 11:33	7440-70-2	
Chromium	**0.00054J**	mg/L	0.0050	0.00035	1	04/28/21 16:26	05/06/21 11:33	7440-47-3	
Cobalt	**0.013**	mg/L	0.0050	0.00053	1	04/28/21 16:26	05/06/21 11:33	7440-48-4	
Copper	**0.0052**	mg/L	0.0050	0.0027	1	04/28/21 16:26	05/06/21 11:33	7440-50-8	
Iron	**0.070 U**	mg/L	0.070	0.041	1	04/28/21 16:26	05/06/21 11:33	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/28/21 16:26	05/06/21 11:33	7439-92-1	
Magnesium	**1.7**	mg/L	0.20	0.028	1	04/28/21 16:26	05/06/21 11:33	7439-95-4	
Manganese	**0.026**	mg/L	0.0050	0.0012	1	04/28/21 16:26	05/06/21 11:33	7439-96-5	
Nickel	**0.012**	mg/L	0.010	0.0015	1	04/28/21 16:26	05/06/21 11:33	7440-02-0	
Potassium	**1.1**	mg/L	0.50	0.072	1	04/28/21 16:26	05/06/21 11:33	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/28/21 16:26	05/06/21 11:33	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/28/21 16:26	05/06/21 11:33	7440-22-4	
Sodium	**7.3**	mg/L	1.0	0.42	1	04/28/21 16:26	05/06/21 11:33	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/28/21 16:26	05/06/21 11:33	7440-28-0	
Total Hardness by SM2340B-2011	**9.9**	mg/L	3.3	0.37	1	04/28/21 16:26	05/06/21 11:33		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/28/21 16:26	05/06/21 11:33	7440-62-2	
Zinc	**0.016**	mg/L	0.010	0.0024	1	04/28/21 16:26	05/06/21 11:33	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**1.3**	mg/L	1.0	0.10	1	04/27/21 15:58	04/29/21 16:46	7440-70-2	
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	04/27/21 15:58	04/29/21 16:46	7439-89-6	
Magnesium, Dissolved	**1.7**	mg/L	0.20	0.028	1	04/27/21 15:58	04/29/21 16:46	7439-95-4	
Manganese, Dissolved	**0.029**	mg/L	0.0050	0.0012	1	04/27/21 15:58	04/29/21 16:46	7439-96-5	
Potassium, Dissolved	**1.1**	mg/L	0.50	0.072	1	04/27/21 15:58	04/29/21 16:46	7440-09-7	
Sodium, Dissolved	**7.6**	mg/L	1.0	0.42	1	04/27/21 15:58	04/29/21 16:46	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00086**	mg/L	0.00020	0.000030	1	04/27/21 12:37	04/28/21 21:56	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	05/01/21 01:53	05/01/21 01:53	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	05/01/21 01:53	05/01/21 01:53	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	05/01/21 01:53	05/01/21 01:53	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	05/01/21 01:53	05/01/21 01:53	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	05/01/21 01:53	05/01/21 01:53	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	05/01/21 01:53	05/01/21 01:53	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Sample: TW-15B **Lab ID: 30417011008** Collected: 04/22/21 15:40 Received: 04/22/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	05/01/21 01:53	05/01/21 01:53	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	05/01/21 01:53	05/01/21 01:53	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	05/01/21 01:53	05/01/21 01:53	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	05/01/21 01:53	05/01/21 01:53	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	05/01/21 01:53	05/01/21 01:53	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	05/01/21 01:53	05/01/21 01:53	75-00-3	
Chloroform	**0.123J**	ug/L	5.00	0.111	1	05/01/21 01:53	05/01/21 01:53	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	05/01/21 01:53	05/01/21 01:53	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	05/01/21 01:53	05/01/21 01:53	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	05/01/21 01:53	05/01/21 01:53	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	05/01/21 01:53	05/01/21 01:53	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	05/01/21 01:53	05/01/21 01:53	95-50-1	
1,4-Dichlorobenzene	**0.131J**	ug/L	1.00	0.120	1	05/01/21 01:53	05/01/21 01:53	106-46-7	J
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	05/01/21 01:53	05/01/21 01:53	110-57-6	
Dichlorofluoromethane	**0.881J**	ug/L	5.00	0.130	1	05/01/21 01:53	05/01/21 01:53	75-43-4	J
Dichlorodifluoromethane	**1.76J**	ug/L	5.00	0.374	1	05/01/21 01:53	05/01/21 01:53	75-71-8	J
1,1-Dichloroethane	**1.23**	ug/L	1.00	0.100	1	05/01/21 01:53	05/01/21 01:53	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	05/01/21 01:53	05/01/21 01:53	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	05/01/21 01:53	05/01/21 01:53	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	05/01/21 01:53	05/01/21 01:53	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	05/01/21 01:53	05/01/21 01:53	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	05/01/21 01:53	05/01/21 01:53	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	05/01/21 01:53	05/01/21 01:53	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	05/01/21 01:53	05/01/21 01:53	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	05/01/21 01:53	05/01/21 01:53	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	05/01/21 01:53	05/01/21 01:53	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	05/01/21 01:53	05/01/21 01:53	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	05/01/21 01:53	05/01/21 01:53	78-93-3	
Methylene Chloride	**0.641J**	ug/L	5.00	0.430	1	05/01/21 01:53	05/01/21 01:53	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	05/01/21 01:53	05/01/21 01:53	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	05/01/21 01:53	05/01/21 01:53	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	05/01/21 01:53	05/01/21 01:53	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	05/01/21 01:53	05/01/21 01:53	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	05/01/21 01:53	05/01/21 01:53	79-34-5	
Tetrachloroethene	**1.02**	ug/L	1.00	0.300	1	05/01/21 01:53	05/01/21 01:53	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	05/01/21 01:53	05/01/21 01:53	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	05/01/21 01:53	05/01/21 01:53	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	05/01/21 01:53	05/01/21 01:53	79-00-5	
Trichloroethene	**0.254J**	ug/L	1.00	0.190	1	05/01/21 01:53	05/01/21 01:53	79-01-6	J
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	05/01/21 01:53	05/01/21 01:53	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	05/01/21 01:53	05/01/21 01:53	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	05/01/21 01:53	05/01/21 01:53	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	05/01/21 01:53	05/01/21 01:53	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	05/01/21 01:53	05/01/21 01:53	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	05/01/21 01:53	05/01/21 01:53	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Sample: TW-15B **Lab ID: 30417011008** Collected: 04/22/21 15:40 Received: 04/22/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	115	%	80.0-120		1	05/01/21 01:53	05/01/21 01:53	2037-26-5	
4-Bromofluorobenzene (S)	97.4	%	77.0-126		1	05/01/21 01:53	05/01/21 01:53	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70.0-130		1	05/01/21 01:53	05/01/21 01:53	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/06/21 20:05		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**19.0**	mg/L	10.0	10.0	1		04/28/21 15:24		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/06/21 08:55	05/06/21 12:47		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.1J**	mg/L	25.0	4.7	1	04/28/21 13:00	04/28/21 16:20		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**14.7**	mg/L	3.0	0.67	1		05/05/21 14:23	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.34**	mg/L	0.10	0.024	1		04/29/21 16:49	14797-55-8	
Nitrogen, NO2 plus NO3	**0.34**	mg/L	0.10	0.024	1		04/29/21 16:49		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/06/21 20:21	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/23/21 09:27	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Sample: TRIP BLANK **Lab ID: 30417011009** Collected: 04/22/21 00:01 Received: 04/22/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/30/21 22:02	04/30/21 22:02	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/30/21 22:02	04/30/21 22:02	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/30/21 22:02	04/30/21 22:02	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/30/21 22:02	04/30/21 22:02	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/30/21 22:02	04/30/21 22:02	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/30/21 22:02	04/30/21 22:02	75-25-2	
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/30/21 22:02	04/30/21 22:02	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/30/21 22:02	04/30/21 22:02	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/30/21 22:02	04/30/21 22:02	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/30/21 22:02	04/30/21 22:02	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/30/21 22:02	04/30/21 22:02	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/30/21 22:02	04/30/21 22:02	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	04/30/21 22:02	04/30/21 22:02	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/30/21 22:02	04/30/21 22:02	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/30/21 22:02	04/30/21 22:02	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/30/21 22:02	04/30/21 22:02	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/30/21 22:02	04/30/21 22:02	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/30/21 22:02	04/30/21 22:02	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/30/21 22:02	04/30/21 22:02	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/30/21 22:02	04/30/21 22:02	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	04/30/21 22:02	04/30/21 22:02	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	04/30/21 22:02	04/30/21 22:02	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	04/30/21 22:02	04/30/21 22:02	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/30/21 22:02	04/30/21 22:02	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/30/21 22:02	04/30/21 22:02	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/30/21 22:02	04/30/21 22:02	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/30/21 22:02	04/30/21 22:02	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/30/21 22:02	04/30/21 22:02	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/30/21 22:02	04/30/21 22:02	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/30/21 22:02	04/30/21 22:02	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/30/21 22:02	04/30/21 22:02	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/30/21 22:02	04/30/21 22:02	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/30/21 22:02	04/30/21 22:02	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/30/21 22:02	04/30/21 22:02	78-93-3	
Methylene Chloride	**0.444J**	ug/L	5.00	0.430	1	04/30/21 22:02	04/30/21 22:02	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/30/21 22:02	04/30/21 22:02	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/30/21 22:02	04/30/21 22:02	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/30/21 22:02	04/30/21 22:02	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/30/21 22:02	04/30/21 22:02	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/30/21 22:02	04/30/21 22:02	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/30/21 22:02	04/30/21 22:02	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/30/21 22:02	04/30/21 22:02	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/30/21 22:02	04/30/21 22:02	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/30/21 22:02	04/30/21 22:02	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/30/21 22:02	04/30/21 22:02	79-01-6	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Sample: TRIP BLANK **Lab ID: 30417011009** Collected: 04/22/21 00:01 Received: 04/22/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/30/21 22:02	04/30/21 22:02	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/30/21 22:02	04/30/21 22:02	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/30/21 22:02	04/30/21 22:02	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/30/21 22:02	04/30/21 22:02	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/30/21 22:02	04/30/21 22:02	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/30/21 22:02	04/30/21 22:02	179601-23-1	
Surrogates									
Toluene-d8 (S)	114	%	80.0-120		1	04/30/21 22:02	04/30/21 22:02	2037-26-5	
4-Bromofluorobenzene (S)	98.5	%	77.0-126		1	04/30/21 22:02	04/30/21 22:02	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70.0-130		1	04/30/21 22:02	04/30/21 22:02	17060-07-0	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417011

QC Batch: 445145
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417011001, 30417011002, 30417011003, 30417011004, 30417011005, 30417011006, 30417011007, 30417011008

METHOD BLANK: 2149011
Matrix: Water
Associated Lab Samples: 30417011001, 30417011002, 30417011003, 30417011004, 30417011005, 30417011006, 30417011007, 30417011008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.000030	04/28/21 21:33	

LABORATORY CONTROL SAMPLE: 2149012

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.001	0.00092	92	80-120	

MATRIX SPIKE SAMPLE: 2149014

Parameter	Units	30417011001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.00020 U	0.0025	0.0027	107	75-125	

SAMPLE DUPLICATE: 2149013

Parameter	Units	30417011001 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	0.00020 U	0.00020 U		20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417011

QC Batch: 445456
QC Batch Method: EPA 3005A
Analysis Method: EPA 6010B
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417011001, 30417011002, 30417011003, 30417011004, 30417011005, 30417011006, 30417011007, 30417011008

METHOD BLANK: 2150223
Matrix: Water
Associated Lab Samples: 30417011001, 30417011002, 30417011003, 30417011004, 30417011005, 30417011006, 30417011007, 30417011008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.0060 U	0.0060	0.0033	05/06/21 11:03	
Arsenic	mg/L	0.0050 U	0.0050	0.0020	05/06/21 11:03	
Barium	mg/L	0.0053J	0.010	0.00068	05/06/21 11:03	
Beryllium	mg/L	0.0010 U	0.0010	0.00017	05/06/21 11:03	
Cadmium	mg/L	0.0030 U	0.0030	0.00034	05/06/21 11:03	
Calcium	mg/L	1.0 U	1.0	0.10	05/06/21 11:03	
Chromium	mg/L	0.0050 U	0.0050	0.00035	05/06/21 11:03	
Cobalt	mg/L	0.0050 U	0.0050	0.00053	05/06/21 11:03	
Copper	mg/L	0.0050 U	0.0050	0.0027	05/06/21 11:03	
Iron	mg/L	0.070 U	0.070	0.041	05/06/21 11:03	
Lead	mg/L	0.0050 U	0.0050	0.0049	05/06/21 11:03	
Magnesium	mg/L	0.20 U	0.20	0.028	05/06/21 11:03	
Manganese	mg/L	0.0050 U	0.0050	0.0012	05/06/21 11:03	
Nickel	mg/L	0.010 U	0.010	0.0015	05/06/21 11:03	
Potassium	mg/L	0.50 U	0.50	0.072	05/06/21 11:03	
Selenium	mg/L	0.0080 U	0.0080	0.0055	05/06/21 11:03	
Silver	mg/L	0.0060 U	0.0060	0.0014	05/06/21 11:03	
Sodium	mg/L	1.0 U	1.0	0.42	05/06/21 11:03	
Thallium	mg/L	0.010 U	0.010	0.0040	05/06/21 11:03	
Total Hardness by SM2340B-2011	mg/L	3.3 U	3.3	0.37	05/06/21 11:03	
Vanadium	mg/L	0.0050 U	0.0050	0.00057	05/06/21 11:03	
Zinc	mg/L	0.010 U	0.010	0.0024	05/06/21 11:03	

LABORATORY CONTROL SAMPLE: 2150224

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.5	0.49	99	80-120	
Arsenic	mg/L	0.5	0.48	96	80-120	
Barium	mg/L	0.5	0.51	102	80-120	
Beryllium	mg/L	0.5	0.50	100	80-120	
Cadmium	mg/L	0.5	0.50	99	80-120	
Calcium	mg/L	5	5.1	101	80-120	
Chromium	mg/L	0.5	0.49	98	80-120	
Cobalt	mg/L	0.5	0.47	94	80-120	
Copper	mg/L	0.5	0.51	102	80-120	
Iron	mg/L	5	5.1	102	80-120	
Lead	mg/L	0.5	0.48	95	80-120	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417011

LABORATORY CONTROL SAMPLE: 2150224

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Magnesium	mg/L	5	5.0	100	80-120	
Manganese	mg/L	0.5	0.49	99	80-120	
Nickel	mg/L	0.5	0.51	101	80-120	
Potassium	mg/L	5	4.9	98	80-120	
Selenium	mg/L	0.5	0.50	100	80-120	
Silver	mg/L	0.25	0.25	98	80-120	
Sodium	mg/L	5	5.1	103	80-120	
Thallium	mg/L	0.5	0.48	96	80-120	
Total Hardness by SM2340B-2011	mg/L		33.2			
Vanadium	mg/L	0.5	0.49	98	80-120	
Zinc	mg/L	0.5	0.49	97	80-120	

MATRIX SPIKE SAMPLE: 2150226

Parameter	Units	30416856001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	7.1 ug/L	0.5	0.65	128	75-125	MH
Arsenic	mg/L	ND	0.5	0.63	126	75-125	MH
Barium	mg/L	1280000 ug/L	0.5	1340	12200	75-125	MH
Beryllium	mg/L	ND	0.5	0.46	93	75-125	
Cadmium	mg/L	ND	0.5	0.67	133	75-125	MH
Calcium	mg/L	1350000 ug/L	5	1400	1080	75-125	MH
Chromium	mg/L	ND	0.5	0.44	89	75-125	
Cobalt	mg/L	ND	0.5	0.65J	130	75-125	MH
Copper	mg/L	ND	0.5	0.60	121	75-125	
Iron	mg/L	9530 ug/L	5	14.3	96	75-125	
Lead	mg/L	ND	0.5	5.0 U	-241	75-125	ML
Magnesium	mg/L	134000 ug/L	5	140	124	75-125	
Manganese	mg/L	2480 ug/L	0.5	3.0	99	75-125	
Nickel	mg/L	ND	0.5	0.43	85	75-125	
Potassium	mg/L	21800 ug/L	5	29.2	147	75-125	MH
Selenium	mg/L	ND	0.5	0.62	123	75-125	
Silver	mg/L	ND	0.25	0.37	146	75-125	MH
Sodium	mg/L	4190000 ug/L	5	4580	7760	75-125	MH
Thallium	mg/L	ND	0.5	0.43	87	75-125	
Total Hardness by SM2340B-2011	mg/L	3920000 ug/L		4080			
Vanadium	mg/L	ND	0.5	0.48	97	75-125	
Zinc	mg/L	ND	0.5	0.42	84	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2150228 2150229

Parameter	Units	30417011001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.0060 U	0.5	0.5	0.49	0.48	98	97	75-125	2	20	
Arsenic	mg/L	0.0050 U	0.5	0.5	0.48	0.48	97	95	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417011

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2150228 2150229

Parameter	Units	30417011001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.013	0.5	0.5	0.52	0.51	102	100	75-125	2	20	
Beryllium	mg/L	0.0011	0.5	0.5	0.50	0.49	99	97	75-125	2	20	
Cadmium	mg/L	0.0030 U	0.5	0.5	0.50	0.49	99	98	75-125	2	20	
Calcium	mg/L	0.43J	5	5	5.5	5.4	101	99	75-125	2	20	
Chromium	mg/L	0.00092J	0.5	0.5	0.50	0.50	99	99	75-125	0	20	
Cobalt	mg/L	0.0014J	0.5	0.5	0.47	0.47	95	93	75-125	2	20	
Copper	mg/L	0.0050 U	0.5	0.5	0.51	0.50	102	100	75-125	1	20	
Iron	mg/L	25.2	5	5	30.1	29.8	98	92	75-125	1	20	
Lead	mg/L	0.0050 U	0.5	0.5	0.48	0.48	96	95	75-125	1	20	
Magnesium	mg/L	0.23	5	5	5.2	5.1	99	97	75-125	2	20	
Manganese	mg/L	0.13	0.5	0.5	0.62	0.61	98	96	75-125	2	20	
Nickel	mg/L	0.0031J	0.5	0.5	0.51	0.50	101	100	75-125	1	20	
Potassium	mg/L	0.50	5	5	5.4	5.3	98	96	75-125	2	20	
Selenium	mg/L	0.0080 U	0.5	0.5	0.49	0.49	98	98	75-125	1	20	
Silver	mg/L	0.0060 U	0.25	0.25	0.25	0.25	100	99	75-125	1	20	
Sodium	mg/L	0.85J	5	5	5.9	6.0	101	102	75-125	2	20	
Thallium	mg/L	0.010 U	0.5	0.5	0.48	0.47	95	94	75-125	2	20	
Total Hardness by SM2340B-2011	mg/L	2.0J			35.1	34.5				2		
Vanadium	mg/L	0.0011J	0.5	0.5	0.49	0.49	99	98	75-125	1	20	
Zinc	mg/L	0.010 U	0.5	0.5	0.49	0.49	99	98	75-125	1	20	

SAMPLE DUPLICATE: 2150225

Parameter	Units	30416856001 Result	Dup Result	RPD	Max RPD	Qualifiers
Antimony	mg/L	7.1 ug/L	0.0060 U		20	
Arsenic	mg/L	ND	0.0050 U		20	
Barium	mg/L	1280000 ug/L	1260	1	20	
Beryllium	mg/L	ND	0.00035J		20	
Cadmium	mg/L	ND	3.0 U		20	
Calcium	mg/L	1350000 ug/L	1320	2	20	
Chromium	mg/L	ND	0.00067J		20	
Cobalt	mg/L	ND	5.0 U		20	
Copper	mg/L	ND	0.0050 U		20	
Iron	mg/L	9530 ug/L	9.2	3	20	
Lead	mg/L	ND	5.0 U		20	
Magnesium	mg/L	134000 ug/L	129	4	20	
Manganese	mg/L	2480 ug/L	2.4	3	20	
Nickel	mg/L	ND	0.0092J		20	
Potassium	mg/L	21800 ug/L	21.2	3	20	
Selenium	mg/L	ND	0.0080 U		20	
Silver	mg/L	ND	0.0060 U		20	
Sodium	mg/L	4190000 ug/L	4410	5	20	
Thallium	mg/L	ND	0.010 U		20	

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(724)850-5600

QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417011

SAMPLE DUPLICATE: 2150225

Parameter	Units	30416856001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Hardness by SM2340B-2011	mg/L	3920000 ug/L	3830	2		
Vanadium	mg/L	ND	0.0050 U		20	
Zinc	mg/L	ND	0.010 U		20	

SAMPLE DUPLICATE: 2150227

Parameter	Units	30417011001 Result	Dup Result	RPD	Max RPD	Qualifiers
Antimony	mg/L	0.0060 U	0.0060 U		20	
Arsenic	mg/L	0.0050 U	0.0050 U		20	
Barium	mg/L	0.013	0.014	11	20	
Beryllium	mg/L	0.0011	0.00097J		20	
Cadmium	mg/L	0.0030 U	0.0030 U		20	
Calcium	mg/L	0.43J	0.43J		20	
Chromium	mg/L	0.00092J	0.00094J		20	
Cobalt	mg/L	0.0014J	0.0014J		20	
Copper	mg/L	0.0050 U	0.0050 U		20	
Iron	mg/L	25.2	25.4	1	20	
Lead	mg/L	0.0050 U	0.0050 U		20	
Magnesium	mg/L	0.23	0.22	3	20	
Manganese	mg/L	0.13	0.13	0	20	
Nickel	mg/L	0.0031J	0.0021J		20	
Potassium	mg/L	0.50	0.48J		20	
Selenium	mg/L	0.0080 U	0.0080 U		20	
Silver	mg/L	0.0060 U	0.0060 U		20	
Sodium	mg/L	0.85J	0.94J		20	
Thallium	mg/L	0.010 U	0.010 U		20	
Total Hardness by SM2340B-2011	mg/L	2.0J	2.0J			
Vanadium	mg/L	0.0011J	0.00099J		20	
Zinc	mg/L	0.010 U	0.010 U		20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417011

QC Batch: 445201
QC Batch Method: EPA 3005A
Analysis Method: EPA 6010B
Analysis Description: 6010 MET Dissolved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417011001, 30417011002, 30417011003, 30417011004, 30417011005, 30417011006, 30417011007, 30417011008

METHOD BLANK: 2149257
Matrix: Water
Associated Lab Samples: 30417011001, 30417011002, 30417011003, 30417011004, 30417011005, 30417011006, 30417011007, 30417011008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	1.0 U	1.0	0.10	04/29/21 15:45	
Iron, Dissolved	mg/L	0.070 U	0.070	0.041	04/29/21 15:45	
Magnesium, Dissolved	mg/L	0.20 U	0.20	0.028	04/29/21 15:45	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0012	04/29/21 15:45	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.072	04/29/21 15:45	
Sodium, Dissolved	mg/L	1.0 U	1.0	0.42	04/29/21 15:45	

LABORATORY CONTROL SAMPLE: 2149258

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	5	4.9	98	80-120	
Iron, Dissolved	mg/L	5	4.9	98	80-120	
Magnesium, Dissolved	mg/L	5	4.8	96	80-120	
Manganese, Dissolved	mg/L	0.5	0.48	96	80-120	
Potassium, Dissolved	mg/L	5	4.9	98	80-120	
Sodium, Dissolved	mg/L	5	5.2	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2149260 2149261

Parameter	Units	30416762001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	48.4	5	5	55.5	53.2	143	97	75-125	4	20	MH
Iron, Dissolved	mg/L	0.070 U	5	5	5.2	5.0	104	100	75-125	4	20	
Magnesium, Dissolved	mg/L	5.0	5	5	10.4	9.9	106	97	75-125	4	20	
Manganese, Dissolved	mg/L	0.0050 U	0.5	0.5	0.51	0.48	102	97	75-125	5	20	
Potassium, Dissolved	mg/L	5.0	5	5	10.6	10.2	112	103	75-125	4	20	
Sodium, Dissolved	mg/L	2.4	5	5	7.9	7.5	109	102	75-125	5	20	

MATRIX SPIKE SAMPLE: 2149263

Parameter	Units	30417011001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	0.38J	5	5.4	100	75-125	
Iron, Dissolved	mg/L	24.8	5	29.3	89	75-125	
Magnesium, Dissolved	mg/L	0.21	5	5.1	98	75-125	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417011

MATRIX SPIKE SAMPLE: 2149263

Parameter	Units	30417011001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Manganese, Dissolved	mg/L	0.13	0.5	0.62	98	75-125	
Potassium, Dissolved	mg/L	0.51	5	5.6	101	75-125	
Sodium, Dissolved	mg/L	0.99J	5	6.0	101	75-125	

SAMPLE DUPLICATE: 2149259

Parameter	Units	30416762001 Result	Dup Result	RPD	Max RPD	Qualifiers
Calcium, Dissolved	mg/L	48.4	49.4	2	20	
Iron, Dissolved	mg/L	0.070 U	0.070 U		20	
Magnesium, Dissolved	mg/L	5.0	5.1	2	20	
Manganese, Dissolved	mg/L	0.0050 U	0.0050 U		20	
Potassium, Dissolved	mg/L	5.0	5.1	3	20	
Sodium, Dissolved	mg/L	2.4	2.6	7	20	

SAMPLE DUPLICATE: 2149262

Parameter	Units	30417011001 Result	Dup Result	RPD	Max RPD	Qualifiers
Calcium, Dissolved	mg/L	0.38J	0.41J		20	
Iron, Dissolved	mg/L	24.8	26.8	8	20	
Magnesium, Dissolved	mg/L	0.21	0.25	15	20	
Manganese, Dissolved	mg/L	0.13	0.14	9	20	
Potassium, Dissolved	mg/L	0.51	0.56	9	20	
Sodium, Dissolved	mg/L	0.99J	0.94J		20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417011

QC Batch: 1661499
QC Batch Method: 8260B
Analysis Method: EPA 8260B
Analysis Description: VOA (GC/MS) 8260B
Laboratory: Pace National - Mt. Juliet
Associated Lab Samples: 30417011001, 30417011002

METHOD BLANK: R3650009-2
Matrix: Water
Associated Lab Samples: 30417011001, 30417011002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acetone	ug/L	50.0 U	50.0	11.3	04/30/21 00:45	
Acrylonitrile	ug/L	10.0 U	10.0	0.671	04/30/21 00:45	
Benzene	ug/L	1.00 U	1.00	0.0941	04/30/21 00:45	
Bromodichloromethane	ug/L	1.00 U	1.00	0.136	04/30/21 00:45	
Bromochloromethane	ug/L	1.00 U	1.00	0.128	04/30/21 00:45	
Bromoform	ug/L	1.00 U	1.00	0.129	04/30/21 00:45	
Bromomethane	ug/L	5.00 U	5.00	0.605	04/30/21 00:45	
Carbon disulfide	ug/L	1.00 U	1.00	0.0962	04/30/21 00:45	
Carbon tetrachloride	ug/L	1.00 U	1.00	0.128	04/30/21 00:45	
Chlorobenzene	ug/L	1.00 U	1.00	0.116	04/30/21 00:45	
Dibromochloromethane	ug/L	1.00 U	1.00	0.140	04/30/21 00:45	
Chloroethane	ug/L	5.00 U	5.00	0.192	04/30/21 00:45	
Chloroform	ug/L	5.00 U	5.00	0.111	04/30/21 00:45	
Chloromethane	ug/L	2.50 U	2.50	0.960	04/30/21 00:45	
1,2-Dibromo-3-chloropropane	ug/L	5.00 U	5.00	0.276	04/30/21 00:45	
1,2-Dibromoethane (EDB)	ug/L	1.00 U	1.00	0.126	04/30/21 00:45	
Dibromomethane	ug/L	1.00 U	1.00	0.122	04/30/21 00:45	
1,2-Dichlorobenzene	ug/L	1.00 U	1.00	0.107	04/30/21 00:45	
1,4-Dichlorobenzene	ug/L	1.00 U	1.00	0.120	04/30/21 00:45	
trans-1,4-Dichloro-2-butene	ug/L	2.50 U	2.50	0.467	04/30/21 00:45	
Dichlorodifluoromethane	ug/L	5.00 U	5.00	0.374	04/30/21 00:45	
Dichlorofluoromethane	ug/L	5.00 U	5.00	0.130	04/30/21 00:45	
1,1-Dichloroethane	ug/L	1.00 U	1.00	0.100	04/30/21 00:45	
1,2-Dichloroethane	ug/L	1.00 U	1.00	0.0819	04/30/21 00:45	
1,1-Dichloroethene	ug/L	1.00 U	1.00	0.188	04/30/21 00:45	
cis-1,2-Dichloroethene	ug/L	1.00 U	1.00	0.126	04/30/21 00:45	
trans-1,2-Dichloroethene	ug/L	1.00 U	1.00	0.149	04/30/21 00:45	
1,2-Dichloropropane	ug/L	1.00 U	1.00	0.149	04/30/21 00:45	
cis-1,3-Dichloropropene	ug/L	1.00 U	1.00	0.111	04/30/21 00:45	
trans-1,3-Dichloropropene	ug/L	1.00 U	1.00	0.118	04/30/21 00:45	
Ethylbenzene	ug/L	1.00 U	1.00	0.137	04/30/21 00:45	
2-Hexanone	ug/L	10.0 U	10.0	0.787	04/30/21 00:45	
Iodomethane	ug/L	10.0 U	10.0	6.00	04/30/21 00:45	
2-Butanone (MEK)	ug/L	10.0 U	10.0	1.19	04/30/21 00:45	
Methylene Chloride	ug/L	5.00 U	5.00	0.430	04/30/21 00:45	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.478	04/30/21 00:45	
Methyl-tert-butyl ether	ug/L	1.00 U	1.00	0.101	04/30/21 00:45	
Styrene	ug/L	1.00 U	1.00	0.118	04/30/21 00:45	
1,1,1,2-Tetrachloroethane	ug/L	1.00 U	1.00	0.147	04/30/21 00:45	
1,1,2,2-Tetrachloroethane	ug/L	1.00 U	1.00	0.133	04/30/21 00:45	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417011

METHOD BLANK: R3650009-2 Matrix: Water
Associated Lab Samples: 30417011001, 30417011002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Tetrachloroethene	ug/L	1.00 U	1.00	0.300	04/30/21 00:45	
Toluene	ug/L	1.00 U	1.00	0.278	04/30/21 00:45	
1,1,1-Trichloroethane	ug/L	1.00 U	1.00	0.149	04/30/21 00:45	
1,1,2-Trichloroethane	ug/L	1.00 U	1.00	0.158	04/30/21 00:45	
Trichloroethene	ug/L	1.00 U	1.00	0.190	04/30/21 00:45	
Trichlorofluoromethane	ug/L	5.00 U	5.00	0.160	04/30/21 00:45	
1,2,3-Trichloropropane	ug/L	2.50 U	2.50	0.237	04/30/21 00:45	
Vinyl acetate	ug/L	10.0 U	10.0	0.692	04/30/21 00:45	
Vinyl chloride	ug/L	1.00 U	1.00	0.234	04/30/21 00:45	
o-Xylene	ug/L	1.00 U	1.00	0.174	04/30/21 00:45	
m&p-Xylene	ug/L	2.00 U	2.00	0.430	04/30/21 00:45	
Toluene-d8 (S)	%	105	80.0-120		04/30/21 00:45	
4-Bromofluorobenzene (S)	%	97.2	77.0-126		04/30/21 00:45	
1,2-Dichloroethane-d4 (S)	%	112	70.0-130		04/30/21 00:45	

LABORATORY CONTROL SAMPLE: R3650009-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acetone	ug/L	25.0	27.3	109	19.0-160	
Acrylonitrile	ug/L	25.0	28.3	113	55.0-149	
Benzene	ug/L	5.00	4.67	93.4	70.0-123	
Bromodichloromethane	ug/L	5.00	5.31	106	75.0-120	
Bromochloromethane	ug/L	5.00	5.44	109	76.0-122	
Bromoform	ug/L	5.00	4.95	99.0	68.0-132	
Bromomethane	ug/L	5.00	5.62	112	10.0-160	
Carbon disulfide	ug/L	5.00	4.80	96.0	61.0-128	
Carbon tetrachloride	ug/L	5.00	5.12	102	68.0-126	
Chlorobenzene	ug/L	5.00	5.08	102	80.0-121	
Dibromochloromethane	ug/L	5.00	5.58	112	77.0-125	
Chloroethane	ug/L	5.00	5.63	113	47.0-150	
Chloroform	ug/L	5.00	5.42	108	73.0-120	
Chloromethane	ug/L	5.00	5.59	112	41.0-142	
1,2-Dibromo-3-chloropropane	ug/L	5.00	4.80	96.0	58.0-134	
1,2-Dibromoethane (EDB)	ug/L	5.00	5.61	112	80.0-122	
Dibromomethane	ug/L	5.00	5.43	109	80.0-120	
1,2-Dichlorobenzene	ug/L	5.00	4.84	96.8	79.0-121	
1,4-Dichlorobenzene	ug/L	5.00	5.18	104	79.0-120	
trans-1,4-Dichloro-2-butene	ug/L	5.00	4.56	91.2	33.0-144	
Dichlorodifluoromethane	ug/L	5.00	4.67	93.4	51.0-149	
Dichlorofluoromethane	ug/L	5.00	5.16	103	65.0-133	
1,1-Dichloroethane	ug/L	5.00	5.52	110	70.0-126	
1,2-Dichloroethane	ug/L	5.00	5.37	107	70.0-128	
1,1-Dichloroethene	ug/L	5.00	5.15	103	71.0-124	
cis-1,2-Dichloroethene	ug/L	5.00	4.75	95.0	73.0-120	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417011

LABORATORY CONTROL SAMPLE: R3650009-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,2-Dichloroethene	ug/L	5.00	5.34	107	73.0-120	
1,2-Dichloropropane	ug/L	5.00	5.13	103	77.0-125	
cis-1,3-Dichloropropene	ug/L	5.00	4.96	99.2	80.0-123	
trans-1,3-Dichloropropene	ug/L	5.00	5.04	101	78.0-124	
Ethylbenzene	ug/L	5.00	5.06	101	79.0-123	
2-Hexanone	ug/L	25.0	27.3	109	67.0-149	
Iodomethane	ug/L	25.0	25.2	101	33.0-147	
2-Butanone (MEK)	ug/L	25.0	28.7	115	44.0-160	
Methylene Chloride	ug/L	5.00	4.82	96.4	67.0-120	
4-Methyl-2-pentanone (MIBK)	ug/L	25.0	29.6	118	68.0-142	
Methyl-tert-butyl ether	ug/L	5.00	5.07	101	68.0-125	
Styrene	ug/L	5.00	4.98	99.6	73.0-130	
1,1,1,2-Tetrachloroethane	ug/L	5.00	5.22	104	75.0-125	
1,1,2,2-Tetrachloroethane	ug/L	5.00	4.74	94.8	65.0-130	
Tetrachloroethene	ug/L	5.00	5.25	105	72.0-132	
Toluene	ug/L	5.00	4.76	95.2	79.0-120	
1,1,1-Trichloroethane	ug/L	5.00	5.62	112	73.0-124	
1,1,2-Trichloroethane	ug/L	5.00	5.26	105	80.0-120	
Trichloroethene	ug/L	5.00	5.16	103	78.0-124	
Trichlorofluoromethane	ug/L	5.00	5.72	114	59.0-147	
1,2,3-Trichloropropane	ug/L	5.00	5.45	109	73.0-130	
Vinyl acetate	ug/L	25.0	20.0	80.0	11.0-160	
Vinyl chloride	ug/L	5.00	4.62	92.4	67.0-131	
o-Xylene	ug/L	5.00	5.03	101	80.0-122	
m&p-Xylene	ug/L	10.0	10.3	103	80.0-122	
Toluene-d8 (S)	%			106	80.0-120	
4-Bromofluorobenzene (S)	%			102	77.0-126	
1,2-Dichloroethane-d4 (S)	%			111	70.0-130	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417011

QC Batch: 1661649
QC Batch Method: 8260B
Analysis Method: EPA 8260B
Analysis Description: VOA (GC/MS) 8260B
Laboratory: Pace National - Mt. Juliet
Associated Lab Samples: 30417011003, 30417011004, 30417011005, 30417011006, 30417011007, 30417011008, 30417011009

METHOD BLANK: R3649687-2
Matrix: Water
Associated Lab Samples: 30417011003, 30417011004, 30417011005, 30417011006, 30417011007, 30417011008, 30417011009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acetone	ug/L	50.0 U	50.0	11.3	04/30/21 21:39	
Acrylonitrile	ug/L	10.0 U	10.0	0.671	04/30/21 21:39	
Benzene	ug/L	1.00 U	1.00	0.0941	04/30/21 21:39	
Bromodichloromethane	ug/L	1.00 U	1.00	0.136	04/30/21 21:39	
Bromochloromethane	ug/L	1.00 U	1.00	0.128	04/30/21 21:39	
Bromoform	ug/L	1.00 U	1.00	0.129	04/30/21 21:39	
Bromomethane	ug/L	5.00 U	5.00	0.605	04/30/21 21:39	
Carbon disulfide	ug/L	1.00 U	1.00	0.0962	04/30/21 21:39	
Carbon tetrachloride	ug/L	1.00 U	1.00	0.128	04/30/21 21:39	
Chlorobenzene	ug/L	1.00 U	1.00	0.116	04/30/21 21:39	
Dibromochloromethane	ug/L	1.00 U	1.00	0.140	04/30/21 21:39	
Chloroethane	ug/L	5.00 U	5.00	0.192	04/30/21 21:39	
Chloroform	ug/L	5.00 U	5.00	0.111	04/30/21 21:39	
Chloromethane	ug/L	2.50 U	2.50	0.960	04/30/21 21:39	
1,2-Dibromo-3-chloropropane	ug/L	5.00 U	5.00	0.276	04/30/21 21:39	
1,2-Dibromoethane (EDB)	ug/L	1.00 U	1.00	0.126	04/30/21 21:39	
Dibromomethane	ug/L	1.00 U	1.00	0.122	04/30/21 21:39	
1,2-Dichlorobenzene	ug/L	1.00 U	1.00	0.107	04/30/21 21:39	
1,4-Dichlorobenzene	ug/L	1.00 U	1.00	0.120	04/30/21 21:39	
trans-1,4-Dichloro-2-butene	ug/L	2.50 U	2.50	0.467	04/30/21 21:39	
Dichlorodifluoromethane	ug/L	5.00 U	5.00	0.374	04/30/21 21:39	
Dichlorofluoromethane	ug/L	5.00 U	5.00	0.130	04/30/21 21:39	
1,1-Dichloroethane	ug/L	1.00 U	1.00	0.100	04/30/21 21:39	
1,2-Dichloroethane	ug/L	1.00 U	1.00	0.0819	04/30/21 21:39	
1,1-Dichloroethene	ug/L	1.00 U	1.00	0.188	04/30/21 21:39	
cis-1,2-Dichloroethene	ug/L	1.00 U	1.00	0.126	04/30/21 21:39	
trans-1,2-Dichloroethene	ug/L	1.00 U	1.00	0.149	04/30/21 21:39	
1,2-Dichloropropane	ug/L	1.00 U	1.00	0.149	04/30/21 21:39	
cis-1,3-Dichloropropene	ug/L	1.00 U	1.00	0.111	04/30/21 21:39	
trans-1,3-Dichloropropene	ug/L	1.00 U	1.00	0.118	04/30/21 21:39	
Ethylbenzene	ug/L	1.00 U	1.00	0.137	04/30/21 21:39	
2-Hexanone	ug/L	10.0 U	10.0	0.787	04/30/21 21:39	
Iodomethane	ug/L	10.0 U	10.0	6.00	04/30/21 21:39	
2-Butanone (MEK)	ug/L	10.0 U	10.0	1.19	04/30/21 21:39	
Methylene Chloride	ug/L	5.00 U	5.00	0.430	04/30/21 21:39	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.478	04/30/21 21:39	
Methyl-tert-butyl ether	ug/L	1.00 U	1.00	0.101	04/30/21 21:39	
Styrene	ug/L	1.00 U	1.00	0.118	04/30/21 21:39	
1,1,1,2-Tetrachloroethane	ug/L	1.00 U	1.00	0.147	04/30/21 21:39	
1,1,2,2-Tetrachloroethane	ug/L	1.00 U	1.00	0.133	04/30/21 21:39	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417011

METHOD BLANK: R3649687-2 Matrix: Water
Associated Lab Samples: 30417011003, 30417011004, 30417011005, 30417011006, 30417011007, 30417011008, 30417011009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Tetrachloroethene	ug/L	1.00 U	1.00	0.300	04/30/21 21:39	
Toluene	ug/L	1.00 U	1.00	0.278	04/30/21 21:39	
1,1,1-Trichloroethane	ug/L	1.00 U	1.00	0.149	04/30/21 21:39	
1,1,2-Trichloroethane	ug/L	1.00 U	1.00	0.158	04/30/21 21:39	
Trichloroethene	ug/L	1.00 U	1.00	0.190	04/30/21 21:39	
Trichlorofluoromethane	ug/L	5.00 U	5.00	0.160	04/30/21 21:39	
1,2,3-Trichloropropane	ug/L	2.50 U	2.50	0.237	04/30/21 21:39	
Vinyl acetate	ug/L	10.0 U	10.0	0.692	04/30/21 21:39	
Vinyl chloride	ug/L	1.00 U	1.00	0.234	04/30/21 21:39	
o-Xylene	ug/L	1.00 U	1.00	0.174	04/30/21 21:39	
m&p-Xylene	ug/L	2.00 U	2.00	0.430	04/30/21 21:39	
Toluene-d8 (S)	%	114	80.0-120		04/30/21 21:39	
4-Bromofluorobenzene (S)	%	97.8	77.0-126		04/30/21 21:39	
1,2-Dichloroethane-d4 (S)	%	100	70.0-130		04/30/21 21:39	

LABORATORY CONTROL SAMPLE: R3649687-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acetone	ug/L	25.0	26.0	104	19.0-160	
Acrylonitrile	ug/L	25.0	24.2	96.8	55.0-149	
Benzene	ug/L	5.00	4.34	86.8	70.0-123	
Bromodichloromethane	ug/L	5.00	4.34	86.8	75.0-120	
Bromochloromethane	ug/L	5.00	4.67	93.4	76.0-122	
Bromoform	ug/L	5.00	4.50	90.0	68.0-132	
Bromomethane	ug/L	5.00	4.67	93.4	10.0-160	
Carbon disulfide	ug/L	5.00	4.28	85.6	61.0-128	
Carbon tetrachloride	ug/L	5.00	3.78	75.6	68.0-126	
Chlorobenzene	ug/L	5.00	4.72	94.4	80.0-121	
Dibromochloromethane	ug/L	5.00	4.82	96.4	77.0-125	
Chloroethane	ug/L	5.00	5.26	105	47.0-150	
Chloroform	ug/L	5.00	4.64	92.8	73.0-120	
Chloromethane	ug/L	5.00	5.60	112	41.0-142	
1,2-Dibromo-3-chloropropane	ug/L	5.00	4.46	89.2	58.0-134	
1,2-Dibromoethane (EDB)	ug/L	5.00	4.92	98.4	80.0-122	
Dibromomethane	ug/L	5.00	4.71	94.2	80.0-120	
1,2-Dichlorobenzene	ug/L	5.00	4.36	87.2	79.0-121	
1,4-Dichlorobenzene	ug/L	5.00	4.47	89.4	79.0-120	
trans-1,4-Dichloro-2-butene	ug/L	5.00	4.92	98.4	33.0-144	
Dichlorodifluoromethane	ug/L	5.00	5.45	109	51.0-149	
Dichlorofluoromethane	ug/L	5.00	5.11	102	65.0-133	
1,1-Dichloroethane	ug/L	5.00	4.85	97.0	70.0-126	
1,2-Dichloroethane	ug/L	5.00	4.49	89.8	70.0-128	
1,1-Dichloroethene	ug/L	5.00	4.74	94.8	71.0-124	
cis-1,2-Dichloroethene	ug/L	5.00	4.55	91.0	73.0-120	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417011

LABORATORY CONTROL SAMPLE: R3649687-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,2-Dichloroethene	ug/L	5.00	4.41	88.2	73.0-120	
1,2-Dichloropropane	ug/L	5.00	4.63	92.6	77.0-125	
cis-1,3-Dichloropropene	ug/L	5.00	4.31	86.2	80.0-123	
trans-1,3-Dichloropropene	ug/L	5.00	4.76	95.2	78.0-124	
Ethylbenzene	ug/L	5.00	4.63	92.6	79.0-123	
2-Hexanone	ug/L	25.0	25.7	103	67.0-149	
Iodomethane	ug/L	25.0	19.2	76.8	33.0-147	
2-Butanone (MEK)	ug/L	25.0	25.8	103	44.0-160	
Methylene Chloride	ug/L	5.00	4.65	93.0	67.0-120	
4-Methyl-2-pentanone (MIBK)	ug/L	25.0	26.2	105	68.0-142	
Methyl-tert-butyl ether	ug/L	5.00	4.62	92.4	68.0-125	
Styrene	ug/L	5.00	4.70	94.0	73.0-130	
1,1,1,2-Tetrachloroethane	ug/L	5.00	4.65	93.0	75.0-125	
1,1,2,2-Tetrachloroethane	ug/L	5.00	4.75	95.0	65.0-130	
Tetrachloroethene	ug/L	5.00	4.61	92.2	72.0-132	
Toluene	ug/L	5.00	4.74	94.8	79.0-120	
1,1,1-Trichloroethane	ug/L	5.00	4.65	93.0	73.0-124	
1,1,2-Trichloroethane	ug/L	5.00	4.92	98.4	80.0-120	
Trichloroethene	ug/L	5.00	4.57	91.4	78.0-124	
Trichlorofluoromethane	ug/L	5.00	4.82	96.4	59.0-147	
1,2,3-Trichloropropane	ug/L	5.00	4.58	91.6	73.0-130	
Vinyl acetate	ug/L	25.0	21.2	84.8	11.0-160	
Vinyl chloride	ug/L	5.00	4.90	98.0	67.0-131	
o-Xylene	ug/L	5.00	4.49	89.8	80.0-122	
m&p-Xylene	ug/L	10.0	9.16	91.6	80.0-122	
Toluene-d8 (S)	%			111	80.0-120	
4-Bromofluorobenzene (S)	%			101	77.0-126	
1,2-Dichloroethane-d4 (S)	%			107	70.0-130	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417011

QC Batch: 446804
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417011001, 30417011002, 30417011003, 30417011004, 30417011005, 30417011006, 30417011007, 30417011008

METHOD BLANK: 2156128
Matrix: Water
Associated Lab Samples: 30417011001, 30417011002, 30417011003, 30417011004, 30417011005, 30417011006, 30417011007, 30417011008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	05/06/21 18:07	

LABORATORY CONTROL SAMPLE: 2156129

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2156130 2156131

Parameter	Units	30417011001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	8.0J	50	50	52.0	52.0	88	88	85-115	0	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417011

QC Batch: 445284
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417011001, 30417011002, 30417011003, 30417011004, 30417011005, 30417011006, 30417011007, 30417011008

METHOD BLANK: 2149617
Matrix: Water
Associated Lab Samples: 30417011001, 30417011002, 30417011003, 30417011004, 30417011005, 30417011006, 30417011007, 30417011008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	04/28/21 15:19	

LABORATORY CONTROL SAMPLE: 2149618

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	941	94	85-115	

SAMPLE DUPLICATE: 2149619

Parameter	Units	30416886001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	2430	2320	5	5	5c

SAMPLE DUPLICATE: 2149620

Parameter	Units	30417080001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	54500	54800	1	5	5c

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417011

QC Batch: 446673
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417011001, 30417011002, 30417011003, 30417011004, 30417011005, 30417011006, 30417011007, 30417011008

METHOD BLANK: 2155748
Matrix: Water
Associated Lab Samples: 30417011001, 30417011002, 30417011003, 30417011004, 30417011005, 30417011006, 30417011007, 30417011008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.044	05/06/21 12:21	

LABORATORY CONTROL SAMPLE: 2155749

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.0	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2155750 2155751

Parameter	Units	30416869001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	12.5	8	8	20.4	20.3	98	97	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2155752 2155753

Parameter	Units	30417937002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	ND	4	4	3.9	3.9	98	98	90-110	0	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417011

QC Batch: 445323
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417011001, 30417011002, 30417011003, 30417011004, 30417011005, 30417011006, 30417011007, 30417011008

METHOD BLANK: 2149699
Matrix: Water
Associated Lab Samples: 30417011001, 30417011002, 30417011003, 30417011004, 30417011005, 30417011006, 30417011007, 30417011008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	04/28/21 16:18	

LABORATORY CONTROL SAMPLE: 2149700

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	307	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2149701 2149702

Parameter	Units	30417708001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	6.1J	150	150	173	164	111	105	90-110	5	10	MH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2149703 2149704

Parameter	Units	30417011005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	10.5J	150	150	160	166	100	104	90-110	4	10	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417011

QC Batch: 446462
QC Batch Method: SM 4500CIE-2011
Analysis Method: SM 4500CIE-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417011001, 30417011002, 30417011003, 30417011004, 30417011005, 30417011006, 30417011007, 30417011008

METHOD BLANK: 2154627
Matrix: Water
Associated Lab Samples: 30417011001, 30417011002, 30417011003, 30417011004, 30417011005, 30417011006, 30417011007, 30417011008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/05/21 14:06	

LABORATORY CONTROL SAMPLE: 2154628

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.3	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2154629 2154630

Parameter	Units	30416762005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	14.4	20	20	31.5	35.6	86	106	85-115	12	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417011

QC Batch: 445576 | Analysis Method: SM 4500NO3F-2011
QC Batch Method: SM 4500NO3F-2011 | Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417011001, 30417011002, 30417011003, 30417011004, 30417011005, 30417011006, 30417011007, 30417011008

METHOD BLANK: 2150760 | Matrix: Water
Associated Lab Samples: 30417011001, 30417011002, 30417011003, 30417011004, 30417011005, 30417011006, 30417011007, 30417011008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.024	04/29/21 16:16	

LABORATORY CONTROL SAMPLE: 2150761

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	3.8	95	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2150762 2150763

Parameter	Units	30416940001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.37	5	5	5.3	5.3	99	98	85-115	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417011

QC Batch: 446827
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417011001, 30417011002, 30417011003, 30417011004, 30417011005, 30417011006, 30417011007, 30417011008

METHOD BLANK: 2156215
Matrix: Water
Associated Lab Samples: 30417011001, 30417011002, 30417011003, 30417011004, 30417011005, 30417011006, 30417011007, 30417011008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	05/06/21 20:05	

LABORATORY CONTROL SAMPLE: 2156216

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	29.1	97	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2156217 2156218

Parameter	Units	30417011001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.0 U	20	20	20.9	22.0	105	110	85-115	5	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417011

QC Batch: 444677
QC Batch Method: SM 4500NO2B-2011
Analysis Method: SM 4500NO2B-2011
Analysis Description: SM4500NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417011001, 30417011002, 30417011003, 30417011004, 30417011005, 30417011006, 30417011007, 30417011008

METHOD BLANK: 2146764
Matrix: Water
Associated Lab Samples: 30417011001, 30417011002, 30417011003, 30417011004, 30417011005, 30417011006, 30417011007, 30417011008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	04/23/21 09:15	

LABORATORY CONTROL SAMPLE: 2146765

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.099	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2146766 2146767

Parameter	Units	30416791001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrite as N	mg/L	ND	0.1	0.1	0.097	0.098	97	98	85-115	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: MLF-SPRING 2021
Pace Project No.: 30417011

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

1c	ALK TV: -2 mg/L
2c	ALK TV: 0 mg/L
3c	ALK TV: 2 mg/L
4c	ALK TV: 8 mg/L
5c	Sample volume was reduced so the sample could be within an acceptable range
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
J	Analyte detected below the reporting limit, therefore result is an estimate. This qualifier is also used for all TICs.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30417011001	**TW-9**	EPA 3005A	445456	EPA 6010B	445515
30417011002	**TW-9B**	EPA 3005A	445456	EPA 6010B	445515
30417011003	**TW-9C**	EPA 3005A	445456	EPA 6010B	445515
30417011004	**TW-11A**	EPA 3005A	445456	EPA 6010B	445515
30417011005	**TW-12**	EPA 3005A	445456	EPA 6010B	445515
30417011006	**TW-13**	EPA 3005A	445456	EPA 6010B	445515
30417011007	**TW-15**	EPA 3005A	445456	EPA 6010B	445515
30417011008	**TW-15B**	EPA 3005A	445456	EPA 6010B	445515
30417011001	**TW-9**	EPA 3005A	445201	EPA 6010B	445265
30417011002	**TW-9B**	EPA 3005A	445201	EPA 6010B	445265
30417011003	**TW-9C**	EPA 3005A	445201	EPA 6010B	445265
30417011004	**TW-11A**	EPA 3005A	445201	EPA 6010B	445265
30417011005	**TW-12**	EPA 3005A	445201	EPA 6010B	445265
30417011006	**TW-13**	EPA 3005A	445201	EPA 6010B	445265
30417011007	**TW-15**	EPA 3005A	445201	EPA 6010B	445265
30417011008	**TW-15B**	EPA 3005A	445201	EPA 6010B	445265
30417011001	**TW-9**	EPA 7470A	445145	EPA 7470A	445254
30417011002	**TW-9B**	EPA 7470A	445145	EPA 7470A	445254
30417011003	**TW-9C**	EPA 7470A	445145	EPA 7470A	445254
30417011004	**TW-11A**	EPA 7470A	445145	EPA 7470A	445254
30417011005	**TW-12**	EPA 7470A	445145	EPA 7470A	445254
30417011006	**TW-13**	EPA 7470A	445145	EPA 7470A	445254
30417011007	**TW-15**	EPA 7470A	445145	EPA 7470A	445254
30417011008	**TW-15B**	EPA 7470A	445145	EPA 7470A	445254
30417011001	**TW-9**	8260B	1661499	EPA 8260B	1661499
30417011002	**TW-9B**	8260B	1661499	EPA 8260B	1661499
30417011003	**TW-9C**	8260B	1661649	EPA 8260B	1661649
30417011004	**TW-11A**	8260B	1661649	EPA 8260B	1661649
30417011005	**TW-12**	8260B	1661649	EPA 8260B	1661649
30417011006	**TW-13**	8260B	1661649	EPA 8260B	1661649
30417011007	**TW-15**	8260B	1661649	EPA 8260B	1661649
30417011008	**TW-15B**	8260B	1661649	EPA 8260B	1661649
30417011009	**TRIP BLANK**	8260B	1661649	EPA 8260B	1661649
30417011001	**TW-9**	SM 2320B-2011	446804		
30417011002	**TW-9B**	SM 2320B-2011	446804		
30417011003	**TW-9C**	SM 2320B-2011	446804		
30417011004	**TW-11A**	SM 2320B-2011	446804		
30417011005	**TW-12**	SM 2320B-2011	446804		
30417011006	**TW-13**	SM 2320B-2011	446804		
30417011007	**TW-15**	SM 2320B-2011	446804		
30417011008	**TW-15B**	SM 2320B-2011	446804		
30417011001	**TW-9**	SM 2540C-2011	445284		
30417011002	**TW-9B**	SM 2540C-2011	445284		
30417011003	**TW-9C**	SM 2540C-2011	445284		
30417011004	**TW-11A**	SM 2540C-2011	445284		
30417011005	**TW-12**	SM 2540C-2011	445284		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30417011006	**TW-13**	SM 2540C-2011	445284		
30417011007	**TW-15**	SM 2540C-2011	445284		
30417011008	**TW-15B**	SM 2540C-2011	445284		
30417011001	**TW-9**	EPA 350.1	446673	EPA 350.1	446680
30417011002	**TW-9B**	EPA 350.1	446673	EPA 350.1	446680
30417011003	**TW-9C**	EPA 350.1	446673	EPA 350.1	446680
30417011004	**TW-11A**	EPA 350.1	446673	EPA 350.1	446680
30417011005	**TW-12**	EPA 350.1	446673	EPA 350.1	446680
30417011006	**TW-13**	EPA 350.1	446673	EPA 350.1	446680
30417011007	**TW-15**	EPA 350.1	446673	EPA 350.1	446680
30417011008	**TW-15B**	EPA 350.1	446673	EPA 350.1	446680
30417011001	**TW-9**	EPA 410.4	445323	EPA 410.4	445468
30417011002	**TW-9B**	EPA 410.4	445323	EPA 410.4	445468
30417011003	**TW-9C**	EPA 410.4	445323	EPA 410.4	445468
30417011004	**TW-11A**	EPA 410.4	445323	EPA 410.4	445468
30417011005	**TW-12**	EPA 410.4	445323	EPA 410.4	445468
30417011006	**TW-13**	EPA 410.4	445323	EPA 410.4	445468
30417011007	**TW-15**	EPA 410.4	445323	EPA 410.4	445468
30417011008	**TW-15B**	EPA 410.4	445323	EPA 410.4	445468
30417011001	**TW-9**	SM 4500CIE-2011	446462		
30417011002	**TW-9B**	SM 4500CIE-2011	446462		
30417011003	**TW-9C**	SM 4500CIE-2011	446462		
30417011004	**TW-11A**	SM 4500CIE-2011	446462		
30417011005	**TW-12**	SM 4500CIE-2011	446462		
30417011006	**TW-13**	SM 4500CIE-2011	446462		
30417011007	**TW-15**	SM 4500CIE-2011	446462		
30417011008	**TW-15B**	SM 4500CIE-2011	446462		
30417011001	**TW-9**	SM 4500NO3F-2011	445576		
30417011002	**TW-9B**	SM 4500NO3F-2011	445576		
30417011003	**TW-9C**	SM 4500NO3F-2011	445576		
30417011004	**TW-11A**	SM 4500NO3F-2011	445576		
30417011005	**TW-12**	SM 4500NO3F-2011	445576		
30417011006	**TW-13**	SM 4500NO3F-2011	445576		
30417011007	**TW-15**	SM 4500NO3F-2011	445576		
30417011008	**TW-15B**	SM 4500NO3F-2011	445576		
30417011001	**TW-9**	EPA 9038	446827		
30417011002	**TW-9B**	EPA 9038	446827		
30417011003	**TW-9C**	EPA 9038	446827		
30417011004	**TW-11A**	EPA 9038	446827		
30417011005	**TW-12**	EPA 9038	446827		
30417011006	**TW-13**	EPA 9038	446827		
30417011007	**TW-15**	EPA 9038	446827		
30417011008	**TW-15B**	EPA 9038	446827		
30417011001	**TW-9**	SM 4500NO2B-2011	444677		
30417011002	**TW-9B**	SM 4500NO2B-2011	444677		
30417011003	**TW-9C**	SM 4500NO2B-2011	444677		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2021
Pace Project No.: 30417011

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30417011004	**TW-11A**	SM 4500NO2B-2011	444677		
30417011005	**TW-12**	SM 4500NO2B-2011	444677		
30417011006	**TW-13**	SM 4500NO2B-2011	444677		
30417011007	**TW-15**	SM 4500NO2B-2011	444677		
30417011008	**TW-15B**	SM 4500NO2B-2011	444677		

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF-SPMNG 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - MEOH 8260 (1)	Total Metals (2)	Total + Diss. Metals (3)	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO4, COD					
1	TW-9	1	4.22.21	1200	✓		GW	✓	✓	✓	✓	✓	✓	✓	✓					001
2	TW-9B			1040																002
3	TW-9C			1115																003
4	TW-11A			1245																004
5	TW-12			1335																005
6	TW-13			1420																006
7	TW-15			1500																007
8	TW-15B			1540																008
9	TRIP BLANK	2		—			QA													009
10																				
11																				
12																				

WO#: 30417011

30417011

	Signature	Date	Time	Comments
Relinquished by	NA Brown	4.22.21	1545	(1) PACE NAT'L VOCs - SEE ATTACHED LIST
Received by	PACE	4.22.21	1545	(2) Sb, As, Ba, Be, Cd, Cr, Co, Cu, Hg, Pb, Ni, Se, Ag, Tl, V, Zn
Relinquished by	PACE	4-22-21	1850	(3) Ca, Fe, Mg, Mn, K, Na
Received by	RDS PACE	4-22-21	1855	
Relinquished by	RDS PACE	4-22-21	2215	PACE - G-BURG - METALS + WET CHEM
Received by	Marwa J. [illegible]	4-22-2021	2215	LEVEL 2 REPORT

Cooler Temp on Arrival: 3.5 / 3.3 Deg. C

Rev. Aug. 2018

TABLE 2-2

APPENDIX I
EPA METHOD 8260 - VOLATILE ORGANIC COMPOUNDS AND DETECTION LIMITS

Millersville Landfill, Anne Arundel County, MD

Parameter	PQL (ppb)	Parameter	PQL (ppb)
Acetone	5.0	cis-1,2-Dichloroethene	1.0
Acrylonitrile	5.0	trans-1,2-Dichloroethene	1.0
Benzene	1.0	Dichlorofluoromethane*	1.0
Bromochloromethane	1.0	Methylene chloride	1.0
Bromodichloromethane	1.0	1,2-Dichloropropane	1.0
Bromoform	1.0	trans-1,3-Dichloropropene	1.0
Bromomethane	1.0	cis-1,3-Dichloropropene	1.0
2-Butanone	5.0	Ethylbenzene	1.0
Carbon disulfide	1.0	2-Hexanone	5.0
Carbon tetrachloride	1.0	Iodomethane	1.0
Chlorobenzene	1.0	4-Methyl-2-pentanone	5.0
Chloroethane	1.0	Styrene	1.0
Chloroform	1.0	1,1,1,2-Tetrachloroethane	1.0
Chloromethane	1.0	1,1,2,2-Tetrachloroethane	1.0
Dibromochloromethane	1.0	Tetrachloroethene	1.0
1,2-Dibromo-3-chloropropane (DBCP)	1.0	Toluene	1.0
1,2 - Dibromoethane (EDB)	1.0	1,1,1-Trichloroethane	1.0
Dibromomethane	1.0	1,1,2-Trichloroethane	1.0
1,2 - Dichlorobenzene	1.0	Trichloroethene	1.0
1,4 - Dichlorobenzene	1.0	Trichloroflouromethane	1.0
trans-1,4-dichloro-2-butene	1.0	1,2,3-Trichloropropane	1.0
Dichlorodifluoromethane*	1.0	Vinyl acetate	1.0
1,1-Dichloroethane	1.0	Vinyl chloride	1.0
1,2-Dichloroethane	1.0	o-Xylene	1.0
1,1-Dichloroethene	1.0	m+p-Xylenes	1.0

NOTES: 1) PQL = Practical quantitation limit d: 8260-1dl.doc
2) * = Additional compounds not included on Appendix I list.

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EMA

Project # #-30417011

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label mll
LIMS Login mll

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 11 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 3.5/3.6 °C Correction Factor: 0 °C Final Temp: 3.5/3.6 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# 10D1101	Date and Initials of person examining contents: mll 4/22/2021
Chain of Custody Present:	✓			1.	
Chain of Custody Filled Out:	✓			2.	
Chain of Custody Relinquished:	✓			3.	
Sampler Name & Signature on COC:		✓		4. no signature on coc	
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.	
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):	✓			7.	
Rush Turn Around Time Requested:	✓			8.	
Sufficient Volume:	✓			9.	
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.	
Containers Intact:	✓			11.	
Orthophosphate field filtered			✓	12.	
Hex Cr Aqueous sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.	
All containers meet method preservation requirements.	✓			Initial when completed mll	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:	✓			18.	
Trip Blank Custody Seals Present	✓				
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed:	Date: / Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

F103

Internal Transfer Chain of Custody

Pace Analytical®
www.pacelabs.com

☐ Samples Pre-Logged into eCOC.

State Of Origin: MD
Cert. Needed: [x] Yes ☐ No

Workorder: 30417011 **Workorder Name:** MLF-SPRING 2021 **Owner Received Date:** 4/22/2021 **Results Requested By:** 5/7/2021

Report To

Samantha Bayura
Pace Analytical Pittsburgh
1638 Roseytown Road
Suites 2,3,4
Greensburg, PA 15601
Phone (724)850-5622

Subcontract To

Pace National
12065 Lebanon Rd
Mt. Juliet, TN 37122
Phone (615) 758-5858

Requested Analysis

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HCL	VOC by 8260	LAB USE ONLY (L344452)
1	TW-9	PS	4/22/2021 12:00	30417011001	Water	0 13	X	-01
2	TW-9B	PS	4/22/2021 10:40	30417011002	Water	1	X	-02
3	TW-9C	PS	4/22/2021 11:15	30417011003	Water	1	X	-03
4	TW-11A	PS	4/22/2021 12:45	30417011004	Water	1	X	-04
5	TW-12	PS	4/22/2021 13:35	30417011005	Water	1	X	-05
6	TW-13	PS	4/22/2021 14:20	30417011006	Water	1	X	-06
7	TW-15	PS	4/22/2021 15:00	30417011007	Water	1	X	-07
8	TW-15B	PS	4/22/2021 15:40	30417011008	Water	1	X	-08
9	TRIP BLANK	PS	4/22/2021 00:01	30417011009	Water	12	X	-09

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature]	4/26/21 1700	[signature]	4/27/21 915
2				
3				

Comments

List attached to COC
Report in ug/L

Cooler Temperature on Receipt _____ °C | **Custody Seal** Y or N | **Received on Ice** Y or N | **Samples Intact** Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.
This chain of custody is considered complete as is since this information is available in the owner laboratory.

9-2-7
#6 OT

Fedex: 9242 2961 9138

Sample Receipt Checklist

COC Seal Present/Intact: ✓ Y N
COC Signed/Accurate: ✓ Y N
Bottles arrive intact: ✓ Y N
Correct bottles used: ✓ Y N
Sufficient volume sent: ✓ Y N
RAD Screen <0.5 mR/hr: Y N

If Applicable
VOA Zero Headspace: ✓ Y N
Pres.Correct/Check: Y N

L1344492

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF-SPMNG 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - MSTOD 8260 (1)	Total Metals (2)	Total + Diss. Metals (3)	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO4, COD					
1	TW-9	7	4.22.21	1200	✓		GW	✓	✓	✓	✓	✓	✓	✓	✓					001
2	TW-9B	↓	↓	1040	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓					002
3	TW-9C	↓	↓	1115	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓					003
4	TW-11A	↓	↓	1245	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓					004
5	TW-12	↓	↓	1335	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓					005
6	TW-13	↓	↓	1420	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓					006
7	TW-15	↓	↓	1500	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓					007
8	TW-15B	↓	↓	1540	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓					008
9	TRIP BLANK	2	↓	—	↓		QA	↓												009
10																				
11																				
12																				

WO#: 30417011

30417011

	Signature	Date	Time	Comments
Relinquished by	DA Brown	4.22.21	1545	(1) PACE NAT'L VOCs - SEE ATTACHED LIST
Received by	PACE	4.22.21	1545	(2) Sb, As, Ba, Be, Ca, Cr, Co, Cu, Hg, Pb, Ni, Se, Ag, Tl, V, Zn
Relinquished by	PACE	4-22-21	1850	(3) Ca, Fe, Mg, Mn, K, Na
Received by	RDS PACE	4.22.21	1855	
Relinquished by	RDS PACE	4-22-21	2215	PACE - E-BURG - METALS + WET CHEM
Received by	Marina J. Wolf	4-22-2021	2215	LEVEL 2 REPORT

Cooler Temp on Arrival: 3.5 / 3.3 Deg. C

Rev. Aug. 2018

U134M92

#-30417011

TABLE 2-2

APPENDIX I
EPA METHOD 8260 - VOLATILE ORGANIC COMPOUNDS AND DETECTION LIMITS

Millersville Landfill, Anne Arundel County, MD

Parameter	PQL (ppb)	Parameter	PQL (ppb)
Acetone	5.0	cis-1,2-Dichloroethene	1.0
Acrylonitrile	5.0	trans-1,2-Dichloroethene	1.0
Benzene	1.0	Dichlorofluoromethane*	1.0
Bromochloromethane	1.0	Methylene chloride	1.0
Bromodichloromethane	1.0	1,2-Dichloropropane	1.0
Bromoform	1.0	trans-1,3-Dichloropropene	1.0
Bromomethane	1.0	cis-1,3-Dichloropropene	1.0
2-Butanone	5.0	Ethylbenzene	1.0
Carbon disulfide	1.0	2-Hexanone	5.0
Carbon tetrachloride	1.0	Iodomethane	1.0
Chlorobenzene	1.0	4-Methyl-2-pentanone	5.0
Chloroethane	1.0	Styrene	1.0
Chloroform	1.0	1,1,1,2-Tetrachloroethane	1.0
Chloromethane	1.0	1,1,2,2-Tetrachloroethane	1.0
Dibromochloromethane	1.0	Tetrachloroethene	1.0
1,2-Dibromo-3-chloropropane (DBCP)	1.0	Toluene	1.0
1,2 - Dibromoethane (EDB)	1.0	1,1,1-Trichloroethane	1.0
Dibromomethane	1.0	1,1,2-Trichloroethane	1.0
1,2 - Dichlorobenzene	1.0	Trichloroethene	1.0
1,4 - Dichlorobenzene	1.0	Trichloroflouromethane	1.0
trans-1,4-dichloro-2-butene	1.0	1,2,3-Trichloropropane	1.0
Dichlorodifluoromethane*	1.0	Vinyl acetate	1.0
1,1-Dichloroethane	1.0	Vinyl chloride	1.0
1,2-Dichloroethane	1.0	o-Xylene	1.0
1,1-Dichloroethene	1.0	m+p-Xylenes	1.0

NOTES: 1) PQL = Practical quantitation limit

d: 8260-1dl.doc

2) * = Additional compounds not included on Appendix I list.

C134442

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EMA

Project # #-30417011

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label mll
LIMS Login mll

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 11 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 3.5/3.6 °C Correction Factor: 0 °C Final Temp: 3.5/3.6 °C

Temp should be above freezing to 6°C

pH paper Lot# 10D1101 Date and initials of person examining contents: mll 4/22/2021

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4. no signature on coc
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):	✓			7.
Rush Turn Around Time Requested:	✓			8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.
All containers meet method preservation requirements.	✓			Initial when completed mll Date/time of preservation Lot # of added preservative
Headspace in VOA Vials (>6mm):		✓		17.
Trip Blank Present: Trip Blank Custody Seals Present	✓ ✓			18.
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: Date: Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status Section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

May 13, 2021

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-SPRING 2021
Pace Project No.: 30417486

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on April 26, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace National - Mt. Juliet
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

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CERTIFICATIONS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services National

12065 Lebanon Road, Mt. Juliet, TN 37122
Alabama Certification #: 40660
Alaska Certification 17-026
Arizona Certification #: AZ0612
Arkansas Certification #: 88-0469
California Certification #: 2932
Canada Certification #: 1461.01
Colorado Certification #: TN00003
Connecticut Certification #: PH-0197
DOD Certification: #1461.01
EPA# TN00003
Florida Certification #: E87487
Georgia DW Certification #: 923
Georgia Certification: NELAP
Idaho Certification #: TN00003
Illinois Certification #: 200008
Indiana Certification #: C-TN-01
Iowa Certification #: 364
Kansas Certification #: E-10277
Kentucky UST Certification #: 16
Kentucky Certification #: 90010
Louisiana Certification #: AI30792
Louisiana DW Certification #: LA180010
Maine Certification #: TN0002
Maryland Certification #: 324
Massachusetts Certification #: M-TN003
Michigan Certification #: 9958
Minnesota Certification #: 047-999-395
Mississippi Certification #: TN00003
Missouri Certification #: 340
Montana Certification #: CERT0086
Nebraska Certification #: NE-OS-15-05
Nevada Certification #: TN-03-2002-34
New Hampshire Certification #: 2975
New Jersey Certification #: TN002
New Mexico DW Certification
New York Certification #: 11742
North Carolina Aquatic Toxicity Certification #: 41
North Carolina Drinking Water Certification #: 21704
North Carolina Environmental Certificate #: 375

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CERTIFICATIONS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Pace Analytical Services National

North Dakota Certification #: R-140
Ohio VAP Certification #: CL0069
Oklahoma Certification #: 9915
Oregon Certification #: TN200002
Pennsylvania Certification #: 68-02979
Rhode Island Certification #: LAO00356
South Carolina Certification #: 84004
South Dakota Certification
Tennessee DW/Chem/Micro Certification #: 2006
Texas Certification #: T 104704245-17-14
Texas Mold Certification #: LAB0152
USDA Soil Permit #: P330-15-00234
Utah Certification #: TN00003
Virginia Certification #: VT2006
Vermont Dept. of Health: ID# VT-2006
Virginia Certification #: 460132
Washington Certification #: C847
West Virginia Certification #: 233
Wisconsin Certification #: 998093910
Wyoming UST Certification #: via A2LA 2926.01
A2LA-ISO 17025 Certification #: 1461.01
A2LA-ISO 17025 Certification #: 1461.02
AIHA-LAP/LLC EMLAP Certification #:100789

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Greensburg, PA 15601
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SAMPLE SUMMARY

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30417486001	**TW-16**	Water	04/26/21 10:55	04/26/21 22:45
30417486002	**TW-16A**	Water	04/26/21 10:20	04/26/21 22:45
30417486003	**TW-17**	Water	04/26/21 11:45	04/26/21 22:45
30417486004	**TW-17A**	Water	04/26/21 12:20	04/26/21 22:45
30417486005	**TW-21**	Water	04/26/21 15:45	04/26/21 22:45
30417486006	**TW-21A**	Water	04/26/21 15:20	04/26/21 22:45
30417486007	**TW-22**	Water	04/26/21 14:05	04/26/21 22:45
30417486008	**TW-22A**	Water	04/26/21 14:40	04/26/21 22:45
30417486009	**TW-22B**	Water	04/26/21 13:30	04/26/21 22:45
30417486010	**TRIP BLANK**	Water	04/26/21 00:01	04/26/21 22:45

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30417486001	**TW-16**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30417486002	**TW-16A**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30417486003	**TW-17**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30417486004	**TW-17A**	EPA 6010B	CTS	22	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30417486005	**TW-21**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30417486006	**TW-21A**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30417486007	**TW-22**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500ClE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30417486008	**TW-22A**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JHH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500ClE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30417486009	**TW-22B**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JHH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500ClE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30417486010	**TRIP BLANK**	EPA 8260B	JHH	54	PAN

PAN = Pace National - Mt. Juliet
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Method: **EPA 6010B**
Description: 6010 MET ICP
Client: Environmental Monitoring and Assessment LLC
Date: May 13, 2021

General Information:
9 samples were analyzed for EPA 6010B by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 445841

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30417486002,30417741002

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2152152)
  - Iron

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: 445841

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 2152151)
  - Iron

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Method: **EPA 6010B**
Description: 6010 MET ICP, Dissolved
Client: Environmental Monitoring and Assessment LLC
Date: May 13, 2021

General Information:
9 samples were analyzed for EPA 6010B by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 446167

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30417486001,30417982002

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2153301)
  - Calcium, Dissolved
  - Magnesium, Dissolved
  - Sodium, Dissolved

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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Greensburg, PA 15601
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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: May 13, 2021

General Information:
9 samples were analyzed for EPA 7470A by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 445585

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30417486001,30417883002

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2150817)
  - Mercury

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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(724)850-5600

PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Method: **EPA 8260B**
Description: VOA (GC/MS) 8260B
Client: Environmental Monitoring and Assessment LLC
Date: May 13, 2021

General Information:
10 samples were analyzed for EPA 8260B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 1663318

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: R3650780-1)
  - 1,2,3-Trichloropropane
  - Acetone

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: May 13, 2021

General Information:
9 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 447044

1c: ALK TV : -1 mg/L
- TW-16A (Lab ID: 30417486002)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-22 (Lab ID: 30417486007)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-22A (Lab ID: 30417486008)
  - Alkalinity,Total (CaCO3 pH4.5)

2c: ALK TV : 0 mg/L
- TW-16 (Lab ID: 30417486001)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-17A (Lab ID: 30417486004)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-21 (Lab ID: 30417486005)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-21A (Lab ID: 30417486006)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-22B (Lab ID: 30417486009)
  - Alkalinity,Total (CaCO3 pH4.5)

3c: ALK TV : 2 mg/L
- TW-17 (Lab ID: 30417486003)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Method: **SM 2540C-2011**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: May 13, 2021

General Information:
9 samples were analyzed for SM 2540C-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 445525

5c: Sample volume was reduced so the sample could be within an acceptable range

- DUP (Lab ID: 2150588)
  - Total Dissolved Solids

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: May 13, 2021

General Information:
9 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 446923

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30417486001,30417506001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2156773)
  - Ammonia, Distilled
- MSD (Lab ID: 2156774)
  - Ammonia, Distilled

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: May 13, 2021

General Information:
9 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 445884

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30416651001,30417486001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2152342)
  - Chemical Oxygen Demand

R1: RPD value was outside control limits.

- MSD (Lab ID: 2152343)
  - Chemical Oxygen Demand

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Method: **SM 4500ClE-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: May 13, 2021

General Information:
9 samples were analyzed for SM 4500ClE-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Method: **SM 4500NO3F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: May 13, 2021

General Information:
9 samples were analyzed for SM 4500NO3F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: May 13, 2021

General Information:
9 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 447047

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30417486001

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2157257)
  - Sulfate
- MSD (Lab ID: 2157258)
  - Sulfate

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Method: **SM 4500NO2B-2011**
Description: SM4500NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: May 13, 2021

General Information:
9 samples were analyzed for SM 4500NO2B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 445244

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30416941002

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2149461)
  - Nitrite as N

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 445244

4c: Sample pH adjusted in lab

- DUP (Lab ID: 2149460)
  - Nitrite as N
- MS (Lab ID: 2149461)
  - Nitrite as N

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TW-16 **Lab ID: 30417486001** Collected: 04/26/21 10:55 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/30/21 15:03	05/03/21 06:40	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/30/21 15:03	05/03/21 06:40	7440-38-2	
Barium	**0.028**	mg/L	0.010	0.00068	1	04/30/21 15:03	05/03/21 06:40	7440-39-3	
Beryllium	**0.00090J**	mg/L	0.0010	0.00017	1	04/30/21 15:03	05/03/21 06:40	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/30/21 15:03	05/03/21 06:40	7440-43-9	
Calcium	**12.3**	mg/L	1.0	0.10	1	04/30/21 15:03	05/03/21 06:40	7440-70-2	
Chromium	**0.0034J**	mg/L	0.0050	0.00035	1	04/30/21 15:03	05/03/21 06:40	7440-47-3	
Cobalt	**0.21**	mg/L	0.0050	0.00053	1	04/30/21 15:03	05/03/21 06:40	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0027	1	04/30/21 15:03	05/03/21 06:40	7440-50-8	
Iron	**4.3**	mg/L	0.070	0.041	1	04/30/21 15:03	05/03/21 06:40	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/30/21 15:03	05/03/21 06:40	7439-92-1	
Magnesium	**10.1**	mg/L	0.20	0.028	1	04/30/21 15:03	05/03/21 06:40	7439-95-4	
Manganese	**1.4**	mg/L	0.0050	0.0012	1	04/30/21 15:03	05/03/21 06:40	7439-96-5	
Nickel	**0.24**	mg/L	0.010	0.0015	1	04/30/21 15:03	05/03/21 06:40	7440-02-0	
Potassium	**6.3**	mg/L	0.50	0.072	1	04/30/21 15:03	05/03/21 06:40	7440-09-7	
Selenium	**0.0055J**	mg/L	0.0080	0.0055	1	04/30/21 15:03	05/03/21 06:40	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/30/21 15:03	05/03/21 06:40	7440-22-4	
Sodium	**19.6**	mg/L	1.0	0.42	1	04/30/21 15:03	05/03/21 06:40	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/30/21 15:03	05/03/21 06:40	7440-28-0	
Total Hardness by SM2340B-2011	**72.2**	mg/L	3.3	0.37	1	04/30/21 15:03	05/03/21 06:40		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/30/21 15:03	05/03/21 06:40	7440-62-2	
Zinc	**0.35**	mg/L	0.010	0.0024	1	04/30/21 15:03	05/03/21 06:40	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**12.1**	mg/L	1.0	0.10	1	05/03/21 15:29	05/06/21 08:38	7440-70-2	
Iron, Dissolved	**1.2**	mg/L	0.070	0.041	1	05/03/21 15:29	05/06/21 08:38	7439-89-6	
Magnesium, Dissolved	**10**	mg/L	0.20	0.028	1	05/03/21 15:29	05/06/21 08:38	7439-95-4	
Manganese, Dissolved	**1.4**	mg/L	0.0050	0.0012	1	05/03/21 15:29	05/06/21 08:38	7439-96-5	
Potassium, Dissolved	**6.2**	mg/L	0.50	0.072	1	05/03/21 15:29	05/06/21 08:38	7440-09-7	
Sodium, Dissolved	**19.5**	mg/L	1.0	0.42	1	05/03/21 15:29	05/06/21 08:38	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	04/29/21 12:42	04/29/21 21:06	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	05/04/21 00:42	05/04/21 00:42	67-64-1	L0
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	05/04/21 00:42	05/04/21 00:42	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	05/04/21 00:42	05/04/21 00:42	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	05/04/21 00:42	05/04/21 00:42	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	05/04/21 00:42	05/04/21 00:42	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	05/04/21 00:42	05/04/21 00:42	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TW-16 **Lab ID: 30417486001** Collected: 04/26/21 10:55 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	05/04/21 00:42	05/04/21 00:42	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	05/04/21 00:42	05/04/21 00:42	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	05/04/21 00:42	05/04/21 00:42	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	05/04/21 00:42	05/04/21 00:42	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	05/04/21 00:42	05/04/21 00:42	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	05/04/21 00:42	05/04/21 00:42	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	05/04/21 00:42	05/04/21 00:42	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	05/04/21 00:42	05/04/21 00:42	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	05/04/21 00:42	05/04/21 00:42	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	05/04/21 00:42	05/04/21 00:42	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	05/04/21 00:42	05/04/21 00:42	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	05/04/21 00:42	05/04/21 00:42	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	05/04/21 00:42	05/04/21 00:42	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	05/04/21 00:42	05/04/21 00:42	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	05/04/21 00:42	05/04/21 00:42	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	05/04/21 00:42	05/04/21 00:42	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	05/04/21 00:42	05/04/21 00:42	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	05/04/21 00:42	05/04/21 00:42	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	05/04/21 00:42	05/04/21 00:42	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	05/04/21 00:42	05/04/21 00:42	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	05/04/21 00:42	05/04/21 00:42	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	05/04/21 00:42	05/04/21 00:42	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	05/04/21 00:42	05/04/21 00:42	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	05/04/21 00:42	05/04/21 00:42	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	05/04/21 00:42	05/04/21 00:42	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	05/04/21 00:42	05/04/21 00:42	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	05/04/21 00:42	05/04/21 00:42	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	05/04/21 00:42	05/04/21 00:42	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	05/04/21 00:42	05/04/21 00:42	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	05/04/21 00:42	05/04/21 00:42	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	05/04/21 00:42	05/04/21 00:42	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	05/04/21 00:42	05/04/21 00:42	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	05/04/21 00:42	05/04/21 00:42	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	05/04/21 00:42	05/04/21 00:42	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	05/04/21 00:42	05/04/21 00:42	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	05/04/21 00:42	05/04/21 00:42	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	05/04/21 00:42	05/04/21 00:42	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	05/04/21 00:42	05/04/21 00:42	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	05/04/21 00:42	05/04/21 00:42	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	05/04/21 00:42	05/04/21 00:42	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	05/04/21 00:42	05/04/21 00:42	96-18-4	L0
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	05/04/21 00:42	05/04/21 00:42	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	05/04/21 00:42	05/04/21 00:42	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	05/04/21 00:42	05/04/21 00:42	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	05/04/21 00:42	05/04/21 00:42	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TW-16 **Lab ID: 30417486001** Collected: 04/26/21 10:55 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	111	%	80.0-120		1	05/04/21 00:42	05/04/21 00:42	2037-26-5	
4-Bromofluorobenzene (S)	96.5	%	77.0-126		1	05/04/21 00:42	05/04/21 00:42	460-00-4	
1,2-Dichloroethane-d4 (S)	117	%	70.0-130		1	05/04/21 00:42	05/04/21 00:42	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/07/21 18:30		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**190**	mg/L	10.0	10.0	1		04/29/21 15:42		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/07/21 08:43	05/07/21 11:47		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.1J**	mg/L	25.0	4.7	1	04/30/21 22:54	05/01/21 02:00		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**25.7**	mg/L	3.0	0.67	1		05/13/21 15:22	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.026J**	mg/L	0.10	0.024	1		05/05/21 12:05	14797-55-8	
Nitrogen, NO2 plus NO3	**0.026J**	mg/L	0.10	0.024	1		05/05/21 12:05		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**81.5**	mg/L	20.0	9.3	2		05/07/21 17:45	14808-79-8	MH
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/27/21 19:31	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TW-16A **Lab ID: 30417486002** Collected: 04/26/21 10:20 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/30/21 15:03	05/03/21 06:32	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/30/21 15:03	05/03/21 06:32	7440-38-2	
Barium	**0.0071J**	mg/L	0.010	0.00068	1	04/30/21 15:03	05/03/21 06:32	7440-39-3	
Beryllium	**0.00021J**	mg/L	0.0010	0.00017	1	04/30/21 15:03	05/03/21 06:32	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/30/21 15:03	05/03/21 06:32	7440-43-9	
Calcium	**0.98J**	mg/L	1.0	0.10	1	04/30/21 15:03	05/03/21 06:32	7440-70-2	
Chromium	**0.0061**	mg/L	0.0050	0.00035	1	04/30/21 15:03	05/03/21 06:32	7440-47-3	
Cobalt	**0.028**	mg/L	0.0050	0.00053	1	04/30/21 15:03	05/03/21 06:32	7440-48-4	
Copper	**0.0045J**	mg/L	0.0050	0.0027	1	04/30/21 15:03	05/03/21 06:32	7440-50-8	
Iron	**0.051J**	mg/L	0.070	0.041	1	04/30/21 15:03	05/03/21 06:32	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/30/21 15:03	05/03/21 06:32	7439-92-1	
Magnesium	**0.38**	mg/L	0.20	0.028	1	04/30/21 15:03	05/03/21 06:32	7439-95-4	
Manganese	**0.0066**	mg/L	0.0050	0.0012	1	04/30/21 15:03	05/03/21 06:32	7439-96-5	
Nickel	**0.0095J**	mg/L	0.010	0.0015	1	04/30/21 15:03	05/03/21 06:32	7440-02-0	
Potassium	**0.51**	mg/L	0.50	0.072	1	04/30/21 15:03	05/03/21 06:32	7440-09-7	
Selenium	**0.0058J**	mg/L	0.0080	0.0055	1	04/30/21 15:03	05/03/21 06:32	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/30/21 15:03	05/03/21 06:32	7440-22-4	
Sodium	**1.3**	mg/L	1.0	0.42	1	04/30/21 15:03	05/03/21 06:32	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/30/21 15:03	05/03/21 06:32	7440-28-0	
Total Hardness by SM2340B-2011	**4.0**	mg/L	3.3	0.37	1	04/30/21 15:03	05/03/21 06:32		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/30/21 15:03	05/03/21 06:32	7440-62-2	
Zinc	**0.0050J**	mg/L	0.010	0.0024	1	04/30/21 15:03	05/03/21 06:32	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**0.93J**	mg/L	1.0	0.10	1	05/03/21 15:29	05/06/21 08:46	7440-70-2	
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	05/03/21 15:29	05/06/21 08:46	7439-89-6	
Magnesium, Dissolved	**0.37**	mg/L	0.20	0.028	1	05/03/21 15:29	05/06/21 08:46	7439-95-4	
Manganese, Dissolved	**0.0058**	mg/L	0.0050	0.0012	1	05/03/21 15:29	05/06/21 08:46	7439-96-5	
Potassium, Dissolved	**0.50J**	mg/L	0.50	0.072	1	05/03/21 15:29	05/06/21 08:46	7440-09-7	
Sodium, Dissolved	**1.1**	mg/L	1.0	0.42	1	05/03/21 15:29	05/06/21 08:46	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	04/29/21 12:42	04/29/21 21:11	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	05/04/21 03:27	05/04/21 03:27	67-64-1	L0
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	05/04/21 03:27	05/04/21 03:27	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	05/04/21 03:27	05/04/21 03:27	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	05/04/21 03:27	05/04/21 03:27	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	05/04/21 03:27	05/04/21 03:27	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	05/04/21 03:27	05/04/21 03:27	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TW-16A **Lab ID: 30417486002** Collected: 04/26/21 10:20 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	05/04/21 03:27	05/04/21 03:27	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	05/04/21 03:27	05/04/21 03:27	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	05/04/21 03:27	05/04/21 03:27	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	05/04/21 03:27	05/04/21 03:27	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	05/04/21 03:27	05/04/21 03:27	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	05/04/21 03:27	05/04/21 03:27	75-00-3	
Chloroform	**0.123J**	ug/L	5.00	0.111	1	05/04/21 03:27	05/04/21 03:27	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	05/04/21 03:27	05/04/21 03:27	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	05/04/21 03:27	05/04/21 03:27	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	05/04/21 03:27	05/04/21 03:27	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	05/04/21 03:27	05/04/21 03:27	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	05/04/21 03:27	05/04/21 03:27	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	05/04/21 03:27	05/04/21 03:27	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	05/04/21 03:27	05/04/21 03:27	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	05/04/21 03:27	05/04/21 03:27	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	05/04/21 03:27	05/04/21 03:27	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	05/04/21 03:27	05/04/21 03:27	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	05/04/21 03:27	05/04/21 03:27	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	05/04/21 03:27	05/04/21 03:27	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	05/04/21 03:27	05/04/21 03:27	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	05/04/21 03:27	05/04/21 03:27	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	05/04/21 03:27	05/04/21 03:27	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	05/04/21 03:27	05/04/21 03:27	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	05/04/21 03:27	05/04/21 03:27	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	05/04/21 03:27	05/04/21 03:27	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	05/04/21 03:27	05/04/21 03:27	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	05/04/21 03:27	05/04/21 03:27	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	05/04/21 03:27	05/04/21 03:27	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	05/04/21 03:27	05/04/21 03:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	05/04/21 03:27	05/04/21 03:27	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	05/04/21 03:27	05/04/21 03:27	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	05/04/21 03:27	05/04/21 03:27	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	05/04/21 03:27	05/04/21 03:27	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	05/04/21 03:27	05/04/21 03:27	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	05/04/21 03:27	05/04/21 03:27	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	05/04/21 03:27	05/04/21 03:27	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	05/04/21 03:27	05/04/21 03:27	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	05/04/21 03:27	05/04/21 03:27	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	05/04/21 03:27	05/04/21 03:27	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	05/04/21 03:27	05/04/21 03:27	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	05/04/21 03:27	05/04/21 03:27	96-18-4	L0
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	05/04/21 03:27	05/04/21 03:27	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	05/04/21 03:27	05/04/21 03:27	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	05/04/21 03:27	05/04/21 03:27	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	05/04/21 03:27	05/04/21 03:27	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TW-16A **Lab ID: 30417486002** Collected: 04/26/21 10:20 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	109	%	80.0-120		1	05/04/21 03:27	05/04/21 03:27	2037-26-5	
4-Bromofluorobenzene (S)	93.4	%	77.0-126		1	05/04/21 03:27	05/04/21 03:27	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%	70.0-130		1	05/04/21 03:27	05/04/21 03:27	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/07/21 18:30		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**12.0**	mg/L	10.0	10.0	1		04/29/21 15:43		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/07/21 08:43	05/07/21 11:52		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/30/21 22:54	05/01/21 02:01		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**3.0J**	mg/L	3.0	0.67	1		05/13/21 15:24	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.18**	mg/L	0.10	0.024	1		05/05/21 12:06	14797-55-8	
Nitrogen, NO2 plus NO3	**0.18**	mg/L	0.10	0.024	1		05/05/21 12:06		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/07/21 17:50	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/27/21 19:33	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TW-17 **Lab ID: 30417486003** Collected: 04/26/21 11:45 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/30/21 15:03	05/03/21 06:43	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/30/21 15:03	05/03/21 06:43	7440-38-2	
Barium	**0.023**	mg/L	0.010	0.00068	1	04/30/21 15:03	05/03/21 06:43	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00017	1	04/30/21 15:03	05/03/21 06:43	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/30/21 15:03	05/03/21 06:43	7440-43-9	
Calcium	**7.0**	mg/L	1.0	0.10	1	04/30/21 15:03	05/03/21 06:43	7440-70-2	
Chromium	**0.0088**	mg/L	0.0050	0.00035	1	04/30/21 15:03	05/03/21 06:43	7440-47-3	
Cobalt	**0.019**	mg/L	0.0050	0.00053	1	04/30/21 15:03	05/03/21 06:43	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0027	1	04/30/21 15:03	05/03/21 06:43	7440-50-8	
Iron	**10.0**	mg/L	0.070	0.041	1	04/30/21 15:03	05/03/21 06:43	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/30/21 15:03	05/03/21 06:43	7439-92-1	
Magnesium	**2.1**	mg/L	0.20	0.028	1	04/30/21 15:03	05/03/21 06:43	7439-95-4	
Manganese	**0.43**	mg/L	0.0050	0.0012	1	04/30/21 15:03	05/03/21 06:43	7439-96-5	
Nickel	**0.016**	mg/L	0.010	0.0015	1	04/30/21 15:03	05/03/21 06:43	7440-02-0	
Potassium	**1.8**	mg/L	0.50	0.072	1	04/30/21 15:03	05/03/21 06:43	7440-09-7	
Selenium	**0.0056J**	mg/L	0.0080	0.0055	1	04/30/21 15:03	05/03/21 06:43	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/30/21 15:03	05/03/21 06:43	7440-22-4	
Sodium	**13.6**	mg/L	1.0	0.42	1	04/30/21 15:03	05/03/21 06:43	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/30/21 15:03	05/03/21 06:43	7440-28-0	
Total Hardness by SM2340B-2011	**25.9**	mg/L	3.3	0.37	1	04/30/21 15:03	05/03/21 06:43		
Vanadium	**0.00068J**	mg/L	0.0050	0.00057	1	04/30/21 15:03	05/03/21 06:43	7440-62-2	
Zinc	**0.034**	mg/L	0.010	0.0024	1	04/30/21 15:03	05/03/21 06:43	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**7.0**	mg/L	1.0	0.10	1	05/03/21 15:29	05/06/21 08:48	7440-70-2	
Iron, Dissolved	**7.3**	mg/L	0.070	0.041	1	05/03/21 15:29	05/06/21 08:48	7439-89-6	
Magnesium, Dissolved	**2.0**	mg/L	0.20	0.028	1	05/03/21 15:29	05/06/21 08:48	7439-95-4	
Manganese, Dissolved	**0.42**	mg/L	0.0050	0.0012	1	05/03/21 15:29	05/06/21 08:48	7439-96-5	
Potassium, Dissolved	**1.7**	mg/L	0.50	0.072	1	05/03/21 15:29	05/06/21 08:48	7440-09-7	
Sodium, Dissolved	**13.4**	mg/L	1.0	0.42	1	05/03/21 15:29	05/06/21 08:48	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	04/29/21 12:42	04/29/21 21:12	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	05/04/21 03:47	05/04/21 03:47	67-64-1	L0
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	05/04/21 03:47	05/04/21 03:47	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	05/04/21 03:47	05/04/21 03:47	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	05/04/21 03:47	05/04/21 03:47	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	05/04/21 03:47	05/04/21 03:47	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	05/04/21 03:47	05/04/21 03:47	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TW-17 **Lab ID: 30417486003** Collected: 04/26/21 11:45 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	05/04/21 03:47	05/04/21 03:47	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	05/04/21 03:47	05/04/21 03:47	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	05/04/21 03:47	05/04/21 03:47	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	05/04/21 03:47	05/04/21 03:47	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	05/04/21 03:47	05/04/21 03:47	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	05/04/21 03:47	05/04/21 03:47	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	05/04/21 03:47	05/04/21 03:47	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	05/04/21 03:47	05/04/21 03:47	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	05/04/21 03:47	05/04/21 03:47	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	05/04/21 03:47	05/04/21 03:47	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	05/04/21 03:47	05/04/21 03:47	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	05/04/21 03:47	05/04/21 03:47	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	05/04/21 03:47	05/04/21 03:47	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	05/04/21 03:47	05/04/21 03:47	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	05/04/21 03:47	05/04/21 03:47	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	05/04/21 03:47	05/04/21 03:47	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	05/04/21 03:47	05/04/21 03:47	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	05/04/21 03:47	05/04/21 03:47	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	05/04/21 03:47	05/04/21 03:47	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	05/04/21 03:47	05/04/21 03:47	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	05/04/21 03:47	05/04/21 03:47	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	05/04/21 03:47	05/04/21 03:47	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	05/04/21 03:47	05/04/21 03:47	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	05/04/21 03:47	05/04/21 03:47	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	05/04/21 03:47	05/04/21 03:47	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	05/04/21 03:47	05/04/21 03:47	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	05/04/21 03:47	05/04/21 03:47	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	05/04/21 03:47	05/04/21 03:47	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	05/04/21 03:47	05/04/21 03:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	05/04/21 03:47	05/04/21 03:47	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	05/04/21 03:47	05/04/21 03:47	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	05/04/21 03:47	05/04/21 03:47	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	05/04/21 03:47	05/04/21 03:47	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	05/04/21 03:47	05/04/21 03:47	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	05/04/21 03:47	05/04/21 03:47	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	05/04/21 03:47	05/04/21 03:47	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	05/04/21 03:47	05/04/21 03:47	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	05/04/21 03:47	05/04/21 03:47	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	05/04/21 03:47	05/04/21 03:47	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	05/04/21 03:47	05/04/21 03:47	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	05/04/21 03:47	05/04/21 03:47	96-18-4	L0
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	05/04/21 03:47	05/04/21 03:47	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	05/04/21 03:47	05/04/21 03:47	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	05/04/21 03:47	05/04/21 03:47	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	05/04/21 03:47	05/04/21 03:47	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TW-17 **Lab ID: 30417486003** Collected: 04/26/21 11:45 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	110	%	80.0-120		1	05/04/21 03:47	05/04/21 03:47	2037-26-5	
4-Bromofluorobenzene (S)	96.7	%	77.0-126		1	05/04/21 03:47	05/04/21 03:47	460-00-4	
1,2-Dichloroethane-d4 (S)	118	%	70.0-130		1	05/04/21 03:47	05/04/21 03:47	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		05/07/21 18:30		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**87.0**	mg/L	10.0	10.0	1		04/29/21 15:43		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/07/21 08:43	05/07/21 11:54		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**38.6**	mg/L	25.0	4.7	1	04/30/21 22:54	05/01/21 02:01		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**5.7**	mg/L	3.0	0.67	1		05/13/21 15:25	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.025J**	mg/L	0.10	0.024	1		05/05/21 12:07	14797-55-8	
Nitrogen, NO2 plus NO3	**0.025J**	mg/L	0.10	0.024	1		05/05/21 12:07		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**36.9**	mg/L	10.0	4.7	1		05/07/21 17:50	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/27/21 19:34	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TW-17A **Lab ID: 30417486004** Collected: 04/26/21 12:20 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/30/21 15:03	05/03/21 06:45	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/30/21 15:03	05/03/21 06:45	7440-38-2	
Barium	**0.012**	mg/L	0.010	0.00068	1	04/30/21 15:03	05/03/21 06:45	7440-39-3	
Beryllium	**0.00028J**	mg/L	0.0010	0.00017	1	04/30/21 15:03	05/03/21 06:45	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/30/21 15:03	05/03/21 06:45	7440-43-9	
Calcium	**0.75J**	mg/L	1.0	0.10	1	04/30/21 15:03	05/03/21 06:45	7440-70-2	
Chromium	**0.0033J**	mg/L	0.0050	0.00035	1	04/30/21 15:03	05/03/21 06:45	7440-47-3	
Cobalt	**0.0035J**	mg/L	0.0050	0.00053	1	04/30/21 15:03	05/03/21 06:45	7440-48-4	
Copper	**0.0032J**	mg/L	0.0050	0.0027	1	04/30/21 15:03	05/03/21 06:45	7440-50-8	
Iron	**0.070 U**	mg/L	0.070	0.041	1	04/30/21 15:03	05/03/21 06:45	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/30/21 15:03	05/03/21 06:45	7439-92-1	
Magnesium	**0.38**	mg/L	0.20	0.028	1	04/30/21 15:03	05/03/21 06:45	7439-95-4	
Manganese	**0.0068**	mg/L	0.0050	0.0012	1	04/30/21 15:03	05/03/21 06:45	7439-96-5	
Nickel	**0.0081J**	mg/L	0.010	0.0015	1	04/30/21 15:03	05/03/21 06:45	7440-02-0	
Potassium	**0.49J**	mg/L	0.50	0.072	1	04/30/21 15:03	05/03/21 06:45	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/30/21 15:03	05/03/21 06:45	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/30/21 15:03	05/03/21 06:45	7440-22-4	
Sodium	**1.2**	mg/L	1.0	0.42	1	04/30/21 15:03	05/03/21 06:45	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/30/21 15:03	05/03/21 06:45	7440-28-0	
Total Hardness by SM2340B-2011	**3.4**	mg/L	3.3	0.37	1	04/30/21 15:03	05/03/21 06:45		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/30/21 15:03	05/03/21 06:45	7440-62-2	
Zinc	**0.0058J**	mg/L	0.010	0.0024	1	04/30/21 15:03	05/03/21 06:45	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**0.72J**	mg/L	1.0	0.10	1	05/03/21 15:29	05/06/21 08:50	7440-70-2	
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	05/03/21 15:29	05/06/21 08:50	7439-89-6	
Magnesium, Dissolved	**0.40**	mg/L	0.20	0.028	1	05/03/21 15:29	05/06/21 08:50	7439-95-4	
Manganese, Dissolved	**0.0060**	mg/L	0.0050	0.0012	1	05/03/21 15:29	05/06/21 08:50	7439-96-5	
Potassium, Dissolved	**0.50**	mg/L	0.50	0.072	1	05/03/21 15:29	05/06/21 08:50	7440-09-7	
Sodium, Dissolved	**1.2**	mg/L	1.0	0.42	1	05/03/21 15:29	05/06/21 08:50	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	04/29/21 12:42	04/29/21 21:14	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	05/04/21 04:07	05/04/21 04:07	67-64-1	L0
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	05/04/21 04:07	05/04/21 04:07	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	05/04/21 04:07	05/04/21 04:07	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	05/04/21 04:07	05/04/21 04:07	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	05/04/21 04:07	05/04/21 04:07	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	05/04/21 04:07	05/04/21 04:07	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TW-17A **Lab ID: 30417486004** Collected: 04/26/21 12:20 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	05/04/21 04:07	05/04/21 04:07	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	05/04/21 04:07	05/04/21 04:07	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	05/04/21 04:07	05/04/21 04:07	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	05/04/21 04:07	05/04/21 04:07	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	05/04/21 04:07	05/04/21 04:07	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	05/04/21 04:07	05/04/21 04:07	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	05/04/21 04:07	05/04/21 04:07	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	05/04/21 04:07	05/04/21 04:07	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	05/04/21 04:07	05/04/21 04:07	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	05/04/21 04:07	05/04/21 04:07	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	05/04/21 04:07	05/04/21 04:07	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	05/04/21 04:07	05/04/21 04:07	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	05/04/21 04:07	05/04/21 04:07	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	05/04/21 04:07	05/04/21 04:07	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	05/04/21 04:07	05/04/21 04:07	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	05/04/21 04:07	05/04/21 04:07	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	05/04/21 04:07	05/04/21 04:07	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	05/04/21 04:07	05/04/21 04:07	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	05/04/21 04:07	05/04/21 04:07	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	05/04/21 04:07	05/04/21 04:07	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	05/04/21 04:07	05/04/21 04:07	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	05/04/21 04:07	05/04/21 04:07	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	05/04/21 04:07	05/04/21 04:07	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	05/04/21 04:07	05/04/21 04:07	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	05/04/21 04:07	05/04/21 04:07	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	05/04/21 04:07	05/04/21 04:07	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	05/04/21 04:07	05/04/21 04:07	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	05/04/21 04:07	05/04/21 04:07	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	05/04/21 04:07	05/04/21 04:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	05/04/21 04:07	05/04/21 04:07	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	05/04/21 04:07	05/04/21 04:07	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	05/04/21 04:07	05/04/21 04:07	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	05/04/21 04:07	05/04/21 04:07	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	05/04/21 04:07	05/04/21 04:07	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	05/04/21 04:07	05/04/21 04:07	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	05/04/21 04:07	05/04/21 04:07	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	05/04/21 04:07	05/04/21 04:07	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	05/04/21 04:07	05/04/21 04:07	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	05/04/21 04:07	05/04/21 04:07	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	05/04/21 04:07	05/04/21 04:07	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	05/04/21 04:07	05/04/21 04:07	96-18-4	L0
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	05/04/21 04:07	05/04/21 04:07	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	05/04/21 04:07	05/04/21 04:07	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	05/04/21 04:07	05/04/21 04:07	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	05/04/21 04:07	05/04/21 04:07	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TW-17A **Lab ID: 30417486004** Collected: 04/26/21 12:20 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	111	%	80.0-120		1	05/04/21 04:07	05/04/21 04:07	2037-26-5	
4-Bromofluorobenzene (S)	96.9	%	77.0-126		1	05/04/21 04:07	05/04/21 04:07	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%	70.0-130		1	05/04/21 04:07	05/04/21 04:07	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/07/21 18:31		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		04/29/21 15:43		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/07/21 08:43	05/07/21 11:56		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/30/21 22:54	05/01/21 02:01		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**2.9J**	mg/L	3.0	0.67	1		05/13/21 15:26	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.17**	mg/L	0.10	0.024	1		05/05/21 12:09	14797-55-8	
Nitrogen, NO2 plus NO3	**0.17**	mg/L	0.10	0.024	1		05/05/21 12:09		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/07/21 17:52	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/27/21 19:34	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TW-21 **Lab ID: 30417486005** Collected: 04/26/21 15:45 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/30/21 15:03	05/03/21 06:47	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/30/21 15:03	05/03/21 06:47	7440-38-2	
Barium	**0.077**	mg/L	0.010	0.00068	1	04/30/21 15:03	05/03/21 06:47	7440-39-3	
Beryllium	**0.00054J**	mg/L	0.0010	0.00017	1	04/30/21 15:03	05/03/21 06:47	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/30/21 15:03	05/03/21 06:47	7440-43-9	
Calcium	**6.4**	mg/L	1.0	0.10	1	04/30/21 15:03	05/03/21 06:47	7440-70-2	
Chromium	**0.0011J**	mg/L	0.0050	0.00035	1	04/30/21 15:03	05/03/21 06:47	7440-47-3	
Cobalt	**0.0083**	mg/L	0.0050	0.00053	1	04/30/21 15:03	05/03/21 06:47	7440-48-4	
Copper	**0.0035J**	mg/L	0.0050	0.0027	1	04/30/21 15:03	05/03/21 06:47	7440-50-8	
Iron	**0.070 U**	mg/L	0.070	0.041	1	04/30/21 15:03	05/03/21 06:47	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/30/21 15:03	05/03/21 06:47	7439-92-1	
Magnesium	**2.3**	mg/L	0.20	0.028	1	04/30/21 15:03	05/03/21 06:47	7439-95-4	
Manganese	**0.10**	mg/L	0.0050	0.0012	1	04/30/21 15:03	05/03/21 06:47	7439-96-5	
Nickel	**0.0036J**	mg/L	0.010	0.0015	1	04/30/21 15:03	05/03/21 06:47	7440-02-0	
Potassium	**1.9**	mg/L	0.50	0.072	1	04/30/21 15:03	05/03/21 06:47	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/30/21 15:03	05/03/21 06:47	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/30/21 15:03	05/03/21 06:47	7440-22-4	
Sodium	**15.6**	mg/L	1.0	0.42	1	04/30/21 15:03	05/03/21 06:47	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/30/21 15:03	05/03/21 06:47	7440-28-0	
Total Hardness by SM2340B-2011	**25.6**	mg/L	3.3	0.37	1	04/30/21 15:03	05/03/21 06:47		
Vanadium	**0.00080J**	mg/L	0.0050	0.00057	1	04/30/21 15:03	05/03/21 06:47	7440-62-2	
Zinc	**0.024**	mg/L	0.010	0.0024	1	04/30/21 15:03	05/03/21 06:47	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**6.5**	mg/L	1.0	0.10	1	05/03/21 15:29	05/06/21 08:53	7440-70-2	
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	05/03/21 15:29	05/06/21 08:53	7439-89-6	
Magnesium, Dissolved	**2.4**	mg/L	0.20	0.028	1	05/03/21 15:29	05/06/21 08:53	7439-95-4	
Manganese, Dissolved	**0.10**	mg/L	0.0050	0.0012	1	05/03/21 15:29	05/06/21 08:53	7439-96-5	
Potassium, Dissolved	**1.9**	mg/L	0.50	0.072	1	05/03/21 15:29	05/06/21 08:53	7440-09-7	
Sodium, Dissolved	**15.8**	mg/L	1.0	0.42	1	05/03/21 15:29	05/06/21 08:53	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	04/29/21 12:42	04/29/21 21:16	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	05/04/21 04:27	05/04/21 04:27	67-64-1	L0
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	05/04/21 04:27	05/04/21 04:27	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	05/04/21 04:27	05/04/21 04:27	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	05/04/21 04:27	05/04/21 04:27	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	05/04/21 04:27	05/04/21 04:27	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	05/04/21 04:27	05/04/21 04:27	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TW-21 **Lab ID: 30417486005** Collected: 04/26/21 15:45 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	05/04/21 04:27	05/04/21 04:27	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	05/04/21 04:27	05/04/21 04:27	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	05/04/21 04:27	05/04/21 04:27	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	05/04/21 04:27	05/04/21 04:27	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	05/04/21 04:27	05/04/21 04:27	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	05/04/21 04:27	05/04/21 04:27	75-00-3	
Chloroform	**0.416J**	ug/L	5.00	0.111	1	05/04/21 04:27	05/04/21 04:27	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	05/04/21 04:27	05/04/21 04:27	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	05/04/21 04:27	05/04/21 04:27	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	05/04/21 04:27	05/04/21 04:27	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	05/04/21 04:27	05/04/21 04:27	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	05/04/21 04:27	05/04/21 04:27	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	05/04/21 04:27	05/04/21 04:27	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	05/04/21 04:27	05/04/21 04:27	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	05/04/21 04:27	05/04/21 04:27	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	05/04/21 04:27	05/04/21 04:27	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	05/04/21 04:27	05/04/21 04:27	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	05/04/21 04:27	05/04/21 04:27	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	05/04/21 04:27	05/04/21 04:27	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	05/04/21 04:27	05/04/21 04:27	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	05/04/21 04:27	05/04/21 04:27	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	05/04/21 04:27	05/04/21 04:27	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	05/04/21 04:27	05/04/21 04:27	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	05/04/21 04:27	05/04/21 04:27	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	05/04/21 04:27	05/04/21 04:27	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	05/04/21 04:27	05/04/21 04:27	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	05/04/21 04:27	05/04/21 04:27	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	05/04/21 04:27	05/04/21 04:27	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	05/04/21 04:27	05/04/21 04:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	05/04/21 04:27	05/04/21 04:27	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	05/04/21 04:27	05/04/21 04:27	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	05/04/21 04:27	05/04/21 04:27	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	05/04/21 04:27	05/04/21 04:27	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	05/04/21 04:27	05/04/21 04:27	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	05/04/21 04:27	05/04/21 04:27	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	05/04/21 04:27	05/04/21 04:27	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	05/04/21 04:27	05/04/21 04:27	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	05/04/21 04:27	05/04/21 04:27	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	05/04/21 04:27	05/04/21 04:27	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	05/04/21 04:27	05/04/21 04:27	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	05/04/21 04:27	05/04/21 04:27	96-18-4	L0
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	05/04/21 04:27	05/04/21 04:27	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	05/04/21 04:27	05/04/21 04:27	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	05/04/21 04:27	05/04/21 04:27	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	05/04/21 04:27	05/04/21 04:27	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TW-21 **Lab ID: 30417486005** Collected: 04/26/21 15:45 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	110	%	80.0-120		1	05/04/21 04:27	05/04/21 04:27	2037-26-5	
4-Bromofluorobenzene (S)	96.8	%	77.0-126		1	05/04/21 04:27	05/04/21 04:27	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%	70.0-130		1	05/04/21 04:27	05/04/21 04:27	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/07/21 18:32		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**78.0**	mg/L	10.0	10.0	1		04/29/21 15:43		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/07/21 08:43	05/07/21 11:58		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/30/21 22:54	05/01/21 02:01		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**23.0**	mg/L	3.0	0.67	1		05/13/21 15:27	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.9**	mg/L	0.10	0.024	1		05/05/21 12:10	14797-55-8	
Nitrogen, NO2 plus NO3	**1.9**	mg/L	0.10	0.024	1		05/05/21 12:10		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**26.7**	mg/L	10.0	4.7	1		05/07/21 17:55	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/27/21 19:35	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TW-21A **Lab ID: 30417486006** Collected: 04/26/21 15:20 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/30/21 15:03	05/03/21 06:54	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/30/21 15:03	05/03/21 06:54	7440-38-2	
Barium	**0.073**	mg/L	0.010	0.00068	1	04/30/21 15:03	05/03/21 06:54	7440-39-3	
Beryllium	**0.00037J**	mg/L	0.0010	0.00017	1	04/30/21 15:03	05/03/21 06:54	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/30/21 15:03	05/03/21 06:54	7440-43-9	
Calcium	**6.8**	mg/L	1.0	0.10	1	04/30/21 15:03	05/03/21 06:54	7440-70-2	
Chromium	**0.0024J**	mg/L	0.0050	0.00035	1	04/30/21 15:03	05/03/21 06:54	7440-47-3	
Cobalt	**0.0056**	mg/L	0.0050	0.00053	1	04/30/21 15:03	05/03/21 06:54	7440-48-4	
Copper	**0.0030J**	mg/L	0.0050	0.0027	1	04/30/21 15:03	05/03/21 06:54	7440-50-8	
Iron	**0.070 U**	mg/L	0.070	0.041	1	04/30/21 15:03	05/03/21 06:54	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/30/21 15:03	05/03/21 06:54	7439-92-1	
Magnesium	**2.0**	mg/L	0.20	0.028	1	04/30/21 15:03	05/03/21 06:54	7439-95-4	
Manganese	**0.069**	mg/L	0.0050	0.0012	1	04/30/21 15:03	05/03/21 06:54	7439-96-5	
Nickel	**0.0037J**	mg/L	0.010	0.0015	1	04/30/21 15:03	05/03/21 06:54	7440-02-0	
Potassium	**1.8**	mg/L	0.50	0.072	1	04/30/21 15:03	05/03/21 06:54	7440-09-7	
Selenium	**0.0059J**	mg/L	0.0080	0.0055	1	04/30/21 15:03	05/03/21 06:54	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/30/21 15:03	05/03/21 06:54	7440-22-4	
Sodium	**21.9**	mg/L	1.0	0.42	1	04/30/21 15:03	05/03/21 06:54	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/30/21 15:03	05/03/21 06:54	7440-28-0	
Total Hardness by SM2340B-2011	**25.2**	mg/L	3.3	0.37	1	04/30/21 15:03	05/03/21 06:54		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/30/21 15:03	05/03/21 06:54	7440-62-2	
Zinc	**0.019**	mg/L	0.010	0.0024	1	04/30/21 15:03	05/03/21 06:54	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**7.0**	mg/L	1.0	0.10	1	05/03/21 15:29	05/06/21 08:59	7440-70-2	
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	05/03/21 15:29	05/06/21 08:59	7439-89-6	
Magnesium, Dissolved	**2.0**	mg/L	0.20	0.028	1	05/03/21 15:29	05/06/21 08:59	7439-95-4	
Manganese, Dissolved	**0.067**	mg/L	0.0050	0.0012	1	05/03/21 15:29	05/06/21 08:59	7439-96-5	
Potassium, Dissolved	**1.8**	mg/L	0.50	0.072	1	05/03/21 15:29	05/06/21 08:59	7440-09-7	
Sodium, Dissolved	**22.0**	mg/L	1.0	0.42	1	05/03/21 15:29	05/06/21 08:59	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	04/29/21 12:42	04/29/21 21:17	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	05/04/21 04:47	05/04/21 04:47	67-64-1	L0
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	05/04/21 04:47	05/04/21 04:47	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	05/04/21 04:47	05/04/21 04:47	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	05/04/21 04:47	05/04/21 04:47	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	05/04/21 04:47	05/04/21 04:47	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	05/04/21 04:47	05/04/21 04:47	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TW-21A **Lab ID: 30417486006** Collected: 04/26/21 15:20 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	05/04/21 04:47	05/04/21 04:47	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	05/04/21 04:47	05/04/21 04:47	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	05/04/21 04:47	05/04/21 04:47	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	05/04/21 04:47	05/04/21 04:47	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	05/04/21 04:47	05/04/21 04:47	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	05/04/21 04:47	05/04/21 04:47	75-00-3	
Chloroform	**0.255J**	ug/L	5.00	0.111	1	05/04/21 04:47	05/04/21 04:47	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	05/04/21 04:47	05/04/21 04:47	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	05/04/21 04:47	05/04/21 04:47	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	05/04/21 04:47	05/04/21 04:47	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	05/04/21 04:47	05/04/21 04:47	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	05/04/21 04:47	05/04/21 04:47	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	05/04/21 04:47	05/04/21 04:47	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	05/04/21 04:47	05/04/21 04:47	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	05/04/21 04:47	05/04/21 04:47	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	05/04/21 04:47	05/04/21 04:47	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	05/04/21 04:47	05/04/21 04:47	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	05/04/21 04:47	05/04/21 04:47	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	05/04/21 04:47	05/04/21 04:47	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	05/04/21 04:47	05/04/21 04:47	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	05/04/21 04:47	05/04/21 04:47	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	05/04/21 04:47	05/04/21 04:47	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	05/04/21 04:47	05/04/21 04:47	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	05/04/21 04:47	05/04/21 04:47	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	05/04/21 04:47	05/04/21 04:47	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	05/04/21 04:47	05/04/21 04:47	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	05/04/21 04:47	05/04/21 04:47	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	05/04/21 04:47	05/04/21 04:47	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	05/04/21 04:47	05/04/21 04:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	05/04/21 04:47	05/04/21 04:47	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	05/04/21 04:47	05/04/21 04:47	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	05/04/21 04:47	05/04/21 04:47	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	05/04/21 04:47	05/04/21 04:47	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	05/04/21 04:47	05/04/21 04:47	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	05/04/21 04:47	05/04/21 04:47	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	05/04/21 04:47	05/04/21 04:47	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	05/04/21 04:47	05/04/21 04:47	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	05/04/21 04:47	05/04/21 04:47	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	05/04/21 04:47	05/04/21 04:47	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	05/04/21 04:47	05/04/21 04:47	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	05/04/21 04:47	05/04/21 04:47	96-18-4	L0
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	05/04/21 04:47	05/04/21 04:47	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	05/04/21 04:47	05/04/21 04:47	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	05/04/21 04:47	05/04/21 04:47	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	05/04/21 04:47	05/04/21 04:47	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TW-21A **Lab ID: 30417486006** Collected: 04/26/21 15:20 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	108	%	80.0-120		1	05/04/21 04:47	05/04/21 04:47	2037-26-5	
4-Bromofluorobenzene (S)	97.0	%	77.0-126		1	05/04/21 04:47	05/04/21 04:47	460-00-4	
1,2-Dichloroethane-d4 (S)	115	%	70.0-130		1	05/04/21 04:47	05/04/21 04:47	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/07/21 18:32		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**87.0**	mg/L	10.0	10.0	1		04/29/21 15:44		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/07/21 08:43	05/07/21 12:00		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.1J**	mg/L	25.0	4.7	1	04/30/21 22:54	05/01/21 02:01		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**32.0**	mg/L	3.0	0.67	1		05/13/21 15:28	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.6**	mg/L	0.10	0.024	1		05/05/21 12:11	14797-55-8	
Nitrogen, NO2 plus NO3	**1.6**	mg/L	0.10	0.024	1		05/05/21 12:11		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**22.1**	mg/L	10.0	4.7	1		05/07/21 17:57	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/27/21 19:37	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TW-22 **Lab ID: 30417486007** Collected: 04/26/21 14:05 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/30/21 15:03	05/03/21 06:57	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/30/21 15:03	05/03/21 06:57	7440-38-2	
Barium	**0.043**	mg/L	0.010	0.00068	1	04/30/21 15:03	05/03/21 06:57	7440-39-3	
Beryllium	**0.00038J**	mg/L	0.0010	0.00017	1	04/30/21 15:03	05/03/21 06:57	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/30/21 15:03	05/03/21 06:57	7440-43-9	
Calcium	**2.0**	mg/L	1.0	0.10	1	04/30/21 15:03	05/03/21 06:57	7440-70-2	
Chromium	**0.015**	mg/L	0.0050	0.00035	1	04/30/21 15:03	05/03/21 06:57	7440-47-3	
Cobalt	**0.010**	mg/L	0.0050	0.00053	1	04/30/21 15:03	05/03/21 06:57	7440-48-4	
Copper	**0.014**	mg/L	0.0050	0.0027	1	04/30/21 15:03	05/03/21 06:57	7440-50-8	
Iron	**0.088**	mg/L	0.070	0.041	1	04/30/21 15:03	05/03/21 06:57	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/30/21 15:03	05/03/21 06:57	7439-92-1	
Magnesium	**1.7**	mg/L	0.20	0.028	1	04/30/21 15:03	05/03/21 06:57	7439-95-4	
Manganese	**0.027**	mg/L	0.0050	0.0012	1	04/30/21 15:03	05/03/21 06:57	7439-96-5	
Nickel	**0.024**	mg/L	0.010	0.0015	1	04/30/21 15:03	05/03/21 06:57	7440-02-0	
Potassium	**1.2**	mg/L	0.50	0.072	1	04/30/21 15:03	05/03/21 06:57	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/30/21 15:03	05/03/21 06:57	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/30/21 15:03	05/03/21 06:57	7440-22-4	
Sodium	**11.3**	mg/L	1.0	0.42	1	04/30/21 15:03	05/03/21 06:57	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/30/21 15:03	05/03/21 06:57	7440-28-0	
Total Hardness by SM2340B-2011	**12.1**	mg/L	3.3	0.37	1	04/30/21 15:03	05/03/21 06:57		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/30/21 15:03	05/03/21 06:57	7440-62-2	
Zinc	**0.013**	mg/L	0.010	0.0024	1	04/30/21 15:03	05/03/21 06:57	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**2.0**	mg/L	1.0	0.10	1	05/03/21 15:29	05/06/21 09:01	7440-70-2	
Iron, Dissolved	**0.050J**	mg/L	0.070	0.041	1	05/03/21 15:29	05/06/21 09:01	7439-89-6	
Magnesium, Dissolved	**1.7**	mg/L	0.20	0.028	1	05/03/21 15:29	05/06/21 09:01	7439-95-4	
Manganese, Dissolved	**0.025**	mg/L	0.0050	0.0012	1	05/03/21 15:29	05/06/21 09:01	7439-96-5	
Potassium, Dissolved	**1.1**	mg/L	0.50	0.072	1	05/03/21 15:29	05/06/21 09:01	7440-09-7	
Sodium, Dissolved	**11.0**	mg/L	1.0	0.42	1	05/03/21 15:29	05/06/21 09:01	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	04/29/21 12:42	04/29/21 21:24	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	05/04/21 05:07	05/04/21 05:07	67-64-1	L0
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	05/04/21 05:07	05/04/21 05:07	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	05/04/21 05:07	05/04/21 05:07	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	05/04/21 05:07	05/04/21 05:07	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	05/04/21 05:07	05/04/21 05:07	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	05/04/21 05:07	05/04/21 05:07	75-25-2	

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Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TW-22 **Lab ID: 30417486007** Collected: 04/26/21 14:05 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	05/04/21 05:07	05/04/21 05:07	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	05/04/21 05:07	05/04/21 05:07	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	05/04/21 05:07	05/04/21 05:07	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	05/04/21 05:07	05/04/21 05:07	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	05/04/21 05:07	05/04/21 05:07	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	05/04/21 05:07	05/04/21 05:07	75-00-3	
Chloroform	**0.401J**	ug/L	5.00	0.111	1	05/04/21 05:07	05/04/21 05:07	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	05/04/21 05:07	05/04/21 05:07	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	05/04/21 05:07	05/04/21 05:07	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	05/04/21 05:07	05/04/21 05:07	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	05/04/21 05:07	05/04/21 05:07	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	05/04/21 05:07	05/04/21 05:07	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	05/04/21 05:07	05/04/21 05:07	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	05/04/21 05:07	05/04/21 05:07	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	05/04/21 05:07	05/04/21 05:07	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	05/04/21 05:07	05/04/21 05:07	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	05/04/21 05:07	05/04/21 05:07	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	05/04/21 05:07	05/04/21 05:07	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	05/04/21 05:07	05/04/21 05:07	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	05/04/21 05:07	05/04/21 05:07	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	05/04/21 05:07	05/04/21 05:07	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	05/04/21 05:07	05/04/21 05:07	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	05/04/21 05:07	05/04/21 05:07	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	05/04/21 05:07	05/04/21 05:07	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	05/04/21 05:07	05/04/21 05:07	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	05/04/21 05:07	05/04/21 05:07	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	05/04/21 05:07	05/04/21 05:07	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	05/04/21 05:07	05/04/21 05:07	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	05/04/21 05:07	05/04/21 05:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	05/04/21 05:07	05/04/21 05:07	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	05/04/21 05:07	05/04/21 05:07	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	05/04/21 05:07	05/04/21 05:07	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	05/04/21 05:07	05/04/21 05:07	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	05/04/21 05:07	05/04/21 05:07	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	05/04/21 05:07	05/04/21 05:07	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	05/04/21 05:07	05/04/21 05:07	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	05/04/21 05:07	05/04/21 05:07	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	05/04/21 05:07	05/04/21 05:07	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	05/04/21 05:07	05/04/21 05:07	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	05/04/21 05:07	05/04/21 05:07	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	05/04/21 05:07	05/04/21 05:07	96-18-4	L0
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	05/04/21 05:07	05/04/21 05:07	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	05/04/21 05:07	05/04/21 05:07	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	05/04/21 05:07	05/04/21 05:07	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	05/04/21 05:07	05/04/21 05:07	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TW-22 **Lab ID: 30417486007** Collected: 04/26/21 14:05 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	112	%	80.0-120		1	05/04/21 05:07	05/04/21 05:07	2037-26-5	
4-Bromofluorobenzene (S)	97.6	%	77.0-126		1	05/04/21 05:07	05/04/21 05:07	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%	70.0-130		1	05/04/21 05:07	05/04/21 05:07	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/07/21 18:32		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**35.0**	mg/L	10.0	10.0	1		04/29/21 15:44		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.072J**	mg/L	0.10	0.044	1	05/07/21 08:43	05/07/21 12:02		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/30/21 22:54	05/01/21 02:01		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**21.5**	mg/L	3.0	0.67	1		05/13/21 15:29	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.1**	mg/L	0.10	0.024	1		05/05/21 12:13	14797-55-8	
Nitrogen, NO2 plus NO3	**1.1**	mg/L	0.10	0.024	1		05/05/21 12:13		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/07/21 17:57	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/27/21 19:37	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TW-22A **Lab ID: 30417486008** Collected: 04/26/21 14:40 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/30/21 15:03	05/03/21 06:59	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/30/21 15:03	05/03/21 06:59	7440-38-2	
Barium	**0.17**	mg/L	0.010	0.00068	1	04/30/21 15:03	05/03/21 06:59	7440-39-3	
Beryllium	**0.00067J**	mg/L	0.0010	0.00017	1	04/30/21 15:03	05/03/21 06:59	7440-41-7	
Cadmium	**0.00034J**	mg/L	0.0030	0.00034	1	04/30/21 15:03	05/03/21 06:59	7440-43-9	
Calcium	**5.9**	mg/L	1.0	0.10	1	04/30/21 15:03	05/03/21 06:59	7440-70-2	
Chromium	**0.0067**	mg/L	0.0050	0.00035	1	04/30/21 15:03	05/03/21 06:59	7440-47-3	
Cobalt	**0.017**	mg/L	0.0050	0.00053	1	04/30/21 15:03	05/03/21 06:59	7440-48-4	
Copper	**0.011**	mg/L	0.0050	0.0027	1	04/30/21 15:03	05/03/21 06:59	7440-50-8	
Iron	**0.19**	mg/L	0.070	0.041	1	04/30/21 15:03	05/03/21 06:59	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/30/21 15:03	05/03/21 06:59	7439-92-1	
Magnesium	**4.9**	mg/L	0.20	0.028	1	04/30/21 15:03	05/03/21 06:59	7439-95-4	
Manganese	**0.14**	mg/L	0.0050	0.0012	1	04/30/21 15:03	05/03/21 06:59	7439-96-5	
Nickel	**0.017**	mg/L	0.010	0.0015	1	04/30/21 15:03	05/03/21 06:59	7440-02-0	
Potassium	**1.8**	mg/L	0.50	0.072	1	04/30/21 15:03	05/03/21 06:59	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/30/21 15:03	05/03/21 06:59	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/30/21 15:03	05/03/21 06:59	7440-22-4	
Sodium	**41.0**	mg/L	1.0	0.42	1	04/30/21 15:03	05/03/21 06:59	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/30/21 15:03	05/03/21 06:59	7440-28-0	
Total Hardness by SM2340B-2011	**34.8**	mg/L	3.3	0.37	1	04/30/21 15:03	05/03/21 06:59		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/30/21 15:03	05/03/21 06:59	7440-62-2	
Zinc	**0.038**	mg/L	0.010	0.0024	1	04/30/21 15:03	05/03/21 06:59	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**5.7**	mg/L	1.0	0.10	1	05/03/21 15:29	05/06/21 09:03	7440-70-2	
Iron, Dissolved	**0.11**	mg/L	0.070	0.041	1	05/03/21 15:29	05/06/21 09:03	7439-89-6	
Magnesium, Dissolved	**4.7**	mg/L	0.20	0.028	1	05/03/21 15:29	05/06/21 09:03	7439-95-4	
Manganese, Dissolved	**0.13**	mg/L	0.0050	0.0012	1	05/03/21 15:29	05/06/21 09:03	7439-96-5	
Potassium, Dissolved	**1.7**	mg/L	0.50	0.072	1	05/03/21 15:29	05/06/21 09:03	7440-09-7	
Sodium, Dissolved	**40.8**	mg/L	1.0	0.42	1	05/03/21 15:29	05/06/21 09:03	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00018J**	mg/L	0.00020	0.000030	1	04/29/21 12:42	04/29/21 21:25	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	05/03/21 22:31	05/03/21 22:31	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	05/03/21 22:31	05/03/21 22:31	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	05/03/21 22:31	05/03/21 22:31	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	05/03/21 22:31	05/03/21 22:31	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	05/03/21 22:31	05/03/21 22:31	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	05/03/21 22:31	05/03/21 22:31	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TW-22A **Lab ID: 30417486008** Collected: 04/26/21 14:40 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	05/03/21 22:31	05/03/21 22:31	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	05/03/21 22:31	05/03/21 22:31	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	05/03/21 22:31	05/03/21 22:31	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	05/03/21 22:31	05/03/21 22:31	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	05/03/21 22:31	05/03/21 22:31	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	05/03/21 22:31	05/03/21 22:31	75-00-3	
Chloroform	**0.252J**	ug/L	5.00	0.111	1	05/03/21 22:31	05/03/21 22:31	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	05/03/21 22:31	05/03/21 22:31	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	05/03/21 22:31	05/03/21 22:31	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	05/03/21 22:31	05/03/21 22:31	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	05/03/21 22:31	05/03/21 22:31	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	05/03/21 22:31	05/03/21 22:31	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	05/03/21 22:31	05/03/21 22:31	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	05/03/21 22:31	05/03/21 22:31	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	05/03/21 22:31	05/03/21 22:31	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	05/03/21 22:31	05/03/21 22:31	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	05/03/21 22:31	05/03/21 22:31	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	05/03/21 22:31	05/03/21 22:31	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	05/03/21 22:31	05/03/21 22:31	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	05/03/21 22:31	05/03/21 22:31	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 22:31	05/03/21 22:31	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 22:31	05/03/21 22:31	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	05/03/21 22:31	05/03/21 22:31	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	05/03/21 22:31	05/03/21 22:31	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	05/03/21 22:31	05/03/21 22:31	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	05/03/21 22:31	05/03/21 22:31	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	05/03/21 22:31	05/03/21 22:31	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	05/03/21 22:31	05/03/21 22:31	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	05/03/21 22:31	05/03/21 22:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	05/03/21 22:31	05/03/21 22:31	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	05/03/21 22:31	05/03/21 22:31	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	05/03/21 22:31	05/03/21 22:31	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	05/03/21 22:31	05/03/21 22:31	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	05/03/21 22:31	05/03/21 22:31	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	05/03/21 22:31	05/03/21 22:31	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	05/03/21 22:31	05/03/21 22:31	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 22:31	05/03/21 22:31	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	05/03/21 22:31	05/03/21 22:31	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	05/03/21 22:31	05/03/21 22:31	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	05/03/21 22:31	05/03/21 22:31	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	05/03/21 22:31	05/03/21 22:31	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	05/03/21 22:31	05/03/21 22:31	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	05/03/21 22:31	05/03/21 22:31	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	05/03/21 22:31	05/03/21 22:31	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	05/03/21 22:31	05/03/21 22:31	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TW-22A **Lab ID: 30417486008** Collected: 04/26/21 14:40 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	103	%	80.0-120		1	05/03/21 22:31	05/03/21 22:31	2037-26-5	
4-Bromofluorobenzene (S)	103	%	77.0-126		1	05/03/21 22:31	05/03/21 22:31	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%	70.0-130		1	05/03/21 22:31	05/03/21 22:31	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/07/21 18:33		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**160**	mg/L	10.0	10.0	1		04/29/21 15:44		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/07/21 08:43	05/07/21 12:04		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**8.3J**	mg/L	25.0	4.7	1	04/30/21 22:54	05/01/21 02:01		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**82.2**	mg/L	3.0	0.67	1		05/13/21 15:30	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.8**	mg/L	0.10	0.024	1		05/05/21 12:14	14797-55-8	
Nitrogen, NO2 plus NO3	**1.8**	mg/L	0.10	0.024	1		05/05/21 12:14		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**15.7**	mg/L	10.0	4.7	1		05/07/21 17:59	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/27/21 19:37	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TW-22B **Lab ID: 30417486009** Collected: 04/26/21 13:30 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/30/21 15:03	05/03/21 07:01	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/30/21 15:03	05/03/21 07:01	7440-38-2	
Barium	**0.044**	mg/L	0.010	0.00068	1	04/30/21 15:03	05/03/21 07:01	7440-39-3	
Beryllium	**0.00022J**	mg/L	0.0010	0.00017	1	04/30/21 15:03	05/03/21 07:01	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/30/21 15:03	05/03/21 07:01	7440-43-9	
Calcium	**9.7**	mg/L	1.0	0.10	1	04/30/21 15:03	05/03/21 07:01	7440-70-2	
Chromium	**0.011**	mg/L	0.0050	0.00035	1	04/30/21 15:03	05/03/21 07:01	7440-47-3	
Cobalt	**0.0084**	mg/L	0.0050	0.00053	1	04/30/21 15:03	05/03/21 07:01	7440-48-4	
Copper	**0.018**	mg/L	0.0050	0.0027	1	04/30/21 15:03	05/03/21 07:01	7440-50-8	
Iron	**0.42**	mg/L	0.070	0.041	1	04/30/21 15:03	05/03/21 07:01	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/30/21 15:03	05/03/21 07:01	7439-92-1	
Magnesium	**2.5**	mg/L	0.20	0.028	1	04/30/21 15:03	05/03/21 07:01	7439-95-4	
Manganese	**0.021**	mg/L	0.0050	0.0012	1	04/30/21 15:03	05/03/21 07:01	7439-96-5	
Nickel	**0.0097J**	mg/L	0.010	0.0015	1	04/30/21 15:03	05/03/21 07:01	7440-02-0	
Potassium	**2.2**	mg/L	0.50	0.072	1	04/30/21 15:03	05/03/21 07:01	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/30/21 15:03	05/03/21 07:01	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/30/21 15:03	05/03/21 07:01	7440-22-4	
Sodium	**6.8**	mg/L	1.0	0.42	1	04/30/21 15:03	05/03/21 07:01	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/30/21 15:03	05/03/21 07:01	7440-28-0	
Total Hardness by SM2340B-2011	**34.3**	mg/L	3.3	0.37	1	04/30/21 15:03	05/03/21 07:01		
Vanadium	**0.00063J**	mg/L	0.0050	0.00057	1	04/30/21 15:03	05/03/21 07:01	7440-62-2	
Zinc	**0.0037J**	mg/L	0.010	0.0024	1	04/30/21 15:03	05/03/21 07:01	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**9.8**	mg/L	1.0	0.10	1	05/03/21 15:29	05/06/21 09:06	7440-70-2	
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	05/03/21 15:29	05/06/21 09:06	7439-89-6	
Magnesium, Dissolved	**2.6**	mg/L	0.20	0.028	1	05/03/21 15:29	05/06/21 09:06	7439-95-4	
Manganese, Dissolved	**0.022**	mg/L	0.0050	0.0012	1	05/03/21 15:29	05/06/21 09:06	7439-96-5	
Potassium, Dissolved	**2.2**	mg/L	0.50	0.072	1	05/03/21 15:29	05/06/21 09:06	7440-09-7	
Sodium, Dissolved	**7.6**	mg/L	1.0	0.42	1	05/03/21 15:29	05/06/21 09:06	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	04/29/21 12:42	04/29/21 21:27	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	05/03/21 22:51	05/03/21 22:51	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	05/03/21 22:51	05/03/21 22:51	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	05/03/21 22:51	05/03/21 22:51	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	05/03/21 22:51	05/03/21 22:51	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	05/03/21 22:51	05/03/21 22:51	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	05/03/21 22:51	05/03/21 22:51	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TW-22B **Lab ID: 30417486009** Collected: 04/26/21 13:30 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	05/03/21 22:51	05/03/21 22:51	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	05/03/21 22:51	05/03/21 22:51	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	05/03/21 22:51	05/03/21 22:51	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	05/03/21 22:51	05/03/21 22:51	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	05/03/21 22:51	05/03/21 22:51	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	05/03/21 22:51	05/03/21 22:51	75-00-3	
Chloroform	**0.129J**	ug/L	5.00	0.111	1	05/03/21 22:51	05/03/21 22:51	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	05/03/21 22:51	05/03/21 22:51	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	05/03/21 22:51	05/03/21 22:51	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	05/03/21 22:51	05/03/21 22:51	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	05/03/21 22:51	05/03/21 22:51	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	05/03/21 22:51	05/03/21 22:51	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	05/03/21 22:51	05/03/21 22:51	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	05/03/21 22:51	05/03/21 22:51	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	05/03/21 22:51	05/03/21 22:51	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	05/03/21 22:51	05/03/21 22:51	75-71-8	
1,1-Dichloroethane	**0.152J**	ug/L	1.00	0.100	1	05/03/21 22:51	05/03/21 22:51	75-34-3	J
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	05/03/21 22:51	05/03/21 22:51	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	05/03/21 22:51	05/03/21 22:51	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	05/03/21 22:51	05/03/21 22:51	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 22:51	05/03/21 22:51	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 22:51	05/03/21 22:51	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	05/03/21 22:51	05/03/21 22:51	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	05/03/21 22:51	05/03/21 22:51	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	05/03/21 22:51	05/03/21 22:51	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	05/03/21 22:51	05/03/21 22:51	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	05/03/21 22:51	05/03/21 22:51	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	05/03/21 22:51	05/03/21 22:51	78-93-3	
Methylene Chloride	**0.438J**	ug/L	5.00	0.430	1	05/03/21 22:51	05/03/21 22:51	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	05/03/21 22:51	05/03/21 22:51	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	05/03/21 22:51	05/03/21 22:51	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	05/03/21 22:51	05/03/21 22:51	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	05/03/21 22:51	05/03/21 22:51	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	05/03/21 22:51	05/03/21 22:51	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	05/03/21 22:51	05/03/21 22:51	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	05/03/21 22:51	05/03/21 22:51	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 22:51	05/03/21 22:51	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	05/03/21 22:51	05/03/21 22:51	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	05/03/21 22:51	05/03/21 22:51	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	05/03/21 22:51	05/03/21 22:51	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	05/03/21 22:51	05/03/21 22:51	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	05/03/21 22:51	05/03/21 22:51	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	05/03/21 22:51	05/03/21 22:51	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	05/03/21 22:51	05/03/21 22:51	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	05/03/21 22:51	05/03/21 22:51	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TW-22B **Lab ID: 30417486009** Collected: 04/26/21 13:30 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	102	%	80.0-120		1	05/03/21 22:51	05/03/21 22:51	2037-26-5	
4-Bromofluorobenzene (S)	102	%	77.0-126		1	05/03/21 22:51	05/03/21 22:51	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%	70.0-130		1	05/03/21 22:51	05/03/21 22:51	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/07/21 18:33		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**64.0**	mg/L	10.0	10.0	1		04/29/21 15:44		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/07/21 08:43	05/07/21 12:06		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**8.3J**	mg/L	25.0	4.7	1	04/30/21 22:54	05/01/21 02:02		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**9.3**	mg/L	3.0	0.67	1		05/13/21 15:31	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**5.1**	mg/L	0.10	0.024	1		05/05/21 12:16	14797-55-8	
Nitrogen, NO2 plus NO3	**5.1**	mg/L	0.10	0.024	1		05/05/21 12:16		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**15.4**	mg/L	10.0	4.7	1		05/07/21 18:00	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/27/21 19:38	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TRIP BLANK **Lab ID: 30417486010** Collected: 04/26/21 00:01 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	05/03/21 20:56	05/03/21 20:56	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	05/03/21 20:56	05/03/21 20:56	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	05/03/21 20:56	05/03/21 20:56	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	05/03/21 20:56	05/03/21 20:56	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	05/03/21 20:56	05/03/21 20:56	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	05/03/21 20:56	05/03/21 20:56	75-25-2	
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	05/03/21 20:56	05/03/21 20:56	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	05/03/21 20:56	05/03/21 20:56	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	05/03/21 20:56	05/03/21 20:56	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	05/03/21 20:56	05/03/21 20:56	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	05/03/21 20:56	05/03/21 20:56	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	05/03/21 20:56	05/03/21 20:56	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	05/03/21 20:56	05/03/21 20:56	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	05/03/21 20:56	05/03/21 20:56	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	05/03/21 20:56	05/03/21 20:56	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	05/03/21 20:56	05/03/21 20:56	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	05/03/21 20:56	05/03/21 20:56	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	05/03/21 20:56	05/03/21 20:56	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	05/03/21 20:56	05/03/21 20:56	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	05/03/21 20:56	05/03/21 20:56	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	05/03/21 20:56	05/03/21 20:56	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	05/03/21 20:56	05/03/21 20:56	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	05/03/21 20:56	05/03/21 20:56	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	05/03/21 20:56	05/03/21 20:56	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	05/03/21 20:56	05/03/21 20:56	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	05/03/21 20:56	05/03/21 20:56	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 20:56	05/03/21 20:56	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 20:56	05/03/21 20:56	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	05/03/21 20:56	05/03/21 20:56	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	05/03/21 20:56	05/03/21 20:56	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	05/03/21 20:56	05/03/21 20:56	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	05/03/21 20:56	05/03/21 20:56	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	05/03/21 20:56	05/03/21 20:56	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	05/03/21 20:56	05/03/21 20:56	78-93-3	
Methylene Chloride	**0.503J**	ug/L	5.00	0.430	1	05/03/21 20:56	05/03/21 20:56	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	05/03/21 20:56	05/03/21 20:56	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	05/03/21 20:56	05/03/21 20:56	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	05/03/21 20:56	05/03/21 20:56	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	05/03/21 20:56	05/03/21 20:56	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	05/03/21 20:56	05/03/21 20:56	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	05/03/21 20:56	05/03/21 20:56	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	05/03/21 20:56	05/03/21 20:56	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 20:56	05/03/21 20:56	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	05/03/21 20:56	05/03/21 20:56	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	05/03/21 20:56	05/03/21 20:56	79-01-6	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Sample: TRIP BLANK **Lab ID: 30417486010** Collected: 04/26/21 00:01 Received: 04/26/21 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	05/03/21 20:56	05/03/21 20:56	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	05/03/21 20:56	05/03/21 20:56	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	05/03/21 20:56	05/03/21 20:56	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	05/03/21 20:56	05/03/21 20:56	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	05/03/21 20:56	05/03/21 20:56	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	05/03/21 20:56	05/03/21 20:56	179601-23-1	
Surrogates									
Toluene-d8 (S)	102	%	80.0-120		1	05/03/21 20:56	05/03/21 20:56	2037-26-5	
4-Bromofluorobenzene (S)	101	%	77.0-126		1	05/03/21 20:56	05/03/21 20:56	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%	70.0-130		1	05/03/21 20:56	05/03/21 20:56	17060-07-0	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417486

QC Batch: 445585
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417486001, 30417486002, 30417486003, 30417486004, 30417486005, 30417486006, 30417486007, 30417486008, 30417486009

METHOD BLANK: 2150814
Matrix: Water
Associated Lab Samples: 30417486001, 30417486002, 30417486003, 30417486004, 30417486005, 30417486006, 30417486007, 30417486008, 30417486009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.000030	04/29/21 21:03	

LABORATORY CONTROL SAMPLE: 2150815

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.001	0.00095	95	80-120	

MATRIX SPIKE SAMPLE: 2150817

Parameter	Units	30417883002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L			0.046			ML

MATRIX SPIKE SAMPLE: 2150819

Parameter	Units	30417486001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.00020 U	0.0025	0.0026	102	75-125	

SAMPLE DUPLICATE: 2150816

Parameter	Units	30417883002 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L		0.0050 U			

SAMPLE DUPLICATE: 2150818

Parameter	Units	30417486001 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	0.00020 U	0.00020 U		20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417486

QC Batch: 445841
QC Batch Method: EPA 3005A
Analysis Method: EPA 6010B
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417486001, 30417486002, 30417486003, 30417486004, 30417486005, 30417486006, 30417486007, 30417486008, 30417486009

METHOD BLANK: 2152149
Matrix: Water
Associated Lab Samples: 30417486001, 30417486002, 30417486003, 30417486004, 30417486005, 30417486006, 30417486007, 30417486008, 30417486009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.0060 U	0.0060	0.0033	05/03/21 06:28	
Arsenic	mg/L	0.0050 U	0.0050	0.0020	05/03/21 06:28	
Barium	mg/L	0.010 U	0.010	0.00068	05/03/21 06:28	
Beryllium	mg/L	0.0010 U	0.0010	0.00017	05/03/21 06:28	
Cadmium	mg/L	0.0030 U	0.0030	0.00034	05/03/21 06:28	
Calcium	mg/L	1.0 U	1.0	0.10	05/03/21 06:28	
Chromium	mg/L	0.0050 U	0.0050	0.00035	05/03/21 06:28	
Cobalt	mg/L	0.0050 U	0.0050	0.00053	05/03/21 06:28	
Copper	mg/L	0.0050 U	0.0050	0.0027	05/03/21 06:28	
Iron	mg/L	0.070 U	0.070	0.041	05/03/21 06:28	
Lead	mg/L	0.0050 U	0.0050	0.0049	05/03/21 06:28	
Magnesium	mg/L	0.20 U	0.20	0.028	05/03/21 06:28	
Manganese	mg/L	0.0050 U	0.0050	0.0012	05/03/21 06:28	
Nickel	mg/L	0.010 U	0.010	0.0015	05/03/21 06:28	
Potassium	mg/L	0.50 U	0.50	0.072	05/03/21 06:28	
Selenium	mg/L	0.0080 U	0.0080	0.0055	05/03/21 06:28	
Silver	mg/L	0.0060 U	0.0060	0.0014	05/03/21 06:28	
Sodium	mg/L	1.0 U	1.0	0.42	05/03/21 06:28	
Thallium	mg/L	0.010 U	0.010	0.0040	05/03/21 06:28	
Total Hardness by SM2340B-2011	mg/L	3.3 U	3.3	0.37	05/03/21 06:28	
Vanadium	mg/L	0.0050 U	0.0050	0.00057	05/03/21 06:28	
Zinc	mg/L	0.010 U	0.010	0.0024	05/03/21 06:28	

LABORATORY CONTROL SAMPLE: 2152150

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.5	0.49	98	80-120	
Arsenic	mg/L	0.5	0.48	97	80-120	
Barium	mg/L	0.5	0.53	105	80-120	
Beryllium	mg/L	0.5	0.53	106	80-120	
Cadmium	mg/L	0.5	0.50	100	80-120	
Calcium	mg/L	5	5.2	105	80-120	
Chromium	mg/L	0.5	0.50	101	80-120	
Cobalt	mg/L	0.5	0.48	96	80-120	
Copper	mg/L	0.5	0.54	108	80-120	
Iron	mg/L	5	5.3	107	80-120	
Lead	mg/L	0.5	0.47	93	80-120	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417486

LABORATORY CONTROL SAMPLE: 2152150

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Magnesium	mg/L	5	5.2	104	80-120	
Manganese	mg/L	0.5	0.52	105	80-120	
Nickel	mg/L	0.5	0.50	99	80-120	
Potassium	mg/L	5	5.1	102	80-120	
Selenium	mg/L	0.5	0.50	99	80-120	
Silver	mg/L	0.25	0.25	100	80-120	
Sodium	mg/L	5	5.2	103	80-120	
Thallium	mg/L	0.5	0.47	94	80-120	
Total Hardness by SM2340B-2011	mg/L		34.6			
Vanadium	mg/L	0.5	0.50	100	80-120	
Zinc	mg/L	0.5	0.49	97	80-120	

MATRIX SPIKE SAMPLE: 2152152

Parameter	Units	30417741002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	ND	0.5	0.47	95	75-125	
Arsenic	mg/L	ND	0.5	0.47	94	75-125	
Barium	mg/L	99.1 ug/L	0.5	0.61	103	75-125	
Beryllium	mg/L	ND	0.5	0.51	102	75-125	
Cadmium	mg/L	ND	0.5	0.48	97	75-125	
Calcium	mg/L	101000 ug/L	5	107	124	75-125	
Chromium	mg/L	ND	0.5	0.48	96	75-125	
Cobalt	mg/L	ND	0.5	0.48	96	75-125	
Copper	mg/L	5.7 ug/L	0.5	0.52	103	75-125	
Iron	mg/L	3710 ug/L	5	10.6	137	75-125	MH
Lead	mg/L	ND	0.5	0.46	92	75-125	
Magnesium	mg/L	17700 ug/L	5	23.2	110	75-125	
Manganese	mg/L	220 ug/L	0.5	0.73	102	75-125	
Nickel	mg/L	ND	0.5	0.47	93	75-125	
Potassium	mg/L	4020 ug/L	5	9.6	111	75-125	
Selenium	mg/L	ND	0.5	0.48	95	75-125	
Silver	mg/L	ND	0.25	0.24	97	75-125	
Sodium	mg/L	16200 ug/L	5	21.0	96	75-125	
Thallium	mg/L	ND	0.5	0.46	91	75-125	
Total Hardness by SM2340B-2011	mg/L	325000 ug/L		363			
Vanadium	mg/L	6.3 ug/L	0.5	0.49	97	75-125	
Zinc	mg/L	ND	0.5	0.46	91	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2152154 2152155

Parameter	Units	30417486002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.0060 U	0.5	0.5	0.49	0.50	98	99	75-125	1	20	
Arsenic	mg/L	0.0050 U	0.5	0.5	0.49	0.49	98	98	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417486

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2152154 2152155

Parameter	Units	30417486002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.0071J	0.5	0.5	0.52	0.52	103	103	75-125	0	20	
Beryllium	mg/L	0.00021J	0.5	0.5	0.52	0.52	104	104	75-125	0	20	
Cadmium	mg/L	0.0030 U	0.5	0.5	0.50	0.50	101	100	75-125	1	20	
Calcium	mg/L	0.98J	5	5	6.1	6.1	102	102	75-125	0	20	
Chromium	mg/L	0.0061	0.5	0.5	0.51	0.50	100	100	75-125	1	20	
Cobalt	mg/L	0.028	0.5	0.5	0.52	0.52	98	98	75-125	1	20	
Copper	mg/L	0.0045J	0.5	0.5	0.53	0.53	105	105	75-125	0	20	
Iron	mg/L	0.051J	5	5	5.2	5.2	102	103	75-125	0	20	
Lead	mg/L	0.0050 U	0.5	0.5	0.48	0.47	95	95	75-125	0	20	
Magnesium	mg/L	0.38	5	5	5.4	5.4	100	100	75-125	0	20	
Manganese	mg/L	0.0066	0.5	0.5	0.51	0.51	101	101	75-125	0	20	
Nickel	mg/L	0.0095J	0.5	0.5	0.51	0.51	100	100	75-125	0	20	
Potassium	mg/L	0.51	5	5	5.5	5.5	100	100	75-125	0	20	
Selenium	mg/L	0.0058J	0.5	0.5	0.50	0.50	99	98	75-125	1	20	
Silver	mg/L	0.0060 U	0.25	0.25	0.25	0.25	100	99	75-125	0	20	
Sodium	mg/L	1.3	5	5	6.3	6.3	100	101	75-125	1	20	
Thallium	mg/L	0.010 U	0.5	0.5	0.48	0.48	97	95	75-125	1	20	
Total Hardness by SM2340B-2011	mg/L	4.0			37.2	37.3				0		
Vanadium	mg/L	0.0050 U	0.5	0.5	0.50	0.50	100	100	75-125	0	20	
Zinc	mg/L	0.0050J	0.5	0.5	0.50	0.49	98	98	75-125	1	20	

SAMPLE DUPLICATE: 2152151

Parameter	Units	30417741002 Result	Dup Result	RPD	Max RPD	Qualifiers
Antimony	mg/L	ND	0.0060 U		20	
Arsenic	mg/L	ND	0.0025J		20	
Barium	mg/L	99.1 ug/L	0.12	16	20	
Beryllium	mg/L	ND	0.00072J		20	
Cadmium	mg/L	ND	0.0030 U		20	
Calcium	mg/L	101000 ug/L	103	2	20	
Chromium	mg/L	ND	0.0042J		20	
Cobalt	mg/L	ND	0.0023J		20	
Copper	mg/L	5.7 ug/L	0.0046J		20	
Iron	mg/L	3710 ug/L	4.6	21	20	D6
Lead	mg/L	ND	0.0050 U		20	
Magnesium	mg/L	17700 ug/L	18.0	2	20	
Manganese	mg/L	220 ug/L	0.23	5	20	
Nickel	mg/L	ND	0.0055J		20	
Potassium	mg/L	4020 ug/L	4.2	4	20	
Selenium	mg/L	ND	0.0080 U		20	
Silver	mg/L	ND	0.0060 U		20	
Sodium	mg/L	16200 ug/L	16.4	1	20	
Thallium	mg/L	ND	0.010 U		20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417486

SAMPLE DUPLICATE: 2152151

Parameter	Units	30417741002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Hardness by SM2340B-2011	mg/L	325000 ug/L	332	2		
Vanadium	mg/L	6.3 ug/L	0.0071	13	20	
Zinc	mg/L	ND	0.0089J		20	

SAMPLE DUPLICATE: 2152153

Parameter	Units	30417486002 Result	Dup Result	RPD	Max RPD	Qualifiers
Antimony	mg/L	0.0060 U	0.0060 U		20	
Arsenic	mg/L	0.0050 U	0.0050 U		20	
Barium	mg/L	0.0071J	0.0067J		20	
Beryllium	mg/L	0.00021J	0.0010 U		20	
Cadmium	mg/L	0.0030 U	0.0030 U		20	
Calcium	mg/L	0.98J	0.97J		20	
Chromium	mg/L	0.0061	0.0060	2	20	
Cobalt	mg/L	0.028	0.028	1	20	
Copper	mg/L	0.0045J	0.0050 U		20	
Iron	mg/L	0.051J	0.049J		20	
Lead	mg/L	0.0050 U	0.0050 U		20	
Magnesium	mg/L	0.38	0.36	5	20	
Manganese	mg/L	0.0066	0.0063	4	20	
Nickel	mg/L	0.0095J	0.0093J		20	
Potassium	mg/L	0.51	0.50J		20	
Selenium	mg/L	0.0058J	0.0062J		20	
Silver	mg/L	0.0060 U	0.0060 U		20	
Sodium	mg/L	1.3	1.3	2	20	
Thallium	mg/L	0.010 U	0.010 U		20	
Total Hardness by SM2340B-2011	mg/L	4.0	3.9	2		
Vanadium	mg/L	0.0050 U	0.0050 U		20	
Zinc	mg/L	0.0050J	0.0049J		20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417486

QC Batch: 446167
QC Batch Method: EPA 3005A
Analysis Method: EPA 6010B
Analysis Description: 6010 MET Dissolved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417486001, 30417486002, 30417486003, 30417486004, 30417486005, 30417486006, 30417486007, 30417486008, 30417486009

METHOD BLANK: 2153298
Matrix: Water
Associated Lab Samples: 30417486001, 30417486002, 30417486003, 30417486004, 30417486005, 30417486006, 30417486007, 30417486008, 30417486009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	1.0 U	1.0	0.10	05/06/21 08:33	
Iron, Dissolved	mg/L	0.070 U	0.070	0.041	05/06/21 08:33	
Magnesium, Dissolved	mg/L	0.20 U	0.20	0.028	05/06/21 08:33	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0012	05/06/21 08:33	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.072	05/06/21 08:33	
Sodium, Dissolved	mg/L	1.0 U	1.0	0.42	05/06/21 08:33	

LABORATORY CONTROL SAMPLE: 2153299

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	5	4.9	97	80-120	
Iron, Dissolved	mg/L	5	4.8	97	80-120	
Magnesium, Dissolved	mg/L	5	4.8	96	80-120	
Manganese, Dissolved	mg/L	0.5	0.47	95	80-120	
Potassium, Dissolved	mg/L	5	4.8	95	80-120	
Sodium, Dissolved	mg/L	5	4.7	94	80-120	

MATRIX SPIKE SAMPLE: 2153301

Parameter	Units	30417982002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	327000 ug/L	5	334	146	75-125	MH
Iron, Dissolved	mg/L	5420 ug/L	5	10.5	101	75-125	
Magnesium, Dissolved	mg/L	116000 ug/L	5	122	126	75-125	MH
Manganese, Dissolved	mg/L	213 ug/L	0.5	0.70	97	75-125	
Potassium, Dissolved	mg/L	15500 ug/L	5	21.4	119	75-125	
Sodium, Dissolved	mg/L	1390000 ug/L	5	1410	400	75-125	MH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2153303 2153304

Parameter	Units	30417486001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	12.1	5	5	17.5	16.9	107	96	75-125	3	20	
Iron, Dissolved	mg/L	1.2	5	5	6.3	6.2	103	99	75-125	3	20	
Magnesium, Dissolved	mg/L	10	5	5	15.3	14.8	107	97	75-125	3	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417486

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2153303 2153304

Parameter	Units	30417486001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Manganese, Dissolved	mg/L	1.4	0.5	0.5	1.9	1.8	104	91	75-125	3	20	
Potassium, Dissolved	mg/L	6.2	5	5	11.2	10.9	101	94	75-125	3	20	
Sodium, Dissolved	mg/L	19.5	5	5	24.8	24.2	106	93	75-125	3	20	

SAMPLE DUPLICATE: 2153300

Parameter	Units	30417982002 Result	Dup Result	RPD	Max RPD	Qualifiers
Calcium, Dissolved	mg/L	327000 ug/L	329	1	20	
Iron, Dissolved	mg/L	5420 ug/L	5.5	2	20	
Magnesium, Dissolved	mg/L	116000 ug/L	116	1	20	
Manganese, Dissolved	mg/L	213 ug/L	0.22	1	20	
Potassium, Dissolved	mg/L	15500 ug/L	15.9	2	20	
Sodium, Dissolved	mg/L	1390000 ug/L	1390	0	20	

SAMPLE DUPLICATE: 2153302

Parameter	Units	30417486001 Result	Dup Result	RPD	Max RPD	Qualifiers
Calcium, Dissolved	mg/L	12.1	12.2	0	20	
Iron, Dissolved	mg/L	1.2	1.2	0	20	
Magnesium, Dissolved	mg/L	10	10.0	1	20	
Manganese, Dissolved	mg/L	1.4	1.4	1	20	
Potassium, Dissolved	mg/L	6.2	6.2	0	20	
Sodium, Dissolved	mg/L	19.5	19.5	0	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417486

QC Batch: 1663318
QC Batch Method: 8260B
Analysis Method: EPA 8260B
Analysis Description: VOA (GC/MS) 8260B
Laboratory: Pace National - Mt. Juliet
Associated Lab Samples: 30417486001, 30417486002, 30417486003, 30417486004, 30417486005, 30417486006, 30417486007

METHOD BLANK: R3650780-2
Matrix: Water
Associated Lab Samples: 30417486001, 30417486002, 30417486003, 30417486004, 30417486005, 30417486006, 30417486007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acetone	ug/L	50.0 U	50.0	11.3	05/03/21 19:58	
Acrylonitrile	ug/L	10.0 U	10.0	0.671	05/03/21 19:58	
Benzene	ug/L	1.00 U	1.00	0.0941	05/03/21 19:58	
Bromodichloromethane	ug/L	1.00 U	1.00	0.136	05/03/21 19:58	
Bromochloromethane	ug/L	1.00 U	1.00	0.128	05/03/21 19:58	
Bromoform	ug/L	1.00 U	1.00	0.129	05/03/21 19:58	
Bromomethane	ug/L	5.00 U	5.00	0.605	05/03/21 19:58	
Carbon disulfide	ug/L	1.00 U	1.00	0.0962	05/03/21 19:58	
Carbon tetrachloride	ug/L	1.00 U	1.00	0.128	05/03/21 19:58	
Chlorobenzene	ug/L	1.00 U	1.00	0.116	05/03/21 19:58	
Dibromochloromethane	ug/L	1.00 U	1.00	0.140	05/03/21 19:58	
Chloroethane	ug/L	5.00 U	5.00	0.192	05/03/21 19:58	
Chloroform	ug/L	5.00 U	5.00	0.111	05/03/21 19:58	
Chloromethane	ug/L	2.50 U	2.50	0.960	05/03/21 19:58	
1,2-Dibromo-3-chloropropane	ug/L	5.00 U	5.00	0.276	05/03/21 19:58	
1,2-Dibromoethane (EDB)	ug/L	1.00 U	1.00	0.126	05/03/21 19:58	
Dibromomethane	ug/L	1.00 U	1.00	0.122	05/03/21 19:58	
1,2-Dichlorobenzene	ug/L	1.00 U	1.00	0.107	05/03/21 19:58	
1,4-Dichlorobenzene	ug/L	1.00 U	1.00	0.120	05/03/21 19:58	
trans-1,4-Dichloro-2-butene	ug/L	2.50 U	2.50	0.467	05/03/21 19:58	
Dichlorodifluoromethane	ug/L	5.00 U	5.00	0.374	05/03/21 19:58	
Dichlorofluoromethane	ug/L	5.00 U	5.00	0.130	05/03/21 19:58	
1,1-Dichloroethane	ug/L	1.00 U	1.00	0.100	05/03/21 19:58	
1,2-Dichloroethane	ug/L	1.00 U	1.00	0.0819	05/03/21 19:58	
1,1-Dichloroethene	ug/L	1.00 U	1.00	0.188	05/03/21 19:58	
cis-1,2-Dichloroethene	ug/L	1.00 U	1.00	0.126	05/03/21 19:58	
trans-1,2-Dichloroethene	ug/L	1.00 U	1.00	0.149	05/03/21 19:58	
1,2-Dichloropropane	ug/L	1.00 U	1.00	0.149	05/03/21 19:58	
cis-1,3-Dichloropropene	ug/L	1.00 U	1.00	0.111	05/03/21 19:58	
trans-1,3-Dichloropropene	ug/L	1.00 U	1.00	0.118	05/03/21 19:58	
Ethylbenzene	ug/L	1.00 U	1.00	0.137	05/03/21 19:58	
2-Hexanone	ug/L	10.0 U	10.0	0.787	05/03/21 19:58	
Iodomethane	ug/L	10.0 U	10.0	6.00	05/03/21 19:58	
2-Butanone (MEK)	ug/L	10.0 U	10.0	1.19	05/03/21 19:58	
Methylene Chloride	ug/L	5.00 U	5.00	0.430	05/03/21 19:58	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.478	05/03/21 19:58	
Methyl-tert-butyl ether	ug/L	1.00 U	1.00	0.101	05/03/21 19:58	
Styrene	ug/L	1.00 U	1.00	0.118	05/03/21 19:58	
1,1,1,2-Tetrachloroethane	ug/L	1.00 U	1.00	0.147	05/03/21 19:58	
1,1,2,2-Tetrachloroethane	ug/L	1.00 U	1.00	0.133	05/03/21 19:58	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417486

METHOD BLANK: R3650780-2 Matrix: Water
Associated Lab Samples: 30417486001, 30417486002, 30417486003, 30417486004, 30417486005, 30417486006, 30417486007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Tetrachloroethene	ug/L	1.00 U	1.00	0.300	05/03/21 19:58	
Toluene	ug/L	1.00 U	1.00	0.278	05/03/21 19:58	
1,1,1-Trichloroethane	ug/L	1.00 U	1.00	0.149	05/03/21 19:58	
1,1,2-Trichloroethane	ug/L	1.00 U	1.00	0.158	05/03/21 19:58	
Trichloroethene	ug/L	1.00 U	1.00	0.190	05/03/21 19:58	
Trichlorofluoromethane	ug/L	5.00 U	5.00	0.160	05/03/21 19:58	
1,2,3-Trichloropropane	ug/L	2.50 U	2.50	0.237	05/03/21 19:58	
Vinyl acetate	ug/L	10.0 U	10.0	0.692	05/03/21 19:58	
Vinyl chloride	ug/L	1.00 U	1.00	0.234	05/03/21 19:58	
o-Xylene	ug/L	1.00 U	1.00	0.174	05/03/21 19:58	
m&p-Xylene	ug/L	2.00 U	2.00	0.430	05/03/21 19:58	
Toluene-d8 (S)	%	110	80.0-120		05/03/21 19:58	
4-Bromofluorobenzene (S)	%	96.6	77.0-126		05/03/21 19:58	
1,2-Dichloroethane-d4 (S)	%	114	70.0-130		05/03/21 19:58	

LABORATORY CONTROL SAMPLE: R3650780-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acetone	ug/L	25.0	51.0	204	19.0-160	L0
Acrylonitrile	ug/L	25.0	36.9	148	55.0-149	
Benzene	ug/L	5.00	5.45	109	70.0-123	
Bromodichloromethane	ug/L	5.00	5.65	113	75.0-120	
Bromochloromethane	ug/L	5.00	5.73	115	76.0-122	
Bromoform	ug/L	5.00	5.77	115	68.0-132	
Bromomethane	ug/L	5.00	5.22	104	10.0-160	
Carbon disulfide	ug/L	5.00	5.48	110	61.0-128	
Carbon tetrachloride	ug/L	5.00	5.99	120	68.0-126	
Chlorobenzene	ug/L	5.00	5.79	116	80.0-121	
Dibromochloromethane	ug/L	5.00	6.22	124	77.0-125	
Chloroethane	ug/L	5.00	5.90	118	47.0-150	
Chloroform	ug/L	5.00	5.45	109	73.0-120	
Chloromethane	ug/L	5.00	5.40	108	41.0-142	
1,2-Dibromo-3-chloropropane	ug/L	5.00	5.89	118	58.0-134	
1,2-Dibromoethane (EDB)	ug/L	5.00	5.83	117	80.0-122	
Dibromomethane	ug/L	5.00	5.67	113	80.0-120	
1,2-Dichlorobenzene	ug/L	5.00	6.07	121	79.0-121	
1,4-Dichlorobenzene	ug/L	5.00	5.66	113	79.0-120	
trans-1,4-Dichloro-2-butene	ug/L	5.00	5.70	114	33.0-144	
Dichlorodifluoromethane	ug/L	5.00	5.65	113	51.0-149	
Dichlorofluoromethane	ug/L	5.00	5.53	111	65.0-133	
1,1-Dichloroethane	ug/L	5.00	5.33	107	70.0-126	
1,2-Dichloroethane	ug/L	5.00	5.50	110	70.0-128	
1,1-Dichloroethene	ug/L	5.00	5.96	119	71.0-124	
cis-1,2-Dichloroethene	ug/L	5.00	5.78	116	73.0-120	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417486

LABORATORY CONTROL SAMPLE: R3650780-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,2-Dichloroethene	ug/L	5.00	5.21	104	73.0-120	
1,2-Dichloropropane	ug/L	5.00	5.88	118	77.0-125	
cis-1,3-Dichloropropene	ug/L	5.00	5.39	108	80.0-123	
trans-1,3-Dichloropropene	ug/L	5.00	5.84	117	78.0-124	
Ethylbenzene	ug/L	5.00	5.19	104	79.0-123	
2-Hexanone	ug/L	25.0	31.0	124	67.0-149	
Iodomethane	ug/L	25.0	28.3	113	33.0-147	
2-Butanone (MEK)	ug/L	25.0	34.4	138	44.0-160	
Methylene Chloride	ug/L	5.00	3.88	77.6	67.0-120	
4-Methyl-2-pentanone (MIBK)	ug/L	25.0	33.5	134	68.0-142	
Methyl-tert-butyl ether	ug/L	5.00	6.17	123	68.0-125	
Styrene	ug/L	5.00	5.67	113	73.0-130	
1,1,1,2-Tetrachloroethane	ug/L	5.00	5.46	109	75.0-125	
1,1,2,2-Tetrachloroethane	ug/L	5.00	6.11	122	65.0-130	
Tetrachloroethene	ug/L	5.00	6.05	121	72.0-132	
Toluene	ug/L	5.00	5.49	110	79.0-120	
1,1,1-Trichloroethane	ug/L	5.00	6.17	123	73.0-124	
1,1,2-Trichloroethane	ug/L	5.00	5.71	114	80.0-120	
Trichloroethene	ug/L	5.00	5.74	115	78.0-124	
Trichlorofluoromethane	ug/L	5.00	5.14	103	59.0-147	
1,2,3-Trichloropropane	ug/L	5.00	6.53	131	73.0-130	L0
Vinyl acetate	ug/L	25.0	24.8	99.2	11.0-160	
Vinyl chloride	ug/L	5.00	6.10	122	67.0-131	
o-Xylene	ug/L	5.00	5.43	109	80.0-122	
m&p-Xylene	ug/L	10.0	10.3	103	80.0-122	
Toluene-d8 (S)	%			111	80.0-120	
4-Bromofluorobenzene (S)	%			99.7	77.0-126	
1,2-Dichloroethane-d4 (S)	%			110	70.0-130	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417486

QC Batch: 1663344
QC Batch Method: 8260B
Analysis Method: EPA 8260B
Analysis Description: VOA (GC/MS) 8260B
Laboratory: Pace National - Mt. Juliet
Associated Lab Samples: 30417486008, 30417486009, 30417486010

METHOD BLANK: R3650859-3
Matrix: Water
Associated Lab Samples: 30417486008, 30417486009, 30417486010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acetone	ug/L	50.0 U	50.0	11.3	05/03/21 20:37	
Acrylonitrile	ug/L	10.0 U	10.0	0.671	05/03/21 20:37	
Benzene	ug/L	1.00 U	1.00	0.0941	05/03/21 20:37	
Bromodichloromethane	ug/L	1.00 U	1.00	0.136	05/03/21 20:37	
Bromochloromethane	ug/L	1.00 U	1.00	0.128	05/03/21 20:37	
Bromoform	ug/L	1.00 U	1.00	0.129	05/03/21 20:37	
Bromomethane	ug/L	5.00 U	5.00	0.605	05/03/21 20:37	
Carbon disulfide	ug/L	1.00 U	1.00	0.0962	05/03/21 20:37	
Carbon tetrachloride	ug/L	1.00 U	1.00	0.128	05/03/21 20:37	
Chlorobenzene	ug/L	1.00 U	1.00	0.116	05/03/21 20:37	
Dibromochloromethane	ug/L	1.00 U	1.00	0.140	05/03/21 20:37	
Chloroethane	ug/L	5.00 U	5.00	0.192	05/03/21 20:37	
Chloroform	ug/L	5.00 U	5.00	0.111	05/03/21 20:37	
Chloromethane	ug/L	2.50 U	2.50	0.960	05/03/21 20:37	
1,2-Dibromo-3-chloropropane	ug/L	5.00 U	5.00	0.276	05/03/21 20:37	
1,2-Dibromoethane (EDB)	ug/L	1.00 U	1.00	0.126	05/03/21 20:37	
Dibromomethane	ug/L	1.00 U	1.00	0.122	05/03/21 20:37	
1,2-Dichlorobenzene	ug/L	1.00 U	1.00	0.107	05/03/21 20:37	
1,4-Dichlorobenzene	ug/L	1.00 U	1.00	0.120	05/03/21 20:37	
trans-1,4-Dichloro-2-butene	ug/L	2.50 U	2.50	0.467	05/03/21 20:37	
Dichlorodifluoromethane	ug/L	5.00 U	5.00	0.374	05/03/21 20:37	
Dichlorofluoromethane	ug/L	5.00 U	5.00	0.130	05/03/21 20:37	
1,1-Dichloroethane	ug/L	1.00 U	1.00	0.100	05/03/21 20:37	
1,2-Dichloroethane	ug/L	1.00 U	1.00	0.0819	05/03/21 20:37	
1,1-Dichloroethene	ug/L	1.00 U	1.00	0.188	05/03/21 20:37	
cis-1,2-Dichloroethene	ug/L	1.00 U	1.00	0.126	05/03/21 20:37	
trans-1,2-Dichloroethene	ug/L	1.00 U	1.00	0.149	05/03/21 20:37	
1,2-Dichloropropane	ug/L	1.00 U	1.00	0.149	05/03/21 20:37	
cis-1,3-Dichloropropene	ug/L	1.00 U	1.00	0.111	05/03/21 20:37	
trans-1,3-Dichloropropene	ug/L	1.00 U	1.00	0.118	05/03/21 20:37	
Ethylbenzene	ug/L	1.00 U	1.00	0.137	05/03/21 20:37	
2-Hexanone	ug/L	10.0 U	10.0	0.787	05/03/21 20:37	
Iodomethane	ug/L	10.0 U	10.0	6.00	05/03/21 20:37	
2-Butanone (MEK)	ug/L	10.0 U	10.0	1.19	05/03/21 20:37	
Methylene Chloride	ug/L	5.00 U	5.00	0.430	05/03/21 20:37	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.478	05/03/21 20:37	
Methyl-tert-butyl ether	ug/L	1.00 U	1.00	0.101	05/03/21 20:37	
Styrene	ug/L	1.00 U	1.00	0.118	05/03/21 20:37	
1,1,1,2-Tetrachloroethane	ug/L	1.00 U	1.00	0.147	05/03/21 20:37	
1,1,2,2-Tetrachloroethane	ug/L	1.00 U	1.00	0.133	05/03/21 20:37	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417486

METHOD BLANK: R3650859-3 Matrix: Water
Associated Lab Samples: 30417486008, 30417486009, 30417486010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Tetrachloroethene	ug/L	1.00 U	1.00	0.300	05/03/21 20:37	
Toluene	ug/L	1.00 U	1.00	0.278	05/03/21 20:37	
1,1,1-Trichloroethane	ug/L	1.00 U	1.00	0.149	05/03/21 20:37	
1,1,2-Trichloroethane	ug/L	1.00 U	1.00	0.158	05/03/21 20:37	
Trichloroethene	ug/L	1.00 U	1.00	0.190	05/03/21 20:37	
Trichlorofluoromethane	ug/L	5.00 U	5.00	0.160	05/03/21 20:37	
1,2,3-Trichloropropane	ug/L	2.50 U	2.50	0.237	05/03/21 20:37	
Vinyl acetate	ug/L	10.0 U	10.0	0.692	05/03/21 20:37	
Vinyl chloride	ug/L	1.00 U	1.00	0.234	05/03/21 20:37	
o-Xylene	ug/L	1.00 U	1.00	0.174	05/03/21 20:37	
m&p-Xylene	ug/L	2.00 U	2.00	0.430	05/03/21 20:37	
Toluene-d8 (S)	%	105	80.0-120		05/03/21 20:37	
4-Bromofluorobenzene (S)	%	105	77.0-126		05/03/21 20:37	
1,2-Dichloroethane-d4 (S)	%	109	70.0-130		05/03/21 20:37	

LABORATORY CONTROL SAMPLE & LCSD: R3650859-1 R3650859-2

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Acetone	ug/L	25.0	25.3	26.5	101	106	19.0-160	4.63	27	
Acrylonitrile	ug/L	25.0	29.8	30.2	119	121	55.0-149	1.33	20	
Benzene	ug/L	5.00	4.74	4.91	94.8	98.2	70.0-123	3.52	20	
Bromodichloromethane	ug/L	5.00	5.01	5.23	100	105	75.0-120	4.30	20	
Bromochloromethane	ug/L	5.00	5.02	5.11	100	102	76.0-122	1.78	20	
Bromoform	ug/L	5.00	5.26	5.40	105	108	68.0-132	2.63	20	
Bromomethane	ug/L	5.00	3.89	4.09	77.8	81.8	10.0-160	5.01	25	
Carbon disulfide	ug/L	5.00	4.33	4.74	86.6	94.8	61.0-128	9.04	20	
Carbon tetrachloride	ug/L	5.00	4.94	5.25	98.8	105	68.0-126	6.08	20	
Chlorobenzene	ug/L	5.00	4.95	5.31	99.0	106	80.0-121	7.02	20	
Dibromochloromethane	ug/L	5.00	5.24	5.39	105	108	77.0-125	2.82	20	
Chloroethane	ug/L	5.00	4.30	4.39	86.0	87.8	47.0-150	2.07	20	
Chloroform	ug/L	5.00	4.80	5.05	96.0	101	73.0-120	5.08	20	
Chloromethane	ug/L	5.00	4.51	4.78	90.2	95.6	41.0-142	5.81	20	
1,2-Dibromo-3-chloropropane	ug/L	5.00	5.17	5.26	103	105	58.0-134	1.73	20	
1,2-Dibromoethane (EDB)	ug/L	5.00	5.55	5.66	111	113	80.0-122	1.96	20	
Dibromomethane	ug/L	5.00	5.48	5.48	110	110	80.0-120	0.00	20	
1,2-Dichlorobenzene	ug/L	5.00	5.01	5.18	100	104	79.0-121	3.34	20	
1,4-Dichlorobenzene	ug/L	5.00	4.82	5.06	96.4	101	79.0-120	4.86	20	
trans-1,4-Dichloro-2-butene	ug/L	5.00	2.47	2.50	49.4	50.0	33.0-144	1.21	20	
Dichlorodifluoromethane	ug/L	5.00	5.08	5.53	102	111	51.0-149	8.48	20	
Dichlorofluoromethane	ug/L	5.00	4.44	4.72	88.8	94.4	65.0-133	6.11	20	
1,1-Dichloroethane	ug/L	5.00	5.07	5.37	101	107	70.0-126	5.75	20	
1,2-Dichloroethane	ug/L	5.00	5.13	5.24	103	105	70.0-128	2.12	20	
1,1-Dichloroethene	ug/L	5.00	5.06	5.50	101	110	71.0-124	8.33	20	
cis-1,2-Dichloroethene	ug/L	5.00	4.52	4.82	90.4	96.4	73.0-120	6.42	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417486

LABORATORY CONTROL SAMPLE & LCSD: R3650859-1 R3650859-2

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
trans-1,2-Dichloroethene	ug/L	5.00	4.52	4.88	90.4	97.6	73.0-120	7.66	20	
1,2-Dichloropropane	ug/L	5.00	4.97	5.34	99.4	107	77.0-125	7.18	20	
cis-1,3-Dichloropropene	ug/L	5.00	4.84	5.12	96.8	102	80.0-123	5.62	20	
trans-1,3-Dichloropropene	ug/L	5.00	4.95	5.25	99.0	105	78.0-124	5.88	20	
Ethylbenzene	ug/L	5.00	4.77	5.19	95.4	104	79.0-123	8.43	20	
2-Hexanone	ug/L	25.0	28.5	29.5	114	118	67.0-149	3.45	20	
Iodomethane	ug/L	25.0	23.7	24.4	94.8	97.6	33.0-147	2.91	26	
2-Butanone (MEK)	ug/L	25.0	28.8	28.6	115	114	44.0-160	0.697	20	
Methylene Chloride	ug/L	5.00	4.60	5.02	92.0	100	67.0-120	8.73	20	
4-Methyl-2-pentanone (MIBK)	ug/L	25.0	28.5	29.1	114	116	68.0-142	2.08	20	
Methyl-tert-butyl ether	ug/L	5.00	4.80	4.88	96.0	97.6	68.0-125	1.65	20	
Styrene	ug/L	5.00	4.97	5.26	99.4	105	73.0-130	5.67	20	
1,1,1,2-Tetrachloroethane	ug/L	5.00	4.86	5.16	97.2	103	75.0-125	5.99	20	
1,1,2,2-Tetrachloroethane	ug/L	5.00	4.95	5.04	99.0	101	65.0-130	1.80	20	
Tetrachloroethene	ug/L	5.00	5.01	5.48	100	110	72.0-132	8.96	20	
Toluene	ug/L	5.00	4.97	5.37	99.4	107	79.0-120	7.74	20	
1,1,1-Trichloroethane	ug/L	5.00	4.90	5.11	98.0	102	73.0-124	4.20	20	
1,1,2-Trichloroethane	ug/L	5.00	5.39	5.43	108	109	80.0-120	0.739	20	
Trichloroethene	ug/L	5.00	5.26	5.52	105	110	78.0-124	4.82	20	
Trichlorofluoromethane	ug/L	5.00	4.90	5.24	98.0	105	59.0-147	6.71	20	
1,2,3-Trichloropropane	ug/L	5.00	5.70	5.70	114	114	73.0-130	0.00	20	
Vinyl acetate	ug/L	25.0	17.2	18.8	68.8	75.2	11.0-160	8.89	20	
Vinyl chloride	ug/L	5.00	4.56	4.88	91.2	97.6	67.0-131	6.78	20	
o-Xylene	ug/L	5.00	4.98	5.23	99.6	105	80.0-122	4.90	20	
m&p-Xylene	ug/L	10.0	9.62	10.3	96.2	103	80.0-122	6.83	20	
Toluene-d8 (S)	%				103	103	80.0-120			
4-Bromofluorobenzene (S)	%				102	103	77.0-126			
1,2-Dichloroethane-d4 (S)	%				109	108	70.0-130			

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417486

QC Batch: 447044
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417486001, 30417486002, 30417486003, 30417486004, 30417486005, 30417486006, 30417486007, 30417486008, 30417486009

METHOD BLANK: 2157244
Matrix: Water
Associated Lab Samples: 30417486001, 30417486002, 30417486003, 30417486004, 30417486005, 30417486006, 30417486007, 30417486008, 30417486009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	05/07/21 17:05	

LABORATORY CONTROL SAMPLE: 2157245

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2157246 2157247

Parameter	Units	30418604021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20.0	50	50	70.0	68.0	100	96	85-115	3	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417486

QC Batch: 445525
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417486001, 30417486002, 30417486003, 30417486004, 30417486005, 30417486006, 30417486007, 30417486008, 30417486009

METHOD BLANK: 2150585 Matrix: Water
Associated Lab Samples: 30417486001, 30417486002, 30417486003, 30417486004, 30417486005, 30417486006, 30417486007, 30417486008, 30417486009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	04/29/21 15:39	

LABORATORY CONTROL SAMPLE: 2150586

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	965	96	85-115	

SAMPLE DUPLICATE: 2150587

Parameter	Units	30417435002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	204	200	2	5	

SAMPLE DUPLICATE: 2150588

Parameter	Units	30417514001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	48700	48500	0	5	5c

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417486

QC Batch: 446923
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417486001, 30417486002, 30417486003, 30417486004, 30417486005, 30417486006, 30417486007, 30417486008, 30417486009

METHOD BLANK: 2156769
Matrix: Water
Associated Lab Samples: 30417486001, 30417486002, 30417486003, 30417486004, 30417486005, 30417486006, 30417486007, 30417486008, 30417486009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.044	05/07/21 11:43	

LABORATORY CONTROL SAMPLE: 2156770

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.1	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2156771 2156772

Parameter	Units	30417486001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.4	4.3	108	105	90-110	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2156773 2156774

Parameter	Units	30417506001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	29.7	4	4	31.9	32.7	54	76	90-110	3	20	ML

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417486

QC Batch: 445884
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417486001, 30417486002, 30417486003, 30417486004, 30417486005, 30417486006, 30417486007, 30417486008, 30417486009

METHOD BLANK: 2152338
Matrix: Water
Associated Lab Samples: 30417486001, 30417486002, 30417486003, 30417486004, 30417486005, 30417486006, 30417486007, 30417486008, 30417486009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	05/01/21 02:00	

LABORATORY CONTROL SAMPLE: 2152339

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	305	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2152340 2152341

Parameter	Units	30417486001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	6.1J	150	150	166	164	107	105	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2152342 2152343

Parameter	Units	30416651001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	8.3J	150	150	112	173	69	110	90-110	43	10	ML,R1

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417486

QC Batch: 447873
QC Batch Method: SM 4500CIE-2011
Analysis Method: SM 4500CIE-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417486001, 30417486002, 30417486003, 30417486004, 30417486005, 30417486006, 30417486007, 30417486008, 30417486009

METHOD BLANK: 2161521 Matrix: Water
Associated Lab Samples: 30417486001, 30417486002, 30417486003, 30417486004, 30417486005, 30417486006, 30417486007, 30417486008, 30417486009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/13/21 15:18	

METHOD BLANK: 2161523 Matrix: Water
Associated Lab Samples: 30417486001, 30417486002, 30417486003, 30417486004, 30417486005, 30417486006, 30417486007, 30417486008, 30417486009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/13/21 15:20	

METHOD BLANK: 2161539 Matrix: Water
Associated Lab Samples: 30417486001, 30417486002, 30417486003, 30417486004, 30417486005, 30417486006, 30417486007, 30417486008, 30417486009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/13/21 15:21	

LABORATORY CONTROL SAMPLE: 2161522

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	19.9	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2161524 2161525

Parameter	Units	30417486001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	25.7	20	20	47.8	47.2	111	108	85-115	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417486

QC Batch: 446460
QC Batch Method: SM 4500NO3F-2011
Analysis Method: SM 4500NO3F-2011
Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417486001, 30417486002, 30417486003, 30417486004, 30417486005, 30417486006, 30417486007, 30417486008, 30417486009

METHOD BLANK: 2154619
Matrix: Water
Associated Lab Samples: 30417486001, 30417486002, 30417486003, 30417486004, 30417486005, 30417486006, 30417486007, 30417486008, 30417486009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.024	05/05/21 12:02	

LABORATORY CONTROL SAMPLE: 2154620

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	4.1	104	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2154621 2154622

Parameter	Units	30418018002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	11.6	5	5	16.3	16.2	94	92	85-115	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417486

QC Batch: 447047
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417486001, 30417486002, 30417486003, 30417486004, 30417486005, 30417486006, 30417486007, 30417486008, 30417486009

METHOD BLANK: 2157255
Matrix: Water
Associated Lab Samples: 30417486001, 30417486002, 30417486003, 30417486004, 30417486005, 30417486006, 30417486007, 30417486008, 30417486009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	05/07/21 17:43	

LABORATORY CONTROL SAMPLE: 2157256

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	26.4	88	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2157257 2157258

Parameter	Units	30417486001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	81.5	40	40	131	129	125	119	85-115	2	20	MH

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417486

QC Batch: 445244
QC Batch Method: SM 4500NO2B-2011
Analysis Method: SM 4500NO2B-2011
Analysis Description: SM4500NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417486001, 30417486002, 30417486003, 30417486004, 30417486005, 30417486006, 30417486007, 30417486008, 30417486009

METHOD BLANK: 2149457 Matrix: Water
Associated Lab Samples: 30417486001, 30417486002, 30417486003, 30417486004, 30417486005, 30417486006, 30417486007, 30417486008, 30417486009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	04/27/21 19:28	

METHOD BLANK: 2149458 Matrix: Water
Associated Lab Samples: 30417486001, 30417486002, 30417486003, 30417486004, 30417486005, 30417486006, 30417486007, 30417486008, 30417486009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	04/27/21 19:30	

LABORATORY CONTROL SAMPLE: 2149459

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.098	98	90-110	

MATRIX SPIKE SAMPLE: 2149461

Parameter	Units	30416941002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.52	1	0.65	13	85-115	4c,ML

SAMPLE DUPLICATE: 2149460

Parameter	Units	30416941002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	0.52	0.50	5	20	4c

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REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: MLF-SPRING 2021
Pace Project No.: 30417486

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

1c	ALK TV : -1 mg/L
2c	ALK TV : 0 mg/L
3c	ALK TV : 2 mg/L
4c	Sample pH adjusted in lab
5c	Sample volume was reduced so the sample could be within an acceptable range
D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
J	Analyte detected below the reporting limit, therefore result is an estimate. This qualifier is also used for all TICs.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30417486001	**TW-16**	EPA 3005A	445841	EPA 6010B	445905
30417486002	**TW-16A**	EPA 3005A	445841	EPA 6010B	445905
30417486003	**TW-17**	EPA 3005A	445841	EPA 6010B	445905
30417486004	**TW-17A**	EPA 3005A	445841	EPA 6010B	445905
30417486005	**TW-21**	EPA 3005A	445841	EPA 6010B	445905
30417486006	**TW-21A**	EPA 3005A	445841	EPA 6010B	445905
30417486007	**TW-22**	EPA 3005A	445841	EPA 6010B	445905
30417486008	**TW-22A**	EPA 3005A	445841	EPA 6010B	445905
30417486009	**TW-22B**	EPA 3005A	445841	EPA 6010B	445905
30417486001	**TW-16**	EPA 3005A	446167	EPA 6010B	446232
30417486002	**TW-16A**	EPA 3005A	446167	EPA 6010B	446232
30417486003	**TW-17**	EPA 3005A	446167	EPA 6010B	446232
30417486004	**TW-17A**	EPA 3005A	446167	EPA 6010B	446232
30417486005	**TW-21**	EPA 3005A	446167	EPA 6010B	446232
30417486006	**TW-21A**	EPA 3005A	446167	EPA 6010B	446232
30417486007	**TW-22**	EPA 3005A	446167	EPA 6010B	446232
30417486008	**TW-22A**	EPA 3005A	446167	EPA 6010B	446232
30417486009	**TW-22B**	EPA 3005A	446167	EPA 6010B	446232
30417486001	**TW-16**	EPA 7470A	445585	EPA 7470A	445636
30417486002	**TW-16A**	EPA 7470A	445585	EPA 7470A	445636
30417486003	**TW-17**	EPA 7470A	445585	EPA 7470A	445636
30417486004	**TW-17A**	EPA 7470A	445585	EPA 7470A	445636
30417486005	**TW-21**	EPA 7470A	445585	EPA 7470A	445636
30417486006	**TW-21A**	EPA 7470A	445585	EPA 7470A	445636
30417486007	**TW-22**	EPA 7470A	445585	EPA 7470A	445636
30417486008	**TW-22A**	EPA 7470A	445585	EPA 7470A	445636
30417486009	**TW-22B**	EPA 7470A	445585	EPA 7470A	445636
30417486001	**TW-16**	8260B	1663318	EPA 8260B	1663318
30417486002	**TW-16A**	8260B	1663318	EPA 8260B	1663318
30417486003	**TW-17**	8260B	1663318	EPA 8260B	1663318
30417486004	**TW-17A**	8260B	1663318	EPA 8260B	1663318
30417486005	**TW-21**	8260B	1663318	EPA 8260B	1663318
30417486006	**TW-21A**	8260B	1663318	EPA 8260B	1663318
30417486007	**TW-22**	8260B	1663318	EPA 8260B	1663318
30417486008	**TW-22A**	8260B	1663344	EPA 8260B	1663344
30417486009	**TW-22B**	8260B	1663344	EPA 8260B	1663344
30417486010	**TRIP BLANK**	8260B	1663344	EPA 8260B	1663344
30417486001	**TW-16**	SM 2320B-2011	447044		
30417486002	**TW-16A**	SM 2320B-2011	447044		
30417486003	**TW-17**	SM 2320B-2011	447044		
30417486004	**TW-17A**	SM 2320B-2011	447044		
30417486005	**TW-21**	SM 2320B-2011	447044		
30417486006	**TW-21A**	SM 2320B-2011	447044		
30417486007	**TW-22**	SM 2320B-2011	447044		
30417486008	**TW-22A**	SM 2320B-2011	447044		
30417486009	**TW-22B**	SM 2320B-2011	447044		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30417486001	**TW-16**	SM 2540C-2011	445525		
30417486002	**TW-16A**	SM 2540C-2011	445525		
30417486003	**TW-17**	SM 2540C-2011	445525		
30417486004	**TW-17A**	SM 2540C-2011	445525		
30417486005	**TW-21**	SM 2540C-2011	445525		
30417486006	**TW-21A**	SM 2540C-2011	445525		
30417486007	**TW-22**	SM 2540C-2011	445525		
30417486008	**TW-22A**	SM 2540C-2011	445525		
30417486009	**TW-22B**	SM 2540C-2011	445525		
30417486001	**TW-16**	EPA 350.1	446923	EPA 350.1	446928
30417486002	**TW-16A**	EPA 350.1	446923	EPA 350.1	446928
30417486003	**TW-17**	EPA 350.1	446923	EPA 350.1	446928
30417486004	**TW-17A**	EPA 350.1	446923	EPA 350.1	446928
30417486005	**TW-21**	EPA 350.1	446923	EPA 350.1	446928
30417486006	**TW-21A**	EPA 350.1	446923	EPA 350.1	446928
30417486007	**TW-22**	EPA 350.1	446923	EPA 350.1	446928
30417486008	**TW-22A**	EPA 350.1	446923	EPA 350.1	446928
30417486009	**TW-22B**	EPA 350.1	446923	EPA 350.1	446928
30417486001	**TW-16**	EPA 410.4	445884	EPA 410.4	445910
30417486002	**TW-16A**	EPA 410.4	445884	EPA 410.4	445910
30417486003	**TW-17**	EPA 410.4	445884	EPA 410.4	445910
30417486004	**TW-17A**	EPA 410.4	445884	EPA 410.4	445910
30417486005	**TW-21**	EPA 410.4	445884	EPA 410.4	445910
30417486006	**TW-21A**	EPA 410.4	445884	EPA 410.4	445910
30417486007	**TW-22**	EPA 410.4	445884	EPA 410.4	445910
30417486008	**TW-22A**	EPA 410.4	445884	EPA 410.4	445910
30417486009	**TW-22B**	EPA 410.4	445884	EPA 410.4	445910
30417486001	**TW-16**	SM 4500CIE-2011	447873		
30417486002	**TW-16A**	SM 4500CIE-2011	447873		
30417486003	**TW-17**	SM 4500CIE-2011	447873		
30417486004	**TW-17A**	SM 4500CIE-2011	447873		
30417486005	**TW-21**	SM 4500CIE-2011	447873		
30417486006	**TW-21A**	SM 4500CIE-2011	447873		
30417486007	**TW-22**	SM 4500CIE-2011	447873		
30417486008	**TW-22A**	SM 4500CIE-2011	447873		
30417486009	**TW-22B**	SM 4500CIE-2011	447873		
30417486001	**TW-16**	SM 4500NO3F-2011	446460		
30417486002	**TW-16A**	SM 4500NO3F-2011	446460		
30417486003	**TW-17**	SM 4500NO3F-2011	446460		
30417486004	**TW-17A**	SM 4500NO3F-2011	446460		
30417486005	**TW-21**	SM 4500NO3F-2011	446460		
30417486006	**TW-21A**	SM 4500NO3F-2011	446460		
30417486007	**TW-22**	SM 4500NO3F-2011	446460		
30417486008	**TW-22A**	SM 4500NO3F-2011	446460		
30417486009	**TW-22B**	SM 4500NO3F-2011	446460		
30417486001	**TW-16**	EPA 9038	447047		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2021
Pace Project No.: 30417486

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30417486002	**TW-16A**	EPA 9038	447047		
30417486003	**TW-17**	EPA 9038	447047		
30417486004	**TW-17A**	EPA 9038	447047		
30417486005	**TW-21**	EPA 9038	447047		
30417486006	**TW-21A**	EPA 9038	447047		
30417486007	**TW-22**	EPA 9038	447047		
30417486008	**TW-22A**	EPA 9038	447047		
30417486009	**TW-22B**	EPA 9038	447047		
30417486001	**TW-16**	SM 4500NO2B-2011	445244		
30417486002	**TW-16A**	SM 4500NO2B-2011	445244		
30417486003	**TW-17**	SM 4500NO2B-2011	445244		
30417486004	**TW-17A**	SM 4500NO2B-2011	445244		
30417486005	**TW-21**	SM 4500NO2B-2011	445244		
30417486006	**TW-21A**	SM 4500NO2B-2011	445244		
30417486007	**TW-22**	SM 4500NO2B-2011	445244		
30417486008	**TW-22A**	SM 4500NO2B-2011	445244		
30417486009	**TW-22B**	SM 4500NO2B-2011	445244		

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

WO#: 30417486

30417486

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF-SPRING 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - MEMOD 8260 (1)	TOTAL METALS (2)	TOTAL + DISS. METALS (3)	ALKALINITY, TDS	HARDNESS, Cl	AMMONIA	NITRATE	SO4, COD				
1	TW-16	7	4-26-21	1055	✓		GW	✓	✓	✓	✓	✓	✓	✓	✓				001
2	TW-16A			1020															002
3	TW-17			1145															003
4	TW-17A			1220															004
5	TW-21			1545															005
6	TW-21A			1520															006
7	TW-22			1405															007
8	TW-22A			1440															008
9	TW-22B	↓		1330			↓		↓	↓	↓	↓	↓	↓	↓				009
10	TRIP BLANK	2	↓		↓		QC	↓											010
11																			
12																			

	Signature	Date	Time	Comments
Relinquished by	DABrown	4-26-21	1550	(1) PACE NAT'L - VOCs - SEE ATTACHED LIST
Received by	Pace	4-26-21	1550	(2) Sb, As, Ba, Be, Cd, CR, Co, Cu, Hg, Pb, Ni, Se, Ag, Tl, V, ZN
Relinquished by	Pace	4-26-21	1925	(3) Ca, Fe, Mg, MN, K, Na
Received by	RDS PACE	4-26-21	1945	
Relinquished by	RDS PACE	4-26-21	2245	PACE - GREENSBURG - METALS + WET CHEM
Received by	Marina L Udry	4-26-2021	2245	LEVEL 2 REPORT

Cooler Temp on Arrival: 4.2 / 3.2 Deg. C

Rev. Aug. 2018

TABLE 2-2

APPENDIX I
EPA METHOD 8260 - VOLATILE ORGANIC COMPOUNDS AND DETECTION LIMITS

Millersville Landfill, Anne Arundel County, MD

Parameter	PQL (ppb)	Parameter	PQL (ppb)
Acetone	5.0	cis-1,2-Dichloroethene	1.0
Acrylonitrile	5.0	trans-1,2-Dichloroethene	1.0
Benzene	1.0	Dichlorofluoromethane*	1.0
Bromochloromethane	1.0	Methylene chloride	1.0
Bromodichloromethane	1.0	1,2-Dichloropropane	1.0
Bromoform	1.0	trans-1,3-Dichloropropene	1.0
Bromomethane	1.0	cis-1,3-Dichloropropene	1.0
2-Butanone	5.0	Ethylbenzene	1.0
Carbon disulfide	1.0	2-Hexanone	5.0
Carbon tetrachloride	1.0	Iodomethane	1.0
Chlorobenzene	1.0	4-Methyl-2-pentanone	5.0
Chloroethane	1.0	Styrene	1.0
Chloroform	1.0	1,1,1,2-Tetrachloroethane	1.0
Chloromethane	1.0	1,1,2,2-Tetrachloroethane	1.0
Dibromochloromethane	1.0	Tetrachloroethene	1.0
1,2-Dibromo-3-chloropropane (DBCP)	1.0	Toluene	1.0
1,2 - Dibromoethane (EDB)	1.0	1,1,1-Trichloroethane	1.0
Dibromomethane	1.0	1,1,2-Trichloroethane	1.0
1,2 - Dichlorobenzene	1.0	Trichloroethene	1.0
1,4 - Dichlorobenzene	1.0	Trichloroflouromethane	1.0
trans-1,4-dichloro-2-butene	1.0	1,2,3-Trichloropropane	1.0
Dichlorodifluoromethane*	1.0	Vinyl acetate	1.0
1,1-Dichloroethane	1.0	Vinyl chloride	1.0
1,2-Dichloroethane	1.0	o-Xylene	1.0
1,1-Dichloroethene	1.0	m+p-Xylenes	1.0

NOTES: 1) PQL = Practical quantitation limit

d: 8260-1dl.doc

2) * = Additional compounds not included on Appendix I list.

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EMA

Project # 30417486

Courier: ☐ Fed Ex ☐ UPS ☒ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label MLL
LIMS Login MLL

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 9 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 4.3/3.3 °C Correction Factor: -.1 °C Final Temp: 4.2/3.2 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# 1D0401	Date and Initials of person examining contents MLL 4/27/2021
Chain of Custody Present:	✓			1.	
Chain of Custody Filled Out:	✓			2.	
Chain of Custody Relinquished:	✓			3.	
Sampler Name & Signature on COC:		✓		4. no signature on coc	
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.	
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):	✓			7.	
Rush Turn Around Time Requested:	✓			8.	
Sufficient Volume:	✓			9.	
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.	
Containers Intact:	✓			11.	
Orthophosphate field filtered			✓	12.	
Hex Cr Aqueous sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: (VOA) coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.	
All containers meet method preservation requirements.	✓			Initial when completed MLL	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:	✓			18.	
Trip Blank Custody Seals Present	✓				
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed:	Date: / Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Internal Transfer Chain of Custody

☐ Samples Pre-Logged into eCOC.

State Of Origin: MD
Cert. Needed: [X] Yes ☐ No

Pace Analytical®
www.pacelabs.com

Workorder: 30417486 **Workorder Name:** MLF-SPRING 2021 **Owner Received Date:** 4/26/2021 **Results Requested By:** 5/11/2021

Report To

Samantha Bayura
Pace Analytical Pittsburgh
1638 Roseytown Road
Suites 2,3,4
Greensburg, PA 15601
Phone (724)850-5622

Subcontract To

Pace National
12065 Lebanon Rd
Mt. Juliet, TN 37122
Phone (615) 758-5858

Requested Analysis

E008

L1345740

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HNO3	HCL					VOC by 8260											LAB USE ONLY
1	TW-16	PS	4/26/2021 10:55	30417486001	Water	1		3				X											-01
2	TW-16A	PS	4/26/2021 10:20	30417486002	Water		1					X											-02
3	TW-17	PS	4/26/2021 11:45	30417486003	Water		1					X											-03
4	TW-17A	PS	4/26/2021 12:20	30417486004	Water		1					X											-04
5	TW-21	PS	4/26/2021 15:45	30417486005	Water		1					X											-05
6	TW-21A	PS	4/26/2021 15:20	30417486006	Water		1					X											-06
7	TW-22	PS	4/26/2021 14:05	30417486007	Water		1					X											-07
8	TW-22A	PS	4/26/2021 14:40	30417486008	Water		1					X											-08
9	TW-22B	PS	4/26/2021 13:30	30417486009	Water		1					X											-09
10	TRIP BLANK	PS	4/26/2021 00:01	30417486010	Water		2 DK					X											-10

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature]	4/27/21 1700		
2				
3			[signature]	4/29/21 1500

Comments

List attached to COC
Report in ug/L

Cooler Temperature on Receipt _____ °C | **Custody Seal** Y or N | **Received on Ice** Y or N | **Samples Intact** Y or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.*
This chain of custody is considered complete as is since this information is available in the owner laboratory.

PT 60
4.4-1.4.5

Sample Receipt Checklist

COC Seal Present/Intact: ✓ Y N
COC Signed/Accurate: ✓ Y N
Bottles arrive intact: ✓ Y N
Correct bottles used: ✓ Y N
Sufficient volume sent: ✓ Y N
RAD Screen <0.5 mR/hr: ✓ Y N

If Applicable
VOA Zero Headspace: ✓ Y N
Pres.Correct/Check: Y N

U1345740

TABLE 2-2

APPENDIX I
EPA METHOD 8260 - VOLATILE ORGANIC COMPOUNDS AND DETECTION LIMITS

Millersville Landfill, Anne Arundel County, MD

Parameter	PQL (ppb)	Parameter	PQL (ppb)
Acetone	5.0	cis-1,2-Dichloroethene	1.0
Acrylonitrile	5.0	trans-1,2-Dichloroethene	1.0
Benzene	1.0	Dichlorofluoromethane*	1.0
Bromochloromethane	1.0	Methylene chloride	1.0
Bromodichloromethane	1.0	1,2-Dichloropropane	1.0
Bromoform	1.0	trans-1,3-Dichloropropene	1.0
Bromomethane	1.0	cis-1,3-Dichloropropene	1.0
2-Butanone	5.0	Ethylbenzene	1.0
Carbon disulfide	1.0	2-Hexanone	5.0
Carbon tetrachloride	1.0	Iodomethane	1.0
Chlorobenzene	1.0	4-Methyl-2-pentanone	5.0
Chloroethane	1.0	Styrene	1.0
Chloroform	1.0	1,1,1,2-Tetrachloroethane	1.0
Chloromethane	1.0	1,1,2,2-Tetrachloroethane	1.0
Dibromochloromethane	1.0	Tetrachloroethene	1.0
1,2-Dibromo-3-chloropropane (DBCP)	1.0	Toluene	1.0
1,2 - Dibromoethane (EDB)	1.0	1,1,1-Trichloroethane	1.0
Dibromomethane	1.0	1,1,2-Trichloroethane	1.0
1,2 - Dichlorobenzene	1.0	Trichloroethene	1.0
1,4 - Dichlorobenzene	1.0	Trichloroflouromethane	1.0
trans-1,4-dichloro-2-butene	1.0	1,2,3-Trichloropropane	1.0
Dichlorodifluoromethane*	1.0	Vinyl acetate	1.0
1,1-Dichloroethane	1.0	Vinyl chloride	1.0
1,2-Dichloroethane	1.0	o-Xylene	1.0
1,1-Dichloroethene	1.0	m+p-Xylenes	1.0

NOTES: 1) PQL = Practical quantitation limit
2) * = Additional compounds not included on Appendix I list.

d: 8260-1dl.doc

L1345740

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EMA

Project # 30417486

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label MLL
LIMS Login MLL

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 9 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 4.3/3.3 °C Correction Factor: -.1 °C Final Temp: 4.2/3.2 °C

Temp should be above freezing to 6°C

pH paper Lot# 1DN0401 Date and Initials of person examining contents MLL 4/27/2021

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4. no signature on coc
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):	✓			7.
Rush Turn Around Time Requested:	✓			8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: (VOA) coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.
All containers meet method preservation requirements.	✓			Initial when completed MLL / Date/time of preservation / Lot # of added preservative
Headspace in VOA Vials (>6mm):		✓		17.
Trip Blank Present:	✓			18.
Trip Blank Custody Seals Present	✓			
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: / Date: / Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

UJ45740

WO#: 30417486

30417486

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF-SPRING 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260 (1)	TOTAL METAL (2)	TOTAL + DISS. METALS (3)	ALKALINITY, TDS	HARDNESS, Cl	AMMONIA	NITRATE	SO4, COD				
1	TW-16	7	4-26-21	1055	✓		GW	✓	✓	✓	✓	✓	✓	✓	✓				001
2	TW-16A			1020															002
3	TW-17			1145															003
4	TW-17A			1220															004
5	TW-21			1545															005
6	TW-21A			1520															006
7	TW-22			1405															007
8	TW-22A			1440															008
9	TW-22B	↓		1330			↓		↓	↓	↓	↓	↓	↓	↓				009
10	TRIP BLANK	2	↓		↓		OK	↓											010
11																			
12																			

	Signature	Date	Time	Comments
Relinquished by	DA Brown	4-26-21	1550	(1) PACE NAT'L - VOCs - SEE ATTACHED LIST
Received by	[illegible] PACE	4-26-21	1550	(2) Sb, As, Ba, Be, Cd, CR, Co, Cu, Hg, Pb, Ni, Se, Ag, Tl, V, ZN
Relinquished by	[illegible] PACE	4-26-21	1925	(3) Ca, Fe, Mg, MN, K, Na
Received by	RDS PACE	4-26-21	1945	
Relinquished by	RDS PACE	4-26-21	2245	PACE - GREENSBURG - METALS + WET CHEM
Received by	Marvin L Clay	4-26-2021	2245	LEVEL 2 REPORT

Cooler Temp on Arrival: 4.2 / 3.2 Deg. C

Rev. Aug. 2018

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

May 17, 2021

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-SPRING 2021
Pace Project No.: 30417711

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on April 27, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace National - Mt. Juliet
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services National

12065 Lebanon Road, Mt. Juliet, TN 37122
Alabama Certification #: 40660
Alaska Certification 17-026
Arizona Certification #: AZ0612
Arkansas Certification #: 88-0469
California Certification #: 2932
Canada Certification #: 1461.01
Colorado Certification #: TN00003
Connecticut Certification #: PH-0197
DOD Certification: #1461.01
EPA# TN00003
Florida Certification #: E87487
Georgia DW Certification #: 923
Georgia Certification: NELAP
Idaho Certification #: TN00003
Illinois Certification #: 200008
Indiana Certification #: C-TN-01
Iowa Certification #: 364
Kansas Certification #: E-10277
Kentucky UST Certification #: 16
Kentucky Certification #: 90010
Louisiana Certification #: AI30792
Louisiana DW Certification #: LA180010
Maine Certification #: TN0002
Maryland Certification #: 324
Massachusetts Certification #: M-TN003
Michigan Certification #: 9958
Minnesota Certification #: 047-999-395
Mississippi Certification #: TN00003
Missouri Certification #: 340
Montana Certification #: CERT0086
Nebraska Certification #: NE-OS-15-05
Nevada Certification #: TN-03-2002-34
New Hampshire Certification #: 2975
New Jersey Certification #: TN002
New Mexico DW Certification
New York Certification #: 11742
North Carolina Aquatic Toxicity Certification #: 41
North Carolina Drinking Water Certification #: 21704
North Carolina Environmental Certificate #: 375

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CERTIFICATIONS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Pace Analytical Services National

North Dakota Certification #: R-140
Ohio VAP Certification #: CL0069
Oklahoma Certification #: 9915
Oregon Certification #: TN200002
Pennsylvania Certification #: 68-02979
Rhode Island Certification #: LAO00356
South Carolina Certification #: 84004
South Dakota Certification
Tennessee DW/Chem/Micro Certification #: 2006
Texas Certification #: T 104704245-17-14
Texas Mold Certification #: LAB0152
USDA Soil Permit #: P330-15-00234
Utah Certification #: TN00003
Virginia Certification #: VT2006
Vermont Dept. of Health: ID# VT-2006
Virginia Certification #: 460132
Washington Certification #: C847
West Virginia Certification #: 233
Wisconsin Certification #: 998093910
Wyoming UST Certification #: via A2LA 2926.01
A2LA-ISO 17025 Certification #: 1461.01
A2LA-ISO 17025 Certification #: 1461.02
AIHA-LAP/LLC EMLAP Certification #:100789

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Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30417711001	**TW-2**	Water	04/27/21 10:25	04/27/21 22:30
30417711002	**TW-2A**	Water	04/27/21 09:50	04/27/21 22:30
30417711003	**TW-3**	Water	04/27/21 11:05	04/27/21 22:30
30417711004	**TW-3A**	Water	04/27/21 11:40	04/27/21 22:30
30417711005	**TW-4**	Water	04/27/21 13:00	04/27/21 22:30
30417711006	**TW-4B**	Water	04/27/21 13:30	04/27/21 22:30
30417711007	**TW-27**	Water	04/27/21 12:15	04/27/21 22:30
30417711008	**TW-30**	Water	04/27/21 14:15	04/27/21 22:30
30417711009	**FIELD BLANK**	Water	04/27/21 15:15	04/27/21 22:30
30417711010	**TRIP BLANK**	Water	04/27/21 00:01	04/27/21 22:30
30417711011	**SW-1**	Water	04/27/21 14:30	04/27/21 22:30
30417711012	**SW-2**	Water	04/27/21 15:30	04/27/21 22:30
30417711013	**SW-3**	Water	04/27/21 14:45	04/27/21 22:30

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30417711001	**TW-2**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30417711002	**TW-2A**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30417711003	**TW-3**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30417711004	**TW-3A**	EPA 6010B	CTS	22	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30417711005	**TW-4**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30417711006	**TW-4B**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30417711007	**TW-27**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500ClE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30417711008	**TW-30**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500ClE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30417711009	**FIELD BLANK**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500ClE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30417711010	**TRIP BLANK**	EPA 8260B	JAH	54	PAN
30417711011	**SW-1**	EPA 6010B	CTS	22	PASI-PA
		EPA 7470A	EMM	1	PASI-PA

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30417711012	**SW-2**	EPA 6010B	CTS	22	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30417711013	**SW-3**	EPA 6010B	CTS	22	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	JAH	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA

PAN = Pace National - Mt. Juliet
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Method: **EPA 6010B**
Description: 6010 MET ICP
Client: Environmental Monitoring and Assessment LLC
Date: May 17, 2021

General Information:
12 samples were analyzed for EPA 6010B by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Method: **EPA 6010B**
Description: 6010 MET ICP, Dissolved
Client: Environmental Monitoring and Assessment LLC
Date: May 17, 2021

General Information:
9 samples were analyzed for EPA 6010B by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 446368

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30417711004,30417910001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2154154)
  - Calcium, Dissolved
  - Sodium, Dissolved

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: May 17, 2021

General Information:
12 samples were analyzed for EPA 7470A by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Method: **EPA 8260B**
Description: VOA (GC/MS) 8260B
Client: Environmental Monitoring and Assessment LLC
Date: May 17, 2021

General Information:
13 samples were analyzed for EPA 8260B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 1663318

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: R3650780-1)
  - 1,2,3-Trichloropropane
  - Acetone

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: May 17, 2021

General Information:
12 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 447485

1c: ALK TV: -2 mg/L
- TW-4B (Lab ID: 30417711006)
  - Alkalinity,Total (CaCO3 pH4.5)

2c: ALK TV: 0 mg/L
- FIELD BLANK (Lab ID: 30417711009)
  - Alkalinity,Total (CaCO3 pH4.5)

3c: ALK TV: 2 mg/L
- TW-3 (Lab ID: 30417711003)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-3A (Lab ID: 30417711004)
  - Alkalinity,Total (CaCO3 pH4.5)

4c: ALK TV: 4 mg/L
- TW-30 (Lab ID: 30417711008)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Method: **SM 2540C-2011**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: May 17, 2021

General Information:
12 samples were analyzed for SM 2540C-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: 445749

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 2151680)
  - Total Dissolved Solids

Additional Comments:

Analyte Comments:

QC Batch: 445752

5c: Sample volume was reduced so the sample could be within an acceptable range

- DUP (Lab ID: 2151725)
  - Total Dissolved Solids

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: May 17, 2021

General Information:
12 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: May 17, 2021

General Information:
12 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 445997

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30417711008,30418476001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2152886)
  - Chemical Oxygen Demand
- MSD (Lab ID: 2152887)
  - Chemical Oxygen Demand

Additional Comments:

Analyte Comments:

QC Batch: 445997

D4: Sample was diluted due to the presence of high levels of target analytes.

- MS (Lab ID: 2152886)
  - Chemical Oxygen Demand
- MSD (Lab ID: 2152887)
  - Chemical Oxygen Demand

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Method: **SM 4500ClE-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: May 17, 2021

General Information:
12 samples were analyzed for SM 4500ClE-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Method: **SM 4500NO3F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: May 17, 2021

General Information:
12 samples were analyzed for SM 4500NO3F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: May 17, 2021

General Information:
12 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Method: **SM 4500NO2B-2011**
Description: SM4500NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: May 17, 2021

General Information:
12 samples were analyzed for SM 4500NO2B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: TW-2 **Lab ID: 30417711001** Collected: 04/27/21 10:25 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	05/03/21 15:31	05/11/21 07:39	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	05/03/21 15:31	05/11/21 07:39	7440-38-2	
Barium	**0.0085J**	mg/L	0.010	0.00068	1	05/03/21 15:31	05/11/21 07:39	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00017	1	05/03/21 15:31	05/11/21 07:39	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	05/03/21 15:31	05/11/21 07:39	7440-43-9	
Calcium	**0.26J**	mg/L	1.0	0.10	1	05/03/21 15:31	05/11/21 07:39	7440-70-2	
Chromium	**0.0017J**	mg/L	0.0050	0.00035	1	05/03/21 15:31	05/11/21 07:39	7440-47-3	
Cobalt	**0.00062J**	mg/L	0.0050	0.00053	1	05/03/21 15:31	05/11/21 07:39	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0027	1	05/03/21 15:31	05/11/21 07:39	7440-50-8	
Iron	**11.2**	mg/L	0.070	0.041	1	05/03/21 15:31	05/11/21 07:39	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	05/03/21 15:31	05/11/21 07:39	7439-92-1	
Magnesium	**0.53**	mg/L	0.20	0.028	1	05/03/21 15:31	05/11/21 07:39	7439-95-4	
Manganese	**0.15**	mg/L	0.0050	0.0012	1	05/03/21 15:31	05/11/21 07:39	7439-96-5	
Nickel	**0.0019J**	mg/L	0.010	0.0015	1	05/03/21 15:31	05/11/21 07:39	7440-02-0	
Potassium	**0.63**	mg/L	0.50	0.072	1	05/03/21 15:31	05/11/21 07:39	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	05/03/21 15:31	05/11/21 07:39	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	05/03/21 15:31	05/11/21 07:39	7440-22-4	
Sodium	**2.1**	mg/L	1.0	0.42	1	05/03/21 15:31	05/11/21 07:39	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	05/03/21 15:31	05/11/21 07:39	7440-28-0	
Total Hardness by SM2340B-2011	**2.8J**	mg/L	3.3	0.37	1	05/03/21 15:31	05/11/21 07:39		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	05/03/21 15:31	05/11/21 07:39	7440-62-2	
Zinc	**0.010 U**	mg/L	0.010	0.0024	1	05/03/21 15:31	05/11/21 07:39	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**0.27J**	mg/L	1.0	0.10	1	05/04/21 15:25	05/07/21 12:23	7440-70-2	
Iron, Dissolved	**10.2**	mg/L	0.070	0.041	1	05/04/21 15:25	05/07/21 12:23	7439-89-6	
Magnesium, Dissolved	**0.53**	mg/L	0.20	0.028	1	05/04/21 15:25	05/07/21 12:23	7439-95-4	
Manganese, Dissolved	**0.15**	mg/L	0.0050	0.0012	1	05/04/21 15:25	05/07/21 12:23	7439-96-5	
Potassium, Dissolved	**0.63**	mg/L	0.50	0.072	1	05/04/21 15:25	05/07/21 12:23	7440-09-7	
Sodium, Dissolved	**2.0**	mg/L	1.0	0.42	1	05/04/21 15:25	05/07/21 12:23	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	05/04/21 12:37	05/04/21 19:16	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	05/03/21 20:59	05/03/21 20:59	67-64-1	L0
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	05/03/21 20:59	05/03/21 20:59	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	05/03/21 20:59	05/03/21 20:59	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	05/03/21 20:59	05/03/21 20:59	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	05/03/21 20:59	05/03/21 20:59	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	05/03/21 20:59	05/03/21 20:59	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: TW-2 **Lab ID: 30417711001** Collected: 04/27/21 10:25 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	05/03/21 20:59	05/03/21 20:59	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	05/03/21 20:59	05/03/21 20:59	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	05/03/21 20:59	05/03/21 20:59	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	05/03/21 20:59	05/03/21 20:59	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	05/03/21 20:59	05/03/21 20:59	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	05/03/21 20:59	05/03/21 20:59	75-00-3	
Chloroform	**0.164J**	ug/L	5.00	0.111	1	05/03/21 20:59	05/03/21 20:59	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	05/03/21 20:59	05/03/21 20:59	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	05/03/21 20:59	05/03/21 20:59	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	05/03/21 20:59	05/03/21 20:59	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	05/03/21 20:59	05/03/21 20:59	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	05/03/21 20:59	05/03/21 20:59	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	05/03/21 20:59	05/03/21 20:59	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	05/03/21 20:59	05/03/21 20:59	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	05/03/21 20:59	05/03/21 20:59	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	05/03/21 20:59	05/03/21 20:59	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	05/03/21 20:59	05/03/21 20:59	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	05/03/21 20:59	05/03/21 20:59	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	05/03/21 20:59	05/03/21 20:59	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	05/03/21 20:59	05/03/21 20:59	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 20:59	05/03/21 20:59	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 20:59	05/03/21 20:59	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	05/03/21 20:59	05/03/21 20:59	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	05/03/21 20:59	05/03/21 20:59	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	05/03/21 20:59	05/03/21 20:59	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	05/03/21 20:59	05/03/21 20:59	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	05/03/21 20:59	05/03/21 20:59	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	05/03/21 20:59	05/03/21 20:59	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	05/03/21 20:59	05/03/21 20:59	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	05/03/21 20:59	05/03/21 20:59	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	05/03/21 20:59	05/03/21 20:59	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	05/03/21 20:59	05/03/21 20:59	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	05/03/21 20:59	05/03/21 20:59	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	05/03/21 20:59	05/03/21 20:59	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	05/03/21 20:59	05/03/21 20:59	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	05/03/21 20:59	05/03/21 20:59	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 20:59	05/03/21 20:59	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	05/03/21 20:59	05/03/21 20:59	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	05/03/21 20:59	05/03/21 20:59	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	05/03/21 20:59	05/03/21 20:59	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	05/03/21 20:59	05/03/21 20:59	96-18-4	L0
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	05/03/21 20:59	05/03/21 20:59	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	05/03/21 20:59	05/03/21 20:59	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	05/03/21 20:59	05/03/21 20:59	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	05/03/21 20:59	05/03/21 20:59	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: TW-2 **Lab ID: 30417711001** Collected: 04/27/21 10:25 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	111	%	80.0-120		1	05/03/21 20:59	05/03/21 20:59	2037-26-5	
4-Bromofluorobenzene (S)	98.7	%	77.0-126		1	05/03/21 20:59	05/03/21 20:59	460-00-4	
1,2-Dichloroethane-d4 (S)	117	%	70.0-130		1	05/03/21 20:59	05/03/21 20:59	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**12.0**	mg/L	10.0	1.0	1		05/11/21 17:26		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**16.0**	mg/L	10.0	10.0	1		04/30/21 15:32		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/07/21 08:43	05/07/21 13:44		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/03/21 10:51	05/03/21 14:37		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**3.5**	mg/L	3.0	0.67	1		05/13/21 15:46	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.065J**	mg/L	0.10	0.024	1		05/06/21 15:26	14797-55-8	
Nitrogen, NO2 plus NO3	**0.065J**	mg/L	0.10	0.024	1		05/06/21 15:26		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/10/21 18:20	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/28/21 20:53	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: TW-2A **Lab ID: 30417711002** Collected: 04/27/21 09:50 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	05/03/21 15:31	05/11/21 07:47	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	05/03/21 15:31	05/11/21 07:47	7440-38-2	
Barium	**0.063**	mg/L	0.010	0.00068	1	05/03/21 15:31	05/11/21 07:47	7440-39-3	
Beryllium	**0.00020J**	mg/L	0.0010	0.00017	1	05/03/21 15:31	05/11/21 07:47	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	05/03/21 15:31	05/11/21 07:47	7440-43-9	
Calcium	**5.0**	mg/L	1.0	0.10	1	05/03/21 15:31	05/11/21 07:47	7440-70-2	
Chromium	**0.0018J**	mg/L	0.0050	0.00035	1	05/03/21 15:31	05/11/21 07:47	7440-47-3	
Cobalt	**0.0012J**	mg/L	0.0050	0.00053	1	05/03/21 15:31	05/11/21 07:47	7440-48-4	
Copper	**0.0049J**	mg/L	0.0050	0.0027	1	05/03/21 15:31	05/11/21 07:47	7440-50-8	
Iron	**31.6**	mg/L	0.070	0.041	1	05/03/21 15:31	05/11/21 07:47	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	05/03/21 15:31	05/11/21 07:47	7439-92-1	
Magnesium	**2.8**	mg/L	0.20	0.028	1	05/03/21 15:31	05/11/21 07:47	7439-95-4	
Manganese	**0.21**	mg/L	0.0050	0.0012	1	05/03/21 15:31	05/11/21 07:47	7439-96-5	
Nickel	**0.0028J**	mg/L	0.010	0.0015	1	05/03/21 15:31	05/11/21 07:47	7440-02-0	
Potassium	**1.0**	mg/L	0.50	0.072	1	05/03/21 15:31	05/11/21 07:47	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	05/03/21 15:31	05/11/21 07:47	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	05/03/21 15:31	05/11/21 07:47	7440-22-4	
Sodium	**12.4**	mg/L	1.0	0.42	1	05/03/21 15:31	05/11/21 07:47	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	05/03/21 15:31	05/11/21 07:47	7440-28-0	
Total Hardness by SM2340B-2011	**23.8**	mg/L	3.3	0.37	1	05/03/21 15:31	05/11/21 07:47		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	05/03/21 15:31	05/11/21 07:47	7440-62-2	
Zinc	**0.010 U**	mg/L	0.010	0.0024	1	05/03/21 15:31	05/11/21 07:47	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**5.1**	mg/L	1.0	0.10	1	05/04/21 15:25	05/07/21 12:25	7440-70-2	
Iron, Dissolved	**31.1**	mg/L	0.070	0.041	1	05/04/21 15:25	05/07/21 12:25	7439-89-6	
Magnesium, Dissolved	**2.9**	mg/L	0.20	0.028	1	05/04/21 15:25	05/07/21 12:25	7439-95-4	
Manganese, Dissolved	**0.22**	mg/L	0.0050	0.0012	1	05/04/21 15:25	05/07/21 12:25	7439-96-5	
Potassium, Dissolved	**1.1**	mg/L	0.50	0.072	1	05/04/21 15:25	05/07/21 12:25	7440-09-7	
Sodium, Dissolved	**13.1**	mg/L	1.0	0.42	1	05/04/21 15:25	05/07/21 12:25	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	05/04/21 12:37	05/04/21 19:11	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	05/03/21 21:19	05/03/21 21:19	67-64-1	L0
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	05/03/21 21:19	05/03/21 21:19	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	05/03/21 21:19	05/03/21 21:19	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	05/03/21 21:19	05/03/21 21:19	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	05/03/21 21:19	05/03/21 21:19	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	05/03/21 21:19	05/03/21 21:19	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: TW-2A **Lab ID: 30417711002** Collected: 04/27/21 09:50 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	05/03/21 21:19	05/03/21 21:19	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	05/03/21 21:19	05/03/21 21:19	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	05/03/21 21:19	05/03/21 21:19	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	05/03/21 21:19	05/03/21 21:19	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	05/03/21 21:19	05/03/21 21:19	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	05/03/21 21:19	05/03/21 21:19	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	05/03/21 21:19	05/03/21 21:19	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	05/03/21 21:19	05/03/21 21:19	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	05/03/21 21:19	05/03/21 21:19	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	05/03/21 21:19	05/03/21 21:19	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	05/03/21 21:19	05/03/21 21:19	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	05/03/21 21:19	05/03/21 21:19	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	05/03/21 21:19	05/03/21 21:19	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	05/03/21 21:19	05/03/21 21:19	110-57-6	
Dichlorofluoromethane	**0.344J**	ug/L	5.00	0.130	1	05/03/21 21:19	05/03/21 21:19	75-43-4	J
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	05/03/21 21:19	05/03/21 21:19	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	05/03/21 21:19	05/03/21 21:19	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	05/03/21 21:19	05/03/21 21:19	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	05/03/21 21:19	05/03/21 21:19	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	05/03/21 21:19	05/03/21 21:19	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 21:19	05/03/21 21:19	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 21:19	05/03/21 21:19	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	05/03/21 21:19	05/03/21 21:19	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	05/03/21 21:19	05/03/21 21:19	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	05/03/21 21:19	05/03/21 21:19	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	05/03/21 21:19	05/03/21 21:19	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	05/03/21 21:19	05/03/21 21:19	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	05/03/21 21:19	05/03/21 21:19	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	05/03/21 21:19	05/03/21 21:19	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	05/03/21 21:19	05/03/21 21:19	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	05/03/21 21:19	05/03/21 21:19	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	05/03/21 21:19	05/03/21 21:19	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	05/03/21 21:19	05/03/21 21:19	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	05/03/21 21:19	05/03/21 21:19	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	05/03/21 21:19	05/03/21 21:19	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	05/03/21 21:19	05/03/21 21:19	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 21:19	05/03/21 21:19	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	05/03/21 21:19	05/03/21 21:19	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	05/03/21 21:19	05/03/21 21:19	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	05/03/21 21:19	05/03/21 21:19	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	05/03/21 21:19	05/03/21 21:19	96-18-4	L0
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	05/03/21 21:19	05/03/21 21:19	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	05/03/21 21:19	05/03/21 21:19	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	05/03/21 21:19	05/03/21 21:19	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	05/03/21 21:19	05/03/21 21:19	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: TW-2A **Lab ID: 30417711002** Collected: 04/27/21 09:50 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	112	%	80.0-120		1	05/03/21 21:19	05/03/21 21:19	2037-26-5	
4-Bromofluorobenzene (S)	99.9	%	77.0-126		1	05/03/21 21:19	05/03/21 21:19	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%	70.0-130		1	05/03/21 21:19	05/03/21 21:19	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**20.0**	mg/L	10.0	1.0	1		05/11/21 17:28		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**92.0**	mg/L	10.0	10.0	1		04/30/21 15:32		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/07/21 08:43	05/07/21 13:49		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.1J**	mg/L	25.0	4.7	1	05/03/21 10:51	05/03/21 14:37		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**35.6**	mg/L	3.0	0.67	1		05/13/21 15:49	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.075J**	mg/L	0.10	0.024	1		05/06/21 15:27	14797-55-8	
Nitrogen, NO2 plus NO3	**0.075J**	mg/L	0.10	0.024	1		05/06/21 15:27		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/10/21 18:24	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/28/21 20:54	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: TW-3 **Lab ID: 30417711003** Collected: 04/27/21 11:05 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	05/03/21 15:31	05/11/21 07:49	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	05/03/21 15:31	05/11/21 07:49	7440-38-2	
Barium	**0.0080J**	mg/L	0.010	0.00068	1	05/03/21 15:31	05/11/21 07:49	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00017	1	05/03/21 15:31	05/11/21 07:49	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	05/03/21 15:31	05/11/21 07:49	7440-43-9	
Calcium	**1.1**	mg/L	1.0	0.10	1	05/03/21 15:31	05/11/21 07:49	7440-70-2	
Chromium	**0.0060**	mg/L	0.0050	0.00035	1	05/03/21 15:31	05/11/21 07:49	7440-47-3	
Cobalt	**0.0013J**	mg/L	0.0050	0.00053	1	05/03/21 15:31	05/11/21 07:49	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0027	1	05/03/21 15:31	05/11/21 07:49	7440-50-8	
Iron	**9.4**	mg/L	0.070	0.041	1	05/03/21 15:31	05/11/21 07:49	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	05/03/21 15:31	05/11/21 07:49	7439-92-1	
Magnesium	**0.54**	mg/L	0.20	0.028	1	05/03/21 15:31	05/11/21 07:49	7439-95-4	
Manganese	**0.11**	mg/L	0.0050	0.0012	1	05/03/21 15:31	05/11/21 07:49	7439-96-5	
Nickel	**0.011**	mg/L	0.010	0.0015	1	05/03/21 15:31	05/11/21 07:49	7440-02-0	
Potassium	**0.50**	mg/L	0.50	0.072	1	05/03/21 15:31	05/11/21 07:49	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	05/03/21 15:31	05/11/21 07:49	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	05/03/21 15:31	05/11/21 07:49	7440-22-4	
Sodium	**2.6**	mg/L	1.0	0.42	1	05/03/21 15:31	05/11/21 07:49	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	05/03/21 15:31	05/11/21 07:49	7440-28-0	
Total Hardness by SM2340B-2011	**5.0**	mg/L	3.3	0.37	1	05/03/21 15:31	05/11/21 07:49		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	05/03/21 15:31	05/11/21 07:49	7440-62-2	
Zinc	**0.010 U**	mg/L	0.010	0.0024	1	05/03/21 15:31	05/11/21 07:49	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**1.1**	mg/L	1.0	0.10	1	05/04/21 15:25	05/07/21 12:27	7440-70-2	
Iron, Dissolved	**5.3**	mg/L	0.070	0.041	1	05/04/21 15:25	05/07/21 12:27	7439-89-6	
Magnesium, Dissolved	**0.54**	mg/L	0.20	0.028	1	05/04/21 15:25	05/07/21 12:27	7439-95-4	
Manganese, Dissolved	**0.12**	mg/L	0.0050	0.0012	1	05/04/21 15:25	05/07/21 12:27	7439-96-5	
Potassium, Dissolved	**0.52**	mg/L	0.50	0.072	1	05/04/21 15:25	05/07/21 12:27	7440-09-7	
Sodium, Dissolved	**2.7**	mg/L	1.0	0.42	1	05/04/21 15:25	05/07/21 12:27	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	05/04/21 12:37	05/04/21 19:17	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	05/03/21 21:39	05/03/21 21:39	67-64-1	L0
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	05/03/21 21:39	05/03/21 21:39	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	05/03/21 21:39	05/03/21 21:39	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	05/03/21 21:39	05/03/21 21:39	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	05/03/21 21:39	05/03/21 21:39	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	05/03/21 21:39	05/03/21 21:39	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: TW-3 **Lab ID: 30417711003** Collected: 04/27/21 11:05 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	05/03/21 21:39	05/03/21 21:39	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	05/03/21 21:39	05/03/21 21:39	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	05/03/21 21:39	05/03/21 21:39	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	05/03/21 21:39	05/03/21 21:39	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	05/03/21 21:39	05/03/21 21:39	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	05/03/21 21:39	05/03/21 21:39	75-00-3	
Chloroform	**0.172J**	ug/L	5.00	0.111	1	05/03/21 21:39	05/03/21 21:39	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	05/03/21 21:39	05/03/21 21:39	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	05/03/21 21:39	05/03/21 21:39	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	05/03/21 21:39	05/03/21 21:39	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	05/03/21 21:39	05/03/21 21:39	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	05/03/21 21:39	05/03/21 21:39	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	05/03/21 21:39	05/03/21 21:39	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	05/03/21 21:39	05/03/21 21:39	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	05/03/21 21:39	05/03/21 21:39	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	05/03/21 21:39	05/03/21 21:39	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	05/03/21 21:39	05/03/21 21:39	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	05/03/21 21:39	05/03/21 21:39	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	05/03/21 21:39	05/03/21 21:39	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	05/03/21 21:39	05/03/21 21:39	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 21:39	05/03/21 21:39	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 21:39	05/03/21 21:39	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	05/03/21 21:39	05/03/21 21:39	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	05/03/21 21:39	05/03/21 21:39	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	05/03/21 21:39	05/03/21 21:39	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	05/03/21 21:39	05/03/21 21:39	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	05/03/21 21:39	05/03/21 21:39	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	05/03/21 21:39	05/03/21 21:39	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	05/03/21 21:39	05/03/21 21:39	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	05/03/21 21:39	05/03/21 21:39	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	05/03/21 21:39	05/03/21 21:39	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	05/03/21 21:39	05/03/21 21:39	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	05/03/21 21:39	05/03/21 21:39	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	05/03/21 21:39	05/03/21 21:39	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	05/03/21 21:39	05/03/21 21:39	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	05/03/21 21:39	05/03/21 21:39	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 21:39	05/03/21 21:39	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	05/03/21 21:39	05/03/21 21:39	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	05/03/21 21:39	05/03/21 21:39	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	05/03/21 21:39	05/03/21 21:39	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	05/03/21 21:39	05/03/21 21:39	96-18-4	L0
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	05/03/21 21:39	05/03/21 21:39	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	05/03/21 21:39	05/03/21 21:39	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	05/03/21 21:39	05/03/21 21:39	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	05/03/21 21:39	05/03/21 21:39	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: TW-3 **Lab ID: 30417711003** Collected: 04/27/21 11:05 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	109	%	80.0-120		1	05/03/21 21:39	05/03/21 21:39	2037-26-5	
4-Bromofluorobenzene (S)	96.3	%	77.0-126		1	05/03/21 21:39	05/03/21 21:39	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%	70.0-130		1	05/03/21 21:39	05/03/21 21:39	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		05/11/21 17:30		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**13.0**	mg/L	10.0	10.0	1		04/30/21 15:32		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/07/21 08:43	05/07/21 13:51		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/03/21 10:51	05/03/21 14:37		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**4.6**	mg/L	3.0	0.67	1		05/13/21 15:50	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.059J**	mg/L	0.10	0.024	1		05/06/21 15:31	14797-55-8	
Nitrogen, NO2 plus NO3	**0.059J**	mg/L	0.10	0.024	1		05/06/21 15:31		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/10/21 18:24	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/28/21 20:56	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: TW-3A **Lab ID: 30417711004** Collected: 04/27/21 11:40 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	05/03/21 15:31	05/11/21 07:52	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	05/03/21 15:31	05/11/21 07:52	7440-38-2	
Barium	**0.014**	mg/L	0.010	0.00068	1	05/03/21 15:31	05/11/21 07:52	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00017	1	05/03/21 15:31	05/11/21 07:52	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	05/03/21 15:31	05/11/21 07:52	7440-43-9	
Calcium	**0.84J**	mg/L	1.0	0.10	1	05/03/21 15:31	05/11/21 07:52	7440-70-2	
Chromium	**0.00071J**	mg/L	0.0050	0.00035	1	05/03/21 15:31	05/11/21 07:52	7440-47-3	
Cobalt	**0.0050 U**	mg/L	0.0050	0.00053	1	05/03/21 15:31	05/11/21 07:52	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0027	1	05/03/21 15:31	05/11/21 07:52	7440-50-8	
Iron	**64.0**	mg/L	0.070	0.041	1	05/03/21 15:31	05/11/21 07:52	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	05/03/21 15:31	05/11/21 07:52	7439-92-1	
Magnesium	**0.42**	mg/L	0.20	0.028	1	05/03/21 15:31	05/11/21 07:52	7439-95-4	
Manganese	**0.45**	mg/L	0.0050	0.0012	1	05/03/21 15:31	05/11/21 07:52	7439-96-5	
Nickel	**0.010 U**	mg/L	0.010	0.0015	1	05/03/21 15:31	05/11/21 07:52	7440-02-0	
Potassium	**0.54**	mg/L	0.50	0.072	1	05/03/21 15:31	05/11/21 07:52	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	05/03/21 15:31	05/11/21 07:52	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	05/03/21 15:31	05/11/21 07:52	7440-22-4	
Sodium	**16.0**	mg/L	1.0	0.42	1	05/03/21 15:31	05/11/21 07:52	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	05/03/21 15:31	05/11/21 07:52	7440-28-0	
Total Hardness by SM2340B-2011	**3.8**	mg/L	3.3	0.37	1	05/03/21 15:31	05/11/21 07:52		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	05/03/21 15:31	05/11/21 07:52	7440-62-2	
Zinc	**0.010 U**	mg/L	0.010	0.0024	1	05/03/21 15:31	05/11/21 07:52	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**0.88J**	mg/L	1.0	0.10	1	05/04/21 15:25	05/07/21 12:29	7440-70-2	
Iron, Dissolved	**62.9**	mg/L	0.070	0.041	1	05/04/21 15:25	05/07/21 12:29	7439-89-6	
Magnesium, Dissolved	**0.42**	mg/L	0.20	0.028	1	05/04/21 15:25	05/07/21 12:29	7439-95-4	
Manganese, Dissolved	**0.46**	mg/L	0.0050	0.0012	1	05/04/21 15:25	05/07/21 12:29	7439-96-5	
Potassium, Dissolved	**0.57**	mg/L	0.50	0.072	1	05/04/21 15:25	05/07/21 12:29	7440-09-7	
Sodium, Dissolved	**16.8**	mg/L	1.0	0.42	1	05/04/21 15:25	05/07/21 12:29	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	05/04/21 12:37	05/04/21 19:19	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	05/03/21 22:00	05/03/21 22:00	67-64-1	L0
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	05/03/21 22:00	05/03/21 22:00	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	05/03/21 22:00	05/03/21 22:00	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	05/03/21 22:00	05/03/21 22:00	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	05/03/21 22:00	05/03/21 22:00	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	05/03/21 22:00	05/03/21 22:00	75-25-2	

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Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: TW-3A **Lab ID: 30417711004** Collected: 04/27/21 11:40 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	05/03/21 22:00	05/03/21 22:00	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	05/03/21 22:00	05/03/21 22:00	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	05/03/21 22:00	05/03/21 22:00	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	05/03/21 22:00	05/03/21 22:00	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	05/03/21 22:00	05/03/21 22:00	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	05/03/21 22:00	05/03/21 22:00	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	05/03/21 22:00	05/03/21 22:00	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	05/03/21 22:00	05/03/21 22:00	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	05/03/21 22:00	05/03/21 22:00	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	05/03/21 22:00	05/03/21 22:00	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	05/03/21 22:00	05/03/21 22:00	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	05/03/21 22:00	05/03/21 22:00	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	05/03/21 22:00	05/03/21 22:00	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	05/03/21 22:00	05/03/21 22:00	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	05/03/21 22:00	05/03/21 22:00	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	05/03/21 22:00	05/03/21 22:00	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	05/03/21 22:00	05/03/21 22:00	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	05/03/21 22:00	05/03/21 22:00	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	05/03/21 22:00	05/03/21 22:00	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	05/03/21 22:00	05/03/21 22:00	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 22:00	05/03/21 22:00	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 22:00	05/03/21 22:00	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	05/03/21 22:00	05/03/21 22:00	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	05/03/21 22:00	05/03/21 22:00	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	05/03/21 22:00	05/03/21 22:00	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	05/03/21 22:00	05/03/21 22:00	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	05/03/21 22:00	05/03/21 22:00	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	05/03/21 22:00	05/03/21 22:00	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	05/03/21 22:00	05/03/21 22:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	05/03/21 22:00	05/03/21 22:00	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	05/03/21 22:00	05/03/21 22:00	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	05/03/21 22:00	05/03/21 22:00	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	05/03/21 22:00	05/03/21 22:00	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	05/03/21 22:00	05/03/21 22:00	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	05/03/21 22:00	05/03/21 22:00	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	05/03/21 22:00	05/03/21 22:00	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 22:00	05/03/21 22:00	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	05/03/21 22:00	05/03/21 22:00	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	05/03/21 22:00	05/03/21 22:00	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	05/03/21 22:00	05/03/21 22:00	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	05/03/21 22:00	05/03/21 22:00	96-18-4	L0
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	05/03/21 22:00	05/03/21 22:00	108-05-4	
Vinyl chloride	**0.278J**	ug/L	1.00	0.234	1	05/03/21 22:00	05/03/21 22:00	75-01-4	J
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	05/03/21 22:00	05/03/21 22:00	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	05/03/21 22:00	05/03/21 22:00	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: TW-3A **Lab ID: 30417711004** Collected: 04/27/21 11:40 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	110	%	80.0-120		1	05/03/21 22:00	05/03/21 22:00	2037-26-5	
4-Bromofluorobenzene (S)	96.8	%	77.0-126		1	05/03/21 22:00	05/03/21 22:00	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%	70.0-130		1	05/03/21 22:00	05/03/21 22:00	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		05/11/21 17:30		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**102**	mg/L	10.0	10.0	1		04/30/21 15:32		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/07/21 08:43	05/07/21 13:53		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**10.5J**	mg/L	25.0	4.7	1	05/03/21 10:51	05/03/21 14:37		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**54.6**	mg/L	3.0	0.67	1		05/13/21 15:51	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.068J**	mg/L	0.10	0.024	1		05/06/21 15:33	14797-55-8	
Nitrogen, NO2 plus NO3	**0.068J**	mg/L	0.10	0.024	1		05/06/21 15:33		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/10/21 18:26	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/28/21 20:57	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: TW-4 **Lab ID: 30417711005** Collected: 04/27/21 13:00 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	05/03/21 15:31	05/11/21 07:54	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	05/03/21 15:31	05/11/21 07:54	7440-38-2	
Barium	**0.028**	mg/L	0.010	0.00068	1	05/03/21 15:31	05/11/21 07:54	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00017	1	05/03/21 15:31	05/11/21 07:54	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	05/03/21 15:31	05/11/21 07:54	7440-43-9	
Calcium	**4.6**	mg/L	1.0	0.10	1	05/03/21 15:31	05/11/21 07:54	7440-70-2	
Chromium	**0.00090J**	mg/L	0.0050	0.00035	1	05/03/21 15:31	05/11/21 07:54	7440-47-3	
Cobalt	**0.0013J**	mg/L	0.0050	0.00053	1	05/03/21 15:31	05/11/21 07:54	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0027	1	05/03/21 15:31	05/11/21 07:54	7440-50-8	
Iron	**30.4**	mg/L	0.070	0.041	1	05/03/21 15:31	05/11/21 07:54	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	05/03/21 15:31	05/11/21 07:54	7439-92-1	
Magnesium	**1.2**	mg/L	0.20	0.028	1	05/03/21 15:31	05/11/21 07:54	7439-95-4	
Manganese	**0.16**	mg/L	0.0050	0.0012	1	05/03/21 15:31	05/11/21 07:54	7439-96-5	
Nickel	**0.010 U**	mg/L	0.010	0.0015	1	05/03/21 15:31	05/11/21 07:54	7440-02-0	
Potassium	**0.76**	mg/L	0.50	0.072	1	05/03/21 15:31	05/11/21 07:54	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	05/03/21 15:31	05/11/21 07:54	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	05/03/21 15:31	05/11/21 07:54	7440-22-4	
Sodium	**3.7**	mg/L	1.0	0.42	1	05/03/21 15:31	05/11/21 07:54	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	05/03/21 15:31	05/11/21 07:54	7440-28-0	
Total Hardness by SM2340B-2011	**16.7**	mg/L	3.3	0.37	1	05/03/21 15:31	05/11/21 07:54		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	05/03/21 15:31	05/11/21 07:54	7440-62-2	
Zinc	**0.010 U**	mg/L	0.010	0.0024	1	05/03/21 15:31	05/11/21 07:54	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**4.5**	mg/L	1.0	0.10	1	05/04/21 15:25	05/07/21 12:36	7440-70-2	
Iron, Dissolved	**21.8**	mg/L	0.070	0.041	1	05/04/21 15:25	05/07/21 12:36	7439-89-6	
Magnesium, Dissolved	**1.2**	mg/L	0.20	0.028	1	05/04/21 15:25	05/07/21 12:36	7439-95-4	
Manganese, Dissolved	**0.16**	mg/L	0.0050	0.0012	1	05/04/21 15:25	05/07/21 12:36	7439-96-5	
Potassium, Dissolved	**0.77**	mg/L	0.50	0.072	1	05/04/21 15:25	05/07/21 12:36	7440-09-7	
Sodium, Dissolved	**3.4**	mg/L	1.0	0.42	1	05/04/21 15:25	05/07/21 12:36	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	05/04/21 12:37	05/04/21 19:20	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	05/03/21 22:21	05/03/21 22:21	67-64-1	L0
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	05/03/21 22:21	05/03/21 22:21	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	05/03/21 22:21	05/03/21 22:21	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	05/03/21 22:21	05/03/21 22:21	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	05/03/21 22:21	05/03/21 22:21	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	05/03/21 22:21	05/03/21 22:21	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: TW-4 **Lab ID: 30417711005** Collected: 04/27/21 13:00 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	05/03/21 22:21	05/03/21 22:21	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	05/03/21 22:21	05/03/21 22:21	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	05/03/21 22:21	05/03/21 22:21	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	05/03/21 22:21	05/03/21 22:21	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	05/03/21 22:21	05/03/21 22:21	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	05/03/21 22:21	05/03/21 22:21	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	05/03/21 22:21	05/03/21 22:21	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	05/03/21 22:21	05/03/21 22:21	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	05/03/21 22:21	05/03/21 22:21	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	05/03/21 22:21	05/03/21 22:21	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	05/03/21 22:21	05/03/21 22:21	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	05/03/21 22:21	05/03/21 22:21	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	05/03/21 22:21	05/03/21 22:21	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	05/03/21 22:21	05/03/21 22:21	110-57-6	
Dichlorofluoromethane	**4.77J**	ug/L	5.00	0.130	1	05/03/21 22:21	05/03/21 22:21	75-43-4	J
Dichlorodifluoromethane	**1.36J**	ug/L	5.00	0.374	1	05/03/21 22:21	05/03/21 22:21	75-71-8	J
1,1-Dichloroethane	**2.35**	ug/L	1.00	0.100	1	05/03/21 22:21	05/03/21 22:21	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	05/03/21 22:21	05/03/21 22:21	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	05/03/21 22:21	05/03/21 22:21	75-35-4	
cis-1,2-Dichloroethene	**0.400J**	ug/L	1.00	0.126	1	05/03/21 22:21	05/03/21 22:21	156-59-2	J
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 22:21	05/03/21 22:21	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 22:21	05/03/21 22:21	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	05/03/21 22:21	05/03/21 22:21	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	05/03/21 22:21	05/03/21 22:21	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	05/03/21 22:21	05/03/21 22:21	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	05/03/21 22:21	05/03/21 22:21	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	05/03/21 22:21	05/03/21 22:21	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	05/03/21 22:21	05/03/21 22:21	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	05/03/21 22:21	05/03/21 22:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	05/03/21 22:21	05/03/21 22:21	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	05/03/21 22:21	05/03/21 22:21	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	05/03/21 22:21	05/03/21 22:21	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	05/03/21 22:21	05/03/21 22:21	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	05/03/21 22:21	05/03/21 22:21	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	05/03/21 22:21	05/03/21 22:21	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	05/03/21 22:21	05/03/21 22:21	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 22:21	05/03/21 22:21	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	05/03/21 22:21	05/03/21 22:21	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	05/03/21 22:21	05/03/21 22:21	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	05/03/21 22:21	05/03/21 22:21	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	05/03/21 22:21	05/03/21 22:21	96-18-4	L0
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	05/03/21 22:21	05/03/21 22:21	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	05/03/21 22:21	05/03/21 22:21	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	05/03/21 22:21	05/03/21 22:21	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	05/03/21 22:21	05/03/21 22:21	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: TW-4 **Lab ID: 30417711005** Collected: 04/27/21 13:00 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	110	%	80.0-120		1	05/03/21 22:21	05/03/21 22:21	2037-26-5	
4-Bromofluorobenzene (S)	98.4	%	77.0-126		1	05/03/21 22:21	05/03/21 22:21	460-00-4	
1,2-Dichloroethane-d4 (S)	115	%	70.0-130		1	05/03/21 22:21	05/03/21 22:21	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0**	mg/L	10.0	1.0	1		05/11/21 17:31		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**55.0**	mg/L	10.0	10.0	1		04/30/21 15:33		D6
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.064J**	mg/L	0.10	0.044	1	05/07/21 08:43	05/07/21 13:55		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/03/21 10:51	05/03/21 14:37		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**9.4**	mg/L	3.0	0.67	1		05/13/21 15:52	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.073J**	mg/L	0.10	0.024	1		05/06/21 15:34	14797-55-8	
Nitrogen, NO2 plus NO3	**0.073J**	mg/L	0.10	0.024	1		05/06/21 15:34		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/10/21 18:27	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/28/21 20:57	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: TW-4B **Lab ID: 30417711006** Collected: 04/27/21 13:30 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	05/03/21 15:31	05/11/21 08:57	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	05/03/21 15:31	05/11/21 08:57	7440-38-2	
Barium	**0.036**	mg/L	0.010	0.00068	1	05/03/21 15:31	05/11/21 08:57	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00017	1	05/03/21 15:31	05/11/21 08:57	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	05/03/21 15:31	05/11/21 08:57	7440-43-9	
Calcium	**1.8**	mg/L	1.0	0.10	1	05/03/21 15:31	05/11/21 08:57	7440-70-2	
Chromium	**0.0021J**	mg/L	0.0050	0.00035	1	05/03/21 15:31	05/11/21 08:57	7440-47-3	
Cobalt	**0.0037J**	mg/L	0.0050	0.00053	1	05/03/21 15:31	05/11/21 08:57	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0027	1	05/03/21 15:31	05/11/21 08:57	7440-50-8	
Iron	**0.070 U**	mg/L	0.070	0.041	1	05/03/21 15:31	05/11/21 08:57	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	05/03/21 15:31	05/11/21 08:57	7439-92-1	
Magnesium	**1.7**	mg/L	0.20	0.028	1	05/03/21 15:31	05/11/21 08:57	7439-95-4	
Manganese	**0.039**	mg/L	0.0050	0.0012	1	05/03/21 15:31	05/11/21 08:57	7439-96-5	
Nickel	**0.0037J**	mg/L	0.010	0.0015	1	05/03/21 15:31	05/11/21 08:57	7440-02-0	
Potassium	**1.1**	mg/L	0.50	0.072	1	05/03/21 15:31	05/11/21 08:57	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	05/03/21 15:31	05/11/21 08:57	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	05/03/21 15:31	05/11/21 08:57	7440-22-4	
Sodium	**1.7**	mg/L	1.0	0.42	1	05/03/21 15:31	05/11/21 08:57	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	05/03/21 15:31	05/11/21 08:57	7440-28-0	
Total Hardness by SM2340B-2011	**11.3**	mg/L	3.3	0.37	1	05/03/21 15:31	05/11/21 08:57		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	05/03/21 15:31	05/11/21 08:57	7440-62-2	
Zinc	**0.0043J**	mg/L	0.010	0.0024	1	05/03/21 15:31	05/11/21 08:57	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**1.8**	mg/L	1.0	0.10	1	05/04/21 15:25	05/07/21 12:38	7440-70-2	
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	05/04/21 15:25	05/07/21 12:38	7439-89-6	
Magnesium, Dissolved	**1.6**	mg/L	0.20	0.028	1	05/04/21 15:25	05/07/21 12:38	7439-95-4	
Manganese, Dissolved	**0.040**	mg/L	0.0050	0.0012	1	05/04/21 15:25	05/07/21 12:38	7439-96-5	
Potassium, Dissolved	**1.1**	mg/L	0.50	0.072	1	05/04/21 15:25	05/07/21 12:38	7440-09-7	
Sodium, Dissolved	**1.7**	mg/L	1.0	0.42	1	05/04/21 15:25	05/07/21 12:38	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	05/04/21 12:37	05/04/21 19:22	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	05/03/21 22:41	05/03/21 22:41	67-64-1	L0
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	05/03/21 22:41	05/03/21 22:41	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	05/03/21 22:41	05/03/21 22:41	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	05/03/21 22:41	05/03/21 22:41	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	05/03/21 22:41	05/03/21 22:41	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	05/03/21 22:41	05/03/21 22:41	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: TW-4B **Lab ID: 30417711006** Collected: 04/27/21 13:30 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	05/03/21 22:41	05/03/21 22:41	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	05/03/21 22:41	05/03/21 22:41	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	05/03/21 22:41	05/03/21 22:41	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	05/03/21 22:41	05/03/21 22:41	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	05/03/21 22:41	05/03/21 22:41	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	05/03/21 22:41	05/03/21 22:41	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	05/03/21 22:41	05/03/21 22:41	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	05/03/21 22:41	05/03/21 22:41	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	05/03/21 22:41	05/03/21 22:41	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	05/03/21 22:41	05/03/21 22:41	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	05/03/21 22:41	05/03/21 22:41	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	05/03/21 22:41	05/03/21 22:41	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	05/03/21 22:41	05/03/21 22:41	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	05/03/21 22:41	05/03/21 22:41	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	05/03/21 22:41	05/03/21 22:41	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	05/03/21 22:41	05/03/21 22:41	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	05/03/21 22:41	05/03/21 22:41	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	05/03/21 22:41	05/03/21 22:41	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	05/03/21 22:41	05/03/21 22:41	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	05/03/21 22:41	05/03/21 22:41	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 22:41	05/03/21 22:41	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 22:41	05/03/21 22:41	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	05/03/21 22:41	05/03/21 22:41	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	05/03/21 22:41	05/03/21 22:41	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	05/03/21 22:41	05/03/21 22:41	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	05/03/21 22:41	05/03/21 22:41	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	05/03/21 22:41	05/03/21 22:41	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	05/03/21 22:41	05/03/21 22:41	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	05/03/21 22:41	05/03/21 22:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	05/03/21 22:41	05/03/21 22:41	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	05/03/21 22:41	05/03/21 22:41	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	05/03/21 22:41	05/03/21 22:41	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	05/03/21 22:41	05/03/21 22:41	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	05/03/21 22:41	05/03/21 22:41	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	05/03/21 22:41	05/03/21 22:41	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	05/03/21 22:41	05/03/21 22:41	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 22:41	05/03/21 22:41	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	05/03/21 22:41	05/03/21 22:41	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	05/03/21 22:41	05/03/21 22:41	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	05/03/21 22:41	05/03/21 22:41	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	05/03/21 22:41	05/03/21 22:41	96-18-4	L0
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	05/03/21 22:41	05/03/21 22:41	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	05/03/21 22:41	05/03/21 22:41	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	05/03/21 22:41	05/03/21 22:41	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	05/03/21 22:41	05/03/21 22:41	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: TW-4B **Lab ID: 30417711006** Collected: 04/27/21 13:30 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	110	%	80.0-120		1	05/03/21 22:41	05/03/21 22:41	2037-26-5	
4-Bromofluorobenzene (S)	97.5	%	77.0-126		1	05/03/21 22:41	05/03/21 22:41	460-00-4	
1,2-Dichloroethane-d4 (S)	115	%	70.0-130		1	05/03/21 22:41	05/03/21 22:41	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/11/21 17:32		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**34.0**	mg/L	10.0	10.0	1		04/30/21 15:33		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/07/21 08:43	05/07/21 13:57		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/03/21 10:51	05/03/21 14:37		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**2.3J**	mg/L	3.0	0.67	1		05/13/21 15:52	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.11**	mg/L	0.10	0.024	1		05/06/21 15:36	14797-55-8	
Nitrogen, NO2 plus NO3	**0.11**	mg/L	0.10	0.024	1		05/06/21 15:36		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**9.6J**	mg/L	10.0	4.7	1		05/10/21 18:29	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/28/21 20:57	14797-65-0	

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Greensburg, PA 15601
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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: TW-27 **Lab ID: 30417711007** Collected: 04/27/21 12:15 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	05/03/21 15:31	05/11/21 09:00	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	05/03/21 15:31	05/11/21 09:00	7440-38-2	
Barium	**0.011**	mg/L	0.010	0.00068	1	05/03/21 15:31	05/11/21 09:00	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00017	1	05/03/21 15:31	05/11/21 09:00	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	05/03/21 15:31	05/11/21 09:00	7440-43-9	
Calcium	**0.85J**	mg/L	1.0	0.10	1	05/03/21 15:31	05/11/21 09:00	7440-70-2	
Chromium	**0.013**	mg/L	0.0050	0.00035	1	05/03/21 15:31	05/11/21 09:00	7440-47-3	
Cobalt	**0.0018J**	mg/L	0.0050	0.00053	1	05/03/21 15:31	05/11/21 09:00	7440-48-4	
Copper	**0.020**	mg/L	0.0050	0.0027	1	05/03/21 15:31	05/11/21 09:00	7440-50-8	
Iron	**0.76**	mg/L	0.070	0.041	1	05/03/21 15:31	05/11/21 09:00	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	05/03/21 15:31	05/11/21 09:00	7439-92-1	
Magnesium	**0.38**	mg/L	0.20	0.028	1	05/03/21 15:31	05/11/21 09:00	7439-95-4	
Manganese	**0.0077**	mg/L	0.0050	0.0012	1	05/03/21 15:31	05/11/21 09:00	7439-96-5	
Nickel	**0.013**	mg/L	0.010	0.0015	1	05/03/21 15:31	05/11/21 09:00	7440-02-0	
Potassium	**0.53**	mg/L	0.50	0.072	1	05/03/21 15:31	05/11/21 09:00	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	05/03/21 15:31	05/11/21 09:00	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	05/03/21 15:31	05/11/21 09:00	7440-22-4	
Sodium	**2.4**	mg/L	1.0	0.42	1	05/03/21 15:31	05/11/21 09:00	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	05/03/21 15:31	05/11/21 09:00	7440-28-0	
Total Hardness by SM2340B-2011	**3.7**	mg/L	3.3	0.37	1	05/03/21 15:31	05/11/21 09:00		
Vanadium	**0.0012J**	mg/L	0.0050	0.00057	1	05/03/21 15:31	05/11/21 09:00	7440-62-2	
Zinc	**0.0033J**	mg/L	0.010	0.0024	1	05/03/21 15:31	05/11/21 09:00	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**0.72J**	mg/L	1.0	0.10	1	05/04/21 15:25	05/07/21 12:44	7440-70-2	
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	05/04/21 15:25	05/07/21 12:44	7439-89-6	
Magnesium, Dissolved	**0.33**	mg/L	0.20	0.028	1	05/04/21 15:25	05/07/21 12:44	7439-95-4	
Manganese, Dissolved	**0.0058**	mg/L	0.0050	0.0012	1	05/04/21 15:25	05/07/21 12:44	7439-96-5	
Potassium, Dissolved	**0.41J**	mg/L	0.50	0.072	1	05/04/21 15:25	05/07/21 12:44	7440-09-7	
Sodium, Dissolved	**2.3**	mg/L	1.0	0.42	1	05/04/21 15:25	05/07/21 12:44	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	05/04/21 12:37	05/04/21 19:29	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	05/03/21 23:01	05/03/21 23:01	67-64-1	L0
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	05/03/21 23:01	05/03/21 23:01	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	05/03/21 23:01	05/03/21 23:01	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	05/03/21 23:01	05/03/21 23:01	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	05/03/21 23:01	05/03/21 23:01	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	05/03/21 23:01	05/03/21 23:01	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: TW-27 **Lab ID: 30417711007** Collected: 04/27/21 12:15 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	05/03/21 23:01	05/03/21 23:01	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	05/03/21 23:01	05/03/21 23:01	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	05/03/21 23:01	05/03/21 23:01	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	05/03/21 23:01	05/03/21 23:01	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	05/03/21 23:01	05/03/21 23:01	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	05/03/21 23:01	05/03/21 23:01	75-00-3	
Chloroform	**0.206J**	ug/L	5.00	0.111	1	05/03/21 23:01	05/03/21 23:01	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	05/03/21 23:01	05/03/21 23:01	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	05/03/21 23:01	05/03/21 23:01	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	05/03/21 23:01	05/03/21 23:01	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	05/03/21 23:01	05/03/21 23:01	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	05/03/21 23:01	05/03/21 23:01	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	05/03/21 23:01	05/03/21 23:01	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	05/03/21 23:01	05/03/21 23:01	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	05/03/21 23:01	05/03/21 23:01	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	05/03/21 23:01	05/03/21 23:01	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	05/03/21 23:01	05/03/21 23:01	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	05/03/21 23:01	05/03/21 23:01	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	05/03/21 23:01	05/03/21 23:01	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	05/03/21 23:01	05/03/21 23:01	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 23:01	05/03/21 23:01	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 23:01	05/03/21 23:01	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	05/03/21 23:01	05/03/21 23:01	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	05/03/21 23:01	05/03/21 23:01	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	05/03/21 23:01	05/03/21 23:01	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	05/03/21 23:01	05/03/21 23:01	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	05/03/21 23:01	05/03/21 23:01	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	05/03/21 23:01	05/03/21 23:01	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	05/03/21 23:01	05/03/21 23:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	05/03/21 23:01	05/03/21 23:01	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	05/03/21 23:01	05/03/21 23:01	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	05/03/21 23:01	05/03/21 23:01	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	05/03/21 23:01	05/03/21 23:01	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	05/03/21 23:01	05/03/21 23:01	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	05/03/21 23:01	05/03/21 23:01	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	05/03/21 23:01	05/03/21 23:01	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 23:01	05/03/21 23:01	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	05/03/21 23:01	05/03/21 23:01	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	05/03/21 23:01	05/03/21 23:01	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	05/03/21 23:01	05/03/21 23:01	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	05/03/21 23:01	05/03/21 23:01	96-18-4	L0
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	05/03/21 23:01	05/03/21 23:01	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	05/03/21 23:01	05/03/21 23:01	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	05/03/21 23:01	05/03/21 23:01	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	05/03/21 23:01	05/03/21 23:01	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: TW-27 **Lab ID: 30417711007** Collected: 04/27/21 12:15 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	112	%	80.0-120		1	05/03/21 23:01	05/03/21 23:01	2037-26-5	
4-Bromofluorobenzene (S)	95.8	%	77.0-126		1	05/03/21 23:01	05/03/21 23:01	460-00-4	
1,2-Dichloroethane-d4 (S)	115	%	70.0-130		1	05/03/21 23:01	05/03/21 23:01	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**20.0**	mg/L	10.0	1.0	1		05/11/21 17:33		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		04/30/21 16:17		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/07/21 08:43	05/07/21 13:59		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/03/21 10:51	05/03/21 14:37		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**4.3**	mg/L	3.0	0.67	1		05/13/21 15:53	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.089J**	mg/L	0.10	0.024	1		05/06/21 15:37	14797-55-8	
Nitrogen, NO2 plus NO3	**0.089J**	mg/L	0.10	0.024	1		05/06/21 15:37		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/10/21 18:32	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/28/21 21:00	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: TW-30 **Lab ID: 30417711008** Collected: 04/27/21 14:15 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	05/03/21 15:31	05/11/21 09:02	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	05/03/21 15:31	05/11/21 09:02	7440-38-2	
Barium	**0.034**	mg/L	0.010	0.00068	1	05/03/21 15:31	05/11/21 09:02	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00017	1	05/03/21 15:31	05/11/21 09:02	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	05/03/21 15:31	05/11/21 09:02	7440-43-9	
Calcium	**4.7**	mg/L	1.0	0.10	1	05/03/21 15:31	05/11/21 09:02	7440-70-2	
Chromium	**0.00081J**	mg/L	0.0050	0.00035	1	05/03/21 15:31	05/11/21 09:02	7440-47-3	
Cobalt	**0.0023J**	mg/L	0.0050	0.00053	1	05/03/21 15:31	05/11/21 09:02	7440-48-4	
Copper	**0.0053**	mg/L	0.0050	0.0027	1	05/03/21 15:31	05/11/21 09:02	7440-50-8	
Iron	**0.070 U**	mg/L	0.070	0.041	1	05/03/21 15:31	05/11/21 09:02	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	05/03/21 15:31	05/11/21 09:02	7439-92-1	
Magnesium	**1.9**	mg/L	0.20	0.028	1	05/03/21 15:31	05/11/21 09:02	7439-95-4	
Manganese	**0.011**	mg/L	0.0050	0.0012	1	05/03/21 15:31	05/11/21 09:02	7439-96-5	
Nickel	**0.0041J**	mg/L	0.010	0.0015	1	05/03/21 15:31	05/11/21 09:02	7440-02-0	
Potassium	**1.5**	mg/L	0.50	0.072	1	05/03/21 15:31	05/11/21 09:02	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	05/03/21 15:31	05/11/21 09:02	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	05/03/21 15:31	05/11/21 09:02	7440-22-4	
Sodium	**12.4**	mg/L	1.0	0.42	1	05/03/21 15:31	05/11/21 09:02	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	05/03/21 15:31	05/11/21 09:02	7440-28-0	
Total Hardness by SM2340B-2011	**19.3**	mg/L	3.3	0.37	1	05/03/21 15:31	05/11/21 09:02		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	05/03/21 15:31	05/11/21 09:02	7440-62-2	
Zinc	**0.0042J**	mg/L	0.010	0.0024	1	05/03/21 15:31	05/11/21 09:02	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**4.3**	mg/L	1.0	0.10	1	05/04/21 15:25	05/07/21 12:47	7440-70-2	
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	05/04/21 15:25	05/07/21 12:47	7439-89-6	
Magnesium, Dissolved	**1.7**	mg/L	0.20	0.028	1	05/04/21 15:25	05/07/21 12:47	7439-95-4	
Manganese, Dissolved	**0.010**	mg/L	0.0050	0.0012	1	05/04/21 15:25	05/07/21 12:47	7439-96-5	
Potassium, Dissolved	**1.4**	mg/L	0.50	0.072	1	05/04/21 15:25	05/07/21 12:47	7440-09-7	
Sodium, Dissolved	**11.8**	mg/L	1.0	0.42	1	05/04/21 15:25	05/07/21 12:47	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	05/04/21 12:37	05/04/21 19:30	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	05/03/21 23:21	05/03/21 23:21	67-64-1	L0
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	05/03/21 23:21	05/03/21 23:21	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	05/03/21 23:21	05/03/21 23:21	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	05/03/21 23:21	05/03/21 23:21	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	05/03/21 23:21	05/03/21 23:21	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	05/03/21 23:21	05/03/21 23:21	75-25-2	

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: TW-30 **Lab ID: 30417711008** Collected: 04/27/21 14:15 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	05/03/21 23:21	05/03/21 23:21	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	05/03/21 23:21	05/03/21 23:21	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	05/03/21 23:21	05/03/21 23:21	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	05/03/21 23:21	05/03/21 23:21	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	05/03/21 23:21	05/03/21 23:21	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	05/03/21 23:21	05/03/21 23:21	75-00-3	
Chloroform	**0.181J**	ug/L	5.00	0.111	1	05/03/21 23:21	05/03/21 23:21	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	05/03/21 23:21	05/03/21 23:21	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	05/03/21 23:21	05/03/21 23:21	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	05/03/21 23:21	05/03/21 23:21	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	05/03/21 23:21	05/03/21 23:21	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	05/03/21 23:21	05/03/21 23:21	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	05/03/21 23:21	05/03/21 23:21	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	05/03/21 23:21	05/03/21 23:21	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	05/03/21 23:21	05/03/21 23:21	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	05/03/21 23:21	05/03/21 23:21	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	05/03/21 23:21	05/03/21 23:21	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	05/03/21 23:21	05/03/21 23:21	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	05/03/21 23:21	05/03/21 23:21	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	05/03/21 23:21	05/03/21 23:21	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 23:21	05/03/21 23:21	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 23:21	05/03/21 23:21	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	05/03/21 23:21	05/03/21 23:21	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	05/03/21 23:21	05/03/21 23:21	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	05/03/21 23:21	05/03/21 23:21	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	05/03/21 23:21	05/03/21 23:21	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	05/03/21 23:21	05/03/21 23:21	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	05/03/21 23:21	05/03/21 23:21	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	05/03/21 23:21	05/03/21 23:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	05/03/21 23:21	05/03/21 23:21	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	05/03/21 23:21	05/03/21 23:21	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	05/03/21 23:21	05/03/21 23:21	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	05/03/21 23:21	05/03/21 23:21	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	05/03/21 23:21	05/03/21 23:21	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	05/03/21 23:21	05/03/21 23:21	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	05/03/21 23:21	05/03/21 23:21	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 23:21	05/03/21 23:21	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	05/03/21 23:21	05/03/21 23:21	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	05/03/21 23:21	05/03/21 23:21	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	05/03/21 23:21	05/03/21 23:21	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	05/03/21 23:21	05/03/21 23:21	96-18-4	L0
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	05/03/21 23:21	05/03/21 23:21	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	05/03/21 23:21	05/03/21 23:21	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	05/03/21 23:21	05/03/21 23:21	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	05/03/21 23:21	05/03/21 23:21	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: TW-30 **Lab ID: 30417711008** Collected: 04/27/21 14:15 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	108	%	80.0-120		1	05/03/21 23:21	05/03/21 23:21	2037-26-5	
4-Bromofluorobenzene (S)	93.5	%	77.0-126		1	05/03/21 23:21	05/03/21 23:21	460-00-4	
1,2-Dichloroethane-d4 (S)	115	%	70.0-130		1	05/03/21 23:21	05/03/21 23:21	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**4.0J**	mg/L	10.0	1.0	1		05/11/21 17:34		4c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**56.0**	mg/L	10.0	10.0	1		04/30/21 16:18		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/07/21 08:43	05/07/21 14:01		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/03/21 10:51	05/03/21 14:38		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**26.0**	mg/L	3.0	0.67	1		05/13/21 15:54	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**2.2**	mg/L	0.10	0.024	1		05/06/21 15:38	14797-55-8	
Nitrogen, NO2 plus NO3	**2.2**	mg/L	0.10	0.024	1		05/06/21 15:38		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/10/21 18:34	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/28/21 21:00	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: FIELD BLANK **Lab ID: 30417711009** Collected: 04/27/21 15:15 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	05/03/21 15:31	05/11/21 09:04	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	05/03/21 15:31	05/11/21 09:04	7440-38-2	
Barium	**0.010 U**	mg/L	0.010	0.00068	1	05/03/21 15:31	05/11/21 09:04	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00017	1	05/03/21 15:31	05/11/21 09:04	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	05/03/21 15:31	05/11/21 09:04	7440-43-9	
Calcium	**1.0 U**	mg/L	1.0	0.10	1	05/03/21 15:31	05/11/21 09:04	7440-70-2	
Chromium	**0.0050 U**	mg/L	0.0050	0.00035	1	05/03/21 15:31	05/11/21 09:04	7440-47-3	
Cobalt	**0.0050 U**	mg/L	0.0050	0.00053	1	05/03/21 15:31	05/11/21 09:04	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0027	1	05/03/21 15:31	05/11/21 09:04	7440-50-8	
Iron	**0.070 U**	mg/L	0.070	0.041	1	05/03/21 15:31	05/11/21 09:04	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	05/03/21 15:31	05/11/21 09:04	7439-92-1	
Magnesium	**0.20 U**	mg/L	0.20	0.028	1	05/03/21 15:31	05/11/21 09:04	7439-95-4	
Manganese	**0.0050 U**	mg/L	0.0050	0.0012	1	05/03/21 15:31	05/11/21 09:04	7439-96-5	
Nickel	**0.010 U**	mg/L	0.010	0.0015	1	05/03/21 15:31	05/11/21 09:04	7440-02-0	
Potassium	**0.50 U**	mg/L	0.50	0.072	1	05/03/21 15:31	05/11/21 09:04	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	05/03/21 15:31	05/11/21 09:04	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	05/03/21 15:31	05/11/21 09:04	7440-22-4	
Sodium	**1.0 U**	mg/L	1.0	0.42	1	05/03/21 15:31	05/11/21 09:04	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	05/03/21 15:31	05/11/21 09:04	7440-28-0	
Total Hardness by SM2340B-2011	**3.3 U**	mg/L	3.3	0.37	1	05/03/21 15:31	05/11/21 09:04		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	05/03/21 15:31	05/11/21 09:04	7440-62-2	
Zinc	**0.010 U**	mg/L	0.010	0.0024	1	05/03/21 15:31	05/11/21 09:04	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**1.0 U**	mg/L	1.0	0.10	1	05/04/21 15:25	05/07/21 12:49	7440-70-2	
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	05/04/21 15:25	05/07/21 12:49	7439-89-6	
Magnesium, Dissolved	**0.20 U**	mg/L	0.20	0.028	1	05/04/21 15:25	05/07/21 12:49	7439-95-4	
Manganese, Dissolved	**0.0050 U**	mg/L	0.0050	0.0012	1	05/04/21 15:25	05/07/21 12:49	7439-96-5	
Potassium, Dissolved	**0.50 U**	mg/L	0.50	0.072	1	05/04/21 15:25	05/07/21 12:49	7440-09-7	
Sodium, Dissolved	**1.0 U**	mg/L	1.0	0.42	1	05/04/21 15:25	05/07/21 12:49	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	05/04/21 12:37	05/04/21 19:32	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	05/03/21 20:18	05/03/21 20:18	67-64-1	L0
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	05/03/21 20:18	05/03/21 20:18	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	05/03/21 20:18	05/03/21 20:18	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	05/03/21 20:18	05/03/21 20:18	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	05/03/21 20:18	05/03/21 20:18	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	05/03/21 20:18	05/03/21 20:18	75-25-2	

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Greensburg, PA 15601
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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: FIELD BLANK **Lab ID: 30417711009** Collected: 04/27/21 15:15 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	05/03/21 20:18	05/03/21 20:18	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	05/03/21 20:18	05/03/21 20:18	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	05/03/21 20:18	05/03/21 20:18	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	05/03/21 20:18	05/03/21 20:18	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	05/03/21 20:18	05/03/21 20:18	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	05/03/21 20:18	05/03/21 20:18	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	05/03/21 20:18	05/03/21 20:18	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	05/03/21 20:18	05/03/21 20:18	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	05/03/21 20:18	05/03/21 20:18	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	05/03/21 20:18	05/03/21 20:18	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	05/03/21 20:18	05/03/21 20:18	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	05/03/21 20:18	05/03/21 20:18	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	05/03/21 20:18	05/03/21 20:18	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	05/03/21 20:18	05/03/21 20:18	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	05/03/21 20:18	05/03/21 20:18	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	05/03/21 20:18	05/03/21 20:18	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	05/03/21 20:18	05/03/21 20:18	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	05/03/21 20:18	05/03/21 20:18	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	05/03/21 20:18	05/03/21 20:18	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	05/03/21 20:18	05/03/21 20:18	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 20:18	05/03/21 20:18	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 20:18	05/03/21 20:18	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	05/03/21 20:18	05/03/21 20:18	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	05/03/21 20:18	05/03/21 20:18	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	05/03/21 20:18	05/03/21 20:18	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	05/03/21 20:18	05/03/21 20:18	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	05/03/21 20:18	05/03/21 20:18	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	05/03/21 20:18	05/03/21 20:18	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	05/03/21 20:18	05/03/21 20:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	05/03/21 20:18	05/03/21 20:18	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	05/03/21 20:18	05/03/21 20:18	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	05/03/21 20:18	05/03/21 20:18	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	05/03/21 20:18	05/03/21 20:18	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	05/03/21 20:18	05/03/21 20:18	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	05/03/21 20:18	05/03/21 20:18	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	05/03/21 20:18	05/03/21 20:18	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 20:18	05/03/21 20:18	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	05/03/21 20:18	05/03/21 20:18	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	05/03/21 20:18	05/03/21 20:18	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	05/03/21 20:18	05/03/21 20:18	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	05/03/21 20:18	05/03/21 20:18	96-18-4	L0
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	05/03/21 20:18	05/03/21 20:18	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	05/03/21 20:18	05/03/21 20:18	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	05/03/21 20:18	05/03/21 20:18	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	05/03/21 20:18	05/03/21 20:18	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: FIELD BLANK **Lab ID: 30417711009** Collected: 04/27/21 15:15 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	115	%	80.0-120		1	05/03/21 20:18	05/03/21 20:18	2037-26-5	
4-Bromofluorobenzene (S)	98.6	%	77.0-126		1	05/03/21 20:18	05/03/21 20:18	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%	70.0-130		1	05/03/21 20:18	05/03/21 20:18	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/11/21 17:34		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		04/30/21 16:18		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/07/21 08:43	05/07/21 14:03		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/03/21 10:51	05/03/21 14:38		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**3.0 U**	mg/L	3.0	0.67	1		05/13/21 15:55	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.024	1		05/06/21 15:40	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.024	1		05/06/21 15:40		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/10/21 18:34	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/28/21 21:01	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: TRIP BLANK **Lab ID: 30417711010** Collected: 04/27/21 00:01 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	05/03/21 20:38	05/03/21 20:38	67-64-1	L0
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	05/03/21 20:38	05/03/21 20:38	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	05/03/21 20:38	05/03/21 20:38	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	05/03/21 20:38	05/03/21 20:38	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	05/03/21 20:38	05/03/21 20:38	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	05/03/21 20:38	05/03/21 20:38	75-25-2	
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	05/03/21 20:38	05/03/21 20:38	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	05/03/21 20:38	05/03/21 20:38	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	05/03/21 20:38	05/03/21 20:38	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	05/03/21 20:38	05/03/21 20:38	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	05/03/21 20:38	05/03/21 20:38	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	05/03/21 20:38	05/03/21 20:38	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	05/03/21 20:38	05/03/21 20:38	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	05/03/21 20:38	05/03/21 20:38	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	05/03/21 20:38	05/03/21 20:38	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	05/03/21 20:38	05/03/21 20:38	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	05/03/21 20:38	05/03/21 20:38	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	05/03/21 20:38	05/03/21 20:38	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	05/03/21 20:38	05/03/21 20:38	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	05/03/21 20:38	05/03/21 20:38	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	05/03/21 20:38	05/03/21 20:38	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	05/03/21 20:38	05/03/21 20:38	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	05/03/21 20:38	05/03/21 20:38	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	05/03/21 20:38	05/03/21 20:38	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	05/03/21 20:38	05/03/21 20:38	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	05/03/21 20:38	05/03/21 20:38	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 20:38	05/03/21 20:38	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 20:38	05/03/21 20:38	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	05/03/21 20:38	05/03/21 20:38	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	05/03/21 20:38	05/03/21 20:38	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	05/03/21 20:38	05/03/21 20:38	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	05/03/21 20:38	05/03/21 20:38	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	05/03/21 20:38	05/03/21 20:38	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	05/03/21 20:38	05/03/21 20:38	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	05/03/21 20:38	05/03/21 20:38	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	05/03/21 20:38	05/03/21 20:38	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	05/03/21 20:38	05/03/21 20:38	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	05/03/21 20:38	05/03/21 20:38	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	05/03/21 20:38	05/03/21 20:38	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	05/03/21 20:38	05/03/21 20:38	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	05/03/21 20:38	05/03/21 20:38	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	05/03/21 20:38	05/03/21 20:38	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 20:38	05/03/21 20:38	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	05/03/21 20:38	05/03/21 20:38	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	05/03/21 20:38	05/03/21 20:38	79-01-6	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: TRIP BLANK **Lab ID: 30417711010** Collected: 04/27/21 00:01 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	05/03/21 20:38	05/03/21 20:38	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	05/03/21 20:38	05/03/21 20:38	96-18-4	L0
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	05/03/21 20:38	05/03/21 20:38	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	05/03/21 20:38	05/03/21 20:38	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	05/03/21 20:38	05/03/21 20:38	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	05/03/21 20:38	05/03/21 20:38	179601-23-1	
Surrogates									
Toluene-d8 (S)	109	%	80.0-120		1	05/03/21 20:38	05/03/21 20:38	2037-26-5	
4-Bromofluorobenzene (S)	93.8	%	77.0-126		1	05/03/21 20:38	05/03/21 20:38	460-00-4	
1,2-Dichloroethane-d4 (S)	112	%	70.0-130		1	05/03/21 20:38	05/03/21 20:38	17060-07-0	

Sample: SW-1 **Lab ID: 30417711011** Collected: 04/27/21 14:30 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	05/03/21 15:31	05/11/21 09:06	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	05/03/21 15:31	05/11/21 09:06	7440-38-2	
Barium	**0.038**	mg/L	0.010	0.00068	1	05/03/21 15:31	05/11/21 09:06	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00017	1	05/03/21 15:31	05/11/21 09:06	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	05/03/21 15:31	05/11/21 09:06	7440-43-9	
Calcium	**17.7**	mg/L	1.0	0.10	1	05/03/21 15:31	05/11/21 09:06	7440-70-2	
Chromium	**0.00043J**	mg/L	0.0050	0.00035	1	05/03/21 15:31	05/11/21 09:06	7440-47-3	
Cobalt	**0.0050 U**	mg/L	0.0050	0.00053	1	05/03/21 15:31	05/11/21 09:06	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0027	1	05/03/21 15:31	05/11/21 09:06	7440-50-8	
Iron	**0.20**	mg/L	0.070	0.041	1	05/03/21 15:31	05/11/21 09:06	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	05/03/21 15:31	05/11/21 09:06	7439-92-1	
Magnesium	**3.8**	mg/L	0.20	0.028	1	05/03/21 15:31	05/11/21 09:06	7439-95-4	
Manganese	**0.013**	mg/L	0.0050	0.0012	1	05/03/21 15:31	05/11/21 09:06	7439-96-5	
Nickel	**0.010 U**	mg/L	0.010	0.0015	1	05/03/21 15:31	05/11/21 09:06	7440-02-0	
Potassium	**2.3**	mg/L	0.50	0.072	1	05/03/21 15:31	05/11/21 09:06	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	05/03/21 15:31	05/11/21 09:06	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	05/03/21 15:31	05/11/21 09:06	7440-22-4	
Sodium	**43.4**	mg/L	1.0	0.42	1	05/03/21 15:31	05/11/21 09:06	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	05/03/21 15:31	05/11/21 09:06	7440-28-0	
Total Hardness by SM2340B-2011	**59.8**	mg/L	3.3	0.37	1	05/03/21 15:31	05/11/21 09:06		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	05/03/21 15:31	05/11/21 09:06	7440-62-2	
Zinc	**0.0066J**	mg/L	0.010	0.0024	1	05/03/21 15:31	05/11/21 09:06	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	05/04/21 12:37	05/04/21 19:35	7439-97-6	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: SW-1 **Lab ID: 30417711011** Collected: 04/27/21 14:30 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	05/03/21 23:41	05/03/21 23:41	67-64-1	L0
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	05/03/21 23:41	05/03/21 23:41	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	05/03/21 23:41	05/03/21 23:41	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	05/03/21 23:41	05/03/21 23:41	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	05/03/21 23:41	05/03/21 23:41	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	05/03/21 23:41	05/03/21 23:41	75-25-2	
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	05/03/21 23:41	05/03/21 23:41	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	05/03/21 23:41	05/03/21 23:41	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	05/03/21 23:41	05/03/21 23:41	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	05/03/21 23:41	05/03/21 23:41	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	05/03/21 23:41	05/03/21 23:41	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	05/03/21 23:41	05/03/21 23:41	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	05/03/21 23:41	05/03/21 23:41	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	05/03/21 23:41	05/03/21 23:41	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	05/03/21 23:41	05/03/21 23:41	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	05/03/21 23:41	05/03/21 23:41	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	05/03/21 23:41	05/03/21 23:41	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	05/03/21 23:41	05/03/21 23:41	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	05/03/21 23:41	05/03/21 23:41	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	05/03/21 23:41	05/03/21 23:41	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	05/03/21 23:41	05/03/21 23:41	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	05/03/21 23:41	05/03/21 23:41	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	05/03/21 23:41	05/03/21 23:41	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	05/03/21 23:41	05/03/21 23:41	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	05/03/21 23:41	05/03/21 23:41	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	05/03/21 23:41	05/03/21 23:41	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 23:41	05/03/21 23:41	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 23:41	05/03/21 23:41	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	05/03/21 23:41	05/03/21 23:41	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	05/03/21 23:41	05/03/21 23:41	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	05/03/21 23:41	05/03/21 23:41	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	05/03/21 23:41	05/03/21 23:41	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	05/03/21 23:41	05/03/21 23:41	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	05/03/21 23:41	05/03/21 23:41	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	05/03/21 23:41	05/03/21 23:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	05/03/21 23:41	05/03/21 23:41	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	05/03/21 23:41	05/03/21 23:41	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	05/03/21 23:41	05/03/21 23:41	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	05/03/21 23:41	05/03/21 23:41	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	05/03/21 23:41	05/03/21 23:41	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	05/03/21 23:41	05/03/21 23:41	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	05/03/21 23:41	05/03/21 23:41	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	05/03/21 23:41	05/03/21 23:41	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	05/03/21 23:41	05/03/21 23:41	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	05/03/21 23:41	05/03/21 23:41	79-01-6	

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: SW-1 **Lab ID: 30417711011** Collected: 04/27/21 14:30 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	05/03/21 23:41	05/03/21 23:41	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	05/03/21 23:41	05/03/21 23:41	96-18-4	L0
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	05/03/21 23:41	05/03/21 23:41	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	05/03/21 23:41	05/03/21 23:41	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	05/03/21 23:41	05/03/21 23:41	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	05/03/21 23:41	05/03/21 23:41	179601-23-1	
Surrogates									
Toluene-d8 (S)	112	%	80.0-120		1	05/03/21 23:41	05/03/21 23:41	2037-26-5	
4-Bromofluorobenzene (S)	96.5	%	77.0-126		1	05/03/21 23:41	05/03/21 23:41	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%	70.0-130		1	05/03/21 23:41	05/03/21 23:41	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**40.0**	mg/L	10.0	1.0	1		05/11/21 17:35		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**152**	mg/L	10.0	10.0	1		04/30/21 16:18		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/07/21 08:43	05/07/21 14:05		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.1J**	mg/L	25.0	4.7	1	05/03/21 10:51	05/03/21 14:38		
4500 Chloride	Analytical Method: SM 4500CIE-2011 Pace Analytical Services - Greensburg								
Chloride	**69.3**	mg/L	3.0	0.67	1		05/13/21 15:56	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.6**	mg/L	0.10	0.024	1		05/06/21 15:41	14797-55-8	
Nitrogen, NO2 plus NO3	**1.6**	mg/L	0.10	0.024	1		05/06/21 15:41		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**16.4**	mg/L	10.0	4.7	1		05/10/21 18:36	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/28/21 21:01	14797-65-0	

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Greensburg, PA 15601
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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: SW-2 **Lab ID: 30417711012** Collected: 04/27/21 15:30 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	05/03/21 15:31	05/11/21 09:08	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	05/03/21 15:31	05/11/21 09:08	7440-38-2	
Barium	**0.035**	mg/L	0.010	0.00068	1	05/03/21 15:31	05/11/21 09:08	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00017	1	05/03/21 15:31	05/11/21 09:08	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	05/03/21 15:31	05/11/21 09:08	7440-43-9	
Calcium	**29.2**	mg/L	1.0	0.10	1	05/03/21 15:31	05/11/21 09:08	7440-70-2	
Chromium	**0.0011J**	mg/L	0.0050	0.00035	1	05/03/21 15:31	05/11/21 09:08	7440-47-3	
Cobalt	**0.00087J**	mg/L	0.0050	0.00053	1	05/03/21 15:31	05/11/21 09:08	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0027	1	05/03/21 15:31	05/11/21 09:08	7440-50-8	
Iron	**1.1**	mg/L	0.070	0.041	1	05/03/21 15:31	05/11/21 09:08	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	05/03/21 15:31	05/11/21 09:08	7439-92-1	
Magnesium	**6.0**	mg/L	0.20	0.028	1	05/03/21 15:31	05/11/21 09:08	7439-95-4	
Manganese	**0.032**	mg/L	0.0050	0.0012	1	05/03/21 15:31	05/11/21 09:08	7439-96-5	
Nickel	**0.0016J**	mg/L	0.010	0.0015	1	05/03/21 15:31	05/11/21 09:08	7440-02-0	
Potassium	**4.0**	mg/L	0.50	0.072	1	05/03/21 15:31	05/11/21 09:08	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	05/03/21 15:31	05/11/21 09:08	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	05/03/21 15:31	05/11/21 09:08	7440-22-4	
Sodium	**24.6**	mg/L	1.0	0.42	1	05/03/21 15:31	05/11/21 09:08	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	05/03/21 15:31	05/11/21 09:08	7440-28-0	
Total Hardness by SM2340B-2011	**97.8**	mg/L	3.3	0.37	1	05/03/21 15:31	05/11/21 09:08		
Vanadium	**0.0021J**	mg/L	0.0050	0.00057	1	05/03/21 15:31	05/11/21 09:08	7440-62-2	
Zinc	**0.0043J**	mg/L	0.010	0.0024	1	05/03/21 15:31	05/11/21 09:08	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	05/04/21 12:37	05/04/21 19:34	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	05/04/21 00:02	05/04/21 00:02	67-64-1	L0
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	05/04/21 00:02	05/04/21 00:02	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	05/04/21 00:02	05/04/21 00:02	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	05/04/21 00:02	05/04/21 00:02	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	05/04/21 00:02	05/04/21 00:02	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	05/04/21 00:02	05/04/21 00:02	75-25-2	
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	05/04/21 00:02	05/04/21 00:02	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	05/04/21 00:02	05/04/21 00:02	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	05/04/21 00:02	05/04/21 00:02	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	05/04/21 00:02	05/04/21 00:02	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	05/04/21 00:02	05/04/21 00:02	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	05/04/21 00:02	05/04/21 00:02	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	05/04/21 00:02	05/04/21 00:02	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	05/04/21 00:02	05/04/21 00:02	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	05/04/21 00:02	05/04/21 00:02	96-12-8	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: SW-2 **Lab ID: 30417711012** Collected: 04/27/21 15:30 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	05/04/21 00:02	05/04/21 00:02	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	05/04/21 00:02	05/04/21 00:02	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	05/04/21 00:02	05/04/21 00:02	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	05/04/21 00:02	05/04/21 00:02	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	05/04/21 00:02	05/04/21 00:02	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	05/04/21 00:02	05/04/21 00:02	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	05/04/21 00:02	05/04/21 00:02	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	05/04/21 00:02	05/04/21 00:02	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	05/04/21 00:02	05/04/21 00:02	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	05/04/21 00:02	05/04/21 00:02	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	05/04/21 00:02	05/04/21 00:02	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	05/04/21 00:02	05/04/21 00:02	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	05/04/21 00:02	05/04/21 00:02	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	05/04/21 00:02	05/04/21 00:02	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	05/04/21 00:02	05/04/21 00:02	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	05/04/21 00:02	05/04/21 00:02	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	05/04/21 00:02	05/04/21 00:02	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	05/04/21 00:02	05/04/21 00:02	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	05/04/21 00:02	05/04/21 00:02	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	05/04/21 00:02	05/04/21 00:02	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	05/04/21 00:02	05/04/21 00:02	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	05/04/21 00:02	05/04/21 00:02	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	05/04/21 00:02	05/04/21 00:02	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	05/04/21 00:02	05/04/21 00:02	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	05/04/21 00:02	05/04/21 00:02	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	05/04/21 00:02	05/04/21 00:02	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	05/04/21 00:02	05/04/21 00:02	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	05/04/21 00:02	05/04/21 00:02	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	05/04/21 00:02	05/04/21 00:02	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	05/04/21 00:02	05/04/21 00:02	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	05/04/21 00:02	05/04/21 00:02	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	05/04/21 00:02	05/04/21 00:02	96-18-4	L0
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	05/04/21 00:02	05/04/21 00:02	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	05/04/21 00:02	05/04/21 00:02	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	05/04/21 00:02	05/04/21 00:02	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	05/04/21 00:02	05/04/21 00:02	179601-23-1	
Surrogates									
Toluene-d8 (S)	113	%	80.0-120		1	05/04/21 00:02	05/04/21 00:02	2037-26-5	
4-Bromofluorobenzene (S)	98.2	%	77.0-126		1	05/04/21 00:02	05/04/21 00:02	460-00-4	
1,2-Dichloroethane-d4 (S)	116	%	70.0-130		1	05/04/21 00:02	05/04/21 00:02	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011								
	Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**80.0**	mg/L	10.0	1.0	1		05/11/21 17:36		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: SW-2 **Lab ID: 30417711012** Collected: 04/27/21 15:30 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**150**	mg/L	10.0	10.0	1		04/30/21 16:19		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/07/21 08:43	05/07/21 14:11		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**14.8J**	mg/L	25.0	4.7	1	05/03/21 10:51	05/03/21 14:38		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**41.0**	mg/L	3.0	0.67	1		05/13/21 15:59	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.44**	mg/L	0.10	0.024	1		05/06/21 15:42	14797-55-8	
Nitrogen, NO2 plus NO3	**0.45**	mg/L	0.10	0.024	1		05/06/21 15:42		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**16.6**	mg/L	10.0	4.7	1		05/10/21 18:36	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/28/21 21:01	14797-65-0	

Sample: SW-3 **Lab ID: 30417711013** Collected: 04/27/21 14:45 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	05/03/21 15:31	05/11/21 09:15	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	05/03/21 15:31	05/11/21 09:15	7440-38-2	
Barium	**0.023**	mg/L	0.010	0.00068	1	05/03/21 15:31	05/11/21 09:15	7440-39-3	
Beryllium	**0.00018J**	mg/L	0.0010	0.00017	1	05/03/21 15:31	05/11/21 09:15	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	05/03/21 15:31	05/11/21 09:15	7440-43-9	
Calcium	**31.7**	mg/L	1.0	0.10	1	05/03/21 15:31	05/11/21 09:15	7440-70-2	
Chromium	**0.00079J**	mg/L	0.0050	0.00035	1	05/03/21 15:31	05/11/21 09:15	7440-47-3	
Cobalt	**0.0050 U**	mg/L	0.0050	0.00053	1	05/03/21 15:31	05/11/21 09:15	7440-48-4	
Copper	**0.0027J**	mg/L	0.0050	0.0027	1	05/03/21 15:31	05/11/21 09:15	7440-50-8	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: SW-3 **Lab ID: 30417711013** Collected: 04/27/21 14:45 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Iron	**0.33**	mg/L	0.070	0.041	1	05/03/21 15:31	05/11/21 09:15	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	05/03/21 15:31	05/11/21 09:15	7439-92-1	
Magnesium	**7.7**	mg/L	0.20	0.028	1	05/03/21 15:31	05/11/21 09:15	7439-95-4	
Manganese	**0.0095**	mg/L	0.0050	0.0012	1	05/03/21 15:31	05/11/21 09:15	7439-96-5	
Nickel	**0.0018J**	mg/L	0.010	0.0015	1	05/03/21 15:31	05/11/21 09:15	7440-02-0	
Potassium	**4.4**	mg/L	0.50	0.072	1	05/03/21 15:31	05/11/21 09:15	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	05/03/21 15:31	05/11/21 09:15	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	05/03/21 15:31	05/11/21 09:15	7440-22-4	
Sodium	**4.2**	mg/L	1.0	0.42	1	05/03/21 15:31	05/11/21 09:15	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	05/03/21 15:31	05/11/21 09:15	7440-28-0	
Total Hardness by SM2340B-2011	**111**	mg/L	3.3	0.37	1	05/03/21 15:31	05/11/21 09:15		
Vanadium	**0.0021J**	mg/L	0.0050	0.00057	1	05/03/21 15:31	05/11/21 09:15	7440-62-2	
Zinc	**0.0033J**	mg/L	0.010	0.0024	1	05/03/21 15:31	05/11/21 09:15	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	05/04/21 12:37	05/04/21 19:40	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	05/04/21 00:22	05/04/21 00:22	67-64-1	L0
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	05/04/21 00:22	05/04/21 00:22	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	05/04/21 00:22	05/04/21 00:22	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	05/04/21 00:22	05/04/21 00:22	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	05/04/21 00:22	05/04/21 00:22	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	05/04/21 00:22	05/04/21 00:22	75-25-2	
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	05/04/21 00:22	05/04/21 00:22	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	05/04/21 00:22	05/04/21 00:22	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	05/04/21 00:22	05/04/21 00:22	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	05/04/21 00:22	05/04/21 00:22	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	05/04/21 00:22	05/04/21 00:22	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	05/04/21 00:22	05/04/21 00:22	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	05/04/21 00:22	05/04/21 00:22	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	05/04/21 00:22	05/04/21 00:22	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	05/04/21 00:22	05/04/21 00:22	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	05/04/21 00:22	05/04/21 00:22	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	05/04/21 00:22	05/04/21 00:22	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	05/04/21 00:22	05/04/21 00:22	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	05/04/21 00:22	05/04/21 00:22	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	05/04/21 00:22	05/04/21 00:22	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	05/04/21 00:22	05/04/21 00:22	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	05/04/21 00:22	05/04/21 00:22	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	05/04/21 00:22	05/04/21 00:22	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	05/04/21 00:22	05/04/21 00:22	107-06-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: SW-3 **Lab ID: 30417711013** Collected: 04/27/21 14:45 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	05/04/21 00:22	05/04/21 00:22	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	05/04/21 00:22	05/04/21 00:22	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	05/04/21 00:22	05/04/21 00:22	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	05/04/21 00:22	05/04/21 00:22	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	05/04/21 00:22	05/04/21 00:22	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	05/04/21 00:22	05/04/21 00:22	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	05/04/21 00:22	05/04/21 00:22	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	05/04/21 00:22	05/04/21 00:22	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	05/04/21 00:22	05/04/21 00:22	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	05/04/21 00:22	05/04/21 00:22	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	05/04/21 00:22	05/04/21 00:22	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	05/04/21 00:22	05/04/21 00:22	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	05/04/21 00:22	05/04/21 00:22	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	05/04/21 00:22	05/04/21 00:22	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	05/04/21 00:22	05/04/21 00:22	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	05/04/21 00:22	05/04/21 00:22	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	05/04/21 00:22	05/04/21 00:22	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	05/04/21 00:22	05/04/21 00:22	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	05/04/21 00:22	05/04/21 00:22	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	05/04/21 00:22	05/04/21 00:22	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	05/04/21 00:22	05/04/21 00:22	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	05/04/21 00:22	05/04/21 00:22	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	05/04/21 00:22	05/04/21 00:22	96-18-4	L0
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	05/04/21 00:22	05/04/21 00:22	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	05/04/21 00:22	05/04/21 00:22	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	05/04/21 00:22	05/04/21 00:22	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	05/04/21 00:22	05/04/21 00:22	179601-23-1	
Surrogates									
Toluene-d8 (S)	111	%	80.0-120		1	05/04/21 00:22	05/04/21 00:22	2037-26-5	
4-Bromofluorobenzene (S)	97.3	%	77.0-126		1	05/04/21 00:22	05/04/21 00:22	460-00-4	
1,2-Dichloroethane-d4 (S)	118	%	70.0-130		1	05/04/21 00:22	05/04/21 00:22	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011								
	Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**100**	mg/L	10.0	1.0	1		05/11/21 17:38		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011								
	Pace Analytical Services - Greensburg								
Total Dissolved Solids	**119**	mg/L	10.0	10.0	1		04/30/21 16:19		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1								
	Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/07/21 08:43	05/07/21 14:17		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Sample: SW-3 **Lab ID: 30417711013** Collected: 04/27/21 14:45 Received: 04/27/21 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**27.8**	mg/L	25.0	4.7	1	05/03/21 10:51	05/03/21 14:39		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**4.1**	mg/L	3.0	0.67	1		05/13/21 15:59	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.42**	mg/L	0.10	0.024	1		05/06/21 15:44	14797-55-8	
Nitrogen, NO2 plus NO3	**0.43**	mg/L	0.10	0.024	1		05/06/21 15:44		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**12.0**	mg/L	10.0	4.7	1		05/10/21 18:41	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.0095J**	mg/L	0.010	0.0055	1		04/28/21 21:01	14797-65-0	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417711

QC Batch: 446324 | Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A | Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30417711001, 30417711002, 30417711003, 30417711004, 30417711005, 30417711006, 30417711007, 30417711008, 30417711009, 30417711011, 30417711012, 30417711013

METHOD BLANK: 2154028 | Matrix: Water

Associated Lab Samples: 30417711001, 30417711002, 30417711003, 30417711004, 30417711005, 30417711006, 30417711007, 30417711008, 30417711009, 30417711011, 30417711012, 30417711013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.000030	05/04/21 19:07	

LABORATORY CONTROL SAMPLE: 2154029

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.001	0.00099	99	80-120	

MATRIX SPIKE SAMPLE: 2154031

Parameter	Units	30417711002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.00020 U	0.0025	0.0026	106	75-125	

MATRIX SPIKE SAMPLE: 2154033

Parameter	Units	30417711011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.00020 U	0.0025	0.0027	106	75-125	

SAMPLE DUPLICATE: 2154030

Parameter	Units	30417711002 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	0.00020 U	0.00020 U		20	

SAMPLE DUPLICATE: 2154032

Parameter	Units	30417711011 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	0.00020 U	0.00020 U		20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417711

QC Batch: 446169
QC Batch Method: EPA 3005A
Analysis Method: EPA 6010B
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417711001, 30417711002, 30417711003, 30417711004, 30417711005, 30417711006, 30417711007, 30417711008, 30417711009, 30417711011, 30417711012, 30417711013

METHOD BLANK: 2153308
Matrix: Water
Associated Lab Samples: 30417711001, 30417711002, 30417711003, 30417711004, 30417711005, 30417711006, 30417711007, 30417711008, 30417711009, 30417711011, 30417711012, 30417711013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.0060 U	0.0060	0.0033	05/11/21 07:35	
Arsenic	mg/L	0.0050 U	0.0050	0.0020	05/11/21 07:35	
Barium	mg/L	0.010 U	0.010	0.00068	05/11/21 07:35	
Beryllium	mg/L	0.0010 U	0.0010	0.00017	05/11/21 07:35	
Cadmium	mg/L	0.0030 U	0.0030	0.00034	05/11/21 07:35	
Calcium	mg/L	1.0 U	1.0	0.10	05/11/21 07:35	
Chromium	mg/L	0.0050 U	0.0050	0.00035	05/11/21 07:35	
Cobalt	mg/L	0.0050 U	0.0050	0.00053	05/11/21 07:35	
Copper	mg/L	0.0050 U	0.0050	0.0027	05/11/21 07:35	
Iron	mg/L	0.070 U	0.070	0.041	05/11/21 07:35	
Lead	mg/L	0.0050 U	0.0050	0.0049	05/11/21 07:35	
Magnesium	mg/L	0.20 U	0.20	0.028	05/11/21 07:35	
Manganese	mg/L	0.0050 U	0.0050	0.0012	05/11/21 07:35	
Nickel	mg/L	0.010 U	0.010	0.0015	05/11/21 07:35	
Potassium	mg/L	0.50 U	0.50	0.072	05/11/21 07:35	
Selenium	mg/L	0.0080 U	0.0080	0.0055	05/11/21 07:35	
Silver	mg/L	0.0060 U	0.0060	0.0014	05/11/21 07:35	
Sodium	mg/L	1.0 U	1.0	0.42	05/11/21 07:35	
Thallium	mg/L	0.010 U	0.010	0.0040	05/11/21 07:35	
Total Hardness by SM2340B-2011	mg/L	3.3 U	3.3	0.37	05/11/21 07:35	
Vanadium	mg/L	0.0050 U	0.0050	0.00057	05/11/21 07:35	
Zinc	mg/L	0.010 U	0.010	0.0024	05/11/21 07:35	

LABORATORY CONTROL SAMPLE: 2153309

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.5	0.46	92	80-120	
Arsenic	mg/L	0.5	0.45	89	80-120	
Barium	mg/L	0.5	0.47	94	80-120	
Beryllium	mg/L	0.5	0.47	94	80-120	
Cadmium	mg/L	0.5	0.47	94	80-120	
Calcium	mg/L	5	4.8	97	80-120	
Chromium	mg/L	0.5	0.47	95	80-120	
Cobalt	mg/L	0.5	0.47	94	80-120	
Copper	mg/L	0.5	0.49	98	80-120	
Iron	mg/L	5	4.9	98	80-120	
Lead	mg/L	0.5	0.46	92	80-120	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417711

LABORATORY CONTROL SAMPLE: 2153309

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Magnesium	mg/L	5	4.7	95	80-120	
Manganese	mg/L	0.5	0.47	94	80-120	
Nickel	mg/L	0.5	0.47	93	80-120	
Potassium	mg/L	5	4.5	91	80-120	
Selenium	mg/L	0.5	0.46	92	80-120	
Silver	mg/L	0.25	0.24	95	80-120	
Sodium	mg/L	5	4.9	97	80-120	
Thallium	mg/L	0.5	0.44	88	80-120	
Total Hardness by SM2340B-2011	mg/L		31.6			
Vanadium	mg/L	0.5	0.46	92	80-120	
Zinc	mg/L	0.5	0.48	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2153311 2153312

Parameter	Units	30417711001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.0060 U	0.5	0.5	0.49	0.49	98	97	75-125	0	20	
Arsenic	mg/L	0.0050 U	0.5	0.5	0.48	0.46	95	92	75-125	4	20	
Barium	mg/L	0.0085J	0.5	0.5	0.51	0.49	100	96	75-125	3	20	
Beryllium	mg/L	0.0010 U	0.5	0.5	0.50	0.48	100	96	75-125	3	20	
Cadmium	mg/L	0.0030 U	0.5	0.5	0.50	0.48	100	96	75-125	4	20	
Calcium	mg/L	0.26J	5	5	5.3	5.3	101	101	75-125	0	20	
Chromium	mg/L	0.0017J	0.5	0.5	0.50	0.48	99	95	75-125	4	20	
Cobalt	mg/L	0.00062J	0.5	0.5	0.50	0.48	100	96	75-125	4	20	
Copper	mg/L	0.0050 U	0.5	0.5	0.52	0.50	103	100	75-125	3	20	
Iron	mg/L	11.2	5	5	16.5	16.4	106	106	75-125	0	20	
Lead	mg/L	0.0050 U	0.5	0.5	0.48	0.47	97	93	75-125	4	20	
Magnesium	mg/L	0.53	5	5	5.5	5.5	100	99	75-125	1	20	
Manganese	mg/L	0.15	0.5	0.5	0.65	0.63	99	96	75-125	3	20	
Nickel	mg/L	0.0019J	0.5	0.5	0.50	0.48	99	96	75-125	3	20	
Potassium	mg/L	0.63	5	5	5.4	5.4	96	95	75-125	1	20	
Selenium	mg/L	0.0080 U	0.5	0.5	0.49	0.47	97	93	75-125	4	20	
Silver	mg/L	0.0060 U	0.25	0.25	0.25	0.25	99	99	75-125	1	20	
Sodium	mg/L	2.1	5	5	7.0	7.0	97	98	75-125	1	20	
Thallium	mg/L	0.010 U	0.5	0.5	0.47	0.46	94	91	75-125	4	20	
Total Hardness by SM2340B-2011	mg/L	2.8J			36.0	35.9				0		
Vanadium	mg/L	0.0050 U	0.5	0.5	0.48	0.46	96	92	75-125	4	20	
Zinc	mg/L	0.010 U	0.5	0.5	0.51	0.49	101	97	75-125	4	20	

MATRIX SPIKE SAMPLE: 2153314

Parameter	Units	30417711012 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.0060 U	0.5	0.52	103	75-125	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417711

MATRIX SPIKE SAMPLE: 2153314

Parameter	Units	30417711012 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	0.0050 U	0.5	0.51	102	75-125	
Barium	mg/L	0.035	0.5	0.56	104	75-125	
Beryllium	mg/L	0.0010 U	0.5	0.54	107	75-125	
Cadmium	mg/L	0.0030 U	0.5	0.52	104	75-125	
Calcium	mg/L	29.2	5	34.6	109	75-125	
Chromium	mg/L	0.0011J	0.5	0.52	105	75-125	
Cobalt	mg/L	0.00087J	0.5	0.52	104	75-125	
Copper	mg/L	0.0050 U	0.5	0.54	107	75-125	
Iron	mg/L	1.1	5	6.4	107	75-125	
Lead	mg/L	0.0050 U	0.5	0.51	101	75-125	
Magnesium	mg/L	6.0	5	11.4	107	75-125	
Manganese	mg/L	0.032	0.5	0.56	105	75-125	
Nickel	mg/L	0.0016J	0.5	0.52	104	75-125	
Potassium	mg/L	4.0	5	9.3	106	75-125	
Selenium	mg/L	0.0080 U	0.5	0.51	101	75-125	
Silver	mg/L	0.0060 U	0.25	0.26	105	75-125	
Sodium	mg/L	24.6	5	29.9	106	75-125	
Thallium	mg/L	0.010 U	0.5	0.50	100	75-125	
Total Hardness by SM2340B-2011	mg/L	97.8		133			
Vanadium	mg/L	0.0021J	0.5	0.52	104	75-125	
Zinc	mg/L	0.0043J	0.5	0.52	104	75-125	

SAMPLE DUPLICATE: 2153310

Parameter	Units	30417711001 Result	Dup Result	RPD	Max RPD	Qualifiers
Antimony	mg/L	0.0060 U	0.0060 U		20	
Arsenic	mg/L	0.0050 U	0.0050 U		20	
Barium	mg/L	0.0085J	0.0085J		20	
Beryllium	mg/L	0.0010 U	0.0010 U		20	
Cadmium	mg/L	0.0030 U	0.0030 U		20	
Calcium	mg/L	0.26J	0.27J		20	
Chromium	mg/L	0.0017J	0.0018J		20	
Cobalt	mg/L	0.00062J	0.0050 U		20	
Copper	mg/L	0.0050 U	0.0050 U		20	
Iron	mg/L	11.2	11.5	3	20	
Lead	mg/L	0.0050 U	0.0050 U		20	
Magnesium	mg/L	0.53	0.55	4	20	
Manganese	mg/L	0.15	0.16	4	20	
Nickel	mg/L	0.0019J	0.0021J		20	
Potassium	mg/L	0.63	0.64	1	20	
Selenium	mg/L	0.0080 U	0.0080 U		20	
Silver	mg/L	0.0060 U	0.0060 U		20	
Sodium	mg/L	2.1	2.1	1	20	
Thallium	mg/L	0.010 U	0.010 U		20	
Total Hardness by SM2340B-2011	mg/L	2.8J	3.0J			

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417711

SAMPLE DUPLICATE: 2153310

Parameter	Units	30417711001 Result	Dup Result	RPD	Max RPD	Qualifiers
Vanadium	mg/L	0.0050 U	0.0050 U		20	
Zinc	mg/L	0.010 U	0.010 U		20	

SAMPLE DUPLICATE: 2153313

Parameter	Units	30417711012 Result	Dup Result	RPD	Max RPD	Qualifiers
Antimony	mg/L	0.0060 U	0.0060 U		20	
Arsenic	mg/L	0.0050 U	0.0050 U		20	
Barium	mg/L	0.035	0.037	7	20	
Beryllium	mg/L	0.0010 U	0.0010 U		20	
Cadmium	mg/L	0.0030 U	0.0030 U		20	
Calcium	mg/L	29.2	31.2	7	20	
Chromium	mg/L	0.0011J	0.0010J		20	
Cobalt	mg/L	0.00087J	0.00079J		20	
Copper	mg/L	0.0050 U	0.0050 U		20	
Iron	mg/L	1.1	1.2	7	20	
Lead	mg/L	0.0050 U	0.0050 U		20	
Magnesium	mg/L	6.0	6.4	5	20	
Manganese	mg/L	0.032	0.035	6	20	
Nickel	mg/L	0.0016J	0.010 U		20	
Potassium	mg/L	4.0	4.3	7	20	
Selenium	mg/L	0.0080 U	0.0080 U		20	
Silver	mg/L	0.0060 U	0.0060 U		20	
Sodium	mg/L	24.6	26.4	7	20	
Thallium	mg/L	0.010 U	0.010 U		20	
Total Hardness by SM2340B-2011	mg/L	97.8	104	6		
Vanadium	mg/L	0.0021J	0.0022J		20	
Zinc	mg/L	0.0043J	0.0032J		20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417711

QC Batch: 446368
QC Batch Method: EPA 3005A
Analysis Method: EPA 6010B
Analysis Description: 6010 MET Dissolved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417711001, 30417711002, 30417711003, 30417711004, 30417711005, 30417711006, 30417711007, 30417711008, 30417711009

METHOD BLANK: 2154149
Matrix: Water
Associated Lab Samples: 30417711001, 30417711002, 30417711003, 30417711004, 30417711005, 30417711006, 30417711007, 30417711008, 30417711009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	1.0 U	1.0	0.10	05/07/21 11:53	
Iron, Dissolved	mg/L	0.070 U	0.070	0.041	05/07/21 11:53	
Magnesium, Dissolved	mg/L	0.20 U	0.20	0.028	05/07/21 11:53	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0012	05/07/21 11:53	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.072	05/07/21 11:53	
Sodium, Dissolved	mg/L	1.0 U	1.0	0.42	05/07/21 11:53	

LABORATORY CONTROL SAMPLE: 2154150

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	5	4.7	94	80-120	
Iron, Dissolved	mg/L	5	4.7	95	80-120	
Magnesium, Dissolved	mg/L	5	4.6	93	80-120	
Manganese, Dissolved	mg/L	0.5	0.47	94	80-120	
Potassium, Dissolved	mg/L	5	4.7	95	80-120	
Sodium, Dissolved	mg/L	5	4.9	98	80-120	

MATRIX SPIKE SAMPLE: 2154152

Parameter	Units	30417711004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	0.88J	5	6.1	104	75-125	
Iron, Dissolved	mg/L	62.9	5	69.0	122	75-125	
Magnesium, Dissolved	mg/L	0.42	5	5.5	102	75-125	
Manganese, Dissolved	mg/L	0.46	0.5	0.99	105	75-125	
Potassium, Dissolved	mg/L	0.57	5	5.9	107	75-125	
Sodium, Dissolved	mg/L	16.8	5	22.7	117	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2154154 2154155

Parameter	Units	30417910001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	73000 ug/L	5	5	75.5	77.3	50	86	75-125	2	20	ML
Iron, Dissolved	mg/L	0.070 U	5	5	5.0	5.1	100	101	75-125	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417711

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2154154 2154155

Parameter	Units	30417910001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Magnesium, Dissolved	mg/L	19800 ug/L	5	5	24.0	24.8	85	100	75-125	3	20	
Manganese, Dissolved	mg/L	0.016	0.5	0.5	0.51	0.52	98	100	75-125	2	20	
Potassium, Dissolved	mg/L	1540 ug/L	5	5	6.6	6.7	101	104	75-125	2	20	
Sodium, Dissolved	mg/L	33500 ug/L	5	5	37.1	38.5	73	100	75-125	4	20	ML

SAMPLE DUPLICATE: 2154151

Parameter	Units	30417711004 Result	Dup Result	RPD	Max RPD	Qualifiers
Calcium, Dissolved	mg/L	0.88J	0.89J		20	
Iron, Dissolved	mg/L	62.9	63.4	1	20	
Magnesium, Dissolved	mg/L	0.42	0.42	1	20	
Manganese, Dissolved	mg/L	0.46	0.47	1	20	
Potassium, Dissolved	mg/L	0.57	0.58	2	20	
Sodium, Dissolved	mg/L	16.8	17.0	1	20	

SAMPLE DUPLICATE: 2154153

Parameter	Units	30417910001 Result	Dup Result	RPD	Max RPD	Qualifiers
Calcium, Dissolved	mg/L	73000 ug/L	71.4	2	20	
Iron, Dissolved	mg/L	0.070 U	0.070 U		20	
Magnesium, Dissolved	mg/L	19800 ug/L	19.5	1	20	
Manganese, Dissolved	mg/L	0.016	0.015	4	20	
Potassium, Dissolved	mg/L	1540 ug/L	1.5	1	20	
Sodium, Dissolved	mg/L	33500 ug/L	33.3	0	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417711

QC Batch: 1663318
QC Batch Method: 8260B
Analysis Method: EPA 8260B
Analysis Description: VOA (GC/MS) 8260B
Laboratory: Pace National - Mt. Juliet
Associated Lab Samples: 30417711001, 30417711002, 30417711003, 30417711004, 30417711005, 30417711006, 30417711007, 30417711008, 30417711009, 30417711010, 30417711011, 30417711012, 30417711013

METHOD BLANK: R3650780-2
Matrix: Water
Associated Lab Samples: 30417711001, 30417711002, 30417711003, 30417711004, 30417711005, 30417711006, 30417711007, 30417711008, 30417711009, 30417711010, 30417711011, 30417711012, 30417711013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acetone	ug/L	50.0 U	50.0	11.3	05/03/21 19:58	
Acrylonitrile	ug/L	10.0 U	10.0	0.671	05/03/21 19:58	
Benzene	ug/L	1.00 U	1.00	0.0941	05/03/21 19:58	
Bromodichloromethane	ug/L	1.00 U	1.00	0.136	05/03/21 19:58	
Bromochloromethane	ug/L	1.00 U	1.00	0.128	05/03/21 19:58	
Bromoform	ug/L	1.00 U	1.00	0.129	05/03/21 19:58	
Bromomethane	ug/L	5.00 U	5.00	0.605	05/03/21 19:58	
Carbon disulfide	ug/L	1.00 U	1.00	0.0962	05/03/21 19:58	
Carbon tetrachloride	ug/L	1.00 U	1.00	0.128	05/03/21 19:58	
Chlorobenzene	ug/L	1.00 U	1.00	0.116	05/03/21 19:58	
Dibromochloromethane	ug/L	1.00 U	1.00	0.140	05/03/21 19:58	
Chloroethane	ug/L	5.00 U	5.00	0.192	05/03/21 19:58	
Chloroform	ug/L	5.00 U	5.00	0.111	05/03/21 19:58	
Chloromethane	ug/L	2.50 U	2.50	0.960	05/03/21 19:58	
1,2-Dibromo-3-chloropropane	ug/L	5.00 U	5.00	0.276	05/03/21 19:58	
1,2-Dibromoethane (EDB)	ug/L	1.00 U	1.00	0.126	05/03/21 19:58	
Dibromomethane	ug/L	1.00 U	1.00	0.122	05/03/21 19:58	
1,2-Dichlorobenzene	ug/L	1.00 U	1.00	0.107	05/03/21 19:58	
1,4-Dichlorobenzene	ug/L	1.00 U	1.00	0.120	05/03/21 19:58	
trans-1,4-Dichloro-2-butene	ug/L	2.50 U	2.50	0.467	05/03/21 19:58	
Dichlorodifluoromethane	ug/L	5.00 U	5.00	0.374	05/03/21 19:58	
Dichlorofluoromethane	ug/L	5.00 U	5.00	0.130	05/03/21 19:58	
1,1-Dichloroethane	ug/L	1.00 U	1.00	0.100	05/03/21 19:58	
1,2-Dichloroethane	ug/L	1.00 U	1.00	0.0819	05/03/21 19:58	
1,1-Dichloroethene	ug/L	1.00 U	1.00	0.188	05/03/21 19:58	
cis-1,2-Dichloroethene	ug/L	1.00 U	1.00	0.126	05/03/21 19:58	
trans-1,2-Dichloroethene	ug/L	1.00 U	1.00	0.149	05/03/21 19:58	
1,2-Dichloropropane	ug/L	1.00 U	1.00	0.149	05/03/21 19:58	
cis-1,3-Dichloropropene	ug/L	1.00 U	1.00	0.111	05/03/21 19:58	
trans-1,3-Dichloropropene	ug/L	1.00 U	1.00	0.118	05/03/21 19:58	
Ethylbenzene	ug/L	1.00 U	1.00	0.137	05/03/21 19:58	
2-Hexanone	ug/L	10.0 U	10.0	0.787	05/03/21 19:58	
Iodomethane	ug/L	10.0 U	10.0	6.00	05/03/21 19:58	
2-Butanone (MEK)	ug/L	10.0 U	10.0	1.19	05/03/21 19:58	
Methylene Chloride	ug/L	5.00 U	5.00	0.430	05/03/21 19:58	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.478	05/03/21 19:58	
Methyl-tert-butyl ether	ug/L	1.00 U	1.00	0.101	05/03/21 19:58	
Styrene	ug/L	1.00 U	1.00	0.118	05/03/21 19:58	
1,1,1,2-Tetrachloroethane	ug/L	1.00 U	1.00	0.147	05/03/21 19:58	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417711

METHOD BLANK: R3650780-2 Matrix: Water

Associated Lab Samples: 30417711001, 30417711002, 30417711003, 30417711004, 30417711005, 30417711006, 30417711007, 30417711008, 30417711009, 30417711010, 30417711011, 30417711012, 30417711013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L	1.00 U	1.00	0.133	05/03/21 19:58	
Tetrachloroethene	ug/L	1.00 U	1.00	0.300	05/03/21 19:58	
Toluene	ug/L	1.00 U	1.00	0.278	05/03/21 19:58	
1,1,1-Trichloroethane	ug/L	1.00 U	1.00	0.149	05/03/21 19:58	
1,1,2-Trichloroethane	ug/L	1.00 U	1.00	0.158	05/03/21 19:58	
Trichloroethene	ug/L	1.00 U	1.00	0.190	05/03/21 19:58	
Trichlorofluoromethane	ug/L	5.00 U	5.00	0.160	05/03/21 19:58	
1,2,3-Trichloropropane	ug/L	2.50 U	2.50	0.237	05/03/21 19:58	
Vinyl acetate	ug/L	10.0 U	10.0	0.692	05/03/21 19:58	
Vinyl chloride	ug/L	1.00 U	1.00	0.234	05/03/21 19:58	
o-Xylene	ug/L	1.00 U	1.00	0.174	05/03/21 19:58	
m&p-Xylene	ug/L	2.00 U	2.00	0.430	05/03/21 19:58	
Toluene-d8 (S)	%	110	80.0-120		05/03/21 19:58	
4-Bromofluorobenzene (S)	%	96.6	77.0-126		05/03/21 19:58	
1,2-Dichloroethane-d4 (S)	%	114	70.0-130		05/03/21 19:58	

LABORATORY CONTROL SAMPLE: R3650780-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acetone	ug/L	25.0	51.0	204	19.0-160	L0
Acrylonitrile	ug/L	25.0	36.9	148	55.0-149	
Benzene	ug/L	5.00	5.45	109	70.0-123	
Bromodichloromethane	ug/L	5.00	5.65	113	75.0-120	
Bromochloromethane	ug/L	5.00	5.73	115	76.0-122	
Bromoform	ug/L	5.00	5.77	115	68.0-132	
Bromomethane	ug/L	5.00	5.22	104	10.0-160	
Carbon disulfide	ug/L	5.00	5.48	110	61.0-128	
Carbon tetrachloride	ug/L	5.00	5.99	120	68.0-126	
Chlorobenzene	ug/L	5.00	5.79	116	80.0-121	
Dibromochloromethane	ug/L	5.00	6.22	124	77.0-125	
Chloroethane	ug/L	5.00	5.90	118	47.0-150	
Chloroform	ug/L	5.00	5.45	109	73.0-120	
Chloromethane	ug/L	5.00	5.40	108	41.0-142	
1,2-Dibromo-3-chloropropane	ug/L	5.00	5.89	118	58.0-134	
1,2-Dibromoethane (EDB)	ug/L	5.00	5.83	117	80.0-122	
Dibromomethane	ug/L	5.00	5.67	113	80.0-120	
1,2-Dichlorobenzene	ug/L	5.00	6.07	121	79.0-121	
1,4-Dichlorobenzene	ug/L	5.00	5.66	113	79.0-120	
trans-1,4-Dichloro-2-butene	ug/L	5.00	5.70	114	33.0-144	
Dichlorodifluoromethane	ug/L	5.00	5.65	113	51.0-149	
Dichlorofluoromethane	ug/L	5.00	5.53	111	65.0-133	
1,1-Dichloroethane	ug/L	5.00	5.33	107	70.0-126	
1,2-Dichloroethane	ug/L	5.00	5.50	110	70.0-128	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417711

LABORATORY CONTROL SAMPLE: R3650780-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	5.00	5.96	119	71.0-124	
cis-1,2-Dichloroethene	ug/L	5.00	5.78	116	73.0-120	
trans-1,2-Dichloroethene	ug/L	5.00	5.21	104	73.0-120	
1,2-Dichloropropane	ug/L	5.00	5.88	118	77.0-125	
cis-1,3-Dichloropropene	ug/L	5.00	5.39	108	80.0-123	
trans-1,3-Dichloropropene	ug/L	5.00	5.84	117	78.0-124	
Ethylbenzene	ug/L	5.00	5.19	104	79.0-123	
2-Hexanone	ug/L	25.0	31.0	124	67.0-149	
Iodomethane	ug/L	25.0	28.3	113	33.0-147	
2-Butanone (MEK)	ug/L	25.0	34.4	138	44.0-160	
Methylene Chloride	ug/L	5.00	3.88	77.6	67.0-120	
4-Methyl-2-pentanone (MIBK)	ug/L	25.0	33.5	134	68.0-142	
Methyl-tert-butyl ether	ug/L	5.00	6.17	123	68.0-125	
Styrene	ug/L	5.00	5.67	113	73.0-130	
1,1,1,2-Tetrachloroethane	ug/L	5.00	5.46	109	75.0-125	
1,1,2,2-Tetrachloroethane	ug/L	5.00	6.11	122	65.0-130	
Tetrachloroethene	ug/L	5.00	6.05	121	72.0-132	
Toluene	ug/L	5.00	5.49	110	79.0-120	
1,1,1-Trichloroethane	ug/L	5.00	6.17	123	73.0-124	
1,1,2-Trichloroethane	ug/L	5.00	5.71	114	80.0-120	
Trichloroethene	ug/L	5.00	5.74	115	78.0-124	
Trichlorofluoromethane	ug/L	5.00	5.14	103	59.0-147	
1,2,3-Trichloropropane	ug/L	5.00	6.53	131	73.0-130	L0
Vinyl acetate	ug/L	25.0	24.8	99.2	11.0-160	
Vinyl chloride	ug/L	5.00	6.10	122	67.0-131	
o-Xylene	ug/L	5.00	5.43	109	80.0-122	
m&p-Xylene	ug/L	10.0	10.3	103	80.0-122	
Toluene-d8 (S)	%			111	80.0-120	
4-Bromofluorobenzene (S)	%			99.7	77.0-126	
1,2-Dichloroethane-d4 (S)	%			110	70.0-130	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417711

QC Batch: 447485
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417711001, 30417711002, 30417711003, 30417711004, 30417711005, 30417711006, 30417711007, 30417711008, 30417711009, 30417711011, 30417711012, 30417711013

METHOD BLANK: 2159402
Matrix: Water
Associated Lab Samples: 30417711001, 30417711002, 30417711003, 30417711004, 30417711005, 30417711006, 30417711007, 30417711008, 30417711009, 30417711011, 30417711012, 30417711013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	05/11/21 17:24	

LABORATORY CONTROL SAMPLE: 2159403

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2159404 2159405

Parameter	Units	30417711001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	12.0	50	50	68.0	64.0	112	104	85-115	6	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417711

QC Batch: 445749
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417711001, 30417711002, 30417711003, 30417711004, 30417711005, 30417711006

METHOD BLANK: 2151677
Matrix: Water
Associated Lab Samples: 30417711001, 30417711002, 30417711003, 30417711004, 30417711005, 30417711006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	04/30/21 15:25	

LABORATORY CONTROL SAMPLE: 2151678

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	946	95	85-115	

SAMPLE DUPLICATE: 2151679

Parameter	Units	30417569003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	508	521	3	5	

SAMPLE DUPLICATE: 2151680

Parameter	Units	30417711005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	55.0	60.0	9	5	D6

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417711

QC Batch: 445752 | Analysis Method: SM 2540C-2011
QC Batch Method: SM 2540C-2011 | Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417711007, 30417711008, 30417711009, 30417711011, 30417711012, 30417711013

METHOD BLANK: 2151722 | Matrix: Water
Associated Lab Samples: 30417711007, 30417711008, 30417711009, 30417711011, 30417711012, 30417711013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	04/30/21 16:16	

LABORATORY CONTROL SAMPLE: 2151723

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	919	92	85-115	

SAMPLE DUPLICATE: 2151724

Parameter	Units	30417711007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0 U		5	

SAMPLE DUPLICATE: 2151725

Parameter	Units	30418194001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	2850	2920	2	5	5c

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417711

QC Batch: 446925 | Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 | Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30417711001, 30417711002, 30417711003, 30417711004, 30417711005, 30417711006, 30417711007, 30417711008, 30417711009, 30417711011, 30417711012, 30417711013

METHOD BLANK: 2156781 | Matrix: Water

Associated Lab Samples: 30417711001, 30417711002, 30417711003, 30417711004, 30417711005, 30417711006, 30417711007, 30417711008, 30417711009, 30417711011, 30417711012, 30417711013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.044	05/07/21 13:40	

LABORATORY CONTROL SAMPLE: 2156782

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.1	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2156783 2156784

Parameter	Units	30417711001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.1	4.1	103	103	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2156785 2156786

Parameter	Units	30417711012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.1	4.1	103	103	90-110	0	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417711

QC Batch: 445997
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417711001, 30417711002, 30417711003, 30417711004, 30417711005, 30417711006, 30417711007, 30417711008, 30417711009, 30417711011, 30417711012, 30417711013

METHOD BLANK: 2152884
Matrix: Water
Associated Lab Samples: 30417711001, 30417711002, 30417711003, 30417711004, 30417711005, 30417711006, 30417711007, 30417711008, 30417711009, 30417711011, 30417711012, 30417711013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	05/03/21 14:36	

LABORATORY CONTROL SAMPLE: 2152885

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	303	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2152886 2152887

Parameter	Units	30418476001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	1360	300	300	1590	1620	78	87	90-110	2	10	D4,ML

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2152888 2152889

Parameter	Units	30417711008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	25.0 U	150	150	155	162	104	108	90-110	4	10	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417711

QC Batch: 447874
QC Batch Method: SM 4500ClE-2011
Analysis Method: SM 4500ClE-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417711001, 30417711002, 30417711003, 30417711004, 30417711005, 30417711006, 30417711007, 30417711008, 30417711009, 30417711011, 30417711012, 30417711013

METHOD BLANK: 2161526
Matrix: Water
Associated Lab Samples: 30417711001, 30417711002, 30417711003, 30417711004, 30417711005, 30417711006, 30417711007, 30417711008, 30417711009, 30417711011, 30417711012, 30417711013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/13/21 15:45	

LABORATORY CONTROL SAMPLE: 2161527

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	19.9	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2161528 2161529

Parameter	Units	30417711001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.5	20	20	24.7	24.8	106	106	85-115	0	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417711

QC Batch: 446676 | Analysis Method: SM 4500NO3F-2011
QC Batch Method: SM 4500NO3F-2011 | Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30417711001, 30417711002, 30417711003, 30417711004, 30417711005, 30417711006, 30417711007, 30417711008, 30417711009, 30417711011, 30417711012, 30417711013

METHOD BLANK: 2155763 | Matrix: Water

Associated Lab Samples: 30417711001, 30417711002, 30417711003, 30417711004, 30417711005, 30417711006, 30417711007, 30417711008, 30417711009, 30417711011, 30417711012, 30417711013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.024	05/06/21 15:19	

LABORATORY CONTROL SAMPLE: 2155764

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	4.2	104	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2155765 2155766

Parameter	Units	30418105001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	2.7	5	5	7.7	7.7	101	100	85-115	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417711

QC Batch: 447357
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417711001, 30417711002, 30417711003, 30417711004, 30417711005, 30417711006, 30417711007, 30417711008, 30417711009, 30417711011, 30417711012, 30417711013

METHOD BLANK: 2158778
Matrix: Water
Associated Lab Samples: 30417711001, 30417711002, 30417711003, 30417711004, 30417711005, 30417711006, 30417711007, 30417711008, 30417711009, 30417711011, 30417711012, 30417711013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	05/10/21 18:17	

LABORATORY CONTROL SAMPLE: 2158779

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	29.6	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2158780 2158781

Parameter	Units	30417711001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.0 U	20	20	21.5	22.1	107	111	85-115	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2158782 2158783

Parameter	Units	30417711012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	16.6	20	20	38.2	36.3	108	98	85-115	5	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021
Pace Project No.: 30417711

QC Batch: 445503
QC Batch Method: SM 4500NO2B-2011
Analysis Method: SM 4500NO2B-2011
Analysis Description: SM4500NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30417711001, 30417711002, 30417711003, 30417711004, 30417711005, 30417711006, 30417711007, 30417711008, 30417711009, 30417711011, 30417711012, 30417711013

METHOD BLANK: 2150477
Matrix: Water
Associated Lab Samples: 30417711001, 30417711002, 30417711003, 30417711004, 30417711005, 30417711006, 30417711007, 30417711008, 30417711009, 30417711011, 30417711012, 30417711013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	04/28/21 20:53	

LABORATORY CONTROL SAMPLE: 2150478

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.10	100	90-110	

MATRIX SPIKE SAMPLE: 2150480

Parameter	Units	30417711001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.010 U	0.1	0.092	92	85-115	

SAMPLE DUPLICATE: 2150479

Parameter	Units	30417711001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010 U		20	

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QUALIFIERS

Project: MLF-SPRING 2021
Pace Project No.: 30417711

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

1c	ALK TV: -2 mg/L
2c	ALK TV: 0 mg/L
3c	ALK TV: 2 mg/L
4c	ALK TV: 4 mg/L
5c	Sample volume was reduced so the sample could be within an acceptable range
D4	Sample was diluted due to the presence of high levels of target analytes.
D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
J	Analyte detected below the reporting limit, therefore result is an estimate. This qualifier is also used for all TICs.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30417711001	**TW-2**	EPA 3005A	446169	EPA 6010B	446233
30417711002	**TW-2A**	EPA 3005A	446169	EPA 6010B	446233
30417711003	**TW-3**	EPA 3005A	446169	EPA 6010B	446233
30417711004	**TW-3A**	EPA 3005A	446169	EPA 6010B	446233
30417711005	**TW-4**	EPA 3005A	446169	EPA 6010B	446233
30417711006	**TW-4B**	EPA 3005A	446169	EPA 6010B	446233
30417711007	**TW-27**	EPA 3005A	446169	EPA 6010B	446233
30417711008	**TW-30**	EPA 3005A	446169	EPA 6010B	446233
30417711009	**FIELD BLANK**	EPA 3005A	446169	EPA 6010B	446233
30417711011	**SW-1**	EPA 3005A	446169	EPA 6010B	446233
30417711012	**SW-2**	EPA 3005A	446169	EPA 6010B	446233
30417711013	**SW-3**	EPA 3005A	446169	EPA 6010B	446233
30417711001	**TW-2**	EPA 3005A	446368	EPA 6010B	446434
30417711002	**TW-2A**	EPA 3005A	446368	EPA 6010B	446434
30417711003	**TW-3**	EPA 3005A	446368	EPA 6010B	446434
30417711004	**TW-3A**	EPA 3005A	446368	EPA 6010B	446434
30417711005	**TW-4**	EPA 3005A	446368	EPA 6010B	446434
30417711006	**TW-4B**	EPA 3005A	446368	EPA 6010B	446434
30417711007	**TW-27**	EPA 3005A	446368	EPA 6010B	446434
30417711008	**TW-30**	EPA 3005A	446368	EPA 6010B	446434
30417711009	**FIELD BLANK**	EPA 3005A	446368	EPA 6010B	446434
30417711001	**TW-2**	EPA 7470A	446324	EPA 7470A	446412
30417711002	**TW-2A**	EPA 7470A	446324	EPA 7470A	446412
30417711003	**TW-3**	EPA 7470A	446324	EPA 7470A	446412
30417711004	**TW-3A**	EPA 7470A	446324	EPA 7470A	446412
30417711005	**TW-4**	EPA 7470A	446324	EPA 7470A	446412
30417711006	**TW-4B**	EPA 7470A	446324	EPA 7470A	446412
30417711007	**TW-27**	EPA 7470A	446324	EPA 7470A	446412
30417711008	**TW-30**	EPA 7470A	446324	EPA 7470A	446412
30417711009	**FIELD BLANK**	EPA 7470A	446324	EPA 7470A	446412
30417711011	**SW-1**	EPA 7470A	446324	EPA 7470A	446412
30417711012	**SW-2**	EPA 7470A	446324	EPA 7470A	446412
30417711013	**SW-3**	EPA 7470A	446324	EPA 7470A	446412
30417711001	**TW-2**	8260B	1663318	EPA 8260B	1663318
30417711002	**TW-2A**	8260B	1663318	EPA 8260B	1663318
30417711003	**TW-3**	8260B	1663318	EPA 8260B	1663318
30417711004	**TW-3A**	8260B	1663318	EPA 8260B	1663318
30417711005	**TW-4**	8260B	1663318	EPA 8260B	1663318
30417711006	**TW-4B**	8260B	1663318	EPA 8260B	1663318
30417711007	**TW-27**	8260B	1663318	EPA 8260B	1663318
30417711008	**TW-30**	8260B	1663318	EPA 8260B	1663318
30417711009	**FIELD BLANK**	8260B	1663318	EPA 8260B	1663318
30417711010	**TRIP BLANK**	8260B	1663318	EPA 8260B	1663318
30417711011	**SW-1**	8260B	1663318	EPA 8260B	1663318
30417711012	**SW-2**	8260B	1663318	EPA 8260B	1663318
30417711013	**SW-3**	8260B	1663318	EPA 8260B	1663318
30417711001	**TW-2**	SM 2320B-2011	447485		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30417711002	**TW-2A**	SM 2320B-2011	447485		
30417711003	**TW-3**	SM 2320B-2011	447485		
30417711004	**TW-3A**	SM 2320B-2011	447485		
30417711005	**TW-4**	SM 2320B-2011	447485		
30417711006	**TW-4B**	SM 2320B-2011	447485		
30417711007	**TW-27**	SM 2320B-2011	447485		
30417711008	**TW-30**	SM 2320B-2011	447485		
30417711009	**FIELD BLANK**	SM 2320B-2011	447485		
30417711011	**SW-1**	SM 2320B-2011	447485		
30417711012	**SW-2**	SM 2320B-2011	447485		
30417711013	**SW-3**	SM 2320B-2011	447485		
30417711001	**TW-2**	SM 2540C-2011	445749		
30417711002	**TW-2A**	SM 2540C-2011	445749		
30417711003	**TW-3**	SM 2540C-2011	445749		
30417711004	**TW-3A**	SM 2540C-2011	445749		
30417711005	**TW-4**	SM 2540C-2011	445749		
30417711006	**TW-4B**	SM 2540C-2011	445749		
30417711007	**TW-27**	SM 2540C-2011	445752		
30417711008	**TW-30**	SM 2540C-2011	445752		
30417711009	**FIELD BLANK**	SM 2540C-2011	445752		
30417711011	**SW-1**	SM 2540C-2011	445752		
30417711012	**SW-2**	SM 2540C-2011	445752		
30417711013	**SW-3**	SM 2540C-2011	445752		
30417711001	**TW-2**	EPA 350.1	446925	EPA 350.1	446930
30417711002	**TW-2A**	EPA 350.1	446925	EPA 350.1	446930
30417711003	**TW-3**	EPA 350.1	446925	EPA 350.1	446930
30417711004	**TW-3A**	EPA 350.1	446925	EPA 350.1	446930
30417711005	**TW-4**	EPA 350.1	446925	EPA 350.1	446930
30417711006	**TW-4B**	EPA 350.1	446925	EPA 350.1	446930
30417711007	**TW-27**	EPA 350.1	446925	EPA 350.1	446930
30417711008	**TW-30**	EPA 350.1	446925	EPA 350.1	446930
30417711009	**FIELD BLANK**	EPA 350.1	446925	EPA 350.1	446930
30417711011	**SW-1**	EPA 350.1	446925	EPA 350.1	446930
30417711012	**SW-2**	EPA 350.1	446925	EPA 350.1	446930
30417711013	**SW-3**	EPA 350.1	446925	EPA 350.1	446930
30417711001	**TW-2**	EPA 410.4	445997	EPA 410.4	446161
30417711002	**TW-2A**	EPA 410.4	445997	EPA 410.4	446161
30417711003	**TW-3**	EPA 410.4	445997	EPA 410.4	446161
30417711004	**TW-3A**	EPA 410.4	445997	EPA 410.4	446161
30417711005	**TW-4**	EPA 410.4	445997	EPA 410.4	446161
30417711006	**TW-4B**	EPA 410.4	445997	EPA 410.4	446161
30417711007	**TW-27**	EPA 410.4	445997	EPA 410.4	446161
30417711008	**TW-30**	EPA 410.4	445997	EPA 410.4	446161
30417711009	**FIELD BLANK**	EPA 410.4	445997	EPA 410.4	446161
30417711011	**SW-1**	EPA 410.4	445997	EPA 410.4	446161
30417711012	**SW-2**	EPA 410.4	445997	EPA 410.4	446161
30417711013	**SW-3**	EPA 410.4	445997	EPA 410.4	446161

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30417711001	**TW-2**	SM 4500CIE-2011	447874		
30417711002	**TW-2A**	SM 4500CIE-2011	447874		
30417711003	**TW-3**	SM 4500CIE-2011	447874		
30417711004	**TW-3A**	SM 4500CIE-2011	447874		
30417711005	**TW-4**	SM 4500CIE-2011	447874		
30417711006	**TW-4B**	SM 4500CIE-2011	447874		
30417711007	**TW-27**	SM 4500CIE-2011	447874		
30417711008	**TW-30**	SM 4500CIE-2011	447874		
30417711009	**FIELD BLANK**	SM 4500CIE-2011	447874		
30417711011	**SW-1**	SM 4500CIE-2011	447874		
30417711012	**SW-2**	SM 4500CIE-2011	447874		
30417711013	**SW-3**	SM 4500CIE-2011	447874		
30417711001	**TW-2**	SM 4500NO3F-2011	446676		
30417711002	**TW-2A**	SM 4500NO3F-2011	446676		
30417711003	**TW-3**	SM 4500NO3F-2011	446676		
30417711004	**TW-3A**	SM 4500NO3F-2011	446676		
30417711005	**TW-4**	SM 4500NO3F-2011	446676		
30417711006	**TW-4B**	SM 4500NO3F-2011	446676		
30417711007	**TW-27**	SM 4500NO3F-2011	446676		
30417711008	**TW-30**	SM 4500NO3F-2011	446676		
30417711009	**FIELD BLANK**	SM 4500NO3F-2011	446676		
30417711011	**SW-1**	SM 4500NO3F-2011	446676		
30417711012	**SW-2**	SM 4500NO3F-2011	446676		
30417711013	**SW-3**	SM 4500NO3F-2011	446676		
30417711001	**TW-2**	EPA 9038	447357		
30417711002	**TW-2A**	EPA 9038	447357		
30417711003	**TW-3**	EPA 9038	447357		
30417711004	**TW-3A**	EPA 9038	447357		
30417711005	**TW-4**	EPA 9038	447357		
30417711006	**TW-4B**	EPA 9038	447357		
30417711007	**TW-27**	EPA 9038	447357		
30417711008	**TW-30**	EPA 9038	447357		
30417711009	**FIELD BLANK**	EPA 9038	447357		
30417711011	**SW-1**	EPA 9038	447357		
30417711012	**SW-2**	EPA 9038	447357		
30417711013	**SW-3**	EPA 9038	447357		
30417711001	**TW-2**	SM 4500NO2B-2011	445503		
30417711002	**TW-2A**	SM 4500NO2B-2011	445503		
30417711003	**TW-3**	SM 4500NO2B-2011	445503		
30417711004	**TW-3A**	SM 4500NO2B-2011	445503		
30417711005	**TW-4**	SM 4500NO2B-2011	445503		
30417711006	**TW-4B**	SM 4500NO2B-2011	445503		
30417711007	**TW-27**	SM 4500NO2B-2011	445503		
30417711008	**TW-30**	SM 4500NO2B-2011	445503		
30417711009	**FIELD BLANK**	SM 4500NO2B-2011	445503		
30417711011	**SW-1**	SM 4500NO2B-2011	445503		
30417711012	**SW-2**	SM 4500NO2B-2011	445503		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2021
Pace Project No.: 30417711

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30417711013	**SW-3**	SM 4500NO2B-2011	445503		

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

WO# : 30417711

30417711

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - SPRING 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260 (1)	TOTAL METALS (2)	TOTAL + DISS METALS (3)	ALKALINITY, TDS	HARDNESS, Cl	AMMONIA	NITRATE	SO_4, COD				
1	TW-2	7	4.27.21	1025	✓		GW	✓	✓	✓	✓	✓	✓	✓	✓				001
2	TW-2A	↓	↓	950	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓				002
3	TW-3			1105															003
4	TW-3A			1140															004
5	TW-4			1300															005
6	TW-4B			1330															006
7	TW-27			1215															007
8	TW-30			1415			↓												008
9	FIELD BLANK	↓		1515			QA		↓	↓	↓	↓	↓	↓	↓				009
10	TRIP BLANK	2	↓	—	↓		QA	↓											010
11																			
12																			

	Signature	Date	Time	Comments
Relinquished by	[illegible]	4.27.21	1940	(1) PACE NAT'L - VOCs - SEE ATTACHED LIST
Received by	[illegible] / PACE	4.27.21	1940	(2) Sb, As, Ba, Be, Cd, Cr, Co, Cu, Hg, Pb, Ni, Se, Ag, Tl, V, Zn
Relinquished by	[illegible] / PACE	4/27/21	1920	(3) Ca, Fe, Mg, Mn, K, Na
Received by	RDS PACE	4-27-21	1930	
Relinquished by	RDS PACE	4-27-21	2230	PACE - 6-BULK METALS + WET CHEM
Received by	Marina Ulm	4-27-2021	2230	LEVEL 2 REPORT

Cooler Temp on Arrival: 3.8 / 3.7 Deg. C

Rev. Aug. 2018

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - SPRING 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260 (1)	TOTAL METALS (2)	ALKALINITY, TDS	HARDNESS, Cl	AMMONIA	NITRATE	SO4, COD					
1	SW-1	6	4.27.21	1430	✓		SW	✓	✓	✓	✓	✓	✓	✓					
2	SW-2	6	↓	1500	✓		↓	↓	↓	↓	↓	↓	↓	↓					
3	SW-3	6	↓	1445	✓		↓	↓	↓	↓	↓	↓	↓	↓					
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

011
012
013

	Signature	Date	Time	Comments
Relinquished by	N Brown	4.27.21	1540	(1) PACE NATL - VOCs - SEE ATTACHED LIST
Received by	PACE	4.27.21	1540	(2) Sb, As, Ba, Be, Cd, Cr, Co, Cu, Hg, Pb, Ni, Se, Ag, Tl,
Relinquished by	PACE	4-27-21	1920	V, ZN, Ca, Fe, Mg, Mn, K, Na
Received by	RDS PACE	4-27-21	1930	
Relinquished by	RDS PACE	4-27-21	2230	PACE - G - BULK - METALS & WET CHEM
Received by	Marcus J (Jay)	4-27-2021	2230	LEVEL 2 REPORT

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

30417711

TABLE 2-2

APPENDIX I
EPA METHOD 8260 - VOLATILE ORGANIC COMPOUNDS AND DETECTION LIMITS

Millersville Landfill, Anne Arundel County, MD

Parameter	PQL (ppb)	Parameter	PQL (ppb)
Acetone	5.0	cis-1,2-Dichloroethene	1.0
Acrylonitrile	5.0	trans-1,2-Dichloroethene	1.0
Benzene	1.0	Dichlorofluoromethane*	1.0
Bromochloromethane	1.0	Methylene chloride	1.0
Bromodichloromethane	1.0	1,2-Dichloropropane	1.0
Bromoform	1.0	trans-1,3-Dichloropropene	1.0
Bromomethane	1.0	cis-1,3-Dichloropropene	1.0
2-Butanone	5.0	Ethylbenzene	1.0
Carbon disulfide	1.0	2-Hexanone	5.0
Carbon tetrachloride	1.0	Iodomethane	1.0
Chlorobenzene	1.0	4-Methyl-2-pentanone	5.0
Chloroethane	1.0	Styrene	1.0
Chloroform	1.0	1,1,1,2-Tetrachloroethane	1.0
Chloromethane	1.0	1,1,2,2-Tetrachloroethane	1.0
Dibromochloromethane	1.0	Tetrachloroethene	1.0
1,2-Dibromo-3-chloropropane (DBCP)	1.0	Toluene	1.0
1,2 - Dibromoethane (EDB)	1.0	1,1,1-Trichloroethane	1.0
Dibromomethane	1.0	1,1,2-Trichloroethane	1.0
1,2 - Dichlorobenzene	1.0	Trichloroethene	1.0
1,4 - Dichlorobenzene	1.0	Trichloroflouromethane	1.0
trans-1,4-dichloro-2-butene	1.0	1,2,3-Trichloropropane	1.0
Dichlorodifluoromethane*	1.0	Vinyl acetate	1.0
1,1-Dichloroethane	1.0	Vinyl chloride	1.0
1,2-Dichloroethane	1.0	o-Xylene	1.0
1,1-Dichloroethene	1.0	m+p-Xylenes	1.0

NOTES: 1) PQL = Practical quantitation limit d: 8260-1dl.doc
2) * = Additional compounds not included on Appendix I list.

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EMA

Project # 30417711

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label MLL
LIMS Login MLL

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 11 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 38/37 °C Correction Factor: 0 °C Final Temp: 38/37 °C

Temp should be above freezing to 6°C

pH paper Lot# 100 0401 Date and Initials of person examining contents: MLL 4/27/2021

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4. no Signature on COC
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):	✓			7.
Rush Turn Around Time Requested:	✓			8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.
All containers meet method preservation requirements.	✓			Initial when completed MLL / Date/time of preservation / Lot # of added preservative
Headspace in VOA Vials (>6mm):		✓		17.
Trip Blank Present: / Trip Blank Custody Seals Present	✓ ✓			18.
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: / Date: / Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Internal Transfer Chain of Custody

☐ Samples Pre-Logged into eCOC.

State Of Origin: MD
Cert. Needed: [X] Yes ☐ No

Pace Analytical®
www.pacelabs.com

Workorder: 30417711 **Workorder Name:** MLF-SPRING 2021 **Owner Received Date:** 4/27/2021 **Results Requested By:** 5/12/2021

Report To

Samantha Bayura
Pace Analytical Pittsburgh
1638 Roseytown Road
Suites 2,3,4
Greensburg, PA 15601
Phone (724)850-5622

Subcontract To

Pace National
12065 Lebanon Rd
Mt. Juliet, TN 37122
Phone (615) 758-5858

U1345734
E007

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HCL						Requested Analysis: VOC by 8260												LAB USE ONLY
1	TW-2	PS	4/27/2021 10:25	30417711001	Water	1						X												-01
2	TW-2A	PS	4/27/2021 09:50	30417711002	Water	1						X												-02
3	TW-3	PS	4/27/2021 11:05	30417711003	Water	1						X												-03
4	TW-3A	PS	4/27/2021 11:40	30417711004	Water	1						X												-04
5	TW-4	PS	4/27/2021 13:00	30417711005	Water	1						X												-05
6	TW-4B	PS	4/27/2021 13:30	30417711006	Water	1						X												-06
7	TW-27	PS	4/27/2021 12:15	30417711007	Water	1						X												-07
8	TW-30	PS	4/27/2021 14:15	30417711008	Water	1						X												-08
9	FIELD BLANK	PS	4/27/2021 15:15	30417711009	Water	1						X												-09
10	TRIP BLANK	PS	4/27/2021 00:01	30417711010	Water	1						X												-10
11	SW-1	PS	4/27/2021 14:30	30417711011	Water	1						X												-11
12	SW-2	PS	4/27/2021 15:30	30417711012	Water	1						X												-12
13	SW-3	PS	4/27/2021 14:45	30417711013	Water	1						X												-13

Sample Receipt Checklist

COC Seal Present/Intact: X Y N
COC Signed/Accurate: X Y N
Bottles arrive intact: X Y N
Correct bottles used: X Y N
Sufficient volume sent: X Y N
RAD Screen <0.5 mR/hr: Y N

If Applicable
VOA Zero Headspace: Y N
Pres.Correct/Check: Y N

mGA
4.6-.1=4.5

9242 2961 0723

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	[illegible]	4/23/21 1700			List attached to COC Report in ug/L
2			[illegible]		
3				4-23-21 1500	

Cooler Temperature on Receipt _____°C	Custody Seal Y or N	Received on Ice Y or N	Samples Intact Y or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.*
This chain of custody is considered complete as is since this information is available in the owner laboratory.

L/345734

30417711

TABLE 2-2

APPENDIX I
EPA METHOD 8260 - VOLATILE ORGANIC COMPOUNDS AND DETECTION LIMITS

Millersville Landfill, Anne Arundel County, MD

Parameter	PQL (ppb)	Parameter	PQL (ppb)
Acetone	5.0	cis-1,2-Dichloroethene	1.0
Acrylonitrile	5.0	trans-1,2-Dichloroethene	1.0
Benzene	1.0	Dichlorofluoromethane*	1.0
Bromochloromethane	1.0	Methylene chloride	1.0
Bromodichloromethane	1.0	1,2-Dichloropropane	1.0
Bromoform	1.0	trans-1,3-Dichloropropene	1.0
Bromomethane	1.0	cis-1,3-Dichloropropene	1.0
2-Butanone	5.0	Ethylbenzene	1.0
Carbon disulfide	1.0	2-Hexanone	5.0
Carbon tetrachloride	1.0	Iodomethane	1.0
Chlorobenzene	1.0	4-Methyl-2-pentanone	5.0
Chloroethane	1.0	Styrene	1.0
Chloroform	1.0	1,1,1,2-Tetrachloroethane	1.0
Chloromethane	1.0	1,1,2,2-Tetrachloroethane	1.0
Dibromochloromethane	1.0	Tetrachloroethene	1.0
1,2-Dibromo-3-chloropropane (DBCP)	1.0	Toluene	1.0
1,2 - Dibromoethane (EDB)	1.0	1,1,1-Trichloroethane	1.0
Dibromomethane	1.0	1,1,2-Trichloroethane	1.0
1,2 - Dichlorobenzene	1.0	Trichloroethene	1.0
1,4 - Dichlorobenzene	1.0	Trichloroflouromethane	1.0
trans-1,4-dichloro-2-butene	1.0	1,2,3-Trichloropropane	1.0
Dichlorodifluoromethane*	1.0	Vinyl acetate	1.0
1,1-Dichloroethane	1.0	Vinyl chloride	1.0
1,2-Dichloroethane	1.0	o-Xylene	1.0
1,1-Dichloroethene	1.0	m+p-Xylenes	1.0

NOTES: 1) PQL = Practical quantitation limit d: 8260-1dl.doc
2) * = Additional compounds not included on Appendix I list.

U/345-734

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EMA

Project # 30417711

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label MLL
LIMS Login MLL

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 11 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 38/37 °C Correction Factor: 0 °C Final Temp: 38/37 °C

Temp should be above freezing to 6°C

pH paper Lot# 1000401 Date and Initials of person examining contents: MLL 4/27/2021

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4. no signature on coc
Sample Labels match COC: -Includes date/time/ID Matrix: WI	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):	✓			7.
Rush Turn Around Time Requested:	✓			8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.
All containers meet method preservation requirements.	✓			Initial when completed MLL Date/time of preservation Lot # of added preservative
Headspace in VOA Vials (>6mm):		✓		17.
Trip Blank Present:	✓			18.
Trip Blank Custody Seals Present	✓			
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: Date: Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

L1345774

WO#: 30417711

30417711

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - SPRING 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260 (1)	TOTAL METALS (2)	TOTAL + DISS METALS (3)	ALKALINITY, TDS	HARDNESS, Cl	AMMONIA	NITRATE	SO4, COD				
1	TW-2	7	4.27.21	1025	✓		GW	✓	✓	✓	✓	✓	✓	✓	✓				001
2	TW-2A			950															002
3	TW-3			1105															003
4	TW-3A			1140															004
5	TW-4			1300															005
6	TW-4B			1330															006
7	TW-27			1215															007
8	TW-30			1415															008
9	FIELD BLANK			1515			QA												009
10	TRIP BLANK	2		—			QA												010
11																			
12																			

	Signature	Date	Time
Relinquished by	NA Brown	4.27.21	1940
Received by	PACE	4.27.21	1940
Relinquished by	PACE	4/27/21	1920
Received by	RDS PACE	4-27-21	1930
Relinquished by	RDS PACE	4-27-21	2230
Received by	Marian Ulm	4-27-2021	2230

Comments

(1) PACE NAT'L - VOCs - SEE ATTACHED LIST
(2) Sb, As, Ba, Be, Cd, Cr, Co, Cu, Hg, Pb, Ni, Se, Ag, Tl, V, Zn
(3) Ca, Fe, Mg, Mn, K, Na

PACE - 6-BULK METALS + WET CHEM
LEVEL 2 REPORT

Cooler Temp on Arrival: 3.8/3.7 Deg. C

Rev. Aug. 2018

L1345704
2 of 2 SW

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - SPRING 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260 (1)	TOTAL METALS (2)	ALKALINITY, TDS	HARDNESS, Cl	AMMONIA	NITRATE	SO4, COD						
1	SW-1	6	4.27.21	1430	✓		SW	✓	✓	✓	✓	✓	✓	✓						011
2	SW-2	6	↓	1500	✓		↓	↓	↓	↓	↓	↓	↓	↓						OR
3	SW-3	6	↓	1445	✓		↓	↓	↓	↓	↓	↓	↓	↓						013
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

	Signature	Date	Time	Comments
Relinquished by	[signature]	4.27.21	1540	(1) PACE NATL - VOCs - SEE ATTACHED LIST
Received by	[signature] PACE	4.27.21	1540	(2) Sb, As, Ba, Be, Cd, Cr, Co, Cu, Hg, Pb, Ni, Se, Ag, Tl,
Relinquished by	[signature] PACE	4-27-21	1920	V, ZN, Ca, Fe, Mg, Mn, K, Na
Received by	KDS PACE	4-27-21	1930	
Relinquished by	KDS PACE	4-27-21	2230	PACE - G - BULK - METALS & WET CHEM
Received by	[signature]	4-27-2021	2230	LEVEL 2 REPORT

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

304177 11

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

May 19, 2021

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on April 21, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace National - Mt. Juliet
- Pace Analytical Services - Greensburg

Revision 1 - This report replaces the May 7, 2021 report. This project was revised on May 19, 2021 to rerun alkalinity for samples TW-25 and Dup-2. (Greensburg, PA)

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Samantha Bayura

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services National

12065 Lebanon Road, Mt. Juliet, TN 37122
Alabama Certification #: 40660
Alaska Certification 17-026
Arizona Certification #: AZ0612
Arkansas Certification #: 88-0469
California Certification #: 2932
Canada Certification #: 1461.01
Colorado Certification #: TN00003
Connecticut Certification #: PH-0197
DOD Certification: #1461.01
EPA# TN00003
Florida Certification #: E87487
Georgia DW Certification #: 923
Georgia Certification: NELAP
Idaho Certification #: TN00003
Illinois Certification #: 200008
Indiana Certification #: C-TN-01
Iowa Certification #: 364
Kansas Certification #: E-10277
Kentucky UST Certification #: 16
Kentucky Certification #: 90010
Louisiana Certification #: AI30792
Louisiana DW Certification #: LA180010
Maine Certification #: TN0002
Maryland Certification #: 324
Massachusetts Certification #: M-TN003
Michigan Certification #: 9958
Minnesota Certification #: 047-999-395
Mississippi Certification #: TN00003
Missouri Certification #: 340
Montana Certification #: CERT0086
Nebraska Certification #: NE-OS-15-05
Nevada Certification #: TN-03-2002-34
New Hampshire Certification #: 2975
New Jersey Certification #: TN002
New Mexico DW Certification
New York Certification #: 11742
North Carolina Aquatic Toxicity Certification #: 41
North Carolina Drinking Water Certification #: 21704
North Carolina Environmental Certificate #: 375

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Greensburg, PA 15601
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CERTIFICATIONS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Pace Analytical Services National

North Dakota Certification #: R-140
Ohio VAP Certification #: CL0069
Oklahoma Certification #: 9915
Oregon Certification #: TN200002
Pennsylvania Certification #: 68-02979
Rhode Island Certification #: LAO00356
South Carolina Certification #: 84004
South Dakota Certification
Tennessee DW/Chem/Micro Certification #: 2006
Texas Certification #: T 104704245-17-14
Texas Mold Certification #: LAB0152
USDA Soil Permit #: P330-15-00234
Utah Certification #: TN00003
Virginia Certification #: VT2006
Vermont Dept. of Health: ID# VT-2006
Virginia Certification #: 460132
Washington Certification #: C847
West Virginia Certification #: 233
Wisconsin Certification #: 998093910
Wyoming UST Certification #: via A2LA 2926.01
A2LA-ISO 17025 Certification #: 1461.01
A2LA-ISO 17025 Certification #: 1461.02
AIHA-LAP/LLC EMLAP Certification #:100789

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Greensburg, PA 15601
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SAMPLE SUMMARY

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30416762001	**TW-6A**	Water	04/21/21 10:10	04/21/21 22:15
30416762002	**TW-6B**	Water	04/21/21 10:45	04/21/21 22:15
30416762003	**TW-14B**	Water	04/21/21 11:35	04/21/21 22:15
30416762004	**TW-18**	Water	04/21/21 13:50	04/21/21 22:15
30416762005	**TW-19**	Water	04/21/21 14:30	04/21/21 22:15
30416762006	**TW-20R**	Water	04/21/21 15:10	04/21/21 22:15
30416762007	**TW-24A**	Water	04/21/21 09:10	04/21/21 22:15
30416762008	**TW-25**	Water	04/21/21 12:15	04/21/21 22:15
30416762009	**DUP-1**	Water	04/21/21 00:01	04/21/21 22:15
30416762010	**DUP-2**	Water	04/21/21 00:01	04/21/21 22:15
30416762011	**TRIP BLANK**	Water	04/21/21 00:01	04/21/21 22:15

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30416762001	**TW-6A**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	ADM	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30416762002	**TW-6B**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	ADM	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30416762003	**TW-14B**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	ADM	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30416762004	**TW-18**	EPA 6010B	CTS	22	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	ADM	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30416762005	**TW-19**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	ADM	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30416762006	**TW-20R**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	ADM	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500CIE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30416762007	**TW-24A**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	ADM	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500ClE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30416762008	**TW-25**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	ADM	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500ClE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30416762009	**DUP-1**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA
		EPA 8260B	ADM	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500ClE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30416762010	**DUP-2**	EPA 6010B	CTS	22	PASI-PA
		EPA 6010B	CTS	6	PASI-PA
		EPA 7470A	EMM	1	PASI-PA

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8260B	ADM	54	PAN
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500ClE-2011	JLM	1	PASI-PA
		SM 4500NO3F-2011	JLM	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2B-2011	PAS	1	PASI-PA
30416762011	**TRIP BLANK**	EPA 8260B	ADM	54	PAN

PAN = Pace National - Mt. Juliet
PASI-PA = Pace Analytical Services - Greensburg

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Method: **EPA 6010B**
Description: 6010 MET ICP
Client: Environmental Monitoring and Assessment LLC
Date: May 19, 2021

General Information:
10 samples were analyzed for EPA 6010B by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 445444

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30416762001,30416771008

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2150202)
  - Calcium
- MSD (Lab ID: 2150203)
  - Calcium

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 445444

- DUP-1 (Lab ID: 30416762009)
  - Chromium

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PROJECT NARRATIVE

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Method: **EPA 6010B**
Description: 6010 MET ICP
Client: Environmental Monitoring and Assessment LLC
Date: May 19, 2021

Analyte Comments:

QC Batch: 445444

- DUP-2 (Lab ID: 30416762010)
  - Chromium
- TW-14B (Lab ID: 30416762003)
  - Barium
  - Chromium
- TW-19 (Lab ID: 30416762005)
  - Chromium
- TW-20R (Lab ID: 30416762006)
  - Chromium
- TW-24A (Lab ID: 30416762007)
  - Chromium
- TW-25 (Lab ID: 30416762008)
  - Chromium
- TW-6A (Lab ID: 30416762001)
  - Chromium
- TW-6B (Lab ID: 30416762002)
  - Barium
  - Chromium

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PROJECT NARRATIVE

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Method: **EPA 6010B**
Description: 6010 MET ICP, Dissolved
Client: Environmental Monitoring and Assessment LLC
Date: May 19, 2021

General Information:
10 samples were analyzed for EPA 6010B by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 445201

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30416762001,30417011001

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2149260)
  - Calcium, Dissolved

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: May 19, 2021

General Information:
10 samples were analyzed for EPA 7470A by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 445139

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30416762001,30416856001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2148991)
  - Mercury

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Method: **EPA 8260B**
Description: VOA (GC/MS) 8260B
Client: Environmental Monitoring and Assessment LLC
Date: May 19, 2021

General Information:
11 samples were analyzed for EPA 8260B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: May 19, 2021

General Information:
10 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the EPA method holding time.
- DUP-2 (Lab ID: 30416762010)
- TW-25 (Lab ID: 30416762008)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 446532

2c: Alkalinity TV: -1 mg/L
- TW-14B (Lab ID: 30416762003)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-18 (Lab ID: 30416762004)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-6B (Lab ID: 30416762002)
  - Alkalinity,Total (CaCO3 pH4.5)

3c: Alkalinity TV: 4 mg/L
- TW-25 (Lab ID: 30416762008)
  - Alkalinity,Total (CaCO3 pH4.5)

QC Batch: 448464

1c: ALK TV: 0 mg/L
- DUP-2 (Lab ID: 30416762010)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-25 (Lab ID: 30416762008)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Method: **SM 2540C-2011**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: May 19, 2021

General Information:
10 samples were analyzed for SM 2540C-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: 444899

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.
- DUP (Lab ID: 2147743)
  - Total Dissolved Solids

QC Batch: 445062

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.
- DUP (Lab ID: 2148498)
  - Total Dissolved Solids
- DUP (Lab ID: 2148499)
  - Total Dissolved Solids

Additional Comments:

Analyte Comments:

QC Batch: 445062

4c: Sample volume was reduced so that the sample could be within an acceptable range
- DUP (Lab ID: 2148499)
  - Total Dissolved Solids

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PROJECT NARRATIVE

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: May 19, 2021

General Information:
10 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 446672

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30416762001,30416855001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2155743)
  - Ammonia, Distilled
- MSD (Lab ID: 2155744)
  - Ammonia, Distilled

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: May 19, 2021

General Information:
10 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Method: **SM 4500ClE-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: May 19, 2021

General Information:
10 samples were analyzed for SM 4500ClE-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Method: **SM 4500NO3F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: May 19, 2021

General Information:
10 samples were analyzed for SM 4500NO3F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: May 19, 2021

General Information:
10 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 445663

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30416534001,30416762001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2151179)
  - Sulfate
- MSD (Lab ID: 2151180)
  - Sulfate

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Method: **SM 4500NO2B-2011**
Description: SM4500NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: May 19, 2021

General Information:
10 samples were analyzed for SM 4500NO2B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: TW-6A **Lab ID: 30416762001** Collected: 04/21/21 10:10 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/28/21 16:21	04/30/21 11:10	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/28/21 16:21	04/30/21 11:10	7440-38-2	
Barium	**0.027**	mg/L	0.010	0.00068	1	04/28/21 16:21	04/30/21 11:10	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00017	1	04/28/21 16:21	04/30/21 11:10	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/28/21 16:21	04/30/21 11:10	7440-43-9	
Calcium	**48.2**	mg/L	1.0	0.10	1	04/28/21 16:21	04/30/21 11:10	7440-70-2	ML
Chromium	**0.0015J**	mg/L	0.0050	0.00035	1	04/28/21 16:21	04/30/21 11:10	7440-47-3	
Cobalt	**0.0015J**	mg/L	0.0050	0.00053	1	04/28/21 16:21	04/30/21 11:10	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0027	1	04/28/21 16:21	04/30/21 11:10	7440-50-8	
Iron	**0.67**	mg/L	0.070	0.041	1	04/28/21 16:21	04/30/21 11:10	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/28/21 16:21	04/30/21 11:10	7439-92-1	
Magnesium	**5.1**	mg/L	0.20	0.028	1	04/28/21 16:21	04/30/21 11:10	7439-95-4	
Manganese	**0.0050J**	mg/L	0.0050	0.0012	1	04/28/21 16:21	04/30/21 11:10	7439-96-5	
Nickel	**0.010 U**	mg/L	0.010	0.0015	1	04/28/21 16:21	04/30/21 11:10	7440-02-0	
Potassium	**5.0**	mg/L	0.50	0.072	1	04/28/21 16:21	04/30/21 11:10	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/28/21 16:21	04/30/21 11:10	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/28/21 16:21	04/30/21 11:10	7440-22-4	
Sodium	**2.3**	mg/L	1.0	0.42	1	04/28/21 16:21	04/30/21 11:10	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/28/21 16:21	04/30/21 11:10	7440-28-0	
Total Hardness by SM2340B-2011	**141**	mg/L	3.3	0.37	1	04/28/21 16:21	04/30/21 11:10		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/28/21 16:21	04/30/21 11:10	7440-62-2	
Zinc	**0.010 U**	mg/L	0.010	0.0024	1	04/28/21 16:21	04/30/21 11:10	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**48.4**	mg/L	1.0	0.10	1	04/27/21 15:58	04/29/21 15:49	7440-70-2	MH
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	04/27/21 15:58	04/29/21 15:49	7439-89-6	
Magnesium, Dissolved	**5.0**	mg/L	0.20	0.028	1	04/27/21 15:58	04/29/21 15:49	7439-95-4	
Manganese, Dissolved	**0.0050 U**	mg/L	0.0050	0.0012	1	04/27/21 15:58	04/29/21 15:49	7439-96-5	
Potassium, Dissolved	**5.0**	mg/L	0.50	0.072	1	04/27/21 15:58	04/29/21 15:49	7440-09-7	
Sodium, Dissolved	**2.4**	mg/L	1.0	0.42	1	04/27/21 15:58	04/29/21 15:49	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	04/27/21 12:30	04/27/21 22:50	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/28/21 06:13	04/28/21 06:13	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/28/21 06:13	04/28/21 06:13	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/28/21 06:13	04/28/21 06:13	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/28/21 06:13	04/28/21 06:13	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/28/21 06:13	04/28/21 06:13	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/28/21 06:13	04/28/21 06:13	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: TW-6A **Lab ID: 30416762001** Collected: 04/21/21 10:10 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/28/21 06:13	04/28/21 06:13	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/28/21 06:13	04/28/21 06:13	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/28/21 06:13	04/28/21 06:13	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/28/21 06:13	04/28/21 06:13	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/28/21 06:13	04/28/21 06:13	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/28/21 06:13	04/28/21 06:13	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	04/28/21 06:13	04/28/21 06:13	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/28/21 06:13	04/28/21 06:13	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/28/21 06:13	04/28/21 06:13	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/28/21 06:13	04/28/21 06:13	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/28/21 06:13	04/28/21 06:13	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/28/21 06:13	04/28/21 06:13	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/28/21 06:13	04/28/21 06:13	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/28/21 06:13	04/28/21 06:13	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	04/28/21 06:13	04/28/21 06:13	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	04/28/21 06:13	04/28/21 06:13	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	04/28/21 06:13	04/28/21 06:13	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/28/21 06:13	04/28/21 06:13	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/28/21 06:13	04/28/21 06:13	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/28/21 06:13	04/28/21 06:13	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 06:13	04/28/21 06:13	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 06:13	04/28/21 06:13	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/28/21 06:13	04/28/21 06:13	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/28/21 06:13	04/28/21 06:13	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/28/21 06:13	04/28/21 06:13	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/28/21 06:13	04/28/21 06:13	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/28/21 06:13	04/28/21 06:13	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/28/21 06:13	04/28/21 06:13	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	04/28/21 06:13	04/28/21 06:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/28/21 06:13	04/28/21 06:13	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/28/21 06:13	04/28/21 06:13	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/28/21 06:13	04/28/21 06:13	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/28/21 06:13	04/28/21 06:13	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/28/21 06:13	04/28/21 06:13	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/28/21 06:13	04/28/21 06:13	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/28/21 06:13	04/28/21 06:13	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 06:13	04/28/21 06:13	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/28/21 06:13	04/28/21 06:13	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/28/21 06:13	04/28/21 06:13	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/28/21 06:13	04/28/21 06:13	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/28/21 06:13	04/28/21 06:13	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/28/21 06:13	04/28/21 06:13	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/28/21 06:13	04/28/21 06:13	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/28/21 06:13	04/28/21 06:13	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/28/21 06:13	04/28/21 06:13	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: TW-6A **Lab ID: 30416762001** Collected: 04/21/21 10:10 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	109	%	80.0-120		1	04/28/21 06:13	04/28/21 06:13	2037-26-5	
4-Bromofluorobenzene (S)	98.1	%	77.0-126		1	04/28/21 06:13	04/28/21 06:13	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70.0-130		1	04/28/21 06:13	04/28/21 06:13	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**120**	mg/L	10.0	1.0	1		05/05/21 14:15		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**170**	mg/L	10.0	10.0	1		04/26/21 14:54		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/06/21 08:55	05/06/21 11:30		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**12.6J**	mg/L	25.0	4.7	1	04/27/21 11:49	04/27/21 14:48		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**2.7J**	mg/L	3.0	0.67	1		05/05/21 14:01	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10**	mg/L	0.10	0.024	1		04/29/21 15:51	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10**	mg/L	0.10	0.024	1		04/29/21 15:51		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**30.1**	mg/L	10.0	4.7	1		04/30/21 16:54	14808-79-8	ML
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/21/21 23:38	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: TW-6B **Lab ID: 30416762002** Collected: 04/21/21 10:45 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/28/21 16:21	04/30/21 11:19	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/28/21 16:21	04/30/21 11:19	7440-38-2	
Barium	**0.0070J**	mg/L	0.010	0.00068	1	04/28/21 16:21	04/30/21 11:19	7440-39-3	
Beryllium	**0.00039J**	mg/L	0.0010	0.00017	1	04/28/21 16:21	04/30/21 11:19	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/28/21 16:21	04/30/21 11:19	7440-43-9	
Calcium	**0.52J**	mg/L	1.0	0.10	1	04/28/21 16:21	04/30/21 11:19	7440-70-2	
Chromium	**0.0033J**	mg/L	0.0050	0.00035	1	04/28/21 16:21	04/30/21 11:19	7440-47-3	
Cobalt	**0.0055**	mg/L	0.0050	0.00053	1	04/28/21 16:21	04/30/21 11:19	7440-48-4	
Copper	**0.018**	mg/L	0.0050	0.0027	1	04/28/21 16:21	04/30/21 11:19	7440-50-8	
Iron	**0.070 U**	mg/L	0.070	0.041	1	04/28/21 16:21	04/30/21 11:19	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/28/21 16:21	04/30/21 11:19	7439-92-1	
Magnesium	**0.24**	mg/L	0.20	0.028	1	04/28/21 16:21	04/30/21 11:19	7439-95-4	
Manganese	**0.0067**	mg/L	0.0050	0.0012	1	04/28/21 16:21	04/30/21 11:19	7439-96-5	
Nickel	**0.0094J**	mg/L	0.010	0.0015	1	04/28/21 16:21	04/30/21 11:19	7440-02-0	
Potassium	**0.52**	mg/L	0.50	0.072	1	04/28/21 16:21	04/30/21 11:19	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/28/21 16:21	04/30/21 11:19	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/28/21 16:21	04/30/21 11:19	7440-22-4	
Sodium	**1.5**	mg/L	1.0	0.42	1	04/28/21 16:21	04/30/21 11:19	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/28/21 16:21	04/30/21 11:19	7440-28-0	
Total Hardness by SM2340B-2011	**2.3J**	mg/L	3.3	0.37	1	04/28/21 16:21	04/30/21 11:19		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/28/21 16:21	04/30/21 11:19	7440-62-2	
Zinc	**0.0078J**	mg/L	0.010	0.0024	1	04/28/21 16:21	04/30/21 11:19	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**0.54J**	mg/L	1.0	0.10	1	04/27/21 15:58	04/29/21 15:58	7440-70-2	
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	04/27/21 15:58	04/29/21 15:58	7439-89-6	
Magnesium, Dissolved	**0.24**	mg/L	0.20	0.028	1	04/27/21 15:58	04/29/21 15:58	7439-95-4	
Manganese, Dissolved	**0.0061**	mg/L	0.0050	0.0012	1	04/27/21 15:58	04/29/21 15:58	7439-96-5	
Potassium, Dissolved	**0.53**	mg/L	0.50	0.072	1	04/27/21 15:58	04/29/21 15:58	7440-09-7	
Sodium, Dissolved	**1.8**	mg/L	1.0	0.42	1	04/27/21 15:58	04/29/21 15:58	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	04/27/21 12:30	04/27/21 22:55	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/28/21 06:33	04/28/21 06:33	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/28/21 06:33	04/28/21 06:33	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/28/21 06:33	04/28/21 06:33	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/28/21 06:33	04/28/21 06:33	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/28/21 06:33	04/28/21 06:33	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/28/21 06:33	04/28/21 06:33	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: TW-6B **Lab ID: 30416762002** Collected: 04/21/21 10:45 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/28/21 06:33	04/28/21 06:33	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/28/21 06:33	04/28/21 06:33	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/28/21 06:33	04/28/21 06:33	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/28/21 06:33	04/28/21 06:33	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/28/21 06:33	04/28/21 06:33	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/28/21 06:33	04/28/21 06:33	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	04/28/21 06:33	04/28/21 06:33	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/28/21 06:33	04/28/21 06:33	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/28/21 06:33	04/28/21 06:33	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/28/21 06:33	04/28/21 06:33	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/28/21 06:33	04/28/21 06:33	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/28/21 06:33	04/28/21 06:33	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/28/21 06:33	04/28/21 06:33	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/28/21 06:33	04/28/21 06:33	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	04/28/21 06:33	04/28/21 06:33	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	04/28/21 06:33	04/28/21 06:33	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	04/28/21 06:33	04/28/21 06:33	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/28/21 06:33	04/28/21 06:33	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/28/21 06:33	04/28/21 06:33	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/28/21 06:33	04/28/21 06:33	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 06:33	04/28/21 06:33	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 06:33	04/28/21 06:33	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/28/21 06:33	04/28/21 06:33	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/28/21 06:33	04/28/21 06:33	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/28/21 06:33	04/28/21 06:33	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/28/21 06:33	04/28/21 06:33	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/28/21 06:33	04/28/21 06:33	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/28/21 06:33	04/28/21 06:33	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	04/28/21 06:33	04/28/21 06:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/28/21 06:33	04/28/21 06:33	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/28/21 06:33	04/28/21 06:33	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/28/21 06:33	04/28/21 06:33	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/28/21 06:33	04/28/21 06:33	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/28/21 06:33	04/28/21 06:33	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/28/21 06:33	04/28/21 06:33	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/28/21 06:33	04/28/21 06:33	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 06:33	04/28/21 06:33	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/28/21 06:33	04/28/21 06:33	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/28/21 06:33	04/28/21 06:33	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/28/21 06:33	04/28/21 06:33	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/28/21 06:33	04/28/21 06:33	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/28/21 06:33	04/28/21 06:33	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/28/21 06:33	04/28/21 06:33	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/28/21 06:33	04/28/21 06:33	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/28/21 06:33	04/28/21 06:33	179601-23-1	

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(724)850-5600

ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: TW-6B **Lab ID: 30416762002** Collected: 04/21/21 10:45 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	111	%	80.0-120		1	04/28/21 06:33	04/28/21 06:33	2037-26-5	
4-Bromofluorobenzene (S)	96.1	%	77.0-126		1	04/28/21 06:33	04/28/21 06:33	460-00-4	
1,2-Dichloroethane-d4 (S)	97.3	%	70.0-130		1	04/28/21 06:33	04/28/21 06:33	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/05/21 14:16		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**17.0**	mg/L	10.0	10.0	1		04/26/21 14:54		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/06/21 08:55	05/06/21 11:36		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/27/21 11:49	04/27/21 14:49		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**3.1**	mg/L	3.0	0.67	1		05/05/21 14:02	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.34**	mg/L	0.10	0.024	1		04/29/21 15:53	14797-55-8	
Nitrogen, NO2 plus NO3	**0.34**	mg/L	0.10	0.024	1		04/29/21 15:53		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/30/21 16:59	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/21/21 23:40	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: TW-14B **Lab ID: 30416762003** Collected: 04/21/21 11:35 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/28/21 16:21	04/30/21 11:21	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/28/21 16:21	04/30/21 11:21	7440-38-2	
Barium	**0.0091J**	mg/L	0.010	0.00068	1	04/28/21 16:21	04/30/21 11:21	7440-39-3	
Beryllium	**0.00026J**	mg/L	0.0010	0.00017	1	04/28/21 16:21	04/30/21 11:21	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/28/21 16:21	04/30/21 11:21	7440-43-9	
Calcium	**0.49J**	mg/L	1.0	0.10	1	04/28/21 16:21	04/30/21 11:21	7440-70-2	
Chromium	**0.0029J**	mg/L	0.0050	0.00035	1	04/28/21 16:21	04/30/21 11:21	7440-47-3	
Cobalt	**0.0055**	mg/L	0.0050	0.00053	1	04/28/21 16:21	04/30/21 11:21	7440-48-4	
Copper	**0.0050J**	mg/L	0.0050	0.0027	1	04/28/21 16:21	04/30/21 11:21	7440-50-8	
Iron	**0.070 U**	mg/L	0.070	0.041	1	04/28/21 16:21	04/30/21 11:21	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/28/21 16:21	04/30/21 11:21	7439-92-1	
Magnesium	**0.23**	mg/L	0.20	0.028	1	04/28/21 16:21	04/30/21 11:21	7439-95-4	
Manganese	**0.0074**	mg/L	0.0050	0.0012	1	04/28/21 16:21	04/30/21 11:21	7439-96-5	
Nickel	**0.010**	mg/L	0.010	0.0015	1	04/28/21 16:21	04/30/21 11:21	7440-02-0	
Potassium	**0.42J**	mg/L	0.50	0.072	1	04/28/21 16:21	04/30/21 11:21	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/28/21 16:21	04/30/21 11:21	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/28/21 16:21	04/30/21 11:21	7440-22-4	
Sodium	**0.86J**	mg/L	1.0	0.42	1	04/28/21 16:21	04/30/21 11:21	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/28/21 16:21	04/30/21 11:21	7440-28-0	
Total Hardness by SM2340B-2011	**2.2J**	mg/L	3.3	0.37	1	04/28/21 16:21	04/30/21 11:21		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/28/21 16:21	04/30/21 11:21	7440-62-2	
Zinc	**0.010**	mg/L	0.010	0.0024	1	04/28/21 16:21	04/30/21 11:21	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**0.48J**	mg/L	1.0	0.10	1	04/27/21 15:58	04/29/21 16:00	7440-70-2	
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	04/27/21 15:58	04/29/21 16:00	7439-89-6	
Magnesium, Dissolved	**0.24**	mg/L	0.20	0.028	1	04/27/21 15:58	04/29/21 16:00	7439-95-4	
Manganese, Dissolved	**0.0073**	mg/L	0.0050	0.0012	1	04/27/21 15:58	04/29/21 16:00	7439-96-5	
Potassium, Dissolved	**0.41J**	mg/L	0.50	0.072	1	04/27/21 15:58	04/29/21 16:00	7440-09-7	
Sodium, Dissolved	**1.1**	mg/L	1.0	0.42	1	04/27/21 15:58	04/29/21 16:00	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	04/27/21 12:30	04/27/21 22:56	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/28/21 06:54	04/28/21 06:54	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/28/21 06:54	04/28/21 06:54	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/28/21 06:54	04/28/21 06:54	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/28/21 06:54	04/28/21 06:54	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/28/21 06:54	04/28/21 06:54	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/28/21 06:54	04/28/21 06:54	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: TW-14B **Lab ID: 30416762003** Collected: 04/21/21 11:35 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/28/21 06:54	04/28/21 06:54	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/28/21 06:54	04/28/21 06:54	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/28/21 06:54	04/28/21 06:54	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/28/21 06:54	04/28/21 06:54	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/28/21 06:54	04/28/21 06:54	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/28/21 06:54	04/28/21 06:54	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	04/28/21 06:54	04/28/21 06:54	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/28/21 06:54	04/28/21 06:54	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/28/21 06:54	04/28/21 06:54	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/28/21 06:54	04/28/21 06:54	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/28/21 06:54	04/28/21 06:54	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/28/21 06:54	04/28/21 06:54	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/28/21 06:54	04/28/21 06:54	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/28/21 06:54	04/28/21 06:54	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	04/28/21 06:54	04/28/21 06:54	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	04/28/21 06:54	04/28/21 06:54	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	04/28/21 06:54	04/28/21 06:54	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/28/21 06:54	04/28/21 06:54	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/28/21 06:54	04/28/21 06:54	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/28/21 06:54	04/28/21 06:54	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 06:54	04/28/21 06:54	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 06:54	04/28/21 06:54	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/28/21 06:54	04/28/21 06:54	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/28/21 06:54	04/28/21 06:54	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/28/21 06:54	04/28/21 06:54	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/28/21 06:54	04/28/21 06:54	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/28/21 06:54	04/28/21 06:54	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/28/21 06:54	04/28/21 06:54	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	04/28/21 06:54	04/28/21 06:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/28/21 06:54	04/28/21 06:54	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/28/21 06:54	04/28/21 06:54	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/28/21 06:54	04/28/21 06:54	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/28/21 06:54	04/28/21 06:54	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/28/21 06:54	04/28/21 06:54	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/28/21 06:54	04/28/21 06:54	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/28/21 06:54	04/28/21 06:54	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 06:54	04/28/21 06:54	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/28/21 06:54	04/28/21 06:54	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/28/21 06:54	04/28/21 06:54	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/28/21 06:54	04/28/21 06:54	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/28/21 06:54	04/28/21 06:54	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/28/21 06:54	04/28/21 06:54	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/28/21 06:54	04/28/21 06:54	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/28/21 06:54	04/28/21 06:54	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/28/21 06:54	04/28/21 06:54	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: TW-14B **Lab ID: 30416762003** Collected: 04/21/21 11:35 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	109	%	80.0-120		1	04/28/21 06:54	04/28/21 06:54	2037-26-5	
4-Bromofluorobenzene (S)	95.1	%	77.0-126		1	04/28/21 06:54	04/28/21 06:54	460-00-4	
1,2-Dichloroethane-d4 (S)	95.9	%	70.0-130		1	04/28/21 06:54	04/28/21 06:54	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/05/21 14:16		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**26.0**	mg/L	10.0	10.0	1		04/26/21 14:55		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/06/21 08:55	05/06/21 11:38		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/27/21 11:49	04/27/21 14:49		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**1.7J**	mg/L	3.0	0.67	1		05/05/21 14:03	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.32**	mg/L	0.10	0.024	1		04/29/21 15:54	14797-55-8	
Nitrogen, NO2 plus NO3	**0.32**	mg/L	0.10	0.024	1		04/29/21 15:54		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/30/21 17:01	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/21/21 23:40	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: TW-18 **Lab ID: 30416762004** Collected: 04/21/21 13:50 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/28/21 16:21	04/30/21 11:23	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/28/21 16:21	04/30/21 11:23	7440-38-2	
Barium	**0.073**	mg/L	0.010	0.00068	1	04/28/21 16:21	04/30/21 11:23	7440-39-3	
Beryllium	**0.00057J**	mg/L	0.0010	0.00017	1	04/28/21 16:21	04/30/21 11:23	7440-41-7	
Cadmium	**0.00087J**	mg/L	0.0030	0.00034	1	04/28/21 16:21	04/30/21 11:23	7440-43-9	
Calcium	**4.9**	mg/L	1.0	0.10	1	04/28/21 16:21	04/30/21 11:23	7440-70-2	
Chromium	**0.0050**	mg/L	0.0050	0.00035	1	04/28/21 16:21	04/30/21 11:23	7440-47-3	
Cobalt	**0.085**	mg/L	0.0050	0.00053	1	04/28/21 16:21	04/30/21 11:23	7440-48-4	
Copper	**0.0032J**	mg/L	0.0050	0.0027	1	04/28/21 16:21	04/30/21 11:23	7440-50-8	
Iron	**0.068J**	mg/L	0.070	0.041	1	04/28/21 16:21	04/30/21 11:23	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/28/21 16:21	04/30/21 11:23	7439-92-1	
Magnesium	**2.5**	mg/L	0.20	0.028	1	04/28/21 16:21	04/30/21 11:23	7439-95-4	
Manganese	**0.37**	mg/L	0.0050	0.0012	1	04/28/21 16:21	04/30/21 11:23	7439-96-5	
Nickel	**0.074**	mg/L	0.010	0.0015	1	04/28/21 16:21	04/30/21 11:23	7440-02-0	
Potassium	**1.3**	mg/L	0.50	0.072	1	04/28/21 16:21	04/30/21 11:23	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/28/21 16:21	04/30/21 11:23	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/28/21 16:21	04/30/21 11:23	7440-22-4	
Sodium	**3.2**	mg/L	1.0	0.42	1	04/28/21 16:21	04/30/21 11:23	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/28/21 16:21	04/30/21 11:23	7440-28-0	
Total Hardness by SM2340B-2011	**22.5**	mg/L	3.3	0.37	1	04/28/21 16:21	04/30/21 11:23		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/28/21 16:21	04/30/21 11:23	7440-62-2	
Zinc	**0.21**	mg/L	0.010	0.0024	1	04/28/21 16:21	04/30/21 11:23	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**5.6**	mg/L	1.0	0.10	1	04/27/21 15:58	04/29/21 16:02	7440-70-2	
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	04/27/21 15:58	04/29/21 16:02	7439-89-6	
Magnesium, Dissolved	**2.9**	mg/L	0.20	0.028	1	04/27/21 15:58	04/29/21 16:02	7439-95-4	
Manganese, Dissolved	**0.41**	mg/L	0.0050	0.0012	1	04/27/21 15:58	04/29/21 16:02	7439-96-5	
Potassium, Dissolved	**1.5**	mg/L	0.50	0.072	1	04/27/21 15:58	04/29/21 16:02	7440-09-7	
Sodium, Dissolved	**3.7**	mg/L	1.0	0.42	1	04/27/21 15:58	04/29/21 16:02	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	04/27/21 12:30	04/27/21 23:03	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/28/21 07:14	04/28/21 07:14	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/28/21 07:14	04/28/21 07:14	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/28/21 07:14	04/28/21 07:14	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/28/21 07:14	04/28/21 07:14	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/28/21 07:14	04/28/21 07:14	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/28/21 07:14	04/28/21 07:14	75-25-2	

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Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: TW-18 **Lab ID: 30416762004** Collected: 04/21/21 13:50 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/28/21 07:14	04/28/21 07:14	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/28/21 07:14	04/28/21 07:14	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/28/21 07:14	04/28/21 07:14	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/28/21 07:14	04/28/21 07:14	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/28/21 07:14	04/28/21 07:14	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/28/21 07:14	04/28/21 07:14	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	04/28/21 07:14	04/28/21 07:14	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/28/21 07:14	04/28/21 07:14	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/28/21 07:14	04/28/21 07:14	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/28/21 07:14	04/28/21 07:14	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/28/21 07:14	04/28/21 07:14	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/28/21 07:14	04/28/21 07:14	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/28/21 07:14	04/28/21 07:14	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/28/21 07:14	04/28/21 07:14	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	04/28/21 07:14	04/28/21 07:14	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	04/28/21 07:14	04/28/21 07:14	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	04/28/21 07:14	04/28/21 07:14	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/28/21 07:14	04/28/21 07:14	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/28/21 07:14	04/28/21 07:14	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/28/21 07:14	04/28/21 07:14	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 07:14	04/28/21 07:14	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 07:14	04/28/21 07:14	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/28/21 07:14	04/28/21 07:14	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/28/21 07:14	04/28/21 07:14	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/28/21 07:14	04/28/21 07:14	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/28/21 07:14	04/28/21 07:14	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/28/21 07:14	04/28/21 07:14	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/28/21 07:14	04/28/21 07:14	78-93-3	
Methylene Chloride	**0.513J**	ug/L	5.00	0.430	1	04/28/21 07:14	04/28/21 07:14	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/28/21 07:14	04/28/21 07:14	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/28/21 07:14	04/28/21 07:14	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/28/21 07:14	04/28/21 07:14	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/28/21 07:14	04/28/21 07:14	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/28/21 07:14	04/28/21 07:14	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/28/21 07:14	04/28/21 07:14	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/28/21 07:14	04/28/21 07:14	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 07:14	04/28/21 07:14	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/28/21 07:14	04/28/21 07:14	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/28/21 07:14	04/28/21 07:14	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/28/21 07:14	04/28/21 07:14	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/28/21 07:14	04/28/21 07:14	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/28/21 07:14	04/28/21 07:14	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/28/21 07:14	04/28/21 07:14	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/28/21 07:14	04/28/21 07:14	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/28/21 07:14	04/28/21 07:14	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: TW-18 **Lab ID: 30416762004** Collected: 04/21/21 13:50 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	107	%	80.0-120		1	04/28/21 07:14	04/28/21 07:14	2037-26-5	
4-Bromofluorobenzene (S)	94.8	%	77.0-126		1	04/28/21 07:14	04/28/21 07:14	460-00-4	
1,2-Dichloroethane-d4 (S)	97.9	%	70.0-130		1	04/28/21 07:14	04/28/21 07:14	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/05/21 14:16		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**55.0**	mg/L	10.0	10.0	1		04/26/21 14:55		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/06/21 08:55	05/06/21 11:40		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**12.6J**	mg/L	25.0	4.7	1	04/27/21 11:49	04/27/21 14:49		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**7.2**	mg/L	3.0	0.67	1		05/05/21 14:03	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.4**	mg/L	0.10	0.024	1		04/29/21 15:55	14797-55-8	
Nitrogen, NO2 plus NO3	**1.4**	mg/L	0.10	0.024	1		04/29/21 15:55		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**27.1**	mg/L	10.0	4.7	1		04/30/21 17:02	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/21/21 23:40	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: TW-19 **Lab ID: 30416762005** Collected: 04/21/21 14:30 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/28/21 16:21	04/30/21 11:25	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/28/21 16:21	04/30/21 11:25	7440-38-2	
Barium	**0.062**	mg/L	0.010	0.00068	1	04/28/21 16:21	04/30/21 11:25	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00017	1	04/28/21 16:21	04/30/21 11:25	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/28/21 16:21	04/30/21 11:25	7440-43-9	
Calcium	**22.7**	mg/L	1.0	0.10	1	04/28/21 16:21	04/30/21 11:25	7440-70-2	
Chromium	**0.00088J**	mg/L	0.0050	0.00035	1	04/28/21 16:21	04/30/21 11:25	7440-47-3	
Cobalt	**0.00079J**	mg/L	0.0050	0.00053	1	04/28/21 16:21	04/30/21 11:25	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0027	1	04/28/21 16:21	04/30/21 11:25	7440-50-8	
Iron	**0.070 U**	mg/L	0.070	0.041	1	04/28/21 16:21	04/30/21 11:25	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/28/21 16:21	04/30/21 11:25	7439-92-1	
Magnesium	**5.8**	mg/L	0.20	0.028	1	04/28/21 16:21	04/30/21 11:25	7439-95-4	
Manganese	**0.0067**	mg/L	0.0050	0.0012	1	04/28/21 16:21	04/30/21 11:25	7439-96-5	
Nickel	**0.0024J**	mg/L	0.010	0.0015	1	04/28/21 16:21	04/30/21 11:25	7440-02-0	
Potassium	**6.1**	mg/L	0.50	0.072	1	04/28/21 16:21	04/30/21 11:25	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/28/21 16:21	04/30/21 11:25	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/28/21 16:21	04/30/21 11:25	7440-22-4	
Sodium	**10.3**	mg/L	1.0	0.42	1	04/28/21 16:21	04/30/21 11:25	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/28/21 16:21	04/30/21 11:25	7440-28-0	
Total Hardness by SM2340B-2011	**80.6**	mg/L	3.3	0.37	1	04/28/21 16:21	04/30/21 11:25		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/28/21 16:21	04/30/21 11:25	7440-62-2	
Zinc	**0.0025J**	mg/L	0.010	0.0024	1	04/28/21 16:21	04/30/21 11:25	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**24.0**	mg/L	1.0	0.10	1	04/27/21 15:58	04/29/21 16:04	7440-70-2	
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	04/27/21 15:58	04/29/21 16:04	7439-89-6	
Magnesium, Dissolved	**6.2**	mg/L	0.20	0.028	1	04/27/21 15:58	04/29/21 16:04	7439-95-4	
Manganese, Dissolved	**0.0062**	mg/L	0.0050	0.0012	1	04/27/21 15:58	04/29/21 16:04	7439-96-5	
Potassium, Dissolved	**6.6**	mg/L	0.50	0.072	1	04/27/21 15:58	04/29/21 16:04	7440-09-7	
Sodium, Dissolved	**11.1**	mg/L	1.0	0.42	1	04/27/21 15:58	04/29/21 16:04	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	04/27/21 12:30	04/27/21 23:04	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/28/21 07:35	04/28/21 07:35	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/28/21 07:35	04/28/21 07:35	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/28/21 07:35	04/28/21 07:35	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/28/21 07:35	04/28/21 07:35	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/28/21 07:35	04/28/21 07:35	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/28/21 07:35	04/28/21 07:35	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: TW-19 **Lab ID: 30416762005** Collected: 04/21/21 14:30 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/28/21 07:35	04/28/21 07:35	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/28/21 07:35	04/28/21 07:35	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/28/21 07:35	04/28/21 07:35	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/28/21 07:35	04/28/21 07:35	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/28/21 07:35	04/28/21 07:35	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/28/21 07:35	04/28/21 07:35	75-00-3	
Chloroform	**0.755J**	ug/L	5.00	0.111	1	04/28/21 07:35	04/28/21 07:35	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/28/21 07:35	04/28/21 07:35	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/28/21 07:35	04/28/21 07:35	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/28/21 07:35	04/28/21 07:35	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/28/21 07:35	04/28/21 07:35	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/28/21 07:35	04/28/21 07:35	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/28/21 07:35	04/28/21 07:35	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/28/21 07:35	04/28/21 07:35	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	04/28/21 07:35	04/28/21 07:35	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	04/28/21 07:35	04/28/21 07:35	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	04/28/21 07:35	04/28/21 07:35	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/28/21 07:35	04/28/21 07:35	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/28/21 07:35	04/28/21 07:35	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/28/21 07:35	04/28/21 07:35	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 07:35	04/28/21 07:35	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 07:35	04/28/21 07:35	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/28/21 07:35	04/28/21 07:35	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/28/21 07:35	04/28/21 07:35	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/28/21 07:35	04/28/21 07:35	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/28/21 07:35	04/28/21 07:35	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/28/21 07:35	04/28/21 07:35	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/28/21 07:35	04/28/21 07:35	78-93-3	
Methylene Chloride	**0.611J**	ug/L	5.00	0.430	1	04/28/21 07:35	04/28/21 07:35	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/28/21 07:35	04/28/21 07:35	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/28/21 07:35	04/28/21 07:35	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/28/21 07:35	04/28/21 07:35	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/28/21 07:35	04/28/21 07:35	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/28/21 07:35	04/28/21 07:35	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/28/21 07:35	04/28/21 07:35	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/28/21 07:35	04/28/21 07:35	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 07:35	04/28/21 07:35	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/28/21 07:35	04/28/21 07:35	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/28/21 07:35	04/28/21 07:35	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/28/21 07:35	04/28/21 07:35	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/28/21 07:35	04/28/21 07:35	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/28/21 07:35	04/28/21 07:35	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/28/21 07:35	04/28/21 07:35	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/28/21 07:35	04/28/21 07:35	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/28/21 07:35	04/28/21 07:35	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: TW-19 **Lab ID: 30416762005** Collected: 04/21/21 14:30 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	111	%	80.0-120		1	04/28/21 07:35	04/28/21 07:35	2037-26-5	
4-Bromofluorobenzene (S)	96.9	%	77.0-126		1	04/28/21 07:35	04/28/21 07:35	460-00-4	
1,2-Dichloroethane-d4 (S)	96.0	%	70.0-130		1	04/28/21 07:35	04/28/21 07:35	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**60.0**	mg/L	10.0	1.0	1		05/05/21 14:17		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**139**	mg/L	10.0	10.0	1		04/26/21 14:55		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/06/21 08:55	05/06/21 11:42		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**12.6J**	mg/L	25.0	4.7	1	04/27/21 11:49	04/27/21 14:49		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**14.4**	mg/L	3.0	0.67	1		05/05/21 14:08	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.78**	mg/L	0.10	0.024	1		04/29/21 16:00	14797-55-8	
Nitrogen, NO2 plus NO3	**0.78**	mg/L	0.10	0.024	1		04/29/21 16:00		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**31.9**	mg/L	10.0	4.7	1		04/30/21 17:04	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/21/21 23:41	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: TW-20R **Lab ID: 30416762006** Collected: 04/21/21 15:10 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/28/21 16:21	04/30/21 11:32	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/28/21 16:21	04/30/21 11:32	7440-38-2	
Barium	**0.035**	mg/L	0.010	0.00068	1	04/28/21 16:21	04/30/21 11:32	7440-39-3	
Beryllium	**0.00022J**	mg/L	0.0010	0.00017	1	04/28/21 16:21	04/30/21 11:32	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/28/21 16:21	04/30/21 11:32	7440-43-9	
Calcium	**25.4**	mg/L	1.0	0.10	1	04/28/21 16:21	04/30/21 11:32	7440-70-2	
Chromium	**0.0015J**	mg/L	0.0050	0.00035	1	04/28/21 16:21	04/30/21 11:32	7440-47-3	
Cobalt	**0.0017J**	mg/L	0.0050	0.00053	1	04/28/21 16:21	04/30/21 11:32	7440-48-4	
Copper	**0.0033J**	mg/L	0.0050	0.0027	1	04/28/21 16:21	04/30/21 11:32	7440-50-8	
Iron	**0.070 U**	mg/L	0.070	0.041	1	04/28/21 16:21	04/30/21 11:32	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/28/21 16:21	04/30/21 11:32	7439-92-1	
Magnesium	**5.4**	mg/L	0.20	0.028	1	04/28/21 16:21	04/30/21 11:32	7439-95-4	
Manganese	**0.020**	mg/L	0.0050	0.0012	1	04/28/21 16:21	04/30/21 11:32	7439-96-5	
Nickel	**0.0017J**	mg/L	0.010	0.0015	1	04/28/21 16:21	04/30/21 11:32	7440-02-0	
Potassium	**3.1**	mg/L	0.50	0.072	1	04/28/21 16:21	04/30/21 11:32	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/28/21 16:21	04/30/21 11:32	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/28/21 16:21	04/30/21 11:32	7440-22-4	
Sodium	**12.5**	mg/L	1.0	0.42	1	04/28/21 16:21	04/30/21 11:32	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/28/21 16:21	04/30/21 11:32	7440-28-0	
Total Hardness by SM2340B-2011	**85.8**	mg/L	3.3	0.37	1	04/28/21 16:21	04/30/21 11:32		
Vanadium	**0.0040J**	mg/L	0.0050	0.00057	1	04/28/21 16:21	04/30/21 11:32	7440-62-2	
Zinc	**0.010 U**	mg/L	0.010	0.0024	1	04/28/21 16:21	04/30/21 11:32	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**27.2**	mg/L	1.0	0.10	1	04/27/21 15:58	04/29/21 16:11	7440-70-2	
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	04/27/21 15:58	04/29/21 16:11	7439-89-6	
Magnesium, Dissolved	**5.8**	mg/L	0.20	0.028	1	04/27/21 15:58	04/29/21 16:11	7439-95-4	
Manganese, Dissolved	**0.020**	mg/L	0.0050	0.0012	1	04/27/21 15:58	04/29/21 16:11	7439-96-5	
Potassium, Dissolved	**3.4**	mg/L	0.50	0.072	1	04/27/21 15:58	04/29/21 16:11	7440-09-7	
Sodium, Dissolved	**13.6**	mg/L	1.0	0.42	1	04/27/21 15:58	04/29/21 16:11	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	04/27/21 12:30	04/27/21 23:06	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/28/21 07:55	04/28/21 07:55	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/28/21 07:55	04/28/21 07:55	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/28/21 07:55	04/28/21 07:55	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/28/21 07:55	04/28/21 07:55	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/28/21 07:55	04/28/21 07:55	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/28/21 07:55	04/28/21 07:55	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: TW-20R **Lab ID: 30416762006** Collected: 04/21/21 15:10 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/28/21 07:55	04/28/21 07:55	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/28/21 07:55	04/28/21 07:55	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/28/21 07:55	04/28/21 07:55	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/28/21 07:55	04/28/21 07:55	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/28/21 07:55	04/28/21 07:55	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/28/21 07:55	04/28/21 07:55	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	04/28/21 07:55	04/28/21 07:55	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/28/21 07:55	04/28/21 07:55	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/28/21 07:55	04/28/21 07:55	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/28/21 07:55	04/28/21 07:55	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/28/21 07:55	04/28/21 07:55	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/28/21 07:55	04/28/21 07:55	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/28/21 07:55	04/28/21 07:55	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/28/21 07:55	04/28/21 07:55	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	04/28/21 07:55	04/28/21 07:55	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	04/28/21 07:55	04/28/21 07:55	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	04/28/21 07:55	04/28/21 07:55	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/28/21 07:55	04/28/21 07:55	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/28/21 07:55	04/28/21 07:55	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/28/21 07:55	04/28/21 07:55	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 07:55	04/28/21 07:55	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 07:55	04/28/21 07:55	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/28/21 07:55	04/28/21 07:55	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/28/21 07:55	04/28/21 07:55	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/28/21 07:55	04/28/21 07:55	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/28/21 07:55	04/28/21 07:55	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/28/21 07:55	04/28/21 07:55	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/28/21 07:55	04/28/21 07:55	78-93-3	
Methylene Chloride	**0.516J**	ug/L	5.00	0.430	1	04/28/21 07:55	04/28/21 07:55	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/28/21 07:55	04/28/21 07:55	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/28/21 07:55	04/28/21 07:55	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/28/21 07:55	04/28/21 07:55	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/28/21 07:55	04/28/21 07:55	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/28/21 07:55	04/28/21 07:55	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/28/21 07:55	04/28/21 07:55	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/28/21 07:55	04/28/21 07:55	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 07:55	04/28/21 07:55	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/28/21 07:55	04/28/21 07:55	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/28/21 07:55	04/28/21 07:55	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/28/21 07:55	04/28/21 07:55	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/28/21 07:55	04/28/21 07:55	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/28/21 07:55	04/28/21 07:55	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/28/21 07:55	04/28/21 07:55	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/28/21 07:55	04/28/21 07:55	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/28/21 07:55	04/28/21 07:55	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: TW-20R **Lab ID: 30416762006** Collected: 04/21/21 15:10 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	113	%	80.0-120		1	04/28/21 07:55	04/28/21 07:55	2037-26-5	
4-Bromofluorobenzene (S)	99.2	%	77.0-126		1	04/28/21 07:55	04/28/21 07:55	460-00-4	
1,2-Dichloroethane-d4 (S)	99.8	%	70.0-130		1	04/28/21 07:55	04/28/21 07:55	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**44.0**	mg/L	10.0	1.0	1		05/05/21 14:18		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**157**	mg/L	10.0	10.0	1		04/27/21 14:16		D6
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/06/21 08:55	05/06/21 11:44		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**14.8J**	mg/L	25.0	4.7	1	04/27/21 11:49	04/27/21 14:49		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**12.9**	mg/L	3.0	0.67	1		05/05/21 14:10	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.98**	mg/L	0.10	0.024	1		04/29/21 16:01	14797-55-8	
Nitrogen, NO2 plus NO3	**0.98**	mg/L	0.10	0.024	1		04/29/21 16:01		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**53.8**	mg/L	10.0	4.7	1		04/30/21 17:04	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/21/21 23:41	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: TW-24A **Lab ID: 30416762007** Collected: 04/21/21 09:10 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/28/21 16:21	04/30/21 11:34	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/28/21 16:21	04/30/21 11:34	7440-38-2	
Barium	**0.064**	mg/L	0.010	0.00068	1	04/28/21 16:21	04/30/21 11:34	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00017	1	04/28/21 16:21	04/30/21 11:34	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/28/21 16:21	04/30/21 11:34	7440-43-9	
Calcium	**19.2**	mg/L	1.0	0.10	1	04/28/21 16:21	04/30/21 11:34	7440-70-2	
Chromium	**0.0027J**	mg/L	0.0050	0.00035	1	04/28/21 16:21	04/30/21 11:34	7440-47-3	
Cobalt	**0.0034J**	mg/L	0.0050	0.00053	1	04/28/21 16:21	04/30/21 11:34	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0027	1	04/28/21 16:21	04/30/21 11:34	7440-50-8	
Iron	**0.067J**	mg/L	0.070	0.041	1	04/28/21 16:21	04/30/21 11:34	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/28/21 16:21	04/30/21 11:34	7439-92-1	
Magnesium	**3.4**	mg/L	0.20	0.028	1	04/28/21 16:21	04/30/21 11:34	7439-95-4	
Manganese	**0.11**	mg/L	0.0050	0.0012	1	04/28/21 16:21	04/30/21 11:34	7439-96-5	
Nickel	**0.0028J**	mg/L	0.010	0.0015	1	04/28/21 16:21	04/30/21 11:34	7440-02-0	
Potassium	**3.0**	mg/L	0.50	0.072	1	04/28/21 16:21	04/30/21 11:34	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/28/21 16:21	04/30/21 11:34	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/28/21 16:21	04/30/21 11:34	7440-22-4	
Sodium	**3.2**	mg/L	1.0	0.42	1	04/28/21 16:21	04/30/21 11:34	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/28/21 16:21	04/30/21 11:34	7440-28-0	
Total Hardness by SM2340B-2011	**61.8**	mg/L	3.3	0.37	1	04/28/21 16:21	04/30/21 11:34		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/28/21 16:21	04/30/21 11:34	7440-62-2	
Zinc	**0.0034J**	mg/L	0.010	0.0024	1	04/28/21 16:21	04/30/21 11:34	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**19.3**	mg/L	1.0	0.10	1	04/27/21 15:58	04/29/21 16:13	7440-70-2	
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	04/27/21 15:58	04/29/21 16:13	7439-89-6	
Magnesium, Dissolved	**3.4**	mg/L	0.20	0.028	1	04/27/21 15:58	04/29/21 16:13	7439-95-4	
Manganese, Dissolved	**0.10**	mg/L	0.0050	0.0012	1	04/27/21 15:58	04/29/21 16:13	7439-96-5	
Potassium, Dissolved	**3.1**	mg/L	0.50	0.072	1	04/27/21 15:58	04/29/21 16:13	7440-09-7	
Sodium, Dissolved	**3.3**	mg/L	1.0	0.42	1	04/27/21 15:58	04/29/21 16:13	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.0010**	mg/L	0.00020	0.000030	1	04/27/21 12:30	04/27/21 23:08	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/28/21 08:16	04/28/21 08:16	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/28/21 08:16	04/28/21 08:16	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/28/21 08:16	04/28/21 08:16	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/28/21 08:16	04/28/21 08:16	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/28/21 08:16	04/28/21 08:16	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/28/21 08:16	04/28/21 08:16	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: TW-24A **Lab ID: 30416762007** Collected: 04/21/21 09:10 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/28/21 08:16	04/28/21 08:16	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/28/21 08:16	04/28/21 08:16	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/28/21 08:16	04/28/21 08:16	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/28/21 08:16	04/28/21 08:16	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/28/21 08:16	04/28/21 08:16	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/28/21 08:16	04/28/21 08:16	75-00-3	
Chloroform	**0.444J**	ug/L	5.00	0.111	1	04/28/21 08:16	04/28/21 08:16	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/28/21 08:16	04/28/21 08:16	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/28/21 08:16	04/28/21 08:16	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/28/21 08:16	04/28/21 08:16	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/28/21 08:16	04/28/21 08:16	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/28/21 08:16	04/28/21 08:16	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/28/21 08:16	04/28/21 08:16	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/28/21 08:16	04/28/21 08:16	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	04/28/21 08:16	04/28/21 08:16	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	04/28/21 08:16	04/28/21 08:16	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	04/28/21 08:16	04/28/21 08:16	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/28/21 08:16	04/28/21 08:16	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/28/21 08:16	04/28/21 08:16	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/28/21 08:16	04/28/21 08:16	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 08:16	04/28/21 08:16	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 08:16	04/28/21 08:16	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/28/21 08:16	04/28/21 08:16	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/28/21 08:16	04/28/21 08:16	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/28/21 08:16	04/28/21 08:16	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/28/21 08:16	04/28/21 08:16	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/28/21 08:16	04/28/21 08:16	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/28/21 08:16	04/28/21 08:16	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	04/28/21 08:16	04/28/21 08:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/28/21 08:16	04/28/21 08:16	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/28/21 08:16	04/28/21 08:16	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/28/21 08:16	04/28/21 08:16	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/28/21 08:16	04/28/21 08:16	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/28/21 08:16	04/28/21 08:16	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/28/21 08:16	04/28/21 08:16	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/28/21 08:16	04/28/21 08:16	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 08:16	04/28/21 08:16	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/28/21 08:16	04/28/21 08:16	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/28/21 08:16	04/28/21 08:16	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/28/21 08:16	04/28/21 08:16	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/28/21 08:16	04/28/21 08:16	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/28/21 08:16	04/28/21 08:16	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/28/21 08:16	04/28/21 08:16	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/28/21 08:16	04/28/21 08:16	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/28/21 08:16	04/28/21 08:16	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: TW-24A **Lab ID: 30416762007** Collected: 04/21/21 09:10 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	107	%	80.0-120		1	04/28/21 08:16	04/28/21 08:16	2037-26-5	
4-Bromofluorobenzene (S)	94.8	%	77.0-126		1	04/28/21 08:16	04/28/21 08:16	460-00-4	
1,2-Dichloroethane-d4 (S)	95.2	%	70.0-130		1	04/28/21 08:16	04/28/21 08:16	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**40.0**	mg/L	10.0	1.0	1		05/05/21 14:19		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**91.0**	mg/L	10.0	10.0	1		04/27/21 14:17		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/06/21 08:55	05/06/21 11:46		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**12.6J**	mg/L	25.0	4.7	1	04/27/21 11:49	04/27/21 14:50		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**6.4**	mg/L	3.0	0.67	1		05/05/21 14:11	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.9**	mg/L	0.10	0.024	1		04/29/21 16:02	14797-55-8	
Nitrogen, NO2 plus NO3	**1.9**	mg/L	0.10	0.024	1		04/29/21 16:02		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**12.3**	mg/L	10.0	4.7	1		04/30/21 17:06	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/21/21 23:41	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: TW-25 **Lab ID: 30416762008** Collected: 04/21/21 12:15 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/28/21 16:21	04/30/21 12:08	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/28/21 16:21	04/30/21 12:08	7440-38-2	
Barium	**0.024**	mg/L	0.010	0.00068	1	04/28/21 16:21	04/30/21 12:08	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00017	1	04/28/21 16:21	04/30/21 12:08	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/28/21 16:21	04/30/21 12:08	7440-43-9	
Calcium	**1.5**	mg/L	1.0	0.10	1	04/28/21 16:21	04/30/21 12:08	7440-70-2	
Chromium	**0.0025J**	mg/L	0.0050	0.00035	1	04/28/21 16:21	04/30/21 12:08	7440-47-3	
Cobalt	**0.0051**	mg/L	0.0050	0.00053	1	04/28/21 16:21	04/30/21 12:08	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0027	1	04/28/21 16:21	04/30/21 12:08	7440-50-8	
Iron	**0.070 U**	mg/L	0.070	0.041	1	04/28/21 16:21	04/30/21 12:08	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/28/21 16:21	04/30/21 12:08	7439-92-1	
Magnesium	**0.85**	mg/L	0.20	0.028	1	04/28/21 16:21	04/30/21 12:08	7439-95-4	
Manganese	**0.017**	mg/L	0.0050	0.0012	1	04/28/21 16:21	04/30/21 12:08	7439-96-5	
Nickel	**0.0036J**	mg/L	0.010	0.0015	1	04/28/21 16:21	04/30/21 12:08	7440-02-0	
Potassium	**0.64**	mg/L	0.50	0.072	1	04/28/21 16:21	04/30/21 12:08	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/28/21 16:21	04/30/21 12:08	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/28/21 16:21	04/30/21 12:08	7440-22-4	
Sodium	**2.6**	mg/L	1.0	0.42	1	04/28/21 16:21	04/30/21 12:08	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/28/21 16:21	04/30/21 12:08	7440-28-0	
Total Hardness by SM2340B-2011	**7.3**	mg/L	3.3	0.37	1	04/28/21 16:21	04/30/21 12:08		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/28/21 16:21	04/30/21 12:08	7440-62-2	
Zinc	**0.0051J**	mg/L	0.010	0.0024	1	04/28/21 16:21	04/30/21 12:08	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**1.6**	mg/L	1.0	0.10	1	04/27/21 15:58	04/29/21 16:15	7440-70-2	
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	04/27/21 15:58	04/29/21 16:15	7439-89-6	
Magnesium, Dissolved	**0.93**	mg/L	0.20	0.028	1	04/27/21 15:58	04/29/21 16:15	7439-95-4	
Manganese, Dissolved	**0.017**	mg/L	0.0050	0.0012	1	04/27/21 15:58	04/29/21 16:15	7439-96-5	
Potassium, Dissolved	**0.68**	mg/L	0.50	0.072	1	04/27/21 15:58	04/29/21 16:15	7440-09-7	
Sodium, Dissolved	**3.1**	mg/L	1.0	0.42	1	04/27/21 15:58	04/29/21 16:15	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	04/27/21 12:30	04/27/21 23:09	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/28/21 08:37	04/28/21 08:37	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/28/21 08:37	04/28/21 08:37	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/28/21 08:37	04/28/21 08:37	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/28/21 08:37	04/28/21 08:37	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/28/21 08:37	04/28/21 08:37	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/28/21 08:37	04/28/21 08:37	75-25-2	

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: TW-25 **Lab ID: 30416762008** Collected: 04/21/21 12:15 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/28/21 08:37	04/28/21 08:37	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/28/21 08:37	04/28/21 08:37	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/28/21 08:37	04/28/21 08:37	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/28/21 08:37	04/28/21 08:37	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/28/21 08:37	04/28/21 08:37	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/28/21 08:37	04/28/21 08:37	75-00-3	
Chloroform	**0.235J**	ug/L	5.00	0.111	1	04/28/21 08:37	04/28/21 08:37	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/28/21 08:37	04/28/21 08:37	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/28/21 08:37	04/28/21 08:37	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/28/21 08:37	04/28/21 08:37	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/28/21 08:37	04/28/21 08:37	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/28/21 08:37	04/28/21 08:37	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/28/21 08:37	04/28/21 08:37	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/28/21 08:37	04/28/21 08:37	110-57-6	
Dichlorofluoromethane	**3.70J**	ug/L	5.00	0.130	1	04/28/21 08:37	04/28/21 08:37	75-43-4	J
Dichlorodifluoromethane	**3.60J**	ug/L	5.00	0.374	1	04/28/21 08:37	04/28/21 08:37	75-71-8	J
1,1-Dichloroethane	**2.07**	ug/L	1.00	0.100	1	04/28/21 08:37	04/28/21 08:37	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/28/21 08:37	04/28/21 08:37	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/28/21 08:37	04/28/21 08:37	75-35-4	
cis-1,2-Dichloroethene	**0.674J**	ug/L	1.00	0.126	1	04/28/21 08:37	04/28/21 08:37	156-59-2	J
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 08:37	04/28/21 08:37	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 08:37	04/28/21 08:37	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/28/21 08:37	04/28/21 08:37	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/28/21 08:37	04/28/21 08:37	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/28/21 08:37	04/28/21 08:37	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/28/21 08:37	04/28/21 08:37	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/28/21 08:37	04/28/21 08:37	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/28/21 08:37	04/28/21 08:37	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	04/28/21 08:37	04/28/21 08:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/28/21 08:37	04/28/21 08:37	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/28/21 08:37	04/28/21 08:37	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/28/21 08:37	04/28/21 08:37	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/28/21 08:37	04/28/21 08:37	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/28/21 08:37	04/28/21 08:37	79-34-5	
Tetrachloroethene	**1.41**	ug/L	1.00	0.300	1	04/28/21 08:37	04/28/21 08:37	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/28/21 08:37	04/28/21 08:37	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 08:37	04/28/21 08:37	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/28/21 08:37	04/28/21 08:37	79-00-5	
Trichloroethene	**0.343J**	ug/L	1.00	0.190	1	04/28/21 08:37	04/28/21 08:37	79-01-6	J
Trichlorofluoromethane	**0.446J**	ug/L	5.00	0.160	1	04/28/21 08:37	04/28/21 08:37	75-69-4	J
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/28/21 08:37	04/28/21 08:37	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/28/21 08:37	04/28/21 08:37	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/28/21 08:37	04/28/21 08:37	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/28/21 08:37	04/28/21 08:37	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/28/21 08:37	04/28/21 08:37	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: TW-25 **Lab ID: 30416762008** Collected: 04/21/21 12:15 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	109	%	80.0-120		1	04/28/21 08:37	04/28/21 08:37	2037-26-5	
4-Bromofluorobenzene (S)	96.1	%	77.0-126		1	04/28/21 08:37	04/28/21 08:37	460-00-4	
1,2-Dichloroethane-d4 (S)	99.2	%	70.0-130		1	04/28/21 08:37	04/28/21 08:37	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**4.0J**	mg/L	10.0	1.0	1		05/05/21 14:20		3c
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/18/21 14:37		1c,H1
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**14.0**	mg/L	10.0	10.0	1		04/27/21 14:17		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/06/21 08:55	05/06/21 11:48		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.1J**	mg/L	25.0	4.7	1	04/27/21 11:49	04/27/21 14:50		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**7.3**	mg/L	3.0	0.67	1		05/05/21 14:12	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.26**	mg/L	0.10	0.024	1		04/29/21 16:04	14797-55-8	
Nitrogen, NO2 plus NO3	**0.26**	mg/L	0.10	0.024	1		04/29/21 16:04		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/30/21 17:06	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/21/21 23:43	14797-65-0	

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Greensburg, PA 15601
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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: DUP-1 **Lab ID: 30416762009** Collected: 04/21/21 00:01 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/28/21 16:21	04/30/21 11:38	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/28/21 16:21	04/30/21 11:38	7440-38-2	
Barium	**0.064**	mg/L	0.010	0.00068	1	04/28/21 16:21	04/30/21 11:38	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00017	1	04/28/21 16:21	04/30/21 11:38	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/28/21 16:21	04/30/21 11:38	7440-43-9	
Calcium	**19.2**	mg/L	1.0	0.10	1	04/28/21 16:21	04/30/21 11:38	7440-70-2	
Chromium	**0.0032J**	mg/L	0.0050	0.00035	1	04/28/21 16:21	04/30/21 11:38	7440-47-3	
Cobalt	**0.0033J**	mg/L	0.0050	0.00053	1	04/28/21 16:21	04/30/21 11:38	7440-48-4	
Copper	**0.0029J**	mg/L	0.0050	0.0027	1	04/28/21 16:21	04/30/21 11:38	7440-50-8	
Iron	**0.13**	mg/L	0.070	0.041	1	04/28/21 16:21	04/30/21 11:38	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/28/21 16:21	04/30/21 11:38	7439-92-1	
Magnesium	**3.4**	mg/L	0.20	0.028	1	04/28/21 16:21	04/30/21 11:38	7439-95-4	
Manganese	**0.11**	mg/L	0.0050	0.0012	1	04/28/21 16:21	04/30/21 11:38	7439-96-5	
Nickel	**0.0029J**	mg/L	0.010	0.0015	1	04/28/21 16:21	04/30/21 11:38	7440-02-0	
Potassium	**3.1**	mg/L	0.50	0.072	1	04/28/21 16:21	04/30/21 11:38	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/28/21 16:21	04/30/21 11:38	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/28/21 16:21	04/30/21 11:38	7440-22-4	
Sodium	**3.3**	mg/L	1.0	0.42	1	04/28/21 16:21	04/30/21 11:38	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/28/21 16:21	04/30/21 11:38	7440-28-0	
Total Hardness by SM2340B-2011	**61.8**	mg/L	3.3	0.37	1	04/28/21 16:21	04/30/21 11:38		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/28/21 16:21	04/30/21 11:38	7440-62-2	
Zinc	**0.0034J**	mg/L	0.010	0.0024	1	04/28/21 16:21	04/30/21 11:38	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**20.2**	mg/L	1.0	0.10	1	04/27/21 15:58	04/29/21 16:18	7440-70-2	
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	04/27/21 15:58	04/29/21 16:18	7439-89-6	
Magnesium, Dissolved	**3.5**	mg/L	0.20	0.028	1	04/27/21 15:58	04/29/21 16:18	7439-95-4	
Manganese, Dissolved	**0.11**	mg/L	0.0050	0.0012	1	04/27/21 15:58	04/29/21 16:18	7439-96-5	
Potassium, Dissolved	**3.3**	mg/L	0.50	0.072	1	04/27/21 15:58	04/29/21 16:18	7440-09-7	
Sodium, Dissolved	**3.5**	mg/L	1.0	0.42	1	04/27/21 15:58	04/29/21 16:18	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.0013**	mg/L	0.00020	0.000030	1	04/27/21 12:30	04/27/21 23:11	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/28/21 08:57	04/28/21 08:57	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/28/21 08:57	04/28/21 08:57	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/28/21 08:57	04/28/21 08:57	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/28/21 08:57	04/28/21 08:57	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/28/21 08:57	04/28/21 08:57	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/28/21 08:57	04/28/21 08:57	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: DUP-1 **Lab ID: 30416762009** Collected: 04/21/21 00:01 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/28/21 08:57	04/28/21 08:57	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/28/21 08:57	04/28/21 08:57	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/28/21 08:57	04/28/21 08:57	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/28/21 08:57	04/28/21 08:57	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/28/21 08:57	04/28/21 08:57	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/28/21 08:57	04/28/21 08:57	75-00-3	
Chloroform	**0.434J**	ug/L	5.00	0.111	1	04/28/21 08:57	04/28/21 08:57	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/28/21 08:57	04/28/21 08:57	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/28/21 08:57	04/28/21 08:57	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/28/21 08:57	04/28/21 08:57	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/28/21 08:57	04/28/21 08:57	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/28/21 08:57	04/28/21 08:57	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/28/21 08:57	04/28/21 08:57	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/28/21 08:57	04/28/21 08:57	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	04/28/21 08:57	04/28/21 08:57	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	04/28/21 08:57	04/28/21 08:57	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	04/28/21 08:57	04/28/21 08:57	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/28/21 08:57	04/28/21 08:57	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/28/21 08:57	04/28/21 08:57	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/28/21 08:57	04/28/21 08:57	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 08:57	04/28/21 08:57	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 08:57	04/28/21 08:57	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/28/21 08:57	04/28/21 08:57	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/28/21 08:57	04/28/21 08:57	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/28/21 08:57	04/28/21 08:57	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/28/21 08:57	04/28/21 08:57	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/28/21 08:57	04/28/21 08:57	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/28/21 08:57	04/28/21 08:57	78-93-3	
Methylene Chloride	**5.00 U**	ug/L	5.00	0.430	1	04/28/21 08:57	04/28/21 08:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/28/21 08:57	04/28/21 08:57	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/28/21 08:57	04/28/21 08:57	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/28/21 08:57	04/28/21 08:57	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/28/21 08:57	04/28/21 08:57	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/28/21 08:57	04/28/21 08:57	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/28/21 08:57	04/28/21 08:57	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/28/21 08:57	04/28/21 08:57	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 08:57	04/28/21 08:57	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/28/21 08:57	04/28/21 08:57	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/28/21 08:57	04/28/21 08:57	79-01-6	
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/28/21 08:57	04/28/21 08:57	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/28/21 08:57	04/28/21 08:57	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/28/21 08:57	04/28/21 08:57	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/28/21 08:57	04/28/21 08:57	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/28/21 08:57	04/28/21 08:57	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/28/21 08:57	04/28/21 08:57	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: DUP-1 **Lab ID: 30416762009** Collected: 04/21/21 00:01 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	110	%	80.0-120		1	04/28/21 08:57	04/28/21 08:57	2037-26-5	
4-Bromofluorobenzene (S)	96.1	%	77.0-126		1	04/28/21 08:57	04/28/21 08:57	460-00-4	
1,2-Dichloroethane-d4 (S)	96.3	%	70.0-130		1	04/28/21 08:57	04/28/21 08:57	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**50.0**	mg/L	10.0	1.0	1		05/05/21 14:21		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**87.0**	mg/L	10.0	10.0	1		04/27/21 14:17		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/06/21 08:55	05/06/21 11:50		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**14.8J**	mg/L	25.0	4.7	1	04/27/21 11:49	04/27/21 14:50		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**6.3**	mg/L	3.0	0.67	1		05/05/21 14:13	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.9**	mg/L	0.10	0.024	1		04/29/21 16:05	14797-55-8	
Nitrogen, NO2 plus NO3	**1.9**	mg/L	0.10	0.024	1		04/29/21 16:05		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**12.3**	mg/L	10.0	4.7	1		04/30/21 17:08	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/21/21 23:44	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: DUP-2 **Lab ID: 30416762010** Collected: 04/21/21 00:01 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Antimony	**0.0060 U**	mg/L	0.0060	0.0033	1	04/28/21 16:21	04/30/21 11:41	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0020	1	04/28/21 16:21	04/30/21 11:41	7440-38-2	
Barium	**0.024**	mg/L	0.010	0.00068	1	04/28/21 16:21	04/30/21 11:41	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00017	1	04/28/21 16:21	04/30/21 11:41	7440-41-7	
Cadmium	**0.0030 U**	mg/L	0.0030	0.00034	1	04/28/21 16:21	04/30/21 11:41	7440-43-9	
Calcium	**1.5**	mg/L	1.0	0.10	1	04/28/21 16:21	04/30/21 11:41	7440-70-2	
Chromium	**0.0022J**	mg/L	0.0050	0.00035	1	04/28/21 16:21	04/30/21 11:41	7440-47-3	
Cobalt	**0.0048J**	mg/L	0.0050	0.00053	1	04/28/21 16:21	04/30/21 11:41	7440-48-4	
Copper	**0.0028J**	mg/L	0.0050	0.0027	1	04/28/21 16:21	04/30/21 11:41	7440-50-8	
Iron	**0.070 U**	mg/L	0.070	0.041	1	04/28/21 16:21	04/30/21 11:41	7439-89-6	
Lead	**0.0050 U**	mg/L	0.0050	0.0049	1	04/28/21 16:21	04/30/21 11:41	7439-92-1	
Magnesium	**0.85**	mg/L	0.20	0.028	1	04/28/21 16:21	04/30/21 11:41	7439-95-4	
Manganese	**0.017**	mg/L	0.0050	0.0012	1	04/28/21 16:21	04/30/21 11:41	7439-96-5	
Nickel	**0.0033J**	mg/L	0.010	0.0015	1	04/28/21 16:21	04/30/21 11:41	7440-02-0	
Potassium	**0.64**	mg/L	0.50	0.072	1	04/28/21 16:21	04/30/21 11:41	7440-09-7	
Selenium	**0.0080 U**	mg/L	0.0080	0.0055	1	04/28/21 16:21	04/30/21 11:41	7782-49-2	
Silver	**0.0060 U**	mg/L	0.0060	0.0014	1	04/28/21 16:21	04/30/21 11:41	7440-22-4	
Sodium	**2.7**	mg/L	1.0	0.42	1	04/28/21 16:21	04/30/21 11:41	7440-23-5	
Thallium	**0.010 U**	mg/L	0.010	0.0040	1	04/28/21 16:21	04/30/21 11:41	7440-28-0	
Total Hardness by SM2340B-2011	**7.3**	mg/L	3.3	0.37	1	04/28/21 16:21	04/30/21 11:41		
Vanadium	**0.0050 U**	mg/L	0.0050	0.00057	1	04/28/21 16:21	04/30/21 11:41	7440-62-2	
Zinc	**0.0047J**	mg/L	0.010	0.0024	1	04/28/21 16:21	04/30/21 11:41	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Pace Analytical Services - Greensburg								
Calcium, Dissolved	**1.6**	mg/L	1.0	0.10	1	04/27/21 15:58	04/29/21 16:20	7440-70-2	
Iron, Dissolved	**0.070 U**	mg/L	0.070	0.041	1	04/27/21 15:58	04/29/21 16:20	7439-89-6	
Magnesium, Dissolved	**0.92**	mg/L	0.20	0.028	1	04/27/21 15:58	04/29/21 16:20	7439-95-4	
Manganese, Dissolved	**0.017**	mg/L	0.0050	0.0012	1	04/27/21 15:58	04/29/21 16:20	7439-96-5	
Potassium, Dissolved	**0.68**	mg/L	0.50	0.072	1	04/27/21 15:58	04/29/21 16:20	7440-09-7	
Sodium, Dissolved	**3.0**	mg/L	1.0	0.42	1	04/27/21 15:58	04/29/21 16:20	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	04/27/21 12:30	04/27/21 23:12	7439-97-6	
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/28/21 09:18	04/28/21 09:18	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/28/21 09:18	04/28/21 09:18	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/28/21 09:18	04/28/21 09:18	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/28/21 09:18	04/28/21 09:18	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/28/21 09:18	04/28/21 09:18	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/28/21 09:18	04/28/21 09:18	75-25-2	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: DUP-2 **Lab ID: 30416762010** Collected: 04/21/21 00:01 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/28/21 09:18	04/28/21 09:18	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/28/21 09:18	04/28/21 09:18	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/28/21 09:18	04/28/21 09:18	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/28/21 09:18	04/28/21 09:18	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/28/21 09:18	04/28/21 09:18	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/28/21 09:18	04/28/21 09:18	75-00-3	
Chloroform	**0.208J**	ug/L	5.00	0.111	1	04/28/21 09:18	04/28/21 09:18	67-66-3	J
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/28/21 09:18	04/28/21 09:18	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/28/21 09:18	04/28/21 09:18	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/28/21 09:18	04/28/21 09:18	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/28/21 09:18	04/28/21 09:18	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/28/21 09:18	04/28/21 09:18	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/28/21 09:18	04/28/21 09:18	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/28/21 09:18	04/28/21 09:18	110-57-6	
Dichlorofluoromethane	**4.07J**	ug/L	5.00	0.130	1	04/28/21 09:18	04/28/21 09:18	75-43-4	J
Dichlorodifluoromethane	**3.66J**	ug/L	5.00	0.374	1	04/28/21 09:18	04/28/21 09:18	75-71-8	J
1,1-Dichloroethane	**1.87**	ug/L	1.00	0.100	1	04/28/21 09:18	04/28/21 09:18	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/28/21 09:18	04/28/21 09:18	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/28/21 09:18	04/28/21 09:18	75-35-4	
cis-1,2-Dichloroethene	**0.643J**	ug/L	1.00	0.126	1	04/28/21 09:18	04/28/21 09:18	156-59-2	J
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 09:18	04/28/21 09:18	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 09:18	04/28/21 09:18	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/28/21 09:18	04/28/21 09:18	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/28/21 09:18	04/28/21 09:18	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/28/21 09:18	04/28/21 09:18	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/28/21 09:18	04/28/21 09:18	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/28/21 09:18	04/28/21 09:18	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/28/21 09:18	04/28/21 09:18	78-93-3	
Methylene Chloride	**0.622J**	ug/L	5.00	0.430	1	04/28/21 09:18	04/28/21 09:18	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/28/21 09:18	04/28/21 09:18	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/28/21 09:18	04/28/21 09:18	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/28/21 09:18	04/28/21 09:18	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/28/21 09:18	04/28/21 09:18	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/28/21 09:18	04/28/21 09:18	79-34-5	
Tetrachloroethene	**1.47**	ug/L	1.00	0.300	1	04/28/21 09:18	04/28/21 09:18	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/28/21 09:18	04/28/21 09:18	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 09:18	04/28/21 09:18	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/28/21 09:18	04/28/21 09:18	79-00-5	
Trichloroethene	**0.349J**	ug/L	1.00	0.190	1	04/28/21 09:18	04/28/21 09:18	79-01-6	J
Trichlorofluoromethane	**0.462J**	ug/L	5.00	0.160	1	04/28/21 09:18	04/28/21 09:18	75-69-4	J
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/28/21 09:18	04/28/21 09:18	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/28/21 09:18	04/28/21 09:18	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/28/21 09:18	04/28/21 09:18	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/28/21 09:18	04/28/21 09:18	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/28/21 09:18	04/28/21 09:18	179601-23-1	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: DUP-2 **Lab ID: 30416762010** Collected: 04/21/21 00:01 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B Pace National - Mt. Juliet								
Surrogates									
Toluene-d8 (S)	111	%	80.0-120		1	04/28/21 09:18	04/28/21 09:18	2037-26-5	
4-Bromofluorobenzene (S)	97.6	%	77.0-126		1	04/28/21 09:18	04/28/21 09:18	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70.0-130		1	04/28/21 09:18	04/28/21 09:18	17060-07-0	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**564**	mg/L	10.0	1.0	1		05/05/21 18:54		
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/18/21 14:39		1c,H1
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**14.0**	mg/L	10.0	10.0	1		04/27/21 14:18		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/06/21 08:55	05/06/21 11:52		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**8.3J**	mg/L	25.0	4.7	1	04/27/21 11:49	04/27/21 14:50		
4500 Chloride	Analytical Method: SM 4500ClE-2011 Pace Analytical Services - Greensburg								
Chloride	**7.2**	mg/L	3.0	0.67	1		05/05/21 14:14	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.26**	mg/L	0.10	0.024	1		04/29/21 16:07	14797-55-8	
Nitrogen, NO2 plus NO3	**0.26**	mg/L	0.10	0.024	1		04/29/21 16:07		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/30/21 17:11	14808-79-8	
SM4500NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/21/21 23:44	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: TRIP BLANK **Lab ID: 30416762011** Collected: 04/21/21 00:01 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Acetone	**50.0 U**	ug/L	50.0	11.3	1	04/28/21 04:29	04/28/21 04:29	67-64-1	
Acrylonitrile	**10.0 U**	ug/L	10.0	0.671	1	04/28/21 04:29	04/28/21 04:29	107-13-1	
Benzene	**1.00 U**	ug/L	1.00	0.0941	1	04/28/21 04:29	04/28/21 04:29	71-43-2	
Bromochloromethane	**1.00 U**	ug/L	1.00	0.128	1	04/28/21 04:29	04/28/21 04:29	74-97-5	
Bromodichloromethane	**1.00 U**	ug/L	1.00	0.136	1	04/28/21 04:29	04/28/21 04:29	75-27-4	
Bromoform	**1.00 U**	ug/L	1.00	0.129	1	04/28/21 04:29	04/28/21 04:29	75-25-2	
Bromomethane	**5.00 U**	ug/L	5.00	0.605	1	04/28/21 04:29	04/28/21 04:29	74-83-9	
Carbon disulfide	**1.00 U**	ug/L	1.00	0.0962	1	04/28/21 04:29	04/28/21 04:29	75-15-0	
Carbon tetrachloride	**1.00 U**	ug/L	1.00	0.128	1	04/28/21 04:29	04/28/21 04:29	56-23-5	
Chlorobenzene	**1.00 U**	ug/L	1.00	0.116	1	04/28/21 04:29	04/28/21 04:29	108-90-7	
Dibromochloromethane	**1.00 U**	ug/L	1.00	0.140	1	04/28/21 04:29	04/28/21 04:29	124-48-1	
Chloroethane	**5.00 U**	ug/L	5.00	0.192	1	04/28/21 04:29	04/28/21 04:29	75-00-3	
Chloroform	**5.00 U**	ug/L	5.00	0.111	1	04/28/21 04:29	04/28/21 04:29	67-66-3	
Chloromethane	**2.50 U**	ug/L	2.50	0.960	1	04/28/21 04:29	04/28/21 04:29	74-87-3	
1,2-Dibromo-3-chloropropane	**5.00 U**	ug/L	5.00	0.276	1	04/28/21 04:29	04/28/21 04:29	96-12-8	
1,2-Dibromoethane (EDB)	**1.00 U**	ug/L	1.00	0.126	1	04/28/21 04:29	04/28/21 04:29	106-93-4	
Dibromomethane	**1.00 U**	ug/L	1.00	0.122	1	04/28/21 04:29	04/28/21 04:29	74-95-3	
1,2-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.107	1	04/28/21 04:29	04/28/21 04:29	95-50-1	
1,4-Dichlorobenzene	**1.00 U**	ug/L	1.00	0.120	1	04/28/21 04:29	04/28/21 04:29	106-46-7	
trans-1,4-Dichloro-2-butene	**2.50 U**	ug/L	2.50	0.467	1	04/28/21 04:29	04/28/21 04:29	110-57-6	
Dichlorofluoromethane	**5.00 U**	ug/L	5.00	0.130	1	04/28/21 04:29	04/28/21 04:29	75-43-4	
Dichlorodifluoromethane	**5.00 U**	ug/L	5.00	0.374	1	04/28/21 04:29	04/28/21 04:29	75-71-8	
1,1-Dichloroethane	**1.00 U**	ug/L	1.00	0.100	1	04/28/21 04:29	04/28/21 04:29	75-34-3	
1,2-Dichloroethane	**1.00 U**	ug/L	1.00	0.0819	1	04/28/21 04:29	04/28/21 04:29	107-06-2	
1,1-Dichloroethene	**1.00 U**	ug/L	1.00	0.188	1	04/28/21 04:29	04/28/21 04:29	75-35-4	
cis-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.126	1	04/28/21 04:29	04/28/21 04:29	156-59-2	
trans-1,2-Dichloroethene	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 04:29	04/28/21 04:29	156-60-5	
1,2-Dichloropropane	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 04:29	04/28/21 04:29	78-87-5	
cis-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.111	1	04/28/21 04:29	04/28/21 04:29	10061-01-5	
trans-1,3-Dichloropropene	**1.00 U**	ug/L	1.00	0.118	1	04/28/21 04:29	04/28/21 04:29	10061-02-6	
Ethylbenzene	**1.00 U**	ug/L	1.00	0.137	1	04/28/21 04:29	04/28/21 04:29	100-41-4	
Iodomethane	**10.0 U**	ug/L	10.0	6.00	1	04/28/21 04:29	04/28/21 04:29	74-88-4	
2-Hexanone	**10.0 U**	ug/L	10.0	0.787	1	04/28/21 04:29	04/28/21 04:29	591-78-6	
2-Butanone (MEK)	**10.0 U**	ug/L	10.0	1.19	1	04/28/21 04:29	04/28/21 04:29	78-93-3	
Methylene Chloride	**0.797J**	ug/L	5.00	0.430	1	04/28/21 04:29	04/28/21 04:29	75-09-2	J
4-Methyl-2-pentanone (MIBK)	**10.0 U**	ug/L	10.0	0.478	1	04/28/21 04:29	04/28/21 04:29	108-10-1	
Methyl-tert-butyl ether	**1.00 U**	ug/L	1.00	0.101	1	04/28/21 04:29	04/28/21 04:29	1634-04-4	
Styrene	**1.00 U**	ug/L	1.00	0.118	1	04/28/21 04:29	04/28/21 04:29	100-42-5	
1,1,1,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.147	1	04/28/21 04:29	04/28/21 04:29	630-20-6	
1,1,2,2-Tetrachloroethane	**1.00 U**	ug/L	1.00	0.133	1	04/28/21 04:29	04/28/21 04:29	79-34-5	
Tetrachloroethene	**1.00 U**	ug/L	1.00	0.300	1	04/28/21 04:29	04/28/21 04:29	127-18-4	
Toluene	**1.00 U**	ug/L	1.00	0.278	1	04/28/21 04:29	04/28/21 04:29	108-88-3	
1,1,1-Trichloroethane	**1.00 U**	ug/L	1.00	0.149	1	04/28/21 04:29	04/28/21 04:29	71-55-6	
1,1,2-Trichloroethane	**1.00 U**	ug/L	1.00	0.158	1	04/28/21 04:29	04/28/21 04:29	79-00-5	
Trichloroethene	**1.00 U**	ug/L	1.00	0.190	1	04/28/21 04:29	04/28/21 04:29	79-01-6	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Sample: TRIP BLANK **Lab ID: 30416762011** Collected: 04/21/21 00:01 Received: 04/21/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (GC/MS) 8260B	Analytical Method: EPA 8260B Preparation Method: 8260B								
	Pace National - Mt. Juliet								
Trichlorofluoromethane	**5.00 U**	ug/L	5.00	0.160	1	04/28/21 04:29	04/28/21 04:29	75-69-4	
1,2,3-Trichloropropane	**2.50 U**	ug/L	2.50	0.237	1	04/28/21 04:29	04/28/21 04:29	96-18-4	
Vinyl acetate	**10.0 U**	ug/L	10.0	0.692	1	04/28/21 04:29	04/28/21 04:29	108-05-4	
Vinyl chloride	**1.00 U**	ug/L	1.00	0.234	1	04/28/21 04:29	04/28/21 04:29	75-01-4	
o-Xylene	**1.00 U**	ug/L	1.00	0.174	1	04/28/21 04:29	04/28/21 04:29	95-47-6	
m&p-Xylene	**2.00 U**	ug/L	2.00	0.430	1	04/28/21 04:29	04/28/21 04:29	179601-23-1	
Surrogates									
Toluene-d8 (S)	114	%	80.0-120		1	04/28/21 04:29	04/28/21 04:29	2037-26-5	
4-Bromofluorobenzene (S)	102	%	77.0-126		1	04/28/21 04:29	04/28/21 04:29	460-00-4	
1,2-Dichloroethane-d4 (S)	99.7	%	70.0-130		1	04/28/21 04:29	04/28/21 04:29	17060-07-0	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

QC Batch: 445139
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416762001, 30416762002, 30416762003, 30416762004, 30416762005, 30416762006, 30416762007, 30416762008, 30416762009, 30416762010

METHOD BLANK: 2148986
Matrix: Water
Associated Lab Samples: 30416762001, 30416762002, 30416762003, 30416762004, 30416762005, 30416762006, 30416762007, 30416762008, 30416762009, 30416762010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.000030	04/27/21 22:46	

LABORATORY CONTROL SAMPLE: 2148987

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.001	0.00099	99	80-120	

MATRIX SPIKE SAMPLE: 2148989

Parameter	Units	30416762001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.00020 U	0.0025	0.0026	106	75-125	

MATRIX SPIKE SAMPLE: 2148991

Parameter	Units	30416856001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	0.0025	0.0013	54	75-125	ML

SAMPLE DUPLICATE: 2148988

Parameter	Units	30416762001 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	0.00020 U	0.00020 U		20	

SAMPLE DUPLICATE: 2148990

Parameter	Units	30416856001 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	ND	0.00020 U		20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

QC Batch: 445444
QC Batch Method: EPA 3005A
Analysis Method: EPA 6010B
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416762001, 30416762002, 30416762003, 30416762004, 30416762005, 30416762006, 30416762007, 30416762008, 30416762009, 30416762010

METHOD BLANK: 2150199
Matrix: Water
Associated Lab Samples: 30416762001, 30416762002, 30416762003, 30416762004, 30416762005, 30416762006, 30416762007, 30416762008, 30416762009, 30416762010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.0060 U	0.0060	0.0033	04/30/21 11:06	
Arsenic	mg/L	0.0050 U	0.0050	0.0020	04/30/21 11:06	
Barium	mg/L	0.0016J	0.010	0.00068	04/30/21 11:06	
Beryllium	mg/L	0.0010 U	0.0010	0.00017	04/30/21 11:06	
Cadmium	mg/L	0.0030 U	0.0030	0.00034	04/30/21 11:06	
Calcium	mg/L	1.0 U	1.0	0.10	04/30/21 11:06	
Chromium	mg/L	0.00044J	0.0050	0.00035	04/30/21 11:06	
Cobalt	mg/L	0.0050 U	0.0050	0.00053	04/30/21 11:06	
Copper	mg/L	0.0050 U	0.0050	0.0027	04/30/21 11:06	
Iron	mg/L	0.070 U	0.070	0.041	04/30/21 11:06	
Lead	mg/L	0.0050 U	0.0050	0.0049	04/30/21 11:06	
Magnesium	mg/L	0.20 U	0.20	0.028	04/30/21 11:06	
Manganese	mg/L	0.0050 U	0.0050	0.0012	04/30/21 11:06	
Nickel	mg/L	0.010 U	0.010	0.0015	04/30/21 11:06	
Potassium	mg/L	0.50 U	0.50	0.072	04/30/21 11:06	
Selenium	mg/L	0.0080 U	0.0080	0.0055	04/30/21 11:06	
Silver	mg/L	0.0060 U	0.0060	0.0014	04/30/21 11:06	
Sodium	mg/L	1.0 U	1.0	0.42	04/30/21 11:06	
Thallium	mg/L	0.010 U	0.010	0.0040	04/30/21 11:06	
Total Hardness by SM2340B-2011	mg/L	3.3 U	3.3	0.37	04/30/21 11:06	
Vanadium	mg/L	0.0050 U	0.0050	0.00057	04/30/21 11:06	
Zinc	mg/L	0.010 U	0.010	0.0024	04/30/21 11:06	

LABORATORY CONTROL SAMPLE: 2150200

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.5	0.49	98	80-120	
Arsenic	mg/L	0.5	0.51	103	80-120	
Barium	mg/L	0.5	0.49	97	80-120	
Beryllium	mg/L	0.5	0.50	99	80-120	
Cadmium	mg/L	0.5	0.51	102	80-120	
Calcium	mg/L	5	4.8	96	80-120	
Chromium	mg/L	0.5	0.50	101	80-120	
Cobalt	mg/L	0.5	0.52	103	80-120	
Copper	mg/L	0.5	0.49	97	80-120	
Iron	mg/L	5	4.8	97	80-120	
Lead	mg/L	0.5	0.49	98	80-120	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

LABORATORY CONTROL SAMPLE: 2150200

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Magnesium	mg/L	5	4.7	94	80-120	
Manganese	mg/L	0.5	0.49	98	80-120	
Nickel	mg/L	0.5	0.50	100	80-120	
Potassium	mg/L	5	4.7	94	80-120	
Selenium	mg/L	0.5	0.51	103	80-120	
Silver	mg/L	0.25	0.25	99	80-120	
Sodium	mg/L	5	4.7	94	80-120	
Thallium	mg/L	0.5	0.47	94	80-120	
Total Hardness by SM2340B-2011	mg/L		31.4			
Vanadium	mg/L	0.5	0.49	98	80-120	
Zinc	mg/L	0.5	0.51	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2150202 2150203

Parameter	Units	30416762001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.0060 U	0.5	0.5	0.50	0.49	100	98	75-125	2	20	
Arsenic	mg/L	0.0050 U	0.5	0.5	0.52	0.51	104	101	75-125	3	20	
Barium	mg/L	0.027	0.5	0.5	0.52	0.51	99	97	75-125	2	20	
Beryllium	mg/L	0.0010 U	0.5	0.5	0.51	0.51	102	101	75-125	1	20	
Cadmium	mg/L	0.0030 U	0.5	0.5	0.51	0.51	103	101	75-125	2	20	
Calcium	mg/L	48.2	5	5	51.9	51.3	74	62	75-125	1	20	ML
Chromium	mg/L	0.0015J	0.5	0.5	0.50	0.49	100	98	75-125	2	20	
Cobalt	mg/L	0.0015J	0.5	0.5	0.51	0.50	102	100	75-125	2	20	
Copper	mg/L	0.0050 U	0.5	0.5	0.50	0.49	100	98	75-125	2	20	
Iron	mg/L	0.67	5	5	5.7	5.8	100	102	75-125	2	20	
Lead	mg/L	0.0050 U	0.5	0.5	0.49	0.48	98	96	75-125	3	20	
Magnesium	mg/L	5.1	5	5	9.7	9.6	93	91	75-125	1	20	
Manganese	mg/L	0.0050J	0.5	0.5	0.51	0.50	100	99	75-125	1	20	
Nickel	mg/L	0.010 U	0.5	0.5	0.50	0.49	99	97	75-125	2	20	
Potassium	mg/L	5.0	5	5	9.6	9.5	93	91	75-125	1	20	
Selenium	mg/L	0.0080 U	0.5	0.5	0.52	0.51	103	101	75-125	2	20	
Silver	mg/L	0.0060 U	0.25	0.25	0.25	0.24	100	98	75-125	2	20	
Sodium	mg/L	2.3	5	5	7.0	6.8	96	90	75-125	4	20	
Thallium	mg/L	0.010 U	0.5	0.5	0.48	0.47	95	93	75-125	2	20	
Total Hardness by SM2340B-2011	mg/L	141			170	168				1		
Vanadium	mg/L	0.0050 U	0.5	0.5	0.49	0.48	98	96	75-125	2	20	
Zinc	mg/L	0.010 U	0.5	0.5	0.50	0.48	100	97	75-125	3	20	

MATRIX SPIKE SAMPLE: 2150205

Parameter	Units	30416771008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	ND	0.5	0.49	99	75-125	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

MATRIX SPIKE SAMPLE: 2150205

Parameter	Units	30416771008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	0.5	0.51	102	75-125	
Barium	mg/L	34.5 ug/L	0.5	0.51	94	75-125	
Beryllium	mg/L	ND	0.5	0.49	98	75-125	
Cadmium	mg/L	ND	0.5	0.51	101	75-125	
Calcium	mg/L	63600 ug/L	5	67.7	83	75-125	
Chromium	mg/L	ND	0.5	0.49	97	75-125	
Cobalt	mg/L	ND	0.5	0.50	100	75-125	
Copper	mg/L	ND	0.5	0.48	96	75-125	
Iron	mg/L	ND	5	4.8	95	75-125	
Lead	mg/L	ND	0.5	0.48	96	75-125	
Magnesium	mg/L	14300 ug/L	5	18.8	90	75-125	
Manganese	mg/L	58.4 ug/L	0.5	0.53	94	75-125	
Nickel	mg/L	ND	0.5	0.48	96	75-125	
Potassium	mg/L	2170 ug/L	5	6.9	94	75-125	
Selenium	mg/L	ND	0.5	0.51	101	75-125	
Silver	mg/L	ND	0.25	0.25	98	75-125	
Sodium	mg/L	40300 ug/L	5	44.5	83	75-125	
Thallium	mg/L	ND	0.5	0.47	93	75-125	
Total Hardness by SM2340B-2011	mg/L	218000 ug/L		246			
Vanadium	mg/L	ND	0.5	0.47	95	75-125	
Zinc	mg/L	ND	0.5	0.49	96	75-125	

SAMPLE DUPLICATE: 2150201

Parameter	Units	30416762001 Result	Dup Result	RPD	Max RPD	Qualifiers
Antimony	mg/L	0.0060 U	0.0060 U		20	
Arsenic	mg/L	0.0050 U	0.0050 U		20	
Barium	mg/L	0.027	0.026	3	20	
Beryllium	mg/L	0.0010 U	0.0010 U		20	
Cadmium	mg/L	0.0030 U	0.0030 U		20	
Calcium	mg/L	48.2	47.7	1	20	
Chromium	mg/L	0.0015J	0.0016J		20	
Cobalt	mg/L	0.0015J	0.0017J		20	
Copper	mg/L	0.0050 U	0.0050 U		20	
Iron	mg/L	0.67	0.65	3	20	
Lead	mg/L	0.0050 U	0.0050 U		20	
Magnesium	mg/L	5.1	5.0	2	20	
Manganese	mg/L	0.0050J	0.0082		20	
Nickel	mg/L	0.010 U	0.010 U		20	
Potassium	mg/L	5.0	5.0	0	20	
Selenium	mg/L	0.0080 U	0.0080 U		20	
Silver	mg/L	0.0060 U	0.0060 U		20	
Sodium	mg/L	2.3	2.1	6	20	
Thallium	mg/L	0.010 U	0.010 U		20	
Total Hardness by SM2340B-2011	mg/L	141	140	1		

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

SAMPLE DUPLICATE: 2150201

Parameter	Units	30416762001 Result	Dup Result	RPD	Max RPD	Qualifiers
Vanadium	mg/L	0.0050 U	0.0050 U		20	
Zinc	mg/L	0.010 U	0.010 U		20	

SAMPLE DUPLICATE: 2150204

Parameter	Units	30416771008 Result	Dup Result	RPD	Max RPD	Qualifiers
Antimony	mg/L	ND	0.0060 U		20	
Arsenic	mg/L	ND	0.0050 U		20	
Barium	mg/L	34.5 ug/L	0.035	0	20	
Beryllium	mg/L	ND	0.0010 U		20	
Cadmium	mg/L	ND	0.0030 U		20	
Calcium	mg/L	63600 ug/L	62.9	1	20	
Chromium	mg/L	ND	0.00081J		20	
Cobalt	mg/L	ND	0.0050 U		20	
Copper	mg/L	ND	0.0050 U		20	
Iron	mg/L	ND	0.060J		20	
Lead	mg/L	ND	0.0050 U		20	
Magnesium	mg/L	14300 ug/L	14.2	1	20	
Manganese	mg/L	58.4 ug/L	0.058	1	20	
Nickel	mg/L	ND	0.010 U		20	
Potassium	mg/L	2170 ug/L	2.2	0	20	
Selenium	mg/L	ND	0.0080 U		20	
Silver	mg/L	ND	0.0060 U		20	
Sodium	mg/L	40300 ug/L	41.1	2	20	
Thallium	mg/L	ND	0.010 U		20	
Total Hardness by SM2340B-2011	mg/L	218000 ug/L	216	1		
Vanadium	mg/L	ND	0.0050 U		20	
Zinc	mg/L	ND	0.0064J		20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

QC Batch: 445201
QC Batch Method: EPA 3005A
Analysis Method: EPA 6010B
Analysis Description: 6010 MET Dissolved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416762001, 30416762002, 30416762003, 30416762004, 30416762005, 30416762006, 30416762007, 30416762008, 30416762009, 30416762010

METHOD BLANK: 2149257
Matrix: Water
Associated Lab Samples: 30416762001, 30416762002, 30416762003, 30416762004, 30416762005, 30416762006, 30416762007, 30416762008, 30416762009, 30416762010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	1.0 U	1.0	0.10	04/29/21 15:45	
Iron, Dissolved	mg/L	0.070 U	0.070	0.041	04/29/21 15:45	
Magnesium, Dissolved	mg/L	0.20 U	0.20	0.028	04/29/21 15:45	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0012	04/29/21 15:45	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.072	04/29/21 15:45	
Sodium, Dissolved	mg/L	1.0 U	1.0	0.42	04/29/21 15:45	

LABORATORY CONTROL SAMPLE: 2149258

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	5	4.9	98	80-120	
Iron, Dissolved	mg/L	5	4.9	98	80-120	
Magnesium, Dissolved	mg/L	5	4.8	96	80-120	
Manganese, Dissolved	mg/L	0.5	0.48	96	80-120	
Potassium, Dissolved	mg/L	5	4.9	98	80-120	
Sodium, Dissolved	mg/L	5	5.2	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2149260 2149261

Parameter	Units	30416762001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	48.4	5	5	55.5	53.2	143	97	75-125	4	20	MH
Iron, Dissolved	mg/L	0.070 U	5	5	5.2	5.0	104	100	75-125	4	20	
Magnesium, Dissolved	mg/L	5.0	5	5	10.4	9.9	106	97	75-125	4	20	
Manganese, Dissolved	mg/L	0.0050 U	0.5	0.5	0.51	0.48	102	97	75-125	5	20	
Potassium, Dissolved	mg/L	5.0	5	5	10.6	10.2	112	103	75-125	4	20	
Sodium, Dissolved	mg/L	2.4	5	5	7.9	7.5	109	102	75-125	5	20	

MATRIX SPIKE SAMPLE: 2149263

Parameter	Units	30417011001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	0.38J	5	5.4	100	75-125	
Iron, Dissolved	mg/L	24.8	5	29.3	89	75-125	
Magnesium, Dissolved	mg/L	0.21	5	5.1	98	75-125	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

MATRIX SPIKE SAMPLE: 2149263

Parameter	Units	30417011001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Manganese, Dissolved	mg/L	0.13	0.5	0.62	98	75-125	
Potassium, Dissolved	mg/L	0.51	5	5.6	101	75-125	
Sodium, Dissolved	mg/L	0.99J	5	6.0	101	75-125	

SAMPLE DUPLICATE: 2149259

Parameter	Units	30416762001 Result	Dup Result	RPD	Max RPD	Qualifiers
Calcium, Dissolved	mg/L	48.4	49.4	2	20	
Iron, Dissolved	mg/L	0.070 U	0.070 U		20	
Magnesium, Dissolved	mg/L	5.0	5.1	2	20	
Manganese, Dissolved	mg/L	0.0050 U	0.0050 U		20	
Potassium, Dissolved	mg/L	5.0	5.1	3	20	
Sodium, Dissolved	mg/L	2.4	2.6	7	20	

SAMPLE DUPLICATE: 2149262

Parameter	Units	30417011001 Result	Dup Result	RPD	Max RPD	Qualifiers
Calcium, Dissolved	mg/L	0.38J	0.41J		20	
Iron, Dissolved	mg/L	24.8	26.8	8	20	
Magnesium, Dissolved	mg/L	0.21	0.25	15	20	
Manganese, Dissolved	mg/L	0.13	0.14	9	20	
Potassium, Dissolved	mg/L	0.51	0.56	9	20	
Sodium, Dissolved	mg/L	0.99J	0.94J		20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

QC Batch: 1659916
QC Batch Method: 8260B
Analysis Method: EPA 8260B
Analysis Description: VOA (GC/MS) 8260B
Laboratory: Pace National - Mt. Juliet
Associated Lab Samples: 30416762001, 30416762002, 30416762003, 30416762004, 30416762005, 30416762006, 30416762007, 30416762008, 30416762009, 30416762010, 30416762011

METHOD BLANK: R3649672-2
Matrix: Water
Associated Lab Samples: 30416762001, 30416762002, 30416762003, 30416762004, 30416762005, 30416762006, 30416762007, 30416762008, 30416762009, 30416762010, 30416762011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acetone	ug/L	50.0 U	50.0	11.3	04/28/21 04:08	
Acrylonitrile	ug/L	10.0 U	10.0	0.671	04/28/21 04:08	
Benzene	ug/L	1.00 U	1.00	0.0941	04/28/21 04:08	
Bromodichloromethane	ug/L	1.00 U	1.00	0.136	04/28/21 04:08	
Bromochloromethane	ug/L	1.00 U	1.00	0.128	04/28/21 04:08	
Bromoform	ug/L	1.00 U	1.00	0.129	04/28/21 04:08	
Bromomethane	ug/L	5.00 U	5.00	0.605	04/28/21 04:08	
Carbon disulfide	ug/L	1.00 U	1.00	0.0962	04/28/21 04:08	
Carbon tetrachloride	ug/L	1.00 U	1.00	0.128	04/28/21 04:08	
Chlorobenzene	ug/L	1.00 U	1.00	0.116	04/28/21 04:08	
Dibromochloromethane	ug/L	1.00 U	1.00	0.140	04/28/21 04:08	
Chloroethane	ug/L	5.00 U	5.00	0.192	04/28/21 04:08	
Chloroform	ug/L	5.00 U	5.00	0.111	04/28/21 04:08	
Chloromethane	ug/L	2.50 U	2.50	0.960	04/28/21 04:08	
1,2-Dibromo-3-chloropropane	ug/L	5.00 U	5.00	0.276	04/28/21 04:08	
1,2-Dibromoethane (EDB)	ug/L	1.00 U	1.00	0.126	04/28/21 04:08	
Dibromomethane	ug/L	1.00 U	1.00	0.122	04/28/21 04:08	
1,2-Dichlorobenzene	ug/L	1.00 U	1.00	0.107	04/28/21 04:08	
1,4-Dichlorobenzene	ug/L	1.00 U	1.00	0.120	04/28/21 04:08	
trans-1,4-Dichloro-2-butene	ug/L	2.50 U	2.50	0.467	04/28/21 04:08	
Dichlorodifluoromethane	ug/L	5.00 U	5.00	0.374	04/28/21 04:08	
Dichlorofluoromethane	ug/L	5.00 U	5.00	0.130	04/28/21 04:08	
1,1-Dichloroethane	ug/L	1.00 U	1.00	0.100	04/28/21 04:08	
1,2-Dichloroethane	ug/L	1.00 U	1.00	0.0819	04/28/21 04:08	
1,1-Dichloroethene	ug/L	1.00 U	1.00	0.188	04/28/21 04:08	
cis-1,2-Dichloroethene	ug/L	1.00 U	1.00	0.126	04/28/21 04:08	
trans-1,2-Dichloroethene	ug/L	1.00 U	1.00	0.149	04/28/21 04:08	
1,2-Dichloropropane	ug/L	1.00 U	1.00	0.149	04/28/21 04:08	
cis-1,3-Dichloropropene	ug/L	1.00 U	1.00	0.111	04/28/21 04:08	
trans-1,3-Dichloropropene	ug/L	1.00 U	1.00	0.118	04/28/21 04:08	
Ethylbenzene	ug/L	1.00 U	1.00	0.137	04/28/21 04:08	
2-Hexanone	ug/L	10.0 U	10.0	0.787	04/28/21 04:08	
Iodomethane	ug/L	10.0 U	10.0	6.00	04/28/21 04:08	
2-Butanone (MEK)	ug/L	10.0 U	10.0	1.19	04/28/21 04:08	
Methylene Chloride	ug/L	5.00 U	5.00	0.430	04/28/21 04:08	
4-Methyl-2-pentanone (MIBK)	ug/L	10.0 U	10.0	0.478	04/28/21 04:08	
Methyl-tert-butyl ether	ug/L	1.00 U	1.00	0.101	04/28/21 04:08	
Styrene	ug/L	1.00 U	1.00	0.118	04/28/21 04:08	
1,1,1,2-Tetrachloroethane	ug/L	1.00 U	1.00	0.147	04/28/21 04:08	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

METHOD BLANK: R3649672-2 Matrix: Water

Associated Lab Samples: 30416762001, 30416762002, 30416762003, 30416762004, 30416762005, 30416762006, 30416762007, 30416762008, 30416762009, 30416762010, 30416762011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L	1.00 U	1.00	0.133	04/28/21 04:08	
Tetrachloroethene	ug/L	1.00 U	1.00	0.300	04/28/21 04:08	
Toluene	ug/L	1.00 U	1.00	0.278	04/28/21 04:08	
1,1,1-Trichloroethane	ug/L	1.00 U	1.00	0.149	04/28/21 04:08	
1,1,2-Trichloroethane	ug/L	1.00 U	1.00	0.158	04/28/21 04:08	
Trichloroethene	ug/L	1.00 U	1.00	0.190	04/28/21 04:08	
Trichlorofluoromethane	ug/L	5.00 U	5.00	0.160	04/28/21 04:08	
1,2,3-Trichloropropane	ug/L	2.50 U	2.50	0.237	04/28/21 04:08	
Vinyl acetate	ug/L	10.0 U	10.0	0.692	04/28/21 04:08	
Vinyl chloride	ug/L	1.00 U	1.00	0.234	04/28/21 04:08	
o-Xylene	ug/L	1.00 U	1.00	0.174	04/28/21 04:08	
m&p-Xylene	ug/L	2.00 U	2.00	0.430	04/28/21 04:08	
Toluene-d8 (S)	%	111	80.0-120		04/28/21 04:08	
4-Bromofluorobenzene (S)	%	95.2	77.0-126		04/28/21 04:08	
1,2-Dichloroethane-d4 (S)	%	98.2	70.0-130		04/28/21 04:08	

LABORATORY CONTROL SAMPLE: R3649672-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acetone	ug/L	25.0	24.2	96.8	19.0-160	
Acrylonitrile	ug/L	25.0	26.3	105	55.0-149	
Benzene	ug/L	5.00	4.96	99.2	70.0-123	
Bromodichloromethane	ug/L	5.00	4.49	89.8	75.0-120	
Bromochloromethane	ug/L	5.00	5.44	109	76.0-122	
Bromoform	ug/L	5.00	4.07	81.4	68.0-132	
Bromomethane	ug/L	5.00	4.59	91.8	10.0-160	
Carbon disulfide	ug/L	5.00	4.81	96.2	61.0-128	
Carbon tetrachloride	ug/L	5.00	4.93	98.6	68.0-126	
Chlorobenzene	ug/L	5.00	5.15	103	80.0-121	
Dibromochloromethane	ug/L	5.00	4.54	90.8	77.0-125	
Chloroethane	ug/L	5.00	4.61	92.2	47.0-150	
Chloroform	ug/L	5.00	5.05	101	73.0-120	
Chloromethane	ug/L	5.00	5.72	114	41.0-142	
1,2-Dibromo-3-chloropropane	ug/L	5.00	3.88	77.6	58.0-134	
1,2-Dibromoethane (EDB)	ug/L	5.00	4.79	95.8	80.0-122	
Dibromomethane	ug/L	5.00	4.92	98.4	80.0-120	
1,2-Dichlorobenzene	ug/L	5.00	4.84	96.8	79.0-121	
1,4-Dichlorobenzene	ug/L	5.00	4.78	95.6	79.0-120	
trans-1,4-Dichloro-2-butene	ug/L	5.00	3.09	61.8	33.0-144	
Dichlorodifluoromethane	ug/L	5.00	5.28	106	51.0-149	
Dichlorofluoromethane	ug/L	5.00	5.02	100	65.0-133	
1,1-Dichloroethane	ug/L	5.00	5.10	102	70.0-126	
1,2-Dichloroethane	ug/L	5.00	5.16	103	70.0-128	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

LABORATORY CONTROL SAMPLE: R3649672-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	5.00	4.61	92.2	71.0-124	
cis-1,2-Dichloroethene	ug/L	5.00	4.46	89.2	73.0-120	
trans-1,2-Dichloroethene	ug/L	5.00	5.21	104	73.0-120	
1,2-Dichloropropane	ug/L	5.00	4.75	95.0	77.0-125	
cis-1,3-Dichloropropene	ug/L	5.00	4.68	93.6	80.0-123	
trans-1,3-Dichloropropene	ug/L	5.00	4.44	88.8	78.0-124	
Ethylbenzene	ug/L	5.00	5.21	104	79.0-123	
2-Hexanone	ug/L	25.0	25.1	100	67.0-149	
Iodomethane	ug/L	25.0	24.2	96.8	33.0-147	
2-Butanone (MEK)	ug/L	25.0	27.1	108	44.0-160	
Methylene Chloride	ug/L	5.00	4.57	91.4	67.0-120	
4-Methyl-2-pentanone (MIBK)	ug/L	25.0	26.7	107	68.0-142	
Methyl-tert-butyl ether	ug/L	5.00	4.73	94.6	68.0-125	
Styrene	ug/L	5.00	4.93	98.6	73.0-130	
1,1,1,2-Tetrachloroethane	ug/L	5.00	4.25	85.0	75.0-125	
1,1,2,2-Tetrachloroethane	ug/L	5.00	4.65	93.0	65.0-130	
Tetrachloroethene	ug/L	5.00	5.09	102	72.0-132	
Toluene	ug/L	5.00	4.79	95.8	79.0-120	
1,1,1-Trichloroethane	ug/L	5.00	4.80	96.0	73.0-124	
1,1,2-Trichloroethane	ug/L	5.00	4.72	94.4	80.0-120	
Trichloroethene	ug/L	5.00	5.37	107	78.0-124	
Trichlorofluoromethane	ug/L	5.00	4.83	96.6	59.0-147	
1,2,3-Trichloropropane	ug/L	5.00	5.06	101	73.0-130	
Vinyl acetate	ug/L	25.0	16.1	64.4	11.0-160	
Vinyl chloride	ug/L	5.00	5.07	101	67.0-131	
o-Xylene	ug/L	5.00	4.81	96.2	80.0-122	
m&p-Xylene	ug/L	10.0	10.1	101	80.0-122	
Toluene-d8 (S)	%			105	80.0-120	
4-Bromofluorobenzene (S)	%			98.6	77.0-126	
1,2-Dichloroethane-d4 (S)	%			95.0	70.0-130	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

QC Batch: 446532
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416762001, 30416762002, 30416762003, 30416762004, 30416762005, 30416762006, 30416762007, 30416762008, 30416762009

METHOD BLANK: 2154908
Matrix: Water
Associated Lab Samples: 30416762001, 30416762002, 30416762003, 30416762004, 30416762005, 30416762006, 30416762007, 30416762008, 30416762009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	05/05/21 13:49	

LABORATORY CONTROL SAMPLE: 2154909

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2154910 2154911

Parameter	Units	30416791001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	180	50	50	230	230	100	100	85-115	0	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

QC Batch: 446568
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416762010

METHOD BLANK: 2155060 Matrix: Water
Associated Lab Samples: 30416762010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	05/05/21 18:13	

LABORATORY CONTROL SAMPLE: 2155061

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2155062 2155063

Parameter	Units	30416762010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	50	50	610	610	92	92	85-115	0	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

QC Batch: 448464
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416762008, 30416762010

METHOD BLANK: 2164523
Matrix: Water
Associated Lab Samples: 30416762008, 30416762010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	05/18/21 14:36	

LABORATORY CONTROL SAMPLE: 2164524

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2164525 2164526

Parameter	Units	30416762008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	50	50	50.0	50.0	100	100	85-115	0	20	H1

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

QC Batch: 444899
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416762001, 30416762002, 30416762003, 30416762004, 30416762005

METHOD BLANK: 2147741 Matrix: Water
Associated Lab Samples: 30416762001, 30416762002, 30416762003, 30416762004, 30416762005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	04/26/21 14:48	

LABORATORY CONTROL SAMPLE: 2147742

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	943	94	85-115	

SAMPLE DUPLICATE: 2147743

Parameter	Units	30416534001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	53.0	48.0	10	5	D6

SAMPLE DUPLICATE: 2147744

Parameter	Units	30416762005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	139	146	5	5	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

QC Batch: 445062 | Analysis Method: SM 2540C-2011
QC Batch Method: SM 2540C-2011 | Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416762006, 30416762007, 30416762008, 30416762009, 30416762010

METHOD BLANK: 2148496 | Matrix: Water
Associated Lab Samples: 30416762006, 30416762007, 30416762008, 30416762009, 30416762010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	04/27/21 14:16	

LABORATORY CONTROL SAMPLE: 2148497

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	966	97	85-115	

SAMPLE DUPLICATE: 2148498

Parameter	Units	30416762006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	157	147	7	5	D6

SAMPLE DUPLICATE: 2148499

Parameter	Units	30416863001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	140000	129000	8	5	4c,D6

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

QC Batch: 446672
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416762001, 30416762002, 30416762003, 30416762004, 30416762005, 30416762006, 30416762007, 30416762008, 30416762009, 30416762010

METHOD BLANK: 2155739
Matrix: Water
Associated Lab Samples: 30416762001, 30416762002, 30416762003, 30416762004, 30416762005, 30416762006, 30416762007, 30416762008, 30416762009, 30416762010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.044	05/06/21 11:27	

LABORATORY CONTROL SAMPLE: 2155740

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2155741 2155742

Parameter	Units	30416762001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	3.8	3.8	96	96	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2155743 2155744

Parameter	Units	30416855001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	170	4	4	160	160	-244	-252	90-110	0	20	ML

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

QC Batch: 445076
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416762001, 30416762002, 30416762003, 30416762004, 30416762005, 30416762006, 30416762007, 30416762008, 30416762009, 30416762010

METHOD BLANK: 2148657
Matrix: Water
Associated Lab Samples: 30416762001, 30416762002, 30416762003, 30416762004, 30416762005, 30416762006, 30416762007, 30416762008, 30416762009, 30416762010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	04/27/21 14:47	

METHOD BLANK: 2148658
Matrix: Water
Associated Lab Samples: 30416762001, 30416762002, 30416762003, 30416762004, 30416762005, 30416762006, 30416762007, 30416762008, 30416762009, 30416762010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	04/27/21 14:47	

LABORATORY CONTROL SAMPLE: 2148659

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	311	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2148660 2148661

Parameter	Units	30416762001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	12.6J	150	150	162	166	100	102	90-110	3	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2148662 2148663

Parameter	Units	30416762010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	8.3J	150	150	164	162	104	102	90-110	1	10	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

QC Batch: 446461
QC Batch Method: SM 4500CIE-2011
Analysis Method: SM 4500CIE-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416762001, 30416762002, 30416762003, 30416762004

METHOD BLANK: 2154623
Matrix: Water
Associated Lab Samples: 30416762001, 30416762002, 30416762003, 30416762004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/05/21 13:16	

LABORATORY CONTROL SAMPLE: 2154624

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	19.6	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2154625 2154626

Parameter	Units	30416534001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	7.1	20	20	28.2	27.7	106	103	85-115	2	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

QC Batch: 446462
QC Batch Method: SM 4500CIE-2011
Analysis Method: SM 4500CIE-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416762005, 30416762006, 30416762007, 30416762008, 30416762009, 30416762010

METHOD BLANK: 2154627 Matrix: Water
Associated Lab Samples: 30416762005, 30416762006, 30416762007, 30416762008, 30416762009, 30416762010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/05/21 14:06	

LABORATORY CONTROL SAMPLE: 2154628

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.3	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2154629 2154630

Parameter	Units	30416762005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	14.4	20	20	31.5	35.6	86	106	85-115	12	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

QC Batch: 445575
QC Batch Method: SM 4500NO3F-2011
Analysis Method: SM 4500NO3F-2011
Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416762001, 30416762002, 30416762003, 30416762004, 30416762005, 30416762006, 30416762007, 30416762008, 30416762009, 30416762010

METHOD BLANK: 2150756
Matrix: Water
Associated Lab Samples: 30416762001, 30416762002, 30416762003, 30416762004, 30416762005, 30416762006, 30416762007, 30416762008, 30416762009, 30416762010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.024	04/29/21 15:38	

LABORATORY CONTROL SAMPLE: 2150757

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	3.9	96	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2150758 2150759

Parameter	Units	30416760001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	ND	5	5	4.9	4.8	98	95	85-115	3	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

QC Batch: 445663
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416762001, 30416762002, 30416762003, 30416762004, 30416762005, 30416762006, 30416762007, 30416762008, 30416762009, 30416762010

METHOD BLANK: 2151175
Matrix: Water
Associated Lab Samples: 30416762001, 30416762002, 30416762003, 30416762004, 30416762005, 30416762006, 30416762007, 30416762008, 30416762009, 30416762010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	04/30/21 16:35	

LABORATORY CONTROL SAMPLE: 2151176

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	28.3	94	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2151177 2151178

Parameter	Units	30416534001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.0 U	20	20	18.3	17.5	91	88	85-115	4	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2151179 2151180

Parameter	Units	30416762001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	30.1	20	20	46.7	45.9	83	79	85-115	2	20	ML

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QUALITY CONTROL DATA

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

QC Batch: 444452
QC Batch Method: SM 4500NO2B-2011
Analysis Method: SM 4500NO2B-2011
Analysis Description: SM4500NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30416762001, 30416762002, 30416762003, 30416762004, 30416762005, 30416762006, 30416762007, 30416762008, 30416762009, 30416762010

METHOD BLANK: 2145575
Matrix: Water
Associated Lab Samples: 30416762001, 30416762002, 30416762003, 30416762004, 30416762005, 30416762006, 30416762007, 30416762008, 30416762009, 30416762010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	04/21/21 23:30	

LABORATORY CONTROL SAMPLE: 2145576

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.11	109	90-110	

MATRIX SPIKE SAMPLE: 2145578

Parameter	Units	30416760001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	ND	0.1	0.097	97	85-115	

SAMPLE DUPLICATE: 2145577

Parameter	Units	30416760001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	ND	0.010 U		20	

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QUALIFIERS

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

1c	ALK TV: 0 mg/L
2c	Alkalinity TV: -1 mg/L
3c	Alkalinity TV: 4 mg/L
4c	Sample volume was reduced so that the sample could be within an acceptable range
D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
H1	Analysis conducted outside the EPA method holding time.
J	Analyte detected below the reporting limit, therefore result is an estimate. This qualifier is also used for all TICs.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30416762001	**TW-6A**	EPA 3005A	445444	EPA 6010B	445514
30416762002	**TW-6B**	EPA 3005A	445444	EPA 6010B	445514
30416762003	**TW-14B**	EPA 3005A	445444	EPA 6010B	445514
30416762004	**TW-18**	EPA 3005A	445444	EPA 6010B	445514
30416762005	**TW-19**	EPA 3005A	445444	EPA 6010B	445514
30416762006	**TW-20R**	EPA 3005A	445444	EPA 6010B	445514
30416762007	**TW-24A**	EPA 3005A	445444	EPA 6010B	445514
30416762008	**TW-25**	EPA 3005A	445444	EPA 6010B	445514
30416762009	**DUP-1**	EPA 3005A	445444	EPA 6010B	445514
30416762010	**DUP-2**	EPA 3005A	445444	EPA 6010B	445514
30416762001	**TW-6A**	EPA 3005A	445201	EPA 6010B	445265
30416762002	**TW-6B**	EPA 3005A	445201	EPA 6010B	445265
30416762003	**TW-14B**	EPA 3005A	445201	EPA 6010B	445265
30416762004	**TW-18**	EPA 3005A	445201	EPA 6010B	445265
30416762005	**TW-19**	EPA 3005A	445201	EPA 6010B	445265
30416762006	**TW-20R**	EPA 3005A	445201	EPA 6010B	445265
30416762007	**TW-24A**	EPA 3005A	445201	EPA 6010B	445265
30416762008	**TW-25**	EPA 3005A	445201	EPA 6010B	445265
30416762009	**DUP-1**	EPA 3005A	445201	EPA 6010B	445265
30416762010	**DUP-2**	EPA 3005A	445201	EPA 6010B	445265
30416762001	**TW-6A**	EPA 7470A	445139	EPA 7470A	445247
30416762002	**TW-6B**	EPA 7470A	445139	EPA 7470A	445247
30416762003	**TW-14B**	EPA 7470A	445139	EPA 7470A	445247
30416762004	**TW-18**	EPA 7470A	445139	EPA 7470A	445247
30416762005	**TW-19**	EPA 7470A	445139	EPA 7470A	445247
30416762006	**TW-20R**	EPA 7470A	445139	EPA 7470A	445247
30416762007	**TW-24A**	EPA 7470A	445139	EPA 7470A	445247
30416762008	**TW-25**	EPA 7470A	445139	EPA 7470A	445247
30416762009	**DUP-1**	EPA 7470A	445139	EPA 7470A	445247
30416762010	**DUP-2**	EPA 7470A	445139	EPA 7470A	445247
30416762001	**TW-6A**	8260B	1659916	EPA 8260B	1659916
30416762002	**TW-6B**	8260B	1659916	EPA 8260B	1659916
30416762003	**TW-14B**	8260B	1659916	EPA 8260B	1659916
30416762004	**TW-18**	8260B	1659916	EPA 8260B	1659916
30416762005	**TW-19**	8260B	1659916	EPA 8260B	1659916
30416762006	**TW-20R**	8260B	1659916	EPA 8260B	1659916
30416762007	**TW-24A**	8260B	1659916	EPA 8260B	1659916
30416762008	**TW-25**	8260B	1659916	EPA 8260B	1659916
30416762009	**DUP-1**	8260B	1659916	EPA 8260B	1659916
30416762010	**DUP-2**	8260B	1659916	EPA 8260B	1659916
30416762011	**TRIP BLANK**	8260B	1659916	EPA 8260B	1659916
30416762001	**TW-6A**	SM 2320B-2011	446532		
30416762002	**TW-6B**	SM 2320B-2011	446532		
30416762003	**TW-14B**	SM 2320B-2011	446532		
30416762004	**TW-18**	SM 2320B-2011	446532		
30416762005	**TW-19**	SM 2320B-2011	446532		
30416762006	**TW-20R**	SM 2320B-2011	446532		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30416762007	**TW-24A**	SM 2320B-2011	446532		
30416762008	**TW-25**	SM 2320B-2011	446532		
30416762008	**TW-25**	SM 2320B-2011	448464		
30416762009	**DUP-1**	SM 2320B-2011	446532		
30416762010	**DUP-2**	SM 2320B-2011	446568		
30416762010	**DUP-2**	SM 2320B-2011	448464		
30416762001	**TW-6A**	SM 2540C-2011	444899		
30416762002	**TW-6B**	SM 2540C-2011	444899		
30416762003	**TW-14B**	SM 2540C-2011	444899		
30416762004	**TW-18**	SM 2540C-2011	444899		
30416762005	**TW-19**	SM 2540C-2011	444899		
30416762006	**TW-20R**	SM 2540C-2011	445062		
30416762007	**TW-24A**	SM 2540C-2011	445062		
30416762008	**TW-25**	SM 2540C-2011	445062		
30416762009	**DUP-1**	SM 2540C-2011	445062		
30416762010	**DUP-2**	SM 2540C-2011	445062		
30416762001	**TW-6A**	EPA 350.1	446672	EPA 350.1	446679
30416762002	**TW-6B**	EPA 350.1	446672	EPA 350.1	446679
30416762003	**TW-14B**	EPA 350.1	446672	EPA 350.1	446679
30416762004	**TW-18**	EPA 350.1	446672	EPA 350.1	446679
30416762005	**TW-19**	EPA 350.1	446672	EPA 350.1	446679
30416762006	**TW-20R**	EPA 350.1	446672	EPA 350.1	446679
30416762007	**TW-24A**	EPA 350.1	446672	EPA 350.1	446679
30416762008	**TW-25**	EPA 350.1	446672	EPA 350.1	446679
30416762009	**DUP-1**	EPA 350.1	446672	EPA 350.1	446679
30416762010	**DUP-2**	EPA 350.1	446672	EPA 350.1	446679
30416762001	**TW-6A**	EPA 410.4	445076	EPA 410.4	445193
30416762002	**TW-6B**	EPA 410.4	445076	EPA 410.4	445193
30416762003	**TW-14B**	EPA 410.4	445076	EPA 410.4	445193
30416762004	**TW-18**	EPA 410.4	445076	EPA 410.4	445193
30416762005	**TW-19**	EPA 410.4	445076	EPA 410.4	445193
30416762006	**TW-20R**	EPA 410.4	445076	EPA 410.4	445193
30416762007	**TW-24A**	EPA 410.4	445076	EPA 410.4	445193
30416762008	**TW-25**	EPA 410.4	445076	EPA 410.4	445193
30416762009	**DUP-1**	EPA 410.4	445076	EPA 410.4	445193
30416762010	**DUP-2**	EPA 410.4	445076	EPA 410.4	445193
30416762001	**TW-6A**	SM 4500CIE-2011	446461		
30416762002	**TW-6B**	SM 4500CIE-2011	446461		
30416762003	**TW-14B**	SM 4500CIE-2011	446461		
30416762004	**TW-18**	SM 4500CIE-2011	446461		
30416762005	**TW-19**	SM 4500CIE-2011	446462		
30416762006	**TW-20R**	SM 4500CIE-2011	446462		
30416762007	**TW-24A**	SM 4500CIE-2011	446462		
30416762008	**TW-25**	SM 4500CIE-2011	446462		

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2021-Revised Report
Pace Project No.: 30416762

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30416762009	**DUP-1**	SM 4500CIE-2011	446462		
30416762010	**DUP-2**	SM 4500CIE-2011	446462		
30416762001	**TW-6A**	SM 4500NO3F-2011	445575		
30416762002	**TW-6B**	SM 4500NO3F-2011	445575		
30416762003	**TW-14B**	SM 4500NO3F-2011	445575		
30416762004	**TW-18**	SM 4500NO3F-2011	445575		
30416762005	**TW-19**	SM 4500NO3F-2011	445575		
30416762006	**TW-20R**	SM 4500NO3F-2011	445575		
30416762007	**TW-24A**	SM 4500NO3F-2011	445575		
30416762008	**TW-25**	SM 4500NO3F-2011	445575		
30416762009	**DUP-1**	SM 4500NO3F-2011	445575		
30416762010	**DUP-2**	SM 4500NO3F-2011	445575		
30416762001	**TW-6A**	EPA 9038	445663		
30416762002	**TW-6B**	EPA 9038	445663		
30416762003	**TW-14B**	EPA 9038	445663		
30416762004	**TW-18**	EPA 9038	445663		
30416762005	**TW-19**	EPA 9038	445663		
30416762006	**TW-20R**	EPA 9038	445663		
30416762007	**TW-24A**	EPA 9038	445663		
30416762008	**TW-25**	EPA 9038	445663		
30416762009	**DUP-1**	EPA 9038	445663		
30416762010	**DUP-2**	EPA 9038	445663		
30416762001	**TW-6A**	SM 4500NO2B-2011	444452		
30416762002	**TW-6B**	SM 4500NO2B-2011	444452		
30416762003	**TW-14B**	SM 4500NO2B-2011	444452		
30416762004	**TW-18**	SM 4500NO2B-2011	444452		
30416762005	**TW-19**	SM 4500NO2B-2011	444452		
30416762006	**TW-20R**	SM 4500NO2B-2011	444452		
30416762007	**TW-24A**	SM 4500NO2B-2011	444452		
30416762008	**TW-25**	SM 4500NO2B-2011	444452		
30416762009	**DUP-1**	SM 4500NO2B-2011	444452		
30416762010	**DUP-2**	SM 4500NO2B-2011	444452		

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - SPRING 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals (1)	Total + Diss. Metals (2)	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO4, COD		VOCs - Method 8260 (3)				
1	TW-6A	7	4-21-21	1010	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓				001
2	TW-6B	↓	↓	1045	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				002
3	TW-14B	↓	↓	1135	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				003
4	TW-13	↓	↓	1350	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				004
5	TW-19	↓	↓	1430	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				005
6	TW-20R	↓	↓	1510	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				006
7	TW-24A	↓	↓	910	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				007
8	TW-25	↓	↓	1215	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				008
9	DUP-1	↓	↓	—	↓		QA	↓	↓	↓	↓	↓	↓	↓		↓				009
10	DUP-2	↓	↓	—	↓		QA	↓	↓	↓	↓	↓	↓	↓		↓				010
11	TRIP BLANK	2	↓	—	↓		QA									↓				011
12																				

WO#: 30416762

30416762

	Signature	Date	Time	Comments
Relinquished by	M Brown	4-21-21	1515	(1) Sb, As, Ba, Be, Cd, Cr, Co, Cu, Hg, Pb, Ni, Se, Ag, Tl, V, Zn
Received by	[illegible] / Pace	4-21-21	1515	(2) Ca, Fe, Mg, Mn, K, Na
Relinquished by	[illegible] / Pace	4-21-21	17:15	
Received by	RDS / PACE	4/21-21	1800	PACE - G-BULG - METALS + WET CHEM
Relinquished by	RDS / PACE	4/21-21	2215	PACE - NAT'L - VOCs - SEE ATTACHED LIST (3)
Received by	Marina J Wang			LEVEL 2 REPORT

Cooler Temp on Arrival: 3.2 | 2.1 Deg. C

Rev. Aug. 2018

30416761 2 AU 4/22/21

TABLE 2-2

APPENDIX I
EPA METHOD 8260 - VOLATILE ORGANIC COMPOUNDS AND DETECTION LIMITS

Millersville Landfill, Anne Arundel County, MD

Parameter	PQL (ppb)	Parameter	PQL (ppb)
Acetone	5.0	cis-1,2-Dichloroethene	1.0
Acrylonitrile	5.0	trans-1,2-Dichloroethene	1.0
Benzene	1.0	Dichlorofluoromethane*	1.0
Bromochloromethane	1.0	Methylene chloride	1.0
Bromodichloromethane	1.0	1,2-Dichloropropane	1.0
Bromoform	1.0	trans-1,3-Dichloropropene	1.0
Bromomethane	1.0	cis-1,3-Dichloropropene	1.0
2-Butanone	5.0	Ethylbenzene	1.0
Carbon disulfide	1.0	2-Hexanone	5.0
Carbon tetrachloride	1.0	Iodomethane	1.0
Chlorobenzene	1.0	4-Methyl-2-pentanone	5.0
Chloroethane	1.0	Styrene	1.0
Chloroform	1.0	1,1,1,2-Tetrachloroethane	1.0
Chloromethane	1.0	1,1,2,2-Tetrachloroethane	1.0
Dibromochloromethane	1.0	Tetrachloroethene	1.0
1,2-Dibromo-3-chloropropane (DBCP)	1.0	Toluene	1.0
1,2 - Dibromoethane (EDB)	1.0	1,1,1-Trichloroethane	1.0
Dibromomethane	1.0	1,1,2-Trichloroethane	1.0
1,2 - Dichlorobenzene	1.0	Trichloroethene	1.0
1,4 - Dichlorobenzene	1.0	Trichloroflouromethane	1.0
trans-1,4-dichloro-2-butene	1.0	1,2,3-Trichloropropane	1.0
Dichlorodifluoromethane*	1.0	Vinyl acetate	1.0
1,1-Dichloroethane	1.0	Vinyl chloride	1.0
1,2-Dichloroethane	1.0	o-Xylene	1.0
1,1-Dichloroethene	1.0	m+p-Xylenes	1.0

NOTES: 1) PQL = Practical quantitation limit d: 8260-1dl.doc
2) * = Additional compounds not included on Appendix I list.

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EMA

Project # 3041676 12 AM 4/22/21

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label MLL
LIMS Login MLL

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 9 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 3.3/2.2 °C Correction Factor: -.1 °C Final Temp: 3.2/2.1 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# 10D1101	Date and Initials of person examining contents MLL 4/21/2021
Chain of Custody Present:	✓			1.	
Chain of Custody Filled Out:	✓			2.	
Chain of Custody Relinquished:	✓			3.	
Sampler Name & Signature on COC:		✓		4. no signature on coc	
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.	
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):	✓			7.	
Rush Turn Around Time Requested:	✓			8.	
Sufficient Volume:	✓			9.	
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.	
Containers Intact:	✓			11.	
Orthophosphate field filtered			✓	12.	
Hex Cr Aqueous sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.	
All containers meet method preservation requirements.	✓			Initial when completed MLL	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:	✓			18.	
Trip Blank Custody Seals Present	✓				
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed:	Date: / Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Internal Transfer Chain of Custody

☐ Samples Pre-Logged into eCOC.

State Of Origin: MD
Cert. Needed: [x] Yes ☐ No

Pace Analytical®
www.pacelabs.com

Workorder: 30416762 **Workorder Name:** MLF-SPRING 2021 **Owner Received Date:** 4/21/2021 **Results Requested By:** 5/6/2021

Report To

Samantha Bayura
Pace Analytical Pittsburgh
1638 Roseytown Road
Suites 2,3,4
Greensburg, PA 15601
Phone (724)850-5622

Subcontract To

Pace National
12065 Lebanon Rd
Mt. Juliet, TN 37122
Phone (615) 758-5858

Requested Analysis

L1343126

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HCL	VOC by 8260	LAB USE ONLY
1	TW-6A	PS	4/21/2021 10:10	30416762001	Water	31	X	-01
2	TW-6B	PS	4/21/2021 10:45	30416762002	Water	31	X	-02
3	TW-14B	PS	4/21/2021 11:35	30416762003	Water	31	X	-03
4	TW-18	PS	4/21/2021 13:50	30416762004	Water	31	X	-04
5	TW-19	PS	4/21/2021 14:30	30416762005	Water	31	X	-05
6	TW-20R	PS	4/21/2021 15:10	30416762006	Water	31	X	-06
7	TW-24A	PS	4/21/2021 09:10	30416762007	Water	31	X	-07
8	TW-25	PS	4/21/2021 12:15	30416762008	Water	31	X	-08
9	DUP-1	PS	4/21/2021 00:01	30416762009	Water	31	X	-09
10	DUP-2	PS	4/21/2021 00:01	30416762010	Water	31	X	-10
11	TRIP BLANK	PS	4/21/2021 00:01	30416762011	Water	31	X	-11

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature]	4/23/21 1700	B. Barlow	4/24/21 0930
2				
3				

Comments

List attached to COC
Report in ug/

Cooler Temperature on Receipt ____ °C | **Custody Seal** (Y) or N | **Received on Ice** (Y) or N | **Samples Intact** (Y) or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.*
This chain of custody is considered complete as is since this information is available in the owner laboratory.

4.0 + 0 = 4.0
A6 BB

D196

9242 2961 5863

Friday, April 23, 2021 8:58:30 AM

Sample Receipt Checklist

COC Seal Present/Intact:	Y N	If Applicable	
COC Signed/Accurate:	Y N	VOA Zero Headspace:	Y N
Bottles arrive intact:	Y N	Pres.Correct/Check:	Y N
Correct bottles used:	Y N		
Sufficient volume sent:	Y N		
RAD Screen <0.5 mR/hr:	Y N		

L1343726

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - SPMNL 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals (1)	Total + Diss. Metals (2)	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO_4, COD	VOCs - Method 8260 (3)			
1	TW-6A	7	4-21-21	1010	✓		GW	✓	✓	✓	✓	✓	✓	✓	✓			001
2	TW-6B			1045														002
3	TW-14B			1135														003
4	TW-13			1350														004
5	TW-19			1430														005
6	TW-20R			1510														006
7	TW-24A			910														007
8	TW-25			1215			✓											008
9	DUP-1			—			QA											009
10	DUP-2			—			QA	✓	✓	✓	✓	✓	✓	✓				010
11	TRIP BLANK	2	✓	—	✓		QA								✓			011
12																		

WO#: 30416762

30416762

	Signature	Date	Time	Comments
Relinquished by	M Brown	4-21-21	1515	(1) Sb, As, Ba, Be, Cd, Cr, Co, Cu, Hg, Pb, Ni, Se, Ag, Tl, V, Zn
Received by	[illegible] Pace	4-21-21	1515	(2) Ca, Fe, Mg, Mn, K, Na
Relinquished by	[illegible] Pace	4-21-21	17:15	
Received by	RDS PACE	4/21-21	1800	PACE - G-BURG - METALS + WET CHEM
Relinquished by	RDS PACE	4/21-21	2215	PACE - NAT'L - VOCs - SEE ATTACHED LIST (3)
Received by	Marina J Clary			LEVEL 2 REPORT

Cooler Temp on Arrival: 3.2 | 2.1 Deg. C

Rev. Aug. 2018

U1343726

30416761 2 AW 4/22/24

TABLE 2-2

APPENDIX I
EPA METHOD 8260 - VOLATILE ORGANIC COMPOUNDS AND DETECTION LIMITS

Millersville Landfill, Anne Arundel County, MD

Parameter	PQL (ppb)	Parameter	PQL (ppb)
Acetone	5.0	cis-1,2-Dichloroethene	1.0
Acrylonitrile	5.0	trans-1,2-Dichloroethene	1.0
Benzene	1.0	Dichlorofluoromethane*	1.0
Bromochloromethane	1.0	Methylene chloride	1.0
Bromodichloromethane	1.0	1,2-Dichloropropane	1.0
Bromoform	1.0	trans-1,3-Dichloropropene	1.0
Bromomethane	1.0	cis-1,3-Dichloropropene	1.0
2-Butanone	5.0	Ethylbenzene	1.0
Carbon disulfide	1.0	2-Hexanone	5.0
Carbon tetrachloride	1.0	Iodomethane	1.0
Chlorobenzene	1.0	4-Methyl-2-pentanone	5.0
Chloroethane	1.0	Styrene	1.0
Chloroform	1.0	1,1,1,2-Tetrachloroethane	1.0
Chloromethane	1.0	1,1,2,2-Tetrachloroethane	1.0
Dibromochloromethane	1.0	Tetrachloroethene	1.0
1,2-Dibromo-3-chloropropane (DBCP)	1.0	Toluene	1.0
1,2 - Dibromoethane (EDB)	1.0	1,1,1-Trichloroethane	1.0
Dibromomethane	1.0	1,1,2-Trichloroethane	1.0
1,2 - Dichlorobenzene	1.0	Trichloroethene	1.0
1,4 - Dichlorobenzene	1.0	Trichloroflouromethane	1.0
trans-1,4-dichloro-2-butene	1.0	1,2,3-Trichloropropane	1.0
Dichlorodifluoromethane*	1.0	Vinyl acetate	1.0
1,1-Dichloroethane	1.0	Vinyl chloride	1.0
1,2-Dichloroethane	1.0	o-Xylene	1.0
1,1-Dichloroethene	1.0	m+p-Xylenes	1.0

NOTES: 1) PQL = Practical quantitation limit
2) * = Additional compounds not included on Appendix I list.

d: 8260-1dl.doc

U343726

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EMA

Project # 30416761 2 AM 4/22/21

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label MLC
LIMS Login MLC

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 9 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 3.3/2.2 °C Correction Factor: -.1 °C Final Temp: 3.2/2.1 °C

Temp should be above freezing to 6°C

pH paper Lot# 100110 | Date and Initials of person examining contents MLL 4/21/2021

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4. no signature on COC
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):	✓			7.
Rush Turn Around Time Requested:	✓			8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.
All containers meet method preservation requirements.	✓			Initial when completed MLC / Date/time of preservation / Lot # of added preservative
Headspace in VOA Vials (>6mm):		✓		17.
Trip Blank Present:	✓			18.
Trip Blank Custody Seals Present	✓			
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: / Date: / Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Appendix C.2
Fall 2021

Bureau of Waste Management Services
389 Burns Crossing Road
Severn, Maryland 21144
Phone (410) 222-6108

January 31, 2022

Mr. Andrew Grenzer, Chief
Solid Waste Operations Division
Land and Materials Administration
Maryland Department of the Environment
1800 Washington Blvd., Suite 605
Baltimore, MD 21230-1720

RE: Semi-Annual Groundwater and Surface Water Reports, July 1 – December 31, 2021, Millersville Landfill and Resource Recovery Facility and Sudley Closed Landfill

Dear Mr. Grenzer:

Enclosed are the Semi-Annual Groundwater and Surface Water Data Evaluation Reports for the Millersville Landfill and Resource Recovery Facility and the Sudley Landfill. The analytical results (raw data reports) for the monitoring events are also enclosed. The text, tables, and appendices are included as hard copies. The appendix containing the raw analytical data results is included electronically on the accompanying CDs.

Should you have any questions regarding the information covered in this document, please contact me or Mark Morris on (410) 222-6108.

Sincerely,

Stephen J. Krajcsik
Solid Waste Operations Administrator

Enclosure

bcc: Bill Dehn, AACo. Health Department (Mail Stop 3101), w/enclosures
Rhody Holthaus, w/enclosures
Michael Porath, w/enclosures
Mark Morris, w/enclosures
Stewart Kabis, ARM Group (cover letter only)
File# OR-O-MLF-551E w/enclosures; OR-O-MCC/MLF-506 (cover letter only) for Millersville
File# OR-O-SLF-651C w/enclosures; OR-O-SCC/SLF-606 (cover letter only) for Sudley

ANNE ARUNDEL COUNTY

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY

GROUNDWATER MONITORING REPORT
2nd SEMI-ANNUAL 2021

ARM Project 21011025

Prepared for:

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS
WASTE MANAGEMENT SERVICES
389 Burns Crossing Road
Severn, Maryland 21144

Prepared by:

ARM Group LLC
9175 Guilford Road
Suite 310
Columbia, MD 21046

January 2022

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January 2022

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EXECUTIVE SUMMARY

The Maryland Department of Environment (MDE) has developed groundwater and surface water monitoring requirements to detect pollutant releases from landfills that could have adverse impacts on public health and the environment. To fulfill these requirements, landfills must be monitored to address three issues: (i) whether a release of chemicals from the landfill has occurred; (ii) whether conditions potentially adverse to public health and the environment were created as a result of a release; and (iii) whether the results of a statistical evaluation of groundwater data require that additional sampling and/or corrective measures be implemented. This executive summary presents the findings of the 2nd semi-annual 2021 (Fall 2021) groundwater sampling event, performed at the Millersville Landfill and Resource Recovery Facility (MLFRRF) located in Anne Arundel County. The findings are summarized with respect to these three issues.

The sampling results are evaluated for compliance with regulatory standards, including: (i) U.S. Environmental Protection Agency (USEPA) maximum contaminant levels (MCLs) and secondary maximum contaminant levels (SMCLs); (ii) Maryland health-based standards; and (iii) groundwater protection standards (GWPS) established for the site. MCLs and groundwater protection standards are established based on health concerns, whereas SMCLs are based on aesthetic concerns, such as taste, color, and odor.

The groundwater and surface water monitoring strategy for the MLFRRF was first identified in the Environmental Monitoring Plan (EMP), prepared for the Anne Arundel County Department of Public Works (the County) by Stearns & Wheeler [June 1995, Revised June 1996]. An updated EMP for MLFRRF prepared by ERM, dated November 5, 2002, was conditionally approved by MDE with their June 7, 2004 letter, contingent upon the County adding methyl tertiary butyl ether (MTBE) analysis to the monitoring program. The EMP was updated by ERM and approved by MDE in a letter dated March 25, 2010. The EMP defines two separate portions of the MLFRRF. Closed portions (Cells 1 East, 2, and 4) that stopped receiving waste prior to October 9, 1991, are subject to the requirements of the Code of Maryland (COMAR). The closed portions (Cells 5, 6, and 7) that stopped receiving waste prior to October 9, 1993, are subject to the provisions of 40 CFR Part 258 related to final cover requirements only. The recently-closed Cell 8 and currently active Cell 9 are subject to 40 CFR Part 258. However, for the purposes of monitoring, the closed portion (Cells 5, 6, and 7) are included in the monitoring and analysis requirements pursuant to 40 CFR Part 258 along with Cell 8 and Cell 9. Each of these portions of the MLFRRF are monitored by a comprehensive monitoring network, on-site regulated monitoring wells (Subtitle D), on-site regulated monitoring wells (COMAR), on-site non-regulated monitoring wells, off-site non-regulated monitoring wells, and other off-site monitoring locations. The monitoring networks were defined according to strategies that comply with the applicable regulatory requirements.

At the request of MDE, additional monitoring was performed for a select list of parameters from the Appendix II list in 40 CFR Part 258 for the on-site Subtitle D regulated monitoring wells.

OVERVIEW OF FINDINGS

Overall, the sampling event did not reveal substantial changes in groundwater quality and the results for inorganic parameters are consistent with historical results. Given the data for the MLFRRF, the site-specific hydrogeology, and the corrective actions implemented by the County, the potential for adverse effects to human health and the environment continues to be minimal.

Of all samples collected for the Fall 2021 sampling event, there were two MCL exceedances, shown on **Table 3.** One of these was a first-time MCL exceedance, that of the concentration of nitrate in well TW-02A. The MDE was notified of the exceedance. However, the laboratory subsequently admitted that there was an error during the analysis and therefore the result was invalid. As a conservative measure, a confirmation sample was collected from TW-2A and the resulting concentration of nitrate was measured to be below the MCL. The other MCL exceedance during this sampling event was for methylene chloride in TW-25A, which is routinely measured above its applicable MCL in this well. The two MCL exceedances are discussed below in **Section 3.3.1**.

The groundwater elevations and flow directions observed in the Zone 3 aquifer during this sampling event are generally consistent with historical data and seasonal variations.

The following summarizes the results of the Fall 2021 groundwater sampling event.

On-Site Regulated Monitoring Wells (Subtitle D)

All of the Appendix I VOC detections above the reporting limit (RL) are listed in **Table 4.** The Appendix II VOC detections are listed in **Table 5**. The concentration of methylene chloride in TW-25A exceeded its applicable MCL, as is typical. A first-time MCL exceedance was identified for nitrate in well TW-2A which, as mentioned above, was later determined to be an invalid result. A confirmation sample was collected in which the nitrate concentration was measured below the MCL.

In general, concentrations of Appendix I and Appendix II VOCs in the on-site Subtitle D regulated wells are consistent with historical concentrations. All VOC results for Subtitle D wells are discussed below in **Section 3.3.2**.

While iron and manganese continue to exceed SMCLs and pH is below the SMCL range in several wells, concentrations are generally consistent with historical levels.

On-site Regulated Monitoring Wells (COMAR)

Detections of Appendix I VOCs above the RL in COMAR wells are typically listed in **Table 6**; however, there were no Appendix I VOCs detected above the RL in these wells during the Fall 2021 event. The Appendix II VOC detections above the RL are listed in **Table 7.** There were no

GWPS or MCL exceedances for VOCs. The concentrations measured for Appendix I and Appendix II VOCs in the on-site COMAR-regulated wells are generally consistent with historical records.

While iron and manganese continue to exceed SMCLs and pH is below the SMCL range in several wells, concentrations are generally consistent with historical levels.

On-site Non-regulated Monitoring Wells

Appendix I VOC detections above the RL are listed in **Table 8.** Appendix II VOC detections above the RL are typically listed in **Table 9;** however, there were no detections of any Appendix II VOCs in on-site non-regulated wells during this sampling event**.** There were no GWPS or MCL exceedances for VOCs.

While iron and manganese continue to exceed SMCLs and pH is below the SMCL range in several wells, concentrations are generally consistent with historical levels. Concentrations of inorganic parameters measured in on-site non-regulated monitoring wells during the Fall 2021 sampling event—including those of iron, manganese, and pH—are generally consistent with the historical record.

Off-site Non-regulated Monitoring Wells

Appendix I VOC detections above the RL are listed in **Table 10.** Appendix II VOC detections above the RL are listed in **Table 11.** There were no MCL or GWPS exceedances. Appendix I and Appendix II VOC concentrations in these wells are generally consistent with historical concentrations. Mercury concentrations in the off-site non-regulated monitoring wells are generally consistent with the historical record.

Off-site Residential Zone 4 Water Supply Wells

As shown on **Table 12** and **Table 13**, there were no Zone 4 residential water supply wells sampled during the Fall 2021 event.

Surface Water Sampling Locations

Appendix I VOC detections above the RL are typically listed in **Table 14,** but there were no detections above the RL during the Fall 2021 sampling event**.** Appendix II VOC detections above the RL are typically listed in **Table 15**, but there were no detections above the RL at surface water locations during this sampling event. As such, there were no MCL or GWPS exceedances.

Concentrations of inorganic parameters were generally consistent with the historical record for surface water sampling locations.

Statistical Evaluation

The results of the statistical evaluation of the Fall 2021 groundwater data are generally consistent with historical results. The findings indicate that downgradient samples show constituent concentrations that are statistically significant increases (SSIs) above background levels for several VOCs and inorganic parameters. There were five new SSIs for parameters detected above the RL during the Fall 2021 sampling event that were not identified during the Spring 2021 event. These new SSIs consist of trichlorofluoromethane in TW-25A and TW-28, beryllium in TW-25A, vanadium in TW-20R, and total dissolved solids in TW-24A. Concentrations of most parameters that exhibited SSIs have generally been consistent with their historical data set; that is, no trend is apparent in the concentrations.

1 INTRODUCTION

1.1 BACKGROUND

In accordance with the requirements of the Solid Waste Management Regulations provided in Title 40 of the Code of Federal Regulations, Part 258 (40 CFR Part 258) and the Maryland Department of the Environment (MDE), the Anne Arundel County Department of Public Works (County) monitors groundwater and surface water at the Millersville Landfill and Resource Recovery Facility (MLFRRF), located in Anne Arundel County, Maryland. The monitoring requirements are provided in the Environmental Monitoring Plan (EMP), prepared by Stearns & Wheeler [June 1995, Revised June 1996]. An updated EMP for MLFRRF prepared by ERM, dated November 5, 2002, was conditionally approved by MDE with their June 7, 2004 letter, contingent upon the County adding methyl tertiary butyl ether (MTBE) analysis to the monitoring program. The EMP was revised by ERM and approved by MDE in a letter dated March 25, 2010. The primary objectives of the compliance monitoring program for the MLFRRF are: (i) to determine if leachate from the landfill affects groundwater quality; (ii) to evaluate whether or not conditions that are potentially adverse to public health and the environment have been caused in groundwater or surface water by the operation of the landfill; and (iii) to determine whether the results of a statistical evaluation of the sampling data indicate that the County needs to perform additional groundwater sampling or implement corrective measures.

This semi-annual report summarizes the findings of the evaluation performed on the data obtained during the Fall 2021 groundwater sampling event. The sampling performed during this event was conducted to fulfill the monitoring requirements of 40 CFR Part 258 and the approved EMP. This report also provides an overview of groundwater quality based on current and historical data.

The sampling data were evaluated through: (i) data validation; (ii) an evaluation of the ion balances of the samples that were collected, and an evaluation of the relative percent differences (RPDs) between sampling locations and corresponding duplicates (**Appendix D**); (iii) a statistical comparison of laboratory data between designated upgradient and downgradient groundwater on-site Subtitle D regulated monitoring wells; (iv) a comparison of laboratory results for each groundwater monitoring well with historical groundwater quality information; and (v) a comparison of laboratory results for each groundwater monitoring well with United States Environmental Protection Agency (USEPA) and MDE regulatory criteria, as well as with site-specific groundwater protection standards (GWPS).

There are three sets of rules that govern how the MLFRRF monitoring data are evaluated: 40 CFR Part 258 regulations apply to those portions of the MLFRRF that continued to receive waste after October 9th, 1993; 40 CFR Part 258 regulations related to final cover requirements apply to those portions of the MLFRRF that stopped receiving waste prior to October 9, 1993; and State Code of Maryland (COMAR) regulations apply to those closed portions of the MLFRRF that stopped

receiving waste before October 9, 1991. Closed disposal Cells 1 East, 2, and 4 are monitored in compliance with COMAR standards. The closed Cells 5, 6, and 7 that stopped receiving waste prior to October 9, 1993, are subject to the provisions of 40 CFR Part 258 related to final cover requirements only. Recently-closed Cell 8 and currently active Cell 9 are subject to 40 CFR Part 258. However, for the purposes of monitoring, the closed Cells 5, 6, and 7 are included in the monitoring and analysis requirements pursuant to 40 CFR Part 258 along with Cell 8 and Cell 9.

Table 1 provides a summary of the groundwater monitoring network for the MLFRRF. As shown in **Table 1**, the wells are designated according to whether they are used to monitor the older (Cells 1 East, 2, and 4) or newer (combined Cells 5, 6, and 7, Cell 8, and Cell 9) portions of the MLFRRF. The groundwater and surface water monitoring network for the MLFRRF is illustrated in **Figure C-1** in **Appendix C**. In general, the older and newer portions are separated by the Baltimore Gas Electric right-of-way.

In accordance with the EMP and in conformance with applicable regulations, 22 of the 50 on-site monitoring wells at the MLFRRF are classified as on-site regulated monitoring wells (Subtitle D). Eleven are located along the Eastern Boundary, two are near Cell 8, two are near the facility entrance serving as background wells, and seven are near Cell 9. Additionally, another 15 of the 50 on-site monitoring wells are classified as on-site regulated monitoring wells (COMAR). These monitoring wells are governed by COMAR for the closed portion of the MLFRRF. One monitoring well, TW-26R, is regulated by the facility's refuse disposal permit and is not covered by this semi-annual report. The remaining 13 on-site monitoring wells are classified as non-regulated. In conjunction with the regulated wells, numerous off-site monitoring locations have been established by the County to take proactive measures that comply with 40 CFR Part 258 groundwater monitoring requirements.

The regulated monitoring wells (Subtitle D) consist of the wells at the site that provide information on the quality of groundwater passing the relevant point of compliance and that are downgradient of combined Cells 5, 6, and 7, Cell 8 and Cell 9. **Table 1** summarizes the sampling locations used to monitor these cells. The on-site monitoring wells are designated as "TW". Wells designated as "MW" are off-site monitoring wells installed by the County to monitor off-site chemical concentrations in the groundwater. Wells designated as "RW" are also off-site monitoring wells and were converted from drinking water supply wells to monitoring wells by the County. Off-site residential water supply wells drilled into either the Zone 3 or Zone 4 aquifer are designated by the County parcel number with the prefix "P". Off-site residential water supply wells which have been drilled into the Zone 4 aquifer by the County have the suffix "Z4". Zone 4 residential wells are sampled biennially, with the exception of well P-417-Z4. This well is sampled annually as a conservative measure because there is no sentry monitoring point between the landfill and Parcel 417. **Table 2** lists the residential water supply wells. The residential water supply wells were not sampled during the Fall 2021 sampling event.

Regulated monitoring well (Subtitle D) TW-20 was abandoned on April 8, 2010, by a licensed well driller in accordance with COMAR 26.04.04.11. The well was placed to monitor groundwater downgradient of Cell 8 but was placed where a stormwater management pond was designated for Cell 9. Zone 3 monitoring well TW-20R was installed February 3-5, 2010, adjacent to Cell 8 as a replacement for abandoned monitoring well TW-20 per the approved EMP.

In addition to TW-20R, two non-regulated on-site Zone 4 monitoring wells were installed prior to the Spring 2010 sampling event. The installation of non-regulated on-site Zone 4 monitoring wells TW-14B and TW-6B were completed per the approved EMP on January 21, 2010 and February 2, 2010, respectively.

In accordance with the EMP, four on-site Zone 3 monitoring wells, TW-27, TW-28, TW-29, and TW-30, were installed prior to the Spring 2013 sampling event for incorporation into the regulatory monitoring well network for Cell 9. Additionally, existing monitoring wells TW-01, TW-02A, and TW-03, located south of Cell 9, are now considered part of the regulatory monitoring well network. Two years of background monitoring were completed prior to Cell 9 becoming operational in January 2017.

During the Fall 2020, construction activity for Cell 9 of the landfill involved significant earthwork in the immediate vicinity of TW-28, including raising the ground surface by 10-12 feet. As a result, new sections of well pipe were added to the top of TW-28 in order to vertically extend the well.

1.2 GROUNDWATER SAMPLING AND LABORATORY ANALYSIS

1.2.1 Groundwater Sampling

The County contracted with Environmental Monitoring and Assessment, LLC (EMA) of Lititz, Pennsylvania, to conduct the semi-annual groundwater sampling at the MLFRRF for the Fall 2021 sampling event. The sampling event included the collection of samples from 22 regulated on-site monitoring wells (Subtitle D), 15 regulated on-site monitoring wells (COMAR), 7 on-site non-regulated monitoring wells, and 12 off-site monitoring wells. The sampling locations are listed in **Table 1.**

Prior to collecting the groundwater samples, the depth to the water table was measured at each well. Once the water table measurement was recorded, the monitoring wells were purged and sampled in accordance with 40 CFR Part 258, MDE requirements, and the EMP. As the monitoring wells were purged, measurements of groundwater dissolved oxygen, pH, conductivity, temperature, oxidation-reduction potential, turbidity, and appearance were recorded.

1.2.2 Groundwater Sample Analysis

The groundwater analytical program for the MLFRRF includes the analysis of samples for parameters used to monitor both the existing and closed portion of the MLFRRF. For the purpose of uniformity and ease of implementation, the samples that are collected from the wells used to monitor the closed portion of the MLFRRF are analyzed in accordance with the detection monitoring requirements (defined by 40 CFR Part 258) for the existing portion of the MLFRRF, as specified in the EMP. In accordance with these detection monitoring requirements, the samples are analyzed for the parameters listed in Appendix I of 40 CFR Part 258 (Appendix I parameters). The Appendix I parameters include inorganic constituents (metals) and organic constituents (volatile organic compounds or VOCs).

In addition to these analytical requirements, the samples collected at the site are also analyzed for parameters historically monitored at the site. These parameters include dichlorodifluoromethane and dichlorofluoromethane, which are listed in Appendix II of 40 CFR Part 258 (Appendix II parameters), methyl tertiary butyl ether (MTBE), and general chemistry parameters such as chloride and total dissolved solids that can sometimes be indicators of landfill leachate (indicator parameters).

In accordance with this analytical program described above, the groundwater samples were analyzed for VOCs, total and dissolved metals, and general chemistry indicator parameters. The methods used to analyze the samples included USEPA Methods 8260 and 8011 for VOCs; USEPA Methods 6010D, 6020B, and 7470A for metals; and 40 CFR Part 136 methods for the indicator parameters. The full laboratory analytical results and data packages are presented as **Appendix E.**

1.3 SURFACE WATER SAMPLING AND LABORATORY ANALYSIS

1.3.1 Surface Water Sampling

During the Fall 2021 sampling event, three surface water samples, SW-1, SW-2, and SW-3 were collected by EMA from Wells Branch, which flows west to east across the site (see Figure C-1). The surface water samples were collected from the stream locations that are representative of upgradient and downgradient conditions. Sample location SW-1 is an upgradient location between Cell 8 and the leachate pretreatment plant, approximately 200 feet downgradient of monitoring well TW-10A. Sample location SW-2 is a downgradient location near the TW-4 well cluster. Surface water collected at this location is representative of surface water conditions prior to discharging off-site. Sample location SW-3 is a mid-stream location that is downgradient of Stormwater Pond 8-1 and is located between combined Cells 5-7, Cell 8, and Cell 9. This location is approximately equal distance from sample locations SW-1 and SW-2.

1.3.2 Surface Water Sample Analysis

The surface water samples were analyzed for VOCs, total metals, and indicator parameters. The methods used to analyze the samples included USEPA Method 8260 and 8011 for VOCs; USEPA Methods 6010D, 6020B, and 7470A for metals; and 40 CFR Part 136 methods for the indicator parameters.

1.4 QUALITY ASSURANCE/QUALITY CONTROL SAMPLING AND ANALYSIS

1.4.1 Quality Assurance/Quality Control Sampling (QA/QC)

Field and laboratory QA/QC protocols were employed during the sampling event to ensure that QA/QC criteria were met. The field QA/QC protocols included the collection and analysis of two blind duplicate samples from wells TW-24 and TW-30. In addition, one field blank and four trip blanks were prepared and analyzed. The laboratory QA/QC protocols included the analysis of method blanks and matrix spike (MS) and matrix spike duplicate (MSD) samples for GC/MS runs. These protocols help identify possible sources of VOC contamination that may cause elevated or false positive parameter levels to be reported.

1.4.2 Quality Assurance/Quality Control Sample Analysis

To ensure that the field QC criteria were met, blind duplicate samples were analyzed for all parameters for which the groundwater samples were analyzed. These parameters include VOCs by USEPA Method 8260 and 8011; total and dissolved metals by USEPA Methods 6010D, 6020B, and 7470A; and the indicator parameters by 40 CFR Part 136 methods. The field blank was also analyzed for all parameters for which the Subtitle D regulated monitoring wells were analyzed. These parameters include VOCs by USEPA Method 8260 and 8011; total and dissolved metals by USEPA Methods 6010D, 6020B, and 7470A; and indicator parameters by 40 CFR Part 136 methods. The trip blanks were analyzed for VOCs according to USEPA Method 8260 and 8011.

To ensure that the laboratory QA criteria were met, project-specific MS and MSD samples were analyzed at the rate of one MS/MSD sample for every 20 field samples, as specified in the EMP. The MS and MSD samples were used by the laboratory to evaluate possible matrix effects that could have interfered with the analytical method, and to estimate the method precision. The analysis of laboratory method blanks was performed to identify possible sources of contamination that may have caused elevated or false positive parameter levels to be reported.

1.5 DATA ANALYSIS METHODOLOGY

The analysis of the data obtained during this sampling event included: validation of the laboratory data, determination of USEPA National Primary Drinking Water Standards (MCLs) exceedances,

statistical evaluation of upgradient versus downgradient parameter concentrations, identification of GWPS exceedances, and assessment of groundwater elevations.

The laboratory sample data and QA/QC data were validated to verify proper analytical procedures and checks were performed by the analytical laboratory. The laboratory data validation is discussed further in **Appendix D** of this report. The laboratory analytical data packages are presented as **Appendix E** of this report.

The data were evaluated to determine whether or not concentrations exceeded MCLs and National Secondary Drinking Water Standards (SMCLs), state health-based standards, and site-specific GWPS. The GWPS for the site were established in 1997. This evaluation is included in **Section 3** of this report.

The data analysis included a statistical evaluation of the detection monitoring data obtained from the on-site regulated monitoring wells (Subtitle D). This evaluation was used to determine if there is a statistically significant change in groundwater quality for the portions of the site subject to 40 CFR Part 258.54 that may be attributed to the MLFRRF. The historical concentrations of the parameters detected in the groundwater samples from each on-site regulated monitoring well (Subtitle D) were compared to the historical background data using statistical methods described in the EMP and 40 CFR Part 258.53(g). The statistical analysis is discussed further in **Section 4** of this report.

2 SUMMARY OF SAMPLING EVENT

2.1 OVERVIEW

The County contracted with EMA to conduct the Fall 2021 sampling event at the MLFRRF. VOC sample analysis was performed by Maryland Spectral Services of Baltimore, Maryland, and inorganic sample analysis was performed by Pace Analytical Service (Pace), of Greensburg, Pennsylvania and Beaver, West Virginia.

The groundwater monitoring wells were purged and sampled in accordance with the EMP and 40 CFR Part 258. **Figure C-1** shows the locations of the sampling points and the corresponding sampling classifications. Quality control blanks and blind duplicates were obtained, as discussed in **Section 1.4.1** of this report. The groundwater samples were submitted to the laboratory for analyses of total and specific dissolved metals, Appendix I VOCs, and inorganic indicators of leachate (chloride, ammonia, nitrite and nitrate-nitrogen, chemical oxygen demand, total alkalinity, sulfate, dissolved solids, and hardness).

2.2 DATA ANALYSIS

The methods used to collect and analyze the groundwater, surface water and QA/QC samples for this sampling event were evaluated to determine compliance with the EMP for the site and 40 CFR Part 258. The following procedures were followed to evaluate the compliance of the field sampling activities and the laboratory methods:

- Review of the appropriateness of the analytical methods;
- Review of the appropriateness of sample bottle types, preservatives, and holding times for each analytical method;
- Review of reports and analytical data for trip blanks, field blanks, duplicate samples, and laboratory method blanks to identify possible evidence of contamination;
- Review of Chain-of-Custody documentation for accuracy and completeness; and
- Review of field methods described in the field sampling reports.

The field and laboratory results were also evaluated to determine the validity of the data. The following procedures were followed to assess the validity of the data:

- Calculation of charge balance errors on the samples collected in the field;

- Review of MS and MSD samples to evaluate possible matrix effects that may interfere with the analytical method;
- Review of MS, MSD, and blind duplicate samples to calculate the relative percent difference (RPD) of duplicate samples in obtaining an estimate of laboratory method precision;
- Review of laboratory reports on instrument tuning, instrument calibration, and recoveries of spiked samples for each analytical method; and
- Comparison of the analytical data and groundwater elevations to historical values at each sampling location.

The results obtained from this evaluation satisfy the project QA/QC objectives. The results of the evaluation of the analytical data are provided in **Appendix D.** The full laboratory analytical data packages are presented as **Appendix E** of this report.

A comparison of the analytical data to MCLs, SMCLs, State standards, and established GWPS, as well as to historical data, is discussed in **Section 3.**

3 SUMMARY OF ANALYTICAL RESULTS

3.1 INTRODUCTION

Groundwater elevations were measured by the County on a monthly basis and are included in this report in **Appendix C**. The field and laboratory analytical results were evaluated by comparing the current data to historical data. The laboratory results were also evaluated for compliance with regulatory standards. In assessing the laboratory data, each parameter was evaluated for compliance with: (i) MCLs and SMCLs; (ii) Maryland health-based standards; and (iii) GWPS established for the site. MCLs and GWPS are established based on health concerns, whereas SMCLs are based on aesthetic concerns, such as taste, color, and odor. A statistical evaluation of the laboratory results is presented in **Section 4**.

3.2 GROUNDWATER ELEVATION DATA

The monthly water table measurements recorded during October 2021 are provided in **Appendix C.** The groundwater elevations are generally consistent with historical data.

Potentiometric surface contours for groundwater levels measured in wells screened within the Zone 3 aquifer during Fall 2021 are illustrated on **Figure C-1** in **Appendix C**. As shown on the drawing, the general direction of groundwater flow in the Zone 3 aquifer at the MLFRRF is toward the northeast. Groundwater flow direction is consistent with historical data.

3.3 ANALYTICAL RESULTS

The results of the comparison of the analytical data to regulatory standards and to historical trends are discussed below for the volatile organic and inorganic data. In assessing the data, each parameter was evaluated for compliance with the MCLs and SMCLs, with Maryland health-based standards, and with GWPS established for the site.

The current analytical data and the historical analytical data are included in tables in **Appendix A.** The tables present the concentrations over time for organic and inorganic parameters. They provide a simple means of evaluating trends in the concentrations. The "J" qualifier associated with a concentration indicates the compound was detected at a trace concentration below the laboratory RL but above the MDL and as such is an estimated value. The "U" qualifier associated with a concentration indicates the compound was not detected. The "B" qualifier indicates possible laboratory contamination due to the compound being detected in the method or field blank sample analysis.

3.3.1 **MCL Exceedances**

Table 3 lists the MCL exceedances at the site for this sampling event. As shown in **Table 3**, there were two parameters that exceeded their applicable MCLs. Time-series plots for parameter concentrations with historic MCL exceedances for on-site monitoring wells have been constructed to identify potential trends in concentrations over time. These plots are included in **Appendix B**.

One of the MCL exceedances was consistent with the historical record. There was one first-time MCL exceedance during the Fall 2021 sampling event. The concentration of nitrate, 21.7 J mg/L, in Subtitle D well TW-02A exceeded the applicable MCL of 10 mg/L. The MDE was notified of the exceedance. However, the laboratory subsequently admitted that there was an error during the analysis and therefore the result was invalid. As a conservative measure, a confirmation sample was collected from TW-02A on December 9th, 2021 and analyzed for nitrate. The concentration of nitrate in the confirmation sample was measured to be below the applicable MCL.

3.3.2 **On-site Regulated Monitoring Wells (Subtitle D)**

Appendix I Volatile Organic Compounds

As shown on **Table 4,** eight different VOCs were detected above the RL across 13 different monitoring locations. The concentration of methylene chloride in TW-25A exceeded its applicable MCL, as it has done over the past several years.

All detections of VOCs above the RL were generally consistent with the historical record. No Appendix I VOCs were detected above the RL in the following Subtitle D wells during the Fall 2021 sampling event: TW-02A, TW-03, TW-04B, TW-10A, TW-20R, TW-23, TW-24A, TW-27, and TW-30.

Appendix II Volatile Organic Compounds and MTBE

As shown in **Table 5**, detections above the RL of dichlorodifluoromethane, dichlorofluoromethane, and MTBE were noted for 11 different locations. There were no GWPS or Maryland State Action Level exceedances. In general, concentrations of these parameters are consistent with concentrations measured over the past 10 years.

No Appendix II VOCs were detected above the reporting limit in the following Subtitle D wells during the Fall 2021 sampling event: TW-02A, TW-03, TW-04B, TW-05A, TW-10A, TW-14A, TW-20R, TW-23, TW-24A, TW-27, and TW-30.

Inorganics

As previously mentioned, there was an MCL exceedance in TW-02A for nitrate. However, the laboratory subsequently admitted that there was an error during the analysis and therefore the result was invalid. The concentration of nitrate in the confirmation sample was measured below the applicable MCL.

Mercury was detected at concentrations above the RL only in Subtitle D wells TW-04B, TW-06, TW-24, TW-24A, and TW-25A. Concentrations in all five of these wells were below the applicable MCL.

Iron (total and dissolved), manganese (total and dissolved), and turbidity were detected in many of the regulated monitoring wells (Subtitle D) at concentrations that exceeded the applicable SMCLs. Iron and manganese are typical naturally occurring metals found in groundwater and are not necessarily indicative of contamination from the landfill. Measurements of pH were below the SMCL range for most on-site Subtitle D regulated monitoring wells. Low pH is also typical of groundwater and is believed to be a natural property of groundwater at the MLFRRF. Furthermore, pH concentrations in the downgradient monitoring wells are consistent with those measured in upgradient background groundwater.

Concentrations of inorganic parameters measured during the Fall 2021 sampling event—including those of iron, manganese, and pH—are generally consistent with the historical record.

3.3.3 **On-site Regulated Monitoring Wells (COMAR)**

Appendix I Volatile Organic Compounds

As shown on **Table 6,** there were no Appendix I VOCs detected above the RL across all COMAR regulated on-site monitoring wells. As such, there were no MCL or GWPS exceedances.

Appendix II Volatile Organic Compounds and MTBE

As shown in **Table 7**, there was only one detection above the RL in a COMAR regulated on-site monitoring well. There were no GWPS or Maryland State Action Level exceedances. The concentration was consistent with the historical record. There were no Appendix II VOCs detected above the RL in COMAR regulated wells TW-07, TW-07A, TW-08, TW-08A, TW-09B, TW-09C, TW-15, TW-16, TW-17, TW-17A, TW-21, TW-22, TW-22A, and TW-22B.

Inorganics

Mercury was detected at a concentration above the RL in two COMAR regulated wells (TW-15B and TW-22A). The concentrations were below the applicable MCL. Iron (total and dissolved), manganese (total and dissolved), and turbidity were detected in several of the COMAR regulated

monitoring wells at concentrations that exceeded their applicable SMCLs. Iron and manganese are typical naturally occurring metals found in groundwater and are not necessarily indicative of contamination from the landfill. Measurements of pH were below the SMCL range for all on-site COMAR regulated monitoring wells. Low pH is also typical of groundwater and is believed to be a natural property of groundwater at the MLFRRF. Furthermore, pH concentrations measured in the downgradient wells are comparable to upgradient background concentrations.

Concentrations of inorganic parameters measured in COMAR regulated monitoring wells during the Fall 2021 sampling event—including those of iron, manganese, and pH—were consistent with the historical record.

3.3.4 **On-site Non-regulated Monitoring Wells**

Volatile Organic Compounds

As shown on **Table 8**, there was one Appendix I VOCs detected above the RL in one on-site non-regulated monitoring well during the Fall 2021 sampling event. This detection is consistent with the historical record. There were no Appendix I VOCs detected above the RL in the following on-site non-regulated wells: TW-02, TW-03A, TW-06A, TW-06B, TW-09, TW-14B, and TW-16A.

Appendix II VOCs detected above the RL are typically shown on **Table 9** but there were no detections above the RL in on-site non-regulated monitoring wells during the Fall 2021 sampling event.

Inorganics

Mercury was not detected above the RL in any on-site non-regulated monitoring wells. Iron (total and dissolved), manganese (total and dissolved), and turbidity were detected in a few of the on-site non-regulated monitoring wells at concentrations that exceeded their applicable SMCLs. Iron and manganese are typical naturally-occurring metals found in groundwater and are not necessarily indicative of contamination from the landfill. Measurements of pH were below the SMCL range for most on-site non-regulated monitoring wells. Low pH is also typical of groundwater and is believed to be a natural property of groundwater at the MLFRRF. Furthermore, pH concentrations measured in the downgradient wells are comparable to upgradient background concentrations.

Concentrations of inorganic parameters measured in on-site non-regulated monitoring wells during the Fall 2021 sampling event—including those of iron, manganese, and pH—are generally consistent with the historical record.

3.3.5 **Off-site Non-regulated Monitoring Wells**

Appendix I Volatile Organic Compounds

As shown on **Table 10,** six different Appendix I VOCs were detected above the RL across ten different off-site non-regulated monitoring well locations. There were no MCL or GWPS exceedances. In general, VOC concentrations detected above the RL in these wells are consistent with historical concentrations.

Appendix II Volatile Organic Compounds and MTBE

As shown in **Table 11**, detections of dichlorodifluoromethane and dichlorofluoromethane above the RL were observed at nine off-site non-regulated monitoring wells. There were no detections of MTBE above the RL. There were no GWPS or Maryland State Action Level exceedances. The detected concentrations of dichlorodifluoromethane and dichlorofluoromethane are generally consistent with the historical record. There were no Appendix II VOCs detected above the RL in well MW-P4, MW-P440, and RW-P171-1.

Inorganics

All off-site non-regulated monitoring wells were analyzed for mercury. There were no concentrations detected above the RL during the Fall 2021 sampling event.

3.3.6 **Off-site Residential Zone 4 Water Supply Wells**

As shown on **Table 12** and **Table 13**, there were no off-site residential Zone 4 water supply wells sampled during the Fall 2021 event.

3.3.7 **Surface Water Sampling Locations**

Appendix I and Appendix II Volatile Organic Compounds

As shown on **Table 14** and **Table 15**, there were no Appendix I or Appendix II VOCs detected above the RL at any surface water monitoring locations during the Fall 2021 sampling event.

Inorganics

There were no MCL exceedances of inorganic parameters at the surface water sampling locations. SMCL exceedances were observed for iron at SW-2 and SW-3, manganese at SW-3, while turbidity exceeded its SMCL at all three locations. Concentrations of all detected inorganic parameters at surface water locations were consistent with historical values.

4 STATISTICAL EVALUATION

4.1 INTRODUCTION

In accordance with the EMP and 40 CFR Part 258.53, groundwater sampling and analysis requirements, the groundwater parameters at the MLFRRF have been statistically analyzed. Listed below are the objective of the analysis, the procedures used, and the summary of results. The detailed results of the statistical analysis are included after the text.

4.2 OBJECTIVE

According to the Code of Federal Regulations (40 CFR Part 258), groundwater monitoring data must be statistically analyzed to determine if parameter levels are exceeding background groundwater quality levels at each downgradient well. This goal is met by statistically analyzing the groundwater data that have been collected on the site since 1993. The analyses will determine if the land use may be contributing to groundwater contamination.

4.3 PROCEDURE

Samples have been collected since 1993 and tested for the constituents specified in the EMP. The concentrations observed in the downgradient wells are compared to the concentrations observed in the upgradient wells. If the downgradient samples show significantly higher concentrations than the upgradient samples statistically, it indicates that land use practices are likely affecting the groundwater quality.

The groundwater data were analyzed using the Mann-Whitney Test (Wilcoxon Rank Sum Test) to determine whether the downgradient data differed from the upgradient data with statistical significance. The Mann-Whitney analysis is nonparametric, that is, it assumes no underlying distribution (like the normal distribution) and compares two groups of data and determines whether both groups come from the same population with a certain confidence.

Individual statistical tests have a certain amount of uncertainty associated with them. When multiple tests are combined (from different wells and different constituents), that uncertainty is compounded. An overall network-wide Type I error rate of 5% is required by 40 CFR Part 258.53(h)(2); however, an error rate no less than 1% shall be applied to any single test. A 5% Type I error rate means 5% of the recognized exceedances are in reality not actually elevated above background levels; that is, they represent false positives.

Statistical analyses are performed for all parameters detected over the RL during the Fall 2021 sampling event at downgradient wells. Using the Bonferroni adjustment to account for multiple

statistical comparisons, a Type I error rate of much less than 1% per analysis would result, so a Type I error rate of 1% was used as the minimum allowable under 40 CFR Part 258.52(h)(2).

For each sampling event, an average concentration from the upgradient wells was calculated. The collection of average concentrations for all sampling events was then compared to the concentrations for all sampling events at each of the downgradient wells. For each downgradient well, the upgradient and downgradient concentrations are combined and ranked (the lowest concentration is assigned a rank of 1). Tied concentrations are ranked equally by averaging the ranks that would be assigned to the tied group if they were not tied.

The sum of the ranks, the number of upgradient observations, and the number of downgradient observations are used to calculate the Mann-Whitney Test Statistic (U). The calculated U for each well/parameter pair is compared to a critical U value which is published in tables in statistical texts. Critical U values are based on the number of samples in the upgradient group and at each downgradient well. Therefore, the critical U values vary from parameter-to-parameter and from well-to-well. If the calculated U is greater than the critical U, there is no exceedance at 99% confidence (a 1% Type I error rate for each analysis). Likewise, if the calculated U is less than the critical U, there is an exceedance.

Because the upgradient (background) condition is compared to each downgradient well separately, each well/parameter combination is tested. The results of all of the tests are included following the report text. There may be exceedances in some downgradient wells for a particular parameter, but not in other downgradient wells.

4.4 SUMMARY OF RESULTS

The results of the statistical analysis are shown on **Table 16.** The findings indicated that downgradient samples show constituent concentrations that are statistically significant increases (SSIs) above background levels in all 20 of the downgradient on-site regulated wells. While there were a few new SSIs identified during the Fall 2021 sampling event for which concentrations are below the RL, these are not of major concern because the parameters were detected at trace levels.

There were five new SSIs identified for which parameters were detected above the RL during this sampling event that were not identified during the previous sampling event. These new SSIs consist of trichlorofluoromethane in TW-25A and TW-28, beryllium in TW-25A, vanadium in TW-20R, and total dissolved solids in TW-24A. The SSIs for trichlorofluoromethane in TW-25A and TW-28, beryllium in TW-25A, vanadium in TW-20R were not identified during the previous sampling event because statistical tests were not run for these parameters, as they were not detected above the RL in any Subtitle D wells during the Spring 2021 sampling event. However, these parameters are typically detected at low level concentrations in their respective wells and none of

them exhibited significant increases during the Fall 2021 event. As such, these new SSIs are not of major concern.

Although a new SSI was identified for total dissolved solids in TW-24A, the concentration detected during the Fall 2021 event was less than the concentration detected during the Spring 2021 event. Furthermore, the concentration measured in TW-24A was less than that of background well TW-10A.

The statistical exceedances are generally consistent with historical exceedances. Concentrations of most parameters that exhibited SSIs have generally been consistent with their historical data set; that is, no trend is apparent in the concentrations.

5 RECOMMENDATIONS

The results of the Fall 2021 groundwater sampling event indicate that overall, groundwater conditions are generally consistent with historical data for the MLFRRF. Many monitoring wells continue to show VOC concentrations lower than historical data. While the data and statistical evaluations indicate that a release of landfill constituents to groundwater may have occurred, the site-specific hydrogeology and the corrective measures already implemented by the County have limited the potential for any adverse effects on human health and the environment. It is recommended that regular groundwater monitoring be continued in accordance with the EMP.

TABLES

Table 1 - MLFRRF SAMPLING LOCATIONS						
Sampling Locations Used to Monitor Cells 5, 6, 7, 8, and 9				**Sampling Locations Used to Monitor Cells 1 east, 2, and 4**		
On Site Regulated Monitoring Wells (Subtitle D)	Off-Site Non-Regulated Monitoring Wells	On-Site Non-Regulated Monitoring Wells	Surface Water Sampling Locations	On-Site Regulated Monitoring Wells (COMAR)	On-Site Non-Regulated Monitoring Wells	Surface Water Sampling Locations
TW-01	MW-P4	TW-02	SW-1	TW-07	TW-09	SW-1
TW-02A	MW-P9	TW-03A	SW-2	TW-07A	TW-16A	SW-2
TW-03	MW-P106	TW-05B	SW-3	TW-08		SW-3
TW-04	MW-P417	TW-06A*		TW-08A		
TW-04B	MW-P440	TW-06B		TW-09B		
TW-05	RW-P109	TW-11A*		TW-09C		
TW-05A	RW-P165	TW-12*		TW-15		
TW-06	RW-P171-1	TW-13*		TW-15B		
TW-10A	RW-P264	TW-14B		TW-16		
TW-14	RW-P440	TW-18*		TW-17		
TW-14A	RW-P441	TW-21A*		TW-17A		
TW-19	RW-P584			TW-21		
TW-20R				TW-22		
TW-23				TW-22A		
TW-24				TW-22B		
TW-24A						
TW-25						
TW-25A						
TW-27						
TW-28						
TW-29						
TW-30						

*Note: As specified in the EMP, the wells with an * are sampled annually only during the spring events.*

Table 2 - RESIDENTIAL SUPPLY WELL SAMPLING LOCATIONS			
Sampling Location	Aquifer	Sampling Location	Aquifer
P-109-Z4	Zone 4	P-417-Z4	Zone 4
P-145-Z4	Zone 4	P-261-Z4	Zone 4
P-160-Z4	Zone 4	P-264-Z4	Zone 4
P-161-Z4	Zone 4	P-277-Z4	Zone 4
P-162-Z4	Zone 4	P-323-Z4	Zone 4
P-164-Z4	Zone 4	P-359-Z4	Zone 4
P-165-Z4	Zone 4	P-383-Z4	Zone 4
P-166-Z4	Zone 4	P-412-Z4	Zone 4
P-168-Z4	Zone 4	P-440-Z4	Zone 4
P-169-Z4	Zone 4	P-441-Z4R	Zone 4
P-257-Z4	Zone 4	P-478-Z4	Zone 4

None of these wells were sampled during the Fall 2021 sampling event.

Table 3 - Current MCL Exceedances						
Well Group	Location	Parameter	Result	Qualifier	MCL	Units
Subtitle D	**TW-02A**	Nitrate as N	21.7*		10	mg/L
	TW-25A	Methylene Chloride	23.6		5	µg/L

Confirmation Samples for First-Time Exceedances						
Well Group	Location	Parameter	Result	Qualifier	MCL	Units
Subtitle D	**TW-02A**	Nitrate as N	0.15	U	10	mg/L

** Laboratory acknowledged this value was an invalid result due to an error during analysis.*

Table 4 - APPENDIX I VOC DETECTIONS IN REGULATED WELLS (SUBTITLE D)					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
TW-01	1,1-Dichloroethane	2.2		1370	µg/L
TW-04	1,1-Dichloroethane	3		1370	µg/L
TW-05	1,1-Dichloroethane	2.6		1370	µg/L
TW-05A	1,1-Dichloroethane	1		1370	µg/L
TW-06	1,1-Dichloroethane	9.1		1370	µg/L
	cis-1,2-Dichloroethene	4.6		70	µg/L
	Tetrachloroethene	1.7		5	µg/L
	Trichloroethene	1.4		5	µg/L
TW-14	1,1-Dichloroethane	3.5		1370	µg/L
	Tetrachloroethene	4.2		5	µg/L
	Trichloroethene	1		5	µg/L
TW-14A	1,1-Dichloroethane	1		1370	µg/L
TW-19	1,1-Dichloroethane	2		1370	µg/L
TW-24	1,1-Dichloroethane	2.3		1370	µg/L
TW-25	1,1-Dichloroethane	1.9		1370	µg/L
	Tetrachloroethene	1.1		5	µg/L
TW-25A	1,1-Dichloroethane	30.6		1370	µg/L
	1,2-Dichloropropane	1.2		5	µg/L
	Benzene	2.1		5	µg/L
	cis-1,2-Dichloroethene	5.1		70	µg/L
	Methylene Chloride	**23.6**		**5**	**µg/L**
	Tetrachloroethene	3		5	µg/L
	Trichloroethene	4.1		5	µg/L
	Trichlorofluoromethane	1.9		1920	µg/L
TW-28	1,1-Dichloroethane	1.8		1370	µg/L
	Tetrachloroethene	1		5	µg/L
	Trichlorofluoromethane	1.7		1920	µg/L
TW-29	1,1-Dichloroethane	1.1		1370	µg/L
	Tetrachloroethene	1.3		5	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 5 - APPENDIX II VOC DETECTIONS IN REGULATED WELLS (SUBTITLE D)					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
TW-01	Dichlorodifluoromethane	13.3		1000	µg/L
	Dichlorofluoromethane	3.5		550	µg/L
TW-04	Dichlorodifluoromethane	2.6		1000	µg/L
	Dichlorofluoromethane	4.4		550	µg/L
TW-05	Dichlorodifluoromethane	4		1000	µg/L
	Dichlorofluoromethane	4.1		550	µg/L
TW-06	Dichlorodifluoromethane	9.8		1000	µg/L
	Dichlorofluoromethane	6.8		550	µg/L
TW-14	Dichlorodifluoromethane	6.5		1000	µg/L
	Dichlorofluoromethane	4.4		550	µg/L
TW-19	Dichlorofluoromethane	1.5		550	µg/L
TW-24	Dichlorodifluoromethane	2.3		1000	µg/L
TW-25	Dichlorodifluoromethane	5		1000	µg/L
	Dichlorofluoromethane	2.9		550	µg/L
TW-25A	Dichlorodifluoromethane	9.1		1000	µg/L
	Dichlorofluoromethane	26		550	µg/L
	Methyl-tert-butyl ether	4.1		20	µg/L
TW-28	Dichlorodifluoromethane	5.1		1000	µg/L
	Dichlorofluoromethane	4.4		550	µg/L
TW-29	Dichlorodifluoromethane	3.9		1000	µg/L
	Dichlorofluoromethane	1.5		550	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 6 - APPENDIX I VOC DETECTIONS IN REGULATED WELLS (COMAR)					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
No Appendix I VOCs detected above the RL.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 7 - APPENDIX II VOC DETECTIONS IN REGULATED WELLS (COMAR)					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
TW-15B	Dichlorodifluoromethane	2.1		1000	µg/L

• *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 8 - APPENDIX I VOC DETECTIONS IN ON-SITE NON-REGULATED WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
TW-05B	Acetone	6.5		----	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 9 - APPENDIX II VOC DETECTIONS IN ON-SITE NON-REGULATED WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
No Appendix II VOCs detected above the RL.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 10 - APPENDIX I VOC DETECTIONS IN OFF-SITE NON-REGULATED WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
MW-P106	1,1-Dichloroethane	2.8		1370	µg/L
	cis-1,2-Dichloroethene	1		70	µg/L
MW-P417	1,1-Dichloroethane	1.2		1370	µg/L
MW-P440	Chloroform	1.6		80	µg/L
MW-P9	1,1-Dichloroethane	1.1		1370	µg/L
RW-P109	1,1-Dichloroethane	1.4		1370	µg/L
	Trichloroethene	1.1		5	µg/L
RW-P165	1,1-Dichloroethane	4		1370	µg/L
	Tetrachloroethene	2.4		5	µg/L
RW-P264	1,1-Dichloroethane	3.9		1370	µg/L
	Tetrachloroethene	1.6		5	µg/L
RW-P440	1,1-Dichloroethane	1.2		1370	µg/L
	Vinyl chloride	1.7		2	µg/L
RW-P441	1,1-Dichloroethane	1.1		1370	µg/L
RW-P584	1,1-Dichloroethane	3.1		1370	µg/L
	Tetrachloroethene	1.8		5	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 11 - APPENDIX II VOC DETECTIONS IN OFF-SITE NON-REGULATED WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
MW-P106	Dichlorodifluoromethane	2.3		1000	µg/L
	Dichlorofluoromethane	2		550	µg/L
MW-P417	Dichlorofluoromethane	1.4		1000	µg/L
MW-P9	Dichlorofluoromethane	1.5		1000	µg/L
RW-P109	Dichlorofluoromethane	2.5		1000	µg/L
RW-P165	Dichlorofluoromethane	6.3		1000	µg/L
	Dichlorofluoromethane	5		550	µg/L
RW-P264	Dichlorofluoromethane	6.4		1000	µg/L
	Dichlorofluoromethane	4.6		550	µg/L
RW-P440	Dichlorofluoromethane	1.4		1000	µg/L
RW-P441	Dichlorofluoromethane	2.2		1000	µg/L
RW-P584	Dichlorofluoromethane	4.4		1000	µg/L
	Dichlorofluoromethane	2.3		550	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 12 - APPENDIX I VOC DETECTIONS IN RESIDENTIAL SUPPLY WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
No Residential Supply Wells were sampled during the Fall 2021 event.					

Table 13 - APPENDIX II VOC DETECTIONS IN RESIDENTIAL SUPPLY WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
No Residential Supply Wells were sampled during the Fall 2021 event.					

Table 14 - APPENDIX I VOC DETECTIONS AT SURFACE WATER LOCATIONS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
No Appendix I VOCs detected above the RL.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 15 - APPENDIX II VOC DETECTIONS AT SURFACE WATER LOCATIONS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
No Appendix II VOCs detected above the RL.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 16 - STATISTICAL EXCEEDANCES OF BACKGROUND CONCENTRATIONS																					
		Regulated Wells (Subtitle D)																			
	Parameter	TW-01	TW-02A	TW-03	TW-04	TW-04B	TW-05	TW-05A	TW-06	TW-14	TW-14A	TW-19	TW-20R	TW-24	TW-24A	TW-25	TW-25A	TW-27	TW-28	TW-29	TW-30
Volatile Organic Compounds (VOCs	1,1-Dichloroethane	X			X		X	X	X	X	X	X		X	‡	X	X		X	X	
	1,2-Dichloropropane								‡		‡			‡			X				
	Benzene								‡		‡			‡	‡		X				
	cis-1,2-Dichloroethene	*			*		*****	‡	X	*	‡	*		‡	‡	*	X		‡	*	
	Dichlorodifluoromethane	X	‡		X		X	‡	X	X	‡	‡		X	‡	X	X		X	X	
	Dichlorofluoromethane	X	‡		X		X	*	X	X	*	X		*	‡	X	X		X	X	
	Methylene Chloride								‡		‡			‡	‡		X			‡	
	Methyl tert-butyl ether										‡						X				
	Tetrachloroethene	*			‡			‡	X	X	‡	*		‡	‡	X	X		X	X	
	Trichloroethene	*			‡			‡	X	X	‡	‡		‡	‡	‡	X		‡	‡	
	Trichlorofluoromethane	**‡**	**‡**						**‡**	**‡**	**‡**			**‡**		*****	**X**		**X**	**‡**	
Inorganics	Barium, total														X						
	Beryllium												*****				**X**			*****	
	Calcium, total	X										X	X		X						X
	Chromium, total																	*	X		
	Cobalt, total												X		X				X	*	
	Copper, total			*						X	X	X	X		X		X	X			
	Iron, total	X	X	X	X		X	X	X	X	X				X						
	Magnesium, total											X	X		X						
	Manganese, total	X		X					X	X	X		X		X						
	Mercury, total							‡	X	‡	‡		‡	X	X		*				
	Nickel, total												X								
	Potassium, total											X	X		X						
	Sodium, total											X	X								
	Vanadium, total											*****	**X**			**‡**		*****			
General Chemistry	Alkalinity	X		*****	X				*	*		X			*		X				
	Chloride											X	X								
	Nitrate																				X
	Nitrite	‡	‡	‡	‡		‡	‡	X	‡	‡						X				‡
	pH	X	X	X	X		X	X		X	X	X									
	Specific Conductivity											X	X		X						
	Sulfate					*						X	X		X						
	Total Dissolved Solids											X	X		**X**						
	Total Hardness	X										X	X		X						
	Turbidity	X	X	X	X	X	X	X		X	X					X					

An X indicates an SSI over background. A ‡ indicates an SSI was identified during this event, but the parameter was not detected during this event. An asterisk (*) indicates an SSI was identified during this event, but the parameter was detected below the reporting limit or was flagged with a B qualifier during this event. A bold character indicates an SSI that was not identified during the previous event.

APPENDIX A
Historical Data Tables

HISTORICAL TABLES –
Subtitle D Wells

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-01***											
Nov-1993	36	36	ND	ND	2.6	0.2	ND	5.71	76.8	3.7	76	29.9
Apr-1994	34	34	0.1	42.3	2.5	ND	ND	6.15	62.5	3.9	57	23.37
Apr-1995	22.7	22.7	ND	ND	2.4	ND	ND	6.6	56.5	3.6	31	18.2
Apr-1997	ND	26	ND	ND	1.5	0.09	ND	NA	NA	ND	59	33
Apr-1998	25	25	0.27	ND	2.56	ND	ND	7.29	53.1	2.36	44	35
Apr-1999	21	21	0.13	ND	3.11	0.07	ND	7	61.6	1.84	63	26
Apr-2000	23	23	ND	ND	2.4	0.101	ND	7.07	52	3.92	32	25
Apr-2001	20	NA	ND	ND	2.57	ND	ND	NA	NA	67.1	30	21.5
Mar-2002	16	16	ND	ND	2.36	ND	ND	6.2	55.4	ND	43	22.3
Mar-2003	18	18	ND	ND	17.7	ND	ND	6.3	56.5	ND	34	20.7
Apr-2004	21	21	ND	ND	2.84	ND	ND	6.3	54.5	ND	49	24.6
Apr-2005	29	29	ND	ND	2.74	0.08	ND	6.5	66.3	2.38	120	33.5
Mar-2006	28	28	ND	ND	3.44	0.13	ND	6.4	64.1	2	69	30.5
Mar-2007	24	24	0.61	ND	4.15	0.18	ND	6.3	56.8	1.64	53	27.2
Mar-2008	24	24	ND	ND	4.32	0.2	ND	6.1	62.7	1.75	42	26.7
Mar-2009	23	23	ND	ND	4.4	0.16	ND	5.7	61.6	ND	56	23.9
Mar-2010	65	65	ND	ND	4.22	ND	ND	7.26	170	4.34	62	70.4
Apr-2011	21	21	ND	ND	4.49	0.16	ND	5.6	56.9	1.1	57	23.5
Mar-2012	18	18	ND	ND	4.81	0.17	ND	4.8	56.4	ND	62	20
Sep-2012	19.7	19.7	ND	ND	4.84	0.175	ND	6.2	54.6	ND	66	23.4
Mar-2013	20.4	20.4	0.123 J	ND	5.36	0.2	ND	6.4	58.2	1.14	31	21.4
Oct-2013	21.3	21.3	ND	ND	5.51	0.2	ND	6.1	62.7	1.5	41	25
Mar-2014	22.7	22.7	ND	ND	5.27	0.157	ND	6.1	58.7	0.915 J	50	23.1
Oct-2014	33	33	ND	ND	5.71	0.198	ND	5.9	55.6	ND	49	24.1
Apr-2015	21.6	21.6	ND	ND	5.71	0.206	ND	5.1	60.7	ND	51	26.8
Nov-2015	25.6	25.6	ND	ND	5.77	0.223	ND	6.4	105.4	ND	44	26.9
May-2016	21.7	21.7	ND	ND	6.02	0.227	ND	6.4	79.9	ND	40	27.8
Oct-2016	23.6	23.6	ND	ND	6.46	NA	NA	6.2	110.6	2.07	48	27.8
May-2017	20.1	20.1	ND	ND	6.17	0.231	ND	6.1	100.7	0.71 J	35	23.6
Oct-2017	27	27	ND	5 J	6.37	0.224	ND	6.3	113.3	ND	36	22.4
May-2018	30	30	ND	5.7 J	6.1	0.17	0.007 J	5.6	111.8	ND	55	25.7
Nov-2018	40	40	ND	ND	6.6	ND	0.018	6.77	149.5	ND	46	47.6
May-2019	52	NA	ND	ND	7.3	ND	ND	6.39	114.8	ND	68	50.3
Oct-2019	48 H1	NA	ND	ND	5.7	0.056 JB	0.028	6.22	153.3	48.2	82	49.3
May-2020	50	NA	ND	9.1 J	6.6	ND	0.0087 JMH	5.9	148.9	ND	51	53.7
Oct-2020	40	NA	ND	4.8 J	6.2	ND	ND	5.85	147.7	ND	132	49.9

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-01***										
Apr-2021	42	*NA*	*ND*	*6.1 J*	7.1	*0.048 J*	*ND*	7.17	193.3	*ND*	53	49.6
Oct-2021	50	*NA*	*ND*	*ND*	6.5	*ND*	*ND*	7.09	227.4	*ND*	45	51.3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-01***													
Nov-1993	*NA*	*ND*	*ND*	*NA*	*ND*	11.3	*NA*	*ND*	*NA*	*ND*	0.08	0.12	*ND*	0.42	*NA*
Apr-1994	*NA*	*ND*	*ND*	*NA*	*ND*	9.3	*NA*	*ND*	*NA*	*ND*	0.64	*ND*	*ND*	*ND*	*NA*
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	6.6	*NA*	*ND*	*ND*	0.02	0.65	*ND*	*ND*	0.41	*NA*
Apr-1997	0.006	*ND*	0.016	*ND*	*ND*	13	9	*ND*	*ND*	*ND*	1.1	0.43	0.003	0.6	0.63
Apr-1998	*ND*	*ND*	0.041	*ND*	*ND*	12.5	9.96	0.052	*ND*	0.01	14.2	0.259	*ND*	1.04	0.456
Apr-1999	*ND*	*ND*	*ND*	*ND*	*ND*	9.67	9.79	*ND*	*ND*	*ND*	1.49	0.197	*ND*	0.564	0.491
Apr-2000	*ND*	*ND*	*ND*	*ND*	*ND*	9.04	7.45	0.018	*ND*	0.035	3.35	0.183	*ND*	0.601	0.442
Apr-2001	*ND*	*ND*	0.014	*ND*	*ND*	7.62	*NA*	*ND*	*ND*	*ND*	4.21	*NA*	*ND*	0.61	*NA*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	8	8.82	*ND*	*ND*	*ND*	3.62	0.64	*ND*	0.577	0.548
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	7.43	7.85	*ND*	*ND*	*ND*	0.716	*ND*	*ND*	0.504	0.466
Apr-2004	*ND*	0.002	0.014	*ND*	*ND*	8.52	11.1	*ND*	*ND*	*ND*	2.75	0.378	0.002	0.839	0.578
Apr-2005	*ND*	0.004	0.017	*ND*	*ND*	11.8	10.2	0.029	*ND*	0.011	7.16	0.279	0.006	1.01	0.504
Mar-2006	*ND*	0.003	0.015	*ND*	*ND*	10.8	9.72	*ND*	*ND*	*ND*	3.86	0.077	0.003	0.827	0.507
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	9.95	8.75	*ND*	*ND*	*ND*	0.916	0.346	*ND*	0.574	0.51
Mar-2008	*ND*	0.003	0.012	*ND*	*ND*	9.61	8.12	*ND*	*ND*	*ND*	12.8	0.358	*ND*	0.655	0.559
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	8.67	7.75	*ND*	*ND*	*ND*	3.36	0.541	*ND*	0.554	0.521
Mar-2010	*ND*	0.006	0.019	*ND*	*ND*	26.4	24.8	0.033	*ND*	0.017	44.1	1.58	0.01	1.09	0.65
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	8.29	8.23	*ND*	*ND*	*ND*	2.43	1.64	*ND*	0.688	0.678
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	6.77	6.84	*ND*	*ND*	*ND*	1.56	1.2	*ND*	0.753	0.749
Sep-2012	*ND*	*ND*	0.0101	*0.000181 J*	*ND*	8.15	7.91	*0.0025 J*	*0.000625 J*	*ND*	2.48	2.29	*0.000533 J*	0.749	0.707
Mar-2013	*ND*	*ND*	*0.0098 J*	*ND*	*ND*	7.39	7.3	*0.0026 J*	*0.000621 J*	*0.000478 J*	1.6	1.39	*ND*	0.724	0.753

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-01***													
Oct-2013	ND	ND	0.0113	ND	ND	8.7	8.9	0.0017 J	0.000632 J	ND	1.68	1.68	ND	0.794	0.824
Mar-2014	ND	ND	0.0103	ND	ND	8.09	9.7	0.0064 J	0.00061 J	0.000338 J	2.32	2.51	ND	0.712	0.86
Oct-2014	0.000689 J	ND	0.0116	ND	ND	8.35	8.86	0.0014 J	0.000654 J	ND	2.43	2.76	ND	0.796	0.826
Apr-2015	0.000671 J	ND	0.0128	ND	ND	9.14	9.46	0.0046 J	0.000818 J	0.000868 J	4.77	3.89	ND	0.962	0.952
Nov-2015	ND	ND	0.0121	ND	ND	9.24	8.94	0.0024 J	0.000698 J	ND	3.97	3.58	ND	0.928	0.927
May-2016	ND	ND	0.0126	ND	ND	9.47	9.13	0.0019 J	0.00072 J	0.00068 J	3.53	3.37	ND	1.01	0.989
Oct-2016	ND	ND	0.0121	ND	ND	9.44	9.71	0.00087 J	0.00071 J	ND	3.95	3.67	ND	1.03	1.02
May-2017	ND	ND	0.012	ND	ND	7.74	7.2	0.00096 J,B	0.0011	0.00054 J,B	4.07	3.43	ND	1.03	0.999
Oct-2017	ND	ND	0.0155	ND	ND	7.45	6.97	0.0017 J	0.00087 J	ND	8.05	7.72	ND	0.919	0.961
May-2018	0.000048 J	ND	0.016	0.000027 J	ND	8.7	8.6	0.0027 J	0.00072	0.00089 JB	11.5	10.5	ND	0.97 J	0.98 J
Nov-2018	ND	ND	0.012	ND	ND	16.7	15.7	0.002 J	0.00018 J	0.00043 J	31.8	25.7	0.000039 J	1.4	1.3
May-2019	ND	ND	0.011	ND	ND	17.9	17.7	ND	0.00058	ND	22.9	18	ND	1.4	1.4
Oct-2019	0.00012 JB	ND	0.013	ND	0.00018 JB	17.5	17	0.0043 J	0.0013	0.0043	31.9	18.4	0.00012 JB	1.4	1.3
May-2020	0.00016 J	ND	0.015	ND	ND	19	18.3	0.0087	0.00072	0.0032	39	20.9	0.00021 J	1.5	1.4
Oct-2020	0.00044 J	ND	0.013	ND	ND	17.5	16.5	0.0082 JB	0.0006 J	ND	25.6	23.5	ND	1.5	1.4
Apr-2021	ND	ND	0.014	ND	ND	17.4	18.1	0.0048 J	0.00089 J	ND	28	22.8	ND	1.5	1.6
Oct-2021	0.000089 JB	ND	0.015	ND	ND	18	17.4	0.0056	0.0016 J	0.00094 J	35.6	26.4 M1	0.00004 J	1.6	1.5

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-01*												
Nov-1993	0.05	NA	ND	NA	0.49	NA	ND	NA	1.3	NA	NA	NA	ND
Apr-1994	0.019	NA	ND	NA	0.55	NA	ND	NA	1.7	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.65	NA	ND	ND	0.94	NA	ND	ND	0.06
Apr-1997	0.06	0.043	ND	ND	2.5	2.2	ND	ND	1.2	1.4	0.002	ND	0.028
Apr-1998	0.226	0.02	NA	0.019	2.16	0.95	ND	ND	1.22	1.16	ND	0.023	0.1
Apr-1999	0.028	0.019	NA	ND	ND	0.722	ND	ND	1.24	1.22	ND	ND	0.027
Apr-2000	0.037	0.017	NA	0.015	1.47	0.759	ND	ND	2.06	1.19	ND	ND	0.321
Apr-2001	0.059	NA	NA	ND	1.39	NA	ND	ND	2.65	NA	ND	ND	0.131
Mar-2002	0.037	0.028	NA	ND	1.24	ND	ND	ND	1.82	1.27	ND	ND	0.05
Mar-2003	0.022	0.019	NA	ND	ND	0.706	ND	ND	1.29	1.33	ND	ND	0.023
Apr-2004	0.069	0.026	ND	ND	0.534	ND	ND	ND	1.72	1.34	ND	ND	0.038
Apr-2005	0.163	0.019	ND	0.018	1.07	0.66	ND	ND	1.78	1.4	ND	0.014	0.112
Mar-2006	ND	ND	ND	ND	0.828	ND	ND	ND	1.59	1.14	ND	ND	0.014
Mar-2007	0.018	0.015	ND	ND	ND	ND	ND	ND	1.43	1.36	ND	ND	0.033
Mar-2008	0.031	0.013	ND	ND	0.809	0.663	ND	ND	2.11	1.61	ND	ND	0.038
Mar-2009	0.019	0.014	ND	ND	ND	ND	ND	ND	1.62	1.84	ND	ND	0.024
Mar-2010	0.134	0.078	ND	0.031	0.809	0.596	ND	ND	1.25	1.38	ND	0.019	0.033
Apr-2011	0.038	0.037	ND	ND	0.608	0.621	ND	ND	1.75	1.8	ND	ND	ND
Mar-2012	0.028	0.027	ND	ND	0.573	0.537	ND	ND	1.89	1.84	ND	ND	ND
Sep-2012	0.0426	0.0427	ND	0.0018 J	0.553	0.531	ND	ND	2.02	1.98	0.0014 J	ND	ND
Mar-2013	0.0247	0.0248	0.000109 J	0.0033 J	0.554	0.543	ND	ND	1.83	1.84	0.000233 J	ND	0.0116
Oct-2013	0.0387	0.0397	ND	0.0022	0.563	0.579	ND	ND	2.12	2.22	0.000271 J	0.0014 J	0.0111

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-01***												
Mar-2014	0.0351	0.0331	*ND*	*0.0029 J*	0.518	0.645	*ND*	*ND*	1.77	2.12	*0.000265 J*	*0.006 J*	*0.0043 J*
Oct-2014	0.0314	0.0384	*ND*	*0.0025 J*	0.599	0.618	*0.0012 J*	*ND*	2.16	2.25	*ND*	*ND*	*ND*
Apr-2015	0.0436	0.0494	*ND*	*0.0045 J*	0.674	0.669	*ND*	*ND*	2.37	2.37	*ND*	*ND*	*ND*
Nov-2015	0.0469	0.0454	*ND*	*0.0039 J*	0.647	0.63	*ND*	*ND*	2.55	2.54	*ND*	*ND*	*0.0033 J*
May-2016	0.0394	0.0391	*ND*	*0.0026 J*	0.676	0.643	*ND*	*ND*	2.49	2.41	*ND*	*ND*	*ND*
Oct-2016	0.0558	0.056	*ND*	*0.0016 J*	0.647	0.68	*ND*	*ND*	2.49	2.51	*ND*	*ND*	*ND*
May-2017	0.0382	0.0419	*ND*	0.0043	0.62	0.629	*ND*	*ND*	2.52	2.4	*ND*	*0.00023 J*	*ND*
Oct-2017	0.0676	0.0715	*ND*	*0.0024 JB*	0.628	0.663	*ND*	*ND*	2.63	2.68	*ND*	*ND*	*ND*
May-2018	0.079	0.079	*ND*	0.0024	*ND*	*ND*	*0.00028 JB*	*ND*	*2.8 J*	*2.9 J*	*ND*	0.0028	*0.003 JB*
Nov-2018	0.18	0.17	*ND*	0.0011	*ND*	*ND*	*ND*	*ND*	*3 J*	*2.9 J*	*ND*	*ND*	*0.0033 J*
May-2019	0.18	0.17	*ND*	0.001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	0.16	0.15	*ND*	0.0038	*ND*	*ND*	*ND*	*ND*	*2.8 J*	*3.3 J*	*ND*	*0.0009 J*	0.01 B
May-2020	0.17	0.15	*ND*	0.0064	*ND*	*ND*	*ND*	*ND*	*2.9 J*	*2.9 J*	*ND*	0.0018	0.0061
Oct-2020	0.18	0.16	*ND*	*ND*	*ND*	*ND*	*0.0017 J*	*ND*	*3.2 J*	*2.6 J*	*ND*	*0.0024 JB*	*ND*
Apr-2021	0.16	0.17	*0.00005 J*	*0.0058 J*	0.73	0.74	*ND*	*ND*	2.8	3	*ND*	*ND*	*ND*
Oct-2021	0.18	0.17	*ND*	0.0077	0.71	0.71	*ND*	*ND*	3.2	3.2	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-01*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.63 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-01*																
Mar-2013	ND	ND	ND	ND	0.73 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.63 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.81 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.1	0.22 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	0.2 J	ND	ND	1.2	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	0.2 J	ND	ND	1.5	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	0.2 J	ND	ND	1.4	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	0.1 J	ND	ND	1.5	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8 JB	ND
Nov-2018	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1.3 M1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.75	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-01***															
Nov-1993	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	3.7
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	0.7 J
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	1.7
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2	1.1
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.5	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	14.1	2.3
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.45 J	ND	ND	ND	ND	ND	4.38	1.68

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-01***															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.56 J	ND	ND	ND	ND	ND	8.81	2.83
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.49 J	ND	ND	ND	ND	ND	7.27	2.41
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.56 J	ND	ND	ND	ND	ND	8.99	2.7
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.55 J	ND	ND	ND	ND	ND	7.38	3.83
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.53 J	ND	ND	ND	ND	ND	6.99	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J,B	ND	ND	ND	ND	ND	15.6 J	3.4
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	6.5	3.7
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	0.1 J	ND	ND	ND	8.4	4.5
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J,B	ND	0.1 J	ND	ND	ND	7.7	4.3
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	0.2 J	ND	ND	ND	8.4	5.1
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.5	4.7
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.9 CL	3.7 N3
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5 CL	3.6 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.2	2.5
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.9	2.5
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.2	2.8
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.167 J	ND	0.349 J	ND	ND	ND	5.48	2.94 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	13.3	3.5

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-01***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	1	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-01***															
Sep-2012	ND	ND	ND	ND	ND	ND	ND	2.96	ND	ND	ND	ND	0.28 J	0.71 J	ND	ND	ND
Mar-2013	ND	ND	ND	0.15 J	ND	ND	ND	3.44	ND	ND	ND	ND	0.41 J	1 J	ND	ND	ND
Oct-2013	ND	ND	ND	0.21 J	ND	ND	ND	2.81	ND	ND	ND	ND	0.38 J	0.97 J	ND	ND	ND
Mar-2014	ND	ND	ND	0.17 J	ND	ND	ND	3.73	ND	ND	ND	ND	0.46 J	1	ND	ND	ND
Oct-2014	ND	ND	ND	0.21 J	ND	ND	ND	4.14	ND	ND	ND	ND	0.5 J	0.73 J	ND	ND	ND
Apr-2015	ND	ND	ND	0.18 J	ND	ND	ND	3.57 J	ND	ND	ND	ND	0.43 J	0.95 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	ND	0.5 J	0.9 J	ND	ND	ND
May-2016	ND	ND	ND	0.1 J	0.2 J	ND	ND	4.3	ND	ND	ND	ND	0.5 J	0.8 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	0.2 J	ND	ND	4.4	ND	ND	ND	ND	0.4 J	0.9 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	4.7	ND	ND	ND	ND	0.5 J	0.4 J	ND	ND	ND
Oct-2017	ND	ND	ND	0.1 J	0.2 J	ND	ND	3.7	ND	ND	ND	ND	0.4 J	0.7 J	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	1.2 B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Apr-2021	ND	ND	ND	0.431 J	0.653 JB	ND	ND	0.507 J	ND	ND	ND	ND	0.632 J	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-02A***											
Nov-1993	ND	ND	ND	ND	3.8	ND	ND	4.93	22.5	ND	90	3.52
Apr-1994	ND	ND	ND	23.4	3.6	ND	ND	4.94	22.2	ND	17	0.9
Apr-1995	10.3	10.3	ND	ND	5.5	0.2	0.3	5.6	30.9	2.2	38	4.7
Apr-1997	ND	2	ND	ND	7	0.08	ND	NA	NA	ND	28	6
Apr-1998	ND	ND	0.27	ND	8.76	0.22	ND	6.33	36.8	ND	21	5.8
Apr-1999	ND	ND	0.16	ND	6.58	ND	ND	5.04	35.5	ND	35	5.7
Apr-2000	2	2	ND	ND	6.4	ND	ND	5.28	29	ND	36	5.7
Apr-2001	ND	NA	ND	ND	5.43	1.65	ND	NA	NA	ND	11	6.47
Mar-2002	2.4	2.4	ND	ND	7	ND	ND	5.4	42.9	ND	30	6.94
Mar-2003	2.7	2.7	ND	ND	14.6	ND	ND	5.3	41.7	ND	25	6.69
Apr-2004	2.8	2.8	ND	ND	7.95	0.08	ND	5.3	40.5	1.31	40	9.39
Apr-2005	3.1	3.1	ND	ND	7.57	ND	ND	5.1	20.9	1.26	56	8.76
Mar-2006	7.8	7.8	ND	ND	9.04	0.1	ND	5.3	48.5	1.26	57	8.76
Mar-2007	3.8	3.8	ND	ND	9.84	0.11	ND	5.1	45.7	1.89	37	8.57
Mar-2008	5.3	5.3	ND	ND	9.58	0.09	ND	4.9	57.9	2.52	41	8.56
Mar-2009	4.9	4.9	ND	ND	9.98	0.07	ND	4.5	51.1	1.25	45	9.24
Apr-2010	3.7	3.7	ND	ND	10.1	0.08	ND	4.6	48.4	2.66	31	9.5
Apr-2011	5.2	5.2	ND	ND	10.4	0.08	ND	4.6	46.4	2.34	29	9.74
Mar-2012	4	4	ND	ND	11.6	ND	ND	4.5	51.2	2.34	12	11.2
Sep-2012	4.4	4.4	ND	ND	12.8	ND	ND	5.4	53.4	2.85	69	11.8
Mar-2013	6	6	0.106 J	ND	13.9	0.0653	ND	6.1	62.1	3	20	12.4
Oct-2013	5.72	5.72	ND	ND	14	0.0613	ND	5.7	62.3	3.15	31	13.6
Mar-2014	5.6	5.6	ND	ND	14.9	0.0668	ND	5.3	62.5	3.19	36	13.1
Oct-2014	4.4	4.4	ND	10	17.1	0.094	ND	5	68.2	2.88	64	15.6
Apr-2015	5.56	5.56	ND	5 J	17.3	0.061	ND	4.5	67.5	3.26	54	16.5
Nov-2015	4.4	4.4	ND	ND	19.1	0.0607	ND	5.9	136.2	2.63	55	18.4
May-2016	2.8	2.8	0.129 J	21	22.3	ND	ND	5.8	112.3	1.91	90	19.2
Oct-2016	3.4	3.4	ND	21	16.9	NA	NA	5.5	105.1	3.01	71	14.8
May-2017	4.48	4.48	ND	7 J	15.3	0.0687	ND	5.4	101.7	2.09	50	14.9
Oct-2017	30.9	30.9	ND	13	14.7	0.0511	ND	5.8	129.4	0.67 J	38	15.8
May-2018	16	16	ND	7.9 J	16.2	ND	ND	5	96	ND	26	15.1
Nov-2018	22	22	ND	7.9 J	19.5	ND	0.015	6.54	136.9	ND	55	18.6
May-2019	46	NA	ND	ND	21.8	ND	ND	6.43	123.6	ND	58	19.2
Oct-2019	16 H1	NA	ND	ND	22.6	0.083 J	0.0093 J	5.99	168.1	ND	90	19.6
May-2020	20	NA	ND	9.1 J	25.8	ND	0.074	5.93	168.3	ND	74	23.5
Oct-2020	20	NA	ND	7 J	27.2	ND	ND	6.52	172.1	ND	113	23.2
Apr-2021	20	NA	ND	6.1 J	35.6	0.075 J	ND	7.02	239.3	ND	92	23.8

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-02A***										
Oct-2021	22	*NA*	*ND*	*12.6 J*	32.2	*NA*	*ND*	7.02	273.5	*ND*	82	25.9
Dec-2021	*NA*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-02A***													
Nov-1993	NA	ND	ND	NA	ND	0.7	NA	ND	NA	ND	4.4	0.69	ND	0.43	NA
Apr-1994	NA	ND	ND	NA	ND	0.3	NA	ND	NA	ND	1.8	0.059	ND	0.35	NA
Apr-1995	ND	ND	ND	ND	ND	0.88	NA	ND	ND	ND	3.2	0.31	ND	0.6	NA
Apr-1997	ND	ND	0.02	ND	ND	1.3	1.3	ND	ND	ND	0.5	ND	0.002	0.54	0.54
Apr-1998	ND	ND	0.016	ND	ND	1.23	1.18	ND	ND	ND	1.58	0.101	ND	0.651	0.626
Apr-1999	ND	ND	0.015	ND	ND	1.21	1.27	ND	ND	ND	1.13	0.121	ND	0.646	0.667
Apr-2000	ND	ND	0.014	ND	ND	1.21	1.19	ND	ND	ND	3.54	0.08	ND	0.65	0.626
Apr-2001	ND	ND	0.016	ND	ND	1.45	NA	ND	ND	ND	3.08	NA	ND	0.695	NA
Mar-2002	ND	ND	0.019	ND	ND	1.47	1.53	ND	ND	ND	8.67	1.81	ND	0.795	0.798
Mar-2003	ND	ND	0.018	ND	ND	1.44	1.53	ND	ND	ND	6.22	0.282	ND	0.754	0.804
Apr-2004	ND	ND	0.023	ND	ND	2.06	1.82	ND	ND	ND	1.91	0.124	ND	1.03	0.943
Apr-2005	ND	ND	0.021	ND	ND	1.9	1.94	ND	ND	ND	4.1	0.2	ND	0.973	0.983
Mar-2006	ND	0.003	0.025	ND	ND	2.02	1.52	ND	ND	0.022	11.4	3.53	0.005	0.902	0.783
Mar-2007	ND	ND	0.025	ND	ND	1.93	1.9	ND	ND	ND	1.49	1.03	ND	0.911	0.876
Mar-2008	ND	ND	0.021	ND	ND	1.86	1.95	ND	ND	ND	2	1.62	ND	0.952	0.995
Mar-2009	ND	ND	0.025	ND	ND	2.11	2.32	ND	ND	ND	20.1	2.18	ND	0.964	0.967
Apr-2010	ND	ND	0.025	ND	ND	2.13	1.97	ND	ND	ND	25.9	2.03	ND	1.02	0.925
Apr-2011	ND	ND	0.027	ND	ND	2.12	2.15	ND	ND	0.02	41.9	1.51	ND	1.08	1.1
Mar-2012	ND	ND	0.027	ND	ND	2.36	2.3	ND	ND	ND	4.29	0.7	ND	1.3	1.26
Sep-2012	ND	ND	0.0298	0.000292 J	ND	2.58	2.49	0.0026 J	0.0027 J	0.0136	16.7	1.5	0.0016 J	1.31	1.31
Mar-2013	ND	ND	0.0316	0.000205 J	ND	2.78	2.7	0.0019 J	0.0026 J	0.0078 J	6.93	2.41	0.000514 J	1.33	1.24

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-02A***													
Oct-2013	ND	ND	0.0347	ND	ND	2.96	2.94	0.0018 J	0.0026	0.0067	3.49	2	0.000652 J	1.5	1.52
Mar-2014	0.000337 J	0.00014 J	0.028	0.00015 J	ND	2.8	2.85	0.0014 J	0.0025 J	0.0059 J	4.47	1.46	0.000364 J	1.49	1.5
Oct-2014	0.000589 J	0.000473 J	0.04	0.000176 J	0.000095 J	3.51	3.51	0.0023 J	0.0042 J	0.0087 J	9.19	2.4	0.000763 J	1.65	1.72
Apr-2015	0.000574 J	ND	0.0405	ND	ND	3.64	3.65	0.0017 J	0.0039 J	0.007 J	5.1	2	ND	1.8	1.8
Nov-2015	0.000674 J	0.000571 J	0.0442	0.000294 J	0.000111 J	3.97	3.8	0.0035 J	0.0047 J	0.0157	14.4	2.05	0.0012 J	2.07	1.93
May-2016	ND	ND	0.0709	ND	ND	4.72	4.64	0.0022 J	0.0014	0.0059	10.8	5.19	0.00095 J	1.8	1.84
Oct-2016	0.00068 J	0.0025 J	0.0372	0.00012 J	0.0002 J	3.09	3.25	0.0103 J+	0.0063	0.0368 J+	9.84	3.1	0.0016 J	1.73 J+	1.72
May-2017	ND	0.0012 J	0.0357	ND	ND	3.17	3.17	0.0037 J	0.0047	0.0181	14	9.1	0.0012 J	1.68	1.7
Oct-2017	ND	ND	0.0357	ND	ND	3.55	3	0.003 J	0.0036	0.012	21.1	16.6	0.002	1.69	1.57
May-2018	0.00045	0.0013	0.035	0.00011 J	0.00015 J	3.3	3.2	0.0046 JB	0.0054	0.02	12.1	5.6	0.0014	1.6	1.6
Nov-2018	ND	ND	0.045	0.000024 J	0.000029 J	4	3.9	0.004 J	0.00095	0.0028	28	27.4	0.00046 J	2.1	2
May-2019	ND	ND	0.05	ND	ND	4.1	4	ND	0.00093	0.004	30.4	28.5	ND	2.2	2.1
Oct-2019	0.00018 JB	ND	0.05	0.000052 J	0.00042 JB	4.2	4.1	0.0061 J	0.0017	0.0055	28.8	27.1	0.00018 JB	2.2	2.2
May-2020	0.00014 J	ND	0.055	0.000063 J	0.0001 J	5	4.6	0.0054 J	0.0014	0.0055	33.6	29.7	ND	2.7	2.5
Oct-2020	0.00056 J	ND	0.063	ND	ND	4.9	4.6	0.011 JB	0.0018 J	ND	32.3	29.5	ND	2.7	2.5
Apr-2021	ND	ND	0.063	0.0002 J	ND	5	5.1	0.0018 J	0.0012 J	0.0049 J	31.6	31.1	ND	2.8	2.9
Oct-2021	0.000074 JB	ND	0.065	ND	ND	5.4	5.3	0.0025 J	0.0018 J	0.0027	35	33.7	ND	3	3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-02A*												
Nov-1993	0.06	NA	ND	NA	0.44	NA	ND	NA	1.5	NA	NA	NA	ND
Apr-1994	0.07	NA	ND	NA	ND	NA	ND	NA	2.4	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.59	NA	ND	ND	1.7	NA	ND	ND	0.07
Apr-1997	0.01	0.013	ND	ND	1.7	1.6	ND	ND	2.1	2.6	ND	ND	ND
Apr-1998	0.01	0.024	NA	ND	1.06	1.53	ND	ND	2.28	2.31	ND	ND	0.034
Apr-1999	ND	ND	NA	ND	ND	ND	ND	ND	2.46	2.52	ND	ND	ND
Apr-2000	0.011	0.01	NA	ND	ND	0.83	ND	ND	2.46	2.41	ND	ND	ND
Apr-2001	0.011	NA	NA	ND	0.981	NA	ND	ND	3.65	NA	ND	ND	0.01
Mar-2002	0.019	0.025	NA	ND	ND	0.975	ND	ND	2.5	2.34	ND	ND	0.016
Mar-2003	0.018	0.011	NA	ND	1.48	ND	ND	ND	2.49	2.53	ND	ND	ND
Apr-2004	0.016	0.012	ND	ND	1.76	0.597	ND	ND	3.87	3.29	ND	ND	0.014
Apr-2005	0.02	0.015	ND	ND	0.81	0.77	ND	ND	3.58	3.91	ND	ND	ND
Mar-2006	ND	ND	ND	0.018	0.889	0.523	ND	ND	3.88	3.26	ND	ND	0.013
Mar-2007	0.016	0.016	ND	ND	ND	ND	ND	ND	3.57	3.44	ND	ND	0.019
Mar-2008	0.016	0.02	ND	ND	0.702	0.783	ND	ND	3.52	3.8	ND	ND	0.016
Mar-2009	0.019	0.024	ND	ND	0.596	0.636	ND	ND	3.79	3.93	ND	ND	0.03
Apr-2010	0.024	0.021	ND	ND	0.708	0.653	ND	ND	3.94	3.86	ND	ND	0.027
Apr-2011	0.025	0.023	ND	ND	0.716	0.694	ND	ND	4.34	4.33	ND	ND	0.036
Mar-2012	0.025	0.018	ND	ND	0.687	0.622	ND	ND	5.08	4.9	ND	ND	0.027
Sep-2012	0.0259	0.0243	ND	0.0042 J	0.717	0.68	0.000797 J	ND	5.33	5.26	0.000232 J	ND	0.0305
Mar-2013	0.0322	0.0295	0.000113 J	0.004 J	0.761	0.724	0.000652 J	ND	5.44	5.24	ND	ND	0.0434
Oct-2013	0.0299	0.0301	ND	0.0041	0.78	0.755	0.000848 J	ND	5.88	6.06	ND	0.0014 J	0.0452

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-02A***												
Mar-2014	0.0246	0.0247	ND	0.0042 J	0.77	0.792	ND	ND	5.7	5.82	ND	ND	0.0394
Oct-2014	0.0372	0.0346	0.000034 J	0.0065 J	0.866	0.876	0.0019 J	ND	6.43	6.55	ND	ND	0.0465
Apr-2015	0.0353	0.0334	ND	0.0058 J	0.917	0.923	0.0014 J	ND	6.77	6.88	ND	ND	0.0404
Nov-2015	0.048	0.0369	ND	0.008 J	0.988	0.931	0.0013 J	ND	7.94	7.9	ND	0.000203 J	0.045
May-2016	0.246	0.26	ND	0.0101	1.01	1.1	ND	ND	7.41	6.97	ND	ND	0.0868
Oct-2016	0.107 R	0.0689	ND	0.037 J+	0.944	0.887	0.00071 J-	ND	6.71 J+	6.72	ND	0.0013	0.076
May-2017	0.122	0.0983	ND	0.0205	0.946	0.931	ND	ND	6.8	6.41	ND	0.0003 J	0.0455
Oct-2017	0.169	0.152	ND	0.0184	0.92	0.857	ND	ND	6.33	6.08	ND	ND	0.0516
May-2018	0.12	0.074	ND	0.027	ND	ND	0.00065 J	ND	6.8	6.3	ND	0.002	0.032
Nov-2018	0.18	0.18	ND	0.0038	0.93 J	ND	0.00009 J	ND	7.6	7.8	ND	ND	0.0044 J
May-2019	0.22	0.2	ND	0.0025	ND	ND	ND	ND	8.1	7.4	ND	ND	ND
Oct-2019	0.19	0.18	ND	0.0052	1.1 J	1.1 J	ND	ND	8.4	8.7	ND	0.0021 D6	0.012 B
May-2020	0.21	0.2	ND	0.0042	ND	1.1 J	ND	ND	10.1	9.4	ND	0.0023	0.0065
Oct-2020	0.23	0.2	ND	0.0042	ND	ND	ND	ND	11.4	9.6	ND	0.0029 JB	ND
Apr-2021	0.21	0.22	ND	0.0028 J	1	1.1	ND	ND	12.4	13.1	ND	ND	ND
Oct-2021	0.23	0.23	ND	0.0035	1.1	1.1	ND	ND	14.4	14.4	ND	ND	0.0027 J

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-02A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-02A*																
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.7 J*	200	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.8 B	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-02A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-02A***															
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.42 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*0.66 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*0.2 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.344 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-02A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.2 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-02A*															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-03***											
Nov-1993	7	7	ND	ND	3.7	ND	ND	3.47	24.8	2.6	106	3.21
Apr-1994	5	5	ND	161	2.8	ND	ND	5.36	29.2	ND	25	2.12
Apr-1995	9.3	9.3	ND	ND	2.8	ND	ND	6.6	26.3	2	9	4
Apr-1997	ND	5	ND	ND	3.5	0.09	ND	NA	NA	ND	57	25
Apr-1998	2	2	0.95	ND	3.1	ND	ND	7.06	32	ND	23	4.7
Apr-1999	4	4	0.16	ND	3.94	ND	ND	5.41	38.6	ND	31	5.1
Apr-2000	3	3	ND	ND	3.67	0.16	ND	5.68	45	ND	25	5.7
Apr-2001	3.5	NA	0.28	ND	3.11	ND	ND	NA	NA	ND	ND	5.86
Mar-2002	2	2	ND	ND	4.01	ND	ND	5.6	62.7	ND	40	6.05
Mar-2003	3.4	3.4	ND	ND	13.7	ND	ND	5.6	31.8	ND	12	5.14
Apr-2004	6.5	6.5	ND	ND	4.53	ND	ND	5.6	26.9	ND	28	6.35
Apr-2005	4	4	ND	ND	4.92	0.08	ND	6.1	43.5	1.65	49	5.25
Mar-2006	6.4	6.4	ND	ND	5.27	0.12	ND	5.6	36.7	ND	13	4.72
Mar-2007	3.7	3.7	ND	ND	5.47	ND	ND	5.6	42.7	ND	39	6.21
Mar-2008	5.4	5.4	ND	ND	5.45	0.11	ND	5.2	33.1	ND	17	4.81
Mar-2009	14	14	ND	ND	6.19	0.06	ND	5.3	34.8	14.3	18	5.01
Apr-2010	11.1	11.1	ND	ND	6.96	ND	ND	4.8	34.2	ND	40	7.3
Apr-2011	6.2	6.2	ND	ND	6.95	0.08	ND	4.6	33.2	ND	39	6.57
Mar-2012	7.6	7.6	ND	ND	6.59	0.1	ND	4.4	34.9	ND	14	7.58
Sep-2012	7.64	7.64	ND	ND	6.11	ND	ND	5.4	34.4	ND	43	6.36
Mar-2013	15.3	15.3	0.236 J	ND	7.05	0.0585	ND	6	38.2	0.415 J	24	6.96
Oct-2013	14.2	14.2	ND	ND	7.85	0.0937	ND	5.3	39.4	ND	29	7.08
Mar-2014	13.6	13.6	ND	6 J	6.84	ND	ND	5.3	36	ND	ND	6.49
Oct-2014	35.2	35.2	ND	8 J	7.49	ND	ND	5	38.5	ND	ND	7.66
Apr-2015	4.72	4.72	ND	ND	8.49	0.16	ND	4.5	30.3	ND	ND	7.56
Nov-2015	3.52	3.52	ND	ND	8.33	0.127	ND	5.6	66.5	ND	34	7.43
May-2016	4.6	4.6	ND	6 J	5.74 B	ND	ND	5.5	44.6	ND	96	5.7
Oct-2016	4.6	4.6	ND	11	6.14	NA	NA	5.5	49.3	0.678 J	41	5.5
May-2017	3.52	3.52	ND	18	5.38	ND	ND	5.3	46.2	ND	ND	5.1
Oct-2017	14	14	ND	7 J	5.54	ND	ND	5.5	54.1	ND	16 J	5.5
May-2018	14	14	ND	12.2 J	5.5	ND	0.015	5.1	52	ND	ND	5.7
Nov-2018	6 JB	ND	ND	ND	5.4	0.041 J	0.0084 J	5.2	26.1	ND	10	5.2
May-2019	ND	NA	ND	ND	5.3	ND	ND	4.87	22.3	ND	17	5
Oct-2019	4 JH1	NA	ND	ND	4.7	0.11	ND	5.01	28.9	ND	25	4.6
May-2020	ND	NA	ND	ND	5.3	ND	0.02	5.51	39.6	ND	12	5.6
Oct-2020	4 J	NA	ND	ND	4.9	0.049 JB	ND	5.69	45.7	ND	37	5.5
Apr-2021	2 J3c	NA	ND	ND	4.6	0.059 J	ND	6.22	50.9	ND	13	5

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-03***										
Oct-2021	*6 J2c*	*NA*	*ND*	*ND*	4.1	*0.07 J*	*ND*	6.34	83.5	*ND*	*ND*	5.34

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-03***													
Nov-1993	NA	ND	ND	NA	ND	0.61	NA	ND	NA	ND	4.2	1.9	ND	0.41	NA
Apr-1994	NA	ND	ND	NA	ND	0.79	NA	ND	NA	ND	ND	0.66	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	0.94	NA	ND	ND	ND	1.6	1.6	ND	0.41	NA
Apr-1997	ND	ND	0.019	ND	ND	1.8	0.8	ND	ND	ND	4.5	1.6	0.003	0.63	ND
Apr-1998	ND	ND	0.016	ND	ND	1.04	1.01	ND	ND	ND	1.28	0.593	ND	0.517	0.455
Apr-1999	ND	ND	ND	ND	ND	1.14	0.977	ND	ND	ND	6.94	1.18	ND	0.555	0.444
Apr-2000	ND	ND	ND	ND	ND	1.36	1.06	ND	ND	ND	13.6	1.09	ND	0.56	0.497
Apr-2001	ND	ND	0.016	ND	ND	1.36	NA	0.012	ND	ND	34.5	NA	0.009	0.597	NA
Mar-2002	ND	ND	0.013	ND	ND	1.46	1.17	ND	ND	ND	53.8	0.367	0.007	0.586	0.543
Mar-2003	ND	ND	ND	ND	ND	1.16	1.21	ND	ND	0.012	7.65	1.54	0.005	0.545	0.558
Apr-2004	ND	ND	0.015	ND	ND	1.47	1.25	ND	ND	0.012	141	7.86	0.009	0.654	0.596
Apr-2005	ND	ND	0.02	ND	ND	1.56	1.31	ND	ND	ND	92.8	1.3	0.013	0.627	0.589
Mar-2006	ND	ND	ND	ND	ND	1.13	0.987	ND	ND	0.011	20.5	1.04	0.006	0.458	0.442
Mar-2007	ND	ND	0.017	ND	ND	1.48	1.3	ND	ND	ND	19.1	7.55	0.007	0.609	0.524
Mar-2008	ND	0.002	ND	ND	ND	1.11	1.15	ND	ND	ND	9.41	0.532	ND	0.496	0.509
Mar-2009	ND	ND	ND	ND	ND	1.2	1.23	ND	ND	0.1	7.56	5.53	ND	0.487	0.504
Apr-2010	ND	ND	ND	ND	ND	1.92	1.75	ND	ND	0.01	10.4	7.4	ND	0.618	0.585
Apr-2011	ND	ND	ND	ND	ND	1.55	1.55	ND	ND	0.041	15.3	8.29	ND	0.655	0.65
Mar-2012	ND	ND	0.01	ND	ND	1.66	1.61	ND	ND	ND	11.4	3.66	ND	0.832	0.807
Sep-2012	ND	0.003	0.0074 J	ND	ND	1.45	1.39	0.0189	0.0026 J	0.0368	23.1	12.2	ND	0.666	0.632
Mar-2013	0.000835 J	0.0036	0.0104	ND	0.000273 J	1.62	1.58	0.0296	0.0056 J	0.0555	26.9	7.99	0.000874 J	0.709	0.678

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-03***													
Oct-2013	*ND*	*ND*	0.0127	*ND*	*0.000247 J*	1.61	1.46	0.0053	0.0024	0.0154	8.54	7.41	*0.000425 J*	0.742	0.693
Mar-2014	*0.000669 J*	0.0023	*0.0075 J*	*ND*	*0.000144 J*	1.75	1.64	0.019	*0.0032 J*	0.0282	26.8	16	*0.000588 J*	0.516	0.609
Oct-2014	0.0023	0.005	0.0112	*ND*	*0.000642 J*	1.81	1.6	0.0266	*0.0057 J*	0.0498	37.3	14.1	0.002	0.766	0.72
Apr-2015	0.002	0.0031	0.013	*ND*	*0.000276 J*	1.75	1.6	0.0133	*0.004 J*	0.0253	19.2	1.14	*0.0014 J*	0.775	0.718
Nov-2015	0.0036	**0.021 R,C**	0.0143	*0.000084 J*	*0.000979 J*	1.72	1.56	**0.133 R,C**	0.0252	0.245	75.4	2.2	0.0031	0.76	0.698
Dec-2015	*NA*	0.0052	*NA*	*NA*	*NA*	*NA*	*NA*	0.0261	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
May-2016	*ND*	*0.0022 J*	0.0076	*ND*	*0.00022 J*	1.32	1.23	0.0133	0.003	0.04	15.7	14.6	0.0036	0.59	0.599
Oct-2016	*0.00093 J*	*0.0033 J*	0.0075	*ND*	*0.00022 J*	1.22	1.2	*0.0245 J+*	0.0058	*0.0495 J+*	32.8	15.8	*0.0013 J*	*0.588 J+*	0.598
May-2017	*ND*	0.0045	0.0075	*ND*	*0.00036 J*	1.11	1.17	0.0304	0.0058	0.0716	23.9	13.6	0.002	0.575	0.55
Oct-2017	*ND*	*0.0034 J*	0.0091	*ND*	*0.00019 J*	1.31	1.07	0.0196	0.0048	0.0499	35.6	10.8	0.0024	0.535	0.507
May-2018	0.001	0.0052	0.0071	*0.000029 J*	*0.00032 J*	1.3	1.2	0.03	0.0071	0.065	26.8	11.9	0.002	*0.59 J*	*0.55 J*
Nov-2018	*ND*	*ND*	0.0096	*0.000053 J*	*0.00013 J*	1.1	1.1	*0.0037 J*	0.001	0.0034	20.6	0.84	*0.00056 J*	*0.59 J*	*0.54 J*
May-2019	*ND*	*ND*	0.011	*ND*	*ND*	1.1	1.1	*ND*	0.0011	0.0021	22.6	0.5	*ND*	*ND*	*ND*
Oct-2019	*0.0003 JB*	*ND*	0.03	*0.00045 J*	*0.0012 J*	1.1	1.1	*0.017 J*	*0.002 J*	0.015	195	1.7	*0.0027 J*	0.46	*0.54 J*
May-2020	0.00056	0.0011	0.0099	*ND*	*0.00013 J*	1.2	1.2	0.022	0.0042	0.0088	19.2	5.1	0.0019	0.61	*0.6 J*
Oct-2020	*0.00044 J*	*ND*	*0.0098 J*	*ND*	*ND*	1.2	1.1	*0.017 JB*	0.0038	*ND*	7.4	5.5	*ND*	0.63	*0.54 J*
Apr-2021	*ND*	*ND*	*0.008 J*	*ND*	*ND*	1.1	1.1	0.006	*0.0013 J*	*ND*	9.4	5.3	*ND*	0.54	0.54
Oct-2021	*0.000055 JB*	*ND*	0.0076	*ND*	*ND*	1.2	1.1	*0.0018 J*	*0.00072 J*	*0.00061 J*	10.6	7	*ND*	0.58	0.56

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-03*												
Nov-1993	0.12	NA	ND	NA	0.58	NA	ND	NA	1.5	NA	NA	NA	ND
Apr-1994	ND	NA	ND	NA	ND	NA	ND	NA	1.1	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.52	NA	ND	ND	1.4	NA	ND	ND	0.02
Apr-1997	0.066	0.026	ND	ND	2	2	ND	ND	1.8	1.7	ND	ND	0.066
Apr-1998	0.031	0.031	NA	ND	1.2	0.97	ND	ND	1.56	1.59	ND	ND	0.011
Apr-1999	0.043	0.023	NA	ND	1.49	0.644	ND	ND	2.03	1.56	ND	ND	ND
Apr-2000	0.023	0.03	NA	ND	0.653	ND	ND	ND	2.55	1.61	0.002	ND	0.011
Apr-2001	0.015	NA	NA	ND	1.51	NA	ND	ND	2.89	NA	ND	0.011	0.015
Mar-2002	0.015	0.015	NA	ND	0.806	1.14	ND	ND	2.48	1.76	ND	ND	0.026
Mar-2003	0.012	0.039	NA	ND	1.73	ND	ND	ND	1.92	1.96	ND	ND	0.026
Apr-2004	0.138	0.15	ND	ND	0.898	ND	ND	ND	2.6	2.23	ND	ND	0.028
Apr-2005	0.046	0.029	ND	ND	0.86	0.64	ND	ND	2.42	2.21	ND	ND	0.018
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	1.85	1.83	ND	ND	ND
Mar-2007	0.077	0.082	ND	ND	ND	ND	ND	ND	2.25	2	ND	ND	0.018
Mar-2008	0.033	0.012	ND	ND	0.575	0.598	ND	ND	2.17	2.22	ND	ND	ND
Mar-2009	0.097	0.088	ND	ND	ND	ND	ND	ND	2.41	2.72	ND	ND	ND
Apr-2010	0.146	0.116	ND	ND	0.638	0.623	ND	ND	2.83	2.79	ND	ND	ND
Apr-2011	0.156	0.162	ND	0.029	0.606	0.625	ND	ND	2.9	2.92	ND	ND	0.01
Mar-2012	0.12	0.1	ND	ND	0.735	0.708	ND	ND	3.68	3.55	ND	ND	ND
Sep-2012	0.249	0.217	ND	0.0133	0.796	0.764	ND	ND	3.52	3.48	ND	ND	0.0035 J
Mar-2013	0.152	0.101	0.000134 J	0.0242	0.812	0.748	ND	0.000022 J	3.48	3.28	ND	ND	0.019
Oct-2013	0.102	0.0916	ND	0.0073	0.646	0.592	ND	ND	3.52	3.41	0.000098 J	0.001 J	0.0166

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-03***												
Mar-2014	0.206	0.192	ND	0.0131	0.726	0.682	ND	0.000041 J	2.64	3.27	0.000185 J	0.0042 J	0.01
Oct-2014	0.38	0.247	0.00003 J	0.0253	0.864	0.816	ND	0.000086 J	3.85	3.83	ND	ND	0.0121
Apr-2015	0.0779	0.0368	ND	0.0164	0.765	0.736	0.000801 J	0.000033 J	3.95	4.01	ND	ND	0.0092 J
Nov-2015	0.278	0.0454	ND	0.111	0.804	0.714	0.000367 J	0.000192 J	4.19	4.09	0.000278 J	ND	0.0273
May-2016	0.24	0.234	ND	0.0191	0.874	0.828	ND	ND	3.33	3.09	ND	ND	0.0309
Oct-2016	0.272 R	0.217	ND	0.0249 J+	0.727	0.715	ND	ND	2.75 J+	2.77	ND	0.00032 J	0.0173 J
May-2017	0.242	0.217	ND	0.0324	0.766	0.729	ND	ND	2.73	2.68	ND	0.0003 J	0.0154 J
Oct-2017	0.269	0.186	ND	0.0217	0.628	0.603	ND	ND	2.57	2.39	ND	0.00025 J	0.0403
May-2018	0.27	0.21	ND	0.034	ND	ND	0.00027 J	ND	2.8 J	2.4 J	ND	0.0026	0.025
Nov-2018	0.018	0.019	ND	0.0045	ND	ND	ND	ND	2.2 J	2.3 J	ND	ND	0.0058
May-2019	0.02	0.016	ND	0.004	ND	ND	ND	ND	ND	ND	ND	ND	0.0057
Oct-2019	0.15	0.054	ND	0.012	ND	ND	ND	ND	2 J	2.4 J	ND	ND	0.065
May-2020	0.1	0.078	ND	0.028	ND	ND	ND	ND	2.3 J	2.3 J	ND	0.0013	0.0068
Oct-2020	0.093	0.08	ND	0.015	ND	ND	ND	ND	2.5 J	1.9 J	ND	0.0043 JB	ND
Apr-2021	0.11	0.12	ND	0.011	0.5	0.52	ND	ND	2.6	2.7	ND	ND	ND
Oct-2021	0.14	0.13	ND	0.0039	0.51	0.5	ND	ND	2.5	2.5	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-03*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.5	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.8	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.23	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.06 J	ND	ND	4.68 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-03*																
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.63 J,B*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.84 J*	*ND*	*ND*	7.02	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.19 J*	*ND*	*ND*	5.12	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.41 J*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.1	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.3 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.1	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.1	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.4	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-03*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-03***															
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.172 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-03***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-03*															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-04***											
Nov-1993	6	6	0.5	ND	21.6	ND	ND	5.25	21.8	4.2	34	5.14
Apr-1994	6	6	ND	ND	2.2	ND	ND	5.3	21	ND	18	4.39
Apr-1995	8.2	8.2	ND	ND	2.3	ND	ND	6.1	20.7	1.9	ND	4.2
Apr-1997	ND	4	ND	ND	2	0.09	ND	NA	NA	ND	50	11
Oct-1997	4	4	0.5	ND	1.51	0.28	ND	8.07	21.5	ND	ND	16
Apr-1998	3	3	ND	ND	2.03	ND	ND	6.81	19.53	ND	ND	5
Apr-1999	ND	ND	0.24	ND	2.61	ND	ND	5.26	22.5	ND	32	5.7
Oct-1999	ND	ND	0.08	ND	2.88	ND	ND	5.6	20.1	ND	18	5.3
Apr-2000	4	4	ND	ND	3.25	ND	ND	5.7	17	ND	23	5.9
Oct-2000	6.4	NA	ND	ND	1.96	ND	ND	5.6	17.05	ND	19	5.63
Apr-2001	5.5	NA	ND	ND	1.96	ND	ND	NA	NA	ND	ND	7
Sep-2001	4.9	4.9	ND	ND	5.92	ND	ND	5.6	21	ND	22	6.2
Mar-2002	3.2	3.2	ND	ND	1.71	ND	ND	4.5	16	ND	20	5.03
Sep-2002	5.8	5.8	ND	ND	1.99	ND	ND	5.5	20.1	ND	22	6.44
Mar-2003	5.4	5.4	ND	ND	12	ND	ND	5.3	21.6	ND	12	5.53
Oct-2003	5.2	5.2	ND	ND	7.09	ND	ND	4.1	21.6	ND	48	7.6
Apr-2004	4.2	4.2	ND	ND	2.28	0.1	ND	5.5	16.6	ND	21	9.54
Oct-2004	5.4	5.4	ND	ND	2.39	0.12	ND	5.6	16.6	ND	13	9.5
Apr-2005	4.9	4.9	ND	ND	2.45	0.1	ND	5.3	15.4	1.58	35	5.33
Oct-2005	6.4	6.4	ND	ND	2.42	0.11	ND	4.6	13.7	ND	27	5.76
Mar-2006	7.5	7.5	ND	ND	2.27	ND	ND	5.3	17.6	ND	ND	4.15
Sep-2006	6.1	6.1	ND	ND	2.6	0.12	ND	5.5	17.9	ND	15	5.94
Mar-2007	6.2	6.2	ND	ND	2.72	ND	ND	5.7	20	ND	27	5.01
Sep-2007	4.9	4.9	0.39	ND	8.92	ND	ND	5.5	18.3	ND	29	4.52
Mar-2008	6.5	6.5	ND	ND	2.62	0.1	ND	5.5	18.8	ND	ND	4.66
Sep-2008	6.5	6.5	0.2	ND	2.77	0.06	ND	5.5	18.1	ND	19	5.6
Mar-2009	6	6	ND	ND	2.71	0.08	ND	5.2	23.2	ND	22	4.7
Oct-2009	5.9	5.9	ND	ND	2.58	0.09	ND	5	18	ND	37	5.25
Mar-2010	6	6	ND	ND	2.64	ND	ND	5.48	27	ND	32	5.19
Oct-2010	5.5	5.5	ND	ND	3.16	0.06	ND	5	18.8	ND	ND	4.93
Apr-2011	7	7	ND	ND	2.92	0.09	ND	5.3	15.7	ND	13	4.72
Sep-2011	7.5	7.5	ND	ND	7.53	0.38	ND	5.5	20.6	ND	36	5.78
Mar-2012	5.3	5.3	ND	ND	3.12	0.08	ND	4.8	18.9	ND	ND	5.87
Sep-2012	6.12	6.12	ND	ND	3.38	0.11	ND	4.3	21.4	ND	53	6.25
Mar-2013	5.84	5.84	0.055 J	ND	3.76	0.0899	ND	5.6	21.2	0.359 J	25	6.49
Oct-2013	6.2	6.2	ND	ND	3.87	0.0901	ND	5.9	24.7	ND	ND	6.18
Mar-2014	6.24	6.24	ND	ND	4.1	0.0804	ND	5.6	24.8	ND	38	7.94

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-04***											
Oct-2014	*ND*	*ND*	*ND*	*5 J*	4.42	0.119	*ND*	5.2	24.4	*ND*	*ND*	6.5
Apr-2015	4.68	4.68	*ND*	*ND*	4.59	0.091	*ND*	4.4	23.7	*ND*	*ND*	5.68
Nov-2015	5.4	5.4	*ND*	*ND*	4.6	0.111	*ND*	5.7	45.6	*ND*	25	7.79
May-2016	4.64	4.64	*ND*	*ND*	4.99	0.103	*ND*	5.7	33.9	*ND*	46	7.6
Oct-2016	3.76	3.76	*ND*	*ND*	5.4	*NA*	*NA*	5.6	43.5	*0.708 J*	44	7.2
May-2017	4.28	4.28	*ND*	*ND*	6.43	0.137	*ND*	5.5	53.6	*ND*	27	6.5
Oct-2017	6.36	6.36	*ND*	*6 J+*	7.26	0.114	*ND*	6.1	59	*ND*	*16 J*	7.4
May-2018	10	10	*ND*	*18.6 J*	8.2	0.1	*ND*	5.9	54.3	*ND*	*ND*	8.4
Nov-2018	18	18	*ND*	*ND*	8.2	*ND*	*0.0075 J*	6.2	79.3	*ND*	77	8.6
May-2019	24	*NA*	*ND*	*ND*	9.1	*ND*	*ND*	5.9	62.7	*ND*	38	9.2
Oct-2019	10 H1	*NA*	*ND*	*ND*	7.1	*0.084 J*	0.017	5.84	87.3	*ND*	47	13
May-2020	26	*NA*	*ND*	*6.9 J*	9.9	*ND*	*ND*	5.64	94.7	*ND*	40	17.7
Oct-2020	26	*NA*	*ND*	*ND*	7.8	*ND*	*0.0072 J*	5.66	108	*ND*	68	27
Apr-2021	10	*NA*	*0.064 J*	*ND*	9.4	*0.073 J*	*ND*	6.53	131.1	*ND*	55 D6	16.7
Oct-2021	30	*NA*	*ND*	*8.3 J*	8.2	*0.063 J*	*ND*	6.69	170.9	*ND*	41	24.8

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-04*													
Nov-1993	NA	ND	ND	NA	ND	1.4	NA	ND	NA	ND	1.1	0.13	ND	0.4	NA
Apr-1994	NA	ND	ND	NA	ND	1.7	NA	ND	NA	ND	0.072	ND	ND	0.45	NA
Apr-1995	ND	ND	ND	ND	ND	1.1	NA	ND	ND	ND	0.49	ND	ND	0.36	NA
Oct-1996	ND	ND	0.008	ND	ND	1.6	1.6	ND	ND	ND	0.82	0.22	ND	ND	ND
Apr-1997	ND	ND	0.021	ND	ND	2.5	0.86	ND	ND	ND	0.82	0.25	ND	0.55	ND
Oct-1997	ND	ND	ND	ND	ND	1.39	1.29	ND	ND	ND	20.7	0.786	ND	0.349	0.33
Apr-1998	ND	ND	0.01	ND	ND	1.37	1.29	ND	ND	ND	25.9	0.456	ND	0.374	0.366
Apr-1999	ND	ND	0.011	ND	ND	1.58	1.43	ND	ND	ND	19.3	0.422	ND	0.418	0.398
Oct-1999	ND	ND	ND	ND	ND	1.46	1.33	ND	ND	ND	15	0.465	ND	0.421	0.38
Apr-2000	ND	ND	ND	ND	ND	1.64	1.65	ND	ND	ND	5.3	0.212	ND	0.445	0.429
Oct-2000	ND	ND	ND	ND	ND	1.57	1.56	ND	ND	0.004	12	0.477	ND	0.415	0.416
Apr-2001	ND	ND	0.012	ND	ND	2	NA	ND	ND	ND	34.9	NA	ND	0.485	NA
Sep-2001	ND	ND	ND	ND	ND	1.65	1.58	ND	ND	ND	10.9	0.145	ND	0.5	0.422
Mar-2002	ND	ND	0.011	ND	ND	1.35	1.37	ND	ND	ND	29.7	0.607	ND	0.403	0.422
Sep-2002	ND	ND	0.011	ND	ND	1.82	1.35	ND	ND	ND	59.6	0.703	ND	0.462	0.414
Mar-2003	ND	ND	ND	ND	ND	1.49	1.41	ND	ND	ND	7.57	0.379	ND	0.441	0.412
Oct-2003	ND	ND	0.013	ND	ND	2.09	1.36	ND	ND	0.011	55.9	0.527	ND	0.579	0.402
Apr-2004	0.004	0.003	0.014	0.003	ND	1.89	1.04	ND	ND	ND	30.5	0.142	0.004	1.17	0.4
Oct-2004	ND	ND	0.01	ND	ND	2.86	1.45	ND	ND	0.014	36.3	0.288	ND	0.571	0.426
Apr-2005	ND	ND	0.013	ND	ND	1.41	1.38	ND	ND	ND	81.5	0.537	ND	0.437	0.424
Oct-2005	ND	ND	0.01	ND	ND	1.58	1.23	ND	ND	ND	39.4	0.379	ND	0.449	0.414

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-04***													
Mar-2006	ND	ND	ND	ND	ND	1.08	0.996	ND	ND	ND	43.7	0.372	ND	0.352	0.338
Sep-2006	ND	ND	ND	ND	ND	1.61	1.36	ND	ND	ND	38.2	0.206	ND	0.467	0.431
Mar-2007	ND	ND	0.014	ND	ND	1.33	1.22	ND	ND	ND	41.8	0.151	ND	0.41	0.376
Sep-2007	ND	ND	ND	ND	ND	1.14	1.11	ND	ND	ND	17.1	0.705	ND	0.406	0.372
Mar-2008	ND	ND	0.011	ND	ND	1.17	1.14	ND	ND	ND	40.9	0.576	ND	0.423	0.416
Sep-2008	ND	ND	ND	ND	ND	1.41	1.19	ND	ND	ND	23.6	0.24	ND	0.501	0.454
Mar-2009	ND	ND	ND	ND	ND	1.25	1.31	ND	ND	ND	26.9	0.4	ND	0.383	0.41
Oct-2009	ND	ND	ND	ND	ND	1.32	1.27	ND	ND	ND	10	0.243	ND	0.474	0.467
Mar-2010	ND	ND	ND	ND	ND	1.37	1.27	ND	ND	ND	2.48	0.155	ND	0.429	0.407
Oct-2010	ND	ND	ND	ND	ND	1.17	1.13	ND	ND	ND	11.3	0.91	ND	0.488	0.458
Apr-2011	ND	ND	0.012	ND	ND	1.11	1.1	ND	ND	ND	57.8	0.317	ND	0.473	0.462
Sep-2011	ND	ND	0.015	ND	ND	1.44	1.48	ND	ND	ND	90.5	0.469	ND	0.53	0.47
Mar-2012	ND	ND	0.01	ND	ND	1.36	1.33	ND	ND	ND	8.58	0.191	ND	0.599	0.576
Sep-2012	ND	ND	0.014	0.000181 J	ND	1.62	1.5	ND	0.00098 J	0.0044 J	68.2	0.274	0.000594 J	0.536	0.551
Mar-2013	ND	ND	0.0133	0.000126 J	ND	1.66	1.49	0.0021 J	0.0012 J	0.0025 J	20.2	0.251	ND	0.57	0.534
Oct-2013	ND	ND	0.0128	ND	ND	1.56	1.58	ND	0.000945 J	0.0018 J	9.53	0.335	ND	0.555	0.585
Mar-2014	ND	ND	0.0123	ND	ND	2.34	2.3	0.0049 J	0.000947 J	0.0026 J	17.5	0.389	ND	0.509	0.652
Oct-2014	0.000253 J	ND	0.0139	ND	ND	1.58	1.66	0.00074 J	0.001 J	0.0027 J	17.7	0.275	ND	0.621	0.62
Apr-2015	0.0012 J	ND	0.0148	ND	ND	1.27	1.31	0.000412 J	0.0012 J	0.0028 J	13.6	0.382	ND	0.611	0.631
Nov-2015	ND	ND	0.0144	ND	ND	1.94	1.82	0.000332 J	0.0012 J	0.002 J	5.46	0.512	0.000478 J	0.717	0.67
May-2016	ND	ND	0.0162	0.00019 J	ND	1.83	1.91	0.00071 J	0.0013	0.0032 J	25.4	0.285	0.00015 J	0.741	0.734
Oct-2016	ND	ND	0.0166	ND	ND	1.62	1.64	0.00071 J	0.0013	0.0021 J	1.62	0.824	0.00011 J	0.763	0.784
May-2017	ND	ND	0.0185	0.00019 J	ND	1.37	1.58	0.00083 JB	0.0016	0.0038 J	14.4	1.64	0.00018 J	0.745	0.751
Oct-2017	ND	ND	0.0183	0.00015 J	ND	1.62	1.62	ND	0.0016	0.0035 J	11.2	2.68	0.00019 J	0.811	0.844

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-04***													
May-2018	*0.00013 J*	*ND*	0.023	*0.00021 J*	*0.000078 J*	1.8	1.7	*0.0022 J*	0.0018	0.014	14.1	2.4	*0.00023 J*	*0.94 J*	*0.91 J*
Nov-2018	*ND*	*ND*	0.023	*0.00018 J*	*0.000032 J*	1.9	1.9	*0.0024 J*	0.0015	0.0041	44	17.7 M1	*0.000076 J*	*0.96 J*	*0.99 J*
May-2019	*ND*	*ND*	0.023	*ND*	*ND*	2.1	2.2	*ND*	0.0015	0.0028	23.4	14.1	*ND*	*ND*	1
Oct-2019	*ND*	*ND*	0.038	*0.00086 J*	*0.00076 J*	3.6	3.5	*0.0036 J*	0.0026	0.017	152	11.6	*0.00037 J*	1	1
May-2020	*0.00032 J*	*ND*	0.025	*0.00015 J*	*0.00016 J*	5.2	5.4	*0.003 J*	0.0026	0.0063	27.5	17.5	*ND*	1.2	1.2
Oct-2020	*0.00072 J*	*ND*	0.028	*ND*	*ND*	8.8	8.4	*0.01 J*	*0.0018 J*	*ND*	22.4 M1	19.5	*ND*	1.2	1.2
Apr-2021	*ND*	*ND*	0.028	*ND*	*ND*	4.6	4.5	*0.0009 J*	*0.0013 J*	*ND*	30.4	21.8	*ND*	1.2	1.2
Oct-2021	*0.000053 JB*	*ND*	0.027	*ND*	*ND*	7.5	7.2	*ND*	*0.0013 J*	*0.0014 J*	29.8	21.5	*ND*	1.5	1.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-04*												
Nov-1993	0.07	NA	ND	NA	0.36	NA	ND	NA	1.1	NA	NA	NA	ND
Apr-1994	0.012	NA	ND	NA	ND	NA	ND	NA	1.9	NA	NA	NA	0.014
Apr-1995	0.01	NA	ND	ND	0.46	NA	ND	ND	1	NA	ND	ND	0.02
Oct-1996	0.019	0.016	NA	ND	ND	ND	ND	ND	2.1	2.5	ND	ND	ND
Apr-1997	0.025	ND	ND	ND	2	1.8	ND	ND	1.3	1.2	ND	ND	0.044
Oct-1997	0.011	0.015	ND	ND	ND	0.552	ND	ND	1.08	1.02	ND	ND	0.01
Apr-1998	ND	0.033	ND	ND	ND	ND	ND	ND	1.09	1.18	ND	ND	ND
Apr-1999	0.01	0.015	NA	ND	0.875	ND	ND	ND	1.18	1.12	ND	ND	ND
Oct-1999	0.01	0.015	NA	ND	ND	ND	ND	ND	1.1	1.01	ND	ND	ND
Apr-2000	0.011	0.012	NA	ND	0.547	ND	ND	ND	1.12	1.04	ND	ND	ND
Oct-2000	0.012	0.015	NA	ND	0.514	ND	ND	ND	1.05	1.16	ND	ND	ND
Apr-2001	ND	NA	NA	ND	1.11	NA	ND	ND	2.15	NA	ND	ND	ND
Sep-2001	ND	ND	NA	ND	ND	0.641	ND	ND	1.18	1.1	ND	ND	ND
Mar-2002	0.015	0.017	NA	ND	1.03	0.901	ND	ND	1.16	1.15	ND	ND	ND
Sep-2002	ND	0.017	NA	ND	0.843	0.821	ND	ND	1.43	1.11	ND	ND	ND
Mar-2003	0.013	0.012	NA	ND	0.646	ND	ND	ND	1.18	1.13	ND	ND	ND
Oct-2003	ND	0.017	NA	ND	1.18	1.53	ND	ND	2.74	1.13	ND	0.044	ND
Apr-2004	ND	ND	ND	ND	1.48	ND	ND	ND	2.17	1.13	**0.003**	ND	0.021
Oct-2004	ND	0.011	ND	ND	ND	ND	ND	ND	1.56	0.833	ND	ND	0.073
Apr-2005	0.017	0.014	ND	ND	ND	ND	ND	ND	1.21	1.15	ND	ND	ND
Oct-2005	0.016	0.011	ND	ND	0.58	ND	ND	ND	1.97	1.06	ND	ND	0.012
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	0.919	0.81	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-04*												
Sep-2006	0.01	ND	ND	ND	0.514	ND	ND	ND	1.27	0.989	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	1.09	0.925	ND	ND	ND
Sep-2007	0.022	0.019	ND	ND	ND	ND	ND	ND	1.1	1.05	ND	ND	0.015
Mar-2008	0.019	0.014	ND	ND	ND	ND	ND	ND	1.18	1.13	ND	ND	ND
Sep-2008	0.01	ND	ND	ND	ND	ND	ND	ND	1.13	1.02	ND	ND	0.021
Mar-2009	ND	ND	**0.0072 R,C**	ND	ND	ND	ND	ND	1.14	1.17	ND	ND	0.011
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Jul-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.14	1.14	ND	ND	ND
Mar-2010	ND	ND	ND	ND	0.562	0.512	ND	ND	1.07	1.04	ND	ND	ND
Oct-2010	0.028	0.021	ND	ND	ND	ND	ND	ND	1.22	1.17	ND	ND	ND
Apr-2011	0.015	0.012	ND	ND	ND	ND	ND	ND	1.32	1.26	ND	ND	ND
Sep-2011	0.021	0.012	ND	ND	ND	ND	ND	ND	1.34	1.31	ND	ND	0.012
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	1.34	1.34	ND	ND	ND
Sep-2012	0.0153	0.011	ND	0.0019 J	0.45 J	0.54	ND	ND	1.38	1.39	ND	ND	0.006 J
Mar-2013	0.0122	0.0103	0.00018 J	0.0029 J	0.524	0.467 J	ND	ND	1.56	1.45	0.000555 J	ND	0.0128
Oct-2013	0.0132	0.0121	ND	0.0017 J	0.427	0.44	ND	ND	1.46	1.57	ND	0.000803 J	0.0114
Mar-2014	0.0108	0.0101	ND	0.0019 J	0.558	0.539	ND	ND	1.27	1.61	ND	0.0048 J	0.0098 J
Oct-2014	0.0144	0.012	0.000022 J	0.0018 J	0.518	0.529	0.0013 J	ND	1.69	1.71	ND	ND	ND
Apr-2015	0.0165	0.0146	ND	0.0017 J	0.545	0.548	0.000983 J	ND	1.83	1.88	ND	ND	0.0098 J
Nov-2015	0.0184	0.0167	ND	0.0017 J	0.557	0.516	ND	ND	2.03	1.92	0.000116 J	ND	0.0095 J
May-2016	0.0186	0.0122	ND	0.002 J	0.57	0.562	ND	ND	1.95	1.93	ND	ND	ND
Oct-2016	0.0193	0.0195	ND	0.002 J	0.546	0.582	ND	ND	2	2.1	ND	ND	ND
May-2017	0.0472	0.0279	0.00023	0.0021 J	0.575	0.588	ND	ND	2.25	2.24	ND	ND	0.0036 JB

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-04***												
Oct-2017	0.0403	0.0357	*0.00015 J*	*0.002 JB*	0.626	0.625	*ND*	*ND*	2.5	2.64	*ND*	*ND*	*ND*
May-2018	0.032	0.029	*0.00015 J*	0.0027	*ND*	*ND*	*0.00013 J*	*ND*	*2.9 J*	*2.7 J*	*0.000076 J*	*ND*	0.0065
Nov-2018	0.15	0.15	0.00032	0.0036	*ND*	*ND*	*0.0002 J*	*ND*	*3.5 J*	*3 J*	*ND*	*ND*	0.0057
May-2019	0.18	0.16	*ND*	0.0026	7.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	0.17	0.11	0.0006	0.0042	*ND*	*ND*	*ND*	*ND*	*2.6 J*	*3 J*	*ND*	*ND*	0.025
May-2020	0.1	0.16	*ND*	0.0032	*ND*	*ND*	*ND*	*ND*	*3.1 J*	*3.2 J*	*ND*	0.003	0.01
Oct-2020	0.15	0.12	*ND*	0.0042	*ND*	*ND*	*0.0017 J*	*ND*	*1.8 J*	*2.5 J*	*ND*	*0.0025 J*	*ND*
Apr-2021	0.16	0.16	*ND*	*ND*	0.76	0.77	*ND*	*ND*	3.7	3.4	*ND*	*ND*	*ND*
Oct-2021	0.16	0.16	*ND*	*0.0013 J*	0.8	0.77	*ND*	*ND*	3.6	3.6	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.5	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04*																
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*0.21 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*0.24 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*0.25 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04*																
May-2017	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.9 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	2.35	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.48 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.62 J	0.4 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.18 J	ND	ND	ND	ND	ND	0.71 J	0.47 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.18 J	ND	ND	ND	ND	ND	0.81 J	0.33 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	0.64 J	0.45 J
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8 J	0.9 J
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	0.8 J	1.3
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.1 J	ND	ND	ND	1.3	2.3

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	1.2	3
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	1.5	4.1
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	4.7
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.3 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1 CL	4 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	2.9
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	3
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2	3.1
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*1.36 J*	*4.77 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	2.6	4.4

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-04B***											
Nov-1993	ND	ND	ND	30	3.1	ND	ND	4.82	25.8	4.2	42	3.93
Apr-1994	4.27	ND	ND	21.1	2.7	ND	ND	5.2	28.6	3.6	17	3.93
Apr-1995	ND	ND	ND	ND	3	ND	ND	5.4	27.5	8	16	5.6
Apr-1997	ND	5	ND	ND	2.5	0.03	ND	NA	NA	ND	54	5.7
Oct-1997	ND	ND	0.6	ND	1.54	ND	ND	8.34	51.6	2.5	18	ND
Apr-1998	ND	ND	0.34	ND	2.67	ND	ND	6.57	29.4	7.4	16	9.3
Apr-1999	ND	ND	0.13	ND	3.66	ND	ND	4.87	29.3	4.79	39	7.8
Oct-1999	ND	ND	0.07	ND	2.52	ND	ND	5.13	29.4	5.33	29	8.4
Apr-2000	1	1	ND	ND	2.8	ND	ND	5.47	25	4.27	42	9
Oct-2000	1	NA	ND	ND	3.58	ND	ND	5.06	34.2	11.7	364	7.72
Apr-2001	1.3	NA	ND	ND	2.33	ND	ND	NA	NA	8.7	37	8.47
Sep-2001	ND	ND	ND	ND	11.7	1.25	ND	4.9	48	11.4	33	10.5
Mar-2002	1	1	ND	ND	3.75	ND	ND	4.6	30	5.04	35	9.56
Sep-2002	1.4	1.4	ND	ND	3.03	ND	ND	5	41.1	7.73	83	10.8
Mar-2003	1.9	1.9	ND	ND	12.5	ND	ND	4.8	38.2	14.2	33	9.6
Oct-2003	2.1	2.1	ND	ND	2.72	ND	ND	3.8	39.9	7.67	55	10.5
Apr-2004	1.7	1.7	ND	ND	2.23	ND	ND	5.1	35.6	11.1	31	11.8
Oct-2004	1.9	1.9	ND	ND	3.14	ND	ND	4.9	37.6	8.58	28	10.1
Apr-2005	1.6	1.6	ND	ND	2.43	ND	ND	4.8	33	9.86	70	11.6
Oct-2005	2.7	2.7	0.22	ND	2.3	ND	ND	4.1	29.7	8.56	46	8.69
Mar-2006	3	3	ND	ND	2.16	0.08	ND	5	32.3	9.06	15	7.49
Sep-2006	2.8	2.8	ND	ND	2.6	ND	ND	4.8	33.5	8.32	34	9.31
Mar-2007	2.8	2.8	ND	ND	3.02	0.08	ND	5.1	35.1	8.73	41	8.47
Sep-2007	2.6	2.6	0.36	ND	2.57	ND	ND	5.5	35.9	7.63	45	9.1
Mar-2008	3	3	ND	ND	2.77	0.08	ND	5	36	9.24	29	9.43
Sep-2008	3.2	3.2	ND	43	2.86	ND	ND	5.1	33.6	9.75	37	10.2
Mar-2009	3.1	3.1	ND	ND	2.71	ND	ND	4.5	35.4	7.43	47	9.18
Oct-2009	3	3	ND	ND	2.73	ND	ND	4.5	31.7	10.3	60	10.4
Apr-2010	3.3	3.3	ND	ND	2.59	ND	ND	4.2	37.7	11.5	54	9.5
Oct-2010	2.6	2.6	ND	ND	3.08	ND	ND	4.4	34.9	8.6	29	11.1
Apr-2011	3.5	3.5	ND	ND	2.62	ND	ND	4.5	36.2	8.96	42	10.3
Sep-2011	3.6	3.6	ND	ND	3.02	ND	ND	4.7	36.6	7.53	19	10.7
Mar-2012	2.7	2.7	ND	ND	2.55	ND	ND	4.4	35.8	10	ND	11.1
Sep-2012	2.88	2.88	ND	ND	3.14	0.0613	ND	3.8	36.4	9.39	34	10.9
Mar-2013	3.4	3.4	ND	ND	3.44	0.0421 J	ND	5.1	39.1	9.35	28	11.4
Oct-2013	3.48	3.48	ND	ND	3.56	0.0428 J	ND	5.2	40.3	9.26	ND	11.1
Mar-2014	3	3	ND	ND	3.05	ND	ND	5	37.2	11.2	ND	10.9

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-04B***										
Oct-2014	*ND*	*ND*	*ND*	*5 J*	3.14	*ND*	*ND*	4.6	35.9	8.82	*ND*	11.2
Apr-2015	3.76	3.76	*ND*	*ND*	2.84	*ND*	*ND*	4.7	35.1	11.2	32	11.7
Nov-2015	2.64	2.64	*ND*	*ND*	2.72	*ND*	*ND*	5.1	60.9	10.8	27	11.7
May-2016	*ND*	*ND*	*ND*	*ND*	2.82	*ND*	*ND*	4.9	47.4	9.84	*19 J*	11.2
Oct-2016	*ND*	*ND*	*ND*	*ND*	3.03	*NA*	*NA*	5.1	53.1	9.28	41	10.9
May-2017	2.6	2.6	*ND*	*ND*	3.83	0.181	*ND*	4.9	66.7	8.3	*24 J*	12.4
Oct-2017	*ND*	*ND*	*ND*	*ND*	3.67	0.159	*ND*	5.1	65.4	9.23	35	12.3
May-2018	*4 J*	*ND*	*ND*	*ND*	3.3	0.16	*ND*	5.8	52.4	*7 J*	*ND*	11.6
Nov-2018	*6 JB*	*ND*	*ND*	*ND*	*2.8 J*	*0.076 J*	*ND*	4.63	40.9	*9.7 J*	93	11.6
May-2019	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	4.53	32.5	11.3	23	10.9
Oct-2019	*1 JH1*	*NA*	*ND*	*ND*	*2.7 J*	0.19	*ND*	4.32	46.2	*8.7 J*	231	11.9
May-2020	*ND*	*NA*	*ND*	*ND*	5.8	0.16	*ND*	4.41	55.9	*9.1 J*	46	16.2
Oct-2020	*ND*	*NA*	*ND*	*ND*	4.2	0.15	*ND*	4.41	50.3	10.4	27	14.9
Apr-2021	*ND*	*NA*	*ND*	*ND*	*2.3 J*	0.11	*ND*	4.82	47.3	*9.6 J*	34	11.3
Oct-2021	*ND*	*NA*	*ND*	*ND*	4.3	0.23	*ND*	4.79	88.6	*8.1 J*	14	16.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-04B*													
Nov-1993	NA	ND	ND	NA	ND	0.37	NA	0.007	NA	ND	2.2	0.04	ND	0.73	NA
Apr-1994	NA	ND	ND	NA	ND	1.1	NA	ND	NA	ND	ND	ND	ND	0.37	NA
Apr-1995	ND	ND	ND	ND	ND	0.66	NA	ND	ND	ND	ND	ND	ND	0.95	NA
Oct-1996	ND	ND	0.026	ND	ND	1.4	1.5	ND	ND	ND	ND	ND	0.002	1.4	1.4
Apr-1997	ND	ND	0.042	ND	ND	2.7	1.6	ND	ND	ND	0.26	ND	ND	1.9	1.1
Oct-1997	ND	ND	0.022	ND	ND	0.982	0.948	ND	ND	ND	0.418	ND	ND	0.961	0.918
Apr-1998	ND	ND	0.03	ND	ND	1.72	1.59	ND	ND	ND	1.16	ND	ND	1.22	1.11
Apr-1999	ND	ND	0.039	ND	ND	1.2	1.18	ND	ND	ND	2.96	ND	ND	1.17	1.01
Oct-1999	ND	ND	0.022	ND	ND	1.27	0.964	ND	ND	ND	0.678	ND	ND	1.01	0.832
Apr-2000	ND	ND	0.023	ND	ND	1.54	1.22	ND	ND	ND	0.503	ND	ND	1.26	1.16
Oct-2000	ND	ND	0.022	ND	ND	1.26	1.27	ND	ND	ND	0.286	ND	ND	1.11	1.09
Apr-2001	ND	ND	0.024	ND	ND	1.48	NA	ND	ND	ND	0.556	NA	ND	1.16	NA
Sep-2001	ND	ND	0.027	ND	ND	1.83	1.38	ND	ND	ND	0.623	ND	ND	1.45	1.26
Mar-2002	ND	ND	0.026	ND	ND	1.67	1.53	ND	ND	ND	0.352	ND	ND	1.31	1.34
Sep-2002	ND	ND	0.035	ND	ND	1.95	1.44	ND	ND	0.013	4.57	ND	ND	1.45	1.33
Mar-2003	ND	ND	0.029	ND	ND	1.45	1.33	ND	ND	ND	0.257	ND	ND	1.46	1.28
Oct-2003	ND	ND	0.029	ND	ND	1.81	1.4	ND	ND	ND	0.68	ND	ND	1.46	1.36
Apr-2004	ND	ND	0.032	ND	ND	1.85	1.59	ND	ND	ND	0.599	ND	ND	1.74	1.67
Oct-2004	ND	ND	0.031	ND	ND	1.51	1.51	ND	ND	ND	0.609	ND	ND	1.53	1.52
Apr-2005	ND	ND	0.033	ND	ND	1.98	1.54	ND	ND	ND	0.998	ND	ND	1.62	1.58
Oct-2005	ND	ND	0.024	ND	ND	1.45	1.17	ND	ND	ND	0.491	ND	ND	1.32	1.23

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-04B***													
Mar-2006	ND	ND	0.019	ND	ND	1.19	1.07	ND	ND	ND	0.295	ND	ND	1.1	1.16
Sep-2006	ND	ND	0.023	ND	ND	1.57	1.39	ND	ND	ND	0.375	ND	ND	1.31	1.3
Mar-2007	ND	ND	0.031	ND	ND	1.36	1.28	ND	ND	ND	0.299	ND	ND	1.23	1.16
Sep-2007	ND	ND	0.027	ND	ND	1.4	1.4	ND	ND	ND	0.312	ND	ND	1.36	1.33
Mar-2008	ND	0.002	0.028	ND	ND	1.55	1.37	ND	ND	ND	0.63	ND	ND	1.35	1.24
Sep-2008	ND	ND	0.035	ND	ND	1.6	1.3	0.012	ND	ND	4.91	ND	ND	1.5	1.38
Mar-2009	ND	ND	0.029	ND	ND	1.58	1.5	ND	ND	ND	0.627	ND	ND	1.27	1.31
Oct-2009	ND	ND	0.031	ND	ND	1.79	1.44	ND	ND	ND	1.82	0.051	ND	1.44	1.46
Apr-2010	ND	ND	0.026	ND	ND	1.72	1.6	ND	ND	ND	0.816	ND	ND	1.27	1.52
Oct-2010	ND	ND	0.036	ND	ND	1.7	1.65	ND	ND	ND	0.659	ND	ND	1.67	1.64
Apr-2011	ND	ND	0.031	ND	ND	1.52	1.39	ND	ND	ND	0.543	ND	ND	1.59	1.41
Sep-2011	ND	ND	0.033	ND	ND	1.6	1.55	ND	ND	ND	ND	ND	ND	1.63	1.6
Mar-2012	ND	ND	0.032	ND	ND	1.55	1.57	ND	ND	ND	0.053	ND	ND	1.76	1.77
Sep-2012	ND	ND	0.0355	0.000114 J	ND	1.73	1.6	0.0018 J	0.0041 J	0.0015 J	0.108	0.0208 J	ND	1.61	1.57
Mar-2013	ND	ND	0.0368	0.000116 J	ND	1.81	1.8	0.002 J	0.004 J	0.0015 J	0.0309 J	0.0064 J	ND	1.66	1.66
Oct-2013	ND	ND	0.0404	ND	0.000097 J	1.77	1.69	0.0018 J	0.0042	0.0025	ND	ND	ND	1.62	1.64
Mar-2014	ND	ND	0.0319	ND	ND	2.2	2.06	0.0063 J	0.0035 J	0.0025 J	0.076	0.0586	ND	1.32	1.58
Oct-2014	0.000469 J	ND	0.0403	ND	0.000087 J	1.76	1.83	0.0025 J	0.0042 J	0.0021 J	0.0811	0.0111 J	ND	1.66	1.68
Apr-2015	0.0011 J	ND	0.0397	0.000169 J	0.000106 J	1.82	1.79	0.0016 J	0.0042 J	0.0019 J	0.0405 J	0.0639	ND	1.74	1.68
Nov-2015	ND	ND	0.0399	0.000126 J	0.000113 J	1.82	1.77	0.000929 J	0.0044 J	0.0017 J	0.0292 J	ND	0.000337 J	1.74	1.74
May-2016	ND	ND	0.0385	0.00013 J	ND	1.7	1.72	0.0019 J	0.004	0.0014 J	0.04 J	ND	ND	1.69	1.73
Oct-2016	ND	ND	0.0464	0.00015 J	ND	1.68	1.65	0.0022 J	0.0053	0.0019 J	0.035 J	ND	ND	1.63	1.65
May-2017	ND	ND	0.0528	0.00015 J	ND	2.08	1.83	0.0016 J	0.0055	0.002 J	ND	ND	ND	1.75	1.84
Oct-2017	ND	ND	0.0521	0.00013 J	0.00019 J	2.04	1.98	0.0015 J	0.0056	0.0021 J	0.0858 J	ND	ND	1.75	1.87

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-04B***													
May-2018	*ND*	*ND*	0.044	*0.00016 J*	*0.00012 J*	1.8	1.8	*0.0027 J*	0.0039	0.0064	*0.016 J*	*ND*	*0.000021 JB*	1.7	1.7
Nov-2018	*ND*	*ND*	0.036	*0.00013 J*	*0.000092 J*	1.8	1.8	*0.0034 J*	0.0031	*0.0013 J*	*0.017 J*	*ND*	*0.00021 J*	1.7	1.7
May-2019	*ND*	*ND*	0.034	*ND*	*ND*	1.8	1.8	*ND*	0.0036	*ND*	*ND*	*ND*	*ND*	1.6	1.6
Oct-2019	*0.00011 JB*	*ND*	0.038	*0.00015 J*	*0.00034 JB*	1.8	1.7	*0.0034 J*	0.0041	0.0022	*0.037 J*	*0.014 J*	*0.000079 JB*	1.8	1.8
May-2020	*0.000093 J*	*ND*	0.054	*0.00018 J*	*0.00025 J*	2.4	2.4	*0.0045 J*	0.0058	0.0031	*0.024 J*	*0.013 J*	*ND*	2.5	2.5
Oct-2020	*0.00049 J*	*ND*	0.055	*ND*	*ND*	2.4	2.2	*0.012 J*	0.006	*ND*	*0.024 J*	*0.013 J*	*ND*	2.2	2.1
Apr-2021	*ND*	*ND*	0.036	*ND*	*ND*	1.8	1.8	*0.0021 J*	*0.0037 J*	*ND*	*ND*	*ND*	*ND*	1.7	1.6
Oct-2021	*0.000071 JB*	*ND*	0.059	*0.00023 J*	*ND*	2.4	2.4	0.0027	0.0062	*0.002 J*	*0.029 J*	*0.013 J*	*ND*	2.5	2.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-04B*												
Nov-1993	0.07	NA	ND	NA	1.2	NA	ND	NA	1.6	NA	NA	NA	0.02
Apr-1994	0.008	NA	ND	NA	1.2	NA	ND	NA	2.6	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	1	NA	ND	ND	1.4	NA	ND	ND	0.02
Oct-1996	0.016	0.014	NA	ND	ND	ND	ND	ND	2.5	3.1	ND	ND	0.043
Apr-1997	0.019	0.01	ND	ND	2.9	2.5	ND	ND	1.6	1.7	ND	ND	0.045
Oct-1997	0.012	0.012	ND	ND	0.711	0.907	ND	ND	1.52	1.49	ND	ND	0.018
Apr-1998	0.017	0.014	ND	ND	1.59	0.81	ND	ND	1.57	2.88	ND	ND	ND
Apr-1999	0.027	0.013	NA	ND	1.6	1.27	ND	ND	1.63	1.47	ND	0.014	ND
Oct-1999	0.018	0.011	NA	ND	1.65	1.05	ND	ND	1.84	1.31	ND	ND	ND
Apr-2000	0.017	0.014	NA	ND	1.44	1.17	ND	ND	2.42	1.52	ND	ND	ND
Oct-2000	0.018	0.015	NA	ND	0.911	0.926	ND	ND	1.8	1.86	ND	ND	ND
Apr-2001	0.025	NA	NA	ND	1.77	NA	ND	ND	2.62	NA	ND	ND	ND
Sep-2001	0.027	0.016	NA	0.013	1.02	0.835	ND	ND	2.29	1.49	ND	ND	0.012
Mar-2002	0.021	0.019	NA	ND	0.839	0.869	ND	ND	2.03	1.56	ND	ND	0.013
Sep-2002	0.048	0.019	NA	ND	1.62	1.01	ND	ND	2.09	1.72	ND	ND	ND
Mar-2003	0.022	0.017	NA	ND	1.79	ND	ND	ND	1.74	1.73	ND	ND	ND
Oct-2003	0.023	0.018	NA	ND	1.81	1.88	ND	ND	2.25	1.54	ND	ND	ND
Apr-2004	0.025	0.023	ND	ND	1.41	1.48	ND	ND	1.81	1.43	ND	ND	0.038
Oct-2004	0.022	0.022	ND	ND	1.07	0.963	ND	ND	1.46	1.4	ND	ND	ND
Apr-2005	0.028	0.022	ND	ND	1.23	1.05	ND	ND	1.9	1.52	ND	ND	0.04
Oct-2005	0.018	0.015	ND	ND	0.937	0.81	ND	ND	1.96	1.15	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.574	0.567	ND	ND	0.949	0.942	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-04B***												
Sep-2006	0.019	0.018	*ND*	*ND*	0.985	0.957	*ND*	*ND*	1.031	1.12	*ND*	*ND*	*ND*
Mar-2007	0.018	0.016	*ND*	*ND*	0.676	0.589	*ND*	*ND*	1.29	1.21	*ND*	*ND*	*ND*
Sep-2007	0.022	0.021	*ND*	*ND*	0.894	0.796	*ND*	*ND*	1.39	1.35	*ND*	*ND*	*ND*
Mar-2008	0.023	0.02	*ND*	*ND*	1.01	0.862	*ND*	*ND*	1.64	1.42	*ND*	*ND*	*ND*
Sep-2008	0.057	0.023	*ND*	*ND*	1.1	0.806	*ND*	*ND*	1.41	1.29	*ND*	*ND*	0.024
Mar-2009	0.027	0.024	*ND*	*ND*	0.856	0.823	*ND*	*ND*	1.51	1.47	*ND*	*ND*	0.011
Oct-2009	0.051	0.026	*ND*	*ND*	0.835	0.757	*ND*	*ND*	1.45	1.7	*ND*	*ND*	0.03
Apr-2010	0.021	0.019	*ND*	*ND*	1.18	1.33	*ND*	*ND*	1.91	1.52	*ND*	*ND*	0.022
Oct-2010	0.033	0.029	*ND*	*ND*	1.11	0.936	*ND*	*ND*	1.46	1.43	*ND*	*ND*	*ND*
Apr-2011	0.025	0.021	*ND*	*ND*	1.16	1.07	*ND*	*ND*	1.58	1.58	*ND*	*ND*	*ND*
Sep-2011	0.03	0.029	*ND*	*ND*	0.867	0.955	*ND*	*ND*	1.65	1.65	*ND*	*ND*	*ND*
Mar-2012	0.025	0.025	*ND*	*ND*	0.93	0.913	*ND*	*ND*	1.49	1.5	*ND*	*ND*	*ND*
Sep-2012	0.0364	0.0344	*ND*	*0.0035 J*	0.959	0.884	*ND*	*ND*	1.69	1.69	*ND*	*ND*	*0.007 J*
Mar-2013	0.0368	0.0358	*0.000061 J*	*0.0035 J*	0.938	0.971	*ND*	*ND*	1.82	1.86	*ND*	*ND*	0.0131
Oct-2013	0.0419	0.041	*ND*	0.0036	0.881	0.862	*ND*	*ND*	1.94	1.96	*ND*	*0.0012 J*	0.0168
Mar-2014	0.0319	0.0323	*ND*	*0.0028 J*	1.16	1.12	*ND*	*ND*	1.36	1.89	*ND*	*0.0037 J*	*0.006 J*
Oct-2014	0.0461	0.0462	*ND*	*0.004 J*	0.991	0.984	*ND*	*ND*	1.8	1.82	*ND*	*ND*	*0.0086 J*
Apr-2015	0.0426	0.0405	*ND*	*0.0036 J*	1.08	1.02	*0.0011 J*	*ND*	1.83	1.73	*0.00079 J*	*ND*	0.0117
Nov-2015	0.0465	0.0458	*ND*	*0.0033 J*	0.907	0.891	*ND*	*ND*	1.73	1.74	*0.000083 J*	*ND*	0.0107
May-2016	0.0428	0.0456	*ND*	*0.0035 J*	0.943	0.954	*ND*	*ND*	1.64	1.74	*ND*	*ND*	*ND*
Oct-2016	0.0638	0.0613	*ND*	0.0044	0.935	0.949	*ND*	*ND*	1.7	1.76	*ND*	*ND*	*0.0059 J*
May-2017	0.0649	0.0629	*ND*	*0.0035 J*	0.9	0.936	*ND*	*ND*	1.81	1.92	*ND*	*ND*	*0.0068 JB*
Oct-2017	0.0662	0.0713	*0.00012 J*	*0.0039 JB*	0.913	0.999	*ND*	*ND*	1.78	1.89	*ND*	*ND*	*0.0057 J*
May-2018	0.057	0.045	**0.0025**	0.003	*0.95 J*	*0.98 J*	*0.00057 J*	*ND*	*1.7 J*	*1.7 J*	*0.00025 J*	*ND*	0.029

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-04B***												
Nov-2018	0.036	0.036	*ND*	0.0034	*1.2 J*	*ND*	*0.00024 J*	*ND*	*2 JB*	*1.6 J*	*ND*	*ND*	0.0063
May-2019	0.049	0.032	*ND*	0.0039	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0029	0.0051
Oct-2019	0.043	0.041	*ND*	0.0034	*ND*	*ND*	*ND*	*ND*	*ND*	*1.9 J*	*ND*	*ND*	0.013 B
May-2020	0.063	0.061	0.0002 B	0.0049	*ND*	*1.1 J*	*ND*	*ND*	*2.4 J*	*2.3 J*	*ND*	0.0031	0.012
Oct-2020	0.064	0.058	*ND*	0.006	*ND*	*ND*	*ND*	*ND*	*ND*	*1.7 J*	*ND*	*0.0024 J*	*ND*
Apr-2021	0.039	0.04	*ND*	*0.0037 J*	1.1	1.1	*ND*	*ND*	1.7	1.7	*ND*	*ND*	*0.0043 J*
Oct-2021	0.083	0.08	*0.00017 J*	0.0046	0.98	0.96	*ND*	*ND*	2.5	2.5	*ND*	*ND*	0.0073

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04B*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.9	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04B*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04B*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.9 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04B***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04B***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04B***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-04B*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04B***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05***											
Nov-1993	ND	ND	0.1	ND	2.2	ND	ND	5.24	18	ND	ND	2.86
Apr-1994	ND	ND	0.1	ND	2.4	ND	ND	5.03	18.2	ND	44	0.92
Aug-1994	7.5	7.5	ND	ND	2.2	0.3	ND	5.7	17.8	ND	ND	2.92
Sep-1994	ND	ND	ND	ND	2.5	0.2	ND	5.3	16.2	2.8	12	3.4
Nov-1994	ND	ND	ND	ND	2.2	ND	ND	5	16.5	1.9	40	3.3
Apr-1995	ND	ND	ND	43.7	2.2	ND	ND	5.3	17.2	ND	16	2.6
Apr-1997	ND	3	ND	ND	1.5	0.08	ND	NA	NA	ND	42	3.8
Oct-1997	ND	ND	0.53	ND	1.83	0.138	ND	5.56	18.62	ND	ND	7.5
Apr-1998	2	2	0.27	ND	1.91	0.15	ND	6.93	18.02	0.68	ND	3.2
Apr-1999	ND	ND	0.28	ND	2.69	ND	ND	5.43	18.79	ND	32	3.1
Oct-1999	ND	ND	0.08	ND	3.2	0.159	ND	5.38	18.07	ND	23	3.5
Apr-2000	4	4	ND	ND	1.86	ND	ND	6.76	14	ND	ND	4.2
Oct-2000	3.7	NA	ND	ND	2.43	0.8	ND	5.43	19.68	1.72	22	3.31
Apr-2001	2.8	NA	ND	ND	1.58	ND	ND	NA	NA	ND	13	3.97
Mar-2002	ND	ND	ND	ND	4.46	0.337	ND	5.5	19	1.58	33	3.8
Sep-2002	3	3	ND	ND	2.31	ND	ND	5.6	20.7	ND	33	4.36
Mar-2003	3.3	3.3	ND	ND	2.79	ND	ND	5.6	23.4	ND	20	3.23
Oct-2003	3.4	3.4	ND	11	2.24	0.122	ND	4.5	21	ND	51	4.28
Apr-2004	3.6	3.6	ND	ND	2.83	0.12	ND	5.5	19.9	ND	16	4.79
Oct-2004	3.4	3.4	ND	ND	2.83	0.1	ND	5.6	20	ND	13	6.17
Apr-2005	ND	ND	ND	ND	1.56	0.11	ND	4.6	15.7	4.59	46	1.79
Oct-2005	4.8	4.8	ND	ND	2.79	0.1	ND	5.5	15.3	ND	22	3.81
Mar-2006	4.6	4.6	ND	10	2.43	0.12	ND	4.8	17.7	ND	17	2.81
Sep-2006	4	4	ND	ND	2.29	0.11	ND	5.2	15.4	ND	20	3.49
Mar-2007	3.8	3.8	ND	ND	2.42	0.12	ND	5.2	15.8	ND	ND	2.65
Sep-2007	3.8	3.8	0.38	ND	2.16	ND	ND	5.3	18.6	ND	10	2.98
Mar-2008	5.1	5.1	ND	ND	2.57	0.1	ND	5.2	16.6	ND	20	2.7
Sep-2008	4.4	4.4	0.27	ND	2.33	0.07	ND	5.3	15.3	ND	33	3
Mar-2009	5.2	5.2	ND	ND	2.25	ND	ND	5	19	ND	20	3.31
Oct-2009	5.1	5.1	ND	ND	2.67	0.11	ND	5.4	19.5	ND	26	4.41
Apr-2010	4.2	4.2	ND	ND	2.77	0.1	ND	4.7	19.1	ND	31	3
Oct-2010	4.7	4.7	ND	ND	3.32	ND	ND	4.7	19.4	ND	10	3.77
Apr-2011	6	6	ND	ND	3.13	0.1	ND	5	17.6	ND	36	3.7
Sep-2011	5.8	5.8	0.23	ND	2.54	0.08	ND	4.8	17.2	ND	17	3.31
Mar-2012	4.7	4.7	ND	ND	2.81	0.07	ND	4.7	17.2	ND	ND	3.83
Sep-2012	4.88	4.88	ND	ND	2.76	0.1	ND	4.3	18.1	ND	ND	3.83
Mar-2013	6.4	6.4	0.061 J	ND	2.82	0.0898	ND	5.7	17.5	0.268 J	ND	3.84

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05***											
Oct-2013	6.68	6.68	*ND*	*ND*	2.72	0.0764	*ND*	5.4	17.8	*ND*	*ND*	3.63
Mar-2014	5.76	5.76	*ND*	*6 J*	3.21	0.068	*ND*	5.6	18.8	*ND*	30	4.53
Oct-2014	2.2	2.2	*ND*	13	3.74	0.102	*ND*	5.1	22.7	*ND*	*ND*	4.45
Apr-2015	9.8	9.8	*ND*	*ND*	3.83	0.0738	*ND*	4.2	24.9	*ND*	*ND*	4.39
Nov-2015	4.64	4.64	*ND*	*ND*	3.84	0.0896	*ND*	5.9	35.9	*ND*	*18 J*	4.41
May-2016	4.48	4.48	*ND*	10	3.73	0.0895	*ND*	5.7	31	*ND*	*16 J*	4.3
Oct-2016	3.88	3.88	*ND*	*ND*	3.33	*NA*	*NA*	5.6	31.6	*0.593 J*	*23 J*	4
May-2017	5.32	5.32	*ND*	*ND*	3.7	0.103	*ND*	5.8	43.5	*ND*	*12 J*	4.4
Oct-2017	10.1	10.1	*ND*	*ND*	3.83	0.0896	*ND*	5.9	48.9	*ND*	34	5
May-2018	16	16	*ND*	*5.7 J*	4.8	*0.093 J*	*ND*	5.9	50.2	*ND*	*ND*	6.4
Nov-2018	24 ML	24	*ND*	*ND*	6.8	*ND*	*0.0079 J*	6.46	105.2	*ND*	36	14.7
May-2019	36	*NA*	*ND*	*ND*	10.2	*ND*	0.012	6.36	99.3	*ND*	77	15.6
Oct-2019	*2.5 JH1*	*NA*	*ND*	*ND*	7.3	0.11	*0.0071 J*	6.27	85	*ND*	56	9.1
May-2020	22	*NA*	*ND*	*ND*	7.5	*ND*	*ND*	5.69	91.9	*ND*	33	12.3
Oct-2020	24	*NA*	*ND*	*7 J*	6.7	*0.048 J*	*ND*	5.76	86.8	*ND*	47	11.3
Apr-2021	20	*NA*	*ND*	*ND*	6.2	*0.074 J*	*ND*	6.38	105.1	*ND*	*ND*	10
Oct-2021	36	*NA*	*ND*	*6.1 J*	7.2	*ND*	*ND*	6.59	156.7	*ND*	30	14

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-05*													
Nov-1993	NA	ND	ND	NA	ND	0.6	NA	ND	NA	ND	14.6	9.6	ND	0.33	NA
Apr-1994	NA	ND	ND	NA	ND	0.31	NA	ND	NA	ND	1.5	0.16	ND	1.1	NA
Aug-1994	NA	ND	ND	NA	ND	0.74	NA	ND	NA	ND	10.2	0.73	**0.016**	0.26	NA
Sep-1994	NA	ND	ND	NA	ND	0.85	NA	ND	NA	ND	0.84	0.17	ND	0.3	NA
Nov-1994	NA	ND	ND	NA	ND	0.75	NA	ND	NA	0.02	2.7	0.18	0.009	0.35	NA
Apr-1995	ND	ND	0.9	ND	ND	0.53	NA	ND	ND	ND	2.8	0.2	0.005	0.32	NA
Oct-1996	ND	ND	0.019	ND	ND	0.73	0.72	ND	ND	ND	14	1.5	ND	ND	ND
Apr-1997	ND	ND	0.01	ND	ND	0.83	0.8	ND	ND	ND	2.6	0.22	0.005	ND	ND
Oct-1997	ND	ND	0.01	ND	0.004	0.642	1.5	ND	ND	ND	6.76	2.38	ND	0.293	0.456
Apr-1998	ND	ND	ND	ND	ND	0.798	0.794	ND	ND	ND	27.9	0.544	ND	0.291	0.287
Apr-1999	ND	ND	0.01	ND	ND	0.762	0.728	ND	ND	ND	46.2	0.622	ND	0.296	0.278
Oct-1999	ND	ND	0.011	ND	ND	1.06	0.711	ND	ND	ND	29	0.62	ND	0.338	0.262
Apr-2000	ND	ND	0.012	ND	ND	1.07	0.658	ND	ND	ND	37.3	0.475	ND	0.368	0.271
Oct-2000	ND	ND	ND	ND	ND	0.793	0.747	ND	ND	ND	41.1	0.618	ND	0.322	0.3
Apr-2001	ND	ND	0.011	ND	ND	1.02	NA	ND	ND	ND	28.1	NA	0.006	0.346	NA
Mar-2002	ND	ND	ND	ND	ND	0.973	0.79	0.014	ND	0.039	50.1	0.789	0.011	0.333	0.317
Sep-2002	ND	ND	0.011	ND	ND	1.16	0.722	ND	ND	0.022	31.9	0.816	0.007	0.356	0.309
Mar-2003	ND	ND	ND	ND	ND	0.767	0.723	ND	ND	0.017	5.11	0.967	0.01	0.321	0.297
Oct-2003	ND	ND	0.01	ND	ND	1.11	0.757	ND	ND	ND	22.3	0.901	0.007	0.367	0.317
Apr-2004	ND	ND	0.013	ND	ND	1.21	0.761	ND	ND	0.012	31.7	0.889	0.006	0.43	0.326
Oct-2004	ND	ND	0.01	ND	ND	1.76	0.797	ND	ND	ND	24.2	0.924	0.006	0.431	0.338

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05***													
Apr-2005	ND	ND	ND	ND	ND	0.454	0.491	ND	ND	ND	ND	ND	ND	0.16	0.174
Oct-2005	ND	ND	0.01	ND	ND	1.03	0.719	ND	ND	0.022	45.5	0.602	0.009	0.312	0.292
Mar-2006	ND	ND	ND	ND	ND	0.695	0.504	ND	ND	0.01	105	0.819	0.011	0.26	0.208
Sep-2006	ND	ND	0.01	ND	ND	0.908	0.612	ND	ND	0.013	68.8	0.899	0.011	0.296	0.266
Mar-2007	ND	ND	0.012	ND	ND	0.642	0.554	ND	ND	ND	34.1	0.622	0.009	0.256	0.226
Sep-2007	ND	ND	ND	ND	ND	0.739	0.64	ND	ND	ND	21.1	0.7	0.006	0.275	0.236
Mar-2008	ND	ND	ND	ND	ND	0.631	0.631	ND	ND	ND	11.5	0.735	0.004	0.271	0.275
Sep-2008	ND	ND	0.007	ND	ND	0.699	0.509	ND	ND	ND	22.4	0.601	0.004	0.314	0.278
Mar-2009	ND	ND	0.011	ND	ND	0.787	0.697	ND	ND	ND	81.6	0.914	0.012	0.326	0.288
Oct-2009	ND	ND	ND	ND	ND	1.15	0.839	ND	ND	ND	26.3	2.54	0.003	0.374	0.344
Apr-2010	ND	ND	ND	ND	ND	0.671	0.584	ND	ND	ND	34.9	0.762	0.004	0.304	0.292
Oct-2010	ND	ND	ND	ND	ND	0.859	0.811	ND	ND	ND	51.6	1.05	0.008	0.396	0.374
Apr-2011	ND	ND	ND	ND	ND	0.889	0.803	ND	ND	ND	13.9	1.2	0.005	0.36	0.334
Sep-2011	ND	ND	ND	ND	ND	0.82	0.82	ND	ND	ND	15.2	1.72	0.005	0.306	0.327
Mar-2012	ND	ND	ND	ND	ND	0.829	0.824	ND	ND	ND	11.4	1.36	0.005	0.428	0.415
Sep-2012	ND	ND	0.0083 J	ND	ND	0.971	0.958	ND	0.000838 J	0.0011 J	2.43	1.42	0.0036	0.341	0.311
Mar-2013	ND	ND	0.0087 J	ND	ND	1	0.961	0.0018 J	0.000789 J	0.002 J	6.24	1.95	0.003	0.326	0.283
Oct-2013	ND	ND	0.0091	ND	ND	0.904	0.885	0.0011 J	0.000728 J	0.000891 J	1.58	1.48	0.0044	0.334	0.333
Mar-2014	ND	ND	0.0081 J	ND	ND	1.33	1.31	0.0064 J	0.000768 J	0.0011 J	5.65	1.83	0.0047	0.294	0.372
Oct-2014	0.000461 J	ND	0.0104	ND	ND	1.12	1.13	0.000704 J	0.000804 J	0.000686 J	4.25	2.54	0.0029	0.401	0.406
Apr-2015	0.0011 J	ND	0.0113	ND	ND	1.06	1.13	0.0014 J	0.000967 J	0.0018 J	11.2	2.16	0.0044	0.425	0.442
Nov-2015	ND	ND	0.0109	ND	ND	1.05	1.02	0.000637 J	0.000944 J	ND	2.53	1.76	0.002	0.432	0.425
May-2016	ND	ND	0.0108	ND	ND	1.02	1.1	0.00084 J	0.00086 J	0.00054 J	2.93	2.42	0.0022	0.43	0.442
Oct-2016	ND	ND	0.0118	ND	ND	0.922	0.91	0.0014 J	0.00088 J	0.0012 J	5.81	2.24	0.0028	0.407	0.409

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05***													
May-2017	*ND*	*ND*	0.011	*ND*	*ND*	1.1	1.13	*0.002 J*	*0.00093 J*	*ND*	2.76	2.59	*0.0018 J*	0.398	0.427
Oct-2017	*ND*	*ND*	0.0123	*ND*	*ND*	1.26	1.22	*ND*	*0.00087 J*	*ND*	4.82	4.01	*0.0014 J*	0.452	0.44
May-2018	*ND*	*ND*	0.015	*0.000077 J*	*0.000046 J*	1.6	1.5	*0.0025 J*	0.0011	0.0056	7.7	5.3	0.0012	*0.55 J*	*0.52 J*
Nov-2018	*ND*	*ND*	0.025	*0.00015 J*	*ND*	4.4	4.2	*0.0059 J*	0.00098	0.0026	49.7 M1	22.3 M1	*0.0009 J*	*0.92 J*	*0.92 J*
May-2019	*ND*	*ND*	0.027	*ND*	*ND*	4.6	4.6	*ND*	0.0013	0.0028	34.5 M1	25.8 M1	*ND*	1	1
Oct-2019	*0.000056 J*	*ND*	0.021	*0.000073 J*	*0.00018 J*	2.4	2.5	*0.0042 J*	0.0014	*0.0014 J*	23	13.5	*0.00086 J*	0.73	*0.7 J*
May-2020	*ND*	*ND*	0.024	*ND*	*ND*	3.6	3.6	**0.01 D6**	*0.0015 J*	0.012	29 ML	19.7	*ND*	0.82	0.85
Oct-2020	*0.00048 J*	*ND*	0.021	*ND*	*ND*	3.2	3.3	*0.011 J*	*0.0013 J*	*ND*	19.3	18.2	*ND*	0.79	*0.81 J*
Apr-2021	*ND*	*ND*	0.018	*ND*	*ND*	2.7	2.8	*0.0013 J*	*0.00054 J*	*ND*	18.7	17.9	*ND*	0.78	0.76
Oct-2021	*0.00006 JB*	*ND*	0.023	*ND*	*ND*	3.8	3.6	*0.0015 J*	*0.00088 J*	*0.00045 J*	27.4	25.2	*0.00015 J*	1.1	1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-05*												
Nov-1993	0.06	NA	ND	NA	0.37	NA	ND	NA	1.2	NA	NA	NA	ND
Apr-1994	0.18	NA	ND	NA	ND	NA	ND	NA	1.6	NA	NA	NA	ND
Aug-1994	0.02	NA	ND	NA	0.48	NA	ND	NA	0.88	NA	NA	NA	ND
Sep-1994	0.01	NA	ND	NA	0.38	NA	ND	NA	1.1	NA	NA	NA	0.03
Nov-1994	0.03	NA	ND	NA	0.53	NA	ND	NA	1.1	NA	NA	NA	0.01
Apr-1995	ND	NA	ND	ND	0.53	NA	ND	0.01	0.96	NA	ND	ND	0.02
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	1.2	1.3	ND	ND	0.026
Apr-1997	0.011	0.01	ND	ND	ND	ND	ND	ND	1.6	1.4	ND	ND	0.024
Oct-1997	0.026	0.03	0.0005	ND	ND	ND	ND	ND	1.35	1.35	ND	ND	0.016
Apr-1998	0.015	0.016	ND	ND	ND	ND	ND	ND	1.11	1.11	ND	ND	ND
Apr-1999	0.01	0.017	NA	ND	ND	ND	ND	ND	1.09	1.02	ND	ND	ND
Oct-1999	0.014	0.016	NA	ND	0.879	0.631	ND	ND	1.38	0.952	ND	ND	ND
Apr-2000	0.019	0.014	NA	ND	ND	ND	ND	ND	3.38	1.03	ND	ND	0.018
Oct-2000	ND	0.018	NA	ND	0.455	0.217	ND	ND	1.06	1.06	ND	ND	ND
Apr-2001	0.015	NA	NA	ND	1.16	NA	ND	ND	2.31	NA	ND	ND	ND
Mar-2002	0.015	0.018	NA	0.012	0.651	0.751	ND	ND	1.78	1.17	ND	ND	0.016
Sep-2002	0.016	0.019	NA	ND	1.43	ND	ND	ND	1.7	1.12	ND	ND	ND
Mar-2003	0.02	0.018	NA	ND	0.792	ND	ND	ND	1.18	1.16	ND	ND	ND
Oct-2003	0.014	0.018	NA	ND	0.663	0.638	ND	ND	1.52	1.16	ND	ND	ND
Apr-2004	0.015	0.019	ND	ND	0.753	ND	ND	ND	1.74	1.24	ND	ND	0.044
Oct-2004	0.02	0.018	ND	ND	1.15	ND	ND	ND	1.83	0.991	ND	ND	0.055
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	0.949	0.955	ND	ND	0.019

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05***												
Oct-2005	0.02	0.013	ND	ND	ND	ND	ND	ND	1.76	1.08	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	0.973	0.827	ND	ND	ND
Sep-2006	0.021	0.016	ND	ND	0.508	ND	ND	ND	1.14	0.883	ND	ND	ND
Mar-2007	0.019	0.012	ND	ND	ND	ND	ND	ND	0.981	0.81	ND	ND	ND
Sep-2007	0.023	0.015	ND	ND	ND	ND	ND	ND	0.967	0.953	ND	ND	ND
Mar-2008	0.017	0.014	ND	ND	ND	ND	ND	ND	0.963	0.976	ND	ND	ND
Sep-2008	0.017	0.013	ND	ND	ND	ND	ND	ND	0.964	0.899	ND	ND	0.016
Mar-2009	0.026	0.015	ND	ND	ND	ND	ND	ND	1.14	1.08	ND	ND	0.016
Oct-2009	0.04	0.036	ND	ND	ND	ND	ND	ND	1.24	1.17	ND	ND	0.027
Apr-2010	0.023	0.013	ND	ND	ND	ND	ND	ND	1.24	1.22	ND	ND	ND
Oct-2010	0.03	0.018	ND	ND	ND	ND	ND	ND	1.27	1.22	ND	ND	ND
Apr-2011	0.025	0.02	ND	ND	ND	ND	ND	ND	1.32	1.37	ND	ND	0.01
Sep-2011	0.03	0.027	ND	ND	ND	ND	ND	ND	1.27	1.28	ND	ND	ND
Mar-2012	0.024	0.022	ND	ND	ND	ND	ND	ND	1.29	1.26	ND	ND	0.011
Sep-2012	0.0343	0.0323	ND	0.0016 J	0.458 J	0.551	ND	ND	1.21	1.14	ND	ND	0.0043 J
Mar-2013	0.0306	0.0327	0.000055 J	0.0015 J	0.505	0.459 J	ND	ND	1.25	1.12	ND	ND	0.0624
Oct-2013	0.0274	0.0285	ND	0.0019 J	0.427	0.427	ND	ND	1.19	1.22	ND	0.0011 J	0.0121
Mar-2014	0.0224	0.0243	ND	0.0015 J	0.529	0.515	ND	ND	1.01	1.32	ND	0.0026 J	0.0041 J
Oct-2014	0.0369	0.0387	ND	0.0016 J	0.518	0.53	0.001 J	ND	1.53	1.56	ND	ND	0.0053 J
Apr-2015	0.0303	0.0323	ND	0.0019 J	0.506	0.542	ND	ND	1.57	1.66	ND	ND	0.0069 J
Nov-2015	0.0303	0.0265	ND	0.0015 J	0.508	0.487 J	ND	ND	1.75	1.74	0.000064 J	ND	0.0027 J
May-2016	0.0294	0.0324	ND	0.0016 J	0.528	0.512	ND	ND	1.58	1.6	ND	ND	0.0078 J
Oct-2016	0.0278	0.0271	ND	0.0024 J	0.5	0.489	ND	ND	1.48	1.52	ND	ND	ND
May-2017	0.0298	0.0294	ND	0.0021 J	0.495	0.495	ND	ND	1.45	1.55	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05***												
Oct-2017	0.0416	0.0396	*ND*	*0.0013 J*	0.516	0.538	*ND*	*ND*	1.63	1.65	*ND*	*ND*	*ND*
May-2018	0.049	0.04	*ND*	0.0022	*ND*	*ND*	*ND*	*ND*	*1.9 J*	*1.8 J*	*0.000077 J*	*ND*	*0.0047 J*
Nov-2018	0.18	0.17	*ND*	0.0049	*ND*	*1 J*	*ND*	*ND*	*2.8 J*	*2.7 J*	*ND*	*ND*	0.0065
May-2019	0.17	0.16	*ND*	0.0032	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0075
Oct-2019	0.085	0.085	*ND*	0.003	*ND*	*ND*	*ND*	*ND*	*2.8 J*	*2.8 J*	*ND*	0.0056	0.015
May-2020	0.11	0.11	*ND*	*0.009 J*	1	0.89	*ND*	*ND*	3	3.1	*ND*	*ND*	*ND*
Oct-2020	0.14	0.12	*ND*	0.0037	*ND*	*ND*	*0.0017 J*	*ND*	*2.4 J*	*2.2 J*	*ND*	*0.0031 J*	*ND*
Apr-2021	0.12	0.12	*0.00005 J*	*0.0021 J*	0.72	0.75	*ND*	*ND*	2.5	2.5	*ND*	*ND*	*ND*
Oct-2021	0.16	0.16	*ND*	*0.0023 J*	0.94	0.92	*ND*	*ND*	3.4	3.3	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.8	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4 J	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.6 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.4 L2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.2 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	1.58	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	2.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-05*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05***															
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.46 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.39 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.51 J*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*0.6 J*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*0.5 J*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*0.7 J*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.9 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	1.9
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	3.1 CLN3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	4.9 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	2.3
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	2.3
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	2.5	2.5
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.113 J*	*ND*	*0.544 J*	*ND*	*ND*	*ND*	*1.25 J*	*4.18 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	4	4.1

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	1.2	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05***															
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.5 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.483 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05A***											
Nov-1993	6	6	ND	ND	2.5	ND	ND	5.43	18.1	ND	26	1.98
Apr-1994	ND	ND	0.1	ND	2.4	ND	ND	5	19.3	ND	48	0.75
Apr-1995	5	5	0.2	ND	2.9	ND	ND	5.4	21.8	2.3	ND	2.4
Apr-1997	ND	2	ND	ND	3	0.09	ND	NA	NA	ND	ND	7.8
Oct-1997	4	4	0.28	ND	ND	ND	ND	5.93	19.8	ND	ND	5
Apr-1998	ND	ND	ND	ND	2.24	ND	ND	6	62.1	ND	ND	3.1
Apr-1999	ND	ND	0.19	ND	4.41	ND	ND	5.32	19.8	ND	23	2.9
Oct-1999	20	20	0.08	ND	3.24	ND	ND	5.16	19.5	ND	18	3.1
Apr-2000	1	1	ND	ND	3.12	ND	ND	5.61	17	ND	19	3
Oct-2000	2.7	NA	ND	ND	5.19	ND	ND	5.26	21.8	5.48	25	3.12
Apr-2001	1.9	NA	ND	ND	3.51	0.498	ND	NA	NA	ND	ND	3.23
Sep-2001	1.9	1.9	ND	ND	4.28	ND	ND	5.49	25	ND	27	3.27
Mar-2002	ND	ND	ND	ND	3.28	ND	ND	5.5	22	ND	36	2.99
Sep-2002	3	3	ND	ND	2.96	ND	ND	5.5	24.5	ND	38	4.99
Mar-2003	4.2	4.2	ND	ND	3.59	ND	ND	5.3	25.1	ND	25	3.06
Oct-2003	3.6	3.6	ND	ND	3.23	0.093	ND	4.8	28.5	ND	62	10.3
Apr-2004	3.8	3.8	ND	ND	3.46	0.07	ND	5.5	23.5	ND	20	4.72
Oct-2004	3.6	3.6	ND	ND	36	0.74	ND	5.2	22.8	4.56	36	3.8
Apr-2005	3.6	3.6	ND	ND	3.27	0.08	ND	5.3	22.4	ND	62	4.39
Oct-2005	3.7	3.7	ND	ND	3.95	0.09	ND	5.3	18	ND	33	4.04
Mar-2006	4.7	4.7	ND	ND	3.83	0.11	ND	4.6	24.2	ND	36	3.64
Sep-2006	4.4	4.4	ND	ND	3.88	0.1	ND	5.2	24.1	ND	31	3.44
Mar-2007	4.7	4.7	0.38	ND	4.05	0.14	ND	5.4	25.5	ND	27	3.21
Sep-2007	3.4	3.4	0.35	ND	3.86	0.16	ND	5.3	26.6	ND	94	3.53
Mar-2008	4	4	ND	ND	4.03	0.15	ND	5.7	28.1	ND	18	3.4
Sep-2008	4	4	ND	14	4.22	0.1	ND	5.3	27.1	ND	23	3.7
Mar-2009	13	13	ND	ND	4.14	0.11	ND	4.5	26.6	ND	31	3.51
Oct-2009	3.9	3.9	ND	ND	4.08	0.13	ND	4.7	24	ND	44	4.3
Apr-2010	4.5	4.5	ND	ND	3.61	0.13	ND	5.2	25.8	ND	25	3
Oct-2010	3.2	3.2	ND	ND	4.2	0.09	ND	4.5	25.6	ND	ND	3.45
Apr-2011	4.4	4.4	ND	ND	3.88	0.11	ND	4.7	25.6	ND	30	3.65
Sep-2011	4.8	4.8	ND	ND	4.25	0.1	ND	5.5	20.1	ND	25	3.67
Mar-2012	3.8	3.8	ND	ND	4.14	0.12	ND	4.5	22.3	ND	ND	3.77
Sep-2012	3.32	3.32	ND	ND	4.24	0.142	ND	4.2	23.3	ND	27	3.74
Mar-2013	4.68	4.68	0.096 J	ND	4.58	0.127	ND	5.3	26	0.562 J	25	4.07
Oct-2013	5.12	5.12	ND	ND	4.66	0.119	ND	5.8	28.8	0.581 J	ND	4.29
Mar-2014	4.88	4.88	ND	ND	4.77	0.103	ND	5.3	26.6	0.869 J	ND	5.22

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05A***											
Oct-2014	*ND*	*ND*	*ND*	10	4.92	0.148	*ND*	4.6	27.3	*ND*	*ND*	5.18
Apr-2015	4.84	4.84	*ND*	*ND*	5.04	0.171	*ND*	4.2	27.2	*0.515 J*	*ND*	5.43
Nov-2015	3.48	3.48	*ND*	*ND*	5.05	0.236	*ND*	5.4	53.6	*ND*	*12 J*	5.52
May-2016	4.44	4.44	*ND*	*ND*	4.92	0.263	*ND*	5.6	36.6	*ND*	27	5.1
Oct-2016	2.8	2.8	*ND*	*ND*	5.3	*NA*	*NA*	5.2	43	1.42	31	5.5
May-2017	2.64	2.64	*ND*	*7 J*	5.1	0.314	*ND*	5.3	50.2	1.08	*22 J*	6.2
Oct-2017	5.76	5.76	*ND*	*ND*	5.13	0.354	*ND*	5.6	53.7	*0.753 J*	34	5.8
May-2018	22	22	*ND*	*ND*	4.3	0.32	*0.0063 J*	6.1	61.4	*ND*	10	6.1
Nov-2018	22	22	*ND*	*5.7 J*	5.4	*ND*	0.013	6.58	149.6	*ND*	32	6.3
May-2019	14	*NA*	*ND*	*ND*	4.9	*ND*	0.033	6.69	98.8	*ND*	45	7.8
Oct-2019	*2.5 JH1*	*NA*	*ND*	*10.4 JMH*	4.6	*0.079 J*	0.016	6.19	153.5	*ND*	65	7.1
May-2020	*6 J*	*NA*	*ND*	*9.1 J*	4.9	*ND*	*0.0071 J*	5.83	157.7	*ND*	18	6.2
Oct-2020	*8 J*	*NA*	*ND*	*9.3 J*	5	*ND*	0.014	5.8	142.4	*ND*	44	7.5
Apr-2021	14	*NA*	*ND*	*8.3 J*	5.7	*0.077 J*	*ND*	7.02	187.8	*ND*	*ND*	7.35
Oct-2021	24	*NA*	*ND*	*10.5 J*	5.5	*ND*	*ND*	6.92	212.5	*ND*	*ND*	7.95

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05A***													
Nov-1993	NA	ND	ND	NA	ND	0.38	NA	ND	NA	ND	1.5	1	ND	0.25	NA
Apr-1994	NA	ND	ND	NA	ND	0.24	NA	ND	NA	ND	1.7	0.84	ND	4.3	NA
Apr-1995	ND	ND	0.6	ND	ND	0.5	NA	ND	ND	ND	3	1.3	ND	0.29	NA
Oct-1996	ND	ND	0.021	ND	ND	0.73	0.93	ND	ND	ND	8.2	3.7	ND	ND	ND
Apr-1997	ND	ND	0.016	ND	ND	1.6	0.84	ND	ND	ND	2.4	2.1	0.002	ND	ND
Oct-1997	ND	ND	0.011	ND	0.004	1.01	0.743	ND	ND	ND	19.9	0.371	ND	0.343	0.257
Apr-1998	ND	ND	0.012	ND	ND	0.696	0.751	ND	ND	ND	4.85	1.28	ND	0.331	0.306
Apr-1999	ND	ND	0.011	ND	ND	0.629	0.615	ND	ND	ND	1.93	0.436	ND	0.328	0.303
Oct-1999	ND	ND	0.011	ND	ND	0.666	0.601	ND	ND	ND	2.21	0.506	ND	0.338	0.295
Apr-2000	ND	ND	ND	ND	ND	0.657	0.647	ND	ND	ND	1.49	0.663	ND	0.332	0.311
Oct-2000	ND	ND	ND	ND	ND	0.678	0.653	ND	ND	ND	2.22	0.79	ND	0.347	0.329
Apr-2001	ND	ND	ND	ND	ND	0.698	NA	ND	ND	ND	1.15	NA	ND	0.361	NA
Sep-2001	ND	ND	ND	ND	ND	0.714	0.654	ND	ND	ND	5.08	1.46	ND	0.361	0.326
Mar-2002	ND	ND	0.012	ND	ND	0.638	0.684	ND	ND	ND	2.39	0.628	ND	0.338	0.343
Sep-2002	ND	ND	0.011	ND	ND	1.36	0.63	ND	ND	ND	11.3	1.35	ND	0.385	0.32
Mar-2003	ND	ND	ND	ND	ND	0.681	0.641	ND	ND	ND	1.36	0.966	ND	0.33	0.315
Oct-2003	ND	ND	0.013	ND	ND	1.06	0.668	ND	ND	ND	4.65	1.01	ND	0.419	0.357
Apr-2004	ND	ND	0.012	ND	ND	1.13	0.736	ND	ND	ND	2.63	0.712	ND	0.46	0.379
Oct-2004	ND	ND	0.013	ND	ND	0.788	0.708	ND	ND	ND	4.33	1.61	ND	0.443	0.398
Apr-2005	ND	ND	0.016	ND	ND	1.03	0.57	ND	ND	ND	4.97	0.373	0.003	0.444	0.294
Oct-2005	ND	ND	0.011	ND	ND	0.93	0.718	ND	ND	ND	1.82	0.515	ND	0.418	0.384

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05A***													
Mar-2006	ND	ND	ND	ND	ND	0.917	0.544	ND	ND	ND	1.9	0.34	ND	0.329	0.324
Sep-2006	ND	ND	0.011	ND	ND	0.723	0.741	ND	ND	ND	1.26	1.45	ND	0.395	0.402
Mar-2007	ND	ND	0.015	ND	ND	0.701	0.684	ND	ND	ND	1.11	0.338	ND	0.355	0.34
Sep-2007	ND	ND	0.011	ND	ND	0.741	0.72	ND	ND	ND	1.46	0.548	ND	0.408	0.408
Mar-2008	ND	ND	0.011	ND	ND	0.708	0.728	ND	ND	ND	1.27	1.51	ND	0.396	0.395
Sep-2008	ND	ND	0.012	ND	ND	0.721	0.585	ND	ND	ND	2.18	1.19	ND	0.453	0.416
Mar-2009	ND	ND	0.01	ND	ND	0.815	0.87	ND	ND	ND	6.91	6.48	ND	0.356	0.394
Oct-2009	ND	ND	0.011	ND	ND	0.974	0.648	ND	ND	ND	3.48	0.517	ND	0.455	0.416
Apr-2010	ND	ND	0.011	ND	ND	0.614	0.578	ND	ND	ND	3.23	0.768	ND	0.353	0.342
Oct-2010	ND	ND	0.011	ND	ND	0.698	0.698	ND	ND	ND	2.54	0.739	ND	0.416	0.431
Apr-2011	ND	ND	0.013	ND	ND	0.776	0.685	ND	ND	ND	8.66	1.94	ND	0.416	0.367
Sep-2011	ND	ND	0.013	ND	ND	0.788	0.792	ND	ND	ND	4.34	0.979	0.002	0.412	0.424
Mar-2012	ND	ND	0.012	ND	ND	0.703	0.695	ND	ND	ND	1.65	0.712	ND	0.488	0.488
Sep-2012	ND	ND	0.0124	0.000105 J	ND	0.779	0.703	0.0016 J	0.0013 J	0.0021 J	1.67	0.756	0.000612 J	0.436	0.425
Mar-2013	ND	ND	0.0131	0.000106 J	ND	0.889	0.969	0.0062 J	0.0017 J	0.0035 J	1.29	0.617	ND	0.449	0.457
Oct-2013	ND	ND	0.0156	ND	ND	0.864	0.886	0.0018 J	0.0015 J	0.0019 J	1.54	1.24	0.000467 J	0.517	0.554
Mar-2014	ND	ND	0.0151	ND	ND	1.33	1.37	0.0072 J	0.0016 J	0.0018 J	2.12	1.18	0.000372 J	0.46	0.587
Oct-2014	0.000634 J	ND	0.0181	ND	ND	1.07	1.03	0.000965 J	0.0019 J	0.0021 J	1.76	0.824	ND	0.609	0.588
Apr-2015	0.0011 J	ND	0.0192	ND	0.000076 J	1.08	1.02	0.0011 J	0.002 J	0.0022 J	3.18	0.994	ND	0.663	0.616
Nov-2015	ND	ND	0.019	0.000121 J	ND	1.09	1.06	0.000455 J	0.002 J	0.0019 J	1.73	0.715	0.000719 J	0.681	0.671
May-2016	ND	ND	0.0191	0.00012 J	ND	0.929	1.05	ND	0.002	0.0019 J	1.71	1.02	0.00031 J	0.674	0.669
Oct-2016	ND	ND	0.02	0.00012 J	ND	1.1	0.969	ND	0.0022	0.0017 J	1.13	0.861	0.00032 J	0.657	0.708
May-2017	ND	ND	0.0212	0.00012 J	ND	1.28	1.1	0.0017 J	0.0022	0.0017 J	1.07	0.809	0.00026 J	0.721	0.69
Oct-2017	ND	ND	0.02	0.00012 J	ND	1.1	1.03	ND	0.0018	0.0017 J	2.31	1.8	0.00024 J	0.743	0.721

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05A***													
May-2018	*0.000044 J*	*ND*	0.018	*0.00011 J*	*0.000033 J*	1.3	1.3	*0.0028 J*	0.0016	0.0065	16.5	8.8	*0.00034 J*	*0.69 J*	*0.67 J*
Nov-2018	*ND*	*0.00028 J*	0.014	*0.00002 J*	*0.00018 J*	1.4	1.4	*0.0026 J*	*0.0004 J*	*0.0016 J*	41.1	41.8 M1	*0.000085 J*	*0.67 J*	*0.67 J*
May-2019	*ND*	*ND*	0.015	*ND*	*ND*	1.8	1.9	*ND*	*ND*	**0.0033 D6**	31.7	32.1	*ND*	*ND*	*ND*
Oct-2019	*0.000052 J*	*ND*	0.016	*ND*	*0.00015 J*	1.6	1.6	*0.0027 J*	*0.00036 J*	*ND*	42.9	40.6	*0.000057 J*	0.73	*0.67 J*
May-2020	*ND*	*ND*	0.018	*ND*	*0.00035 J*	1.4	1.5	*ND*	*ND*	*0.0024 J*	53.6	43.7	*ND*	0.68	0.76
Oct-2020	*0.00046 J*	*ND*	0.018	*ND*	*ND*	1.8	1.7	*0.0087 J*	*0.0007 J*	*ND*	50.6	45.8	*ND*	0.72	*0.71 J*
Apr-2021	*ND*	*ND*	0.018	*0.00018 J*	*ND*	1.7	1.7	*ND*	*ND*	*ND*	47.6	45.9	*ND*	0.78	0.76
Oct-2021	*0.000063 JB*	*ND*	0.018	*ND*	*ND*	1.8	1.8	*ND*	*0.00056 J*	*0.00052 J*	53.4	48.4	*ND*	0.82	0.8

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-05A*												
Nov-1993	0.05	NA	ND	NA	0.34	NA	ND	NA	1.2	NA	NA	NA	ND
Apr-1994	0.36	NA	ND	NA	0.7	NA	ND	NA	1.9	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.65	NA	ND	ND	1.1	NA	ND	ND	0.03
Oct-1996	0.031	0.026	NA	ND	ND	ND	ND	ND	1.8	1.7	ND	ND	0.021
Apr-1997	0.034	0.023	ND	ND	2	2.1	ND	ND	1.9	1.7	ND	ND	0.075
Oct-1997	0.014	0.016	ND	0.012	ND	1.14	ND	ND	1.23	1.1	ND	ND	0.032
Apr-1998	0.023	0.023	ND	ND	0.927	ND	ND	ND	1.45	1.46	ND	ND	ND
Apr-1999	0.014	0.012	NA	ND	0.575	0.847	ND	ND	1.48	1.39	ND	ND	ND
Oct-1999	0.014	0.011	NA	ND	ND	0.601	ND	ND	1.46	1.29	ND	ND	ND
Apr-2000	0.015	0.014	NA	ND	ND	ND	ND	ND	1.58	1.53	ND	ND	ND
Oct-2000	0.016	0.016	NA	ND	0.409	0.71	ND	ND	1.56	1.55	ND	ND	0.01
Apr-2001	0.015	NA	NA	ND	1.4	NA	ND	ND	1.69	NA	ND	ND	ND
Sep-2001	0.043	0.028	NA	ND	0.682	0.896	ND	ND	1.65	1.63	ND	ND	ND
Mar-2002	0.015	0.014	NA	ND	1.75	1.72	ND	ND	1.72	1.69	ND	ND	ND
Sep-2002	0.046	0.022	NA	ND	0.951	0.789	ND	ND	1.98	1.71	ND	ND	ND
Mar-2003	0.018	0.016	NA	ND	2.85	ND	ND	ND	1.86	1.79	ND	ND	ND
Oct-2003	0.023	0.02	NA	0.658	1.86	1.21	ND	ND	2.72	1.83	ND	ND	0.012
Apr-2004	0.019	0.021	ND	ND	2.08	1.12	ND	ND	2.43	1.94	ND	ND	0.091
Oct-2004	0.039	0.04	ND	ND	1.25	0.517	ND	ND	1.98	1.6	ND	ND	ND
Apr-2005	0.023	0.014	ND	ND	1.46	1.52	ND	ND	2.32	1.76	ND	ND	0.021
Oct-2005	0.017	0.015	ND	ND	0.699	0.664	ND	ND	2.27	1.62	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.789	0.718	ND	ND	1.69	1.66	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05A***												
Sep-2006	0.014	0.025	0.0003	ND	1.15	1.11	ND	ND	1.85	1.82	ND	ND	ND
Mar-2007	0.014	0.012	0.0003	ND	0.703	0.641	ND	ND	1.75	1.67	ND	ND	ND
Sep-2007	0.017	0.016	0.0003	ND	0.641	0.604	ND	ND	1.83	1.82	ND	ND	0.012
Mar-2008	0.016	0.019	0.0003	ND	0.757	0.734	ND	ND	1.94	1.99	ND	ND	ND
Sep-2008	0.018	0.018	0.0003	ND	0.691	0.67	ND	ND	1.86	1.82	ND	ND	0.014
Mar-2009	0.037	0.043	ND	ND	0.659	0.719	ND	ND	1.91	2.04	ND	ND	ND
Oct-2009	0.017	0.014	ND	ND	0.692	0.701	ND	ND	2.02	2	ND	ND	0.022
Apr-2010	0.017	0.014	ND	ND	0.9	0.794	ND	ND	1.92	1.86	ND	ND	ND
Oct-2010	0.014	0.014	ND	ND	0.611	0.574	ND	ND	1.91	1.87	ND	ND	ND
Apr-2011	0.04	0.028	ND	0.033	0.841	0.798	ND	ND	2.1	2.11	ND	ND	ND
Sep-2011	0.019	0.015	ND	ND	0.858	0.826	ND	ND	2.32	2.27	ND	ND	ND
Mar-2012	0.015	0.015	ND	ND	0.602	0.658	ND	ND	2.1	2.13	ND	ND	ND
Sep-2012	0.0173	0.0155	0.000106 J	0.0025 J	0.601	0.639	ND	ND	2.04	2.12	ND	ND	0.0037 J
Mar-2013	0.0171	0.0164	0.000226	0.008 J	0.713	0.745	ND	ND	2.01	2.11	ND	ND	0.011
Oct-2013	0.0197	0.0213	0.000268	0.003	0.65	0.688	ND	ND	2.21	2.37	ND	0.0013 J	0.0214
Mar-2014	0.0185	0.0184	0.000251	0.0027 J	0.904	0.916	ND	ND	1.88	2.44	ND	0.0043 J	0.0054 J
Oct-2014	0.0219	0.0206	0.000253	0.01 J	0.934	0.895	0.0014 J	ND	2.47	2.37	ND	ND	0.0079 J
Apr-2015	0.0235	0.0216	0.000245	0.0039 J	0.971	0.86	0.000772 J	ND	2.75	2.52	ND	ND	0.008 J
Nov-2015	0.0224	0.0218	0.000413	0.003 J	0.788	0.756	ND	ND	2.71	2.69	0.000065 J	ND	0.0034 J
May-2016	0.0233	0.0216	0.0003	0.003 J	0.807	0.8	ND	ND	2.47	2.48	ND	ND	ND
Oct-2016	0.0213	0.0242	0.00032	0.0039 J	0.77	0.83	ND	ND	2.35	2.59	ND	ND	ND
May-2017	0.022	0.0235	0.00046	0.0043	0.784	0.818	ND	ND	2.43	2.5	ND	ND	0.0038 JB
Oct-2017	0.0275	0.0278	0.00054	0.0024 J	0.823	0.8	ND	ND	2.57	2.56	ND	ND	ND
May-2018	0.093	0.075	0.00088	0.0037	0.91 J	ND	0.00036 J	ND	2.4 J	2.2 J	ND	ND	0.005 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05A***												
Nov-2018	0.22	0.23	*ND*	0.002	*ND*	*0.96 J*	*ND*	*ND*	*2.4 J*	*2.5 J*	*ND*	*ND*	*0.0036 J*
May-2019	0.31 M1	0.3	*ND*	0.0013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0054 D6
Oct-2019	0.32	0.31	*ND*	0.0013	*ND*	*ND*	*0.00039 J*	*ND*	*2.7 J*	*2.4 J*	*ND*	0.0049	0.012
May-2020	0.24	0.24	*ND*	*ND*	0.78	0.73	*ND*	*ND*	2.2	2.6	*ND*	*ND*	*ND*
Oct-2020	0.25	0.22	*ND*	0.0028	*ND*	*ND*	*ND*	*ND*	*1.2 J*	*1.9 J*	*ND*	*0.0026 J*	*ND*
Apr-2021	0.24	0.23	*0.00006 J*	*ND*	0.67	0.69	*ND*	*ND*	2.6	2.4	*ND*	*ND*	*ND*
Oct-2021	0.32	0.31	*ND*	*0.00094 J*	0.69	0.67	*ND*	*ND*	2.5	2.6	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	42	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05A*																
Mar-2006	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*0.87 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	1.18	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	1.12	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	1.13	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	1.47	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	1.28	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05A*																
May-2017	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 J	ND
Nov-2018	ND	ND	ND	ND	1.1 L2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*0.5 J*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05A***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	0.9 J
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	1.4
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	2.1
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	2.2
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	1.1
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.94 J
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.52 J	1.41
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.21 J	ND	ND	ND	ND	ND	0.87 J	2.38
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	0.73 J	1.31
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	0.25 J	ND	ND	ND	0.62 J	2.1
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.16 J	ND	0.22 J	ND	ND	ND	0.58 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4 J	2.2
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	0.6 J	2.3
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.2 J	ND	ND	ND	0.7 J	2.7

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*0.7 J*	2.7
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*0.8 J*	2.8
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	3
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3 CLN3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.128 J*	*ND*	*ND*	*ND*	*ND*	*1.58 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	1.2	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05A***															
Oct-2005	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1.7 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*0.14 J*	*ND*	*ND*	*ND*	*0.23 J*	*ND*	*ND*	*ND*	*ND*	*0.22 J*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*0.13 J*	*ND*	*ND*	*ND*	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.1 J*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05A***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.132 J*	*0.83 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-06***											
Nov-1993	6	6	0.2	ND	12.6	0.2	ND	5.44	49.9	2.6	60	8.1
Apr-1994	ND	ND	ND	ND	11.9	ND	ND	4.82	50.3	ND	45	5.34
Aug-1994	ND	ND	ND	ND	11.7	0.4	0.4	4.5	49.5	3.2	57	7.9
Sep-1994	ND	ND	ND	ND	12.2	0.3	ND	5.1	52.8	2.8	35	8.7
Nov-1994	ND	ND	ND	ND	13.2	0.2	ND	5.2	53.6	2.6	33	12
Apr-1995	8.2	8.2	ND	ND	14.1	ND	ND	5.4	62.8	2.2	9	10
Apr-1997	ND	16	ND	ND	11	0.06	ND	NA	NA	ND	52	12
Apr-1997	ND	8	ND	ND	9.5	0.06	ND	NA	NA	ND	36	6.1
Oct-1997	14	14	0.21	ND	10.9	ND	ND	6.65	75.3	ND	32	17
Apr-1998	17	17	ND	ND	8.13	ND	ND	6.32	64.9	ND	27	7.7
Apr-1999	11	11	0.31	ND	8.56	ND	ND	5.71	75.1	ND	65	12
Oct-1999	16	16	0.13	ND	7.73	0.172	ND	5.39	72.8	ND	52	8.4
Apr-2000	14	14	ND	ND	16.5	ND	ND	5.63	65	ND	31	11
Oct-2000	14	NA	ND	ND	14.9	ND	ND	5.39	78.4	3.52	55	12.8
Apr-2001	11	NA	ND	ND	12.2	ND	ND	NA	NA	ND	43	14.3
Sep-2001	8.7	8.7	ND	ND	16.5	ND	ND	5.04	89	ND	65	15.7
Mar-2002	17	17	ND	ND	24.6	ND	ND	6	143	ND	74	19.9
Sep-2002	14	14	ND	ND	19.3	ND	ND	5.9	141.3	ND	73	19.6
Mar-2003	13	13	ND	ND	16.4	ND	ND	5.4	112.1	ND	46	15.2
Oct-2003	11	11	ND	ND	18.1	0.122	ND	4.1	118.9	ND	101	18.7
Apr-2004	21	21	ND	ND	17.6	0.08	ND	5.6	102.9	ND	96	18.6
Oct-2004	7.2	7.2	ND	ND	13.4	0.11	ND	5.7	79.4	ND	60	13.8
Apr-2005	6.9	6.9	ND	ND	11.6	0.1	ND	5.2	63.8	1.44	69	12.5
Oct-2005	13	13	ND	ND	15.2	0.1	ND	4.8	82.1	2.83	67	12.9
Mar-2006	9.2	9.2	ND	ND	14.7	0.13	ND	4.8	92.4	4.02	49	13.7
Sep-2006	14	14	ND	ND	12.2	0.16	ND	5.6	91.7	1.55	74	12
Mar-2007	20	20	ND	ND	12.9	0.14	ND	6	97.8	1.59	52	11.5
Sep-2007	7.2	7.2	0.4	ND	12.9	0.15	ND	4.9	66.8	2.67	103	11.9
Mar-2008	7.8	7.8	0.35	ND	16.1	ND	ND	5	69.6	ND	55	11.5
Sep-2008	9.1	9.1	0.32	ND	14.2	0.28	ND	4.7	67.9	ND	60	11.8
Mar-2009	7.5	7.5	ND	ND	14.3	0.32	ND	4.9	71.9	1.1	49	10.2
Oct-2009	9	9	ND	ND	15.5	0.26	ND	4.6	69.5	1.64	53	12.1
Mar-2010	9.8	9.8	ND	ND	17.1	0.22	ND	5	93	2.53	37	11.8
Oct-2010	9.6	9.6	ND	ND	14.2	0.28	ND	4.5	69.8	2.47	38	13.7
Apr-2011	9.1	9.1	ND	ND	15.8	0.35	0.02	4.6	69.2	2.57	50	13.5
Sep-2011	5.5	5.5	ND	ND	14	0.41	ND	4.8	70.3	2.14	61	13.2
Mar-2012	6.4	6.4	ND	ND	14.8	0.42	ND	4.6	60.3	2.8	46	13.4

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-06***											
Sep-2012	7.72	7.72	*ND*	*ND*	14.6	0.389	*ND*	3.8	72.6	2.83	59	13.9
Mar-2013	10.6	10.6	0.258	*ND*	15.7	0.297	*ND*	5.1	85.7	4.27	44	14.7
Oct-2013	8.96	8.96	0.212	*ND*	15	0.418	*ND*	5.7	76.3	3.92	46	14
Mar-2014	9.2	9.2	*0.197 J*	*ND*	15.8	0.362	*ND*	5.3	74.6	4.95	54	16.9
Oct-2014	*ND*	*ND*	0.23	14	15.4	0.4	*ND*	4.8	73.2	3.96	39	16.5
Apr-2015	8.36	8.36	0.231	*ND*	15.6	0.427	*ND*	4.1	74.7	4.56	47	15.6
Nov-2015	7.8	7.8	0.216	*ND*	15.2	0.412	*ND*	5.5	131.2	2.08	50	18.5
May-2016	17.7	17.7	*0.186 J*	*ND*	16.3	0.195	0.0897	5.6	97.2	6.32	68	16.9
Oct-2016	5.56	5.56	*ND*	*ND*	14.7	*NA*	*NA*	5.6	101.1	4.1	44	16.4
May-2017	6.2	6.2	*0.182 J*	*ND*	14.5	0.419	*ND*	5.1	117.2	4.67	49	16.7
Oct-2017	7.36	7.36	*0.196 J*	13	14.2	0.453	*ND*	5.2	124.3	3.7	60	16.1
May-2018	14	14	0.21	*ND*	13.7	*0.077 J*	*ND*	5.84	147	*6.6 J*	*ND*	16.9
Nov-2018	70	70	0.29	*ND*	17.1	*ND*	0.024	5.88	183.2	*5.8 J*	70	19.2
May-2019	72	*NA*	0.35	*ND*	19.4	*ND*	0.024	5.96	155.6	*ND*	127	18.1
Oct-2019	25 H1	*NA*	0.26	*8.2 J*	12.9	*0.067 J*	0.044	5.8	194.2	*ND*	111	18.4
May-2020	30	*NA*	0.46	*6.9 J*	11.5	*ND*	0.054	5.66	164.7	*ND*	84	15
Oct-2020	40	*NA*	0.17	*11.6 J*	10.9	*ND*	0.055	5.67	156.1	4.9	105	17.8
Apr-2021	*8 J6c*	*NA*	0.16	*ND*	12.4	1.2	*0.0063 J*	5.27	120.5	10	66	21.2
Oct-2021	*6 J2c*	*NA*	*ND*	*6.1 JMH*	12.8	*0.086 J*	0.049 H1	5.6	168.7	17.7 MH	102	30.2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-06*													
Nov-1993	NA	ND	ND	NA	ND	1.1	NA	ND	NA	ND	8	2.7	ND	1.3	NA
Apr-1994	NA	ND	0.012	NA	ND	1.1	NA	ND	NA	ND	0.37	2.7	ND	0.63	NA
Aug-1994	NA	ND	ND	NA	ND	1.2	NA	ND	NA	ND	1.2	0.7	ND	1.2	NA
Sep-1994	NA	ND	ND	NA	ND	1	NA	ND	NA	ND	0.53	0.1	ND	1.5	NA
Nov-1994	NA	ND	ND	NA	ND	2	NA	ND	NA	0.04	6.8	0.69	ND	1.7	NA
Apr-1995	ND	ND	ND	ND	ND	1.7	NA	ND	ND	ND	3.4	3.4	ND	1.4	NA
Oct-1996	ND	ND	0.076	ND	ND	1.9	1.8	ND	ND	ND	11	10	ND	1.8	1.8
Apr-1997	ND	ND	0.058	ND	ND	1.6	1.5	ND	ND	ND	7.2	5.8	0.004	1.4	1.4
Apr-1997	ND	ND	0.054	ND	ND	1.5	1.5	ND	ND	ND	5.1	3.2	ND	1.1	1.2
Oct-1997	ND	ND	0.053	ND	ND	1.24	1.26	ND	ND	ND	13	11.9	ND	1.22	1.23
Apr-1998	ND	ND	0.049	ND	ND	1.2	1.21	ND	ND	ND	17.6	9.85	ND	1.15	1.17
Apr-1999	ND	ND	0.075	ND	ND	1.8	1.61	ND	ND	0.016	10.5	8.17	ND	1.69	1.54
Oct-1999	ND	ND	0.06	ND	ND	1.65	1.47	ND	ND	ND	9.57	8.57	ND	1.52	1.38
Apr-2000	ND	ND	0.061	ND	ND	1.71	1.62	ND	ND	ND	9.73	9.18	ND	1.68	1.58
Oct-2000	ND	ND	0.069	ND	ND	1.95	1.95	ND	ND	ND	10.7	8.59	ND	1.93	1.95
Apr-2001	ND	ND	0.076	ND	ND	2.12	NA	ND	0.012	0.022	11.5	NA	0.002	2.19	NA
Sep-2001	ND	ND	0.086	ND	ND	2.26	2.18	ND	0.011	0.014	6.46	6.78	0.004	2.45	2.34
Mar-2002	ND	ND	0.099	ND	ND	2.71	2.67	ND	0.023	0.048	19.6	12.4	0.005	3.19	3.15
Sep-2002	ND	ND	0.091	ND	ND	2.82	2.27	ND	0.011	0.028	17.3	14.5	0.004	3.04	2.85
Mar-2003	ND	ND	0.072	ND	ND	2.01	1.89	ND	0.011	0.018	11.5	8.47	0.006	2.48	2.31
Oct-2003	ND	ND	0.084	ND	ND	2.33	2.28	ND	0.012	0.02	10.3	9.31	0.004	3.13	3.1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06***													
Apr-2004	ND	ND	ND	ND	ND	2.23	2.06	ND	0.016	0.037	19.7	16.6	0.003	3.17	2.98
Oct-2004	ND	ND	0.055	ND	ND	1.65	1.69	ND	ND	0.017	8.42	7.62	0.004	2.35	2.44
Apr-2005	ND	ND	0.047	ND	ND	1.63	1.62	ND	ND	0.01	5.5	4.89	0.007	2.05	2.02
Oct-2005	ND	ND	0.046	ND	0.004	1.74	1.74	ND	ND	0.043	9.53	7.71	0.004	2.07	2.08
Mar-2006	ND	ND	0.043	ND	ND	2.29	1.55	0.017	0.03	0.062	12.5	6.7	0.005	1.93	1.93
Sep-2006	0.002	ND	0.037	ND	ND	1.74	1.56	0.044	0.024	0.146	24.4	14.7	0.007	1.87	1.83
Mar-2007	ND	ND	0.039	ND	ND	1.6	1.62	ND	ND	ND	14.1	14.6	ND	1.83	1.84
Sep-2007	ND	0.002	0.035	ND	ND	2.12	2.17	ND	ND	ND	2.61	2.61	ND	1.61	1.65
Mar-2008	ND	0.003	0.034	ND	ND	1.94	1.78	ND	ND	0.01	2.78	2.9	0.006	1.61	1.62
Sep-2008	ND	ND	0.036	ND	ND	1.96	1.99	ND	ND	ND	2.53	2.53	0.003	1.67	1.76
Mar-2009	ND	ND	0.029	ND	ND	1.88	1.92	ND	ND	ND	1.75	2.1	0.003	1.35	1.44
Oct-2009	ND	ND	0.036	ND	ND	1.91	1.81	ND	ND	ND	2.77	2.59	ND	1.78	1.63
Mar-2010	ND	ND	0.043	ND	ND	1.89	1.83	ND	ND	ND	3.26	3.01	ND	1.72	1.68
Oct-2010	ND	ND	0.044	ND	ND	2.19	2.12	ND	ND	ND	2.77	2.58	ND	2	1.95
Apr-2011	ND	ND	0.044	ND	ND	2.09	2.02	ND	ND	ND	2.69	2.44	ND	2.01	1.92
Sep-2011	ND	ND	0.04	ND	ND	2.3	2.33	ND	ND	ND	1.28	1.41	0.002	1.82	1.98
Mar-2012	ND	ND	0.04	ND	ND	2.13	2.09	ND	ND	ND	1.92	1.93	ND	1.97	2.02
Sep-2012	ND	ND	0.0404	0.00056 J	0.00049 J	2.3	2.39	0.0022 J	0.0071 J	0.0047 J	2.37	2.61	0.0018 J	1.99	2.14
Mar-2013	ND	ND	0.0425	0.000544 J	0.000483 J	2.49	2.46	0.0041 J	0.0078 J	0.0035 J	3.1	3.07	0.0013 J	2.07	2
Oct-2013	0.000242 J	ND	0.0454	0.000534 J	0.000554 J	2.57	2.52	0.0096 J	0.0091 J	0.0029 J	2.3	2.28	0.0024	1.85	1.8
Mar-2014	ND	ND	0.0427	0.000407 J	0.000494 J	3.47	3.31	0.0086 J	0.01	0.0027 J	2.38	2.92	0.0013 J	2	2.53
Oct-2014	0.000382 J	0.000409 J	0.0535	0.000408 J	0.000392 J	2.57	2.57	0.0017 J	0.0105	0.0029 J	2.46	2.35	0.00099 J	2.46	2.41
Apr-2015	0.000488 J	0.000426 J	0.0502	0.000489 J	0.000465 J	2.59	2.63	0.0019 J	0.0114	0.0027 J	2.17	2.08	0.00085 J	2.21	2.22
Nov-2015	ND	0.000534 J	0.0582	0.000527 J	0.000548 J	2.96	2.86	0.0024 J	0.014	0.0032 J	4.66	4.32	0.001 J	2.7	2.58

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06***													
May-2016	*ND*	*ND*	0.0532	*0.00033 J*	*0.00032 J*	2.76	2.67	*0.0036 J*	0.0122	*0.0024 J*	1.97	1.95	*0.00098 J*	2.43	2.41
Oct-2016	*ND*	*ND*	0.054	*0.00036 J*	*0.00029 J*	2.73	2.82	*0.0017 J*	0.0131	*0.0028 J*	2.01	2.07	*0.00074 J*	2.32	2.18
May-2017	*ND*	*0.001 J*	0.0609	*0.00038 J*	*0.0006 J*	2.61	2.76	*0.0025 J*	0.0131	*0.0027 J*	2.55	2.41	*0.00081 J*	2.48	2.44
Oct-2017	*ND*	*ND*	0.0581	*0.00043 J*	*0.00054 J*	2.8	2.72	*0.0024 J*	0.0117	*0.0027 J*	2.39	2.38	*0.0011 J*	2.21	2.23
May-2018	*0.000091 J*	*ND*	0.069	0.00039	*0.00048 J*	2.9	2.6	*0.0041 J*	0.006	*0.0015 JB*	2.5	2.4	*0.00075 J*	2.3	2.2
Nov-2018	*ND*	*ND*	0.095	*0.00014 J*	*0.00027 J*	3.2	3.1	*0.0039 J*	0.0092	0.0037	39.2	36.7	*0.000026 J*	2.7	2.7
May-2019	*ND*	*ND*	0.091	*ND*	*ND*	3	3.5	*ND*	0.0087	0.0036	40.3	41.2	*ND*	2.6	2.6
Oct-2019	*0.000069 J*	*ND*	0.09	*0.00013 J*	*0.00021 J*	3.2	3	*0.0044 J*	0.0075	*ND*	42.1	39.7	*0.000085 J*	2.6	2.4
May-2020	*ND*	*ND*	0.096	*ND*	*0.00056 J*	2.3	2.3	*0.0027 J*	0.0073	0.007	38.1	36	*ND*	2.2	2.3
Oct-2020	*0.00034 J*	*ND*	0.087	*0.00032 J*	*ND*	3	2.7	*0.0035 J*	0.0079	*ND*	36.5	34	*ND*	2.5	2.4
Apr-2021	*ND*	*ND*	0.11	*0.00026 J*	*0.0017 J*	3.4	3.5	*0.0033 J*	0.022	0.02	6.2	6	*ND*	3.1	3.4
Oct-2021	*ND*	*ND*	0.15	*0.00021 J*	*0.00015 J*	4.8	4.9	0.0031	0.024	0.0077	14.6	15.4	*0.000055 J*	4.4	4.6

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-06*												
Nov-1993	0.08	NA	ND	NA	1.4	NA	ND	NA	2.7	NA	NA	NA	ND
Apr-1994	0.023	NA	ND	NA	0.93	NA	ND	NA	2.8	NA	NA	NA	ND
Aug-1994	0.03	NA	ND	NA	2.3	NA	ND	NA	2.2	NA	NA	NA	0.02
Sep-1994	0.03	NA	ND	NA	1.4	NA	ND	NA	2.6	NA	NA	NA	0.04
Nov-1994	0.15	NA	ND	NA	1.5	NA	ND	NA	2.7	NA	NA	NA	0.03
Apr-1995	0.03	NA	ND	ND	1.8	NA	ND	ND	2.7	NA	ND	ND	0.02
Oct-1996	0.074	0.073	NA	ND	ND	ND	ND	ND	3.7	3.8	ND	ND	0.037
Apr-1997	0.089	0.084	**0.005**	ND	1.5	1.2	ND	ND	3.5	3.2	ND	ND	0.024
Apr-1997	0.05	0.052	0.0016	ND	2.7	2.4	ND	ND	4.2	3	ND	ND	0.036
Oct-1997	0.067	0.068	0.0012	ND	1.73	1.32	ND	ND	2.6	2.61	ND	ND	0.014
Apr-1998	0.06	0.062	0.0015	ND	0.683	1.08	ND	ND	2.36	2.38	ND	ND	0.01
Apr-1999	0.06	0.051	NA	ND	0.856	ND	ND	ND	3.31	3.06	ND	ND	0.016
Oct-1999	0.056	0.053	NA	ND	1.79	1.14	ND	ND	3	2.78	ND	ND	ND
Apr-2000	0.053	0.051	NA	ND	1.04	1.02	ND	ND	3.3	3.14	ND	ND	ND
Oct-2000	0.048	0.047	NA	ND	1.38	1.06	ND	ND	3.57	3.58	ND	ND	ND
Apr-2001	0.06	NA	NA	ND	1.98	NA	ND	ND	4.1	NA	ND	ND	0.018
Sep-2001	0.049	0.046	NA	0.022	1.58	0.692	ND	ND	4.51	4.27	ND	ND	0.016
Mar-2002	0.078	0.073	NA	0.044	2.11	1.13	ND	ND	5.59	5.41	ND	ND	0.041
Sep-2002	0.083	0.071	NA	0.018	1.23	1.11	ND	ND	5.04	4.6	ND	ND	0.021
Mar-2003	0.054	0.054	NA	0.013	2.4	0.954	ND	ND	4.29	4.11	ND	ND	0.012
Oct-2003	0.068	0.066	NA	0.013	2.55	2.47	ND	ND	5.16	4.96	ND	ND	0.014
Apr-2004	0.11	0.099	0.0009	0.037	2.23	1.49	ND	ND	5.43	5.17	ND	ND	0.02

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-06*												
Oct-2004	0.054	0.054	0.0006	ND	1.88	1.65	ND	ND	4.47	4.37	ND	ND	ND
Apr-2005	0.052	0.051	0.0003	ND	1.17	1.12	ND	ND	4.35	4.32	ND	ND	ND
Oct-2005	0.069	0.062	0.0003	0.027	1.23	1.24	ND	ND	4.81	4.73	ND	ND	ND
Mar-2006	0.03	0.015	0.00097	0.123	0.952	0.955	ND	ND	4.83	4.79	ND	ND	0.052
Sep-2006	0.11	0.092	**0.0025**	0.084	1.29	1.29	ND	ND	5.14	4.91	ND	ND	0.043
Mar-2007	0.08	0.083	ND	ND	1.24	1.3	ND	ND	4.89	4.91	ND	ND	ND
Sep-2007	0.036	0.038	ND	ND	1.02	0.953	ND	ND	5.04	5.16	ND	ND	0.011
Mar-2008	0.037	0.036	ND	ND	0.997	1.28	ND	ND	5.14	5.16	ND	ND	ND
Sep-2008	0.038	0.044	ND	0.005	1.07	1.08	ND	ND	5.39	6.11	ND	ND	ND
Mar-2009	0.032	0.037	ND	ND	1.13	1.19	ND	ND	5.46	5.93	ND	ND	ND
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	0.046	0.042	ND	ND	1.07	0.965	ND	ND	6.95	6.27	ND	ND	ND
Mar-2010	0.05	0.049	ND	ND	1.28	1.17	ND	ND	6.45	6.09	ND	ND	ND
Oct-2010	0.054	0.052	ND	ND	1.38	1.27	ND	ND	6.22	6.03	ND	ND	ND
Apr-2011	0.062	0.057	ND	ND	1.39	1.32	ND	ND	6.49	5.99	ND	ND	ND
Sep-2011	0.052	0.056	ND	ND	1.25	1.34	ND	ND	5.43	5.57	ND	ND	ND
Mar-2012	0.062	0.065	ND	ND	1.33	1.3	ND	ND	5.77	5.79	ND	ND	ND
Sep-2012	0.0717	0.0771	ND	0.0073 J	1.35	1.43	ND	ND	5.96	6.31	ND	ND	0.0075 J
Mar-2013	0.0785	0.0727	0.000119 J	0.0082 J	1.33	1.33	ND	ND	6.68	6.44	ND	ND	0.0171
Oct-2013	0.0901	0.0902	ND	0.0072 J	1.16	1.15	ND	ND	5.22	5.06	0.000745 J	0.0088 J	0.0158
Mar-2014	0.0864	0.0903	ND	0.0081 J	1.61	1.56	ND	ND	5.28	6.77	ND	0.0067 J	0.0085 J
Oct-2014	0.107	0.104	ND	0.0083 J	1.4	1.39	0.0016 J	ND	6	5.95	ND	ND	0.0107
Apr-2015	0.0949	0.0914	0.000032 J	0.0098 J	1.31	1.33	0.0012 J	ND	5.83	5.88	ND	ND	0.0119
Nov-2015	0.132	0.125	ND	0.0107	1.51	1.45	0.0017 J	ND	6.82	6.51	ND	ND	0.013

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-06***												
May-2016	0.0965	0.0994	*ND*	0.0108	1.45	1.39	*ND*	*ND*	6.23	6.1	*ND*	*ND*	*0.0087 J*
Oct-2016	0.0951	0.0881	*ND*	0.0089	1.44	1.4	*ND*	*ND*	5.9	5.6	*ND*	*ND*	*0.0087 J*
May-2017	0.103	0.103	*ND*	0.0101	1.48	1.55	*ND*	*ND*	6.08	5.73	*ND*	*ND*	*0.01 J*
Oct-2017	0.0965	0.0976	*ND*	0.0104	1.39	1.47	*ND*	*ND*	5.55	5.59	*ND*	*ND*	*0.0108 J*
May-2018	0.098	0.089	*ND*	0.0049	*0.97 J*	*0.94 J*	*0.00022 JB*	*ND*	6.4	5.9	*ND*	0.0047	0.0059 B
Nov-2018	0.27	0.26	*ND*	0.0047	*1.3 J*	*2 J*	*0.0004 J*	*ND*	7.2	8.1	*ND*	*ND*	0.0068
May-2019	0.33	0.32	*ND*	0.0049	*ND*	*ND*	*ND*	*ND*	6.9	7.1	*ND*	0.0029	0.0083
Oct-2019	0.31	0.31	*ND*	0.0039	*ND*	*1.6 J*	*0.00047 J*	*ND*	6.8	5.9	*ND*	0.005	0.011
May-2020	0.29	0.29	*ND*	*0.0047 J*	1.7	1.5	*ND*	*ND*	6.1	5.9	*ND*	*ND*	0.012
Oct-2020	0.3	0.29	*ND*	0.0043	*1.5 J*	*1.4 J*	*ND*	*ND*	5.6	5.1	*0.00084 J*	*0.00079 J*	*ND*
Apr-2021	0.22	0.23	0.0002	0.015	1.7	1.6	*ND*	*ND*	6	6.2	*ND*	*ND*	0.049
Oct-2021	0.31	0.32	0.00051	0.013	1.7	1.7	*0.0011 J*	*ND*	5.6	5.7	*0.000025 J*	*ND*	0.024

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06*																
Nov-1993	ND	1.6	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	1.8	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	ND
Aug-1994	ND	1.5	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	2.1	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	2.9	ND	ND	2.4	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	9.2	ND	ND	8.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	1	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	1	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	1.2	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	0.9 J	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	0.9 J	NA	NA	5.3	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	4.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	0.7 J	NA	NA	5.2	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	1.5	ND	ND	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	1.1	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	1.2	ND	ND	14	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Mar-2002	ND	1.4	ND	ND	18	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Sep-2002	ND	2.3	ND	ND	23	1.2	ND	ND	ND	ND	ND	1	1.5	ND	ND	ND	ND	ND
Mar-2003	ND	1	ND	ND	13	0.5 J	ND	ND	ND	ND	ND	0.6 J	0.8 J	ND	ND	ND	ND	ND
Oct-2003	ND	1.2	ND	ND	20	0.8 J	ND	ND	ND	ND	ND	1	1.3	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06*																
Apr-2004	ND	0.9 J	ND	ND	16	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	7.2	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	8.5	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	5.8	0.6 J	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Sep-2006	ND	1.7	ND	ND	7.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	7.5	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2007	ND	0.6 J	ND	ND	11.2	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	5.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	8	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	6.9	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	7.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	8.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	8.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	4.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	6.54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	9.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	6.98	0.31 J	ND	ND	ND	ND	ND	0.25 J	0.36 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	6.42	0.21 J	ND	ND	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	7.14	ND	ND	ND	ND	ND	ND	ND	0.28 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06*																
Apr-2015	*ND*	*ND*	*ND*	*ND*	5.67	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	5.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	4.8	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	5.7	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	4.8	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	5.6	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	3.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	8.5 L2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.4 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	6.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	6.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	4.74	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	9.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-06*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	3.2
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	5.2
Aug-1994	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	7	4.8
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	4.9
Nov-1994	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.4	6
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	49	22
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	22	4
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	ND	2	ND	ND	ND	13	9
Oct-1997	ND	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	1.1	ND	ND	ND	10	12
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	20	5.6
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	0.7 J	ND	NA	3.8	NA	NA	NA	6	9.3
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND	ND	ND	4.3	6.3
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	0.8 J	ND	NA	2.9	NA	ND	NA	5.1	7.4
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	6	ND	ND	ND	38	15
Apr-2001	0.6 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	5.7	ND	ND	ND	22	14
Sep-2001	0.8 J	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	6.9	ND	ND	ND	24	18
Mar-2002	0.6 J	ND	ND	ND	ND	2.4	ND	ND	1.5	ND	0.8 J	5.8	ND	ND	ND	16	21
Sep-2002	1.3	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	9.6	ND	ND	ND	74	52
Mar-2003	0.6 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	7	ND	ND	ND	33	22
Oct-2003	1.3	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	12	ND	ND	ND	41	36

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-06***															
Apr-2004	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	9.8	*ND*	*ND*	*ND*	40	28
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	4.9	*ND*	*ND*	*ND*	24	23
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	15	14
Oct-2005	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	5.1	*ND*	*ND*	*ND*	13.6	15.9
Mar-2006	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	12.1	26.3
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.5	*ND*	*ND*	*ND*	17.8	21.9
Mar-2007	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	11.7	14.9
Sep-2007	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	4.5	*ND*	*ND*	*ND*	16.3	11.2
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	12.1	15.7
Sep-2008	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	14.5	13
Mar-2009	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	10.8	10.1
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	9.4	11.9
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*11.8 J*	13.5
Oct-2010	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	11.7	9.3
Apr-2011	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	14.4	11.9
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7	*ND*	*ND*	*ND*	15	6.6
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7	*ND*	*ND*	*ND*	11.5	6.4
Sep-2012	*0.42 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.81	*ND*	*ND*	*ND*	5.56	7.44
Mar-2013	*0.58 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.44 J*	*ND*	*ND*	7.25	*ND*	*ND*	*ND*	8.15	12.6
Oct-2013	*0.29 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.59 J*	*0.22 J*	*ND*	4.34	*ND*	*ND*	*ND*	8.76	13.6
Mar-2014	*0.28 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	3.85	*ND*	*ND*	*ND*	9.56	9.22
Oct-2014	*0.28 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.23 J*	*ND*	4.45	*ND*	*ND*	*ND*	7.33	9.85

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-06***															
Apr-2015	*0.25 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	3.26	*ND*	*ND*	*ND*	6	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.1	*ND*	*ND*	*ND*	*12.6 J*	6.3
May-2016	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	3.3	*ND*	*ND*	*ND*	4.7	5.5
Oct-2016	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	2.9	*ND*	*ND*	*ND*	6.3	7.7
May-2017	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J,B*	*ND*	3	*ND*	*ND*	*ND*	5.1	5.7
Oct-2017	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	3.9	*ND*	*ND*	*ND*	6.8	8
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.2	*ND*	*ND*	*ND*	6.5	4.5
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.3	*ND*	*ND*	*ND*	11.5	9.2 CLN3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	6.9	8.3 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	7.5	4.6
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	3.4	2.3
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	4.3	2.1
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.19	*ND*	*ND*	*ND*	*1.48 J*	*3.62 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	9.8	6.8

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-06***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*NA*
Aug-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	2.8	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*0.5 J*	3	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	**7.4**	*ND*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	3	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	4	*ND*	*ND*	*ND*	*ND*	1	3	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*0.7 J*	2.3	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*0.9 J*	1.9	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	2	*ND*	*NA*	3.7	*ND*	*ND*	*NA*	*NA*	1.5	1.4	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	1.7	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*0.9 J*	1.2	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	1.3	*ND*	*NA*	2.9	*ND*	*ND*	*NA*	*NA*	*1 J*	1.4	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	3.2	*ND*	*ND*	**5.8**	*ND*	*ND*	*ND*	*ND*	2.1	2.6	*ND*	1.1	*NA*
Apr-2001	*ND*	*ND*	*0.5 J*	*NA*	3.3	*0.5 J*	*ND*	**5.2**	*ND*	*ND*	*ND*	*ND*	1.9	2.1	*ND*	1.1	*NA*
Sep-2001	*ND*	*ND*	*0.7 J*	*NA*	**7.3**	*0.8 J*	*ND*	**8.1**	*ND*	*ND*	*ND*	*ND*	2.8	2.5	*ND*	1.3	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	**6.9**	*ND*	*ND*	4.2	*ND*	*ND*	*ND*	*ND*	1.8	2.1	*ND*	1	*NA*
Sep-2002	*ND*	*ND*	1.5	*NA*	**24**	3.5	*ND*	**18**	*ND*	*ND*	*ND*	*ND*	**5.1**	6.9	*ND*	**2.5**	*NA*
Mar-2003	*ND*	*ND*	*0.6 J*	*NA*	**9.9**	*0.7 J*	*ND*	**9.9**	*ND*	*ND*	*ND*	*ND*	3	2.5	*ND*	1.2	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-06*															
Oct-2003	ND	ND	1.1	NA	**17**	1.2	ND	**15**	ND	ND	ND	ND	4.5	3.6	ND	**2.7**	NA
Apr-2004	ND	ND	0.6 J	NA	0.6 J	0.6 J	ND	**12**	ND	ND	ND	ND	3.5	2.5	ND	1.9	NA
Oct-2004	ND	ND	ND	NA	4.9	ND	ND	**5.7**	ND	ND	ND	ND	2.1	2.5	ND	1	NA
Apr-2005	ND	ND	ND	ND	2.9	ND	ND	**5.5**	ND	ND	ND	ND	1.7	1.1	ND	0.7 J	NA
Oct-2005	ND	ND	ND	ND	2.2	ND	ND	**6.9**	ND	ND	ND	ND	2.3	1.1	ND	1	NA
Mar-2006	ND	ND	ND	ND	2.6	1	ND	**6.4**	ND	ND	ND	ND	2.1	1.5	ND	1.1	NA
Sep-2006	ND	ND	ND	ND	1.7	ND	ND	**7.9**	ND	ND	ND	ND	2.9	0.7 J	ND	ND	NA
Mar-2007	ND	ND	ND	ND	4.1 R	ND	ND	**5.6**	ND	ND	ND	ND	2.2	1.3	ND	ND	NA
Sep-2007	ND	ND	0.5 J	ND	4.7	ND	ND	**6.9**	ND	ND	ND	ND	3.1	2	ND	1.1	NA
Mar-2008	ND	ND	ND	ND	2	ND	ND	**5.4**	ND	ND	ND	ND	2.3	1.4	ND	ND	NA
Sep-2008	ND	ND	ND	ND	3.9	ND	ND	**5.7**	ND	ND	ND	ND	2.3	1.2	ND	0.7 J	NA
Mar-2009	ND	ND	ND	ND	4.5	ND	ND	5	ND	ND	ND	ND	2	0.8 J	ND	0.5 J	NA
Oct-2009	ND	ND	ND	ND	**5.5**	ND	ND	4.8	ND	ND	ND	ND	2.1	0.8 J	ND	ND	NA
Mar-2010	ND	ND	ND	ND	**6.2**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	4.3	ND	ND	4.7	ND	ND	ND	ND	ND	0.7 J	ND	ND	NA
Apr-2011	ND	ND	ND	ND	**6.6**	ND	ND	**5.6**	ND	ND	ND	ND	2.2	ND	ND	0.6 J	NA
Sep-2011	ND	ND	ND	ND	2.1	ND	ND	3.7	ND	ND	ND	ND	1.5	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	2	ND	ND	4.3	ND	ND	ND	ND	1.6	0.5 J	ND	0.9 J	NA
Sep-2012	ND	ND	ND	ND	3.52	ND	ND	**5.6**	ND	ND	ND	ND	2.5	0.63 J	ND	0.48 J	ND
Mar-2013	ND	0.58 J,B	ND	ND	4.91	ND	ND	**6.59**	ND	ND	ND	ND	3.32	ND	ND	0.93 J	ND
Oct-2013	ND	ND	ND	ND	2.79	0.19 J	ND	4.43	ND	ND	ND	ND	2.73	1.25	ND	0.41 J	ND
Mar-2014	ND	ND	ND	ND	2.49	ND	ND	**5.1**	ND	ND	ND	ND	2.43	1.04	ND	0.35 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-06***															
Oct-2014	ND	ND	ND	ND	2.61	ND	ND	4.99	ND	ND	ND	ND	2.43	0.76 J	ND	0.24 J	ND
Apr-2015	ND	ND	ND	ND	2.5	ND	ND	3.81	ND	ND	ND	ND	1.96	0.66 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.7	ND	ND	3.9	ND	ND	ND	ND	2.1	0.7 J	ND	ND	ND
May-2016	ND	ND	ND	ND	2.2	ND	ND	3.5	ND	ND	ND	ND	1.9	ND	ND	0.2 J	ND
Oct-2016	ND	ND	ND	ND	2.6	ND	ND	3.8	ND	ND	ND	ND	1.8	0.8 J	ND	0.3 J	ND
May-2017	ND	ND	ND	ND	NA	ND	ND	3.9	ND	ND	ND	ND	1.7	0.3 J	ND	0.2 J	ND
Oct-2017	ND	ND	ND	ND	1.8	ND	ND	4.2	ND	ND	ND	ND	2	0.8 J	ND	0.2 J	ND
May-2018	ND	ND	ND	ND	2.4 B	ND	ND	1.7	ND	ND	ND	ND	1.4	0.61 J	ND	ND	NA
Nov-2018	ND	ND	ND	ND	3.6	ND	ND	3	ND	ND	ND	ND	1.9	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	2.5	ND	ND	1.9	ND	ND	ND	ND	1.3	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	2.4	ND	ND	1.5	ND	ND	ND	ND	1.2	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.722 J	ND	ND	1.43	ND	ND	ND	ND	1.07	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	1.4	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-10A***											
Nov-1993	11	11	0.3	ND	18.8	2.6	ND	5.54	108	4.2	18	16.7
Apr-1994	7	7	0.2	ND	19.9	2.8	ND	5.26	112	3.1	91	21.05
Apr-1995	ND	ND	ND	ND	21.1	3.3	ND	5.1	120	5.1	44	18.8
Apr-1997	ND	10	ND	ND	27	2.5	ND	NA	NA	12	79	24
Oct-1997	5	5	0.21	ND	20.6	3.11	ND	7.8	149.8	3.17	51	22
Apr-1998	4	4	ND	ND	19.8	2.41	ND	5.26	162.2	5.6	62	27
Apr-1999	1	1	0.19	ND	18.2	2.34	ND	5.15	142.8	4	81	25
Oct-1999	6	6	0.11	ND	19.2	2.95	ND	5.68	148.1	5.86	98	25
Apr-2000	4	ND	ND	ND	26.2	3.28	ND	5.62	115	5.79	86	24
Oct-2000	6.6	NA	ND	ND	26.2	2.76	ND	5.63	141.8	4.79	93	28.9
Apr-2001	4.1	NA	ND	ND	25	2.9	ND	NA	NA	15.3	85	28.1
Sep-2001	5.7	5.7	ND	ND	24.1	3.18	ND	5.35	131	10.2	91	26.1
Mar-2002	4.6	4.6	ND	ND	41.7	3.23	ND	5.2	159.5	8.1	99	27.5
Sep-2002	4.2	4.2	ND	ND	32.1	2.73	ND	5.2	157.3	6.23	80	25.4
Mar-2003	4.4	4.4	ND	ND	29.2	2.27	ND	5.2	164.5	10.7	101	25
Oct-2003	5.1	5.1	ND	ND	26.9	2.62	ND	5.2	169.1	5.07	73	24.4
Apr-2004	5.9	5.9	ND	ND	24.2	2.61	ND	5.1	141.6	5.56	134	25.8
Oct-2004	5.9	5.9	ND	ND	22.5	2.47	ND	5.2	142	6.46	79	15.4
Apr-2005	6.1	6.1	ND	ND	22.3	2.41	ND	5.1	136.2	7.48	94	25.9
Oct-2005	6.1	6.1	0.21	ND	31.2	1.92	ND	4.7	126.6	8.34	112	21.1
Mar-2006	5.7	5.7	ND	ND	29.7	1.99	ND	5.3	136.2	8.1	79	20.8
Sep-2006	5.5	5.5	ND	ND	29.7	1.8	ND	5.1	129.4	8.63	105	21.5
Mar-2007	5.9	5.9	ND	ND	31.2	2.35	ND	5	123.9	6.69	72	20.8
Sep-2007	6.1	6.1	ND	ND	28.4	2	ND	5.2	113.2	10.7	90	21.6
Mar-2008	5.7	5.7	ND	ND	31	1.6	ND	5.2	128.2	9	107	21.3
Sep-2008	6.5	6.5	ND	ND	32.1	1.76	ND	4.8	116.7	6.1	112	21.6
Mar-2009	7	7	ND	ND	35.8	1.53	ND	4.9	138.9	5.17	101	22.5
Oct-2009	5.7	5.7	ND	ND	39.8	1.44	ND	4.9	138.7	5.45	95	24.3
Apr-2010	5.4	5.4	ND	ND	45.1	1.41	ND	4.5	139.1	6.43	73	24.6
Oct-2010	6	6	ND	ND	46	1.46	ND	4.8	143	5.77	117	26.7
Apr-2011	4.5	4.5	ND	ND	48	1.38	ND	4.7	154.6	5.68	117	26
Sep-2011	4.7	4.7	0.25	ND	47.6	1.51	ND	5.3	162.7	5.5	120	25.8
Mar-2012	4.6	4.6	ND	ND	45.7	1.48	ND	4.2	160.8	6.59	94	25.3
Sep-2012	4.96	4.96	ND	ND	48.5	1.48	ND	4.1	175.1	8.12	121	26.7
Mar-2013	4.64	4.64	ND	ND	42.2	1.7	ND	4.3	155.9	6.58	102	25.2
Oct-2013	4.8	4.8	ND	ND	43.2	1.65	ND	4.1	158	7.02	94	24.8
Mar-2014	3.84	3.84	ND	ND	48.8	1.49	ND	5.2	155.3	8.62	114	22.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-10A***										
Oct-2014	*ND*	*ND*	*ND*	*ND*	45.7	1.81	*ND*	4.8	148.1	6.76	102	25.5
Apr-2015	4.64	4.64	*ND*	*ND*	44.3	1.93	*ND*	4.6	175.1	8.7	104	25.9
Nov-2015	3.76	3.76	*ND*	*ND*	44.6	1.99	*ND*	5.1	199	8.64	109	28.6
May-2016	2.88	2.88	*ND*	*ND*	44.1	1.83	*ND*	5.2	259	9.58	113	28.3
Oct-2016	2.84	2.84	*ND*	*ND*	42.3	*NA*	*NA*	5.3	254	7.49	115	25.8
May-2017	2.64	2.64	*ND*	*ND*	43	1.93	*ND*	5	275	8.4	102	25.3
Oct-2017	2.04	2.04	*ND*	*ND*	44.5	1.98	*ND*	5.5	247	8.93	103	25.6
May-2018	*2 JB*	*ND*	*ND*	*5.8 J*	45.9	0.33	*ND*	4.8	253	*9 J*	112	27.4
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	42.6	1.9	*ND*	4.72	178.6	*9.3 J*	98	26.3
May-2019	*ND*	*NA*	*ND*	*ND*	44.3	2	*ND*	4.57	152.2	*ND*	90	26.5
Oct-2019	*ND*	*NA*	*ND*	*8.2 J*	44.9	2	*ND*	4.51	203.9	12.1	85	28.3
May-2020	*1 J*	*NA*	*ND*	*ND*	43.5	2.4	*ND*	4.43	189.7	10.8	118	28.2
Oct-2020	*ND*	*NA*	*ND*	*ND*	41.5	2.3	*ND*	4.34	177.9	10.7	95	29.8
Apr-2021	*2 J5c*	*NA*	*ND*	*ND*	45	2.2	*ND*	4.7	213	*8.6 J*	106	28
Oct-2021	*ND*	*NA*	*ND*	*ND*	43.3	2.2	*ND*	4.84	251.8	*9.3 J*	93	28.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-10A***													
Nov-1993	NA	ND	ND	NA	ND	3.4	NA	0.006	NA	ND	0.18	0.28	ND	2	NA
Apr-1994	NA	ND	ND	NA	ND	3.6	NA	ND	NA	ND	0.63	0.09	ND	2.93	NA
Apr-1995	ND	ND	0.6	ND	ND	2.9	NA	ND	0.02	ND	0.3	0.06	ND	2.8	NA
Oct-1996	ND	ND	0.066	ND	ND	5.9	5.6	ND	ND	ND	ND	ND	ND	2.8	2.9
Apr-1997	ND	ND	0.065	ND	ND	7	6	ND	ND	ND	ND	ND	0.002	3	2.6
Oct-1997	ND	ND	0.056	ND	ND	4.98	4.82	ND	ND	ND	0.226	ND	ND	3.08	3.03
Apr-1998	ND	ND	0.057	ND	ND	5.45	4.88	ND	ND	ND	0.248	ND	ND	3.25	3.18
Apr-1999	ND	ND	0.061	ND	ND	4.86	4.81	ND	ND	ND	0.099	ND	ND	3.04	2.92
Oct-1999	ND	ND	0.074	ND	ND	5.75	5.02	ND	ND	ND	0.164	ND	ND	3.14	2.84
Apr-2000	ND	ND	0.068	ND	ND	4.57	4.34	ND	ND	ND	ND	ND	ND	3.14	2.96
Oct-2000	ND	ND	0.075	ND	ND	6.1	5.79	ND	0.011	ND	0.389	ND	ND	3.31	3.11
Apr-2001	ND	ND	0.077	ND	ND	5.39	NA	ND	0.012	ND	0.184	NA	ND	3.57	NA
Sep-2001	ND	ND	0.074	ND	ND	5.23	5.11	ND	ND	ND	0.159	ND	ND	3.17	3.12
Mar-2002	ND	ND	0.073	ND	ND	5.76	5.44	ND	ND	ND	0.068	ND	ND	3.18	3.13
Sep-2002	ND	ND	0.075	ND	ND	5.09	4.53	ND	ND	0.016	0.073	ND	ND	3.1	3.04
Mar-2003	ND	ND	0.081	ND	ND	4.64	4.35	ND	ND	ND	ND	ND	ND	3.27	3.07
Oct-2003	ND	ND	0.078	ND	ND	4.47	4.05	ND	ND	0.012	0.074	ND	ND	3.2	3.12
Apr-2004	ND	0.002	0.081	ND	ND	4.79	4.68	ND	0.012	ND	0.125	ND	ND	3.38	3.25
Oct-2004	ND	ND	0.085	ND	ND	4.7	4.55	ND	0.01	ND	ND	ND	ND	3.46	3.34
Apr-2005	ND	0.002	0.084	ND	ND	4.98	5.09	ND	ND	ND	0.14	ND	ND	3.26	3.28
Oct-2005	ND	ND	0.066	ND	ND	4.44	3.96	ND	ND	ND	0.18	ND	ND	2.44	2.26

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-10A***													
Mar-2006	ND	ND	0.061	ND	ND	4.23	4.14	ND	ND	ND	ND	ND	ND	2.49	2.5
Sep-2006	ND	ND	0.057	ND	ND	4.68	4.8	ND	ND	ND	ND	ND	ND	2.38	2.58
Mar-2007	ND	ND	0.06	ND	ND	4.6	4.73	ND	ND	ND	ND	ND	ND	2.27	2.44
Sep-2007	ND	ND	0.061	ND	ND	4.86	4.71	ND	ND	ND	ND	ND	ND	2.31	2.32
Mar-2008	ND	0.002	0.063	ND	ND	4.73	4.47	ND	ND	ND	ND	ND	ND	2.31	2.19
Sep-2008	ND	ND	0.06	ND	ND	4.73	4.43	ND	ND	ND	ND	ND	ND	2.37	2.22
Mar-2009	ND	ND	0.061	ND	ND	5.15	4.92	ND	ND	ND	ND	ND	ND	2.32	2.25
Oct-2009	ND	ND	0.072	ND	ND	5.24	5.03	ND	ND	ND	0.065	ND	ND	2.72	2.62
Apr-2010	ND	ND	0.076	ND	ND	5.33	5.13	ND	ND	ND	ND	ND	ND	2.75	2.67
Oct-2010	ND	ND	0.072	ND	ND	5.56	5.48	ND	0.011	ND	ND	ND	ND	3.11	3.03
Apr-2011	ND	ND	0.087	ND	ND	5.41	4.57	ND	0.01	ND	0.059	ND	ND	3.3	2.66
Sep-2011	ND	ND	0.083	ND	ND	5.36	5.33	ND	ND	ND	0.053	ND	ND	3.01	2.99
Mar-2012	ND	ND	0.081	ND	ND	4.97	5.1	ND	ND	ND	ND	ND	ND	3.14	3.24
Sep-2012	ND	ND	0.0803	0.000438 J	ND	5.04	4.89	0.0019 J	0.01	0.0034 J	0.0379 J	0.051	ND	3.43	3.26
Mar-2013	ND	ND	0.0846	0.000432 J	ND	4.96	4.78	0.0033 J	0.0101	0.0042 J	0.0142 J	0.0094 J	ND	3.11	2.94
Oct-2013	ND	ND	0.0847	0.000355 J	0.000148 J	4.66	4.35	0.0037 J	0.0105	0.0046 J	ND	ND	ND	3.19	2.88
Mar-2014	0.00033 J	ND	0.0719	0.000412 J	0.000127 J	4.6	4.43	0.0025 J	0.0097 J	0.0024 J	0.0374 J	0.01 J	ND	2.71	2.69
Oct-2014	0.000857 J	ND	0.0862	0.000448 J	0.00013 J	4.96	5.08	0.000907 J	0.0106	0.0047 J	ND	ND	ND	3.19	3.27
Apr-2015	0.000433 J	ND	0.0874	0.000393 J	0.000126 J	4.99	4.9	0.0015 J	0.0116	0.0044 J	0.0426 J	0.0169 J	ND	3.26	3.21
Nov-2015	0.000357 J	ND	0.093	0.000553 J	0.000155 J	5.87	5.7	0.0011 J	0.0118	0.0038 J	ND	0.0514	0.000188 J	3.39	3.34
May-2016	ND	ND	0.0921	0.00041 J	0.00022 J	5.45	4.52	0.0016 J	0.0118	0.0035 J	ND	ND	ND	3.56	3.17
Oct-2016	ND	ND	0.095	0.00038 J	ND	5.06	5.21 J+	0.0029 J	0.0135	0.0032 J	0.0705 J	ND	0.00013 J	3.2	3.47 J+
May-2017	ND	ND	0.0907	0.00042 J	ND	4.7	5.32	0.0035 J	0.0239	0.004 J	0.102 J	ND	0.0003 J	3.28	3.31
Oct-2017	ND	ND	0.0849	0.00046 J	0.0002 J	5.27	5.07	ND	0.0117	0.0036 J	ND	ND	ND	3.02	3.15

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-10A***													
May-2018	*ND*	*ND*	*0.0891 J*	*ND*	*0.0002 J*	5.4	5.2	*0.0054 J*	*0.0126 J*	*ND*	0.03	*ND*	*ND*	3.4	3.3
Nov-2018	*ND*	*ND*	0.085	0.00062	*0.00019 J*	5.3	5.2	*0.0064 J*	0.011	0.0047	0.085	0.07	*0.000068 J*	3.2	3.1
May-2019	*ND*	*ND*	0.081	0.00055	*ND*	5.4	5.5	*ND*	0.01	0.004	*ND*	0.037	*ND*	3.2	3.3
Oct-2019	*0.00012 J*	*0.00021 J*	0.089	0.00052	*0.0003 J*	5.8	5.5	0.0078	0.01	0.0047	*0.05 J*	0.049	*0.000069 J*	3.4	3.3
May-2020	*ND*	*ND*	0.087	0.00052	*0.00016 J*	5.7	5.6	*0.005 J*	0.012	0.0045	*0.028 J*	*0.02 J*	*ND*	3.4	3.3
Oct-2020	*ND*	*ND*	0.087	*0.0006 J*	*ND*	5.9	5.4	*0.0034 J*	0.012	*0.0074 J*	*0.038 J*	0.027	*ND*	3.6	3.2
Apr-2021	*ND*	*ND*	0.093	*0.00055 J*	*ND*	5.6	5.7	*0.003 J*	0.012	*0.0049 J*	*ND*	*ND*	*ND*	3.4	3.6
Oct-2021	*ND*	*ND*	0.095	0.00061	*ND*	5.6	6.1	0.0032	0.015	0.0057	*0.048 J*	*0.033 J*	*0.000037 J*	3.6	3.8

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-10A*												
Nov-1993	0.05	NA	ND	NA	2.7	NA	ND	NA	9.5	NA	NA	NA	0.02
Apr-1994	0.04	NA	ND	NA	2.39	NA	ND	NA	10.8	NA	NA	NA	0.07
Apr-1995	0.02	NA	ND	ND	2	NA	ND	ND	10.8	NA	ND	0.2	0.06
Oct-1996	0.028	0.026	NA	ND	ND	ND	ND	ND	13	13	ND	ND	0.53
Apr-1997	0.035	0.026	ND	ND	3.4	3.5	ND	ND	16	14	ND	ND	0.048
Oct-1997	0.041	0.03	0.0004	ND	2.43	1.52	ND	ND	12.7	12.7	ND	ND	0.021
Apr-1998	0.038	0.032	ND	ND	2.52	2.3	ND	ND	12.5	12.3	ND	ND	0.016
Apr-1999	0.035	0.03	NA	ND	2.29	2.18	ND	ND	12.6	12.2	ND	ND	0.013
Oct-1999	0.046	0.031	NA	0.02	2.61	2.37	ND	ND	14.1	12.7	ND	ND	0.013
Apr-2000	0.037	0.033	NA	ND	1.16	1.68	ND	ND	13.6	12.9	ND	ND	0.01
Oct-2000	0.06	0.035	NA	ND	2.44	2.27	ND	ND	14.8	14.1	ND	ND	0.013
Apr-2001	0.05	NA	NA	ND	2.48	NA	ND	ND	15.4	NA	ND	ND	0.015
Sep-2001	0.044	0.034	NA	0.011	2.17	2.11	ND	ND	14.7	14.2	ND	ND	0.014
Mar-2002	0.04	0.036	NA	0.012	3.27	2.47	ND	ND	17.8	17	ND	ND	0.02
Sep-2002	0.045	0.039	NA	0.012	3.36	2.92	ND	ND	16.4	16	ND	ND	0.016
Mar-2003	0.045	0.04	NA	ND	1.99	2.32	ND	ND	16.9	15.6	ND	ND	0.011
Oct-2003	0.049	0.047	NA	ND	4.57	2.88	ND	ND	15.8	15	ND	ND	0.011
Apr-2004	0.062	0.047	ND	ND	2.71	2.53	ND	ND	14.2	14.5	ND	ND	ND
Oct-2004	0.057	0.054	ND	ND	2.54	2.47	ND	ND	14.4	13.6	ND	ND	ND
Apr-2005	0.05	0.046	ND	ND	2.19	2.17	ND	ND	14.6	15.5	ND	ND	ND
Oct-2005	0.037	0.028	ND	ND	2.26	2.04	ND	ND	15.9	14.2	ND	ND	0.012
Mar-2006	ND	ND	ND	ND	2.14	2.17	ND	ND	16.8	15.9	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-10A***												
Sep-2006	0.027	0.034	*ND*	*ND*	2.3	2.33	*ND*	*ND*	16.5	14.9	*ND*	*ND*	*ND*
Mar-2007	0.024	0.029	*ND*	*ND*	2.18	2.15	*ND*	*ND*	16.8	15.6	*ND*	*ND*	0.011
Sep-2007	0.025	0.027	*ND*	*ND*	2.07	1.89	*ND*	*ND*	17.1	15.7	*ND*	*ND*	0.011
Mar-2008	0.025	0.024	*ND*	*ND*	2.19	2.04	*ND*	*ND*	18.6	16.6	*ND*	*ND*	0.011
Sep-2008	0.025	0.024	*ND*	*ND*	2.04	1.93	*ND*	*ND*	16.5	15.5	*ND*	*ND*	0.01
Mar-2009	0.026	0.025	*ND*	*ND*	2.14	2.09	*ND*	*ND*	17.4	17	*ND*	0.012	*ND*
Oct-2009	0.03	0.029	*ND*	*ND*	2.13	2.04	*ND*	*ND*	19.7	19.1	*ND*	*ND*	0.014
Apr-2010	0.032	0.029	*ND*	0.011	2.48	2.33	*ND*	*ND*	21.5	20.5	*ND*	*ND*	0.014
Oct-2010	0.038	0.037	*ND*	0.014	2.46	2.36	*ND*	*ND*	22.3	21.9	*ND*	*ND*	0.018
Apr-2011	0.042	0.04	*ND*	0.014	2.41	2.06	*ND*	*ND*	22.3	19	*ND*	*ND*	0.014
Sep-2011	0.041	0.039	*ND*	0.012	2.48	2.41	*ND*	*ND*	22.3	22	*ND*	*ND*	0.015
Mar-2012	0.041	0.043	*ND*	*ND*	2.34	2.41	*ND*	*ND*	22.3	22.9	*ND*	*ND*	0.015
Sep-2012	0.0422	0.0415	*0.000024 J*	0.0117	2.58	2.43	*ND*	*ND*	25.8	24.9	*0.0011 J*	*ND*	0.0128
Mar-2013	0.0507	0.0489	*0.000052 J*	0.0113	2.25	2.2	*0.000642 J*	*ND*	20.8	19.5	*ND*	*ND*	0.0218
Oct-2013	0.0521	0.0442	*ND*	0.0115	2.46	2.25	*0.000744 J*	*ND*	22.5	21.6	*0.000099 J*	*0.0016 J*	0.0246
Mar-2014	0.0489	0.0513	*ND*	*0.0108 J*	2.18	2.13	*ND*	*ND*	20.2	18.9	*ND*	*ND*	0.0163
Oct-2014	0.053	0.0518	*0.000023 J*	0.0111	2.37	2.48	*0.0018 J*	*ND*	22.9	24.1	*0.0017 J*	*ND*	0.018
Apr-2015	0.0569	0.0564	*0.000043 J*	0.0121	2.38	2.33	*0.0017 J*	*ND*	23.7	23.4	*ND*	*ND*	0.0197
Nov-2015	0.0577	0.0559	*ND*	0.0124	2.63	2.56	*0.001 J*	*ND*	26.3	25.6	*0.000146 J*	*ND*	0.0165
May-2016	0.0622	0.0596	*ND*	0.0119	2.62	2.45	*0.00079 J*	*ND*	26.9	23.9	*ND*	*ND*	*0.016 J,B*
Oct-2016	*0.0707 J+*	*0.0636 J+*	*ND*	0.0139	2.53	2.62	0.0008	*ND*	22.2	23.6	*ND*	*ND*	*0.015 J*
May-2017	0.135	0.0595	*ND*	0.0133	2.38	2.42	*0.00073 J*	*ND*	22.5	23.2	*ND*	*ND*	*0.0157 J*
Oct-2017	0.0555	0.0538	*ND*	0.0122 B	2.15	2.27	*0.00051 J*	*ND*	21.1	22.8	*ND*	*ND*	*0.0173 J*
May-2018	0.063	0.0558	*ND*	*0.022 J*	*2.5 J*	*2 J*	*ND*	*ND*	26.9	25.7	*ND*	*ND*	0.0227

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-10A***												
Nov-2018	0.053	0.05	*ND*	0.015	*2.3 J*	*2.2 J*	*0.00074 J*	*ND*	23	22.8	*ND*	*ND*	0.021
May-2019	0.058	0.055	*ND*	0.012	*ND*	*ND*	*ND*	*ND*	22.5	21.5	*ND*	0.0033	0.018
Oct-2019	0.073	0.06	*ND*	0.013	*2.2 J*	*ND*	*0.00055 J*	*ND*	24.5	24.7	*ND*	*ND*	0.024
May-2020	0.06	0.056	*ND*	0.013	*2.6 J*	*1.8 J*	*0.00082 J*	*ND*	25	22.3	*ND*	*ND*	0.02
Oct-2020	0.058	0.055	*ND*	0.013	*ND*	*2.1 J*	*ND*	*ND*	23.6	21.9	*ND*	*0.001 J*	*0.025 J*
Apr-2021	0.059	0.061	*0.00006 J*	0.015	2.3	2.3	*ND*	*ND*	23.3	24.6	*ND*	*ND*	0.021
Oct-2021	0.06	0.064	*ND*	0.016	2.1	2.1	*0.0012 J*	*ND*	22.9	24.1	*0.000039 J*	*ND*	0.022

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-10A***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	28	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-10A*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-10A*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.9 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.9 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-10A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-10A***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	0.63 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.32 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.27 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.21 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.22 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-10A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.163 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-10A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-10A***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.14 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-10A***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.3 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-14***											
Nov-1993	7	7	ND	ND	2.3	ND	ND	5.2	20.2	ND	10	1.41
Apr-1994	ND	ND	ND	ND	2	ND	ND	4.99	16.5	ND	38	ND
Aug-1994	9.5	9.5	ND	ND	2.2	0.3	ND	4.9	25.2	2.6	ND	1.69
Sep-1994	10	10	ND	ND	2.3	0.2	ND	5.9	25.6	2.4	18	1.6
Nov-1994	ND	ND	ND	ND	2.2	ND	ND	5.4	18.4	ND	ND	1.5
Apr-1995	ND	ND	0.3	ND	2.1	ND	ND	5.3	20.3	ND	22	1.4
Apr-1997	ND	5	ND	ND	3	0.06	ND	NA	NA	ND	32	5.8
Oct-1997	3	3	0.23	ND	1	ND	ND	7.68	21.1	ND	ND	11
Apr-1998	2	2	0.52	ND	1.92	0.12	ND	6.51	20.1	ND	16	1.7
Apr-1999	9	9	0.28	ND	3.77	ND	ND	6.11	35.1	ND	38	2.6
Oct-1999	4	4	0.21	ND	2.56	ND	ND	5.62	28.2	ND	29	2
Apr-2000	13	13	ND	ND	4.29	ND	ND	7.28	28	ND	20	3.7
Oct-2000	4	NA	ND	11	3.01	ND	ND	6.16	45.9	5.5	26	2.77
Apr-2001	2	NA	ND	ND	2.4	ND	ND	NA	NA	ND	28	3.43
Sep-2001	32	32	1.1	109	3.88	ND	ND	6.09	43	ND	45	2.52
Mar-2002	ND	ND	ND	ND	3.44	ND	ND	6	42	ND	ND	3.81
Sep-2002	2.8	2.8	ND	60	2.99	ND	ND	5.9	40.2	1.15	24	3.82
Mar-2003	3.5	3.5	ND	ND	31.9	ND	ND	5.8	34.2	7.67	22	2.43
Oct-2003	3.1	3	ND	ND	2.48	ND	ND	5.6	35.2	ND	15	2.86
Apr-2004	2.8	2.8	ND	ND	2.58	ND	ND	5.7	26.6	ND	37	3.02
Oct-2004	2.8	2.8	ND	ND	2.38	ND	ND	5.9	28.2	ND	31	3.22
Apr-2005	2.7	2.7	ND	ND	2.62	ND	ND	5.6	24.6	ND	33	2.1
Oct-2005	3.2	3.2	0.23	ND	3.47	0.08	ND	4.7	16.8	ND	40	3.14
Mar-2006	4.2	4.2	ND	ND	3.49	0.1	ND	6.7	19.8	ND	30	2.18
Sep-2006	4.4	4.4	ND	ND	3.79	ND	ND	5.2	23.7	ND	ND	2.66
Mar-2007	9.7	9.7	0.6	ND	3.47	1.9	ND	5.6	32.1	ND	ND	2.55
Sep-2007	8.5	8.5	0.29	ND	10.3	ND	ND	6.3	38.9	ND	40	2.47
Mar-2008	8.9	8.9	ND	ND	4.4	ND	ND	5.9	46.2	ND	18	1.36
Sep-2008	3.2	3.2	ND	19	5.01	ND	ND	5.6	37.5	ND	15	2.9
Mar-2009	21	21	ND	ND	5.18	ND	ND	5.8	56.9	ND	15	3.76
Oct-2009	13	13	ND	ND	5.95	ND	ND	5.5	50.9	ND	39	5.29
Apr-2010	18.9	18.9	ND	ND	6.5	ND	ND	5.1	57.6	ND	46	27.2
Oct-2010	19	19	ND	ND	7.52	ND	ND	4.9	46.4	ND	59	5.99
Apr-2011	6.7	6.7	ND	ND	6.4	ND	ND	4.6	34.7	ND	25	4.7
Sep-2011	8.9	8.9	ND	ND	6.57	ND	ND	5.8	47.8	ND	43	5.24
Mar-2012	7.7	7.7	ND	ND	5.75	ND	ND	4.7	33.8	ND	ND	6.78
Sep-2012	7.76	7.76	ND	ND	5.16	0.115	ND	4.5	31.8	ND	19	3.53

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-14***											
Mar-2013	9.68	9.68	*ND*	*ND*	5.46	0.107	*ND*	4.1	37.1	*0.385 J*	16	3.62
Oct-2013	9.6	9.6	*ND*	*ND*	5.5	0.101	*ND*	4.2	40.5	*ND*	*ND*	3.04
Mar-2014	10.7	10.7	*ND*	*ND*	5.75	0.113	*ND*	5.8	35.9	*ND*	32	3.23
Oct-2014	5.5	5.5	*ND*	*ND*	6.06	0.136	*ND*	5.3	38.3	*ND*	*ND*	3.86
Apr-2015	7.52	7.52	*ND*	*ND*	5.98	0.105	*ND*	5.2	48.2	*ND*	30	4.07
Nov-2015	6.68	6.68	*ND*	*ND*	5.88	0.129	*ND*	5.8	55.3	*ND*	*19 J*	4.08
May-2016	7.24	7.24	*ND*	*ND*	6.39	0.12	*ND*	6	67.4	*ND*	*21 J*	4.1
Oct-2016	7.68	7.68	*ND*	*5 J*	6.46	*NA*	*NA*	5.9	73.2	*ND*	31	4
May-2017	7.28	7.28	*ND*	*ND*	7.17	0.131	*ND*	5	68.5	*ND*	*24 J*	4.2
Oct-2017	14	14	*ND*	*ND*	7.41	0.118	*ND*	6.1	92.5	*ND*	*21 J*	4.5
May-2018	34	34	*ND*	*ND*	8.6	0.1	*ND*	6.2	96.8	*ND*	*ND*	6.8
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	9.8	*ND*	0.02	5.96	100.7	*ND*	16	6.7
May-2019	*ND*	*NA*	*ND*	*ND*	10.1	*ND*	0.016 H1	5.89	71.3	*ND*	24	6.2
Oct-2019	*2.5 JH1*	*NA*	*ND*	*10.4 J*	6.9	*0.053 J*	0.053 H1	6.09	81.5	*ND*	*ND*	5.7
May-2020	12	*NA*	*ND*	*ND*	8.1	*ND*	*0.0067 J*	5.3	71.1	*ND*	48	7.3
Oct-2020	*ND*	*NA*	*ND*	*ND*	8.4	*ND*	0.019 H1	5.26	74.7	*ND*	*ND*	7.1
Apr-2021	*1 J4c*	*NA*	*ND*	*ND*	8.8	*0.074 J*	*ND*	5.59	67.7	*ND*	30	6.9
Oct-2021	*8 J6c*	*NA*	*ND*	*6.1 JMH*	7.7	*ND*	*ND*	5.75	93.5	*ND*	*ND*	7.26

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-14*													
Nov-1993	NA	ND	ND	NA	ND	0.2	NA	ND	NA	ND	8.8	2.7	ND	0.22	NA
Apr-1994	NA	ND	ND	NA	ND	ND	NA	ND	NA	ND	1.6	1	ND	ND	NA
Aug-1994	NA	ND	ND	NA	ND	0.33	NA	ND	NA	ND	5	3.9	ND	0.21	NA
Sep-1994	NA	ND	ND	NA	ND	0.22	NA	ND	NA	ND	6.2	4.9	ND	0.25	NA
Nov-1994	NA	ND	ND	NA	ND	0.25	NA	ND	NA	0.04	2.5	2.7	ND	0.2	NA
Apr-1995	ND	ND	0.7	ND	ND	0.2	NA	ND	ND	ND	2.4	1.3	ND	0.23	NA
Oct-1996	ND	ND	0.011	ND	ND	0.43	0.33	ND	ND	ND	5	0.48	ND	ND	ND
Apr-1997	ND	ND	0.014	ND	ND	0.32	0.48	ND	ND	ND	3.6	2.8	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	0.274	0.289	ND	ND	ND	10.2	3.66	ND	0.211	0.216
Apr-1998	ND	ND	ND	ND	ND	0.298	0.391	ND	ND	ND	16.2	2.8	ND	0.237	0.237
Apr-1999	ND	ND	0.012	ND	ND	0.447	0.436	ND	ND	ND	19.1	7.85	ND	0.364	0.345
Oct-1999	ND	ND	0.013	ND	ND	0.498	0.438	ND	ND	ND	12.7	9.24	ND	0.383	0.34
Apr-2000	ND	ND	0.013	ND	ND	0.747	0.442	ND	ND	0.008	15.1	8.34	ND	0.437	0.351
Oct-2000	ND	ND	0.018	ND	ND	0.5	0.458	ND	ND	ND	122	12.3	ND	0.369	0.35
Apr-2001	ND	ND	0.018	ND	ND	0.704	NA	ND	ND	ND	87	NA	0.003	0.405	NA
Sep-2001	ND	ND	0.106	ND	ND	1.01	0.5	0.02	ND	0.121	1140	10.3	**0.046**	0.543	0.371
Mar-2002	ND	ND	0.022	ND	ND	0.816	0.478	0.014	ND	0.015	118	9.94	0.007	0.431	0.368
Sep-2002	ND	ND	0.024	ND	ND	0.867	0.415	ND	ND	0.044	43.9	8.96	0.005	0.404	0.341
Mar-2003	ND	ND	0.017	ND	ND	0.427	0.429	ND	ND	0.017	48.7	3.58	0.004	0.331	0.311
Oct-2003	ND	ND	0.024	ND	ND	0.648	0.316	ND	ND	0.043	195	6.42	0.004	0.302	0.24
Apr-2004	ND	ND	0.014	ND	ND	0.603	0.311	ND	ND	ND	80.4	7.38	0.002	0.37	0.236

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14***													
Oct-2004	ND	ND	0.014	ND	ND	0.788	0.286	ND	ND	0.043	59.3	6.44	0.002	0.303	0.232
Apr-2005	ND	ND	0.012	ND	ND	0.36	0.363	ND	ND	ND	14.3	5.68	ND	0.287	0.267
Oct-2005	ND	ND	0.011	ND	ND	0.659	0.47	ND	ND	0.014	3.11	0.264	ND	0.363	0.321
Mar-2006	ND	ND	ND	ND	ND	0.269	0.231	ND	ND	ND	5.84	0.262	ND	0.367	0.357
Sep-2006	ND	ND	ND	ND	ND	0.454	0.448	ND	ND	ND	1.96	1.22	ND	0.371	0.369
Mar-2007	ND	ND	0.01	ND	ND	0.459	0.421	ND	ND	ND	21.9	6.27	ND	0.341	0.331
Sep-2007	ND	0.002	ND	ND	ND	0.421	0.394	ND	ND	ND	14.3	11.3	ND	0.346	0.33
Mar-2008	ND	ND	0.016	ND	ND	0.547	0.49	ND	ND	0.013	45.6	7.07	ND	0.435	0.382
Sep-2008	ND	ND	0.016	0.002	ND	0.495	0.292	0.012	ND	0.029	70.7	10.4	ND	0.393	0.306
Mar-2009	ND	ND	0.012	ND	ND	0.72	0.612	ND	ND	0.013	27.7	16.4	ND	0.477	0.494
Oct-2009	ND	ND	0.017	ND	ND	0.957	0.624	0.043	ND	0.066	39	10.2	ND	0.705	0.585
Apr-2010	ND	ND	0.018	ND	ND	0.974	0.76	ND	ND	ND	22	19.8	ND	0.707	0.568
Oct-2010	ND	0.003	0.016	ND	ND	0.985	0.927	0.02	ND	0.039	39.9	28.2	ND	0.857	0.82
Apr-2011	ND	ND	0.018	ND	ND	0.787	0.779	ND	ND	ND	23.3	18.5	ND	0.666	0.655
Sep-2011	ND	0.005	0.02	ND	ND	0.851	0.903	0.047	0.012	0.09	54.1	22.1	ND	0.741	0.728
Mar-2012	ND	ND	0.017	ND	ND	1.09	0.917	0.015	ND	0.032	29.6	20.4	ND	0.987	0.86
Sep-2012	ND	ND	0.0156	0.00008 J	ND	0.608	0.614	0.0021 J	0.0024 J	0.0028 J	5	4.43	ND	0.488	0.511
Mar-2013	ND	ND	0.0158	0.000123 J	ND	0.691	0.695	0.0026 J	0.0026 J	0.0038 J	13.7	5	ND	0.46	0.457
Oct-2013	ND	ND	0.0143	ND	ND	0.544	0.533	0.0024 J	0.0023 J	0.0016 J	5.94	6	ND	0.409	0.431
Mar-2014	0.000447 J	ND	0.0139	ND	ND	0.572	0.583	0.0021 J	0.0025 J	0.0065 J	16.8	5.61	ND	0.438	0.435
Oct-2014	0.000554 J	ND	0.0185	0.000226 J	0.000111 J	0.716	0.679	0.000749 J	0.003 J	0.0047 J	19.3	6.29	ND	0.504	0.493
Apr-2015	0.0011 J	ND	0.0186	ND	0.000104 J	0.726	0.767	0.0031 J	0.0034 J	0.0041 J	21.3	8.53	ND	0.547	0.586
Nov-2015	ND	0.004	0.0216	0.000682 J	0.000281 J	0.783	0.782	0.0016 J	0.0037 J	0.0171	69.1	7.37	0.00054 J	0.516	0.506
May-2016	ND	ND	0.0169	0.00011 J	ND	0.709	0.715	0.0012 J	0.003	0.0024 J	10.9	7.06	ND	0.564	0.512

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14***													
Oct-2016	*ND*	*ND*	0.0199	*0.00032 J*	*ND*	0.701	*0.727 J+*	*0.0013 J*	0.0036	0.0084	40.9	10.1	*0.00015 J*	0.544	*0.55 J+*
May-2017	*ND*	*ND*	0.0221	*0.00012 J*	*ND*	0.731	0.807	*0.00073 J*	0.0038	*0.0018 J*	8.84	9.11	*ND*	0.576	0.594
Oct-2017	*ND*	*ND*	0.0207	*0.00012 J*	*ND*	0.713	0.948	*ND*	0.0054	*0.0015 J*	10.4	11.4	*ND*	0.664	0.698
May-2018	*ND*	*ND*	0.026	*0.000097 J*	*0.000043 J*	1.2	1.1	*0.0018 J*	0.0077	0.006	21.4	18.3	*0.000044 JB*	*0.95 J*	*0.89 J*
Nov-2018	*ND*	*ND*	0.025	*0.000065 J*	*0.000045 J*	1.1	1.1	*0.002 J*	0.0075	0.0022	22.4	20	*0.00012 J*	*0.93 J*	*0.94 J*
May-2019	*ND*	*ND*	0.024	*ND*	*ND*	1.1	1.1	*ND*	0.0079	*ND*	21.2	16.6	*ND*	*ND*	*ND*
Oct-2019	0.00059	0.0034	0.053	0.0021	*0.00033 J*	1.1	1.1	0.016	0.011	0.065	251	15.7	*0.00051 J*	0.74	*0.84 J*
May-2020	*ND*	*ND*	0.027	*0.000072 J*	*ND*	1.3	1.2	*0.0041 J*	0.0061	*0.0015 J*	12.2	11.4	*ND*	1	*0.95 J*
Oct-2020	*ND*	*ND*	0.026	*ND*	*ND*	1.2	1.3	*0.006 J*	0.0052	*ND*	23	13.4	*ND*	0.99	1
Apr-2021	*ND*	*ND*	0.026	*0.00018 J*	*ND*	1.2	1.3	*0.0017 J*	0.0062	0.0052	20.4	7.9	*ND*	0.96	1.1
Oct-2021	*0.000063 JB*	*ND*	0.028	*0.00016 J*	*ND*	1.2	1.3	*0.0022 J*	0.0084	0.0033	26.6	8.5	*ND*	1	1.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-14*												
Nov-1993	0.09	NA	ND	NA	0.29	NA	ND	NA	1.2	NA	NA	NA	ND
Apr-1994	0.029	NA	ND	NA	ND	NA	ND	NA	1.4	NA	NA	NA	ND
Aug-1994	0.06	NA	ND	NA	0.39	NA	ND	NA	0.94	NA	NA	NA	0.01
Sep-1994	0.08	NA	ND	NA	0.26	NA	ND	NA	1.1	NA	NA	NA	0.04
Nov-1994	0.07	NA	ND	NA	0.22	NA	ND	NA	0.91	NA	NA	NA	0.01
Apr-1995	0.02	NA	ND	ND	0.42	NA	ND	0.01	0.92	NA	ND	ND	0.03
Oct-1996	0.034	0.038	NA	ND	ND	ND	ND	ND	1.7	1.6	ND	ND	0.087
Apr-1997	0.062	0.055	**0.0045**	ND	1.8	ND	ND	ND	1.1	1.7	ND	ND	ND
Oct-1997	0.063	0.065	ND	ND	0.711	0.711	ND	ND	1.12	1.16	ND	ND	ND
Apr-1998	0.043	0.043	ND	ND	ND	0.566	ND	ND	1.16	1.16	ND	ND	ND
Apr-1999	0.091	0.091	NA	ND	ND	0.711	ND	ND	1.45	1.43	ND	ND	ND
Oct-1999	0.091	0.087	NA	ND	ND	0.594	ND	ND	1.53	1.37	ND	ND	ND
Apr-2000	0.078	0.071	NA	ND	ND	ND	ND	ND	3.04	1.63	ND	ND	0.011
Oct-2000	0.071	0.096	NA	ND	0.607	0.517	ND	ND	1.53	1.52	ND	ND	ND
Apr-2001	0.075	NA	NA	ND	0.514	NA	ND	ND	3.27	NA	ND	ND	ND
Sep-2001	ND	0.087	NA	0.016	ND	ND	ND	ND	2.94	1.57	ND	ND	0.183
Mar-2002	0.058	0.084	NA	ND	2.48	1.35	ND	ND	2.66	1.51	ND	ND	ND
Sep-2002	0.075	0.077	NA	ND	1.15	ND	ND	ND	1.8	1.44	ND	ND	0.012
Mar-2003	0.042	0.05	NA	ND	1.19	ND	ND	ND	1.57	1.48	ND	ND	0.019
Oct-2003	0.022	0.069	NA	ND	1.47	1.21	ND	ND	2.28	1.29	ND	ND	ND
Apr-2004	0.063	0.074	0.0002	ND	0.63	ND	ND	ND	1.95	1.26	ND	ND	0.03
Oct-2004	0.071	0.071	0.0004	ND	0.875	ND	ND	ND	1.86	1.33	ND	ND	0.016

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14***												
Apr-2005	0.067	0.064	*ND*	*ND*	0.59	0.51	*ND*	*ND*	1.31	1.27	*ND*	*ND*	*ND*
Oct-2005	0.045	0.041	*ND*	*ND*	0.63	0.558	*ND*	*ND*	2.06	1.43	*ND*	*ND*	*ND*
Mar-2006	0.047	0.04	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.57	1.57	*ND*	*ND*	*ND*
Sep-2006	0.054	0.053	*ND*	*ND*	*ND*	0.502	*ND*	*ND*	1.88	1.9	*ND*	*ND*	*ND*
Mar-2007	0.065	0.059	0.0002	*ND*	*ND*	*ND*	*ND*	*ND*	1.81	1.72	*ND*	*ND*	*ND*
Sep-2007	0.091	0.087	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.96	1.82	*ND*	*ND*	*ND*
Mar-2008	0.074	0.067	0.0004	*ND*	0.586	*ND*	*ND*	*ND*	2.29	2.05	*ND*	*ND*	0.014
Sep-2008	0.082	0.068	0.0005	*ND*	*ND*	*ND*	*ND*	*ND*	2.45	2.04	*ND*	*ND*	0.011
Mar-2009	0.137	0.136	*ND*	0.011	0.527	0.555	*ND*	*ND*	2.41	2.65	*ND*	*ND*	0.019
Oct-2009	0.247	0.079	0.0002	0.063	*ND*	*ND*	*ND*	*ND*	3.11	2.63	*ND*	*ND*	0.032
Apr-2010	0.28	0.152	*ND*	*ND*	0.648	0.541	*ND*	*ND*	3.26	3.08	*ND*	*ND*	0.013
Oct-2010	0.244	0.218	*ND*	0.029	0.515	0.524	*ND*	*ND*	3.55	3.45	*ND*	*ND*	0.011
Apr-2011	0.171	0.166	*ND*	0.012	*ND*	*ND*	*ND*	*ND*	2.91	2.9	*ND*	*ND*	*ND*
Sep-2011	0.227	0.17	*ND*	0.057	0.515	0.533	*ND*	*ND*	2.99	2.89	*ND*	*ND*	0.02
Mar-2012	0.203	0.188	*ND*	0.017	0.707	0.575	*ND*	*ND*	3.97	3.39	*ND*	*ND*	0.011
Sep-2012	0.049	0.0501	*ND*	*0.0023 J*	*0.491 J*	0.501	*ND*	*ND*	2.45	2.47	*0.000477 J*	*ND*	*ND*
Mar-2013	0.0575	0.0526	*0.000145 J*	*0.0027 J*	*0.491 J*	*0.48 J*	*ND*	*ND*	2.3	2.3	*ND*	*ND*	0.0101
Oct-2013	0.056	0.0606	*ND*	*0.0021 J*	*0.427 J*	*0.452 J*	*ND*	*ND*	2.02	2.17	*0.000108 J*	*ND*	0.0105
Mar-2014	0.0556	0.0557	*ND*	*0.0031 J*	*0.456 J*	*0.458 J*	*ND*	*ND*	2.17	2.18	*ND*	*ND*	*0.0027 J*
Oct-2014	0.062	0.0581	*0.000081 J*	*0.0028 J*	0.506	*0.499 J*	*0.000906 J*	*ND*	2.58	2.55	*0.000972 J*	*ND*	*0.0091 J*
Apr-2015	0.0748	0.0748	*ND*	*0.0037 J*	0.546	0.584	*0.000938 J*	*ND*	2.67	2.84	*ND*	*ND*	*0.0067 J*
Nov-2015	0.0735	0.0661	*0.000137 J*	*0.004 J*	0.567	0.56	0.004	*ND*	2.57	2.55	**0.0025 R,C**	*ND*	0.0101
Dec-2015	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*0.000588 J*	*NA*	*NA*
May-2016	0.0651	0.0658	*ND*	*0.0028 J*	0.584	0.509	*ND*	*ND*	2.64	2.37	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14***												
Oct-2016	*0.0756 J+*	*0.0811 J+*	*ND*	*0.0034 J*	0.579	0.557	*ND*	*ND*	2.57	2.6	*ND*	*ND*	*0.0062 J*
May-2017	0.0645	0.0693	*ND*	*0.0028 J*	0.561	0.596	*ND*	*ND*	2.59	2.64	*ND*	*ND*	*ND*
Oct-2017	0.0768	0.0811	*ND*	*0.0036 J*	0.58	0.616	*ND*	*ND*	3.06	3.16	*ND*	*ND*	*ND*
May-2018	0.13	0.12	*ND*	0.0066	*ND*	*ND*	*0.00038 J*	*ND*	*4 J*	*3.6 J*	*ND*	*ND*	0.006
Nov-2018	0.17	0.16	*ND*	0.0071	*ND*	*ND*	*0.00016 J*	*ND*	*4.3 J*	*4.4 J*	*ND*	*ND*	0.011
May-2019	0.2	0.24 M1	*ND*	0.0068	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0056
Oct-2019	0.22	0.17	*0.00017 J*	0.019	*1.3 J*	*ND*	*ND*	*ND*	*3.3 J*	*3.5 J*	*ND*	0.0057	0.03
May-2020	0.098	0.092	*ND*	0.0053	*ND*	*ND*	*ND*	*ND*	*4 J*	*2.8 J*	*ND*	*ND*	*0.0045 J*
Oct-2020	0.16	0.15	*ND*	0.0084	*ND*	*ND*	*ND*	*ND*	*3.7 J*	*3.3 J*	*ND*	0.0065	*ND*
Apr-2021	0.14	0.15	*0.00007 J*	*0.0069 J*	0.71	0.68	*ND*	*ND*	3.5	3.3	*ND*	*ND*	*0.0035 J*
Oct-2021	0.16	0.163	*ND*	0.0086	0.64	0.68	*ND*	*ND*	3.2	3.5	*ND*	*ND*	*0.0034 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7 J	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	2.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	2.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	3.1	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	3.5	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	3.8	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	4.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.4 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	4.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	2.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	3.48	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	3.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Aug-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	1.6	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*0.6 J*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14***															
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	0.6 J
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	1.2
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	1.4
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	1.1
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	1.6
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	2
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	1.9
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.69	2
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.34 J	ND	ND	ND	ND	ND	4.61	3.3
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.36 J	ND	ND	ND	ND	ND	6.33	4.38
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND	ND	6.94	4.58
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.27	4.48
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.8	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*12.9 J*	5.1
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	6.4	6.3
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	6.6	7.6
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J,B*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	6.3	7.4
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	6	6.8
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	11.4	7.5
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.8	9.4 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.3 CL	6.5 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.1	4.5
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.6	3.8
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	7.8	4.3
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.29 J*	*ND*	*0.912 J*	*ND*	*ND*	*ND*	*4.73 J*	6.33
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	6.5	4.4

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14***															
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	1.52	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.56	ND	ND	ND	ND	0.37 J	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	1.86	ND	ND	ND	ND	0.5 J	0.47 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	2.87	ND	ND	ND	ND	0.6 J	0.51 J	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	0.54 J	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.64	*ND*	*ND*	*ND*	*ND*	*0.54 J*	*0.42 J*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.5	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	4.1	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.5 J*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.9	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*0.6 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	4.8	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.5 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	4.4	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.9	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.494 J*	*ND*	*ND*	4.19	*ND*	*ND*	*ND*	*ND*	*0.91 J*	*0.35 J*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.2	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-14A***											
Nov-1993	ND	ND	0.2	ND	3.1	ND	ND	5.07	15.8	2.3	ND	1.31
Apr-1994	ND	ND	0.1	ND	2.5	ND	ND	4.84	17.8	ND	12	ND
Apr-1995	10.3	10.3	ND	ND	3.3	ND	ND	5.3	28.5	2.4	18	2.1
Apr-1997	ND	4	ND	ND	3	0.03	ND	NA	NA	ND	40	4.8
Oct-1997	ND	ND	0.27	ND	2.16	ND	ND	7.1	18.21	ND	ND	ND
Apr-1998	ND	ND	0.22	ND	2.6	0.1	ND	6.78	126.4	0.69	15	3.2
Apr-1999	ND	ND	0.29	ND	4.77	ND	ND	5.74	29.6	ND	46	2.9
Oct-1999	12	12	0.14	ND	4.26	ND	ND	4.85	26.2	ND	36	2.9
Apr-2000	3	3	ND	ND	6.79	ND	ND	6.99	52	ND	24	4.7
Oct-2000	2.5	NA	ND	ND	4.66	ND	ND	6.08	28.8	15	16	4.46
Apr-2001	2.8	NA	ND	ND	4.67	ND	ND	NA	NA	ND	29	3.92
Sep-2001	3.4	3.4	ND	ND	5.92	ND	ND	5.59	35	ND	26	3.58
Mar-2002	2	2	ND	ND	7.48	ND	ND	5.8	37	ND	14	4.37
Sep-2002	4	4	ND	ND	6.88	ND	ND	6.3	42.9	ND	27	3.38
Mar-2003	6.5	6.5	ND	ND	60.7	ND	ND	6.5	54.4	7.43	59	3.79
Oct-2003	4.6	4.6	ND	ND	4.89	ND	ND	5.7	38.3	ND	34	4.24
Apr-2004	2.1	2.1	ND	11	4.01	ND	ND	6.2	22.8	ND	32	2.71
Oct-2004	1.9	1.9	ND	ND	5.22	ND	ND	4.8	30.1	ND	47	4.51
Apr-2005	2.6	2.6	ND	ND	5.11	ND	ND	4.8	26.1	ND	37	4
Oct-2005	4.2	4.2	0.21	ND	6.87	ND	ND	4.4	33.1	ND	48	4.36
Mar-2006	6.7	6.7	ND	ND	6.89	ND	ND	6.8	40.7	1.15	34	2.69
Sep-2006	6.4	6.4	ND	ND	7.87	ND	ND	5	45	ND	31	4.51
Mar-2007	4.7	4.7	ND	ND	6.58	ND	ND	5.5	47.2	ND	ND	3.4
Sep-2007	3.8	3.8	0.31	ND	89.5	ND	ND	5.8	43.5	29.9	24	4.47
Mar-2008	16	16	ND	ND	13.9	ND	ND	5.2	62.4	1.93	37	4.15
Sep-2008	13	13	ND	27	9.82	ND	ND	5.1	55.7	ND	39	4.9
Mar-2009	12	12	ND	ND	9.92	ND	ND	5	74.6	ND	31	4.64
Oct-2009	9.9	9.9	ND	ND	10.1	ND	ND	5.1	66.7	ND	19	5.84
Mar-2010	11	11	ND	10.1	8.05	ND	ND	5.31	71	0.97	ND	3.26
Oct-2010	9.3	9.3	ND	ND	8.46	ND	ND	4.2	46.8	ND	32	3.83
Apr-2011	13	13	ND	ND	9.4	ND	0.02	5	51.9	ND	40	4.1
Sep-2011	15	15	0.22	ND	8.85	ND	ND	5.3	56.7	ND	47	7.08
Mar-2012	5.9	5.9	0.26	ND	9.58	0.06	ND	4.4	44.7	ND	18	4.53
Sep-2012	11.2	11.2	ND	ND	10.7	ND	ND	4.1	58.1	ND	46	3.24
Mar-2013	10.6	10.6	ND	ND	11.8	0.0417 J	ND	3.9	65.1	0.595 J	38	5.14
Oct-2013	20.5	20.5	ND	ND	12.7	0.0382 J	ND	4.4	115.8	ND	47	4.31
Mar-2014	15	15	ND	23	13.7	0.0274 J	ND	5.3	65	ND	54	4.82

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-14A***											
Oct-2014	2.2	2.2	ND	ND	10.7	0.0948	ND	4.9	51	ND	ND	4
Apr-2015	4.44	4.44	ND	8 J	11.1	0.0572	ND	4.4	51.9	ND	44	4.34
Nov-2015	ND	ND	ND	13	9.08	ND	ND	5.3	71.1	3.34	45	5.31
May-2016	3.72	3.72	ND	5 J	10.3	ND	ND	5.5	105.6	5.35	60	10.6
Oct-2016	1.92	1.92	ND	6 J	14.8	NA	NA	5.8	130.3	8.02	66	7.1
May-2017	7.2	7.2	0.154 J	10	15.6	ND	ND	5.2	157.9	11.7	66	18.4
Oct-2017	16.5	16.5	0.228	8 J+	17	ND	ND	5.5	165.2	15.5	135	22.6
May-2018	56	56	0.35	16.5 J	18.8	0.064 J	ND	5.75	207.6	ND	104	39.1
Nov-2018	74	74	0.2	16.5 J	14.1	ND	0.007 J	6.07	257.7	ND	149	28.4
May-2019	12 H1	NA	ND	ND	4.5	ND	ND	6.04	57.2	ND	31	ND
Oct-2019	ND	NA	ND	ND	4	0.039 J	0.034	5.99	59.4	ND	28	2.1
May-2020	30	NA	0.074 J	6.9 J	10.6	ND	0.02	5.58	235.7	ND	109	21.5
Oct-2020	2 J	NA	ND	4.8 J	9.5	ND	0.068 H1	5.62	134.9	1.2	10	8.5
Apr-2021	ND	NA	ND	ND	4.9	0.058 J	ND	6.49	97	ND	16	1.8 J
Oct-2021	ND	NA	ND	ND	6	ND	ND	6.47	109.8	ND	ND	3.82

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14A***													
Nov-1993	NA	ND	ND	NA	ND	0.03	NA	0.007	NA	ND	6.9	0.34	ND	0.3	NA
Apr-1994	NA	ND	ND	NA	ND	ND	NA	ND	NA	ND	0.89	0.29	ND	ND	NA
Apr-1995	ND	ND	1	ND	ND	0.3	NA	ND	ND	ND	5.7	2.3	ND	0.32	NA
Oct-1996	ND	ND	0.014	ND	ND	0.81	0.53	ND	ND	ND	3.3	3.7	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	0.64	0.66	ND	ND	ND	2.7	0.71	ND	ND	ND
Oct-1997	ND	ND	0.031	ND	ND	0.514	0.403	ND	ND	ND	4.32	0.628	ND	0.354	0.217
Apr-1998	ND	ND	0.044	ND	ND	0.497	0.424	0.012	ND	0.016	9.35	1.6	ND	0.48	0.263
Apr-1999	ND	ND	0.023	ND	ND	0.485	0.52	ND	ND	0.011	6.6	4.72	ND	0.405	0.359
Oct-1999	ND	ND	0.025	ND	ND	0.652	0.62	ND	ND	0.01	3.6	2.31	ND	0.52	0.472
Apr-2000	ND	ND	0.019	ND	ND	0.951	0.619	ND	ND	0.012	4.08	1.94	ND	0.564	0.449
Oct-2000	ND	ND	0.02	ND	ND	0.935	0.543	ND	ND	0.013	4.02	3.19	ND	0.516	0.4
Apr-2001	ND	ND	0.019	ND	ND	0.743	NA	ND	ND	ND	4.46	NA	ND	0.502	NA
Sep-2001	ND	ND	0.017	ND	ND	0.696	0.519	ND	ND	0.01	3.47	2.12	ND	0.446	0.397
Mar-2002	ND	ND	0.018	ND	ND	0.883	0.574	ND	ND	0.012	4.28	3.52	ND	0.527	0.465
Sep-2002	ND	ND	0.019	ND	ND	0.569	0.594	ND	ND	ND	5.86	5.07	ND	0.477	0.479
Mar-2003	ND	ND	0.018	ND	ND	0.655	0.608	ND	ND	ND	3.65	3.01	ND	0.523	0.501
Oct-2003	ND	ND	0.021	ND	ND	0.867	0.546	ND	ND	0.014	7.09	3.56	ND	0.504	0.452
Apr-2004	ND	ND	0.021	ND	ND	0.552	0.542	ND	ND	0.012	4.52	1.08	ND	0.322	0.268
Oct-2004	ND	ND	0.02	ND	ND	1.09	0.662	ND	ND	0.018	5.17	0.752	ND	0.434	0.359
Apr-2005	ND	ND	0.016	ND	ND	1.04	0.703	ND	ND	0.019	5.87	2.26	ND	0.347	0.282
Oct-2005	ND	ND	0.02	ND	ND	1.04	0.799	ND	ND	0.014	5.53	1.6	ND	0.427	0.389

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14A***													
Mar-2006	ND	ND	0.016	ND	ND	0.429	0.333	ND	ND	ND	5.67	2.51	ND	0.394	0.393
Sep-2006	ND	ND	0.021	ND	ND	0.886	0.689	ND	ND	0.014	6.2	4.04	ND	0.559	0.535
Mar-2007	ND	ND	0.017	ND	ND	0.746	0.728	ND	ND	0.013	2.78	1.63	ND	0.374	0.368
Sep-2007	ND	0.002	0.015	ND	ND	1.18	0.586	0.034	ND	0.017	10.7	4.72	0.002	0.37	0.292
Mar-2008	ND	ND	0.029	ND	ND	0.701	0.648	ND	ND	ND	10	8.37	ND	0.583	0.524
Sep-2008	ND	ND	0.033	ND	ND	0.835	0.565	ND	ND	0.013	12.6	7.3	0.002	0.685	0.58
Mar-2009	ND	ND	0.032	ND	ND	0.84	0.691	ND	ND	0.024	17	9.93	ND	0.616	0.599
Oct-2009	ND	ND	0.035	ND	ND	1.14	0.711	ND	ND	0.017	15.5	10.5	ND	0.727	0.68
Mar-2010	ND	ND	0.029	ND	ND	0.572	0.568	ND	ND	0.012	11.6	12.1	ND	0.445	0.43
Oct-2010	ND	ND	0.02	ND	ND	0.681	0.655	ND	ND	0.016	5.71	5.21	ND	0.518	0.519
Apr-2011	ND	ND	0.029	ND	ND	0.722	0.691	ND	ND	0.013	6.77	5.66	ND	0.559	0.549
Sep-2011	ND	ND	0.03	ND	ND	1.59	0.82	ND	ND	0.023	9.09	7.51	ND	0.756	0.583
Mar-2012	ND	ND	0.026	ND	ND	0.726	0.729	ND	ND	0.011	3.33	4.84	ND	0.661	0.668
Sep-2012	ND	ND	0.0188	0.000445 J	ND	0.543	0.53	0.0021 J	0.0051 J	0.0068 J	5.3	4.6	ND	0.457	0.438
Mar-2013	ND	ND	0.0358	0.000832 J	ND	0.906	0.92	0.0029 J	0.0086 J	0.0114	6.88	6.75	ND	0.699	0.666
Oct-2013	ND	ND	0.0292	0.000643 J	0.000239 J	0.702	0.599	0.0092 J	0.0079 J	0.0138	27.5	24	ND	0.621	0.568
Mar-2014	0.000526 J	ND	0.0293	0.000653 J	0.000211 J	0.771	0.758	0.0021 J	0.0083 J	0.0143	7.53	7.79	ND	0.703	0.68
Oct-2014	0.000546 J	ND	0.0281	0.000749 J	0.000238 J	0.713	0.708	0.000747 J	0.0068 J	0.0183	5.65	5.31	ND	0.539	0.541
Apr-2015	0.001 J	0.0019 J	0.0358	0.000875 J	0.000381 J	0.752	0.754	0.0137	0.0179	0.0435	6.62	4.29	ND	0.597	0.589
Nov-2015	0.0012 J	0.0023	0.0333	0.0013 J	0.000551 J	0.918	0.944	0.0254	0.0155	0.0883	13.9	3.29	0.000848 J	0.734	0.733
May-2016	ND	0.0015 J	0.0638	0.00082 J	0.00052 J	1.66	1.63	0.0107	0.0202	0.0387	9.96	6.77	0.00051 J	1.56	1.64
Oct-2016	0.00075 J	0.0022 J	0.0399	0.00064 J	0.00039 J	1.16	1.88	0.0148 J+	0.0167	0.0511 J+	12.7	5.76	0.00087 J	1.02 J+	1.85
May-2017	0.0011 J	0.0065	0.107	0.00091 J	0.00047 J	2.73	2.64	0.0456	0.0505	0.106	14	7.92	0.0003 J	2.82	2.71
Oct-2017	0.00051 J	0.0016 J	0.119	0.00086 J	0.00086 J	3.48	3.51	0.0079	0.0358	0.0291	9.45	8.96	ND	3.37	3.58

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14A***													
May-2018	*0.00039 J*	0.0012	0.2	0.00093	0.0019	6	5.8	*0.0065 J*	0.042	0.045	27.4	24.7	*0.00026 J*	5.9	5.7
Nov-2018	*0.000045 J*	*0.00073 J*	0.16	0.00057	*0.00054 J*	4.3	4.6	*0.0052 J*	0.02	0.012	52.1	50.1	*0.00016 J*	4.3	4.5
May-2019	*ND*	*ND*	0.019	0.00036	0.0022	*ND*	*ND*	0.012	0.0027	0.026	14.2	12.9	*ND*	*ND*	*ND*
Oct-2019	*0.00015 J*	*0.0003 J*	0.014	*0.00029 J*	*0.00043 J*	0.46	*0.43 J*	0.0085	0.0017	0.0094	13.2	10.4	*0.00011 J*	0.22	*0.23 J*
May-2020	*0.000095 J*	0.0014	0.086	*0.00025 J*	*0.00035 J*	3.3	3.2	0.011	0.012	0.0071	50.8	46.7	*ND*	3.2	3.1
Oct-2020	*ND*	*ND*	0.042	*ND*	*ND*	1.4	1.4	*0.0024 J*	0.0035	*ND*	32.3	26.3	*ND*	1.2	1.3
Apr-2021	*ND*	*0.0028 J*	0.016	*0.00043 J*	*ND*	*0.4 J*	*0.38 J*	0.0051	*0.0009 J*	0.0098	23.3	17.3	*ND*	*0.19 J*	0.22
Oct-2021	*0.00012 JB*	*0.0013 J*	0.02	*0.00037 J*	*ND*	0.73	0.84	0.0039	0.0032	0.0079	21.8	13.3	*0.00012 J*	*0.48 J*	0.56

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-14A*												
Nov-1993	0.07	NA	ND	NA	1.1	NA	ND	NA	1.4	NA	NA	NA	ND
Apr-1994	0.036	NA	ND	NA	ND	NA	ND	NA	1.9	NA	NA	NA	ND
Apr-1995	0.02	NA	ND	ND	0.61	NA	ND	0.01	1.6	NA	ND	ND	0.03
Oct-1996	0.053	0.05	NA	ND	ND	ND	ND	ND	2.3	2.3	ND	ND	0.18
Apr-1997	0.084	0.029	ND	ND	ND	ND	ND	ND	2.3	2.1	ND	ND	0.021
Oct-1997	0.025	0.026	ND	ND	1.57	ND	ND	ND	1.67	1.61	ND	0.01	0.02
Apr-1998	0.03	0.033	0.0005	ND	1.68	ND	ND	ND	2.03	1.93	ND	0.013	0.012
Apr-1999	0.043	0.043	NA	ND	1.16	0.659	ND	ND	2.36	2.32	ND	ND	0.01
Oct-1999	0.02	0.024	NA	ND	ND	0.541	ND	ND	2.57	2.42	ND	ND	ND
Apr-2000	0.029	0.024	NA	ND	ND	ND	ND	ND	4.08	2.53	ND	ND	0.015
Oct-2000	0.023	0.03	NA	ND	0.572	0.95	ND	ND	3.57	2.53	ND	ND	0.015
Apr-2001	0.03	NA	NA	ND	ND	NA	ND	ND	3.58	NA	ND	ND	0.015
Sep-2001	0.019	0.019	NA	0.012	0.722	ND	ND	ND	3.97	2.61	ND	ND	0.01
Mar-2002	0.039	0.037	NA	ND	1.32	0.388	ND	ND	4.13	2.98	ND	ND	0.012
Sep-2002	0.054	0.056	NA	ND	0.696	ND	ND	ND	3.26	3.27	ND	ND	ND
Mar-2003	0.073	0.067	NA	0.012	1.2	ND	ND	ND	3.54	3.37	ND	ND	ND
Oct-2003	0.083	0.075	NA	0.014	0.986	0.533	ND	ND	3.85	2.98	ND	ND	0.011
Apr-2004	0.025	0.023	0.0008	ND	1.21	1.28	ND	ND	3.3	2.31	ND	ND	ND
Oct-2004	0.037	0.031	0.0006	ND	1.17	ND	ND	ND	3.45	2.92	ND	ND	0.018
Apr-2005	0.046	0.045	0.0003	ND	0.95	0.69	ND	ND	3.47	2.95	ND	ND	0.026
Oct-2005	0.032	0.034	0.0006	ND	0.823	0.675	ND	ND	3.86	3	ND	ND	0.01
Mar-2006	ND	ND	0.0004	ND	ND	ND	ND	ND	3.94	3.3	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14A***												
Sep-2006	0.027	0.023	0.0002	0.013	0.692	0.6	ND	ND	3.99	3.87	ND	ND	0.015
Mar-2007	0.014	0.013	0.0004	ND	0.57	0.529	ND	ND	3.17	3.17	ND	ND	ND
Sep-2007	0.059	0.043	0.0004	0.022	0.518	ND	ND	ND	3.22	3.19	ND	ND	0.034
Mar-2008	0.052	0.047	ND	ND	0.802	0.577	ND	ND	4.14	3.88	ND	ND	0.012
Sep-2008	0.05	0.043	ND	ND	0.798	0.503	ND	ND	4.26	3.9	ND	ND	0.025
Mar-2009	0.054	0.056	ND	0.014	0.839	0.668	ND	ND	4.4	4.45	ND	ND	0.027
Oct-2009	0.061	0.06	ND	0.014	0.777	0.526	ND	ND	4.72	4.81	ND	ND	0.041
Mar-2010	0.069	0.067	ND	ND	0.715	0.622	ND	ND	3.71	4.15	ND	ND	ND
Oct-2010	0.047	0.044	ND	0.011	0.526	0.525	ND	ND	4.61	4.58	ND	ND	0.019
Apr-2011	0.037	0.033	ND	ND	ND	ND	ND	ND	4.13	3.96	ND	ND	0.014
Sep-2011	0.042	0.249	ND	0.023	1.36	0.832	ND	ND	4.96	4.7	ND	ND	0.026
Mar-2012	0.028	0.035	ND	ND	0.536	0.525	ND	ND	4.44	4.61	ND	ND	0.012
Sep-2012	0.0341	0.0312	ND	0.0056 J	0.573	0.556	ND	ND	7.85	7.89	0.000238 J	ND	0.0055 J
Mar-2013	0.0391	0.0391	0.000072 J	0.0102 J	0.66	0.645	ND	ND	6.06	6.03	ND	ND	0.0219
Oct-2013	0.121	0.111	0.000061 J	0.0084 J	0.634	0.56	ND	ND	7	6.52	0.000189 J	0.0021 J	0.0168
Mar-2014	0.0448	0.0469	ND	0.0084 J	0.606	0.582	ND	ND	6.34	6.27	ND	ND	0.0132
Oct-2014	0.032	0.0313	0.000073 J	0.0072 J	0.601	0.597	0.000986 J	ND	5.62	5.55	0.000758 J	ND	0.013
Apr-2015	0.0648	0.0478	0.000064 J	0.0724	0.794	0.732	ND	ND	5.24	5.45	ND	0.000833 J	0.0203
Nov-2015	0.125	0.104	0.000039 J	0.0332	0.996	0.908	0.000688 J	ND	4.76	4.85	ND	0.0011 J	0.0265
May-2016	0.0836	0.0492	0.00011 J	0.0365	1.11	1.14	0.00051 J	ND	5.37	5.13	0.00018 J	0.00067 J	0.0443
Oct-2016	0.0642 R	0.0627	0.000056 J	0.0329 J+	0.833	1.25	ND	ND	3.45 J+	6.37	0.00017 J	0.0032	0.0322
May-2017	0.133	0.0909	ND	0.109	1.57	1.51	0.00067 J	ND	7.75	7.42	0.00025 J	0.00046 J	0.0535
Oct-2017	0.106	0.0998	ND	0.0436	1.61	1.67	0.00057 J	ND	7.65	8.26	0.0002 J	ND	0.0431
May-2018	0.17	0.078	ND	0.046	2.2 J	1.6 J	0.00079 J	ND	10.1	10.1	0.00031	0.0031 B	0.0528

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14A***												
Nov-2018	0.27	0.25	*ND*	0.023	*1.7 J*	*1.8 J*	*0.00024 J*	*ND*	7.5	7.9	*0.00008 J*	*ND*	0.029
May-2019	0.13	0.12	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.00031	*ND*	0.022
Oct-2019	0.23	0.21	*ND*	0.0055	*ND*	*ND*	*ND*	*ND*	*2.9 J*	*3 J*	*ND*	0.0062	0.012
May-2020	0.28	0.26	*0.00016 J*	0.015	*1.5 J*	*1.1 J*	*ND*	*ND*	7.3	6.1	*ND*	0.0047	0.017
Oct-2020	0.17	0.16	*ND*	0.0058	*ND*	*ND*	*ND*	*ND*	*4.2 J*	*3.9 J*	*ND*	*0.0014 J*	*ND*
Apr-2021	0.2	0.19	*0.00008 J*	*0.0062 J*	0.54	*0.47 J*	*ND*	*ND*	3	2.8	*ND*	*ND*	*0.0062 J*
Oct-2021	0.29	0.29	*ND*	0.006	0.61	0.7	*ND*	*ND*	3.8	4.3	*0.000068 J*	*ND*	0.0077

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-14A***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	0.8 J	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	0.8 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	0.7 J	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	1.2	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	0.5 J	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14A*																
Mar-2006	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2007	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	6.2	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	10	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	9.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	7.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	4.72	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	9.59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	9.97	0.32 J	ND	ND	ND	ND	ND	0.39 J	0.37 J	ND	ND	ND	1.09 J,B	ND
Mar-2014	ND	ND	ND	ND	8.29	0.24 J	ND	ND	ND	ND	ND	0.28 J	0.43 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	3.77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	3.82	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	0.1 J	0.2 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14A*																
Oct-2016	ND	ND	ND	ND	5.1	0.1 J	ND	ND	ND	ND	ND	0.2 J	0.2 J	1.4 J	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	8.5	0.2 J	ND	ND	ND	ND	0.1 J	0.3 J	0.4 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	7.8	0.2 J	ND	ND	ND	ND	0.1 J	0.3 J	0.4 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	6.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.1 JB	ND
Nov-2018	ND	ND	ND	ND	10.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	2.9
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	4.1
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	7.1	4
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.3	7.2
Apr-2000	ND	NA	NA	ND	NA	2.4	NA	ND	ND	ND	NA	ND	NA	ND	NA	1.4	4
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	6
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	8.3
Sep-2001	ND	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.7	5.1
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	3.4
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	6.2
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	3.5
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.8	5.6
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.2	3.5
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	8.3
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.3	7.2
Oct-2005	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	13.2	10.5

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14A***															
Mar-2006	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	22.8	11.9
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	22.6	13.3
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	9.8	9.9
May-2007	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	7.5	10.8
Sep-2007	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	12.5	5.2
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	22.5	16.9
Sep-2008	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	14.2	19.4
Mar-2009	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	16.5	20.8
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	14.7	19.9
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*10.9 J*	11.4
Oct-2010	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	8.5	7.8
Apr-2011	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	10.6	10.5
Sep-2011	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	17.8	11.7
Mar-2012	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	7.6	6.7
Sep-2012	*0.76 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.86 J*	*ND*	*ND*	*ND*	3.17	4.82
Mar-2013	1.39	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.84	*ND*	*ND*	*ND*	6.7	12
Oct-2013	2.01	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.98	*ND*	*ND*	*ND*	5.13	12.4
Mar-2014	1.68	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.95	*ND*	*ND*	*ND*	5.67	10
Oct-2014	*0.92 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.01	*ND*	*ND*	*ND*	1.88	4.45
Apr-2015	*0.88 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.89 J*	*ND*	*ND*	*ND*	1.95	4.21
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*2.7 J*	2.9
May-2016	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	1.3	3.5

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14A***															
Oct-2016	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	2	6.3
May-2017	2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	3.7	10
Oct-2017	2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	2.5	*ND*	*ND*	*ND*	3.7	11
May-2018	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	4.5	6.5
Nov-2018	2.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	6.3	14.9 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	2.4	3.7
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	1.1	1.6
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	2.5	NA	ND	NA
Oct-1999	ND	ND	ND	NA	3.3	ND	ND	1.7	ND	ND	ND	ND	1.1	4.4	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	1	ND	ND	NA
Oct-2000	ND	ND	ND	NA	2.8	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	NA
Apr-2001	ND	ND	ND	NA	4	ND	ND	1.1	ND	ND	ND	ND	0.7 J	3.5	ND	ND	NA
Sep-2001	ND	ND	ND	NA	2.9	ND	ND	0.5 J	ND	ND	ND	ND	ND	1.7	ND	ND	NA
Mar-2002	ND	ND	ND	NA	3.9	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	NA
Sep-2002	ND	ND	ND	NA	**6.4**	ND	ND	0.6 J	ND	ND	ND	ND	0.5 J	1.1	ND	ND	NA
Mar-2003	ND	ND	ND	NA	**5.3**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	2.7	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	NA
Apr-2004	ND	ND	ND	NA	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	4.9	ND	ND	0.7 J	ND	ND	ND	ND	ND	2.3	ND	ND	NA
Apr-2005	ND	ND	ND	ND	**5.9**	ND	ND	0.9 J	ND	ND	ND	ND	0.6 J	1.5	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14A***															
Oct-2005	ND	ND	0.7 J	ND	**9.5**	0.5 J	ND	1.7	ND	ND	ND	ND	1.3	2.3	ND	0.7 J	NA
Mar-2006	ND	ND	0.9 J	ND	**11.6**	0.6 J	ND	1.9	ND	ND	ND	ND	1.6	3.1	ND	0.5 J	NA
Sep-2006	ND	ND	ND	ND	**7.6**	ND	ND	2.1	ND	ND	ND	ND	1.6	1.7	ND	ND	NA
Mar-2007	ND	ND	0.5 J	ND	**6.5 R**	ND	ND	1.3	ND	ND	ND	ND	0.9 J	1.5	ND	ND	NA
May-2007	ND	ND	0.6 J	1.7	5	ND	ND	1.5	ND	ND	ND	ND	0.9 J	1.3	ND	0.7 J	NA
Sep-2007	ND	ND	0.6 J	0.6 J	**7.7**	ND	ND	1.4	ND	ND	ND	ND	1.1	2	ND	ND	NA
Mar-2008	ND	ND	0.9 J	ND	**8.9**	0.7 J	ND	2.3	ND	ND	ND	ND	2	3.6	ND	ND	NA
Sep-2008	ND	ND	0.7 J	ND	**12**	0.7 J	ND	2.4	ND	ND	ND	ND	1.8	6.5	ND	1.5	NA
Mar-2009	ND	ND	1.1	ND	**16.3**	1.1	ND	2.6	ND	ND	ND	ND	2.5 J	0.5 J	ND	0.8 J	NA
Oct-2009	ND	ND	0.7 J	ND	**14.2**	0.8 J	ND	2.6	ND	ND	ND	ND	2.3	2.1	ND	0.6 J	NA
Mar-2010	ND	ND	ND	ND	**8.4**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	**6.5**	ND	ND	1.3	ND	ND	ND	ND	ND	0.9 J	ND	ND	NA
Apr-2011	ND	ND	ND	ND	**8.1**	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	0.7 J	ND	**7.4**	0.5 J	ND	2	ND	ND	ND	ND	1.4	1.3	ND	ND	NA
Mar-2012	ND	ND	ND	ND	3.9	ND	ND	1.3	ND	ND	ND	ND	0.9 J	0.6 J	ND	0.7 J	NA
Sep-2012	ND	ND	0.81 J	0.28 J	3.95	0.36 J	ND	1.48	ND	ND	ND	ND	1.05	0.48 J	ND	ND	1.17
Mar-2013	0.5 J	ND	1 J	0.37 J	**8.69**	0.68 J	ND	2.09	ND	ND	ND	ND	1.77	ND	ND	0.34 J	1.68
Oct-2013	ND	ND	0.7 J	ND	**5.94**	0.53 J	ND	2.02	ND	ND	ND	ND	1.67	0.7 J	ND	ND	1.23
Mar-2014	ND	ND	1.08	0.53 J	**6.26**	0.41 J	ND	2.75	ND	ND	ND	ND	1.89	0.74 J	ND	0.34 J	1.49
Oct-2014	ND	ND	0.52 J	0.29 J	2.35	ND	ND	1.34	ND	ND	ND	ND	0.83 J	ND	ND	ND	0.52 J
Apr-2015	ND	ND	0.59 J	0.28 J	2.66	ND	ND	1.32	ND	ND	ND	ND	0.93 J	ND	ND	ND	0.59 J
Nov-2015	ND	ND	ND	ND	2	ND	ND	0.7 J	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14A***															
May-2016	*ND*	*ND*	*0.3 J*	*0.2 J*	2	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*0.1 J*	*ND*	*0.1 J*	*0.3 J*
Oct-2016	*ND*	*ND*	*0.4 J*	*0.3 J*	3.1	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	1	*0.4 J*	*ND*	*0.3 J*	*0.4 J*
May-2017	*ND*	*ND*	*0.7 J*	*0.7 J*	4.9	*0.2 J*	*ND*	2.5	*ND*	*ND*	*ND*	*ND*	1.8	*0.2 J*	*ND*	*0.4 J*	*0.9 J*
Oct-2017	*ND*	*ND*	*0.5 J*	*0.6 J*	4.4	*0.1 J*	*ND*	2.5	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*0.5 J*	*0.6 J*
May-2018	*ND*	*ND*	*ND*	*ND*	2.3 B	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	1.1	2.9 CH	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.46 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-19***											
Nov-1993	ND	ND	0.1	ND	7.6	0.9	ND	4.68	74.7	12.4	50	13
Apr-1994	ND	ND	0.2	ND	17.3	2.7	ND	4.5	201	45.6	181	52.2
Apr-1995	ND	ND	0.2	ND	19.5	2.2	ND	4.7	176	40.2	112	38.6
Apr-1997	ND	3	ND	ND	12	0.46	ND	NA	NA	32	80	21
Apr-1998	ND	ND	1.1	ND	14.6	0.196	ND	6.19	156.4	16.2	96	51
Apr-1999	ND	ND	0.13	ND	13.5	0.68	ND	4.49	204	52.8	110	63
Apr-2000	12	12	ND	ND	29.6	1.48	ND	5.64	252	71.8	196	102
Apr-2001	16	NA	ND	ND	26.4	ND	ND	NA	NA	45.1	119	86
Mar-2002	6.8	6.8	ND	40	11	0.29	ND	5.4	87.6	15.7	88	34.3
Mar-2003	22	22	ND	ND	25.8	0.75	ND	6	206	35.8	143	65.3
Apr-2004	13	13	ND	ND	22.4	ND	ND	5.3	160.1	19.3	90	47.2
Apr-2005	11	11	ND	ND	26.8	0.45	ND	5.3	154.9	30	108	56.1
Mar-2006	9.8	9.8	ND	ND	21.4	0.72	ND	5.3	142.8	27.3	112	40.8
Mar-2007	13	13	0.46	ND	25.5	0.78	ND	5.4	158.3	41.9	142	56.5
Mar-2008	13	13	ND	ND	22.8	0.91	ND	5.5	145.3	27.8	114	49
Mar-2009	14	14	ND	ND	18.2	0.34	ND	4.9	118.3	15.7	86	32.5
Mar-2010	45	45	ND	ND	56.9	0.42	ND	5.84	390	51.8	183	96.2
Oct-2010	28	28	ND	ND	31.8	0.64	ND	5.3	189.9	34.9	154	72
Apr-2011	43	43	ND	ND	38.5	0.67	ND	5.6	312	46.5	207	89.2
Sep-2011	39	39	ND	ND	54	0.52	ND	6	321	45.6	229	99.1
Mar-2012	33	33	ND	ND	43.2	0.46	ND	5.3	354	44.4	164	78.1
Sep-2012	40.6	40.6	ND	ND	29.8	0.733	ND	5.5	199.6	37.3	156	76.4
Mar-2013	32.6	32.6	ND	ND	32.8	0.829	ND	5.8	201	36	145	68.3
Oct-2013	19.5	19.5	ND	ND	21.1	0.462	ND	4.8	138.9	22.3	105	44.3
Mar-2014	51.4	51.4	ND	30	62.1	1.07	ND	6.2	429	58.5	253	106
Oct-2014	35.2	35.2	ND	6 J	73	0.581	ND	5.9	404	29.1	220	83.4
Apr-2015	89.2	89.2	ND	8 J	80.4	0.763	ND	5.9	532	44.7	299	116
Nov-2015	37.6	37.6	ND	6 J	44.9	0.573	ND	6	329	25.8	152	73.5
May-2016	51.2	51.2	ND	12	41.4	0.701	ND	6.3	410	30.8	178	77.7
Oct-2016	50.4	50.4	ND	ND	34.1	NA	NA	6.4	340	30	170	74.4
May-2017	74.5	74.5	ND	ND	49.1	0.847	ND	6.3	510	40.4	225	104
Oct-2017	55.8	55.8	ND	9 J	35.4	0.699	ND	6.1	426	29.5	172	88.5
May-2018	28	28	ND	ND	22.8	0.082 J	ND	5.4	174.5	16.6	149	52
Nov-2018	66	66	ND	ND	30.5	0.84	ND	5.94	283	41.4	163	96.5
May-2019	22 H1	NA	0.19	ND	27.7	1.4	ND	5.27	159.3	31.9	129	60.7
Oct-2019	7.5 J	NA	ND	ND	22.7	1	0.0086 J	5.03	165.3	23.9	290	44.7
May-2020	12	NA	ND	9.1 J	8.7	2.3	ND	5.26	205.8	40.3	123	84.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-19***										
Oct-2020	40	*NA*	*ND*	*9.3 J*	12.3	1.8	*0.0099 J*	5.38	190.4	33.2	126	79.6
Apr-2021	60	*NA*	*ND*	*12.6 J*	14.4	0.78	*ND*	5.9	246.4	31.9	139	80.6
Oct-2021	36	*NA*	*ND*	*8.3 J*	13.5	0.8	*ND*	5.7	218.9	19.5	82	56.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-19***													
Nov-1993	NA	ND	ND	NA	ND	1.6	NA	ND	NA	ND	1.9	0.07	ND	2.2	NA
Apr-1994	NA	ND	0.19	NA	ND	12	NA	ND	NA	0.02	ND	ND	ND	5.4	NA
Apr-1995	ND	ND	1.3	ND	ND	8.2	NA	ND	ND	ND	0.29	ND	ND	4.4	NA
Apr-1997	ND	ND	0.068	ND	ND	9.7	9.8	ND	ND	ND	1.9	0.33	ND	2.9	2.9
Apr-1998	ND	ND	0.103	ND	ND	13.8	13.5	0.01	0.012	0.021	3.35	ND	ND	3.96	3.84
Apr-1999	ND	ND	0.1	ND	0.004	17.9	17.1	ND	0.01	0.022	3.36	ND	ND	4.52	4.29
Apr-2000	ND	ND	0.076	ND	ND	31.8	29.3	0.012	ND	0.033	10	ND	ND	5.51	5.02
Apr-2001	ND	ND	0.081	ND	ND	25.7	NA	0.05	ND	0.086	40.5	NA	0.005	5.23	NA
Mar-2002	ND	ND	0.043	ND	ND	9.42	8.88	0.02	ND	0.045	14.6	ND	ND	2.63	2.49
Mar-2003	ND	ND	0.051	ND	ND	20.1	19.4	ND	ND	ND	0.799	ND	ND	3.68	3.52
Apr-2004	ND	0.003	0.068	ND	ND	12.1	11.6	ND	ND	0.018	4.63	ND	0.002	4.1	3.88
Apr-2005	ND	ND	0.09	ND	ND	14.3	14	ND	ND	0.02	2.98	ND	ND	4.96	4.86
Mar-2006	ND	ND	0.067	ND	ND	10.1	10.5	ND	ND	ND	2.41	ND	ND	3.79	3.91
Mar-2007	ND	0.007	0.072	ND	ND	15.5	15.6	ND	ND	0.019	7.26	ND	ND	4.33	4.32
Mar-2008	ND	ND	0.058	ND	ND	13.5	12.5	ND	ND	ND	ND	ND	ND	3.71	3.34
Mar-2009	ND	ND	0.035	ND	ND	9.17	9.05	ND	ND	0.014	0.104	ND	ND	2.34	2.31
Mar-2010	ND	ND	0.073	ND	ND	28.2	26.7	ND	ND	ND	0.101	ND	ND	6.26	6.02
Oct-2010	ND	ND	0.067	ND	ND	19.9	18.3	ND	ND	0.006	ND	ND	ND	5.42	5.28
Apr-2011	ND	ND	0.075	ND	ND	26	25	ND	ND	ND	0.189	ND	ND	5.91	5.69
Sep-2011	ND	ND	0.078	ND	ND	29.1	28.7	ND	ND	ND	ND	ND	ND	6.42	6.3
Mar-2012	ND	ND	0.069	ND	ND	22.2	21.6	ND	ND	ND	ND	ND	ND	5.52	5.41

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-19***													
Sep-2012	*ND*	*ND*	0.0644	*0.000086 J*	*ND*	21.3	20.9	*0.002 J*	*0.0022 J*	*0.0051 J*	*0.0256 J*	0.0777	*ND*	5.64	5.69
Mar-2013	*ND*	*ND*	0.0634	*ND*	*ND*	19.9	18.1	*0.0014 J*	*0.0025 J*	*0.0055 J*	*0.0275 J*	*0.0053 J*	*0.0016 J*	4.51	4.06
Oct-2013	*ND*	*ND*	0.0482	*0.000147 J*	*ND*	12.7	12.4	*0.0082 J*	*0.0063 J*	0.0122	*ND*	*ND*	*ND*	3.05	3.04
Mar-2014	*0.000279 J*	*ND*	0.0654	*ND*	*ND*	31.6	32.2	*0.0011 J*	*0.0012 J*	*0.0037 J*	0.0845	*0.0447 J*	*ND*	6.47	6.6
Oct-2014	*0.000873 J*	*ND*	0.0629	*ND*	*ND*	24.5	24.3	*0.000605 J*	*0.0025 J*	*0.0056 J*	*0.0105 J*	*0.0212 J*	*ND*	5.4	5.29
Apr-2015	*0.000587 J*	*ND*	0.0642	*ND*	*ND*	35.4	35.9	*0.000881 J*	*0.000674 J*	*0.0023 J*	*0.0386 J*	*0.0145 J*	*ND*	6.73	6.77
Nov-2015	*ND*	*ND*	0.0547	*ND*	*0.000073 J*	21.6	20.8	*0.000527 J*	*0.0026 J*	*0.0058 J*	*ND*	*ND*	*ND*	4.78	4.76
May-2016	*ND*	*ND*	0.0483	*ND*	*ND*	22.9	24.1	*0.00078 J*	0.0019	*0.0039 J*	*ND*	*ND*	*ND*	4.96	5.09
Oct-2016	*ND*	*ND*	0.0469	*ND*	*ND*	22.1	21.9	*0.00074 J*	0.0024	0.0066	*ND*	*ND*	*0.00011 J*	4.66	*4.85 J+*
May-2017	*ND*	*ND*	0.0502	*ND*	*ND*	31.1	33.3	*0.0011 J*	0.0024	0.0046	*0.0414 J*	*ND*	*ND*	6.52	6.15
Oct-2017	*ND*	*ND*	0.0456	*0.00011 J*	*ND*	27.2	24.8	*ND*	0.0046	0.0098	*0.0378 J*	*ND*	*0.00075 J*	4.97	4.86
May-2018	*0.000062 J*	*ND*	0.047	*0.00024 J*	*0.00019 J*	14.6	13.4	*0.0008 J*	0.0103	0.017	0.11	*ND*	*0.00013 JB*	3.8	3.4
Nov-2018	*ND*	*ND*	0.042	*0.000022 J*	*0.000051 J*	29.8	30.6	*0.0029 J*	0.0013	0.0033	0.034	*ND*	*0.000086 J*	5.4	5.5
May-2019	*ND*	*ND*	0.071	*ND*	*ND*	15.9	16.7	*ND*	0.0013	0.0021	*ND*	*ND*	*ND*	5.1	5.2
Oct-2019	*0.00011 J*	*ND*	0.051	*0.000072 J*	*0.00018 J*	11.3	10.7	*0.0048 J*	0.0023	0.004	*0.007 J*	*ND*	*ND*	4	3.8
May-2020	*0.000075 J*	*ND*	0.061	*ND*	*ND*	22.9	22.9	*0.0049 J*	*0.00049 J*	0.0026	*ND*	*ND*	*ND*	6.7	6.6
Oct-2020	*ND*	*ND*	0.038	*ND*	*ND*	21.8	21.4	*0.0025 J*	*0.00056 J*	*ND*	*ND*	*ND*	*ND*	6.1	5.9
Apr-2021	*ND*	*ND*	0.062	*ND*	*ND*	22.7	24	*0.00088 J*	*0.00079 J*	*ND*	*ND*	*ND*	*ND*	5.8	6.2
Oct-2021	*0.000065 JB*	*ND*	0.05	*ND*	*ND*	15.2	16.5	*ND*	0.0033	0.0059	*ND*	*ND*	*ND*	4.5	4.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-19*												
Nov-1993	0.12	NA	ND	NA	1.1	NA	ND	NA	2.3	NA	NA	NA	0.01
Apr-1994	0.05	NA	ND	NA	2.1	NA	ND	NA	7.4	NA	NA	NA	0.037
Apr-1995	0.12	NA	ND	1.1	2.8	NA	ND	ND	5.5	NA	ND	ND	0.04
Apr-1997	0.082	0.087	**0.003**	ND	3.5	3.4	ND	ND	4.9	5.6	ND	ND	0.025
Apr-1998	0.095	0.115	NA	ND	4.38	3.11	ND	ND	6.97	6.97	ND	0.012	0.024
Apr-1999	0.091	0.084	NA	ND	3.93	3.1	ND	ND	6.12	5.85	ND	ND	0.015
Apr-2000	0.065	0.049	NA	ND	6.11	5.89	ND	ND	15.5	13	ND	0.029	0.02
Apr-2001	0.083	NA	NA	ND	6.53	NA	ND	ND	12.2	NA	ND	0.141	0.035
Mar-2002	0.039	0.026	NA	ND	3.14	3.05	ND	ND	6.41	5.25	ND	0.055	0.016
Mar-2003	0.018	0.011	NA	ND	6.64	6.93	ND	ND	11	10.5	ND	ND	ND
Apr-2004	0.05	0.04	ND	ND	4.03	3.83	ND	ND	11	10.3	ND	0.014	0.068
Apr-2005	0.048	0.044	ND	ND	3.85	3.62	ND	ND	11.9	11.6	ND	ND	0.029
Mar-2006	0.021	0.017	ND	ND	2.49	2.49	ND	ND	8.93	8.97	ND	ND	ND
Mar-2007	0.035	0.025	ND	ND	4.15	4.11	ND	ND	11.1	11.2	ND	0.02	0.01
Mar-2008	0.018	0.016	ND	ND	3.76	3.47	ND	ND	10.2	9.4	ND	ND	ND
Mar-2009	0.01	ND	ND	ND	2.33	2.28	ND	ND	7.65	7.48	ND	ND	ND
Mar-2010	ND	ND	ND	ND	6.71	6.35	ND	ND	26.8	27.9	ND	ND	ND
Oct-2010	0.017	0.014	ND	ND	4.55	4.32	ND	ND	17.6	17.4	ND	ND	ND
Apr-2011	0.01	ND	ND	ND	5.85	5.61	ND	ND	22.8	21.9	ND	ND	ND
Sep-2011	ND	ND	ND	ND	6.14	6	ND	ND	24.6	24.2	ND	ND	ND
Mar-2012	0.011	0.011	ND	ND	5.36	5.21	ND	ND	23.1	22.2	ND	ND	0.014
Sep-2012	0.0091 J	0.01 J	0.000032 J	0.0049 J	4.53	4.62	ND	ND	21.5	20.7	0.00054 J	ND	0.0026 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-19***												
Mar-2013	0.01 J	0.0088 J	0.000031 J	0.0044 J	4.85	4.33	ND	ND	18.9	17	ND	ND	0.0145
Oct-2013	0.0146	0.0141	ND	0.0059 J	2.87	2.79	ND	ND	10.6	10.8	ND	0.0033 J	0.0127
Mar-2014	0.0054 J	0.0051 J	ND	0.0024 J	7.14	7.25	ND	ND	32.4	33.1	ND	ND	0.0028 J
Oct-2014	0.0097 J	0.0096 J	0.000023 J	0.004 J	5.08	4.97	0.0016 J	ND	31.9	31.5	ND	ND	0.007 J
Apr-2015	0.0046 J	0.0036 J	ND	0.002 J	9.82	9.94	0.000992 J	ND	55.7	56.4	ND	ND	ND
Nov-2015	0.0086 J	0.0083 J	ND	0.0042 J	5.31	5.22	0.001 J	ND	27.5	26.9	ND	0.000161 J	0.0035 J
May-2016	0.0071	0.0057	ND	0.0031 J	6.27	6.31	ND	ND	26.2	26.6	ND	0.00034 J	ND
Oct-2016	0.0044	0.0061 B	ND	0.0039 J	5.75	5.86	ND	ND	20.4	21.2	ND	0.00035 J	ND
May-2017	0.0049	0.0042	ND	0.0037 J	9.06	9.41	ND	ND	30.2	30	ND	0.00037 J	ND
Oct-2017	0.0067	0.0054	ND	0.0049	6.24	6.29	ND	ND	19.6	18.4	ND	0.00031 J	ND
May-2018	0.021	0.019	0.00018 JB	0.011	3.5 J	2.9 J	0.00032 J	ND	13.7	11.7	ND	0.0037	0.0091 B
Nov-2018	0.004	0.0026	ND	0.0028	7.1	7.3	0.00017 J	ND	19.5	20.2	ND	0.0022	0.0047 J
May-2019	0.039	0.037	ND	0.0059	ND	ND	ND	ND	15.6	15.5	ND	0.0035 B	0.0072
Oct-2019	0.016	0.015	ND	0.0045	3.7 J	3.5 J	0.00051 J	ND	14.7	12.1	ND	0.0088	0.0075
May-2020	0.0057	0.005	ND	0.0023	6.5	6.8	ND	ND	9.1	9.2	ND	0.01	0.0034 J
Oct-2020	0.0045	0.0042	ND	ND	5.7	5.8	ND	ND	9.1	8.4	ND	0.0012 J	ND
Apr-2021	0.0067	0.0062	ND	0.0024 J	6.1	6.6	ND	ND	10.3	11.1	ND	ND	0.0025 J
Oct-2021	0.0071	0.0075	ND	0.0041	4.2	4.6	ND	ND	8.9	9.8	0.000028 J	0.00035 J	0.0027 J

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-19*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	6.5	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2002	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2002	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	7.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-19*																
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.93 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.81 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	7.73	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	2.73	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-19***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.2	10
Jul-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	1.2
Jul-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	1.9
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	13	15
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5	8.3
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-19***															
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.97 J
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.96 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	3.39	ND	ND	ND	2.84	9.26
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.89 J	ND	ND	ND	0.75 J	3.18
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	2.3 J	3.5
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	0.5 J	ND	ND	ND	0.8 J	2.9
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.6 J	ND	ND	ND	0.7 J	3.4
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	0.3 J
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.8 J	ND	ND	ND	0.9 J	3.2
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	4.4	7
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.755 J	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	1.5

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-19***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	4.8	ND	ND	ND	ND	1.9	ND	ND	ND	NA
Jul-2002	ND	ND	ND	NA	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Jul-2002	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	**6.4**	ND	ND	ND	ND	2.7	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.2 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	3.3	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-19***															
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	0.95 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	0.46 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	3.48	ND	ND	ND	ND	1.06	0.47 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	1.73	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	0.3 J	0.2 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.6 B	ND	ND	3.1	ND	ND	ND	ND	1.1	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	1.2 BCH	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.611 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-19***															
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-20R***											
Apr-2010	3.2	3.2	*ND*	*ND*	105	0.81	*ND*	4.3	604	211	352	143
Oct-2010	*ND*	*ND*	*ND*	*ND*	102	0.87	*ND*	4.1	556	153	349	128
Apr-2011	*ND*	*ND*	*ND*	13	119	0.86	*ND*	4	573	115	386	123
Sep-2011	*ND*	*ND*	*ND*	*ND*	94.8	0.79	*ND*	4.3	520	115	363	124
Mar-2012	*ND*	*ND*	*ND*	10	121	0.86	*ND*	3.6	660	204	391	138
Sep-2012	*ND*	*ND*	*ND*	10.3	107	0.794	*ND*	3.9	511	177	365	135
Mar-2013	*ND*	*ND*	*ND*	14.6	108	0.902	*ND*	4.1	633	124	358	104
Oct-2013	*ND*	*ND*	*ND*	15.7	106	0.874	*ND*	3.6	658	161	401	109
Mar-2014	*ND*	*ND*	*ND*	22	104	0.902	*ND*	4.5	578	179	371	105
Oct-2014	*ND*	*ND*	*ND*	*9 J*	96.9	0.831	*ND*	4.3	633	209	326	119
Apr-2015	0.96	0.96	*ND*	*5 J*	91.1	1.04	*ND*	3.9	548	180	346	112
Nov-2015	*ND*	*ND*	*ND*	*9 J*	96.4	0.979	*ND*	4.4	650	214	343	87
May-2016	*ND*	*ND*	*ND*	14	82.6	1.25	*ND*	4.5	767	163	341	114
Oct-2016	*ND*	*ND*	*ND*	11	75.4	*NA*	*NA*	4.3	670	186	376	114
May-2017	*ND*	*ND*	*ND*	*ND*	81.9	1.27	*ND*	4.2	714	189	341	114
Oct-2017	*ND*	*ND*	*0.078 J*	*6 J*	75.7	1.82	*ND*	4.4	785	204	330	94.3
May-2018	*ND*	*ND*	*ND*	*18.7 J*	65.4	0.58	0.013	4	603	133	311	110
Nov-2018	*ND*	*ND*	*ND*	*14.3 J*	59.4	1.8	*ND*	4.15	473.8	144	272	110
May-2019	16 H1	*NA*	*ND*	*ND*	44	1.2	*ND*	5.13	355	139	284	139
Oct-2019	*2.5 J*	*NA*	*ND*	*14.8 J*	48.1	1.5	*ND*	4.56	472.6	126	276	115
May-2020	*ND*	*NA*	*ND*	*13.5 J*	32.2	1.1	*ND*	4.83	320.4	84.4	197	106
Oct-2020	*4 J*	*NA*	*ND*	*11.6 J*	20.3	0.98	*ND*	5.05	246.8	79.6	158	67.2
Apr-2021	44	*NA*	*ND*	*14.8 J*	12.9	0.98	*ND*	5.7	270.8	53.8	157 D6	85.8
Oct-2021	30	*NA*	*ND*	*8.3 J*	11	0.93	*ND*	5.54	277.7	60.5 ML	139	80.7

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-20R*													
Apr-2010	ND	ND	0.04	ND	ND	37.3	36.5	ND	0.017	0.018	0.076	ND	ND	12.1	11.8
Oct-2010	ND	ND	0.032	0.002	ND	29.9	29	ND	0.025	0.027	0.062	ND	ND	13	12.8
Apr-2011	ND	ND	0.036	0.002	ND	30.1	29.7	ND	0.02	0.022	0.357	0.031	ND	11.6	11.3
Sep-2011	ND	ND	0.041	ND	ND	27	25.2	ND	0.027	0.035	0.436	ND	ND	13.7	13.1
Mar-2012	ND	ND	0.035	0.003	ND	33.4	32.3	ND	0.019	0.025	0.122	ND	ND	13.2	12.7
Sep-2012	ND	ND	0.0383	0.0027	0.000685 J	31.6	31.7	0.0064 J	0.0225	0.0301	0.155	0.0323 J	ND	13.7	13.2
Mar-2013	ND	ND	0.0307	0.0017 J	0.000583 J	25.1	29.2	ND	0.0197 J	0.0259	0.0963	0.0261 J	0.0014 J	10.1	11.9
Oct-2013	ND	0.000794 J	0.0358	0.0019 J	0.0012 J	28	29.3	0.0085 J	0.0188 J	0.0266	ND	ND	0.000426 J	9.6	10.4
Mar-2014	0.00044 J	ND	0.0478 J	ND	ND	25.7	26	0.0094 J	0.0159 J	0.0249 J	2.02	0.0426 J	ND	10	10.3
Oct-2014	0.0013 J	0.0043 J	0.0574	0.0025 J	0.000866 J	28.9	28.9	0.0117 J	0.0229 J	0.0263 J	1.87	ND	0.003	11.4	11.6
Apr-2015	0.000541 J	0.0018 J	0.0334	0.0014 J	0.000605 J	27.3	26.8	ND	0.0173 J	0.0209	0.0507 J	ND	ND	10.7	10.6
Nov-2015	ND	0.0041	0.0364	0.0019 J	0.00099 J	20.6	20.7	0.0011 J	0.0158	0.0314	0.0486 J	0.0265 J	ND	8.67	8.66
May-2016	ND	0.0012 J	0.0342	0.0019	0.00046 J	28.1	28.6	0.0022 J	0.0229	0.0257	ND	ND	ND	10.6	10.7
Oct-2016	ND	0.0028 J	0.0216	0.0021	0.00052 J	26	28.2	0.0022 J	0.0276	0.0282	ND	0.0395 J	0.00013 J	11.8	13
May-2017	ND	0.0024 J	0.0342	0.0023	0.00062 J	23.4	24.5	0.0032 J	0.0323	0.0294	0.263	ND	0.00035 J	13.6	13.2
Oct-2017	ND	0.0013 J	0.0293	0.0018	0.00057 J	19.7	20.3	0.0044	0.0304	0.0263	0.147 J	0.0387 J	0.00021 J	11	11.4
May-2018	0.000035 J	ND	0.027	0.0021	0.0019	25.7	22.1	0.0036 JB	0.0223	0.018	0.24	0.022	0.00045 J	11.1	9.8
Nov-2018	0.000054 J	ND	0.024	0.00092	0.00084 J	31.1	31.5	0.0068 J	0.0072 J	0.025 J	0.07	0.018 J	0.00049 J	7.9	8
May-2019	ND	ND	0.025	0.00071	ND	40.2	41.1	ND	ND	ND	ND	ND	ND	9.5	9.6
Oct-2019	0.00011 J	ND	0.022	0.001	0.00082 J	32.1	31.2	0.0064 J	0.008	0.013	0.021 J	0.014 J	ND	8.4	8.2
May-2020	0.000086 J	ND	0.026	0.00043	0.00027 J	31.1	30.5	0.0064 J	0.0034	ND	0.055 J	0.015 J	ND	6.8	6.7

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-20R***													
Oct-2020	*ND*	*ND*	0.018	*0.00035 J*	*ND*	18.9	18.5	*0.0043 J*	*0.0021 J*	*ND*	0.13	*ND*	*ND*	4.9	4.6
Apr-2021	*ND*	*ND*	0.035	*0.00022 J*	*ND*	25.4	27.2	*0.0015 J*	*0.0017 J*	*0.0033 J*	*ND*	*ND*	*ND*	5.4	5.8
Oct-2021	*ND*	*ND*	0.031 M1	*0.0003 J*	*ND*	22.9 M1	21.2	*0.002 J*	0.0042	0.0037 M1	*0.041 JM1*	*0.025 JB*	*0.000049 JR1M1*	5.7 M1	5.3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-20R*												
Apr-2010	0.298	0.292	ND	0.013	3.77	3.74	ND	ND	35.4	34.9	ND	ND	0.019
Oct-2010	0.269	0.263	ND	0.019	3.4	3.36	ND	ND	37.7	37.1	ND	ND	0.024
Apr-2011	0.238	0.232	ND	0.015	3.53	3.43	ND	ND	44.6	44	ND	ND	0.019
Sep-2011	0.291	0.278	0.0002	0.028	3.84	3.18	ND	ND	41.7	39.2	ND	ND	0.037
Mar-2012	0.239	0.233	0.0003	0.014	3.87	3.77	ND	ND	50.1	48.7	ND	ND	0.019
Sep-2012	0.227	0.228	0.000349	0.0195	3.67	3.67	0.0026	ND	56.1	55.3	0.000296 J	ND	0.022
Mar-2013	0.229	0.261	0.000199 J	0.015	2.56 J	3.06 J	0.002 J	ND	42	49.6	ND	ND	0.0264
Oct-2013	0.239	0.265	ND	0.0124	3.47 J	3.16 J	0.0023	0.000025 J	53.5	57	ND	0.0135 J	0.0252
Mar-2014	0.198	0.195	ND	0.0128 J	3.48 J	3.14	ND	ND	48.6	48.9	ND	0.0147 J	0.0738 J
Oct-2014	0.233	0.234	0.000118 J	0.0194 J	3.62 J	3.18 J	0.0184 J	0.000032 J	48.5	50.4	ND	0.0141 J	ND
Apr-2015	0.186	0.192	0.000095 J	0.0128	3.09	3.08	0.0118	ND	41.8	41.5	ND	ND	0.0245
Nov-2015	0.167	0.166	0.000325	0.0154	2.51	2.52	0.0267	ND	36.8	37.5	ND	0.0018 J	0.0235
May-2016	0.18	0.175	0.00024	0.0136	3.46	3.37	0.0011 J	ND	44.3	44.2	ND	0.0022	0.0195 J
Oct-2016	0.19	0.215	0.00016 J	0.0177	3.09	3.51	0.00058 J	ND	39	45.3	ND	0.0025	0.0254 J
May-2017	0.246	0.248	0.00039	0.0208	3.14	3.08	0.00063 J	ND	47	45.3	ND	0.0059	0.0309
Oct-2017	0.205	0.206	0.000077 J	0.0179	2.99	2.96	0.00057 J	ND	50.7 J-	50.4	ND	0.0044	0.0227 J
May-2018	0.19	0.22	0.00015 J	0.011 B	2.5 J	2.6 J	0.0033	ND	55.1	45.8	ND	0.0032 J	0.0016 JB
Nov-2018	0.11	0.13	ND	0.0052 J	4 J	4 J	ND	ND	40.3	41.5	ND	0.0014 J	ND
May-2019	0.055	0.057	ND	ND	ND	ND	ND	ND	26.8	27	ND	ND	ND
Oct-2019	0.063	0.022	ND	0.0055	4.3 J	4.3 J	0.0021	ND	36.4	34.5	ND	0.01	0.01
May-2020	0.028	0.03	ND	0.0032	3.7 J	3.7 J	ND	ND	23.6	23.4	ND	0.0054	ND
Oct-2020	0.055	0.03	ND	ND	2.9 J	3 J	ND	ND	22.7	20.3	ND	0.0028 J	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-20R***												
Apr-2021	0.02	0.02	*ND*	*0.0017 J*	3.1	3.4	*ND*	*ND*	12.5	13.6	*ND*	*0.004 J*	*ND*
Oct-2021	0.033 M1	0.031	*ND*	0.0028 M1	3.5 M1	3.3	*0.0015 J*	*ND*	14.6 M1	14.4	*0.000032 J*	0.0031	*0.0022 JR1M1*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-20R*																
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-20R*																
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-20R*															
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-20R***															
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-20R***															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.56 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*0.31 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-20R***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.516 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-23***											
Apr-1995	10.3	10.3	ND	34.7	3.4	0.6	ND	5.8	40.6	5.3	34	8.5
Apr-1997	ND	2	ND	ND	4	0.42	ND	NA	NA	ND	57	12
Oct-1997	2	2	ND	ND	3.52	0.695	ND	8.92	34.2	ND	ND	ND
Apr-1998	ND	ND	0.21	ND	2.44	0.36	ND	6.73	20.3	ND	12	4.6
Apr-1999	ND	ND	0.25	ND	13.9	0.24	ND	5.36	68.4	ND	33	4.7
Oct-1999	ND	ND	0.16	ND	3.42	0.38	ND	5.6	23.2	0.93	33	4.5
Apr-2000	10	10	ND	ND	2.75	0.32	ND	6.02	20	ND	29	7.3
Oct-2000	9.5	NA	ND	14	3.06	0.31	ND	6.06	23.4	ND	27	5.76
Apr-2001	2.2	NA	ND	ND	2.57	0.44	ND	NA	NA	ND	31	4.8
Sep-2001	1.6	1.6	ND	ND	3.87	1.4	ND	5.22	19	ND	25	4.81
Mar-2002	ND	ND	ND	27	4.35	0.522	ND	5.2	15.6	ND	36	5
Sep-2002	2	2	ND	ND	3.9	0.56	ND	5.2	26.2	ND	ND	5
Mar-2003	4.4	4.4	ND	ND	16	ND	ND	5.4	35.5	ND	42	6.69
Oct-2003	4.2	4.2	ND	11	3.33	0.384	ND	4.5	27.8	ND	ND	7.79
Apr-2004	7.8	7.8	ND	10	14.9	0.435	ND	5.6	75.3	ND	96	6.26
Oct-2004	3.7	3.7	ND	14	3.68	0.48	ND	5.2	24.7	ND	31	8.08
Apr-2005	4.1	4.1	ND	ND	8.81	0.48	ND	5.4	40.4	ND	ND	5.1
Oct-2005	3.8	3.8	ND	ND	3.51	0.4	ND	5.1	19.6	ND	34	5.22
Mar-2006	4.7	4.7	ND	ND	8.69	0.41	ND	5.3	42.1	ND	19	2.45
Sep-2006	3.5	3.5	ND	43	3.52	0.39	ND	5.2	26.1	ND	30	5.88
Mar-2007	6.1	6.1	ND	ND	32.6	0.45	ND	5.4	99.8	ND	52	3.24
Sep-2007	3	3	ND	ND	8.75	0.94	ND	5.1	21.2	ND	37	4.27
Mar-2008	2.9	2.9	ND	15	13	1.39	ND	5	26	4.86	18	5.05
Sep-2008	3.9	3.9	ND	11	3.44	0.42	ND	4.7	19.1	ND	22	5.1
Mar-2009	4.6	4.6	ND	37	4.22	0.45	ND	4.8	27.3	ND	26	3.81
Oct-2009	3.7	3.7	ND	13	3.88	0.58	ND	4.7	24.4	ND	30	9.1
Apr-2010	7	7	ND	ND	6.3	0.67	ND	4.9	40	ND	27	3.9
Oct-2010	4.4	4.4	ND	ND	3.81	0.57	ND	4.6	21.6	1.31	39	6.87
Apr-2011	10	10	ND	22	15.9	0.76	ND	5.6	73.2	ND	89	5.9
Sep-2011	14	14	ND	ND	1.98	0.36	ND	6	31.4	ND	34	15.4
Mar-2012	14	14	ND	ND	10	0.6	ND	5.3	58	ND	37	10.7
Sep-2012	10.4	10.4	ND	ND	3.42	0.562	ND	5	30.4	ND	43	12.6
Mar-2013	20.7	20.7	ND	11.7	38.1	0.717	ND	6.1	148.4	0.922 J	99	15.5
Oct-2013	17	17	0.101 J	50.6	1.89	0.277	ND	6	29.8	1.45	ND	16.8
Mar-2014	7.56	7.56	ND	ND	3.88	0.596	ND	6.1	33.7	0.498 J	ND	9.85
Oct-2014	ND	ND	ND	ND	7.73	1.2	ND	5.1	44.6	2	50	8.03
Apr-2015	6.52	6.52	ND	ND	7.01	1.34	ND	4.4	42.5	0.879 J	60	10.8

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-23***										
Nov-2015	4.28	4.28	*ND*	*ND*	6.66	1.35	*ND*	5.5	68.1	*ND*	112	17.6
May-2016	2.68	2.68	*ND*	*8 J*	6.53	*ND*	*ND*	5.3	56.2	*ND*	27	8.2
Oct-2016	3.68	3.68	*ND*	*ND*	6.72	*NA*	*NA*	5.2	57.5	*0.895 J*	35	8.7
May-2017	*ND*	*ND*	*ND*	*ND*	7.43	1.41	*ND*	5.2	60.9	*0.749 J*	*15 J*	8.3
Oct-2017	3.56	3.56	*ND*	*ND*	7.17	1.55	*ND*	5	72	*0.567 J*	*20 J*	8.8
May-2018	*4 J*	*ND*	*ND*	*ND*	6.7	1.5	*ND*	5.8	51.1	*ND*	31	9.5
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	6.3	1.4	*ND*	4.79	47.4	*ND*	11	9.5
May-2019	*ND*	*NA*	*ND*	*ND*	6.3	1.2	*ND*	4.84	33	*ND*	16	8.6
Oct-2019	*ND*	*NA*	*ND*	*ND*	5.3	1.5	*ND*	4.56	4.14	*ND*	18	9.7
May-2020	*ND*	*NA*	*ND*	*ND*	6.7	1.4	*ND*	5.23	55.1	*ND*	*ND*	9.6
Oct-2020	*ND*	*NA*	*ND*	*ND*	6.5	1.5	*ND*	5.01	44.3	*ND*	39	10
Apr-2021	*ND*	*NA*	*ND*	*ND*	6.9	1.6	*ND*	4.95	51.4	*ND*	23	10.1
Oct-2021	*ND*	*NA*	*0.061 J*	*ND*	6.5	1.4	*ND*	4.97	87.2	*ND*	20	10.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-23***													
Apr-1995	ND	ND	ND	ND	ND	2.2	NA	ND	ND	ND	0.57	0.05	ND	0.72	NA
Oct-1996	ND	ND	0.019	ND	ND	1.4	1.5	0.026	ND	ND	0.91	0.5	ND	ND	ND
Apr-1997	ND	ND	0.024	ND	ND	2.6	1.3	ND	ND	ND	0.26	ND	0.005	0.76	ND
Oct-1997	ND	ND	ND	ND	ND	1.08	1.06	ND	ND	ND	0.092	ND	ND	0.387	0.377
Apr-1998	ND	ND	ND	ND	ND	1.15	1.15	ND	ND	ND	0.13	ND	ND	0.421	0.396
Apr-1999	ND	ND	ND	ND	ND	1.25	1.32	ND	ND	ND	0.164	ND	ND	0.394	0.385
Oct-1999	ND	ND	ND	ND	ND	1.24	1.15	ND	ND	ND	0.113	ND	ND	0.406	0.352
Apr-2000	ND	ND	ND	ND	ND	1.42	1.26	ND	ND	0.017	0.795	ND	ND	0.91	0.389
Oct-2000	ND	ND	ND	ND	ND	1.48	1.46	ND	ND	ND	0.285	ND	ND	0.499	0.428
Apr-2001	ND	ND	ND	ND	ND	1.17	NA	ND	ND	ND	0.199	NA	ND	0.447	NA
Sep-2001	ND	ND	ND	ND	ND	1.19	1.29	ND	ND	ND	0.4	0.128	ND	0.448	0.436
Mar-2002	ND	ND	ND	ND	ND	1.27	1.11	ND	ND	ND	0.156	ND	ND	0.443	0.403
Sep-2002	ND	ND	ND	ND	ND	1.26	1.19	ND	ND	ND	0.565	ND	ND	0.482	0.4
Mar-2003	ND	ND	ND	ND	ND	1.81	1.28	ND	ND	ND	0.173	ND	ND	0.53	0.391
Oct-2003	ND	ND	0.011	ND	ND	2.04	1.56	ND	ND	ND	1.59	ND	0.003	0.656	0.434
Apr-2004	ND	ND	0.033	ND	ND	1.29	0.335	0.034	ND	0.024	13.6	ND	0.01	0.737	0.166
Oct-2004	ND	ND	0.011	ND	ND	2.22	1.22	0.011	ND	0.015	3.11	0.122	0.005	0.617	0.375
Apr-2005	ND	ND	ND	ND	ND	1.29	0.986	ND	ND	0.011	0.829	ND	ND	0.464	0.374
Oct-2005	ND	ND	ND	ND	ND	1.33	1.04	ND	ND	ND	0.527	ND	ND	0.46	0.372
Mar-2006	ND	ND	ND	ND	ND	0.683	0.497	ND	ND	ND	0.523	ND	ND	0.18	0.14
Sep-2006	ND	ND	ND	ND	ND	1.42	1.12	0.021	ND	ND	0.758	ND	0.004	0.565	0.383

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-23***													
Mar-2007	ND	ND	ND	ND	ND	0.708	0.573	0.014	ND	ND	2.05	ND	0.004	0.356	0.211
Sep-2007	ND	ND	ND	ND	ND	1.03	0.921	ND	ND	ND	0.628	ND	ND	0.414	0.358
Mar-2008	ND	ND	ND	ND	ND	1.19	0.977	0.046	ND	0.026	1.35	ND	0.006	0.505	0.349
Sep-2008	ND	ND	ND	ND	ND	1.25	1.08	ND	ND	ND	0.427	ND	ND	0.484	0.396
Mar-2009	ND	ND	ND	ND	ND	0.931	0.826	ND	ND	ND	0.243	ND	ND	0.363	0.299
Oct-2009	ND	ND	0.015	ND	ND	1.83	1.12	0.021	ND	0.014	2.17	0.19	0.011	1.1	0.382
Apr-2010	ND	ND	ND	ND	ND	1.33	1.52	ND	ND	ND	3.62	0.182	ND	0.395	0.247
Oct-2010	ND	ND	ND	ND	ND	1.89	1.8	ND	ND	ND	0.508	ND	ND	0.523	0.437
Apr-2011	ND	ND	0.02	ND	ND	1.24	0.396	0.014	ND	ND	4.31	0.121	0.007	0.689	0.135
Sep-2011	ND	ND	0.012	ND	ND	4.88	3.75	ND	ND	0.011	0.959	ND	0.002	0.771	0.469
Mar-2012	ND	ND	0.012	ND	ND	3.02	2.25	ND	ND	ND	2	0.088	0.003	0.764	0.411
Sep-2012	ND	ND	0.0158	ND	ND	3.9	3.58	0.0072 J	0.000829 J	0.003 J	1.07	0.163	0.0018 J	0.706	0.568
Mar-2013	ND	ND	0.0101	ND	ND	4.83	4.79	0.0107	0.000515 J	0.0043 J	1.31	0.365	0.0035	0.829	0.624
Oct-2013	0.001 J	0.0011 J	0.0255	0.000179 J	0.000162 J	4.9	4.8	0.0189	0.000838 J	0.0101	5.28	0.112	0.0083	1.11	0.552
Mar-2014	0.00041 J	0.001 J	0.0144	0.000128 J	ND	2.9	2.76	0.0058 J	0.0022 J	0.0049 J	3.69	0.161	0.0016 J	0.631	0.535
Oct-2014	0.000466 J	ND	0.0207	ND	ND	1.88	1.84	0.0012 J	0.0035 J	0.0023 J	0.0652	0.012 J	ND	0.811	0.775
Apr-2015	0.000661 J	0.000492 J	0.0376	0.000279 J	0.000075 J	2.33	1.49	0.0056 J	0.0027 J	0.0041 J	2.26	0.0177 J	0.0022	1.21	0.505
Nov-2015	ND	0.00087 J	0.0601	0.000503 J	0.000116 J	3.56	1.5	0.0071 J	0.0032 J	0.0077 J	5.46	0.031 J	0.0049	2.11	0.539
May-2016	ND	ND	0.0135	0.000088 J	ND	2	1.98	0.0013 J	0.0022	0.0024 J	0.0559 J	ND	ND	0.77	0.721
Oct-2016	ND	ND	0.0137	ND	ND	2.22	2.11	0.00082 J	0.0022	0.0021 J	ND	ND	ND	0.775	0.795
May-2017	ND	ND	0.0143	ND	ND	2.02	2.14	0.00095 J	0.0023	0.0026 J	ND	ND	ND	0.787	0.857
Oct-2017	ND	ND	0.0134	0.000084 J	ND	2.17	2.3	ND	0.0025	0.004	ND	ND	ND	0.824	0.893
May-2018	0.000055 J	ND	0.015	0.0001 J	0.000053 J	2.3	2.2	0.0072	0.005	0.0079	0.078	0.023	0.00004 J	0.91 J	0.85 J
Nov-2018	ND	ND	0.011	0.000097 J	0.000061 J	2.4	2.4	0.0047 J	0.0028	0.0052	0.13	0.022	0.00011 JB	0.86 J	0.88 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-23***													
May-2019	*ND*	*ND*	0.01	*ND*	*ND*	2.2	2.2	0.016	0.0068	0.0092	0.26	0.19	*ND*	*ND*	*ND*
Oct-2019	*0.00011 J*	*ND*	0.01	*0.00011 J*	*0.00026 J*	2.4	2.4	*0.0069 J*	0.0032	0.014	*0.059 J*	0.023	*0.000074 J*	0.88	*0.87 J*
May-2020	*0.00007 J*	*ND*	0.012	*0.000059 J*	*ND*	2.4	2.3	0.046	0.0055	0.015	0.39	0.16	*ND*	0.86	*0.85 J*
Oct-2020	*0.00032 J*	*ND*	0.015	*ND*	*ND*	2.5	2.5	*0.017 J*	0.0042	*ND*	0.12	0.055	*ND*	0.91	*0.91 J*
Apr-2021	*ND*	*ND*	0.014	*ND*	*ND*	2.5	2.4	0.006	*0.0036 J*	0.0096	0.076	*0.062 J*	*ND*	0.93	0.97
Oct-2021	*0.000089 J*	*ND*	0.016	*ND*	*ND*	2.7	2.7	0.0081	0.0041	0.0073	0.067	*0.047 J*	*0.000042 J*	1	1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-23*												
Apr-1995	0.03	NA	ND	ND	1.2	NA	ND	0.02	3.1	NA	ND	ND	0.07
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	1.7	1.8	ND	ND	0.099
Apr-1997	0.011	ND	ND	ND	2.1	2.3	ND	ND	1.2	1.9	ND	ND	0.073
Oct-1997	ND	ND	ND	ND	0.907	1.32	ND	ND	1.33	1.38	ND	ND	0.015
Apr-1998	ND	ND	ND	0.016	ND	ND	ND	ND	1.61	1.4	ND	ND	0.013
Apr-1999	ND	ND	NA	ND	ND	1.12	ND	ND	8.54	8.47	ND	ND	0.027
Oct-1999	ND	0.01	NA	ND	0.759	ND	ND	ND	1.51	1.37	ND	ND	0.016
Apr-2000	ND	ND	NA	ND	ND	ND	ND	ND	2.26	2.21	ND	ND	0.044
Oct-2000	ND	ND	NA	ND	0.712	0.577	ND	ND	1.42	1.37	ND	ND	0.023
Apr-2001	ND	NA	NA	ND	1.66	NA	ND	ND	1.53	NA	ND	ND	0.016
Sep-2001	ND	ND	NA	ND	0.9	1.09	ND	ND	1.72	1.67	ND	ND	0.019
Mar-2002	ND	ND	NA	ND	0.948	0.868	ND	ND	2.74	1.78	ND	ND	0.02
Sep-2002	ND	ND	NA	ND	0.833	ND	ND	ND	1.68	1.65	ND	ND	0.022
Mar-2003	ND	ND	NA	ND	1.42	0.569	ND	ND	3.83	3.32	ND	ND	0.035
Oct-2003	ND	0.012	NA	0.012	ND	ND	ND	ND	2.35	1.61	ND	ND	0.122
Apr-2004	0.01	ND	ND	0.017	1.35	0.73	ND	ND	15.1	16	ND	0.034	0.081
Oct-2004	ND	ND	ND	ND	1.55	0.598	ND	ND	2.9	2.08	ND	ND	0.064
Apr-2005	ND	ND	ND	ND	0.83	0.69	ND	ND	6.96	6.52	ND	ND	0.082
Oct-2005	ND	ND	ND	ND	0.686	0.545	ND	ND	2.05	1.3	ND	ND	0.039
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	6.12	7.09	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.75	0.694	ND	ND	1.7	1.43	ND	ND	0.039
Mar-2007	ND	ND	ND	ND	0.74	0.512	ND	ND	21.4	21.3	ND	ND	0.037

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-23***												
Sep-2007	ND	ND	ND	ND	0.873	0.671	ND	ND	1.82	1.79	ND	ND	0.016
Mar-2008	ND	ND	ND	ND	0.915	0.793	ND	ND	1.84	1.58	ND	ND	0.058
Sep-2008	ND	ND	ND	ND	0.706	0.652	ND	ND	1.49	1.4	ND	ND	0.026
Mar-2009	ND	ND	ND	ND	0.775	0.721	ND	ND	2.38	2.36	ND	ND	0.023
Oct-2009	0.016	ND	ND	ND	0.722	ND	ND	ND	1.67	1.51	ND	ND	0.12
Apr-2010	ND	ND	ND	ND	0.752	0.579	ND	ND	5.28	5.44	ND	ND	0.036
Oct-2010	ND	ND	ND	ND	0.735	0.653	ND	ND	2.03	1.97	ND	ND	0.041
Apr-2011	0.011	ND	ND	ND	0.801	ND	ND	ND	13.3	12.4	ND	0.013	0.066
Sep-2011	0.013	ND	ND	0.013	0.985	0.574	ND	ND	2.52	2.06	ND	ND	0.042
Mar-2012	0.014	ND	ND	ND	0.68	ND	ND	ND	10.5	10.5	ND	ND	0.057
Sep-2012	0.0157	0.0131	ND	0.0032 J	1	0.679	ND	ND	1.84	1.85	ND	ND	0.0594
Mar-2013	0.024	0.0208	0.000095 J	0.0051 J	1.57	1.58	ND	0.000036 J	26	26.8	ND	ND	0.111
Oct-2013	0.0286	0.0171	ND	0.0058 J	0.933	0.397 J	ND	ND	1.32	1.55	0.000312 J	0.0149	0.134
Mar-2014	0.026	0.0181	ND	0.0101 J	0.856	0.752	ND	0.000044 J	1.57	1.65	ND	0.0063 J	0.0335
Oct-2014	0.0115	0.0125	ND	0.0051 J	0.936	0.923	ND	ND	5	5.16	ND	ND	0.0084 J
Apr-2015	0.0492	0.029	ND	0.0055 J	1.25	1.02	ND	ND	6.82	6.98	ND	0.0034 J	0.014
Nov-2015	0.0908	0.0381	ND	0.0062 J	1.65	0.943	0.0014 J	ND	7.18	7.04	ND	0.0088 J	0.0284
May-2016	0.0427	0.0402	ND	0.0036 J	0.987	1	ND	ND	4.26	4.26	ND	ND	0.0144 J
Oct-2016	0.0339	0.0342	ND	0.0038 J	0.988	1.02	ND	ND	3.95	4.07	ND	ND	0.0099 J
May-2017	0.0212	0.0215	ND	0.0037 J	0.923	1.02	ND	ND	3.98	4.11	ND	ND	0.0089 J
Oct-2017	0.0189	0.0193	ND	0.0035 J	0.971	1.06	ND	ND	4.17 J-	4.32	ND	ND	0.0101 J
May-2018	0.019	0.017	ND	0.0092	1.1 J	ND	0.0006 JB	ND	4.2 J	4.2 J	ND	0.0035	0.011
Nov-2018	0.02	0.017	ND	0.0069	1.2 J	1.6 J	0.00012 J	ND	2.4 J	4 JB	ND	0.0026	0.011
May-2019	0.024	0.021	ND	0.022	ND	ND	ND	ND	ND	ND	ND	0.0034	0.012

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-23***												
Oct-2019	0.019	0.016	*ND*	0.0094	*1.1 J*	*1.1 J*	*ND*	*ND*	*3.2 J*	*3.2 J*	*ND*	*ND*	0.022
May-2020	0.032	0.028	*ND*	0.055	*ND*	*1.4 J*	*ND*	*ND*	*3.3 J*	*3.1 J*	*ND*	0.012	0.0097
Oct-2020	0.019	0.016	*ND*	0.026	*ND*	*ND*	*ND*	*ND*	*2.5 J*	*2.9 J*	*ND*	*0.0025 J*	*ND*
Apr-2021	0.014	0.012	*0.00006 J*	0.014	1.1	0.96	*ND*	*ND*	3.9	3.4	*ND*	*ND*	*0.0068 J*
Oct-2021	0.012	0.012	*ND*	0.016	1	1.1	*ND*	*ND*	4.4	4.6	*ND*	*ND*	0.0059

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-23***																
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-23*																
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1 J	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-23*																
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-23***															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-23***															
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.44 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-23***															
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.189 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-23***															
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Feb-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-23***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*0.66 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*0.26 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-23***															
May-2017	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.292 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-24***											
Apr-1995	47.4	31	ND	30.1	9.4	ND	ND	8.8	125	7	77	17.9
Apr-1997	ND	2	ND	ND	7	0.17	ND	NA	NA	0.1	51	12
Oct-1997	3	3	0.26	ND	7.44	ND	ND	5.58	40.5	ND	16	ND
Apr-1998	ND	ND	0.23	ND	5.44	0.14	ND	5.65	47.7	ND	10	7.4
Apr-1999	ND	ND	0.46	ND	24.7	0.125	ND	5.03	39.3	ND	37	6
Oct-1999	ND	ND	0.08	ND	6.98	0.299	ND	5.39	36.8	ND	32	7.2
Apr-2000	5	5	0.61	ND	7.27	0.227	ND	5.84	33	ND	28	10
Oct-2000	7.9	NA	ND	ND	5.45	ND	ND	5.18	29.1	5	28	6.34
Apr-2001	4.1	NA	0.26	ND	6.18	ND	ND	NA	NA	ND	25	8.5
Sep-2001	2	2	ND	ND	9.87	1.38	ND	4.81	42	38.6	38	6.77
Mar-2002	3.6	3.6	ND	ND	9.49	ND	ND	5.1	49	ND	37	7.42
Sep-2002	4	4	ND	ND	9.42	ND	ND	6.1	46.1	ND	24	8.25
Mar-2003	3.6	3.6	ND	ND	7.39	0.256	ND	5.1	45	ND	50	8.22
Oct-2003	4.2	4.2	ND	ND	7.42	0.24	ND	4.6	51.7	ND	17	9.13
Apr-2004	4.2	4.2	ND	ND	8.28	0.174	ND	4.7	51.2	ND	45	13.1
Oct-2004	4.2	4.2	ND	ND	9.13	0.223	ND	4.85	47.8	ND	42	9.83
Apr-2005	18	18	ND	ND	10.2	0.25	ND	5.5	66.4	ND	65	13.6
Oct-2005	5	5	ND	ND	6.25	0.28	ND	4.4	38.4	ND	38	6.16
Mar-2006	4.9	4.9	ND	ND	7.6	0.28	ND	5.6	60.3	1.16	42	5.83
Sep-2006	4.3	4.3	ND	ND	6.63	0.25	ND	4.9	43	1.07	37	6.71
Mar-2007	4.7	4.7	ND	ND	8.12	0.2	ND	4.7	45.9	ND	ND	7.64
Sep-2007	5.3	5.3	ND	ND	8.37	0.14	ND	5.6	41.8	ND	57	7.71
Mar-2008	16	16	ND	ND	21.1	1.01	ND	4.8	44.6	6.71	37	11.9
Sep-2008	6.3	6.3	ND	ND	9.79	0.09	ND	4.8	45.9	1.15	34	8.4
Mar-2009	5.8	5.8	ND	ND	15.8	0.07	ND	4.7	73.6	1.67	43	13.4
Oct-2009	7	7	ND	ND	12.5	0.08	ND	4.7	60.3	2.3	64	11.7
Mar-2010	7.5	7.5	0.44	11.8	13.9	0.07	ND	4.82	75	4.01	62	12
Oct-2010	6	6	ND	ND	12.2	ND	ND	4.6	59.2	4.05	37	11.6
Apr-2011	7.1	7.1	ND	ND	11.4	0.07	ND	4.5	62.6	3.6	66	10.4
Sep-2011	7.1	7.1	ND	ND	11.7	0.08	ND	4.7	57.6	3.44	52	12
Mar-2012	6.8	6.8	ND	ND	12	0.09	ND	4.1	61.4	3.98	46	12.3
Sep-2012	6	6	ND	ND	11.9	0.125	ND	3.6	59.3	3.23	46	12.1
Mar-2013	5.84	5.84	ND	ND	12.1	0.135	ND	4.9	60.9	3.23	51	9.7
Oct-2013	6.76	6.76	ND	ND	13	0.109	ND	5.7	62.3	3.7	46	13.5
Mar-2014	6.52	6.52	ND	ND	13.5	0.138	ND	5	66.7	3.68	460	13.4
Oct-2014	ND	ND	ND	ND	13.3	0.137	ND	4.9	67.8	4.81	34	14.7
Apr-2015	7.44	7.44	ND	ND	14.7	0.0722	ND	3.9	66	4.46	48	15.2

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-24***											
Nov-2015	4.52	4.52	*ND*	*6 J*	14.7	0.0738	*ND*	5	94.1	5.42	55	14.9
May-2016	4.4	4.4	*ND*	*ND*	13.7	0.0732	*ND*	5	89.7	4.15	47	14.7
Oct-2016	5.48	5.48	*ND*	*ND*	14.9	*NA*	*NA*	4.9	97.2	4.7	51	14.2
May-2017	3.56	3.56	*ND*	*ND*	14.7	0.334	*ND*	4.9	105.5	5.01	*21 J*	15.5
Oct-2017	2	2	*0.144 J*	*ND*	15.2	0.408	*ND*	5.1	110.4	3.28	53	16.2
May-2018	*4 J*	*ND*	*ND*	*7.9 J*	14.5	0.41	*ND*	5.3	97.5	*5.5 J*	43	17.4
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	16.5	0.73	*ND*	4.58	86.7	*7.1 J*	47	19.4
May-2019	*ND*	*NA*	*ND*	*ND*	19.8	0.61	*ND*	4.56	78.3	*ND*	61	21.2
Oct-2019	*4 J*	*NA*	*ND*	*ND*	18.2	0.63	*ND*	4.21	102.8	*8.4 J*	104	23.9
May-2020	*ND*	*NA*	*ND*	*ND*	16.1	0.25	*ND*	4.29	89.6	*9.2 J*	30	19.2
Oct-2020	*2 J*	*NA*	*ND*	*ND*	15.8	0.28	*ND*	4.47	82.2	8.2	38	19.8
Apr-2021	*ND*	*NA*	*ND*	*ND*	24.4	1.1	*ND*	4.61	129.3	*ND*	72	22.2
Oct-2021	12	*NA*	*ND*	*ND*	22.1	1	*ND*	4.8	165	*5.2 J*	55	22.6

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24***													
Apr-1995	ND	ND	ND	ND	ND	43.2	NA	0.01	ND	ND	1.7	0.07	ND	2.4	NA
Oct-1996	ND	ND	0.026	ND	ND	1.9	1.6	ND	ND	ND	0.22	ND	ND	0.87	0.71
Apr-1997	ND	ND	0.018	ND	ND	1.4	1.8	ND	ND	ND	ND	ND	ND	0.85	1.1
Oct-1997	ND	ND	0.019	ND	ND	1.36	1.39	ND	ND	ND	0.201	ND	ND	0.886	0.897
Apr-1998	ND	ND	0.021	ND	ND	1.44	1.41	ND	ND	ND	0.198	ND	ND	0.918	0.908
Apr-1999	ND	ND	0.015	ND	ND	1.16	1.19	ND	ND	ND	ND	ND	ND	0.747	0.759
Oct-1999	ND	ND	0.018	ND	ND	1.28	1.2	ND	ND	ND	0.085	0.058	ND	0.836	0.776
Apr-2000	ND	ND	0.018	ND	ND	2.77	1.23	0.021	ND	ND	3.87	0.571	ND	0.828	0.694
Oct-2000	ND	ND	0.014	ND	ND	1.23	1.23	ND	ND	ND	0.053	ND	ND	0.792	0.81
Apr-2001	ND	ND	0.017	ND	ND	2.03	NA	ND	ND	ND	1.27	NA	ND	0.842	NA
Sep-2001	ND	ND	0.016	ND	ND	1.29	1.41	ND	ND	ND	0.175	0.111	ND	0.863	0.9
Mar-2002	ND	ND	0.02	ND	ND	1.44	1.44	ND	ND	ND	0.132	0.121	ND	0.929	0.919
Sep-2002	ND	ND	0.022	ND	ND	1.68	1.58	ND	ND	ND	0.251	0.189	ND	0.987	0.97
Mar-2003	ND	ND	0.02	ND	ND	1.73	1.41	ND	ND	ND	0.185	0.083	ND	0.945	0.943
Oct-2003	ND	ND	0.022	ND	ND	1.87	1.47	ND	ND	ND	0.161	0.089	ND	1.08	1.01
Apr-2004	ND	ND	0.027	ND	ND	3.01	1.85	ND	ND	ND	1.65	0.177	ND	1.36	1.25
Oct-2004	ND	ND	0.025	ND	ND	1.85	1.84	ND	ND	ND	0.379	0.275	ND	1.27	1.26
Apr-2005	ND	ND	0.024	ND	ND	3.6	1.85	ND	ND	ND	4.47	1.07	ND	1.12	0.975
Oct-2005	ND	ND	0.017	ND	ND	1.15	1.11	ND	ND	ND	0.199	0.112	ND	0.801	0.773
Mar-2006	ND	ND	0.015	ND	ND	1.08	0.969	ND	ND	ND	ND	ND	ND	0.765	0.723
Sep-2006	ND	ND	0.017	ND	ND	1.24	1.23	ND	ND	ND	0.077	0.051	ND	0.876	0.921

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24***													
Mar-2007	ND	ND	0.022	ND	ND	1.33	1.36	ND	ND	0.118 J	ND	ND	ND	1.05	1.06
Sep-2007	ND	ND	0.02	ND	ND	1.42	1.29	ND	ND	ND	0.066	0.052	ND	1.01	0.956
Mar-2008	ND	0.002	0.024	ND	ND	2.9	1.93	ND	ND	ND	3.09	1.41	ND	1.13	0.988
Sep-2008	ND	ND	0.022	ND	ND	1.43	1.37	ND	ND	ND	0.128	0.096	ND	1.17	1.13
Mar-2009	ND	ND	0.036	ND	ND	2.39	2.32	ND	ND	ND	0.103	0.074	ND	1.8	1.76
Oct-2009	ND	ND	0.033	ND	ND	2.1	1.93	ND	ND	ND	0.189	0.137	ND	1.56	1.45
Mar-2010	ND	ND	0.04	ND	ND	2.08	1.85	ND	ND	ND	0.079	ND	ND	1.66	1.47
Oct-2010	ND	ND	0.027	ND	ND	1.99	1.98	ND	ND	ND	ND	ND	ND	1.62	1.63
Apr-2011	ND	ND	0.033	ND	ND	1.78	1.74	ND	ND	ND	0.064	ND	ND	1.45	1.42
Sep-2011	ND	ND	0.034	ND	ND	2.07	2.03	ND	ND	ND	ND	ND	ND	1.66	1.61
Mar-2012	ND	ND	0.039	ND	ND	1.95	1.86	ND	ND	ND	ND	ND	ND	1.8	1.73
Sep-2012	ND	ND	0.0356	0.000072 J	ND	2.02	2.16	ND	0.0038 J	0.0027 J	0.0281 J	0.0308 J	ND	1.71	1.79
Mar-2013	ND	ND	0.0295	ND	ND	1.69	2.07	ND	0.0031 J	0.002 J	0.0085 J	0.007 J	0.0013 J	1.33	1.65
Oct-2013	ND	ND	0.0423	ND	ND	2.28	2.19	0.0025 J	0.0045 J	0.0021 J	ND	ND	ND	1.9	1.79
Mar-2014	ND	ND	0.0438	ND	0.000104 J	2.35	2.36	0.0012 J	0.0039 J	0.0021 J	0.041 J	0.0637	ND	1.84	1.82
Oct-2014	0.000819 J	ND	0.0449	ND	0.000131 J	2.43	2.4	ND	0.0047 J	0.0033 J	0.0107 J	0.0112 J	ND	2.1	2.07
Apr-2015	0.000837 J	ND	0.0467	ND	0.000153 J	2.5	2.56	ND	0.0049 J	0.0027 J	0.371	0.101	ND	2.19	2.21
Nov-2015	ND	ND	0.0444	ND	0.000201 J	2.45	2.52	ND	0.0049 J	0.0022 J	ND	ND	ND	2.13	2.2
May-2016	ND	ND	0.0444	0.000079 J	ND	2.34	2.37	ND	0.0052	0.002 J	ND	ND	ND	2.15	2.17
Oct-2016	ND	ND	0.0422	ND	ND	2.44	2.37	ND	0.0051	0.0022 J	ND	ND	ND	1.98	2.16
May-2017	ND	ND	0.0461	ND	ND	2.42	2.49	0.00069 J	0.0054	0.0022 J	ND	ND	ND	2.29	2.39
Oct-2017	ND	ND	0.0494	0.000072 J	ND	2.64	2.59	ND	0.0058	0.0024 J	ND	ND	ND	2.34	2.34
May-2018	0.000084 J	ND	0.053	0.000074 J	0.00015 J	2.8	2.6	0.0025 J	0.0056	0.003 B	ND	ND	0.000018 J	2.5	2.3
Nov-2018	ND	ND	0.06	0.000089 J	0.00017 J	3.1	3	0.0024 J	0.0062	0.0038	ND	ND	0.00014 JB	2.8	2.9

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24***													
May-2019	*ND*	*ND*	0.068	*ND*	*ND*	3.4	3.6	*ND*	0.0075	0.0031	*ND*	*ND*	*ND*	3.1	3.3
Oct-2019	*0.00011 J*	*ND*	0.072	*0.00012 J*	*0.00044 J*	3.8	3.7	*0.0034 J*	0.0082	0.0067	*ND*	*ND*	*0.000058 J*	3.5	3.4
May-2020	*0.000059 J*	*ND*	0.059	*ND*	*ND*	3.4	3.1	*0.0054 J*	0.0069	0.0027	*ND*	*ND*	*ND*	3.2	3
Oct-2020	*ND*	*ND*	0.045	*ND*	*ND*	3.2	3.1	*0.0034 J*	0.0054	*ND*	*ND*	*ND*	*ND*	2.9	2.9
Apr-2021	*ND*	*ND*	0.074	*ND*	*ND*	3.5	3.5	*ND*	0.0086	*0.0049 J*	*ND*	*ND*	*ND*	3.3	3.4
Oct-2021	*ND*	*ND*	0.071	*ND*	*ND*	3.6	3.7	*ND*	0.009	0.0038	*ND*	*ND*	*ND*	3.3	3.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-24*												
Apr-1995	0.1	NA	ND	ND	4.6	NA	ND	ND	2.8	NA	ND	ND	0.07
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	2.6	2.7	ND	ND	0.023
Apr-1997	ND	0.011	**0.0023**	ND	ND	1.3	ND	ND	2.5	2.6	ND	ND	ND
Oct-1997	ND	ND	0.0007	ND	1.47	1.28	ND	ND	2.09	2.09	ND	ND	0.013
Apr-1998	0.01	0.011	0.0006	ND	1.13	ND	ND	ND	2.19	2.18	ND	ND	0.011
Apr-1999	ND	ND	NA	ND	ND	1.44	ND	ND	1.94	1.9	ND	ND	ND
Oct-1999	ND	ND	NA	ND	1.03	1.26	ND	ND	2.14	1.97	ND	ND	ND
Apr-2000	0.032	0.011	NA	ND	0.764	ND	ND	ND	2.49	2.14	ND	ND	ND
Oct-2000	ND	ND	NA	ND	0.887	0.986	ND	ND	2.27	2.33	ND	ND	ND
Apr-2001	0.017	NA	NA	ND	1.51	NA	ND	ND	2.57	NA	ND	ND	ND
Sep-2001	0.011	0.01	NA	ND	0.638	2.07	ND	ND	2.97	2.99	ND	ND	ND
Mar-2002	0.011	0.011	NA	ND	1.65	1.54	ND	ND	3.09	2.93	ND	ND	ND
Sep-2002	0.012	0.011	NA	ND	1.06	1.12	ND	ND	3.57	3.34	ND	ND	ND
Mar-2003	0.011	0.01	NA	ND	2.14	1.47	ND	ND	3.11	3.07	ND	ND	ND
Oct-2003	0.012	ND	NA	ND	0.645	0.609	ND	ND	4.39	3.25	ND	ND	0.015
Apr-2004	0.026	0.015	0.0012	ND	2.08	1.14	ND	ND	3.57	3.42	ND	ND	ND
Oct-2004	0.016	0.015	0.0007	ND	1.48	1.3	ND	ND	3.6	3.55	ND	ND	ND
Apr-2005	0.036	0.016	0.0002	ND	1.17	1.08	ND	ND	3.72	3.35	ND	ND	ND
Oct-2005	ND	ND	0.0002	ND	0.827	0.771	ND	ND	2.84	2.96	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.774	0.75	ND	ND	3.4	3.19	ND	ND	ND
Sep-2006	ND	ND	0.0002	ND	0.908	1.02	ND	ND	3.02	3.22	ND	ND	ND
Mar-2007	ND	ND	0.0012	0.057 J	1.02	1.04	ND	ND	3.14	3.36	ND	ND	0.102 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-24*												
Sep-2007	ND	ND	0.0016	ND	1.09	1.03	ND	ND	3.73	3.74	ND	ND	ND
Mar-2008	0.027	0.017	0.0008	ND	1.2	1.12	ND	ND	3.85	3.24	ND	ND	ND
Sep-2008	0.012	0.012	0.0003	ND	0.999	0.976	ND	ND	3.75	3.75	ND	ND	ND
Mar-2009	0.02	0.019	0.0008	ND	1.47	1.42	ND	ND	5.32	5.22	ND	ND	ND
Oct-2009	0.018	0.016	0.0002	ND	1.15	1.04	ND	ND	4.82	4.62	ND	ND	ND
Mar-2010	0.018	0.016	ND	ND	1.44	1.31	ND	ND	5.88	6.35	ND	ND	ND
Oct-2010	0.018	0.019	ND	ND	1.3	1.3	ND	ND	7.13	7.13	ND	ND	ND
Apr-2011	0.016	0.016	0.0002	ND	1.03	0.997	ND	ND	6.32	6.2	ND	ND	ND
Sep-2011	0.018	0.018	ND	ND	1.25	1.22	ND	ND	6.48	6.42	ND	ND	ND
Mar-2012	0.02	0.019	ND	ND	1.25	1.2	ND	ND	6	5.87	ND	ND	ND
Sep-2012	0.0197	0.0208	ND	0.0044 J	1.14	1.23	ND	ND	5.64	5.82	ND	ND	0.0074 J
Mar-2013	0.0165	0.0195	0.000081 J	0.0035 J	0.848	1.07	ND	ND	4.31	5.26	ND	ND	0.0123
Oct-2013	0.0225	0.0215	ND	0.0049 J	1.15	1.09	ND	ND	6.2	5.73	0.0004 J	0.000639 J	0.0189
Mar-2014	0.0238	0.0219	ND	0.0049 J	1.15	1.15	ND	ND	5.94	5.79	0.000109 J	0.000843 J	0.0051 J
Oct-2014	0.0236	0.0234	0.000564	0.0054 J	1.31	1.29	ND	ND	7.18	7.14	ND	ND	0.0085 J
Apr-2015	0.025	0.0252	0.000477	0.0055 J	1.24	1.27	ND	ND	7.05	7.19	ND	ND	0.0112
Nov-2015	0.0252	0.0259	0.000072 J	0.0056 J	1.26	1.31	ND	ND	7.23	7.46	ND	ND	0.0126
May-2016	0.0243	0.024	0.00015 J	0.005	1.24	1.22	ND	ND	7.02	7.03	ND	ND	0.0076 J
Oct-2016	0.0232	0.0284	0.00036	0.0059	1.15	1.25	ND	ND	6.59	7.01	ND	ND	0.0064 J
May-2017	0.0264	0.0264	0.00046	0.0061	1.18	1.24	ND	ND	6.51	6.79	ND	ND	0.008 J
Oct-2017	0.0278	0.0283	0.00089	0.0051	1.27	1.33	ND	ND	6.67 J-	6.66	ND	ND	0.0078 J
May-2018	0.026	0.027	0.00076	0.0066	ND	ND	0.0012 JB	ND	7.9	7.3	ND	0.0044	0.01
Nov-2018	0.038	0.032	0.00057	0.0071	1.4 J	1.9 J	0.00019 J	ND	6.5	8.1 B	ND	0.003	0.011
May-2019	0.041	0.041	**0.0023**	0.0084	ND	ND	ND	ND	7.9	8.2	ND	0.0042 B	0.011

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-24***												
Oct-2019	0.041	0.04	0.0019 M1	0.0083	*1.5 J*	*1.5 J*	*ND*	*ND*	8.8	8.7	*ND*	*ND*	0.02
May-2020	0.038	0.35	0.00039	0.0074	*ND*	*ND*	*0.00036 J*	*ND*	7.7	7.4	*ND*	0.011	0.0082
Oct-2020	0.038	0.037	0.00042	0.0056	*ND*	*1.1 J*	*ND*	*ND*	7.3	6.7	*ND*	*0.00082 J*	*ND*
Apr-2021	0.044	0.045	0.00057	0.01	1.3	1.2	*ND*	*ND*	10.1	9.9	*ND*	*ND*	0.01
Oct-2021	0.045	0.046	0.00054	0.0089	1.3	1.3	*ND*	*ND*	12	12.7	*0.000027 J*	*ND*	0.01

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24*																
Oct-1996	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	0.6 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	1.5	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7 J	ND
Apr-2004	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24*																
Mar-2007	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	5.8	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Jun-2009	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.8	ND
Mar-2010	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	6.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	6.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	4.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	5.59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	6.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	7.35	ND	ND	ND	ND	ND	ND	0.27 J	0.55 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	6.96	ND	ND	ND	ND	ND	ND	0.27 J	0.47 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	6.14	ND	ND	ND	ND	ND	ND	0.25 J	0.44 J	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	7.87	ND	ND	ND	ND	ND	ND	0.29 J	0.32 J	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	6.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	6.7	0.1 J	ND	ND	ND	ND	0.1 J	0.3 J	0.3 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	7	0.1 J	ND	ND	ND	ND	0.1 J	0.2 J	0.3 J	1.4 J	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	0.1 J	0.2 J	0.3 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24*																
Oct-2017	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3 JB	ND
Nov-2018	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	5.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	2.07	ND	ND	ND	ND	ND	ND	ND	0.126 J	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24***															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	9.5	4.4
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	9	1
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	5	6.5
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	5	2.4
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	0.9 J	NA	NA	NA	ND	0.8 J
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	1.3	1
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	1.9	NA	ND	NA	2	2
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	7.1	1.6
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	4.8	2
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	5.8	2.4
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	5.7	2.3
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	9.7	5.3
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	4.8	2.8
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	12	7.4
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3	ND	ND	ND	15	7.8
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	6.2	6.4
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2	ND	ND	ND	6.6	7.4
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	6	2.1
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	7.6	2.4
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	7.6	1.6

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24***															
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	7.2	2.5
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	15.2	2.3
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	7.2	2.9
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	10.7	7.4
Mar-2009	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	ND	ND	ND	17.6	10.4
Jun-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	17.4	8
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	9.7	6.1
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4 J	12.2
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND	ND	ND	24.1	10
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	ND	ND	ND	ND	10
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	24	12.3
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	20.1	11.3
Sep-2012	0.27 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.39	ND	ND	ND	10.4	6.77
Mar-2013	0.28 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	12.4	9.38
Oct-2013	0.49 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.41 J,B	4.95	ND	ND	ND	11.8	10.7
Mar-2014	0.47 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	ND	ND	ND	14.9 J	10.1
Oct-2014	0.37 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.59 J,B	3.92	ND	ND	ND	9.73	7.49
Apr-2015	0.61 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.68	ND	ND	ND	9.67	9.41
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.4	ND	ND	ND	20.3 J	8.2
May-2016	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	3.5	ND	ND	ND	9.4	9.3
Oct-2016	0.3 J	ND	ND	ND	ND	ND	ND	ND	0.1 J	0.2 J	0.8 J	2.3	ND	ND	ND	9.2	9.9
May-2017	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J,B	ND	1.7	ND	ND	ND	5.8	5.6

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24***															
Oct-2017	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	1.5	*ND*	*ND*	*ND*	5.1	4.9
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	9.2	4.7
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*0.86 JN3*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2 CL	2.2 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.7	2.1
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	7.3	4.5
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	9	4.7
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.282 J*	*ND*	*ND*	*ND*	*1.54 J*	*1.49 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*1 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24***															
Oct-1996	ND	ND	NA	NA	ND	NA	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	2.5	ND	ND	ND	ND	0.9 J	0.7 J	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	1.9	ND	ND	ND	ND	0.8 J	0.7 J	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	0.7 J	ND	ND	NA	NA	ND	0.5 J	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	0.6 J	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	1.6	ND	ND	NA	NA	0.6 J	0.9 J	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	2.1	ND	ND	ND	ND	0.6 J	0.6 J	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	2.8	ND	ND	ND	ND	0.7 J	0.7 J	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	2.7	ND	ND	ND	ND	0.6 J	0.6 J	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	4.4	ND	ND	ND	ND	1.2	1.2	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	2.8	ND	ND	ND	ND	0.6 J	0.6 J	ND	ND	NA
Oct-2003	ND	ND	ND	NA	1.1	ND	ND	4.6	ND	ND	ND	ND	1.6	1.1	ND	ND	NA
Apr-2004	ND	ND	ND	NA	2.3	ND	ND	5	ND	ND	ND	ND	1.8	1.1	ND	0.9 J	NA
Oct-2004	ND	ND	ND	NA	1.6	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	0.6 J	ND	ND	4.2	ND	ND	ND	ND	1.5	1.1	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	3.4	ND	ND	ND	ND	0.8 J	0.7 J	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	ND	0.8 J	0.9 J	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-24*															
Sep-2006	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	3.6	ND	ND	ND	ND	1.2	0.9 J	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	3.7	ND	ND	ND	ND	1.5	1.9	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	1.1	1.1	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	5	ND	ND	ND	ND	3.1	5.1	ND	1.1	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	**9.2 C**	ND	ND	ND	ND	**8.4 C**	ND	ND	ND	NA
Jun-2009	ND	ND	ND	ND	ND	ND	ND	**8**	ND	ND	ND	ND	**5.9**	1.1	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	**6**	ND	ND	ND	ND	4.1	1 J	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	**11.7**	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	**11**	ND	ND	ND	ND	ND	1.5	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	**11.8**	ND	ND	ND	ND	**7.2**	1.3	ND	1.4	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	**11.8**	ND	ND	ND	ND	**7.8**	1.4	ND	ND	NA
Mar-2012	ND	ND	ND	ND	0.5 J	ND	ND	**11**	ND	ND	ND	ND	**7.1**	1.3	ND	0.8 J	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	**8.9**	ND	ND	ND	ND	**5.44**	1.04	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	**7.14**	ND	ND	ND	ND	**5.73**	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.16 J	ND	ND	ND	**8.91**	ND	ND	ND	ND	**8.32**	1.08	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	**7.46**	ND	ND	ND	ND	**7.33**	0.88 J	ND	ND	ND
Oct-2014	ND	ND	ND	0.13 J	ND	ND	ND	**6.5**	ND	ND	ND	ND	**5.75**	0.76 J	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	**6.29**	ND	ND	ND	ND	**6.48**	0.69 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	**5.1**	ND	ND	ND	ND	**5.2**	0.6 J	ND	ND	ND
May-2016	ND	ND	ND	0.1 J	0.3 J	ND	ND	4.6	ND	ND	ND	ND	4.2	0.6 J	ND	0.2 J	ND
Oct-2016	ND	ND	ND	0.1 J	0.3 J	ND	ND	3.6	ND	ND	ND	ND	3.1	0.6 J	ND	0.2 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24***															
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	1.9	*0.1 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	1.7	*0.3 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2 B	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	2.2	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*0.98 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.106 J*	*ND*	*ND*	*ND*	*0.434 J*	*ND*	*ND*	*ND*	*ND*	*0.326 J*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-24A***											
Apr-1995	33	33	ND	94.6	5	ND	ND	5.4	472	137	278	19.3
Apr-1997	ND	4	ND	ND	16	ND	ND	NA	NA	16	79	21
Oct-1997	ND	ND	0.51	ND	18	ND	ND	5.1	125.9	9.64	70	26
Apr-1998	ND	ND	0.3	ND	11.1	0.19	ND	4.71	119.6	21.7	55	24
Apr-1999	ND	ND	1.3	ND	12	ND	ND	4.29	264	47.6	170	68
Oct-1999	ND	ND	0.43	ND	19.6	ND	ND	4.67	174	43.3	120	46
Apr-2000	ND	ND	0.92	ND	16.4	ND	ND	4.55	143	55.3	82	35
Oct-2000	ND	NA	0.75	15	13.1	ND	ND	4.27	154	43.4	102	30.6
Apr-2001	ND	NA	0.9	13	11	ND	ND	NA	NA	40	96	32
Sep-2001	ND	ND	0.48	ND	13.8	ND	ND	4.06	159	35.5	91	23.5
Mar-2002	ND	ND	0.64	ND	14.6	ND	ND	4.5	180	44.4	116	26.1
Sep-2002	ND	ND	0.69	ND	11.1	ND	ND	4.4	155.6	43.6	101	25.7
Mar-2003	ND	ND	0.78	ND	17.9	ND	ND	4.3	163.9	43.5	100	30
Oct-2003	ND	ND	0.31	12	12.2	0.086	ND	4.3	133.3	26.3	45	20.8
Apr-2004	1.2	1.2	0.41	14	11.8	ND	ND	4.4	106.5	29.6	96	18.2
Oct-2004	2	2	0.34	19	10.4	ND	ND	4.56	96.9	25.9	110	18.6
Apr-2005	4.3	4.3	0.55	17	8.3	ND	ND	4.7	107.4	36.4	90	26.3
Oct-2005	9.5	9.5	0.48	ND	9.29	ND	ND	4.4	108.9	32.9	76	25.4
Mar-2006	13	13	ND	ND	8.34	ND	ND	4.8	124.6	38.8	92	31.9
Sep-2006	4.8	4.8	0.46	ND	8.04	ND	ND	4.7	104.9	31.9	78	29.1
Mar-2007	7.6	7.6	ND	ND	8.51	ND	ND	4.7	92.7	25.8	71	26.2
Sep-2007	8.6	8.6	0.21	13	7.69	ND	ND	5.5	102.1	24.3	95	31.2
Mar-2008	23	23	0.56	16	11.4	ND	ND	5.2	117	35.2	78	38.7
Sep-2008	26	26	0.63	ND	7.48	ND	ND	5.3	109.6	23.2	97	40.6
Mar-2009	35	35	0.88	ND	6.32	ND	ND	5	133.6	27.1	82	45.9
Oct-2009	31	31	0.64	ND	6.74	ND	ND	5	119.3	23.4	86	42.2
Mar-2010	28	28	0.6	11.4	6.85	ND	ND	5.4	144	21.4	82	38.8
Oct-2010	31	31	0.46	ND	6.6	ND	ND	4.9	102.6	18.7	76	40.5
Apr-2011	28	28	0.72	ND	5.81	ND	ND	5	113.1	20.2	95	35.3
Sep-2011	18	18	0.26	ND	6.49	0.08	ND	5.1	92.1	15.3	75	29.7
Mar-2012	14	14	0.42	ND	5.81	0.27	ND	4.5	88.7	18.1	55	27.6
Sep-2012	14.7	14.7	0.29	ND	5.31	0.251	ND	4	108.9	32.9	84	47.1
Mar-2013	12	12	ND	ND	5.39	0.993	ND	5.2	98.8	26.1	74	36
Oct-2013	17	17	0.187 J	12	5.7	0.88	ND	5.7	103.4	27.5	80	45.1
Mar-2014	28	28	ND	6 J	5.32	0.992	ND	5.6	118.5	24.7	57	54.2
Oct-2014	37.4	37.4	ND	5 J	5.17	1.29	ND	5.7	115	18.2	78	58.2
Apr-2015	43.2	43.2	ND	ND	4.84	1.32	ND	5	121.9	18.5	80	72.7

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-24A***											
Nov-2015	33.2	33.2	*0.108 J*	*9 J*	5.49	1.41	*ND*	5.8	143	16.7	89	57.5
May-2016	43	43	*ND*	*6 J*	4.61	1.31	*ND*	6	168.5	16.2	84	62.2
Oct-2016	44.8	44.8	*ND*	*ND*	4.63	*NA*	*NA*	5.9	183.7	14	141	62.6
May-2017	50.2	50.2	*ND*	*5 J*	4.55	1.22	*ND*	5.9	214	15.3	75	63.2
Oct-2017	46.2	46.2	*0.125 J*	*ND*	4.83	1.35	*ND*	6.1	196	14.3	93	60.3
May-2018	42	42	*ND*	*ND*	6	1.5	*ND*	5.2	141.5	13.1	30	63
Nov-2018	26	26	*ND*	*7.9 J*	10	0.95	*ND*	5.43	116.4	10.7	72	46.4
May-2019	22 H1	*NA*	*ND*	*ND*	11.5	1.3	*ND*	5.34	96.9	14.7	91	42
Oct-2019	20	*NA*	*ND*	*6 J*	9	1	0.018	4.85	118.3	16.3	25	40.1
May-2020	36	*NA*	*ND*	*ND*	6.8	1.5	*ND*	5.12	132	15.2	66	56.3
Oct-2020	36	*NA*	*ND*	*ND*	7	1.6	*ND*	5.23	132.1	17.6	71	63.7
Apr-2021	40	*NA*	*ND*	*12.6 J*	6.4	1.9	*ND*	5.79	163	12.3	91	61.8
Oct-2021	*4 J4c*	*NA*	*0.059 J*	*8.3 J*	4.7	1.6	*ND*	5.83	203.2	17.9	84	69.7

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24A***													
Apr-1995	ND	ND	ND	ND	ND	4.6	NA	**0.156**	ND	ND	1.7	1.4	ND	1.9	NA
Oct-1996	ND	ND	0.14	ND	ND	3.3	3.2	ND	ND	ND	ND	ND	ND	2.4	2.3
Apr-1997	ND	ND	0.13	ND	ND	3.7	3.5	ND	ND	0.033	1.5	0.38	ND	2.6	2.4
Oct-1997	ND	ND	0.128	ND	ND	3.14	3.21	ND	0.012	0.019	4.55	4.5	ND	2.61	2.6
Apr-1998	ND	ND	0.144	ND	ND	4.11	4.09	ND	0.019	0.013	2.07	2.08	ND	3.45	3.42
Apr-1999	ND	ND	0.222	ND	ND	12.5	11.6	ND	0.079	0.017	3.29	3.04	ND	8.85	8.24
Oct-1999	ND	ND	0.139	ND	0.004	12.7	11.8	ND	0.066	0.032	1.83	1.71	ND	6.61	6.15
Apr-2000	ND	ND	0.114	ND	ND	8.15	7.71	ND	0.033	0.027	1.25	1.22	ND	3.61	3.42
Oct-2000	ND	ND	0.105	0.003	ND	7.02	6.68	ND	0.025	0.1	3.7	3.61	ND	3.16	3.04
Apr-2001	ND	ND	0.086	**0.005**	ND	7.41	NA	ND	0.024	0.111	4.67	NA	ND	3.26	NA
Sep-2001	ND	ND	0.075	ND	ND	5.4	6.14	ND	0.021	0.065	4.79	5.02	ND	2.44	2.61
Mar-2002	ND	ND	0.063	ND	ND	6.07	6.01	ND	0.02	0.069	5.4	5.53	ND	2.66	2.7
Sep-2002	ND	ND	0.061	ND	ND	5.94	5.94	ND	0.019	0.071	5.24	5.19	ND	2.64	2.64
Mar-2003	ND	ND	0.067	ND	ND	6.92	7.04	ND	0.019	0.052	5.66	5.67	ND	3.09	3.09
Oct-2003	ND	ND	0.079	ND	ND	4.5	3.99	ND	0.014	0.045	5.75	5.55	ND	2.33	2.23
Apr-2004	ND	ND	0.079	ND	ND	3.6	3.29	ND	0.015	0.045	8.23	7.57	ND	2.23	2.06
Oct-2004	ND	ND	0.088	ND	ND	3.56	3.5	ND	0.013	0.032	8.94	8.7	ND	2.36	2.31
Apr-2005	ND	ND	0.082	ND	ND	6.09	5.65	ND	0.013	0.072	7.77	7.8	ND	2.69	2.5
Oct-2005	ND	ND	0.075	ND	ND	5.94	5.6	ND	0.014	0.061	8.83	8.31	ND	2.56	2.42
Mar-2006	ND	ND	0.064	ND	ND	8	7.68	ND	ND	0.03	6.43	6.12	ND	2.89	2.78
Sep-2006	ND	ND	0.051	ND	ND	7.39	6.99	ND	ND	0.04	5.16	4.92	ND	2.58	2.46

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24A***													
Mar-2007	ND	ND	0.046	ND	ND	6.97	6.76	ND	ND	0.051	4.1	3.98	ND	2.13	2.08
Sep-2007	ND	ND	0.053	ND	ND	8.51	7.65	ND	ND	0.031	4.5	4.23	ND	2.44	2.27
Mar-2008	ND	ND	0.04	ND	ND	10.8	10.3	ND	ND	0.012	4.73	4.57	ND	2.83	2.74
Sep-2008	ND	ND	0.035	ND	ND	11.3	10.7	ND	ND	0.023	4.65	4.41	ND	3	2.84
Mar-2009	ND	ND	0.038	ND	ND	13	13.6	ND	ND	0.018	5.66	5.47	ND	3.26	3.2
Oct-2009	ND	ND	0.042	ND	ND	12.1	11.4	ND	ND	0.033	5.54	4.9	ND	2.91	2.68
Mar-2010	ND	ND	0.053	ND	ND	10.9	10.2	ND	ND	ND	4.81	4.91	ND	2.82	2.69
Oct-2010	ND	ND	0.053	ND	ND	11.4	11.3	ND	ND	ND	5.71	5.89	ND	2.91	2.9
Apr-2011	ND	ND	0.051	ND	ND	10.4	10.1	ND	ND	ND	6.16	5.92	ND	2.27	2.21
Sep-2011	ND	ND	0.057	ND	ND	8.4	8.51	ND	ND	ND	4.29	4.25	ND	2.11	2.1
Mar-2012	ND	ND	0.048	ND	ND	7.73	7.53	ND	ND	ND	4	3.8	ND	2.01	2
Sep-2012	ND	ND	0.0636	0.00011 J	ND	13.3	13.1	ND	0.0047 J	0.0081 J	0.498	0.509	ND	3.37	3.26
Mar-2013	ND	ND	0.0452	ND	0.000734 J	10.2	10.5	0.0023 J	0.0054 J	0.0141	0.546	0.531	0.0015 J	2.56	2.54
Oct-2013	ND	ND	0.0562	ND	0.000263 J	12.5	12.3	0.0034 J	0.0049 J	0.0172	ND	ND	ND	3.38	3.35
Mar-2014	ND	ND	0.048	ND	0.000148 J	15.7	15.6	0.0013 J	0.0023 J	0.0049 J	0.0821	0.0516	ND	3.65	3.67
Oct-2014	ND	ND	0.0448	ND	0.000135 J	17.2	17.5	ND	0.0016 J	0.0069 J	0.0096 J	0.008 J	ND	3.7	3.74
Apr-2015	0.000526 J	ND	0.0497	ND	ND	21.7	21.3	0.000514 J	0.0015 J	0.011	0.0228 J	0.0095 J	ND	4.5	4.4
Nov-2015	ND	ND	0.0481	ND	0.000106 J	17.2	16.7	0.000487 J	0.0021 J	0.0168	0.0671	ND	ND	3.52	3.45
May-2016	ND	ND	0.0506	ND	ND	18.3	18.6	0.00085 J	0.0018	0.0151	ND	ND	ND	3.99	3.95
Oct-2016	ND	ND	0.0425	ND	ND	18.9	18.3	0.00098 J	0.0015	0.0097	ND	ND	ND	3.74	3.78
May-2017	ND	ND	0.0383	ND	ND	19.1	19.9	0.00099 J	0.00092 J	0.0053	ND	ND	ND	3.77	4.06
Oct-2017	ND	ND	0.0364	ND	ND	18.6	20.8	ND	0.0015	0.0033 J	ND	ND	ND	3.34	3.6
May-2018	0.000079 J	ND	0.047	ND	0.000085 J	19.5	17.4	0.0035 J	0.002	0.0037 B	0.014 J	ND	ND	3.4	3.13
Nov-2018	ND	ND	0.042	ND	0.000096 J	14.4	14.3	0.0037 J	0.0024	0.0032	0.023	0.076	0.00008 JB	2.5	2.7

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24A***													
May-2019	*ND*	*ND*	0.065	*ND*	*ND*	12.7	13.4	0.0088	0.0061	0.0062	*ND*	*ND*	*ND*	2.5	2.6
Oct-2019	*0.00012 J*	*ND*	0.064	*0.0002 J*	*0.00047 J*	12	11.9	*0.0067 J*	0.0061	0.0086	*0.077 J*	*0.017 J*	*0.000096 J*	2.5	2.4
May-2020	*0.000074 J*	*ND*	0.059	*0.00011 J*	*ND*	16.4	16.6	*0.0064 J*	0.006	0.004	*0.02 J*	*ND*	*ND*	3.7	3.7
Oct-2020	*ND*	*ND*	0.073	*ND*	*ND*	18.9	18.2	*0.011 J*	0.0072	*ND*	0.16	*0.016 J*	*ND*	4	3.8
Apr-2021	*ND*	*ND*	0.064	*ND*	*ND*	19.2	19.3	*0.0027 J*	*0.0034 J*	*ND*	*0.067 J*	*ND*	*ND*	3.4	3.4
Oct-2021	*0.000073 J*	*ND*	0.068	*0.00018 J*	*ND*	21.5	21.5	0.0034	0.005	0.0044	0.066	*0.012 J*	*0.000033 J*	3.9	3.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-24A***												
Apr-1995	0.13	NA	ND	ND	135	NA	ND	0.02	18.1	NA	ND	ND	0.08
Oct-1996	0.1	0.096	NA	ND	ND	ND	ND	ND	3.4	5.1	ND	ND	0.074
Apr-1997	0.11	0.1	0.0005	ND	2	2	ND	ND	5.7	5.3	ND	ND	0.057
Oct-1997	0.13	0.131	ND	0.013	1.72	2.39	ND	ND	6.64	6.66	ND	ND	0.032
Apr-1998	0.14	0.156	0.0002	0.03	1.23	2.17	ND	ND	3.95	3.96	ND	ND	0.037
Apr-1999	0.804	0.746	NA	0.064	2.99	3.55	ND	ND	6.23	5.86	ND	ND	0.088
Oct-1999	0.862	0.805	NA	0.04	2.84	2.98	ND	ND	5.07	4.66	ND	ND	0.097
Apr-2000	0.442	0.424	NA	ND	2.65	1.56	ND	ND	4.89	4.64	ND	ND	0.061
Oct-2000	0.348	0.334	NA	ND	2.06	2.35	ND	ND	5.08	5.03	ND	ND	0.043
Apr-2001	0.357	NA	NA	0.013	2.61	NA	ND	ND	4.85	NA	ND	ND	0.038
Sep-2001	0.251	0.261	NA	0.02	1.65	2.26	ND	ND	4.65	4.61	ND	ND	0.028
Mar-2002	0.26	0.267	NA	ND	3.09	1.51	ND	ND	5.2	4.49	ND	ND	0.028
Sep-2002	0.252	0.25	NA	ND	2.85	2.46	ND	ND	4.53	4.51	ND	ND	0.023
Mar-2003	0.289	0.292	NA	ND	2.21	2.01	ND	ND	4.18	4.17	ND	ND	0.026
Oct-2003	0.211	0.202	NA	ND	1.18	1.42	ND	ND	5.56	4.31	ND	ND	0.047
Apr-2004	0.188	0.174	ND	ND	3.21	1.86	ND	ND	4.71	4.33	ND	ND	0.019
Oct-2004	0.179	0.173	0.0002	ND	2.61	1.55	ND	ND	4.64	4.36	ND	ND	0.017
Apr-2005	0.215	0.199	ND	ND	2.12	2.03	ND	ND	3.79	3.69	ND	ND	0.016
Oct-2005	0.21	0.2	0.0002	ND	2.23	2.02	ND	ND	3.62	3.38	ND	ND	0.016
Mar-2006	0.217	0.207	ND	ND	2.03	1.96	ND	ND	3.3	3.16	ND	ND	ND
Sep-2006	0.179	0.17	ND	ND	2.01	1.89	ND	ND	3.29	3.07	ND	ND	ND
Mar-2007	0.147	0.143	0.0003	ND	1.89	1.89	ND	ND	3.32	3.21	ND	ND	0.014

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-24A***												
Sep-2007	0.166	0.153	0.0006	ND	2.05	1.81	ND	ND	3.16	3.05	ND	ND	ND
Mar-2008	0.185	0.178	0.0007	ND	2.21	2.14	ND	ND	2.48	2.39	ND	ND	ND
Sep-2008	0.189	0.179	**0.0041 C**	ND	1.97	1.87	ND	ND	2.87	2.71	ND	ND	0.01
Dec-2008	NA	NA	**0.0031**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mar-2009	0.212	0.209	**0.0034**	ND	2.21	2.14	ND	ND	2.78	2.7	ND	ND	0.012
Oct-2009	0.194	0.181	**0.0144**	ND	2.16	1.97	ND	ND	2.71	2.65	ND	ND	ND
Mar-2010	0.196	0.189	0.0011	ND	2.36	2.13	ND	ND	2.8	3.1	ND	ND	ND
Oct-2010	0.187	0.183	0.0002	ND	2.76	2.68	ND	ND	2.83	2.8	ND	ND	0.012
Apr-2011	0.153	0.147	0.0008	ND	2	1.96	ND	ND	2.76	2.67	ND	ND	ND
Sep-2011	0.155	0.157	0.0004	ND	2.3	2.29	ND	ND	3.28	3.29	ND	ND	ND
Mar-2012	0.131	0.13	0.0004	ND	2.4	2.35	ND	ND	3.19	3.14	ND	ND	ND
Sep-2012	0.192	0.19	0.000044 J	0.0043 J	2.65	2.63	ND	ND	2.9	2.82	ND	ND	0.0042 J
Mar-2013	0.15	0.155	0.000091 J	0.0044 J	2.25	2.28	ND	0.000025 J	2.3	2.35	0.00035 J	ND	0.0163
Oct-2013	0.155	0.152	ND	0.0034 J	2.26	2.19	ND	ND	2.94	2.88	0.000199 J	0.000806 J	0.0133
Mar-2014	0.155	0.158	ND	0.002 J	2.26	2.22	ND	ND	2.38	2.39	0.000203 J	0.000563 J	ND
Oct-2014	0.151	0.154	0.000071 J	0.00099 J	2.61	2.64	ND	ND	2.53	2.55	ND	ND	ND
Apr-2015	0.172	0.169	0.000063 J	0.0011 J	2.95	2.93	ND	ND	2.75	2.69	ND	ND	0.0051 J
Nov-2015	0.17	0.162	0.000063 J	0.0014 J	2.77	2.74	0.000746 J	ND	2.85	2.84	ND	ND	0.0038 J
May-2016	0.16	0.153	0.000065 J	ND	2.73	2.78	ND	ND	2.51	2.47	ND	ND	ND
Oct-2016	0.142	0.148	0.00014 J	0.0012 J	2.71	2.82	ND	ND	2.34	2.34	ND	ND	ND
May-2017	0.128	0.134	0.00022	0.00099 J	2.84	3.06	ND	ND	2.32	2.37	ND	ND	ND
Oct-2017	0.117	0.126	ND	ND	3.05	3.33	ND	ND	2.55 J-	2.6	ND	ND	ND
May-2018	0.11	0.1	0.00026	0.0024	2.6 J	2.51 J	0.00076 JB	ND	3.6 J	3.34 J	ND	0.0037	0.0035 JB
Nov-2018	0.091	0.094	ND	0.0038	3.2 J	3.7 J	0.00033 J	ND	2.6 J	4.3 JB	0.000092 J	0.003	0.004 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-24A***												
May-2019	0.13	0.13	0.0008	0.0068	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0036 B	0.0089
Oct-2019	0.13	0.14	**0.0023**	0.0051	*3.8 J*	*3.7 J*	*0.00035 J*	*ND*	*4.1 J*	*4 J*	*ND*	*ND*	0.019
May-2020	0.16	0.1	0.00022	0.0033	*3 J*	*2.9 J*	*0.00056 J*	*ND*	*2.9 J*	*2.8 J*	*ND*	0.0098	*0.0045 J*
Oct-2020	0.14	0.13	**0.0026**	0.007	*3.4 J*	*3 J*	*ND*	*ND*	*3.9 J*	*3.2 J*	*ND*	*0.0014 J*	*ND*
Apr-2021	0.11	0.1	0.001	*0.0028 J*	3	3.1	*ND*	*ND*	3.2	3.3	*ND*	*ND*	*0.0034 J*
Oct-2021	0.13	0.12	0.00025	0.0036	3.4	3.4	*ND*	*ND*	3.5	3.6	*0.000078 J*	*ND*	0.0058

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-24A***																
Oct-1996	ND	3.3	ND	ND	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	1	ND	ND	28	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	3	ND
Oct-1997	ND	1.8	ND	ND	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	1.2 J	ND	ND	35	ND	ND	ND	ND	ND	1.7	0.8 J	1.3 J	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	22	ND	NA	NA	NA	NA	1	ND	1.7	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	12	ND	ND	ND	ND	ND	0.6 J	ND	0.9 J	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	5.3	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	4.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24A*																
Mar-2007	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.45	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.93 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.56 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.58 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	0.33 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24A*																
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.3 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-24A*															
Oct-1996	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	39
Apr-1997	3	ND	ND	ND	ND	ND	ND	ND	13	ND	ND	2	ND	ND	ND	17	15
Oct-1997	2.6	ND	ND	ND	ND	ND	ND	ND	8.1	ND	ND	2.8	ND	ND	ND	6.7	47
Apr-1998	2.9	ND	ND	ND	ND	1.7	ND	ND	8.8	ND	ND	5.4	ND	ND	ND	15	35
Apr-1999	1.9	NA	NA	NA	NA	ND	NA	ND	4.3	ND	NA	3.4	NA	NA	NA	4	18
Oct-1999	1.1	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	1.8	ND	ND	ND	4	12
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	1	ND	NA	0.7 J	NA	ND	NA	2.5	5.4
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	5.1
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	5.5	5
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	2.1
Mar-2002	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	7.5	3
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	0.7 J	ND	ND	ND	8.6	4.1
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	0.6 J	ND	ND	ND	5.9	3.2
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	8.3	2.1
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	0.9 J	ND	ND	ND	12	3.1
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	0.6 J	ND	ND	ND	8.9	3.5
Apr-2005	0.5 J	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	1.1	ND	ND	ND	8.4	4.7
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	0.9 J	ND	ND	ND	8.3	3.1
Mar-2006	0.7 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.2	ND	ND	ND	8	5.2
Sep-2006	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	9.5	3.5

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24A***															
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	1.5
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.6	1.2
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	3
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	0.9 J
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.9 J
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.29 J	ND	ND	ND	0.6 J	1.17
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.47 J	0.86 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43 J	0.5 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.36 J	0.43 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.41 J,B	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	0.2 J	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J,B	ND	ND	ND	ND	ND	0.2 J	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	0.2 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24A***															
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.444 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24A***															
Oct-1996	ND	ND	NA	NA	**24**	NA	ND	3.2	ND	ND	ND	ND	3.7	ND	ND	ND	2.4
Apr-1997	ND	ND	NA	NA	**38**	NA	ND	4	ND	ND	ND	ND	5	ND	ND	**7**	4
Oct-1997	ND	ND	3.4	NA	**44**	3.5	ND	**8.3**	ND	ND	ND	ND	**7.5**	ND	ND	**4.8**	NA
Apr-1998	ND	ND	2.6	NA	**46**	4.3	ND	**8.8**	ND	ND	ND	ND	**6.2**	1.1 J	ND	**4.9**	NA
Apr-1999	ND	NA	0.7 J	NA	**15**	1	NA	3.1	ND	ND	NA	NA	3.2	ND	NA	**2.8**	NA
Oct-1999	ND	ND	ND	NA	**9.3**	ND	ND	2.3	ND	ND	ND	ND	1.7	0.5 J	ND	1.4	NA
Apr-2000	ND	NA	ND	NA	4.1	ND	NA	1.2	ND	ND	NA	NA	0.7 J	ND	ND	0.7 J	NA
Oct-2000	ND	ND	ND	NA	3.3	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	1.1	NA
Apr-2001	ND	ND	ND	NA	4.9	ND	ND	1.1	ND	ND	ND	ND	0.7 J	ND	ND	0.7 J	NA
Sep-2001	ND	ND	ND	NA	1.8	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	0.6 J	NA
Mar-2002	ND	ND	ND	NA	2.7	ND	ND	0.8 J	0.6 J	ND	ND	ND	ND	ND	ND	1.1	NA
Sep-2002	ND	ND	ND	NA	2.8	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	**2.4**	NA
Mar-2003	ND	ND	ND	NA	2.2	ND	ND	2.4	ND	ND	ND	ND	0.7 J	ND	ND	**2.2**	NA
Oct-2003	ND	ND	ND	NA	1.1	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	**2.8**	NA
Apr-2004	ND	ND	ND	NA	1.9	0.6 J	ND	3.6	ND	ND	ND	ND	1.4	ND	ND	**5.1**	NA
Oct-2004	ND	ND	ND	NA	1.1	ND	ND	3.2	ND	ND	ND	ND	1.3	ND	ND	**7.7**	NA
Apr-2005	ND	ND	ND	ND	2.2	ND	ND	4.4	ND	ND	ND	ND	1.6	ND	ND	**8.1**	NA
Oct-2005	ND	ND	ND	ND	3.2	ND	ND	4.5	ND	ND	ND	ND	1.5	ND	ND	**5.4**	NA
Mar-2006	ND	ND	ND	ND	**6.3**	ND	ND	**5.7**	ND	ND	ND	ND	2	ND	ND	**4.7**	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24A***															
Sep-2006	ND	ND	ND	ND	5	ND	ND	3.1	ND	ND	ND	ND	1.2	ND	ND	**3.7**	NA
Mar-2007	ND	ND	ND	ND	2.1 R	ND	ND	1.5	ND	ND	ND	ND	0.7 J	ND	ND	1.3	NA
Sep-2007	ND	ND	ND	ND	2.3	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	1.4	NA
Mar-2008	ND	ND	ND	ND	0.7 J	ND	ND	2.6	ND	ND	ND	ND	0.9 J	ND	ND	1.1	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	1.5	NA
Mar-2009	ND	ND	ND	ND	1.9	ND	ND	0.9 J	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	1.79	ND	ND	0.69 J	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.81 J	ND	ND	0.26 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.69 J	ND	ND	0.22 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24A***															
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-25***											
Apr-1995	13.4	13.4	ND	ND	2.6	0.4	ND	5.8	37.3	2.5	15	11.6
Apr-1997	ND	40	ND	ND	2	0.06	ND	NA	NA	ND	51	1.9
Oct-1997	1	1	0.47	ND	1.7	ND	ND	6.83	13.71	ND	14	ND
Apr-1998	ND	ND	0.27	ND	1.86	0.1	ND	5.87	23.9	0.76	29	5.6
Apr-1999	ND	ND	0.35	ND	1.86	ND	ND	5.29	16.52	ND	ND	7
Oct-1999	ND	ND	0.11	ND	2.33	ND	ND	5.24	16.1	ND	29	5.6
Apr-2000	2	2	ND	ND	2.03	0.147	ND	5.17	12	ND	17	4.9
Oct-2000	3	NA	ND	ND	1.76	ND	ND	5.34	12.9	ND	47	4.89
Apr-2001	2.2	NA	0.2	ND	1.6	ND	ND	NA	NA	ND	28	4.4
Sep-2001	2.6	2.6	ND	ND	3.74	ND	ND	5.03	17	ND	51	4.67
Mar-2002	5.8	5.8	ND	28	3.08	ND	ND	5.1	15	ND	38	4.39
Sep-2002	2.8	2.8	ND	ND	2.15	ND	ND	5	17.3	ND	115	5.12
Mar-2003	2.8	2.8	ND	ND	2.67	0.099	ND	5.1	16.8	ND	36	4.47
Oct-2003	2.4	2.4	ND	ND	7.17	ND	ND	4.8	16.5	ND	ND	4.87
Apr-2004	2.5	2.5	ND	ND	2.18	ND	ND	4.9	13.7	ND	46	3.2
Oct-2004	2.4	2.4	ND	11	2.29	0.13	ND	4.8	14.1	ND	20	2.66
Apr-2005	2.5	2.5	ND	ND	2.36	0.13	ND	5	12.5	2.02	23	4.2
Oct-2005	3.6	3.6	0.21	ND	2.34	0.12	ND	4.7	13.9	ND	21	4.21
Mar-2006	3.6	3.6	ND	ND	2.38	0.14	ND	5	16.4	1.04	52	3.21
Sep-2006	3.4	3.4	ND	ND	2.5	0.13	ND	5	14.2	ND	48	2.9
Mar-2007	3.5	3.5	ND	ND	2.63	0.15	ND	4.9	12	ND	36	2.87
Sep-2007	3.3	3.3	ND	ND	7.59	ND	ND	6.5	13.7	ND	69	4.77
Mar-2008	3.5	3.5	ND	29	14.9	ND	ND	4.9	13.9	ND	15	3.23
Sep-2008	3.5	3.5	ND	25	3.03	0.09	ND	5.4	15.3	ND	22	4.2
Mar-2009	3.6	3.6	ND	ND	2.72	0.11	ND	4.5	15.5	ND	19	2.88
Oct-2009	3.4	3.4	ND	ND	2.71	0.13	ND	4.5	15	ND	62	3.51
Apr-2010	3.3	3.3	ND	11	2.75	0.15	ND	4.6	14.6	ND	ND	4.1
Oct-2010	3	3	ND	ND	3.31	0.12	ND	4.3	14.9	ND	24	4.16
Apr-2011	5.2	5.2	ND	ND	2.93	0.15	ND	4.7	16.5	ND	16	4.6
Sep-2011	3.5	3.5	0.22	ND	3.06	0.13	ND	4.7	16.6	ND	35	3.61
Mar-2012	3.4	3.4	ND	ND	3.26	0.13	ND	3.5	43.2	ND	19	2.85
Sep-2012	ND	ND	ND	12.2	3.39	0.15	ND	4.3	17.2	ND	16	3.57
Mar-2013	3.56	3.56	ND	ND	3.5	0.137	ND	5.1	18.1	0.482 J	14	3.65
Oct-2013	3.64	3.64	ND	ND	3.58	0.156	ND	5.8	17	0.487 J	ND	3.75
Mar-2014	3.44	3.44	ND	ND	3.75	0.154	ND	5.2	20.3	ND	ND	4.32
Oct-2014	ND	ND	ND	ND	3.96	0.126	ND	5	22.9	0.324 J	ND	4.29
Apr-2015	3.8	3.8	ND	ND	4.06	0.177	ND	4.2	20	ND	ND	4.64

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-25***											
Nov-2015	*ND*	*ND*	*ND*	*ND*	4.2	0.189	*ND*	5.2	27.7	*ND*	29	4.73
May-2016	*ND*	*ND*	*ND*	*5 J*	4.27	0.2	*ND*	5.2	28.4	*ND*	*ND*	4.3
Oct-2016	*ND*	*ND*	*ND*	*ND*	4.46	*NA*	*NA*	5.4	31.8	*0.627 J*	26	4.7
May-2017	2.4	2.4	*ND*	*ND*	4.73	0.21	*ND*	4.9	34.6	*ND*	*9 J*	4.9
Oct-2017	2	2	*ND*	*ND*	4.88	0.229	*ND*	5	40	*ND*	*21 J*	5.2
May-2018	*2 J*	*ND*	*0.052 J*	*ND*	4.9	0.22	*ND*	5.1	46.3	*ND*	*ND*	5.7
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	5.6	0.22	*ND*	4.64	29.5	*ND*	73	6.2
May-2019	*ND*	*NA*	*ND*	*ND*	6.2	0.18	*ND*	4.56	23.4	*ND*	*ND*	5.7
Oct-2019	*ND*	*NA*	*ND*	*ND*	4.8	0.23	*ND*	4.34	29.5	*ND*	14	5.8
May-2020	*ND*	*NA*	*ND*	*ND*	6.3	0.22	*ND*	4.28	33.7	*ND*	26	6.5
Oct-2020	*ND*	*NA*	*ND*	*ND*	6.2	0.23	*ND*	4.44	31.4	*ND*	11	6.9
Apr-2021	*ND*	*NA*	*ND*	*6.1 J*	7.3	0.26	*ND*	4.81	40.7	*ND*	14	7.3
Oct-2021	*ND*	*NA*	*ND*	*ND*	6.2	0.28	*ND*	4.95	72	*ND*	*ND*	7.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25***													
Apr-1995	ND	ND	ND	ND	ND	3.6	NA	ND	ND	ND	0.46	0.33	ND	0.63	NA
Oct-1996	ND	ND	0.03	ND	ND	1.6	2.2	0.041	ND	ND	5.5	0.52	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	0.7	0.69	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	0.034	ND	ND	0.921	0.827	ND	ND	ND	3.92	0.075	ND	0.487	0.309
Apr-1998	ND	ND	0.055	ND	ND	1.18	1.07	0.019	ND	ND	8.41	ND	ND	0.649	0.334
Apr-1999	ND	ND	0.04	ND	ND	1.63	0.995	0.019	ND	0.013	7.21	ND	ND	0.706	0.32
Oct-1999	ND	ND	0.023	ND	ND	1.21	0.802	0.012	ND	0.011	4.98	ND	ND	0.505	0.303
Apr-2000	ND	ND	0.018	ND	ND	1.18	0.708	ND	ND	ND	3.2	ND	ND	0.481	0.288
Oct-2000	ND	ND	0.012	ND	ND	1.25	0.778	ND	ND	0.012	1.39	ND	ND	0.432	0.312
Apr-2001	ND	ND	0.012	ND	ND	1.13	NA	ND	ND	0.011	0.753	NA	ND	0.381	NA
Sep-2001	ND	ND	0.02	ND	ND	1.04	0.703	0.011	ND	ND	4.31	ND	0.003	0.504	0.293
Mar-2002	ND	ND	0.016	ND	ND	1.04	0.78	ND	ND	ND	2.44	ND	0.002	0.436	0.308
Sep-2002	ND	ND	0.02	ND	ND	1.28	0.724	ND	ND	ND	3.66	0.073	0.003	0.468	0.294
Mar-2003	ND	ND	0.012	ND	ND	1.14	0.609	ND	ND	ND	0.374	ND	ND	0.397	0.303
Oct-2003	ND	ND	0.022	ND	ND	1.1	0.607	0.012	ND	ND	5.65	ND	0.004	0.518	0.299
Apr-2004	ND	ND	0.011	ND	ND	0.704	0.608	ND	ND	ND	0.408	ND	ND	0.351	0.298
Oct-2004	ND	ND	ND	ND	ND	0.543	0.531	ND	ND	ND	0.231	ND	ND	0.319	0.31
Apr-2005	ND	ND	0.018	ND	ND	0.963	0.614	ND	ND	ND	3.85	ND	ND	0.446	0.302
Oct-2005	ND	ND	0.021	ND	ND	0.94	0.602	0.012	ND	0.011	4.8	ND	0.003	0.452	0.273
Mar-2006	ND	ND	0.022	ND	ND	0.668	0.373	ND	ND	ND	6.83	ND	0.005	0.374	0.179
Sep-2006	ND	ND	ND	ND	ND	0.633	0.505	ND	ND	ND	0.496	ND	ND	0.321	0.292

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25***													
Mar-2007	ND	ND	0.012	ND	ND	0.586	0.543	ND	ND	ND	1.17	ND	ND	0.343	0.296
Sep-2007	ND	0.004	0.012	ND	ND	1.16	0.531	ND	ND	ND	1.08	ND	ND	0.455	0.302
Mar-2008	ND	ND	0.014	ND	ND	0.726	0.615	ND	ND	ND	2.29	ND	ND	0.344	0.291
Sep-2008	ND	ND	0.021	0.002 R	ND	0.814	0.49	0.018	ND	ND	5.7	ND	0.003	0.536	0.337
Mar-2009	ND	ND	ND	ND	ND	0.629	0.538	ND	ND	ND	0.268	ND	ND	0.318	0.326
Oct-2009	ND	ND	0.016	ND	ND	0.712	0.561	ND	ND	ND	2.95	ND	ND	0.419	0.319
Apr-2010	ND	ND	0.02	ND	ND	0.806	0.527	0.014	ND	ND	7.96	ND	0.003	0.521	0.306
Oct-2010	ND	0.003	0.017	ND	ND	0.757	0.676	0.014	ND	ND	5.19	ND	0.003	0.551	0.385
Apr-2011	ND	ND	0.011	ND	ND	1.25	0.907	ND	ND	ND	0.355	ND	ND	0.357	0.294
Sep-2011	ND	ND	ND	ND	ND	0.781	0.797	ND	ND	ND	ND	ND	ND	0.402	0.426
Mar-2012	ND	ND	0.011	ND	ND	0.485	0.477	ND	ND	ND	ND	ND	ND	0.399	0.385
Sep-2012	ND	ND	0.0103	ND	ND	0.736	0.698	ND	0.0015 J	0.0018 J	0.0253 J	0.0118 J	ND	0.421	0.411
Mar-2013	ND	ND	0.0103	ND	ND	0.829	0.792	0.0034 J	0.0015 J	0.0022 J	0.0107 J	0.0049 J	0.0017 J	0.384	0.367
Oct-2013	ND	ND	0.0119	ND	ND	0.777	0.857	0.0012 J	0.0016 J	0.0016 J	ND	ND	ND	0.439	0.453
Mar-2014	ND	ND	0.011	ND	ND	1.02	0.921	0.0013 J	0.0012 J	0.0016 J	0.0546	0.041 J	ND	0.431	0.388
Oct-2014	0.001 J	ND	0.0136	ND	ND	0.932	0.924	0.000551 J	0.0019 J	0.0017 J	ND	0.0119 J	ND	0.482	0.488
Apr-2015	0.000883 J	ND	0.0135	ND	ND	0.986	0.959	0.000597 J	0.0019 J	0.0018 J	ND	ND	ND	0.53	0.528
Nov-2015	ND	ND	0.0127	ND	0.000095 J	1.06	0.908	0.000538 J	0.0018 J	0.0015 J	ND	ND	ND	0.506	0.521
May-2016	ND	ND	0.0168	0.000072 J	ND	0.86	0.85	0.0013 J	0.0021	0.0016 J	ND	ND	ND	0.53	0.553
Oct-2016	ND	ND	0.0131	ND	ND	0.985	0.841	0.00085 J	0.002	0.0021 J	ND	ND	ND	0.533	0.567
May-2017	ND	ND	0.0159	ND	ND	0.946	1.02	0.0014 J	0.002	0.0018 J	ND	ND	ND	0.606	0.609
Oct-2017	ND	ND	0.0159	0.000081 J	ND	1.01	1.12	ND	0.0023	0.0018 J	ND	ND	ND	0.648	0.674
May-2018	0.000052 J	ND	0.017	0.000075 J	0.000042 J	1.2	1.07	0.0027 J	0.0022	0.0052 B	ND	ND	0.000068 J	0.67 J	0.644 J
Nov-2018	ND	ND	0.016	0.000086 J	0.000056 J	1.3	1.2	0.0027 JB	0.0022	0.0065	ND	ND	0.00019 JB	0.72 J	0.7 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25***													
May-2019	*ND*	*ND*	0.017	*ND*	*ND*	1.2	1.2	*ND*	0.0046	0.0068	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*0.00011 J*	*ND*	0.017	*0.000096 J*	*0.00027 J*	1.2	1.2	*0.0045 J*	0.0029	0.0058	*0.0085 J*	*ND*	*0.0001 J*	0.68	*0.67 J*
May-2020	*0.000052 J*	*ND*	0.018	*ND*	*ND*	1.4	1.3	*0.0054 J*	0.0028	0.0056	*ND*	*0.0098 J*	*ND*	0.76	*0.72 J*
Oct-2020	*ND*	*ND*	0.015	*ND*	*ND*	1.4	1.4	*0.0056 J*	0.0038	*ND*	*0.016 J*	*ND*	*ND*	0.8	*0.74 J*
Apr-2021	*ND*	*ND*	0.024	*ND*	*ND*	1.5	1.6	*0.0025 J*	0.0051	*ND*	*ND*	*ND*	*ND*	0.85	0.93
Oct-2021	*0.00007 J*	*ND*	0.023	*ND*	*ND*	1.7	1.8	0.0044	0.0074	0.0085	*0.025 JB*	*0.02 J*	*0.00011 J*	0.88	0.91

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-25*												
Apr-1995	0.03	NA	ND	ND	0.1	NA	ND	0.01	1.5	NA	ND	ND	0.1
Oct-1996	0.017	0.023	NA	ND	ND	ND	ND	ND	2	1.7	ND	ND	0.32
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	1.8	1.6	ND	ND	0.035
Oct-1997	0.014	ND	ND	ND	1.08	0.735	ND	ND	1.16	1.09	ND	0.016	0.01
Apr-1998	0.019	0.012	ND	ND	2.34	ND	ND	ND	1.21	1.11	ND	0.03	0.013
Apr-1999	0.017	0.01	NA	0.013	1.25	ND	ND	ND	1.49	1.09	ND	0.022	0.032
Oct-1999	0.015	0.01	NA	ND	1.38	0.661	ND	ND	1.52	1.05	ND	0.019	0.013
Apr-2000	0.012	ND	NA	ND	0.957	ND	ND	ND	2.46	1.02	ND	0.012	0.011
Oct-2000	0.013	ND	NA	ND	0.642	ND	ND	ND	1.73	1.14	ND	ND	0.011
Apr-2001	ND	NA	NA	ND	1.23	NA	ND	ND	1.92	NA	ND	ND	0.017
Sep-2001	0.012	ND	NA	ND	0.652	ND	ND	ND	2.5	1.1	ND	0.016	ND
Mar-2002	0.01	ND	NA	ND	1.14	0.988	ND	ND	2.27	1.23	ND	0.01	ND
Sep-2002	0.014	ND	NA	ND	0.738	ND	ND	ND	1.44	1.16	ND	0.017	ND
Mar-2003	ND	ND	NA	ND	0.517	ND	ND	ND	1.6	1.14	ND	ND	ND
Oct-2003	0.011	ND	NA	ND	ND	ND	ND	ND	2.43	1.09	ND	0.022	0.014
Apr-2004	ND	ND	ND	ND	1.22	ND	ND	ND	1.23	1.17	ND	ND	ND
Oct-2004	ND	ND	ND	ND	1.07	ND	ND	ND	1.03	0.936	ND	ND	ND
Apr-2005	0.011	ND	ND	ND	0.83	0.43	ND	ND	2	1.09	ND	0.016	0.011
Oct-2005	0.013	ND	ND	ND	0.757	ND	ND	ND	1.94	0.997	ND	0.02	0.012
Mar-2006	ND	ND	ND	ND	0.699	ND	ND	ND	1.19	0.939	ND	0.015	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	1.44	1.08	ND	ND	ND
Mar-2007	ND	ND	ND	ND	0.559	ND	ND	ND	1.17	1.13	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-25***												
Sep-2007	ND	ND	ND	0.014	0.547	ND	ND	ND	1.41	1.12	ND	ND	0.028
Mar-2008	ND	ND	0.0004	ND	0.798	0.536	ND	ND	1.29	1.05	ND	ND	ND
Sep-2008	0.013	ND	ND	ND	0.754	ND	ND	ND	1.25	1.11	ND	ND	0.022
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.17	1.17	ND	ND	0.016
Oct-2009	ND	ND	ND	ND	0.665	ND	ND	ND	1.33	1.06	ND	0.012	0.012
Apr-2010	0.013	ND	ND	ND	0.896	ND	ND	ND	1.53	1.25	ND	0.023	0.013
Oct-2010	0.016	ND	ND	ND	0.995	ND	ND	ND	1.44	1.4	ND	0.023	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.46	1.45	ND	ND	0.014
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.58	1.58	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	1.44	1.41	ND	ND	ND
Sep-2012	0.0085 J	0.008 J	ND	0.0016 J	0.41 J	0.387 J	ND	ND	1.48	1.48	ND	ND	0.005 J
Mar-2013	0.0083 J	0.0081 J	0.000044 J	0.0019 J	0.412 J	0.392 J	ND	0.000026 J	1.42	1.36	ND	ND	0.0153
Oct-2013	0.0089 J	0.0089 J	ND	0.0017 J	0.399 J	0.398 J	ND	ND	1.56	1.61	0.0001525 J	0.000873 J	0.013
Mar-2014	0.0084 J	0.0082 J	ND	0.0018 J	0.452 J	0.412 J	ND	ND	1.53	1.4	ND	ND	ND
Oct-2014	0.0102	0.0103	ND	0.002 J	0.535	0.536	0.0021	ND	1.92	1.92	ND	ND	0.0069 J
Apr-2015	0.0106	0.0104	ND	0.0024 J	0.503	0.496 J	ND	ND	1.94	1.93	ND	ND	0.0096 J
Nov-2015	0.0102	0.0106	ND	0.0021 J	0.51	0.523	ND	ND	1.88	1.93	ND	ND	0.0064 J
May-2016	0.0091	0.0111	ND	0.003 J	0.483	0.483	ND	ND	1.83	1.85	ND	ND	ND
Oct-2016	0.01	0.0131	ND	0.0026 J	0.478	0.499	ND	ND	1.76	1.89	ND	ND	ND
May-2017	0.0118	0.0119	ND	0.0026 J	0.528	0.529	ND	ND	1.94	1.9	ND	ND	0.0036 JB
Oct-2017	0.0117	0.0126	ND	0.0016 J	0.543	0.607	ND	ND	1.99 J-	2.13	ND	ND	0.0058 J
May-2018	0.011	0.01	ND	0.0027	ND	ND	0.00028 JB	ND	2.5 J	2.24 J	ND	0.0034	0.0053 B
Nov-2018	0.013	0.012	ND	0.0028	ND	1.3 J	0.00013 JB	ND	0.95 J	2.7 JB	ND	0.0034 B	0.0077
May-2019	0.014	0.013	ND	0.0037	ND	ND	ND	ND	ND	ND	ND	0.0039 B	0.0072

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-25***												
Oct-2019	0.014	0.012	*ND*	0.0031	*ND*	*ND*	*ND*	*ND*	*2.2 J*	*2.1 J*	*ND*	*ND*	0.015
May-2020	0.014	0.013	*ND*	0.0027	*ND*	*ND*	*ND*	*ND*	*2.3 J*	*2.2 J*	*ND*	0.0084	0.0051
Oct-2020	0.015	0.015	*ND*	0.0045	*ND*	*ND*	*ND*	*ND*	*2.4 J*	*2.1 J*	*ND*	*0.001 J*	*ND*
Apr-2021	0.017	0.017	*ND*	*0.0036 J*	0.64	0.68	*ND*	*ND*	2.6	3.1	*ND*	*ND*	*0.0051 J*
Oct-2021	0.017	0.018	*ND*	0.0051	0.59	0.605	*ND*	*0.00027 J*	2.8	2.8	*ND*	*ND*	0.0061

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25*																
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25*																
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	1 R	1 R	1 R	1 R	7.4 R	1 R	1 R	**1 R**	**1 R**	1 R	0.7 R	1 R	1 R	5 R	5 R	5 R	5 R	5 R
Dec-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*0.42 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*0.45 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*0.42 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*0.66 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25*																
Oct-2017	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.7 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*0.94 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	2.07	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25***															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25***															
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	0.9 R	1 R	1 R	1 R	1 R	11.4 R
Dec-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.6 J
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.7 J
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.05	0.46 J
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.11	0.62 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	1.25	0.84 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.19 J	ND	ND	ND	ND	ND	1.83 J	0.77 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	0.5 J,B	ND	ND	ND	ND	1.67	0.83 J
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	1.11
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8 J	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	2.7	1.9
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	3	2.4
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J,B	ND	ND	ND	ND	ND	2.7	2

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25***															
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	3	2.2
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.5	2.5
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	**3 D6**	2.2 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3 CL	2.2 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	1.4
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.8	1.7
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	5.8	2.5
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.235 J*	*ND*	*0.674 J*	*ND*	*ND*	*ND*	*3.6 J*	*3.7 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	5	2.9

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25***															
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25***															
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	1 R	1 R	1 R	1.5 R	**9 R**	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1.1 R	1 R	1 R	1 R	*NA*
Dec-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.27 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.31 J*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.27 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.36 J*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.34 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.34 J*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.39 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.4 J*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.5 J*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.4 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.4 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.41	*ND*	*ND*	*ND*	*ND*	*0.343 J*	*0.446 J*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-25A***											
Apr-1995	52.5	52.5	ND	59.7	2.7	ND	ND	8.9	100	3.2	70	99.7
Apr-1997	ND	36	ND	ND	3	0.06	ND	NA	NA	ND	82	33
Oct-1997	21	21	ND	ND	2.33	ND	ND	8.38	50.7	ND	ND	18
Apr-1998	37	37	ND	ND	2.64	0.22	ND	6.65	110.9	2.25	50	41
Apr-1999	25	25	0.8	ND	2.64	ND	ND	5.89	91.2	1.44	35	32
Oct-1999	32	32	0.07	ND	4.37	ND	ND	5.72	44.9	2.75	35	18
Apr-2000	16	16	ND	ND	3	ND	ND	6.32	43	2.16	45	19
Oct-2000	16	NA	ND	ND	2.03	ND	ND	5.77	42.4	4.37	33	21.7
Apr-2001	20	NA	ND	ND	2.85	ND	ND	NA	NA	1.57	33	23
Sep-2001	5.9	5.9	0.32	ND	5.01	ND	ND	5.71	43	7.52	28	15
Mar-2002	8	8	ND	ND	3.88	ND	ND	5.5	36	2.16	13	12
Sep-2002	5.2	5.2	ND	ND	3.55	ND	ND	5.4	34	3.13	20	8.49
Mar-2003	22	22	ND	ND	14.4	ND	ND	5.8	59.9	5.65	30	22.6
Oct-2003	14	14	ND	ND	4.24	0.118	ND	5.2	56.1	1.43	11	98.6
Apr-2004	12	12	ND	ND	4.85	ND	ND	5.5	48.6	1.34	50	17.5
Oct-2004	15	15	ND	ND	5.7	ND	ND	3.2	50.8	1.43	41	19.6
Apr-2005	18	18	ND	ND	5.64	ND	ND	5.2	49.8	3.51	ND	22.6
Oct-2005	11	11	0.22	ND	5.94	ND	ND	4.7	42.8	2.62	43	13.5
Mar-2006	11	11	ND	ND	6.33	ND	ND	5.3	51.5	2.99	26	13
Sep-2006	7.1	7.1	ND	ND	6.05	ND	ND	4.9	37.7	2.83	42	10.7
Mar-2007	6.9	6.9	ND	ND	5.9	ND	ND	4.9	37.5	2.17	42	9.64
Sep-2007	11	11	0.23	ND	5.45	ND	ND	6.2	42.6	1.87	38	14.1
Mar-2008	17	17	ND	11	17.5	ND	ND	6.2	52.7	5.13	53	18.2
Sep-2008	7.5	7.5	0.27	ND	5.59	ND	ND	5.7	33.5	2.25	30	9.2
Mar-2009	6	6	ND	ND	5.78	ND	ND	5.1	35.8	1.52	ND	8.57
Oct-2009	5.2	5.2	ND	ND	5.98	ND	ND	4.9	31.8	1.6	34	7.53
Mar-2010	8.8	8.8	ND	ND	6.41	ND	ND	4.59	45	2.01	14	9.74
Oct-2010	1.8	1.8	ND	ND	6.58	ND	ND	3.6	37.8	2.54	22	7.13
Apr-2011	3	3	ND	ND	6.57	ND	0.04	4.1	41.5	1.8	42	6.4
Sep-2011	4.7	4.7	0.22	ND	7.04	ND	0.03	4.3	40.7	1.56	44	8.48
Mar-2012	4.3	4.3	ND	ND	7.23	0.06	0.04	3.6	41	1.98	24	8.01
Sep-2012	4.2	4.2	ND	ND	7.96	0.104	ND	3.5	42.8	2.47	28	8.53
Mar-2013	3.8	3.8	ND	ND	8.59	0.103	0.0377 J	4.5	48.8	1.79	31	8.47
Oct-2013	3.64	3.64	ND	ND	8.62	0.127	0.134	5.3	46.9	2.29	ND	9.02
Mar-2014	3.52	3.52	ND	ND	8.88	0.131	ND	4.6	48.2	2.66	26	8.9
Oct-2014	ND	ND	ND	ND	9.57	0.106	ND	4.5	46	3.2	25	9.8
Apr-2015	3.72	3.72	ND	ND	8.62	0.116	ND	3.6	46	1.75	ND	8.86

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-25A***											
Nov-2015	*ND*	*ND*	*ND*	*5 J*	9.48	0.125	0.0657	4.7	60.8	1.9	*22 J*	9.15
May-2016	*ND*	*ND*	*ND*	*ND*	8.67	0.132	0.0891	4.5	61.3	3.23	*13 J*	8.7
Oct-2016	*ND*	*ND*	*ND*	*ND*	9.05	*NA*	*NA*	4.6	69.9	2.81	42	9.7
May-2017	*ND*	*ND*	*ND*	13	9.61	0.235	0.106	4.5	76.2	3.52	*13 J*	9.8
Oct-2017	*ND*	*ND*	*ND*	*ND*	8.92	0.244	0.0755	4.6	84.6	2.31	33	11.3
May-2018	*ND*	*ND*	*ND*	*5.8 J*	8.4	0.24	0.023	4.8	67.3	*ND*	23	11.2
Nov-2018	18	18	*ND*	*ND*	10.1	0.16	0.04	5.03	87.7	*6.2 J*	90	30.8
May-2019	*ND*	*NA*	*ND*	*ND*	10.4	0.23	0.066	4.67	53.8	*ND*	48	18.3
Oct-2019	*6 J*	*NA*	*ND*	*6 J*	62.8	0.58	0.093	4.33	70.1	*ND*	44	17.2
May-2020	*4 J*	*NA*	*ND*	*ND*	11.2	0.77	0.11	4.32	76.5	*5 J*	46	19.4
Oct-2020	*2 J*	*NA*	*ND*	*ND*	10.5	0.76	0.096	4.62	74.3	4	35	21.4
Apr-2021	20	*NA*	*ND*	*ND*	10.7	0.71	0.12	5.29	113.9	*ND*	55	36.5
Oct-2021	12	*NA*	*ND*	*ND*	9.4	0.82	0.1	4.98	116.8	*ND*	22	22.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25A***													
Apr-1995	ND	ND	ND	ND	ND	38.8	NA	ND	ND	ND	0.82	0.05	ND	0.68	NA
Oct-1996	ND	ND	0.041	ND	ND	8	7.7	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	0.048	ND	ND	12	NA	ND	ND	ND	ND	NA	ND	ND	ND
Oct-1997	ND	ND	0.028	ND	ND	7.09	6.38	ND	ND	ND	0.108	ND	ND	0.491	0.47
Apr-1998	ND	ND	0.06	ND	ND	15	15.7	ND	ND	ND	ND	ND	ND	0.743	0.732
Apr-1999	ND	ND	0.048	ND	ND	11.6	11.1	ND	ND	ND	0.104	ND	ND	0.629	0.567
Oct-1999	ND	ND	0.028	ND	ND	1.23	1.09	ND	ND	0.017	0.057	ND	ND	0.643	0.589
Apr-2000	ND	ND	0.043	ND	ND	6.43	5.88	ND	ND	ND	ND	ND	ND	0.729	0.691
Oct-2000	ND	ND	0.029	ND	ND	7.46	7.78	ND	ND	0.02	0.065	ND	ND	0.758	0.614
Apr-2001	ND	ND	0.044	ND	ND	7.78	NA	ND	ND	0.012	ND	NA	ND	0.812	NA
Sep-2001	ND	ND	0.029	ND	ND	4.89	4.23	ND	ND	0.014	0.067	ND	ND	0.679	0.585
Mar-2002	ND	ND	0.031	ND	ND	3.67	3.47	ND	ND	0.019	0.051	ND	ND	0.702	0.678
Sep-2002	ND	ND	0.034	ND	ND	2.2	2.05	ND	ND	0.013	0.097	ND	ND	0.728	0.715
Mar-2003	ND	ND	0.051	ND	ND	7.8	5.8	ND	ND	0.012	0.08	ND	ND	0.753	0.708
Oct-2003	ND	ND	0.213	ND	0.005	32.3	5.95	ND	0.02	0.094	0.252	ND	ND	4.37	0.762
Apr-2004	ND	ND	0.047	ND	ND	5.54	4.82	ND	ND	0.02	ND	ND	ND	0.901	0.887
Oct-2004	ND	ND	0.053	ND	ND	6.17	5.84	ND	ND	0.021	ND	ND	ND	1.03	1.03
Apr-2005	ND	ND	0.055	ND	ND	7.35	6.71	ND	ND	0.017	ND	ND	ND	1.04	0.995
Oct-2005	ND	ND	0.052	ND	ND	3.81	3.58	ND	ND	0.024	ND	ND	ND	0.97	0.913
Mar-2006	ND	ND	0.047	ND	ND	3.85	3.77	ND	ND	0.013	ND	ND	ND	0.812	0.778
Sep-2006	ND	ND	0.049	ND	ND	2.7	2.69	ND	ND	0.021	ND	ND	ND	0.964	0.915

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25A***													
Mar-2007	ND	ND	0.046	ND	ND	2.35	2.36	ND	ND	0.023	ND	ND	ND	0.916	0.878
Sep-2007	ND	ND	0.045	ND	ND	4.12	3.41	ND	ND	0.022	ND	ND	ND	0.932	0.873
Mar-2008	ND	ND	0.048	ND	ND	5.75	5	ND	ND	0.02	ND	ND	ND	0.922	0.87
Sep-2008	ND	ND	0.047	0.002	ND	2.03	2.02	ND	ND	0.023	ND	ND	0.003	1.01	0.977
Mar-2009	ND	ND	0.05	ND	ND	1.65	1.34	ND	ND	0.025	ND	ND	ND	1.08	0.968
Oct-2009	ND	ND	0.048	ND	ND	1.35	1.24	ND	ND	0.025	0.052	ND	ND	1.01	0.997
Mar-2010	ND	ND	0.054	ND	ND	2.25	2.4	ND	ND	0.021	0.069	ND	ND	1	0.981
Oct-2010	ND	ND	0.049	ND	ND	0.845	0.803	ND	ND	0.024	ND	ND	ND	1.22	1.2
Apr-2011	ND	ND	0.058	ND	ND	0.744	0.756	ND	ND	0.016	ND	ND	ND	1.09	1.16
Sep-2011	ND	ND	0.056	ND	ND	1.3	1.32	ND	ND	0.022	ND	ND	ND	1.27	1.28
Mar-2012	ND	ND	0.062	ND	ND	1.08	1.19	ND	ND	0.024	ND	ND	ND	1.29	1.26
Sep-2012	ND	ND	0.0669	0.0011 J	ND	0.993	1.18	ND	0.007 J	0.0276	0.0538	0.0413 J	ND	1.47	1.41
Mar-2013	ND	ND	0.0556	0.000842 J	0.000248 J	1.33	1.46	0.0017 J	0.0065 J	0.0231	0.0754	0.0186 J	0.0015 J	1.25	1.3
Oct-2013	ND	ND	0.0704	ND	0.000199 J	1.19	1.16	0.004 J	0.0075 J	0.0262	ND	ND	ND	1.47	1.43
Mar-2014	ND	ND	0.0629	0.000979 J	0.000205 J	1.32	1.4	0.0013 J	0.0056 J	0.0243	0.0595	0.0542	ND	1.36	1.43
Oct-2014	0.000772 J	ND	0.078	0.0011 J	0.000284 J	1.47	1.47	0.000361 J	0.0075 J	0.0309	0.0403 J	0.0371 J	0.0011 J	1.49	1.49
Apr-2015	0.00058 J	ND	0.0698	0.0011 J	0.000246 J	1.12	1.13	0.000575 J	0.0071 J	0.0328	0.239	0.0264 J	ND	1.47	1.5
Nov-2015	ND	ND	0.0647	0.0011 J	0.000276 J	1.18	1.21	0.000316 J	0.0071 J	0.0265	0.0234 J	ND	ND	1.5	1.57
May-2016	ND	ND	0.0645	0.001 J	0.0002 J	1.05	1.24	ND	0.0067	0.0232	ND	ND	ND	1.49	1.48
Oct-2016	ND	ND	0.0683	0.001	ND	1.27	1.28	ND	0.0075	0.0248	ND	ND	ND	1.58	1.68
May-2017	ND	ND	0.0625	0.00092 J	0.00022 J	1.15	1.1	ND	0.0073	0.0225	ND	ND	ND	1.67	1.71
Oct-2017	ND	ND	0.0661	0.00097 J	0.00026 J	1.73	1.66	ND	0.0078	0.0258	0.0551 J	ND	0.00028 J	1.71	1.77
May-2018	0.000062 J	ND	0.072	0.00099	0.00027 J	1.3	1.21	0.002 J	0.0065	0.02	0.012 J	ND	0.000018 J	1.9	1.76
Nov-2018	ND	ND	0.063	0.00074	0.00023 J	9.9	9.9	0.0019 JB	0.0056	0.046	0.017 J	ND	0.000088 JB	1.5	1.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25A***													
May-2019	*ND*	*ND*	0.066	0.001	*ND*	4.7	4.8	*ND*	0.0059	0.035	*ND*	*ND*	*ND*	1.6	1.6
Oct-2019	*0.0002 J*	*0.00016 J*	0.066	0.0012	*0.00049 J*	4	3.8	*0.0029 J*	0.0059	0.039	*0.015 J*	*0.013 J*	*0.000086 J*	1.8	1.7
May-2020	*0.000059 J*	*ND*	0.067	0.00086	*0.00014 J*	4.8	4.6	*0.0049 J*	0.0076	0.048	*0.017 J*	*0.016 J*	*ND*	1.8	1.8
Oct-2020	*ND*	*ND*	0.058	*0.00068 J*	*ND*	5.5	5.2	*0.0035 J*	0.0063	0.03	*ND*	*ND*	*ND*	1.9	1.8
Apr-2021	*ND*	*ND*	0.073	*0.00061 J*	*ND*	11.8	11.8	*0.00036 J*	0.0073	0.026	*ND*	*ND*	*ND*	1.7	1.9
Oct-2021	*0.000079 J*	*ND*	0.076	0.0012	*0.0001 J*	5.6	5.7	*0.0011 J*	0.0085	0.055	0.076	*0.011 J*	*0.000082 J*	2	2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-25A*												
Apr-1995	0.01	NA	ND	ND	2.8	NA	ND	0.02	2.1	NA	ND	ND	0.05
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	1.6	1.8	ND	ND	0.04
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	2	2	ND	ND	0.03
Oct-1997	ND	ND	ND	ND	0.821	ND	ND	ND	1.37	1.35	ND	ND	0.013
Apr-1998	ND	ND	ND	0.015	0.799	0.749	ND	ND	1.48	1.46	ND	ND	0.024
Apr-1999	ND	ND	NA	ND	ND	ND	ND	ND	1.5	1.39	ND	ND	ND
Oct-1999	ND	ND	NA	ND	1.04	ND	ND	ND	1.37	1.29	ND	ND	0.01
Apr-2000	ND	ND	NA	ND	1.02	0.621	ND	ND	1.47	1.34	ND	ND	ND
Oct-2000	ND	ND	NA	ND	0.759	0.625	ND	ND	2.35	1.47	ND	ND	0.011
Apr-2001	NA	NA	NA	ND	1.23	NA	ND	ND	1.6	NA	ND	ND	ND
Sep-2001	ND	ND	NA	ND	0.504	0.935	ND	ND	1.55	1.42	ND	ND	ND
Mar-2002	ND	ND	NA	ND	1.61	0.754	ND	ND	1.65	1.5	ND	ND	ND
Sep-2002	ND	ND	NA	ND	0.682	ND	ND	ND	1.6	1.57	ND	ND	ND
Mar-2003	ND	ND	NA	ND	0.768	ND	ND	ND	1.65	1.62	ND	ND	ND
Oct-2003	0.039	ND	NA	0.032	ND	ND	ND	ND	13.7	1.84	ND	ND	0.074
Apr-2004	0.011	0.011	**0.0036**	ND	0.833	0.931	ND	ND	2.19	2.1	ND	ND	ND
Oct-2004	0.012	0.011	0.002	ND	1.62	1.11	ND	ND	2.39	2.12	ND	ND	0.012
Apr-2005	0.011	ND	ND	ND	0.75	0.68	ND	ND	2.23	2.11	ND	ND	ND
Oct-2005	0.011	0.01	**0.0037**	ND	0.521	ND	ND	ND	2.25	2.11	ND	ND	0.012
Mar-2006	ND	ND	**0.0033**	ND	ND	ND	ND	ND	2.19	2.12	ND	ND	ND
Sep-2006	0.011	0.01	**0.0042**	ND	0.657	0.666	ND	ND	2.3	2.17	ND	ND	ND
Mar-2007	ND	ND	**0.0065**	ND	0.671	0.646	ND	ND	2.26	2.19	ND	ND	0.011

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-25A***												
Sep-2007	0.01	*ND*	**0.0089**	*ND*	0.632	0.545	*ND*	*ND*	2.1	2.07	*ND*	*ND*	0.01
Mar-2008	0.012	0.011	**0.0065**	*ND*	0.815	0.778	*ND*	*ND*	2.06	1.94	*ND*	*ND*	*ND*
Sep-2008	0.013	0.013	**0.0036**	*ND*	0.617	0.62	*ND*	*ND*	2.12	2.05	*ND*	*ND*	0.015
Mar-2009	0.014	0.012	**0.0021**	*ND*	0.652	0.646	*ND*	*ND*	2.29	2.4	*ND*	*ND*	*ND*
Oct-2009	0.013	0.013	**0.0024**	*ND*	0.516	*ND*	*ND*	*ND*	1.96	2.1	*ND*	*ND*	*ND*
Mar-2010	0.013	0.013	0.0019	*ND*	0.742	0.695	*ND*	*ND*	2.07	2.36	*ND*	*ND*	0.011
Oct-2010	0.017	0.017	0.0012	*ND*	0.71	0.689	*ND*	*ND*	2.53	2.5	*ND*	*ND*	*ND*
Apr-2011	0.016	0.016	0.0011	*ND*	0.513	*ND*	*ND*	*ND*	2.26	2.24	*ND*	*ND*	*ND*
Sep-2011	0.018	0.018	0.0011	*ND*	0.848	0.872	*ND*	*ND*	2.69	2.69	*ND*	*ND*	*ND*
Mar-2012	0.019	0.019	0.0011	*ND*	0.719	0.726	*ND*	*ND*	2.57	2.56	*ND*	*ND*	*ND*
Sep-2012	0.0236	0.0231	0.00087	*0.0067 J*	0.835	0.793	*ND*	*ND*	2.88	2.94	*0.000481 J*	*ND*	0.0105
Mar-2013	0.0224	0.0223	0.000742	*0.0065 J*	0.748	0.754	*ND*	*0.000028 J*	2.52	2.58	*ND*	*ND*	0.0192
Oct-2013	0.0257	0.0241	0.000652	*0.007 J*	0.833	0.776	*0.00058 J*	*ND*	3.02	2.95	*0.000124 J*	*0.00095 J*	0.02
Mar-2014	0.024	0.0269	0.000517	*0.006 J*	0.851	0.897	*0.000457 J*	*ND*	2.72	2.86	*0.000144 J*	*0.000758 J*	*0.0056 J*
Oct-2014	0.0284	0.0285	0.000379	*0.0075 J*	0.996	0.991	*0.0019 J*	*0.003 J*	3.37	3.37	*ND*	*ND*	0.0112
Apr-2015	0.0277	0.0283	0.000377	*0.0071 J*	0.937	0.934	*ND*	*ND*	3.29	3.22	*ND*	*ND*	0.0107
Nov-2015	0.0284	0.0298	0.000269	*0.007 J*	1.02	1.06	*0.000731 J*	*ND*	3.34	3.48	*ND*	*ND*	*0.0083 J*
May-2016	0.0294	0.0284	0.00023	0.0064	0.969	0.966	*ND*	*ND*	3.1	3.09	*ND*	*ND*	*0.0094 J*
Oct-2016	0.0319	0.0365	*0.00015 J*	0.0071	1.02	1.09	*ND*	*ND*	3.15	3.32	*ND*	*ND*	*0.007 J*
May-2017	0.0343	0.0346	*0.00016 J*	0.0065	1.02	1.04	*ND*	*ND*	3.2	3.13	*ND*	*ND*	*0.0085 J*
Oct-2017	0.0335	0.0408	*0.000059 J*	0.0056	1.06	1.13	*ND*	*ND*	*3.2 J-*	3.36	*0.00013 J*	*ND*	*0.0105 J*
May-2018	0.032	0.031	*0.00018 J*	0.0061	*ND*	*ND*	*0.00094 JB*	*ND*	*3.9 J*	*3.54 J*	*0.00008 J*	0.0036	0.0082 B
Nov-2018	0.028	0.028	0.00027	0.0061	*1.1 J*	*1.4 J*	*0.00066 J*	*ND*	*1.7 J*	*3.7 JB*	*0.000078 J*	0.0029 B	0.0091
May-2019	0.034	0.034	*ND*	0.0062	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0041 B	0.0086

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-25A***												
Oct-2019	0.032	0.036	*ND*	0.0053	*1.2 J*	*1.2 J*	*0.00053 J*	*ND*	*4.1 J*	*4 J*	*ND*	*ND*	0.064
May-2020	0.041	0.04	*ND*	0.0077	*ND*	*1.1 J*	*0.00064 J*	*ND*	*4.4 J*	*3.9 J*	*ND*	0.01	0.011
Oct-2020	0.043	0.042	*ND*	0.0059	*ND*	*ND*	*ND*	*ND*	*4.1 J*	*3.7 J*	*ND*	*0.00092 J*	*ND*
Apr-2021	0.041	0.042	*0.00011 J*	*0.0078 J*	1	1	*ND*	*ND*	3.9	4	*ND*	*ND*	*0.0093 J*
Oct-2021	0.046	0.045	*0.00009 J*	0.008	1.1	0.977	*ND*	*ND*	4.2	4.1	*0.00014 J*	*ND*	0.012

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-25A***																
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	0.5 J	NA	NA	0.7 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	1	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	0.7 J	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	0.7 J	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	0.9 J	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	0.5 J	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	0.7 J	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	0.9 J	ND	ND	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	0.8 J	ND	ND	4.4	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	1	ND	ND	5.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	0.9 J	ND	ND	6.4	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	0.7 J	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	1.2	ND	ND	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25A*																
Mar-2007	ND	1.1	ND	ND	13.1	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	2	ND	ND	20	0.7 J	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	0.6 J	ND	ND	6.8	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Sep-2008	1 R	1 R	1 R	1 R	1 R	1 R	1 R	**1 R**	**1 R**	1 R	1 R	1 R	1 R	5 R	5 R	5 R	5 R	5 R
Dec-2008	ND	ND	ND	ND	12.5	ND	ND	ND	ND	ND	1.1	ND	0.6 J	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	7.4	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	9.6	ND	ND	ND	ND	ND	0.9 J	ND	0.6 J	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	21.3	ND	ND	ND	ND	ND	ND	ND	0.97 J	ND	ND	ND	ND	ND
Oct-2010	ND	1.4	ND	ND	27.5	ND	ND	ND	ND	ND	1.4	0.8 J	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	14.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	34.1	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	24.8	1.1	ND	ND	ND	ND	2.4	1	1.6	ND	ND	ND	ND	ND
Sep-2012	ND	1.16	ND	ND	35	0.95 J	ND	ND	ND	ND	2.01	1.16	1.69	ND	ND	ND	ND	ND
Mar-2013	ND	1.14	ND	ND	42.1	1.28	ND	ND	ND	ND	2.9	1.12	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	41.9	1.14	ND	ND	ND	ND	2.5	1.34	2.17	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	39.7	1.2	ND	ND	ND	ND	2.47	1.1	2.13	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	40.1	1.16	ND	ND	ND	ND	2.35	1.36	2.17	ND	ND	ND	ND	ND
Apr-2015	ND	0.94 J	ND	ND	37.3	1.17	ND	ND	ND	ND	2.28	1.26	1.7	ND	ND	ND	ND	ND
Nov-2015	ND	1 J	ND	ND	35.1	1.4	ND	ND	ND	ND	2.3	1.3	1.9	ND	ND	ND	ND	ND
May-2016	ND	0.8 J	ND	ND	27	1.2	ND	ND	ND	ND	2	1.2	1.8	ND	ND	ND	ND	ND
Oct-2016	ND	0.8 J	ND	ND	32	1	ND	ND	ND	ND	2.4	1.2	1.9	ND	ND	ND	ND	ND
May-2017	ND	0.6 J	ND	ND	33	1 J	ND	ND	ND	ND	2.2	1	1.7	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25A*																
Oct-2017	ND	0.6 J	ND	ND	28	1.2	ND	ND	ND	ND	2	1.2	1.7	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	37.4	1.3	ND	ND	ND	ND	2.4	1.4	2.2	ND	ND	ND	2.5 JB	ND
Nov-2018	ND	0.59 J	ND	ND	30.3	1 J	ND	ND	ND	ND	1.8	1.1	1.3	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	19.5	ND	ND	ND	ND	ND	1.2	ND	1.4	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	23.3	ND	ND	ND	ND	ND	1.4	ND	1.3	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	18.4	ND	ND	ND	ND	ND	1.4	ND	1.4	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	24.2	0.7 J	ND	ND	ND	ND	1.5	1	ND	ND	ND	ND	ND	ND
Apr-2021	ND	0.295 J	ND	ND	28	0.718 J	ND	ND	ND	ND	1.95	1.02	1.01	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	30.6	0.8 J	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25A***															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	1.4
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	2.6
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	1.4	2.8
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.2	5.7
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.4	5.3
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	4.3
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	5.5
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	9.8
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19	5.4
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	28	12
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	61	11
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	24	14
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	36	18
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	32.3	22.2
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21.9	16.9
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	22.1	21.9

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25A***															
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	0.8 J	ND	ND	ND	16.1	31.7
Sep-2007	0.5 J	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	1	ND	ND	ND	24.2	23.6
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	1	15.4
Sep-2008	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1.8 R	3 R
Dec-2008	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	1	16.2
Mar-2009	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	7.5
Oct-2009	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	12.8	2.5
Mar-2010	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	30.5 J	46.9
Oct-2010	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	ND	ND	ND	33.5	47.9
Apr-2011	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7	ND	ND	ND	43.7	42.7
Sep-2011	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	28.8	57.6
Mar-2012	3	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	ND	ND	ND	25.6	59.1
Sep-2012	3.57	ND	ND	ND	ND	ND	ND	ND	0.83 J	ND	ND	5.6	ND	ND	ND	15.2	42
Mar-2013	3.82	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.5	ND	ND	ND	19.6	60.8
Oct-2013	4.24	0.24 J	ND	ND	ND	ND	ND	ND	0.94 J	0.23 J	ND	6.43	ND	ND	ND	16.7	61.4
Mar-2014	3.79	ND	ND	ND	ND	ND	ND	ND	0.8 J	0.24 J	ND	5.87	ND	ND	ND	22 J	62.3
Oct-2014	3.98	ND	ND	ND	ND	ND	ND	ND	0.53 J	0.24 J	ND	6.16	ND	ND	ND	19.3	57.7
Apr-2015	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.79	ND	ND	ND	16.9	51.4
Nov-2015	3.4	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	6.4	ND	ND	ND	32.3 J	48.4
May-2016	3.3	ND	ND	ND	ND	ND	ND	ND	0.5 J	0.2 J	ND	6.1	ND	ND	ND	17	41
Oct-2016	3.3	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.3 J	ND	5.5	ND	ND	ND	16	53
May-2017	3	ND	ND	ND	ND	ND	ND	ND	0.4 J	0.2 J,B	ND	5.5	ND	ND	ND	13	47

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25A***															
Oct-2017	3.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*0.2 J*	*ND*	5.9	*ND*	*ND*	*ND*	13	48
May-2018	3.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.2	*ND*	*ND*	*ND*	26.9	52.3
Nov-2018	2.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.1	*ND*	*ND*	*ND*	11.7	44.3 N3
May-2019	1.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	8.5 CL	32 N3
Oct-2019	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.9	*ND*	*ND*	*ND*	12.2	20.4
May-2020	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	7.6	15.5
Oct-2020	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.1	*ND*	*ND*	*ND*	12.9	21.4
Apr-2021	1.88	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.233 J*	*0.187 J*	*ND*	4.75	*ND*	*ND*	*ND*	6.82	35.8
Oct-2021	2.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.1	*ND*	*ND*	*ND*	9.1	26

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25A***															
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	1.4	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	1.6	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	NA
Apr-2000	ND	NA	ND	NA	1.6	ND	NA	ND	ND	ND	NA	NA	ND	0.7 J	ND	ND	NA
Oct-2000	ND	ND	ND	NA	2	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	NA
Apr-2001	ND	ND	ND	NA	1.4	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	NA
Sep-2001	ND	ND	ND	NA	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	NA
Mar-2002	ND	ND	ND	NA	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	NA
Sep-2002	ND	ND	ND	NA	1.2	ND	ND	ND	ND	ND	ND	ND	0.7 J	1.8	ND	ND	NA
Mar-2003	ND	ND	ND	NA	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	NA
Oct-2003	ND	ND	ND	NA	1.1	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	NA
Apr-2004	ND	ND	ND	NA	1	ND	ND	0.6 J	ND	ND	ND	ND	0.8 J	2.3	ND	ND	NA
Oct-2004	ND	ND	ND	NA	2.4	ND	ND	ND	ND	ND	ND	ND	ND	3.1	ND	ND	NA
Apr-2005	ND	ND	ND	ND	2.3	ND	ND	0.9 J	ND	ND	ND	ND	1.2	2.7	ND	ND	NA
Oct-2005	ND	ND	ND	ND	3.3	ND	ND	1.6	ND	ND	ND	ND	1.4	2.5	ND	ND	NA
Mar-2006	ND	ND	ND	ND	2.5	ND	ND	1.4	ND	ND	ND	ND	1.1	1.8	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-25A*															
Sep-2006	ND	ND	ND	ND	**5.4**	ND	ND	1.4	ND	ND	ND	ND	1.7	3.9	ND	ND	NA
Mar-2007	ND	ND	ND	1	6.1 J	ND	ND	1.9	ND	ND	ND	ND	2.6	3	ND	ND	NA
Sep-2007	ND	ND	ND	1.5	**12.1**	ND	ND	2.1	ND	ND	ND	ND	3.6	3.9	ND	ND	NA
Mar-2008	ND	ND	ND	1.6	**9**	ND	ND	1.1	ND	ND	ND	ND	1.8	ND	ND	0.6 J	NA
Sep-2008	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	NA
Dec-2008	ND	ND	0.6 J	2.2	**14.1**	ND	ND	0.9 J	0.5 J	ND	ND	ND	2	ND	ND	ND	NA
Mar-2009	ND	ND	ND	2.4	**11.4**	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA
Oct-2009	ND	ND	0.7 J	ND	**12.1**	0.6 J	ND	0.8 J	ND	ND	ND	ND	1.8	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	**20.7**	ND	ND	ND	ND	ND	ND	ND	ND	3.6	ND	ND	NA
Oct-2010	ND	ND	1.1	3.4	**25.9**	1.2	ND	3.5	ND	ND	ND	ND	ND	3.6	ND	1.2	NA
Apr-2011	ND	ND	1.1	2.8	**22.9**	1.2	ND	3.7	ND	ND	ND	ND	**5.4 C**	3	ND	**5.5 R,C**	NA
May-2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**5.5**	NA	NA	1	NA
Sep-2011	ND	ND	1.1	5.3	**30.9**	1.2	ND	4.7	ND	ND	ND	ND	**6.8**	4	ND	1.4	NA
Mar-2012	ND	ND	1.2	4.8	**34.3**	1.4	ND	4.5	ND	ND	ND	ND	**6.5**	3.6	ND	**4.3 R,C**	NA
May-2012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5	NA
Sep-2012	ND	ND	1.9	5.97	**36.1**	1.88	ND	**5.06 C**	ND	ND	ND	ND	**6.71**	3.53	ND	1.36	3.78
Nov-2012	NA	NA	NA	NA	NA	NA	NA	**5.44**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mar-2013	ND	ND	1.73	6.33	**44**	1.94	ND	**5.14**	ND	ND	ND	ND	**7.31**	ND	ND	1.55	3.67
Oct-2013	ND	ND	2.07	6.05	**43**	2.28	ND	**6.05**	ND	0.18 J	ND	ND	**7.97**	3.34	ND	1.66	4.35
Mar-2014	ND	ND	1.9	6.01	**40.8**	2.26	ND	**5.68**	ND	ND	ND	ND	**7.69**	3.2	ND	1.52	4.16
Oct-2014	ND	ND	0.94 J	5.65	**41.7**	2.17	ND	**6.1**	ND	ND	ND	ND	**8.14**	3.64	ND	1.45	3.11
Apr-2015	0.28 J	ND	ND	5.65	**41.1**	1.94	ND	**5.08**	ND	ND	ND	ND	**7.43**	3.61	ND	1.42	1.94

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25A***															
Nov-2015	*ND*	*ND*	*ND*	5.5	**40.8**	1.8	*ND*	4.9	*ND*	*ND*	*ND*	*ND*	**7.5**	3.3	*ND*	2	1.8
May-2016	*ND*	*ND*	*0.1 J*	4.6	**33**	1.7	*ND*	5	*ND*	*0.1 J*	*ND*	*ND*	**7.1**	3.7	*ND*	1.3	1.8
Oct-2016	*ND*	*ND*	*ND*	4	**35**	1.2	*ND*	4.3	*ND*	*0.2 J*	*ND*	*ND*	**6.4**	4	*ND*	1.5	1.2
May-2017	*ND*	*ND*	*ND*	4.6	**37**	1.6	*ND*	4.3	*ND*	*0.1 J*	*ND*	*ND*	**6**	1.5	*ND*	1.2	1.6
Oct-2017	*ND*	*ND*	*ND*	4.6	**32**	1.6	*ND*	4.5	*ND*	*0.1 J*	*ND*	*ND*	**6.4**	3.4	*ND*	1.3	1.6
May-2018	*ND*	*ND*	*ND*	5.2	**42.1**	2.1	*ND*	**5.6**	*ND*	*ND*	*ND*	*ND*	**8.9**	4.4	*ND*	1.7	*NA*
Nov-2018	*ND*	*ND*	*ND*	4.4	**26.3**	1	*ND*	2.6 CL	*ND*	*ND*	*ND*	*ND*	**5.7**	3.4	*ND*	*0.98 J*	*NA*
May-2019	*ND*	*ND*	*ND*	2.8	**16.7**	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	3.8	2.2	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	2.9	**18.8**	*ND*	*ND*	3.1	*ND*	*ND*	*ND*	*ND*	4	1.6	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	2.2	**15.2**	*ND*	*ND*	2.7	*ND*	*ND*	*ND*	*ND*	2.9	1.2	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	3.1	**16.4**	*0.6 J*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	3.2	1.7	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	3.98	**19.5**	*0.526 J*	*ND*	2.62	*ND*	*ND*	*ND*	*ND*	3.84	*2.1 J*	*ND*	*0.693 J*	*NA*
Oct-2021	*ND*	*ND*	*ND*	4.1	**23.6**	*0.7 J*	*ND*	3	*ND*	*ND*	*ND*	*ND*	4.1	1.9	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-27***											
Mar-2013	4.24	4.24	*0.0847 J*	*ND*	3.16	0.0583	*ND*	6.2	17.5	*0.63 J*	*ND*	3.43
Oct-2013	4.36	4.36	*ND*	*ND*	3.03	0.0804	*ND*	5.8	18.4	*0.615 J*	32	3.37
Mar-2014	4.28	4.28	*ND*	*ND*	2.96	0.0592	*ND*	5.5	20.1	*ND*	*ND*	3.56
Oct-2014	24.2	24.2	*ND*	*ND*	3.09	0.0724	*ND*	5.8	18.2	*ND*	*ND*	3.72
Apr-2015	4.48	4.48	*ND*	*5 J*	2.92	0.0554	*ND*	3.9	18.6	*ND*	31	3.57
Nov-2015	*ND*	*ND*	*ND*	*ND*	3.16	0.053	*ND*	5.4	23.2	*ND*	32	4.25
May-2016	3.6	3.6	*ND*	*ND*	3.93	0.0614	*ND*	5.3	22.9	*ND*	*20 J*	3.6
Oct-2016	*ND*	*ND*	*ND*	*ND*	3.72	*NA*	*NA*	5.2	26.9	*0.701 J*	*23 J*	3.3
May-2017	*ND*	*ND*	*ND*	*ND*	3.1	0.0707	*ND*	5.1	37.8	*ND*	*ND*	3.6
Oct-2017	*ND*	*ND*	*ND*	*ND*	3.63	0.0788	*ND*	5.3	31.3	*ND*	*21 J*	3.5
May-2018	*6 J*	*ND*	*ND*	*ND*	3.3	*0.063 J*	*ND*	6.5	225	*ND*	15	*3.4 J*
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	4.7	*0.076 J*	*ND*	4.7	24	*ND*	80	*3.7 J*
May-2019	*ND*	*NA*	*ND*	*ND*	4.7	*ND*	*ND*	4.45	19.7	*ND*	*ND*	*ND*
Oct-2019	*2.5 J*	*NA*	*ND*	*ND*	4	*0.095 J*	*ND*	4.5	25.3	*ND*	24	3.5
May-2020	*ND*	*NA*	*ND*	*ND*	4.7	*0.056 J*	*ND*	4.5	22	*ND*	25	3.5
Oct-2020	*ND*	*NA*	*ND*	*ND*	4.4	*0.068 J*	*ND*	4.69	22.1	*ND*	20	3.8
Apr-2021	20	*NA*	*ND*	*ND*	4.3	*0.089 J*	*ND*	6.08	25.1	*ND*	*ND*	3.7
Oct-2021	20	*NA*	*ND*	*ND*	3.8	*0.055 J*	*ND*	5.48	21.1	*ND*	*ND*	3.5

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-27***													
Mar-2013	ND	ND	0.006 J	ND	ND	0.877	0.928	0.0074 J	0.000939 J	0.0023 J	0.0538	0.0056	ND	0.302	0.311
Oct-2013	ND	ND	0.006 J	ND	ND	0.835	0.803	0.0034 J	0.00098 J	0.0019 J	0.0606	ND	0.000286 J	0.313	0.307
Mar-2014	0.0017 J	0.000343 J	0.007 J	ND	ND	0.869	0.872	0.0039 J	0.000823 J	0.0025 J	0.287	0.0077 J	ND	0.337	0.328
Oct-2014	0.0012 J	0.000421 J	0.0173	ND	ND	0.915	0.82	0.0062 J	0.000869 J	0.0024 J	0.737	ND	0.0012 J	0.348	0.273
Apr-2015	0.000396 J	ND	0.0065 J	ND	ND	0.899	0.887	0.0015 J	0.000804 J	0.0019 J	0.0623	ND	ND	0.323	0.326
Nov-2015	ND	ND	0.0065 J	ND	0.00008 J	1.13	0.872	0.0014 J	0.000764 J	0.0023 J	0.0973	ND	ND	0.346	0.337
May-2016	ND	ND	0.0065	ND	ND	0.875	0.926	0.0024 J	0.00078 J	0.0023 J	0.385	ND	ND	0.34	0.34
Oct-2016	ND	ND	0.0073	ND	ND	0.77	0.8	0.00062 J	0.0008 J	0.0022 J	ND	ND	ND	0.332	0.35
May-2017	ND	ND	0.0064	ND	ND	0.902	0.721	0.0015 J	0.00084 J	0.0025 J	0.0661 J	ND	ND	0.338	0.327
Oct-2017	ND	ND	0.006	ND	ND	0.8	0.764	0.00092 J	0.00075 J	0.0023 J	ND	ND	ND	0.358	0.305
May-2018	0.000039 J	ND	0.0065	ND	0.000025 J	0.8 J	0.76 J	0.0027 J	0.00077	0.0048 B	ND	ND	ND	0.34 J	0.32 J
Nov-2018	ND	ND	0.0064	0.000027 J	0.000046 J	0.88 J	0.86 J	0.0033 J	0.00082	0.0068	0.026	ND	0.00018 J	0.37 J	0.34 J
May-2019	ND	ND	0.0069	ND	ND	ND	ND	ND	0.00091	0.0074	ND	ND	ND	ND	ND
Oct-2019	0.00011 J	ND	0.0067	ND	0.00025 J	0.8	0.79 J	0.0055 J	0.00093	0.021	0.035 J	0.0088 J	0.000054 J	0.36	0.34 J
May-2020	0.000078 J	ND	0.0064	ND	0.0001 J	0.8	0.82 J	0.0068 J	0.00097	0.022	0.039 J	0.014 J	ND	0.36	0.36 J
Oct-2020	0.00052 J	ND	0.028	ND	ND	0.92	0.78 J	0.054	0.0084	ND	4.2	0.06	ND	0.38	0.36 J
Apr-2021	ND	ND	0.011	ND	ND	0.85 J	0.72 J	0.013	0.0018 J	0.02	0.76	ND	ND	0.38	0.33
Oct-2021	ND	ND	0.0074	ND	ND	0.81	0.84	0.0022 J	0.0011 J	0.0146	0.54	0.014 J	0.00011 J	0.36 J	0.37 J

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-27*												
Mar-2013	0.0078 J	0.0079 J	0.000098 J	0.0045 J	0.437 J	0.45	ND	ND	1.41	1.46	ND	ND	0.0177
Oct-2013	0.0079 J	0.0073 J	ND	0.0031 J	0.377 J	0.344 J	ND	ND	1.45	1.43	ND	0.000916 J	0.0184
Mar-2014	0.0078 J	0.0071 J	ND	0.0028 J	0.491 J	0.441 J	ND	ND	1.53	1.63	0.000579 J	0.0011 J	0.0086 J
Oct-2014	0.0111	0.0087 J	ND	0.0035 J	0.58	0.372 J	ND	ND	1.62	1.65	ND	0.003 J	0.0089 J
Apr-2015	0.0078 J	0.0078 J	ND	0.0018 J	0.377 J	0.389 J	ND	ND	1.51	1.6	ND	ND	0.0094 J
Nov-2015	0.0074 J	0.007 J	ND	0.0017 J	0.444 J	0.422 J	ND	ND	1.64	1.64	ND	0.000256 J	0.0086 J
May-2016	0.007	0.0067	ND	0.0022 J	0.383 J	0.363 J	ND	ND	1.49	1.48	ND	0.00039 J	0.008 J
Oct-2016	0.0067	0.006	ND	0.0013 J	0.427	0.415	ND	ND	1.71	1.76	ND	ND	0.0037 J
May-2017	0.0073	0.0054	ND	0.005	0.418	0.38 J	ND	ND	1.52	1.36	ND	0.00024 J	0.0049 JB
Oct-2017	0.0062	0.0056	ND	0.0016 J	0.444	0.416	ND	ND	1.82	1.86	ND	ND	0.0051 J
May-2018	0.0053	0.0049	ND	0.0024	ND	ND	0.00045 JB	ND	1.7 J	1.9 J	ND	0.0041	0.0061 B
Nov-2018	0.0073	0.0054	ND	0.0028	ND	ND	0.00013 J	ND	2.5 JB	2.2 J	ND	0.0028	0.0069
May-2019	0.0062	0.0051	ND	0.0028	ND	ND	ND	ND	ND	ND	ND	0.0038	0.0053
Oct-2019	0.0051	0.0046	ND	0.0033	ND	ND	ND	ND	2.2 J	2 J	ND	0.0008 J	0.014
May-2020	0.005	0.0045	ND	0.0044	ND	ND	ND	ND	2.1 J	2.1 J	ND	0.003	0.0077
Oct-2020	0.024	0.012	ND	0.045	ND	ND	ND	ND	ND	ND	ND	0.0065	ND
Apr-2021	0.0077	0.0058	ND	0.013	0.53	0.41 J	ND	ND	2.4	2.3	ND	0.0012 J	0.0033 J
Oct-2021	0.0067	0.0074	ND	0.0042	0.51	0.446 J	ND	ND	2.2	2.2	ND	0.00036 J	0.0028 J

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-27*																
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.8 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-27***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.18 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.206 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-27*															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Millersville Landfill and Resource Recovery Facility

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-28***											
Mar-2013	4.52	4.52	*0.0847 J*	*ND*	4.04	0.0805	*ND*	6.2	20	*0.533 J*	*ND*	4.82
Oct-2013	4.4	4.4	*ND*	*ND*	3.95	0.112	*ND*	5.6	21.4	*0.517 J*	46	4.9
Mar-2014	4.32	4.32	*ND*	*ND*	4.19	0.0818	*ND*	5.4	23.5	*ND*	*ND*	5.44
Oct-2014	*ND*	*ND*	*0.106 J*	*ND*	4.85	0.0941	*ND*	4.7	28.3	*ND*	36	5.31
Apr-2015	4.64	4.64	*ND*	*ND*	5.29	0.0508	*ND*	4.1	25.7	*ND*	*ND*	6
Nov-2015	3.72	3.72	*ND*	*ND*	6.06	0.0781	*ND*	5.2	47.9	*ND*	*12 J*	6.59
May-2016	2.24	2.24	*ND*	*ND*	6.46	0.0791	*ND*	5.2	39	*ND*	27	6.4
Oct-2016	*ND*	*ND*	*ND*	*ND*	7.83	*NA*	*NA*	5.3	47.6	*0.717 J*	31	6.8
May-2017	2.68	2.68	*ND*	*5 J*	9.52	0.16	*ND*	5	58.6	*0.545 J*	*22 J*	7.7
Oct-2017	*ND*	*ND*	*ND*	*ND*	12.3	0.101	*ND*	5	79.6	*0.542 J*	29	9.6
May-2018	*2 JB*	*ND*	*0.066 J*	*ND*	14.6	*0.086 J*	*ND*	5.4	79.2	*ND*	37	10.7
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	19.5	*0.079 J*	*ND*	4.68	70.1	*ND*	83	13.2
May-2019	*ND*	*NA*	*ND*	*ND*	28.6	*ND*	*ND*	4.28	78.8	*ND*	67	16.8
Oct-2019	*2.5 J*	*NA*	*ND*	*ND*	40.6	*0.098 J*	*ND*	4.29	139.3	*ND*	85	22.3
May-2020	*ND*	*NA*	*ND*	*ND*	45.1	*0.087 J*	*ND*	4.44	141.9	*ND*	94	20.3
Oct-2020	*ND*	*NA*	*ND*	*6.1 J*	43.5	*0.058 J*	*ND*	5.03	170.4	*ND*	90	23.8
Apr-2021	*1 J3c*	*NA*	*ND*	*ND*	54.5	*0.076 J*	*ND*	4.63	204.2	*ND*	80	25
Oct-2021	*1 J2c*	*NA*	*ND*	*ND*	51.6	*0.075 J*	*ND*	4.82	235.9	*ND*	86	25.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-28***													
Mar-2013	ND	ND	0.0103	ND	ND	1.16	1.27	0.0017 J	0.0025 J	0.0013 J	0.0052 J	0.0051 J	ND	0.466	0.522
Oct-2013	ND	ND	0.0118	ND	ND	1.16	1.14	0.0013 J	0.0027 J	0.000921 J	ND	ND	ND	0.487	0.485
Mar-2014	0.000945 J	ND	0.0116	ND	ND	1.26	1.23	0.000968 J	0.0028 J	0.0013 J	0.0131 J	0.0044 J	ND	0.56	0.549
Oct-2014	0.000718 J	ND	0.0125	ND	ND	1.28	1.29	0.0021 J	0.0027 J	0.000985 J	0.0179 J	ND	ND	0.515	0.499
Apr-2015	0.000611 J	ND	0.0142	ND	ND	1.41	1.42	0.0027 J	0.0028 J	0.0013 J	0.0482 J	ND	ND	0.602	0.611
Nov-2015	ND	0.000252 J	0.0154	ND	ND	1.51	1.51	0.000811 J	0.0029 J	0.0011 J	ND	ND	0.000474 J	0.683	0.695
May-2016	ND	ND	0.0181	0.000071 J	ND	1.4	1.59	0.002 J	0.0026	0.0011 J	ND	ND	ND	0.695	0.716
Oct-2016	ND	ND	0.0175	ND	ND	1.54	1.54	0.003 J	0.0029	0.0013 J	0.0662 J	ND	ND	0.726	0.756
May-2017	ND	ND	0.0172	ND	ND	1.71	1.7	0.0018 J	0.003	0.0013 J	ND	ND	ND	0.829	0.832
Oct-2017	ND	ND	0.0216	0.000092 J	ND	2.19	1.9	0.0014 J	0.003	0.001 J	ND	ND	ND	1.01	0.986
May-2018	0.000045 J	ND	0.028	0.0001 J	0.000029 J	2.4	2.4	0.0039 J	0.003	0.0025 B	0.044	ND	ND	1.1	1.1
Nov-2018	ND	ND	0.029	0.00012 J	0.000039 J	3	2.9	0.0098	0.0028	0.0015 J	0.072	0.029	0.00014 J	1.4	1.4
May-2019	ND	ND	0.041	ND	ND	3.8	3.9	0.0087	0.0038	0.0025	ND	0.021	ND	1.8	1.8
Oct-2019	0.000099 J	ND	0.052	0.00021 J	0.00026 J	5.1	5	0.011	0.0045	0.0057	0.098 J	0.048	0.000073 J	2.3	2.3
May-2020	0.000088 J	ND	0.05	0.00018 J	ND	4.6	3.2	0.0071	0.0045	0.0026	0.062 J	ND	ND	2.2	3
Oct-2020	ND	ND	0.068	0.00029 J	ND	5.3	5.1	0.081	0.013	0.0062	2.2	0.29	ND	2.6	2.5
Apr-2021	ND	ND	0.064	0.00018 J	ND	5.6	5.8	0.0085	0.006	ND	0.11	0.06 J	ND	2.7	2.8
Oct-2021	0.000063 J	ND	0.066	0.0002 J	ND	5.6	6.2	0.0043	0.0059	0.0018 J	0.2	0.036 J	0.000051 J	2.8	3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-28*												
Mar-2013	0.0077 J	0.0086 J	0.000105 J	0.0014 J	0.39 J	0.412 J	ND	ND	1.47	1.7	ND	ND	0.0154
Oct-2013	0.0074 J	0.0071 J	ND	0.0019 J	0.36 J	0.349 J	ND	ND	1.7	1.71	ND	0.001 J	0.0136
Mar-2014	0.0072 J	0.0072 J	ND	0.0018 J	0.477 J	0.469 J	ND	ND	1.86	1.81	ND	ND	0.0087 J
Oct-2014	0.0072 J	0.0069 J	ND	0.0028 J	0.431 J	0.43 J	ND	ND	1.98	1.97	ND	ND	0.0093 J
Apr-2015	0.013	0.0077 J	ND	0.0032 J	0.452 J	0.464 J	ND	ND	2.19	2.24	ND	ND	0.0079 J
Nov-2015	0.0085 J	0.0087 J	ND	0.0023 J	0.497 J	0.497 J	ND	ND	2.6	2.69	0.000168 J	ND	0.0065 J
May-2016	0.0087	0.0089	ND	0.0027 J	0.465	0.454	ND	ND	2.62	2.69	ND	ND	0.0075 J
Oct-2016	0.0091	0.0083	ND	0.0036 J	0.504	0.533	ND	ND	3.2	3.24	ND	ND	ND
May-2017	0.0098	0.0092	ND	0.0033 J	0.537	0.577	ND	ND	3.8	3.62	ND	ND	0.0045 JB
Oct-2017	0.0096	0.0107	ND	0.003 J	0.613	0.641	ND	ND	4.85	4.65	ND	ND	0.0049 J
May-2018	0.012	0.011	ND	0.0047	ND	ND	0.00018 JB	ND	5.9	6.2	ND	0.0036	0.007 B
Nov-2018	0.015	0.014	ND	0.0087	0.84 J	ND	0.00012 J	ND	8	7.5	ND	0.0024	0.0081
May-2019	0.02	0.019	ND	0.0079	ND	ND	ND	ND	9.5	9.2	ND	0.0056	0.0092
Oct-2019	0.03	0.024	ND	0.011	ND	1.1 J	ND	ND	16.7	16.2	ND	ND	0.017
May-2020	0.026	0.023	ND	0.0084	ND	1.2 J	ND	ND	15.3	7.3	ND	0.0029	0.011
Oct-2020	0.037	0.032	ND	0.072	1.5	1.1	ND	ND	20	19.1	ND	0.007	0.02
Apr-2021	0.027	0.028	0.00006 J	0.015	1.1	1.1	ND	ND	23.2	24.2	ND	ND	0.009 J
Oct-2021	0.026	0.028	ND	0.0097	1.1	1.12	ND	ND	24.4	26.2	ND	ND	0.0082

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-28*																
Mar-2013	ND	ND	ND	ND	1.08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	2.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	0.1 J	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	0.1 J	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	0.1 J	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2 JB	ND
Nov-2018	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.63	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-28***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.42 J*	*ND*	*ND*	*ND*	*ND*	*ND*	8.46	6.37
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.41 J*	*ND*	*ND*	*ND*	*ND*	*ND*	5.9	6.23
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*9.82 J*	7.38
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.39 J*	*ND*	*ND*	*ND*	*ND*	*ND*	6.82	7.55
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.37 J*	*ND*	*ND*	*ND*	*ND*	*ND*	8.14	8.59
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*18.1 J*	9
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	4.2	4.5
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	4.5	4.7
May-2017	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	3.8	4.6
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	4	4.8
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	8.3	5.1
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4 CL	4.4 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7 CL	4.6 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.3	3.6
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.3	3.4
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	2.3
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.22 J*	*ND*	*0.213 J*	*ND*	*ND*	*ND*	*3.49 J*	5.5
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.1	4.4

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-28***															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.3	0.16 J	ND	ND	ND	0.29 J	3.88	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	1.58	ND	ND	ND	ND	0.33 J	3.32	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.56	ND	ND	ND	ND	0.34 J	4.15	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	0.33 J	3.09	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	2.04	ND	ND	ND	ND	0.43 J	3.43	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	0.5 J	3.9	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	0.2 J	1.8	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	0.8 J	0.1 J	ND	ND	ND	0.2 J	1.9	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	0.2 J	1.8	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	0.2 J	1.6	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	2.3	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	1.4	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	0.6 J	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.481 JB	ND	ND	0.849 J	0.563 J	ND	ND	ND	0.227 J	1.31 J	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	1.7	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-29***											
Mar-2013	3.68	3.68	*0.0847 J*	*ND*	7.45	0.345	*ND*	6.1	39.4	1.38	19	7.56
Oct-2013	3.84	3.84	*ND*	*ND*	7.1	0.338	*ND*	5.8	39.2	*0.95 J*	44	8.02
Mar-2014	3.64	3.64	*0.108 J*	*ND*	7.5	0.378	*ND*	5.1	40	*0.635 J*	*ND*	8.99
Oct-2014	*ND*	*ND*	*ND*	*ND*	7.85	0.352	*ND*	4.5	37.1	*ND*	32	8.22
Apr-2015	4.76	4.76	*ND*	*ND*	7.91	0.401	*ND*	4.9	39.6	*ND*	27	8.83
Nov-2015	*ND*	*ND*	*ND*	*ND*	8.47	0.453	*ND*	5.1	66.3	*ND*	28	10
May-2016	*ND*	*ND*	*ND*	*ND*	9.01	0.442	*ND*	5	57.4	*0.644 J*	29	9
Oct-2016	*ND*	*ND*	*ND*	*ND*	8.1	*NA*	*NA*	4.9	57.9	*0.951 J*	28	7.9
May-2017	*ND*	*ND*	*ND*	*ND*	8.33	0.438	*ND*	4.9	59.4	*0.855 J*	25	8.3
Oct-2017	*ND*	*ND*	*ND*	*ND*	9.03	0.498	*ND*	5.3	69.4	*0.69 J*	26	8.6
May-2018	*2 JB*	*ND*	*ND*	*ND*	8.6	0.49	*ND*	5.7	59.2	*ND*	27	9.1
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	9.8	0.51	*ND*	4.64	43.1	*ND*	33	10.1
May-2019	*ND*	*NA*	*ND*	*ND*	9.4	0.54	*ND*	4.44	38.1	*ND*	81	9.3
Oct-2019	*ND*	*NA*	*ND*	161 ML	10.1	0.58	*ND*	4.35	48.8	*ND*	44	9.2
May-2020	*ND*	*NA*	*ND*	*ND*	10.5	0.57	*ND*	4.4	49.7	*ND*	30	9.8
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	9.4	0.55	*ND*	4.83	48.3	*ND*	39	9.9
Apr-2021	*1 J3c*	*NA*	*ND*	*ND*	10.7	0.58	*ND*	4.73	62.4	*ND*	21	9.5
Oct-2021	*ND*	*NA*	*ND*	*ND*	9.1	0.66	*ND*	4.84	89.8	*ND*	*ND*	10.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-29***													
Mar-2013	ND	ND	0.0168	0.000171 J	ND	1.73	2.1	0.0039 J	0.0172	0.004 J	0.0493 J	0.0085 J	ND	0.786	0.903
Oct-2013	ND	ND	0.0214	ND	ND	1.77	1.86	0.0018 J	0.0117	0.0024 J	ND	ND	ND	0.874	0.936
Mar-2014	0.000625 J	0.00023 J	0.0219	ND	ND	1.96	1.99	0.0044 J	0.0078 J	0.0026 J	0.11	0.0084 J	ND	0.992	0.996
Oct-2014	0.000547 J	ND	0.0225	ND	ND	1.86	1.88	0.000879 J	0.0057 J	0.0018 J	0.0223 J	ND	ND	0.867	0.869
Apr-2015	0.000537 J	ND	0.0258	0.000165 J	ND	1.96	1.98	0.000867 J	0.0047 J	0.0019 J	0.0169 J	ND	ND	0.955	0.983
Nov-2015	ND	ND	0.0276	0.000158 J	ND	2.14	1.96	0.00074 J	0.0051 J	0.0022 J	0.0248 J	0.0151 J	0.000367 J	1.13	1.07
May-2016	ND	ND	0.0237	0.00014 J	ND	1.99	1.87	0.0015 J	0.0035	0.0018 J	ND	ND	0.00025 J	0.985	0.93
Oct-2016	ND	ND	0.0209	0.00013 J	ND	1.66	1.71	0.00068 J	0.0032	0.0015 J	ND	ND	ND	0.919	0.971
May-2017	ND	ND	0.0228	0.00013 J	ND	1.7	1.74	0.0017 J	0.0024	0.0017 J	0.0474 J	ND	0.000095 J	0.975	0.988
Oct-2017	ND	ND	0.0241	0.00016 J	ND	1.68	1.84	ND	0.0024	0.0016 J	ND	ND	ND	1.07	1.04
May-2018	0.000048 J	ND	0.028	0.00014 J	0.000033 J	2	1.9	0.0022 J	0.0018	0.0024 B	ND	ND	0.000018 J	1	1
Nov-2018	ND	ND	0.028	0.00017 J	0.000042 J	2.1	2.1	0.0057 J	0.0019	0.0071	0.041	0.019 J	0.00009 J	1.2	1.1
May-2019	ND	ND	0.027	ND	ND	2	2	ND	0.0018	0.0045	ND	ND	ND	1	1.1
Oct-2019	0.00009 J	ND	0.026	0.00016 J	0.00022 J	2	2	0.0047 J	0.0018	0.009	0.013 J	0.0068 J	0.000065 J	1	1.1
May-2020	0.000068 J	ND	0.027	0.00014 J	ND	2.1	1.4	0.0047 J	0.0018	0.0072	0.015 J	ND	ND	1.1	0.75 J
Oct-2020	ND	ND	0.028	ND	ND	2.1	2	0.012 J	0.0019 J	0.0076 J	0.02 J	0.0063 J	ND	1.2	1.1
Apr-2021	ND	ND	0.029	ND	ND	2	2	0.002 J	0.0015 J	ND	ND	ND	ND	1.1	1.1
Oct-2021	ND	ND	0.031	0.00019 J	ND	2.2	2.3	0.002 J	0.002 J	0.0016 J	0.015 J	ND	0.000033 J	1.2	1.2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-29***												
Mar-2013	0.0086 J	0.0094 J	0.000099 J	0.0165	0.594	0.681	ND	ND	2.65	3.01	ND	ND	0.0155
Oct-2013	0.0075 J	0.0078 J	ND	0.0081 J	0.569	0.588	ND	ND	2.93	3.13	ND	ND	0.0127
Mar-2014	0.0073 J	0.0072 J	ND	0.0079 J	0.775	0.729	ND	ND	3.09	3.18	ND	ND	0.006 J
Oct-2014	0.0072 J	0.0072 J	ND	0.0041 J	0.672	0.653	0.00076 J	ND	3.14	3.14	ND	ND	ND
Apr-2015	0.0078 J	0.008 J	ND	0.0037 J	0.683	0.703	ND	ND	3.63	3.73	ND	ND	0.0072 J
Nov-2015	0.0085 J	0.0082 J	ND	0.0041 J	0.744	0.686	ND	ND	3.98	3.76	ND	ND	0.0111
May-2016	0.0075	0.0067	ND	0.0032 J	0.688	0.655	ND	ND	3.29	3.28	ND	ND	ND
Oct-2016	0.0069	0.0068	ND	0.0027 J	0.655	0.688	ND	ND	3.23	3.34	ND	ND	ND
May-2017	0.0074	0.0069	ND	0.0032 J	0.731	0.711	ND	ND	3.38	3.18	ND	0.00044 J	ND
Oct-2017	0.0068	0.0074	ND	0.0025 J	0.716	0.741	ND	ND	3.79	3.68	ND	ND	ND
May-2018	0.0071	0.007	ND	0.0031	ND	ND	0.00037 JB	ND	3.7 J	3.9 J	ND	0.0033	0.0044 JB
Nov-2018	0.0097	0.009	ND	0.0054	ND	ND	0.00022 J	ND	4.2 J	4.2 J	ND	0.0024	0.0049 J
May-2019	0.0085	0.008	ND	0.0034	ND	ND	ND	ND	ND	ND	ND	0.0054	ND
Oct-2019	0.008	0.0079	ND	0.003	ND	ND	ND	ND	3.8 J	3.9 J	ND	ND	0.011
May-2020	0.0092	0.0079	ND	0.0036	1.1 J	ND	ND	ND	3.2 J	2.2 J	ND	0.0032	0.0053
Oct-2020	0.0089	0.0085	ND	0.0038	ND	ND	ND	ND	4.2 J	3.7 J	ND	0.0039 J	ND
Apr-2021	0.0089	0.0087	0.00007 J	0.0042 J	0.8	0.75	ND	ND	4.2	4.3	ND	ND	ND
Oct-2021	0.0095	0.0089	ND	0.0031	0.79	0.743	ND	ND	4.5	4.5	ND	ND	0.002 J

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-29*																
Mar-2013	ND	ND	ND	ND	1.48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.96	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.68	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.51	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.6	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	0.1 J	ND	ND	1.7	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	0.1 J	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8 J	ND
Nov-2018	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-29***															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.88 J	ND	0.45 J	ND	ND	ND	9.31	4.23
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.99 J	ND	0.66 J	ND	ND	ND	6.72	4.54
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.97 J	0.45 J,B	0.54 J	ND	ND	ND	9.34 J	4.81
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.86 J	ND	0.51 J	ND	ND	ND	6.19	3.62
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.72 J	ND	0.53 J	ND	ND	ND	5.59	3.13
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J,B	ND	0.9 J	ND	ND	ND	12.1 J	3.4
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	0.8 J	ND	ND	ND	5.6	3.7
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	0.7 J	ND	ND	ND	6.4	3.9
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	0.9 J	ND	ND	ND	5.3	3.7
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	0.9 J	ND	ND	ND	5	3.5
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	9.1	3.2
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.54 J	ND	0.71 J	ND	ND	ND	4.3 CL	2.3 N3
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3 CL	2.4 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	1.9
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	1.4
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	0.7 J	ND	ND	ND	5.1	1.6
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.571 J	ND	0.751 J	ND	ND	ND	3.23 J	2.34 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	0.7 J	ND	ND	ND	3.9	1.5

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-29***															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	3.78	0.36 J	ND	ND	ND	0.5 J	0.92 J	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	4.65	ND	ND	ND	ND	0.6 J	0.79 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	4.04	ND	ND	ND	ND	0.57 J	0.94 J	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	3.8	ND	ND	ND	ND	0.51 J	0.48 J	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	3.29	ND	ND	ND	ND	0.44 J	0.45 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND
May-2016	ND	ND	ND	0.1 J	ND	ND	ND	3.1	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	0.5 J	0.6 J	ND	ND	ND
May-2017	ND	ND	ND	0.1 J	ND	ND	ND	2.9	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
Oct-2017	ND	ND	ND	0.2 J	ND	ND	ND	2.5	ND	ND	ND	ND	0.4 J	0.4 J	ND	ND	ND
May-2018	ND	ND	ND	ND	1.2	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	0.75 J	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	**1.9 D6**	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	0.274 J	0.46 JB	ND	ND	1.36	ND	ND	ND	ND	0.326 J	0.277 J	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Millersville Landfill and Resource Recovery Facility

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-30***											
Mar-2013	13.4	13.4	*0.107 J*	*ND*	20.6	1.75	*ND*	6.2	108.6	4.07	71	25.2
Oct-2013	12.5	12.5	*ND*	*ND*	21	1.71	*ND*	6.6	99.2	1.24	72	25.2
Mar-2014	8.92	8.92	*ND*	*ND*	21.8	1.8	*ND*	5.8	94.7	*0.863 J*	58	24.2
Oct-2014	3.3	3.3	*ND*	*ND*	21.3	1.82	*ND*	5.5	83	*ND*	70	21.4
Apr-2015	6.52	6.52	*ND*	*ND*	21.5	1.88	*ND*	4.6	84.5	*ND*	68	20.9
Nov-2015	2.84	2.84	*ND*	*ND*	20.9	1.93	*ND*	5.4	129.7	*ND*	45	18.4
May-2016	2.72	2.72	*ND*	*ND*	22.8	1.86	*ND*	5	114.9	*ND*	77	18.9
Oct-2016	*ND*	*ND*	*ND*	*ND*	22.9	*NA*	*NA*	5.3	126.3	1.03	88	17.4
May-2017	*ND*	*ND*	*ND*	*6 J*	23.5	1.84	*ND*	5.1	133.9	*0.765 J*	50	17.3
Oct-2017	*ND*	*ND*	*ND*	*7 J*	23.1	2.02	*ND*	5.3	146.2	*0.73 J*	73	17.5
May-2018	*2 JB*	*ND*	*ND*	*ND*	21.5	2	*ND*	5	131.8	28.6	*ND*	18
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	23.5	2.1	*ND*	4.78	98.3	*ND*	69	18.8
May-2019	*ND*	*NA*	*ND*	*ND*	23.2	2.2	*ND*	4.77	75.9	*ND*	55	18.3
Oct-2019	*2 JH1*	*NA*	*ND*	*ND*	22.7	2.1	*ND*	4.76	100.1	*ND*	72	19.7
May-2020	*2 J*	*NA*	*ND*	*ND*	25.6	2.2	0.01	4.42	99.5	*ND*	73	19.6
Oct-2020	*ND*	*NA*	*ND*	*ND*	23.6	1.9	*ND*	4.77	102.4	*ND*	86	18.3
Apr-2021	*4 J4c*	*NA*	*ND*	*ND*	26	2.2	*ND*	4.84	121.2	*ND*	56	19.3
Oct-2021	*2 J3c*	*NA*	*0.047 J*	*ND*	22.1	2.3	*ND*	4.97	151.4	*ND*	56	18.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-30***													
Mar-2013	ND	ND	0.026	ND	ND	7.64	7.6	0.007 J	0.0023 J	0.0013 J	0.29	0.0067 J	ND	1.48	1.48
Oct-2013	ND	ND	0.0302	ND	ND	7.39	7.55	0.0022 J	0.0019 J	0.000525 J	0.0226 J	ND	ND	1.63	1.69
Mar-2014	0.000575 J	0.000086 J	0.0279	ND	ND	7	7.06	0.0013 J	0.0017 J	0.0013 J	0.0734	0.0057 J	ND	1.64	1.63
Oct-2014	0.0004 J	ND	0.0289	ND	ND	5.96	5.94	0.0011 J	0.0018 J	0.000821 J	0.0747	ND	ND	1.57	1.4
Apr-2015	0.000927 J	ND	0.031	ND	ND	5.79	5.78	0.000877 J	0.0019 J	0.0015 J	0.0312 J	0.0135 J	ND	1.57	1.57
Nov-2015	ND	ND	0.0284	0.000066 J	0.000064 J	4.82	4.68	0.000609 J	0.0017 J	0.0016 J	0.0353 J	ND	0.00038 J	1.55	1.53
May-2016	ND	ND	0.0307	0.00012 J	ND	4.89	4.64	0.0015 J	0.002	0.002 J	ND	ND	ND	1.61	1.58
Oct-2016	ND	ND	0.0274	ND	ND	4.41	4.47	0.0017 J	0.002	0.0014 J	ND	ND	ND	1.55	1.54
May-2017	ND	ND	0.0317	0.00011 J	ND	4.28	4.33	0.00079 J	0.002	0.002 J	ND	ND	ND	1.61	1.6
Oct-2017	ND	ND	0.0263	0.00011 J	ND	4.27	4.48	ND	0.0018	0.0014 J	ND	ND	ND	1.66	1.58
May-2018	0.000036 JB	ND	0.032	0.0001 J	0.000058 J	4.5	4.5	0.0027 JB	0.0019	0.0026 B	0.013 J	ND	ND	1.6	1.7
Nov-2018	ND	ND	0.032	0.00012 J	0.000064 J	4.6	4.6	0.0032 J	0.002	0.0018 J	0.016 J	ND	0.000033 J	1.8	1.7
May-2019	ND	ND	0.032	ND	ND	4.5	4.5	ND	0.0021	0.0033	ND	ND	ND	1.7	1.7
Oct-2019	0.000094 JB	ND	0.031	0.000099 J	0.00028 JB	4.9	4.5	0.0042 J	0.0021	0.0039	0.021 J	0.018 J	0.000075 JB	1.8	1.7
May-2020	0.000061 J	ND	0.033	0.0001 J	ND	4.8	4.8	0.0047 J	0.0022	0.014	0.024 J	0.011 J	ND	1.8	1.8
Oct-2020	ND	ND	0.033	ND	ND	4.5	4.5	0.0073 JB	0.0025 J	ND	0.0093 J	ND	ND	1.7	1.8
Apr-2021	ND	ND	0.034	ND	ND	4.7	4.3	0.00081 J	0.0023 J	0.0053	ND	ND	ND	1.9	1.7
Oct-2021	ND	ND	0.036	ND	ND	4.6	4.7	0.0019 J	0.0025 J	0.0015 J	0.012 J	ND	ND	1.8	1.8

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-30*												
Mar-2013	0.0145	0.0146	*0.000097 J*	*0.0055 J*	1.45	1.35	*ND*	*ND*	12.1	12.3	*0.000257 J*	*ND*	0.019
Oct-2013	0.0106	0.0108	*ND*	*0.0032 J*	1.18	1.2	*ND*	*ND*	10.4	10.6	*ND*	*ND*	0.0156
Mar-2014	*0.0087 J*	*0.0085 J*	*ND*	*0.0031 J*	1.39	1.4	*ND*	*ND*	10.3	10.4	*0.000698 J*	*ND*	*0.0077 J*
Oct-2014	*0.0086 J*	*0.0083 J*	*ND*	*0.003 J*	1.38	1.37	*ND*	*ND*	10.2	10.1	*ND*	*ND*	*0.0073 J*
Apr-2015	*0.009 J*	*0.0092 J*	*ND*	*0.0031 J*	1.35	1.35	*ND*	*ND*	10.8	10.8	*ND*	*ND*	0.0106
Nov-2015	*0.0086 J*	*0.0088 J*	*ND*	*0.0029 J*	1.32	1.31	*ND*	*ND*	10.6	10.5	*ND*	*ND*	*0.0071 J*
May-2016	0.0097	0.0096	*ND*	*0.0035 J*	1.26	1.25	*ND*	*ND*	10.8	10.5	*ND*	*ND*	*ND*
Oct-2016	0.0114	0.0087	*ND*	0.0042	1.35	1.34	*ND*	*ND*	10.5	10.7	*ND*	*ND*	*0.0049 J*
May-2017	0.0096	0.0092	*ND*	*0.0032 J*	1.37	1.36	*ND*	*ND*	10.5	10.4	*ND*	*ND*	*0.0051 JB*
Oct-2017	0.0089	0.0095	*ND*	*0.0032 J*	1.34	1.38	*ND*	*ND*	10.9	10.4	*ND*	*ND*	*ND*
May-2018	0.009	0.0093	*ND*	0.004	*1.4 J*	*0.88 J*	*ND*	*ND*	10.2	10.7	*0.00023 J*	0.0032 B	0.0061
Nov-2018	0.01	0.0099	*ND*	0.0043	*1.5 J*	*1 J*	*0.00016 J*	*ND*	9.9	10.7	*ND*	0.0025	0.0062
May-2019	0.01	0.01	*ND*	0.006	*ND*	*ND*	*ND*	*ND*	9.6	9	*ND*	0.0051	0.0057
Oct-2019	0.011	0.01	*ND*	0.005	*1.6 J*	*1.6 J*	*ND*	*ND*	10.9	10.5	*ND*	*ND*	0.011 B
May-2020	0.012	0.01	*ND*	0.0054	*1.6 J*	*1.4 J*	*ND*	*ND*	9.8	10.6	*ND*	0.0033	0.007
Oct-2020	0.01	0.01	*ND*	0.004	*1.4 J*	*1.3 J*	*ND*	*ND*	10.2	10.3	*ND*	*0.0032 JB*	*ND*
Apr-2021	0.011	0.01	*ND*	*0.0041 J*	1.5	1.4	*ND*	*ND*	12.4	11.8	*ND*	*ND*	*0.0042 J*
Oct-2021	0.011	0.011	*ND*	0.0043	1.5	1.41	*ND*	*ND*	11.8	11.5	*ND*	*ND*	*0.0036 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-30***																
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.2 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-30***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.34 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*0.39 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.181 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-30***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*0.89 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Millersville Landfill and Resource Recovery Facility

HISTORICAL TABLES –
COMAR Wells

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-07***											
Nov-1993	10	10	0.1	ND	2.9	0.3	ND	5.75	31.5	ND	ND	3.38
Apr-1994	10	10	0.1	ND	3	0.3	ND	5.61	22.3	3	20	3.4
Apr-1995	ND	ND	ND	ND	2.7	0.3	ND	5.2	21.6	2.1	33	2.3
Apr-1997	ND	8	ND	ND	2.5	0.17	ND	NA	NA	ND	80	9.6
Oct-1997	2	2	0.23	ND	ND	ND	ND	6.17	39.7	ND	40	6.5
Apr-1998	ND	ND	0.21	ND	2.17	0.38	ND	6.37	41.9	0.65	12	3.1
Apr-1999	ND	ND	0.74	ND	3.88	0.34	ND	5.32	25.7	ND	28	3.7
Oct-1999	ND	ND	0.08	ND	3.12	0.433	ND	5.12	23.1	ND	47	3.1
Apr-2000	2	2	ND	ND	2.3	0.4	ND	5.85	20	ND	19	4.2
Oct-2000	3	NA	ND	ND	2.61	ND	ND	5.41	27.5	ND	ND	3.45
Apr-2001	3.3	NA	ND	ND	1.49	ND	ND	NA	NA	ND	22	3.49
Sep-2001	6	6	ND	ND	4.04	1.3	ND	5.17	24	ND	25	4.7
Mar-2002	4	4	ND	ND	1.49	0.282	ND	5.6	28.1	ND	21	3.79
Sep-2002	5	5	ND	ND	3.19	ND	ND	5.6	28.3	ND	32	5.2
Mar-2003	5	5	ND	ND	3.37	ND	ND	5.5	31.2	ND	21	5.64
Oct-2003	4.3	4.3	ND	ND	2.69	0.289	ND	5.3	25.7	ND	42	4.97
Apr-2004	3.2	3.2	ND	ND	2.69	0.27	ND	5.5	22.3	ND	41	3.71
Oct-2004	8.1	8.1	ND	ND	2.94	0.32	ND	5.7	22.4	ND	19	11
Apr-2005	3.6	3.6	ND	ND	2.63	0.32	ND	5.7	22.4	ND	36	4.3
Oct-2005	11	11	ND	ND	3.06	0.3	ND	4.8	34.5	ND	34	10
Mar-2006	7.1	7.1	ND	ND	2.84	0.32	ND	5.1	28.9	0.58	22	5.45
Sep-2006	4.3	4.3	ND	ND	2.9	0.41	ND	5.5	25.5	ND	27	3.85
Mar-2007	5.1	5.1	ND	ND	3.03	0.38	ND	5.2	23.3	ND	ND	3.98
Sep-2007	6.3	6.3	ND	ND	7.78	ND	ND	5.2	25.6	ND	21	5.54
Mar-2008	6.3	6.3	ND	ND	7.05	ND	ND	5.4	27.1	ND	31	5.67
Sep-2008	7.3	7.3	ND	ND	3.16	ND	ND	5.2	24.2	ND	31	4.4
Mar-2009	20	20	ND	ND	2.44	0.11	ND	5.6	31.9	ND	11	13.9
Oct-2009	35	35	ND	ND	2.29	0.08	ND	5.1	26	ND	49	24.9
Apr-2010	22.5	22.5	ND	ND	3.07	0.08	ND	4.8	21.7	ND	39	18.2
Oct-2010	30	30	ND	ND	2.91	ND	ND	4.5	25.4	ND	27	27.6
Apr-2011	24	24	ND	ND	2.82	0.1	ND	4.3	26.6	ND	34	27.4
Sep-2011	26	26	ND	ND	2.58	ND	ND	5.7	24.9	ND	28	18.8
Mar-2012	32	32	ND	ND	2.51	ND	ND	4.7	24.8	ND	42	22.4
Sep-2012	7.04	7.04	ND	ND	2.93	0.285	ND	4.1	24.4	ND	20	4.27
Mar-2013	11.4	11.4	0.159 J	79.5	3.17	0.245	ND	4.8	38.7	0.983 J	42	7.08
Oct-2013	7.2	7.2	ND	ND	3.38	0.278	ND	6.2	29.8	0.521 J	ND	4.86
Mar-2014	8.8	8.8	ND	ND	3.88	0.193	ND	5.9	30.5	ND	32	4.85

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-07***											
Oct-2014	*ND*	*ND*	*ND*	*5 J*	4.4	0.261	*ND*	5.3	27.1	*ND*	*ND*	4.89
Apr-2015	7.56	7.56	*ND*	*ND*	3.93	0.33	*ND*	4.5	31.5	*ND*	*ND*	5.34
Nov-2015	5.56	5.56	*ND*	10	5.09	0.342	*ND*	5.9	55.3	*ND*	*20 J*	5.1
May-2016	8.16	8.16	*ND*	*ND*	6.53	*ND*	*ND*	5.9	68.3	*ND*	28	7.2
Oct-2016	5.6	5.6	*ND*	*ND*	6.47	*NA*	*NA*	5.7	61.3	*0.538 J*	30	7.2
May-2017	17.3	17.3	*ND*	*ND*	4.48	0.0902	*ND*	5.9	84.5	*0.515 J*	30	19.1
Oct-2017	8.2	8.2	*0.0707 J*	*ND*	11.2	0.378	*ND*	6.1	89.2	*ND*	35	9.3
May-2018	10 B	10	*ND*	*ND*	14	*ND*	0.029	5.8	95.4	*ND*	53	10.7
Nov-2018	10 B	10	*ND*	*ND*	14.4	*ND*	0.1	6.09	92.5	*ND*	*ND*	10.1
May-2019	*ND*	*NA*	*ND*	*ND*	11.2	*ND*	0.16	5.72	59	*ND*	18	11.4
Oct-2019	*2.5 JH1*	*NA*	*ND*	*6 J*	10.5	0.25	0.032 H1	5.86	78.4	*ND*	68	11.4
May-2020	24	*NA*	*ND*	*6.9 J*	11.1	*ND*	0.012	5.57	111.6	*ND*	57	14.2
Oct-2020	28	*NA*	*ND*	*4.8 J*	11.2	0.16	*0.0094 J*	5.61	99.7	*ND*	65	18
Apr-2021	20	*NA*	*ND*	*ND*	12.3	0.17	*ND*	6.19	123	*ND*	*ND*	17.2
Oct-2021	20	*NA*	*ND*	*ND*	9.3	0.13	*ND*	6.22	112.7	*ND*	51	17.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-07*													
Nov-1993	NA	ND	ND	NA	ND	0.94	NA	ND	NA	ND	25.5	0.82	ND	0.25	NA
Apr-1994	NA	ND	ND	NA	ND	0.9	NA	ND	NA	ND	1.79	0.26	ND	0.28	NA
Apr-1995	ND	ND	0.7	ND	ND	0.54	NA	ND	ND	ND	5.3	0.41	ND	0.24	NA
Oct-1996	ND	ND	0.011	ND	ND	0.7	0.7	ND	ND	ND	0.55	0.22	ND	ND	0.17
Apr-1997	ND	ND	0.034	ND	ND	3	1.4	ND	ND	ND	4.3	2.1	ND	0.56	ND
Oct-1997	ND	ND	0.014	ND	ND	0.842	0.83	ND	ND	ND	23.9	0.846	ND	0.239	0.234
Apr-1998	ND	ND	0.014	ND	ND	0.841	0.821	ND	ND	ND	23.1	0.767	ND	0.249	0.246
Apr-1999	ND	ND	0.014	ND	ND	1.03	1.01	ND	ND	ND	22	0.77	ND	0.268	0.26
Oct-1999	ND	ND	0.017	ND	ND	1.35	0.995	ND	ND	ND	45	0.831	ND	0.323	0.251
Apr-2000	ND	ND	0.015	ND	ND	1.11	0.823	ND	ND	0.011	33.1	0.885	ND	0.357	0.262
Oct-2000	ND	ND	0.014	ND	ND	0.911	0.869	ND	ND	ND	24.3	0.718	ND	0.284	0.286
Apr-2001	ND	ND	0.014	ND	ND	0.916	NA	ND	ND	ND	20.7	NA	ND	0.292	NA
Sep-2001	ND	ND	0.027	ND	ND	1.38	0.964	ND	ND	ND	97.5	0.65	0.003	0.305	0.276
Mar-2002	ND	ND	0.015	ND	ND	1.11	1.04	ND	ND	ND	22.5	1.11	ND	0.249	0.26
Sep-2002	ND	ND	0.021	ND	ND	1.6	1.11	ND	ND	ND	59.5	1.35	0.002	0.296	0.244
Mar-2003	ND	ND	0.019	ND	ND	1.81	0.994	ND	ND	ND	23.3	0.984	0.002	0.275	0.242
Oct-2003	ND	ND	0.018	ND	ND	1.47	1.08	ND	ND	0.012	10.8	0.173	0.003	0.314	0.267
Apr-2004	ND	ND	0.014	ND	ND	1.01	0.894	ND	ND	ND	8.44	0.651	ND	0.286	0.266
Oct-2004	ND	ND	0.051	ND	ND	3.81	0.928	ND	ND	ND	152	0.561	0.011	0.349	0.267
Apr-2005	ND	ND	0.022	ND	ND	1.29	1.04	ND	ND	ND	30.6	1.14	0.004	0.271	0.258
Oct-2005	ND	ND	0.013	ND	ND	3.47	3.53	ND	ND	ND	1.25	0.248	ND	0.333	0.306

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-07***													
Mar-2006	ND	ND	0.01	ND	ND	1.86	1.86	ND	ND	ND	0.886	0.886	ND	0.2	0.2
Sep-2006	ND	ND	0.012	ND	ND	1.13	1.37	ND	ND	ND	6.85	0.43	ND	0.249	0.257
Mar-2007	ND	ND	0.016	ND	ND	1.16	1.37	ND	ND	ND	12.6	0.521	ND	0.261	0.252
Sep-2007	ND	0.003	0.013	ND	ND	1.79	1.71	ND	ND	ND	0.933	0.662	ND	0.261	0.258
Mar-2008	ND	ND	0.015	ND	ND	1.85	1.78	ND	ND	ND	9.16	0.848	ND	0.255	0.23
Sep-2008	ND	ND	0.013	ND	ND	1.35	1.25	ND	ND	ND	4.05	0.759	ND	0.251	0.247
Mar-2009	ND	ND	0.012	ND	ND	5.02	4.37	ND	ND	ND	8.26	4.53	ND	0.33	0.298
Oct-2009	ND	ND	0.018	ND	ND	9.1	1.41	ND	ND	ND	14.3	1.06	ND	0.532	0.259
Apr-2010	ND	ND	0.024	ND	ND	6.56	5.83	ND	ND	ND	10.4	7.39	ND	0.444	0.396
Oct-2010	ND	0.002	0.018	ND	ND	9.96	9.5	ND	ND	0.018	11.4	9.55	ND	0.644	0.573
Apr-2011	ND	ND	0.016	ND	ND	6.14	5.15	ND	ND	ND	8.2	6.96	ND	0.516	0.4
Sep-2011	ND	ND	0.017	ND	ND	6.66	5.28	ND	ND	ND	10.3	8.49	ND	0.526	0.424
Mar-2012	ND	ND	0.019	ND	ND	7.91	8.26	ND	ND	ND	7.03	6.67	ND	0.634	0.652
Sep-2012	ND	ND	0.0161	0.000286 J	ND	1.24	1.39	ND	0.0018 J	0.0045 J	16.6	1.6	0.000551 J	0.285	0.29
Mar-2013	ND	ND	0.243	**0.0092 R,C**	0.0025 J	2.41	2.33	0.0533	0.0095 J	0.146	1940	2.71	0.0067	0.259	0.338
Jun-2013	NA	NA	NA	0.00015 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2013	0.000272 J	ND	0.0273	0.000789 J	0.000091 J	1.53	1.31	0.0069 J	0.0022 J	0.0085 J	103	1.37	0.000725 J	0.253	0.228
Mar-2014	0.000677 J	ND	0.0137	0.000208 J	ND	1.49	1.22	0.0013 J	0.0015 J	0.000861 J	3.46	1.62	ND	0.273	0.275
Oct-2014	0.00029 J	ND	0.0199	0.000316 J	ND	1.36	1.55	0.000384 J	0.0019 J	0.0035 J	8.18	1.76	ND	0.364	0.34
Apr-2015	0.000734 J	ND	0.0175	0.000333 J	ND	1.59	1.52	0.000813 J	0.0017 J	0.0026 J	5.64	1.98	ND	0.33	0.326
Nov-2015	0.000416 J	ND	0.0193	0.000401 J	0.000074 J	1.37	1.3	0.000686 J	0.0026 J	0.0039 J	3.67	1.07	0.000705 J	0.406	0.405
May-2016	ND	ND	0.0228	0.00034 J	ND	2.07	2	0.0011 J	0.0026	0.0038 J	6.63	2.68	0.00032 J	0.499	0.449
Oct-2016	ND	ND	0.0228	0.00039 J	ND	2.14	2.17 J+	0.0012 J	0.0022	0.004 J	9.41	2.92 J+	0.00052 J	0.44	0.44 J+
May-2017	ND	ND	0.0384	0.00043 J	ND	6.49	6.38	0.0151	0.0018	0.0216	30.2	10.3	0.00051 J	0.692	0.608

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-07***													
Oct-2017	*ND*	*ND*	0.0387	*0.00049 J*	*ND*	2.56	3.06	0.0334	0.0048	0.0255	10.3	5.47	*0.00033 J*	0.704	0.695
May-2018	*ND*	*ND*	*0.0439 J*	*0.00063 J*	*ND*	2.8	2.7	*0.0021 J*	*0.0023 J*	*ND*	25.8	5.1	*ND*	*0.89 J*	*0.93 J*
Nov-2018	*ND*	*ND*	0.051	0.001	*0.0001 J*	2.6	2.5	*0.0024 J*	0.0033	0.0082	70.1	6	*0.00038 J*	*0.91 J*	*0.98 J*
May-2019	*ND*	*ND*	0.046	0.00044	*ND*	3.3	3.3	*ND*	0.0029	0.0068	82.2	7.7	*ND*	*ND*	*ND*
Oct-2019	*0.00033 J*	*0.0005 J*	0.042	0.00074	*0.00038 J*	3.3	3.3	0.0072	0.0039	0.0077	42.7	5.4	*0.00058 J*	0.79	*0.78 J*
May-2020	*ND*	*ND*	0.046	*0.00038 J*	*0.00046 J*	4.2	4.5	0.014	*0.0026 J*	0.0088	32.9	17.4	*ND*	0.91	1
Oct-2020	*ND*	*ND*	0.038	*ND*	*ND*	5.6	5.5	*0.0021 J*	0.0025	*ND*	11.6	11.4	*ND*	0.98	*0.96 J*
Apr-2021	*ND*	*ND*	0.043	*0.00018 J*	*ND*	5.2	4.9	*0.0015 J*	*0.0023 J*	*0.0033 J*	16.1	12.3	*ND*	1	0.94
Oct-2021	*0.000051 J*	*ND*	0.042	*0.00035 J*	*ND*	5.4	5.7	*0.0019 J*	0.0036	0.0032	12.4	8.7	*0.000035 J*	0.88	0.91

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-07*												
Nov-1993	0.06	NA	ND	NA	1.2	NA	ND	NA	1.5	NA	NA	NA	0.05
Apr-1994	0.03	NA	ND	NA	1.46	NA	ND	NA	1.69	NA	NA	NA	0.05
Apr-1995	ND	NA	ND	ND	1.3	NA	ND	ND	1.3	NA	ND	ND	0.03
Oct-1996	0.015	0.011	NA	ND	ND	ND	ND	ND	2.2	2.4	ND	ND	0.035
Apr-1997	0.099	0.048	ND	ND	4.4	3	ND	ND	2.3	2.3	ND	ND	0.082
Oct-1997	0.024	0.024	NA	0.011	1.3	0.83	ND	ND	1.36	1.37	ND	ND	ND
Apr-1998	0.025	0.04	NA	ND	1.15	1.06	ND	ND	1.56	1.58	ND	ND	0.03
Apr-1999	0.027	0.029	NA	ND	1.82	1.09	ND	ND	1.65	1.61	ND	ND	ND
Oct-1999	0.029	0.026	NA	ND	0.847	1.17	ND	ND	2.14	1.51	ND	ND	0.011
Apr-2000	0.019	0.025	NA	ND	1.2	1.22	ND	ND	2.42	1.56	ND	ND	0.031
Oct-2000	0.022	0.02	NA	ND	1.64	1.23	ND	ND	1.69	1.65	ND	ND	ND
Apr-2001	0.022	NA	NA	ND	1.09	NA	ND	ND	1.61	NA	ND	ND	ND
Sep-2001	0.016	0.02	NA	ND	1.1	1.19	ND	ND	1.59	1.57	ND	ND	ND
Mar-2002	0.03	0.027	NA	ND	1.51	1.66	ND	ND	1.63	1.6	ND	ND	ND
Sep-2002	0.024	0.031	NA	ND	1.74	1.77	ND	ND	2.06	1.47	ND	ND	ND
Mar-2003	0.029	0.021	NA	ND	1.99	0.928	ND	ND	1.54	1.46	ND	ND	ND
Oct-2003	0.014	0.013	NA	ND	2.58	1.25	ND	ND	2.16	1.54	ND	ND	ND
Apr-2004	0.019	0.017	ND	1.58	1.89	1.09	ND	ND	1.58	1.48	ND	ND	ND
Oct-2004	0.082	0.018	ND	ND	1.35	1.13	ND	ND	1.97	1.23	ND	ND	0.023
Apr-2005	0.046	0.022	ND	ND	0.92	0.9	ND	ND	1.6	1.58	ND	ND	ND
Oct-2005	0.032	0.033	ND	ND	0.731	0.761	ND	ND	1.34	1.3	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.662	0.662	ND	ND	1.18	1.18	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-07***												
Sep-2006	0.014	0.015	ND	ND	0.953	1.01	ND	ND	1.31	1.34	ND	ND	ND
Mar-2007	0.014	0.015	ND	ND	0.945	1	ND	ND	1.36	1.37	ND	ND	0.011
Sep-2007	0.02	0.02	ND	ND	0.97	0.977	ND	ND	1.31	1.32	ND	ND	0.018
Mar-2008	0.025	0.022	ND	ND	1.17	1.01	ND	ND	1.47	1.27	ND	ND	ND
Sep-2008	0.023	0.021	ND	ND	1.04	1	ND	ND	1.29	1.25	ND	ND	0.014
Mar-2009	0.125	0.1	ND	ND	1.98	1.76	ND	ND	1.69	1.64	ND	ND	ND
Oct-2009	0.177	0.024	ND	0.012	3.98	0.878	ND	ND	2.62	1.23	ND	ND	ND
Apr-2010	0.321	0.247	ND	ND	2.21	2.08	ND	ND	1.77	1.75	ND	ND	ND
Oct-2010	0.142	0.155	ND	0.019	3.26	3.13	ND	ND	2.19	1.96	ND	ND	ND
Apr-2011	0.119	0.125	ND	ND	3.54	2.78	ND	ND	2.09	1.8	ND	ND	ND
Sep-2011	0.146	0.138	ND	ND	3.59	2.62	ND	ND	2.43	1.92	ND	ND	ND
Mar-2012	0.109	0.092	ND	ND	4.12	4.26	ND	ND	2.51	2.63	ND	ND	ND
Sep-2012	0.0289	0.0286	0.000023 J	0.0032 J	0.949	1.03	ND	ND	1.31	1.35	ND	ND	0.0044 J
Mar-2013	0.32	0.0668	0.00014 J	0.04 J	1.09	1.38	ND	0.000269 J	1.16	1.66	ND	ND	0.109
Oct-2013	0.0542	0.0314	0.000077 J	0.0043 J	0.955	0.85	ND	0.0022 J	1.27	1.15	0.00018 J	0.006 J	0.0175 J
Mar-2014	0.0393	0.0307	ND	0.0027 J	1.28	1.2	ND	0.000154 J	1.79	1.82	ND	ND	0.0071 J
Oct-2014	0.0309	0.0354	0.000025 J	0.0032 J	1.38	1.42	ND	ND	1.95	1.88	ND	ND	0.0118
Apr-2015	0.0384	0.0367	0.000029 J	0.003 J	1.3	1.28	0.000802 J	0.000065 J	1.99	1.98	ND	ND	0.0068 J
Nov-2015	0.0277	0.0259	ND	0.0047 J	1.22	1.21	ND	ND	2.44	2.46	0.000251 J	ND	0.0073 J
May-2016	0.0571	0.0497	ND	0.0049	1.54	1.23	ND	0.00012 J	3.33	3.09	ND	ND	ND
Oct-2016	0.0502 J+	0.0477 J+	ND	0.0051	1.43	1.43	ND	0.00025 J	3.18	3.13	ND	ND	0.0046 J
May-2017	0.184	0.171	ND	0.0518	2.44	2.42	ND	0.0117	2.59	2.41	ND	ND	0.0181 J
Oct-2017	0.0857	0.0849	ND	0.0889	1.72	1.77	ND	0.0312	5.21	5.09	ND	ND	0.0289 J
May-2018	0.0801	0.0711	ND	0.0139 J	2.2 J	1.7 J	ND	ND	7 B	6.7	ND	ND	0.009 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-07***												
Nov-2018	0.09	0.083	*ND*	0.0069	*1.6 J*	*2.5 J*	*0.00011 J*	*ND*	6.8	7.8	*ND*	*ND*	0.014
May-2019	0.12	0.14 M1	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	6.6	5.5	*ND*	*ND*	0.01
Oct-2019	0.099	0.096	*ND*	0.0086	*1.8 J*	*ND*	*0.00043 J*	*0.00046 J*	5.8	6.1	*0.00015 J*	0.0073	0.023
May-2020	0.15	0.16	*ND*	0.028	1.7	1.6	*ND*	0.0077	5.8	6	*ND*	*ND*	*0.01 J*
Oct-2020	0.11	0.11	*ND*	0.0061	*1.6 J*	*1.6 J*	*ND*	*ND*	6	5.8	*ND*	*0.00083 J*	*ND*
Apr-2021	0.14	0.12	*0.00005 J*	*0.0059 J*	1.8	1.7	*ND*	*ND*	6.5	6.2	*ND*	*ND*	*0.0037 J*
Oct-2021	0.12	0.12	*ND*	0.0072	1.7	1.6	*ND*	*ND*	4.7	4.9	*ND*	*ND*	0.0058

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.7 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.5 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-07*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-07***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.37 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-07***															
May-2017	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-07*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-07*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	4.3 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-07***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.583 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-07A***											
Nov-1993	ND	ND	ND	ND	3.3	ND	ND	4.43	51	7.4	ND	5.54
Apr-1994	5	5	0.1	ND	3	ND	ND	5.11	34.7	5.1	27	3.18
Apr-1995	ND	ND	ND	ND	3.8	ND	ND	4.7	46.1	9.1	45	8.8
Apr-1997	ND	ND	ND	ND	4	0.04	ND	NA	NA	12	58	23
Oct-1997	2	2	0.24	ND	2.73	ND	ND	5.66	46.6	13.7	33	12
Apr-1998	ND	ND	0.21	ND	4.39	ND	ND	6.07	40.7	9.48	16	11
Apr-1999	ND	ND	0.2	ND	4.49	ND	ND	4.47	47.3	6.03	43	12
Oct-1999	ND	ND	0.08	ND	5.12	0.128	ND	4.45	53.6	9.36	40	14
Apr-2000	2	2	ND	ND	3.34	ND	ND	5.01	37	7.01	38	10
Oct-2000	3	NA	ND	ND	3.37	ND	ND	4.74	41.9	6.71	38	10.6
Apr-2001	1.4	NA	ND	ND	3.54	ND	ND	NA	NA	5.02	45	10.1
Sep-2001	ND	ND	0.33	ND	6.41	1.19	ND	4.1	46	12.8	35	9.4
Mar-2002	2.2	2.2	ND	ND	3.85	ND	ND	4.9	44.3	7.58	31	9.01
Sep-2002	1.8	1.8	ND	ND	3.2	ND	ND	4.8	44.1	8.01	26	9.24
Mar-2003	2.3	2.3	ND	ND	3.57	ND	ND	4.8	47.2	6.71	27	9.41
Oct-2003	2	2	ND	ND	2.73	0.135	ND	5.4	54.5	8.97	64	11.8
Apr-2004	2.1	2.1	ND	ND	3.21	0.11	ND	4.9	44.2	11.2	54	14
Oct-2004	2.4	2.4	ND	14	3.49	0.15	ND	4.6	46	9.99	35	13.5
Apr-2005	1.9	1.9	ND	10	3.24	0.17	ND	4.6	46	11.2	54	12.5
Oct-2005	3.3	3.3	ND	ND	3.78	0.3	ND	4.3	41.4	13.3	45	11.7
Mar-2006	3.5	3.5	ND	ND	3.57	0.3	ND	4.3	51.8	11.4	36	11.3
Sep-2006	3	3	ND	ND	3.6	0.3	ND	4.6	40.8	9.94	32	11.4
Mar-2007	2.6	2.6	ND	ND	3.67	0.21	ND	4.8	44.3	9.24	16	9.95
Sep-2007	2.4	2.4	0.21	ND	7.81	ND	ND	4.7	42.4	10.9	43	11.1
Mar-2008	3	3	0.24	ND	8.04	ND	ND	4.7	43.9	8.72	29	10.4
Sep-2008	2.6	2.6	ND	ND	3.48	ND	ND	4.8	38	6.93	61	9.7
Mar-2009	2.5	2.5	ND	ND	3.2	0.15	ND	4.3	40.5	8.29	35	9.12
Oct-2009	2.4	2.4	ND	ND	3.2	0.16	ND	4.3	40.6	11.8	38	10.4
Apr-2010	2.6	2.6	ND	ND	3.5	0.31	ND	4	41	10.6	12	12
Oct-2010	1.6	1.6	ND	ND	3.76	0.52	ND	4.1	41.3	8.51	30	13.3
Apr-2011	14	14	ND	ND	3.3	0.2	ND	4.4	40.6	7.49	65	26
Sep-2011	2	2	0.23	ND	3.45	0.38	ND	4.7	41.8	8.03	48	11.6
Mar-2012	2.1	2.1	ND	ND	3.7	0.58	ND	3.8	44.2	10.3	18	12.8
Sep-2012	2.04	2.04	ND	ND	3.69	0.58	ND	3.8	41.6	11.1	60	12.4
Mar-2013	2.56	2.56	0.07 J	ND	4.28	0.458	ND	4.1	48	12.1	24	12.3
Oct-2013	2.64	2.64	ND	ND	5	0.3	ND	5.6	46.4	9.52	ND	11.5
Mar-2014	2.28	2.28	ND	ND	5.67	0.234	ND	4.8	43.6	9.91	47	9.82

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-07A***											
Oct-2014	*ND*	*ND*	*ND*	*6 J*	4.67	0.428	*ND*	4.3	42.5	9.81	37	12
Apr-2015	2.84	2.84	*ND*	*ND*	5.25	0.336	*ND*	3.8	48.2	8.7	*ND*	11.8
Nov-2015	2.64	2.64	*ND*	11	4.8	0.397	*ND*	4.8	59.7	11.2	*16 J*	13.3
May-2016	*ND*	*ND*	*ND*	*ND*	6.04	*ND*	*ND*	4.8	80.1	10.9	28	13.3
Oct-2016	*ND*	*ND*	*ND*	*7 J*	7.07	*NA*	*NA*	5	79.7	9.27	28	12.1
May-2017	*ND*	*ND*	*ND*	*ND*	7.33	0.348	*ND*	4.7	823	8.89	36	13
Oct-2017	*ND*	*ND*	*ND*	*ND*	8.52	0.369	*ND*	4.8	87	9.63	30	12.7
May-2018	*2 JB*	*ND*	*ND*	*ND*	8.2	*0.06 J*	*ND*	4.6	81.6	*8.6 J*	42	13.3
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	3.9	0.33	*ND*	4.39	47.4	*9.9 J*	*ND*	12.9
May-2019	*ND*	*NA*	*ND*	*ND*	3.6	0.24	*ND*	4.46	39.5	*ND*	15	13.2
Oct-2019	*2.5 JH1*	*NA*	*ND*	*ND*	3.5	0.29	*ND*	4.3	48.1	*6.8 J*	24	11.7
May-2020	*ND*	*NA*	*ND*	*ND*	4.5	0.31	*ND*	4.32	48.1	*9.9 J*	21	11.7
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	4.3	0.31	*ND*	4.26	48	9.9	46	12.1
Apr-2021	*ND*	*NA*	*ND*	*ND*	3.4	0.24	*ND*	4.51	54.2	*8.5 J*	*ND*	11.9
Oct-2021	*ND*	*NA*	*ND*	*ND*	3.1	0.23	*ND*	4.66	67.2	*8.3 J*	36	12.5

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-07A*													
Nov-1993	NA	ND	ND	NA	ND	0.46	NA	0.009	NA	ND	3.7	0.09	ND	1.2	NA
Apr-1994	NA	ND	ND	NA	ND	1.24	NA	ND	NA	ND	0.34	0.1	ND	1.09	NA
Apr-1995	ND	ND	0.8	ND	ND	1.2	NA	ND	ND	ND	0.16	0.09	ND	1.4	NA
Oct-1996	ND	ND	0.048	ND	ND	2	2	ND	ND	ND	ND	ND	ND	1.7	1.7
Apr-1997	ND	ND	0.055	ND	ND	2.4	2.6	ND	ND	ND	ND	ND	0.003	1.7	1.9
Oct-1997	ND	ND	0.057	ND	ND	2.49	2.44	ND	ND	ND	ND	ND	ND	1.7	1.71
Apr-1998	ND	ND	0.046	ND	ND	1.88	1.92	ND	ND	ND	ND	ND	ND	1.46	1.48
Apr-1999	ND	ND	0.053	ND	ND	2.14	1.92	ND	ND	ND	ND	ND	ND	1.72	1.55
Oct-1999	ND	ND	0.05	ND	ND	1.8	1.61	ND	ND	ND	ND	ND	ND	1.54	1.38
Apr-2000	ND	ND	0.044	ND	ND	1.7	1.68	ND	ND	ND	ND	ND	ND	1.44	1.42
Oct-2000	ND	ND	0.043	ND	ND	1.88	1.86	ND	ND	ND	ND	ND	ND	1.45	1.46
Apr-2001	ND	ND	0.044	ND	ND	1.63	NA	ND	ND	ND	ND	NA	ND	1.47	NA
Sep-2001	ND	ND	0.037	ND	ND	1.46	1.36	ND	ND	ND	0.037	ND	ND	1.39	1.26
Mar-2002	ND	ND	0.037	ND	ND	1.57	1.36	ND	ND	0.011	ND	ND	ND	1.23	1.2
Sep-2002	ND	ND	0.043	ND	ND	1.43	1.47	ND	ND	ND	0.055	ND	ND	1.38	1.36
Mar-2003	ND	ND	0.041	ND	ND	1.56	1.42	ND	ND	ND	ND	ND	ND	1.34	1.25
Oct-2003	ND	ND	0.05	ND	ND	2.06	2.02	ND	ND	ND	ND	ND	ND	1.61	1.54
Apr-2004	ND	ND	0.056	ND	ND	2.81	2.58	ND	ND	ND	0.121	ND	ND	1.7	1.62
Oct-2004	ND	ND	0.056	ND	ND	2.75	2.64	ND	ND	ND	ND	ND	ND	1.61	1.57
Apr-2005	ND	ND	0.054	ND	ND	2.49	2.24	ND	ND	ND	ND	ND	ND	1.52	1.39
Oct-2005	ND	ND	0.048	ND	ND	2.36	2.27	ND	ND	ND	ND	ND	ND	1.42	1.34

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-07A***													
Mar-2006	ND	ND	0.047	ND	ND	2.14	2.02	ND	ND	ND	ND	ND	ND	1.45	1.39
Sep-2006	ND	ND	0.045	ND	ND	2.12	2.11	ND	ND	ND	ND	ND	ND	1.48	1.45
Mar-2007	ND	ND	0.044	ND	ND	1.78	1.77	ND	ND	ND	ND	ND	ND	1.34	1.31
Sep-2007	ND	ND	0.048	ND	ND	2.15	2.16	ND	ND	ND	ND	ND	ND	1.39	1.4
Mar-2008	ND	ND	0.046	ND	ND	1.62	1.56	ND	ND	ND	ND	ND	ND	1.55	1.47
Sep-2008	ND	ND	0.04	ND	ND	1.41	1.35	ND	ND	ND	0.062	ND	ND	1.5	1.49
Mar-2009	ND	ND	0.037	ND	ND	1.31	1.3	ND	ND	ND	ND	ND	ND	1.42	1.38
Oct-2009	ND	ND	0.04	ND	ND	1.36	1.33	ND	ND	ND	0.069	ND	ND	1.71	1.67
Apr-2010	ND	ND	0.052	ND	ND	2.22	2.14	ND	ND	ND	ND	ND	ND	1.59	1.5
Oct-2010	ND	ND	0.054	ND	ND	2.66	2.58	ND	ND	ND	0.067	ND	ND	1.62	1.59
Apr-2011	ND	ND	0.046	ND	ND	7.67	4.47	ND	ND	ND	0.283	ND	ND	1.65	1.58
Sep-2011	ND	ND	0.049	ND	ND	2.26	2.22	ND	ND	ND	ND	ND	ND	1.44	1.44
Mar-2012	ND	ND	0.055	ND	ND	2.46	2.55	ND	ND	ND	0.15	ND	ND	1.62	1.66
Sep-2012	ND	ND	0.0542	0.000101 J	ND	2.49	2.47	ND	0.0037 J	0.0038 J	0.023 J	0.0225 J	ND	1.5	1.49
Mar-2013	ND	ND	0.0477	0.000121 J	ND	2.27	2.42	0.0012 J	0.003 J	0.003 J	0.0153 J	ND	ND	1.6	1.71
Oct-2013	ND	ND	0.0501	0.00013 J	0.000118 J	2.32	2.13	0.0072 J	0.0031 J	0.0028 J	0.0514	0.0672	ND	1.39	1.15
Mar-2014	0.000707 J	ND	0.039	0.000209 J	ND	1.85	1.97	0.0019 J	0.0026 J	0.0012 J	0.0071 J	0.0049 J	ND	1.26	1.35
Oct-2014	0.000751 J	ND	0.0542	ND	0.000186 J	2.4	2.49	0.0014 J	0.0036 J	0.0036 J	0.0178 J	ND	ND	1.47	1.52
Apr-2015	0.000315 J	ND	0.0521	ND	0.000144 J	2.29	2.43	0.0014 J	0.0036 J	0.0037 J	0.014 J	0.0178 J	ND	1.47	1.53
Nov-2015	0.000487 J	ND	0.056	0.000112 J	0.000199 J	2.85	2.85	0.000928 J	0.0041 J	0.0041 J	0.0983	0.04 J	0.000348 J	1.5	1.51
May-2016	ND	ND	0.0543	0.00014 J	0.0002 J	2.63	2.17	0.0016 J	0.0036	0.0036 J	ND	ND	ND	1.64	1.51
Oct-2016	ND	ND	0.0553	0.00012 J	ND	2.28	2.54 J+	0.0021 J	0.0032	0.0032 J	ND	ND	ND	1.57	1.77 J+
May-2017	ND	ND	0.0512	0.00013 J	ND	2.28	2.47	0.0015 J	0.003	0.0034 J	ND	ND	ND	1.77	1.83
Oct-2017	ND	ND	0.0491	0.000096 J	0.00015 J	2.28	2.26	ND	0.0032	0.0031 J	ND	ND	ND	1.71	1.68

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-07A***													
May-2018	*ND*	*ND*	*0.0524 J*	*ND*	*ND*	2.5	2.5	*0.0018 J*	*0.0029 J*	*0.0026 J*	*0.012 J*	*ND*	*ND*	1.7	1.7
Nov-2018	*ND*	*ND*	0.052	*0.00018 J*	*0.00021 J*	2.8	2.6	*0.0038 J*	0.0038	0.004	*0.016 J*	*ND*	*0.000016 J*	1.5	1.5
May-2019	*ND*	*ND*	0.055	*ND*	*ND*	2.8	2.6	*ND*	0.0041	0.0053	*ND*	*ND*	*ND*	1.5	1.4
Oct-2019	*0.00019 J*	*0.00047 J*	0.052	*0.00018 J*	*0.00041 J*	2.6	2.6	*0.0065 J*	0.0039	0.0051	*0.015 J*	*0.0096 J*	*0.00009 J*	1.3	1.3
May-2020	*ND*	*ND*	0.058	*ND*	*ND*	2.5	2.5	*0.0036 J*	*0.004 J*	0.0056	*ND*	*ND*	*ND*	1.3	1.4
Oct-2020	*ND*	*ND*	0.049	*ND*	*ND*	2.5	2.5	*0.0031 J*	0.0041	*ND*	*0.014 J*	*0.018 J*	*ND*	1.4	1.4
Apr-2021	*ND*	*ND*	0.053	*ND*	*0.00041 J*	2.5	2.4	*0.0024 J*	*0.0045 J*	*0.0045 J*	*ND*	*ND*	*ND*	1.4	1.3
Oct-2021	*ND*	*ND*	0.054	*0.00017 J*	*0.000082 J*	2.6	2.7	*0.0025 J*	0.005	0.0044	*0.012 J*	*ND*	*ND*	1.4	1.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-07A*												
Nov-1993	ND	NA	ND	NA	1.6	NA	ND	NA	1.5	NA	NA	NA	0.01
Apr-1994	0.02	NA	ND	NA	1.26	NA	ND	NA	1.67	NA	NA	NA	0.03
Apr-1995	ND	NA	ND	ND	1.4	NA	ND	ND	1.3	NA	ND	ND	0.02
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	2.3	2.6	ND	ND	0.13
Apr-1997	0.015	0.014	0.0011	ND	1.1	2.5	ND	ND	2	1.5	ND	ND	ND
Oct-1997	0.017	0.017	NA	ND	0.733	0.589	ND	ND	1.51	1.47	ND	ND	0.01
Apr-1998	0.012	0.012	NA	0.011	0.918	0.928	ND	ND	1.52	1.51	ND	ND	ND
Apr-1999	0.013	0.013	NA	ND	1.51	0.878	ND	ND	1.86	1.68	ND	ND	ND
Oct-1999	0.011	0.012	NA	ND	0.597	0.869	ND	ND	1.88	1.63	ND	ND	ND
Apr-2000	0.011	0.011	NA	0.014	1.74	1.21	ND	ND	1.77	1.75	ND	ND	ND
Oct-2000	0.01	0.011	NA	ND	1.26	1.07	ND	ND	1.89	1.81	ND	ND	ND
Apr-2001	0.011	NA	NA	ND	1.1	NA	ND	ND	1.76	NA	ND	ND	ND
Sep-2001	0.011	0.01	NA	ND	1.32	0.875	ND	ND	1.72	1.53	ND	ND	ND
Mar-2002	0.011	ND	NA	ND	2.68	1.5	ND	ND	2.48	1.51	ND	ND	ND
Sep-2002	0.01	0.011	NA	ND	1.05	1.04	ND	ND	1.63	1.6	ND	ND	ND
Mar-2003	ND	ND	NA	ND	0.707	0.588	ND	ND	1.47	1.44	ND	ND	ND
Oct-2003	0.011	0.015	NA	ND	1.52	1.53	ND	ND	1.52	1.45	ND	ND	ND
Apr-2004	0.021	0.021	0.0005	ND	1.26	1.23	ND	ND	1.61	1.51	ND	ND	ND
Oct-2004	0.022	0.021	0.0007	ND	1.01	0.89	ND	ND	1.57	1.27	ND	ND	ND
Apr-2005	0.019	0.016	0.0006	ND	0.82	0.71	ND	ND	1.67	1.55	ND	ND	ND
Oct-2005	0.017	0.016	0.0008	ND	0.83	0.912	ND	ND	1.41	1.38	ND	ND	ND
Mar-2006	ND	ND	0.00093	ND	0.801	0.779	ND	ND	1.28	1.18	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-07A*												
Sep-2006	0.014	0.015	0.0009	ND	1.19	1.2	ND	ND	1.39	1.35	ND	ND	ND
Mar-2007	0.011	0.011	0.0004	ND	1.05	1.03	ND	ND	1.36	1.34	ND	ND	0.03
Sep-2007	0.017	0.017	0.0007	ND	0.989	0.951	ND	ND	1.37	1.37	ND	ND	0.011
Mar-2008	0.016	0.015	0.0004	ND	1.11	0.958	ND	ND	1.49	1.3	ND	ND	ND
Sep-2008	0.016	0.016	ND	ND	0.92	0.941	ND	ND	1.31	1.28	ND	ND	ND
Mar-2009	0.016	0.015	ND	ND	1.05	1.04	ND	ND	1.32	1.3	ND	ND	ND
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	0.019	0.018	ND	ND	0.834	0.801	ND	ND	1.33	1.3	ND	ND	ND
Apr-2010	0.017	0.016	ND	ND	0.85	0.792	ND	ND	1.57	1.53	ND	ND	ND
Oct-2010	0.021	0.021	0.0002	ND	0.784	0.75	ND	ND	1.43	1.45	ND	ND	ND
Apr-2011	0.022	0.02	ND	ND	1.69	1.6	ND	ND	1.97	1.87	ND	ND	0.016
Sep-2011	0.02	0.02	ND	ND	0.84	0.785	ND	ND	1.66	1.63	ND	ND	ND
Mar-2012	0.024	0.024	ND	ND	0.74	0.727	ND	ND	1.57	1.57	ND	ND	ND
Sep-2012	0.0227	0.0228	0.000199 J	0.0037 J	0.8	0.795	ND	ND	1.41	1.44	ND	ND	0.006 J
Mar-2013	0.0217	0.0225	0.000197 J	0.0028 J	0.892	0.95	0.000665 J	ND	1.8	1.93	ND	ND	0.0139
Oct-2013	0.0226	0.0217	ND	0.0029 J	0.775	0.695	0.000413 J	ND	1.79	1.49	0.000154 J	0.0062 J	0.0146
Mar-2014	0.02	0.0214	ND	0.0031 J	0.894	0.94	ND	ND	2.27	2.4	ND	ND	0.0077 J
Oct-2014	0.0229	0.0241	0.000077 J	0.0041 J	0.833	0.839	0.0013 J	ND	1.81	1.83	ND	ND	0.0069 J
Apr-2015	0.0241	0.0252	0.000047 J	0.004 J	0.898	0.906	0.0014 J	ND	2.26	2.29	ND	ND	0.0113
Nov-2015	0.0261	0.0264	ND	0.004 J	0.824	0.811	0.00099 J	ND	2.11	2.04	0.000247 J	ND	0.0124
May-2016	0.0267	0.0243	ND	0.004	0.936	0.772	ND	ND	3.03	2.75	ND	ND	ND
Oct-2016	0.0258 J+	0.0285 J+	ND	0.0044	0.935	0.979	0.00057	ND	3.56	3.63	ND	ND	0.0052 J
May-2017	0.0272	0.0289	ND	0.0034 J	0.981	1	0.00054 J	ND	3.5	3.38	ND	ND	0.0051 J
Oct-2017	0.0265	0.0286	ND	0.0031 J	0.932	0.919	0.00057 J	ND	4.1	4.17	ND	ND	0.0041 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-07A***												
May-2018	0.0284	0.0273	*0.00012 JB*	*0.0102 J*	*1.2 J*	*ND*	*ND*	*ND*	5.1 B	*4.5 J*	*0.0061 J*	*ND*	*0.0061 J*
Nov-2018	0.026	0.028	*ND*	0.005	*ND*	*1.1 J*	*0.00058 J*	*ND*	*1.8 J*	*2.6 JB*	*ND*	*0.00005 J*	0.0095
May-2019	0.025	0.025	*ND*	0.006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.01
Oct-2019	0.028	0.028	*ND*	0.0057	*ND*	*ND*	*0.00079 J*	*ND*	*1.8 J*	*2 J*	*ND*	0.0074 D6	0.017
May-2020	0.025	0.026	*ND*	*0.0064 J*	0.82	0.71	*ND*	*ND*	1.9	2.2	*ND*	*ND*	*0.0094 J*
Oct-2020	0.026	0.027	*ND*	0.0052	*ND*	*ND*	*ND*	*ND*	*2.3 J*	*2.1 J*	*ND*	*0.00068 J*	*ND*
Apr-2021	0.029	0.027	*0.00006 J*	*0.0055 J*	0.65	0.65	*ND*	*ND*	1.7	1.5	*ND*	*ND*	*0.008 J*
Oct-2021	0.029	0.029	*ND*	0.0057	0.64	0.6	*0.00089 J*	*ND*	1.6 B	1.7	*0.000049 J*	*ND*	0.0099

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Oct-1996	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	3.9	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	4.6	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07A*																
Mar-2006	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.32 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.82 J	ND	ND	1.63 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07A*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.8 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.7 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-07A*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	4.7
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	14
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	2.2
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	1 J	NA	NA	NA	1.5	5.9
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	1.1	5.5
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	1.3	NA	ND	NA	1.3	6.6
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	4.8	6.7
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	2.7	5.8
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	1.7	4.3
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.7 J
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	3
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	1.7
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	1.9
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	2.5
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.4	4.5
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	1.8
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.1	2.5

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-07A***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	1.9
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	0.6 J
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	0.9 J
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	1.3
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.68 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	ND	ND	ND	ND	0.77 J	0.37 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	ND	ND	ND	ND	0.41 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.24 J	ND	ND	ND	ND	ND	0.42 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.34 J	ND	ND	ND	ND	ND	0.6 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	0.34 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J,B	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	0.4 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	0.3 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-07A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.13 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.481 J*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-07A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	**6.6**	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	**5.1**	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	3.6	*ND*	*ND*	*NA*	*NA*	1.1	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.5	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	4.7	*ND*	*ND*	*NA*	*NA*	1.5	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.9	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*0.6 J*	*ND*	*ND*	2.9	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	2.5	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	2.2	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-07A***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	2.4	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.8 R	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	0.38 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	0.22 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-07A***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.507 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-08***										
Nov-1993	8	8	ND	33.8	6.2	0.4	ND	6.34	49	5.4	ND	6.55
Apr-1994	9	9	0.1	ND	6.5	0.4	ND	5.57	20.4	5.4	28	48.2
Apr-1995	5	5	ND	ND	7.1	0.5	ND	5.3	49.6	5.7	26	7.8
Apr-1997	ND	2	ND	ND	6	0.35	ND	NA	NA	5.7	42	7.6
Oct-1997	4	4	0.44	ND	5.05	0.195	ND	5.55	83.2	4.4	34	11
Apr-1998	4	4	0.2	ND	4.82	0.3	ND	6.14	45.7	3.58	31	9.5
Apr-1999	4	4	0.17	ND	10.1	ND	ND	5.05	45.6	5.74	64	12
Oct-1999	5	5	0.1	ND	5.83	0.334	ND	5.25	47.1	5.12	36	11
Apr-2000	7	7	ND	ND	3.92	0.39	ND	5.99	39	5.81	33	11
Oct-2000	7	NA	ND	ND	4.11	ND	ND	5.83	51.8	6.75	17	11.6
Apr-2001	5.2	NA	ND	ND	4.59	ND	ND	NA	NA	6.13	35	12.1
Sep-2001	5.3	5.3	ND	ND	5.67	ND	ND	5.16	52	11	37	11.9
Mar-2002	6.9	6.9	ND	ND	6.38	0.317	ND	5.3	46.3	6.43	35	13
Sep-2002	5.2	5.2	ND	ND	4.5	0.49	ND	5.4	46.8	8.3	36	11.2
Mar-2003	7.5	7.5	ND	ND	46.9	0.881	ND	5.3	55.2	46	ND	12.1
Oct-2003	6.1	6.1	ND	ND	4.33	0.168	ND	5.5	54.3	5.5	59	13.5
Apr-2004	7.8	7.8	ND	ND	4.12	0.17	ND	5.4	45	5.7	56	13
Oct-2004	6.6	6.6	ND	10	4.44	0.23	ND	5.5	45.8	5.08	37	16.9
Apr-2005	5.9	5.9	ND	ND	4.42	0.3	ND	5.1	40.6	4.95	66	12.1
Oct-2005	8.3	8.3	ND	ND	4.98	0.29	ND	4.9	38.3	4.73	40	10.2
Mar-2006	7	7	ND	ND	4.89	0.2	ND	4.7	41	5.72	40	10
Sep-2006	6.8	6.8	ND	ND	4.87	0.34	ND	5.2	42.6	4.57	27	10.8
Mar-2007	7.3	7.3	ND	ND	4.74	0.22	ND	5.2	46.7	5.12	18	10.7
Sep-2007	6.6	6.6	ND	ND	9.98	ND	ND	5.9	48.3	8.74	38	10.9
Mar-2008	9.5	9.5	ND	ND	9.91	0.79	ND	5.2	43.9	4.42	36	11.2
Sep-2008	11	11	ND	ND	5.84	0.32	ND	5.1	45.3	4.54	39	10.8
Mar-2009	12	12	ND	ND	6.71	0.35	ND	4.8	47.1	3.21	41	10.8
Oct-2009	8.2	8.2	ND	ND	5.79	0.21	ND	4.8	47.1	4.48	37	13
Apr-2010	10	10	ND	ND	6.69	0.29	ND	4.3	56.9	4.16	ND	13.1
Oct-2010	14	14	ND	ND	8.15	0.43	ND	4.2	50.3	3.63	35	14.8
Apr-2011	7.2	7.2	ND	ND	9.96	0.53	ND	5	61.9	7.95	63	16.7
Sep-2011	6.3	6.3	ND	ND	10.4	0.6	ND	5.1	64.9	7.82	58	17.6
Mar-2012	6.8	6.8	ND	ND	16	0.93	ND	4.6	82.4	10.5	52	20.2
Sep-2012	11.7	11.7	ND	ND	16.6	0.931	ND	4.9	83.9	11.3	64	21.4
Mar-2013	11.8	11.8	0.128 J	ND	16.6	1.05	ND	4.5	100.2	10.9	58	22.2
Oct-2013	9.24	9.24	ND	ND	19.6	1.29	ND	6.1	105.1	10.8	59	21.3
Mar-2014	10.4	10.4	ND	ND	17.9	1.24	ND	5.7	105	12.5	85	21.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-08***											
Oct-2014	37.4	37.4	*0.141 J*	14	17.3	0.07	*ND*	5.7	107.9	1.82	56	30.8
Apr-2015	22.9	22.9	0.33	12	16.6	*ND*	*ND*	4.7	115.1	*ND*	28	21.2
Nov-2015	11.4	11.4	*ND*	10	24.7	1.13	*ND*	5.7	174.3	6.94	72	27.3
May-2016	8.92	8.92	1.17	*ND*	22.3	*ND*	*ND*	5.7	205	*ND*	66	12
Oct-2016	11.2	11.2	1.09	13	22.4	*NA*	*NA*	5.7	228	*0.93 J*	69	14.1
May-2017	15.8	15.8	0.852	24	21.3	*ND*	*ND*	5.5	233	*0.612 J*	52	18.3
Oct-2017	16	16	0.699	16	25.7	*ND*	*ND*	5.9	275	*ND*	58	16.8
May-2018	30	30	0.34	27.2	34.8	*ND*	0.035	5.4	243	*ND*	49	24.6
Nov-2018	46	46	0.12	*ND*	44.6	*0.038 J*	0.028	6.21	257.7	*ND*	88	34
May-2019	50	*NA*	*ND*	*ND*	50.5	0.13	0.03	6.14	224.3	*ND*	146	37.4
Oct-2019	20 H1	*NA*	*0.08 J*	*14.8 J*	47.2	0.18	0.028	6.15	282.5	*ND*	97	34.8
May-2020	36	*NA*	0.2	*11.3 J*	43.5	*ND*	0.023	5.64	257.4	*ND*	137	31.5
Oct-2020	110	*NA*	0.14	*11.6 J*	43.5	*0.084 J*	0.021	5.9	249.7	3.8	147	32.8
Apr-2021	14	*NA*	0.18	*10.5 J*	47.3	0.22	*ND*	6.37	325.7	*ND*	93	35.7
Oct-2021	36	*NA*	0.17	*10.5 J*	50.7	*0.075 J*	0.014	6.57	357.8	*ND*	130	34.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-08*													
Nov-1993	NA	ND	ND	NA	ND	0.81	NA	ND	NA	ND	14.2	2.2	ND	1.1	NA
Apr-1994	NA	ND	ND	NA	ND	1.17	NA	ND	NA	ND	3.23	2.24	ND	1.49	NA
Apr-1995	ND	ND	0.7	ND	ND	0.82	NA	ND	0.03	ND	2.2	2	ND	1.4	NA
Oct-1996	ND	ND	0.053	ND	ND	1.7	1.6	ND	ND	ND	3.7	1.8	ND	1.2	1.2
Apr-1997	ND	ND	0.059	ND	ND	2.1	1.8	ND	ND	ND	0.89	0.63	ND	1.5	1.2
Oct-1997	ND	ND	0.047	ND	ND	1.68	1.73	ND	ND	ND	3.91	1.3	ND	1.39	1.4
Apr-1998	ND	ND	0.049	ND	ND	1.62	1.68	ND	ND	0.014	19	1.33	ND	1.32	1.38
Apr-1999	ND	ND	0.052	ND	ND	1.97	1.93	ND	ND	ND	6.45	4.05	ND	1.64	1.59
Oct-1999	ND	ND	0.059	ND	ND	1.87	1.7	ND	ND	ND	9.14	1.44	ND	1.56	1.42
Apr-2000	ND	ND	0.055	ND	ND	1.89	1.84	ND	ND	ND	4.64	1.94	ND	1.56	1.49
Oct-2000	ND	ND	0.057	ND	ND	1.99	2.01	ND	ND	ND	6.68	2.52	ND	1.62	1.63
Apr-2001	ND	ND	0.066	ND	ND	2.02	NA	ND	ND	ND	11.3	NA	ND	1.7	NA
Sep-2001	ND	ND	0.065	ND	ND	1.98	1.89	ND	ND	ND	4.89	3.36	ND	1.7	1.6
Mar-2002	ND	ND	0.065	ND	ND	2.3	1.93	ND	ND	0.016	10.5	2.21	ND	1.77	1.7
Sep-2002	ND	ND	0.066	ND	ND	1.83	1.88	ND	ND	0.013	13.4	2.13	ND	1.61	1.67
Mar-2003	ND	ND	0.067	ND	ND	2.02	1.96	ND	ND	ND	3.26	2.24	ND	1.72	1.63
Oct-2003	ND	ND	0.07	ND	ND	2.39	2.06	ND	ND	0.011	7.7	2.2	ND	1.84	1.79
Apr-2004	ND	ND	0.068	ND	ND	2.16	2.11	ND	ND	ND	3.16	1.75	ND	1.84	1.83
Oct-2004	ND	ND	0.073	ND	ND	3.5	2.13	ND	ND	0.015	13.1	2.67	ND	1.98	1.84
Apr-2005	ND	ND	0.076	ND	ND	2.11	1.95	ND	ND	ND	13.2	1.82	ND	1.67	1.55
Oct-2005	ND	ND	0.064	ND	ND	1.8	1.7	ND	ND	ND	4.74	1.86	ND	1.38	1.31

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-08***													
Mar-2006	ND	ND	0.054	ND	ND	1.91	1.6	ND	ND	ND	11.7	2.29	ND	1.28	1.31
Sep-2006	ND	ND	0.059	ND	ND	1.97	1.89	ND	ND	0.021	19.1	1.92	ND	1.43	1.45
Mar-2007	ND	ND	0.064	ND	ND	1.91	1.87	ND	ND	ND	4.12	2.64	ND	1.45	1.45
Sep-2007	ND	0.003	0.068	ND	ND	1.91	1.86	ND	ND	ND	10.2	2.06	ND	1.49	1.44
Mar-2008	ND	ND	0.074	ND	ND	1.93	1.82	ND	ND	ND	3.68	1.89	ND	1.54	1.42
Sep-2008	ND	ND	0.068	ND	ND	1.9	1.79	ND	ND	ND	5.49	2.41	ND	1.48	1.47
Mar-2009	ND	ND	0.073	ND	ND	2	1.84	ND	ND	ND	4.88	2.66	ND	1.41	1.38
Oct-2009	ND	ND	0.08	ND	ND	2.19	2.06	ND	ND	ND	11.7	4.86	ND	1.84	1.72
Apr-2010	ND	ND	0.089	ND	ND	2.49	2.31	ND	ND	ND	9.78	5.06	ND	1.68	1.65
Oct-2010	ND	ND	0.102	ND	ND	2.58	2.47	ND	ND	ND	7.8	5.13	ND	2.04	1.94
Apr-2011	ND	ND	0.108	ND	ND	2.89	2.69	ND	0.015	0.023	19.6	2.12	ND	2.3	2.1
Sep-2011	ND	ND	0.106	ND	ND	3.01	2.91	0.013	0.016	0.028	26.1	2.12	ND	2.44	2.34
Mar-2012	ND	0.005	0.132	ND	ND	3.41	3.57	0.076	0.041	0.168	132	2	ND	2.83	3.08
Sep-2012	ND	ND	0.116	0.000371 J	0.000301 J	3.67	3.81	0.0031 J	0.0146	0.007 J	5.82	4.27	ND	2.98	3.1
Mar-2013	ND	ND	0.144	0.00032 J	ND	3.93	3.93	0.0023 J	0.01	0.0067 J	8.35	7.68	ND	3.01	3.03
Oct-2013	ND	ND	0.155	0.00045 J	0.000277 J	4.02	4.06	0.0108	0.0128	0.0094 J	11.5	6.37	ND	2.73	2.59
Mar-2014	0.000428 J	0.000546 J	0.135	ND	0.000305 J	3.91	3.9	0.0049 J	0.0141	0.0165	15.1	8.32	ND	2.87	2.8
Oct-2014	0.000647 J	0.0013 J	0.147	ND	0.000338 J	5.49	5.45	0.0056 J	0.0111	0.0102	48.1	27.9	0.0012 J	4.16	4.14
Apr-2015	0.000966 J	0.0016 J	0.0912	0.000178 J	0.000209 J	3.74	3.87	0.0031 J	0.0064 J	0.0176	48.9	19.2	0.0011 J	2.87	3.08
Nov-2015	0.000355 J	0.000813 J	0.175	0.000355 J	0.000252 J	5.16	5.3	0.0016 J	0.0123	0.0089 J	15	10.6	0.000386 J	3.51	3.65
May-2016	ND	0.00064 J	0.0467	ND	ND	2.18	2.12	0.0024 J	0.0018	0.0028 J,B	3.81	0.392	0.00056 J	1.59	1.67
Oct-2016	0.00058 J	0.004	0.0573	ND	ND	2.57	2.44	0.0035 J+	0.0035	0.0125 J+	23.5	2.98	0.00084 J	1.85 J+	1.85
May-2017	ND	0.0023 J	0.0693	ND	ND	3.8	3.41	0.0036 J	0.0049	0.0098	17.9	10.2	0.0008 J	2.13	2.27
Oct-2017	ND	0.001 J	0.0619	ND	0.00032 J	3.23	3.22	0.0028 J	0.0039	0.0027 J	13.6	9.96	0.0005 J	2.11	2.17

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-08***													
May-2018	0.00068	0.0028	0.1	*0.00012 J*	*0.00044 J*	4.9	4.8	*0.0044 JB*	0.0059	0.012	27.7	23	0.0014	3	3
Nov-2018	*0.000056 J*	*0.00011 J*	0.19	*0.00022 J*	*0.00012 J*	6.3	6.2	*0.0029 J*	0.0047	0.0068	33.2	31.4	*0.00004 J*	4.4	4.6
May-2019	*ND*	*ND*	0.23	0.00038	*ND*	7	6.6	*ND*	0.0068	0.0087	35.6	31.2	*ND*	4.9	4.6
Oct-2019	*0.00021 J*	*0.00042 J*	0.22	*0.00023 J*	*0.00026 J*	6.6	6.7	*0.0054 J*	0.0053	0.0041	36.1	35.3	*0.000081 J*	4.4	4.5
May-2020	*ND*	*ND*	0.22	*0.00032 J*	*0.00037 J*	5.9	6.1	*0.0021 J*	*0.0048 J*	0.0098	40.5	36.4	*ND*	4.1	4.5
Oct-2020	*ND*	*ND*	0.19	*0.00028 J*	*ND*	6.3	6.2	*0.0033 J*	0.0047	*0.0072 J*	36.1	32	*ND*	4.2	4.2
Apr-2021	*ND*	*ND*	0.2	*0.00024 J*	*ND*	6.7	6.4	*ND*	0.0056	*0.0049 J*	36	30.1	*ND*	4.6	4.3
Oct-2021	*ND*	*ND*	0.2	*0.00024 J*	*ND*	6.5	7	*ND*	0.0056	0.0045	33.5	31.9	*ND*	4.4	4.7

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-08*												
Nov-1993	0.08	NA	ND	NA	0.73	NA	ND	NA	2.5	NA	NA	NA	ND
Apr-1994	0.1	NA	ND	NA	0.9	NA	ND	NA	3.28	NA	NA	NA	0.06
Apr-1995	ND	NA	ND	ND	1.1	NA	ND	ND	2.7	NA	ND	ND	0.03
Oct-1996	0.075	0.068	NA	ND	ND	ND	ND	ND	3.2	3.3	ND	ND	0.082
Apr-1997	0.054	0.053	ND	ND	2.4	ND	ND	ND	2.5	2.9	ND	ND	0.037
Oct-1997	0.087	0.087	NA	ND	ND	0.748	ND	ND	2.65	2.77	ND	ND	0.014
Apr-1998	0.101	0.081	NA	0.013	ND	0.719	ND	ND	2.68	2.44	ND	ND	0.017
Apr-1999	0.148	0.143	NA	ND	0.763	0.544	ND	ND	2.21	2.13	ND	ND	ND
Oct-1999	0.099	0.092	NA	0.013	0.564	0.714	ND	ND	2.85	2.53	ND	ND	0.011
Apr-2000	0.138	0.132	NA	ND	1.53	1.13	ND	ND	2.69	2.63	ND	ND	ND
Oct-2000	0.136	0.133	NA	ND	0.887	1.05	ND	ND	2.67	2.6	ND	ND	ND
Apr-2001	0.148	NA	NA	ND	0.545	NA	ND	ND	2.67	NA	ND	ND	ND
Sep-2001	0.133	0.143	NA	0.01	0.639	0.947	ND	ND	2.66	2.62	ND	ND	ND
Mar-2002	0.119	0.116	NA	ND	1.64	ND	ND	ND	3.74	2.66	ND	ND	0.012
Sep-2002	0.113	0.109	NA	ND	1.81	1.43	ND	ND	2.34	2.35	ND	ND	ND
Mar-2003	0.128	0.119	NA	ND	1.2	1.28	ND	ND	2.5	2.36	ND	ND	ND
Oct-2003	0.134	0.131	NA	ND	1.95	2	ND	ND	2.82	2.22	ND	ND	0.01
Apr-2004	0.13	0.12	ND	ND	0.636	ND	ND	ND	2.36	2.25	ND	ND	ND
Oct-2004	0.142	0.138	ND	ND	0.94	0.81	ND	ND	3.22	2.32	ND	ND	0.073
Apr-2005	0.127	0.116	ND	ND	0.7	0.62	ND	ND	2.83	2.7	ND	ND	0.01
Oct-2005	0.111	0.104	ND	ND	0.833	0.717	ND	ND	2.4	2.27	ND	ND	ND
Mar-2006	0.104	0.088	ND	ND	ND	ND	ND	ND	2.05	2.11	ND	ND	0.019

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-08***												
Sep-2006	0.127	0.117	ND	0.011	0.84	0.839	ND	ND	2.48	2.34	ND	ND	0.017
Mar-2007	0.137	0.13	ND	ND	0.782	0.785	ND	ND	2.33	2.33	ND	ND	0.011
Sep-2007	0.144	0.121	ND	ND	0.744	0.683	ND	ND	2.67	2.76	ND	ND	0.015
Mar-2008	0.123	0.111	ND	ND	0.781	0.703	ND	ND	2.84	2.5	ND	ND	0.01
Sep-2008	0.125	0.121	ND	ND	0.758	0.734	ND	ND	2.71	2.6	ND	ND	0.034
Mar-2009	0.127	0.12	ND	ND	0.943	0.853	ND	ND	3.17	3.11	ND	ND	0.021
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	0.21	0.181	ND	ND	0.632	0.642	ND	ND	2.74	2.76	ND	ND	0.016
Apr-2010	0.163	0.162	ND	ND	0.765	0.747	ND	ND	3.29	3.17	ND	ND	0.019
Oct-2010	0.178	0.169	ND	ND	0.789	0.77	ND	ND	3.66	3.66	ND	ND	0.015
Apr-2011	0.143	0.123	ND	0.016	0.742	0.691	ND	ND	4.44	4.34	ND	ND	0.052
Sep-2011	0.15	0.132	ND	0.019	0.86	0.777	ND	ND	4.63	4.51	ND	ND	0.051
Mar-2012	0.24	0.152	0.0003	0.088	0.824	0.855	ND	ND	7.75	8.15	ND	ND	0.141
Sep-2012	0.173	0.178	0.000044 J	0.0146	0.875	0.931	0.000466 J	ND	7.63	7.82	ND	ND	0.0343
Mar-2013	0.193	0.191	0.000079 J	0.0108 J	0.933	0.919	ND	ND	7.9	7.86	ND	ND	0.0408
Oct-2013	0.195	0.189	ND	0.0112	0.812	0.798	ND	ND	7.68	7.21	0.000106 J	0.0082 J	0.0383
Mar-2014	0.202	0.213	ND	0.0139	0.952	0.962	ND	ND	7.38	7.52	ND	ND	0.0488
Oct-2014	0.715	0.58	0.000082 J	0.0217	1.18	1.22	0.000855 J	ND	10.9	11.2	ND	ND	0.0362
Apr-2015	0.396	0.348	0.000074 J	0.0146	1.19	1.21	ND	0.000058 J	10.7	10.7	ND	ND	0.0262
Nov-2015	0.306	0.31	ND	0.0111	1.14	1.2	0.000756 J	ND	12.1	12.6	0.000181 J	ND	0.0366
May-2016	0.152	0.102	ND	0.0066	1.13	1.09	ND	ND	11.7	11.9	ND	ND	0.0162 J
Oct-2016	0.231 R	0.152	ND	0.008 J+	1.17	1.14	ND	ND	11.9 J+	11	ND	ND	0.0131 J
May-2017	0.363	0.337	ND	0.0112	1.17	1.16	ND	ND	12.7	12.7	ND	ND	0.0177 J
Oct-2017	0.305	0.289	ND	0.0075	1.15	1.17	ND	ND	13.1	12.9	ND	ND	0.0175 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-08***												
May-2018	0.58	0.52	*ND*	0.011	*ND*	*0.86 J*	*0.00045 J*	*ND*	17.1	16.1	*ND*	0.002	0.03
Nov-2018	0.53	0.52	*ND*	0.0049	*1.1 J*	*1.6 J*	*0.0002 J*	*ND*	22.2	23.8	*ND*	*ND*	0.015
May-2019	0.61	0.62	*ND*	0.005	*ND*	*ND*	*ND*	*ND*	24.4	23.9	*ND*	*ND*	0.02
Oct-2019	0.64	0.63	*ND*	0.0044	*1.5 J*	*ND*	*ND*	*ND*	25	26.4	*ND*	0.0088	0.019
May-2020	0.59	0.62	*ND*	*0.0068 J*	1.5	1.4	*ND*	*ND*	22.6	22.1	*ND*	*ND*	0.016
Oct-2020	0.62	0.57	*ND*	0.0045	*1.3 J*	*1.3 J*	*ND*	*ND*	21.6	21.6	*ND*	*0.00092 J*	*0.014 J*
Apr-2021	0.72	0.66	*0.00006 J*	*0.0042 J*	1.4	1.4	*ND*	*ND*	25.9	24.3	*ND*	*ND*	0.014
Oct-2021	0.66	0.71	*ND*	0.0038	1.3	1.3	*ND*	*ND*	25.7	27.5	*ND*	*ND*	0.013

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	23	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08*																
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.59 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.8 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.94 J*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.7 J*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.2 J*	*ND*	*ND*	5.2	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.5 B	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.8 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-08*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-08***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	0.58 J	ND	ND	ND	ND	0.64 J,B	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	0.45 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-08***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-08***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-08*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-08***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.551 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-08A***											
Nov-1993	ND	ND	ND	ND	3.5	ND	ND	4.61	51.3	11.8	18	10.4
Apr-1994	10	10	0.1	67.6	3.5	ND	ND	4.74	50.5	12.1	34	13.46
Apr-1995	ND	ND	ND	ND	4.2	ND	ND	4.4	54.9	13.1	ND	10.2
Apr-1997	ND	2	ND	ND	4.5	0.07	ND	NA	NA	13	96	29
Oct-1997	ND	ND	0.24	ND	2.76	ND	ND	5.62	50.7	11.7	45	15
Apr-1998	ND	ND	ND	ND	3.8	ND	ND	5.38	47.9	11.9	26	14
Apr-1999	ND	ND	0.19	ND	3.8	ND	ND	4.16	54.1	9.69	67	15
Oct-1999	ND	ND	0.2	ND	3.98	ND	ND	4.82	78.5	11	38	15
Apr-2000	ND	ND	ND	ND	2.42	ND	ND	5.39	44	11	45	13
Oct-2000	2.8	NA	ND	ND	4.56	ND	ND	5.29	59.2	14.6	45	14.5
Apr-2001	ND	NA	ND	ND	3.62	ND	ND	NA	NA	12.1	20	15.1
Sep-2001	ND	ND	ND	ND	4.78	ND	ND	4.32	60	17.1	41	15.4
Mar-2002	ND	ND	ND	ND	4.39	ND	ND	4.7	57	17.8	58	16.3
Sep-2002	ND	ND	ND	ND	4	ND	ND	4.8	56.5	17.9	27	16.2
Mar-2003	ND	ND	ND	ND	39.5	ND	ND	4.7	64.8	128	23	14.9
Oct-2003	ND	ND	ND	ND	3.93	0.086	ND	4.7	79.2	18.3	72	18.8
Apr-2004	ND	ND	ND	ND	3.32	ND	ND	4.8	53.9	16.6	66	19.4
Oct-2004	1.1	1.1	ND	ND	2.78	ND	ND	4.7	42.5	11.6	41	17
Apr-2005	ND	ND	ND	ND	3.92	0.1	ND	4.6	42.6	16.3	81	17.4
Oct-2005	1.7	1.7	ND	ND	3.74	0.09	ND	4.6	41.9	15.8	51	13.3
Mar-2006	1.8	1.8	ND	ND	5.66	0.16	ND	4.1	54.8	18.8	40	14.9
Sep-2006	1.7	1.7	ND	ND	4.79	0.23	ND	4.5	53.5	16.7	49	16.6
Mar-2007	1.1	1.1	0.3	ND	17.6	2.22	ND	4.6	93.6	15.8	47	26.8
Sep-2007	ND	ND	0.23	ND	10	ND	ND	4.8	63.1	19	51	16.3
Mar-2008	ND	ND	ND	ND	24.2	3.29	ND	4.4	77.1	19	73	22.8
Sep-2008	1.5	1.5	ND	12	8.63	0.83	ND	4.4	77.3	21.4	54	18.2
Mar-2009	1.1	1.1	ND	ND	11.8	0.57	ND	4.2	77	18	60	18.1
Oct-2009	1	1	ND	ND	27.5	1.14	ND	4.1	119.2	18.4	87	25.3
Apr-2010	1.2	1.2	ND	ND	34.6	1.18	ND	3.9	129.1	19.7	58	27.6
Oct-2010	ND	ND	ND	ND	56.8	2.15	ND	4	121.8	19.1	166	37.4
Apr-2011	1.4	1.4	ND	ND	23	2	ND	4.3	130	20.8	109	21
Sep-2011	ND	ND	0.21	ND	45.6	4.16	ND	4.5	179.2	20.4	142	37.1
Mar-2012	ND	ND	ND	ND	43.7	2.89	ND	3.5	183.8	27.1	101	36.4
Sep-2012	ND	ND	ND	ND	18.9	0.982	ND	3.9	95.4	23.3	62	21.7
Mar-2013	1.16	1.16	0.167 J	ND	42.1	2.72	ND	3.7	177.1	25	108	33.7
Oct-2013	1.16 J	1.16 J	ND	ND	62	4.01	ND	5.3	352	25.1	176	36.6
Mar-2014	ND	ND	ND	6 J	66.7	3.38	ND	4.5	308	30.3	173	31.1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-08A***										
Oct-2014	*ND*	*ND*	*ND*	*6 J*	63	3.52	*ND*	4.3	353	30.7	152	35.7
Apr-2015	1.92	1.92	*ND*	*7 J*	33.8	2.36	*ND*	3.9	157.2	24.7	90	26.6
Nov-2015	*ND*	*ND*	*ND*	*5 J*	55.6	3.65	*ND*	4.6	292	24.6	132	38.8
May-2016	*ND*	*ND*	*ND*	*ND*	57.3	2.11	*ND*	4.6	383	27	160	32.8
Oct-2016	*ND*	*ND*	*ND*	*ND*	83.9	*NA*	*NA*	4.5	416	20.9	177	44.7
May-2017	*ND*	*ND*	*ND*	*5 J*	109	4.81	*ND*	4.4	590	33.1	237	47.1
Oct-2017	*ND*	*ND*	*0.103 J*	*5 J+*	181	5.05	*ND*	4.7	625	27.9	271	47.6
May-2018	*4 JB*	*ND*	0.12	*5.8 J*	94	1.5	*ND*	4.2	494	25.4	190	44.5
Nov-2018	*1 JB*	*ND*	*ND*	*ND*	76.1	5.3	*ND*	4.3	342.1	24.4	157	42.8
May-2019	*ND*	*NA*	*ND*	*ND*	30.6	0.58	*ND*	4.25	116.4	14.9	73	31.1
Oct-2019	*2.5 JH1*	*NA*	*ND*	*6 J*	15.5	0.62	*ND*	4.31	97	10.9	33	19.5
May-2020	*ND*	*NA*	*ND*	*6.9 J*	63	1.5	*ND*	4.24	261.7	18.4	143	28.7
Oct-2020	240	*NA*	*ND*	*ND*	58.8	3.1	*ND*	4.36	246.4	19.4	160	39.1
Apr-2021	*ND*	*NA*	*ND*	*ND*	46.1	2.7	*ND*	4.34	271.6	26.3	132	35.9
Oct-2021	*ND*	*NA*	*ND*	*ND*	30.2	0.85	*ND*	4.54	200	12.9	71	26

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-08A*													
Nov-1993	NA	ND	ND	NA	ND	1.7	NA	0.005	NA	ND	0.99	0.06	ND	1.5	NA
Apr-1994	NA	ND	ND	NA	ND	2.8	NA	ND	NA	ND	1.15	0.15	ND	1.57	NA
Apr-1995	ND	ND	ND	ND	0.005	1.3	NA	ND	0.02	ND	0.84	0.06	0.006	1.7	NA
Oct-1996	ND	ND	0.055	ND	ND	2.3	2.6	ND	ND	ND	0.31	ND	ND	1.5	1.4
Apr-1997	ND	ND	0.074	ND	ND	5.4	4	ND	ND	ND	ND	ND	0.006	2	1.7
Oct-1997	ND	ND	0.06	ND	ND	3.15	3.19	ND	ND	0.015	1.31	ND	ND	1.72	1.67
Apr-1998	ND	ND	0.066	ND	ND	2.61	2.56	0.011	ND	0.017	4.87	ND	ND	1.93	1.76
Apr-1999	ND	ND	0.063	ND	ND	2.79	2.65	ND	ND	0.01	1.47	ND	ND	1.95	1.8
Oct-1999	ND	ND	0.06	ND	ND	2.84	2.5	ND	ND	0.011	0.894	ND	ND	1.96	1.77
Apr-2000	ND	ND	0.056	ND	ND	2.57	2.43	ND	ND	ND	ND	ND	ND	1.7	1.6
Oct-2000	ND	ND	0.049	ND	ND	2.79	2.6	ND	ND	0.018	2.39	ND	ND	1.84	1.74
Apr-2001	ND	ND	0.055	ND	ND	2.91	NA	ND	ND	ND	0.562	NA	ND	1.89	NA
Sep-2001	ND	ND	0.054	ND	ND	2.85	2.54	ND	ND	ND	0.924	ND	ND	2.01	1.97
Mar-2002	ND	ND	0.053	ND	ND	3.06	2.68	ND	ND	0.011	0.434	ND	ND	2.11	1.96
Sep-2002	ND	ND	0.057	ND	ND	3.18	2.53	ND	ND	0.015	2.22	ND	ND	1.99	1.86
Mar-2003	ND	ND	0.054	ND	ND	2.58	2.49	ND	ND	ND	0.094	ND	ND	2.05	1.94
Oct-2003	ND	ND	0.066	ND	ND	3.53	3.12	ND	ND	0.012	0.305	ND	ND	2.42	2.28
Apr-2004	ND	0.002	0.067	ND	ND	3.59	3.04	ND	ND	0.015	2.43	ND	ND	2.54	2.26
Oct-2004	ND	ND	0.055	ND	ND	3.77	2.53	ND	ND	ND	0.797	0.365	ND	1.83	1.67
Apr-2005	ND	ND	0.067	ND	ND	3.69	3.14	ND	ND	0.014	1.01	ND	ND	1.99	1.87
Oct-2005	ND	ND	0.054	ND	ND	2.69	2.34	ND	ND	0.011	0.57	ND	ND	1.59	1.48

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-08A***													
Mar-2006	ND	ND	0.058	ND	ND	2.91	2.89	ND	ND	ND	1.43	ND	ND	1.86	1.95
Sep-2006	ND	ND	0.063	ND	ND	3.29	3.27	ND	ND	ND	0.834	ND	ND	2.03	2.04
Mar-2007	ND	ND	0.106	ND	ND	5.05	4.62	ND	0.011	ND	0.384	ND	ND	3.46	2.92
Sep-2007	ND	0.002	0.068	ND	ND	3.18	3.24	ND	ND	0.011	1.89	ND	ND	2.04	2.07
Mar-2008	ND	ND	0.095	ND	ND	4.15	4.18	ND	ND	0.01	1.05	ND	ND	3.02	3.03
Sep-2008	ND	0.003	0.071	ND	ND	3.3	3.22	ND	ND	ND	1.33	ND	ND	2.41	2.37
Mar-2009	ND	ND	0.071	ND	ND	3.36	3.3	ND	ND	0.011	0.553	ND	ND	2.35	2.32
Oct-2009	ND	ND	0.097	ND	ND	4.58	4.51	ND	ND	ND	2.32	0.053	ND	3.38	3.58
Apr-2010	ND	ND	0.117	ND	ND	5.07	4.86	ND	0.01	0.013	2.89	ND	ND	3.62	3.53
Oct-2010	ND	ND	0.142	ND	ND	6.65	6.27	ND	0.013	ND	1.17	ND	ND	5.05	4.78
Apr-2011	ND	ND	0.112	ND	ND	5.25	5.16	ND	ND	0.01	1.71	ND	ND	4	3.85
Sep-2011	ND	ND	0.15	ND	ND	6.9	6.93	ND	0.012	0.015	0.292	ND	ND	4.84	4.87
Mar-2012	ND	ND	0.145	ND	ND	6.61	6.6	ND	0.011	0.015	0.319	ND	ND	4.84	4.85
Sep-2012	ND	ND	0.0894	0.00034 J	0.000282 J	3.9	3.86	0.0013 J	0.0071 J	0.0144	0.0248 J	0.0324 J	ND	2.91	2.84
Mar-2013	ND	ND	0.127	0.000413 J	0.0003 J	6.11	5.96	0.0091 J	0.0099 J	0.0132	0.0782	0.0589	ND	4.48	4.44
Oct-2013	ND	ND	0.16	0.000546 J	0.000533 J	7.32	7.19	0.0176	0.0113	0.0125	0.133	0.0672	ND	4.45	4.03
Mar-2014	0.000446 J	ND	0.124	0.000413 J	0.000432 J	6.16	6.15	0.0028 J	0.0092 J	0.01	0.0305 J	0.0142 J	ND	3.83	3.82
Oct-2014	0.000379 J	0.000519 J	0.15	0.000413 J	0.000427 J	6.79	6.68	0.0026 J	0.0099 J	0.013	0.0319 J	0.0146 J	ND	4.55	4.47
Apr-2015	0.000529 J	0.000397 J	0.096	0.000215 J	0.000305 J	4.91	5.3	0.003 J	0.0078 J	0.0086 J	0.0457 J	0.018 J	ND	3.48	3.76
Nov-2015	0.000371 J	0.000482 J	0.145	0.000405 J	0.000439 J	7.77	7.73	0.002 J	0.0111	0.0124	0.0202 J	0.0164 J	0.000371 J	4.72	4.75
May-2016	ND	ND	0.117	0.0003 J	0.0003 J	6.21	5.79	0.0019 J	0.0102	0.009	ND	ND	ND	4.2	4
Oct-2016	ND	0.0017 J	0.167	0.00044 J	0.00055 J	8.84	8.77 J+	0.0044	0.0135	0.0146	0.058 J	ND	ND	5.5	5.77 J+
May-2017	ND	0.0012 J	0.159	0.00039 J	0.00045 J	9.1	8.72	0.0084	0.0147	0.0156	0.379	ND	0.00026 J	5.93	5.98
Oct-2017	ND	ND	0.166	0.00033 J	0.00059 J	9.29	8.97	0.0021 J	0.0151	0.0119	ND	ND	ND	5.92	6.25

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-08A***													
May-2018	*ND*	*ND*	*0.157 J*	*ND*	*0.00052 J*	8.7	8.8	*0.0026 J*	*0.0129 J*	*0.0106 J*	0.024	*0.011 J*	*ND*	5.5	5.6
Nov-2018	*ND*	*ND*	0.13	0.00041	*0.00058 J*	8.3	8.1	0.0076	0.011	0.009	0.052	0.032	*0.000046 J*	5.3	5.5
May-2019	*ND*	*ND*	0.099	0.00032	*ND*	6.1	5.7	0.0081	0.0076	0.015	*ND*	*ND*	*ND*	3.8	3.6
Oct-2019	*0.00016 J*	*ND*	0.074	*0.00027 J*	*0.00041 J*	3.7	3.8	0.0094	0.0064	0.012	*0.034 J*	*0.015 J*	*0.00007 J*	2.5	2.5
May-2020	*ND*	*ND*	0.11	*0.00031 J*	*0.00051 J*	5.6	5.9	0.0079	0.0089	0.0091	0.086	*ND*	*ND*	3.6	3.9
Oct-2020	*ND*	*ND*	0.13	*0.0003 J*	*ND*	7.4	7.3	*0.0066 J*	0.011	*0.0099 J*	*0.059 J*	0.029	*ND*	5	4.9
Apr-2021	*ND*	*ND*	0.14	*0.00028 J*	*0.00067 J*	6.8	6.6	*0.0036 J*	0.011	0.0096	*ND*	*ND*	*ND*	4.6	4.2
Oct-2021	*ND*	*ND*	0.12	*0.00042 J*	*0.00018 J*	4.6	5.1	0.0039	0.01	0.019	*0.024 J*	*0.024 J*	*ND*	3.5	3.8

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-08A*												
Nov-1993	0.1	NA	ND	NA	0.87	NA	ND	NA	2.1	NA	NA	NA	ND
Apr-1994	0.07	NA	ND	NA	0.78	NA	ND	NA	1.51	NA	NA	NA	0.03
Apr-1995	0.03	NA	ND	ND	0.89	NA	ND	ND	1.5	NA	ND	ND	0.06
Oct-1996	0.054	0.056	NA	ND	ND	ND	ND	ND	2.2	2	ND	ND	0.034
Apr-1997	0.081	0.064	0.0009	ND	2.3	1.6	ND	ND	2.1	2.6	ND	ND	0.032
Oct-1997	0.066	0.063	NA	ND	ND	ND	ND	ND	1.47	1.54	ND	ND	0.021
Apr-1998	0.055	0.055	NA	0.016	2.17	ND	ND	ND	1.73	1.63	ND	0.015	0.031
Apr-1999	0.069	0.068	NA	ND	1.43	1.06	ND	ND	2.02	1.75	ND	ND	0.018
Oct-1999	0.062	0.06	NA	ND	0.97	1.05	ND	ND	2.16	1.72	ND	ND	0.021
Apr-2000	0.068	0.064	NA	ND	ND	ND	ND	ND	1.82	1.7	ND	ND	0.014
Oct-2000	0.056	0.06	NA	ND	1.18	1.24	ND	ND	4.19	2.8	ND	ND	0.016
Apr-2001	0.068	NA	NA	ND	1.32	NA	ND	ND	3.02	NA	ND	ND	0.016
Sep-2001	0.058	0.055	NA	0.018	1.06	0.662	ND	ND	2.62	1.81	ND	ND	0.019
Mar-2002	0.066	0.066	NA	ND	1.43	1.7	ND	ND	2.51	1.61	ND	ND	0.015
Sep-2002	0.072	0.062	NA	ND	1.21	ND	ND	ND	2.14	1.75	ND	ND	0.015
Mar-2003	0.055	0.054	NA	ND	1.52	ND	ND	ND	1.89	1.8	ND	ND	0.01
Oct-2003	0.086	0.081	NA	ND	1.64	1.56	ND	ND	3.23	2.72	ND	ND	0.019
Apr-2004	0.082	0.078	ND	ND	1.81	0.922	ND	ND	2.26	1.77	ND	ND	0.044
Oct-2004	0.091	0.083	ND	ND	0.817	ND	ND	ND	1.78	1.25	ND	ND	0.063
Apr-2005	0.1	0.093	ND	ND	0.72	0.62	ND	ND	2.26	1.86	ND	ND	0.046
Oct-2005	0.066	0.058	ND	ND	0.979	0.922	ND	ND	2.38	1.47	ND	ND	0.015
Mar-2006	0.041	0.038	ND	ND	0.672	0.637	ND	ND	1.75	1.7	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-08A***												
Sep-2006	0.091	0.091	ND	ND	0.991	0.975	ND	ND	2.13	2.09	ND	ND	0.021
Mar-2007	0.134	0.124	ND	ND	1.26	1.13	ND	ND	8.06	6.5	ND	ND	0.032
Sep-2007	0.091	0.091	ND	ND	0.922	0.759	ND	ND	2.61	2.71	ND	ND	0.024
Mar-2008	0.105	0.106	ND	ND	1.13	1.02	ND	ND	7.26	6.57	ND	ND	0.023
Sep-2008	0.088	0.09	ND	ND	1	0.896	ND	ND	3.38	3.57	ND	ND	0.035
Mar-2009	0.084	0.085	ND	ND	1.13	1.02	ND	ND	4.71	4.77	ND	ND	0.022
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	0.105	0.11	ND	ND	1.12	1	ND	ND	11.2	12.1	ND	ND	0.049
Apr-2010	0.119	0.116	ND	ND	1.3	1.08	ND	ND	16.3	15.4	ND	ND	0.036
Oct-2010	0.16	0.153	ND	ND	1.54	1.29	ND	ND	29.3	27.7	ND	ND	0.032
Apr-2011	0.131	0.118	ND	ND	1.16	0.97	ND	ND	13.3	13	ND	ND	0.024
Sep-2011	0.182	0.183	ND	ND	1.5	1.4	ND	ND	22.8	22.8	ND	ND	0.036
Mar-2012	0.181	0.18	ND	0.012	1.38	1.34	ND	ND	22.9	23	ND	ND	0.033
Sep-2012	0.1	0.0963	0.000033 J	0.006 J	1.06	1.07	0.000578 J	ND	9.79	9.35	ND	ND	0.0168
Mar-2013	0.161	0.155	0.000077 J	0.0119	1.3	1.32	0.000678 J	ND	23	22.6	ND	ND	0.0394
Oct-2013	0.186	0.184	ND	0.0086 J	1.3	1.25	ND	ND	33.2	33	0.000098 J	ND	0.0371
Mar-2014	0.173	0.174	ND	0.0072 J	1.27	1.25	ND	ND	28.8	28.8	ND	ND	0.0272
Oct-2014	0.166	0.163	ND	0.0088 J	1.51	1.49	0.0038	ND	33	31.9	ND	ND	0.0289
Apr-2015	0.129	0.139	0.000032 J	0.0068 J	1.19	1.28	0.0021	ND	18.5	19.8	ND	ND	0.0201
Nov-2015	0.194	0.197	ND	0.0088 J	1.53	1.52	0.0036	ND	34.3	34.2	0.000192 J	ND	0.0356
May-2016	0.185	0.177	ND	0.0071	1.4	1.44	ND	ND	38.9	36.8	ND	ND	0.024 J,B
Oct-2016	0.252 J+	0.254 J+	ND	0.0117	1.75	1.84	ND	ND	45.8	46.6	ND	ND	0.0382
May-2017	0.259	0.265	ND	0.0135	1.9	1.84	0.00058 J	ND	65	64.1	ND	0.0011	0.0329
Oct-2017	0.275	0.273	ND	0.0099	1.74	1.88	ND	ND	65.9	72.2	ND	ND	0.0335

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-08A***												
May-2018	0.248	0.25	*ND*	*0.0163 J*	*2 J*	*1.7 J*	*ND*	*ND*	53.3	54.3	*0.0038 J*	*ND*	0.0395
Nov-2018	0.19	0.26	*ND*	0.0098	*1.6 J*	*2.5 J*	*0.00077 J*	*ND*	46.2	46.7	*ND*	0.0014	0.029
May-2019	0.077	0.081	*ND*	0.0098	*ND*	*ND*	*ND*	*ND*	15	14.5	*ND*	*ND*	0.014
Oct-2019	0.083	0.082	*ND*	0.008	*1.4 J*	*ND*	*0.0005 J*	*ND*	7.2	7.8	*ND*	0.0081	0.023
May-2020	0.15	0.16	*ND*	0.011	1.7	1.6	*ND*	*ND*	37.1	36.2	*ND*	*ND*	0.026
Oct-2020	0.17	0.17	*ND*	0.0095	*1.8 J*	*1.7 J*	*ND*	*ND*	30.8	30.5	*ND*	*0.00091 J*	0.033
Apr-2021	0.18	0.17	*0.00005 J*	*0.009 J*	1.7	1.7	*ND*	*ND*	29.7	27.2	*ND*	*ND*	0.03
Oct-2021	0.068	0.076	*ND*	0.01	1.5	1.6	*0.0015 J*	*ND*	15	16.5	*0.000026 J*	*ND*	0.015

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-08A***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	33	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5 J	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08A*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08A*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.7 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-08A*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.1	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	63	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	1
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	2.3	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	25	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.3	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.4	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-08A***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.23	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.63	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.16 J	ND	ND	ND	ND	ND	1.83	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.21	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.38 J,B	ND	ND	ND	ND	1.45	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.19 J	ND	ND	ND	ND	ND	1.13	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	0.56 J	ND	ND	ND	ND	ND	ND	0.64 J	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.9 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-08A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.518 J*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-08A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-08A*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	0.7 J,B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.16 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	0.13 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-08A***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.4 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.538 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-09B***											
Nov-1993	ND	ND	ND	26.8	17.3	2	ND	4.61	78.9	2.8	ND	7.38
Apr-1994	ND	ND	ND	74.5	1.4	2	ND	4.88	81.2	2.5	41	10.47
Apr-1995	ND	ND	ND	ND	17.9	2.2	ND	4.6	87.2	2.4	37	2.7
Apr-1997	ND	13	ND	24	13	1.7	ND	NA	NA	ND	74	11
Oct-1997	ND	ND	0.6	ND	22.5	2.48	ND	5.62	95.1	ND	85	11
Apr-1998	ND	ND	0.21	ND	20.1	2	ND	5.91	86.2	ND	67	13
Apr-1999	ND	ND	0.24	ND	22.4	2.07	ND	4.52	89.2	ND	74	20
Oct-1999	ND	ND	0.14	ND	17.7	1.97	ND	4.99	94.2	0.883	390	17
Apr-2000	ND	3	ND	ND	19.3	1.9	ND	5.62	73	ND	71	14
Oct-2000	ND	NA	ND	32	21.9	2.52	ND	4.86	91.2	ND	92	15.1
Apr-2001	ND	NA	ND	ND	18.9	1.96	ND	NA	NA	ND	62	13.4
Sep-2001	ND	ND	ND	ND	18.7	2.59	ND	6.78	103	ND	166	12
Mar-2002	ND	ND	ND	45	20.9	2.32	ND	4.9	97.3	ND	356	16.6
Sep-2002	1	1	ND	11	23.3	2.11	ND	4.9	139.3	ND	124	15.4
Mar-2003	1.3	1.3	ND	ND	23.1	2.18	ND	4.9	114.3	ND	114	14.5
Oct-2003	1.9	1.9	ND	ND	22.6	2.25	ND	5.1	115.1	1.06	114	15.6
Apr-2004	1.6	1.6	ND	ND	21	1.98	ND	4.8	94.9	1.38	116	15.1
Oct-2004	1.6	1.6	ND	ND	21	2.01	ND	4.9	90.5	ND	72	12.9
Apr-2005	ND	ND	ND	39	22.7	2.1	ND	4.8	91.3	2.12	212	18.3
Oct-2005	2	2	ND	54	24	2.15	ND	5	92.5	1.65	155	18.1
Mar-2006	3	3	ND	ND	21.8	2.2	ND	6	95.1	2.01	96	11
Sep-2006	2	2	ND	ND	19.7	2.31	ND	4.8	88.4	1.66	152	16.3
Mar-2007	3.3	3.3	ND	ND	19.3	2.36	ND	5.4	90	1.58	71	14.1
Sep-2007	2.1	2.1	ND	ND	21.8	2.77	ND	5	89.6	ND	101	12.4
Mar-2008	2.1	2.1	ND	ND	25.1	3.26	ND	4.9	87.1	1.19	155	12.4
Sep-2008	3.1	3.1	ND	34	20.4	2.55	ND	4.7	81.6	2.03	109	12.5
Mar-2009	2.6	2.6	ND	ND	19.6	2.56	ND	4.7	87.5	2.01	42	11.3
Oct-2009	2.4	2.4	ND	23	20.1	2.34	ND	4.6	80.8	1.35	173	15.1
Apr-2010	2.9	2.9	ND	35	19.7	2.26	ND	4.3	80.1	1.97	200	16.7
Oct-2010	3	3	ND	ND	17.8	2.06	ND	4.3	76.2	2.3	72	11.4
Apr-2011	10	10	ND	ND	17.2	1.72	ND	4.5	79.7	2.65	73	18.3
Sep-2011	3.4	3.4	ND	ND	20.6	2.36	ND	5	68.1	ND	60	12.1
Mar-2012	3.2	3.2	ND	ND	14.7	1.54	ND	4	79.5	10.6	24	17.4
Sep-2012	3.4	3.4	ND	ND	19.7	2.23	ND	3.7	84.1	1.79	66	12.1
Mar-2013	3.56	3.56	ND	ND	19.3	2.39	ND	4.1	87.8	1.6	44	11.9
Oct-2013	3.8	3.8	ND	ND	19.7	2.43	ND	3.6	89.8	1.51	54	12
Mar-2014	3.44	3.44	ND	6 J	20.3	2.4	ND	5	81.3	1.56	75	14.4

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-09B***										
Oct-2014	*ND*	*ND*	*ND*	*ND*	21.3	2.39	*ND*	4.8	85.7	2.11	72	13.7
Apr-2015	3.76	3.76	*ND*	*ND*	21.1	2.53	*ND*	4.4	89.8	*0.855 J*	42	13.6
Nov-2015	*ND*	*ND*	*ND*	*ND*	20.8	2.37	*ND*	5.1	134.8	3	33	14.2
May-2016	3.16	3.16	*ND*	*ND*	19.7	2.23	*ND*	5.1	145.9	3.53	62	14.7
Oct-2016	3.72	3.72	*ND*	*ND*	21.3	*NA*	*NA*	5.1	140.5	2.91	82	14.5
May-2017	2.24	2.24	*ND*	*7 J*	22.3	2.69	*ND*	5.1	143.8	2.85	76	21
Oct-2017	*ND*	*ND*	*ND*	*ND*	22	2.96	*ND*	5.1	139.9	2.84	52	14.7
May-2018	*3 JB*	*ND*	*ND*	*ND*	23	0.52	*ND*	4.8	143.8	*ND*	62	17.2
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	21.4	2.5	*ND*	4.85	106.3	*ND*	57	16.2
May-2019	*ND*	*NA*	*ND*	*ND*	22.6	2.4	*ND*	4.75	86	*ND*	53	17.5
Oct-2019	*ND*	*NA*	*ND*	*6 J*	18.7	2.3	*ND*	4.66	103.2	*5.3 J*	67	16.4
May-2020	*6 J*	*NA*	*ND*	*ND*	20.2	2.2	*ND*	5.36	107.7	*5.2 J*	64	18.3
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	20.5	2.1	*ND*	5.24	110.2	6.4	86	22.5
Apr-2021	*2 J3c*	*NA*	*ND*	*6.1 J*	23.7	2.5	*ND*	6.43	136.2	*ND*	62	23.3
Oct-2021	12	*NA*	0.12	*ND*	20.9	2.4	*ND*	5.53	161.5	*ND*	63	22.7

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-09B*													
Nov-1993	NA	0.005	ND	NA	ND	0.15	NA	0.018	NA	ND	4.6	0.13	ND	1.7	NA
Apr-1994	NA	ND	ND	NA	ND	1.72	NA	ND	NA	ND	0.27	ND	ND	1.5	NA
Apr-1995	ND	ND	0.7	ND	ND	1	NA	ND	ND	ND	0.25	ND	ND	1.5	NA
Oct-1996	ND	ND	0.09	0.001	ND	2.5	2.3	ND	0.021	ND	3.3	0.46	ND	1.7	1.6
Apr-1997	ND	ND	0.05	ND	ND	5.4	6.9	ND	ND	ND	ND	ND	0.003	1.5	1.6
Oct-1997	ND	ND	0.063	ND	ND	2.21	2.08	ND	0.01	ND	1.58	ND	ND	1.92	1.69
Apr-1998	ND	ND	0.057	ND	ND	2.21	2.12	ND	ND	ND	1.1	ND	ND	1.74	1.56
Apr-1999	ND	ND	0.182	ND	ND	3	2.07	0.047	0.02	0.052	9.09	ND	ND	2.97	1.52
Oct-1999	ND	ND	0.087	ND	ND	2.73	1.93	0.028	0.017	0.056	5.02	ND	ND	1.91	1.38
Apr-2000	ND	ND	0.055	ND	ND	2.54	1.92	ND	0.012	0.022	1.6	0.219	ND	1.77	1.52
Oct-2000	ND	ND	0.067	ND	ND	2.77	2.22	0.014	0.015	0.028	2.54	ND	ND	1.98	1.67
Apr-2001	ND	ND	0.046	ND	ND	2.49	NA	ND	0.012	ND	0.856	NA	ND	1.75	NA
Sep-2001	ND	ND	0.097	ND	ND	2.92	2.21	0.031	0.015	0.053	7.62	ND	0.013	2.19	1.65
Mar-2002	ND	ND	0.079	ND	ND	3.01	2.23	0.023	0.017	0.043	4.51	0.059	0.009	2.2	1.71
Sep-2002	ND	ND	0.073	ND	ND	2.9	2.14	0.015	0.012	0.038	3.78	ND	0.007	1.98	1.63
Mar-2003	ND	0.002	0.051	ND	ND	2.63	2.3	ND	0.017	0.039	0.907	0.118	0.003	1.92	1.67
Oct-2003	ND	0.004	0.074	ND	ND	2.85	2.19	0.015	0.012	0.066	3.45	ND	0.008	2.07	1.7
Apr-2004	ND	0.004	0.069	ND	ND	2.74	2.03	0.014	0.01	0.024	3.02	ND	0.006	2.01	1.65
Oct-2004	ND	ND	0.042	ND	ND	2.31	1.86	ND	ND	ND	0.71	ND	ND	1.73	1.62
Apr-2005	ND	0.009	0.123	0.002	ND	3.35	2.22	0.047	0.02	0.085	9.19	ND	**0.018**	2.41	1.78
Oct-2005	ND	**0.014**	0.149	ND	0.004	3.09	1.86	0.064	0.025	0.116	11.5	ND	**0.028**	2.52	1.49

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09B***													
Mar-2006	ND	ND	0.031	ND	ND	2.07	1.93	ND	ND	ND	0.277	ND	ND	1.42	1.49
Sep-2006	ND	ND	0.081	ND	ND	3.1	2.21	0.039	0.019	0.079	7.79	ND	**0.016**	2.05	1.55
Mar-2007	ND	0.003	0.058	ND	ND	2.66	2.48	ND	0.012	0.021	1.4	ND	0.003	1.81	1.59
Sep-2007	ND	ND	0.046	ND	ND	2.26	2.2	ND	ND	ND	0.88	ND	0.003	1.65	1.56
Mar-2008	ND	0.004	0.062	ND	ND	2.27	2.1	0.013	0.011	0.023	2.38	ND	0.006	1.64	1.5
Sep-2008	ND	0.003	0.063	ND	ND	2.17	1.92	0.018	0.014	0.02	2.31	ND	0.005	1.71	1.48
Mar-2009	ND	ND	0.046	ND	ND	2.09	1.88	ND	ND	0.017	1.51	ND	0.003	1.48	1.35
Oct-2009	ND	0.005	0.09	ND	ND	2.82	1.93	0.031	0.016	0.061	4.87	0.052	0.011	1.96	1.52
Apr-2010	ND	0.006	0.094	ND	ND	3.34	2.45	0.039	0.017	0.066	11	ND	0.014	2.05	1.38
Oct-2010	ND	ND	0.037	ND	ND	1.94	1.97	ND	ND	ND	0.516	ND	ND	1.59	1.59
Apr-2011	ND	ND	0.034	ND	ND	4.56	4.07	ND	0.022	ND	4.41	ND	ND	1.67	1.53
Sep-2011	ND	ND	0.04	ND	ND	2.12	2.05	ND	ND	ND	0.211	ND	ND	1.65	1.61
Mar-2012	ND	ND	0.066	ND	ND	2.82	2.86	ND	ND	ND	ND	ND	ND	2.51	2.54
Sep-2012	ND	ND	0.0335	0.000191 J	ND	2.09	2.03	ND	0.0068 J	0.0015 J	0.0749	0.0223 J	ND	1.66	1.67
Mar-2013	ND	ND	0.0379	0.000152 J	ND	2.13	2.19	0.0029 J	0.0069 J	0.0016 J	0.0186 J	0.0078 J	ND	1.61	1.62
Oct-2013	ND	ND	0.0414	0.000199 J	ND	2.39	2.43	0.0095 J	0.0074 J	0.0012 J	0.101	0.0559	0.000275 J	1.47	1.42
Mar-2014	0.000599 J	ND	0.0436	0.000386 J	ND	2.67	2.23	0.0046 J	0.0069 J	0.00041 J	0.194	0.003 J	ND	1.87	1.58
Oct-2014	0.000623 J	ND	0.0454	0.00016 J	0.000098 J	2.39	2.4	0.0025 J	0.0074 J	0.0017 J	0.0974	ND	ND	1.89	1.89
Apr-2015	0.000723 J	ND	0.0449	0.00016 J	0.000093 J	2.42	2.49	0.002 J	0.0079 J	0.0022 J	0.137	ND	0.00099 J	1.83	1.9
Nov-2015	0.000329 J	ND	0.041	0.000183 J	0.0001 J	2.56	2.52	0.000845 J	0.0068 J	0.0023 J	0.054	ND	0.000315 J	1.89	1.95
May-2016	ND	ND	0.0411	0.00021 J	ND	2.43	2.18	0.0014 J	0.0065	0.003 J	0.265	ND	ND	2.11	1.89
Oct-2016	ND	ND	0.0474	0.00017 J	ND	2.5	2.55 J+	0.0021 J	0.0066	0.0022 J	0.128 J	ND	0.00017 J	2	2.23 J+
May-2017	ND	ND	0.0508	0.0002 J	ND	2.83	2.32	0.0024 J	0.0085	0.0068	0.177 J	ND	0.00054 J	3.39	2.14
Oct-2017	ND	ND	0.0464	0.00014 J	ND	2.47	2.45	ND	0.0075	0.0017 J	ND	ND	ND	2.07	2.14

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09B***													
May-2018	*ND*	*ND*	*0.0507 J*	*ND*	*ND*	2.9	2.9	*ND*	*0.0078 J*	*ND*	*0.017 J*	*ND*	*ND*	2.4	2.4
Nov-2018	*ND*	*ND*	0.043	*0.00014 JM1*	*0.000091 J*	2.9	2.8	*0.0041 J*	0.0057	0.0029	*0.014 J*	*ND*	*0.000081 J*	2.2	2.2
May-2019	*ND*	*ND*	0.048	*ND*	*ND*	2.8	2.6	*ND*	0.0058	0.0035	*ND*	*ND*	*ND*	2.6	2.4
Oct-2019	*0.00014 J*	*0.00044 J*	0.05	*0.00012 J*	*0.0002 J*	2.5	2.5	*0.0056 J*	0.0056	0.0022	*0.017 J*	*ND*	*ND*	2.5	2.5
May-2020	*0.000061 J*	*ND*	0.047	*0.000093 J*	*ND*	3.1	3	*0.0041 J*	0.0046	0.0023	*0.017 J*	*0.013 J*	*ND*	2.5	2.4
Oct-2020	*ND*	*ND*	0.045	*ND*	*ND*	4.6	4.3	*0.0031 J*	0.0045	*ND*	*0.021 J*	*0.01 J*	*ND*	2.7	2.5
Apr-2021	*ND*	*ND*	0.052	*ND*	*ND*	4.9	4.8	*0.0014 J*	*0.0046 J*	*ND*	*0.053 J*	*ND*	*ND*	2.7	2.8
Oct-2021	*ND*	*ND*	0.051	*ND*	*ND*	4.3	4.6	0.0034	0.0051	*0.002 J*	*0.031 J*	*0.013 J*	*0.000034 J*	2.9	3.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-09B*												
Nov-1993	0.05	NA	ND	NA	4.7	NA	ND	NA	8	NA	NA	NA	0.04
Apr-1994	0.03	NA	ND	NA	1.2	NA	ND	NA	8.28	NA	NA	NA	0.08
Apr-1995	ND	NA	ND	ND	1.7	NA	ND	ND	7.2	NA	ND	ND	0.03
Oct-1996	0.019	0.017	NA	ND	ND	ND	ND	ND	8.9	9.1	ND	0.026	0.16
Apr-1997	0.019	0.017	ND	ND	2.3	4.4	ND	ND	8.4	9.2	ND	ND	0.031
Oct-1997	0.02	0.018	NA	0.018	1.49	ND	ND	ND	11.1	10.9	ND	0.012	0.025
Apr-1998	0.019	0.017	NA	0.018	2.09	1.85	ND	ND	10.2	10.2	ND	ND	0.026
Apr-1999	0.03	0.018	NA	0.025	8.15	1.24	ND	ND	11.8	10.5	ND	0.079	0.056
Oct-1999	0.02	0.017	NA	0.035	2.97	1.29	ND	ND	10.3	9.04	ND	0.055	0.06
Apr-2000	0.02	0.017	NA	0.018	1.88	1.31	ND	ND	10.9	9.63	ND	0.017	0.033
Oct-2000	0.021	0.017	NA	0.025	2.6	1.53	ND	ND	12.6	11.1	ND	0.025	0.036
Apr-2001	0.02	NA	NA	0.012	1.92	NA	ND	ND	12.3	NA	ND	ND	0.015
Sep-2001	0.026	0.018	NA	0.036	3.42	1.42	ND	ND	13.2	11.7	ND	0.061	0.038
Mar-2002	0.025	0.02	NA	0.019	3.42	2.01	ND	ND	14.3	12.2	ND	0.047	0.038
Sep-2002	0.025	0.018	NA	0.015	2.03	1.56	ND	ND	13.2	12.3	ND	0.034	0.028
Mar-2003	0.021	0.018	NA	0.019	2.98	1.45	ND	ND	13.4	12.5	ND	0.025	0.027
Oct-2003	0.028	0.02	NA	0.016	3.2	2.95	ND	ND	14.1	12.9	ND	0.036	0.047
Apr-2004	0.026	0.02	ND	0.016	3.46	2.34	ND	ND	13.3	12.8	ND	0.028	0.108
Oct-2004	0.021	0.02	ND	ND	2.49	ND	ND	ND	13.6	13.1	ND	ND	0.02
Apr-2005	0.03	0.019	ND	0.033	3.31	1.33	ND	ND	15.2	15.1	ND	0.086	0.1
Oct-2005	0.031	0.016	ND	0.034	4.29	1.35	ND	ND	14.3	11.9	ND	0.12	0.069
Mar-2006	ND	ND	ND	ND	1.25	1.15	ND	ND	11	11.8	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09B***												
Sep-2006	0.027	0.017	0.0002	0.024	2.93	1.41	ND	ND	11.4	10.9	ND	0.07	0.046
Mar-2007	0.02	0.016	ND	0.014	2.3	1.48	ND	ND	10.5	10.7	ND	0.019	0.02
Sep-2007	0.02	0.019	ND	0.012	1.66	1.23	ND	ND	11.5	11.6	ND	ND	0.017
Mar-2008	0.021	0.017	ND	0.015	2.29	1.26	ND	ND	11.9	11.4	ND	0.019	0.023
Sep-2008	0.022	0.017	ND	0.019	2.63	1.24	ND	ND	10.2	10.1	ND	0.016	0.049
Mar-2009	0.019	0.016	ND	ND	2.08	1.36	ND	ND	10.6	10.3	ND	ND	0.018
Oct-2009	0.031	0.017	ND	0.023	2.9	1.16	ND	ND	10.7	11	ND	0.058	0.062
Apr-2010	0.029	0.014	ND	0.023	3.54	1.37	ND	ND	11	10.9	ND	0.08	0.043
Oct-2010	0.024	0.02	ND	ND	1.91	1.49	ND	ND	11.1	11.3	ND	ND	0.015
Apr-2011	0.239	0.012	ND	0.011	1.56	1.42	ND	ND	10.6	10.2	ND	ND	0.022
Sep-2011	0.019	0.018	ND	ND	1.71	1.52	ND	ND	11.7	11.3	ND	ND	0.01
Mar-2012	0.045	0.045	ND	ND	1.5	1.51	ND	ND	8.98	9.28	ND	ND	ND
Sep-2012	0.0202	0.02	ND	0.0083 J	1.47	1.37	ND	ND	11.6	11.5	ND	ND	0.0074 J
Mar-2013	0.0199	0.0206	0.000063 J	0.0091 J	1.33	1.36	ND	ND	11	10.9	ND	ND	0.0167
Oct-2013	0.0238	0.0241	ND	0.0081 J	1.24	1.21	ND	ND	9.63	9.33	0.000127 J	0.0052 J	0.0169
Mar-2014	0.0211	0.0218	ND	0.0091 J	1.85	1.44	ND	ND	12.7	10.6	ND	0.000972 J	0.0119
Oct-2014	0.0233	0.0232	0.000034 J	0.0099 J	1.65	1.6	0.00081 J	ND	12.6	12.6	ND	ND	0.0117
Apr-2015	0.0251	0.0248	ND	0.0097 J	1.66	1.61	0.0014 J	ND	12.9	13.2	0.000871 J	ND	0.0152
Nov-2015	0.0223	0.0226	ND	0.0087 J	1.68	1.71	0.000537 J	ND	12.5	12.7	0.00018 J	ND	0.0133
May-2016	0.0235	0.0224	ND	0.0081	1.84	1.65	ND	ND	14.9	12.3	ND	ND	0.0088 J,B
Oct-2016	0.0236 J+	0.0256 J+	ND	0.0099	1.83	1.79	ND	ND	13.1	14.1	ND	0.00068 J	0.0122 J
May-2017	0.0309	0.0254	ND	0.0127	2.25	1.69	ND	ND	50.3	13.2	ND	0.00067 J	0.0208 J
Oct-2017	0.0261	0.0267	ND	0.0084	1.56	1.63	ND	ND	12.9	13.3	ND	ND	0.0092 J
May-2018	0.0293	0.0279	ND	0.0178 J	1.9 J	1.4 J	ND	ND	14.8	14	ND	ND	0.0124 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09B***												
Nov-2018	0.022	0.02	*ND*	0.0093	*1.9 J*	*1.7 J*	*0.0004 J*	*ND*	13.4	13.4	*ND*	0.002	0.011 D6
May-2019	0.026	0.024	*ND*	0.008	*ND*	*ND*	*ND*	*ND*	13.3	12.8	*ND*	*ND*	0.0086
Oct-2019	0.029	0.03	*ND*	0.0073	*1.9 J*	*ND*	*0.00065 J*	*ND*	12.5	13	*ND*	0.0087	0.015
May-2020	0.021	0.02	*ND*	0.0098	*2.2 J*	*1.3 J*	*0.00043 J*	*ND*	15.2	11.8	*ND*	0.0044	0.01
Oct-2020	0.023	0.022	*ND*	0.0084	*ND*	*1.5 J*	*ND*	*ND*	13	12.9	*ND*	*0.0012 J*	*0.015 J*
Apr-2021	0.026	0.029	*ND*	*0.0084 J*	1.7	1.8	*ND*	*ND*	14.5	15.1	*ND*	*0.00073 J*	*0.0078 J*
Oct-2021	0.026	0.028	*ND*	0.0098	1.6	1.6	*0.0011 J*	*ND*	13.1	14	*0.000034 J*	*ND*	0.0097

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09B*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	6	5	4	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	17	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09B*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09B*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.6 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-09B*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	2.1	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	0.6 J	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.1	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.3	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09B***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.49 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	0.39 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.32 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.4 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.3 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09B***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	5.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-09B*															
Oct-2005	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	0.5 J	0.5 J	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.44 J	ND	ND	ND	0.18 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	0.34 J	ND	ND	ND	0.21 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	0.38 J	ND	ND	ND	0.19 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	0.29 J	ND	ND	ND	0.19 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	0.3 J	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09B***															
Oct-2016	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.455 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-09C***											
Nov-1993	9	9	ND	ND	13.3	1.6	ND	5.05	78.9	3.5	38	14.7
Apr-1994	57	31	0.2	ND	14.1	1.5	ND	8.94	143	3.3	71	91.14
Apr-1995	19.6	19.6	ND	17.6	17.6	2.1	ND	5.6	114	3	68	28
Apr-1997	ND	1	ND	ND	18	2.1	ND	NA	NA	ND	68	8
Oct-1997	6	6	0.42	ND	17.2	1.74	ND	5.8	94.5	1.1	59	17
Apr-1998	15	15	0.23	ND	15	1.45	ND	6.66	86.2	1.26	63	25
Apr-1999	ND	ND	0.17	ND	18.2	1.52	ND	5.07	87.3	2.12	88	17
Oct-1999	5	5	0.1	ND	15.6	1.73	ND	5.37	111.2	2.12	110	21
Apr-2000	3	4	ND	ND	17.1	1.8	ND	5.73	79	4.23	83	20
Oct-2000	10.2	NA	ND	ND	17	1.94	ND	5.49	98	5.69	91	26.1
Apr-2001	3.1	NA	ND	ND	15.2	1.36	ND	NA	NA	6.39	68	18.7
Sep-2001	5.1	5.1	ND	ND	16.9	2.63	ND	6.91	100	10.5	90	20.5
Mar-2002	2.8	2.8	ND	ND	17	2.16	ND	5.2	88.3	4.78	95	17.5
Sep-2002	2.8	2.8	ND	ND	17.3	1.85	ND	5.1	99.2	6.62	197	17.8
Mar-2003	5.7	5.7	ND	ND	20.8	1.82	ND	5.4	111.5	11.2	94	18.9
Oct-2003	29	29	ND	ND	17.9	1.98	ND	5.9	113.3	4.71	105	42.5
Apr-2004	7.2	7.2	ND	ND	18.4	1.91	ND	5.4	95.1	2.6	112	18.9
Oct-2004	9.6	9.6	ND	ND	17.9	1.83	ND	5.3	86.8	2.45	74	26.9
Apr-2005	23	23	ND	ND	17.1	1.84	ND	5	92.8	2.97	120	30.5
Oct-2005	5.4	5.4	ND	ND	19.3	1.96	ND	5.4	82.8	4.26	78	14.6
Mar-2006	4.8	4.8	ND	ND	15.5	1.6	ND	5.2	97.9	8.46	72	16.3
Sep-2006	3.8	3.8	ND	ND	16.5	1.83	ND	4.9	92.6	8.75	91	17.6
Mar-2007	4	4	ND	ND	17.2	1.97	ND	5.2	94.1	7.75	73	17.6
Sep-2007	3.2	3.2	ND	ND	18.4	2.35	ND	5.1	85	10.8	80	16.2
Mar-2008	3.5	3.5	ND	ND	19.9	2.49	ND	5.2	84.3	9.06	88	15.3
Sep-2008	4.2	4.2	ND	ND	15.2	1.76	ND	4.9	82.5	9.79	67	15.1
Mar-2009	3.5	3.5	ND	ND	14.4	1.87	ND	4.8	83.5	10	35	14.2
Oct-2009	3.4	3.4	ND	ND	15	1.66	ND	4.9	79.7	9.35	86	16.2
Apr-2010	6.1	6.1	ND	ND	17.5	2.2	ND	4.6	81.1	5.77	62	18.9
Oct-2010	3	3	ND	ND	15.9	2.11	ND	4.2	608	5.13	131	14.5
Apr-2011	33	33	ND	ND	16.1	1.88	0.03	4.5	81.2	5.33	110	38
Sep-2011	2.7	2.7	0.29	ND	16.7	1.77	ND	4.9	72.6	6.5	59	15.4
Mar-2012	3.1	3.1	ND	ND	19.5	2.25	ND	15.4	80.7	ND	76	12
Sep-2012	3.04	3.04	ND	ND	14.3	1.46	ND	4.1	86.3	12.8	72	18
Mar-2013	2.84	2.84	ND	ND	16.7	1.54	ND	3.9	97.1	11.9	65	16.4
Oct-2013	3.32	3.32	ND	ND	16.2	1.6	ND	3.6	94.3	12.5	65	18.1
Mar-2014	2.68	2.68	ND	ND	16.6	1.55	ND	5	91.3	13.5	63	17.1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-09C***										
Oct-2014	*ND*	*ND*	*ND*	11	17	1.57	*ND*	4.7	90.7	12.4	62	20.6
Apr-2015	2.84	2.84	*ND*	*ND*	18.1	2.11	*ND*	4.2	95.2	11.2	50	19.3
Nov-2015	*ND*	*ND*	*ND*	*8 J*	19.6	2.29	*ND*	5	129.4	10.2	58	18.7
May-2016	*ND*	*ND*	*ND*	*ND*	18.1	2.15	*ND*	5	151	9.71	66	18.4
Oct-2016	*ND*	*ND*	*ND*	*ND*	19.3	*NA*	*NA*	4.9	149.5	8.32	64	17.5
May-2017	*ND*	*ND*	*ND*	*7 J*	18.7	2.23	*ND*	4.9	147.7	10.4	64	24.3
Oct-2017	*ND*	*ND*	*ND*	*7 J+*	16.7	2.14	*ND*	4.9	138.3	11.9	50	20
May-2018	*4 JB*	*ND*	*0.088 J*	*ND*	17.4	0.39	*ND*	4.6	139.4	12.7	68	22.1
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	22.5	2.8	*ND*	4.69	125.1	12	31	23.6
May-2019	20	*NA*	*ND*	*ND*	19.9	2.6	*ND*	5.6	112.6	11.7	84	39.4
Oct-2019	*ND*	*NA*	*ND*	*8.2 J*	16.7	2.3	*ND*	4.77	121.8	15.4	60	25.3
May-2020	*ND*	*NA*	*ND*	*ND*	19.4	2.6	*ND*	4.56	123	13.1	89	25.5
Oct-2020	*ND*	*NA*	*ND*	*ND*	20	2.7	*ND*	4.53	124.4	13.4	93	27.5
Apr-2021	22	*NA*	*ND*	*6.1 J*	23.3	2.9	*ND*	4.88	155.3	12.9	80	27.4
Oct-2021	*6 J2c*	*NA*	*ND*	*ND*	25.5	3.5	*ND*	4.85	201.4	10.1	67	26.3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-09C*													
Nov-1993	NA	ND	ND	NA	ND	2.6	NA	0.015	NA	ND	6.4	0.14	ND	2	NA
Apr-1994	NA	ND	ND	NA	ND	33.5	NA	ND	NA	ND	0.25	1.59	ND	1.82	NA
Apr-1995	ND	ND	ND	ND	ND	7.9	NA	ND	ND	ND	ND	ND	ND	2	NA
Oct-1996	ND	ND	0.065	ND	ND	10	6.4	ND	ND	ND	ND	ND	ND	1.7	1.8
Apr-1997	ND	ND	0.042	ND	ND	2.3	2.2	ND	ND	ND	0.22	ND	0.002	1.5	1.5
Oct-1997	ND	ND	0.049	ND	ND	4.65	3.92	ND	0.013	ND	0.49	ND	ND	1.59	1.48
Apr-1998	ND	ND	0.053	ND	ND	7.37	6.97	ND	ND	ND	0.338	ND	ND	1.6	1.48
Apr-1999	ND	ND	0.06	ND	ND	3.68	3	ND	0.016	0.016	0.881	ND	ND	1.99	1.59
Oct-1999	ND	ND	0.061	ND	ND	3.2	2.57	ND	0.013	0.015	0.387	ND	ND	2.24	2.19
Apr-2000	ND	ND	0.072	ND	ND	3.92	3.13	ND	0.015	0.017	1.27	0.11	ND	2.37	2.11
Oct-2000	ND	ND	0.071	ND	ND	6.62	5.77	ND	0.012	0.013	0.777	ND	ND	2.32	2.08
Apr-2001	ND	ND	0.067	ND	ND	3.39	NA	ND	0.012	ND	0.154	NA	ND	2.5	NA
Sep-2001	ND	ND	0.071	ND	ND	4.36	3.13	ND	0.011	0.012	0.366	ND	ND	2.33	2.19
Mar-2002	ND	ND	0.063	ND	ND	3.27	2.67	ND	0.01	ND	0.54	ND	ND	2.26	2.16
Sep-2002	ND	ND	0.072	ND	ND	3.47	2.66	ND	ND	0.017	1.42	0.329	0.002	2.23	2.1
Mar-2003	ND	ND	0.061	ND	ND	4.11	3.51	ND	0.013	ND	0.059	ND	ND	2.09	2.14
Oct-2003	ND	ND	0.07	ND	ND	13.5	8.39	ND	ND	0.012	0.43	ND	ND	2.13	2.09
Apr-2004	ND	0.002	0.059	ND	ND	4.28	3.25	ND	ND	ND	0.312	ND	ND	1.98	1.86
Oct-2004	ND	ND	0.054	ND	ND	7.84	3.16	ND	0.016	0.016	0.676	ND	0.002	1.76	1.61
Apr-2005	ND	0.005	0.091	ND	ND	8.6	3.38	0.023	0.035	0.049	5.71	ND	0.011	2.18	1.56
Oct-2005	ND	ND	0.047	ND	ND	3.15	2.53	ND	0.011	0.012	0.965	ND	0.002	1.65	1.55

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09C***													
Mar-2006	ND	ND	0.053	ND	ND	3.13	3.08	ND	0.011	ND	0.608	ND	ND	2.06	2.12
Sep-2006	ND	ND	0.059	ND	ND	3.21	2.94	ND	0.011	ND	0.373	ND	ND	2.32	2.31
Mar-2007	ND	0.003	0.076	ND	ND	3.32	2.92	ND	0.016	0.014	1.44	ND	0.002	2.25	2.13
Sep-2007	ND	ND	0.066	ND	ND	2.87	2.71	ND	0.011	ND	0.377	ND	ND	2.2	2.18
Mar-2008	ND	0.002	0.066	ND	ND	2.74	2.6	ND	0.01	ND	0.477	ND	ND	2.05	2.1
Sep-2008	ND	0.002	0.06	ND	ND	2.68	2.46	ND	ND	ND	0.492	ND	ND	2.04	2.12
Mar-2009	ND	ND	0.062	ND	ND	2.53	2.35	ND	ND	0.015	1.53	ND	ND	1.91	1.87
Oct-2009	ND	ND	0.063	ND	ND	3.08	2.62	ND	0.012	0.013	1.35	ND	ND	2.06	2.22
Apr-2010	ND	ND	0.069	ND	ND	4	3.41	ND	0.014	0.012	2.1	ND	ND	2.15	1.91
Oct-2010	ND	ND	0.056	ND	ND	2.49	2.42	ND	ND	ND	0.207	ND	ND	2.01	1.91
Apr-2011	ND	ND	0.061	ND	ND	11.3	8.91	ND	0.019	0.014	0.202	ND	ND	2.38	1.85
Sep-2011	ND	ND	0.064	ND	ND	2.56	2.56	ND	ND	ND	0.177	ND	ND	2.18	2.15
Mar-2012	ND	ND	0.036	ND	ND	1.93	1.93	ND	ND	ND	ND	ND	ND	1.75	1.75
Sep-2012	ND	ND	0.0637	0.000327 J	ND	2.89	2.96	0.0023 J	0.0081 J	0.0042 J	0.227	0.0343 J	ND	2.62	2.65
Mar-2013	ND	ND	0.0686	0.00029 J	ND	2.6	3.15	0.0023 J	0.0071 J	0.0027 J	0.0286 J	0.0103 J	ND	2.41	2.82
Oct-2013	ND	ND	0.0751	0.000345 J	0.00013 J	2.72	2.76	0.0028 J	0.008 J	0.0031 J	ND	ND	ND	2.75	2.73
Mar-2014	0.000518 J	ND	0.0717	0.000333 J	0.000115 J	2.95	3.05	0.0025 J	0.008 J	0.0015 J	0.241	0.0045 J	ND	2.37	2.44
Oct-2014	0.001 J	ND	0.0893	0.000437 J	0.000143 J	3.42	3.31	0.0011 J	0.0086 J	0.0042 J	0.102	ND	ND	2.94	2.86
Apr-2015	0.000486 J	ND	0.0873	0.000482 J	0.000129 J	3.26	3.17	0.0016 J	0.0089 J	0.0034 J	0.0461 J	0.009 J	ND	2.72	2.67
Nov-2015	0.000371 J	0.000239 J	0.0776	0.00042 J	0.000141 J	3.3	3.29	0.0013 J	0.0082 J	0.0042 J	0.17	ND	0.000519 J	2.53	2.55
May-2016	ND	ND	0.0732	0.00041 J	ND	3.11	2.77	0.0013 J	0.0081	0.0034 J	0.036 J	ND	ND	2.59	2.32
Oct-2016	ND	ND	0.0711	0.00041 J	ND	3.03	2.97 J+	0.0017 J	0.0084	0.0036 J	0.0493 J	ND	ND	2.4	2.55 J+
May-2017	ND	ND	0.085	0.00039 J	ND	3.62	3.25	0.0017 J	0.01	0.0079	0.159 J	ND	0.00054 J	3.7	2.73
Oct-2017	ND	ND	0.0807	0.00033 J	ND	3.46	3.31	ND	0.0096	0.0031 J	ND	ND	ND	2.76	2.93

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09C***													
May-2018	*ND*	*ND*	*0.0871 J*	*ND*	*0.00014 J*	3.8	3.7	*0.0022 J*	*0.0097 J*	*0.0032 J*	*0.02 J*	*ND*	*ND*	3.1	3
Nov-2018	*ND*	*ND*	0.086	0.0004	*0.00017 J*	4.2	4.1	*0.0064 J*	0.0086	0.0043	0.026	*0.014 J*	*0.000046 J*	3.2	3.2
May-2019	*ND*	*ND*	0.075	*ND*	*ND*	10.3	9.4	*ND*	0.0071	0.0031	*ND*	*ND*	*ND*	3.3	3.1
Oct-2019	*0.00013 J*	*ND*	0.083	*0.00029 J*	*0.00028 J*	4.5	4.7	0.0074	0.0082	0.0033	*0.018 J*	*0.011 J*	*ND*	3.4	3.4
May-2020	*0.000054 J*	*ND*	0.089	*0.0003 J*	*0.00017 J*	4.2	4.2	0.0094	0.011	0.0037	*0.06 J*	*0.019 J*	*ND*	3.7	3.6
Oct-2020	*0.00026 J*	*ND*	0.11	*0.00038 J*	*0.0007 J*	4.5	4.3	0.099	0.0098	0.57	*0.028 J*	*0.014 J*	*0.0014 J*	4	3.7
Apr-2021	*ND*	*0.0029 J*	0.1	*0.00028 J*	*0.00035 J*	4.8	5	*0.0035 J*	0.011	*0.0044 J*	*ND*	*ND*	*ND*	3.7	3.9
Oct-2021	*ND*	*ND*	0.1	*0.00032 J*	*ND*	4.3	4.6	0.0037	0.013	0.0033	*0.016 J*	*0.01 J*	*ND*	3.8	4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-09C*												
Nov-1993	0.06	NA	ND	NA	4.3	NA	ND	NA	6.5	NA	NA	NA	0.04
Apr-1994	0.03	NA	ND	NA	3.26	NA	ND	NA	8.87	NA	NA	NA	0.05
Apr-1995	0.01	NA	ND	ND	7.8	NA	ND	ND	7.3	NA	ND	ND	0.02
Oct-1996	0.024	0.023	NA	ND	ND	ND	ND	ND	8	8.1	ND	ND	0.096
Apr-1997	0.018	0.015	ND	ND	2.6	2.3	ND	ND	9.5	10	ND	ND	0.043
Oct-1997	0.023	0.02	NA	0.016	1.74	0.969	ND	ND	9.14	8.95	ND	ND	0.02
Apr-1998	0.019	0.015	NA	ND	1.99	1.61	ND	ND	9.25	8.96	ND	ND	0.017
Apr-1999	0.029	0.02	NA	ND	3.16	1.65	ND	ND	10	9.15	ND	ND	0.028
Oct-1999	0.032	0.031	NA	0.025	1.91	1.78	ND	ND	9.38	8.42	ND	ND	0.033
Apr-2000	0.039	0.035	NA	0.017	1.39	0.689	ND	ND	10.6	9.28	ND	ND	0.032
Oct-2000	0.041	0.032	NA	ND	1.94	1.58	ND	ND	11.5	9.91	ND	ND	0.024
Apr-2001	0.045	NA	NA	ND	1.86	NA	ND	ND	10.7	NA	ND	ND	0.012
Sep-2001	0.042	0.036	NA	0.02	1.79	1.44	ND	ND	11.5	9.26	ND	ND	0.023
Mar-2002	0.039	0.036	NA	ND	1.98	1.34	ND	ND	10.4	9.3	ND	ND	0.019
Sep-2002	0.041	0.034	NA	ND	2.08	1.79	ND	ND	9.83	9.67	ND	ND	0.021
Mar-2003	0.032	0.034	NA	0.012	2.47	1.03	ND	ND	10.1	9.64	ND	ND	0.017
Oct-2003	0.036	0.029	NA	ND	2.86	1.49	ND	ND	12.7	11.9	ND	ND	0.018
Apr-2004	0.032	0.03	ND	ND	2.5	1.95	ND	ND	12.2	12.4	ND	ND	0.01
Oct-2004	0.027	0.022	ND	0.045	3.34	2.15	ND	ND	12.9	11.5	ND	ND	0.086
Apr-2005	0.045	0.018	ND	0.044	3.36	1.23	ND	ND	13.5	11.9	ND	0.035	0.096
Oct-2005	0.023	0.019	ND	0.013	1.79	1.45	ND	ND	11.1	9.58	ND	ND	0.022
Mar-2006	ND	ND	ND	0.012	1.69	1.42	ND	ND	8.26	8.69	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09C***												
Sep-2006	0.047	0.044	ND	ND	1.83	1.69	ND	ND	9.88	9.84	ND	ND	0.017
Mar-2007	0.045	0.042	ND	0.016	2.37	1.51	ND	ND	10.3	9.87	ND	0.012	0.029
Sep-2007	0.046	0.047	ND	ND	1.61	1.41	ND	ND	9.72	9.14	ND	ND	0.018
Mar-2008	0.043	0.044	ND	ND	1.64	1.43	ND	ND	9.61	8.98	ND	ND	0.022
Sep-2008	0.041	0.043	ND	0.012	1.54	1.43	ND	ND	7.7	7.86	ND	ND	0.038
Mar-2009	0.04	0.039	ND	ND	2.02	1.57	ND	ND	8	7.76	ND	ND	0.02
Oct-2009	0.044	0.043	ND	0.017	1.6	1.42	ND	ND	8.01	8.5	ND	ND	0.055
Apr-2010	0.039	0.031	ND	0.016	1.9	1.47	ND	ND	10.5	10	ND	ND	0.03
Oct-2010	0.038	0.035	ND	ND	1.68	1.51	ND	ND	10.1	10.3	ND	ND	0.014
Apr-2011	0.076	0.032	ND	0.014	1.62	1.46	ND	ND	10.2	9.47	ND	ND	0.033
Sep-2011	0.041	0.04	ND	ND	1.77	1.66	ND	ND	9.56	9.44	ND	ND	ND
Mar-2012	0.018	0.019	ND	ND	1.35	1.34	ND	ND	11.8	11.8	ND	ND	ND
Sep-2012	0.0536	0.0546	0.000045 J	0.0081 J	1.6	1.65	ND	ND	8.42	8.5	ND	ND	0.0075 J
Mar-2013	0.0558	0.0621	0.000083 J	0.0074 J	1.38	1.68	0.000739 J	ND	8.32	9.93	ND	ND	0.0144
Oct-2013	0.0658	0.066	ND	0.0076 J	1.6	1.62	0.000585 J	ND	9.71	9.88	0.00019 J	0.0016 J	0.018
Mar-2014	0.0707	0.0719	ND	0.0074 J	1.59	1.57	ND	ND	8.71	8.98	ND	0.000889 J	0.0108
Oct-2014	0.0739	0.0722	ND	0.0079 J	1.76	1.72	0.0016 J	ND	10.2	10.2	ND	ND	0.0176
Apr-2015	0.0757	0.0749	0.000028 J	0.0085 J	1.66	1.61	0.0013 J	ND	10.8	10.6	ND	ND	0.0286
Nov-2015	0.0616	0.0611	ND	0.0079 J	1.75	1.71	0.0012 J	ND	11.5	11.9	0.000156 J	0.000737 J	0.018
May-2016	0.0629	0.0571	ND	0.0084	1.81	1.76	ND	ND	13.3	11.2	ND	ND	0.0099 J,B
Oct-2016	0.0504 J+	0.0559 J+	ND	0.0096	1.81	1.86	ND	ND	12.2	12.7	ND	0.0002 J	0.0108 J
May-2017	0.0644	0.064	ND	0.0112	2.21	1.73	0.00046 J	ND	43	11	ND	0.0005 J	0.0211 J
Oct-2017	0.0721	0.0727	ND	0.0093	1.74	1.82	ND	ND	9.91	10.3	ND	ND	0.0104 J
May-2018	0.0804	0.0772	ND	0.0163 J	2 J	1.4 J	ND	ND	11.2	10.4	ND	ND	0.0128 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09C***												
Nov-2018	0.067	0.065	*ND*	0.011	*1.8 J*	*2.4 J*	*0.00065 J*	*ND*	13.5	14.4	*ND*	0.0021	0.012
May-2019	0.055	0.058	*ND*	0.01	*ND*	*ND*	*ND*	*ND*	12.2	11.9	*ND*	0.01	0.0097
Oct-2019	0.068	0.065	*ND*	0.0095	*2 J*	*ND*	*0.00086 J*	*ND*	11.2	12.1	*ND*	0.0044	0.015
May-2020	0.074	0.069	*ND*	0.013	*2.5 J*	*1.6 J*	*0.00086 J*	*ND*	13.7	11.3	*ND*	*ND*	0.012
Oct-2020	0.6	0.068	*ND*	0.1	*ND*	*2 J*	*ND*	*ND*	11.6	11.9	*ND*	*ND*	0.93
Apr-2021	0.078	0.08	*ND*	0.012	2.1	2.2	*ND*	*ND*	13.8	14.7	*ND*	*ND*	*0.009 J*
Oct-2021	0.079	0.084	*ND*	0.014	1.8	1.9	*ND*	*ND*	15.1	16	*0.00004 J*	*ND*	0.013

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09C*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	1	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09C*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09C*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.1 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-09C*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.1	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.6	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.4	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	2.9	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	2	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.5	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.6	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.9	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.5	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.2	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.2	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.6	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09C***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.77 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.44 J	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	0.61 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.21 J	ND	ND	ND	ND	ND	0.34 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	0.34 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.16 J	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	0.3 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	0.2 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09C***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.324 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09C***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-09C*															
Oct-2005	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	4.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	1.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	0.89 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.78 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	0.55 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	0.69 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	0.37 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	0.48 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	0.4 J	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09C***															
Oct-2016	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.51 J*	*0.561 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-15***											
Nov-1993	7	7	0.2	ND	3	ND	ND	5.12	24.4	ND	34	2.43
Apr-1994	ND	ND	0.1	ND	3.1	ND	ND	4.89	20.5	1.8	ND	0.33
Aug-1994	ND	ND	ND	ND	2.9	0.3	ND	4.7	21.8	2.6	ND	2.51
Sep-1994	ND	ND	ND	ND	3.2	0.3	ND	5.4	21.8	3.9	46	2.4
Nov-1994	ND	ND	ND	ND	3.1	0.2	ND	5.1	21.6	1.8	27	2.6
Apr-1995	ND	ND	ND	ND	2.9	0.4	ND	5.1	19.3	2.9	7	2.3
Apr-1997	ND	ND	ND	ND	2	0.15	ND	NA	NA	ND	26	1.8
Oct-1997	ND	ND	0.26	ND	2.75	ND	ND	5.68	22.8	7.77	18	ND
Apr-1998	ND	ND	0.24	ND	1.71	0.133	ND	7.32	20	ND	ND	2.6
Apr-1999	ND	ND	0.14	ND	3.45	ND	ND	4.94	19.59	ND	13	2.9
Oct-1999	ND	ND	0.07	ND	3.03	ND	ND	4.85	24.3	ND	29	2.9
Apr-2000	2	2	ND	ND	3.31	ND	ND	5.29	17	ND	ND	3.3
Oct-2000	24	NA	ND	13	2.48	ND	ND	5.17	20.6	ND	41	3.59
Apr-2001	2.2	NA	ND	ND	2.51	ND	ND	NA	NA	ND	26	3.2
Sep-2001	2.2	2.2	ND	ND	11.7	ND	ND	5.07	22	ND	29	3.61
Mar-2002	2	2	ND	ND	2.72	ND	ND	5.3	173.6	ND	42	3.38
Sep-2002	2.8	2.8	ND	ND	3.05	ND	ND	5.2	19.4	ND	16	2.87
Mar-2003	2.5	2.5	ND	ND	31.7	ND	ND	5.1	24.3	8.11	58	2.94
Oct-2003	4	4	ND	ND	3	0.124	ND	5.3	25.7	ND	30	4.33
Apr-2004	2.7	2.7	ND	ND	2.71	0.148	ND	5.1	20.2	ND	28	3.59
Oct-2004	2.7	2.7	ND	ND	2.69	0.113	ND	5.3	17.2	ND	25	4.2
Apr-2005	2.5	2.5	ND	ND	2.86	0.16	ND	5	16.7	ND	32	3
Oct-2005	4.4	4.4	0.21	ND	3.08	0.14	ND	4.4	17.8	ND	37	3.33
Mar-2006	4.2	4.2	ND	ND	2.85	0.16	ND	7.2	21	1.05	83	1.85
Sep-2006	3.4	3.4	ND	ND	2.97	0.16	ND	5	20.7	ND	22	2.8
Mar-2007	4.4	4.4	0.62	ND	3.07	0.16	ND	4.9	18.6	ND	ND	2.82
Sep-2007	4.2	4.2	0.33	ND	9.64	ND	ND	5.6	21.2	ND	33	2.96
Mar-2008	6.7	6.7	0.47	ND	8.02	0.48	ND	4.9	24.8	1.69	56	3.33
Sep-2008	4.4	4.4	ND	ND	3.11	ND	ND	4.9	20.2	ND	22	2.9
Mar-2009	5.2	5.2	ND	ND	3.11	0.11	ND	4.5	21.9	ND	ND	3.16
Oct-2009	5.2	5.2	ND	ND	2.85	0.1	ND	4.6	20.1	ND	37	3.31
Mar-2010	5.5	5.5	ND	ND	2.85	0.1	ND	5.54	42	ND	28	2.81
Oct-2010	4.8	4.8	ND	ND	3.4	0.07	ND	4.8	19.4	ND	18	3.11
Apr-2011	4	4	ND	ND	2.98	0.14	ND	4.8	19.5	ND	49	2.9
Sep-2011	3.9	3.9	0.24	ND	2.97	0.13	ND	4.8	31.9	ND	14	3.32
Mar-2012	3.4	3.4	ND	ND	3.05	0.16	ND	4.8	21.9	ND	ND	3.27
Sep-2012	3.48	3.48	ND	ND	3.07	0.157	ND	3.9	19.6	ND	ND	3.16

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-15***											
Mar-2013	4.36	4.36	*ND*	*ND*	3.38	0.193	*ND*	3.8	16.8	*0.601 J*	23	2.59
Oct-2013	3.8	3.8	*ND*	*ND*	3.25	0.165	*ND*	3.1	18.9	*ND*	*ND*	2.92
Mar-2014	3.64	3.64	*ND*	22	3.3	0.174	*ND*	5.4	23.8	*ND*	*ND*	2.74
Oct-2014	*ND*	*ND*	*ND*	*7 J*	3.59	0.158	*ND*	4.9	19.6	*ND*	*ND*	3.32
Apr-2015	4.64	4.64	*ND*	*ND*	3.25	0.168	*ND*	4.2	21.5	*ND*	*ND*	3.24
Nov-2015	3.48	3.48	*ND*	*ND*	3.48	0.169	*ND*	5.3	27.6	*ND*	*ND*	3.68
May-2016	*ND*	*ND*	*ND*	*ND*	3.37	0.197	*ND*	5.3	33.8	*ND*	*15 J*	3.3
Oct-2016	*ND*	*ND*	*ND*	*ND*	3.27	*NA*	*NA*	5.7	30.3	*0.742 J*	32	3.2
May-2017	2.68	2.68	*ND*	*ND*	3.18	0.192	*ND*	5.2	81.3	*0.512 J*	*ND*	3.2
Oct-2017	3.88	3.88	*ND*	*7 J*	3.23	0.209	*ND*	5.5	36.8	*ND*	*15 J*	3
May-2018	*8 J*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	4.3	97.4	*ND*	39	*3.6 J*
Nov-2018	24	24	*0.052 J*	*ND*	3.4	*0.038 J*	*ND*	6.01	65.5	*ND*	39	*3.7 J*
May-2019	40	*NA*	*ND*	*ND*	3.4	*ND*	*ND*	6.14	72.3	*ND*	20	*ND*
Oct-2019	*2.5 JH1*	*NA*	*ND*	*14.8 J*	3.1	0.13	0.011	5.83	67.3	*ND*	34	3.8
May-2020	12	*NA*	*ND*	*ND*	3.4	*ND*	*ND*	5.98	74.1	*ND*	*ND*	4.1
Oct-2020	*ND*	*NA*	*ND*	*ND*	3.4	*ND*	0.07	6.07	66.2	*ND*	21	3.9
Apr-2021	*ND*	*NA*	*ND*	*10.5 J*	3.5	0.14	*ND*	6.32	106.8	*ND*	25	3.8
Oct-2021	14	*NA*	*ND*	*ND*	3.5	*ND*	*ND*	6.49	126.3	*ND*	*ND*	3.85

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15***													
Nov-1993	NA	ND	ND	NA	ND	0.38	NA	ND	NA	ND	67	3	ND	0.36	NA
Apr-1994	NA	ND	ND	NA	ND	0.38	NA	ND	NA	ND	1.5	1	ND	0.25	NA
Aug-1994	NA	ND	ND	NA	ND	0.46	NA	ND	NA	ND	7.1	0.31	ND	0.33	NA
Sep-1994	NA	ND	ND	NA	ND	0.34	NA	ND	NA	ND	6.5	1.7	ND	0.37	NA
Nov-1994	NA	ND	ND	NA	ND	0.45	NA	ND	NA	0.02	4.8	1.6	ND	0.35	NA
Apr-1995	ND	ND	0.7	ND	ND	0.36	NA	ND	ND	ND	8.1	ND	ND	0.35	NA
Oct-1996	ND	ND	0.015	ND	ND	0.55	0.62	ND	ND	ND	26	0.94	0.002	ND	ND
Apr-1997	ND	ND	ND	ND	ND	0.6	0.69	ND	ND	ND	0.6	0.45	ND	ND	ND
Oct-1997	ND	ND	0.011	ND	ND	0.495	0.587	ND	ND	ND	5.37	0.273	ND	0.328	0.322
Apr-1998	ND	ND	0.01	ND	ND	0.5	0.491	ND	ND	ND	26.2	0.201	ND	0.331	0.326
Apr-1999	ND	ND	0.011	ND	ND	0.551	0.543	ND	ND	ND	7.77	0.245	ND	0.372	0.355
Oct-1999	ND	ND	ND	ND	ND	0.508	0.471	ND	ND	ND	12.1	0.396	ND	0.345	0.318
Apr-2000	ND	ND	ND	ND	ND	0.716	0.452	ND	ND	ND	9.48	0.476	ND	0.378	0.304
Oct-2000	ND	ND	ND	ND	ND	0.728	0.667	ND	ND	ND	23.5	16.8	ND	0.43	0.425
Apr-2001	ND	ND	0.012	ND	ND	0.602	NA	ND	ND	ND	7.97	NA	ND	0.401	NA
Sep-2001	ND	ND	0.012	ND	ND	0.738	0.569	ND	ND	ND	24	0.88	ND	0.431	0.386
Mar-2002	ND	ND	0.012	ND	ND	0.713	0.552	ND	ND	ND	15.3	1.81	ND	0.388	0.376
Sep-2002	ND	ND	0.011	ND	ND	0.544	0.513	ND	ND	ND	12.2	0.425	ND	0.366	0.351
Mar-2003	ND	ND	0.012	ND	ND	0.565	0.528	ND	ND	ND	7.18	0.178	ND	0.373	0.349
Oct-2003	ND	ND	0.013	ND	ND	0.956	0.603	ND	ND	0.012	21.5	1.12	ND	0.47	0.408
Apr-2004	ND	ND	ND	ND	ND	0.754	0.548	ND	ND	ND	11.4	0.306	ND	0.415	0.359

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15***													
Oct-2004	*ND*	*ND*	0.013	*ND*	*ND*	0.978	0.536	*ND*	*ND*	*ND*	50.2	0.81	*ND*	0.426	0.366
Apr-2005	*ND*	*ND*	0.012	*ND*	*ND*	0.574	0.566	*ND*	*ND*	*ND*	13.1	0.214	*ND*	0.384	0.371
Oct-2005	*ND*	*ND*	0.012	*ND*	*ND*	0.758	0.559	*ND*	*ND*	*ND*	18.4	0.378	*ND*	0.35	0.324
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	0.271	0.26	*ND*	*ND*	*ND*	10.8	0.27	*ND*	0.285	0.302
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	0.542	0.532	*ND*	*ND*	*ND*	6.1	0.274	*ND*	0.353	0.351
Mar-2007	*ND*	*ND*	0.011	*ND*	*ND*	0.543	0.512	*ND*	*ND*	*ND*	14.6	1.12	*ND*	0.354	0.345
Sep-2007	*ND*	*ND*	0.011	*ND*	*ND*	0.563	0.527	*ND*	*ND*	*ND*	19.1	0.483	*ND*	0.379	0.364
Mar-2008	*ND*	*ND*	0.015	*ND*	*ND*	0.649	0.626	*ND*	*ND*	*ND*	28.5	3.92	*ND*	0.416	0.393
Sep-2008	*ND*	*ND*	0.011	*ND*	*ND*	0.507	0.466	*ND*	*ND*	*ND*	16.8	0.914	*ND*	0.386	0.389
Mar-2009	*ND*	*ND*	0.013	*ND*	*ND*	0.655	0.562	*ND*	*ND*	*ND*	44	2.06	*ND*	0.37	0.352
Oct-2009	*ND*	*ND*	0.012	*ND*	*ND*	0.605	0.558	*ND*	*ND*	*ND*	29.2	12	*ND*	0.436	0.385
Mar-2010	*ND*	*ND*	0.013	*ND*	*ND*	0.541	0.504	*ND*	*ND*	0.011	28	4.21	*ND*	0.354	0.335
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	0.581	0.526	*ND*	*ND*	*ND*	5.14	1.88	*ND*	0.404	0.391
Apr-2011	*ND*	*ND*	0.012	*ND*	*ND*	0.543	0.528	*ND*	*ND*	*ND*	8.19	0.312	*ND*	0.362	0.369
Sep-2011	*ND*	*ND*	0.012	*ND*	*ND*	0.693	0.692	*ND*	*ND*	*ND*	20.6	0.252	*ND*	0.387	0.383
Mar-2012	*ND*	*ND*	0.011	*ND*	*ND*	0.574	0.567	*ND*	*ND*	*ND*	7.42	0.296	*ND*	0.448	0.434
Sep-2012	*ND*	*ND*	0.0117	*0.000263 J*	*ND*	0.636	0.606	*ND*	*0.0042 J*	*0.0053 J*	10.3	0.217	*ND*	0.381	0.372
Mar-2013	*ND*	*ND*	0.0114	*0.000278 J*	*ND*	0.537	0.614	*ND*	*0.004 J*	*0.0076 J*	27.6	0.115	*0.0014 J*	0.303	0.335
Oct-2013	*ND*	*ND*	0.0115	*0.000213 J*	*ND*	0.573	0.508	*0.0025 J*	*0.0044 J*	*0.0033 J*	0.449	0.118	*ND*	0.362	0.345
Mar-2014	*0.000418 J*	*ND*	0.0109	*ND*	*ND*	0.534	0.538	*0.0017 J*	*0.0044 J*	*0.0074 J*	28.4	0.123	*ND*	0.341	0.343
Oct-2014	*0.00056 J*	*ND*	0.0125	*0.000239 J*	*ND*	0.672	0.69	*0.000523 J*	*0.0043 J*	*0.0044 J*	6.7	0.216	*ND*	0.399	0.412
Apr-2015	*0.000993 J*	*ND*	0.0126	*0.000209 J*	*0.000102 J*	0.638	0.648	*0.001 J*	*0.0047 J*	*0.0044 J*	11.6	0.175	*ND*	0.4	0.412
Nov-2015	*ND*	*ND*	0.0132	*0.000321 J*	*0.000099 J*	0.781	0.752	*0.00054 J*	*0.0044 J*	0.0124	26.7	0.234	*0.000304 J*	0.421	0.446
May-2016	*ND*	*ND*	0.0114	*0.00021 J*	*ND*	0.613	0.6	*0.001 J*	0.0042	0.0045	15.5	*0.151 J*	*ND*	0.424	0.381

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15***													
Oct-2016	*ND*	*ND*	0.0129	*0.00022 J*	*ND*	0.644	0.573	*0.0011 J*	0.0041	0.0044	10.6	*0.19 J+*	*ND*	0.378	0.409
May-2017	*ND*	*ND*	0.0124	*0.00019 J*	*ND*	0.58	0.711	*0.0006 J*	0.0044	*0.0032 J*	1.08	0.892	*ND*	0.415	0.428
Oct-2017	*ND*	*ND*	0.0116	*0.00018 J*	*ND*	0.527	0.648	*ND*	0.0042	*0.003 J*	1.43	1.08	*ND*	0.414	0.426
May-2018	*0.000047 J*	*ND*	0.013	*0.0002 J*	*0.000068 J*	*0.73 J*	*0.68 J*	*0.00059 J*	0.0039	0.0056	1.8	1.6	*0.000031 JB*	*0.44 J*	*0.43 J*
Nov-2018	*ND*	*ND*	0.012	*0.000097 J*	*0.000034 J*	*0.71 J*	*0.74 J*	*0.0018 J*	0.0028	0.0022	15.3	13.6	*0.000079 J*	*0.46 J*	*0.46 J*
May-2019	*ND*	*ND*	0.014	*ND*	*ND*	*ND*	*ND*	*ND*	0.0037	*ND*	22	21	*ND*	*ND*	*ND*
Oct-2019	*0.00012 J*	*ND*	0.014	*0.0002 J*	*0.00015 J*	0.75	*0.78 J*	0.0074	0.0031	0.0028	24.1	13.8	*0.000074 J*	0.48	*0.49 J*
May-2020	*0.00022 J*	*0.00032 J*	0.017	0.00034	*0.00011 J*	0.78	*0.78 J*	*0.0046 J*	0.0032	0.0066	52.2	16.9	*ND*	0.51	*0.52 J*
Oct-2020	*0.00046 J*	*ND*	0.019	*0.00062 J*	*ND*	0.76	*0.72 J*	*0.0048 J*	0.0044	0.012	60.9	9.5	*ND*	0.49	*0.47 J*
Apr-2021	*ND*	*ND*	0.016	*ND*	*ND*	*0.73 J*	*0.72 J*	*0.00041 J*	*0.0029 J*	*ND*	25	24.9	*ND*	0.48	0.5
Oct-2021	*0.000049 JB*	*ND*	0.015	*ND*	*ND*	0.75	0.79	*0.0017 J*	0.0027	*0.001 J*	22.9	20.6	*ND*	*0.48 J*	0.51

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-15*												
Nov-1993	0.08	NA	ND	NA	0.58	NA	ND	NA	1.6	NA	NA	NA	ND
Apr-1994	0.05	NA	ND	NA	0.34	NA	ND	NA	1.2	NA	NA	NA	ND
Aug-1994	0.01	NA	ND	NA	0.49	NA	ND	NA	1.1	NA	NA	NA	ND
Sep-1994	0.02	NA	ND	NA	0.4	NA	ND	NA	1.3	NA	NA	NA	0.03
Nov-1994	0.04	NA	ND	NA	0.47	NA	ND	NA	1.2	NA	NA	NA	0.02
Apr-1995	0.04	NA	ND	ND	0.06	NA	ND	ND	1.2	NA	ND	ND	0.02
Oct-1996	0.02	0.01	NA	ND	ND	ND	ND	ND	1.9	1.8	ND	ND	0.049
Apr-1997	0.011	ND	ND	ND	ND	2	ND	ND	1.9	1.4	ND	ND	ND
Oct-1997	ND	0.011	NA	ND	0.922	ND	ND	ND	1.29	1.36	ND	ND	ND
Apr-1998	ND	0.011	NA	ND	1.64	ND	ND	ND	1.4	1.33	ND	ND	0.03
Apr-1999	ND	ND	NA	ND	0.972	0.732	ND	ND	1.52	1.45	ND	ND	ND
Oct-1999	ND	ND	NA	ND	ND	0.831	ND	ND	1.43	1.32	ND	ND	ND
Apr-2000	0.012	0.01	NA	ND	ND	ND	ND	ND	2.95	1.33	ND	ND	ND
Oct-2000	0.184	0.176	NA	ND	0.782	0.661	ND	ND	1.69	1.69	ND	ND	ND
Apr-2001	0.014	NA	NA	ND	1.08	NA	ND	ND	1.62	NA	ND	ND	ND
Sep-2001	0.01	0.013	NA	ND	0.816	0.478	ND	ND	2.38	1.5	ND	ND	ND
Mar-2002	0.022	0.024	NA	ND	1.95	1.06	ND	ND	2.33	1.47	ND	ND	ND
Sep-2002	ND	ND	NA	ND	0.583	0.568	ND	ND	1.48	1.44	ND	ND	ND
Mar-2003	ND	ND	NA	ND	1.16	1.1	ND	ND	1.5	1.4	ND	ND	ND
Oct-2003	0.016	0.015	NA	ND	2.54	1	ND	ND	2.4	1.52	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.67	1	ND	ND	1.33	1.43	ND	ND	ND
Oct-2004	ND	0.014	0.0002	ND	1.26	0.739	ND	ND	2	1.52	ND	ND	0.014

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-15***												
Apr-2005	ND	ND	ND	ND	0.74	0.74	ND	ND	1.46	1.43	ND	ND	ND
Oct-2005	0.01	ND	ND	ND	0.712	0.665	ND	ND	1.85	1.23	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	1.14	1.11	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.633	0.694	ND	ND	1.29	1.27	ND	ND	ND
Mar-2007	0.016	0.013	ND	ND	0.621	0.563	ND	ND	1.3	1.24	ND	ND	ND
Sep-2007	ND	ND	ND	ND	0.574	ND	ND	ND	1.48	1.38	ND	ND	ND
Mar-2008	0.031	0.041	ND	ND	0.809	0.745	ND	ND	1.59	1.43	ND	ND	ND
Sep-2008	ND	ND	ND	ND	0.567	0.557	ND	ND	1.32	1.3	ND	ND	0.023
Mar-2009	0.018	0.019	ND	ND	0.665	0.684	ND	ND	1.48	1.36	ND	ND	0.047
Oct-2009	0.152	0.135	ND	ND	0.576	0.573	ND	ND	1.47	1.57	ND	ND	ND
Mar-2010	0.086	0.052	0.0002	0.018	0.806	0.714	ND	ND	1.21	1.47	ND	ND	ND
Oct-2010	0.017	0.023	ND	ND	0.592	0.542	ND	ND	1.42	1.38	ND	ND	0.014
Apr-2011	0.01	ND	ND	ND	ND	ND	ND	ND	1.33	1.28	ND	ND	ND
Sep-2011	0.013	ND	ND	ND	0.753	0.735	ND	ND	1.64	1.58	ND	ND	0.012
Mar-2012	ND	ND	ND	ND	0.65	0.63	ND	ND	1.45	1.39	ND	ND	ND
Sep-2012	0.01 J	0.0077 J	ND	0.0062 J	0.692	0.666	ND	ND	1.43	1.37	ND	ND	0.0068 J
Mar-2013	0.0122	0.0069 J	0.000141 J	0.0059 J	0.546	0.605	ND	ND	1.18	1.27	ND	ND	0.0155
Oct-2013	0.0074 J	0.0068 J	ND	0.0065 J	0.686	0.644	ND	ND	1.36	1.31	0.000103 J	0.0011 J	0.014
Mar-2014	0.0137	0.007 J	ND	0.0066 J	0.646	0.666	ND	ND	1.35	1.39	ND	ND	0.0084 J
Oct-2014	0.0095 J	0.008 J	0.000027 J	0.0061 J	0.711	0.721	ND	ND	1.65	1.69	ND	ND	0.009 J
Apr-2015	0.0101	0.0079 J	ND	0.0067 J	0.764	0.774	0.001 J	ND	1.59	1.63	ND	ND	0.0125
Nov-2015	0.0151	0.009 J	ND	0.0065 J	0.739	0.779	ND	ND	1.61	1.67	0.000123 J	ND	0.0148
May-2016	0.0109	0.0071	ND	0.0067	0.901	0.764	ND	ND	1.57	1.38	ND	ND	0.0075 J,B
Oct-2016	0.0101	0.0083 J+	ND	0.0061	0.688	0.757	ND	ND	1.44	1.57	ND	ND	0.009 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-15***												
May-2017	0.0119	0.0149	*ND*	0.006	0.794	0.801	*ND*	*ND*	1.48	1.5	*ND*	*ND*	*0.006 J*
Oct-2017	0.0175	0.0191	*ND*	0.006	0.81	0.815	*ND*	*ND*	1.53	1.57	*ND*	*ND*	*0.006 J*
May-2018	0.022	0.023	*ND*	0.007	*0.94 J*	*ND*	*0.00012 J*	*0.0008 J*	*1.8 J*	*1.5 J*	*ND*	0.0025	0.012
Nov-2018	0.16	0.16	*ND*	0.005	*ND*	*ND*	*0.00014 J*	*ND*	*1.5 J*	*1.6 J*	*ND*	*ND*	0.012
May-2019	0.17	0.16	*ND*	0.0052	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.011
Oct-2019	0.19	0.16	*ND*	0.0057	*ND*	*ND*	*ND*	*ND*	*ND*	*2 J*	*ND*	0.006	0.011
May-2020	0.25	0.22	*ND*	0.0053	*ND*	*ND*	*ND*	*ND*	*1.7 J*	*1.8 J*	0.00059	0.0034	0.0099
Oct-2020	0.18	0.15	*ND*	0.0074	*ND*	*ND*	*ND*	*ND*	*1.8 J*	*ND*	*ND*	*0.00064 J*	*0.013 J*
Apr-2021	0.17	0.18	*ND*	*0.0027 J*	0.79	0.88	*ND*	*ND*	2	2	*ND*	*0.00061 J*	*ND*
Oct-2021	0.22	0.234	*ND*	0.005	0.75	0.81	*ND*	*ND*	1.7	1.9	*ND*	*ND*	*0.0019 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.7	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.7	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	5.1	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	7.2	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	37	ND
Apr-2005	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7	ND
Mar-2006	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.48 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.51 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.51 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	0.67 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*0.74 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.368 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-15*															
Nov-1993	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	1.5	NA	1.2	NA	ND	ND	ND	NA	ND	NA	0.7 J	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	0.7 J
Sep-2001	ND	ND	ND	0.9 J	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.5 J
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15***															
Oct-2004	ND	ND	ND	1.5	ND	1.4	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	0.8 J	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	1.3
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	1
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.9 J
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	1.1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	0.8 J
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	1.4
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	1.9
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	1.1
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	1.2
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	0.9 J
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.68 J	0.44 J
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.77 J	0.58 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	0.73 J	0.59 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.85 J	0.57 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.73 J	0.76 J
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.69 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*0.78 J*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.6 J*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.6 J*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.6 J*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.6 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.1	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	1.3 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.1	2.1 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.463 J*	*0.419 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15***															
Nov-1993	*ND*	*ND*	3.7	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Aug-1994	*0.5 J*	*ND*	3.1	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*0.8 J*	*NA*	*ND*	*0.9 J*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15***															
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1.7 R	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	2	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.74 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.52 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.68 J*	*ND*	*ND*	*ND*	*ND*	*0.22 J*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.84 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.61 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.611 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-15B***											
Nov-1993	ND	ND	0.3	75.6	5.3	ND	ND	4.53	39.5	6.6	46	5.78
Apr-1994	ND	ND	ND	ND	5.1	ND	ND	4.8	30.3	1.6	7	0.8
Aug-1994	ND	ND	0.1	ND	6.3	0.3	ND	4.5	42.7	5.8	40	5.9
Sep-1994	ND	ND	ND	ND	5.5	0.3	ND	4.9	32.6	5.1	36	4.4
Nov-1994	ND	ND	ND	ND	6.1	ND	ND	4.6	43.3	6.6	12	5.6
Apr-1995	ND	ND	0.2	ND	6.2	ND	ND	4.7	37.3	4.4	5	4.8
Apr-1997	ND	5	ND	ND	5	0.06	ND	NA	NA	6.7	51	7.7
Oct-1997	ND	ND	0.92	ND	4.17	ND	ND	5.48	50.3	7.77	37	7.5
Apr-1998	ND	ND	ND	ND	4.2	ND	ND	6.72	51.3	1.35	29	5.7
Apr-1999	ND	ND	0.17	ND	7.53	ND	ND	4.38	40.2	1.18	41	6.8
Oct-1999	ND	ND	0.14	ND	5.43	ND	ND	4.32	44.8	5.53	33	6.1
Apr-2000	2	2	ND	ND	8.41	ND	ND	5.55	38	ND	35	7.9
Oct-2000	30	NA	ND	ND	8.09	ND	ND	4.69	40.5	4.93	36	7.36
Apr-2001	2.6	NA	ND	ND	9.2	ND	ND	NA	NA	ND	39	9.4
Sep-2001	2.2	2.2	ND	ND	16	ND	ND	4.89	71	7.37	53	13.1
Mar-2002	ND	ND	ND	ND	20.6	ND	ND	4.9	72.8	1.15	35	13.9
Sep-2002	3.2	3.2	ND	ND	16	ND	ND	5.5	64.1	1.57	57	12
Mar-2003	5.4	5.4	ND	ND	161	ND	ND	5.8	74.9	14.5	73	12.3
Oct-2003	2.9	2.9	ND	ND	10.4	ND	ND	5.4	54.8	1.98	14	9.25
Apr-2004	3.3	3.3	ND	ND	7.79	ND	ND	4.6	46.3	1.97	37	6.99
Oct-2004	2	2	ND	ND	7.13	ND	ND	4.8	46.1	5	47	7.2
Apr-2005	4.1	4.1	ND	ND	9.37	ND	ND	4.4	50.1	5.11	59	9.2
Oct-2005	3.7	3.7	ND	ND	8.61	ND	ND	4.2	41.9	2.79	48	6.13
Mar-2006	5.2	5.2	ND	ND	12.3	ND	ND	7.1	51.7	4.13	47	8.93
Sep-2006	4.4	4.4	ND	ND	10.2	ND	ND	7.1	51.7	4.11	26	8.95
Mar-2007	4.5	4.5	ND	ND	9.49	ND	ND	4.3	49.6	3.44	14	8.09
Sep-2007	1.3	1.3	0.31	ND	9.97	ND	ND	5.3	45.8	8.48	41	6.17
Mar-2008	3.9	3.9	0.47	ND	11.7	ND	ND	4.2	51.2	14.4	20	8.23
Sep-2008	3.8	3.8	ND	ND	8.06	ND	ND	4.3	52.7	8.14	40	8.1
Mar-2009	4.6	4.6	ND	ND	10	ND	ND	4.2	57.5	8.04	ND	7.71
Oct-2009	2.8	2.8	ND	ND	11.2	ND	ND	4.3	60.7	4.44	35	9.12
Mar-2010	2.8	2.8	ND	ND	14.8	ND	ND	4.42	83	5.87	53	9.44
Oct-2010	1.6	1.6	ND	ND	9.94	ND	ND	4.2	58.9	8.79	30	9.04
Apr-2011	3.2	3.2	ND	ND	7.25	0.18	0.08	4	51.3	5.24	31	8
Sep-2011	3.1	3.1	ND	ND	11.9	ND	ND	4.1	58.7	4.46	46	8.71
Mar-2012	1.9	1.9	ND	ND	13.5	ND	ND	3.5	71.4	7.38	38	8.96
Sep-2012	1.4	1.4	ND	ND	10.7	ND	ND	3.2	57.5	5.83	42	8.62

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-15B***										
Mar-2013	3.8	3.8	*ND*	*ND*	8.6	0.731	*0.0348 J*	3.1	46.3	3	37	7.63
Oct-2013	3.56	3.56	*ND*	*ND*	14.8	0.072	*ND*	3	66.4	3.33	*ND*	10.9
Mar-2014	3.6	3.6	*ND*	21	13	0.119	*ND*	4.8	77.2	3.59	46	9.57
Oct-2014	*ND*	*ND*	*ND*	*ND*	9.14	*ND*	*ND*	4.3	47.3	6.05	*ND*	7.47
Apr-2015	1	1	*ND*	*ND*	13.3	0.0959	*ND*	3.5	65.7	7.62	37	8.89
Nov-2015	*ND*	*ND*	*ND*	*8 J*	15.5	*ND*	*ND*	4.6	90.5	7.22	26	10.4
May-2016	*ND*	*ND*	*ND*	*ND*	14	0.107	*ND*	4.6	105	7.39	44	9.9
Oct-2016	*ND*	*ND*	*ND*	*ND*	16.8	*NA*	*NA*	4.6	109.3	4.72	48	10.7
May-2017	*ND*	*ND*	*ND*	*ND*	14.9	0.157	*ND*	4.5	111.2	5.24	38	11.2
Oct-2017	*ND*	*ND*	*0.0868 J*	*ND*	15.8	0.0769	*ND*	4.7	118.5	6.26	46	13.4
May-2018	*1 J*	*ND*	*0.086 J*	*ND*	15.7	*ND*	*ND*	5	33.9	*5.1 J*	60	13.6
Nov-2018	*2 JB*	*ND*	*0.071 J*	*7.9 J*	15.5	*0.083 J*	*ND*	4.31	76.9	*ND*	44	10.4
May-2019	*ND*	*NA*	*ND*	*ND*	17.2	*ND*	*ND*	4.21	62.6	*ND*	20	9
Oct-2019	*ND*	*NA*	*ND*	*6 J*	12.8	0.2	*0.0074 J*	4.11	74.2	*5.5 J*	42	8.9
May-2020	*ND*	*NA*	*ND*	*6.9 J*	30.5	0.56	*ND*	3.97	126	*ND*	48	20.8
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	23.7	0.25	*0.0065 J*	3.99	107.1	5.4	66	16.7
Apr-2021	*ND*	*NA*	*ND*	*6.1 J*	14.7	0.34	*ND*	4.36	90	*ND*	19	9.9
Oct-2021	*ND*	*NA*	*ND*	*ND*	18.7	0.27	*ND*	4.35	137.7	*ND*	29	12.2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15B***													
Nov-1993	NA	ND	ND	NA	ND	0.5	NA	ND	NA	ND	1.3	0.08	ND	1.1	NA
Apr-1994	NA	ND	ND	NA	ND	0.6	NA	ND	NA	ND	ND	ND	ND	ND	NA
Aug-1994	NA	ND	ND	NA	ND	0.75	NA	ND	NA	ND	ND	ND	ND	0.97	NA
Sep-1994	NA	ND	ND	NA	ND	0.51	NA	ND	NA	ND	ND	ND	ND	0.75	NA
Nov-1994	NA	ND	ND	NA	ND	0.61	NA	ND	NA	0.03	ND	ND	ND	1	NA
Apr-1995	ND	ND	0.8	ND	ND	0.36	NA	ND	ND	ND	0.23	ND	ND	0.95	NA
Oct-1996	ND	ND	0.13	0.002	ND	1.2	1.2	ND	ND	ND	ND	ND	ND	0.87	0.87
Apr-1997	ND	ND	0.086	0.002	ND	1.4	1	ND	ND	ND	ND	ND	ND	0.96	0.75
Oct-1997	ND	ND	0.157	0.004	ND	1.19	1.21	ND	0.013	0.015	ND	ND	ND	1.26	1.26
Apr-1998	ND	ND	0.031	ND	ND	1.09	1.09	ND	ND	ND	0.124	0.226	ND	0.72	0.831
Apr-1999	ND	ND	0.032	ND	ND	1.22	1.2	ND	ND	0.018	0.303	0.3	ND	0.913	0.891
Oct-1999	ND	ND	0.028	ND	ND	0.906	0.902	ND	ND	0.012	0.445	0.263	ND	0.849	0.817
Apr-2000	ND	ND	0.027	ND	ND	1.77	1.57	ND	ND	0.012	0.054	0.053	ND	0.835	0.906
Oct-2000	ND	ND	0.052	ND	ND	1.13	1.12	ND	ND	0.123	0.083	0.077	ND	1.1	1.06
Apr-2001	ND	ND	0.038	ND	ND	1.64	NA	ND	0.01	ND	0.234	NA	ND	1.28	NA
Sep-2001	ND	ND	0.051	ND	ND	2.16	1.96	ND	0.013	0.011	0.556	0.326	ND	1.86	1.76
Mar-2002	ND	ND	0.052	ND	ND	2.3	2.21	ND	0.019	0.013	0.48	0.469	ND	1.99	1.91
Sep-2002	ND	ND	0.045	ND	ND	2.01	1.97	ND	0.015	ND	0.505	0.447	ND	1.69	1.69
Mar-2003	ND	ND	0.046	ND	ND	2.19	2.18	ND	0.015	0.01	0.24	0.245	ND	1.65	1.72
Oct-2003	ND	ND	0.038	ND	ND	1.69	1.41	ND	0.011	0.011	0.242	0.171	ND	1.22	1.21
Apr-2004	ND	ND	0.041	ND	ND	1.15	1.12	ND	ND	0.013	0.088	0.075	ND	1	1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15B***													
Oct-2004	ND	ND	0.061	ND	ND	1.13	1.06	ND	0.01	ND	0.089	ND	ND	1.06	1.05
Apr-2005	ND	ND	0.056	ND	ND	1.54	1.48	ND	0.011	ND	0.126	0.108	ND	1.3	1.26
Oct-2005	ND	ND	0.034	ND	ND	1.01	0.974	ND	ND	ND	0.098	0.095	ND	0.874	0.819
Mar-2006	ND	ND	0.037	ND	ND	1.34	1.22	ND	0.01	ND	ND	ND	ND	1.35	1.29
Sep-2006	ND	ND	0.034	ND	ND	1.44	1.39	ND	0.013	ND	0.214	0.214	ND	1.3	1.29
Mar-2007	ND	ND	0.042	ND	ND	1.31	1.27	ND	0.012	0.012	0.174	0.17	ND	1.17	1.17
Sep-2007	ND	ND	0.035	ND	ND	0.839	0.801	0.012	ND	ND	0.561	0.498	ND	0.991	0.967
Mar-2008	ND	ND	0.034	ND	ND	1.2	1.1	ND	0.011	ND	0.943	0.85	ND	1.27	1.16
Sep-2008	ND	ND	0.037	ND	ND	1.18	1.04	ND	0.01	ND	1.49	1.36	ND	1.26	1.22
Mar-2009	ND	ND	0.032	ND	ND	1.19	1.17	ND	ND	0.013	1.52	1.58	ND	1.15	1.24
Oct-2009	ND	ND	0.037	ND	ND	1.23	1.2	ND	0.01	ND	1.87	1.74	ND	1.47	1.43
Mar-2010	ND	ND	0.059	ND	ND	1.34	1.3	ND	0.012	0.019	1.82	1.54	ND	1.48	1.43
Oct-2010	ND	ND	0.069	0.002	ND	1.23	1.16	ND	0.011	0.012	1.44	1.38	ND	1.45	1.36
Apr-2011	ND	ND	0.05	ND	ND	1.16	1.15	ND	0.011	ND	1.16	1.17	ND	1.24	1.26
Sep-2011	ND	ND	0.057	ND	ND	1.33	1.35	ND	0.012	ND	1.58	1.54	ND	1.31	1.35
Mar-2012	ND	ND	0.08	0.003	ND	1.13	1.16	ND	0.012	0.011	1.22	1.22	ND	1.49	1.5
Sep-2012	ND	ND	0.0504	0.0018 J	ND	1.21	1.19	0.0012 J	0.0122	0.0087 J	1.29	1.3	ND	1.36	1.38
Mar-2013	ND	ND	0.039	0.000838 J	ND	1.11	1.21	ND	0.0114	0.0078 J	0.125	0.126	0.0013 J	1.18	1.24
Oct-2013	ND	ND	0.0564	0.000901 J	0.000222 J	1.35	1.3	0.0115	0.0157	0.0089 J	0.104	0.0962	ND	1.83	1.76
Mar-2014	0.000563 J	ND	0.0422	ND	0.000177 J	1.27	1.32	0.0013 J	0.0143	0.0103	0.116	0.108	ND	1.55	1.59
Oct-2014	0.000751 J	ND	0.0443	0.000845 J	0.000166 J	1.07	1.04	0.000391 J	0.0109	0.0084 J	0.55	0.551	ND	1.17	1.16
Apr-2015	0.0011 J	ND	0.0609	0.0013 J	0.000297 J	1.25	1.25	0.000321 J	0.0144	0.0095 J	1.13	1.16	ND	1.4	1.45
Nov-2015	0.000315 J	ND	0.0639	0.0018 J	0.000282 J	1.48	1.46	0.000671 J	0.0158	0.0109	1.35	1.34	0.000298 J	1.63	1.63
May-2016	ND	ND	0.0709	0.0017	0.00024 J	1.41	1.24	ND	0.0165	0.0093	1.21	1.18	ND	1.56	1.51

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15B***													
Oct-2016	*ND*	*ND*	0.0517	*0.00095 J*	*0.00025 J*	1.47	1.37	*0.00062 J*	0.0178	0.0082	0.731	*0.738 J+*	*ND*	1.71	1.76
May-2017	*ND*	*ND*	0.0556	*0.00068 J*	*0.00026 J*	1.38	1.67	*0.0017 J*	0.0181	0.0075	*0.116 J*	*0.103 J*	*ND*	1.89	1.87
Oct-2017	*ND*	*ND*	0.0613	*0.00069 J*	*0.00025 J*	1.69	1.67	*ND*	0.0187	0.0075	*ND*	*ND*	*ND*	2.22	2.2
May-2018	*0.00011 J*	*ND*	0.06	0.00065	*0.00029 J*	1.9	1.8	*0.00051 J*	0.0136	0.0068	*0.013 J*	*ND*	*0.00014 JB*	2.1	2
Nov-2018	*ND*	*ND*	0.052	0.00073	*0.00022 J*	1.3	1.4	*0.0018 J*	0.013	0.0049	0.022	*0.018 J*	*0.000077 J*	1.7	1.8
May-2019	*ND*	*ND*	0.045	0.00088	*ND*	1.3	1.4	*ND*	0.011	0.0056	*ND*	0.042	*ND*	1.4	1.4
Oct-2019	*0.0001 J*	*ND*	0.046	0.00091	*0.00032 J*	1.3	1.3	*0.0049 J*	0.01	0.007	*0.02 J*	*0.011 J*	*0.000095 J*	1.4	1.3
May-2020	*0.000085 J*	*ND*	0.078	0.0011	*0.00037 J*	2.8	2.7	*0.0055 J*	0.024	0.011	*0.015 J*	0.063	*ND*	3.4	3.2
Oct-2020	*ND*	*ND*	0.087	*0.0011 JM1*	*ND*	2.2	2.1	*0.0034 JM1*	0.021	*0.0095 J*	*0.017 JB*	*0.02 J*	*ND*	2.7	2.6
Apr-2021	*ND*	*ND*	0.054	*0.00056 J*	*ND*	1.2	1.3	*0.00054 J*	0.013	0.0052	*ND*	*ND*	*ND*	1.7	1.7
Oct-2021	*0.000053 JB*	*ND*	0.075	0.0013	*0.00007 J*	1.5	1.6	*0.0015 J*	0.017	0.011	*0.011 J*	*0.016 J*	*0.000046 J*	2	2.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-15B*												
Nov-1993	0.18	NA	ND	NA	0.82	NA	ND	NA	2.1	NA	NA	NA	0.03
Apr-1994	0.06	NA	ND	NA	0.85	NA	ND	NA	2.9	NA	NA	NA	0.01
Aug-1994	0.1	NA	ND	NA	0.98	NA	ND	NA	2.3	NA	NA	NA	0.06
Sep-1994	0.11	NA	ND	NA	0.67	NA	ND	NA	2.2	NA	NA	NA	0.05
Nov-1994	0.14	NA	ND	NA	0.72	NA	ND	NA	2.1	NA	NA	NA	0.05
Apr-1995	ND	NA	ND	ND	1	NA	ND	ND	2	NA	ND	ND	0.05
Oct-1996	0.25	0.23	NA	ND	ND	ND	ND	ND	2.5	2.4	ND	ND	0.082
Apr-1997	0.095	0.079	ND	ND	ND	ND	ND	ND	3.1	2.3	ND	ND	0.05
Oct-1997	0.271	0.272	NA	0.011	ND	ND	ND	ND	1.96	1.9	ND	ND	0.079
Apr-1998	0.013	0.033	NA	0.013	0.811	1.07	ND	ND	2.54	2.55	ND	ND	0.023
Apr-1999	0.015	0.018	NA	ND	1.07	1.59	ND	ND	3.18	2.92	ND	ND	0.016
Oct-1999	ND	0.01	NA	ND	ND	0.839	ND	ND	3.1	2.89	ND	ND	0.019
Apr-2000	ND	ND	NA	ND	0.814	0.739	ND	ND	3.15	3.18	ND	ND	0.012
Oct-2000	0.041	0.039	NA	ND	1.37	1.26	ND	ND	3.58	3.38	ND	ND	0.027
Apr-2001	0.012	NA	NA	ND	1.18	NA	ND	ND	4.07	NA	ND	ND	0.021
Sep-2001	0.021	0.018	NA	0.025	1.4	1.14	ND	ND	7.22	5.84	ND	ND	0.028
Mar-2002	0.02	0.019	NA	0.023	1.69	1.17	ND	ND	7.55	7.17	ND	ND	0.034
Sep-2002	0.017	0.017	NA	0.02	1.23	1.12	ND	ND	7.03	6.93	ND	ND	0.025
Mar-2003	0.018	0.018	NA	0.018	1.27	1.41	ND	ND	7.33	7.02	ND	ND	0.026
Oct-2003	0.018	0.015	NA	ND	2.98	1.34	ND	ND	6.29	5.35	ND	ND	0.024
Apr-2004	0.034	0.044	ND	ND	1.57	1.55	ND	ND	4.37	4.11	ND	ND	0.019
Oct-2004	0.095	0.108	0.0003	ND	1.5	1.43	ND	ND	3.97	3.44	ND	ND	0.033

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-15B***												
Apr-2005	0.054	0.074	ND	ND	1.21	1.16	ND	ND	4.38	4.11	ND	ND	0.027
Oct-2005	0.02	0.031	ND	ND	0.945	0.886	ND	ND	3.35	3.04	ND	ND	0.017
Mar-2006	ND	ND	ND	0.014	0.917	0.9	ND	ND	5	4.67	ND	ND	ND
Sep-2006	0.018	0.019	ND	0.015	1.04	1.03	ND	ND	4.26	4.19	ND	ND	0.018
Mar-2007	0.025	0.029	ND	0.014	0.933	0.866	ND	ND	3.9	3.78	ND	ND	0.025
Sep-2007	0.035	0.034	ND	ND	0.564	0.521	ND	ND	2.6	2.52	ND	ND	0.022
Mar-2008	0.024	0.022	0.0004	ND	0.877	0.808	ND	ND	3	2.74	ND	ND	0.023
Sep-2008	0.03	0.029	ND	0.013	0.678	0.678	ND	ND	3.02	2.95	ND	ND	0.031
Mar-2009	0.017	0.018	0.0008	ND	0.799	0.807	ND	ND	3.36	3.59	ND	ND	0.029
Oct-2009	0.035	0.032	ND	0.011	0.618	0.641	ND	ND	4.09	3.99	ND	ND	0.026
Mar-2010	0.052	0.049	ND	0.014	0.912	0.839	ND	ND	4.64	4.99	ND	ND	0.033
Oct-2010	0.128	0.126	ND	0.017	0.628	0.549	ND	ND	4.3	4.05	ND	ND	0.049
Apr-2011	0.049	0.049	ND	0.011	0.552	0.536	ND	ND	3.05	3.09	ND	ND	0.028
Sep-2011	0.051	0.05	ND	0.012	0.82	0.796	ND	ND	4.91	4.99	ND	ND	0.033
Mar-2012	0.07	0.071	ND	0.013	0.728	0.707	ND	ND	5.61	5.52	ND	ND	0.037
Sep-2012	0.0504	0.0502	ND	0.0129	0.757	0.733	ND	ND	4.49	4.55	ND	ND	0.032
Mar-2013	0.0289	0.0296	0.000082 J	0.012	0.649	0.672	ND	ND	2.93	3.15	ND	ND	0.0331
Oct-2013	0.0302	0.0294	ND	0.0167	0.862	0.828	ND	ND	5.82	5.49	0.000162 J	0.004 J	0.0442
Mar-2014	0.0259	0.0257	ND	0.0144	0.765	0.789	ND	ND	4.44	4.48	ND	ND	0.0281
Oct-2014	0.0562	0.0563	0.00004 J	0.012	0.663	0.649	0.0012 J	ND	3.91	3.89	ND	ND	0.0331
Apr-2015	0.0585	0.0623	ND	0.0141	0.788	0.811	0.0013 J	ND	4.81	4.97	ND	ND	0.0382
Nov-2015	0.0561	0.0561	0.00007 J	0.0146	0.84	0.82	0.000647 J	ND	5.71	5.55	0.000173 J	ND	0.0375
May-2016	0.0698	0.0652	ND	0.0134	0.893	0.892	ND	ND	5.76	5.46	ND	ND	0.0361
Oct-2016	0.0398	0.0409 J+	0.000073 J	0.0156	0.898	1.01	ND	ND	6.46	6.52	ND	ND	0.0299 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-15B***												
May-2017	0.0311	0.033	*0.00012 J*	0.0155	0.989	1.03	*ND*	*ND*	6.21	6.24	*ND*	*ND*	*0.0286 J*
Oct-2017	0.0336	0.0361	*ND*	0.0161	1.05	1.1	*ND*	*ND*	6.86	6.73	*ND*	*ND*	*0.0288 J*
May-2018	0.028	0.026	*0.00017 JB*	0.014	*1.2 J*	*ND*	*0.0005 J*	*ND*	7.5	6.6	*0.000073 J*	0.0032	0.024
Nov-2018	0.028	0.025	*0.00016 J*	0.011	*1 J*	*1 J*	*0.00021 J*	*ND*	6.5	6.8	*ND*	*ND*	0.02
May-2019	0.027	0.028	*ND*	0.0087	*ND*	*ND*	*ND*	*ND*	7.1	6.8	*ND*	*ND*	0.039
Oct-2019	0.04	0.036	0.00046	0.012	*ND*	*ND*	*0.00039 J*	*ND*	5.8	6	*ND*	0.0061	0.024
May-2020	0.053	0.049	0.00045	0.022	*1.4 J*	*1.4 J*	*0.00041 J*	*ND*	11.6	11.2	*ND*	0.004	0.035
Oct-2020	0.052	0.043	0.0003	0.019	*ND*	*1.1 J*	*ND*	*ND*	10	9	*ND*	*0.00052 JM1*	0.04 M1
Apr-2021	0.026	0.029	0.00086	0.012	1.1	1.1	*ND*	*ND*	7.3	7.6	*ND*	*ND*	0.016
Oct-2021	0.055	0.0579	0.00022	0.016	1	1.1	*ND*	*ND*	8.1	8.4	*0.000078 J*	*ND*	0.029

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-15B***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	3.3	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	1.8	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	6.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	9.2	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	9.9	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	6.7	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	6.3	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	5.3	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15B*																
Oct-2004	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	7	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2007	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	5.7	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	3.4	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	2.71	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.92	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	4.79	ND	ND	ND	ND	ND	ND	0.72 J	0.81 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	2.87	ND	ND	ND	ND	ND	ND	0.34 J	0.52 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15B*																
Apr-2015	ND	ND	ND	ND	1.71	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.23	ND	ND	ND	ND	ND	ND	0.26 J	0.31 J	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	0.2 J	0.3 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4 JB	ND
Nov-2018	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9 JBIH	ND
May-2019	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.23	ND	ND	ND	ND	ND	ND	ND	0.131 J	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.7
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	2.4
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	0.6 J	ND	ND	ND	ND	ND	3.2	4.2
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	3.4
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	4.8	16
Apr-1998	0.8 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	4.1	4.8
Apr-1999	0.8 J	NA	NA	NA	NA	ND	NA	ND	0.8 J	ND	NA	ND	NA	NA	NA	2.7	4.3
Oct-1999	2.3	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	1.5	ND	ND	ND	2	6.3
Apr-2000	0.5 J	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	1.2	1.9
Oct-2000	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	4
Apr-2001	2	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	4.6	6.5
Sep-2001	3.2	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	1.1	ND	ND	ND	6.9	8.3
Mar-2002	4.3	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	1.5	ND	ND	ND	8.9	9
Sep-2002	2.8	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	1.2	ND	ND	ND	11	8.9
Mar-2003	2.7	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.3	ND	ND	ND	8.4	6.7
Oct-2003	2	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	0.6 J	0.8 J	ND	ND	ND	2.8	5.2
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3	2.7

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15B***															
Oct-2004	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	0.7 J	ND	ND	ND	4.7	3.3
Apr-2005	2.4	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.5	ND	ND	ND	7.9	7.1
Oct-2005	0.6 J	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	2.9
Mar-2006	3.3	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.7	ND	ND	ND	8.4	7
Sep-2006	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	8.4	6.2
Mar-2007	2.5	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	1.8	ND	ND	ND	5.9	6.3
May-2007	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	5.8	6.1
Sep-2007	2.8	ND	ND	ND	ND	ND	ND	ND	0.7 J	1.2	ND	1.8	ND	ND	ND	5.8	2.2
Mar-2008	2.2	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	5.2	7
Sep-2008	3.7	ND	ND	ND	ND	ND	ND	ND	1.5	1	ND	2.5	ND	ND	ND	6.6	6.9
Mar-2009	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND	ND	3.2	3.5
Oct-2009	3	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	2.1	ND	ND	ND	6.1	6.2
Mar-2010	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	1.5	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	1.1	ND	ND	ND	4.6	2.6
Apr-2011	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	1.9	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	1.5	ND	ND	ND	9.5	3.5
Mar-2012	1.9	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	1.7	ND	ND	ND	7.4	3.7
Sep-2012	1.45	ND	ND	ND	ND	ND	ND	ND	ND	0.81 J	ND	1.16	ND	ND	ND	3.04	2.08
Mar-2013	1.04	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	0.74 J	ND	ND	ND	3.04	2.01
Oct-2013	2.39	ND	ND	ND	ND	ND	ND	ND	0.51 J	0.33 J	ND	1.89	ND	ND	ND	3.83	3.94
Mar-2014	1.34	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	1.02	ND	ND	ND	4.14	2.7
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	1.87	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15B***															
Apr-2015	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.38 J*	*ND*	*0.55 J*	*ND*	*ND*	*ND*	2.42	*ND*
Nov-2015	*0.82 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.47 B	*ND*	*0.61 J*	*ND*	*ND*	*ND*	1.48	1.87
May-2016	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.6 J*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	2.2	1.6
Oct-2016	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.5 J*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	2.8	2.4
May-2017	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	2.5	1.8
Oct-2017	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	2.5	1.6
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5	1.6
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.1	1.9 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.9	1.9 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.8	*0.7 J*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.123 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.76 J*	*0.881 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	2.1	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	**6**	ND	ND	3	ND	ND	ND	ND	1.1	0.6 J	ND	1.3	NA
Apr-1998	ND	ND	0.5 J	NA	**7.6**	ND	ND	2.3	ND	ND	ND	ND	1	ND	ND	1.1	NA
Apr-1999	ND	NA	0.6 J	NA	**8.5**	ND	NA	2	ND	ND	NA	NA	0.9 J	ND	NA	1	NA
Oct-1999	ND	ND	0.6 J	NA	**22**	1	ND	4.1	ND	ND	ND	ND	2.1	ND	ND	1.5	NA
Apr-2000	ND	NA	ND	NA	2.6	ND	NA	1.2	ND	ND	NA	NA	0.7 J	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	**6.3**	ND	ND	3.1	ND	ND	ND	ND	1.4	ND	ND	1.1	NA
Apr-2001	ND	ND	1.2	NA	**5.6**	0.6 J	ND	4.9	ND	ND	ND	ND	2.4	ND	ND	1.7	NA
Sep-2001	ND	ND	0.9 J	NA	**12**	1.3	ND	**8.9**	ND	ND	ND	ND	3.9	0.6 J	ND	**3.3**	NA
Mar-2002	ND	ND	1.1	NA	**18**	2	ND	**9.1**	ND	ND	ND	ND	4.2	0.6 J	ND	**3.8**	NA
Sep-2002	ND	ND	ND	NA	**12**	2.2	ND	**7.2**	ND	ND	ND	ND	3	0.7 J	ND	**3.4**	NA
Mar-2003	ND	ND	ND	NA	**12**	0.8 J	ND	**6.3**	ND	ND	ND	ND	2.8	ND	ND	**2.4**	NA
Oct-2003	ND	ND	1.6	NA	**8.5**	2	ND	3.8	ND	ND	ND	ND	1.9	ND	ND	1.1	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-15B*															
Apr-2004	ND	ND	ND	NA	2.6	ND	ND	2.5	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	3.6	ND	ND	2.8	ND	ND	ND	ND	1.1	ND	ND	0.8 J	NA
Apr-2005	ND	ND	ND	ND	**12**	0.6 J	ND	4.9	ND	ND	ND	ND	2.4	ND	ND	**2.6**	NA
Oct-2005	ND	ND	ND	ND	2.2	ND	ND	3	ND	ND	ND	ND	1	ND	ND	0.9 J	NA
Mar-2006	ND	ND	ND	ND	**15**	0.8 J	ND	**6.8**	ND	ND	ND	ND	2.8	0.5 J	ND	**3.3**	NA
Sep-2006	ND	ND	ND	ND	**18.7**	0.6 J	ND	**5.8**	ND	ND	ND	ND	2.4	ND	ND	**3.9**	NA
Mar-2007	ND	ND	ND	ND	**13.3 R**	0.7 J	ND	**5.3**	ND	ND	ND	ND	2.4	ND	ND	**2.3**	NA
May-2007	ND	ND	ND	ND	**11.4**	0.7 J	ND	**5.7**	ND	ND	ND	ND	2.2	ND	ND	**2.3**	NA
Sep-2007	ND	ND	ND	ND	**12.1**	1.1	ND	4.3	ND	ND	ND	ND	2.2	ND	ND	1.9	NA
Mar-2008	ND	ND	ND	ND	**15.4**	1.3	ND	**6.6**	ND	ND	ND	ND	3.1	0.5 J	ND	ND	NA
Sep-2008	ND	ND	ND	ND	**17.6**	3.7	ND	**7.8**	ND	ND	ND	ND	3.4	4.5	ND	**3.7**	NA
Mar-2009	ND	ND	ND	ND	**14.6**	1.3	ND	**5.6**	ND	ND	ND	ND	2.8	ND	ND	**2.9**	NA
Oct-2009	ND	ND	ND	ND	**12.7**	1.1	ND	**5.3**	ND	ND	ND	ND	2.5	ND	ND	**3.2**	NA
Mar-2010	ND	ND	ND	ND	**12.5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**3**	NA
Oct-2010	ND	ND	ND	ND	**5.3**	0.8 J	ND	3.3	ND	ND	ND	ND	ND	ND	ND	1.5	NA
Apr-2011	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	NA
Sep-2011	ND	ND	ND	ND	**5.3**	0.8 J	ND	3.9	ND	ND	ND	ND	1.5	ND	ND	**2.1**	NA
Mar-2012	ND	ND	ND	ND	**5.2**	1 J	ND	4.3	ND	ND	ND	ND	1.9	ND	ND	2	NA
Sep-2012	ND	ND	ND	ND	3.86	ND	ND	3.35	ND	ND	ND	ND	1.39	ND	ND	1.08	ND
Mar-2013	ND	ND	ND	ND	2.65	0.43 J	ND	1.57	ND	ND	ND	ND	0.8 J	ND	ND	0.66 J	ND
Oct-2013	ND	ND	0.48 J	ND	**5.49**	1.52	ND	3.65	ND	ND	ND	ND	2.01	ND	ND	1.75	2
Mar-2014	ND	ND	ND	ND	3.24	0.8 J	ND	3.53	ND	ND	ND	ND	1.34	ND	ND	1.05	0.8 J

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15B***															
Oct-2014	ND	ND	ND	ND	ND	ND	ND	1.01	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.97	0.33 J	ND	1.76	ND	ND	ND	ND	0.71 J	ND	ND	0.55 J	ND
Nov-2015	ND	ND	ND	ND	1.68	0.46 J	ND	2.25	ND	ND	ND	ND	0.88 J	ND	ND	0.46 J	0.46 J
May-2016	ND	ND	ND	ND	1.6	0.2 J	ND	1.8	ND	ND	ND	ND	0.7 J	ND	ND	0.5 J	0.2 J
Oct-2016	ND	ND	ND	ND	1.6	0.2 J	ND	2	ND	ND	ND	ND	0.7 J	0.1 J	ND	0.6 J	0.2 J
May-2017	ND	ND	ND	ND	1.4	0.1 J	ND	1.9	ND	ND	ND	ND	0.6 J	ND	ND	0.5 J	0.1 J
Oct-2017	ND	ND	ND	ND	1.1	0.2 J	ND	1.8	ND	ND	ND	ND	0.6 J	ND	ND	0.4 J	0.2 J
May-2018	ND	ND	ND	ND	1.9 B	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	1.6 CH	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	1	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.641 JB	ND	ND	1.02	ND	ND	ND	ND	0.254 J	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-16***											
Nov-1993	ND	ND	0.2	31.5	18.3	0.4	0.3	3.7	20.4	74.6	60	37.9
Apr-1994	ND	ND	0.1	ND	14.9	ND	ND	3.6	311	64.9	128	32.56
Aug-1994	ND	ND	0.2	ND	13.6	0.3	ND	3.4	252	59.1	163	25.6
Sep-1994	ND	ND	ND	ND	11.2	0.3	ND	3.7	233	53.5	93	22.5
Nov-1994	ND	ND	0.2	ND	19.5	ND	ND	3.6	326	87.3	148	27.5
Apr-1995	ND	ND	ND	ND	16.6	0.3	ND	3.6	298	74.9	ND	27.7
Apr-1997	ND	ND	ND	ND	18	0.05	ND	NA	NA	78	172	52
Oct-1997	ND	ND	0.49	ND	14.5	ND	ND	5.62	285	60.4	128	47
Apr-1998	ND	ND	ND	ND	14.2	0.114	ND	5.79	229	68.3	120	36
Apr-1999	ND	ND	0.25	ND	14.7	ND	ND	3.4	287	67.1	150	42
Oct-1999	ND	ND	0.12	ND	18	ND	ND	3.52	284	75.1	141	42
Apr-2000	ND	ND	ND	ND	22.2	ND	ND	3.6	315	96.7	211	66
Oct-2000	ND	NA	ND	ND	14.9	ND	ND	3.64	326	80	162	56.7
Apr-2001	ND	NA	ND	ND	16	ND	ND	NA	NA	74	148	54
Sep-2001	ND	ND	0.24	ND	16.4	1.28	ND	3.47	330	72.7	146	46.4
Mar-2002	ND	ND	ND	ND	16	ND	ND	3.8	308	75.7	155	54.1
Sep-2002	ND	ND	ND	ND	20.2	ND	ND	3.8	364	97.7	176	58.9
Mar-2003	ND	ND	ND	ND	25.8	ND	ND	3.7	413	90.4	215	71.6
Oct-2003	ND	ND	ND	ND	12.8	0.146	ND	4.2	295	69.1	97	41.3
Apr-2004	ND	ND	ND	ND	15.8	ND	ND	3.7	395	91.5	149	53.2
Oct-2004	ND	ND	ND	ND	11.2	0.111	ND	3.7	246	63.2	112	38.7
Apr-2005	ND	ND	ND	ND	13.1	0.13	ND	3.7	295	58.4	133	36.6
Oct-2005	ND	ND	0.21	ND	6.61	0.13	ND	3.4	116.1	26.4	84	20.8
Mar-2006	5.1	5.1	ND	ND	6.63	0.16	ND	5.1	83.1	25.4	61	18.1
Sep-2006	4.1	4.1	ND	ND	6.41	0.16	ND	5.1	83.1	22.8	68	20
Mar-2007	2.8	2.8	ND	ND	9.81	0.14	ND	4.7	114.8	43.4	109	30.4
Sep-2007	3.1	3.1	0.3	ND	12.5	ND	ND	5.9	86.2	24.1	57	21.1
Mar-2008	5.2	5.2	ND	ND	5.76	0.16	ND	5.2	72.8	15.6	55	15.4
Sep-2008	4.7	4.7	ND	ND	6.5	0.13	ND	4.8	65.4	20.7	69	19.8
Mar-2009	5.5	5.5	ND	ND	6.25	0.12	ND	4.4	89.3	19.1	65	17.4
Oct-2009	5	5	ND	ND	5.77	0.11	ND	4.6	66	16.6	54	19.9
Apr-2010	5	5	ND	ND	7.36	0.1	ND	4.1	734	25.8	102	22.8
Oct-2010	2.8	2.8	ND	ND	8.61	0.08	ND	4.6	90.7	30.1	77	25.5
Apr-2011	5.5	5.5	ND	ND	6	0.13	ND	4.7	88.4	15.1	61	16.9
Sep-2011	6.1	6.1	0.27	ND	5.61	0.13	ND	4.8	57.6	11.9	40	15
Mar-2012	5.3	5.3	ND	ND	8.01	0.11	ND	4.5	111.4	25	106	27.1
Sep-2012	6.08	6.08	ND	ND	5.34	0.115	ND	4.6	68.9	11.1	55	14.7

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-16***											
Mar-2013	6.72	6.72	*ND*	*ND*	7.78	0.122	*ND*	3.9	78.7	22.4	78	20.6
Oct-2013	6.92	6.92	*ND*	*ND*	5.55	0.122	*ND*	3.9	69.6	12.2	36	17.4
Mar-2014	7.68	7.68	*ND*	21	5.95	0.114	*ND*	5.6	73.3	14.3	44	17.6
Oct-2014	2.2	2.2	*ND*	*6 J*	6.01	0.134	*ND*	5.1	57.4	13.4	29	16.9
Apr-2015	4.64	4.64	*ND*	*ND*	9.61	0.0957	*ND*	4.1	115.7	36.5	76	31.4
Nov-2015	3.48	3.48	*ND*	*ND*	9.77	0.0997	*ND*	5.2	124.9	35	77	31.9
May-2016	4.44	4.44	*ND*	*ND*	7.85	0.104	*ND*	5.3	157.7	23.8	59	23.8
Oct-2016	4.56	4.56	*ND*	*ND*	6.98	*NA*	*NA*	5.6	98.3	16.9	78	18.5
May-2017	4.52	4.52	*ND*	*ND*	6.67	0.126	*ND*	5.2	102.4	15.5	38	20.3
Oct-2017	4.64	4.64	*ND*	*ND*	7	0.127	*ND*	5.5	119.3	18.8	68	21.4
May-2018	*4 J*	*ND*	*ND*	*ND*	10.4	*ND*	*0.0062 J*	4.8	248	40.2	114	37.4
Nov-2018	*ND*	*ND*	*ND*	*5.7 J*	23.4	*0.044 J*	*ND*	4.05	275.7	87.6	193	67.2
May-2019	*ND*	*NA*	*ND*	*ND*	24.8	*ND*	*ND*	4.1	227.9	84.4	153	66.7
Oct-2019	*ND*	*NA*	*ND*	*8.2 J*	23.4	*0.045 J*	*ND*	4.07	326.3	158	224	74.5
May-2020	*ND*	*NA*	*ND*	*9.1 J*	24	*ND*	*ND*	3.82	294.7	92.5	182	75.5
Oct-2020	*ND*	*NA*	*ND*	*9.3 J*	22.2	*0.055 J*	*ND*	3.94	283.7	95.2	182	72.4
Apr-2021	*ND*	*NA*	*ND*	*6.1 J*	25.7	*0.026 J*	*ND*	3.99	348.7	81.5 MH	190	72.2
Oct-2021	*ND*	*NA*	*ND*	*6.1 J*	23.6	*ND*	*ND*	4.05	396.7	99.1	195	71.5

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-16*													
Nov-1993	NA	ND	ND	NA	ND	4.8	NA	0.008	NA	ND	1.2	1.3	ND	6.3	NA
Apr-1994	NA	ND	ND	NA	ND	2.98	NA	ND	NA	ND	0.46	0.14	ND	6.1	NA
Aug-1994	NA	ND	ND	NA	ND	3	NA	ND	NA	ND	0.21	0.04	ND	4.4	NA
Sep-1994	NA	ND	ND	NA	ND	2.1	NA	ND	NA	ND	0.86	0.08	ND	4.2	NA
Nov-1994	NA	ND	ND	NA	ND	3.1	NA	ND	NA	ND	ND	1	ND	4.8	NA
Apr-1995	ND	ND	0.8	ND	ND	2.2	NA	ND	ND	ND	0.11	0.03	ND	5.4	NA
Oct-1996	ND	ND	0.013	ND	ND	4.1	4.2	ND	ND	ND	0.23	0.21	ND	4	4.2
Apr-1997	ND	ND	0.013	ND	ND	7	6.7	ND	0.18	ND	8.3	7.4	ND	6.9	6.6
Oct-1997	ND	ND	0.012	ND	ND	6.43	5.58	ND	0.163	ND	9.98	7.88	ND	6.56	5.64
Apr-1998	ND	ND	0.01	ND	ND	5.54	5.49	ND	0.13	ND	8.98	2.65	ND	5.5	5.42
Apr-1999	ND	ND	0.014	ND	ND	6.45	6.64	ND	0.143	ND	1.99	0.075	ND	6.2	6.29
Oct-1999	ND	ND	0.01	ND	ND	5.53	5	ND	0.125	ND	0.589	0.077	ND	5.55	5.01
Apr-2000	ND	ND	0.017	ND	ND	9.8	9.27	ND	0.236	ND	0.881	0.078	ND	10	9.46
Oct-2000	ND	ND	0.014	ND	ND	8.67	8.03	ND	0.2	ND	1.02	0.125	ND	8.51	7.91
Apr-2001	ND	ND	0.016	ND	ND	8.09	NA	ND	0.187	ND	2.89	NA	ND	8.12	NA
Sep-2001	ND	ND	0.013	ND	ND	7.02	6.93	ND	0.163	ND	1.6	0.051	ND	7.03	7.06
Mar-2002	ND	ND	0.016	ND	ND	8.37	8.21	ND	0.183	0.01	0.337	0.076	ND	8.05	8.09
Sep-2002	ND	ND	0.021	ND	ND	9.1	8.56	ND	0.199	ND	5.45	0.1	ND	8.79	8.64
Mar-2003	ND	ND	0.023	ND	ND	10.8	10.6	ND	0.256	ND	0.816	0.126	ND	10.8	10.6
Oct-2003	ND	ND	0.015	ND	ND	6.46	6.24	ND	0.142	ND	6.58	0.185	0.003	6.12	6.16
Apr-2004	ND	0.002	0.017	ND	ND	8.41	8.92	ND	0.182	ND	1.29	0.081	ND	7.82	8.29

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-16***													
Oct-2004	*ND*	*ND*	0.014	*ND*	*ND*	6.13	5.54	*ND*	0.14	*ND*	1.48	0.267	*ND*	5.69	5.18
Apr-2005	*ND*	*ND*	0.014	*ND*	*ND*	5.83	5.59	*ND*	0.134	*ND*	1.53	0.203	*ND*	5.36	5.11
Oct-2005	*ND*	*ND*	0.016	*ND*	*ND*	4.03	3.17	0.022	0.08	*ND*	10.7	0.421	0.003	2.61	1.99
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	3.87	4.26	*ND*	0.045	*ND*	0.706	*ND*	*ND*	2.04	2.43
Sep-2006	*ND*	*ND*	0.011	*ND*	*ND*	4.91	4.79	*ND*	0.044	*ND*	0.6	*ND*	*ND*	1.86	2.59
Mar-2007	*ND*	*ND*	0.016	*ND*	*ND*	6.47	5.73	*ND*	0.078	*ND*	2.12	0.066	*ND*	3.46	3.16
Sep-2007	*ND*	*ND*	0.012	*ND*	*ND*	4.49	4.16	*ND*	0.053	*ND*	0.535	0.066	*ND*	2.4	2.08
Mar-2008	*ND*	*ND*	0.014	*ND*	*ND*	3.88	3.75	*ND*	0.028	*ND*	0.721	*ND*	*ND*	1.39	1.52
Sep-2008	*ND*	*ND*	0.015	*ND*	*ND*	4.28	4.02	*ND*	0.048	*ND*	1.09	*ND*	*ND*	2.21	1.89
Mar-2009	*ND*	*ND*	0.013	*ND*	*ND*	4.18	4.09	*ND*	0.037	*ND*	0.806	0.101	*ND*	1.71	1.8
Oct-2009	*ND*	*ND*	0.015	*ND*	*ND*	4.49	4.18	*ND*	0.045	*ND*	1.23	0.232	*ND*	2.12	2.13
Apr-2010	*ND*	*ND*	0.015	*ND*	*ND*	5.49	5.41	*ND*	0.046	*ND*	1.86	0.184	*ND*	2.22	2.34
Oct-2010	*ND*	*ND*	0.01	*ND*	*ND*	5.59	5.83	*ND*	0.058	*ND*	0.998	0.853	*ND*	2.8	2.93
Apr-2011	*ND*	*ND*	0.017	*ND*	*ND*	4.16	3.84	*ND*	0.031	*ND*	1.96	0.487	*ND*	1.57	1.28
Sep-2011	*ND*	*ND*	0.019	*ND*	*ND*	3.93	3.47	*ND*	0.023	*ND*	2.41	0.192	*ND*	1.27	1.03
Mar-2012	*ND*	*ND*	0.019	*ND*	*ND*	5.79	5.15	*ND*	0.061	*ND*	1.99	0.475	*ND*	3.07	2.41
Sep-2012	*ND*	*ND*	0.0168	*0.000142 J*	*ND*	3.82	3.97	*0.0066 J*	0.0228	*0.0012 J*	1.94	0.593	*0.000893 J*	1.26	1.21
Mar-2013	*ND*	*ND*	0.0183	*0.000163 J*	*ND*	4.91	4.69	*0.0075 J*	0.0469	*0.0021 J*	1.97	0.542	*0.002 J*	2.03	1.83
Oct-2013	*ND*	*ND*	0.0174	*0.000136 J*	*ND*	4	3.89	*0.0047 J*	0.0341	*ND*	1.38	1.2	*0.000314 J*	1.81	1.77
Mar-2014	*0.000507 J*	*0.0001 J*	0.0158	*ND*	*ND*	4.23	3.97	*0.0034 J*	0.0311	*0.0027 J*	1.1	0.765	*ND*	1.71	1.5
Oct-2014	*0.000763 J*	*0.000465 J*	0.0185	*0.000205 J*	*ND*	4.29	4.34	*0.0032 J*	0.0265	*0.000607 J*	1.52	0.604	*ND*	1.51	1.53
Apr-2015	*0.000937 J*	*ND*	0.0205	*0.000285 J*	*ND*	6.36	6.7	*0.0021 J*	0.0749	*0.000363 J*	1.21	0.91	*ND*	3.77	3.91
Nov-2015	*0.000322 J*	*ND*	0.0214	*0.000315 J*	*ND*	6.8	6.75	*0.0024 J*	0.0721	*0.00064 J*	0.889	0.43	*0.000521 J*	3.61	3.38
May-2016	*ND*	*ND*	0.0201	*0.00025 J*	*ND*	5.29	5.21	0.0045	0.0439	*0.0007 J*	1.27	0.546	*0.00032 J*	2.58	2.42

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-16***													
Oct-2016	*ND*	*ND*	0.0207	*0.00022 J*	*ND*	4.29	4.92	0.0077	0.0309	*0.00059 J*	2.1	*1.07 J+*	*0.00025 J*	1.89	2.19
May-2017	*ND*	*ND*	0.0195	*0.0002 J*	*ND*	4.6	5.47	*0.003 J*	0.0319	*ND*	0.769	0.473	*ND*	2.13	2.01
Oct-2017	*ND*	*ND*	0.0184	*0.00025 J*	*ND*	4.79	4.7	0.0179	0.0343	*ND*	0.767	0.519	*ND*	2.29	2.3
May-2018	*0.000091 J*	*ND*	0.019	0.00033	*0.00007 J*	7.2	6.6	*0.0026 J*	0.0685	*0.0013 J*	1.3	0.14	*0.00021 J*	4.7	4.2
Nov-2018	*ND*	*ND*	0.022	*0.00058 J*	*0.000038 J*	11.5	11.4	0.024	0.18	*0.001 J*	1.3	0.81	*0.000064 J*	9.4	9.3
May-2019	*ND*	*ND*	0.028	0.00035	*ND*	11.9	11.9	0.0073	0.19	*ND*	3.7	0.9	*ND*	9	9
Oct-2019	*0.0001 J*	*ND*	0.028	0.00046	*0.00013 J*	13	12.2	*0.0053 J*	0.21	*ND*	2.7	1	*ND*	10.2	9.3
May-2020	*0.000091 J*	*ND*	0.027	0.00057	*ND*	13.1	12.4	0.0075	0.2	0.0025	3.6	0.67	*ND*	10.4	9.8
Oct-2020	*ND*	*ND*	0.028	*0.00078 J*	*ND*	12.3	11.7	*0.011 J*	0.22	*ND*	2.3	0.68	*ND*	10.1	9.5
Apr-2021	*ND*	*ND*	0.028	*0.0009 J*	*ND*	12.3	12.1	*0.0034 J*	0.21	*ND*	4.3	1.2	*ND*	10.1	10
Oct-2021	*0.000057 JB*	*ND*	0.027	0.00058	*ND*	12.2	13.1	0.0049	0.24	*ND*	3	0.95	*0.000031 J*	10	10.8

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-16*												
Nov-1993	1.4	NA	ND	NA	6.7	NA	ND	NA	21.8	NA	NA	NA	0.42
Apr-1994	0.8	NA	ND	NA	4.22	NA	ND	NA	11.37	NA	NA	NA	0.28
Aug-1994	0.68	NA	ND	NA	4.7	NA	ND	NA	8.8	NA	NA	NA	0.26
Sep-1994	0.66	NA	ND	NA	3.6	NA	ND	NA	8.7	NA	NA	NA	0.24
Nov-1994	0.97	NA	ND	NA	5.5	NA	ND	NA	10.7	NA	NA	NA	0.24
Apr-1995	0.08	NA	ND	0.06	4.9	NA	ND	0.01	9.5	NA	ND	ND	0.28
Oct-1996	0.56	0.57	NA	0.085	ND	ND	ND	ND	8.7	8.5	ND	ND	0.2
Apr-1997	1.2	1.1	ND	0.31	5.3	5.1	ND	ND	14	14	ND	ND	0.29
Oct-1997	1.04	0.91	NA	0.157	4.16	3.04	ND	ND	13.3	11.4	ND	ND	0.267
Apr-1998	0.804	0.811	NA	0.125	5.25	5.07	ND	ND	10.7	10.6	ND	ND	0.337
Apr-1999	0.858	0.871	NA	0.142	4.23	4.05	ND	ND	11.8	12.1	ND	ND	0.286
Oct-1999	0.751	0.677	NA	0.116	4.88	3.62	ND	ND	10.4	9.32	ND	ND	0.242
Apr-2000	1.42	1.34	NA	0.222	5.86	6.21	ND	ND	20.2	19.2	ND	ND	0.454
Oct-2000	1.2	1.11	NA	0.188	6	5.56	ND	ND	16.4	15.1	ND	ND	0.403
Apr-2001	1.12	NA	NA	0.183	6.01	NA	ND	ND	15.6	NA	ND	ND	0.365
Sep-2001	0.962	0.963	NA	0.161	5.66	5.25	ND	ND	14.6	13.3	ND	ND	0.313
Mar-2002	1.09	1.1	NA	0.173	7.03	6.6	ND	ND	16.4	15.4	ND	ND	0.34
Sep-2002	1.19	1.17	NA	0.198	5.89	6.09	ND	ND	18.1	17.9	ND	ND	0.382
Mar-2003	1.52	1.49	NA	0.251	6.94	7.24	ND	ND	21.5	20.9	ND	ND	0.491
Oct-2003	0.84	0.841	NA	0.143	5.97	5.21	ND	ND	12.5	11.8	ND	ND	0.314
Apr-2004	1.09	1.16	ND	0.188	6.55	5.88	ND	ND	15	16.3	ND	ND	0.322
Oct-2004	0.823	0.756	ND	0.141	5.11	4.74	ND	ND	11	9.79	ND	ND	0.241

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-16***												
Apr-2005	0.785	0.749	*ND*	0.132	4.43	4.01	*ND*	*ND*	10.1	9.66	*ND*	*ND*	0.225
Oct-2005	0.466	0.338	*ND*	0.072	2.51	1.93	*ND*	*ND*	5.64	3.89	*ND*	*ND*	0.132
Mar-2006	0.26	0.308	*ND*	0.053	1.84	2.04	*ND*	*ND*	4.3	4.88	*ND*	*ND*	0.058
Sep-2006	0.241	0.358	*ND*	0.048	1.92	2.4	*ND*	*ND*	4.15	5.25	*ND*	*ND*	0.123
Mar-2007	0.458	0.419	*ND*	0.082	2.97	2.71	*ND*	*ND*	6.86	6.32	*ND*	*ND*	0.154
Sep-2007	0.316	0.267	*ND*	0.054	2.02	1.7	*ND*	*ND*	5.22	4.59	*ND*	*ND*	0.1
Mar-2008	0.158	0.174	*ND*	0.034	1.64	1.6	*ND*	*ND*	3.19	3.47	*ND*	*ND*	0.067
Sep-2008	0.259	0.22	*ND*	0.057	1.82	1.63	*ND*	*ND*	4.49	3.98	*ND*	*ND*	0.091
Mar-2009	0.204	0.222	*ND*	0.043	1.77	1.74	*ND*	*ND*	3.97	4.18	*ND*	*ND*	0.075
Oct-2009	0.25	0.254	*ND*	0.052	1.79	1.63	*ND*	*ND*	4.5	4.42	*ND*	*ND*	0.088
Apr-2010	0.258	0.279	*ND*	0.053	2	1.99	*ND*	*ND*	4.88	5.04	*ND*	*ND*	0.09
Oct-2010	0.326	0.343	*ND*	0.061	2.15	2.2	*ND*	*ND*	5.88	6.18	*ND*	*ND*	0.092
Apr-2011	0.174	0.135	*ND*	0.039	1.49	1.16	*ND*	*ND*	3.55	3.06	*ND*	*ND*	0.06
Sep-2011	0.118	0.096	*ND*	0.038	1.69	1.04	*ND*	*ND*	3.13	2.87	*ND*	*ND*	0.055
Mar-2012	0.367	0.275	*ND*	0.068	2.46	1.94	*ND*	*ND*	6.41	5.25	*ND*	*ND*	0.104
Sep-2012	0.121	0.12	*ND*	0.0333	1.34	1.27	*ND*	*ND*	3.06	3.02	*0.0015 J*	*ND*	0.0492
Mar-2013	0.272	0.224	*0.000048 J*	0.0554	1.73	1.52	*ND*	*ND*	4.33	3.89	*ND*	*ND*	0.0989
Oct-2013	0.177	0.174	*ND*	0.0424	1.72	1.54	*ND*	*ND*	3.97	3.86	*0.000104 J*	*0.0028 J*	0.0741
Mar-2014	0.181	0.154	*ND*	0.0407	1.55	1.33	*ND*	*ND*	3.59	3.27	*ND*	*0.000622 J*	0.0629
Oct-2014	0.152	0.155	*ND*	0.0353	1.59	1.47	*ND*	*ND*	3.62	3.78	*ND*	*0.0013 J*	0.063
Apr-2015	0.435	0.458	*ND*	0.0863	2.79	2.84	*0.000895 J*	*ND*	7.45	7.8	*ND*	*ND*	0.139
Nov-2015	0.407	0.378	*ND*	0.0833	2.72	2.51	*ND*	*ND*	7.24	6.83	*0.00011 J*	*0.000842 J*	0.133
May-2016	0.258	0.257	*ND*	0.0549	2.19	1.92	*ND*	*ND*	5.36	4.96	*ND*	0.0012	0.0855
Oct-2016	0.191	0.223	*ND*	0.0439	1.62	1.86	*ND*	*ND*	4.42	4.9	*ND*	0.0011	0.0652

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-16***												
May-2017	0.176	0.169	*ND*	0.048	1.72	1.75	*ND*	*ND*	4.39	4.28	*ND*	*0.00034 J*	0.0754
Oct-2017	0.19	0.196	*ND*	0.0503	1.84	1.87	*ND*	*ND*	4.63	4.67	*ND*	*0.00037 J*	0.0795
May-2018	0.34	0.33	*ND*	0.099	*3.3 J*	*2.6 J*	*0.000095 J*	*ND*	9.4	7.8	*ND*	0.0036	0.17
Nov-2018	1.2	0.93	*ND*	0.21	6	6	*0.00012 J*	*ND*	18.5	18.6	*ND*	0.0056	0.34
May-2019	1.3	1.2	*ND*	0.21	5.9	5.4	*ND*	*ND*	17.6	17.2	*ND*	*ND*	0.34
Oct-2019	1.5	1.3	*ND*	0.22	6	5.9	*ND*	*ND*	19.3	18.6	*ND*	0.0068	0.34
May-2020	1.3	1.3	*ND*	0.21	6.4	6.4	*ND*	*ND*	19.6	18.8	*ND*	*ND*	0.35
Oct-2020	1.3	1.2	*ND*	0.23	6.1	6	*ND*	*ND*	19.6	18.1	*ND*	*0.00092 J*	0.37
Apr-2021	1.4	1.4	*ND*	0.24	6.3	6.2	*0.0055 J*	*ND*	19.6	19.5	*ND*	*ND*	0.35
Oct-2021	1.4	1.54	*ND*	0.24	6.2	6.9	*ND*	*ND*	19.6	21.5	*0.000044 J*	*ND*	0.36

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	33	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.3 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.4 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-16***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-16***															
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-16***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16***															
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.1 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-17***											
Nov-1993	62	62	0.2	24.8	6.7	ND	ND	5.94	172	15.4	45	63.1
Apr-1994	64	64	0.1	62.3	6.1	ND	ND	5.96	183	18.9	103	58.75
Apr-1995	58.7	58.7	ND	74.7	7.1	ND	ND	6	186	22.5	88	43.9
Apr-1997	ND	20	ND	ND	5	0.04	ND	NA	NA	14	88	15
Oct-1997	35	35	0.24	ND	4.39	ND	ND	6.48	170.5	14.3	107	46
Apr-1998	32	32	0.26	ND	4.22	ND	ND	7.6	164.7	19	64	39
Apr-1999	28	28	0.82	16	5.33	ND	ND	5.61	143.1	19.5	110	48
Oct-1999	38	38	0.08	ND	7.13	ND	ND	5.68	132	17.1	140	32
Apr-2000	31	31	ND	ND	3.42	ND	ND	6.01	74	29	117	48
Oct-2000	23	NA	0.22	56	6.06	ND	ND	5.88	137.9	27.3	87	37.8
Apr-2001	29	NA	ND	10	6	ND	ND	NA	NA	28.4	108	45
Sep-2001	26	26	ND	ND	8.69	ND	ND	5.74	165	34.4	105	36.7
Mar-2002	25	25	ND	38	4.51	ND	ND	5.8	68.5	27.1	122	37
Sep-2002	17	17	ND	ND	5.88	ND	ND	5.7	167.5	43.5	108	36.2
Mar-2003	22	22	ND	ND	15.2	ND	ND	5.8	157.9	33.9	110	42
Oct-2003	27	27	ND	ND	5.19	ND	ND	5.6	164.7	34.6	106	46.2
Apr-2004	31	31	ND	27	5.06	ND	ND	5.6	151.5	28.1	106	51.8
Oct-2004	45	45	ND	ND	5.21	0.08	ND	5.6	164.6	30.7	123	51.7
Apr-2005	33	33	ND	ND	5.68	ND	ND	5.7	127.4	26.3	113	41.8
Oct-2005	29	29	ND	ND	1.03	ND	ND	5.5	296	2.32	92	35.2
Mar-2006	27	27	ND	ND	5.6	ND	ND	7.7	104.8	21.9	105	26.3
Sep-2006	13	13	ND	ND	5.22	ND	ND	7.7	104.8	20.3	210	33.3
Mar-2007	8.2	8.2	0.6	ND	5.44	ND	ND	5.5	107.9	20	58	17.6
Sep-2007	6.1	6.1	ND	82	9.89	ND	ND	6.1	104.6	20.5	87	14
Mar-2008	13	13	0.25	ND	10.1	ND	ND	5.3	107.2	33.7	39	17.2
Sep-2008	13	13	ND	36	9.93	ND	ND	5.3	101.1	15	67	18
Mar-2009	10	10	ND	ND	5.52	ND	ND	5	113.4	31.4	85	19.4
Oct-2009	7	7	ND	ND	5.35	ND	ND	5.1	97.3	23.2	62	12.7
Apr-2010	6.2	6.2	ND	ND	5.67	ND	ND	4.8	119.7	25.7	133	13.6
Oct-2010	14	14	ND	ND	5.7	ND	ND	5.2	89.3	24.9	73	24.3
Apr-2011	106	106	ND	ND	5.38	ND	ND	5.1	103.4	22.5	70	16.7
Sep-2011	9.2	9.2	ND	ND	5.65	ND	ND	5.1	95.5	20.7	59	14.7
Mar-2012	15	15	ND	ND	5.53	ND	ND	5	111.4	26.6	72	27.4
Sep-2012	8.44	8.44	ND	ND	5.83	ND	ND	4.5	100.4	24.1	95	16.6
Mar-2013	8.72	8.72	ND	10.2	5.86	ND	ND	5.3	113	23	83	11.2
Oct-2013	14	14	ND	10.3	5.78	ND	ND	4.1	110.6	28.6	77	24.3
Mar-2014	6.8	6.8	ND	19	5.56	ND	ND	5.5	108.5	27.1	58	13.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-17***										
Oct-2014	2.2	2.2	*ND*	33	5.75	*ND*	*ND*	5.3	100.3	26.5	108	22.3
Apr-2015	13.2	13.2	*ND*	13	5.52	*ND*	*ND*	4.5	102.1	28.7	71	21.1
Nov-2015	5.56	5.56	*ND*	*ND*	5.95	0.0536	*ND*	5.5	122.9	25.5	53	14.9
May-2016	12.6	12.6	0.274	*7 J*	5.87	0.0852	*ND*	5.6	182.9	28.9	81	24.1
Oct-2016	18.3	18.3	*0.185 J*	45	5.86	*NA*	*NA*	5.5	190.5	34.1	140	29.6
May-2017	2.6	2.6	*ND*	*ND*	5.56	0.076	*ND*	5.2	162.4	30.6	64	17
Oct-2017	*ND*	*ND*	*0.0838 J*	*ND*	5.58	*ND*	*ND*	5.1	160.4	34.5	96	17.3
May-2018	*ND*	*ND*	*ND*	*ND*	5.9	*ND*	0.024	4.4	191.5	62.5	139	38.2
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	5.9	*0.038 J*	*ND*	4.63	169.6	63.6	95	39.3
May-2019	*ND*	*NA*	*ND*	*ND*	4.8	*ND*	*ND*	5.06	128.2	50.6	82	34.2
Oct-2019	*ND*	*NA*	*ND*	*ND*	5.4	*0.047 J*	*ND*	5.05	164	52.5	108	30
May-2020	*1 J*	*NA*	*ND*	*ND*	5.7	*ND*	*ND*	4.69	143.9	45.2	68	26.9
Oct-2020	*8 J*	*NA*	*ND*	*ND*	5.4	*ND*	*0.0064 J*	4.79	143.4	43.3	75	25.4
Apr-2021	*2 J3c*	*NA*	*ND*	38.6	5.7	*0.025 J*	*ND*	5.29	166.1	36.9	87	25.9
Oct-2021	*6 J5c*	*NA*	*ND*	*ND*	5	*ND*	*ND*	5.45	190.6	36.8	65	20.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17***													
Nov-1993	*NA*	*ND*	*ND*	*NA*	*ND*	22.5	*NA*	0.012	*NA*	*ND*	10	6.7	*ND*	1.7	*NA*
Apr-1994	*NA*	*ND*	*ND*	*NA*	*ND*	20.4	*NA*	*ND*	*NA*	*ND*	8.53	3.14	*ND*	1.89	*NA*
Apr-1995	*ND*	*ND*	1	*ND*	*ND*	14.6	*NA*	*ND*	*ND*	*ND*	7.6	7.6	*ND*	1.8	*NA*
Oct-1996	*ND*	*ND*	0.035	*ND*	*ND*	8.8	8.4	*ND*	*ND*	*ND*	6	8	*ND*	1.4	1.3
Apr-1997	*ND*	*ND*	0.016	*ND*	*ND*	8.4	8.7	*ND*	*ND*	*ND*	4.2	2.1	0.003	1.1	1.1
Oct-1997	*ND*	*ND*	0.053	*ND*	*ND*	12.2	10.9	0.014	0.019	0.053	14.3	7.52	*ND*	1.9	1.55
Apr-1998	*ND*	*ND*	0.116	*ND*	*ND*	11.5	2.12	0.031	0.018	0.033	23.9	4.46	*ND*	2.45	0.453
Apr-1999	*ND*	*ND*	0.179	*ND*	*ND*	13.7	10.1	0.054	0.026	0.042	38.5	7.9	*ND*	3.41	1.65
Oct-1999	*ND*	*ND*	0.025	*ND*	*ND*	6.94	6.54	*ND*	*ND*	0.011	6.29	1.08	*ND*	1.51	1.38
Apr-2000	*ND*	*ND*	0.034	*ND*	*ND*	15.9	15	*ND*	0.012	0.012	11.6	4.76	*ND*	2.04	1.89
Oct-2000	*ND*	*ND*	0.031	*ND*	*ND*	12	9.46	*ND*	0.011	0.018	17.2	6.64	*ND*	1.91	1.6
Apr-2001	*ND*	*ND*	0.084	*ND*	*ND*	14	*NA*	0.02	0.019	0.02	35.7	*NA*	0.004	2.32	*NA*
Sep-2001	*ND*	*ND*	0.04	*ND*	*ND*	11.5	10.4	0.011	0.011	0.012	24.1	6.29	0.003	1.91	1.61
Mar-2002	*ND*	*ND*	0.037	*ND*	*ND*	11.4	10.1	0.01	0.018	0.011	16.2	5.94	*ND*	2.08	1.85
Sep-2002	*ND*	*ND*	0.044	*ND*	*ND*	11.2	10.6	*ND*	0.027	0.014	22.6	15	0.003	1.98	1.8
Mar-2003	*ND*	*ND*	0.045	*ND*	*ND*	13.5	11.8	*ND*	0.05	0.01	47.7	3.79	0.002	2.02	1.85
Oct-2003	*ND*	0.005	0.05	*ND*	*ND*	14.9	12	0.016	0.04	0.025	24.7	4.81	0.006	2.15	1.69
Apr-2004	*ND*	**0.011**	0.088	*ND*	*ND*	16.8	14.2	0.041	0.056	0.045	45.1	3.94	0.01	2.37	1.9
Oct-2004	*ND*	0.003	0.041	*ND*	*ND*	17.2	15.7	0.012	0.037	0.017	16.3	3.7	0.004	2.11	1.94
Apr-2005	*ND*	0.002	0.04	*ND*	*ND*	13.6	12.8	0.012	0.03	0.02	12.4	4.46	0.002	1.9	1.74
Oct-2005	*ND*	*ND*	0.019	*ND*	*ND*	11.6	10.7	*ND*	0.011	*ND*	0.798	1.86	*ND*	1.54	1.49

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17***													
Mar-2006	*ND*	*ND*	0.016	*ND*	*ND*	8.36	8.68	*ND*	0.01	*ND*	2.02	3.39	*ND*	1.3	1.37
Sep-2006	*ND*	*ND*	0.042	*ND*	*ND*	10.8	9.11	*ND*	0.019	0.016	9.22	4.96	0.003	1.54	1.43
Mar-2007	*ND*	0.005	0.043	*ND*	*ND*	4.73	6.14	0.04	0.033	0.029	18.5	4.58	0.007	1.4	1.37
Sep-2007	*ND*	0.009	0.045	*ND*	*ND*	3.5	3.39	0.045	0.034	0.031	21.4	5.09	0.008	1.28	1.11
Mar-2008	*ND*	0.003	0.026	*ND*	*ND*	4.7	4.37	0.013	0.012	*ND*	8.65	3.43	0.002	1.33	1.28
Sep-2008	*ND*	0.003	0.03	*ND*	*ND*	4.66	4.35	0.013	0.01	*ND*	8.02	3.63	*ND*	1.56	1.41
Mar-2009	*ND*	0.005	0.051	*ND*	*ND*	5.16	3.43	0.049	0.038	0.029	38.5	4.56	0.008	1.57	1.25
Oct-2009	*ND*	0.003	0.03	*ND*	*ND*	3.16	3.27	0.023	0.014	0.016	17.6	4.26	0.003	1.16	1.21
Apr-2010	*ND*	0.006	0.034	*ND*	*ND*	3.26	2.33	0.023	0.022	0.018	20	5.97	0.005	1.33	1.07
Oct-2010	*ND*	0.003	0.031	*ND*	*ND*	6.87	6.32	0.02	0.02	0.012	12.3	3.91	0.003	1.73	1.54
Apr-2011	*ND*	*ND*	0.019	*ND*	*ND*	4.46	4.49	*ND*	*ND*	*ND*	3.83	4.49	*ND*	1.36	1.39
Sep-2011	*ND*	0.002	0.034	*ND*	*ND*	3.55	2.45	0.016	*ND*	0.014	11.5	5.9	0.003	1.42	1.16
Mar-2012	*ND*	0.002	0.038	*ND*	*ND*	7.74	5.95	0.014	*ND*	0.017	11.1	4.72	0.003	1.96	1.61
Sep-2012	*ND*	0.0036	0.035	*0.000401 J*	*ND*	4.15	4.04	0.0266	0.0172	0.0152	26.3	4.65	0.0042	1.52	1.47
Mar-2013	*ND*	*ND*	0.0298	*0.000333 J*	*ND*	2.73	3.13	0.0217	0.0158	0.0148	30.9	4.77	0.0052	1.07	1.19
Oct-2013	*ND*	*0.0018 J*	0.0414	*0.000309 J*	*0.000155 J*	6.69	5.28	*0.0154 J*	*0.0081 J*	*0.0089 J*	16	4.38	0.0025	1.84	1.65
Jan-2014	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	0.0252	*NA*	*NA*	*NA*	*NA*	0.0059	*NA*	*NA*
Mar-2014	*0.000701 J*	*0.0015 J*	0.0326	*0.000238 J*	*ND*	3.06	3.26	*0.0074 J*	*0.0048 J*	*0.0005 J*	8.91	4.5	*0.0018 J*	1.45	1.46
Oct-2014	*0.0012 J*	*0.0261 J*	0.166	*ND*	*0.000168 J*	5.24	4.81	*0.112 J*	*0.0474 J*	*0.0591 J*	78.3	4.4	**0.0239**	2.25	1.57
Apr-2015	*0.0013 J*	**0.013**	0.133	*0.000895 J*	*0.000127 J*	5.13	5.14	0.075	*0.0326 J*	*0.0353 J*	55.6	4.01	**0.0181**	2	1.63
Nov-2015	*0.00073 J*	0.0042	0.0658	*0.000416 J*	*0.000064 J*	3.51	4.08	0.022	0.0111	0.0124	16.4	5.09	0.0061	1.5	1.56
May-2016	*ND*	0.0099	0.064	*0.00059 J*	*ND*	6.17	5.41	0.0461	0.0247	0.0239	39.9	8.98	0.0082	2.11	1.83
Oct-2016	*ND*	*0.0024 J*	0.0367	*0.00028 J*	*ND*	8.2	7.35	0.0168	0.0074	0.0063	11.9	7.49	0.0021	2.23	2.19
May-2017	*ND*	*0.001 J*	0.0263	*0.00015 J*	*ND*	4.03	4.4	0.0067	0.0041	*0.0026 J*	8.35	4.65	*0.00079 J*	1.67	1.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17***													
Oct-2017	*ND*	*0.0016 J*	0.0297	*0.00017 J*	*ND*	4.22	3.55	0.0068	0.0057	*0.0022 J*	14.2	4.78	*0.00065 J*	1.65	1.64
May-2018	*0.00011 J*	*0.00026 J*	0.053	0.00086	*0.00049 J*	10.1	9.9	0.025	0.0433	0.0023	9.6	0.96	*0.00024 J*	3.1	3.1
Nov-2018	*ND*	*0.0007 J*	0.032	0.00044	*0.00025 J*	11.5	11.3	0.038	0.021	0.0029	7	0.79	*0.0006 J*	2.6	2.6
May-2019	*ND*	*ND*	0.026	*ND*	*ND*	9.8	9.9	0.049	0.029	*ND*	9.2	6.1	*ND*	2.4	2.4
Oct-2019	*0.00011 J*	*0.0005 J*	0.025	*0.000094 J*	*0.0002 J*	8.3	7.7	0.024	0.041	*ND*	8	6.3	*0.00014 J*	2.2	2
May-2020	*0.000083 J*	*0.0005 J*	0.024	*0.00014 J*	*ND*	7.2	7	0.063	0.036	0.003	13.5	3.6	*0.00024 J*	2.2	2.1
Oct-2020	*ND*	*ND*	0.021	*ND*	*ND*	6.8	6.8	*0.03 J*	0.022	*ND*	9.8	3.7	*ND*	2	2
Apr-2021	*ND*	*ND*	0.023	*ND*	*ND*	7	7	0.0088	0.019	*ND*	10	7.3	*ND*	2.1	2
Oct-2021	*0.000051 JB*	*ND*	0.022	*ND*	*ND*	5.6	6	0.0044	0.023	*0.00036 J*	8.2	7.3	*0.000042 J*	1.7	1.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-17*												
Nov-1993	0.27	NA	ND	NA	2	NA	ND	NA	11	NA	NA	NA	0.01
Apr-1994	0.31	NA	ND	NA	1.69	NA	ND	NA	12.97	NA	NA	NA	0.06
Apr-1995	0.28	NA	ND	ND	2.1	NA	ND	ND	8.4	NA	ND	ND	0.03
Oct-1996	0.21	0.19	NA	ND	ND	ND	ND	ND	9	8.4	ND	ND	0.27
Apr-1997	0.18	0.19	ND	ND	1.8	1.8	ND	ND	7.2	7.3	ND	ND	0.025
Oct-1997	0.259	0.244	NA	0.064	3.88	0.695	ND	ND	10.2	9.61	ND	0.018	0.08
Apr-1998	0.262	0.048	NA	0.1	6.8	1.61	ND	ND	10.6	1.99	ND	0.051	0.076
Apr-1999	0.348	0.243	NA	0.03	8.91	ND	ND	ND	13.1	10.6	ND	0.088	0.106
Oct-1999	0.214	0.204	NA	ND	1.78	1.28	ND	ND	10.8	10.2	ND	ND	0.032
Apr-2000	0.231	0.225	NA	ND	1.89	1.25	ND	ND	12.8	11.2	ND	ND	0.037
Oct-2000	0.237	0.21	NA	0.018	2.16	1.5	ND	ND	13.1	10.8	ND	0.011	0.041
Apr-2001	0.25	NA	NA	0.015	4.25	NA	ND	ND	12.5	NA	ND	0.037	0.059
Sep-2001	0.212	0.199	NA	0.022	2.82	1.91	ND	ND	13.4	10.4	ND	0.015	0.048
Mar-2002	0.255	0.236	NA	0.018	2.87	1.53	ND	ND	12	11.1	ND	0.014	0.046
Sep-2002	0.249	0.234	NA	0.029	2.39	2.13	ND	ND	12.4	11.6	ND	0.018	0.064
Mar-2003	0.236	0.233	NA	0.046	2.32	1.33	ND	ND	12.4	11.5	ND	ND	0.084
Oct-2003	0.22	0.209	NA	0.041	2.74	1.76	ND	ND	12.9	10.8	ND	0.03	0.08
Apr-2004	0.234	0.211	ND	0.055	4.63	2.15	ND	ND	12.6	11.9	ND	0.065	0.226
Oct-2004	0.244	0.232	ND	0.025	2.76	1.76	ND	ND	12.7	12	ND	0.017	0.079
Apr-2005	0.263	0.253	ND	0.03	2.66	1.68	ND	ND	11.9	11.5	ND	0.02	0.061
Oct-2005	0.216	0.216	ND	0.017	1.58	1.43	ND	ND	9.66	8.61	ND	ND	0.04
Mar-2006	0.174	0.194	ND	0.015	1.34	1.29	ND	ND	9.53	9.45	ND	ND	0.015

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-17***												
Sep-2006	0.244	0.221	ND	0.027	1.92	1.49	ND	ND	9.55	9.87	ND	0.01	0.096
Mar-2007	0.218	0.205	ND	0.04	2.2	1.36	ND	ND	9.08	9.56	ND	0.033	0.085
Sep-2007	0.183	0.172	ND	0.039	1.96	1.1	ND	ND	8.21	8.9	ND	0.038	0.088
Mar-2008	0.196	0.183	ND	0.019	1.69	1.36	ND	ND	9.11	9.26	ND	ND	0.052
Sep-2008	0.202	0.186	ND	0.017	1.84	1.32	ND	ND	9.74	9.32	ND	ND	0.043
Mar-2009	0.201	0.175	ND	0.045	2.36	1.38	ND	ND	9.67	9.75	ND	0.036	0.1
Oct-2009	0.157	0.176	ND	0.018	1.56	1.13	ND	ND	8.17	8.59	ND	0.019	0.05
Apr-2010	0.174	0.155	ND	0.022	2.05	1.18	ND	ND	8.91	8.64	ND	0.033	0.064
Oct-2010	0.224	0.204	ND	0.026	2.2	1.44	ND	ND	11.7	11.6	ND	0.013	0.052
Apr-2011	0.171	0.17	ND	0.016	1.26	1.24	ND	ND	10.4	10.3	ND	ND	0.032
Sep-2011	0.181	0.166	ND	0.017	2.44	1.28	ND	ND	9.96	9.42	ND	0.011	0.044
Mar-2012	0.276	0.252	0.0002	0.024	2.87	1.52	ND	ND	12.2	11.1	ND	0.012	0.065
Sep-2012	0.196	0.184	ND	0.0238	1.9	1.44	ND	ND	10.4	10.8	0.000409 J	0.0179	0.0513
Mar-2013	0.153	0.174	0.000142 J	0.0182	1.37	1.15	ND	0.000022 J	7.37	8.92	ND	0.0191	0.0512
Oct-2013	0.227	0.192	ND	0.015	2.27 J	1.52	ND	0.000018 J	10.8	11.4	0.000198 J	0.0205 J	0.0491
Mar-2014	0.157	0.17	ND	0.0106 J	1.8	1.37	ND	ND	9.13	10.1	0.000637 J	0.0083 J	0.0257
Oct-2014	0.203	0.17	0.000121 J	0.0665 J	5.72 J	1.61	ND	0.000089 J	9.92 J	11.6	ND	0.0981 J	0.104
Apr-2015	0.187	0.182	ND	0.0425 J	4.91	1.57	ND	0.00008 J	10.2	11.8	ND	0.0674	0.0674
Nov-2015	0.158	0.184	ND	0.0161	2.82	1.56	0.000942 J	ND	8.92	11.2	0.000327 J	0.0234	0.0383
May-2016	0.2	0.188	ND	0.0294	3.22	1.8	ND	ND	12.3	12	0.00017 J	0.0438	0.0732
Oct-2016	0.265	0.262	ND	0.019	2.11	1.94	ND	ND	13.7	13.8	ND	0.0106	0.0647
May-2017	0.2	0.191	ND	0.0091	1.67	1.62	ND	ND	11.3	11.2	ND	0.0044	0.039
Oct-2017	0.213	0.203	ND	0.0104	1.58	1.56	ND	ND	11	11	ND	0.0033	0.0382
May-2018	0.33	0.34	ND	0.062	2.1 J	1.7 J	0.00046 J	ND	15.1	13.8	0.000071 J	0.0041	0.15

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-17***												
Nov-2018	0.22	0.23	*ND*	0.048	*2.1 J*	*2 J*	*0.00019 J*	*ND*	13.8	13.9	*ND*	0.0055	0.089
May-2019	0.5	0.47	*ND*	0.04	*ND*	*ND*	*ND*	*ND*	13.5	13.4	*ND*	*ND*	0.077
Oct-2019	0.7	0.63	*ND*	0.034	*1.4 J*	*ND*	*ND*	*ND*	13.4	13.1	*ND*	0.0073	0.066
May-2020	0.57	0.58	*ND*	0.026	*1.8 J*	*1.8 J*	*ND*	*ND*	13.4	13.1	*ND*	*ND*	0.048
Oct-2020	0.42	0.4	*ND*	0.02	*ND*	*1.7 J*	*ND*	*ND*	13.4	12.9	*ND*	*0.0015 J*	0.041
Apr-2021	0.43	0.42	*ND*	0.016	1.8	1.7	*0.0056 J*	*ND*	13.6	13.4	*ND*	*0.00068 J*	0.034
Oct-2021	0.45	0.482	*ND*	0.016	1.6	1.7	*ND*	*ND*	12.2	13.5	*0.000029 J*	*ND*	0.035

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	35	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.96 J	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 J	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 J	ND	11	22 J+	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.4 J*	7.9	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.4 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.6 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.5 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-17A***											
Nov-1993	ND	ND	ND	21.3	2.6	0.3	ND	4.76	19.2	2.5	ND	2.47
Apr-1994	5	5	0.2	ND	2.4	0.3	ND	5	19	ND	20	3.79
Apr-1995	ND	ND	0.4	ND	2.7	0.3	ND	4.8	19.1	2.3	18	2
Apr-1997	ND	2	ND	ND	1.5	0.29	ND	NA	NA	ND	66	4.1
Oct-1997	2	2	0.33	30	2.6	0.294	ND	5.99	19.7	ND	22	ND
Apr-1998	3	ND	ND	ND	1.79	0.301	ND	7.35	18.75	ND	ND	3
Apr-1999	ND	ND	0.45	ND	2.04	0.18	ND	4.95	48.5	ND	20	3.2
Oct-1999	ND	ND	0.07	ND	2.76	0.563	ND	4.69	20.8	1.35	19	3.1
Apr-2000	ND	ND	ND	ND	1.62	0.26	ND	6.88	103	0.87	24	3.2
Oct-2000	1	NA	ND	ND	2.03	ND	ND	6.08	29.8	ND	33	3.31
Apr-2001	1.3	NA	ND	ND	2.23	0.292	ND	NA	NA	ND	25	3.3
Sep-2001	ND	ND	ND	ND	3.42	1.27	ND	5.04	19	ND	21	3.16
Mar-2002	ND	ND	ND	ND	3.6	0.426	ND	5.1	14.2	0.821	21	3.08
Sep-2002	1.8	1.8	ND	ND	2.62	0.3	ND	5	20.8	ND	16	2.97
Mar-2003	1.6	1.6	ND	ND	1.34	ND	ND	5.2	16.2	ND	36	3.15
Oct-2003	1.5	1.5	ND	ND	4.03	0.214	ND	4.8	20.9	ND	19	4.09
Apr-2004	1.7	1.7	ND	ND	2.44	0.189	ND	4.8	17.9	ND	21	3.39
Oct-2004	1.5	1.5	ND	ND	2.45	0.266	ND	4.8	15.7	ND	30	3.05
Apr-2005	1.8	1.8	ND	ND	2.63	0.3	ND	4.8	15.5	1.45	38	3.2
Oct-2005	2.7	2.7	ND	ND	2.68	0.27	ND	4.1	15.9	1.21	35	3.07
Mar-2006	2.8	2.8	ND	ND	2.51	0.29	ND	4.9	17.5	1.51	24	2.14
Sep-2006	2.7	2.7	ND	ND	2.54	0.3	ND	4.9	17.5	1.2	20	2.92
Mar-2007	2.8	2.8	ND	ND	2.73	0.29	ND	4.7	15.2	ND	ND	2.89
Sep-2007	2.4	2.4	ND	ND	2.5	0.3	ND	6.4	16.6	ND	17	2.7
Mar-2008	2.2	2.2	ND	ND	7.48	ND	ND	4.8	14.8	2.92	11	2.8
Sep-2008	2.9	2.9	0.22	ND	2.61	0.26	ND	4.5	14.6	ND	23	3
Mar-2009	2.6	2.6	ND	ND	2.69	0.3	ND	4.3	16.7	2.38	ND	2.97
Oct-2009	2.6	2.6	ND	ND	2.59	0.24	ND	4.5	15.5	ND	14	2.66
Apr-2010	2.5	2.5	ND	ND	2.98	0.22	ND	3.7	16.4	ND	54	3.1
Oct-2010	2.3	2.3	ND	ND	2.97	0.2	ND	4.8	12.2	ND	16	3.24
Apr-2011	2.6	2.6	ND	ND	2.55	0.26	ND	4.4	16.2	ND	16	2.8
Sep-2011	2.8	2.8	ND	ND	2.59	0.26	ND	4.6	16.2	ND	ND	3.57
Mar-2012	2.6	2.6	ND	ND	2.77	0.26	ND	4.5	21.3	ND	ND	2.68
Sep-2012	2.28	2.28	ND	ND	2.81	0.246	ND	3.9	16.3	ND	36	3.26
Mar-2013	3.08	3.08	0.0641	ND	2.94	0.253	ND	5	16.1	0.742 J	16	3.25
Oct-2013	2.76	2.76	ND	ND	2.89	0.246	ND	3.1	15.8	0.63 J	ND	3.12
Mar-2014	2.72	2.72	ND	18	2.89	0.251	ND	5.2	16.6	0.725 J	ND	3.08

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-17A***										
Oct-2014	*ND*	*ND*	*ND*	*ND*	3.23	0.197	*ND*	4.7	16	*ND*	*ND*	3.14
Apr-2015	3.72	3.72	*ND*	*ND*	2.93	0.214	*ND*	3.8	16.6	*ND*	*ND*	3.26
Nov-2015	*ND*	*ND*	*ND*	*7 J*	2.99	0.223	*ND*	5.2	56.1	*ND*	*23 J*	3.73
May-2016	*ND*	*ND*	*ND*	*ND*	2.97	0.233	*ND*	5.3	26.6	*ND*	*12 J*	3.4
Oct-2016	*ND*	*ND*	*ND*	*6 J*	2.87	*NA*	*NA*	5.3	24.2	*0.922 J*	*23 J*	3
May-2017	*ND*	*ND*	*ND*	*ND*	2.75	0.255	*ND*	4.9	26.9	*ND*	*ND*	3.1
Oct-2017	*ND*	*ND*	*0.0677 J*	*ND*	2.84	0.221	*ND*	4.9	30.4	*ND*	*15 J*	3.1
May-2018	*2 J*	*ND*	*ND*	*ND*	3.1	*ND*	*ND*	4.4	24.4	*ND*	60	*3.2 J*
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	3	0.18	*ND*	4.64	19.4	*ND*	*ND*	*3.2 J*
May-2019	*ND*	*NA*	*ND*	*ND*	*ND*	0.17	*ND*	4.63	15.4	*ND*	*ND*	*ND*
Oct-2019	*2.5 JH1*	*NA*	*ND*	*ND*	*2.6 J*	0.2	*ND*	4.53	20.6	*ND*	38	3.5
May-2020	*ND*	*NA*	*ND*	*ND*	*2.7 J*	0.19	*ND*	4.4	20.7	*ND*	*ND*	3.5
Oct-2020	*ND*	*NA*	*ND*	*ND*	*2.8 J*	0.21	*ND*	4.48	19.4	*ND*	*ND*	3.4
Apr-2021	*ND*	*NA*	*ND*	*ND*	*2.9 J*	0.17	*ND*	4.86	22.4	*ND*	*ND*	3.4
Oct-2021	*4 J4c*	*NA*	*ND*	*ND*	*2.4 J*	0.25	*ND*	5.01	51.9	*ND*	*ND*	*3.28 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17A***													
Nov-1993	NA	ND	ND	NA	ND	0.46	NA	ND	NA	ND	0.37	0.08	ND	0.32	NA
Apr-1994	NA	ND	ND	NA	ND	0.76	NA	ND	NA	ND	0.24	0.93	ND	0.46	NA
Apr-1995	ND	ND	0.8	ND	ND	0.27	NA	ND	ND	ND	0.03	ND	ND	0.33	NA
Oct-1996	ND	ND	0.013	ND	ND	0.65	0.61	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	**0.007**	ND	0.025	ND	ND	1.4	0.55	ND	ND	ND	ND	ND	ND	0.66	ND
Oct-1997	ND	ND	0.011	ND	ND	0.646	0.542	ND	ND	ND	0.115	ND	ND	0.338	0.279
Apr-1998	ND	ND	0.01	ND	ND	0.648	0.608	ND	ND	ND	0.097	ND	ND	0.341	0.315
Apr-1999	ND	ND	0.01	ND	ND	0.686	0.638	ND	ND	ND	0.196	ND	ND	0.369	0.34
Oct-1999	ND	ND	0.01	ND	ND	0.668	0.619	ND	ND	ND	ND	ND	ND	0.36	0.335
Apr-2000	ND	ND	ND	ND	ND	0.699	0.628	ND	ND	ND	0.361	ND	ND	0.346	0.317
Oct-2000	ND	ND	ND	ND	ND	0.722	0.682	ND	ND	ND	ND	ND	ND	0.366	0.347
Apr-2001	ND	ND	ND	ND	ND	0.699	NA	ND	ND	ND	ND	NA	ND	0.366	NA
Sep-2001	ND	ND	ND	ND	ND	0.675	0.677	ND	ND	ND	0.092	ND	ND	0.358	0.347
Mar-2002	ND	ND	0.011	ND	ND	0.661	0.662	ND	ND	ND	ND	ND	ND	0.348	0.349
Sep-2002	ND	ND	0.011	ND	ND	0.631	0.619	ND	ND	ND	0.067	ND	ND	0.341	0.337
Mar-2003	ND	ND	ND	ND	ND	0.657	0.621	ND	ND	ND	ND	ND	ND	0.368	0.341
Oct-2003	ND	ND	0.011	ND	ND	0.979	0.622	ND	ND	ND	0.086	ND	ND	0.401	0.349
Apr-2004	ND	ND	ND	ND	ND	0.723	0.711	ND	ND	ND	0.166	ND	ND	0.385	0.369
Oct-2004	ND	ND	ND	ND	ND	0.649	0.643	ND	ND	ND	ND	ND	ND	0.347	0.354
Apr-2005	ND	ND	0.011	ND	ND	0.674	0.664	ND	ND	ND	ND	ND	ND	0.367	0.36
Oct-2005	ND	ND	0.011	ND	ND	0.676	0.645	ND	ND	ND	ND	ND	ND	0.334	0.319

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17A***													
Mar-2006	ND	ND	ND	ND	ND	0.373	0.356	ND	ND	ND	ND	ND	ND	0.293	0.291
Sep-2006	ND	ND	ND	ND	ND	0.619	0.614	ND	ND	ND	ND	ND	ND	0.333	0.327
Mar-2007	ND	ND	ND	ND	ND	0.617	0.599	ND	ND	ND	ND	ND	ND	0.327	0.323
Sep-2007	ND	ND	ND	ND	ND	0.568	0.55	ND	ND	ND	ND	ND	ND	0.312	0.308
Mar-2008	ND	ND	0.01	ND	ND	0.603	0.606	ND	ND	ND	ND	ND	ND	0.313	0.316
Sep-2008	ND	ND	0.011	ND	ND	0.629	0.62	ND	ND	ND	ND	ND	ND	0.35	0.334
Mar-2009	ND	ND	ND	ND	ND	0.663	0.594	ND	ND	ND	ND	ND	ND	0.317	0.306
Oct-2009	ND	ND	ND	ND	ND	0.566	0.564	ND	ND	ND	ND	ND	ND	0.303	0.325
Apr-2010	ND	ND	ND	ND	ND	0.695	0.49	ND	ND	ND	ND	ND	ND	0.341	0.298
Oct-2010	ND	ND	ND	ND	ND	0.681	0.61	ND	ND	ND	ND	0.11	ND	0.373	0.349
Apr-2011	ND	ND	0.01	ND	ND	0.619	0.578	ND	ND	ND	ND	ND	ND	0.326	0.323
Sep-2011	ND	ND	ND	ND	ND	0.756	0.745	ND	ND	ND	ND	ND	ND	0.408	0.364
Mar-2012	ND	ND	0.011	ND	0.004	0.476	0.456	ND	0.016	0.029	ND	ND	ND	0.363	0.327
Sep-2012	ND	ND	0.0106	0.00024 J	ND	0.714	0.707	0.0012 J	0.0033 J	0.0019 J	0.0251 J	0.0327 J	ND	0.358	0.354
Mar-2013	ND	ND	0.0105	0.000213 J	ND	0.77	0.725	0.0017 J	0.0034 J	0.0018 J	0.0127 J	0.0068 J	0.0016 J	0.323	0.294
Oct-2013	ND	ND	0.0106	ND	ND	0.755	0.729	0.0024 J	0.0029 J	0.0017 J	ND	ND	ND	0.3	0.317
Mar-2014	0.000468 J	ND	0.0096 J	0.000304 J	ND	0.642	0.537	0.0012 J	0.0028 J	0.0025 J	0.0127 J	0.0046 J	ND	0.358	0.286
Oct-2014	0.000907 J	ND	0.0105	0.000251 J	ND	0.689	0.703	0.000956 J	0.0031 J	0.0017 J	0.0108 J	ND	ND	0.345	0.351
Apr-2015	0.000929 J	ND	0.0108	0.000254 J	ND	0.705	0.702	0.000605 J	0.0033 J	0.0017 J	0.011 J	0.0739	ND	0.365	0.357
Nov-2015	0.000479 J	ND	0.0113	0.000303 J	ND	0.854	0.817	0.000597 J	0.0033 J	0.0017 J	ND	0.0179 J	ND	0.389	0.389
May-2016	ND	ND	0.0108	0.00027 J	ND	0.725	0.626	0.0011 J	0.0029	0.0016 J	ND	ND	ND	0.381	0.347
Oct-2016	ND	ND	0.0097	0.00026 J	ND	0.653	0.688	ND	0.0028	0.0015 J	ND	ND	ND	0.335	0.356
May-2017	ND	ND	0.0108	0.00027 J	ND	0.666	0.649	0.0017 J	0.0031	0.0016 J	ND	ND	ND	0.354	0.35
Oct-2017	ND	ND	0.0095	0.00024 J	ND	0.673	0.699	0.0013 J	0.003	0.0016 J	ND	ND	ND	0.339	0.327

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17A***													
May-2018	*0.00004 J*	*ND*	0.011	*0.00027 J*	*0.000032 J*	*0.71 J*	*0.74 J*	*0.0025 J*	0.0035	*0.002 J*	0.028	*0.011 J*	*0.000043 JB*	*0.35 J*	*0.38 J*
Nov-2018	*ND*	*ND*	0.011	0.0003	*0.000034 J*	*0.7 J*	*0.7 J*	0.015	0.0065	0.0024	0.13	0.11	*0.000027 J*	*0.36 J*	*0.36 J*
May-2019	*ND*	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	0.017	0.0068	0.0022	0.13	0.094	*ND*	*ND*	*ND*
Oct-2019	*0.00011 J*	*ND*	0.01	*0.00027 J*	*0.00014 J*	0.76	*0.72 J*	*0.0062 J*	0.0032	*0.0019 J*	*0.03 J*	0.022	*ND*	0.39	*0.37 J*
May-2020	*0.000053 J*	*ND*	0.01	*0.00022 J*	*ND*	0.75	*0.72 J*	0.01	0.0043	0.0036	*0.055 J*	0.035	*ND*	0.39	*0.38 JB*
Oct-2020	*ND*	*ND*	*0.0087 J*	*ND*	*ND*	0.75	*0.72 J*	*0.0058 J*	0.0033	*ND*	*0.07 JB*	0.022	*ND*	0.37	*0.38 J*
Apr-2021	*ND*	*ND*	0.012	*0.00028 J*	*ND*	*0.75 J*	*0.72 J*	*0.0033 J*	*0.0035 J*	*0.0032 J*	*ND*	*ND*	*ND*	0.38	0.4
Oct-2021	*ND*	*ND*	0.011	*0.00021 J*	*ND*	0.71	0.77	0.0058	0.0049	*0.0022 J*	0.061	*0.031 J*	*ND*	*0.37 J*	*0.39 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-17A*												
Nov-1993	ND	NA	ND	NA	0.49	NA	ND	NA	1.2	NA	NA	NA	ND
Apr-1994	0.01	NA	ND	NA	0.57	NA	ND	NA	1.39	NA	NA	NA	0.19
Apr-1995	ND	NA	ND	ND	0.59	NA	ND	ND	0.96	NA	ND	ND	0.02
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	1.8	1.7	ND	ND	0.054
Apr-1997	0.011	ND	ND	0.044	1.9	1.4	ND	ND	1.2	1.6	ND	ND	0.065
Oct-1997	ND	ND	NA	ND	ND	ND	ND	ND	0.99	0.658	ND	ND	0.012
Apr-1998	ND	0.023	NA	ND	0.889	0.711	ND	ND	1.13	1.17	ND	ND	ND
Apr-1999	ND	ND	NA	ND	ND	ND	ND	ND	1.22	1.1	ND	ND	ND
Oct-1999	ND	ND	NA	ND	ND	ND	ND	ND	1.21	1.13	ND	ND	ND
Apr-2000	ND	ND	NA	ND	ND	ND	ND	ND	1.11	1.07	ND	ND	0.011
Oct-2000	ND	ND	NA	ND	0.771	0.842	ND	ND	1.35	1.15	ND	ND	ND
Apr-2001	ND	NA	NA	ND	1.05	NA	ND	ND	1.19	NA	ND	ND	ND
Sep-2001	ND	ND	NA	ND	ND	ND	ND	ND	1.16	1.14	ND	ND	ND
Mar-2002	ND	ND	NA	ND	ND	ND	ND	ND	1.2	1.15	ND	ND	ND
Sep-2002	ND	ND	NA	ND	0.837	ND	ND	ND	1.17	1.15	ND	ND	ND
Mar-2003	ND	ND	NA	ND	ND	ND	ND	ND	1.16	1.1	ND	ND	ND
Oct-2003	ND	ND	NA	ND	1.3	ND	ND	ND	2.06	1.12	ND	ND	0.012
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	1.18	1.22	ND	ND	ND
Oct-2004	ND	ND	ND	ND	0.83	ND	ND	ND	1.28	1.24	ND	ND	ND
Apr-2005	ND	ND	ND	ND	0.65	0.59	ND	ND	1.18	1.14	ND	ND	ND
Oct-2005	ND	ND	ND	ND	0.602	0.607	ND	ND	1.09	1.03	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	0.859	0.818	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-17A***												
Sep-2006	ND	ND	ND	ND	0.526	0.514	ND	ND	1.03	1.03	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	1.01	0.996	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	0.355	ND	ND	1.08	1.01	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.53	0.549	ND	ND	1.07	1.07	ND	ND	ND
Sep-2008	ND	ND	ND	ND	0.525	ND	ND	ND	1.13	1.08	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.07	1.04	ND	ND	0.018
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	0.995	0.944	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.2	1.04	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.2	1.08	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.03	1.01	ND	ND	ND
Sep-2011	ND	ND	ND	ND	0.517	ND	ND	ND	1.3	1.27	ND	ND	ND
Mar-2012	0.016	ND	ND	0.024	0.521	ND	ND	ND	1.18	1.12	ND	0.03	0.011
Sep-2012	0.0064 J	0.006 J	ND	0.0052 J	0.481 J	0.474 J	ND	ND	1.16	1.15	0.000259 J	ND	0.0074 J
Mar-2013	0.0065 J	0.0057 J	0.000048 J	0.0053 J	0.421 J	0.394 J	ND	ND	1.05	0.984	ND	ND	0.0197
Oct-2013	0.0057 J	0.0058 J	ND	0.0052 J	0.427 J	0.454 J	ND	ND	1.05	1.13	ND	ND	0.0169
Mar-2014	0.0056 J	0.0047 J	ND	0.0046 J	0.494 J	0.512	ND	ND	1.05	1.1	0.000376 J	ND	0.0071 J
Oct-2014	0.0059 J	0.0061 J	ND	0.0051 J	0.468 J	0.474 J	ND	ND	1.26	1.29	0.0012 J	ND	0.0088 J
Apr-2015	0.0063 J	0.0065 J	ND	0.0052 J	0.507	0.492 J	0.000917 J	ND	1.29	1.28	ND	ND	0.0093 J
Nov-2015	0.0065 J	0.0068 J	ND	0.0052 J	0.526	0.527	ND	ND	1.34	1.39	0.000182 J	ND	0.0081 J
May-2016	0.0058	0.0057	ND	0.0049	0.504	0.465	ND	ND	1.26	1.13	ND	ND	0.0083 J,B
Oct-2016	0.0056	0.0062 J+	ND	0.0048	0.439	0.507	ND	ND	1.13	1.22	ND	ND	0.0063 J
May-2017	0.0059	0.006	ND	0.0054	0.486	0.49	ND	ND	1.1	1.12	ND	ND	0.0066 J
Oct-2017	0.0062	0.0053	ND	0.0057	0.444	0.464	ND	ND	1.05	1.09	ND	ND	0.0059 J
May-2018	0.0064	0.0056	ND	0.0086	ND	ND	ND	ND	1.5 J	1.2 J	ND	0.0039	0.0077 B

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-17A***												
Nov-2018	0.0083	0.0069	*ND*	0.025	*ND*	*ND*	*0.00012 J*	*ND*	*1.1 J*	*1.2 J*	*ND*	0.0023	0.0098
May-2019	0.013	0.0073	*ND*	0.027	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.014
Oct-2019	0.0073	0.0065	*ND*	0.0074	*ND*	*ND*	*ND*	*ND*	*ND*	*1.4 J*	*ND*	0.0073	0.012
May-2020	0.009	0.0063	*ND*	0.013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0099	0.0073
Oct-2020	0.0068	0.0062	*ND*	0.008	*ND*	*ND*	*ND*	*ND*	*1.3 J*	*ND*	*ND*	*0.00063 J*	*ND*
Apr-2021	0.0068	0.006	*ND*	*0.0081 J*	*0.49 J*	0.5	*ND*	*ND*	1.2	1.2	*ND*	*ND*	*0.0058 J*
Oct-2021	0.0068	0.0069	*ND*	0.013	*0.44 J*	*0.46 J*	*ND*	*ND*	1.2	1.4 B	*ND*	*ND*	0.0061

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	22	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17A*																
Feb-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17A*																
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.2 J*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.5 B	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17A***															
Feb-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17A***															
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-17A*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	NA
Feb-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17A***															
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.5 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1 BCH	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-21***											
Nov-1993	ND	ND	0.2	ND	14.9	0.8	0.2	4.76	116.2	19.6	34	12.8
Apr-1994	ND	ND	0.2	ND	14.5	1	ND	4.47	126	21.9	50	17.15
Apr-1995	ND	ND	ND	ND	17.4	0.9	ND	4.4	125	23.9	44	14.5
Apr-1997	ND	ND	ND	22	15	0.62	ND	NA	NA	22	71	11
Oct-1997	ND	ND	0.2	ND	15	0.382	ND	5.58	117.4	24.5	80	20
Apr-1998	ND	ND	ND	ND	14.8	0.52	ND	4.61	124.2	19.8	69	31
Apr-1999	ND	ND	0.19	ND	17.9	0.392	ND	4.03	125.6	23.3	83	22
Oct-1999	ND	ND	0.06	ND	14.4	0.374	ND	4.5	152.3	19.5	79	19
Apr-2000	ND	ND	ND	ND	19.3	0.95	ND	5.01	113	32.8	82	21
Oct-2000	ND	NA	ND	ND	12.1	0.37	ND	6.12	136.3	23.2	83	21.3
Apr-2001	ND	NA	ND	ND	15.4	0.785	ND	NA	NA	27.4	84	23
Sep-2001	ND	ND	ND	ND	16.8	1.83	ND	4.45	150	28.5	87	23.9
Mar-2002	ND	ND	ND	ND	19.1	0.896	ND	4.5	155	28.4	89	24.4
Sep-2002	ND	ND	ND	ND	20	1.04	ND	4.5	152.3	31.1	73	21.1
Mar-2003	ND	ND	ND	ND	22.8	1.01	ND	4.4	153.8	29.4	103	23.7
Oct-2003	ND	ND	ND	ND	12.8	1.69	ND	4.3	128.3	20.8	78	20.2
Apr-2004	ND	ND	ND	ND	16.1	0.575	ND	4.3	120.1	28.4	77	22.9
Oct-2004	ND	ND	ND	ND	11.3	0.504	ND	3.7	107.7	25.9	71	19
Apr-2005	ND	ND	ND	11	16.8	0.74	ND	4.4	108.9	24.1	85	21.2
Oct-2005	ND	ND	ND	ND	13.4	0.48	ND	3.9	103.8	32.5	74	17.3
Mar-2006	ND	ND	ND	ND	16	0.53	ND	4.5	125.8	36.2	71	19.4
Sep-2006	ND	ND	ND	ND	16	0.46	ND	4.3	119.1	28.6	75	20.1
Mar-2007	ND	ND	0.46	ND	16.5	0.51	ND	4.2	111.2	30.5	83	19.4
Sep-2007	ND	ND	ND	ND	16.4	0.96	ND	4.5	103.7	30.4	94	17.4
Mar-2008	ND	ND	0.47	ND	23.1	ND	ND	4.1	118.5	33.3	91	20.7
Sep-2008	ND	ND	ND	ND	21.8	0.74	ND	4.3	121.5	34.9	88	19
Mar-2009	ND	ND	ND	ND	23.7	0.89	ND	4	132.3	33.8	97	20.8
Oct-2009	ND	ND	ND	ND	29.7	0.83	ND	4.1	133	32.4	115	19.5
Apr-2010	ND	ND	ND	ND	30.5	1	ND	3.6	142.7	33	58	20.8
Oct-2010	ND	ND	ND	ND	21.4	0.88	ND	3.6	114.2	26.4	77	20.2
Apr-2011	2.9	2.9	ND	ND	23.9	0.75	ND	3.9	144.2	21	89	19.5
Sep-2011	ND	ND	0.26	ND	26.3	1.05	ND	4.5	126.1	27.2	95	20.7
Mar-2012	ND	ND	ND	ND	22	0.68	ND	3.6	125.4	30	100	20.3
Sep-2012	ND	ND	ND	ND	19.2	0.654	ND	4.2	115.1	29.6	97	20.1
Mar-2013	0.52 J	0.52 J	ND	ND	29.9	0.931	ND	4.3	147.6	26.8	102	18.5
Oct-2013	0.4	0.4	ND	ND	22.1	0.731	ND	3.2	103.7	26.6	86	19.6
Mar-2014	ND	ND	ND	10	24.4	0.754	ND	4.5	146.1	33.8	92	20.8

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-21***										
Oct-2014	*ND*	*ND*	*ND*	*ND*	17.2	0.523	*ND*	4.3	113.2	28.7	50	19.2
Apr-2015	0.96	0.96	*ND*	*ND*	23.7	0.887	*ND*	3.9	123.8	29.6	78	22.5
Nov-2015	*ND*	*ND*	*ND*	*8 J*	19.1	0.769	*ND*	4.5	156.8	27.4	62	22.8
May-2016	*ND*	*ND*	*ND*	*6 J*	22	1	*ND*	4.5	216	30.8	78	22.5
Oct-2016	*ND*	*ND*	*ND*	*ND*	21.7	*NA*	*NA*	4.5	181.9	24.2	93	21.1
May-2017	*ND*	*ND*	*ND*	*5 J*	24	1.27	*ND*	4.4	227	27	98	22
Oct-2017	*ND*	*ND*	*ND*	*7 J*	26.9	1.63	*ND*	4.5	262	30.4	89	23.8
May-2018	*ND*	*ND*	*ND*	*7.9 J*	32	0.46	*ND*	4.2	246	26.9	80	28.9
Nov-2018	*ND*	*ND*	*ND*	*ND*	32	2.2	*ND*	4.26	170.1	24.9	98	27.4
May-2019	*ND*	*NA*	*ND*	*ND*	22.8	1.6	*ND*	3.96	116.5	23.7	96	25.3
Oct-2019	*ND*	*NA*	*ND*	*6 J*	17.5	1.4	*ND*	4.06	138.7	24.3	73	22.8
May-2020	*ND*	*NA*	*ND*	*ND*	28.2	1.9	*ND*	4.1	158.5	26.6	74	27
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	28.1	2	*ND*	4.13	163.4	29.2	81	26.3
Apr-2021	*ND*	*NA*	*ND*	*ND*	23	1.9	*ND*	4.33	184.6	26.7	78	25.6
Oct-2021	*ND*	*NA*	*ND*	*6.1 J*	17.1	1.5	*ND*	4.44	196.8	26	84	23

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-21***													
Nov-1993	NA	ND	ND	NA	ND	2	NA	ND	NA	ND	0.03	0.12	ND	1.9	NA
Apr-1994	NA	ND	ND	NA	ND	2.91	NA	ND	NA	ND	0.24	ND	ND	2.4	NA
Apr-1995	ND	ND	0.6	ND	ND	2	NA	ND	ND	ND	0.35	0.05	ND	2.3	NA
Oct-1996	ND	ND	0.12	ND	ND	4.5	4.9	ND	ND	ND	ND	ND	ND	2	2
Apr-1997	0.006	ND	0.11	ND	ND	4	4.1	ND	ND	ND	ND	ND	ND	1.8	2.1
Oct-1997	ND	ND	0.114	ND	ND	3.99	4.02	ND	0.014	ND	ND	ND	ND	2.07	2.09
Apr-1998	ND	ND	0.194	ND	ND	6.7	4.7	ND	0.019	ND	0.246	ND	ND	3.43	2.38
Apr-1999	ND	ND	0.13	ND	ND	4.66	4.35	ND	0.012	ND	0.179	ND	ND	2.39	2.24
Oct-1999	ND	ND	0.127	ND	ND	4.3	3.98	ND	0.014	0.031	0.068	ND	ND	2.25	2.08
Apr-2000	ND	ND	0.115	ND	ND	4.75	4.55	ND	0.012	ND	ND	ND	ND	2.3	2.2
Oct-2000	ND	ND	0.106	ND	ND	4.9	4.83	ND	0.012	ND	0.101	ND	ND	2.21	2.18
Apr-2001	ND	ND	0.115	ND	ND	5.22	NA	ND	0.014	ND	0.166	NA	ND	2.39	NA
Sep-2001	ND	ND	0.121	ND	ND	5.4	5.39	ND	0.012	ND	0.079	ND	ND	2.52	2.45
Mar-2002	ND	ND	0.11	ND	ND	5.71	5.39	ND	0.013	ND	0.078	ND	ND	2.47	2.43
Sep-2002	ND	ND	0.119	ND	ND	4.72	4.76	ND	0.01	ND	0.091	ND	ND	2.26	2.27
Mar-2003	ND	ND	0.123	ND	ND	5.42	5.3	ND	0.012	ND	ND	ND	ND	2.49	2.41
Oct-2003	ND	ND	0.105	ND	ND	4.72	4.45	ND	ND	ND	0.065	ND	ND	2.04	2
Apr-2004	ND	ND	0.105	ND	ND	5.53	5.53	ND	ND	ND	0.123	ND	ND	2.21	2.19
Oct-2004	ND	ND	0.102	ND	ND	4.2	4.19	ND	0.011	ND	0.128	ND	ND	2.06	2.05
Apr-2005	ND	ND	0.112	ND	ND	4.84	4.6	ND	ND	ND	0.122	ND	ND	2.21	2.17
Oct-2005	ND	0.002	0.099	ND	ND	4.04	3.74	ND	ND	ND	2.38	ND	ND	1.74	1.66

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-21***													
Mar-2006	ND	ND	0.103	ND	ND	4.46	4.36	ND	ND	ND	ND	ND	ND	2.01	1.94
Sep-2006	ND	ND	0.097	ND	ND	4.77	4.76	ND	0.011	ND	ND	ND	ND	1.98	1.99
Mar-2007	ND	ND	0.092	ND	ND	4.68	4.76	ND	0.012	ND	ND	ND	ND	1.86	1.87
Sep-2007	ND	0.002	0.084	ND	ND	4.13	4.07	ND	ND	ND	ND	ND	ND	1.72	1.71
Mar-2008	ND	ND	0.101	ND	ND	4.85	4.35	ND	0.012	ND	0.074	ND	ND	2.09	1.84
Sep-2008	ND	ND	0.086	ND	ND	4.38	4.37	ND	0.011	ND	0.067	ND	ND	1.97	1.96
Mar-2009	ND	ND	0.096	ND	ND	4.95	4.8	ND	ND	ND	0.078	ND	ND	2.05	2.01
Oct-2009	ND	ND	0.089	ND	ND	4.65	4.9	ND	ND	ND	0.898	ND	ND	1.91	2.01
Apr-2010	ND	ND	0.087	ND	ND	5.06	4.92	ND	0.01	ND	0.11	ND	ND	1.99	1.98
Oct-2010	ND	ND	0.086	ND	ND	4.73	4.72	ND	0.013	ND	1.28	ND	ND	2.03	2
Apr-2011	ND	ND	0.09	ND	ND	4.79	4.7	ND	ND	ND	0.165	ND	ND	1.83	1.82
Sep-2011	ND	ND	0.092	ND	ND	4.9	4.86	ND	ND	ND	ND	ND	ND	2.07	2.02
Mar-2012	ND	ND	0.088	ND	ND	4.69	4.62	ND	ND	ND	ND	ND	ND	2.08	2.05
Sep-2012	ND	ND	0.0898	0.000585 J	0.000276 J	4.72	4.71	0.0024 J	0.0096 J	0.0024 J	0.0469 J	0.0228 J	ND	2.03	1.98
Mar-2013	ND	ND	0.0813	0.000462 J	0.000305 J	4.47	5.23	0.0017 J	0.009 J	0.0025 J	0.0121 J	0.007 J	0.0013 J	1.78	2.01
Oct-2013	ND	ND	0.0899	0.000545 J	0.000395 J	4.8	4.87	0.0048 J	0.0098 J	0.0024 J	ND	ND	ND	1.85	1.94
Mar-2014	0.000344 J	0.00009 J	0.0884	0.000622 J	0.000346 J	4.93	4.93	0.0011 J	0.0089 J	0.0024 J	0.009 J	0.0072 J	ND	2.06	2.11
Oct-2014	0.000961 J	0.000473 J	0.0834	0.000457 J	0.000301 J	4.62	4.63	0.0016 J	0.0089 J	0.0023 J	0.0101 J	0.0082 J	ND	1.86	1.86
Apr-2015	0.000744 J	ND	0.0981	0.000598 J	0.000275 J	5.42	5.47	0.000653 J	0.0102	0.0025 J	ND	0.0108 J	ND	2.19	2.25
Nov-2015	0.000487 J	0.000599 J	0.0931	0.000635 J	0.000341 J	5.65	5.69	0.000609 J	0.0091 J	0.0024 J	ND	ND	ND	2.12	2.14
May-2016	ND	0.00086 J	0.0875	0.00053 J	0.00037 J	5.47	5.38	0.00086 J	0.0103	0.0025 J	ND	ND	ND	2.15	2.18
Oct-2016	ND	0.0016 J	0.0821	0.00049 J	0.00031 J	5.02	4.84	0.00085 J	0.01	0.0028 J	ND	ND	ND	2.08	2.04
May-2017	ND	0.0013 J	0.0866	0.0005 J	0.00024 J	5.27	5.76	0.0015 J	0.0088	0.0026 J	ND	ND	ND	2.14	2.26
Oct-2017	ND	0.00099 J	0.087	0.00053 J	0.00031 J	5.68	6.29	0.0014 J	0.0103	0.0026 J	ND	ND	ND	2.34	2.53

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-21***													
May-2018	*0.000059 J*	*ND*	0.076	0.00053	*0.00053 J*	7.2	6.8	*0.0019 JB*	0.0092	*0.00069 J*	*ND*	*ND*	*0.00011 JB*	2.7	2.5
Nov-2018	*ND*	*ND*	0.071	0.00054	*0.00042 J*	6.8	6.8	*0.0054 J*	0.0076	0.0024	0.04	*0.016 J*	*0.000092 J*	2.5	2.5
May-2019	*ND*	*ND*	0.068	0.00046	*ND*	6.3	6.1	*ND*	0.004	*ND*	*ND*	*ND*	*ND*	2.4	2.2
Oct-2019	*0.00011 J*	*ND*	0.074	0.00043	*0.00048 J*	5.6	5.4	*0.0058 J*	0.0084	0.0024	*0.014 J*	*0.0098 J*	*0.000069 J*	2.1	2
May-2020	*0.000068 J*	*ND*	0.084	0.00053	*0.00038 J*	6.6	6.4	*0.0052 J*	0.0093	*ND*	*0.015 J*	*0.012 J*	*ND*	2.6	2.5
Oct-2020	*ND*	*ND*	0.068	*0.00041 J*	*ND*	6.5	6.3	*0.0049 J*	0.0077	*ND*	*ND*	*ND*	*ND*	2.5	2.4
Apr-2021	*ND*	*ND*	0.077	*0.00054 J*	*ND*	6.4	6.5	*0.0011 J*	0.0083	*0.0035 J*	*ND*	*ND*	*ND*	2.3	2.4
Oct-2021	*0.0001 J*	*0.00032 J*	0.077	*0.00044 J*	*0.000081 J*	5.8	6.1	*0.0012 J*	0.0086	*0.0023 J*	*ND*	*0.021 JB*	*0.000055 J*	2.1	2.2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-21***												
Nov-1993	0.17	NA	ND	NA	2	NA	ND	NA	3	NA	NA	NA	0.04
Apr-1994	0.17	NA	ND	NA	2.59	NA	ND	NA	11.2	NA	NA	NA	0.09
Apr-1995	0.16	NA	ND	ND	2.2	NA	ND	ND	9.3	NA	ND	ND	0.08
Oct-1996	0.12	0.13	NA	ND	ND	ND	ND	ND	9.8	9.9	ND	ND	0.18
Apr-1997	0.13	0.13	ND	ND	3.7	3.1	ND	ND	8	9.1	0.002	ND	0.23
Oct-1997	0.149	0.151	NA	0.013	1.81	2.46	ND	ND	8.32	8.35	ND	ND	0.051
Apr-1998	0.22	0.153	NA	0.011	3.52	2.33	ND	ND	16	10.9	ND	ND	0.084
Apr-1999	0.158	0.149	NA	ND	1.58	2.01	ND	ND	11.5	10.8	ND	ND	0.05
Oct-1999	0.155	0.146	NA	0.018	2.71	2.75	ND	ND	10.8	9.99	ND	ND	0.062
Apr-2000	0.133	0.128	NA	ND	1.91	2.1	ND	ND	10.9	10.4	ND	ND	0.041
Oct-2000	0.134	0.131	NA	ND	2.3	1.94	ND	ND	10	9.79	ND	ND	0.039
Apr-2001	0.147	NA	NA	ND	3.52	NA	ND	ND	11.3	NA	ND	ND	0.044
Sep-2001	0.145	0.146	NA	ND	3.01	2.66	ND	ND	13.1	12.1	ND	ND	0.044
Mar-2002	0.137	0.139	NA	ND	3.65	3.48	ND	ND	14.2	13.1	ND	ND	0.047
Sep-2002	0.139	0.141	NA	ND	2.12	2.07	ND	ND	12.8	12.7	ND	ND	0.044
Mar-2003	0.147	0.145	NA	ND	2.47	2.14	ND	ND	13.4	12.7	ND	ND	0.045
Oct-2003	0.16	0.164	NA	ND	2.24	2.76	ND	ND	8.91	8.29	ND	ND	0.045
Apr-2004	0.154	0.152	ND	ND	2.12	2.14	ND	ND	10.3	10.7	ND	ND	0.043
Oct-2004	0.188	0.187	ND	ND	1.88	1.87	ND	ND	7.81	7.63	ND	ND	0.048
Apr-2005	0.175	0.176	ND	ND	2.21	1.86	ND	ND	10.5	9.96	ND	ND	0.053
Oct-2005	0.148	0.142	ND	ND	1.83	1.59	ND	ND	8.39	7.29	ND	0.013	0.044
Mar-2006	0.141	0.138	ND	ND	1.64	1.58	ND	ND	9.97	9.69	ND	ND	0.02

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-21***												
Sep-2006	0.154	0.156	ND	ND	1.79	1.82	ND	ND	9.83	9.95	ND	ND	0.039
Mar-2007	0.139	0.139	ND	ND	1.68	1.69	ND	ND	9.37	9.39	ND	ND	0.043
Sep-2007	0.137	0.137	ND	ND	1.42	1.33	ND	ND	8.11	8.01	ND	ND	0.05
Mar-2008	0.154	0.136	ND	ND	1.95	1.66	ND	ND	11.6	10.3	ND	ND	0.047
Sep-2008	0.137	0.136	ND	ND	1.63	1.6	ND	ND	11.7	11.6	ND	ND	0.038
Mar-2009	0.146	0.144	ND	ND	1.81	1.72	ND	ND	13.7	13.3	ND	ND	0.043
Oct-2009	0.135	0.141	ND	ND	1.56	1.5	ND	ND	14.6	14.9	ND	ND	ND
Apr-2010	0.132	0.131	ND	ND	1.71	1.66	ND	ND	17	16.8	ND	ND	0.038
Oct-2010	0.143	0.142	ND	ND	1.63	1.61	ND	ND	13	13.1	ND	ND	0.047
Apr-2011	0.127	0.124	ND	ND	1.35	1.29	ND	ND	14.2	14	ND	ND	0.049
Sep-2011	0.137	0.136	ND	ND	1.73	1.73	ND	ND	15.9	16	ND	ND	0.037
Mar-2012	0.13	0.128	ND	ND	1.6	1.57	ND	ND	13.3	13.3	ND	ND	0.036
Sep-2012	0.125	0.126	0.000024 J	0.0057 J	1.57	1.6	0.000692 J	ND	13.8	13.5	ND	ND	0.0393
Mar-2013	0.12	0.138	0.000061 J	0.0049 J	1.46	1.65	0.000602 J	ND	14.8	16.3	ND	ND	0.0415
Oct-2013	0.127	0.128	ND	0.0052 J	1.57	1.59	0.000675 J	ND	12.3	12.9	ND	0.002 J	0.0484
Mar-2014	0.111	0.113	ND	0.0043 J	1.66	1.69	ND	ND	13.1	13.4	ND	ND	0.033
Oct-2014	0.112	0.112	0.000023 J	0.0056 J	1.59	1.58	0.0028	ND	9.32	9.39	ND	ND	0.035
Apr-2015	0.133	0.135	ND	0.0051 J	1.71	1.77	0.0029	ND	12.9	13.2	ND	ND	0.0376
Nov-2015	0.124	0.127	ND	0.0048 J	1.73	1.74	0.0039	ND	11.1	11.2	0.000151 J	ND	0.0369
May-2016	0.123	0.125	ND	0.0048	1.75	1.75	ND	ND	13.4	14	ND	ND	0.04
Oct-2016	0.118	0.124	ND	0.0054	1.67	1.7	ND	ND	12.6	12.9	ND	ND	0.0371
May-2017	0.116	0.118	ND	0.0049	1.76	1.86	ND	ND	14.5	14.6	ND	ND	0.0347
Oct-2017	0.117	0.123	ND	0.005	1.9	2.07	ND	ND	13.3 J-	16.9	ND	ND	0.0361
May-2018	0.1	0.1	ND	0.00071 B	1.5 J	1.6 J	0.0013 J	ND	21.6	19.5	ND	0.0023	0.0066

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-21***												
Nov-2018	0.094	0.095	*ND*	0.0062	*2.1 J*	*2.1 J*	*0.00064 J*	*ND*	19.6	19.9	*ND*	0.002	0.026
May-2019	0.098	0.095	*ND*	0.0031	*ND*	*ND*	*ND*	*ND*	14.8	14.1	*ND*	*ND*	0.013
Oct-2019	0.11	0.1	*ND*	0.0054	*2.2 J*	*2 J*	*0.00062 J*	*ND*	14.2	12.6	*ND*	0.0075	0.036
May-2020	0.13	0.12	*ND*	0.0052	*2 J*	*2.1 J*	*ND*	*ND*	18	18	*ND*	0.0098	0.032
Oct-2020	0.13	0.11	*ND*	0.0039	*ND*	*1.9 J*	*ND*	*ND*	18.8	17.3	*ND*	0.016	0.025
Apr-2021	0.1	0.1	*ND*	*0.0036 J*	1.9	1.9	*ND*	*ND*	15.6	15.8	*ND*	*0.0008 J*	0.024
Oct-2021	0.1	0.11	*ND*	0.0044	1.7	1.8	*0.0016 J*	*ND*	13.5	14.4	*ND*	*ND*	0.028

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-21*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	25	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-21*																
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.3 J*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-21*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.5 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-21***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.5	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*0.6 J*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-21***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.44 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.37 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.39 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*0.49 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.36 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-21***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.416 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-21***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	1.4	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	0.7 J	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-21***															
Oct-2005	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*0.29 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.29 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-21***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.1 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.4 BCH	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-22***											
Nov-1993	5	5	0.2	ND	7.1	0.8	ND	5.44	40.4	2.6	ND	5.18
Apr-1994	ND	ND	0.1	ND	4.6	0.8	ND	5.28	172	ND	22	63.1
Apr-1995	ND	ND	ND	4	4	0.7	ND	4.6	29.3	2.6	15	2.9
Apr-1997	ND	ND	ND	ND	5	0.79	ND	NA	NA	ND	78	6.2
Oct-1997	ND	ND	0.2	ND	4.85	0.733	ND	5.98	51.3	ND	30	5
Apr-1998	ND	ND	ND	ND	5.12	0.93	ND	6.28	28.3	0.7	28	5.1
Apr-1999	ND	ND	0.5	ND	3.51	0.591	ND	4.62	29.6	ND	14	4.6
Oct-1999	ND	ND	0.09	ND	4.81	0.987	ND	4.86	39.5	ND	32	4.5
Apr-2000	ND	ND	ND	ND	2.96	ND	ND	5.11	29	ND	30	4.2
Oct-2000	ND	NA	ND	ND	5.77	1.08	ND	5.3	24.1	ND	32	6.57
Apr-2001	1.2	NA	ND	ND	5.47	0.561	ND	NA	NA	ND	35	6.5
Sep-2001	ND	ND	ND	ND	7.55	1.84	ND	4.93	28	ND	32	6.77
Mar-2002	2.1	2.1	ND	13	6.11	1.15	ND	4.9	36.5	ND	54	6.65
Sep-2002	ND	ND	ND	ND	6.2	0.93	ND	4.9	35.3	ND	62	6.75
Mar-2003	ND	ND	ND	ND	15.6	1.07	ND	4.8	38.1	ND	48	5.84
Oct-2003	ND	ND	ND	ND	5.15	0.783	ND	5	44.3	ND	17	6.29
Apr-2004	ND	ND	ND	ND	4.93	0.709	ND	4.6	31.5	1.54	31	4.98
Oct-2004	ND	ND	ND	ND	4.68	0.71	ND	4.9	32.6	ND	23	4.81
Apr-2005	ND	ND	ND	ND	5.01	0.76	ND	4.6	29.4	3.61	45	5.7
Oct-2005	1.7	1.7	ND	ND	5.4	0.78	ND	4.6	28.7	1.77	43	4.51
Mar-2006	1.9	1.9	ND	ND	5.16	0.77	ND	5.1	33.3	3.93	18	3.88
Sep-2006	1.7	1.7	ND	ND	5.05	0.75	ND	5.1	33.3	1.78	21	5.56
Mar-2007	1.7	1.7	ND	ND	5.32	0.81	ND	4.8	32.3	1.33	ND	5.04
Sep-2007	1.6	1.6	ND	ND	5.14	0.81	ND	6.1	32.7	1.28	47	4.9
Mar-2008	1.4	1.4	ND	ND	16.6	1.72	ND	4.4	33.5	4.72	13	4.84
Sep-2008	1.6	1.6	0.25	ND	5.79	0.86	ND	4.5	35.6	ND	23	5.3
Mar-2009	1.9	1.9	ND	ND	5.91	0.85	ND	4.5	36.7	1.58	31	5.11
Oct-2009	2	2	ND	ND	5.94	0.76	ND	4.1	34.8	1.38	14	5.39
Apr-2010	1.8	1.8	ND	ND	6.68	0.81	ND	3.7	38.4	2.68	70	5
Oct-2010	1.8	1.8	ND	ND	7.32	0.82	ND	4.2	38.7	1.61	23	6.5
Apr-2011	1.8	1.8	ND	ND	7.03	0.81	ND	4.3	41	1.66	42	5.8
Sep-2011	1.6	1.6	ND	ND	7.71	0.86	ND	4.5	39	1.24	23	6.37
Mar-2012	1.6	1.6	ND	ND	8.18	0.86	ND	3.9	42.8	2.3	53	6.54
Sep-2012	1.32	1.32	ND	ND	8.79	0.849	ND	4.1	43.1	3.6	29	6.8
Mar-2013	1.92	1.92	ND	ND	9.97	1.03	ND	4.7	49.4	1.19	31	7.32
Oct-2013	1.96 J	1.96 J	0.134 J	ND	9.55	0.986	ND	5.8	48.3	1.19	37	7.05
Mar-2014	1.88	1.88	ND	ND	10.2	0.904	ND	4.9	54.1	2.71	29	7.67

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-22***										
Oct-2014	*ND*	*ND*	*ND*	*ND*	12.3	0.952	*ND*	4.8	54.5	2.86	29	8.6
Apr-2015	1.92	1.92	*ND*	*ND*	14.3	1.21	*ND*	3.7	61.4	2.75	32	10.3
Nov-2015	*ND*	*ND*	*ND*	*6 J*	14.6	1.19	*ND*	4.8	98.9	3.48	37	10.4
May-2016	*ND*	*ND*	*ND*	*ND*	13.9	1.14	*ND*	4.9	102.6	2.63	36	9.2
Oct-2016	*ND*	*ND*	*ND*	*ND*	14.2	*NA*	*NA*	4.7	95.7	1.88	41	8.4
May-2017	*ND*	*ND*	*ND*	*ND*	14.9	1.11	*ND*	4.6	98.6	2.56	29	8.9
Oct-2017	2.8	2.8	*ND*	*7 J*	16.2	1.2	*ND*	4.7	116.5	4.97	50	11.8
May-2018	16 B	16	*ND*	*10.1 J*	15.2	0.48	*ND*	4.6	94.6	29.8	79	54.2
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	14.7	0.97	*ND*	4.56	70.6	*5.6 J*	*ND*	9.1
May-2019	*ND*	*NA*	*ND*	*ND*	21.6	1.2	*ND*	4.47	74.7	*ND*	57	12.7
Oct-2019	*ND*	*NA*	*ND*	*6 J*	22.4	1.3	*ND*	4.16	113.4	*ND*	53	14.9
May-2020	*ND*	*NA*	*ND*	*ND*	22	1.2	*ND*	4.11	98.1	*ND*	48	13
Oct-2020	*ND*	*NA*	*ND*	*ND*	21.1	1	*ND*	4.36	91.7	2.8	38	11.9
Apr-2021	*ND*	*NA*	*0.072 J*	*ND*	21.5	1.1	*ND*	4.59	103.4	*ND*	35	12.1
Oct-2021	*2 J3c*	*NA*	*ND*	*ND*	21.6	1.2	*ND*	4.67	154.6	*ND*	45	14

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22***													
Nov-1993	NA	ND	ND	NA	ND	0.82	NA	0.009	NA	ND	3.8	0.29	ND	0.76	NA
Apr-1994	NA	ND	ND	NA	ND	1.64	NA	ND	NA	ND	0.16	0.12	ND	0.68	NA
Apr-1995	ND	ND	0.9	ND	ND	0.41	NA	ND	ND	ND	ND	ND	ND	0.45	NA
Oct-1996	ND	ND	0.011	ND	ND	0.79	0.83	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	0.041	ND	ND	2.2	0.72	ND	0.023	ND	0.43	ND	ND	0.79	ND
Oct-1997	ND	ND	0.013	ND	ND	0.877	0.806	ND	ND	ND	0.656	ND	ND	0.49	0.465
Apr-1998	ND	ND	0.029	ND	ND	1.01	0.956	ND	ND	ND	1.7	ND	ND	0.613	0.506
Apr-1999	ND	ND	0.015	ND	ND	0.947	0.807	ND	ND	ND	0.482	ND	ND	0.546	0.502
Oct-1999	ND	ND	0.013	ND	ND	0.907	0.833	ND	ND	ND	ND	ND	ND	0.541	0.502
Apr-2000	ND	ND	0.011	ND	ND	0.81	0.773	ND	ND	ND	ND	ND	ND	0.529	0.495
Oct-2000	ND	ND	0.013	ND	ND	1.54	1.09	ND	ND	0.011	0.268	ND	ND	0.662	0.594
Apr-2001	ND	ND	0.02	ND	ND	1.46	NA	ND	ND	ND	2.25	NA	ND	0.686	NA
Sep-2001	ND	ND	0.014	ND	ND	1.42	1.11	ND	ND	ND	0.575	ND	ND	0.782	0.607
Mar-2002	ND	ND	0.016	ND	ND	1.49	1.09	ND	ND	ND	0.624	ND	ND	0.71	0.629
Sep-2002	ND	ND	0.016	ND	ND	1.59	1.08	ND	ND	ND	0.408	ND	ND	0.675	0.598
Mar-2003	ND	ND	0.015	ND	ND	1.21	1.1	ND	ND	ND	ND	ND	ND	0.686	0.636
Oct-2003	ND	ND	0.02	ND	ND	1.42	0.984	ND	ND	ND	1.14	ND	ND	0.668	0.612
Apr-2004	ND	ND	0.013	ND	ND	0.95	0.958	ND	ND	ND	ND	ND	ND	0.633	0.606
Oct-2004	ND	ND	0.013	ND	ND	0.878	0.886	ND	ND	ND	0.067	ND	ND	0.636	0.62
Apr-2005	ND	ND	0.018	ND	ND	1.22	0.874	ND	ND	ND	1.47	ND	ND	0.645	0.594
Oct-2005	ND	ND	0.013	ND	ND	0.911	0.862	ND	ND	ND	ND	ND	ND	0.544	0.534

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22***													
Mar-2006	ND	ND	0.01	ND	ND	0.736	0.66	ND	ND	ND	ND	ND	ND	0.496	0.486
Sep-2006	ND	ND	0.013	ND	ND	1.2	0.88	ND	ND	ND	ND	ND	ND	0.622	0.658
Mar-2007	ND	ND	0.015	ND	ND	0.931	0.874	ND	ND	ND	ND	ND	ND	0.661	0.64
Sep-2007	ND	ND	0.014	ND	ND	0.863	0.825	ND	ND	ND	ND	ND	ND	0.668	0.648
Mar-2008	ND	ND	0.015	ND	ND	0.936	0.846	ND	ND	ND	ND	ND	ND	0.608	0.617
Sep-2008	ND	ND	0.016	ND	ND	0.934	0.926	ND	ND	ND	ND	ND	ND	0.722	0.704
Mar-2009	ND	ND	0.014	ND	ND	0.913	0.893	ND	ND	ND	ND	ND	ND	0.688	0.666
Oct-2009	ND	ND	0.016	ND	ND	0.938	0.916	ND	ND	ND	ND	ND	ND	0.741	0.726
Apr-2010	ND	ND	0.014	ND	ND	0.878	0.881	ND	ND	ND	ND	ND	ND	0.684	0.688
Oct-2010	ND	ND	0.014	ND	ND	1.15	1.12	ND	ND	ND	ND	ND	ND	0.881	0.878
Apr-2011	ND	ND	0.018	ND	ND	1.04	1.01	ND	ND	ND	ND	ND	ND	0.768	0.754
Sep-2011	ND	ND	0.018	ND	ND	1.24	1.25	ND	ND	ND	ND	ND	ND	0.794	0.788
Mar-2012	ND	ND	0.019	ND	ND	1.12	1.13	ND	ND	ND	ND	ND	ND	0.908	0.902
Sep-2012	ND	ND	0.0187	0.000215 J	ND	1.23	1.26	ND	0.008 J	0.0037 J	0.0364 J	0.0396 J	ND	0.906	0.997
Mar-2013	ND	ND	0.0202	0.000232 J	ND	1.41	1.32	0.003 J	0.0088 J	0.0071 J	0.0383 J	0.0062 J	0.0016 J	0.923	0.759
Oct-2013	ND	ND	0.0223	0.000213 J	ND	1.4	1.46	0.0016 J	0.0087 J	0.004 J	ND	ND	ND	0.863	0.943
Mar-2014	ND	ND	0.0235	0.00026 J	0.000094 J	1.52	1.7	0.0027 J	0.0073 J	0.0054 J	0.073	0.0562	ND	0.94	1.08
Oct-2014	0.000768 J	ND	0.0281	0.000346 J	0.000097 J	1.55	1.62	0.0013 J	0.01	0.0051 J	0.0143 J	ND	ND	1.15	1.18
Apr-2015	0.000774 J	ND	0.0332	0.00028 J	0.00012 J	1.86	1.79	0.0012 J	0.0109	0.0058 J	0.0177 J	0.0262 J	ND	1.37	1.34
Nov-2015	0.000428 J	ND	0.0325	0.00035 J	0.000131 J	1.86	2.04	0.000665 J	0.0104	0.005 J	ND	ND	0.000458 J	1.41	1.38
May-2016	ND	ND	0.0304	0.0003 J	ND	1.56	1.78	ND	0.011	0.0051	ND	ND	ND	1.28	1.3
Oct-2016	ND	ND	0.0291	0.00026 J	ND	1.5	1.49	0.00075 J	0.0101	0.0052	ND	ND	ND	1.13	1.18
May-2017	ND	ND	0.0285	0.00025 J	ND	1.46	1.64	0.00087 J	0.0087	0.0044	ND	ND	ND	1.27	1.35
Oct-2017	ND	ND	0.0267	0.00026 J	0.00024 J	2.4	2.05	0.0013 J	0.0094	0.0191	0.539	0.0811 J	0.0044	1.41	1.37

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22***													
May-2018	*0.0001 J*	*ND*	0.036	*ND*	*0.0001 J*	15.9	1.6	*0.0066 JB*	0.0029	0.0043	0.24	*0.015 J*	*0.000079 JB*	3.5	1.4
Nov-2018	*ND*	*ND*	0.03	*0.00028 J*	*0.00011 J*	1.5	1.7	0.022	0.007	0.0037	0.13	0.079	*0.0001 J*	1.3	1.4
May-2019	*ND*	*ND*	0.04	0.00038	*ND*	2.1	2.1	0.017	0.0098	0.0051	*ND*	0.054	*ND*	1.8	1.8
Oct-2019	*0.00019 J*	*ND*	0.049	0.00037	*0.00063 J*	2.3	2.3	0.0094	0.0094	0.011	*0.046 J*	0.032	*0.00017 J*	2.2	2.1
May-2020	*0.000058 J*	*ND*	0.041	*0.00028 J*	*ND*	2.1	2.1	0.021	0.011	0.0066	0.11	0.042	*ND*	1.9	1.8
Oct-2020	*ND*	*ND*	0.032	*0.00027 J*	*ND*	2.1	2	*0.031 J*	0.01	*0.0098 J*	0.19	0.099	*ND*	1.6	1.6
Apr-2021	*ND*	*ND*	0.043	*0.00038 J*	*ND*	2	2	0.015	0.01	0.014	0.088	*0.05 J*	*ND*	1.7	1.7
Oct-2021	*0.000076 J*	*ND*	0.052	*0.00035 J*	*ND*	2.2	2.3	0.01	0.012	0.014	0.096	0.054 B	*ND*	2	2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-22*												
Nov-1993	ND	NA	ND	NA	1.6	NA	ND	NA	3.3	NA	NA	NA	0.01
Apr-1994	0.02	NA	ND	NA	0.85	NA	ND	NA	2.6	NA	NA	NA	0.04
Apr-1995	ND	NA	ND	ND	1	NA	ND	ND	1.8	NA	ND	ND	0.01
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	3.2	3.3	ND	ND	0.068
Apr-1997	0.012	ND	0.0014	ND	2.4	1.6	ND	ND	2.7	2.6	ND	ND	0.084
Oct-1997	ND	ND	NA	ND	0.802	0.886	ND	ND	2	1.98	ND	ND	0.014
Apr-1998	ND	0.018	NA	ND	2	0.939	ND	ND	2.23	2.25	ND	ND	0.014
Apr-1999	ND	ND	NA	ND	0.588	0.71	ND	ND	2.19	2.09	ND	ND	0.015
Oct-1999	ND	ND	NA	0.012	0.947	1.66	ND	ND	2.41	2.16	ND	ND	0.011
Apr-2000	ND	ND	NA	ND	0.605	ND	ND	ND	2.4	2.28	ND	ND	0.01
Oct-2000	ND	ND	NA	ND	1.2	0.734	ND	ND	3.23	2.67	ND	ND	0.019
Apr-2001	ND	NA	NA	ND	1.81	NA	ND	ND	3.35	NA	ND	ND	0.017
Sep-2001	ND	ND	NA	0.014	1.1	0.794	ND	ND	3.83	2.64	ND	ND	0.023
Mar-2002	ND	ND	NA	ND	0.932	0.822	ND	ND	4.13	2.84	ND	ND	0.017
Sep-2002	0.01	ND	NA	0.011	0.434	1.02	ND	ND	3.12	2.76	ND	ND	0.019
Mar-2003	ND	ND	NA	ND	0.908	0.713	ND	ND	3.04	2.88	ND	ND	0.013
Oct-2003	ND	ND	NA	0.014	0.771	ND	ND	ND	3.63	2.68	ND	ND	0.023
Apr-2004	ND	ND	ND	ND	1.4	1.28	ND	ND	2.5	2.47	ND	ND	ND
Oct-2004	ND	ND	ND	ND	1.23	0.7	ND	ND	2.41	2.24	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.26	1.03	ND	ND	3.27	2.38	ND	ND	0.015
Oct-2005	ND	ND	ND	0.011	0.933	0.89	ND	ND	2.43	2.25	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.644	0.584	ND	ND	2.54	2.36	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22***												
Sep-2006	ND	ND	ND	ND	0.893	0.959	ND	ND	2.31	2.4	ND	ND	0.042
Mar-2007	ND	ND	ND	ND	0.874	0.852	ND	ND	2.43	2.39	ND	ND	0.019
Sep-2007	ND	ND	ND	ND	0.778	0.729	ND	ND	2.57	2.44	ND	ND	ND
Mar-2008	ND	ND	ND	ND	1.06	1.02	ND	ND	2.57	2.21	ND	ND	ND
Sep-2008	ND	ND	ND	ND	0.847	0.819	ND	ND	2.66	2.53	ND	ND	ND
Mar-2009	ND	ND	ND	ND	0.951	0.933	ND	ND	2.73	2.68	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.705	0.627	ND	ND	2.69	2.52	ND	ND	ND
Apr-2010	ND	ND	ND	ND	0.79	0.783	ND	ND	3.02	2.96	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.907	0.926	ND	ND	3.43	3.64	ND	ND	0.012
Apr-2011	ND	ND	ND	ND	0.673	0.645	ND	ND	3.27	3.17	ND	ND	0.012
Sep-2011	ND	ND	ND	ND	0.909	0.928	ND	ND	3.9	3.84	ND	ND	0.011
Mar-2012	ND	ND	ND	ND	0.876	0.851	ND	ND	3.96	3.86	ND	ND	0.01
Sep-2012	0.0318	0.0101	0.000022 J	0.0099 J	0.877	0.879	ND	ND	3.96	4.02	ND	ND	0.009 J
Mar-2013	0.0101	0.0089 J	0.00003 J	0.0123	0.9	0.878	ND	0.000033 J	4.54	4.54	0.00046 J	ND	0.0264
Oct-2013	0.01 J	0.0111	ND	0.0109 J	0.881	0.908	ND	ND	4.39	4.49	ND	0.0014 J	0.0199
Mar-2014	0.0111	0.0117	ND	0.0136	0.923	0.966	ND	0.000054 J	4.34	4.81	0.000268 J	0.000699 J	0.0103
Oct-2014	0.0131	0.0136	ND	0.0138	1.03	1.02	ND	ND	6.03	5.97	ND	ND	0.0169
Apr-2015	0.0156	0.0153	ND	0.015	1.13	1.09	ND	ND	7.58	7.28	ND	ND	0.0202
Nov-2015	0.0153	0.015	ND	0.0137	1.19	1.17	0.000479 J	ND	7.46	7.24	0.000174 J	ND	0.0177
May-2016	0.0146	0.0158	ND	0.0145	1.07	1.15	ND	ND	7.28	7	ND	ND	0.0164 J
Oct-2016	0.0122	0.0146	ND	0.0133	1.03	1.06	ND	ND	6.75	6.99	ND	ND	0.0143 J
May-2017	0.0152	0.0157	ND	0.0121	1.06	1.09	ND	ND	7.54	7.91	ND	ND	0.0122 J
Oct-2017	0.0211	0.0231	0.000051 J	0.0229	1.09	1.09	ND	ND	9.27	9.11	ND	ND	0.134
May-2018	0.041	0.017	ND	0.0056	3.4 J	ND	0.0014 J	ND	11.9	8	ND	0.0021	0.0043 JB

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22***												
Nov-2018	0.018	0.017	*ND*	0.023	*0.99 J*	*1.2 J*	*0.00028 J*	*ND*	7.5	7.7	*ND*	0.0029	0.012
May-2019	0.024	0.024	*ND*	0.022	*ND*	*ND*	*ND*	*ND*	10.5	10	*ND*	*ND*	0.014
Oct-2019	0.026	0.029	*ND*	0.016	*1.7 J*	*1.5 J*	*0.00062 J*	*ND*	13.4	12.1	*ND*	0.0029	0.03
May-2020	0.028	0.027	*ND*	0.024	*ND*	*1.3 J*	*0.00062 JM1*	*ND*	11.6	10.1	*ND*	0.013 D6M1	0.015
Oct-2020	0.024	0.025	*ND*	0.031	*ND*	*1.1 J*	*ND*	*ND*	10.7	9.4	*ND*	*0.0023 J*	*0.015 J*
Apr-2021	0.027	0.025	*ND*	0.024	1.2	1.1	*ND*	*ND*	11.3	11	*ND*	*ND*	0.013
Oct-2021	0.035	0.036	*ND*	0.022	1.2	1.2	*ND*	*ND*	12.8	13	*0.000053 J*	*ND*	0.015

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-22***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5 J	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.9 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.3 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.25 J*	*0.37 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.6 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.401 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.23 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-22A***											
Nov-1993	50	50	0.2	ND	30	ND	ND	5.25	217	9.3	90	15.9
Apr-1994	69	69	2.2	20.2	61.7	ND	ND	5.62	341	7.5	182	30.36
Apr-1995	99.9	99.9	1.4	ND	44.4	ND	ND	5.5	379	16.6	ND	28.6
Apr-1997	ND	10	ND	ND	6	0.14	ND	NA	NA	5.6	113	15
Oct-1997	47	47	0.59	ND	7.36	0.228	ND	6.37	96.9	7.1	80	26
Apr-1998	92	92	1.2	15	16.8	ND	ND	6.24	75.2	7.17	150	28
Apr-1999	67	67	1.5	ND	15.2	ND	ND	5.14	57.1	4.99	96	17
Oct-1999	57	57	1.2	ND	21.3	ND	ND	5.89	92.7	8.3	140	21
Apr-2000	21	21	1.7	ND	32.3	ND	ND	6.31	131	10.4	102	17
Oct-2000	23	NA	2.8	16	31.8	ND	ND	6.07	98	10.1	108	17
Apr-2001	14	NA	1.9	ND	14.6	ND	ND	NA	NA	2.59	91	14
Sep-2001	11	11	4.8	14	83.3	1.21	ND	5.27	209	29.4	205	28.8
Mar-2002	12	12	2.6	ND	50.6	0.264	ND	5	58.7	25.2	137	21.4
Sep-2002	7	7	2	ND	42.4	0.76	ND	5	48.1	22.6	112	16.6
Mar-2003	2.5	2.5	ND	ND	14	ND	ND	4.9	52.1	12.7	52	14.1
Oct-2003	2.2	2.2	0.55	15	4.38	0.49	ND	5.4	66.4	8.49	17	15.3
Apr-2004	5.3	5.3	0.43	19	28.3	ND	ND	6	71.2	8.39	84	18.1
Oct-2004	4.8	4.8	0.55	ND	21.9	0.11	ND	4.3	67.4	10.4	72	14.1
Apr-2005	2.2	2.2	ND	ND	10.1	0.55	ND	4.6	78.8	11.6	55	13.6
Oct-2005	2.6	2.6	ND	ND	6	0.67	ND	4.9	46.6	10.4	55	12.2
Mar-2006	3	3	ND	ND	5.48	0.65	ND	5.1	48.1	11.4	31	11.2
Sep-2006	3	3	ND	ND	4.61	0.35	ND	4.7	44.5	8.85	31	11.7
Mar-2007	3.1	3.1	ND	ND	4.54	0.35	ND	4.5	38.9	8.38	19	10.8
Sep-2007	2.8	2.8	ND	ND	4.22	0.28	ND	6.1	40.5	7.67	55	10.8
Mar-2008	3.2	3.2	ND	ND	16.2	1.12	ND	4.5	43.5	16	22	10.5
Sep-2008	3.2	3.2	ND	ND	4.75	0.21	ND	4.6	41.9	10.7	25	11.2
Mar-2009	3.4	3.4	ND	ND	5.57	0.35	ND	4.4	46	7.32	36	11.5
Oct-2009	3.4	3.4	ND	ND	10.4	0.8	ND	4.3	61.1	7.43	43	14
Apr-2010	2.8	2.8	ND	ND	19.5	1.33	ND	3.9	86.7	8.81	113	16.9
Oct-2010	2.7	2.7	ND	ND	29.8	1.66	ND	4.6	113.5	7.86	84	21.2
Apr-2011	2.4	2.4	ND	ND	32.5	1.48	ND	4.3	129.1	8.18	94	18.9
Sep-2011	2.6	2.6	ND	ND	30.6	1.31	ND	4.4	115.3	10.1	83	21
Mar-2012	2.6	2.6	ND	ND	16.6	0.73	ND	3.6	80.8	10.5	84	18.4
Sep-2012	2.12	2.12	ND	ND	18.8	0.747	ND	4.1	79.8	11.1	62	18.9
Mar-2013	2.96	2.96	ND	ND	31.2	1.1	ND	4.7	121	8.15	77	18.5
Oct-2013	2.8	2.8	ND	ND	27.3	0.953	ND	6	110.7	9.18	67	19.5
Mar-2014	2.68	2.68	ND	ND	31.1	1.08	ND	4.9	129.8	9.94	91	22.3

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-22A***										
Oct-2014	*ND*	*ND*	*ND*	*ND*	44.4	1.37	*ND*	4.8	146.5	11.9	88	25
Apr-2015	2.84	2.84	*ND*	*ND*	49.8	1.68	*ND*	3.9	157.1	12.7	106	27.9
Nov-2015	*ND*	*ND*	*ND*	*6 J*	45.2	1.55	*ND*	4.9	205	13.1	96	26.2
May-2016	*ND*	*ND*	*ND*	*ND*	32.5	1.16	*ND*	4.8	203	12.6	74	21.9
Oct-2016	*ND*	*ND*	*ND*	*ND*	40.4	*NA*	*NA*	4.6	221	9.36	97	22.8
May-2017	*ND*	*ND*	*ND*	10	40.5	1.17	*ND*	4.7	240	10.8	76	24.4
Oct-2017	*ND*	*ND*	*ND*	*ND*	45.4	1.36	*ND*	4.8	264	11.1	96	27
May-2018	*2 JB*	*ND*	*ND*	*ND*	42.6	0.24	*ND*	4.4	228	10.4	78	27.1
Nov-2018	*1 JB*	*ND*	*ND*	*5.7 J*	57.2	1.6	*ND*	4.44	232.1	*9.3 J*	99	27.4
May-2019	*ND*	*NA*	*ND*	*ND*	56.8	1.7	*ND*	4.48	213.4	*ND*	135	32.7
Oct-2019	*ND*	*NA*	*ND*	*6 J*	61.4	1.9	*ND*	4.16	260.8	12.9	142	32.2
May-2020	*ND*	*NA*	*ND*	*6.9 J*	95.5	2.3	*ND*	4.03	350	12.6	182	33.8
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	94.5	2.4	*ND*	4.19	350.2	19	178	39.7
Apr-2021	*ND*	*NA*	*ND*	*8.3 J*	82.2	1.8	*ND*	4.42	339.7	15.7	160	34.8
Oct-2021	*ND*	*NA*	*ND*	*6.1 J*	65.4	1.4	*ND*	4.53	341.6	11.9	142	30.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-22A*													
Nov-1993	NA	ND	ND	NA	ND	3.4	NA	ND	NA	ND	18.4	18.3	ND	1.8	NA
Apr-1994	NA	ND	ND	NA	ND	5.89	NA	ND	NA	ND	27.7	22.7	ND	3.8	NA
Apr-1995	ND	ND	0.6	ND	ND	5.2	NA	ND	ND	ND	50.1	47	ND	3.8	NA
Oct-1996	ND	**0.12**	0.054	ND	ND	8.1	8.6	ND	ND	ND	40	37	ND	3.6	3.7
Apr-1997	ND	ND	0.055	ND	ND	3.4	2.4	ND	ND	ND	16	11	ND	2	1.5
Oct-1997	ND	**0.065**	0.043	ND	ND	2.76	2.44	ND	ND	ND	20	15	ND	1.69	1.61
Apr-1998	ND	ND	0.058	ND	ND	6.16	6.1	ND	ND	ND	57	56	ND	3.06	3.05
Apr-1999	ND	ND	0.04	ND	ND	3.66	3.55	ND	ND	ND	38.5	36.7	ND	1.82	1.78
Oct-1999	ND	ND	0.033	ND	ND	2.82	2.44	ND	ND	ND	0.597	0.083	ND	1.5	1.36
Apr-2000	ND	ND	0.042	ND	ND	3.55	3.3	ND	ND	ND	0.894	0.472	ND	1.95	1.81
Oct-2000	ND	ND	0.041	ND	ND	3.65	3.68	ND	ND	ND	4.38	4.02	ND	1.92	1.92
Apr-2001	ND	ND	0.039	ND	ND	2.83	NA	ND	ND	ND	1.01	NA	ND	1.77	NA
Sep-2001	ND	ND	0.069	ND	ND	5.81	6.18	ND	ND	ND	8.81	1.55	ND	3.47	3.64
Mar-2002	ND	ND	0.054	ND	ND	4.35	2.24	ND	ND	ND	3.46	ND	ND	2.55	1.83
Sep-2002	ND	ND	0.056	ND	ND	3.09	2.14	ND	ND	ND	1.44	ND	ND	2.15	1.78
Mar-2003	ND	ND	0.073	ND	ND	2.23	2.1	ND	ND	ND	1.58	ND	ND	2.08	1.97
Oct-2003	ND	ND	0.07	ND	ND	2.78	3.28	ND	ND	ND	1.13	1.71	ND	2.04	1.95
Apr-2004	ND	ND	0.066	ND	ND	3.66	3.05	ND	ND	ND	1.61	2.01	ND	2.18	1.95
Oct-2004	ND	ND	0.062	ND	ND	2.76	2.55	ND	ND	ND	1.6	0.842	ND	1.75	1.72
Apr-2005	ND	ND	0.073	ND	ND	2.26	2.12	ND	ND	ND	0.366	0.118	ND	1.93	1.88
Oct-2005	ND	ND	0.066	ND	ND	2.04	1.77	ND	ND	ND	0.222	ND	ND	1.72	1.63

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22A***													
Mar-2006	ND	ND	0.065	ND	ND	1.69	1.66	ND	ND	ND	ND	ND	ND	1.7	1.68
Sep-2006	ND	ND	0.062	ND	ND	1.85	1.87	ND	ND	ND	0.113	ND	ND	1.71	1.72
Mar-2007	ND	ND	0.059	ND	ND	1.68	1.66	ND	ND	ND	ND	ND	ND	1.61	1.6
Sep-2007	ND	0.002	0.058	ND	ND	1.62	1.57	ND	ND	ND	0.14	ND	ND	1.63	1.58
Mar-2008	ND	ND	0.061	ND	ND	1.65	1.56	ND	ND	ND	0.232	ND	ND	1.55	1.46
Sep-2008	ND	ND	0.061	ND	ND	1.65	1.58	ND	ND	ND	ND	ND	ND	1.72	1.62
Mar-2009	ND	ND	0.064	ND	ND	1.77	1.7	ND	ND	ND	ND	ND	ND	1.73	1.67
Oct-2009	ND	ND	0.81	ND	ND	2.18	2.11	ND	ND	ND	ND	ND	ND	2.08	2.02
Apr-2010	ND	ND	0.095	ND	ND	2.8	2.67	ND	ND	ND	0.051	ND	ND	2.41	2.33
Oct-2010	ND	ND	0.116	ND	ND	3.45	3.25	ND	ND	ND	ND	ND	ND	3.06	2.93
Apr-2011	ND	ND	0.125	ND	ND	3.13	3.09	ND	ND	ND	0.171	ND	ND	2.7	2.67
Sep-2011	ND	ND	0.131	ND	ND	3.59	3.54	ND	ND	ND	0.083	ND	ND	2.93	2.91
Mar-2012	ND	ND	0.118	ND	ND	3.12	3.05	ND	ND	ND	0.22	0.132	ND	2.57	2.5
Sep-2012	ND	ND	0.115	0.00023 J	0.000299 J	3.24	3.24	0.002 J	0.0069 J	0.0031 J	0.0642	0.0258 J	ND	2.62	2.52
Mar-2013	ND	ND	0.113	0.000199 J	0.00036 J	3.22	3.78	0.0041 J	0.0073 J	0.004 J	0.0516	0.0259 J	0.0014 J	2.54	3.03
Oct-2013	ND	ND	0.132	0.00029 J	0.000255 J	3.38	3.34	0.0099 J	0.008 J	0.0036 J	0.0763	0.0189 J	ND	2.69	2.8
Mar-2014	ND	ND	0.148	0.00036 J	0.00034 J	3.8	3.81	0.0017 J	0.0073 J	0.0043 J	0.0757	0.0336 J	ND	3.1	3.16
Oct-2014	0.000489 J	ND	0.155	0.000342 J	0.000317 J	4.03	4.11	0.000798 J	0.0094 J	0.0044 J	0.04 J	ND	ND	3.63	3.67
Apr-2015	0.000647 J	ND	0.171	0.000472 J	0.000416 J	4.42	4.28	0.0013 J	0.01	0.0061 J	0.0228 J	0.0465 J	ND	4.09	4.04
Nov-2015	0.000376 J	0.000221 J	0.17	0.000477 J	0.000345 J	4.75	5.01	0.0052 J	0.01	0.006 J	0.331	0.0372 J	0.000558 J	3.48	3.57
May-2016	ND	ND	0.136	0.00044 J	0.0003 J	3.67	3.91	0.0015 J	0.0087	0.0056	ND	ND	ND	3.1	3.17
Oct-2016	ND	ND	0.144	0.00041 J	0.00032 J	3.65	4.08	0.0011 J	0.0098	0.0056	0.038 J	ND	ND	3.32	3.49
May-2017	ND	ND	0.14	0.00038 J	0.00029 J	3.65	3.45	0.0012 J	0.009	0.0052	ND	ND	ND	3.71	3.59
Oct-2017	ND	ND	0.148	0.00035 J	0.0003 J	3.97	4.13	0.0027 J	0.0105	0.0049	0.372	ND	0.00016 J	4.15	4.28

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22A***													
May-2018	*0.00005 J*	*ND*	0.13	0.00045	*0.00036 J*	3.9	3.7	*0.0013 JB*	0.0084	0.0055	*ND*	*ND*	*0.000069 JB*	4.2	4
Nov-2018	*ND*	*ND*	0.15	0.00066	*0.00043 J*	4.2	4.2	*0.0058 J*	0.0094	0.0065	0.22	0.07	*0.000079 J*	4.1	4.2
May-2019	*ND*	*ND*	0.18	0.00067	*ND*	5.5	5.2	0.0071	0.0078	0.0048	0.16	0.095	*ND*	4.6	4.2
Oct-2019	*0.00014 J*	*ND*	0.17	0.00069	*0.00084 J*	5.4	5.2	*0.0065 J*	0.012	0.012	0.1	0.084	*0.00012 J*	4.5	4.3
May-2020	*0.000075 J*	*ND*	0.18	0.00071	*0.00055 J*	5.9	5.7	0.0091	0.013	*0.0095 J*	0.32	0.078	*ND*	4.6	4.4
Oct-2020	*ND*	*ND*	0.15	*0.00052 J*	*ND*	6.7	6.2	*0.0062 J*	0.013	*0.0077 J*	0.12	0.077	*ND*	5.6	5.2
Apr-2021	*ND*	*ND*	0.17	*0.00067 J*	*0.00034 J*	5.9	5.7	0.0067	0.017	0.011	0.19	0.11	*ND*	4.9	4.7
Oct-2021	*0.000077 J*	*0.00027 J*	0.15	0.00054	*0.0002 J*	5	5	*0.0022 J*	0.025	0.0072	0.089	0.075 B	*ND*	4.3	4.3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22A***												
Nov-1993	0.08	NA	ND	NA	3.3	NA	ND	NA	35.8	NA	NA	NA	ND
Apr-1994	0.15	NA	ND	NA	3.69	NA	ND	NA	50.2	NA	NA	NA	0.06
Apr-1995	0.11	NA	ND	ND	3.7	NA	ND	ND	19.4	NA	ND	ND	0.02
Oct-1996	0.085	0.09	NA	ND	ND	ND	ND	ND	23	24	ND	ND	0.035
Apr-1997	0.053	0.037	ND	ND	3	2.1	ND	ND	4.2	4.1	ND	ND	0.16
Oct-1997	0.04	0.04	NA	ND	0.955	0.623	ND	ND	3.31	2.89	ND	ND	ND
Apr-1998	0.075	0.095	NA	ND	2.15	2.62	ND	ND	9.73	9.68	ND	ND	ND
Apr-1999	0.04	0.039	NA	ND	1.94	1.84	ND	ND	10.7	10.4	ND	ND	ND
Oct-1999	0.043	0.039	NA	ND	2.17	2.61	ND	ND	11.1	8.85	ND	ND	ND
Apr-2000	0.062	0.058	NA	ND	2.67	2.18	ND	ND	24.7	22.7	ND	ND	ND
Oct-2000	0.077	0.083	NA	ND	4.34	4.61	ND	ND	23	23.5	ND	ND	ND
Apr-2001	0.066	NA	NA	ND	4	NA	ND	ND	17.8	NA	ND	ND	ND
Sep-2001	0.159	0.172	NA	ND	6.76	7.11	ND	ND	70.2	68.7	ND	ND	ND
Mar-2002	0.103	0.061	NA	ND	4.88	1.97	ND	ND	30.2	7.09	ND	ND	ND
Sep-2002	0.079	0.061	NA	ND	2.91	2.05	ND	ND	20.4	6.92	ND	ND	ND
Mar-2003	0.065	0.062	NA	ND	1.46	0.736	ND	ND	2.74	2.41	ND	ND	ND
Oct-2003	0.07	0.084	NA	ND	0.914	2.92	ND	ND	6.56	16.5	ND	ND	0.021
Apr-2004	0.081	0.079	ND	ND	3.84	2.04	ND	ND	18.1	14.8	ND	ND	ND
Oct-2004	0.052	0.051	ND	ND	1.66	1.55	ND	ND	16.7	13.9	ND	ND	ND
Apr-2005	0.059	0.057	ND	ND	1.09	1.04	ND	ND	5.98	4.73	ND	ND	0.012
Oct-2005	0.052	0.049	ND	ND	1.01	0.935	ND	ND	3.18	2.44	ND	ND	0.012
Mar-2006	0.04	0.039	ND	ND	0.526	0.548	ND	ND	2.51	2.47	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22A***												
Sep-2006	0.054	0.056	ND	ND	0.808	0.82	ND	ND	2.14	2.1	ND	ND	ND
Mar-2007	0.044	0.043	ND	0.012	0.809	0.804	ND	ND	2.06	2.02	ND	ND	0.018
Sep-2007	0.044	0.043	ND	ND	0.743	0.604	ND	ND	2	1.94	ND	ND	0.01
Mar-2008	0.042	0.04	ND	ND	1	0.935	ND	ND	1.84	1.73	ND	ND	0.011
Sep-2008	0.044	0.041	ND	ND	0.843	0.804	ND	ND	2.08	1.96	ND	ND	0.01
Mar-2009	0.046	0.044	ND	ND	0.947	0.908	ND	ND	2.49	2.37	ND	ND	0.011
Oct-2009	0.055	0.053	ND	ND	0.736	0.703	ND	ND	4.58	4.31	ND	ND	0.012
Apr-2010	0.066	0.064	ND	ND	1	0.973	ND	ND	9.49	9.43	ND	ND	0.019
Oct-2010	0.1	0.094	ND	ND	1.1	1.12	ND	ND	16	16	ND	ND	0.029
Apr-2011	0.096	0.094	ND	ND	0.87	0.878	ND	ND	16.9	16.6	ND	ND	0.029
Sep-2011	0.119	0.117	ND	ND	1.07	1.13	ND	ND	16	15.7	ND	ND	0.034
Mar-2012	0.107	0.103	0.0002	0.026	1.02	1.01	ND	ND	7.66	7.5	ND	ND	0.029
Sep-2012	0.106	0.104	0.00005 J	0.0078 J	1.01	1.01	0.000507 J	ND	8.23	8.19	ND	ND	0.0338
Mar-2013	0.1	0.117	0.00009 J	0.0103 J	0.997	1.13	ND	0.000027 J	12.3	14.5	ND	ND	0.0439
Oct-2013	0.101	0.102	ND	0.012	1.19	1.16	0.000502 J	ND	12.4	12.9	ND	0.0024 J	0.0388
Mar-2014	0.117	0.11	ND	0.0083 J	1.26	1.28	0.000771 J	ND	13.4	13.6	0.000178 J	0.000816 J	0.0331
Oct-2014	0.116	0.117	0.000127 J	0.0092 J	1.42	1.43	0.0016 J	ND	20.2	20.5	ND	ND	0.0393
Apr-2015	0.126	0.124	0.000219	0.0107 J	1.36	1.36	0.0021	ND	26.2	25.7	ND	ND	0.0529
Nov-2015	0.129	0.131	0.000393	0.014	1.42	1.46	0.0021	ND	22.8	23.2	0.000133 J	ND	0.0427
May-2016	0.117	0.117	0.0001 J	0.009	1.24	1.3	ND	ND	15.6	15.8	ND	ND	0.0467
Oct-2016	0.115	0.127	0.000051 J	0.0095	1.28	1.34	0.00044 J	ND	18	19.2	ND	ND	0.0445
May-2017	0.114	0.109	ND	0.0082	1.52	1.43	0.00048 J	ND	21.5	20.3	ND	ND	0.0379
Oct-2017	0.117	0.119	ND	0.009	1.62	1.66	0.00057 J	ND	18.6 J-	22.9	ND	0.00038 J	0.0376
May-2018	0.078	0.078	0.00014 J	0.0069	0.97 J	1 J	0.00078 J	ND	23.4	21.8	ND	0.0022	0.016

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22A***												
Nov-2018	0.12	0.12	0.00054	0.011	*1.4 J*	*1.7 J*	*0.00071 J*	*ND*	27.5	28.3	*ND*	0.003	0.034
May-2019	0.13	0.15	0.00062	0.0095	*ND*	*ND*	*ND*	*ND*	33.9	31.1	*ND*	0.0017	0.03
Oct-2019	0.14	0.11	0.00046	0.012	*2 J*	*2 J*	*0.00097 J*	*ND*	34.3	32.6	*ND*	0.0025	0.056
May-2020	0.15	0.15	0.00056	0.014	*ND*	*1.9 J*	*0.0019 JM1*	*ND*	47.6	40.7	*ND*	0.0099	0.047
Oct-2020	0.18	0.15	*0.00013 J*	0.012	*ND*	*1.8 J*	*ND*	*ND*	52.6	45.6	*ND*	*0.0012 J*	0.037
Apr-2021	0.14	0.13	*0.00018 J*	0.017	1.8	1.7	*ND*	*ND*	41	40.8	*ND*	*ND*	0.038
Oct-2021	0.12	0.12	0.00027	0.012	1.6	1.6	0.0025	*ND*	37.6	38.9	*0.00003 J*	*ND*	0.037

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-22A***																
Nov-1993	ND	ND	ND	ND	39	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	33	ND
Apr-1994	ND	ND	ND	ND	21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	54	ND
Oct-1996	ND	ND	ND	ND	86	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	57	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	34	ND	ND	ND	ND	ND	ND	0.7 J	0.9 J	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	27	ND	ND	ND	ND	ND	ND	0.5 J	0.6 J	2.3 J	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	31	ND	NA	NA	NA	NA	ND	0.7 J	0.6 J	ND	NA	NA	7.6	NA
Oct-1999	ND	ND	ND	ND	19	ND	ND	ND	ND	0.6 J	ND	0.6 J	1.1	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	8.3	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	12	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	6.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	6.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	6.4	ND
Apr-2005	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22A*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22A*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.6 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-22A*															
Nov-1993	**9.6**	ND	ND	ND	ND	1.2	ND	ND	4.4	ND	ND	15	ND	ND	ND	8	33
Apr-1994	3.9	ND	ND	ND	ND	ND	ND	ND	1.9 J	ND	ND	6.8	ND	ND	ND	3.5	18
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	ND	ND	ND	9	51
Apr-1997	**17**	ND	ND	ND	2	ND	ND	ND	4	ND	2	ND	15	ND	ND	54	28
Oct-1997	**8.3**	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	7.5	ND	ND	ND	6.1	42
Apr-1998	**6.4**	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	6.6	ND	ND	ND	5.4	16
Apr-1999	4.4	NA	NA	NA	NA	ND	NA	ND	1 J	ND	NA	5.8	NA	NA	NA	1.7	17
Oct-1999	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	ND	ND	ND	1.4	8.9
Apr-2000	1.4	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	1.5	NA	ND	NA	0.9 J	4
Oct-2000	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.1	5.7
Apr-2001	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	5.1	4.9
Sep-2001	0.8 J	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	1.1	ND	ND	ND	1.6	2.5
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	1
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	1
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.3
Oct-2004	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	3.9	6.7
Apr-2005	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	2.7	3.5
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22A***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.9 J
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.37 J	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	0.52 J,B	ND	ND	ND	ND	0.4 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.36 J	0.4 J,B	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	0.2 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	0.2 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*0.2 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.252 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22A***															
Nov-1993	ND	ND	5.2	ND	ND	ND	ND	**9**	ND	ND	ND	ND	**7.5**	ND	ND	**2.2**	NA
Apr-1994	ND	ND	1.3 J	ND	ND	ND	ND	3.2	ND	ND	ND	ND	5	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	**11**	ND	1.5	ND	ND	**11**	ND	ND	**3.8**	ND
Apr-1997	ND	ND	NA	NA	1	NA	ND	**8**	ND	ND	1	ND	**11**	ND	ND	**7**	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	3.7	ND	0.9 J	ND	ND	**7.9**	ND	ND	2	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	4.5	ND	0.7 J	ND	ND	**6.7**	ND	ND	1.9	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	3.8	ND	0.6 J	NA	NA	**6**	ND	NA	1.2	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	3	ND	ND	ND	ND	3.7	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	2.8	ND	ND	NA	NA	2.3	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	4.6	ND	ND	ND	ND	4.2	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	4.3	ND	ND	ND	ND	1.8	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	3.5	ND	ND	ND	ND	2.4	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	1.4	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	0.7 J	ND	ND	3.4	ND	ND	ND	ND	2.1	ND	ND	0.8 J	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22A***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*0.45 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.21 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*0.14 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22A***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-22B***											
Nov-1993	69	69	1.5	ND	20	ND	ND	5.31	227	9.6	142	15.2
Apr-1994	367	367	19.6	109.6	524	ND	ND	6.06	2.1	5.6	948	125.86
Apr-1995	216	216	10.8	27.1	133	ND	ND	5.8	823	8.9	376	35.6
Apr-1997	ND	26	ND	ND	4.5	0.02	ND	NA	NA	9.1	141	16
Oct-1997	95	95	0.87	ND	5.06	ND	ND	6.07	208	7.36	114	42
Apr-1998	102	102	6.7	14	28.6	ND	ND	5.96	319	7.08	160	30
Apr-1999	80	80	5.1	20	81.4	0.61	ND	6.32	545	30	560	36
Oct-1999	52	58	0.88	ND	4.35	ND	ND	5.18	152.1	9.13	91	13
Apr-2000	65	65	5.2	ND	1.05	ND	ND	6.27	253	12.7	131	29
Oct-2000	33	NA	4.4	15	47.4	ND	ND	5.34	425	15	148	25.9
Apr-2001	25	NA	11	55	239	ND	ND	NA	NA	75.4	631	78
Sep-2001	39	39	8.4	24	77.1	ND	ND	5.86	657	45.3	247	31.8
Mar-2002	38	38	6.3	16	30.4	ND	ND	5.9	419	24.6	242	30
Sep-2002	8.2	8.2	2.3	13	54.4	ND	ND	5.9	310	22	146	12.3
Mar-2003	11	11	1.1	ND	36.2	ND	ND	5.7	253	13.5	111	13.2
Oct-2003	2	2	ND	13	30	1.15	ND	4.8	168.3	12.2	63	16.5
Apr-2004	7.8	7.8	ND	16	22.3	2.81	ND	4.8	120.8	7.45	97	31.7
Oct-2004	21	21	ND	ND	8.79	2.27	ND	5.1	69.6	6.68	76	27.1
Apr-2005	4	4	ND	ND	5.31	0.48	ND	5	65.8	7.66	50	10.3
Oct-2005	2.7	2.7	ND	ND	3.91	3.04	ND	4.8	47.8	3.43	47	12.1
Mar-2006	4.5	4.5	ND	ND	4.14	0.42	ND	5.2	36.4	6.42	28	4.87
Sep-2006	4.8	4.8	0.54	ND	12.8	1.21	ND	4.6	71.7	9.5	74	10.6
Mar-2007	8.7	8.7	0.97	ND	20.1	0.21	ND	3.1	674	18.6	69	15.4
Sep-2007	1.7	1.7	ND	ND	4.76	6.67	ND	6	80.1	2.82	87	20.4
Mar-2008	5.3	5.3	0.52	ND	28.3	2.82	ND	4.6	102	22.9	63	17.5
Sep-2008	4.1	4.1	0.72	13	18.4	1.61	ND	4.7	108.1	20.1	79	17
Mar-2009	5.3	5.3	0.99	ND	16.4	0.12	ND	4.7	133.7	34.9	95	17
Oct-2009	4.3	4.3	0.41	10	17.9	0.21	ND	4.6	112.9	27.5	87	14.9
Apr-2010	1.6	1.6	ND	ND	9.26	6.17	ND	4.1	98.2	10.9	113	22.8
Oct-2010	2.8	2.8	0.22	ND	6.07	6.15	ND	5.3	84.1	5.63	71	25
Apr-2011	3.5	3.5	ND	ND	9.27	2.43	ND	4.4	97.8	17.3	77	23.3
Sep-2011	2.2	2.2	ND	ND	14.4	2.09	ND	4.4	95.3	20.2	74	23.4
Mar-2012	1.4	1.4	ND	ND	8.89	5.28	ND	3.5	93.6	10.3	80	22.9
Sep-2012	1.24	1.24	ND	ND	8.83	4.42	ND	4.1	88.9	15.9	80	22.8
Mar-2013	2.96	2.96	ND	ND	12.6	1.43	ND	4.8	115.4	28	84	26.5
Oct-2013	3.2	3.2	ND	13.1	13	0.803	ND	5.3	104.6	25.2	69	21.9
Mar-2014	3.8	3.8	ND	8 J	18.5	1.17	ND	5	123.9	25.6	76	23.8

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-22B***											
Oct-2014	*ND*	*ND*	*ND*	*ND*	9.18	4.44	*ND*	4.5	96.3	16.2	58	22.2
Apr-2015	2.8	2.8	*ND*	*ND*	8.54	1.66	*ND*	4	103	33.8	63	28.6
Nov-2015	*ND*	*ND*	*ND*	*6 J*	7.57	3.95	*ND*	4.2	110	18.9	58	25.7
May-2016	*ND*	*ND*	*ND*	*ND*	8.05	2.18	*ND*	4.9	166.3	25.6	67	22.3
Oct-2016	*ND*	*ND*	*ND*	*ND*	7.44	*NA*	*NA*	4.9	144.3	26.2	80	26
May-2017	10	10	*ND*	13	7.53	1.39	*ND*	5.4	174.5	29.3	61	40.5
Oct-2017	14	14	*ND*	*ND*	13.7	2.63	*ND*	5.7	194.1	27.1	97	48.6
May-2018	*1 JB*	*ND*	*ND*	*10.1 J*	15.8	0.19	*ND*	4.9	87.1	*ND*	*ND*	10
Nov-2018	28	28	*ND*	*14.3 J*	7.9	1.8	*ND*	5.47	163.7	33.8	88	57.7
May-2019	*ND*	*NA*	*ND*	*ND*	10	3.5	*ND*	4.78	118.9	33.2	103	50.1
Oct-2019	*ND*	*NA*	*ND*	*6 J*	5.2	3.6	*ND*	4.71	100.1	14.6	54	28.7
May-2020	*4 J*	*NA*	*ND*	*6.9 J*	8.9	2.4	*ND*	4.54	123.2	23.9	63	32.6
Oct-2020	*4 J*	*NA*	*ND*	*7 J*	21.7	4.4	*ND*	4.87	165.7	18	93	49.5
Apr-2021	*ND*	*NA*	*ND*	*8.3 J*	9.3	5.1	*ND*	4.88	3.26	15.4	64	34.3
Oct-2021	22	*NA*	*ND*	*8.3 J*	6.1	2.4	*ND*	5.39	143.6	21.3	67	36.8

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22B***													
Nov-1993	NA	**0.018**	ND	NA	0.001	2.3	NA	ND	NA	ND	31.8	28.2	ND	2.3	NA
Apr-1994	NA	**0.014**	ND	NA	ND	20.7	NA	ND	NA	ND	125	126	ND	18	NA
Apr-1995	ND	ND	ND	ND	ND	5.7	NA	ND	ND	0.03	69.6	60.7	ND	5.2	NA
Oct-1996	ND	ND	0.032	ND	ND	3.5	3.2	ND	ND	ND	23	20	ND	1.9	1.7
Apr-1997	ND	ND	0.051	ND	ND	3.9	2.9	ND	0.021	ND	27	20	ND	2	1.7
Oct-1997	ND	ND	0.049	ND	ND	6.18	6.26	ND	ND	ND	43.1	43.6	ND	3.23	3.27
Apr-1998	ND	ND	0.056	ND	ND	6.96	6.64	ND	ND	ND	45.3	45.5	ND	3.05	3.05
Apr-1999	ND	ND	0.073	ND	ND	7.26	6.71	ND	ND	ND	70	67.2	ND	4.25	4.04
Oct-1999	ND	ND	0.073	ND	ND	8.7	8.09	ND	ND	ND	66.7	41.7	ND	4.27	3.92
Apr-2000	ND	ND	0.04	ND	ND	8.02	6.3	ND	ND	ND	34.9	29.9	ND	2.17	1.98
Oct-2000	ND	ND	0.049	ND	ND	5.84	5.26	ND	ND	ND	58.1	55.2	ND	2.75	2.65
Apr-2001	ND	ND	0.128	ND	ND	18.4	NA	ND	ND	ND	88.2	NA	ND	7.73	NA
Sep-2001	ND	ND	0.062	ND	ND	6.28	6.29	ND	ND	ND	52.2	52.1	ND	3.89	3.94
Mar-2002	ND	ND	0.054	ND	ND	6.76	6.05	ND	ND	ND	44.9	43.2	ND	3.18	3.21
Sep-2002	ND	ND	0.031	ND	ND	2.73	3.56	ND	ND	ND	25.8	23.4	ND	1.34	1.3
Mar-2003	ND	ND	0.021	ND	ND	3.84	6.09	ND	ND	ND	4.82	1.51	ND	0.867	0.812
Oct-2003	ND	ND	0.038	ND	ND	3.57	3.12	ND	ND	ND	0.742	ND	ND	1.83	1.72
Apr-2004	ND	ND	0.059	ND	ND	9.48	3.68	ND	ND	ND	0.233	ND	ND	1.95	1.87
Oct-2004	ND	ND	0.049	ND	ND	8.19	5.74	ND	ND	ND	0.343	ND	ND	1.6	1.5
Apr-2005	ND	ND	0.031	ND	ND	2.42	2.37	ND	ND	ND	0.99	0.05	ND	1.04	0.989
Oct-2005	ND	ND	0.041	ND	ND	2.71	2.31	0.03	ND	0.013	1.23	0.073	ND	1.29	1.19

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22B***													
Mar-2006	ND	ND	0.017	ND	ND	1.09	1.04	ND	ND	ND	0.34	ND	ND	0.519	0.487
Sep-2006	ND	ND	0.031	ND	ND	2.63	2.79	ND	ND	ND	0.27	0.219	ND	0.987	1.06
Mar-2007	ND	0.002	0.042	ND	ND	3.97	3.58	0.011	ND	ND	1.91	1.09	ND	1.33	1.28
Sep-2007	ND	0.003	0.063	ND	ND	4.49	4.06	0.017	0.011	0.012	1.38	0.054	ND	2.24	2.12
Mar-2008	ND	ND	0.055	ND	ND	4.12	3.83	ND	ND	0.013	0.161	ND	ND	1.74	1.63
Sep-2008	ND	0.002	0.058	ND	ND	3.68	3.45	0.014	ND	ND	1.92	1.04	ND	1.89	1.8
Mar-2009	ND	0.002	0.048	ND	ND	4.19	3.88	0.019	ND	ND	5.94	2.84	ND	1.57	1.49
Oct-2009	ND	ND	0.041	ND	ND	3.45	3.34	ND	ND	ND	3.17	2.83	ND	1.53	1.48
Apr-2010	ND	ND	0.062	ND	ND	5.13	4.97	0.017	ND	ND	1.46	0.063	ND	2.44	2.39
Oct-2010	ND	ND	0.068	ND	ND	5.83	5.81	0.01	0.011	0.025	0.615	ND	ND	2.52	2.53
Apr-2011	ND	ND	0.078	ND	ND	5.5	5.39	0.021	0.011	0.029	1.5	ND	ND	2.33	2.3
Sep-2011	ND	ND	0.082	ND	ND	5.14	5.04	0.025	0.013	0.042	2.64	ND	ND	2.57	2.53
Mar-2012	ND	ND	0.077	ND	ND	4.95	4.82	ND	0.011	0.043	0.909	ND	ND	2.55	2.46
Sep-2012	ND	ND	0.0823	0.000583 J	0.000553 J	5.05	4.81	0.0218	0.0129	0.0585	2.34	0.0587	0.000532 J	2.48	2.68
Mar-2013	ND	ND	0.0858	0.000419 J	0.000611 J	6.08	6.07	0.0213	0.016	0.0655	1.7	0.0317 J	0.0018 J	2.76	2.76
Oct-2013	ND	0.000692 J	0.0652	0.000203 J	0.000316 J	5.35	5.48	0.0081 J	0.0131	0.0273	0.323	ND	0.000304 J	2.07	2.11
Mar-2014	ND	ND	0.0552	0.000163 J	0.000285 J	5.99	6.09	0.012	0.0171	0.0324	1.59	0.103	ND	2.15	2.13
Oct-2014	0.00035 J	0.0011 J	0.0743	0.000259 J	0.000421 J	5.15	5.41	0.0149	0.0092 J	0.0221	1.75	0.0281 J	0.000845 J	2.28	2.34
Apr-2015	0.000643 J	0.000575 J	0.0723	0.000279 J	0.000368 J	7.01	6.97	0.0121	0.0102	0.0245	0.887	0.129	ND	2.68	2.62
Nov-2015	0.000394 J	0.0012 J	0.0753	0.000384 J	0.000372 J	6.29	6.92	0.0098 J	0.009 J	0.024	1.37	0.0313 J	0.001 J	2.44	2.6
May-2016	ND	ND	0.0561	0.00032 J	0.00038 J	5.43	5.63	0.0037 J	0.0088	0.0241	0.3	0.0419 J	ND	2.12	2.16
Oct-2016	ND	0.00094 J	0.0501	0.00018 J	0.00022 J	6.58	6.7	0.0039 J	0.0062	0.0102	0.654	0.0793 J	0.00017 J	2.32	2.46
May-2017	ND	0.0009 J	0.0418	ND	ND	11.2	10.4	0.0089	0.0036	0.0066	0.887	ND	0.00026 J	3.04	3.01
Oct-2017	ND	ND	0.0407	ND	ND	13.9	15.7	0.0024 J	0.0086	0.0045	0.0558 J	1.7	ND	3.35	3.75

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22B***													
May-2018	*0.000038 J*	*ND*	0.036	*0.00026 J*	*0.00011 J*	1.6	14.5	*0.0049 JB*	0.009	0.0042	0.044	*ND*	*0.000037 JB*	1.5	3.2
Nov-2018	*0.000032 J*	*0.0002 J*	0.037	*ND*	*0.0001 J*	16.8	16.6	0.042	0.004	0.0048	0.67	0.076	*0.00012 J*	3.8	3.8
May-2019	*ND*	*ND*	0.051	*ND*	*ND*	13.6	12.8	0.014	0.0044	0.0088	0.28	0.04	*ND*	3.9	3.6
Oct-2019	0.00054	*0.00042 J*	0.044	*0.00017 J*	*0.00053 J*	7.5	7	0.013	0.0053	0.016	0.38	0.026	*0.00039 J*	2.4	2.3
May-2020	*0.000094 J*	*ND*	0.042	*0.000095 J*	*0.0001 J*	8.7	7.8	0.016	0.014	0.0074	0.46	0.026	*ND*	2.6	2.4
Oct-2020	*ND*	*ND*	0.038	*ND*	*ND*	13.8	12.7	*0.022 J*	0.0094	*ND*	0.73	0.05	*ND*	3.6	3.4
Apr-2021	*ND*	*ND*	0.044	*0.00022 J*	*ND*	9.7	9.8	0.011	0.0084	0.018	0.42	*ND*	*ND*	2.5	2.6
Oct-2021	*0.000091 J*	*ND*	0.044	*ND*	*ND*	10	9.5	0.006	0.0089	0.0053	0.14	*0.04 JB*	*0.000033 J*	2.9	2.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-22B*												
Nov-1993	0.13	NA	ND	NA	2.5	NA	ND	NA	18.2	NA	NA	NA	ND
Apr-1994	0.66	NA	ND	NA	17.95	NA	ND	NA	375	NA	NA	NA	0.03
Apr-1995	0.27	NA	ND	ND	10.1	NA	ND	ND	75.2	NA	ND	ND	0.04
Oct-1996	0.077	0.068	NA	ND	ND	ND	ND	ND	5.1	5	ND	ND	0.19
Apr-1997	0.064	0.047	**0.0031**	ND	3.2	2.5	ND	ND	3.1	3.2	ND	ND	0.027
Oct-1997	0.065	0.064	NA	ND	2.49	2.42	ND	ND	2.76	2.84	ND	ND	ND
Apr-1998	0.147	0.145	NA	ND	7.13	6.77	ND	ND	20.2	19.9	ND	ND	ND
Apr-1999	0.231	0.218	NA	ND	6.9	6.16	ND	ND	48.2	46	ND	ND	ND
Oct-1999	0.29	0.267	NA	ND	11.9	11.2	ND	ND	52.8	49.1	ND	ND	ND
Apr-2000	0.144	0.132	NA	ND	6.73	6.12	ND	ND	17.9	16.2	ND	ND	0.015
Oct-2000	0.208	0.202	NA	ND	5.69	5.34	ND	ND	30.9	30.1	ND	ND	ND
Apr-2001	0.481	NA	NA	ND	12.5	NA	ND	ND	199	NA	ND	ND	0.029
Sep-2001	0.202	0.206	NA	ND	9.37	8.75	ND	ND	58.1	54.3	ND	ND	ND
Mar-2002	0.178	0.181	NA	ND	8.72	9.26	ND	ND	39.6	39.6	ND	ND	ND
Sep-2002	0.098	0.094	NA	ND	3.93	5.05	ND	ND	30.9	30.8	ND	ND	ND
Mar-2003	0.072	0.067	NA	ND	4.66	3.82	ND	ND	26.9	24.9	ND	ND	0.013
Oct-2003	0.12	0.123	NA	ND	2.92	3.27	ND	ND	20.9	18.9	ND	ND	0.022
Apr-2004	0.129	0.126	ND	ND	3.66	2.91	ND	ND	16.2	15.9	ND	ND	0.019
Oct-2004	0.115	0.109	ND	ND	2.69	2.43	ND	ND	6.47	5.89	ND	ND	0.013
Apr-2005	0.072	0.065	ND	ND	1.9	1.77	ND	ND	3.32	3.52	ND	ND	ND
Oct-2005	0.06	0.054	ND	0.029	1.62	1.33	ND	ND	3.34	2.43	ND	ND	0.014
Mar-2006	0.012	0.01	ND	ND	0.981	0.85	ND	ND	2.34	2.23	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22B***												
Sep-2006	0.051	0.055	ND	ND	1.56	1.75	ND	ND	8.01	8.42	ND	ND	ND
Mar-2007	0.075	0.071	ND	0.016	2.84	2.7	ND	ND	13.9	13.4	ND	ND	0.015
Sep-2007	0.085	0.079	ND	0.021	2.16	1.95	ND	ND	3.58	3.55	ND	ND	0.016
Mar-2008	0.067	0.067	ND	ND	2.29	2.09	ND	ND	8.64	8.12	ND	ND	0.015
Sep-2008	0.081	0.078	ND	0.016	2.48	2.43	ND	ND	11.5	11.1	ND	ND	0.018
Mar-2009	0.105	0.102	ND	ND	3.41	3.39	ND	ND	12.9	12.8	ND	ND	0.012
Oct-2009	0.112	0.108	ND	ND	3.32	3.24	ND	ND	12.3	11.7	ND	ND	ND
Apr-2010	0.137	0.134	ND	0.017	3.16	3.05	ND	ND	6.23	6.02	ND	ND	0.014
Oct-2010	0.088	0.087	ND	0.014	2.04	2.16	ND	ND	4.27	4.55	ND	ND	0.016
Apr-2011	0.106	0.104	ND	0.018	2.26	2.16	ND	ND	6.75	6.67	ND	ND	0.013
Sep-2011	0.12	0.117	ND	0.02	2.76	2.54	ND	ND	10.4	10.3	ND	ND	0.015
Mar-2012	0.093	0.09	0.0002	0.014	2.34	2.24	ND	ND	6.23	5.9	ND	ND	0.013
Sep-2012	0.0894	0.0852	0.000076 J	0.0185	2.32	2.19	0.000538 J	ND	6.34	6.97	ND	ND	0.0138
Mar-2013	0.131	0.133	0.000096 J	0.0176	3.12	3.08	ND	0.000087 J	8.97	9.08	ND	ND	0.0275
Oct-2013	0.132	0.136	ND	0.0086 J	3.71	3.69	ND	0.000069 J	9.02	9.25	0.000169 J	0.0026 J	0.0152
Mar-2014	0.127	0.128	ND	0.0095 J	3.88	3.93	ND	0.00019 J	10.6	10.8	0.000166 J	0.0012 J	0.0048 J
Oct-2014	0.0756	0.0787	0.000077 J	0.0141	2.6	2.55	0.000825 J	ND	6.02	6.25	ND	0.003 J	0.0125
Apr-2015	0.113	0.112	0.000027 J	0.0153	3.81	3.79	0.000966 J	ND	8.21	8.08	ND	0.0012 J	0.0194
Nov-2015	0.0686	0.0749	ND	0.0111	2.87	2.92	0.0012 J	ND	5.56	5.95	0.00017 J	0.0039 J	0.0099 J
May-2016	0.0743	0.0756	0.000053 J	0.0089	3.1	2.97	ND	ND	6.96	6.43	ND	0.00071 J	0.0095 J
Oct-2016	0.0725	0.0807	ND	0.007	3.41	3.73	ND	ND	6.19	6.52	ND	0.00093 J	0.0054 J
May-2017	0.0811	0.0733	ND	0.005	4.28	4.09	0.00052 J	ND	6.01	5.56	ND	0.0014	0.0047 JB
Oct-2017	0.0631	0.0706	ND	0.0084	4.09	4.76	0.00052 J	ND	7.57 J-	8.44	ND	ND	0.0045 J
May-2018	0.019	0.042	ND	0.015	0.93 J	3.5 J	0.00088 J	ND	8.6	10.9	ND	0.0022	0.013

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22B***												
Nov-2018	0.037	0.034	*ND*	0.028	*4 J*	*4 J*	*0.00091 J*	*ND*	7.4	7.6	*ND*	0.0034	*0.0049 J*
May-2019	0.029	0.033	*ND*	0.0093	*ND*	*ND*	*ND*	*ND*	8	7.7	*ND*	0.0043	*ND*
Oct-2019	0.026	0.028	*ND*	0.0096	*2.5 J*	*2.2 J*	*0.00069 J*	*0.00045 J*	*4.8 J*	*4 J*	0.00051	0.0023	0.016
May-2020	0.046	0.044	*ND*	0.0097	*2.8 J*	*3.2 J*	*0.00062 J*	*ND*	7.5	6.4	*ND*	0.01	*0.0038 J*
Oct-2020	0.037	0.037	*ND*	0.013	*3.7 J*	*3.3 J*	*ND*	*ND*	12.8	11.5	*ND*	*0.0017 J*	*ND*
Apr-2021	0.021	0.022	*ND*	*0.0097 J*	2.2	2.2	*ND*	*ND*	6.8	7.6	*ND*	*0.00063 J*	*0.0037 J*
Oct-2021	0.037	0.042	*0.00003 J*	0.0064	3.2	3	*ND*	*ND*	7.6	9.3	*0.000089 J*	*ND*	*0.0022 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-22B***																
Nov-1993	ND	ND	ND	ND	75	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	72	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	47	ND
Oct-1996	ND	ND	ND	ND	97	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND
Apr-1997	ND	ND	9	ND	66	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	39	ND	ND	ND	ND	ND	ND	ND	1.1 J	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	80	ND	ND	ND	ND	ND	ND	1.8 J	1.9 J	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	24	ND	NA	NA	NA	NA	ND	ND	1	ND	NA	NA	7.3	NA
Oct-1999	ND	ND	ND	ND	21	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	6.7	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	20	ND	ND	ND	ND	ND	ND	0.7 J	1.7	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	16	ND	ND	ND	ND	ND	ND	0.5 J	0.8 J	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	15	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	7.1	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	8.4	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22B*																
Feb-2006	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2006	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	ND	NA	0.8 J	NA	NA	NA	ND	NA
Dec-2006	NA	ND	NA	NA	3.1	NA	NA	NA	NA	NA	ND	NA	ND	NA	NA	NA	ND	NA
Mar-2007	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.62 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.86 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	0.42 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.11 J	ND
Apr-2015	ND	ND	ND	ND	0.34 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22B*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.9 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.152 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-22B*															
Nov-1993	**19**	ND	ND	ND	ND	ND	ND	ND	7.7	ND	ND	28	ND	ND	ND	9.9	70
Apr-1994	**43**	ND	ND	ND	ND	ND	ND	ND	10	ND	ND	18	ND	ND	ND	5.9	47
Oct-1996	**49**	ND	ND	ND	ND	ND	ND	ND	3.4	ND	ND	18	ND	ND	ND	8	58
Apr-1997	**21**	ND	ND	ND	ND	ND	ND	ND	5	ND	ND	13	ND	ND	ND	39	33
Oct-1997	**12**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10	ND	ND	ND	4.9	56
Apr-1998	**45**	ND	ND	ND	ND	ND	ND	ND	4.1	ND	ND	16	ND	ND	ND	10	35
Apr-1999	**9.2**	NA	NA	NA	NA	ND	NA	0.5 J	ND	ND	NA	5	NA	NA	NA	3.3	17
Oct-1999	**5.5**	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	4.8	ND	ND	ND	2.6	15
Apr-2000	1.8	NA	NA	ND	NA	ND	NA	ND	0.5 J	ND	NA	1.2	NA	ND	NA	1.5	4.6
Oct-2000	4.2	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	2.4	ND	ND	ND	7	9.2
Apr-2001	**15**	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	2.7	ND	ND	ND	2.3	8
Sep-2001	**7.2**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	2.5	5.8
Mar-2002	**7.3**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	3.6	5.8
Sep-2002	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	1.5	2.7
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.6 J
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	1.6	2.1
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	1.1	1.4
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.6 J
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22B***															
Feb-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.2
Dec-2006	ND	NA	NA	ND	NA	NA	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND
Dec-2006	ND	NA	NA	ND	NA	NA	NA	ND	NA	ND	NA	ND	NA	ND	NA	1.3	1.4
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.9 J
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.9 J
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.6 J
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.32 J	0.27 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22B***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.129 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22B***															
Nov-1993	ND	ND	7.2	ND	**6.3**	ND	ND	**18**	ND	ND	ND	ND	**16**	ND	ND	**4.2**	NA
Apr-1994	13	ND	ND	ND	3.4	ND	ND	4.5	ND	ND	ND	ND	**6.6**	ND	ND	**3**	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	**16**	ND	1.7	ND	ND	**12**	ND	ND	**4**	2.1
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	2	ND	ND	ND	9	ND	**6**	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	**7.8**	ND	ND	ND	ND	**7.7**	ND	ND	1.9 J	NA
Apr-1998	ND	ND	1.5	NA	ND	ND	ND	**6.7**	ND	1.9 J	ND	ND	**7.3**	ND	ND	**2.9**	NA
Apr-1999	0.6 J	NA	ND	NA	ND	ND	NA	1.3	ND	0.8 J	NA	NA	1.6	ND	NA	1.6	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	1.3	ND	0.7 J	ND	ND	1.9	ND	ND	1.4	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	1.4	ND	ND	NA	NA	1	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	1.2	ND	ND	ND	ND	2.4	ND	ND	1.1	NA
Apr-2001	1.1	ND	0.5 J	NA	ND	ND	ND	0.5 J	ND	0.5 J	ND	ND	2.3	ND	ND	0.8 J	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	0.5 J	ND	ND	ND	ND	1.9	ND	ND	0.6 J	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	0.8 J	ND	ND	ND	ND	1.7	ND	ND	0.7 J	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	1.1	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22B***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	34.7	ND	ND	ND	ND	ND	ND	ND	NA
Feb-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Dec-2006	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Dec-2006	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	0.6 J	ND	NA	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22B***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.9 BCH	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.438 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

HISTORICAL TABLES –
On-site Non-regulated Wells

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-02***											
Nov-1993	ND	ND	ND	ND	2.5	ND	ND	4.9	14.8	ND	18	1.36
Apr-1994	13	13	ND	ND	2.2	0.9	ND	4.68	16.9	ND	19	ND
Apr-1995	ND	ND	ND	ND	2.3	ND	ND	4.9	17.2	1.9	12	1.3
Apr-1997	ND	2	ND	24	2	0.02	ND	NA	NA	ND	82	4
Apr-1998	5	5	0.24	ND	1.69	ND	ND	6.56	51.6	ND	ND	1.8
Apr-1999	ND	ND	0.14	ND	2.64	ND	ND	4.99	17.57	ND	18	1.8
Apr-2001	ND	NA	ND	ND	33.5	ND	ND	NA	NA	ND	ND	2.3
Mar-2002	ND	ND	ND	16	3.79	ND	ND	6.1	34.8	1.62	22	1.91
Mar-2003	1.9	1.9	ND	ND	12.8	ND	ND	5.3	16	ND	42	1.36
Apr-2004	2	2	ND	ND	2.1	ND	ND	5.5	13.3	ND	ND	2.19
Apr-2005	2.2	2.2	ND	ND	2.18	ND	ND	5.9	22.9	ND	45	3.12
Mar-2006	4.3	4.3	ND	ND	2.45	ND	ND	5.3	14.4	ND	29	2.01
Mar-2007	3.4	3.4	ND	ND	2.83	ND	ND	5	12.9	ND	26	1.69
Mar-2008	2.8	2.8	ND	ND	2.63	ND	ND	4.6	16	ND	14	2.6
Mar-2009	3.5	3.5	ND	ND	2.65	ND	ND	4.8	15.2	ND	29	2.4
Apr-2010	4.3	4.3	ND	ND	2.28	ND	ND	4.5	14.5	ND	18	1.6
Apr-2011	4.2	4.2	ND	ND	2.4	ND	ND	4.8	12.4	ND	ND	2.25
Mar-2012	3.3	3.3	ND	ND	2.46	ND	ND	4.1	12.1	ND	ND	2.38
Sep-2012	3.52	3.52	ND	ND	2.73	ND	ND	5.4	14.6	ND	35	2.73
Mar-2013	3.76	3.76	0.0847 J	ND	2.95	0.0243 J	ND	6	15.7	0.72 J	ND	2.84
Oct-2013	4.84	4.84	ND	ND	2.9	0.0353 J	ND	5.8	15.4	0.577 J	ND	2.28
Mar-2014	4.68	4.68	ND	ND	3.04	ND	ND	5.8	21.3	0.56 J	ND	2.33
Oct-2014	ND	ND	ND	ND	3.15	ND	ND	5	17.4	ND	ND	2.32
Apr-2015	7.8	7.8	ND	5 J	2.76	ND	ND	5	25.1	ND	ND	2.26
Nov-2015	2.76	2.76	ND	ND	2.54	ND	ND	5.8	28.6	ND	29	2.54
May-2016	4.8	4.8	ND	198	3.03 B	ND	ND	5.3	24.3	ND	93	3.5
Oct-2016	3.36	3.36	ND	8 J	3.2	NA	NA	5.4	27.1	1.03	37	3
May-2017	4.64	4.64	ND	ND	3.38	ND	ND	5.3	28.9	0.703 J	14 J	3.7
Oct-2017	22.6	22.6	ND	13	2.97	ND	ND	5.6	31.7	ND	30	3.2
May-2018	6 JB	ND	ND	5.8 J	3.7	0.063 J	ND	4.9	39.1	ND	ND	4.7
Nov-2018	18	18	0.099 J	ND	3.9	0.093 J	ND	6.05	42.6	ND	14	4.9
May-2019	ND	NA	ND	ND	ND	0.22	ND	5.72	26.5	ND	63	ND
Oct-2019	10 H1	NA	ND	ND	3.6	0.18	ND	5.79	51.7	ND	40	4.1
May-2020	14	NA	ND	6.9 J	4.6	ND	0.01	5.8	62.2	ND	11	4.1
Oct-2020	12	NA	ND	7 J	3.3	ND	ND	5.92	50.8	ND	46	3.3
Apr-2021	12	NA	ND	ND	3.5	0.065 J	ND	6.41	60.8	ND	16	2.8 J
Oct-2021	8 J3c	NA	ND	ND	2.8 J	ND	ND	6.21	75.4	ND	ND	3.17 J

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-02***													
Nov-1993	NA	ND	ND	NA	ND	0.15	NA	ND	NA	ND	0.55	0.25	ND	0.24	NA
Apr-1994	NA	ND	ND	NA	ND	ND	NA	ND	NA	ND	0.11	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	0.14	NA	ND	ND	ND	0.62	1.8	ND	0.24	NA
Apr-1997	ND	ND	0.015	ND	ND	0.7	0.54	ND	ND	ND	0.26	0.24	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	0.296	0.317	ND	ND	ND	5.76	2.06	ND	0.266	0.266
Apr-1999	ND	ND	ND	ND	ND	0.263	0.285	ND	ND	ND	9.7	0.976	ND	0.268	0.276
Apr-2001	ND	ND	0.011	ND	ND	0.407	NA	0.019	ND	0.055	11.2	NA	0.002	0.311	NA
Mar-2002	ND	ND	0.011	ND	ND	0.455	0.17	ND	ND	0.015	20.2	1.69	ND	0.309	0.266
Mar-2003	ND	ND	ND	ND	ND	0.175	0.15	ND	ND	ND	0.609	0.421	ND	0.225	0.19
Apr-2004	ND	ND	ND	ND	ND	0.402	0.158	ND	ND	ND	3.89	0.572	ND	0.289	0.195
Apr-2005	ND	ND	0.011	ND	ND	0.695	0.247	ND	ND	ND	5.82	0.502	0.002	0.335	0.278
Mar-2006	ND	0.002	0.012	ND	ND	0.259	0.14	0.01	ND	0.013	18.5	ND	0.003	0.332	0.269
Mar-2007	ND	ND	0.013	ND	ND	0.165	0.158	ND	ND	0.02	3.08	0.175	ND	0.311	0.293
Mar-2008	ND	0.004	0.011	ND	ND	0.377	0.224	ND	ND	ND	2.93	0.165	ND	0.403	0.31
Mar-2009	ND	ND	ND	ND	ND	0.367	0.256	ND	ND	ND	4.14	0.325	ND	0.36	0.273
Apr-2010	ND	ND	ND	ND	ND	0.12	ND	ND	ND	ND	23.9	0.187	ND	0.32	0.213
Apr-2011	ND	ND	ND	ND	ND	0.257	0.227	ND	ND	ND	19.9	0.145	ND	0.391	0.264
Mar-2012	ND	ND	ND	ND	ND	0.226	0.223	ND	ND	ND	14.3	0.236	ND	0.441	0.411
Sep-2012	ND	ND	0.009 J	ND	ND	0.35	0.33	0.0016 J	0.000481 J	0.0028 J	5.6	0.278	0.000853 J	0.45	0.453
Mar-2013	ND	ND	0.0093 J	ND	ND	0.418	0.281	0.0017 J	0.000427 J	0.0031 J	5.84	0.18	ND	0.436	0.314
Oct-2013	ND	ND	0.0093	ND	ND	0.265	0.27	ND	0.000352 J	ND	1.11	0.371	ND	0.393	0.412

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-02***													
Mar-2014	0.000324 J	ND	0.0081 J	ND	ND	0.222	0.188	0.000473 J	0.000339 J	0.000538 J	1.18	0.422	ND	0.431	0.347
Oct-2014	0.000908 J	0.000509 J	0.0099 J	ND	ND	0.287	0.257	0.0024 J	0.000575 J	0.0077 J	11.2	0.255	ND	0.39	0.321
Apr-2015	0.000544 J	ND	0.0105	ND	ND	0.275	0.247	0.0022 J	0.000408 J	0.0024 J	8.26	0.743	ND	0.382	0.337
Nov-2015	0.000654 J	0.000454 J	0.0108	ND	ND	0.321	0.35	0.0048 J	0.000604 J	0.0047 J	11.9	0.395	0.000883 J	0.423	0.34
May-2016	0.0004 J	0.0017 J	0.0114	ND	ND	0.588	0.584	0.0046	0.003	0.0203	11.6	3.49	0.00099 J	0.49	0.498
Oct-2016	0.00058 J	0.0023 J	0.0095	ND	ND	0.382 J	0.368 J	0.008 J+	0.0029	0.035 J+	19.7	1.73	0.00036 J	0.498 J+	0.475
May-2017	ND	0.002 J	0.0088	ND	ND	0.546	0.42	0.0105	0.0025	0.0459	15	10.4	0.0006 J	0.568	0.555
Oct-2017	0.00059 J	0.0035 J	0.007	ND	ND	0.433	0.418	0.0161	0.0035	0.0677	19.8	12.2	0.00068 J	0.504	0.466
May-2018	0.00011 J	ND	0.014	0.000038 J	0.00005 J	0.51 J	0.52 J	0.0016 JB	0.00054	0.003	1.2	1.2	0.000091 JB	0.83 J	0.85 J
Nov-2018	ND	ND	0.011	ND	ND	0.52 J	0.49 J	0.0041 J	0.00049 J	0.00078 J	8.8	7.8	0.00016 J	0.87 J	0.82 J
May-2019	ND	ND	0.011	ND	ND	ND	ND	ND	0.00052	ND	4.4	3.9	ND	ND	ND
Oct-2019	0.000089 JB	ND	0.012	ND	0.00018 JB	0.41	0.41 J	0.0029 J	0.00056	0.0035	9.7	8.3	0.00014 JB	0.75	0.77 J
May-2020	0.000067 J	ND	0.01	ND	ND	0.51	0.51 J	0.0032 J	0.00064	0.002 J	16.2	13.9	ND	0.7	0.69 J
Oct-2020	0.00039 J	ND	0.011	ND	ND	0.36	0.31 J	0.01 JB	0.00064 J	ND	12.2	9.9	ND	0.59	0.53 J
Apr-2021	ND	ND	0.0085 J	ND	ND	0.26 J	0.27 J	0.0017 J	0.00062 J	ND	11.2	10.2	ND	0.53	0.53
Oct-2021	0.000084 JB	ND	0.0089	ND	ND	0.32 J	0.37 J	0.0027	0.00051 J	ND	8.2	7.3	ND	0.58	0.57

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-02*												
Nov-1993	0.06	NA	ND	NA	0.62	NA	ND	NA	1.3	NA	NA	NA	ND
Apr-1994	0.007	NA	ND	NA	0.8	NA	ND	NA	1.6	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.73	NA	ND	ND	1.2	NA	ND	ND	0.01
Apr-1997	ND	0.012	ND	ND	2.1	1.8	ND	ND	1.1	1.9	ND	ND	0.039
Apr-1998	0.066	0.083	NA	ND	1.2	0.689	ND	ND	1.21	1.27	ND	ND	0.012
Apr-1999	0.036	0.037	NA	ND	ND	ND	ND	ND	1.19	1.21	ND	ND	ND
Apr-2001	0.039	NA	NA	0.026	1.57	NA	ND	ND	2.73	NA	ND	ND	0.031
Mar-2002	0.059	0.036	NA	ND	0.702	0.507	ND	ND	1.8	1.22	ND	ND	0.026
Mar-2003	0.015	0.017	NA	ND	1.09	ND	ND	ND	1.28	1.27	ND	ND	0.106
Apr-2004	0.044	0.024	ND	ND	0.983	ND	ND	ND	1.74	1.19	ND	ND	0.042
Apr-2005	0.028	0.013	ND	ND	0.8	0.72	ND	ND	1.52	1.29	ND	ND	0.064
Mar-2006	ND	ND	ND	ND	0.687	0.509	ND	ND	1.42	0.923	ND	ND	ND
Mar-2007	0.016	ND	ND	ND	ND	ND	ND	ND	1.13	1.06	ND	ND	0.019
Mar-2008	0.015	0.011	ND	ND	0.808	0.673	ND	ND	1.38	1.23	ND	ND	0.025
Mar-2009	0.017	ND	ND	ND	0.552	0.599	ND	ND	1.41	1.61	ND	ND	0.019
Apr-2010	0.021	ND	ND	ND	0.706	0.627	ND	ND	1.23	1.29	ND	ND	0.02
Apr-2011	0.018	ND	ND	ND	0.706	0.653	ND	ND	1.33	1.38	ND	ND	0.019
Mar-2012	0.018	ND	ND	ND	0.564	0.581	ND	ND	1.26	1.26	ND	ND	0.017
Sep-2012	0.0103	0.0076 J	ND	0.0016 J	0.656	0.635	ND	ND	1.33	1.3	0.000582 J	ND	0.0142
Mar-2013	0.0082 J	0.0054 J	0.000085 J	0.0014 J	0.66	0.591	ND	ND	1.33	1.25	ND	ND	0.0303
Oct-2013	0.0158	0.0143	ND	0.0014 J	0.616	0.619	ND	ND	1.38	1.44	0.000112 J	0.000996 J	0.0216
Mar-2014	0.0154	0.0099 J	ND	0.00098 J	0.652	0.703	ND	ND	1.38	1.46	ND	ND	0.0151

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-02***												
Oct-2014	0.0176	0.0112	*0.00005 J*	*0.0028 J*	0.691	0.717	*0.0013 J*	*ND*	1.41	1.48	*ND*	*ND*	0.0234
Apr-2015	0.0283	0.0204	*ND*	*0.0017 J*	0.76	0.721	*0.00072 J*	*ND*	1.42	1.46	*ND*	*0.000969 J*	0.0236
Nov-2015	0.0355	0.0112	*ND*	*0.004 J*	0.792	0.736	*0.000487 J*	*ND*	1.5	1.72	*ND*	*0.0011 J*	0.0201
May-2016	0.0867	0.0433	*ND*	0.0273	0.827	0.766	*ND*	*ND*	1.5	1.41	*ND*	0.001	0.13
Oct-2016	0.0331 R	0.0178	*ND*	*0.031 J+*	0.745	0.73	*ND*	*ND*	*1.63 J+*	1.59	*ND*	*0.00022 J*	*0.0191 J*
May-2017	0.109	0.0891	*ND*	0.029	0.755	0.763	*ND*	*ND*	1.38	1.63	*ND*	*ND*	*0.0162 J*
Oct-2017	0.14	0.117	*ND*	0.0432	0.739	0.685	*ND*	*ND*	1.32	1.27	*ND*	*ND*	*0.0241 J*
May-2018	0.016	0.017	*ND*	0.0023	*ND*	*ND*	*0.00046 J*	*ND*	*1.8 J*	*1.7 JB*	*ND*	0.0021	0.013
Nov-2018	0.15	0.18	*ND*	0.0043	*1.2 J*	*ND*	*0.00014 J*	*ND*	*1.8 J*	*1.8 J*	*ND*	*ND*	*0.0033 J*
May-2019	0.093	0.083	*ND*	0.0047	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	0.15	0.14	*ND*	0.0027	*ND*	*1.1 J*	*ND*	*ND*	*1.8 J*	*2.2 J*	*ND*	*ND*	0.0091 B
May-2020	0.19	0.19	*ND*	0.0031	*ND*	*ND*	*ND*	*ND*	*2.2 J*	*2.2 J*	*ND*	*0.00027 J*	*0.0047 J*
Oct-2020	0.17	0.15	*ND*	0.0032	*ND*	*ND*	*ND*	*ND*	*2.2 J*	*1.7 J*	*ND*	*0.0029 JB*	*ND*
Apr-2021	0.15	0.15	*ND*	*0.0019 J*	0.63	0.63	*ND*	*ND*	2.1	2	*ND*	*ND*	*ND*
Oct-2021	0.12	0.11	*ND*	*0.0023 J*	0.66	0.65	*ND*	*ND*	2	2	*0.000024 J*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-02*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.21 J	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.99 J,B	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-02*																
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.24 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.6 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.7 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-02***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.76 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.68 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-02***															
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.89 J*	*0.41 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.35 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.28 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.164 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-02***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-02***															
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	1 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-03A***											
Nov-1993	ND	ND	0.5	ND	21.6	ND	ND	5.15	88.3	4.2	64	2.75
Apr-1994	ND	18	0.1	31.9	5.5	ND	ND	5.12	28.7	1.1	22	ND
Apr-1995	5.2	5.2	ND	ND	13.8	ND	ND	6	49.3	3.5	ND	2.8
Apr-1997	ND	5	ND	ND	38	0.07	ND	NA	NA	ND	91	12
Apr-1998	4	4	0.22	ND	14	0.15	ND	6.85	52.7	ND	43	2.5
Apr-1999	ND	ND	0.16	ND	8.58	0.13	ND	4.97	44.1	ND	44	3
Apr-2000	1	1	0.76	ND	190	0.28	ND	5.1	298	4.99	379	37
Apr-2001	ND	NA	ND	ND	22.8	ND	ND	NA	NA	4.16	42	6.97
Mar-2002	1.2	1.2	0.34	ND	219	ND	ND	5	711	9.53	353	31.8
Mar-2003	ND	ND	ND	ND	189	ND	ND	4.9	970	13.2	191	40.7
Apr-2004	3	3	ND	ND	32.7	0.07	ND	5.7	120.2	2.07	67	8.7
Apr-2005	2.3	2.3	ND	16	35.6	0.08	ND	5.1	114.5	3.25	88	5.45
Mar-2006	3.8	3.8	ND	ND	17.2	0.1	ND	5.1	74.3	3.54	ND	3.72
Mar-2007	1.1	1.1	ND	ND	233	0.17	ND	5.1	845	8.42	373	34.3
Mar-2008	4.8	4.8	ND	ND	12.8	0.09	ND	5.2	64.7	2.96	29	3.84
Mar-2009	17	17	0.23	ND	20.1	ND	ND	5.1	90.7	3.22	53	4.42
Apr-2010	11.4	11.4	ND	ND	45.5	ND	ND	4.8	188.5	1.11	91	10.3
Apr-2011	8.3	8.3	ND	ND	19.6	ND	ND	4.7	60	1.58	55	3.69
Mar-2012	8.3	8.3	ND	ND	42	ND	ND	4.8	134.7	2.09	78	9.69
Sep-2012	11.1	11.1	ND	ND	30.3	ND	ND	5.9	111.2	3.08	93	6.68
Mar-2013	4.72	4.72	0.0887 J	ND	7.13	0.0421 J	ND	5.7	38.9	2.13	ND	3.36
Oct-2013	17.1	17.1	ND	10.1	45.6	0.0428 J	ND	5.5	159.8	6.59	96	8.13
Mar-2014	6.32	6.32	ND	ND	56.8	0.0633	ND	5.4	166.3	10.5	115	9.28
Oct-2014	26.4	26.4	ND	9 J	51.8	0.0908	ND	5.5	176.8	4.91	104	8.6
Apr-2015	4.68	4.68	0.155 J	ND	6.83	0.0594	ND	4	41.9	3.66	25	3.93
Nov-2015	ND	ND	ND	5 J	62.5	ND	ND	5.7	328	2.14	112	11.5
May-2016	ND	ND	ND	6 J	168	0.0605	ND	5.1	491	2.36	254	19.6
Oct-2016	1.88	1.88	ND	17	155	NA	NA	6.1	524	1.92	254	16.9
May-2017	ND	ND	ND	ND	105	0.103	ND	5.1	487	5.61	185	15.6
Oct-2017	3.72	3.72	ND	ND	207	0.0842	ND	6	663	8.01	257	20.8
May-2018	8 JB	ND	ND	7.9 J	119	ND	ND	NA	NA	9 J	184	18.2
Nov-2018	8 JB	ND	ND	12.2 J	101	ND	0.046	6.7	386.2	ND	161	15.6
May-2019	14	NA	0.31 ML	ND	61.7	ND	0.019	6.14	229.1	ND	121	6.5
Oct-2019	4 JH1	NA	ND	8.2 J	45.8	0.064 J	0.012	6.1	260.6	ND	100	5.4
May-2020	2 J	NA	ND	11.3 J	39.6	ND	0.027	5.97	197.3	ND	61	4.4
Oct-2020	2 J	NA	ND	9.3 J	48.6	ND	ND	5.98	228.1	ND	113	4.6
Apr-2021	2 J3c	NA	ND	10.5 J	54.6	0.068 J	ND	7	328.6	ND	102	3.8

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-03A***										
Oct-2021	*ND*	*NA*	*ND*	*10.5 J*	40.6	*ND*	*ND*	6.88	309.9	*ND*	64	4.02

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-03A***													
Nov-1993	NA	ND	ND	NA	ND	0.36	NA	ND	NA	ND	3.7	2.4	ND	0.45	NA
Apr-1994	NA	ND	ND	NA	ND	ND	NA	ND	NA	ND	0.32	0.08	ND	7.3	NA
Apr-1995	ND	ND	ND	ND	ND	0.45	NA	ND	ND	ND	0.6	0.56	ND	0.4	NA
Apr-1997	ND	ND	0.057	ND	ND	1.8	1.3	ND	ND	ND	4.5	2.8	ND	1.4	1.2
Apr-1998	ND	ND	0.016	ND	ND	0.46	0.465	ND	ND	ND	7.02	3.87	ND	0.34	0.339
Apr-1999	ND	ND	0.014	ND	ND	0.587	0.591	ND	ND	ND	4.69	1.27	ND	0.361	0.334
Apr-2000	ND	ND	0.195	ND	ND	8.12	7.98	ND	ND	ND	4.54	3	ND	3.96	3.89
Apr-2001	ND	ND	0.039	ND	ND	1.47	NA	ND	ND	ND	8.19	NA	ND	0.802	NA
Mar-2002	ND	ND	0.183	ND	ND	7.3	7.51	ND	ND	ND	3.22	1.4	ND	3.3	3.33
Mar-2003	ND	ND	0.31	ND	ND	8.68	8.46	ND	ND	ND	2.32	1.61	ND	4.61	4.43
Apr-2004	ND	ND	0.038	ND	ND	1.83	1.62	ND	ND	ND	3.39	1.07	ND	1.01	0.924
Apr-2005	ND	ND	0.036	ND	ND	1.02	1.02	ND	ND	ND	5.4	2.96	ND	0.704	0.685
Mar-2006	ND	ND	0.014	ND	ND	0.898	0.683	ND	ND	ND	6.28	0.653	ND	0.36	0.343
Mar-2007	ND	ND	0.176	ND	ND	9.17	8.74	ND	ND	ND	3.13	1.55	ND	2.78	2.62
Mar-2008	ND	ND	0.017	ND	ND	0.878	0.84	ND	ND	ND	2.98	1.72	ND	0.399	0.377
Mar-2009	ND	ND	0.018	ND	ND	1.04	0.964	ND	ND	ND	14.6	7.91	ND	0.443	0.419
Apr-2010	ND	ND	0.031	ND	ND	0.654	1.77	ND	ND	ND	13.7	9.24	ND	1.02	0.971
Apr-2011	ND	ND	0.015	ND	ND	0.812	0.751	ND	ND	ND	15.9	14	ND	0.402	0.377
Mar-2012	ND	ND	0.033	ND	ND	2.13	1.97	ND	ND	ND	11.1	2.3	ND	1.06	0.98
Sep-2012	ND	ND	0.0218	0.000066 J	ND	1.6	1.49	0.0018 J	0.0012 J	0.0019 J	7.83	3.83	ND	0.651	0.6
Mar-2013	ND	ND	0.0133	0.000107 J	ND	0.784	0.638	0.0015 J	0.0011 J	0.0014 J	3.34	1.27	ND	0.34	0.278

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-03A***													
Oct-2013	ND	ND	0.0286	ND	ND	1.95	1.91	0.000793 J	0.0025	0.0014 J	16.3	17.6	0.000568 J	0.791	0.747
Mar-2014	ND	0.001 J	0.0289	ND	0.000177 J	2.63	2.43	0.0051 J	0.0021 J	0.0041 J	14.9	2.44	0.0024	0.658	0.799
Oct-2014	0.000393 J	0.0013 J	0.0271	ND	0.00013 J	2.02	1.97	0.000888 J	0.0014 J	0.0033 J	27.7	14.9	0.0011 J	0.865	0.848
Apr-2015	0.0016 J	0.000766 J	0.0135	ND	0.000106 J	0.858	0.839	0.000666 J	0.0013 J	0.0033 J	5.19	1.13	ND	0.434	0.393
Nov-2015	0.000548 J	0.000437 J	0.0321	ND	0.000323 J	2.79	2.71	0.000539 J	0.0015 J	0.0027 J	28.6	24.5	0.00049 J	1.1	1.06
May-2016	ND	0.00058 J	0.0897	0.00024 J,B	0.00024 J	4.38	4.07	0.00088 J	0.0043	0.0015 J,B	3.55	2.24	0.0011 J	2.1	2.09
Oct-2016	ND	0.0021 J	0.0614	ND	ND	4.02	4.19	0.0027 J+	0.0034	0.0093 J+	55.5	34.8	0.0022	1.68 J+	1.68
May-2017	ND	0.00098 J	0.0824	0.00016 J	ND	3.66	3.71	0.0013 J	0.0061	0.0046	7.74	2.93	0.00075 J	1.57	1.63
Oct-2017	ND	ND	0.0982	0.00014 J	ND	5.44	5.13	0.0046	0.0025	0.00065 J	3.11	2.21	0.00021 J	1.75	1.89
May-2018	0.000066 J	ND	0.079	0.00012 J	0.000094 J	4.5	4.4	0.0026 JB	0.0018	0.0017 J	2.7	2.8	0.00018 J	1.7	1.6
Nov-2018	ND	0.00017 J	0.056	ND	0.000022 J	3.5	3.4	0.0026 J	0.00044 J	0.0019 J	52	48.2	0.00013 J	1.6	1.5
May-2019	ND	ND	0.025	ND	ND	1.4	1.6	ND	ND	ND	54.2	53.4	ND	ND	ND
Oct-2019	0.00011 JB	ND	0.014	ND	0.00025 JB	1.2	1.2	0.002 JB	0.0002 J	0.0016 J	52	47.4	0.000067 JB	0.58	0.59 J
May-2020	0.00025 J	ND	0.011	ND	ND	1	1	0.0027 J	0.0002 J	0.0014 J	29.5	27.6	ND	0.44	0.44 J
Oct-2020	0.00042 J	ND	0.011	ND	ND	1.1	0.97 J	0.0078 JB	ND	ND	36.8	33	ND	0.46	0.4 J
Apr-2021	ND	ND	0.014	ND	ND	0.84 J	0.88 J	0.00071 J	ND	ND	64	62.9	ND	0.42	0.42
Oct-2021	0.00007 JB	ND	0.011	ND	ND	0.94	0.87	0.00094 J	0.00017 J	ND	59.3	52.9	ND	0.41 J	0.38 J

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-03A*												
Nov-1993	0.12	NA	ND	NA	1.1	NA	ND	NA	26.1	NA	NA	NA	0.02
Apr-1994	0.038	NA	ND	NA	0.79	NA	ND	NA	4.1	NA	NA	NA	0.009
Apr-1995	0.02	NA	ND	ND	0.99	NA	ND	ND	5.7	NA	ND	ND	0.03
Apr-1997	0.13	0.095	ND	ND	2.8	2.8	ND	ND	26	26	ND	ND	ND
Apr-1998	0.099	0.099	NA	ND	0.643	1.57	ND	ND	6.95	7.43	ND	ND	0.01
Apr-1999	0.064	0.063	NA	ND	ND	1.09	ND	ND	4.03	4.01	ND	ND	ND
Apr-2000	0.195	0.201	NA	ND	2	2.15	ND	ND	114	112	ND	ND	0.01
Apr-2001	0.92	NA	NA	ND	1.35	NA	ND	ND	19.2	NA	ND	ND	ND
Mar-2002	0.134	0.131	NA	ND	2.72	2.54	ND	ND	108	103	ND	ND	0.015
Mar-2003	0.192	0.184	NA	ND	2.02	1.02	ND	ND	161	154	ND	ND	0.015
Apr-2004	0.061	0.057	ND	ND	1.31	ND	ND	ND	20.8	19.7	ND	ND	0.011
Apr-2005	0.09	0.084	ND	ND	1.19	1.19	ND	ND	21	20.2	ND	ND	ND
Mar-2006	0.01	ND	ND	ND	0.552	0.565	ND	ND	9.06	8.7	ND	ND	ND
Mar-2007	0.103	0.099	ND	ND	1.27	1.18	ND	ND	100	107	ND	ND	0.032
Mar-2008	0.046	0.037	ND	ND	0.776	0.728	ND	ND	8.12	7.66	ND	ND	ND
Mar-2009	0.125	0.104	ND	0.015	0.649	0.69	ND	ND	10.9	11.4	ND	ND	0.012
Apr-2010	0.736	0.233	ND	ND	1.35	1.16	ND	ND	26.4	37.7	ND	ND	ND
Apr-2011	0.184	0.157	ND	ND	0.895	0.887	ND	ND	12.6	12.4	ND	ND	0.013
Mar-2012	0.178	0.076	ND	ND	1.06	0.933	ND	ND	26.7	25.3	ND	ND	ND
Sep-2012	0.0886	0.0681	ND	0.0027 J	0.789	0.738	ND	ND	20	18.9	ND	ND	0.0048 J
Mar-2013	0.0367	0.0268	0.000069 J	0.0071 J	0.674	0.541	ND	ND	4.59	3.96	ND	ND	0.0143
Oct-2013	0.162	0.164	ND	0.0124	0.886	0.806	ND	ND	31.9	34.2	ND	0.0011 J	0.0143

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-03A***												
Mar-2014	0.0648	0.0499	ND	0.0078 J	1.07	0.939	ND	ND	38.7	38.3	ND	0.0122	0.0105
Oct-2014	0.24	0.193	ND	0.0045 J	1.17	1.14	0.0018 J	ND	32.8	32.5	ND	ND	0.0107
Apr-2015	0.0551	0.0339	ND	0.007 J	0.763	0.771	ND	ND	5.44	5.33	ND	ND	0.0076 J
Nov-2015	0.359	0.312	ND	0.0048 J	1.06	1.07	ND	ND	35.6	35.5	ND	ND	0.0084 J
May-2016	0.124	0.103	ND	0.0109	1.52	1.36	ND	ND	71.1	67.1	ND	0.00041 J	0.0163 J
Oct-2016	0.382 R	0.304	ND	0.0199 J+	1.22	1.23	ND	ND	68.1	62.4	ND	0.00053 J	0.0124 J
May-2017	0.111	0.0807	ND	0.0373	1.21	1.23	ND	ND	57.9	58.4	ND	ND	0.0075 J
Oct-2017	0.102	0.093	ND	0.0057 B	1.26	1.38	ND	ND	72.9	82	ND	ND	ND
May-2018	0.079	0.081	ND	0.0034	ND	0.95 J	0.00098 J	ND	81.7	74.2	0.00018 J	0.002	0.0073
Nov-2018	0.76	0.75	ND	0.0025	ND	ND	0.00012 J	ND	47.2	47.9	ND	ND	0.0032 J
May-2019	0.64	0.61	ND	0.00082	ND	ND	ND	ND	21	22.2	ND	ND	ND
Oct-2019	0.49	0.48	ND	0.00068	ND	ND	ND	ND	19.4	19.6	ND	ND	0.0088 B
May-2020	0.36	0.34	ND	0.0012	ND	ND	ND	ND	19.5	19.6	ND	ND	0.0044 J
Oct-2020	0.39	0.35	ND	ND	ND	ND	ND	ND	23	19	ND	0.0039 JB	ND
Apr-2021	0.45	0.46	ND	ND	0.54	0.57	ND	ND	16	16.8	ND	ND	ND
Oct-2021	0.51	0.47	ND	0.00071 J	0.57	0.53	ND	ND	15.4	14.7	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-03A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	18	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	5.8	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.14 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-03A*																
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.03 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.26 J*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.4 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-03A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*0.6 J*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.55 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.51 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-03A***															
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.76 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.68 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.36 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.48 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.22 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-03A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-03A*															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.278 J*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05B***											
Nov-1993	ND	ND	0.1	ND	1.6	0.2	ND	3.73	44.6	3.8	32	1.54
Apr-1994	ND	ND	ND	ND	1.3	ND	ND	4.95	24.4	2.7	ND	ND
Aug-1994	ND	ND	ND	ND	1.6	0.4	ND	4.9	20.4	4.3	ND	2.61
Sep-1994	ND	ND	ND	ND	1.6	0.3	ND	4.8	19.3	4.8	10	2.8
Nov-1994	ND	ND	ND	ND	1.5	0.2	ND	4.5	19.5	4.3	42	1.7
Apr-1995	ND	ND	ND	ND	1.4	ND	ND	4.7	18.7	4.2	ND	1.3
Apr-1997	ND	ND	ND	ND	ND	0.15	ND	NA	NA	ND	35	3.8
Oct-1997	ND	ND	0.2	ND	1.06	ND	ND	5.58	19.8	1.86	21	ND
Apr-1998	3	3	0.22	ND	1.42	ND	ND	5.71	17.86	3.05	15	3.4
Apr-1999	ND	ND	0.27	ND	2.2	ND	ND	4.52	19.24	1.52	32	1.7
Oct-1999	ND	ND	0.06	ND	1.69	ND	ND	4.79	18.92	1.83	32	1.8
Apr-2000	ND	ND	ND	ND	2.52	0.15	ND	4.99	15	1.13	23	1.8
Oct-2000	ND	NA	ND	ND	1.54	ND	ND	4.57	15.62	5.31	14	2.71
Apr-2001	ND	NA	ND	ND	1.2	ND	ND	NA	NA	ND	10	1.92
Sep-2001	ND	ND	ND	ND	2.62	ND	ND	4.61	20	7.5	26	1.99
Mar-2002	ND	ND	ND	ND	1.34	ND	ND	4.7	18	1.9	ND	1.55
Sep-2002	ND	ND	ND	ND	1.34	ND	ND	4.4	19.8	3.95	27	2.95
Mar-2003	ND	ND	ND	ND	2.17	ND	ND	4.8	18.2	2.69	17	2.53
Oct-2003	ND	ND	ND	ND	1.51	0.142	ND	3.8	19.4	2.74	49	10.5
Apr-2004	ND	ND	ND	ND	1.7	0.12	ND	5	15.2	3.17	ND	3.01
Oct-2004	ND	ND	ND	15	1.61	0.11	ND	4.5	19.9	2.56	31	1.77
Apr-2005	3.2	3.2	ND	ND	2.53	0.09	ND	5.2	18.4	ND	44	3.32
Oct-2005	1.1	1.1	ND	ND	1.83	0.12	ND	4.7	14.7	4.29	33	1.76
Mar-2006	1.4	1.4	ND	ND	1.68	0.13	ND	4	16.1	4.73	ND	0.971
Sep-2006	1.2	1.2	ND	ND	1.78	0.12	ND	4.6	16.2	4.13	18	1.42
Mar-2007	1.8	1.8	ND	ND	1.91	0.14	ND	4.8	15.4	3.74	12	1.61
Sep-2007	ND	ND	0.31	ND	1.68	0.13	ND	4.2	14.6	3.39	28	1.33
Mar-2008	ND	ND	ND	10	1.9	0.12	ND	4.4	15.6	4.55	28	1.51
Sep-2008	1.8	1.8	ND	ND	1.74	0.06	ND	4.7	15	5.72	21	1.7
Mar-2009	1.2	1.2	ND	ND	1.65	0.1	ND	4.7	16.8	6.58	16	1.96
Oct-2009	1.4	1.4	ND	ND	1.58	0.14	ND	3.9	15.5	2.74	19	1.47
Apr-2010	1.5	1.5	ND	ND	1.53	0.12	ND	4.6	17.2	2.94	22	1.2
Oct-2010	ND	ND	ND	ND	1.95	0.08	ND	3.8	15.6	2.67	ND	1.62
Apr-2011	1.1	1.1	ND	ND	1.84	0.13	ND	4.1	16.8	2.11	27	1.54
Sep-2011	1.3	1.3	0.21	ND	1.62	0.1	ND	4.5	15.8	2.25	32	1.44
Mar-2012	1.2	1.2	ND	ND	1.82	0.1	ND	3.8	15.8	3.4	ND	1.72
Sep-2012	1	1	ND	ND	1.84	0.12	ND	3.8	16.4	1.9	22	1.59

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05B***											
Mar-2013	1.6	1.6	*ND*	*ND*	2.02	0.117	*ND*	4.8	16.6	2.39	12	1.75
Oct-2013	1.72	1.72	*ND*	*ND*	1.88	0.12	*ND*	4.8	16.4	2.52	*ND*	2.23
Mar-2014	1.4	1.4	*ND*	*ND*	1.87	0.115	*ND*	5.1	16.2	2.72	*ND*	1.59
Oct-2014	*ND*	*ND*	*ND*	*9 J*	2.1	0.129	*ND*	4.1	16.1	2.36	*ND*	1.61
Apr-2015	1.92	1.92	*ND*	*ND*	1.94	0.122	*ND*	4.4	15.3	2.86	*ND*	1.89
Nov-2015	*ND*	*ND*	*ND*	*ND*	1.93	0.144	*ND*	4.9	27.7	2.94	*ND*	1.52
May-2016	2.76	2.76	*ND*	*ND*	2.13 B	0.158	*ND*	4.7	26	3.66	57	3
Oct-2016	1.04	1.04	*ND*	*ND*	1.99	*NA*	*NA*	4.8	28.4	4.36	28	2.8
May-2017	2.6	2.6	*ND*	35	2.29	0.211	*ND*	4.5	32.1	4.68	*22 J*	3.5
Oct-2017	*ND*	*ND*	*ND*	*ND*	1.91	0.182	*ND*	4.9	33.5	2.97	*ND*	1.5
May-2018	*1 JB*	*ND*	*ND*	*7.9 J*	*2 J*	*ND*	*ND*	4.5	26.8	*ND*	*ND*	*1.8 J*
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	*1.8 J*	0.17	*ND*	4.27	18.5	*ND*	*ND*	*1.6 J*
May-2019	*ND*	*NA*	*ND*	*ND*	*ND*	0.18	*ND*	4.23	14.5	*ND*	27	*ND*
Oct-2019	*ND*	*NA*	*ND*	*ND*	*1.5 J*	0.19	*ND*	4.34	19.5	*ND*	20	1.2
May-2020	*ND*	*NA*	*ND*	*ND*	*1.7 J*	0.17	*ND*	4.4	18.9	*ND*	19	*1.8 J*
Oct-2020	*ND*	*NA*	*ND*	*ND*	*1.6 J*	0.18	*ND*	4.26	17.6	*ND*	11	1.6
Apr-2021	14	*NA*	*ND*	*ND*	*1.8 J*	0.2	*ND*	4.96	22.7	*ND*	*ND*	3.45
Oct-2021	*ND*	*NA*	*ND*	*ND*	*1.5 J*	0.22	*ND*	4.95	51.6	*ND*	*ND*	*1.78 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-05B*													
Nov-1993	NA	ND	ND	NA	ND	0.32	NA	ND	NA	ND	0.03	ND	ND	0.18	NA
Apr-1994	NA	ND	ND	NA	ND	0.011	NA	ND	NA	ND	67	3	ND	0.036	NA
Aug-1994	NA	ND	ND	NA	ND	0.78	NA	ND	NA	ND	ND	ND	ND	0.16	NA
Sep-1994	NA	ND	ND	NA	ND	0.82	NA	ND	NA	ND	0.11	0.04	**0.038**	0.19	NA
Nov-1994	NA	ND	ND	NA	ND	0.4	NA	ND	NA	0.03	ND	ND	ND	0.17	NA
Apr-1995	ND	ND	0.8	ND	ND	0.24	NA	ND	ND	ND	3.2	ND	ND	0.18	NA
Oct-1996	ND	ND	0.006	ND	ND	0.58	0.49	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	0.72	0.48	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	0.572	0.507	ND	ND	0.013	0.652	ND	ND	0.208	0.166
Apr-1998	ND	ND	ND	ND	ND	1.01	3.15	ND	ND	ND	0.378	0.019	ND	0.213	0.545
Apr-1999	ND	ND	ND	ND	ND	0.441	0.495	ND	ND	ND	ND	ND	ND	0.169	0.163
Oct-1999	ND	ND	ND	ND	ND	0.48	0.497	ND	ND	ND	0.11	ND	ND	0.176	0.168
Apr-2000	ND	ND	ND	ND	ND	0.451	0.457	ND	ND	ND	ND	ND	ND	0.169	0.157
Oct-2000	ND	ND	ND	ND	ND	0.716	0.417	ND	ND	0.015	0.104	ND	ND	0.224	0.16
Apr-2001	ND	ND	ND	ND	ND	0.471	NA	ND	ND	ND	0.075	NA	ND	0.18	NA
Sep-2001	ND	ND	ND	ND	ND	0.476	0.432	ND	ND	0.023	58.1	0.079	**0.02**	0.193	0.157
Mar-2002	ND	ND	ND	ND	ND	0.363	0.442	ND	ND	ND	0.144	ND	ND	0.157	0.168
Sep-2002	ND	ND	ND	ND	ND	0.829	0.368	ND	ND	0.014	0.136	ND	ND	0.214	0.159
Mar-2003	ND	ND	ND	ND	ND	0.699	0.673	ND	ND	ND	ND	ND	ND	0.192	0.178
Oct-2003	ND	ND	ND	ND	ND	0.807	0.504	ND	ND	0.028	0.194	ND	0.01	0.204	0.168
Apr-2004	ND	ND	ND	ND	ND	0.808	0.591	ND	ND	0.012	0.103	ND	ND	0.239	0.177

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05B***													
Oct-2004	ND	ND	ND	ND	ND	0.429	0.423	ND	ND	ND	0.094	ND	ND	0.169	0.157
Apr-2005	ND	ND	0.011	ND	ND	0.78	0.816	ND	ND	ND	30.5	0.897	0.007	0.333	0.342
Oct-2005	ND	ND	ND	ND	ND	0.431	0.428	ND	ND	ND	0.286	ND	ND	0.166	0.167
Mar-2006	ND	ND	ND	ND	ND	0.233	0.226	ND	ND	ND	ND	ND	ND	0.095	0.099
Sep-2006	ND	ND	ND	ND	ND	0.332	0.338	ND	ND	ND	0.158	ND	ND	0.144	0.138
Mar-2007	ND	ND	ND	ND	ND	0.417	0.409	ND	ND	ND	0.058	ND	ND	0.138	0.165
Sep-2007	ND	0.002	ND	ND	ND	0.319	0.327	ND	ND	ND	ND	ND	ND	0.13	0.126
Mar-2008	ND	0.003	ND	ND	ND	0.363	0.391	ND	ND	ND	0.082	ND	ND	0.147	0.153
Sep-2008	ND	ND	ND	ND	ND	0.42	0.263	ND	ND	ND	0.176	ND	ND	0.163	0.152
Mar-2009	ND	ND	ND	ND	ND	0.497	0.31	ND	ND	ND	0.175	ND	ND	0.175	0.125
Oct-2009	ND	ND	ND	ND	ND	0.323	0.35	ND	ND	ND	0.157	ND	ND	0.16	0.161
Apr-2010	ND	ND	ND	ND	ND	0.296	0.212	ND	ND	ND	0.165	ND	ND	0.113	0.094
Oct-2010	ND	ND	ND	ND	ND	0.392	0.289	ND	ND	ND	0.213	ND	ND	0.156	0.1
Apr-2011	ND	ND	ND	ND	ND	0.362	0.302	ND	ND	ND	0.101	ND	ND	1.55	0.123
Sep-2011	ND	ND	ND	ND	ND	0.356	0.381	ND	ND	ND	0.148	ND	ND	0.133	0.165
Mar-2012	ND	ND	ND	ND	ND	0.323	0.337	ND	ND	ND	0.062	ND	ND	0.222	0.216
Sep-2012	ND	ND	0.0043 J	0.000281 J	ND	0.381	0.372	ND	0.0035 J	0.0077 J	0.0666	0.0131 J	0.000497 J	0.154	0.16
Mar-2013	ND	ND	0.0059 J	0.000283 J	ND	0.468	0.464	0.0049 J	0.0034 J	0.0107	0.947	0.0082 J	0.0014 J	0.141	0.115
Oct-2013	0.000873 J	ND	0.0049 J	0.000283 J	ND	0.684	0.602	0.0084 J	0.0035 J	0.0072 J	0.253	0.0668	0.000971 J	0.126	0.11
Mar-2014	0.000335 J	ND	0.0036 J	0.000313 J	ND	0.371	0.336	0.000381 J	0.0031 J	0.0064 J	0.0871 J	0.0073 J	0.000355 J	0.161	0.142
Oct-2014	0.000609 J	ND	0.0077 J	0.00036 J	ND	0.374	0.308	0.0029 J	0.0033 J	0.008 J	0.828	0.0991	0.0011 J	0.165	0.101
Apr-2015	0.0013 J	ND	0.0047 J	0.00023 J	0.000094 J	0.479	0.324	0.000635 J	0.0035 J	0.0075 J	0.157	0.0084 J	ND	0.169	0.105
Nov-2015	0.000506 J	ND	0.0042 J	0.000288 J	ND	0.357	0.221	0.00062 J	0.0037 J	0.0093 J	0.0924	ND	0.000591 J	0.153	0.0846
May-2016	0.00052 J	ND	0.0051	0.00026 J,B	ND	0.857	0.608	0.0011 J	0.0031	0.0058	0.557	ND	0.0025	0.201	0.185 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05B***													
Oct-2016	*0.00069 J*	*ND*	0.0059	*0.00025 J*	*0.00074 J*	0.767	0.658	*0.0014 J+*	0.0033	*0.0044 J+*	0.734	*ND*	0.0027	*0.216 J+*	*0.191 J*
May-2017	*0.00076 J*	*ND*	0.0055	*0.00023 J*	*ND*	0.976	0.705	*0.0011 J*	0.0031	0.0043	0.423	*ND*	0.0027	0.264	0.209
Oct-2017	*ND*	*ND*	0.0045	*0.00023 J*	*ND*	*0.366 J*	*0.37 J*	*0.0015 J*	0.0035	*0.0031 J*	*ND*	*ND*	*ND*	*0.15 J*	*0.164 J*
May-2018	*0.000066 J*	*ND*	0.0044	*0.00022 J*	*0.000056 J*	*0.38 J*	*0.36 J*	*0.0047 J*	0.0033	0.0034 B	*0.017 J*	*ND*	*0.000041 J*	*0.22 J*	*0.17 J*
Nov-2018	*ND*	*0.000041 J*	0.0039	*0.00024 J*	*0.000062 J*	*0.47 J*	1.6	0.011	0.0034	**0.0037 D6**	0.086	0.026	*0.00014 J*	*0.11 J*	*0.19 J*
May-2019	*ND*	*ND*	0.0042	*ND*	*ND*	*ND*	*ND*	0.011	0.0041	0.004	*ND*	0.033	*ND*	*ND*	*ND*
Oct-2019	*0.000052 J*	*ND*	0.0041	*0.00022 J*	*0.0002 J*	0.31	*0.75 J*	0.017	0.0052	0.0086	0.11	0.058	*0.00011 J*	*0.11 J*	*0.17 J*
May-2020	*ND*	*ND*	*0.0049 J*	*0.00028 J*	*ND*	*0.49 J*	*0.68 J*	0.0073	*0.0034 J*	0.0085	0.072	*ND*	*ND*	*0.15 J*	*0.17 J*
Oct-2020	*0.0005 J*	*ND*	*0.0045 J*	*ND*	*ND*	0.48	*0.65 J*	*0.013 J*	0.0042	*ND*	*0.061 J*	0.03	*ND*	*0.11 J*	*0.18 J*
Apr-2021	*ND*	*ND*	*0.0043 J*	*0.00023 J*	*ND*	1	1.1	*0.0049 J*	*0.0034 J*	0.0059	*0.053 J*	*ND*	*ND*	0.23	0.23
Oct-2021	*0.000053 JB*	*ND*	0.0044	*0.00024 J*	*ND*	*0.44 J*	0.509	0.013	0.0048	0.011	0.14	0.0576	*0.000061 J*	*0.16 J*	*0.186 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-05B*												
Nov-1993	0.05	NA	ND	NA	0.47	NA	ND	NA	1.1	NA	NA	NA	0.01
Apr-1994	0.08	NA	ND	NA	0.58	NA	ND	NA	1.6	NA	NA	NA	ND
Aug-1994	0.01	NA	ND	NA	0.58	NA	ND	NA	0.76	NA	NA	NA	0.05
Sep-1994	0.01	NA	ND	NA	0.37	NA	ND	NA	0.85	NA	NA	NA	1.1
Nov-1994	ND	NA	ND	NA	0.3	NA	ND	NA	0.75	NA	NA	NA	0.02
Apr-1995	ND	NA	ND	ND	0.53	NA	ND	0.01	0.82	NA	ND	ND	0.04
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	2.2	1.7	ND	ND	0.13
Apr-1997	ND	ND	0.0018	ND	1.1	1.8	ND	ND	1.9	1	ND	ND	0.039
Oct-1997	ND	ND	NA	0.015	ND	ND	ND	ND	0.971	0.907	ND	ND	0.049
Apr-1998	ND	0.012	NA	0.022	1.16	ND	ND	ND	0.898	1.11	ND	ND	0.107
Apr-1999	ND	ND	NA	ND	ND	1.05	ND	ND	0.93	0.926	ND	ND	0.024
Oct-1999	ND	ND	NA	ND	ND	ND	ND	ND	0.95	0.91	ND	ND	0.027
Apr-2000	ND	ND	NA	ND	ND	ND	ND	ND	0.96	0.974	ND	ND	0.019
Oct-2000	ND	ND	NA	ND	0.712	0.457	ND	ND	1.74	0.939	ND	ND	0.023
Apr-2001	ND	NA	NA	ND	1.28	NA	ND	ND	0.993	NA	ND	ND	0.018
Sep-2001	0.125	ND	NA	ND	0.573	0.733	ND	ND	0.963	0.909	ND	ND	2.11
Mar-2002	ND	ND	NA	ND	0.773	ND	ND	ND	0.936	0.975	ND	ND	0.022
Sep-2002	ND	ND	NA	ND	1.26	ND	ND	ND	1.58	0.873	ND	ND	0.023
Mar-2003	ND	ND	NA	ND	ND	ND	ND	ND	0.92	0.941	ND	ND	0.033
Oct-2003	ND	ND	NA	ND	1.93	1.06	ND	ND	1.54	0.922	ND	ND	0.025
Apr-2004	ND	ND	ND	ND	0.668	ND	ND	ND	1.37	0.976	ND	ND	0.058
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	0.914	0.604	ND	ND	0.024

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05B***												
Apr-2005	0.018	0.016	ND	ND	ND	0.54	ND	ND	1.36	1.35	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	0.845	0.812	ND	ND	0.013
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	0.63	0.588	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.52	0.51	ND	ND	0.783	0.777	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	0.764	0.695	ND	ND	0.02
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	0.804	0.778	ND	ND	0.015
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	0.834	0.829	ND	ND	0.01
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	0.831	0.753	ND	ND	0.057
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.12	0.887	ND	ND	0.02
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	0.81	0.791	ND	ND	0.015
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	0.847	0.841	ND	ND	0.021
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	0.857	0.87	ND	ND	0.018
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	0.907	0.899	ND	ND	0.02
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	0.983	0.947	ND	ND	0.013
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	0.9	0.901	ND	ND	0.013
Sep-2012	0.0039 J	0.0036 J	ND	0.0055 J	0.39 J	0.321 J	ND	ND	0.948	0.903	ND	ND	0.0168
Mar-2013	0.0044 J	0.0027 J	0.000072 J	0.0068 J	0.48 J	0.435 J	ND	ND	0.909	1.02	ND	ND	0.0321
Oct-2013	0.0043 J	0.0035 J	ND	0.005 J	0.347 J	0.302 J	ND	ND	0.753	0.744	0.000122 J	0.0084 J	0.0276
Mar-2014	0.0032 J	0.003 J	ND	0.0052 J	0.396 J	0.401 J	ND	ND	0.903	0.932	ND	ND	0.02
Oct-2014	0.0046 J	0.0027 J	ND	0.0064 J	0.551	0.443 J	0.0012 J	ND	0.984	1.1	ND	0.0018 J	0.0197
Apr-2015	0.0039 J	0.0021 J	ND	0.0059 J	0.47 J	0.453 J	ND	ND	1.05	1.09	ND	ND	0.023
Nov-2015	0.004 J	0.002 J	ND	0.0062 J	0.414 J	0.42 J	ND	ND	1.09	1.15	ND	ND	0.0205
May-2016	0.0064	0.0043 B	ND	0.0062	0.464	0.451	ND	ND	2.4	1.98	ND	0.0003 J	0.809
Oct-2016	0.0079 R	0.0042	ND	0.0057 J+	0.515	0.52	ND	ND	2.49 J+	2.44	ND	0.00037 J	0.55

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05B***												
May-2017	0.008	*0.004 J*	*ND*	0.0055	0.488	0.477	*ND*	*ND*	4	3.23	*ND*	*0.00028 J*	0.835
Oct-2017	0.0042	*0.0035 J*	*ND*	0.0074	0.427	*0.395 J*	*ND*	*ND*	1.01	1.04	*ND*	*ND*	*0.0091 J*
May-2018	0.0036 B	0.0031	*ND*	0.008	*ND*	*ND*	*0.00048 JB*	*ND*	*1.5 J*	*1.2 J*	*ND*	*ND*	0.0088 B
Nov-2018	0.0037	0.0041	*ND*	0.015	*ND*	*ND*	*0.00013 J*	*ND*	*1.2 J*	*1.2 J*	*0.000076 J*	*0.00045 J*	0.0086 D6
May-2019	0.0048	0.0057	*ND*	0.013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0026	0.023
Oct-2019	0.006	0.0064	*ND*	0.018	*ND*	*ND*	*0.00054 J*	*0.00049 J*	*ND*	*ND*	*ND*	0.005	0.034
May-2020	*0.0041 J*	*0.0045 JB*	*ND*	0.011	*0.5 J*	*0.45 J*	*ND*	*ND*	1.2	1.3	*ND*	*ND*	0.017
Oct-2020	0.0049	0.0034	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.0035 J*	*ND*
Apr-2021	*0.0045 J*	*0.0042 J*	*0.00005 J*	*0.0092 J*	*0.47 J*	*0.49 J*	*ND*	*ND*	1.1	*0.98 J*	*ND*	*ND*	0.051
Oct-2021	0.0053	0.0062	*ND*	0.018	*0.4 J*	*0.424 J*	*ND*	*0.0003 J*	1.1	1.29 B	*0.000079 J*	*ND*	0.012

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05B*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05B*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05B*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.8 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.5	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05B***															
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.18 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05B***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05B***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Aug-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-05B*															
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.1 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05B***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.705 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-06B***											
Apr-2010	1.3	1.3	ND	ND	2.76	0.33	ND	3.8	22.1	3.09	26	1.9
Oct-2010	1.2	1.2	ND	ND	2.81	0.32	ND	3.6	22.4	3.58	10	2.24
Apr-2011	ND	ND	ND	ND	2.82	0.35	ND	4	24.1	1.7	17	2
Sep-2011	ND	ND	0.21	ND	2.69	0.34	ND	4.5	23.5	2.22	28	2.4
Mar-2012	ND	ND	ND	ND	3.17	0.35	ND	3.8	20.8	3.55	14	2.51
Sep-2012	ND	ND	ND	ND	2.95	0.335	ND	3.1	23.6	3.24	20	2.23
Mar-2013	0.92 J	0.92 J	ND	ND	3.22	0.341	ND	3.9	25.7	1.98	15	2.52
Oct-2013	1.56	1.56	ND	ND	3.09	0.324	ND	5.4	24.9	2.33	ND	2.77
Mar-2014	ND	ND	ND	ND	3.32	0.291	ND	4.6	24.1	2.84	ND	2.02
Oct-2014	ND	ND	ND	11	3.31	0.314	ND	4.4	23	2.8	ND	2.26
Apr-2015	0.96	0.96	ND	ND	3.16	0.357	ND	4.2	23.3	3.1	ND	2.28
Nov-2015	ND	ND	ND	ND	3.06	0.352	ND	4.8	37.5	1.95	20 J	2.2
May-2016	ND	ND	ND	ND	3.19	ND	ND	4.6	40.8	3.11	15 J	2.3
Oct-2016	ND	ND	ND	ND	3.36	NA	NA	4.8	36.1	2.17	31	2.1
May-2017	2.64	2.64	ND	ND	2.99	0.336	ND	4.5	43.8	2.15	13 J,B	3
Oct-2017	ND	ND	0.0676 J	ND	3.3	0.399	ND	4.4	44.2	2.88	25	2.3
May-2018	1 JB	ND	ND	5.8 J	2.7 J	0.073 J	ND	4.4	34.7	ND	ND	2.3 J
Nov-2018	1 JB	ND	ND	ND	2.9 J	0.31	ND	4.1	24.8	ND	ND	2.2 J
May-2019	ND	NA	ND	ND	ND	0.35	ND	3.86	20.3	ND	21	ND
Oct-2019	ND	NA	ND	ND	2.6 J	0.35	ND	4.14	24.6	ND	10	2.2
May-2020	ND	NA	ND	ND	2.9 J	0.33	ND	4.17	24.6	ND	ND	2.2 J
Oct-2020	ND	NA	ND	ND	3.2	0.35	ND	5.01	24.4	1.2	35	2.3
Apr-2021	ND	NA	ND	ND	3.1	0.34	ND	4.51	29.1	ND	17	2.3 J
Oct-2021	ND	NA	ND	ND	3 J	0.35	ND	4.57	38.5	ND	ND	2.5 J

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06B***													
Apr-2010	ND	ND	ND	ND	ND	0.431	0.353	ND	ND	ND	ND	ND	ND	0.188	0.157
Oct-2010	ND	ND	ND	ND	ND	0.521	0.514	ND	ND	ND	0.052	ND	ND	0.229	0.226
Apr-2011	ND	ND	ND	ND	ND	0.446	0.484	ND	ND	ND	ND	ND	ND	0.216	0.236
Sep-2011	ND	ND	ND	ND	ND	0.578	0.606	ND	ND	ND	ND	ND	ND	0.233	0.233
Mar-2012	ND	ND	ND	ND	ND	0.507	0.501	ND	ND	ND	ND	ND	ND	0.301	0.299
Sep-2012	ND	ND	0.0065 J	0.000303 J	ND	0.522	0.602	0.0011 J	0.005 J	0.0032 J	0.0367 J	0.0319 J	ND	0.225	0.245
Mar-2013	ND	ND	0.0069 J	0.000275 J	ND	0.613	0.481	0.0016 J	0.0052 J	0.0028 J	0.011 J	0.0147 J	ND	0.241	0.195
Oct-2013	ND	ND	0.0066 J	0.000312 J	ND	0.801	0.791	0.0124 J	0.0049 J	0.0022 J	0.0756	0.0724	0.000335 J	0.186	0.215
Mar-2014	0.0025	ND	0.0056 J	0.000252 J	ND	0.481	0.501	0.0015 J	0.0044 J	0.0015 J	ND	ND	ND	0.199	0.207
Oct-2014	0.0012 J	ND	0.0067 J	0.000301 J	0.000074 J	0.526	0.553	0.000384 J	0.0048 J	0.003 J	ND	ND	ND	0.231	0.244
Apr-2015	0.000346 J	ND	0.0066 J	0.000287 J	0.000071 J	0.523	0.551	0.000417 J	0.0049 J	0.0029 J	0.143	0.0882	ND	0.237	0.241
Nov-2015	ND	ND	0.0062 J	0.000327 J	0.000108 J	0.504	0.567	0.000703 J	0.0049 J	0.0028 J	ND	ND	0.000426 J	0.229	0.238
May-2016	ND	ND	0.0068	0.00029 J	ND	0.522	0.455	0.00096 J	0.0048	0.0025 J	ND	ND	ND	0.249	0.227
Oct-2016	ND	ND	0.0069	0.00028 J	ND	0.439	0.451	0.00095 J	0.0053	0.0028 J	ND	ND	0.00011 J	0.236	0.244
May-2017	ND	0.00077 J	0.0053 B	0.00027 J	ND	0.738	0.78	0.00084 J,B	0.0053	0.0051	0.134 J	ND	0.001 J	0.283	0.256
Oct-2017	ND	ND	0.0067	0.0003 J	ND	0.512	0.509	ND	0.0051	0.0027 J	ND	ND	0.00012 J	0.24	0.247
May-2018	0.000054 J	ND	0.0068	0.00025 J	0.000078 J	0.51 J	0.49 J	0.0022 J	0.0048	0.0034 B	0.028	ND	0.00012 J	0.24 J	0.25 J
Nov-2018	ND	ND	0.0062	0.00028 J	0.00011 J	0.5 J	0.85 J	0.0018 J	0.0049	0.0087	ND	0.014 J	0.00039 J	0.24 J	0.24 J
May-2019	ND	ND	0.0063	ND	ND	ND	ND	ND	0.005	0.011	ND	ND	ND	ND	ND
Oct-2019	0.000055 J	ND	0.0065	0.00027 J	0.00022 J	0.52	0.5 J	0.0046 J	0.0054	0.0098	0.016 J	0.015 J	0.00017 J	0.23	0.23 J
May-2020	ND	ND	0.0067 J	0.00029 J	ND	0.5 J	0.5 J	0.004 J	0.0045 J	0.02	ND	ND	ND	0.22	0.23

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06B***													
Oct-2020	*ND*	*ND*	*0.0064 J*	*0.00031 J*	*ND*	0.52	*0.5 J*	*0.0039 J*	0.0066	0.016	*0.023 J*	0.03 D6	*ND*	0.24	*0.24 J*
Apr-2021	*ND*	*ND*	*0.007 J*	*0.00039 J*	*ND*	*0.52 J*	*0.54 J*	*0.0033 J*	0.0055	0.018	*ND*	*ND*	*ND*	0.24	0.24
Oct-2021	*ND*	*ND*	0.0064	*0.00023 J*	*ND*	0.56	0.58	0.0026	0.0058	0.015	*0.013 J*	*0.014 J*	*0.00014 J*	*0.27 J*	*0.28 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-06B*												
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.27	1.23	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.17	1.15	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.28	1.25	ND	ND	ND
Sep-2011	ND	ND	ND	ND	0.534	ND	ND	ND	1.4	1.42	ND	ND	ND
Mar-2012	ND	ND	ND	ND	0.533	0.514	ND	ND	1.36	1.3	ND	ND	ND
Sep-2012	0.006 J	0.0065 J	ND	0.0076 J	0.465 J	0.493 J	ND	ND	1.32	1.32	ND	ND	0.0088 J
Mar-2013	0.0061 J	0.0047 J	0.000106 J	0.0075 J	0.53	0.521	ND	ND	1.53	1.57	ND	ND	0.018
Oct-2013	0.0064 J	0.0072 J	ND	0.0069 J	0.405 J	0.407 J	ND	ND	1.04	1.12	0.000409 J	0.004 J	0.0202
Mar-2014	0.0056	0.0058	ND	0.0069 J	0.556	0.545	ND	ND	1.68	1.64	0.000593 J	ND	0.0104
Oct-2014	0.0057 J	0.0061 J	ND	0.0077 J	0.529	0.516	0.0015 J	ND	1.45	1.41	ND	ND	0.0104
Apr-2015	0.0061 J	0.0064 J	ND	0.0076 J	0.523	0.502	0.000966 J	ND	1.47	1.49	ND	ND	0.0133
Nov-2015	0.0057 J	0.0061 J	ND	0.0082 J	0.517	0.496 J	0.000419 J	ND	1.55	1.53	0.000183 J	ND	0.01
May-2016	0.01	0.0053	ND	0.008	0.651	0.439	ND	ND	1.53	1.35	ND	ND	0.0091 J,B
Oct-2016	0.0055	0.006	ND	0.0086	0.529	0.535	ND	ND	1.49	1.55	ND	ND	0.0073 J
May-2017	0.0072	0.0068	ND	0.0095	0.564	0.599	ND	ND	2.54	2.45	ND	ND	0.0156 JB
Oct-2017	0.0063	0.0057	ND	0.0079	0.516	0.539	ND	ND	1.54	1.56	ND	ND	0.0076 J
May-2018	0.0058	0.0051	ND	0.0088	ND	ND	0.00044 JB	ND	1.8 J	1.6 J	ND	0.003	0.0092 B
Nov-2018	0.0091	0.0099	ND	0.0072	ND	ND	0.00019 J	ND	1.5 J	1.5 J	0.000069 J	0.0019	0.011
May-2019	0.0061	0.0058	ND	0.0096	ND	ND	ND	ND	ND	ND	ND	0.0049	0.01
Oct-2019	0.011	0.0078	ND	0.0099	ND	ND	0.00041 J	ND	1.5 J	ND	ND	0.0056	0.018
May-2020	0.0058	0.0061 B	ND	0.012	0.56	0.49 J	ND	ND	1.4	1.6	ND	ND	0.0094 J
Oct-2020	0.0095	0.0088	ND	0.0093	ND	ND	ND	ND	ND	ND	ND	0.00081 J	0.011 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-06B***												
Apr-2021	0.0067	0.0061	*ND*	*0.0094 J*	0.52	0.53	*ND*	*ND*	1.5	1.8	*ND*	*ND*	*0.0078 J*
Oct-2021	0.0059	0.0065	*ND*	0.0094	0.52	*0.47 J*	*ND*	*ND*	1.6 B	1.7	*0.000062 J*	*ND*	0.0089

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06B*																
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06B*																
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-06B*															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-06B***															
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-06B***															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-06B***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-09***											
Nov-1993	ND	ND	ND	22.8	2.1	ND	ND	4.73	36.8	11.9	44	2.72
Apr-1994	10	10	ND	ND	1.6	ND	ND	6.8	39.4	8.6	43	2.3
Apr-1995	ND	ND	ND	ND	1.8	ND	ND	4.5	38.8	11.3	19	1.8
Apr-1997	ND	2	ND	ND	1.5	0.02	ND	NA	NA	7.3	88	7.7
Apr-1998	7	7	0.21	ND	1.35	ND	ND	6.41	79.7	7.32	40	2.6
Apr-1999	ND	ND	0.15	ND	2.09	ND	ND	5.56	49.3	7.28	39	2.8
Apr-2000	ND	ND	ND	ND	ND	ND	ND	6.24	38	9.45	36	2.4
Apr-2001	ND	NA	ND	ND	1.12	ND	ND	NA	NA	10.2	33	2.59
Mar-2002	7.1	7.1	ND	ND	2.12	ND	ND	5.9	44.5	11.6	54	3.28
Mar-2003	ND	ND	ND	ND	14.8	0.961	ND	5.5	52.3	14.9	49	2.47
Apr-2004	ND	ND	ND	ND	1.47	ND	ND	5.8	43.7	11.4	58	2.5
Apr-2005	5.3	5.3	ND	ND	1.42	ND	ND	5.5	39.8	7.73	68	4.6
Mar-2006	ND	ND	ND	ND	1.58	ND	ND	5.7	41.8	16.2	23	1.84
Mar-2007	9.2	9.2	ND	ND	1.76	ND	ND	5.9	41.1	7.1	ND	2.25
Mar-2008	1.3	1.3	ND	ND	5.71	ND	ND	5.7	39.5	20.2	29	2.28
Mar-2009	1.2	1.2	ND	ND	1.47	ND	ND	5.8	40.7	18.2	19	2.56
Oct-2009	2.5	2.5	ND	ND	1.41	ND	ND	5.4	40.8	8.11	49	1.04
Apr-2010	1.8	1.8	ND	ND	1.35	ND	ND	5	39.1	11.7	ND	1.7
Oct-2010	11	11	ND	ND	1.76	ND	ND	5	38	7.69	40	2.47
Apr-2011	8.4	8.4	ND	ND	1.64	ND	ND	5.3	37.8	6.64	42	2.2
Sep-2011	4.7	4.7	ND	ND	1.42	ND	ND	5.8	39.2	6.7	29	2.26
Mar-2012	5.2	5.2	ND	ND	1.61	ND	ND	5	37.2	7.33	17	2.55
Sep-2012	6.16	6.16	ND	ND	1.6	ND	ND	4.9	37.9	6.8	28	2.33
Mar-2013	11.5	11.5	0.0707	ND	1.8	ND	ND	4.8	41.1	7.24	ND	2.53
Oct-2013	8.52	8.52	ND	ND	1.66	ND	ND	6.7	39.8	6.81	ND	2.68
Mar-2014	14.4	14.4	ND	ND	1.72	ND	ND	6	39.1	7.15	ND	2.21
Oct-2014	22	ND	ND	10	1.84	ND	ND	5.8	37.4	6.72	29	2.25
Apr-2015	9.4	9.4	ND	8 J	1.77	ND	ND	5	38.9	6.21	ND	2.33
Nov-2015	4	4	ND	ND	1.64	ND	ND	6.2	69.6	6.03	21 J	2.36
May-2016	4.64	4.64	ND	13	1.67 B	ND	ND	6	60.8	0.832 J	85	6.1
Oct-2016	ND	ND	ND	16	1.65	NA	NA	6.1	65.6	4.4	33	3.7
May-2017	5.32	5.32	ND	14	1.64	ND	ND	6.4	88.9	4.49	17 J	8
Oct-2017	27.3	27.3	ND	15	1.57	ND	ND	6.5	119.4	1.66	29	2.4
May-2018	4 J	ND	ND	18.7 J	3.2	ND	ND	5.7	59.2	ND	10	2.9 J
Nov-2018	18	18	ND	7.9 J	1.4 J	ND	ND	6.33	76.6	ND	12	2.1 J
May-2019	22	NA	ND	ND	ND	ND	0.017	5.87	62	ND	22	ND
Oct-2019	2.5 JH1	NA	ND	8.2 J	1.3 J	0.34 J	0.014	6.15	81.9	ND	13	2.1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-09***											
May-2020	12	*NA*	*ND*	*6.9 J*	*1.5 J*	*ND*	*ND*	5.76	75.2	*ND*	41	2.2
Oct-2020	*4 J*	*NA*	*ND*	*7 J*	*1.6 J*	*ND*	*ND*	5.32	74.2	1.4	59	2
Apr-2021	*8 J4c*	*NA*	*ND*	*17 J*	*1.6 J*	*0.14 J*	*ND*	6.77	94.5	*ND*	17	*2 J*
Oct-2021	20	*NA*	*ND*	*6.1 J*	*1.4 J*	*ND*	*ND*	6.85	125.2	*ND*	29	*2.1 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-09*													
Nov-1993	NA	ND	ND	NA	ND	0.58	NA	ND	NA	ND	8.2	4	ND	0.31	NA
Apr-1994	NA	ND	0.56	NA	ND	0.51	NA	ND	NA	ND	3	9.22	ND	0.25	NA
Apr-1995	ND	ND	0.7	0.003	ND	0.19	NA	ND	ND	ND	3.4	2.7	ND	0.32	NA
Apr-1997	ND	ND	0.023	0.002	ND	0.68	0.79	ND	ND	ND	14	12	ND	ND	ND
Apr-1998	ND	ND	0.016	ND	ND	0.516	0.571	ND	ND	ND	8.83	7.96	ND	0.3	0.293
Apr-1999	ND	ND	0.016	ND	ND	0.615	0.637	ND	ND	ND	3.24	2.74	ND	0.295	0.27
Apr-2000	ND	ND	0.014	0.003	ND	0.522	0.506	ND	ND	ND	2.37	2.35	ND	0.271	0.257
Apr-2001	ND	ND	0.013	ND	ND	0.555	NA	ND	ND	ND	3.14	NA	ND	0.292	NA
Mar-2002	ND	ND	0.015	0.002	ND	0.774	1.41	ND	ND	ND	10.3	8.16	ND	0.327	0.38
Mar-2003	ND	ND	0.015	ND	ND	0.537	0.511	ND	ND	ND	3.16	2.67	ND	0.274	0.259
Apr-2004	ND	0.002	0.013	0.004	ND	0.55	0.542	ND	ND	ND	4.38	2.8	ND	0.276	0.272
Apr-2005	ND	ND	0.015	ND	ND	1.34	0.685	ND	ND	ND	9.81	8.11	ND	0.316	0.398
Mar-2006	ND	ND	0.012	ND	ND	0.385	0.358	ND	ND	ND	3.01	1.96	ND	0.214	0.183
Mar-2007	ND	ND	0.013	ND	ND	0.488	0.508	ND	ND	ND	11.7	9.23	ND	0.249	0.26
Mar-2008	ND	ND	0.013	0.003	ND	0.501	0.501	ND	ND	ND	4.74	4.29	ND	0.251	0.233
Mar-2009	ND	ND	0.012	ND	ND	0.617	0.434	ND	ND	ND	5.2	3.49	ND	0.248	0.215
Oct-2009	ND	ND	0.013	ND	ND	ND	ND	ND	ND	ND	9.66	8.16	ND	2.53	0.243
Apr-2010	ND	ND	0.012	ND	ND	0.351	0.374	ND	ND	ND	3.29	2.28	ND	0.203	0.205
Oct-2010	ND	ND	ND	ND	ND	0.538	0.495	ND	ND	ND	9.58	7.81	ND	0.274	0.264
Apr-2011	ND	ND	0.014	ND	ND	0.464	0.5	ND	ND	ND	9.56	8.44	ND	0.252	0.286
Sep-2011	ND	ND	0.014	0.002	ND	0.491	0.483	ND	ND	ND	10.4	7.33	ND	0.25	0.237

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09***													
Mar-2012	ND	ND	0.014	0.002	ND	0.47	0.467	ND	ND	ND	9.88	8.15	ND	0.336	0.323
Sep-2012	ND	ND	0.0141	0.0017 J	ND	0.52	0.472	ND	0.0058 J	0.000562 J	9.77	8.43	0.000735 J	0.25	0.251
Mar-2013	ND	ND	0.0132	0.002	ND	0.569	0.565	0.0018 J	0.0067 J	ND	11.4	8.56	ND	0.269	0.255
Oct-2013	ND	ND	0.0149	0.0021	ND	0.695	0.681	0.0068 J	0.0062 J	ND	10	8.6	0.000338 J	0.229	0.207
Mar-2014	0.000232 J	0.00068 J	0.0122	0.0021	0.000096 J	0.456	0.455	0.000821 J	0.0061 J	0.000268 J	10.9	8.75	0.000593 J	0.261	0.261
Oct-2014	0.000345 J	0.000869 J	0.0146	0.0021	ND	0.507	0.556	0.00094 J	0.0059 J	0.0011 J	10.8	9.4	ND	0.24	0.249
Apr-2015	0.000374 J	0.000603 J	0.0146	0.0018 J	0.000074 J	0.512	0.571	0.000714 J	0.0058 J	0.000342 J	11.5	10.7	ND	0.256	0.259
Nov-2015	0.00038 J	0.000334 J	0.0139	0.0016 J	ND	0.515	0.544	0.000373 J	0.0042 J	0.000839 J	11.6	11.9	ND	0.261	0.263
May-2016	ND	0.0007 J	0.0147	0.0019	0.00033 J	1.24	1.23	0.0012 J	0.0066	0.00068 J,B	27.6	14.3	0.0011 J	0.734	0.724
Oct-2016	ND	0.0069	0.0174	0.0027	0.00031 J	0.989	0.616	0.0031 J+	0.0156	0.0064 J+	38.3	14.2	0.002 J	0.291 J+	0.253
May-2017	ND	0.0031 J	0.0145	0.0022	0.00024 J	0.866	0.62	0.003 J	0.0085	0.0076	29.1	16.6	0.0053	1.42	0.268
Oct-2017	ND	0.001 J	0.0163	0.0022	ND	0.531	0.421	0.0014 J	0.0031	ND	33.6	22.5	0.00054 J	0.256	0.234
May-2018	0.00053	0.0043	0.013	0.0019	0.00016 J	0.79 J	0.63 J	0.0034 JB	0.0081	0.0061	41.5	24.4	0.0017	0.23 J	0.26 J
Nov-2018	ND	0.00045 J	0.012	0.0016	0.000048 J	0.47 J	0.47 J	0.0046 J	0.0024	0.0009 J	24.2	22.7	0.00012 JM1	0.23 J	0.24 J
May-2019	ND	ND	0.012	0.0012	ND	ND	ND	ND	0.0016	ND	27.2	24.8	ND	ND	ND
Oct-2019	0.00014 J	0.00065 J	0.013	0.0015	0.00018 J	0.47	0.49 J	0.0068 J	0.0015	ND	25.6	24.9	0.000099 J	0.23	0.23 J
May-2020	0.00023 J	0.00092 J	0.012	0.0015	0.00014 J	0.49	0.46 JB	0.0058 J	0.014	ND	38.8	23.9	ND	0.25	0.22 JB
Oct-2020	ND	ND	0.012	0.0014 J	ND	0.45	0.43 J	0.0033 J	0.0017 J	ND	24.9	23.6	ND	0.22	0.22 J
Apr-2021	ND	ND	0.013	0.0011	ND	0.43 J	0.38 J	0.00092 J	0.0014 J	ND	25.2	24.8	ND	0.23	0.21
Oct-2021	0.000047 J	0.00089 J	0.012	0.0014	ND	0.46 J	0.47 J	0.0015 J	0.0015 J	0.00062 J	25.7	26	ND	0.23 J	0.24 J

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-09*												
Nov-1993	0.07	NA	ND	NA	0.59	NA	ND	NA	0.95	NA	NA	NA	ND
Apr-1994	0.01	NA	ND	NA	0.29	NA	ND	NA	0.74	NA	NA	NA	ND
Apr-1995	0.09	NA	ND	ND	0.75	NA	ND	ND	0.98	NA	ND	ND	0.04
Apr-1997	0.073	0.064	ND	ND	1.9	1.4	ND	ND	1	1.3	ND	ND	0.034
Apr-1998	0.049	0.048	NA	ND	0.847	0.796	ND	ND	0.833	0.825	ND	ND	0.042
Apr-1999	0.02	0.019	NA	ND	0.677	0.81	ND	ND	0.995	0.831	ND	ND	0.041
Apr-2000	0.02	0.019	NA	0.016	ND	ND	ND	ND	0.788	0.746	ND	ND	0.039
Apr-2001	0.019	NA	NA	0.014	ND	NA	ND	ND	0.905	NA	ND	ND	0.03
Mar-2002	0.055	0.051	NA	0.012	1.16	0.947	ND	ND	1.81	0.891	ND	ND	0.055
Mar-2003	0.017	0.016	NA	0.015	ND	ND	ND	ND	0.888	0.861	ND	ND	0.04
Apr-2004	0.019	0.019	ND	0.022	1.33	1.08	ND	ND	0.889	0.87	ND	ND	0.081
Apr-2005	0.056	0.051	ND	0.018	0.52	ND	ND	ND	1.33	0.984	ND	ND	0.305
Mar-2006	ND	ND	ND	0.019	ND	ND	ND	ND	0.613	0.547	ND	ND	0.043
Mar-2007	0.061	0.056	ND	0.015	0.582	0.576	ND	ND	0.748	0.738	ND	ND	0.059
Mar-2008	0.025	0.025	ND	0.017	0.561	ND	ND	ND	0.792	0.677	ND	ND	0.026
Mar-2009	0.027	0.022	ND	0.016	0.819	0.618	ND	ND	1.2	0.803	ND	ND	0.039
Oct-2009	0.057	0.058	ND	0.015	ND	ND	ND	ND	0.749	0.672	ND	ND	0.031
Apr-2010	0.017	0.014	ND	0.013	ND	ND	ND	ND	0.806	0.758	ND	ND	0.025
Oct-2010	0.054	0.05	ND	0.018	ND	ND	ND	ND	0.784	0.72	ND	ND	0.032
Apr-2011	0.058	0.056	ND	0.01	ND	ND	ND	ND	0.766	0.792	ND	ND	0.026
Sep-2011	0.052	0.046	ND	0.016	0.53	ND	ND	ND	0.91	0.873	ND	ND	0.03
Mar-2012	0.054	0.053	ND	0.016	ND	ND	ND	ND	0.855	0.846	ND	ND	0.034

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09***												
Sep-2012	0.0572	0.0538	ND	0.0137	0.504	0.446 J	ND	ND	0.836	0.827	ND	ND	0.0362
Mar-2013	0.0543	0.0505	0.00009 J	0.0157	0.51	0.49 J	ND	ND	0.932	0.945	ND	ND	0.0424
Oct-2013	0.0597	0.0587	ND	0.0132	0.436 J	0.406 J	ND	ND	0.726	0.672	0.000144 J	0.0056 J	0.0406
Mar-2014	0.0552	0.0545	ND	0.0159	0.516	0.511	ND	ND	0.826	0.836	ND	0.0011 J	0.0372
Oct-2014	0.0531	0.055	ND	0.0153	0.528	0.522	0.000836 J	ND	0.9	0.938	ND	0.0013 J	0.0363
Apr-2015	0.0626	0.0655	0.000032 J	0.0137	0.558	0.54	ND	ND	0.899	0.917	ND	0.0013 J	0.0355
Nov-2015	0.0713	0.0691	ND	0.0102	0.568	0.569	ND	ND	1.11	1.01	ND	0.000282 J	0.0408
May-2016	0.398	0.358	ND	0.0285	0.887	0.845	ND	ND	1.3	1.2	ND	0.0014	0.0547
Oct-2016	0.226 R	0.116	ND	0.045 J+	0.739	0.6	ND	ND	1.05 J+	0.919	ND	0.0021	0.0587
May-2017	0.145	0.104	ND	0.0294	0.955	0.59	ND	ND	33.9	0.915	ND	0.002	0.0505
Oct-2017	0.144	0.132	ND	0.0162	0.526	0.516	ND	ND	0.84	0.84	ND	0.0013	0.0255 J
May-2018	0.22	0.15	ND	0.023	ND	ND	0.00042 J	ND	1.3 J	1 JB	ND	0.0029	0.028
Nov-2018	0.12	0.12	ND	0.0072	ND	ND	0.0001 JM1	ND	0.84 J	0.88 J	ND	0.0017	0.013 D6
May-2019	0.14	0.14	ND	0.004	ND	ND	ND	ND	ND	ND	ND	ND	0.0068
Oct-2019	0.13	0.13	ND	0.0054	ND	ND	ND	ND	ND	ND	ND	0.0096	0.018
May-2020	0.14	0.14	ND	0.036	1.3 J	ND	ND	ND	4.4 J	ND	0.00043	0.0059	0.02
Oct-2020	0.13	0.13	ND	0.0042	ND	ND	ND	ND	ND	ND	ND	0.0018 J	0.012 J
Apr-2021	0.13	0.13	ND	0.0031 J	0.5	0.51	ND	ND	0.85 J	0.99 J	ND	0.0011 J	ND
Oct-2021	0.14	0.14	ND	0.0037	0.48 J	0.44 J	ND	ND	0.85 B	0.93	ND	0.00092 J	0.0071

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	22	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09*																
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.6 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-09*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09***															
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.5 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-09*															
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.578 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-14B***											
Apr-2010	ND	ND	ND	ND	1.71	0.17	ND	4	27.7	6.92	11	2.8
Oct-2010	ND	ND	ND	ND	1.82	0.18	ND	3.5	21.6	4.72	11	2.62
Apr-2011	ND	ND	ND	ND	1.61	0.2	ND	4	21	3.35	18	1.9
Sep-2011	ND	ND	ND	ND	1.56	0.2	ND	4.4	20.5	4.28	22	2.41
Mar-2012	ND	ND	ND	ND	1.74	0.21	ND	3.5	20.7	5.11	ND	2.36
Sep-2012	ND	ND	ND	ND	1.69	0.193	ND	3.4	21	5.08	ND	1.96
Mar-2013	0.92 J	0.92 J	ND	ND	1.88	0.202	ND	3.1	20.8	3.24	15	2.11
Oct-2013	1.72 J	1.72 J	ND	ND	1.8	0.196	ND	2.9	20.1	3.64	ND	2.16
Mar-2014	0.72	0.72	ND	24	1.75	0.208	ND	5.4	27.3	3.75	ND	1.85
Oct-2014	ND	ND	ND	ND	1.9	0.212	ND	4.1	20.7	4.02	ND	2.2
Apr-2015	5.64	5.64	ND	ND	1.92	0.234	ND	3.9	21.4	4.35	36	4.51
Nov-2015	1.92	1.92	ND	ND	1.78	0.221	ND	4.8	33.2	4.39	21 J	2.79
May-2016	ND	ND	ND	5 J	1.89 B	0.187	ND	4.7	28.3	3.78	73	2.9
Oct-2016	1.8	1.8	ND	5 J	1.77	NA	NA	4.6	34.4	3.98	133	2.6
May-2017	2.56	2.56	ND	12	1.72	0.227	ND	4.5	34.7	3.56	13 J	3.1
Oct-2017	ND	ND	ND	ND	1.71	0.243	ND	4.7	35.7	4.29	11 J	2.1
May-2018	ND	ND	ND	ND	1.5 J	0.24	ND	6.1	29.3	ND	ND	2.3 J
Nov-2018	ND	ND	ND	ND	1.5 J	0.25	ND	4.28	22.3	ND	ND	2.3 J
May-2019	ND	NA	ND	ND	ND	0.25	ND	4.31	17.8	ND	16	ND
Oct-2019	ND	NA	ND	ND	1.4 J	0.29	ND	3.6	23.9	ND	ND	2.3
May-2020	ND	NA	ND	ND	1.5 J	0.28	ND	4.02	22.8	ND	20	2.4
Oct-2020	ND	NA	ND	ND	1.9 J	0.27	ND	3.98	22.3	2.2	ND	2.3
Apr-2021	ND	NA	ND	ND	1.7 J	0.32	ND	4.43	26.4	ND	26	2.2 J
Oct-2021	ND	NA	ND	ND	1.3 J	0.34	ND	4.56	52.8	ND	ND	2.24 J

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14B***													
Apr-2010	ND	ND	ND	ND	ND	0.674	0.553	ND	0.022	0.01	ND	ND	ND	0.271	0.225
Oct-2010	ND	ND	ND	ND	ND	0.62	0.551	ND	0.015	ND	ND	ND	ND	0.26	0.235
Apr-2011	ND	ND	ND	ND	ND	0.445	0.466	ND	0.011	ND	ND	ND	ND	0.205	0.23
Sep-2011	ND	ND	ND	ND	ND	0.608	0.61	ND	ND	ND	ND	ND	ND	0.216	0.262
Mar-2012	ND	ND	ND	ND	ND	0.462	0.445	ND	ND	ND	0.064	ND	ND	0.295	0.283
Sep-2012	ND	ND	0.0054 J	0.000317 J	ND	0.44	0.591	0.0023 J	0.0082 J	0.0051 J	0.0352 J	0.0702	ND	0.21	0.245
Mar-2013	ND	ND	0.0055 J	0.000399 J	ND	0.518	0.516	0.0022 J	0.008 J	0.0047 J	0.0052 J	0.0174 J	ND	0.199	0.202
Oct-2013	ND	ND	0.0053 J	0.000313 J	0.000151 J	0.586	0.483	0.0072 J	0.0071 J	0.0036 J	0.0542	ND	ND	0.169	0.225
Mar-2014	0.000742 J	ND	0.0047 J	ND	0.00012 J	0.428	0.342	0.0018 J	0.0071 J	0.0063 J	ND	ND	ND	0.19	0.133
Oct-2014	0.00092 J	0.000584 J	0.0055 J	0.000383 J	0.000144 J	0.531	0.523	0.000633 J	0.0071 J	0.0048 J	0.0109 J	0.0173 J	ND	0.213	0.224
Apr-2015	0.0026	0.000676 J	0.0083 J	0.000399 J	0.000295 J	1.27	0.831	0.000584 J	0.0089 J	0.0422	0.317	0.0251 J	0.0037	0.323	0.227
Nov-2015	0.000636 J	0.000194 J	0.0067 J	0.000425 J	0.000178 J	0.688	0.907	0.000423 J	0.0079 J	0.008 J	0.18	ND	0.000607 J	0.26	0.282
May-2016	ND	ND	0.007	0.00034 J,B	0.00021 J	0.762	0.654	ND	0.0071	0.0062	0.114 J	0.0412 J	0.0015 J	0.25	0.248
Oct-2016	ND	0.00075 J	0.0066	0.00036 J	ND	0.62	0.606	0.00086 J+	0.0069	0.0068 J+	0.176 J	ND	0.0016 J	0.26 J+	0.241
May-2017	0.0015 J	0.00076 J	0.006	0.00035 J	ND	0.766	0.732	0.00074 J	0.0068	0.007	0.107 J	ND	0.0012 J	0.279	0.25
Oct-2017	ND	ND	0.0052	0.00026 J	0.00021 J	0.48	0.465	0.0011 J	0.0058	0.0034 J	ND	ND	ND	0.209	0.221
May-2018	ND	ND	0.0055	0.00032	0.00017 J	0.5 J	0.48 J	0.0029 J	0.0052	0.0069	0.02 J	ND	0.000047 JB	0.24 J	0.23 J
Nov-2018	ND	ND	0.0056	0.00031	0.00016 J	0.52 J	0.5 J	0.0064 J	0.0049	0.005	0.035	0.02 J	0.00011 J	0.23 J	0.23 J
May-2019	ND	ND	0.0058	ND	ND	ND	ND	0.009	0.0052	0.0063	ND	0.026	ND	ND	ND
Oct-2019	0.0001 J	ND	0.0058	0.00029 J	0.00026 J	0.52	0.5 J	0.007 J	0.0051	0.0087	0.025 J	0.019 J	0.000056 J	0.25	0.2 J
May-2020	ND	ND	0.0055	0.00026 J	0.00013 J	0.53	0.49 JB	0.0065 J	0.0054	0.0047	0.02 J	0.016 J	ND	0.25	0.22 JB

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14B***													
Oct-2020	*ND*	*ND*	*0.0061 J*	*0.00029 J*	*ND*	0.5	*0.48 J*	*0.0063 J*	0.0057	0.013	*0.034 JB*	*0.019 J*	*ND*	0.25	*0.24 J*
Apr-2021	*ND*	*ND*	*0.0091 J*	*0.00026 J*	*ND*	*0.49 J*	*0.48 J*	*0.0029 J*	0.0055	*0.005 J*	*ND*	*ND*	*ND*	0.23	0.24
Oct-2021	*ND*	*ND*	0.006	*0.00032 J*	*ND*	*0.5 J*	0.53	0.0038	0.0058	0.0091	*0.021 J*	*0.014 J*	*0.000046 J*	*0.24 J*	*0.25 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-14B*												
Apr-2010	0.013	0.012	ND	0.028	ND	ND	ND	ND	0.89	0.777	ND	ND	0.071
Oct-2010	ND	ND	ND	0.019	ND	ND	ND	ND	0.835	0.817	ND	ND	0.037
Apr-2011	ND	ND	ND	0.015	ND	ND	ND	ND	0.758	0.741	ND	ND	0.025
Sep-2011	ND	ND	ND	0.015	0.51	ND	ND	ND	1.07	1.03	ND	ND	0.021
Mar-2012	ND	ND	ND	0.012	ND	ND	ND	ND	0.907	0.862	ND	ND	0.016
Sep-2012	0.0072 J	0.0086 J	ND	0.0128	0.387 J	0.419 J	ND	ND	0.861	0.908	ND	ND	0.0148
Mar-2013	0.0068 J	0.007 J	0.00006 J	0.0115	0.385 J	0.345 J	ND	ND	0.799	0.755	ND	ND	0.025
Oct-2013	0.0065 J	0.0073 J	ND	0.0089 J	0.351 J	0.412 J	ND	0.000036 J	0.653	0.851	0.000443 J	0.002 J	0.0563
Mar-2014	0.0064 J	0.0039 J	ND	0.0111	0.382 J	0.41 J	ND	ND	0.859	1.03	ND	ND	0.0151
Oct-2014	0.007 J	0.0073 J	ND	0.0108 J	0.423 J	0.409 J	0.0012 J	ND	0.958	0.942	0.00071 J	ND	0.0206
Apr-2015	0.0118	0.0068 J	ND	0.0135	0.59	0.58	ND	ND	3.48	3.31	ND	ND	0.0647
Nov-2015	0.0088 J	0.0097 J	ND	0.0125	0.524	0.618	ND	ND	1.75	2.98	ND	ND	0.0276
May-2016	0.0093	0.0093 B	ND	0.0117	0.496	0.516	ND	ND	1.63	1.37	ND	ND	0.0262 J
Oct-2016	0.0082 R	0.0069	ND	0.0112 J+	0.508	0.519	ND	ND	2.09 J+	1.82	ND	ND	0.045
May-2017	0.0094	0.0088	ND	0.0107	0.528	0.477	ND	ND	1.96	1.47	ND	ND	0.0591
Oct-2017	0.0061	0.0059	ND	0.0093	0.401	0.455	ND	ND	0.859	0.876	ND	ND	0.0104 J
May-2018	0.0059	0.0053	ND	0.0091	ND	ND	0.00012 J	ND	0.84 J	0.81 J	ND	ND	0.013
Nov-2018	0.015	0.0061	ND	0.012	ND	ND	0.00022 J	ND	0.81 J	0.91 J	ND	ND	0.014
May-2019	0.0073	0.0084	ND	0.013	ND	ND	ND	ND	ND	ND	ND	0.0024	0.013
Oct-2019	0.0078	0.0068	ND	0.011	ND	ND	ND	ND	ND	ND	ND	0.0068	0.016
May-2020	0.0077	0.0071	ND	0.01	ND	ND	ND	ND	ND	ND	ND	ND	0.011
Oct-2020	0.0079	0.0071	ND	0.012	ND	ND	ND	ND	ND	ND	ND	0.0014 J	0.013 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14B***												
Apr-2021	0.0074	0.0073	*ND*	0.01	*0.42 J*	*0.41 J*	*ND*	*ND*	*0.86 J*	1.1	*ND*	*ND*	0.01
Oct-2021	0.0075	0.008	*ND*	0.011	*0.38 J*	*0.4 J*	*ND*	*ND*	0.89	1 B	*0.000068 J*	*ND*	0.015

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-14B***																
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14B*																
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-14B*															
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14B***															
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14B***															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14B***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-16A***											
Oct-2009	2.9	2.9	ND	ND	2.93	0.2	ND	4.6	18.3	0.81	16	3.39
Apr-2010	2.9	2.9	ND	ND	3.33	0.2	ND	4.1	18.4	ND	44	3.1
Oct-2010	2.5	2.5	ND	ND	3.27	0.16	ND	4.6	18.2	ND	14	3.86
Apr-2011	2.9	2.9	ND	ND	3.06	0.2	ND	4.6	17	ND	12	3.5
Sep-2011	3.1	3.1	ND	ND	3.05	0.19	ND	4.6	17.5	ND	13	4
Mar-2012	3	3	ND	ND	3.13	0.2	ND	4.2	23.3	ND	39	3.9
Sep-2012	2.64	2.64	ND	ND	3.27	0.174	ND	3.8	18.3	ND	49	3.67
Mar-2013	3.32	3.32	ND	ND	3.44	0.19	ND	3.7	417.6	0.868 J	19	3.74
Oct-2013	3.72	3.72	ND	ND	3.38	0.169	ND	3.4	18.9	0.747 J	28	3.62
Mar-2014	3.08	3.08	ND	17	3.27	0.178	ND	5.4	20.5	0.581 J	ND	3.41
Oct-2014	ND	ND	ND	8 J	3.44	0.186	ND	5.1	17.9	0.224 J	ND	3.86
Apr-2015	3.76	3.76	ND	ND	3.3	0.173	ND	4.3	20.9	ND	ND	3.88
Nov-2015	2.56	2.56	ND	6 J	3.4	0.19	ND	5.1	44.9	1.08	ND	3.99
May-2016	2.56	2.56	ND	ND	3.37	0.187	ND	5.2	30.7	ND	14 J	4
Oct-2016	ND	ND	ND	ND	3.2	NA	NA	5.1	32.7	1.06	31	3.4
May-2017	ND	ND	ND	ND	3.07	0.19	ND	5	28.6	0.899 J	ND	3.3
Oct-2017	ND	ND	0.0787 J	ND	3.05	0.203	ND	5.2	34.5	0.501 J	33	3.8
May-2018	2 J	ND	0.056 J	ND	3.1	ND	ND	4.8	33.9	ND	45	4 J
Nov-2018	2 JB	ND	ND	ND	2.9 J	0.18	ND	4.66	20.4	ND	17	59.7
May-2019	ND	NA	ND	ND	ND	0.19	ND	4.7	14.9	ND	ND	ND
Oct-2019	ND	NA	ND	ND	2.6 J	0.19	ND	4.59	20.8	ND	21	3.9
May-2020	ND	NA	ND	ND	2.8 J	0.15	ND	4.38	19.2	ND	ND	4.1
Oct-2020	ND	NA	ND	ND	2.9 J	0.17	ND	4.45	20	ND	ND	4
Apr-2021	ND	NA	ND	ND	3 J	0.18	ND	4.91	25.6	ND	12	4
Oct-2021	2 J3c	NA	ND	ND	2.4 J	0.18	ND	5.02	52.4	ND	ND	3.79

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-16A***													
Oct-2009	ND	ND	ND	ND	ND	0.828	0.795	ND	ND	ND	ND	ND	ND	0.32	0.329
Apr-2010	ND	ND	ND	ND	ND	0.746	0.735	ND	ND	ND	0.152	ND	ND	0.299	0.296
Oct-2010	ND	ND	ND	ND	ND	0.92	0.864	ND	ND	ND	ND	ND	ND	0.378	0.359
Apr-2011	ND	ND	ND	ND	ND	0.833	0.811	ND	ND	ND	ND	ND	ND	0.348	0.329
Sep-2011	ND	ND	ND	ND	ND	0.973	0.98	ND	ND	ND	ND	ND	ND	0.381	0.382
Mar-2012	ND	ND	ND	ND	ND	0.86	0.85	ND	ND	ND	ND	ND	ND	0.424	0.409
Sep-2012	ND	ND	0.0064 J	0.000091 J	ND	0.889	0.905	ND	0.0034 J	0.0012 J	0.024 J	0.0281 J	ND	0.351	0.356
Mar-2013	ND	ND	0.0066 J	0.000067 J	ND	0.981	0.898	0.0021 J	0.0038 J	0.000806 J	0.0113 J	0.0061 J	0.0014 J	0.313	0.291
Oct-2013	ND	ND	0.0067 J	ND	ND	0.991	0.878	0.0088 J	0.0037 J	0.000741 J	0.062	ND	ND	0.279	0.35
Mar-2014	0.00052 J	ND	0.0057 J	ND	ND	0.845	0.875	0.0018 J	0.0034 J	0.0022 J	ND	ND	ND	0.315	0.319
Oct-2014	0.000784 J	ND	0.0069 J	ND	ND	0.966	0.975	0.000635 J	0.003 J	0.000772 J	ND	ND	ND	0.351	0.348
Apr-2015	0.0011 J	0.000376 J	0.007 J	ND	ND	0.945	0.93	0.00071 J	0.0038 J	0.001 J	ND	0.0106 J	ND	0.369	0.363
Nov-2015	0.000344 J	ND	0.0065 J	0.000083 J	0.000101 J	0.999	1.01	0.000304 J	0.0031 J	0.0012 J	0.0175 J	ND	0.000283 J	0.362	0.371
May-2016	ND	ND	0.0067	ND	ND	0.982	0.825	0.00082 J	0.0032	0.00098 J	ND	ND	ND	0.37	0.34
Oct-2016	ND	ND	0.0068	ND	ND	0.816	0.904	ND	0.003	0.00098 J	ND	ND	ND	0.339	0.366
May-2017	ND	ND	0.0074	ND	ND	0.749	0.796	0.001 J	0.003	0.00088 J	ND	ND	ND	0.35	0.344
Oct-2017	ND	ND	0.0055	0.000077 J	ND	0.944	0.901	0.00091 J	0.0041	0.0018 J	ND	ND	ND	0.352	0.344
May-2018	0.000063 J	ND	0.0067	0.0001 J	0.000079 J	0.97 J	0.96 J	0.00085 J	0.0053	0.0017 J	0.011 J	ND	0.000068 JB	0.38 J	0.37 J
Nov-2018	ND	ND	0.0058	0.000055 J	0.000072 J	13.4	1.1	0.0087	0.026	0.0061	0.31	0.04	0.00026 J	6.4	0.46 J
May-2019	ND	ND	0.0058	ND	ND	ND	1.4	0.0099	0.029	0.0024	ND	0.04	ND	ND	ND
Oct-2019	0.000096 J	ND	0.0059	0.000078 J	0.00016 J	0.96	0.93 J	0.012	0.032	0.0031	0.068 J	0.041	ND	0.37	0.37 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-16A***													
May-2020	*0.000058 J*	*ND*	0.006	*ND*	*ND*	1	*0.97 J*	0.014	0.045	0.0032	*0.095 J*	0.054	*ND*	0.38	*0.37 JB*
Oct-2020	*ND*	*ND*	*0.0065 J*	*ND*	*ND*	0.97	*0.93 J*	*0.0094 J*	0.034	*ND*	*0.057 JB*	0.042	*ND*	0.37	*0.36 J*
Apr-2021	*ND*	*ND*	*0.0071 J*	*0.00021 J*	*ND*	*0.98 J*	*0.93 J*	0.0061	0.028	*0.0045 J*	*0.051 J*	*ND*	*ND*	0.38	0.37
Oct-2021	*ND*	*ND*	0.0065	*ND*	*ND*	0.94	1	0.0025	0.017	*0.002 J*	*0.024 J*	*0.017 J*	*ND*	*0.35 J*	*0.38 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-16A*												
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.1	1.04	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.17	1.16	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.52	ND	ND	ND	1.28	1.21	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.21	1.16	ND	ND	ND
Sep-2011	ND	ND	ND	ND	0.525	0.536	ND	ND	1.48	1.45	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	1.3	1.27	ND	ND	ND
Sep-2012	0.0042 J	0.0043 J	ND	0.0046 J	0.472 J	0.464 J	ND	ND	1.28	1.33	0.000679 J	ND	0.0065 J
Mar-2013	0.0045 J	0.0042 J	0.000054 J	0.0048 J	0.424 J	0.376 J	ND	ND	1.19	1.12	ND	ND	0.0163
Oct-2013	0.0047 J	0.0045 J	ND	0.0038 J	0.409 J	0.489 J	ND	ND	1.01	1.32	0.001 J	0.0022 J	0.0123
Mar-2014	0.0036 J	0.0037 J	ND	0.0046 J	0.45 J	0.423 J	ND	ND	1.26	1.23	ND	ND	0.0064 J
Oct-2014	0.0039 J	0.0041 J	0.000024 J	0.0052 J	0.502	0.489 J	0.000965 J	ND	1.47	1.41	ND	ND	0.0095 J
Apr-2015	0.0045 J	0.0045 J	ND	0.005 J	0.529	0.516	0.0013 J	0.000034 J	1.51	1.48	0.000888 J	ND	0.0118
Nov-2015	0.004 J	0.0041 J	ND	0.0046 J	0.508	0.521	ND	ND	1.39	1.43	0.000103 J	ND	0.0044 J
May-2016	0.0046	0.0041	ND	0.0046	0.529	0.492	ND	ND	1.43	1.26	ND	ND	0.0076 J,B
Oct-2016	0.003 J	0.0038 J+	ND	0.0043	0.446	0.49	ND	ND	1.29	1.36	ND	ND	0.006 J
May-2017	0.0042	0.0032 J	ND	0.0051	0.484	0.485	ND	ND	1.21	1.23	ND	ND	0.0055 J
Oct-2017	0.0046	0.004	ND	0.0044	0.482	0.506	ND	ND	1.25	1.29	ND	ND	0.006 J
May-2018	0.0048	0.0034	ND	0.0062	ND	ND	ND	ND	1.6 J	1.2 J	ND	0.0039	0.0084 B
Nov-2018	0.0098	0.015	ND	0.009	2.3 J	ND	0.0002 J	ND	22.4	1.4 J	ND	ND	0.021
May-2019	0.025	0.064	ND	0.01	ND	ND	ND	ND	ND	ND	ND	ND	0.015
Oct-2019	0.0074	0.0091	ND	0.01	ND	ND	ND	ND	ND	1.4 J	ND	0.0072	0.011
May-2020	0.0093	0.0074	ND	0.011	ND	ND	ND	ND	ND	ND	ND	0.0081	0.0075

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-16A***												
Oct-2020	0.0071	0.0067	*ND*	0.01	*ND*	*ND*	*ND*	*ND*	*1.3 J*	*ND*	*ND*	*0.00089 J*	*ND*
Apr-2021	0.0066	0.0058	*ND*	*0.0095 J*	0.51	*0.5 J*	*0.0058 J*	*ND*	1.3	1.1	*ND*	*ND*	*0.005 J*
Oct-2021	*0.0045 J*	*0.0048 J*	*ND*	0.0068	*0.44 J*	*0.49 J*	*ND*	*ND*	1.2	1.4 B	*0.000053 J*	*ND*	0.0051

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16A*																
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16A*																
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-16A*															
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-16A***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.123 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16A***															
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16A***															
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

HISTORICAL TABLES –
Off-site Non-regulated Wells

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P4*																
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P4*																
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.8 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P4***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.27 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.28 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.26 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.36 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P4***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.23 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.404 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P4***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P4***															
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***MW-P4***
Nov-2005	*ND*
Mar-2009	*ND*
Oct-2009	*ND*
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000031 J*
Mar-2013	*0.000056 J*
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*ND*
Apr-2015	*ND*
Nov-2015	*ND*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.000058 J*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00005 J*
Oct-2021	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***MW-P9***																
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	35	91	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	139	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	1 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	1 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P9*																
Oct-2004	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	*0.6 J*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	*0.8 J*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.45	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.53	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.36	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P9*																
Nov-2015	ND	ND	ND	ND	1.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	0.818 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P9***															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	1 J	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND
Sep-1994	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	3
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	2.2
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	1.4
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	0.7 J	2.2
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	1.8
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	0.6 J	1.8
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	2.5
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	2
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	2.1
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	2.2
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	3.5
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	2
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	3
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	3.2

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P9***															
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	3
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	2.6
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	2
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	3.1
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	2.3
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	2.1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	1.3
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	1.8
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	2.4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	2
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	2.1
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	2.3
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	2.8
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	2	ND	ND	ND	6.3	3.2
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.9	0.8 J
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	0.38 J	ND	ND	ND	1.14	1.56
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31 J	ND	0.32 J	ND	ND	ND	1.8	1.62
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.29 J	0.37 J,B	0.34 J	ND	ND	ND	2.09	1.86
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	0.25 J	ND	ND	ND	2.3	1.65
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	0.24 J	ND	ND	ND	2.09	1.73
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.22 J	ND	0.25 J	ND	ND	ND	2	1.26

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P9***															
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.47	1.47
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.2 J	ND	ND	ND	1.9	1.8
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.2 J	ND	ND	ND	1.5	1.5
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.2 J	ND	ND	ND	1.5	1.3
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.2 J	ND	ND	ND	1.7	1.6
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	1.6
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	1.4 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.9 J
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.806 J	0.982 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	0.9 J

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P9***															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	0.5 J	ND	0.6 J	ND	ND	0.6 J	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	0.8 J	ND	2.1	ND	ND	1	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	1	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	1.5	ND	NA	0.6 J	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	1.5	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	1.5	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	1.6	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	1.4	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	1.1	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	0.8 J	ND	ND	1.4	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P9***															
Apr-2004	ND	ND	ND	NA	0.9 J	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	1.1	ND	ND	1.7	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	0.9 J	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	0.9 J	ND	ND	1.8	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	0.5 J	ND	ND	1.3	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	1	ND	ND	2.7	ND	ND	ND	ND	1.8	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	0.86 J	ND	ND	2.44	ND	ND	ND	ND	0.68 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.66 J	ND	ND	1.75	ND	ND	ND	ND	0.59 J	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.71 J	ND	ND	1.62	ND	ND	ND	ND	0.62 J	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	0.61 J	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	2.06	ND	ND	ND	ND	0.58 J	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P9***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.51	*ND*	*ND*	*ND*	*ND*	*0.46 J*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.43	*ND*	*ND*	*ND*	*ND*	*0.51 J*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*0.2 J*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*0.1 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.13	*ND*	*ND*	*ND*	*ND*	*0.284 J*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID: MW-P9	
Jun-1994	*ND*
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	0.0013
Apr-1997	*ND*
Apr-2004	*ND*
Oct-2004	*ND*
Mar-2009	0.0012
Oct-2009	*ND*
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	0.0002
Sep-2012	0.00024
Mar-2013	0.000223
Oct-2013	0.000384
Mar-2014	0.000259
Oct-2014	0.00022
Apr-2015	*0.000126 J*
Nov-2015	*0.000117 J*
May-2016	*0.00013 J*
Oct-2016	*0.00016 J*
May-2017	0.00033
Oct-2017	*0.00013 J*
May-2018	0.00041 B
Nov-2018	0.00038
May-2019	0.00024
Oct-2019	*0.0002 J*
May-2020	0.00026
Oct-2020	*ND*
Apr-2021	0.00022
Oct-2021	*0.00014 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***MW-P106***																
Oct-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	0.7 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	1.5	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	1.7	NA	NA	6.5	0.5 J	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	1.4	ND	ND	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	1.3	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	0.5 J	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	0.6 J	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	0.6 J	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	0.7 J	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	0.6 J	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P106*																
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.78	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	0.23 J	ND	ND	7.16	ND	ND	ND	ND	ND	ND	ND	0.44 J	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	11.1	0.34 J	ND	ND	ND	ND	ND	0.34 J	0.56 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	9	0.27 J	ND	ND	ND	ND	ND	ND	0.54 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	0.58 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	3.43	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	0.1 J	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P106*																
Oct-2016	ND	0.1 J	ND	ND	5.1	0.1 J	ND	ND	ND	ND	ND	0.1 J	0.2 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	4.5	0.1 J	ND	ND	ND	ND	ND	0.1 J	0.2 J	ND	ND	ND	ND	ND
Oct-2017	ND	0.1 J	ND	ND	5	0.2 J	ND	ND	ND	ND	ND	0.1 J	0.2 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.64	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*MW-P106*															
Oct-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	0.6 J	NA	NA	NA	2.5	1.2
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	5.7	ND	ND	ND	11	10
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	1 J	ND	NA	6.5	NA	ND	NA	10	11
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.9	ND	ND	ND	34	9.6
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	3.3	ND	ND	ND	16	6.9
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	6.3	1.8
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.7	1.4
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.7	1.8
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	14	3.3
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	6.3	3.1
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	8.6	2.1
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	0.9 J
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P106***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	6.4	4.7
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	7	8.1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	2.4	3.3
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	3.4	4.7
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	5.3
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.4	7.2
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.9	5
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	2.1
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.58 J	ND	ND	ND	1.81	1.93
Mar-2013	0.34 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.01	ND	ND	ND	6.99	8.26
Oct-2013	0.66 J	ND	ND	ND	ND	ND	ND	ND	0.7 J	0.28 J	ND	4.75	ND	ND	ND	8.57	13.1
Mar-2014	0.41 J	ND	ND	ND	ND	ND	ND	ND	0.36 J	ND	ND	3.44	ND	ND	ND	8.47	11.6
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.21 J	ND	ND	ND	0.51 J	0.76 J
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.16	ND	ND	ND	3.11	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.68 J	ND	ND	ND	1.17	2.59
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	3.8	4.7

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P106***															
Oct-2016	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.1 J*	*ND*	1.6	*ND*	*ND*	*ND*	5.5	6.6
May-2017	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.1 J*	*ND*	1.5	*ND*	*ND*	*ND*	4.4	5.4
Oct-2017	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	1.6	*ND*	*ND*	*ND*	6.4	6.3
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	6.4	3.8
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.5	1.3
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	3.3	2.3
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.588 J*	*ND*	*ND*	*ND*	*1.35 J*	*1.71 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	2.3	2

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P106***															
Oct-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	1 J	ND	ND	NA	NA	ND	0.8 J	NA	ND	NA
Oct-1999	ND	ND	ND	NA	1.1	ND	ND	**5.4**	ND	ND	ND	ND	2	2.8	ND	ND	NA
Apr-2000	ND	NA	ND	NA	1.9	ND	NA	**5.3**	ND	ND	NA	NA	2	2.9	ND	0.7 J	NA
Oct-2000	ND	ND	ND	NA	1.5	ND	ND	3.4	ND	ND	ND	ND	1.2	2.6	ND	ND	NA
Apr-2001	ND	ND	ND	NA	1.3	ND	ND	3	ND	ND	ND	ND	1	1.9	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	1.1	ND	ND	ND	ND	ND	0.9 J	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	1	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	1	ND	ND	NA
Mar-2003	ND	ND	ND	NA	0.9 J	ND	ND	1.5	ND	ND	ND	ND	ND	1.2	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	0.9 J	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	0.7 J	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P106***															
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	0.6 J	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.9 R	ND	ND	3.9	ND	ND	ND	ND	1.3	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	1.5	ND	ND	1.8	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	1	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	ND	1.5	1 J	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	1.1	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	0.51 J	ND	ND	1.11	ND	ND	ND	ND	0.93 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	2.45	ND	ND	3.21	ND	ND	ND	ND	2.58	ND	ND	ND	ND
Oct-2013	ND	ND	0.42 J	ND	**5.11**	0.24 J	ND	3.68	ND	ND	ND	ND	2.56	1.07	ND	0.42 J	0.66 J
Mar-2014	ND	ND	0.31 J	ND	3.21	ND	ND	4.64	ND	ND	ND	ND	2.81	0.92 J	ND	ND	0.31 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	0.78 J	ND	ND	1.81	ND	ND	ND	ND	1.36	0.51 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	1.11	ND	ND	ND	ND	0.91 J	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P106***															
May-2016	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	1.5	*0.6 J*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	2.2	*ND*	*ND*	*ND*	*ND*	1.5	*0.7 J*	*ND*	*0.1 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*1.8 J+*	*ND*	*ND*	*ND*	*ND*	1.2	*0.5 J*	*ND*	*0.1 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	1.5	*0.8 J*	*ND*	*0.1 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.608 JB*	*ND*	*ND*	*0.622 J*	*ND*	*ND*	*ND*	*ND*	*0.515 J*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID: MW-P106	
Sep-1994	*ND*
Oct-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	**0.0027**
Apr-1997	0.0009
Apr-2004	0.001
Oct-2004	0.0005
Apr-2005	0.0005
Mar-2009	0.0003
Oct-2009	0.0002
Mar-2010	*ND*
Oct-2010	0.0004
Apr-2011	0.0002
Sep-2011	0.0004
Mar-2012	0.0002
Sep-2012	0.00029
Mar-2013	*0.000178 J*
Oct-2013	*0.000097 J*
Mar-2014	*0.000064 J*
Oct-2014	*0.000109 J*
Apr-2015	*0.000152 J*
Nov-2015	0.00043
May-2016	0.00024
Oct-2016	*0.00012 J*
May-2017	*0.00015 J*
Oct-2017	*0.00011 J*
May-2018	*0.00018 JB*
Nov-2018	*0.00016 J*
May-2019	*ND*
Oct-2019	*ND*
May-2020	0.00071
Oct-2020	0.0004
Apr-2021	0.00021
Oct-2021	*0.00011 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P417*																
Aug-1994	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	31	4.9 J	ND
Sep-1994	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	75	109	ND
Nov-1994	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	43	203 E	ND
Apr-1995	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	66	ND
Oct-1996	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	0.5 J	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	5.2	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	8.3	ND	NA	NA	NA	NA	ND	ND	0.5 J	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	4.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P417*																
Apr-2005	ND	ND	ND	ND	6.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	7.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	9.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	7.2	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
May-2007	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	7.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	5.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	5.86	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	7.47	ND	ND	ND	ND	ND	ND	ND	0.53 J	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	5.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	4.08	ND	ND	ND	ND	ND	ND	ND	0.29 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	4.15	ND	ND	ND	ND	ND	ND	ND	0.28 J	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	3.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P417*																
Nov-2015	ND	ND	ND	ND	3.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.6 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	0.309 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P417***															
Aug-1994	*0.6 J*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	18	*ND*	*ND*	*ND*	*ND*	*ND*	2.9	3.2
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	3.3	2.9
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	3.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.4	2.7
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	2
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.1	3
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	6	5
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.7	8.9
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	9.8	7.1
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	1.1	*ND*	*NA*	1.4	*NA*	*NA*	*NA*	5.9	10
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	1	*ND*	*ND*	*ND*	2.9	8.6
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	1.5	*ND*	*NA*	1.6	*NA*	*ND*	*NA*	2.9	13
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	16	16
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	1	*ND*	*ND*	*ND*	6.9	7
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	1	*ND*	*ND*	*ND*	8.9	5.2
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	6.5	3.8
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	7.1	4.6
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	8.7	4.3
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.2	6
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	9.1	6.7
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	11	7.2

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P417***															
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	1.7	ND	ND	ND	12	12
Oct-2005	ND	0.9 J	ND	ND	ND	ND	ND	ND	3	ND	ND	1.7	ND	ND	ND	7.4	8.4
Mar-2006	0.7 J	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	1.6	ND	ND	ND	8.9	19.7
Sep-2006	0.8 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.9	ND	ND	ND	11.2	12
Mar-2007	0.7 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.8	ND	ND	ND	7.5	9.6
May-2007	0.9 J	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	2	ND	ND	ND	9.7	12
Sep-2007	0.8 J	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	1.9	ND	ND	ND	10.5	7
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	10.8	8.4
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	1.4	ND	ND	ND	12.9	8.6
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.1	5.9
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	11.7	7.5
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.8 J	6.4
Oct-2010	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	21.7	7.2
Apr-2011	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND	ND	ND	17.5	8.4
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5	ND	ND	ND	15.5	9.9
Mar-2012	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	18.7	7.6
Sep-2012	0.64 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.75	ND	ND	ND	7.99	6.5
Mar-2013	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.15	ND	ND	ND	9.09	9.12
Oct-2013	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.84	ND	ND	ND	6.28	6.28
Mar-2014	0.32 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.89	ND	ND	ND	5.88	5.01
Oct-2014	0.31 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.94	ND	ND	ND	3.11	4.78
Apr-2015	0.23 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	3.5	3.08

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P417***															
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.27	ND	ND	ND	1.72	2.86
May-2016	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	2.2	2.7
Oct-2016	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	2.1	2.2
May-2017	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	1.8	2.2
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	1.3	1.2
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	1.2
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	1.4
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.229 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.6 J

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P417***															
Aug-1994	ND	ND	1.1	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	1	NA	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND
Oct-1997	ND	ND	ND	NA	1.5	ND	ND	1.2	ND	ND	ND	ND	0.6 J	0.8 J	ND	ND	NA
Apr-1998	ND	ND	ND	NA	2.9	ND	ND	1.6	ND	ND	ND	ND	0.9 J	1.2	ND	ND	NA
Apr-1999	ND	NA	ND	NA	3.4	ND	NA	2.6	ND	ND	NA	NA	1.3	0.9 J	NA	ND	NA
Oct-1999	ND	ND	ND	NA	2.7	ND	ND	3.3	ND	ND	ND	ND	1.2	0.6 J	ND	ND	NA
Apr-2000	ND	NA	ND	NA	**5.3**	ND	NA	3.9	ND	ND	NA	NA	1.7	0.8 J	ND	0.5 J	NA
Oct-2000	ND	ND	ND	NA	**9.6**	ND	ND	4.6	ND	ND	ND	ND	2	1.5	ND	1.2	NA
Apr-2001	ND	ND	ND	NA	3.9	ND	ND	2.7	ND	ND	ND	ND	1	0.8 J	ND	ND	NA
Sep-2001	ND	ND	ND	NA	2.6	ND	ND	2.3	ND	ND	ND	ND	0.9 J	0.8 J	ND	ND	NA
Mar-2002	ND	ND	ND	NA	1.8	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	1.5	ND	ND	1.5	ND	ND	ND	ND	0.6 J	0.6 J	ND	ND	NA
Mar-2003	ND	ND	ND	NA	4.1	ND	ND	1.3	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	3.7	ND	ND	1.5	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	2.6	ND	3.2	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*MW-P417*															
Oct-2004	ND	ND	ND	NA	2.9	ND	ND	4	ND	ND	ND	ND	1.4	0.7 J	ND	ND	NA
Apr-2005	ND	ND	ND	ND	4.7	ND	ND	**6.7**	ND	ND	ND	ND	2.3	1.1	ND	0.9 J	NA
Oct-2005	ND	ND	ND	ND	**6.2**	ND	ND	**10.3**	ND	ND	ND	ND	3.1	0.7 J	ND	1.5	NA
Mar-2006	ND	ND	ND	ND	**9.7**	1.2	ND	**14**	ND	ND	ND	ND	4.1	0.9 J	ND	**2.7**	NA
Sep-2006	ND	ND	ND	ND	**10.9**	ND	ND	**15.3**	ND	ND	ND	ND	5	ND	ND	**3.2**	NA
Mar-2007	ND	ND	ND	ND	**7.1 R**	ND	ND	**10.8**	ND	ND	ND	ND	3.6	ND	ND	**3**	NA
May-2007	ND	ND	ND	0.9 J	**6.5**	ND	ND	**11.3**	ND	ND	ND	ND	3.2	0.7 J	ND	**3.6**	NA
Sep-2007	ND	ND	ND	ND	**9.2**	ND	ND	**8.6**	ND	ND	ND	ND	3.5	0.8 J	ND	**2.8**	NA
Mar-2008	ND	ND	ND	ND	4.1	ND	ND	**7.6**	ND	ND	ND	ND	2.3	1 J	ND	1.7	NA
Sep-2008	ND	ND	ND	ND	**6**	ND	ND	**5.1**	ND	ND	ND	ND	2	1.1	ND	1.5	NA
Mar-2009	ND	ND	ND	ND	4.4	ND	ND	5	ND	ND	ND	ND	1.7	0.7 J	ND	ND	NA
Oct-2009	ND	ND	ND	ND	4	ND	ND	4	ND	ND	ND	ND	1.9	0.9 J	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	3.3	ND	ND	4.9	ND	ND	ND	ND	ND	0.6 J	ND	0.7 J	NA
Apr-2011	ND	ND	ND	ND	3	ND	ND	**5.6**	ND	ND	ND	ND	**6.4 C**	ND	ND	0.6 J	NA
May-2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**8.5**	NA	NA	NA	NA
Sep-2011	ND	ND	ND	ND	4.1	ND	ND	3.5	ND	ND	ND	ND	**5.9**	ND	ND	0.8 J	NA
Mar-2012	ND	ND	ND	ND	2.6	ND	ND	3.9	ND	ND	ND	ND	4.9	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	2.27	ND	ND	**6.84**	ND	ND	ND	ND	**7.36**	0.63 J	ND	0.3 J	ND
Mar-2013	ND	ND	ND	ND	1.95	0.26 J	ND	**7.97**	ND	ND	ND	ND	**9.29**	ND	ND	0.34 J	ND
Oct-2013	ND	ND	ND	0.17 J	2.64	ND	ND	3.17	ND	ND	ND	ND	4.37	0.42 J	ND	0.36 J	ND
Mar-2014	ND	ND	ND	0.16 J	2.02	ND	ND	3.17	ND	ND	ND	ND	3.31	0.26 J	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P417***															
Oct-2014	*ND*	*ND*	*ND*	*0.13 J*	2.03	*ND*	*ND*	3.24	*ND*	*ND*	*ND*	*ND*	3.37	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	1.74	*ND*	*ND*	2.04	*ND*	*ND*	*ND*	*ND*	2.35	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	1.49	*ND*	*ND*	*ND*	*ND*	1.78	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.1 J*	1.5	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	1.4	*0.1 J*	*ND*	*0.1 J*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	1.3	*0.1 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*1.1 J+*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*0.1 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***MW-P417***
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	*ND*
Apr-1997	0.0012
Apr-2004	*ND*
Oct-2004	*ND*
Mar-2009	*ND*
Oct-2009	*ND*
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000035 J*
Mar-2013	*0.000077 J*
Oct-2013	*0.000173 J*
Mar-2014	*0.000171 J*
Oct-2014	*0.000136 J*
Apr-2015	*0.00014 J*
Nov-2015	0.000344
May-2016	0.00026
Oct-2016	0.00054
May-2017	0.00055
Oct-2017	0.00081
May-2018	0.0018
Nov-2018	0.001
May-2019	0.0011
Oct-2019	0.00021
May-2020	*0.00018 J*
Oct-2020	0.00035
Apr-2021	0.00023
Oct-2021	*0.00006 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P440*																
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	36	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	0.7 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P440*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.43 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.32 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P440*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.1 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.1 L2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P440***															
Aug-1994	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*0.8 J*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*0.7 J*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	1.2
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	1.3	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	3.8	7
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	20	9.4
Feb-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.7	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	13	10
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	4.1	4.5
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.9	5.3
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	5.9	3.7
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	2.4	1.8
Mar-2003	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	9	5.9
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.7	*0.6 J*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P440***															
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	3.2	0.9 J
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	5	1.6
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3	0.9 J
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.7	1.3
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	4.1	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	0.7 J
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	0.8 J
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	0.5 J
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.6	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.79 J	ND	ND	ND	ND	ND	1.21	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	0.54 J	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	ND	ND	ND	ND	1.62	0.56 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND	ND	1.48	0.29 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.91 J	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.71 J	ND	0.44 J	ND	ND	ND	2.3	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P440***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*0.4 J*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.96 JN3*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.383 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P440***															
Aug-1994	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	3.9	*ND*	*ND*	*NA*	*NA*	*0.6 J*	*0.9 J*	*ND*	**2.8**	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.7	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	**4.4**	*NA*
Feb-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	**6.4**	*ND*	*ND*	*ND*	*ND*	1.4	1.1	*ND*	**3.6**	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*0.5 J*	*ND*	1.1	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*0.6 J*	*ND*	1.6	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*0.9 J*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.4	*ND*	*ND*	*ND*	*ND*	1.3	*0.6 J*	*ND*	**2.4**	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P440***															
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.42 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.37 J*	*ND*	*ND*	*ND*	*ND*	*0.21 J*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.31 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P440***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.77 J*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*0.37 J*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.96 J*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***MW-P440***
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	*ND*
Apr-1997	*ND*
Apr-2004	*ND*
Oct-2004	*ND*
Mar-2009	*ND*
Oct-2009	*ND*
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000092 J*
Mar-2013	*0.000085 J*
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*ND*
Apr-2015	*ND*
Nov-2015	*ND*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.000065 J*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00006 J*
Oct-2021	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P109*																
Jan-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P109*																
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	2.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.91	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	0.1 J	0.1 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9 J	ND
Nov-2018	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P109*																
Apr-2021	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P109*															
Jan-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.5 J
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	0.6 J
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	1.1
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	0.9 J
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.1	2.2
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	3.7
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	6.3	4.5
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	5.6	3.7
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	3.2	4.1
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	7.8	4
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	3.8	2.9
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	5.8	2.1
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P109***															
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	1.8
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	0.7 J
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	0.5 J	ND	ND	ND	2.87	1.85
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	0.56 J	ND	ND	ND	2.89	2.11
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	0.83 J	ND	ND	ND	3.54	2.55
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.28 J	ND	0.8 J	ND	ND	ND	3.84	2.52
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.32 J	ND	0.9 J	ND	ND	ND	2.95	2.61
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	0.84 J	ND	ND	ND	2.86	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.28	ND	ND	ND	1.8	2.21
May-2016	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	1.6	ND	ND	ND	3	2.9
Oct-2016	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	1.9	ND	ND	ND	3.4	3.2
May-2017	0.2 J	ND	ND	ND	ND	ND	ND	ND	0.1 J	0.3 J	ND	1.7	ND	ND	ND	3.2	3.5
Oct-2017	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	2	ND	ND	ND	3.3	3.3
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	5.5	2.7
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5 CL	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	1.3 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	0.7 J

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P109***															
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.302 J*	*ND*	*ND*	*ND*	*1.27 J*	*1.01 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.5	*0.9 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P109***															
Jan-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Feb-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	0.8 J	2.1	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	0.5 J	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P109***															
Oct-2009	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	2.09	ND	ND	ND	ND	1.42	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.86	ND	ND	ND	ND	1.56	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	1.45	ND	ND	ND	ND	1.73	0.36 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	2.16	0.29 J	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	2.05	ND	ND	ND	ND	2.57	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	1.41	ND	ND	ND	ND	2.46	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	1.41	ND	ND	ND	ND	2.99	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	3.7	0.3 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	4.2	0.3 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	1.7 J+	ND	ND	ND	ND	4	0.3 J	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	4	0.3 J	ND	ND	ND
May-2018	ND	ND	ND	ND	1.3	ND	ND	1.2	ND	ND	ND	ND	3.2	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P109***															
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.823 J*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P109***
Apr-2004	0.0003
Oct-2004	0.0006
Mar-2009	0.0003
Oct-2009	0.0005
Mar-2010	0.0003
Oct-2010	*ND*
Apr-2011	0.0005
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000086 J*
Mar-2013	*0.000088 J*
Oct-2013	*0.000084 J*
Mar-2014	*0.000066 J*
Oct-2014	*0.000101 J*
Apr-2015	*0.000071 J*
Nov-2015	*0.000081 J*
May-2016	*0.000051 J*
Oct-2016	*ND*
May-2017	*0.00013 J*
Oct-2017	*ND*
May-2018	0.00021 B
Nov-2018	*0.00013 J*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00007 J*
Oct-2021	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P165*																
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.46	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.76	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3 J	ND
Nov-2018	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P165*																
Oct-2019	*ND*	*ND*	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	2.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	3.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	3.16	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P165*															
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.7 J
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	0.9 J
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.57	1.34
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	ND	ND	ND	ND	2.17	1.97
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	2.48	2.33
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	3.11	2.41
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.29 J	ND	ND	ND	ND	ND	2.5	2.7
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.23 J	ND	ND	ND	2.72	2.47
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.64	2.81
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	2.9	3.3
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	3.4	3.6
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	0.3 J
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	0.3 J	ND	ND	ND	4.8	4.2
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8	5
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8 CL	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	4.1 N3

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P165***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.4	3.2
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.3	2.9
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	6.4	3.8
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.292 J*	*ND*	*0.728 J*	*ND*	*ND*	*ND*	*3.94 J*	5.51
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	6.3	5

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P165***															
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	0.46 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.16 J	ND	ND	ND	0.42 J	ND	ND	ND	ND	0.22 J	0.43 J	ND	ND	ND
Mar-2014	ND	ND	ND	0.17 J	ND	ND	ND	0.61 J	ND	ND	ND	ND	0.24 J	0.4 J	ND	ND	ND
Oct-2014	ND	ND	ND	0.21 J	ND	ND	ND	0.78 J	ND	ND	ND	ND	0.32 J	0.38 J	ND	ND	ND
Apr-2015	ND	ND	ND	0.17 J	ND	ND	ND	0.75 J	ND	ND	ND	ND	0.28 J	0.36 J	ND	ND	ND
Nov-2015	ND	ND	ND	0.26 J	ND	ND	ND	0.66 J	ND	ND	ND	ND	0.29 J	0.36 J	ND	ND	ND
May-2016	ND	ND	ND	0.2 J	ND	ND	ND	0.8 J	ND	ND	ND	ND	0.3 J	0.4 J	ND	ND	ND
Oct-2016	ND	ND	ND	0.2 J	ND	ND	ND	1 J	ND	ND	ND	ND	0.4 J	0.5 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	0.2 J	ND	ND	ND	1.1	ND	ND	ND	ND	0.4 J	0.6 J	ND	ND	ND
May-2018	ND	ND	ND	ND	1.3	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P165***															
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.202 J*	*ND*	*ND*	*ND*	2.39	*ND*	*ND*	*ND*	*ND*	*0.719 J*	*0.429 J*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.6 J*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P165***
Oct-2009	*ND*
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000047 J*
Mar-2013	*0.000073 J*
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*0.000033 J*
Apr-2015	*ND*
Nov-2015	*0.00003 J*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.0001 J*
Oct-2017	*0.000064 J*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00007 J*
Oct-2021	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P171-1*																
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P171-1*																
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P171-1***															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.54 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.47 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.48 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.51 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P171-1***															
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.405 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P171-1***															
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P171-1***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P171-1***
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000071 J*
Mar-2013	*0.000076 J*
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*0.000025 J*
Apr-2015	*ND*
Nov-2015	*ND*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.00015 J*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00005 J*
Oct-2021	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P264*																
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.91 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.55	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P264*																
Mar-2014	ND	ND	ND	ND	1.61	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	1.85	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 J	ND
Nov-2018	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	3.02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P264*															
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	0.7 J
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	0.8 J
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.8 J
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	1.1
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	1.1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	0.7
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	1.1
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	3.8
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	1
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.3
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	1.3
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	0.6 J
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.76	1.57
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	ND	ND	ND	ND	2.33	2.28
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	0.22 J	ND	ND	ND	2.69	2.79

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P264***															
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	0.22 J	ND	ND	ND	3.3	3.41
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.24 J	ND	0.22 J	ND	ND	ND	2.27	3.23
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.24 J	ND	0.22 J	ND	ND	ND	2.64	2.76
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.61	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	2.6	3.4
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	3	3.8
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	0.3 J	0.2 J	ND	ND	ND	3	4.2
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	3.2	4.3
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.3	5
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 CL	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	4.9 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	3.6
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	2.5
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	6	3.5
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.464 J	ND	0.343 J	ND	ND	ND	4.29 J	5.38
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	6.4	4.6

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P264***															
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.61 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.44 J*	*ND*	*ND*	*ND*	*ND*	*0.28 J*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P264***															
Oct-2013	ND	ND	ND	ND	ND	ND	ND	0.55 J	ND	ND	ND	ND	0.35 J	0.37 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	0.74 J	ND	ND	ND	ND	0.39 J	0.43 J	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	0.91 J	ND	ND	ND	ND	0.47 J	0.36 J	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	0.65 J	ND	ND	ND	ND	0.37 J	0.31 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	0.74 J	ND	ND	ND	ND	0.36 J	0.28 J	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	0.4 J	0.4 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	1 J+	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
May-2018	ND	ND	ND	ND	1.2	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	NA
Apr-2021	ND	ND	ND	0.164 J	0.543 JB	ND	ND	2.27	ND	ND	ND	ND	0.789 J	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	0.7 J	0.6 J	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P264***
Apr-2004	0.0003
Oct-2004	0.0003
Mar-2009	*ND*
Oct-2009	*ND*
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000109 J*
Mar-2013	*0.000094 J*
Oct-2013	*0.000065 J*
Mar-2014	*0.000056 J*
Oct-2014	*0.000083 J*
Apr-2015	*ND*
Nov-2015	*0.000059 J*
May-2016	*0.000068 J*
Oct-2016	*0.000059 J*
May-2017	0.00021
Oct-2017	*0.00013 J*
May-2018	*0.00019 JB*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00007 J*
Oct-2021	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P440*																
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	ND
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	0.7 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jan-2001	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2 J	ND
Apr-2001	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P440*																
Mar-2003	ND	ND	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	*1.6 J*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	*0.7 J*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	*0.98 J*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P440*																
Mar-2014	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	1.56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	0.512 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P440*															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	1.2	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	1 J	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	1.3	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	1.5	NA	ND	NA	NA	NA	1.1	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	1.3	0.7 J
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	1	NA	ND	NA	ND	NA	1.9	2.4
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	12	7.5
Jan-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.67 J	ND	ND	ND	ND	14	9
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.3	0.5 J	ND	ND	ND	ND	ND	10	7.7
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	7.4	7
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.1	0.7 J	ND	ND	ND	ND	ND	9.5	6.4
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	1	1.6	ND	ND	ND	ND	ND	8.6	6.2
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	0.7 J	ND	ND	ND	ND	ND	8.7	5.3

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P440***															
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	0.6 J	ND	ND	ND	ND	ND	7.3	5.2
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	5.5	4.4
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	8.1	4.8
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	4.3	3.4
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	4.1	2.8
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	2.6	1.6
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	4.5	4.8
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	6.3	2.7
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	4.5 J	3 J
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	5.3	1.7
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	3.4	2.2
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	6.3	4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	2.6
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	4.8	3.8
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	6.7	1.9
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	6.1	3
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND	ND	ND	ND	ND	ND	2.9
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.88 J	ND	ND	ND	ND	ND	2.14	1.1
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.95 J	ND	0.45 J	ND	ND	ND	3.92	2.15
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.22	ND	0.36 J	ND	ND	ND	3.25	1.54

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P440***															
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.85 J	ND	0.31 J	ND	ND	ND	4.18 J	1.92
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.91 J	ND	0.34 J	ND	ND	ND	2.39	1.52
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.86 J	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.89 J,B	ND	0.78 J	ND	ND	ND	1.42	1.57
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	0.5 J	ND	ND	ND	1.4	0.9 J
Oct-2016	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	0.9 J	ND	ND	ND	2.3	1.6
May-2017	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	0.9 J	ND	ND	ND	2.2	1.7
Oct-2017	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	0.8 J	ND	ND	ND	2	1.4
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	1.2	ND	ND	ND	3.6	1.6
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.2 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	0.7 J	ND	ND	ND	2	0.8 J
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.09 J	ND	0.134 J	ND	ND	ND	0.433 J	0.398 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 JB	ND	ND	ND	ND	ND	1.4	0.6 J

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P440***															
Jun-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jun-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Aug-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	1.2	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	**2.3**	*NA*
Jan-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	*ND*	1.1	*0.78 J*	*ND*	**3.2**	*NA*
Feb-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.2	*ND*	*ND*	*ND*	*ND*	1	*0.7 J*	*ND*	**2.6**	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.4	*ND*	*ND*	*ND*	*ND*	1	*0.7 J*	*ND*	**2.3**	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.8	*ND*	*ND*	*ND*	*ND*	1	*0.8 J*	*ND*	**2.2**	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*0.6 J*	*ND*	1.7	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*RW-P440*															
Sep-2002	ND	ND	ND	NA	ND	ND	ND	2.9	ND	ND	ND	ND	0.9 J	ND	ND	1.5	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	3.1	ND	ND	ND	ND	0.9 J	0.5 J	ND	1.4	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	2.2	ND	ND	ND	ND	0.7 J	ND	ND	1	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	1.3	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	0.7 J	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	0.6 J	ND	ND	0.9 J	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	2.2 J	ND	ND	ND	ND	0.7 J	ND	ND	0.8 J	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.5 J	ND	ND	1.1	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	0.5 J	ND	ND	2.4	ND	ND	ND	ND	0.6 J	ND	ND	1.6	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	0.6 J	ND	ND	**2.1**	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	1.8	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	1.1	ND	ND	1.3	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	0.7 J	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	1.13	ND	ND	ND	ND	0.6 J	ND	ND	0.51 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.28	ND	ND	ND	ND	0.93 J	ND	ND	0.55 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P440***															
Oct-2013	ND	ND	ND	ND	ND	ND	ND	0.92 J	ND	ND	ND	ND	0.73 J	0.24 J	ND	0.54 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.23	ND	ND	ND	ND	0.55 J	0.23 J	ND	0.32 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	1.17	ND	ND	ND	ND	0.65 J	ND	ND	0.46 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	1.05	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.6 J	ND	ND	0.1 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	1.2	ND	ND	0.2 J	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	1.3	0.1 J	ND	0.3 J	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	1	ND	ND	0.2 J	ND
May-2018	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	1.9	NA
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.272 J	ND	ND	0.867 J	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P440***
Jun-1994	*ND*
Jun-1994	*ND*
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	0.001
Apr-1997	*ND*
Apr-2004	0.001
Oct-2004	0.0005
Mar-2009	*ND*
Oct-2009	*ND*
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000056 J*
Mar-2013	0.000101
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*0.000051 J*
Apr-2015	*ND*
Nov-2015	*0.000036 J*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.00012 J*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00006 J*
Oct-2021	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P441*																
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	0.9 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P441*																
Oct-2004	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	1.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.44	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.58	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	2.14	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	2.12	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	2.01	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.74	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P441*																
Nov-2015	ND	ND	ND	ND	2.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	0.332 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P441*															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	1	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	0.6 J	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	0.7 J	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	4.1	1.5
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	2	1
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	1.4	1.8
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	1.6	0.9 J
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	0.5 J	NA	ND	NA	NA	NA	0.9 J	1
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	1.7
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	2.7	3.1
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	2.9
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	1.9
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.7	2.8
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.4	2.2
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.6	3.2
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	3.1
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	7.3	5.5
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.1	3.2

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P441***															
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.1	3.6
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.7	1.7
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	4.6	2
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	5.6	4.4
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.5	1.9
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*5.6 J*	*3.3 J*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.6	1.6
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.6	1.8
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	8.7	3
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.3	1.8
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.6	3
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.1	2.2
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	10.6	1.6
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.5	1.9
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	11.3	1.7
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.4	1.8
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.06	1.02
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.34 J*	*ND*	*ND*	*ND*	*ND*	*ND*	3.54	1.31
Oct-2013	*0.28 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.27 J*	*ND*	*ND*	*ND*	4.49	1.8
Mar-2014	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.17 J*	*ND*	*0.33 J*	*ND*	*ND*	*ND*	*5.54 J*	1.91
Oct-2014	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	3.67	1.8
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*0.34 J*	*ND*	*ND*	*ND*	3.41	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P441***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.35 J*	*ND*	*ND*	*ND*	2.18	1.32
May-2016	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	2.7	1.3
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	3.5	1.5
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	2.9	1.3
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	3.7	1.5
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.4	1.4
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6 CL	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.8	1.1 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.6	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.412 J*	*0.223 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.2	*0.5 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P441***															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	1.3	ND	ND	NA	NA	ND	0.7 J	ND	0.5 J	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	0.5 J	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	1	ND	ND	1.5	ND	ND	ND	ND	0.5 J	0.5 J	ND	0.5 J	NA
Mar-2002	ND	ND	ND	NA	0.7 J	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	1.3	ND	ND	1.9	ND	ND	ND	ND	0.6 J	ND	ND	1.1	NA
Mar-2003	ND	ND	ND	NA	1.3	ND	ND	2.1	ND	ND	ND	ND	0.7 J	ND	ND	1.2	NA
Oct-2003	ND	ND	ND	NA	2.4	ND	ND	3.3	ND	ND	ND	ND	1.1	ND	ND	1.9	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P441***															
Apr-2004	ND	ND	ND	NA	1.4	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	1.1	ND	ND	2.2	ND	ND	ND	ND	0.7 J	ND	ND	0.9 J	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	1.5	0.8 J	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.3 R	ND	ND	2.3 J	ND	ND	ND	ND	0.7 J	ND	ND	1.2 J	NA
Sep-2007	ND	ND	ND	ND	1.3	ND	ND	2	ND	ND	ND	ND	0.6 J	ND	ND	0.9 J	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	0.9 J	ND	ND	2.5	ND	ND	ND	ND	0.5 J	ND	ND	1.3	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	1.3	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	0.6 J	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.5 J	ND	ND	0.6 J	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	1.69	ND	ND	ND	ND	0.54 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.07	ND	ND	ND	ND	0.36 J	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	0.5 J	0.26 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	0.6 J	0.35 J	ND	0.33 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	2.22	ND	ND	ND	ND	0.91 J	ND	ND	0.28 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P441***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.32	*ND*	*ND*	*ND*	*ND*	*0.63 J*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.34	*ND*	*ND*	*ND*	*ND*	*0.69 J*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.2 J*	*ND*	*0.1 J*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.1 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P441***
Jun-1994	*ND*
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	0.0017
Apr-1997	0.0008
Apr-2004	0.0018
Oct-2004	0.0007
Mar-2009	0.0003
Oct-2009	0.0003
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	0.0005
Sep-2011	0.0002
Mar-2012	0.0006
Sep-2012	0.00086
Mar-2013	0.0013
Oct-2013	*0.000198 J*
Mar-2014	*ND*
Oct-2014	*0.00006 J*
Apr-2015	*0.000081 J*
Nov-2015	0.000206
May-2016	*ND*
Oct-2016	*0.000071 J*
May-2017	0.00032
Oct-2017	*0.000061 J*
May-2018	0.00042 B
Nov-2018	0.00022
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00014 J*
Oct-2021	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P584*																
Apr-1995	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	0.6 J	NA	NA	3.2	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	0.7 J	NA	NA	4	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	9.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jan-2001	ND	0.76 J	ND	ND	9.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	0.9 J	ND	ND	13	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND
Apr-2001	ND	1	ND	ND	16	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2001	ND	0.7 J	ND	ND	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	0.7 J	ND	ND	15	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2002	ND	0.6 J	ND	ND	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	ND
Mar-2003	ND	ND	ND	ND	9.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	7.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	5.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P584*																
Oct-2005	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	4.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	5.49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	6.76	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	6.59	0.24 J	ND	ND	ND	ND	ND	ND	0.38 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	5.01	ND	ND	ND	ND	ND	ND	ND	0.32 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	4.26	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	3.91	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	4.74	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	4.2	0.1 J	ND	ND	ND	ND	ND	0.1 J	0.2 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P584*																
Oct-2016	ND	ND	ND	ND	3.4	ND	ND	ND	ND	ND	0.1 J+	0.1 J	0.2 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	3.7	ND	ND	ND	ND	ND	ND	0.1 J	0.2 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	3.4	ND	ND	ND	ND	ND	ND	0.1 J	0.2 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2 J	ND
Nov-2018	ND	ND	ND	ND	1.7 L2M0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	2.64	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P584*															
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	2.1
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	4
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	4.7
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	2.3
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	0.9 J	NA	NA	NA	1.3	6.7
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	1.6	4.4
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	0.8 J	ND	NA	0.8 J	NA	ND	NA	4.5	11
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	1.7	ND	ND	ND	22	20
Jan-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	1.7	ND	ND	ND	ND	21
Feb-2001	0.7 J	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND	2.2	ND	ND	ND	18	23
Apr-2001	1	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	2.6	ND	ND	ND	12	25
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	1.9	ND	ND	ND	8.8	16
Mar-2002	0.9 J	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	3.1	ND	ND	ND	12	20
Sep-2002	0.7 J	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	2.7	ND	ND	ND	13	18
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	2.1	ND	ND	ND	7.9	12
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	1.2	ND	ND	ND	12	11
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	15	9.2
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	14	8.4
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	15	9

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P584***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	12.4	5.5
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	9	5.8
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	13.2	5.3
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 J	ND	ND	ND	10 J	6.8 J
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	1.4	ND	ND	ND	11.8	3.9
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	9.4	5.2
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	9.9	5.4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	9.4	5.5
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	11.6	6.5
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.9 J	6.3
Oct-2010	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	18.7	7.2
Apr-2011	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.1	ND	ND	ND	20.7	9.4
Sep-2011	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5	ND	ND	ND	25.4	9.1
Mar-2012	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND	ND	ND	22.7	9.3
Sep-2012	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.59	ND	ND	ND	8.55	5.98
Mar-2013	0.55 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.11	ND	ND	ND	10.7	8.85
Oct-2013	0.58 J	ND	ND	ND	ND	ND	ND	ND	0.34 J	ND	ND	4.36	ND	ND	ND	10.4	8.15
Mar-2014	0.37 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.16	ND	ND	ND	10.6	8.31
Oct-2014	0.34 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.55	ND	ND	ND	7.23	6.15
Apr-2015	0.32 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.36	ND	ND	ND	6.98	4.91
Nov-2015	0.31 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.74	ND	ND	ND	3.83	5.33
May-2016	0.3 J	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	3	ND	ND	ND	6.4	5.7

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P584***															
Oct-2016	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	4.9	4.6
May-2017	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	2.3	*ND*	*ND*	*ND*	5.6	4.6
Oct-2017	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	2.1	*ND*	*ND*	*ND*	5.1	4.4
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	9	4.5
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3 CL	2.1 N3M1
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	5	3.8 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	5.7	2.5
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	4.8	2.2
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	6.2	2.6
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.886 J*	*ND*	*ND*	*ND*	*2.74 J*	*2.5 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	4.4	2.3

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P584***															
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	1.1	*ND*	*NA*	2	*ND*	*ND*	*NA*	*NA*	*0.8 J*	1.3	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	1.8	*ND*	*NA*	4.4	*ND*	*ND*	*NA*	*NA*	1.2	1.4	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	**8.3**	*ND*	*ND*	**10**	*ND*	*ND*	*ND*	*ND*	3.1	2.1	*ND*	*ND*	*NA*
Jan-2001	*ND*	*ND*	*ND*	*NA*	**9.8**	*ND*	*ND*	**6.3**	*ND*	*ND*	*ND*	*ND*	2.5	1.6	*ND*	*0.73 J*	*NA*
Feb-2001	*0.6 J*	*ND*	*0.9 J*	*NA*	**14**	*1 J*	*ND*	**15**	*ND*	*ND*	*ND*	*ND*	4.7	1.8	*ND*	1.4	*NA*
Apr-2001	*ND*	*ND*	1.2	*NA*	**19**	1.4	*ND*	**18**	*ND*	*ND*	*ND*	*ND*	**5.8**	1.6	*ND*	1.5	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	**12**	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	2.2	1.2	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*0.8 J*	*NA*	**16**	*0.9 J*	*ND*	**15**	*ND*	*ND*	*ND*	*ND*	4.9	1.3	*ND*	1.7	*NA*
Sep-2002	*ND*	*ND*	*0.5 J*	*NA*	**11**	*ND*	*ND*	**11**	*ND*	*ND*	*ND*	*ND*	3.5	1.2	*ND*	1.2	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	**7**	*ND*	*ND*	4.7	*ND*	*ND*	*ND*	*ND*	2.5	1	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	**7.1**	*ND*	*ND*	4.8	*ND*	*ND*	*ND*	*ND*	1.7	1	*ND*	*0.6 J*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	4.8	*ND*	*ND*	4.9	*ND*	*ND*	*ND*	*ND*	1.8	1.1	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	4.4	*ND*	*ND*	2.8	*ND*	*ND*	*ND*	*ND*	1.4	1.4	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*RW-P584*															
Apr-2005	ND	ND	ND	ND	3.9	ND	ND	4.6	ND	ND	ND	ND	1.7	1.5	ND	ND	NA
Oct-2005	ND	ND	ND	ND	1.6	ND	ND	3.9	ND	ND	ND	ND	1.8	1	ND	0.6 J	NA
Mar-2006	ND	ND	ND	ND	1.8	ND	ND	**5.4**	ND	ND	ND	ND	2.1	1.1	ND	ND	NA
Sep-2006	ND	ND	ND	ND	0.6 J	ND	ND	4.9	ND	ND	ND	ND	2.4	1.9	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.6 R	ND	ND	6.8 J	ND	ND	ND	ND	3 J	ND	ND	0.7 J	NA
Sep-2007	ND	ND	ND	ND	2.5	ND	ND	**8.6**	0.5 J	ND	ND	ND	2.9	1.2	ND	1.5	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	**9.5**	ND	ND	ND	ND	2.5	0.9 J	ND	1.8	NA
Sep-2008	ND	ND	ND	ND	1.8	ND	ND	**7.7**	ND	ND	ND	ND	2.6	1.1	ND	1.7	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	**7.6**	ND	ND	ND	ND	2.7	0.9 J	ND	ND	NA
Oct-2009	ND	ND	ND	ND	1.6	ND	ND	**7.2**	ND	ND	ND	ND	3.7	0.9 J	ND	1.3	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	NA
Oct-2010	ND	ND	ND	ND	2.5	ND	ND	**5.5**	ND	ND	ND	ND	ND	ND	ND	0.9 J	NA
Apr-2011	ND	ND	ND	ND	2.5	ND	ND	**5.4**	ND	ND	ND	ND	**5.6**	ND	ND	0.8 J	NA
Sep-2011	ND	ND	ND	ND	2.3	ND	ND	**5.1**	ND	ND	ND	ND	**6.6**	ND	ND	0.7 J	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	**5.1**	ND	ND	ND	ND	**7.2**	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	1.33	ND	ND	**6.13**	ND	ND	ND	ND	**7.44**	0.85 J	ND	0.29 J	ND
Mar-2013	ND	ND	ND	ND	1.02	ND	ND	**6.48**	ND	ND	ND	ND	**8.3**	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.84 J	ND	ND	**5.5**	ND	ND	ND	ND	**7.22**	0.88 J	ND	0.32 J	ND
Mar-2014	ND	ND	ND	ND	0.58 J	ND	ND	**6.17**	ND	ND	ND	ND	**5.89**	0.74 J	ND	0.23 J	ND
Oct-2014	ND	ND	ND	0.13 J	ND	ND	ND	**6.23**	ND	ND	ND	ND	4.83	0.6 J	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	ND	3.56	0.53 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	ND	3.54	0.42 J	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P584***															
May-2016	*ND*	*ND*	*ND*	*0.1 J*	*0.4 J*	*ND*	*ND*	4.5	*ND*	*ND*	*ND*	*ND*	3.9	*0.5 J*	*ND*	*0.2 J*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*0.1 J*	*0.3 J*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	2.8	*0.4 J*	*ND*	*0.1 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	*ND*	3	*0.2 J*	*ND*	*0.1 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	2.6	*0.4 J*	*ND*	*0.1 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	2.7	*ND*	*ND*	*ND*	*ND*	2.6	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3 M1	*ND*	*ND*	*ND*	*ND*	*0.99 JM1*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.5	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.2	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.6	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.34	*ND*	*ND*	*ND*	*ND*	1.23	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P584***
Apr-1995	*ND*
Oct-1996	0.0013
Apr-1997	0.0017
Apr-2004	*ND*
Oct-2004	*ND*
Mar-2009	*ND*
Oct-2009	*ND*
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000119 J*
Mar-2013	0.000103
Oct-2013	*0.000073 J*
Mar-2014	*ND*
Oct-2014	*0.000041 J*
Apr-2015	*ND*
Nov-2015	*0.000043 J*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*ND*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	0.00028
Oct-2021	*0.00005 J*

MCLs and Results are in mg/L unless indicated otherwise

HISTORICAL TABLES –
Surface Water Monitoring Locations

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-1***											
Nov-1993	17	17	0.2	30.9	21.7	8.3	ND	NA	192	15.8	146	58
Apr-1994	42	42	0.1	ND	25.3	3.6	ND	5.9	233	28.8	135	71.77
Apr-1995	12.4	12.4	ND	ND	18	3.1	ND	6	157	17.2	95	36.2
Apr-1997	ND	84	ND	ND	32	0.63	ND	NA	NA	37	229	120
Oct-1997	10	10	0.64	ND	8.4	0.255	ND	6.76	146	ND	80	33
Apr-1998	ND	ND	0.2	ND	2	ND	ND	6.4	242	4.71	22	1.8
Apr-1999	21	21	0.16	ND	125	0.901	ND	5.92	573	27.6	340	111
Oct-1999	30	30	0.1	32	13.6	2.34	ND	5.92	150.3	23.6	99	49
Oct-2000	13	NA	ND	10	67.6	2.21	ND	6.32	302	27.2	184	50.5
Apr-2001	7.5	NA	ND	ND	90.3	1.9	ND	NA	NA	15.3	206	60
Sep-2001	6	6	0.35	ND	63.4	3.51	ND	5.8	176	21.9	156	44.2
Mar-2002	8.5	8.5	ND	26	32.7	ND	ND	5.8	302	21.1	254	46.4
Sep-2002	15	15	ND	ND	55	2.09	ND	5.9	355	14.1	165	46.1
Mar-2003	18	18	ND	ND	93.9	2.02	ND	5.8	469	19.6	244	73.6
Oct-2003	22	22	ND	16	168	1.7	ND	6	691	20.8	378	101
Apr-2004	26	26	ND	ND	130	1.28	ND	6.6	619	18.9	350	73.4
Oct-2004	45	45	ND	19	37.6	1.03	ND	6.8	256	15.5	147	69.8
Apr-2005	23	23	ND	10	102	1.85	ND	6.2	399	15.6	274	65.8
Mar-2006	11	11	ND	ND	109	1.94	ND	5.7	421	17.4	224	51.9
Mar-2007	21	21	ND	ND	133	2.11	ND	6.2	606	18.3	298	59.4
Mar-2008	11	11	ND	12	126	2.23	ND	6	586	16.6	280	55.3
Mar-2009	12	12	ND	ND	118	1.16	ND	5.7	489	13.6	257	42.5
Apr-2010	27	27	ND	ND	115	1.5	ND	7.6	523	27.8	279	64.3
Oct-2010	43	43	0.27	11	42.4	0.55	ND	7	271	16.9	151	51
Apr-2011	24	24	ND	17	167	1.73	ND	7.2	532	16.2	311	57.4
Sep-2011	27	27	0.22	ND	15.1	0.57	ND	7.2	89.8	3.49	75	33.5
Mar-2012	21	21	ND	16	95.9	1.48	ND	6.1	417	18.1	213	50.9
Sep-2012	12.8	12.8	ND	ND	90.3	1.79	ND	5.6	412	13.2	191	41
Mar-2013	14.8	14.8	ND	ND	82.2	1.81	ND	7.1	386	15.1	188	43.1
Oct-2013	14.5	14.5	ND	ND	99.2	1.52	ND	6.7	459	15.4	238	44.5
Mar-2014	25.7	25.7	ND	18	489	1.62	ND	6.1	1139	19	710	60.5
Oct-2014	37.4	37.4	ND	14	187	1.58	ND	6.3	514	16	307	61.9
Apr-2015	21.9	21.9	ND	13	157	1.59	ND	6.5	501	17.1	263	61.3
Nov-2015	23.8	23.8	ND	ND	158	1.36	ND	6.5	482	15.4	285	63.3
May-2016	25.3	25.3	ND	19	109	1.32	ND	6.9	558	14.8	250	51.9
Oct-2016	13.2	13.2	ND	8 J	108	NA	NA	6.9	540	14.1	242	42.4
May-2017	11.7	11.7	ND	9 J	136	1.78	ND	6.8	650	13.3	286	50.4

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-1***											
Oct-2017	14.9	14.9	*ND*	*6 J*	106	2.12	*ND*	6.5	521	13.2	223	42
May-2018	20	20	*ND*	*20.8 J*	109	0.33	*ND*	6.9	474	15.2	187	53.5
Nov-2018	30	30	*ND*	*7.9 J*	120	1.3	*ND*	6.37	610	17.9	270	63.7
May-2019	60	*NA*	*ND*	28.4	35.8	0.2	*ND*	7.2	393	10.3	157	73.3
Oct-2019	16	*NA*	*ND*	*19.3 J*	143	1.3	*ND*	6.92	631	21.8	296	60.5
May-2020	12	12	*ND*	31.4	63.6	1.9	*ND*	6.8	406	11.6	185	48.3
Oct-2020	26	*NA*	*ND*	*ND*	61.7	1.9	*ND*	6.21	375	14.7	146	43.6
Apr-2021	40	*NA*	*ND*	*6.1 J*	69.3	1.6	*ND*	6.61	321	16.4	152	59.8
Oct-2021	*8 J5c*	*NA*	*ND*	*12.6 J*	74.7	2	*ND*	7.02	436	12	177	46.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-1***													
Nov-1993	NA	ND	ND	NA	0.002	14	NA	ND	NA	ND	1.2	NA	**0.034**	5.6	NA
Apr-1994	NA	ND	ND	NA	ND	20	NA	ND	NA	ND	0.42	NA	**0.034**	5.3	NA
Apr-1995	ND	ND	0.5	ND	ND	9.4	NA	ND	ND	ND	0.31	NA	ND	3.1	NA
Oct-1996	ND	ND	0.1	ND	ND	66	58	ND	ND	ND	6.5	1.1	ND	12	11
Apr-1997	ND	ND	0.038	ND	ND	36	35	ND	ND	ND	0.74	0.52	ND	8.8	8.4
Oct-1997	ND	ND	0.041	ND	ND	8.89	NA	ND	ND	ND	0.292	NA	ND	2.77	NA
Apr-1998	ND	ND	0.044	ND	ND	23.7	NA	ND	ND	ND	1.04	NA	ND	6.21	NA
Apr-1999	ND	ND	0.086	ND	ND	31.3	NA	ND	ND	ND	0.345	NA	ND	7.97	NA
Oct-1999	ND	ND	0.067	ND	ND	11.9	NA	ND	ND	ND	0.337	NA	ND	3.67	NA
Oct-2000	ND	ND	0.043	ND	ND	14.2	NA	ND	ND	ND	0.366	NA	ND	3.65	NA
Apr-2001	ND	ND	0.084	ND	ND	16.1	NA	ND	ND	ND	0.546	NA	ND	4.78	NA
Sep-2001	ND	ND	0.056	ND	ND	10.1	NA	ND	ND	ND	1.82	NA	0.003	4.59	NA
Mar-2002	ND	ND	0.044	ND	ND	12.8	NA	ND	ND	ND	0.573	NA	ND	3.51	NA
Sep-2002	ND	ND	0.052	ND	ND	13.2	NA	ND	ND	ND	0.171	NA	ND	3.19	NA
Mar-2003	ND	ND	0.094	ND	ND	19.9	NA	ND	ND	ND	0.258	NA	ND	5.8	NA
Oct-2003	ND	ND	0.126	ND	ND	28.1	NA	ND	ND	ND	0.594	NA	ND	7.54	NA
Apr-2004	ND	ND	0.072	ND	ND	21	NA	ND	ND	ND	0.701	NA	ND	5.11	NA
Oct-2004	ND	ND	0.032	ND	ND	20.1	NA	ND	ND	ND	1.23	NA	0.003	4.73	NA
Apr-2005	ND	0.004	0.058	ND	ND	18.6	NA	ND	ND	ND	1.12	NA	ND	4.69	NA
Mar-2006	ND	ND	0.056	ND	ND	14.4	NA	ND	ND	ND	0.471	NA	ND	3.84	NA
Mar-2007	ND	ND	0.055	ND	ND	17.7	NA	ND	ND	ND	0.116	NA	ND	3.68	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-1***													
Mar-2008	ND	0.002	0.071	ND	ND	15.4	NA	ND	ND	ND	0.208	NA	ND	4.07	NA
Mar-2009	ND	ND	0.055	ND	ND	11.7	NA	ND	ND	ND	0.496	NA	ND	3.22	NA
Apr-2010	ND	ND	0.049	ND	ND	18.7	NA	ND	ND	ND	ND	NA	ND	4.27	NA
Oct-2010	ND	ND	0.02	ND	ND	15	NA	ND	ND	ND	0.339	NA	ND	3.5	NA
Apr-2011	ND	ND	0.054	ND	ND	16.8	NA	ND	ND	ND	0.657	NA	ND	3.77	NA
Sep-2011	ND	ND	0.014	ND	ND	10.4	NA	ND	ND	ND	0.519	NA	ND	1.82	NA
Mar-2012	ND	ND	0.044	ND	ND	14.2	NA	ND	ND	ND	ND	NA	ND	3.74	NA
Sep-2012	ND	ND	0.0428	0.000066 J	ND	11.3	NA	ND	0.000981 J	ND	0.0847	NA	ND	3.1	NA
Mar-2013	ND	ND	0.0436	ND	ND	11.8	NA	0.0022 J	0.0011 J	0.00083 J	0.0408 J	NA	0.0012 J	3.31	NA
Oct-2013	0.000594 J	ND	0.0516	ND	ND	13.1	NA	0.0065 J	0.0012 J	0.00074 J	0.142	NA	0.000333 J	2.86	NA
Mar-2014	0.000455 J	0.000116 J	0.0655	ND	ND	18.1	NA	0.0009 J	0.001 J	0.0012 J	0.185	NA	0.000482 J	3.73	NA
Oct-2014	0.000432 J	0.000397 J	0.0661	ND	ND	17.5	NA	0.000625 J	0.0008 J	0.000969 J	0.169	NA	ND	4.41	NA
Apr-2015	0.000634 J	0.000521 J	0.0611	ND	ND	17.3	NA	0.0013 J	0.0017 J	0.0013 J	0.496	NA	0.0012 J	4.4	NA
Nov-2015	0.000471 J	0.000477 J	0.0549	ND	ND	18.7	NA	0.0012 J	0.0013 J	0.000996 J	0.682	NA	0.000705 J	4.02	NA
May-2016	ND	0.00074 J	0.0542	ND	ND	14.5	NA	0.00081 J	0.00063 J	0.0014 J	0.19 J	NA	0.00055 J	3.81	NA
Oct-2016	ND	ND	0.0552	ND	ND	11.5	NA	0.00074 J	0.0021	0.00078 J	0.34	NA	0.001 J	3.31	NA
May-2017	ND	ND	0.0641	ND	ND	13.8	NA	0.0018 J	0.002	0.0012 J,B	0.248	NA	0.00094 J	3.88	NA
Oct-2017	ND	ND	0.0482	ND	ND	11.8	NA	ND	0.00081 J	ND	ND	NA	ND	3.02	NA
May-2018	0.0001 J	ND	0.057	0.000038 J	0.000065 J	15.1	NA	0.0052 J	0.001	0.003 B	0.42	NA	0.00071 J	3.8	NA
Nov-2018	0.00033 J	0.000072 J	0.04	0.000047 J	0.000054 J	18.3	NA	0.0035 J	0.0016	0.0033	0.91	NA	0.0013	4.4	NA
May-2019	ND	ND	0.021	ND	ND	24.6	NA	ND	0.00069	0.0024	2.5	NA	0.0018	2.9	NA
Oct-2019	0.00016 J	0.00018 J	0.056	0.000096 J	0.00032 J	16.9	NA	0.004 J	0.0016	0.0039	0.92	NA	0.0018	4.4	NA
May-2020	0.00036 J	0.00034 J	0.044	0.00011 J	0.00012 J	13.4	NA	0.0079	0.0022	**0.0026 D6**	0.84	NA	0.0021	3.6	NA
Oct-2020	ND	ND	0.037	ND	ND	12.4	NA	0.0095 J	0.00053 J	ND	0.037 J	NA	ND	3.1	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-1***													
Apr-2021	*ND*	*ND*	0.038	*ND*	*ND*	17.7	*NA*	*0.00043 J*	*ND*	*ND*	0.2	*NA*	*ND*	3.8	*NA*
Oct-2021	*0.000076 J*	*ND*	0.042	*ND*	*ND*	13.1	*NA*	*ND*	*0.00037 J*	*0.00042 J*	0.076	*NA*	*0.00012 J*	3.2	*NA*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*SW-1*												
Nov-1993	0.2	NA	ND	NA	4.1	NA	ND	NA	16.9	NA	NA	NA	0.02
Apr-1994	0.064	NA	ND	NA	2.7	NA	ND	NA	11	NA	NA	NA	0.022
Apr-1995	0.05	NA	ND	ND	1.7	NA	ND	ND	7.1	NA	ND	ND	0.04
Oct-1996	0.57	0.076	NA	ND	ND	ND	ND	ND	7.7	8.7	ND	ND	0.43
Apr-1997	0.14	0.13	ND	ND	4.2	4	ND	ND	19	18	ND	ND	0.047
Oct-1997	0.049	NA	NA	ND	1.98	NA	ND	ND	13.6	NA	ND	ND	ND
Apr-1998	0.041	NA	ND	3.09	ND	NA	ND	17.5	ND	NA	ND	0.025	NA
Apr-1999	0.07	NA	NA	ND	3.91	NA	ND	ND	67.9	NA	ND	ND	0.01
Oct-1999	0.076	NA	NA	ND	2.93	NA	ND	ND	44.8	NA	ND	ND	ND
Oct-2000	0.036	NA	NA	ND	3.15	NA	ND	ND	40.6	NA	ND	ND	ND
Apr-2001	0.1	NA	NA	ND	2.48	NA	ND	ND	46.3	NA	ND	ND	ND
Sep-2001	0.052	NA	NA	0.023	3.79	NA	ND	ND	37.4	NA	ND	ND	0.015
Mar-2002	0.025	NA	NA	ND	2.64	NA	ND	ND	66.9	NA	ND	ND	0.012
Sep-2002	0.059	NA	NA	ND	2.4	NA	ND	ND	35.1	NA	ND	ND	0.012
Mar-2003	0.116	NA	NA	ND	2.77	NA	ND	ND	62.9	NA	ND	ND	ND
Oct-2003	0.182	NA	NA	ND	2.28	NA	ND	ND	91.7	NA	ND	ND	0.021
Apr-2004	0.116	NA	ND	ND	2.42	NA	ND	ND	103	NA	ND	ND	0.035
Oct-2004	0.042	NA	ND	ND	3.49	NA	ND	ND	28.5	NA	ND	ND	0.048
Apr-2005	0.063	NA	ND	ND	3.17	NA	ND	ND	66.4	NA	ND	ND	0.011
Mar-2006	0.026	NA	ND	ND	2.28	NA	ND	ND	52.1	NA	ND	ND	0.048
Mar-2007	0.039	NA	ND	ND	2.78	NA	ND	ND	73	NA	ND	ND	ND
Mar-2008	0.051	NA	ND	ND	2.96	NA	ND	ND	79.3	NA	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-1***												
Mar-2009	0.06	NA	0.0002	ND	2.26	NA	ND	ND	63	NA	ND	ND	0.01
Apr-2010	0.038	NA	ND	ND	2.52	NA	ND	ND	62	NA	ND	ND	ND
Oct-2010	0.014	NA	ND	ND	2.74	NA	ND	ND	29.2	NA	ND	ND	ND
Apr-2011	0.049	NA	ND	ND	2.46	NA	ND	ND	76.7	NA	ND	ND	ND
Sep-2011	0.015	NA	ND	ND	1.16	NA	ND	ND	10.1	NA	ND	ND	ND
Mar-2012	0.038	NA	ND	ND	2.41	NA	ND	ND	55.8	NA	ND	ND	ND
Sep-2012	0.0339	NA	ND	0.0014 J	2.43	NA	0.000504 J	ND	51.5	NA	ND	ND	0.0053 J
Mar-2013	0.0335	NA	0.000055 J	0.0015 J	2.4	NA	0.000445 J	0.00002 J	41.3	NA	ND	ND	0.0172
Oct-2013	0.0329	NA	ND	0.0017 J	2.19	NA	ND	0.000026 J	58.8	NA	0.000724 J	ND	0.0162
Mar-2014	0.0326	NA	ND	0.0016 J	2.34	NA	0.0011 J	ND	216	NA	ND	0.000342 J	0.0106
Oct-2014	0.0244	NA	0.00004 J	0.0033 J	2.62	NA	0.0014 J	ND	82.5	NA	ND	ND	0.0073 J
Apr-2015	0.0572	NA	ND	0.0034 J	2.76	NA	0.0013 J	ND	76.8	NA	ND	0.0011 J	0.0153
Nov-2015	0.0414	NA	ND	0.0027 J	2.95	NA	0.0012 J	ND	74.5	NA	0.000195 J	0.00091 J	0.0067 J
May-2016	0.0216	NA	ND	0.0021 J	2.66	NA	0.0006 J	ND	64.3	NA	ND	0.00049 J	0.0123 J
Oct-2016	0.0512	NA	ND	0.0025 J	2.34	NA	0.0006 J	ND	66.7	NA	ND	0.00064 J	0.0079 J
May-2017	0.0382	NA	ND	0.0019 J,B	2.47	NA	0.00068 J	ND	76	NA	ND	0.00047 J	0.0144 JB
Oct-2017	0.0203	NA	ND	0.0013 JB	2.31	NA	0.00059 J	ND	59.6	NA	ND	ND	0.0062 J
May-2018	0.043	NA	ND	0.0034	2.2 J	NA	0.0013 JB	ND	73.2	NA	ND	ND	0.0092 B
Nov-2018	0.057	NA	ND	0.0035	1.9 J	NA	0.00075 J	ND	80.2	NA	0.000095 J	0.0041	0.01
May-2019	0.063	NA	ND	0.0035	ND	NA	ND	ND	24.1	NA	ND	0.0059	0.019
Oct-2019	0.05	NA	ND	0.0037	2.6 J	NA	0.0013 J	ND	96.3	NA	ND	ND	0.015
May-2020	0.056	NA	ND	0.0054	2.3 J	NA	0.001 J	ND	38.6	NA	ND	0.0012 D6	0.011 D6
Oct-2020	0.011	NA	ND	ND	2.3 J	NA	ND	ND	39.7	NA	ND	0.0027 J	ND
Apr-2021	0.013	NA	ND	ND	2.3	NA	ND	ND	43.4	NA	ND	ND	0.0066 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-1***												
Oct-2021	0.009	*NA*	*ND*	*0.0012 J*	2.2	*NA*	*ND*	*ND*	48.4	*NA*	*ND*	*0.00028 J*	*0.0035 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***SW-1***																
Nov-1993	NA	ND	ND	ND	ND	ND	NA	NA	NA	NA	ND	ND	NA	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	23	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.5	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-1*																
Jun-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.46 J*	*ND*	*ND*	*4.84 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.09 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.25 J,B*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***SW-1***																
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.4 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-1***															
Nov-1993	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA	NA	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-1***															
Jun-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-1***															
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-1***															
Nov-1993	ND	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-1***															
May-2005	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jun-2005	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	1.7	2.1 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-1***															
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-2***											
Nov-1993	28	28	ND	39.3	18.4	1.3	ND	5.8	306	80	200	104
Apr-1994	30	30	0.2	22.7	8.6	0.5	ND	6.15	164	26.1	107	61.88
Apr-1995	23.7	23.7	ND	ND	13.7	0.7	ND	6.5	140	23.7	70	47
Apr-1997	ND	24	ND	ND	11	0.21	ND	NA	NA	32	192	54
Apr-1997	ND	17	ND	ND	14	0.22	ND	NA	NA	27	164	21
Oct-1997	23	23	0.39	ND	25.8	2.54	ND	6.83	92.2	15.1	17	36
Apr-1998	13	13	0.33	11	6.7	0.2	ND	6.29	164.7	18.4	72	37
Apr-1999	31	31	0.29	14	20.4	0.503	ND	5.99	296	46.6	480	89
Oct-1999	4	4	0.2	ND	4.95	ND	ND	5.62	62.2	13.8	40	15
Oct-2000	30	NA	ND	16	18.1	ND	ND	6.69	130.4	10.5	90	50.3
Apr-2001	36	NA	ND	17	14.9	ND	ND	NA	NA	15.5	151	77.2
Sep-2001	45	45	0.25	22	16.2	ND	ND	7.2	202	22.2	121	70.5
Mar-2002	46	46	ND	28	13.7	ND	ND	7.1	388	116	256	104
Sep-2002	80	80	ND	21	10.3	ND	ND	7.4	327	49.2	206	140
Mar-2003	45	45	ND	25	19	0.254	ND	7.1	212	23.6	133	71.6
Oct-2003	39	39	ND	23	29.4	0.358	ND	6.7	233	10.3	174	59.6
Apr-2004	110	110	ND	46	30	1.63	ND	7.7	372	31	248	143
Oct-2004	35	35	ND	26	23.1	0.53	ND	6.95	160.2	15.7	121	60.4
Apr-2005	42	42	ND	21	13.9	0.36	ND	6.5	131.7	14.2	185	61.9
Mar-2006	30	30	ND	ND	31.7	0.42	ND	6.9	192.3	24.6	146	58.6
Mar-2007	49	49	ND	19	54.6	0.44	ND	6.9	401	20.1	165	72.8
Mar-2008	43	43	ND	26	60.8	0.29	ND	7.1	392	25.3	199	74.3
Mar-2009	28	28	ND	ND	45.5	0.26	ND	6	320	19.3	160	51
Apr-2010	32	32	ND	23	42.9	0.39	ND	7	188.5	16.9	132	50.6
Oct-2010	59	59	ND	26	45.7	0.15	ND	7.6	309	26.2	214	96.1
Apr-2011	37	37	ND	20	53.7	0.47	ND	6.8	210	19.8	160	59.4
Sep-2011	89	89	ND	43	26	0.44	0.03	7.2	279	21.3	208	109
Mar-2012	23	23	ND	ND	56.6	0.43	0.02	6.1	202	12.9	140	45.7
Sep-2012	32.8	32.8	ND	81.1	24.5	0.212	ND	5.7	146.9	11.4	116	50.3
Mar-2013	31.9	31.9	ND	19.5	43.9	0.229	ND	6.9	310	19.7	162	52.6
Oct-2013	48.6	48.6	ND	42.8	11.4	0.293	ND	7.2	174.5	29.7	161	74.3
Mar-2014	33.2	33.2	ND	37	73.9	0.246	ND	6.5	354	22.7	204	62.1
Oct-2014	44	44	ND	23	45.2	0.0948	ND	6.9	177.5	11.7	131	49.9
Apr-2015	108	108	0.195 J	53	81.9	0.987	ND	6.4	528	25.1	338	137
Nov-2015	60	60	ND	33	37.5	0.362	ND	7.4	310	27.7	250	95.2
May-2016	53.8	53.8	ND	21	56.4	0.104	ND	6.2	354	12.8	194	77.4
Oct-2016	112	112	ND	97	32.6	NA	NA	7.1	565	55	356	154

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-2***											
May-2017	51.8	51.8	*ND*	20	37.4	0.504	*ND*	6.9	368	15	151	74
Oct-2017	63.2	63.2	*ND*	30	4.97	*ND*	*ND*	6.9	238	9.23	102	71.5
May-2018	60	60	0.16	42.3	33.2	*ND*	0.021	6	234	13.7	68	81.7
Nov-2018	88	88	*0.052 J*	*20.8 J*	24.2	0.21	*0.0069 J*	7.99	328	17.1	147	104
May-2019	78	*NA*	*ND*	*ND*	53.6	0.38	0.013	7.49	374	15.8	206	93.8
Oct-2019	122	*NA*	*ND*	*12.6 J*	8.9	0.29	*ND*	7.24	872	*5.1 J*	122	134
May-2020	68	68	*ND*	55.9	46.9	0.46	*0.0057 J*	7.25	530	10.9	199	84.5
Oct-2020	92	*NA*	*ND*	29.6	15.1	0.21	*ND*	6.93	327	16.1	146	121
Apr-2021	80	*NA*	*ND*	*14.8 J*	41	0.44	*ND*	8.19	304	16.6	150	97.8
Oct-2021	20	*NA*	*ND*	*17 J*	27.8	0.61	*ND*	6.55	365	10.5	164	113

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-2***													
Nov-1993	NA	ND	ND	NA	ND	32.3	NA	ND	NA	ND	0.2	NA	ND	5.8	NA
Apr-1994	NA	ND	0.008	NA	ND	20	NA	ND	NA	ND	0.37	NA	ND	2.9	NA
Apr-1995	ND	ND	ND	ND	ND	14.7	NA	ND	ND	ND	0.6	NA	0.006	2.5	NA
Oct-1996	ND	ND	0.028	ND	ND	15	14	ND	ND	ND	1.1	1.1	ND	3.1	2.8
Apr-1997	ND	ND	0.029	ND	ND	15	16	ND	ND	ND	0.71	0.7	ND	3.2	3.5
Apr-1997	ND	ND	0.035	ND	ND	11	12	ND	ND	ND	0.79	0.56	ND	3	3.1
Oct-1997	ND	ND	0.031	ND	ND	9.35	NA	ND	ND	ND	1.46	NA	ND	2.19	NA
Apr-1998	ND	ND	0.03	ND	ND	10.4	NA	ND	ND	ND	1.01	NA	ND	2.63	NA
Apr-1999	ND	ND	0.066	ND	ND	25.4	NA	0.03	0.013	0.015	12.5	NA	ND	6.09	NA
Oct-1999	ND	ND	0.045	ND	ND	22.5	NA	ND	ND	ND	1.03	NA	ND	5.03	NA
Oct-2000	ND	ND	0.036	ND	ND	14.4	NA	ND	ND	ND	0.311	NA	ND	3.48	NA
Apr-2001	ND	ND	0.03	ND	ND	22.7	NA	ND	ND	ND	0.326	NA	ND	4.98	NA
Sep-2001	ND	ND	0.031	ND	ND	21.1	NA	ND	ND	ND	0.502	NA	ND	4.35	NA
Mar-2002	ND	ND	0.039	ND	ND	31	NA	ND	ND	ND	0.68	NA	ND	6.53	NA
Sep-2002	ND	ND	0.025	ND	ND	43.8	NA	ND	ND	ND	0.286	NA	ND	7.55	NA
Mar-2003	ND	ND	0.026	ND	ND	21.9	NA	ND	ND	0.01	0.257	NA	ND	4.11	NA
Oct-2003	ND	ND	0.04	ND	ND	17.2	NA	ND	ND	ND	0.8	NA	ND	4.06	NA
Apr-2004	ND	0.002	0.034	ND	ND	44.5	NA	ND	ND	0.012	0.378	NA	0.003	7.88	NA
Oct-2004	ND	ND	0.041	ND	ND	17.5	NA	ND	ND	ND	0.271	NA	ND	4.06	NA
Apr-2005	ND	0.003	0.03	ND	ND	18.9	NA	ND	ND	ND	1.69	NA	0.003	3.57	NA
Mar-2006	ND	ND	0.038	ND	ND	16.2	NA	ND	ND	ND	0.071	NA	ND	4.41	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-2***													
Mar-2007	ND	ND	0.029	ND	ND	23.7	NA	ND	ND	ND	0.478	NA	ND	4.1	NA
Mar-2008	ND	0.003	0.032	ND	ND	22	NA	ND	ND	ND	0.399	NA	ND	4.7	NA
Mar-2009	ND	ND	0.028	ND	ND	14.5	NA	ND	ND	ND	0.391	NA	ND	3.59	NA
Apr-2010	ND	ND	0.039	ND	ND	14.8	NA	ND	ND	ND	0.329	NA	ND	3.31	NA
Oct-2010	ND	ND	0.038	ND	ND	29	NA	ND	ND	ND	0.311	NA	ND	6.09	NA
Apr-2011	ND	ND	0.041	ND	ND	17.5	NA	ND	ND	ND	0.436	NA	ND	3.82	NA
Sep-2011	ND	0.003	0.035	ND	ND	33.8	NA	ND	ND	ND	1.18	NA	ND	5.94	NA
Mar-2012	ND	ND	0.046	ND	ND	12.5	NA	ND	ND	ND	0.727	NA	ND	3.51	NA
Sep-2012	ND	0.0013 J	0.0369	0.00007 J	ND	14.3	NA	ND	0.0016 J	0.0013 J	1.13	NA	ND	3.55	NA
Mar-2013	ND	ND	0.0303	ND	ND	15.1	NA	0.0027 J	0.0017 J	0.0018 J	0.671	NA	0.0014 J	3.62	NA
Oct-2013	0.000546 J	ND	0.033	ND	0.000306 J	23.5	NA	0.0066 J	0.0013 J	0.0045 J	1.03	NA	0.004	3.79	NA
Mar-2014	0.000427 J	0.000355 J	0.0333	ND	ND	18.2	NA	0.0014 J	0.0017 J	0.002 J	0.43	NA	ND	4.04	NA
Oct-2014	0.00048 J	0.000872 J	0.0412	ND	ND	13.6	NA	0.001 J	0.000988 J	0.000866 J	0.549	NA	ND	3.88	NA
Apr-2015	0.000938 J	0.0022	0.039	ND	0.000074 J	42.4	NA	0.002 J	0.0015 J	0.0053 J	0.66	NA	0.0012 J	7.44	NA
Nov-2015	0.000754 J	0.0036	0.0675	0.000225 J	0.000081 J	30.1	NA	0.0201	0.0017 J	0.0051 J	6.97	NA	0.0079	4.86	NA
May-2016	ND	0.0011 J	0.0403	ND	ND	22.7	NA	0.0015 J	0.0014	0.00071 J	1.93	NA	0.00028 J	5.06	NA
Oct-2016	0.00066 J	0.0036 J	0.0535	ND	ND	41.8	NA	0.0021 J	0.0009 J	0.0042	1.14	NA	0.00083 J	12.1	NA
May-2017	ND	0.0013 J	0.0195	ND	ND	22.5	NA	0.0017 J	0.00081 J	0.0016 J	1.44	NA	0.00055 J	4.3	NA
Oct-2017	ND	0.0017 J	0.0128	ND	ND	21.6	NA	0.0012 J	0.00043 J	0.0012 J	0.619	NA	0.00046 J	4.28	NA
May-2018	0.0003 J	0.00094 JB	0.02	ND	0.000022 J	24.4	NA	0.0042 J	0.0012	0.0038 B	1.3	NA	0.00042 J	5.1	NA
Nov-2018	0.00015 J	0.00032 J	0.026	0.00003 J	ND	32	NA	0.0025 J	0.00058	0.0027	0.93	NA	0.00032 J	5.8	NA
May-2019	ND	ND	0.035	ND	ND	28.2	NA	ND	0.0011	ND	1.2	NA	ND	5.7	NA
Oct-2019	0.00014 J	0.00036 J	0.033	ND	0.00019 J	38.1	NA	0.0018 J	0.0004 J	0.0062	0.84	NA	0.0002 J	9.4	NA
May-2020	0.00013 J	ND	0.033	ND	ND	24.8	NA	0.0043 J	0.00092	0.0017 J	0.9	NA	ND	5.5	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-2***													
Oct-2020	*0.00031 J*	*ND*	0.032	*ND*	*ND*	37.5	*NA*	*0.0092 J*	*0.00061 J*	*ND*	0.84	*NA*	*ND*	6.6	*NA*
Apr-2021	*ND*	*ND*	0.035	*ND*	*ND*	29.2	*NA*	*0.0011 J*	*0.00087 J*	*ND*	1.1	*NA*	*ND*	6	*NA*
Oct-2021	*0.00012 J*	*0.00067 J*	0.039	*ND*	*ND*	32.1	*NA*	*ND*	*0.00032 J*	*0.00031 J*	0.43	*NA*	*0.000066 J*	7.9	*NA*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-2***												
Nov-1993	0.1	NA	ND	NA	6.2	NA	ND	NA	6.7	NA	NA	NA	ND
Apr-1994	0.061	NA	ND	NA	3.3	NA	ND	NA	4.8	NA	NA	NA	0.014
Apr-1995	0.02	NA	ND	ND	3.6	NA	ND	ND	4.7	NA	ND	ND	0.03
Oct-1996	0.062	0.047	NA	ND	ND	ND	ND	ND	4.9	4.7	ND	ND	0.04
Apr-1997	0.062	0.065	ND	ND	3.1	3.6	ND	ND	5.7	6.3	ND	ND	0.037
Apr-1997	0.059	0.065	ND	ND	3.4	3.5	ND	ND	6.1	7.2	ND	ND	ND
Oct-1997	0.105	NA	NA	ND	2.16	NA	ND	ND	1.65	NA	ND	ND	0.017
Apr-1998	0.069	NA	ND	2.16	ND	NA	ND	3.59	ND	NA	ND	0.05	NA
Apr-1999	0.141	NA	NA	0.047	5.54	NA	ND	ND	11.7	NA	ND	0.046	0.11
Oct-1999	0.138	NA	NA	0.016	11.3	NA	ND	ND	8.72	NA	ND	ND	0.011
Oct-2000	0.057	NA	NA	ND	3.63	NA	ND	ND	8.6	NA	ND	ND	ND
Apr-2001	0.071	NA	NA	0.011	4.57	NA	ND	ND	17.6	NA	ND	ND	0.015
Sep-2001	0.059	NA	NA	ND	4.39	NA	ND	ND	11.1	NA	ND	ND	0.012
Mar-2002	0.054	NA	NA	ND	5.48	NA	ND	ND	37.7	NA	ND	ND	0.012
Sep-2002	0.023	NA	NA	0.022	6.52	NA	ND	ND	5.22	NA	ND	ND	0.032
Mar-2003	0.063	NA	NA	0.014	5.32	NA	ND	ND	14	NA	ND	ND	0.023
Oct-2003	0.052	NA	NA	ND	4.41	NA	ND	ND	17	NA	ND	ND	0.012
Apr-2004	0.029	NA	ND	ND	14	NA	ND	ND	25.6	NA	ND	ND	0.023
Oct-2004	0.028	NA	ND	ND	7.12	NA	ND	ND	14.8	NA	ND	ND	ND
Apr-2005	0.048	NA	ND	ND	3.92	NA	ND	ND	10.2	NA	ND	ND	0.039
Mar-2006	ND	NA	ND	ND	2.75	NA	ND	ND	17	NA	ND	ND	ND
Mar-2007	0.039	NA	ND	ND	3.53	NA	ND	ND	27.7	NA	ND	ND	0.014

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-2***												
Mar-2008	0.048	NA	ND	ND	3.57	NA	ND	ND	34.8	NA	ND	ND	ND
Mar-2009	0.052	NA	ND	ND	2.57	NA	ND	ND	21.4	NA	ND	ND	ND
Apr-2010	0.03	NA	ND	ND	3.25	NA	ND	ND	23.2	NA	ND	ND	0.011
Oct-2010	0.026	NA	ND	ND	6.05	NA	ND	ND	25.2	NA	ND	ND	ND
Apr-2011	0.044	NA	ND	ND	2.7	NA	ND	ND	26.1	NA	ND	ND	ND
Sep-2011	0.037	NA	ND	ND	9.74	NA	ND	ND	16.3	NA	ND	ND	ND
Mar-2012	0.043	NA	ND	ND	3.2	NA	ND	ND	29.9	NA	ND	ND	ND
Sep-2012	0.06	NA	ND	0.0027 J	5.93	NA	0.000415 J	ND	14.2	NA	ND	ND	0.0057 J
Mar-2013	0.0394	NA	0.000056 J	0.0039 J	3.39	NA	ND	ND	22.6	NA	ND	ND	0.0193
Oct-2013	0.0259	NA	ND	0.0071 J	8.3	NA	ND	0.000018 J	6.88	NA	ND	0.0079 J	0.0186
Mar-2014	0.0396	NA	ND	0.0036 J	3.26	NA	ND	ND	38.9	NA	ND	0.0021 J	0.0106
Oct-2014	0.0312	NA	0.000022 J	0.0019 J	4.19	NA	ND	ND	23.2	NA	ND	0.0011 J	0.0051 J
Apr-2015	0.0453	NA	ND	0.0067 J	12.1	NA	ND	ND	58.6	NA	ND	0.0043 J	0.0131
Nov-2015	0.0381	NA	ND	0.0051 J	6.95	NA	0.0013 J	ND	19.4	NA	0.000222 J	0.0234	0.0103
May-2016	0.058	NA	ND	0.0018 J	2.7	NA	ND	ND	30.6	NA	ND	0.0011	0.0129 J
Oct-2016	0.0327	NA	ND	0.0061	23.1	NA	ND	ND	19.4	NA	ND	0.0033	0.0059 J
May-2017	0.0309	NA	ND	0.0019 J,B	3.42	NA	ND	ND	21.6	NA	ND	0.0018	0.0072 JB
Oct-2017	0.0125	NA	ND	0.0012 JB	4.86	NA	ND	ND	3.68	NA	ND	0.0021	ND
May-2018	0.062	NA	ND	0.005	3.9 J	NA	0.0011 JB	ND	19.7	NA	ND	0.00034 J	0.007 B
Nov-2018	0.026	NA	ND	0.0039	4 J	NA	0.00019 J	ND	14.8	NA	ND	0.0048	0.0052
May-2019	0.067	NA	ND	0.0021	ND	NA	ND	ND	29.4	NA	ND	0.0045	0.0051
Oct-2019	0.026	NA	ND	0.00074	2.4 J	NA	ND	ND	5.9	NA	ND	0.0032	0.011
May-2020	0.042	NA	ND	0.0016	2.8 J	NA	ND	ND	25.5	NA	ND	0.0027	0.0029 J
Oct-2020	0.019	NA	ND	0.0029	4.8 J	NA	ND	ND	9.9	NA	ND	0.0051	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-2***												
Apr-2021	0.032	*NA*	*ND*	*0.0016 J*	4	*NA*	*ND*	*ND*	24.6	*NA*	*ND*	*0.0021 J*	*0.0043 J*
Oct-2021	0.017	*NA*	*ND*	*0.00075 J*	4.9	*NA*	*ND*	*ND*	17.8	*NA*	*ND*	*0.00056 J*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***SW-2***																
Nov-1993	NA	ND	ND	ND	ND	ND	NA	NA	NA	NA	ND	ND	NA	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5 J	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2002	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jan-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-2*																
Apr-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.93 J*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.72 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.67 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.47 J*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.36 J,B*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-2*																
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.7	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.5	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.3	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.2 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*SW-2*															
Nov-1993	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA	NA	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jan-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-2***															
Apr-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-2***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-2***															
Nov-1993	*ND*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jul-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jun-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Dec-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jan-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-2***															
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.1 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 R	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-2***															
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-3***											
Apr-1995	10.3	10.3	*ND*	*ND*	14.4	0.8	*ND*	6.2	157	18.5	66	19.2
Apr-1997	*ND*	15	*ND*	*ND*	22	0.35	*ND*	*NA*	*NA*	13	109	35
Oct-1997	12	12	0.44	17	4.53	*ND*	*ND*	6.7	121	15.4	41	28
Apr-1998	43	43	0.25	26	3.22	*ND*	*ND*	7.23	212	36.3	140	88
Apr-1999	20	20	0.14	*ND*	103	0.416	*ND*	6.18	369	13.6	260	51
Oct-2000	23	*NA*	*ND*	27	39.4	*ND*	*ND*	7.2	170.6	21	105	42.5
Apr-2001	15	*NA*	*ND*	12	18.9	0.395	*ND*	*NA*	*NA*	6.13	131	40
Sep-2001	28	28	0.26	33	35.3	1.38	*ND*	7.1	318	13.3	123	48
Mar-2002	88	88	*ND*	29	187	3.74	*ND*	7.1	444	61.7	353	210
Sep-2002	14	14	*ND*	*ND*	29.8	*ND*	*ND*	6.4	231	14.6	111	44.1
Mar-2003	13	13	*ND*	14	49.1	0.239	*ND*	5.8	209	14.1	118	34.7
Oct-2003	26	26	*ND*	21	47.4	0.398	*ND*	6.3	268	9	131	51.5
Apr-2004	15	15	*ND*	11	53.7	0.49	*ND*	7.1	252	11.3	130	40.1
Oct-2004	20	20	*ND*	18	45.4	0.61	*ND*	7	179.6	8.04	128	45
Apr-2005	13	13	*ND*	12	45.4	0.48	*ND*	6.5	176	11.5	150	39.1
Mar-2006	13	13	*ND*	*ND*	59.5	0.65	*ND*	6.7	209	12.1	148	38.2
Mar-2007	14	14	0.51	11	131	0.56	*ND*	5.9	544	13.3	220	45.9
Mar-2008	15	15	0.38	12	104	0.35	*ND*	6.5	445	12.6	210	40.2
Mar-2009	13	13	*ND*	*ND*	85.8	0.26	*ND*	6.1	387	9.7	206	39.7
Apr-2010	21	21	*ND*	17	62.4	0.44	*ND*	7.4	359	14.8	157	39.6
Oct-2010	116	116	*ND*	45	22.7	0.26	*ND*	7.4	375	56.3	294	174
Apr-2011	104	104	*ND*	38	6.96	*ND*	*ND*	8.1	301	46.7	244	65.5
Sep-2011	130	130	*ND*	57	18.4	0.51	0.05	7.3	311	27.5	277	139
Mar-2012	20	20	*ND*	*ND*	90.2	0.45	0.03	6.3	400	13.8	206	48.1
Sep-2012	131	131	*ND*	32.9	17.7	0.304	*ND*	6.4	440	27.6	258	167
Mar-2013	94.2	94.2	*ND*	93.1	1.78	*ND*	*ND*	8.4	323	45.1	196	126
Oct-2013	55.2	55.2	*0.113 J*	46.7	4.53	0.522	*ND*	7.4	151.7	23.1	172	77
Mar-2014	15	15	*ND*	25	162	0.415	*ND*	6.2	543	22.2	274	48.3
Oct-2014	30.8	30.8	*ND*	21	88.6	0.123	*ND*	6.9	356	14	201	59.3
Apr-2015	24.6	24.6	*ND*	12	107	0.332	*ND*	6.1	404	17	250	56.5
Nov-2015	46.3	46.3	*ND*	18	108	0.299	*ND*	7.4	510	15.6	275	98
May-2016	50.6	50.6	*ND*	15	100	0.323	*ND*	6.8	515	18.7	258	87.4
Oct-2016	81.3	81.3	*ND*	47	7.37	*NA*	*NA*	7.1	332	25.8	213	107
May-2017	43.8	43.8	*ND*	14	80.8	0.357	0.132	7	547	23.5	218	82.1
Oct-2017	30.2	30.2	*ND*	13	12.2	0.063	*ND*	6.5	167.7	14.1	74	41.8
May-2018	30	30	*0.045 J*	27.2	49.1	*ND*	*ND*	5.3	275	25.6	68	62.4
Nov-2018	114	114	*ND*	31.5	3	*0.063 J*	*ND*	8.58	313	19.8	63	124

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-3***											
May-2019	70	*NA*	*ND*	*ND*	71.3	*ND*	*ND*	7.06	433	18.4	228	93.1
Oct-2019	100	*NA*	*ND*	30.3	53.5	0.11	0.014	7.35	439	17.2	226	131
May-2020	98	98	*ND*	29.1	4.9	1.2	**0.017 D6D8**	7.61	354	17.4	181	120
Oct-2020	140	*NA*	*ND*	36.4	*1.8 J*	0.1	*ND*	7.96	380	20.6	146	138
Apr-2021	100	*NA*	*ND*	27.8	4.1	0.42	*0.0095 J*	9.55	232	12	119	111
Oct-2021	110	*NA*	*ND*	*ND*	77.1 ML	0.87	*ND*	7.07	562	*9.8 J*	241	107

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*SW-3*													
Apr-1995	ND	ND	ND	ND	ND	4.4	NA	ND	ND	ND	0.44	NA	ND	2	NA
Oct-1996	ND	ND	0.037	ND	ND	9.5	8.8	ND	ND	ND	0.7	0.42	ND	2.8	2.8
Apr-1997	ND	ND	0.049	ND	ND	9.1	7.9	ND	ND	ND	1.6	0.34	0.008	2.8	2.5
Oct-1997	ND	ND	0.04	ND	ND	7.1	NA	ND	ND	ND	0.784	NA	ND	2.63	NA
Apr-1998	ND	ND	0.017	ND	ND	27	NA	ND	0.041	ND	1.2	NA	ND	4.94	NA
Apr-1999	ND	ND	0.052	ND	ND	14.3	NA	ND	ND	ND	1.64	NA	ND	3.68	NA
Oct-1999	ND	ND	0.059	ND	ND	11.9	NA	ND	ND	ND	1.18	NA	ND	3.71	NA
Oct-2000	ND	ND	0.038	ND	ND	11.3	NA	ND	ND	ND	0.687	NA	ND	3.49	NA
Apr-2001	ND	ND	0.044	ND	ND	10.4	NA	ND	ND	ND	0.287	NA	ND	3.41	NA
Sep-2001	ND	ND	0.044	ND	ND	13.1	NA	ND	ND	ND	0.495	NA	ND	3.7	NA
Mar-2002	ND	ND	0.043	ND	ND	63.2	NA	ND	ND	ND	0.974	NA	ND	12.7	NA
Sep-2002	ND	ND	0.046	ND	ND	11.8	NA	ND	ND	ND	0.141	NA	ND	3.58	NA
Mar-2003	ND	ND	0.038	ND	ND	9.34	NA	ND	ND	ND	0.171	NA	ND	2.78	NA
Oct-2003	ND	ND	0.049	ND	ND	13.9	NA	ND	ND	ND	1.5	NA	ND	4.04	NA
Apr-2004	ND	ND	0.047	ND	ND	10.5	NA	ND	ND	ND	0.536	NA	ND	3.35	NA
Oct-2004	ND	ND	0.045	ND	ND	11.7	NA	ND	ND	ND	0.28	NA	ND	3.8	NA
Apr-2005	ND	0.003	0.043	ND	ND	10.2	NA	ND	ND	ND	0.411	NA	ND	3.3	NA
Mar-2006	ND	ND	0.051	ND	ND	9.61	NA	ND	ND	ND	0.145	NA	ND	3.46	NA
Mar-2007	ND	ND	0.056	ND	ND	13.2	NA	ND	ND	ND	0.139	NA	ND	3.62	NA
Mar-2008	ND	ND	0.046	ND	ND	10.5	NA	ND	ND	ND	0.161	NA	ND	3.39	NA
Mar-2009	ND	ND	0.045	ND	ND	10.3	NA	ND	ND	ND	0.124	NA	ND	3.4	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-3***													
Apr-2010	ND	ND	0.044	ND	ND	10.8	NA	ND	ND	ND	0.39	NA	ND	3.05	NA
Oct-2010	ND	ND	0.023	ND	ND	55.6	NA	ND	ND	ND	0.251	NA	ND	8.88	NA
Apr-2011	ND	ND	ND	ND	ND	43.2	NA	ND	ND	ND	0.695	NA	ND	6.06	NA
Sep-2011	ND	0.003	0.026	ND	ND	44	NA	ND	ND	ND	0.298	NA	ND	7.07	NA
Mar-2012	ND	ND	0.061	ND	ND	12.5	NA	ND	ND	ND	0.639	NA	ND	4.11	NA
Sep-2012	ND	ND	0.0583 J	ND	ND	53.8	NA	0.0111 J	0.011 J	0.009 J	2.96	NA	ND	8.01	NA
Mar-2013	ND	0.0012 J	0.293	0.000214 J	ND	40.5	NA	0.0029 J	0.0112	0.0044 J	0.811	NA	0.0022	5.97	NA
Oct-2013	0.000514 J	ND	0.0183	ND	ND	25.6	NA	0.0053 J	0.0024 J	0.0056 J	0.67	NA	0.000659 J	3.17	NA
Mar-2014	0.000334 J	ND	0.0506	ND	ND	12.4	NA	0.000922 J	0.0029 J	0.000955 J	0.116	NA	ND	4.23	NA
Oct-2014	0.000416 J	0.000399 J	0.0703	ND	ND	15.5	NA	0.000492 J	0.0042 J	0.000492 J	0.469	NA	ND	5.02	NA
Apr-2015	0.000671 J	0.0004 J	0.0576	ND	ND	15.2	NA	0.000947 J	0.0028 J	0.0014 J	0.557	NA	0.000675 J	4.48	NA
Nov-2015	0.000352 J	0.000599 J	0.0701	ND	ND	28.8	NA	0.000715 J	0.0065 J	0.000868 J	0.758	NA	0.000331 J	6.3	NA
May-2016	ND	0.0006 J	0.059	ND	ND	25	NA	ND	0.0006 J	0.0005 J	0.255	NA	0.00017 J	6.09	NA
Oct-2016	ND	0.0012 J	0.0232	ND	ND	35.3	NA	0.00086 J	0.0012	0.0052	0.395	NA	0.00022 J	4.56	NA
May-2017	ND	ND	0.0512	ND	ND	23.2	NA	0.0012 J,B	0.0061	ND	0.773	NA	0.00012 J	5.88	NA
Oct-2017	ND	ND	0.0392	ND	ND	11	NA	ND	0.0044	ND	1.14	NA	0.00027 J	3.46	NA
May-2018	0.00011 J	ND	0.045	ND	ND	16.8	NA	0.0029 J	0.0017	0.0018 JB	0.39	NA	0.000067 J	4.9	NA
Nov-2018	0.00036 J	ND	0.02	0.00011 J	0.000033 J	41.4	NA	0.0025 J	0.0011	0.0048	0.35	NA	0.00035 J	5	NA
May-2019	ND	ND	0.027	ND	ND	28.1	NA	ND	0.0018	0.0021	0.38	NA	ND	5.6	NA
Oct-2019	0.00018 J	0.00054 J	0.063	ND	0.00023 J	39.9	NA	0.0023 J	0.0021	0.0051	0.85	NA	0.00082 J	7.6	NA
May-2020	0.00017 J	0.00019 J	0.028	ND	ND	35.4	NA	0.0042 J	0.00057	0.0039	0.2	NA	ND	7.7	NA
Oct-2020	0.00026 J	ND	0.033	ND	ND	42.9	NA	0.0092 J	0.00046 J	ND	0.26	NA	ND	7.6	NA
Apr-2021	ND	ND	0.023	0.00018 J	ND	31.7	NA	0.00079 J	ND	0.0027 J	0.33	NA	ND	7.7	NA
Oct-2021	0.00009 J	ND	0.053	ND	ND	32.4	NA	ND	0.0013 J	ND	0.47	NA	0.00006 J	6.3	NA

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*SW-3*												
Apr-1995	0.1	NA	ND	ND	1.2	NA	ND	ND	4.6	NA	ND	ND	0.04
Oct-1996	0.045	0.027	NA	ND	ND	ND	ND	ND	7.8	8	ND	ND	0.23
Apr-1997	0.047	ND	ND	ND	2.3	2.3	ND	ND	11	11	ND	ND	0.028
Oct-1997	0.038	NA	NA	ND	1.85	NA	ND	ND	10.4	NA	ND	ND	ND
Apr-1998	0.295	NA	**0.102**	3.58	ND	NA	ND	2.21	ND	NA	ND	0.248	NA
Apr-1999	0.028	NA	NA	ND	4.72	NA	ND	ND	49.2	NA	ND	ND	0.014
Oct-1999	0.083	NA	NA	0.013	3.49	NA	ND	ND	15.2	NA	ND	ND	ND
Oct-2000	0.026	NA	NA	ND	2.76	NA	ND	ND	19.9	NA	ND	ND	ND
Apr-2001	0.022	NA	NA	ND	2.5	NA	ND	ND	24.9	NA	ND	ND	ND
Sep-2001	0.03	NA	NA	ND	2.7	NA	ND	ND	21.5	NA	ND	ND	ND
Mar-2002	0.128	NA	NA	0.028	10.8	NA	ND	ND	7.24	NA	ND	ND	0.045
Sep-2002	0.011	NA	NA	ND	3.09	NA	ND	ND	19.4	NA	ND	ND	ND
Mar-2003	ND	NA	NA	ND	2.84	NA	ND	ND	31.3	NA	ND	ND	0.013
Oct-2003	0.075	NA	NA	ND	2.35	NA	ND	ND	26.4	NA	ND	ND	0.014
Apr-2004	0.025	NA	ND	ND	2.26	NA	ND	ND	33.2	NA	ND	ND	0.016
Oct-2004	0.011	NA	ND	ND	3.49	NA	ND	ND	27.4	NA	ND	ND	ND
Apr-2005	0.028	NA	ND	ND	2.15	NA	ND	ND	28.9	NA	ND	ND	ND
Mar-2006	ND	NA	ND	ND	1.94	NA	ND	ND	29.4	NA	ND	ND	ND
Mar-2007	0.018	NA	ND	ND	2.15	NA	ND	ND	67.7	NA	ND	ND	ND
Mar-2008	0.012	NA	ND	ND	2.18	NA	ND	ND	54.1	NA	ND	ND	ND
Mar-2009	ND	NA	ND	ND	2.21	NA	ND	ND	46.4	NA	ND	ND	ND
Apr-2010	0.022	NA	ND	ND	2.32	NA	ND	ND	31	NA	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-3***												
Oct-2010	0.021	NA	ND	ND	13.1	NA	ND	ND	14	NA	ND	ND	ND
Apr-2011	0.125	NA	ND	0.026	3.67	NA	ND	ND	4.63	NA	ND	ND	0.023
Sep-2011	0.029	NA	ND	ND	13.4	NA	ND	ND	13.8	NA	ND	0.01	ND
Mar-2012	0.042	NA	ND	ND	3.44	NA	ND	ND	48.2	NA	ND	ND	ND
Sep-2012	0.237	NA	ND	0.0209 J	18.5	NA	ND	ND	13.2	NA	ND	ND	0.0519 J
Mar-2013	0.0573	NA	0.000088 J	0.0265	3.23	NA	ND	0.000031 J	2.2	NA	ND	0.0043 J	0.0718
Oct-2013	0.0343	NA	ND	0.0114	6.69	NA	ND	0.000019 J	2.15	NA	ND	0.00094 J	0.0261
Mar-2014	0.115	NA	ND	0.0015 J	2.81	NA	ND	ND	74.8	NA	ND	ND	0.0064 J
Oct-2014	0.219	NA	ND	0.0022 J	4.18	NA	0.000787 J	ND	44.4	NA	ND	ND	0.0051 J
Apr-2015	0.136	NA	ND	0.0022 J	3.19	NA	ND	ND	61.8	NA	ND	0.0011 J	0.0093 J
Nov-2015	0.333	NA	ND	0.0024 J	4.25	NA	0.000606 J	ND	61.7	NA	0.000161 J	0.000718 J	0.0035 J
May-2016	0.0913	NA	ND	0.0015 J	3.04	NA	ND	ND	55.5	NA	ND	0.00025 J	0.0152 J
Oct-2016	0.0153	NA	ND	0.0162	9.17	NA	ND	ND	4.53	NA	ND	0.002	0.0073 J
May-2017	0.532	NA	ND	0.0011 J,B	2.76	NA	ND	ND	42.5	NA	ND	ND	ND
Oct-2017	0.45	NA	ND	ND	2.67	NA	ND	ND	8.68	NA	ND	0.00042 J	ND
May-2018	0.35	NA	ND	0.0019	2.1 J	NA	0.00066 JB	ND	27.6	NA	ND	0.0048	0.0035 JB
Nov-2018	0.015	NA	ND	0.014	2.9 J	NA	0.00014 J	ND	1.6 J	NA	ND	0.0047	0.013
May-2019	0.08	NA	ND	0.0044	ND	NA	ND	ND	40.1	NA	ND	0.0068	0.0067
Oct-2019	0.37	NA	ND	0.003	5.8	NA	0.00055 J	ND	31.4	NA	ND	0.0046	0.013
May-2020	0.015	NA	ND	0.0022	5.5	NA	ND	ND	5.1	NA	ND	0.0014	0.003 J
Oct-2020	0.01	NA	ND	0.0043	5.5	NA	ND	ND	2.6 J	NA	ND	0.0056	ND
Apr-2021	0.0095	NA	ND	0.0018 J	4.4	NA	ND	ND	4.2	NA	ND	0.0021 J	0.0033 J
Oct-2021	0.4	NA	ND	ND	4	NA	ND	ND	45.8	NA	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-3*																
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7 J	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-3*																
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.15 J*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.65 J*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.47 J*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.14 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.25 J,B*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.3 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.4	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.6 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.1 JBIH*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-3*																
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	10	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*SW-3*															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-3***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-3***															
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-3***															
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jul-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jun-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Dec-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

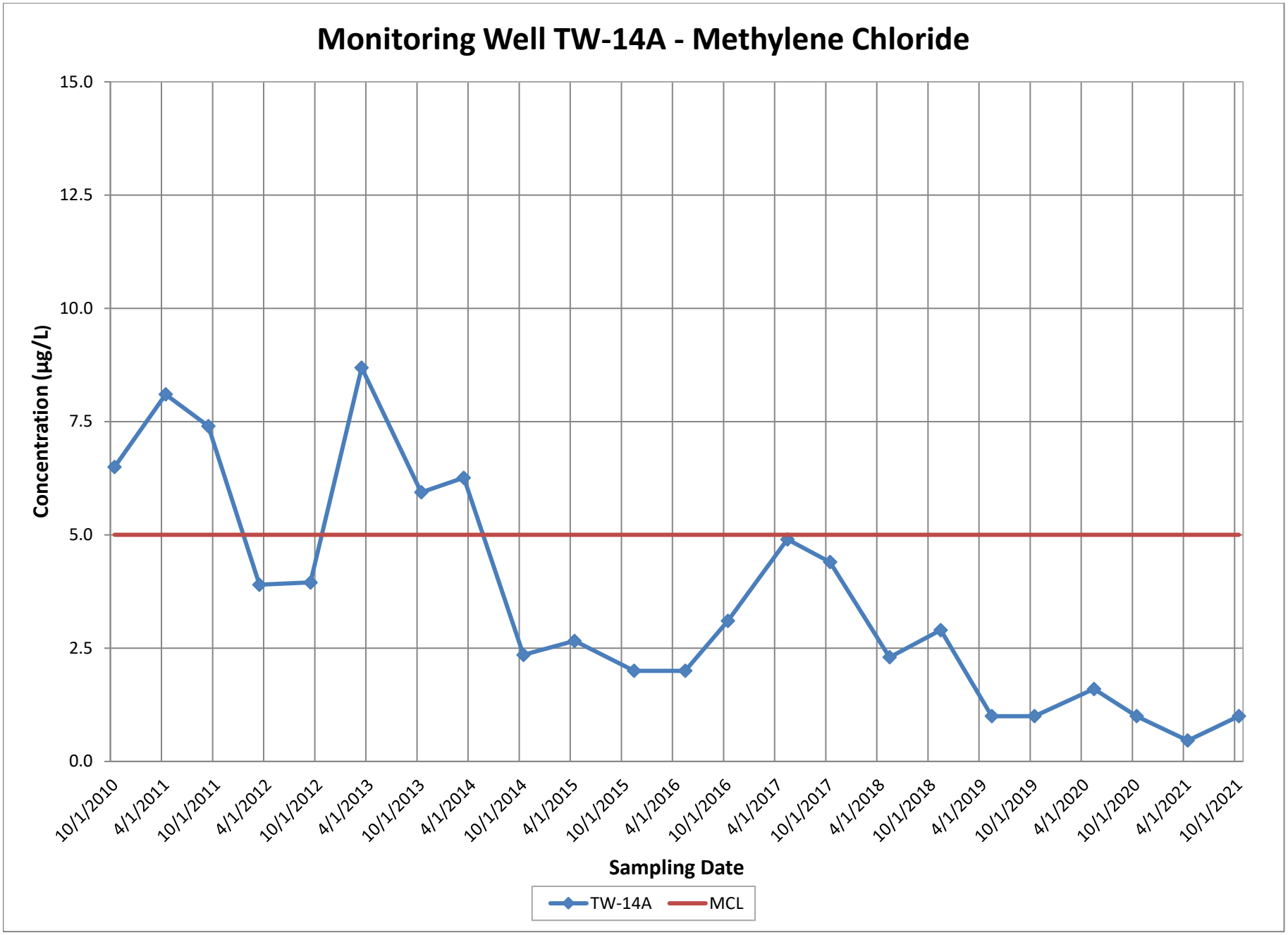
Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-3***															
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.5 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 R	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

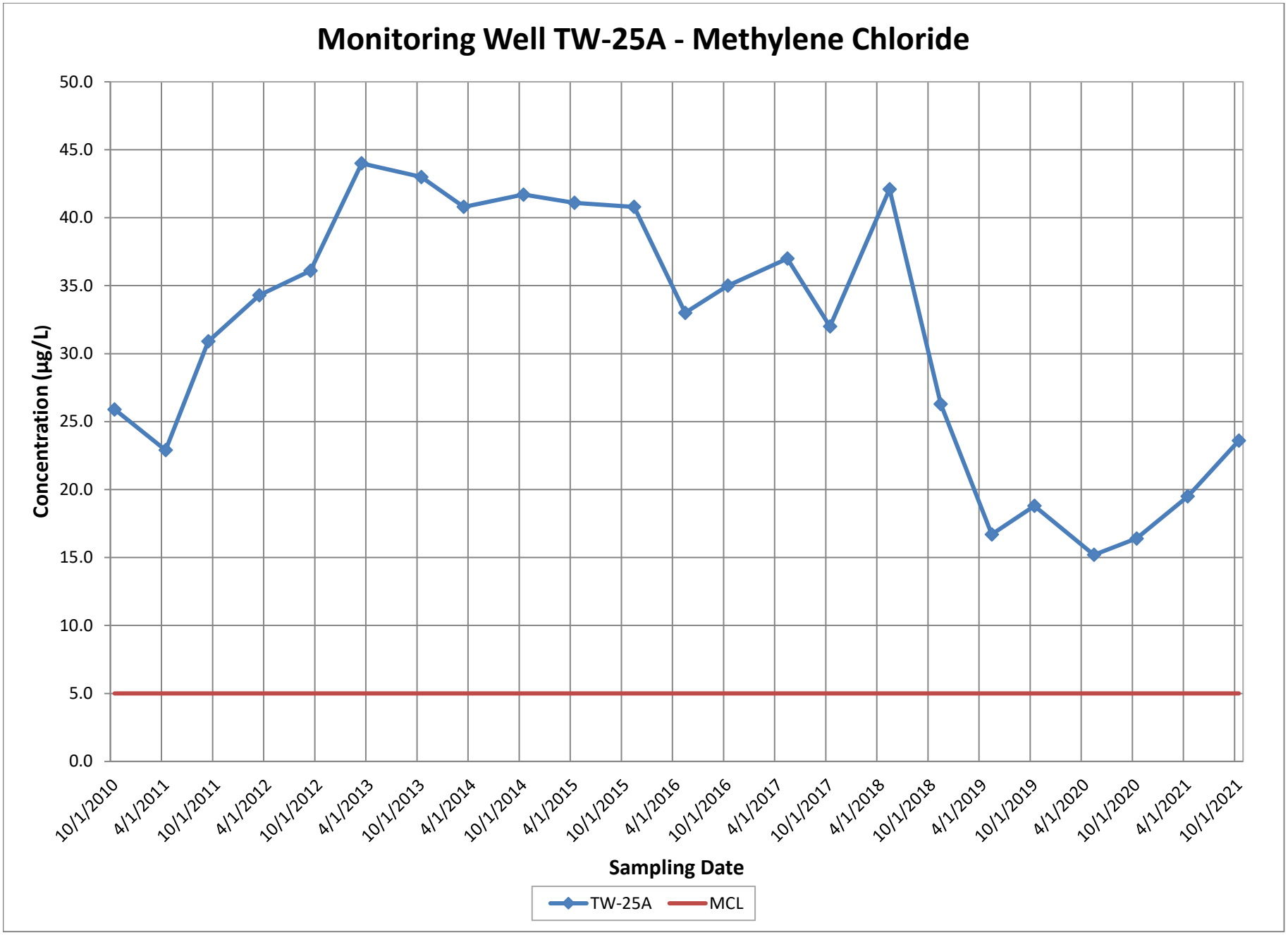
MCLs and Results are in ug/L unless indicated otherwise

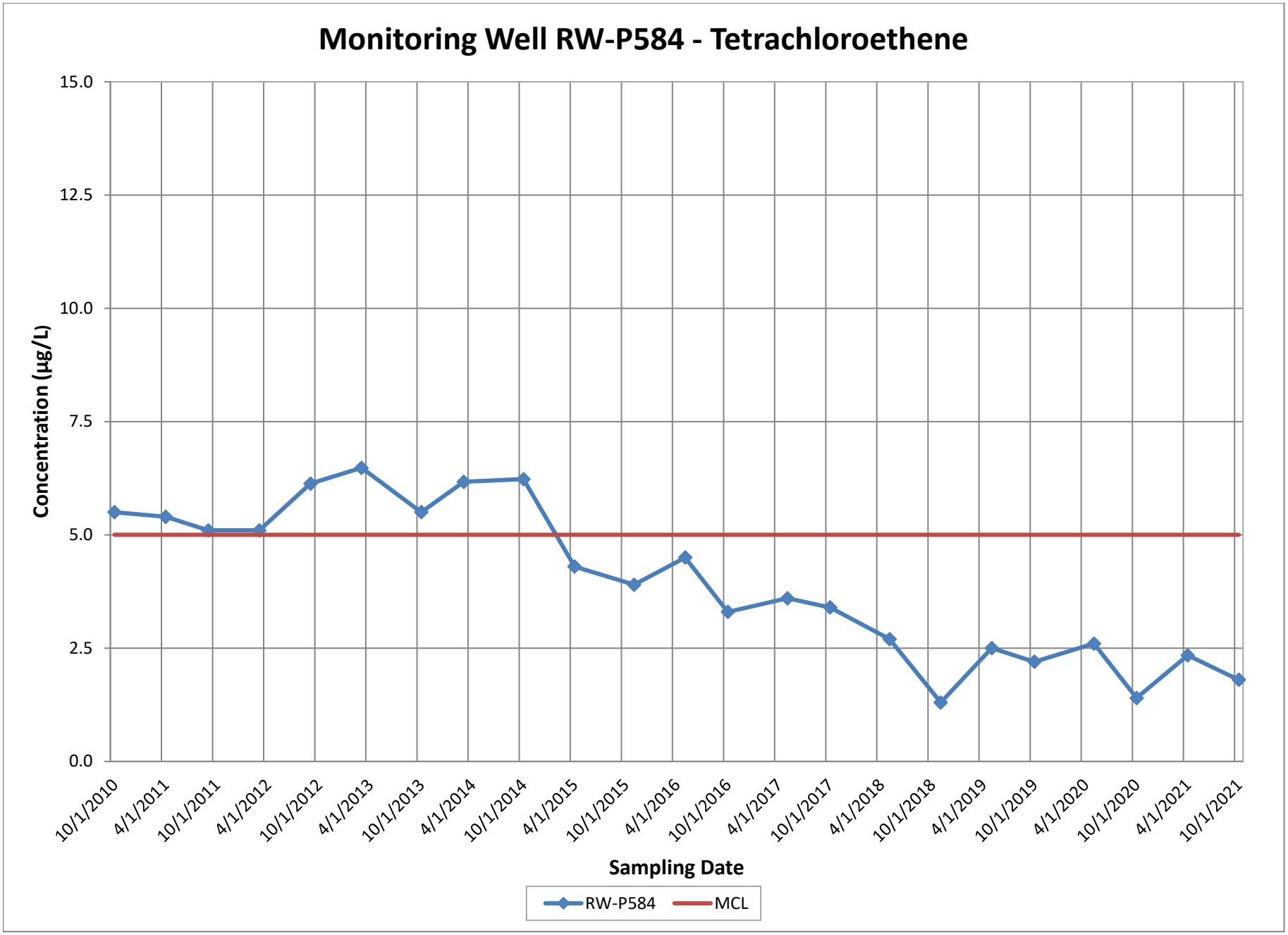
Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-3***															
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

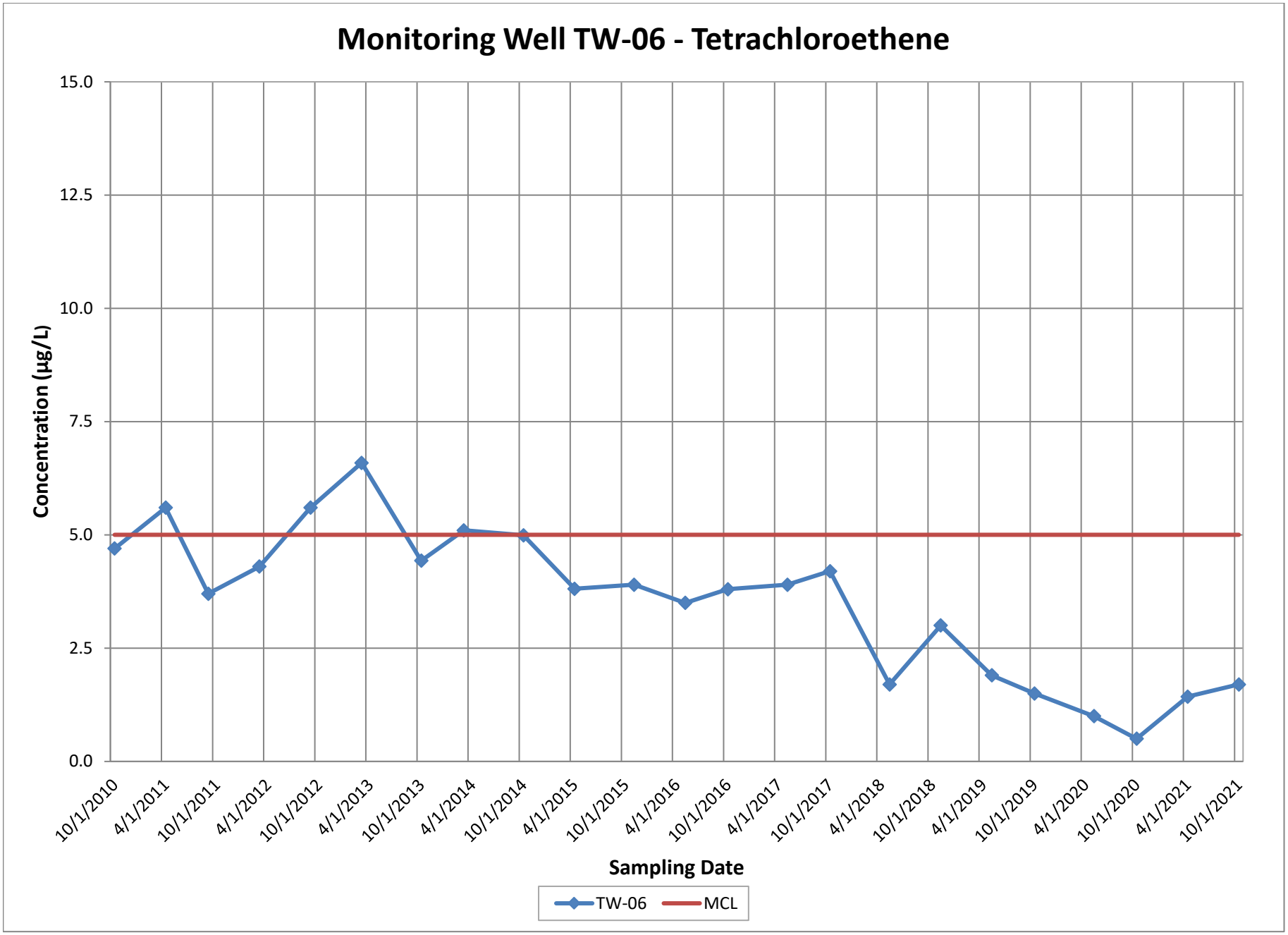
MCLs and Results are in ug/L unless indicated otherwise

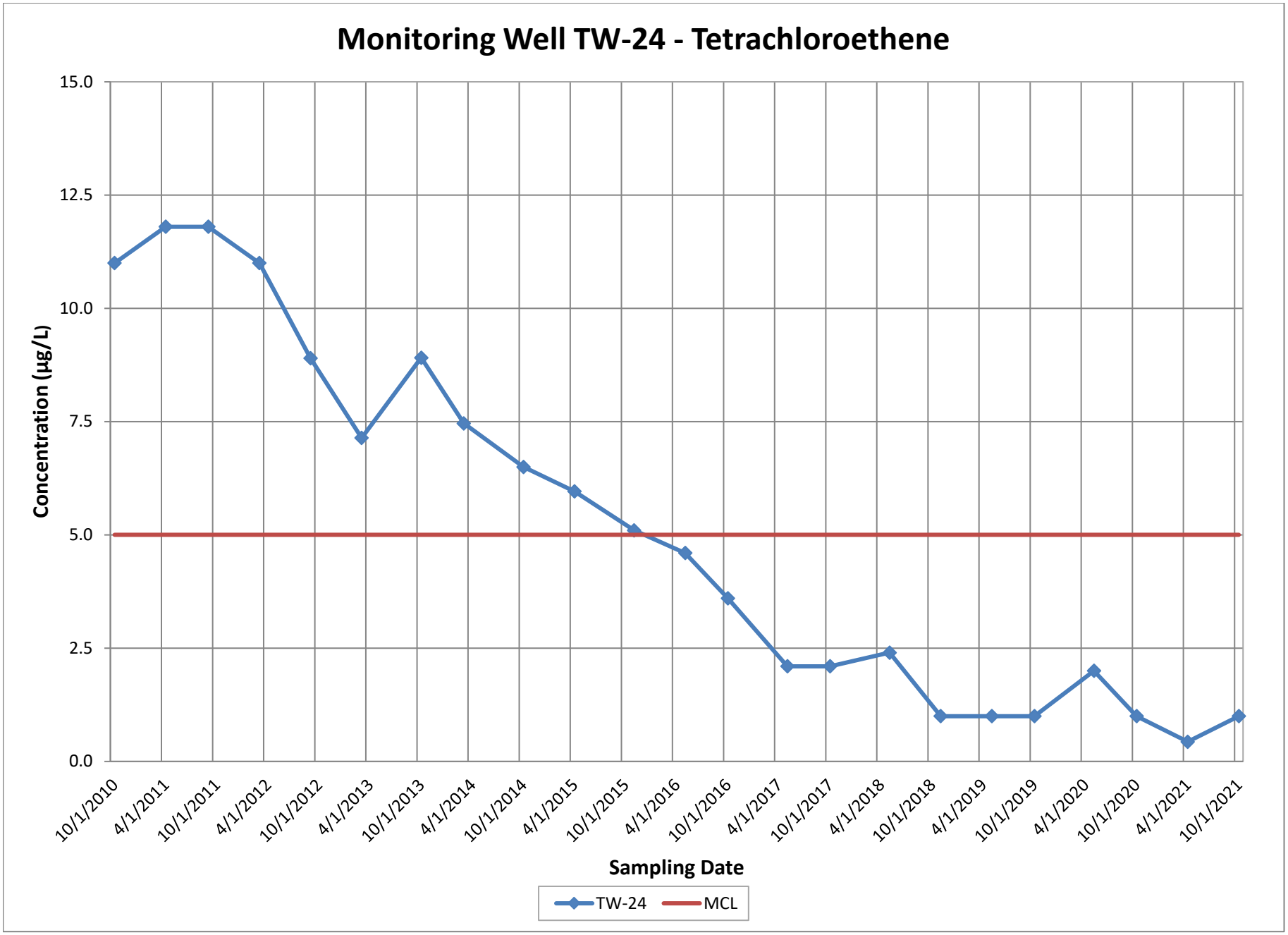
APPENDIX B
Historical MCL Exceedance
Time-Series Plots

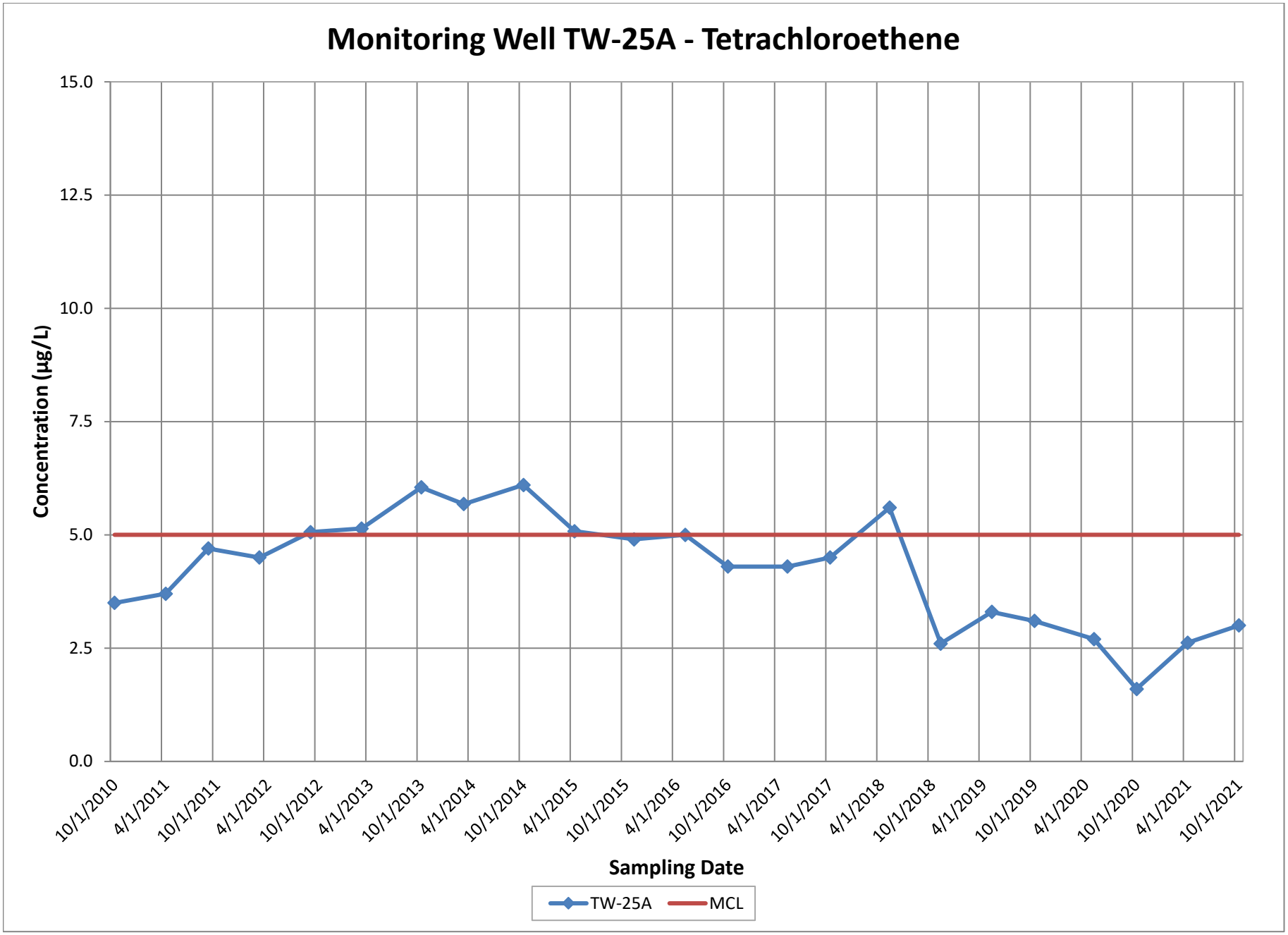

Monitoring Well TW-14A - Methylene Chloride
15.0
12.5
10.0
7.5
5.0
2.5
0.0
Concentration (µg/L)
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
Sampling Date
TW-14A
MCL

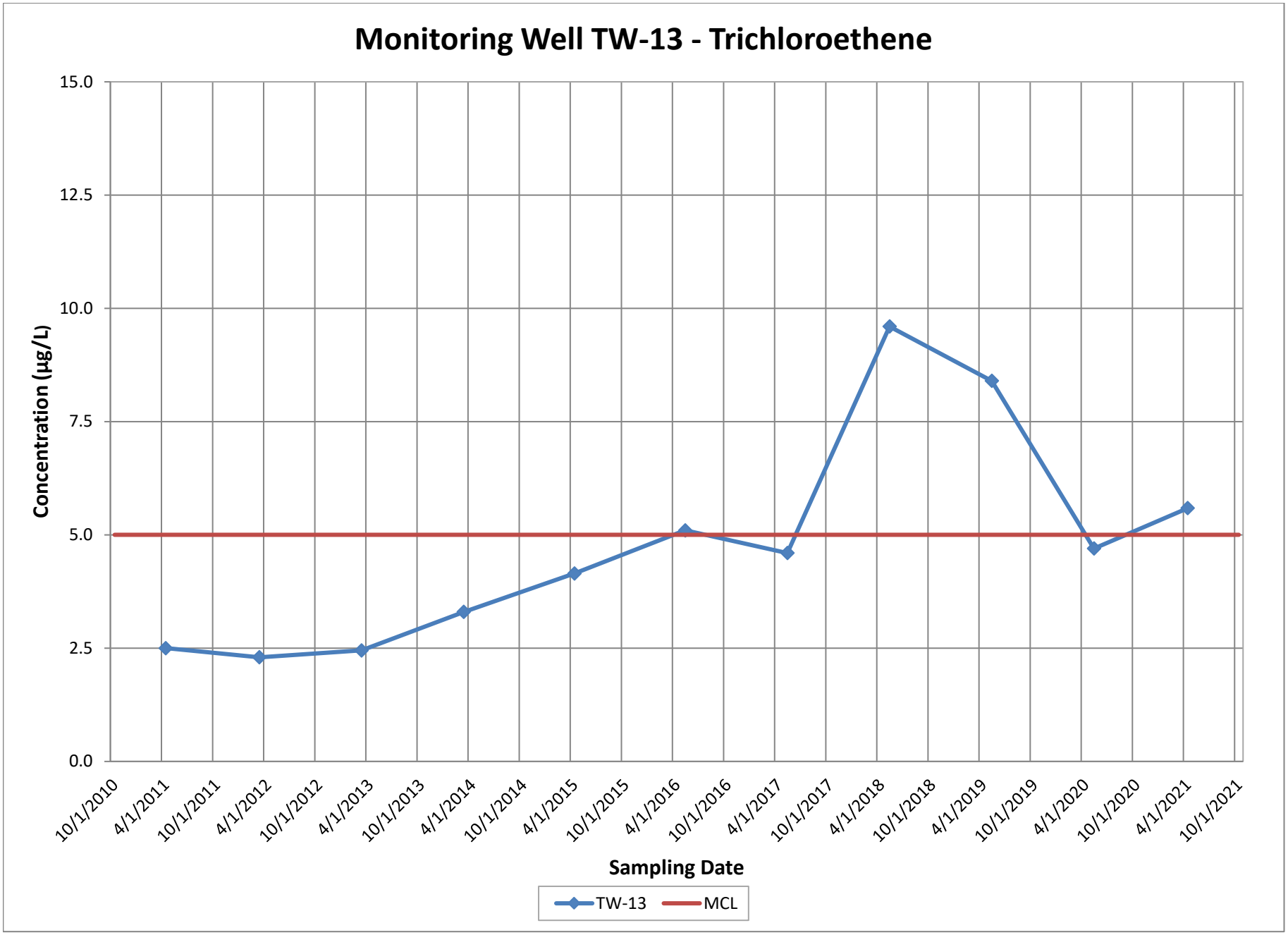

Monitoring Well TW-25A - Methylene Chloride
Concentration (µg/L)
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
Sampling Date
TW-25A
MCL

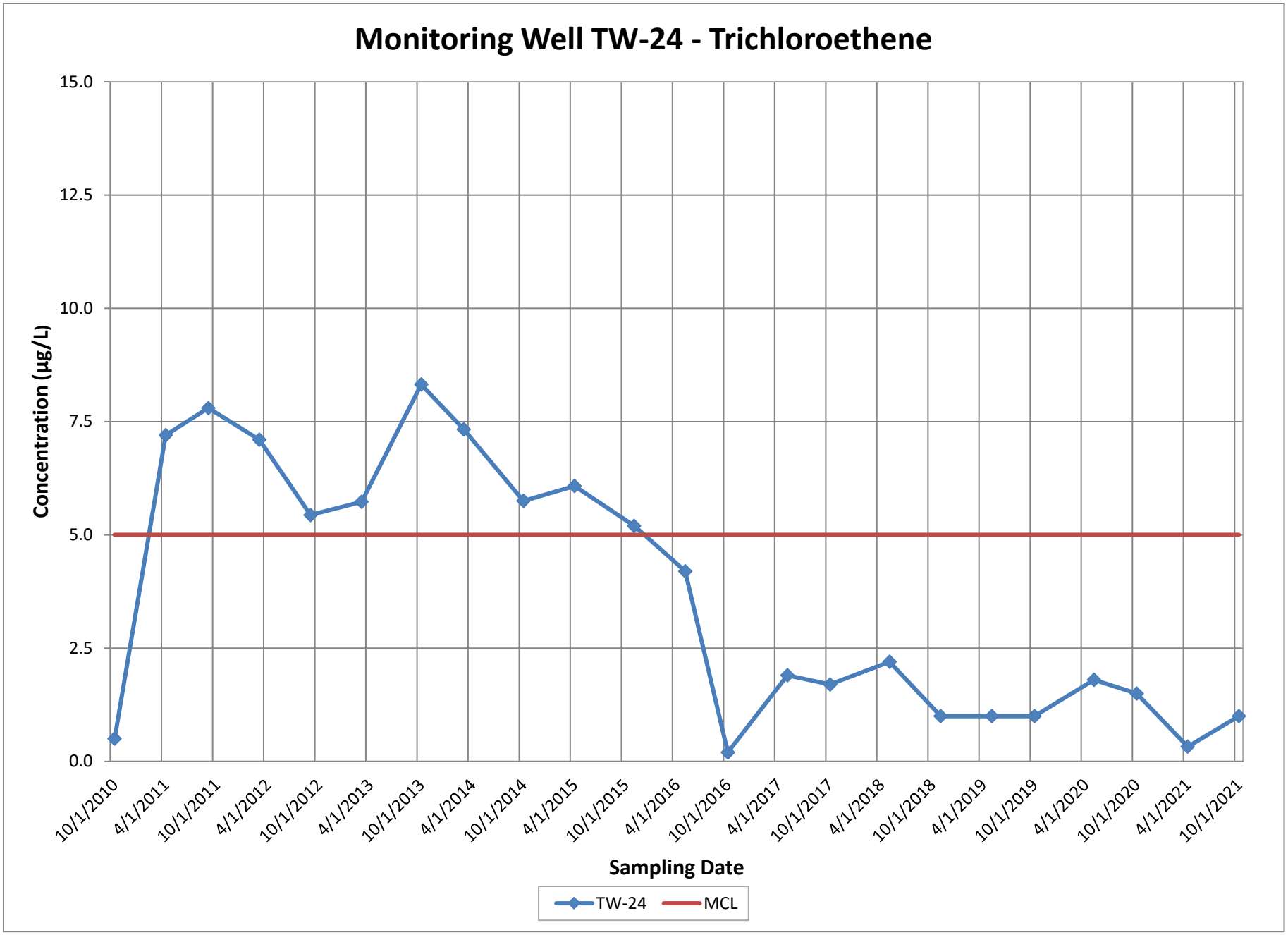

Monitoring Well RW-P584 - Tetrachloroethene
15.0
12.5
10.0
7.5
5.0
2.5
0.0
Concentration (µg/L)
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
Sampling Date
RW-P584
MCL

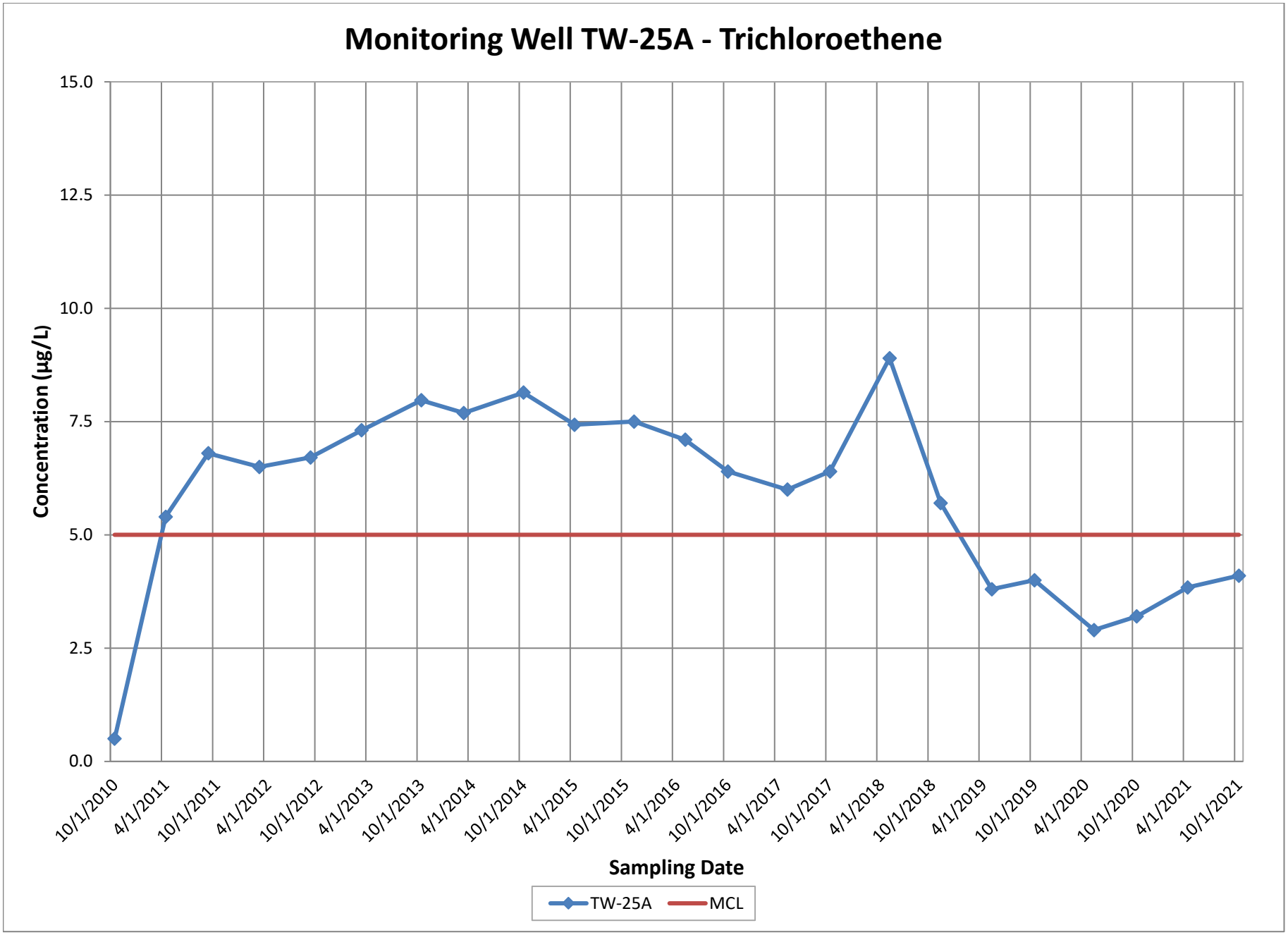

Monitoring Well TW-06 - Tetrachloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
Sampling Date
TW-06
MCL


Monitoring Well TW-24 - Tetrachloroethene
15.0
12.5
10.0
7.5
5.0
2.5
0.0
Concentration (µg/L)
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
Sampling Date
TW-24
MCL


Monitoring Well TW-25A - Tetrachloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
Sampling Date
TW-25A
MCL


Monitoring Well TW-13 - Trichloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
Sampling Date
TW-13
MCL


Monitoring Well TW-24 - Trichloroethene
15.0
12.5
10.0
7.5
5.0
2.5
0.0
Concentration (µg/L)
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
Sampling Date
TW-24
MCL


Monitoring Well TW-25A - Trichloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
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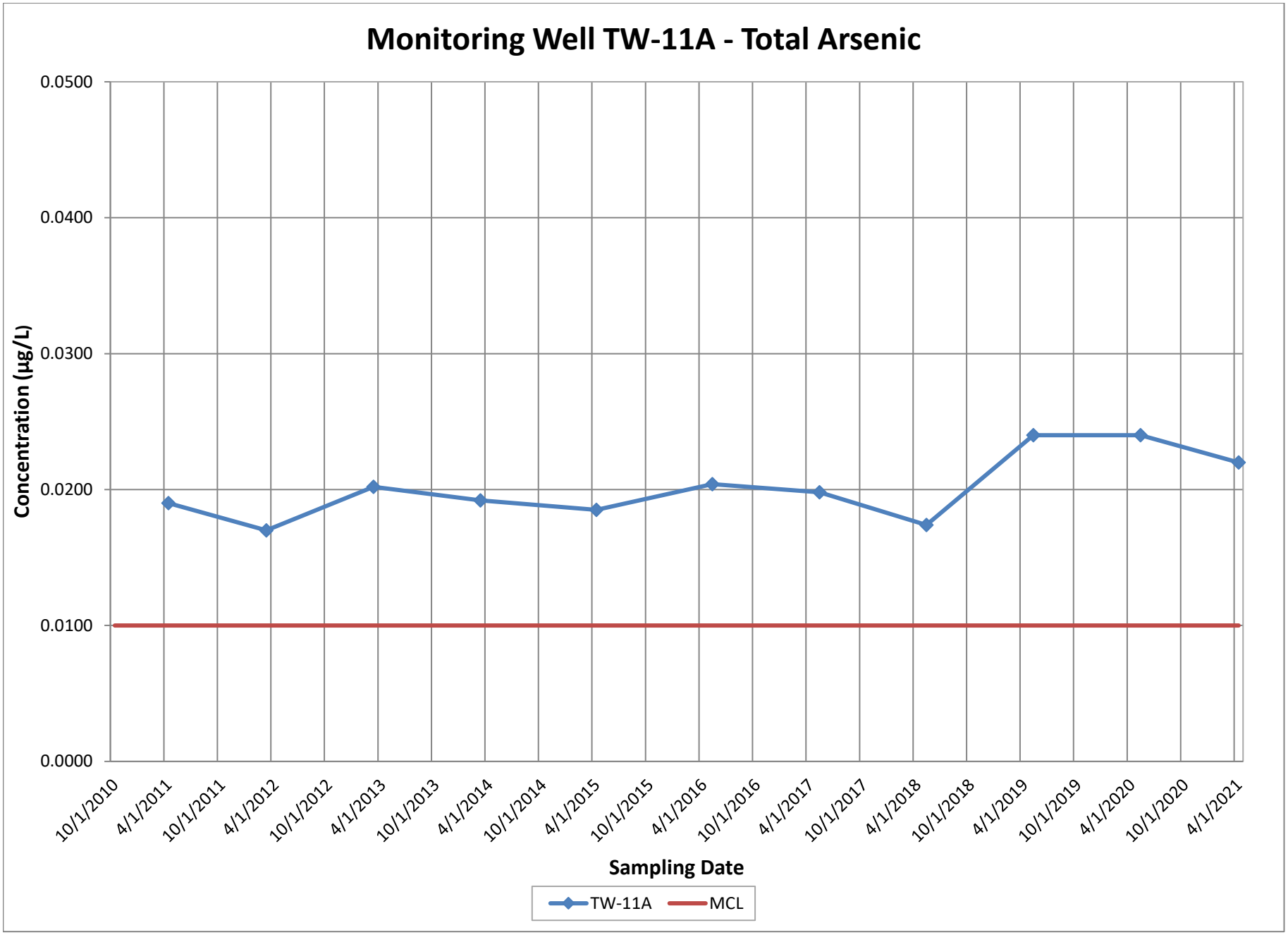
4/1/2020
10/1/2020
4/1/2021
10/1/2021
Sampling Date
TW-25A
MCL


Monitoring Well TW-11A - Total Arsenic
Concentration (µg/L)
0.0500
0.0400
0.0300
0.0200
0.0100
0.0000
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
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4/1/2020
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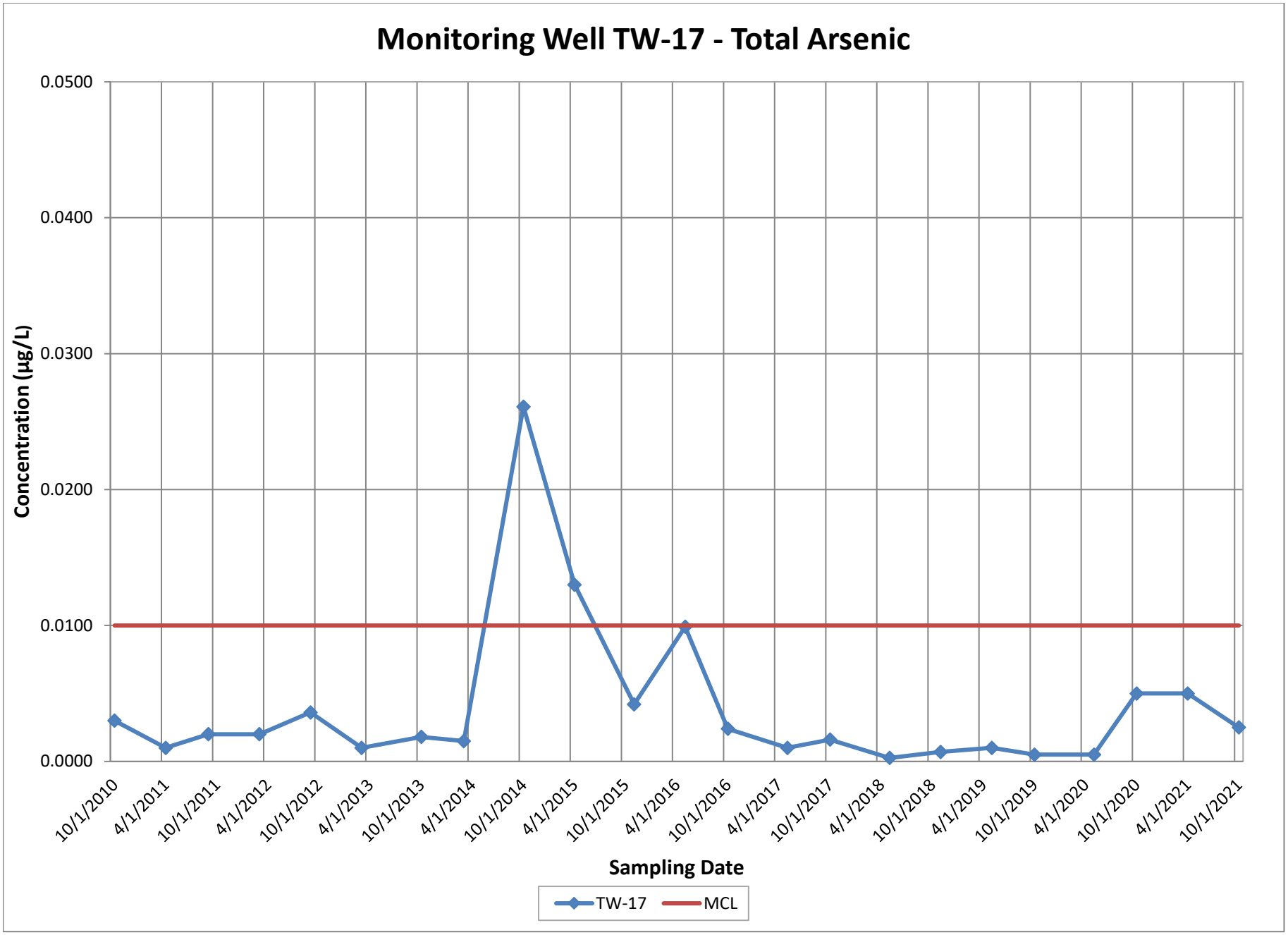
4/1/2021
Sampling Date
TW-11A
MCL


Monitoring Well TW-17 - Total Arsenic
Concentration (µg/L)
0.0500
0.0400
0.0300
0.0200
0.0100
0.0000
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
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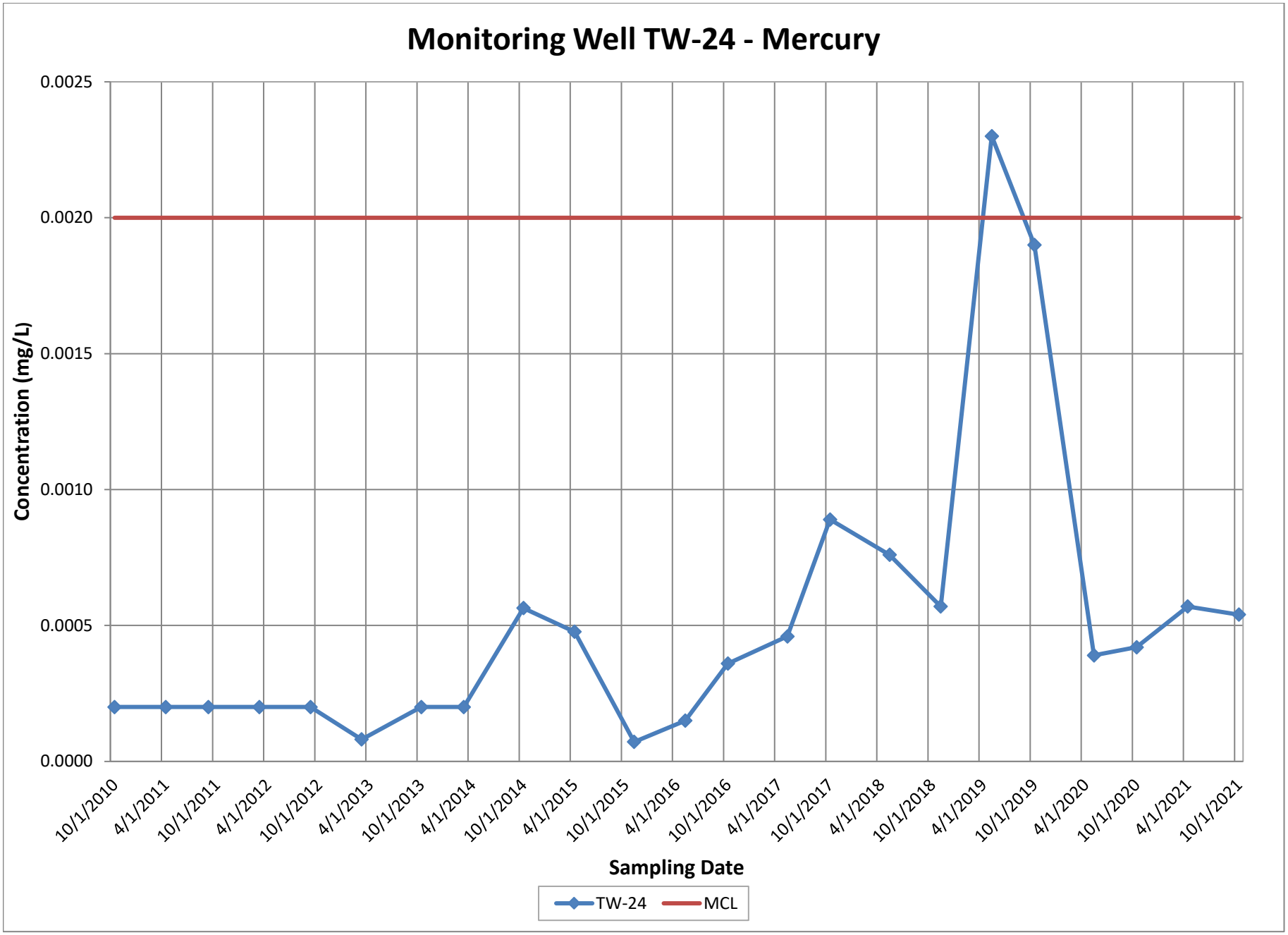
4/1/2020
10/1/2020
4/1/2021
10/1/2021
Sampling Date
TW-17
MCL


Monitoring Well TW-24 - Mercury
Concentration (mg/L)
0.0025
0.0020
0.0015
0.0010
0.0005
0.0000
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
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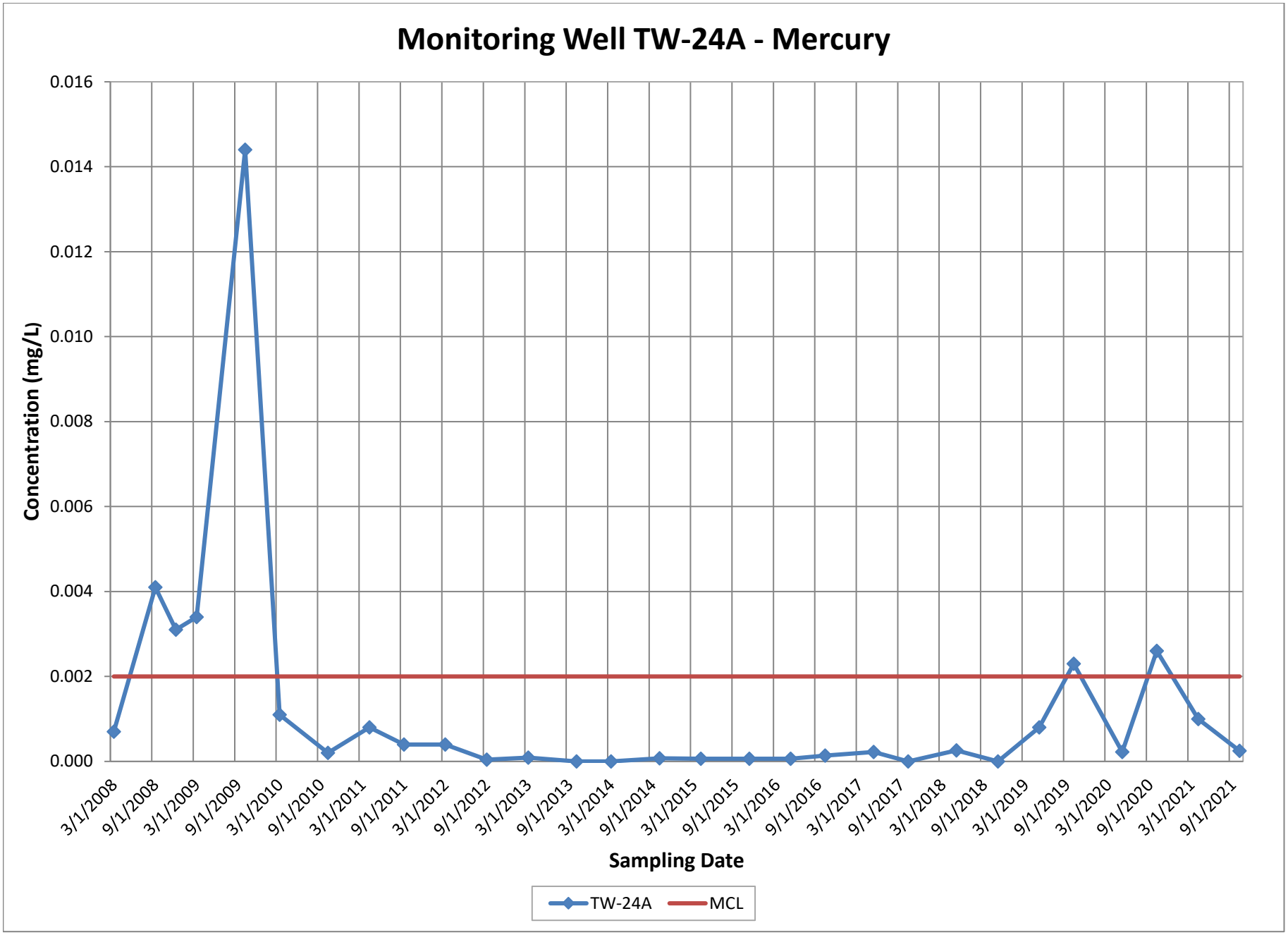
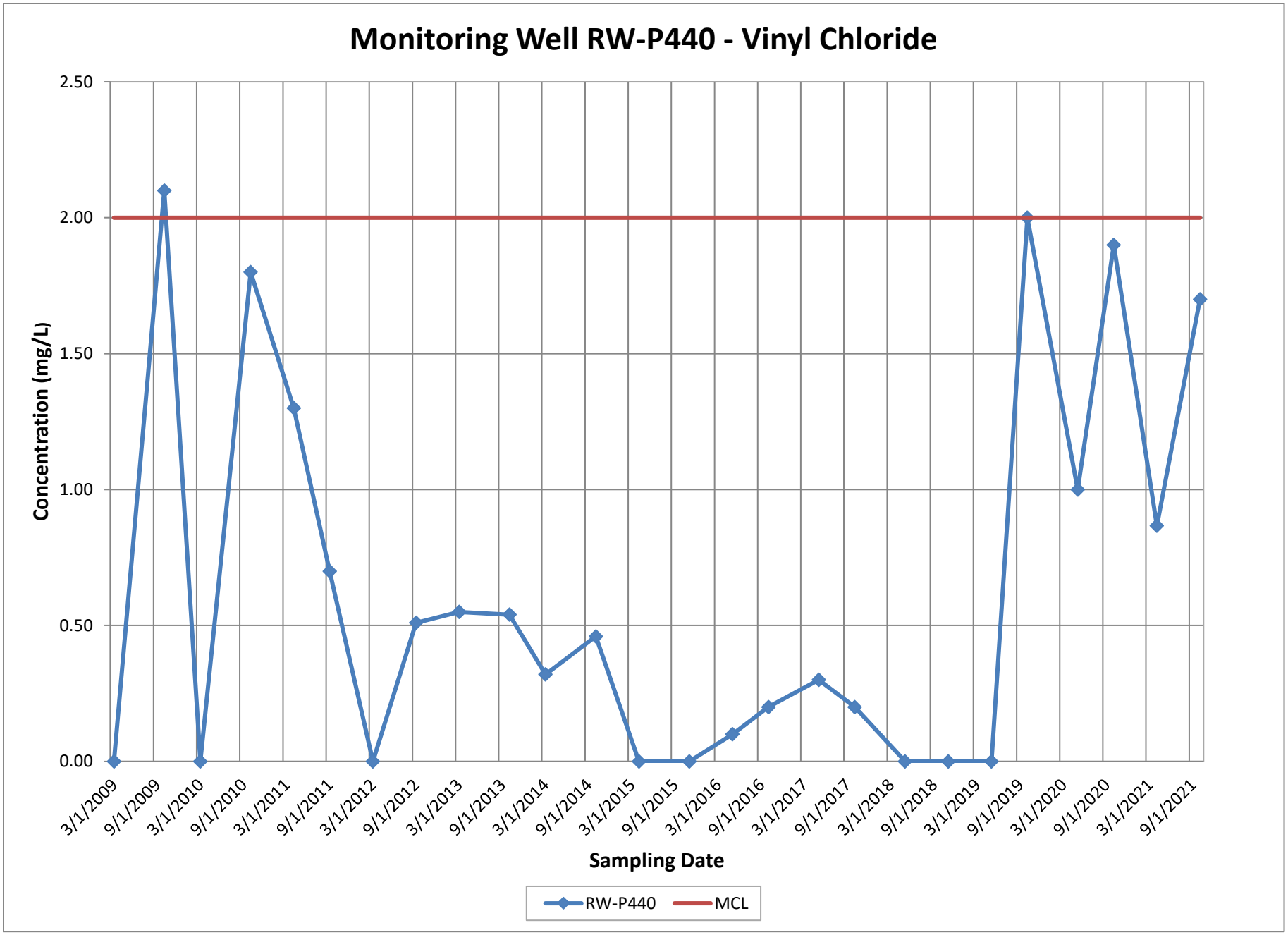
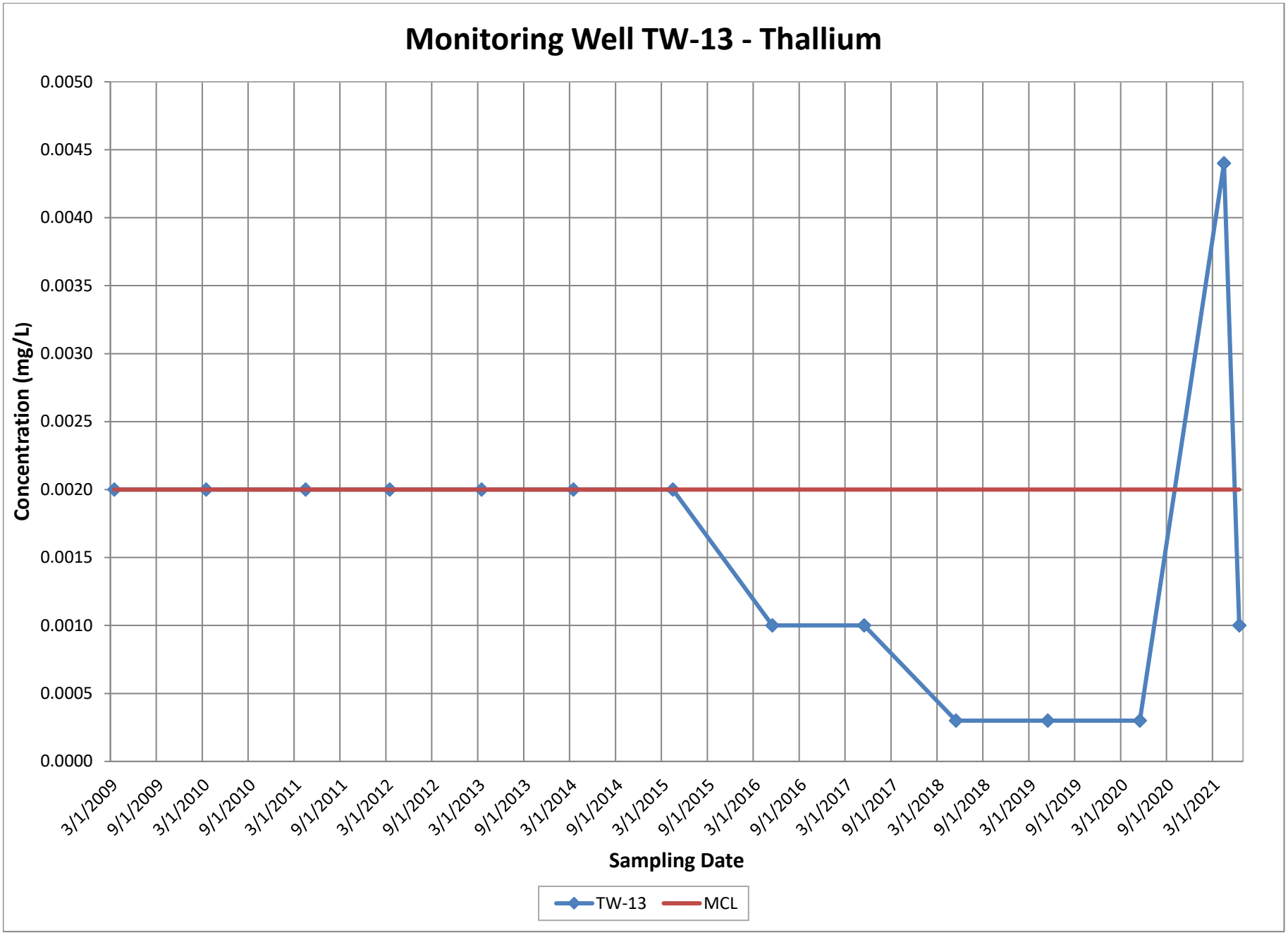
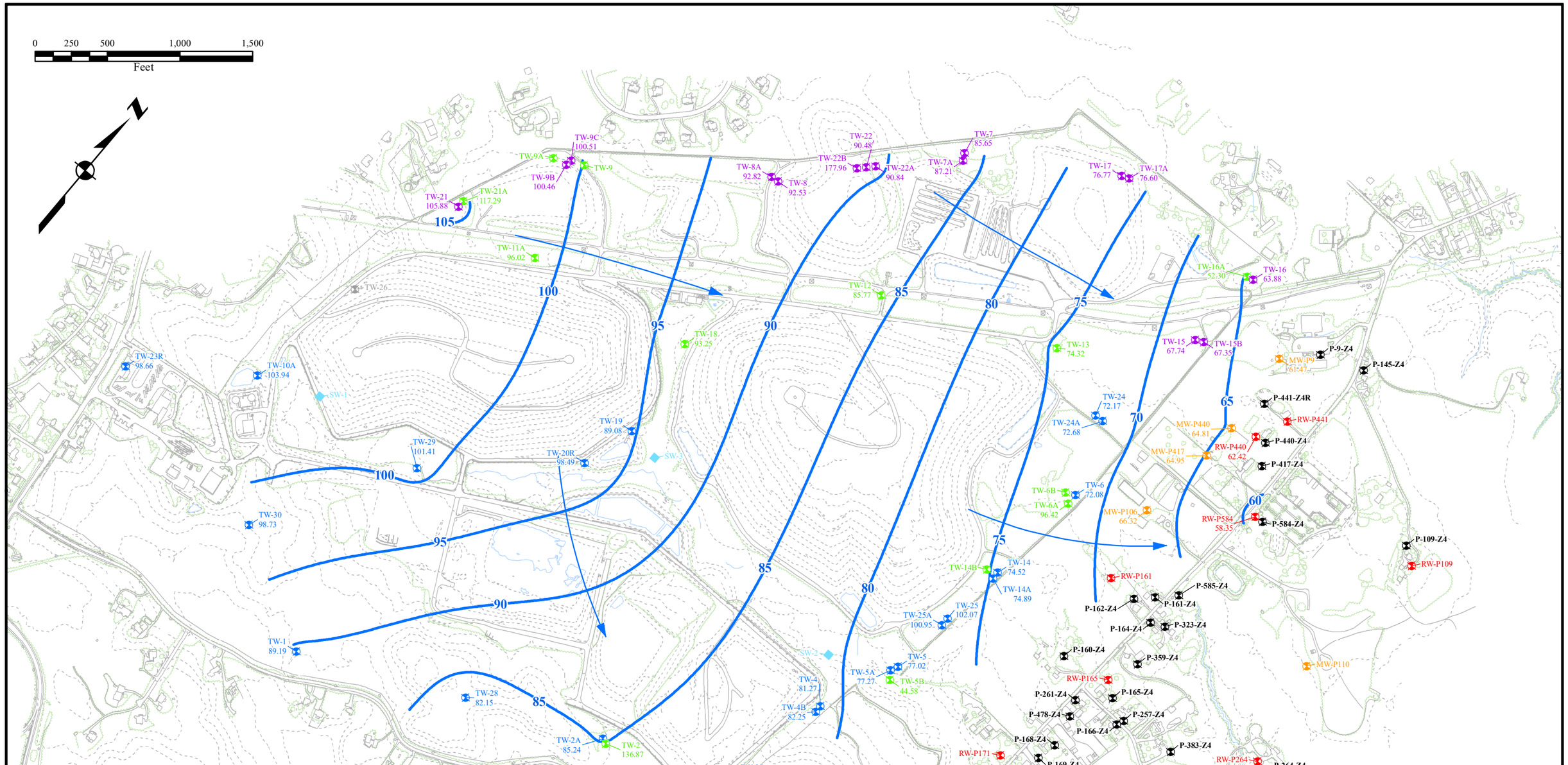
4/1/2020
10/1/2020
4/1/2021
10/1/2021
Sampling Date
TW-24
MCL


Monitoring Well TW-24A - Mercury
Concentration (mg/L)
0.016
0.014
0.012
0.010
0.008
0.006
0.004
0.002
0.000
3/1/2008
9/1/2008
3/1/2009
9/1/2009
3/1/2010
9/1/2010
3/1/2011
9/1/2011
3/1/2012
9/1/2012
3/1/2013
9/1/2013
3/1/2014
9/1/2014
3/1/2015
9/1/2015
3/1/2016
9/1/2016
3/1/2017
9/1/2017
3/1/2018
9/1/2018
3/1/2019
9/1/2019
3/1/2020
9/1/2020
3/1/2021
9/1/2021
Sampling Date
TW-24A
MCL


Monitoring Well RW-P440 - Vinyl Chloride
Concentration (mg/L)
2.50
2.00
1.50
1.00
0.50
0.00
3/1/2009
9/1/2009
3/1/2010
9/1/2010
3/1/2011
9/1/2011
3/1/2012
9/1/2012
3/1/2013
9/1/2013
3/1/2014
9/1/2014
3/1/2015
9/1/2015
3/1/2016
9/1/2016
3/1/2017
9/1/2017
3/1/2018
9/1/2018
3/1/2019
9/1/2019
3/1/2020
9/1/2020
3/1/2021
9/1/2021
Sampling Date
RW-P440
MCL


Monitoring Well TW-13 - Thallium
Concentration (mg/L)
0.0050
0.0045
0.0040
0.0035
0.0030
0.0025
0.0020
0.0015
0.0010
0.0005
0.0000
3/1/2009
9/1/2009
3/1/2010
9/1/2010
3/1/2011
9/1/2011
3/1/2012
9/1/2012
3/1/2013
9/1/2013
3/1/2014
9/1/2014
3/1/2015
9/1/2015
3/1/2016
9/1/2016
3/1/2017
9/1/2017
3/1/2018
9/1/2018
3/1/2019
9/1/2019
3/1/2020
9/1/2020
3/1/2021
Sampling Date
TW-13
MCL

APPENDIX C
Groundwater Elevations



LEGEND

TW-1 89.06	WELL NAME, GROUNDWATER ELEVATION (FT AMSL)
TW-30	ONSITE REGULATED MONITORING WELL (SUBTITLE D)
SW-1	SURFACE WATER SAMPLE LOCATION
TW-26	ONSITE REGULATED MONITORING WELL (RPD)
TW-06	ONSITE REGULATED MONITORING WELL (COMAR)
TW-02	ONSITE NON-REGULATED MONITORING WELL
MW-417	OFFSITE NON-REGULATED MONITORING WELL
RW-P165	OFFSITE RESIDENTIAL WATER SUPPLY WELL
P-277-Z4	OFFSITE RESIDENTIAL ZONE 4 WELL
90	GROUNDWATER ELEVATION CONTOUR (FT AMSL)
	GROUNDWATER FLOW DIRECTION

GROUNDWATER ELEVATIONS MEASURED OCTOBER 2021

CONTOURS DEVELOPED BASED ON ZONE 3 WELL GROUND-WATER ELEVATIONS

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ARM Group LLC
Engineers and Scientists

GROUNDWATER CONTOUR MAP

MILLERSVILLE LANDFILL
ANNE ARUNDEL COUNTY, MD

January 2022

21011025

Figure
C-1

C:\Users\SKahis\Desktop\MLF GIS\MLF GW Contour Map.mxd

APPENDIX C - MILLERSVILLE LANDFILL GROUNDWATER LEVEL MEASUREMENTS (October 2021)

WELL ID	DATE	MEASURING POINT ELEV. (FEET)	DEPTH TO WATER (FEET)	ELEV. (FEET)
MW-MB	10/28	236.81	137.75	99.06
MW-P106	10/21	107.62	41.30	66.32
MW-P417	10/20	112.75	47.80	64.95
MW-P440	10/20	115.25	50.44	64.81
MW-P9	10/20	112.32	50.85	61.47
N	10/28	195.48	105.21	90.27
P-564	10/28	176.31	99.49	76.82
RW-P440	10/20	117.11	54.69	62.42
RW-P441	10/28	117.58	55.17	62.41
RW-P584	10/20	118.56	60.21	58.35
TW1	10/6	193.42	104.23	89.19
TW10A	10/2	194.52	90.58	103.94
TW10B	10/25	195.96	92.85	103.11
TW11A	10/28	138.52	42.50	96.02
TW12	10/25	141.99	56.22	85.77
TW13	10/25	117.71	43.39	74.32
TW14	10/7	123.07	48.55	74.52
TW14A	10/7	123.26	48.37	74.89
TW15	10/7	116.98	49.24	67.74
TW15B	10/7	116.30	48.95	67.35
TW16	10/7	115.07	51.19	63.88
TW16A	10/7	115.44	63.14	52.30
TW17	10/7	131.99	55.22	76.77
TW17A	10/7	131.55	54.95	76.60
TW18	10/25	128.09	34.84	93.25
TW19	10/25	116.19	27.11	89.08
TW2	10/6	197.71	60.84	136.87
TW20R	10/12	129.97	31.48	98.49
TW21	10/12	158.75	52.87	105.88
TW21A	10/25	158.83	41.54	117.29
TW22	10/13	189.15	98.67	90.48
TW22A	10/13	188.24	97.40	90.84
TW22B	10/13	189.58	11.62	177.96
TW23R	10/12	236.64	137.98	98.66
TW24	10/13	109.19	37.02	72.17
TW24A	10/13	108.69	36.01	72.68
TW25	10/13	117.42	15.35	102.07
TW25A	10/13	117.05	16.10	100.95
TW27	10/6	182.90	100.45	82.45
TW28	10/14	211.73	129.58	82.15

APPENDIX C - MILLERSVILLE LANDFILL GROUNDWATER LEVEL MEASUREMENTS (October 2021)

WELL ID	DATE	MEASURING POINT ELEV. (FEET)	DEPTH TO WATER (FEET)	ELEV. (FEET)
TW29	10/14	143.89	42.48	101.41
TW2A	10/6	197.92	112.68	85.24
TW3	10/6	180.75	98.83	81.92
TW30	10/12	221.00	122.27	98.73
TW31	10/28	186.47	100.28	86.19
TW32	10/28	190.09	70.77	119.32
TW3A	10/6	181.45	47.43	134.02
TW4	10/6	112.56	31.29	81.27
TW4B	10/6	113.60	31.35	82.25
TW5	10/5	104.77	27.75	77.02
TW5A	10/5	105.31	28.04	77.27
TW5B	10/5	103.98	59.40	44.58
TW6	10/4	107.41	35.33	72.08
TW6A	10/25	106.29	9.87	96.42
TW7	10/14	126.85	41.20	85.65
TW7A	10/14	127.56	40.35	87.21
TW8	10/5	139.49	46.96	92.53
TW8A	10/5	139.67	46.85	92.82
TW9	10/5	131.24	75.92	55.32
TW9A	10/5	134.68	6.59	128.09
TW9B	10/5	133.81	33.35	100.46
TW9C	10/5	133.95	33.44	100.51
W	10/28	203.57	113.44	90.13

APPENDIX D
Data Validation

APPENDIX D
LABORATORY DATA VALIDATION

1.1 INTRODUCTION

This document presents the summary of data validation performed on the laboratory analytical data associated with the 2nd semi-annual 2021 groundwater monitoring event at the Millersville Landfill and Resource Recovery Facility (MLFRRF) in Anne Arundel County, Maryland. Groundwater samples were collected pursuant to the Annotated Code of Maryland (COMAR) Title 26, Chapter 4; the Code of Federal Regulations (CFR) Title 40, Chapter Part 258; and the MLFRRF Environmental Monitoring Plan (EMP).

Groundwater and surface water sampling for the 2nd semi-annual 2021 event was performed on October 4-7, October 12-14, and October 20-21, 2021. Environmental Monitoring and Assessment (EMA), LLC of Lititz, Pennsylvania conducted the sampling. Laboratory analysis for volatile organic compounds (VOCs) was performed by Maryland Spectral Services (MSS) of Baltimore, Maryland and for laboratory analysis for inorganic compounds was performed by Pace Analytical Service (Pace) of Greensburg, Pennsylvania.

Quality Assurance/Quality Control (QA/QC) protocols employed during this event included the analysis of matrix spike (MS) and matrix spike duplicate (MSD) samples, laboratory control samples (LCS), laboratory method blanks, and laboratory preparation blanks. These protocols also included the analysis of two blind duplicate samples obtained from TW-24 (DUP-1) and TW-30 (DUP-2). In addition, the QA/QC protocols included the preparation of four trip blanks and one field blank.

Samples were analyzed for VOCs, total and dissolved metals, and general chemistry parameters.

1.2 SAMPLE PACKAGE COMPLETENESS AND DELIVERABLES

Chains of custody were present in the data packages for all samples, along with statements from the laboratory attesting to the validity of the data. All requested analyses were accounted for in the data report. Sample receipt forms were present for all samples.

1.3 VOLATILE ORGANIC COMPOUND ANALYSES

1.3.1 General Information

<u>Groundwater Sampling Locations (56):</u>

TW-01, TW-02, TW-02A, TW-03, TW-03A, TW-04, TW-04B, TW-05, TW-05A, TW-05B, TW-06, TW-06B, TW-07, TW-07A, TW-08, TW-08A, TW-09, TW-09B, TW-09C, TW-10A, TW-14, TW-14A, TW-14B, TW-15, TW-15B, TW-16, TW-16A, TW-17, TW-17A, TW-19,

TW-20R, TW-21, TW-22, TW-22A, TW-22B, TW-23R, TW-24, TW-24A, TW-25, TW-25A, TW-27, TW-28, TW-29, TW-30, MW-P4, MW-P9, MW-P106, MW-P417, MW-P440, RW-P109, RW-P165, RW-P171-1, RW-P264, RW-P440, RW-P441, and RW-P584.

Surface Water Sampling Locations (3):

SW-1, SW-2, and SW-3.

QA/QC Samples:

Field blank, all trip blanks, laboratory control samples, laboratory method blanks, and laboratory MS/MSDs.

1.3.2 **Analytical Method**

The samples were analyzed for VOCs following the United States Environmental Protection Agency (USEPA) Methods 8260B and 8011. The target analyte list was that established as Appendix I by 40 CFR Part 258, "Constituents for Detection Monitoring" and Appendix II (40 CFR Part 258) parameters – dichlorodifluoromethane and dichlorofluoromethane, and methyl tertiary-butyl ether (MTBE).

Field and Trip Blanks

One field blank and four trip blanks were prepared and analyzed for this sampling event. There were no parameters detected in any of the four trip blanks. Chloroform was detected in the field blank in work order 3044673; however, chloroform was not detected in any samples on the same day, so no concentrations were flagged with "B" qualifiers.

Blind Duplicate Samples

The blind duplicate samples were collected from wells TW-24 (DUP-1) and TW-30 (DUP-2). Analyses were performed to calculate the RPD of duplicate samples in obtaining an estimate of laboratory method precision. Table D-1 summarizes the RPD of constituents detected above the RL. The agreement between the detected VOCs in the duplicate and corresponding sample was within QC standards.

Quality Control Sample Review

Quality Control samples for each laboratory report were reviewed to verify proper documentation of any analysis issues. Notable observations from the quality control samples are summarized below.

- Surrogates: For all projects, all surrogates were within quality control limits.
- Method Blanks: For all projects, there were no analytes detected in method blanks.

- Laboratory Control Spike: For all projects, recoveries in the laboratory control samples were within quality control limits, with a few exceptions. For the following projects, recoveries in the laboratory control samples were outside quality control limits:1100618. No additional qualification was necessary.
- Matrix Spikes: For all projects, recoveries in matrix spikes and matrix spike duplicates were within quality control limits, with a few exceptions. The following projects had matrix spike or matrix spike duplicate recoveries that were outside control limits: 1100618, 1100727, 1101426, and 1102137. No additional qualification was necessary.
- Laboratory Duplicate: For all projects, the precision between the sample and laboratory sample duplicate was within control limits. No additional qualification was necessary.

1.4 INORGANIC ANALYSIS

1.4.1 General Information

Groundwater Sampling Locations (56):

TW-01, TW-02, TW-02A, TW-03, TW-03A, TW-04, TW-04B, TW-05, TW-05A, TW-05B, TW-06, TW-06B, TW-07, TW-07A, TW-08, TW-08A, TW-09, TW-09B, TW-09C, TW-10A, TW-14, TW-14A, TW-14B, TW-15, TW-15B, TW-16, TW-16A, TW-17, TW-17A, TW-19, TW-20R, TW-21, TW-22, TW-22A, TW-22B, TW-23R, TW-24, TW-24A, TW-25, TW-25A, TW-27, TW-28, TW-29, TW-30, MW-P106, MW-P4, MW-P417, MW-P440, MW-P9, RW-P109, RW-P165, RW-P171-1, RW-P264, RW-P440, RW-P441, and RW-P584.

Surface Water Sampling Locations (3):

SW-1, SW-2, and SW-3.

QA/QC Samples:

Field Blank, laboratory control samples, laboratory method blanks, laboratory duplicates, and laboratory MS/MSDs.

1.4.2 Analytical Methods

On-site samples were analyzed for antimony, arsenic, barium, beryllium, cadmium, calcium (total and dissolved), chromium, cobalt, copper, iron (total and dissolved), lead, magnesium (total and dissolved), manganese (total and dissolved), mercury, nickel, potassium (total and dissolved), selenium, silver, sodium (total and dissolved), thallium, vanadium, and zinc using the Inductively Coupled Plasma Optical Emission Spectrometry/Mass Spectrometer (ICP/MS) (USEPA Method 6010D and 6020B). Mercury was analyzed using the Cold Vapor Atomic Absorption Spectrometry method (CVAA) (USEPA Method 7470A).

Additionally, samples were analyzed for chloride (Standard Method [SM]4500CIE), nitrate and nitrite (SM4500NO3-F and SM4500NO2-B), ammonia (USEPA Method 350.1), chemical oxygen demand (USEPA Method 410.4), hardness (SM2340B), alkalinity (SM2320B), sulfate (USEPA Method 9038), total dissolved solids (SM2540C), and turbidity (SM2130B).

Off-site samples (MW and RW) were analyzed for mercury (total) only. All QC data were compared with quality control criteria for drinking water analysis in the USEPA Analytical Procedures for Determination of Metals under 40 CFR Part 136.

Field Blank

One field blank was prepared and analyzed for this sampling event as part of work order 30446733. There were "J" qualified" detections for chemical oxygen demand and chloride in the field blank; however, no concentrations of these parameters were detected in samples on the same day, so no parameters were flagged with "B" qualifiers.

Blind Duplicate Samples

Table D1 summarizes the RPD of the detected inorganic constituents in duplicate samples. RPD's were generally within control limits. The highest RPD was 111.1% for concentrations of alkalinity in TW-24 and DUP-1. There was one other parameter with a RPD over 20%: total dissolved solids at 24% for TW-30 and DUP-2. The RPD for most analytes was less than 10%.

Charge-Balance Error

The charge-balance error of samples collected in the field can be used to evaluate whether all ionic species that exist in the groundwater sample have been identified. Table D2 provides a summary of the calculated charge-balance errors. Thirteen out of 47 samples had a charge-balance error greater than the 20%. Charge-balance errors greater than 20% may indicate that ions are present in the groundwater sample that were not used in the calculations.

Project Narrative Review

Project narratives for each data package were reviewed to verify proper documentation of any analysis issues. Notable observations from the project narratives are summarized below.

- Holding Time: All samples in all projects were analyzed within the method required holding times, except for a few analyses using method SM4500NO2B in projects 30444380 and 30443913, and 7470A in project 30446733.
- Initial Calibration: For all projects, all criteria were within method requirements.
- Continuing Calibration: For all projects, all criteria were within method requirements.
- Internal Standards: For all projects, all internal standards were within quality control limits.

- Method Blanks: The following projects had at least one analyte detected above the reporting limit in the associated method blank: 30444380, 30444398, 30445538, 30443913, and 30445311. The results were flagged with a "B" qualifier if an analyte was detected above the reporting limit in a method blank.
- Laboratory Control Spike: All laboratory control spike compounds were within quality control limits.
- Matrix Spikes: For the following projects, at least one analyte in a matrix spike or matrix spike duplicate was recovered outside the quality control limits: 30444380, 30444398, 30445538, 30443913, 30445311, 30446733, and 30458348. The associated batch was either accepted based on LCS recovery or proper qualification was added for the associated sample results.
- Laboratory Duplicate: For all projects, the precision between the sample and laboratory sample duplicate was within control limits.
- Dilutions: For all projects, no samples required dilution.
- Volume reduction: For the following projects, at least one sample was reduced in volume to be within an acceptable range: 30444398. Proper qualification was added by the laboratory for the associated sample results.

TABLE D1 MLFRRF LABORATORY DATA VALIDATION - FALL 2021 Duplicate Comparison - Detected Parameters								
Parameter	**Unit**	**TW-24 Result**	**Dup 1 Result**	**Relative Percent Difference**	**TW-30**		**Dup 2 Result**	**Relative Percent Difference**
1,1-Dichloroethane	µg/L	2.3	2.4	4.3%	1	U	1 U	NA
Dichlorodifluoromethane	µg/L	2.3	2.2	4.4%	1	U	1 U	NA
Dichlorofluoromethane	µg/L	1 J	1.1	NA	1	U	1 U	NA
Alkalinity	mg/L	12	42	**111.1%**	10	U	10 U	NA
Barium	mg/L	0.071	0.072	1.4%	0.036		0.034	5.7%
Calcium	mg/L	3.6	3.5	2.8%	4.6		4.7	2.2%
Calcium, Dissolved	mg/L	3.7	3.8	2.7%	4.7		4.8	2.1%
Chloride	mg/L	22.1	22.5	1.8%	22.1		22.1	0.0%
Cobalt	mg/L	0.009	0.009	0.0%	0.0025	J	0.0024 J	**NA**
Copper	mg/L	0.0038	0.004	5.1%	0.0015	J	0.0014 J	**NA**
Magnesium	mg/L	3.3	3.3	0.0%	1.8		1.8	0.0%
Magnesium, Dissolved	mg/L	3.4	3.6	5.7%	1.8		1.9	5.4%
Manganese	mg/L	0.045	0.044	2.2%	0.011		0.012	8.7%
Manganese, Dissolved	mg/L	0.046	0.049	6.3%	0.011		0.011	0.0%
Mercury	mg/L	0.00054	0.00054	0.0%	0.0002	U	0.0002 U	NA
Nickel	mg/L	0.0089	0.0091	2.2%	0.0043		0.0041	4.8%
Nitrate as N	mg/L	1	1	0.0%	2.3		2.3	0.0%
Nitrogen, NO2 plus NO3	mg/L	0.93	0.94	1.1%	2.3		2.3	0.0%
Potassium	mg/L	1.3	1.2	8.0%	1.5		1.5	0.0%
Potassium, Dissolved	mg/L	1.3	1.4	7.4%	1.41		1.44	2.1%
Sodium	mg/L	12	11.8	1.7%	11.8		12.1	2.5%
Sodium, Dissolved	mg/L	12.7	13.3	4.6%	11.5		11.7	1.7%
Total Dissolved Solids	mg/L	55	59	7.0%	56		44	**24.0%**
Total Hardness	mg/L	22.6	22.2	1.8%	18.9		19.3	2.1%
Zinc	mg/L	0.01	0.01	0.0%	0.0036	J	0.0034 J	NA

TABLE D2
MLFRRF DATA EVALUATION - FALL 2021
Cation/Anion Balance Worksheet

	ION	M.W. (g/mol)	*Subtite D Regulated Wells*														
			Concentration (mg/L)														
			TW-01	TW-02A	TW-03	TW-04	TW-04B	TW-05	TW-05A	TW-06	TW-10A	TW-14	TW-14A	TW-19	TW-20R	TW-23	TW-24
CATIONS	Ca^{2+}	40.08	17.4	5.3	1.1	7.2	2.4	3.6	1.8	4.9	6.1	1.3	0.84	16.5	21.2	2.7	3.7
	Mg^{2+}	24.31	1.5	3	0.56	1.4	2.4	1.0	0.8	4.6	3.8	1.0	0.56	4.9	5.3	1.0	3.4
	K^{+}	39.10	0.71	1.1	0.5	0.77	0.96	0.9	0.7	1.7	2.1	0.68	0.7	4.6	3.3	1.1	1.3
	Na^{+}	22.99	3.2	14.4	2.5	3.6	2.5	3.3	2.6	5.7	24.1	3.5	4.3	9.8	14.4	4.6	12.7
Cations (meq/L)			**1.15**	**1.17**	**0.22**	**0.65**	**0.45**	**0.43**	**0.29**	**0.91**	**1.72**	**0.32**	**0.29**	**1.77**	**2.20**	**0.45**	**1.05**
ANIONS	HCO_3^-	61.01	30.5	13.42	3.7	18.3	0	22.0	14.6	3.7	0.0	4.9	0	22.0	18.3	0	7.32
	Cl^-	35.45	6.5	32.2	4.1	8.2	4.3	7.2	5.5	12.8	43.3	7.7	6	13.5	11	6.5	22.1
	NO_3^-	62.00	0	96	0	0	1.0	0	0	0	9.7	0	0	3.5	4.1	6.2	4.4
	SO_4^{2-}	96.06	0	0	0	0	8.1	0	0	17.7	9.3	0	0	19.5	60.5	0	5.2
Anions (meq/L)			**0.68**	**2.68**	**0.18**	**0.54**	**0.31**	**0.56**	**0.39**	**0.80**	**1.57**	**0.30**	**0.17**	**1.20**	**1.94**	**0.28**	**0.92**
CBE (%)			***25.4***	***39.4***	*10.2*	*9.7*	*19.0*	*13.6*	*16.0*	*6.9*	*4.5*	*3.1*	***26.8***	*19.0*	*6.5*	***22.2***	*6.4*

	ION	M.W. (g/mol)	*Subtite D Regulated Wells*							*On-site Non-Regulated Wells*						
			Concentration (mg/L)													
			TW-24A	TW-25	TW-25A	TW-27	TW-28	TW-29	TW-30	TW-02	TW-03A	TW-05B	TW-06B	TW-09	TW-14B	TW-16A
CATIONS	Ca^{2+}	40.08	21.5	1.8	5.7	0.8	6.2	2.3	4.7	0.4	0.87	0.5	0.58	0.47	0.53	1
	Mg^{2+}	24.31	3.9	0.9	2	0.4	3	1.2	1.8	0.6	0.4	0.2	0.3	0.24	0.25	0.38
	K^{+}	39.10	3.4	0.61	0.98	0.45	1.1	0.74	1.4	0.65	0.53	0.4	0.5	0.44	0.4	0.49
	Na^{+}	22.99	3.6	2.8	4.1	2.2	26.2	4.5	11.5	2	14.7	1.29	1.7	0.93	1	1.4
Cations (meq/L)			**1.64**	**0.30**	**0.65**	**0.18**	**1.72**	**0.43**	**0.92**	**0.17**	**0.73**	**0.11**	**0.14**	**0.09**	**0.10**	**0.15**
ANIONS	HCO_3^-	61.01	2.4	0	7.3	12.2	0.61	0	1.2	4.9	0	0	0	12.2	0	1.22
	Cl^-	35.45	4.7	6.2	9.4	3.8	51.6	9.1	22.1	2.8	40.6	1.5	3	1.4	1.3	2.4
	NO_3^-	62.00	7.1	1.2	3.6	0.24	0.33	2.9	10.2	0	0	1.0	1.6	0	1.5	0.8
	SO_4^{2-}	96.06	17.9	0	0	0	0	0	0	0	0	0	0	0	0	0
Anions (meq/L)			**0.66**	**0.19**	**0.44**	**0.31**	**1.47**	**0.30**	**0.81**	**0.16**	**1.15**	**0.06**	**0.11**	**0.24**	**0.06**	**0.10**
CBE (%)			***42.6***	***21.7***	*19.1*	***26.8***	*7.9*	*17.0*	*6.4*	*2.9*	***22.3***	***29.3***	*11.1*	***43.2***	***24.7***	***21.2***

TABLE D2
MLFRRF DATA EVALUATION - FALL 2021
Cation/Anion Balance Worksheet

	ION	M.W. (g/mol)	*COMAR Regulated Wells* Concentration (mg/L)														
			TW-07	TW-07A	TW-08	TW-08A	TW-09B	TW-09C	TW-15	TW-15B	TW-16	TW-17	TW-17A	TW-21	TW-22	TW-22A	TW-22B
CATIONS	Ca^{2+}	40.08	5.7	2.7	7	5.1	4.6	4.6	0.8	1.6	13.1	6	0.8	6.1	2.3	5	9.5
	Mg^{2+}	24.31	0.91	1.4	4.7	3.8	3.1	4	0.5	2.1	10.8	1.9	0.4	2.2	2	4.3	2.9
	K^{+}	39.10	1.6	0.6	1.3	1.6	1.6	1.9	0.81	1.1	6.9	1.7	0.5	1.8	1.2	1.6	3
	Na^{+}	22.99	4.9	1.7	27.5	16.5	14	16	1.9	8.4	21.5	13.5	1.4	14.4	13	38.9	9.3
Cations (meq/L)			0.61	0.34	1.97	1.33	1.13	1.30	0.18	0.65	2.65	1.09	0.15	1.16	0.88	2.34	1.19
ANIONS	HCO_3^-	61.01	12.2	0	22.0	0	7.3	3.7	9.0	0	0	3.7	2.44	0	1.22	0	13.4
	Cl^-	35.45	12.3	3.4	47.3	46.1	23.7	23.3	3.5	14.7	25.7	5.7	2.9	23	21.5	82.2	9.3
	NO_3^-	62.00	0.58	1.0	0.33	3.8	10.6	15.5	0	1.2	0	0	1.1	6.6	5.3	6.2	10.6
	SO_4^{2-}	96.06	0	8.3	0	12.9	0	10.1	0	0	99.1	36.8	0	26	0	11.9	21.3
Anions (meq/L)			0.56	0.29	1.70	1.63	0.96	1.18	0.25	0.43	2.79	0.99	0.14	1.30	0.71	2.67	1.10
CBE (%)			*4.9*	*8.7*	*7.2*	*10.3*	*8.4*	*5.0*	*14.5*	*19.6*	*2.5*	*4.8*	*1.9*	*5.7*	*10.3*	*6.6*	*4.2*

	ION	M.W. (g/mol)	*Surface Water* Concentration (mg/L)		
			SW-1	SW-2	SW-3
CATIONS	Ca^{2+}	40.08	13.1	32.1	32.4
	Mg^{2+}	24.31	3.2	7.9	6.3
	K^{+}	39.10	2.2	4.9	4
	Na^{+}	22.99	48.4	17.8	45.8
Cations (meq/L)			3.08	3.15	4.23
ANIONS	HCO_3^-	61.01	4.88	12.2	67.1
	Cl^-	35.45	74.7	27.8	77.1
	NO_3^-	62.00	8.9	2.7	3.9
	SO_4^{2-}	96.06	12	10.5	9.8
Anions (meq/L)			2.58	1.25	3.54
CBE (%)			*8.8*	***43.3***	*8.9*

APPENDIX E
Laboratory Analytical Data Packages

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

15 October 2021

Steve Brown
Environmental Monitoring and Assessment
207 East Sixth Street
Lititz, PA 17543
RE: MILLERSVILLE LANDFILL

Enclosed are the results of analyses for samples received by the laboratory on 10/06/21 16:00.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TW-1		1100618-01	Nonpotable Water	10/06/21 14:00	10/06/21 16:00
TW-2		1100618-02	Nonpotable Water	10/06/21 11:25	10/06/21 16:00
TW-2A		1100618-03	Nonpotable Water	10/06/21 10:50	10/06/21 16:00
TW-3		1100618-04	Nonpotable Water	10/06/21 12:15	10/06/21 16:00
TW-3A		1100618-05	Nonpotable Water	10/06/21 12:50	10/06/21 16:00
TW-4		1100618-06	Nonpotable Water	10/06/21 08:45	10/06/21 16:00
TW-4B		1100618-07	Nonpotable Water	10/06/21 09:20	10/06/21 16:00
TW-5		1100618-08	Nonpotable Water	10/05/21 15:30	10/06/21 16:00
TW-5A		1100618-09	Nonpotable Water	10/05/21 16:00	10/06/21 16:00
TW-5B		1100618-10	Nonpotable Water	10/05/21 15:00	10/06/21 16:00
TW-6		1100618-11	Nonpotable Water	10/04/21 13:10	10/06/21 16:00
TW-6B		1100618-12	Nonpotable Water	10/04/21 12:30	10/06/21 16:00
TW-7		1100618-13	Nonpotable Water	10/04/21 15:00	10/06/21 16:00
TW-7A		1100618-14	Nonpotable Water	10/04/21 13:50	10/06/21 16:00
TW-8		1100618-15	Nonpotable Water	10/05/21 10:00	10/06/21 16:00
TW-8A		1100618-16	Nonpotable Water	10/05/21 10:30	10/06/21 16:00
TW-9		1100618-17	Nonpotable Water	10/05/21 12:50	10/06/21 16:00
TW-9B		1100618-18	Nonpotable Water	10/05/21 11:30	10/06/21 16:00
TW-9C		1100618-19	Nonpotable Water	10/05/21 12:10	10/06/21 16:00
TW-10A		1100618-20	Nonpotable Water	10/05/21 14:00	10/06/21 16:00
TRIP BLANK		1100618-21	Nonpotable Water	10/06/21 00:00	10/06/21 16:00

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-1

1100618-01 (Nonpotable Water)
Sample Date: 10/06/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 19:41	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 19:41	AS
Benzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 19:41	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 19:41	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 19:41	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 19:41	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 19:41	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 19:41	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
Dichlorodifluoromethane	**13.3**		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
1,1-Dichloroethane	**2.2**		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
cis-1,2-Dichloroethene	**0.5**	J	ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
Dichlorofluoromethane	**3.5**		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
2-Hexanone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 19:41	AS

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Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-1

1100618-01 (Nonpotable Water)
Sample Date: 10/06/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 19:41	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 19:41	AS
Styrene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
Tetrachloroethene	**0.5**	J	ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
Toluene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
Trichloroethene	**0.7**	J	ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 19:41	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 19:41	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 19:41	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 19:41	AS

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*121 %*	*10/07/21*	*10/07/21 19:41*
Surrogate: Toluene-d8	*75-120*	*105 %*	*10/07/21*	*10/07/21 19:41*
Surrogate: 4-Bromofluorobenzene	*75-120*	*103 %*	*10/07/21*	*10/07/21 19:41*

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

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Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-2

1100618-02 (Nonpotable Water)
Sample Date: 10/06/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 20:06	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 20:06	AS
Benzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 20:06	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 20:06	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 20:06	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 20:06	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 20:06	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 20:06	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-2

1100618-02 (Nonpotable Water)
Sample Date: 10/06/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 20:06	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 20:06	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 20:06	AS
Styrene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
Toluene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 20:06	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 20:06	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 20:06	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:06	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*125 %*		*10/07/21*	*10/07/21 20:06*		
Surrogate: Toluene-d8			*75-120*	*104 %*		*10/07/21*	*10/07/21 20:06*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*104 %*		*10/07/21*	*10/07/21 20:06*		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-2A

1100618-03 (Nonpotable Water)
Sample Date: 10/06/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 20:30	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 20:30	AS
Benzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 20:30	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 20:30	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 20:30	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 20:30	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 20:30	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 20:30	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-2A

1100618-03 (Nonpotable Water)
Sample Date: 10/06/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 20:30	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 20:30	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 20:30	AS
Styrene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
Toluene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 20:30	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 20:30	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 20:30	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:30	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*122 %*		*10/07/21*	*10/07/21 20:30*		
Surrogate: Toluene-d8			*75-120*	*104 %*		*10/07/21*	*10/07/21 20:30*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*103 %*		*10/07/21*	*10/07/21 20:30*		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-3

1100618-04 (Nonpotable Water)
Sample Date: 10/06/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 20:55	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 20:55	AS
Benzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 20:55	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 20:55	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 20:55	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 20:55	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 20:55	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 20:55	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-3

1100618-04 (Nonpotable Water)
Sample Date: 10/06/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 20:55	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 20:55	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 20:55	AS
Styrene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
Toluene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 20:55	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 20:55	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 20:55	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 20:55	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*125 %*		*10/07/21*	*10/07/21 20:55*		
Surrogate: Toluene-d8			*75-120*	*104 %*		*10/07/21*	*10/07/21 20:55*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*103 %*		*10/07/21*	*10/07/21 20:55*		

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-3A

1100618-05 (Nonpotable Water)
Sample Date: 10/06/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 21:19	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 21:19	AS
Benzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 21:19	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 21:19	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 21:19	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 21:19	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 21:19	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 21:19	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-3A

1100618-05 (Nonpotable Water)
Sample Date: 10/06/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 21:19	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 21:19	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 21:19	AS
Styrene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
Toluene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 21:19	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 21:19	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 21:19	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:19	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*124 %*		*10/07/21*	*10/07/21 21:19*		
Surrogate: Toluene-d8			*75-120*	*104 %*		*10/07/21*	*10/07/21 21:19*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*102 %*		*10/07/21*	*10/07/21 21:19*		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-4

1100618-06 (Nonpotable Water)
Sample Date: 10/06/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 21:44	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 21:44	AS
Benzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 21:44	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 21:44	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 21:44	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 21:44	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 21:44	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 21:44	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
Dichlorodifluoromethane	**2.6**		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
1,1-Dichloroethane	**3.0**		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
cis-1,2-Dichloroethene	**0.5**	J	ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
Dichlorofluoromethane	**4.4**		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
2-Hexanone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 21:44	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-4

1100618-06 (Nonpotable Water)
Sample Date: 10/06/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 21:44	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 21:44	AS
Styrene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
Toluene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 21:44	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 21:44	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 21:44	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 21:44	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*124 %*		*10/07/21*	*10/07/21 21:44*		
Surrogate: Toluene-d8			*75-120*	*104 %*		*10/07/21*	*10/07/21 21:44*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*103 %*		*10/07/21*	*10/07/21 21:44*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-4B

1100618-07 (Nonpotable Water)
Sample Date: 10/06/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 22:08	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 22:08	AS
Benzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 22:08	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 22:08	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 22:08	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 22:08	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 22:08	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 22:08	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-4B

1100618-07 (Nonpotable Water)
Sample Date: 10/06/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 22:08	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 22:08	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 22:08	AS
Styrene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
Toluene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 22:08	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 22:08	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 22:08	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:08	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*123 %*		*10/07/21*	*10/07/21 22:08*		
Surrogate: Toluene-d8			*75-120*	*105 %*		*10/07/21*	*10/07/21 22:08*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*103 %*		*10/07/21*	*10/07/21 22:08*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-5

1100618-08 (Nonpotable Water)
Sample Date: 10/05/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 22:32	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 22:32	AS
Benzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 22:32	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 22:32	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 22:32	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 22:32	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 22:32	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 22:32	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
Dichlorodifluoromethane	**4.0**		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
1,1-Dichloroethane	**2.6**		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
cis-1,2-Dichloroethene	**1.0**	J	ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
Dichlorofluoromethane	**4.1**		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
2-Hexanone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 22:32	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-5

1100618-08 (Nonpotable Water)
Sample Date: 10/05/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 22:32	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 22:32	AS
Styrene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
Toluene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 22:32	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 22:32	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 22:32	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:32	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*124 %*		*10/07/21*	*10/07/21 22:32*		
Surrogate: Toluene-d8			*75-120*	*104 %*		*10/07/21*	*10/07/21 22:32*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*103 %*		*10/07/21*	*10/07/21 22:32*		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-5A

1100618-09 (Nonpotable Water)
Sample Date: 10/05/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 22:57	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 22:57	AS
Benzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 22:57	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 22:57	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 22:57	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 22:57	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 22:57	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 22:57	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
1,1-Dichloroethane	**1.0**		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
Dichlorofluoromethane	**0.9**	J	ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-5A

1100618-09 (Nonpotable Water)
Sample Date: 10/05/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 22:57	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 22:57	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 22:57	AS
Styrene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
Toluene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 22:57	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 22:57	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 22:57	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 22:57	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*124 %*		*10/07/21*	*10/07/21 22:57*		
Surrogate: Toluene-d8			*75-120*	*105 %*		*10/07/21*	*10/07/21 22:57*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*104 %*		*10/07/21*	*10/07/21 22:57*		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-5B

1100618-10 (Nonpotable Water)
Sample Date: 10/05/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	**6.5**		ug/L	5.0	5.0	1	10/07/21	10/07/21 23:21	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 23:21	AS
Benzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 23:21	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 23:21	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 23:21	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 23:21	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 23:21	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 23:21	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-5B

1100618-10 (Nonpotable Water)
Sample Date: 10/05/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 23:21	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 23:21	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 23:21	AS
Styrene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
Toluene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 23:21	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 23:21	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 23:21	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:21	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*124 %*		*10/07/21*	*10/07/21 23:21*		
Surrogate: Toluene-d8			*75-120*	*104 %*		*10/07/21*	*10/07/21 23:21*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*102 %*		*10/07/21*	*10/07/21 23:21*		

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Will Brewington, President

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Baltimore MD 21227
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-6

1100618-11 (Nonpotable Water)
Sample Date: 10/04/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 23:46	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 23:46	AS
Benzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 23:46	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 23:46	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 23:46	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 23:46	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 23:46	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 23:46	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
Dichlorodifluoromethane	**9.8**		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
1,1-Dichloroethane	**9.1**		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
cis-1,2-Dichloroethene	**4.6**		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
Dichlorofluoromethane	**6.8**		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
2-Hexanone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 23:46	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-6

1100618-11 (Nonpotable Water)
Sample Date: 10/04/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/07/21	10/07/21 23:46	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 23:46	AS
Styrene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
Tetrachloroethene	**1.7**		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
Toluene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
Trichloroethene	**1.4**		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 23:46	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 23:46	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/07/21	10/07/21 23:46	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/07/21	10/07/21 23:46	AS

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*125 %*	*10/07/21*	*10/07/21 23:46*
Surrogate: Toluene-d8	*75-120*	*104 %*	*10/07/21*	*10/07/21 23:46*
Surrogate: 4-Bromofluorobenzene	*75-120*	*103 %*	*10/07/21*	*10/07/21 23:46*

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-6B

1100618-12 (Nonpotable Water)
Sample Date: 10/04/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/08/21	10/08/21 00:10	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/08/21	10/08/21 00:10	AS
Benzene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/08/21	10/08/21 00:10	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/08/21	10/08/21 00:10	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/08/21	10/08/21 00:10	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/08/21	10/08/21 00:10	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/08/21	10/08/21 00:10	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/08/21	10/08/21 00:10	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-6B

1100618-12 (Nonpotable Water)
Sample Date: 10/04/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/08/21	10/08/21 00:10	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/08/21	10/08/21 00:10	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/08/21	10/08/21 00:10	AS
Styrene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
Toluene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/08/21	10/08/21 00:10	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/08/21	10/08/21 00:10	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/08/21	10/08/21 00:10	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:10	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*125 %*			*10/08/21*	*10/08/21 00:10*	
Surrogate: Toluene-d8			*75-120*	*105 %*			*10/08/21*	*10/08/21 00:10*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*103 %*			*10/08/21*	*10/08/21 00:10*	

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-7

1100618-13 (Nonpotable Water)
Sample Date: 10/04/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/08/21	10/08/21 00:35	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/08/21	10/08/21 00:35	AS
Benzene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/08/21	10/08/21 00:35	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/08/21	10/08/21 00:35	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/08/21	10/08/21 00:35	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/08/21	10/08/21 00:35	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/08/21	10/08/21 00:35	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/08/21	10/08/21 00:35	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-7

1100618-13 (Nonpotable Water)
Sample Date: 10/04/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/08/21	10/08/21 00:35	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/08/21	10/08/21 00:35	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/08/21	10/08/21 00:35	AS
Styrene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
Toluene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/08/21	10/08/21 00:35	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/08/21	10/08/21 00:35	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/08/21	10/08/21 00:35	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:35	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*125 %*			*10/08/21*	*10/08/21 00:35*	
Surrogate: Toluene-d8			*75-120*	*105 %*			*10/08/21*	*10/08/21 00:35*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*103 %*			*10/08/21*	*10/08/21 00:35*	

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-7A

1100618-14 (Nonpotable Water)
Sample Date: 10/04/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/08/21	10/08/21 00:59	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/08/21	10/08/21 00:59	AS
Benzene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/08/21	10/08/21 00:59	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/08/21	10/08/21 00:59	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/08/21	10/08/21 00:59	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/08/21	10/08/21 00:59	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/08/21	10/08/21 00:59	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/08/21	10/08/21 00:59	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-7A

1100618-14 (Nonpotable Water)
Sample Date: 10/04/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/08/21	10/08/21 00:59	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/08/21	10/08/21 00:59	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/08/21	10/08/21 00:59	AS
Styrene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
Toluene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/08/21	10/08/21 00:59	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/08/21	10/08/21 00:59	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/08/21	10/08/21 00:59	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/08/21	10/08/21 00:59	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*126 %*		*10/08/21*	*10/08/21 00:59*		
Surrogate: Toluene-d8			*75-120*	*106 %*		*10/08/21*	*10/08/21 00:59*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*104 %*		*10/08/21*	*10/08/21 00:59*		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-8

1100618-15 (Nonpotable Water)
Sample Date: 10/05/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 15:21	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 15:21	AS
Benzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 15:21	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 15:21	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 15:21	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 15:21	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 15:21	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 15:21	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-8

1100618-15 (Nonpotable Water)
Sample Date: 10/05/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 15:21	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 15:21	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 15:21	AS
Styrene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
Toluene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 15:21	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 15:21	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 15:21	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:21	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*106 %*		*10/11/21*	*10/11/21 15:21*		
Surrogate: Toluene-d8			*75-120*	*99 %*		*10/11/21*	*10/11/21 15:21*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*		*10/11/21*	*10/11/21 15:21*		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-8A

1100618-16 (Nonpotable Water)
Sample Date: 10/05/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 15:45	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 15:45	AS
Benzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 15:45	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 15:45	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 15:45	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 15:45	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 15:45	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 15:45	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-8A

1100618-16 (Nonpotable Water)
Sample Date: 10/05/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 15:45	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 15:45	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 15:45	AS
Styrene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
Toluene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 15:45	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 15:45	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 15:45	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 15:45	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*107 %*		*10/11/21*	*10/11/21 15:45*		
Surrogate: Toluene-d8			*75-120*	*100 %*		*10/11/21*	*10/11/21 15:45*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*		*10/11/21*	*10/11/21 15:45*		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-9

1100618-17 (Nonpotable Water)
Sample Date: 10/05/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 16:10	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 16:10	AS
Benzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 16:10	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 16:10	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 16:10	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 16:10	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 16:10	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 16:10	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-9

1100618-17 (Nonpotable Water)
Sample Date: 10/05/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 16:10	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 16:10	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 16:10	AS
Styrene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
Toluene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 16:10	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 16:10	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 16:10	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:10	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*106 %*		*10/11/21*		*10/11/21 16:10*	
Surrogate: Toluene-d8			*75-120*	*101 %*		*10/11/21*		*10/11/21 16:10*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*		*10/11/21*		*10/11/21 16:10*	

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-9B

1100618-18 (Nonpotable Water)
Sample Date: 10/05/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 16:35	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 16:35	AS
Benzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 16:35	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 16:35	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 16:35	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 16:35	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 16:35	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 16:35	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-9B

1100618-18 (Nonpotable Water)
Sample Date: 10/05/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 16:35	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 16:35	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 16:35	AS
Styrene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
Toluene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 16:35	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 16:35	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 16:35	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 16:35	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*107 %*		*10/11/21*		*10/11/21 16:35*	
Surrogate: Toluene-d8			*75-120*	*100 %*		*10/11/21*		*10/11/21 16:35*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*		*10/11/21*		*10/11/21 16:35*	

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-9C

1100618-19 (Nonpotable Water)
Sample Date: 10/05/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 17:00	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 17:00	AS
Benzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 17:00	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 17:00	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 17:00	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 17:00	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 17:00	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 17:00	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-9C

1100618-19 (Nonpotable Water)
Sample Date: 10/05/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 17:00	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
Methyl tert-butyl ether (MTBE)	**0.6**	J	ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 17:00	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 17:00	AS
Styrene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
Toluene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 17:00	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 17:00	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 17:00	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:00	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*107 %*		*10/11/21*	*10/11/21 17:00*		
Surrogate: Toluene-d8			*75-120*	*100 %*		*10/11/21*	*10/11/21 17:00*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*		*10/11/21*	*10/11/21 17:00*		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-10A

1100618-20 (Nonpotable Water)
Sample Date: 10/05/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 17:25	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 17:25	AS
Benzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 17:25	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 17:25	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 17:25	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 17:25	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 17:25	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 17:25	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TW-10A

1100618-20 (Nonpotable Water)
Sample Date: 10/05/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 17:25	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 17:25	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 17:25	AS
Styrene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
Toluene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 17:25	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 17:25	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 17:25	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:25	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*110 %*		*10/11/21*		*10/11/21 17:25*	
Surrogate: Toluene-d8			*75-120*	*99 %*		*10/11/21*		*10/11/21 17:25*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*		*10/11/21*		*10/11/21 17:25*	

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Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TRIP BLANK

1100618-21 (Nonpotable Water)
Sample Date: 10/06/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 17:50	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 17:50	AS
Benzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 17:50	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 17:50	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 17:50	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 17:50	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 17:50	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 17:50	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

TRIP BLANK

1100618-21 (Nonpotable Water)
Sample Date: 10/06/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 17:50	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/11/21	10/11/21 17:50	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 17:50	AS
Styrene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
Toluene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 17:50	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 17:50	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/11/21	10/11/21 17:50	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/11/21	10/11/21 17:50	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*107 %*		*10/11/21*	*10/11/21 17:50*		
Surrogate: Toluene-d8			*75-120*	*99 %*		*10/11/21*	*10/11/21 17:50*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*		*10/11/21*	*10/11/21 17:50*		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110097 - GCMS-WATER-VOLATILES										
Blank (B110097-BLK1)					Prepared & Analyzed: 10/07/21					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						

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Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110097 - GCMS-WATER-VOLATILES										
Blank (B110097-BLK1)					Prepared & Analyzed: 10/07/21					
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*60.48*			ug/L	*50.0*		*121*	*70-130*		
Surrogate: Toluene-d8	*52.33*			ug/L	*50.0*		*105*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*52.03*			ug/L	*50.0*		*104*	*75-120*		

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110097 - GCMS-WATER-VOLATILES										
LCS (B110097-BS1)					Prepared & Analyzed: 10/07/21					
Acetone	14.5		5.0	ug/L	10.0		145	50-150		
Acrylonitrile	5.9		5.0	ug/L	5.00		119	50-150		
Benzene	5.8		1.0	ug/L	5.00		115	50-150		
Bromochloromethane	5.0		1.0	ug/L	5.00		100	50-150		
Bromodichloromethane	5.4		1.0	ug/L	5.00		108	50-150		
Bromoform	3.3		1.0	ug/L	5.00		66	50-150		
Bromomethane	5.6		1.0	ug/L	5.00		112	50-150		
2-Butanone (MEK)	12.6		5.0	ug/L	10.0		126	50-150		
Carbon disulfide	6.8		1.0	ug/L	5.00		136	50-150		
Carbon tetrachloride	5.0		1.0	ug/L	5.00		100	50-150		
Chlorobenzene	5.2		1.0	ug/L	5.00		104	50-150		
Chloroethane	7.3		1.0	ug/L	5.00		146	50-150		
Chloroform	5.7		1.0	ug/L	5.00		113	50-150		
Chloromethane	7.5		1.0	ug/L	5.00		151	50-150		
Dibromochloromethane	4.3		1.0	ug/L	5.00		86	50-150		
1,2-Dibromo-3-chloropropane	4.5		1.0	ug/L	5.00		90	50-150		
1,2-Dibromoethane (EDB)	5.0		1.0	ug/L	5.00		99	50-150		
Dibromomethane	5.6		1.0	ug/L	5.00		112	50-150		
1,2-Dichlorobenzene	5.1		1.0	ug/L	5.00		102	50-150		
1,4-Dichlorobenzene	5.5		1.0	ug/L	5.00		110	50-150		
1,1-Dichloroethane	6.2		1.0	ug/L	5.00		123	50-150		
1,2-Dichloroethane	5.9		1.0	ug/L	5.00		118	50-150		
1,1-Dichloroethene	5.7		1.0	ug/L	5.00		115	50-150		
cis-1,2-Dichloroethene	5.4		1.0	ug/L	5.00		107	50-150		
trans-1,2-Dichloroethene	5.3		1.0	ug/L	5.00		107	50-150		
1,2-Dichloropropane	5.7		1.0	ug/L	5.00		115	50-150		
1,3-Dichloropropane	5.4		1.0	ug/L	5.00		107	50-150		
2,2-Dichloropropane	5.0		1.0	ug/L	5.00		101	50-150		
1,1-Dichloropropene	5.6		1.0	ug/L	5.00		111	50-150		
cis-1,3-Dichloropropene	5.0		1.0	ug/L	5.00		100	50-150		
trans-1,3-Dichloropropene	4.9		1.0	ug/L	5.00		98	50-150		

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Project Manager: Steve Brown

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110097 - GCMS-WATER-VOLATILES										
LCS (B110097-BS1)					Prepared & Analyzed: 10/07/21					
Ethylbenzene	5.4		1.0	ug/L	5.00		109	50-150		
2-Hexanone	11.3		5.0	ug/L	10.0		113	50-150		
Methyl tert-butyl ether (MTBE)	5.9		1.0	ug/L	5.00		118	50-150		
4-Methyl-2-pentanone	11.4		5.0	ug/L	10.0		114	50-150		
Methylene chloride	6.6		1.0	ug/L	5.00		131	0-200		
Methyl methacrylate	5.6		5.0	ug/L	5.00		111	50-150		
Styrene	4.9		1.0	ug/L	5.00		99	50-150		
1,1,1,2-Tetrachloroethane	4.1		1.0	ug/L	5.00		82	50-150		
1,1,2,2-Tetrachloroethane	5.1		1.0	ug/L	5.00		101	50-150		
Tetrachloroethene	4.4		1.0	ug/L	5.00		88	50-150		
Toluene	5.2		1.0	ug/L	5.00		104	50-150		
1,1,1-Trichloroethane	5.2		1.0	ug/L	5.00		105	50-150		
1,1,2-Trichloroethane	4.9		1.0	ug/L	5.00		99	50-150		
Trichloroethene	4.9		1.0	ug/L	5.00		97	50-150		
Trichlorofluoromethane (Freon 11)	6.3		1.0	ug/L	5.00		125	50-150		
1,2,3-Trichloropropane	5.9		1.0	ug/L	5.00		117	50-150		
Vinyl acetate	3.4		1.0	ug/L	5.00		67	50-150		
Vinyl chloride	8.0		1.0	ug/L	5.00		160	50-150		
o-Xylene	5.0		1.0	ug/L	5.00		100	50-150		
m- & p-Xylenes	10.1		1.0	ug/L	10.0		101	50-150		
Surrogate: 1,2-Dichloroethane-d4	*59.25*			ug/L	*50.0*		*119*	*70-130*		
Surrogate: Toluene-d8	*51.90*			ug/L	*50.0*		*104*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*51.97*			ug/L	*50.0*		*104*	*75-120*		
Duplicate (B110097-DUP1)			**Source: 1100618-01**		Prepared & Analyzed: 10/08/21					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20

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Project Manager: Steve Brown

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110097 - GCMS-WATER-VOLATILES										
Duplicate (B110097-DUP1)		**Source: 1100618-01**		Prepared & Analyzed: 10/08/21						
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	2.3		1.0	ug/L		2.2			5	20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	0.5	J	1.0	ug/L		0.5			2	20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110097 - GCMS-WATER-VOLATILES										
Duplicate (B110097-DUP1)		**Source: 1100618-01**		Prepared & Analyzed: 10/08/21						
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	0.5	J	1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	0.5	J	1.0	ug/L		0.5			2	20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	0.7	J	1.0	ug/L		0.7			1	20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*63.86*			ug/L	*50.0*		*128*	*70-130*		
Surrogate: Toluene-d8	*52.77*			ug/L	*50.0*		*106*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*51.65*			ug/L	*50.0*		*103*	*75-120*		
Matrix Spike (B110097-MS1)		**Source: 1100615-01**		Prepared & Analyzed: 10/08/21						
Acetone	14.5		5.0	ug/L	10.0	ND	145	60-120		
Acrylonitrile	13.4		5.0	ug/L	10.0	ND	134	0-200		
Benzene	12.5		1.0	ug/L	10.0	ND	125	60-120		
Bromochloromethane	9.9		1.0	ug/L	10.0	ND	99	60-120		
Bromodichloromethane	11.6		1.0	ug/L	10.0	ND	116	60-120		
Bromoform	7.2		1.0	ug/L	10.0	ND	72	60-120		
Bromomethane	12.2		1.0	ug/L	10.0	ND	122	60-120		
2-Butanone (MEK)	13.5		5.0	ug/L	10.0	ND	135	60-120		

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110097 - GCMS-WATER-VOLATILES										
Matrix Spike (B110097-MS1)		**Source: 1100615-01**		Prepared & Analyzed: 10/08/21						
Carbon disulfide	13.3		1.0	ug/L	10.0	ND	133	60-120		
Carbon tetrachloride	10.5		1.0	ug/L	10.0	ND	105	60-120		
Chlorobenzene	9.7		1.0	ug/L	10.0	ND	97	60-120		
Chloroethane	16.4		1.0	ug/L	10.0	ND	164	60-120		
Chloroform	12.0		1.0	ug/L	10.0	ND	120	60-120		
Chloromethane	17.7		1.0	ug/L	10.0	ND	177	60-120		
Dibromochloromethane	8.9		1.0	ug/L	10.0	ND	89	60-120		
1,2-Dibromo-3-chloropropane	8.7		1.0	ug/L	10.0	ND	87	60-120		
1,2-Dibromoethane (EDB)	9.7		1.0	ug/L	10.0	ND	97	60-120		
Dibromomethane	11.2		1.0	ug/L	10.0	ND	112	60-120		
1,2-Dichlorobenzene	9.0		1.0	ug/L	10.0	ND	90	60-120		
1,4-Dichlorobenzene	8.7		1.0	ug/L	10.0	ND	87	60-120		
1,1-Dichloroethane	13.6		1.0	ug/L	10.0	ND	136	60-120		
1,2-Dichloroethane	12.6		1.0	ug/L	10.0	ND	126	60-120		
1,1-Dichloroethene	11.7		1.0	ug/L	10.0	ND	117	60-120		
cis-1,2-Dichloroethene	11.0		1.0	ug/L	10.0	ND	110	60-120		
trans-1,2-Dichloroethene	11.0		1.0	ug/L	10.0	ND	110	60-120		
1,2-Dichloropropane	12.8		1.0	ug/L	10.0	ND	128	60-120		
1,3-Dichloropropane	11.3		1.0	ug/L	10.0	ND	113	60-120		
2,2-Dichloropropane	9.1		1.0	ug/L	10.0	ND	91	60-120		
1,1-Dichloropropene	11.2		1.0	ug/L	10.0	ND	112	60-120		
cis-1,3-Dichloropropene	10.3		1.0	ug/L	10.0	ND	103	60-120		
trans-1,3-Dichloropropene	9.5		1.0	ug/L	10.0	ND	95	60-120		
Ethylbenzene	10.3		1.0	ug/L	10.0	ND	103	60-120		
2-Hexanone	10.6		5.0	ug/L	10.0	ND	106	60-120		
Methyl tert-butyl ether (MTBE)	11.0		1.0	ug/L	10.0	ND	110	60-120		
4-Methyl-2-pentanone	11.8		5.0	ug/L	10.0	ND	118	60-120		
Methylene chloride	12.3		1.0	ug/L	10.0	ND	123	60-120		
Methyl methacrylate	11.2		5.0	ug/L	10.0	ND	112	60-120		
Styrene	9.1		1.0	ug/L	10.0	ND	91	60-120		
1,1,1,2-Tetrachloroethane	8.7		1.0	ug/L	10.0	ND	87	60-120		

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110097 - GCMS-WATER-VOLATILES										
Matrix Spike (B110097-MS1)		**Source: 1100615-01**		Prepared & Analyzed: 10/08/21						
1,1,2,2-Tetrachloroethane	10.9		1.0	ug/L	10.0	ND	109	60-120		
Tetrachloroethene	6.9		1.0	ug/L	10.0	ND	69	60-120		
Toluene	10.4		1.0	ug/L	10.0	ND	104	60-120		
1,1,1-Trichloroethane	11.6		1.0	ug/L	10.0	ND	116	60-120		
1,1,2-Trichloroethane	10.1		1.0	ug/L	10.0	ND	101	60-120		
Trichloroethene	9.2		1.0	ug/L	10.0	ND	92	60-120		
Trichlorofluoromethane (Freon 11)	13.3		1.0	ug/L	10.0	ND	133	60-120		
1,2,3-Trichloropropane	12.5		1.0	ug/L	10.0	ND	125	60-120		
Vinyl acetate	7.7		1.0	ug/L	10.0	ND	77	60-120		
Vinyl chloride	16.9		1.0	ug/L	10.0	ND	169	60-120		
o-Xylene	9.1		1.0	ug/L	10.0	ND	91	60-120		
m- & p-Xylenes	18.1		1.0	ug/L	20.0	ND	91	60-120		
Surrogate: 1,2-Dichloroethane-d4	*62.44*			ug/L	*50.0*		*125*	*70-130*		
Surrogate: Toluene-d8	*53.15*			ug/L	*50.0*		*106*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*53.01*			ug/L	*50.0*		*106*	*75-120*		
Batch B110150 - GCMS-WATER-VOLATILES										
Blank (B110150-BLK1)				Prepared & Analyzed: 10/11/21						
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						

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Project Manager: Steve Brown

Reported:
10/15/21 11:53

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110150 - GCMS-WATER-VOLATILES										
Blank (B110150-BLK1)					Prepared & Analyzed: 10/11/21					
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110150 - GCMS-WATER-VOLATILES										
Blank (B110150-BLK1)					Prepared & Analyzed: 10/11/21					
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*52.11*			ug/L	*50.0*		*104*	*70-130*		
Surrogate: Toluene-d8	*49.65*			ug/L	*50.0*		*99*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.67*			ug/L	*50.0*		*99*	*75-120*		
LCS (B110150-BS1)					Prepared & Analyzed: 10/11/21					
Acetone	10.9		5.0	ug/L	10.0		109	50-150		
Acrylonitrile	5.9		5.0	ug/L	5.00		118	50-150		
Benzene	4.8		1.0	ug/L	5.00		97	50-150		
Bromochloromethane	5.4		1.0	ug/L	5.00		108	50-150		
Bromodichloromethane	4.8		1.0	ug/L	5.00		96	50-150		
Bromoform	4.8		1.0	ug/L	5.00		96	50-150		
Bromomethane	5.4		1.0	ug/L	5.00		108	50-150		
2-Butanone (MEK)	9.1		5.0	ug/L	10.0		91	50-150		
Carbon disulfide	5.4		1.0	ug/L	5.00		109	50-150		
Carbon tetrachloride	5.0		1.0	ug/L	5.00		100	50-150		
Chlorobenzene	5.1		1.0	ug/L	5.00		101	50-150		
Chloroethane	5.5		1.0	ug/L	5.00		110	50-150		
Chloroform	4.8		1.0	ug/L	5.00		95	50-150		
Chloromethane	5.0		1.0	ug/L	5.00		99	50-150		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110150 - GCMS-WATER-VOLATILES										
LCS (B110150-BS1)					Prepared & Analyzed: 10/11/21					
Dibromochloromethane	4.5		1.0	ug/L	5.00		90	50-150		
1,2-Dibromo-3-chloropropane	5.4		1.0	ug/L	5.00		108	50-150		
1,2-Dibromoethane (EDB)	4.7		1.0	ug/L	5.00		94	50-150		
Dibromomethane	5.0		1.0	ug/L	5.00		100	50-150		
1,2-Dichlorobenzene	5.2		1.0	ug/L	5.00		104	50-150		
1,4-Dichlorobenzene	5.5		1.0	ug/L	5.00		110	50-150		
1,1-Dichloroethane	4.9		1.0	ug/L	5.00		97	50-150		
1,2-Dichloroethane	4.9		1.0	ug/L	5.00		98	50-150		
1,1-Dichloroethene	5.2		1.0	ug/L	5.00		104	50-150		
cis-1,2-Dichloroethene	5.0		1.0	ug/L	5.00		100	50-150		
trans-1,2-Dichloroethene	4.8		1.0	ug/L	5.00		97	50-150		
1,2-Dichloropropane	4.8		1.0	ug/L	5.00		96	50-150		
1,3-Dichloropropane	4.6		1.0	ug/L	5.00		91	50-150		
2,2-Dichloropropane	5.3		1.0	ug/L	5.00		106	50-150		
1,1-Dichloropropene	4.8		1.0	ug/L	5.00		97	50-150		
cis-1,3-Dichloropropene	4.7		1.0	ug/L	5.00		94	50-150		
trans-1,3-Dichloropropene	4.4		1.0	ug/L	5.00		87	50-150		
Ethylbenzene	5.1		1.0	ug/L	5.00		102	50-150		
2-Hexanone	9.6		5.0	ug/L	10.0		96	50-150		
Methyl tert-butyl ether (MTBE)	5.1		1.0	ug/L	5.00		102	50-150		
4-Methyl-2-pentanone	9.1		5.0	ug/L	10.0		91	50-150		
Methylene chloride	5.4		1.0	ug/L	5.00		107	0-200		
Methyl methacrylate	4.5	J	5.0	ug/L	5.00		89	50-150		
Styrene	4.7		1.0	ug/L	5.00		94	50-150		
1,1,1,2-Tetrachloroethane	4.7		1.0	ug/L	5.00		93	50-150		
1,1,2,2-Tetrachloroethane	4.7		1.0	ug/L	5.00		93	50-150		
Tetrachloroethene	5.2		1.0	ug/L	5.00		104	50-150		
Toluene	4.8		1.0	ug/L	5.00		96	50-150		
1,1,1-Trichloroethane	4.8		1.0	ug/L	5.00		96	50-150		
1,1,2-Trichloroethane	4.7		1.0	ug/L	5.00		93	50-150		
Trichloroethene	4.9		1.0	ug/L	5.00		98	50-150		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110150 - GCMS-WATER-VOLATILES										
LCS (B110150-BS1)					Prepared & Analyzed: 10/11/21					
Trichlorofluoromethane (Freon 11)	5.2		1.0	ug/L	5.00		104	50-150		
1,2,3-Trichloropropane	4.8		1.0	ug/L	5.00		95	50-150		
Vinyl acetate	3.1		1.0	ug/L	5.00		62	50-150		
Vinyl chloride	5.4		1.0	ug/L	5.00		108	50-150		
o-Xylene	5.0		1.0	ug/L	5.00		100	50-150		
m- & p-Xylenes	10.0		1.0	ug/L	10.0		100	50-150		
Surrogate: 1,2-Dichloroethane-d4	*50.71*			ug/L	*50.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*49.65*			ug/L	*50.0*		*99*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.66*			ug/L	*50.0*		*99*	*75-120*		
Duplicate (B110150-DUP1)		**Source: 1100618-15**			Prepared & Analyzed: 10/11/21					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110150 - GCMS-WATER-VOLATILES										
Duplicate (B110150-DUP1)		**Source: 1100618-15**		Prepared & Analyzed: 10/11/21						
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	ND		1.0	ug/L		ND				20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	ND		1.0	ug/L		ND				20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	ND		1.0	ug/L		ND				20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110150 - GCMS-WATER-VOLATILES										
Duplicate (B110150-DUP1)		**Source: 1100618-15**		Prepared & Analyzed: 10/11/21						
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*55.28*			ug/L	*50.0*		*111*	*70-130*		
Surrogate: Toluene-d8	*50.27*			ug/L	*50.0*		*101*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.39*			ug/L	*50.0*		*99*	*75-120*		
Matrix Spike (B110150-MS1)		**Source: 1100618-16**		Prepared & Analyzed: 10/11/21						
Acetone	9.5		5.0	ug/L	10.0	ND	95	60-120		
Acrylonitrile	12.7		5.0	ug/L	10.0	ND	127	0-200		
Benzene	10.1		1.0	ug/L	10.0	ND	101	60-120		
Bromochloromethane	9.7		1.0	ug/L	10.0	ND	97	60-120		
Bromodichloromethane	9.6		1.0	ug/L	10.0	ND	96	60-120		
Bromoform	8.0		1.0	ug/L	10.0	ND	80	60-120		
Bromomethane	7.6		1.0	ug/L	10.0	ND	76	60-120		
2-Butanone (MEK)	8.3		5.0	ug/L	10.0	ND	83	60-120		
Carbon disulfide	10.7		1.0	ug/L	10.0	ND	107	60-120		
Carbon tetrachloride	9.9		1.0	ug/L	10.0	ND	99	60-120		
Chlorobenzene	9.2		1.0	ug/L	10.0	ND	92	60-120		
Chloroethane	11.3		1.0	ug/L	10.0	ND	113	60-120		
Chloroform	10.2		1.0	ug/L	10.0	ND	102	60-120		
Chloromethane	11.2		1.0	ug/L	10.0	ND	112	60-120		
Dibromochloromethane	8.8		1.0	ug/L	10.0	ND	88	60-120		
1,2-Dibromo-3-chloropropane	8.8		1.0	ug/L	10.0	ND	88	60-120		
1,2-Dibromoethane (EDB)	8.8		1.0	ug/L	10.0	ND	88	60-120		
Dibromomethane	9.8		1.0	ug/L	10.0	ND	98	60-120		
1,2-Dichlorobenzene	8.5		1.0	ug/L	10.0	ND	85	60-120		
1,4-Dichlorobenzene	8.1		1.0	ug/L	10.0	ND	81	60-120		
1,1-Dichloroethane	10.2		1.0	ug/L	10.0	ND	102	60-120		
1,2-Dichloroethane	9.7		1.0	ug/L	10.0	ND	97	60-120		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110150 - GCMS-WATER-VOLATILES										
Matrix Spike (B110150-MS1)		**Source: 1100618-16**		Prepared & Analyzed: 10/11/21						
1,1-Dichloroethene	10.2		1.0	ug/L	10.0	ND	102	60-120		
cis-1,2-Dichloroethene	10.0		1.0	ug/L	10.0	ND	100	60-120		
trans-1,2-Dichloroethene	9.7		1.0	ug/L	10.0	ND	97	60-120		
1,2-Dichloropropane	9.8		1.0	ug/L	10.0	ND	98	60-120		
1,3-Dichloropropane	9.3		1.0	ug/L	10.0	ND	93	60-120		
2,2-Dichloropropane	9.4		1.0	ug/L	10.0	ND	94	60-120		
1,1-Dichloropropene	9.4		1.0	ug/L	10.0	ND	94	60-120		
cis-1,3-Dichloropropene	9.0		1.0	ug/L	10.0	ND	90	60-120		
trans-1,3-Dichloropropene	8.5		1.0	ug/L	10.0	ND	85	60-120		
Ethylbenzene	9.2		1.0	ug/L	10.0	ND	92	60-120		
2-Hexanone	8.2		5.0	ug/L	10.0	ND	82	60-120		
Methyl tert-butyl ether (MTBE)	9.1		1.0	ug/L	10.0	ND	91	60-120		
4-Methyl-2-pentanone	8.2		5.0	ug/L	10.0	ND	82	60-120		
Methylene chloride	10.0		1.0	ug/L	10.0	ND	100	60-120		
Methyl methacrylate	8.4		5.0	ug/L	10.0	ND	84	60-120		
Styrene	8.4		1.0	ug/L	10.0	ND	84	60-120		
1,1,1,2-Tetrachloroethane	8.7		1.0	ug/L	10.0	ND	87	60-120		
1,1,2,2-Tetrachloroethane	8.9		1.0	ug/L	10.0	ND	89	60-120		
Tetrachloroethene	7.8		1.0	ug/L	10.0	ND	78	60-120		
Toluene	9.4		1.0	ug/L	10.0	ND	94	60-120		
1,1,1-Trichloroethane	10.0		1.0	ug/L	10.0	ND	100	60-120		
1,1,2-Trichloroethane	9.2		1.0	ug/L	10.0	ND	92	60-120		
Trichloroethene	9.0		1.0	ug/L	10.0	ND	90	60-120		
Trichlorofluoromethane (Freon 11)	10.6		1.0	ug/L	10.0	ND	106	60-120		
1,2,3-Trichloropropane	9.0		1.0	ug/L	10.0	ND	90	60-120		
Vinyl acetate	7.4		1.0	ug/L	10.0	ND	74	60-120		
Vinyl chloride	11.2		1.0	ug/L	10.0	ND	112	60-120		
o-Xylene	8.8		1.0	ug/L	10.0	ND	88	60-120		
m- & p-Xylenes	17.5		1.0	ug/L	20.0	ND	87	60-120		
Surrogate: 1,2-Dichloroethane-d4	*53.73*			ug/L	*50.0*		*107*	*70-130*		
Surrogate: Toluene-d8	*51.01*			ug/L	*50.0*		*102*	*75-120*		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110150 - GCMS-WATER-VOLATILES										
Matrix Spike (B110150-MS1)		**Source: 1100618-16**		Prepared & Analyzed: 10/11/21						
Surrogate: 4-Bromofluorobenzene	*50.02*			ug/L	*50.0*		*100*	*75-120*		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/15/21 11:53

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

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Will Brewington, President

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MD SPECTRAL
Project	MLF- FALL 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260 (1)											
1	TW-1		10.6.21	1400	✓		GW	✓								1100	618		-01
2	TW-2		↓	1125	↓		↓	↓											-02
3	TW-2A			1050															-03
4	TW-3			1215															-04
5	TW-3A			1250															-05
6	TW-4			845															-06
7	TW-4B		↓	920															-07
8	TW-5		10-5-21	1530															-08
9	TW-5A		↓	1600															-09
10	TW-5B		↓	1500															-10
11	TW-6		10.4.21	1310															-11
12	TW-6B		10.4.21	1230	↓		↓	↓											-12

	Signature	Date	Time	Comments
Relinquished by	AABrown	10.6.21	1600	(1) APPENDIX I LIST OF 47 VOCS, MTBE,
Received by	[signature]	10.6.21	1600	2 FREONS (DCDFM + DCFM)
Relinquished by				
Received by				
Relinquished by				
Received by				STANDARD REPORT

Cooler Temp on Arrival: 6.0 Deg. C

Rev. Aug. 2018

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MD SPECTRAL
Project	MLF- FALL 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260 (1)											
1	TW-7	3	10.4.21	1500	✓		GW	✓								11	00618		-13
2	TW-7A		10-4.21	1350															-14
3	TW-8		10.5.21	1000															-15
4	TW-8A			1030															-16
5	TW-9			1250															-17
6	TW-9B			1130															-18
7	TW-9C			1210															19
8	TW-10A			1400			✓												-20
9	TRIP BLANK	2	10-6-21	—	✓		QA												-21
10																			
11																			
12																			

	Signature	Date	Time	Comments
Relinquished by	DA Brown	10.6.21	1600	(1) APPENDIX I LIST OF 47 VOCs, MTBE,
Received by	[signature]	10.6.21	1600	2 FREONS (DCDFM + DCFM)
Relinquished by				
Received by				
Relinquished by				
Received by				STANDARD REPORT

Cooler Temp on Arrival: 6.0 Deg. C

Rev. Aug. 2018

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

18 October 2021

Steve Brown
Environmental Monitoring and Assessment
207 East Sixth Street
Lititz, PA 17543
RE: MILLERSVILLE LANDFILL

Enclosed are the results of analyses for samples received by the laboratory on 10/07/21 15:45.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TW-14		1100727-01	Nonpotable Water	10/07/21 10:00	10/07/21 15:45
TW-14A		1100727-02	Nonpotable Water	10/07/21 09:20	10/07/21 15:45
TW-14B		1100727-03	Nonpotable Water	10/07/21 08:50	10/07/21 15:45
TW-15		1100727-04	Nonpotable Water	10/07/21 10:50	10/07/21 15:45
TW-15B		1100727-05	Nonpotable Water	10/07/21 11:30	10/07/21 15:45
TW-16		1100727-06	Nonpotable Water	10/07/21 12:55	10/07/21 15:45
TW-16A		1100727-07	Nonpotable Water	10/07/21 12:20	10/07/21 15:45
TW-17		1100727-08	Nonpotable Water	10/07/21 13:35	10/07/21 15:45
TW-17A		1100727-09	Nonpotable Water	10/07/21 14:10	10/07/21 15:45
TW-19		1100727-10	Nonpotable Water	10/07/21 14:50	10/07/21 15:45
Trip Blank		1100727-11	Nonpotable Water	10/07/21 00:00	10/07/21 15:45

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Will Brewington, President

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410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

TW-14

1100727-01 (Nonpotable Water)
Sample Date: 10/07/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 16:18	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 16:18	AS
Benzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 16:18	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 16:18	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 16:18	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 16:18	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 16:18	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 16:18	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
Dichlorodifluoromethane	**6.5**		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
1,1-Dichloroethane	**3.5**		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
cis-1,2-Dichloroethene	**1.0**	J	ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
Dichlorofluoromethane	**4.4**		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
2-Hexanone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 16:18	AS

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Will Brewington, President

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410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

TW-14

1100727-01 (Nonpotable Water)
Sample Date: 10/07/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 16:18	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 16:18	AS
Styrene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
Tetrachloroethene	**4.2**		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
Toluene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
Trichloroethene	**1.0**		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 16:18	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 16:18	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 16:18	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:18	AS

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*114 %*	*10/13/21*	*10/13/21 16:18*
Surrogate: Toluene-d8	*75-120*	*103 %*	*10/13/21*	*10/13/21 16:18*
Surrogate: 4-Bromofluorobenzene	*75-120*	*99 %*	*10/13/21*	*10/13/21 16:18*

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410-247-7600
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

TW-14A

1100727-02 (Nonpotable Water)
Sample Date: 10/07/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 16:43	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 16:43	AS
Benzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 16:43	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 16:43	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 16:43	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 16:43	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 16:43	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 16:43	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
1,1-Dichloroethane	**1.0**		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
Dichlorofluoromethane	**0.8**	J	ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS

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Will Brewington, President

1500 Caton Center Dr Suite G
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410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

TW-14A

1100727-02 (Nonpotable Water)
Sample Date: 10/07/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 16:43	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 16:43	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 16:43	AS
Styrene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
Toluene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 16:43	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 16:43	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 16:43	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 16:43	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*115 %*		*10/13/21*	*10/13/21 16:43*		
Surrogate: Toluene-d8			*75-120*	*102 %*		*10/13/21*	*10/13/21 16:43*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*		*10/13/21*	*10/13/21 16:43*		

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Will Brewington, President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

TW-14B

1100727-03 (Nonpotable Water)
Sample Date: 10/07/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 17:08	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 17:08	AS
Benzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 17:08	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 17:08	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 17:08	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 17:08	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 17:08	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 17:08	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

TW-14B

1100727-03 (Nonpotable Water)
Sample Date: 10/07/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 17:08	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 17:08	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 17:08	AS
Styrene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
Toluene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 17:08	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 17:08	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 17:08	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:08	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*114 %*		*10/13/21*	*10/13/21 17:08*		
Surrogate: Toluene-d8			*75-120*	*103 %*		*10/13/21*	*10/13/21 17:08*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*		*10/13/21*	*10/13/21 17:08*		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

TW-15

1100727-04 (Nonpotable Water)
Sample Date: 10/07/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 17:33	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 17:33	AS
Benzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 17:33	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 17:33	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 17:33	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 17:33	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 17:33	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 17:33	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

TW-15

1100727-04 (Nonpotable Water)
Sample Date: 10/07/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 17:33	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 17:33	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 17:33	AS
Styrene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
Toluene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 17:33	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 17:33	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 17:33	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:33	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*115 %*		*10/13/21*	*10/13/21 17:33*		
Surrogate: Toluene-d8			*75-120*	*103 %*		*10/13/21*	*10/13/21 17:33*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*		*10/13/21*	*10/13/21 17:33*		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

TW-15B

1100727-05 (Nonpotable Water)
Sample Date: 10/07/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 17:58	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 17:58	AS
Benzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 17:58	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 17:58	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 17:58	AS
Chloroform	**0.8**	J	ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 17:58	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 17:58	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 17:58	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
Dichlorodifluoromethane	**2.1**		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
1,1-Dichloroethane	**1.0**	J	ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
2-Hexanone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 17:58	AS

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

TW-15B

1100727-05 (Nonpotable Water)
Sample Date: 10/07/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 17:58	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 17:58	AS
Styrene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
Tetrachloroethene	**0.8**	J	ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
Toluene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 17:58	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 17:58	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 17:58	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 17:58	AS

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*116 %*	*10/13/21*	*10/13/21 17:58*
Surrogate: Toluene-d8	*75-120*	*103 %*	*10/13/21*	*10/13/21 17:58*
Surrogate: 4-Bromofluorobenzene	*75-120*	*101 %*	*10/13/21*	*10/13/21 17:58*

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

TW-16

1100727-06 (Nonpotable Water)
Sample Date: 10/07/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 18:23	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 18:23	AS
Benzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 18:23	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 18:23	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 18:23	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 18:23	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 18:23	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 18:23	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

TW-16

1100727-06 (Nonpotable Water)
Sample Date: 10/07/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 18:23	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 18:23	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 18:23	AS
Styrene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
Toluene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 18:23	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 18:23	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 18:23	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:23	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*117 %*		*10/13/21*	*10/13/21 18:23*		
Surrogate: Toluene-d8			*75-120*	*103 %*		*10/13/21*	*10/13/21 18:23*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*		*10/13/21*	*10/13/21 18:23*		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

TW-16A

1100727-07 (Nonpotable Water)
Sample Date: 10/07/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 18:48	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 18:48	AS
Benzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 18:48	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 18:48	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 18:48	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 18:48	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 18:48	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 18:48	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

TW-16A

1100727-07 (Nonpotable Water)
Sample Date: 10/07/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 18:48	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 18:48	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 18:48	AS
Styrene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
Toluene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 18:48	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 18:48	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 18:48	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 18:48	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*116 %*		*10/13/21*	*10/13/21 18:48*		
Surrogate: Toluene-d8			*75-120*	*103 %*		*10/13/21*	*10/13/21 18:48*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*		*10/13/21*	*10/13/21 18:48*		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

TW-17

1100727-08 (Nonpotable Water)
Sample Date: 10/07/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 19:12	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 19:12	AS
Benzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 19:12	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 19:12	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 19:12	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 19:12	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 19:12	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 19:12	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

TW-17

1100727-08 (Nonpotable Water)
Sample Date: 10/07/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 19:12	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 19:12	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 19:12	AS
Styrene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
Toluene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 19:12	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 19:12	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 19:12	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:12	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*116 %*		*10/13/21*	*10/13/21 19:12*		
Surrogate: Toluene-d8			*75-120*	*103 %*		*10/13/21*	*10/13/21 19:12*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*		*10/13/21*	*10/13/21 19:12*		

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Baltimore MD 21227
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

TW-17A

1100727-09 (Nonpotable Water)
Sample Date: 10/07/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 19:36	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 19:36	AS
Benzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 19:36	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 19:36	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 19:36	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 19:36	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 19:36	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 19:36	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

TW-17A

1100727-09 (Nonpotable Water)
Sample Date: 10/07/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 19:36	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 19:36	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 19:36	AS
Styrene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
Toluene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 19:36	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 19:36	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 19:36	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 19:36	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*115 %*		*10/13/21*	*10/13/21 19:36*		
Surrogate: Toluene-d8			*75-120*	*104 %*		*10/13/21*	*10/13/21 19:36*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*		*10/13/21*	*10/13/21 19:36*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

TW-19

1100727-10 (Nonpotable Water)
Sample Date: 10/07/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 20:01	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 20:01	AS
Benzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 20:01	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 20:01	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 20:01	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 20:01	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 20:01	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 20:01	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
1,1-Dichloroethane	**2.0**		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
cis-1,2-Dichloroethene	**0.6**	J	ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
Dichlorofluoromethane	**1.5**		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
2-Hexanone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 20:01	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

TW-19

1100727-10 (Nonpotable Water)
Sample Date: 10/07/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 20:01	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 20:01	AS
Styrene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
Tetrachloroethene	**1.0**	J	ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
Toluene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 20:01	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 20:01	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 20:01	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:01	AS

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*116 %*	*10/13/21*	*10/13/21 20:01*
Surrogate: Toluene-d8	*75-120*	*103 %*	*10/13/21*	*10/13/21 20:01*
Surrogate: 4-Bromofluorobenzene	*75-120*	*99 %*	*10/13/21*	*10/13/21 20:01*

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Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

Trip Blank

1100727-11 (Nonpotable Water)
Sample Date: 10/07/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 20:25	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 20:25	AS
Benzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 20:25	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 20:25	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 20:25	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 20:25	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 20:25	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 20:25	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

Trip Blank

1100727-11 (Nonpotable Water)
Sample Date: 10/07/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 20:25	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/13/21	10/13/21 20:25	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 20:25	AS
Styrene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
Toluene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 20:25	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 20:25	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/13/21	10/13/21 20:25	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/13/21	10/13/21 20:25	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*117 %*		*10/13/21*	*10/13/21 20:25*		
Surrogate: Toluene-d8			*75-120*	*104 %*		*10/13/21*	*10/13/21 20:25*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*		*10/13/21*	*10/13/21 20:25*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110183 - GCMS-WATER-VOLATILES										
Blank (B110183-BLK1)					Prepared & Analyzed: 10/13/21					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110183 - GCMS-WATER-VOLATILES										
Blank (B110183-BLK1)					Prepared & Analyzed: 10/13/21					
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*57.09*			ug/L	*50.0*		*114*	*70-130*		
Surrogate: Toluene-d8	*51.57*			ug/L	*50.0*		*103*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.68*			ug/L	*50.0*		*99*	*75-120*		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110183 - GCMS-WATER-VOLATILES										
LCS (B110183-BS1)					Prepared & Analyzed: 10/13/21					
Acetone	10.8		5.0	ug/L	10.0		108	50-150		
Acrylonitrile	2.9	J	5.0	ug/L	5.00		58	50-150		
Benzene	5.1		1.0	ug/L	5.00		101	50-150		
Bromochloromethane	5.5		1.0	ug/L	5.00		109	50-150		
Bromodichloromethane	5.1		1.0	ug/L	5.00		102	50-150		
Bromoform	4.4		1.0	ug/L	5.00		87	50-150		
Bromomethane	5.8		1.0	ug/L	5.00		116	50-150		
2-Butanone (MEK)	9.3		5.0	ug/L	10.0		93	50-150		
Carbon disulfide	5.8		1.0	ug/L	5.00		116	50-150		
Carbon tetrachloride	5.3		1.0	ug/L	5.00		107	50-150		
Chlorobenzene	5.1		1.0	ug/L	5.00		102	50-150		
Chloroethane	5.8		1.0	ug/L	5.00		115	50-150		
Chloroform	5.0		1.0	ug/L	5.00		100	50-150		
Chloromethane	5.6		1.0	ug/L	5.00		112	50-150		
Dibromochloromethane	4.3		1.0	ug/L	5.00		87	50-150		
1,2-Dibromo-3-chloropropane	5.0		1.0	ug/L	5.00		100	50-150		
1,2-Dibromoethane (EDB)	4.4		1.0	ug/L	5.00		87	50-150		
Dibromomethane	5.2		1.0	ug/L	5.00		104	50-150		
1,2-Dichlorobenzene	5.2		1.0	ug/L	5.00		104	50-150		
1,4-Dichlorobenzene	5.5		1.0	ug/L	5.00		109	50-150		
1,1-Dichloroethane	5.3		1.0	ug/L	5.00		106	50-150		
1,2-Dichloroethane	5.3		1.0	ug/L	5.00		105	50-150		
1,1-Dichloroethene	5.1		1.0	ug/L	5.00		102	50-150		
cis-1,2-Dichloroethene	5.5		1.0	ug/L	5.00		109	50-150		
trans-1,2-Dichloroethene	5.2		1.0	ug/L	5.00		104	50-150		
1,2-Dichloropropane	5.1		1.0	ug/L	5.00		102	50-150		
1,3-Dichloropropane	4.8		1.0	ug/L	5.00		95	50-150		
2,2-Dichloropropane	5.3		1.0	ug/L	5.00		107	50-150		
1,1-Dichloropropene	4.9		1.0	ug/L	5.00		97	50-150		
cis-1,3-Dichloropropene	4.9		1.0	ug/L	5.00		97	50-150		
trans-1,3-Dichloropropene	4.6		1.0	ug/L	5.00		92	50-150		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110183 - GCMS-WATER-VOLATILES										
LCS (B110183-BS1)					Prepared & Analyzed: 10/13/21					
Ethylbenzene	5.1		1.0	ug/L	5.00		103	50-150		
2-Hexanone	9.9		5.0	ug/L	10.0		99	50-150		
Methyl tert-butyl ether (MTBE)	5.3		1.0	ug/L	5.00		106	50-150		
4-Methyl-2-pentanone	9.5		5.0	ug/L	10.0		95	50-150		
Methylene chloride	5.8		1.0	ug/L	5.00		116	0-200		
Methyl methacrylate	4.8	J	5.0	ug/L	5.00		96	50-150		
Styrene	4.8		1.0	ug/L	5.00		96	50-150		
1,1,1,2-Tetrachloroethane	4.6		1.0	ug/L	5.00		91	50-150		
1,1,2,2-Tetrachloroethane	4.8		1.0	ug/L	5.00		96	50-150		
Tetrachloroethene	4.9		1.0	ug/L	5.00		97	50-150		
Toluene	4.9		1.0	ug/L	5.00		98	50-150		
1,1,1-Trichloroethane	5.1		1.0	ug/L	5.00		103	50-150		
1,1,2-Trichloroethane	4.7		1.0	ug/L	5.00		93	50-150		
Trichloroethene	4.8		1.0	ug/L	5.00		96	50-150		
Trichlorofluoromethane (Freon 11)	5.6		1.0	ug/L	5.00		112	50-150		
1,2,3-Trichloropropane	5.0		1.0	ug/L	5.00		100	50-150		
Vinyl acetate	3.3		1.0	ug/L	5.00		66	50-150		
Vinyl chloride	6.2		1.0	ug/L	5.00		123	50-150		
o-Xylene	4.7		1.0	ug/L	5.00		95	50-150		
m- & p-Xylenes	9.8		1.0	ug/L	10.0		98	50-150		
Surrogate: 1,2-Dichloroethane-d4	*55.75*			ug/L	*50.0*		*112*	*70-130*		
Surrogate: Toluene-d8	*50.67*			ug/L	*50.0*		*101*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.99*			ug/L	*50.0*		*100*	*75-120*		
Duplicate (B110183-DUP1)			**Source: 1100727-01**		Prepared & Analyzed: 10/13/21					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110183 - GCMS-WATER-VOLATILES										
Duplicate (B110183-DUP1)		**Source: 1100727-01**		Prepared & Analyzed: 10/13/21						
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	3.7		1.0	ug/L		3.5			6	20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	1.1		1.0	ug/L		1.0			13	20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110183 - GCMS-WATER-VOLATILES										
Duplicate (B110183-DUP1)		**Source: 1100727-01**		Prepared & Analyzed: 10/13/21						
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	4.2		1.0	ug/L		4.2			0.2	20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	1.1		1.0	ug/L		1.0			2	20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*58.85*			ug/L	*50.0*		*118*	*70-130*		
Surrogate: Toluene-d8	*51.35*			ug/L	*50.0*		*103*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.58*			ug/L	*50.0*		*99*	*75-120*		
Matrix Spike (B110183-MS1)		**Source: 1100727-02**		Prepared & Analyzed: 10/13/21						
Acetone	10.8		5.0	ug/L	10.0	ND	108	60-120		
Acrylonitrile	6.6		5.0	ug/L	10.0	ND	66	0-200		
Benzene	11.1		1.0	ug/L	10.0	ND	111	60-120		
Bromochloromethane	10.5		1.0	ug/L	10.0	ND	105	60-120		
Bromodichloromethane	10.9		1.0	ug/L	10.0	ND	109	60-120		
Bromoform	8.8		1.0	ug/L	10.0	ND	88	60-120		
Bromomethane	11.6		1.0	ug/L	10.0	ND	116	60-120		
2-Butanone (MEK)	11.3		5.0	ug/L	10.0	ND	113	60-120		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110183 - GCMS-WATER-VOLATILES										
Matrix Spike (B110183-MS1)		**Source: 1100727-02**		Prepared & Analyzed: 10/13/21						
Carbon disulfide	11.6		1.0	ug/L	10.0	ND	116	60-120		
Carbon tetrachloride	10.3		1.0	ug/L	10.0	ND	103	60-120		
Chlorobenzene	9.9		1.0	ug/L	10.0	ND	99	60-120		
Chloroethane	12.5		1.0	ug/L	10.0	ND	125	60-120		
Chloroform	10.9		1.0	ug/L	10.0	ND	109	60-120		
Chloromethane	12.4		1.0	ug/L	10.0	ND	124	60-120		
Dibromochloromethane	9.5		1.0	ug/L	10.0	ND	95	60-120		
1,2-Dibromo-3-chloropropane	10.1		1.0	ug/L	10.0	ND	101	60-120		
1,2-Dibromoethane (EDB)	9.6		1.0	ug/L	10.0	ND	96	60-120		
Dibromomethane	10.2		1.0	ug/L	10.0	ND	102	60-120		
1,2-Dichlorobenzene	9.2		1.0	ug/L	10.0	ND	92	60-120		
1,4-Dichlorobenzene	8.7		1.0	ug/L	10.0	ND	87	60-120		
1,1-Dichloroethane	12.5		1.0	ug/L	10.0	1.0	115	60-120		
1,2-Dichloroethane	11.3		1.0	ug/L	10.0	ND	113	60-120		
1,1-Dichloroethene	10.5		1.0	ug/L	10.0	ND	105	60-120		
cis-1,2-Dichloroethene	10.6		1.0	ug/L	10.0	ND	106	60-120		
trans-1,2-Dichloroethene	10.3		1.0	ug/L	10.0	ND	103	60-120		
1,2-Dichloropropane	11.3		1.0	ug/L	10.0	ND	113	60-120		
1,3-Dichloropropane	10.7		1.0	ug/L	10.0	ND	107	60-120		
2,2-Dichloropropane	9.8		1.0	ug/L	10.0	ND	98	60-120		
1,1-Dichloropropene	10.3		1.0	ug/L	10.0	ND	103	60-120		
cis-1,3-Dichloropropene	10.0		1.0	ug/L	10.0	ND	100	60-120		
trans-1,3-Dichloropropene	9.4		1.0	ug/L	10.0	ND	94	60-120		
Ethylbenzene	10.1		1.0	ug/L	10.0	ND	101	60-120		
2-Hexanone	10.1		5.0	ug/L	10.0	ND	101	60-120		
Methyl tert-butyl ether (MTBE)	10.4		1.0	ug/L	10.0	ND	104	60-120		
4-Methyl-2-pentanone	10.3		5.0	ug/L	10.0	ND	103	60-120		
Methylene chloride	11.0		1.0	ug/L	10.0	0.5	105	60-120		
Methyl methacrylate	9.8		5.0	ug/L	10.0	ND	98	60-120		
Styrene	9.3		1.0	ug/L	10.0	ND	93	60-120		
1,1,1,2-Tetrachloroethane	9.7		1.0	ug/L	10.0	ND	97	60-120		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110183 - GCMS-WATER-VOLATILES										
Matrix Spike (B110183-MS1)		**Source: 1100727-02**		Prepared & Analyzed: 10/13/21						
1,1,2,2-Tetrachloroethane	10.2		1.0	ug/L	10.0	ND	102	60-120		
Tetrachloroethene	8.1		1.0	ug/L	10.0	ND	81	60-120		
Toluene	9.8		1.0	ug/L	10.0	ND	98	60-120		
1,1,1-Trichloroethane	10.9		1.0	ug/L	10.0	ND	109	60-120		
1,1,2-Trichloroethane	9.7		1.0	ug/L	10.0	ND	97	60-120		
Trichloroethene	9.6		1.0	ug/L	10.0	ND	96	60-120		
Trichlorofluoromethane (Freon 11)	11.4		1.0	ug/L	10.0	ND	114	60-120		
1,2,3-Trichloropropane	10.6		1.0	ug/L	10.0	ND	106	60-120		
Vinyl acetate	7.8		1.0	ug/L	10.0	ND	78	60-120		
Vinyl chloride	13.2		1.0	ug/L	10.0	ND	132	60-120		
o-Xylene	9.1		1.0	ug/L	10.0	ND	91	60-120		
m- & p-Xylenes	18.5		1.0	ug/L	20.0	ND	92	60-120		
Surrogate: 1,2-Dichloroethane-d4	*56.46*			ug/L	*50.0*		*113*	*70-130*		
Surrogate: Toluene-d8	*51.87*			ug/L	*50.0*		*104*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*50.77*			ug/L	*50.0*		*102*	*75-120*		

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/18/21 15:12

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MD. SPECTRAL
Project	MLF - FALL 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - MEthod 8260B											
1	TW-14	3	10.7.21	1000	✓		GW	✓										1100727-01
2	TW-14A			920														02
3	TW-14B			850														03
4	TW-15			1050														04
5	TW-15B			1130														05
6	TW-16			1255														06
7	TW-16A			1220														07
8	TW-17			1335														08
9	TW-17A			1410														09
10	TW-19			1450														10
11	TRIP BLANK	2					QA											11
12																		

	Signature	Date	Time	Comments
Relinquished by	DA Brown	10.7.21	1545	① APPENDIX I LIST OF 47 VOCs, MTBE,
Received by	[signature]	10.7.21	1545	2 FREONS (DCDFM + DCFM)
Relinquished by				
Received by				
Relinquished by				
Received by				STANDARD REPORT

Cooler Temp on Arrival: 6.8 Deg. C

Rev. Aug. 2018

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

25 October 2021

Steve Brown
Environmental Monitoring and Assessment
207 East Sixth Street
Lititz, PA 17543
RE: MILLERSVILLE LANDFILL

Enclosed are the results of analyses for samples received by the laboratory on 10/14/21 15:27.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TW-20R		1101426-01	Nonpotable Water	10/12/21 13:50	10/14/21 15:27
TW-21		1101426-02	Nonpotable Water	10/12/21 14:50	10/14/21 15:27
TW-22		1101426-03	Nonpotable Water	10/13/21 10:35	10/14/21 15:27
TW-22A		1101426-04	Nonpotable Water	10/13/21 11:10	10/14/21 15:27
TW-22B		1101426-05	Nonpotable Water	10/13/21 10:00	10/14/21 15:27
TW-23R		1101426-06	Nonpotable Water	10/12/21 15:30	10/14/21 15:27
TW-24		1101426-07	Nonpotable Water	10/13/21 13:00	10/14/21 15:27
TW-24A		1101426-08	Nonpotable Water	10/13/21 13:35	10/14/21 15:27
DUP1		1101426-09	Nonpotable Water	10/13/21 00:00	10/14/21 15:27
SW-1		1101426-10	Nonpotable Water	10/13/21 07:00	10/14/21 15:27
SW-2		1101426-11	Nonpotable Water	10/13/21 07:30	10/14/21 15:27
SW-3		1101426-12	Nonpotable Water	10/13/21 08:00	10/14/21 15:27
TW-25		1101426-13	Nonpotable Water	10/13/21 15:35	10/14/21 15:27
TW-25A		1101426-14	Nonpotable Water	10/13/21 16:10	10/14/21 15:27
TW-27		1101426-15	Nonpotable Water	10/14/21 09:15	10/14/21 15:27
TW-28		1101426-16	Nonpotable Water	10/14/21 10:15	10/14/21 15:27
TW-29		1101426-17	Nonpotable Water	10/14/21 11:15	10/14/21 15:27
TW-30		1101426-18	Nonpotable Water	10/14/21 12:20	10/14/21 15:27
DUP-2		1101426-19	Nonpotable Water	10/14/21 00:00	10/14/21 15:27
TRIP BLANK		1101426-20	Nonpotable Water	10/14/21 00:00	10/14/21 15:27

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410-247-7600
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TW-20R

1101426-01 (Nonpotable Water)
Sample Date: 10/12/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/15/21	10/15/21 17:58	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/15/21	10/15/21 17:58	AS
Benzene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 17:58	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/15/21	10/15/21 17:58	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 17:58	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 17:58	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 17:58	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 17:58	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS

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Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TW-20R

1101426-01 (Nonpotable Water)
Sample Date: 10/12/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/15/21	10/15/21 17:58	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/15/21	10/15/21 17:58	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 17:58	AS
Styrene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
Toluene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 17:58	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 17:58	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 17:58	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 17:58	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*119 %*		*10/15/21*	*10/15/21 17:58*		
Surrogate: Toluene-d8			*75-120*	*104 %*		*10/15/21*	*10/15/21 17:58*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*101 %*		*10/15/21*	*10/15/21 17:58*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TW-21

1101426-02 (Nonpotable Water)
Sample Date: 10/12/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/15/21	10/15/21 18:23	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/15/21	10/15/21 18:23	AS
Benzene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 18:23	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/15/21	10/15/21 18:23	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 18:23	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 18:23	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 18:23	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 18:23	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS

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Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TW-21

1101426-02 (Nonpotable Water)
Sample Date: 10/12/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/15/21	10/15/21 18:23	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/15/21	10/15/21 18:23	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 18:23	AS
Styrene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
Toluene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 18:23	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 18:23	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 18:23	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:23	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*119 %*		*10/15/21*	*10/15/21 18:23*		
Surrogate: Toluene-d8			*75-120*	*103 %*		*10/15/21*	*10/15/21 18:23*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*		*10/15/21*	*10/15/21 18:23*		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TW-22

1101426-03 (Nonpotable Water)
Sample Date: 10/13/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/15/21	10/15/21 18:47	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/15/21	10/15/21 18:47	AS
Benzene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 18:47	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/15/21	10/15/21 18:47	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 18:47	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 18:47	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 18:47	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 18:47	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TW-22

1101426-03 (Nonpotable Water)
Sample Date: 10/13/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/15/21	10/15/21 18:47	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/15/21	10/15/21 18:47	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 18:47	AS
Styrene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
Toluene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 18:47	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 18:47	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 18:47	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 18:47	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*119 %*		*10/15/21*	*10/15/21 18:47*		
Surrogate: Toluene-d8			*75-120*	*104 %*		*10/15/21*	*10/15/21 18:47*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*102 %*		*10/15/21*	*10/15/21 18:47*		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TW-22A

1101426-04 (Nonpotable Water)
Sample Date: 10/13/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/15/21	10/15/21 19:11	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/15/21	10/15/21 19:11	AS
Benzene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 19:11	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/15/21	10/15/21 19:11	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 19:11	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 19:11	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 19:11	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 19:11	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TW-22A

1101426-04 (Nonpotable Water)
Sample Date: 10/13/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/15/21	10/15/21 19:11	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/15/21	10/15/21 19:11	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 19:11	AS
Styrene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
Toluene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 19:11	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 19:11	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 19:11	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:11	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*120 %*		*10/15/21*	*10/15/21 19:11*		
Surrogate: Toluene-d8			*75-120*	*104 %*		*10/15/21*	*10/15/21 19:11*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*		*10/15/21*	*10/15/21 19:11*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TW-22B

1101426-05 (Nonpotable Water)
Sample Date: 10/13/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/15/21	10/15/21 19:36	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/15/21	10/15/21 19:36	AS
Benzene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 19:36	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/15/21	10/15/21 19:36	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 19:36	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 19:36	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 19:36	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 19:36	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TW-22B

1101426-05 (Nonpotable Water)
Sample Date: 10/13/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/15/21	10/15/21 19:36	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/15/21	10/15/21 19:36	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 19:36	AS
Styrene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
Toluene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 19:36	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 19:36	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/15/21	10/15/21 19:36	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/15/21	10/15/21 19:36	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*121 %*	*10/15/21*		*10/15/21 19:36*		
Surrogate: Toluene-d8			*75-120*	*104 %*	*10/15/21*		*10/15/21 19:36*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*	*10/15/21*		*10/15/21 19:36*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TW-23R

1101426-06 (Nonpotable Water)
Sample Date: 10/12/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 15:43	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 15:43	AS
Benzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 15:43	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 15:43	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 15:43	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 15:43	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 15:43	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 15:43	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TW-23R

1101426-06 (Nonpotable Water)
Sample Date: 10/12/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 15:43	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
Methyl tert-butyl ether (MTBE)	**0.5**	J	ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 15:43	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 15:43	AS
Styrene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
Toluene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 15:43	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 15:43	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 15:43	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 15:43	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*118 %*	*10/18/21*		*10/18/21 15:43*		
Surrogate: Toluene-d8			*75-120*	*104 %*	*10/18/21*		*10/18/21 15:43*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*101 %*	*10/18/21*		*10/18/21 15:43*		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TW-24

1101426-07 (Nonpotable Water)
Sample Date: 10/13/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 16:08	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 16:08	AS
Benzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 16:08	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 16:08	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 16:08	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 16:08	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 16:08	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 16:08	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
Dichlorodifluoromethane	**2.3**		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
1,1-Dichloroethane	**2.3**		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
Dichlorofluoromethane	**1.0**	J	ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
2-Hexanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 16:08	AS

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TW-24

1101426-07 (Nonpotable Water)
Sample Date: 10/13/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 16:08	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 16:08	AS
Styrene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
Toluene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 16:08	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 16:08	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 16:08	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:08	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*118 %*		*10/18/21*	*10/18/21 16:08*		
Surrogate: Toluene-d8			*75-120*	*104 %*		*10/18/21*	*10/18/21 16:08*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*101 %*		*10/18/21*	*10/18/21 16:08*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TW-24A

1101426-08 (Nonpotable Water)
Sample Date: 10/13/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 16:32	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 16:32	AS
Benzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 16:32	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 16:32	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 16:32	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 16:32	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 16:32	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 16:32	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TW-24A

1101426-08 (Nonpotable Water)
Sample Date: 10/13/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 16:32	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 16:32	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 16:32	AS
Styrene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
Toluene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 16:32	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 16:32	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 16:32	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:32	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*120 %*		*10/18/21*	*10/18/21 16:32*		
Surrogate: Toluene-d8			*75-120*	*104 %*		*10/18/21*	*10/18/21 16:32*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*101 %*		*10/18/21*	*10/18/21 16:32*		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

DUP1

1101426-09 (Nonpotable Water)
Sample Date: 10/13/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 16:57	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 16:57	AS
Benzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 16:57	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 16:57	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 16:57	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 16:57	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 16:57	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 16:57	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
Dichlorodifluoromethane	**2.2**		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
1,1-Dichloroethane	**2.4**		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
Dichlorofluoromethane	**1.1**		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
2-Hexanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 16:57	AS

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

DUP1

1101426-09 (Nonpotable Water)
Sample Date: 10/13/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 16:57	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 16:57	AS
Styrene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
Toluene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 16:57	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 16:57	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 16:57	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 16:57	AS

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*120 %*	*10/18/21*	*10/18/21 16:57*
Surrogate: Toluene-d8	*75-120*	*104 %*	*10/18/21*	*10/18/21 16:57*
Surrogate: 4-Bromofluorobenzene	*75-120*	*101 %*	*10/18/21*	*10/18/21 16:57*

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

SW-1

1101426-10 (Nonpotable Water)
Sample Date: 10/13/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 17:23	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 17:23	AS
Benzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 17:23	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 17:23	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 17:23	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 17:23	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 17:23	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 17:23	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

SW-1

1101426-10 (Nonpotable Water)
Sample Date: 10/13/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 17:23	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 17:23	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 17:23	AS
Styrene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
Toluene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 17:23	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 17:23	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 17:23	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:23	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*120 %*		*10/18/21*	*10/18/21 17:23*		
Surrogate: Toluene-d8			*75-120*	*104 %*		*10/18/21*	*10/18/21 17:23*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*		*10/18/21*	*10/18/21 17:23*		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

SW-2

1101426-11 (Nonpotable Water)
Sample Date: 10/13/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 17:47	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 17:47	AS
Benzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 17:47	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 17:47	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 17:47	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 17:47	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 17:47	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 17:47	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

SW-2

1101426-11 (Nonpotable Water)
Sample Date: 10/13/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 17:47	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 17:47	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 17:47	AS
Styrene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
Toluene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 17:47	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 17:47	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 17:47	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 17:47	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*118 %*		*10/18/21*	*10/18/21 17:47*		
Surrogate: Toluene-d8			*75-120*	*103 %*		*10/18/21*	*10/18/21 17:47*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*		*10/18/21*	*10/18/21 17:47*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

SW-3

1101426-12 (Nonpotable Water)
Sample Date: 10/13/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 18:12	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 18:12	AS
Benzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 18:12	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 18:12	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 18:12	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 18:12	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 18:12	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 18:12	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

SW-3

1101426-12 (Nonpotable Water)
Sample Date: 10/13/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 18:12	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 18:12	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 18:12	AS
Styrene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
Toluene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 18:12	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 18:12	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 18:12	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:12	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*123 %*		*10/18/21*	*10/18/21 18:12*		
Surrogate: Toluene-d8			*75-120*	*103 %*		*10/18/21*	*10/18/21 18:12*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*101 %*		*10/18/21*	*10/18/21 18:12*		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TW-25

1101426-13 (Nonpotable Water)
Sample Date: 10/13/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 18:37	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 18:37	AS
Benzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 18:37	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 18:37	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 18:37	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 18:37	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 18:37	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 18:37	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
Dichlorodifluoromethane	**5.0**		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
1,1-Dichloroethane	**1.9**		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
cis-1,2-Dichloroethene	**0.7**	J	ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
Dichlorofluoromethane	**2.9**		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
2-Hexanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 18:37	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TW-25

1101426-13 (Nonpotable Water)
Sample Date: 10/13/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 18:37	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 18:37	AS
Styrene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
Tetrachloroethene	**1.1**		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
Toluene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
Trichlorofluoromethane (Freon 11)	**0.6**	J	ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 18:37	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 18:37	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 18:37	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 18:37	AS

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*121 %*	*10/18/21*	*10/18/21 18:37*
Surrogate: Toluene-d8	*75-120*	*104 %*	*10/18/21*	*10/18/21 18:37*
Surrogate: 4-Bromofluorobenzene	*75-120*	*100 %*	*10/18/21*	*10/18/21 18:37*

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Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TW-25A

1101426-14 (Nonpotable Water)
Sample Date: 10/13/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 19:01	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 19:01	AS
Benzene	**2.1**		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 19:01	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 19:01	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 19:01	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 19:01	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 19:01	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 19:01	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
Dichlorodifluoromethane	**9.1**		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
1,1-Dichloroethane	**30.6**		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
1,1-Dichloroethene	**0.8**	J	ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
cis-1,2-Dichloroethene	**5.1**		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
Dichlorofluoromethane	**26.0**		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
1,2-Dichloropropane	**1.2**		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
2-Hexanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 19:01	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TW-25A

1101426-14 (Nonpotable Water)
Sample Date: 10/13/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
Methyl tert-butyl ether (MTBE)	**4.1**		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 19:01	AS
Methylene chloride	**23.6**		ug/L	1.0	1.0	1	10/18/21	10/18/21 19:01	AS
Styrene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
Tetrachloroethene	**3.0**		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
Toluene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
Trichloroethene	**4.1**		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
Trichlorofluoromethane (Freon 11)	**1.9**		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 19:01	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 19:01	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 19:01	AS
o-Xylene	**0.7**	J	ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:01	AS

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*119 %*	*10/18/21*	*10/18/21 19:01*
Surrogate: Toluene-d8	*75-120*	*104 %*	*10/18/21*	*10/18/21 19:01*
Surrogate: 4-Bromofluorobenzene	*75-120*	*101 %*	*10/18/21*	*10/18/21 19:01*

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TW-27

1101426-15 (Nonpotable Water)
Sample Date: 10/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 19:25	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 19:25	AS
Benzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 19:25	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 19:25	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 19:25	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 19:25	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 19:25	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 19:25	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TW-27

1101426-15 (Nonpotable Water)
Sample Date: 10/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 19:25	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 19:25	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 19:25	AS
Styrene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
Toluene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 19:25	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 19:25	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 19:25	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:25	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*120 %*		*10/18/21*	*10/18/21 19:25*		
Surrogate: Toluene-d8			*75-120*	*103 %*		*10/18/21*	*10/18/21 19:25*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*		*10/18/21*	*10/18/21 19:25*		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TW-28

1101426-16 (Nonpotable Water)
Sample Date: 10/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 19:50	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 19:50	AS
Benzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 19:50	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 19:50	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 19:50	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 19:50	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 19:50	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 19:50	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
Dichlorodifluoromethane	**5.1**		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
1,1-Dichloroethane	**1.8**		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
Dichlorofluoromethane	**4.4**		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
2-Hexanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 19:50	AS

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TW-28

1101426-16 (Nonpotable Water)
Sample Date: 10/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 19:50	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 19:50	AS
Styrene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
Tetrachloroethene	**1.0**		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
Toluene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
Trichlorofluoromethane (Freon 11)	**1.7**		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 19:50	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 19:50	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 19:50	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 19:50	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*121 %*		*10/18/21*		*10/18/21 19:50*	
Surrogate: Toluene-d8			*75-120*	*104 %*		*10/18/21*		*10/18/21 19:50*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*		*10/18/21*		*10/18/21 19:50*	

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TW-29

1101426-17 (Nonpotable Water)
Sample Date: 10/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 20:14	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 20:14	AS
Benzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 20:14	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 20:14	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 20:14	AS
Chloroform	**0.6**	J	ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 20:14	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 20:14	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 20:14	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
Dichlorodifluoromethane	**3.9**		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
1,1-Dichloroethane	**1.1**		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
cis-1,2-Dichloroethene	**0.7**	J	ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
Dichlorofluoromethane	**1.5**		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
2-Hexanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 20:14	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TW-29

1101426-17 (Nonpotable Water)
Sample Date: 10/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 20:14	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 20:14	AS
Styrene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
Tetrachloroethene	**1.3**		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
Toluene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 20:14	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 20:14	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 20:14	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:14	AS

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*120 %*	*10/18/21*	*10/18/21 20:14*
Surrogate: Toluene-d8	*75-120*	*104 %*	*10/18/21*	*10/18/21 20:14*
Surrogate: 4-Bromofluorobenzene	*75-120*	*99 %*	*10/18/21*	*10/18/21 20:14*

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TW-30

1101426-18 (Nonpotable Water)
Sample Date: 10/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 20:38	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 20:38	AS
Benzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 20:38	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 20:38	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 20:38	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 20:38	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 20:38	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 20:38	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TW-30

1101426-18 (Nonpotable Water)
Sample Date: 10/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 20:38	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 20:38	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 20:38	AS
Styrene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
Toluene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 20:38	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 20:38	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 20:38	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 20:38	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*121 %*		*10/18/21*	*10/18/21 20:38*		
Surrogate: Toluene-d8			*75-120*	*105 %*		*10/18/21*	*10/18/21 20:38*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*102 %*		*10/18/21*	*10/18/21 20:38*		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

DUP-2

1101426-19 (Nonpotable Water)
Sample Date: 10/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 21:03	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 21:03	AS
Benzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 21:03	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 21:03	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 21:03	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 21:03	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 21:03	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 21:03	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

DUP-2

1101426-19 (Nonpotable Water)
Sample Date: 10/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 21:03	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 21:03	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 21:03	AS
Styrene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
Toluene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 21:03	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 21:03	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 21:03	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:03	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*123 %*		*10/18/21*	*10/18/21 21:03*		
Surrogate: Toluene-d8			*75-120*	*105 %*		*10/18/21*	*10/18/21 21:03*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*		*10/18/21*	*10/18/21 21:03*		

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Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TRIP BLANK

1101426-20 (Nonpotable Water)
Sample Date: 10/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 21:28	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 21:28	AS
Benzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 21:28	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 21:28	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 21:28	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 21:28	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 21:28	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 21:28	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

TRIP BLANK

1101426-20 (Nonpotable Water)
Sample Date: 10/14/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 21:28	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/18/21	10/18/21 21:28	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 21:28	AS
Styrene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
Toluene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 21:28	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 21:28	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/18/21	10/18/21 21:28	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/18/21	10/18/21 21:28	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*124 %*		*10/18/21*	*10/18/21 21:28*		
Surrogate: Toluene-d8			*75-120*	*105 %*		*10/18/21*	*10/18/21 21:28*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*101 %*		*10/18/21*	*10/18/21 21:28*		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110215 - GCMS-WATER-VOLATILES										
Blank (B110215-BLK1)					Prepared & Analyzed: 10/15/21					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110215 - GCMS-WATER-VOLATILES										
Blank (B110215-BLK1)					Prepared & Analyzed: 10/15/21					
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*58.09*			ug/L	*50.0*		*116*	*70-130*		
Surrogate: Toluene-d8	*52.20*			ug/L	*50.0*		*104*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*51.17*			ug/L	*50.0*		*102*	*75-120*		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110215 - GCMS-WATER-VOLATILES										
LCS (B110215-BS1)					Prepared & Analyzed: 10/15/21					
Acetone	11.5		5.0	ug/L	10.0		115	50-150		
Acrylonitrile	3.2	J	5.0	ug/L	5.00		63	50-150		
Benzene	5.3		1.0	ug/L	5.00		105	50-150		
Bromochloromethane	5.2		1.0	ug/L	5.00		103	50-150		
Bromodichloromethane	5.1		1.0	ug/L	5.00		102	50-150		
Bromoform	4.3		1.0	ug/L	5.00		85	50-150		
Bromomethane	6.4		1.0	ug/L	5.00		129	50-150		
2-Butanone (MEK)	10.2		5.0	ug/L	10.0		102	50-150		
Carbon disulfide	6.0		1.0	ug/L	5.00		120	50-150		
Carbon tetrachloride	5.3		1.0	ug/L	5.00		106	50-150		
Chlorobenzene	5.1		1.0	ug/L	5.00		101	50-150		
Chloroethane	6.3		1.0	ug/L	5.00		125	50-150		
Chloroform	5.2		1.0	ug/L	5.00		104	50-150		
Chloromethane	5.7		1.0	ug/L	5.00		114	50-150		
Dibromochloromethane	4.5		1.0	ug/L	5.00		90	50-150		
1,2-Dibromo-3-chloropropane	5.5		1.0	ug/L	5.00		109	50-150		
1,2-Dibromoethane (EDB)	4.7		1.0	ug/L	5.00		94	50-150		
Dibromomethane	5.3		1.0	ug/L	5.00		105	50-150		
1,2-Dichlorobenzene	5.1		1.0	ug/L	5.00		102	50-150		
1,4-Dichlorobenzene	5.5		1.0	ug/L	5.00		110	50-150		
1,1-Dichloroethane	5.5		1.0	ug/L	5.00		109	50-150		
1,2-Dichloroethane	5.4		1.0	ug/L	5.00		107	50-150		
1,1-Dichloroethene	5.4		1.0	ug/L	5.00		108	50-150		
cis-1,2-Dichloroethene	5.3		1.0	ug/L	5.00		106	50-150		
trans-1,2-Dichloroethene	5.2		1.0	ug/L	5.00		105	50-150		
1,2-Dichloropropane	5.2		1.0	ug/L	5.00		104	50-150		
1,3-Dichloropropane	5.1		1.0	ug/L	5.00		101	50-150		
2,2-Dichloropropane	5.8		1.0	ug/L	5.00		116	50-150		
1,1-Dichloropropene	5.4		1.0	ug/L	5.00		108	50-150		
cis-1,3-Dichloropropene	5.0		1.0	ug/L	5.00		101	50-150		
trans-1,3-Dichloropropene	4.9		1.0	ug/L	5.00		97	50-150		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110215 - GCMS-WATER-VOLATILES										
LCS (B110215-BS1)					Prepared & Analyzed: 10/15/21					
Ethylbenzene	5.4		1.0	ug/L	5.00		108	50-150		
2-Hexanone	11.2		5.0	ug/L	10.0		112	50-150		
Methyl tert-butyl ether (MTBE)	5.7		1.0	ug/L	5.00		113	50-150		
4-Methyl-2-pentanone	10.7		5.0	ug/L	10.0		107	50-150		
Methylene chloride	6.6		1.0	ug/L	5.00		132	0-200		
Methyl methacrylate	5.1		5.0	ug/L	5.00		103	50-150		
Styrene	4.9		1.0	ug/L	5.00		98	50-150		
1,1,1,2-Tetrachloroethane	4.5		1.0	ug/L	5.00		90	50-150		
1,1,2,2-Tetrachloroethane	4.9		1.0	ug/L	5.00		98	50-150		
Tetrachloroethene	5.0		1.0	ug/L	5.00		101	50-150		
Toluene	5.1		1.0	ug/L	5.00		102	50-150		
1,1,1-Trichloroethane	5.1		1.0	ug/L	5.00		101	50-150		
1,1,2-Trichloroethane	4.7		1.0	ug/L	5.00		93	50-150		
Trichloroethene	4.9		1.0	ug/L	5.00		98	50-150		
Trichlorofluoromethane (Freon 11)	6.1		1.0	ug/L	5.00		121	50-150		
1,2,3-Trichloropropane	5.5		1.0	ug/L	5.00		109	50-150		
Vinyl acetate	3.6		1.0	ug/L	5.00		72	50-150		
Vinyl chloride	6.5		1.0	ug/L	5.00		129	50-150		
o-Xylene	5.0		1.0	ug/L	5.00		100	50-150		
m- & p-Xylenes	10.0		1.0	ug/L	10.0		100	50-150		
Surrogate: 1,2-Dichloroethane-d4	*56.08*			ug/L	*50.0*		*112*	*70-130*		
Surrogate: Toluene-d8	*51.66*			ug/L	*50.0*		*103*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*51.24*			ug/L	*50.0*		*102*	*75-120*		
Duplicate (B110215-DUP1)		**Source: 1101426-01**			Prepared & Analyzed: 10/15/21					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110215 - GCMS-WATER-VOLATILES										
Duplicate (B110215-DUP1)			**Source: 1101426-01**		Prepared & Analyzed: 10/15/21					
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	9.4		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	ND		1.0	ug/L		ND				20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110215 - GCMS-WATER-VOLATILES										
Duplicate (B110215-DUP1)		**Source: 1101426-01**		Prepared & Analyzed: 10/15/21						
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	ND		1.0	ug/L		ND				20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	ND		1.0	ug/L		ND				20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*60.48*			ug/L	*50.0*		*121*	*70-130*		
Surrogate: Toluene-d8	*52.28*			ug/L	*50.0*		*105*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*50.81*			ug/L	*50.0*		*102*	*75-120*		
Matrix Spike (B110215-MS1)		**Source: 1101426-02**		Prepared & Analyzed: 10/15/21						
Acetone	12.0		5.0	ug/L	10.0	ND	120	60-120		
Acrylonitrile	7.2		5.0	ug/L	10.0	ND	72	0-200		
Benzene	11.5		1.0	ug/L	10.0	ND	115	60-120		
Bromochloromethane	10.6		1.0	ug/L	10.0	ND	106	60-120		
Bromodichloromethane	11.6		1.0	ug/L	10.0	ND	116	60-120		
Bromoform	8.5		1.0	ug/L	10.0	ND	85	60-120		
Bromomethane	4.5		1.0	ug/L	10.0	ND	45	60-120		
2-Butanone (MEK)	11.6		5.0	ug/L	10.0	ND	116	60-120		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110215 - GCMS-WATER-VOLATILES										
Matrix Spike (B110215-MS1)		**Source: 1101426-02**		Prepared & Analyzed: 10/15/21						
Carbon disulfide	11.9		1.0	ug/L	10.0	ND	119	60-120		
Carbon tetrachloride	10.9		1.0	ug/L	10.0	ND	109	60-120		
Chlorobenzene	10.1		1.0	ug/L	10.0	ND	101	60-120		
Chloroethane	14.9		1.0	ug/L	10.0	ND	149	60-120		
Chloroform	11.2		1.0	ug/L	10.0	ND	112	60-120		
Chloromethane	12.0		1.0	ug/L	10.0	ND	120	60-120		
Dibromochloromethane	9.7		1.0	ug/L	10.0	ND	97	60-120		
1,2-Dibromo-3-chloropropane	11.2		1.0	ug/L	10.0	ND	112	60-120		
1,2-Dibromoethane (EDB)	9.9		1.0	ug/L	10.0	ND	99	60-120		
Dibromomethane	10.5		1.0	ug/L	10.0	ND	105	60-120		
1,2-Dichlorobenzene	9.8		1.0	ug/L	10.0	ND	98	60-120		
1,4-Dichlorobenzene	9.4		1.0	ug/L	10.0	ND	94	60-120		
1,1-Dichloroethane	12.0		1.0	ug/L	10.0	ND	120	60-120		
1,2-Dichloroethane	11.4		1.0	ug/L	10.0	ND	114	60-120		
1,1-Dichloroethene	10.9		1.0	ug/L	10.0	ND	109	60-120		
cis-1,2-Dichloroethene	10.7		1.0	ug/L	10.0	ND	107	60-120		
trans-1,2-Dichloroethene	10.5		1.0	ug/L	10.0	ND	105	60-120		
1,2-Dichloropropane	11.9		1.0	ug/L	10.0	ND	119	60-120		
1,3-Dichloropropane	10.7		1.0	ug/L	10.0	ND	107	60-120		
2,2-Dichloropropane	10.1		1.0	ug/L	10.0	ND	101	60-120		
1,1-Dichloropropene	11.1		1.0	ug/L	10.0	ND	111	60-120		
cis-1,3-Dichloropropene	10.3		1.0	ug/L	10.0	ND	103	60-120		
trans-1,3-Dichloropropene	10.0		1.0	ug/L	10.0	ND	100	60-120		
Ethylbenzene	10.8		1.0	ug/L	10.0	ND	108	60-120		
2-Hexanone	12.0		5.0	ug/L	10.0	ND	120	60-120		
Methyl tert-butyl ether (MTBE)	10.9		1.0	ug/L	10.0	ND	109	60-120		
4-Methyl-2-pentanone	11.6		5.0	ug/L	10.0	ND	116	60-120		
Methylene chloride	10.9		1.0	ug/L	10.0	ND	109	60-120		
Methyl methacrylate	10.9		5.0	ug/L	10.0	ND	109	60-120		
Styrene	9.6		1.0	ug/L	10.0	ND	96	60-120		
1,1,1,2-Tetrachloroethane	9.4		1.0	ug/L	10.0	ND	94	60-120		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110215 - GCMS-WATER-VOLATILES										
Matrix Spike (B110215-MS1)		**Source: 1101426-02**		Prepared & Analyzed: 10/15/21						
1,1,2,2-Tetrachloroethane	10.5		1.0	ug/L	10.0	ND	105	60-120		
Tetrachloroethene	8.6		1.0	ug/L	10.0	ND	86	60-120		
Toluene	10.7		1.0	ug/L	10.0	ND	107	60-120		
1,1,1-Trichloroethane	11.2		1.0	ug/L	10.0	ND	112	60-120		
1,1,2-Trichloroethane	10.0		1.0	ug/L	10.0	ND	100	60-120		
Trichloroethene	9.2		1.0	ug/L	10.0	ND	92	60-120		
Trichlorofluoromethane (Freon 11)	12.7		1.0	ug/L	10.0	ND	127	60-120		
1,2,3-Trichloropropane	11.2		1.0	ug/L	10.0	ND	112	60-120		
Vinyl acetate	7.8		1.0	ug/L	10.0	ND	78	60-120		
Vinyl chloride	13.5		1.0	ug/L	10.0	ND	135	60-120		
o-Xylene	9.8		1.0	ug/L	10.0	ND	98	60-120		
m- & p-Xylenes	19.8		1.0	ug/L	20.0	ND	99	60-120		
Surrogate: 1,2-Dichloroethane-d4	*58.52*			ug/L	*50.0*		*117*	*70-130*		
Surrogate: Toluene-d8	*52.32*			ug/L	*50.0*		*105*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*51.54*			ug/L	*50.0*		*103*	*75-120*		
Batch B110237 - GCMS-WATER-VOLATILES										
Blank (B110237-BLK1)				Prepared & Analyzed: 10/18/21						
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110237 - GCMS-WATER-VOLATILES										
Blank (B110237-BLK1)					Prepared & Analyzed: 10/18/21					
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110237 - GCMS-WATER-VOLATILES										
Blank (B110237-BLK1)					Prepared & Analyzed: 10/18/21					
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*57.24*			ug/L	*50.0*		*114*	*70-130*		
Surrogate: Toluene-d8	*51.38*			ug/L	*50.0*		*103*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.90*			ug/L	*50.0*		*100*	*75-120*		
LCS (B110237-BS1)					Prepared & Analyzed: 10/18/21					
Acetone	11.9		5.0	ug/L	10.0		119	50-150		
Acrylonitrile	3.4	J	5.0	ug/L	5.00		67	50-150		
Benzene	5.4		1.0	ug/L	5.00		109	50-150		
Bromochloromethane	5.4		1.0	ug/L	5.00		108	50-150		
Bromodichloromethane	5.4		1.0	ug/L	5.00		108	50-150		
Bromoform	4.4		1.0	ug/L	5.00		88	50-150		
Bromomethane	5.3		1.0	ug/L	5.00		105	50-150		
2-Butanone (MEK)	9.9		5.0	ug/L	10.0		99	50-150		
Carbon disulfide	6.1		1.0	ug/L	5.00		122	50-150		
Carbon tetrachloride	5.3		1.0	ug/L	5.00		107	50-150		
Chlorobenzene	5.1		1.0	ug/L	5.00		102	50-150		
Chloroethane	6.6		1.0	ug/L	5.00		131	50-150		
Chloroform	5.3		1.0	ug/L	5.00		106	50-150		
Chloromethane	5.7		1.0	ug/L	5.00		114	50-150		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110237 - GCMS-WATER-VOLATILES										
LCS (B110237-BS1)					Prepared & Analyzed: 10/18/21					
Dibromochloromethane	4.5		1.0	ug/L	5.00		91	50-150		
1,2-Dibromo-3-chloropropane	5.4		1.0	ug/L	5.00		107	50-150		
1,2-Dibromoethane (EDB)	4.6		1.0	ug/L	5.00		91	50-150		
Dibromomethane	5.5		1.0	ug/L	5.00		109	50-150		
1,2-Dichlorobenzene	5.4		1.0	ug/L	5.00		108	50-150		
1,4-Dichlorobenzene	5.5		1.0	ug/L	5.00		110	50-150		
1,1-Dichloroethane	5.5		1.0	ug/L	5.00		109	50-150		
1,2-Dichloroethane	5.7		1.0	ug/L	5.00		113	50-150		
1,1-Dichloroethene	5.5		1.0	ug/L	5.00		110	50-150		
cis-1,2-Dichloroethene	5.4		1.0	ug/L	5.00		109	50-150		
trans-1,2-Dichloroethene	5.4		1.0	ug/L	5.00		107	50-150		
1,2-Dichloropropane	5.4		1.0	ug/L	5.00		108	50-150		
1,3-Dichloropropane	5.1		1.0	ug/L	5.00		102	50-150		
2,2-Dichloropropane	5.6		1.0	ug/L	5.00		112	50-150		
1,1-Dichloropropene	5.3		1.0	ug/L	5.00		106	50-150		
cis-1,3-Dichloropropene	4.8		1.0	ug/L	5.00		96	50-150		
trans-1,3-Dichloropropene	5.0		1.0	ug/L	5.00		99	50-150		
Ethylbenzene	5.4		1.0	ug/L	5.00		107	50-150		
2-Hexanone	11.1		5.0	ug/L	10.0		111	50-150		
Methyl tert-butyl ether (MTBE)	5.5		1.0	ug/L	5.00		110	50-150		
4-Methyl-2-pentanone	10.4		5.0	ug/L	10.0		104	50-150		
Methylene chloride	6.5		1.0	ug/L	5.00		130	0-200		
Methyl methacrylate	5.2		5.0	ug/L	5.00		104	50-150		
Styrene	4.7		1.0	ug/L	5.00		94	50-150		
1,1,1,2-Tetrachloroethane	4.6		1.0	ug/L	5.00		92	50-150		
1,1,2,2-Tetrachloroethane	4.9		1.0	ug/L	5.00		99	50-150		
Tetrachloroethene	4.8		1.0	ug/L	5.00		96	50-150		
Toluene	5.1		1.0	ug/L	5.00		103	50-150		
1,1,1-Trichloroethane	5.2		1.0	ug/L	5.00		104	50-150		
1,1,2-Trichloroethane	5.0		1.0	ug/L	5.00		100	50-150		
Trichloroethene	4.9		1.0	ug/L	5.00		97	50-150		

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110237 - GCMS-WATER-VOLATILES										
LCS (B110237-BS1)					Prepared & Analyzed: 10/18/21					
Trichlorofluoromethane (Freon 11)	6.3		1.0	ug/L	5.00		125	50-150		
1,2,3-Trichloropropane	5.5		1.0	ug/L	5.00		111	50-150		
Vinyl acetate	3.5		1.0	ug/L	5.00		71	50-150		
Vinyl chloride	6.8		1.0	ug/L	5.00		135	50-150		
o-Xylene	4.9		1.0	ug/L	5.00		98	50-150		
m- & p-Xylenes	10.1		1.0	ug/L	10.0		101	50-150		
Surrogate: 1,2-Dichloroethane-d4	*56.68*			ug/L	*50.0*		*113*	*70-130*		
Surrogate: Toluene-d8	*51.12*			ug/L	*50.0*		*102*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*50.93*			ug/L	*50.0*		*102*	*75-120*		
Duplicate (B110237-DUP1)		**Source: 1101426-06**			Prepared & Analyzed: 10/18/21					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110237 - GCMS-WATER-VOLATILES										
Duplicate (B110237-DUP1)		**Source: 1101426-06**		Prepared & Analyzed: 10/18/21						
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	ND		1.0	ug/L		ND				20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	0.5	J	1.0	ug/L		0.5			0	20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	ND		1.0	ug/L		ND				20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	ND		1.0	ug/L		ND				20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20

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Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110237 - GCMS-WATER-VOLATILES										
Duplicate (B110237-DUP1)		**Source: 1101426-06**		Prepared & Analyzed: 10/18/21						
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*60.98*			ug/L	*50.0*		*122*	*70-130*		
Surrogate: Toluene-d8	*52.26*			ug/L	*50.0*		*105*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*50.24*			ug/L	*50.0*		*100*	*75-120*		
Matrix Spike (B110237-MS1)		**Source: 1101426-07**		Prepared & Analyzed: 10/18/21						
Acetone	11.0		5.0	ug/L	10.0	ND	110	60-120		
Acrylonitrile	7.7		5.0	ug/L	10.0	ND	77	0-200		
Benzene	12.6		1.0	ug/L	10.0	ND	126	60-120		
Bromochloromethane	11.4		1.0	ug/L	10.0	ND	114	60-120		
Bromodichloromethane	12.1		1.0	ug/L	10.0	ND	121	60-120		
Bromoform	9.5		1.0	ug/L	10.0	ND	95	60-120		
Bromomethane	11.5		1.0	ug/L	10.0	ND	115	60-120		
2-Butanone (MEK)	11.7		5.0	ug/L	10.0	ND	117	60-120		
Carbon disulfide	12.9		1.0	ug/L	10.0	ND	129	60-120		
Carbon tetrachloride	11.6		1.0	ug/L	10.0	ND	116	60-120		
Chlorobenzene	10.9		1.0	ug/L	10.0	ND	109	60-120		
Chloroethane	14.5		1.0	ug/L	10.0	ND	145	60-120		
Chloroform	12.3		1.0	ug/L	10.0	ND	123	60-120		
Chloromethane	13.8		1.0	ug/L	10.0	ND	138	60-120		
Dibromochloromethane	10.4		1.0	ug/L	10.0	ND	104	60-120		
1,2-Dibromo-3-chloropropane	11.3		1.0	ug/L	10.0	ND	113	60-120		
1,2-Dibromoethane (EDB)	10.9		1.0	ug/L	10.0	ND	109	60-120		
Dibromomethane	11.6		1.0	ug/L	10.0	ND	116	60-120		
1,2-Dichlorobenzene	10.3		1.0	ug/L	10.0	ND	103	60-120		
1,4-Dichlorobenzene	10.0		1.0	ug/L	10.0	ND	100	60-120		
1,1-Dichloroethane	15.4		1.0	ug/L	10.0	2.3	131	60-120		
1,2-Dichloroethane	12.6		1.0	ug/L	10.0	ND	126	60-120		

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Will Brewington, President

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410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110237 - GCMS-WATER-VOLATILES										
Matrix Spike (B110237-MS1)		**Source: 1101426-07**		Prepared & Analyzed: 10/18/21						
1,1-Dichloroethene	12.1		1.0	ug/L	10.0	ND	121	60-120		
cis-1,2-Dichloroethene	11.5		1.0	ug/L	10.0	ND	115	60-120		
trans-1,2-Dichloroethene	11.4		1.0	ug/L	10.0	ND	114	60-120		
1,2-Dichloropropane	12.8		1.0	ug/L	10.0	ND	128	60-120		
1,3-Dichloropropane	11.9		1.0	ug/L	10.0	ND	119	60-120		
2,2-Dichloropropane	11.4		1.0	ug/L	10.0	ND	114	60-120		
1,1-Dichloropropene	11.7		1.0	ug/L	10.0	ND	117	60-120		
cis-1,3-Dichloropropene	11.2		1.0	ug/L	10.0	ND	112	60-120		
trans-1,3-Dichloropropene	10.8		1.0	ug/L	10.0	ND	108	60-120		
Ethylbenzene	11.3		1.0	ug/L	10.0	ND	113	60-120		
2-Hexanone	11.7		5.0	ug/L	10.0	ND	117	60-120		
Methyl tert-butyl ether (MTBE)	11.7		1.0	ug/L	10.0	ND	117	60-120		
4-Methyl-2-pentanone	12.1		5.0	ug/L	10.0	ND	121	60-120		
Methylene chloride	12.1		1.0	ug/L	10.0	ND	121	60-120		
Methyl methacrylate	11.9		5.0	ug/L	10.0	ND	119	60-120		
Styrene	10.2		1.0	ug/L	10.0	ND	102	60-120		
1,1,1,2-Tetrachloroethane	10.1		1.0	ug/L	10.0	ND	101	60-120		
1,1,2,2-Tetrachloroethane	11.2		1.0	ug/L	10.0	ND	112	60-120		
Tetrachloroethene	9.1		1.0	ug/L	10.0	ND	91	60-120		
Toluene	11.3		1.0	ug/L	10.0	ND	113	60-120		
1,1,1-Trichloroethane	12.1		1.0	ug/L	10.0	ND	121	60-120		
1,1,2-Trichloroethane	11.1		1.0	ug/L	10.0	ND	111	60-120		
Trichloroethene	10.3		1.0	ug/L	10.0	ND	103	60-120		
Trichlorofluoromethane (Freon 11)	13.4		1.0	ug/L	10.0	ND	134	60-120		
1,2,3-Trichloropropane	12.2		1.0	ug/L	10.0	ND	122	60-120		
Vinyl acetate	8.7		1.0	ug/L	10.0	ND	87	60-120		
Vinyl chloride	14.7		1.0	ug/L	10.0	ND	147	60-120		
o-Xylene	10.4		1.0	ug/L	10.0	ND	104	60-120		
m- & p-Xylenes	20.4		1.0	ug/L	20.0	ND	102	60-120		
Surrogate: 1,2-Dichloroethane-d4	*58.15*			ug/L	*50.0*		*116*	*70-130*		
Surrogate: Toluene-d8	*51.80*			ug/L	*50.0*		*104*	*75-120*		

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Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110237 - GCMS-WATER-VOLATILES										
Matrix Spike (B110237-MS1)		**Source: 1101426-07**			Prepared & Analyzed: 10/18/21					
Surrogate: 4-Bromofluorobenzene	*51.76*			ug/L	*50.0*		*104*	*75-120*		

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Will Brewington, President

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410-247-7600
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: [none]
Project Manager: Steve Brown

Reported:
10/25/21 11:47

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MD SPECTRAL
Project	MLF - FALL 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260	MSS Sample ID
1	TW-20R	3	10.12.21	1350	✓		GW	✓	1101426-01
2	TW-21		10.12.21	1450					-02
3	TW-22		10.13.21	1035					-03
4	TW-22A			1110					-04
5	TW-22B			1000					-05
6	TW-23R		10.12.21	1530					-06
7	TW-24		10.13.21	1300					-07
8	TW-24A			1335					-08
9	DUP-1			—			QA		-09
10	SW-1			700			SW		-10
11	SW-2			730			SW		-11
12	SW-3			800			SW		-12

	Signature	Date	Time	Comments
Relinquished by	S A Brown	10-14-21		① APPENDIX I LIST of 47 VOCs, MTBE,
Received by	Clara Petrie	10-14-21	15:27	2 FREONS (DCDFM + DCFM)
Relinquished by				
Received by				
Relinquished by				
Received by				STANDARD REPORT

Cooler Temp on Arrival: 4.6 Deg. C

Rev. Aug. 2018

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MD. SPECTRAL
Project	MLF - FALL 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260 (1)	MSS	Sample ID
1	TW-25	3	10.13.21	1535	✓		GW	✓	1101	426-13
2	TW-25A	↓	10.13.21	1610	↓		↓	↓		-14
3	TW-27	↓	10.14.21	915	↓		↓	↓		-15
4	TW-28	↓	↓	1015	↓		↓	↓		-16
5	TW-29	↓	↓	1115	↓		↓	↓		-17
6	TW-30	↓	↓	1220	↓		↓	↓		-18
7	DUP-2	↓	↓	—	↓		DA	↓		-19
8	TRIP BLANK	2	↓	—	↓		DA	↓		-20
9	~~DUP-1~~ SAB									
10										
11										
12										

	Signature	Date	Time	Comments
Relinquished by	DA Brown	10-14-21		(1) APPENDIX I LIST OF 47 VOCs, MTBE +
Received by	Clara Petrie	10-14-21	15:27	2 FREONS (DCDFM + DCFM)
Relinquished by				
Received by				
Relinquished by				
Received by				STANDARD REPORT

Cooler Temp on Arrival: 4.6 Deg. C

Rev. Aug. 2018

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

01 November 2021

Steve Brown
Environmental Monitoring and Assessment
207 East Sixth Street
Lititz, PA 17543
RE: MILLERSVILLE LANDFILL

Enclosed are the results of analyses for samples received by the laboratory on 10/21/21 16:50.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-P4		1102137-01	Nonpotable Water	10/21/21 11:35	10/21/21 16:50
MW-P9		1102137-02	Nonpotable Water	10/20/21 10:45	10/21/21 16:50
MW-P106		1102137-03	Nonpotable Water	10/21/21 13:00	10/21/21 16:50
MW-P417		1102137-04	Nonpotable Water	10/20/21 17:40	10/21/21 16:50
MW-P440		1102137-05	Nonpotable Water	10/20/21 17:00	10/21/21 16:50
RW-P109		1102137-06	Nonpotable Water	10/20/21 12:30	10/21/21 16:50
RW-P165		1102137-07	Nonpotable Water	10/21/21 12:20	10/21/21 16:50
RW-P171-1		1102137-08	Nonpotable Water	10/20/21 15:40	10/21/21 16:50
RW-P264		1102137-09	Nonpotable Water	10/20/21 13:15	10/21/21 16:50
RW-P440		1102137-10	Nonpotable Water	10/21/21 14:30	10/21/21 16:50
RW-P441		1102137-11	Nonpotable Water	10/21/21 13:45	10/21/21 16:50
RW-P584		1102137-12	Nonpotable Water	10/20/21 11:30	10/21/21 16:50
FIELD BLANK		1102137-13	Nonpotable Water	10/21/21 12:00	10/21/21 16:50
TRIP BLANK		1102137-14	Nonpotable Water	10/21/21 00:00	10/21/21 16:50

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Will Brewington, President

Maryland spectral Services

Analytical Chemistry Services

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410-247-7600
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

MW-P4

1102137-01 (Nonpotable Water)
Sample Date: 10/21/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 19:54	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 19:54	AS
Benzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 19:54	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 19:54	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 19:54	AS
Chloroform	**0.6**	J	ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 19:54	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 19:54	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 19:54	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS

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Will Brewington, President

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www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

MW-P4

1102137-01 (Nonpotable Water)
Sample Date: 10/21/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 19:54	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 19:54	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 19:54	AS
Styrene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
Toluene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 19:54	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 19:54	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 19:54	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 19:54	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*126 %*	*10/22/21*		*10/22/21 19:54*		
Surrogate: Toluene-d8			*75-120*	*107 %*	*10/22/21*		*10/22/21 19:54*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*102 %*	*10/22/21*		*10/22/21 19:54*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

MW-P9

1102137-02 (Nonpotable Water)
Sample Date: 10/20/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 20:18	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 20:18	AS
Benzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 20:18	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 20:18	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 20:18	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 20:18	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 20:18	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 20:18	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
Dichlorodifluoromethane	**1.5**		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
1,1-Dichloroethane	**1.1**		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
Dichlorofluoromethane	**0.9**	J	ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
2-Hexanone	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 20:18	AS

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

MW-P9

1102137-02 (Nonpotable Water)
Sample Date: 10/20/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 20:18	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 20:18	AS
Styrene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
Tetrachloroethene	**0.9**	J	ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
Toluene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 20:18	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 20:18	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 20:18	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:18	AS

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*128 %*	*10/22/21*	*10/22/21 20:18*
Surrogate: Toluene-d8	*75-120*	*106 %*	*10/22/21*	*10/22/21 20:18*
Surrogate: 4-Bromofluorobenzene	*75-120*	*101 %*	*10/22/21*	*10/22/21 20:18*

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

MW-P106

1102137-03 (Nonpotable Water)
Sample Date: 10/21/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 20:43	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 20:43	AS
Benzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 20:43	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 20:43	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 20:43	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 20:43	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 20:43	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 20:43	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
Dichlorodifluoromethane	**2.3**		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
1,1-Dichloroethane	**2.8**		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
cis-1,2-Dichloroethene	**1.0**		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
Dichlorofluoromethane	**2.0**		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
2-Hexanone	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 20:43	AS

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

MW-P106

1102137-03 (Nonpotable Water)
Sample Date: 10/21/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 20:43	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 20:43	AS
Styrene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
Tetrachloroethene	**0.8**	J	ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
Toluene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
Trichloroethene	**0.7**	J	ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 20:43	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 20:43	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 20:43	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 20:43	AS

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*126 %*	*10/22/21*	*10/22/21 20:43*
Surrogate: Toluene-d8	*75-120*	*106 %*	*10/22/21*	*10/22/21 20:43*
Surrogate: 4-Bromofluorobenzene	*75-120*	*101 %*	*10/22/21*	*10/22/21 20:43*

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

MW-P417

1102137-04 (Nonpotable Water)
Sample Date: 10/20/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 21:07	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 21:07	AS
Benzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 21:07	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 21:07	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 21:07	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 21:07	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 21:07	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 21:07	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
Dichlorodifluoromethane	**1.4**		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
1,1-Dichloroethane	**1.2**		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
Dichlorofluoromethane	**0.6**	J	ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
2-Hexanone	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 21:07	AS

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

MW-P417

1102137-04 (Nonpotable Water)
Sample Date: 10/20/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 21:07	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 21:07	AS
Styrene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
Toluene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 21:07	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 21:07	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 21:07	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:07	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*127 %*		*10/22/21*	*10/22/21 21:07*		
Surrogate: Toluene-d8			*75-120*	*107 %*		*10/22/21*	*10/22/21 21:07*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*102 %*		*10/22/21*	*10/22/21 21:07*		

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Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

MW-P440

1102137-05 (Nonpotable Water)
Sample Date: 10/20/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 21:31	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 21:31	AS
Benzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 21:31	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 21:31	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 21:31	AS
Chloroform	**1.6**		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 21:31	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 21:31	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 21:31	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

MW-P440

1102137-05 (Nonpotable Water)
Sample Date: 10/20/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 21:31	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 21:31	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 21:31	AS
Styrene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
Toluene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 21:31	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 21:31	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 21:31	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:31	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*125 %*		*10/22/21*	*10/22/21 21:31*		
Surrogate: Toluene-d8			*75-120*	*107 %*		*10/22/21*	*10/22/21 21:31*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*102 %*		*10/22/21*	*10/22/21 21:31*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

RW-P109

1102137-06 (Nonpotable Water)
Sample Date: 10/20/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 21:56	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 21:56	AS
Benzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 21:56	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 21:56	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 21:56	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 21:56	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 21:56	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 21:56	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
Dichlorodifluoromethane	**2.5**		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
1,1-Dichloroethane	**1.4**		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
Dichlorofluoromethane	**0.9**	J	ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
2-Hexanone	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 21:56	AS

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

RW-P109

1102137-06 (Nonpotable Water)
Sample Date: 10/20/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/22/21	10/22/21 21:56	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 21:56	AS
Styrene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
Tetrachloroethene	**0.7**	J	ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
Toluene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
Trichloroethene	**1.1**		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 21:56	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 21:56	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/22/21	10/22/21 21:56	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/22/21	10/22/21 21:56	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*127 %*		*10/22/21*		*10/22/21 21:56*	
Surrogate: Toluene-d8			*75-120*	*107 %*		*10/22/21*		*10/22/21 21:56*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*101 %*		*10/22/21*		*10/22/21 21:56*	

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

RW-P165

1102137-07 (Nonpotable Water)
Sample Date: 10/21/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 18:19	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 18:19	AS
Benzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 18:19	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 18:19	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 18:19	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 18:19	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 18:19	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 18:19	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
Dichlorodifluoromethane	**6.3**		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
1,1-Dichloroethane	**4.0**		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
cis-1,2-Dichloroethene	**1.0**	J	ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
Dichlorofluoromethane	**5.0**		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
2-Hexanone	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 18:19	AS

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

RW-P165

1102137-07 (Nonpotable Water)
Sample Date: 10/21/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 18:19	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 18:19	AS
Styrene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
Tetrachloroethene	**2.4**		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
Toluene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
Trichloroethene	**0.6**	J	ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
Trichlorofluoromethane (Freon 11)	**0.6**	J	ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 18:19	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 18:19	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 18:19	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:19	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*123 %*		*10/25/21*	*10/25/21 18:19*		
Surrogate: Toluene-d8			*75-120*	*105 %*		*10/25/21*	*10/25/21 18:19*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*101 %*		*10/25/21*	*10/25/21 18:19*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

RW-P171-1

1102137-08 (Nonpotable Water)
Sample Date: 10/20/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 18:44	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 18:44	AS
Benzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 18:44	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 18:44	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 18:44	AS
Chloroform	**0.5**	J	ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 18:44	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 18:44	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 18:44	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

RW-P171-1

1102137-08 (Nonpotable Water)
Sample Date: 10/20/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 18:44	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 18:44	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 18:44	AS
Styrene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
Toluene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 18:44	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 18:44	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 18:44	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 18:44	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*124 %*		*10/25/21*	*10/25/21 18:44*		
Surrogate: Toluene-d8			*75-120*	*104 %*		*10/25/21*	*10/25/21 18:44*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*101 %*		*10/25/21*	*10/25/21 18:44*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

RW-P264

1102137-09 (Nonpotable Water)
Sample Date: 10/20/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 19:09	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 19:09	AS
Benzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 19:09	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 19:09	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 19:09	AS
Chloroform	**0.9**	J	ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 19:09	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 19:09	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 19:09	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
Dichlorodifluoromethane	**6.4**		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
1,1-Dichloroethane	**3.9**		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
Dichlorofluoromethane	**4.6**		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
2-Hexanone	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 19:09	AS

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

RW-P264

1102137-09 (Nonpotable Water)
Sample Date: 10/20/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 19:09	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 19:09	AS
Styrene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
Tetrachloroethene	**1.6**		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
Toluene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
Trichloroethene	**0.7**	J	ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
Trichlorofluoromethane (Freon 11)	**0.6**	J	ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 19:09	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 19:09	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 19:09	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:09	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*126 %*		*10/25/21*	*10/25/21 19:09*		
Surrogate: Toluene-d8			*75-120*	*104 %*		*10/25/21*	*10/25/21 19:09*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*101 %*		*10/25/21*	*10/25/21 19:09*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

RW-P440

1102137-10 (Nonpotable Water)
Sample Date: 10/21/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 19:34	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 19:34	AS
Benzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 19:34	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 19:34	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 19:34	AS
Chloroform	**0.7**	J	ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 19:34	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 19:34	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 19:34	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
Dichlorodifluoromethane	**1.4**		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
1,1-Dichloroethane	**1.2**		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
Dichlorofluoromethane	**0.6**	J	ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
2-Hexanone	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 19:34	AS

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

RW-P440

1102137-10 (Nonpotable Water)
Sample Date: 10/21/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 19:34	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 19:34	AS
Styrene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
Toluene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 19:34	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 19:34	AS
Vinyl chloride	**1.7**		ug/L	1.0	1.0	1	10/25/21	10/25/21 19:34	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:34	AS

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*125 %*	*10/25/21*	*10/25/21 19:34*
Surrogate: Toluene-d8	*75-120*	*103 %*	*10/25/21*	*10/25/21 19:34*
Surrogate: 4-Bromofluorobenzene	*75-120*	*100 %*	*10/25/21*	*10/25/21 19:34*

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

RW-P441

1102137-11 (Nonpotable Water)
Sample Date: 10/21/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 19:59	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 19:59	AS
Benzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 19:59	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 19:59	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 19:59	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 19:59	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 19:59	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 19:59	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
Dichlorodifluoromethane	**2.2**		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
1,1-Dichloroethane	**1.1**		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
Dichlorofluoromethane	**0.5**	J	ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
2-Hexanone	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 19:59	AS

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

RW-P441

1102137-11 (Nonpotable Water)
Sample Date: 10/21/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 19:59	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 19:59	AS
Styrene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
Toluene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 19:59	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 19:59	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 19:59	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 19:59	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*126 %*		*10/25/21*	*10/25/21 19:59*		
Surrogate: Toluene-d8			*75-120*	*104 %*		*10/25/21*	*10/25/21 19:59*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*101 %*		*10/25/21*	*10/25/21 19:59*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

RW-P584

1102137-12 (Nonpotable Water)
Sample Date: 10/20/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 20:24	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 20:24	AS
Benzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 20:24	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 20:24	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 20:24	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 20:24	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 20:24	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 20:24	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
Dichlorodifluoromethane	**4.4**		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
1,1-Dichloroethane	**3.1**		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
cis-1,2-Dichloroethene	**1.0**	J	ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
Dichlorofluoromethane	**2.3**		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
2-Hexanone	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 20:24	AS

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

RW-P584

1102137-12 (Nonpotable Water)
Sample Date: 10/20/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 20:24	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 20:24	AS
Styrene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
Tetrachloroethene	**1.8**		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
Toluene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
Trichloroethene	**1.0**	J	ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 20:24	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 20:24	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 20:24	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:24	AS

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*128 %*	*10/25/21*	*10/25/21 20:24*
Surrogate: Toluene-d8	*75-120*	*103 %*	*10/25/21*	*10/25/21 20:24*
Surrogate: 4-Bromofluorobenzene	*75-120*	*101 %*	*10/25/21*	*10/25/21 20:24*

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

FIELD BLANK

1102137-13 (Nonpotable Water)
Sample Date: 10/21/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 20:49	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 20:49	AS
Benzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 20:49	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 20:49	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 20:49	AS
Chloroform	**0.6**	J	ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 20:49	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 20:49	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 20:49	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

FIELD BLANK

1102137-13 (Nonpotable Water)
Sample Date: 10/21/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 20:49	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 20:49	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 20:49	AS
Styrene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
Toluene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 20:49	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 20:49	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 20:49	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 20:49	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*128 %*		*10/25/21*	*10/25/21 20:49*		
Surrogate: Toluene-d8			*75-120*	*104 %*		*10/25/21*	*10/25/21 20:49*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*102 %*		*10/25/21*	*10/25/21 20:49*		

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Maryland spectral Services

Analytical Chemistry Services

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
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1102137-14 (Nonpotable Water)
Sample Date: 10/21/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 21:14	AS
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 21:14	AS
Benzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
Bromoform	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
Bromomethane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 21:14	AS
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 21:14	AS
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
Chloroethane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 21:14	AS
Chloroform	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
Chloromethane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 21:14	AS
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 21:14	AS
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 21:14	AS
Dibromomethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
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1102137-14 (Nonpotable Water)
Sample Date: 10/21/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 21:14	AS
Iodomethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/25/21	10/25/21 21:14	AS
Methylene chloride	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 21:14	AS
Styrene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
Toluene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
Trichloroethene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 21:14	AS
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 21:14	AS
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/25/21	10/25/21 21:14	AS
o-Xylene	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/25/21	10/25/21 21:14	AS
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*128 %*		*10/25/21*	*10/25/21 21:14*		
Surrogate: Toluene-d8			*75-120*	*105 %*		*10/25/21*	*10/25/21 21:14*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*101 %*		*10/25/21*	*10/25/21 21:14*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110321 - GCMS-WATER-VOLATILES										
Blank (B110321-BLK1)					Prepared & Analyzed: 10/22/21					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						

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Project Manager: Steve Brown

Reported:
11/01/21 08:54

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110321 - GCMS-WATER-VOLATILES										
Blank (B110321-BLK1)					Prepared & Analyzed: 10/22/21					
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*61.00*			ug/L	*50.0*		*122*	*70-130*		
Surrogate: Toluene-d8	*52.43*			ug/L	*50.0*		*105*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*50.72*			ug/L	*50.0*		*101*	*75-120*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110321 - GCMS-WATER-VOLATILES										
LCS (B110321-BS1)					Prepared & Analyzed: 10/22/21					
Acetone	12.5		5.0	ug/L	10.0		125	50-150		
Acrylonitrile	3.3	J	5.0	ug/L	5.00		65	50-150		
Benzene	5.4		1.0	ug/L	5.00		107	50-150		
Bromochloromethane	5.1		1.0	ug/L	5.00		102	50-150		
Bromodichloromethane	5.3		1.0	ug/L	5.00		106	50-150		
Bromoform	4.0		1.0	ug/L	5.00		80	50-150		
Bromomethane	6.0		1.0	ug/L	5.00		121	50-150		
2-Butanone (MEK)	10.9		5.0	ug/L	10.0		109	50-150		
Carbon disulfide	6.2		1.0	ug/L	5.00		124	50-150		
Carbon tetrachloride	5.1		1.0	ug/L	5.00		102	50-150		
Chlorobenzene	4.9		1.0	ug/L	5.00		99	50-150		
Chloroethane	6.5		1.0	ug/L	5.00		130	50-150		
Chloroform	5.3		1.0	ug/L	5.00		106	50-150		
Chloromethane	6.3		1.0	ug/L	5.00		126	50-150		
Dibromochloromethane	4.1		1.0	ug/L	5.00		82	50-150		
1,2-Dibromo-3-chloropropane	5.7		1.0	ug/L	5.00		114	50-150		
1,2-Dibromoethane (EDB)	4.7		1.0	ug/L	5.00		95	50-150		
Dibromomethane	5.2		1.0	ug/L	5.00		104	50-150		
1,2-Dichlorobenzene	5.0		1.0	ug/L	5.00		100	50-150		
1,4-Dichlorobenzene	5.2		1.0	ug/L	5.00		104	50-150		
1,1-Dichloroethane	5.6		1.0	ug/L	5.00		112	50-150		
1,2-Dichloroethane	5.7		1.0	ug/L	5.00		115	50-150		
1,1-Dichloroethene	5.3		1.0	ug/L	5.00		105	50-150		
cis-1,2-Dichloroethene	5.1		1.0	ug/L	5.00		102	50-150		
trans-1,2-Dichloroethene	5.3		1.0	ug/L	5.00		106	50-150		
1,2-Dichloropropane	5.4		1.0	ug/L	5.00		107	50-150		
1,3-Dichloropropane	5.1		1.0	ug/L	5.00		102	50-150		
2,2-Dichloropropane	5.8		1.0	ug/L	5.00		117	50-150		
1,1-Dichloropropene	5.2		1.0	ug/L	5.00		104	50-150		
cis-1,3-Dichloropropene	5.0		1.0	ug/L	5.00		101	50-150		
trans-1,3-Dichloropropene	5.0		1.0	ug/L	5.00		100	50-150		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110321 - GCMS-WATER-VOLATILES										
LCS (B110321-BS1)					Prepared & Analyzed: 10/22/21					
Ethylbenzene	5.1		1.0	ug/L	5.00		101	50-150		
2-Hexanone	11.4		5.0	ug/L	10.0		114	50-150		
Methyl tert-butyl ether (MTBE)	5.6		1.0	ug/L	5.00		112	50-150		
4-Methyl-2-pentanone	11.2		5.0	ug/L	10.0		112	50-150		
Methylene chloride	6.2		1.0	ug/L	5.00		124	0-200		
Methyl methacrylate	5.3		5.0	ug/L	5.00		107	50-150		
Styrene	4.6		1.0	ug/L	5.00		92	50-150		
1,1,1,2-Tetrachloroethane	4.3		1.0	ug/L	5.00		85	50-150		
1,1,2,2-Tetrachloroethane	5.2		1.0	ug/L	5.00		103	50-150		
Tetrachloroethene	4.4		1.0	ug/L	5.00		88	50-150		
Toluene	4.9		1.0	ug/L	5.00		98	50-150		
1,1,1-Trichloroethane	5.0		1.0	ug/L	5.00		99	50-150		
1,1,2-Trichloroethane	4.6		1.0	ug/L	5.00		91	50-150		
Trichloroethene	4.4		1.0	ug/L	5.00		88	50-150		
Trichlorofluoromethane (Freon 11)	6.0		1.0	ug/L	5.00		119	50-150		
1,2,3-Trichloropropane	5.5		1.0	ug/L	5.00		110	50-150		
Vinyl acetate	3.4		1.0	ug/L	5.00		67	50-150		
Vinyl chloride	7.1		1.0	ug/L	5.00		142	50-150		
o-Xylene	4.6		1.0	ug/L	5.00		91	50-150		
m- & p-Xylenes	9.4		1.0	ug/L	10.0		94	50-150		
Surrogate: 1,2-Dichloroethane-d4	*58.82*			ug/L	*50.0*		*118*	*70-130*		
Surrogate: Toluene-d8	*52.36*			ug/L	*50.0*		*105*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*52.14*			ug/L	*50.0*		*104*	*75-120*		
Duplicate (B110321-DUP1)		**Source: 1102137-01**			Prepared & Analyzed: 10/22/21					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110321 - GCMS-WATER-VOLATILES										
Duplicate (B110321-DUP1)		**Source: 1102137-01**		Prepared & Analyzed: 10/22/21						
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	0.6	J	1.0	ug/L		0.6			7	20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	ND		1.0	ug/L		ND				20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110321 - GCMS-WATER-VOLATILES										
Duplicate (B110321-DUP1)		**Source: 1102137-01**		Prepared & Analyzed: 10/22/21						
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	ND		1.0	ug/L		ND				20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	ND		1.0	ug/L		ND				20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*64.20*			ug/L	*50.0*		*128*	*70-130*		
Surrogate: Toluene-d8	*53.33*			ug/L	*50.0*		*107*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*51.36*			ug/L	*50.0*		*103*	*75-120*		
Matrix Spike (B110321-MS1)		**Source: 1102137-02**		Prepared & Analyzed: 10/22/21						
Acetone	13.5		5.0	ug/L	10.0	ND	135	60-120		
Acrylonitrile	8.6		5.0	ug/L	10.0	ND	86	0-200		
Benzene	13.4		1.0	ug/L	10.0	ND	134	60-120		
Bromochloromethane	12.2		1.0	ug/L	10.0	ND	122	60-120		
Bromodichloromethane	13.3		1.0	ug/L	10.0	ND	133	60-120		
Bromoform	10.2		1.0	ug/L	10.0	ND	102	60-120		
Bromomethane	14.1		1.0	ug/L	10.0	ND	141	60-120		
2-Butanone (MEK)	13.7		5.0	ug/L	10.0	ND	137	60-120		

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110321 - GCMS-WATER-VOLATILES										
Matrix Spike (B110321-MS1)		**Source: 1102137-02**		Prepared & Analyzed: 10/22/21						
Carbon disulfide	14.2		1.0	ug/L	10.0	ND	142	60-120		
Carbon tetrachloride	12.7		1.0	ug/L	10.0	ND	127	60-120		
Chlorobenzene	11.6		1.0	ug/L	10.0	ND	116	60-120		
Chloroethane	16.5		1.0	ug/L	10.0	ND	165	60-120		
Chloroform	13.5		1.0	ug/L	10.0	ND	135	60-120		
Chloromethane	15.5		1.0	ug/L	10.0	ND	155	60-120		
Dibromochloromethane	11.3		1.0	ug/L	10.0	ND	113	60-120		
1,2-Dibromo-3-chloropropane	12.1		1.0	ug/L	10.0	ND	121	60-120		
1,2-Dibromoethane (EDB)	11.3		1.0	ug/L	10.0	ND	113	60-120		
Dibromomethane	12.4		1.0	ug/L	10.0	ND	124	60-120		
1,2-Dichlorobenzene	11.4		1.0	ug/L	10.0	ND	114	60-120		
1,4-Dichlorobenzene	10.8		1.0	ug/L	10.0	ND	108	60-120		
1,1-Dichloroethane	15.8		1.0	ug/L	10.0	1.1	147	60-120		
1,2-Dichloroethane	14.0		1.0	ug/L	10.0	ND	140	60-120		
1,1-Dichloroethene	12.8		1.0	ug/L	10.0	ND	128	60-120		
cis-1,2-Dichloroethene	12.4		1.0	ug/L	10.0	ND	124	60-120		
trans-1,2-Dichloroethene	12.5		1.0	ug/L	10.0	ND	125	60-120		
1,2-Dichloropropane	14.2		1.0	ug/L	10.0	ND	142	60-120		
1,3-Dichloropropane	13.3		1.0	ug/L	10.0	ND	133	60-120		
2,2-Dichloropropane	12.0		1.0	ug/L	10.0	ND	120	60-120		
1,1-Dichloropropene	13.1		1.0	ug/L	10.0	ND	131	60-120		
cis-1,3-Dichloropropene	12.2		1.0	ug/L	10.0	ND	122	60-120		
trans-1,3-Dichloropropene	12.1		1.0	ug/L	10.0	ND	121	60-120		
Ethylbenzene	12.4		1.0	ug/L	10.0	ND	124	60-120		
2-Hexanone	13.3		5.0	ug/L	10.0	ND	133	60-120		
Methyl tert-butyl ether (MTBE)	12.8		1.0	ug/L	10.0	ND	128	60-120		
4-Methyl-2-pentanone	14.1		5.0	ug/L	10.0	ND	141	60-120		
Methylene chloride	13.4		1.0	ug/L	10.0	ND	134	60-120		
Methyl methacrylate	13.4		5.0	ug/L	10.0	ND	134	60-120		
Styrene	10.8		1.0	ug/L	10.0	ND	108	60-120		
1,1,1,2-Tetrachloroethane	10.9		1.0	ug/L	10.0	ND	109	60-120		

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Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110321 - GCMS-WATER-VOLATILES										
Matrix Spike (B110321-MS1)		**Source: 1102137-02**		Prepared & Analyzed: 10/22/21						
1,1,2,2-Tetrachloroethane	13.0		1.0	ug/L	10.0	ND	130	60-120		
Tetrachloroethene	10.3		1.0	ug/L	10.0	0.9	94	60-120		
Toluene	12.4		1.0	ug/L	10.0	ND	124	60-120		
1,1,1-Trichloroethane	13.0		1.0	ug/L	10.0	ND	130	60-120		
1,1,2-Trichloroethane	12.3		1.0	ug/L	10.0	ND	123	60-120		
Trichloroethene	10.9		1.0	ug/L	10.0	ND	109	60-120		
Trichlorofluoromethane (Freon 11)	14.5		1.0	ug/L	10.0	ND	145	60-120		
1,2,3-Trichloropropane	14.0		1.0	ug/L	10.0	ND	140	60-120		
Vinyl acetate	9.7		1.0	ug/L	10.0	ND	97	60-120		
Vinyl chloride	16.7		1.0	ug/L	10.0	ND	167	60-120		
o-Xylene	11.4		1.0	ug/L	10.0	ND	114	60-120		
m- & p-Xylenes	23.0		1.0	ug/L	20.0	ND	115	60-120		
Surrogate: 1,2-Dichloroethane-d4	*60.86*			ug/L	*50.0*		*122*	*70-130*		
Surrogate: Toluene-d8	*53.42*			ug/L	*50.0*		*107*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*52.57*			ug/L	*50.0*		*105*	*75-120*		
Batch B110340 - GCMS-WATER-VOLATILES										
Blank (B110340-BLK1)				Prepared & Analyzed: 10/25/21						
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110340 - GCMS-WATER-VOLATILES										
Blank (B110340-BLK1)					Prepared & Analyzed: 10/25/21					
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110340 - GCMS-WATER-VOLATILES										
Blank (B110340-BLK1)					Prepared & Analyzed: 10/25/21					
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*62.26*			ug/L	*50.0*		*125*	*70-130*		
Surrogate: Toluene-d8	*51.89*			ug/L	*50.0*		*104*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.93*			ug/L	*50.0*		*100*	*75-120*		
LCS (B110340-BS1)					Prepared & Analyzed: 10/25/21					
Acetone	13.1		5.0	ug/L	10.0		131	50-150		
Acrylonitrile	3.3	J	5.0	ug/L	5.00		65	50-150		
Benzene	5.4		1.0	ug/L	5.00		108	50-150		
Bromochloromethane	5.1		1.0	ug/L	5.00		102	50-150		
Bromodichloromethane	5.5		1.0	ug/L	5.00		109	50-150		
Bromoform	4.2		1.0	ug/L	5.00		83	50-150		
Bromomethane	6.4		1.0	ug/L	5.00		128	50-150		
2-Butanone (MEK)	10.6		5.0	ug/L	10.0		106	50-150		
Carbon disulfide	6.4		1.0	ug/L	5.00		129	50-150		
Carbon tetrachloride	5.2		1.0	ug/L	5.00		103	50-150		
Chlorobenzene	5.0		1.0	ug/L	5.00		100	50-150		
Chloroethane	6.2		1.0	ug/L	5.00		124	50-150		
Chloroform	5.5		1.0	ug/L	5.00		110	50-150		
Chloromethane	6.2		1.0	ug/L	5.00		124	50-150		

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110340 - GCMS-WATER-VOLATILES										
LCS (B110340-BS1)					Prepared & Analyzed: 10/25/21					
Dibromochloromethane	4.4		1.0	ug/L	5.00		88	50-150		
1,2-Dibromo-3-chloropropane	5.4		1.0	ug/L	5.00		108	50-150		
1,2-Dibromoethane (EDB)	4.8		1.0	ug/L	5.00		96	50-150		
Dibromomethane	5.6		1.0	ug/L	5.00		113	50-150		
1,2-Dichlorobenzene	5.1		1.0	ug/L	5.00		102	50-150		
1,4-Dichlorobenzene	5.2		1.0	ug/L	5.00		104	50-150		
1,1-Dichloroethane	5.9		1.0	ug/L	5.00		118	50-150		
1,2-Dichloroethane	5.8		1.0	ug/L	5.00		116	50-150		
1,1-Dichloroethene	5.5		1.0	ug/L	5.00		110	50-150		
cis-1,2-Dichloroethene	5.1		1.0	ug/L	5.00		102	50-150		
trans-1,2-Dichloroethene	5.5		1.0	ug/L	5.00		110	50-150		
1,2-Dichloropropane	5.6		1.0	ug/L	5.00		112	50-150		
1,3-Dichloropropane	5.2		1.0	ug/L	5.00		104	50-150		
2,2-Dichloropropane	5.5		1.0	ug/L	5.00		111	50-150		
1,1-Dichloropropene	5.1		1.0	ug/L	5.00		103	50-150		
cis-1,3-Dichloropropene	5.1		1.0	ug/L	5.00		103	50-150		
trans-1,3-Dichloropropene	5.0		1.0	ug/L	5.00		100	50-150		
Ethylbenzene	5.1		1.0	ug/L	5.00		102	50-150		
2-Hexanone	11.1		5.0	ug/L	10.0		111	50-150		
Methyl tert-butyl ether (MTBE)	5.7		1.0	ug/L	5.00		115	50-150		
4-Methyl-2-pentanone	10.7		5.0	ug/L	10.0		107	50-150		
Methylene chloride	6.7		1.0	ug/L	5.00		134	0-200		
Methyl methacrylate	5.3		5.0	ug/L	5.00		105	50-150		
Styrene	4.6		1.0	ug/L	5.00		91	50-150		
1,1,1,2-Tetrachloroethane	4.4		1.0	ug/L	5.00		88	50-150		
1,1,2,2-Tetrachloroethane	5.2		1.0	ug/L	5.00		104	50-150		
Tetrachloroethene	4.4		1.0	ug/L	5.00		87	50-150		
Toluene	5.0		1.0	ug/L	5.00		100	50-150		
1,1,1-Trichloroethane	5.3		1.0	ug/L	5.00		105	50-150		
1,1,2-Trichloroethane	4.7		1.0	ug/L	5.00		93	50-150		
Trichloroethene	4.8		1.0	ug/L	5.00		95	50-150		

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Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110340 - GCMS-WATER-VOLATILES										
LCS (B110340-BS1)					Prepared & Analyzed: 10/25/21					
Trichlorofluoromethane (Freon 11)	5.8		1.0	ug/L	5.00		116	50-150		
1,2,3-Trichloropropane	5.5		1.0	ug/L	5.00		109	50-150		
Vinyl acetate	3.8		1.0	ug/L	5.00		77	50-150		
Vinyl chloride	7.1		1.0	ug/L	5.00		143	50-150		
o-Xylene	4.7		1.0	ug/L	5.00		94	50-150		
m- & p-Xylenes	9.4		1.0	ug/L	10.0		94	50-150		
Surrogate: 1,2-Dichloroethane-d4	*58.33*			ug/L	*50.0*		*117*	*70-130*		
Surrogate: Toluene-d8	*51.75*			ug/L	*50.0*		*104*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*50.76*			ug/L	*50.0*		*102*	*75-120*		
Duplicate (B110340-DUP1)		**Source: 1102137-07**			Prepared & Analyzed: 10/26/21					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110340 - GCMS-WATER-VOLATILES										
Duplicate (B110340-DUP1)		**Source: 1102137-07**		Prepared & Analyzed: 10/26/21						
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	4.3		1.0	ug/L		4.0			6	20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	1.0		1.0	ug/L		1.0			4	20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	2.5		1.0	ug/L		2.4			6	20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	0.6	J	1.0	ug/L		0.6			8	20
Trichlorofluoromethane (Freon 11)	0.5	J	1.0	ug/L		0.6			18	20

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Will Brewington, President

1500 Caton Center Dr Suite G
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110340 - GCMS-WATER-VOLATILES										
Duplicate (B110340-DUP1)		**Source: 1102137-07**		Prepared & Analyzed: 10/26/21						
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*64.01*			ug/L	*50.0*		*128*	*70-130*		
Surrogate: Toluene-d8	*52.68*			ug/L	*50.0*		*105*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*50.67*			ug/L	*50.0*		*101*	*75-120*		
Matrix Spike (B110340-MS1)		**Source: 1102137-08**		Prepared & Analyzed: 10/26/21						
Acetone	13.3		5.0	ug/L	10.0	ND	133	60-120		
Acrylonitrile	8.4		5.0	ug/L	10.0	ND	84	0-200		
Benzene	13.2		1.0	ug/L	10.0	ND	132	60-120		
Bromochloromethane	10.9		1.0	ug/L	10.0	ND	109	60-120		
Bromodichloromethane	12.7		1.0	ug/L	10.0	ND	127	60-120		
Bromoform	9.0		1.0	ug/L	10.0	ND	90	60-120		
Bromomethane	14.2		1.0	ug/L	10.0	ND	142	60-120		
2-Butanone (MEK)	12.3		5.0	ug/L	10.0	ND	123	60-120		
Carbon disulfide	14.0		1.0	ug/L	10.0	ND	140	60-120		
Carbon tetrachloride	12.3		1.0	ug/L	10.0	ND	123	60-120		
Chlorobenzene	10.7		1.0	ug/L	10.0	ND	107	60-120		
Chloroethane	15.9		1.0	ug/L	10.0	ND	159	60-120		
Chloroform	13.1		1.0	ug/L	10.0	0.5	126	60-120		
Chloromethane	14.9		1.0	ug/L	10.0	ND	149	60-120		
Dibromochloromethane	10.2		1.0	ug/L	10.0	ND	102	60-120		
1,2-Dibromo-3-chloropropane	12.1		1.0	ug/L	10.0	ND	121	60-120		
1,2-Dibromoethane (EDB)	10.4		1.0	ug/L	10.0	ND	104	60-120		
Dibromomethane	12.0		1.0	ug/L	10.0	ND	120	60-120		
1,2-Dichlorobenzene	10.1		1.0	ug/L	10.0	ND	101	60-120		
1,4-Dichlorobenzene	9.8		1.0	ug/L	10.0	ND	98	60-120		
1,1-Dichloroethane	14.2		1.0	ug/L	10.0	ND	142	60-120		
1,2-Dichloroethane	13.5		1.0	ug/L	10.0	ND	135	60-120		

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110340 - GCMS-WATER-VOLATILES										
Matrix Spike (B110340-MS1)		**Source: 1102137-08**		Prepared & Analyzed: 10/26/21						
1,1-Dichloroethene	12.6		1.0	ug/L	10.0	ND	126	60-120		
cis-1,2-Dichloroethene	12.2		1.0	ug/L	10.0	ND	122	60-120		
trans-1,2-Dichloroethene	12.2		1.0	ug/L	10.0	ND	122	60-120		
1,2-Dichloropropane	13.4		1.0	ug/L	10.0	ND	134	60-120		
1,3-Dichloropropane	11.8		1.0	ug/L	10.0	ND	118	60-120		
2,2-Dichloropropane	11.4		1.0	ug/L	10.0	ND	114	60-120		
1,1-Dichloropropene	12.2		1.0	ug/L	10.0	ND	122	60-120		
cis-1,3-Dichloropropene	11.5		1.0	ug/L	10.0	ND	115	60-120		
trans-1,3-Dichloropropene	11.0		1.0	ug/L	10.0	ND	110	60-120		
Ethylbenzene	11.3		1.0	ug/L	10.0	ND	113	60-120		
2-Hexanone	12.7		5.0	ug/L	10.0	ND	127	60-120		
Methyl tert-butyl ether (MTBE)	12.0		1.0	ug/L	10.0	ND	120	60-120		
4-Methyl-2-pentanone	12.6		5.0	ug/L	10.0	ND	126	60-120		
Methylene chloride	12.7		1.0	ug/L	10.0	ND	127	60-120		
Methyl methacrylate	12.9		5.0	ug/L	10.0	ND	129	60-120		
Styrene	10.0		1.0	ug/L	10.0	ND	100	60-120		
1,1,1,2-Tetrachloroethane	10.1		1.0	ug/L	10.0	ND	101	60-120		
1,1,2,2-Tetrachloroethane	11.5		1.0	ug/L	10.0	ND	115	60-120		
Tetrachloroethene	8.2		1.0	ug/L	10.0	ND	82	60-120		
Toluene	11.5		1.0	ug/L	10.0	ND	115	60-120		
1,1,1-Trichloroethane	12.6		1.0	ug/L	10.0	ND	126	60-120		
1,1,2-Trichloroethane	11.0		1.0	ug/L	10.0	ND	110	60-120		
Trichloroethene	10.2		1.0	ug/L	10.0	ND	102	60-120		
Trichlorofluoromethane (Freon 11)	14.0		1.0	ug/L	10.0	ND	140	60-120		
1,2,3-Trichloropropane	12.3		1.0	ug/L	10.0	ND	123	60-120		
Vinyl acetate	8.0		1.0	ug/L	10.0	ND	80	60-120		
Vinyl chloride	16.5		1.0	ug/L	10.0	ND	165	60-120		
o-Xylene	10.1		1.0	ug/L	10.0	ND	101	60-120		
m- & p-Xylenes	20.1		1.0	ug/L	20.0	ND	101	60-120		
Surrogate: 1,2-Dichloroethane-d4	*61.93*			ug/L	*50.0*		*124*	*70-130*		
Surrogate: Toluene-d8	*52.39*			ug/L	*50.0*		*105*	*75-120*		

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110340 - GCMS-WATER-VOLATILES										
Matrix Spike (B110340-MS1)		**Source: 1102137-08**			Prepared & Analyzed: 10/26/21					
Surrogate: 4-Bromofluorobenzene	*52.83*			ug/L	*50.0*		*106*	*75-120*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2021
Project Manager: Steve Brown

Reported:
11/01/21 08:54

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MO. SPECTRAL
Project	MLF - FALL 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260											
1	MW-P4	3	10.21.21	1135	✓		GW	✓								110213	7		-01
2	MW-P9		10-20-21	1045															-02
3	MW-P106		10.21.21	1300															-03
4	MW-P417		10.20.21	1740															-04
5	MW-P440			1700															-05
6	RW-P109			1230															-06
7	RW-P165		10.21.21	1220															-07
8	RW-P171-1		10-20.21	1940															-08
9	RW-P264			1315															-09
10	RW-P440		10.21.21	1430															-10
11	RW-P441		10.21.21	1345															-11
12	RW-P584		10.20.21	1130															-12

	Signature	Date	Time	Comments
Relinquished by	D A Brown	10.21.21	1650	① APPENDIX I LIST OF 47 VOCs, MTBE +
Received by	[signature]	10/21/21	16:50	2 FREONS (DCDFM + DCFM)
Relinquished by				
Received by				
Relinquished by				
Received by				STANDARD REPORT

Cooler Temp on Arrival: 6.0 Deg. C

Rev. Aug. 2018

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MD SPECIALTY
Project	MLF-FALL 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	① VOCs - METHOD 8260											
1	FIELD BLANK	2	10.21.21	1200	—		QA	✓								110	21	37	-13
2	TRIP BLANK	2	10.21.21	—	—		QA	✓											-14
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

	Signature	Date	Time
Relinquished by	[signature]	10.21.21	1650
Received by	[signature]	10/21/21	16:50
Relinquished by			
Received by			
Relinquished by			
Received by			

Comments

① APPENDIX I LIST OF 47 VOCs MTBE & 2 FREONS (DCDFM + DCFM)

STD. REPORT

Cooler Temp on Arrival: 6.0 Deg. C

Rev. Aug. 2018

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

November 09, 2021

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-FALL-2021
Pace Project No.: 30443913

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on October 05, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - WestVirginia
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alexis E. Ozoroski
alexis.ozoroski@pacelabs.com
(724)850-5600
Project Manager

Enclosures

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: MLF-FALL-2021
Pace Project No.: 30443913

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Florida: Cert E871149 SEKS WET
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver

225 Industrial Park Drive, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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SAMPLE SUMMARY

Project: MLF-FALL-2021
Pace Project No.: 30443913

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30443913001	**TW-6**	Water	10/04/21 13:10	10/05/21 22:00
30443913002	**TW-6B**	Water	10/04/21 12:30	10/05/21 22:00
30443913003	**TW-7**	Water	10/04/21 15:00	10/05/21 22:00
30443913004	**TW-7A**	Water	10/04/21 13:50	10/05/21 22:00
30443913005	**TW-8**	Water	10/05/21 10:00	10/05/21 22:00
30443913006	**TW-9**	Water	10/05/21 12:50	10/05/21 22:00
30443913007	**TW-9B**	Water	10/05/21 11:30	10/05/21 22:00
30443913008	**TW-9C**	Water	10/05/21 12:10	10/05/21 22:00
30443913009	**TW-10A**	Water	10/05/21 14:00	10/05/21 22:00
30443913010	**TW-8A**	Water	10/05/21 10:30	10/05/21 22:00

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SAMPLE ANALYTE COUNT

Project: MLF-FALL-2021
Pace Project No.: 30443913

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30443913001	**TW-6**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	MEH	7	PASI-BVWV
		EPA 6010D	MEH	6	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30443913002	**TW-6B**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	MEH	7	PASI-BVWV
		EPA 6010D	MEH	6	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30443913003	**TW-7**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	MEH	7	PASI-BVWV
		EPA 6010D	MEH	6	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-FALL-2021
Pace Project No.: 30443913

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30443913004	**TW-7A**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	MEH	7	PASI-BVWV
		EPA 6010D	MEH	6	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30443913005	**TW-8**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	MEH	7	PASI-BVWV
		EPA 6010D	MEH	6	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30443913006	**TW-9**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	MEH	7	PASI-BVWV
		EPA 6010D	MEH	6	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-FALL-2021
Pace Project No.: 30443913

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30443913007	**TW-9B**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	MEH	7	PASI-BVWV
		EPA 6010D	MEH	6	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30443913008	**TW-9C**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	MEH	7	PASI-BVWV
		EPA 6010D	MEH	6	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30443913009	**TW-10A**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	MEH	7	PASI-BVWV
		EPA 6010D	MEH	6	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-FALL-2021
Pace Project No.: 30443913

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30443913010	**TW-8A**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	MEH	7	PASI-BVWV
		EPA 6010D	MEH	6	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA

PASI-BVWV = Pace Analytical Services - WestVirginia
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: MLF-FALL-2021
Pace Project No.: 30443913

Date: November 09, 2021

TW-6 (Lab ID: 30443913001)

- 8011 sample pH is 7

TW-6B (Lab ID: 30443913002)

- 8011 sample pH is 7

TW-7 (Lab ID: 30443913003)

- 8011 sample pH is 7

TW-7A (Lab ID: 30443913004)

- 8011 sample pH is 7

TW-8 (Lab ID: 30443913005)

- 8011 sample pH is 7

TW-9 (Lab ID: 30443913006)

- 8011 sample pH is 7

TW-9B (Lab ID: 30443913007)

- 8011 sample pH is 7

TW-9C (Lab ID: 30443913008)

- 8011 sample pH is 7

TW-10A (Lab ID: 30443913009)

- 8011 sample pH is 7

TW-8A (Lab ID: 30443913010)

- 8011 sample pH is 7

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PROJECT NARRATIVE

Project: MLF-FALL-2021
Pace Project No.: 30443913

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 09, 2021

General Information:
10 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL-2021
Pace Project No.: 30443913

Method: **EPA 6010D**
Description: 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 09, 2021

General Information:
10 samples were analyzed for EPA 6010D by Pace Analytical Services WestVirginia. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 87142

B: Analyte was detected in the associated method blank.

- BLANK for HBN 87142 [MPRP/8314 (Lab ID: 427655)
  - Sodium

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL-2021
Pace Project No.: 30443913

Method: **EPA 6010D**
Description: 6010D ICP, Dissolved, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 09, 2021

General Information:
10 samples were analyzed for EPA 6010D by Pace Analytical Services WestVirginia. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL-2021
Pace Project No.: 30443913

Method: **EPA 6020B**
Description: 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: November 09, 2021

General Information:
10 samples were analyzed for EPA 6020B by Pace Analytical Services WestVirginia. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL-2021
Pace Project No.: 30443913

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: November 09, 2021

General Information:
9 samples were analyzed for EPA 7470A by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL-2021
Pace Project No.: 30443913

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: November 09, 2021

General Information:
10 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 468434

1c: alk tv 0 mg/L
- TW-6B (Lab ID: 30443913002)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-7A (Lab ID: 30443913004)
  - Alkalinity,Total (CaCO3 pH4.5)

2c: alk tv 6 mg/L
- TW-6 (Lab ID: 30443913001)
  - Alkalinity,Total (CaCO3 pH4.5)

QC Batch: 468435

1c: alk tv 0 mg/L
- TW-10A (Lab ID: 30443913009)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-8A (Lab ID: 30443913010)
  - Alkalinity,Total (CaCO3 pH4.5)

2c: alk tv 6 mg/L
- TW-9C (Lab ID: 30443913008)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-FALL-2021
Pace Project No.: 30443913

Method: **SM 2540C-2011**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: November 09, 2021

General Information:
10 samples were analyzed for SM 2540C-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL-2021
Pace Project No.: 30443913

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: November 09, 2021

General Information:
10 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 467299

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30443221003,30444028002

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2256504)
  - Ammonia, Distilled
- MSD (Lab ID: 2256505)
  - Ammonia, Distilled

Additional Comments:

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-FALL-2021
Pace Project No.: 30443913

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: November 09, 2021

General Information:
10 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 467330

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30443913001,30444273002

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2256599)
  - Chemical Oxygen Demand
- MSD (Lab ID: 2256600)
  - Chemical Oxygen Demand

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2256601)
  - Chemical Oxygen Demand

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL-2021
Pace Project No.: 30443913

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: November 09, 2021

General Information:
10 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL-2021
Pace Project No.: 30443913

Method: **SM 4500NO3-F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: November 09, 2021

General Information:
10 samples were analyzed for SM 4500NO3-F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 468654

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30443913001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2262727)
  - Nitrogen, NO2 plus NO3
- MSD (Lab ID: 2262728)
  - Nitrogen, NO2 plus NO3

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL-2021
Pace Project No.: 30443913

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: November 09, 2021

General Information:
10 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 467623

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30443913001

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2257945)
  - Sulfate
- MSD (Lab ID: 2257946)
  - Sulfate

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL-2021
Pace Project No.: 30443913

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: November 09, 2021

General Information:
10 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the EPA method holding time.
- TW-6 (Lab ID: 30443913001)
- TW-6B (Lab ID: 30443913002)
- TW-7 (Lab ID: 30443913003)
- TW-7A (Lab ID: 30443913004)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 466980

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30442324002

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
- MS (Lab ID: 2255148)
  - Nitrite as N

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-FALL-2021
Pace Project No.: 30443913

Sample: TW-6 **Lab ID: 30443913001** Collected: 10/04/21 13:10 Received: 10/05/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.022	1	10/08/21 10:07	10/08/21 15:29	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	10/08/21 10:07	10/08/21 15:29	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	95	%.	60-140		1	10/08/21 10:07	10/08/21 15:29	630-20-6	
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**4.8**	mg/L	0.50	0.029	1	10/14/21 14:48	10/20/21 12:42	7440-70-2	
Iron	**14.6**	mg/L	0.050	0.0076	1	10/14/21 14:48	10/20/21 12:42	7439-89-6	
Magnesium	**4.4**	mg/L	0.50	0.047	1	10/14/21 14:48	10/20/21 12:42	7439-95-4	
Manganese	**0.31**	mg/L	0.0050	0.00044	1	10/14/21 14:48	10/20/21 12:42	7439-96-5	
Potassium	**1.7**	mg/L	0.50	0.19	1	10/14/21 14:48	10/20/21 12:42	7440-09-7	
Sodium	**5.6**	mg/L	0.50	0.15	1	10/14/21 14:48	10/20/21 12:42	7440-23-5	
Total Hardness by 2340B	**30.2**	mg/L	3.3	0.27	1	10/14/21 14:48	10/20/21 12:42		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**4.9**	mg/L	0.50	0.029	1	10/15/21 11:51	10/21/21 00:01	7440-70-2	
Iron, Dissolved	**15.4**	mg/L	0.050	0.0076	1	10/15/21 11:51	10/21/21 00:01	7439-89-6	
Magnesium, Dissolved	**4.6**	mg/L	0.50	0.047	1	10/15/21 11:51	10/21/21 00:01	7439-95-4	
Manganese, Dissolved	**0.32**	mg/L	0.0050	0.00044	1	10/15/21 11:51	10/21/21 00:01	7439-96-5	
Potassium, Dissolved	**1.7**	mg/L	0.50	0.19	1	10/15/21 11:51	10/21/21 00:01	7440-09-7	
Sodium, Dissolved	**5.7**	mg/L	0.50	0.15	1	10/15/21 11:51	10/21/21 00:01	7440-23-5	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - WestVirginia								
Antimony	**0.00050 U**	mg/L	0.00050	0.000045	1	10/12/21 11:58	10/12/21 16:36	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/12/21 11:58	10/12/21 16:36	7440-38-2	
Barium	**0.15**	mg/L	0.0025	0.00011	1	10/12/21 11:58	10/12/21 16:36	7440-39-3	
Beryllium	**0.00021J**	mg/L	0.00050	0.00015	1	10/12/21 11:58	10/12/21 16:36	7440-41-7	
Cadmium	**0.00015J**	mg/L	0.00050	0.000065	1	10/12/21 11:58	10/12/21 16:36	7440-43-9	
Chromium	**0.0031**	mg/L	0.0025	0.00086	1	10/12/21 11:58	10/12/21 16:36	7440-47-3	
Cobalt	**0.024**	mg/L	0.0025	0.00015	1	10/12/21 11:58	10/12/21 16:36	7440-48-4	
Copper	**0.0077**	mg/L	0.0025	0.00025	1	10/12/21 11:58	10/12/21 16:36	7440-50-8	
Lead	**0.000055J**	mg/L	0.00050	0.000030	1	10/12/21 11:58	10/12/21 16:36	7439-92-1	
Nickel	**0.013**	mg/L	0.0025	0.00065	1	10/12/21 11:58	10/12/21 16:36	7440-02-0	
Selenium	**0.0011J**	mg/L	0.0025	0.00084	1	10/12/21 11:58	10/12/21 16:36	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/12/21 11:58	10/12/21 16:36	7440-22-4	
Thallium	**0.000025J**	mg/L	0.00050	0.000024	1	10/12/21 11:58	10/12/21 16:36	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/12/21 11:58	10/12/21 16:36	7440-62-2	
Zinc	**0.024**	mg/L	0.0050	0.0017	1	10/12/21 11:58	10/12/21 16:36	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
	Pace Analytical Services - Greensburg								
Mercury	**0.00051**	mg/L	0.00020	0.000030	1	10/19/21 12:40	10/20/21 10:01	7439-97-6	

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ANALYTICAL RESULTS

Project: MLF-FALL-2021
Pace Project No.: 30443913

Sample: TW-6 **Lab ID: 30443913001** Collected: 10/04/21 13:10 Received: 10/05/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**6.0J**	mg/L	10.0	1.0	1		10/15/21 16:43		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**102**	mg/L	10.0	10.0	1		10/08/21 17:01		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/08/21 08:23	10/08/21 13:00		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.1J**	mg/L	25.0	4.7	1	10/08/21 11:20	10/08/21 14:32		MH
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**12.8**	mg/L	3.0	0.67	1		10/13/21 16:11	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.086J**	mg/L	0.10	0.024	1		10/18/21 17:27	14797-55-8	
Nitrogen, NO2 plus NO3	**0.13**	mg/L	0.10	0.024	1		10/18/21 17:27		ML
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**17.7**	mg/L	10.0	4.7	1		10/11/21 18:48	14808-79-8	MH
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.049**	mg/L	0.010	0.0055	1		10/06/21 19:30	14797-65-0	H1

Sample: TW-6B **Lab ID: 30443913002** Collected: 10/04/21 12:30 Received: 10/05/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/08/21 10:07	10/08/21 16:07	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/08/21 10:07	10/08/21 16:07	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	97	%.	60-140		1	10/08/21 10:07	10/08/21 16:07	630-20-6	

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ANALYTICAL RESULTS

Project: MLF-FALL-2021
Pace Project No.: 30443913

Sample: TW-6B **Lab ID: 30443913002** Collected: 10/04/21 12:30 Received: 10/05/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium	**0.56**	mg/L	0.50	0.029	1	10/14/21 14:48	10/20/21 12:45	7440-70-2	
Iron	**0.013J**	mg/L	0.050	0.0076	1	10/14/21 14:48	10/20/21 12:45	7439-89-6	
Magnesium	**0.27J**	mg/L	0.50	0.047	1	10/14/21 14:48	10/20/21 12:45	7439-95-4	
Manganese	**0.0059**	mg/L	0.0050	0.00044	1	10/14/21 14:48	10/20/21 12:45	7439-96-5	
Potassium	**0.52**	mg/L	0.50	0.19	1	10/14/21 14:48	10/20/21 12:45	7440-09-7	
Sodium	**1.6**	mg/L	0.50	0.15	1	10/14/21 14:48	10/20/21 12:45	7440-23-5	B
Total Hardness by 2340B	**2.5J**	mg/L	3.3	0.27	1	10/14/21 14:48	10/20/21 12:45		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**0.58**	mg/L	0.50	0.029	1	10/15/21 11:51	10/21/21 00:03	7440-70-2	
Iron, Dissolved	**0.014J**	mg/L	0.050	0.0076	1	10/15/21 11:51	10/21/21 00:03	7439-89-6	
Magnesium, Dissolved	**0.28J**	mg/L	0.50	0.047	1	10/15/21 11:51	10/21/21 00:03	7439-95-4	
Manganese, Dissolved	**0.0065**	mg/L	0.0050	0.00044	1	10/15/21 11:51	10/21/21 00:03	7439-96-5	
Potassium, Dissolved	**0.47J**	mg/L	0.50	0.19	1	10/15/21 11:51	10/21/21 00:03	7440-09-7	
Sodium, Dissolved	**1.7**	mg/L	0.50	0.15	1	10/15/21 11:51	10/21/21 00:03	7440-23-5	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Antimony	**0.00050 U**	mg/L	0.00050	0.000045	1	10/12/21 11:58	10/12/21 16:38	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/12/21 11:58	10/12/21 16:38	7440-38-2	
Barium	**0.0064**	mg/L	0.0025	0.00011	1	10/12/21 11:58	10/12/21 16:38	7440-39-3	
Beryllium	**0.00023J**	mg/L	0.00050	0.00015	1	10/12/21 11:58	10/12/21 16:38	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/12/21 11:58	10/12/21 16:38	7440-43-9	
Chromium	**0.0026**	mg/L	0.0025	0.00086	1	10/12/21 11:58	10/12/21 16:38	7440-47-3	
Cobalt	**0.0058**	mg/L	0.0025	0.00015	1	10/12/21 11:58	10/12/21 16:38	7440-48-4	
Copper	**0.015**	mg/L	0.0025	0.00025	1	10/12/21 11:58	10/12/21 16:38	7440-50-8	
Lead	**0.00014J**	mg/L	0.00050	0.000030	1	10/12/21 11:58	10/12/21 16:38	7439-92-1	
Nickel	**0.0094**	mg/L	0.0025	0.00065	1	10/12/21 11:58	10/12/21 16:38	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/12/21 11:58	10/12/21 16:38	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/12/21 11:58	10/12/21 16:38	7440-22-4	
Thallium	**0.000062J**	mg/L	0.00050	0.000024	1	10/12/21 11:58	10/12/21 16:38	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/12/21 11:58	10/12/21 16:38	7440-62-2	
Zinc	**0.0089**	mg/L	0.0050	0.0017	1	10/12/21 11:58	10/12/21 16:38	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/19/21 12:40	10/20/21 10:10	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		10/15/21 16:43		1c

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ANALYTICAL RESULTS

Project: MLF-FALL-2021
Pace Project No.: 30443913

Sample: TW-6B **Lab ID: 30443913002** Collected: 10/04/21 12:30 Received: 10/05/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		10/08/21 17:01		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/08/21 08:23	10/08/21 13:02		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/08/21 11:20	10/08/21 14:33		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**3.0J**	mg/L	3.0	0.67	1		10/13/21 16:13	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.35**	mg/L	0.10	0.024	1		10/18/21 17:31	14797-55-8	
Nitrogen, NO2 plus NO3	**0.35**	mg/L	0.10	0.024	1		10/18/21 17:31		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/11/21 18:53	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/06/21 19:30	14797-65-0	H1

Sample: TW-7 **Lab ID: 30443913003** Collected: 10/04/21 15:00 Received: 10/05/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.022	1	10/08/21 10:07	10/08/21 16:20	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	10/08/21 10:07	10/08/21 16:20	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	94	%.	60-140		1	10/08/21 10:07	10/08/21 16:20	630-20-6	
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium	**5.4**	mg/L	0.50	0.029	1	10/14/21 14:48	10/20/21 12:47	7440-70-2	
Iron	**12.4**	mg/L	0.050	0.0076	1	10/14/21 14:48	10/20/21 12:47	7439-89-6	

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ANALYTICAL RESULTS

Project: MLF-FALL-2021
Pace Project No.: 30443913

Sample: TW-7 **Lab ID: 30443913003** Collected: 10/04/21 15:00 Received: 10/05/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Magnesium	**0.88**	mg/L	0.50	0.047	1	10/14/21 14:48	10/20/21 12:47	7439-95-4	
Manganese	**0.12**	mg/L	0.0050	0.00044	1	10/14/21 14:48	10/20/21 12:47	7439-96-5	
Potassium	**1.7**	mg/L	0.50	0.19	1	10/14/21 14:48	10/20/21 12:47	7440-09-7	
Sodium	**4.7**	mg/L	0.50	0.15	1	10/14/21 14:48	10/20/21 12:47	7440-23-5	
Total Hardness by 2340B	**17.1**	mg/L	3.3	0.27	1	10/14/21 14:48	10/20/21 12:47		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**5.7**	mg/L	0.50	0.029	1	10/15/21 11:51	10/21/21 00:05	7440-70-2	
Iron, Dissolved	**8.7**	mg/L	0.050	0.0076	1	10/15/21 11:51	10/21/21 00:05	7439-89-6	
Magnesium, Dissolved	**0.91**	mg/L	0.50	0.047	1	10/15/21 11:51	10/21/21 00:05	7439-95-4	
Manganese, Dissolved	**0.12**	mg/L	0.0050	0.00044	1	10/15/21 11:51	10/21/21 00:05	7439-96-5	
Potassium, Dissolved	**1.6**	mg/L	0.50	0.19	1	10/15/21 11:51	10/21/21 00:05	7440-09-7	
Sodium, Dissolved	**4.9**	mg/L	0.50	0.15	1	10/15/21 11:51	10/21/21 00:05	7440-23-5	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Antimony	**0.000051J**	mg/L	0.00050	0.000045	1	10/12/21 11:58	10/12/21 16:41	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/12/21 11:58	10/12/21 16:41	7440-38-2	
Barium	**0.042**	mg/L	0.0025	0.00011	1	10/12/21 11:58	10/12/21 16:41	7440-39-3	
Beryllium	**0.00035J**	mg/L	0.00050	0.00015	1	10/12/21 11:58	10/12/21 16:41	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/12/21 11:58	10/12/21 16:41	7440-43-9	
Chromium	**0.0019J**	mg/L	0.0025	0.00086	1	10/12/21 11:58	10/12/21 16:41	7440-47-3	
Cobalt	**0.0036**	mg/L	0.0025	0.00015	1	10/12/21 11:58	10/12/21 16:41	7440-48-4	
Copper	**0.0032**	mg/L	0.0025	0.00025	1	10/12/21 11:58	10/12/21 16:41	7440-50-8	
Lead	**0.000035J**	mg/L	0.00050	0.000030	1	10/12/21 11:58	10/12/21 16:41	7439-92-1	
Nickel	**0.0072**	mg/L	0.0025	0.00065	1	10/12/21 11:58	10/12/21 16:41	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/12/21 11:58	10/12/21 16:41	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/12/21 11:58	10/12/21 16:41	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000024	1	10/12/21 11:58	10/12/21 16:41	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/12/21 11:58	10/12/21 16:41	7440-62-2	
Zinc	**0.0058**	mg/L	0.0050	0.0017	1	10/12/21 11:58	10/12/21 16:41	7440-66-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**20.0**	mg/L	10.0	1.0	1		10/15/21 16:44		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**51.0**	mg/L	10.0	10.0	1		10/08/21 17:01		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/08/21 08:23	10/08/21 13:04		

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ANALYTICAL RESULTS

Project: MLF-FALL-2021
Pace Project No.: 30443913

Sample: TW-7 **Lab ID: 30443913003** Collected: 10/04/21 15:00 Received: 10/05/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
	Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/08/21 11:20	10/08/21 14:33		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
	Pace Analytical Services - Greensburg								
Chloride	**9.3**	mg/L	3.0	0.67	1		10/13/21 16:14	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011								
	Pace Analytical Services - Greensburg								
Nitrate as N	**0.13**	mg/L	0.10	0.024	1		10/18/21 17:33	14797-55-8	
Nitrogen, NO2 plus NO3	**0.13**	mg/L	0.10	0.024	1		10/18/21 17:33		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/11/21 18:53	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011								
	Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/06/21 19:31	14797-65-0	H1

Sample: TW-7A **Lab ID: 30443913004** Collected: 10/04/21 13:50 Received: 10/05/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/08/21 10:07	10/08/21 16:33	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/08/21 10:07	10/08/21 16:33	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	95	%.	60-140		1	10/08/21 10:07	10/08/21 16:33	630-20-6	
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**2.6**	mg/L	0.50	0.029	1	10/14/21 14:48	10/20/21 12:49	7440-70-2	
Iron	**0.012J**	mg/L	0.050	0.0076	1	10/14/21 14:48	10/20/21 12:49	7439-89-6	
Magnesium	**1.4**	mg/L	0.50	0.047	1	10/14/21 14:48	10/20/21 12:49	7439-95-4	
Manganese	**0.029**	mg/L	0.0050	0.00044	1	10/14/21 14:48	10/20/21 12:49	7439-96-5	
Potassium	**0.64**	mg/L	0.50	0.19	1	10/14/21 14:48	10/20/21 12:49	7440-09-7	
Sodium	**1.6**	mg/L	0.50	0.15	1	10/14/21 14:48	10/20/21 12:49	7440-23-5	B
Total Hardness by 2340B	**12.5**	mg/L	3.3	0.27	1	10/14/21 14:48	10/20/21 12:49		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**2.7**	mg/L	0.50	0.029	1	10/15/21 11:51	10/21/21 00:07	7440-70-2	

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ANALYTICAL RESULTS

Project: MLF-FALL-2021
Pace Project No.: 30443913

Sample: TW-7A **Lab ID: 30443913004** Collected: 10/04/21 13:50 Received: 10/05/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.0076	1	10/15/21 11:51	10/21/21 00:07	7439-89-6	
Magnesium, Dissolved	**1.4**	mg/L	0.50	0.047	1	10/15/21 11:51	10/21/21 00:07	7439-95-4	
Manganese, Dissolved	**0.029**	mg/L	0.0050	0.00044	1	10/15/21 11:51	10/21/21 00:07	7439-96-5	
Potassium, Dissolved	**0.60**	mg/L	0.50	0.19	1	10/15/21 11:51	10/21/21 00:07	7440-09-7	
Sodium, Dissolved	**1.7**	mg/L	0.50	0.15	1	10/15/21 11:51	10/21/21 00:07	7440-23-5	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Antimony	**0.00050 U**	mg/L	0.00050	0.000045	1	10/12/21 11:58	10/12/21 16:49	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/12/21 11:58	10/12/21 16:49	7440-38-2	
Barium	**0.054**	mg/L	0.0025	0.00011	1	10/12/21 11:58	10/12/21 16:49	7440-39-3	
Beryllium	**0.00017J**	mg/L	0.00050	0.00015	1	10/12/21 11:58	10/12/21 16:49	7440-41-7	
Cadmium	**0.000082J**	mg/L	0.00050	0.000065	1	10/12/21 11:58	10/12/21 16:49	7440-43-9	
Chromium	**0.0025J**	mg/L	0.0025	0.00086	1	10/12/21 11:58	10/12/21 16:49	7440-47-3	
Cobalt	**0.0050**	mg/L	0.0025	0.00015	1	10/12/21 11:58	10/12/21 16:49	7440-48-4	
Copper	**0.0044**	mg/L	0.0025	0.00025	1	10/12/21 11:58	10/12/21 16:49	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.000030	1	10/12/21 11:58	10/12/21 16:49	7439-92-1	
Nickel	**0.0057**	mg/L	0.0025	0.00065	1	10/12/21 11:58	10/12/21 16:49	7440-02-0	
Selenium	**0.00089J**	mg/L	0.0025	0.00084	1	10/12/21 11:58	10/12/21 16:49	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/12/21 11:58	10/12/21 16:49	7440-22-4	
Thallium	**0.000049J**	mg/L	0.00050	0.000024	1	10/12/21 11:58	10/12/21 16:49	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/12/21 11:58	10/12/21 16:49	7440-62-2	
Zinc	**0.0099**	mg/L	0.0050	0.0017	1	10/12/21 11:58	10/12/21 16:49	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/19/21 12:40	10/20/21 10:11	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		10/15/21 16:44		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**36.0**	mg/L	10.0	10.0	1		10/08/21 17:01		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/08/21 08:23	10/08/21 13:06		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/08/21 11:20	10/08/21 14:33		

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ANALYTICAL RESULTS

Project: MLF-FALL-2021
Pace Project No.: 30443913

Sample: TW-7A **Lab ID: 30443913004** Collected: 10/04/21 13:50 Received: 10/05/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**3.1**	mg/L	3.0	0.67	1		10/13/21 16:15	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.23**	mg/L	0.10	0.024	1		10/18/21 17:34	14797-55-8	
Nitrogen, NO2 plus NO3	**0.23**	mg/L	0.10	0.024	1		10/18/21 17:34		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**8.3J**	mg/L	10.0	4.7	1		10/11/21 18:55	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/06/21 19:31	14797-65-0	H1

Sample: TW-8 **Lab ID: 30443913005** Collected: 10/05/21 10:00 Received: 10/05/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/08/21 10:07	10/08/21 16:46	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/08/21 10:07	10/08/21 16:46	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	101	%.	60-140		1	10/08/21 10:07	10/08/21 16:46	630-20-6	
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium	**6.5**	mg/L	0.50	0.029	1	10/14/21 14:48	10/20/21 12:51	7440-70-2	
Iron	**33.5**	mg/L	0.050	0.0076	1	10/14/21 14:48	10/20/21 12:51	7439-89-6	
Magnesium	**4.4**	mg/L	0.50	0.047	1	10/14/21 14:48	10/20/21 12:51	7439-95-4	
Manganese	**0.66**	mg/L	0.0050	0.00044	1	10/14/21 14:48	10/20/21 12:51	7439-96-5	
Potassium	**1.3**	mg/L	0.50	0.19	1	10/14/21 14:48	10/20/21 12:51	7440-09-7	
Sodium	**25.7**	mg/L	0.50	0.15	1	10/14/21 14:48	10/20/21 12:51	7440-23-5	
Total Hardness by 2340B	**34.4**	mg/L	3.3	0.27	1	10/14/21 14:48	10/20/21 12:51		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**7.0**	mg/L	0.50	0.029	1	10/15/21 11:51	10/21/21 00:09	7440-70-2	
Iron, Dissolved	**31.9**	mg/L	0.050	0.0076	1	10/15/21 11:51	10/21/21 00:09	7439-89-6	
Magnesium, Dissolved	**4.7**	mg/L	0.50	0.047	1	10/15/21 11:51	10/21/21 00:09	7439-95-4	
Manganese, Dissolved	**0.71**	mg/L	0.0050	0.00044	1	10/15/21 11:51	10/21/21 00:09	7439-96-5	
Potassium, Dissolved	**1.3**	mg/L	0.50	0.19	1	10/15/21 11:51	10/21/21 00:09	7440-09-7	

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ANALYTICAL RESULTS

Project: MLF-FALL-2021
Pace Project No.: 30443913

Sample: TW-8 **Lab ID: 30443913005** Collected: 10/05/21 10:00 Received: 10/05/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Sodium, Dissolved	**27.5**	mg/L	0.50	0.15	1	10/15/21 11:51	10/21/21 00:09	7440-23-5	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Antimony	**0.00050 U**	mg/L	0.00050	0.000045	1	10/12/21 11:58	10/12/21 16:52	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/12/21 11:58	10/12/21 16:52	7440-38-2	
Barium	**0.20**	mg/L	0.0025	0.00011	1	10/12/21 11:58	10/12/21 16:52	7440-39-3	
Beryllium	**0.00024J**	mg/L	0.00050	0.00015	1	10/12/21 11:58	10/12/21 16:52	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/12/21 11:58	10/12/21 16:52	7440-43-9	
Chromium	**0.0025 U**	mg/L	0.0025	0.00086	1	10/12/21 11:58	10/12/21 16:52	7440-47-3	
Cobalt	**0.0056**	mg/L	0.0025	0.00015	1	10/12/21 11:58	10/12/21 16:52	7440-48-4	
Copper	**0.0045**	mg/L	0.0025	0.00025	1	10/12/21 11:58	10/12/21 16:52	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.000030	1	10/12/21 11:58	10/12/21 16:52	7439-92-1	
Nickel	**0.0038**	mg/L	0.0025	0.00065	1	10/12/21 11:58	10/12/21 16:52	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/12/21 11:58	10/12/21 16:52	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/12/21 11:58	10/12/21 16:52	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000024	1	10/12/21 11:58	10/12/21 16:52	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/12/21 11:58	10/12/21 16:52	7440-62-2	
Zinc	**0.013**	mg/L	0.0050	0.0017	1	10/12/21 11:58	10/12/21 16:52	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/19/21 12:40	10/20/21 10:13	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**36.0**	mg/L	10.0	1.0	1		10/15/21 17:04		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**130**	mg/L	10.0	10.0	1		10/08/21 17:48		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.17**	mg/L	0.10	0.044	1	10/08/21 08:23	10/08/21 13:08		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**10.5J**	mg/L	25.0	4.7	1	10/08/21 11:20	10/08/21 14:33		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**50.7**	mg/L	3.0	0.67	1		10/13/21 16:16	16887-00-6	

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ANALYTICAL RESULTS

Project: MLF-FALL-2021
Pace Project No.: 30443913

Sample: TW-8 **Lab ID: 30443913005** Collected: 10/05/21 10:00 Received: 10/05/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.075J**	mg/L	0.10	0.024	1		10/18/21 17:35	14797-55-8	
Nitrogen, NO2 plus NO3	**0.089J**	mg/L	0.10	0.024	1		10/18/21 17:35		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/11/21 18:55	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.014**	mg/L	0.010	0.0055	1		10/06/21 19:31	14797-65-0	

Sample: TW-9 **Lab ID: 30443913006** Collected: 10/05/21 12:50 Received: 10/05/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/08/21 10:07	10/08/21 16:58	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/08/21 10:07	10/08/21 16:58	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	110	%.	60-140		1	10/08/21 10:07	10/08/21 16:58	630-20-6	
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium	**0.46J**	mg/L	0.50	0.029	1	10/14/21 14:48	10/20/21 12:53	7440-70-2	
Iron	**25.7**	mg/L	0.050	0.0076	1	10/14/21 14:48	10/20/21 12:53	7439-89-6	
Magnesium	**0.23J**	mg/L	0.50	0.047	1	10/14/21 14:48	10/20/21 12:53	7439-95-4	
Manganese	**0.14**	mg/L	0.0050	0.00044	1	10/14/21 14:48	10/20/21 12:53	7439-96-5	
Potassium	**0.48J**	mg/L	0.50	0.19	1	10/14/21 14:48	10/20/21 12:53	7440-09-7	
Sodium	**0.85**	mg/L	0.50	0.15	1	10/14/21 14:48	10/20/21 12:53	7440-23-5	B
Total Hardness by 2340B	**2.1J**	mg/L	3.3	0.27	1	10/14/21 14:48	10/20/21 12:53		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**0.47J**	mg/L	0.50	0.029	1	10/15/21 11:51	10/21/21 00:11	7440-70-2	
Iron, Dissolved	**26.0**	mg/L	0.050	0.0076	1	10/15/21 11:51	10/21/21 00:11	7439-89-6	
Magnesium, Dissolved	**0.24J**	mg/L	0.50	0.047	1	10/15/21 11:51	10/21/21 00:11	7439-95-4	
Manganese, Dissolved	**0.14**	mg/L	0.0050	0.00044	1	10/15/21 11:51	10/21/21 00:11	7439-96-5	
Potassium, Dissolved	**0.44J**	mg/L	0.50	0.19	1	10/15/21 11:51	10/21/21 00:11	7440-09-7	
Sodium, Dissolved	**0.93**	mg/L	0.50	0.15	1	10/15/21 11:51	10/21/21 00:11	7440-23-5	

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ANALYTICAL RESULTS

Project: MLF-FALL-2021
Pace Project No.: 30443913

Sample: TW-9 **Lab ID: 30443913006** Collected: 10/05/21 12:50 Received: 10/05/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Antimony	**0.000047J**	mg/L	0.00050	0.000045	1	10/12/21 11:58	10/12/21 16:55	7440-36-0	
Arsenic	**0.00089J**	mg/L	0.0025	0.00025	1	10/12/21 11:58	10/12/21 16:55	7440-38-2	
Barium	**0.012**	mg/L	0.0025	0.00011	1	10/12/21 11:58	10/12/21 16:55	7440-39-3	
Beryllium	**0.0014**	mg/L	0.00050	0.00015	1	10/12/21 11:58	10/12/21 16:55	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/12/21 11:58	10/12/21 16:55	7440-43-9	
Chromium	**0.0015J**	mg/L	0.0025	0.00086	1	10/12/21 11:58	10/12/21 16:55	7440-47-3	
Cobalt	**0.0015J**	mg/L	0.0025	0.00015	1	10/12/21 11:58	10/12/21 16:55	7440-48-4	
Copper	**0.00062J**	mg/L	0.0025	0.00025	1	10/12/21 11:58	10/12/21 16:55	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.000030	1	10/12/21 11:58	10/12/21 16:55	7439-92-1	
Nickel	**0.0037**	mg/L	0.0025	0.00065	1	10/12/21 11:58	10/12/21 16:55	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/12/21 11:58	10/12/21 16:55	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/12/21 11:58	10/12/21 16:55	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000024	1	10/12/21 11:58	10/12/21 16:55	7440-28-0	
Vanadium	**0.00092J**	mg/L	0.0025	0.00021	1	10/12/21 11:58	10/12/21 16:55	7440-62-2	
Zinc	**0.0071**	mg/L	0.0050	0.0017	1	10/12/21 11:58	10/12/21 16:55	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/19/21 12:40	10/20/21 10:15	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**20.0**	mg/L	10.0	1.0	1		10/15/21 17:05		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**29.0**	mg/L	10.0	10.0	1		10/08/21 17:48		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/08/21 08:23	10/08/21 13:10		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.1J**	mg/L	25.0	4.7	1	10/08/21 11:20	10/08/21 14:33		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**1.4J**	mg/L	3.0	0.67	1		10/13/21 16:19	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.024	1		10/18/21 17:37	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.024	1		10/18/21 17:37		

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ANALYTICAL RESULTS

Project: MLF-FALL-2021
Pace Project No.: 30443913

Sample: TW-9 **Lab ID: 30443913006** Collected: 10/05/21 12:50 Received: 10/05/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/11/21 18:57	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/06/21 19:33	14797-65-0	

Sample: TW-9B **Lab ID: 30443913007** Collected: 10/05/21 11:30 Received: 10/05/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.022	1	10/08/21 10:07	10/08/21 17:11	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	10/08/21 10:07	10/08/21 17:11	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	101	%.	60-140		1	10/08/21 10:07	10/08/21 17:11	630-20-6	
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium	**4.3**	mg/L	0.50	0.029	1	10/14/21 14:48	10/20/21 12:55	7440-70-2	
Iron	**0.031J**	mg/L	0.050	0.0076	1	10/14/21 14:48	10/20/21 12:55	7439-89-6	
Magnesium	**2.9**	mg/L	0.50	0.047	1	10/14/21 14:48	10/20/21 12:55	7439-95-4	
Manganese	**0.026**	mg/L	0.0050	0.00044	1	10/14/21 14:48	10/20/21 12:55	7439-96-5	
Potassium	**1.6**	mg/L	0.50	0.19	1	10/14/21 14:48	10/20/21 12:55	7440-09-7	
Sodium	**13.1**	mg/L	0.50	0.15	1	10/14/21 14:48	10/20/21 12:55	7440-23-5	
Total Hardness by 2340B	**22.7**	mg/L	3.3	0.27	1	10/14/21 14:48	10/20/21 12:55		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**4.6**	mg/L	0.50	0.029	1	10/15/21 11:51	10/21/21 00:13	7440-70-2	
Iron, Dissolved	**0.013J**	mg/L	0.050	0.0076	1	10/15/21 11:51	10/21/21 00:13	7439-89-6	
Magnesium, Dissolved	**3.1**	mg/L	0.50	0.047	1	10/15/21 11:51	10/21/21 00:13	7439-95-4	
Manganese, Dissolved	**0.028**	mg/L	0.0050	0.00044	1	10/15/21 11:51	10/21/21 00:13	7439-96-5	
Potassium, Dissolved	**1.6**	mg/L	0.50	0.19	1	10/15/21 11:51	10/21/21 00:13	7440-09-7	
Sodium, Dissolved	**14.0**	mg/L	0.50	0.15	1	10/15/21 11:51	10/21/21 00:13	7440-23-5	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Antimony	**0.00050 U**	mg/L	0.00050	0.000045	1	10/12/21 11:58	10/12/21 16:58	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/12/21 11:58	10/12/21 16:58	7440-38-2	
Barium	**0.051**	mg/L	0.0025	0.00011	1	10/12/21 11:58	10/12/21 16:58	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	10/12/21 11:58	10/12/21 16:58	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/12/21 11:58	10/12/21 16:58	7440-43-9	

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ANALYTICAL RESULTS

Project: MLF-FALL-2021
Pace Project No.: 30443913

Sample: TW-9B **Lab ID: 30443913007** Collected: 10/05/21 11:30 Received: 10/05/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Chromium	**0.0034**	mg/L	0.0025	0.00086	1	10/12/21 11:58	10/12/21 16:58	7440-47-3	
Cobalt	**0.0051**	mg/L	0.0025	0.00015	1	10/12/21 11:58	10/12/21 16:58	7440-48-4	
Copper	**0.0020J**	mg/L	0.0025	0.00025	1	10/12/21 11:58	10/12/21 16:58	7440-50-8	
Lead	**0.000034J**	mg/L	0.00050	0.000030	1	10/12/21 11:58	10/12/21 16:58	7439-92-1	
Nickel	**0.0098**	mg/L	0.0025	0.00065	1	10/12/21 11:58	10/12/21 16:58	7440-02-0	
Selenium	**0.0011J**	mg/L	0.0025	0.00084	1	10/12/21 11:58	10/12/21 16:58	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/12/21 11:58	10/12/21 16:58	7440-22-4	
Thallium	**0.000034J**	mg/L	0.00050	0.000024	1	10/12/21 11:58	10/12/21 16:58	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/12/21 11:58	10/12/21 16:58	7440-62-2	
Zinc	**0.0097**	mg/L	0.0050	0.0017	1	10/12/21 11:58	10/12/21 16:58	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/19/21 12:40	10/20/21 10:16	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**12.0**	mg/L	10.0	1.0	1		10/15/21 17:06		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**63.0**	mg/L	10.0	10.0	1		10/08/21 17:48		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.12**	mg/L	0.10	0.044	1	10/08/21 08:23	10/08/21 13:12		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/08/21 11:20	10/08/21 14:33		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**20.9**	mg/L	3.0	0.67	1		10/13/21 16:19	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**2.4**	mg/L	0.10	0.024	1		10/18/21 17:38	14797-55-8	
Nitrogen, NO2 plus NO3	**2.4**	mg/L	0.10	0.024	1		10/18/21 17:38		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/11/21 19:00	14808-79-8	

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ANALYTICAL RESULTS

Project: MLF-FALL-2021
Pace Project No.: 30443913

Sample: TW-9B **Lab ID: 30443913007** Collected: 10/05/21 11:30 Received: 10/05/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/06/21 19:34	14797-65-0	

Sample: TW-9C **Lab ID: 30443913008** Collected: 10/05/21 12:10 Received: 10/05/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/08/21 10:07	10/08/21 17:24	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/08/21 10:07	10/08/21 17:24	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	106	%.	60-140		1	10/08/21 10:07	10/08/21 17:24	630-20-6	
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium	**4.3**	mg/L	0.50	0.029	1	10/14/21 14:48	10/20/21 12:57	7440-70-2	
Iron	**0.016J**	mg/L	0.050	0.0076	1	10/14/21 14:48	10/20/21 12:57	7439-89-6	
Magnesium	**3.8**	mg/L	0.50	0.047	1	10/14/21 14:48	10/20/21 12:57	7439-95-4	
Manganese	**0.079**	mg/L	0.0050	0.00044	1	10/14/21 14:48	10/20/21 12:57	7439-96-5	
Potassium	**1.8**	mg/L	0.50	0.19	1	10/14/21 14:48	10/20/21 12:57	7440-09-7	
Sodium	**15.1**	mg/L	0.50	0.15	1	10/14/21 14:48	10/20/21 12:57	7440-23-5	
Total Hardness by 2340B	**26.3**	mg/L	3.3	0.27	1	10/14/21 14:48	10/20/21 12:57		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**4.6**	mg/L	0.50	0.029	1	10/15/21 11:51	10/21/21 00:15	7440-70-2	
Iron, Dissolved	**0.010J**	mg/L	0.050	0.0076	1	10/15/21 11:51	10/21/21 00:15	7439-89-6	
Magnesium, Dissolved	**4.0**	mg/L	0.50	0.047	1	10/15/21 11:51	10/21/21 00:15	7439-95-4	
Manganese, Dissolved	**0.084**	mg/L	0.0050	0.00044	1	10/15/21 11:51	10/21/21 00:15	7439-96-5	
Potassium, Dissolved	**1.9**	mg/L	0.50	0.19	1	10/15/21 11:51	10/21/21 00:15	7440-09-7	
Sodium, Dissolved	**16.0**	mg/L	0.50	0.15	1	10/15/21 11:51	10/21/21 00:15	7440-23-5	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Antimony	**0.00050 U**	mg/L	0.00050	0.000045	1	10/12/21 11:58	10/12/21 17:00	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/12/21 11:58	10/12/21 17:00	7440-38-2	
Barium	**0.10**	mg/L	0.0025	0.00011	1	10/12/21 11:58	10/12/21 17:00	7440-39-3	
Beryllium	**0.00032J**	mg/L	0.00050	0.00015	1	10/12/21 11:58	10/12/21 17:00	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/12/21 11:58	10/12/21 17:00	7440-43-9	
Chromium	**0.0037**	mg/L	0.0025	0.00086	1	10/12/21 11:58	10/12/21 17:00	7440-47-3	
Cobalt	**0.013**	mg/L	0.0025	0.00015	1	10/12/21 11:58	10/12/21 17:00	7440-48-4	
Copper	**0.0033**	mg/L	0.0025	0.00025	1	10/12/21 11:58	10/12/21 17:00	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.000030	1	10/12/21 11:58	10/12/21 17:00	7439-92-1	

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ANALYTICAL RESULTS

Project: MLF-FALL-2021
Pace Project No.: 30443913

Sample: TW-9C **Lab ID: 30443913008** Collected: 10/05/21 12:10 Received: 10/05/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Nickel	**0.014**	mg/L	0.0025	0.00065	1	10/12/21 11:58	10/12/21 17:00	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/12/21 11:58	10/12/21 17:00	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/12/21 11:58	10/12/21 17:00	7440-22-4	
Thallium	**0.000040J**	mg/L	0.00050	0.000024	1	10/12/21 11:58	10/12/21 17:00	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/12/21 11:58	10/12/21 17:00	7440-62-2	
Zinc	**0.013**	mg/L	0.0050	0.0017	1	10/12/21 11:58	10/12/21 17:00	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/19/21 12:40	10/20/21 10:18	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**6.0J**	mg/L	10.0	1.0	1		10/15/21 17:06		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**67.0**	mg/L	10.0	10.0	1		10/08/21 17:48		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/08/21 08:23	10/08/21 13:14		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/08/21 11:20	10/08/21 14:33		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**25.5**	mg/L	3.0	0.67	1		10/13/21 16:20	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**3.5**	mg/L	0.10	0.024	1		10/18/21 17:40	14797-55-8	
Nitrogen, NO2 plus NO3	**3.5**	mg/L	0.10	0.024	1		10/18/21 17:40		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.1**	mg/L	10.0	4.7	1		10/11/21 19:02	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/06/21 19:34	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-FALL-2021
Pace Project No.: 30443913

Sample: TW-10A **Lab ID: 30443913009** Collected: 10/05/21 14:00 Received: 10/05/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.022	1	10/08/21 10:07	10/08/21 17:36	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	10/08/21 10:07	10/08/21 17:36	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	103	%.	60-140		1	10/08/21 10:07	10/08/21 17:36	630-20-6	
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**5.6**	mg/L	0.50	0.029	1	10/14/21 14:48	10/20/21 13:03	7440-70-2	
Iron	**0.048J**	mg/L	0.050	0.0076	1	10/14/21 14:48	10/20/21 13:03	7439-89-6	
Magnesium	**3.6**	mg/L	0.50	0.047	1	10/14/21 14:48	10/20/21 13:03	7439-95-4	
Manganese	**0.060**	mg/L	0.0050	0.00044	1	10/14/21 14:48	10/20/21 13:03	7439-96-5	
Potassium	**2.1**	mg/L	0.50	0.19	1	10/14/21 14:48	10/20/21 13:03	7440-09-7	
Sodium	**22.9**	mg/L	0.50	0.15	1	10/14/21 14:48	10/20/21 13:03	7440-23-5	
Total Hardness by 2340B	**28.9**	mg/L	3.3	0.27	1	10/14/21 14:48	10/20/21 13:03		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**6.1**	mg/L	0.50	0.029	1	10/15/21 11:51	10/21/21 00:17	7440-70-2	
Iron, Dissolved	**0.033J**	mg/L	0.050	0.0076	1	10/15/21 11:51	10/21/21 00:17	7439-89-6	
Magnesium, Dissolved	**3.8**	mg/L	0.50	0.047	1	10/15/21 11:51	10/21/21 00:17	7439-95-4	
Manganese, Dissolved	**0.064**	mg/L	0.0050	0.00044	1	10/15/21 11:51	10/21/21 00:17	7439-96-5	
Potassium, Dissolved	**2.1**	mg/L	0.50	0.19	1	10/15/21 11:51	10/21/21 00:17	7440-09-7	
Sodium, Dissolved	**24.1**	mg/L	0.50	0.15	1	10/15/21 11:51	10/21/21 00:17	7440-23-5	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - WestVirginia								
Antimony	**0.00050 U**	mg/L	0.00050	0.000045	1	10/12/21 11:58	10/12/21 17:03	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/12/21 11:58	10/12/21 17:03	7440-38-2	
Barium	**0.095**	mg/L	0.0025	0.00011	1	10/12/21 11:58	10/12/21 17:03	7440-39-3	
Beryllium	**0.00061**	mg/L	0.00050	0.00015	1	10/12/21 11:58	10/12/21 17:03	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/12/21 11:58	10/12/21 17:03	7440-43-9	
Chromium	**0.0032**	mg/L	0.0025	0.00086	1	10/12/21 11:58	10/12/21 17:03	7440-47-3	
Cobalt	**0.015**	mg/L	0.0025	0.00015	1	10/12/21 11:58	10/12/21 17:03	7440-48-4	
Copper	**0.0057**	mg/L	0.0025	0.00025	1	10/12/21 11:58	10/12/21 17:03	7440-50-8	
Lead	**0.000037J**	mg/L	0.00050	0.000030	1	10/12/21 11:58	10/12/21 17:03	7439-92-1	
Nickel	**0.016**	mg/L	0.0025	0.00065	1	10/12/21 11:58	10/12/21 17:03	7440-02-0	
Selenium	**0.0012J**	mg/L	0.0025	0.00084	1	10/12/21 11:58	10/12/21 17:03	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/12/21 11:58	10/12/21 17:03	7440-22-4	
Thallium	**0.000039J**	mg/L	0.00050	0.000024	1	10/12/21 11:58	10/12/21 17:03	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/12/21 11:58	10/12/21 17:03	7440-62-2	
Zinc	**0.022**	mg/L	0.0050	0.0017	1	10/12/21 11:58	10/12/21 17:03	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
	Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/19/21 12:40	10/20/21 10:20	7439-97-6	

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ANALYTICAL RESULTS

Project: MLF-FALL-2021
Pace Project No.: 30443913

Sample: TW-10A **Lab ID: 30443913009** Collected: 10/05/21 14:00 Received: 10/05/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		10/15/21 17:07		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**93.0**	mg/L	10.0	10.0	1		10/08/21 17:48		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/15/21 07:59	10/15/21 10:11		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/08/21 11:20	10/08/21 14:34		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**43.3**	mg/L	3.0	0.67	1		10/13/21 16:21	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**2.2**	mg/L	0.10	0.024	1		10/18/21 17:41	14797-55-8	
Nitrogen, NO2 plus NO3	**2.2**	mg/L	0.10	0.024	1		10/18/21 17:41		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**9.3J**	mg/L	10.0	4.7	1		10/11/21 19:02	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/06/21 19:35	14797-65-0	

Sample: TW-8A **Lab ID: 30443913010** Collected: 10/05/21 10:30 Received: 10/05/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/08/21 10:07	10/08/21 17:49	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/08/21 10:07	10/08/21 17:49	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	108	%.	60-140		1	10/08/21 10:07	10/08/21 17:49	630-20-6	

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ANALYTICAL RESULTS

Project: MLF-FALL-2021
Pace Project No.: 30443913

Sample: TW-8A **Lab ID: 30443913010** Collected: 10/05/21 10:30 Received: 10/05/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium	**4.6**	mg/L	0.50	0.029	1	10/14/21 14:48	10/20/21 13:05	7440-70-2	
Iron	**0.024J**	mg/L	0.050	0.0076	1	10/14/21 14:48	10/20/21 13:05	7439-89-6	
Magnesium	**3.5**	mg/L	0.50	0.047	1	10/14/21 14:48	10/20/21 13:05	7439-95-4	
Manganese	**0.068**	mg/L	0.0050	0.00044	1	10/14/21 14:48	10/20/21 13:05	7439-96-5	
Potassium	**1.5**	mg/L	0.50	0.19	1	10/14/21 14:48	10/20/21 13:05	7440-09-7	
Sodium	**15.0**	mg/L	0.50	0.15	1	10/14/21 14:48	10/20/21 13:05	7440-23-5	
Total Hardness by 2340B	**26.0**	mg/L	3.3	0.27	1	10/14/21 14:48	10/20/21 13:05		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**5.1**	mg/L	0.50	0.029	1	10/15/21 11:51	10/21/21 00:19	7440-70-2	
Iron, Dissolved	**0.024J**	mg/L	0.050	0.0076	1	10/15/21 11:51	10/21/21 00:19	7439-89-6	
Magnesium, Dissolved	**3.8**	mg/L	0.50	0.047	1	10/15/21 11:51	10/21/21 00:19	7439-95-4	
Manganese, Dissolved	**0.076**	mg/L	0.0050	0.00044	1	10/15/21 11:51	10/21/21 00:19	7439-96-5	
Potassium, Dissolved	**1.6**	mg/L	0.50	0.19	1	10/15/21 11:51	10/21/21 00:19	7440-09-7	
Sodium, Dissolved	**16.5**	mg/L	0.50	0.15	1	10/15/21 11:51	10/21/21 00:19	7440-23-5	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Antimony	**0.00050 U**	mg/L	0.00050	0.000045	1	10/12/21 11:58	10/12/21 17:06	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/12/21 11:58	10/12/21 17:06	7440-38-2	
Barium	**0.12**	mg/L	0.0025	0.00011	1	10/12/21 11:58	10/12/21 17:06	7440-39-3	
Beryllium	**0.00042J**	mg/L	0.00050	0.00015	1	10/12/21 11:58	10/12/21 17:06	7440-41-7	
Cadmium	**0.00018J**	mg/L	0.00050	0.000065	1	10/12/21 11:58	10/12/21 17:06	7440-43-9	
Chromium	**0.0039**	mg/L	0.0025	0.00086	1	10/12/21 11:58	10/12/21 17:06	7440-47-3	
Cobalt	**0.010**	mg/L	0.0025	0.00015	1	10/12/21 11:58	10/12/21 17:06	7440-48-4	
Copper	**0.019**	mg/L	0.0025	0.00025	1	10/12/21 11:58	10/12/21 17:06	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.000030	1	10/12/21 11:58	10/12/21 17:06	7439-92-1	
Nickel	**0.010**	mg/L	0.0025	0.00065	1	10/12/21 11:58	10/12/21 17:06	7440-02-0	
Selenium	**0.0015J**	mg/L	0.0025	0.00084	1	10/12/21 11:58	10/12/21 17:06	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/12/21 11:58	10/12/21 17:06	7440-22-4	
Thallium	**0.000026J**	mg/L	0.00050	0.000024	1	10/12/21 11:58	10/12/21 17:06	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/12/21 11:58	10/12/21 17:06	7440-62-2	
Zinc	**0.015**	mg/L	0.0050	0.0017	1	10/12/21 11:58	10/12/21 17:06	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/19/21 12:40	10/20/21 10:21	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		10/15/21 17:08		1c

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ANALYTICAL RESULTS

Project: MLF-FALL-2021
Pace Project No.: 30443913

Sample: TW-8A **Lab ID: 30443913010** Collected: 10/05/21 10:30 Received: 10/05/21 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**71.0**	mg/L	10.0	10.0	1		10/08/21 17:48		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/15/21 07:59	10/15/21 10:16		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/08/21 11:20	10/08/21 14:34		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**30.2**	mg/L	3.0	0.67	1		10/13/21 16:22	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.85**	mg/L	0.10	0.024	1		10/18/21 17:42	14797-55-8	
Nitrogen, NO2 plus NO3	**0.85**	mg/L	0.10	0.024	1		10/18/21 17:42		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**12.9**	mg/L	10.0	4.7	1		10/11/21 19:05	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/06/21 19:37	14797-65-0	

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QUALITY CONTROL DATA

Project: MLF-FALL-2021
Pace Project No.: 30443913

QC Batch: 467360
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30443913001, 30443913002, 30443913003, 30443913004, 30443913005, 30443913006, 30443913007, 30443913008, 30443913009, 30443913010

METHOD BLANK: 2256625
Matrix: Water
Associated Lab Samples: 30443913001, 30443913002, 30443913003, 30443913004, 30443913005, 30443913006, 30443913007, 30443913008, 30443913009, 30443913010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.022	10/08/21 15:04	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	10/08/21 15:04	
1,1,1,2-Tetrachloroethane (S)	%.	106	60-140		10/08/21 15:04	

LABORATORY CONTROL SAMPLE: 2256626

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.24	95	85-115	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.27	106	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			101	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2256627 2256628

Parameter	Units	30443913001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.4	0.4	0.36	0.38	91	94	60-140	4	25	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.4	0.4	0.40	0.41	100	102	60-140	3	25	
1,1,1,2-Tetrachloroethane (S)	%.						97	99	60-140			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-FALL-2021
Pace Project No.: 30443913

QC Batch: 468811
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30443913001, 30443913002, 30443913004, 30443913005, 30443913006, 30443913007, 30443913008, 30443913009, 30443913010

METHOD BLANK: 2263666
Matrix: Water
Associated Lab Samples: 30443913001, 30443913002, 30443913004, 30443913005, 30443913006, 30443913007, 30443913008, 30443913009, 30443913010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.000030	10/20/21 09:58	

LABORATORY CONTROL SAMPLE: 2263667

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.001	0.0010	100	80-120	

MATRIX SPIKE SAMPLE: 2263669

Parameter	Units	30443913001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.00051	0.0025	0.0027	88	75-125	

SAMPLE DUPLICATE: 2263668

Parameter	Units	30443913001 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	0.00051	0.00050	2	20	

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QUALITY CONTROL DATA

Project: MLF-FALL-2021
Pace Project No.: 30443913

QC Batch: 87142
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D MET
Laboratory: Pace Analytical Services - WestVirginia
Associated Lab Samples: 30443913001, 30443913002, 30443913003, 30443913004, 30443913005, 30443913006, 30443913007, 30443913008, 30443913009, 30443913010

METHOD BLANK: 427655
Matrix: Water
Associated Lab Samples: 30443913001, 30443913002, 30443913003, 30443913004, 30443913005, 30443913006, 30443913007, 30443913008, 30443913009, 30443913010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.029	10/20/21 12:18	
Iron	mg/L	0.050 U	0.050	0.0076	10/20/21 12:18	
Magnesium	mg/L	0.50 U	0.50	0.047	10/20/21 12:18	
Manganese	mg/L	0.0050 U	0.0050	0.00044	10/20/21 12:18	
Potassium	mg/L	0.50 U	0.50	0.19	10/20/21 12:18	
Sodium	mg/L	0.22J	0.50	0.15	10/20/21 12:18	

LABORATORY CONTROL SAMPLE: 427656

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	41.6	104	80-120	
Iron	mg/L	2	2.0	100	80-120	
Magnesium	mg/L	20	21.6	108	80-120	
Manganese	mg/L	2	2.1	103	80-120	
Potassium	mg/L	20	19.5	98	80-120	
Sodium	mg/L	20	19.3	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 427682 427683

Parameter	Units	30444323001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	87000 ug/L	40	40	128	131	102	111	80-120	3	20	
Iron	mg/L	ND	2	2	2.0	2.0	100	102	80-120	2	20	
Magnesium	mg/L	33600 ug/L	20	20	55.7	57.1	111	118	80-120	3	20	
Manganese	mg/L	5.3 ug/L	2	2	2.0	2.1	101	103	80-120	2	20	
Potassium	mg/L	2340 ug/L	20	20	22.6	23.0	101	103	80-120	2	20	
Sodium	mg/L	22500 ug/L	20	20	41.6	42.6	96	101	80-120	3	20	

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QUALITY CONTROL DATA

Project: MLF-FALL-2021
Pace Project No.: 30443913

QC Batch: 87239
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D MET Dissolved
Laboratory: Pace Analytical Services - WestVirginia
Associated Lab Samples: 30443913001, 30443913002, 30443913003, 30443913004, 30443913005, 30443913006, 30443913007, 30443913008, 30443913009, 30443913010

METHOD BLANK: 428497
Matrix: Water
Associated Lab Samples: 30443913001, 30443913002, 30443913003, 30443913004, 30443913005, 30443913006, 30443913007, 30443913008, 30443913009, 30443913010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.029	10/20/21 23:45	
Iron, Dissolved	mg/L	0.050 U	0.050	0.0076	10/20/21 23:45	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	10/20/21 23:45	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.00044	10/20/21 23:45	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.19	10/20/21 23:45	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.15	10/20/21 23:45	

LABORATORY CONTROL SAMPLE: 428498

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	41.3	103	80-120	
Iron, Dissolved	mg/L	2	2.1	107	80-120	
Magnesium, Dissolved	mg/L	20	22.0	110	80-120	
Manganese, Dissolved	mg/L	2	2.1	106	80-120	
Potassium, Dissolved	mg/L	20	19.1	95	80-120	
Sodium, Dissolved	mg/L	20	19.6	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 428499 428500

Parameter	Units	30442225001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	813 ug/L	40	40	41.7	42.0	102	103	80-120	1	20	
Iron, Dissolved	mg/L	ND	2	2	2.1	2.1	106	107	80-120	1	20	
Magnesium, Dissolved	mg/L	ND	20	20	21.7	21.9	107	109	80-120	1	20	
Manganese, Dissolved	mg/L	ND	2	2	2.1	2.1	103	104	80-120	1	20	
Potassium, Dissolved	mg/L	ND	20	20	21.0	21.1	104	104	80-120	0	20	
Sodium, Dissolved	mg/L	240000 ug/L	20	20	258	258	90	91	80-120	0	20	

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QUALITY CONTROL DATA

Project: MLF-FALL-2021
Pace Project No.: 30443913

QC Batch: 86826
QC Batch Method: EPA 3020A
Analysis Method: EPA 6020B
Analysis Description: 6020B MET
Laboratory: Pace Analytical Services - WestVirginia
Associated Lab Samples: 30443913001, 30443913002, 30443913003, 30443913004, 30443913005, 30443913006, 30443913007, 30443913008, 30443913009, 30443913010

METHOD BLANK: 425713
Matrix: Water
Associated Lab Samples: 30443913001, 30443913002, 30443913003, 30443913004, 30443913005, 30443913006, 30443913007, 30443913008, 30443913009, 30443913010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.000045	10/12/21 16:16	
Arsenic	mg/L	0.0025 U	0.0025	0.00025	10/12/21 16:16	
Barium	mg/L	0.0025 U	0.0025	0.00011	10/12/21 16:16	
Beryllium	mg/L	0.00050 U	0.00050	0.00015	10/12/21 16:16	
Cadmium	mg/L	0.00050 U	0.00050	0.000065	10/12/21 16:16	
Chromium	mg/L	0.0025 U	0.0025	0.00086	10/12/21 16:16	
Cobalt	mg/L	0.0025 U	0.0025	0.00015	10/12/21 16:16	
Copper	mg/L	0.0025 U	0.0025	0.00025	10/12/21 16:16	
Lead	mg/L	0.00050 U	0.00050	0.000030	10/12/21 16:16	
Nickel	mg/L	0.0025 U	0.0025	0.00065	10/12/21 16:16	
Selenium	mg/L	0.0025 U	0.0025	0.00084	10/12/21 16:16	
Silver	mg/L	0.0025 U	0.0025	0.00016	10/12/21 16:16	
Thallium	mg/L	0.00050 U	0.00050	0.000024	10/12/21 16:16	
Vanadium	mg/L	0.0025 U	0.0025	0.00021	10/12/21 16:16	
Zinc	mg/L	0.0050 U	0.0050	0.0017	10/12/21 16:16	

LABORATORY CONTROL SAMPLE: 425714

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.021	107	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.097	97	80-120	
Beryllium	mg/L	0.02	0.019	96	80-120	
Cadmium	mg/L	0.02	0.020	100	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Copper	mg/L	0.1	0.10	103	80-120	
Lead	mg/L	0.02	0.020	99	80-120	
Nickel	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.096	96	80-120	
Silver	mg/L	0.1	0.10	102	80-120	
Thallium	mg/L	0.02	0.020	100	80-120	
Vanadium	mg/L	0.1	0.10	102	80-120	
Zinc	mg/L	0.2	0.20	102	80-120	

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QUALITY CONTROL DATA

Project: MLF-FALL-2021
Pace Project No.: 30443913

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 425715 425716

Parameter	Units	7390863001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.02	0.02	0.022	0.022	108	110	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.098	0.10	97	101	75-125	4	20	
Barium	mg/L	14.4 ug/L	0.1	0.1	0.11	0.12	97	102	75-125	4	20	
Beryllium	mg/L	ND	0.02	0.02	0.020	0.021	98	102	75-125	4	20	
Cadmium	mg/L	ND	0.02	0.02	0.020	0.021	101	104	75-125	2	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.11	103	107	75-125	3	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.11	104	108	75-125	4	20	
Copper	mg/L	ND	0.1	0.1	0.10	0.11	105	109	75-125	4	20	
Lead	mg/L	9.0 ug/L	0.02	0.02	0.029	0.030	101	103	75-125	2	20	
Nickel	mg/L	3.0 ug/L	0.1	0.1	0.10	0.11	102	106	75-125	4	20	
Selenium	mg/L	ND	0.1	0.1	0.099	0.10	99	100	75-125	0	20	
Silver	mg/L	ND	0.1	0.1	0.10	0.11	101	105	75-125	4	20	
Thallium	mg/L	ND	0.02	0.02	0.020	0.020	100	102	75-125	2	20	
Vanadium	mg/L	ND	0.1	0.1	0.10	0.11	103	106	75-125	4	20	
Zinc	mg/L	32.6 ug/L	0.2	0.2	0.24	0.25	102	107	75-125	4	20	

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QUALITY CONTROL DATA

Project: MLF-FALL-2021
Pace Project No.: 30443913

QC Batch: 468434
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30443913001, 30443913002, 30443913003, 30443913004

METHOD BLANK: 2261878 Matrix: Water
Associated Lab Samples: 30443913001, 30443913002, 30443913003, 30443913004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	10/15/21 16:16	

LABORATORY CONTROL SAMPLE: 2261879

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2261880 2261881

Parameter	Units	30444191003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	72.0	50	50	122	122	100	100	85-115	0	20	

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QUALITY CONTROL DATA

Project: MLF-FALL-2021
Pace Project No.: 30443913

QC Batch: 468435
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30443913005, 30443913006, 30443913007, 30443913008, 30443913009, 30443913010

METHOD BLANK: 2261883 Matrix: Water
Associated Lab Samples: 30443913005, 30443913006, 30443913007, 30443913008, 30443913009, 30443913010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	10/15/21 17:03	

LABORATORY CONTROL SAMPLE: 2261884

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2261885 2261886

Parameter	Units	30443913005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	36.0	50	50	86.0	86.0	100	100	85-115	0	20	

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QUALITY CONTROL DATA

Project: MLF-FALL-2021
Pace Project No.: 30443913

QC Batch: 467310
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30443913001, 30443913002, 30443913003, 30443913004

METHOD BLANK: 2256542 Matrix: Water
Associated Lab Samples: 30443913001, 30443913002, 30443913003, 30443913004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	10/08/21 17:01	

LABORATORY CONTROL SAMPLE: 2256543

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	982	98	85-115	

SAMPLE DUPLICATE: 2256544

Parameter	Units	30443598001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	69.0	67.0	3	5	

SAMPLE DUPLICATE: 2256545

Parameter	Units	30443875002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	32.0	32.0	0	5	

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QUALITY CONTROL DATA

Project: MLF-FALL-2021
Pace Project No.: 30443913

QC Batch: 467311
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30443913005, 30443913006, 30443913007, 30443913008, 30443913009, 30443913010

METHOD BLANK: 2256546 Matrix: Water
Associated Lab Samples: 30443913005, 30443913006, 30443913007, 30443913008, 30443913009, 30443913010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	10/08/21 17:48	

LABORATORY CONTROL SAMPLE: 2256547

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	960	96	85-115	

SAMPLE DUPLICATE: 2256548

Parameter	Units	30443875003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0 U		5	

SAMPLE DUPLICATE: 2256549

Parameter	Units	30443913010 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	71.0	68.0	4	5	

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QUALITY CONTROL DATA

Project: MLF-FALL-2021
Pace Project No.: 30443913

QC Batch: 467299
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30443913001, 30443913002, 30443913003, 30443913004, 30443913005, 30443913006, 30443913007, 30443913008

METHOD BLANK: 2256502
Matrix: Water
Associated Lab Samples: 30443913001, 30443913002, 30443913003, 30443913004, 30443913005, 30443913006, 30443913007, 30443913008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.044	10/08/21 12:21	

LABORATORY CONTROL SAMPLE: 2256503

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.0	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2256504 2256505

Parameter	Units	30443221003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	19.5	4	4	22.9	22.9	85	86	90-110	0	20	ML

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2256506 2256507

Parameter	Units	30444028002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.23	4	4	4.0	4.0	95	95	90-110	0	20	

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QUALITY CONTROL DATA

Project: MLF-FALL-2021
Pace Project No.: 30443913

QC Batch: 468315
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30443913009, 30443913010

METHOD BLANK: 2261380
Matrix: Water
Associated Lab Samples: 30443913009, 30443913010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.044	10/15/21 10:07	

LABORATORY CONTROL SAMPLE: 2261381

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.1	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2261382 2261383

Parameter	Units	30443913009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.1	4.1	102	103	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2261384 2261385

Parameter	Units	30444266002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	ND	4	4	4.1	4.2	103	104	90-110	0	20	

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QUALITY CONTROL DATA

Project: MLF-FALL-2021
Pace Project No.: 30443913

QC Batch: 467330
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30443913001, 30443913002, 30443913003, 30443913004, 30443913005, 30443913006, 30443913007, 30443913008, 30443913009, 30443913010

METHOD BLANK: 2256597
Matrix: Water
Associated Lab Samples: 30443913001, 30443913002, 30443913003, 30443913004, 30443913005, 30443913006, 30443913007, 30443913008, 30443913009, 30443913010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	10/08/21 14:32	

LABORATORY CONTROL SAMPLE: 2256598

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	305	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2256599 2256600

Parameter	Units	30443913001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	6.1J	150	150	179	177	115	114	90-110	1	10	MH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2256601 2256602

Parameter	Units	30444273002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	370	150	150	504	506	89	91	90-110	0	10	ML

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QUALITY CONTROL DATA

Project: MLF-FALL-2021
Pace Project No.: 30443913

QC Batch: 468046 | Analysis Method: SM 4500-Cl-E-2011
QC Batch Method: SM 4500-Cl-E-2011 | Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30443913001, 30443913002, 30443913003, 30443913004, 30443913005, 30443913006, 30443913007, 30443913008, 30443913009, 30443913010

METHOD BLANK: 2259756 | Matrix: Water
Associated Lab Samples: 30443913001, 30443913002, 30443913003, 30443913004, 30443913005, 30443913006, 30443913007, 30443913008, 30443913009, 30443913010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	10/13/21 16:04	

METHOD BLANK: 2259829 | Matrix: Water
Associated Lab Samples: 30443913001, 30443913002, 30443913003, 30443913004, 30443913005, 30443913006, 30443913007, 30443913008, 30443913009, 30443913010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	10/13/21 16:05	

LABORATORY CONTROL SAMPLE: 2259757

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	21.5	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2259758 2259759

Parameter	Units	30443913001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	12.8	20	20	34.6	32.8	109	100	85-115	5	20	

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QUALITY CONTROL DATA

Project: MLF-FALL-2021
Pace Project No.: 30443913

QC Batch: 468654
QC Batch Method: SM 4500NO3-F-2011
Analysis Method: SM 4500NO3-F-2011
Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30443913001, 30443913002, 30443913003, 30443913004, 30443913005, 30443913006, 30443913007, 30443913008, 30443913009, 30443913010

METHOD BLANK: 2262725
Matrix: Water
Associated Lab Samples: 30443913001, 30443913002, 30443913003, 30443913004, 30443913005, 30443913006, 30443913007, 30443913008, 30443913009, 30443913010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.024	10/18/21 17:24	

LABORATORY CONTROL SAMPLE: 2262726

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	4.2	104	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2262727 2262728

Parameter	Units	30443913001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.13	5	5	3.6	3.6	70	70	85-115	0	20	ML

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-FALL-2021
Pace Project No.: 30443913

QC Batch: 467623
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30443913001, 30443913002, 30443913003, 30443913004, 30443913005, 30443913006, 30443913007, 30443913008, 30443913009, 30443913010

METHOD BLANK: 2257943
Matrix: Water
Associated Lab Samples: 30443913001, 30443913002, 30443913003, 30443913004, 30443913005, 30443913006, 30443913007, 30443913008, 30443913009, 30443913010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	10/11/21 18:46	

LABORATORY CONTROL SAMPLE: 2257944

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	32.4	108	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2257945 2257946

Parameter	Units	30443913001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	17.7	20	20	42.8	42.4	125	123	85-115	1	20	MH

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QUALITY CONTROL DATA

Project: MLF-FALL-2021
Pace Project No.: 30443913

QC Batch: 466980
QC Batch Method: SM 4500NO2-B-2011
Analysis Method: SM 4500NO2-B-2011
Analysis Description: SM4500-NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30443913001, 30443913002, 30443913003, 30443913004, 30443913005, 30443913006, 30443913007, 30443913008, 30443913009, 30443913010

METHOD BLANK: 2255144 Matrix: Water
Associated Lab Samples: 30443913001, 30443913002, 30443913003, 30443913004, 30443913005, 30443913006, 30443913007, 30443913008, 30443913009, 30443913010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	10/06/21 19:21	

METHOD BLANK: 2255145 Matrix: Water
Associated Lab Samples: 30443913001, 30443913002, 30443913003, 30443913004, 30443913005, 30443913006, 30443913007, 30443913008, 30443913009, 30443913010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	10/06/21 19:23	

LABORATORY CONTROL SAMPLE: 2255146

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.092	92	90-110	

MATRIX SPIKE SAMPLE: 2255148

Parameter	Units	30442324002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	ND	0.1	0.045	45	85-115	ML

SAMPLE DUPLICATE: 2255147

Parameter	Units	30442324002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	ND	0.010 U		20	

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QUALIFIERS

Project: MLF-FALL-2021
Pace Project No.: 30443913

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30443913001
[1] 8011 sample pH is 7

Sample: 30443913002
[1] 8011 sample pH is 7

Sample: 30443913003
[1] 8011 sample pH is 7

Sample: 30443913004
[1] 8011 sample pH is 7

Sample: 30443913005
[1] 8011 sample pH is 7

Sample: 30443913006
[1] 8011 sample pH is 7

Sample: 30443913007
[1] 8011 sample pH is 7

Sample: 30443913008
[1] 8011 sample pH is 7

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QUALIFIERS

Project: MLF-FALL-2021
Pace Project No.: 30443913

SAMPLE QUALIFIERS

Sample: 30443913009

[1] 8011 sample pH is 7

Sample: 30443913010

[1] 8011 sample pH is 7

ANALYTE QUALIFIERS

1c	alk tv 0 mg/L
2c	alk tv 6 mg/L
B	Analyte was detected in the associated method blank.
H1	Analysis conducted outside the EPA method holding time.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-FALL-2021
Pace Project No.: 30443913

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30443913001	**TW-6**	EPA 8011	467360	EPA 8011	467415
30443913002	**TW-6B**	EPA 8011	467360	EPA 8011	467415
30443913003	**TW-7**	EPA 8011	467360	EPA 8011	467415
30443913004	**TW-7A**	EPA 8011	467360	EPA 8011	467415
30443913005	**TW-8**	EPA 8011	467360	EPA 8011	467415
30443913006	**TW-9**	EPA 8011	467360	EPA 8011	467415
30443913007	**TW-9B**	EPA 8011	467360	EPA 8011	467415
30443913008	**TW-9C**	EPA 8011	467360	EPA 8011	467415
30443913009	**TW-10A**	EPA 8011	467360	EPA 8011	467415
30443913010	**TW-8A**	EPA 8011	467360	EPA 8011	467415
30443913001	**TW-6**	EPA 3010A	87142	EPA 6010D	87711
30443913002	**TW-6B**	EPA 3010A	87142	EPA 6010D	87711
30443913003	**TW-7**	EPA 3010A	87142	EPA 6010D	87711
30443913004	**TW-7A**	EPA 3010A	87142	EPA 6010D	87711
30443913005	**TW-8**	EPA 3010A	87142	EPA 6010D	87711
30443913006	**TW-9**	EPA 3010A	87142	EPA 6010D	87711
30443913007	**TW-9B**	EPA 3010A	87142	EPA 6010D	87711
30443913008	**TW-9C**	EPA 3010A	87142	EPA 6010D	87711
30443913009	**TW-10A**	EPA 3010A	87142	EPA 6010D	87711
30443913010	**TW-8A**	EPA 3010A	87142	EPA 6010D	87711
30443913001	**TW-6**	EPA 3010A	87239	EPA 6010D	87787
30443913002	**TW-6B**	EPA 3010A	87239	EPA 6010D	87787
30443913003	**TW-7**	EPA 3010A	87239	EPA 6010D	87787
30443913004	**TW-7A**	EPA 3010A	87239	EPA 6010D	87787
30443913005	**TW-8**	EPA 3010A	87239	EPA 6010D	87787
30443913006	**TW-9**	EPA 3010A	87239	EPA 6010D	87787
30443913007	**TW-9B**	EPA 3010A	87239	EPA 6010D	87787
30443913008	**TW-9C**	EPA 3010A	87239	EPA 6010D	87787
30443913009	**TW-10A**	EPA 3010A	87239	EPA 6010D	87787
30443913010	**TW-8A**	EPA 3010A	87239	EPA 6010D	87787
30443913001	**TW-6**	EPA 3020A	86826	EPA 6020B	86857
30443913002	**TW-6B**	EPA 3020A	86826	EPA 6020B	86857
30443913003	**TW-7**	EPA 3020A	86826	EPA 6020B	86857
30443913004	**TW-7A**	EPA 3020A	86826	EPA 6020B	86857
30443913005	**TW-8**	EPA 3020A	86826	EPA 6020B	86857
30443913006	**TW-9**	EPA 3020A	86826	EPA 6020B	86857
30443913007	**TW-9B**	EPA 3020A	86826	EPA 6020B	86857
30443913008	**TW-9C**	EPA 3020A	86826	EPA 6020B	86857
30443913009	**TW-10A**	EPA 3020A	86826	EPA 6020B	86857
30443913010	**TW-8A**	EPA 3020A	86826	EPA 6020B	86857
30443913001	**TW-6**	EPA 7470A	468811	EPA 7470A	468854
30443913002	**TW-6B**	EPA 7470A	468811	EPA 7470A	468854
30443913004	**TW-7A**	EPA 7470A	468811	EPA 7470A	468854
30443913005	**TW-8**	EPA 7470A	468811	EPA 7470A	468854
30443913006	**TW-9**	EPA 7470A	468811	EPA 7470A	468854
30443913007	**TW-9B**	EPA 7470A	468811	EPA 7470A	468854
30443913008	**TW-9C**	EPA 7470A	468811	EPA 7470A	468854

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-FALL-2021
Pace Project No.: 30443913

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30443913009	**TW-10A**	EPA 7470A	468811	EPA 7470A	468854
30443913010	**TW-8A**	EPA 7470A	468811	EPA 7470A	468854
30443913001	**TW-6**	SM 2320B-2011	468434		
30443913002	**TW-6B**	SM 2320B-2011	468434		
30443913003	**TW-7**	SM 2320B-2011	468434		
30443913004	**TW-7A**	SM 2320B-2011	468434		
30443913005	**TW-8**	SM 2320B-2011	468435		
30443913006	**TW-9**	SM 2320B-2011	468435		
30443913007	**TW-9B**	SM 2320B-2011	468435		
30443913008	**TW-9C**	SM 2320B-2011	468435		
30443913009	**TW-10A**	SM 2320B-2011	468435		
30443913010	**TW-8A**	SM 2320B-2011	468435		
30443913001	**TW-6**	SM 2540C-2011	467310		
30443913002	**TW-6B**	SM 2540C-2011	467310		
30443913003	**TW-7**	SM 2540C-2011	467310		
30443913004	**TW-7A**	SM 2540C-2011	467310		
30443913005	**TW-8**	SM 2540C-2011	467311		
30443913006	**TW-9**	SM 2540C-2011	467311		
30443913007	**TW-9B**	SM 2540C-2011	467311		
30443913008	**TW-9C**	SM 2540C-2011	467311		
30443913009	**TW-10A**	SM 2540C-2011	467311		
30443913010	**TW-8A**	SM 2540C-2011	467311		
30443913001	**TW-6**	EPA 350.1	467299	EPA 350.1	467328
30443913002	**TW-6B**	EPA 350.1	467299	EPA 350.1	467328
30443913003	**TW-7**	EPA 350.1	467299	EPA 350.1	467328
30443913004	**TW-7A**	EPA 350.1	467299	EPA 350.1	467328
30443913005	**TW-8**	EPA 350.1	467299	EPA 350.1	467328
30443913006	**TW-9**	EPA 350.1	467299	EPA 350.1	467328
30443913007	**TW-9B**	EPA 350.1	467299	EPA 350.1	467328
30443913008	**TW-9C**	EPA 350.1	467299	EPA 350.1	467328
30443913009	**TW-10A**	EPA 350.1	468315	EPA 350.1	468333
30443913010	**TW-8A**	EPA 350.1	468315	EPA 350.1	468333
30443913001	**TW-6**	EPA 410.4	467330	EPA 410.4	467448
30443913002	**TW-6B**	EPA 410.4	467330	EPA 410.4	467448
30443913003	**TW-7**	EPA 410.4	467330	EPA 410.4	467448
30443913004	**TW-7A**	EPA 410.4	467330	EPA 410.4	467448
30443913005	**TW-8**	EPA 410.4	467330	EPA 410.4	467448
30443913006	**TW-9**	EPA 410.4	467330	EPA 410.4	467448
30443913007	**TW-9B**	EPA 410.4	467330	EPA 410.4	467448
30443913008	**TW-9C**	EPA 410.4	467330	EPA 410.4	467448
30443913009	**TW-10A**	EPA 410.4	467330	EPA 410.4	467448
30443913010	**TW-8A**	EPA 410.4	467330	EPA 410.4	467448
30443913001	**TW-6**	SM 4500-Cl-E-2011	468046		
30443913002	**TW-6B**	SM 4500-Cl-E-2011	468046		
30443913003	**TW-7**	SM 4500-Cl-E-2011	468046		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-FALL-2021
Pace Project No.: 30443913

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30443913004	**TW-7A**	SM 4500-Cl-E-2011	468046		
30443913005	**TW-8**	SM 4500-Cl-E-2011	468046		
30443913006	**TW-9**	SM 4500-Cl-E-2011	468046		
30443913007	**TW-9B**	SM 4500-Cl-E-2011	468046		
30443913008	**TW-9C**	SM 4500-Cl-E-2011	468046		
30443913009	**TW-10A**	SM 4500-Cl-E-2011	468046		
30443913010	**TW-8A**	SM 4500-Cl-E-2011	468046		
30443913001	**TW-6**	SM 4500NO3-F-2011	468654		
30443913002	**TW-6B**	SM 4500NO3-F-2011	468654		
30443913003	**TW-7**	SM 4500NO3-F-2011	468654		
30443913004	**TW-7A**	SM 4500NO3-F-2011	468654		
30443913005	**TW-8**	SM 4500NO3-F-2011	468654		
30443913006	**TW-9**	SM 4500NO3-F-2011	468654		
30443913007	**TW-9B**	SM 4500NO3-F-2011	468654		
30443913008	**TW-9C**	SM 4500NO3-F-2011	468654		
30443913009	**TW-10A**	SM 4500NO3-F-2011	468654		
30443913010	**TW-8A**	SM 4500NO3-F-2011	468654		
30443913001	**TW-6**	EPA 9038	467623		
30443913002	**TW-6B**	EPA 9038	467623		
30443913003	**TW-7**	EPA 9038	467623		
30443913004	**TW-7A**	EPA 9038	467623		
30443913005	**TW-8**	EPA 9038	467623		
30443913006	**TW-9**	EPA 9038	467623		
30443913007	**TW-9B**	EPA 9038	467623		
30443913008	**TW-9C**	EPA 9038	467623		
30443913009	**TW-10A**	EPA 9038	467623		
30443913010	**TW-8A**	EPA 9038	467623		
30443913001	**TW-6**	SM 4500NO2-B-2011	466980		
30443913002	**TW-6B**	SM 4500NO2-B-2011	466980		
30443913003	**TW-7**	SM 4500NO2-B-2011	466980		
30443913004	**TW-7A**	SM 4500NO2-B-2011	466980		
30443913005	**TW-8**	SM 4500NO2-B-2011	466980		
30443913006	**TW-9**	SM 4500NO2-B-2011	466980		
30443913007	**TW-9B**	SM 4500NO2-B-2011	466980		
30443913008	**TW-9C**	SM 4500NO2-B-2011	466980		
30443913009	**TW-10A**	SM 4500NO2-B-2011	466980		
30443913010	**TW-8A**	SM 4500NO2-B-2011	466980		

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WO# : 30443913

30443913

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF- FALL 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals (1)	Total & Diss. Metals (2)	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO4, COD		Method 8011 - EDB	DBCP			
1	TW-6	7	10.4.21	1310	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓				001
2	TW-6B	↓	↓	1230	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				002
3	TW-7	↓	↓	1500	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				003
4	TW-7A	↓	↓	1350	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				004
5	TW-8	↓	10.5.21	1000	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			10-5-21	005
6	TW-8A	↓	↓	1030	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓	011			006
7	TW-9	↓	↓	1250	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓	006			007
8	TW-9B	↓	↓	1130	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓	007			008
9	TW-9C	↓	↓	1210	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓	008			009
10	TW-10A	↓	↓	1400	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓	009			010
11	TRIP BLANK	2	↓	—	—		QC									✓				ON
12																				

	Signature	Date	Time	Comments
Relinquished by	DA Brown	10.4.21		(1) Sb, As, Ba, Be, Cd, Cr, Co, Cu, Hg, Pb, Ni, Se, Ag, Tl, V, Zn
Received by	RSB PACE 10/5/21	10.4.21	15:15	(2) Ca, Fe, Mg, Mn, K, Na
Relinquished by	RSB PACE	10/5/21	18:30	
Received by	RDS PACE	10-5-21	1835	PACE-WV - METALS - SEE ATTACHED LIST FOR METHODS
Relinquished by	RDS PACE	10521	2200	PACE-G-BURG - WET CHEM
Received by	[illegible]	10-5-21	22:00	LEVEL 2 REPORT

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Environmental Monitoring Project # _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Label AM
LIMS Login ✓

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Thermometer Used 12 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 2.4 / 2.6 °C Correction Factor: -0.4 / -0.4 °C Final Temp: 2.0 / 2.2 °C

Temp should be above freezing to 6°C

pH paper Lot# 10D0411 Date and Initials of person examining contents: 10-6-21 JA

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:		✓		2. no container preservative type on COC
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests 10-6-21		✓		15. TW-7 not marked as Field Filtered
All containers have been checked for preservation. exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.
All containers meet method preservation requirements.	✓			Initial when completed JA / Date/time of preservation / Lot # of added preservative
Headspace in VOA Vials (>6mm):		✓		17.
Trip Blank Present:		✓		18.
Trip Blank Custody Seals Present			✓	
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: JA / Date: / Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: COC indicates trip blank sent. NONE WERE RECEIVED.

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

WO#: 30443913
PM: SMB Due Date: 10/20/21
CLIENT: ENV MONITOR

WO# : 7392726

7392726

Chain of Custody

☐ Samples Pre-Logged into eCOC.

State Of Origin: MD

Cert. Needed: [X] Yes ☐ No

Pace Analytical®
www.pacelabs.com

Workorder: 30443913 **Workorder Name:** MLF-FALL-2021 **Owner Received Date:** 10/5/2021 **Results Requested By:** 10/20/2021

Report To

Samantha Bayura
Pace Analytical Pittsburgh
1638 Roseytown Road
Suites 2,3,4
Greensburg, PA 15601
Phone (724)850-5622

Subcontract To

Pace Beaver West Virginia
225 Industrial Park RD
Beaver, WV 25813
Phone (800)999-0105

Requested Analysis

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HNO3	Diss Metals see list	T.Metals/Hardness see list	Total Mercury	LAB USE ONLY
1	TW-6	PS	10/4/2021 13:10	30443913001	Water	2	X	X	X	
2	TW-6B	PS	10/4/2021 12:30	30443913002	Water	2	X	X	X	
3	TW-7	PS	10/4/2021 15:00	30443913003	Water	2	X	X	X	
4	TW-7A	PS	10/4/2021 13:50	30443913004	Water	2	X	X	X	
5	TW-8	PS	10/5/2021 10:00	30443913005	Water	2	X	X	X	
6	TW-9	PS	10/5/2021 12:50	30443913006	Water	2	X	X	X	
7	TW-9B	PS	10/5/2021 11:30	30443913007	Water	2	X	X	X	
8	TW-9C	PS	10/5/2021 12:10	30443913008	Water	2	X	X	X	
9	TW-10A	PS	10/5/2021 14:00	30443913009	Water	2	X	X	X	
10	TW-8A	PS	10/5/2021 10:30	30443913010	Water	2	X	X	X	

Transfers	Released By	Date/Time	Received By	Date/Time
1	[illegible] 10/8/21	1700	@ 10-9-21	0300
2				
3				

Comments

See attached list for methods/analytes, and units

Cooler Temperature on Receipt °C | **Custody Seal** Y or N | **Received on Ice** Y or N | **Samples Intact** Y or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.*
This chain of custody is considered complete as is since this information is available in the owner laboratory.

WO#: 73926726
PM: BMJ Due Date: 10/18/21
CLIENT: PACEPITT

TABLE 1

TOTAL AND DISSOLVED METALS: ANALYTICAL METHODS AND REPORTING LIMITS

Millersville Sanitary Landfill, Anne Arundel County, MD

Elements	Techniques	Methods	Fractions	MCL/ SMCL (mg/l)	RL (mg/l)
Appendix I Metals					
Antimony	ICP/MS	6020	Total	0.006	0.0005
Arsenic	ICP/MS	6020	Total	0.01	0.0025
Barium	ICP/MS	6020	Total	2	0.0025
Beryllium	ICP/MS	6020	Total	0.004	0.0005
Cadmium	ICP/MS	6020	Total	0.005	0.0005
Chromium	ICP/MS	6020	Total	0.1	0.0025
Cobalt	ICP/MS	6020	Total	---	0.0025
Copper	ICP/MS	6020	Total	1.3[b]	0.0025
Lead	ICP/MS	6020	Total	0.015[b]	0.0005
Nickel	ICP/MS	6020	Total	---	0.0025
Selenium	ICP/MS	6020	Total	0.05	0.0025
Silver	ICP/MS	6020	Total	0.1 [a]	0.0025
Thallium	ICP/MS	6020	Total	0.002	0.0005
Vanadium	ICP/MS	6020	Total	---	0.0025
Zinc	ICP/MS	6020	Total	5 [a]	0.005
Additional metals					
Calcium	ICP	6010	Total & Dissolved	---	0.5
Iron	ICP	6010	Total & Dissolved	0.3[a]	0.05
Magnesium	ICP	6010	Total & Dissolved	---	0.5
Manganese	ICP/MS	6010	Total & Dissolved	0.05 [a]	0.005
Mercury	Cold Vapor AAS	SW-846 7470A	Total	0.002	0.0005
Potassium	ICP	6010	Total & Dissolved	---	0.5
Sodium	ICP	6010	Total & Dissolved	---	0.5

Notes: 1) MCL = Maximum contaminant level; 2) a = Secondary maximum contaminant level; 3) RL = Reporting limit

WO#: 30443913

WO#: 7392726

PM: BMJ Due Date: 10/18/21

CLIENT: PACEPITT

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF- FALL 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals (1)	Total & Diss. Metals (2)	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO4, COD		Method Boil	DBCP			
1	TW-6	7	10.4.21	1310	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓				001
2	TW-6B	↓	↓	1230	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				002
3	TW-7	↓	↓	1500	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				003
4	TW-7A	↓	↓	1350	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				004
5	TW-8	↓	10.5.21	1000	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			10-6-21	005
6	TW-8A	↓	↓	1030	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓	011		011	006
7	TW-9	↓	↓	1250	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓	006		006	007
8	TW-9B	↓	↓	1130	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓	007		007	008
9	TW-9C	↓	↓	1210	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓	008		008	009
10	TW-10A	↓	↓	1400	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓	009			010
11	TRIP BLANK	2	↓	—	—		QA									✓				OH
12																				

	Signature	Date	Time	Comments
Relinquished by	DA Brown	10.4.21		(1) Sb, As, Ba, Be, Cd, Cr, Co, Cu, Hg, Pb, Ni, Se, Ag, Tl, V, Zn
Received by	RDS PACE 10/5/21	10.4.21	15:15	(2) Ca, Fe, Mg, Mn, K, Na
Relinquished by	RDS PACE	10/5/21	18:30	
Received by	RDS PACE	10-5-21	1835	PACE-WV - METALS - SEE ATTACHED LIST FOR METHODS
Relinquished by	RDS PACE	10521	2200	PACE-G-BURN - WET CHEM
Received by	[illegible]	10-5-21	22:00	LEVEL 2 REPORT

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Environmental Monitoring Project # _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Tracking #: _____

Label ✓
LIMS Login ✓

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Thermometer Used 12 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 2.4 2.6 °C Correction Factor: -0.4 -0.4 °C Final Temp: 2.0 2.2 °C

Temp should be above freezing to 6°C

pH paper Lot# 10D0411 Date and Initials of person examining contents: 10-6-21 JA

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:		✓		2. no container preservative type on COC
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests 10-6-21	✓	✓		15. TW-7 not marked as Field Filtered
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.
All containers meet method preservation requirements.	✓			Initial when completed JA Date/time of preservation Lot # of added preservative
Headspace in VOA Vials (>6mm):		✓		17.
Trip Blank Present:		✓		18.
Trip Blank Custody Seals Present			✓	
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: JA Date: Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: COC indicates trip blank sent. NONE WERE RECEIVED

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

WO#: 30443913
PM: SMB Due Date: 10/20/21
CLIENT: ENV MONITOR

WO#: 73927726
PM: BMJ Due Date: 10/18/21
CLIENT: PACEPITT

WO#: 7392726
PM: BMJ Due Date: 10/18/21
CLIENT: PACEPITT

LIMS73 Lab Sample Condition Upon Receipt (West Virgin

Pace Analytical

Client Name:

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other: 3rd Party

Tracking #:

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 23 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** .8 °C Correction Factor: .0 °C Final Temp: .8 °C

Comments:

pH paper Lot#	Date and Initials of person examining contents:
223419	CDW 10-11-21

	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:		✓		3.
Sampler Name & Signature on COC:			✓	4. Sub from Pitt
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5. Lab Labeled by: B Checked by: B
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered:			✓	13.
-pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓	
Filtered volume received for Dissolved tests:	✓			14.
All containers have been checked for preservation:	✓			15.
exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix				
All containers meet method preservation requirements:	✓			Initial when completed: CDW Date: 10-11-21
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present:			✓	17.
Trip Blank Custody Seals Present:			✓	
				Initial when completed: CDW Date: 10-11-21

Client Notification/ Resolution:

Person Contacted: Date/Time: Contacted By:

Comments/ Resolution:

☐ **A check in this box indicates that additional information has been stored in ereports.**

***PM review** is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

December 10, 2021

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on October 07, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - WestVirginia
- Pace Analytical Services - Greensburg

(Greensburg, PA) - Revision 1 - This report replaces the November, 3, 2021 report. This project was revised on December, 10, 2021 to include hardness.

(Beaver, WV) - Revision 1 - This report replaces the November 3, 2021 report. This project was revised on December 6, 2021 to include Hardness.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alexis E. Ozoroski
alexis.ozoroski@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver
225 Industrial Park Drive, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30444380001	**TW-1**	Water	10/06/21 14:00	10/07/21 23:00
30444380002	**TW-2**	Water	10/06/21 11:25	10/07/21 23:00
30444380003	**TW-2A**	Water	10/06/21 10:50	10/07/21 23:00
30444380004	**TW-3**	Water	10/06/21 12:15	10/07/21 23:00
30444380005	**TW-3A**	Water	10/06/21 12:50	10/07/21 23:00
30444380006	**TW-4**	Water	10/06/21 08:45	10/07/21 23:00
30444380007	**TW-4B**	Water	10/06/21 09:20	10/07/21 23:00
30444380008	**TW-5**	Water	10/05/21 15:30	10/07/21 23:00
30444380009	**TW-5A**	Water	10/05/21 16:00	10/07/21 23:00
30444380010	**TW-5B**	Water	10/05/21 15:00	10/07/21 23:00
30444380011	**Trip Blank**	Water	10/06/21 00:00	10/07/21 23:00

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SAMPLE ANALYTE COUNT

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30444380001	**TW-1**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30444380002	**TW-2**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30444380003	**TW-2A**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA

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SAMPLE ANALYTE COUNT

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30444380004	**TW-3**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30444380005	**TW-3A**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30444380006	**TW-4**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30444380007	**TW-4B**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30444380008	**TW-5**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30444380009	**TW-5A**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30444380010	**TW-5B**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	AJM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30444380011	**Trip Blank**	EPA 8011	TAW	3	PASI-PA

PASI-BVWV = Pace Analytical Services - WestVirginia
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Date: December 10, 2021

TW-1 (Lab ID: 30444380001)

- 8011 Sample pH is 7

TW-2 (Lab ID: 30444380002)

- 8011 Sample pH is 7

TW-2A (Lab ID: 30444380003)

- 8011 Sample pH is 7

TW-3 (Lab ID: 30444380004)

- 8011 Sample pH is 7

TW-3A (Lab ID: 30444380005)

- 8011 Sample pH is 7

TW-4 (Lab ID: 30444380006)

- 8011 Sample pH is 7

TW-4B (Lab ID: 30444380007)

- 8011 Sample pH is 7

TW-5 (Lab ID: 30444380008)

- 8011 Sample pH is 7

TW-5A (Lab ID: 30444380009)

- 8011 Sample pH is 7

TW-5B (Lab ID: 30444380010)

- 8011 Sample pH is 7

Trip Blank (Lab ID: 30444380011)

- 8011 Sample pH is 7

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
11 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 467759

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- BLANK (Lab ID: 2258524)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- LCS (Lab ID: 2258525)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- MS (Lab ID: 2258595)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- MSD (Lab ID: 2258596)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- TW-1 (Lab ID: 30444380001)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- TW-2 (Lab ID: 30444380002)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- TW-2A (Lab ID: 30444380003)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- TW-3 (Lab ID: 30444380004)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- TW-3A (Lab ID: 30444380005)
  - 1,1,1,2-Tetrachloroethane (S)

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

QC Batch: 467759

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- 1,2-Dibromo-3-chloropropane
- TW-4 (Lab ID: 30444380006)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- TW-4B (Lab ID: 30444380007)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- TW-5 (Lab ID: 30444380008)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- TW-5A (Lab ID: 30444380009)
  - 1,2-Dibromo-3-chloropropane
- TW-5B (Lab ID: 30444380010)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- Trip Blank (Lab ID: 30444380011)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Method: **EPA 6010D**
Description: 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
10 samples were analyzed for EPA 6010D by Pace Analytical Services WestVirginia. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Method: **EPA 6010D**
Description: 6010D ICP, Dissolved, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
10 samples were analyzed for EPA 6010D by Pace Analytical Services WestVirginia. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 87574

B: Analyte was detected in the associated method blank.

- BLANK for HBN 87574 [MPRP/8381 (Lab ID: 430012)
  - Sodium, Dissolved

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 87574

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30444380001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 430072)
  - Iron, Dissolved
- MSD (Lab ID: 430073)
  - Iron, Dissolved

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Method: **EPA 6020B**
Description: 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
10 samples were analyzed for EPA 6020B by Pace Analytical Services WestVirginia. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 87006

B: Analyte was detected in the associated method blank.

- BLANK for HBN 87006 [MPRP/8293 (Lab ID: 426788)
  - Antimony

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
10 samples were analyzed for EPA 7470A by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
10 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 468435

4c: alk tv 0 mg/L
- TW-5B (Lab ID: 30444380010)
  - Alkalinity,Total (CaCO3 pH4.5)

QC Batch: 468843

1c: TV= 0 mg/L
- TW-3A (Lab ID: 30444380005)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-4B (Lab ID: 30444380007)
  - Alkalinity,Total (CaCO3 pH4.5)

2c: TV= 6 mg/L
- TW-3 (Lab ID: 30444380004)
  - Alkalinity,Total (CaCO3 pH4.5)

3c: TV= 8 mg/L
- TW-2 (Lab ID: 30444380002)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Method: **SM 2540C-2011**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
10 samples were analyzed for SM 2540C-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
10 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
10 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 468098

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30444380001,30444398001

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2260147)
  - Chemical Oxygen Demand
- MSD (Lab ID: 2260146)
  - Chemical Oxygen Demand
- MSD (Lab ID: 2260148)
  - Chemical Oxygen Demand

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
10 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Method: **SM 4500NO3-F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
10 samples were analyzed for SM 4500NO3-F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 469031

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30445146002

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MSD (Lab ID: 2264842)
  - Nitrogen, NO2 plus NO3

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
10 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 468658

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30444380001,30444398001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MSD (Lab ID: 2262748)
  - Sulfate

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
10 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the EPA method holding time.
- TW-1 (Lab ID: 30444380001)
- TW-2 (Lab ID: 30444380002)
- TW-2A (Lab ID: 30444380003)
- TW-3 (Lab ID: 30444380004)
- TW-3A (Lab ID: 30444380005)
- TW-4 (Lab ID: 30444380006)
- TW-4B (Lab ID: 30444380007)

H3: Sample was received or analysis requested beyond the recognized method holding time.
- TW-5 (Lab ID: 30444380008)
- TW-5A (Lab ID: 30444380009)
- TW-5B (Lab ID: 30444380010)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 467402

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30444380001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
- MS (Lab ID: 2256845)
  - Nitrite as N

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Sample: TW-1 **Lab ID: 30444380001** Collected: 10/06/21 14:00 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/12/21 11:50	10/13/21 13:40	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/12/21 11:50	10/13/21 13:40	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	92	%.	60-140		1	10/12/21 11:50	10/13/21 13:40	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**18.0**	mg/L	0.50	0.029	1	10/18/21 12:44	10/20/21 12:53	7440-70-2	
Iron	**35.6**	mg/L	0.050	0.0076	1	10/18/21 12:44	10/20/21 12:53	7439-89-6	
Magnesium	**1.6**	mg/L	0.50	0.047	1	10/18/21 12:44	10/20/21 12:53	7439-95-4	
Manganese	**0.18**	mg/L	0.0050	0.00044	1	10/18/21 12:44	10/20/21 12:53	7439-96-5	
Potassium	**0.71**	mg/L	0.50	0.19	1	10/18/21 12:44	10/20/21 12:53	7440-09-7	
Sodium	**3.2**	mg/L	0.50	0.15	1	10/18/21 12:44	10/20/21 12:53	7440-23-5	
Total Hardness by 2340B	**51300**	ug/L	3310	267	1	10/18/21 12:44	10/20/21 12:53		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**17.4**	mg/L	0.50	0.029	1	10/19/21 13:15	10/20/21 22:32	7440-70-2	
Iron, Dissolved	**26.4**	mg/L	0.050	0.0076	1	10/19/21 13:15	10/20/21 22:32	7439-89-6	M1
Magnesium, Dissolved	**1.5**	mg/L	0.50	0.047	1	10/19/21 13:15	10/20/21 22:32	7439-95-4	
Manganese, Dissolved	**0.17**	mg/L	0.0050	0.00044	1	10/19/21 13:15	10/20/21 22:32	7439-96-5	
Potassium, Dissolved	**0.71**	mg/L	0.50	0.19	1	10/19/21 13:15	10/20/21 22:32	7440-09-7	
Sodium, Dissolved	**3.2**	mg/L	0.50	0.15	1	10/19/21 13:15	10/20/21 22:32	7440-23-5	
Total Hardness by 2340B, Dissolved	**49700**	ug/L	3310	267	1	10/19/21 13:15	10/20/21 22:32		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - WestVirginia								
Antimony	**0.000089J**	mg/L	0.00050	0.000045	1	10/13/21 15:00	10/14/21 10:07	7440-36-0	B
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 10:07	7440-38-2	
Barium	**0.015**	mg/L	0.0025	0.00011	1	10/13/21 15:00	10/14/21 10:07	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	10/13/21 15:00	10/14/21 10:07	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/13/21 15:00	10/14/21 10:07	7440-43-9	
Chromium	**0.0056**	mg/L	0.0025	0.00086	1	10/13/21 15:00	10/14/21 10:07	7440-47-3	
Cobalt	**0.0016J**	mg/L	0.0025	0.00015	1	10/13/21 15:00	10/14/21 10:07	7440-48-4	
Copper	**0.00094J**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 10:07	7440-50-8	
Lead	**0.000040J**	mg/L	0.00050	0.000030	1	10/13/21 15:00	10/14/21 10:07	7439-92-1	
Nickel	**0.0077**	mg/L	0.0025	0.00065	1	10/13/21 15:00	10/14/21 10:07	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/13/21 15:00	10/14/21 10:07	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/13/21 15:00	10/14/21 10:07	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000024	1	10/13/21 15:00	10/14/21 10:07	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/13/21 15:00	10/14/21 10:07	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0017	1	10/13/21 15:00	10/14/21 10:07	7440-66-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Sample: TW-1 **Lab ID: 30444380001** Collected: 10/06/21 14:00 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/28/21 13:55	10/29/21 08:22	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**50.0**	mg/L	10.0	1.0	1		10/19/21 15:14		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**45.0**	mg/L	10.0	10.0	1		10/12/21 19:47		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/19/21 10:35	10/19/21 12:52		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/14/21 06:43	10/14/21 09:50		MH
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**6.5**	mg/L	3.0	0.67	1		10/20/21 18:35	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		10/20/21 16:01	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		10/20/21 16:01		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/18/21 17:28	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/08/21 16:56	14797-65-0	H1,ML

Sample: TW-2 **Lab ID: 30444380002** Collected: 10/06/21 11:25 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.022	1	10/12/21 11:50	10/13/21 13:53	96-12-8	CH

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Sample: TW-2 **Lab ID: 30444380002** Collected: 10/06/21 11:25 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	10/12/21 11:50	10/13/21 13:53	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	95	%.	60-140		1	10/12/21 11:50	10/13/21 13:53	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**0.32J**	mg/L	0.50	0.029	1	10/18/21 12:44	10/20/21 12:55	7440-70-2	
Iron	**8.2**	mg/L	0.050	0.0076	1	10/18/21 12:44	10/20/21 12:55	7439-89-6	
Magnesium	**0.58**	mg/L	0.50	0.047	1	10/18/21 12:44	10/20/21 12:55	7439-95-4	
Manganese	**0.12**	mg/L	0.0050	0.00044	1	10/18/21 12:44	10/20/21 12:55	7439-96-5	
Potassium	**0.66**	mg/L	0.50	0.19	1	10/18/21 12:44	10/20/21 12:55	7440-09-7	
Sodium	**2.0**	mg/L	0.50	0.15	1	10/18/21 12:44	10/20/21 12:55	7440-23-5	
Total Hardness by 2340B	**3170J**	ug/L	3310	267	1	10/18/21 12:44	10/20/21 12:55		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**0.37J**	mg/L	0.50	0.029	1	10/19/21 13:15	10/20/21 22:38	7440-70-2	
Iron, Dissolved	**7.3**	mg/L	0.050	0.0076	1	10/19/21 13:15	10/20/21 22:38	7439-89-6	
Magnesium, Dissolved	**0.57**	mg/L	0.50	0.047	1	10/19/21 13:15	10/20/21 22:38	7439-95-4	
Manganese, Dissolved	**0.11**	mg/L	0.0050	0.00044	1	10/19/21 13:15	10/20/21 22:38	7439-96-5	
Potassium, Dissolved	**0.65**	mg/L	0.50	0.19	1	10/19/21 13:15	10/20/21 22:38	7440-09-7	
Sodium, Dissolved	**2.0**	mg/L	0.50	0.15	1	10/19/21 13:15	10/20/21 22:38	7440-23-5	
Total Hardness by 2340B, Dissolved	**3260J**	ug/L	3310	267	1	10/19/21 13:15	10/20/21 22:38		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - WestVirginia								
Antimony	**0.000084J**	mg/L	0.00050	0.000045	1	10/13/21 15:00	10/14/21 10:10	7440-36-0	B
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 10:10	7440-38-2	
Barium	**0.0089**	mg/L	0.0025	0.00011	1	10/13/21 15:00	10/14/21 10:10	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	10/13/21 15:00	10/14/21 10:10	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/13/21 15:00	10/14/21 10:10	7440-43-9	
Chromium	**0.0027**	mg/L	0.0025	0.00086	1	10/13/21 15:00	10/14/21 10:10	7440-47-3	
Cobalt	**0.00051J**	mg/L	0.0025	0.00015	1	10/13/21 15:00	10/14/21 10:10	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 10:10	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.000030	1	10/13/21 15:00	10/14/21 10:10	7439-92-1	
Nickel	**0.0023J**	mg/L	0.0025	0.00065	1	10/13/21 15:00	10/14/21 10:10	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/13/21 15:00	10/14/21 10:10	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/13/21 15:00	10/14/21 10:10	7440-22-4	
Thallium	**0.000024J**	mg/L	0.00050	0.000024	1	10/13/21 15:00	10/14/21 10:10	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/13/21 15:00	10/14/21 10:10	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0017	1	10/13/21 15:00	10/14/21 10:10	7440-66-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Sample: TW-2 **Lab ID: 30444380002** Collected: 10/06/21 11:25 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/28/21 13:55	10/29/21 08:30	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**8.0J**	mg/L	10.0	1.0	1		10/19/21 15:16		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		10/12/21 19:47		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/19/21 10:35	10/19/21 12:58		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/14/21 06:43	10/14/21 09:50		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**2.8J**	mg/L	3.0	0.67	1		10/20/21 18:38	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		10/20/21 16:02	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		10/20/21 16:02		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/18/21 17:32	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/08/21 16:57	14797-65-0	H1

Sample: TW-2A **Lab ID: 30444380003** Collected: 10/06/21 10:50 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.022	1	10/12/21 11:50	10/13/21 14:31	96-12-8	CH

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Sample: TW-2A **Lab ID: 30444380003** Collected: 10/06/21 10:50 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	10/12/21 11:50	10/13/21 14:31	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	96	%.	60-140		1	10/12/21 11:50	10/13/21 14:31	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**5.4**	mg/L	0.50	0.029	1	10/18/21 12:44	10/20/21 12:57	7440-70-2	
Iron	**35.0**	mg/L	0.050	0.0076	1	10/18/21 12:44	10/20/21 12:57	7439-89-6	
Magnesium	**3.0**	mg/L	0.50	0.047	1	10/18/21 12:44	10/20/21 12:57	7439-95-4	
Manganese	**0.23**	mg/L	0.0050	0.00044	1	10/18/21 12:44	10/20/21 12:57	7439-96-5	
Potassium	**1.1**	mg/L	0.50	0.19	1	10/18/21 12:44	10/20/21 12:57	7440-09-7	
Sodium	**14.4**	mg/L	0.50	0.15	1	10/18/21 12:44	10/20/21 12:57	7440-23-5	
Total Hardness by 2340B	**25900**	ug/L	3310	267	1	10/18/21 12:44	10/20/21 12:57		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**5.3**	mg/L	0.50	0.029	1	10/19/21 13:15	10/20/21 22:40	7440-70-2	
Iron, Dissolved	**33.7**	mg/L	0.050	0.0076	1	10/19/21 13:15	10/20/21 22:40	7439-89-6	
Magnesium, Dissolved	**3.0**	mg/L	0.50	0.047	1	10/19/21 13:15	10/20/21 22:40	7439-95-4	
Manganese, Dissolved	**0.23**	mg/L	0.0050	0.00044	1	10/19/21 13:15	10/20/21 22:40	7439-96-5	
Potassium, Dissolved	**1.1**	mg/L	0.50	0.19	1	10/19/21 13:15	10/20/21 22:40	7440-09-7	
Sodium, Dissolved	**14.4**	mg/L	0.50	0.15	1	10/19/21 13:15	10/20/21 22:40	7440-23-5	
Total Hardness by 2340B, Dissolved	**25500**	ug/L	3310	267	1	10/19/21 13:15	10/20/21 22:40		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - WestVirginia								
Antimony	**0.000074J**	mg/L	0.00050	0.000045	1	10/13/21 15:00	10/14/21 10:29	7440-36-0	B
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 10:29	7440-38-2	
Barium	**0.065**	mg/L	0.0025	0.00011	1	10/13/21 15:00	10/14/21 10:29	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	10/13/21 15:00	10/14/21 10:29	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/13/21 15:00	10/14/21 10:29	7440-43-9	
Chromium	**0.0025J**	mg/L	0.0025	0.00086	1	10/13/21 15:00	10/14/21 10:29	7440-47-3	
Cobalt	**0.0018J**	mg/L	0.0025	0.00015	1	10/13/21 15:00	10/14/21 10:29	7440-48-4	
Copper	**0.0027**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 10:29	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.000030	1	10/13/21 15:00	10/14/21 10:29	7439-92-1	
Nickel	**0.0035**	mg/L	0.0025	0.00065	1	10/13/21 15:00	10/14/21 10:29	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/13/21 15:00	10/14/21 10:29	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/13/21 15:00	10/14/21 10:29	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000024	1	10/13/21 15:00	10/14/21 10:29	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/13/21 15:00	10/14/21 10:29	7440-62-2	
Zinc	**0.0027J**	mg/L	0.0050	0.0017	1	10/13/21 15:00	10/14/21 10:29	7440-66-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Sample: TW-2A **Lab ID: 30444380003** Collected: 10/06/21 10:50 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/28/21 13:55	10/29/21 08:32	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**22.0**	mg/L	10.0	1.0	1		10/19/21 15:17		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**82.0**	mg/L	10.0	10.0	1		10/12/21 19:47		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/19/21 10:35	10/19/21 13:00		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**12.6J**	mg/L	25.0	4.7	1	10/14/21 06:43	10/14/21 09:50		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**32.2**	mg/L	3.0	0.67	1		10/20/21 18:39	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**21.7**	mg/L	0.50	0.27	5		10/20/21 16:03	14797-55-8	
Nitrogen, NO2 plus NO3	**21.7**	mg/L	0.50	0.27	5		10/20/21 16:03		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/18/21 17:33	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/08/21 16:58	14797-65-0	H1

Sample: TW-3 **Lab ID: 30444380004** Collected: 10/06/21 12:15 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.022	1	10/12/21 11:50	10/13/21 14:44	96-12-8	CH

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Sample: TW-3 **Lab ID: 30444380004** Collected: 10/06/21 12:15 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	10/12/21 11:50	10/13/21 14:44	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	84	%.	60-140		1	10/12/21 11:50	10/13/21 14:44	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**1.2**	mg/L	0.50	0.029	1	10/18/21 12:44	10/20/21 13:03	7440-70-2	
Iron	**10.6**	mg/L	0.050	0.0076	1	10/18/21 12:44	10/20/21 13:03	7439-89-6	
Magnesium	**0.58**	mg/L	0.50	0.047	1	10/18/21 12:44	10/20/21 13:03	7439-95-4	
Manganese	**0.14**	mg/L	0.0050	0.00044	1	10/18/21 12:44	10/20/21 13:03	7439-96-5	
Potassium	**0.51**	mg/L	0.50	0.19	1	10/18/21 12:44	10/20/21 13:03	7440-09-7	
Sodium	**2.5**	mg/L	0.50	0.15	1	10/18/21 12:44	10/20/21 13:03	7440-23-5	
Total Hardness by 2340B	**5340**	ug/L	3310	267	1	10/18/21 12:44	10/20/21 13:03		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**1.1**	mg/L	0.50	0.029	1	10/19/21 13:15	10/20/21 22:42	7440-70-2	
Iron, Dissolved	**7.0**	mg/L	0.050	0.0076	1	10/19/21 13:15	10/20/21 22:42	7439-89-6	
Magnesium, Dissolved	**0.56**	mg/L	0.50	0.047	1	10/19/21 13:15	10/20/21 22:42	7439-95-4	
Manganese, Dissolved	**0.13**	mg/L	0.0050	0.00044	1	10/19/21 13:15	10/20/21 22:42	7439-96-5	
Potassium, Dissolved	**0.50**	mg/L	0.50	0.19	1	10/19/21 13:15	10/20/21 22:42	7440-09-7	
Sodium, Dissolved	**2.5**	mg/L	0.50	0.15	1	10/19/21 13:15	10/20/21 22:42	7440-23-5	
Total Hardness by 2340B, Dissolved	**5100**	ug/L	3310	267	1	10/19/21 13:15	10/20/21 22:42		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - WestVirginia								
Antimony	**0.000055J**	mg/L	0.00050	0.000045	1	10/13/21 15:00	10/14/21 10:32	7440-36-0	B
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 10:32	7440-38-2	
Barium	**0.0076**	mg/L	0.0025	0.00011	1	10/13/21 15:00	10/14/21 10:32	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	10/13/21 15:00	10/14/21 10:32	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/13/21 15:00	10/14/21 10:32	7440-43-9	
Chromium	**0.0018J**	mg/L	0.0025	0.00086	1	10/13/21 15:00	10/14/21 10:32	7440-47-3	
Cobalt	**0.00072J**	mg/L	0.0025	0.00015	1	10/13/21 15:00	10/14/21 10:32	7440-48-4	
Copper	**0.00061J**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 10:32	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.000030	1	10/13/21 15:00	10/14/21 10:32	7439-92-1	
Nickel	**0.0039**	mg/L	0.0025	0.00065	1	10/13/21 15:00	10/14/21 10:32	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/13/21 15:00	10/14/21 10:32	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/13/21 15:00	10/14/21 10:32	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000024	1	10/13/21 15:00	10/14/21 10:32	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/13/21 15:00	10/14/21 10:32	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0017	1	10/13/21 15:00	10/14/21 10:32	7440-66-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Sample: TW-3 **Lab ID: 30444380004** Collected: 10/06/21 12:15 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/28/21 13:55	10/29/21 08:34	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**6.0J**	mg/L	10.0	1.0	1		10/19/21 15:19		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		10/12/21 19:47		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/19/21 10:35	10/19/21 13:02		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/14/21 06:43	10/14/21 09:50		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**4.1**	mg/L	3.0	0.67	1		10/20/21 18:39	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.070J**	mg/L	0.10	0.053	1		10/20/21 16:05	14797-55-8	
Nitrogen, NO2 plus NO3	**0.070J**	mg/L	0.10	0.053	1		10/20/21 16:05		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/18/21 17:35	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/08/21 17:00	14797-65-0	H1

Sample: TW-3A **Lab ID: 30444380005** Collected: 10/06/21 12:50 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.022	1	10/12/21 11:50	10/13/21 14:56	96-12-8	CH

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Sample: TW-3A **Lab ID: 30444380005** Collected: 10/06/21 12:50 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	10/12/21 11:50	10/13/21 14:56	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	100	%.	60-140		1	10/12/21 11:50	10/13/21 14:56	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**0.94**	mg/L	0.50	0.029	1	10/18/21 12:44	10/20/21 13:05	7440-70-2	
Iron	**59.3**	mg/L	0.050	0.0076	1	10/18/21 12:44	10/20/21 13:05	7439-89-6	
Magnesium	**0.41J**	mg/L	0.50	0.047	1	10/18/21 12:44	10/20/21 13:05	7439-95-4	
Manganese	**0.51**	mg/L	0.0050	0.00044	1	10/18/21 12:44	10/20/21 13:05	7439-96-5	
Potassium	**0.57**	mg/L	0.50	0.19	1	10/18/21 12:44	10/20/21 13:05	7440-09-7	
Sodium	**15.4**	mg/L	0.50	0.15	1	10/18/21 12:44	10/20/21 13:05	7440-23-5	
Total Hardness by 2340B	**4020**	ug/L	3310	267	1	10/18/21 12:44	10/20/21 13:05		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**0.87**	mg/L	0.50	0.029	1	10/19/21 13:15	10/20/21 22:48	7440-70-2	
Iron, Dissolved	**52.9**	mg/L	0.050	0.0076	1	10/19/21 13:15	10/20/21 22:48	7439-89-6	
Magnesium, Dissolved	**0.38J**	mg/L	0.50	0.047	1	10/19/21 13:15	10/20/21 22:48	7439-95-4	
Manganese, Dissolved	**0.47**	mg/L	0.0050	0.00044	1	10/19/21 13:15	10/20/21 22:48	7439-96-5	
Potassium, Dissolved	**0.53**	mg/L	0.50	0.19	1	10/19/21 13:15	10/20/21 22:48	7440-09-7	
Sodium, Dissolved	**14.7**	mg/L	0.50	0.15	1	10/19/21 13:15	10/20/21 22:48	7440-23-5	
Total Hardness by 2340B, Dissolved	**3740**	ug/L	3310	267	1	10/19/21 13:15	10/20/21 22:48		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - WestVirginia								
Antimony	**0.000070J**	mg/L	0.00050	0.000045	1	10/13/21 15:00	10/14/21 10:35	7440-36-0	B
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 10:35	7440-38-2	
Barium	**0.011**	mg/L	0.0025	0.00011	1	10/13/21 15:00	10/14/21 10:35	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	10/13/21 15:00	10/14/21 10:35	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/13/21 15:00	10/14/21 10:35	7440-43-9	
Chromium	**0.00094J**	mg/L	0.0025	0.00086	1	10/13/21 15:00	10/14/21 10:35	7440-47-3	
Cobalt	**0.00017J**	mg/L	0.0025	0.00015	1	10/13/21 15:00	10/14/21 10:35	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 10:35	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.000030	1	10/13/21 15:00	10/14/21 10:35	7439-92-1	
Nickel	**0.00071J**	mg/L	0.0025	0.00065	1	10/13/21 15:00	10/14/21 10:35	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/13/21 15:00	10/14/21 10:35	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/13/21 15:00	10/14/21 10:35	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000024	1	10/13/21 15:00	10/14/21 10:35	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/13/21 15:00	10/14/21 10:35	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0017	1	10/13/21 15:00	10/14/21 10:35	7440-66-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Sample: TW-3A **Lab ID: 30444380005** Collected: 10/06/21 12:50 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/28/21 13:55	10/29/21 08:35	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		10/19/21 15:20		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**64.0**	mg/L	10.0	10.0	1		10/12/21 19:47		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/19/21 10:35	10/19/21 13:04		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**10.5J**	mg/L	25.0	4.7	1	10/14/21 06:43	10/14/21 09:50		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**40.6**	mg/L	3.0	0.67	1		10/20/21 18:40	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		10/20/21 16:06	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		10/20/21 16:06		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/18/21 17:35	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/08/21 17:00	14797-65-0	H1

Sample: TW-4 **Lab ID: 30444380006** Collected: 10/06/21 08:45 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.022	1	10/12/21 11:50	10/13/21 15:09	96-12-8	CH

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Sample: TW-4 **Lab ID: 30444380006** Collected: 10/06/21 08:45 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	10/12/21 11:50	10/13/21 15:09	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	95	%.	60-140		1	10/12/21 11:50	10/13/21 15:09	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**7.5**	mg/L	0.50	0.029	1	10/18/21 12:44	10/20/21 13:07	7440-70-2	
Iron	**29.8**	mg/L	0.050	0.0076	1	10/18/21 12:44	10/20/21 13:07	7439-89-6	
Magnesium	**1.5**	mg/L	0.50	0.047	1	10/18/21 12:44	10/20/21 13:07	7439-95-4	
Manganese	**0.16**	mg/L	0.0050	0.00044	1	10/18/21 12:44	10/20/21 13:07	7439-96-5	
Potassium	**0.80**	mg/L	0.50	0.19	1	10/18/21 12:44	10/20/21 13:07	7440-09-7	
Sodium	**3.6**	mg/L	0.50	0.15	1	10/18/21 12:44	10/20/21 13:07	7440-23-5	
Total Hardness by 2340B	**24800**	ug/L	3310	267	1	10/18/21 12:44	10/20/21 13:07		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**7.2**	mg/L	0.50	0.029	1	10/19/21 13:15	10/20/21 22:50	7440-70-2	
Iron, Dissolved	**21.5**	mg/L	0.050	0.0076	1	10/19/21 13:15	10/20/21 22:50	7439-89-6	
Magnesium, Dissolved	**1.4**	mg/L	0.50	0.047	1	10/19/21 13:15	10/20/21 22:50	7439-95-4	
Manganese, Dissolved	**0.16**	mg/L	0.0050	0.00044	1	10/19/21 13:15	10/20/21 22:50	7439-96-5	
Potassium, Dissolved	**0.77**	mg/L	0.50	0.19	1	10/19/21 13:15	10/20/21 22:50	7440-09-7	
Sodium, Dissolved	**3.6**	mg/L	0.50	0.15	1	10/19/21 13:15	10/20/21 22:50	7440-23-5	
Total Hardness by 2340B, Dissolved	**23800**	ug/L	3310	267	1	10/19/21 13:15	10/20/21 22:50		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - WestVirginia								
Antimony	**0.000053J**	mg/L	0.00050	0.000045	1	10/13/21 15:00	10/14/21 10:37	7440-36-0	B
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 10:37	7440-38-2	
Barium	**0.027**	mg/L	0.0025	0.00011	1	10/13/21 15:00	10/14/21 10:37	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	10/13/21 15:00	10/14/21 10:37	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/13/21 15:00	10/14/21 10:37	7440-43-9	
Chromium	**0.0025 U**	mg/L	0.0025	0.00086	1	10/13/21 15:00	10/14/21 10:37	7440-47-3	
Cobalt	**0.0013J**	mg/L	0.0025	0.00015	1	10/13/21 15:00	10/14/21 10:37	7440-48-4	
Copper	**0.0014J**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 10:37	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.000030	1	10/13/21 15:00	10/14/21 10:37	7439-92-1	
Nickel	**0.0013J**	mg/L	0.0025	0.00065	1	10/13/21 15:00	10/14/21 10:37	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/13/21 15:00	10/14/21 10:37	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/13/21 15:00	10/14/21 10:37	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000024	1	10/13/21 15:00	10/14/21 10:37	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/13/21 15:00	10/14/21 10:37	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0017	1	10/13/21 15:00	10/14/21 10:37	7440-66-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Sample: TW-4 **Lab ID: 30444380006** Collected: 10/06/21 08:45 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/28/21 13:55	10/29/21 08:37	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**30.0**	mg/L	10.0	1.0	1		10/19/21 15:21		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**41.0**	mg/L	10.0	10.0	1		10/12/21 19:47		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/19/21 10:35	10/19/21 13:06		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**8.3J**	mg/L	25.0	4.7	1	10/14/21 06:43	10/14/21 09:51		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**8.2**	mg/L	3.0	0.67	1		10/20/21 18:41	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.063J**	mg/L	0.10	0.053	1		10/20/21 16:10	14797-55-8	
Nitrogen, NO2 plus NO3	**0.063J**	mg/L	0.10	0.053	1		10/20/21 16:10		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/18/21 17:37	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/08/21 17:00	14797-65-0	H1

Sample: TW-4B **Lab ID: 30444380007** Collected: 10/06/21 09:20 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.022	1	10/12/21 11:50	10/13/21 15:22	96-12-8	CH

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Sample: TW-4B **Lab ID: 30444380007** Collected: 10/06/21 09:20 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	10/12/21 11:50	10/13/21 15:22	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	99	%.	60-140		1	10/12/21 11:50	10/13/21 15:22	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**2.4**	mg/L	0.50	0.029	1	10/18/21 12:44	10/20/21 13:09	7440-70-2	
Iron	**0.029J**	mg/L	0.050	0.0076	1	10/18/21 12:44	10/20/21 13:09	7439-89-6	
Magnesium	**2.5**	mg/L	0.50	0.047	1	10/18/21 12:44	10/20/21 13:09	7439-95-4	
Manganese	**0.083**	mg/L	0.0050	0.00044	1	10/18/21 12:44	10/20/21 13:09	7439-96-5	
Potassium	**0.98**	mg/L	0.50	0.19	1	10/18/21 12:44	10/20/21 13:09	7440-09-7	
Sodium	**2.5**	mg/L	0.50	0.15	1	10/18/21 12:44	10/20/21 13:09	7440-23-5	
Total Hardness by 2340B	**16400**	ug/L	3310	267	1	10/18/21 12:44	10/20/21 13:09		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**2.4**	mg/L	0.50	0.029	1	10/19/21 13:15	10/20/21 22:52	7440-70-2	
Iron, Dissolved	**0.013J**	mg/L	0.050	0.0076	1	10/19/21 13:15	10/20/21 22:52	7439-89-6	
Magnesium, Dissolved	**2.4**	mg/L	0.50	0.047	1	10/19/21 13:15	10/20/21 22:52	7439-95-4	
Manganese, Dissolved	**0.080**	mg/L	0.0050	0.00044	1	10/19/21 13:15	10/20/21 22:52	7439-96-5	
Potassium, Dissolved	**0.96**	mg/L	0.50	0.19	1	10/19/21 13:15	10/20/21 22:52	7440-09-7	
Sodium, Dissolved	**2.5**	mg/L	0.50	0.15	1	10/19/21 13:15	10/20/21 22:52	7440-23-5	
Total Hardness by 2340B, Dissolved	**15900**	ug/L	3310	267	1	10/19/21 13:15	10/20/21 22:52		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - WestVirginia								
Antimony	**0.000071J**	mg/L	0.00050	0.000045	1	10/13/21 15:00	10/14/21 10:40	7440-36-0	B
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 10:40	7440-38-2	
Barium	**0.059**	mg/L	0.0025	0.00011	1	10/13/21 15:00	10/14/21 10:40	7440-39-3	
Beryllium	**0.00023J**	mg/L	0.00050	0.00015	1	10/13/21 15:00	10/14/21 10:40	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/13/21 15:00	10/14/21 10:40	7440-43-9	
Chromium	**0.0027**	mg/L	0.0025	0.00086	1	10/13/21 15:00	10/14/21 10:40	7440-47-3	
Cobalt	**0.0062**	mg/L	0.0025	0.00015	1	10/13/21 15:00	10/14/21 10:40	7440-48-4	
Copper	**0.0020J**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 10:40	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.000030	1	10/13/21 15:00	10/14/21 10:40	7439-92-1	
Nickel	**0.0046**	mg/L	0.0025	0.00065	1	10/13/21 15:00	10/14/21 10:40	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/13/21 15:00	10/14/21 10:40	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/13/21 15:00	10/14/21 10:40	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000024	1	10/13/21 15:00	10/14/21 10:40	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/13/21 15:00	10/14/21 10:40	7440-62-2	
Zinc	**0.0073**	mg/L	0.0050	0.0017	1	10/13/21 15:00	10/14/21 10:40	7440-66-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Sample: TW-4B **Lab ID: 30444380007** Collected: 10/06/21 09:20 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00017J**	mg/L	0.00020	0.000030	1	10/28/21 13:55	10/29/21 08:38	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		10/19/21 15:27		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**14.0**	mg/L	10.0	10.0	1		10/12/21 19:47		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/19/21 10:35	10/19/21 13:08		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/14/21 06:43	10/14/21 09:51		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**4.3**	mg/L	3.0	0.67	1		10/20/21 18:42	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.23**	mg/L	0.10	0.053	1		10/20/21 16:12	14797-55-8	
Nitrogen, NO2 plus NO3	**0.23**	mg/L	0.10	0.053	1		10/20/21 16:12		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**8.1J**	mg/L	10.0	4.7	1		10/18/21 17:40	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/08/21 17:01	14797-65-0	H1

Sample: TW-5 **Lab ID: 30444380008** Collected: 10/05/21 15:30 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.022	1	10/12/21 11:50	10/13/21 15:34	96-12-8	CH

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Sample: TW-5 **Lab ID: 30444380008** Collected: 10/05/21 15:30 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	10/12/21 11:50	10/13/21 15:34	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	103	%.	60-140		1	10/12/21 11:50	10/13/21 15:34	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**3.8**	mg/L	0.50	0.029	1	10/18/21 12:44	10/20/21 13:11	7440-70-2	
Iron	**27.4**	mg/L	0.050	0.0076	1	10/18/21 12:44	10/20/21 13:11	7439-89-6	
Magnesium	**1.1**	mg/L	0.50	0.047	1	10/18/21 12:44	10/20/21 13:11	7439-95-4	
Manganese	**0.16**	mg/L	0.0050	0.00044	1	10/18/21 12:44	10/20/21 13:11	7439-96-5	
Potassium	**0.94**	mg/L	0.50	0.19	1	10/18/21 12:44	10/20/21 13:11	7440-09-7	
Sodium	**3.4**	mg/L	0.50	0.15	1	10/18/21 12:44	10/20/21 13:11	7440-23-5	
Total Hardness by 2340B	**14000**	ug/L	3310	267	1	10/18/21 12:44	10/20/21 13:11		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**3.6**	mg/L	0.50	0.029	1	10/19/21 13:15	10/20/21 22:54	7440-70-2	
Iron, Dissolved	**25.2**	mg/L	0.050	0.0076	1	10/19/21 13:15	10/20/21 22:54	7439-89-6	
Magnesium, Dissolved	**1.0**	mg/L	0.50	0.047	1	10/19/21 13:15	10/20/21 22:54	7439-95-4	
Manganese, Dissolved	**0.16**	mg/L	0.0050	0.00044	1	10/19/21 13:15	10/20/21 22:54	7439-96-5	
Potassium, Dissolved	**0.92**	mg/L	0.50	0.19	1	10/19/21 13:15	10/20/21 22:54	7440-09-7	
Sodium, Dissolved	**3.3**	mg/L	0.50	0.15	1	10/19/21 13:15	10/20/21 22:54	7440-23-5	
Total Hardness by 2340B, Dissolved	**13200**	ug/L	3310	267	1	10/19/21 13:15	10/20/21 22:54		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - WestVirginia								
Antimony	**0.000060J**	mg/L	0.00050	0.000045	1	10/13/21 15:00	10/14/21 10:43	7440-36-0	B
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 10:43	7440-38-2	
Barium	**0.023**	mg/L	0.0025	0.00011	1	10/13/21 15:00	10/14/21 10:43	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	10/13/21 15:00	10/14/21 10:43	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/13/21 15:00	10/14/21 10:43	7440-43-9	
Chromium	**0.0015J**	mg/L	0.0025	0.00086	1	10/13/21 15:00	10/14/21 10:43	7440-47-3	
Cobalt	**0.00088J**	mg/L	0.0025	0.00015	1	10/13/21 15:00	10/14/21 10:43	7440-48-4	
Copper	**0.00045J**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 10:43	7440-50-8	
Lead	**0.00015J**	mg/L	0.00050	0.000030	1	10/13/21 15:00	10/14/21 10:43	7439-92-1	
Nickel	**0.0023J**	mg/L	0.0025	0.00065	1	10/13/21 15:00	10/14/21 10:43	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/13/21 15:00	10/14/21 10:43	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/13/21 15:00	10/14/21 10:43	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000024	1	10/13/21 15:00	10/14/21 10:43	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/13/21 15:00	10/14/21 10:43	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0017	1	10/13/21 15:00	10/14/21 10:43	7440-66-6	

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Sample: TW-5 **Lab ID: 30444380008** Collected: 10/05/21 15:30 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/28/21 13:55	10/29/21 08:40	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**36.0**	mg/L	10.0	1.0	1		10/15/21 17:15		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**30.0**	mg/L	10.0	10.0	1		10/12/21 19:47		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/19/21 10:35	10/19/21 13:10		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.1J**	mg/L	25.0	4.7	1	10/14/21 06:43	10/14/21 09:51		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**7.2**	mg/L	3.0	0.67	1		10/20/21 18:43	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		10/20/21 16:13	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		10/20/21 16:13		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/18/21 17:42	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/08/21 17:03	14797-65-0	H3

Sample: TW-5A **Lab ID: 30444380009** Collected: 10/05/21 16:00 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.022	1	10/12/21 11:50	10/13/21 15:47	96-12-8	CH

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Sample: TW-5A **Lab ID: 30444380009** Collected: 10/05/21 16:00 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	10/12/21 11:50	10/13/21 15:47	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	95	%.	60-140		1	10/12/21 11:50	10/13/21 15:47	630-20-6	
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**1.8**	mg/L	0.50	0.029	1	10/18/21 12:44	10/20/21 13:13	7440-70-2	
Iron	**53.4**	mg/L	0.050	0.0076	1	10/18/21 12:44	10/20/21 13:13	7439-89-6	
Magnesium	**0.82**	mg/L	0.50	0.047	1	10/18/21 12:44	10/20/21 13:13	7439-95-4	
Manganese	**0.32**	mg/L	0.0050	0.00044	1	10/18/21 12:44	10/20/21 13:13	7439-96-5	
Potassium	**0.69**	mg/L	0.50	0.19	1	10/18/21 12:44	10/20/21 13:13	7440-09-7	
Sodium	**2.5**	mg/L	0.50	0.15	1	10/18/21 12:44	10/20/21 13:13	7440-23-5	
Total Hardness by 2340B	**7950**	ug/L	3310	267	1	10/18/21 12:44	10/20/21 13:13		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**1.8**	mg/L	0.50	0.029	1	10/19/21 13:15	10/20/21 22:56	7440-70-2	
Iron, Dissolved	**48.4**	mg/L	0.050	0.0076	1	10/19/21 13:15	10/20/21 22:56	7439-89-6	
Magnesium, Dissolved	**0.80**	mg/L	0.50	0.047	1	10/19/21 13:15	10/20/21 22:56	7439-95-4	
Manganese, Dissolved	**0.31**	mg/L	0.0050	0.00044	1	10/19/21 13:15	10/20/21 22:56	7439-96-5	
Potassium, Dissolved	**0.67**	mg/L	0.50	0.19	1	10/19/21 13:15	10/20/21 22:56	7440-09-7	
Sodium, Dissolved	**2.6**	mg/L	0.50	0.15	1	10/19/21 13:15	10/20/21 22:56	7440-23-5	
Total Hardness by 2340B, Dissolved	**7760**	ug/L	3310	267	1	10/19/21 13:15	10/20/21 22:56		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - WestVirginia								
Antimony	**0.000063J**	mg/L	0.00050	0.000045	1	10/13/21 15:00	10/14/21 10:46	7440-36-0	B
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 10:46	7440-38-2	
Barium	**0.018**	mg/L	0.0025	0.00011	1	10/13/21 15:00	10/14/21 10:46	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	10/13/21 15:00	10/14/21 10:46	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/13/21 15:00	10/14/21 10:46	7440-43-9	
Chromium	**0.0025 U**	mg/L	0.0025	0.00086	1	10/13/21 15:00	10/14/21 10:46	7440-47-3	
Cobalt	**0.00056J**	mg/L	0.0025	0.00015	1	10/13/21 15:00	10/14/21 10:46	7440-48-4	
Copper	**0.00052J**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 10:46	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.000030	1	10/13/21 15:00	10/14/21 10:46	7439-92-1	
Nickel	**0.00094J**	mg/L	0.0025	0.00065	1	10/13/21 15:00	10/14/21 10:46	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/13/21 15:00	10/14/21 10:46	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/13/21 15:00	10/14/21 10:46	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000024	1	10/13/21 15:00	10/14/21 10:46	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/13/21 15:00	10/14/21 10:46	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0017	1	10/13/21 15:00	10/14/21 10:46	7440-66-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Sample: TW-5A **Lab ID: 30444380009** Collected: 10/05/21 16:00 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/28/21 13:55	10/29/21 08:42	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**24.0**	mg/L	10.0	1.0	1		10/15/21 17:16		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		10/12/21 19:47		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/19/21 10:35	10/19/21 13:12		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**10.5J**	mg/L	25.0	4.7	1	10/14/21 06:43	10/14/21 09:51		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**5.5**	mg/L	3.0	0.67	1		10/20/21 18:44	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		10/20/21 16:14	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		10/20/21 16:14		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/18/21 17:42	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/08/21 17:04	14797-65-0	H3

Sample: TW-5B **Lab ID: 30444380010** Collected: 10/05/21 15:00 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/12/21 11:50	10/13/21 16:00	96-12-8	CH

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Sample: TW-5B **Lab ID: 30444380010** Collected: 10/05/21 15:00 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/12/21 11:50	10/13/21 16:00	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	96	%.	60-140		1	10/12/21 11:50	10/13/21 16:00	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**0.44J**	mg/L	0.50	0.029	1	10/18/21 12:44	10/20/21 13:15	7440-70-2	
Iron	**0.14**	mg/L	0.050	0.0076	1	10/18/21 12:44	10/20/21 13:15	7439-89-6	
Magnesium	**0.16J**	mg/L	0.50	0.047	1	10/18/21 12:44	10/20/21 13:15	7439-95-4	
Manganese	**0.0053**	mg/L	0.0050	0.00044	1	10/18/21 12:44	10/20/21 13:15	7439-96-5	
Potassium	**0.40J**	mg/L	0.50	0.19	1	10/18/21 12:44	10/20/21 13:15	7440-09-7	
Sodium	**1.1**	mg/L	0.50	0.15	1	10/18/21 12:44	10/20/21 13:15	7440-23-5	
Total Hardness by 2340B	**1780J**	ug/L	3310	267	1	10/18/21 12:44	10/20/21 13:15		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**509**	ug/L	500	28.8	1	10/19/21 13:15	10/20/21 22:58	7440-70-2	
Iron, Dissolved	**57.6**	ug/L	50.0	7.6	1	10/19/21 13:15	10/20/21 22:58	7439-89-6	
Magnesium, Dissolved	**186J**	ug/L	500	47.5	1	10/19/21 13:15	10/20/21 22:58	7439-95-4	
Manganese, Dissolved	**6.2**	ug/L	5.0	0.44	1	10/19/21 13:15	10/20/21 22:58	7439-96-5	
Potassium, Dissolved	**424J**	ug/L	500	190	1	10/19/21 13:15	10/20/21 22:58	7440-09-7	
Sodium, Dissolved	**1290**	ug/L	500	149	1	10/19/21 13:15	10/20/21 22:58	7440-23-5	B
Total Hardness by 2340B, Dissolved	**2030J**	ug/L	3310	267	1	10/19/21 13:15	10/20/21 22:58		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - WestVirginia								
Antimony	**0.000053J**	mg/L	0.00050	0.000045	1	10/13/21 15:00	10/14/21 10:48	7440-36-0	B
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 10:48	7440-38-2	
Barium	**0.0044**	mg/L	0.0025	0.00011	1	10/13/21 15:00	10/14/21 10:48	7440-39-3	
Beryllium	**0.00024J**	mg/L	0.00050	0.00015	1	10/13/21 15:00	10/14/21 10:48	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/13/21 15:00	10/14/21 10:48	7440-43-9	
Chromium	**0.013**	mg/L	0.0025	0.00086	1	10/13/21 15:00	10/14/21 10:48	7440-47-3	
Cobalt	**0.0048**	mg/L	0.0025	0.00015	1	10/13/21 15:00	10/14/21 10:48	7440-48-4	
Copper	**0.011**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 10:48	7440-50-8	
Lead	**0.000061J**	mg/L	0.00050	0.000030	1	10/13/21 15:00	10/14/21 10:48	7439-92-1	
Nickel	**0.018**	mg/L	0.0025	0.00065	1	10/13/21 15:00	10/14/21 10:48	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/13/21 15:00	10/14/21 10:48	7782-49-2	
Silver	**0.00030J**	mg/L	0.0025	0.00016	1	10/13/21 15:00	10/14/21 10:48	7440-22-4	
Thallium	**0.000079J**	mg/L	0.00050	0.000024	1	10/13/21 15:00	10/14/21 10:48	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/13/21 15:00	10/14/21 10:48	7440-62-2	
Zinc	**0.012**	mg/L	0.0050	0.0017	1	10/13/21 15:00	10/14/21 10:48	7440-66-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Sample: TW-5B **Lab ID: 30444380010** Collected: 10/05/21 15:00 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/28/21 13:55	10/29/21 08:43	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		10/15/21 17:16		4c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		10/12/21 19:47		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/19/21 10:35	10/19/21 13:13		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/14/21 06:43	10/14/21 09:51		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**1.5J**	mg/L	3.0	0.67	1		10/20/21 18:45	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.22**	mg/L	0.10	0.053	1		10/20/21 16:16	14797-55-8	
Nitrogen, NO2 plus NO3	**0.22**	mg/L	0.10	0.053	1		10/20/21 16:16		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/18/21 17:44	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/08/21 17:04	14797-65-0	H3

Sample: Trip Blank **Lab ID: 30444380011** Collected: 10/06/21 00:00 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/12/21 11:50	10/13/21 16:12	96-12-8	CH

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Sample: Trip Blank **Lab ID: 30444380011** Collected: 10/06/21 00:00 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/12/21 11:50	10/13/21 16:12	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	95	%.	60-140		1	10/12/21 11:50	10/13/21 16:12	630-20-6	CH

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

QC Batch: 467759
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30444380001, 30444380002, 30444380003, 30444380004, 30444380005, 30444380006, 30444380007, 30444380008, 30444380009, 30444380010, 30444380011

METHOD BLANK: 2258524
Matrix: Water
Associated Lab Samples: 30444380001, 30444380002, 30444380003, 30444380004, 30444380005, 30444380006, 30444380007, 30444380008, 30444380009, 30444380010, 30444380011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.022	10/13/21 13:15	CH
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	10/13/21 13:15	
1,1,1,2-Tetrachloroethane (S)	%.	91	60-140		10/13/21 13:15	CH

LABORATORY CONTROL SAMPLE: 2258525

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.27	109	85-115	CH
1,2-Dibromoethane (EDB)	ug/L	0.25	0.24	97	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			98	60-140	CH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2258595 2258596

Parameter	Units	30444380002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.4	0.4	0.40	0.39	99	97	60-140	2	25	CH
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.4	0.4	0.37	0.38	92	95	60-140	4	25	
1,1,1,2-Tetrachloroethane (S)	%.						95	92	60-140			CH

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

QC Batch: 470246
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30444380001, 30444380002, 30444380003, 30444380004, 30444380005, 30444380006, 30444380007, 30444380008, 30444380009, 30444380010

METHOD BLANK: 2270119
Matrix: Water
Associated Lab Samples: 30444380001, 30444380002, 30444380003, 30444380004, 30444380005, 30444380006, 30444380007, 30444380008, 30444380009, 30444380010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.000030	10/29/21 08:19	

LABORATORY CONTROL SAMPLE: 2270120

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.001	0.00097	97	80-120	

MATRIX SPIKE SAMPLE: 2270122

Parameter	Units	30444461001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	0.0025	0.0024	95	75-125	

MATRIX SPIKE SAMPLE: 2270124

Parameter	Units	30444380001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.00020 U	0.0025	0.0025	100	75-125	

SAMPLE DUPLICATE: 2270121

Parameter	Units	30444461001 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	ND	0.00020 U		20	

SAMPLE DUPLICATE: 2270123

Parameter	Units	30444380001 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	0.00020 U	0.00020 U		20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

QC Batch: 87419
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D MET
Laboratory: Pace Analytical Services - WestVirginia
Associated Lab Samples: 30444380001, 30444380002, 30444380003, 30444380004, 30444380005, 30444380006, 30444380007, 30444380008, 30444380009, 30444380010

METHOD BLANK: 429346
Matrix: Water
Associated Lab Samples: 30444380001, 30444380002, 30444380003, 30444380004, 30444380005, 30444380006, 30444380007, 30444380008, 30444380009, 30444380010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.029	10/20/21 12:23	
Iron	mg/L	0.050 U	0.050	0.0076	10/20/21 12:23	
Magnesium	mg/L	0.50 U	0.50	0.047	10/20/21 12:23	
Manganese	mg/L	0.0050 U	0.0050	0.00044	10/20/21 12:23	
Potassium	mg/L	0.50 U	0.50	0.19	10/20/21 12:23	
Sodium	mg/L	0.50 U	0.50	0.15	10/20/21 12:23	

LABORATORY CONTROL SAMPLE: 429347

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	39.9	100	80-120	
Iron	mg/L	2	2.1	103	80-120	
Magnesium	mg/L	20	20.3	101	80-120	
Manganese	mg/L	2	2.0	102	80-120	
Potassium	mg/L	20	20.5	103	80-120	
Sodium	mg/L	20	19.9	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 429421 429422

Parameter	Units	30435713002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	8070	40	40	47.4	47.7	98	99	80-120	1	20	
Iron	mg/L	0.16	2	2	2.2	2.2	101	102	80-120	1	20	
Magnesium	mg/L	2850	20	20	22.8	23.0	100	101	80-120	1	20	
Manganese	mg/L	0.013	2	2	2.0	2.0	100	101	80-120	1	20	
Potassium	mg/L	1580	20	20	23.7	23.9	111	111	80-120	1	20	
Sodium	mg/L	186000	20	20	216	220	150	166	80-120	1	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

QC Batch: 87574
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D MET Dissolved
Laboratory: Pace Analytical Services - WestVirginia
Associated Lab Samples: 30444380001, 30444380002, 30444380003, 30444380004, 30444380005, 30444380006, 30444380007, 30444380008, 30444380009, 30444380010

METHOD BLANK: 430012
Matrix: Water
Associated Lab Samples: 30444380001, 30444380002, 30444380003, 30444380004, 30444380005, 30444380006, 30444380007, 30444380008, 30444380009, 30444380010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.029	10/20/21 22:28	
Iron, Dissolved	mg/L	0.050 U	0.050	0.0076	10/20/21 22:28	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	10/20/21 22:28	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.00044	10/20/21 22:28	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.19	10/20/21 22:28	
Sodium, Dissolved	mg/L	0.16J	0.50	0.15	10/20/21 22:28	

LABORATORY CONTROL SAMPLE: 430013

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	44.7	112	80-120	
Iron, Dissolved	mg/L	2	2.0	102	80-120	
Magnesium, Dissolved	mg/L	20	22.8	114	80-120	
Manganese, Dissolved	mg/L	2	2.3	114	80-120	
Potassium, Dissolved	mg/L	20	23.0	115	80-120	
Sodium, Dissolved	mg/L	20	22.2	111	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 430072 430073

Parameter	Units	30444380001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	17.4	40	40	64.3	63.4	117	115	80-120	1	20	
Iron, Dissolved	mg/L	26.4	2	2	30.9	30.4	228	201	80-120	2	20	M1
Magnesium, Dissolved	mg/L	1.5	20	20	24.8	24.5	116	115	80-120	1	20	
Manganese, Dissolved	mg/L	0.17	2	2	2.5	2.5	116	115	80-120	1	20	
Potassium, Dissolved	mg/L	0.71	20	20	24.5	24.1	119	117	80-120	1	20	
Sodium, Dissolved	mg/L	3.2	20	20	26.3	25.9	115	113	80-120	1	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

QC Batch: 87006
QC Batch Method: EPA 3020A
Analysis Method: EPA 6020B
Analysis Description: 6020B MET
Laboratory: Pace Analytical Services - WestVirginia
Associated Lab Samples: 30444380001, 30444380002, 30444380003, 30444380004, 30444380005, 30444380006, 30444380007, 30444380008, 30444380009, 30444380010

METHOD BLANK: 426788
Matrix: Water
Associated Lab Samples: 30444380001, 30444380002, 30444380003, 30444380004, 30444380005, 30444380006, 30444380007, 30444380008, 30444380009, 30444380010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.000058J	0.00050	0.000045	10/14/21 10:02	
Arsenic	mg/L	0.0025 U	0.0025	0.00025	10/14/21 10:02	
Barium	mg/L	0.0025 U	0.0025	0.00011	10/14/21 10:02	
Beryllium	mg/L	0.00050 U	0.00050	0.00015	10/14/21 10:02	
Cadmium	mg/L	0.00050 U	0.00050	0.000065	10/14/21 10:02	
Chromium	mg/L	0.0025 U	0.0025	0.00086	10/14/21 10:02	
Cobalt	mg/L	0.0025 U	0.0025	0.00015	10/14/21 10:02	
Copper	mg/L	0.0025 U	0.0025	0.00025	10/14/21 10:02	
Lead	mg/L	0.00050 U	0.00050	0.000030	10/14/21 10:02	
Nickel	mg/L	0.0025 U	0.0025	0.00065	10/14/21 10:02	
Selenium	mg/L	0.0025 U	0.0025	0.00084	10/14/21 10:02	
Silver	mg/L	0.0025 U	0.0025	0.00016	10/14/21 10:02	
Thallium	mg/L	0.00050 U	0.00050	0.000024	10/14/21 10:02	
Vanadium	mg/L	0.0025 U	0.0025	0.00021	10/14/21 10:02	
Zinc	mg/L	0.0050 U	0.0050	0.0017	10/14/21 10:02	

LABORATORY CONTROL SAMPLE: 426789

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.022	108	80-120	
Arsenic	mg/L	0.1	0.10	100	80-120	
Barium	mg/L	0.1	0.10	101	80-120	
Beryllium	mg/L	0.02	0.020	99	80-120	
Cadmium	mg/L	0.02	0.020	100	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Copper	mg/L	0.1	0.10	102	80-120	
Lead	mg/L	0.02	0.020	101	80-120	
Nickel	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.098	98	80-120	
Silver	mg/L	0.1	0.099	99	80-120	
Thallium	mg/L	0.02	0.020	100	80-120	
Vanadium	mg/L	0.1	0.10	101	80-120	
Zinc	mg/L	0.2	0.20	101	80-120	

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 426790 426791

Parameter	Units	30444380002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.000084J	0.02	0.02	0.022	0.022	111	110	75-125	1	20	
Arsenic	mg/L	0.0025 U	0.1	0.1	0.10	0.10	103	103	75-125	0	20	
Barium	mg/L	0.0089	0.1	0.1	0.11	0.11	103	105	75-125	1	20	
Beryllium	mg/L	0.00050 U	0.02	0.02	0.021	0.020	103	102	75-125	1	20	
Cadmium	mg/L	0.00050 U	0.02	0.02	0.021	0.020	103	102	75-125	1	20	
Chromium	mg/L	0.0027	0.1	0.1	0.11	0.11	105	105	75-125	0	20	
Cobalt	mg/L	0.00051J	0.1	0.1	0.11	0.11	106	105	75-125	1	20	
Copper	mg/L	0.0025 U	0.1	0.1	0.11	0.11	107	105	75-125	1	20	
Lead	mg/L	0.00050 U	0.02	0.02	0.021	0.021	104	103	75-125	1	20	
Nickel	mg/L	0.0023J	0.1	0.1	0.11	0.11	104	104	75-125	1	20	
Selenium	mg/L	0.0025 U	0.1	0.1	0.10	0.10	102	102	75-125	0	20	
Silver	mg/L	0.0025 U	0.1	0.1	0.10	0.10	102	102	75-125	0	20	
Thallium	mg/L	0.000024J	0.02	0.02	0.021	0.021	104	103	75-125	1	20	
Vanadium	mg/L	0.0025 U	0.1	0.1	0.11	0.10	105	104	75-125	1	20	
Zinc	mg/L	0.0050 U	0.2	0.2	0.21	0.21	104	104	75-125	0	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

QC Batch: 468435
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30444380008, 30444380009, 30444380010

METHOD BLANK: 2261883 Matrix: Water
Associated Lab Samples: 30444380008, 30444380009, 30444380010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	10/15/21 17:03	

LABORATORY CONTROL SAMPLE: 2261884

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2261885 2261886

Parameter	Units	30443913005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	36.0	50	50	86.0	86.0	100	100	85-115	0	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

QC Batch: 468843
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30444380001, 30444380002, 30444380003, 30444380004, 30444380005, 30444380006, 30444380007

METHOD BLANK: 2263823
Matrix: Water
Associated Lab Samples: 30444380001, 30444380002, 30444380003, 30444380004, 30444380005, 30444380006, 30444380007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	1.0J	10.0	1.0	10/19/21 15:01	

LABORATORY CONTROL SAMPLE: 2263824

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	22.0	110	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2263844 2263845

Parameter	Units	30444440001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	216	50	50	262	264	92	96	85-115	1	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

QC Batch: 467794 | Analysis Method: SM 2540C-2011
QC Batch Method: SM 2540C-2011 | Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30444380001, 30444380002, 30444380003, 30444380004, 30444380005, 30444380006, 30444380007, 30444380008, 30444380009, 30444380010

METHOD BLANK: 2258655 | Matrix: Water
Associated Lab Samples: 30444380001, 30444380002, 30444380003, 30444380004, 30444380005, 30444380006, 30444380007, 30444380008, 30444380009, 30444380010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	10/12/21 19:47	

LABORATORY CONTROL SAMPLE: 2258656

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	931	93	85-115	

SAMPLE DUPLICATE: 2258657

Parameter	Units	30444380008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	30.0	31.0	3	5	

SAMPLE DUPLICATE: 2258658

Parameter	Units	30444398009 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0 U		5	

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

QC Batch: 468767
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30444380001, 30444380002, 30444380003, 30444380004, 30444380005, 30444380006, 30444380007, 30444380008, 30444380009, 30444380010

METHOD BLANK: 2263400
Matrix: Water
Associated Lab Samples: 30444380001, 30444380002, 30444380003, 30444380004, 30444380005, 30444380006, 30444380007, 30444380008, 30444380009, 30444380010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.044	10/19/21 12:48	

LABORATORY CONTROL SAMPLE: 2263401

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2263402 2263403

Parameter	Units	30444380001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.0	4.0	100	101	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2263404 2263405

Parameter	Units	30444840001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	<0.10	4	4	4.1	4.0	101	101	90-110	0	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

QC Batch: 468098
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30444380001, 30444380002, 30444380003, 30444380004, 30444380005, 30444380006, 30444380007, 30444380008, 30444380009, 30444380010

METHOD BLANK: 2260143
Matrix: Water
Associated Lab Samples: 30444380001, 30444380002, 30444380003, 30444380004, 30444380005, 30444380006, 30444380007, 30444380008, 30444380009, 30444380010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	10/14/21 09:49	

LABORATORY CONTROL SAMPLE: 2260144

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	326	109	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2260145 2260146

Parameter	Units	30444380001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	25.0 U	150	150	168	171	110	111	90-110	1	10	MH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2260147 2260148

Parameter	Units	30444398001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	6.1J	150	150	173	177	111	114	90-110	2	10	MH

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

QC Batch: 469063
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30444380001, 30444380002, 30444380003, 30444380004, 30444380005, 30444380006, 30444380007, 30444380008, 30444380009, 30444380010

METHOD BLANK: 2265019
Matrix: Water
Associated Lab Samples: 30444380001, 30444380002, 30444380003, 30444380004, 30444380005, 30444380006, 30444380007, 30444380008, 30444380009, 30444380010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	10/20/21 18:33	

LABORATORY CONTROL SAMPLE: 2265020

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	19.8	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2265021 2265022

Parameter	Units	30444380001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	6.5	20	20	25.7	25.8	96	97	85-115	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

QC Batch: 469031 | Analysis Method: SM 4500NO3-F-2011
QC Batch Method: SM 4500NO3-F-2011 | Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30444380001, 30444380002, 30444380003, 30444380004, 30444380005, 30444380006, 30444380007, 30444380008, 30444380009, 30444380010

METHOD BLANK: 2264839 | Matrix: Water
Associated Lab Samples: 30444380001, 30444380002, 30444380003, 30444380004, 30444380005, 30444380006, 30444380007, 30444380008, 30444380009, 30444380010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	10/20/21 15:48	

LABORATORY CONTROL SAMPLE: 2264840

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	4.1	103	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2264841 2264842

Parameter	Units	30445146002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	16.0	10	10	24.5	23.2	85	72	85-115	5	20	ML

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

QC Batch: 468658
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30444380001, 30444380002, 30444380003, 30444380004, 30444380005, 30444380006, 30444380007, 30444380008, 30444380009, 30444380010

METHOD BLANK: 2262743
Matrix: Water
Associated Lab Samples: 30444380001, 30444380002, 30444380003, 30444380004, 30444380005, 30444380006, 30444380007, 30444380008, 30444380009, 30444380010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	10/18/21 17:25	

LABORATORY CONTROL SAMPLE: 2262744

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	31.9	106	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2262745 2262746

Parameter	Units	30444380001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.0 U	20	20	19.6	19.1	96	93	85-115	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2262747 2262748

Parameter	Units	30444398001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.0 U	20	20	17.4	17.3	85	84	85-115	1	20	ML

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

QC Batch: 467402
QC Batch Method: SM 4500NO2-B-2011
Analysis Method: SM 4500NO2-B-2011
Analysis Description: SM4500-NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30444380001, 30444380002, 30444380003, 30444380004, 30444380005, 30444380006, 30444380007, 30444380008, 30444380009, 30444380010

METHOD BLANK: 2256842
Matrix: Water
Associated Lab Samples: 30444380001, 30444380002, 30444380003, 30444380004, 30444380005, 30444380006, 30444380007, 30444380008, 30444380009, 30444380010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	10/08/21 16:54	

LABORATORY CONTROL SAMPLE: 2256843

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.092	92	90-110	

MATRIX SPIKE SAMPLE: 2256845

Parameter	Units	30444380001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.010 U	0.1	0.076	76	85-115	H1,ML

SAMPLE DUPLICATE: 2256844

Parameter	Units	30444380001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010 U		20	H1

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30444380001
[1] 8011 Sample pH is 7
Sample: 30444380002
[1] 8011 Sample pH is 7
Sample: 30444380003
[1] 8011 Sample pH is 7
Sample: 30444380004
[1] 8011 Sample pH is 7
Sample: 30444380005
[1] 8011 Sample pH is 7
Sample: 30444380006
[1] 8011 Sample pH is 7
Sample: 30444380007
[1] 8011 Sample pH is 7
Sample: 30444380008
[1] 8011 Sample pH is 7

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QUALIFIERS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

SAMPLE QUALIFIERS

Sample: 30444380009
[1] 8011 Sample pH is 7
Sample: 30444380010
[1] 8011 Sample pH is 7
Sample: 30444380011
[1] 8011 Sample pH is 7

ANALYTE QUALIFIERS

1c	TV= 0 mg/L
2c	TV= 6 mg/L
3c	TV= 8 mg/L
4c	alk tv 0 mg/L
B	Analyte was detected in the associated method blank.
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
H1	Analysis conducted outside the EPA method holding time.
H3	Sample was received or analysis requested beyond the recognized method holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30444380001	**TW-1**	EPA 8011	467759	EPA 8011	467892
30444380002	**TW-2**	EPA 8011	467759	EPA 8011	467892
30444380003	**TW-2A**	EPA 8011	467759	EPA 8011	467892
30444380004	**TW-3**	EPA 8011	467759	EPA 8011	467892
30444380005	**TW-3A**	EPA 8011	467759	EPA 8011	467892
30444380006	**TW-4**	EPA 8011	467759	EPA 8011	467892
30444380007	**TW-4B**	EPA 8011	467759	EPA 8011	467892
30444380008	**TW-5**	EPA 8011	467759	EPA 8011	467892
30444380009	**TW-5A**	EPA 8011	467759	EPA 8011	467892
30444380010	**TW-5B**	EPA 8011	467759	EPA 8011	467892
30444380011	**Trip Blank**	EPA 8011	467759	EPA 8011	467892
30444380001	**TW-1**	EPA 3010A	87419	EPA 6010D	87708
30444380002	**TW-2**	EPA 3010A	87419	EPA 6010D	87708
30444380003	**TW-2A**	EPA 3010A	87419	EPA 6010D	87708
30444380004	**TW-3**	EPA 3010A	87419	EPA 6010D	87708
30444380005	**TW-3A**	EPA 3010A	87419	EPA 6010D	87708
30444380006	**TW-4**	EPA 3010A	87419	EPA 6010D	87708
30444380007	**TW-4B**	EPA 3010A	87419	EPA 6010D	87708
30444380008	**TW-5**	EPA 3010A	87419	EPA 6010D	87708
30444380009	**TW-5A**	EPA 3010A	87419	EPA 6010D	87708
30444380010	**TW-5B**	EPA 3010A	87419	EPA 6010D	87708
30444380001	**TW-1**	EPA 3010A	87574	EPA 6010D	87795
30444380002	**TW-2**	EPA 3010A	87574	EPA 6010D	87795
30444380003	**TW-2A**	EPA 3010A	87574	EPA 6010D	87795
30444380004	**TW-3**	EPA 3010A	87574	EPA 6010D	87795
30444380005	**TW-3A**	EPA 3010A	87574	EPA 6010D	87795
30444380006	**TW-4**	EPA 3010A	87574	EPA 6010D	87795
30444380007	**TW-4B**	EPA 3010A	87574	EPA 6010D	87795
30444380008	**TW-5**	EPA 3010A	87574	EPA 6010D	87795
30444380009	**TW-5A**	EPA 3010A	87574	EPA 6010D	87795
30444380010	**TW-5B**	EPA 3010A	87574	EPA 6010D	87795
30444380001	**TW-1**	EPA 3020A	87006	EPA 6020B	87083
30444380002	**TW-2**	EPA 3020A	87006	EPA 6020B	87083
30444380003	**TW-2A**	EPA 3020A	87006	EPA 6020B	87083
30444380004	**TW-3**	EPA 3020A	87006	EPA 6020B	87083
30444380005	**TW-3A**	EPA 3020A	87006	EPA 6020B	87083
30444380006	**TW-4**	EPA 3020A	87006	EPA 6020B	87083
30444380007	**TW-4B**	EPA 3020A	87006	EPA 6020B	87083
30444380008	**TW-5**	EPA 3020A	87006	EPA 6020B	87083
30444380009	**TW-5A**	EPA 3020A	87006	EPA 6020B	87083
30444380010	**TW-5B**	EPA 3020A	87006	EPA 6020B	87083
30444380001	**TW-1**	EPA 7470A	470246	EPA 7470A	470266
30444380002	**TW-2**	EPA 7470A	470246	EPA 7470A	470266
30444380003	**TW-2A**	EPA 7470A	470246	EPA 7470A	470266
30444380004	**TW-3**	EPA 7470A	470246	EPA 7470A	470266
30444380005	**TW-3A**	EPA 7470A	470246	EPA 7470A	470266
30444380006	**TW-4**	EPA 7470A	470246	EPA 7470A	470266

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30444380007	**TW-4B**	EPA 7470A	470246	EPA 7470A	470266
30444380008	**TW-5**	EPA 7470A	470246	EPA 7470A	470266
30444380009	**TW-5A**	EPA 7470A	470246	EPA 7470A	470266
30444380010	**TW-5B**	EPA 7470A	470246	EPA 7470A	470266
30444380001	**TW-1**	SM 2320B-2011	468843		
30444380002	**TW-2**	SM 2320B-2011	468843		
30444380003	**TW-2A**	SM 2320B-2011	468843		
30444380004	**TW-3**	SM 2320B-2011	468843		
30444380005	**TW-3A**	SM 2320B-2011	468843		
30444380006	**TW-4**	SM 2320B-2011	468843		
30444380007	**TW-4B**	SM 2320B-2011	468843		
30444380008	**TW-5**	SM 2320B-2011	468435		
30444380009	**TW-5A**	SM 2320B-2011	468435		
30444380010	**TW-5B**	SM 2320B-2011	468435		
30444380001	**TW-1**	SM 2540C-2011	467794		
30444380002	**TW-2**	SM 2540C-2011	467794		
30444380003	**TW-2A**	SM 2540C-2011	467794		
30444380004	**TW-3**	SM 2540C-2011	467794		
30444380005	**TW-3A**	SM 2540C-2011	467794		
30444380006	**TW-4**	SM 2540C-2011	467794		
30444380007	**TW-4B**	SM 2540C-2011	467794		
30444380008	**TW-5**	SM 2540C-2011	467794		
30444380009	**TW-5A**	SM 2540C-2011	467794		
30444380010	**TW-5B**	SM 2540C-2011	467794		
30444380001	**TW-1**	EPA 350.1	468767	EPA 350.1	468781
30444380002	**TW-2**	EPA 350.1	468767	EPA 350.1	468781
30444380003	**TW-2A**	EPA 350.1	468767	EPA 350.1	468781
30444380004	**TW-3**	EPA 350.1	468767	EPA 350.1	468781
30444380005	**TW-3A**	EPA 350.1	468767	EPA 350.1	468781
30444380006	**TW-4**	EPA 350.1	468767	EPA 350.1	468781
30444380007	**TW-4B**	EPA 350.1	468767	EPA 350.1	468781
30444380008	**TW-5**	EPA 350.1	468767	EPA 350.1	468781
30444380009	**TW-5A**	EPA 350.1	468767	EPA 350.1	468781
30444380010	**TW-5B**	EPA 350.1	468767	EPA 350.1	468781
30444380001	**TW-1**	EPA 410.4	468098	EPA 410.4	468143
30444380002	**TW-2**	EPA 410.4	468098	EPA 410.4	468143
30444380003	**TW-2A**	EPA 410.4	468098	EPA 410.4	468143
30444380004	**TW-3**	EPA 410.4	468098	EPA 410.4	468143
30444380005	**TW-3A**	EPA 410.4	468098	EPA 410.4	468143
30444380006	**TW-4**	EPA 410.4	468098	EPA 410.4	468143
30444380007	**TW-4B**	EPA 410.4	468098	EPA 410.4	468143
30444380008	**TW-5**	EPA 410.4	468098	EPA 410.4	468143
30444380009	**TW-5A**	EPA 410.4	468098	EPA 410.4	468143
30444380010	**TW-5B**	EPA 410.4	468098	EPA 410.4	468143
30444380001	**TW-1**	SM 4500-Cl-E-2011	469063		
30444380002	**TW-2**	SM 4500-Cl-E-2011	469063		

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444380

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30444380003	**TW-2A**	SM 4500-Cl-E-2011	469063		
30444380004	**TW-3**	SM 4500-Cl-E-2011	469063		
30444380005	**TW-3A**	SM 4500-Cl-E-2011	469063		
30444380006	**TW-4**	SM 4500-Cl-E-2011	469063		
30444380007	**TW-4B**	SM 4500-Cl-E-2011	469063		
30444380008	**TW-5**	SM 4500-Cl-E-2011	469063		
30444380009	**TW-5A**	SM 4500-Cl-E-2011	469063		
30444380010	**TW-5B**	SM 4500-Cl-E-2011	469063		
30444380001	**TW-1**	SM 4500NO3-F-2011	469031		
30444380002	**TW-2**	SM 4500NO3-F-2011	469031		
30444380003	**TW-2A**	SM 4500NO3-F-2011	469031		
30444380004	**TW-3**	SM 4500NO3-F-2011	469031		
30444380005	**TW-3A**	SM 4500NO3-F-2011	469031		
30444380006	**TW-4**	SM 4500NO3-F-2011	469031		
30444380007	**TW-4B**	SM 4500NO3-F-2011	469031		
30444380008	**TW-5**	SM 4500NO3-F-2011	469031		
30444380009	**TW-5A**	SM 4500NO3-F-2011	469031		
30444380010	**TW-5B**	SM 4500NO3-F-2011	469031		
30444380001	**TW-1**	EPA 9038	468658		
30444380002	**TW-2**	EPA 9038	468658		
30444380003	**TW-2A**	EPA 9038	468658		
30444380004	**TW-3**	EPA 9038	468658		
30444380005	**TW-3A**	EPA 9038	468658		
30444380006	**TW-4**	EPA 9038	468658		
30444380007	**TW-4B**	EPA 9038	468658		
30444380008	**TW-5**	EPA 9038	468658		
30444380009	**TW-5A**	EPA 9038	468658		
30444380010	**TW-5B**	EPA 9038	468658		
30444380001	**TW-1**	SM 4500NO2-B-2011	467402		
30444380002	**TW-2**	SM 4500NO2-B-2011	467402		
30444380003	**TW-2A**	SM 4500NO2-B-2011	467402		
30444380004	**TW-3**	SM 4500NO2-B-2011	467402		
30444380005	**TW-3A**	SM 4500NO2-B-2011	467402		
30444380006	**TW-4**	SM 4500NO2-B-2011	467402		
30444380007	**TW-4B**	SM 4500NO2-B-2011	467402		
30444380008	**TW-5**	SM 4500NO2-B-2011	467402		
30444380009	**TW-5A**	SM 4500NO2-B-2011	467402		
30444380010	**TW-5B**	SM 4500NO2-B-2011	467402		

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF- FALL 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals ①	Total + Dis. Metals ②	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO_4, COD		Method 8011 - EDB + DBCP			
1	TW-1	7	10-6-21	1400	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓			
2	TW-2	↓	↓	1125	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
3	TW-2A			1050															
4	TW-3			1215															
5	TW-3A			1250															
6	TW-4			845															
7	TW-4B		↓	920															
8	TW-5		10-5-21	1530															
9	TW-5A			1600															
10	TW-5B	↓	↓	1500	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
11	TRIP BLANK	2	10-6-21	—	—		QA									✓			
12																			

WO#: 30444380

30444380

	Signature	Date	Time	Comments
Relinquished by	D A Brown	10-6-21	1430	① Sb, As, Ba, Be, Cd, Cr, Co, Cu, Hg, Pb, Ni, Se, Ag, Tl, V, Zn
Received by	RSB / PACE	10-6-21	1430	② Ca, Fe, Mg, MN, K, Na
Relinquished by	RSB / PACE	10/6/21	17:45	
Received by	RDS PACE	10-7-21	1905	PACE - WV - METALS - SEE ATTACHED LIST FOR METHODS
Relinquished by	RDS PACE	10-7-21	2350	PACE - G-BURL - WET CHEM + 8011
Received by	B. Rumer	10-7-21	2300	LEVEL 2 REPORT

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EMA Project # _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Tracking #: –

Label M
LIMS Login VPS

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 13 Type of Ice: Wet Blue None

Cooler Temperature Observed Temp 5.1 °C Correction Factor: 0.1 °C Final Temp: _____ °C

Temp should be above freezing to 6°C

#_3044380

Comments:	Yes	No	N/A	pH paper Lot# 102411 / Date and initials of person examining contents: M 10-8-21
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.
Samples Arrived within Hold Time:		✓		6. Nitrite out of hold
Short Hold Time Analysis (<72hr remaining):	✓			7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.
All containers meet method preservation requirements.	✓			Initial when completed M / Date/time of preservation / Lot # of added preservative
Headspace in VOA Vials (>6mm):		✓		17.
Trip Blank Present: / Trip Blank Custody Seals Present	✓ ✓			18.
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: M / Date: 10-8 / Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pace Analytical®

Pace Greensburg Lab -Sample Container Count

Client EMA

Site Millersville landfill

Profile Number 8469

Notes line 1 whole line

Sample Line Item	Matrix	AG1H	AG1S	AG1T	AG2U	AG3S	AG3U	AG5U	AG5T	BG1U	BG2U	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	GCUB	VG9H	VG9T	VG9U	VOAK	WGFU	WGKU	ZPLC	
1	WT												1				2	1					3						
2																													
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																							2						
12																													

Container Codes

Glass

GJN	1 Gallon Jug with HNO3	DG9S	40mL amber VOA vial H2SO4
AG5U	100mL amber glass unprserved	VG9U	40mL clear VOA vial
AG5T	100mL amber glass Na Thiosulfate	VG9T	40mL clear VOA vial Na Thiosul
GJN	1 Gallon Jug	VG9H	40mL clear VOA vial HCl
AG1S	1L amber glass H2SO4	JGFU	4oz amber wide jar
AG1H	1L amber glass HCl	WGFU	4oz wide jar unpreserved
AG1T	1L amber glass Na Thiosulfate	BG2U	500mL clear glass unpreserved
BG1U	1L clear glass unpreserved	AG2U	500mL amber glass unpreserve
AG3S	250mL amber glass H2SO4	WGKU	8oz wide jar unpreserved
AG3U	250mL amber glass unpreserved		

Plastic / Misc.

GCUB	1 Gallon Cubitainer
12GN	1/2 Gallon Cubitainer
SP5T	120mL Coliform Na Thiosulfate
BP1N	1L plastic HNO3
BP1U	1L plastic unpreserved
BP3S	250mL plastic H2SO4
BP3N	250mL plastic HNO3
BP3U	250mL plastic unpreserved
BP3C	250ml plastic NAOH
BP2S	500mL plastic H2SO4
BP2U	500mL plastic unpreserved

EZI	5g Encore
VOAK	Kit for Volatile Solid
I	Wipe/Swab
ZPLC	Ziploc Bag

WT	Water
SL	Solid
OL	Non-aqueous liquid
WP	Wipe

#-30444380

Millersville Landfill		
	Pace, Beaver, WV	
	Method 6020 - ICPMS	
Parameter	RL	MDL
	(mg/l)	
TOTAL METALS		
Antimony	0.0005	
Arsenic	0.0025	0.0002473
Barium	0.0025	
Beryllium	0.0005	
Cadmium	0.0005	
Chromium	0.0025	
Cobalt	0.0025	
Copper	0.0025	
Lead	0.0005	
Nickel	0.0025	
Selenium	0.0025	
Silver	0.0025	
Thallium	0.0005	
Vanadium	0.0025	
Zinc	0.005	
	Pace, Beaver, WV	
TOTAL AND DISSOLVED METALS	Method 6010 - ICP	
Calcium	0.5	0.028
Iron	0.05	0.0076
Magnesium	0.5	0.047
Manganese	0.005	0.00043
Potassium	0.5	0.19
Sodium	0.5	0.148
	Pace, Beaver, WV	
	Method 7470A	
Mercury	0.0005	0.00025
GENERAL CHEMISTRY	Pace - Greensburg, PA	
Alkalinity - SM 2320B	10	1
Ammonia - EPA 350.1	0.1	0.0445
COD - EPA 410.4	25	4.6532
Chloride - EPA 300.0	3	0.06683
Hardness - 2340B		
Nitrate - EPA 300.0	0.1	0.0238
Sulfate - EPA 300.0	10	4.6702
Total dissolved solids - SM2540C	10	10

#-30443080

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

January 04, 2022

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on October 07, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - WestVirginia
- Pace Analytical Services - Greensburg

(Greensburg, PA) - Revision 1 - This report replaces the November, 5, 2012 report. This project was revised on December, 10, 2021 to report hardness.

(Beaver, WV) - Revision 1 - This report replaces the November 5, 2021 report. This project was revised on November 6, 2021 to include Hardness.

(Greensburg, PA) - Revision 2 - This report replaces the December, 10, 2012 report. This project was revised on January, 4, 2021 to report dissolved Mn.

(Beaver, WV) - Revision 2- This report replaces the November 6, 2021 report. This project was revised on December 17, 2021 to include Dissolved Manganese.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alexis E. Ozoroski
alexis.ozoroski@pacelabs.com
(724)850-5600
Project Manager

REPORT OF LABORATORY ANALYSIS

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Enclosures

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CERTIFICATIONS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver

225 Industrial Park Drive, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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Greensburg, PA 15601
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SAMPLE SUMMARY

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30444398001	**TW-14**	Water	10/07/21 10:00	10/07/21 23:00
30444398002	**TW-14A**	Water	10/07/21 09:20	10/07/21 23:00
30444398003	**TW-14B**	Water	10/07/21 08:50	10/07/21 23:00
30444398004	**TW-15**	Water	10/07/21 10:50	10/07/21 23:00
30444398005	**TW-15B**	Water	10/07/21 11:30	10/07/21 23:00
30444398006	**TW-16**	Water	10/07/21 12:55	10/07/21 23:00
30444398007	**TW-16A**	Water	10/07/21 12:20	10/07/21 23:00
30444398008	**TW-17**	Water	10/07/21 13:35	10/07/21 23:00
30444398009	**TW-17A**	Water	10/07/21 14:10	10/07/21 23:00
30444398010	**TW-19**	Water	10/07/21 14:50	10/07/21 23:00
30444398011	**Trip Blank**	Water	10/07/21 00:00	10/07/21 23:00

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Greensburg, PA 15601
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SAMPLE ANALYTE COUNT

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30444398001	**TW-14**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6010D	ACH1	8	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30444398002	**TW-14A**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6010D	ACH1	8	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30444398003	**TW-14B**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6010D	ACH1	8	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30444398004	**TW-15**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6010D	ACH1	8	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30444398005	**TW-15B**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6010D	ACH1	8	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30444398006	**TW-16**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6010D	ACH1	8	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30444398007	**TW-16A**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6010D	ACH1	8	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30444398008	**TW-17**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6010D	ACH1	8	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30444398009	**TW-17A**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6010D	ACH1	8	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30444398010	**TW-19**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6010D	ACH1	8	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30444398011	**Trip Blank**	EPA 8011	TAW	3	PASI-PA

PASI-BVWV = Pace Analytical Services - WestVirginia
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Date: January 04, 2022

TW-14 (Lab ID: 30444398001)

- 8011 sample pH is 7

TW-14A (Lab ID: 30444398002)

- 8011 sample pH is 7

TW-14B (Lab ID: 30444398003)

- 8011 sample pH is 7

TW-15 (Lab ID: 30444398004)

- 8011 sample pH is 7

TW-15B (Lab ID: 30444398005)

- 8011 sample pH is 7

TW-16 (Lab ID: 30444398006)

- 8011 sample pH is 7

TW-16A (Lab ID: 30444398007)

- 8011 sample pH is 7

TW-17 (Lab ID: 30444398008)

- 8011 sample pH is 7

TW-17A (Lab ID: 30444398009)

- 8011 sample pH is 7

Trip Blank (Lab ID: 30444398011)

- 8011 sample pH is 7

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: January 04, 2022

General Information:
11 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 467907

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- BLANK (Lab ID: 2259207)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- LCS (Lab ID: 2259208)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- MS (Lab ID: 2259209)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- MSD (Lab ID: 2259210)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- TW-14 (Lab ID: 30444398001)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- TW-14A (Lab ID: 30444398002)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- TW-14B (Lab ID: 30444398003)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- TW-15 (Lab ID: 30444398004)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- TW-15B (Lab ID: 30444398005)
  - 1,1,1,2-Tetrachloroethane (S)

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: January 04, 2022

QC Batch: 467907

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- 1,2-Dibromo-3-chloropropane
- TW-16 (Lab ID: 30444398006)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- TW-16A (Lab ID: 30444398007)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- TW-17 (Lab ID: 30444398008)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- TW-17A (Lab ID: 30444398009)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- TW-19 (Lab ID: 30444398010)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- Trip Blank (Lab ID: 30444398011)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Method: **EPA 6010D**
Description: 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: January 04, 2022

General Information:
10 samples were analyzed for EPA 6010D by Pace Analytical Services WestVirginia. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 87428

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 7392774001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 429457)
  - Iron
- MSD (Lab ID: 429458)
  - Iron
  - Manganese

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Method: **EPA 6010D**
Description: 6010D ICP, Dissolved, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: January 04, 2022

General Information:
10 samples were analyzed for EPA 6010D by Pace Analytical Services WestVirginia. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 87574

B: Analyte was detected in the associated method blank.

- BLANK for HBN 87574 [MPRP/8381 (Lab ID: 430012)
  - Sodium, Dissolved

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 87574

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30444380001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 430072)
  - Iron, Dissolved
- MSD (Lab ID: 430073)
  - Iron, Dissolved

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Method: **EPA 6020B**
Description: 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: January 04, 2022

General Information:
10 samples were analyzed for EPA 6020B by Pace Analytical Services WestVirginia. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 87006

B: Analyte was detected in the associated method blank.

- BLANK for HBN 87006 [MPRP/8293 (Lab ID: 426788)
  - Antimony

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: January 04, 2022

General Information:
10 samples were analyzed for EPA 7470A by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: January 04, 2022

General Information:
10 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 468843

2c: TV= 0 mg/L
- TW-14A (Lab ID: 30444398002)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-14B (Lab ID: 30444398003)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-15B (Lab ID: 30444398005)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-16 (Lab ID: 30444398006)
  - Alkalinity,Total (CaCO3 pH4.5)

3c: TV= 2 mg/L
- TW-16A (Lab ID: 30444398007)
  - Alkalinity,Total (CaCO3 pH4.5)

4c: TV= 4 mg/L
- TW-17A (Lab ID: 30444398009)
  - Alkalinity,Total (CaCO3 pH4.5)

5c: TV= 6 mg/L
- TW-17 (Lab ID: 30444398008)
  - Alkalinity,Total (CaCO3 pH4.5)

6c: TV= 8 mg/L
- TW-14 (Lab ID: 30444398001)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Method: **SM 2540C-2011**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: January 04, 2022

General Information:
10 samples were analyzed for SM 2540C-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 467893

1c: Sample volume was reduced so the sample could be within an acceptable range

- DUP (Lab ID: 2259164)
  - Total Dissolved Solids

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: January 04, 2022

General Information:
10 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: January 04, 2022

General Information:
10 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 468098

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30444380001,30444398001

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2260147)
  - Chemical Oxygen Demand
- MSD (Lab ID: 2260146)
  - Chemical Oxygen Demand
- MSD (Lab ID: 2260148)
  - Chemical Oxygen Demand

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: January 04, 2022

General Information:
10 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Method: **SM 4500NO3-F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: January 04, 2022

General Information:
10 samples were analyzed for SM 4500NO3-F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 469320

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30444398001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2266208)
  - Nitrogen, NO2 plus NO3
- MSD (Lab ID: 2266209)
  - Nitrogen, NO2 plus NO3

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: January 04, 2022

General Information:
10 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 468658

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30444380001,30444398001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MSD (Lab ID: 2262748)
  - Sulfate

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: January 04, 2022

General Information:
10 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 467402

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30444380001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2256845)
  - Nitrite as N

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Sample: TW-14 **Lab ID: 30444398001** Collected: 10/07/21 10:00 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/13/21 08:49	10/13/21 17:28	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/13/21 08:49	10/13/21 17:28	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	101	%.	60-140		1	10/13/21 08:49	10/13/21 17:28	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**1.2**	mg/L	0.50	0.029	1	10/18/21 14:08	10/20/21 15:57	7440-70-2	
Iron	**26.6**	mg/L	0.050	0.0076	1	10/18/21 14:08	10/20/21 15:57	7439-89-6	
Magnesium	**1.0**	mg/L	0.50	0.047	1	10/18/21 14:08	10/20/21 15:57	7439-95-4	
Manganese	**0.16**	mg/L	0.0050	0.00044	1	10/18/21 14:08	10/20/21 15:57	7439-96-5	
Potassium	**0.64**	mg/L	0.50	0.19	1	10/18/21 14:08	10/20/21 15:57	7440-09-7	
Sodium	**3.2**	mg/L	0.50	0.15	1	10/18/21 14:08	10/20/21 15:57	7440-23-5	
Total Hardness by 2340B	**7260**	ug/L	3310	267	1	10/18/21 14:08	10/20/21 15:57		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**1.3**	mg/L	0.50	0.029	1	10/19/21 13:15	10/20/21 23:00	7440-70-2	
Iron, Dissolved	**8.5**	mg/L	0.050	0.0076	1	10/19/21 13:15	10/20/21 23:00	7439-89-6	
Magnesium, Dissolved	**1.1**	mg/L	0.50	0.047	1	10/19/21 13:15	10/20/21 23:00	7439-95-4	
Manganese, Dissolved	**163**	ug/L	5.0	0.44	1	10/19/21 13:15	10/20/21 23:00	7439-96-5	
Potassium, Dissolved	**0.68**	mg/L	0.50	0.19	1	10/19/21 13:15	10/20/21 23:00	7440-09-7	
Sodium, Dissolved	**3.5**	mg/L	0.50	0.15	1	10/19/21 13:15	10/20/21 23:00	7440-23-5	
Total Hardness by 2340B, Dissolved	**7760**	ug/L	3310	267	1	10/19/21 13:15	10/20/21 23:00		
Zinc, Dissolved	**0.0031J**	mg/L	0.020	0.0020	1	10/19/21 13:15	10/20/21 23:00	7440-66-6	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - WestVirginia								
Antimony	**0.000063J**	mg/L	0.00050	0.000045	1	10/13/21 15:00	10/14/21 10:51	7440-36-0	B
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 10:51	7440-38-2	
Barium	**0.028**	mg/L	0.0025	0.00011	1	10/13/21 15:00	10/14/21 10:51	7440-39-3	
Beryllium	**0.00016J**	mg/L	0.00050	0.00015	1	10/13/21 15:00	10/14/21 10:51	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/13/21 15:00	10/14/21 10:51	7440-43-9	
Chromium	**0.0022J**	mg/L	0.0025	0.00086	1	10/13/21 15:00	10/14/21 10:51	7440-47-3	
Cobalt	**0.0084**	mg/L	0.0025	0.00015	1	10/13/21 15:00	10/14/21 10:51	7440-48-4	
Copper	**0.0033**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 10:51	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.000030	1	10/13/21 15:00	10/14/21 10:51	7439-92-1	
Nickel	**0.0086**	mg/L	0.0025	0.00065	1	10/13/21 15:00	10/14/21 10:51	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/13/21 15:00	10/14/21 10:51	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/13/21 15:00	10/14/21 10:51	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000024	1	10/13/21 15:00	10/14/21 10:51	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/13/21 15:00	10/14/21 10:51	7440-62-2	
Zinc	**0.0034J**	mg/L	0.0050	0.0017	1	10/13/21 15:00	10/14/21 10:51	7440-66-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Sample: TW-14 **Lab ID: 30444398001** Collected: 10/07/21 10:00 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/28/21 13:57	10/29/21 07:21	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**8.0J**	mg/L	10.0	1.0	1		10/19/21 15:31		6c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		10/12/21 19:47		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/19/21 10:35	10/19/21 13:56		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.1J**	mg/L	25.0	4.7	1	10/14/21 06:43	10/14/21 09:51		MH
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**7.7**	mg/L	3.0	0.67	1		10/20/21 19:24	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		10/21/21 20:05	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		10/21/21 20:05		ML
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/18/21 17:45	14808-79-8	ML
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/08/21 17:04	14797-65-0	

Sample: TW-14A **Lab ID: 30444398002** Collected: 10/07/21 09:20 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/13/21 08:49	10/13/21 18:06	96-12-8	CH

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Sample: TW-14A **Lab ID: 30444398002** Collected: 10/07/21 09:20 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/13/21 08:49	10/13/21 18:06	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	92	%.	60-140		1	10/13/21 08:49	10/13/21 18:06	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**0.73**	mg/L	0.50	0.029	1	10/18/21 14:08	10/20/21 15:59	7440-70-2	
Iron	**21.8**	mg/L	0.050	0.0076	1	10/18/21 14:08	10/20/21 15:59	7439-89-6	
Magnesium	**0.48J**	mg/L	0.50	0.047	1	10/18/21 14:08	10/20/21 15:59	7439-95-4	
Manganese	**0.29**	mg/L	0.0050	0.00044	1	10/18/21 14:08	10/20/21 15:59	7439-96-5	
Potassium	**0.61**	mg/L	0.50	0.19	1	10/18/21 14:08	10/20/21 15:59	7440-09-7	
Sodium	**3.8**	mg/L	0.50	0.15	1	10/18/21 14:08	10/20/21 15:59	7440-23-5	
Total Hardness by 2340B	**3820**	ug/L	3310	267	1	10/18/21 14:08	10/20/21 15:59		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**0.84**	mg/L	0.50	0.029	1	10/19/21 13:15	10/20/21 23:02	7440-70-2	
Iron, Dissolved	**13.3**	mg/L	0.050	0.0076	1	10/19/21 13:15	10/20/21 23:02	7439-89-6	
Magnesium, Dissolved	**0.56**	mg/L	0.50	0.047	1	10/19/21 13:15	10/20/21 23:02	7439-95-4	
Manganese, Dissolved	**290**	ug/L	5.0	0.44	1	10/19/21 13:15	10/20/21 23:02	7439-96-5	
Potassium, Dissolved	**0.70**	mg/L	0.50	0.19	1	10/19/21 13:15	10/20/21 23:02	7440-09-7	
Sodium, Dissolved	**4.3**	mg/L	0.50	0.15	1	10/19/21 13:15	10/20/21 23:02	7440-23-5	
Total Hardness by 2340B, Dissolved	**4390**	ug/L	3310	267	1	10/19/21 13:15	10/20/21 23:02		
Zinc, Dissolved	**0.0060J**	mg/L	0.020	0.0020	1	10/19/21 13:15	10/20/21 23:02	7440-66-6	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - WestVirginia								
Antimony	**0.00012J**	mg/L	0.00050	0.000045	1	10/13/21 15:00	10/14/21 10:59	7440-36-0	B
Arsenic	**0.0013J**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 10:59	7440-38-2	
Barium	**0.020**	mg/L	0.0025	0.00011	1	10/13/21 15:00	10/14/21 10:59	7440-39-3	
Beryllium	**0.00037J**	mg/L	0.00050	0.00015	1	10/13/21 15:00	10/14/21 10:59	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/13/21 15:00	10/14/21 10:59	7440-43-9	
Chromium	**0.0039**	mg/L	0.0025	0.00086	1	10/13/21 15:00	10/14/21 10:59	7440-47-3	
Cobalt	**0.0032**	mg/L	0.0025	0.00015	1	10/13/21 15:00	10/14/21 10:59	7440-48-4	
Copper	**0.0079**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 10:59	7440-50-8	
Lead	**0.00012J**	mg/L	0.00050	0.000030	1	10/13/21 15:00	10/14/21 10:59	7439-92-1	
Nickel	**0.0060**	mg/L	0.0025	0.00065	1	10/13/21 15:00	10/14/21 10:59	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/13/21 15:00	10/14/21 10:59	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/13/21 15:00	10/14/21 10:59	7440-22-4	
Thallium	**0.000068J**	mg/L	0.00050	0.000024	1	10/13/21 15:00	10/14/21 10:59	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/13/21 15:00	10/14/21 10:59	7440-62-2	
Zinc	**0.0077**	mg/L	0.0050	0.0017	1	10/13/21 15:00	10/14/21 10:59	7440-66-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Sample: TW-14A **Lab ID: 30444398002** Collected: 10/07/21 09:20 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/28/21 13:57	10/29/21 07:16	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		10/19/21 15:32		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		10/12/21 19:47		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/19/21 10:35	10/19/21 13:58		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/14/21 06:43	10/14/21 09:52		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**6.0**	mg/L	3.0	0.67	1		10/20/21 19:24	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		10/21/21 20:09	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		10/21/21 20:09		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/18/21 17:49	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/08/21 17:05	14797-65-0	

Sample: TW-14B **Lab ID: 30444398003** Collected: 10/07/21 08:50 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/13/21 08:49	10/13/21 18:19	96-12-8	CH

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Sample: TW-14B **Lab ID: 30444398003** Collected: 10/07/21 08:50 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/13/21 08:49	10/13/21 18:19	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	107	%.	60-140		1	10/13/21 08:49	10/13/21 18:19	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**0.50J**	mg/L	0.50	0.029	1	10/18/21 14:08	10/20/21 16:01	7440-70-2	
Iron	**0.021J**	mg/L	0.050	0.0076	1	10/18/21 14:08	10/20/21 16:01	7439-89-6	
Magnesium	**0.24J**	mg/L	0.50	0.047	1	10/18/21 14:08	10/20/21 16:01	7439-95-4	
Manganese	**0.0075**	mg/L	0.0050	0.00044	1	10/18/21 14:08	10/20/21 16:01	7439-96-5	
Potassium	**0.38J**	mg/L	0.50	0.19	1	10/18/21 14:08	10/20/21 16:01	7440-09-7	
Sodium	**0.89**	mg/L	0.50	0.15	1	10/18/21 14:08	10/20/21 16:01	7440-23-5	
Total Hardness by 2340B	**2240J**	ug/L	3310	267	1	10/18/21 14:08	10/20/21 16:01		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**0.53**	mg/L	0.50	0.029	1	10/19/21 13:15	10/20/21 23:04	7440-70-2	
Iron, Dissolved	**0.014J**	mg/L	0.050	0.0076	1	10/19/21 13:15	10/20/21 23:04	7439-89-6	
Magnesium, Dissolved	**0.25J**	mg/L	0.50	0.047	1	10/19/21 13:15	10/20/21 23:04	7439-95-4	
Manganese, Dissolved	**8.0**	ug/L	5.0	0.44	1	10/19/21 13:15	10/20/21 23:04	7439-96-5	
Potassium, Dissolved	**0.40J**	mg/L	0.50	0.19	1	10/19/21 13:15	10/20/21 23:04	7440-09-7	
Sodium, Dissolved	**1.0**	mg/L	0.50	0.15	1	10/19/21 13:15	10/20/21 23:04	7440-23-5	B
Total Hardness by 2340B, Dissolved	**2360J**	ug/L	3310	267	1	10/19/21 13:15	10/20/21 23:04		
Zinc, Dissolved	**0.012J**	mg/L	0.020	0.0020	1	10/19/21 13:15	10/20/21 23:04	7440-66-6	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - WestVirginia								
Antimony	**0.00050 U**	mg/L	0.00050	0.000045	1	10/13/21 15:00	10/14/21 11:02	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 11:02	7440-38-2	
Barium	**0.0060**	mg/L	0.0025	0.00011	1	10/13/21 15:00	10/14/21 11:02	7440-39-3	
Beryllium	**0.00032J**	mg/L	0.00050	0.00015	1	10/13/21 15:00	10/14/21 11:02	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/13/21 15:00	10/14/21 11:02	7440-43-9	
Chromium	**0.0038**	mg/L	0.0025	0.00086	1	10/13/21 15:00	10/14/21 11:02	7440-47-3	
Cobalt	**0.0058**	mg/L	0.0025	0.00015	1	10/13/21 15:00	10/14/21 11:02	7440-48-4	
Copper	**0.0091**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 11:02	7440-50-8	
Lead	**0.000046J**	mg/L	0.00050	0.000030	1	10/13/21 15:00	10/14/21 11:02	7439-92-1	
Nickel	**0.011**	mg/L	0.0025	0.00065	1	10/13/21 15:00	10/14/21 11:02	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/13/21 15:00	10/14/21 11:02	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/13/21 15:00	10/14/21 11:02	7440-22-4	
Thallium	**0.000068J**	mg/L	0.00050	0.000024	1	10/13/21 15:00	10/14/21 11:02	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/13/21 15:00	10/14/21 11:02	7440-62-2	
Zinc	**0.015**	mg/L	0.0050	0.0017	1	10/13/21 15:00	10/14/21 11:02	7440-66-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Sample: TW-14B **Lab ID: 30444398003** Collected: 10/07/21 08:50 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/28/21 13:57	10/29/21 07:23	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		10/19/21 15:33		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		10/12/21 19:47		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/19/21 10:35	10/19/21 14:00		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/14/21 06:43	10/14/21 09:52		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**1.3J**	mg/L	3.0	0.67	1		10/20/21 19:25	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.34**	mg/L	0.10	0.053	1		10/21/21 20:10	14797-55-8	
Nitrogen, NO2 plus NO3	**0.34**	mg/L	0.10	0.053	1		10/21/21 20:10		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/18/21 17:49	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/08/21 17:05	14797-65-0	

Sample: TW-15 **Lab ID: 30444398004** Collected: 10/07/21 10:50 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.023	1	10/13/21 08:49	10/13/21 18:32	96-12-8	CH

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Sample: TW-15 **Lab ID: 30444398004** Collected: 10/07/21 10:50 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/13/21 08:49	10/13/21 18:32	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	102	%.	60-140		1	10/13/21 08:49	10/13/21 18:32	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**0.75**	mg/L	0.50	0.029	1	10/18/21 14:08	10/20/21 16:03	7440-70-2	
Iron	**22.9**	mg/L	0.050	0.0076	1	10/18/21 14:08	10/20/21 16:03	7439-89-6	
Magnesium	**0.48J**	mg/L	0.50	0.047	1	10/18/21 14:08	10/20/21 16:03	7439-95-4	
Manganese	**0.22**	mg/L	0.0050	0.00044	1	10/18/21 14:08	10/20/21 16:03	7439-96-5	
Potassium	**0.75**	mg/L	0.50	0.19	1	10/18/21 14:08	10/20/21 16:03	7440-09-7	
Sodium	**1.7**	mg/L	0.50	0.15	1	10/18/21 14:08	10/20/21 16:03	7440-23-5	
Total Hardness by 2340B	**3850**	ug/L	3310	267	1	10/18/21 14:08	10/20/21 16:03		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**0.79**	mg/L	0.50	0.029	1	10/19/21 13:15	10/20/21 23:06	7440-70-2	
Iron, Dissolved	**20.6**	mg/L	0.050	0.0076	1	10/19/21 13:15	10/20/21 23:06	7439-89-6	
Magnesium, Dissolved	**0.51**	mg/L	0.50	0.047	1	10/19/21 13:15	10/20/21 23:06	7439-95-4	
Manganese, Dissolved	**234**	ug/L	5.0	0.44	1	10/19/21 13:15	10/20/21 23:06	7439-96-5	
Potassium, Dissolved	**0.81**	mg/L	0.50	0.19	1	10/19/21 13:15	10/20/21 23:06	7440-09-7	
Sodium, Dissolved	**1.9**	mg/L	0.50	0.15	1	10/19/21 13:15	10/20/21 23:06	7440-23-5	
Total Hardness by 2340B, Dissolved	**4100**	ug/L	3310	267	1	10/19/21 13:15	10/20/21 23:06		
Zinc, Dissolved	**0.0020J**	mg/L	0.020	0.0020	1	10/19/21 13:15	10/20/21 23:06	7440-66-6	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - WestVirginia								
Antimony	**0.000049J**	mg/L	0.00050	0.000045	1	10/13/21 15:00	10/14/21 11:05	7440-36-0	B
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 11:05	7440-38-2	
Barium	**0.015**	mg/L	0.0025	0.00011	1	10/13/21 15:00	10/14/21 11:05	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	10/13/21 15:00	10/14/21 11:05	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/13/21 15:00	10/14/21 11:05	7440-43-9	
Chromium	**0.0017J**	mg/L	0.0025	0.00086	1	10/13/21 15:00	10/14/21 11:05	7440-47-3	
Cobalt	**0.0027**	mg/L	0.0025	0.00015	1	10/13/21 15:00	10/14/21 11:05	7440-48-4	
Copper	**0.0010J**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 11:05	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.000030	1	10/13/21 15:00	10/14/21 11:05	7439-92-1	
Nickel	**0.0050**	mg/L	0.0025	0.00065	1	10/13/21 15:00	10/14/21 11:05	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/13/21 15:00	10/14/21 11:05	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/13/21 15:00	10/14/21 11:05	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000024	1	10/13/21 15:00	10/14/21 11:05	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/13/21 15:00	10/14/21 11:05	7440-62-2	
Zinc	**0.0019J**	mg/L	0.0050	0.0017	1	10/13/21 15:00	10/14/21 11:05	7440-66-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Sample: TW-15 **Lab ID: 30444398004** Collected: 10/07/21 10:50 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/28/21 13:57	10/29/21 07:24	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**14.0**	mg/L	10.0	1.0	1		10/19/21 15:35		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		10/12/21 19:47		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/19/21 10:35	10/19/21 14:02		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/14/21 06:43	10/14/21 09:52		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**3.5**	mg/L	3.0	0.67	1		10/20/21 19:26	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		10/21/21 20:12	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		10/21/21 20:12		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/18/21 17:51	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/08/21 17:07	14797-65-0	

Sample: TW-15B **Lab ID: 30444398005** Collected: 10/07/21 11:30 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.042 U**	ug/L	0.042	0.023	1	10/13/21 08:49	10/13/21 18:44	96-12-8	CH

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Sample: TW-15B **Lab ID: 30444398005** Collected: 10/07/21 11:30 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.042 U**	ug/L	0.042	0.032	1	10/13/21 08:49	10/13/21 18:44	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	99	%.	60-140		1	10/13/21 08:49	10/13/21 18:44	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**1.5**	mg/L	0.50	0.029	1	10/18/21 14:08	10/20/21 16:05	7440-70-2	
Iron	**0.011J**	mg/L	0.050	0.0076	1	10/18/21 14:08	10/20/21 16:05	7439-89-6	
Magnesium	**2.0**	mg/L	0.50	0.047	1	10/18/21 14:08	10/20/21 16:05	7439-95-4	
Manganese	**0.055**	mg/L	0.0050	0.00044	1	10/18/21 14:08	10/20/21 16:05	7439-96-5	
Potassium	**1.0**	mg/L	0.50	0.19	1	10/18/21 14:08	10/20/21 16:05	7440-09-7	
Sodium	**8.1**	mg/L	0.50	0.15	1	10/18/21 14:08	10/20/21 16:05	7440-23-5	
Total Hardness by 2340B	**12200**	ug/L	3310	267	1	10/18/21 14:08	10/20/21 16:05		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**1.6**	mg/L	0.50	0.029	1	10/19/21 13:15	10/20/21 23:12	7440-70-2	
Iron, Dissolved	**0.016J**	mg/L	0.050	0.0076	1	10/19/21 13:15	10/20/21 23:12	7439-89-6	
Magnesium, Dissolved	**2.1**	mg/L	0.50	0.047	1	10/19/21 13:15	10/20/21 23:12	7439-95-4	
Manganese, Dissolved	**57.9**	ug/L	5.0	0.44	1	10/19/21 13:15	10/20/21 23:12	7439-96-5	
Potassium, Dissolved	**1.1**	mg/L	0.50	0.19	1	10/19/21 13:15	10/20/21 23:12	7440-09-7	
Sodium, Dissolved	**8.4**	mg/L	0.50	0.15	1	10/19/21 13:15	10/20/21 23:12	7440-23-5	
Total Hardness by 2340B, Dissolved	**12500**	ug/L	3310	267	1	10/19/21 13:15	10/20/21 23:12		
Zinc, Dissolved	**0.032**	mg/L	0.020	0.0020	1	10/19/21 13:15	10/20/21 23:12	7440-66-6	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - WestVirginia								
Antimony	**0.000053J**	mg/L	0.00050	0.000045	1	10/13/21 15:00	10/14/21 11:08	7440-36-0	B
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 11:08	7440-38-2	
Barium	**0.075**	mg/L	0.0025	0.00011	1	10/13/21 15:00	10/14/21 11:08	7440-39-3	
Beryllium	**0.0013**	mg/L	0.00050	0.00015	1	10/13/21 15:00	10/14/21 11:08	7440-41-7	
Cadmium	**0.000070J**	mg/L	0.00050	0.000065	1	10/13/21 15:00	10/14/21 11:08	7440-43-9	
Chromium	**0.0015J**	mg/L	0.0025	0.00086	1	10/13/21 15:00	10/14/21 11:08	7440-47-3	
Cobalt	**0.017**	mg/L	0.0025	0.00015	1	10/13/21 15:00	10/14/21 11:08	7440-48-4	
Copper	**0.011**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 11:08	7440-50-8	
Lead	**0.000046J**	mg/L	0.00050	0.000030	1	10/13/21 15:00	10/14/21 11:08	7439-92-1	
Nickel	**0.016**	mg/L	0.0025	0.00065	1	10/13/21 15:00	10/14/21 11:08	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/13/21 15:00	10/14/21 11:08	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/13/21 15:00	10/14/21 11:08	7440-22-4	
Thallium	**0.000078J**	mg/L	0.00050	0.000024	1	10/13/21 15:00	10/14/21 11:08	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/13/21 15:00	10/14/21 11:08	7440-62-2	
Zinc	**0.029**	mg/L	0.0050	0.0017	1	10/13/21 15:00	10/14/21 11:08	7440-66-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Sample: TW-15B **Lab ID: 30444398005** Collected: 10/07/21 11:30 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00022**	mg/L	0.00020	0.000030	1	10/28/21 13:57	10/29/21 07:26	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		10/19/21 15:36		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**29.0**	mg/L	10.0	10.0	1		10/12/21 19:47		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/19/21 10:35	10/19/21 14:04		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/14/21 06:43	10/14/21 09:52		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**18.7**	mg/L	3.0	0.67	1		10/20/21 19:27	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.27**	mg/L	0.10	0.053	1		10/21/21 20:13	14797-55-8	
Nitrogen, NO2 plus NO3	**0.27**	mg/L	0.10	0.053	1		10/21/21 20:13		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/18/21 17:54	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/08/21 17:07	14797-65-0	

Sample: TW-16 **Lab ID: 30444398006** Collected: 10/07/21 12:55 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.042 U**	ug/L	0.042	0.023	1	10/13/21 08:49	10/13/21 18:57	96-12-8	CH

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Sample: TW-16 **Lab ID: 30444398006** Collected: 10/07/21 12:55 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.042 U**	ug/L	0.042	0.032	1	10/13/21 08:49	10/13/21 18:57	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	109	%.	60-140		1	10/13/21 08:49	10/13/21 18:57	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**12.2**	mg/L	0.50	0.029	1	10/18/21 14:08	10/20/21 16:07	7440-70-2	
Iron	**3.0**	mg/L	0.050	0.0076	1	10/18/21 14:08	10/20/21 16:07	7439-89-6	
Magnesium	**10**	mg/L	0.50	0.047	1	10/18/21 14:08	10/20/21 16:07	7439-95-4	
Manganese	**1.4**	mg/L	0.0050	0.00044	1	10/18/21 14:08	10/20/21 16:07	7439-96-5	
Potassium	**6.2**	mg/L	0.50	0.19	1	10/18/21 14:08	10/20/21 16:07	7440-09-7	
Sodium	**19.6**	mg/L	0.50	0.15	1	10/18/21 14:08	10/20/21 16:07	7440-23-5	
Total Hardness by 2340B	**71500**	ug/L	3310	267	1	10/18/21 14:08	10/20/21 16:07		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**13.1**	mg/L	0.50	0.029	1	10/19/21 13:15	10/20/21 23:14	7440-70-2	
Iron, Dissolved	**0.95**	mg/L	0.050	0.0076	1	10/19/21 13:15	10/20/21 23:14	7439-89-6	
Magnesium, Dissolved	**10.8**	mg/L	0.50	0.047	1	10/19/21 13:15	10/20/21 23:14	7439-95-4	
Manganese, Dissolved	**1540**	ug/L	5.0	0.44	1	10/19/21 13:15	10/20/21 23:14	7439-96-5	
Potassium, Dissolved	**6.9**	mg/L	0.50	0.19	1	10/19/21 13:15	10/20/21 23:14	7440-09-7	
Sodium, Dissolved	**21.5**	mg/L	0.50	0.15	1	10/19/21 13:15	10/20/21 23:14	7440-23-5	
Total Hardness by 2340B, Dissolved	**77000**	ug/L	3310	267	1	10/19/21 13:15	10/20/21 23:14		
Zinc, Dissolved	**0.39**	mg/L	0.020	0.0020	1	10/19/21 13:15	10/20/21 23:14	7440-66-6	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - WestVirginia								
Antimony	**0.000057J**	mg/L	0.00050	0.000045	1	10/13/21 15:00	10/14/21 11:10	7440-36-0	B
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 11:10	7440-38-2	
Barium	**0.027**	mg/L	0.0025	0.00011	1	10/13/21 15:00	10/14/21 11:10	7440-39-3	
Beryllium	**0.00058**	mg/L	0.00050	0.00015	1	10/13/21 15:00	10/14/21 11:10	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/13/21 15:00	10/14/21 11:10	7440-43-9	
Chromium	**0.0049**	mg/L	0.0025	0.00086	1	10/13/21 15:00	10/14/21 11:10	7440-47-3	
Cobalt	**0.24**	mg/L	0.0025	0.00015	1	10/13/21 15:00	10/14/21 11:10	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 11:10	7440-50-8	
Lead	**0.000031J**	mg/L	0.00050	0.000030	1	10/13/21 15:00	10/14/21 11:10	7439-92-1	
Nickel	**0.24**	mg/L	0.0025	0.00065	1	10/13/21 15:00	10/14/21 11:10	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/13/21 15:00	10/14/21 11:10	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/13/21 15:00	10/14/21 11:10	7440-22-4	
Thallium	**0.000044J**	mg/L	0.00050	0.000024	1	10/13/21 15:00	10/14/21 11:10	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/13/21 15:00	10/14/21 11:10	7440-62-2	
Zinc	**0.36**	mg/L	0.0050	0.0017	1	10/13/21 15:00	10/14/21 11:10	7440-66-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Sample: TW-16 **Lab ID: 30444398006** Collected: 10/07/21 12:55 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/28/21 13:57	10/29/21 07:28	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		10/19/21 15:37		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**195**	mg/L	10.0	10.0	1		10/12/21 19:47		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/19/21 10:35	10/19/21 14:06		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.1J**	mg/L	25.0	4.7	1	10/14/21 06:43	10/14/21 09:52		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**23.6**	mg/L	3.0	0.67	1		10/20/21 19:28	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		10/21/21 20:15	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		10/21/21 20:15		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**99.1**	mg/L	20.0	9.3	2		10/18/21 18:46	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/08/21 17:08	14797-65-0	

Sample: TW-16A **Lab ID: 30444398007** Collected: 10/07/21 12:20 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/13/21 08:49	10/13/21 19:10	96-12-8	CH

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Sample: TW-16A **Lab ID: 30444398007** Collected: 10/07/21 12:20 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/13/21 08:49	10/13/21 19:10	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	113	%.	60-140		1	10/13/21 08:49	10/13/21 19:10	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**0.94**	mg/L	0.50	0.029	1	10/18/21 14:08	10/20/21 16:09	7440-70-2	
Iron	**0.024J**	mg/L	0.050	0.0076	1	10/18/21 14:08	10/20/21 16:09	7439-89-6	
Magnesium	**0.35J**	mg/L	0.50	0.047	1	10/18/21 14:08	10/20/21 16:09	7439-95-4	
Manganese	**0.0045J**	mg/L	0.0050	0.00044	1	10/18/21 14:08	10/20/21 16:09	7439-96-5	
Potassium	**0.44J**	mg/L	0.50	0.19	1	10/18/21 14:08	10/20/21 16:09	7440-09-7	
Sodium	**1.2**	mg/L	0.50	0.15	1	10/18/21 14:08	10/20/21 16:09	7440-23-5	
Total Hardness by 2340B	**3790**	ug/L	3310	267	1	10/18/21 14:08	10/20/21 16:09		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**1.0**	mg/L	0.50	0.029	1	10/19/21 13:15	10/20/21 23:16	7440-70-2	
Iron, Dissolved	**0.017J**	mg/L	0.050	0.0076	1	10/19/21 13:15	10/20/21 23:16	7439-89-6	
Magnesium, Dissolved	**0.38J**	mg/L	0.50	0.047	1	10/19/21 13:15	10/20/21 23:16	7439-95-4	
Manganese, Dissolved	**4.8J**	ug/L	5.0	0.44	1	10/19/21 13:15	10/20/21 23:16	7439-96-5	
Potassium, Dissolved	**0.49J**	mg/L	0.50	0.19	1	10/19/21 13:15	10/20/21 23:16	7440-09-7	
Sodium, Dissolved	**1.4**	mg/L	0.50	0.15	1	10/19/21 13:15	10/20/21 23:16	7440-23-5	B
Total Hardness by 2340B, Dissolved	**4100**	ug/L	3310	267	1	10/19/21 13:15	10/20/21 23:16		
Zinc, Dissolved	**0.0060J**	mg/L	0.020	0.0020	1	10/19/21 13:15	10/20/21 23:16	7440-66-6	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - WestVirginia								
Antimony	**0.00050 U**	mg/L	0.00050	0.000045	1	10/13/21 15:00	10/14/21 11:13	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 11:13	7440-38-2	
Barium	**0.0065**	mg/L	0.0025	0.00011	1	10/13/21 15:00	10/14/21 11:13	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	10/13/21 15:00	10/14/21 11:13	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/13/21 15:00	10/14/21 11:13	7440-43-9	
Chromium	**0.0025**	mg/L	0.0025	0.00086	1	10/13/21 15:00	10/14/21 11:13	7440-47-3	
Cobalt	**0.017**	mg/L	0.0025	0.00015	1	10/13/21 15:00	10/14/21 11:13	7440-48-4	
Copper	**0.0020J**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 11:13	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.000030	1	10/13/21 15:00	10/14/21 11:13	7439-92-1	
Nickel	**0.0068**	mg/L	0.0025	0.00065	1	10/13/21 15:00	10/14/21 11:13	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/13/21 15:00	10/14/21 11:13	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/13/21 15:00	10/14/21 11:13	7440-22-4	
Thallium	**0.000053J**	mg/L	0.00050	0.000024	1	10/13/21 15:00	10/14/21 11:13	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/13/21 15:00	10/14/21 11:13	7440-62-2	
Zinc	**0.0051**	mg/L	0.0050	0.0017	1	10/13/21 15:00	10/14/21 11:13	7440-66-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Sample: TW-16A **Lab ID: 30444398007** Collected: 10/07/21 12:20 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/28/21 13:57	10/29/21 07:33	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		10/19/21 15:37		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		10/12/21 19:47		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/19/21 10:35	10/19/21 14:08		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/14/21 06:43	10/14/21 09:53		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**2.4J**	mg/L	3.0	0.67	1		10/20/21 19:29	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.18**	mg/L	0.10	0.053	1		10/21/21 20:16	14797-55-8	
Nitrogen, NO2 plus NO3	**0.18**	mg/L	0.10	0.053	1		10/21/21 20:16		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/18/21 17:57	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/08/21 17:08	14797-65-0	

Sample: TW-17 **Lab ID: 30444398008** Collected: 10/07/21 13:35 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.022	1	10/13/21 08:49	10/13/21 19:22	96-12-8	CH

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Sample: TW-17 **Lab ID: 30444398008** Collected: 10/07/21 13:35 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	10/13/21 08:49	10/13/21 19:22	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	107	%.	60-140		1	10/13/21 08:49	10/13/21 19:22	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**5.6**	mg/L	0.50	0.029	1	10/18/21 14:08	10/20/21 16:11	7440-70-2	
Iron	**8.2**	mg/L	0.050	0.0076	1	10/18/21 14:08	10/20/21 16:11	7439-89-6	
Magnesium	**1.7**	mg/L	0.50	0.047	1	10/18/21 14:08	10/20/21 16:11	7439-95-4	
Manganese	**0.45**	mg/L	0.0050	0.00044	1	10/18/21 14:08	10/20/21 16:11	7439-96-5	
Potassium	**1.6**	mg/L	0.50	0.19	1	10/18/21 14:08	10/20/21 16:11	7440-09-7	
Sodium	**12.2**	mg/L	0.50	0.15	1	10/18/21 14:08	10/20/21 16:11	7440-23-5	
Total Hardness by 2340B	**20900**	ug/L	3310	267	1	10/18/21 14:08	10/20/21 16:11		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**6.0**	mg/L	0.50	0.029	1	10/19/21 13:15	10/20/21 23:18	7440-70-2	
Iron, Dissolved	**7.3**	mg/L	0.050	0.0076	1	10/19/21 13:15	10/20/21 23:18	7439-89-6	
Magnesium, Dissolved	**1.9**	mg/L	0.50	0.047	1	10/19/21 13:15	10/20/21 23:18	7439-95-4	
Manganese, Dissolved	**482**	ug/L	5.0	0.44	1	10/19/21 13:15	10/20/21 23:18	7439-96-5	
Potassium, Dissolved	**1.7**	mg/L	0.50	0.19	1	10/19/21 13:15	10/20/21 23:18	7440-09-7	
Sodium, Dissolved	**13.5**	mg/L	0.50	0.15	1	10/19/21 13:15	10/20/21 23:18	7440-23-5	
Total Hardness by 2340B, Dissolved	**22700**	ug/L	3310	267	1	10/19/21 13:15	10/20/21 23:18		
Zinc, Dissolved	**0.036**	mg/L	0.020	0.0020	1	10/19/21 13:15	10/20/21 23:18	7440-66-6	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - WestVirginia								
Antimony	**0.000051J**	mg/L	0.00050	0.000045	1	10/13/21 15:00	10/14/21 11:16	7440-36-0	B
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 11:16	7440-38-2	
Barium	**0.022**	mg/L	0.0025	0.00011	1	10/13/21 15:00	10/14/21 11:16	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	10/13/21 15:00	10/14/21 11:16	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/13/21 15:00	10/14/21 11:16	7440-43-9	
Chromium	**0.0044**	mg/L	0.0025	0.00086	1	10/13/21 15:00	10/14/21 11:16	7440-47-3	
Cobalt	**0.023**	mg/L	0.0025	0.00015	1	10/13/21 15:00	10/14/21 11:16	7440-48-4	
Copper	**0.00036J**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 11:16	7440-50-8	
Lead	**0.000042J**	mg/L	0.00050	0.000030	1	10/13/21 15:00	10/14/21 11:16	7439-92-1	
Nickel	**0.016**	mg/L	0.0025	0.00065	1	10/13/21 15:00	10/14/21 11:16	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/13/21 15:00	10/14/21 11:16	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/13/21 15:00	10/14/21 11:16	7440-22-4	
Thallium	**0.000029J**	mg/L	0.00050	0.000024	1	10/13/21 15:00	10/14/21 11:16	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/13/21 15:00	10/14/21 11:16	7440-62-2	
Zinc	**0.035**	mg/L	0.0050	0.0017	1	10/13/21 15:00	10/14/21 11:16	7440-66-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Sample: TW-17 **Lab ID: 30444398008** Collected: 10/07/21 13:35 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/28/21 13:57	10/29/21 07:34	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**6.0J**	mg/L	10.0	1.0	1		10/19/21 15:39		5c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**65.0**	mg/L	10.0	10.0	1		10/12/21 19:47		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/19/21 10:35	10/19/21 14:10		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/14/21 06:43	10/14/21 09:53		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**5.0**	mg/L	3.0	0.67	1		10/20/21 19:30	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		10/21/21 20:17	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		10/21/21 20:17		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**36.8**	mg/L	10.0	4.7	1		10/18/21 17:59	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/08/21 17:11	14797-65-0	

Sample: TW-17A **Lab ID: 30444398009** Collected: 10/07/21 14:10 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/13/21 08:49	10/13/21 19:35	96-12-8	CH

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Sample: TW-17A **Lab ID: 30444398009** Collected: 10/07/21 14:10 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/13/21 08:49	10/13/21 19:35	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	108	%.	60-140		1	10/13/21 08:49	10/13/21 19:35	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**0.71**	mg/L	0.50	0.029	1	10/18/21 14:08	10/20/21 16:16	7440-70-2	
Iron	**0.061**	mg/L	0.050	0.0076	1	10/18/21 14:08	10/20/21 16:16	7439-89-6	
Magnesium	**0.37J**	mg/L	0.50	0.047	1	10/18/21 14:08	10/20/21 16:16	7439-95-4	
Manganese	**0.0068**	mg/L	0.0050	0.00044	1	10/18/21 14:08	10/20/21 16:16	7439-96-5	
Potassium	**0.44J**	mg/L	0.50	0.19	1	10/18/21 14:08	10/20/21 16:16	7440-09-7	
Sodium	**1.2**	mg/L	0.50	0.15	1	10/18/21 14:08	10/20/21 16:16	7440-23-5	
Total Hardness by 2340B	**3280J**	ug/L	3310	267	1	10/18/21 14:08	10/20/21 16:16		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**0.77**	mg/L	0.50	0.029	1	10/19/21 13:15	10/20/21 23:20	7440-70-2	
Iron, Dissolved	**0.031J**	mg/L	0.050	0.0076	1	10/19/21 13:15	10/20/21 23:20	7439-89-6	
Magnesium, Dissolved	**0.39J**	mg/L	0.50	0.047	1	10/19/21 13:15	10/20/21 23:20	7439-95-4	
Manganese, Dissolved	**6.9**	ug/L	5.0	0.44	1	10/19/21 13:15	10/20/21 23:20	7439-96-5	
Potassium, Dissolved	**0.46J**	mg/L	0.50	0.19	1	10/19/21 13:15	10/20/21 23:20	7440-09-7	
Sodium, Dissolved	**1.4**	mg/L	0.50	0.15	1	10/19/21 13:15	10/20/21 23:20	7440-23-5	B
Total Hardness by 2340B, Dissolved	**3530**	ug/L	3310	267	1	10/19/21 13:15	10/20/21 23:20		
Zinc, Dissolved	**0.0069J**	mg/L	0.020	0.0020	1	10/19/21 13:15	10/20/21 23:20	7440-66-6	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - WestVirginia								
Antimony	**0.00050 U**	mg/L	0.00050	0.000045	1	10/13/21 15:00	10/14/21 11:19	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 11:19	7440-38-2	
Barium	**0.011**	mg/L	0.0025	0.00011	1	10/13/21 15:00	10/14/21 11:19	7440-39-3	
Beryllium	**0.00021J**	mg/L	0.00050	0.00015	1	10/13/21 15:00	10/14/21 11:19	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/13/21 15:00	10/14/21 11:19	7440-43-9	
Chromium	**0.0058**	mg/L	0.0025	0.00086	1	10/13/21 15:00	10/14/21 11:19	7440-47-3	
Cobalt	**0.0049**	mg/L	0.0025	0.00015	1	10/13/21 15:00	10/14/21 11:19	7440-48-4	
Copper	**0.0022J**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 11:19	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.000030	1	10/13/21 15:00	10/14/21 11:19	7439-92-1	
Nickel	**0.013**	mg/L	0.0025	0.00065	1	10/13/21 15:00	10/14/21 11:19	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/13/21 15:00	10/14/21 11:19	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/13/21 15:00	10/14/21 11:19	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000024	1	10/13/21 15:00	10/14/21 11:19	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/13/21 15:00	10/14/21 11:19	7440-62-2	
Zinc	**0.0061**	mg/L	0.0050	0.0017	1	10/13/21 15:00	10/14/21 11:19	7440-66-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Sample: TW-17A **Lab ID: 30444398009** Collected: 10/07/21 14:10 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/28/21 13:57	10/29/21 07:36	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**4.0J**	mg/L	10.0	1.0	1		10/19/21 15:40		4c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		10/12/21 19:47		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/19/21 10:35	10/19/21 14:12		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/14/21 06:43	10/14/21 09:53		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**2.4J**	mg/L	3.0	0.67	1		10/20/21 19:31	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.25**	mg/L	0.10	0.053	1		10/21/21 20:19	14797-55-8	
Nitrogen, NO2 plus NO3	**0.25**	mg/L	0.10	0.053	1		10/21/21 20:19		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/18/21 17:59	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/08/21 17:11	14797-65-0	

Sample: TW-19 **Lab ID: 30444398010** Collected: 10/07/21 14:50 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/13/21 08:49	10/13/21 19:48	96-12-8	CH

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Sample: TW-19 **Lab ID: 30444398010** Collected: 10/07/21 14:50 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/13/21 08:49	10/13/21 19:48	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	105	%.	60-140		1	10/13/21 08:49	10/13/21 19:48	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**15.2**	mg/L	0.50	0.029	1	10/18/21 14:08	10/20/21 16:18	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.0076	1	10/18/21 14:08	10/20/21 16:18	7439-89-6	
Magnesium	**4.5**	mg/L	0.50	0.047	1	10/18/21 14:08	10/20/21 16:18	7439-95-4	
Manganese	**0.0071**	mg/L	0.0050	0.00044	1	10/18/21 14:08	10/20/21 16:18	7439-96-5	
Potassium	**4.2**	mg/L	0.50	0.19	1	10/18/21 14:08	10/20/21 16:18	7440-09-7	
Sodium	**8.9**	mg/L	0.50	0.15	1	10/18/21 14:08	10/20/21 16:18	7440-23-5	
Total Hardness by 2340B	**56400**	ug/L	3310	267	1	10/18/21 14:08	10/20/21 16:18		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**16.5**	mg/L	0.50	0.029	1	10/19/21 13:15	10/20/21 23:22	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.0076	1	10/19/21 13:15	10/20/21 23:22	7439-89-6	
Magnesium, Dissolved	**4.9**	mg/L	0.50	0.047	1	10/19/21 13:15	10/20/21 23:22	7439-95-4	
Manganese, Dissolved	**7.5**	ug/L	5.0	0.44	1	10/19/21 13:15	10/20/21 23:22	7439-96-5	
Potassium, Dissolved	**4.6**	mg/L	0.50	0.19	1	10/19/21 13:15	10/20/21 23:22	7440-09-7	
Sodium, Dissolved	**9.8**	mg/L	0.50	0.15	1	10/19/21 13:15	10/20/21 23:22	7440-23-5	
Total Hardness by 2340B, Dissolved	**61500**	ug/L	3310	267	1	10/19/21 13:15	10/20/21 23:22		
Zinc, Dissolved	**0.0033J**	mg/L	0.020	0.0020	1	10/19/21 13:15	10/20/21 23:22	7440-66-6	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - WestVirginia								
Antimony	**0.000065J**	mg/L	0.00050	0.000045	1	10/13/21 15:00	10/14/21 11:21	7440-36-0	B
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 11:21	7440-38-2	
Barium	**0.050**	mg/L	0.0025	0.00011	1	10/13/21 15:00	10/14/21 11:21	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	10/13/21 15:00	10/14/21 11:21	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/13/21 15:00	10/14/21 11:21	7440-43-9	
Chromium	**0.0025 U**	mg/L	0.0025	0.00086	1	10/13/21 15:00	10/14/21 11:21	7440-47-3	
Cobalt	**0.0033**	mg/L	0.0025	0.00015	1	10/13/21 15:00	10/14/21 11:21	7440-48-4	
Copper	**0.0059**	mg/L	0.0025	0.00025	1	10/13/21 15:00	10/14/21 11:21	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.000030	1	10/13/21 15:00	10/14/21 11:21	7439-92-1	
Nickel	**0.0041**	mg/L	0.0025	0.00065	1	10/13/21 15:00	10/14/21 11:21	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/13/21 15:00	10/14/21 11:21	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/13/21 15:00	10/14/21 11:21	7440-22-4	
Thallium	**0.000028J**	mg/L	0.00050	0.000024	1	10/13/21 15:00	10/14/21 11:21	7440-28-0	
Vanadium	**0.00035J**	mg/L	0.0025	0.00021	1	10/13/21 15:00	10/14/21 11:21	7440-62-2	
Zinc	**0.0027J**	mg/L	0.0050	0.0017	1	10/13/21 15:00	10/14/21 11:21	7440-66-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Sample: TW-19 **Lab ID: 30444398010** Collected: 10/07/21 14:50 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/28/21 13:57	10/29/21 07:38	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**36.0**	mg/L	10.0	1.0	1		10/19/21 15:41		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**82.0**	mg/L	10.0	10.0	1		10/13/21 14:56		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/19/21 10:35	10/19/21 14:18		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**8.3J**	mg/L	25.0	4.7	1	10/14/21 06:43	10/14/21 09:53		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**13.5**	mg/L	3.0	0.67	1		10/20/21 19:31	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.80**	mg/L	0.10	0.053	1		10/21/21 20:20	14797-55-8	
Nitrogen, NO2 plus NO3	**0.80**	mg/L	0.10	0.053	1		10/21/21 20:20		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**19.5**	mg/L	10.0	4.7	1		10/18/21 18:01	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/08/21 17:11	14797-65-0	

Sample: Trip Blank **Lab ID: 30444398011** Collected: 10/07/21 00:00 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/13/21 08:49	10/13/21 20:00	96-12-8	CH

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Sample: Trip Blank **Lab ID: 30444398011** Collected: 10/07/21 00:00 Received: 10/07/21 23:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/13/21 08:49	10/13/21 20:00	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	110	%.	60-140		1	10/13/21 08:49	10/13/21 20:00	630-20-6	CH

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

QC Batch: 467907 | Analysis Method: EPA 8011
QC Batch Method: EPA 8011 | Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30444398001, 30444398002, 30444398003, 30444398004, 30444398005, 30444398006, 30444398007, 30444398008, 30444398009, 30444398010, 30444398011

METHOD BLANK: 2259207 | Matrix: Water

Associated Lab Samples: 30444398001, 30444398002, 30444398003, 30444398004, 30444398005, 30444398006, 30444398007, 30444398008, 30444398009, 30444398010, 30444398011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.022	10/13/21 17:03	CH
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	10/13/21 17:03	
1,1,1,2-Tetrachloroethane (S)	%.	126	60-140		10/13/21 17:03	CH

LABORATORY CONTROL SAMPLE: 2259208

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.27	107	85-115	CH
1,2-Dibromoethane (EDB)	ug/L	0.25	0.25	99	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			105	60-140	CH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2259209 2259210

Parameter	Units	30444398001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.041 U	0.41	0.4	0.40	0.38	99	94	60-140	6	25	CH
1,2-Dibromoethane (EDB)	ug/L	0.041 U	0.41	0.4	0.41	0.38	99	95	60-140	6	25	
1,1,1,2-Tetrachloroethane (S)	%.						97	94	60-140			CH

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

QC Batch: 470247
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30444398001, 30444398002, 30444398003, 30444398004, 30444398005, 30444398006, 30444398007, 30444398008, 30444398009, 30444398010

METHOD BLANK: 2270126 Matrix: Water
Associated Lab Samples: 30444398001, 30444398002, 30444398003, 30444398004, 30444398005, 30444398006, 30444398007, 30444398008, 30444398009, 30444398010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.000030	10/29/21 07:13	

LABORATORY CONTROL SAMPLE: 2270127

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.001	0.0010	105	80-120	

MATRIX SPIKE SAMPLE: 2270129

Parameter	Units	30444398002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.00020 U	0.0025	0.0025	102	75-125	

SAMPLE DUPLICATE: 2270128

Parameter	Units	30444398002 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	0.00020 U	0.00020 U		20	

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

QC Batch: 87428
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D MET
Laboratory: Pace Analytical Services - WestVirginia
Associated Lab Samples: 30444398001, 30444398002, 30444398003, 30444398004, 30444398005, 30444398006, 30444398007, 30444398008, 30444398009, 30444398010

METHOD BLANK: 429451
Matrix: Water
Associated Lab Samples: 30444398001, 30444398002, 30444398003, 30444398004, 30444398005, 30444398006, 30444398007, 30444398008, 30444398009, 30444398010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.029	10/20/21 15:30	
Iron	mg/L	0.050 U	0.050	0.0076	10/20/21 15:30	
Magnesium	mg/L	0.50 U	0.50	0.047	10/20/21 15:30	
Manganese	mg/L	0.0050 U	0.0050	0.00044	10/20/21 15:30	
Potassium	mg/L	0.50 U	0.50	0.19	10/20/21 15:30	
Sodium	mg/L	0.50 U	0.50	0.15	10/20/21 15:30	

LABORATORY CONTROL SAMPLE: 429452

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	39.9	100	80-120	
Iron	mg/L	2	2.1	103	80-120	
Magnesium	mg/L	20	20.3	102	80-120	
Manganese	mg/L	2	2.0	102	80-120	
Potassium	mg/L	20	20.4	102	80-120	
Sodium	mg/L	20	19.9	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 429457 429458

Parameter	Units	7392774001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	55200	40	40	93.4	92.7	96	94	80-120	1	20	
Iron	mg/L	98800	2	2	100	99.3	68	25	80-120	1	20	M1
Magnesium	mg/L	23100	20	20	42.9	42.4	99	97	80-120	1	20	
Manganese	mg/L	16200	2	2	17.9	17.7	85	76	80-120	1	20	M1
Potassium	mg/L	2660	20	20	24.4	24.3	109	108	80-120	1	20	
Sodium	mg/L	171000	20	20	189	188	91	84	80-120	1	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

QC Batch: 87574
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D MET Dissolved
Laboratory: Pace Analytical Services - WestVirginia
Associated Lab Samples: 30444398001, 30444398002, 30444398003, 30444398004, 30444398005, 30444398006, 30444398007, 30444398008, 30444398009, 30444398010

METHOD BLANK: 430012
Matrix: Water
Associated Lab Samples: 30444398001, 30444398002, 30444398003, 30444398004, 30444398005, 30444398006, 30444398007, 30444398008, 30444398009, 30444398010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.029	10/20/21 22:28	
Iron, Dissolved	mg/L	0.050 U	0.050	0.0076	10/20/21 22:28	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	10/20/21 22:28	
Manganese, Dissolved	ug/L	5.0 U	5.0	0.44	10/20/21 22:28	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.19	10/20/21 22:28	
Sodium, Dissolved	mg/L	0.16J	0.50	0.15	10/20/21 22:28	
Zinc, Dissolved	mg/L	0.020 U	0.020	0.0020	10/20/21 22:28	

LABORATORY CONTROL SAMPLE: 430013

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	44.7	112	80-120	
Iron, Dissolved	mg/L	2	2.0	102	80-120	
Magnesium, Dissolved	mg/L	20	22.8	114	80-120	
Manganese, Dissolved	ug/L	2000	2290	114	80-120	
Potassium, Dissolved	mg/L	20	23.0	115	80-120	
Sodium, Dissolved	mg/L	20	22.2	111	80-120	
Zinc, Dissolved	mg/L	2	2.3	117	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 430072 430073

Parameter	Units	30444380001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	17.4	40	40	64.3	63.4	117	115	80-120	1	20	
Iron, Dissolved	mg/L	26.4	2	2	30.9	30.4	228	201	80-120	2	20	M1
Magnesium, Dissolved	mg/L	1.5	20	20	24.8	24.5	116	115	80-120	1	20	
Manganese, Dissolved	ug/L	0.17	2000	2000	2490	2460	116	115	80-120	1	20	
Potassium, Dissolved	mg/L	0.71	20	20	24.5	24.1	119	117	80-120	1	20	
Sodium, Dissolved	mg/L	3.2	20	20	26.3	25.9	115	113	80-120	1	20	
Zinc, Dissolved	mg/L	20.0 U	2	2	2.3	2.3	116	114	80-120	1	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

QC Batch: 87006
QC Batch Method: EPA 3020A
Analysis Method: EPA 6020B
Analysis Description: 6020B MET
Laboratory: Pace Analytical Services - WestVirginia
Associated Lab Samples: 30444398001, 30444398002, 30444398003, 30444398004, 30444398005, 30444398006, 30444398007, 30444398008, 30444398009, 30444398010

METHOD BLANK: 426788
Matrix: Water
Associated Lab Samples: 30444398001, 30444398002, 30444398003, 30444398004, 30444398005, 30444398006, 30444398007, 30444398008, 30444398009, 30444398010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.000058J	0.00050	0.000045	10/14/21 10:02	
Arsenic	mg/L	0.0025 U	0.0025	0.00025	10/14/21 10:02	
Barium	mg/L	0.0025 U	0.0025	0.00011	10/14/21 10:02	
Beryllium	mg/L	0.00050 U	0.00050	0.00015	10/14/21 10:02	
Cadmium	mg/L	0.00050 U	0.00050	0.000065	10/14/21 10:02	
Chromium	mg/L	0.0025 U	0.0025	0.00086	10/14/21 10:02	
Cobalt	mg/L	0.0025 U	0.0025	0.00015	10/14/21 10:02	
Copper	mg/L	0.0025 U	0.0025	0.00025	10/14/21 10:02	
Lead	mg/L	0.00050 U	0.00050	0.000030	10/14/21 10:02	
Nickel	mg/L	0.0025 U	0.0025	0.00065	10/14/21 10:02	
Selenium	mg/L	0.0025 U	0.0025	0.00084	10/14/21 10:02	
Silver	mg/L	0.0025 U	0.0025	0.00016	10/14/21 10:02	
Thallium	mg/L	0.00050 U	0.00050	0.000024	10/14/21 10:02	
Vanadium	mg/L	0.0025 U	0.0025	0.00021	10/14/21 10:02	
Zinc	mg/L	0.0050 U	0.0050	0.0017	10/14/21 10:02	

LABORATORY CONTROL SAMPLE: 426789

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.022	108	80-120	
Arsenic	mg/L	0.1	0.10	100	80-120	
Barium	mg/L	0.1	0.10	101	80-120	
Beryllium	mg/L	0.02	0.020	99	80-120	
Cadmium	mg/L	0.02	0.020	100	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Copper	mg/L	0.1	0.10	102	80-120	
Lead	mg/L	0.02	0.020	101	80-120	
Nickel	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.098	98	80-120	
Silver	mg/L	0.1	0.099	99	80-120	
Thallium	mg/L	0.02	0.020	100	80-120	
Vanadium	mg/L	0.1	0.10	101	80-120	
Zinc	mg/L	0.2	0.20	101	80-120	

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 426790 426791

Parameter	Units	30444380002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.000084J	0.02	0.02	0.022	0.022	111	110	75-125	1	20	
Arsenic	mg/L	0.0025 U	0.1	0.1	0.10	0.10	103	103	75-125	0	20	
Barium	mg/L	0.0089	0.1	0.1	0.11	0.11	103	105	75-125	1	20	
Beryllium	mg/L	0.00050 U	0.02	0.02	0.021	0.020	103	102	75-125	1	20	
Cadmium	mg/L	0.00050 U	0.02	0.02	0.021	0.020	103	102	75-125	1	20	
Chromium	mg/L	0.0027	0.1	0.1	0.11	0.11	105	105	75-125	0	20	
Cobalt	mg/L	0.00051J	0.1	0.1	0.11	0.11	106	105	75-125	1	20	
Copper	mg/L	0.0025 U	0.1	0.1	0.11	0.11	107	105	75-125	1	20	
Lead	mg/L	0.00050 U	0.02	0.02	0.021	0.021	104	103	75-125	1	20	
Nickel	mg/L	0.0023J	0.1	0.1	0.11	0.11	104	104	75-125	1	20	
Selenium	mg/L	0.0025 U	0.1	0.1	0.10	0.10	102	102	75-125	0	20	
Silver	mg/L	0.0025 U	0.1	0.1	0.10	0.10	102	102	75-125	0	20	
Thallium	mg/L	0.000024J	0.02	0.02	0.021	0.021	104	103	75-125	1	20	
Vanadium	mg/L	0.0025 U	0.1	0.1	0.11	0.10	105	104	75-125	1	20	
Zinc	mg/L	0.0050 U	0.2	0.2	0.21	0.21	104	104	75-125	0	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

QC Batch: 468843
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30444398001, 30444398002, 30444398003, 30444398004, 30444398005, 30444398006, 30444398007, 30444398008, 30444398009, 30444398010

METHOD BLANK: 2263823
Matrix: Water
Associated Lab Samples: 30444398001, 30444398002, 30444398003, 30444398004, 30444398005, 30444398006, 30444398007, 30444398008, 30444398009, 30444398010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	1.0J	10.0	1.0	10/19/21 15:01	

LABORATORY CONTROL SAMPLE: 2263824

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	22.0	110	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2263844 2263845

Parameter	Units	30444440001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	216	50	50	262	264	92	96	85-115	1	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

QC Batch: 467794
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30444398001, 30444398002, 30444398003, 30444398004, 30444398005, 30444398006, 30444398007, 30444398008, 30444398009

METHOD BLANK: 2258655
Matrix: Water
Associated Lab Samples: 30444398001, 30444398002, 30444398003, 30444398004, 30444398005, 30444398006, 30444398007, 30444398008, 30444398009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	10/12/21 19:47	

LABORATORY CONTROL SAMPLE: 2258656

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	931	93	85-115	

SAMPLE DUPLICATE: 2258657

Parameter	Units	30444380008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	30.0	31.0	3	5	

SAMPLE DUPLICATE: 2258658

Parameter	Units	30444398009 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0 U		5	

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

QC Batch: 467893
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30444398010

METHOD BLANK: 2259161 Matrix: Water
Associated Lab Samples: 30444398010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	10/13/21 14:56	

LABORATORY CONTROL SAMPLE: 2259162

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	960	96	85-115	

SAMPLE DUPLICATE: 2259163

Parameter	Units	30444398010 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	82.0	83.0	1	5	

SAMPLE DUPLICATE: 2259164

Parameter	Units	30444704001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	4620	4670	1	5	1c

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

QC Batch: 468769
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30444398001, 30444398002, 30444398003, 30444398004, 30444398005, 30444398006, 30444398007, 30444398008, 30444398009, 30444398010

METHOD BLANK: 2263410
Matrix: Water
Associated Lab Samples: 30444398001, 30444398002, 30444398003, 30444398004, 30444398005, 30444398006, 30444398007, 30444398008, 30444398009, 30444398010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.044	10/19/21 13:47	

LABORATORY CONTROL SAMPLE: 2263411

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.0	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2263412 2263413

Parameter	Units	30444390001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	ND	4	4	3.9	4.0	97	97	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2263414 2263415

Parameter	Units	30444398010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	3.8	3.9	96	97	90-110	1	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

QC Batch: 468098
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30444398001, 30444398002, 30444398003, 30444398004, 30444398005, 30444398006, 30444398007, 30444398008, 30444398009, 30444398010

METHOD BLANK: 2260143
Matrix: Water
Associated Lab Samples: 30444398001, 30444398002, 30444398003, 30444398004, 30444398005, 30444398006, 30444398007, 30444398008, 30444398009, 30444398010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	10/14/21 09:49	

LABORATORY CONTROL SAMPLE: 2260144

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	326	109	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2260145 2260146

Parameter	Units	30444380001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	25.0 U	150	150	168	171	110	111	90-110	1	10	MH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2260147 2260148

Parameter	Units	30444398001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	6.1J	150	150	173	177	111	114	90-110	2	10	MH

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

QC Batch: 469063
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30444398001, 30444398002, 30444398003, 30444398004, 30444398005, 30444398006, 30444398007, 30444398008, 30444398009, 30444398010

METHOD BLANK: 2265019
Matrix: Water
Associated Lab Samples: 30444398001, 30444398002, 30444398003, 30444398004, 30444398005, 30444398006, 30444398007, 30444398008, 30444398009, 30444398010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	10/20/21 18:33	

LABORATORY CONTROL SAMPLE: 2265020

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	19.8	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2265021 2265022

Parameter	Units	30444380001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	6.5	20	20	25.7	25.8	96	97	85-115	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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(724)850-5600

QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

QC Batch: 469320 | Analysis Method: SM 4500NO3-F-2011
QC Batch Method: SM 4500NO3-F-2011 | Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30444398001, 30444398002, 30444398003, 30444398004, 30444398005, 30444398006, 30444398007, 30444398008, 30444398009, 30444398010

METHOD BLANK: 2266206 | Matrix: Water
Associated Lab Samples: 30444398001, 30444398002, 30444398003, 30444398004, 30444398005, 30444398006, 30444398007, 30444398008, 30444398009, 30444398010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	10/21/21 20:02	

LABORATORY CONTROL SAMPLE: 2266207

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	4.0	101	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2266208 2266209

Parameter	Units	30444398001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.10 U	5	5	3.6	3.5	71	71	85-115	0	20	ML

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

QC Batch: 468658
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30444398001, 30444398002, 30444398003, 30444398004, 30444398005, 30444398006, 30444398007, 30444398008, 30444398009, 30444398010

METHOD BLANK: 2262743
Matrix: Water
Associated Lab Samples: 30444398001, 30444398002, 30444398003, 30444398004, 30444398005, 30444398006, 30444398007, 30444398008, 30444398009, 30444398010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	10/18/21 17:25	

LABORATORY CONTROL SAMPLE: 2262744

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	31.9	106	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2262745 2262746

Parameter	Units	30444380001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.0 U	20	20	19.6	19.1	96	93	85-115	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2262747 2262748

Parameter	Units	30444398001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.0 U	20	20	17.4	17.3	85	84	85-115	1	20	ML

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

QC Batch: 467402
QC Batch Method: SM 4500NO2-B-2011
Analysis Method: SM 4500NO2-B-2011
Analysis Description: SM4500-NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30444398001, 30444398002, 30444398003, 30444398004, 30444398005, 30444398006, 30444398007, 30444398008, 30444398009, 30444398010

METHOD BLANK: 2256842 Matrix: Water
Associated Lab Samples: 30444398001, 30444398002, 30444398003, 30444398004, 30444398005, 30444398006, 30444398007, 30444398008, 30444398009, 30444398010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	10/08/21 16:54	

LABORATORY CONTROL SAMPLE: 2256843

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.092	92	90-110	

MATRIX SPIKE SAMPLE: 2256845

Parameter	Units	30444380001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.010 U	0.1	0.076	76	85-115	H1,ML

SAMPLE DUPLICATE: 2256844

Parameter	Units	30444380001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010 U		20	H1

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30444398001
[1] 8011 sample pH is 7

Sample: 30444398002
[1] 8011 sample pH is 7

Sample: 30444398003
[1] 8011 sample pH is 7

Sample: 30444398004
[1] 8011 sample pH is 7

Sample: 30444398005
[1] 8011 sample pH is 7

Sample: 30444398006
[1] 8011 sample pH is 7

Sample: 30444398007
[1] 8011 sample pH is 7

Sample: 30444398008
[1] 8011 sample pH is 7

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QUALIFIERS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

SAMPLE QUALIFIERS

Sample: 30444398009
[1] 8011 sample pH is 7
Sample: 30444398011
[1] 8011 sample pH is 7

ANALYTE QUALIFIERS

1c	Sample volume was reduced so the sample could be within an acceptable range
2c	TV= 0 mg/L
3c	TV= 2 mg/L
4c	TV= 4 mg/L
5c	TV= 6 mg/L
6c	TV= 8 mg/L
B	Analyte was detected in the associated method blank.
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
H1	Analysis conducted outside the EPA method holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30444398001	**TW-14**	EPA 8011	467907	EPA 8011	467955
30444398002	**TW-14A**	EPA 8011	467907	EPA 8011	467955
30444398003	**TW-14B**	EPA 8011	467907	EPA 8011	467955
30444398004	**TW-15**	EPA 8011	467907	EPA 8011	467955
30444398005	**TW-15B**	EPA 8011	467907	EPA 8011	467955
30444398006	**TW-16**	EPA 8011	467907	EPA 8011	467955
30444398007	**TW-16A**	EPA 8011	467907	EPA 8011	467955
30444398008	**TW-17**	EPA 8011	467907	EPA 8011	467955
30444398009	**TW-17A**	EPA 8011	467907	EPA 8011	467955
30444398010	**TW-19**	EPA 8011	467907	EPA 8011	467955
30444398011	**Trip Blank**	EPA 8011	467907	EPA 8011	467955
30444398001	**TW-14**	EPA 3010A	87428	EPA 6010D	87729
30444398002	**TW-14A**	EPA 3010A	87428	EPA 6010D	87729
30444398003	**TW-14B**	EPA 3010A	87428	EPA 6010D	87729
30444398004	**TW-15**	EPA 3010A	87428	EPA 6010D	87729
30444398005	**TW-15B**	EPA 3010A	87428	EPA 6010D	87729
30444398006	**TW-16**	EPA 3010A	87428	EPA 6010D	87729
30444398007	**TW-16A**	EPA 3010A	87428	EPA 6010D	87729
30444398008	**TW-17**	EPA 3010A	87428	EPA 6010D	87729
30444398009	**TW-17A**	EPA 3010A	87428	EPA 6010D	87729
30444398010	**TW-19**	EPA 3010A	87428	EPA 6010D	87729
30444398001	**TW-14**	EPA 3010A	87574	EPA 6010D	87795
30444398002	**TW-14A**	EPA 3010A	87574	EPA 6010D	87795
30444398003	**TW-14B**	EPA 3010A	87574	EPA 6010D	87795
30444398004	**TW-15**	EPA 3010A	87574	EPA 6010D	87795
30444398005	**TW-15B**	EPA 3010A	87574	EPA 6010D	87795
30444398006	**TW-16**	EPA 3010A	87574	EPA 6010D	87795
30444398007	**TW-16A**	EPA 3010A	87574	EPA 6010D	87795
30444398008	**TW-17**	EPA 3010A	87574	EPA 6010D	87795
30444398009	**TW-17A**	EPA 3010A	87574	EPA 6010D	87795
30444398010	**TW-19**	EPA 3010A	87574	EPA 6010D	87795
30444398001	**TW-14**	EPA 3020A	87006	EPA 6020B	87083
30444398002	**TW-14A**	EPA 3020A	87006	EPA 6020B	87083
30444398003	**TW-14B**	EPA 3020A	87006	EPA 6020B	87083
30444398004	**TW-15**	EPA 3020A	87006	EPA 6020B	87083
30444398005	**TW-15B**	EPA 3020A	87006	EPA 6020B	87083
30444398006	**TW-16**	EPA 3020A	87006	EPA 6020B	87083
30444398007	**TW-16A**	EPA 3020A	87006	EPA 6020B	87083
30444398008	**TW-17**	EPA 3020A	87006	EPA 6020B	87083
30444398009	**TW-17A**	EPA 3020A	87006	EPA 6020B	87083
30444398010	**TW-19**	EPA 3020A	87006	EPA 6020B	87083
30444398001	**TW-14**	EPA 7470A	470247	EPA 7470A	470294
30444398002	**TW-14A**	EPA 7470A	470247	EPA 7470A	470294
30444398003	**TW-14B**	EPA 7470A	470247	EPA 7470A	470294
30444398004	**TW-15**	EPA 7470A	470247	EPA 7470A	470294
30444398005	**TW-15B**	EPA 7470A	470247	EPA 7470A	470294
30444398006	**TW-16**	EPA 7470A	470247	EPA 7470A	470294

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30444398007	**TW-16A**	EPA 7470A	470247	EPA 7470A	470294
30444398008	**TW-17**	EPA 7470A	470247	EPA 7470A	470294
30444398009	**TW-17A**	EPA 7470A	470247	EPA 7470A	470294
30444398010	**TW-19**	EPA 7470A	470247	EPA 7470A	470294
30444398001	**TW-14**	SM 2320B-2011	468843		
30444398002	**TW-14A**	SM 2320B-2011	468843		
30444398003	**TW-14B**	SM 2320B-2011	468843		
30444398004	**TW-15**	SM 2320B-2011	468843		
30444398005	**TW-15B**	SM 2320B-2011	468843		
30444398006	**TW-16**	SM 2320B-2011	468843		
30444398007	**TW-16A**	SM 2320B-2011	468843		
30444398008	**TW-17**	SM 2320B-2011	468843		
30444398009	**TW-17A**	SM 2320B-2011	468843		
30444398010	**TW-19**	SM 2320B-2011	468843		
30444398001	**TW-14**	SM 2540C-2011	467794		
30444398002	**TW-14A**	SM 2540C-2011	467794		
30444398003	**TW-14B**	SM 2540C-2011	467794		
30444398004	**TW-15**	SM 2540C-2011	467794		
30444398005	**TW-15B**	SM 2540C-2011	467794		
30444398006	**TW-16**	SM 2540C-2011	467794		
30444398007	**TW-16A**	SM 2540C-2011	467794		
30444398008	**TW-17**	SM 2540C-2011	467794		
30444398009	**TW-17A**	SM 2540C-2011	467794		
30444398010	**TW-19**	SM 2540C-2011	467893		
30444398001	**TW-14**	EPA 350.1	468769	EPA 350.1	468782
30444398002	**TW-14A**	EPA 350.1	468769	EPA 350.1	468782
30444398003	**TW-14B**	EPA 350.1	468769	EPA 350.1	468782
30444398004	**TW-15**	EPA 350.1	468769	EPA 350.1	468782
30444398005	**TW-15B**	EPA 350.1	468769	EPA 350.1	468782
30444398006	**TW-16**	EPA 350.1	468769	EPA 350.1	468782
30444398007	**TW-16A**	EPA 350.1	468769	EPA 350.1	468782
30444398008	**TW-17**	EPA 350.1	468769	EPA 350.1	468782
30444398009	**TW-17A**	EPA 350.1	468769	EPA 350.1	468782
30444398010	**TW-19**	EPA 350.1	468769	EPA 350.1	468782
30444398001	**TW-14**	EPA 410.4	468098	EPA 410.4	468143
30444398002	**TW-14A**	EPA 410.4	468098	EPA 410.4	468143
30444398003	**TW-14B**	EPA 410.4	468098	EPA 410.4	468143
30444398004	**TW-15**	EPA 410.4	468098	EPA 410.4	468143
30444398005	**TW-15B**	EPA 410.4	468098	EPA 410.4	468143
30444398006	**TW-16**	EPA 410.4	468098	EPA 410.4	468143
30444398007	**TW-16A**	EPA 410.4	468098	EPA 410.4	468143
30444398008	**TW-17**	EPA 410.4	468098	EPA 410.4	468143
30444398009	**TW-17A**	EPA 410.4	468098	EPA 410.4	468143
30444398010	**TW-19**	EPA 410.4	468098	EPA 410.4	468143
30444398001	**TW-14**	SM 4500-Cl-E-2011	469063		
30444398002	**TW-14A**	SM 4500-Cl-E-2011	469063		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30444398

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30444398003	**TW-14B**	SM 4500-Cl-E-2011	469063		
30444398004	**TW-15**	SM 4500-Cl-E-2011	469063		
30444398005	**TW-15B**	SM 4500-Cl-E-2011	469063		
30444398006	**TW-16**	SM 4500-Cl-E-2011	469063		
30444398007	**TW-16A**	SM 4500-Cl-E-2011	469063		
30444398008	**TW-17**	SM 4500-Cl-E-2011	469063		
30444398009	**TW-17A**	SM 4500-Cl-E-2011	469063		
30444398010	**TW-19**	SM 4500-Cl-E-2011	469063		
30444398001	**TW-14**	SM 4500NO3-F-2011	469320		
30444398002	**TW-14A**	SM 4500NO3-F-2011	469320		
30444398003	**TW-14B**	SM 4500NO3-F-2011	469320		
30444398004	**TW-15**	SM 4500NO3-F-2011	469320		
30444398005	**TW-15B**	SM 4500NO3-F-2011	469320		
30444398006	**TW-16**	SM 4500NO3-F-2011	469320		
30444398007	**TW-16A**	SM 4500NO3-F-2011	469320		
30444398008	**TW-17**	SM 4500NO3-F-2011	469320		
30444398009	**TW-17A**	SM 4500NO3-F-2011	469320		
30444398010	**TW-19**	SM 4500NO3-F-2011	469320		
30444398001	**TW-14**	EPA 9038	468658		
30444398002	**TW-14A**	EPA 9038	468658		
30444398003	**TW-14B**	EPA 9038	468658		
30444398004	**TW-15**	EPA 9038	468658		
30444398005	**TW-15B**	EPA 9038	468658		
30444398006	**TW-16**	EPA 9038	468658		
30444398007	**TW-16A**	EPA 9038	468658		
30444398008	**TW-17**	EPA 9038	468658		
30444398009	**TW-17A**	EPA 9038	468658		
30444398010	**TW-19**	EPA 9038	468658		
30444398001	**TW-14**	SM 4500NO2-B-2011	467402		
30444398002	**TW-14A**	SM 4500NO2-B-2011	467402		
30444398003	**TW-14B**	SM 4500NO2-B-2011	467402		
30444398004	**TW-15**	SM 4500NO2-B-2011	467402		
30444398005	**TW-15B**	SM 4500NO2-B-2011	467402		
30444398006	**TW-16**	SM 4500NO2-B-2011	467402		
30444398007	**TW-16A**	SM 4500NO2-B-2011	467402		
30444398008	**TW-17**	SM 4500NO2-B-2011	467402		
30444398009	**TW-17A**	SM 4500NO2-B-2011	467402		
30444398010	**TW-19**	SM 4500NO2-B-2011	467402		

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MA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF- FALL 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

WO#: 30444398

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Analytical Parameters: Total Metals (1)	Total + Diss. Metals (2)	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO4, COD		Method 8011 - EDB +	DBCP		
1	TW-14	7	10.7.21	1000	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓			001
2	TW-14A			920															002
3	TW-14B			850															003
4	TW-15			1050															004
5	TW-15B			1130															005
6	TW-16			1255															006
7	TW-16A			1220															007
8	TW-17			1335															008
9	TW-17A			1410															009
10	TW-19	✓		1450	✓		✓	✓	✓	✓	✓	✓	✓	✓					010
11	TRIP BLANK	2	✓	—	✓		QA									✓			011
12																			

	Signature	Date	Time	Comments
Relinquished by	DABrown	10-7-21	1500	(1) Sb, As, Ba, Be, Cd, Cr, Co, Cu, Hg, Pb, Ni, Se, Ag, Tl, V, Zn
Received by	PACE	10-7-21	1500	(2) Ca, Fe, Mg, Mn, K, Na
Relinquished by	PACE	10/7/21	1840	PACE - WV - METALS - SEE ATTACHED LIST
Received by	PACE	10/7/21	1835	PACE - G-BURG - WET CHEM + 8011
Relinquished by	PACE	10/7/21	2300	
Received by	[illegible]	10/7/21	2300	LEVEL 2 REPORT

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

Millersville Landfill		
	Pace, Beaver, WV	
	Method 6020 - ICPMS	
Parameter	RL	MDL
	(mg/l)	
TOTAL METALS		
Antimony	0.0005	
Arsenic	0.0025	0.0002473
Barium	0.0025	
Beryllium	0.0005	
Cadmium	0.0005	
Chromium	0.0025	
Cobalt	0.0025	
Copper	0.0025	
Lead	0.0005	
Nickel	0.0025	
Selenium	0.0025	
Silver	0.0025	
Thallium	0.0005	
Vanadium	0.0025	
Zinc	0.005	
	Pace, Beaver, WV	
TOTAL AND DISSOLVED METALS	Method 6010 - ICP	
Calcium	0.5	0.028
Iron	0.05	0.0076
Magnesium	0.5	0.047
Manganese	0.005	0.00043
Potassium	0.5	0.19
Sodium	0.5	0.148
	Pace, Beaver, WV	
	Method 7470A	
Mercury	0.0005	0.00025
GENERAL CHEMISTRY	Pace - Greensburg, PA	
Alkalinity - SM 2320B	10	1
Ammonia - EPA 350.1	0.1	0.0445
COD - EPA 410.4	25	4.6532
Chloride - EPA 300.0	3	0.06683
Hardness - 2340B		
Nitrate - EPA 300.0	0.1	0.0238
Sulfate - EPA 300.0	10	4.6702
Total dissolved solids - SM2540C	10	10

WO#: 30444398

PM: SMB Due Date: 10/22/21

CLIENT: ENV MONITOR

Pace Analytical®

Pace Greensburg Lab -Sample Container Count

* load entire line

Client EMA

Site Millersville Landfill

Profile Number 8469 Line 1

Notes

WO#: 30444398

PM: SMB Due Date: 10/22/21

CLIENT: ENV MONITOR

Sample Line Item	Matrix	AG1H	AG1S	AG1T	AG2U	AG3S	AG3U	AG5U	AG5T	BG1U	BG2U	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	GCUB	VG9H	VG9T	VG9U	VOAK	WGFU	WGKU	ZPLC	
1	WT												1	1			2						3						
2																													
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																							2						
12																													

Container Codes

Glass

GJN	1 Gallon Jug with HNO3	DG9S	40mL amber VOA vial H2SO4
AG5U	100mL amber glass unprserved	VG9U	40mL clear VOA vial
AG5T	100mL amber glass Na Thiosulfate	VG9T	40mL clear VOA vial Na Thiosul
GJN	1 Gallon Jug	VG9H	40mL clear VOA vial HCl
AG1S	1L amber glass H2SO4	JGFU	4oz amber wide jar
AG1H	1L amber glass HCl	WGFU	4oz wide jar unpreserved
AG1T	1L amber glass Na Thiosulfate	BG2U	500mL clear glass unpreserved
BG1U	1L clear glass unpreserved	AG2U	500mL amber glass unpreserved
AG3S	250mL amber glass H2SO4	WGKU	8oz wide jar unpreserved
AG3U	250mL amber glass unpreserved		

Plastic / Misc.

GCUB	1 Gallon Cubitainer
12GN	1/2 Gallon Cubitainer
SP5T	120mL Coliform Na Thiosulfate
BP1N	1L plastic HNO3
BP1U	1L plastic unpreserved
BP3S	250mL plastic H2SO4
BP3N	250mL plastic HNO3
BP3U	250mL plastic unpreserved
BP3C	250ml plastic NAOH
BP2S	500mL plastic H2SO4
BP2U	500mL plastic unpreserved

EZI	5g Encore
VOAK	Kit for Volatile Solid
I	Wipe/Swab
ZPLC	Ziploc Bag

WT	Water
SL	Solid
OL	Non-aqueous liquid
WP	Wipe

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EMA Project # _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Label [illegible]
LIMS Login [illegible]

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Thermometer Used 11 Type of Ice: Wet Blue None

Cooler Temperature Observed Temp 5.8 °C Correction Factor: -0.3 °C Final Temp: 5.5 °C

Temp should be above freezing to 6°C

pH paper Lot# 10100411 Date and Initials of person examining contents: AL 10/8/21

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:		X		2. no preservatives listed
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:		X		4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT	X			5.
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):	X			7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:	X			
Containers Intact:	X			11.
Orthophosphate field filtered			X	12.
Hex Cr Aqueous sample field filtered			X	13.
Organic Samples checked for dechlorination:			X	14.
Filtered volume received for Dissolved tests		X		15.
All containers have been checked for preservation. exceptions: VOA coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix		X		16.
All containers meet method preservation requirements.	X			Initial when completed: AL Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):		X		17.
Trip Blank Present:	X			18.
Trip Blank Custody Seals Present	X			
Rad Samples Screened < 0.5 mrem/hr			X	Initial when completed: Date: Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

WO#: 30444398
PM: SMB Due Date: 10/22/21
CLIENT: ENV MONITOR

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

October 29, 2021

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-FALL 2021
Pace Project No.: 30445311

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on October 13, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - WestVirginia
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alexis E. Ozoroski
alexis.ozoroski@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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Greensburg, PA 15601
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CERTIFICATIONS

Project: MLF-FALL 2021
Pace Project No.: 30445311

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver

225 Industrial Park Drive, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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Greensburg, PA 15601
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SAMPLE SUMMARY

Project: MLF-FALL 2021
Pace Project No.: 30445311

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30445311001	**TW-20R**	Water	10/12/21 13:50	10/13/21 22:15
30445311002	**TW-21**	Water	10/12/21 14:50	10/13/21 22:15
30445311003	**TW-22**	Water	10/13/21 10:35	10/13/21 22:15
30445311004	**TW-22A**	Water	10/13/21 11:10	10/13/21 22:15
30445311005	**TW-22B**	Water	10/13/21 10:00	10/13/21 22:15
30445311006	**TW-23R**	Water	10/12/21 15:30	10/13/21 22:15
30445311007	**TW-24**	Water	10/13/21 13:00	10/13/21 22:15
30445311008	**TW-24A**	Water	10/13/21 13:35	10/13/21 22:15
30445311009	**DUP-1**	Water	10/13/21 00:00	10/13/21 22:15
30445311010	**TRIP BLANK**	Water	10/13/21 00:00	10/13/21 22:15
30445311011	**SW-1**	Water	10/13/21 07:00	10/13/21 22:15
30445311012	**SW-2**	Water	10/13/21 07:30	10/13/21 22:15
30445311013	**SW-3**	Water	10/13/21 08:00	10/13/21 22:15

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SAMPLE ANALYTE COUNT

Project: MLF-FALL 2021
Pace Project No.: 30445311

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30445311001	**TW-20R**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	1	PASI-PA
		EPA 9038	DRK	1	PASI-PA
30445311002	**TW-21**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6010D	ACH1	6	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	1	PASI-PA
		EPA 9038	DRK	1	PASI-PA
30445311003	**TW-22**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6010D	ACH1	6	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	1	PASI-PA
		EPA 9038	DRK	1	PASI-PA
30445311004	**TW-22A**	EPA 8011	TAW	3	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-FALL 2021
Pace Project No.: 30445311

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6010D	ACH1	6	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	1	PASI-PA
		EPA 9038	DRK	1	PASI-PA
30445311005	**TW-22B**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6010D	ACH1	6	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	1	PASI-PA
		EPA 9038	DRK	1	PASI-PA
30445311006	**TW-23R**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6010D	ACH1	6	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	1	PASI-PA
		EPA 9038	DRK	1	PASI-PA
30445311007	**TW-24**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV

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SAMPLE ANALYTE COUNT

Project: MLF-FALL 2021
Pace Project No.: 30445311

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6010D	ACH1	6	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	1	PASI-PA
		EPA 9038	DRK	1	PASI-PA
30445311008	**TW-24A**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6010D	ACH1	6	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	1	PASI-PA
		EPA 9038	DRK	1	PASI-PA
30445311009	**DUP-1**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6010D	ACH1	6	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	1	PASI-PA
		EPA 9038	DRK	1	PASI-PA
30445311010	**TRIP BLANK**	EPA 8011	TAW	3	PASI-PA
30445311011	**SW-1**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV

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Greensburg, PA 15601
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SAMPLE ANALYTE COUNT

Project: MLF-FALL 2021
Pace Project No.: 30445311

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	1	PASI-PA
		EPA 9038	DRK	1	PASI-PA
30445311012	**SW-2**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	1	PASI-PA
		EPA 9038	DRK	1	PASI-PA
30445311013	**SW-3**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	ACH1	7	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	1	PASI-PA
		EPA 9038	DRK	1	PASI-PA

PASI-BVWV = Pace Analytical Services - WestVirginia
PASI-PA = Pace Analytical Services - Greensburg

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Greensburg, PA 15601
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PROJECT NARRATIVE

Project: MLF-FALL 2021
Pace Project No.: 30445311

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: October 29, 2021

General Information:
13 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 468791

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- BLANK (Lab ID: 2263677)
  - 1,1,1,2-Tetrachloroethane (S)
- DUP-1 (Lab ID: 30445311009)
  - 1,1,1,2-Tetrachloroethane (S)
- LCS (Lab ID: 2263509)
  - 1,1,1,2-Tetrachloroethane (S)
- MS (Lab ID: 2263510)
  - 1,1,1,2-Tetrachloroethane (S)
- MSD (Lab ID: 2263511)
  - 1,1,1,2-Tetrachloroethane (S)
- SW-1 (Lab ID: 30445311011)
  - 1,1,1,2-Tetrachloroethane (S)
- SW-2 (Lab ID: 30445311012)
  - 1,1,1,2-Tetrachloroethane (S)
- SW-3 (Lab ID: 30445311013)
  - 1,1,1,2-Tetrachloroethane (S)
- TRIP BLANK (Lab ID: 30445311010)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-20R (Lab ID: 30445311001)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-21 (Lab ID: 30445311002)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-22 (Lab ID: 30445311003)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-22A (Lab ID: 30445311004)
  - 1,1,1,2-Tetrachloroethane (S)

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-FALL 2021
Pace Project No.: 30445311

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: October 29, 2021

QC Batch: 468791

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- TW-22B (Lab ID: 30445311005)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-23R (Lab ID: 30445311006)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-24 (Lab ID: 30445311007)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-24A (Lab ID: 30445311008)
  - 1,1,1,2-Tetrachloroethane (S)

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 468791

6c: The sample pH is 7.

- DUP-1 (Lab ID: 30445311009)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- SW-1 (Lab ID: 30445311011)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- SW-2 (Lab ID: 30445311012)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- SW-3 (Lab ID: 30445311013)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TRIP BLANK (Lab ID: 30445311010)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-20R (Lab ID: 30445311001)
  - 1,2-Dibromo-3-chloropropane

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PROJECT NARRATIVE

Project: MLF-FALL 2021
Pace Project No.: 30445311

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: October 29, 2021

Analyte Comments:

QC Batch: 468791

6c: The sample pH is 7.

- TW-20R (Lab ID: 30445311001)
  - 1,2-Dibromoethane (EDB)
- TW-21 (Lab ID: 30445311002)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-22 (Lab ID: 30445311003)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-22A (Lab ID: 30445311004)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-22B (Lab ID: 30445311005)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-23R (Lab ID: 30445311006)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-24 (Lab ID: 30445311007)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-24A (Lab ID: 30445311008)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

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PROJECT NARRATIVE

Project: MLF-FALL 2021
Pace Project No.: 30445311

Method: **EPA 6010D**
Description: 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: October 29, 2021

General Information:
12 samples were analyzed for EPA 6010D by Pace Analytical Services WestVirginia. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 88027

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30445311001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 432863)
  - Calcium
  - Iron
  - Magnesium
  - Manganese
  - Potassium
  - Sodium

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2021
Pace Project No.: 30445311

Method: **EPA 6010D**
Description: 6010D ICP, Dissolved, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: October 29, 2021

General Information:
9 samples were analyzed for EPA 6010D by Pace Analytical Services WestVirginia. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 88235

B: Analyte was detected in the associated method blank.

- BLANK for HBN 88235 [MPRP/8480 (Lab ID: 433900)
  - Iron, Dissolved

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 88235

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30439085001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 433910)
  - Calcium, Dissolved
  - Sodium, Dissolved
- MSD (Lab ID: 433911)
  - Calcium, Dissolved
  - Magnesium, Dissolved
  - Potassium, Dissolved
  - Sodium, Dissolved

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PROJECT NARRATIVE

Project: MLF-FALL 2021
Pace Project No.: 30445311

Method: **EPA 6010D**
Description: 6010D ICP, Dissolved, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: October 29, 2021

QC Batch: 88462

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 7393637003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 434729)
  - Calcium, Dissolved
  - Iron, Dissolved
  - Magnesium, Dissolved
  - Sodium, Dissolved
- MSD (Lab ID: 434730)
  - Magnesium, Dissolved

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2021
Pace Project No.: 30445311

Method: **EPA 6020B**
Description: 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: October 29, 2021

General Information:
12 samples were analyzed for EPA 6020B by Pace Analytical Services WestVirginia. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 87872

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30445311001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 431973)
  - Antimony
  - Barium
  - Copper
  - Lead
  - Nickel
  - Zinc

R1: RPD value was outside control limits.

- MSD (Lab ID: 431974)
  - Lead
  - Zinc

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PROJECT NARRATIVE

Project: MLF-FALL 2021
Pace Project No.: 30445311

Method: **EPA 6020B**
Description: 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: October 29, 2021

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2021
Pace Project No.: 30445311

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: October 29, 2021

General Information:
12 samples were analyzed for EPA 7470A by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2021
Pace Project No.: 30445311

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: October 29, 2021

General Information:
12 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 468940

2c: TV= 0 mg/L
- TW-21 (Lab ID: 30445311002)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-22A (Lab ID: 30445311004)
  - Alkalinity,Total (CaCO3 pH4.5)

3c: TV= 2 mg/L
- TW-22 (Lab ID: 30445311003)
  - Alkalinity,Total (CaCO3 pH4.5)

4c: TV= 4 mg/L
- TW-24A (Lab ID: 30445311008)
  - Alkalinity,Total (CaCO3 pH4.5)

5c: TV= 8 mg/L
- SW-1 (Lab ID: 30445311011)
  - Alkalinity,Total (CaCO3 pH4.5)

QC Batch: 469120

1c: TV = 0 mg/L
- TW-23R (Lab ID: 30445311006)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-FALL 2021
Pace Project No.: 30445311

Method: **SM 2540C-2011**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: October 29, 2021

General Information:
12 samples were analyzed for SM 2540C-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2021
Pace Project No.: 30445311

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: October 29, 2021

General Information:
12 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2021
Pace Project No.: 30445311

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: October 29, 2021

General Information:
12 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 468548

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30444583019,30445311004

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2262475)
  - Chemical Oxygen Demand
- MSD (Lab ID: 2262476)
  - Chemical Oxygen Demand

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2021
Pace Project No.: 30445311

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: October 29, 2021

General Information:
12 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 469866

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30445311013

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2268554)
  - Chloride
- MSD (Lab ID: 2268555)
  - Chloride

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2021
Pace Project No.: 30445311

Method: **SM 4500NO3-F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: October 29, 2021

General Information:
12 samples were analyzed for SM 4500NO3-F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2021
Pace Project No.: 30445311

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: October 29, 2021

General Information:
12 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 468660

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30445311001,30445311012

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2262755)
  - Sulfate
- MSD (Lab ID: 2262756)
  - Sulfate

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-FALL 2021
Pace Project No.: 30445311

Sample: TW-20R **Lab ID: 30445311001** Collected: 10/12/21 13:50 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/19/21 12:32	10/19/21 23:33	96-12-8	6c
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/19/21 12:32	10/19/21 23:33	106-93-4	6c
Surrogates									
1,1,1,2-Tetrachloroethane (S)	108	%.	60-140		1	10/19/21 12:32	10/19/21 23:33	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**22.9**	mg/L	0.50	0.029	1	10/22/21 11:26	10/26/21 21:19	7440-70-2	M1
Iron	**0.041J**	mg/L	0.050	0.0076	1	10/22/21 11:26	10/26/21 21:19	7439-89-6	M1
Magnesium	**5.7**	mg/L	0.50	0.047	1	10/22/21 11:26	10/26/21 21:19	7439-95-4	M1
Manganese	**0.033**	mg/L	0.0050	0.00044	1	10/22/21 11:26	10/26/21 21:19	7439-96-5	M1
Potassium	**3.5**	mg/L	0.50	0.19	1	10/22/21 11:26	10/26/21 21:19	7440-09-7	M1
Sodium	**14.6**	mg/L	0.50	0.15	1	10/22/21 11:26	10/26/21 21:19	7440-23-5	M1
Total Hardness by 2340B	**80.7**	mg/L	3.3	0.27	1	10/22/21 11:26	10/26/21 21:19		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**21.2**	mg/L	0.50	0.029	1	10/25/21 12:56	10/27/21 16:23	7440-70-2	
Iron, Dissolved	**0.025J**	mg/L	0.050	0.0076	1	10/25/21 12:56	10/27/21 16:23	7439-89-6	B
Magnesium, Dissolved	**5.3**	mg/L	0.50	0.047	1	10/25/21 12:56	10/27/21 16:23	7439-95-4	
Manganese, Dissolved	**0.031**	mg/L	0.0050	0.00044	1	10/25/21 12:56	10/27/21 16:23	7439-96-5	
Potassium, Dissolved	**3.3**	mg/L	0.50	0.19	1	10/25/21 12:56	10/27/21 16:23	7440-09-7	
Sodium, Dissolved	**14.4**	mg/L	0.50	0.15	1	10/25/21 12:56	10/27/21 16:23	7440-23-5	
Total Hardness by 2340B, Dissolved	**74.8**	mg/L	3.3	0.27	1	10/25/21 12:56	10/27/21 16:23		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - WestVirginia								
Antimony	**0.00050 U**	mg/L	0.00050	0.000045	1	10/21/21 10:46	10/21/21 14:00	7440-36-0	M1
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:00	7440-38-2	
Barium	**0.031**	mg/L	0.0025	0.00011	1	10/21/21 10:46	10/21/21 14:00	7440-39-3	M1
Beryllium	**0.00030J**	mg/L	0.00050	0.00015	1	10/21/21 10:46	10/21/21 14:00	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/21/21 10:46	10/21/21 14:00	7440-43-9	
Chromium	**0.0020J**	mg/L	0.0025	0.00086	1	10/21/21 10:46	10/21/21 14:00	7440-47-3	
Cobalt	**0.0042**	mg/L	0.0025	0.00015	1	10/21/21 10:46	10/21/21 14:00	7440-48-4	
Copper	**0.0037**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:00	7440-50-8	M1
Lead	**0.000049J**	mg/L	0.00050	0.000030	1	10/21/21 10:46	10/21/21 14:00	7439-92-1	M1,R1
Nickel	**0.0028**	mg/L	0.0025	0.00065	1	10/21/21 10:46	10/21/21 14:00	7440-02-0	M1
Selenium	**0.0015J**	mg/L	0.0025	0.00084	1	10/21/21 10:46	10/21/21 14:00	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/21/21 10:46	10/21/21 14:00	7440-22-4	
Thallium	**0.000032J**	mg/L	0.00050	0.000024	1	10/21/21 10:46	10/21/21 14:00	7440-28-0	
Vanadium	**0.0031**	mg/L	0.0025	0.00021	1	10/21/21 10:46	10/21/21 14:00	7440-62-2	
Zinc	**0.0022J**	mg/L	0.0050	0.0017	1	10/21/21 10:46	10/21/21 14:00	7440-66-6	M1,R1

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ANALYTICAL RESULTS

Project: MLF-FALL 2021
Pace Project No.: 30445311

Sample: TW-20R **Lab ID: 30445311001** Collected: 10/12/21 13:50 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/19/21 12:17	10/20/21 09:14	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**30.0**	mg/L	10.0	1.0	1		10/19/21 21:29		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**139**	mg/L	10.0	10.0	1		10/15/21 18:04		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/25/21 08:01	10/25/21 10:59		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**8.3J**	mg/L	25.0	4.7	1	10/18/21 13:39	10/18/21 17:05		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**11.0**	mg/L	3.0	0.67	1		10/26/21 17:26	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrogen, NO2 plus NO3	**0.91**	mg/L	0.10	0.053	1		10/27/21 10:18		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**60.5**	mg/L	10.0	4.7	1		10/18/21 18:04	14808-79-8	ML

Sample: TW-21 **Lab ID: 30445311002** Collected: 10/12/21 14:50 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.023	1	10/19/21 12:32	10/20/21 00:11	96-12-8	6c
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/19/21 12:32	10/20/21 00:11	106-93-4	6c
Surrogates									
1,1,1,2-Tetrachloroethane (S)	115	%.	60-140		1	10/19/21 12:32	10/20/21 00:11	630-20-6	CH

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ANALYTICAL RESULTS

Project: MLF-FALL 2021
Pace Project No.: 30445311

Sample: TW-21 **Lab ID: 30445311002** Collected: 10/12/21 14:50 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium	**5.8**	mg/L	0.50	0.029	1	10/22/21 11:26	10/27/21 14:16	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.0076	1	10/22/21 11:26	10/27/21 14:16	7439-89-6	
Magnesium	**2.1**	mg/L	0.50	0.047	1	10/22/21 11:26	10/27/21 14:16	7439-95-4	
Manganese	**0.10**	mg/L	0.0050	0.00044	1	10/22/21 11:26	10/27/21 14:16	7439-96-5	
Potassium	**1.7**	mg/L	0.50	0.19	1	10/22/21 11:26	10/27/21 14:16	7440-09-7	
Sodium	**13.5**	mg/L	0.50	0.15	1	10/22/21 11:26	10/27/21 14:16	7440-23-5	
Total Hardness by 2340B	**23.0**	mg/L	3.3	0.27	1	10/22/21 11:26	10/27/21 14:16		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**6.1**	mg/L	0.50	0.029	1	10/25/21 12:56	10/27/21 16:27	7440-70-2	
Iron, Dissolved	**0.021J**	mg/L	0.050	0.0076	1	10/25/21 12:56	10/27/21 16:27	7439-89-6	B
Magnesium, Dissolved	**2.2**	mg/L	0.50	0.047	1	10/25/21 12:56	10/27/21 16:27	7439-95-4	
Manganese, Dissolved	**0.11**	mg/L	0.0050	0.00044	1	10/25/21 12:56	10/27/21 16:27	7439-96-5	
Potassium, Dissolved	**1.8**	mg/L	0.50	0.19	1	10/25/21 12:56	10/27/21 16:27	7440-09-7	
Sodium, Dissolved	**14.4**	mg/L	0.50	0.15	1	10/25/21 12:56	10/27/21 16:27	7440-23-5	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Antimony	**0.00010J**	mg/L	0.00050	0.000045	1	10/21/21 10:46	10/21/21 14:14	7440-36-0	
Arsenic	**0.00032J**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:14	7440-38-2	
Barium	**0.077**	mg/L	0.0025	0.00011	1	10/21/21 10:46	10/21/21 14:14	7440-39-3	
Beryllium	**0.00044J**	mg/L	0.00050	0.00015	1	10/21/21 10:46	10/21/21 14:14	7440-41-7	
Cadmium	**0.000081J**	mg/L	0.00050	0.000065	1	10/21/21 10:46	10/21/21 14:14	7440-43-9	
Chromium	**0.0012J**	mg/L	0.0025	0.00086	1	10/21/21 10:46	10/21/21 14:14	7440-47-3	
Cobalt	**0.0086**	mg/L	0.0025	0.00015	1	10/21/21 10:46	10/21/21 14:14	7440-48-4	
Copper	**0.0023J**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:14	7440-50-8	
Lead	**0.000055J**	mg/L	0.00050	0.000030	1	10/21/21 10:46	10/21/21 14:14	7439-92-1	
Nickel	**0.0044**	mg/L	0.0025	0.00065	1	10/21/21 10:46	10/21/21 14:14	7440-02-0	
Selenium	**0.0016J**	mg/L	0.0025	0.00084	1	10/21/21 10:46	10/21/21 14:14	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/21/21 10:46	10/21/21 14:14	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000024	1	10/21/21 10:46	10/21/21 14:14	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/21/21 10:46	10/21/21 14:14	7440-62-2	
Zinc	**0.028**	mg/L	0.0050	0.0017	1	10/21/21 10:46	10/21/21 14:14	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/19/21 12:17	10/20/21 09:18	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		10/19/21 21:31		2c

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ANALYTICAL RESULTS

Project: MLF-FALL 2021
Pace Project No.: 30445311

Sample: TW-21 **Lab ID: 30445311002** Collected: 10/12/21 14:50 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**84.0**	mg/L	10.0	10.0	1		10/15/21 18:04		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/25/21 08:01	10/25/21 11:01		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.1J**	mg/L	25.0	4.7	1	10/18/21 13:39	10/18/21 17:05		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**17.1**	mg/L	3.0	0.67	1		10/26/21 17:28	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrogen, NO2 plus NO3	**1.5**	mg/L	0.10	0.053	1		10/27/21 10:22		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**26.0**	mg/L	10.0	4.7	1		10/18/21 18:11	14808-79-8	

Sample: TW-22 **Lab ID: 30445311003** Collected: 10/13/21 10:35 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.023	1	10/19/21 12:32	10/20/21 00:24	96-12-8	6c
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/19/21 12:32	10/20/21 00:24	106-93-4	6c
Surrogates									
1,1,1,2-Tetrachloroethane (S)	119	%.	60-140		1	10/19/21 12:32	10/20/21 00:24	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium	**2.2**	mg/L	0.50	0.029	1	10/22/21 11:26	10/27/21 14:22	7440-70-2	
Iron	**0.096**	mg/L	0.050	0.0076	1	10/22/21 11:26	10/27/21 14:22	7439-89-6	
Magnesium	**2.0**	mg/L	0.50	0.047	1	10/22/21 11:26	10/27/21 14:22	7439-95-4	
Manganese	**0.035**	mg/L	0.0050	0.00044	1	10/22/21 11:26	10/27/21 14:22	7439-96-5	
Potassium	**1.2**	mg/L	0.50	0.19	1	10/22/21 11:26	10/27/21 14:22	7440-09-7	
Sodium	**12.8**	mg/L	0.50	0.15	1	10/22/21 11:26	10/27/21 14:22	7440-23-5	
Total Hardness by 2340B	**14.0**	mg/L	3.3	0.27	1	10/22/21 11:26	10/27/21 14:22		

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ANALYTICAL RESULTS

Project: MLF-FALL 2021
Pace Project No.: 30445311

Sample: TW-22 **Lab ID: 30445311003** Collected: 10/13/21 10:35 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**2.3**	mg/L	0.50	0.029	1	10/25/21 12:56	10/27/21 16:39	7440-70-2	
Iron, Dissolved	**0.054**	mg/L	0.050	0.0076	1	10/25/21 12:56	10/27/21 16:39	7439-89-6	B
Magnesium, Dissolved	**2.0**	mg/L	0.50	0.047	1	10/25/21 12:56	10/27/21 16:39	7439-95-4	
Manganese, Dissolved	**0.036**	mg/L	0.0050	0.00044	1	10/25/21 12:56	10/27/21 16:39	7439-96-5	
Potassium, Dissolved	**1.2**	mg/L	0.50	0.19	1	10/25/21 12:56	10/27/21 16:39	7440-09-7	
Sodium, Dissolved	**13.0**	mg/L	0.50	0.15	1	10/25/21 12:56	10/27/21 16:39	7440-23-5	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Antimony	**0.000076J**	mg/L	0.00050	0.000045	1	10/21/21 10:46	10/21/21 14:16	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:16	7440-38-2	
Barium	**0.052**	mg/L	0.0025	0.00011	1	10/21/21 10:46	10/21/21 14:16	7440-39-3	
Beryllium	**0.00035J**	mg/L	0.00050	0.00015	1	10/21/21 10:46	10/21/21 14:16	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/21/21 10:46	10/21/21 14:16	7440-43-9	
Chromium	**0.010**	mg/L	0.0025	0.00086	1	10/21/21 10:46	10/21/21 14:16	7440-47-3	
Cobalt	**0.012**	mg/L	0.0025	0.00015	1	10/21/21 10:46	10/21/21 14:16	7440-48-4	
Copper	**0.014**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:16	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.000030	1	10/21/21 10:46	10/21/21 14:16	7439-92-1	
Nickel	**0.022**	mg/L	0.0025	0.00065	1	10/21/21 10:46	10/21/21 14:16	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/21/21 10:46	10/21/21 14:16	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/21/21 10:46	10/21/21 14:16	7440-22-4	
Thallium	**0.000053J**	mg/L	0.00050	0.000024	1	10/21/21 10:46	10/21/21 14:16	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/21/21 10:46	10/21/21 14:16	7440-62-2	
Zinc	**0.015**	mg/L	0.0050	0.0017	1	10/21/21 10:46	10/21/21 14:16	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/19/21 12:17	10/20/21 09:20	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		10/19/21 21:32		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**45.0**	mg/L	10.0	10.0	1		10/15/21 18:04		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/25/21 08:01	10/25/21 11:03		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/18/21 13:39	10/18/21 17:05		

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ANALYTICAL RESULTS

Project: MLF-FALL 2021
Pace Project No.: 30445311

Sample: TW-22 **Lab ID: 30445311003** Collected: 10/13/21 10:35 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**21.6**	mg/L	3.0	0.67	1		10/26/21 17:29	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrogen, NO2 plus NO3	**1.1**	mg/L	0.10	0.053	1		10/27/21 10:24		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/18/21 18:11	14808-79-8	

Sample: TW-22A **Lab ID: 30445311004** Collected: 10/13/21 11:10 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/19/21 12:32	10/20/21 00:37	96-12-8	6c
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/19/21 12:32	10/20/21 00:37	106-93-4	6c
Surrogates									
1,1,1,2-Tetrachloroethane (S)	118	%.	60-140		1	10/19/21 12:32	10/20/21 00:37	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium	**5.0**	mg/L	0.50	0.029	1	10/22/21 11:26	10/27/21 14:24	7440-70-2	
Iron	**0.089**	mg/L	0.050	0.0076	1	10/22/21 11:26	10/27/21 14:24	7439-89-6	
Magnesium	**4.3**	mg/L	0.50	0.047	1	10/22/21 11:26	10/27/21 14:24	7439-95-4	
Manganese	**0.12**	mg/L	0.0050	0.00044	1	10/22/21 11:26	10/27/21 14:24	7439-96-5	
Potassium	**1.6**	mg/L	0.50	0.19	1	10/22/21 11:26	10/27/21 14:24	7440-09-7	
Sodium	**37.6**	mg/L	0.50	0.15	1	10/22/21 11:26	10/27/21 14:24	7440-23-5	
Total Hardness by 2340B	**30.1**	mg/L	3.3	0.27	1	10/22/21 11:26	10/27/21 14:24		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**5.0**	mg/L	0.50	0.029	1	10/25/21 12:56	10/27/21 16:41	7440-70-2	
Iron, Dissolved	**0.075**	mg/L	0.050	0.0076	1	10/25/21 12:56	10/27/21 16:41	7439-89-6	B
Magnesium, Dissolved	**4.3**	mg/L	0.50	0.047	1	10/25/21 12:56	10/27/21 16:41	7439-95-4	
Manganese, Dissolved	**0.12**	mg/L	0.0050	0.00044	1	10/25/21 12:56	10/27/21 16:41	7439-96-5	
Potassium, Dissolved	**1.6**	mg/L	0.50	0.19	1	10/25/21 12:56	10/27/21 16:41	7440-09-7	
Sodium, Dissolved	**38.9**	mg/L	0.50	0.15	1	10/25/21 12:56	10/27/21 16:41	7440-23-5	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Antimony	**0.000077J**	mg/L	0.00050	0.000045	1	10/21/21 10:46	10/21/21 14:19	7440-36-0	

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ANALYTICAL RESULTS

Project: MLF-FALL 2021
Pace Project No.: 30445311

Sample: TW-22A **Lab ID: 30445311004** Collected: 10/13/21 11:10 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Arsenic	**0.00027J**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:19	7440-38-2	
Barium	**0.15**	mg/L	0.0025	0.00011	1	10/21/21 10:46	10/21/21 14:19	7440-39-3	
Beryllium	**0.00054**	mg/L	0.00050	0.00015	1	10/21/21 10:46	10/21/21 14:19	7440-41-7	
Cadmium	**0.00020J**	mg/L	0.00050	0.000065	1	10/21/21 10:46	10/21/21 14:19	7440-43-9	
Chromium	**0.0022J**	mg/L	0.0025	0.00086	1	10/21/21 10:46	10/21/21 14:19	7440-47-3	
Cobalt	**0.025**	mg/L	0.0025	0.00015	1	10/21/21 10:46	10/21/21 14:19	7440-48-4	
Copper	**0.0072**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:19	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.000030	1	10/21/21 10:46	10/21/21 14:19	7439-92-1	
Nickel	**0.012**	mg/L	0.0025	0.00065	1	10/21/21 10:46	10/21/21 14:19	7440-02-0	
Selenium	**0.0025**	mg/L	0.0025	0.00084	1	10/21/21 10:46	10/21/21 14:19	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/21/21 10:46	10/21/21 14:19	7440-22-4	
Thallium	**0.000030J**	mg/L	0.00050	0.000024	1	10/21/21 10:46	10/21/21 14:19	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/21/21 10:46	10/21/21 14:19	7440-62-2	
Zinc	**0.037**	mg/L	0.0050	0.0017	1	10/21/21 10:46	10/21/21 14:19	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00027**	mg/L	0.00020	0.000030	1	10/19/21 12:17	10/20/21 09:22	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		10/19/21 21:33		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**142**	mg/L	10.0	10.0	1		10/15/21 18:04		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/25/21 08:01	10/25/21 11:04		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.1J**	mg/L	25.0	4.7	1	10/18/21 13:39	10/18/21 17:06		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**65.4**	mg/L	3.0	0.67	1		10/26/21 17:30	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrogen, NO2 plus NO3	**1.5**	mg/L	0.10	0.053	1		10/27/21 10:25		

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ANALYTICAL RESULTS

Project: MLF-FALL 2021
Pace Project No.: 30445311

Sample: TW-22A **Lab ID: 30445311004** Collected: 10/13/21 11:10 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**11.9**	mg/L	10.0	4.7	1		10/18/21 18:13	14808-79-8	

Sample: TW-22B **Lab ID: 30445311005** Collected: 10/13/21 10:00 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.022	1	10/19/21 12:32	10/20/21 00:49	96-12-8	6c
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	10/19/21 12:32	10/20/21 00:49	106-93-4	6c
Surrogates									
1,1,1,2-Tetrachloroethane (S)	109	%.	60-140		1	10/19/21 12:32	10/20/21 00:49	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**10.0**	mg/L	0.50	0.029	1	10/22/21 11:26	10/27/21 14:26	7440-70-2	
Iron	**0.14**	mg/L	0.050	0.0076	1	10/22/21 11:26	10/27/21 14:26	7439-89-6	
Magnesium	**2.9**	mg/L	0.50	0.047	1	10/22/21 11:26	10/27/21 14:26	7439-95-4	
Manganese	**0.037**	mg/L	0.0050	0.00044	1	10/22/21 11:26	10/27/21 14:26	7439-96-5	
Potassium	**3.2**	mg/L	0.50	0.19	1	10/22/21 11:26	10/27/21 14:26	7440-09-7	
Sodium	**7.6**	mg/L	0.50	0.15	1	10/22/21 11:26	10/27/21 14:26	7440-23-5	
Total Hardness by 2340B	**36.8**	mg/L	3.3	0.27	1	10/22/21 11:26	10/27/21 14:26		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**9.5**	mg/L	0.50	0.029	1	10/25/21 12:56	10/27/21 16:43	7440-70-2	
Iron, Dissolved	**0.040J**	mg/L	0.050	0.0076	1	10/25/21 12:56	10/27/21 16:43	7439-89-6	B
Magnesium, Dissolved	**2.9**	mg/L	0.50	0.047	1	10/25/21 12:56	10/27/21 16:43	7439-95-4	
Manganese, Dissolved	**0.042**	mg/L	0.0050	0.00044	1	10/25/21 12:56	10/27/21 16:43	7439-96-5	
Potassium, Dissolved	**3.0**	mg/L	0.50	0.19	1	10/25/21 12:56	10/27/21 16:43	7440-09-7	
Sodium, Dissolved	**9.3**	mg/L	0.50	0.15	1	10/25/21 12:56	10/27/21 16:43	7440-23-5	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - WestVirginia								
Antimony	**0.000091J**	mg/L	0.00050	0.000045	1	10/21/21 10:46	10/21/21 14:22	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:22	7440-38-2	
Barium	**0.044**	mg/L	0.0025	0.00011	1	10/21/21 10:46	10/21/21 14:22	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	10/21/21 10:46	10/21/21 14:22	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/21/21 10:46	10/21/21 14:22	7440-43-9	
Chromium	**0.0060**	mg/L	0.0025	0.00086	1	10/21/21 10:46	10/21/21 14:22	7440-47-3	
Cobalt	**0.0089**	mg/L	0.0025	0.00015	1	10/21/21 10:46	10/21/21 14:22	7440-48-4	
Copper	**0.0053**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:22	7440-50-8	
Lead	**0.000033J**	mg/L	0.00050	0.000030	1	10/21/21 10:46	10/21/21 14:22	7439-92-1	

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ANALYTICAL RESULTS

Project: MLF-FALL 2021
Pace Project No.: 30445311

Sample: TW-22B **Lab ID: 30445311005** Collected: 10/13/21 10:00 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Nickel	**0.0064**	mg/L	0.0025	0.00065	1	10/21/21 10:46	10/21/21 14:22	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/21/21 10:46	10/21/21 14:22	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/21/21 10:46	10/21/21 14:22	7440-22-4	
Thallium	**0.000089J**	mg/L	0.00050	0.000024	1	10/21/21 10:46	10/21/21 14:22	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/21/21 10:46	10/21/21 14:22	7440-62-2	
Zinc	**0.0022J**	mg/L	0.0050	0.0017	1	10/21/21 10:46	10/21/21 14:22	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.000030J**	mg/L	0.00020	0.000030	1	10/19/21 12:17	10/20/21 09:23	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**22.0**	mg/L	10.0	1.0	1		10/19/21 21:35		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**67.0**	mg/L	10.0	10.0	1		10/15/21 18:04		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/25/21 08:01	10/25/21 11:06		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**8.3J**	mg/L	25.0	4.7	1	10/18/21 13:39	10/18/21 17:07		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**6.1**	mg/L	3.0	0.67	1		10/26/21 17:31	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrogen, NO2 plus NO3	**3.0**	mg/L	0.10	0.053	1		10/27/21 10:26		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**21.3**	mg/L	10.0	4.7	1		10/18/21 18:13	14808-79-8	

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ANALYTICAL RESULTS

Project: MLF-FALL 2021
Pace Project No.: 30445311

Sample: TW-23R **Lab ID: 30445311006** Collected: 10/12/21 15:30 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/19/21 12:32	10/20/21 01:02	96-12-8	6c
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/19/21 12:32	10/20/21 01:02	106-93-4	6c
Surrogates									
1,1,1,2-Tetrachloroethane (S)	113	%.	60-140		1	10/19/21 12:32	10/20/21 01:02	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**2.7**	mg/L	0.50	0.029	1	10/22/21 11:26	10/27/21 14:28	7440-70-2	
Iron	**0.067**	mg/L	0.050	0.0076	1	10/22/21 11:26	10/27/21 14:28	7439-89-6	
Magnesium	**1.0**	mg/L	0.50	0.047	1	10/22/21 11:26	10/27/21 14:28	7439-95-4	
Manganese	**0.012**	mg/L	0.0050	0.00044	1	10/22/21 11:26	10/27/21 14:28	7439-96-5	
Potassium	**1.0**	mg/L	0.50	0.19	1	10/22/21 11:26	10/27/21 14:28	7440-09-7	
Sodium	**4.4**	mg/L	0.50	0.15	1	10/22/21 11:26	10/27/21 14:28	7440-23-5	
Total Hardness by 2340B	**10.9**	mg/L	3.3	0.27	1	10/22/21 11:26	10/27/21 14:28		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**2.7**	mg/L	0.50	0.029	1	10/26/21 14:36	10/27/21 18:02	7440-70-2	
Iron, Dissolved	**0.047J**	mg/L	0.050	0.0076	1	10/26/21 14:36	10/27/21 18:02	7439-89-6	
Magnesium, Dissolved	**1.0**	mg/L	0.50	0.047	1	10/26/21 14:36	10/27/21 18:02	7439-95-4	
Manganese, Dissolved	**0.012**	mg/L	0.0050	0.00044	1	10/26/21 14:36	10/27/21 18:02	7439-96-5	
Potassium, Dissolved	**1.1**	mg/L	0.50	0.19	1	10/26/21 14:36	10/27/21 18:02	7440-09-7	
Sodium, Dissolved	**4.6**	mg/L	0.50	0.15	1	10/26/21 14:36	10/27/21 18:02	7440-23-5	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - WestVirginia								
Antimony	**0.000089J**	mg/L	0.00050	0.000045	1	10/21/21 10:46	10/21/21 14:25	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:25	7440-38-2	
Barium	**0.016**	mg/L	0.0025	0.00011	1	10/21/21 10:46	10/21/21 14:25	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	10/21/21 10:46	10/21/21 14:25	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/21/21 10:46	10/21/21 14:25	7440-43-9	
Chromium	**0.0081**	mg/L	0.0025	0.00086	1	10/21/21 10:46	10/21/21 14:25	7440-47-3	
Cobalt	**0.0041**	mg/L	0.0025	0.00015	1	10/21/21 10:46	10/21/21 14:25	7440-48-4	
Copper	**0.0073**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:25	7440-50-8	
Lead	**0.000042J**	mg/L	0.00050	0.000030	1	10/21/21 10:46	10/21/21 14:25	7439-92-1	
Nickel	**0.016**	mg/L	0.0025	0.00065	1	10/21/21 10:46	10/21/21 14:25	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/21/21 10:46	10/21/21 14:25	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/21/21 10:46	10/21/21 14:25	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000024	1	10/21/21 10:46	10/21/21 14:25	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/21/21 10:46	10/21/21 14:25	7440-62-2	
Zinc	**0.0059**	mg/L	0.0050	0.0017	1	10/21/21 10:46	10/21/21 14:25	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
	Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/19/21 12:17	10/20/21 09:25	7439-97-6	

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ANALYTICAL RESULTS

Project: MLF-FALL 2021
Pace Project No.: 30445311

Sample: TW-23R **Lab ID: 30445311006** Collected: 10/12/21 15:30 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		10/20/21 21:59		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**20.0**	mg/L	10.0	10.0	1		10/15/21 18:04		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.061J**	mg/L	0.10	0.044	1	10/25/21 08:01	10/25/21 11:08		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/18/21 13:39	10/18/21 17:07		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**6.5**	mg/L	3.0	0.67	1		10/26/21 17:32	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrogen, NO2 plus NO3	**2.1**	mg/L	0.10	0.053	1		10/27/21 14:27		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/18/21 18:15	14808-79-8	

Sample: TW-24 **Lab ID: 30445311007** Collected: 10/13/21 13:00 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/19/21 12:32	10/20/21 01:15	96-12-8	6c
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/19/21 12:32	10/20/21 01:15	106-93-4	6c
Surrogates									
1,1,1,2-Tetrachloroethane (S)	104	%.	60-140		1	10/19/21 12:32	10/20/21 01:15	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium	**3.6**	mg/L	0.50	0.029	1	10/22/21 11:26	10/27/21 14:30	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.0076	1	10/22/21 11:26	10/27/21 14:30	7439-89-6	
Magnesium	**3.3**	mg/L	0.50	0.047	1	10/22/21 11:26	10/27/21 14:30	7439-95-4	

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ANALYTICAL RESULTS

Project: MLF-FALL 2021
Pace Project No.: 30445311

Sample: TW-24 **Lab ID: 30445311007** Collected: 10/13/21 13:00 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Manganese	**0.045**	mg/L	0.0050	0.00044	1	10/22/21 11:26	10/27/21 14:30	7439-96-5	
Potassium	**1.3**	mg/L	0.50	0.19	1	10/22/21 11:26	10/27/21 14:30	7440-09-7	
Sodium	**12.0**	mg/L	0.50	0.15	1	10/22/21 11:26	10/27/21 14:30	7440-23-5	
Total Hardness by 2340B	**22.6**	mg/L	3.3	0.27	1	10/22/21 11:26	10/27/21 14:30		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**3.7**	mg/L	0.50	0.029	1	10/26/21 14:36	10/27/21 18:04	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.0076	1	10/26/21 14:36	10/27/21 18:04	7439-89-6	
Magnesium, Dissolved	**3.4**	mg/L	0.50	0.047	1	10/26/21 14:36	10/27/21 18:04	7439-95-4	
Manganese, Dissolved	**0.046**	mg/L	0.0050	0.00044	1	10/26/21 14:36	10/27/21 18:04	7439-96-5	
Potassium, Dissolved	**1.3**	mg/L	0.50	0.19	1	10/26/21 14:36	10/27/21 18:04	7440-09-7	
Sodium, Dissolved	**12.7**	mg/L	0.50	0.15	1	10/26/21 14:36	10/27/21 18:04	7440-23-5	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Antimony	**0.00050 U**	mg/L	0.00050	0.000045	1	10/21/21 10:46	10/21/21 14:33	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:33	7440-38-2	
Barium	**0.071**	mg/L	0.0025	0.00011	1	10/21/21 10:46	10/21/21 14:33	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	10/21/21 10:46	10/21/21 14:33	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/21/21 10:46	10/21/21 14:33	7440-43-9	
Chromium	**0.0025 U**	mg/L	0.0025	0.00086	1	10/21/21 10:46	10/21/21 14:33	7440-47-3	
Cobalt	**0.0090**	mg/L	0.0025	0.00015	1	10/21/21 10:46	10/21/21 14:33	7440-48-4	
Copper	**0.0038**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:33	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.000030	1	10/21/21 10:46	10/21/21 14:33	7439-92-1	
Nickel	**0.0089**	mg/L	0.0025	0.00065	1	10/21/21 10:46	10/21/21 14:33	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/21/21 10:46	10/21/21 14:33	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/21/21 10:46	10/21/21 14:33	7440-22-4	
Thallium	**0.000027J**	mg/L	0.00050	0.000024	1	10/21/21 10:46	10/21/21 14:33	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/21/21 10:46	10/21/21 14:33	7440-62-2	
Zinc	**0.010**	mg/L	0.0050	0.0017	1	10/21/21 10:46	10/21/21 14:33	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00054**	mg/L	0.00020	0.000030	1	10/19/21 12:17	10/20/21 09:30	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**12.0**	mg/L	10.0	1.0	1		10/19/21 21:36		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**55.0**	mg/L	10.0	10.0	1		10/15/21 18:04		

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ANALYTICAL RESULTS

Project: MLF-FALL 2021
Pace Project No.: 30445311

Sample: TW-24 **Lab ID: 30445311007** Collected: 10/13/21 13:00 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/25/21 08:01	10/25/21 11:10		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/18/21 13:39	10/18/21 17:07		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**22.1**	mg/L	3.0	0.67	1		10/26/21 17:33	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrogen, NO2 plus NO3	**0.93**	mg/L	0.10	0.053	1		10/27/21 14:28		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**5.2J**	mg/L	10.0	4.7	1		10/18/21 18:16	14808-79-8	

Sample: TW-24A **Lab ID: 30445311008** Collected: 10/13/21 13:35 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/19/21 12:32	10/20/21 01:27	96-12-8	6c
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/19/21 12:32	10/20/21 01:27	106-93-4	6c
Surrogates									
1,1,1,2-Tetrachloroethane (S)	102	%.	60-140		1	10/19/21 12:32	10/20/21 01:27	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium	**21.5**	mg/L	0.50	0.029	1	10/22/21 11:26	10/27/21 14:32	7440-70-2	
Iron	**0.066**	mg/L	0.050	0.0076	1	10/22/21 11:26	10/27/21 14:32	7439-89-6	
Magnesium	**3.9**	mg/L	0.50	0.047	1	10/22/21 11:26	10/27/21 14:32	7439-95-4	
Manganese	**0.13**	mg/L	0.0050	0.00044	1	10/22/21 11:26	10/27/21 14:32	7439-96-5	
Potassium	**3.4**	mg/L	0.50	0.19	1	10/22/21 11:26	10/27/21 14:32	7440-09-7	
Sodium	**3.5**	mg/L	0.50	0.15	1	10/22/21 11:26	10/27/21 14:32	7440-23-5	
Total Hardness by 2340B	**69.7**	mg/L	3.3	0.27	1	10/22/21 11:26	10/27/21 14:32		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**21.5**	mg/L	0.50	0.029	1	10/26/21 14:36	10/27/21 18:10	7440-70-2	
Iron, Dissolved	**0.012J**	mg/L	0.050	0.0076	1	10/26/21 14:36	10/27/21 18:10	7439-89-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-FALL 2021
Pace Project No.: 30445311

Sample: TW-24A **Lab ID: 30445311008** Collected: 10/13/21 13:35 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Magnesium, Dissolved	**3.9**	mg/L	0.50	0.047	1	10/26/21 14:36	10/27/21 18:10	7439-95-4	
Manganese, Dissolved	**0.12**	mg/L	0.0050	0.00044	1	10/26/21 14:36	10/27/21 18:10	7439-96-5	
Potassium, Dissolved	**3.4**	mg/L	0.50	0.19	1	10/26/21 14:36	10/27/21 18:10	7440-09-7	
Sodium, Dissolved	**3.6**	mg/L	0.50	0.15	1	10/26/21 14:36	10/27/21 18:10	7440-23-5	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Antimony	**0.000073J**	mg/L	0.00050	0.000045	1	10/21/21 10:46	10/21/21 14:36	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:36	7440-38-2	
Barium	**0.068**	mg/L	0.0025	0.00011	1	10/21/21 10:46	10/21/21 14:36	7440-39-3	
Beryllium	**0.00018J**	mg/L	0.00050	0.00015	1	10/21/21 10:46	10/21/21 14:36	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/21/21 10:46	10/21/21 14:36	7440-43-9	
Chromium	**0.0034**	mg/L	0.0025	0.00086	1	10/21/21 10:46	10/21/21 14:36	7440-47-3	
Cobalt	**0.0050**	mg/L	0.0025	0.00015	1	10/21/21 10:46	10/21/21 14:36	7440-48-4	
Copper	**0.0044**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:36	7440-50-8	
Lead	**0.000033J**	mg/L	0.00050	0.000030	1	10/21/21 10:46	10/21/21 14:36	7439-92-1	
Nickel	**0.0036**	mg/L	0.0025	0.00065	1	10/21/21 10:46	10/21/21 14:36	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/21/21 10:46	10/21/21 14:36	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/21/21 10:46	10/21/21 14:36	7440-22-4	
Thallium	**0.000078J**	mg/L	0.00050	0.000024	1	10/21/21 10:46	10/21/21 14:36	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/21/21 10:46	10/21/21 14:36	7440-62-2	
Zinc	**0.0058**	mg/L	0.0050	0.0017	1	10/21/21 10:46	10/21/21 14:36	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00025**	mg/L	0.00020	0.000030	1	10/19/21 12:17	10/20/21 09:32	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**4.0J**	mg/L	10.0	1.0	1		10/19/21 21:37		4c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**84.0**	mg/L	10.0	10.0	1		10/15/21 18:04		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.059J**	mg/L	0.10	0.044	1	10/25/21 08:01	10/25/21 11:12		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**8.3J**	mg/L	25.0	4.7	1	10/18/21 13:39	10/18/21 17:07		

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ANALYTICAL RESULTS

Project: MLF-FALL 2021
Pace Project No.: 30445311

Sample: TW-24A **Lab ID: 30445311008** Collected: 10/13/21 13:35 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**4.7**	mg/L	3.0	0.67	1		10/26/21 17:34	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrogen, NO2 plus NO3	**2.0**	mg/L	0.10	0.053	1		10/27/21 14:29		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**17.9**	mg/L	10.0	4.7	1		10/18/21 18:18	14808-79-8	

Sample: DUP-1 **Lab ID: 30445311009** Collected: 10/13/21 00:00 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/19/21 12:32	10/20/21 01:40	96-12-8	6c
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/19/21 12:32	10/20/21 01:40	106-93-4	6c
Surrogates									
1,1,1,2-Tetrachloroethane (S)	111	%.	60-140		1	10/19/21 12:32	10/20/21 01:40	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium	**3.5**	mg/L	0.50	0.029	1	10/22/21 11:26	10/27/21 14:34	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.0076	1	10/22/21 11:26	10/27/21 14:34	7439-89-6	
Magnesium	**3.3**	mg/L	0.50	0.047	1	10/22/21 11:26	10/27/21 14:34	7439-95-4	
Manganese	**0.044**	mg/L	0.0050	0.00044	1	10/22/21 11:26	10/27/21 14:34	7439-96-5	
Potassium	**1.2**	mg/L	0.50	0.19	1	10/22/21 11:26	10/27/21 14:34	7440-09-7	
Sodium	**11.8**	mg/L	0.50	0.15	1	10/22/21 11:26	10/27/21 14:34	7440-23-5	
Total Hardness by 2340B	**22.2**	mg/L	3.3	0.27	1	10/22/21 11:26	10/27/21 14:34		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**3.8**	mg/L	0.50	0.029	1	10/26/21 14:36	10/27/21 18:13	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.0076	1	10/26/21 14:36	10/27/21 18:13	7439-89-6	
Magnesium, Dissolved	**3.6**	mg/L	0.50	0.047	1	10/26/21 14:36	10/27/21 18:13	7439-95-4	
Manganese, Dissolved	**0.049**	mg/L	0.0050	0.00044	1	10/26/21 14:36	10/27/21 18:13	7439-96-5	
Potassium, Dissolved	**1.4**	mg/L	0.50	0.19	1	10/26/21 14:36	10/27/21 18:13	7440-09-7	
Sodium, Dissolved	**13.3**	mg/L	0.50	0.15	1	10/26/21 14:36	10/27/21 18:13	7440-23-5	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Antimony	**0.000057J**	mg/L	0.00050	0.000045	1	10/21/21 10:46	10/21/21 14:39	7440-36-0	

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ANALYTICAL RESULTS

Project: MLF-FALL 2021
Pace Project No.: 30445311

Sample: DUP-1 **Lab ID: 30445311009** Collected: 10/13/21 00:00 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:39	7440-38-2	
Barium	**0.072**	mg/L	0.0025	0.00011	1	10/21/21 10:46	10/21/21 14:39	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	10/21/21 10:46	10/21/21 14:39	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/21/21 10:46	10/21/21 14:39	7440-43-9	
Chromium	**0.0025 U**	mg/L	0.0025	0.00086	1	10/21/21 10:46	10/21/21 14:39	7440-47-3	
Cobalt	**0.0090**	mg/L	0.0025	0.00015	1	10/21/21 10:46	10/21/21 14:39	7440-48-4	
Copper	**0.0040**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:39	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.000030	1	10/21/21 10:46	10/21/21 14:39	7439-92-1	
Nickel	**0.0091**	mg/L	0.0025	0.00065	1	10/21/21 10:46	10/21/21 14:39	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/21/21 10:46	10/21/21 14:39	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/21/21 10:46	10/21/21 14:39	7440-22-4	
Thallium	**0.000025J**	mg/L	0.00050	0.000024	1	10/21/21 10:46	10/21/21 14:39	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/21/21 10:46	10/21/21 14:39	7440-62-2	
Zinc	**0.010**	mg/L	0.0050	0.0017	1	10/21/21 10:46	10/21/21 14:39	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00054**	mg/L	0.00020	0.000030	1	10/19/21 12:17	10/20/21 09:33	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**42.0**	mg/L	10.0	1.0	1		10/19/21 21:38		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**59.0**	mg/L	10.0	10.0	1		10/15/21 18:04		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/25/21 08:01	10/25/21 11:14		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/18/21 13:39	10/18/21 17:07		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**22.5**	mg/L	3.0	0.67	1		10/26/21 17:35	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrogen, NO2 plus NO3	**0.94**	mg/L	0.10	0.053	1		10/27/21 14:31		

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ANALYTICAL RESULTS

Project: MLF-FALL 2021
Pace Project No.: 30445311

Sample: DUP-1 **Lab ID: 30445311009** Collected: 10/13/21 00:00 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**4.9J**	mg/L	10.0	4.7	1		10/18/21 18:18	14808-79-8	

Sample: TRIP BLANK **Lab ID: 30445311010** Collected: 10/13/21 00:00 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/19/21 12:32	10/20/21 01:53	96-12-8	6c
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/19/21 12:32	10/20/21 01:53	106-93-4	6c
Surrogates									
1,1,1,2-Tetrachloroethane (S)	111	%.	60-140		1	10/19/21 12:32	10/20/21 01:53	630-20-6	CH

Sample: SW-1 **Lab ID: 30445311011** Collected: 10/13/21 07:00 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/19/21 12:32	10/20/21 02:05	96-12-8	6c
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/19/21 12:32	10/20/21 02:05	106-93-4	6c
Surrogates									
1,1,1,2-Tetrachloroethane (S)	106	%.	60-140		1	10/19/21 12:32	10/20/21 02:05	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium	**13.1**	mg/L	0.50	0.029	1	10/22/21 11:26	10/27/21 14:36	7440-70-2	
Iron	**0.076**	mg/L	0.050	0.0076	1	10/22/21 11:26	10/27/21 14:36	7439-89-6	
Magnesium	**3.2**	mg/L	0.50	0.047	1	10/22/21 11:26	10/27/21 14:36	7439-95-4	
Manganese	**0.0090**	mg/L	0.0050	0.00044	1	10/22/21 11:26	10/27/21 14:36	7439-96-5	
Potassium	**2.2**	mg/L	0.50	0.19	1	10/22/21 11:26	10/27/21 14:36	7440-09-7	
Sodium	**48.4**	mg/L	0.50	0.15	1	10/22/21 11:26	10/27/21 14:36	7440-23-5	
Total Hardness by 2340B	**46.1**	mg/L	3.3	0.27	1	10/22/21 11:26	10/27/21 14:36		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Antimony	**0.000076J**	mg/L	0.00050	0.000045	1	10/21/21 10:46	10/21/21 14:42	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:42	7440-38-2	
Barium	**0.042**	mg/L	0.0025	0.00011	1	10/21/21 10:46	10/21/21 14:42	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	10/21/21 10:46	10/21/21 14:42	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/21/21 10:46	10/21/21 14:42	7440-43-9	

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ANALYTICAL RESULTS

Project: MLF-FALL 2021
Pace Project No.: 30445311

Sample: SW-1 **Lab ID: 30445311011** Collected: 10/13/21 07:00 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Chromium	**0.0025 U**	mg/L	0.0025	0.00086	1	10/21/21 10:46	10/21/21 14:42	7440-47-3	
Cobalt	**0.00037J**	mg/L	0.0025	0.00015	1	10/21/21 10:46	10/21/21 14:42	7440-48-4	
Copper	**0.00042J**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:42	7440-50-8	
Lead	**0.00012J**	mg/L	0.00050	0.000030	1	10/21/21 10:46	10/21/21 14:42	7439-92-1	
Nickel	**0.0012J**	mg/L	0.0025	0.00065	1	10/21/21 10:46	10/21/21 14:42	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/21/21 10:46	10/21/21 14:42	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/21/21 10:46	10/21/21 14:42	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000024	1	10/21/21 10:46	10/21/21 14:42	7440-28-0	
Vanadium	**0.00028J**	mg/L	0.0025	0.00021	1	10/21/21 10:46	10/21/21 14:42	7440-62-2	
Zinc	**0.0035J**	mg/L	0.0050	0.0017	1	10/21/21 10:46	10/21/21 14:42	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/19/21 12:17	10/20/21 09:35	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**8.0J**	mg/L	10.0	1.0	1		10/19/21 21:39		5c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**177**	mg/L	10.0	10.0	1		10/15/21 18:04		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/25/21 08:01	10/25/21 11:20		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**12.6J**	mg/L	25.0	4.7	1	10/18/21 13:39	10/18/21 17:08		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**74.7**	mg/L	3.0	0.67	1		10/26/21 17:35	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrogen, NO2 plus NO3	**2.3**	mg/L	0.10	0.053	1		10/27/21 14:32		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**12.0**	mg/L	10.0	4.7	1		10/18/21 18:20	14808-79-8	

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ANALYTICAL RESULTS

Project: MLF-FALL 2021
Pace Project No.: 30445311

Sample: SW-2 **Lab ID: 30445311012** Collected: 10/13/21 07:30 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.042 U**	ug/L	0.042	0.023	1	10/19/21 12:32	10/20/21 02:18	96-12-8	6c
1,2-Dibromoethane (EDB)	**0.042 U**	ug/L	0.042	0.032	1	10/19/21 12:32	10/20/21 02:18	106-93-4	6c
Surrogates									
1,1,1,2-Tetrachloroethane (S)	121	%.	60-140		1	10/19/21 12:32	10/20/21 02:18	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**32.1**	mg/L	0.50	0.029	1	10/22/21 11:26	10/27/21 14:38	7440-70-2	
Iron	**0.43**	mg/L	0.050	0.0076	1	10/22/21 11:26	10/27/21 14:38	7439-89-6	
Magnesium	**7.9**	mg/L	0.50	0.047	1	10/22/21 11:26	10/27/21 14:38	7439-95-4	
Manganese	**0.017**	mg/L	0.0050	0.00044	1	10/22/21 11:26	10/27/21 14:38	7439-96-5	
Potassium	**4.9**	mg/L	0.50	0.19	1	10/22/21 11:26	10/27/21 14:38	7440-09-7	
Sodium	**17.8**	mg/L	0.50	0.15	1	10/22/21 11:26	10/27/21 14:38	7440-23-5	
Total Hardness by 2340B	**113**	mg/L	3.3	0.27	1	10/22/21 11:26	10/27/21 14:38		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - WestVirginia								
Antimony	**0.00012J**	mg/L	0.00050	0.000045	1	10/21/21 10:46	10/21/21 14:44	7440-36-0	
Arsenic	**0.00067J**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:44	7440-38-2	
Barium	**0.039**	mg/L	0.0025	0.00011	1	10/21/21 10:46	10/21/21 14:44	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	10/21/21 10:46	10/21/21 14:44	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/21/21 10:46	10/21/21 14:44	7440-43-9	
Chromium	**0.0025 U**	mg/L	0.0025	0.00086	1	10/21/21 10:46	10/21/21 14:44	7440-47-3	
Cobalt	**0.00032J**	mg/L	0.0025	0.00015	1	10/21/21 10:46	10/21/21 14:44	7440-48-4	
Copper	**0.00031J**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:44	7440-50-8	
Lead	**0.000066J**	mg/L	0.00050	0.000030	1	10/21/21 10:46	10/21/21 14:44	7439-92-1	
Nickel	**0.00075J**	mg/L	0.0025	0.00065	1	10/21/21 10:46	10/21/21 14:44	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/21/21 10:46	10/21/21 14:44	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/21/21 10:46	10/21/21 14:44	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000024	1	10/21/21 10:46	10/21/21 14:44	7440-28-0	
Vanadium	**0.00056J**	mg/L	0.0025	0.00021	1	10/21/21 10:46	10/21/21 14:44	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0017	1	10/21/21 10:46	10/21/21 14:44	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
	Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/19/21 12:17	10/20/21 09:36	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011								
	Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**20.0**	mg/L	10.0	1.0	1		10/19/21 21:41		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011								
	Pace Analytical Services - Greensburg								
Total Dissolved Solids	**164**	mg/L	10.0	10.0	1		10/15/21 18:04		

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ANALYTICAL RESULTS

Project: MLF-FALL 2021
Pace Project No.: 30445311

Sample: SW-2 **Lab ID: 30445311012** Collected: 10/13/21 07:30 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/25/21 08:01	10/25/21 11:26		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**17.0J**	mg/L	25.0	4.7	1	10/18/21 13:39	10/18/21 17:08		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**27.8**	mg/L	3.0	0.67	1		10/26/21 17:36	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrogen, NO2 plus NO3	**0.37**	mg/L	0.10	0.053	1		10/27/21 14:33		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.5**	mg/L	10.0	4.7	1		10/18/21 18:23	14808-79-8	

Sample: SW-3 **Lab ID: 30445311013** Collected: 10/13/21 08:00 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/19/21 12:32	10/20/21 02:31	96-12-8	6c
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/19/21 12:32	10/20/21 02:31	106-93-4	6c
Surrogates									
1,1,1,2-Tetrachloroethane (S)	94	%.	60-140		1	10/19/21 12:32	10/20/21 02:31	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium	**32.4**	mg/L	0.50	0.029	1	10/22/21 11:26	10/27/21 14:40	7440-70-2	
Iron	**0.47**	mg/L	0.050	0.0076	1	10/22/21 11:26	10/27/21 14:40	7439-89-6	
Magnesium	**6.3**	mg/L	0.50	0.047	1	10/22/21 11:26	10/27/21 14:40	7439-95-4	
Manganese	**0.40**	mg/L	0.0050	0.00044	1	10/22/21 11:26	10/27/21 14:40	7439-96-5	
Potassium	**4.0**	mg/L	0.50	0.19	1	10/22/21 11:26	10/27/21 14:40	7440-09-7	
Sodium	**45.8**	mg/L	0.50	0.15	1	10/22/21 11:26	10/27/21 14:40	7440-23-5	
Total Hardness by 2340B	**107**	mg/L	3.3	0.27	1	10/22/21 11:26	10/27/21 14:40		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Antimony	**0.000090J**	mg/L	0.00050	0.000045	1	10/21/21 10:46	10/21/21 14:47	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:47	7440-38-2	

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ANALYTICAL RESULTS

Project: MLF-FALL 2021
Pace Project No.: 30445311

Sample: SW-3 **Lab ID: 30445311013** Collected: 10/13/21 08:00 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Barium	**0.053**	mg/L	0.0025	0.00011	1	10/21/21 10:46	10/21/21 14:47	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	10/21/21 10:46	10/21/21 14:47	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/21/21 10:46	10/21/21 14:47	7440-43-9	
Chromium	**0.0025 U**	mg/L	0.0025	0.00086	1	10/21/21 10:46	10/21/21 14:47	7440-47-3	
Cobalt	**0.0013J**	mg/L	0.0025	0.00015	1	10/21/21 10:46	10/21/21 14:47	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:47	7440-50-8	
Lead	**0.000060J**	mg/L	0.00050	0.000030	1	10/21/21 10:46	10/21/21 14:47	7439-92-1	
Nickel	**0.0025 U**	mg/L	0.0025	0.00065	1	10/21/21 10:46	10/21/21 14:47	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/21/21 10:46	10/21/21 14:47	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/21/21 10:46	10/21/21 14:47	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000024	1	10/21/21 10:46	10/21/21 14:47	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/21/21 10:46	10/21/21 14:47	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0017	1	10/21/21 10:46	10/21/21 14:47	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/19/21 12:17	10/20/21 09:41	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**110**	mg/L	10.0	1.0	1		10/19/21 21:42		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**241**	mg/L	10.0	10.0	1		10/15/21 18:04		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/25/21 08:01	10/25/21 11:28		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/18/21 13:39	10/18/21 17:08		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**77.1**	mg/L	3.0	0.67	1		10/26/21 17:41	16887-00-6	ML
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrogen, NO2 plus NO3	**0.51**	mg/L	0.10	0.053	1		10/27/21 14:35		

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ANALYTICAL RESULTS

Project: MLF-FALL 2021
Pace Project No.: 30445311

Sample: SW-3 **Lab ID: 30445311013** Collected: 10/13/21 08:00 Received: 10/13/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**9.8J**	mg/L	10.0	4.7	1		10/18/21 18:27	14808-79-8	

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QUALITY CONTROL DATA

Project: MLF-FALL 2021
Pace Project No.: 30445311

QC Batch: 468791
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30445311001, 30445311002, 30445311003, 30445311004, 30445311005, 30445311006, 30445311007, 30445311008, 30445311009, 30445311010, 30445311011, 30445311012, 30445311013

METHOD BLANK: 2263677
Matrix: Water
Associated Lab Samples: 30445311001, 30445311002, 30445311003, 30445311004, 30445311005, 30445311006, 30445311007, 30445311008, 30445311009, 30445311010, 30445311011, 30445311012, 30445311013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.022	10/19/21 23:08	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	10/19/21 23:08	
1,1,1,2-Tetrachloroethane (S)	%.	118	60-140		10/19/21 23:08	CH

LABORATORY CONTROL SAMPLE: 2263509

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.25	100	85-115	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.27	109	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			113	60-140	CH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2263510 2263511

Parameter	Units	30445311001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.041 U	0.41	0.42	0.41	0.39	99	93	60-140	5	25	
1,2-Dibromoethane (EDB)	ug/L	0.041 U	0.41	0.42	0.43	0.42	105	100	60-140	4	25	
1,1,1,2-Tetrachloroethane (S)	%.						111	107	60-140			CH

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-FALL 2021
Pace Project No.: 30445311

QC Batch: 468712
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30445311001, 30445311002, 30445311003, 30445311004, 30445311005, 30445311006, 30445311007, 30445311008, 30445311009, 30445311011, 30445311012, 30445311013

METHOD BLANK: 2263011
Matrix: Water
Associated Lab Samples: 30445311001, 30445311002, 30445311003, 30445311004, 30445311005, 30445311006, 30445311007, 30445311008, 30445311009, 30445311011, 30445311012, 30445311013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.000030	10/20/21 09:10	

LABORATORY CONTROL SAMPLE: 2263012

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.001	0.0010	103	80-120	

MATRIX SPIKE SAMPLE: 2263014

Parameter	Units	30445311001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.00020 U	0.0025	0.0024	96	75-125	

MATRIX SPIKE SAMPLE: 2263016

Parameter	Units	30445311012 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.00020 U	0.0025	0.0024	95	75-125	

SAMPLE DUPLICATE: 2263013

Parameter	Units	30445311001 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	0.00020 U	0.00020 U		20	

SAMPLE DUPLICATE: 2263015

Parameter	Units	30445311012 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	0.00020 U	0.00020 U		20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-FALL 2021
Pace Project No.: 30445311

QC Batch: 88027
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D MET
Laboratory: Pace Analytical Services - WestVirginia
Associated Lab Samples: 30445311001, 30445311002, 30445311003, 30445311004, 30445311005, 30445311006, 30445311007, 30445311008, 30445311009, 30445311011, 30445311012, 30445311013

METHOD BLANK: 432860
Matrix: Water
Associated Lab Samples: 30445311001, 30445311002, 30445311003, 30445311004, 30445311005, 30445311006, 30445311007, 30445311008, 30445311009, 30445311011, 30445311012, 30445311013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.029	10/27/21 14:03	
Iron	mg/L	0.050 U	0.050	0.0076	10/27/21 14:03	
Magnesium	mg/L	0.50 U	0.50	0.047	10/27/21 14:03	
Manganese	mg/L	0.0050 U	0.0050	0.00044	10/27/21 14:03	
Potassium	mg/L	0.50 U	0.50	0.19	10/27/21 14:03	
Sodium	mg/L	0.50 U	0.50	0.15	10/27/21 14:03	

LABORATORY CONTROL SAMPLE: 432861

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	41.9	105	80-120	
Iron	mg/L	2	2.2	109	80-120	
Magnesium	mg/L	20	21.0	105	80-120	
Manganese	mg/L	2	2.1	107	80-120	
Potassium	mg/L	20	21.2	106	80-120	
Sodium	mg/L	20	20.7	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 432862 432863

Parameter	Units	30445311001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	22.9	40	40	65.0	78.3	105	138	80-120	19	20	M1
Iron	mg/L	0.041J	2	2	2.2	2.7	110	133	80-120	19	20	M1
Magnesium	mg/L	5.7	20	20	27.6	33.4	110	138	80-120	19	20	M1
Manganese	mg/L	0.033	2	2	2.2	2.7	110	132	80-120	19	20	M1
Potassium	mg/L	3.5	20	20	25.2	29.6	109	131	80-120	16	20	M1
Sodium	mg/L	14.6	20	20	35.5	41.8	104	136	80-120	16	20	M1

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QUALITY CONTROL DATA

Project: MLF-FALL 2021
Pace Project No.: 30445311

QC Batch: 88235
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D MET Dissolved
Laboratory: Pace Analytical Services - WestVirginia
Associated Lab Samples: 30445311001, 30445311002, 30445311003, 30445311004, 30445311005

METHOD BLANK: 433900 Matrix: Water
Associated Lab Samples: 30445311001, 30445311002, 30445311003, 30445311004, 30445311005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.029	10/27/21 15:45	
Iron, Dissolved	mg/L	0.013J	0.050	0.0076	10/27/21 15:45	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	10/27/21 15:45	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.00044	10/27/21 15:45	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.19	10/27/21 15:45	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.15	10/27/21 15:45	

LABORATORY CONTROL SAMPLE: 433901

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	42.0	105	80-120	
Iron, Dissolved	mg/L	2	2.1	106	80-120	
Magnesium, Dissolved	mg/L	20	21.3	107	80-120	
Manganese, Dissolved	mg/L	2	2.1	106	80-120	
Potassium, Dissolved	mg/L	20	20.6	103	80-120	
Sodium, Dissolved	mg/L	20	20.6	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 433910 433911

Parameter	Units	30439085001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	1480000	40	40	931	1060	-1380	-1070	80-120	13	20	M1
Iron, Dissolved	mg/L	0.092	2	2	2.0	2.1	95	102	80-120	6	20	
Magnesium, Dissolved	mg/L	135000	20	20	156	166	107	152	80-120	6	20	M1
Manganese, Dissolved	mg/L	5.3	2	2	7.1	7.6	93	115	80-120	6	20	
Potassium, Dissolved	mg/L	6830	20	20	30.7	33.2	119	132	80-120	8	20	M1
Sodium, Dissolved	mg/L	858000	20	20	634	625	-1120	-1160	80-120	1	20	M1

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QUALITY CONTROL DATA

Project: MLF-FALL 2021
Pace Project No.: 30445311

QC Batch: 88462
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D MET Dissolved
Laboratory: Pace Analytical Services - WestVirginia
Associated Lab Samples: 30445311006, 30445311007, 30445311008, 30445311009

METHOD BLANK: 434720 Matrix: Water
Associated Lab Samples: 30445311006, 30445311007, 30445311008, 30445311009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.075J	0.50	0.029	10/27/21 17:48	
Iron, Dissolved	mg/L	0.050 U	0.050	0.0076	10/27/21 17:48	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	10/27/21 17:48	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.00044	10/27/21 17:48	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.19	10/27/21 17:48	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.15	10/27/21 17:48	

LABORATORY CONTROL SAMPLE: 434721

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	40.8	102	80-120	
Iron, Dissolved	mg/L	2	2.1	103	80-120	
Magnesium, Dissolved	mg/L	20	20.6	103	80-120	
Manganese, Dissolved	mg/L	2	2.1	103	80-120	
Potassium, Dissolved	mg/L	20	20.3	102	80-120	
Sodium, Dissolved	mg/L	20	20.2	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 434729 434730

Parameter	Units	7393637003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	27700	40	40	78.9	75.5	128	119	80-120	4	20	M1
Iron, Dissolved	mg/L	ND	2	2	2.4	2.3	122	114	80-120	6	20	M1
Magnesium, Dissolved	mg/L	13200	20	20	39.7	37.9	133	124	80-120	5	20	M1
Manganese, Dissolved	mg/L	3.0J	2	2	2.4	2.3	120	113	80-120	6	20	
Potassium, Dissolved	mg/L	493J	20	20	24.1	22.9	118	112	80-120	5	20	
Sodium, Dissolved	mg/L	14700	20	20	39.7	38.2	125	118	80-120	4	20	M1

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QUALITY CONTROL DATA

Project: MLF-FALL 2021
Pace Project No.: 30445311

QC Batch: 87872
QC Batch Method: EPA 3020A
Analysis Method: EPA 6020B
Analysis Description: 6020B MET
Laboratory: Pace Analytical Services - WestVirginia
Associated Lab Samples: 30445311001, 30445311002, 30445311003, 30445311004, 30445311005, 30445311006, 30445311007, 30445311008, 30445311009, 30445311011, 30445311012, 30445311013

METHOD BLANK: 431971
Matrix: Water
Associated Lab Samples: 30445311001, 30445311002, 30445311003, 30445311004, 30445311005, 30445311006, 30445311007, 30445311008, 30445311009, 30445311011, 30445311012, 30445311013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.000045	10/21/21 13:48	
Arsenic	mg/L	0.0025 U	0.0025	0.00025	10/21/21 13:48	
Barium	mg/L	0.0025 U	0.0025	0.00011	10/21/21 13:48	
Beryllium	mg/L	0.00050 U	0.00050	0.00015	10/21/21 13:48	
Cadmium	mg/L	0.00050 U	0.00050	0.000065	10/21/21 13:48	
Chromium	mg/L	0.0025 U	0.0025	0.00086	10/21/21 13:48	
Cobalt	mg/L	0.0025 U	0.0025	0.00015	10/21/21 13:48	
Copper	mg/L	0.0025 U	0.0025	0.00025	10/21/21 13:48	
Lead	mg/L	0.00050 U	0.00050	0.000030	10/21/21 13:48	
Nickel	mg/L	0.0025 U	0.0025	0.00065	10/21/21 13:48	
Selenium	mg/L	0.0025 U	0.0025	0.00084	10/21/21 13:48	
Silver	mg/L	0.0025 U	0.0025	0.00016	10/21/21 13:48	
Thallium	mg/L	0.00050 U	0.00050	0.000024	10/21/21 13:48	
Vanadium	mg/L	0.0025 U	0.0025	0.00021	10/21/21 13:48	
Zinc	mg/L	0.0050 U	0.0050	0.0017	10/21/21 13:48	

LABORATORY CONTROL SAMPLE: 431972

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.023	114	80-120	
Arsenic	mg/L	0.1	0.10	101	80-120	
Barium	mg/L	0.1	0.10	100	80-120	
Beryllium	mg/L	0.02	0.019	96	80-120	
Cadmium	mg/L	0.02	0.020	99	80-120	
Chromium	mg/L	0.1	0.10	101	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Copper	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.02	0.020	101	80-120	
Nickel	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	
Silver	mg/L	0.1	0.097	97	80-120	
Thallium	mg/L	0.02	0.020	101	80-120	
Vanadium	mg/L	0.1	0.10	101	80-120	
Zinc	mg/L	0.2	0.20	100	80-120	

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QUALITY CONTROL DATA

Project: MLF-FALL 2021
Pace Project No.: 30445311

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 431973 431974

Parameter	Units	30445311001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00050 U	0.02	0.02	0.027	0.023	133	117	75-125	12	20	M1
Arsenic	mg/L	0.0025 U	0.1	0.1	0.11	0.096	109	96	75-125	12	20	
Barium	mg/L	0.031	0.1	0.1	0.16	0.13	126	103	75-125	16	20	M1
Beryllium	mg/L	0.00030J	0.02	0.02	0.023	0.020	111	100	75-125	11	20	
Cadmium	mg/L	0.00050 U	0.02	0.02	0.023	0.020	117	102	75-125	14	20	
Chromium	mg/L	0.0020J	0.1	0.1	0.12	0.11	123	104	75-125	16	20	
Cobalt	mg/L	0.0042	0.1	0.1	0.13	0.11	122	104	75-125	15	20	
Copper	mg/L	0.0037	0.1	0.1	0.13	0.11	128	104	75-125	19	20	M1
Lead	mg/L	0.000049J	0.02	0.02	0.032	0.021	158	103	75-125	42	20	M1,R1
Nickel	mg/L	0.0028	0.1	0.1	0.13	0.11	128	105	75-125	19	20	M1
Selenium	mg/L	0.0015J	0.1	0.1	0.11	0.099	105	97	75-125	8	20	
Silver	mg/L	0.0025 U	0.1	0.1	0.11	0.098	111	98	75-125	12	20	
Thallium	mg/L	0.000032J	0.02	0.02	0.024	0.021	118	104	75-125	13	20	
Vanadium	mg/L	0.0031	0.1	0.1	0.13	0.11	122	105	75-125	15	20	
Zinc	mg/L	0.0022J	0.2	0.2	0.44	0.21	221	103	75-125	72	20	M1,R1

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QUALITY CONTROL DATA

Project: MLF-FALL 2021
Pace Project No.: 30445311

QC Batch: 468940
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30445311001, 30445311002, 30445311003, 30445311004, 30445311005, 30445311007, 30445311008, 30445311009, 30445311011, 30445311012, 30445311013

METHOD BLANK: 2264232
Matrix: Water
Associated Lab Samples: 30445311001, 30445311002, 30445311003, 30445311004, 30445311005, 30445311007, 30445311008, 30445311009, 30445311011, 30445311012, 30445311013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	10/19/21 21:08	

LABORATORY CONTROL SAMPLE: 2264233

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	21.0	105	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2264234 2264235

Parameter	Units	30444911001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	316	50	50	360	362	88	92	85-115	1	20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2021
Pace Project No.: 30445311

QC Batch: 469120
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30445311006

METHOD BLANK: 2265525 Matrix: Water
Associated Lab Samples: 30445311006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	1.0J	10.0	1.0	10/20/21 21:58	

LABORATORY CONTROL SAMPLE: 2265526

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2265527 2265528

Parameter	Units	30445311006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	50	50	44.0	46.0	88	92	85-115	4	20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2021
Pace Project No.: 30445311

QC Batch: 468385
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30445311001, 30445311002, 30445311003, 30445311004, 30445311005, 30445311006, 30445311007, 30445311008, 30445311009, 30445311011, 30445311012, 30445311013

METHOD BLANK: 2261577
Matrix: Water
Associated Lab Samples: 30445311001, 30445311002, 30445311003, 30445311004, 30445311005, 30445311006, 30445311007, 30445311008, 30445311009, 30445311011, 30445311012, 30445311013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	10/15/21 18:04	

LABORATORY CONTROL SAMPLE: 2261578

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	975	98	85-115	

SAMPLE DUPLICATE: 2261579

Parameter	Units	30445311001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	139	133	4	5	

SAMPLE DUPLICATE: 2261580

Parameter	Units	30445311013 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	241	245	2	5	

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QUALITY CONTROL DATA

Project: MLF-FALL 2021
Pace Project No.: 30445311

QC Batch: 469599
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30445311001, 30445311002, 30445311003, 30445311004, 30445311005, 30445311006, 30445311007, 30445311008, 30445311009, 30445311011, 30445311012, 30445311013

METHOD BLANK: 2267488
Matrix: Water
Associated Lab Samples: 30445311001, 30445311002, 30445311003, 30445311004, 30445311005, 30445311006, 30445311007, 30445311008, 30445311009, 30445311011, 30445311012, 30445311013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.044	10/25/21 10:49	

LABORATORY CONTROL SAMPLE: 2267489

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.1	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2267490 2267491

Parameter	Units	30445172001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	1.2	4	4	5.4	5.4	104	104	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2267492 2267493

Parameter	Units	30445311011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.1	4.1	102	102	90-110	0	20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2021
Pace Project No.: 30445311

QC Batch: 468548
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30445311001, 30445311002, 30445311003, 30445311004, 30445311005, 30445311006, 30445311007, 30445311008, 30445311009, 30445311011, 30445311012, 30445311013

METHOD BLANK: 2262472
Matrix: Water
Associated Lab Samples: 30445311001, 30445311002, 30445311003, 30445311004, 30445311005, 30445311006, 30445311007, 30445311008, 30445311009, 30445311011, 30445311012, 30445311013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	10/18/21 17:03	

METHOD BLANK: 2262473
Matrix: Water
Associated Lab Samples: 30445311001, 30445311002, 30445311003, 30445311004, 30445311005, 30445311006, 30445311007, 30445311008, 30445311009, 30445311011, 30445311012, 30445311013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	10/18/21 17:03	

LABORATORY CONTROL SAMPLE: 2262474

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	322	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2262475 2262476

Parameter	Units	30444583019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	ND	150	150	171	173	113	114	90-110	1	10	MH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2262477 2262478

Parameter	Units	30445311004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	6.1J	150	150	171	166	110	107	90-110	3	10	

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QUALITY CONTROL DATA

Project: MLF-FALL 2021
Pace Project No.: 30445311

QC Batch: 469864 | Analysis Method: SM 4500-Cl-E-2011
QC Batch Method: SM 4500-Cl-E-2011 | Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30445311001, 30445311002, 30445311003, 30445311004, 30445311005, 30445311006, 30445311007, 30445311008, 30445311009, 30445311011, 30445311012

METHOD BLANK: 2268547 | Matrix: Water
Associated Lab Samples: 30445311001, 30445311002, 30445311003, 30445311004, 30445311005, 30445311006, 30445311007, 30445311008, 30445311009, 30445311011, 30445311012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	10/26/21 17:13	

METHOD BLANK: 2268625 | Matrix: Water
Associated Lab Samples: 30445311001, 30445311002, 30445311003, 30445311004, 30445311005, 30445311006, 30445311007, 30445311008, 30445311009, 30445311011, 30445311012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	10/26/21 17:15	

LABORATORY CONTROL SAMPLE: 2268548

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	19.5	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2268549 2268550

Parameter	Units	30443951001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.1	20	20	20.2	21.5	86	92	85-115	6	20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2021
Pace Project No.: 30445311

QC Batch: 469866
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30445311013

METHOD BLANK: 2268552 Matrix: Water
Associated Lab Samples: 30445311013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	10/26/21 17:39	

LABORATORY CONTROL SAMPLE: 2268553

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	19.7	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2268554 2268555

Parameter	Units	30445311013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	77.1	20	20	91.6	93.6	72	82	85-115	2	20	ML

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QUALITY CONTROL DATA

Project: MLF-FALL 2021
Pace Project No.: 30445311

QC Batch: 469869 | Analysis Method: SM 4500NO3-F-2011
QC Batch Method: SM 4500NO3-F-2011 | Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30445311001, 30445311002, 30445311003, 30445311004, 30445311005, 30445311006, 30445311007, 30445311008, 30445311009, 30445311011, 30445311012, 30445311013

METHOD BLANK: 2268565 | Matrix: Water
Associated Lab Samples: 30445311001, 30445311002, 30445311003, 30445311004, 30445311005, 30445311006, 30445311007, 30445311008, 30445311009, 30445311011, 30445311012, 30445311013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	10/27/21 10:07	

METHOD BLANK: 2268840 | Matrix: Water
Associated Lab Samples: 30445311001, 30445311002, 30445311003, 30445311004, 30445311005, 30445311006, 30445311007, 30445311008, 30445311009, 30445311011, 30445311012, 30445311013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	10/27/21 10:10	

LABORATORY CONTROL SAMPLE: 2268566

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	4.1	103	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2268567 2268568

Parameter	Units	30445311001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.91	5	5	5.8	5.8	97	97	85-115	0	20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2021
Pace Project No.: 30445311

QC Batch: 468660
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30445311001, 30445311002, 30445311003, 30445311004, 30445311005, 30445311006, 30445311007, 30445311008, 30445311009, 30445311011, 30445311012, 30445311013

METHOD BLANK: 2262753
Matrix: Water
Associated Lab Samples: 30445311001, 30445311002, 30445311003, 30445311004, 30445311005, 30445311006, 30445311007, 30445311008, 30445311009, 30445311011, 30445311012, 30445311013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	10/18/21 18:01	

LABORATORY CONTROL SAMPLE: 2262754

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	32.1	107	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2262755 2262756

Parameter	Units	30445311001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	60.5	20	20	75.6	76.9	75	82	85-115	2	20	ML

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2262757 2262758

Parameter	Units	30445311012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.5	20	20	32.3	32.7	109	111	85-115	1	20	

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QUALIFIERS

Project: MLF-FALL 2021
Pace Project No.: 30445311

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

1c	TV = 0 mg/L
2c	TV= 0 mg/L
3c	TV= 2 mg/L
4c	TV= 4 mg/L
5c	TV= 8 mg/L
6c	The sample pH is 7.
B	Analyte was detected in the associated method blank.
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-FALL 2021
Pace Project No.: 30445311

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30445311001	**TW-20R**	EPA 8011	468791	EPA 8011	468856
30445311002	**TW-21**	EPA 8011	468791	EPA 8011	468856
30445311003	**TW-22**	EPA 8011	468791	EPA 8011	468856
30445311004	**TW-22A**	EPA 8011	468791	EPA 8011	468856
30445311005	**TW-22B**	EPA 8011	468791	EPA 8011	468856
30445311006	**TW-23R**	EPA 8011	468791	EPA 8011	468856
30445311007	**TW-24**	EPA 8011	468791	EPA 8011	468856
30445311008	**TW-24A**	EPA 8011	468791	EPA 8011	468856
30445311009	**DUP-1**	EPA 8011	468791	EPA 8011	468856
30445311010	**TRIP BLANK**	EPA 8011	468791	EPA 8011	468856
30445311011	**SW-1**	EPA 8011	468791	EPA 8011	468856
30445311012	**SW-2**	EPA 8011	468791	EPA 8011	468856
30445311013	**SW-3**	EPA 8011	468791	EPA 8011	468856
30445311001	**TW-20R**	EPA 3010A	88027	EPA 6010D	88499
30445311002	**TW-21**	EPA 3010A	88027	EPA 6010D	88499
30445311003	**TW-22**	EPA 3010A	88027	EPA 6010D	88499
30445311004	**TW-22A**	EPA 3010A	88027	EPA 6010D	88499
30445311005	**TW-22B**	EPA 3010A	88027	EPA 6010D	88499
30445311006	**TW-23R**	EPA 3010A	88027	EPA 6010D	88499
30445311007	**TW-24**	EPA 3010A	88027	EPA 6010D	88499
30445311008	**TW-24A**	EPA 3010A	88027	EPA 6010D	88499
30445311009	**DUP-1**	EPA 3010A	88027	EPA 6010D	88499
30445311011	**SW-1**	EPA 3010A	88027	EPA 6010D	88499
30445311012	**SW-2**	EPA 3010A	88027	EPA 6010D	88499
30445311013	**SW-3**	EPA 3010A	88027	EPA 6010D	88499
30445311001	**TW-20R**	EPA 3010A	88235	EPA 6010D	88573
30445311002	**TW-21**	EPA 3010A	88235	EPA 6010D	88573
30445311003	**TW-22**	EPA 3010A	88235	EPA 6010D	88573
30445311004	**TW-22A**	EPA 3010A	88235	EPA 6010D	88573
30445311005	**TW-22B**	EPA 3010A	88235	EPA 6010D	88573
30445311006	**TW-23R**	EPA 3010A	88462	EPA 6010D	88621
30445311007	**TW-24**	EPA 3010A	88462	EPA 6010D	88621
30445311008	**TW-24A**	EPA 3010A	88462	EPA 6010D	88621
30445311009	**DUP-1**	EPA 3010A	88462	EPA 6010D	88621
30445311001	**TW-20R**	EPA 3020A	87872	EPA 6020B	87922
30445311002	**TW-21**	EPA 3020A	87872	EPA 6020B	87922
30445311003	**TW-22**	EPA 3020A	87872	EPA 6020B	87922
30445311004	**TW-22A**	EPA 3020A	87872	EPA 6020B	87922
30445311005	**TW-22B**	EPA 3020A	87872	EPA 6020B	87922
30445311006	**TW-23R**	EPA 3020A	87872	EPA 6020B	87922
30445311007	**TW-24**	EPA 3020A	87872	EPA 6020B	87922
30445311008	**TW-24A**	EPA 3020A	87872	EPA 6020B	87922
30445311009	**DUP-1**	EPA 3020A	87872	EPA 6020B	87922
30445311011	**SW-1**	EPA 3020A	87872	EPA 6020B	87922
30445311012	**SW-2**	EPA 3020A	87872	EPA 6020B	87922
30445311013	**SW-3**	EPA 3020A	87872	EPA 6020B	87922

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-FALL 2021
Pace Project No.: 30445311

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30445311001	**TW-20R**	EPA 7470A	468712	EPA 7470A	468853
30445311002	**TW-21**	EPA 7470A	468712	EPA 7470A	468853
30445311003	**TW-22**	EPA 7470A	468712	EPA 7470A	468853
30445311004	**TW-22A**	EPA 7470A	468712	EPA 7470A	468853
30445311005	**TW-22B**	EPA 7470A	468712	EPA 7470A	468853
30445311006	**TW-23R**	EPA 7470A	468712	EPA 7470A	468853
30445311007	**TW-24**	EPA 7470A	468712	EPA 7470A	468853
30445311008	**TW-24A**	EPA 7470A	468712	EPA 7470A	468853
30445311009	**DUP-1**	EPA 7470A	468712	EPA 7470A	468853
30445311011	**SW-1**	EPA 7470A	468712	EPA 7470A	468853
30445311012	**SW-2**	EPA 7470A	468712	EPA 7470A	468853
30445311013	**SW-3**	EPA 7470A	468712	EPA 7470A	468853
30445311001	**TW-20R**	SM 2320B-2011	468940		
30445311002	**TW-21**	SM 2320B-2011	468940		
30445311003	**TW-22**	SM 2320B-2011	468940		
30445311004	**TW-22A**	SM 2320B-2011	468940		
30445311005	**TW-22B**	SM 2320B-2011	468940		
30445311006	**TW-23R**	SM 2320B-2011	469120		
30445311007	**TW-24**	SM 2320B-2011	468940		
30445311008	**TW-24A**	SM 2320B-2011	468940		
30445311009	**DUP-1**	SM 2320B-2011	468940		
30445311011	**SW-1**	SM 2320B-2011	468940		
30445311012	**SW-2**	SM 2320B-2011	468940		
30445311013	**SW-3**	SM 2320B-2011	468940		
30445311001	**TW-20R**	SM 2540C-2011	468385		
30445311002	**TW-21**	SM 2540C-2011	468385		
30445311003	**TW-22**	SM 2540C-2011	468385		
30445311004	**TW-22A**	SM 2540C-2011	468385		
30445311005	**TW-22B**	SM 2540C-2011	468385		
30445311006	**TW-23R**	SM 2540C-2011	468385		
30445311007	**TW-24**	SM 2540C-2011	468385		
30445311008	**TW-24A**	SM 2540C-2011	468385		
30445311009	**DUP-1**	SM 2540C-2011	468385		
30445311011	**SW-1**	SM 2540C-2011	468385		
30445311012	**SW-2**	SM 2540C-2011	468385		
30445311013	**SW-3**	SM 2540C-2011	468385		
30445311001	**TW-20R**	EPA 350.1	469599	EPA 350.1	469606
30445311002	**TW-21**	EPA 350.1	469599	EPA 350.1	469606
30445311003	**TW-22**	EPA 350.1	469599	EPA 350.1	469606
30445311004	**TW-22A**	EPA 350.1	469599	EPA 350.1	469606
30445311005	**TW-22B**	EPA 350.1	469599	EPA 350.1	469606
30445311006	**TW-23R**	EPA 350.1	469599	EPA 350.1	469606
30445311007	**TW-24**	EPA 350.1	469599	EPA 350.1	469606
30445311008	**TW-24A**	EPA 350.1	469599	EPA 350.1	469606
30445311009	**DUP-1**	EPA 350.1	469599	EPA 350.1	469606
30445311011	**SW-1**	EPA 350.1	469599	EPA 350.1	469606

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-FALL 2021
Pace Project No.: 30445311

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30445311012	**SW-2**	EPA 350.1	469599	EPA 350.1	469606
30445311013	**SW-3**	EPA 350.1	469599	EPA 350.1	469606
30445311001	**TW-20R**	EPA 410.4	468548	EPA 410.4	468688
30445311002	**TW-21**	EPA 410.4	468548	EPA 410.4	468688
30445311003	**TW-22**	EPA 410.4	468548	EPA 410.4	468688
30445311004	**TW-22A**	EPA 410.4	468548	EPA 410.4	468688
30445311005	**TW-22B**	EPA 410.4	468548	EPA 410.4	468688
30445311006	**TW-23R**	EPA 410.4	468548	EPA 410.4	468688
30445311007	**TW-24**	EPA 410.4	468548	EPA 410.4	468688
30445311008	**TW-24A**	EPA 410.4	468548	EPA 410.4	468688
30445311009	**DUP-1**	EPA 410.4	468548	EPA 410.4	468688
30445311011	**SW-1**	EPA 410.4	468548	EPA 410.4	468688
30445311012	**SW-2**	EPA 410.4	468548	EPA 410.4	468688
30445311013	**SW-3**	EPA 410.4	468548	EPA 410.4	468688
30445311001	**TW-20R**	SM 4500-Cl-E-2011	469864		
30445311002	**TW-21**	SM 4500-Cl-E-2011	469864		
30445311003	**TW-22**	SM 4500-Cl-E-2011	469864		
30445311004	**TW-22A**	SM 4500-Cl-E-2011	469864		
30445311005	**TW-22B**	SM 4500-Cl-E-2011	469864		
30445311006	**TW-23R**	SM 4500-Cl-E-2011	469864		
30445311007	**TW-24**	SM 4500-Cl-E-2011	469864		
30445311008	**TW-24A**	SM 4500-Cl-E-2011	469864		
30445311009	**DUP-1**	SM 4500-Cl-E-2011	469864		
30445311011	**SW-1**	SM 4500-Cl-E-2011	469864		
30445311012	**SW-2**	SM 4500-Cl-E-2011	469864		
30445311013	**SW-3**	SM 4500-Cl-E-2011	469866		
30445311001	**TW-20R**	SM 4500NO3-F-2011	469869		
30445311002	**TW-21**	SM 4500NO3-F-2011	469869		
30445311003	**TW-22**	SM 4500NO3-F-2011	469869		
30445311004	**TW-22A**	SM 4500NO3-F-2011	469869		
30445311005	**TW-22B**	SM 4500NO3-F-2011	469869		
30445311006	**TW-23R**	SM 4500NO3-F-2011	469869		
30445311007	**TW-24**	SM 4500NO3-F-2011	469869		
30445311008	**TW-24A**	SM 4500NO3-F-2011	469869		
30445311009	**DUP-1**	SM 4500NO3-F-2011	469869		
30445311011	**SW-1**	SM 4500NO3-F-2011	469869		
30445311012	**SW-2**	SM 4500NO3-F-2011	469869		
30445311013	**SW-3**	SM 4500NO3-F-2011	469869		
30445311001	**TW-20R**	EPA 9038	468660		
30445311002	**TW-21**	EPA 9038	468660		
30445311003	**TW-22**	EPA 9038	468660		
30445311004	**TW-22A**	EPA 9038	468660		
30445311005	**TW-22B**	EPA 9038	468660		
30445311006	**TW-23R**	EPA 9038	468660		
30445311007	**TW-24**	EPA 9038	468660		
30445311008	**TW-24A**	EPA 9038	468660		

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-FALL 2021
Pace Project No.: 30445311

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30445311009	**DUP-1**	EPA 9038	468660		
30445311011	**SW-1**	EPA 9038	468660		
30445311012	**SW-2**	EPA 9038	468660		
30445311013	**SW-3**	EPA 9038	468660		

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF- FALL 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals ①	Total + Diss. Metals ②	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO_4, COD	Methane 8011 - EDB + DBCP				
TW-20R	7	10.12.21	1350	✓		GW	✓	✓	✓	✓	✓	✓	✓	✓				001
TW-21		10-12-21	1450															002
TW-22		10-13-21	1035															003
TW-22A			1110															004
TW-22B			1000															005
TW-23R		10-12-21	1530															006
TW-24		10-13-21	1300															007
TW-24A			1335			✓												008
Dup-1			—	✓		QA	✓	✓	✓	✓	✓	✓	✓					009
TRIP BLANK	2	✓	—	—		QA								✓				010

	Signature	Date	Time
Relinquished by	[signature]	10.13.21	14:30
Received by	[signature] PACE	10.13.21	14:30
Relinquished by	[signature] PACE	10/13/21	18:00
Received by	RDS PACE	10-13-21	1815
Relinquished by	RDS PACE	10-13-21	2215
Received by	[signature]	10/13/21	2215

Comments

① Sb, Ba, As, Be, Cd, Cr, Co, Cu, Hg, Pb, Ni, Se, Ag, Tl, V Zn
② Ca, Fe, Mg, Mn, K, Na
PACE - WV - METALS
PACE - G-BULK - WET CHEM
LEVEL 2 REPORT

Cooler Temp on Arrival: _____ Deg. C

⊗ SEE ATTACHED SHEET FOR METALS METHODS

Rev. Aug. 2018

WO#: 30445311

30445311

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - FALL 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	TOTAL METALS (1)	ALKALINITY, TDS	HARDNESS, Cl	AMMONIA	NITRATE	SO4, COD		METHOD 8011	EDB + DBCP				
1	SW-1	6	10.13.21	700	✓		SW	✓	✓	✓	✓	✓	✓		✓					C11
2	SW-2	↓	↓	730	✓		↓	↓	↓	↓	↓	↓	↓		✓					C12
3	SW-3	↓	↓	800	✓		↓	↓	↓	↓	↓	↓	↓		✓					C13
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

WO#: 30445311
PM: AES Due Date: 10/28/21
CLIENT: ENV MONITOR

	Signature	Date	Time	Comments
Relinquished by	D A Brown	10.13.21	14:30	(1) Sb, As, Ba, Be, Cd, CR, Co, Cu, Hg, Pb, Ni, Se, Ag, Tl,
Received by	RSB / PACE	10.13.21	14:30	V, Zn, Ca, Fe, Mg, Mn, K, Na
Relinquished by	RSB / PACE	10/13/21	18:00	
Received by	RDS PACE	10-13-21	18:15	PACE - WV. - METALS
Relinquished by	RDS PACE	10-13-21	2215	PACE - G - BUNG - WET CHEM
Received by	[illegible]	10/13/21	2215	LEVEL 2 REPORT

Cooler Temp on Arrival: _____ Deg. C

(1) SEE ATTACHED LIST FOR METALS METHODS

Rev. Aug. 2018

Millersville Landfill		
	Pace, Beaver, WV	
	Method 6020 - ICPMS	
Parameter	RL	MDL
	(mg/l)	
TOTAL METALS		
Antimony	0.0005	
Arsenic	0.0025	0.0002473
Barium	0.0025	
Beryllium	0.0005	
Cadmium	0.0005	
Chromium	0.0025	
Cobalt	0.0025	
Copper	0.0025	
Lead	0.0005	
Nickel	0.0025	
Selenium	0.0025	
Silver	0.0025	
Thallium	0.0005	
Vanadium	0.0025	
Zinc	0.005	
	Pace, Beaver, WV	
TOTAL AND DISSOLVED METALS	Method 6010 - ICP	
Calcium	0.5	0.028
Iron	0.05	0.0076
Magnesium	0.5	0.047
Manganese	0.005	0.00043
Potassium	0.5	0.19
Sodium	0.5	0.148
	Pace, Beaver, WV	
	Method 7470A	
Mercury	0.0005	0.00025
GENERAL CHEMISTRY	Pace - Greensburg, PA	
Alkalinity - SM 2320B	10	1
Ammonia - EPA 350.1	0.1	0.0445
COD - EPA 410.4	25	4.6532
Chloride - EPA 300.0	3	0.06683
Hardness - 2340B		
Nitrate - EPA 300.0	0.1	0.0238
Sulfate - EPA 300.0	10	4.6702
Total dissolved solids - SM2540C	10	10

WO#: 30445311

PM: AES Due Date: 10/28/21

CLIENT: ENV MONITOR

Pace Analytical®

Pace Greensburg Lab -Sample Container Count

Client: EMC

Site: Millersville Cemetery

Profile Number: 8469

Notes:

WO#: 30445311
PM: AES Due Date: 10/28/21
CLIENT: ENV MONITOR

Sample Line Item	Matrix	AG1H	AG1S	AG1T	AG2U	AG3S	AG3U	AG5U	AG5T	BG1U	BG2U	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	GCUB	VG9H	VG9T	VG9U	VOAK	WGFU	WGKU	ZPLC	
1	WT												1	1			3						3						
2																													
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																							2						
11	WT												1	1			1						3						
12	WT												1	1			1						3						

Container Codes

Glass

GJN	1 Gallon Jug with HNO3	DG9S	40mL amber VOA vial H2SO4
AG5U	100mL amber glass unprserved	VG9U	40mL clear VOA vial
AG5T	100mL amber glass Na Thiosulfate	VG9T	40mL clear VOA vial Na Thiosul
GJN	1 Gallon Jug	VG9H	40mL clear VOA vial HCl
AG1S	1L amber glass H2SO4	JGFU	4oz amber wide jar
AG1H	1L amber glass HCl	WGFU	4oz wide jar unpreserved
AG1T	1L amber glass Na Thiosulfate	BG2U	500mL clear glass unpreserved
BG1U	1L clear glass unpreserved	AG2U	500mL amber glass unpreserve
AG3S	250mL amber glass H2SO4	WGKU	8oz wide jar unpreserved
AG3U	250mL amber glass unpreserved		

Plastic / Misc.

GCUB	1 Gallon Cubitainer
12GN	1/2 Gallon Cubitainer
SP5T	120mL Coliform Na Thiosulfate
BP1N	1L plastic HNO3
BP1U	1L plastic unpreserved
BP3S	250mL plastic H2SO4
BP3N	250mL plastic HNO3
BP3U	250mL plastic unpreserved
BP3C	250ml plastic NAOH
BP2S	500mL plastic H2SO4
BP2U	500mL plastic unpreserved

EZI	5g Encore
VOAK	Kit for Volatile Solid
I	Wipe/Swab
ZPLC	Ziploc Bag

WT	Water
SL	Solid
OL	Non-aqueous liquid
WP	Wipe

Pace Analytical®

Pace Greensburg Lab -Sample Container Count

Client _____

Site _____

Profile Number _____

Notes _____

Sample Line Item	Matrix	AG1H	AG1S	AG1T	AG2U	AG3S	AG3U	AG5U	AG5T	BG1U	BG2U	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	GCUB	VG9H	VG9T	VG9U	VOAK	WGFU	WGKU	ZPLC	
1D	WT												1	1			1						W						
2																													
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

WO#: 30445311
PM: AES Due Date: 10/28/21
CLIENT: ENV MONITOR

Container Codes

Glass

GJN	1 Gallon Jug with HNO3	DG9S	40mL amber VOA vial H2SO4
AG5U	100mL amber glass unprserved	VG9U	40mL clear VOA vial
AG5T	100mL amber glass Na Thiosulfate	VG9T	40mL clear VOA vial Na Thiosul
GJN	1 Gallon Jug	VG9H	40mL clear VOA vial HCl
AG1S	1L amber glass H2SO4	JGFU	4oz amber wide jar
AG1H	1L amber glass HCl	WGFU	4oz wide jar unpreserved
AG1T	1L amber glass Na Thiosulfate	BG2U	500mL clear glass unpreserved
BG1U	1L clear glass unpreserved	AG2U	500mL amber glass unpreserve
AG3S	250mL amber glass H2SO4	WGKU	8oz wide jar unpreserved
AG3U	250mL amber glass unpreserved		

Plastic / Misc.

GCUB	1 Gallon Cubitainer
12GN	1/2 Gallon Cubitainer
SP5T	120mL Coliform Na Thiosulfate
BP1N	1L plastic HNO3
BP1U	1L plastic unpreserved
BP3S	250mL plastic H2SO4
BP3N	250mL plastic HNO3
BP3U	250mL plastic unpreserved
BP3C	250ml plastic NAOH
BP2S	500mL plastic H2SO4
BP2U	500mL plastic unpreserved

EZI	5g Encore
VOAK	Kit for Volatile Solid
I	Wipe/Swab
ZPLC	Ziploc Bag

WT	Water
SL	Solid
OL	Non-aqueous liquid
WP	Wipe

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EMA Project #

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other

Label AL
LIMS Login ~~BR~~ 05
AL 10/14/21

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Thermometer Used 11 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 3.8 °C Correction Factor: -0.3 °C Final Temp: 3.5 °C

Temp should be above freezing to 6°C

WO#: 30445311
PM: AES Due Date: 10/28/21
CLIENT: ENV MONITOR

Comments:	Yes	No	N/A	pH paper Lot# 1000411	Date and Initials of person examining contents: AL 10/14/21
Chain of Custody Present:	X			1.	
Chain of Custody Filled Out:		X		2. no preservatives listed	
Chain of Custody Relinquished:	X			3.	
Sampler Name & Signature on COC:		X		4.	
Sample Labels match COC: -Includes date/time/ID Matrix: WT	X			5.	
Samples Arrived within Hold Time:	X			6.	
Short Hold Time Analysis (<72hr remaining):	X			7.	
Rush Turn Around Time Requested:		X		8.	
Sufficient Volume:	X			9.	
Correct Containers Used: -Pace Containers Used:	X X			10.	
Containers Intact:	X			11.	
Orthophosphate field filtered			X	12.	
Hex Cr Aqueous sample field filtered			X	13.	
Organic Samples checked for dechlorination:			X	14.	
Filtered volume received for Dissolved tests			X	15.	
All containers have been checked for preservation. exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix		X		16.	
All containers meet method preservation requirements.	X			Initial when completed AL	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		X		17.	
Trip Blank Present:	X			18.	
Trip Blank Custody Seals Present	X				
Rad Samples Screened < 0.5 mrem/hr			X	Initial when completed:	Date: / Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

December 10, 2021

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on October 14, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - WestVirginia
- Pace Analytical Services - Greensburg

(Greensburg, PA) - Revision 1 - This report replaces the November, 11, 2021 report. This project was revised on Decemeber, 10, 2021 to update the metals reporting list.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alexis E. Ozoroski
alexis.ozoroski@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver
225 Industrial Park Drive, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30445538001	**TW-25**	Water	10/13/21 15:35	10/14/21 22:15
30445538002	**TW-25A**	Water	10/13/21 16:10	10/14/21 22:15
30445538003	**TW-27**	Water	10/14/21 09:15	10/14/21 22:15
30445538004	**TW-28**	Water	10/14/21 10:15	10/14/21 22:15
30445538005	**TW-29**	Water	10/14/21 11:15	10/14/21 22:15
30445538006	**TW-30**	Water	10/14/21 12:20	10/14/21 22:15
30445538007	**DUP-2**	Water	10/14/21 00:01	10/14/21 22:15
30445538008	**TRIP BLANK**	Water	10/14/21 00:01	10/14/21 22:15

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30445538001	**TW-25**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	MEH	7	PASI-BVWV
		EPA 6010D	MEH	6	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	AK1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	DRK	1	PASI-PA
30445538002	**TW-25A**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	MEH	7	PASI-BVWV
		EPA 6010D	MEH	6	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	AK1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	DRK	1	PASI-PA
30445538003	**TW-27**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	MEH	7	PASI-BVWV
		EPA 6010D	MEH	6	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	AK1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	DRK	1	PASI-PA
30445538004	**TW-28**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	MEH	7	PASI-BVWV
		EPA 6010D	MEH	6	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	AK1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	DRK	1	PASI-PA
30445538005	**TW-29**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	MEH	7	PASI-BVWV
		EPA 6010D	MEH	6	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	AK1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	DRK	1	PASI-PA
30445538006	**TW-30**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	MEH	7	PASI-BVWV
		EPA 6010D	MEH	6	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	AK1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	DRK	1	PASI-PA
30445538007	**DUP-2**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	MEH	7	PASI-BVWV
		EPA 6010D	MEH	6	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	AK1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	DRK	1	PASI-PA
		SM 4500NO2-B-2011	DRK	1	PASI-PA
30445538008	**TRIP BLANK**	EPA 8011	TAW	3	PASI-PA

PASI-BVWV = Pace Analytical Services - WestVirginia
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Date: December 10, 2021

TW-25 (Lab ID: 30445538001)

- 8011 sample pH is 7

TW-25A (Lab ID: 30445538002)

- 8011 sample pH is 7

TW-27 (Lab ID: 30445538003)

- 8011 sample pH is 7

TW-29 (Lab ID: 30445538005)

- 8011 sample pH is 7

TW-30 (Lab ID: 30445538006)

- 8011 sample pH is 7

DUP-2 (Lab ID: 30445538007)

- 8011 sample pH is 7

TRIP BLANK (Lab ID: 30445538008)

- 8011 sample pH is 7

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PROJECT NARRATIVE

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
8 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 468792

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- BLANK (Lab ID: 2263517)
  - 1,1,1,2-Tetrachloroethane (S)
- DUP-2 (Lab ID: 30445538007)
  - 1,1,1,2-Tetrachloroethane (S)
- LCS (Lab ID: 2263518)
  - 1,1,1,2-Tetrachloroethane (S)
- TRIP BLANK (Lab ID: 30445538008)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-25 (Lab ID: 30445538001)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-25A (Lab ID: 30445538002)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-27 (Lab ID: 30445538003)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-28 (Lab ID: 30445538004)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-29 (Lab ID: 30445538005)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-30 (Lab ID: 30445538006)
  - 1,1,1,2-Tetrachloroethane (S)

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

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PROJECT NARRATIVE

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Method: **EPA 6010D**
Description: 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
7 samples were analyzed for EPA 6010D by Pace Analytical Services WestVirginia. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 89406

B: Analyte was detected in the associated method blank.

- BLANK for HBN 89406 [MPRP/8626 (Lab ID: 440065)
  - Iron

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 88787

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30439085001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 436463)
  - Iron
  - Magnesium
  - Manganese
  - Potassium
- MSD (Lab ID: 436464)
  - Magnesium
  - Manganese

R1: RPD value was outside control limits.

- MSD (Lab ID: 436464)

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PROJECT NARRATIVE

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Method: **EPA 6010D**
Description: 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

QC Batch: 88787

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30439085001

R1: RPD value was outside control limits.

- Iron
- Magnesium
- Manganese
- Potassium

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Method: **EPA 6010D**
Description: 6010D ICP, Dissolved, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
7 samples were analyzed for EPA 6010D by Pace Analytical Services WestVirginia. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Method: **EPA 6020B**
Description: 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
7 samples were analyzed for EPA 6020B by Pace Analytical Services WestVirginia. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 87872

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30445311001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 431973)
  - Antimony
  - Barium
  - Copper
  - Lead
  - Nickel
  - Zinc

R1: RPD value was outside control limits.

- MSD (Lab ID: 431974)
  - Lead
  - Zinc

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PROJECT NARRATIVE

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Method: **EPA 6020B**
Description: 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
7 samples were analyzed for EPA 7470A by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
7 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 469369

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30445538001

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2266462)
  - Alkalinity,Total (CaCO3 pH4.5)
- MSD (Lab ID: 2266463)
  - Alkalinity,Total (CaCO3 pH4.5)

Additional Comments:

Analyte Comments:

QC Batch: 469369

1c: TV= 0 mg/L
- DUP-2 (Lab ID: 30445538007)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-25 (Lab ID: 30445538001)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-29 (Lab ID: 30445538005)
  - Alkalinity,Total (CaCO3 pH4.5)

2c: TV= 1 mg/L
- TW-28 (Lab ID: 30445538004)
  - Alkalinity,Total (CaCO3 pH4.5)

3c: TV= 2 mg/L
- TW-30 (Lab ID: 30445538006)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Method: **SM 2540C-2011**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
7 samples were analyzed for SM 2540C-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
7 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
7 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
7 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 469866

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30445311013

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2268554)
  - Chloride
- MSD (Lab ID: 2268555)
  - Chloride

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Method: **SM 4500NO3-F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
7 samples were analyzed for SM 4500NO3-F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
7 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 468660

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30445311001,30445311012

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2262755)
  - Sulfate
- MSD (Lab ID: 2262756)
  - Sulfate

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
7 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Sample: TW-25 **Lab ID: 30445538001** Collected: 10/13/21 15:35 Received: 10/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/19/21 14:53	10/20/21 05:03	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/19/21 14:53	10/20/21 05:03	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	101	%.	60-140		1	10/19/21 14:53	10/20/21 05:03	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**1.7**	mg/L	0.50	0.029	1	11/03/21 14:43	11/04/21 14:44	7440-70-2	
Iron	**0.025J**	mg/L	0.050	0.0076	1	11/03/21 14:43	11/04/21 14:44	7439-89-6	B
Magnesium	**0.88**	mg/L	0.50	0.047	1	11/03/21 14:43	11/04/21 14:44	7439-95-4	
Manganese	**0.017**	mg/L	0.0050	0.00044	1	11/03/21 14:43	11/04/21 14:44	7439-96-5	
Potassium	**0.59**	mg/L	0.50	0.19	1	11/03/21 14:43	11/04/21 14:44	7440-09-7	
Sodium	**2.8**	mg/L	0.50	0.15	1	11/03/21 14:43	11/04/21 14:44	7440-23-5	
Total Hardness by 2340B	**7.9**	mg/L	3.3	0.27	1	11/03/21 14:43	11/04/21 14:44		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**1.8**	mg/L	0.50	0.029	1	11/03/21 12:50	11/04/21 12:43	7440-70-2	
Iron, Dissolved	**0.020J**	mg/L	0.050	0.0076	1	11/03/21 12:50	11/04/21 12:43	7439-89-6	
Magnesium, Dissolved	**0.91**	mg/L	0.50	0.047	1	11/03/21 12:50	11/04/21 12:43	7439-95-4	
Manganese, Dissolved	**0.018**	mg/L	0.0050	0.00044	1	11/03/21 12:50	11/04/21 12:43	7439-96-5	
Potassium, Dissolved	**605**	ug/L	500	190	1	11/03/21 12:50	11/04/21 12:43	7440-09-7	
Sodium, Dissolved	**2.8**	mg/L	0.50	0.15	1	11/03/21 12:50	11/04/21 12:43	7440-23-5	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - WestVirginia								
Antimony	**0.000070J**	mg/L	0.00050	0.000045	1	10/21/21 10:46	10/21/21 14:50	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:50	7440-38-2	
Barium	**0.023**	mg/L	0.0025	0.00011	1	10/21/21 10:46	10/21/21 14:50	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	10/21/21 10:46	10/21/21 14:50	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/21/21 10:46	10/21/21 14:50	7440-43-9	
Chromium	**0.0044**	mg/L	0.0025	0.00086	1	10/21/21 10:46	10/21/21 14:50	7440-47-3	
Cobalt	**0.0074**	mg/L	0.0025	0.00015	1	10/21/21 10:46	10/21/21 14:50	7440-48-4	
Copper	**0.0085**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:50	7440-50-8	
Lead	**0.00011J**	mg/L	0.00050	0.000030	1	10/21/21 10:46	10/21/21 14:50	7439-92-1	
Nickel	**0.0051**	mg/L	0.0025	0.00065	1	10/21/21 10:46	10/21/21 14:50	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/21/21 10:46	10/21/21 14:50	7782-49-2	
Silver	**0.00027J**	mg/L	0.0025	0.00016	1	10/21/21 10:46	10/21/21 14:50	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000024	1	10/21/21 10:46	10/21/21 14:50	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/21/21 10:46	10/21/21 14:50	7440-62-2	
Zinc	**0.0061**	mg/L	0.0050	0.0017	1	10/21/21 10:46	10/21/21 14:50	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
	Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/19/21 12:17	10/20/21 09:43	7439-97-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Sample: TW-25 **Lab ID: 30445538001** Collected: 10/13/21 15:35 Received: 10/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		10/21/21 20:39		1c,MH
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		10/20/21 15:00		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/25/21 08:01	10/25/21 12:07		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/20/21 14:02	10/20/21 17:43		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**6.2**	mg/L	3.0	0.67	1		10/26/21 17:55	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.28**	mg/L	0.10	0.053	1		10/27/21 13:31	14797-55-8	
Nitrogen, NO2 plus NO3	**0.28**	mg/L	0.10	0.053	1		10/27/21 13:31		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/18/21 18:28	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/15/21 14:34	14797-65-0	

Sample: TW-25A **Lab ID: 30445538002** Collected: 10/13/21 16:10 Received: 10/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.022	1	10/19/21 14:53	10/20/21 05:16	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	10/19/21 14:53	10/20/21 05:16	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	101	%.	60-140		1	10/19/21 14:53	10/20/21 05:16	630-20-6	CH

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ANALYTICAL RESULTS

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Sample: TW-25A **Lab ID: 30445538002** Collected: 10/13/21 16:10 Received: 10/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium	**5.6**	mg/L	0.50	0.029	1	10/28/21 16:49	11/02/21 12:29	7440-70-2	
Iron	**0.076**	mg/L	0.050	0.0076	1	10/28/21 16:49	11/02/21 12:29	7439-89-6	
Magnesium	**2.0**	mg/L	0.50	0.047	1	10/28/21 16:49	11/02/21 12:29	7439-95-4	
Manganese	**0.046**	mg/L	0.0050	0.00044	1	10/28/21 16:49	11/02/21 12:29	7439-96-5	
Potassium	**1.1**	mg/L	0.50	0.19	1	10/28/21 16:49	11/02/21 12:29	7440-09-7	
Sodium	**4.2**	mg/L	0.50	0.15	1	10/28/21 16:49	11/02/21 12:29	7440-23-5	
Total Hardness by 2340B	**22.1**	mg/L	3.3	0.27	1	10/28/21 16:49	11/02/21 12:29		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**5.7**	mg/L	0.50	0.029	1	11/03/21 12:50	11/04/21 12:57	7440-70-2	
Iron, Dissolved	**0.011J**	mg/L	0.050	0.0076	1	11/03/21 12:50	11/04/21 12:57	7439-89-6	
Magnesium, Dissolved	**2.0**	mg/L	0.50	0.047	1	11/03/21 12:50	11/04/21 12:57	7439-95-4	
Manganese, Dissolved	**0.045**	mg/L	0.0050	0.00044	1	11/03/21 12:50	11/04/21 12:57	7439-96-5	
Potassium, Dissolved	**977**	ug/L	500	190	1	11/03/21 12:50	11/04/21 12:57	7440-09-7	
Sodium, Dissolved	**4.1**	mg/L	0.50	0.15	1	11/03/21 12:50	11/04/21 12:57	7440-23-5	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Antimony	**0.000079J**	mg/L	0.00050	0.000045	1	10/21/21 10:46	10/21/21 14:53	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:53	7440-38-2	
Barium	**0.076**	mg/L	0.0025	0.00011	1	10/21/21 10:46	10/21/21 14:53	7440-39-3	
Beryllium	**0.0012**	mg/L	0.00050	0.00015	1	10/21/21 10:46	10/21/21 14:53	7440-41-7	
Cadmium	**0.00010J**	mg/L	0.00050	0.000065	1	10/21/21 10:46	10/21/21 14:53	7440-43-9	
Chromium	**0.0011J**	mg/L	0.0025	0.00086	1	10/21/21 10:46	10/21/21 14:53	7440-47-3	
Cobalt	**0.0085**	mg/L	0.0025	0.00015	1	10/21/21 10:46	10/21/21 14:53	7440-48-4	
Copper	**0.055**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:53	7440-50-8	
Lead	**0.000082J**	mg/L	0.00050	0.000030	1	10/21/21 10:46	10/21/21 14:53	7439-92-1	
Nickel	**0.0080**	mg/L	0.0025	0.00065	1	10/21/21 10:46	10/21/21 14:53	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/21/21 10:46	10/21/21 14:53	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/21/21 10:46	10/21/21 14:53	7440-22-4	
Thallium	**0.00014J**	mg/L	0.00050	0.000024	1	10/21/21 10:46	10/21/21 14:53	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/21/21 10:46	10/21/21 14:53	7440-62-2	
Zinc	**0.012**	mg/L	0.0050	0.0017	1	10/21/21 10:46	10/21/21 14:53	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.000090J**	mg/L	0.00020	0.000030	1	10/19/21 12:17	10/20/21 09:45	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**12.0**	mg/L	10.0	1.0	1		10/21/21 20:50		

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ANALYTICAL RESULTS

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Sample: TW-25A **Lab ID: 30445538002** Collected: 10/13/21 16:10 Received: 10/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**22.0**	mg/L	10.0	10.0	1		10/20/21 15:00		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/25/21 08:01	10/25/21 12:09		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/20/21 14:02	10/20/21 17:43		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**9.4**	mg/L	3.0	0.67	1		10/26/21 17:56	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.82**	mg/L	0.10	0.053	1		10/27/21 13:33	14797-55-8	
Nitrogen, NO2 plus NO3	**0.92**	mg/L	0.10	0.053	1		10/27/21 13:33		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/18/21 18:30	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.10**	mg/L	0.010	0.0055	1		10/15/21 14:36	14797-65-0	

Sample: TW-27 **Lab ID: 30445538003** Collected: 10/14/21 09:15 Received: 10/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/19/21 14:53	10/20/21 05:28	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/19/21 14:53	10/20/21 05:28	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	109	%.	60-140		1	10/19/21 14:53	10/20/21 05:28	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium	**0.81**	mg/L	0.50	0.029	1	10/28/21 16:49	11/02/21 12:31	7440-70-2	
Iron	**0.54**	mg/L	0.050	0.0076	1	10/28/21 16:49	11/02/21 12:31	7439-89-6	

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ANALYTICAL RESULTS

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Sample: TW-27 **Lab ID: 30445538003** Collected: 10/14/21 09:15 Received: 10/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Magnesium	**0.36J**	mg/L	0.50	0.047	1	10/28/21 16:49	11/02/21 12:31	7439-95-4	
Manganese	**0.0067**	mg/L	0.0050	0.00044	1	10/28/21 16:49	11/02/21 12:31	7439-96-5	
Potassium	**0.51**	mg/L	0.50	0.19	1	10/28/21 16:49	11/02/21 12:31	7440-09-7	
Sodium	**2.2**	mg/L	0.50	0.15	1	10/28/21 16:49	11/02/21 12:31	7440-23-5	
Total Hardness by 2340B	**3.5**	mg/L	3.3	0.27	1	10/28/21 16:49	11/02/21 12:31		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**0.84**	mg/L	0.50	0.029	1	11/03/21 12:50	11/04/21 12:59	7440-70-2	
Iron, Dissolved	**0.014J**	mg/L	0.050	0.0076	1	11/03/21 12:50	11/04/21 12:59	7439-89-6	
Magnesium, Dissolved	**0.37J**	mg/L	0.50	0.047	1	11/03/21 12:50	11/04/21 12:59	7439-95-4	
Manganese, Dissolved	**0.0074**	mg/L	0.0050	0.00044	1	11/03/21 12:50	11/04/21 12:59	7439-96-5	
Potassium, Dissolved	**446J**	ug/L	500	190	1	11/03/21 12:50	11/04/21 12:59	7440-09-7	
Sodium, Dissolved	**2.2**	mg/L	0.50	0.15	1	11/03/21 12:50	11/04/21 12:59	7440-23-5	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Antimony	**0.00050 U**	mg/L	0.00050	0.000045	1	10/21/21 10:46	10/21/21 14:55	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:55	7440-38-2	
Barium	**0.0074**	mg/L	0.0025	0.00011	1	10/21/21 10:46	10/21/21 14:55	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	10/21/21 10:46	10/21/21 14:55	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/21/21 10:46	10/21/21 14:55	7440-43-9	
Chromium	**0.0022J**	mg/L	0.0025	0.00086	1	10/21/21 10:46	10/21/21 14:55	7440-47-3	
Cobalt	**0.0011J**	mg/L	0.0025	0.00015	1	10/21/21 10:46	10/21/21 14:55	7440-48-4	
Copper	**0.015**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:55	7440-50-8	
Lead	**0.00011J**	mg/L	0.00050	0.000030	1	10/21/21 10:46	10/21/21 14:55	7439-92-1	
Nickel	**0.0042**	mg/L	0.0025	0.00065	1	10/21/21 10:46	10/21/21 14:55	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/21/21 10:46	10/21/21 14:55	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/21/21 10:46	10/21/21 14:55	7440-22-4	
Thallium	**0.000027J**	mg/L	0.00050	0.000024	1	10/21/21 10:46	10/21/21 14:55	7440-28-0	
Vanadium	**0.00036J**	mg/L	0.0025	0.00021	1	10/21/21 10:46	10/21/21 14:55	7440-62-2	
Zinc	**0.0028J**	mg/L	0.0050	0.0017	1	10/21/21 10:46	10/21/21 14:55	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/19/21 12:17	10/20/21 09:50	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**20.0**	mg/L	10.0	1.0	1		10/21/21 20:50		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		10/20/21 15:00		

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ANALYTICAL RESULTS

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Sample: TW-27 **Lab ID: 30445538003** Collected: 10/14/21 09:15 Received: 10/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/25/21 08:01	10/25/21 12:11		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/20/21 14:02	10/20/21 17:43		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**3.8**	mg/L	3.0	0.67	1		10/26/21 17:56	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.055J**	mg/L	0.10	0.053	1		10/27/21 13:34	14797-55-8	
Nitrogen, NO2 plus NO3	**0.055J**	mg/L	0.10	0.053	1		10/27/21 13:34		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/18/21 18:30	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/15/21 14:37	14797-65-0	

Sample: TW-28 **Lab ID: 30445538004** Collected: 10/14/21 10:15 Received: 10/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.022	1	10/19/21 14:53	10/20/21 05:41	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	10/19/21 14:53	10/20/21 05:41	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	107	%.	60-140		1	10/19/21 14:53	10/20/21 05:41	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium	**5.6**	mg/L	0.50	0.029	1	10/28/21 16:49	11/02/21 12:37	7440-70-2	
Iron	**0.20**	mg/L	0.050	0.0076	1	10/28/21 16:49	11/02/21 12:37	7439-89-6	
Magnesium	**2.8**	mg/L	0.50	0.047	1	10/28/21 16:49	11/02/21 12:37	7439-95-4	
Manganese	**0.026**	mg/L	0.0050	0.00044	1	10/28/21 16:49	11/02/21 12:37	7439-96-5	
Potassium	**1.1**	mg/L	0.50	0.19	1	10/28/21 16:49	11/02/21 12:37	7440-09-7	
Sodium	**24.4**	mg/L	0.50	0.15	1	10/28/21 16:49	11/02/21 12:37	7440-23-5	
Total Hardness by 2340B	**25.4**	mg/L	3.3	0.27	1	10/28/21 16:49	11/02/21 12:37		

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ANALYTICAL RESULTS

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Sample: TW-28 **Lab ID: 30445538004** Collected: 10/14/21 10:15 Received: 10/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**6.2**	mg/L	0.50	0.029	1	11/03/21 12:50	11/04/21 13:01	7440-70-2	
Iron, Dissolved	**0.036J**	mg/L	0.050	0.0076	1	11/03/21 12:50	11/04/21 13:01	7439-89-6	
Magnesium, Dissolved	**3.0**	mg/L	0.50	0.047	1	11/03/21 12:50	11/04/21 13:01	7439-95-4	
Manganese, Dissolved	**0.028**	mg/L	0.0050	0.00044	1	11/03/21 12:50	11/04/21 13:01	7439-96-5	
Potassium, Dissolved	**1120**	ug/L	500	190	1	11/03/21 12:50	11/04/21 13:01	7440-09-7	
Sodium, Dissolved	**26.2**	mg/L	0.50	0.15	1	11/03/21 12:50	11/04/21 13:01	7440-23-5	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Antimony	**0.000063J**	mg/L	0.00050	0.000045	1	10/21/21 10:46	10/21/21 14:58	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:58	7440-38-2	
Barium	**0.066**	mg/L	0.0025	0.00011	1	10/21/21 10:46	10/21/21 14:58	7440-39-3	
Beryllium	**0.00020J**	mg/L	0.00050	0.00015	1	10/21/21 10:46	10/21/21 14:58	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/21/21 10:46	10/21/21 14:58	7440-43-9	
Chromium	**0.0043**	mg/L	0.0025	0.00086	1	10/21/21 10:46	10/21/21 14:58	7440-47-3	
Cobalt	**0.0059**	mg/L	0.0025	0.00015	1	10/21/21 10:46	10/21/21 14:58	7440-48-4	
Copper	**0.0018J**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 14:58	7440-50-8	
Lead	**0.000051J**	mg/L	0.00050	0.000030	1	10/21/21 10:46	10/21/21 14:58	7439-92-1	
Nickel	**0.0097**	mg/L	0.0025	0.00065	1	10/21/21 10:46	10/21/21 14:58	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/21/21 10:46	10/21/21 14:58	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/21/21 10:46	10/21/21 14:58	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000024	1	10/21/21 10:46	10/21/21 14:58	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/21/21 10:46	10/21/21 14:58	7440-62-2	
Zinc	**0.0082**	mg/L	0.0050	0.0017	1	10/21/21 10:46	10/21/21 14:58	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/19/21 12:17	10/20/21 09:51	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**1.0J**	mg/L	10.0	1.0	1		10/21/21 20:49		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**86.0**	mg/L	10.0	10.0	1		10/20/21 15:00		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/25/21 08:01	10/25/21 12:13		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/20/21 14:02	10/20/21 17:43		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Sample: TW-28 **Lab ID: 30445538004** Collected: 10/14/21 10:15 Received: 10/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**51.6**	mg/L	3.0	0.67	1		10/26/21 17:57	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.075J**	mg/L	0.10	0.053	1		10/27/21 13:36	14797-55-8	
Nitrogen, NO2 plus NO3	**0.075J**	mg/L	0.10	0.053	1		10/27/21 13:36		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/18/21 18:32	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/15/21 14:37	14797-65-0	

Sample: TW-29 **Lab ID: 30445538005** Collected: 10/14/21 11:15 Received: 10/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/19/21 14:53	10/20/21 05:54	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/19/21 14:53	10/20/21 05:54	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	100	%.	60-140		1	10/19/21 14:53	10/20/21 05:54	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium	**2.2**	mg/L	0.50	0.029	1	10/28/21 16:49	11/02/21 12:39	7440-70-2	
Iron	**0.015J**	mg/L	0.050	0.0076	1	10/28/21 16:49	11/02/21 12:39	7439-89-6	
Magnesium	**1.2**	mg/L	0.50	0.047	1	10/28/21 16:49	11/02/21 12:39	7439-95-4	
Manganese	**0.0095**	mg/L	0.0050	0.00044	1	10/28/21 16:49	11/02/21 12:39	7439-96-5	
Potassium	**0.79**	mg/L	0.50	0.19	1	10/28/21 16:49	11/02/21 12:39	7440-09-7	
Sodium	**4.5**	mg/L	0.50	0.15	1	10/28/21 16:49	11/02/21 12:39	7440-23-5	
Total Hardness by 2340B	**10.4**	mg/L	3.3	0.27	1	10/28/21 16:49	11/02/21 12:39		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**2.3**	mg/L	0.50	0.029	1	11/03/21 12:50	11/04/21 13:03	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.0076	1	11/03/21 12:50	11/04/21 13:03	7439-89-6	
Magnesium, Dissolved	**1.2**	mg/L	0.50	0.047	1	11/03/21 12:50	11/04/21 13:03	7439-95-4	
Manganese, Dissolved	**0.0089**	mg/L	0.0050	0.00044	1	11/03/21 12:50	11/04/21 13:03	7439-96-5	
Potassium, Dissolved	**743**	ug/L	500	190	1	11/03/21 12:50	11/04/21 13:03	7440-09-7	

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ANALYTICAL RESULTS

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Sample: TW-29 **Lab ID: 30445538005** Collected: 10/14/21 11:15 Received: 10/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Sodium, Dissolved	**4.5**	mg/L	0.50	0.15	1	11/03/21 12:50	11/04/21 13:03	7440-23-5	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Antimony	**0.00050 U**	mg/L	0.00050	0.000045	1	10/21/21 10:46	10/21/21 15:06	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 15:06	7440-38-2	
Barium	**0.031**	mg/L	0.0025	0.00011	1	10/21/21 10:46	10/21/21 15:06	7440-39-3	
Beryllium	**0.00019J**	mg/L	0.00050	0.00015	1	10/21/21 10:46	10/21/21 15:06	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/21/21 10:46	10/21/21 15:06	7440-43-9	
Chromium	**0.0020J**	mg/L	0.0025	0.00086	1	10/21/21 10:46	10/21/21 15:06	7440-47-3	
Cobalt	**0.0020J**	mg/L	0.0025	0.00015	1	10/21/21 10:46	10/21/21 15:06	7440-48-4	
Copper	**0.0016J**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 15:06	7440-50-8	
Lead	**0.000033J**	mg/L	0.00050	0.000030	1	10/21/21 10:46	10/21/21 15:06	7439-92-1	
Nickel	**0.0031**	mg/L	0.0025	0.00065	1	10/21/21 10:46	10/21/21 15:06	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/21/21 10:46	10/21/21 15:06	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/21/21 10:46	10/21/21 15:06	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000024	1	10/21/21 10:46	10/21/21 15:06	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/21/21 10:46	10/21/21 15:06	7440-62-2	
Zinc	**0.0020J**	mg/L	0.0050	0.0017	1	10/21/21 10:46	10/21/21 15:06	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/19/21 12:17	10/20/21 09:53	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		10/21/21 20:49		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		10/20/21 15:00		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/25/21 08:01	10/25/21 12:19		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/20/21 14:02	10/20/21 17:44		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**9.1**	mg/L	3.0	0.67	1		10/26/21 17:58	16887-00-6	

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ANALYTICAL RESULTS

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Sample: TW-29 **Lab ID: 30445538005** Collected: 10/14/21 11:15 Received: 10/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.66**	mg/L	0.10	0.053	1		10/27/21 13:37	14797-55-8	
Nitrogen, NO2 plus NO3	**0.66**	mg/L	0.10	0.053	1		10/27/21 13:37		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/18/21 18:33	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/15/21 14:39	14797-65-0	

Sample: TW-30 **Lab ID: 30445538006** Collected: 10/14/21 12:20 Received: 10/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/19/21 14:53	10/20/21 06:07	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/19/21 14:53	10/20/21 06:07	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	105	%.	60-140		1	10/19/21 14:53	10/20/21 06:07	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium	**4.6**	mg/L	0.50	0.029	1	10/28/21 16:49	11/02/21 12:41	7440-70-2	
Iron	**0.012J**	mg/L	0.050	0.0076	1	10/28/21 16:49	11/02/21 12:41	7439-89-6	
Magnesium	**1.8**	mg/L	0.50	0.047	1	10/28/21 16:49	11/02/21 12:41	7439-95-4	
Manganese	**0.011**	mg/L	0.0050	0.00044	1	10/28/21 16:49	11/02/21 12:41	7439-96-5	
Potassium	**1.5**	mg/L	0.50	0.19	1	10/28/21 16:49	11/02/21 12:41	7440-09-7	
Sodium	**11.8**	mg/L	0.50	0.15	1	10/28/21 16:49	11/02/21 12:41	7440-23-5	
Total Hardness by 2340B	**18.9**	mg/L	3.3	0.27	1	10/28/21 16:49	11/02/21 12:41		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**4.7**	mg/L	0.50	0.029	1	11/03/21 12:50	11/04/21 13:05	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.0076	1	11/03/21 12:50	11/04/21 13:05	7439-89-6	
Magnesium, Dissolved	**1.8**	mg/L	0.50	0.047	1	11/03/21 12:50	11/04/21 13:05	7439-95-4	
Manganese, Dissolved	**0.011**	mg/L	0.0050	0.00044	1	11/03/21 12:50	11/04/21 13:05	7439-96-5	
Potassium, Dissolved	**1410**	ug/L	500	190	1	11/03/21 12:50	11/04/21 13:05	7440-09-7	
Sodium, Dissolved	**11.5**	mg/L	0.50	0.15	1	11/03/21 12:50	11/04/21 13:05	7440-23-5	

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ANALYTICAL RESULTS

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Sample: TW-30 **Lab ID: 30445538006** Collected: 10/14/21 12:20 Received: 10/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Antimony	**0.00050 U**	mg/L	0.00050	0.000045	1	10/21/21 10:46	10/21/21 15:09	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 15:09	7440-38-2	
Barium	**0.036**	mg/L	0.0025	0.00011	1	10/21/21 10:46	10/21/21 15:09	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	10/21/21 10:46	10/21/21 15:09	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/21/21 10:46	10/21/21 15:09	7440-43-9	
Chromium	**0.0019J**	mg/L	0.0025	0.00086	1	10/21/21 10:46	10/21/21 15:09	7440-47-3	
Cobalt	**0.0025J**	mg/L	0.0025	0.00015	1	10/21/21 10:46	10/21/21 15:09	7440-48-4	
Copper	**0.0015J**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 15:09	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.000030	1	10/21/21 10:46	10/21/21 15:09	7439-92-1	
Nickel	**0.0043**	mg/L	0.0025	0.00065	1	10/21/21 10:46	10/21/21 15:09	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/21/21 10:46	10/21/21 15:09	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/21/21 10:46	10/21/21 15:09	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000024	1	10/21/21 10:46	10/21/21 15:09	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/21/21 10:46	10/21/21 15:09	7440-62-2	
Zinc	**0.0036J**	mg/L	0.0050	0.0017	1	10/21/21 10:46	10/21/21 15:09	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/19/21 12:17	10/20/21 09:55	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		10/21/21 20:49		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**56.0**	mg/L	10.0	10.0	1		10/20/21 15:00		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.047J**	mg/L	0.10	0.044	1	10/27/21 06:33	10/27/21 08:26		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/20/21 14:02	10/20/21 17:44		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**22.1**	mg/L	3.0	0.67	1		10/26/21 17:59	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**2.3**	mg/L	0.10	0.053	1		10/27/21 13:38	14797-55-8	
Nitrogen, NO2 plus NO3	**2.3**	mg/L	0.10	0.053	1		10/27/21 13:38		

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ANALYTICAL RESULTS

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Sample: TW-30 **Lab ID: 30445538006** Collected: 10/14/21 12:20 Received: 10/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/18/21 18:35	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/15/21 14:40	14797-65-0	

Sample: DUP-2 **Lab ID: 30445538007** Collected: 10/14/21 00:01 Received: 10/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/19/21 14:53	10/20/21 06:19	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/19/21 14:53	10/20/21 06:19	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	92	%.	60-140		1	10/19/21 14:53	10/20/21 06:19	630-20-6	CH
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium	**4.7**	mg/L	0.50	0.029	1	10/28/21 16:49	11/02/21 12:43	7440-70-2	
Iron	**0.015J**	mg/L	0.050	0.0076	1	10/28/21 16:49	11/02/21 12:43	7439-89-6	
Magnesium	**1.8**	mg/L	0.50	0.047	1	10/28/21 16:49	11/02/21 12:43	7439-95-4	
Manganese	**0.012**	mg/L	0.0050	0.00044	1	10/28/21 16:49	11/02/21 12:43	7439-96-5	
Potassium	**1.5**	mg/L	0.50	0.19	1	10/28/21 16:49	11/02/21 12:43	7440-09-7	
Sodium	**12.1**	mg/L	0.50	0.15	1	10/28/21 16:49	11/02/21 12:43	7440-23-5	
Total Hardness by 2340B	**19.3**	mg/L	3.3	0.27	1	10/28/21 16:49	11/02/21 12:43		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**4.8**	mg/L	0.50	0.029	1	11/03/21 12:50	11/04/21 13:07	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.0076	1	11/03/21 12:50	11/04/21 13:07	7439-89-6	
Magnesium, Dissolved	**1.9**	mg/L	0.50	0.047	1	11/03/21 12:50	11/04/21 13:07	7439-95-4	
Manganese, Dissolved	**0.011**	mg/L	0.0050	0.00044	1	11/03/21 12:50	11/04/21 13:07	7439-96-5	
Potassium, Dissolved	**1440**	ug/L	500	190	1	11/03/21 12:50	11/04/21 13:07	7440-09-7	
Sodium, Dissolved	**11.7**	mg/L	0.50	0.15	1	11/03/21 12:50	11/04/21 13:07	7440-23-5	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Antimony	**0.00050 U**	mg/L	0.00050	0.000045	1	10/21/21 10:46	10/21/21 15:12	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 15:12	7440-38-2	
Barium	**0.034**	mg/L	0.0025	0.00011	1	10/21/21 10:46	10/21/21 15:12	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	10/21/21 10:46	10/21/21 15:12	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/21/21 10:46	10/21/21 15:12	7440-43-9	

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ANALYTICAL RESULTS

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Sample: DUP-2 **Lab ID: 30445538007** Collected: 10/14/21 00:01 Received: 10/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - WestVirginia								
Chromium	**0.0018J**	mg/L	0.0025	0.00086	1	10/21/21 10:46	10/21/21 15:12	7440-47-3	
Cobalt	**0.0024J**	mg/L	0.0025	0.00015	1	10/21/21 10:46	10/21/21 15:12	7440-48-4	
Copper	**0.0014J**	mg/L	0.0025	0.00025	1	10/21/21 10:46	10/21/21 15:12	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.000030	1	10/21/21 10:46	10/21/21 15:12	7439-92-1	
Nickel	**0.0041**	mg/L	0.0025	0.00065	1	10/21/21 10:46	10/21/21 15:12	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/21/21 10:46	10/21/21 15:12	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/21/21 10:46	10/21/21 15:12	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000024	1	10/21/21 10:46	10/21/21 15:12	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/21/21 10:46	10/21/21 15:12	7440-62-2	
Zinc	**0.0034J**	mg/L	0.0050	0.0017	1	10/21/21 10:46	10/21/21 15:12	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	10/19/21 12:17	10/20/21 09:56	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		10/21/21 20:51		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**44.0**	mg/L	10.0	10.0	1		10/20/21 15:00		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/27/21 06:33	10/27/21 08:32		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/20/21 14:02	10/20/21 17:44		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**22.1**	mg/L	3.0	0.67	1		10/26/21 18:00	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**2.3**	mg/L	0.10	0.053	1		10/27/21 13:40	14797-55-8	
Nitrogen, NO2 plus NO3	**2.3**	mg/L	0.10	0.053	1		10/27/21 13:40		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/18/21 18:37	14808-79-8	

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ANALYTICAL RESULTS

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Sample: DUP-2 **Lab ID: 30445538007** Collected: 10/14/21 00:01 Received: 10/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/15/21 14:37	14797-65-0	

Sample: TRIP BLANK **Lab ID: 30445538008** Collected: 10/14/21 00:01 Received: 10/14/21 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/19/21 14:53	10/20/21 06:32	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/19/21 14:53	10/20/21 06:32	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	113	%.	60-140		1	10/19/21 14:53	10/20/21 06:32	630-20-6	CH

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QUALITY CONTROL DATA

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

QC Batch: 468792
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30445538001, 30445538002, 30445538003, 30445538004, 30445538005, 30445538006, 30445538007, 30445538008

METHOD BLANK: 2263517
Matrix: Water
Associated Lab Samples: 30445538001, 30445538002, 30445538003, 30445538004, 30445538005, 30445538006, 30445538007, 30445538008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.022	10/20/21 04:38	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	10/20/21 04:38	
1,1,1,2-Tetrachloroethane (S)	%.	117	60-140		10/20/21 04:38	CH

LABORATORY CONTROL SAMPLE: 2263518

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.26	104	85-115	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.27	108	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			114	60-140	CH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2265762 2265763

Parameter	Units	30445749003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.041 U	0.41	0.4	0.34	0.36	84	90	60-140	6	25	
1,2-Dibromoethane (EDB)	ug/L	0.041 U	0.41	0.4	0.38	0.39	94	97	60-140	3	25	
1,1,1,2-Tetrachloroethane (S)	%.						94	100	60-140			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

QC Batch: 468712
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30445538001, 30445538002, 30445538003, 30445538004, 30445538005, 30445538006, 30445538007

METHOD BLANK: 2263011 Matrix: Water
Associated Lab Samples: 30445538001, 30445538002, 30445538003, 30445538004, 30445538005, 30445538006, 30445538007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.000030	10/20/21 09:10	

LABORATORY CONTROL SAMPLE: 2263012

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.001	0.0010	103	80-120	

MATRIX SPIKE SAMPLE: 2263014

Parameter	Units	30445311001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.00020 U	0.0025	0.0024	96	75-125	

MATRIX SPIKE SAMPLE: 2263016

Parameter	Units	30445311012 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.00020 U	0.0025	0.0024	95	75-125	

SAMPLE DUPLICATE: 2263013

Parameter	Units	30445311001 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	0.00020 U	0.00020 U		20	

SAMPLE DUPLICATE: 2263015

Parameter	Units	30445311012 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	0.00020 U	0.00020 U		20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

QC Batch: 88787
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D MET
Laboratory: Pace Analytical Services - WestVirginia
Associated Lab Samples: 30445538002, 30445538003, 30445538004, 30445538005, 30445538006, 30445538007

METHOD BLANK: 436461 Matrix: Water
Associated Lab Samples: 30445538002, 30445538003, 30445538004, 30445538005, 30445538006, 30445538007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.029	11/03/21 13:44	
Iron	mg/L	0.050 U	0.050	0.0076	11/03/21 13:44	
Magnesium	mg/L	0.50 U	0.50	0.047	11/03/21 13:44	
Manganese	mg/L	0.0050 U	0.0050	0.00044	11/03/21 13:44	
Potassium	mg/L	0.50 U	0.50	0.19	11/03/21 13:44	
Sodium	mg/L	0.50 U	0.50	0.15	11/03/21 13:44	

LABORATORY CONTROL SAMPLE: 436462

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	42.7	107	80-120	
Iron	mg/L	2	2.2	110	80-120	
Magnesium	mg/L	20	21.6	108	80-120	
Manganese	mg/L	2	2.2	108	80-120	
Potassium	mg/L	20	21.1	106	80-120	
Sodium	mg/L	20	21.1	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 436463 436464

Parameter	Units	30439085001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	mg/L	5.9			5.1	8.0				44	20	M1,R1
Magnesium	mg/L	144000			97.1	155				46	20	M1,R1
Manganese	mg/L	6.5			4.6	7.2				44	20	M1,R1
Potassium	mg/L	7090			19.1	31.2				48	20	M1,R1

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QUALITY CONTROL DATA

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

QC Batch: 89406
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D MET
Laboratory: Pace Analytical Services - WestVirginia
Associated Lab Samples: 30445538001

METHOD BLANK: 440065 Matrix: Water
Associated Lab Samples: 30445538001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.062J	0.50	0.029	11/04/21 14:40	
Iron	mg/L	0.014J	0.050	0.0076	11/04/21 14:40	
Magnesium	mg/L	0.50 U	0.50	0.047	11/04/21 14:40	
Manganese	mg/L	0.0050 U	0.0050	0.00044	11/04/21 14:40	
Potassium	mg/L	0.50 U	0.50	0.19	11/04/21 14:40	
Sodium	mg/L	0.50 U	0.50	0.15	11/04/21 14:40	

LABORATORY CONTROL SAMPLE: 440066

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	41.7	104	80-120	
Iron	mg/L	2	2.0	102	80-120	
Magnesium	mg/L	20	20.9	105	80-120	
Manganese	mg/L	2	2.1	104	80-120	
Potassium	mg/L	20	19.9	99	80-120	
Sodium	mg/L	20	19.8	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 440092 440093

Parameter	Units	30445538001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	1.7	40	40	41.8	43.1	100	104	80-120	3	20	
Iron	mg/L	0.025J	2	2	2.0	2.0	98	101	80-120	3	20	
Magnesium	mg/L	0.88	20	20	21.0	21.6	101	104	80-120	3	20	
Manganese	mg/L	0.017	2	2	2.0	2.1	100	104	80-120	3	20	
Potassium	mg/L	0.59	20	20	19.8	20.4	96	99	80-120	3	20	
Sodium	mg/L	2.8	20	20	21.7	22.4	95	98	80-120	3	20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

QC Batch: 89378
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D MET Dissolved
Laboratory: Pace Analytical Services - WestVirginia
Associated Lab Samples: 30445538001, 30445538002, 30445538003, 30445538004, 30445538005, 30445538006, 30445538007

METHOD BLANK: 439963
Matrix: Water
Associated Lab Samples: 30445538001, 30445538002, 30445538003, 30445538004, 30445538005, 30445538006, 30445538007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.029	11/04/21 12:39	
Iron, Dissolved	mg/L	0.050 U	0.050	0.0076	11/04/21 12:39	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	11/04/21 12:39	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.00044	11/04/21 12:39	
Potassium, Dissolved	ug/L	500 U	500	190	11/04/21 12:39	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.15	11/04/21 12:39	

LABORATORY CONTROL SAMPLE: 439964

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	42.1	105	80-120	
Iron, Dissolved	mg/L	2	2.1	103	80-120	
Magnesium, Dissolved	mg/L	20	21.1	106	80-120	
Manganese, Dissolved	mg/L	2	2.1	105	80-120	
Potassium, Dissolved	ug/L	20000	20200	101	80-120	
Sodium, Dissolved	mg/L	20	20.1	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 440007 440008

Parameter	Units	30445538001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	1.8	40	40	44.2	43.5	106	104	80-120	2	20	
Iron, Dissolved	mg/L	0.020J	2	2	2.1	2.1	104	102	80-120	2	20	
Magnesium, Dissolved	mg/L	0.91	20	20	22.2	21.9	107	105	80-120	2	20	
Manganese, Dissolved	mg/L	0.018	2	2	2.1	2.1	106	104	80-120	1	20	
Potassium, Dissolved	ug/L	605	20000	20000	21300	21000	103	102	80-120	1	20	
Sodium, Dissolved	mg/L	2.8	20	20	23.2	22.9	102	100	80-120	1	20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

QC Batch: 87872
QC Batch Method: EPA 3020A
Analysis Method: EPA 6020B
Analysis Description: 6020B MET
Laboratory: Pace Analytical Services - WestVirginia
Associated Lab Samples: 30445538001, 30445538002, 30445538003, 30445538004, 30445538005, 30445538006, 30445538007

METHOD BLANK: 431971
Matrix: Water
Associated Lab Samples: 30445538001, 30445538002, 30445538003, 30445538004, 30445538005, 30445538006, 30445538007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.000045	10/21/21 13:48	
Arsenic	mg/L	0.0025 U	0.0025	0.00025	10/21/21 13:48	
Barium	mg/L	0.0025 U	0.0025	0.00011	10/21/21 13:48	
Beryllium	mg/L	0.00050 U	0.00050	0.00015	10/21/21 13:48	
Cadmium	mg/L	0.00050 U	0.00050	0.000065	10/21/21 13:48	
Chromium	mg/L	0.0025 U	0.0025	0.00086	10/21/21 13:48	
Cobalt	mg/L	0.0025 U	0.0025	0.00015	10/21/21 13:48	
Copper	mg/L	0.0025 U	0.0025	0.00025	10/21/21 13:48	
Lead	mg/L	0.00050 U	0.00050	0.000030	10/21/21 13:48	
Nickel	mg/L	0.0025 U	0.0025	0.00065	10/21/21 13:48	
Selenium	mg/L	0.0025 U	0.0025	0.00084	10/21/21 13:48	
Silver	mg/L	0.0025 U	0.0025	0.00016	10/21/21 13:48	
Thallium	mg/L	0.00050 U	0.00050	0.000024	10/21/21 13:48	
Vanadium	mg/L	0.0025 U	0.0025	0.00021	10/21/21 13:48	
Zinc	mg/L	0.0050 U	0.0050	0.0017	10/21/21 13:48	

LABORATORY CONTROL SAMPLE: 431972

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.023	114	80-120	
Arsenic	mg/L	0.1	0.10	101	80-120	
Barium	mg/L	0.1	0.10	100	80-120	
Beryllium	mg/L	0.02	0.019	96	80-120	
Cadmium	mg/L	0.02	0.020	99	80-120	
Chromium	mg/L	0.1	0.10	101	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Copper	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.02	0.020	101	80-120	
Nickel	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	
Silver	mg/L	0.1	0.097	97	80-120	
Thallium	mg/L	0.02	0.020	101	80-120	
Vanadium	mg/L	0.1	0.10	101	80-120	
Zinc	mg/L	0.2	0.20	100	80-120	

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QUALITY CONTROL DATA

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 431973 431974

Parameter	Units	30445311001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00050 U	0.02	0.02	0.027	0.023	133	117	75-125	12	20	M1
Arsenic	mg/L	0.0025 U	0.1	0.1	0.11	0.096	109	96	75-125	12	20	
Barium	mg/L	0.031	0.1	0.1	0.16	0.13	126	103	75-125	16	20	M1
Beryllium	mg/L	0.00030J	0.02	0.02	0.023	0.020	111	100	75-125	11	20	
Cadmium	mg/L	0.00050 U	0.02	0.02	0.023	0.020	117	102	75-125	14	20	
Chromium	mg/L	0.0020J	0.1	0.1	0.12	0.11	123	104	75-125	16	20	
Cobalt	mg/L	0.0042	0.1	0.1	0.13	0.11	122	104	75-125	15	20	
Copper	mg/L	0.0037	0.1	0.1	0.13	0.11	128	104	75-125	19	20	M1
Lead	mg/L	0.000049J	0.02	0.02	0.032	0.021	158	103	75-125	42	20	M1,R1
Nickel	mg/L	0.0028	0.1	0.1	0.13	0.11	128	105	75-125	19	20	M1
Selenium	mg/L	0.0015J	0.1	0.1	0.11	0.099	105	97	75-125	8	20	
Silver	mg/L	0.0025 U	0.1	0.1	0.11	0.098	111	98	75-125	12	20	
Thallium	mg/L	0.000032J	0.02	0.02	0.024	0.021	118	104	75-125	13	20	
Vanadium	mg/L	0.0031	0.1	0.1	0.13	0.11	122	105	75-125	15	20	
Zinc	mg/L	0.0022J	0.2	0.2	0.44	0.21	221	103	75-125	72	20	M1,R1

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QUALITY CONTROL DATA

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

QC Batch: 469369
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30445538001, 30445538002, 30445538003, 30445538004, 30445538005, 30445538006, 30445538007

METHOD BLANK: 2266460 Matrix: Water
Associated Lab Samples: 30445538001, 30445538002, 30445538003, 30445538004, 30445538005, 30445538006, 30445538007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	10/21/21 20:37	

LABORATORY CONTROL SAMPLE: 2266461

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	21.0	105	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2266462 2266463

Parameter	Units	30445538001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	50	50	60.0	58.0	120	116	85-115	3	20	MH

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QUALITY CONTROL DATA

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

QC Batch: 468947
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30445538001, 30445538002, 30445538003, 30445538004, 30445538005, 30445538006, 30445538007

METHOD BLANK: 2264347 Matrix: Water
Associated Lab Samples: 30445538001, 30445538002, 30445538003, 30445538004, 30445538005, 30445538006, 30445538007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	10/20/21 15:00	

LABORATORY CONTROL SAMPLE: 2264348

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	917	92	85-115	

SAMPLE DUPLICATE: 2264946

Parameter	Units	30445987001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	188	182	3	5	

SAMPLE DUPLICATE: 2264947

Parameter	Units	30445985004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	286	291	2	5	

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QUALITY CONTROL DATA

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

QC Batch: 469600
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30445538001, 30445538002, 30445538003, 30445538004, 30445538005

METHOD BLANK: 2267494 Matrix: Water
Associated Lab Samples: 30445538001, 30445538002, 30445538003, 30445538004, 30445538005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.044	10/25/21 11:47	

METHOD BLANK: 2267495 Matrix: Water
Associated Lab Samples: 30445538001, 30445538002, 30445538003, 30445538004, 30445538005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.044	10/25/21 11:51	

LABORATORY CONTROL SAMPLE: 2267496

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.1	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2267497 2267498

Parameter	Units	30445366002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	ND	4	4	4.2	4.2	104	104	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2267499 2267500

Parameter	Units	30446642001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.31	4	4	4.4	4.5	104	104	90-110	1	20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

QC Batch: 469935
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30445538006, 30445538007

METHOD BLANK: 2268883
Matrix: Water
Associated Lab Samples: 30445538006, 30445538007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.044	10/27/21 08:16	

LABORATORY CONTROL SAMPLE: 2268884

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	3.9	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2268885 2268886

Parameter	Units	30445538006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.047J	4	4	4.2	4.3	104	106	90-110	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2268887 2268888

Parameter	Units	30446032001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	ND	4	4	4.3	4.2	107	105	90-110	2	20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

QC Batch: 468983
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30445538001, 30445538002, 30445538003, 30445538004, 30445538005, 30445538006, 30445538007

METHOD BLANK: 2264535 Matrix: Water
Associated Lab Samples: 30445538001, 30445538002, 30445538003, 30445538004, 30445538005, 30445538006, 30445538007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	10/20/21 17:42	

METHOD BLANK: 2264536 Matrix: Water
Associated Lab Samples: 30445538001, 30445538002, 30445538003, 30445538004, 30445538005, 30445538006, 30445538007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	10/20/21 17:42	

LABORATORY CONTROL SAMPLE: 2264537

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	307	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2264538 2264539

Parameter	Units	30444583021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	ND	150	150	160	164	107	109	90-110	3	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2264540 2264541

Parameter	Units	30445538006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	25.0 U	150	150	160	155	107	104	90-110	3	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

QC Batch: 469866
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30445538001, 30445538002, 30445538003, 30445538004, 30445538005, 30445538006, 30445538007

METHOD BLANK: 2268552
Matrix: Water
Associated Lab Samples: 30445538001, 30445538002, 30445538003, 30445538004, 30445538005, 30445538006, 30445538007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	10/26/21 17:39	

LABORATORY CONTROL SAMPLE: 2268553

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	19.7	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2268554 2268555

Parameter	Units	30445311013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	77.1	20	20	91.6	93.6	72	82	85-115	2	20	ML

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

QC Batch: 469872
QC Batch Method: SM 4500NO3-F-2011
Analysis Method: SM 4500NO3-F-2011
Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30445538001, 30445538002, 30445538003, 30445538004, 30445538005, 30445538006, 30445538007

METHOD BLANK: 2268571 Matrix: Water
Associated Lab Samples: 30445538001, 30445538002, 30445538003, 30445538004, 30445538005, 30445538006, 30445538007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	10/27/21 11:11	

LABORATORY CONTROL SAMPLE: 2268572

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	4.2	106	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2268573 2268574

Parameter	Units	30446555002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	9.2	5	5	14.2	14.1	100	98	85-115	1	20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

QC Batch: 468660
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30445538001, 30445538002, 30445538003, 30445538004, 30445538005, 30445538006, 30445538007

METHOD BLANK: 2262753 Matrix: Water
Associated Lab Samples: 30445538001, 30445538002, 30445538003, 30445538004, 30445538005, 30445538006, 30445538007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	10/18/21 18:01	

LABORATORY CONTROL SAMPLE: 2262754

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	32.1	107	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2262755 2262756

Parameter	Units	30445311001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	60.5	20	20	75.6	76.9	75	82	85-115	2	20	ML

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2262757 2262758

Parameter	Units	30445311012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.5	20	20	32.3	32.7	109	111	85-115	1	20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

QC Batch: 468423
QC Batch Method: SM 4500NO2-B-2011
Analysis Method: SM 4500NO2-B-2011
Analysis Description: SM4500-NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30445538001, 30445538002, 30445538003, 30445538004, 30445538005, 30445538006, 30445538007

METHOD BLANK: 2261805 Matrix: Water
Associated Lab Samples: 30445538001, 30445538002, 30445538003, 30445538004, 30445538005, 30445538006, 30445538007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	10/15/21 14:33	

LABORATORY CONTROL SAMPLE: 2261806

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.096	96	90-110	

MATRIX SPIKE SAMPLE: 2261808

Parameter	Units	30445538001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.010 U	0.1	0.098	98	85-115	

SAMPLE DUPLICATE: 2261807

Parameter	Units	30445538001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010 U		20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30445538001
[1] 8011 sample pH is 7

Sample: 30445538002
[1] 8011 sample pH is 7

Sample: 30445538003
[1] 8011 sample pH is 7

Sample: 30445538005
[1] 8011 sample pH is 7

Sample: 30445538006
[1] 8011 sample pH is 7

Sample: 30445538007
[1] 8011 sample pH is 7

Sample: 30445538008
[1] 8011 sample pH is 7

ANALYTE QUALIFIERS

1c TV= 0 mg/L

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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

ANALYTE QUALIFIERS

2c	TV= 1 mg/L
3c	TV= 2 mg/L
B	Analyte was detected in the associated method blank.
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30445538001	**TW-25**	EPA 8011	468792	EPA 8011	468875
30445538002	**TW-25A**	EPA 8011	468792	EPA 8011	468875
30445538003	**TW-27**	EPA 8011	468792	EPA 8011	468875
30445538004	**TW-28**	EPA 8011	468792	EPA 8011	468875
30445538005	**TW-29**	EPA 8011	468792	EPA 8011	468875
30445538006	**TW-30**	EPA 8011	468792	EPA 8011	468875
30445538007	**DUP-2**	EPA 8011	468792	EPA 8011	468875
30445538008	**TRIP BLANK**	EPA 8011	468792	EPA 8011	468875
30445538001	**TW-25**	EPA 3010A	89406	EPA 6010D	89567
30445538002	**TW-25A**	EPA 3010A	88787	EPA 6010D	89129
30445538003	**TW-27**	EPA 3010A	88787	EPA 6010D	89129
30445538004	**TW-28**	EPA 3010A	88787	EPA 6010D	89129
30445538005	**TW-29**	EPA 3010A	88787	EPA 6010D	89129
30445538006	**TW-30**	EPA 3010A	88787	EPA 6010D	89129
30445538007	**DUP-2**	EPA 3010A	88787	EPA 6010D	89129
30445538001	**TW-25**	EPA 3010A	89378	EPA 6010D	89564
30445538002	**TW-25A**	EPA 3010A	89378	EPA 6010D	89564
30445538003	**TW-27**	EPA 3010A	89378	EPA 6010D	89564
30445538004	**TW-28**	EPA 3010A	89378	EPA 6010D	89564
30445538005	**TW-29**	EPA 3010A	89378	EPA 6010D	89564
30445538006	**TW-30**	EPA 3010A	89378	EPA 6010D	89564
30445538007	**DUP-2**	EPA 3010A	89378	EPA 6010D	89564
30445538001	**TW-25**	EPA 3020A	87872	EPA 6020B	87922
30445538002	**TW-25A**	EPA 3020A	87872	EPA 6020B	87922
30445538003	**TW-27**	EPA 3020A	87872	EPA 6020B	87922
30445538004	**TW-28**	EPA 3020A	87872	EPA 6020B	87922
30445538005	**TW-29**	EPA 3020A	87872	EPA 6020B	87922
30445538006	**TW-30**	EPA 3020A	87872	EPA 6020B	87922
30445538007	**DUP-2**	EPA 3020A	87872	EPA 6020B	87922
30445538001	**TW-25**	EPA 7470A	468712	EPA 7470A	468853
30445538002	**TW-25A**	EPA 7470A	468712	EPA 7470A	468853
30445538003	**TW-27**	EPA 7470A	468712	EPA 7470A	468853
30445538004	**TW-28**	EPA 7470A	468712	EPA 7470A	468853
30445538005	**TW-29**	EPA 7470A	468712	EPA 7470A	468853
30445538006	**TW-30**	EPA 7470A	468712	EPA 7470A	468853
30445538007	**DUP-2**	EPA 7470A	468712	EPA 7470A	468853
30445538001	**TW-25**	SM 2320B-2011	469369		
30445538002	**TW-25A**	SM 2320B-2011	469369		
30445538003	**TW-27**	SM 2320B-2011	469369		
30445538004	**TW-28**	SM 2320B-2011	469369		
30445538005	**TW-29**	SM 2320B-2011	469369		
30445538006	**TW-30**	SM 2320B-2011	469369		
30445538007	**DUP-2**	SM 2320B-2011	469369		
30445538001	**TW-25**	SM 2540C-2011	468947		
30445538002	**TW-25A**	SM 2540C-2011	468947		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30445538003	**TW-27**	SM 2540C-2011	468947		
30445538004	**TW-28**	SM 2540C-2011	468947		
30445538005	**TW-29**	SM 2540C-2011	468947		
30445538006	**TW-30**	SM 2540C-2011	468947		
30445538007	**DUP-2**	SM 2540C-2011	468947		
30445538001	**TW-25**	EPA 350.1	469600	EPA 350.1	469607
30445538002	**TW-25A**	EPA 350.1	469600	EPA 350.1	469607
30445538003	**TW-27**	EPA 350.1	469600	EPA 350.1	469607
30445538004	**TW-28**	EPA 350.1	469600	EPA 350.1	469607
30445538005	**TW-29**	EPA 350.1	469600	EPA 350.1	469607
30445538006	**TW-30**	EPA 350.1	469935	EPA 350.1	469942
30445538007	**DUP-2**	EPA 350.1	469935	EPA 350.1	469942
30445538001	**TW-25**	EPA 410.4	468983	EPA 410.4	469114
30445538002	**TW-25A**	EPA 410.4	468983	EPA 410.4	469114
30445538003	**TW-27**	EPA 410.4	468983	EPA 410.4	469114
30445538004	**TW-28**	EPA 410.4	468983	EPA 410.4	469114
30445538005	**TW-29**	EPA 410.4	468983	EPA 410.4	469114
30445538006	**TW-30**	EPA 410.4	468983	EPA 410.4	469114
30445538007	**DUP-2**	EPA 410.4	468983	EPA 410.4	469114
30445538001	**TW-25**	SM 4500-Cl-E-2011	469866		
30445538002	**TW-25A**	SM 4500-Cl-E-2011	469866		
30445538003	**TW-27**	SM 4500-Cl-E-2011	469866		
30445538004	**TW-28**	SM 4500-Cl-E-2011	469866		
30445538005	**TW-29**	SM 4500-Cl-E-2011	469866		
30445538006	**TW-30**	SM 4500-Cl-E-2011	469866		
30445538007	**DUP-2**	SM 4500-Cl-E-2011	469866		
30445538001	**TW-25**	SM 4500NO3-F-2011	469872		
30445538002	**TW-25A**	SM 4500NO3-F-2011	469872		
30445538003	**TW-27**	SM 4500NO3-F-2011	469872		
30445538004	**TW-28**	SM 4500NO3-F-2011	469872		
30445538005	**TW-29**	SM 4500NO3-F-2011	469872		
30445538006	**TW-30**	SM 4500NO3-F-2011	469872		
30445538007	**DUP-2**	SM 4500NO3-F-2011	469872		
30445538001	**TW-25**	EPA 9038	468660		
30445538002	**TW-25A**	EPA 9038	468660		
30445538003	**TW-27**	EPA 9038	468660		
30445538004	**TW-28**	EPA 9038	468660		
30445538005	**TW-29**	EPA 9038	468660		
30445538006	**TW-30**	EPA 9038	468660		
30445538007	**DUP-2**	EPA 9038	468660		
30445538001	**TW-25**	SM 4500NO2-B-2011	468423		
30445538002	**TW-25A**	SM 4500NO2-B-2011	468423		
30445538003	**TW-27**	SM 4500NO2-B-2011	468423		
30445538004	**TW-28**	SM 4500NO2-B-2011	468423		
30445538005	**TW-29**	SM 4500NO2-B-2011	468423		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-FALL 2021-Revised Report
Pace Project No.: 30445538

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30445538006	**TW-30**	SM 4500NO2-B-2011	468423		
30445538007	**DUP-2**	SM 4500NO2-B-2011	468423		

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WO# : 30445538

30445538

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF- FALL 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	TOTAL METALS (1)	TOTAL + DIS. METALS (2)	ALKALINITY, TDS	HARDNESS, Cl	AMMONIA	NITRATE	SO4, COD		METHOD 8011 - EDB + DBCP			
1	TW-25	1	10.13.21	1535	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓			001
2	TW-25A	1	10.13.21	1610															002
3	TW-27	6	10.14.21	915															003
4	TW-28	1		1015															004
5	TW-29			1115															005
6	TW-30			1220			↓												006
7	DUP-2	↓		—	↓		QA	✓	✓	✓	✓	✓	✓	✓					007
8	TRIP BLANK	2	↓	—	—		QA									✓			008
9																			
10																			
11																			
12																			

	Signature	Date	Time	Comments
Relinquished by	[signature]	10.14.21	14:15	(1) Sb, As, Ba, Be, Cd, Cr, Co, Cu, Hg, Pb, Ni, Se, Ag, Tl, V, Zn
Received by	[signature] / PACE	10.14.21	14:15	(2) Ca, Fe, Mg, Mn, K, Na
Relinquished by	[signature] / PACE	10/14/21	1710	
Received by	RDS PACE	10-14-21	1810	PACE - WV - METALS - SEE ATTACHED LIST for METHODS
Relinquished by	RDS PACE	10-14-21	2015	PACE - G-BULK - WET CHEM
Received by	Mauricio J Ulary	10-14-2021	2215	LEVEL 2 REPORT

Cooler Temp on Arrival: 36.135 Deg. C

Rev. Aug. 2018

Millersville Landfill		
	Pace, Beaver, WV	
	Method 6020 - ICPMS	
Parameter	RL	MDL
	(mg/l)	
TOTAL METALS		
Antimony	0.0005	
Arsenic	0.0025	0.0002473
Barium	0.0025	
Beryllium	0.0005	
Cadmium	0.0005	
Chromium	0.0025	
Cobalt	0.0025	
Copper	0.0025	
Lead	0.0005	
Nickel	0.0025	
Selenium	0.0025	
Silver	0.0025	
Thallium	0.0005	
Vanadium	0.0025	
Zinc	0.005	
	Pace, Beaver, WV	
TOTAL AND DISSOLVED METALS	Method 6010 - ICP	
Calcium	0.5	0.028
Iron	0.05	0.0076
Magnesium	0.5	0.047
Manganese	0.005	0.00043
Potassium	0.5	0.19
Sodium	0.5	0.148
	Pace, Beaver, WV	
	Method 7470A	
Mercury	0.0005	0.00025
GENERAL CHEMISTRY	Pace - Greensburg, PA	
Alkalinity - SM 2320B	10	1
Ammonia - EPA 350.1	0.1	0.0445
COD - EPA 410.4	25	4.6532
Chloride - EPA 300.0	3	0.06683
Hardness - 2340B		
Nitrate - EPA 300.0	0.1	0.0238
Sulfate - EPA 300.0	10	4.6702
Total dissolved solids - SM2540C	10	10

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EMA

Project # #-30445538

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label MC
LIMS Login MC

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 11 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 3.9/3.8 °C Correction Factor: -.3 °C Final Temp: 3.6/3.5 °C

Temp should be above freezing to 6°C

pH paper Lot# 1000411 Date and initials of person examining contents: MC 10/15/2021

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4. no signature on COC
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.
All containers meet method preservation requirements.	✓			Initial when completed: MC Date/time of preservation: Lot # of added preservative:
Headspace in VOA Vials (>6mm):		✓		17.
Trip Blank Present:	✓			18.
Trip Blank Custody Seals Present	✓			
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: Date: Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
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(724)850-5600

December 10, 2021

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on October 21, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - WestVirginia
- Pace Analytical Services - Greensburg

(Greensburg, PA) - Revision 1 - This report replaces the November, 22, 2021 report. This project was revised on November, 29, 2021 to include Hg.

(Greensburg, PA) - Revision 2 - This report replaces the November, 29, 2021 report. This project was revised on December, 10, 2021 to update the metals reporting list.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alexis E. Ozoroski
alexis.ozoroski@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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CERTIFICATIONS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver

225 Industrial Park Drive, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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SAMPLE SUMMARY

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30446733001	**MW-P4**	Water	10/21/21 11:35	10/21/21 23:45
30446733002	**MW-P9**	Water	10/20/21 10:45	10/21/21 23:45
30446733003	**MW-P106**	Water	10/21/21 13:00	10/21/21 23:45
30446733004	**MW-P417**	Water	10/20/21 17:40	10/21/21 23:45
30446733005	**MW-P440**	Water	10/20/21 17:00	10/21/21 23:45
30446733006	**RW-P109**	Water	10/20/21 12:30	10/21/21 23:45
30446733007	**RW-P165**	Water	10/21/21 12:20	10/21/21 23:45
30446733008	**RW-P171-1**	Water	10/20/21 15:40	10/21/21 23:45
30446733009	**RW-P264**	Water	10/20/21 13:15	10/21/21 23:45
30446733010	**RW-P440**	Water	10/21/21 14:30	10/21/21 23:45
30446733011	**RW-P441**	Water	10/21/21 13:45	10/21/21 23:45
30446733012	**RW-P584**	Water	10/21/21 11:30	10/21/21 23:45
30446733013	**FIELD BLANK**	Water	10/21/21 12:00	10/21/21 23:45
30446733014	**TRIP BLANK**	Water	10/21/21 00:01	10/21/21 23:45

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(724)850-5600

SAMPLE ANALYTE COUNT

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30446733001	**MW-P4**	EPA 8011	TAW	3	PASI-PA
		EPA 7470A	CTS	1	PASI-PA
30446733002	**MW-P9**	EPA 8011	TAW	3	PASI-PA
		EPA 7470A	CTS	1	PASI-PA
30446733003	**MW-P106**	EPA 8011	TAW	3	PASI-PA
		EPA 7470A	CTS	1	PASI-PA
30446733004	**MW-P417**	EPA 8011	TAW	3	PASI-PA
		EPA 7470A	CTS	1	PASI-PA
30446733005	**MW-P440**	EPA 8011	TAW	3	PASI-PA
		EPA 7470A	CTS	1	PASI-PA
30446733006	**RW-P109**	EPA 8011	TAW	3	PASI-PA
		EPA 7470A	CTS	1	PASI-PA
30446733007	**RW-P165**	EPA 8011	TAW	3	PASI-PA
		EPA 7470A	CTS	1	PASI-PA
30446733008	**RW-P171-1**	EPA 8011	TAW	3	PASI-PA
		EPA 7470A	CTS	1	PASI-PA
30446733009	**RW-P264**	EPA 8011	TAW	3	PASI-PA
		EPA 7470A	CTS	1	PASI-PA
30446733010	**RW-P440**	EPA 8011	TAW	3	PASI-PA
		EPA 7470A	CTS	1	PASI-PA
30446733011	**RW-P441**	EPA 8011	TAW	3	PASI-PA
		EPA 7470A	CTS	1	PASI-PA
30446733012	**RW-P584**	EPA 8011	TAW	3	PASI-PA
		EPA 7470A	CTS	1	PASI-PA
30446733013	**FIELD BLANK**	EPA 8011	TAW	3	PASI-PA
		EPA 6010D	MEH	7	PASI-BVWV
		EPA 6010D	MEH	7	PASI-BVWV
		EPA 6020B	WES	15	PASI-BVWV
		EPA 7470A	CTS	1	PASI-PA
		SM 2320B-2011	PAS	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	1	PASI-PA
		EPA 9038	DRK	1	PASI-PA
30446733014	**TRIP BLANK**	EPA 8011	TAW	3	PASI-PA

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SAMPLE ANALYTE COUNT

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory

PASI-BVWV = Pace Analytical Services - WestVirginia
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
14 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 469791

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- BLANK (Lab ID: 2268242)
  - 1,2-Dibromo-3-chloropropane
- FIELD BLANK (Lab ID: 30446733013)
  - 1,2-Dibromo-3-chloropropane
- LCS (Lab ID: 2268243)
  - 1,2-Dibromo-3-chloropropane
- MS (Lab ID: 2268244)
  - 1,2-Dibromo-3-chloropropane
- MSD (Lab ID: 2268245)
  - 1,2-Dibromo-3-chloropropane
- MW-P106 (Lab ID: 30446733003)
  - 1,2-Dibromo-3-chloropropane
- MW-P4 (Lab ID: 30446733001)
  - 1,2-Dibromo-3-chloropropane
- MW-P417 (Lab ID: 30446733004)
  - 1,2-Dibromo-3-chloropropane
- MW-P440 (Lab ID: 30446733005)
  - 1,2-Dibromo-3-chloropropane
- MW-P9 (Lab ID: 30446733002)
  - 1,2-Dibromo-3-chloropropane
- RW-P109 (Lab ID: 30446733006)
  - 1,2-Dibromo-3-chloropropane
- RW-P165 (Lab ID: 30446733007)
  - 1,2-Dibromo-3-chloropropane
- RW-P171-1 (Lab ID: 30446733008)
  - 1,2-Dibromo-3-chloropropane

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

QC Batch: 469791

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- RW-P264 (Lab ID: 30446733009)
  - 1,2-Dibromo-3-chloropropane
- RW-P440 (Lab ID: 30446733010)
  - 1,2-Dibromo-3-chloropropane
- RW-P441 (Lab ID: 30446733011)
  - 1,2-Dibromo-3-chloropropane
- RW-P584 (Lab ID: 30446733012)
  - 1,2-Dibromo-3-chloropropane
- TRIP BLANK (Lab ID: 30446733014)
  - 1,2-Dibromo-3-chloropropane

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 469791

2c: The sample pH is 7.

- FIELD BLANK (Lab ID: 30446733013)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MW-P106 (Lab ID: 30446733003)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MW-P4 (Lab ID: 30446733001)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MW-P417 (Lab ID: 30446733004)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MW-P440 (Lab ID: 30446733005)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

Analyte Comments:

QC Batch: 469791

2c: The sample pH is 7.

- MW-P9 (Lab ID: 30446733002)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- RW-P109 (Lab ID: 30446733006)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- RW-P165 (Lab ID: 30446733007)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- RW-P171-1 (Lab ID: 30446733008)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- RW-P264 (Lab ID: 30446733009)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- RW-P440 (Lab ID: 30446733010)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- RW-P441 (Lab ID: 30446733011)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- RW-P584 (Lab ID: 30446733012)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TRIP BLANK (Lab ID: 30446733014)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

Method: **EPA 6010D**
Description: 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
1 sample was analyzed for EPA 6010D by Pace Analytical Services WestVirginia. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 88860

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30445869001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 437138)
  - Calcium
  - Iron
  - Magnesium
  - Sodium
- MSD (Lab ID: 437139)
  - Calcium
  - Iron
  - Magnesium
  - Sodium

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

Method: **EPA 6010D**
Description: 6010D ICP, Dissolved, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
1 sample was analyzed for EPA 6010D by Pace Analytical Services WestVirginia. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

Method: **EPA 6020B**
Description: 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
1 sample was analyzed for EPA 6020B by Pace Analytical Services WestVirginia. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
13 samples were analyzed for EPA 7470A by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the EPA method holding time.
- MW-P4 (Lab ID: 30446733001)

H2: Extraction or preparation conducted outside EPA method holding time.
- MW-P4 (Lab ID: 30446733001)

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
1 sample was analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 469928

1c: TV= 0 mg/L

- FIELD BLANK (Lab ID: 30446733013)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

Method: **SM 2540C-2011**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
1 sample was analyzed for SM 2540C-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
1 sample was analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
1 sample was analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 470560

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30446859002,30447404002

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2271792)
  - Chemical Oxygen Demand
- MSD (Lab ID: 2271793)
  - Chemical Oxygen Demand

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
1 sample was analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 471266

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30446719007

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2274943)
  - Chloride
- MSD (Lab ID: 2274944)
  - Chloride

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

Method: **SM 4500NO3-F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
1 sample was analyzed for SM 4500NO3-F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 471146

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30446733013

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2274394)
  - Nitrogen, NO2 plus NO3
- MSD (Lab ID: 2274395)
  - Nitrogen, NO2 plus NO3

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: December 10, 2021

General Information:
1 sample was analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 470644

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30446437001,30447106001

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2272133)
  - Sulfate
- MS (Lab ID: 2272135)
  - Sulfate
- MSD (Lab ID: 2272134)
  - Sulfate
- MSD (Lab ID: 2272136)
  - Sulfate

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

Sample: MW-P4 **Lab ID: 30446733001** Collected: 10/21/21 11:35 Received: 10/21/21 23:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.042 U**	ug/L	0.042	0.023	1	10/26/21 10:06	10/27/21 01:14	96-12-8	2c,CH
1,2-Dibromoethane (EDB)	**0.042 U**	ug/L	0.042	0.032	1	10/26/21 10:06	10/27/21 01:14	106-93-4	2c
Surrogates									
1,1,1,2-Tetrachloroethane (S)	79	%.	60-140		1	10/26/21 10:06	10/27/21 01:14	630-20-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	11/23/21 14:22	11/24/21 08:46	7439-97-6	H1,H2

Sample: MW-P9 **Lab ID: 30446733002** Collected: 10/20/21 10:45 Received: 10/21/21 23:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/26/21 10:06	10/27/21 01:53	96-12-8	2c,CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/26/21 10:06	10/27/21 01:53	106-93-4	2c
Surrogates									
1,1,1,2-Tetrachloroethane (S)	89	%.	60-140		1	10/26/21 10:06	10/27/21 01:53	630-20-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00014J**	mg/L	0.00020	0.000030	1	11/01/21 12:04	11/02/21 12:17	7439-97-6	

Sample: MW-P106 **Lab ID: 30446733003** Collected: 10/21/21 13:00 Received: 10/21/21 23:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.023	1	10/26/21 10:06	10/27/21 02:05	96-12-8	2c,CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/26/21 10:06	10/27/21 02:05	106-93-4	2c
Surrogates									
1,1,1,2-Tetrachloroethane (S)	87	%.	60-140		1	10/26/21 10:06	10/27/21 02:05	630-20-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00011J**	mg/L	0.00020	0.000030	1	11/01/21 12:04	11/02/21 12:22	7439-97-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

Sample: MW-P417 **Lab ID: 30446733004** Collected: 10/20/21 17:40 Received: 10/21/21 23:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/26/21 10:06	10/27/21 02:18	96-12-8	2c,CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/26/21 10:06	10/27/21 02:18	106-93-4	2c
Surrogates									
1,1,1,2-Tetrachloroethane (S)	82	%.	60-140		1	10/26/21 10:06	10/27/21 02:18	630-20-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.000060J**	mg/L	0.00020	0.000030	1	11/01/21 12:04	11/02/21 12:24	7439-97-6	

Sample: MW-P440 **Lab ID: 30446733005** Collected: 10/20/21 17:00 Received: 10/21/21 23:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/26/21 10:06	10/27/21 02:30	96-12-8	2c,CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/26/21 10:06	10/27/21 02:30	106-93-4	2c
Surrogates									
1,1,1,2-Tetrachloroethane (S)	99	%.	60-140		1	10/26/21 10:06	10/27/21 02:30	630-20-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	11/01/21 12:04	11/02/21 12:25	7439-97-6	

Sample: RW-P109 **Lab ID: 30446733006** Collected: 10/20/21 12:30 Received: 10/21/21 23:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/26/21 10:06	10/27/21 02:43	96-12-8	2c,CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/26/21 10:06	10/27/21 02:43	106-93-4	2c
Surrogates									
1,1,1,2-Tetrachloroethane (S)	108	%.	60-140		1	10/26/21 10:06	10/27/21 02:43	630-20-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	11/01/21 12:04	11/02/21 12:27	7439-97-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

Sample: RW-P165 **Lab ID: 30446733007** Collected: 10/21/21 12:20 Received: 10/21/21 23:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/26/21 10:06	10/27/21 02:56	96-12-8	2c,CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/26/21 10:06	10/27/21 02:56	106-93-4	2c
Surrogates									
1,1,1,2-Tetrachloroethane (S)	105	%.	60-140		1	10/26/21 10:06	10/27/21 02:56	630-20-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	11/01/21 12:04	11/02/21 12:28	7439-97-6	

Sample: RW-P171-1 **Lab ID: 30446733008** Collected: 10/20/21 15:40 Received: 10/21/21 23:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/26/21 10:06	10/27/21 03:09	96-12-8	2c,CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/26/21 10:06	10/27/21 03:09	106-93-4	2c
Surrogates									
1,1,1,2-Tetrachloroethane (S)	100	%.	60-140		1	10/26/21 10:06	10/27/21 03:09	630-20-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	11/01/21 12:04	11/02/21 12:30	7439-97-6	

Sample: RW-P264 **Lab ID: 30446733009** Collected: 10/20/21 13:15 Received: 10/21/21 23:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/26/21 10:06	10/27/21 03:22	96-12-8	2c,CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/26/21 10:06	10/27/21 03:22	106-93-4	2c
Surrogates									
1,1,1,2-Tetrachloroethane (S)	108	%.	60-140		1	10/26/21 10:06	10/27/21 03:22	630-20-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	11/01/21 12:04	11/02/21 12:32	7439-97-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

Sample: RW-P440 **Lab ID: 30446733010** Collected: 10/21/21 14:30 Received: 10/21/21 23:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/26/21 10:06	10/27/21 03:34	96-12-8	2c,CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/26/21 10:06	10/27/21 03:34	106-93-4	2c
Surrogates									
1,1,1,2-Tetrachloroethane (S)	114	%.	60-140		1	10/26/21 10:06	10/27/21 03:34	630-20-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	11/01/21 12:04	11/02/21 12:37	7439-97-6	

Sample: RW-P441 **Lab ID: 30446733011** Collected: 10/21/21 13:45 Received: 10/21/21 23:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/26/21 10:06	10/27/21 03:47	96-12-8	2c,CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/26/21 10:06	10/27/21 03:47	106-93-4	2c
Surrogates									
1,1,1,2-Tetrachloroethane (S)	111	%.	60-140		1	10/26/21 10:06	10/27/21 03:47	630-20-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	11/01/21 12:04	11/02/21 12:38	7439-97-6	

Sample: RW-P584 **Lab ID: 30446733012** Collected: 10/21/21 11:30 Received: 10/21/21 23:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/26/21 10:06	10/27/21 03:59	96-12-8	2c,CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/26/21 10:06	10/27/21 03:59	106-93-4	2c
Surrogates									
1,1,1,2-Tetrachloroethane (S)	116	%.	60-140		1	10/26/21 10:06	10/27/21 03:59	630-20-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.000050J**	mg/L	0.00020	0.000030	1	11/01/21 12:04	11/02/21 12:40	7439-97-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

Sample: FIELD BLANK **Lab ID: 30446733013** Collected: 10/21/21 12:00 Received: 10/21/21 23:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.023	1	10/26/21 10:06	10/27/21 04:12	96-12-8	2c,CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/26/21 10:06	10/27/21 04:12	106-93-4	2c
Surrogates									
1,1,1,2-Tetrachloroethane (S)	118	%.	60-140		1	10/26/21 10:06	10/27/21 04:12	630-20-6	
6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium	**0.50 U**	mg/L	0.50	0.029	1	10/29/21 09:40	11/02/21 08:56	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.0076	1	10/29/21 09:40	11/02/21 08:56	7439-89-6	
Magnesium	**0.50 U**	mg/L	0.50	0.047	1	10/29/21 09:40	11/02/21 08:56	7439-95-4	
Manganese	**0.0050 U**	mg/L	0.0050	0.00044	1	10/29/21 09:40	11/02/21 08:56	7439-96-5	
Potassium	**0.50 U**	mg/L	0.50	0.19	1	10/29/21 09:40	11/02/21 08:56	7440-09-7	
Sodium	**0.50 U**	mg/L	0.50	0.15	1	10/29/21 09:40	11/02/21 08:56	7440-23-5	
Total Hardness by 2340B	**3310 U**	ug/L	3310	267	1	10/29/21 09:40	11/02/21 08:56		
6010D ICP, Dissolved, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - WestVirginia								
Calcium, Dissolved	**0.50 U**	mg/L	0.50	0.029	1	11/10/21 13:20	11/12/21 19:04	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.0076	1	11/10/21 13:20	11/12/21 19:04	7439-89-6	
Magnesium, Dissolved	**0.50 U**	mg/L	0.50	0.047	1	11/10/21 13:20	11/12/21 19:04	7439-95-4	
Manganese, Dissolved	**0.0050 U**	mg/L	0.0050	0.00044	1	11/10/21 13:20	11/12/21 19:04	7439-96-5	
Potassium, Dissolved	**0.50 U**	mg/L	0.50	0.19	1	11/10/21 13:20	11/12/21 19:04	7440-09-7	
Sodium, Dissolved	**0.50 U**	mg/L	0.50	0.15	1	11/10/21 13:20	11/12/21 19:04	7440-23-5	
Total Hardness by 2340B, Dissolved	**3310 U**	ug/L	3310	267	1	11/10/21 13:20	11/12/21 19:04		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - WestVirginia								
Antimony	**0.00050 U**	mg/L	0.00050	0.000045	1	10/28/21 10:02	10/28/21 15:35	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00025	1	10/28/21 10:02	10/28/21 15:35	7440-38-2	
Barium	**0.0025 U**	mg/L	0.0025	0.00011	1	10/28/21 10:02	10/28/21 15:35	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	10/28/21 10:02	10/28/21 15:35	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.000065	1	10/28/21 10:02	10/28/21 15:35	7440-43-9	
Chromium	**0.0025 U**	mg/L	0.0025	0.00086	1	10/28/21 10:02	10/28/21 15:35	7440-47-3	
Cobalt	**0.0025 U**	mg/L	0.0025	0.00015	1	10/28/21 10:02	10/28/21 15:35	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.00025	1	10/28/21 10:02	10/28/21 15:35	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.000030	1	10/28/21 10:02	10/28/21 15:35	7439-92-1	
Nickel	**0.0025 U**	mg/L	0.0025	0.00065	1	10/28/21 10:02	10/28/21 15:35	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/28/21 10:02	10/28/21 15:35	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00016	1	10/28/21 10:02	10/28/21 15:35	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000024	1	10/28/21 10:02	10/28/21 15:35	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00021	1	10/28/21 10:02	10/28/21 15:35	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0017	1	10/28/21 10:02	10/28/21 15:35	7440-66-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

Sample: FIELD BLANK **Lab ID: 30446733013** Collected: 10/21/21 12:00 Received: 10/21/21 23:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Greensburg								
Mercury	**0.00020 U**	mg/L	0.00020	0.000030	1	11/01/21 12:04	11/02/21 12:45	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		10/26/21 21:22		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		10/26/21 16:34		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	10/29/21 07:33	10/29/21 10:39		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**5.3J**	mg/L	25.0	4.7	1	11/01/21 12:02	11/01/21 15:29		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**0.86J**	mg/L	3.0	0.67	1		11/04/21 19:49	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		11/04/21 13:26		MH
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/01/21 18:51	14808-79-8	

Sample: TRIP BLANK **Lab ID: 30446733014** Collected: 10/21/21 00:01 Received: 10/21/21 23:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/26/21 10:06	10/27/21 04:25	96-12-8	2c,CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/26/21 10:06	10/27/21 04:25	106-93-4	2c
Surrogates									
1,1,1,2-Tetrachloroethane (S)	114	%.	60-140		1	10/26/21 10:06	10/27/21 04:25	630-20-6	

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

QC Batch: 469791 | Analysis Method: EPA 8011
QC Batch Method: EPA 8011 | Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30446733001, 30446733002, 30446733003, 30446733004, 30446733005, 30446733006, 30446733007, 30446733008, 30446733009, 30446733010, 30446733011, 30446733012, 30446733013, 30446733014

METHOD BLANK: 2268242 | Matrix: Water

Associated Lab Samples: 30446733001, 30446733002, 30446733003, 30446733004, 30446733005, 30446733006, 30446733007, 30446733008, 30446733009, 30446733010, 30446733011, 30446733012, 30446733013, 30446733014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.022	10/27/21 00:49	CH
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	10/27/21 00:49	
1,1,1,2-Tetrachloroethane (S)	%.	89	60-140		10/27/21 00:49	

LABORATORY CONTROL SAMPLE: 2268243

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.27	108	85-115	CH
1,2-Dibromoethane (EDB)	ug/L	0.25	0.24	97	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			119	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2268244 2268245

Parameter	Units	30446733001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.042 U	0.41	0.41	0.35	0.37	86	89	60-140	4	25	CH
1,2-Dibromoethane (EDB)	ug/L	0.042 U	0.41	0.41	0.34	0.35	83	85	60-140	2	25	
1,1,1,2-Tetrachloroethane (S)	%.						90	92	60-140			

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

QC Batch: 470609
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30446733002, 30446733003, 30446733004, 30446733005, 30446733006, 30446733007, 30446733008, 30446733009, 30446733010, 30446733011, 30446733012, 30446733013

METHOD BLANK: 2271982
Matrix: Water
Associated Lab Samples: 30446733002, 30446733003, 30446733004, 30446733005, 30446733006, 30446733007, 30446733008, 30446733009, 30446733010, 30446733011, 30446733012, 30446733013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.000030	11/02/21 11:26	

LABORATORY CONTROL SAMPLE: 2271983

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.001	0.0011	106	80-120	

MATRIX SPIKE SAMPLE: 2271985

Parameter	Units	30446733002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.00014J	0.0025	0.0027	103	75-125	

MATRIX SPIKE SAMPLE: 2271987

Parameter	Units	30446733012 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.000050J	0.0025	0.0028	110	75-125	

SAMPLE DUPLICATE: 2271984

Parameter	Units	30446733002 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	0.00014J	0.00014J		20	

SAMPLE DUPLICATE: 2271986

Parameter	Units	30446733012 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	0.000050J	0.000060J		20	

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

QC Batch: 473738
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30446733001

METHOD BLANK: 2288531 Matrix: Water
Associated Lab Samples: 30446733001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.000030	11/24/21 08:43	

LABORATORY CONTROL SAMPLE: 2288532

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.001	0.0011	109	80-120	

MATRIX SPIKE SAMPLE: 2288534

Parameter	Units	30446733001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.00020 U	0.0025	0.0027	108	75-125	H1

MATRIX SPIKE SAMPLE: 2288536

Parameter	Units	30451653001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.000060J	0.0025	0.0029	112	75-125	

SAMPLE DUPLICATE: 2288533

Parameter	Units	30446733001 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	0.00020 U	0.00020 U		20	H1

SAMPLE DUPLICATE: 2288535

Parameter	Units	30451653001 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	0.000060J	0.000070J		20	

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

QC Batch: 88860
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D MET
Laboratory: Pace Analytical Services - WestVirginia
Associated Lab Samples: 30446733013

METHOD BLANK: 437073 Matrix: Water
Associated Lab Samples: 30446733013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.029	11/02/21 12:45	
Iron	mg/L	0.050 U	0.050	0.0076	11/02/21 12:45	
Magnesium	mg/L	0.50 U	0.50	0.047	11/02/21 12:45	
Manganese	mg/L	0.0050 U	0.0050	0.00044	11/02/21 12:45	
Potassium	mg/L	0.50 U	0.50	0.19	11/02/21 12:45	
Sodium	mg/L	0.50 U	0.50	0.15	11/02/21 12:45	

LABORATORY CONTROL SAMPLE: 437074

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	44.5	111	80-120	
Iron	mg/L	2	2.0	102	80-120	
Magnesium	mg/L	20	22.5	112	80-120	
Manganese	mg/L	2	2.2	112	80-120	
Potassium	mg/L	20	22.6	113	80-120	
Sodium	mg/L	20	22.1	110	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 437138 437139

Parameter	Units	30445869001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	2650	40	40	135	147	332	360	80-120	8	20	M1
Iron	mg/L	ND	2	2	2.5	2.8	123	138	80-120	12	20	M1
Magnesium	mg/L	658	20	20	37.2	41.9	183	206	80-120	12	20	M1
Manganese	mg/L	0.011	2	2	2.1	2.3	102	115	80-120	12	20	
Potassium	mg/L	ND	20	20	20.6	23.4	103	117	80-120	13	20	
Sodium	mg/L	1540	20	20	55.6	61.7	270	301	80-120	10	20	M1

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

QC Batch: 90170
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D MET Dissolved
Laboratory: Pace Analytical Services - WestVirginia
Associated Lab Samples: 30446733013

METHOD BLANK: 445258 Matrix: Water
Associated Lab Samples: 30446733013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.029	11/11/21 17:05	
Iron, Dissolved	mg/L	0.050 U	0.050	0.0076	11/11/21 17:05	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	11/11/21 17:05	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.00044	11/11/21 17:05	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.19	11/11/21 17:05	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.15	11/11/21 17:05	

LABORATORY CONTROL SAMPLE: 445259

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	40.8	102	80-120	
Iron, Dissolved	mg/L	2	2.0	98	80-120	
Magnesium, Dissolved	mg/L	20	20.9	104	80-120	
Manganese, Dissolved	mg/L	2	2.1	103	80-120	
Potassium, Dissolved	mg/L	20	20.7	104	80-120	
Sodium, Dissolved	mg/L	20	20.4	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 445282 445283

Parameter	Units	30446733013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	0.50 U	40	40	40.9	41.3	102	103	80-120	1	20	
Iron, Dissolved	mg/L	0.050 U	2	2	2.1	2.1	104	105	80-120	1	20	
Magnesium, Dissolved	mg/L	0.50 U	20	20	20.9	21.2	105	106	80-120	1	20	
Manganese, Dissolved	mg/L	0.0050 U	2	2	2.1	2.1	104	105	80-120	1	20	
Potassium, Dissolved	mg/L	0.50 U	20	20	20.8	21.1	104	105	80-120	1	20	
Sodium, Dissolved	mg/L	0.50 U	20	20	20.5	20.7	102	103	80-120	1	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

QC Batch: 88730
QC Batch Method: EPA 3020A
Analysis Method: EPA 6020B
Analysis Description: 6020B MET
Laboratory: Pace Analytical Services - WestVirginia
Associated Lab Samples: 30446733013

METHOD BLANK: 436209
Matrix: Water
Associated Lab Samples: 30446733013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.000045	10/28/21 15:30	
Arsenic	mg/L	0.0025 U	0.0025	0.00025	10/28/21 15:30	
Barium	mg/L	0.0025 U	0.0025	0.00011	10/28/21 15:30	
Beryllium	mg/L	0.00050 U	0.00050	0.00015	10/28/21 15:30	
Cadmium	mg/L	0.00050 U	0.00050	0.000065	10/28/21 15:30	
Chromium	mg/L	0.0025 U	0.0025	0.00086	10/28/21 15:30	
Cobalt	mg/L	0.0025 U	0.0025	0.00015	10/28/21 15:30	
Copper	mg/L	0.0025 U	0.0025	0.00025	10/28/21 15:30	
Lead	mg/L	0.00050 U	0.00050	0.000030	10/28/21 15:30	
Nickel	mg/L	0.0025 U	0.0025	0.00065	10/28/21 15:30	
Selenium	mg/L	0.0025 U	0.0025	0.00084	10/28/21 15:30	
Silver	mg/L	0.0025 U	0.0025	0.00016	10/28/21 15:30	
Thallium	mg/L	0.00050 U	0.00050	0.000024	10/28/21 15:30	
Vanadium	mg/L	0.0025 U	0.0025	0.00021	10/28/21 15:30	
Zinc	mg/L	0.0050 U	0.0050	0.0017	10/28/21 15:30	

LABORATORY CONTROL SAMPLE: 436210

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.022	111	80-120	
Arsenic	mg/L	0.1	0.098	98	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.02	0.020	98	80-120	
Cadmium	mg/L	0.02	0.020	100	80-120	
Chromium	mg/L	0.1	0.10	101	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Copper	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.02	0.020	99	80-120	
Nickel	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.10	103	80-120	
Silver	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.02	0.020	99	80-120	
Vanadium	mg/L	0.1	0.10	100	80-120	
Zinc	mg/L	0.2	0.20	100	80-120	

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 436211 436212

Parameter	Units	30446733013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00050 U	0.02	0.02	0.023	0.023	116	113	75-125	3	20	
Arsenic	mg/L	0.0025 U	0.1	0.1	0.10	0.098	102	98	75-125	3	20	
Barium	mg/L	0.0025 U	0.1	0.1	0.10	0.10	102	100	75-125	2	20	
Beryllium	mg/L	0.00050 U	0.02	0.02	0.020	0.019	99	97	75-125	2	20	
Cadmium	mg/L	0.00050 U	0.02	0.02	0.020	0.020	102	101	75-125	2	20	
Chromium	mg/L	0.0025 U	0.1	0.1	0.10	0.10	104	103	75-125	1	20	
Cobalt	mg/L	0.0025 U	0.1	0.1	0.10	0.10	104	103	75-125	1	20	
Copper	mg/L	0.0025 U	0.1	0.1	0.10	0.10	104	104	75-125	1	20	
Lead	mg/L	0.00050 U	0.02	0.02	0.021	0.020	103	101	75-125	2	20	
Nickel	mg/L	0.0025 U	0.1	0.1	0.10	0.10	104	102	75-125	2	20	
Selenium	mg/L	0.0025 U	0.1	0.1	0.10	0.097	104	97	75-125	7	20	
Silver	mg/L	0.0025 U	0.1	0.1	0.10	0.10	105	103	75-125	2	20	
Thallium	mg/L	0.00050 U	0.02	0.02	0.020	0.020	102	101	75-125	1	20	
Vanadium	mg/L	0.0025 U	0.1	0.1	0.10	0.10	104	102	75-125	2	20	
Zinc	mg/L	0.0050 U	0.2	0.2	0.20	0.20	102	101	75-125	2	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

QC Batch: 469928
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30446733013

METHOD BLANK: 2268841
Matrix: Water
Associated Lab Samples: 30446733013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	10/26/21 20:31	

LABORATORY CONTROL SAMPLE: 2268842

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	21.0	105	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2268843 2268844

Parameter	Units	30444699001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	108	50	50	162	160	108	104	85-115	1	20	H1

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

QC Batch: 469807
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30446733013

METHOD BLANK: 2268303
Matrix: Water
Associated Lab Samples: 30446733013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	10/26/21 16:34	

LABORATORY CONTROL SAMPLE: 2268304

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	951	95	85-115	

SAMPLE DUPLICATE: 2268305

Parameter	Units	30446519002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1610	1610	0	5	

SAMPLE DUPLICATE: 2268306

Parameter	Units	30446733013 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0 U		5	

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

QC Batch: 470334
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30446733013

METHOD BLANK: 2270821
Matrix: Water
Associated Lab Samples: 30446733013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.044	10/29/21 10:26	

LABORATORY CONTROL SAMPLE: 2270822

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.0	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2270823 2270824

Parameter	Units	30446689001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	5.2	4	4	9.2	9.2	100	101	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2270825 2270826

Parameter	Units	30447363002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	ND	4	4	4.2	4.2	105	105	90-110	0	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

QC Batch: 470560
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30446733013

METHOD BLANK: 2271789 Matrix: Water
Associated Lab Samples: 30446733013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/01/21 15:27	

METHOD BLANK: 2271790 Matrix: Water
Associated Lab Samples: 30446733013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/01/21 15:27	

LABORATORY CONTROL SAMPLE: 2271791

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	319	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2271792 2271793

Parameter	Units	30447404002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	18.5J	150	150	194	187	117	112	90-110	3	10	MH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2271794 2271795

Parameter	Units	30446859002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	62.3	150	150	224	227	108	110	90-110	1	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

QC Batch: 471266
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30446733013

METHOD BLANK: 2274941 Matrix: Water
Associated Lab Samples: 30446733013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	11/04/21 19:44	

METHOD BLANK: 2275176 Matrix: Water
Associated Lab Samples: 30446733013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	11/04/21 19:46	

METHOD BLANK: 2275177 Matrix: Water
Associated Lab Samples: 30446733013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	30.0 U	30.0	6.7	11/05/21 14:05	

LABORATORY CONTROL SAMPLE: 2274942

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.1	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2274943 2274944

Parameter	Units	30446719007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	773	200	200	709	787	-32	7	85-115	10	20	ML

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

QC Batch: 471146
QC Batch Method: SM 4500NO3-F-2011
Analysis Method: SM 4500NO3-F-2011
Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30446733013

METHOD BLANK: 2274392 Matrix: Water
Associated Lab Samples: 30446733013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	11/04/21 13:23	

LABORATORY CONTROL SAMPLE: 2274393

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	4.0	101	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2274394 2274395

Parameter	Units	30446733013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.10 U	5	5	6.0	6.0	120	120	85-115	0	20	MH

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

QC Batch: 470644
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30446733013

METHOD BLANK: 2272131
Matrix: Water
Associated Lab Samples: 30446733013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	11/01/21 18:44	

LABORATORY CONTROL SAMPLE: 2272132

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	29.8	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2272133 2272134

Parameter	Units	30446437001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	23.3	40	40	134	127	277	258	85-115	6	20	MH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2272135 2272136

Parameter	Units	30447106001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	ND	20	20	24.5	26.5	118	128	85-115	8	20	MH

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QUALIFIERS

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

1c	TV= 0 mg/L
2c	The sample pH is 7.
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
H1	Analysis conducted outside the EPA method holding time.
H2	Extraction or preparation conducted outside EPA method holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Millersville Landfill-Revised Report
Pace Project No.: 30446733

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30446733001	**MW-P4**	EPA 8011	469791	EPA 8011	469840
30446733002	**MW-P9**	EPA 8011	469791	EPA 8011	469840
30446733003	**MW-P106**	EPA 8011	469791	EPA 8011	469840
30446733004	**MW-P417**	EPA 8011	469791	EPA 8011	469840
30446733005	**MW-P440**	EPA 8011	469791	EPA 8011	469840
30446733006	**RW-P109**	EPA 8011	469791	EPA 8011	469840
30446733007	**RW-P165**	EPA 8011	469791	EPA 8011	469840
30446733008	**RW-P171-1**	EPA 8011	469791	EPA 8011	469840
30446733009	**RW-P264**	EPA 8011	469791	EPA 8011	469840
30446733010	**RW-P440**	EPA 8011	469791	EPA 8011	469840
30446733011	**RW-P441**	EPA 8011	469791	EPA 8011	469840
30446733012	**RW-P584**	EPA 8011	469791	EPA 8011	469840
30446733013	**FIELD BLANK**	EPA 8011	469791	EPA 8011	469840
30446733014	**TRIP BLANK**	EPA 8011	469791	EPA 8011	469840
30446733013	**FIELD BLANK**	EPA 3010A	88860	EPA 6010D	89130
30446733013	**FIELD BLANK**	EPA 3010A	90170	EPA 6010D	90324
30446733013	**FIELD BLANK**	EPA 3020A	88730	EPA 6020B	88781
30446733001	**MW-P4**	EPA 7470A	473738	EPA 7470A	473764
30446733002	**MW-P9**	EPA 7470A	470609	EPA 7470A	470613
30446733003	**MW-P106**	EPA 7470A	470609	EPA 7470A	470613
30446733004	**MW-P417**	EPA 7470A	470609	EPA 7470A	470613
30446733005	**MW-P440**	EPA 7470A	470609	EPA 7470A	470613
30446733006	**RW-P109**	EPA 7470A	470609	EPA 7470A	470613
30446733007	**RW-P165**	EPA 7470A	470609	EPA 7470A	470613
30446733008	**RW-P171-1**	EPA 7470A	470609	EPA 7470A	470613
30446733009	**RW-P264**	EPA 7470A	470609	EPA 7470A	470613
30446733010	**RW-P440**	EPA 7470A	470609	EPA 7470A	470613
30446733011	**RW-P441**	EPA 7470A	470609	EPA 7470A	470613
30446733012	**RW-P584**	EPA 7470A	470609	EPA 7470A	470613
30446733013	**FIELD BLANK**	EPA 7470A	470609	EPA 7470A	470613
30446733013	**FIELD BLANK**	SM 2320B-2011	469928		
30446733013	**FIELD BLANK**	SM 2540C-2011	469807		
30446733013	**FIELD BLANK**	EPA 350.1	470334	EPA 350.1	470343
30446733013	**FIELD BLANK**	EPA 410.4	470560	EPA 410.4	470668
30446733013	**FIELD BLANK**	SM 4500-Cl-E-2011	471266		
30446733013	**FIELD BLANK**	SM 4500NO3-F-2011	471146		
30446733013	**FIELD BLANK**	EPA 9038	470644		

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF- FALL 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

WO#: 30446733

30446733

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	METHOD 8011 - EDB + DBCP	TOTAL MERCURY	
1	MW-P4	4	10.21.21	1135	✓			✓	✓	C01
2	MW-P9	↓	10.20.21	1045	↓			↓	↓	C02
3	MW-P106	↓	10.21.21	1300	↓			↓	↓	C03
4	MW-P417	↓	10.20.21	1740	↓			↓	↓	C04
5	MW-P440	↓	↓	1700	↓			↓	↓	C05
6	RW-P109	↓	↓	1230	↓			↓	↓	C06
7	RW-P165	↓	10.21.21	1220	↓			↓	↓	C07
8	RW-P171-1	↓	10.20.21	1540	↓			↓	↓	C08
9	RW-P264	↓	↓	1315	↓			↓	↓	C09
10	RW-P440	↓	10.21.21	1430	↓			↓	↓	C10
11	RW-P441	↓	10.21.21	1345	↓			↓	↓	C11
12	RW-P584	↓	10.20.21	1130	↓			↓	↓	C12

	Signature	Date	Time	Comments
Relinquished by	[illegible]	10.21.21	1615	
Received by	[illegible] PACE	10.21.21	1615	
Relinquished by	[illegible] PACE	10/21/21	20:30	
Received by	RDS PACE	10-21-21	2045	
Relinquished by	RDS PACE	10-21-21	2345	
Received by				LEVEL 2 REPORT

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - FALL 2021	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals ①	Total + Diss. Metals ②	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO4, COD		Method 8011 - EDB	DBCP		
1	FIELD BLANK	6	10-21-21	1200	—		QA	✓	✓	✓	✓	✓	✓	✓		✓			013
2	TRIP BLANK	2	10-21-21	—	—		QA									✓			014
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

	Signature	Date	Time	Comments
Relinquished by	DA Brown	10-21-21	1615	① Sb, Ba, As, Be, Cd, Cr, Co, Cu, Hg, Pb, Ni, Se, Ag, Tl, V, Zn
Received by	[illegible] PACE	10-21-21	1615	② Ca, Fe, Mg, Mn, K, Na
Relinquished by	[illegible] PACE	10/21/21	20:30	SEE ATTACHED LIST FOR METAL METHODS
Received by	RDS PACE	10-21-21	2045	PACE - WV - METALS
Relinquished by	RDS PACE	10-21-21	2345	PACE - G - BUMA - WET CHEM
Received by				LEVEL 2 REPORT

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

Millersville Landfill		
	Pace, Beaver, WV	
	Method 6020 - ICPMS	
Parameter	RL	MDL
	(mg/l)	
TOTAL METALS		
Antimony	0.0005	
Arsenic	0.0025	0.0002473
Barium	0.0025	
Beryllium	0.0005	
Cadmium	0.0005	
Chromium	0.0025	
Cobalt	0.0025	
Copper	0.0025	
Lead	0.0005	
Nickel	0.0025	
Selenium	0.0025	
Silver	0.0025	
Thallium	0.0005	
Vanadium	0.0025	
Zinc	0.005	
	Pace, Beaver, WV	
TOTAL AND DISSOLVED METALS	Method 6010 - ICP	
Calcium	0.5	0.028
Iron	0.05	0.0076
Magnesium	0.5	0.047
Manganese	0.005	0.00043
Potassium	0.5	0.19
Sodium	0.5	0.148
	Pace, Beaver, WV	
	Method 7470A	
Mercury	0.0005	0.00025
GENERAL CHEMISTRY	Pace - Greensburg, PA	
Alkalinity - SM 2320B	10	1
Ammonia - EPA 350.1	0.1	0.0445
COD - EPA 410.4	25	4.6532
Chloride - EPA 300.0	3	0.06683
Hardness - 2340B		
Nitrate - EPA 300.0	0.1	0.0238
Sulfate - EPA 300.0	10	4.6702
Total dissolved solids - SM2540C	10	10

Pittsburgh Lab Sample Condition Upon Receipt

WO#: 30446733

PM: AES Due Date: 11/05/21

CLIENT: ENV MONITOR

Pace Analytical

Client Name: BMA

Pro

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Label: NA

LIMS Login: DW

Tracking #: N/A

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Thermometer Used: 11 Type of Ice: Wet Blue None

Cooler Temperature Observed Temp: 5.4 °C Correction Factor: -0.3 °C Final Temp: 5.1 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# 101D411 / Date and Initials of person examining contents: DK 10-22-21
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.
All containers meet method preservation requirements.	✓			Initial when completed: DK / Date/time of preservation / Lot # of added preservative
Headspace in VOA Vials (>6mm):		✓		17.
Trip Blank Present: / Trip Blank Custody Seals Present	✓			18.
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: DK / Date: / Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

January 10, 2022

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-FALL 2021-RES AMP
Pace Project No.: 30455942

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on December 21, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - WestVirginia

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alexis E. Ozoroski
alexis.ozoroski@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project:	MLF-FALL 2021-RES AMP
Pace Project No.:	30455942

Pace Analytical Services Beaver
225 Industrial Park Drive, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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SAMPLE SUMMARY

Project: MLF-FALL 2021-RES AMP
Pace Project No.: 30455942

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30455942001	**TW-7**	Water	12/21/21 10:45	12/21/21 21:50
30455942002	**-**	Water	12/21/21 08:15	12/21/21 21:50
30455942003	**-**	Water	12/21/21 08:45	12/21/21 21:50
30455942004	**-**	Water	12/21/21 09:45	12/21/21 21:50
30455942005	**-**	Water	12/21/21 10:15	12/21/21 21:50
30455942006	**-**	Water	12/21/21 09:15	12/21/21 21:50
30455942007	**-**	Water	12/21/21 13:10	12/21/21 21:50
30455942008	**-**	Water	12/21/21 11:10	12/21/21 21:50
30455942009	**-**	Water	12/21/21 11:50	12/21/21 21:50
30455942010	**-**	Water	12/21/21 00:01	12/21/21 21:50

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SAMPLE ANALYTE COUNT

Project: MLF-FALL 2021-RES AMP
Pace Project No.: 30455942

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30455942001	**TW-7**	EPA 7470A	RCH	1	PASI-BVWV

PASI-BVWV = Pace Analytical Services - WestVirginia

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PROJECT NARRATIVE

Project: MLF-FALL 2021-RES AMP
Pace Project No.: 30455942

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: January 10, 2022

General Information:
1 sample was analyzed for EPA 7470A by Pace Analytical Services WestVirginia. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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Greensburg, PA 15601
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ANALYTICAL RESULTS

Project: MLF-FALL 2021-RES AMP
Pace Project No.: 30455942

Sample: TW-7 **Lab ID: 30455942001** Collected: 12/21/21 10:45 Received: 12/21/21 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - WestVirginia								
Mercury	**0.20 U**	ug/L	0.20	0.20	1	01/06/22 09:32	01/07/22 15:12	7439-97-6	

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QUALITY CONTROL DATA

Project: MLF-FALL 2021-RES AMP
Pace Project No.: 30455942

QC Batch: 95692
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - WestVirginia
Associated Lab Samples: 30455942001

METHOD BLANK: 478252
Matrix: Water
Associated Lab Samples: 30455942001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	0.20 U	0.20	0.20	01/07/22 17:24	

LABORATORY CONTROL SAMPLE: 478253

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	10	10.0	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 478254 478255

Parameter	Units	30454667013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	0.20 U	10	10	10.4	10.2	102	100	80-120	2	20	H1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: MLF-FALL 2021-RES AMP
Pace Project No.: 30455942

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

H1 Analysis conducted outside the EPA method holding time.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-FALL 2021-RES AMP
Pace Project No.: 30455942

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30455942001	**TW-7**	EPA 7470A	95692	EPA 7470A	95743

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EMA ENVIRONMENTAL MONITORING ASSOCIATES
207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

WO# : 30455942

30455942

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF- FALL 2021-RESAMP	Turnaround Time	☐ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	NITRATE/NITRITE	Total Hg									
1	TW-7	1	12/21/21	1045	✓		GW		✓									001
2	TW-20R	2	↓	815	↓		↓	✓	↓									002
3	TW-21	↓	↓	845	↓		↓	↓	↓									003
4	TW-22	↓	↓	945	↓		↓	↓	↓									004
5	TW-22A	↓	↓	1015	↓		↓	↓	↓									005
6	TW-22B	↓	↓	915	↓		↓	↓	↓									006
7	TW-23R	↓	↓	1310	↓		↓	↓	↓									007
8	TW-24	↓	↓	1110	↓		↓	↓	↓									008
9	TW-24A	↓	↓	1150	↓		↓	↓	↓									009
10	DUP-1	↓	↓	—	↓		QA											010
11																		
12																		

	Signature	Date	Time	Comments
Relinquished by	DA Brown	12/21/21		RESAMPLING EVENT - RESULTS NEEDED ASAP
Received by	Jason Chandler	12/21/21	15:00	PACE - WV - TOTAL Hg
Relinquished by	Jason Chandler	12/21/21	17:49	PACE - G-BURG - NITRATE/NITRITE
Received by	RDS PACE	12-21-21	1825	
Relinquished by	RDS PACE	12-21-21	2150	
Received by				LEVEL 2 REPORT

Rev. Aug. 2018

Cooler Temp on Arrival: .6 Deg. C

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EMA

Project # #30455942#

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Tracking #: N/A

Label MLC
LIMS Login MLC

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 13 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 1.1 °C Correction Factor: -.5 °C Final Temp: .6 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# 10D7811	Date and Initials of person examining contents: MLC 12/22/2021
Chain of Custody Present:	✓			1.	
Chain of Custody Filled Out:	✓			2.	
Chain of Custody Relinquished:	✓			3.	
Sampler Name & Signature on COC:		✓		4. no Signature on rec	
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.	
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):		✓		7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.	
Containers Intact:	✓			11.	
Orthophosphate field filtered			✓	12.	
Hex Cr Aqueous sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.	
All containers meet method preservation requirements.	✓			Initial when completed MLC	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):			✓	17.	
Trip Blank Present:			✓	18.	
Trip Blank Custody Seals Present			✓		
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed:	Date: / Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
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December 30, 2021

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: Millersville Landfill
Pace Project No.: 30456981

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on December 28, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alexis E. Ozoroski
alexis.ozoroski@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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CERTIFICATIONS

Project: Millersville Landfill
Pace Project No.: 30456981

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: Millersville Landfill
Pace Project No.: 30456981

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30456981001	**TW-20R**	Water	12/28/21 11:00	12/28/21 21:45
30456981002	**TW-21**	Water	12/28/21 12:15	12/28/21 21:45
30456981003	**TW-22**	Water	12/28/21 13:20	12/28/21 21:45
30456981004	**TW-22A**	Water	12/28/21 14:00	12/28/21 21:45
30456981005	**TW-22B**	Water	12/28/21 12:40	12/28/21 21:45
30456981006	**TW-23R**	Water	12/28/21 10:00	12/28/21 21:45
30456981007	**TW-24**	Water	12/28/21 14:40	12/28/21 21:45
30456981008	**TW-24A**	Water	12/28/21 15:00	12/28/21 21:45
30456981009	**DUP-1**	Water	12/28/21 00:00	12/28/21 21:45

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SAMPLE ANALYTE COUNT

Project: Millersville Landfill
Pace Project No.: 30456981

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30456981001	**TW-20R**	SM 4500NO3-F-2011	AK1	2	PASI-PA
		SM 4500NO2-B-2011	JLM	1	PASI-PA
30456981002	**TW-21**	SM 4500NO3-F-2011	AK1	2	PASI-PA
		SM 4500NO2-B-2011	JLM	1	PASI-PA
30456981003	**TW-22**	SM 4500NO3-F-2011	AK1	2	PASI-PA
		SM 4500NO2-B-2011	JLM	1	PASI-PA
30456981004	**TW-22A**	SM 4500NO3-F-2011	AK1	2	PASI-PA
		SM 4500NO2-B-2011	JLM	1	PASI-PA
30456981005	**TW-22B**	SM 4500NO3-F-2011	AK1	2	PASI-PA
		SM 4500NO2-B-2011	JLM	1	PASI-PA
30456981006	**TW-23R**	SM 4500NO3-F-2011	AK1	2	PASI-PA
		SM 4500NO2-B-2011	JLM	1	PASI-PA
30456981007	**TW-24**	SM 4500NO3-F-2011	AK1	2	PASI-PA
		SM 4500NO2-B-2011	JLM	1	PASI-PA
30456981008	**TW-24A**	SM 4500NO3-F-2011	AK1	2	PASI-PA
		SM 4500NO2-B-2011	JLM	1	PASI-PA
30456981009	**DUP-1**	SM 4500NO3-F-2011	AK1	2	PASI-PA
		SM 4500NO2-B-2011	JLM	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30456981

Method: **SM 4500NO3-F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: December 30, 2021

General Information:
9 samples were analyzed for SM 4500NO3-F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30456981

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: December 30, 2021

General Information:
9 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30456981

Sample: TW-20R **Lab ID: 30456981001** Collected: 12/28/21 11:00 Received: 12/28/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.93**	mg/L	0.10	0.053	1		12/29/21 11:29	14797-55-8	
Nitrogen, NO2 plus NO3	**0.93**	mg/L	0.10	0.053	1		12/29/21 11:29		
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		12/29/21 11:34	14797-65-0	

Sample: TW-21 **Lab ID: 30456981002** Collected: 12/28/21 12:15 Received: 12/28/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.5**	mg/L	0.10	0.053	1		12/29/21 11:33	14797-55-8	
Nitrogen, NO2 plus NO3	**1.5**	mg/L	0.10	0.053	1		12/29/21 11:33		
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		12/29/21 11:36	14797-65-0	

Sample: TW-22 **Lab ID: 30456981003** Collected: 12/28/21 13:20 Received: 12/28/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.2**	mg/L	0.10	0.053	1		12/29/21 11:34	14797-55-8	
Nitrogen, NO2 plus NO3	**1.2**	mg/L	0.10	0.053	1		12/29/21 11:34		
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		12/29/21 11:37	14797-65-0	

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30456981

Sample: TW-22A **Lab ID: 30456981004** Collected: 12/28/21 14:00 Received: 12/28/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.4**	mg/L	0.10	0.053	1		12/29/21 11:36	14797-55-8	
Nitrogen, NO2 plus NO3	**1.4**	mg/L	0.10	0.053	1		12/29/21 11:36		
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		12/29/21 11:37	14797-65-0	

Sample: TW-22B **Lab ID: 30456981005** Collected: 12/28/21 12:40 Received: 12/28/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**2.4**	mg/L	0.10	0.053	1		12/29/21 11:37	14797-55-8	
Nitrogen, NO2 plus NO3	**2.4**	mg/L	0.10	0.053	1		12/29/21 11:37		
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		12/29/21 11:37	14797-65-0	

Sample: TW-23R **Lab ID: 30456981006** Collected: 12/28/21 10:00 Received: 12/28/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.4**	mg/L	0.10	0.053	1		12/29/21 11:38	14797-55-8	
Nitrogen, NO2 plus NO3	**1.4**	mg/L	0.10	0.053	1		12/29/21 11:38		
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		12/29/21 11:34	14797-65-0	

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30456981

Sample: TW-24 **Lab ID: 30456981007** Collected: 12/28/21 14:40 Received: 12/28/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.0**	mg/L	0.10	0.053	1		12/29/21 11:40	14797-55-8	
Nitrogen, NO2 plus NO3	**1.0**	mg/L	0.10	0.053	1		12/29/21 11:40		
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		12/29/21 11:37	14797-65-0	

Sample: TW-24A **Lab ID: 30456981008** Collected: 12/28/21 15:00 Received: 12/28/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.6**	mg/L	0.10	0.053	1		12/29/21 11:41	14797-55-8	
Nitrogen, NO2 plus NO3	**1.6**	mg/L	0.10	0.053	1		12/29/21 11:41		
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		12/29/21 11:38	14797-65-0	

Sample: DUP-1 **Lab ID: 30456981009** Collected: 12/28/21 00:00 Received: 12/28/21 21:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.0**	mg/L	0.10	0.053	1		12/29/21 11:42	14797-55-8	
Nitrogen, NO2 plus NO3	**1.0**	mg/L	0.10	0.053	1		12/29/21 11:42		
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		12/29/21 11:33	14797-65-0	

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(724)850-5600

QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30456981

QC Batch: 477756
QC Batch Method: SM 4500NO3-F-2011
Analysis Method: SM 4500NO3-F-2011
Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30456981001, 30456981002, 30456981003, 30456981004, 30456981005, 30456981006, 30456981007, 30456981008, 30456981009

METHOD BLANK: 2308964
Matrix: Water
Associated Lab Samples: 30456981001, 30456981002, 30456981003, 30456981004, 30456981005, 30456981006, 30456981007, 30456981008, 30456981009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	12/29/21 11:26	

LABORATORY CONTROL SAMPLE: 2308965

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	3.8	94	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2308966 2308968

Parameter	Units	30456981001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.93	5	5	5.8	5.7	97	96	85-115	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30456981

QC Batch: 477741
QC Batch Method: SM 4500NO2-B-2011
Analysis Method: SM 4500NO2-B-2011
Analysis Description: SM4500-NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30456981001, 30456981002, 30456981003, 30456981004, 30456981005, 30456981006, 30456981007, 30456981008, 30456981009

METHOD BLANK: 2308881
Matrix: Water
Associated Lab Samples: 30456981001, 30456981002, 30456981003, 30456981004, 30456981005, 30456981006, 30456981007, 30456981008, 30456981009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	12/29/21 11:31	

LABORATORY CONTROL SAMPLE: 2308882

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.10	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2308883 2308884

Parameter	Units	30456981009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrite as N	mg/L	0.010 U	0.1	0.1	0.10	0.10	100	100	85-115	0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALIFIERS

Project: Millersville Landfill
Pace Project No.: 30456981

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Millersville Landfill
Pace Project No.: 30456981

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30456981001	**TW-20R**	SM 4500NO3-F-2011	477756		
30456981002	**TW-21**	SM 4500NO3-F-2011	477756		
30456981003	**TW-22**	SM 4500NO3-F-2011	477756		
30456981004	**TW-22A**	SM 4500NO3-F-2011	477756		
30456981005	**TW-22B**	SM 4500NO3-F-2011	477756		
30456981006	**TW-23R**	SM 4500NO3-F-2011	477756		
30456981007	**TW-24**	SM 4500NO3-F-2011	477756		
30456981008	**TW-24A**	SM 4500NO3-F-2011	477756		
30456981009	**DUP-1**	SM 4500NO3-F-2011	477756		
30456981001	**TW-20R**	SM 4500NO2-B-2011	477741		
30456981002	**TW-21**	SM 4500NO2-B-2011	477741		
30456981003	**TW-22**	SM 4500NO2-B-2011	477741		
30456981004	**TW-22A**	SM 4500NO2-B-2011	477741		
30456981005	**TW-22B**	SM 4500NO2-B-2011	477741		
30456981006	**TW-23R**	SM 4500NO2-B-2011	477741		
30456981007	**TW-24**	SM 4500NO2-B-2011	477741		
30456981008	**TW-24A**	SM 4500NO2-B-2011	477741		
30456981009	**DUP-1**	SM 4500NO2-B-2011	477741		

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF-FALL 2021-RESAMPLING	Turnaround Time	❑ Normal ❑ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

WO#: 30456981

30456981

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	NITRATE/NITRITE
1	TW-20R	2	12/28/21	1100	✓		GW	✓
2	TW-21	↓	↓	1215	↓		↓	↓
3	TW-22	↓	↓	1320	↓		↓	↓
4	TW-22A	↓	↓	1400	↓		↓	↓
5	TW-22B	↓	↓	1240	↓		↓	↓
6	TW-23R	↓	↓	1000	↓		↓	↓
7	TW-24	↓	↓	1440	↓		↓	↓
8	TW-24A	↓	↓	1500	↓		↓	↓
9	DUP-1	↓	↓	—	↓		QA	↓
10								
11								
12								

	Signature	Date	Time	Comments
Relinquished by	DABrown	12/28/21	1510	2nd RESAMPLING EVENT - NEED RESULTS
Received by	Jason Chandler	12/28/21	1510	ASAP
Relinquished by	Jason Chandler	12/28/21	1756	
Received by	ROS PACE	12/28/21	1805	PACE - G-BURG - NITRATE/NITRITE
Relinquished by	ROS PACE	12/28/21	2145	
Received by	[signature]	12/28/21	2145	LEVEL 2 REPORT

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EMA Project #

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other

Label JAG
LIMS Login pnl

Tracking #:

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 14 Type of Ice: Wet Blue None

Cooler Temperature Observed Temp 2.3 °C Correction Factor: 0.0 °C Final Temp: 2.3 °C

Temp should be above freezing to 6°C

WO#: 30456981
PM: AES Due Date: 01/13/22
CLIENT: ENV MONITOR

Comments:	Yes	No	N/A	pH paper Lot# 10D2811	Date and Initials of person examining contents: JAG 12/29/21
Chain of Custody Present:	✓			1.	
Chain of Custody Filled Out:		✓		2. No preservative listed	
Chain of Custody Relinquished:	✓			3.	
Sampler Name & Signature on COC:		✓		4.	
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.	
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):	✓			7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.	
Containers Intact:	✓			11.	
Orthophosphate field filtered			✓	12.	
Hex Cr Aqueous sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.	
All containers meet method preservation requirements.	✓			Initial when completed JAG	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):			✓	17.	
Trip Blank Present:		✓		18.	
Trip Blank Custody Seals Present			✓		
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed:	Date: / Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: Date/Time: Contacted By:

Comments/ Resolution:

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

January 10, 2022

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-FAU 2021
Pace Project No.: 30458348

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on January 06, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alexis E. Ozoroski
alexis.ozoroski@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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CERTIFICATIONS

Project: MLF-FAU 2021
Pace Project No.: 30458348

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: MLF-FAU 2021
Pace Project No.: 30458348

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30458348001	**SW-1**	Water	01/06/22 12:00	01/06/22 21:50
30458348002	**SW-2**	Water	01/06/22 12:30	01/06/22 21:50
30458348003	**SW-3**	Water	01/06/22 12:15	01/06/22 21:50

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SAMPLE ANALYTE COUNT

Project: MLF-FAU 2021
Pace Project No.: 30458348

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30458348001	**SW-1**	SM 4500NO3-F-2011	SAC	2	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30458348002	**SW-2**	SM 4500NO3-F-2011	SAC	2	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30458348003	**SW-3**	SM 4500NO3-F-2011	SAC	2	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: MLF-FAU 2021
Pace Project No.: 30458348

Method: **SM 4500NO3-F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: January 10, 2022

General Information:
3 samples were analyzed for SM 4500NO3-F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 478842

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30457157002

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2313718)
  - Nitrogen, NO2 plus NO3
- MSD (Lab ID: 2313719)
  - Nitrogen, NO2 plus NO3

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FAU 2021
Pace Project No.: 30458348

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: January 10, 2022

General Information:
3 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-FAU 2021
Pace Project No.: 30458348

Sample: SW-1 **Lab ID: 30458348001** Collected: 01/06/22 12:00 Received: 01/06/22 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**2.0**	mg/L	0.10	0.053	1		01/07/22 16:26	14797-55-8	
Nitrogen, NO2 plus NO3	**2.0**	mg/L	0.10	0.053	1		01/07/22 16:26		
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		01/07/22 20:38	14797-65-0	

Sample: SW-2 **Lab ID: 30458348002** Collected: 01/06/22 12:30 Received: 01/06/22 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.61**	mg/L	0.10	0.053	1		01/07/22 16:30	14797-55-8	
Nitrogen, NO2 plus NO3	**0.61**	mg/L	0.10	0.053	1		01/07/22 16:30		
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		01/07/22 20:39	14797-65-0	

Sample: SW-3 **Lab ID: 30458348003** Collected: 01/06/22 12:15 Received: 01/06/22 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.87**	mg/L	0.10	0.053	1		01/07/22 16:32	14797-55-8	
Nitrogen, NO2 plus NO3	**0.87**	mg/L	0.10	0.053	1		01/07/22 16:32		
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		01/07/22 20:40	14797-65-0	

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QUALITY CONTROL DATA

Project: MLF-FAU 2021
Pace Project No.: 30458348

QC Batch: 478842
QC Batch Method: SM 4500NO3-F-2011
Analysis Method: SM 4500NO3-F-2011
Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30458348001, 30458348002, 30458348003

METHOD BLANK: 2313716 Matrix: Water
Associated Lab Samples: 30458348001, 30458348002, 30458348003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	01/07/22 16:08	

LABORATORY CONTROL SAMPLE: 2313717

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	3.9	97	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2313718 2313719

Parameter	Units	30457157002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	5.4	5	5	12.5	12.3	142	137	85-115	2	20	MH

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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Greensburg, PA 15601
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QUALITY CONTROL DATA

Project: MLF-FAU 2021
Pace Project No.: 30458348

QC Batch: 478881
QC Batch Method: SM 4500NO2-B-2011
Analysis Method: SM 4500NO2-B-2011
Analysis Description: SM4500-NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30458348001, 30458348002, 30458348003

METHOD BLANK: 2313860 Matrix: Water
Associated Lab Samples: 30458348001, 30458348002, 30458348003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	01/07/22 20:36	

LABORATORY CONTROL SAMPLE: 2313861

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.11	105	90-110	

MATRIX SPIKE SAMPLE: 2313863

Parameter	Units	30458348001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.010 U	0.1	0.10	101	85-115	

SAMPLE DUPLICATE: 2313862

Parameter	Units	30458348001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010 U		20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: MLF-FAU 2021
Pace Project No.: 30458348

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-FAU 2021
Pace Project No.: 30458348

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30458348001	**SW-1**	SM 4500NO3-F-2011	478842		
30458348002	**SW-2**	SM 4500NO3-F-2011	478842		
30458348003	**SW-3**	SM 4500NO3-F-2011	478842		
30458348001	**SW-1**	SM 4500NO2-B-2011	478881		
30458348002	**SW-2**	SM 4500NO2-B-2011	478881		
30458348003	**SW-3**	SM 4500NO2-B-2011	478881		

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF- FALL 2021	Turnaround Time	☐ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	NITRATE/NITRITE											
1	SW-1	2	1/6/22	1200	✓		SW	✓										01	
2	SW-2	↓	↓	1230	✓		↓	✓										02	
3	SW-3	↓	↓	1215	✓		↓	✓										03	
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

WO#: 30458348

30458348

	Signature	Date	Time	Comments
Relinquished by	[illegible]	1/6/22		RESAMPLING EVENT #3 - NEED
Received by	QMB / PACE	1/6/22	14:45	RESULTS ASAP.
Relinquished by	QMB / PACE	1/6/22	17:50	
Received by	KDS PACE	1-6-22	1755	LEVEL 2 REPORT
Relinquished by	KDS PACE	1-6-22	2150	
Received by	Brewer	1-6-22	2150	PACE - G - BULL - NITRATE/NITRITE

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EMA

Project #

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other

Tracking #: –

Label

LIMS Login

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 13 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 1.7 °C Correction Factor: 0.5 °C Final Temp: 1.2 °C

Temp should be above freezing to 6°C

WO#: 30458348

PM: AES Due Date: 01/12/22

CLIENT: ENV MONITOR

Comments:	Yes	No	N/A	pH paper Lot# 1002811 / Date and initials of person examining contents: 1-7-22
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):	✓			7.
Rush Turn Around Time Requested:	✓	Day		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.
All containers meet method preservation requirements.	✓			Initial when completed: JR / Date/time of preservation / Lot # of added preservative
Headspace in VOA Vials (>6mm):			✓	17.
Trip Blank Present: / Trip Blank Custody Seals Present			✓ ✓	18.
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: JR / Date: / Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: Date/Time: Contacted By:

Comments/ Resolution:

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

ENVIRO-CHEM LABORATORIES, INC.

47 Loveton Circle, Suite K • Sparks, Maryland 21152 410-472-1112

FINAL REPORT OF ANALYSIS

Environmental Monitoring & Assesment LLC
207 East Sixth St
Lititz, PA 17543

PROJECT NAME: [none]
REPORT DATE: 12/16/2021
REPORT NBR: 211216174855

LAB#: E069157-01
SAMPLE ID: TW-2A
LOCATION: Millersville Landfill
DATE SAMPLED: 12/09/2021
TIME SAMPLED: 2:20PM
SAMPLER- Steve Brown
DATE RECEIVED: 12/09/2021
TIME RECEIVED: 4:00PM
DELIVERED BY: Steve Brown
RECEIVED BY: Ginny Shelley

COMMENTS:

COMMENTS:

ANALYSIS	METHOD	ANALYSIS DATE/TIME	BY	RESULT	Qual	REPORTING LIMIT
Wet Chemistry by Enviro-Chem						
Nitrate (as N)	EPA 300.0	12/09/21 21:59	SES	< 0.15 mg/L		0.15

Stephen Shelley
Laboratory Director

ENVIRO-CHEM
LABORATORIES, INC.

47 Loveton Circle, Suite K • Sparks, Maryland 21152 410-472-1112

Qualifier(s)

Certifications

State of Maryland Laboratory #192

QUALITY CONTROL SUMMARY REPORT NBR: 211216174855

Enviro-Chem

Analyte QC Type	Sample Source	Date Prep'd	Date Analyzed	Result	MRL	Units	Spike Level	Source Result	% REC	% REC Limits	RPD	RPD Limit
Batch B1L0080												
Nitrate (as N)												
Duplicate	E069145-01	12/09/2021	12/09/2021	8.36	0.15	mg/L		8.36			0.00	20
LCS		12/09/2021	12/09/2021	1.03	0.15	mg/L	1.00		103	90-110		
Matrix Spike	E069145-01	12/09/2021	12/09/2021	9.54	0.15	mg/L	1.00	8.36	118	80-120		

* - Indicates Recovery/RPD failed Criteria.

NC - Indicates Duplicate Result or Sample Duplicate Result < 4 * Method reporting limit

69157

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	ENVIRO CHEM
Project	TW-2A - PASSAMP	Turnaround Time	☑ Normal ☐ Rush

Sample Type

GW = Groundwater **SO** = Soil **DW** = Drinking Water **QC** = Quality Control
SW = Surface Water **LE** = Leachate **Other** _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Analytical Parameters: NITRATE											
1	TW-2A	1	12.9.21	1420	✓		GW	✓											
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

	Signature	Date	Time	Comments
Relinquished by	[signature]	12/9/21	1600	
Received by	[signature]	12/9/21	1600	
Relinquished by				
Received by				
Relinquished by				
Received by				T=24

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

Appendix C.3
Spring 2022

Bureau of Waste Management Services
389 Burns Crossing Road
Severn, Maryland 21144
Phone (410) 222-6108

July 31, 2022

Mr. Andrew Grenzer, Chief
Solid Waste Operations Division
Land and Materials Administration
Maryland Department of the Environment
1800 Washington Blvd., Suite 605
Baltimore, MD 21230-1720

RE: Semi-Annual Groundwater and Surface Water Reports, January 1 – June 30, 2022, Millersville Landfill and Resource Recovery Facility and Sudley Closed Landfill

Dear Mr. Grenzer:

Enclosed are the Semi-Annual Groundwater and Surface Water Data Evaluation Reports for the Millersville Landfill and Resource Recovery Facility and the Sudley Landfill. The analytical results (raw data reports) for the monitoring events are also enclosed. The text, tables, and appendices are included as hard copies. The appendix containing the raw analytical data results is included electronically on the accompanying CDs.

Should you have any questions regarding the information covered in this document, please contact me or Mark Morris on (410) 222-6108.

Sincerely,

Stephen J. Krajcsik
Solid Waste Operations Administrator

Enclosure

bcc: Bill Dehn, AACo. Health Department (Mail Stop 3101), w/enclosures
Rhody Holthaus, w/enclosures
Michael Porath, w/enclosures
Mark Morris, w/enclosures
Stewart Kabis, ARM Group (cover letter only)
File# OR-O-MLF-551E w/enclosures; OR-O-MCC/MLF-506 (cover letter only) for Millersville
File# OR-O-SLF-651C w/enclosures; OR-O-SCC/SLF-606 (cover letter only) for Sudley

ANNE ARUNDEL COUNTY

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY

GROUNDWATER MONITORING REPORT
1st SEMI-ANNUAL 2022

ARM Project 21011025

Prepared for:

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS
WASTE MANAGEMENT SERVICES
389 Burns Crossing Road
Severn, Maryland 21144

Prepared by:

ARM Group LLC
9175 Guilford Road
Suite 310
Columbia, MD 21046

July 2022

ANNE ARUNDEL COUNTY

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY

GROUNDWATER MONITORING REPORT
1st SEMI-ANNUAL 2022

ARM Project 21011025

Prepared for:

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS
WASTE MANAGEMENT SERVICES
389 Burns Crossing Road
Severn, Maryland 21144

Prepared by:

ARM Group LLC
9175 Guilford Road
Suite 310
Columbia, MD 21046

July 2022

Lauren Parker, G.I.T.
Staff Geologist

Stewart Kabis, P.G.
Project Geologist II/Q.A. Reviewer

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(following text)

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Appendix B Historical MCL Exceedance Time-Series Plots

Appendix C Groundwater Elevations

Appendix D Data Validation

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EXECUTIVE SUMMARY

The Maryland Department of Environment (MDE) has developed groundwater and surface water monitoring requirements to detect pollutant releases from landfills that could have adverse impacts on public health and the environment. To fulfill these requirements, landfills must be monitored to address three issues: (i) whether a release of chemicals from the landfill has occurred; (ii) whether conditions potentially adverse to public health and the environment were created as a result of a release; and (iii) whether the results of a statistical evaluation of groundwater data require that additional sampling and/or corrective measures be implemented. This executive summary presents the findings of the 1st semi-annual 2022 (Spring 2022) groundwater sampling event, performed at the Millersville Landfill and Resource Recovery Facility (MLFRRF) located in Anne Arundel County. The findings are summarized with respect to these three issues.

The sampling results are evaluated for compliance with regulatory standards, including: (i) U.S. Environmental Protection Agency (USEPA) maximum contaminant levels (MCLs) and secondary maximum contaminant levels (SMCLs); (ii) Maryland health-based standards; and (iii) groundwater protection standards (GWPS) established for the site. MCLs and groundwater protection standards are established based on health concerns, whereas SMCLs are based on aesthetic concerns, such as taste, color, and odor.

The groundwater and surface water monitoring strategy for the MLFRRF was first identified in the Environmental Monitoring Plan (EMP), prepared for the Anne Arundel County Department of Public Works (the County) by Stearns & Wheeler [June 1995, Revised June 1996]. An updated EMP for MLFRRF prepared by ERM, dated November 5, 2002, was conditionally approved by MDE with their June 7, 2004 letter, contingent upon the County adding methyl tertiary butyl ether (MTBE) analysis to the monitoring program. The EMP was updated by ERM and approved by MDE in a letter dated March 25, 2010. The EMP defines two separate portions of the MLFRRF. Closed portions (Cells 1 East, 2, and 4) that stopped receiving waste prior to October 9, 1991, are subject to the requirements of the Code of Maryland (COMAR). The closed portions (Cells 5, 6, and 7) that stopped receiving waste prior to October 9, 1993, are subject to the provisions of 40 CFR Part 258 related to final cover requirements only. The recently-closed Cell 8 and currently active Cell 9 are subject to 40 CFR Part 258. However, for the purposes of monitoring, the closed portion (Cells 5, 6, and 7) are included in the monitoring and analysis requirements pursuant to 40 CFR Part 258 along with Cell 8 and Cell 9. Each of these portions of the MLFRRF are monitored by a comprehensive monitoring network, on-site regulated monitoring wells (Subtitle D), on-site regulated monitoring wells (COMAR), on-site non-regulated monitoring wells, off-site non-regulated monitoring wells, and other off-site monitoring locations. The monitoring networks were defined according to strategies that comply with the applicable regulatory requirements.

At the request of MDE, additional monitoring was performed for a select list of parameters from the Appendix II list in 40 CFR Part 258 for the on-site Subtitle D regulated monitoring wells.

OVERVIEW OF FINDINGS

Overall, the sampling event did not reveal substantial changes in groundwater quality and the results for inorganic parameters are consistent with historical results. Given the data for the MLFRRF, the site-specific hydrogeology, and the corrective actions implemented by the County, the potential for adverse effects to human health and the environment continues to be minimal.

Of all samples collected for the Spring 2022 sampling event, there were three MCL exceedances, shown on **Table 3.** None of the three MCL exceedances were first time exceedances. The three MCL exceedances are discussed below in **Section 3.3.1**.

The groundwater elevations and flow directions observed in the Zone 3 aquifer during this sampling event are generally consistent with historical data and seasonal variations.

The following summarizes the results of the Spring 2022 groundwater sampling event.

On-Site Regulated Monitoring Wells (Subtitle D)

All of the Appendix I VOC detections above the reporting limit (RL) are listed in **Table 4.** The Appendix II VOC detections are listed in **Table 5**. The concentration of methylene chloride in TW-25A exceeded its applicable MCL, as is typical.

In general, concentrations of Appendix I and Appendix II VOCs in the on-site Subtitle D regulated wells are consistent with historical concentrations. All VOC results for Subtitle D wells are discussed below in **Section 3.3.2**.

While iron and manganese continue to exceed SMCLs and pH is below the SMCL range in several wells, concentrations are generally consistent with historical levels.

On-site Regulated Monitoring Wells (COMAR)

Detections of Appendix I VOCs above the RL in COMAR wells are typically listed in **Table 6**; however, there were no Appendix I VOCs detected above the RL in these wells during the Spring 2022 event. The Appendix II VOC detections above the RL are listed in **Table 7.** There were no GWPS or MCL exceedances for VOCs. The concentrations measured for Appendix I and Appendix II VOCs in the on-site COMAR-regulated wells are generally consistent with historical records.

While iron and manganese continue to exceed SMCLs and pH is below the SMCL range in several wells, concentrations are generally consistent with historical levels.

On-site Non-regulated Monitoring Wells

Appendix I VOC detections above the RL are listed in **Table 8.** Appendix II VOC detections above the RL are listed in **Table 9.** The concentration of trichloroethene in TW-13 exceeded its applicable MCL, as is typical.

While iron and manganese continue to exceed SMCLs and pH is below the SMCL range in several wells, concentrations are generally consistent with historical levels. The concentration of arsenic in TW-11A exceeded its applicable MCL, as is typical.

Off-site Non-regulated Monitoring Wells

Appendix I VOC detections above the RL are listed in **Table 10.** Appendix II VOC detections above the RL are listed in **Table 11.** There were no MCL or GWPS exceedances. Appendix I and Appendix II VOC concentrations in these wells are generally consistent with historical concentrations. Mercury concentrations in the off-site non-regulated monitoring wells are generally consistent with the historical record.

Off-site Residential Zone 4 Water Supply Wells

Appendix I VOC detections above the RL are typically listed in **Table 12,** but there were no detections above the RL during the Spring 2022 sampling event**.** Appendix II VOC detections above the RL are typically listed in **Table 13**, but there were no detections above the RL at Zone 4 residential water supply wells during this sampling event. As such, there were no MCL or GWPS exceedances.

Surface Water Sampling Locations

Appendix I VOC detections above the RL are typically listed in **Table 14,** but there were no detections above the RL during the Spring 2022 sampling event**.** Appendix II VOC detections above the RL are typically listed in **Table 15**, but there were no detections above the RL at surface water locations during this sampling event. As such, there were no MCL or GWPS exceedances.

Concentrations of inorganic parameters were generally consistent with the historical record for surface water sampling locations.

Statistical Evaluation

The results of the statistical evaluation of the Spring 2022 groundwater data are generally consistent with historical results. The findings indicate that downgradient samples show constituent concentrations that are statistically significant increases (SSIs) above background levels for several VOCs and inorganic parameters. There were two new SSIs for parameters detected above the RL during the Spring 2022 sampling event that were not identified during the Fall 2021 event. These

new SSIs consist of 1,2-dichloroethane and 1,4-dichlorobenzene in TW-25A. Concentrations of most parameters that exhibited SSIs have generally been consistent with their historical data set; that is, no trend is apparent in the concentrations.

1 INTRODUCTION

1.1 BACKGROUND

In accordance with the requirements of the Solid Waste Management Regulations provided in Title 40 of the Code of Federal Regulations, Part 258 (40 CFR Part 258) and the Maryland Department of the Environment (MDE), the Anne Arundel County Department of Public Works (County) monitors groundwater and surface water at the Millersville Landfill and Resource Recovery Facility (MLFRRF), located in Anne Arundel County, Maryland. The monitoring requirements are provided in the Environmental Monitoring Plan (EMP), prepared by Stearns & Wheeler [June 1995, Revised June 1996]. An updated EMP for MLFRRF prepared by ERM, dated November 5, 2002, was conditionally approved by MDE with their June 7, 2004 letter, contingent upon the County adding methyl tertiary butyl ether (MTBE) analysis to the monitoring program. The EMP was revised by ERM and approved by MDE in a letter dated March 25, 2010. The primary objectives of the compliance monitoring program for the MLFRRF are: (i) to determine if leachate from the landfill affects groundwater quality; (ii) to evaluate whether or not conditions that are potentially adverse to public health and the environment have been caused in groundwater or surface water by the operation of the landfill; and (iii) to determine whether the results of a statistical evaluation of the sampling data indicate that the County needs to perform additional groundwater sampling or implement corrective measures.

This semi-annual report summarizes the findings of the evaluation performed on the data obtained during the Spring 2022 groundwater sampling event. The sampling performed during this event was conducted to fulfill the monitoring requirements of 40 CFR Part 258 and the approved EMP. This report also provides an overview of groundwater quality based on current and historical data.

The sampling data were evaluated through: (i) data validation; (ii) an evaluation of the ion balances of the samples that were collected, and an evaluation of the relative percent differences (RPDs) between sampling locations and corresponding duplicates (**Appendix D**); (iii) a statistical comparison of laboratory data between designated upgradient and downgradient groundwater on-site Subtitle D regulated monitoring wells; (iv) a comparison of laboratory results for each groundwater monitoring well with historical groundwater quality information; and (v) a comparison of laboratory results for each groundwater monitoring well with United States Environmental Protection Agency (USEPA) and MDE regulatory criteria, as well as with site-specific groundwater protection standards (GWPS).

There are three sets of rules that govern how the MLFRRF monitoring data are evaluated: 40 CFR Part 258 regulations apply to those portions of the MLFRRF that continued to receive waste after October 9th, 1993; 40 CFR Part 258 regulations related to final cover requirements apply to those portions of the MLFRRF that stopped receiving waste prior to October 9, 1993; and State Code of Maryland (COMAR) regulations apply to those closed portions of the MLFRRF that stopped

receiving waste before October 9, 1991. Closed disposal Cells 1 East, 2, and 4 are monitored in compliance with COMAR standards. The closed Cells 5, 6, and 7 that stopped receiving waste prior to October 9, 1993, are subject to the provisions of 40 CFR Part 258 related to final cover requirements only. Recently-closed Cell 8 and currently active Cell 9 are subject to 40 CFR Part 258. However, for the purposes of monitoring, the closed Cells 5, 6, and 7 are included in the monitoring and analysis requirements pursuant to 40 CFR Part 258 along with Cell 8 and Cell 9.

Table 1 provides a summary of the groundwater monitoring network for the MLFRRF. As shown in **Table 1**, the wells are designated according to whether they are used to monitor the older (Cells 1 East, 2, and 4) or newer (combined Cells 5, 6, and 7, Cell 8, and Cell 9) portions of the MLFRRF. The groundwater and surface water monitoring network for the MLFRRF is illustrated in **Figure C-1** in **Appendix C**. In general, the older and newer portions are separated by the Baltimore Gas Electric right-of-way.

In accordance with the EMP and in conformance with applicable regulations, 22 of the 50 on-site monitoring wells at the MLFRRF are classified as on-site regulated monitoring wells (Subtitle D). Eleven are located along the Eastern Boundary, two are near Cell 8, two are near the facility entrance serving as background wells, and seven are near Cell 9. Additionally, another 15 of the 50 on-site monitoring wells are classified as on-site regulated monitoring wells (COMAR). These monitoring wells are governed by COMAR for the closed portion of the MLFRRF. One monitoring well, TW-26R, is regulated by the facility's refuse disposal permit and is not covered by this semi-annual report. The remaining 13 on-site monitoring wells are classified as non-regulated. In conjunction with the regulated wells, numerous off-site monitoring locations have been established by the County to take proactive measures that comply with 40 CFR Part 258 groundwater monitoring requirements.

The regulated monitoring wells (Subtitle D) consist of the wells at the site that provide information on the quality of groundwater passing the relevant point of compliance and that are downgradient of combined Cells 5, 6, and 7, Cell 8 and Cell 9. **Table 1** summarizes the sampling locations used to monitor these cells. The on-site monitoring wells are designated as "TW". Wells designated as "MW" are off-site monitoring wells installed by the County to monitor off-site chemical concentrations in the groundwater. Wells designated as "RW" are also off-site monitoring wells and were converted from drinking water supply wells to monitoring wells by the County. Off-site residential water supply wells drilled into either the Zone 3 or Zone 4 aquifer are designated by the County parcel number with the prefix "P". Off-site residential water supply wells which have been drilled into the Zone 4 aquifer by the County have the suffix "Z4". Zone 4 residential wells are sampled biennially, with the exception of well P-417-Z4. This well is sampled annually as a conservative measure because there is no sentry monitoring point between the landfill and Parcel 417. **Table 2** lists the residential water supply wells. Five of the 22 residential water supply wells were not sampled during the Spring 2022 sampling event.

Regulated monitoring well (Subtitle D) TW-20 was abandoned on April 8, 2010, by a licensed well driller in accordance with COMAR 26.04.04.11. The well was placed to monitor groundwater downgradient of Cell 8 but was placed where a stormwater management pond was designated for Cell 9. Zone 3 monitoring well TW-20R was installed February 3-5, 2010, adjacent to Cell 8 as a replacement for abandoned monitoring well TW-20 per the approved EMP.

In addition to TW-20R, two non-regulated on-site Zone 4 monitoring wells were installed prior to the Spring 2010 sampling event. The installation of non-regulated on-site Zone 4 monitoring wells TW-14B and TW-6B were completed per the approved EMP on January 21, 2010 and February 2, 2010, respectively.

In accordance with the EMP, four on-site Zone 3 monitoring wells, TW-27, TW-28, TW-29, and TW-30, were installed prior to the Spring 2013 sampling event for incorporation into the regulatory monitoring well network for Cell 9. Additionally, existing monitoring wells TW-01, TW-02A, and TW-03, located south of Cell 9, are now considered part of the regulatory monitoring well network. Two years of background monitoring were completed prior to Cell 9 becoming operational in January 2017.

During the Fall 2020, construction activity for Cell 9 of the landfill involved significant earthwork in the immediate vicinity of TW-28, including raising the ground surface by 10-12 feet. As a result, new sections of well pipe were added to the top of TW-28 in order to vertically extend the well.

1.2 GROUNDWATER SAMPLING AND LABORATORY ANALYSIS

1.2.1 Groundwater Sampling

The County contracted with Environmental Monitoring and Assessment, LLC (EMA) of Lititz, Pennsylvania, to conduct the semi-annual groundwater sampling at the MLFRRF for the Spring 2022 sampling event. The sampling event included the collection of samples from 22 regulated on-site monitoring wells (Subtitle D), 15 regulated on-site monitoring wells (COMAR), 13 on-site non-regulated monitoring wells, and 12 off-site monitoring wells. The sampling locations are listed in **Table 1.**

Prior to collecting the groundwater samples, the depth to the water table was measured at each well. Once the water table measurement was recorded, the monitoring wells were purged and sampled in accordance with 40 CFR Part 258, MDE requirements, and the EMP. As the monitoring wells were purged, measurements of groundwater dissolved oxygen, pH, conductivity, temperature, oxidation-reduction potential, turbidity, and appearance were recorded.

1.2.2 Groundwater Sample Analysis

The groundwater analytical program for the MLFRRF includes the analysis of samples for parameters used to monitor both the existing and closed portion of the MLFRRF. For the purpose of uniformity and ease of implementation, the samples that are collected from the wells used to monitor the closed portion of the MLFRRF are analyzed in accordance with the detection monitoring requirements (defined by 40 CFR Part 258) for the existing portion of the MLFRRF, as specified in the EMP. In accordance with these detection monitoring requirements, the samples are analyzed for the parameters listed in Appendix I of 40 CFR Part 258 (Appendix I parameters). The Appendix I parameters include inorganic constituents (metals) and organic constituents (volatile organic compounds or VOCs).

In addition to these analytical requirements, the samples collected at the site are also analyzed for parameters historically monitored at the site. These parameters include dichlorodifluoromethane and dichlorofluoromethane, which are listed in Appendix II of 40 CFR Part 258 (Appendix II parameters), methyl tertiary butyl ether (MTBE), and general chemistry parameters such as chloride and total dissolved solids that can sometimes be indicators of landfill leachate (indicator parameters).

In accordance with this analytical program described above, the groundwater samples were analyzed for VOCs, total and dissolved metals, and general chemistry indicator parameters. The methods used to analyze the samples included USEPA Methods 8260 and 8011 for VOCs; USEPA Methods 6010D, 6020B, and 7470A for metals; and 40 CFR Part 136 methods for the indicator parameters. The full laboratory analytical results and data packages are presented as **Appendix E.**

1.3 SURFACE WATER SAMPLING AND LABORATORY ANALYSIS

1.3.1 Surface Water Sampling

During the Spring 2022 sampling event, three surface water samples, SW-1, SW-2, and SW-3 were collected by EMA from Wells Branch, which flows west to east across the site (see Figure C-1). The surface water samples were collected from the stream locations that are representative of upgradient and downgradient conditions. Sample location SW-1 is an upgradient location between Cell 8 and the leachate pretreatment plant, approximately 200 feet downgradient of monitoring well TW-10A. Sample location SW-2 is a downgradient location near the TW-4 well cluster. Surface water collected at this location is representative of surface water conditions prior to discharging off-site. Sample location SW-3 is a mid-stream location that is downgradient of Stormwater Pond 8-1 and is located between combined Cells 5-7, Cell 8, and Cell 9. This location is approximately equal distance from sample locations SW-1 and SW-2.

1.3.2 Surface Water Sample Analysis

The surface water samples were analyzed for VOCs, total metals, and indicator parameters. The methods used to analyze the samples included USEPA Method 8260 for VOCs; USEPA Methods 6010D, 6020B, and 7470A for metals; and 40 CFR Part 136 methods for the indicator parameters.

1.4 QUALITY ASSURANCE/QUALITY CONTROL SAMPLING AND ANALYSIS

1.4.1 Quality Assurance/Quality Control Sampling (QA/QC)

Field and laboratory QA/QC protocols were employed during the sampling event to ensure that QA/QC criteria were met. The field QA/QC protocols included the collection and analysis of two blind duplicate samples from wells TW-24 and TW-25. In addition, one field blank and four trip blanks were prepared and analyzed. The laboratory QA/QC protocols included the analysis of method blanks and matrix spike (MS) and matrix spike duplicate (MSD) samples for GC/MS runs. These protocols help identify possible sources of VOC contamination that may cause elevated or false positive parameter levels to be reported.

1.4.2 Quality Assurance/Quality Control Sample Analysis

To ensure that the field QC criteria were met, blind duplicate samples were analyzed for all parameters for which the groundwater samples were analyzed. These parameters include VOCs by USEPA Method 8260 and 8011; total and dissolved metals by USEPA Methods 6010D, 6020B, and 7470A; and the indicator parameters by 40 CFR Part 136 methods. The field blank was also analyzed for all parameters for which the Subtitle D regulated monitoring wells were analyzed. These parameters include VOCs by USEPA Method 8260; total and dissolved metals by USEPA Methods 6010D, 6020B, and 7470A; and indicator parameters by 40 CFR Part 136 methods. The trip blanks were analyzed for VOCs according to USEPA Method 8260 and 8011.

To ensure that the laboratory QA criteria were met, project-specific MS and MSD samples were analyzed at the rate of one MS/MSD sample for every 20 field samples, as specified in the EMP. The MS and MSD samples were used by the laboratory to evaluate possible matrix effects that could have interfered with the analytical method, and to estimate the method precision. The analysis of laboratory method blanks was performed to identify possible sources of contamination that may have caused elevated or false positive parameter levels to be reported.

1.5 DATA ANALYSIS METHODOLOGY

The analysis of the data obtained during this sampling event included: validation of the laboratory data, determination of USEPA National Primary Drinking Water Standards (MCLs) exceedances,

statistical evaluation of upgradient versus downgradient parameter concentrations, identification of GWPS exceedances, and assessment of groundwater elevations.

The laboratory sample data and QA/QC data were validated to verify proper analytical procedures and checks were performed by the analytical laboratory. The laboratory data validation is discussed further in **Appendix D** of this report. The laboratory analytical data packages are presented as **Appendix E** of this report.

The data were evaluated to determine whether or not concentrations exceeded MCLs and National Secondary Drinking Water Standards (SMCLs), state health-based standards, and site-specific GWPS. The GWPS for the site were established in 1997. This evaluation is included in **Section 3** of this report.

The data analysis included a statistical evaluation of the detection monitoring data obtained from the on-site regulated monitoring wells (Subtitle D). This evaluation was used to determine if there is a statistically significant change in groundwater quality for the portions of the site subject to 40 CFR Part 258.54 that may be attributed to the MLFRRF. The historical concentrations of the parameters detected in the groundwater samples from each on-site regulated monitoring well (Subtitle D) were compared to the historical background data using statistical methods described in the EMP and 40 CFR Part 258.53(g). The statistical analysis is discussed further in **Section 4** of this report.

2 SUMMARY OF SAMPLING EVENT

2.1 OVERVIEW

The County contracted with EMA to conduct the Spring 2022 sampling event at the MLFRRF. VOC sample analysis was performed by Maryland Spectral Services of Baltimore, Maryland, and inorganic sample analysis was performed by Pace Analytical Service (Pace), of Greensburg, Pennsylvania and Beaver, West Virginia.

The groundwater monitoring wells were purged and sampled in accordance with the EMP and 40 CFR Part 258. **Figure C-1** shows the locations of the sampling points and the corresponding sampling classifications. Quality control blanks and blind duplicates were obtained, as discussed in **Section 1.4.1** of this report. The groundwater samples were submitted to the laboratory for analyses of total and specific dissolved metals, Appendix I VOCs, and inorganic indicators of leachate (chloride, ammonia, nitrite and nitrate-nitrogen, chemical oxygen demand, total alkalinity, sulfate, dissolved solids, and hardness).

2.2 DATA ANALYSIS

The methods used to collect and analyze the groundwater, surface water and QA/QC samples for this sampling event were evaluated to determine compliance with the EMP for the site and 40 CFR Part 258. The following procedures were followed to evaluate the compliance of the field sampling activities and the laboratory methods:

- Review of the appropriateness of the analytical methods;
- Review of the appropriateness of sample bottle types, preservatives, and holding times for each analytical method;
- Review of reports and analytical data for trip blanks, field blanks, duplicate samples, and laboratory method blanks to identify possible evidence of contamination;
- Review of Chain-of-Custody documentation for accuracy and completeness; and
- Review of field methods described in the field sampling reports.

The field and laboratory results were also evaluated to determine the validity of the data. The following procedures were followed to assess the validity of the data:

- Calculation of charge balance errors on the samples collected in the field;

- Review of MS and MSD samples to evaluate possible matrix effects that may interfere with the analytical method;

- Review of MS, MSD, and blind duplicate samples to calculate the relative percent difference (RPD) of duplicate samples in obtaining an estimate of laboratory method precision;

- Review of laboratory reports on instrument tuning, instrument calibration, and recoveries of spiked samples for each analytical method; and

- Comparison of the analytical data and groundwater elevations to historical values at each sampling location.

The results obtained from this evaluation satisfy the project QA/QC objectives. The results of the evaluation of the analytical data are provided in **Appendix D.** The full laboratory analytical data packages are presented as **Appendix E** of this report.

A comparison of the analytical data to MCLs, SMCLs, State standards, and established GWPS, as well as to historical data, is discussed in **Section 3.**

3 SUMMARY OF ANALYTICAL RESULTS

3.1 INTRODUCTION

Groundwater elevations were measured by the County on a monthly basis and are included in this report in **Appendix C**. The field and laboratory analytical results were evaluated by comparing the current data to historical data. The laboratory results were also evaluated for compliance with regulatory standards. In assessing the laboratory data, each parameter was evaluated for compliance with: (i) MCLs and SMCLs; (ii) Maryland health-based standards; and (iii) GWPS established for the site. MCLs and GWPS are established based on health concerns, whereas SMCLs are based on aesthetic concerns, such as taste, color, and odor. A statistical evaluation of the laboratory results is presented in **Section 4**.

3.2 GROUNDWATER ELEVATION DATA

The monthly water table measurements recorded during May 2022 are provided in **Appendix C.** The groundwater elevations are generally consistent with historical data.

Potentiometric surface contours for groundwater levels measured in wells screened within the Zone 3 aquifer during Spring 2022 are illustrated on **Figure C-1** in **Appendix C**. As shown on the drawing, the general direction of groundwater flow in the Zone 3 aquifer at the MLFRRF is toward the northeast. Groundwater flow direction is consistent with historical data.

3.3 ANALYTICAL RESULTS

The results of the comparison of the analytical data to regulatory standards and to historical trends are discussed below for the volatile organic and inorganic data. In assessing the data, each parameter was evaluated for compliance with the MCLs and SMCLs, with Maryland health-based standards, and with GWPS established for the site.

The current analytical data and the historical analytical data are included in tables in **Appendix A.** The tables present the concentrations over time for organic and inorganic parameters. They provide a simple means of evaluating trends in the concentrations. The “J” qualifier associated with a concentration indicates the compound was detected at a trace concentration below the laboratory RL but above the MDL and as such is an estimated value. The “U” qualifier associated with a concentration indicates the compound was not detected. The “B” qualifier indicates possible laboratory contamination due to the compound being detected in the method or field blank sample analysis. An “L” qualifier indicates possible laboratory contaminant.

3.3.1 **MCL Exceedances**

Table 3 lists the MCL exceedances at the site for this sampling event. As shown in **Table 3**, there were three parameters that exceeded their applicable MCLs. Time-series plots for parameter concentrations with historic MCL exceedances for on-site monitoring wells have been constructed to identify potential trends in concentrations over time. These plots are included in **Appendix B**. All three of the MCL exceedances were consistent with the historical record. There were no first-time MCL exceedances during the Spring 2022 sampling event.

3.3.2 **On-site Regulated Monitoring Wells (Subtitle D)**

Appendix I Volatile Organic Compounds

As shown on **Table 4**, ten different VOCs were detected above the RL across 12 different monitoring locations. The concentration of methylene chloride in TW-25A exceeded its applicable MCL, as it has done over the past several years.

All detections of VOCs above the RL were generally consistent with the historical record. No Appendix I VOCs were detected above the RL in the following Subtitle D wells during the Spring 2022 sampling event: TW-02A, TW-03, TW-04B, TW-10A, TW-19, TW-20R, TW-23, TW-24A, TW-27, and TW-30.

Appendix II Volatile Organic Compounds and MTBE

As shown in **Table 5**, detections above the RL of dichlorodifluoromethane, dichlorofluoromethane, and MTBE were noted for 12 different locations. There were no GWPS or Maryland State Action Level exceedances. In general, concentrations of these parameters are consistent with concentrations measured over the past 10 years.

No Appendix II VOCs were detected above the reporting limit in the following Subtitle D wells during the Spring 2022 sampling event: TW-02A, TW-03, TW-04B, TW-10A, TW-19, TW-20R, TW-23, TW-24A, TW-27, and TW-30.

Inorganics

Mercury was detected at concentrations above the RL only in Subtitle D wells TW-04B, TW-05, TW-06, TW-24, and TW-24A. Concentrations in all five of these wells were below the applicable MCL.

Iron (total and dissolved), manganese (total and dissolved), and turbidity were detected in many of the regulated monitoring wells (Subtitle D) at concentrations that exceeded the applicable SMCLs. Iron and manganese are typical naturally occurring metals found in groundwater and are not necessarily indicative of contamination from the landfill. Measurements of pH were below

the SMCL range for most on-site Subtitle D regulated monitoring wells. Low pH is also typical of groundwater and is believed to be a natural property of groundwater at the MLFRRF. Furthermore, pH concentrations in the downgradient monitoring wells are consistent with those measured in upgradient background groundwater.

Concentrations of inorganic parameters measured during the Spring 2022 sampling event—including those of iron, manganese, and pH—are generally consistent with the historical record.

3.3.3 **On-site Regulated Monitoring Wells (COMAR)**

Appendix I Volatile Organic Compounds

As shown on **Table 6,** there were no Appendix I VOCs detected above the RL across all COMAR regulated on-site monitoring wells. As such, there were no MCL or GWPS exceedances.

Appendix II Volatile Organic Compounds and MTBE

As shown in **Table 7**, there was only one detection above the RL of an Appendix II VOC in a COMAR regulated on-site monitoring well. There were no GWPS or Maryland State Action Level exceedances. The concentration was consistent with the historical record. There were no Appendix II VOCs detected above the RL in COMAR regulated wells TW-07, TW-07A, TW-08, TW-08A, TW-09B, TW-09C, TW-15, TW-16, TW-17, TW-17A, TW-21, TW-22, TW-22A, and TW-22B.

Inorganics

Mercury was detected at a concentration above the RL in one COMAR regulated well (TW-22A). The concentration was below the applicable MCL. Iron (total and dissolved), manganese (total and dissolved), and turbidity were detected in several of the COMAR regulated monitoring wells at concentrations that exceeded their applicable SMCLs. Iron and manganese are typical naturally occurring metals found in groundwater and are not necessarily indicative of contamination from the landfill. Measurements of pH were below the SMCL range for all on-site COMAR regulated monitoring wells. Low pH is also typical of groundwater and is believed to be a natural property of groundwater at the MLFRRF. Furthermore, pH concentrations measured in the downgradient wells are comparable to upgradient background concentrations.

Concentrations of inorganic parameters measured in COMAR regulated monitoring wells during the Spring 2022 sampling event—including those of iron, manganese, and pH—were consistent with the historical record.

3.3.4 **On-site Non-regulated Monitoring Wells**

Appendix I Volatile Organic Compounds

As shown on **Table 8**, there were five Appendix I VOCs detected above the RL across three on-site non-regulated monitoring wells during the Spring 2022 sampling event. These detections are consistent with the historical record. There were no Appendix I VOCs detected above the RL in the following on-site non-regulated wells: TW-02, TW-03A, TW-05B, TW-06B, TW-09, TW-11A, TW-14B, TW-16A, TW-18, and TW-21A.

Appendix II Volatile Organic Compounds and MTBE

As shown on **Table 9**, detections of dichlorodifluoromethane and dichlorofluoromethane above the RL were observed in two on-site non-regulated monitoring wells during the Spring 2022 sampling event. There were no GWPS or Maryland State Action Level exceedances. The concentrations were consistent with the historical record. There were no Appendix II VOCs detected above the RL in on-site non-regulated wells TW-02, TW-03A, TW-05B, TW-06A, TW-06B, TW-09, TW-11A, TW-14B, TW-16A, TW-18, and TW-21A.

Inorganics

Mercury was not detected above the RL in any on-site non-regulated monitoring wells. Iron (total and dissolved), manganese (total and dissolved), and turbidity were detected in a few of the on-site non-regulated monitoring wells at concentrations that exceeded their applicable SMCLs. Iron and manganese are typical naturally-occurring metals found in groundwater and are not necessarily indicative of contamination from the landfill. Measurements of pH were below the SMCL range for most on-site non-regulated monitoring wells. Low pH is also typical of groundwater and is believed to be a natural property of groundwater at the MLFRRF. Furthermore, pH concentrations measured in the downgradient wells are comparable to upgradient background concentrations.

Concentrations of inorganic parameters measured in on-site non-regulated monitoring wells during the Spring 2022 sampling event—including those of iron, manganese, and pH—are generally consistent with the historical record.

3.3.5 **Off-site Non-regulated Monitoring Wells**

Appendix I Volatile Organic Compounds

As shown on **Table 10**, four different Appendix I VOCs were detected above the RL across seven different off-site non-regulated monitoring well locations. There were no MCL or GWPS exceedances. In general, VOC concentrations detected above the RL in these wells are consistent with historical concentrations. There were no Appendix I VOCs detected above the RL in wells MW-P4, MW-P9, MW-P440, RW-P171-1, and RW-P441.

Appendix II Volatile Organic Compounds and MTBE

As shown in **Table 11**, detections of dichlorodifluoromethane and dichlorofluoromethane above the RL were observed at nine off-site non-regulated monitoring wells. There were no detections of MTBE above the RL. There were no GWPS or Maryland State Action Level exceedances. The detected concentrations of dichlorodifluoromethane and dichlorofluoromethane are generally consistent with the historical record. There were no Appendix II VOCs detected above the RL in wells MW-P4, MW-P440, and RW-P171-1.

Inorganics

Mercury was detected at a concentration above the RL in one off-site non-regulated monitoring well (RW-P584). The concentration was below the applicable MCL.

3.3.6 **Off-site Residential Zone 4 Water Supply Wells**

As shown on **Table 12** and **Table 13**, there were no Appendix I or Appendix II VOCs detected above the RL at any off-site residential Zone 4 water supply wells during the Spring 2022 sampling event. Zone 4 residential water supply wells P-109-Z4, P-145-Z4, P-161-Z4, P-277-Z4, and P-359-Z4 were not sampled during this event for the following reasons:

- P-109-Z4 – Outside faucet not working, owner requested that sample be collected at a later date.
- P-145-Z4 – Outside faucet not working and unable to contact property owner of rental property for access.
- P-161-Z4 – Residence is under renovation and water is turned off because no one is living at this location.
- P-277-Z4 – Unable to contact property owner for access.
- P-359-Z4 – Unable to contact property owner for access.

3.3.7 **Surface Water Sampling Locations**

Appendix I and Appendix II Volatile Organic Compounds

As shown on **Table 14** and **Table 15**, there were no Appendix I or Appendix II VOCs detected above the RL at any surface water monitoring locations during the Spring 2022 sampling event.

Inorganics

There were no MCL exceedances of inorganic parameters at the surface water sampling locations. SMCL exceedances were observed for iron at SW-2 while turbidity exceeded its SMCL at SW-2 and SW-3. Concentrations of all detected inorganic parameters at surface water locations were consistent with historical values.

4 STATISTICAL EVALUATION

4.1 INTRODUCTION

In accordance with the EMP and 40 CFR Part 258.53, groundwater sampling and analysis requirements, the groundwater parameters at the MLFRRF have been statistically analyzed. Listed below are the objective of the analysis, the procedures used, and the summary of results. The detailed results of the statistical analysis are included after the text.

4.2 OBJECTIVE

According to the Code of Federal Regulations (40 CFR Part 258), groundwater monitoring data must be statistically analyzed to determine if parameter levels are exceeding background groundwater quality levels at each downgradient well. This goal is met by statistically analyzing the groundwater data that have been collected on the site since 1993. The analyses will determine if the land use may be contributing to groundwater contamination.

4.3 PROCEDURE

Samples have been collected since 1993 and tested for the constituents specified in the EMP. The concentrations observed in the downgradient wells are compared to the concentrations observed in the upgradient wells. If the downgradient samples show significantly higher concentrations than the upgradient samples statistically, it indicates that land use practices are likely affecting the groundwater quality.

The groundwater data were analyzed using the Mann-Whitney Test (Wilcoxon Rank Sum Test) to determine whether the downgradient data differed from the upgradient data with statistical significance. The Mann-Whitney analysis is nonparametric, that is, it assumes no underlying distribution (like the normal distribution) and compares two groups of data and determines whether both groups come from the same population with a certain confidence.

Individual statistical tests have a certain amount of uncertainty associated with them. When multiple tests are combined (from different wells and different constituents), that uncertainty is compounded. An overall network-wide Type I error rate of 5% is required by 40 CFR Part 258.53(h)(2); however, an error rate no less than 1% shall be applied to any single test. A 5% Type I error rate means 5% of the recognized exceedances are in reality not actually elevated above background levels; that is, they represent false positives.

Statistical analyses are performed for all parameters detected over the RL during the Spring 2022 sampling event at downgradient wells. Using the Bonferroni adjustment to account for multiple

statistical comparisons, a Type I error rate of much less than 1% per analysis would result, so a Type I error rate of 1% was used as the minimum allowable under 40 CFR Part 258.52(h)(2).

For each sampling event, an average concentration from the upgradient wells was calculated. The collection of average concentrations for all sampling events was then compared to the concentrations for all sampling events at each of the downgradient wells. For each downgradient well, the upgradient and downgradient concentrations are combined and ranked (the lowest concentration is assigned a rank of 1). Tied concentrations are ranked equally by averaging the ranks that would be assigned to the tied group if they were not tied.

The sum of the ranks, the number of upgradient observations, and the number of downgradient observations are used to calculate the Mann-Whitney Test Statistic (U). The calculated U for each well/parameter pair is compared to a critical U value which is published in tables in statistical texts. Critical U values are based on the number of samples in the upgradient group and at each downgradient well. Therefore, the critical U values vary from parameter-to-parameter and from well-to-well. If the calculated U is greater than the critical U, there is no exceedance at 99% confidence (a 1% Type I error rate for each analysis). Likewise, if the calculated U is less than the critical U, there is an exceedance.

Because the upgradient (background) condition is compared to each downgradient well separately, each well/parameter combination is tested. The results of all of the tests are included following the report text. There may be exceedances in some downgradient wells for a particular parameter, but not in other downgradient wells.

4.4 SUMMARY OF RESULTS

The results of the statistical analysis are shown on **Table 16.** The findings indicated that downgradient samples show constituent concentrations that are statistically significant increases (SSIs) above background levels in all 20 of the downgradient on-site regulated wells. While there were a few new SSIs identified during the Spring 2022 sampling event for which concentrations are below the RL, these are not of major concern because the parameters were detected at trace levels.

There were two new SSIs identified for which parameters were detected above the RL during this sampling event that were not identified during the previous sampling event. These new SSIs consist of 1,2-dichloroethane and 1,4-dichlorobenzene in TW-25A. The SSIs for these two parameters were not identified during the previous sampling event because statistical tests were not run for these parameters, as they were not detected above the RL in any Subtitle D wells during the Fall 2021 sampling event. However, these parameters are typically detected at low level concentrations in TW-25A and neither of them exhibited significant increases during the Spring 2022 event. Furthermore, neither of these VOCs have been historically detected in either of the

background wells (TW-10A and TW-23), so a detection in a downgradient well easily triggers an SSI.

The statistical exceedances are generally consistent with historical exceedances. Concentrations of most parameters that exhibited SSIs have generally been consistent with their historical data set; that is, no trend is apparent in the concentrations.

5 RECOMMENDATIONS

The results of the Spring 2022 groundwater sampling event indicate that overall, groundwater conditions are generally consistent with historical data for the MLFRRF. Many monitoring wells continue to show VOC concentrations lower than historical data. While the data and statistical evaluations indicate that a release of landfill constituents to groundwater may have occurred, the site-specific hydrogeology and the corrective measures already implemented by the County have limited the potential for any adverse effects on human health and the environment. It is recommended that regular groundwater monitoring be continued in accordance with the EMP.

TABLES

Table 1 - MLFRRF SAMPLING LOCATIONS						
Sampling Locations Used to Monitor Cells 5, 6, 7, 8, and 9				**Sampling Locations Used to Monitor Cells 1 east, 2, and 4**		
On Site Regulated Monitoring Wells (Subtitle D)	Off-Site Non-Regulated Monitoring Wells	On-Site Non-Regulated Monitoring Wells	Surface Water Sampling Locations	On-Site Regulated Monitoring Wells (COMAR)	On-Site Non-Regulated Monitoring Wells	Surface Water Sampling Locations
TW-01	MW-P4	TW-02	SW-1	TW-07	TW-09	SW-1
TW-02A	MW-P9	TW-03A	SW-2	TW-07A	TW-16A	SW-2
TW-03	MW-P106	TW-05B	SW-3	TW-08		SW-3
TW-04	MW-P417	TW-06A*		TW-08A		
TW-04B	MW-P440	TW-06B		TW-09B		
TW-05	RW-P109	TW-11A*		TW-09C		
TW-05A	RW-P165	TW-12*		TW-15		
TW-06	RW-P171-1	TW-13*		TW-15B		
TW-10A	RW-P264	TW-14B		TW-16		
TW-14	RW-P440	TW-18*		TW-17		
TW-14A	RW-P441	TW-21A*		TW-17A		
TW-19	RW-P584			TW-21		
TW-20R				TW-22		
TW-23				TW-22A		
TW-24				TW-22B		
TW-24A						
TW-25						
TW-25A						
TW-27						
TW-28						
TW-29						
TW-30						

*Note: As specified in the EMP, the wells with an * are sampled annually only during the spring events.*

Table 2 - RESIDENTIAL SUPPLY WELL SAMPLING LOCATIONS			
Sampling Location	Aquifer	Sampling Location	Aquifer
P-109-Z4*	Zone 4	P-417-Z4	Zone 4
P-145-Z4*	Zone 4	P-261-Z4	Zone 4
P-160-Z4	Zone 4	P-264-Z4	Zone 4
P-161-Z4*	Zone 4	P-277-Z4*	Zone 4
P-162-Z4	Zone 4	P-323-Z4	Zone 4
P-164-Z4	Zone 4	P-359-Z4*	Zone 4
P-165-Z4	Zone 4	P-383-Z4	Zone 4
P-166-Z4	Zone 4	P-412-Z4	Zone 4
P-168-Z4	Zone 4	P-440-Z4	Zone 4
P-169-Z4	Zone 4	P-441-Z4R	Zone 4
P-257-Z4	Zone 4	P-478-Z4	Zone 4

** - Wells which were not sampled during the Spring 2022 sampling event.*

Table 3 - Current MCL Exceedances						
Well Group	Location	Parameter	Result	Qualifier	MCL	Units
On-Site Non-Regulated	**TW-11A**	Arsenic	0.025		0.01	mg/L
	TW-13	Trichloroethene	5.3		5	µg/L
Subtitle D	**TW-25A**	Methylene Chloride	22.4	L	5	µg/L

Notes:

- *L flag - Analyte is a possible laboratory contaminant.*

Table 4 - APPENDIX I VOC DETECTIONS IN REGULATED WELLS (SUBTITLE D)					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
TW-01	1,1-Dichloroethane	1.7		1370	µg/L
TW-04	1,1-Dichloroethane	2.3		1370	µg/L
TW-05	1,1-Dichloroethane	2.5		1370	µg/L
	cis-1,2-Dichloroethene	1.1		70	µg/L
TW-05A	1,1-Dichloroethane	1.3		1370	µg/L
TW-06	1,1-Dichloroethane	7.6		1370	µg/L
	cis-1,2-Dichloroethene	4.2		70	µg/L
	Tetrachloroethene	2.1		5	µg/L
	Trichloroethene	1.3		5	µg/L
TW-14	1,1-Dichloroethane	3.2		1370	µg/L
	cis-1,2-Dichloroethene	1.2		70	µg/L
	Tetrachloroethene	3.6		5	µg/L
	Trichloroethene	1.2		5	µg/L
TW-14A	1,1-Dichloroethane	6		1370	µg/L
	Benzene	1.4		5	µg/L
	cis-1,2-Dichloroethene	1.9		70	µg/L
	Methylene Chloride	1.5	L	5	µg/L
	Tetrachloroethene	1.3		5	µg/L
	Trichloroethene	1.1		5	µg/L
TW-24	1,1-Dichloroethane	1.8		1370	µg/L
TW-25	1,1-Dichloroethane	1.6		1370	µg/L
	Tetrachloroethene	1.2		5	µg/L
TW-25A	1,1-Dichloroethane	25.5		1370	µg/L
	1,2-Dichloroethane	1.6		5	µg/L
	1,2-Dichloropropane	1.1		5	µg/L
	1,4-Dichlorobenzene	1.5		75	µg/L
	Benzene	2.3		5	µg/L
	cis-1,2-Dichloroethene	5		70	µg/L
	Methylene Chloride	**22.4**	**L**	**5**	**µg/L**
	Tetrachloroethene	3.4		5	µg/L
	Trichloroethene	4.7		5	µg/L
	Trichlorofluoromethane	1.8		1920	µg/L
TW-28	1,1-Dichloroethane	1.6		1370	µg/L
	Tetrachloroethene	1		5	µg/L
	Trichlorofluoromethane	1.3		1920	µg/L
TW-29	Tetrachloroethene	1.3		5	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*
- *L flag - Analyte is a possible laboratory contaminant.*

Table 5 - APPENDIX II VOC DETECTIONS IN REGULATED WELLS (SUBTITLE D)					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
TW-01	Dichlorodifluoromethane	10.2		1000	µg/L
	Dichlorofluoromethane	2.4		550	µg/L
TW-04	Dichlorodifluoromethane	2.3		1000	µg/L
	Dichlorofluoromethane	3.5		550	µg/L
TW-05	Dichlorodifluoromethane	3.4		1000	µg/L
	Dichlorofluoromethane	3.7		550	µg/L
TW-05A	Dichlorofluoromethane	1.1		550	µg/L
TW-06	Dichlorodifluoromethane	7		1000	µg/L
	Dichlorofluoromethane	5.3		550	µg/L
TW-14	Dichlorodifluoromethane	7.3		1000	µg/L
	Dichlorofluoromethane	4.1		550	µg/L
TW-14A	Dichlorodifluoromethane	4.6		1000	µg/L
	Dichlorofluoromethane	5.2		550	µg/L
TW-24	Dichlorodifluoromethane	2.5		1000	µg/L
TW-25	Dichlorodifluoromethane	6.4		1000	µg/L
	Dichlorofluoromethane	2.4		550	µg/L
TW-25A	Dichlorodifluoromethane	12.9		1000	µg/L
	Dichlorofluoromethane	22.7		550	µg/L
	Methyl-tert-butyl ether	3.9		20	µg/L
TW-28	Dichlorodifluoromethane	5.7		1000	µg/L
	Dichlorofluoromethane	3.5		550	µg/L
TW-29	Dichlorodifluoromethane	4.2		1000	µg/L
	Dichlorofluoromethane	1		550	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 6 - APPENDIX I VOC DETECTIONS IN REGULATED WELLS (COMAR)					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
No Appendix I VOCs detected above the Reporting Limit.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 7 - APPENDIX II VOC DETECTIONS IN REGULATED WELLS (COMAR)					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
TW-15B	Dichlorodifluoromethane	1.3		1000	µg/L

• *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 8 - APPENDIX I VOC DETECTIONS IN ON-SITE NON-REGULATED WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
TW-06A	Acetone	5		----	µg/L
TW-12	1,1-Dichloroethane	1.5		1370	µg/L
	Trichloroethene	1.8		5	µg/L
TW-13	1,1-Dichloroethane	3.5		1370	µg/L
	cis-1,2-Dichloroethene	3.7		70	µg/L
	Tetrachloroethene	3.6		5	µg/L
	Trichloroethene	**5.3**		**5**	**µg/L**

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 9 - APPENDIX II VOC DETECTIONS IN ON-SITE NON-REGULATED WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
TW-12	Dichlorodifluoromethane	2.7		1000	µg/L
	Dichlorofluoromethane	1.1		550	µg/L
TW-13	Dichlorodifluoromethane	8.5		1000	µg/L
	Dichlorofluoromethane	2.7		550	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 10 - APPENDIX I VOC DETECTIONS IN OFF-SITE NON-REGULATED WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
MW-P106	1,1-Dichloroethane	1.9		1370	µg/L
MW-P417	1,1-Dichloroethane	1.1		1370	µg/L
RW-P109	1,1-Dichloroethane	1.1		1370	µg/L
	Trichloroethene	1.2		5	µg/L
RW-P165	1,1-Dichloroethane	3.1		1370	µg/L
	Tetrachloroethene	2.7		5	µg/L
RW-P264	1,1-Dichloroethane	3		1370	µg/L
	Tetrachloroethene	2		5	µg/L
RW-P440	1,1-Dichloroethane	1.1		1370	µg/L
	Vinyl chloride	1.1		2	µg/L
RW-P584	1,1-Dichloroethane	1.7		1370	µg/L
	Tetrachloroethene	1.3		5	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 11 - APPENDIX II VOC DETECTIONS IN OFF-SITE NON-REGULATED WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
MW-P106	Dichlorodifluoromethane	1.2		1000	µg/L
	Dichlorofluoromethane	1.2		550	µg/L
MW-P417	Dichlorodifluoromethane	1.6		1000	µg/L
MW-P9	Dichlorodifluoromethane	1.3		1000	µg/L
RW-P109	Dichlorodifluoromethane	2.6		1000	µg/L
RW-P165	Dichlorodifluoromethane	7		1000	µg/L
	Dichlorofluoromethane	3.7		550	µg/L
RW-P264	Dichlorodifluoromethane	7.1		1000	µg/L
	Dichlorofluoromethane	3.6		550	µg/L
RW-P440	Dichlorodifluoromethane	1.6		1000	µg/L
RW-P441	Dichlorodifluoromethane	1.9		1000	µg/L
RW-P584	Dichlorodifluoromethane	3.1		1000	µg/L
	Dichlorofluoromethane	1.1		550	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 12 - APPENDIX I VOC DETECTIONS IN RESIDENTIAL SUPPLY WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
No Appendix I VOCs detected above the Reporting Limit.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 13 - APPENDIX II VOC DETECTIONS IN RESIDENTIAL SUPPLY WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
No Appendix II VOCs detected above the Reporting Limit.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 14 - APPENDIX I VOC DETECTIONS AT SURFACE WATER LOCATIONS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
No Appendix I VOCs detected above the Reporting Limit.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 15 - APPENDIX II VOC DETECTIONS AT SURFACE WATER LOCATIONS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
No Appendix II VOCs detected above the Reporting Limit.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 16 - STATISTICAL EXCEEDANCES OF BACKGROUND CONCENTRATIONS																				
		Regulated Wells (Subtitle D)																		
	Parameter	TW-01	TW-02A	TW-03	TW-04	TW-04B	TW-05	TW-05A	TW-06	TW-14	TW-14A	TW-19	TW-20R	TW-24	TW-24A	TW-25	TW-25A	TW-27	TW-28	TW-29	TW-30
Volatile Organic Compounds (VOCs)	1,1-Dichloroethane	X			X		X	X	X	X	X	X		X	‡	X	X		X	*	
	1,2-Dichloroethane													**‡**	**‡**		**X**				
	1,2-Dichloropropane								‡		‡			‡			X				
	1,4-Dichlorobenzene								**‡**		**‡**			**‡**	**‡**		**X**				
	Benzene								‡		‡			‡	‡		X				
	cis-1,2-Dichloroethene	‡			‡		X	‡	X	X	X	‡		‡	‡	*	X		‡	‡	
	Dichlorodifluoromethane	X	*		X		X	‡	X	X	X	‡		X	‡	X	X		X	X	
	Dichlorofluoromethane	X	*		X		X	X	X	X	X	‡		*	‡	X	X		X	X	
	Methylene Chloride								‡		X			‡	‡		X			‡	
	Methyl tert-butyl ether										*						X				
	Tetrachloroethene	‡			‡			‡	X	X	X	‡		*	‡	X	X		X	X	
	Trichloroethene	*			‡			‡	X	X	X	‡		‡	‡	‡	X		‡	‡	
	Trichlorofluoromethane	‡	‡						‡	‡	‡			‡		‡	X		X	‡	
Inorganics	Barium, total														X						
	Beryllium												*				X				
	Calcium, total	X										X	X		X						X
	Chromium, total																	*	X		
	Cobalt, total												X		X				X		
	Copper, total			*						X	X	*	X		X		X	X			
	Iron, total	X	X	X	X		X	X	X	X	X				X						
	Magnesium, total											X	X		X						
	Manganese, total	X		X					X	X	X		X		X						
	Mercury, total							‡	X	‡	‡		‡	X	X		‡				
	Nickel, total												X								
	Potassium, total											X	X		X						
	Sodium, total											X	X								
	Vanadium, total											*	X			‡		*			
General Chemistry	Alkalinity	X		X	X				X	*		X			X		‡				
	Nitrite	*	X	‡	*		‡	X	‡	X	X						X				‡
	pH	X	X	X	X		X	X		X	X	X									
	Specific Conductivity											X	X		X						
	Total Dissolved Solids											X	X		X						
	Total Hardness	X										X	X		X						
	Turbidity	X	X	X	X	X	X	X		X	X					X					

An X indicates an SSI over background. A ‡ indicates an SSI was identified during this event, but the parameter was not detected during this event. An asterisk (*) indicates an SSI was identified during this event, but the parameter was detected below the reporting limit or was flagged with a B qualifier during this event. A bold character indicates an SSI that was not identified during the previous event.

APPENDIX A
Historical Data Tables

HISTORICAL TABLES –
Subtitle D Wells

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-01***											
Nov-1993	36	36	ND	ND	2.6	0.2	ND	5.71	76.8	3.7	76	29.9
Apr-1994	34	34	0.1	42.3	2.5	ND	ND	6.15	62.5	3.9	57	23.37
Apr-1995	22.7	22.7	ND	ND	2.4	ND	ND	6.6	56.5	3.6	31	18.2
Apr-1997	ND	26	ND	ND	1.5	0.09	ND	NA	NA	ND	59	33
Apr-1998	25	25	0.27	ND	2.56	ND	ND	7.29	53.1	2.36	44	35
Apr-1999	21	21	0.13	ND	3.11	0.07	ND	7	61.6	1.84	63	26
Apr-2000	23	23	ND	ND	2.4	0.101	ND	7.07	52	3.92	32	25
Apr-2001	20	NA	ND	ND	2.57	ND	ND	NA	NA	67.1	30	21.5
Mar-2002	16	16	ND	ND	2.36	ND	ND	6.2	55.4	ND	43	22.3
Mar-2003	18	18	ND	ND	17.7	ND	ND	6.3	56.5	ND	34	20.7
Apr-2004	21	21	ND	ND	2.84	ND	ND	6.3	54.5	ND	49	24.6
Apr-2005	29	29	ND	ND	2.74	0.08	ND	6.5	66.3	2.38	120	33.5
Mar-2006	28	28	ND	ND	3.44	0.13	ND	6.4	64.1	2	69	30.5
Mar-2007	24	24	0.61	ND	4.15	0.18	ND	6.3	56.8	1.64	53	27.2
Mar-2008	24	24	ND	ND	4.32	0.2	ND	6.1	62.7	1.75	42	26.7
Mar-2009	23	23	ND	ND	4.4	0.16	ND	5.7	61.6	ND	56	23.9
Mar-2010	65	65	ND	ND	4.22	ND	ND	7.26	170	4.34	62	70.4
Apr-2011	21	21	ND	ND	4.49	0.16	ND	5.6	56.9	1.1	57	23.5
Mar-2012	18	18	ND	ND	4.81	0.17	ND	4.8	56.4	ND	62	20
Sep-2012	19.7	19.7	ND	ND	4.84	0.175	ND	6.2	54.6	ND	66	23.4
Mar-2013	20.4	20.4	0.123 J	ND	5.36	0.2	ND	6.4	58.2	1.14	31	21.4
Oct-2013	21.3	21.3	ND	ND	5.51	0.2	ND	6.1	62.7	1.5	41	25
Mar-2014	22.7	22.7	ND	ND	5.27	0.157	ND	6.1	58.7	0.915 J	50	23.1
Oct-2014	33	33	ND	ND	5.71	0.198	ND	5.9	55.6	ND	49	24.1
Apr-2015	21.6	21.6	ND	ND	5.71	0.206	ND	5.1	60.7	ND	51	26.8
Nov-2015	25.6	25.6	ND	ND	5.77	0.223	ND	6.4	105.4	ND	44	26.9
May-2016	21.7	21.7	ND	ND	6.02	0.227	ND	6.4	79.9	ND	40	27.8
Oct-2016	23.6	23.6	ND	ND	6.46	NA	NA	6.2	110.6	2.07	48	27.8
May-2017	20.1	20.1	ND	ND	6.17	0.231	ND	6.1	100.7	0.71 J	35	23.6
Oct-2017	27	27	ND	5 J	6.37	0.224	ND	6.3	113.3	ND	36	22.4
May-2018	30	30	ND	5.7 J	6.1	0.17	0.007 J	5.6	111.8	ND	55	25.7
Nov-2018	40	40	ND	ND	6.6	ND	0.018	6.77	149.5	ND	46	47.6
May-2019	52	NA	ND	ND	7.3	ND	ND	6.39	114.8	ND	68	50.3
Oct-2019	48 H1	NA	ND	ND	5.7	0.056 JB	0.028	6.22	153.3	48.2	82	49.3
May-2020	50	NA	ND	9.1 J	6.6	ND	0.0087 JMH	5.9	148.9	ND	51	53.7
Oct-2020	40	NA	ND	4.8 J	6.2	ND	ND	5.85	147.7	ND	132	49.9

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-01***											
Apr-2021	42	*NA*	*ND*	*6.1 J*	7.1	*0.048 J*	*ND*	7.17	193.3	*ND*	53	49.6
Oct-2021	50	*NA*	*ND*	*ND*	6.5	*ND*	*ND*	7.09	227.4	*ND*	45	51.3
May-2022	44 ML	*NA*	*ND*	*ND*	5.9	*0.099 J*	*0.0066 J*	6.7	205.1	*ND*	48	48.9 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-01***													
Nov-1993	*NA*	*ND*	*ND*	*NA*	*ND*	11.3	*NA*	*ND*	*NA*	*ND*	0.08	0.12	*ND*	0.42	*NA*
Apr-1994	*NA*	*ND*	*ND*	*NA*	*ND*	9.3	*NA*	*ND*	*NA*	*ND*	0.64	*ND*	*ND*	*ND*	*NA*
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	6.6	*NA*	*ND*	*ND*	0.02	0.65	*ND*	*ND*	0.41	*NA*
Apr-1997	0.006	*ND*	0.016	*ND*	*ND*	13	9	*ND*	*ND*	*ND*	1.1	0.43	0.003	0.6	0.63
Apr-1998	*ND*	*ND*	0.041	*ND*	*ND*	12.5	9.96	0.052	*ND*	0.01	14.2	0.259	*ND*	1.04	0.456
Apr-1999	*ND*	*ND*	*ND*	*ND*	*ND*	9.67	9.79	*ND*	*ND*	*ND*	1.49	0.197	*ND*	0.564	0.491
Apr-2000	*ND*	*ND*	*ND*	*ND*	*ND*	9.04	7.45	0.018	*ND*	0.035	3.35	0.183	*ND*	0.601	0.442
Apr-2001	*ND*	*ND*	0.014	*ND*	*ND*	7.62	*NA*	*ND*	*ND*	*ND*	4.21	*NA*	*ND*	0.61	*NA*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	8	8.82	*ND*	*ND*	*ND*	3.62	0.64	*ND*	0.577	0.548
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	7.43	7.85	*ND*	*ND*	*ND*	0.716	*ND*	*ND*	0.504	0.466
Apr-2004	*ND*	0.002	0.014	*ND*	*ND*	8.52	11.1	*ND*	*ND*	*ND*	2.75	0.378	0.002	0.839	0.578
Apr-2005	*ND*	0.004	0.017	*ND*	*ND*	11.8	10.2	0.029	*ND*	0.011	7.16	0.279	0.006	1.01	0.504
Mar-2006	*ND*	0.003	0.015	*ND*	*ND*	10.8	9.72	*ND*	*ND*	*ND*	3.86	0.077	0.003	0.827	0.507
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	9.95	8.75	*ND*	*ND*	*ND*	0.916	0.346	*ND*	0.574	0.51
Mar-2008	*ND*	0.003	0.012	*ND*	*ND*	9.61	8.12	*ND*	*ND*	*ND*	12.8	0.358	*ND*	0.655	0.559
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	8.67	7.75	*ND*	*ND*	*ND*	3.36	0.541	*ND*	0.554	0.521
Mar-2010	*ND*	0.006	0.019	*ND*	*ND*	26.4	24.8	0.033	*ND*	0.017	44.1	1.58	0.01	1.09	0.65
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	8.29	8.23	*ND*	*ND*	*ND*	2.43	1.64	*ND*	0.688	0.678
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	6.77	6.84	*ND*	*ND*	*ND*	1.56	1.2	*ND*	0.753	0.749
Sep-2012	*ND*	*ND*	0.0101	*0.000181 J*	*ND*	8.15	7.91	*0.0025 J*	*0.000625 J*	*ND*	2.48	2.29	*0.000533 J*	0.749	0.707
Mar-2013	*ND*	*ND*	*0.0098 J*	*ND*	*ND*	7.39	7.3	*0.0026 J*	*0.000621 J*	*0.000478 J*	1.6	1.39	*ND*	0.724	0.753

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-01***													
Oct-2013	ND	ND	0.0113	ND	ND	8.7	8.9	0.0017 J	0.000632 J	ND	1.68	1.68	ND	0.794	0.824
Mar-2014	ND	ND	0.0103	ND	ND	8.09	9.7	0.0064 J	0.00061 J	0.000338 J	2.32	2.51	ND	0.712	0.86
Oct-2014	0.000689 J	ND	0.0116	ND	ND	8.35	8.86	0.0014 J	0.000654 J	ND	2.43	2.76	ND	0.796	0.826
Apr-2015	0.000671 J	ND	0.0128	ND	ND	9.14	9.46	0.0046 J	0.000818 J	0.000868 J	4.77	3.89	ND	0.962	0.952
Nov-2015	ND	ND	0.0121	ND	ND	9.24	8.94	0.0024 J	0.000698 J	ND	3.97	3.58	ND	0.928	0.927
May-2016	ND	ND	0.0126	ND	ND	9.47	9.13	0.0019 J	0.00072 J	0.00068 J	3.53	3.37	ND	1.01	0.989
Oct-2016	ND	ND	0.0121	ND	ND	9.44	9.71	0.00087 J	0.00071 J	ND	3.95	3.67	ND	1.03	1.02
May-2017	ND	ND	0.012	ND	ND	7.74	7.2	0.00096 J,B	0.0011	0.00054 J,B	4.07	3.43	ND	1.03	0.999
Oct-2017	ND	ND	0.0155	ND	ND	7.45	6.97	0.0017 J	0.00087 J	ND	8.05	7.72	ND	0.919	0.961
May-2018	0.000048 J	ND	0.016	0.000027 J	ND	8.7	8.6	0.0027 J	0.00072	0.00089 JB	11.5	10.5	ND	0.97 J	0.98 J
Nov-2018	ND	ND	0.012	ND	ND	16.7	15.7	0.002 J	0.00018 J	0.00043 J	31.8	25.7	0.000039 J	1.4	1.3
May-2019	ND	ND	0.011	ND	ND	17.9	17.7	ND	0.00058	ND	22.9	18	ND	1.4	1.4
Oct-2019	0.00012 JB	ND	0.013	ND	0.00018 JB	17.5	17	0.0043 J	0.0013	0.0043	31.9	18.4	0.00012 JB	1.4	1.3
May-2020	0.00016 J	ND	0.015	ND	ND	19	18.3	0.0087	0.00072	0.0032	39	20.9	0.00021 J	1.5	1.4
Oct-2020	0.00044 J	ND	0.013	ND	ND	17.5	16.5	0.0082 JB	0.0006 J	ND	25.6	23.5	ND	1.5	1.4
Apr-2021	ND	ND	0.014	ND	ND	17.4	18.1	0.0048 J	0.00089 J	ND	28	22.8	ND	1.5	1.6
Oct-2021	0.000089 JB	ND	0.015	ND	ND	18	17.4	0.0056	0.0016 J	0.00094 J	35.6	26.4 M1	0.00004 J	1.6	1.5
May-2022	ND	ND	0.016	ND	ND	17.1	17.5	0.004	0.00093 J	0.0008 J	37.3	29	ND	1.5	1.7

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-01*												
Nov-1993	0.05	NA	ND	NA	0.49	NA	ND	NA	1.3	NA	NA	NA	ND
Apr-1994	0.019	NA	ND	NA	0.55	NA	ND	NA	1.7	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.65	NA	ND	ND	0.94	NA	ND	ND	0.06
Apr-1997	0.06	0.043	ND	ND	2.5	2.2	ND	ND	1.2	1.4	0.002	ND	0.028
Apr-1998	0.226	0.02	NA	0.019	2.16	0.95	ND	ND	1.22	1.16	ND	0.023	0.1
Apr-1999	0.028	0.019	NA	ND	ND	0.722	ND	ND	1.24	1.22	ND	ND	0.027
Apr-2000	0.037	0.017	NA	0.015	1.47	0.759	ND	ND	2.06	1.19	ND	ND	0.321
Apr-2001	0.059	NA	NA	ND	1.39	NA	ND	ND	2.65	NA	ND	ND	0.131
Mar-2002	0.037	0.028	NA	ND	1.24	ND	ND	ND	1.82	1.27	ND	ND	0.05
Mar-2003	0.022	0.019	NA	ND	ND	0.706	ND	ND	1.29	1.33	ND	ND	0.023
Apr-2004	0.069	0.026	ND	ND	0.534	ND	ND	ND	1.72	1.34	ND	ND	0.038
Apr-2005	0.163	0.019	ND	0.018	1.07	0.66	ND	ND	1.78	1.4	ND	0.014	0.112
Mar-2006	ND	ND	ND	ND	0.828	ND	ND	ND	1.59	1.14	ND	ND	0.014
Mar-2007	0.018	0.015	ND	ND	ND	ND	ND	ND	1.43	1.36	ND	ND	0.033
Mar-2008	0.031	0.013	ND	ND	0.809	0.663	ND	ND	2.11	1.61	ND	ND	0.038
Mar-2009	0.019	0.014	ND	ND	ND	ND	ND	ND	1.62	1.84	ND	ND	0.024
Mar-2010	0.134	0.078	ND	0.031	0.809	0.596	ND	ND	1.25	1.38	ND	0.019	0.033
Apr-2011	0.038	0.037	ND	ND	0.608	0.621	ND	ND	1.75	1.8	ND	ND	ND
Mar-2012	0.028	0.027	ND	ND	0.573	0.537	ND	ND	1.89	1.84	ND	ND	ND
Sep-2012	0.0426	0.0427	ND	0.0018 J	0.553	0.531	ND	ND	2.02	1.98	0.0014 J	ND	ND
Mar-2013	0.0247	0.0248	0.000109 J	0.0033 J	0.554	0.543	ND	ND	1.83	1.84	0.000233 J	ND	0.0116
Oct-2013	0.0387	0.0397	ND	0.0022	0.563	0.579	ND	ND	2.12	2.22	0.000271 J	0.0014 J	0.0111

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-01***												
Mar-2014	0.0351	0.0331	*ND*	*0.0029 J*	0.518	0.645	*ND*	*ND*	1.77	2.12	*0.000265 J*	*0.006 J*	*0.0043 J*
Oct-2014	0.0314	0.0384	*ND*	*0.0025 J*	0.599	0.618	*0.0012 J*	*ND*	2.16	2.25	*ND*	*ND*	*ND*
Apr-2015	0.0436	0.0494	*ND*	*0.0045 J*	0.674	0.669	*ND*	*ND*	2.37	2.37	*ND*	*ND*	*ND*
Nov-2015	0.0469	0.0454	*ND*	*0.0039 J*	0.647	0.63	*ND*	*ND*	2.55	2.54	*ND*	*ND*	*0.0033 J*
May-2016	0.0394	0.0391	*ND*	*0.0026 J*	0.676	0.643	*ND*	*ND*	2.49	2.41	*ND*	*ND*	*ND*
Oct-2016	0.0558	0.056	*ND*	*0.0016 J*	0.647	0.68	*ND*	*ND*	2.49	2.51	*ND*	*ND*	*ND*
May-2017	0.0382	0.0419	*ND*	0.0043	0.62	0.629	*ND*	*ND*	2.52	2.4	*ND*	*0.00023 J*	*ND*
Oct-2017	0.0676	0.0715	*ND*	*0.0024 JB*	0.628	0.663	*ND*	*ND*	2.63	2.68	*ND*	*ND*	*ND*
May-2018	0.079	0.079	*ND*	0.0024	*ND*	*ND*	*0.00028 JB*	*ND*	*2.8 J*	*2.9 J*	*ND*	0.0028	*0.003 JB*
Nov-2018	0.18	0.17	*ND*	0.0011	*ND*	*ND*	*ND*	*ND*	*3 J*	*2.9 J*	*ND*	*ND*	*0.0033 J*
May-2019	0.18	0.17	*ND*	0.001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	0.16	0.15	*ND*	0.0038	*ND*	*ND*	*ND*	*ND*	*2.8 J*	*3.3 J*	*ND*	*0.0009 J*	0.01 B
May-2020	0.17	0.15	*ND*	0.0064	*ND*	*ND*	*ND*	*ND*	*2.9 J*	*2.9 J*	*ND*	0.0018	0.0061
Oct-2020	0.18	0.16	*ND*	*ND*	*ND*	*ND*	*0.0017 J*	*ND*	*3.2 J*	*2.6 J*	*ND*	*0.0024 JB*	*ND*
Apr-2021	0.16	0.17	*0.00005 J*	*0.0058 J*	0.73	0.74	*ND*	*ND*	2.8	3	*ND*	*ND*	*ND*
Oct-2021	0.18	0.17	*ND*	0.0077	0.71	0.71	*ND*	*ND*	3.2	3.2	*ND*	*ND*	*ND*
May-2022	0.18	0.19	*ND*	0.0053	0.69	0.8	*ND*	*ND*	3	3.2	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-01*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.63 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-01*																
Mar-2013	ND	ND	ND	ND	0.73 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.63 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.81 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.1	0.22 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	0.2 J	ND	ND	1.2	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	0.2 J	ND	ND	1.5	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	0.2 J	ND	ND	1.4	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	0.1 J	ND	ND	1.5	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8 JB	ND
Nov-2018	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1.3 M1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.75	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-01***															
Nov-1993	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	3.7
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	0.7 J
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	1.7
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2	1.1
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.5	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	14.1	2.3
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.45 J	ND	ND	ND	ND	ND	4.38	1.68

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-01***															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.56 J	ND	ND	ND	ND	ND	8.81	2.83
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.49 J	ND	ND	ND	ND	ND	7.27	2.41
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.56 J	ND	ND	ND	ND	ND	8.99	2.7
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.55 J	ND	ND	ND	ND	ND	7.38	3.83
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.53 J	ND	ND	ND	ND	ND	6.99	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J,B	ND	ND	ND	ND	ND	15.6 J	3.4
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	6.5	3.7
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	0.1 J	ND	ND	ND	8.4	4.5
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J,B	ND	0.1 J	ND	ND	ND	7.7	4.3
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	0.2 J	ND	ND	ND	8.4	5.1
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.5	4.7
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.9 CL	3.7 N3
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5 CL	3.6 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.2	2.5
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.9	2.5
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.2	2.8
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.167 J	ND	0.349 J	ND	ND	ND	5.48	2.94 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	13.3	3.5
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.2	2.4

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-01***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	1	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-01***															
Sep-2012	ND	ND	ND	ND	ND	ND	ND	2.96	ND	ND	ND	ND	0.28 J	0.71 J	ND	ND	ND
Mar-2013	ND	ND	ND	0.15 J	ND	ND	ND	3.44	ND	ND	ND	ND	0.41 J	1 J	ND	ND	ND
Oct-2013	ND	ND	ND	0.21 J	ND	ND	ND	2.81	ND	ND	ND	ND	0.38 J	0.97 J	ND	ND	ND
Mar-2014	ND	ND	ND	0.17 J	ND	ND	ND	3.73	ND	ND	ND	ND	0.46 J	1	ND	ND	ND
Oct-2014	ND	ND	ND	0.21 J	ND	ND	ND	4.14	ND	ND	ND	ND	0.5 J	0.73 J	ND	ND	ND
Apr-2015	ND	ND	ND	0.18 J	ND	ND	ND	3.57 J	ND	ND	ND	ND	0.43 J	0.95 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	ND	0.5 J	0.9 J	ND	ND	ND
May-2016	ND	ND	ND	0.1 J	0.2 J	ND	ND	4.3	ND	ND	ND	ND	0.5 J	0.8 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	0.2 J	ND	ND	4.4	ND	ND	ND	ND	0.4 J	0.9 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	4.7	ND	ND	ND	ND	0.5 J	0.4 J	ND	ND	ND
Oct-2017	ND	ND	ND	0.1 J	0.2 J	ND	ND	3.7	ND	ND	ND	ND	0.4 J	0.7 J	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	1.2 B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Apr-2021	ND	ND	ND	0.431 J	0.653 JB	ND	ND	0.507 J	ND	ND	ND	ND	0.632 J	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-02A***											
Nov-1993	ND	ND	ND	ND	3.8	ND	ND	4.93	22.5	ND	90	3.52
Apr-1994	ND	ND	ND	23.4	3.6	ND	ND	4.94	22.2	ND	17	0.9
Apr-1995	10.3	10.3	ND	ND	5.5	0.2	0.3	5.6	30.9	2.2	38	4.7
Apr-1997	ND	2	ND	ND	7	0.08	ND	NA	NA	ND	28	6
Apr-1998	ND	ND	0.27	ND	8.76	0.22	ND	6.33	36.8	ND	21	5.8
Apr-1999	ND	ND	0.16	ND	6.58	ND	ND	5.04	35.5	ND	35	5.7
Apr-2000	2	2	ND	ND	6.4	ND	ND	5.28	29	ND	36	5.7
Apr-2001	ND	NA	ND	ND	5.43	1.65	ND	NA	NA	ND	11	6.47
Mar-2002	2.4	2.4	ND	ND	7	ND	ND	5.4	42.9	ND	30	6.94
Mar-2003	2.7	2.7	ND	ND	14.6	ND	ND	5.3	41.7	ND	25	6.69
Apr-2004	2.8	2.8	ND	ND	7.95	0.08	ND	5.3	40.5	1.31	40	9.39
Apr-2005	3.1	3.1	ND	ND	7.57	ND	ND	5.1	20.9	1.26	56	8.76
Mar-2006	7.8	7.8	ND	ND	9.04	0.1	ND	5.3	48.5	1.26	57	8.76
Mar-2007	3.8	3.8	ND	ND	9.84	0.11	ND	5.1	45.7	1.89	37	8.57
Mar-2008	5.3	5.3	ND	ND	9.58	0.09	ND	4.9	57.9	2.52	41	8.56
Mar-2009	4.9	4.9	ND	ND	9.98	0.07	ND	4.5	51.1	1.25	45	9.24
Apr-2010	3.7	3.7	ND	ND	10.1	0.08	ND	4.6	48.4	2.66	31	9.5
Apr-2011	5.2	5.2	ND	ND	10.4	0.08	ND	4.6	46.4	2.34	29	9.74
Mar-2012	4	4	ND	ND	11.6	ND	ND	4.5	51.2	2.34	12	11.2
Sep-2012	4.4	4.4	ND	ND	12.8	ND	ND	5.4	53.4	2.85	69	11.8
Mar-2013	6	6	0.106 J	ND	13.9	0.0653	ND	6.1	62.1	3	20	12.4
Oct-2013	5.72	5.72	ND	ND	14	0.0613	ND	5.7	62.3	3.15	31	13.6
Mar-2014	5.6	5.6	ND	ND	14.9	0.0668	ND	5.3	62.5	3.19	36	13.1
Oct-2014	4.4	4.4	ND	10	17.1	0.094	ND	5	68.2	2.88	64	15.6
Apr-2015	5.56	5.56	ND	5 J	17.3	0.061	ND	4.5	67.5	3.26	54	16.5
Nov-2015	4.4	4.4	ND	ND	19.1	0.0607	ND	5.9	136.2	2.63	55	18.4
May-2016	2.8	2.8	0.129 J	21	22.3	ND	ND	5.8	112.3	1.91	90	19.2
Oct-2016	3.4	3.4	ND	21	16.9	NA	NA	5.5	105.1	3.01	71	14.8
May-2017	4.48	4.48	ND	7 J	15.3	0.0687	ND	5.4	101.7	2.09	50	14.9
Oct-2017	30.9	30.9	ND	13	14.7	0.0511	ND	5.8	129.4	0.67 J	38	15.8
May-2018	16	16	ND	7.9 J	16.2	ND	ND	5	96	ND	26	15.1
Nov-2018	22	22	ND	7.9 J	19.5	ND	0.015	6.54	136.9	ND	55	18.6
May-2019	46	NA	ND	ND	21.8	ND	ND	6.43	123.6	ND	58	19.2
Oct-2019	16 H1	NA	ND	ND	22.6	0.083 J	0.0093 J	5.99	168.1	ND	90	19.6
May-2020	20	NA	ND	9.1 J	25.8	ND	0.074	5.93	168.3	ND	74	23.5
Oct-2020	20	NA	ND	7 J	27.2	ND	ND	6.52	172.1	ND	113	23.2
Apr-2021	20	NA	ND	6.1 J	35.6	0.075 J	ND	7.02	239.3	ND	92	23.8

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-02A***											
Oct-2021	22	*NA*	*ND*	*12.6 J*	32.2	*NA*	*ND*	7.02	273.5	*ND*	82	25.9
Dec-2021	*NA*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
May-2022	16	*NA*	*ND*	*ND*	31.5	*ND*	0.051	6.76	252	*ND*	73	24.9 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-02A***													
Nov-1993	NA	ND	ND	NA	ND	0.7	NA	ND	NA	ND	4.4	0.69	ND	0.43	NA
Apr-1994	NA	ND	ND	NA	ND	0.3	NA	ND	NA	ND	1.8	0.059	ND	0.35	NA
Apr-1995	ND	ND	ND	ND	ND	0.88	NA	ND	ND	ND	3.2	0.31	ND	0.6	NA
Apr-1997	ND	ND	0.02	ND	ND	1.3	1.3	ND	ND	ND	0.5	ND	0.002	0.54	0.54
Apr-1998	ND	ND	0.016	ND	ND	1.23	1.18	ND	ND	ND	1.58	0.101	ND	0.651	0.626
Apr-1999	ND	ND	0.015	ND	ND	1.21	1.27	ND	ND	ND	1.13	0.121	ND	0.646	0.667
Apr-2000	ND	ND	0.014	ND	ND	1.21	1.19	ND	ND	ND	3.54	0.08	ND	0.65	0.626
Apr-2001	ND	ND	0.016	ND	ND	1.45	NA	ND	ND	ND	3.08	NA	ND	0.695	NA
Mar-2002	ND	ND	0.019	ND	ND	1.47	1.53	ND	ND	ND	8.67	1.81	ND	0.795	0.798
Mar-2003	ND	ND	0.018	ND	ND	1.44	1.53	ND	ND	ND	6.22	0.282	ND	0.754	0.804
Apr-2004	ND	ND	0.023	ND	ND	2.06	1.82	ND	ND	ND	1.91	0.124	ND	1.03	0.943
Apr-2005	ND	ND	0.021	ND	ND	1.9	1.94	ND	ND	ND	4.1	0.2	ND	0.973	0.983
Mar-2006	ND	0.003	0.025	ND	ND	2.02	1.52	ND	ND	0.022	11.4	3.53	0.005	0.902	0.783
Mar-2007	ND	ND	0.025	ND	ND	1.93	1.9	ND	ND	ND	1.49	1.03	ND	0.911	0.876
Mar-2008	ND	ND	0.021	ND	ND	1.86	1.95	ND	ND	ND	2	1.62	ND	0.952	0.995
Mar-2009	ND	ND	0.025	ND	ND	2.11	2.32	ND	ND	ND	20.1	2.18	ND	0.964	0.967
Apr-2010	ND	ND	0.025	ND	ND	2.13	1.97	ND	ND	ND	25.9	2.03	ND	1.02	0.925
Apr-2011	ND	ND	0.027	ND	ND	2.12	2.15	ND	ND	0.02	41.9	1.51	ND	1.08	1.1
Mar-2012	ND	ND	0.027	ND	ND	2.36	2.3	ND	ND	ND	4.29	0.7	ND	1.3	1.26
Sep-2012	ND	ND	0.0298	0.000292 J	ND	2.58	2.49	0.0026 J	0.0027 J	0.0136	16.7	1.5	0.0016 J	1.31	1.31
Mar-2013	ND	ND	0.0316	0.000205 J	ND	2.78	2.7	0.0019 J	0.0026 J	0.0078 J	6.93	2.41	0.000514 J	1.33	1.24

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-02A***													
Oct-2013	ND	ND	0.0347	ND	ND	2.96	2.94	0.0018 J	0.0026	0.0067	3.49	2	0.000652 J	1.5	1.52
Mar-2014	0.000337 J	0.00014 J	0.028	0.00015 J	ND	2.8	2.85	0.0014 J	0.0025 J	0.0059 J	4.47	1.46	0.000364 J	1.49	1.5
Oct-2014	0.000589 J	0.000473 J	0.04	0.000176 J	0.000095 J	3.51	3.51	0.0023 J	0.0042 J	0.0087 J	9.19	2.4	0.000763 J	1.65	1.72
Apr-2015	0.000574 J	ND	0.0405	ND	ND	3.64	3.65	0.0017 J	0.0039 J	0.007 J	5.1	2	ND	1.8	1.8
Nov-2015	0.000674 J	0.000571 J	0.0442	0.000294 J	0.000111 J	3.97	3.8	0.0035 J	0.0047 J	0.0157	14.4	2.05	0.0012 J	2.07	1.93
May-2016	ND	ND	0.0709	ND	ND	4.72	4.64	0.0022 J	0.0014	0.0059	10.8	5.19	0.00095 J	1.8	1.84
Oct-2016	0.00068 J	0.0025 J	0.0372	0.00012 J	0.0002 J	3.09	3.25	0.0103 J+	0.0063	0.0368 J+	9.84	3.1	0.0016 J	1.73 J+	1.72
May-2017	ND	0.0012 J	0.0357	ND	ND	3.17	3.17	0.0037 J	0.0047	0.0181	14	9.1	0.0012 J	1.68	1.7
Oct-2017	ND	ND	0.0357	ND	ND	3.55	3	0.003 J	0.0036	0.012	21.1	16.6	0.002	1.69	1.57
May-2018	0.00045	0.0013	0.035	0.00011 J	0.00015 J	3.3	3.2	0.0046 JB	0.0054	0.02	12.1	5.6	0.0014	1.6	1.6
Nov-2018	ND	ND	0.045	0.000024 J	0.000029 J	4	3.9	0.004 J	0.00095	0.0028	28	27.4	0.00046 J	2.1	2
May-2019	ND	ND	0.05	ND	ND	4.1	4	ND	0.00093	0.004	30.4	28.5	ND	2.2	2.1
Oct-2019	0.00018 JB	ND	0.05	0.000052 J	0.00042 JB	4.2	4.1	0.0061 J	0.0017	0.0055	28.8	27.1	0.00018 JB	2.2	2.2
May-2020	0.00014 J	ND	0.055	0.000063 J	0.0001 J	5	4.6	0.0054 J	0.0014	0.0055	33.6	29.7	ND	2.7	2.5
Oct-2020	0.00056 J	ND	0.063	ND	ND	4.9	4.6	0.011 JB	0.0018 J	ND	32.3	29.5	ND	2.7	2.5
Apr-2021	ND	ND	0.063	0.0002 J	ND	5	5.1	0.0018 J	0.0012 J	0.0049 J	31.6	31.1	ND	2.8	2.9
Oct-2021	0.000074 JB	ND	0.065	ND	ND	5.4	5.3	0.0025 J	0.0018 J	0.0027	35	33.7	ND	3	3
May-2022	ND	0.0014 JB	0.064	ND	ND	5.2	5.5	0.0019 J	0.0016 J	0.0024 J	32.7	34.6	ND	2.9	3.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-02A*												
Nov-1993	0.06	NA	ND	NA	0.44	NA	ND	NA	1.5	NA	NA	NA	ND
Apr-1994	0.07	NA	ND	NA	ND	NA	ND	NA	2.4	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.59	NA	ND	ND	1.7	NA	ND	ND	0.07
Apr-1997	0.01	0.013	ND	ND	1.7	1.6	ND	ND	2.1	2.6	ND	ND	ND
Apr-1998	0.01	0.024	NA	ND	1.06	1.53	ND	ND	2.28	2.31	ND	ND	0.034
Apr-1999	ND	ND	NA	ND	ND	ND	ND	ND	2.46	2.52	ND	ND	ND
Apr-2000	0.011	0.01	NA	ND	ND	0.83	ND	ND	2.46	2.41	ND	ND	ND
Apr-2001	0.011	NA	NA	ND	0.981	NA	ND	ND	3.65	NA	ND	ND	0.01
Mar-2002	0.019	0.025	NA	ND	ND	0.975	ND	ND	2.5	2.34	ND	ND	0.016
Mar-2003	0.018	0.011	NA	ND	1.48	ND	ND	ND	2.49	2.53	ND	ND	ND
Apr-2004	0.016	0.012	ND	ND	1.76	0.597	ND	ND	3.87	3.29	ND	ND	0.014
Apr-2005	0.02	0.015	ND	ND	0.81	0.77	ND	ND	3.58	3.91	ND	ND	ND
Mar-2006	ND	ND	ND	0.018	0.889	0.523	ND	ND	3.88	3.26	ND	ND	0.013
Mar-2007	0.016	0.016	ND	ND	ND	ND	ND	ND	3.57	3.44	ND	ND	0.019
Mar-2008	0.016	0.02	ND	ND	0.702	0.783	ND	ND	3.52	3.8	ND	ND	0.016
Mar-2009	0.019	0.024	ND	ND	0.596	0.636	ND	ND	3.79	3.93	ND	ND	0.03
Apr-2010	0.024	0.021	ND	ND	0.708	0.653	ND	ND	3.94	3.86	ND	ND	0.027
Apr-2011	0.025	0.023	ND	ND	0.716	0.694	ND	ND	4.34	4.33	ND	ND	0.036
Mar-2012	0.025	0.018	ND	ND	0.687	0.622	ND	ND	5.08	4.9	ND	ND	0.027
Sep-2012	0.0259	0.0243	ND	0.0042 J	0.717	0.68	0.000797 J	ND	5.33	5.26	0.000232 J	ND	0.0305
Mar-2013	0.0322	0.0295	0.000113 J	0.004 J	0.761	0.724	0.000652 J	ND	5.44	5.24	ND	ND	0.0434
Oct-2013	0.0299	0.0301	ND	0.0041	0.78	0.755	0.000848 J	ND	5.88	6.06	ND	0.0014 J	0.0452

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-02A***												
Mar-2014	0.0246	0.0247	ND	0.0042 J	0.77	0.792	ND	ND	5.7	5.82	ND	ND	0.0394
Oct-2014	0.0372	0.0346	0.000034 J	0.0065 J	0.866	0.876	0.0019 J	ND	6.43	6.55	ND	ND	0.0465
Apr-2015	0.0353	0.0334	ND	0.0058 J	0.917	0.923	0.0014 J	ND	6.77	6.88	ND	ND	0.0404
Nov-2015	0.048	0.0369	ND	0.008 J	0.988	0.931	0.0013 J	ND	7.94	7.9	ND	0.000203 J	0.045
May-2016	0.246	0.26	ND	0.0101	1.01	1.1	ND	ND	7.41	6.97	ND	ND	0.0868
Oct-2016	0.107 R	0.0689	ND	0.037 J+	0.944	0.887	0.00071 J-	ND	6.71 J+	6.72	ND	0.0013	0.076
May-2017	0.122	0.0983	ND	0.0205	0.946	0.931	ND	ND	6.8	6.41	ND	0.0003 J	0.0455
Oct-2017	0.169	0.152	ND	0.0184	0.92	0.857	ND	ND	6.33	6.08	ND	ND	0.0516
May-2018	0.12	0.074	ND	0.027	ND	ND	0.00065 J	ND	6.8	6.3	ND	0.002	0.032
Nov-2018	0.18	0.18	ND	0.0038	0.93 J	ND	0.00009 J	ND	7.6	7.8	ND	ND	0.0044 J
May-2019	0.22	0.2	ND	0.0025	ND	ND	ND	ND	8.1	7.4	ND	ND	ND
Oct-2019	0.19	0.18	ND	0.0052	1.1 J	1.1 J	ND	ND	8.4	8.7	ND	0.0021 D6	0.012 B
May-2020	0.21	0.2	ND	0.0042	ND	1.1 J	ND	ND	10.1	9.4	ND	0.0023	0.0065
Oct-2020	0.23	0.2	ND	0.0042	ND	ND	ND	ND	11.4	9.6	ND	0.0029 JB	ND
Apr-2021	0.21	0.22	ND	0.0028 J	1	1.1	ND	ND	12.4	13.1	ND	ND	ND
Oct-2021	0.23	0.23	ND	0.0035	1.1	1.1	ND	ND	14.4	14.4	ND	ND	0.0027 J
May-2022	0.23	0.24	ND	0.0035	1.1	1.1	ND	ND	14.5	16	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-02A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-02A*																
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7 J	200	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.8 B	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-02A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-02A***															
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.42 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*0.66 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*0.2 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.344 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*0.6 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-02A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.2 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-02A***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-03***											
Nov-1993	7	7	ND	ND	3.7	ND	ND	3.47	24.8	2.6	106	3.21
Apr-1994	5	5	ND	161	2.8	ND	ND	5.36	29.2	ND	25	2.12
Apr-1995	9.3	9.3	ND	ND	2.8	ND	ND	6.6	26.3	2	9	4
Apr-1997	ND	5	ND	ND	3.5	0.09	ND	NA	NA	ND	57	25
Apr-1998	2	2	0.95	ND	3.1	ND	ND	7.06	32	ND	23	4.7
Apr-1999	4	4	0.16	ND	3.94	ND	ND	5.41	38.6	ND	31	5.1
Apr-2000	3	3	ND	ND	3.67	0.16	ND	5.68	45	ND	25	5.7
Apr-2001	3.5	NA	0.28	ND	3.11	ND	ND	NA	NA	ND	ND	5.86
Mar-2002	2	2	ND	ND	4.01	ND	ND	5.6	62.7	ND	40	6.05
Mar-2003	3.4	3.4	ND	ND	13.7	ND	ND	5.6	31.8	ND	12	5.14
Apr-2004	6.5	6.5	ND	ND	4.53	ND	ND	5.6	26.9	ND	28	6.35
Apr-2005	4	4	ND	ND	4.92	0.08	ND	6.1	43.5	1.65	49	5.25
Mar-2006	6.4	6.4	ND	ND	5.27	0.12	ND	5.6	36.7	ND	13	4.72
Mar-2007	3.7	3.7	ND	ND	5.47	ND	ND	5.6	42.7	ND	39	6.21
Mar-2008	5.4	5.4	ND	ND	5.45	0.11	ND	5.2	33.1	ND	17	4.81
Mar-2009	14	14	ND	ND	6.19	0.06	ND	5.3	34.8	14.3	18	5.01
Apr-2010	11.1	11.1	ND	ND	6.96	ND	ND	4.8	34.2	ND	40	7.3
Apr-2011	6.2	6.2	ND	ND	6.95	0.08	ND	4.6	33.2	ND	39	6.57
Mar-2012	7.6	7.6	ND	ND	6.59	0.1	ND	4.4	34.9	ND	14	7.58
Sep-2012	7.64	7.64	ND	ND	6.11	ND	ND	5.4	34.4	ND	43	6.36
Mar-2013	15.3	15.3	0.236 J	ND	7.05	0.0585	ND	6	38.2	0.415 J	24	6.96
Oct-2013	14.2	14.2	ND	ND	7.85	0.0937	ND	5.3	39.4	ND	29	7.08
Mar-2014	13.6	13.6	ND	6 J	6.84	ND	ND	5.3	36	ND	ND	6.49
Oct-2014	35.2	35.2	ND	8 J	7.49	ND	ND	5	38.5	ND	ND	7.66
Apr-2015	4.72	4.72	ND	ND	8.49	0.16	ND	4.5	30.3	ND	ND	7.56
Nov-2015	3.52	3.52	ND	ND	8.33	0.127	ND	5.6	66.5	ND	34	7.43
May-2016	4.6	4.6	ND	6 J	5.74 B	ND	ND	5.5	44.6	ND	96	5.7
Oct-2016	4.6	4.6	ND	11	6.14	NA	NA	5.5	49.3	0.678 J	41	5.5
May-2017	3.52	3.52	ND	18	5.38	ND	ND	5.3	46.2	ND	ND	5.1
Oct-2017	14	14	ND	7 J	5.54	ND	ND	5.5	54.1	ND	16 J	5.5
May-2018	14	14	ND	12.2 J	5.5	ND	0.015	5.1	52	ND	ND	5.7
Nov-2018	6 JB	ND	ND	ND	5.4	0.041 J	0.0084 J	5.2	26.1	ND	10	5.2
May-2019	ND	NA	ND	ND	5.3	ND	ND	4.87	22.3	ND	17	5
Oct-2019	4 JH1	NA	ND	ND	4.7	0.11	ND	5.01	28.9	ND	25	4.6
May-2020	ND	NA	ND	ND	5.3	ND	0.02	5.51	39.6	ND	12	5.6
Oct-2020	4 J	NA	ND	ND	4.9	0.049 JB	ND	5.69	45.7	ND	37	5.5
Apr-2021	2 J3c	NA	ND	ND	4.6	0.059 J	ND	6.22	50.9	ND	13	5

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-03***											
Oct-2021	*6 J2c*	*NA*	*ND*	*ND*	4.1	*0.07 J*	*ND*	6.34	83.5	*ND*	*ND*	5.34
May-2022	10	*NA*	*ND*	*ND*	4.3	*0.071 J*	*ND*	6.38	79.1	*ND*	*ND*	5.1 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-03***													
Nov-1993	NA	ND	ND	NA	ND	0.61	NA	ND	NA	ND	4.2	1.9	ND	0.41	NA
Apr-1994	NA	ND	ND	NA	ND	0.79	NA	ND	NA	ND	ND	0.66	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	0.94	NA	ND	ND	ND	1.6	1.6	ND	0.41	NA
Apr-1997	ND	ND	0.019	ND	ND	1.8	0.8	ND	ND	ND	4.5	1.6	0.003	0.63	ND
Apr-1998	ND	ND	0.016	ND	ND	1.04	1.01	ND	ND	ND	1.28	0.593	ND	0.517	0.455
Apr-1999	ND	ND	ND	ND	ND	1.14	0.977	ND	ND	ND	6.94	1.18	ND	0.555	0.444
Apr-2000	ND	ND	ND	ND	ND	1.36	1.06	ND	ND	ND	13.6	1.09	ND	0.56	0.497
Apr-2001	ND	ND	0.016	ND	ND	1.36	NA	0.012	ND	ND	34.5	NA	0.009	0.597	NA
Mar-2002	ND	ND	0.013	ND	ND	1.46	1.17	ND	ND	ND	53.8	0.367	0.007	0.586	0.543
Mar-2003	ND	ND	ND	ND	ND	1.16	1.21	ND	ND	0.012	7.65	1.54	0.005	0.545	0.558
Apr-2004	ND	ND	0.015	ND	ND	1.47	1.25	ND	ND	0.012	141	7.86	0.009	0.654	0.596
Apr-2005	ND	ND	0.02	ND	ND	1.56	1.31	ND	ND	ND	92.8	1.3	0.013	0.627	0.589
Mar-2006	ND	ND	ND	ND	ND	1.13	0.987	ND	ND	0.011	20.5	1.04	0.006	0.458	0.442
Mar-2007	ND	ND	0.017	ND	ND	1.48	1.3	ND	ND	ND	19.1	7.55	0.007	0.609	0.524
Mar-2008	ND	0.002	ND	ND	ND	1.11	1.15	ND	ND	ND	9.41	0.532	ND	0.496	0.509
Mar-2009	ND	ND	ND	ND	ND	1.2	1.23	ND	ND	0.1	7.56	5.53	ND	0.487	0.504
Apr-2010	ND	ND	ND	ND	ND	1.92	1.75	ND	ND	0.01	10.4	7.4	ND	0.618	0.585
Apr-2011	ND	ND	ND	ND	ND	1.55	1.55	ND	ND	0.041	15.3	8.29	ND	0.655	0.65
Mar-2012	ND	ND	0.01	ND	ND	1.66	1.61	ND	ND	ND	11.4	3.66	ND	0.832	0.807
Sep-2012	ND	0.003	0.0074 J	ND	ND	1.45	1.39	0.0189	0.0026 J	0.0368	23.1	12.2	ND	0.666	0.632
Mar-2013	0.000835 J	0.0036	0.0104	ND	0.000273 J	1.62	1.58	0.0296	0.0056 J	0.0555	26.9	7.99	0.000874 J	0.709	0.678

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-03***													
Oct-2013	*ND*	*ND*	0.0127	*ND*	*0.000247 J*	1.61	1.46	0.0053	0.0024	0.0154	8.54	7.41	*0.000425 J*	0.742	0.693
Mar-2014	*0.000669 J*	0.0023	*0.0075 J*	*ND*	*0.000144 J*	1.75	1.64	0.019	*0.0032 J*	0.0282	26.8	16	*0.000588 J*	0.516	0.609
Oct-2014	0.0023	0.005	0.0112	*ND*	*0.000642 J*	1.81	1.6	0.0266	*0.0057 J*	0.0498	37.3	14.1	0.002	0.766	0.72
Apr-2015	0.002	0.0031	0.013	*ND*	*0.000276 J*	1.75	1.6	0.0133	*0.004 J*	0.0253	19.2	1.14	*0.0014 J*	0.775	0.718
Nov-2015	0.0036	**0.021 R,C**	0.0143	*0.000084 J*	*0.000979 J*	1.72	1.56	**0.133 R,C**	0.0252	0.245	75.4	2.2	0.0031	0.76	0.698
Dec-2015	*NA*	0.0052	*NA*	*NA*	*NA*	*NA*	*NA*	0.0261	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
May-2016	*ND*	*0.0022 J*	0.0076	*ND*	*0.00022 J*	1.32	1.23	0.0133	0.003	0.04	15.7	14.6	0.0036	0.59	0.599
Oct-2016	*0.00093 J*	*0.0033 J*	0.0075	*ND*	*0.00022 J*	1.22	1.2	*0.0245 J+*	0.0058	*0.0495 J+*	32.8	15.8	*0.0013 J*	*0.588 J+*	0.598
May-2017	*ND*	0.0045	0.0075	*ND*	*0.00036 J*	1.11	1.17	0.0304	0.0058	0.0716	23.9	13.6	0.002	0.575	0.55
Oct-2017	*ND*	*0.0034 J*	0.0091	*ND*	*0.00019 J*	1.31	1.07	0.0196	0.0048	0.0499	35.6	10.8	0.0024	0.535	0.507
May-2018	0.001	0.0052	0.0071	*0.000029 J*	*0.00032 J*	1.3	1.2	0.03	0.0071	0.065	26.8	11.9	0.002	*0.59 J*	*0.55 J*
Nov-2018	*ND*	*ND*	0.0096	*0.000053 J*	*0.00013 J*	1.1	1.1	*0.0037 J*	0.001	0.0034	20.6	0.84	*0.00056 J*	*0.59 J*	*0.54 J*
May-2019	*ND*	*ND*	0.011	*ND*	*ND*	1.1	1.1	*ND*	0.0011	0.0021	22.6	0.5	*ND*	*ND*	*ND*
Oct-2019	*0.0003 JB*	*ND*	0.03	*0.00045 J*	*0.0012 J*	1.1	1.1	*0.017 J*	*0.002 J*	0.015	195	1.7	*0.0027 J*	0.46	*0.54 J*
May-2020	0.00056	0.0011	0.0099	*ND*	*0.00013 J*	1.2	1.2	0.022	0.0042	0.0088	19.2	5.1	0.0019	0.61	*0.6 J*
Oct-2020	*0.00044 J*	*ND*	*0.0098 J*	*ND*	*ND*	1.2	1.1	*0.017 JB*	0.0038	*ND*	7.4	5.5	*ND*	0.63	*0.54 J*
Apr-2021	*ND*	*ND*	*0.008 J*	*ND*	*ND*	1.1	1.1	0.006	*0.0013 J*	*ND*	9.4	5.3	*ND*	0.54	0.54
Oct-2021	*0.000055 JB*	*ND*	0.0076	*ND*	*ND*	1.2	1.1	*0.0018 J*	*0.00072 J*	*0.00061 J*	10.6	7	*ND*	0.58	0.56
May-2022	*ND*	*0.0015 JB*	0.0078	*ND*	*ND*	1.1	1.2	0.0045	*0.0016 J*	*0.0014 J*	7.9	7.5	*ND*	0.56	0.61

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-03*												
Nov-1993	0.12	NA	ND	NA	0.58	NA	ND	NA	1.5	NA	NA	NA	ND
Apr-1994	ND	NA	ND	NA	ND	NA	ND	NA	1.1	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.52	NA	ND	ND	1.4	NA	ND	ND	0.02
Apr-1997	0.066	0.026	ND	ND	2	2	ND	ND	1.8	1.7	ND	ND	0.066
Apr-1998	0.031	0.031	NA	ND	1.2	0.97	ND	ND	1.56	1.59	ND	ND	0.011
Apr-1999	0.043	0.023	NA	ND	1.49	0.644	ND	ND	2.03	1.56	ND	ND	ND
Apr-2000	0.023	0.03	NA	ND	0.653	ND	ND	ND	2.55	1.61	0.002	ND	0.011
Apr-2001	0.015	NA	NA	ND	1.51	NA	ND	ND	2.89	NA	ND	0.011	0.015
Mar-2002	0.015	0.015	NA	ND	0.806	1.14	ND	ND	2.48	1.76	ND	ND	0.026
Mar-2003	0.012	0.039	NA	ND	1.73	ND	ND	ND	1.92	1.96	ND	ND	0.026
Apr-2004	0.138	0.15	ND	ND	0.898	ND	ND	ND	2.6	2.23	ND	ND	0.028
Apr-2005	0.046	0.029	ND	ND	0.86	0.64	ND	ND	2.42	2.21	ND	ND	0.018
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	1.85	1.83	ND	ND	ND
Mar-2007	0.077	0.082	ND	ND	ND	ND	ND	ND	2.25	2	ND	ND	0.018
Mar-2008	0.033	0.012	ND	ND	0.575	0.598	ND	ND	2.17	2.22	ND	ND	ND
Mar-2009	0.097	0.088	ND	ND	ND	ND	ND	ND	2.41	2.72	ND	ND	ND
Apr-2010	0.146	0.116	ND	ND	0.638	0.623	ND	ND	2.83	2.79	ND	ND	ND
Apr-2011	0.156	0.162	ND	0.029	0.606	0.625	ND	ND	2.9	2.92	ND	ND	0.01
Mar-2012	0.12	0.1	ND	ND	0.735	0.708	ND	ND	3.68	3.55	ND	ND	ND
Sep-2012	0.249	0.217	ND	0.0133	0.796	0.764	ND	ND	3.52	3.48	ND	ND	0.0035 J
Mar-2013	0.152	0.101	0.000134 J	0.0242	0.812	0.748	ND	0.000022 J	3.48	3.28	ND	ND	0.019
Oct-2013	0.102	0.0916	ND	0.0073	0.646	0.592	ND	ND	3.52	3.41	0.000098 J	0.001 J	0.0166

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-03***												
Mar-2014	0.206	0.192	ND	0.0131	0.726	0.682	ND	0.000041 J	2.64	3.27	0.000185 J	0.0042 J	0.01
Oct-2014	0.38	0.247	0.00003 J	0.0253	0.864	0.816	ND	0.000086 J	3.85	3.83	ND	ND	0.0121
Apr-2015	0.0779	0.0368	ND	0.0164	0.765	0.736	0.000801 J	0.000033 J	3.95	4.01	ND	ND	0.0092 J
Nov-2015	0.278	0.0454	ND	0.111	0.804	0.714	0.000367 J	0.000192 J	4.19	4.09	0.000278 J	ND	0.0273
May-2016	0.24	0.234	ND	0.0191	0.874	0.828	ND	ND	3.33	3.09	ND	ND	0.0309
Oct-2016	0.272 R	0.217	ND	0.0249 J+	0.727	0.715	ND	ND	2.75 J+	2.77	ND	0.00032 J	0.0173 J
May-2017	0.242	0.217	ND	0.0324	0.766	0.729	ND	ND	2.73	2.68	ND	0.0003 J	0.0154 J
Oct-2017	0.269	0.186	ND	0.0217	0.628	0.603	ND	ND	2.57	2.39	ND	0.00025 J	0.0403
May-2018	0.27	0.21	ND	0.034	ND	ND	0.00027 J	ND	2.8 J	2.4 J	ND	0.0026	0.025
Nov-2018	0.018	0.019	ND	0.0045	ND	ND	ND	ND	2.2 J	2.3 J	ND	ND	0.0058
May-2019	0.02	0.016	ND	0.004	ND	ND	ND	ND	ND	ND	ND	ND	0.0057
Oct-2019	0.15	0.054	ND	0.012	ND	ND	ND	ND	2 J	2.4 J	ND	ND	0.065
May-2020	0.1	0.078	ND	0.028	ND	ND	ND	ND	2.3 J	2.3 J	ND	0.0013	0.0068
Oct-2020	0.093	0.08	ND	0.015	ND	ND	ND	ND	2.5 J	1.9 J	ND	0.0043 JB	ND
Apr-2021	0.11	0.12	ND	0.011	0.5	0.52	ND	ND	2.6	2.7	ND	ND	ND
Oct-2021	0.14	0.13	ND	0.0039	0.51	0.5	ND	ND	2.5	2.5	ND	ND	ND
May-2022	0.13	0.13	ND	0.01	0.5 J	0.46 J	ND	ND	2.4	2.9	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-03*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.5	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.8	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.23	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.06 J	ND	ND	4.68 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-03*																
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.63 J,B	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.84 J	ND	ND	7.02	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.19 J	ND	ND	5.12	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.41 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.1	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3 J	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.1	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.1	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.4	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-03*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-03***															
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.172 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-03***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-03*															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-04***											
Nov-1993	6	6	0.5	ND	21.6	ND	ND	5.25	21.8	4.2	34	5.14
Apr-1994	6	6	ND	ND	2.2	ND	ND	5.3	21	ND	18	4.39
Apr-1995	8.2	8.2	ND	ND	2.3	ND	ND	6.1	20.7	1.9	ND	4.2
Apr-1997	ND	4	ND	ND	2	0.09	ND	NA	NA	ND	50	11
Oct-1997	4	4	0.5	ND	1.51	0.28	ND	8.07	21.5	ND	ND	16
Apr-1998	3	3	ND	ND	2.03	ND	ND	6.81	19.53	ND	ND	5
Apr-1999	ND	ND	0.24	ND	2.61	ND	ND	5.26	22.5	ND	32	5.7
Oct-1999	ND	ND	0.08	ND	2.88	ND	ND	5.6	20.1	ND	18	5.3
Apr-2000	4	4	ND	ND	3.25	ND	ND	5.7	17	ND	23	5.9
Oct-2000	6.4	NA	ND	ND	1.96	ND	ND	5.6	17.05	ND	19	5.63
Apr-2001	5.5	NA	ND	ND	1.96	ND	ND	NA	NA	ND	ND	7
Sep-2001	4.9	4.9	ND	ND	5.92	ND	ND	5.6	21	ND	22	6.2
Mar-2002	3.2	3.2	ND	ND	1.71	ND	ND	4.5	16	ND	20	5.03
Sep-2002	5.8	5.8	ND	ND	1.99	ND	ND	5.5	20.1	ND	22	6.44
Mar-2003	5.4	5.4	ND	ND	12	ND	ND	5.3	21.6	ND	12	5.53
Oct-2003	5.2	5.2	ND	ND	7.09	ND	ND	4.1	21.6	ND	48	7.6
Apr-2004	4.2	4.2	ND	ND	2.28	0.1	ND	5.5	16.6	ND	21	9.54
Oct-2004	5.4	5.4	ND	ND	2.39	0.12	ND	5.6	16.6	ND	13	9.5
Apr-2005	4.9	4.9	ND	ND	2.45	0.1	ND	5.3	15.4	1.58	35	5.33
Oct-2005	6.4	6.4	ND	ND	2.42	0.11	ND	4.6	13.7	ND	27	5.76
Mar-2006	7.5	7.5	ND	ND	2.27	ND	ND	5.3	17.6	ND	ND	4.15
Sep-2006	6.1	6.1	ND	ND	2.6	0.12	ND	5.5	17.9	ND	15	5.94
Mar-2007	6.2	6.2	ND	ND	2.72	ND	ND	5.7	20	ND	27	5.01
Sep-2007	4.9	4.9	0.39	ND	8.92	ND	ND	5.5	18.3	ND	29	4.52
Mar-2008	6.5	6.5	ND	ND	2.62	0.1	ND	5.5	18.8	ND	ND	4.66
Sep-2008	6.5	6.5	0.2	ND	2.77	0.06	ND	5.5	18.1	ND	19	5.6
Mar-2009	6	6	ND	ND	2.71	0.08	ND	5.2	23.2	ND	22	4.7
Oct-2009	5.9	5.9	ND	ND	2.58	0.09	ND	5	18	ND	37	5.25
Mar-2010	6	6	ND	ND	2.64	ND	ND	5.48	27	ND	32	5.19
Oct-2010	5.5	5.5	ND	ND	3.16	0.06	ND	5	18.8	ND	ND	4.93
Apr-2011	7	7	ND	ND	2.92	0.09	ND	5.3	15.7	ND	13	4.72
Sep-2011	7.5	7.5	ND	ND	7.53	0.38	ND	5.5	20.6	ND	36	5.78
Mar-2012	5.3	5.3	ND	ND	3.12	0.08	ND	4.8	18.9	ND	ND	5.87
Sep-2012	6.12	6.12	ND	ND	3.38	0.11	ND	4.3	21.4	ND	53	6.25
Mar-2013	5.84	5.84	0.055 J	ND	3.76	0.0899	ND	5.6	21.2	0.359 J	25	6.49
Oct-2013	6.2	6.2	ND	ND	3.87	0.0901	ND	5.9	24.7	ND	ND	6.18
Mar-2014	6.24	6.24	ND	ND	4.1	0.0804	ND	5.6	24.8	ND	38	7.94

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-04***											
Oct-2014	*ND*	*ND*	*ND*	*5 J*	4.42	0.119	*ND*	5.2	24.4	*ND*	*ND*	6.5
Apr-2015	4.68	4.68	*ND*	*ND*	4.59	0.091	*ND*	4.4	23.7	*ND*	*ND*	5.68
Nov-2015	5.4	5.4	*ND*	*ND*	4.6	0.111	*ND*	5.7	45.6	*ND*	25	7.79
May-2016	4.64	4.64	*ND*	*ND*	4.99	0.103	*ND*	5.7	33.9	*ND*	46	7.6
Oct-2016	3.76	3.76	*ND*	*ND*	5.4	*NA*	*NA*	5.6	43.5	*0.708 J*	44	7.2
May-2017	4.28	4.28	*ND*	*ND*	6.43	0.137	*ND*	5.5	53.6	*ND*	27	6.5
Oct-2017	6.36	6.36	*ND*	*6 J+*	7.26	0.114	*ND*	6.1	59	*ND*	*16 J*	7.4
May-2018	10	10	*ND*	*18.6 J*	8.2	0.1	*ND*	5.9	54.3	*ND*	*ND*	8.4
Nov-2018	18	18	*ND*	*ND*	8.2	*ND*	*0.0075 J*	6.2	79.3	*ND*	77	8.6
May-2019	24	*NA*	*ND*	*ND*	9.1	*ND*	*ND*	5.9	62.7	*ND*	38	9.2
Oct-2019	10 H1	*NA*	*ND*	*ND*	7.1	*0.084 J*	0.017	5.84	87.3	*ND*	47	13
May-2020	26	*NA*	*ND*	*6.9 J*	9.9	*ND*	*ND*	5.64	94.7	*ND*	40	17.7
Oct-2020	26	*NA*	*ND*	*ND*	7.8	*ND*	*0.0072 J*	5.66	108	*ND*	68	27
Apr-2021	10	*NA*	*0.064 J*	*ND*	9.4	*0.073 J*	*ND*	6.53	131.1	*ND*	55 D6	16.7
Oct-2021	30	*NA*	*ND*	*8.3 J*	8.2	*0.063 J*	*ND*	6.69	170.9	*ND*	41	24.8
May-2022	28 ML	*NA*	*ND*	*ND*	8.7	0.15	*0.0073 J*	6.27	154.3	*ND*	64	16.5 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-04*													
Nov-1993	NA	ND	ND	NA	ND	1.4	NA	ND	NA	ND	1.1	0.13	ND	0.4	NA
Apr-1994	NA	ND	ND	NA	ND	1.7	NA	ND	NA	ND	0.072	ND	ND	0.45	NA
Apr-1995	ND	ND	ND	ND	ND	1.1	NA	ND	ND	ND	0.49	ND	ND	0.36	NA
Oct-1996	ND	ND	0.008	ND	ND	1.6	1.6	ND	ND	ND	0.82	0.22	ND	ND	ND
Apr-1997	ND	ND	0.021	ND	ND	2.5	0.86	ND	ND	ND	0.82	0.25	ND	0.55	ND
Oct-1997	ND	ND	ND	ND	ND	1.39	1.29	ND	ND	ND	20.7	0.786	ND	0.349	0.33
Apr-1998	ND	ND	0.01	ND	ND	1.37	1.29	ND	ND	ND	25.9	0.456	ND	0.374	0.366
Apr-1999	ND	ND	0.011	ND	ND	1.58	1.43	ND	ND	ND	19.3	0.422	ND	0.418	0.398
Oct-1999	ND	ND	ND	ND	ND	1.46	1.33	ND	ND	ND	15	0.465	ND	0.421	0.38
Apr-2000	ND	ND	ND	ND	ND	1.64	1.65	ND	ND	ND	5.3	0.212	ND	0.445	0.429
Oct-2000	ND	ND	ND	ND	ND	1.57	1.56	ND	ND	0.004	12	0.477	ND	0.415	0.416
Apr-2001	ND	ND	0.012	ND	ND	2	NA	ND	ND	ND	34.9	NA	ND	0.485	NA
Sep-2001	ND	ND	ND	ND	ND	1.65	1.58	ND	ND	ND	10.9	0.145	ND	0.5	0.422
Mar-2002	ND	ND	0.011	ND	ND	1.35	1.37	ND	ND	ND	29.7	0.607	ND	0.403	0.422
Sep-2002	ND	ND	0.011	ND	ND	1.82	1.35	ND	ND	ND	59.6	0.703	ND	0.462	0.414
Mar-2003	ND	ND	ND	ND	ND	1.49	1.41	ND	ND	ND	7.57	0.379	ND	0.441	0.412
Oct-2003	ND	ND	0.013	ND	ND	2.09	1.36	ND	ND	0.011	55.9	0.527	ND	0.579	0.402
Apr-2004	0.004	0.003	0.014	0.003	ND	1.89	1.04	ND	ND	ND	30.5	0.142	0.004	1.17	0.4
Oct-2004	ND	ND	0.01	ND	ND	2.86	1.45	ND	ND	0.014	36.3	0.288	ND	0.571	0.426
Apr-2005	ND	ND	0.013	ND	ND	1.41	1.38	ND	ND	ND	81.5	0.537	ND	0.437	0.424
Oct-2005	ND	ND	0.01	ND	ND	1.58	1.23	ND	ND	ND	39.4	0.379	ND	0.449	0.414

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-04***													
Mar-2006	ND	ND	ND	ND	ND	1.08	0.996	ND	ND	ND	43.7	0.372	ND	0.352	0.338
Sep-2006	ND	ND	ND	ND	ND	1.61	1.36	ND	ND	ND	38.2	0.206	ND	0.467	0.431
Mar-2007	ND	ND	0.014	ND	ND	1.33	1.22	ND	ND	ND	41.8	0.151	ND	0.41	0.376
Sep-2007	ND	ND	ND	ND	ND	1.14	1.11	ND	ND	ND	17.1	0.705	ND	0.406	0.372
Mar-2008	ND	ND	0.011	ND	ND	1.17	1.14	ND	ND	ND	40.9	0.576	ND	0.423	0.416
Sep-2008	ND	ND	ND	ND	ND	1.41	1.19	ND	ND	ND	23.6	0.24	ND	0.501	0.454
Mar-2009	ND	ND	ND	ND	ND	1.25	1.31	ND	ND	ND	26.9	0.4	ND	0.383	0.41
Oct-2009	ND	ND	ND	ND	ND	1.32	1.27	ND	ND	ND	10	0.243	ND	0.474	0.467
Mar-2010	ND	ND	ND	ND	ND	1.37	1.27	ND	ND	ND	2.48	0.155	ND	0.429	0.407
Oct-2010	ND	ND	ND	ND	ND	1.17	1.13	ND	ND	ND	11.3	0.91	ND	0.488	0.458
Apr-2011	ND	ND	0.012	ND	ND	1.11	1.1	ND	ND	ND	57.8	0.317	ND	0.473	0.462
Sep-2011	ND	ND	0.015	ND	ND	1.44	1.48	ND	ND	ND	90.5	0.469	ND	0.53	0.47
Mar-2012	ND	ND	0.01	ND	ND	1.36	1.33	ND	ND	ND	8.58	0.191	ND	0.599	0.576
Sep-2012	ND	ND	0.014	0.000181 J	ND	1.62	1.5	ND	0.00098 J	0.0044 J	68.2	0.274	0.000594 J	0.536	0.551
Mar-2013	ND	ND	0.0133	0.000126 J	ND	1.66	1.49	0.0021 J	0.0012 J	0.0025 J	20.2	0.251	ND	0.57	0.534
Oct-2013	ND	ND	0.0128	ND	ND	1.56	1.58	ND	0.000945 J	0.0018 J	9.53	0.335	ND	0.555	0.585
Mar-2014	ND	ND	0.0123	ND	ND	2.34	2.3	0.0049 J	0.000947 J	0.0026 J	17.5	0.389	ND	0.509	0.652
Oct-2014	0.000253 J	ND	0.0139	ND	ND	1.58	1.66	0.00074 J	0.001 J	0.0027 J	17.7	0.275	ND	0.621	0.62
Apr-2015	0.0012 J	ND	0.0148	ND	ND	1.27	1.31	0.000412 J	0.0012 J	0.0028 J	13.6	0.382	ND	0.611	0.631
Nov-2015	ND	ND	0.0144	ND	ND	1.94	1.82	0.000332 J	0.0012 J	0.002 J	5.46	0.512	0.000478 J	0.717	0.67
May-2016	ND	ND	0.0162	0.00019 J	ND	1.83	1.91	0.00071 J	0.0013	0.0032 J	25.4	0.285	0.00015 J	0.741	0.734
Oct-2016	ND	ND	0.0166	ND	ND	1.62	1.64	0.00071 J	0.0013	0.0021 J	1.62	0.824	0.00011 J	0.763	0.784
May-2017	ND	ND	0.0185	0.00019 J	ND	1.37	1.58	0.00083 JB	0.0016	0.0038 J	14.4	1.64	0.00018 J	0.745	0.751
Oct-2017	ND	ND	0.0183	0.00015 J	ND	1.62	1.62	ND	0.0016	0.0035 J	11.2	2.68	0.00019 J	0.811	0.844

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-04***													
May-2018	*0.00013 J*	*ND*	0.023	*0.00021 J*	*0.000078 J*	1.8	1.7	*0.0022 J*	0.0018	0.014	14.1	2.4	*0.00023 J*	*0.94 J*	*0.91 J*
Nov-2018	*ND*	*ND*	0.023	*0.00018 J*	*0.000032 J*	1.9	1.9	*0.0024 J*	0.0015	0.0041	44	17.7 M1	*0.000076 J*	*0.96 J*	*0.99 J*
May-2019	*ND*	*ND*	0.023	*ND*	*ND*	2.1	2.2	*ND*	0.0015	0.0028	23.4	14.1	*ND*	*ND*	1
Oct-2019	*ND*	*ND*	0.038	*0.00086 J*	*0.00076 J*	3.6	3.5	*0.0036 J*	0.0026	0.017	152	11.6	*0.00037 J*	1	1
May-2020	*0.00032 J*	*ND*	0.025	*0.00015 J*	*0.00016 J*	5.2	5.4	*0.003 J*	0.0026	0.0063	27.5	17.5	*ND*	1.2	1.2
Oct-2020	*0.00072 J*	*ND*	0.028	*ND*	*ND*	8.8	8.4	*0.01 J*	*0.0018 J*	*ND*	22.4 M1	19.5	*ND*	1.2	1.2
Apr-2021	*ND*	*ND*	0.028	*ND*	*ND*	4.6	4.5	*0.0009 J*	*0.0013 J*	*ND*	30.4	21.8	*ND*	1.2	1.2
Oct-2021	*0.000053 JB*	*ND*	0.027	*ND*	*ND*	7.5	7.2	*ND*	*0.0013 J*	*0.0014 J*	29.8	21.5	*ND*	1.5	1.4
May-2022	*ND*	*ND*	0.03	*ND*	*ND*	4.3	3.9	*0.0011 J*	*0.002 J*	*0.0017 J*	28.3	22.7	*ND*	1.4	1.3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-04*												
Nov-1993	0.07	NA	ND	NA	0.36	NA	ND	NA	1.1	NA	NA	NA	ND
Apr-1994	0.012	NA	ND	NA	ND	NA	ND	NA	1.9	NA	NA	NA	0.014
Apr-1995	0.01	NA	ND	ND	0.46	NA	ND	ND	1	NA	ND	ND	0.02
Oct-1996	0.019	0.016	NA	ND	ND	ND	ND	ND	2.1	2.5	ND	ND	ND
Apr-1997	0.025	ND	ND	ND	2	1.8	ND	ND	1.3	1.2	ND	ND	0.044
Oct-1997	0.011	0.015	ND	ND	ND	0.552	ND	ND	1.08	1.02	ND	ND	0.01
Apr-1998	ND	0.033	ND	ND	ND	ND	ND	ND	1.09	1.18	ND	ND	ND
Apr-1999	0.01	0.015	NA	ND	0.875	ND	ND	ND	1.18	1.12	ND	ND	ND
Oct-1999	0.01	0.015	NA	ND	ND	ND	ND	ND	1.1	1.01	ND	ND	ND
Apr-2000	0.011	0.012	NA	ND	0.547	ND	ND	ND	1.12	1.04	ND	ND	ND
Oct-2000	0.012	0.015	NA	ND	0.514	ND	ND	ND	1.05	1.16	ND	ND	ND
Apr-2001	ND	NA	NA	ND	1.11	NA	ND	ND	2.15	NA	ND	ND	ND
Sep-2001	ND	ND	NA	ND	ND	0.641	ND	ND	1.18	1.1	ND	ND	ND
Mar-2002	0.015	0.017	NA	ND	1.03	0.901	ND	ND	1.16	1.15	ND	ND	ND
Sep-2002	ND	0.017	NA	ND	0.843	0.821	ND	ND	1.43	1.11	ND	ND	ND
Mar-2003	0.013	0.012	NA	ND	0.646	ND	ND	ND	1.18	1.13	ND	ND	ND
Oct-2003	ND	0.017	NA	ND	1.18	1.53	ND	ND	2.74	1.13	ND	0.044	ND
Apr-2004	ND	ND	ND	ND	1.48	ND	ND	ND	2.17	1.13	**0.003**	ND	0.021
Oct-2004	ND	0.011	ND	ND	ND	ND	ND	ND	1.56	0.833	ND	ND	0.073
Apr-2005	0.017	0.014	ND	ND	ND	ND	ND	ND	1.21	1.15	ND	ND	ND
Oct-2005	0.016	0.011	ND	ND	0.58	ND	ND	ND	1.97	1.06	ND	ND	0.012
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	0.919	0.81	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-04*												
Sep-2006	0.01	ND	ND	ND	0.514	ND	ND	ND	1.27	0.989	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	1.09	0.925	ND	ND	ND
Sep-2007	0.022	0.019	ND	ND	ND	ND	ND	ND	1.1	1.05	ND	ND	0.015
Mar-2008	0.019	0.014	ND	ND	ND	ND	ND	ND	1.18	1.13	ND	ND	ND
Sep-2008	0.01	ND	ND	ND	ND	ND	ND	ND	1.13	1.02	ND	ND	0.021
Mar-2009	ND	ND	**0.0072 R,C**	ND	ND	ND	ND	ND	1.14	1.17	ND	ND	0.011
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Jul-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.14	1.14	ND	ND	ND
Mar-2010	ND	ND	ND	ND	0.562	0.512	ND	ND	1.07	1.04	ND	ND	ND
Oct-2010	0.028	0.021	ND	ND	ND	ND	ND	ND	1.22	1.17	ND	ND	ND
Apr-2011	0.015	0.012	ND	ND	ND	ND	ND	ND	1.32	1.26	ND	ND	ND
Sep-2011	0.021	0.012	ND	ND	ND	ND	ND	ND	1.34	1.31	ND	ND	0.012
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	1.34	1.34	ND	ND	ND
Sep-2012	0.0153	0.011	ND	0.0019 J	0.45 J	0.54	ND	ND	1.38	1.39	ND	ND	0.006 J
Mar-2013	0.0122	0.0103	0.00018 J	0.0029 J	0.524	0.467 J	ND	ND	1.56	1.45	0.000555 J	ND	0.0128
Oct-2013	0.0132	0.0121	ND	0.0017 J	0.427	0.44	ND	ND	1.46	1.57	ND	0.000803 J	0.0114
Mar-2014	0.0108	0.0101	ND	0.0019 J	0.558	0.539	ND	ND	1.27	1.61	ND	0.0048 J	0.0098 J
Oct-2014	0.0144	0.012	0.000022 J	0.0018 J	0.518	0.529	0.0013 J	ND	1.69	1.71	ND	ND	ND
Apr-2015	0.0165	0.0146	ND	0.0017 J	0.545	0.548	0.000983 J	ND	1.83	1.88	ND	ND	0.0098 J
Nov-2015	0.0184	0.0167	ND	0.0017 J	0.557	0.516	ND	ND	2.03	1.92	0.000116 J	ND	0.0095 J
May-2016	0.0186	0.0122	ND	0.002 J	0.57	0.562	ND	ND	1.95	1.93	ND	ND	ND
Oct-2016	0.0193	0.0195	ND	0.002 J	0.546	0.582	ND	ND	2	2.1	ND	ND	ND
May-2017	0.0472	0.0279	0.00023	0.0021 J	0.575	0.588	ND	ND	2.25	2.24	ND	ND	0.0036 JB

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-04***												
Oct-2017	0.0403	0.0357	*0.00015 J*	*0.002 JB*	0.626	0.625	*ND*	*ND*	2.5	2.64	*ND*	*ND*	*ND*
May-2018	0.032	0.029	*0.00015 J*	0.0027	*ND*	*ND*	*0.00013 J*	*ND*	*2.9 J*	*2.7 J*	*0.000076 J*	*ND*	0.0065
Nov-2018	0.15	0.15	0.00032	0.0036	*ND*	*ND*	*0.0002 J*	*ND*	*3.5 J*	*3 J*	*ND*	*ND*	0.0057
May-2019	0.18	0.16	*ND*	0.0026	7.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	0.17	0.11	0.0006	0.0042	*ND*	*ND*	*ND*	*ND*	*2.6 J*	*3 J*	*ND*	*ND*	0.025
May-2020	0.1	0.16	*ND*	0.0032	*ND*	*ND*	*ND*	*ND*	*3.1 J*	*3.2 J*	*ND*	0.003	0.01
Oct-2020	0.15	0.12	*ND*	0.0042	*ND*	*ND*	*0.0017 J*	*ND*	*1.8 J*	*2.5 J*	*ND*	*0.0025 J*	*ND*
Apr-2021	0.16	0.16	*ND*	*ND*	0.76	0.77	*ND*	*ND*	3.7	3.4	*ND*	*ND*	*ND*
Oct-2021	0.16	0.16	*ND*	*0.0013 J*	0.8	0.77	*ND*	*ND*	3.6	3.6	*ND*	*ND*	*ND*
May-2022	0.16	0.16	*ND*	*0.0025 J*	0.83	0.8	*ND*	*ND*	4.3	3.9	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.5	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04*																
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*0.21 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*0.24 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*0.25 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04*																
May-2017	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.9 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	2.35	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.48 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.62 J	0.4 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.18 J	ND	ND	ND	ND	ND	0.71 J	0.47 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.18 J	ND	ND	ND	ND	ND	0.81 J	0.33 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	0.64 J	0.45 J
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8 J	0.9 J
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	0.8 J	1.3
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.1 J	ND	ND	ND	1.3	2.3

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	1.2	3
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	1.5	4.1
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	4.7
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.3 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1 CL	4 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	2.9
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	3
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2	3.1
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*1.36 J*	*4.77 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	2.6	4.4
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	3.5

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-04B***											
Nov-1993	ND	ND	ND	30	3.1	ND	ND	4.82	25.8	4.2	42	3.93
Apr-1994	4.27	ND	ND	21.1	2.7	ND	ND	5.2	28.6	3.6	17	3.93
Apr-1995	ND	ND	ND	ND	3	ND	ND	5.4	27.5	8	16	5.6
Apr-1997	ND	5	ND	ND	2.5	0.03	ND	NA	NA	ND	54	5.7
Oct-1997	ND	ND	0.6	ND	1.54	ND	ND	8.34	51.6	2.5	18	ND
Apr-1998	ND	ND	0.34	ND	2.67	ND	ND	6.57	29.4	7.4	16	9.3
Apr-1999	ND	ND	0.13	ND	3.66	ND	ND	4.87	29.3	4.79	39	7.8
Oct-1999	ND	ND	0.07	ND	2.52	ND	ND	5.13	29.4	5.33	29	8.4
Apr-2000	1	1	ND	ND	2.8	ND	ND	5.47	25	4.27	42	9
Oct-2000	1	NA	ND	ND	3.58	ND	ND	5.06	34.2	11.7	364	7.72
Apr-2001	1.3	NA	ND	ND	2.33	ND	ND	NA	NA	8.7	37	8.47
Sep-2001	ND	ND	ND	ND	11.7	1.25	ND	4.9	48	11.4	33	10.5
Mar-2002	1	1	ND	ND	3.75	ND	ND	4.6	30	5.04	35	9.56
Sep-2002	1.4	1.4	ND	ND	3.03	ND	ND	5	41.1	7.73	83	10.8
Mar-2003	1.9	1.9	ND	ND	12.5	ND	ND	4.8	38.2	14.2	33	9.6
Oct-2003	2.1	2.1	ND	ND	2.72	ND	ND	3.8	39.9	7.67	55	10.5
Apr-2004	1.7	1.7	ND	ND	2.23	ND	ND	5.1	35.6	11.1	31	11.8
Oct-2004	1.9	1.9	ND	ND	3.14	ND	ND	4.9	37.6	8.58	28	10.1
Apr-2005	1.6	1.6	ND	ND	2.43	ND	ND	4.8	33	9.86	70	11.6
Oct-2005	2.7	2.7	0.22	ND	2.3	ND	ND	4.1	29.7	8.56	46	8.69
Mar-2006	3	3	ND	ND	2.16	0.08	ND	5	32.3	9.06	15	7.49
Sep-2006	2.8	2.8	ND	ND	2.6	ND	ND	4.8	33.5	8.32	34	9.31
Mar-2007	2.8	2.8	ND	ND	3.02	0.08	ND	5.1	35.1	8.73	41	8.47
Sep-2007	2.6	2.6	0.36	ND	2.57	ND	ND	5.5	35.9	7.63	45	9.1
Mar-2008	3	3	ND	ND	2.77	0.08	ND	5	36	9.24	29	9.43
Sep-2008	3.2	3.2	ND	43	2.86	ND	ND	5.1	33.6	9.75	37	10.2
Mar-2009	3.1	3.1	ND	ND	2.71	ND	ND	4.5	35.4	7.43	47	9.18
Oct-2009	3	3	ND	ND	2.73	ND	ND	4.5	31.7	10.3	60	10.4
Apr-2010	3.3	3.3	ND	ND	2.59	ND	ND	4.2	37.7	11.5	54	9.5
Oct-2010	2.6	2.6	ND	ND	3.08	ND	ND	4.4	34.9	8.6	29	11.1
Apr-2011	3.5	3.5	ND	ND	2.62	ND	ND	4.5	36.2	8.96	42	10.3
Sep-2011	3.6	3.6	ND	ND	3.02	ND	ND	4.7	36.6	7.53	19	10.7
Mar-2012	2.7	2.7	ND	ND	2.55	ND	ND	4.4	35.8	10	ND	11.1
Sep-2012	2.88	2.88	ND	ND	3.14	0.0613	ND	3.8	36.4	9.39	34	10.9
Mar-2013	3.4	3.4	ND	ND	3.44	0.0421 J	ND	5.1	39.1	9.35	28	11.4
Oct-2013	3.48	3.48	ND	ND	3.56	0.0428 J	ND	5.2	40.3	9.26	ND	11.1
Mar-2014	3	3	ND	ND	3.05	ND	ND	5	37.2	11.2	ND	10.9

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-04B***										
Oct-2014	*ND*	*ND*	*ND*	*5 J*	3.14	*ND*	*ND*	4.6	35.9	8.82	*ND*	11.2
Apr-2015	3.76	3.76	*ND*	*ND*	2.84	*ND*	*ND*	4.7	35.1	11.2	32	11.7
Nov-2015	2.64	2.64	*ND*	*ND*	2.72	*ND*	*ND*	5.1	60.9	10.8	27	11.7
May-2016	*ND*	*ND*	*ND*	*ND*	2.82	*ND*	*ND*	4.9	47.4	9.84	*19 J*	11.2
Oct-2016	*ND*	*ND*	*ND*	*ND*	3.03	*NA*	*NA*	5.1	53.1	9.28	41	10.9
May-2017	2.6	2.6	*ND*	*ND*	3.83	0.181	*ND*	4.9	66.7	8.3	*24 J*	12.4
Oct-2017	*ND*	*ND*	*ND*	*ND*	3.67	0.159	*ND*	5.1	65.4	9.23	35	12.3
May-2018	*4 J*	*ND*	*ND*	*ND*	3.3	0.16	*ND*	5.8	52.4	*7 J*	*ND*	11.6
Nov-2018	*6 JB*	*ND*	*ND*	*ND*	*2.8 J*	*0.076 J*	*ND*	4.63	40.9	*9.7 J*	93	11.6
May-2019	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	4.53	32.5	11.3	23	10.9
Oct-2019	*1 JH1*	*NA*	*ND*	*ND*	*2.7 J*	0.19	*ND*	4.32	46.2	*8.7 J*	231	11.9
May-2020	*ND*	*NA*	*ND*	*ND*	5.8	0.16	*ND*	4.41	55.9	*9.1 J*	46	16.2
Oct-2020	*ND*	*NA*	*ND*	*ND*	4.2	0.15	*ND*	4.41	50.3	10.4	27	14.9
Apr-2021	*ND*	*NA*	*ND*	*ND*	*2.3 J*	0.11	*ND*	4.82	47.3	*9.6 J*	34	11.3
Oct-2021	*ND*	*NA*	*ND*	*ND*	4.3	0.23	*ND*	4.79	88.6	*8.1 J*	14	16.4
May-2022	*2 J2c*	*NA*	*ND*	*ND*	5.7	0.28	*ND*	4.54	95.7	10.2	43	19.9 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-04B*													
Nov-1993	NA	ND	ND	NA	ND	0.37	NA	0.007	NA	ND	2.2	0.04	ND	0.73	NA
Apr-1994	NA	ND	ND	NA	ND	1.1	NA	ND	NA	ND	ND	ND	ND	0.37	NA
Apr-1995	ND	ND	ND	ND	ND	0.66	NA	ND	ND	ND	ND	ND	ND	0.95	NA
Oct-1996	ND	ND	0.026	ND	ND	1.4	1.5	ND	ND	ND	ND	ND	0.002	1.4	1.4
Apr-1997	ND	ND	0.042	ND	ND	2.7	1.6	ND	ND	ND	0.26	ND	ND	1.9	1.1
Oct-1997	ND	ND	0.022	ND	ND	0.982	0.948	ND	ND	ND	0.418	ND	ND	0.961	0.918
Apr-1998	ND	ND	0.03	ND	ND	1.72	1.59	ND	ND	ND	1.16	ND	ND	1.22	1.11
Apr-1999	ND	ND	0.039	ND	ND	1.2	1.18	ND	ND	ND	2.96	ND	ND	1.17	1.01
Oct-1999	ND	ND	0.022	ND	ND	1.27	0.964	ND	ND	ND	0.678	ND	ND	1.01	0.832
Apr-2000	ND	ND	0.023	ND	ND	1.54	1.22	ND	ND	ND	0.503	ND	ND	1.26	1.16
Oct-2000	ND	ND	0.022	ND	ND	1.26	1.27	ND	ND	ND	0.286	ND	ND	1.11	1.09
Apr-2001	ND	ND	0.024	ND	ND	1.48	NA	ND	ND	ND	0.556	NA	ND	1.16	NA
Sep-2001	ND	ND	0.027	ND	ND	1.83	1.38	ND	ND	ND	0.623	ND	ND	1.45	1.26
Mar-2002	ND	ND	0.026	ND	ND	1.67	1.53	ND	ND	ND	0.352	ND	ND	1.31	1.34
Sep-2002	ND	ND	0.035	ND	ND	1.95	1.44	ND	ND	0.013	4.57	ND	ND	1.45	1.33
Mar-2003	ND	ND	0.029	ND	ND	1.45	1.33	ND	ND	ND	0.257	ND	ND	1.46	1.28
Oct-2003	ND	ND	0.029	ND	ND	1.81	1.4	ND	ND	ND	0.68	ND	ND	1.46	1.36
Apr-2004	ND	ND	0.032	ND	ND	1.85	1.59	ND	ND	ND	0.599	ND	ND	1.74	1.67
Oct-2004	ND	ND	0.031	ND	ND	1.51	1.51	ND	ND	ND	0.609	ND	ND	1.53	1.52
Apr-2005	ND	ND	0.033	ND	ND	1.98	1.54	ND	ND	ND	0.998	ND	ND	1.62	1.58
Oct-2005	ND	ND	0.024	ND	ND	1.45	1.17	ND	ND	ND	0.491	ND	ND	1.32	1.23

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-04B***													
Mar-2006	ND	ND	0.019	ND	ND	1.19	1.07	ND	ND	ND	0.295	ND	ND	1.1	1.16
Sep-2006	ND	ND	0.023	ND	ND	1.57	1.39	ND	ND	ND	0.375	ND	ND	1.31	1.3
Mar-2007	ND	ND	0.031	ND	ND	1.36	1.28	ND	ND	ND	0.299	ND	ND	1.23	1.16
Sep-2007	ND	ND	0.027	ND	ND	1.4	1.4	ND	ND	ND	0.312	ND	ND	1.36	1.33
Mar-2008	ND	0.002	0.028	ND	ND	1.55	1.37	ND	ND	ND	0.63	ND	ND	1.35	1.24
Sep-2008	ND	ND	0.035	ND	ND	1.6	1.3	0.012	ND	ND	4.91	ND	ND	1.5	1.38
Mar-2009	ND	ND	0.029	ND	ND	1.58	1.5	ND	ND	ND	0.627	ND	ND	1.27	1.31
Oct-2009	ND	ND	0.031	ND	ND	1.79	1.44	ND	ND	ND	1.82	0.051	ND	1.44	1.46
Apr-2010	ND	ND	0.026	ND	ND	1.72	1.6	ND	ND	ND	0.816	ND	ND	1.27	1.52
Oct-2010	ND	ND	0.036	ND	ND	1.7	1.65	ND	ND	ND	0.659	ND	ND	1.67	1.64
Apr-2011	ND	ND	0.031	ND	ND	1.52	1.39	ND	ND	ND	0.543	ND	ND	1.59	1.41
Sep-2011	ND	ND	0.033	ND	ND	1.6	1.55	ND	ND	ND	ND	ND	ND	1.63	1.6
Mar-2012	ND	ND	0.032	ND	ND	1.55	1.57	ND	ND	ND	0.053	ND	ND	1.76	1.77
Sep-2012	ND	ND	0.0355	0.000114 J	ND	1.73	1.6	0.0018 J	0.0041 J	0.0015 J	0.108	0.0208 J	ND	1.61	1.57
Mar-2013	ND	ND	0.0368	0.000116 J	ND	1.81	1.8	0.002 J	0.004 J	0.0015 J	0.0309 J	0.0064 J	ND	1.66	1.66
Oct-2013	ND	ND	0.0404	ND	0.000097 J	1.77	1.69	0.0018 J	0.0042	0.0025	ND	ND	ND	1.62	1.64
Mar-2014	ND	ND	0.0319	ND	ND	2.2	2.06	0.0063 J	0.0035 J	0.0025 J	0.076	0.0586	ND	1.32	1.58
Oct-2014	0.000469 J	ND	0.0403	ND	0.000087 J	1.76	1.83	0.0025 J	0.0042 J	0.0021 J	0.0811	0.0111 J	ND	1.66	1.68
Apr-2015	0.0011 J	ND	0.0397	0.000169 J	0.000106 J	1.82	1.79	0.0016 J	0.0042 J	0.0019 J	0.0405 J	0.0639	ND	1.74	1.68
Nov-2015	ND	ND	0.0399	0.000126 J	0.000113 J	1.82	1.77	0.000929 J	0.0044 J	0.0017 J	0.0292 J	ND	0.000337 J	1.74	1.74
May-2016	ND	ND	0.0385	0.00013 J	ND	1.7	1.72	0.0019 J	0.004	0.0014 J	0.04 J	ND	ND	1.69	1.73
Oct-2016	ND	ND	0.0464	0.00015 J	ND	1.68	1.65	0.0022 J	0.0053	0.0019 J	0.035 J	ND	ND	1.63	1.65
May-2017	ND	ND	0.0528	0.00015 J	ND	2.08	1.83	0.0016 J	0.0055	0.002 J	ND	ND	ND	1.75	1.84
Oct-2017	ND	ND	0.0521	0.00013 J	0.00019 J	2.04	1.98	0.0015 J	0.0056	0.0021 J	0.0858 J	ND	ND	1.75	1.87

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-04B***													
May-2018	*ND*	*ND*	0.044	*0.00016 J*	*0.00012 J*	1.8	1.8	*0.0027 J*	0.0039	0.0064	*0.016 J*	*ND*	*0.000021 JB*	1.7	1.7
Nov-2018	*ND*	*ND*	0.036	*0.00013 J*	*0.000092 J*	1.8	1.8	*0.0034 J*	0.0031	*0.0013 J*	*0.017 J*	*ND*	*0.00021 J*	1.7	1.7
May-2019	*ND*	*ND*	0.034	*ND*	*ND*	1.8	1.8	*ND*	0.0036	*ND*	*ND*	*ND*	*ND*	1.6	1.6
Oct-2019	*0.00011 JB*	*ND*	0.038	*0.00015 J*	*0.00034 JB*	1.8	1.7	*0.0034 J*	0.0041	0.0022	*0.037 J*	*0.014 J*	*0.000079 JB*	1.8	1.8
May-2020	*0.000093 J*	*ND*	0.054	*0.00018 J*	*0.00025 J*	2.4	2.4	*0.0045 J*	0.0058	0.0031	*0.024 J*	*0.013 J*	*ND*	2.5	2.5
Oct-2020	*0.00049 J*	*ND*	0.055	*ND*	*ND*	2.4	2.2	*0.012 J*	0.006	*ND*	*0.024 J*	*0.013 J*	*ND*	2.2	2.1
Apr-2021	*ND*	*ND*	0.036	*ND*	*ND*	1.8	1.8	*0.0021 J*	*0.0037 J*	*ND*	*ND*	*ND*	*ND*	1.7	1.6
Oct-2021	*0.000071 JB*	*ND*	0.059	*0.00023 J*	*ND*	2.4	2.4	0.0027	0.0062	*0.002 J*	*0.029 J*	*0.013 J*	*ND*	2.5	2.4
May-2022	*ND*	*ND*	0.076	*0.00024 J*	*ND*	2.9	2.7	*0.0024 J*	0.0088	0.0025	*ND*	*ND*	*ND*	3.1	2.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-04B*												
Nov-1993	0.07	NA	ND	NA	1.2	NA	ND	NA	1.6	NA	NA	NA	0.02
Apr-1994	0.008	NA	ND	NA	1.2	NA	ND	NA	2.6	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	1	NA	ND	ND	1.4	NA	ND	ND	0.02
Oct-1996	0.016	0.014	NA	ND	ND	ND	ND	ND	2.5	3.1	ND	ND	0.043
Apr-1997	0.019	0.01	ND	ND	2.9	2.5	ND	ND	1.6	1.7	ND	ND	0.045
Oct-1997	0.012	0.012	ND	ND	0.711	0.907	ND	ND	1.52	1.49	ND	ND	0.018
Apr-1998	0.017	0.014	ND	ND	1.59	0.81	ND	ND	1.57	2.88	ND	ND	ND
Apr-1999	0.027	0.013	NA	ND	1.6	1.27	ND	ND	1.63	1.47	ND	0.014	ND
Oct-1999	0.018	0.011	NA	ND	1.65	1.05	ND	ND	1.84	1.31	ND	ND	ND
Apr-2000	0.017	0.014	NA	ND	1.44	1.17	ND	ND	2.42	1.52	ND	ND	ND
Oct-2000	0.018	0.015	NA	ND	0.911	0.926	ND	ND	1.8	1.86	ND	ND	ND
Apr-2001	0.025	NA	NA	ND	1.77	NA	ND	ND	2.62	NA	ND	ND	ND
Sep-2001	0.027	0.016	NA	0.013	1.02	0.835	ND	ND	2.29	1.49	ND	ND	0.012
Mar-2002	0.021	0.019	NA	ND	0.839	0.869	ND	ND	2.03	1.56	ND	ND	0.013
Sep-2002	0.048	0.019	NA	ND	1.62	1.01	ND	ND	2.09	1.72	ND	ND	ND
Mar-2003	0.022	0.017	NA	ND	1.79	ND	ND	ND	1.74	1.73	ND	ND	ND
Oct-2003	0.023	0.018	NA	ND	1.81	1.88	ND	ND	2.25	1.54	ND	ND	ND
Apr-2004	0.025	0.023	ND	ND	1.41	1.48	ND	ND	1.81	1.43	ND	ND	0.038
Oct-2004	0.022	0.022	ND	ND	1.07	0.963	ND	ND	1.46	1.4	ND	ND	ND
Apr-2005	0.028	0.022	ND	ND	1.23	1.05	ND	ND	1.9	1.52	ND	ND	0.04
Oct-2005	0.018	0.015	ND	ND	0.937	0.81	ND	ND	1.96	1.15	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.574	0.567	ND	ND	0.949	0.942	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-04B***												
Sep-2006	0.019	0.018	*ND*	*ND*	0.985	0.957	*ND*	*ND*	1.031	1.12	*ND*	*ND*	*ND*
Mar-2007	0.018	0.016	*ND*	*ND*	0.676	0.589	*ND*	*ND*	1.29	1.21	*ND*	*ND*	*ND*
Sep-2007	0.022	0.021	*ND*	*ND*	0.894	0.796	*ND*	*ND*	1.39	1.35	*ND*	*ND*	*ND*
Mar-2008	0.023	0.02	*ND*	*ND*	1.01	0.862	*ND*	*ND*	1.64	1.42	*ND*	*ND*	*ND*
Sep-2008	0.057	0.023	*ND*	*ND*	1.1	0.806	*ND*	*ND*	1.41	1.29	*ND*	*ND*	0.024
Mar-2009	0.027	0.024	*ND*	*ND*	0.856	0.823	*ND*	*ND*	1.51	1.47	*ND*	*ND*	0.011
Oct-2009	0.051	0.026	*ND*	*ND*	0.835	0.757	*ND*	*ND*	1.45	1.7	*ND*	*ND*	0.03
Apr-2010	0.021	0.019	*ND*	*ND*	1.18	1.33	*ND*	*ND*	1.91	1.52	*ND*	*ND*	0.022
Oct-2010	0.033	0.029	*ND*	*ND*	1.11	0.936	*ND*	*ND*	1.46	1.43	*ND*	*ND*	*ND*
Apr-2011	0.025	0.021	*ND*	*ND*	1.16	1.07	*ND*	*ND*	1.58	1.58	*ND*	*ND*	*ND*
Sep-2011	0.03	0.029	*ND*	*ND*	0.867	0.955	*ND*	*ND*	1.65	1.65	*ND*	*ND*	*ND*
Mar-2012	0.025	0.025	*ND*	*ND*	0.93	0.913	*ND*	*ND*	1.49	1.5	*ND*	*ND*	*ND*
Sep-2012	0.0364	0.0344	*ND*	*0.0035 J*	0.959	0.884	*ND*	*ND*	1.69	1.69	*ND*	*ND*	*0.007 J*
Mar-2013	0.0368	0.0358	*0.000061 J*	*0.0035 J*	0.938	0.971	*ND*	*ND*	1.82	1.86	*ND*	*ND*	0.0131
Oct-2013	0.0419	0.041	*ND*	0.0036	0.881	0.862	*ND*	*ND*	1.94	1.96	*ND*	*0.0012 J*	0.0168
Mar-2014	0.0319	0.0323	*ND*	*0.0028 J*	1.16	1.12	*ND*	*ND*	1.36	1.89	*ND*	*0.0037 J*	*0.006 J*
Oct-2014	0.0461	0.0462	*ND*	*0.004 J*	0.991	0.984	*ND*	*ND*	1.8	1.82	*ND*	*ND*	*0.0086 J*
Apr-2015	0.0426	0.0405	*ND*	*0.0036 J*	1.08	1.02	*0.0011 J*	*ND*	1.83	1.73	*0.00079 J*	*ND*	0.0117
Nov-2015	0.0465	0.0458	*ND*	*0.0033 J*	0.907	0.891	*ND*	*ND*	1.73	1.74	*0.000083 J*	*ND*	0.0107
May-2016	0.0428	0.0456	*ND*	*0.0035 J*	0.943	0.954	*ND*	*ND*	1.64	1.74	*ND*	*ND*	*ND*
Oct-2016	0.0638	0.0613	*ND*	0.0044	0.935	0.949	*ND*	*ND*	1.7	1.76	*ND*	*ND*	*0.0059 J*
May-2017	0.0649	0.0629	*ND*	*0.0035 J*	0.9	0.936	*ND*	*ND*	1.81	1.92	*ND*	*ND*	*0.0068 JB*
Oct-2017	0.0662	0.0713	*0.00012 J*	*0.0039 JB*	0.913	0.999	*ND*	*ND*	1.78	1.89	*ND*	*ND*	*0.0057 J*
May-2018	0.057	0.045	**0.0025**	0.003	*0.95 J*	*0.98 J*	*0.00057 J*	*ND*	*1.7 J*	*1.7 J*	*0.00025 J*	*ND*	0.029

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-04B***												
Nov-2018	0.036	0.036	*ND*	0.0034	*1.2 J*	*ND*	*0.00024 J*	*ND*	*2 JB*	*1.6 J*	*ND*	*ND*	0.0063
May-2019	0.049	0.032	*ND*	0.0039	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0029	0.0051
Oct-2019	0.043	0.041	*ND*	0.0034	*ND*	*ND*	*ND*	*ND*	*ND*	*1.9 J*	*ND*	*ND*	0.013 B
May-2020	0.063	0.061	0.0002 B	0.0049	*ND*	*1.1 J*	*ND*	*ND*	*2.4 J*	*2.3 J*	*ND*	0.0031	0.012
Oct-2020	0.064	0.058	*ND*	0.006	*ND*	*ND*	*ND*	*ND*	*ND*	*1.7 J*	*ND*	*0.0024 J*	*ND*
Apr-2021	0.039	0.04	*ND*	*0.0037 J*	1.1	1.1	*ND*	*ND*	1.7	1.7	*ND*	*ND*	*0.0043 J*
Oct-2021	0.083	0.08	*0.00017 J*	0.0046	0.98	0.96	*ND*	*ND*	2.5	2.5	*ND*	*ND*	0.0073
May-2022	0.094	0.093	0.00082 M1	0.0063	1.1	1.1	*ND*	*ND*	3.3	3.1	*ND*	*ND*	0.0098

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04B*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.9	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04B*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04B*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.9 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04B***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04B***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04B***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-04B*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04B***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05***											
Nov-1993	ND	ND	0.1	ND	2.2	ND	ND	5.24	18	ND	ND	2.86
Apr-1994	ND	ND	0.1	ND	2.4	ND	ND	5.03	18.2	ND	44	0.92
Aug-1994	7.5	7.5	ND	ND	2.2	0.3	ND	5.7	17.8	ND	ND	2.92
Sep-1994	ND	ND	ND	ND	2.5	0.2	ND	5.3	16.2	2.8	12	3.4
Nov-1994	ND	ND	ND	ND	2.2	ND	ND	5	16.5	1.9	40	3.3
Apr-1995	ND	ND	ND	43.7	2.2	ND	ND	5.3	17.2	ND	16	2.6
Apr-1997	ND	3	ND	ND	1.5	0.08	ND	NA	NA	ND	42	3.8
Oct-1997	ND	ND	0.53	ND	1.83	0.138	ND	5.56	18.62	ND	ND	7.5
Apr-1998	2	2	0.27	ND	1.91	0.15	ND	6.93	18.02	0.68	ND	3.2
Apr-1999	ND	ND	0.28	ND	2.69	ND	ND	5.43	18.79	ND	32	3.1
Oct-1999	ND	ND	0.08	ND	3.2	0.159	ND	5.38	18.07	ND	23	3.5
Apr-2000	4	4	ND	ND	1.86	ND	ND	6.76	14	ND	ND	4.2
Oct-2000	3.7	NA	ND	ND	2.43	0.8	ND	5.43	19.68	1.72	22	3.31
Apr-2001	2.8	NA	ND	ND	1.58	ND	ND	NA	NA	ND	13	3.97
Mar-2002	ND	ND	ND	ND	4.46	0.337	ND	5.5	19	1.58	33	3.8
Sep-2002	3	3	ND	ND	2.31	ND	ND	5.6	20.7	ND	33	4.36
Mar-2003	3.3	3.3	ND	ND	2.79	ND	ND	5.6	23.4	ND	20	3.23
Oct-2003	3.4	3.4	ND	11	2.24	0.122	ND	4.5	21	ND	51	4.28
Apr-2004	3.6	3.6	ND	ND	2.83	0.12	ND	5.5	19.9	ND	16	4.79
Oct-2004	3.4	3.4	ND	ND	2.83	0.1	ND	5.6	20	ND	13	6.17
Apr-2005	ND	ND	ND	ND	1.56	0.11	ND	4.6	15.7	4.59	46	1.79
Oct-2005	4.8	4.8	ND	ND	2.79	0.1	ND	5.5	15.3	ND	22	3.81
Mar-2006	4.6	4.6	ND	10	2.43	0.12	ND	4.8	17.7	ND	17	2.81
Sep-2006	4	4	ND	ND	2.29	0.11	ND	5.2	15.4	ND	20	3.49
Mar-2007	3.8	3.8	ND	ND	2.42	0.12	ND	5.2	15.8	ND	ND	2.65
Sep-2007	3.8	3.8	0.38	ND	2.16	ND	ND	5.3	18.6	ND	10	2.98
Mar-2008	5.1	5.1	ND	ND	2.57	0.1	ND	5.2	16.6	ND	20	2.7
Sep-2008	4.4	4.4	0.27	ND	2.33	0.07	ND	5.3	15.3	ND	33	3
Mar-2009	5.2	5.2	ND	ND	2.25	ND	ND	5	19	ND	20	3.31
Oct-2009	5.1	5.1	ND	ND	2.67	0.11	ND	5.4	19.5	ND	26	4.41
Apr-2010	4.2	4.2	ND	ND	2.77	0.1	ND	4.7	19.1	ND	31	3
Oct-2010	4.7	4.7	ND	ND	3.32	ND	ND	4.7	19.4	ND	10	3.77
Apr-2011	6	6	ND	ND	3.13	0.1	ND	5	17.6	ND	36	3.7
Sep-2011	5.8	5.8	0.23	ND	2.54	0.08	ND	4.8	17.2	ND	17	3.31
Mar-2012	4.7	4.7	ND	ND	2.81	0.07	ND	4.7	17.2	ND	ND	3.83
Sep-2012	4.88	4.88	ND	ND	2.76	0.1	ND	4.3	18.1	ND	ND	3.83
Mar-2013	6.4	6.4	0.061 J	ND	2.82	0.0898	ND	5.7	17.5	0.268 J	ND	3.84

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05***											
Oct-2013	6.68	6.68	*ND*	*ND*	2.72	0.0764	*ND*	5.4	17.8	*ND*	*ND*	3.63
Mar-2014	5.76	5.76	*ND*	*6 J*	3.21	0.068	*ND*	5.6	18.8	*ND*	30	4.53
Oct-2014	2.2	2.2	*ND*	13	3.74	0.102	*ND*	5.1	22.7	*ND*	*ND*	4.45
Apr-2015	9.8	9.8	*ND*	*ND*	3.83	0.0738	*ND*	4.2	24.9	*ND*	*ND*	4.39
Nov-2015	4.64	4.64	*ND*	*ND*	3.84	0.0896	*ND*	5.9	35.9	*ND*	*18 J*	4.41
May-2016	4.48	4.48	*ND*	10	3.73	0.0895	*ND*	5.7	31	*ND*	*16 J*	4.3
Oct-2016	3.88	3.88	*ND*	*ND*	3.33	*NA*	*NA*	5.6	31.6	*0.593 J*	*23 J*	4
May-2017	5.32	5.32	*ND*	*ND*	3.7	0.103	*ND*	5.8	43.5	*ND*	*12 J*	4.4
Oct-2017	10.1	10.1	*ND*	*ND*	3.83	0.0896	*ND*	5.9	48.9	*ND*	34	5
May-2018	16	16	*ND*	*5.7 J*	4.8	*0.093 J*	*ND*	5.9	50.2	*ND*	*ND*	6.4
Nov-2018	24 ML	24	*ND*	*ND*	6.8	*ND*	*0.0079 J*	6.46	105.2	*ND*	36	14.7
May-2019	36	*NA*	*ND*	*ND*	10.2	*ND*	0.012	6.36	99.3	*ND*	77	15.6
Oct-2019	*2.5 JH1*	*NA*	*ND*	*ND*	7.3	0.11	*0.0071 J*	6.27	85	*ND*	56	9.1
May-2020	22	*NA*	*ND*	*ND*	7.5	*ND*	*ND*	5.69	91.9	*ND*	33	12.3
Oct-2020	24	*NA*	*ND*	*7 J*	6.7	*0.048 J*	*ND*	5.76	86.8	*ND*	47	11.3
Apr-2021	20	*NA*	*ND*	*ND*	6.2	*0.074 J*	*ND*	6.38	105.1	*ND*	*ND*	10
Oct-2021	36	*NA*	*ND*	*6.1 J*	7.2	*ND*	*ND*	6.59	156.7	*ND*	30	14
May-2022	26	*NA*	*ND*	*ND*	7.7	*ND*	*ND*	6.88	208.8	*ND*	42 H1	13.4 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-05*													
Nov-1993	NA	ND	ND	NA	ND	0.6	NA	ND	NA	ND	14.6	9.6	ND	0.33	NA
Apr-1994	NA	ND	ND	NA	ND	0.31	NA	ND	NA	ND	1.5	0.16	ND	1.1	NA
Aug-1994	NA	ND	ND	NA	ND	0.74	NA	ND	NA	ND	10.2	0.73	**0.016**	0.26	NA
Sep-1994	NA	ND	ND	NA	ND	0.85	NA	ND	NA	ND	0.84	0.17	ND	0.3	NA
Nov-1994	NA	ND	ND	NA	ND	0.75	NA	ND	NA	0.02	2.7	0.18	0.009	0.35	NA
Apr-1995	ND	ND	0.9	ND	ND	0.53	NA	ND	ND	ND	2.8	0.2	0.005	0.32	NA
Oct-1996	ND	ND	0.019	ND	ND	0.73	0.72	ND	ND	ND	14	1.5	ND	ND	ND
Apr-1997	ND	ND	0.01	ND	ND	0.83	0.8	ND	ND	ND	2.6	0.22	0.005	ND	ND
Oct-1997	ND	ND	0.01	ND	0.004	0.642	1.5	ND	ND	ND	6.76	2.38	ND	0.293	0.456
Apr-1998	ND	ND	ND	ND	ND	0.798	0.794	ND	ND	ND	27.9	0.544	ND	0.291	0.287
Apr-1999	ND	ND	0.01	ND	ND	0.762	0.728	ND	ND	ND	46.2	0.622	ND	0.296	0.278
Oct-1999	ND	ND	0.011	ND	ND	1.06	0.711	ND	ND	ND	29	0.62	ND	0.338	0.262
Apr-2000	ND	ND	0.012	ND	ND	1.07	0.658	ND	ND	ND	37.3	0.475	ND	0.368	0.271
Oct-2000	ND	ND	ND	ND	ND	0.793	0.747	ND	ND	ND	41.1	0.618	ND	0.322	0.3
Apr-2001	ND	ND	0.011	ND	ND	1.02	NA	ND	ND	ND	28.1	NA	0.006	0.346	NA
Mar-2002	ND	ND	ND	ND	ND	0.973	0.79	0.014	ND	0.039	50.1	0.789	0.011	0.333	0.317
Sep-2002	ND	ND	0.011	ND	ND	1.16	0.722	ND	ND	0.022	31.9	0.816	0.007	0.356	0.309
Mar-2003	ND	ND	ND	ND	ND	0.767	0.723	ND	ND	0.017	5.11	0.967	0.01	0.321	0.297
Oct-2003	ND	ND	0.01	ND	ND	1.11	0.757	ND	ND	ND	22.3	0.901	0.007	0.367	0.317
Apr-2004	ND	ND	0.013	ND	ND	1.21	0.761	ND	ND	0.012	31.7	0.889	0.006	0.43	0.326
Oct-2004	ND	ND	0.01	ND	ND	1.76	0.797	ND	ND	ND	24.2	0.924	0.006	0.431	0.338

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05***													
Apr-2005	ND	ND	ND	ND	ND	0.454	0.491	ND	ND	ND	ND	ND	ND	0.16	0.174
Oct-2005	ND	ND	0.01	ND	ND	1.03	0.719	ND	ND	0.022	45.5	0.602	0.009	0.312	0.292
Mar-2006	ND	ND	ND	ND	ND	0.695	0.504	ND	ND	0.01	105	0.819	0.011	0.26	0.208
Sep-2006	ND	ND	0.01	ND	ND	0.908	0.612	ND	ND	0.013	68.8	0.899	0.011	0.296	0.266
Mar-2007	ND	ND	0.012	ND	ND	0.642	0.554	ND	ND	ND	34.1	0.622	0.009	0.256	0.226
Sep-2007	ND	ND	ND	ND	ND	0.739	0.64	ND	ND	ND	21.1	0.7	0.006	0.275	0.236
Mar-2008	ND	ND	ND	ND	ND	0.631	0.631	ND	ND	ND	11.5	0.735	0.004	0.271	0.275
Sep-2008	ND	ND	0.007	ND	ND	0.699	0.509	ND	ND	ND	22.4	0.601	0.004	0.314	0.278
Mar-2009	ND	ND	0.011	ND	ND	0.787	0.697	ND	ND	ND	81.6	0.914	0.012	0.326	0.288
Oct-2009	ND	ND	ND	ND	ND	1.15	0.839	ND	ND	ND	26.3	2.54	0.003	0.374	0.344
Apr-2010	ND	ND	ND	ND	ND	0.671	0.584	ND	ND	ND	34.9	0.762	0.004	0.304	0.292
Oct-2010	ND	ND	ND	ND	ND	0.859	0.811	ND	ND	ND	51.6	1.05	0.008	0.396	0.374
Apr-2011	ND	ND	ND	ND	ND	0.889	0.803	ND	ND	ND	13.9	1.2	0.005	0.36	0.334
Sep-2011	ND	ND	ND	ND	ND	0.82	0.82	ND	ND	ND	15.2	1.72	0.005	0.306	0.327
Mar-2012	ND	ND	ND	ND	ND	0.829	0.824	ND	ND	ND	11.4	1.36	0.005	0.428	0.415
Sep-2012	ND	ND	0.0083 J	ND	ND	0.971	0.958	ND	0.000838 J	0.0011 J	2.43	1.42	0.0036	0.341	0.311
Mar-2013	ND	ND	0.0087 J	ND	ND	1	0.961	0.0018 J	0.000789 J	0.002 J	6.24	1.95	0.003	0.326	0.283
Oct-2013	ND	ND	0.0091	ND	ND	0.904	0.885	0.0011 J	0.000728 J	0.000891 J	1.58	1.48	0.0044	0.334	0.333
Mar-2014	ND	ND	0.0081 J	ND	ND	1.33	1.31	0.0064 J	0.000768 J	0.0011 J	5.65	1.83	0.0047	0.294	0.372
Oct-2014	0.000461 J	ND	0.0104	ND	ND	1.12	1.13	0.000704 J	0.000804 J	0.000686 J	4.25	2.54	0.0029	0.401	0.406
Apr-2015	0.0011 J	ND	0.0113	ND	ND	1.06	1.13	0.0014 J	0.000967 J	0.0018 J	11.2	2.16	0.0044	0.425	0.442
Nov-2015	ND	ND	0.0109	ND	ND	1.05	1.02	0.000637 J	0.000944 J	ND	2.53	1.76	0.002	0.432	0.425
May-2016	ND	ND	0.0108	ND	ND	1.02	1.1	0.00084 J	0.00086 J	0.00054 J	2.93	2.42	0.0022	0.43	0.442
Oct-2016	ND	ND	0.0118	ND	ND	0.922	0.91	0.0014 J	0.00088 J	0.0012 J	5.81	2.24	0.0028	0.407	0.409

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05***													
May-2017	*ND*	*ND*	0.011	*ND*	*ND*	1.1	1.13	*0.002 J*	*0.00093 J*	*ND*	2.76	2.59	*0.0018 J*	0.398	0.427
Oct-2017	*ND*	*ND*	0.0123	*ND*	*ND*	1.26	1.22	*ND*	*0.00087 J*	*ND*	4.82	4.01	*0.0014 J*	0.452	0.44
May-2018	*ND*	*ND*	0.015	*0.000077 J*	*0.000046 J*	1.6	1.5	*0.0025 J*	0.0011	0.0056	7.7	5.3	0.0012	*0.55 J*	*0.52 J*
Nov-2018	*ND*	*ND*	0.025	*0.00015 J*	*ND*	4.4	4.2	*0.0059 J*	0.00098	0.0026	49.7 M1	22.3 M1	*0.0009 J*	*0.92 J*	*0.92 J*
May-2019	*ND*	*ND*	0.027	*ND*	*ND*	4.6	4.6	*ND*	0.0013	0.0028	34.5 M1	25.8 M1	*ND*	1	1
Oct-2019	*0.000056 J*	*ND*	0.021	*0.000073 J*	*0.00018 J*	2.4	2.5	*0.0042 J*	0.0014	*0.0014 J*	23	13.5	*0.00086 J*	0.73	*0.7 J*
May-2020	*ND*	*ND*	0.024	*ND*	*ND*	3.6	3.6	**0.01 D6**	*0.0015 J*	0.012	29 ML	19.7	*ND*	0.82	0.85
Oct-2020	*0.00048 J*	*ND*	0.021	*ND*	*ND*	3.2	3.3	*0.011 J*	*0.0013 J*	*ND*	19.3	18.2	*ND*	0.79	*0.81 J*
Apr-2021	*ND*	*ND*	0.018	*ND*	*ND*	2.7	2.8	*0.0013 J*	*0.00054 J*	*ND*	18.7	17.9	*ND*	0.78	0.76
Oct-2021	*0.00006 JB*	*ND*	0.023	*ND*	*ND*	3.8	3.6	*0.0015 J*	*0.00088 J*	*0.00045 J*	27.4	25.2	*0.00015 J*	1.1	1
May-2022	*ND*	*ND*	0.028 M1	*ND*	*ND*	3.5	3.4	*0.0022 JR1M1*	*0.0011 JR1M1*	*0.00066 JR1M1*	29.4 M1	27.3 M1	*ND*	1.1	1.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-05*												
Nov-1993	0.06	NA	ND	NA	0.37	NA	ND	NA	1.2	NA	NA	NA	ND
Apr-1994	0.18	NA	ND	NA	ND	NA	ND	NA	1.6	NA	NA	NA	ND
Aug-1994	0.02	NA	ND	NA	0.48	NA	ND	NA	0.88	NA	NA	NA	ND
Sep-1994	0.01	NA	ND	NA	0.38	NA	ND	NA	1.1	NA	NA	NA	0.03
Nov-1994	0.03	NA	ND	NA	0.53	NA	ND	NA	1.1	NA	NA	NA	0.01
Apr-1995	ND	NA	ND	ND	0.53	NA	ND	0.01	0.96	NA	ND	ND	0.02
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	1.2	1.3	ND	ND	0.026
Apr-1997	0.011	0.01	ND	ND	ND	ND	ND	ND	1.6	1.4	ND	ND	0.024
Oct-1997	0.026	0.03	0.0005	ND	ND	ND	ND	ND	1.35	1.35	ND	ND	0.016
Apr-1998	0.015	0.016	ND	ND	ND	ND	ND	ND	1.11	1.11	ND	ND	ND
Apr-1999	0.01	0.017	NA	ND	ND	ND	ND	ND	1.09	1.02	ND	ND	ND
Oct-1999	0.014	0.016	NA	ND	0.879	0.631	ND	ND	1.38	0.952	ND	ND	ND
Apr-2000	0.019	0.014	NA	ND	ND	ND	ND	ND	3.38	1.03	ND	ND	0.018
Oct-2000	ND	0.018	NA	ND	0.455	0.217	ND	ND	1.06	1.06	ND	ND	ND
Apr-2001	0.015	NA	NA	ND	1.16	NA	ND	ND	2.31	NA	ND	ND	ND
Mar-2002	0.015	0.018	NA	0.012	0.651	0.751	ND	ND	1.78	1.17	ND	ND	0.016
Sep-2002	0.016	0.019	NA	ND	1.43	ND	ND	ND	1.7	1.12	ND	ND	ND
Mar-2003	0.02	0.018	NA	ND	0.792	ND	ND	ND	1.18	1.16	ND	ND	ND
Oct-2003	0.014	0.018	NA	ND	0.663	0.638	ND	ND	1.52	1.16	ND	ND	ND
Apr-2004	0.015	0.019	ND	ND	0.753	ND	ND	ND	1.74	1.24	ND	ND	0.044
Oct-2004	0.02	0.018	ND	ND	1.15	ND	ND	ND	1.83	0.991	ND	ND	0.055
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	0.949	0.955	ND	ND	0.019

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05***												
Oct-2005	0.02	0.013	ND	ND	ND	ND	ND	ND	1.76	1.08	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	0.973	0.827	ND	ND	ND
Sep-2006	0.021	0.016	ND	ND	0.508	ND	ND	ND	1.14	0.883	ND	ND	ND
Mar-2007	0.019	0.012	ND	ND	ND	ND	ND	ND	0.981	0.81	ND	ND	ND
Sep-2007	0.023	0.015	ND	ND	ND	ND	ND	ND	0.967	0.953	ND	ND	ND
Mar-2008	0.017	0.014	ND	ND	ND	ND	ND	ND	0.963	0.976	ND	ND	ND
Sep-2008	0.017	0.013	ND	ND	ND	ND	ND	ND	0.964	0.899	ND	ND	0.016
Mar-2009	0.026	0.015	ND	ND	ND	ND	ND	ND	1.14	1.08	ND	ND	0.016
Oct-2009	0.04	0.036	ND	ND	ND	ND	ND	ND	1.24	1.17	ND	ND	0.027
Apr-2010	0.023	0.013	ND	ND	ND	ND	ND	ND	1.24	1.22	ND	ND	ND
Oct-2010	0.03	0.018	ND	ND	ND	ND	ND	ND	1.27	1.22	ND	ND	ND
Apr-2011	0.025	0.02	ND	ND	ND	ND	ND	ND	1.32	1.37	ND	ND	0.01
Sep-2011	0.03	0.027	ND	ND	ND	ND	ND	ND	1.27	1.28	ND	ND	ND
Mar-2012	0.024	0.022	ND	ND	ND	ND	ND	ND	1.29	1.26	ND	ND	0.011
Sep-2012	0.0343	0.0323	ND	0.0016 J	0.458 J	0.551	ND	ND	1.21	1.14	ND	ND	0.0043 J
Mar-2013	0.0306	0.0327	0.000055 J	0.0015 J	0.505	0.459 J	ND	ND	1.25	1.12	ND	ND	0.0624
Oct-2013	0.0274	0.0285	ND	0.0019 J	0.427	0.427	ND	ND	1.19	1.22	ND	0.0011 J	0.0121
Mar-2014	0.0224	0.0243	ND	0.0015 J	0.529	0.515	ND	ND	1.01	1.32	ND	0.0026 J	0.0041 J
Oct-2014	0.0369	0.0387	ND	0.0016 J	0.518	0.53	0.001 J	ND	1.53	1.56	ND	ND	0.0053 J
Apr-2015	0.0303	0.0323	ND	0.0019 J	0.506	0.542	ND	ND	1.57	1.66	ND	ND	0.0069 J
Nov-2015	0.0303	0.0265	ND	0.0015 J	0.508	0.487 J	ND	ND	1.75	1.74	0.000064 J	ND	0.0027 J
May-2016	0.0294	0.0324	ND	0.0016 J	0.528	0.512	ND	ND	1.58	1.6	ND	ND	0.0078 J
Oct-2016	0.0278	0.0271	ND	0.0024 J	0.5	0.489	ND	ND	1.48	1.52	ND	ND	ND
May-2017	0.0298	0.0294	ND	0.0021 J	0.495	0.495	ND	ND	1.45	1.55	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05***												
Oct-2017	0.0416	0.0396	*ND*	*0.0013 J*	0.516	0.538	*ND*	*ND*	1.63	1.65	*ND*	*ND*	*ND*
May-2018	0.049	0.04	*ND*	0.0022	*ND*	*ND*	*ND*	*ND*	*1.9 J*	*1.8 J*	*0.000077 J*	*ND*	*0.0047 J*
Nov-2018	0.18	0.17	*ND*	0.0049	*ND*	*1 J*	*ND*	*ND*	*2.8 J*	*2.7 J*	*ND*	*ND*	0.0065
May-2019	0.17	0.16	*ND*	0.0032	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0075
Oct-2019	0.085	0.085	*ND*	0.003	*ND*	*ND*	*ND*	*ND*	*2.8 J*	*2.8 J*	*ND*	0.0056	0.015
May-2020	0.11	0.11	*ND*	*0.009 J*	1	0.89	*ND*	*ND*	3	3.1	*ND*	*ND*	*ND*
Oct-2020	0.14	0.12	*ND*	0.0037	*ND*	*ND*	*0.0017 J*	*ND*	*2.4 J*	*2.2 J*	*ND*	*0.0031 J*	*ND*
Apr-2021	0.12	0.12	*0.00005 J*	*0.0021 J*	0.72	0.75	*ND*	*ND*	2.5	2.5	*ND*	*ND*	*ND*
Oct-2021	0.16	0.16	*ND*	*0.0023 J*	0.94	0.92	*ND*	*ND*	3.4	3.3	*ND*	*ND*	*ND*
May-2022	0.17	0.16	0.00033 M1	0.0036 M1	0.99	0.93	*ND*	*ND*	3.5	3.4	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.8	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4 J	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.6 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.4 L2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.2 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	1.58	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	2.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	2.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-05*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05***															
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.46 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.39 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.51 J*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05***															
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.5 J	0.6 J
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.5 J	0.5 J
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.5 J	0.7 J
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.6 J	0.9 J
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	1.9
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	3.1 CLN3
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	4.9 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	2.3
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	2.3
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	2.5	2.5
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.113 J	ND	0.544 J	ND	ND	ND	1.25 J	4.18 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	4	4.1
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	3.4	3.7

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	1.2	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05***															
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.5 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.483 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05A***											
Nov-1993	6	6	ND	ND	2.5	ND	ND	5.43	18.1	ND	26	1.98
Apr-1994	ND	ND	0.1	ND	2.4	ND	ND	5	19.3	ND	48	0.75
Apr-1995	5	5	0.2	ND	2.9	ND	ND	5.4	21.8	2.3	ND	2.4
Apr-1997	ND	2	ND	ND	3	0.09	ND	NA	NA	ND	ND	7.8
Oct-1997	4	4	0.28	ND	ND	ND	ND	5.93	19.8	ND	ND	5
Apr-1998	ND	ND	ND	ND	2.24	ND	ND	6	62.1	ND	ND	3.1
Apr-1999	ND	ND	0.19	ND	4.41	ND	ND	5.32	19.8	ND	23	2.9
Oct-1999	20	20	0.08	ND	3.24	ND	ND	5.16	19.5	ND	18	3.1
Apr-2000	1	1	ND	ND	3.12	ND	ND	5.61	17	ND	19	3
Oct-2000	2.7	NA	ND	ND	5.19	ND	ND	5.26	21.8	5.48	25	3.12
Apr-2001	1.9	NA	ND	ND	3.51	0.498	ND	NA	NA	ND	ND	3.23
Sep-2001	1.9	1.9	ND	ND	4.28	ND	ND	5.49	25	ND	27	3.27
Mar-2002	ND	ND	ND	ND	3.28	ND	ND	5.5	22	ND	36	2.99
Sep-2002	3	3	ND	ND	2.96	ND	ND	5.5	24.5	ND	38	4.99
Mar-2003	4.2	4.2	ND	ND	3.59	ND	ND	5.3	25.1	ND	25	3.06
Oct-2003	3.6	3.6	ND	ND	3.23	0.093	ND	4.8	28.5	ND	62	10.3
Apr-2004	3.8	3.8	ND	ND	3.46	0.07	ND	5.5	23.5	ND	20	4.72
Oct-2004	3.6	3.6	ND	ND	36	0.74	ND	5.2	22.8	4.56	36	3.8
Apr-2005	3.6	3.6	ND	ND	3.27	0.08	ND	5.3	22.4	ND	62	4.39
Oct-2005	3.7	3.7	ND	ND	3.95	0.09	ND	5.3	18	ND	33	4.04
Mar-2006	4.7	4.7	ND	ND	3.83	0.11	ND	4.6	24.2	ND	36	3.64
Sep-2006	4.4	4.4	ND	ND	3.88	0.1	ND	5.2	24.1	ND	31	3.44
Mar-2007	4.7	4.7	0.38	ND	4.05	0.14	ND	5.4	25.5	ND	27	3.21
Sep-2007	3.4	3.4	0.35	ND	3.86	0.16	ND	5.3	26.6	ND	94	3.53
Mar-2008	4	4	ND	ND	4.03	0.15	ND	5.7	28.1	ND	18	3.4
Sep-2008	4	4	ND	14	4.22	0.1	ND	5.3	27.1	ND	23	3.7
Mar-2009	13	13	ND	ND	4.14	0.11	ND	4.5	26.6	ND	31	3.51
Oct-2009	3.9	3.9	ND	ND	4.08	0.13	ND	4.7	24	ND	44	4.3
Apr-2010	4.5	4.5	ND	ND	3.61	0.13	ND	5.2	25.8	ND	25	3
Oct-2010	3.2	3.2	ND	ND	4.2	0.09	ND	4.5	25.6	ND	ND	3.45
Apr-2011	4.4	4.4	ND	ND	3.88	0.11	ND	4.7	25.6	ND	30	3.65
Sep-2011	4.8	4.8	ND	ND	4.25	0.1	ND	5.5	20.1	ND	25	3.67
Mar-2012	3.8	3.8	ND	ND	4.14	0.12	ND	4.5	22.3	ND	ND	3.77
Sep-2012	3.32	3.32	ND	ND	4.24	0.142	ND	4.2	23.3	ND	27	3.74
Mar-2013	4.68	4.68	0.096 J	ND	4.58	0.127	ND	5.3	26	0.562 J	25	4.07
Oct-2013	5.12	5.12	ND	ND	4.66	0.119	ND	5.8	28.8	0.581 J	ND	4.29
Mar-2014	4.88	4.88	ND	ND	4.77	0.103	ND	5.3	26.6	0.869 J	ND	5.22

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05A***											
Oct-2014	ND	ND	ND	10	4.92	0.148	ND	4.6	27.3	ND	ND	5.18
Apr-2015	4.84	4.84	ND	ND	5.04	0.171	ND	4.2	27.2	0.515 J	ND	5.43
Nov-2015	3.48	3.48	ND	ND	5.05	0.236	ND	5.4	53.6	ND	12 J	5.52
May-2016	4.44	4.44	ND	ND	4.92	0.263	ND	5.6	36.6	ND	27	5.1
Oct-2016	2.8	2.8	ND	ND	5.3	NA	NA	5.2	43	1.42	31	5.5
May-2017	2.64	2.64	ND	7 J	5.1	0.314	ND	5.3	50.2	1.08	22 J	6.2
Oct-2017	5.76	5.76	ND	ND	5.13	0.354	ND	5.6	53.7	0.753 J	34	5.8
May-2018	22	22	ND	ND	4.3	0.32	0.0063 J	6.1	61.4	ND	10	6.1
Nov-2018	22	22	ND	5.7 J	5.4	ND	0.013	6.58	149.6	ND	32	6.3
May-2019	14	NA	ND	ND	4.9	ND	0.033	6.69	98.8	ND	45	7.8
Oct-2019	2.5 JH1	NA	ND	10.4 JMH	4.6	0.079 J	0.016	6.19	153.5	ND	65	7.1
May-2020	6 J	NA	ND	9.1 J	4.9	ND	0.0071 J	5.83	157.7	ND	18	6.2
Oct-2020	8 J	NA	ND	9.3 J	5	ND	0.014	5.8	142.4	ND	44	7.5
Apr-2021	14	NA	ND	8.3 J	5.7	0.077 J	ND	7.02	187.8	ND	ND	7.35
Oct-2021	24	NA	ND	10.5 J	5.5	ND	ND	6.92	212.5	ND	ND	7.95
May-2022	14	NA	ND	7.9 J	4.8	ND	0.017	6.47	153.3	ND	14 H1	7.7 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05A***													
Nov-1993	NA	ND	ND	NA	ND	0.38	NA	ND	NA	ND	1.5	1	ND	0.25	NA
Apr-1994	NA	ND	ND	NA	ND	0.24	NA	ND	NA	ND	1.7	0.84	ND	4.3	NA
Apr-1995	ND	ND	0.6	ND	ND	0.5	NA	ND	ND	ND	3	1.3	ND	0.29	NA
Oct-1996	ND	ND	0.021	ND	ND	0.73	0.93	ND	ND	ND	8.2	3.7	ND	ND	ND
Apr-1997	ND	ND	0.016	ND	ND	1.6	0.84	ND	ND	ND	2.4	2.1	0.002	ND	ND
Oct-1997	ND	ND	0.011	ND	0.004	1.01	0.743	ND	ND	ND	19.9	0.371	ND	0.343	0.257
Apr-1998	ND	ND	0.012	ND	ND	0.696	0.751	ND	ND	ND	4.85	1.28	ND	0.331	0.306
Apr-1999	ND	ND	0.011	ND	ND	0.629	0.615	ND	ND	ND	1.93	0.436	ND	0.328	0.303
Oct-1999	ND	ND	0.011	ND	ND	0.666	0.601	ND	ND	ND	2.21	0.506	ND	0.338	0.295
Apr-2000	ND	ND	ND	ND	ND	0.657	0.647	ND	ND	ND	1.49	0.663	ND	0.332	0.311
Oct-2000	ND	ND	ND	ND	ND	0.678	0.653	ND	ND	ND	2.22	0.79	ND	0.347	0.329
Apr-2001	ND	ND	ND	ND	ND	0.698	NA	ND	ND	ND	1.15	NA	ND	0.361	NA
Sep-2001	ND	ND	ND	ND	ND	0.714	0.654	ND	ND	ND	5.08	1.46	ND	0.361	0.326
Mar-2002	ND	ND	0.012	ND	ND	0.638	0.684	ND	ND	ND	2.39	0.628	ND	0.338	0.343
Sep-2002	ND	ND	0.011	ND	ND	1.36	0.63	ND	ND	ND	11.3	1.35	ND	0.385	0.32
Mar-2003	ND	ND	ND	ND	ND	0.681	0.641	ND	ND	ND	1.36	0.966	ND	0.33	0.315
Oct-2003	ND	ND	0.013	ND	ND	1.06	0.668	ND	ND	ND	4.65	1.01	ND	0.419	0.357
Apr-2004	ND	ND	0.012	ND	ND	1.13	0.736	ND	ND	ND	2.63	0.712	ND	0.46	0.379
Oct-2004	ND	ND	0.013	ND	ND	0.788	0.708	ND	ND	ND	4.33	1.61	ND	0.443	0.398
Apr-2005	ND	ND	0.016	ND	ND	1.03	0.57	ND	ND	ND	4.97	0.373	0.003	0.444	0.294
Oct-2005	ND	ND	0.011	ND	ND	0.93	0.718	ND	ND	ND	1.82	0.515	ND	0.418	0.384

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05A***													
Mar-2006	ND	ND	ND	ND	ND	0.917	0.544	ND	ND	ND	1.9	0.34	ND	0.329	0.324
Sep-2006	ND	ND	0.011	ND	ND	0.723	0.741	ND	ND	ND	1.26	1.45	ND	0.395	0.402
Mar-2007	ND	ND	0.015	ND	ND	0.701	0.684	ND	ND	ND	1.11	0.338	ND	0.355	0.34
Sep-2007	ND	ND	0.011	ND	ND	0.741	0.72	ND	ND	ND	1.46	0.548	ND	0.408	0.408
Mar-2008	ND	ND	0.011	ND	ND	0.708	0.728	ND	ND	ND	1.27	1.51	ND	0.396	0.395
Sep-2008	ND	ND	0.012	ND	ND	0.721	0.585	ND	ND	ND	2.18	1.19	ND	0.453	0.416
Mar-2009	ND	ND	0.01	ND	ND	0.815	0.87	ND	ND	ND	6.91	6.48	ND	0.356	0.394
Oct-2009	ND	ND	0.011	ND	ND	0.974	0.648	ND	ND	ND	3.48	0.517	ND	0.455	0.416
Apr-2010	ND	ND	0.011	ND	ND	0.614	0.578	ND	ND	ND	3.23	0.768	ND	0.353	0.342
Oct-2010	ND	ND	0.011	ND	ND	0.698	0.698	ND	ND	ND	2.54	0.739	ND	0.416	0.431
Apr-2011	ND	ND	0.013	ND	ND	0.776	0.685	ND	ND	ND	8.66	1.94	ND	0.416	0.367
Sep-2011	ND	ND	0.013	ND	ND	0.788	0.792	ND	ND	ND	4.34	0.979	0.002	0.412	0.424
Mar-2012	ND	ND	0.012	ND	ND	0.703	0.695	ND	ND	ND	1.65	0.712	ND	0.488	0.488
Sep-2012	ND	ND	0.0124	0.000105 J	ND	0.779	0.703	0.0016 J	0.0013 J	0.0021 J	1.67	0.756	0.000612 J	0.436	0.425
Mar-2013	ND	ND	0.0131	0.000106 J	ND	0.889	0.969	0.0062 J	0.0017 J	0.0035 J	1.29	0.617	ND	0.449	0.457
Oct-2013	ND	ND	0.0156	ND	ND	0.864	0.886	0.0018 J	0.0015 J	0.0019 J	1.54	1.24	0.000467 J	0.517	0.554
Mar-2014	ND	ND	0.0151	ND	ND	1.33	1.37	0.0072 J	0.0016 J	0.0018 J	2.12	1.18	0.000372 J	0.46	0.587
Oct-2014	0.000634 J	ND	0.0181	ND	ND	1.07	1.03	0.000965 J	0.0019 J	0.0021 J	1.76	0.824	ND	0.609	0.588
Apr-2015	0.0011 J	ND	0.0192	ND	0.000076 J	1.08	1.02	0.0011 J	0.002 J	0.0022 J	3.18	0.994	ND	0.663	0.616
Nov-2015	ND	ND	0.019	0.000121 J	ND	1.09	1.06	0.000455 J	0.002 J	0.0019 J	1.73	0.715	0.000719 J	0.681	0.671
May-2016	ND	ND	0.0191	0.00012 J	ND	0.929	1.05	ND	0.002	0.0019 J	1.71	1.02	0.00031 J	0.674	0.669
Oct-2016	ND	ND	0.02	0.00012 J	ND	1.1	0.969	ND	0.0022	0.0017 J	1.13	0.861	0.00032 J	0.657	0.708
May-2017	ND	ND	0.0212	0.00012 J	ND	1.28	1.1	0.0017 J	0.0022	0.0017 J	1.07	0.809	0.00026 J	0.721	0.69
Oct-2017	ND	ND	0.02	0.00012 J	ND	1.1	1.03	ND	0.0018	0.0017 J	2.31	1.8	0.00024 J	0.743	0.721

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05A***													
May-2018	*0.000044 J*	*ND*	0.018	*0.00011 J*	*0.000033 J*	1.3	1.3	*0.0028 J*	0.0016	0.0065	16.5	8.8	*0.00034 J*	*0.69 J*	*0.67 J*
Nov-2018	*ND*	*0.00028 J*	0.014	*0.00002 J*	*0.00018 J*	1.4	1.4	*0.0026 J*	*0.0004 J*	*0.0016 J*	41.1	41.8 M1	*0.000085 J*	*0.67 J*	*0.67 J*
May-2019	*ND*	*ND*	0.015	*ND*	*ND*	1.8	1.9	*ND*	*ND*	**0.0033 D6**	31.7	32.1	*ND*	*ND*	*ND*
Oct-2019	*0.000052 J*	*ND*	0.016	*ND*	*0.00015 J*	1.6	1.6	*0.0027 J*	*0.00036 J*	*ND*	42.9	40.6	*0.000057 J*	0.73	*0.67 J*
May-2020	*ND*	*ND*	0.018	*ND*	*0.00035 J*	1.4	1.5	*ND*	*ND*	*0.0024 J*	53.6	43.7	*ND*	0.68	0.76
Oct-2020	*0.00046 J*	*ND*	0.018	*ND*	*ND*	1.8	1.7	*0.0087 J*	*0.0007 J*	*ND*	50.6	45.8	*ND*	0.72	*0.71 J*
Apr-2021	*ND*	*ND*	0.018	*0.00018 J*	*ND*	1.7	1.7	*ND*	*ND*	*ND*	47.6	45.9	*ND*	0.78	0.76
Oct-2021	*0.000063 JB*	*ND*	0.018	*ND*	*ND*	1.8	1.8	*ND*	*0.00056 J*	*0.00052 J*	53.4	48.4	*ND*	0.82	0.8
May-2022	*ND*	*ND*	0.018	*ND*	*ND*	1.7	1.8	*ND*	*0.00065 J*	*ND*	56.8	55.1	*ND*	0.81	0.81

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-05A*												
Nov-1993	0.05	NA	ND	NA	0.34	NA	ND	NA	1.2	NA	NA	NA	ND
Apr-1994	0.36	NA	ND	NA	0.7	NA	ND	NA	1.9	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.65	NA	ND	ND	1.1	NA	ND	ND	0.03
Oct-1996	0.031	0.026	NA	ND	ND	ND	ND	ND	1.8	1.7	ND	ND	0.021
Apr-1997	0.034	0.023	ND	ND	2	2.1	ND	ND	1.9	1.7	ND	ND	0.075
Oct-1997	0.014	0.016	ND	0.012	ND	1.14	ND	ND	1.23	1.1	ND	ND	0.032
Apr-1998	0.023	0.023	ND	ND	0.927	ND	ND	ND	1.45	1.46	ND	ND	ND
Apr-1999	0.014	0.012	NA	ND	0.575	0.847	ND	ND	1.48	1.39	ND	ND	ND
Oct-1999	0.014	0.011	NA	ND	ND	0.601	ND	ND	1.46	1.29	ND	ND	ND
Apr-2000	0.015	0.014	NA	ND	ND	ND	ND	ND	1.58	1.53	ND	ND	ND
Oct-2000	0.016	0.016	NA	ND	0.409	0.71	ND	ND	1.56	1.55	ND	ND	0.01
Apr-2001	0.015	NA	NA	ND	1.4	NA	ND	ND	1.69	NA	ND	ND	ND
Sep-2001	0.043	0.028	NA	ND	0.682	0.896	ND	ND	1.65	1.63	ND	ND	ND
Mar-2002	0.015	0.014	NA	ND	1.75	1.72	ND	ND	1.72	1.69	ND	ND	ND
Sep-2002	0.046	0.022	NA	ND	0.951	0.789	ND	ND	1.98	1.71	ND	ND	ND
Mar-2003	0.018	0.016	NA	ND	2.85	ND	ND	ND	1.86	1.79	ND	ND	ND
Oct-2003	0.023	0.02	NA	0.658	1.86	1.21	ND	ND	2.72	1.83	ND	ND	0.012
Apr-2004	0.019	0.021	ND	ND	2.08	1.12	ND	ND	2.43	1.94	ND	ND	0.091
Oct-2004	0.039	0.04	ND	ND	1.25	0.517	ND	ND	1.98	1.6	ND	ND	ND
Apr-2005	0.023	0.014	ND	ND	1.46	1.52	ND	ND	2.32	1.76	ND	ND	0.021
Oct-2005	0.017	0.015	ND	ND	0.699	0.664	ND	ND	2.27	1.62	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.789	0.718	ND	ND	1.69	1.66	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05A***												
Sep-2006	0.014	0.025	0.0003	ND	1.15	1.11	ND	ND	1.85	1.82	ND	ND	ND
Mar-2007	0.014	0.012	0.0003	ND	0.703	0.641	ND	ND	1.75	1.67	ND	ND	ND
Sep-2007	0.017	0.016	0.0003	ND	0.641	0.604	ND	ND	1.83	1.82	ND	ND	0.012
Mar-2008	0.016	0.019	0.0003	ND	0.757	0.734	ND	ND	1.94	1.99	ND	ND	ND
Sep-2008	0.018	0.018	0.0003	ND	0.691	0.67	ND	ND	1.86	1.82	ND	ND	0.014
Mar-2009	0.037	0.043	ND	ND	0.659	0.719	ND	ND	1.91	2.04	ND	ND	ND
Oct-2009	0.017	0.014	ND	ND	0.692	0.701	ND	ND	2.02	2	ND	ND	0.022
Apr-2010	0.017	0.014	ND	ND	0.9	0.794	ND	ND	1.92	1.86	ND	ND	ND
Oct-2010	0.014	0.014	ND	ND	0.611	0.574	ND	ND	1.91	1.87	ND	ND	ND
Apr-2011	0.04	0.028	ND	0.033	0.841	0.798	ND	ND	2.1	2.11	ND	ND	ND
Sep-2011	0.019	0.015	ND	ND	0.858	0.826	ND	ND	2.32	2.27	ND	ND	ND
Mar-2012	0.015	0.015	ND	ND	0.602	0.658	ND	ND	2.1	2.13	ND	ND	ND
Sep-2012	0.0173	0.0155	0.000106 J	0.0025 J	0.601	0.639	ND	ND	2.04	2.12	ND	ND	0.0037 J
Mar-2013	0.0171	0.0164	0.000226	0.008 J	0.713	0.745	ND	ND	2.01	2.11	ND	ND	0.011
Oct-2013	0.0197	0.0213	0.000268	0.003	0.65	0.688	ND	ND	2.21	2.37	ND	0.0013 J	0.0214
Mar-2014	0.0185	0.0184	0.000251	0.0027 J	0.904	0.916	ND	ND	1.88	2.44	ND	0.0043 J	0.0054 J
Oct-2014	0.0219	0.0206	0.000253	0.01 J	0.934	0.895	0.0014 J	ND	2.47	2.37	ND	ND	0.0079 J
Apr-2015	0.0235	0.0216	0.000245	0.0039 J	0.971	0.86	0.000772 J	ND	2.75	2.52	ND	ND	0.008 J
Nov-2015	0.0224	0.0218	0.000413	0.003 J	0.788	0.756	ND	ND	2.71	2.69	0.000065 J	ND	0.0034 J
May-2016	0.0233	0.0216	0.0003	0.003 J	0.807	0.8	ND	ND	2.47	2.48	ND	ND	ND
Oct-2016	0.0213	0.0242	0.00032	0.0039 J	0.77	0.83	ND	ND	2.35	2.59	ND	ND	ND
May-2017	0.022	0.0235	0.00046	0.0043	0.784	0.818	ND	ND	2.43	2.5	ND	ND	0.0038 JB
Oct-2017	0.0275	0.0278	0.00054	0.0024 J	0.823	0.8	ND	ND	2.57	2.56	ND	ND	ND
May-2018	0.093	0.075	0.00088	0.0037	0.91 J	ND	0.00036 J	ND	2.4 J	2.2 J	ND	ND	0.005 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05A***												
Nov-2018	0.22	0.23	*ND*	0.002	*ND*	*0.96 J*	*ND*	*ND*	*2.4 J*	*2.5 J*	*ND*	*ND*	*0.0036 J*
May-2019	0.31 M1	0.3	*ND*	0.0013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0054 D6
Oct-2019	0.32	0.31	*ND*	0.0013	*ND*	*ND*	*0.00039 J*	*ND*	*2.7 J*	*2.4 J*	*ND*	0.0049	0.012
May-2020	0.24	0.24	*ND*	*ND*	0.78	0.73	*ND*	*ND*	2.2	2.6	*ND*	*ND*	*ND*
Oct-2020	0.25	0.22	*ND*	0.0028	*ND*	*ND*	*ND*	*ND*	*1.2 J*	*1.9 J*	*ND*	*0.0026 J*	*ND*
Apr-2021	0.24	0.23	*0.00006 J*	*ND*	0.67	0.69	*ND*	*ND*	2.6	2.4	*ND*	*ND*	*ND*
Oct-2021	0.32	0.31	*ND*	*0.00094 J*	0.69	0.67	*ND*	*ND*	2.5	2.6	*ND*	*ND*	*ND*
May-2022	0.25	0.24	*ND*	*0.0012 J*	0.71	0.67	*ND*	*ND*	2.5	2.5	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	42	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05A*																
Mar-2006	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*0.87 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	1.18	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	1.12	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	1.13	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	1.47	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	1.28	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05A*																
May-2017	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 J	ND
Nov-2018	ND	ND	ND	ND	1.1 L2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*0.5 J*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05A***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	0.9 J
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	1.4
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	2.1
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	2.2
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	1.1
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.94 J
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.52 J	1.41
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.21 J	ND	ND	ND	ND	ND	0.87 J	2.38
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	0.73 J	1.31
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	0.25 J	ND	ND	ND	0.62 J	2.1
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.16 J	ND	0.22 J	ND	ND	ND	0.58 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4 J	2.2
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	0.6 J	2.3
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.2 J	ND	ND	ND	0.7 J	2.7

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*0.7 J*	2.7
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*0.8 J*	2.8
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	3
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3 CLN3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.128 J*	*ND*	*ND*	*ND*	*ND*	*1.58 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	1.2	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05A***															
Oct-2005	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1.7 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*0.14 J*	*ND*	*ND*	*ND*	*0.23 J*	*ND*	*ND*	*ND*	*ND*	*0.22 J*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*0.13 J*	*ND*	*ND*	*ND*	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.1 J*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05A***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.132 J*	*0.83 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-06***											
Nov-1993	6	6	0.2	ND	12.6	0.2	ND	5.44	49.9	2.6	60	8.1
Apr-1994	ND	ND	ND	ND	11.9	ND	ND	4.82	50.3	ND	45	5.34
Aug-1994	ND	ND	ND	ND	11.7	0.4	0.4	4.5	49.5	3.2	57	7.9
Sep-1994	ND	ND	ND	ND	12.2	0.3	ND	5.1	52.8	2.8	35	8.7
Nov-1994	ND	ND	ND	ND	13.2	0.2	ND	5.2	53.6	2.6	33	12
Apr-1995	8.2	8.2	ND	ND	14.1	ND	ND	5.4	62.8	2.2	9	10
Apr-1997	ND	16	ND	ND	11	0.06	ND	NA	NA	ND	52	12
Apr-1997	ND	8	ND	ND	9.5	0.06	ND	NA	NA	ND	36	6.1
Oct-1997	14	14	0.21	ND	10.9	ND	ND	6.65	75.3	ND	32	17
Apr-1998	17	17	ND	ND	8.13	ND	ND	6.32	64.9	ND	27	7.7
Apr-1999	11	11	0.31	ND	8.56	ND	ND	5.71	75.1	ND	65	12
Oct-1999	16	16	0.13	ND	7.73	0.172	ND	5.39	72.8	ND	52	8.4
Apr-2000	14	14	ND	ND	16.5	ND	ND	5.63	65	ND	31	11
Oct-2000	14	NA	ND	ND	14.9	ND	ND	5.39	78.4	3.52	55	12.8
Apr-2001	11	NA	ND	ND	12.2	ND	ND	NA	NA	ND	43	14.3
Sep-2001	8.7	8.7	ND	ND	16.5	ND	ND	5.04	89	ND	65	15.7
Mar-2002	17	17	ND	ND	24.6	ND	ND	6	143	ND	74	19.9
Sep-2002	14	14	ND	ND	19.3	ND	ND	5.9	141.3	ND	73	19.6
Mar-2003	13	13	ND	ND	16.4	ND	ND	5.4	112.1	ND	46	15.2
Oct-2003	11	11	ND	ND	18.1	0.122	ND	4.1	118.9	ND	101	18.7
Apr-2004	21	21	ND	ND	17.6	0.08	ND	5.6	102.9	ND	96	18.6
Oct-2004	7.2	7.2	ND	ND	13.4	0.11	ND	5.7	79.4	ND	60	13.8
Apr-2005	6.9	6.9	ND	ND	11.6	0.1	ND	5.2	63.8	1.44	69	12.5
Oct-2005	13	13	ND	ND	15.2	0.1	ND	4.8	82.1	2.83	67	12.9
Mar-2006	9.2	9.2	ND	ND	14.7	0.13	ND	4.8	92.4	4.02	49	13.7
Sep-2006	14	14	ND	ND	12.2	0.16	ND	5.6	91.7	1.55	74	12
Mar-2007	20	20	ND	ND	12.9	0.14	ND	6	97.8	1.59	52	11.5
Sep-2007	7.2	7.2	0.4	ND	12.9	0.15	ND	4.9	66.8	2.67	103	11.9
Mar-2008	7.8	7.8	0.35	ND	16.1	ND	ND	5	69.6	ND	55	11.5
Sep-2008	9.1	9.1	0.32	ND	14.2	0.28	ND	4.7	67.9	ND	60	11.8
Mar-2009	7.5	7.5	ND	ND	14.3	0.32	ND	4.9	71.9	1.1	49	10.2
Oct-2009	9	9	ND	ND	15.5	0.26	ND	4.6	69.5	1.64	53	12.1
Mar-2010	9.8	9.8	ND	ND	17.1	0.22	ND	5	93	2.53	37	11.8
Oct-2010	9.6	9.6	ND	ND	14.2	0.28	ND	4.5	69.8	2.47	38	13.7
Apr-2011	9.1	9.1	ND	ND	15.8	0.35	0.02	4.6	69.2	2.57	50	13.5
Sep-2011	5.5	5.5	ND	ND	14	0.41	ND	4.8	70.3	2.14	61	13.2
Mar-2012	6.4	6.4	ND	ND	14.8	0.42	ND	4.6	60.3	2.8	46	13.4

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-06***											
Sep-2012	7.72	7.72	ND	ND	14.6	0.389	ND	3.8	72.6	2.83	59	13.9
Mar-2013	10.6	10.6	0.258	ND	15.7	0.297	ND	5.1	85.7	4.27	44	14.7
Oct-2013	8.96	8.96	0.212	ND	15	0.418	ND	5.7	76.3	3.92	46	14
Mar-2014	9.2	9.2	0.197 J	ND	15.8	0.362	ND	5.3	74.6	4.95	54	16.9
Oct-2014	ND	ND	0.23	14	15.4	0.4	ND	4.8	73.2	3.96	39	16.5
Apr-2015	8.36	8.36	0.231	ND	15.6	0.427	ND	4.1	74.7	4.56	47	15.6
Nov-2015	7.8	7.8	0.216	ND	15.2	0.412	ND	5.5	131.2	2.08	50	18.5
May-2016	17.7	17.7	0.186 J	ND	16.3	0.195	0.0897	5.6	97.2	6.32	68	16.9
Oct-2016	5.56	5.56	ND	ND	14.7	NA	NA	5.6	101.1	4.1	44	16.4
May-2017	6.2	6.2	0.182 J	ND	14.5	0.419	ND	5.1	117.2	4.67	49	16.7
Oct-2017	7.36	7.36	0.196 J	13	14.2	0.453	ND	5.2	124.3	3.7	60	16.1
May-2018	14	14	0.21	ND	13.7	0.077 J	ND	5.84	147	6.6 J	ND	16.9
Nov-2018	70	70	0.29	ND	17.1	ND	0.024	5.88	183.2	5.8 J	70	19.2
May-2019	72	NA	0.35	ND	19.4	ND	0.024	5.96	155.6	ND	127	18.1
Oct-2019	25 H1	NA	0.26	8.2 J	12.9	0.067 J	0.044	5.8	194.2	ND	111	18.4
May-2020	30	NA	0.46	6.9 J	11.5	ND	0.054	5.66	164.7	ND	84	15
Oct-2020	40	NA	0.17	11.6 J	10.9	ND	0.055	5.67	156.1	4.9	105	17.8
Apr-2021	8 J6c	NA	0.16	ND	12.4	1.2	0.0063 J	5.27	120.5	10	66	21.2
Oct-2021	6 J2c	NA	ND	6.1 JMH	12.8	0.086 J	0.049 H1	5.6	168.7	17.7 MH	102	30.2
May-2022	26	NA	ND	10.1 J	11.4	ND	ND	5.45	161.9	10.3	69 H1	25.7 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-06*													
Nov-1993	NA	ND	ND	NA	ND	1.1	NA	ND	NA	ND	8	2.7	ND	1.3	NA
Apr-1994	NA	ND	0.012	NA	ND	1.1	NA	ND	NA	ND	0.37	2.7	ND	0.63	NA
Aug-1994	NA	ND	ND	NA	ND	1.2	NA	ND	NA	ND	1.2	0.7	ND	1.2	NA
Sep-1994	NA	ND	ND	NA	ND	1	NA	ND	NA	ND	0.53	0.1	ND	1.5	NA
Nov-1994	NA	ND	ND	NA	ND	2	NA	ND	NA	0.04	6.8	0.69	ND	1.7	NA
Apr-1995	ND	ND	ND	ND	ND	1.7	NA	ND	ND	ND	3.4	3.4	ND	1.4	NA
Oct-1996	ND	ND	0.076	ND	ND	1.9	1.8	ND	ND	ND	11	10	ND	1.8	1.8
Apr-1997	ND	ND	0.058	ND	ND	1.6	1.5	ND	ND	ND	7.2	5.8	0.004	1.4	1.4
Apr-1997	ND	ND	0.054	ND	ND	1.5	1.5	ND	ND	ND	5.1	3.2	ND	1.1	1.2
Oct-1997	ND	ND	0.053	ND	ND	1.24	1.26	ND	ND	ND	13	11.9	ND	1.22	1.23
Apr-1998	ND	ND	0.049	ND	ND	1.2	1.21	ND	ND	ND	17.6	9.85	ND	1.15	1.17
Apr-1999	ND	ND	0.075	ND	ND	1.8	1.61	ND	ND	0.016	10.5	8.17	ND	1.69	1.54
Oct-1999	ND	ND	0.06	ND	ND	1.65	1.47	ND	ND	ND	9.57	8.57	ND	1.52	1.38
Apr-2000	ND	ND	0.061	ND	ND	1.71	1.62	ND	ND	ND	9.73	9.18	ND	1.68	1.58
Oct-2000	ND	ND	0.069	ND	ND	1.95	1.95	ND	ND	ND	10.7	8.59	ND	1.93	1.95
Apr-2001	ND	ND	0.076	ND	ND	2.12	NA	ND	0.012	0.022	11.5	NA	0.002	2.19	NA
Sep-2001	ND	ND	0.086	ND	ND	2.26	2.18	ND	0.011	0.014	6.46	6.78	0.004	2.45	2.34
Mar-2002	ND	ND	0.099	ND	ND	2.71	2.67	ND	0.023	0.048	19.6	12.4	0.005	3.19	3.15
Sep-2002	ND	ND	0.091	ND	ND	2.82	2.27	ND	0.011	0.028	17.3	14.5	0.004	3.04	2.85
Mar-2003	ND	ND	0.072	ND	ND	2.01	1.89	ND	0.011	0.018	11.5	8.47	0.006	2.48	2.31
Oct-2003	ND	ND	0.084	ND	ND	2.33	2.28	ND	0.012	0.02	10.3	9.31	0.004	3.13	3.1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06***													
Apr-2004	ND	ND	ND	ND	ND	2.23	2.06	ND	0.016	0.037	19.7	16.6	0.003	3.17	2.98
Oct-2004	ND	ND	0.055	ND	ND	1.65	1.69	ND	ND	0.017	8.42	7.62	0.004	2.35	2.44
Apr-2005	ND	ND	0.047	ND	ND	1.63	1.62	ND	ND	0.01	5.5	4.89	0.007	2.05	2.02
Oct-2005	ND	ND	0.046	ND	0.004	1.74	1.74	ND	ND	0.043	9.53	7.71	0.004	2.07	2.08
Mar-2006	ND	ND	0.043	ND	ND	2.29	1.55	0.017	0.03	0.062	12.5	6.7	0.005	1.93	1.93
Sep-2006	0.002	ND	0.037	ND	ND	1.74	1.56	0.044	0.024	0.146	24.4	14.7	0.007	1.87	1.83
Mar-2007	ND	ND	0.039	ND	ND	1.6	1.62	ND	ND	ND	14.1	14.6	ND	1.83	1.84
Sep-2007	ND	0.002	0.035	ND	ND	2.12	2.17	ND	ND	ND	2.61	2.61	ND	1.61	1.65
Mar-2008	ND	0.003	0.034	ND	ND	1.94	1.78	ND	ND	0.01	2.78	2.9	0.006	1.61	1.62
Sep-2008	ND	ND	0.036	ND	ND	1.96	1.99	ND	ND	ND	2.53	2.53	0.003	1.67	1.76
Mar-2009	ND	ND	0.029	ND	ND	1.88	1.92	ND	ND	ND	1.75	2.1	0.003	1.35	1.44
Oct-2009	ND	ND	0.036	ND	ND	1.91	1.81	ND	ND	ND	2.77	2.59	ND	1.78	1.63
Mar-2010	ND	ND	0.043	ND	ND	1.89	1.83	ND	ND	ND	3.26	3.01	ND	1.72	1.68
Oct-2010	ND	ND	0.044	ND	ND	2.19	2.12	ND	ND	ND	2.77	2.58	ND	2	1.95
Apr-2011	ND	ND	0.044	ND	ND	2.09	2.02	ND	ND	ND	2.69	2.44	ND	2.01	1.92
Sep-2011	ND	ND	0.04	ND	ND	2.3	2.33	ND	ND	ND	1.28	1.41	0.002	1.82	1.98
Mar-2012	ND	ND	0.04	ND	ND	2.13	2.09	ND	ND	ND	1.92	1.93	ND	1.97	2.02
Sep-2012	ND	ND	0.0404	0.00056 J	0.00049 J	2.3	2.39	0.0022 J	0.0071 J	0.0047 J	2.37	2.61	0.0018 J	1.99	2.14
Mar-2013	ND	ND	0.0425	0.000544 J	0.000483 J	2.49	2.46	0.0041 J	0.0078 J	0.0035 J	3.1	3.07	0.0013 J	2.07	2
Oct-2013	0.000242 J	ND	0.0454	0.000534 J	0.000554 J	2.57	2.52	0.0096 J	0.0091 J	0.0029 J	2.3	2.28	0.0024	1.85	1.8
Mar-2014	ND	ND	0.0427	0.000407 J	0.000494 J	3.47	3.31	0.0086 J	0.01	0.0027 J	2.38	2.92	0.0013 J	2	2.53
Oct-2014	0.000382 J	0.000409 J	0.0535	0.000408 J	0.000392 J	2.57	2.57	0.0017 J	0.0105	0.0029 J	2.46	2.35	0.00099 J	2.46	2.41
Apr-2015	0.000488 J	0.000426 J	0.0502	0.000489 J	0.000465 J	2.59	2.63	0.0019 J	0.0114	0.0027 J	2.17	2.08	0.00085 J	2.21	2.22
Nov-2015	ND	0.000534 J	0.0582	0.000527 J	0.000548 J	2.96	2.86	0.0024 J	0.014	0.0032 J	4.66	4.32	0.001 J	2.7	2.58

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06***													
May-2016	*ND*	*ND*	0.0532	*0.00033 J*	*0.00032 J*	2.76	2.67	*0.0036 J*	0.0122	*0.0024 J*	1.97	1.95	*0.00098 J*	2.43	2.41
Oct-2016	*ND*	*ND*	0.054	*0.00036 J*	*0.00029 J*	2.73	2.82	*0.0017 J*	0.0131	*0.0028 J*	2.01	2.07	*0.00074 J*	2.32	2.18
May-2017	*ND*	*0.001 J*	0.0609	*0.00038 J*	*0.0006 J*	2.61	2.76	*0.0025 J*	0.0131	*0.0027 J*	2.55	2.41	*0.00081 J*	2.48	2.44
Oct-2017	*ND*	*ND*	0.0581	*0.00043 J*	*0.00054 J*	2.8	2.72	*0.0024 J*	0.0117	*0.0027 J*	2.39	2.38	*0.0011 J*	2.21	2.23
May-2018	*0.000091 J*	*ND*	0.069	0.00039	*0.00048 J*	2.9	2.6	*0.0041 J*	0.006	*0.0015 JB*	2.5	2.4	*0.00075 J*	2.3	2.2
Nov-2018	*ND*	*ND*	0.095	*0.00014 J*	*0.00027 J*	3.2	3.1	*0.0039 J*	0.0092	0.0037	39.2	36.7	*0.000026 J*	2.7	2.7
May-2019	*ND*	*ND*	0.091	*ND*	*ND*	3	3.5	*ND*	0.0087	0.0036	40.3	41.2	*ND*	2.6	2.6
Oct-2019	*0.000069 J*	*ND*	0.09	*0.00013 J*	*0.00021 J*	3.2	3	*0.0044 J*	0.0075	*ND*	42.1	39.7	*0.000085 J*	2.6	2.4
May-2020	*ND*	*ND*	0.096	*ND*	*0.00056 J*	2.3	2.3	*0.0027 J*	0.0073	0.007	38.1	36	*ND*	2.2	2.3
Oct-2020	*0.00034 J*	*ND*	0.087	*0.00032 J*	*ND*	3	2.7	*0.0035 J*	0.0079	*ND*	36.5	34	*ND*	2.5	2.4
Apr-2021	*ND*	*ND*	0.11	*0.00026 J*	*0.0017 J*	3.4	3.5	*0.0033 J*	0.022	0.02	6.2	6	*ND*	3.1	3.4
Oct-2021	*ND*	*ND*	0.15	*0.00021 J*	*0.00015 J*	4.8	4.9	0.0031	0.024	0.0077	14.6	15.4	*0.000055 J*	4.4	4.6
May-2022	*ND*	*ND*	0.14	*0.00023 J*	*0.0004 J*	4	4.1	0.0035	0.023	0.0074	15.7	15.1	*ND*	3.8	3.7

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-06*												
Nov-1993	0.08	NA	ND	NA	1.4	NA	ND	NA	2.7	NA	NA	NA	ND
Apr-1994	0.023	NA	ND	NA	0.93	NA	ND	NA	2.8	NA	NA	NA	ND
Aug-1994	0.03	NA	ND	NA	2.3	NA	ND	NA	2.2	NA	NA	NA	0.02
Sep-1994	0.03	NA	ND	NA	1.4	NA	ND	NA	2.6	NA	NA	NA	0.04
Nov-1994	0.15	NA	ND	NA	1.5	NA	ND	NA	2.7	NA	NA	NA	0.03
Apr-1995	0.03	NA	ND	ND	1.8	NA	ND	ND	2.7	NA	ND	ND	0.02
Oct-1996	0.074	0.073	NA	ND	ND	ND	ND	ND	3.7	3.8	ND	ND	0.037
Apr-1997	0.089	0.084	**0.005**	ND	1.5	1.2	ND	ND	3.5	3.2	ND	ND	0.024
Apr-1997	0.05	0.052	0.0016	ND	2.7	2.4	ND	ND	4.2	3	ND	ND	0.036
Oct-1997	0.067	0.068	0.0012	ND	1.73	1.32	ND	ND	2.6	2.61	ND	ND	0.014
Apr-1998	0.06	0.062	0.0015	ND	0.683	1.08	ND	ND	2.36	2.38	ND	ND	0.01
Apr-1999	0.06	0.051	NA	ND	0.856	ND	ND	ND	3.31	3.06	ND	ND	0.016
Oct-1999	0.056	0.053	NA	ND	1.79	1.14	ND	ND	3	2.78	ND	ND	ND
Apr-2000	0.053	0.051	NA	ND	1.04	1.02	ND	ND	3.3	3.14	ND	ND	ND
Oct-2000	0.048	0.047	NA	ND	1.38	1.06	ND	ND	3.57	3.58	ND	ND	ND
Apr-2001	0.06	NA	NA	ND	1.98	NA	ND	ND	4.1	NA	ND	ND	0.018
Sep-2001	0.049	0.046	NA	0.022	1.58	0.692	ND	ND	4.51	4.27	ND	ND	0.016
Mar-2002	0.078	0.073	NA	0.044	2.11	1.13	ND	ND	5.59	5.41	ND	ND	0.041
Sep-2002	0.083	0.071	NA	0.018	1.23	1.11	ND	ND	5.04	4.6	ND	ND	0.021
Mar-2003	0.054	0.054	NA	0.013	2.4	0.954	ND	ND	4.29	4.11	ND	ND	0.012
Oct-2003	0.068	0.066	NA	0.013	2.55	2.47	ND	ND	5.16	4.96	ND	ND	0.014
Apr-2004	0.11	0.099	0.0009	0.037	2.23	1.49	ND	ND	5.43	5.17	ND	ND	0.02

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-06*												
Oct-2004	0.054	0.054	0.0006	ND	1.88	1.65	ND	ND	4.47	4.37	ND	ND	ND
Apr-2005	0.052	0.051	0.0003	ND	1.17	1.12	ND	ND	4.35	4.32	ND	ND	ND
Oct-2005	0.069	0.062	0.0003	0.027	1.23	1.24	ND	ND	4.81	4.73	ND	ND	ND
Mar-2006	0.03	0.015	0.00097	0.123	0.952	0.955	ND	ND	4.83	4.79	ND	ND	0.052
Sep-2006	0.11	0.092	**0.0025**	0.084	1.29	1.29	ND	ND	5.14	4.91	ND	ND	0.043
Mar-2007	0.08	0.083	ND	ND	1.24	1.3	ND	ND	4.89	4.91	ND	ND	ND
Sep-2007	0.036	0.038	ND	ND	1.02	0.953	ND	ND	5.04	5.16	ND	ND	0.011
Mar-2008	0.037	0.036	ND	ND	0.997	1.28	ND	ND	5.14	5.16	ND	ND	ND
Sep-2008	0.038	0.044	ND	0.005	1.07	1.08	ND	ND	5.39	6.11	ND	ND	ND
Mar-2009	0.032	0.037	ND	ND	1.13	1.19	ND	ND	5.46	5.93	ND	ND	ND
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	0.046	0.042	ND	ND	1.07	0.965	ND	ND	6.95	6.27	ND	ND	ND
Mar-2010	0.05	0.049	ND	ND	1.28	1.17	ND	ND	6.45	6.09	ND	ND	ND
Oct-2010	0.054	0.052	ND	ND	1.38	1.27	ND	ND	6.22	6.03	ND	ND	ND
Apr-2011	0.062	0.057	ND	ND	1.39	1.32	ND	ND	6.49	5.99	ND	ND	ND
Sep-2011	0.052	0.056	ND	ND	1.25	1.34	ND	ND	5.43	5.57	ND	ND	ND
Mar-2012	0.062	0.065	ND	ND	1.33	1.3	ND	ND	5.77	5.79	ND	ND	ND
Sep-2012	0.0717	0.0771	ND	0.0073 J	1.35	1.43	ND	ND	5.96	6.31	ND	ND	0.0075 J
Mar-2013	0.0785	0.0727	0.000119 J	0.0082 J	1.33	1.33	ND	ND	6.68	6.44	ND	ND	0.0171
Oct-2013	0.0901	0.0902	ND	0.0072 J	1.16	1.15	ND	ND	5.22	5.06	0.000745 J	0.0088 J	0.0158
Mar-2014	0.0864	0.0903	ND	0.0081 J	1.61	1.56	ND	ND	5.28	6.77	ND	0.0067 J	0.0085 J
Oct-2014	0.107	0.104	ND	0.0083 J	1.4	1.39	0.0016 J	ND	6	5.95	ND	ND	0.0107
Apr-2015	0.0949	0.0914	0.000032 J	0.0098 J	1.31	1.33	0.0012 J	ND	5.83	5.88	ND	ND	0.0119
Nov-2015	0.132	0.125	ND	0.0107	1.51	1.45	0.0017 J	ND	6.82	6.51	ND	ND	0.013

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-06***												
May-2016	0.0965	0.0994	*ND*	0.0108	1.45	1.39	*ND*	*ND*	6.23	6.1	*ND*	*ND*	*0.0087 J*
Oct-2016	0.0951	0.0881	*ND*	0.0089	1.44	1.4	*ND*	*ND*	5.9	5.6	*ND*	*ND*	*0.0087 J*
May-2017	0.103	0.103	*ND*	0.0101	1.48	1.55	*ND*	*ND*	6.08	5.73	*ND*	*ND*	*0.01 J*
Oct-2017	0.0965	0.0976	*ND*	0.0104	1.39	1.47	*ND*	*ND*	5.55	5.59	*ND*	*ND*	*0.0108 J*
May-2018	0.098	0.089	*ND*	0.0049	*0.97 J*	*0.94 J*	*0.00022 JB*	*ND*	6.4	5.9	*ND*	0.0047	0.0059 B
Nov-2018	0.27	0.26	*ND*	0.0047	*1.3 J*	*2 J*	*0.0004 J*	*ND*	7.2	8.1	*ND*	*ND*	0.0068
May-2019	0.33	0.32	*ND*	0.0049	*ND*	*ND*	*ND*	*ND*	6.9	7.1	*ND*	0.0029	0.0083
Oct-2019	0.31	0.31	*ND*	0.0039	*ND*	*1.6 J*	*0.00047 J*	*ND*	6.8	5.9	*ND*	0.005	0.011
May-2020	0.29	0.29	*ND*	*0.0047 J*	1.7	1.5	*ND*	*ND*	6.1	5.9	*ND*	*ND*	0.012
Oct-2020	0.3	0.29	*ND*	0.0043	*1.5 J*	*1.4 J*	*ND*	*ND*	5.6	5.1	*0.00084 J*	*0.00079 J*	*ND*
Apr-2021	0.22	0.23	0.0002	0.015	1.7	1.6	*ND*	*ND*	6	6.2	*ND*	*ND*	0.049
Oct-2021	0.31	0.32	0.00051	0.013	1.7	1.7	*0.0011 J*	*ND*	5.6	5.7	*0.000025 J*	*ND*	0.024
May-2022	0.31	0.3	0.00024	0.013	1.7	1.7	*ND*	*ND*	5.5	5.5	*ND*	*ND*	0.022

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06*																
Nov-1993	ND	1.6	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	1.8	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	ND
Aug-1994	ND	1.5	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	2.1	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	2.9	ND	ND	2.4	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	9.2	ND	ND	8.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	1	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	1	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	1.2	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	0.9 J	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	0.9 J	NA	NA	5.3	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	4.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	0.7 J	NA	NA	5.2	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	1.5	ND	ND	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	1.1	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	1.2	ND	ND	14	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Mar-2002	ND	1.4	ND	ND	18	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Sep-2002	ND	2.3	ND	ND	23	1.2	ND	ND	ND	ND	ND	1	1.5	ND	ND	ND	ND	ND
Mar-2003	ND	1	ND	ND	13	0.5 J	ND	ND	ND	ND	ND	0.6 J	0.8 J	ND	ND	ND	ND	ND
Oct-2003	ND	1.2	ND	ND	20	0.8 J	ND	ND	ND	ND	ND	1	1.3	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06*																
Apr-2004	ND	0.9 J	ND	ND	16	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	7.2	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	8.5	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	5.8	0.6 J	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Sep-2006	ND	1.7	ND	ND	7.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	7.5	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2007	ND	0.6 J	ND	ND	11.2	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	5.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	8	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	6.9	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	7.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	8.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	8.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	4.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	6.54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	9.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	6.98	0.31 J	ND	ND	ND	ND	ND	0.25 J	0.36 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	6.42	0.21 J	ND	ND	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	7.14	ND	ND	ND	ND	ND	ND	ND	0.28 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06*																
Apr-2015	*ND*	*ND*	*ND*	*ND*	5.67	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	5.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	4.8	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	5.7	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	4.8	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	5.6	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	3.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	8.5 L2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.4 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	6.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	6.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	4.74	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	9.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	7.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-06*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	3.2
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	5.2
Aug-1994	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	7	4.8
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	4.9
Nov-1994	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.4	6
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	49	22
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	22	4
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	ND	2	ND	ND	ND	13	9
Oct-1997	ND	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	1.1	ND	ND	ND	10	12
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	20	5.6
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	0.7 J	ND	NA	3.8	NA	NA	NA	6	9.3
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND	ND	ND	4.3	6.3
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	0.8 J	ND	NA	2.9	NA	ND	NA	5.1	7.4
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	6	ND	ND	ND	38	15
Apr-2001	0.6 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	5.7	ND	ND	ND	22	14
Sep-2001	0.8 J	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	6.9	ND	ND	ND	24	18
Mar-2002	0.6 J	ND	ND	ND	ND	2.4	ND	ND	1.5	ND	0.8 J	5.8	ND	ND	ND	16	21
Sep-2002	1.3	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	9.6	ND	ND	ND	74	52
Mar-2003	0.6 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	7	ND	ND	ND	33	22
Oct-2003	1.3	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	12	ND	ND	ND	41	36

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-06***															
Apr-2004	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	9.8	*ND*	*ND*	*ND*	40	28
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	4.9	*ND*	*ND*	*ND*	24	23
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	15	14
Oct-2005	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	5.1	*ND*	*ND*	*ND*	13.6	15.9
Mar-2006	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	12.1	26.3
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.5	*ND*	*ND*	*ND*	17.8	21.9
Mar-2007	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	11.7	14.9
Sep-2007	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	4.5	*ND*	*ND*	*ND*	16.3	11.2
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	12.1	15.7
Sep-2008	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	14.5	13
Mar-2009	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	10.8	10.1
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	9.4	11.9
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*11.8 J*	13.5
Oct-2010	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	11.7	9.3
Apr-2011	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	14.4	11.9
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7	*ND*	*ND*	*ND*	15	6.6
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7	*ND*	*ND*	*ND*	11.5	6.4
Sep-2012	*0.42 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.81	*ND*	*ND*	*ND*	5.56	7.44
Mar-2013	*0.58 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.44 J*	*ND*	*ND*	7.25	*ND*	*ND*	*ND*	8.15	12.6
Oct-2013	*0.29 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.59 J*	*0.22 J*	*ND*	4.34	*ND*	*ND*	*ND*	8.76	13.6
Mar-2014	*0.28 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	3.85	*ND*	*ND*	*ND*	9.56	9.22
Oct-2014	*0.28 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.23 J*	*ND*	4.45	*ND*	*ND*	*ND*	7.33	9.85

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-06***															
Apr-2015	*0.25 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	3.26	*ND*	*ND*	*ND*	6	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.1	*ND*	*ND*	*ND*	*12.6 J*	6.3
May-2016	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	3.3	*ND*	*ND*	*ND*	4.7	5.5
Oct-2016	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	2.9	*ND*	*ND*	*ND*	6.3	7.7
May-2017	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J,B*	*ND*	3	*ND*	*ND*	*ND*	5.1	5.7
Oct-2017	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	3.9	*ND*	*ND*	*ND*	6.8	8
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.2	*ND*	*ND*	*ND*	6.5	4.5
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.3	*ND*	*ND*	*ND*	11.5	9.2 CLN3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	6.9	8.3 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	7.5	4.6
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	3.4	2.3
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	4.3	2.1
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.19	*ND*	*ND*	*ND*	*1.48 J*	*3.62 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	9.8	6.8
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.2	*ND*	*ND*	*ND*	7	5.3

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-06***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*NA*
Aug-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	2.8	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*0.5 J*	3	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	**7.4**	*ND*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	3	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	4	*ND*	*ND*	*ND*	*ND*	1	3	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*0.7 J*	2.3	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*0.9 J*	1.9	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	2	*ND*	*NA*	3.7	*ND*	*ND*	*NA*	*NA*	1.5	1.4	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	1.7	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*0.9 J*	1.2	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	1.3	*ND*	*NA*	2.9	*ND*	*ND*	*NA*	*NA*	*1 J*	1.4	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	3.2	*ND*	*ND*	**5.8**	*ND*	*ND*	*ND*	*ND*	2.1	2.6	*ND*	1.1	*NA*
Apr-2001	*ND*	*ND*	*0.5 J*	*NA*	3.3	*0.5 J*	*ND*	**5.2**	*ND*	*ND*	*ND*	*ND*	1.9	2.1	*ND*	1.1	*NA*
Sep-2001	*ND*	*ND*	*0.7 J*	*NA*	**7.3**	*0.8 J*	*ND*	**8.1**	*ND*	*ND*	*ND*	*ND*	2.8	2.5	*ND*	1.3	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	**6.9**	*ND*	*ND*	4.2	*ND*	*ND*	*ND*	*ND*	1.8	2.1	*ND*	1	*NA*
Sep-2002	*ND*	*ND*	1.5	*NA*	**24**	3.5	*ND*	**18**	*ND*	*ND*	*ND*	*ND*	**5.1**	6.9	*ND*	**2.5**	*NA*
Mar-2003	*ND*	*ND*	*0.6 J*	*NA*	**9.9**	*0.7 J*	*ND*	**9.9**	*ND*	*ND*	*ND*	*ND*	3	2.5	*ND*	1.2	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-06*															
Oct-2003	ND	ND	1.1	NA	**17**	1.2	ND	**15**	ND	ND	ND	ND	4.5	3.6	ND	**2.7**	NA
Apr-2004	ND	ND	0.6 J	NA	0.6 J	0.6 J	ND	**12**	ND	ND	ND	ND	3.5	2.5	ND	1.9	NA
Oct-2004	ND	ND	ND	NA	4.9	ND	ND	**5.7**	ND	ND	ND	ND	2.1	2.5	ND	1	NA
Apr-2005	ND	ND	ND	ND	2.9	ND	ND	**5.5**	ND	ND	ND	ND	1.7	1.1	ND	0.7 J	NA
Oct-2005	ND	ND	ND	ND	2.2	ND	ND	**6.9**	ND	ND	ND	ND	2.3	1.1	ND	1	NA
Mar-2006	ND	ND	ND	ND	2.6	1	ND	**6.4**	ND	ND	ND	ND	2.1	1.5	ND	1.1	NA
Sep-2006	ND	ND	ND	ND	1.7	ND	ND	**7.9**	ND	ND	ND	ND	2.9	0.7 J	ND	ND	NA
Mar-2007	ND	ND	ND	ND	4.1 R	ND	ND	**5.6**	ND	ND	ND	ND	2.2	1.3	ND	ND	NA
Sep-2007	ND	ND	0.5 J	ND	4.7	ND	ND	**6.9**	ND	ND	ND	ND	3.1	2	ND	1.1	NA
Mar-2008	ND	ND	ND	ND	2	ND	ND	**5.4**	ND	ND	ND	ND	2.3	1.4	ND	ND	NA
Sep-2008	ND	ND	ND	ND	3.9	ND	ND	**5.7**	ND	ND	ND	ND	2.3	1.2	ND	0.7 J	NA
Mar-2009	ND	ND	ND	ND	4.5	ND	ND	5	ND	ND	ND	ND	2	0.8 J	ND	0.5 J	NA
Oct-2009	ND	ND	ND	ND	**5.5**	ND	ND	4.8	ND	ND	ND	ND	2.1	0.8 J	ND	ND	NA
Mar-2010	ND	ND	ND	ND	**6.2**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	4.3	ND	ND	4.7	ND	ND	ND	ND	ND	0.7 J	ND	ND	NA
Apr-2011	ND	ND	ND	ND	**6.6**	ND	ND	**5.6**	ND	ND	ND	ND	2.2	ND	ND	0.6 J	NA
Sep-2011	ND	ND	ND	ND	2.1	ND	ND	3.7	ND	ND	ND	ND	1.5	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	2	ND	ND	4.3	ND	ND	ND	ND	1.6	0.5 J	ND	0.9 J	NA
Sep-2012	ND	ND	ND	ND	3.52	ND	ND	**5.6**	ND	ND	ND	ND	2.5	0.63 J	ND	0.48 J	ND
Mar-2013	ND	0.58 J,B	ND	ND	4.91	ND	ND	**6.59**	ND	ND	ND	ND	3.32	ND	ND	0.93 J	ND
Oct-2013	ND	ND	ND	ND	2.79	0.19 J	ND	4.43	ND	ND	ND	ND	2.73	1.25	ND	0.41 J	ND
Mar-2014	ND	ND	ND	ND	2.49	ND	ND	**5.1**	ND	ND	ND	ND	2.43	1.04	ND	0.35 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-06*															
Oct-2014	ND	ND	ND	ND	2.61	ND	ND	4.99	ND	ND	ND	ND	2.43	0.76 J	ND	0.24 J	ND
Apr-2015	ND	ND	ND	ND	2.5	ND	ND	3.81	ND	ND	ND	ND	1.96	0.66 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.7	ND	ND	3.9	ND	ND	ND	ND	2.1	0.7 J	ND	ND	ND
May-2016	ND	ND	ND	ND	2.2	ND	ND	3.5	ND	ND	ND	ND	1.9	ND	ND	0.2 J	ND
Oct-2016	ND	ND	ND	ND	2.6	ND	ND	3.8	ND	ND	ND	ND	1.8	0.8 J	ND	0.3 J	ND
May-2017	ND	ND	ND	ND	NA	ND	ND	3.9	ND	ND	ND	ND	1.7	0.3 J	ND	0.2 J	ND
Oct-2017	ND	ND	ND	ND	1.8	ND	ND	4.2	ND	ND	ND	ND	2	0.8 J	ND	0.2 J	ND
May-2018	ND	ND	ND	ND	2.4 B	ND	ND	1.7	ND	ND	ND	ND	1.4	0.61 J	ND	ND	NA
Nov-2018	ND	ND	ND	ND	3.6	ND	ND	3	ND	ND	ND	ND	1.9	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	2.5	ND	ND	1.9	ND	ND	ND	ND	1.3	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	2.4	ND	ND	1.5	ND	ND	ND	ND	1.2	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.722 J	ND	ND	1.43	ND	ND	ND	ND	1.07	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	1.4	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	1.3	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-10A***											
Nov-1993	11	11	0.3	ND	18.8	2.6	ND	5.54	108	4.2	18	16.7
Apr-1994	7	7	0.2	ND	19.9	2.8	ND	5.26	112	3.1	91	21.05
Apr-1995	ND	ND	ND	ND	21.1	3.3	ND	5.1	120	5.1	44	18.8
Apr-1997	ND	10	ND	ND	27	2.5	ND	NA	NA	12	79	24
Oct-1997	5	5	0.21	ND	20.6	3.11	ND	7.8	149.8	3.17	51	22
Apr-1998	4	4	ND	ND	19.8	2.41	ND	5.26	162.2	5.6	62	27
Apr-1999	1	1	0.19	ND	18.2	2.34	ND	5.15	142.8	4	81	25
Oct-1999	6	6	0.11	ND	19.2	2.95	ND	5.68	148.1	5.86	98	25
Apr-2000	4	ND	ND	ND	26.2	3.28	ND	5.62	115	5.79	86	24
Oct-2000	6.6	NA	ND	ND	26.2	2.76	ND	5.63	141.8	4.79	93	28.9
Apr-2001	4.1	NA	ND	ND	25	2.9	ND	NA	NA	15.3	85	28.1
Sep-2001	5.7	5.7	ND	ND	24.1	3.18	ND	5.35	131	10.2	91	26.1
Mar-2002	4.6	4.6	ND	ND	41.7	3.23	ND	5.2	159.5	8.1	99	27.5
Sep-2002	4.2	4.2	ND	ND	32.1	2.73	ND	5.2	157.3	6.23	80	25.4
Mar-2003	4.4	4.4	ND	ND	29.2	2.27	ND	5.2	164.5	10.7	101	25
Oct-2003	5.1	5.1	ND	ND	26.9	2.62	ND	5.2	169.1	5.07	73	24.4
Apr-2004	5.9	5.9	ND	ND	24.2	2.61	ND	5.1	141.6	5.56	134	25.8
Oct-2004	5.9	5.9	ND	ND	22.5	2.47	ND	5.2	142	6.46	79	15.4
Apr-2005	6.1	6.1	ND	ND	22.3	2.41	ND	5.1	136.2	7.48	94	25.9
Oct-2005	6.1	6.1	0.21	ND	31.2	1.92	ND	4.7	126.6	8.34	112	21.1
Mar-2006	5.7	5.7	ND	ND	29.7	1.99	ND	5.3	136.2	8.1	79	20.8
Sep-2006	5.5	5.5	ND	ND	29.7	1.8	ND	5.1	129.4	8.63	105	21.5
Mar-2007	5.9	5.9	ND	ND	31.2	2.35	ND	5	123.9	6.69	72	20.8
Sep-2007	6.1	6.1	ND	ND	28.4	2	ND	5.2	113.2	10.7	90	21.6
Mar-2008	5.7	5.7	ND	ND	31	1.6	ND	5.2	128.2	9	107	21.3
Sep-2008	6.5	6.5	ND	ND	32.1	1.76	ND	4.8	116.7	6.1	112	21.6
Mar-2009	7	7	ND	ND	35.8	1.53	ND	4.9	138.9	5.17	101	22.5
Oct-2009	5.7	5.7	ND	ND	39.8	1.44	ND	4.9	138.7	5.45	95	24.3
Apr-2010	5.4	5.4	ND	ND	45.1	1.41	ND	4.5	139.1	6.43	73	24.6
Oct-2010	6	6	ND	ND	46	1.46	ND	4.8	143	5.77	117	26.7
Apr-2011	4.5	4.5	ND	ND	48	1.38	ND	4.7	154.6	5.68	117	26
Sep-2011	4.7	4.7	0.25	ND	47.6	1.51	ND	5.3	162.7	5.5	120	25.8
Mar-2012	4.6	4.6	ND	ND	45.7	1.48	ND	4.2	160.8	6.59	94	25.3
Sep-2012	4.96	4.96	ND	ND	48.5	1.48	ND	4.1	175.1	8.12	121	26.7
Mar-2013	4.64	4.64	ND	ND	42.2	1.7	ND	4.3	155.9	6.58	102	25.2
Oct-2013	4.8	4.8	ND	ND	43.2	1.65	ND	4.1	158	7.02	94	24.8
Mar-2014	3.84	3.84	ND	ND	48.8	1.49	ND	5.2	155.3	8.62	114	22.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-10A***										
Oct-2014	*ND*	*ND*	*ND*	*ND*	45.7	1.81	*ND*	4.8	148.1	6.76	102	25.5
Apr-2015	4.64	4.64	*ND*	*ND*	44.3	1.93	*ND*	4.6	175.1	8.7	104	25.9
Nov-2015	3.76	3.76	*ND*	*ND*	44.6	1.99	*ND*	5.1	199	8.64	109	28.6
May-2016	2.88	2.88	*ND*	*ND*	44.1	1.83	*ND*	5.2	259	9.58	113	28.3
Oct-2016	2.84	2.84	*ND*	*ND*	42.3	*NA*	*NA*	5.3	254	7.49	115	25.8
May-2017	2.64	2.64	*ND*	*ND*	43	1.93	*ND*	5	275	8.4	102	25.3
Oct-2017	2.04	2.04	*ND*	*ND*	44.5	1.98	*ND*	5.5	247	8.93	103	25.6
May-2018	*2 JB*	*ND*	*ND*	*5.8 J*	45.9	0.33	*ND*	4.8	253	*9 J*	112	27.4
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	42.6	1.9	*ND*	4.72	178.6	*9.3 J*	98	26.3
May-2019	*ND*	*NA*	*ND*	*ND*	44.3	2	*ND*	4.57	152.2	*ND*	90	26.5
Oct-2019	*ND*	*NA*	*ND*	*8.2 J*	44.9	2	*ND*	4.51	203.9	12.1	85	28.3
May-2020	*1 J*	*NA*	*ND*	*ND*	43.5	2.4	*ND*	4.43	189.7	10.8	118	28.2
Oct-2020	*ND*	*NA*	*ND*	*ND*	41.5	2.3	*ND*	4.34	177.9	10.7	95	29.8
Apr-2021	*2 J5c*	*NA*	*ND*	*ND*	45	2.2	*ND*	4.7	213	*8.6 J*	106	28
Oct-2021	*ND*	*NA*	*ND*	*ND*	43.3	2.2	*ND*	4.84	251.8	*9.3 J*	93	28.9
May-2022	*2 J*	*NA*	*ND*	*ND*	39.2	2	*ND*	4.67	225.6	*8.1 J*	85	28.9 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-10A***													
Nov-1993	NA	ND	ND	NA	ND	3.4	NA	0.006	NA	ND	0.18	0.28	ND	2	NA
Apr-1994	NA	ND	ND	NA	ND	3.6	NA	ND	NA	ND	0.63	0.09	ND	2.93	NA
Apr-1995	ND	ND	0.6	ND	ND	2.9	NA	ND	0.02	ND	0.3	0.06	ND	2.8	NA
Oct-1996	ND	ND	0.066	ND	ND	5.9	5.6	ND	ND	ND	ND	ND	ND	2.8	2.9
Apr-1997	ND	ND	0.065	ND	ND	7	6	ND	ND	ND	ND	ND	0.002	3	2.6
Oct-1997	ND	ND	0.056	ND	ND	4.98	4.82	ND	ND	ND	0.226	ND	ND	3.08	3.03
Apr-1998	ND	ND	0.057	ND	ND	5.45	4.88	ND	ND	ND	0.248	ND	ND	3.25	3.18
Apr-1999	ND	ND	0.061	ND	ND	4.86	4.81	ND	ND	ND	0.099	ND	ND	3.04	2.92
Oct-1999	ND	ND	0.074	ND	ND	5.75	5.02	ND	ND	ND	0.164	ND	ND	3.14	2.84
Apr-2000	ND	ND	0.068	ND	ND	4.57	4.34	ND	ND	ND	ND	ND	ND	3.14	2.96
Oct-2000	ND	ND	0.075	ND	ND	6.1	5.79	ND	0.011	ND	0.389	ND	ND	3.31	3.11
Apr-2001	ND	ND	0.077	ND	ND	5.39	NA	ND	0.012	ND	0.184	NA	ND	3.57	NA
Sep-2001	ND	ND	0.074	ND	ND	5.23	5.11	ND	ND	ND	0.159	ND	ND	3.17	3.12
Mar-2002	ND	ND	0.073	ND	ND	5.76	5.44	ND	ND	ND	0.068	ND	ND	3.18	3.13
Sep-2002	ND	ND	0.075	ND	ND	5.09	4.53	ND	ND	0.016	0.073	ND	ND	3.1	3.04
Mar-2003	ND	ND	0.081	ND	ND	4.64	4.35	ND	ND	ND	ND	ND	ND	3.27	3.07
Oct-2003	ND	ND	0.078	ND	ND	4.47	4.05	ND	ND	0.012	0.074	ND	ND	3.2	3.12
Apr-2004	ND	0.002	0.081	ND	ND	4.79	4.68	ND	0.012	ND	0.125	ND	ND	3.38	3.25
Oct-2004	ND	ND	0.085	ND	ND	4.7	4.55	ND	0.01	ND	ND	ND	ND	3.46	3.34
Apr-2005	ND	0.002	0.084	ND	ND	4.98	5.09	ND	ND	ND	0.14	ND	ND	3.26	3.28
Oct-2005	ND	ND	0.066	ND	ND	4.44	3.96	ND	ND	ND	0.18	ND	ND	2.44	2.26

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-10A***													
Mar-2006	ND	ND	0.061	ND	ND	4.23	4.14	ND	ND	ND	ND	ND	ND	2.49	2.5
Sep-2006	ND	ND	0.057	ND	ND	4.68	4.8	ND	ND	ND	ND	ND	ND	2.38	2.58
Mar-2007	ND	ND	0.06	ND	ND	4.6	4.73	ND	ND	ND	ND	ND	ND	2.27	2.44
Sep-2007	ND	ND	0.061	ND	ND	4.86	4.71	ND	ND	ND	ND	ND	ND	2.31	2.32
Mar-2008	ND	0.002	0.063	ND	ND	4.73	4.47	ND	ND	ND	ND	ND	ND	2.31	2.19
Sep-2008	ND	ND	0.06	ND	ND	4.73	4.43	ND	ND	ND	ND	ND	ND	2.37	2.22
Mar-2009	ND	ND	0.061	ND	ND	5.15	4.92	ND	ND	ND	ND	ND	ND	2.32	2.25
Oct-2009	ND	ND	0.072	ND	ND	5.24	5.03	ND	ND	ND	0.065	ND	ND	2.72	2.62
Apr-2010	ND	ND	0.076	ND	ND	5.33	5.13	ND	ND	ND	ND	ND	ND	2.75	2.67
Oct-2010	ND	ND	0.072	ND	ND	5.56	5.48	ND	0.011	ND	ND	ND	ND	3.11	3.03
Apr-2011	ND	ND	0.087	ND	ND	5.41	4.57	ND	0.01	ND	0.059	ND	ND	3.3	2.66
Sep-2011	ND	ND	0.083	ND	ND	5.36	5.33	ND	ND	ND	0.053	ND	ND	3.01	2.99
Mar-2012	ND	ND	0.081	ND	ND	4.97	5.1	ND	ND	ND	ND	ND	ND	3.14	3.24
Sep-2012	ND	ND	0.0803	0.000438 J	ND	5.04	4.89	0.0019 J	0.01	0.0034 J	0.0379 J	0.051	ND	3.43	3.26
Mar-2013	ND	ND	0.0846	0.000432 J	ND	4.96	4.78	0.0033 J	0.0101	0.0042 J	0.0142 J	0.0094 J	ND	3.11	2.94
Oct-2013	ND	ND	0.0847	0.000355 J	0.000148 J	4.66	4.35	0.0037 J	0.0105	0.0046 J	ND	ND	ND	3.19	2.88
Mar-2014	0.00033 J	ND	0.0719	0.000412 J	0.000127 J	4.6	4.43	0.0025 J	0.0097 J	0.0024 J	0.0374 J	0.01 J	ND	2.71	2.69
Oct-2014	0.000857 J	ND	0.0862	0.000448 J	0.00013 J	4.96	5.08	0.000907 J	0.0106	0.0047 J	ND	ND	ND	3.19	3.27
Apr-2015	0.000433 J	ND	0.0874	0.000393 J	0.000126 J	4.99	4.9	0.0015 J	0.0116	0.0044 J	0.0426 J	0.0169 J	ND	3.26	3.21
Nov-2015	0.000357 J	ND	0.093	0.000553 J	0.000155 J	5.87	5.7	0.0011 J	0.0118	0.0038 J	ND	0.0514	0.000188 J	3.39	3.34
May-2016	ND	ND	0.0921	0.00041 J	0.00022 J	5.45	4.52	0.0016 J	0.0118	0.0035 J	ND	ND	ND	3.56	3.17
Oct-2016	ND	ND	0.095	0.00038 J	ND	5.06	5.21 J+	0.0029 J	0.0135	0.0032 J	0.0705 J	ND	0.00013 J	3.2	3.47 J+
May-2017	ND	ND	0.0907	0.00042 J	ND	4.7	5.32	0.0035 J	0.0239	0.004 J	0.102 J	ND	0.0003 J	3.28	3.31
Oct-2017	ND	ND	0.0849	0.00046 J	0.0002 J	5.27	5.07	ND	0.0117	0.0036 J	ND	ND	ND	3.02	3.15

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-10A***													
May-2018	*ND*	*ND*	*0.0891 J*	*ND*	*0.0002 J*	5.4	5.2	*0.0054 J*	*0.0126 J*	*ND*	0.03	*ND*	*ND*	3.4	3.3
Nov-2018	*ND*	*ND*	0.085	0.00062	*0.00019 J*	5.3	5.2	*0.0064 J*	0.011	0.0047	0.085	0.07	*0.000068 J*	3.2	3.1
May-2019	*ND*	*ND*	0.081	0.00055	*ND*	5.4	5.5	*ND*	0.01	0.004	*ND*	0.037	*ND*	3.2	3.3
Oct-2019	*0.00012 J*	*0.00021 J*	0.089	0.00052	*0.0003 J*	5.8	5.5	0.0078	0.01	0.0047	*0.05 J*	0.049	*0.000069 J*	3.4	3.3
May-2020	*ND*	*ND*	0.087	0.00052	*0.00016 J*	5.7	5.6	*0.005 J*	0.012	0.0045	*0.028 J*	*0.02 J*	*ND*	3.4	3.3
Oct-2020	*ND*	*ND*	0.087	*0.0006 J*	*ND*	5.9	5.4	*0.0034 J*	0.012	*0.0074 J*	*0.038 J*	0.027	*ND*	3.6	3.2
Apr-2021	*ND*	*ND*	0.093	*0.00055 J*	*ND*	5.6	5.7	*0.003 J*	0.012	*0.0049 J*	*ND*	*ND*	*ND*	3.4	3.6
Oct-2021	*ND*	*ND*	0.095	0.00061	*ND*	5.6	6.1	0.0032	0.015	0.0057	*0.048 J*	*0.033 J*	*0.000037 J*	3.6	3.8
May-2022	*ND*	*ND*	0.094	0.00052	*ND*	5.6	5.6	0.0042	0.014	0.0054	0.097	0.082	*ND*	3.6	3.5

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-10A*												
Nov-1993	0.05	NA	ND	NA	2.7	NA	ND	NA	9.5	NA	NA	NA	0.02
Apr-1994	0.04	NA	ND	NA	2.39	NA	ND	NA	10.8	NA	NA	NA	0.07
Apr-1995	0.02	NA	ND	ND	2	NA	ND	ND	10.8	NA	ND	0.2	0.06
Oct-1996	0.028	0.026	NA	ND	ND	ND	ND	ND	13	13	ND	ND	0.53
Apr-1997	0.035	0.026	ND	ND	3.4	3.5	ND	ND	16	14	ND	ND	0.048
Oct-1997	0.041	0.03	0.0004	ND	2.43	1.52	ND	ND	12.7	12.7	ND	ND	0.021
Apr-1998	0.038	0.032	ND	ND	2.52	2.3	ND	ND	12.5	12.3	ND	ND	0.016
Apr-1999	0.035	0.03	NA	ND	2.29	2.18	ND	ND	12.6	12.2	ND	ND	0.013
Oct-1999	0.046	0.031	NA	0.02	2.61	2.37	ND	ND	14.1	12.7	ND	ND	0.013
Apr-2000	0.037	0.033	NA	ND	1.16	1.68	ND	ND	13.6	12.9	ND	ND	0.01
Oct-2000	0.06	0.035	NA	ND	2.44	2.27	ND	ND	14.8	14.1	ND	ND	0.013
Apr-2001	0.05	NA	NA	ND	2.48	NA	ND	ND	15.4	NA	ND	ND	0.015
Sep-2001	0.044	0.034	NA	0.011	2.17	2.11	ND	ND	14.7	14.2	ND	ND	0.014
Mar-2002	0.04	0.036	NA	0.012	3.27	2.47	ND	ND	17.8	17	ND	ND	0.02
Sep-2002	0.045	0.039	NA	0.012	3.36	2.92	ND	ND	16.4	16	ND	ND	0.016
Mar-2003	0.045	0.04	NA	ND	1.99	2.32	ND	ND	16.9	15.6	ND	ND	0.011
Oct-2003	0.049	0.047	NA	ND	4.57	2.88	ND	ND	15.8	15	ND	ND	0.011
Apr-2004	0.062	0.047	ND	ND	2.71	2.53	ND	ND	14.2	14.5	ND	ND	ND
Oct-2004	0.057	0.054	ND	ND	2.54	2.47	ND	ND	14.4	13.6	ND	ND	ND
Apr-2005	0.05	0.046	ND	ND	2.19	2.17	ND	ND	14.6	15.5	ND	ND	ND
Oct-2005	0.037	0.028	ND	ND	2.26	2.04	ND	ND	15.9	14.2	ND	ND	0.012
Mar-2006	ND	ND	ND	ND	2.14	2.17	ND	ND	16.8	15.9	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-10A***												
Sep-2006	0.027	0.034	*ND*	*ND*	2.3	2.33	*ND*	*ND*	16.5	14.9	*ND*	*ND*	*ND*
Mar-2007	0.024	0.029	*ND*	*ND*	2.18	2.15	*ND*	*ND*	16.8	15.6	*ND*	*ND*	0.011
Sep-2007	0.025	0.027	*ND*	*ND*	2.07	1.89	*ND*	*ND*	17.1	15.7	*ND*	*ND*	0.011
Mar-2008	0.025	0.024	*ND*	*ND*	2.19	2.04	*ND*	*ND*	18.6	16.6	*ND*	*ND*	0.011
Sep-2008	0.025	0.024	*ND*	*ND*	2.04	1.93	*ND*	*ND*	16.5	15.5	*ND*	*ND*	0.01
Mar-2009	0.026	0.025	*ND*	*ND*	2.14	2.09	*ND*	*ND*	17.4	17	*ND*	0.012	*ND*
Oct-2009	0.03	0.029	*ND*	*ND*	2.13	2.04	*ND*	*ND*	19.7	19.1	*ND*	*ND*	0.014
Apr-2010	0.032	0.029	*ND*	0.011	2.48	2.33	*ND*	*ND*	21.5	20.5	*ND*	*ND*	0.014
Oct-2010	0.038	0.037	*ND*	0.014	2.46	2.36	*ND*	*ND*	22.3	21.9	*ND*	*ND*	0.018
Apr-2011	0.042	0.04	*ND*	0.014	2.41	2.06	*ND*	*ND*	22.3	19	*ND*	*ND*	0.014
Sep-2011	0.041	0.039	*ND*	0.012	2.48	2.41	*ND*	*ND*	22.3	22	*ND*	*ND*	0.015
Mar-2012	0.041	0.043	*ND*	*ND*	2.34	2.41	*ND*	*ND*	22.3	22.9	*ND*	*ND*	0.015
Sep-2012	0.0422	0.0415	*0.000024 J*	0.0117	2.58	2.43	*ND*	*ND*	25.8	24.9	*0.0011 J*	*ND*	0.0128
Mar-2013	0.0507	0.0489	*0.000052 J*	0.0113	2.25	2.2	*0.000642 J*	*ND*	20.8	19.5	*ND*	*ND*	0.0218
Oct-2013	0.0521	0.0442	*ND*	0.0115	2.46	2.25	*0.000744 J*	*ND*	22.5	21.6	*0.000099 J*	*0.0016 J*	0.0246
Mar-2014	0.0489	0.0513	*ND*	*0.0108 J*	2.18	2.13	*ND*	*ND*	20.2	18.9	*ND*	*ND*	0.0163
Oct-2014	0.053	0.0518	*0.000023 J*	0.0111	2.37	2.48	*0.0018 J*	*ND*	22.9	24.1	*0.0017 J*	*ND*	0.018
Apr-2015	0.0569	0.0564	*0.000043 J*	0.0121	2.38	2.33	*0.0017 J*	*ND*	23.7	23.4	*ND*	*ND*	0.0197
Nov-2015	0.0577	0.0559	*ND*	0.0124	2.63	2.56	*0.001 J*	*ND*	26.3	25.6	*0.000146 J*	*ND*	0.0165
May-2016	0.0622	0.0596	*ND*	0.0119	2.62	2.45	*0.00079 J*	*ND*	26.9	23.9	*ND*	*ND*	*0.016 J,B*
Oct-2016	*0.0707 J+*	*0.0636 J+*	*ND*	0.0139	2.53	2.62	0.0008	*ND*	22.2	23.6	*ND*	*ND*	*0.015 J*
May-2017	0.135	0.0595	*ND*	0.0133	2.38	2.42	*0.00073 J*	*ND*	22.5	23.2	*ND*	*ND*	*0.0157 J*
Oct-2017	0.0555	0.0538	*ND*	0.0122 B	2.15	2.27	*0.00051 J*	*ND*	21.1	22.8	*ND*	*ND*	*0.0173 J*
May-2018	0.063	0.0558	*ND*	*0.022 J*	*2.5 J*	*2 J*	*ND*	*ND*	26.9	25.7	*ND*	*ND*	0.0227

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-10A***												
Nov-2018	0.053	0.05	*ND*	0.015	*2.3 J*	*2.2 J*	*0.00074 J*	*ND*	23	22.8	*ND*	*ND*	0.021
May-2019	0.058	0.055	*ND*	0.012	*ND*	*ND*	*ND*	*ND*	22.5	21.5	*ND*	0.0033	0.018
Oct-2019	0.073	0.06	*ND*	0.013	*2.2 J*	*ND*	*0.00055 J*	*ND*	24.5	24.7	*ND*	*ND*	0.024
May-2020	0.06	0.056	*ND*	0.013	*2.6 J*	*1.8 J*	*0.00082 J*	*ND*	25	22.3	*ND*	*ND*	0.02
Oct-2020	0.058	0.055	*ND*	0.013	*ND*	*2.1 J*	*ND*	*ND*	23.6	21.9	*ND*	*0.001 J*	*0.025 J*
Apr-2021	0.059	0.061	*0.00006 J*	0.015	2.3	2.3	*ND*	*ND*	23.3	24.6	*ND*	*ND*	0.021
Oct-2021	0.06	0.064	*ND*	0.016	2.1	2.1	*0.0012 J*	*ND*	22.9	24.1	*0.000039 J*	*ND*	0.022
May-2022	0.064	0.061	*ND*	0.016	2.3	2.3	*0.0012 J*	*ND*	23.9	23.6	*ND*	*ND*	0.021

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-10A***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	28	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-10A*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-10A*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.9 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.9 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-10A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-10A***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	0.63 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.32 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.27 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.21 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.22 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-10A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.163 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-10A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-10A***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.14 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-10A***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.3 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-14***											
Nov-1993	7	7	ND	ND	2.3	ND	ND	5.2	20.2	ND	10	1.41
Apr-1994	ND	ND	ND	ND	2	ND	ND	4.99	16.5	ND	38	ND
Aug-1994	9.5	9.5	ND	ND	2.2	0.3	ND	4.9	25.2	2.6	ND	1.69
Sep-1994	10	10	ND	ND	2.3	0.2	ND	5.9	25.6	2.4	18	1.6
Nov-1994	ND	ND	ND	ND	2.2	ND	ND	5.4	18.4	ND	ND	1.5
Apr-1995	ND	ND	0.3	ND	2.1	ND	ND	5.3	20.3	ND	22	1.4
Apr-1997	ND	5	ND	ND	3	0.06	ND	NA	NA	ND	32	5.8
Oct-1997	3	3	0.23	ND	1	ND	ND	7.68	21.1	ND	ND	11
Apr-1998	2	2	0.52	ND	1.92	0.12	ND	6.51	20.1	ND	16	1.7
Apr-1999	9	9	0.28	ND	3.77	ND	ND	6.11	35.1	ND	38	2.6
Oct-1999	4	4	0.21	ND	2.56	ND	ND	5.62	28.2	ND	29	2
Apr-2000	13	13	ND	ND	4.29	ND	ND	7.28	28	ND	20	3.7
Oct-2000	4	NA	ND	11	3.01	ND	ND	6.16	45.9	5.5	26	2.77
Apr-2001	2	NA	ND	ND	2.4	ND	ND	NA	NA	ND	28	3.43
Sep-2001	32	32	1.1	109	3.88	ND	ND	6.09	43	ND	45	2.52
Mar-2002	ND	ND	ND	ND	3.44	ND	ND	6	42	ND	ND	3.81
Sep-2002	2.8	2.8	ND	60	2.99	ND	ND	5.9	40.2	1.15	24	3.82
Mar-2003	3.5	3.5	ND	ND	31.9	ND	ND	5.8	34.2	7.67	22	2.43
Oct-2003	3.1	3	ND	ND	2.48	ND	ND	5.6	35.2	ND	15	2.86
Apr-2004	2.8	2.8	ND	ND	2.58	ND	ND	5.7	26.6	ND	37	3.02
Oct-2004	2.8	2.8	ND	ND	2.38	ND	ND	5.9	28.2	ND	31	3.22
Apr-2005	2.7	2.7	ND	ND	2.62	ND	ND	5.6	24.6	ND	33	2.1
Oct-2005	3.2	3.2	0.23	ND	3.47	0.08	ND	4.7	16.8	ND	40	3.14
Mar-2006	4.2	4.2	ND	ND	3.49	0.1	ND	6.7	19.8	ND	30	2.18
Sep-2006	4.4	4.4	ND	ND	3.79	ND	ND	5.2	23.7	ND	ND	2.66
Mar-2007	9.7	9.7	0.6	ND	3.47	1.9	ND	5.6	32.1	ND	ND	2.55
Sep-2007	8.5	8.5	0.29	ND	10.3	ND	ND	6.3	38.9	ND	40	2.47
Mar-2008	8.9	8.9	ND	ND	4.4	ND	ND	5.9	46.2	ND	18	1.36
Sep-2008	3.2	3.2	ND	19	5.01	ND	ND	5.6	37.5	ND	15	2.9
Mar-2009	21	21	ND	ND	5.18	ND	ND	5.8	56.9	ND	15	3.76
Oct-2009	13	13	ND	ND	5.95	ND	ND	5.5	50.9	ND	39	5.29
Apr-2010	18.9	18.9	ND	ND	6.5	ND	ND	5.1	57.6	ND	46	27.2
Oct-2010	19	19	ND	ND	7.52	ND	ND	4.9	46.4	ND	59	5.99
Apr-2011	6.7	6.7	ND	ND	6.4	ND	ND	4.6	34.7	ND	25	4.7
Sep-2011	8.9	8.9	ND	ND	6.57	ND	ND	5.8	47.8	ND	43	5.24
Mar-2012	7.7	7.7	ND	ND	5.75	ND	ND	4.7	33.8	ND	ND	6.78
Sep-2012	7.76	7.76	ND	ND	5.16	0.115	ND	4.5	31.8	ND	19	3.53

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-14***											
Mar-2013	9.68	9.68	*ND*	*ND*	5.46	0.107	*ND*	4.1	37.1	*0.385 J*	16	3.62
Oct-2013	9.6	9.6	*ND*	*ND*	5.5	0.101	*ND*	4.2	40.5	*ND*	*ND*	3.04
Mar-2014	10.7	10.7	*ND*	*ND*	5.75	0.113	*ND*	5.8	35.9	*ND*	32	3.23
Oct-2014	5.5	5.5	*ND*	*ND*	6.06	0.136	*ND*	5.3	38.3	*ND*	*ND*	3.86
Apr-2015	7.52	7.52	*ND*	*ND*	5.98	0.105	*ND*	5.2	48.2	*ND*	30	4.07
Nov-2015	6.68	6.68	*ND*	*ND*	5.88	0.129	*ND*	5.8	55.3	*ND*	*19 J*	4.08
May-2016	7.24	7.24	*ND*	*ND*	6.39	0.12	*ND*	6	67.4	*ND*	*21 J*	4.1
Oct-2016	7.68	7.68	*ND*	*5 J*	6.46	*NA*	*NA*	5.9	73.2	*ND*	31	4
May-2017	7.28	7.28	*ND*	*ND*	7.17	0.131	*ND*	5	68.5	*ND*	*24 J*	4.2
Oct-2017	14	14	*ND*	*ND*	7.41	0.118	*ND*	6.1	92.5	*ND*	*21 J*	4.5
May-2018	34	34	*ND*	*ND*	8.6	0.1	*ND*	6.2	96.8	*ND*	*ND*	6.8
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	9.8	*ND*	0.02	5.96	100.7	*ND*	16	6.7
May-2019	*ND*	*NA*	*ND*	*ND*	10.1	*ND*	0.016 H1	5.89	71.3	*ND*	24	6.2
Oct-2019	*2.5 JH1*	*NA*	*ND*	*10.4 J*	6.9	*0.053 J*	0.053 H1	6.09	81.5	*ND*	*ND*	5.7
May-2020	12	*NA*	*ND*	*ND*	8.1	*ND*	*0.0067 J*	5.3	71.1	*ND*	48	7.3
Oct-2020	*ND*	*NA*	*ND*	*ND*	8.4	*ND*	0.019 H1	5.26	74.7	*ND*	*ND*	7.1
Apr-2021	*1 J4c*	*NA*	*ND*	*ND*	8.8	*0.074 J*	*ND*	5.59	67.7	*ND*	30	6.9
Oct-2021	*8 J6c*	*NA*	*ND*	*6.1 JMH*	7.7	*ND*	*ND*	5.75	93.5	*ND*	*ND*	7.26
May-2022	*2 J2c*	*NA*	*ND*	*ND*	7.3	*ND*	0.024 MH	5.67	106	*ND*	14	8.4 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-14*													
Nov-1993	NA	ND	ND	NA	ND	0.2	NA	ND	NA	ND	8.8	2.7	ND	0.22	NA
Apr-1994	NA	ND	ND	NA	ND	ND	NA	ND	NA	ND	1.6	1	ND	ND	NA
Aug-1994	NA	ND	ND	NA	ND	0.33	NA	ND	NA	ND	5	3.9	ND	0.21	NA
Sep-1994	NA	ND	ND	NA	ND	0.22	NA	ND	NA	ND	6.2	4.9	ND	0.25	NA
Nov-1994	NA	ND	ND	NA	ND	0.25	NA	ND	NA	0.04	2.5	2.7	ND	0.2	NA
Apr-1995	ND	ND	0.7	ND	ND	0.2	NA	ND	ND	ND	2.4	1.3	ND	0.23	NA
Oct-1996	ND	ND	0.011	ND	ND	0.43	0.33	ND	ND	ND	5	0.48	ND	ND	ND
Apr-1997	ND	ND	0.014	ND	ND	0.32	0.48	ND	ND	ND	3.6	2.8	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	0.274	0.289	ND	ND	ND	10.2	3.66	ND	0.211	0.216
Apr-1998	ND	ND	ND	ND	ND	0.298	0.391	ND	ND	ND	16.2	2.8	ND	0.237	0.237
Apr-1999	ND	ND	0.012	ND	ND	0.447	0.436	ND	ND	ND	19.1	7.85	ND	0.364	0.345
Oct-1999	ND	ND	0.013	ND	ND	0.498	0.438	ND	ND	ND	12.7	9.24	ND	0.383	0.34
Apr-2000	ND	ND	0.013	ND	ND	0.747	0.442	ND	ND	0.008	15.1	8.34	ND	0.437	0.351
Oct-2000	ND	ND	0.018	ND	ND	0.5	0.458	ND	ND	ND	122	12.3	ND	0.369	0.35
Apr-2001	ND	ND	0.018	ND	ND	0.704	NA	ND	ND	ND	87	NA	0.003	0.405	NA
Sep-2001	ND	ND	0.106	ND	ND	1.01	0.5	0.02	ND	0.121	1140	10.3	**0.046**	0.543	0.371
Mar-2002	ND	ND	0.022	ND	ND	0.816	0.478	0.014	ND	0.015	118	9.94	0.007	0.431	0.368
Sep-2002	ND	ND	0.024	ND	ND	0.867	0.415	ND	ND	0.044	43.9	8.96	0.005	0.404	0.341
Mar-2003	ND	ND	0.017	ND	ND	0.427	0.429	ND	ND	0.017	48.7	3.58	0.004	0.331	0.311
Oct-2003	ND	ND	0.024	ND	ND	0.648	0.316	ND	ND	0.043	195	6.42	0.004	0.302	0.24
Apr-2004	ND	ND	0.014	ND	ND	0.603	0.311	ND	ND	ND	80.4	7.38	0.002	0.37	0.236

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14***													
Oct-2004	ND	ND	0.014	ND	ND	0.788	0.286	ND	ND	0.043	59.3	6.44	0.002	0.303	0.232
Apr-2005	ND	ND	0.012	ND	ND	0.36	0.363	ND	ND	ND	14.3	5.68	ND	0.287	0.267
Oct-2005	ND	ND	0.011	ND	ND	0.659	0.47	ND	ND	0.014	3.11	0.264	ND	0.363	0.321
Mar-2006	ND	ND	ND	ND	ND	0.269	0.231	ND	ND	ND	5.84	0.262	ND	0.367	0.357
Sep-2006	ND	ND	ND	ND	ND	0.454	0.448	ND	ND	ND	1.96	1.22	ND	0.371	0.369
Mar-2007	ND	ND	0.01	ND	ND	0.459	0.421	ND	ND	ND	21.9	6.27	ND	0.341	0.331
Sep-2007	ND	0.002	ND	ND	ND	0.421	0.394	ND	ND	ND	14.3	11.3	ND	0.346	0.33
Mar-2008	ND	ND	0.016	ND	ND	0.547	0.49	ND	ND	0.013	45.6	7.07	ND	0.435	0.382
Sep-2008	ND	ND	0.016	0.002	ND	0.495	0.292	0.012	ND	0.029	70.7	10.4	ND	0.393	0.306
Mar-2009	ND	ND	0.012	ND	ND	0.72	0.612	ND	ND	0.013	27.7	16.4	ND	0.477	0.494
Oct-2009	ND	ND	0.017	ND	ND	0.957	0.624	0.043	ND	0.066	39	10.2	ND	0.705	0.585
Apr-2010	ND	ND	0.018	ND	ND	0.974	0.76	ND	ND	ND	22	19.8	ND	0.707	0.568
Oct-2010	ND	0.003	0.016	ND	ND	0.985	0.927	0.02	ND	0.039	39.9	28.2	ND	0.857	0.82
Apr-2011	ND	ND	0.018	ND	ND	0.787	0.779	ND	ND	ND	23.3	18.5	ND	0.666	0.655
Sep-2011	ND	0.005	0.02	ND	ND	0.851	0.903	0.047	0.012	0.09	54.1	22.1	ND	0.741	0.728
Mar-2012	ND	ND	0.017	ND	ND	1.09	0.917	0.015	ND	0.032	29.6	20.4	ND	0.987	0.86
Sep-2012	ND	ND	0.0156	0.00008 J	ND	0.608	0.614	0.0021 J	0.0024 J	0.0028 J	5	4.43	ND	0.488	0.511
Mar-2013	ND	ND	0.0158	0.000123 J	ND	0.691	0.695	0.0026 J	0.0026 J	0.0038 J	13.7	5	ND	0.46	0.457
Oct-2013	ND	ND	0.0143	ND	ND	0.544	0.533	0.0024 J	0.0023 J	0.0016 J	5.94	6	ND	0.409	0.431
Mar-2014	0.000447 J	ND	0.0139	ND	ND	0.572	0.583	0.0021 J	0.0025 J	0.0065 J	16.8	5.61	ND	0.438	0.435
Oct-2014	0.000554 J	ND	0.0185	0.000226 J	0.000111 J	0.716	0.679	0.000749 J	0.003 J	0.0047 J	19.3	6.29	ND	0.504	0.493
Apr-2015	0.0011 J	ND	0.0186	ND	0.000104 J	0.726	0.767	0.0031 J	0.0034 J	0.0041 J	21.3	8.53	ND	0.547	0.586
Nov-2015	ND	0.004	0.0216	0.000682 J	0.000281 J	0.783	0.782	0.0016 J	0.0037 J	0.0171	69.1	7.37	0.00054 J	0.516	0.506
May-2016	ND	ND	0.0169	0.00011 J	ND	0.709	0.715	0.0012 J	0.003	0.0024 J	10.9	7.06	ND	0.564	0.512

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14***													
Oct-2016	*ND*	*ND*	0.0199	*0.00032 J*	*ND*	0.701	*0.727 J+*	*0.0013 J*	0.0036	0.0084	40.9	10.1	*0.00015 J*	0.544	*0.55 J+*
May-2017	*ND*	*ND*	0.0221	*0.00012 J*	*ND*	0.731	0.807	*0.00073 J*	0.0038	*0.0018 J*	8.84	9.11	*ND*	0.576	0.594
Oct-2017	*ND*	*ND*	0.0207	*0.00012 J*	*ND*	0.713	0.948	*ND*	0.0054	*0.0015 J*	10.4	11.4	*ND*	0.664	0.698
May-2018	*ND*	*ND*	0.026	*0.000097 J*	*0.000043 J*	1.2	1.1	*0.0018 J*	0.0077	0.006	21.4	18.3	*0.000044 JB*	*0.95 J*	*0.89 J*
Nov-2018	*ND*	*ND*	0.025	*0.000065 J*	*0.000045 J*	1.1	1.1	*0.002 J*	0.0075	0.0022	22.4	20	*0.00012 J*	*0.93 J*	*0.94 J*
May-2019	*ND*	*ND*	0.024	*ND*	*ND*	1.1	1.1	*ND*	0.0079	*ND*	21.2	16.6	*ND*	*ND*	*ND*
Oct-2019	0.00059	0.0034	0.053	0.0021	*0.00033 J*	1.1	1.1	0.016	0.011	0.065	251	15.7	*0.00051 J*	0.74	*0.84 J*
May-2020	*ND*	*ND*	0.027	*0.000072 J*	*ND*	1.3	1.2	*0.0041 J*	0.0061	*0.0015 J*	12.2	11.4	*ND*	1	*0.95 J*
Oct-2020	*ND*	*ND*	0.026	*ND*	*ND*	1.2	1.3	*0.006 J*	0.0052	*ND*	23	13.4	*ND*	0.99	1
Apr-2021	*ND*	*ND*	0.026	*0.00018 J*	*ND*	1.2	1.3	*0.0017 J*	0.0062	0.0052	20.4	7.9	*ND*	0.96	1.1
Oct-2021	*0.000063 JB*	*ND*	0.028	*0.00016 J*	*ND*	1.2	1.3	*0.0022 J*	0.0084	0.0033	26.6	8.5	*ND*	1	1.1
May-2022	*ND*	*ND*	0.037	0.0006	*ND*	1.3	1.3	0.015	0.011	0.022	60.3	12.1	*ND*	1.2	1.2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-14*												
Nov-1993	0.09	NA	ND	NA	0.29	NA	ND	NA	1.2	NA	NA	NA	ND
Apr-1994	0.029	NA	ND	NA	ND	NA	ND	NA	1.4	NA	NA	NA	ND
Aug-1994	0.06	NA	ND	NA	0.39	NA	ND	NA	0.94	NA	NA	NA	0.01
Sep-1994	0.08	NA	ND	NA	0.26	NA	ND	NA	1.1	NA	NA	NA	0.04
Nov-1994	0.07	NA	ND	NA	0.22	NA	ND	NA	0.91	NA	NA	NA	0.01
Apr-1995	0.02	NA	ND	ND	0.42	NA	ND	0.01	0.92	NA	ND	ND	0.03
Oct-1996	0.034	0.038	NA	ND	ND	ND	ND	ND	1.7	1.6	ND	ND	0.087
Apr-1997	0.062	0.055	**0.0045**	ND	1.8	ND	ND	ND	1.1	1.7	ND	ND	ND
Oct-1997	0.063	0.065	ND	ND	0.711	0.711	ND	ND	1.12	1.16	ND	ND	ND
Apr-1998	0.043	0.043	ND	ND	ND	0.566	ND	ND	1.16	1.16	ND	ND	ND
Apr-1999	0.091	0.091	NA	ND	ND	0.711	ND	ND	1.45	1.43	ND	ND	ND
Oct-1999	0.091	0.087	NA	ND	ND	0.594	ND	ND	1.53	1.37	ND	ND	ND
Apr-2000	0.078	0.071	NA	ND	ND	ND	ND	ND	3.04	1.63	ND	ND	0.011
Oct-2000	0.071	0.096	NA	ND	0.607	0.517	ND	ND	1.53	1.52	ND	ND	ND
Apr-2001	0.075	NA	NA	ND	0.514	NA	ND	ND	3.27	NA	ND	ND	ND
Sep-2001	ND	0.087	NA	0.016	ND	ND	ND	ND	2.94	1.57	ND	ND	0.183
Mar-2002	0.058	0.084	NA	ND	2.48	1.35	ND	ND	2.66	1.51	ND	ND	ND
Sep-2002	0.075	0.077	NA	ND	1.15	ND	ND	ND	1.8	1.44	ND	ND	0.012
Mar-2003	0.042	0.05	NA	ND	1.19	ND	ND	ND	1.57	1.48	ND	ND	0.019
Oct-2003	0.022	0.069	NA	ND	1.47	1.21	ND	ND	2.28	1.29	ND	ND	ND
Apr-2004	0.063	0.074	0.0002	ND	0.63	ND	ND	ND	1.95	1.26	ND	ND	0.03
Oct-2004	0.071	0.071	0.0004	ND	0.875	ND	ND	ND	1.86	1.33	ND	ND	0.016

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14***												
Apr-2005	0.067	0.064	*ND*	*ND*	0.59	0.51	*ND*	*ND*	1.31	1.27	*ND*	*ND*	*ND*
Oct-2005	0.045	0.041	*ND*	*ND*	0.63	0.558	*ND*	*ND*	2.06	1.43	*ND*	*ND*	*ND*
Mar-2006	0.047	0.04	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.57	1.57	*ND*	*ND*	*ND*
Sep-2006	0.054	0.053	*ND*	*ND*	*ND*	0.502	*ND*	*ND*	1.88	1.9	*ND*	*ND*	*ND*
Mar-2007	0.065	0.059	0.0002	*ND*	*ND*	*ND*	*ND*	*ND*	1.81	1.72	*ND*	*ND*	*ND*
Sep-2007	0.091	0.087	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.96	1.82	*ND*	*ND*	*ND*
Mar-2008	0.074	0.067	0.0004	*ND*	0.586	*ND*	*ND*	*ND*	2.29	2.05	*ND*	*ND*	0.014
Sep-2008	0.082	0.068	0.0005	*ND*	*ND*	*ND*	*ND*	*ND*	2.45	2.04	*ND*	*ND*	0.011
Mar-2009	0.137	0.136	*ND*	0.011	0.527	0.555	*ND*	*ND*	2.41	2.65	*ND*	*ND*	0.019
Oct-2009	0.247	0.079	0.0002	0.063	*ND*	*ND*	*ND*	*ND*	3.11	2.63	*ND*	*ND*	0.032
Apr-2010	0.28	0.152	*ND*	*ND*	0.648	0.541	*ND*	*ND*	3.26	3.08	*ND*	*ND*	0.013
Oct-2010	0.244	0.218	*ND*	0.029	0.515	0.524	*ND*	*ND*	3.55	3.45	*ND*	*ND*	0.011
Apr-2011	0.171	0.166	*ND*	0.012	*ND*	*ND*	*ND*	*ND*	2.91	2.9	*ND*	*ND*	*ND*
Sep-2011	0.227	0.17	*ND*	0.057	0.515	0.533	*ND*	*ND*	2.99	2.89	*ND*	*ND*	0.02
Mar-2012	0.203	0.188	*ND*	0.017	0.707	0.575	*ND*	*ND*	3.97	3.39	*ND*	*ND*	0.011
Sep-2012	0.049	0.0501	*ND*	*0.0023 J*	*0.491 J*	0.501	*ND*	*ND*	2.45	2.47	*0.000477 J*	*ND*	*ND*
Mar-2013	0.0575	0.0526	*0.000145 J*	*0.0027 J*	*0.491 J*	*0.48 J*	*ND*	*ND*	2.3	2.3	*ND*	*ND*	0.0101
Oct-2013	0.056	0.0606	*ND*	*0.0021 J*	*0.427 J*	*0.452 J*	*ND*	*ND*	2.02	2.17	*0.000108 J*	*ND*	0.0105
Mar-2014	0.0556	0.0557	*ND*	*0.0031 J*	*0.456 J*	*0.458 J*	*ND*	*ND*	2.17	2.18	*ND*	*ND*	*0.0027 J*
Oct-2014	0.062	0.0581	*0.000081 J*	*0.0028 J*	0.506	*0.499 J*	*0.000906 J*	*ND*	2.58	2.55	*0.000972 J*	*ND*	*0.0091 J*
Apr-2015	0.0748	0.0748	*ND*	*0.0037 J*	0.546	0.584	*0.000938 J*	*ND*	2.67	2.84	*ND*	*ND*	*0.0067 J*
Nov-2015	0.0735	0.0661	*0.000137 J*	*0.004 J*	0.567	0.56	0.004	*ND*	2.57	2.55	**0.0025 R,C**	*ND*	0.0101
Dec-2015	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*0.000588 J*	*NA*	*NA*
May-2016	0.0651	0.0658	*ND*	*0.0028 J*	0.584	0.509	*ND*	*ND*	2.64	2.37	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14***												
Oct-2016	*0.0756 J+*	*0.0811 J+*	*ND*	*0.0034 J*	0.579	0.557	*ND*	*ND*	2.57	2.6	*ND*	*ND*	*0.0062 J*
May-2017	0.0645	0.0693	*ND*	*0.0028 J*	0.561	0.596	*ND*	*ND*	2.59	2.64	*ND*	*ND*	*ND*
Oct-2017	0.0768	0.0811	*ND*	*0.0036 J*	0.58	0.616	*ND*	*ND*	3.06	3.16	*ND*	*ND*	*ND*
May-2018	0.13	0.12	*ND*	0.0066	*ND*	*ND*	*0.00038 J*	*ND*	*4 J*	*3.6 J*	*ND*	*ND*	0.006
Nov-2018	0.17	0.16	*ND*	0.0071	*ND*	*ND*	*0.00016 J*	*ND*	*4.3 J*	*4.4 J*	*ND*	*ND*	0.011
May-2019	0.2	0.24 M1	*ND*	0.0068	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0056
Oct-2019	0.22	0.17	*0.00017 J*	0.019	*1.3 J*	*ND*	*ND*	*ND*	*3.3 J*	*3.5 J*	*ND*	0.0057	0.03
May-2020	0.098	0.092	*ND*	0.0053	*ND*	*ND*	*ND*	*ND*	*4 J*	*2.8 J*	*ND*	*ND*	*0.0045 J*
Oct-2020	0.16	0.15	*ND*	0.0084	*ND*	*ND*	*ND*	*ND*	*3.7 J*	*3.3 J*	*ND*	0.0065	*ND*
Apr-2021	0.14	0.15	*0.00007 J*	*0.0069 J*	0.71	0.68	*ND*	*ND*	3.5	3.3	*ND*	*ND*	*0.0035 J*
Oct-2021	0.16	0.163	*ND*	0.0086	0.64	0.68	*ND*	*ND*	3.2	3.5	*ND*	*ND*	*0.0034 J*
May-2022	0.18	0.18	*ND*	0.023	0.77	0.71	*ND*	*ND*	3.8	3.7	*ND*	*ND*	0.0062

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7 J	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	2.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14*																
Nov-2015	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	3.1	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	3.5	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	3.8	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4 JB	ND
Nov-2018	ND	ND	ND	ND	4.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 JBIH	ND
May-2019	ND	ND	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	3.48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Aug-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	1.6	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*0.6 J*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14***															
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	0.6 J
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	1.2
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	1.4
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	1.1
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	1.6
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	2
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	1.9
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.69	2
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.34 J	ND	ND	ND	ND	ND	4.61	3.3
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.36 J	ND	ND	ND	ND	ND	6.33	4.38
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND	ND	6.94	4.58
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.27	4.48
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.8	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14***															
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12.9 J	5.1
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	6.4	6.3
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	0.1 J	ND	ND	ND	6.6	7.6
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J,B	ND	0.2 J	ND	ND	ND	6.3	7.4
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	0.2 J	ND	ND	ND	6	6.8
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11.4	7.5
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.8	9.4 N3
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3 CL	6.5 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.1	4.5
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.6	3.8
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	7.8	4.3
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.29 J	ND	0.912 J	ND	ND	ND	4.73 J	6.33
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	6.5	4.4
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	7.3	4.1

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14***															
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	1.52	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.56	ND	ND	ND	ND	0.37 J	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	1.86	ND	ND	ND	ND	0.5 J	0.47 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	2.87	ND	ND	ND	ND	0.6 J	0.51 J	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	0.54 J	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.64	*ND*	*ND*	*ND*	*ND*	*0.54 J*	*0.42 J*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.5	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	4.1	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.5 J*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.9	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*0.6 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	4.8	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.5 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	4.4	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.9	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.494 J*	*ND*	*ND*	4.19	*ND*	*ND*	*ND*	*ND*	*0.91 J*	*0.35 J*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.2	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-14A***											
Nov-1993	ND	ND	0.2	ND	3.1	ND	ND	5.07	15.8	2.3	ND	1.31
Apr-1994	ND	ND	0.1	ND	2.5	ND	ND	4.84	17.8	ND	12	ND
Apr-1995	10.3	10.3	ND	ND	3.3	ND	ND	5.3	28.5	2.4	18	2.1
Apr-1997	ND	4	ND	ND	3	0.03	ND	NA	NA	ND	40	4.8
Oct-1997	ND	ND	0.27	ND	2.16	ND	ND	7.1	18.21	ND	ND	ND
Apr-1998	ND	ND	0.22	ND	2.6	0.1	ND	6.78	126.4	0.69	15	3.2
Apr-1999	ND	ND	0.29	ND	4.77	ND	ND	5.74	29.6	ND	46	2.9
Oct-1999	12	12	0.14	ND	4.26	ND	ND	4.85	26.2	ND	36	2.9
Apr-2000	3	3	ND	ND	6.79	ND	ND	6.99	52	ND	24	4.7
Oct-2000	2.5	NA	ND	ND	4.66	ND	ND	6.08	28.8	15	16	4.46
Apr-2001	2.8	NA	ND	ND	4.67	ND	ND	NA	NA	ND	29	3.92
Sep-2001	3.4	3.4	ND	ND	5.92	ND	ND	5.59	35	ND	26	3.58
Mar-2002	2	2	ND	ND	7.48	ND	ND	5.8	37	ND	14	4.37
Sep-2002	4	4	ND	ND	6.88	ND	ND	6.3	42.9	ND	27	3.38
Mar-2003	6.5	6.5	ND	ND	60.7	ND	ND	6.5	54.4	7.43	59	3.79
Oct-2003	4.6	4.6	ND	ND	4.89	ND	ND	5.7	38.3	ND	34	4.24
Apr-2004	2.1	2.1	ND	11	4.01	ND	ND	6.2	22.8	ND	32	2.71
Oct-2004	1.9	1.9	ND	ND	5.22	ND	ND	4.8	30.1	ND	47	4.51
Apr-2005	2.6	2.6	ND	ND	5.11	ND	ND	4.8	26.1	ND	37	4
Oct-2005	4.2	4.2	0.21	ND	6.87	ND	ND	4.4	33.1	ND	48	4.36
Mar-2006	6.7	6.7	ND	ND	6.89	ND	ND	6.8	40.7	1.15	34	2.69
Sep-2006	6.4	6.4	ND	ND	7.87	ND	ND	5	45	ND	31	4.51
Mar-2007	4.7	4.7	ND	ND	6.58	ND	ND	5.5	47.2	ND	ND	3.4
Sep-2007	3.8	3.8	0.31	ND	89.5	ND	ND	5.8	43.5	29.9	24	4.47
Mar-2008	16	16	ND	ND	13.9	ND	ND	5.2	62.4	1.93	37	4.15
Sep-2008	13	13	ND	27	9.82	ND	ND	5.1	55.7	ND	39	4.9
Mar-2009	12	12	ND	ND	9.92	ND	ND	5	74.6	ND	31	4.64
Oct-2009	9.9	9.9	ND	ND	10.1	ND	ND	5.1	66.7	ND	19	5.84
Mar-2010	11	11	ND	10.1	8.05	ND	ND	5.31	71	0.97	ND	3.26
Oct-2010	9.3	9.3	ND	ND	8.46	ND	ND	4.2	46.8	ND	32	3.83
Apr-2011	13	13	ND	ND	9.4	ND	0.02	5	51.9	ND	40	4.1
Sep-2011	15	15	0.22	ND	8.85	ND	ND	5.3	56.7	ND	47	7.08
Mar-2012	5.9	5.9	0.26	ND	9.58	0.06	ND	4.4	44.7	ND	18	4.53
Sep-2012	11.2	11.2	ND	ND	10.7	ND	ND	4.1	58.1	ND	46	3.24
Mar-2013	10.6	10.6	ND	ND	11.8	0.0417 J	ND	3.9	65.1	0.595 J	38	5.14
Oct-2013	20.5	20.5	ND	ND	12.7	0.0382 J	ND	4.4	115.8	ND	47	4.31
Mar-2014	15	15	ND	23	13.7	0.0274 J	ND	5.3	65	ND	54	4.82

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-14A***										
Oct-2014	2.2	2.2	*ND*	*ND*	10.7	0.0948	*ND*	4.9	51	*ND*	*ND*	4
Apr-2015	4.44	4.44	*ND*	*8 J*	11.1	0.0572	*ND*	4.4	51.9	*ND*	44	4.34
Nov-2015	*ND*	*ND*	*ND*	13	9.08	*ND*	*ND*	5.3	71.1	3.34	45	5.31
May-2016	3.72	3.72	*ND*	*5 J*	10.3	*ND*	*ND*	5.5	105.6	5.35	60	10.6
Oct-2016	1.92	1.92	*ND*	*6 J*	14.8	*NA*	*NA*	5.8	130.3	8.02	66	7.1
May-2017	7.2	7.2	*0.154 J*	10	15.6	*ND*	*ND*	5.2	157.9	11.7	66	18.4
Oct-2017	16.5	16.5	0.228	*8 J+*	17	*ND*	*ND*	5.5	165.2	15.5	135	22.6
May-2018	56	56	0.35	*16.5 J*	18.8	*0.064 J*	*ND*	5.75	207.6	*ND*	104	39.1
Nov-2018	74	74	0.2	*16.5 J*	14.1	*ND*	*0.007 J*	6.07	257.7	*ND*	149	28.4
May-2019	12 H1	*NA*	*ND*	*ND*	4.5	*ND*	*ND*	6.04	57.2	*ND*	31	*ND*
Oct-2019	*ND*	*NA*	*ND*	*ND*	4	*0.039 J*	0.034	5.99	59.4	*ND*	28	2.1
May-2020	30	*NA*	*0.074 J*	*6.9 J*	10.6	*ND*	0.02	5.58	235.7	*ND*	109	21.5
Oct-2020	*2 J*	*NA*	*ND*	*4.8 J*	9.5	*ND*	0.068 H1	5.62	134.9	1.2	10	8.5
Apr-2021	*ND*	*NA*	*ND*	*ND*	4.9	*0.058 J*	*ND*	6.49	97	*ND*	16	*1.8 J*
Oct-2021	*ND*	*NA*	*ND*	*ND*	6	*ND*	*ND*	6.47	109.8	*ND*	*ND*	3.82
May-2022	50	*NA*	0.26	*ND*	11.1	*ND*	0.024	6.08	274.2	*ND*	96	20.5 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14A***													
Nov-1993	NA	ND	ND	NA	ND	0.03	NA	0.007	NA	ND	6.9	0.34	ND	0.3	NA
Apr-1994	NA	ND	ND	NA	ND	ND	NA	ND	NA	ND	0.89	0.29	ND	ND	NA
Apr-1995	ND	ND	1	ND	ND	0.3	NA	ND	ND	ND	5.7	2.3	ND	0.32	NA
Oct-1996	ND	ND	0.014	ND	ND	0.81	0.53	ND	ND	ND	3.3	3.7	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	0.64	0.66	ND	ND	ND	2.7	0.71	ND	ND	ND
Oct-1997	ND	ND	0.031	ND	ND	0.514	0.403	ND	ND	ND	4.32	0.628	ND	0.354	0.217
Apr-1998	ND	ND	0.044	ND	ND	0.497	0.424	0.012	ND	0.016	9.35	1.6	ND	0.48	0.263
Apr-1999	ND	ND	0.023	ND	ND	0.485	0.52	ND	ND	0.011	6.6	4.72	ND	0.405	0.359
Oct-1999	ND	ND	0.025	ND	ND	0.652	0.62	ND	ND	0.01	3.6	2.31	ND	0.52	0.472
Apr-2000	ND	ND	0.019	ND	ND	0.951	0.619	ND	ND	0.012	4.08	1.94	ND	0.564	0.449
Oct-2000	ND	ND	0.02	ND	ND	0.935	0.543	ND	ND	0.013	4.02	3.19	ND	0.516	0.4
Apr-2001	ND	ND	0.019	ND	ND	0.743	NA	ND	ND	ND	4.46	NA	ND	0.502	NA
Sep-2001	ND	ND	0.017	ND	ND	0.696	0.519	ND	ND	0.01	3.47	2.12	ND	0.446	0.397
Mar-2002	ND	ND	0.018	ND	ND	0.883	0.574	ND	ND	0.012	4.28	3.52	ND	0.527	0.465
Sep-2002	ND	ND	0.019	ND	ND	0.569	0.594	ND	ND	ND	5.86	5.07	ND	0.477	0.479
Mar-2003	ND	ND	0.018	ND	ND	0.655	0.608	ND	ND	ND	3.65	3.01	ND	0.523	0.501
Oct-2003	ND	ND	0.021	ND	ND	0.867	0.546	ND	ND	0.014	7.09	3.56	ND	0.504	0.452
Apr-2004	ND	ND	0.021	ND	ND	0.552	0.542	ND	ND	0.012	4.52	1.08	ND	0.322	0.268
Oct-2004	ND	ND	0.02	ND	ND	1.09	0.662	ND	ND	0.018	5.17	0.752	ND	0.434	0.359
Apr-2005	ND	ND	0.016	ND	ND	1.04	0.703	ND	ND	0.019	5.87	2.26	ND	0.347	0.282
Oct-2005	ND	ND	0.02	ND	ND	1.04	0.799	ND	ND	0.014	5.53	1.6	ND	0.427	0.389

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14A***													
Mar-2006	ND	ND	0.016	ND	ND	0.429	0.333	ND	ND	ND	5.67	2.51	ND	0.394	0.393
Sep-2006	ND	ND	0.021	ND	ND	0.886	0.689	ND	ND	0.014	6.2	4.04	ND	0.559	0.535
Mar-2007	ND	ND	0.017	ND	ND	0.746	0.728	ND	ND	0.013	2.78	1.63	ND	0.374	0.368
Sep-2007	ND	0.002	0.015	ND	ND	1.18	0.586	0.034	ND	0.017	10.7	4.72	0.002	0.37	0.292
Mar-2008	ND	ND	0.029	ND	ND	0.701	0.648	ND	ND	ND	10	8.37	ND	0.583	0.524
Sep-2008	ND	ND	0.033	ND	ND	0.835	0.565	ND	ND	0.013	12.6	7.3	0.002	0.685	0.58
Mar-2009	ND	ND	0.032	ND	ND	0.84	0.691	ND	ND	0.024	17	9.93	ND	0.616	0.599
Oct-2009	ND	ND	0.035	ND	ND	1.14	0.711	ND	ND	0.017	15.5	10.5	ND	0.727	0.68
Mar-2010	ND	ND	0.029	ND	ND	0.572	0.568	ND	ND	0.012	11.6	12.1	ND	0.445	0.43
Oct-2010	ND	ND	0.02	ND	ND	0.681	0.655	ND	ND	0.016	5.71	5.21	ND	0.518	0.519
Apr-2011	ND	ND	0.029	ND	ND	0.722	0.691	ND	ND	0.013	6.77	5.66	ND	0.559	0.549
Sep-2011	ND	ND	0.03	ND	ND	1.59	0.82	ND	ND	0.023	9.09	7.51	ND	0.756	0.583
Mar-2012	ND	ND	0.026	ND	ND	0.726	0.729	ND	ND	0.011	3.33	4.84	ND	0.661	0.668
Sep-2012	ND	ND	0.0188	0.000445 J	ND	0.543	0.53	0.0021 J	0.0051 J	0.0068 J	5.3	4.6	ND	0.457	0.438
Mar-2013	ND	ND	0.0358	0.000832 J	ND	0.906	0.92	0.0029 J	0.0086 J	0.0114	6.88	6.75	ND	0.699	0.666
Oct-2013	ND	ND	0.0292	0.000643 J	0.000239 J	0.702	0.599	0.0092 J	0.0079 J	0.0138	27.5	24	ND	0.621	0.568
Mar-2014	0.000526 J	ND	0.0293	0.000653 J	0.000211 J	0.771	0.758	0.0021 J	0.0083 J	0.0143	7.53	7.79	ND	0.703	0.68
Oct-2014	0.000546 J	ND	0.0281	0.000749 J	0.000238 J	0.713	0.708	0.000747 J	0.0068 J	0.0183	5.65	5.31	ND	0.539	0.541
Apr-2015	0.001 J	0.0019 J	0.0358	0.000875 J	0.000381 J	0.752	0.754	0.0137	0.0179	0.0435	6.62	4.29	ND	0.597	0.589
Nov-2015	0.0012 J	0.0023	0.0333	0.0013 J	0.000551 J	0.918	0.944	0.0254	0.0155	0.0883	13.9	3.29	0.000848 J	0.734	0.733
May-2016	ND	0.0015 J	0.0638	0.00082 J	0.00052 J	1.66	1.63	0.0107	0.0202	0.0387	9.96	6.77	0.00051 J	1.56	1.64
Oct-2016	0.00075 J	0.0022 J	0.0399	0.00064 J	0.00039 J	1.16	1.88	0.0148 J+	0.0167	0.0511 J+	12.7	5.76	0.00087 J	1.02 J+	1.85
May-2017	0.0011 J	0.0065	0.107	0.00091 J	0.00047 J	2.73	2.64	0.0456	0.0505	0.106	14	7.92	0.0003 J	2.82	2.71
Oct-2017	0.00051 J	0.0016 J	0.119	0.00086 J	0.00086 J	3.48	3.51	0.0079	0.0358	0.0291	9.45	8.96	ND	3.37	3.58

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14A***													
May-2018	*0.00039 J*	0.0012	0.2	0.00093	0.0019	6	5.8	*0.0065 J*	0.042	0.045	27.4	24.7	*0.00026 J*	5.9	5.7
Nov-2018	*0.000045 J*	*0.00073 J*	0.16	0.00057	*0.00054 J*	4.3	4.6	*0.0052 J*	0.02	0.012	52.1	50.1	*0.00016 J*	4.3	4.5
May-2019	*ND*	*ND*	0.019	0.00036	0.0022	*ND*	*ND*	0.012	0.0027	0.026	14.2	12.9	*ND*	*ND*	*ND*
Oct-2019	*0.00015 J*	*0.0003 J*	0.014	*0.00029 J*	*0.00043 J*	0.46	*0.43 J*	0.0085	0.0017	0.0094	13.2	10.4	*0.00011 J*	0.22	*0.23 J*
May-2020	*0.000095 J*	0.0014	0.086	*0.00025 J*	*0.00035 J*	3.3	3.2	0.011	0.012	0.0071	50.8	46.7	*ND*	3.2	3.1
Oct-2020	*ND*	*ND*	0.042	*ND*	*ND*	1.4	1.4	*0.0024 J*	0.0035	*ND*	32.3	26.3	*ND*	1.2	1.3
Apr-2021	*ND*	*0.0028 J*	0.016	*0.00043 J*	*ND*	*0.4 J*	*0.38 J*	0.0051	*0.0009 J*	0.0098	23.3	17.3	*ND*	*0.19 J*	0.22
Oct-2021	*0.00012 JB*	*0.0013 J*	0.02	*0.00037 J*	*ND*	0.73	0.84	0.0039	0.0032	0.0079	21.8	13.3	*0.00012 J*	*0.48 J*	0.56
May-2022	*ND*	*0.0014 J*	0.093	*0.00032 J*	*0.00023 J*	3.1	3	0.003	0.013	0.0026	53.5	49.6	*ND*	3.1	3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-14A*												
Nov-1993	0.07	NA	ND	NA	1.1	NA	ND	NA	1.4	NA	NA	NA	ND
Apr-1994	0.036	NA	ND	NA	ND	NA	ND	NA	1.9	NA	NA	NA	ND
Apr-1995	0.02	NA	ND	ND	0.61	NA	ND	0.01	1.6	NA	ND	ND	0.03
Oct-1996	0.053	0.05	NA	ND	ND	ND	ND	ND	2.3	2.3	ND	ND	0.18
Apr-1997	0.084	0.029	ND	ND	ND	ND	ND	ND	2.3	2.1	ND	ND	0.021
Oct-1997	0.025	0.026	ND	ND	1.57	ND	ND	ND	1.67	1.61	ND	0.01	0.02
Apr-1998	0.03	0.033	0.0005	ND	1.68	ND	ND	ND	2.03	1.93	ND	0.013	0.012
Apr-1999	0.043	0.043	NA	ND	1.16	0.659	ND	ND	2.36	2.32	ND	ND	0.01
Oct-1999	0.02	0.024	NA	ND	ND	0.541	ND	ND	2.57	2.42	ND	ND	ND
Apr-2000	0.029	0.024	NA	ND	ND	ND	ND	ND	4.08	2.53	ND	ND	0.015
Oct-2000	0.023	0.03	NA	ND	0.572	0.95	ND	ND	3.57	2.53	ND	ND	0.015
Apr-2001	0.03	NA	NA	ND	ND	NA	ND	ND	3.58	NA	ND	ND	0.015
Sep-2001	0.019	0.019	NA	0.012	0.722	ND	ND	ND	3.97	2.61	ND	ND	0.01
Mar-2002	0.039	0.037	NA	ND	1.32	0.388	ND	ND	4.13	2.98	ND	ND	0.012
Sep-2002	0.054	0.056	NA	ND	0.696	ND	ND	ND	3.26	3.27	ND	ND	ND
Mar-2003	0.073	0.067	NA	0.012	1.2	ND	ND	ND	3.54	3.37	ND	ND	ND
Oct-2003	0.083	0.075	NA	0.014	0.986	0.533	ND	ND	3.85	2.98	ND	ND	0.011
Apr-2004	0.025	0.023	0.0008	ND	1.21	1.28	ND	ND	3.3	2.31	ND	ND	ND
Oct-2004	0.037	0.031	0.0006	ND	1.17	ND	ND	ND	3.45	2.92	ND	ND	0.018
Apr-2005	0.046	0.045	0.0003	ND	0.95	0.69	ND	ND	3.47	2.95	ND	ND	0.026
Oct-2005	0.032	0.034	0.0006	ND	0.823	0.675	ND	ND	3.86	3	ND	ND	0.01
Mar-2006	ND	ND	0.0004	ND	ND	ND	ND	ND	3.94	3.3	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14A***												
Sep-2006	0.027	0.023	0.0002	0.013	0.692	0.6	ND	ND	3.99	3.87	ND	ND	0.015
Mar-2007	0.014	0.013	0.0004	ND	0.57	0.529	ND	ND	3.17	3.17	ND	ND	ND
Sep-2007	0.059	0.043	0.0004	0.022	0.518	ND	ND	ND	3.22	3.19	ND	ND	0.034
Mar-2008	0.052	0.047	ND	ND	0.802	0.577	ND	ND	4.14	3.88	ND	ND	0.012
Sep-2008	0.05	0.043	ND	ND	0.798	0.503	ND	ND	4.26	3.9	ND	ND	0.025
Mar-2009	0.054	0.056	ND	0.014	0.839	0.668	ND	ND	4.4	4.45	ND	ND	0.027
Oct-2009	0.061	0.06	ND	0.014	0.777	0.526	ND	ND	4.72	4.81	ND	ND	0.041
Mar-2010	0.069	0.067	ND	ND	0.715	0.622	ND	ND	3.71	4.15	ND	ND	ND
Oct-2010	0.047	0.044	ND	0.011	0.526	0.525	ND	ND	4.61	4.58	ND	ND	0.019
Apr-2011	0.037	0.033	ND	ND	ND	ND	ND	ND	4.13	3.96	ND	ND	0.014
Sep-2011	0.042	0.249	ND	0.023	1.36	0.832	ND	ND	4.96	4.7	ND	ND	0.026
Mar-2012	0.028	0.035	ND	ND	0.536	0.525	ND	ND	4.44	4.61	ND	ND	0.012
Sep-2012	0.0341	0.0312	ND	0.0056 J	0.573	0.556	ND	ND	7.85	7.89	0.000238 J	ND	0.0055 J
Mar-2013	0.0391	0.0391	0.000072 J	0.0102 J	0.66	0.645	ND	ND	6.06	6.03	ND	ND	0.0219
Oct-2013	0.121	0.111	0.000061 J	0.0084 J	0.634	0.56	ND	ND	7	6.52	0.000189 J	0.0021 J	0.0168
Mar-2014	0.0448	0.0469	ND	0.0084 J	0.606	0.582	ND	ND	6.34	6.27	ND	ND	0.0132
Oct-2014	0.032	0.0313	0.000073 J	0.0072 J	0.601	0.597	0.000986 J	ND	5.62	5.55	0.000758 J	ND	0.013
Apr-2015	0.0648	0.0478	0.000064 J	0.0724	0.794	0.732	ND	ND	5.24	5.45	ND	0.000833 J	0.0203
Nov-2015	0.125	0.104	0.000039 J	0.0332	0.996	0.908	0.000688 J	ND	4.76	4.85	ND	0.0011 J	0.0265
May-2016	0.0836	0.0492	0.00011 J	0.0365	1.11	1.14	0.00051 J	ND	5.37	5.13	0.00018 J	0.00067 J	0.0443
Oct-2016	0.0642 R	0.0627	0.000056 J	0.0329 J+	0.833	1.25	ND	ND	3.45 J+	6.37	0.00017 J	0.0032	0.0322
May-2017	0.133	0.0909	ND	0.109	1.57	1.51	0.00067 J	ND	7.75	7.42	0.00025 J	0.00046 J	0.0535
Oct-2017	0.106	0.0998	ND	0.0436	1.61	1.67	0.00057 J	ND	7.65	8.26	0.0002 J	ND	0.0431
May-2018	0.17	0.078	ND	0.046	2.2 J	1.6 J	0.00079 J	ND	10.1	10.1	0.00031	0.0031 B	0.0528

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14A***												
Nov-2018	0.27	0.25	*ND*	0.023	*1.7 J*	*1.8 J*	*0.00024 J*	*ND*	7.5	7.9	*0.00008 J*	*ND*	0.029
May-2019	0.13	0.12	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.00031	*ND*	0.022
Oct-2019	0.23	0.21	*ND*	0.0055	*ND*	*ND*	*ND*	*ND*	*2.9 J*	*3 J*	*ND*	0.0062	0.012
May-2020	0.28	0.26	*0.00016 J*	0.015	*1.5 J*	*1.1 J*	*ND*	*ND*	7.3	6.1	*ND*	0.0047	0.017
Oct-2020	0.17	0.16	*ND*	0.0058	*ND*	*ND*	*ND*	*ND*	*4.2 J*	*3.9 J*	*ND*	*0.0014 J*	*ND*
Apr-2021	0.2	0.19	*0.00008 J*	*0.0062 J*	0.54	*0.47 J*	*ND*	*ND*	3	2.8	*ND*	*ND*	*0.0062 J*
Oct-2021	0.29	0.29	*ND*	0.006	0.61	0.7	*ND*	*ND*	3.8	4.3	*0.000068 J*	*ND*	0.0077
May-2022	0.32	0.3	*ND*	0.013	1.3	1.2	*ND*	*ND*	8.2	7.9	*ND*	*ND*	0.019

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-14A***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	0.8 J	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	0.8 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	0.7 J	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	1.2	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	0.5 J	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14A*																
Mar-2006	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2007	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	6.2	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	10	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	9.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	7.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	4.72	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	9.59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	9.97	0.32 J	ND	ND	ND	ND	ND	0.39 J	0.37 J	ND	ND	ND	1.09 J,B	ND
Mar-2014	ND	ND	ND	ND	8.29	0.24 J	ND	ND	ND	ND	ND	0.28 J	0.43 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	3.77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	3.82	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	0.1 J	0.2 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14A*																
Oct-2016	*ND*	*ND*	*ND*	*ND*	5.1	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*1.4 J*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	8.5	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.3 J*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	7.8	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.3 J*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	6.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.1 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	10.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.7 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	4.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	2.9
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	4.1
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	7.1	4
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.3	7.2
Apr-2000	ND	NA	NA	ND	NA	2.4	NA	ND	ND	ND	NA	ND	NA	ND	NA	1.4	4
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	6
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	8.3
Sep-2001	ND	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.7	5.1
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	3.4
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	6.2
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	3.5
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.8	5.6
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.2	3.5
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	8.3
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.3	7.2
Oct-2005	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	13.2	10.5

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14A***															
Mar-2006	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	22.8	11.9
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	22.6	13.3
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	9.8	9.9
May-2007	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	7.5	10.8
Sep-2007	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	12.5	5.2
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	22.5	16.9
Sep-2008	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	14.2	19.4
Mar-2009	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	16.5	20.8
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	14.7	19.9
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*10.9 J*	11.4
Oct-2010	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	8.5	7.8
Apr-2011	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	10.6	10.5
Sep-2011	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	17.8	11.7
Mar-2012	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	7.6	6.7
Sep-2012	*0.76 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.86 J*	*ND*	*ND*	*ND*	3.17	4.82
Mar-2013	1.39	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.84	*ND*	*ND*	*ND*	6.7	12
Oct-2013	2.01	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.98	*ND*	*ND*	*ND*	5.13	12.4
Mar-2014	1.68	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.95	*ND*	*ND*	*ND*	5.67	10
Oct-2014	*0.92 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.01	*ND*	*ND*	*ND*	1.88	4.45
Apr-2015	*0.88 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.89 J*	*ND*	*ND*	*ND*	1.95	4.21
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*2.7 J*	2.9
May-2016	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	1.3	3.5

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14A***															
Oct-2016	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	2	6.3
May-2017	2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	3.7	10
Oct-2017	2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	2.5	*ND*	*ND*	*ND*	3.7	11
May-2018	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	4.5	6.5
Nov-2018	2.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	6.3	14.9 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	2.4	3.7
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	1.1	1.6
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*
May-2022	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	4.6	5.2

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	2.5	NA	ND	NA
Oct-1999	ND	ND	ND	NA	3.3	ND	ND	1.7	ND	ND	ND	ND	1.1	4.4	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	1	ND	ND	NA
Oct-2000	ND	ND	ND	NA	2.8	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	NA
Apr-2001	ND	ND	ND	NA	4	ND	ND	1.1	ND	ND	ND	ND	0.7 J	3.5	ND	ND	NA
Sep-2001	ND	ND	ND	NA	2.9	ND	ND	0.5 J	ND	ND	ND	ND	ND	1.7	ND	ND	NA
Mar-2002	ND	ND	ND	NA	3.9	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	NA
Sep-2002	ND	ND	ND	NA	**6.4**	ND	ND	0.6 J	ND	ND	ND	ND	0.5 J	1.1	ND	ND	NA
Mar-2003	ND	ND	ND	NA	**5.3**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	2.7	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	NA
Apr-2004	ND	ND	ND	NA	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	4.9	ND	ND	0.7 J	ND	ND	ND	ND	ND	2.3	ND	ND	NA
Apr-2005	ND	ND	ND	ND	**5.9**	ND	ND	0.9 J	ND	ND	ND	ND	0.6 J	1.5	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14A***															
Oct-2005	ND	ND	0.7 J	ND	**9.5**	0.5 J	ND	1.7	ND	ND	ND	ND	1.3	2.3	ND	0.7 J	NA
Mar-2006	ND	ND	0.9 J	ND	**11.6**	0.6 J	ND	1.9	ND	ND	ND	ND	1.6	3.1	ND	0.5 J	NA
Sep-2006	ND	ND	ND	ND	**7.6**	ND	ND	2.1	ND	ND	ND	ND	1.6	1.7	ND	ND	NA
Mar-2007	ND	ND	0.5 J	ND	**6.5 R**	ND	ND	1.3	ND	ND	ND	ND	0.9 J	1.5	ND	ND	NA
May-2007	ND	ND	0.6 J	1.7	5	ND	ND	1.5	ND	ND	ND	ND	0.9 J	1.3	ND	0.7 J	NA
Sep-2007	ND	ND	0.6 J	0.6 J	**7.7**	ND	ND	1.4	ND	ND	ND	ND	1.1	2	ND	ND	NA
Mar-2008	ND	ND	0.9 J	ND	**8.9**	0.7 J	ND	2.3	ND	ND	ND	ND	2	3.6	ND	ND	NA
Sep-2008	ND	ND	0.7 J	ND	**12**	0.7 J	ND	2.4	ND	ND	ND	ND	1.8	6.5	ND	1.5	NA
Mar-2009	ND	ND	1.1	ND	**16.3**	1.1	ND	2.6	ND	ND	ND	ND	2.5 J	0.5 J	ND	0.8 J	NA
Oct-2009	ND	ND	0.7 J	ND	**14.2**	0.8 J	ND	2.6	ND	ND	ND	ND	2.3	2.1	ND	0.6 J	NA
Mar-2010	ND	ND	ND	ND	**8.4**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	**6.5**	ND	ND	1.3	ND	ND	ND	ND	ND	0.9 J	ND	ND	NA
Apr-2011	ND	ND	ND	ND	**8.1**	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	0.7 J	ND	**7.4**	0.5 J	ND	2	ND	ND	ND	ND	1.4	1.3	ND	ND	NA
Mar-2012	ND	ND	ND	ND	3.9	ND	ND	1.3	ND	ND	ND	ND	0.9 J	0.6 J	ND	0.7 J	NA
Sep-2012	ND	ND	0.81 J	0.28 J	3.95	0.36 J	ND	1.48	ND	ND	ND	ND	1.05	0.48 J	ND	ND	1.17
Mar-2013	0.5 J	ND	1 J	0.37 J	**8.69**	0.68 J	ND	2.09	ND	ND	ND	ND	1.77	ND	ND	0.34 J	1.68
Oct-2013	ND	ND	0.7 J	ND	**5.94**	0.53 J	ND	2.02	ND	ND	ND	ND	1.67	0.7 J	ND	ND	1.23
Mar-2014	ND	ND	1.08	0.53 J	**6.26**	0.41 J	ND	2.75	ND	ND	ND	ND	1.89	0.74 J	ND	0.34 J	1.49
Oct-2014	ND	ND	0.52 J	0.29 J	2.35	ND	ND	1.34	ND	ND	ND	ND	0.83 J	ND	ND	ND	0.52 J
Apr-2015	ND	ND	0.59 J	0.28 J	2.66	ND	ND	1.32	ND	ND	ND	ND	0.93 J	ND	ND	ND	0.59 J
Nov-2015	ND	ND	ND	ND	2	ND	ND	0.7 J	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14A***															
May-2016	*ND*	*ND*	*0.3 J*	*0.2 J*	2	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*0.1 J*	*ND*	*0.1 J*	*0.3 J*
Oct-2016	*ND*	*ND*	*0.4 J*	*0.3 J*	3.1	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	1	*0.4 J*	*ND*	*0.3 J*	*0.4 J*
May-2017	*ND*	*ND*	*0.7 J*	*0.7 J*	4.9	*0.2 J*	*ND*	2.5	*ND*	*ND*	*ND*	*ND*	1.8	*0.2 J*	*ND*	*0.4 J*	*0.9 J*
Oct-2017	*ND*	*ND*	*0.5 J*	*0.6 J*	4.4	*0.1 J*	*ND*	2.5	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*0.5 J*	*0.6 J*
May-2018	*ND*	*ND*	*ND*	*ND*	2.3 B	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	1.1	2.9 CH	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.46 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*0.6 J*	1.5 L	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-19***											
Nov-1993	ND	ND	0.1	ND	7.6	0.9	ND	4.68	74.7	12.4	50	13
Apr-1994	ND	ND	0.2	ND	17.3	2.7	ND	4.5	201	45.6	181	52.2
Apr-1995	ND	ND	0.2	ND	19.5	2.2	ND	4.7	176	40.2	112	38.6
Apr-1997	ND	3	ND	ND	12	0.46	ND	NA	NA	32	80	21
Apr-1998	ND	ND	1.1	ND	14.6	0.196	ND	6.19	156.4	16.2	96	51
Apr-1999	ND	ND	0.13	ND	13.5	0.68	ND	4.49	204	52.8	110	63
Apr-2000	12	12	ND	ND	29.6	1.48	ND	5.64	252	71.8	196	102
Apr-2001	16	NA	ND	ND	26.4	ND	ND	NA	NA	45.1	119	86
Mar-2002	6.8	6.8	ND	40	11	0.29	ND	5.4	87.6	15.7	88	34.3
Mar-2003	22	22	ND	ND	25.8	0.75	ND	6	206	35.8	143	65.3
Apr-2004	13	13	ND	ND	22.4	ND	ND	5.3	160.1	19.3	90	47.2
Apr-2005	11	11	ND	ND	26.8	0.45	ND	5.3	154.9	30	108	56.1
Mar-2006	9.8	9.8	ND	ND	21.4	0.72	ND	5.3	142.8	27.3	112	40.8
Mar-2007	13	13	0.46	ND	25.5	0.78	ND	5.4	158.3	41.9	142	56.5
Mar-2008	13	13	ND	ND	22.8	0.91	ND	5.5	145.3	27.8	114	49
Mar-2009	14	14	ND	ND	18.2	0.34	ND	4.9	118.3	15.7	86	32.5
Mar-2010	45	45	ND	ND	56.9	0.42	ND	5.84	390	51.8	183	96.2
Oct-2010	28	28	ND	ND	31.8	0.64	ND	5.3	189.9	34.9	154	72
Apr-2011	43	43	ND	ND	38.5	0.67	ND	5.6	312	46.5	207	89.2
Sep-2011	39	39	ND	ND	54	0.52	ND	6	321	45.6	229	99.1
Mar-2012	33	33	ND	ND	43.2	0.46	ND	5.3	354	44.4	164	78.1
Sep-2012	40.6	40.6	ND	ND	29.8	0.733	ND	5.5	199.6	37.3	156	76.4
Mar-2013	32.6	32.6	ND	ND	32.8	0.829	ND	5.8	201	36	145	68.3
Oct-2013	19.5	19.5	ND	ND	21.1	0.462	ND	4.8	138.9	22.3	105	44.3
Mar-2014	51.4	51.4	ND	30	62.1	1.07	ND	6.2	429	58.5	253	106
Oct-2014	35.2	35.2	ND	6 J	73	0.581	ND	5.9	404	29.1	220	83.4
Apr-2015	89.2	89.2	ND	8 J	80.4	0.763	ND	5.9	532	44.7	299	116
Nov-2015	37.6	37.6	ND	6 J	44.9	0.573	ND	6	329	25.8	152	73.5
May-2016	51.2	51.2	ND	12	41.4	0.701	ND	6.3	410	30.8	178	77.7
Oct-2016	50.4	50.4	ND	ND	34.1	NA	NA	6.4	340	30	170	74.4
May-2017	74.5	74.5	ND	ND	49.1	0.847	ND	6.3	510	40.4	225	104
Oct-2017	55.8	55.8	ND	9 J	35.4	0.699	ND	6.1	426	29.5	172	88.5
May-2018	28	28	ND	ND	22.8	0.082 J	ND	5.4	174.5	16.6	149	52
Nov-2018	66	66	ND	ND	30.5	0.84	ND	5.94	283	41.4	163	96.5
May-2019	22 H1	NA	0.19	ND	27.7	1.4	ND	5.27	159.3	31.9	129	60.7
Oct-2019	7.5 J	NA	ND	ND	22.7	1	0.0086 J	5.03	165.3	23.9	290	44.7
May-2020	12	NA	ND	9.1 J	8.7	2.3	ND	5.26	205.8	40.3	123	84.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-19***										
Oct-2020	40	*NA*	*ND*	*9.3 J*	12.3	1.8	*0.0099 J*	5.38	190.4	33.2	126	79.6
Apr-2021	60	*NA*	*ND*	*12.6 J*	14.4	0.78	*ND*	5.9	246.4	31.9	139	80.6
Oct-2021	36	*NA*	*ND*	*8.3 J*	13.5	0.8	*ND*	5.7	218.9	19.5	82	56.4
May-2022	58	*NA*	*ND*	*ND*	17.9	0.99	*ND*	5.79	266.7	22.2	136	79.8 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-19***													
Nov-1993	NA	ND	ND	NA	ND	1.6	NA	ND	NA	ND	1.9	0.07	ND	2.2	NA
Apr-1994	NA	ND	0.19	NA	ND	12	NA	ND	NA	0.02	ND	ND	ND	5.4	NA
Apr-1995	ND	ND	1.3	ND	ND	8.2	NA	ND	ND	ND	0.29	ND	ND	4.4	NA
Apr-1997	ND	ND	0.068	ND	ND	9.7	9.8	ND	ND	ND	1.9	0.33	ND	2.9	2.9
Apr-1998	ND	ND	0.103	ND	ND	13.8	13.5	0.01	0.012	0.021	3.35	ND	ND	3.96	3.84
Apr-1999	ND	ND	0.1	ND	0.004	17.9	17.1	ND	0.01	0.022	3.36	ND	ND	4.52	4.29
Apr-2000	ND	ND	0.076	ND	ND	31.8	29.3	0.012	ND	0.033	10	ND	ND	5.51	5.02
Apr-2001	ND	ND	0.081	ND	ND	25.7	NA	0.05	ND	0.086	40.5	NA	0.005	5.23	NA
Mar-2002	ND	ND	0.043	ND	ND	9.42	8.88	0.02	ND	0.045	14.6	ND	ND	2.63	2.49
Mar-2003	ND	ND	0.051	ND	ND	20.1	19.4	ND	ND	ND	0.799	ND	ND	3.68	3.52
Apr-2004	ND	0.003	0.068	ND	ND	12.1	11.6	ND	ND	0.018	4.63	ND	0.002	4.1	3.88
Apr-2005	ND	ND	0.09	ND	ND	14.3	14	ND	ND	0.02	2.98	ND	ND	4.96	4.86
Mar-2006	ND	ND	0.067	ND	ND	10.1	10.5	ND	ND	ND	2.41	ND	ND	3.79	3.91
Mar-2007	ND	0.007	0.072	ND	ND	15.5	15.6	ND	ND	0.019	7.26	ND	ND	4.33	4.32
Mar-2008	ND	ND	0.058	ND	ND	13.5	12.5	ND	ND	ND	ND	ND	ND	3.71	3.34
Mar-2009	ND	ND	0.035	ND	ND	9.17	9.05	ND	ND	0.014	0.104	ND	ND	2.34	2.31
Mar-2010	ND	ND	0.073	ND	ND	28.2	26.7	ND	ND	ND	0.101	ND	ND	6.26	6.02
Oct-2010	ND	ND	0.067	ND	ND	19.9	18.3	ND	ND	0.006	ND	ND	ND	5.42	5.28
Apr-2011	ND	ND	0.075	ND	ND	26	25	ND	ND	ND	0.189	ND	ND	5.91	5.69
Sep-2011	ND	ND	0.078	ND	ND	29.1	28.7	ND	ND	ND	ND	ND	ND	6.42	6.3
Mar-2012	ND	ND	0.069	ND	ND	22.2	21.6	ND	ND	ND	ND	ND	ND	5.52	5.41

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-19***													
Sep-2012	ND	ND	0.0644	0.000086 J	ND	21.3	20.9	0.002 J	0.0022 J	0.0051 J	0.0256 J	0.0777	ND	5.64	5.69
Mar-2013	ND	ND	0.0634	ND	ND	19.9	18.1	0.0014 J	0.0025 J	0.0055 J	0.0275 J	0.0053 J	0.0016 J	4.51	4.06
Oct-2013	ND	ND	0.0482	0.000147 J	ND	12.7	12.4	0.0082 J	0.0063 J	0.0122	ND	ND	ND	3.05	3.04
Mar-2014	0.000279 J	ND	0.0654	ND	ND	31.6	32.2	0.0011 J	0.0012 J	0.0037 J	0.0845	0.0447 J	ND	6.47	6.6
Oct-2014	0.000873 J	ND	0.0629	ND	ND	24.5	24.3	0.000605 J	0.0025 J	0.0056 J	0.0105 J	0.0212 J	ND	5.4	5.29
Apr-2015	0.000587 J	ND	0.0642	ND	ND	35.4	35.9	0.000881 J	0.000674 J	0.0023 J	0.0386 J	0.0145 J	ND	6.73	6.77
Nov-2015	ND	ND	0.0547	ND	0.000073 J	21.6	20.8	0.000527 J	0.0026 J	0.0058 J	ND	ND	ND	4.78	4.76
May-2016	ND	ND	0.0483	ND	ND	22.9	24.1	0.00078 J	0.0019	0.0039 J	ND	ND	ND	4.96	5.09
Oct-2016	ND	ND	0.0469	ND	ND	22.1	21.9	0.00074 J	0.0024	0.0066	ND	ND	0.00011 J	4.66	4.85 J+
May-2017	ND	ND	0.0502	ND	ND	31.1	33.3	0.0011 J	0.0024	0.0046	0.0414 J	ND	ND	6.52	6.15
Oct-2017	ND	ND	0.0456	0.00011 J	ND	27.2	24.8	ND	0.0046	0.0098	0.0378 J	ND	0.00075 J	4.97	4.86
May-2018	0.000062 J	ND	0.047	0.00024 J	0.00019 J	14.6	13.4	0.0008 J	0.0103	0.017	0.11	ND	0.00013 JB	3.8	3.4
Nov-2018	ND	ND	0.042	0.000022 J	0.000051 J	29.8	30.6	0.0029 J	0.0013	0.0033	0.034	ND	0.000086 J	5.4	5.5
May-2019	ND	ND	0.071	ND	ND	15.9	16.7	ND	0.0013	0.0021	ND	ND	ND	5.1	5.2
Oct-2019	0.00011 J	ND	0.051	0.000072 J	0.00018 J	11.3	10.7	0.0048 J	0.0023	0.004	0.007 J	ND	ND	4	3.8
May-2020	0.000075 J	ND	0.061	ND	ND	22.9	22.9	0.0049 J	0.00049 J	0.0026	ND	ND	ND	6.7	6.6
Oct-2020	ND	ND	0.038	ND	ND	21.8	21.4	0.0025 J	0.00056 J	ND	ND	ND	ND	6.1	5.9
Apr-2021	ND	ND	0.062	ND	ND	22.7	24	0.00088 J	0.00079 J	ND	ND	ND	ND	5.8	6.2
Oct-2021	0.000065 JB	ND	0.05	ND	ND	15.2	16.5	ND	0.0033	0.0059	ND	ND	ND	4.5	4.9
May-2022	ND	ND	0.059	ND	ND	22.7	24.5	0.00073 J	0.00073 J	0.0018 J	ND	ND	ND	5.6	6.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-19*												
Nov-1993	0.12	NA	ND	NA	1.1	NA	ND	NA	2.3	NA	NA	NA	0.01
Apr-1994	0.05	NA	ND	NA	2.1	NA	ND	NA	7.4	NA	NA	NA	0.037
Apr-1995	0.12	NA	ND	1.1	2.8	NA	ND	ND	5.5	NA	ND	ND	0.04
Apr-1997	0.082	0.087	**0.003**	ND	3.5	3.4	ND	ND	4.9	5.6	ND	ND	0.025
Apr-1998	0.095	0.115	NA	ND	4.38	3.11	ND	ND	6.97	6.97	ND	0.012	0.024
Apr-1999	0.091	0.084	NA	ND	3.93	3.1	ND	ND	6.12	5.85	ND	ND	0.015
Apr-2000	0.065	0.049	NA	ND	6.11	5.89	ND	ND	15.5	13	ND	0.029	0.02
Apr-2001	0.083	NA	NA	ND	6.53	NA	ND	ND	12.2	NA	ND	0.141	0.035
Mar-2002	0.039	0.026	NA	ND	3.14	3.05	ND	ND	6.41	5.25	ND	0.055	0.016
Mar-2003	0.018	0.011	NA	ND	6.64	6.93	ND	ND	11	10.5	ND	ND	ND
Apr-2004	0.05	0.04	ND	ND	4.03	3.83	ND	ND	11	10.3	ND	0.014	0.068
Apr-2005	0.048	0.044	ND	ND	3.85	3.62	ND	ND	11.9	11.6	ND	ND	0.029
Mar-2006	0.021	0.017	ND	ND	2.49	2.49	ND	ND	8.93	8.97	ND	ND	ND
Mar-2007	0.035	0.025	ND	ND	4.15	4.11	ND	ND	11.1	11.2	ND	0.02	0.01
Mar-2008	0.018	0.016	ND	ND	3.76	3.47	ND	ND	10.2	9.4	ND	ND	ND
Mar-2009	0.01	ND	ND	ND	2.33	2.28	ND	ND	7.65	7.48	ND	ND	ND
Mar-2010	ND	ND	ND	ND	6.71	6.35	ND	ND	26.8	27.9	ND	ND	ND
Oct-2010	0.017	0.014	ND	ND	4.55	4.32	ND	ND	17.6	17.4	ND	ND	ND
Apr-2011	0.01	ND	ND	ND	5.85	5.61	ND	ND	22.8	21.9	ND	ND	ND
Sep-2011	ND	ND	ND	ND	6.14	6	ND	ND	24.6	24.2	ND	ND	ND
Mar-2012	0.011	0.011	ND	ND	5.36	5.21	ND	ND	23.1	22.2	ND	ND	0.014
Sep-2012	0.0091 J	0.01 J	0.000032 J	0.0049 J	4.53	4.62	ND	ND	21.5	20.7	0.00054 J	ND	0.0026 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-19***												
Mar-2013	0.01 J	0.0088 J	0.000031 J	0.0044 J	4.85	4.33	ND	ND	18.9	17	ND	ND	0.0145
Oct-2013	0.0146	0.0141	ND	0.0059 J	2.87	2.79	ND	ND	10.6	10.8	ND	0.0033 J	0.0127
Mar-2014	0.0054 J	0.0051 J	ND	0.0024 J	7.14	7.25	ND	ND	32.4	33.1	ND	ND	0.0028 J
Oct-2014	0.0097 J	0.0096 J	0.000023 J	0.004 J	5.08	4.97	0.0016 J	ND	31.9	31.5	ND	ND	0.007 J
Apr-2015	0.0046 J	0.0036 J	ND	0.002 J	9.82	9.94	0.000992 J	ND	55.7	56.4	ND	ND	ND
Nov-2015	0.0086 J	0.0083 J	ND	0.0042 J	5.31	5.22	0.001 J	ND	27.5	26.9	ND	0.000161 J	0.0035 J
May-2016	0.0071	0.0057	ND	0.0031 J	6.27	6.31	ND	ND	26.2	26.6	ND	0.00034 J	ND
Oct-2016	0.0044	0.0061 B	ND	0.0039 J	5.75	5.86	ND	ND	20.4	21.2	ND	0.00035 J	ND
May-2017	0.0049	0.0042	ND	0.0037 J	9.06	9.41	ND	ND	30.2	30	ND	0.00037 J	ND
Oct-2017	0.0067	0.0054	ND	0.0049	6.24	6.29	ND	ND	19.6	18.4	ND	0.00031 J	ND
May-2018	0.021	0.019	0.00018 JB	0.011	3.5 J	2.9 J	0.00032 J	ND	13.7	11.7	ND	0.0037	0.0091 B
Nov-2018	0.004	0.0026	ND	0.0028	7.1	7.3	0.00017 J	ND	19.5	20.2	ND	0.0022	0.0047 J
May-2019	0.039	0.037	ND	0.0059	ND	ND	ND	ND	15.6	15.5	ND	0.0035 B	0.0072
Oct-2019	0.016	0.015	ND	0.0045	3.7 J	3.5 J	0.00051 J	ND	14.7	12.1	ND	0.0088	0.0075
May-2020	0.0057	0.005	ND	0.0023	6.5	6.8	ND	ND	9.1	9.2	ND	0.01	0.0034 J
Oct-2020	0.0045	0.0042	ND	ND	5.7	5.8	ND	ND	9.1	8.4	ND	0.0012 J	ND
Apr-2021	0.0067	0.0062	ND	0.0024 J	6.1	6.6	ND	ND	10.3	11.1	ND	ND	0.0025 J
Oct-2021	0.0071	0.0075	ND	0.0041	4.2	4.6	ND	ND	8.9	9.8	0.000028 J	0.00035 J	0.0027 J
May-2022	0.0037 J	0.0038 J	ND	0.0024 J	6.4	6.4	ND	ND	13	13.2	ND	0.00054 JB	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-19***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	6.5	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2002	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2002	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	7.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-19*																
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.93 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.81 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	7.73	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	2.73	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-19*																
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-19***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.2	10
Jul-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	1.2
Jul-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	1.9
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	13	15
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5	8.3
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-19***															
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.97 J
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.96 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	3.39	ND	ND	ND	2.84	9.26
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.89 J	ND	ND	ND	0.75 J	3.18
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	2.3 J	3.5
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	0.5 J	ND	ND	ND	0.8 J	2.9
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.6 J	ND	ND	ND	0.7 J	3.4
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	0.3 J
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.8 J	ND	ND	ND	0.9 J	3.2
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	4.4	7
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.755 J	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	1.5

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-19*															
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-19***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	4.8	ND	ND	ND	ND	1.9	ND	ND	ND	NA
Jul-2002	ND	ND	ND	NA	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Jul-2002	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	**6.4**	ND	ND	ND	ND	2.7	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.2 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	3.3	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-19***															
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	0.95 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	0.46 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	3.48	ND	ND	ND	ND	1.06	0.47 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	1.73	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	0.3 J	0.2 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.6 B	ND	ND	3.1	ND	ND	ND	ND	1.1	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	1.2 BCH	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.611 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-19***															
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-20R***											
Apr-2010	3.2	3.2	*ND*	*ND*	105	0.81	*ND*	4.3	604	211	352	143
Oct-2010	*ND*	*ND*	*ND*	*ND*	102	0.87	*ND*	4.1	556	153	349	128
Apr-2011	*ND*	*ND*	*ND*	13	119	0.86	*ND*	4	573	115	386	123
Sep-2011	*ND*	*ND*	*ND*	*ND*	94.8	0.79	*ND*	4.3	520	115	363	124
Mar-2012	*ND*	*ND*	*ND*	10	121	0.86	*ND*	3.6	660	204	391	138
Sep-2012	*ND*	*ND*	*ND*	10.3	107	0.794	*ND*	3.9	511	177	365	135
Mar-2013	*ND*	*ND*	*ND*	14.6	108	0.902	*ND*	4.1	633	124	358	104
Oct-2013	*ND*	*ND*	*ND*	15.7	106	0.874	*ND*	3.6	658	161	401	109
Mar-2014	*ND*	*ND*	*ND*	22	104	0.902	*ND*	4.5	578	179	371	105
Oct-2014	*ND*	*ND*	*ND*	*9 J*	96.9	0.831	*ND*	4.3	633	209	326	119
Apr-2015	0.96	0.96	*ND*	*5 J*	91.1	1.04	*ND*	3.9	548	180	346	112
Nov-2015	*ND*	*ND*	*ND*	*9 J*	96.4	0.979	*ND*	4.4	650	214	343	87
May-2016	*ND*	*ND*	*ND*	14	82.6	1.25	*ND*	4.5	767	163	341	114
Oct-2016	*ND*	*ND*	*ND*	11	75.4	*NA*	*NA*	4.3	670	186	376	114
May-2017	*ND*	*ND*	*ND*	*ND*	81.9	1.27	*ND*	4.2	714	189	341	114
Oct-2017	*ND*	*ND*	*0.078 J*	*6 J*	75.7	1.82	*ND*	4.4	785	204	330	94.3
May-2018	*ND*	*ND*	*ND*	*18.7 J*	65.4	0.58	0.013	4	603	133	311	110
Nov-2018	*ND*	*ND*	*ND*	*14.3 J*	59.4	1.8	*ND*	4.15	473.8	144	272	110
May-2019	16 H1	*NA*	*ND*	*ND*	44	1.2	*ND*	5.13	355	139	284	139
Oct-2019	*2.5 J*	*NA*	*ND*	*14.8 J*	48.1	1.5	*ND*	4.56	472.6	126	276	115
May-2020	*ND*	*NA*	*ND*	*13.5 J*	32.2	1.1	*ND*	4.83	320.4	84.4	197	106
Oct-2020	*4 J*	*NA*	*ND*	*11.6 J*	20.3	0.98	*ND*	5.05	246.8	79.6	158	67.2
Apr-2021	44	*NA*	*ND*	*14.8 J*	12.9	0.98	*ND*	5.7	270.8	53.8	157 D6	85.8
Oct-2021	30	*NA*	*ND*	*8.3 J*	11	0.93	*ND*	5.54	277.7	60.5 ML	139	80.7
May-2022	36	*NA*	*ND*	*5.6 J*	8.7	0.89	*ND*	5.46	238	54.1	135	77.4 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-20R*													
Apr-2010	ND	ND	0.04	ND	ND	37.3	36.5	ND	0.017	0.018	0.076	ND	ND	12.1	11.8
Oct-2010	ND	ND	0.032	0.002	ND	29.9	29	ND	0.025	0.027	0.062	ND	ND	13	12.8
Apr-2011	ND	ND	0.036	0.002	ND	30.1	29.7	ND	0.02	0.022	0.357	0.031	ND	11.6	11.3
Sep-2011	ND	ND	0.041	ND	ND	27	25.2	ND	0.027	0.035	0.436	ND	ND	13.7	13.1
Mar-2012	ND	ND	0.035	0.003	ND	33.4	32.3	ND	0.019	0.025	0.122	ND	ND	13.2	12.7
Sep-2012	ND	ND	0.0383	0.0027	0.000685 J	31.6	31.7	0.0064 J	0.0225	0.0301	0.155	0.0323 J	ND	13.7	13.2
Mar-2013	ND	ND	0.0307	0.0017 J	0.000583 J	25.1	29.2	ND	0.0197 J	0.0259	0.0963	0.0261 J	0.0014 J	10.1	11.9
Oct-2013	ND	0.000794 J	0.0358	0.0019 J	0.0012 J	28	29.3	0.0085 J	0.0188 J	0.0266	ND	ND	0.000426 J	9.6	10.4
Mar-2014	0.00044 J	ND	0.0478 J	ND	ND	25.7	26	0.0094 J	0.0159 J	0.0249 J	2.02	0.0426 J	ND	10	10.3
Oct-2014	0.0013 J	0.0043 J	0.0574	0.0025 J	0.000866 J	28.9	28.9	0.0117 J	0.0229 J	0.0263 J	1.87	ND	0.003	11.4	11.6
Apr-2015	0.000541 J	0.0018 J	0.0334	0.0014 J	0.000605 J	27.3	26.8	ND	0.0173 J	0.0209	0.0507 J	ND	ND	10.7	10.6
Nov-2015	ND	0.0041	0.0364	0.0019 J	0.00099 J	20.6	20.7	0.0011 J	0.0158	0.0314	0.0486 J	0.0265 J	ND	8.67	8.66
May-2016	ND	0.0012 J	0.0342	0.0019	0.00046 J	28.1	28.6	0.0022 J	0.0229	0.0257	ND	ND	ND	10.6	10.7
Oct-2016	ND	0.0028 J	0.0216	0.0021	0.00052 J	26	28.2	0.0022 J	0.0276	0.0282	ND	0.0395 J	0.00013 J	11.8	13
May-2017	ND	0.0024 J	0.0342	0.0023	0.00062 J	23.4	24.5	0.0032 J	0.0323	0.0294	0.263	ND	0.00035 J	13.6	13.2
Oct-2017	ND	0.0013 J	0.0293	0.0018	0.00057 J	19.7	20.3	0.0044	0.0304	0.0263	0.147 J	0.0387 J	0.00021 J	11	11.4
May-2018	0.000035 J	ND	0.027	0.0021	0.0019	25.7	22.1	0.0036 JB	0.0223	0.018	0.24	0.022	0.00045 J	11.1	9.8
Nov-2018	0.000054 J	ND	0.024	0.00092	0.00084 J	31.1	31.5	0.0068 J	0.0072 J	0.025 J	0.07	0.018 J	0.00049 J	7.9	8
May-2019	ND	ND	0.025	0.00071	ND	40.2	41.1	ND	ND	ND	ND	ND	ND	9.5	9.6
Oct-2019	0.00011 J	ND	0.022	0.001	0.00082 J	32.1	31.2	0.0064 J	0.008	0.013	0.021 J	0.014 J	ND	8.4	8.2
May-2020	0.000086 J	ND	0.026	0.00043	0.00027 J	31.1	30.5	0.0064 J	0.0034	ND	0.055 J	0.015 J	ND	6.8	6.7

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-20R***													
Oct-2020	*ND*	*ND*	0.018	*0.00035 J*	*ND*	18.9	18.5	*0.0043 J*	*0.0021 J*	*ND*	0.13	*ND*	*ND*	4.9	4.6
Apr-2021	*ND*	*ND*	0.035	*0.00022 J*	*ND*	25.4	27.2	*0.0015 J*	*0.0017 J*	*0.0033 J*	*ND*	*ND*	*ND*	5.4	5.8
Oct-2021	*ND*	*ND*	0.031 M1	*0.0003 J*	*ND*	22.9 M1	21.2	*0.002 J*	0.0042	0.0037 M1	*0.041 JM1*	*0.025 JB*	*0.000049 JR1M1*	5.7 M1	5.3
May-2022	*ND*	*ND*	0.039 M1	*0.00021 J*	*ND*	22.1	24	*0.0014 J*	0.0033	0.0033	*ND*	*ND*	*ND*	5.4	5.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-20R*												
Apr-2010	0.298	0.292	ND	0.013	3.77	3.74	ND	ND	35.4	34.9	ND	ND	0.019
Oct-2010	0.269	0.263	ND	0.019	3.4	3.36	ND	ND	37.7	37.1	ND	ND	0.024
Apr-2011	0.238	0.232	ND	0.015	3.53	3.43	ND	ND	44.6	44	ND	ND	0.019
Sep-2011	0.291	0.278	0.0002	0.028	3.84	3.18	ND	ND	41.7	39.2	ND	ND	0.037
Mar-2012	0.239	0.233	0.0003	0.014	3.87	3.77	ND	ND	50.1	48.7	ND	ND	0.019
Sep-2012	0.227	0.228	0.000349	0.0195	3.67	3.67	0.0026	ND	56.1	55.3	0.000296 J	ND	0.022
Mar-2013	0.229	0.261	0.000199 J	0.015	2.56 J	3.06 J	0.002 J	ND	42	49.6	ND	ND	0.0264
Oct-2013	0.239	0.265	ND	0.0124	3.47 J	3.16 J	0.0023	0.000025 J	53.5	57	ND	0.0135 J	0.0252
Mar-2014	0.198	0.195	ND	0.0128 J	3.48 J	3.14	ND	ND	48.6	48.9	ND	0.0147 J	0.0738 J
Oct-2014	0.233	0.234	0.000118 J	0.0194 J	3.62 J	3.18 J	0.0184 J	0.000032 J	48.5	50.4	ND	0.0141 J	ND
Apr-2015	0.186	0.192	0.000095 J	0.0128	3.09	3.08	0.0118	ND	41.8	41.5	ND	ND	0.0245
Nov-2015	0.167	0.166	0.000325	0.0154	2.51	2.52	0.0267	ND	36.8	37.5	ND	0.0018 J	0.0235
May-2016	0.18	0.175	0.00024	0.0136	3.46	3.37	0.0011 J	ND	44.3	44.2	ND	0.0022	0.0195 J
Oct-2016	0.19	0.215	0.00016 J	0.0177	3.09	3.51	0.00058 J	ND	39	45.3	ND	0.0025	0.0254 J
May-2017	0.246	0.248	0.00039	0.0208	3.14	3.08	0.00063 J	ND	47	45.3	ND	0.0059	0.0309
Oct-2017	0.205	0.206	0.000077 J	0.0179	2.99	2.96	0.00057 J	ND	50.7 J-	50.4	ND	0.0044	0.0227 J
May-2018	0.19	0.22	0.00015 J	0.011 B	2.5 J	2.6 J	0.0033	ND	55.1	45.8	ND	0.0032 J	0.0016 JB
Nov-2018	0.11	0.13	ND	0.0052 J	4 J	4 J	ND	ND	40.3	41.5	ND	0.0014 J	ND
May-2019	0.055	0.057	ND	ND	ND	ND	ND	ND	26.8	27	ND	ND	ND
Oct-2019	0.063	0.022	ND	0.0055	4.3 J	4.3 J	0.0021	ND	36.4	34.5	ND	0.01	0.01
May-2020	0.028	0.03	ND	0.0032	3.7 J	3.7 J	ND	ND	23.6	23.4	ND	0.0054	ND
Oct-2020	0.055	0.03	ND	ND	2.9 J	3 J	ND	ND	22.7	20.3	ND	0.0028 J	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-20R***												
Apr-2021	0.02	0.02	*ND*	*0.0017 J*	3.1	3.4	*ND*	*ND*	12.5	13.6	*ND*	*0.004 J*	*ND*
Oct-2021	0.033 M1	0.031	*ND*	0.0028 M1	3.5 M1	3.3	*0.0015 J*	*ND*	14.6 M1	14.4	*0.000032 J*	0.0031	*0.0022 JR1M1*
May-2022	0.028	0.039	*ND*	0.0027 M1	3.3	3.3	*0.0012 J*	*ND*	10.7	10.9	*ND*	0.0043	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-20R*																
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-20R*																
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-20R*															
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-20R***															
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-20R***															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.56 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*0.31 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-20R***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.516 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-23***											
Apr-1995	10.3	10.3	ND	34.7	3.4	0.6	ND	5.8	40.6	5.3	34	8.5
Apr-1997	ND	2	ND	ND	4	0.42	ND	NA	NA	ND	57	12
Oct-1997	2	2	ND	ND	3.52	0.695	ND	8.92	34.2	ND	ND	ND
Apr-1998	ND	ND	0.21	ND	2.44	0.36	ND	6.73	20.3	ND	12	4.6
Apr-1999	ND	ND	0.25	ND	13.9	0.24	ND	5.36	68.4	ND	33	4.7
Oct-1999	ND	ND	0.16	ND	3.42	0.38	ND	5.6	23.2	0.93	33	4.5
Apr-2000	10	10	ND	ND	2.75	0.32	ND	6.02	20	ND	29	7.3
Oct-2000	9.5	NA	ND	14	3.06	0.31	ND	6.06	23.4	ND	27	5.76
Apr-2001	2.2	NA	ND	ND	2.57	0.44	ND	NA	NA	ND	31	4.8
Sep-2001	1.6	1.6	ND	ND	3.87	1.4	ND	5.22	19	ND	25	4.81
Mar-2002	ND	ND	ND	27	4.35	0.522	ND	5.2	15.6	ND	36	5
Sep-2002	2	2	ND	ND	3.9	0.56	ND	5.2	26.2	ND	ND	5
Mar-2003	4.4	4.4	ND	ND	16	ND	ND	5.4	35.5	ND	42	6.69
Oct-2003	4.2	4.2	ND	11	3.33	0.384	ND	4.5	27.8	ND	ND	7.79
Apr-2004	7.8	7.8	ND	10	14.9	0.435	ND	5.6	75.3	ND	96	6.26
Oct-2004	3.7	3.7	ND	14	3.68	0.48	ND	5.2	24.7	ND	31	8.08
Apr-2005	4.1	4.1	ND	ND	8.81	0.48	ND	5.4	40.4	ND	ND	5.1
Oct-2005	3.8	3.8	ND	ND	3.51	0.4	ND	5.1	19.6	ND	34	5.22
Mar-2006	4.7	4.7	ND	ND	8.69	0.41	ND	5.3	42.1	ND	19	2.45
Sep-2006	3.5	3.5	ND	43	3.52	0.39	ND	5.2	26.1	ND	30	5.88
Mar-2007	6.1	6.1	ND	ND	32.6	0.45	ND	5.4	99.8	ND	52	3.24
Sep-2007	3	3	ND	ND	8.75	0.94	ND	5.1	21.2	ND	37	4.27
Mar-2008	2.9	2.9	ND	15	13	1.39	ND	5	26	4.86	18	5.05
Sep-2008	3.9	3.9	ND	11	3.44	0.42	ND	4.7	19.1	ND	22	5.1
Mar-2009	4.6	4.6	ND	37	4.22	0.45	ND	4.8	27.3	ND	26	3.81
Oct-2009	3.7	3.7	ND	13	3.88	0.58	ND	4.7	24.4	ND	30	9.1
Apr-2010	7	7	ND	ND	6.3	0.67	ND	4.9	40	ND	27	3.9
Oct-2010	4.4	4.4	ND	ND	3.81	0.57	ND	4.6	21.6	1.31	39	6.87
Apr-2011	10	10	ND	22	15.9	0.76	ND	5.6	73.2	ND	89	5.9
Sep-2011	14	14	ND	ND	1.98	0.36	ND	6	31.4	ND	34	15.4
Mar-2012	14	14	ND	ND	10	0.6	ND	5.3	58	ND	37	10.7
Sep-2012	10.4	10.4	ND	ND	3.42	0.562	ND	5	30.4	ND	43	12.6
Mar-2013	20.7	20.7	ND	11.7	38.1	0.717	ND	6.1	148.4	0.922 J	99	15.5
Oct-2013	17	17	0.101 J	50.6	1.89	0.277	ND	6	29.8	1.45	ND	16.8
Mar-2014	7.56	7.56	ND	ND	3.88	0.596	ND	6.1	33.7	0.498 J	ND	9.85
Oct-2014	ND	ND	ND	ND	7.73	1.2	ND	5.1	44.6	2	50	8.03
Apr-2015	6.52	6.52	ND	ND	7.01	1.34	ND	4.4	42.5	0.879 J	60	10.8

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-23***										
Nov-2015	4.28	4.28	*ND*	*ND*	6.66	1.35	*ND*	5.5	68.1	*ND*	112	17.6
May-2016	2.68	2.68	*ND*	*8 J*	6.53	*ND*	*ND*	5.3	56.2	*ND*	27	8.2
Oct-2016	3.68	3.68	*ND*	*ND*	6.72	*NA*	*NA*	5.2	57.5	*0.895 J*	35	8.7
May-2017	*ND*	*ND*	*ND*	*ND*	7.43	1.41	*ND*	5.2	60.9	*0.749 J*	*15 J*	8.3
Oct-2017	3.56	3.56	*ND*	*ND*	7.17	1.55	*ND*	5	72	*0.567 J*	*20 J*	8.8
May-2018	*4 J*	*ND*	*ND*	*ND*	6.7	1.5	*ND*	5.8	51.1	*ND*	31	9.5
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	6.3	1.4	*ND*	4.79	47.4	*ND*	11	9.5
May-2019	*ND*	*NA*	*ND*	*ND*	6.3	1.2	*ND*	4.84	33	*ND*	16	8.6
Oct-2019	*ND*	*NA*	*ND*	*ND*	5.3	1.5	*ND*	4.56	4.14	*ND*	18	9.7
May-2020	*ND*	*NA*	*ND*	*ND*	6.7	1.4	*ND*	5.23	55.1	*ND*	*ND*	9.6
Oct-2020	*ND*	*NA*	*ND*	*ND*	6.5	1.5	*ND*	5.01	44.3	*ND*	39	10
Apr-2021	*ND*	*NA*	*ND*	*ND*	6.9	1.6	*ND*	4.95	51.4	*ND*	23	10.1
Oct-2021	*ND*	*NA*	*0.061 J*	*ND*	6.5	1.4	*ND*	4.97	87.2	*ND*	20	10.9
May-2022	*2 J2c*	*NA*	*ND*	*ND*	6.6	1.8	*ND*	4.87	75.2	*ND*	12	11.3 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-23***													
Apr-1995	ND	ND	ND	ND	ND	2.2	NA	ND	ND	ND	0.57	0.05	ND	0.72	NA
Oct-1996	ND	ND	0.019	ND	ND	1.4	1.5	0.026	ND	ND	0.91	0.5	ND	ND	ND
Apr-1997	ND	ND	0.024	ND	ND	2.6	1.3	ND	ND	ND	0.26	ND	0.005	0.76	ND
Oct-1997	ND	ND	ND	ND	ND	1.08	1.06	ND	ND	ND	0.092	ND	ND	0.387	0.377
Apr-1998	ND	ND	ND	ND	ND	1.15	1.15	ND	ND	ND	0.13	ND	ND	0.421	0.396
Apr-1999	ND	ND	ND	ND	ND	1.25	1.32	ND	ND	ND	0.164	ND	ND	0.394	0.385
Oct-1999	ND	ND	ND	ND	ND	1.24	1.15	ND	ND	ND	0.113	ND	ND	0.406	0.352
Apr-2000	ND	ND	ND	ND	ND	1.42	1.26	ND	ND	0.017	0.795	ND	ND	0.91	0.389
Oct-2000	ND	ND	ND	ND	ND	1.48	1.46	ND	ND	ND	0.285	ND	ND	0.499	0.428
Apr-2001	ND	ND	ND	ND	ND	1.17	NA	ND	ND	ND	0.199	NA	ND	0.447	NA
Sep-2001	ND	ND	ND	ND	ND	1.19	1.29	ND	ND	ND	0.4	0.128	ND	0.448	0.436
Mar-2002	ND	ND	ND	ND	ND	1.27	1.11	ND	ND	ND	0.156	ND	ND	0.443	0.403
Sep-2002	ND	ND	ND	ND	ND	1.26	1.19	ND	ND	ND	0.565	ND	ND	0.482	0.4
Mar-2003	ND	ND	ND	ND	ND	1.81	1.28	ND	ND	ND	0.173	ND	ND	0.53	0.391
Oct-2003	ND	ND	0.011	ND	ND	2.04	1.56	ND	ND	ND	1.59	ND	0.003	0.656	0.434
Apr-2004	ND	ND	0.033	ND	ND	1.29	0.335	0.034	ND	0.024	13.6	ND	0.01	0.737	0.166
Oct-2004	ND	ND	0.011	ND	ND	2.22	1.22	0.011	ND	0.015	3.11	0.122	0.005	0.617	0.375
Apr-2005	ND	ND	ND	ND	ND	1.29	0.986	ND	ND	0.011	0.829	ND	ND	0.464	0.374
Oct-2005	ND	ND	ND	ND	ND	1.33	1.04	ND	ND	ND	0.527	ND	ND	0.46	0.372
Mar-2006	ND	ND	ND	ND	ND	0.683	0.497	ND	ND	ND	0.523	ND	ND	0.18	0.14
Sep-2006	ND	ND	ND	ND	ND	1.42	1.12	0.021	ND	ND	0.758	ND	0.004	0.565	0.383

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-23***													
Mar-2007	ND	ND	ND	ND	ND	0.708	0.573	0.014	ND	ND	2.05	ND	0.004	0.356	0.211
Sep-2007	ND	ND	ND	ND	ND	1.03	0.921	ND	ND	ND	0.628	ND	ND	0.414	0.358
Mar-2008	ND	ND	ND	ND	ND	1.19	0.977	0.046	ND	0.026	1.35	ND	0.006	0.505	0.349
Sep-2008	ND	ND	ND	ND	ND	1.25	1.08	ND	ND	ND	0.427	ND	ND	0.484	0.396
Mar-2009	ND	ND	ND	ND	ND	0.931	0.826	ND	ND	ND	0.243	ND	ND	0.363	0.299
Oct-2009	ND	ND	0.015	ND	ND	1.83	1.12	0.021	ND	0.014	2.17	0.19	0.011	1.1	0.382
Apr-2010	ND	ND	ND	ND	ND	1.33	1.52	ND	ND	ND	3.62	0.182	ND	0.395	0.247
Oct-2010	ND	ND	ND	ND	ND	1.89	1.8	ND	ND	ND	0.508	ND	ND	0.523	0.437
Apr-2011	ND	ND	0.02	ND	ND	1.24	0.396	0.014	ND	ND	4.31	0.121	0.007	0.689	0.135
Sep-2011	ND	ND	0.012	ND	ND	4.88	3.75	ND	ND	0.011	0.959	ND	0.002	0.771	0.469
Mar-2012	ND	ND	0.012	ND	ND	3.02	2.25	ND	ND	ND	2	0.088	0.003	0.764	0.411
Sep-2012	ND	ND	0.0158	ND	ND	3.9	3.58	0.0072 J	0.000829 J	0.003 J	1.07	0.163	0.0018 J	0.706	0.568
Mar-2013	ND	ND	0.0101	ND	ND	4.83	4.79	0.0107	0.000515 J	0.0043 J	1.31	0.365	0.0035	0.829	0.624
Oct-2013	0.001 J	0.0011 J	0.0255	0.000179 J	0.000162 J	4.9	4.8	0.0189	0.000838 J	0.0101	5.28	0.112	0.0083	1.11	0.552
Mar-2014	0.00041 J	0.001 J	0.0144	0.000128 J	ND	2.9	2.76	0.0058 J	0.0022 J	0.0049 J	3.69	0.161	0.0016 J	0.631	0.535
Oct-2014	0.000466 J	ND	0.0207	ND	ND	1.88	1.84	0.0012 J	0.0035 J	0.0023 J	0.0652	0.012 J	ND	0.811	0.775
Apr-2015	0.000661 J	0.000492 J	0.0376	0.000279 J	0.000075 J	2.33	1.49	0.0056 J	0.0027 J	0.0041 J	2.26	0.0177 J	0.0022	1.21	0.505
Nov-2015	ND	0.00087 J	0.0601	0.000503 J	0.000116 J	3.56	1.5	0.0071 J	0.0032 J	0.0077 J	5.46	0.031 J	0.0049	2.11	0.539
May-2016	ND	ND	0.0135	0.000088 J	ND	2	1.98	0.0013 J	0.0022	0.0024 J	0.0559 J	ND	ND	0.77	0.721
Oct-2016	ND	ND	0.0137	ND	ND	2.22	2.11	0.00082 J	0.0022	0.0021 J	ND	ND	ND	0.775	0.795
May-2017	ND	ND	0.0143	ND	ND	2.02	2.14	0.00095 J	0.0023	0.0026 J	ND	ND	ND	0.787	0.857
Oct-2017	ND	ND	0.0134	0.000084 J	ND	2.17	2.3	ND	0.0025	0.004	ND	ND	ND	0.824	0.893
May-2018	0.000055 J	ND	0.015	0.0001 J	0.000053 J	2.3	2.2	0.0072	0.005	0.0079	0.078	0.023	0.00004 J	0.91 J	0.85 J
Nov-2018	ND	ND	0.011	0.000097 J	0.000061 J	2.4	2.4	0.0047 J	0.0028	0.0052	0.13	0.022	0.00011 JB	0.86 J	0.88 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-23***													
May-2019	*ND*	*ND*	0.01	*ND*	*ND*	2.2	2.2	0.016	0.0068	0.0092	0.26	0.19	*ND*	*ND*	*ND*
Oct-2019	*0.00011 J*	*ND*	0.01	*0.00011 J*	*0.00026 J*	2.4	2.4	*0.0069 J*	0.0032	0.014	*0.059 J*	0.023	*0.000074 J*	0.88	*0.87 J*
May-2020	*0.00007 J*	*ND*	0.012	*0.000059 J*	*ND*	2.4	2.3	0.046	0.0055	0.015	0.39	0.16	*ND*	0.86	*0.85 J*
Oct-2020	*0.00032 J*	*ND*	0.015	*ND*	*ND*	2.5	2.5	*0.017 J*	0.0042	*ND*	0.12	0.055	*ND*	0.91	*0.91 J*
Apr-2021	*ND*	*ND*	0.014	*ND*	*ND*	2.5	2.4	0.006	*0.0036 J*	0.0096	0.076	*0.062 J*	*ND*	0.93	0.97
Oct-2021	*0.000089 J*	*ND*	0.016	*ND*	*ND*	2.7	2.7	0.0081	0.0041	0.0073	0.067	*0.047 J*	*0.000042 J*	1	1
May-2022	*ND*	*0.0017 JB*	0.015	*ND*	*ND*	2.8	2.9	0.015	0.004	0.011	0.16	0.095	*ND*	1.1	1.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-23*												
Apr-1995	0.03	NA	ND	ND	1.2	NA	ND	0.02	3.1	NA	ND	ND	0.07
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	1.7	1.8	ND	ND	0.099
Apr-1997	0.011	ND	ND	ND	2.1	2.3	ND	ND	1.2	1.9	ND	ND	0.073
Oct-1997	ND	ND	ND	ND	0.907	1.32	ND	ND	1.33	1.38	ND	ND	0.015
Apr-1998	ND	ND	ND	0.016	ND	ND	ND	ND	1.61	1.4	ND	ND	0.013
Apr-1999	ND	ND	NA	ND	ND	1.12	ND	ND	8.54	8.47	ND	ND	0.027
Oct-1999	ND	0.01	NA	ND	0.759	ND	ND	ND	1.51	1.37	ND	ND	0.016
Apr-2000	ND	ND	NA	ND	ND	ND	ND	ND	2.26	2.21	ND	ND	0.044
Oct-2000	ND	ND	NA	ND	0.712	0.577	ND	ND	1.42	1.37	ND	ND	0.023
Apr-2001	ND	NA	NA	ND	1.66	NA	ND	ND	1.53	NA	ND	ND	0.016
Sep-2001	ND	ND	NA	ND	0.9	1.09	ND	ND	1.72	1.67	ND	ND	0.019
Mar-2002	ND	ND	NA	ND	0.948	0.868	ND	ND	2.74	1.78	ND	ND	0.02
Sep-2002	ND	ND	NA	ND	0.833	ND	ND	ND	1.68	1.65	ND	ND	0.022
Mar-2003	ND	ND	NA	ND	1.42	0.569	ND	ND	3.83	3.32	ND	ND	0.035
Oct-2003	ND	0.012	NA	0.012	ND	ND	ND	ND	2.35	1.61	ND	ND	0.122
Apr-2004	0.01	ND	ND	0.017	1.35	0.73	ND	ND	15.1	16	ND	0.034	0.081
Oct-2004	ND	ND	ND	ND	1.55	0.598	ND	ND	2.9	2.08	ND	ND	0.064
Apr-2005	ND	ND	ND	ND	0.83	0.69	ND	ND	6.96	6.52	ND	ND	0.082
Oct-2005	ND	ND	ND	ND	0.686	0.545	ND	ND	2.05	1.3	ND	ND	0.039
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	6.12	7.09	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.75	0.694	ND	ND	1.7	1.43	ND	ND	0.039
Mar-2007	ND	ND	ND	ND	0.74	0.512	ND	ND	21.4	21.3	ND	ND	0.037

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-23***												
Sep-2007	ND	ND	ND	ND	0.873	0.671	ND	ND	1.82	1.79	ND	ND	0.016
Mar-2008	ND	ND	ND	ND	0.915	0.793	ND	ND	1.84	1.58	ND	ND	0.058
Sep-2008	ND	ND	ND	ND	0.706	0.652	ND	ND	1.49	1.4	ND	ND	0.026
Mar-2009	ND	ND	ND	ND	0.775	0.721	ND	ND	2.38	2.36	ND	ND	0.023
Oct-2009	0.016	ND	ND	ND	0.722	ND	ND	ND	1.67	1.51	ND	ND	0.12
Apr-2010	ND	ND	ND	ND	0.752	0.579	ND	ND	5.28	5.44	ND	ND	0.036
Oct-2010	ND	ND	ND	ND	0.735	0.653	ND	ND	2.03	1.97	ND	ND	0.041
Apr-2011	0.011	ND	ND	ND	0.801	ND	ND	ND	13.3	12.4	ND	0.013	0.066
Sep-2011	0.013	ND	ND	0.013	0.985	0.574	ND	ND	2.52	2.06	ND	ND	0.042
Mar-2012	0.014	ND	ND	ND	0.68	ND	ND	ND	10.5	10.5	ND	ND	0.057
Sep-2012	0.0157	0.0131	ND	0.0032 J	1	0.679	ND	ND	1.84	1.85	ND	ND	0.0594
Mar-2013	0.024	0.0208	0.000095 J	0.0051 J	1.57	1.58	ND	0.000036 J	26	26.8	ND	ND	0.111
Oct-2013	0.0286	0.0171	ND	0.0058 J	0.933	0.397 J	ND	ND	1.32	1.55	0.000312 J	0.0149	0.134
Mar-2014	0.026	0.0181	ND	0.0101 J	0.856	0.752	ND	0.000044 J	1.57	1.65	ND	0.0063 J	0.0335
Oct-2014	0.0115	0.0125	ND	0.0051 J	0.936	0.923	ND	ND	5	5.16	ND	ND	0.0084 J
Apr-2015	0.0492	0.029	ND	0.0055 J	1.25	1.02	ND	ND	6.82	6.98	ND	0.0034 J	0.014
Nov-2015	0.0908	0.0381	ND	0.0062 J	1.65	0.943	0.0014 J	ND	7.18	7.04	ND	0.0088 J	0.0284
May-2016	0.0427	0.0402	ND	0.0036 J	0.987	1	ND	ND	4.26	4.26	ND	ND	0.0144 J
Oct-2016	0.0339	0.0342	ND	0.0038 J	0.988	1.02	ND	ND	3.95	4.07	ND	ND	0.0099 J
May-2017	0.0212	0.0215	ND	0.0037 J	0.923	1.02	ND	ND	3.98	4.11	ND	ND	0.0089 J
Oct-2017	0.0189	0.0193	ND	0.0035 J	0.971	1.06	ND	ND	4.17 J-	4.32	ND	ND	0.0101 J
May-2018	0.019	0.017	ND	0.0092	1.1 J	ND	0.0006 JB	ND	4.2 J	4.2 J	ND	0.0035	0.011
Nov-2018	0.02	0.017	ND	0.0069	1.2 J	1.6 J	0.00012 J	ND	2.4 J	4 JB	ND	0.0026	0.011
May-2019	0.024	0.021	ND	0.022	ND	ND	ND	ND	ND	ND	ND	0.0034	0.012

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-23***												
Oct-2019	0.019	0.016	*ND*	0.0094	*1.1 J*	*1.1 J*	*ND*	*ND*	*3.2 J*	*3.2 J*	*ND*	*ND*	0.022
May-2020	0.032	0.028	*ND*	0.055	*ND*	*1.4 J*	*ND*	*ND*	*3.3 J*	*3.1 J*	*ND*	0.012	0.0097
Oct-2020	0.019	0.016	*ND*	0.026	*ND*	*ND*	*ND*	*ND*	*2.5 J*	*2.9 J*	*ND*	*0.0025 J*	*ND*
Apr-2021	0.014	0.012	*0.00006 J*	0.014	1.1	0.96	*ND*	*ND*	3.9	3.4	*ND*	*ND*	*0.0068 J*
Oct-2021	0.012	0.012	*ND*	0.016	1	1.1	*ND*	*ND*	4.4	4.6	*ND*	*ND*	0.0059
May-2022	0.014	0.014	*ND*	0.03	1	1.1	*ND*	*ND*	4.3	4.8	*ND*	*ND*	0.0055

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-23***																
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-23*																
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1 J	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-23*																
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-23***															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-23***															
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.44 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-23***															
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.189 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-23***															
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Feb-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-23***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*0.66 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*0.26 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-23***															
May-2017	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.292 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-24***											
Apr-1995	47.4	31	ND	30.1	9.4	ND	ND	8.8	125	7	77	17.9
Apr-1997	ND	2	ND	ND	7	0.17	ND	NA	NA	0.1	51	12
Oct-1997	3	3	0.26	ND	7.44	ND	ND	5.58	40.5	ND	16	ND
Apr-1998	ND	ND	0.23	ND	5.44	0.14	ND	5.65	47.7	ND	10	7.4
Apr-1999	ND	ND	0.46	ND	24.7	0.125	ND	5.03	39.3	ND	37	6
Oct-1999	ND	ND	0.08	ND	6.98	0.299	ND	5.39	36.8	ND	32	7.2
Apr-2000	5	5	0.61	ND	7.27	0.227	ND	5.84	33	ND	28	10
Oct-2000	7.9	NA	ND	ND	5.45	ND	ND	5.18	29.1	5	28	6.34
Apr-2001	4.1	NA	0.26	ND	6.18	ND	ND	NA	NA	ND	25	8.5
Sep-2001	2	2	ND	ND	9.87	1.38	ND	4.81	42	38.6	38	6.77
Mar-2002	3.6	3.6	ND	ND	9.49	ND	ND	5.1	49	ND	37	7.42
Sep-2002	4	4	ND	ND	9.42	ND	ND	6.1	46.1	ND	24	8.25
Mar-2003	3.6	3.6	ND	ND	7.39	0.256	ND	5.1	45	ND	50	8.22
Oct-2003	4.2	4.2	ND	ND	7.42	0.24	ND	4.6	51.7	ND	17	9.13
Apr-2004	4.2	4.2	ND	ND	8.28	0.174	ND	4.7	51.2	ND	45	13.1
Oct-2004	4.2	4.2	ND	ND	9.13	0.223	ND	4.85	47.8	ND	42	9.83
Apr-2005	18	18	ND	ND	10.2	0.25	ND	5.5	66.4	ND	65	13.6
Oct-2005	5	5	ND	ND	6.25	0.28	ND	4.4	38.4	ND	38	6.16
Mar-2006	4.9	4.9	ND	ND	7.6	0.28	ND	5.6	60.3	1.16	42	5.83
Sep-2006	4.3	4.3	ND	ND	6.63	0.25	ND	4.9	43	1.07	37	6.71
Mar-2007	4.7	4.7	ND	ND	8.12	0.2	ND	4.7	45.9	ND	ND	7.64
Sep-2007	5.3	5.3	ND	ND	8.37	0.14	ND	5.6	41.8	ND	57	7.71
Mar-2008	16	16	ND	ND	21.1	1.01	ND	4.8	44.6	6.71	37	11.9
Sep-2008	6.3	6.3	ND	ND	9.79	0.09	ND	4.8	45.9	1.15	34	8.4
Mar-2009	5.8	5.8	ND	ND	15.8	0.07	ND	4.7	73.6	1.67	43	13.4
Oct-2009	7	7	ND	ND	12.5	0.08	ND	4.7	60.3	2.3	64	11.7
Mar-2010	7.5	7.5	0.44	11.8	13.9	0.07	ND	4.82	75	4.01	62	12
Oct-2010	6	6	ND	ND	12.2	ND	ND	4.6	59.2	4.05	37	11.6
Apr-2011	7.1	7.1	ND	ND	11.4	0.07	ND	4.5	62.6	3.6	66	10.4
Sep-2011	7.1	7.1	ND	ND	11.7	0.08	ND	4.7	57.6	3.44	52	12
Mar-2012	6.8	6.8	ND	ND	12	0.09	ND	4.1	61.4	3.98	46	12.3
Sep-2012	6	6	ND	ND	11.9	0.125	ND	3.6	59.3	3.23	46	12.1
Mar-2013	5.84	5.84	ND	ND	12.1	0.135	ND	4.9	60.9	3.23	51	9.7
Oct-2013	6.76	6.76	ND	ND	13	0.109	ND	5.7	62.3	3.7	46	13.5
Mar-2014	6.52	6.52	ND	ND	13.5	0.138	ND	5	66.7	3.68	460	13.4
Oct-2014	ND	ND	ND	ND	13.3	0.137	ND	4.9	67.8	4.81	34	14.7
Apr-2015	7.44	7.44	ND	ND	14.7	0.0722	ND	3.9	66	4.46	48	15.2

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-24***											
Nov-2015	4.52	4.52	*ND*	*6 J*	14.7	0.0738	*ND*	5	94.1	5.42	55	14.9
May-2016	4.4	4.4	*ND*	*ND*	13.7	0.0732	*ND*	5	89.7	4.15	47	14.7
Oct-2016	5.48	5.48	*ND*	*ND*	14.9	*NA*	*NA*	4.9	97.2	4.7	51	14.2
May-2017	3.56	3.56	*ND*	*ND*	14.7	0.334	*ND*	4.9	105.5	5.01	*21 J*	15.5
Oct-2017	2	2	*0.144 J*	*ND*	15.2	0.408	*ND*	5.1	110.4	3.28	53	16.2
May-2018	*4 J*	*ND*	*ND*	*7.9 J*	14.5	0.41	*ND*	5.3	97.5	*5.5 J*	43	17.4
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	16.5	0.73	*ND*	4.58	86.7	*7.1 J*	47	19.4
May-2019	*ND*	*NA*	*ND*	*ND*	19.8	0.61	*ND*	4.56	78.3	*ND*	61	21.2
Oct-2019	*4 J*	*NA*	*ND*	*ND*	18.2	0.63	*ND*	4.21	102.8	*8.4 J*	104	23.9
May-2020	*ND*	*NA*	*ND*	*ND*	16.1	0.25	*ND*	4.29	89.6	*9.2 J*	30	19.2
Oct-2020	*2 J*	*NA*	*ND*	*ND*	15.8	0.28	*ND*	4.47	82.2	8.2	38	19.8
Apr-2021	*ND*	*NA*	*ND*	*ND*	24.4	1.1	*ND*	4.61	129.3	*ND*	72	22.2
Oct-2021	12	*NA*	*ND*	*ND*	22.1	1	*ND*	4.8	165	*5.2 J*	55	22.6
May-2022	*2 J3c*	*NA*	*ND*	*ND*	20.2	1	*ND*	4.6	155.1	*8.4 J*	74	25.7 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24***													
Apr-1995	ND	ND	ND	ND	ND	43.2	NA	0.01	ND	ND	1.7	0.07	ND	2.4	NA
Oct-1996	ND	ND	0.026	ND	ND	1.9	1.6	ND	ND	ND	0.22	ND	ND	0.87	0.71
Apr-1997	ND	ND	0.018	ND	ND	1.4	1.8	ND	ND	ND	ND	ND	ND	0.85	1.1
Oct-1997	ND	ND	0.019	ND	ND	1.36	1.39	ND	ND	ND	0.201	ND	ND	0.886	0.897
Apr-1998	ND	ND	0.021	ND	ND	1.44	1.41	ND	ND	ND	0.198	ND	ND	0.918	0.908
Apr-1999	ND	ND	0.015	ND	ND	1.16	1.19	ND	ND	ND	ND	ND	ND	0.747	0.759
Oct-1999	ND	ND	0.018	ND	ND	1.28	1.2	ND	ND	ND	0.085	0.058	ND	0.836	0.776
Apr-2000	ND	ND	0.018	ND	ND	2.77	1.23	0.021	ND	ND	3.87	0.571	ND	0.828	0.694
Oct-2000	ND	ND	0.014	ND	ND	1.23	1.23	ND	ND	ND	0.053	ND	ND	0.792	0.81
Apr-2001	ND	ND	0.017	ND	ND	2.03	NA	ND	ND	ND	1.27	NA	ND	0.842	NA
Sep-2001	ND	ND	0.016	ND	ND	1.29	1.41	ND	ND	ND	0.175	0.111	ND	0.863	0.9
Mar-2002	ND	ND	0.02	ND	ND	1.44	1.44	ND	ND	ND	0.132	0.121	ND	0.929	0.919
Sep-2002	ND	ND	0.022	ND	ND	1.68	1.58	ND	ND	ND	0.251	0.189	ND	0.987	0.97
Mar-2003	ND	ND	0.02	ND	ND	1.73	1.41	ND	ND	ND	0.185	0.083	ND	0.945	0.943
Oct-2003	ND	ND	0.022	ND	ND	1.87	1.47	ND	ND	ND	0.161	0.089	ND	1.08	1.01
Apr-2004	ND	ND	0.027	ND	ND	3.01	1.85	ND	ND	ND	1.65	0.177	ND	1.36	1.25
Oct-2004	ND	ND	0.025	ND	ND	1.85	1.84	ND	ND	ND	0.379	0.275	ND	1.27	1.26
Apr-2005	ND	ND	0.024	ND	ND	3.6	1.85	ND	ND	ND	4.47	1.07	ND	1.12	0.975
Oct-2005	ND	ND	0.017	ND	ND	1.15	1.11	ND	ND	ND	0.199	0.112	ND	0.801	0.773
Mar-2006	ND	ND	0.015	ND	ND	1.08	0.969	ND	ND	ND	ND	ND	ND	0.765	0.723
Sep-2006	ND	ND	0.017	ND	ND	1.24	1.23	ND	ND	ND	0.077	0.051	ND	0.876	0.921

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24***													
Mar-2007	ND	ND	0.022	ND	ND	1.33	1.36	ND	ND	0.118 J	ND	ND	ND	1.05	1.06
Sep-2007	ND	ND	0.02	ND	ND	1.42	1.29	ND	ND	ND	0.066	0.052	ND	1.01	0.956
Mar-2008	ND	0.002	0.024	ND	ND	2.9	1.93	ND	ND	ND	3.09	1.41	ND	1.13	0.988
Sep-2008	ND	ND	0.022	ND	ND	1.43	1.37	ND	ND	ND	0.128	0.096	ND	1.17	1.13
Mar-2009	ND	ND	0.036	ND	ND	2.39	2.32	ND	ND	ND	0.103	0.074	ND	1.8	1.76
Oct-2009	ND	ND	0.033	ND	ND	2.1	1.93	ND	ND	ND	0.189	0.137	ND	1.56	1.45
Mar-2010	ND	ND	0.04	ND	ND	2.08	1.85	ND	ND	ND	0.079	ND	ND	1.66	1.47
Oct-2010	ND	ND	0.027	ND	ND	1.99	1.98	ND	ND	ND	ND	ND	ND	1.62	1.63
Apr-2011	ND	ND	0.033	ND	ND	1.78	1.74	ND	ND	ND	0.064	ND	ND	1.45	1.42
Sep-2011	ND	ND	0.034	ND	ND	2.07	2.03	ND	ND	ND	ND	ND	ND	1.66	1.61
Mar-2012	ND	ND	0.039	ND	ND	1.95	1.86	ND	ND	ND	ND	ND	ND	1.8	1.73
Sep-2012	ND	ND	0.0356	0.000072 J	ND	2.02	2.16	ND	0.0038 J	0.0027 J	0.0281 J	0.0308 J	ND	1.71	1.79
Mar-2013	ND	ND	0.0295	ND	ND	1.69	2.07	ND	0.0031 J	0.002 J	0.0085 J	0.007 J	0.0013 J	1.33	1.65
Oct-2013	ND	ND	0.0423	ND	ND	2.28	2.19	0.0025 J	0.0045 J	0.0021 J	ND	ND	ND	1.9	1.79
Mar-2014	ND	ND	0.0438	ND	0.000104 J	2.35	2.36	0.0012 J	0.0039 J	0.0021 J	0.041 J	0.0637	ND	1.84	1.82
Oct-2014	0.000819 J	ND	0.0449	ND	0.000131 J	2.43	2.4	ND	0.0047 J	0.0033 J	0.0107 J	0.0112 J	ND	2.1	2.07
Apr-2015	0.000837 J	ND	0.0467	ND	0.000153 J	2.5	2.56	ND	0.0049 J	0.0027 J	0.371	0.101	ND	2.19	2.21
Nov-2015	ND	ND	0.0444	ND	0.000201 J	2.45	2.52	ND	0.0049 J	0.0022 J	ND	ND	ND	2.13	2.2
May-2016	ND	ND	0.0444	0.000079 J	ND	2.34	2.37	ND	0.0052	0.002 J	ND	ND	ND	2.15	2.17
Oct-2016	ND	ND	0.0422	ND	ND	2.44	2.37	ND	0.0051	0.0022 J	ND	ND	ND	1.98	2.16
May-2017	ND	ND	0.0461	ND	ND	2.42	2.49	0.00069 J	0.0054	0.0022 J	ND	ND	ND	2.29	2.39
Oct-2017	ND	ND	0.0494	0.000072 J	ND	2.64	2.59	ND	0.0058	0.0024 J	ND	ND	ND	2.34	2.34
May-2018	0.000084 J	ND	0.053	0.000074 J	0.00015 J	2.8	2.6	0.0025 J	0.0056	0.003 B	ND	ND	0.000018 J	2.5	2.3
Nov-2018	ND	ND	0.06	0.000089 J	0.00017 J	3.1	3	0.0024 J	0.0062	0.0038	ND	ND	0.00014 JB	2.8	2.9

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24***													
May-2019	*ND*	*ND*	0.068	*ND*	*ND*	3.4	3.6	*ND*	0.0075	0.0031	*ND*	*ND*	*ND*	3.1	3.3
Oct-2019	*0.00011 J*	*ND*	0.072	*0.00012 J*	*0.00044 J*	3.8	3.7	*0.0034 J*	0.0082	0.0067	*ND*	*ND*	*0.000058 J*	3.5	3.4
May-2020	*0.000059 J*	*ND*	0.059	*ND*	*ND*	3.4	3.1	*0.0054 J*	0.0069	0.0027	*ND*	*ND*	*ND*	3.2	3
Oct-2020	*ND*	*ND*	0.045	*ND*	*ND*	3.2	3.1	*0.0034 J*	0.0054	*ND*	*ND*	*ND*	*ND*	2.9	2.9
Apr-2021	*ND*	*ND*	0.074	*ND*	*ND*	3.5	3.5	*ND*	0.0086	*0.0049 J*	*ND*	*ND*	*ND*	3.3	3.4
Oct-2021	*ND*	*ND*	0.071	*ND*	*ND*	3.6	3.7	*ND*	0.009	0.0038	*ND*	*ND*	*ND*	3.3	3.4
May-2022	*ND*	*ND*	0.075	*ND*	*ND*	4	4.1	*0.00084 J*	0.0097	0.004	*ND*	*ND*	*ND*	3.8	3.8

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-24*												
Apr-1995	0.1	NA	ND	ND	4.6	NA	ND	ND	2.8	NA	ND	ND	0.07
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	2.6	2.7	ND	ND	0.023
Apr-1997	ND	0.011	**0.0023**	ND	ND	1.3	ND	ND	2.5	2.6	ND	ND	ND
Oct-1997	ND	ND	0.0007	ND	1.47	1.28	ND	ND	2.09	2.09	ND	ND	0.013
Apr-1998	0.01	0.011	0.0006	ND	1.13	ND	ND	ND	2.19	2.18	ND	ND	0.011
Apr-1999	ND	ND	NA	ND	ND	1.44	ND	ND	1.94	1.9	ND	ND	ND
Oct-1999	ND	ND	NA	ND	1.03	1.26	ND	ND	2.14	1.97	ND	ND	ND
Apr-2000	0.032	0.011	NA	ND	0.764	ND	ND	ND	2.49	2.14	ND	ND	ND
Oct-2000	ND	ND	NA	ND	0.887	0.986	ND	ND	2.27	2.33	ND	ND	ND
Apr-2001	0.017	NA	NA	ND	1.51	NA	ND	ND	2.57	NA	ND	ND	ND
Sep-2001	0.011	0.01	NA	ND	0.638	2.07	ND	ND	2.97	2.99	ND	ND	ND
Mar-2002	0.011	0.011	NA	ND	1.65	1.54	ND	ND	3.09	2.93	ND	ND	ND
Sep-2002	0.012	0.011	NA	ND	1.06	1.12	ND	ND	3.57	3.34	ND	ND	ND
Mar-2003	0.011	0.01	NA	ND	2.14	1.47	ND	ND	3.11	3.07	ND	ND	ND
Oct-2003	0.012	ND	NA	ND	0.645	0.609	ND	ND	4.39	3.25	ND	ND	0.015
Apr-2004	0.026	0.015	0.0012	ND	2.08	1.14	ND	ND	3.57	3.42	ND	ND	ND
Oct-2004	0.016	0.015	0.0007	ND	1.48	1.3	ND	ND	3.6	3.55	ND	ND	ND
Apr-2005	0.036	0.016	0.0002	ND	1.17	1.08	ND	ND	3.72	3.35	ND	ND	ND
Oct-2005	ND	ND	0.0002	ND	0.827	0.771	ND	ND	2.84	2.96	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.774	0.75	ND	ND	3.4	3.19	ND	ND	ND
Sep-2006	ND	ND	0.0002	ND	0.908	1.02	ND	ND	3.02	3.22	ND	ND	ND
Mar-2007	ND	ND	0.0012	0.057 J	1.02	1.04	ND	ND	3.14	3.36	ND	ND	0.102 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-24*												
Sep-2007	ND	ND	0.0016	ND	1.09	1.03	ND	ND	3.73	3.74	ND	ND	ND
Mar-2008	0.027	0.017	0.0008	ND	1.2	1.12	ND	ND	3.85	3.24	ND	ND	ND
Sep-2008	0.012	0.012	0.0003	ND	0.999	0.976	ND	ND	3.75	3.75	ND	ND	ND
Mar-2009	0.02	0.019	0.0008	ND	1.47	1.42	ND	ND	5.32	5.22	ND	ND	ND
Oct-2009	0.018	0.016	0.0002	ND	1.15	1.04	ND	ND	4.82	4.62	ND	ND	ND
Mar-2010	0.018	0.016	ND	ND	1.44	1.31	ND	ND	5.88	6.35	ND	ND	ND
Oct-2010	0.018	0.019	ND	ND	1.3	1.3	ND	ND	7.13	7.13	ND	ND	ND
Apr-2011	0.016	0.016	0.0002	ND	1.03	0.997	ND	ND	6.32	6.2	ND	ND	ND
Sep-2011	0.018	0.018	ND	ND	1.25	1.22	ND	ND	6.48	6.42	ND	ND	ND
Mar-2012	0.02	0.019	ND	ND	1.25	1.2	ND	ND	6	5.87	ND	ND	ND
Sep-2012	0.0197	0.0208	ND	0.0044 J	1.14	1.23	ND	ND	5.64	5.82	ND	ND	0.0074 J
Mar-2013	0.0165	0.0195	0.000081 J	0.0035 J	0.848	1.07	ND	ND	4.31	5.26	ND	ND	0.0123
Oct-2013	0.0225	0.0215	ND	0.0049 J	1.15	1.09	ND	ND	6.2	5.73	0.0004 J	0.000639 J	0.0189
Mar-2014	0.0238	0.0219	ND	0.0049 J	1.15	1.15	ND	ND	5.94	5.79	0.000109 J	0.000843 J	0.0051 J
Oct-2014	0.0236	0.0234	0.000564	0.0054 J	1.31	1.29	ND	ND	7.18	7.14	ND	ND	0.0085 J
Apr-2015	0.025	0.0252	0.000477	0.0055 J	1.24	1.27	ND	ND	7.05	7.19	ND	ND	0.0112
Nov-2015	0.0252	0.0259	0.000072 J	0.0056 J	1.26	1.31	ND	ND	7.23	7.46	ND	ND	0.0126
May-2016	0.0243	0.024	0.00015 J	0.005	1.24	1.22	ND	ND	7.02	7.03	ND	ND	0.0076 J
Oct-2016	0.0232	0.0284	0.00036	0.0059	1.15	1.25	ND	ND	6.59	7.01	ND	ND	0.0064 J
May-2017	0.0264	0.0264	0.00046	0.0061	1.18	1.24	ND	ND	6.51	6.79	ND	ND	0.008 J
Oct-2017	0.0278	0.0283	0.00089	0.0051	1.27	1.33	ND	ND	6.67 J-	6.66	ND	ND	0.0078 J
May-2018	0.026	0.027	0.00076	0.0066	ND	ND	0.0012 JB	ND	7.9	7.3	ND	0.0044	0.01
Nov-2018	0.038	0.032	0.00057	0.0071	1.4 J	1.9 J	0.00019 J	ND	6.5	8.1 B	ND	0.003	0.011
May-2019	0.041	0.041	**0.0023**	0.0084	ND	ND	ND	ND	7.9	8.2	ND	0.0042 B	0.011

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-24***												
Oct-2019	0.041	0.04	0.0019 M1	0.0083	*1.5 J*	*1.5 J*	*ND*	*ND*	8.8	8.7	*ND*	*ND*	0.02
May-2020	0.038	0.35	0.00039	0.0074	*ND*	*ND*	*0.00036 J*	*ND*	7.7	7.4	*ND*	0.011	0.0082
Oct-2020	0.038	0.037	0.00042	0.0056	*ND*	*1.1 J*	*ND*	*ND*	7.3	6.7	*ND*	*0.00082 J*	*ND*
Apr-2021	0.044	0.045	0.00057	0.01	1.3	1.2	*ND*	*ND*	10.1	9.9	*ND*	*ND*	0.01
Oct-2021	0.045	0.046	0.00054	0.0089	1.3	1.3	*ND*	*ND*	12	12.7	*0.000027 J*	*ND*	0.01
May-2022	0.049	0.049	0.00053	0.01	1.3	1.3	*ND*	*ND*	12.2	12	*ND*	*ND*	0.012

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24*																
Oct-1996	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	0.6 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	1.5	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7 J	ND
Apr-2004	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24*																
Mar-2007	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	5.8	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Jun-2009	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.8	ND
Mar-2010	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	6.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	6.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	4.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	5.59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	6.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	7.35	ND	ND	ND	ND	ND	ND	0.27 J	0.55 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	6.96	ND	ND	ND	ND	ND	ND	0.27 J	0.47 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	6.14	ND	ND	ND	ND	ND	ND	0.25 J	0.44 J	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	7.87	ND	ND	ND	ND	ND	ND	0.29 J	0.32 J	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	6.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	6.7	0.1 J	ND	ND	ND	ND	0.1 J	0.3 J	0.3 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	7	0.1 J	ND	ND	ND	ND	0.1 J	0.2 J	0.3 J	1.4 J	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	0.1 J	0.2 J	0.3 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24*																
Oct-2017	*ND*	*ND*	*ND*	*ND*	4.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.3 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	3.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	5.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	5.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	2.07	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.126 J*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24***															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	9.5	4.4
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	9	1
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	5	6.5
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	5	2.4
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	0.9 J	NA	NA	NA	ND	0.8 J
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	1.3	1
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	1.9	NA	ND	NA	2	2
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	7.1	1.6
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	4.8	2
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	5.8	2.4
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	5.7	2.3
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	9.7	5.3
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	4.8	2.8
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	12	7.4
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3	ND	ND	ND	15	7.8
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	6.2	6.4
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2	ND	ND	ND	6.6	7.4
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	6	2.1
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	7.6	2.4
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	7.6	1.6

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24***															
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	7.2	2.5
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	15.2	2.3
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	7.2	2.9
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	10.7	7.4
Mar-2009	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	ND	ND	ND	17.6	10.4
Jun-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	17.4	8
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	9.7	6.1
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4 J	12.2
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND	ND	ND	24.1	10
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	ND	ND	ND	ND	10
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	24	12.3
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	20.1	11.3
Sep-2012	0.27 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.39	ND	ND	ND	10.4	6.77
Mar-2013	0.28 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	12.4	9.38
Oct-2013	0.49 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.41 J,B	4.95	ND	ND	ND	11.8	10.7
Mar-2014	0.47 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	ND	ND	ND	14.9 J	10.1
Oct-2014	0.37 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.59 J,B	3.92	ND	ND	ND	9.73	7.49
Apr-2015	0.61 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.68	ND	ND	ND	9.67	9.41
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.4	ND	ND	ND	20.3 J	8.2
May-2016	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	3.5	ND	ND	ND	9.4	9.3
Oct-2016	0.3 J	ND	ND	ND	ND	ND	ND	ND	0.1 J	0.2 J	0.8 J	2.3	ND	ND	ND	9.2	9.9
May-2017	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J,B	ND	1.7	ND	ND	ND	5.8	5.6

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24***															
Oct-2017	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	1.5	*ND*	*ND*	*ND*	5.1	4.9
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	9.2	4.7
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*0.86 JN3*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2 CL	2.2 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.7	2.1
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	7.3	4.5
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	9	4.7
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.282 J*	*ND*	*ND*	*ND*	*1.54 J*	*1.49 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*1 J*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.5	*0.9 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24***															
Oct-1996	ND	ND	NA	NA	ND	NA	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	2.5	ND	ND	ND	ND	0.9 J	0.7 J	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	1.9	ND	ND	ND	ND	0.8 J	0.7 J	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	0.7 J	ND	ND	NA	NA	ND	0.5 J	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	0.6 J	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	1.6	ND	ND	NA	NA	0.6 J	0.9 J	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	2.1	ND	ND	ND	ND	0.6 J	0.6 J	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	2.8	ND	ND	ND	ND	0.7 J	0.7 J	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	2.7	ND	ND	ND	ND	0.6 J	0.6 J	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	4.4	ND	ND	ND	ND	1.2	1.2	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	2.8	ND	ND	ND	ND	0.6 J	0.6 J	ND	ND	NA
Oct-2003	ND	ND	ND	NA	1.1	ND	ND	4.6	ND	ND	ND	ND	1.6	1.1	ND	ND	NA
Apr-2004	ND	ND	ND	NA	2.3	ND	ND	5	ND	ND	ND	ND	1.8	1.1	ND	0.9 J	NA
Oct-2004	ND	ND	ND	NA	1.6	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	0.6 J	ND	ND	4.2	ND	ND	ND	ND	1.5	1.1	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	3.4	ND	ND	ND	ND	0.8 J	0.7 J	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	ND	0.8 J	0.9 J	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-24*															
Sep-2006	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	3.6	ND	ND	ND	ND	1.2	0.9 J	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	3.7	ND	ND	ND	ND	1.5	1.9	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	1.1	1.1	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	5	ND	ND	ND	ND	3.1	5.1	ND	1.1	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	**9.2 C**	ND	ND	ND	ND	**8.4 C**	ND	ND	ND	NA
Jun-2009	ND	ND	ND	ND	ND	ND	ND	**8**	ND	ND	ND	ND	**5.9**	1.1	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	**6**	ND	ND	ND	ND	4.1	1 J	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	**11.7**	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	**11**	ND	ND	ND	ND	ND	1.5	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	**11.8**	ND	ND	ND	ND	**7.2**	1.3	ND	1.4	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	**11.8**	ND	ND	ND	ND	**7.8**	1.4	ND	ND	NA
Mar-2012	ND	ND	ND	ND	0.5 J	ND	ND	**11**	ND	ND	ND	ND	**7.1**	1.3	ND	0.8 J	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	**8.9**	ND	ND	ND	ND	**5.44**	1.04	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	**7.14**	ND	ND	ND	ND	**5.73**	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.16 J	ND	ND	ND	**8.91**	ND	ND	ND	ND	**8.32**	1.08	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	**7.46**	ND	ND	ND	ND	**7.33**	0.88 J	ND	ND	ND
Oct-2014	ND	ND	ND	0.13 J	ND	ND	ND	**6.5**	ND	ND	ND	ND	**5.75**	0.76 J	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	**6.29**	ND	ND	ND	ND	**6.48**	0.69 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	**5.1**	ND	ND	ND	ND	**5.2**	0.6 J	ND	ND	ND
May-2016	ND	ND	ND	0.1 J	0.3 J	ND	ND	4.6	ND	ND	ND	ND	4.2	0.6 J	ND	0.2 J	ND
Oct-2016	ND	ND	ND	0.1 J	0.3 J	ND	ND	3.6	ND	ND	ND	ND	3.1	0.6 J	ND	0.2 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24***															
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	1.9	*0.1 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	1.7	*0.3 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2 B	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	2.2	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*0.98 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.106 J*	*ND*	*ND*	*ND*	*0.434 J*	*ND*	*ND*	*ND*	*ND*	*0.326 J*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-24A***											
Apr-1995	33	33	ND	94.6	5	ND	ND	5.4	472	137	278	19.3
Apr-1997	ND	4	ND	ND	16	ND	ND	NA	NA	16	79	21
Oct-1997	ND	ND	0.51	ND	18	ND	ND	5.1	125.9	9.64	70	26
Apr-1998	ND	ND	0.3	ND	11.1	0.19	ND	4.71	119.6	21.7	55	24
Apr-1999	ND	ND	1.3	ND	12	ND	ND	4.29	264	47.6	170	68
Oct-1999	ND	ND	0.43	ND	19.6	ND	ND	4.67	174	43.3	120	46
Apr-2000	ND	ND	0.92	ND	16.4	ND	ND	4.55	143	55.3	82	35
Oct-2000	ND	NA	0.75	15	13.1	ND	ND	4.27	154	43.4	102	30.6
Apr-2001	ND	NA	0.9	13	11	ND	ND	NA	NA	40	96	32
Sep-2001	ND	ND	0.48	ND	13.8	ND	ND	4.06	159	35.5	91	23.5
Mar-2002	ND	ND	0.64	ND	14.6	ND	ND	4.5	180	44.4	116	26.1
Sep-2002	ND	ND	0.69	ND	11.1	ND	ND	4.4	155.6	43.6	101	25.7
Mar-2003	ND	ND	0.78	ND	17.9	ND	ND	4.3	163.9	43.5	100	30
Oct-2003	ND	ND	0.31	12	12.2	0.086	ND	4.3	133.3	26.3	45	20.8
Apr-2004	1.2	1.2	0.41	14	11.8	ND	ND	4.4	106.5	29.6	96	18.2
Oct-2004	2	2	0.34	19	10.4	ND	ND	4.56	96.9	25.9	110	18.6
Apr-2005	4.3	4.3	0.55	17	8.3	ND	ND	4.7	107.4	36.4	90	26.3
Oct-2005	9.5	9.5	0.48	ND	9.29	ND	ND	4.4	108.9	32.9	76	25.4
Mar-2006	13	13	ND	ND	8.34	ND	ND	4.8	124.6	38.8	92	31.9
Sep-2006	4.8	4.8	0.46	ND	8.04	ND	ND	4.7	104.9	31.9	78	29.1
Mar-2007	7.6	7.6	ND	ND	8.51	ND	ND	4.7	92.7	25.8	71	26.2
Sep-2007	8.6	8.6	0.21	13	7.69	ND	ND	5.5	102.1	24.3	95	31.2
Mar-2008	23	23	0.56	16	11.4	ND	ND	5.2	117	35.2	78	38.7
Sep-2008	26	26	0.63	ND	7.48	ND	ND	5.3	109.6	23.2	97	40.6
Mar-2009	35	35	0.88	ND	6.32	ND	ND	5	133.6	27.1	82	45.9
Oct-2009	31	31	0.64	ND	6.74	ND	ND	5	119.3	23.4	86	42.2
Mar-2010	28	28	0.6	11.4	6.85	ND	ND	5.4	144	21.4	82	38.8
Oct-2010	31	31	0.46	ND	6.6	ND	ND	4.9	102.6	18.7	76	40.5
Apr-2011	28	28	0.72	ND	5.81	ND	ND	5	113.1	20.2	95	35.3
Sep-2011	18	18	0.26	ND	6.49	0.08	ND	5.1	92.1	15.3	75	29.7
Mar-2012	14	14	0.42	ND	5.81	0.27	ND	4.5	88.7	18.1	55	27.6
Sep-2012	14.7	14.7	0.29	ND	5.31	0.251	ND	4	108.9	32.9	84	47.1
Mar-2013	12	12	ND	ND	5.39	0.993	ND	5.2	98.8	26.1	74	36
Oct-2013	17	17	0.187 J	12	5.7	0.88	ND	5.7	103.4	27.5	80	45.1
Mar-2014	28	28	ND	6 J	5.32	0.992	ND	5.6	118.5	24.7	57	54.2
Oct-2014	37.4	37.4	ND	5 J	5.17	1.29	ND	5.7	115	18.2	78	58.2
Apr-2015	43.2	43.2	ND	ND	4.84	1.32	ND	5	121.9	18.5	80	72.7

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-24A***											
Nov-2015	33.2	33.2	*0.108 J*	*9 J*	5.49	1.41	*ND*	5.8	143	16.7	89	57.5
May-2016	43	43	*ND*	*6 J*	4.61	1.31	*ND*	6	168.5	16.2	84	62.2
Oct-2016	44.8	44.8	*ND*	*ND*	4.63	*NA*	*NA*	5.9	183.7	14	141	62.6
May-2017	50.2	50.2	*ND*	*5 J*	4.55	1.22	*ND*	5.9	214	15.3	75	63.2
Oct-2017	46.2	46.2	*0.125 J*	*ND*	4.83	1.35	*ND*	6.1	196	14.3	93	60.3
May-2018	42	42	*ND*	*ND*	6	1.5	*ND*	5.2	141.5	13.1	30	63
Nov-2018	26	26	*ND*	*7.9 J*	10	0.95	*ND*	5.43	116.4	10.7	72	46.4
May-2019	22 H1	*NA*	*ND*	*ND*	11.5	1.3	*ND*	5.34	96.9	14.7	91	42
Oct-2019	20	*NA*	*ND*	*6 J*	9	1	0.018	4.85	118.3	16.3	25	40.1
May-2020	36	*NA*	*ND*	*ND*	6.8	1.5	*ND*	5.12	132	15.2	66	56.3
Oct-2020	36	*NA*	*ND*	*ND*	7	1.6	*ND*	5.23	132.1	17.6	71	63.7
Apr-2021	40	*NA*	*ND*	*12.6 J*	6.4	1.9	*ND*	5.79	163	12.3	91	61.8
Oct-2021	*4 J4c*	*NA*	*0.059 J*	*8.3 J*	4.7	1.6	*ND*	5.83	203.2	17.9	84	69.7
May-2022	62	*NA*	*ND*	*ND*	4	1.5	0.016	5.72	189.2	19.1	110	85.7 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24A***													
Apr-1995	ND	ND	ND	ND	ND	4.6	NA	**0.156**	ND	ND	1.7	1.4	ND	1.9	NA
Oct-1996	ND	ND	0.14	ND	ND	3.3	3.2	ND	ND	ND	ND	ND	ND	2.4	2.3
Apr-1997	ND	ND	0.13	ND	ND	3.7	3.5	ND	ND	0.033	1.5	0.38	ND	2.6	2.4
Oct-1997	ND	ND	0.128	ND	ND	3.14	3.21	ND	0.012	0.019	4.55	4.5	ND	2.61	2.6
Apr-1998	ND	ND	0.144	ND	ND	4.11	4.09	ND	0.019	0.013	2.07	2.08	ND	3.45	3.42
Apr-1999	ND	ND	0.222	ND	ND	12.5	11.6	ND	0.079	0.017	3.29	3.04	ND	8.85	8.24
Oct-1999	ND	ND	0.139	ND	0.004	12.7	11.8	ND	0.066	0.032	1.83	1.71	ND	6.61	6.15
Apr-2000	ND	ND	0.114	ND	ND	8.15	7.71	ND	0.033	0.027	1.25	1.22	ND	3.61	3.42
Oct-2000	ND	ND	0.105	0.003	ND	7.02	6.68	ND	0.025	0.1	3.7	3.61	ND	3.16	3.04
Apr-2001	ND	ND	0.086	**0.005**	ND	7.41	NA	ND	0.024	0.111	4.67	NA	ND	3.26	NA
Sep-2001	ND	ND	0.075	ND	ND	5.4	6.14	ND	0.021	0.065	4.79	5.02	ND	2.44	2.61
Mar-2002	ND	ND	0.063	ND	ND	6.07	6.01	ND	0.02	0.069	5.4	5.53	ND	2.66	2.7
Sep-2002	ND	ND	0.061	ND	ND	5.94	5.94	ND	0.019	0.071	5.24	5.19	ND	2.64	2.64
Mar-2003	ND	ND	0.067	ND	ND	6.92	7.04	ND	0.019	0.052	5.66	5.67	ND	3.09	3.09
Oct-2003	ND	ND	0.079	ND	ND	4.5	3.99	ND	0.014	0.045	5.75	5.55	ND	2.33	2.23
Apr-2004	ND	ND	0.079	ND	ND	3.6	3.29	ND	0.015	0.045	8.23	7.57	ND	2.23	2.06
Oct-2004	ND	ND	0.088	ND	ND	3.56	3.5	ND	0.013	0.032	8.94	8.7	ND	2.36	2.31
Apr-2005	ND	ND	0.082	ND	ND	6.09	5.65	ND	0.013	0.072	7.77	7.8	ND	2.69	2.5
Oct-2005	ND	ND	0.075	ND	ND	5.94	5.6	ND	0.014	0.061	8.83	8.31	ND	2.56	2.42
Mar-2006	ND	ND	0.064	ND	ND	8	7.68	ND	ND	0.03	6.43	6.12	ND	2.89	2.78
Sep-2006	ND	ND	0.051	ND	ND	7.39	6.99	ND	ND	0.04	5.16	4.92	ND	2.58	2.46

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24A***													
Mar-2007	ND	ND	0.046	ND	ND	6.97	6.76	ND	ND	0.051	4.1	3.98	ND	2.13	2.08
Sep-2007	ND	ND	0.053	ND	ND	8.51	7.65	ND	ND	0.031	4.5	4.23	ND	2.44	2.27
Mar-2008	ND	ND	0.04	ND	ND	10.8	10.3	ND	ND	0.012	4.73	4.57	ND	2.83	2.74
Sep-2008	ND	ND	0.035	ND	ND	11.3	10.7	ND	ND	0.023	4.65	4.41	ND	3	2.84
Mar-2009	ND	ND	0.038	ND	ND	13	13.6	ND	ND	0.018	5.66	5.47	ND	3.26	3.2
Oct-2009	ND	ND	0.042	ND	ND	12.1	11.4	ND	ND	0.033	5.54	4.9	ND	2.91	2.68
Mar-2010	ND	ND	0.053	ND	ND	10.9	10.2	ND	ND	ND	4.81	4.91	ND	2.82	2.69
Oct-2010	ND	ND	0.053	ND	ND	11.4	11.3	ND	ND	ND	5.71	5.89	ND	2.91	2.9
Apr-2011	ND	ND	0.051	ND	ND	10.4	10.1	ND	ND	ND	6.16	5.92	ND	2.27	2.21
Sep-2011	ND	ND	0.057	ND	ND	8.4	8.51	ND	ND	ND	4.29	4.25	ND	2.11	2.1
Mar-2012	ND	ND	0.048	ND	ND	7.73	7.53	ND	ND	ND	4	3.8	ND	2.01	2
Sep-2012	ND	ND	0.0636	0.00011 J	ND	13.3	13.1	ND	0.0047 J	0.0081 J	0.498	0.509	ND	3.37	3.26
Mar-2013	ND	ND	0.0452	ND	0.000734 J	10.2	10.5	0.0023 J	0.0054 J	0.0141	0.546	0.531	0.0015 J	2.56	2.54
Oct-2013	ND	ND	0.0562	ND	0.000263 J	12.5	12.3	0.0034 J	0.0049 J	0.0172	ND	ND	ND	3.38	3.35
Mar-2014	ND	ND	0.048	ND	0.000148 J	15.7	15.6	0.0013 J	0.0023 J	0.0049 J	0.0821	0.0516	ND	3.65	3.67
Oct-2014	ND	ND	0.0448	ND	0.000135 J	17.2	17.5	ND	0.0016 J	0.0069 J	0.0096 J	0.008 J	ND	3.7	3.74
Apr-2015	0.000526 J	ND	0.0497	ND	ND	21.7	21.3	0.000514 J	0.0015 J	0.011	0.0228 J	0.0095 J	ND	4.5	4.4
Nov-2015	ND	ND	0.0481	ND	0.000106 J	17.2	16.7	0.000487 J	0.0021 J	0.0168	0.0671	ND	ND	3.52	3.45
May-2016	ND	ND	0.0506	ND	ND	18.3	18.6	0.00085 J	0.0018	0.0151	ND	ND	ND	3.99	3.95
Oct-2016	ND	ND	0.0425	ND	ND	18.9	18.3	0.00098 J	0.0015	0.0097	ND	ND	ND	3.74	3.78
May-2017	ND	ND	0.0383	ND	ND	19.1	19.9	0.00099 J	0.00092 J	0.0053	ND	ND	ND	3.77	4.06
Oct-2017	ND	ND	0.0364	ND	ND	18.6	20.8	ND	0.0015	0.0033 J	ND	ND	ND	3.34	3.6
May-2018	0.000079 J	ND	0.047	ND	0.000085 J	19.5	17.4	0.0035 J	0.002	0.0037 B	0.014 J	ND	ND	3.4	3.13
Nov-2018	ND	ND	0.042	ND	0.000096 J	14.4	14.3	0.0037 J	0.0024	0.0032	0.023	0.076	0.00008 JB	2.5	2.7

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24A***													
May-2019	*ND*	*ND*	0.065	*ND*	*ND*	12.7	13.4	0.0088	0.0061	0.0062	*ND*	*ND*	*ND*	2.5	2.6
Oct-2019	*0.00012 J*	*ND*	0.064	*0.0002 J*	*0.00047 J*	12	11.9	*0.0067 J*	0.0061	0.0086	*0.077 J*	*0.017 J*	*0.000096 J*	2.5	2.4
May-2020	*0.000074 J*	*ND*	0.059	*0.00011 J*	*ND*	16.4	16.6	*0.0064 J*	0.006	0.004	*0.02 J*	*ND*	*ND*	3.7	3.7
Oct-2020	*ND*	*ND*	0.073	*ND*	*ND*	18.9	18.2	*0.011 J*	0.0072	*ND*	0.16	*0.016 J*	*ND*	4	3.8
Apr-2021	*ND*	*ND*	0.064	*ND*	*ND*	19.2	19.3	*0.0027 J*	*0.0034 J*	*ND*	*0.067 J*	*ND*	*ND*	3.4	3.4
Oct-2021	*0.000073 J*	*ND*	0.068	*0.00018 J*	*ND*	21.5	21.5	0.0034	0.005	0.0044	0.066	*0.012 J*	*0.000033 J*	3.9	3.9
May-2022	*ND*	*ND*	0.062	*ND*	*ND*	26.2	26.9	0.0037	0.0041	0.004	0.051	*ND*	*ND*	4.9	5

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-24A***												
Apr-1995	0.13	NA	ND	ND	135	NA	ND	0.02	18.1	NA	ND	ND	0.08
Oct-1996	0.1	0.096	NA	ND	ND	ND	ND	ND	3.4	5.1	ND	ND	0.074
Apr-1997	0.11	0.1	0.0005	ND	2	2	ND	ND	5.7	5.3	ND	ND	0.057
Oct-1997	0.13	0.131	ND	0.013	1.72	2.39	ND	ND	6.64	6.66	ND	ND	0.032
Apr-1998	0.14	0.156	0.0002	0.03	1.23	2.17	ND	ND	3.95	3.96	ND	ND	0.037
Apr-1999	0.804	0.746	NA	0.064	2.99	3.55	ND	ND	6.23	5.86	ND	ND	0.088
Oct-1999	0.862	0.805	NA	0.04	2.84	2.98	ND	ND	5.07	4.66	ND	ND	0.097
Apr-2000	0.442	0.424	NA	ND	2.65	1.56	ND	ND	4.89	4.64	ND	ND	0.061
Oct-2000	0.348	0.334	NA	ND	2.06	2.35	ND	ND	5.08	5.03	ND	ND	0.043
Apr-2001	0.357	NA	NA	0.013	2.61	NA	ND	ND	4.85	NA	ND	ND	0.038
Sep-2001	0.251	0.261	NA	0.02	1.65	2.26	ND	ND	4.65	4.61	ND	ND	0.028
Mar-2002	0.26	0.267	NA	ND	3.09	1.51	ND	ND	5.2	4.49	ND	ND	0.028
Sep-2002	0.252	0.25	NA	ND	2.85	2.46	ND	ND	4.53	4.51	ND	ND	0.023
Mar-2003	0.289	0.292	NA	ND	2.21	2.01	ND	ND	4.18	4.17	ND	ND	0.026
Oct-2003	0.211	0.202	NA	ND	1.18	1.42	ND	ND	5.56	4.31	ND	ND	0.047
Apr-2004	0.188	0.174	ND	ND	3.21	1.86	ND	ND	4.71	4.33	ND	ND	0.019
Oct-2004	0.179	0.173	0.0002	ND	2.61	1.55	ND	ND	4.64	4.36	ND	ND	0.017
Apr-2005	0.215	0.199	ND	ND	2.12	2.03	ND	ND	3.79	3.69	ND	ND	0.016
Oct-2005	0.21	0.2	0.0002	ND	2.23	2.02	ND	ND	3.62	3.38	ND	ND	0.016
Mar-2006	0.217	0.207	ND	ND	2.03	1.96	ND	ND	3.3	3.16	ND	ND	ND
Sep-2006	0.179	0.17	ND	ND	2.01	1.89	ND	ND	3.29	3.07	ND	ND	ND
Mar-2007	0.147	0.143	0.0003	ND	1.89	1.89	ND	ND	3.32	3.21	ND	ND	0.014

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-24A***												
Sep-2007	0.166	0.153	0.0006	ND	2.05	1.81	ND	ND	3.16	3.05	ND	ND	ND
Mar-2008	0.185	0.178	0.0007	ND	2.21	2.14	ND	ND	2.48	2.39	ND	ND	ND
Sep-2008	0.189	0.179	**0.0041 C**	ND	1.97	1.87	ND	ND	2.87	2.71	ND	ND	0.01
Dec-2008	NA	NA	**0.0031**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mar-2009	0.212	0.209	**0.0034**	ND	2.21	2.14	ND	ND	2.78	2.7	ND	ND	0.012
Oct-2009	0.194	0.181	**0.0144**	ND	2.16	1.97	ND	ND	2.71	2.65	ND	ND	ND
Mar-2010	0.196	0.189	0.0011	ND	2.36	2.13	ND	ND	2.8	3.1	ND	ND	ND
Oct-2010	0.187	0.183	0.0002	ND	2.76	2.68	ND	ND	2.83	2.8	ND	ND	0.012
Apr-2011	0.153	0.147	0.0008	ND	2	1.96	ND	ND	2.76	2.67	ND	ND	ND
Sep-2011	0.155	0.157	0.0004	ND	2.3	2.29	ND	ND	3.28	3.29	ND	ND	ND
Mar-2012	0.131	0.13	0.0004	ND	2.4	2.35	ND	ND	3.19	3.14	ND	ND	ND
Sep-2012	0.192	0.19	0.000044 J	0.0043 J	2.65	2.63	ND	ND	2.9	2.82	ND	ND	0.0042 J
Mar-2013	0.15	0.155	0.000091 J	0.0044 J	2.25	2.28	ND	0.000025 J	2.3	2.35	0.00035 J	ND	0.0163
Oct-2013	0.155	0.152	ND	0.0034 J	2.26	2.19	ND	ND	2.94	2.88	0.000199 J	0.000806 J	0.0133
Mar-2014	0.155	0.158	ND	0.002 J	2.26	2.22	ND	ND	2.38	2.39	0.000203 J	0.000563 J	ND
Oct-2014	0.151	0.154	0.000071 J	0.00099 J	2.61	2.64	ND	ND	2.53	2.55	ND	ND	ND
Apr-2015	0.172	0.169	0.000063 J	0.0011 J	2.95	2.93	ND	ND	2.75	2.69	ND	ND	0.0051 J
Nov-2015	0.17	0.162	0.000063 J	0.0014 J	2.77	2.74	0.000746 J	ND	2.85	2.84	ND	ND	0.0038 J
May-2016	0.16	0.153	0.000065 J	ND	2.73	2.78	ND	ND	2.51	2.47	ND	ND	ND
Oct-2016	0.142	0.148	0.00014 J	0.0012 J	2.71	2.82	ND	ND	2.34	2.34	ND	ND	ND
May-2017	0.128	0.134	0.00022	0.00099 J	2.84	3.06	ND	ND	2.32	2.37	ND	ND	ND
Oct-2017	0.117	0.126	ND	ND	3.05	3.33	ND	ND	2.55 J-	2.6	ND	ND	ND
May-2018	0.11	0.1	0.00026	0.0024	2.6 J	2.51 J	0.00076 JB	ND	3.6 J	3.34 J	ND	0.0037	0.0035 JB
Nov-2018	0.091	0.094	ND	0.0038	3.2 J	3.7 J	0.00033 J	ND	2.6 J	4.3 JB	0.000092 J	0.003	0.004 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-24A***												
May-2019	0.13	0.13	0.0008	0.0068	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0036 B	0.0089
Oct-2019	0.13	0.14	**0.0023**	0.0051	*3.8 J*	*3.7 J*	*0.00035 J*	*ND*	*4.1 J*	*4 J*	*ND*	*ND*	0.019
May-2020	0.16	0.1	0.00022	0.0033	*3 J*	*2.9 J*	*0.00056 J*	*ND*	*2.9 J*	*2.8 J*	*ND*	0.0098	*0.0045 J*
Oct-2020	0.14	0.13	**0.0026**	0.007	*3.4 J*	*3 J*	*ND*	*ND*	*3.9 J*	*3.2 J*	*ND*	*0.0014 J*	*ND*
Apr-2021	0.11	0.1	0.001	*0.0028 J*	3	3.1	*ND*	*ND*	3.2	3.3	*ND*	*ND*	*0.0034 J*
Oct-2021	0.13	0.12	0.00025	0.0036	3.4	3.4	*ND*	*ND*	3.5	3.6	*0.000078 J*	*ND*	0.0058
May-2022	0.12	0.12	0.00034	0.004	3.3	3.2	*ND*	*ND*	3	3.1	*ND*	*ND*	*0.005 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-24A***																
Oct-1996	ND	3.3	ND	ND	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	1	ND	ND	28	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	3	ND
Oct-1997	ND	1.8	ND	ND	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	1.2 J	ND	ND	35	ND	ND	ND	ND	ND	1.7	0.8 J	1.3 J	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	22	ND	NA	NA	NA	NA	1	ND	1.7	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	12	ND	ND	ND	ND	ND	0.6 J	ND	0.9 J	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	5.3	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	4.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24A*																
Mar-2007	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.45	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.93 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.56 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.58 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	0.33 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24A*																
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.3 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-24A*															
Oct-1996	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	39
Apr-1997	3	ND	ND	ND	ND	ND	ND	ND	13	ND	ND	2	ND	ND	ND	17	15
Oct-1997	2.6	ND	ND	ND	ND	ND	ND	ND	8.1	ND	ND	2.8	ND	ND	ND	6.7	47
Apr-1998	2.9	ND	ND	ND	ND	1.7	ND	ND	8.8	ND	ND	5.4	ND	ND	ND	15	35
Apr-1999	1.9	NA	NA	NA	NA	ND	NA	ND	4.3	ND	NA	3.4	NA	NA	NA	4	18
Oct-1999	1.1	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	1.8	ND	ND	ND	4	12
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	1	ND	NA	0.7 J	NA	ND	NA	2.5	5.4
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	5.1
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	5.5	5
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	2.1
Mar-2002	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	7.5	3
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	0.7 J	ND	ND	ND	8.6	4.1
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	0.6 J	ND	ND	ND	5.9	3.2
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	8.3	2.1
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	0.9 J	ND	ND	ND	12	3.1
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	0.6 J	ND	ND	ND	8.9	3.5
Apr-2005	0.5 J	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	1.1	ND	ND	ND	8.4	4.7
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	0.9 J	ND	ND	ND	8.3	3.1
Mar-2006	0.7 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.2	ND	ND	ND	8	5.2
Sep-2006	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	9.5	3.5

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24A***															
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	1.5
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.6	1.2
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	3
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	0.9 J
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.9 J
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.29 J	ND	ND	ND	0.6 J	1.17
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.47 J	0.86 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43 J	0.5 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.36 J	0.43 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.41 J,B	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	0.2 J	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J,B	ND	ND	ND	ND	ND	0.2 J	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	0.2 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24A***															
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.444 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24A***															
Oct-1996	ND	ND	NA	NA	**24**	NA	ND	3.2	ND	ND	ND	ND	3.7	ND	ND	ND	2.4
Apr-1997	ND	ND	NA	NA	**38**	NA	ND	4	ND	ND	ND	ND	5	ND	ND	**7**	4
Oct-1997	ND	ND	3.4	NA	**44**	3.5	ND	**8.3**	ND	ND	ND	ND	**7.5**	ND	ND	**4.8**	NA
Apr-1998	ND	ND	2.6	NA	**46**	4.3	ND	**8.8**	ND	ND	ND	ND	**6.2**	1.1 J	ND	**4.9**	NA
Apr-1999	ND	NA	0.7 J	NA	**15**	1	NA	3.1	ND	ND	NA	NA	3.2	ND	NA	**2.8**	NA
Oct-1999	ND	ND	ND	NA	**9.3**	ND	ND	2.3	ND	ND	ND	ND	1.7	0.5 J	ND	1.4	NA
Apr-2000	ND	NA	ND	NA	4.1	ND	NA	1.2	ND	ND	NA	NA	0.7 J	ND	ND	0.7 J	NA
Oct-2000	ND	ND	ND	NA	3.3	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	1.1	NA
Apr-2001	ND	ND	ND	NA	4.9	ND	ND	1.1	ND	ND	ND	ND	0.7 J	ND	ND	0.7 J	NA
Sep-2001	ND	ND	ND	NA	1.8	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	0.6 J	NA
Mar-2002	ND	ND	ND	NA	2.7	ND	ND	0.8 J	0.6 J	ND	ND	ND	ND	ND	ND	1.1	NA
Sep-2002	ND	ND	ND	NA	2.8	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	**2.4**	NA
Mar-2003	ND	ND	ND	NA	2.2	ND	ND	2.4	ND	ND	ND	ND	0.7 J	ND	ND	**2.2**	NA
Oct-2003	ND	ND	ND	NA	1.1	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	**2.8**	NA
Apr-2004	ND	ND	ND	NA	1.9	0.6 J	ND	3.6	ND	ND	ND	ND	1.4	ND	ND	**5.1**	NA
Oct-2004	ND	ND	ND	NA	1.1	ND	ND	3.2	ND	ND	ND	ND	1.3	ND	ND	**7.7**	NA
Apr-2005	ND	ND	ND	ND	2.2	ND	ND	4.4	ND	ND	ND	ND	1.6	ND	ND	**8.1**	NA
Oct-2005	ND	ND	ND	ND	3.2	ND	ND	4.5	ND	ND	ND	ND	1.5	ND	ND	**5.4**	NA
Mar-2006	ND	ND	ND	ND	**6.3**	ND	ND	**5.7**	ND	ND	ND	ND	2	ND	ND	**4.7**	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24A***															
Sep-2006	ND	ND	ND	ND	5	ND	ND	3.1	ND	ND	ND	ND	1.2	ND	ND	**3.7**	NA
Mar-2007	ND	ND	ND	ND	2.1 R	ND	ND	1.5	ND	ND	ND	ND	0.7 J	ND	ND	1.3	NA
Sep-2007	ND	ND	ND	ND	2.3	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	1.4	NA
Mar-2008	ND	ND	ND	ND	0.7 J	ND	ND	2.6	ND	ND	ND	ND	0.9 J	ND	ND	1.1	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	1.5	NA
Mar-2009	ND	ND	ND	ND	1.9	ND	ND	0.9 J	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	1.79	ND	ND	0.69 J	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.81 J	ND	ND	0.26 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.69 J	ND	ND	0.22 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24A***															
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-25***											
Apr-1995	13.4	13.4	ND	ND	2.6	0.4	ND	5.8	37.3	2.5	15	11.6
Apr-1997	ND	40	ND	ND	2	0.06	ND	NA	NA	ND	51	1.9
Oct-1997	1	1	0.47	ND	1.7	ND	ND	6.83	13.71	ND	14	ND
Apr-1998	ND	ND	0.27	ND	1.86	0.1	ND	5.87	23.9	0.76	29	5.6
Apr-1999	ND	ND	0.35	ND	1.86	ND	ND	5.29	16.52	ND	ND	7
Oct-1999	ND	ND	0.11	ND	2.33	ND	ND	5.24	16.1	ND	29	5.6
Apr-2000	2	2	ND	ND	2.03	0.147	ND	5.17	12	ND	17	4.9
Oct-2000	3	NA	ND	ND	1.76	ND	ND	5.34	12.9	ND	47	4.89
Apr-2001	2.2	NA	0.2	ND	1.6	ND	ND	NA	NA	ND	28	4.4
Sep-2001	2.6	2.6	ND	ND	3.74	ND	ND	5.03	17	ND	51	4.67
Mar-2002	5.8	5.8	ND	28	3.08	ND	ND	5.1	15	ND	38	4.39
Sep-2002	2.8	2.8	ND	ND	2.15	ND	ND	5	17.3	ND	115	5.12
Mar-2003	2.8	2.8	ND	ND	2.67	0.099	ND	5.1	16.8	ND	36	4.47
Oct-2003	2.4	2.4	ND	ND	7.17	ND	ND	4.8	16.5	ND	ND	4.87
Apr-2004	2.5	2.5	ND	ND	2.18	ND	ND	4.9	13.7	ND	46	3.2
Oct-2004	2.4	2.4	ND	11	2.29	0.13	ND	4.8	14.1	ND	20	2.66
Apr-2005	2.5	2.5	ND	ND	2.36	0.13	ND	5	12.5	2.02	23	4.2
Oct-2005	3.6	3.6	0.21	ND	2.34	0.12	ND	4.7	13.9	ND	21	4.21
Mar-2006	3.6	3.6	ND	ND	2.38	0.14	ND	5	16.4	1.04	52	3.21
Sep-2006	3.4	3.4	ND	ND	2.5	0.13	ND	5	14.2	ND	48	2.9
Mar-2007	3.5	3.5	ND	ND	2.63	0.15	ND	4.9	12	ND	36	2.87
Sep-2007	3.3	3.3	ND	ND	7.59	ND	ND	6.5	13.7	ND	69	4.77
Mar-2008	3.5	3.5	ND	29	14.9	ND	ND	4.9	13.9	ND	15	3.23
Sep-2008	3.5	3.5	ND	25	3.03	0.09	ND	5.4	15.3	ND	22	4.2
Mar-2009	3.6	3.6	ND	ND	2.72	0.11	ND	4.5	15.5	ND	19	2.88
Oct-2009	3.4	3.4	ND	ND	2.71	0.13	ND	4.5	15	ND	62	3.51
Apr-2010	3.3	3.3	ND	11	2.75	0.15	ND	4.6	14.6	ND	ND	4.1
Oct-2010	3	3	ND	ND	3.31	0.12	ND	4.3	14.9	ND	24	4.16
Apr-2011	5.2	5.2	ND	ND	2.93	0.15	ND	4.7	16.5	ND	16	4.6
Sep-2011	3.5	3.5	0.22	ND	3.06	0.13	ND	4.7	16.6	ND	35	3.61
Mar-2012	3.4	3.4	ND	ND	3.26	0.13	ND	3.5	43.2	ND	19	2.85
Sep-2012	ND	ND	ND	12.2	3.39	0.15	ND	4.3	17.2	ND	16	3.57
Mar-2013	3.56	3.56	ND	ND	3.5	0.137	ND	5.1	18.1	0.482 J	14	3.65
Oct-2013	3.64	3.64	ND	ND	3.58	0.156	ND	5.8	17	0.487 J	ND	3.75
Mar-2014	3.44	3.44	ND	ND	3.75	0.154	ND	5.2	20.3	ND	ND	4.32
Oct-2014	ND	ND	ND	ND	3.96	0.126	ND	5	22.9	0.324 J	ND	4.29
Apr-2015	3.8	3.8	ND	ND	4.06	0.177	ND	4.2	20	ND	ND	4.64

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-25***											
Nov-2015	*ND*	*ND*	*ND*	*ND*	4.2	0.189	*ND*	5.2	27.7	*ND*	29	4.73
May-2016	*ND*	*ND*	*ND*	*5 J*	4.27	0.2	*ND*	5.2	28.4	*ND*	*ND*	4.3
Oct-2016	*ND*	*ND*	*ND*	*ND*	4.46	*NA*	*NA*	5.4	31.8	*0.627 J*	26	4.7
May-2017	2.4	2.4	*ND*	*ND*	4.73	0.21	*ND*	4.9	34.6	*ND*	*9 J*	4.9
Oct-2017	2	2	*ND*	*ND*	4.88	0.229	*ND*	5	40	*ND*	*21 J*	5.2
May-2018	*2 J*	*ND*	*0.052 J*	*ND*	4.9	0.22	*ND*	5.1	46.3	*ND*	*ND*	5.7
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	5.6	0.22	*ND*	4.64	29.5	*ND*	73	6.2
May-2019	*ND*	*NA*	*ND*	*ND*	6.2	0.18	*ND*	4.56	23.4	*ND*	*ND*	5.7
Oct-2019	*ND*	*NA*	*ND*	*ND*	4.8	0.23	*ND*	4.34	29.5	*ND*	14	5.8
May-2020	*ND*	*NA*	*ND*	*ND*	6.3	0.22	*ND*	4.28	33.7	*ND*	26	6.5
Oct-2020	*ND*	*NA*	*ND*	*ND*	6.2	0.23	*ND*	4.44	31.4	*ND*	11	6.9
Apr-2021	*ND*	*NA*	*ND*	*6.1 J*	7.3	0.26	*ND*	4.81	40.7	*ND*	14	7.3
Oct-2021	*ND*	*NA*	*ND*	*ND*	6.2	0.28	*ND*	4.95	72	*ND*	*ND*	7.9
May-2022	*ND*	*NA*	*ND*	*ND*	5.1	0.23	*ND*	4.74	54.9	*ND*	19	7.2 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25***													
Apr-1995	ND	ND	ND	ND	ND	3.6	NA	ND	ND	ND	0.46	0.33	ND	0.63	NA
Oct-1996	ND	ND	0.03	ND	ND	1.6	2.2	0.041	ND	ND	5.5	0.52	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	0.7	0.69	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	0.034	ND	ND	0.921	0.827	ND	ND	ND	3.92	0.075	ND	0.487	0.309
Apr-1998	ND	ND	0.055	ND	ND	1.18	1.07	0.019	ND	ND	8.41	ND	ND	0.649	0.334
Apr-1999	ND	ND	0.04	ND	ND	1.63	0.995	0.019	ND	0.013	7.21	ND	ND	0.706	0.32
Oct-1999	ND	ND	0.023	ND	ND	1.21	0.802	0.012	ND	0.011	4.98	ND	ND	0.505	0.303
Apr-2000	ND	ND	0.018	ND	ND	1.18	0.708	ND	ND	ND	3.2	ND	ND	0.481	0.288
Oct-2000	ND	ND	0.012	ND	ND	1.25	0.778	ND	ND	0.012	1.39	ND	ND	0.432	0.312
Apr-2001	ND	ND	0.012	ND	ND	1.13	NA	ND	ND	0.011	0.753	NA	ND	0.381	NA
Sep-2001	ND	ND	0.02	ND	ND	1.04	0.703	0.011	ND	ND	4.31	ND	0.003	0.504	0.293
Mar-2002	ND	ND	0.016	ND	ND	1.04	0.78	ND	ND	ND	2.44	ND	0.002	0.436	0.308
Sep-2002	ND	ND	0.02	ND	ND	1.28	0.724	ND	ND	ND	3.66	0.073	0.003	0.468	0.294
Mar-2003	ND	ND	0.012	ND	ND	1.14	0.609	ND	ND	ND	0.374	ND	ND	0.397	0.303
Oct-2003	ND	ND	0.022	ND	ND	1.1	0.607	0.012	ND	ND	5.65	ND	0.004	0.518	0.299
Apr-2004	ND	ND	0.011	ND	ND	0.704	0.608	ND	ND	ND	0.408	ND	ND	0.351	0.298
Oct-2004	ND	ND	ND	ND	ND	0.543	0.531	ND	ND	ND	0.231	ND	ND	0.319	0.31
Apr-2005	ND	ND	0.018	ND	ND	0.963	0.614	ND	ND	ND	3.85	ND	ND	0.446	0.302
Oct-2005	ND	ND	0.021	ND	ND	0.94	0.602	0.012	ND	0.011	4.8	ND	0.003	0.452	0.273
Mar-2006	ND	ND	0.022	ND	ND	0.668	0.373	ND	ND	ND	6.83	ND	0.005	0.374	0.179
Sep-2006	ND	ND	ND	ND	ND	0.633	0.505	ND	ND	ND	0.496	ND	ND	0.321	0.292

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25***													
Mar-2007	ND	ND	0.012	ND	ND	0.586	0.543	ND	ND	ND	1.17	ND	ND	0.343	0.296
Sep-2007	ND	0.004	0.012	ND	ND	1.16	0.531	ND	ND	ND	1.08	ND	ND	0.455	0.302
Mar-2008	ND	ND	0.014	ND	ND	0.726	0.615	ND	ND	ND	2.29	ND	ND	0.344	0.291
Sep-2008	ND	ND	0.021	0.002 R	ND	0.814	0.49	0.018	ND	ND	5.7	ND	0.003	0.536	0.337
Mar-2009	ND	ND	ND	ND	ND	0.629	0.538	ND	ND	ND	0.268	ND	ND	0.318	0.326
Oct-2009	ND	ND	0.016	ND	ND	0.712	0.561	ND	ND	ND	2.95	ND	ND	0.419	0.319
Apr-2010	ND	ND	0.02	ND	ND	0.806	0.527	0.014	ND	ND	7.96	ND	0.003	0.521	0.306
Oct-2010	ND	0.003	0.017	ND	ND	0.757	0.676	0.014	ND	ND	5.19	ND	0.003	0.551	0.385
Apr-2011	ND	ND	0.011	ND	ND	1.25	0.907	ND	ND	ND	0.355	ND	ND	0.357	0.294
Sep-2011	ND	ND	ND	ND	ND	0.781	0.797	ND	ND	ND	ND	ND	ND	0.402	0.426
Mar-2012	ND	ND	0.011	ND	ND	0.485	0.477	ND	ND	ND	ND	ND	ND	0.399	0.385
Sep-2012	ND	ND	0.0103	ND	ND	0.736	0.698	ND	0.0015 J	0.0018 J	0.0253 J	0.0118 J	ND	0.421	0.411
Mar-2013	ND	ND	0.0103	ND	ND	0.829	0.792	0.0034 J	0.0015 J	0.0022 J	0.0107 J	0.0049 J	0.0017 J	0.384	0.367
Oct-2013	ND	ND	0.0119	ND	ND	0.777	0.857	0.0012 J	0.0016 J	0.0016 J	ND	ND	ND	0.439	0.453
Mar-2014	ND	ND	0.011	ND	ND	1.02	0.921	0.0013 J	0.0012 J	0.0016 J	0.0546	0.041 J	ND	0.431	0.388
Oct-2014	0.001 J	ND	0.0136	ND	ND	0.932	0.924	0.000551 J	0.0019 J	0.0017 J	ND	0.0119 J	ND	0.482	0.488
Apr-2015	0.000883 J	ND	0.0135	ND	ND	0.986	0.959	0.000597 J	0.0019 J	0.0018 J	ND	ND	ND	0.53	0.528
Nov-2015	ND	ND	0.0127	ND	0.000095 J	1.06	0.908	0.000538 J	0.0018 J	0.0015 J	ND	ND	ND	0.506	0.521
May-2016	ND	ND	0.0168	0.000072 J	ND	0.86	0.85	0.0013 J	0.0021	0.0016 J	ND	ND	ND	0.53	0.553
Oct-2016	ND	ND	0.0131	ND	ND	0.985	0.841	0.00085 J	0.002	0.0021 J	ND	ND	ND	0.533	0.567
May-2017	ND	ND	0.0159	ND	ND	0.946	1.02	0.0014 J	0.002	0.0018 J	ND	ND	ND	0.606	0.609
Oct-2017	ND	ND	0.0159	0.000081 J	ND	1.01	1.12	ND	0.0023	0.0018 J	ND	ND	ND	0.648	0.674
May-2018	0.000052 J	ND	0.017	0.000075 J	0.000042 J	1.2	1.07	0.0027 J	0.0022	0.0052 B	ND	ND	0.000068 J	0.67 J	0.644 J
Nov-2018	ND	ND	0.016	0.000086 J	0.000056 J	1.3	1.2	0.0027 JB	0.0022	0.0065	ND	ND	0.00019 JB	0.72 J	0.7 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25***													
May-2019	*ND*	*ND*	0.017	*ND*	*ND*	1.2	1.2	*ND*	0.0046	0.0068	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*0.00011 J*	*ND*	0.017	*0.000096 J*	*0.00027 J*	1.2	1.2	*0.0045 J*	0.0029	0.0058	*0.0085 J*	*ND*	*0.0001 J*	0.68	*0.67 J*
May-2020	*0.000052 J*	*ND*	0.018	*ND*	*ND*	1.4	1.3	*0.0054 J*	0.0028	0.0056	*ND*	*0.0098 J*	*ND*	0.76	*0.72 J*
Oct-2020	*ND*	*ND*	0.015	*ND*	*ND*	1.4	1.4	*0.0056 J*	0.0038	*ND*	*0.016 J*	*ND*	*ND*	0.8	*0.74 J*
Apr-2021	*ND*	*ND*	0.024	*ND*	*ND*	1.5	1.6	*0.0025 J*	0.0051	*ND*	*ND*	*ND*	*ND*	0.85	0.93
Oct-2021	*0.00007 J*	*ND*	0.023	*ND*	*ND*	1.7	1.8	0.0044	0.0074	0.0085	*0.025 JB*	*0.02 J*	*0.00011 J*	0.88	0.91
May-2022	*ND*	*ND*	0.022	*ND*	*ND*	1.5	1.4	*0.0024 J*	0.0051	0.0034	*ND*	*ND*	*ND*	0.86	0.84

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-25*												
Apr-1995	0.03	NA	ND	ND	0.1	NA	ND	0.01	1.5	NA	ND	ND	0.1
Oct-1996	0.017	0.023	NA	ND	ND	ND	ND	ND	2	1.7	ND	ND	0.32
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	1.8	1.6	ND	ND	0.035
Oct-1997	0.014	ND	ND	ND	1.08	0.735	ND	ND	1.16	1.09	ND	0.016	0.01
Apr-1998	0.019	0.012	ND	ND	2.34	ND	ND	ND	1.21	1.11	ND	0.03	0.013
Apr-1999	0.017	0.01	NA	0.013	1.25	ND	ND	ND	1.49	1.09	ND	0.022	0.032
Oct-1999	0.015	0.01	NA	ND	1.38	0.661	ND	ND	1.52	1.05	ND	0.019	0.013
Apr-2000	0.012	ND	NA	ND	0.957	ND	ND	ND	2.46	1.02	ND	0.012	0.011
Oct-2000	0.013	ND	NA	ND	0.642	ND	ND	ND	1.73	1.14	ND	ND	0.011
Apr-2001	ND	NA	NA	ND	1.23	NA	ND	ND	1.92	NA	ND	ND	0.017
Sep-2001	0.012	ND	NA	ND	0.652	ND	ND	ND	2.5	1.1	ND	0.016	ND
Mar-2002	0.01	ND	NA	ND	1.14	0.988	ND	ND	2.27	1.23	ND	0.01	ND
Sep-2002	0.014	ND	NA	ND	0.738	ND	ND	ND	1.44	1.16	ND	0.017	ND
Mar-2003	ND	ND	NA	ND	0.517	ND	ND	ND	1.6	1.14	ND	ND	ND
Oct-2003	0.011	ND	NA	ND	ND	ND	ND	ND	2.43	1.09	ND	0.022	0.014
Apr-2004	ND	ND	ND	ND	1.22	ND	ND	ND	1.23	1.17	ND	ND	ND
Oct-2004	ND	ND	ND	ND	1.07	ND	ND	ND	1.03	0.936	ND	ND	ND
Apr-2005	0.011	ND	ND	ND	0.83	0.43	ND	ND	2	1.09	ND	0.016	0.011
Oct-2005	0.013	ND	ND	ND	0.757	ND	ND	ND	1.94	0.997	ND	0.02	0.012
Mar-2006	ND	ND	ND	ND	0.699	ND	ND	ND	1.19	0.939	ND	0.015	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	1.44	1.08	ND	ND	ND
Mar-2007	ND	ND	ND	ND	0.559	ND	ND	ND	1.17	1.13	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-25***												
Sep-2007	ND	ND	ND	0.014	0.547	ND	ND	ND	1.41	1.12	ND	ND	0.028
Mar-2008	ND	ND	0.0004	ND	0.798	0.536	ND	ND	1.29	1.05	ND	ND	ND
Sep-2008	0.013	ND	ND	ND	0.754	ND	ND	ND	1.25	1.11	ND	ND	0.022
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.17	1.17	ND	ND	0.016
Oct-2009	ND	ND	ND	ND	0.665	ND	ND	ND	1.33	1.06	ND	0.012	0.012
Apr-2010	0.013	ND	ND	ND	0.896	ND	ND	ND	1.53	1.25	ND	0.023	0.013
Oct-2010	0.016	ND	ND	ND	0.995	ND	ND	ND	1.44	1.4	ND	0.023	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.46	1.45	ND	ND	0.014
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.58	1.58	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	1.44	1.41	ND	ND	ND
Sep-2012	0.0085 J	0.008 J	ND	0.0016 J	0.41 J	0.387 J	ND	ND	1.48	1.48	ND	ND	0.005 J
Mar-2013	0.0083 J	0.0081 J	0.000044 J	0.0019 J	0.412 J	0.392 J	ND	0.000026 J	1.42	1.36	ND	ND	0.0153
Oct-2013	0.0089 J	0.0089 J	ND	0.0017 J	0.399 J	0.398 J	ND	ND	1.56	1.61	0.0001525 J	0.000873 J	0.013
Mar-2014	0.0084 J	0.0082 J	ND	0.0018 J	0.452 J	0.412 J	ND	ND	1.53	1.4	ND	ND	ND
Oct-2014	0.0102	0.0103	ND	0.002 J	0.535	0.536	0.0021	ND	1.92	1.92	ND	ND	0.0069 J
Apr-2015	0.0106	0.0104	ND	0.0024 J	0.503	0.496 J	ND	ND	1.94	1.93	ND	ND	0.0096 J
Nov-2015	0.0102	0.0106	ND	0.0021 J	0.51	0.523	ND	ND	1.88	1.93	ND	ND	0.0064 J
May-2016	0.0091	0.0111	ND	0.003 J	0.483	0.483	ND	ND	1.83	1.85	ND	ND	ND
Oct-2016	0.01	0.0131	ND	0.0026 J	0.478	0.499	ND	ND	1.76	1.89	ND	ND	ND
May-2017	0.0118	0.0119	ND	0.0026 J	0.528	0.529	ND	ND	1.94	1.9	ND	ND	0.0036 JB
Oct-2017	0.0117	0.0126	ND	0.0016 J	0.543	0.607	ND	ND	1.99 J-	2.13	ND	ND	0.0058 J
May-2018	0.011	0.01	ND	0.0027	ND	ND	0.00028 JB	ND	2.5 J	2.24 J	ND	0.0034	0.0053 B
Nov-2018	0.013	0.012	ND	0.0028	ND	1.3 J	0.00013 JB	ND	0.95 J	2.7 JB	ND	0.0034 B	0.0077
May-2019	0.014	0.013	ND	0.0037	ND	ND	ND	ND	ND	ND	ND	0.0039 B	0.0072

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-25***												
Oct-2019	0.014	0.012	*ND*	0.0031	*ND*	*ND*	*ND*	*ND*	*2.2 J*	*2.1 J*	*ND*	*ND*	0.015
May-2020	0.014	0.013	*ND*	0.0027	*ND*	*ND*	*ND*	*ND*	*2.3 J*	*2.2 J*	*ND*	0.0084	0.0051
Oct-2020	0.015	0.015	*ND*	0.0045	*ND*	*ND*	*ND*	*ND*	*2.4 J*	*2.1 J*	*ND*	*0.001 J*	*ND*
Apr-2021	0.017	0.017	*ND*	*0.0036 J*	0.64	0.68	*ND*	*ND*	2.6	3.1	*ND*	*ND*	*0.0051 J*
Oct-2021	0.017	0.018	*ND*	0.0051	0.59	0.605	*ND*	*0.00027 J*	2.8	2.8	*ND*	*ND*	0.0061
May-2022	0.017	0.017	*ND*	0.0039	0.58	0.63	*ND*	*ND*	2.6	2.6	*ND*	*ND*	0.0057

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25*																
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25*																
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	1 R	1 R	1 R	1 R	7.4 R	1 R	1 R	**1 R**	**1 R**	1 R	0.7 R	1 R	1 R	5 R	5 R	5 R	5 R	5 R
Dec-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*0.42 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*0.45 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*0.42 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*0.66 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25*																
Oct-2017	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.7 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*0.94 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	2.07	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25***															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25***															
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	0.9 R	1 R	1 R	1 R	1 R	11.4 R
Dec-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.6 J
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.7 J
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.05	0.46 J
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.11	0.62 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	1.25	0.84 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.19 J	ND	ND	ND	ND	ND	1.83 J	0.77 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	0.5 J,B	ND	ND	ND	ND	1.67	0.83 J
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	1.11
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8 J	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	2.7	1.9
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	3	2.4
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J,B	ND	ND	ND	ND	ND	2.7	2

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25***															
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	3	2.2
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.5	2.5
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	**3 D6**	2.2 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3 CL	2.2 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	1.4
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.8	1.7
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	5.8	2.5
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.235 J*	*ND*	*0.674 J*	*ND*	*ND*	*ND*	*3.6 J*	*3.7 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	5	2.9
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	6.4	2.4

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25***															
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25***															
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	1 R	1 R	1 R	1.5 R	**9 R**	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1.1 R	1 R	1 R	1 R	*NA*
Dec-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.27 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.31 J*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.27 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.36 J*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.34 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.34 J*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.39 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.4 J*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.5 J*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.4 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.4 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.41	*ND*	*ND*	*ND*	*ND*	*0.343 J*	*0.446 J*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-25A***											
Apr-1995	52.5	52.5	ND	59.7	2.7	ND	ND	8.9	100	3.2	70	99.7
Apr-1997	ND	36	ND	ND	3	0.06	ND	NA	NA	ND	82	33
Oct-1997	21	21	ND	ND	2.33	ND	ND	8.38	50.7	ND	ND	18
Apr-1998	37	37	ND	ND	2.64	0.22	ND	6.65	110.9	2.25	50	41
Apr-1999	25	25	0.8	ND	2.64	ND	ND	5.89	91.2	1.44	35	32
Oct-1999	32	32	0.07	ND	4.37	ND	ND	5.72	44.9	2.75	35	18
Apr-2000	16	16	ND	ND	3	ND	ND	6.32	43	2.16	45	19
Oct-2000	16	NA	ND	ND	2.03	ND	ND	5.77	42.4	4.37	33	21.7
Apr-2001	20	NA	ND	ND	2.85	ND	ND	NA	NA	1.57	33	23
Sep-2001	5.9	5.9	0.32	ND	5.01	ND	ND	5.71	43	7.52	28	15
Mar-2002	8	8	ND	ND	3.88	ND	ND	5.5	36	2.16	13	12
Sep-2002	5.2	5.2	ND	ND	3.55	ND	ND	5.4	34	3.13	20	8.49
Mar-2003	22	22	ND	ND	14.4	ND	ND	5.8	59.9	5.65	30	22.6
Oct-2003	14	14	ND	ND	4.24	0.118	ND	5.2	56.1	1.43	11	98.6
Apr-2004	12	12	ND	ND	4.85	ND	ND	5.5	48.6	1.34	50	17.5
Oct-2004	15	15	ND	ND	5.7	ND	ND	3.2	50.8	1.43	41	19.6
Apr-2005	18	18	ND	ND	5.64	ND	ND	5.2	49.8	3.51	ND	22.6
Oct-2005	11	11	0.22	ND	5.94	ND	ND	4.7	42.8	2.62	43	13.5
Mar-2006	11	11	ND	ND	6.33	ND	ND	5.3	51.5	2.99	26	13
Sep-2006	7.1	7.1	ND	ND	6.05	ND	ND	4.9	37.7	2.83	42	10.7
Mar-2007	6.9	6.9	ND	ND	5.9	ND	ND	4.9	37.5	2.17	42	9.64
Sep-2007	11	11	0.23	ND	5.45	ND	ND	6.2	42.6	1.87	38	14.1
Mar-2008	17	17	ND	11	17.5	ND	ND	6.2	52.7	5.13	53	18.2
Sep-2008	7.5	7.5	0.27	ND	5.59	ND	ND	5.7	33.5	2.25	30	9.2
Mar-2009	6	6	ND	ND	5.78	ND	ND	5.1	35.8	1.52	ND	8.57
Oct-2009	5.2	5.2	ND	ND	5.98	ND	ND	4.9	31.8	1.6	34	7.53
Mar-2010	8.8	8.8	ND	ND	6.41	ND	ND	4.59	45	2.01	14	9.74
Oct-2010	1.8	1.8	ND	ND	6.58	ND	ND	3.6	37.8	2.54	22	7.13
Apr-2011	3	3	ND	ND	6.57	ND	0.04	4.1	41.5	1.8	42	6.4
Sep-2011	4.7	4.7	0.22	ND	7.04	ND	0.03	4.3	40.7	1.56	44	8.48
Mar-2012	4.3	4.3	ND	ND	7.23	0.06	0.04	3.6	41	1.98	24	8.01
Sep-2012	4.2	4.2	ND	ND	7.96	0.104	ND	3.5	42.8	2.47	28	8.53
Mar-2013	3.8	3.8	ND	ND	8.59	0.103	0.0377 J	4.5	48.8	1.79	31	8.47
Oct-2013	3.64	3.64	ND	ND	8.62	0.127	0.134	5.3	46.9	2.29	ND	9.02
Mar-2014	3.52	3.52	ND	ND	8.88	0.131	ND	4.6	48.2	2.66	26	8.9
Oct-2014	ND	ND	ND	ND	9.57	0.106	ND	4.5	46	3.2	25	9.8
Apr-2015	3.72	3.72	ND	ND	8.62	0.116	ND	3.6	46	1.75	ND	8.86

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-25A***											
Nov-2015	*ND*	*ND*	*ND*	*5 J*	9.48	0.125	0.0657	4.7	60.8	1.9	*22 J*	9.15
May-2016	*ND*	*ND*	*ND*	*ND*	8.67	0.132	0.0891	4.5	61.3	3.23	*13 J*	8.7
Oct-2016	*ND*	*ND*	*ND*	*ND*	9.05	*NA*	*NA*	4.6	69.9	2.81	42	9.7
May-2017	*ND*	*ND*	*ND*	13	9.61	0.235	0.106	4.5	76.2	3.52	*13 J*	9.8
Oct-2017	*ND*	*ND*	*ND*	*ND*	8.92	0.244	0.0755	4.6	84.6	2.31	33	11.3
May-2018	*ND*	*ND*	*ND*	*5.8 J*	8.4	0.24	0.023	4.8	67.3	*ND*	23	11.2
Nov-2018	18	18	*ND*	*ND*	10.1	0.16	0.04	5.03	87.7	*6.2 J*	90	30.8
May-2019	*ND*	*NA*	*ND*	*ND*	10.4	0.23	0.066	4.67	53.8	*ND*	48	18.3
Oct-2019	*6 J*	*NA*	*ND*	*6 J*	62.8	0.58	0.093	4.33	70.1	*ND*	44	17.2
May-2020	*4 J*	*NA*	*ND*	*ND*	11.2	0.77	0.11	4.32	76.5	*5 J*	46	19.4
Oct-2020	*2 J*	*NA*	*ND*	*ND*	10.5	0.76	0.096	4.62	74.3	4	35	21.4
Apr-2021	20	*NA*	*ND*	*ND*	10.7	0.71	0.12	5.29	113.9	*ND*	55	36.5
Oct-2021	12	*NA*	*ND*	*ND*	9.4	0.82	0.1	4.98	116.8	*ND*	22	22.1
May-2022	*ND*	*NA*	*ND*	*ND*	8.5	0.73	0.086	4.63	97.5	*ND*	33	19.1 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25A***													
Apr-1995	ND	ND	ND	ND	ND	38.8	NA	ND	ND	ND	0.82	0.05	ND	0.68	NA
Oct-1996	ND	ND	0.041	ND	ND	8	7.7	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	0.048	ND	ND	12	NA	ND	ND	ND	ND	NA	ND	ND	ND
Oct-1997	ND	ND	0.028	ND	ND	7.09	6.38	ND	ND	ND	0.108	ND	ND	0.491	0.47
Apr-1998	ND	ND	0.06	ND	ND	15	15.7	ND	ND	ND	ND	ND	ND	0.743	0.732
Apr-1999	ND	ND	0.048	ND	ND	11.6	11.1	ND	ND	ND	0.104	ND	ND	0.629	0.567
Oct-1999	ND	ND	0.028	ND	ND	1.23	1.09	ND	ND	0.017	0.057	ND	ND	0.643	0.589
Apr-2000	ND	ND	0.043	ND	ND	6.43	5.88	ND	ND	ND	ND	ND	ND	0.729	0.691
Oct-2000	ND	ND	0.029	ND	ND	7.46	7.78	ND	ND	0.02	0.065	ND	ND	0.758	0.614
Apr-2001	ND	ND	0.044	ND	ND	7.78	NA	ND	ND	0.012	ND	NA	ND	0.812	NA
Sep-2001	ND	ND	0.029	ND	ND	4.89	4.23	ND	ND	0.014	0.067	ND	ND	0.679	0.585
Mar-2002	ND	ND	0.031	ND	ND	3.67	3.47	ND	ND	0.019	0.051	ND	ND	0.702	0.678
Sep-2002	ND	ND	0.034	ND	ND	2.2	2.05	ND	ND	0.013	0.097	ND	ND	0.728	0.715
Mar-2003	ND	ND	0.051	ND	ND	7.8	5.8	ND	ND	0.012	0.08	ND	ND	0.753	0.708
Oct-2003	ND	ND	0.213	ND	0.005	32.3	5.95	ND	0.02	0.094	0.252	ND	ND	4.37	0.762
Apr-2004	ND	ND	0.047	ND	ND	5.54	4.82	ND	ND	0.02	ND	ND	ND	0.901	0.887
Oct-2004	ND	ND	0.053	ND	ND	6.17	5.84	ND	ND	0.021	ND	ND	ND	1.03	1.03
Apr-2005	ND	ND	0.055	ND	ND	7.35	6.71	ND	ND	0.017	ND	ND	ND	1.04	0.995
Oct-2005	ND	ND	0.052	ND	ND	3.81	3.58	ND	ND	0.024	ND	ND	ND	0.97	0.913
Mar-2006	ND	ND	0.047	ND	ND	3.85	3.77	ND	ND	0.013	ND	ND	ND	0.812	0.778
Sep-2006	ND	ND	0.049	ND	ND	2.7	2.69	ND	ND	0.021	ND	ND	ND	0.964	0.915

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25A***													
Mar-2007	ND	ND	0.046	ND	ND	2.35	2.36	ND	ND	0.023	ND	ND	ND	0.916	0.878
Sep-2007	ND	ND	0.045	ND	ND	4.12	3.41	ND	ND	0.022	ND	ND	ND	0.932	0.873
Mar-2008	ND	ND	0.048	ND	ND	5.75	5	ND	ND	0.02	ND	ND	ND	0.922	0.87
Sep-2008	ND	ND	0.047	0.002	ND	2.03	2.02	ND	ND	0.023	ND	ND	0.003	1.01	0.977
Mar-2009	ND	ND	0.05	ND	ND	1.65	1.34	ND	ND	0.025	ND	ND	ND	1.08	0.968
Oct-2009	ND	ND	0.048	ND	ND	1.35	1.24	ND	ND	0.025	0.052	ND	ND	1.01	0.997
Mar-2010	ND	ND	0.054	ND	ND	2.25	2.4	ND	ND	0.021	0.069	ND	ND	1	0.981
Oct-2010	ND	ND	0.049	ND	ND	0.845	0.803	ND	ND	0.024	ND	ND	ND	1.22	1.2
Apr-2011	ND	ND	0.058	ND	ND	0.744	0.756	ND	ND	0.016	ND	ND	ND	1.09	1.16
Sep-2011	ND	ND	0.056	ND	ND	1.3	1.32	ND	ND	0.022	ND	ND	ND	1.27	1.28
Mar-2012	ND	ND	0.062	ND	ND	1.08	1.19	ND	ND	0.024	ND	ND	ND	1.29	1.26
Sep-2012	ND	ND	0.0669	0.0011 J	ND	0.993	1.18	ND	0.007 J	0.0276	0.0538	0.0413 J	ND	1.47	1.41
Mar-2013	ND	ND	0.0556	0.000842 J	0.000248 J	1.33	1.46	0.0017 J	0.0065 J	0.0231	0.0754	0.0186 J	0.0015 J	1.25	1.3
Oct-2013	ND	ND	0.0704	ND	0.000199 J	1.19	1.16	0.004 J	0.0075 J	0.0262	ND	ND	ND	1.47	1.43
Mar-2014	ND	ND	0.0629	0.000979 J	0.000205 J	1.32	1.4	0.0013 J	0.0056 J	0.0243	0.0595	0.0542	ND	1.36	1.43
Oct-2014	0.000772 J	ND	0.078	0.0011 J	0.000284 J	1.47	1.47	0.000361 J	0.0075 J	0.0309	0.0403 J	0.0371 J	0.0011 J	1.49	1.49
Apr-2015	0.00058 J	ND	0.0698	0.0011 J	0.000246 J	1.12	1.13	0.000575 J	0.0071 J	0.0328	0.239	0.0264 J	ND	1.47	1.5
Nov-2015	ND	ND	0.0647	0.0011 J	0.000276 J	1.18	1.21	0.000316 J	0.0071 J	0.0265	0.0234 J	ND	ND	1.5	1.57
May-2016	ND	ND	0.0645	0.001 J	0.0002 J	1.05	1.24	ND	0.0067	0.0232	ND	ND	ND	1.49	1.48
Oct-2016	ND	ND	0.0683	0.001	ND	1.27	1.28	ND	0.0075	0.0248	ND	ND	ND	1.58	1.68
May-2017	ND	ND	0.0625	0.00092 J	0.00022 J	1.15	1.1	ND	0.0073	0.0225	ND	ND	ND	1.67	1.71
Oct-2017	ND	ND	0.0661	0.00097 J	0.00026 J	1.73	1.66	ND	0.0078	0.0258	0.0551 J	ND	0.00028 J	1.71	1.77
May-2018	0.000062 J	ND	0.072	0.00099	0.00027 J	1.3	1.21	0.002 J	0.0065	0.02	0.012 J	ND	0.000018 J	1.9	1.76
Nov-2018	ND	ND	0.063	0.00074	0.00023 J	9.9	9.9	0.0019 JB	0.0056	0.046	0.017 J	ND	0.000088 JB	1.5	1.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25A***													
May-2019	*ND*	*ND*	0.066	0.001	*ND*	4.7	4.8	*ND*	0.0059	0.035	*ND*	*ND*	*ND*	1.6	1.6
Oct-2019	*0.0002 J*	*0.00016 J*	0.066	0.0012	*0.00049 J*	4	3.8	*0.0029 J*	0.0059	0.039	*0.015 J*	*0.013 J*	*0.000086 J*	1.8	1.7
May-2020	*0.000059 J*	*ND*	0.067	0.00086	*0.00014 J*	4.8	4.6	*0.0049 J*	0.0076	0.048	*0.017 J*	*0.016 J*	*ND*	1.8	1.8
Oct-2020	*ND*	*ND*	0.058	*0.00068 J*	*ND*	5.5	5.2	*0.0035 J*	0.0063	0.03	*ND*	*ND*	*ND*	1.9	1.8
Apr-2021	*ND*	*ND*	0.073	*0.00061 J*	*ND*	11.8	11.8	*0.00036 J*	0.0073	0.026	*ND*	*ND*	*ND*	1.7	1.9
Oct-2021	*0.000079 J*	*ND*	0.076	0.0012	*0.0001 J*	5.6	5.7	*0.0011 J*	0.0085	0.055	0.076	*0.011 J*	*0.000082 J*	2	2
May-2022	*ND*	*ND*	0.082	0.0011	*0.00017 J*	4.2	3.9	*0.001 J*	0.011	0.056	*0.045 J*	*0.038 J*	*ND*	2.1	2.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-25A*												
Apr-1995	0.01	NA	ND	ND	2.8	NA	ND	0.02	2.1	NA	ND	ND	0.05
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	1.6	1.8	ND	ND	0.04
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	2	2	ND	ND	0.03
Oct-1997	ND	ND	ND	ND	0.821	ND	ND	ND	1.37	1.35	ND	ND	0.013
Apr-1998	ND	ND	ND	0.015	0.799	0.749	ND	ND	1.48	1.46	ND	ND	0.024
Apr-1999	ND	ND	NA	ND	ND	ND	ND	ND	1.5	1.39	ND	ND	ND
Oct-1999	ND	ND	NA	ND	1.04	ND	ND	ND	1.37	1.29	ND	ND	0.01
Apr-2000	ND	ND	NA	ND	1.02	0.621	ND	ND	1.47	1.34	ND	ND	ND
Oct-2000	ND	ND	NA	ND	0.759	0.625	ND	ND	2.35	1.47	ND	ND	0.011
Apr-2001	NA	NA	NA	ND	1.23	NA	ND	ND	1.6	NA	ND	ND	ND
Sep-2001	ND	ND	NA	ND	0.504	0.935	ND	ND	1.55	1.42	ND	ND	ND
Mar-2002	ND	ND	NA	ND	1.61	0.754	ND	ND	1.65	1.5	ND	ND	ND
Sep-2002	ND	ND	NA	ND	0.682	ND	ND	ND	1.6	1.57	ND	ND	ND
Mar-2003	ND	ND	NA	ND	0.768	ND	ND	ND	1.65	1.62	ND	ND	ND
Oct-2003	0.039	ND	NA	0.032	ND	ND	ND	ND	13.7	1.84	ND	ND	0.074
Apr-2004	0.011	0.011	**0.0036**	ND	0.833	0.931	ND	ND	2.19	2.1	ND	ND	ND
Oct-2004	0.012	0.011	0.002	ND	1.62	1.11	ND	ND	2.39	2.12	ND	ND	0.012
Apr-2005	0.011	ND	ND	ND	0.75	0.68	ND	ND	2.23	2.11	ND	ND	ND
Oct-2005	0.011	0.01	**0.0037**	ND	0.521	ND	ND	ND	2.25	2.11	ND	ND	0.012
Mar-2006	ND	ND	**0.0033**	ND	ND	ND	ND	ND	2.19	2.12	ND	ND	ND
Sep-2006	0.011	0.01	**0.0042**	ND	0.657	0.666	ND	ND	2.3	2.17	ND	ND	ND
Mar-2007	ND	ND	**0.0065**	ND	0.671	0.646	ND	ND	2.26	2.19	ND	ND	0.011

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-25A***												
Sep-2007	0.01	*ND*	**0.0089**	*ND*	0.632	0.545	*ND*	*ND*	2.1	2.07	*ND*	*ND*	0.01
Mar-2008	0.012	0.011	**0.0065**	*ND*	0.815	0.778	*ND*	*ND*	2.06	1.94	*ND*	*ND*	*ND*
Sep-2008	0.013	0.013	**0.0036**	*ND*	0.617	0.62	*ND*	*ND*	2.12	2.05	*ND*	*ND*	0.015
Mar-2009	0.014	0.012	**0.0021**	*ND*	0.652	0.646	*ND*	*ND*	2.29	2.4	*ND*	*ND*	*ND*
Oct-2009	0.013	0.013	**0.0024**	*ND*	0.516	*ND*	*ND*	*ND*	1.96	2.1	*ND*	*ND*	*ND*
Mar-2010	0.013	0.013	0.0019	*ND*	0.742	0.695	*ND*	*ND*	2.07	2.36	*ND*	*ND*	0.011
Oct-2010	0.017	0.017	0.0012	*ND*	0.71	0.689	*ND*	*ND*	2.53	2.5	*ND*	*ND*	*ND*
Apr-2011	0.016	0.016	0.0011	*ND*	0.513	*ND*	*ND*	*ND*	2.26	2.24	*ND*	*ND*	*ND*
Sep-2011	0.018	0.018	0.0011	*ND*	0.848	0.872	*ND*	*ND*	2.69	2.69	*ND*	*ND*	*ND*
Mar-2012	0.019	0.019	0.0011	*ND*	0.719	0.726	*ND*	*ND*	2.57	2.56	*ND*	*ND*	*ND*
Sep-2012	0.0236	0.0231	0.00087	*0.0067 J*	0.835	0.793	*ND*	*ND*	2.88	2.94	*0.000481 J*	*ND*	0.0105
Mar-2013	0.0224	0.0223	0.000742	*0.0065 J*	0.748	0.754	*ND*	*0.000028 J*	2.52	2.58	*ND*	*ND*	0.0192
Oct-2013	0.0257	0.0241	0.000652	*0.007 J*	0.833	0.776	*0.00058 J*	*ND*	3.02	2.95	*0.000124 J*	*0.00095 J*	0.02
Mar-2014	0.024	0.0269	0.000517	*0.006 J*	0.851	0.897	*0.000457 J*	*ND*	2.72	2.86	*0.000144 J*	*0.000758 J*	*0.0056 J*
Oct-2014	0.0284	0.0285	0.000379	*0.0075 J*	0.996	0.991	*0.0019 J*	*0.003 J*	3.37	3.37	*ND*	*ND*	0.0112
Apr-2015	0.0277	0.0283	0.000377	*0.0071 J*	0.937	0.934	*ND*	*ND*	3.29	3.22	*ND*	*ND*	0.0107
Nov-2015	0.0284	0.0298	0.000269	*0.007 J*	1.02	1.06	*0.000731 J*	*ND*	3.34	3.48	*ND*	*ND*	*0.0083 J*
May-2016	0.0294	0.0284	0.00023	0.0064	0.969	0.966	*ND*	*ND*	3.1	3.09	*ND*	*ND*	*0.0094 J*
Oct-2016	0.0319	0.0365	*0.00015 J*	0.0071	1.02	1.09	*ND*	*ND*	3.15	3.32	*ND*	*ND*	*0.007 J*
May-2017	0.0343	0.0346	*0.00016 J*	0.0065	1.02	1.04	*ND*	*ND*	3.2	3.13	*ND*	*ND*	*0.0085 J*
Oct-2017	0.0335	0.0408	*0.000059 J*	0.0056	1.06	1.13	*ND*	*ND*	*3.2 J-*	3.36	*0.00013 J*	*ND*	*0.0105 J*
May-2018	0.032	0.031	*0.00018 J*	0.0061	*ND*	*ND*	*0.00094 JB*	*ND*	*3.9 J*	*3.54 J*	*0.00008 J*	0.0036	0.0082 B
Nov-2018	0.028	0.028	0.00027	0.0061	*1.1 J*	*1.4 J*	*0.00066 J*	*ND*	*1.7 J*	*3.7 JB*	*0.000078 J*	0.0029 B	0.0091
May-2019	0.034	0.034	*ND*	0.0062	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0041 B	0.0086

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-25A***												
Oct-2019	0.032	0.036	*ND*	0.0053	*1.2 J*	*1.2 J*	*0.00053 J*	*ND*	*4.1 J*	*4 J*	*ND*	*ND*	0.064
May-2020	0.041	0.04	*ND*	0.0077	*ND*	*1.1 J*	*0.00064 J*	*ND*	*4.4 J*	*3.9 J*	*ND*	0.01	0.011
Oct-2020	0.043	0.042	*ND*	0.0059	*ND*	*ND*	*ND*	*ND*	*4.1 J*	*3.7 J*	*ND*	*0.00092 J*	*ND*
Apr-2021	0.041	0.042	*0.00011 J*	*0.0078 J*	1	1	*ND*	*ND*	3.9	4	*ND*	*ND*	*0.0093 J*
Oct-2021	0.046	0.045	*0.00009 J*	0.008	1.1	0.977	*ND*	*ND*	4.2	4.1	*0.00014 J*	*ND*	0.012
May-2022	0.047	0.048	*ND*	0.01	1	1.1	*ND*	*ND*	4.1	4	*0.00017 J*	*ND*	0.014

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-25A***																
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	0.5 J	NA	NA	0.7 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	1	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	0.7 J	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	0.7 J	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	0.9 J	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	0.5 J	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	0.7 J	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	0.9 J	ND	ND	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	0.8 J	ND	ND	4.4	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	1	ND	ND	5.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	0.9 J	ND	ND	6.4	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	0.7 J	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	1.2	ND	ND	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25A*																
Mar-2007	ND	1.1	ND	ND	13.1	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	2	ND	ND	20	0.7 J	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	0.6 J	ND	ND	6.8	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Sep-2008	1 R	1 R	1 R	1 R	1 R	1 R	1 R	**1 R**	**1 R**	1 R	1 R	1 R	1 R	5 R	5 R	5 R	5 R	5 R
Dec-2008	ND	ND	ND	ND	12.5	ND	ND	ND	ND	ND	1.1	ND	0.6 J	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	7.4	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	9.6	ND	ND	ND	ND	ND	0.9 J	ND	0.6 J	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	21.3	ND	ND	ND	ND	ND	ND	ND	0.97 J	ND	ND	ND	ND	ND
Oct-2010	ND	1.4	ND	ND	27.5	ND	ND	ND	ND	ND	1.4	0.8 J	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	14.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	34.1	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	24.8	1.1	ND	ND	ND	ND	2.4	1	1.6	ND	ND	ND	ND	ND
Sep-2012	ND	1.16	ND	ND	35	0.95 J	ND	ND	ND	ND	2.01	1.16	1.69	ND	ND	ND	ND	ND
Mar-2013	ND	1.14	ND	ND	42.1	1.28	ND	ND	ND	ND	2.9	1.12	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	41.9	1.14	ND	ND	ND	ND	2.5	1.34	2.17	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	39.7	1.2	ND	ND	ND	ND	2.47	1.1	2.13	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	40.1	1.16	ND	ND	ND	ND	2.35	1.36	2.17	ND	ND	ND	ND	ND
Apr-2015	ND	0.94 J	ND	ND	37.3	1.17	ND	ND	ND	ND	2.28	1.26	1.7	ND	ND	ND	ND	ND
Nov-2015	ND	1 J	ND	ND	35.1	1.4	ND	ND	ND	ND	2.3	1.3	1.9	ND	ND	ND	ND	ND
May-2016	ND	0.8 J	ND	ND	27	1.2	ND	ND	ND	ND	2	1.2	1.8	ND	ND	ND	ND	ND
Oct-2016	ND	0.8 J	ND	ND	32	1	ND	ND	ND	ND	2.4	1.2	1.9	ND	ND	ND	ND	ND
May-2017	ND	0.6 J	ND	ND	33	1 J	ND	ND	ND	ND	2.2	1	1.7	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25A*																
Oct-2017	ND	0.6 J	ND	ND	28	1.2	ND	ND	ND	ND	2	1.2	1.7	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	37.4	1.3	ND	ND	ND	ND	2.4	1.4	2.2	ND	ND	ND	2.5 JB	ND
Nov-2018	ND	0.59 J	ND	ND	30.3	1 J	ND	ND	ND	ND	1.8	1.1	1.3	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	19.5	ND	ND	ND	ND	ND	1.2	ND	1.4	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	23.3	ND	ND	ND	ND	ND	1.4	ND	1.3	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	18.4	ND	ND	ND	ND	ND	1.4	ND	1.4	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	24.2	0.7 J	ND	ND	ND	ND	1.5	1	ND	ND	ND	ND	ND	ND
Apr-2021	ND	0.295 J	ND	ND	28	0.718 J	ND	ND	ND	ND	1.95	1.02	1.01	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	30.6	0.8 J	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	25.5	0.7 J	ND	ND	ND	ND	1.6	1.1	1.5	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25A***															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	1.4
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	2.6
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	1.4	2.8
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.2	5.7
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.4	5.3
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	4.3
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	5.5
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	9.8
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19	5.4
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	28	12
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	61	11
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	24	14
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	36	18
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	32.3	22.2
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21.9	16.9
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	22.1	21.9

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25A***															
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	0.8 J	ND	ND	ND	16.1	31.7
Sep-2007	0.5 J	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	1	ND	ND	ND	24.2	23.6
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	1	15.4
Sep-2008	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1.8 R	3 R
Dec-2008	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	1	16.2
Mar-2009	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	7.5
Oct-2009	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	12.8	2.5
Mar-2010	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	30.5 J	46.9
Oct-2010	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	ND	ND	ND	33.5	47.9
Apr-2011	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7	ND	ND	ND	43.7	42.7
Sep-2011	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	28.8	57.6
Mar-2012	3	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	ND	ND	ND	25.6	59.1
Sep-2012	3.57	ND	ND	ND	ND	ND	ND	ND	0.83 J	ND	ND	5.6	ND	ND	ND	15.2	42
Mar-2013	3.82	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.5	ND	ND	ND	19.6	60.8
Oct-2013	4.24	0.24 J	ND	ND	ND	ND	ND	ND	0.94 J	0.23 J	ND	6.43	ND	ND	ND	16.7	61.4
Mar-2014	3.79	ND	ND	ND	ND	ND	ND	ND	0.8 J	0.24 J	ND	5.87	ND	ND	ND	22 J	62.3
Oct-2014	3.98	ND	ND	ND	ND	ND	ND	ND	0.53 J	0.24 J	ND	6.16	ND	ND	ND	19.3	57.7
Apr-2015	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.79	ND	ND	ND	16.9	51.4
Nov-2015	3.4	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	6.4	ND	ND	ND	32.3 J	48.4
May-2016	3.3	ND	ND	ND	ND	ND	ND	ND	0.5 J	0.2 J	ND	6.1	ND	ND	ND	17	41
Oct-2016	3.3	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.3 J	ND	5.5	ND	ND	ND	16	53
May-2017	3	ND	ND	ND	ND	ND	ND	ND	0.4 J	0.2 J,B	ND	5.5	ND	ND	ND	13	47

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25A***															
Oct-2017	3.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*0.2 J*	*ND*	5.9	*ND*	*ND*	*ND*	13	48
May-2018	3.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.2	*ND*	*ND*	*ND*	26.9	52.3
Nov-2018	2.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.1	*ND*	*ND*	*ND*	11.7	44.3 N3
May-2019	1.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	8.5 CL	32 N3
Oct-2019	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.9	*ND*	*ND*	*ND*	12.2	20.4
May-2020	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	7.6	15.5
Oct-2020	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.1	*ND*	*ND*	*ND*	12.9	21.4
Apr-2021	1.88	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.233 J*	*0.187 J*	*ND*	4.75	*ND*	*ND*	*ND*	6.82	35.8
Oct-2021	2.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.1	*ND*	*ND*	*ND*	9.1	26
May-2022	2.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5	*ND*	*ND*	*ND*	12.9	22.7

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25A***															
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	1.4	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	1.6	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	NA
Apr-2000	ND	NA	ND	NA	1.6	ND	NA	ND	ND	ND	NA	NA	ND	0.7 J	ND	ND	NA
Oct-2000	ND	ND	ND	NA	2	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	NA
Apr-2001	ND	ND	ND	NA	1.4	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	NA
Sep-2001	ND	ND	ND	NA	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	NA
Mar-2002	ND	ND	ND	NA	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	NA
Sep-2002	ND	ND	ND	NA	1.2	ND	ND	ND	ND	ND	ND	ND	0.7 J	1.8	ND	ND	NA
Mar-2003	ND	ND	ND	NA	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	NA
Oct-2003	ND	ND	ND	NA	1.1	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	NA
Apr-2004	ND	ND	ND	NA	1	ND	ND	0.6 J	ND	ND	ND	ND	0.8 J	2.3	ND	ND	NA
Oct-2004	ND	ND	ND	NA	2.4	ND	ND	ND	ND	ND	ND	ND	ND	3.1	ND	ND	NA
Apr-2005	ND	ND	ND	ND	2.3	ND	ND	0.9 J	ND	ND	ND	ND	1.2	2.7	ND	ND	NA
Oct-2005	ND	ND	ND	ND	3.3	ND	ND	1.6	ND	ND	ND	ND	1.4	2.5	ND	ND	NA
Mar-2006	ND	ND	ND	ND	2.5	ND	ND	1.4	ND	ND	ND	ND	1.1	1.8	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-25A*															
Sep-2006	ND	ND	ND	ND	**5.4**	ND	ND	1.4	ND	ND	ND	ND	1.7	3.9	ND	ND	NA
Mar-2007	ND	ND	ND	1	6.1 J	ND	ND	1.9	ND	ND	ND	ND	2.6	3	ND	ND	NA
Sep-2007	ND	ND	ND	1.5	**12.1**	ND	ND	2.1	ND	ND	ND	ND	3.6	3.9	ND	ND	NA
Mar-2008	ND	ND	ND	1.6	**9**	ND	ND	1.1	ND	ND	ND	ND	1.8	ND	ND	0.6 J	NA
Sep-2008	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	NA
Dec-2008	ND	ND	0.6 J	2.2	**14.1**	ND	ND	0.9 J	0.5 J	ND	ND	ND	2	ND	ND	ND	NA
Mar-2009	ND	ND	ND	2.4	**11.4**	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA
Oct-2009	ND	ND	0.7 J	ND	**12.1**	0.6 J	ND	0.8 J	ND	ND	ND	ND	1.8	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	**20.7**	ND	ND	ND	ND	ND	ND	ND	ND	3.6	ND	ND	NA
Oct-2010	ND	ND	1.1	3.4	**25.9**	1.2	ND	3.5	ND	ND	ND	ND	ND	3.6	ND	1.2	NA
Apr-2011	ND	ND	1.1	2.8	**22.9**	1.2	ND	3.7	ND	ND	ND	ND	**5.4 C**	3	ND	**5.5 R,C**	NA
May-2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**5.5**	NA	NA	1	NA
Sep-2011	ND	ND	1.1	5.3	**30.9**	1.2	ND	4.7	ND	ND	ND	ND	**6.8**	4	ND	1.4	NA
Mar-2012	ND	ND	1.2	4.8	**34.3**	1.4	ND	4.5	ND	ND	ND	ND	**6.5**	3.6	ND	**4.3 R,C**	NA
May-2012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5	NA
Sep-2012	ND	ND	1.9	5.97	**36.1**	1.88	ND	**5.06 C**	ND	ND	ND	ND	**6.71**	3.53	ND	1.36	3.78
Nov-2012	NA	NA	NA	NA	NA	NA	NA	**5.44**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mar-2013	ND	ND	1.73	6.33	**44**	1.94	ND	**5.14**	ND	ND	ND	ND	**7.31**	ND	ND	1.55	3.67
Oct-2013	ND	ND	2.07	6.05	**43**	2.28	ND	**6.05**	ND	0.18 J	ND	ND	**7.97**	3.34	ND	1.66	4.35
Mar-2014	ND	ND	1.9	6.01	**40.8**	2.26	ND	**5.68**	ND	ND	ND	ND	**7.69**	3.2	ND	1.52	4.16
Oct-2014	ND	ND	0.94 J	5.65	**41.7**	2.17	ND	**6.1**	ND	ND	ND	ND	**8.14**	3.64	ND	1.45	3.11
Apr-2015	0.28 J	ND	ND	5.65	**41.1**	1.94	ND	**5.08**	ND	ND	ND	ND	**7.43**	3.61	ND	1.42	1.94

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25A***															
Nov-2015	*ND*	*ND*	*ND*	5.5	**40.8**	1.8	*ND*	4.9	*ND*	*ND*	*ND*	*ND*	**7.5**	3.3	*ND*	2	1.8
May-2016	*ND*	*ND*	*0.1 J*	4.6	**33**	1.7	*ND*	5	*ND*	*0.1 J*	*ND*	*ND*	**7.1**	3.7	*ND*	1.3	1.8
Oct-2016	*ND*	*ND*	*ND*	4	**35**	1.2	*ND*	4.3	*ND*	*0.2 J*	*ND*	*ND*	**6.4**	4	*ND*	1.5	1.2
May-2017	*ND*	*ND*	*ND*	4.6	**37**	1.6	*ND*	4.3	*ND*	*0.1 J*	*ND*	*ND*	**6**	1.5	*ND*	1.2	1.6
Oct-2017	*ND*	*ND*	*ND*	4.6	**32**	1.6	*ND*	4.5	*ND*	*0.1 J*	*ND*	*ND*	**6.4**	3.4	*ND*	1.3	1.6
May-2018	*ND*	*ND*	*ND*	5.2	**42.1**	2.1	*ND*	**5.6**	*ND*	*ND*	*ND*	*ND*	**8.9**	4.4	*ND*	1.7	*NA*
Nov-2018	*ND*	*ND*	*ND*	4.4	**26.3**	1	*ND*	2.6 CL	*ND*	*ND*	*ND*	*ND*	**5.7**	3.4	*ND*	*0.98 J*	*NA*
May-2019	*ND*	*ND*	*ND*	2.8	**16.7**	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	3.8	2.2	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	2.9	**18.8**	*ND*	*ND*	3.1	*ND*	*ND*	*ND*	*ND*	4	1.6	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	2.2	**15.2**	*ND*	*ND*	2.7	*ND*	*ND*	*ND*	*ND*	2.9	1.2	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	3.1	**16.4**	*0.6 J*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	3.2	1.7	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	3.98	**19.5**	*0.526 J*	*ND*	2.62	*ND*	*ND*	*ND*	*ND*	3.84	*2.1 J*	*ND*	*0.693 J*	*NA*
Oct-2021	*ND*	*ND*	*ND*	4.1	**23.6**	*0.7 J*	*ND*	3	*ND*	*ND*	*ND*	*ND*	4.1	1.9	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	3.9	**22.4 L**	*0.8 J*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	4.7	1.8	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-27***											
Mar-2013	4.24	4.24	*0.0847 J*	*ND*	3.16	0.0583	*ND*	6.2	17.5	*0.63 J*	*ND*	3.43
Oct-2013	4.36	4.36	*ND*	*ND*	3.03	0.0804	*ND*	5.8	18.4	*0.615 J*	32	3.37
Mar-2014	4.28	4.28	*ND*	*ND*	2.96	0.0592	*ND*	5.5	20.1	*ND*	*ND*	3.56
Oct-2014	24.2	24.2	*ND*	*ND*	3.09	0.0724	*ND*	5.8	18.2	*ND*	*ND*	3.72
Apr-2015	4.48	4.48	*ND*	*5 J*	2.92	0.0554	*ND*	3.9	18.6	*ND*	31	3.57
Nov-2015	*ND*	*ND*	*ND*	*ND*	3.16	0.053	*ND*	5.4	23.2	*ND*	32	4.25
May-2016	3.6	3.6	*ND*	*ND*	3.93	0.0614	*ND*	5.3	22.9	*ND*	*20 J*	3.6
Oct-2016	*ND*	*ND*	*ND*	*ND*	3.72	*NA*	*NA*	5.2	26.9	*0.701 J*	*23 J*	3.3
May-2017	*ND*	*ND*	*ND*	*ND*	3.1	0.0707	*ND*	5.1	37.8	*ND*	*ND*	3.6
Oct-2017	*ND*	*ND*	*ND*	*ND*	3.63	0.0788	*ND*	5.3	31.3	*ND*	*21 J*	3.5
May-2018	*6 J*	*ND*	*ND*	*ND*	3.3	*0.063 J*	*ND*	6.5	225	*ND*	15	*3.4 J*
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	4.7	*0.076 J*	*ND*	4.7	24	*ND*	80	*3.7 J*
May-2019	*ND*	*NA*	*ND*	*ND*	4.7	*ND*	*ND*	4.45	19.7	*ND*	*ND*	*ND*
Oct-2019	*2.5 J*	*NA*	*ND*	*ND*	4	*0.095 J*	*ND*	4.5	25.3	*ND*	24	3.5
May-2020	*ND*	*NA*	*ND*	*ND*	4.7	*0.056 J*	*ND*	4.5	22	*ND*	25	3.5
Oct-2020	*ND*	*NA*	*ND*	*ND*	4.4	*0.068 J*	*ND*	4.69	22.1	*ND*	20	3.8
Apr-2021	20	*NA*	*ND*	*ND*	4.3	*0.089 J*	*ND*	6.08	25.1	*ND*	*ND*	3.7
Oct-2021	20	*NA*	*ND*	*ND*	3.8	*0.055 J*	*ND*	5.48	21.1	*ND*	*ND*	3.5
May-2022	*2 J2c*	*NA*	*ND*	*ND*	3.8	*ND*	*ND*	6.2	92.4	*ND*	*ND*	3.5 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-27***													
Mar-2013	ND	ND	0.006 J	ND	ND	0.877	0.928	0.0074 J	0.000939 J	0.0023 J	0.0538	0.0056	ND	0.302	0.311
Oct-2013	ND	ND	0.006 J	ND	ND	0.835	0.803	0.0034 J	0.00098 J	0.0019 J	0.0606	ND	0.000286 J	0.313	0.307
Mar-2014	0.0017 J	0.000343 J	0.007 J	ND	ND	0.869	0.872	0.0039 J	0.000823 J	0.0025 J	0.287	0.0077 J	ND	0.337	0.328
Oct-2014	0.0012 J	0.000421 J	0.0173	ND	ND	0.915	0.82	0.0062 J	0.000869 J	0.0024 J	0.737	ND	0.0012 J	0.348	0.273
Apr-2015	0.000396 J	ND	0.0065 J	ND	ND	0.899	0.887	0.0015 J	0.000804 J	0.0019 J	0.0623	ND	ND	0.323	0.326
Nov-2015	ND	ND	0.0065 J	ND	0.00008 J	1.13	0.872	0.0014 J	0.000764 J	0.0023 J	0.0973	ND	ND	0.346	0.337
May-2016	ND	ND	0.0065	ND	ND	0.875	0.926	0.0024 J	0.00078 J	0.0023 J	0.385	ND	ND	0.34	0.34
Oct-2016	ND	ND	0.0073	ND	ND	0.77	0.8	0.00062 J	0.0008 J	0.0022 J	ND	ND	ND	0.332	0.35
May-2017	ND	ND	0.0064	ND	ND	0.902	0.721	0.0015 J	0.00084 J	0.0025 J	0.0661 J	ND	ND	0.338	0.327
Oct-2017	ND	ND	0.006	ND	ND	0.8	0.764	0.00092 J	0.00075 J	0.0023 J	ND	ND	ND	0.358	0.305
May-2018	0.000039 J	ND	0.0065	ND	0.000025 J	0.8 J	0.76 J	0.0027 J	0.00077	0.0048 B	ND	ND	ND	0.34 J	0.32 J
Nov-2018	ND	ND	0.0064	0.000027 J	0.000046 J	0.88 J	0.86 J	0.0033 J	0.00082	0.0068	0.026	ND	0.00018 J	0.37 J	0.34 J
May-2019	ND	ND	0.0069	ND	ND	ND	ND	ND	0.00091	0.0074	ND	ND	ND	ND	ND
Oct-2019	0.00011 J	ND	0.0067	ND	0.00025 J	0.8	0.79 J	0.0055 J	0.00093	0.021	0.035 J	0.0088 J	0.000054 J	0.36	0.34 J
May-2020	0.000078 J	ND	0.0064	ND	0.0001 J	0.8	0.82 J	0.0068 J	0.00097	0.022	0.039 J	0.014 J	ND	0.36	0.36 J
Oct-2020	0.00052 J	ND	0.028	ND	ND	0.92	0.78 J	0.054	0.0084	ND	4.2	0.06	ND	0.38	0.36 J
Apr-2021	ND	ND	0.011	ND	ND	0.85 J	0.72 J	0.013	0.0018 J	0.02	0.76	ND	ND	0.38	0.33
Oct-2021	ND	ND	0.0074	ND	ND	0.81	0.84	0.0022 J	0.0011 J	0.0146	0.54	0.014 J	0.00011 J	0.36 J	0.37 J
May-2022	ND	0.0015 JB	0.0077	ND	ND	0.79	0.9	0.0018 J	0.00091 J	0.0071	0.036 J	ND	ND	0.37 J	0.4 J

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-27*												
Mar-2013	0.0078 J	0.0079 J	0.000098 J	0.0045 J	0.437 J	0.45	ND	ND	1.41	1.46	ND	ND	0.0177
Oct-2013	0.0079 J	0.0073 J	ND	0.0031 J	0.377 J	0.344 J	ND	ND	1.45	1.43	ND	0.000916 J	0.0184
Mar-2014	0.0078 J	0.0071 J	ND	0.0028 J	0.491 J	0.441 J	ND	ND	1.53	1.63	0.000579 J	0.0011 J	0.0086 J
Oct-2014	0.0111	0.0087 J	ND	0.0035 J	0.58	0.372 J	ND	ND	1.62	1.65	ND	0.003 J	0.0089 J
Apr-2015	0.0078 J	0.0078 J	ND	0.0018 J	0.377 J	0.389 J	ND	ND	1.51	1.6	ND	ND	0.0094 J
Nov-2015	0.0074 J	0.007 J	ND	0.0017 J	0.444 J	0.422 J	ND	ND	1.64	1.64	ND	0.000256 J	0.0086 J
May-2016	0.007	0.0067	ND	0.0022 J	0.383 J	0.363 J	ND	ND	1.49	1.48	ND	0.00039 J	0.008 J
Oct-2016	0.0067	0.006	ND	0.0013 J	0.427	0.415	ND	ND	1.71	1.76	ND	ND	0.0037 J
May-2017	0.0073	0.0054	ND	0.005	0.418	0.38 J	ND	ND	1.52	1.36	ND	0.00024 J	0.0049 JB
Oct-2017	0.0062	0.0056	ND	0.0016 J	0.444	0.416	ND	ND	1.82	1.86	ND	ND	0.0051 J
May-2018	0.0053	0.0049	ND	0.0024	ND	ND	0.00045 JB	ND	1.7 J	1.9 J	ND	0.0041	0.0061 B
Nov-2018	0.0073	0.0054	ND	0.0028	ND	ND	0.00013 J	ND	2.5 JB	2.2 J	ND	0.0028	0.0069
May-2019	0.0062	0.0051	ND	0.0028	ND	ND	ND	ND	ND	ND	ND	0.0038	0.0053
Oct-2019	0.0051	0.0046	ND	0.0033	ND	ND	ND	ND	2.2 J	2 J	ND	0.0008 J	0.014
May-2020	0.005	0.0045	ND	0.0044	ND	ND	ND	ND	2.1 J	2.1 J	ND	0.003	0.0077
Oct-2020	0.024	0.012	ND	0.045	ND	ND	ND	ND	ND	ND	ND	0.0065	ND
Apr-2021	0.0077	0.0058	ND	0.013	0.53	0.41 J	ND	ND	2.4	2.3	ND	0.0012 J	0.0033 J
Oct-2021	0.0067	0.0074	ND	0.0042	0.51	0.446 J	ND	ND	2.2	2.2	ND	0.00036 J	0.0028 J
May-2022	0.0052	0.0057	ND	0.0026	0.44 J	0.37 J	ND	ND	2.2	2.5	ND	0.00066 JB	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-27***																
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.8 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-27***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.18 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.206 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-27***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-28***											
Mar-2013	4.52	4.52	*0.0847 J*	*ND*	4.04	0.0805	*ND*	6.2	20	*0.533 J*	*ND*	4.82
Oct-2013	4.4	4.4	*ND*	*ND*	3.95	0.112	*ND*	5.6	21.4	*0.517 J*	46	4.9
Mar-2014	4.32	4.32	*ND*	*ND*	4.19	0.0818	*ND*	5.4	23.5	*ND*	*ND*	5.44
Oct-2014	*ND*	*ND*	*0.106 J*	*ND*	4.85	0.0941	*ND*	4.7	28.3	*ND*	36	5.31
Apr-2015	4.64	4.64	*ND*	*ND*	5.29	0.0508	*ND*	4.1	25.7	*ND*	*ND*	6
Nov-2015	3.72	3.72	*ND*	*ND*	6.06	0.0781	*ND*	5.2	47.9	*ND*	*12 J*	6.59
May-2016	2.24	2.24	*ND*	*ND*	6.46	0.0791	*ND*	5.2	39	*ND*	27	6.4
Oct-2016	*ND*	*ND*	*ND*	*ND*	7.83	*NA*	*NA*	5.3	47.6	*0.717 J*	31	6.8
May-2017	2.68	2.68	*ND*	*5 J*	9.52	0.16	*ND*	5	58.6	*0.545 J*	*22 J*	7.7
Oct-2017	*ND*	*ND*	*ND*	*ND*	12.3	0.101	*ND*	5	79.6	*0.542 J*	29	9.6
May-2018	*2 JB*	*ND*	*0.066 J*	*ND*	14.6	*0.086 J*	*ND*	5.4	79.2	*ND*	37	10.7
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	19.5	*0.079 J*	*ND*	4.68	70.1	*ND*	83	13.2
May-2019	*ND*	*NA*	*ND*	*ND*	28.6	*ND*	*ND*	4.28	78.8	*ND*	67	16.8
Oct-2019	*2.5 J*	*NA*	*ND*	*ND*	40.6	*0.098 J*	*ND*	4.29	139.3	*ND*	85	22.3
May-2020	*ND*	*NA*	*ND*	*ND*	45.1	*0.087 J*	*ND*	4.44	141.9	*ND*	94	20.3
Oct-2020	*ND*	*NA*	*ND*	*6.1 J*	43.5	*0.058 J*	*ND*	5.03	170.4	*ND*	90	23.8
Apr-2021	*1 J3c*	*NA*	*ND*	*ND*	54.5	*0.076 J*	*ND*	4.63	204.2	*ND*	80	25
Oct-2021	*1 J2c*	*NA*	*ND*	*ND*	51.6	*0.075 J*	*ND*	4.82	235.9	*ND*	86	25.4
May-2022	*1 J2c*	*NA*	*ND*	*ND*	48.5	*0.061 J*	*ND*	4.66	213.3	*ND*	100	26.7 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-28***													
Mar-2013	*ND*	*ND*	0.0103	*ND*	*ND*	1.16	1.27	*0.0017 J*	*0.0025 J*	*0.0013 J*	*0.0052 J*	*0.0051 J*	*ND*	0.466	0.522
Oct-2013	*ND*	*ND*	0.0118	*ND*	*ND*	1.16	1.14	*0.0013 J*	*0.0027 J*	*0.000921 J*	*ND*	*ND*	*ND*	0.487	0.485
Mar-2014	*0.000945 J*	*ND*	0.0116	*ND*	*ND*	1.26	1.23	*0.000968 J*	*0.0028 J*	*0.0013 J*	*0.0131 J*	*0.0044 J*	*ND*	0.56	0.549
Oct-2014	*0.000718 J*	*ND*	0.0125	*ND*	*ND*	1.28	1.29	*0.0021 J*	*0.0027 J*	*0.000985 J*	*0.0179 J*	*ND*	*ND*	0.515	0.499
Apr-2015	*0.000611 J*	*ND*	0.0142	*ND*	*ND*	1.41	1.42	*0.0027 J*	*0.0028 J*	*0.0013 J*	*0.0482 J*	*ND*	*ND*	0.602	0.611
Nov-2015	*ND*	*0.000252 J*	0.0154	*ND*	*ND*	1.51	1.51	*0.000811 J*	*0.0029 J*	*0.0011 J*	*ND*	*ND*	*0.000474 J*	0.683	0.695
May-2016	*ND*	*ND*	0.0181	*0.000071 J*	*ND*	1.4	1.59	*0.002 J*	0.0026	*0.0011 J*	*ND*	*ND*	*ND*	0.695	0.716
Oct-2016	*ND*	*ND*	0.0175	*ND*	*ND*	1.54	1.54	*0.003 J*	0.0029	*0.0013 J*	*0.0662 J*	*ND*	*ND*	0.726	0.756
May-2017	*ND*	*ND*	0.0172	*ND*	*ND*	1.71	1.7	*0.0018 J*	0.003	*0.0013 J*	*ND*	*ND*	*ND*	0.829	0.832
Oct-2017	*ND*	*ND*	0.0216	*0.000092 J*	*ND*	2.19	1.9	*0.0014 J*	0.003	*0.001 J*	*ND*	*ND*	*ND*	1.01	0.986
May-2018	*0.000045 J*	*ND*	0.028	*0.0001 J*	*0.000029 J*	2.4	2.4	*0.0039 J*	0.003	0.0025 B	0.044	*ND*	*ND*	1.1	1.1
Nov-2018	*ND*	*ND*	0.029	*0.00012 J*	*0.000039 J*	3	2.9	0.0098	0.0028	*0.0015 J*	0.072	0.029	*0.00014 J*	1.4	1.4
May-2019	*ND*	*ND*	0.041	*ND*	*ND*	3.8	3.9	0.0087	0.0038	0.0025	*ND*	0.021	*ND*	1.8	1.8
Oct-2019	*0.000099 J*	*ND*	0.052	*0.00021 J*	*0.00026 J*	5.1	5	0.011	0.0045	0.0057	*0.098 J*	0.048	*0.000073 J*	2.3	2.3
May-2020	*0.000088 J*	*ND*	0.05	*0.00018 J*	*ND*	4.6	3.2	0.0071	0.0045	0.0026	*0.062 J*	*ND*	*ND*	2.2	3
Oct-2020	*ND*	*ND*	0.068	*0.00029 J*	*ND*	5.3	5.1	0.081	0.013	0.0062	2.2	0.29	*ND*	2.6	2.5
Apr-2021	*ND*	*ND*	0.064	*0.00018 J*	*ND*	5.6	5.8	0.0085	0.006	*ND*	0.11	*0.06 J*	*ND*	2.7	2.8
Oct-2021	*0.000063 J*	*ND*	0.066	*0.0002 J*	*ND*	5.6	6.2	0.0043	0.0059	*0.0018 J*	0.2	*0.036 J*	*0.000051 J*	2.8	3
May-2022	*ND*	*ND*	0.07	*0.00016 J*	*ND*	5.8	5.9	0.0063	0.0076	*0.002 J*	0.18	0.067	*ND*	2.9	3.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-28*												
Mar-2013	0.0077 J	0.0086 J	0.000105 J	0.0014 J	0.39 J	0.412 J	ND	ND	1.47	1.7	ND	ND	0.0154
Oct-2013	0.0074 J	0.0071 J	ND	0.0019 J	0.36 J	0.349 J	ND	ND	1.7	1.71	ND	0.001 J	0.0136
Mar-2014	0.0072 J	0.0072 J	ND	0.0018 J	0.477 J	0.469 J	ND	ND	1.86	1.81	ND	ND	0.0087 J
Oct-2014	0.0072 J	0.0069 J	ND	0.0028 J	0.431 J	0.43 J	ND	ND	1.98	1.97	ND	ND	0.0093 J
Apr-2015	0.013	0.0077 J	ND	0.0032 J	0.452 J	0.464 J	ND	ND	2.19	2.24	ND	ND	0.0079 J
Nov-2015	0.0085 J	0.0087 J	ND	0.0023 J	0.497 J	0.497 J	ND	ND	2.6	2.69	0.000168 J	ND	0.0065 J
May-2016	0.0087	0.0089	ND	0.0027 J	0.465	0.454	ND	ND	2.62	2.69	ND	ND	0.0075 J
Oct-2016	0.0091	0.0083	ND	0.0036 J	0.504	0.533	ND	ND	3.2	3.24	ND	ND	ND
May-2017	0.0098	0.0092	ND	0.0033 J	0.537	0.577	ND	ND	3.8	3.62	ND	ND	0.0045 JB
Oct-2017	0.0096	0.0107	ND	0.003 J	0.613	0.641	ND	ND	4.85	4.65	ND	ND	0.0049 J
May-2018	0.012	0.011	ND	0.0047	ND	ND	0.00018 JB	ND	5.9	6.2	ND	0.0036	0.007 B
Nov-2018	0.015	0.014	ND	0.0087	0.84 J	ND	0.00012 J	ND	8	7.5	ND	0.0024	0.0081
May-2019	0.02	0.019	ND	0.0079	ND	ND	ND	ND	9.5	9.2	ND	0.0056	0.0092
Oct-2019	0.03	0.024	ND	0.011	ND	1.1 J	ND	ND	16.7	16.2	ND	ND	0.017
May-2020	0.026	0.023	ND	0.0084	ND	1.2 J	ND	ND	15.3	7.3	ND	0.0029	0.011
Oct-2020	0.037	0.032	ND	0.072	1.5	1.1	ND	ND	20	19.1	ND	0.007	0.02
Apr-2021	0.027	0.028	0.00006 J	0.015	1.1	1.1	ND	ND	23.2	24.2	ND	ND	0.009 J
Oct-2021	0.026	0.028	ND	0.0097	1.1	1.12	ND	ND	24.4	26.2	ND	ND	0.0082
May-2022	0.028	0.029	ND	0.013	1	1.2	ND	ND	22.7	23.7	ND	ND	0.0085

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-28***																
Mar-2013	ND	ND	ND	ND	1.08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	2.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	0.1 J	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	0.1 J	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	0.1 J	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2 JB	ND
Nov-2018	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.63	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-28***															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.42 J	ND	ND	ND	ND	ND	8.46	6.37
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.41 J	ND	ND	ND	ND	ND	5.9	6.23
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43 J	ND	ND	ND	ND	ND	9.82 J	7.38
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.39 J	ND	ND	ND	ND	ND	6.82	7.55
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.37 J	ND	ND	ND	ND	ND	8.14	8.59
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18.1 J	9
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	4.2	4.5
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	4.5	4.7
May-2017	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	3.8	4.6
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	4	4.8
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.3	5.1
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4 CL	4.4 N3
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7 CL	4.6 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	3.6
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	3.4
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	2.3
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.22 J	ND	0.213 J	ND	ND	ND	3.49 J	5.5
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.1	4.4
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	3.5

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-28***															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.3	0.16 J	ND	ND	ND	0.29 J	3.88	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	1.58	ND	ND	ND	ND	0.33 J	3.32	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.56	ND	ND	ND	ND	0.34 J	4.15	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	0.33 J	3.09	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	2.04	ND	ND	ND	ND	0.43 J	3.43	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	0.5 J	3.9	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	0.2 J	1.8	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	0.8 J	0.1 J	ND	ND	ND	0.2 J	1.9	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	0.2 J	1.8	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	0.2 J	1.6	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	2.3	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	1.4	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	0.6 J	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.481 JB	ND	ND	0.849 J	0.563 J	ND	ND	ND	0.227 J	1.31 J	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	1.7	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	1.3	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Millersville Landfill and Resource Recovery Facility

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-29***											
Mar-2013	3.68	3.68	*0.0847 J*	*ND*	7.45	0.345	*ND*	6.1	39.4	1.38	19	7.56
Oct-2013	3.84	3.84	*ND*	*ND*	7.1	0.338	*ND*	5.8	39.2	*0.95 J*	44	8.02
Mar-2014	3.64	3.64	*0.108 J*	*ND*	7.5	0.378	*ND*	5.1	40	*0.635 J*	*ND*	8.99
Oct-2014	*ND*	*ND*	*ND*	*ND*	7.85	0.352	*ND*	4.5	37.1	*ND*	32	8.22
Apr-2015	4.76	4.76	*ND*	*ND*	7.91	0.401	*ND*	4.9	39.6	*ND*	27	8.83
Nov-2015	*ND*	*ND*	*ND*	*ND*	8.47	0.453	*ND*	5.1	66.3	*ND*	28	10
May-2016	*ND*	*ND*	*ND*	*ND*	9.01	0.442	*ND*	5	57.4	*0.644 J*	29	9
Oct-2016	*ND*	*ND*	*ND*	*ND*	8.1	*NA*	*NA*	4.9	57.9	*0.951 J*	28	7.9
May-2017	*ND*	*ND*	*ND*	*ND*	8.33	0.438	*ND*	4.9	59.4	*0.855 J*	25	8.3
Oct-2017	*ND*	*ND*	*ND*	*ND*	9.03	0.498	*ND*	5.3	69.4	*0.69 J*	26	8.6
May-2018	*2 JB*	*ND*	*ND*	*ND*	8.6	0.49	*ND*	5.7	59.2	*ND*	27	9.1
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	9.8	0.51	*ND*	4.64	43.1	*ND*	33	10.1
May-2019	*ND*	*NA*	*ND*	*ND*	9.4	0.54	*ND*	4.44	38.1	*ND*	81	9.3
Oct-2019	*ND*	*NA*	*ND*	161 ML	10.1	0.58	*ND*	4.35	48.8	*ND*	44	9.2
May-2020	*ND*	*NA*	*ND*	*ND*	10.5	0.57	*ND*	4.4	49.7	*ND*	30	9.8
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	9.4	0.55	*ND*	4.83	48.3	*ND*	39	9.9
Apr-2021	*1 J3c*	*NA*	*ND*	*ND*	10.7	0.58	*ND*	4.73	62.4	*ND*	21	9.5
Oct-2021	*ND*	*NA*	*ND*	*ND*	9.1	0.66	*ND*	4.84	89.8	*ND*	*ND*	10.4
May-2022	*ND*	*NA*	*ND*	*ND*	9.8	0.6	*ND*	4.64	80.8	*ND*	14	10.2 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-29***													
Mar-2013	*ND*	*ND*	0.0168	*0.000171 J*	*ND*	1.73	2.1	*0.0039 J*	0.0172	*0.004 J*	*0.0493 J*	*0.0085 J*	*ND*	0.786	0.903
Oct-2013	*ND*	*ND*	0.0214	*ND*	*ND*	1.77	1.86	*0.0018 J*	0.0117	*0.0024 J*	*ND*	*ND*	*ND*	0.874	0.936
Mar-2014	*0.000625 J*	*0.00023 J*	0.0219	*ND*	*ND*	1.96	1.99	*0.0044 J*	*0.0078 J*	*0.0026 J*	0.11	*0.0084 J*	*ND*	0.992	0.996
Oct-2014	*0.000547 J*	*ND*	0.0225	*ND*	*ND*	1.86	1.88	*0.000879 J*	*0.0057 J*	*0.0018 J*	*0.0223 J*	*ND*	*ND*	0.867	0.869
Apr-2015	*0.000537 J*	*ND*	0.0258	*0.000165 J*	*ND*	1.96	1.98	*0.000867 J*	*0.0047 J*	*0.0019 J*	*0.0169 J*	*ND*	*ND*	0.955	0.983
Nov-2015	*ND*	*ND*	0.0276	*0.000158 J*	*ND*	2.14	1.96	*0.00074 J*	*0.0051 J*	*0.0022 J*	*0.0248 J*	*0.0151 J*	*0.000367 J*	1.13	1.07
May-2016	*ND*	*ND*	0.0237	*0.00014 J*	*ND*	1.99	1.87	*0.0015 J*	0.0035	*0.0018 J*	*ND*	*ND*	*0.00025 J*	0.985	0.93
Oct-2016	*ND*	*ND*	0.0209	*0.00013 J*	*ND*	1.66	1.71	*0.00068 J*	0.0032	*0.0015 J*	*ND*	*ND*	*ND*	0.919	0.971
May-2017	*ND*	*ND*	0.0228	*0.00013 J*	*ND*	1.7	1.74	*0.0017 J*	0.0024	*0.0017 J*	*0.0474 J*	*ND*	*0.000095 J*	0.975	0.988
Oct-2017	*ND*	*ND*	0.0241	*0.00016 J*	*ND*	1.68	1.84	*ND*	0.0024	*0.0016 J*	*ND*	*ND*	*ND*	1.07	1.04
May-2018	*0.000048 J*	*ND*	0.028	*0.00014 J*	*0.000033 J*	2	1.9	*0.0022 J*	0.0018	0.0024 B	*ND*	*ND*	*0.000018 J*	1	1
Nov-2018	*ND*	*ND*	0.028	*0.00017 J*	*0.000042 J*	2.1	2.1	*0.0057 J*	0.0019	0.0071	0.041	*0.019 J*	*0.00009 J*	1.2	1.1
May-2019	*ND*	*ND*	0.027	*ND*	*ND*	2	2	*ND*	0.0018	0.0045	*ND*	*ND*	*ND*	1	1.1
Oct-2019	*0.00009 J*	*ND*	0.026	*0.00016 J*	*0.00022 J*	2	2	*0.0047 J*	0.0018	0.009	*0.013 J*	*0.0068 J*	*0.000065 J*	1	1.1
May-2020	*0.000068 J*	*ND*	0.027	*0.00014 J*	*ND*	2.1	1.4	*0.0047 J*	0.0018	0.0072	*0.015 J*	*ND*	*ND*	1.1	*0.75 J*
Oct-2020	*ND*	*ND*	0.028	*ND*	*ND*	2.1	2	*0.012 J*	*0.0019 J*	*0.0076 J*	*0.02 J*	*0.0063 J*	*ND*	1.2	1.1
Apr-2021	*ND*	*ND*	0.029	*ND*	*ND*	2	2	*0.002 J*	*0.0015 J*	*ND*	*ND*	*ND*	*ND*	1.1	1.1
Oct-2021	*ND*	*ND*	0.031	*0.00019 J*	*ND*	2.2	2.3	*0.002 J*	*0.002 J*	*0.0016 J*	*0.015 J*	*ND*	*0.000033 J*	1.2	1.2
May-2022	*ND*	*ND*	0.03	*ND*	*ND*	2.1	2.3	0.0026	*0.0019 J*	*0.0019 J*	*ND*	*ND*	*ND*	1.2	1.3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-29*												
Mar-2013	0.0086 J	0.0094 J	0.000099 J	0.0165	0.594	0.681	ND	ND	2.65	3.01	ND	ND	0.0155
Oct-2013	0.0075 J	0.0078 J	ND	0.0081 J	0.569	0.588	ND	ND	2.93	3.13	ND	ND	0.0127
Mar-2014	0.0073 J	0.0072 J	ND	0.0079 J	0.775	0.729	ND	ND	3.09	3.18	ND	ND	0.006 J
Oct-2014	0.0072 J	0.0072 J	ND	0.0041 J	0.672	0.653	0.00076 J	ND	3.14	3.14	ND	ND	ND
Apr-2015	0.0078 J	0.008 J	ND	0.0037 J	0.683	0.703	ND	ND	3.63	3.73	ND	ND	0.0072 J
Nov-2015	0.0085 J	0.0082 J	ND	0.0041 J	0.744	0.686	ND	ND	3.98	3.76	ND	ND	0.0111
May-2016	0.0075	0.0067	ND	0.0032 J	0.688	0.655	ND	ND	3.29	3.28	ND	ND	ND
Oct-2016	0.0069	0.0068	ND	0.0027 J	0.655	0.688	ND	ND	3.23	3.34	ND	ND	ND
May-2017	0.0074	0.0069	ND	0.0032 J	0.731	0.711	ND	ND	3.38	3.18	ND	0.00044 J	ND
Oct-2017	0.0068	0.0074	ND	0.0025 J	0.716	0.741	ND	ND	3.79	3.68	ND	ND	ND
May-2018	0.0071	0.007	ND	0.0031	ND	ND	0.00037 JB	ND	3.7 J	3.9 J	ND	0.0033	0.0044 JB
Nov-2018	0.0097	0.009	ND	0.0054	ND	ND	0.00022 J	ND	4.2 J	4.2 J	ND	0.0024	0.0049 J
May-2019	0.0085	0.008	ND	0.0034	ND	ND	ND	ND	ND	ND	ND	0.0054	ND
Oct-2019	0.008	0.0079	ND	0.003	ND	ND	ND	ND	3.8 J	3.9 J	ND	ND	0.011
May-2020	0.0092	0.0079	ND	0.0036	1.1 J	ND	ND	ND	3.2 J	2.2 J	ND	0.0032	0.0053
Oct-2020	0.0089	0.0085	ND	0.0038	ND	ND	ND	ND	4.2 J	3.7 J	ND	0.0039 J	ND
Apr-2021	0.0089	0.0087	0.00007 J	0.0042 J	0.8	0.75	ND	ND	4.2	4.3	ND	ND	ND
Oct-2021	0.0095	0.0089	ND	0.0031	0.79	0.743	ND	ND	4.5	4.5	ND	ND	0.002 J
May-2022	0.0098	0.011	ND	0.0032	0.76	0.84	ND	ND	4.4	4.8	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-29*																
Mar-2013	ND	ND	ND	ND	1.48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.96	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.68	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.51	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.6	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	0.1 J	ND	ND	1.7	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	0.1 J	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8 J	ND
Nov-2018	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-29***															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.88 J	ND	0.45 J	ND	ND	ND	9.31	4.23
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.99 J	ND	0.66 J	ND	ND	ND	6.72	4.54
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.97 J	0.45 J,B	0.54 J	ND	ND	ND	9.34 J	4.81
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.86 J	ND	0.51 J	ND	ND	ND	6.19	3.62
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.72 J	ND	0.53 J	ND	ND	ND	5.59	3.13
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J,B	ND	0.9 J	ND	ND	ND	12.1 J	3.4
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	0.8 J	ND	ND	ND	5.6	3.7
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	0.7 J	ND	ND	ND	6.4	3.9
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	0.9 J	ND	ND	ND	5.3	3.7
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	0.9 J	ND	ND	ND	5	3.5
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	9.1	3.2
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.54 J	ND	0.71 J	ND	ND	ND	4.3 CL	2.3 N3
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3 CL	2.4 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	1.9
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	1.4
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	0.7 J	ND	ND	ND	5.1	1.6
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.571 J	ND	0.751 J	ND	ND	ND	3.23 J	2.34 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	0.7 J	ND	ND	ND	3.9	1.5
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	1

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-29***															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	3.78	0.36 J	ND	ND	ND	0.5 J	0.92 J	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	4.65	ND	ND	ND	ND	0.6 J	0.79 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	4.04	ND	ND	ND	ND	0.57 J	0.94 J	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	3.8	ND	ND	ND	ND	0.51 J	0.48 J	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	3.29	ND	ND	ND	ND	0.44 J	0.45 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND
May-2016	ND	ND	ND	0.1 J	ND	ND	ND	3.1	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	0.5 J	0.6 J	ND	ND	ND
May-2017	ND	ND	ND	0.1 J	ND	ND	ND	2.9	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
Oct-2017	ND	ND	ND	0.2 J	ND	ND	ND	2.5	ND	ND	ND	ND	0.4 J	0.4 J	ND	ND	ND
May-2018	ND	ND	ND	ND	1.2	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	0.75 J	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	**1.9 D6**	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	0.274 J	0.46 JB	ND	ND	1.36	ND	ND	ND	ND	0.326 J	0.277 J	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Millersville Landfill and Resource Recovery Facility

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-30***											
Mar-2013	13.4	13.4	*0.107 J*	*ND*	20.6	1.75	*ND*	6.2	108.6	4.07	71	25.2
Oct-2013	12.5	12.5	*ND*	*ND*	21	1.71	*ND*	6.6	99.2	1.24	72	25.2
Mar-2014	8.92	8.92	*ND*	*ND*	21.8	1.8	*ND*	5.8	94.7	*0.863 J*	58	24.2
Oct-2014	3.3	3.3	*ND*	*ND*	21.3	1.82	*ND*	5.5	83	*ND*	70	21.4
Apr-2015	6.52	6.52	*ND*	*ND*	21.5	1.88	*ND*	4.6	84.5	*ND*	68	20.9
Nov-2015	2.84	2.84	*ND*	*ND*	20.9	1.93	*ND*	5.4	129.7	*ND*	45	18.4
May-2016	2.72	2.72	*ND*	*ND*	22.8	1.86	*ND*	5	114.9	*ND*	77	18.9
Oct-2016	*ND*	*ND*	*ND*	*ND*	22.9	*NA*	*NA*	5.3	126.3	1.03	88	17.4
May-2017	*ND*	*ND*	*ND*	*6 J*	23.5	1.84	*ND*	5.1	133.9	*0.765 J*	50	17.3
Oct-2017	*ND*	*ND*	*ND*	*7 J*	23.1	2.02	*ND*	5.3	146.2	*0.73 J*	73	17.5
May-2018	*2 JB*	*ND*	*ND*	*ND*	21.5	2	*ND*	5	131.8	28.6	*ND*	18
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	23.5	2.1	*ND*	4.78	98.3	*ND*	69	18.8
May-2019	*ND*	*NA*	*ND*	*ND*	23.2	2.2	*ND*	4.77	75.9	*ND*	55	18.3
Oct-2019	*2 JH1*	*NA*	*ND*	*ND*	22.7	2.1	*ND*	4.76	100.1	*ND*	72	19.7
May-2020	*2 J*	*NA*	*ND*	*ND*	25.6	2.2	0.01	4.42	99.5	*ND*	73	19.6
Oct-2020	*ND*	*NA*	*ND*	*ND*	23.6	1.9	*ND*	4.77	102.4	*ND*	86	18.3
Apr-2021	*4 J4c*	*NA*	*ND*	*ND*	26	2.2	*ND*	4.84	121.2	*ND*	56	19.3
Oct-2021	*2 J3c*	*NA*	*0.047 J*	*ND*	22.1	2.3	*ND*	4.97	151.4	*ND*	56	18.9
May-2022	*2 J3c*	*NA*	*ND*	*ND*	22.8	2.1	*ND*	4.82	138.6	*ND*	61	20 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-30*													
Mar-2013	ND	ND	0.026	ND	ND	7.64	7.6	0.007 J	0.0023 J	0.0013 J	0.29	0.0067 J	ND	1.48	1.48
Oct-2013	ND	ND	0.0302	ND	ND	7.39	7.55	0.0022 J	0.0019 J	0.000525 J	0.0226 J	ND	ND	1.63	1.69
Mar-2014	0.000575 J	0.000086 J	0.0279	ND	ND	7	7.06	0.0013 J	0.0017 J	0.0013 J	0.0734	0.0057 J	ND	1.64	1.63
Oct-2014	0.0004 J	ND	0.0289	ND	ND	5.96	5.94	0.0011 J	0.0018 J	0.000821 J	0.0747	ND	ND	1.57	1.4
Apr-2015	0.000927 J	ND	0.031	ND	ND	5.79	5.78	0.000877 J	0.0019 J	0.0015 J	0.0312 J	0.0135 J	ND	1.57	1.57
Nov-2015	ND	ND	0.0284	0.000066 J	0.000064 J	4.82	4.68	0.000609 J	0.0017 J	0.0016 J	0.0353 J	ND	0.00038 J	1.55	1.53
May-2016	ND	ND	0.0307	0.00012 J	ND	4.89	4.64	0.0015 J	0.002	0.002 J	ND	ND	ND	1.61	1.58
Oct-2016	ND	ND	0.0274	ND	ND	4.41	4.47	0.0017 J	0.002	0.0014 J	ND	ND	ND	1.55	1.54
May-2017	ND	ND	0.0317	0.00011 J	ND	4.28	4.33	0.00079 J	0.002	0.002 J	ND	ND	ND	1.61	1.6
Oct-2017	ND	ND	0.0263	0.00011 J	ND	4.27	4.48	ND	0.0018	0.0014 J	ND	ND	ND	1.66	1.58
May-2018	0.000036 JB	ND	0.032	0.0001 J	0.000058 J	4.5	4.5	0.0027 JB	0.0019	0.0026 B	0.013 J	ND	ND	1.6	1.7
Nov-2018	ND	ND	0.032	0.00012 J	0.000064 J	4.6	4.6	0.0032 J	0.002	0.0018 J	0.016 J	ND	0.000033 J	1.8	1.7
May-2019	ND	ND	0.032	ND	ND	4.5	4.5	ND	0.0021	0.0033	ND	ND	ND	1.7	1.7
Oct-2019	0.000094 JB	ND	0.031	0.000099 J	0.00028 JB	4.9	4.5	0.0042 J	0.0021	0.0039	0.021 J	0.018 J	0.000075 JB	1.8	1.7
May-2020	0.000061 J	ND	0.033	0.0001 J	ND	4.8	4.8	0.0047 J	0.0022	0.014	0.024 J	0.011 J	ND	1.8	1.8
Oct-2020	ND	ND	0.033	ND	ND	4.5	4.5	0.0073 JB	0.0025 J	ND	0.0093 J	ND	ND	1.7	1.8
Apr-2021	ND	ND	0.034	ND	ND	4.7	4.3	0.00081 J	0.0023 J	0.0053	ND	ND	ND	1.9	1.7
Oct-2021	ND	ND	0.036	ND	ND	4.6	4.7	0.0019 J	0.0025 J	0.0015 J	0.012 J	ND	ND	1.8	1.8
May-2022	ND	ND	0.036	ND	ND	4.8	5.4	0.0018 J	0.0023 J	0.0015 J	ND	ND	ND	1.9	2.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-30*												
Mar-2013	0.0145	0.0146	*0.000097 J*	*0.0055 J*	1.45	1.35	*ND*	*ND*	12.1	12.3	*0.000257 J*	*ND*	0.019
Oct-2013	0.0106	0.0108	*ND*	*0.0032 J*	1.18	1.2	*ND*	*ND*	10.4	10.6	*ND*	*ND*	0.0156
Mar-2014	*0.0087 J*	*0.0085 J*	*ND*	*0.0031 J*	1.39	1.4	*ND*	*ND*	10.3	10.4	*0.000698 J*	*ND*	*0.0077 J*
Oct-2014	*0.0086 J*	*0.0083 J*	*ND*	*0.003 J*	1.38	1.37	*ND*	*ND*	10.2	10.1	*ND*	*ND*	*0.0073 J*
Apr-2015	*0.009 J*	*0.0092 J*	*ND*	*0.0031 J*	1.35	1.35	*ND*	*ND*	10.8	10.8	*ND*	*ND*	0.0106
Nov-2015	*0.0086 J*	*0.0088 J*	*ND*	*0.0029 J*	1.32	1.31	*ND*	*ND*	10.6	10.5	*ND*	*ND*	*0.0071 J*
May-2016	0.0097	0.0096	*ND*	*0.0035 J*	1.26	1.25	*ND*	*ND*	10.8	10.5	*ND*	*ND*	*ND*
Oct-2016	0.0114	0.0087	*ND*	0.0042	1.35	1.34	*ND*	*ND*	10.5	10.7	*ND*	*ND*	*0.0049 J*
May-2017	0.0096	0.0092	*ND*	*0.0032 J*	1.37	1.36	*ND*	*ND*	10.5	10.4	*ND*	*ND*	*0.0051 JB*
Oct-2017	0.0089	0.0095	*ND*	*0.0032 J*	1.34	1.38	*ND*	*ND*	10.9	10.4	*ND*	*ND*	*ND*
May-2018	0.009	0.0093	*ND*	0.004	*1.4 J*	*0.88 J*	*ND*	*ND*	10.2	10.7	*0.00023 J*	0.0032 B	0.0061
Nov-2018	0.01	0.0099	*ND*	0.0043	*1.5 J*	*1 J*	*0.00016 J*	*ND*	9.9	10.7	*ND*	0.0025	0.0062
May-2019	0.01	0.01	*ND*	0.006	*ND*	*ND*	*ND*	*ND*	9.6	9	*ND*	0.0051	0.0057
Oct-2019	0.011	0.01	*ND*	0.005	*1.6 J*	*1.6 J*	*ND*	*ND*	10.9	10.5	*ND*	*ND*	0.011 B
May-2020	0.012	0.01	*ND*	0.0054	*1.6 J*	*1.4 J*	*ND*	*ND*	9.8	10.6	*ND*	0.0033	0.007
Oct-2020	0.01	0.01	*ND*	0.004	*1.4 J*	*1.3 J*	*ND*	*ND*	10.2	10.3	*ND*	*0.0032 JB*	*ND*
Apr-2021	0.011	0.01	*ND*	*0.0041 J*	1.5	1.4	*ND*	*ND*	12.4	11.8	*ND*	*ND*	*0.0042 J*
Oct-2021	0.011	0.011	*ND*	0.0043	1.5	1.41	*ND*	*ND*	11.8	11.5	*ND*	*ND*	*0.0036 J*
May-2022	0.012	0.013	*ND*	0.0042	1.4	1.6	*ND*	*ND*	11.1	12	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-30*																
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-30***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.34 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*0.39 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.181 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-30***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*0.89 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Millersville Landfill and Resource Recovery Facility

HISTORICAL TABLES –
COMAR Wells

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-07***											
Nov-1993	10	10	0.1	ND	2.9	0.3	ND	5.75	31.5	ND	ND	3.38
Apr-1994	10	10	0.1	ND	3	0.3	ND	5.61	22.3	3	20	3.4
Apr-1995	ND	ND	ND	ND	2.7	0.3	ND	5.2	21.6	2.1	33	2.3
Apr-1997	ND	8	ND	ND	2.5	0.17	ND	NA	NA	ND	80	9.6
Oct-1997	2	2	0.23	ND	ND	ND	ND	6.17	39.7	ND	40	6.5
Apr-1998	ND	ND	0.21	ND	2.17	0.38	ND	6.37	41.9	0.65	12	3.1
Apr-1999	ND	ND	0.74	ND	3.88	0.34	ND	5.32	25.7	ND	28	3.7
Oct-1999	ND	ND	0.08	ND	3.12	0.433	ND	5.12	23.1	ND	47	3.1
Apr-2000	2	2	ND	ND	2.3	0.4	ND	5.85	20	ND	19	4.2
Oct-2000	3	NA	ND	ND	2.61	ND	ND	5.41	27.5	ND	ND	3.45
Apr-2001	3.3	NA	ND	ND	1.49	ND	ND	NA	NA	ND	22	3.49
Sep-2001	6	6	ND	ND	4.04	1.3	ND	5.17	24	ND	25	4.7
Mar-2002	4	4	ND	ND	1.49	0.282	ND	5.6	28.1	ND	21	3.79
Sep-2002	5	5	ND	ND	3.19	ND	ND	5.6	28.3	ND	32	5.2
Mar-2003	5	5	ND	ND	3.37	ND	ND	5.5	31.2	ND	21	5.64
Oct-2003	4.3	4.3	ND	ND	2.69	0.289	ND	5.3	25.7	ND	42	4.97
Apr-2004	3.2	3.2	ND	ND	2.69	0.27	ND	5.5	22.3	ND	41	3.71
Oct-2004	8.1	8.1	ND	ND	2.94	0.32	ND	5.7	22.4	ND	19	11
Apr-2005	3.6	3.6	ND	ND	2.63	0.32	ND	5.7	22.4	ND	36	4.3
Oct-2005	11	11	ND	ND	3.06	0.3	ND	4.8	34.5	ND	34	10
Mar-2006	7.1	7.1	ND	ND	2.84	0.32	ND	5.1	28.9	0.58	22	5.45
Sep-2006	4.3	4.3	ND	ND	2.9	0.41	ND	5.5	25.5	ND	27	3.85
Mar-2007	5.1	5.1	ND	ND	3.03	0.38	ND	5.2	23.3	ND	ND	3.98
Sep-2007	6.3	6.3	ND	ND	7.78	ND	ND	5.2	25.6	ND	21	5.54
Mar-2008	6.3	6.3	ND	ND	7.05	ND	ND	5.4	27.1	ND	31	5.67
Sep-2008	7.3	7.3	ND	ND	3.16	ND	ND	5.2	24.2	ND	31	4.4
Mar-2009	20	20	ND	ND	2.44	0.11	ND	5.6	31.9	ND	11	13.9
Oct-2009	35	35	ND	ND	2.29	0.08	ND	5.1	26	ND	49	24.9
Apr-2010	22.5	22.5	ND	ND	3.07	0.08	ND	4.8	21.7	ND	39	18.2
Oct-2010	30	30	ND	ND	2.91	ND	ND	4.5	25.4	ND	27	27.6
Apr-2011	24	24	ND	ND	2.82	0.1	ND	4.3	26.6	ND	34	27.4
Sep-2011	26	26	ND	ND	2.58	ND	ND	5.7	24.9	ND	28	18.8
Mar-2012	32	32	ND	ND	2.51	ND	ND	4.7	24.8	ND	42	22.4
Sep-2012	7.04	7.04	ND	ND	2.93	0.285	ND	4.1	24.4	ND	20	4.27
Mar-2013	11.4	11.4	0.159 J	79.5	3.17	0.245	ND	4.8	38.7	0.983 J	42	7.08
Oct-2013	7.2	7.2	ND	ND	3.38	0.278	ND	6.2	29.8	0.521 J	ND	4.86
Mar-2014	8.8	8.8	ND	ND	3.88	0.193	ND	5.9	30.5	ND	32	4.85

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-07***											
Oct-2014	*ND*	*ND*	*ND*	*5 J*	4.4	0.261	*ND*	5.3	27.1	*ND*	*ND*	4.89
Apr-2015	7.56	7.56	*ND*	*ND*	3.93	0.33	*ND*	4.5	31.5	*ND*	*ND*	5.34
Nov-2015	5.56	5.56	*ND*	10	5.09	0.342	*ND*	5.9	55.3	*ND*	*20 J*	5.1
May-2016	8.16	8.16	*ND*	*ND*	6.53	*ND*	*ND*	5.9	68.3	*ND*	28	7.2
Oct-2016	5.6	5.6	*ND*	*ND*	6.47	*NA*	*NA*	5.7	61.3	*0.538 J*	30	7.2
May-2017	17.3	17.3	*ND*	*ND*	4.48	0.0902	*ND*	5.9	84.5	*0.515 J*	30	19.1
Oct-2017	8.2	8.2	*0.0707 J*	*ND*	11.2	0.378	*ND*	6.1	89.2	*ND*	35	9.3
May-2018	10 B	10	*ND*	*ND*	14	*ND*	0.029	5.8	95.4	*ND*	53	10.7
Nov-2018	10 B	10	*ND*	*ND*	14.4	*ND*	0.1	6.09	92.5	*ND*	*ND*	10.1
May-2019	*ND*	*NA*	*ND*	*ND*	11.2	*ND*	0.16	5.72	59	*ND*	18	11.4
Oct-2019	*2.5 JH1*	*NA*	*ND*	*6 J*	10.5	0.25	0.032 H1	5.86	78.4	*ND*	68	11.4
May-2020	24	*NA*	*ND*	*6.9 J*	11.1	*ND*	0.012	5.57	111.6	*ND*	57	14.2
Oct-2020	28	*NA*	*ND*	*4.8 J*	11.2	0.16	*0.0094 J*	5.61	99.7	*ND*	65	18
Apr-2021	20	*NA*	*ND*	*ND*	12.3	0.17	*ND*	6.19	123	*ND*	*ND*	17.2
Oct-2021	20	*NA*	*ND*	*ND*	9.3	0.13	*ND*	6.22	112.7	*ND*	51	17.1
May-2022	24	*NA*	*ND*	*ND*	8.7	*0.063 J*	0.017	6.2	130.2	*ND*	38	21.2 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-07*													
Nov-1993	NA	ND	ND	NA	ND	0.94	NA	ND	NA	ND	25.5	0.82	ND	0.25	NA
Apr-1994	NA	ND	ND	NA	ND	0.9	NA	ND	NA	ND	1.79	0.26	ND	0.28	NA
Apr-1995	ND	ND	0.7	ND	ND	0.54	NA	ND	ND	ND	5.3	0.41	ND	0.24	NA
Oct-1996	ND	ND	0.011	ND	ND	0.7	0.7	ND	ND	ND	0.55	0.22	ND	ND	0.17
Apr-1997	ND	ND	0.034	ND	ND	3	1.4	ND	ND	ND	4.3	2.1	ND	0.56	ND
Oct-1997	ND	ND	0.014	ND	ND	0.842	0.83	ND	ND	ND	23.9	0.846	ND	0.239	0.234
Apr-1998	ND	ND	0.014	ND	ND	0.841	0.821	ND	ND	ND	23.1	0.767	ND	0.249	0.246
Apr-1999	ND	ND	0.014	ND	ND	1.03	1.01	ND	ND	ND	22	0.77	ND	0.268	0.26
Oct-1999	ND	ND	0.017	ND	ND	1.35	0.995	ND	ND	ND	45	0.831	ND	0.323	0.251
Apr-2000	ND	ND	0.015	ND	ND	1.11	0.823	ND	ND	0.011	33.1	0.885	ND	0.357	0.262
Oct-2000	ND	ND	0.014	ND	ND	0.911	0.869	ND	ND	ND	24.3	0.718	ND	0.284	0.286
Apr-2001	ND	ND	0.014	ND	ND	0.916	NA	ND	ND	ND	20.7	NA	ND	0.292	NA
Sep-2001	ND	ND	0.027	ND	ND	1.38	0.964	ND	ND	ND	97.5	0.65	0.003	0.305	0.276
Mar-2002	ND	ND	0.015	ND	ND	1.11	1.04	ND	ND	ND	22.5	1.11	ND	0.249	0.26
Sep-2002	ND	ND	0.021	ND	ND	1.6	1.11	ND	ND	ND	59.5	1.35	0.002	0.296	0.244
Mar-2003	ND	ND	0.019	ND	ND	1.81	0.994	ND	ND	ND	23.3	0.984	0.002	0.275	0.242
Oct-2003	ND	ND	0.018	ND	ND	1.47	1.08	ND	ND	0.012	10.8	0.173	0.003	0.314	0.267
Apr-2004	ND	ND	0.014	ND	ND	1.01	0.894	ND	ND	ND	8.44	0.651	ND	0.286	0.266
Oct-2004	ND	ND	0.051	ND	ND	3.81	0.928	ND	ND	ND	152	0.561	0.011	0.349	0.267
Apr-2005	ND	ND	0.022	ND	ND	1.29	1.04	ND	ND	ND	30.6	1.14	0.004	0.271	0.258
Oct-2005	ND	ND	0.013	ND	ND	3.47	3.53	ND	ND	ND	1.25	0.248	ND	0.333	0.306

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-07***													
Mar-2006	*ND*	*ND*	0.01	*ND*	*ND*	1.86	1.86	*ND*	*ND*	*ND*	0.886	0.886	*ND*	0.2	0.2
Sep-2006	*ND*	*ND*	0.012	*ND*	*ND*	1.13	1.37	*ND*	*ND*	*ND*	6.85	0.43	*ND*	0.249	0.257
Mar-2007	*ND*	*ND*	0.016	*ND*	*ND*	1.16	1.37	*ND*	*ND*	*ND*	12.6	0.521	*ND*	0.261	0.252
Sep-2007	*ND*	0.003	0.013	*ND*	*ND*	1.79	1.71	*ND*	*ND*	*ND*	0.933	0.662	*ND*	0.261	0.258
Mar-2008	*ND*	*ND*	0.015	*ND*	*ND*	1.85	1.78	*ND*	*ND*	*ND*	9.16	0.848	*ND*	0.255	0.23
Sep-2008	*ND*	*ND*	0.013	*ND*	*ND*	1.35	1.25	*ND*	*ND*	*ND*	4.05	0.759	*ND*	0.251	0.247
Mar-2009	*ND*	*ND*	0.012	*ND*	*ND*	5.02	4.37	*ND*	*ND*	*ND*	8.26	4.53	*ND*	0.33	0.298
Oct-2009	*ND*	*ND*	0.018	*ND*	*ND*	9.1	1.41	*ND*	*ND*	*ND*	14.3	1.06	*ND*	0.532	0.259
Apr-2010	*ND*	*ND*	0.024	*ND*	*ND*	6.56	5.83	*ND*	*ND*	*ND*	10.4	7.39	*ND*	0.444	0.396
Oct-2010	*ND*	0.002	0.018	*ND*	*ND*	9.96	9.5	*ND*	*ND*	0.018	11.4	9.55	*ND*	0.644	0.573
Apr-2011	*ND*	*ND*	0.016	*ND*	*ND*	6.14	5.15	*ND*	*ND*	*ND*	8.2	6.96	*ND*	0.516	0.4
Sep-2011	*ND*	*ND*	0.017	*ND*	*ND*	6.66	5.28	*ND*	*ND*	*ND*	10.3	8.49	*ND*	0.526	0.424
Mar-2012	*ND*	*ND*	0.019	*ND*	*ND*	7.91	8.26	*ND*	*ND*	*ND*	7.03	6.67	*ND*	0.634	0.652
Sep-2012	*ND*	*ND*	0.0161	*0.000286 J*	*ND*	1.24	1.39	*ND*	*0.0018 J*	*0.0045 J*	16.6	1.6	*0.000551 J*	0.285	0.29
Mar-2013	*ND*	*ND*	0.243	**0.0092 R,C**	*0.0025 J*	2.41	2.33	0.0533	*0.0095 J*	0.146	1940	2.71	0.0067	0.259	0.338
Jun-2013	*NA*	*NA*	*NA*	*0.00015 J*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
Oct-2013	*0.000272 J*	*ND*	0.0273	*0.000789 J*	*0.000091 J*	1.53	1.31	*0.0069 J*	*0.0022 J*	*0.0085 J*	103	1.37	*0.000725 J*	0.253	0.228
Mar-2014	*0.000677 J*	*ND*	0.0137	*0.000208 J*	*ND*	1.49	1.22	*0.0013 J*	*0.0015 J*	*0.000861 J*	3.46	1.62	*ND*	0.273	0.275
Oct-2014	*0.00029 J*	*ND*	0.0199	*0.000316 J*	*ND*	1.36	1.55	*0.000384 J*	*0.0019 J*	*0.0035 J*	8.18	1.76	*ND*	0.364	0.34
Apr-2015	*0.000734 J*	*ND*	0.0175	*0.000333 J*	*ND*	1.59	1.52	*0.000813 J*	*0.0017 J*	*0.0026 J*	5.64	1.98	*ND*	0.33	0.326
Nov-2015	*0.000416 J*	*ND*	0.0193	*0.000401 J*	*0.000074 J*	1.37	1.3	*0.000686 J*	*0.0026 J*	*0.0039 J*	3.67	1.07	*0.000705 J*	0.406	0.405
May-2016	*ND*	*ND*	0.0228	*0.00034 J*	*ND*	2.07	2	*0.0011 J*	0.0026	*0.0038 J*	6.63	2.68	*0.00032 J*	0.499	0.449
Oct-2016	*ND*	*ND*	0.0228	*0.00039 J*	*ND*	2.14	*2.17 J+*	*0.0012 J*	0.0022	*0.004 J*	9.41	*2.92 J+*	*0.00052 J*	0.44	*0.44 J+*
May-2017	*ND*	*ND*	0.0384	*0.00043 J*	*ND*	6.49	6.38	0.0151	0.0018	0.0216	30.2	10.3	*0.00051 J*	0.692	0.608

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-07***													
Oct-2017	*ND*	*ND*	0.0387	*0.00049 J*	*ND*	2.56	3.06	0.0334	0.0048	0.0255	10.3	5.47	*0.00033 J*	0.704	0.695
May-2018	*ND*	*ND*	*0.0439 J*	*0.00063 J*	*ND*	2.8	2.7	*0.0021 J*	*0.0023 J*	*ND*	25.8	5.1	*ND*	*0.89 J*	*0.93 J*
Nov-2018	*ND*	*ND*	0.051	0.001	*0.0001 J*	2.6	2.5	*0.0024 J*	0.0033	0.0082	70.1	6	*0.00038 J*	*0.91 J*	*0.98 J*
May-2019	*ND*	*ND*	0.046	0.00044	*ND*	3.3	3.3	*ND*	0.0029	0.0068	82.2	7.7	*ND*	*ND*	*ND*
Oct-2019	*0.00033 J*	*0.0005 J*	0.042	0.00074	*0.00038 J*	3.3	3.3	0.0072	0.0039	0.0077	42.7	5.4	*0.00058 J*	0.79	*0.78 J*
May-2020	*ND*	*ND*	0.046	*0.00038 J*	*0.00046 J*	4.2	4.5	0.014	*0.0026 J*	0.0088	32.9	17.4	*ND*	0.91	1
Oct-2020	*ND*	*ND*	0.038	*ND*	*ND*	5.6	5.5	*0.0021 J*	0.0025	*ND*	11.6	11.4	*ND*	0.98	*0.96 J*
Apr-2021	*ND*	*ND*	0.043	*0.00018 J*	*ND*	5.2	4.9	*0.0015 J*	*0.0023 J*	*0.0033 J*	16.1	12.3	*ND*	1	0.94
Oct-2021	*0.000051 J*	*ND*	0.042	*0.00035 J*	*ND*	5.4	5.7	*0.0019 J*	0.0036	0.0032	12.4	8.7	*0.000035 J*	0.88	0.91
May-2022	*ND*	*ND*	0.052	*0.00043 J*	*ND*	6.8	6.9	0.0056	0.0032	0.0077	17.6	12.3	*ND*	1.1	1.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-07*												
Nov-1993	0.06	NA	ND	NA	1.2	NA	ND	NA	1.5	NA	NA	NA	0.05
Apr-1994	0.03	NA	ND	NA	1.46	NA	ND	NA	1.69	NA	NA	NA	0.05
Apr-1995	ND	NA	ND	ND	1.3	NA	ND	ND	1.3	NA	ND	ND	0.03
Oct-1996	0.015	0.011	NA	ND	ND	ND	ND	ND	2.2	2.4	ND	ND	0.035
Apr-1997	0.099	0.048	ND	ND	4.4	3	ND	ND	2.3	2.3	ND	ND	0.082
Oct-1997	0.024	0.024	NA	0.011	1.3	0.83	ND	ND	1.36	1.37	ND	ND	ND
Apr-1998	0.025	0.04	NA	ND	1.15	1.06	ND	ND	1.56	1.58	ND	ND	0.03
Apr-1999	0.027	0.029	NA	ND	1.82	1.09	ND	ND	1.65	1.61	ND	ND	ND
Oct-1999	0.029	0.026	NA	ND	0.847	1.17	ND	ND	2.14	1.51	ND	ND	0.011
Apr-2000	0.019	0.025	NA	ND	1.2	1.22	ND	ND	2.42	1.56	ND	ND	0.031
Oct-2000	0.022	0.02	NA	ND	1.64	1.23	ND	ND	1.69	1.65	ND	ND	ND
Apr-2001	0.022	NA	NA	ND	1.09	NA	ND	ND	1.61	NA	ND	ND	ND
Sep-2001	0.016	0.02	NA	ND	1.1	1.19	ND	ND	1.59	1.57	ND	ND	ND
Mar-2002	0.03	0.027	NA	ND	1.51	1.66	ND	ND	1.63	1.6	ND	ND	ND
Sep-2002	0.024	0.031	NA	ND	1.74	1.77	ND	ND	2.06	1.47	ND	ND	ND
Mar-2003	0.029	0.021	NA	ND	1.99	0.928	ND	ND	1.54	1.46	ND	ND	ND
Oct-2003	0.014	0.013	NA	ND	2.58	1.25	ND	ND	2.16	1.54	ND	ND	ND
Apr-2004	0.019	0.017	ND	1.58	1.89	1.09	ND	ND	1.58	1.48	ND	ND	ND
Oct-2004	0.082	0.018	ND	ND	1.35	1.13	ND	ND	1.97	1.23	ND	ND	0.023
Apr-2005	0.046	0.022	ND	ND	0.92	0.9	ND	ND	1.6	1.58	ND	ND	ND
Oct-2005	0.032	0.033	ND	ND	0.731	0.761	ND	ND	1.34	1.3	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.662	0.662	ND	ND	1.18	1.18	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-07***												
Sep-2006	0.014	0.015	ND	ND	0.953	1.01	ND	ND	1.31	1.34	ND	ND	ND
Mar-2007	0.014	0.015	ND	ND	0.945	1	ND	ND	1.36	1.37	ND	ND	0.011
Sep-2007	0.02	0.02	ND	ND	0.97	0.977	ND	ND	1.31	1.32	ND	ND	0.018
Mar-2008	0.025	0.022	ND	ND	1.17	1.01	ND	ND	1.47	1.27	ND	ND	ND
Sep-2008	0.023	0.021	ND	ND	1.04	1	ND	ND	1.29	1.25	ND	ND	0.014
Mar-2009	0.125	0.1	ND	ND	1.98	1.76	ND	ND	1.69	1.64	ND	ND	ND
Oct-2009	0.177	0.024	ND	0.012	3.98	0.878	ND	ND	2.62	1.23	ND	ND	ND
Apr-2010	0.321	0.247	ND	ND	2.21	2.08	ND	ND	1.77	1.75	ND	ND	ND
Oct-2010	0.142	0.155	ND	0.019	3.26	3.13	ND	ND	2.19	1.96	ND	ND	ND
Apr-2011	0.119	0.125	ND	ND	3.54	2.78	ND	ND	2.09	1.8	ND	ND	ND
Sep-2011	0.146	0.138	ND	ND	3.59	2.62	ND	ND	2.43	1.92	ND	ND	ND
Mar-2012	0.109	0.092	ND	ND	4.12	4.26	ND	ND	2.51	2.63	ND	ND	ND
Sep-2012	0.0289	0.0286	0.000023 J	0.0032 J	0.949	1.03	ND	ND	1.31	1.35	ND	ND	0.0044 J
Mar-2013	0.32	0.0668	0.00014 J	0.04 J	1.09	1.38	ND	0.000269 J	1.16	1.66	ND	ND	0.109
Oct-2013	0.0542	0.0314	0.000077 J	0.0043 J	0.955	0.85	ND	0.0022 J	1.27	1.15	0.00018 J	0.006 J	0.0175 J
Mar-2014	0.0393	0.0307	ND	0.0027 J	1.28	1.2	ND	0.000154 J	1.79	1.82	ND	ND	0.0071 J
Oct-2014	0.0309	0.0354	0.000025 J	0.0032 J	1.38	1.42	ND	ND	1.95	1.88	ND	ND	0.0118
Apr-2015	0.0384	0.0367	0.000029 J	0.003 J	1.3	1.28	0.000802 J	0.000065 J	1.99	1.98	ND	ND	0.0068 J
Nov-2015	0.0277	0.0259	ND	0.0047 J	1.22	1.21	ND	ND	2.44	2.46	0.000251 J	ND	0.0073 J
May-2016	0.0571	0.0497	ND	0.0049	1.54	1.23	ND	0.00012 J	3.33	3.09	ND	ND	ND
Oct-2016	0.0502 J+	0.0477 J+	ND	0.0051	1.43	1.43	ND	0.00025 J	3.18	3.13	ND	ND	0.0046 J
May-2017	0.184	0.171	ND	0.0518	2.44	2.42	ND	0.0117	2.59	2.41	ND	ND	0.0181 J
Oct-2017	0.0857	0.0849	ND	0.0889	1.72	1.77	ND	0.0312	5.21	5.09	ND	ND	0.0289 J
May-2018	0.0801	0.0711	ND	0.0139 J	2.2 J	1.7 J	ND	ND	7 B	6.7	ND	ND	0.009 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-07***												
Nov-2018	0.09	0.083	*ND*	0.0069	*1.6 J*	*2.5 J*	*0.00011 J*	*ND*	6.8	7.8	*ND*	*ND*	0.014
May-2019	0.12	0.14 M1	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	6.6	5.5	*ND*	*ND*	0.01
Oct-2019	0.099	0.096	*ND*	0.0086	*1.8 J*	*ND*	*0.00043 J*	*0.00046 J*	5.8	6.1	*0.00015 J*	0.0073	0.023
May-2020	0.15	0.16	*ND*	0.028	1.7	1.6	*ND*	0.0077	5.8	6	*ND*	*ND*	*0.01 J*
Oct-2020	0.11	0.11	*ND*	0.0061	*1.6 J*	*1.6 J*	*ND*	*ND*	6	5.8	*ND*	*0.00083 J*	*ND*
Apr-2021	0.14	0.12	*0.00005 J*	*0.0059 J*	1.8	1.7	*ND*	*ND*	6.5	6.2	*ND*	*ND*	*0.0037 J*
Oct-2021	0.12	0.12	*ND*	0.0072	1.7	1.6	*ND*	*ND*	4.7	4.9	*ND*	*ND*	0.0058
May-2022	0.17	0.17	*ND*	0.0078	2.1	2.2	*ND*	*ND*	5	5.2	*ND*	*ND*	0.0054

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.7 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.5 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-07*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-07***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.37 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-07***															
May-2017	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-07*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-07*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	4.3 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-07***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.583 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-07A***											
Nov-1993	ND	ND	ND	ND	3.3	ND	ND	4.43	51	7.4	ND	5.54
Apr-1994	5	5	0.1	ND	3	ND	ND	5.11	34.7	5.1	27	3.18
Apr-1995	ND	ND	ND	ND	3.8	ND	ND	4.7	46.1	9.1	45	8.8
Apr-1997	ND	ND	ND	ND	4	0.04	ND	NA	NA	12	58	23
Oct-1997	2	2	0.24	ND	2.73	ND	ND	5.66	46.6	13.7	33	12
Apr-1998	ND	ND	0.21	ND	4.39	ND	ND	6.07	40.7	9.48	16	11
Apr-1999	ND	ND	0.2	ND	4.49	ND	ND	4.47	47.3	6.03	43	12
Oct-1999	ND	ND	0.08	ND	5.12	0.128	ND	4.45	53.6	9.36	40	14
Apr-2000	2	2	ND	ND	3.34	ND	ND	5.01	37	7.01	38	10
Oct-2000	3	NA	ND	ND	3.37	ND	ND	4.74	41.9	6.71	38	10.6
Apr-2001	1.4	NA	ND	ND	3.54	ND	ND	NA	NA	5.02	45	10.1
Sep-2001	ND	ND	0.33	ND	6.41	1.19	ND	4.1	46	12.8	35	9.4
Mar-2002	2.2	2.2	ND	ND	3.85	ND	ND	4.9	44.3	7.58	31	9.01
Sep-2002	1.8	1.8	ND	ND	3.2	ND	ND	4.8	44.1	8.01	26	9.24
Mar-2003	2.3	2.3	ND	ND	3.57	ND	ND	4.8	47.2	6.71	27	9.41
Oct-2003	2	2	ND	ND	2.73	0.135	ND	5.4	54.5	8.97	64	11.8
Apr-2004	2.1	2.1	ND	ND	3.21	0.11	ND	4.9	44.2	11.2	54	14
Oct-2004	2.4	2.4	ND	14	3.49	0.15	ND	4.6	46	9.99	35	13.5
Apr-2005	1.9	1.9	ND	10	3.24	0.17	ND	4.6	46	11.2	54	12.5
Oct-2005	3.3	3.3	ND	ND	3.78	0.3	ND	4.3	41.4	13.3	45	11.7
Mar-2006	3.5	3.5	ND	ND	3.57	0.3	ND	4.3	51.8	11.4	36	11.3
Sep-2006	3	3	ND	ND	3.6	0.3	ND	4.6	40.8	9.94	32	11.4
Mar-2007	2.6	2.6	ND	ND	3.67	0.21	ND	4.8	44.3	9.24	16	9.95
Sep-2007	2.4	2.4	0.21	ND	7.81	ND	ND	4.7	42.4	10.9	43	11.1
Mar-2008	3	3	0.24	ND	8.04	ND	ND	4.7	43.9	8.72	29	10.4
Sep-2008	2.6	2.6	ND	ND	3.48	ND	ND	4.8	38	6.93	61	9.7
Mar-2009	2.5	2.5	ND	ND	3.2	0.15	ND	4.3	40.5	8.29	35	9.12
Oct-2009	2.4	2.4	ND	ND	3.2	0.16	ND	4.3	40.6	11.8	38	10.4
Apr-2010	2.6	2.6	ND	ND	3.5	0.31	ND	4	41	10.6	12	12
Oct-2010	1.6	1.6	ND	ND	3.76	0.52	ND	4.1	41.3	8.51	30	13.3
Apr-2011	14	14	ND	ND	3.3	0.2	ND	4.4	40.6	7.49	65	26
Sep-2011	2	2	0.23	ND	3.45	0.38	ND	4.7	41.8	8.03	48	11.6
Mar-2012	2.1	2.1	ND	ND	3.7	0.58	ND	3.8	44.2	10.3	18	12.8
Sep-2012	2.04	2.04	ND	ND	3.69	0.58	ND	3.8	41.6	11.1	60	12.4
Mar-2013	2.56	2.56	0.07 J	ND	4.28	0.458	ND	4.1	48	12.1	24	12.3
Oct-2013	2.64	2.64	ND	ND	5	0.3	ND	5.6	46.4	9.52	ND	11.5
Mar-2014	2.28	2.28	ND	ND	5.67	0.234	ND	4.8	43.6	9.91	47	9.82

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-07A***											
Oct-2014	*ND*	*ND*	*ND*	*6 J*	4.67	0.428	*ND*	4.3	42.5	9.81	37	12
Apr-2015	2.84	2.84	*ND*	*ND*	5.25	0.336	*ND*	3.8	48.2	8.7	*ND*	11.8
Nov-2015	2.64	2.64	*ND*	11	4.8	0.397	*ND*	4.8	59.7	11.2	*16 J*	13.3
May-2016	*ND*	*ND*	*ND*	*ND*	6.04	*ND*	*ND*	4.8	80.1	10.9	28	13.3
Oct-2016	*ND*	*ND*	*ND*	*7 J*	7.07	*NA*	*NA*	5	79.7	9.27	28	12.1
May-2017	*ND*	*ND*	*ND*	*ND*	7.33	0.348	*ND*	4.7	823	8.89	36	13
Oct-2017	*ND*	*ND*	*ND*	*ND*	8.52	0.369	*ND*	4.8	87	9.63	30	12.7
May-2018	*2 JB*	*ND*	*ND*	*ND*	8.2	*0.06 J*	*ND*	4.6	81.6	*8.6 J*	42	13.3
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	3.9	0.33	*ND*	4.39	47.4	*9.9 J*	*ND*	12.9
May-2019	*ND*	*NA*	*ND*	*ND*	3.6	0.24	*ND*	4.46	39.5	*ND*	15	13.2
Oct-2019	*2.5 JH1*	*NA*	*ND*	*ND*	3.5	0.29	*ND*	4.3	48.1	*6.8 J*	24	11.7
May-2020	*ND*	*NA*	*ND*	*ND*	4.5	0.31	*ND*	4.32	48.1	*9.9 J*	21	11.7
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	4.3	0.31	*ND*	4.26	48	9.9	46	12.1
Apr-2021	*ND*	*NA*	*ND*	*ND*	3.4	0.24	*ND*	4.51	54.2	*8.5 J*	*ND*	11.9
Oct-2021	*ND*	*NA*	*ND*	*ND*	3.1	0.23	*ND*	4.66	67.2	*8.3 J*	36	12.5
May-2022	*2 J3c*	*NA*	*ND*	*ND*	3.4	0.23	*ND*	4.49	72.1	*7.5 J*	31	13.5 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-07A*													
Nov-1993	NA	ND	ND	NA	ND	0.46	NA	0.009	NA	ND	3.7	0.09	ND	1.2	NA
Apr-1994	NA	ND	ND	NA	ND	1.24	NA	ND	NA	ND	0.34	0.1	ND	1.09	NA
Apr-1995	ND	ND	0.8	ND	ND	1.2	NA	ND	ND	ND	0.16	0.09	ND	1.4	NA
Oct-1996	ND	ND	0.048	ND	ND	2	2	ND	ND	ND	ND	ND	ND	1.7	1.7
Apr-1997	ND	ND	0.055	ND	ND	2.4	2.6	ND	ND	ND	ND	ND	0.003	1.7	1.9
Oct-1997	ND	ND	0.057	ND	ND	2.49	2.44	ND	ND	ND	ND	ND	ND	1.7	1.71
Apr-1998	ND	ND	0.046	ND	ND	1.88	1.92	ND	ND	ND	ND	ND	ND	1.46	1.48
Apr-1999	ND	ND	0.053	ND	ND	2.14	1.92	ND	ND	ND	ND	ND	ND	1.72	1.55
Oct-1999	ND	ND	0.05	ND	ND	1.8	1.61	ND	ND	ND	ND	ND	ND	1.54	1.38
Apr-2000	ND	ND	0.044	ND	ND	1.7	1.68	ND	ND	ND	ND	ND	ND	1.44	1.42
Oct-2000	ND	ND	0.043	ND	ND	1.88	1.86	ND	ND	ND	ND	ND	ND	1.45	1.46
Apr-2001	ND	ND	0.044	ND	ND	1.63	NA	ND	ND	ND	ND	NA	ND	1.47	NA
Sep-2001	ND	ND	0.037	ND	ND	1.46	1.36	ND	ND	ND	0.037	ND	ND	1.39	1.26
Mar-2002	ND	ND	0.037	ND	ND	1.57	1.36	ND	ND	0.011	ND	ND	ND	1.23	1.2
Sep-2002	ND	ND	0.043	ND	ND	1.43	1.47	ND	ND	ND	0.055	ND	ND	1.38	1.36
Mar-2003	ND	ND	0.041	ND	ND	1.56	1.42	ND	ND	ND	ND	ND	ND	1.34	1.25
Oct-2003	ND	ND	0.05	ND	ND	2.06	2.02	ND	ND	ND	ND	ND	ND	1.61	1.54
Apr-2004	ND	ND	0.056	ND	ND	2.81	2.58	ND	ND	ND	0.121	ND	ND	1.7	1.62
Oct-2004	ND	ND	0.056	ND	ND	2.75	2.64	ND	ND	ND	ND	ND	ND	1.61	1.57
Apr-2005	ND	ND	0.054	ND	ND	2.49	2.24	ND	ND	ND	ND	ND	ND	1.52	1.39
Oct-2005	ND	ND	0.048	ND	ND	2.36	2.27	ND	ND	ND	ND	ND	ND	1.42	1.34

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-07A***													
Mar-2006	ND	ND	0.047	ND	ND	2.14	2.02	ND	ND	ND	ND	ND	ND	1.45	1.39
Sep-2006	ND	ND	0.045	ND	ND	2.12	2.11	ND	ND	ND	ND	ND	ND	1.48	1.45
Mar-2007	ND	ND	0.044	ND	ND	1.78	1.77	ND	ND	ND	ND	ND	ND	1.34	1.31
Sep-2007	ND	ND	0.048	ND	ND	2.15	2.16	ND	ND	ND	ND	ND	ND	1.39	1.4
Mar-2008	ND	ND	0.046	ND	ND	1.62	1.56	ND	ND	ND	ND	ND	ND	1.55	1.47
Sep-2008	ND	ND	0.04	ND	ND	1.41	1.35	ND	ND	ND	0.062	ND	ND	1.5	1.49
Mar-2009	ND	ND	0.037	ND	ND	1.31	1.3	ND	ND	ND	ND	ND	ND	1.42	1.38
Oct-2009	ND	ND	0.04	ND	ND	1.36	1.33	ND	ND	ND	0.069	ND	ND	1.71	1.67
Apr-2010	ND	ND	0.052	ND	ND	2.22	2.14	ND	ND	ND	ND	ND	ND	1.59	1.5
Oct-2010	ND	ND	0.054	ND	ND	2.66	2.58	ND	ND	ND	0.067	ND	ND	1.62	1.59
Apr-2011	ND	ND	0.046	ND	ND	7.67	4.47	ND	ND	ND	0.283	ND	ND	1.65	1.58
Sep-2011	ND	ND	0.049	ND	ND	2.26	2.22	ND	ND	ND	ND	ND	ND	1.44	1.44
Mar-2012	ND	ND	0.055	ND	ND	2.46	2.55	ND	ND	ND	0.15	ND	ND	1.62	1.66
Sep-2012	ND	ND	0.0542	0.000101 J	ND	2.49	2.47	ND	0.0037 J	0.0038 J	0.023 J	0.0225 J	ND	1.5	1.49
Mar-2013	ND	ND	0.0477	0.000121 J	ND	2.27	2.42	0.0012 J	0.003 J	0.003 J	0.0153 J	ND	ND	1.6	1.71
Oct-2013	ND	ND	0.0501	0.00013 J	0.000118 J	2.32	2.13	0.0072 J	0.0031 J	0.0028 J	0.0514	0.0672	ND	1.39	1.15
Mar-2014	0.000707 J	ND	0.039	0.000209 J	ND	1.85	1.97	0.0019 J	0.0026 J	0.0012 J	0.0071 J	0.0049 J	ND	1.26	1.35
Oct-2014	0.000751 J	ND	0.0542	ND	0.000186 J	2.4	2.49	0.0014 J	0.0036 J	0.0036 J	0.0178 J	ND	ND	1.47	1.52
Apr-2015	0.000315 J	ND	0.0521	ND	0.000144 J	2.29	2.43	0.0014 J	0.0036 J	0.0037 J	0.014 J	0.0178 J	ND	1.47	1.53
Nov-2015	0.000487 J	ND	0.056	0.000112 J	0.000199 J	2.85	2.85	0.000928 J	0.0041 J	0.0041 J	0.0983	0.04 J	0.000348 J	1.5	1.51
May-2016	ND	ND	0.0543	0.00014 J	0.0002 J	2.63	2.17	0.0016 J	0.0036	0.0036 J	ND	ND	ND	1.64	1.51
Oct-2016	ND	ND	0.0553	0.00012 J	ND	2.28	2.54 J+	0.0021 J	0.0032	0.0032 J	ND	ND	ND	1.57	1.77 J+
May-2017	ND	ND	0.0512	0.00013 J	ND	2.28	2.47	0.0015 J	0.003	0.0034 J	ND	ND	ND	1.77	1.83
Oct-2017	ND	ND	0.0491	0.000096 J	0.00015 J	2.28	2.26	ND	0.0032	0.0031 J	ND	ND	ND	1.71	1.68

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-07A***													
May-2018	*ND*	*ND*	*0.0524 J*	*ND*	*ND*	2.5	2.5	*0.0018 J*	*0.0029 J*	*0.0026 J*	*0.012 J*	*ND*	*ND*	1.7	1.7
Nov-2018	*ND*	*ND*	0.052	*0.00018 J*	*0.00021 J*	2.8	2.6	*0.0038 J*	0.0038	0.004	*0.016 J*	*ND*	*0.000016 J*	1.5	1.5
May-2019	*ND*	*ND*	0.055	*ND*	*ND*	2.8	2.6	*ND*	0.0041	0.0053	*ND*	*ND*	*ND*	1.5	1.4
Oct-2019	*0.00019 J*	*0.00047 J*	0.052	*0.00018 J*	*0.00041 J*	2.6	2.6	*0.0065 J*	0.0039	0.0051	*0.015 J*	*0.0096 J*	*0.00009 J*	1.3	1.3
May-2020	*ND*	*ND*	0.058	*ND*	*ND*	2.5	2.5	*0.0036 J*	*0.004 J*	0.0056	*ND*	*ND*	*ND*	1.3	1.4
Oct-2020	*ND*	*ND*	0.049	*ND*	*ND*	2.5	2.5	*0.0031 J*	0.0041	*ND*	*0.014 J*	*0.018 J*	*ND*	1.4	1.4
Apr-2021	*ND*	*ND*	0.053	*ND*	*0.00041 J*	2.5	2.4	*0.0024 J*	*0.0045 J*	*0.0045 J*	*ND*	*ND*	*ND*	1.4	1.3
Oct-2021	*ND*	*ND*	0.054	*0.00017 J*	*0.000082 J*	2.6	2.7	*0.0025 J*	0.005	0.0044	*0.012 J*	*ND*	*ND*	1.4	1.4
May-2022	*ND*	*ND*	0.055	*0.00018 J*	*0.00017 J*	2.7	2.6	0.0051	0.005	0.0054	0.069	*ND*	*ND*	1.6	1.5

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-07A*												
Nov-1993	ND	NA	ND	NA	1.6	NA	ND	NA	1.5	NA	NA	NA	0.01
Apr-1994	0.02	NA	ND	NA	1.26	NA	ND	NA	1.67	NA	NA	NA	0.03
Apr-1995	ND	NA	ND	ND	1.4	NA	ND	ND	1.3	NA	ND	ND	0.02
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	2.3	2.6	ND	ND	0.13
Apr-1997	0.015	0.014	0.0011	ND	1.1	2.5	ND	ND	2	1.5	ND	ND	ND
Oct-1997	0.017	0.017	NA	ND	0.733	0.589	ND	ND	1.51	1.47	ND	ND	0.01
Apr-1998	0.012	0.012	NA	0.011	0.918	0.928	ND	ND	1.52	1.51	ND	ND	ND
Apr-1999	0.013	0.013	NA	ND	1.51	0.878	ND	ND	1.86	1.68	ND	ND	ND
Oct-1999	0.011	0.012	NA	ND	0.597	0.869	ND	ND	1.88	1.63	ND	ND	ND
Apr-2000	0.011	0.011	NA	0.014	1.74	1.21	ND	ND	1.77	1.75	ND	ND	ND
Oct-2000	0.01	0.011	NA	ND	1.26	1.07	ND	ND	1.89	1.81	ND	ND	ND
Apr-2001	0.011	NA	NA	ND	1.1	NA	ND	ND	1.76	NA	ND	ND	ND
Sep-2001	0.011	0.01	NA	ND	1.32	0.875	ND	ND	1.72	1.53	ND	ND	ND
Mar-2002	0.011	ND	NA	ND	2.68	1.5	ND	ND	2.48	1.51	ND	ND	ND
Sep-2002	0.01	0.011	NA	ND	1.05	1.04	ND	ND	1.63	1.6	ND	ND	ND
Mar-2003	ND	ND	NA	ND	0.707	0.588	ND	ND	1.47	1.44	ND	ND	ND
Oct-2003	0.011	0.015	NA	ND	1.52	1.53	ND	ND	1.52	1.45	ND	ND	ND
Apr-2004	0.021	0.021	0.0005	ND	1.26	1.23	ND	ND	1.61	1.51	ND	ND	ND
Oct-2004	0.022	0.021	0.0007	ND	1.01	0.89	ND	ND	1.57	1.27	ND	ND	ND
Apr-2005	0.019	0.016	0.0006	ND	0.82	0.71	ND	ND	1.67	1.55	ND	ND	ND
Oct-2005	0.017	0.016	0.0008	ND	0.83	0.912	ND	ND	1.41	1.38	ND	ND	ND
Mar-2006	ND	ND	0.00093	ND	0.801	0.779	ND	ND	1.28	1.18	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-07A*												
Sep-2006	0.014	0.015	0.0009	ND	1.19	1.2	ND	ND	1.39	1.35	ND	ND	ND
Mar-2007	0.011	0.011	0.0004	ND	1.05	1.03	ND	ND	1.36	1.34	ND	ND	0.03
Sep-2007	0.017	0.017	0.0007	ND	0.989	0.951	ND	ND	1.37	1.37	ND	ND	0.011
Mar-2008	0.016	0.015	0.0004	ND	1.11	0.958	ND	ND	1.49	1.3	ND	ND	ND
Sep-2008	0.016	0.016	ND	ND	0.92	0.941	ND	ND	1.31	1.28	ND	ND	ND
Mar-2009	0.016	0.015	ND	ND	1.05	1.04	ND	ND	1.32	1.3	ND	ND	ND
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	0.019	0.018	ND	ND	0.834	0.801	ND	ND	1.33	1.3	ND	ND	ND
Apr-2010	0.017	0.016	ND	ND	0.85	0.792	ND	ND	1.57	1.53	ND	ND	ND
Oct-2010	0.021	0.021	0.0002	ND	0.784	0.75	ND	ND	1.43	1.45	ND	ND	ND
Apr-2011	0.022	0.02	ND	ND	1.69	1.6	ND	ND	1.97	1.87	ND	ND	0.016
Sep-2011	0.02	0.02	ND	ND	0.84	0.785	ND	ND	1.66	1.63	ND	ND	ND
Mar-2012	0.024	0.024	ND	ND	0.74	0.727	ND	ND	1.57	1.57	ND	ND	ND
Sep-2012	0.0227	0.0228	0.000199 J	0.0037 J	0.8	0.795	ND	ND	1.41	1.44	ND	ND	0.006 J
Mar-2013	0.0217	0.0225	0.000197 J	0.0028 J	0.892	0.95	0.000665 J	ND	1.8	1.93	ND	ND	0.0139
Oct-2013	0.0226	0.0217	ND	0.0029 J	0.775	0.695	0.000413 J	ND	1.79	1.49	0.000154 J	0.0062 J	0.0146
Mar-2014	0.02	0.0214	ND	0.0031 J	0.894	0.94	ND	ND	2.27	2.4	ND	ND	0.0077 J
Oct-2014	0.0229	0.0241	0.000077 J	0.0041 J	0.833	0.839	0.0013 J	ND	1.81	1.83	ND	ND	0.0069 J
Apr-2015	0.0241	0.0252	0.000047 J	0.004 J	0.898	0.906	0.0014 J	ND	2.26	2.29	ND	ND	0.0113
Nov-2015	0.0261	0.0264	ND	0.004 J	0.824	0.811	0.00099 J	ND	2.11	2.04	0.000247 J	ND	0.0124
May-2016	0.0267	0.0243	ND	0.004	0.936	0.772	ND	ND	3.03	2.75	ND	ND	ND
Oct-2016	0.0258 J+	0.0285 J+	ND	0.0044	0.935	0.979	0.00057	ND	3.56	3.63	ND	ND	0.0052 J
May-2017	0.0272	0.0289	ND	0.0034 J	0.981	1	0.00054 J	ND	3.5	3.38	ND	ND	0.0051 J
Oct-2017	0.0265	0.0286	ND	0.0031 J	0.932	0.919	0.00057 J	ND	4.1	4.17	ND	ND	0.0041 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-07A***												
May-2018	0.0284	0.0273	*0.00012 JB*	*0.0102 J*	*1.2 J*	*ND*	*ND*	*ND*	5.1 B	*4.5 J*	*0.0061 J*	*ND*	*0.0061 J*
Nov-2018	0.026	0.028	*ND*	0.005	*ND*	*1.1 J*	*0.00058 J*	*ND*	*1.8 J*	*2.6 JB*	*ND*	*0.00005 J*	0.0095
May-2019	0.025	0.025	*ND*	0.006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.01
Oct-2019	0.028	0.028	*ND*	0.0057	*ND*	*ND*	*0.00079 J*	*ND*	*1.8 J*	*2 J*	*ND*	0.0074 D6	0.017
May-2020	0.025	0.026	*ND*	*0.0064 J*	0.82	0.71	*ND*	*ND*	1.9	2.2	*ND*	*ND*	*0.0094 J*
Oct-2020	0.026	0.027	*ND*	0.0052	*ND*	*ND*	*ND*	*ND*	*2.3 J*	*2.1 J*	*ND*	*0.00068 J*	*ND*
Apr-2021	0.029	0.027	*0.00006 J*	*0.0055 J*	0.65	0.65	*ND*	*ND*	1.7	1.5	*ND*	*ND*	*0.008 J*
Oct-2021	0.029	0.029	*ND*	0.0057	0.64	0.6	*0.00089 J*	*ND*	1.6 B	1.7	*0.000049 J*	*ND*	0.0099
May-2022	0.035	0.032	*ND*	0.007	0.8	0.77	*ND*	*ND*	1.9	1.8	*ND*	*ND*	0.0096

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Oct-1996	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	3.9	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	4.6	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07A*																
Mar-2006	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.32 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.82 J	ND	ND	1.63 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07A*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.8 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.7 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-07A*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	4.7
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	14
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	2.2
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	1 J	NA	NA	NA	1.5	5.9
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	1.1	5.5
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	1.3	NA	ND	NA	1.3	6.6
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	4.8	6.7
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	2.7	5.8
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	1.7	4.3
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.7 J
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	3
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	1.7
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	1.9
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	2.5
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.4	4.5
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	1.8
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.1	2.5

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-07A***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	1.9
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	0.6 J
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	0.9 J
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	1.3
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.68 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	ND	ND	ND	ND	0.77 J	0.37 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	ND	ND	ND	ND	0.41 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.24 J	ND	ND	ND	ND	ND	0.42 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.34 J	ND	ND	ND	ND	ND	0.6 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	0.34 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J,B	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	0.4 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	0.3 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-07A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.13 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.481 J*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-07A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	**6.6**	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	**5.1**	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	3.6	*ND*	*ND*	*NA*	*NA*	1.1	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.5	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	4.7	*ND*	*ND*	*NA*	*NA*	1.5	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.9	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*0.6 J*	*ND*	*ND*	2.9	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	2.5	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	2.2	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-07A***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	2.4	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.8 R	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	0.38 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	0.22 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-07A***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.507 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-08***										
Nov-1993	8	8	ND	33.8	6.2	0.4	ND	6.34	49	5.4	ND	6.55
Apr-1994	9	9	0.1	ND	6.5	0.4	ND	5.57	20.4	5.4	28	48.2
Apr-1995	5	5	ND	ND	7.1	0.5	ND	5.3	49.6	5.7	26	7.8
Apr-1997	ND	2	ND	ND	6	0.35	ND	NA	NA	5.7	42	7.6
Oct-1997	4	4	0.44	ND	5.05	0.195	ND	5.55	83.2	4.4	34	11
Apr-1998	4	4	0.2	ND	4.82	0.3	ND	6.14	45.7	3.58	31	9.5
Apr-1999	4	4	0.17	ND	10.1	ND	ND	5.05	45.6	5.74	64	12
Oct-1999	5	5	0.1	ND	5.83	0.334	ND	5.25	47.1	5.12	36	11
Apr-2000	7	7	ND	ND	3.92	0.39	ND	5.99	39	5.81	33	11
Oct-2000	7	NA	ND	ND	4.11	ND	ND	5.83	51.8	6.75	17	11.6
Apr-2001	5.2	NA	ND	ND	4.59	ND	ND	NA	NA	6.13	35	12.1
Sep-2001	5.3	5.3	ND	ND	5.67	ND	ND	5.16	52	11	37	11.9
Mar-2002	6.9	6.9	ND	ND	6.38	0.317	ND	5.3	46.3	6.43	35	13
Sep-2002	5.2	5.2	ND	ND	4.5	0.49	ND	5.4	46.8	8.3	36	11.2
Mar-2003	7.5	7.5	ND	ND	46.9	0.881	ND	5.3	55.2	46	ND	12.1
Oct-2003	6.1	6.1	ND	ND	4.33	0.168	ND	5.5	54.3	5.5	59	13.5
Apr-2004	7.8	7.8	ND	ND	4.12	0.17	ND	5.4	45	5.7	56	13
Oct-2004	6.6	6.6	ND	10	4.44	0.23	ND	5.5	45.8	5.08	37	16.9
Apr-2005	5.9	5.9	ND	ND	4.42	0.3	ND	5.1	40.6	4.95	66	12.1
Oct-2005	8.3	8.3	ND	ND	4.98	0.29	ND	4.9	38.3	4.73	40	10.2
Mar-2006	7	7	ND	ND	4.89	0.2	ND	4.7	41	5.72	40	10
Sep-2006	6.8	6.8	ND	ND	4.87	0.34	ND	5.2	42.6	4.57	27	10.8
Mar-2007	7.3	7.3	ND	ND	4.74	0.22	ND	5.2	46.7	5.12	18	10.7
Sep-2007	6.6	6.6	ND	ND	9.98	ND	ND	5.9	48.3	8.74	38	10.9
Mar-2008	9.5	9.5	ND	ND	9.91	0.79	ND	5.2	43.9	4.42	36	11.2
Sep-2008	11	11	ND	ND	5.84	0.32	ND	5.1	45.3	4.54	39	10.8
Mar-2009	12	12	ND	ND	6.71	0.35	ND	4.8	47.1	3.21	41	10.8
Oct-2009	8.2	8.2	ND	ND	5.79	0.21	ND	4.8	47.1	4.48	37	13
Apr-2010	10	10	ND	ND	6.69	0.29	ND	4.3	56.9	4.16	ND	13.1
Oct-2010	14	14	ND	ND	8.15	0.43	ND	4.2	50.3	3.63	35	14.8
Apr-2011	7.2	7.2	ND	ND	9.96	0.53	ND	5	61.9	7.95	63	16.7
Sep-2011	6.3	6.3	ND	ND	10.4	0.6	ND	5.1	64.9	7.82	58	17.6
Mar-2012	6.8	6.8	ND	ND	16	0.93	ND	4.6	82.4	10.5	52	20.2
Sep-2012	11.7	11.7	ND	ND	16.6	0.931	ND	4.9	83.9	11.3	64	21.4
Mar-2013	11.8	11.8	0.128 J	ND	16.6	1.05	ND	4.5	100.2	10.9	58	22.2
Oct-2013	9.24	9.24	ND	ND	19.6	1.29	ND	6.1	105.1	10.8	59	21.3
Mar-2014	10.4	10.4	ND	ND	17.9	1.24	ND	5.7	105	12.5	85	21.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-08***											
Oct-2014	37.4	37.4	*0.141 J*	14	17.3	0.07	*ND*	5.7	107.9	1.82	56	30.8
Apr-2015	22.9	22.9	0.33	12	16.6	*ND*	*ND*	4.7	115.1	*ND*	28	21.2
Nov-2015	11.4	11.4	*ND*	10	24.7	1.13	*ND*	5.7	174.3	6.94	72	27.3
May-2016	8.92	8.92	1.17	*ND*	22.3	*ND*	*ND*	5.7	205	*ND*	66	12
Oct-2016	11.2	11.2	1.09	13	22.4	*NA*	*NA*	5.7	228	*0.93 J*	69	14.1
May-2017	15.8	15.8	0.852	24	21.3	*ND*	*ND*	5.5	233	*0.612 J*	52	18.3
Oct-2017	16	16	0.699	16	25.7	*ND*	*ND*	5.9	275	*ND*	58	16.8
May-2018	30	30	0.34	27.2	34.8	*ND*	0.035	5.4	243	*ND*	49	24.6
Nov-2018	46	46	0.12	*ND*	44.6	*0.038 J*	0.028	6.21	257.7	*ND*	88	34
May-2019	50	*NA*	*ND*	*ND*	50.5	0.13	0.03	6.14	224.3	*ND*	146	37.4
Oct-2019	20 H1	*NA*	*0.08 J*	*14.8 J*	47.2	0.18	0.028	6.15	282.5	*ND*	97	34.8
May-2020	36	*NA*	0.2	*11.3 J*	43.5	*ND*	0.023	5.64	257.4	*ND*	137	31.5
Oct-2020	110	*NA*	0.14	*11.6 J*	43.5	*0.084 J*	0.021	5.9	249.7	3.8	147	32.8
Apr-2021	14	*NA*	0.18	*10.5 J*	47.3	0.22	*ND*	6.37	325.7	*ND*	93	35.7
Oct-2021	36	*NA*	0.17	*10.5 J*	50.7	*0.075 J*	0.014	6.57	357.8	*ND*	130	34.4
May-2022	30	*NA*	0.14	*5.6 J*	45.9	0.1	0.032	6.32	322.5	*ND*	121	35.9 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-08*													
Nov-1993	NA	ND	ND	NA	ND	0.81	NA	ND	NA	ND	14.2	2.2	ND	1.1	NA
Apr-1994	NA	ND	ND	NA	ND	1.17	NA	ND	NA	ND	3.23	2.24	ND	1.49	NA
Apr-1995	ND	ND	0.7	ND	ND	0.82	NA	ND	0.03	ND	2.2	2	ND	1.4	NA
Oct-1996	ND	ND	0.053	ND	ND	1.7	1.6	ND	ND	ND	3.7	1.8	ND	1.2	1.2
Apr-1997	ND	ND	0.059	ND	ND	2.1	1.8	ND	ND	ND	0.89	0.63	ND	1.5	1.2
Oct-1997	ND	ND	0.047	ND	ND	1.68	1.73	ND	ND	ND	3.91	1.3	ND	1.39	1.4
Apr-1998	ND	ND	0.049	ND	ND	1.62	1.68	ND	ND	0.014	19	1.33	ND	1.32	1.38
Apr-1999	ND	ND	0.052	ND	ND	1.97	1.93	ND	ND	ND	6.45	4.05	ND	1.64	1.59
Oct-1999	ND	ND	0.059	ND	ND	1.87	1.7	ND	ND	ND	9.14	1.44	ND	1.56	1.42
Apr-2000	ND	ND	0.055	ND	ND	1.89	1.84	ND	ND	ND	4.64	1.94	ND	1.56	1.49
Oct-2000	ND	ND	0.057	ND	ND	1.99	2.01	ND	ND	ND	6.68	2.52	ND	1.62	1.63
Apr-2001	ND	ND	0.066	ND	ND	2.02	NA	ND	ND	ND	11.3	NA	ND	1.7	NA
Sep-2001	ND	ND	0.065	ND	ND	1.98	1.89	ND	ND	ND	4.89	3.36	ND	1.7	1.6
Mar-2002	ND	ND	0.065	ND	ND	2.3	1.93	ND	ND	0.016	10.5	2.21	ND	1.77	1.7
Sep-2002	ND	ND	0.066	ND	ND	1.83	1.88	ND	ND	0.013	13.4	2.13	ND	1.61	1.67
Mar-2003	ND	ND	0.067	ND	ND	2.02	1.96	ND	ND	ND	3.26	2.24	ND	1.72	1.63
Oct-2003	ND	ND	0.07	ND	ND	2.39	2.06	ND	ND	0.011	7.7	2.2	ND	1.84	1.79
Apr-2004	ND	ND	0.068	ND	ND	2.16	2.11	ND	ND	ND	3.16	1.75	ND	1.84	1.83
Oct-2004	ND	ND	0.073	ND	ND	3.5	2.13	ND	ND	0.015	13.1	2.67	ND	1.98	1.84
Apr-2005	ND	ND	0.076	ND	ND	2.11	1.95	ND	ND	ND	13.2	1.82	ND	1.67	1.55
Oct-2005	ND	ND	0.064	ND	ND	1.8	1.7	ND	ND	ND	4.74	1.86	ND	1.38	1.31

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-08***													
Mar-2006	ND	ND	0.054	ND	ND	1.91	1.6	ND	ND	ND	11.7	2.29	ND	1.28	1.31
Sep-2006	ND	ND	0.059	ND	ND	1.97	1.89	ND	ND	0.021	19.1	1.92	ND	1.43	1.45
Mar-2007	ND	ND	0.064	ND	ND	1.91	1.87	ND	ND	ND	4.12	2.64	ND	1.45	1.45
Sep-2007	ND	0.003	0.068	ND	ND	1.91	1.86	ND	ND	ND	10.2	2.06	ND	1.49	1.44
Mar-2008	ND	ND	0.074	ND	ND	1.93	1.82	ND	ND	ND	3.68	1.89	ND	1.54	1.42
Sep-2008	ND	ND	0.068	ND	ND	1.9	1.79	ND	ND	ND	5.49	2.41	ND	1.48	1.47
Mar-2009	ND	ND	0.073	ND	ND	2	1.84	ND	ND	ND	4.88	2.66	ND	1.41	1.38
Oct-2009	ND	ND	0.08	ND	ND	2.19	2.06	ND	ND	ND	11.7	4.86	ND	1.84	1.72
Apr-2010	ND	ND	0.089	ND	ND	2.49	2.31	ND	ND	ND	9.78	5.06	ND	1.68	1.65
Oct-2010	ND	ND	0.102	ND	ND	2.58	2.47	ND	ND	ND	7.8	5.13	ND	2.04	1.94
Apr-2011	ND	ND	0.108	ND	ND	2.89	2.69	ND	0.015	0.023	19.6	2.12	ND	2.3	2.1
Sep-2011	ND	ND	0.106	ND	ND	3.01	2.91	0.013	0.016	0.028	26.1	2.12	ND	2.44	2.34
Mar-2012	ND	0.005	0.132	ND	ND	3.41	3.57	0.076	0.041	0.168	132	2	ND	2.83	3.08
Sep-2012	ND	ND	0.116	0.000371 J	0.000301 J	3.67	3.81	0.0031 J	0.0146	0.007 J	5.82	4.27	ND	2.98	3.1
Mar-2013	ND	ND	0.144	0.00032 J	ND	3.93	3.93	0.0023 J	0.01	0.0067 J	8.35	7.68	ND	3.01	3.03
Oct-2013	ND	ND	0.155	0.00045 J	0.000277 J	4.02	4.06	0.0108	0.0128	0.0094 J	11.5	6.37	ND	2.73	2.59
Mar-2014	0.000428 J	0.000546 J	0.135	ND	0.000305 J	3.91	3.9	0.0049 J	0.0141	0.0165	15.1	8.32	ND	2.87	2.8
Oct-2014	0.000647 J	0.0013 J	0.147	ND	0.000338 J	5.49	5.45	0.0056 J	0.0111	0.0102	48.1	27.9	0.0012 J	4.16	4.14
Apr-2015	0.000966 J	0.0016 J	0.0912	0.000178 J	0.000209 J	3.74	3.87	0.0031 J	0.0064 J	0.0176	48.9	19.2	0.0011 J	2.87	3.08
Nov-2015	0.000355 J	0.000813 J	0.175	0.000355 J	0.000252 J	5.16	5.3	0.0016 J	0.0123	0.0089 J	15	10.6	0.000386 J	3.51	3.65
May-2016	ND	0.00064 J	0.0467	ND	ND	2.18	2.12	0.0024 J	0.0018	0.0028 J,B	3.81	0.392	0.00056 J	1.59	1.67
Oct-2016	0.00058 J	0.004	0.0573	ND	ND	2.57	2.44	0.0035 J+	0.0035	0.0125 J+	23.5	2.98	0.00084 J	1.85 J+	1.85
May-2017	ND	0.0023 J	0.0693	ND	ND	3.8	3.41	0.0036 J	0.0049	0.0098	17.9	10.2	0.0008 J	2.13	2.27
Oct-2017	ND	0.001 J	0.0619	ND	0.00032 J	3.23	3.22	0.0028 J	0.0039	0.0027 J	13.6	9.96	0.0005 J	2.11	2.17

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-08***													
May-2018	0.00068	0.0028	0.1	*0.00012 J*	*0.00044 J*	4.9	4.8	*0.0044 JB*	0.0059	0.012	27.7	23	0.0014	3	3
Nov-2018	*0.000056 J*	*0.00011 J*	0.19	*0.00022 J*	*0.00012 J*	6.3	6.2	*0.0029 J*	0.0047	0.0068	33.2	31.4	*0.00004 J*	4.4	4.6
May-2019	*ND*	*ND*	0.23	0.00038	*ND*	7	6.6	*ND*	0.0068	0.0087	35.6	31.2	*ND*	4.9	4.6
Oct-2019	*0.00021 J*	*0.00042 J*	0.22	*0.00023 J*	*0.00026 J*	6.6	6.7	*0.0054 J*	0.0053	0.0041	36.1	35.3	*0.000081 J*	4.4	4.5
May-2020	*ND*	*ND*	0.22	*0.00032 J*	*0.00037 J*	5.9	6.1	*0.0021 J*	*0.0048 J*	0.0098	40.5	36.4	*ND*	4.1	4.5
Oct-2020	*ND*	*ND*	0.19	*0.00028 J*	*ND*	6.3	6.2	*0.0033 J*	0.0047	*0.0072 J*	36.1	32	*ND*	4.2	4.2
Apr-2021	*ND*	*ND*	0.2	*0.00024 J*	*ND*	6.7	6.4	*ND*	0.0056	*0.0049 J*	36	30.1	*ND*	4.6	4.3
Oct-2021	*ND*	*ND*	0.2	*0.00024 J*	*ND*	6.5	7	*ND*	0.0056	0.0045	33.5	31.9	*ND*	4.4	4.7
May-2022	*ND*	*ND*	0.2	*0.00029 J*	*ND*	6.7	6.5	*0.00098 J*	0.0051	0.0043	39.1	33	*ND*	4.6	4.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-08*												
Nov-1993	0.08	NA	ND	NA	0.73	NA	ND	NA	2.5	NA	NA	NA	ND
Apr-1994	0.1	NA	ND	NA	0.9	NA	ND	NA	3.28	NA	NA	NA	0.06
Apr-1995	ND	NA	ND	ND	1.1	NA	ND	ND	2.7	NA	ND	ND	0.03
Oct-1996	0.075	0.068	NA	ND	ND	ND	ND	ND	3.2	3.3	ND	ND	0.082
Apr-1997	0.054	0.053	ND	ND	2.4	ND	ND	ND	2.5	2.9	ND	ND	0.037
Oct-1997	0.087	0.087	NA	ND	ND	0.748	ND	ND	2.65	2.77	ND	ND	0.014
Apr-1998	0.101	0.081	NA	0.013	ND	0.719	ND	ND	2.68	2.44	ND	ND	0.017
Apr-1999	0.148	0.143	NA	ND	0.763	0.544	ND	ND	2.21	2.13	ND	ND	ND
Oct-1999	0.099	0.092	NA	0.013	0.564	0.714	ND	ND	2.85	2.53	ND	ND	0.011
Apr-2000	0.138	0.132	NA	ND	1.53	1.13	ND	ND	2.69	2.63	ND	ND	ND
Oct-2000	0.136	0.133	NA	ND	0.887	1.05	ND	ND	2.67	2.6	ND	ND	ND
Apr-2001	0.148	NA	NA	ND	0.545	NA	ND	ND	2.67	NA	ND	ND	ND
Sep-2001	0.133	0.143	NA	0.01	0.639	0.947	ND	ND	2.66	2.62	ND	ND	ND
Mar-2002	0.119	0.116	NA	ND	1.64	ND	ND	ND	3.74	2.66	ND	ND	0.012
Sep-2002	0.113	0.109	NA	ND	1.81	1.43	ND	ND	2.34	2.35	ND	ND	ND
Mar-2003	0.128	0.119	NA	ND	1.2	1.28	ND	ND	2.5	2.36	ND	ND	ND
Oct-2003	0.134	0.131	NA	ND	1.95	2	ND	ND	2.82	2.22	ND	ND	0.01
Apr-2004	0.13	0.12	ND	ND	0.636	ND	ND	ND	2.36	2.25	ND	ND	ND
Oct-2004	0.142	0.138	ND	ND	0.94	0.81	ND	ND	3.22	2.32	ND	ND	0.073
Apr-2005	0.127	0.116	ND	ND	0.7	0.62	ND	ND	2.83	2.7	ND	ND	0.01
Oct-2005	0.111	0.104	ND	ND	0.833	0.717	ND	ND	2.4	2.27	ND	ND	ND
Mar-2006	0.104	0.088	ND	ND	ND	ND	ND	ND	2.05	2.11	ND	ND	0.019

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-08***												
Sep-2006	0.127	0.117	ND	0.011	0.84	0.839	ND	ND	2.48	2.34	ND	ND	0.017
Mar-2007	0.137	0.13	ND	ND	0.782	0.785	ND	ND	2.33	2.33	ND	ND	0.011
Sep-2007	0.144	0.121	ND	ND	0.744	0.683	ND	ND	2.67	2.76	ND	ND	0.015
Mar-2008	0.123	0.111	ND	ND	0.781	0.703	ND	ND	2.84	2.5	ND	ND	0.01
Sep-2008	0.125	0.121	ND	ND	0.758	0.734	ND	ND	2.71	2.6	ND	ND	0.034
Mar-2009	0.127	0.12	ND	ND	0.943	0.853	ND	ND	3.17	3.11	ND	ND	0.021
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	0.21	0.181	ND	ND	0.632	0.642	ND	ND	2.74	2.76	ND	ND	0.016
Apr-2010	0.163	0.162	ND	ND	0.765	0.747	ND	ND	3.29	3.17	ND	ND	0.019
Oct-2010	0.178	0.169	ND	ND	0.789	0.77	ND	ND	3.66	3.66	ND	ND	0.015
Apr-2011	0.143	0.123	ND	0.016	0.742	0.691	ND	ND	4.44	4.34	ND	ND	0.052
Sep-2011	0.15	0.132	ND	0.019	0.86	0.777	ND	ND	4.63	4.51	ND	ND	0.051
Mar-2012	0.24	0.152	0.0003	0.088	0.824	0.855	ND	ND	7.75	8.15	ND	ND	0.141
Sep-2012	0.173	0.178	0.000044 J	0.0146	0.875	0.931	0.000466 J	ND	7.63	7.82	ND	ND	0.0343
Mar-2013	0.193	0.191	0.000079 J	0.0108 J	0.933	0.919	ND	ND	7.9	7.86	ND	ND	0.0408
Oct-2013	0.195	0.189	ND	0.0112	0.812	0.798	ND	ND	7.68	7.21	0.000106 J	0.0082 J	0.0383
Mar-2014	0.202	0.213	ND	0.0139	0.952	0.962	ND	ND	7.38	7.52	ND	ND	0.0488
Oct-2014	0.715	0.58	0.000082 J	0.0217	1.18	1.22	0.000855 J	ND	10.9	11.2	ND	ND	0.0362
Apr-2015	0.396	0.348	0.000074 J	0.0146	1.19	1.21	ND	0.000058 J	10.7	10.7	ND	ND	0.0262
Nov-2015	0.306	0.31	ND	0.0111	1.14	1.2	0.000756 J	ND	12.1	12.6	0.000181 J	ND	0.0366
May-2016	0.152	0.102	ND	0.0066	1.13	1.09	ND	ND	11.7	11.9	ND	ND	0.0162 J
Oct-2016	0.231 R	0.152	ND	0.008 J+	1.17	1.14	ND	ND	11.9 J+	11	ND	ND	0.0131 J
May-2017	0.363	0.337	ND	0.0112	1.17	1.16	ND	ND	12.7	12.7	ND	ND	0.0177 J
Oct-2017	0.305	0.289	ND	0.0075	1.15	1.17	ND	ND	13.1	12.9	ND	ND	0.0175 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-08***												
May-2018	0.58	0.52	*ND*	0.011	*ND*	*0.86 J*	*0.00045 J*	*ND*	17.1	16.1	*ND*	0.002	0.03
Nov-2018	0.53	0.52	*ND*	0.0049	*1.1 J*	*1.6 J*	*0.0002 J*	*ND*	22.2	23.8	*ND*	*ND*	0.015
May-2019	0.61	0.62	*ND*	0.005	*ND*	*ND*	*ND*	*ND*	24.4	23.9	*ND*	*ND*	0.02
Oct-2019	0.64	0.63	*ND*	0.0044	*1.5 J*	*ND*	*ND*	*ND*	25	26.4	*ND*	0.0088	0.019
May-2020	0.59	0.62	*ND*	*0.0068 J*	1.5	1.4	*ND*	*ND*	22.6	22.1	*ND*	*ND*	0.016
Oct-2020	0.62	0.57	*ND*	0.0045	*1.3 J*	*1.3 J*	*ND*	*ND*	21.6	21.6	*ND*	*0.00092 J*	*0.014 J*
Apr-2021	0.72	0.66	*0.00006 J*	*0.0042 J*	1.4	1.4	*ND*	*ND*	25.9	24.3	*ND*	*ND*	0.014
Oct-2021	0.66	0.71	*ND*	0.0038	1.3	1.3	*ND*	*ND*	25.7	27.5	*ND*	*ND*	0.013
May-2022	0.72	0.67	*ND*	0.0053	1.5	1.4	*ND*	*ND*	25.3	24.3	*ND*	*ND*	0.011

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	23	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08*																
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.59 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.8 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.94 J*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.7 J*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.2 J*	*ND*	*ND*	5.2	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.5 B	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.8 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-08*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-08***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	0.58 J	ND	ND	ND	ND	0.64 J,B	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	0.45 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-08***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-08***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-08*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-08***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.551 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-08A***											
Nov-1993	ND	ND	ND	ND	3.5	ND	ND	4.61	51.3	11.8	18	10.4
Apr-1994	10	10	0.1	67.6	3.5	ND	ND	4.74	50.5	12.1	34	13.46
Apr-1995	ND	ND	ND	ND	4.2	ND	ND	4.4	54.9	13.1	ND	10.2
Apr-1997	ND	2	ND	ND	4.5	0.07	ND	NA	NA	13	96	29
Oct-1997	ND	ND	0.24	ND	2.76	ND	ND	5.62	50.7	11.7	45	15
Apr-1998	ND	ND	ND	ND	3.8	ND	ND	5.38	47.9	11.9	26	14
Apr-1999	ND	ND	0.19	ND	3.8	ND	ND	4.16	54.1	9.69	67	15
Oct-1999	ND	ND	0.2	ND	3.98	ND	ND	4.82	78.5	11	38	15
Apr-2000	ND	ND	ND	ND	2.42	ND	ND	5.39	44	11	45	13
Oct-2000	2.8	NA	ND	ND	4.56	ND	ND	5.29	59.2	14.6	45	14.5
Apr-2001	ND	NA	ND	ND	3.62	ND	ND	NA	NA	12.1	20	15.1
Sep-2001	ND	ND	ND	ND	4.78	ND	ND	4.32	60	17.1	41	15.4
Mar-2002	ND	ND	ND	ND	4.39	ND	ND	4.7	57	17.8	58	16.3
Sep-2002	ND	ND	ND	ND	4	ND	ND	4.8	56.5	17.9	27	16.2
Mar-2003	ND	ND	ND	ND	39.5	ND	ND	4.7	64.8	128	23	14.9
Oct-2003	ND	ND	ND	ND	3.93	0.086	ND	4.7	79.2	18.3	72	18.8
Apr-2004	ND	ND	ND	ND	3.32	ND	ND	4.8	53.9	16.6	66	19.4
Oct-2004	1.1	1.1	ND	ND	2.78	ND	ND	4.7	42.5	11.6	41	17
Apr-2005	ND	ND	ND	ND	3.92	0.1	ND	4.6	42.6	16.3	81	17.4
Oct-2005	1.7	1.7	ND	ND	3.74	0.09	ND	4.6	41.9	15.8	51	13.3
Mar-2006	1.8	1.8	ND	ND	5.66	0.16	ND	4.1	54.8	18.8	40	14.9
Sep-2006	1.7	1.7	ND	ND	4.79	0.23	ND	4.5	53.5	16.7	49	16.6
Mar-2007	1.1	1.1	0.3	ND	17.6	2.22	ND	4.6	93.6	15.8	47	26.8
Sep-2007	ND	ND	0.23	ND	10	ND	ND	4.8	63.1	19	51	16.3
Mar-2008	ND	ND	ND	ND	24.2	3.29	ND	4.4	77.1	19	73	22.8
Sep-2008	1.5	1.5	ND	12	8.63	0.83	ND	4.4	77.3	21.4	54	18.2
Mar-2009	1.1	1.1	ND	ND	11.8	0.57	ND	4.2	77	18	60	18.1
Oct-2009	1	1	ND	ND	27.5	1.14	ND	4.1	119.2	18.4	87	25.3
Apr-2010	1.2	1.2	ND	ND	34.6	1.18	ND	3.9	129.1	19.7	58	27.6
Oct-2010	ND	ND	ND	ND	56.8	2.15	ND	4	121.8	19.1	166	37.4
Apr-2011	1.4	1.4	ND	ND	23	2	ND	4.3	130	20.8	109	21
Sep-2011	ND	ND	0.21	ND	45.6	4.16	ND	4.5	179.2	20.4	142	37.1
Mar-2012	ND	ND	ND	ND	43.7	2.89	ND	3.5	183.8	27.1	101	36.4
Sep-2012	ND	ND	ND	ND	18.9	0.982	ND	3.9	95.4	23.3	62	21.7
Mar-2013	1.16	1.16	0.167 J	ND	42.1	2.72	ND	3.7	177.1	25	108	33.7
Oct-2013	1.16 J	1.16 J	ND	ND	62	4.01	ND	5.3	352	25.1	176	36.6
Mar-2014	ND	ND	ND	6 J	66.7	3.38	ND	4.5	308	30.3	173	31.1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-08A***										
Oct-2014	*ND*	*ND*	*ND*	*6 J*	63	3.52	*ND*	4.3	353	30.7	152	35.7
Apr-2015	1.92	1.92	*ND*	*7 J*	33.8	2.36	*ND*	3.9	157.2	24.7	90	26.6
Nov-2015	*ND*	*ND*	*ND*	*5 J*	55.6	3.65	*ND*	4.6	292	24.6	132	38.8
May-2016	*ND*	*ND*	*ND*	*ND*	57.3	2.11	*ND*	4.6	383	27	160	32.8
Oct-2016	*ND*	*ND*	*ND*	*ND*	83.9	*NA*	*NA*	4.5	416	20.9	177	44.7
May-2017	*ND*	*ND*	*ND*	*5 J*	109	4.81	*ND*	4.4	590	33.1	237	47.1
Oct-2017	*ND*	*ND*	*0.103 J*	*5 J+*	181	5.05	*ND*	4.7	625	27.9	271	47.6
May-2018	*4 JB*	*ND*	0.12	*5.8 J*	94	1.5	*ND*	4.2	494	25.4	190	44.5
Nov-2018	*1 JB*	*ND*	*ND*	*ND*	76.1	5.3	*ND*	4.3	342.1	24.4	157	42.8
May-2019	*ND*	*NA*	*ND*	*ND*	30.6	0.58	*ND*	4.25	116.4	14.9	73	31.1
Oct-2019	*2.5 JH1*	*NA*	*ND*	*6 J*	15.5	0.62	*ND*	4.31	97	10.9	33	19.5
May-2020	*ND*	*NA*	*ND*	*6.9 J*	63	1.5	*ND*	4.24	261.7	18.4	143	28.7
Oct-2020	240	*NA*	*ND*	*ND*	58.8	3.1	*ND*	4.36	246.4	19.4	160	39.1
Apr-2021	*ND*	*NA*	*ND*	*ND*	46.1	2.7	*ND*	4.34	271.6	26.3	132	35.9
Oct-2021	*ND*	*NA*	*ND*	*ND*	30.2	0.85	*ND*	4.54	200	12.9	71	26
May-2022	*ND*	*NA*	*ND*	*ND*	25.6	1.4	*ND*	4.44	182.4	12.5	84	25 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-08A*													
Nov-1993	NA	ND	ND	NA	ND	1.7	NA	0.005	NA	ND	0.99	0.06	ND	1.5	NA
Apr-1994	NA	ND	ND	NA	ND	2.8	NA	ND	NA	ND	1.15	0.15	ND	1.57	NA
Apr-1995	ND	ND	ND	ND	0.005	1.3	NA	ND	0.02	ND	0.84	0.06	0.006	1.7	NA
Oct-1996	ND	ND	0.055	ND	ND	2.3	2.6	ND	ND	ND	0.31	ND	ND	1.5	1.4
Apr-1997	ND	ND	0.074	ND	ND	5.4	4	ND	ND	ND	ND	ND	0.006	2	1.7
Oct-1997	ND	ND	0.06	ND	ND	3.15	3.19	ND	ND	0.015	1.31	ND	ND	1.72	1.67
Apr-1998	ND	ND	0.066	ND	ND	2.61	2.56	0.011	ND	0.017	4.87	ND	ND	1.93	1.76
Apr-1999	ND	ND	0.063	ND	ND	2.79	2.65	ND	ND	0.01	1.47	ND	ND	1.95	1.8
Oct-1999	ND	ND	0.06	ND	ND	2.84	2.5	ND	ND	0.011	0.894	ND	ND	1.96	1.77
Apr-2000	ND	ND	0.056	ND	ND	2.57	2.43	ND	ND	ND	ND	ND	ND	1.7	1.6
Oct-2000	ND	ND	0.049	ND	ND	2.79	2.6	ND	ND	0.018	2.39	ND	ND	1.84	1.74
Apr-2001	ND	ND	0.055	ND	ND	2.91	NA	ND	ND	ND	0.562	NA	ND	1.89	NA
Sep-2001	ND	ND	0.054	ND	ND	2.85	2.54	ND	ND	ND	0.924	ND	ND	2.01	1.97
Mar-2002	ND	ND	0.053	ND	ND	3.06	2.68	ND	ND	0.011	0.434	ND	ND	2.11	1.96
Sep-2002	ND	ND	0.057	ND	ND	3.18	2.53	ND	ND	0.015	2.22	ND	ND	1.99	1.86
Mar-2003	ND	ND	0.054	ND	ND	2.58	2.49	ND	ND	ND	0.094	ND	ND	2.05	1.94
Oct-2003	ND	ND	0.066	ND	ND	3.53	3.12	ND	ND	0.012	0.305	ND	ND	2.42	2.28
Apr-2004	ND	0.002	0.067	ND	ND	3.59	3.04	ND	ND	0.015	2.43	ND	ND	2.54	2.26
Oct-2004	ND	ND	0.055	ND	ND	3.77	2.53	ND	ND	ND	0.797	0.365	ND	1.83	1.67
Apr-2005	ND	ND	0.067	ND	ND	3.69	3.14	ND	ND	0.014	1.01	ND	ND	1.99	1.87
Oct-2005	ND	ND	0.054	ND	ND	2.69	2.34	ND	ND	0.011	0.57	ND	ND	1.59	1.48

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-08A***													
Mar-2006	ND	ND	0.058	ND	ND	2.91	2.89	ND	ND	ND	1.43	ND	ND	1.86	1.95
Sep-2006	ND	ND	0.063	ND	ND	3.29	3.27	ND	ND	ND	0.834	ND	ND	2.03	2.04
Mar-2007	ND	ND	0.106	ND	ND	5.05	4.62	ND	0.011	ND	0.384	ND	ND	3.46	2.92
Sep-2007	ND	0.002	0.068	ND	ND	3.18	3.24	ND	ND	0.011	1.89	ND	ND	2.04	2.07
Mar-2008	ND	ND	0.095	ND	ND	4.15	4.18	ND	ND	0.01	1.05	ND	ND	3.02	3.03
Sep-2008	ND	0.003	0.071	ND	ND	3.3	3.22	ND	ND	ND	1.33	ND	ND	2.41	2.37
Mar-2009	ND	ND	0.071	ND	ND	3.36	3.3	ND	ND	0.011	0.553	ND	ND	2.35	2.32
Oct-2009	ND	ND	0.097	ND	ND	4.58	4.51	ND	ND	ND	2.32	0.053	ND	3.38	3.58
Apr-2010	ND	ND	0.117	ND	ND	5.07	4.86	ND	0.01	0.013	2.89	ND	ND	3.62	3.53
Oct-2010	ND	ND	0.142	ND	ND	6.65	6.27	ND	0.013	ND	1.17	ND	ND	5.05	4.78
Apr-2011	ND	ND	0.112	ND	ND	5.25	5.16	ND	ND	0.01	1.71	ND	ND	4	3.85
Sep-2011	ND	ND	0.15	ND	ND	6.9	6.93	ND	0.012	0.015	0.292	ND	ND	4.84	4.87
Mar-2012	ND	ND	0.145	ND	ND	6.61	6.6	ND	0.011	0.015	0.319	ND	ND	4.84	4.85
Sep-2012	ND	ND	0.0894	0.00034 J	0.000282 J	3.9	3.86	0.0013 J	0.0071 J	0.0144	0.0248 J	0.0324 J	ND	2.91	2.84
Mar-2013	ND	ND	0.127	0.000413 J	0.0003 J	6.11	5.96	0.0091 J	0.0099 J	0.0132	0.0782	0.0589	ND	4.48	4.44
Oct-2013	ND	ND	0.16	0.000546 J	0.000533 J	7.32	7.19	0.0176	0.0113	0.0125	0.133	0.0672	ND	4.45	4.03
Mar-2014	0.000446 J	ND	0.124	0.000413 J	0.000432 J	6.16	6.15	0.0028 J	0.0092 J	0.01	0.0305 J	0.0142 J	ND	3.83	3.82
Oct-2014	0.000379 J	0.000519 J	0.15	0.000413 J	0.000427 J	6.79	6.68	0.0026 J	0.0099 J	0.013	0.0319 J	0.0146 J	ND	4.55	4.47
Apr-2015	0.000529 J	0.000397 J	0.096	0.000215 J	0.000305 J	4.91	5.3	0.003 J	0.0078 J	0.0086 J	0.0457 J	0.018 J	ND	3.48	3.76
Nov-2015	0.000371 J	0.000482 J	0.145	0.000405 J	0.000439 J	7.77	7.73	0.002 J	0.0111	0.0124	0.0202 J	0.0164 J	0.000371 J	4.72	4.75
May-2016	ND	ND	0.117	0.0003 J	0.0003 J	6.21	5.79	0.0019 J	0.0102	0.009	ND	ND	ND	4.2	4
Oct-2016	ND	0.0017 J	0.167	0.00044 J	0.00055 J	8.84	8.77 J+	0.0044	0.0135	0.0146	0.058 J	ND	ND	5.5	5.77 J+
May-2017	ND	0.0012 J	0.159	0.00039 J	0.00045 J	9.1	8.72	0.0084	0.0147	0.0156	0.379	ND	0.00026 J	5.93	5.98
Oct-2017	ND	ND	0.166	0.00033 J	0.00059 J	9.29	8.97	0.0021 J	0.0151	0.0119	ND	ND	ND	5.92	6.25

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-08A***													
May-2018	*ND*	*ND*	*0.157 J*	*ND*	*0.00052 J*	8.7	8.8	*0.0026 J*	*0.0129 J*	*0.0106 J*	0.024	*0.011 J*	*ND*	5.5	5.6
Nov-2018	*ND*	*ND*	0.13	0.00041	*0.00058 J*	8.3	8.1	0.0076	0.011	0.009	0.052	0.032	*0.000046 J*	5.3	5.5
May-2019	*ND*	*ND*	0.099	0.00032	*ND*	6.1	5.7	0.0081	0.0076	0.015	*ND*	*ND*	*ND*	3.8	3.6
Oct-2019	*0.00016 J*	*ND*	0.074	*0.00027 J*	*0.00041 J*	3.7	3.8	0.0094	0.0064	0.012	*0.034 J*	*0.015 J*	*0.00007 J*	2.5	2.5
May-2020	*ND*	*ND*	0.11	*0.00031 J*	*0.00051 J*	5.6	5.9	0.0079	0.0089	0.0091	0.086	*ND*	*ND*	3.6	3.9
Oct-2020	*ND*	*ND*	0.13	*0.0003 J*	*ND*	7.4	7.3	*0.0066 J*	0.011	*0.0099 J*	*0.059 J*	0.029	*ND*	5	4.9
Apr-2021	*ND*	*ND*	0.14	*0.00028 J*	*0.00067 J*	6.8	6.6	*0.0036 J*	0.011	0.0096	*ND*	*ND*	*ND*	4.6	4.2
Oct-2021	*ND*	*ND*	0.12	*0.00042 J*	*0.00018 J*	4.6	5.1	0.0039	0.01	0.019	*0.024 J*	*0.024 J*	*ND*	3.5	3.8
May-2022	*ND*	*ND*	0.086	*0.00024 J*	*0.00014 J*	4.7	4.9	0.0048	0.0074	0.007	0.094	0.27	*ND*	3.2	3.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-08A*												
Nov-1993	0.1	NA	ND	NA	0.87	NA	ND	NA	2.1	NA	NA	NA	ND
Apr-1994	0.07	NA	ND	NA	0.78	NA	ND	NA	1.51	NA	NA	NA	0.03
Apr-1995	0.03	NA	ND	ND	0.89	NA	ND	ND	1.5	NA	ND	ND	0.06
Oct-1996	0.054	0.056	NA	ND	ND	ND	ND	ND	2.2	2	ND	ND	0.034
Apr-1997	0.081	0.064	0.0009	ND	2.3	1.6	ND	ND	2.1	2.6	ND	ND	0.032
Oct-1997	0.066	0.063	NA	ND	ND	ND	ND	ND	1.47	1.54	ND	ND	0.021
Apr-1998	0.055	0.055	NA	0.016	2.17	ND	ND	ND	1.73	1.63	ND	0.015	0.031
Apr-1999	0.069	0.068	NA	ND	1.43	1.06	ND	ND	2.02	1.75	ND	ND	0.018
Oct-1999	0.062	0.06	NA	ND	0.97	1.05	ND	ND	2.16	1.72	ND	ND	0.021
Apr-2000	0.068	0.064	NA	ND	ND	ND	ND	ND	1.82	1.7	ND	ND	0.014
Oct-2000	0.056	0.06	NA	ND	1.18	1.24	ND	ND	4.19	2.8	ND	ND	0.016
Apr-2001	0.068	NA	NA	ND	1.32	NA	ND	ND	3.02	NA	ND	ND	0.016
Sep-2001	0.058	0.055	NA	0.018	1.06	0.662	ND	ND	2.62	1.81	ND	ND	0.019
Mar-2002	0.066	0.066	NA	ND	1.43	1.7	ND	ND	2.51	1.61	ND	ND	0.015
Sep-2002	0.072	0.062	NA	ND	1.21	ND	ND	ND	2.14	1.75	ND	ND	0.015
Mar-2003	0.055	0.054	NA	ND	1.52	ND	ND	ND	1.89	1.8	ND	ND	0.01
Oct-2003	0.086	0.081	NA	ND	1.64	1.56	ND	ND	3.23	2.72	ND	ND	0.019
Apr-2004	0.082	0.078	ND	ND	1.81	0.922	ND	ND	2.26	1.77	ND	ND	0.044
Oct-2004	0.091	0.083	ND	ND	0.817	ND	ND	ND	1.78	1.25	ND	ND	0.063
Apr-2005	0.1	0.093	ND	ND	0.72	0.62	ND	ND	2.26	1.86	ND	ND	0.046
Oct-2005	0.066	0.058	ND	ND	0.979	0.922	ND	ND	2.38	1.47	ND	ND	0.015
Mar-2006	0.041	0.038	ND	ND	0.672	0.637	ND	ND	1.75	1.7	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-08A***												
Sep-2006	0.091	0.091	ND	ND	0.991	0.975	ND	ND	2.13	2.09	ND	ND	0.021
Mar-2007	0.134	0.124	ND	ND	1.26	1.13	ND	ND	8.06	6.5	ND	ND	0.032
Sep-2007	0.091	0.091	ND	ND	0.922	0.759	ND	ND	2.61	2.71	ND	ND	0.024
Mar-2008	0.105	0.106	ND	ND	1.13	1.02	ND	ND	7.26	6.57	ND	ND	0.023
Sep-2008	0.088	0.09	ND	ND	1	0.896	ND	ND	3.38	3.57	ND	ND	0.035
Mar-2009	0.084	0.085	ND	ND	1.13	1.02	ND	ND	4.71	4.77	ND	ND	0.022
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	0.105	0.11	ND	ND	1.12	1	ND	ND	11.2	12.1	ND	ND	0.049
Apr-2010	0.119	0.116	ND	ND	1.3	1.08	ND	ND	16.3	15.4	ND	ND	0.036
Oct-2010	0.16	0.153	ND	ND	1.54	1.29	ND	ND	29.3	27.7	ND	ND	0.032
Apr-2011	0.131	0.118	ND	ND	1.16	0.97	ND	ND	13.3	13	ND	ND	0.024
Sep-2011	0.182	0.183	ND	ND	1.5	1.4	ND	ND	22.8	22.8	ND	ND	0.036
Mar-2012	0.181	0.18	ND	0.012	1.38	1.34	ND	ND	22.9	23	ND	ND	0.033
Sep-2012	0.1	0.0963	0.000033 J	0.006 J	1.06	1.07	0.000578 J	ND	9.79	9.35	ND	ND	0.0168
Mar-2013	0.161	0.155	0.000077 J	0.0119	1.3	1.32	0.000678 J	ND	23	22.6	ND	ND	0.0394
Oct-2013	0.186	0.184	ND	0.0086 J	1.3	1.25	ND	ND	33.2	33	0.000098 J	ND	0.0371
Mar-2014	0.173	0.174	ND	0.0072 J	1.27	1.25	ND	ND	28.8	28.8	ND	ND	0.0272
Oct-2014	0.166	0.163	ND	0.0088 J	1.51	1.49	0.0038	ND	33	31.9	ND	ND	0.0289
Apr-2015	0.129	0.139	0.000032 J	0.0068 J	1.19	1.28	0.0021	ND	18.5	19.8	ND	ND	0.0201
Nov-2015	0.194	0.197	ND	0.0088 J	1.53	1.52	0.0036	ND	34.3	34.2	0.000192 J	ND	0.0356
May-2016	0.185	0.177	ND	0.0071	1.4	1.44	ND	ND	38.9	36.8	ND	ND	0.024 J,B
Oct-2016	0.252 J+	0.254 J+	ND	0.0117	1.75	1.84	ND	ND	45.8	46.6	ND	ND	0.0382
May-2017	0.259	0.265	ND	0.0135	1.9	1.84	0.00058 J	ND	65	64.1	ND	0.0011	0.0329
Oct-2017	0.275	0.273	ND	0.0099	1.74	1.88	ND	ND	65.9	72.2	ND	ND	0.0335

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-08A***												
May-2018	0.248	0.25	*ND*	*0.0163 J*	*2 J*	*1.7 J*	*ND*	*ND*	53.3	54.3	*0.0038 J*	*ND*	0.0395
Nov-2018	0.19	0.26	*ND*	0.0098	*1.6 J*	*2.5 J*	*0.00077 J*	*ND*	46.2	46.7	*ND*	0.0014	0.029
May-2019	0.077	0.081	*ND*	0.0098	*ND*	*ND*	*ND*	*ND*	15	14.5	*ND*	*ND*	0.014
Oct-2019	0.083	0.082	*ND*	0.008	*1.4 J*	*ND*	*0.0005 J*	*ND*	7.2	7.8	*ND*	0.0081	0.023
May-2020	0.15	0.16	*ND*	0.011	1.7	1.6	*ND*	*ND*	37.1	36.2	*ND*	*ND*	0.026
Oct-2020	0.17	0.17	*ND*	0.0095	*1.8 J*	*1.7 J*	*ND*	*ND*	30.8	30.5	*ND*	*0.00091 J*	0.033
Apr-2021	0.18	0.17	*0.00005 J*	*0.009 J*	1.7	1.7	*ND*	*ND*	29.7	27.2	*ND*	*ND*	0.03
Oct-2021	0.068	0.076	*ND*	0.01	1.5	1.6	*0.0015 J*	*ND*	15	16.5	*0.000026 J*	*ND*	0.015
May-2022	0.13	0.14	*ND*	0.0074	1.4	1.4	*ND*	*ND*	17.6	18.4	*ND*	*ND*	0.02

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-08A***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	33	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5 J	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08A*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08A*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.7 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-08A*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.1	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	63	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	1
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	2.3	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	25	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.3	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.4	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-08A***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.23	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.63	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.16 J	ND	ND	ND	ND	ND	1.83	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.21	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.38 J,B	ND	ND	ND	ND	1.45	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.19 J	ND	ND	ND	ND	ND	1.13	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	0.56 J	ND	ND	ND	ND	ND	ND	0.64 J	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.9 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-08A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.518 J*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-08A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-08A*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	0.7 J,B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.16 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	0.13 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-08A*															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.4 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.538 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-09B***											
Nov-1993	ND	ND	ND	26.8	17.3	2	ND	4.61	78.9	2.8	ND	7.38
Apr-1994	ND	ND	ND	74.5	1.4	2	ND	4.88	81.2	2.5	41	10.47
Apr-1995	ND	ND	ND	ND	17.9	2.2	ND	4.6	87.2	2.4	37	2.7
Apr-1997	ND	13	ND	24	13	1.7	ND	NA	NA	ND	74	11
Oct-1997	ND	ND	0.6	ND	22.5	2.48	ND	5.62	95.1	ND	85	11
Apr-1998	ND	ND	0.21	ND	20.1	2	ND	5.91	86.2	ND	67	13
Apr-1999	ND	ND	0.24	ND	22.4	2.07	ND	4.52	89.2	ND	74	20
Oct-1999	ND	ND	0.14	ND	17.7	1.97	ND	4.99	94.2	0.883	390	17
Apr-2000	ND	3	ND	ND	19.3	1.9	ND	5.62	73	ND	71	14
Oct-2000	ND	NA	ND	32	21.9	2.52	ND	4.86	91.2	ND	92	15.1
Apr-2001	ND	NA	ND	ND	18.9	1.96	ND	NA	NA	ND	62	13.4
Sep-2001	ND	ND	ND	ND	18.7	2.59	ND	6.78	103	ND	166	12
Mar-2002	ND	ND	ND	45	20.9	2.32	ND	4.9	97.3	ND	356	16.6
Sep-2002	1	1	ND	11	23.3	2.11	ND	4.9	139.3	ND	124	15.4
Mar-2003	1.3	1.3	ND	ND	23.1	2.18	ND	4.9	114.3	ND	114	14.5
Oct-2003	1.9	1.9	ND	ND	22.6	2.25	ND	5.1	115.1	1.06	114	15.6
Apr-2004	1.6	1.6	ND	ND	21	1.98	ND	4.8	94.9	1.38	116	15.1
Oct-2004	1.6	1.6	ND	ND	21	2.01	ND	4.9	90.5	ND	72	12.9
Apr-2005	ND	ND	ND	39	22.7	2.1	ND	4.8	91.3	2.12	212	18.3
Oct-2005	2	2	ND	54	24	2.15	ND	5	92.5	1.65	155	18.1
Mar-2006	3	3	ND	ND	21.8	2.2	ND	6	95.1	2.01	96	11
Sep-2006	2	2	ND	ND	19.7	2.31	ND	4.8	88.4	1.66	152	16.3
Mar-2007	3.3	3.3	ND	ND	19.3	2.36	ND	5.4	90	1.58	71	14.1
Sep-2007	2.1	2.1	ND	ND	21.8	2.77	ND	5	89.6	ND	101	12.4
Mar-2008	2.1	2.1	ND	ND	25.1	3.26	ND	4.9	87.1	1.19	155	12.4
Sep-2008	3.1	3.1	ND	34	20.4	2.55	ND	4.7	81.6	2.03	109	12.5
Mar-2009	2.6	2.6	ND	ND	19.6	2.56	ND	4.7	87.5	2.01	42	11.3
Oct-2009	2.4	2.4	ND	23	20.1	2.34	ND	4.6	80.8	1.35	173	15.1
Apr-2010	2.9	2.9	ND	35	19.7	2.26	ND	4.3	80.1	1.97	200	16.7
Oct-2010	3	3	ND	ND	17.8	2.06	ND	4.3	76.2	2.3	72	11.4
Apr-2011	10	10	ND	ND	17.2	1.72	ND	4.5	79.7	2.65	73	18.3
Sep-2011	3.4	3.4	ND	ND	20.6	2.36	ND	5	68.1	ND	60	12.1
Mar-2012	3.2	3.2	ND	ND	14.7	1.54	ND	4	79.5	10.6	24	17.4
Sep-2012	3.4	3.4	ND	ND	19.7	2.23	ND	3.7	84.1	1.79	66	12.1
Mar-2013	3.56	3.56	ND	ND	19.3	2.39	ND	4.1	87.8	1.6	44	11.9
Oct-2013	3.8	3.8	ND	ND	19.7	2.43	ND	3.6	89.8	1.51	54	12
Mar-2014	3.44	3.44	ND	6 J	20.3	2.4	ND	5	81.3	1.56	75	14.4

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-09B***										
Oct-2014	*ND*	*ND*	*ND*	*ND*	21.3	2.39	*ND*	4.8	85.7	2.11	72	13.7
Apr-2015	3.76	3.76	*ND*	*ND*	21.1	2.53	*ND*	4.4	89.8	*0.855 J*	42	13.6
Nov-2015	*ND*	*ND*	*ND*	*ND*	20.8	2.37	*ND*	5.1	134.8	3	33	14.2
May-2016	3.16	3.16	*ND*	*ND*	19.7	2.23	*ND*	5.1	145.9	3.53	62	14.7
Oct-2016	3.72	3.72	*ND*	*ND*	21.3	*NA*	*NA*	5.1	140.5	2.91	82	14.5
May-2017	2.24	2.24	*ND*	*7 J*	22.3	2.69	*ND*	5.1	143.8	2.85	76	21
Oct-2017	*ND*	*ND*	*ND*	*ND*	22	2.96	*ND*	5.1	139.9	2.84	52	14.7
May-2018	*3 JB*	*ND*	*ND*	*ND*	23	0.52	*ND*	4.8	143.8	*ND*	62	17.2
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	21.4	2.5	*ND*	4.85	106.3	*ND*	57	16.2
May-2019	*ND*	*NA*	*ND*	*ND*	22.6	2.4	*ND*	4.75	86	*ND*	53	17.5
Oct-2019	*ND*	*NA*	*ND*	*6 J*	18.7	2.3	*ND*	4.66	103.2	*5.3 J*	67	16.4
May-2020	*6 J*	*NA*	*ND*	*ND*	20.2	2.2	*ND*	5.36	107.7	*5.2 J*	64	18.3
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	20.5	2.1	*ND*	5.24	110.2	6.4	86	22.5
Apr-2021	*2 J3c*	*NA*	*ND*	*6.1 J*	23.7	2.5	*ND*	6.43	136.2	*ND*	62	23.3
Oct-2021	12	*NA*	0.12	*ND*	20.9	2.4	*ND*	5.53	161.5	*ND*	63	22.7
May-2022	*8 J4c*	*NA*	*ND*	*ND*	17.4	2.1	*ND*	5.2	156.1	*5.6 J*	49	26.7 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-09B*													
Nov-1993	NA	0.005	ND	NA	ND	0.15	NA	0.018	NA	ND	4.6	0.13	ND	1.7	NA
Apr-1994	NA	ND	ND	NA	ND	1.72	NA	ND	NA	ND	0.27	ND	ND	1.5	NA
Apr-1995	ND	ND	0.7	ND	ND	1	NA	ND	ND	ND	0.25	ND	ND	1.5	NA
Oct-1996	ND	ND	0.09	0.001	ND	2.5	2.3	ND	0.021	ND	3.3	0.46	ND	1.7	1.6
Apr-1997	ND	ND	0.05	ND	ND	5.4	6.9	ND	ND	ND	ND	ND	0.003	1.5	1.6
Oct-1997	ND	ND	0.063	ND	ND	2.21	2.08	ND	0.01	ND	1.58	ND	ND	1.92	1.69
Apr-1998	ND	ND	0.057	ND	ND	2.21	2.12	ND	ND	ND	1.1	ND	ND	1.74	1.56
Apr-1999	ND	ND	0.182	ND	ND	3	2.07	0.047	0.02	0.052	9.09	ND	ND	2.97	1.52
Oct-1999	ND	ND	0.087	ND	ND	2.73	1.93	0.028	0.017	0.056	5.02	ND	ND	1.91	1.38
Apr-2000	ND	ND	0.055	ND	ND	2.54	1.92	ND	0.012	0.022	1.6	0.219	ND	1.77	1.52
Oct-2000	ND	ND	0.067	ND	ND	2.77	2.22	0.014	0.015	0.028	2.54	ND	ND	1.98	1.67
Apr-2001	ND	ND	0.046	ND	ND	2.49	NA	ND	0.012	ND	0.856	NA	ND	1.75	NA
Sep-2001	ND	ND	0.097	ND	ND	2.92	2.21	0.031	0.015	0.053	7.62	ND	0.013	2.19	1.65
Mar-2002	ND	ND	0.079	ND	ND	3.01	2.23	0.023	0.017	0.043	4.51	0.059	0.009	2.2	1.71
Sep-2002	ND	ND	0.073	ND	ND	2.9	2.14	0.015	0.012	0.038	3.78	ND	0.007	1.98	1.63
Mar-2003	ND	0.002	0.051	ND	ND	2.63	2.3	ND	0.017	0.039	0.907	0.118	0.003	1.92	1.67
Oct-2003	ND	0.004	0.074	ND	ND	2.85	2.19	0.015	0.012	0.066	3.45	ND	0.008	2.07	1.7
Apr-2004	ND	0.004	0.069	ND	ND	2.74	2.03	0.014	0.01	0.024	3.02	ND	0.006	2.01	1.65
Oct-2004	ND	ND	0.042	ND	ND	2.31	1.86	ND	ND	ND	0.71	ND	ND	1.73	1.62
Apr-2005	ND	0.009	0.123	0.002	ND	3.35	2.22	0.047	0.02	0.085	9.19	ND	**0.018**	2.41	1.78
Oct-2005	ND	**0.014**	0.149	ND	0.004	3.09	1.86	0.064	0.025	0.116	11.5	ND	**0.028**	2.52	1.49

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09B***													
Mar-2006	ND	ND	0.031	ND	ND	2.07	1.93	ND	ND	ND	0.277	ND	ND	1.42	1.49
Sep-2006	ND	ND	0.081	ND	ND	3.1	2.21	0.039	0.019	0.079	7.79	ND	**0.016**	2.05	1.55
Mar-2007	ND	0.003	0.058	ND	ND	2.66	2.48	ND	0.012	0.021	1.4	ND	0.003	1.81	1.59
Sep-2007	ND	ND	0.046	ND	ND	2.26	2.2	ND	ND	ND	0.88	ND	0.003	1.65	1.56
Mar-2008	ND	0.004	0.062	ND	ND	2.27	2.1	0.013	0.011	0.023	2.38	ND	0.006	1.64	1.5
Sep-2008	ND	0.003	0.063	ND	ND	2.17	1.92	0.018	0.014	0.02	2.31	ND	0.005	1.71	1.48
Mar-2009	ND	ND	0.046	ND	ND	2.09	1.88	ND	ND	0.017	1.51	ND	0.003	1.48	1.35
Oct-2009	ND	0.005	0.09	ND	ND	2.82	1.93	0.031	0.016	0.061	4.87	0.052	0.011	1.96	1.52
Apr-2010	ND	0.006	0.094	ND	ND	3.34	2.45	0.039	0.017	0.066	11	ND	0.014	2.05	1.38
Oct-2010	ND	ND	0.037	ND	ND	1.94	1.97	ND	ND	ND	0.516	ND	ND	1.59	1.59
Apr-2011	ND	ND	0.034	ND	ND	4.56	4.07	ND	0.022	ND	4.41	ND	ND	1.67	1.53
Sep-2011	ND	ND	0.04	ND	ND	2.12	2.05	ND	ND	ND	0.211	ND	ND	1.65	1.61
Mar-2012	ND	ND	0.066	ND	ND	2.82	2.86	ND	ND	ND	ND	ND	ND	2.51	2.54
Sep-2012	ND	ND	0.0335	0.000191 J	ND	2.09	2.03	ND	0.0068 J	0.0015 J	0.0749	0.0223 J	ND	1.66	1.67
Mar-2013	ND	ND	0.0379	0.000152 J	ND	2.13	2.19	0.0029 J	0.0069 J	0.0016 J	0.0186 J	0.0078 J	ND	1.61	1.62
Oct-2013	ND	ND	0.0414	0.000199 J	ND	2.39	2.43	0.0095 J	0.0074 J	0.0012 J	0.101	0.0559	0.000275 J	1.47	1.42
Mar-2014	0.000599 J	ND	0.0436	0.000386 J	ND	2.67	2.23	0.0046 J	0.0069 J	0.00041 J	0.194	0.003 J	ND	1.87	1.58
Oct-2014	0.000623 J	ND	0.0454	0.00016 J	0.000098 J	2.39	2.4	0.0025 J	0.0074 J	0.0017 J	0.0974	ND	ND	1.89	1.89
Apr-2015	0.000723 J	ND	0.0449	0.00016 J	0.000093 J	2.42	2.49	0.002 J	0.0079 J	0.0022 J	0.137	ND	0.00099 J	1.83	1.9
Nov-2015	0.000329 J	ND	0.041	0.000183 J	0.0001 J	2.56	2.52	0.000845 J	0.0068 J	0.0023 J	0.054	ND	0.000315 J	1.89	1.95
May-2016	ND	ND	0.0411	0.00021 J	ND	2.43	2.18	0.0014 J	0.0065	0.003 J	0.265	ND	ND	2.11	1.89
Oct-2016	ND	ND	0.0474	0.00017 J	ND	2.5	2.55 J+	0.0021 J	0.0066	0.0022 J	0.128 J	ND	0.00017 J	2	2.23 J+
May-2017	ND	ND	0.0508	0.0002 J	ND	2.83	2.32	0.0024 J	0.0085	0.0068	0.177 J	ND	0.00054 J	3.39	2.14
Oct-2017	ND	ND	0.0464	0.00014 J	ND	2.47	2.45	ND	0.0075	0.0017 J	ND	ND	ND	2.07	2.14

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09B***													
May-2018	*ND*	*ND*	*0.0507 J*	*ND*	*ND*	2.9	2.9	*ND*	*0.0078 J*	*ND*	*0.017 J*	*ND*	*ND*	2.4	2.4
Nov-2018	*ND*	*ND*	0.043	*0.00014 JM1*	*0.000091 J*	2.9	2.8	*0.0041 J*	0.0057	0.0029	*0.014 J*	*ND*	*0.000081 J*	2.2	2.2
May-2019	*ND*	*ND*	0.048	*ND*	*ND*	2.8	2.6	*ND*	0.0058	0.0035	*ND*	*ND*	*ND*	2.6	2.4
Oct-2019	*0.00014 J*	*0.00044 J*	0.05	*0.00012 J*	*0.0002 J*	2.5	2.5	*0.0056 J*	0.0056	0.0022	*0.017 J*	*ND*	*ND*	2.5	2.5
May-2020	*0.000061 J*	*ND*	0.047	*0.000093 J*	*ND*	3.1	3	*0.0041 J*	0.0046	0.0023	*0.017 J*	*0.013 J*	*ND*	2.5	2.4
Oct-2020	*ND*	*ND*	0.045	*ND*	*ND*	4.6	4.3	*0.0031 J*	0.0045	*ND*	*0.021 J*	*0.01 J*	*ND*	2.7	2.5
Apr-2021	*ND*	*ND*	0.052	*ND*	*ND*	4.9	4.8	*0.0014 J*	*0.0046 J*	*ND*	*0.053 J*	*ND*	*ND*	2.7	2.8
Oct-2021	*ND*	*ND*	0.051	*ND*	*ND*	4.3	4.6	0.0034	0.0051	*0.002 J*	*0.031 J*	*0.013 J*	*0.000034 J*	2.9	3.1
May-2022	*ND*	*ND*	0.048	*ND*	*ND*	5.6	5	0.0031	0.0048	0.0026	*ND*	*ND*	*ND*	3.1	2.5

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-09B*												
Nov-1993	0.05	NA	ND	NA	4.7	NA	ND	NA	8	NA	NA	NA	0.04
Apr-1994	0.03	NA	ND	NA	1.2	NA	ND	NA	8.28	NA	NA	NA	0.08
Apr-1995	ND	NA	ND	ND	1.7	NA	ND	ND	7.2	NA	ND	ND	0.03
Oct-1996	0.019	0.017	NA	ND	ND	ND	ND	ND	8.9	9.1	ND	0.026	0.16
Apr-1997	0.019	0.017	ND	ND	2.3	4.4	ND	ND	8.4	9.2	ND	ND	0.031
Oct-1997	0.02	0.018	NA	0.018	1.49	ND	ND	ND	11.1	10.9	ND	0.012	0.025
Apr-1998	0.019	0.017	NA	0.018	2.09	1.85	ND	ND	10.2	10.2	ND	ND	0.026
Apr-1999	0.03	0.018	NA	0.025	8.15	1.24	ND	ND	11.8	10.5	ND	0.079	0.056
Oct-1999	0.02	0.017	NA	0.035	2.97	1.29	ND	ND	10.3	9.04	ND	0.055	0.06
Apr-2000	0.02	0.017	NA	0.018	1.88	1.31	ND	ND	10.9	9.63	ND	0.017	0.033
Oct-2000	0.021	0.017	NA	0.025	2.6	1.53	ND	ND	12.6	11.1	ND	0.025	0.036
Apr-2001	0.02	NA	NA	0.012	1.92	NA	ND	ND	12.3	NA	ND	ND	0.015
Sep-2001	0.026	0.018	NA	0.036	3.42	1.42	ND	ND	13.2	11.7	ND	0.061	0.038
Mar-2002	0.025	0.02	NA	0.019	3.42	2.01	ND	ND	14.3	12.2	ND	0.047	0.038
Sep-2002	0.025	0.018	NA	0.015	2.03	1.56	ND	ND	13.2	12.3	ND	0.034	0.028
Mar-2003	0.021	0.018	NA	0.019	2.98	1.45	ND	ND	13.4	12.5	ND	0.025	0.027
Oct-2003	0.028	0.02	NA	0.016	3.2	2.95	ND	ND	14.1	12.9	ND	0.036	0.047
Apr-2004	0.026	0.02	ND	0.016	3.46	2.34	ND	ND	13.3	12.8	ND	0.028	0.108
Oct-2004	0.021	0.02	ND	ND	2.49	ND	ND	ND	13.6	13.1	ND	ND	0.02
Apr-2005	0.03	0.019	ND	0.033	3.31	1.33	ND	ND	15.2	15.1	ND	0.086	0.1
Oct-2005	0.031	0.016	ND	0.034	4.29	1.35	ND	ND	14.3	11.9	ND	0.12	0.069
Mar-2006	ND	ND	ND	ND	1.25	1.15	ND	ND	11	11.8	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09B***												
Sep-2006	0.027	0.017	0.0002	0.024	2.93	1.41	ND	ND	11.4	10.9	ND	0.07	0.046
Mar-2007	0.02	0.016	ND	0.014	2.3	1.48	ND	ND	10.5	10.7	ND	0.019	0.02
Sep-2007	0.02	0.019	ND	0.012	1.66	1.23	ND	ND	11.5	11.6	ND	ND	0.017
Mar-2008	0.021	0.017	ND	0.015	2.29	1.26	ND	ND	11.9	11.4	ND	0.019	0.023
Sep-2008	0.022	0.017	ND	0.019	2.63	1.24	ND	ND	10.2	10.1	ND	0.016	0.049
Mar-2009	0.019	0.016	ND	ND	2.08	1.36	ND	ND	10.6	10.3	ND	ND	0.018
Oct-2009	0.031	0.017	ND	0.023	2.9	1.16	ND	ND	10.7	11	ND	0.058	0.062
Apr-2010	0.029	0.014	ND	0.023	3.54	1.37	ND	ND	11	10.9	ND	0.08	0.043
Oct-2010	0.024	0.02	ND	ND	1.91	1.49	ND	ND	11.1	11.3	ND	ND	0.015
Apr-2011	0.239	0.012	ND	0.011	1.56	1.42	ND	ND	10.6	10.2	ND	ND	0.022
Sep-2011	0.019	0.018	ND	ND	1.71	1.52	ND	ND	11.7	11.3	ND	ND	0.01
Mar-2012	0.045	0.045	ND	ND	1.5	1.51	ND	ND	8.98	9.28	ND	ND	ND
Sep-2012	0.0202	0.02	ND	0.0083 J	1.47	1.37	ND	ND	11.6	11.5	ND	ND	0.0074 J
Mar-2013	0.0199	0.0206	0.000063 J	0.0091 J	1.33	1.36	ND	ND	11	10.9	ND	ND	0.0167
Oct-2013	0.0238	0.0241	ND	0.0081 J	1.24	1.21	ND	ND	9.63	9.33	0.000127 J	0.0052 J	0.0169
Mar-2014	0.0211	0.0218	ND	0.0091 J	1.85	1.44	ND	ND	12.7	10.6	ND	0.000972 J	0.0119
Oct-2014	0.0233	0.0232	0.000034 J	0.0099 J	1.65	1.6	0.00081 J	ND	12.6	12.6	ND	ND	0.0117
Apr-2015	0.0251	0.0248	ND	0.0097 J	1.66	1.61	0.0014 J	ND	12.9	13.2	0.000871 J	ND	0.0152
Nov-2015	0.0223	0.0226	ND	0.0087 J	1.68	1.71	0.000537 J	ND	12.5	12.7	0.00018 J	ND	0.0133
May-2016	0.0235	0.0224	ND	0.0081	1.84	1.65	ND	ND	14.9	12.3	ND	ND	0.0088 J,B
Oct-2016	0.0236 J+	0.0256 J+	ND	0.0099	1.83	1.79	ND	ND	13.1	14.1	ND	0.00068 J	0.0122 J
May-2017	0.0309	0.0254	ND	0.0127	2.25	1.69	ND	ND	50.3	13.2	ND	0.00067 J	0.0208 J
Oct-2017	0.0261	0.0267	ND	0.0084	1.56	1.63	ND	ND	12.9	13.3	ND	ND	0.0092 J
May-2018	0.0293	0.0279	ND	0.0178 J	1.9 J	1.4 J	ND	ND	14.8	14	ND	ND	0.0124 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09B***												
Nov-2018	0.022	0.02	*ND*	0.0093	*1.9 J*	*1.7 J*	*0.0004 J*	*ND*	13.4	13.4	*ND*	0.002	0.011 D6
May-2019	0.026	0.024	*ND*	0.008	*ND*	*ND*	*ND*	*ND*	13.3	12.8	*ND*	*ND*	0.0086
Oct-2019	0.029	0.03	*ND*	0.0073	*1.9 J*	*ND*	*0.00065 J*	*ND*	12.5	13	*ND*	0.0087	0.015
May-2020	0.021	0.02	*ND*	0.0098	*2.2 J*	*1.3 J*	*0.00043 J*	*ND*	15.2	11.8	*ND*	0.0044	0.01
Oct-2020	0.023	0.022	*ND*	0.0084	*ND*	*1.5 J*	*ND*	*ND*	13	12.9	*ND*	*0.0012 J*	*0.015 J*
Apr-2021	0.026	0.029	*ND*	*0.0084 J*	1.7	1.8	*ND*	*ND*	14.5	15.1	*ND*	*0.00073 J*	*0.0078 J*
Oct-2021	0.026	0.028	*ND*	0.0098	1.6	1.6	*0.0011 J*	*ND*	13.1	14	*0.000034 J*	*ND*	0.0097
May-2022	0.031	0.027	*ND*	0.012	1.7	1.5	*ND*	*ND*	15.4	13	*ND*	*ND*	0.017

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09B*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	6	5	4	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	17	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09B*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09B*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.6 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-09B*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	2.1	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	0.6 J	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.1	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.3	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09B***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.49 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	0.39 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.32 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.4 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.3 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09B***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	5.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-09B*															
Oct-2005	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	0.5 J	0.5 J	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.44 J	ND	ND	ND	0.18 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	0.34 J	ND	ND	ND	0.21 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	0.38 J	ND	ND	ND	0.19 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	0.29 J	ND	ND	ND	0.19 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	0.3 J	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09B***															
Oct-2016	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.455 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-09C***											
Nov-1993	9	9	ND	ND	13.3	1.6	ND	5.05	78.9	3.5	38	14.7
Apr-1994	57	31	0.2	ND	14.1	1.5	ND	8.94	143	3.3	71	91.14
Apr-1995	19.6	19.6	ND	17.6	17.6	2.1	ND	5.6	114	3	68	28
Apr-1997	ND	1	ND	ND	18	2.1	ND	NA	NA	ND	68	8
Oct-1997	6	6	0.42	ND	17.2	1.74	ND	5.8	94.5	1.1	59	17
Apr-1998	15	15	0.23	ND	15	1.45	ND	6.66	86.2	1.26	63	25
Apr-1999	ND	ND	0.17	ND	18.2	1.52	ND	5.07	87.3	2.12	88	17
Oct-1999	5	5	0.1	ND	15.6	1.73	ND	5.37	111.2	2.12	110	21
Apr-2000	3	4	ND	ND	17.1	1.8	ND	5.73	79	4.23	83	20
Oct-2000	10.2	NA	ND	ND	17	1.94	ND	5.49	98	5.69	91	26.1
Apr-2001	3.1	NA	ND	ND	15.2	1.36	ND	NA	NA	6.39	68	18.7
Sep-2001	5.1	5.1	ND	ND	16.9	2.63	ND	6.91	100	10.5	90	20.5
Mar-2002	2.8	2.8	ND	ND	17	2.16	ND	5.2	88.3	4.78	95	17.5
Sep-2002	2.8	2.8	ND	ND	17.3	1.85	ND	5.1	99.2	6.62	197	17.8
Mar-2003	5.7	5.7	ND	ND	20.8	1.82	ND	5.4	111.5	11.2	94	18.9
Oct-2003	29	29	ND	ND	17.9	1.98	ND	5.9	113.3	4.71	105	42.5
Apr-2004	7.2	7.2	ND	ND	18.4	1.91	ND	5.4	95.1	2.6	112	18.9
Oct-2004	9.6	9.6	ND	ND	17.9	1.83	ND	5.3	86.8	2.45	74	26.9
Apr-2005	23	23	ND	ND	17.1	1.84	ND	5	92.8	2.97	120	30.5
Oct-2005	5.4	5.4	ND	ND	19.3	1.96	ND	5.4	82.8	4.26	78	14.6
Mar-2006	4.8	4.8	ND	ND	15.5	1.6	ND	5.2	97.9	8.46	72	16.3
Sep-2006	3.8	3.8	ND	ND	16.5	1.83	ND	4.9	92.6	8.75	91	17.6
Mar-2007	4	4	ND	ND	17.2	1.97	ND	5.2	94.1	7.75	73	17.6
Sep-2007	3.2	3.2	ND	ND	18.4	2.35	ND	5.1	85	10.8	80	16.2
Mar-2008	3.5	3.5	ND	ND	19.9	2.49	ND	5.2	84.3	9.06	88	15.3
Sep-2008	4.2	4.2	ND	ND	15.2	1.76	ND	4.9	82.5	9.79	67	15.1
Mar-2009	3.5	3.5	ND	ND	14.4	1.87	ND	4.8	83.5	10	35	14.2
Oct-2009	3.4	3.4	ND	ND	15	1.66	ND	4.9	79.7	9.35	86	16.2
Apr-2010	6.1	6.1	ND	ND	17.5	2.2	ND	4.6	81.1	5.77	62	18.9
Oct-2010	3	3	ND	ND	15.9	2.11	ND	4.2	608	5.13	131	14.5
Apr-2011	33	33	ND	ND	16.1	1.88	0.03	4.5	81.2	5.33	110	38
Sep-2011	2.7	2.7	0.29	ND	16.7	1.77	ND	4.9	72.6	6.5	59	15.4
Mar-2012	3.1	3.1	ND	ND	19.5	2.25	ND	15.4	80.7	ND	76	12
Sep-2012	3.04	3.04	ND	ND	14.3	1.46	ND	4.1	86.3	12.8	72	18
Mar-2013	2.84	2.84	ND	ND	16.7	1.54	ND	3.9	97.1	11.9	65	16.4
Oct-2013	3.32	3.32	ND	ND	16.2	1.6	ND	3.6	94.3	12.5	65	18.1
Mar-2014	2.68	2.68	ND	ND	16.6	1.55	ND	5	91.3	13.5	63	17.1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-09C***										
Oct-2014	ND	ND	ND	11	17	1.57	ND	4.7	90.7	12.4	62	20.6
Apr-2015	2.84	2.84	ND	ND	18.1	2.11	ND	4.2	95.2	11.2	50	19.3
Nov-2015	ND	ND	ND	8 J	19.6	2.29	ND	5	129.4	10.2	58	18.7
May-2016	ND	ND	ND	ND	18.1	2.15	ND	5	151	9.71	66	18.4
Oct-2016	ND	ND	ND	ND	19.3	NA	NA	4.9	149.5	8.32	64	17.5
May-2017	ND	ND	ND	7 J	18.7	2.23	ND	4.9	147.7	10.4	64	24.3
Oct-2017	ND	ND	ND	7 J+	16.7	2.14	ND	4.9	138.3	11.9	50	20
May-2018	4 JB	ND	0.088 J	ND	17.4	0.39	ND	4.6	139.4	12.7	68	22.1
Nov-2018	4 JB	ND	ND	ND	22.5	2.8	ND	4.69	125.1	12	31	23.6
May-2019	20	NA	ND	ND	19.9	2.6	ND	5.6	112.6	11.7	84	39.4
Oct-2019	ND	NA	ND	8.2 J	16.7	2.3	ND	4.77	121.8	15.4	60	25.3
May-2020	ND	NA	ND	ND	19.4	2.6	ND	4.56	123	13.1	89	25.5
Oct-2020	ND	NA	ND	ND	20	2.7	ND	4.53	124.4	13.4	93	27.5
Apr-2021	22	NA	ND	6.1 J	23.3	2.9	ND	4.88	155.3	12.9	80	27.4
Oct-2021	6 J2c	NA	ND	ND	25.5	3.5	ND	4.85	201.4	10.1	67	26.3
May-2022	4 J3c	NA	ND	ND	22.6	3.1	ND	4.62	190.7	9.6 J	61	27.7 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-09C*													
Nov-1993	NA	ND	ND	NA	ND	2.6	NA	0.015	NA	ND	6.4	0.14	ND	2	NA
Apr-1994	NA	ND	ND	NA	ND	33.5	NA	ND	NA	ND	0.25	1.59	ND	1.82	NA
Apr-1995	ND	ND	ND	ND	ND	7.9	NA	ND	ND	ND	ND	ND	ND	2	NA
Oct-1996	ND	ND	0.065	ND	ND	10	6.4	ND	ND	ND	ND	ND	ND	1.7	1.8
Apr-1997	ND	ND	0.042	ND	ND	2.3	2.2	ND	ND	ND	0.22	ND	0.002	1.5	1.5
Oct-1997	ND	ND	0.049	ND	ND	4.65	3.92	ND	0.013	ND	0.49	ND	ND	1.59	1.48
Apr-1998	ND	ND	0.053	ND	ND	7.37	6.97	ND	ND	ND	0.338	ND	ND	1.6	1.48
Apr-1999	ND	ND	0.06	ND	ND	3.68	3	ND	0.016	0.016	0.881	ND	ND	1.99	1.59
Oct-1999	ND	ND	0.061	ND	ND	3.2	2.57	ND	0.013	0.015	0.387	ND	ND	2.24	2.19
Apr-2000	ND	ND	0.072	ND	ND	3.92	3.13	ND	0.015	0.017	1.27	0.11	ND	2.37	2.11
Oct-2000	ND	ND	0.071	ND	ND	6.62	5.77	ND	0.012	0.013	0.777	ND	ND	2.32	2.08
Apr-2001	ND	ND	0.067	ND	ND	3.39	NA	ND	0.012	ND	0.154	NA	ND	2.5	NA
Sep-2001	ND	ND	0.071	ND	ND	4.36	3.13	ND	0.011	0.012	0.366	ND	ND	2.33	2.19
Mar-2002	ND	ND	0.063	ND	ND	3.27	2.67	ND	0.01	ND	0.54	ND	ND	2.26	2.16
Sep-2002	ND	ND	0.072	ND	ND	3.47	2.66	ND	ND	0.017	1.42	0.329	0.002	2.23	2.1
Mar-2003	ND	ND	0.061	ND	ND	4.11	3.51	ND	0.013	ND	0.059	ND	ND	2.09	2.14
Oct-2003	ND	ND	0.07	ND	ND	13.5	8.39	ND	ND	0.012	0.43	ND	ND	2.13	2.09
Apr-2004	ND	0.002	0.059	ND	ND	4.28	3.25	ND	ND	ND	0.312	ND	ND	1.98	1.86
Oct-2004	ND	ND	0.054	ND	ND	7.84	3.16	ND	0.016	0.016	0.676	ND	0.002	1.76	1.61
Apr-2005	ND	0.005	0.091	ND	ND	8.6	3.38	0.023	0.035	0.049	5.71	ND	0.011	2.18	1.56
Oct-2005	ND	ND	0.047	ND	ND	3.15	2.53	ND	0.011	0.012	0.965	ND	0.002	1.65	1.55

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09C***													
Mar-2006	ND	ND	0.053	ND	ND	3.13	3.08	ND	0.011	ND	0.608	ND	ND	2.06	2.12
Sep-2006	ND	ND	0.059	ND	ND	3.21	2.94	ND	0.011	ND	0.373	ND	ND	2.32	2.31
Mar-2007	ND	0.003	0.076	ND	ND	3.32	2.92	ND	0.016	0.014	1.44	ND	0.002	2.25	2.13
Sep-2007	ND	ND	0.066	ND	ND	2.87	2.71	ND	0.011	ND	0.377	ND	ND	2.2	2.18
Mar-2008	ND	0.002	0.066	ND	ND	2.74	2.6	ND	0.01	ND	0.477	ND	ND	2.05	2.1
Sep-2008	ND	0.002	0.06	ND	ND	2.68	2.46	ND	ND	ND	0.492	ND	ND	2.04	2.12
Mar-2009	ND	ND	0.062	ND	ND	2.53	2.35	ND	ND	0.015	1.53	ND	ND	1.91	1.87
Oct-2009	ND	ND	0.063	ND	ND	3.08	2.62	ND	0.012	0.013	1.35	ND	ND	2.06	2.22
Apr-2010	ND	ND	0.069	ND	ND	4	3.41	ND	0.014	0.012	2.1	ND	ND	2.15	1.91
Oct-2010	ND	ND	0.056	ND	ND	2.49	2.42	ND	ND	ND	0.207	ND	ND	2.01	1.91
Apr-2011	ND	ND	0.061	ND	ND	11.3	8.91	ND	0.019	0.014	0.202	ND	ND	2.38	1.85
Sep-2011	ND	ND	0.064	ND	ND	2.56	2.56	ND	ND	ND	0.177	ND	ND	2.18	2.15
Mar-2012	ND	ND	0.036	ND	ND	1.93	1.93	ND	ND	ND	ND	ND	ND	1.75	1.75
Sep-2012	ND	ND	0.0637	0.000327 J	ND	2.89	2.96	0.0023 J	0.0081 J	0.0042 J	0.227	0.0343 J	ND	2.62	2.65
Mar-2013	ND	ND	0.0686	0.00029 J	ND	2.6	3.15	0.0023 J	0.0071 J	0.0027 J	0.0286 J	0.0103 J	ND	2.41	2.82
Oct-2013	ND	ND	0.0751	0.000345 J	0.00013 J	2.72	2.76	0.0028 J	0.008 J	0.0031 J	ND	ND	ND	2.75	2.73
Mar-2014	0.000518 J	ND	0.0717	0.000333 J	0.000115 J	2.95	3.05	0.0025 J	0.008 J	0.0015 J	0.241	0.0045 J	ND	2.37	2.44
Oct-2014	0.001 J	ND	0.0893	0.000437 J	0.000143 J	3.42	3.31	0.0011 J	0.0086 J	0.0042 J	0.102	ND	ND	2.94	2.86
Apr-2015	0.000486 J	ND	0.0873	0.000482 J	0.000129 J	3.26	3.17	0.0016 J	0.0089 J	0.0034 J	0.0461 J	0.009 J	ND	2.72	2.67
Nov-2015	0.000371 J	0.000239 J	0.0776	0.00042 J	0.000141 J	3.3	3.29	0.0013 J	0.0082 J	0.0042 J	0.17	ND	0.000519 J	2.53	2.55
May-2016	ND	ND	0.0732	0.00041 J	ND	3.11	2.77	0.0013 J	0.0081	0.0034 J	0.036 J	ND	ND	2.59	2.32
Oct-2016	ND	ND	0.0711	0.00041 J	ND	3.03	2.97 J+	0.0017 J	0.0084	0.0036 J	0.0493 J	ND	ND	2.4	2.55 J+
May-2017	ND	ND	0.085	0.00039 J	ND	3.62	3.25	0.0017 J	0.01	0.0079	0.159 J	ND	0.00054 J	3.7	2.73
Oct-2017	ND	ND	0.0807	0.00033 J	ND	3.46	3.31	ND	0.0096	0.0031 J	ND	ND	ND	2.76	2.93

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09C***													
May-2018	*ND*	*ND*	*0.0871 J*	*ND*	*0.00014 J*	3.8	3.7	*0.0022 J*	*0.0097 J*	*0.0032 J*	*0.02 J*	*ND*	*ND*	3.1	3
Nov-2018	*ND*	*ND*	0.086	0.0004	*0.00017 J*	4.2	4.1	*0.0064 J*	0.0086	0.0043	0.026	*0.014 J*	*0.000046 J*	3.2	3.2
May-2019	*ND*	*ND*	0.075	*ND*	*ND*	10.3	9.4	*ND*	0.0071	0.0031	*ND*	*ND*	*ND*	3.3	3.1
Oct-2019	*0.00013 J*	*ND*	0.083	*0.00029 J*	*0.00028 J*	4.5	4.7	0.0074	0.0082	0.0033	*0.018 J*	*0.011 J*	*ND*	3.4	3.4
May-2020	*0.000054 J*	*ND*	0.089	*0.0003 J*	*0.00017 J*	4.2	4.2	0.0094	0.011	0.0037	*0.06 J*	*0.019 J*	*ND*	3.7	3.6
Oct-2020	*0.00026 J*	*ND*	0.11	*0.00038 J*	*0.0007 J*	4.5	4.3	0.099	0.0098	0.57	*0.028 J*	*0.014 J*	*0.0014 J*	4	3.7
Apr-2021	*ND*	*0.0029 J*	0.1	*0.00028 J*	*0.00035 J*	4.8	5	*0.0035 J*	0.011	*0.0044 J*	*ND*	*ND*	*ND*	3.7	3.9
Oct-2021	*ND*	*ND*	0.1	*0.00032 J*	*ND*	4.3	4.6	0.0037	0.013	0.0033	*0.016 J*	*0.01 J*	*ND*	3.8	4
May-2022	*ND*	*ND*	0.12	*0.00039 J*	*0.00017 J*	4.6	4.4	0.0059	0.015	0.0044	*0.036 J*	*ND*	*ND*	3.9	3.8

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-09C*												
Nov-1993	0.06	NA	ND	NA	4.3	NA	ND	NA	6.5	NA	NA	NA	0.04
Apr-1994	0.03	NA	ND	NA	3.26	NA	ND	NA	8.87	NA	NA	NA	0.05
Apr-1995	0.01	NA	ND	ND	7.8	NA	ND	ND	7.3	NA	ND	ND	0.02
Oct-1996	0.024	0.023	NA	ND	ND	ND	ND	ND	8	8.1	ND	ND	0.096
Apr-1997	0.018	0.015	ND	ND	2.6	2.3	ND	ND	9.5	10	ND	ND	0.043
Oct-1997	0.023	0.02	NA	0.016	1.74	0.969	ND	ND	9.14	8.95	ND	ND	0.02
Apr-1998	0.019	0.015	NA	ND	1.99	1.61	ND	ND	9.25	8.96	ND	ND	0.017
Apr-1999	0.029	0.02	NA	ND	3.16	1.65	ND	ND	10	9.15	ND	ND	0.028
Oct-1999	0.032	0.031	NA	0.025	1.91	1.78	ND	ND	9.38	8.42	ND	ND	0.033
Apr-2000	0.039	0.035	NA	0.017	1.39	0.689	ND	ND	10.6	9.28	ND	ND	0.032
Oct-2000	0.041	0.032	NA	ND	1.94	1.58	ND	ND	11.5	9.91	ND	ND	0.024
Apr-2001	0.045	NA	NA	ND	1.86	NA	ND	ND	10.7	NA	ND	ND	0.012
Sep-2001	0.042	0.036	NA	0.02	1.79	1.44	ND	ND	11.5	9.26	ND	ND	0.023
Mar-2002	0.039	0.036	NA	ND	1.98	1.34	ND	ND	10.4	9.3	ND	ND	0.019
Sep-2002	0.041	0.034	NA	ND	2.08	1.79	ND	ND	9.83	9.67	ND	ND	0.021
Mar-2003	0.032	0.034	NA	0.012	2.47	1.03	ND	ND	10.1	9.64	ND	ND	0.017
Oct-2003	0.036	0.029	NA	ND	2.86	1.49	ND	ND	12.7	11.9	ND	ND	0.018
Apr-2004	0.032	0.03	ND	ND	2.5	1.95	ND	ND	12.2	12.4	ND	ND	0.01
Oct-2004	0.027	0.022	ND	0.045	3.34	2.15	ND	ND	12.9	11.5	ND	ND	0.086
Apr-2005	0.045	0.018	ND	0.044	3.36	1.23	ND	ND	13.5	11.9	ND	0.035	0.096
Oct-2005	0.023	0.019	ND	0.013	1.79	1.45	ND	ND	11.1	9.58	ND	ND	0.022
Mar-2006	ND	ND	ND	0.012	1.69	1.42	ND	ND	8.26	8.69	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09C***												
Sep-2006	0.047	0.044	ND	ND	1.83	1.69	ND	ND	9.88	9.84	ND	ND	0.017
Mar-2007	0.045	0.042	ND	0.016	2.37	1.51	ND	ND	10.3	9.87	ND	0.012	0.029
Sep-2007	0.046	0.047	ND	ND	1.61	1.41	ND	ND	9.72	9.14	ND	ND	0.018
Mar-2008	0.043	0.044	ND	ND	1.64	1.43	ND	ND	9.61	8.98	ND	ND	0.022
Sep-2008	0.041	0.043	ND	0.012	1.54	1.43	ND	ND	7.7	7.86	ND	ND	0.038
Mar-2009	0.04	0.039	ND	ND	2.02	1.57	ND	ND	8	7.76	ND	ND	0.02
Oct-2009	0.044	0.043	ND	0.017	1.6	1.42	ND	ND	8.01	8.5	ND	ND	0.055
Apr-2010	0.039	0.031	ND	0.016	1.9	1.47	ND	ND	10.5	10	ND	ND	0.03
Oct-2010	0.038	0.035	ND	ND	1.68	1.51	ND	ND	10.1	10.3	ND	ND	0.014
Apr-2011	0.076	0.032	ND	0.014	1.62	1.46	ND	ND	10.2	9.47	ND	ND	0.033
Sep-2011	0.041	0.04	ND	ND	1.77	1.66	ND	ND	9.56	9.44	ND	ND	ND
Mar-2012	0.018	0.019	ND	ND	1.35	1.34	ND	ND	11.8	11.8	ND	ND	ND
Sep-2012	0.0536	0.0546	0.000045 J	0.0081 J	1.6	1.65	ND	ND	8.42	8.5	ND	ND	0.0075 J
Mar-2013	0.0558	0.0621	0.000083 J	0.0074 J	1.38	1.68	0.000739 J	ND	8.32	9.93	ND	ND	0.0144
Oct-2013	0.0658	0.066	ND	0.0076 J	1.6	1.62	0.000585 J	ND	9.71	9.88	0.00019 J	0.0016 J	0.018
Mar-2014	0.0707	0.0719	ND	0.0074 J	1.59	1.57	ND	ND	8.71	8.98	ND	0.000889 J	0.0108
Oct-2014	0.0739	0.0722	ND	0.0079 J	1.76	1.72	0.0016 J	ND	10.2	10.2	ND	ND	0.0176
Apr-2015	0.0757	0.0749	0.000028 J	0.0085 J	1.66	1.61	0.0013 J	ND	10.8	10.6	ND	ND	0.0286
Nov-2015	0.0616	0.0611	ND	0.0079 J	1.75	1.71	0.0012 J	ND	11.5	11.9	0.000156 J	0.000737 J	0.018
May-2016	0.0629	0.0571	ND	0.0084	1.81	1.76	ND	ND	13.3	11.2	ND	ND	0.0099 J,B
Oct-2016	0.0504 J+	0.0559 J+	ND	0.0096	1.81	1.86	ND	ND	12.2	12.7	ND	0.0002 J	0.0108 J
May-2017	0.0644	0.064	ND	0.0112	2.21	1.73	0.00046 J	ND	43	11	ND	0.0005 J	0.0211 J
Oct-2017	0.0721	0.0727	ND	0.0093	1.74	1.82	ND	ND	9.91	10.3	ND	ND	0.0104 J
May-2018	0.0804	0.0772	ND	0.0163 J	2 J	1.4 J	ND	ND	11.2	10.4	ND	ND	0.0128 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09C***												
Nov-2018	0.067	0.065	*ND*	0.011	*1.8 J*	*2.4 J*	*0.00065 J*	*ND*	13.5	14.4	*ND*	0.0021	0.012
May-2019	0.055	0.058	*ND*	0.01	*ND*	*ND*	*ND*	*ND*	12.2	11.9	*ND*	0.01	0.0097
Oct-2019	0.068	0.065	*ND*	0.0095	*2 J*	*ND*	*0.00086 J*	*ND*	11.2	12.1	*ND*	0.0044	0.015
May-2020	0.074	0.069	*ND*	0.013	*2.5 J*	*1.6 J*	*0.00086 J*	*ND*	13.7	11.3	*ND*	*ND*	0.012
Oct-2020	0.6	0.068	*ND*	0.1	*ND*	*2 J*	*ND*	*ND*	11.6	11.9	*ND*	*ND*	0.93
Apr-2021	0.078	0.08	*ND*	0.012	2.1	2.2	*ND*	*ND*	13.8	14.7	*ND*	*ND*	*0.009 J*
Oct-2021	0.079	0.084	*ND*	0.014	1.8	1.9	*ND*	*ND*	15.1	16	*0.00004 J*	*ND*	0.013
May-2022	0.091	0.086	*ND*	0.017	2.1	2	*0.0016 J*	*ND*	16.1	15.6	*ND*	*ND*	0.02

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09C*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	1	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09C*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09C*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.1 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-09C*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.1	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.6	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.4	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	2.9	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	2	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.5	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.6	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.9	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.5	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.2	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.2	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.6	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09C***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.77 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.44 J	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	0.61 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.21 J	ND	ND	ND	ND	ND	0.34 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	0.34 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.16 J	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	0.3 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	0.2 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09C***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.324 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09C***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-09C*															
Oct-2005	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	4.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	1.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	0.89 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.78 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	0.55 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	0.69 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	0.37 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	0.48 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	0.4 J	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09C***															
Oct-2016	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.51 J*	*0.561 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-15***											
Nov-1993	7	7	0.2	ND	3	ND	ND	5.12	24.4	ND	34	2.43
Apr-1994	ND	ND	0.1	ND	3.1	ND	ND	4.89	20.5	1.8	ND	0.33
Aug-1994	ND	ND	ND	ND	2.9	0.3	ND	4.7	21.8	2.6	ND	2.51
Sep-1994	ND	ND	ND	ND	3.2	0.3	ND	5.4	21.8	3.9	46	2.4
Nov-1994	ND	ND	ND	ND	3.1	0.2	ND	5.1	21.6	1.8	27	2.6
Apr-1995	ND	ND	ND	ND	2.9	0.4	ND	5.1	19.3	2.9	7	2.3
Apr-1997	ND	ND	ND	ND	2	0.15	ND	NA	NA	ND	26	1.8
Oct-1997	ND	ND	0.26	ND	2.75	ND	ND	5.68	22.8	7.77	18	ND
Apr-1998	ND	ND	0.24	ND	1.71	0.133	ND	7.32	20	ND	ND	2.6
Apr-1999	ND	ND	0.14	ND	3.45	ND	ND	4.94	19.59	ND	13	2.9
Oct-1999	ND	ND	0.07	ND	3.03	ND	ND	4.85	24.3	ND	29	2.9
Apr-2000	2	2	ND	ND	3.31	ND	ND	5.29	17	ND	ND	3.3
Oct-2000	24	NA	ND	13	2.48	ND	ND	5.17	20.6	ND	41	3.59
Apr-2001	2.2	NA	ND	ND	2.51	ND	ND	NA	NA	ND	26	3.2
Sep-2001	2.2	2.2	ND	ND	11.7	ND	ND	5.07	22	ND	29	3.61
Mar-2002	2	2	ND	ND	2.72	ND	ND	5.3	173.6	ND	42	3.38
Sep-2002	2.8	2.8	ND	ND	3.05	ND	ND	5.2	19.4	ND	16	2.87
Mar-2003	2.5	2.5	ND	ND	31.7	ND	ND	5.1	24.3	8.11	58	2.94
Oct-2003	4	4	ND	ND	3	0.124	ND	5.3	25.7	ND	30	4.33
Apr-2004	2.7	2.7	ND	ND	2.71	0.148	ND	5.1	20.2	ND	28	3.59
Oct-2004	2.7	2.7	ND	ND	2.69	0.113	ND	5.3	17.2	ND	25	4.2
Apr-2005	2.5	2.5	ND	ND	2.86	0.16	ND	5	16.7	ND	32	3
Oct-2005	4.4	4.4	0.21	ND	3.08	0.14	ND	4.4	17.8	ND	37	3.33
Mar-2006	4.2	4.2	ND	ND	2.85	0.16	ND	7.2	21	1.05	83	1.85
Sep-2006	3.4	3.4	ND	ND	2.97	0.16	ND	5	20.7	ND	22	2.8
Mar-2007	4.4	4.4	0.62	ND	3.07	0.16	ND	4.9	18.6	ND	ND	2.82
Sep-2007	4.2	4.2	0.33	ND	9.64	ND	ND	5.6	21.2	ND	33	2.96
Mar-2008	6.7	6.7	0.47	ND	8.02	0.48	ND	4.9	24.8	1.69	56	3.33
Sep-2008	4.4	4.4	ND	ND	3.11	ND	ND	4.9	20.2	ND	22	2.9
Mar-2009	5.2	5.2	ND	ND	3.11	0.11	ND	4.5	21.9	ND	ND	3.16
Oct-2009	5.2	5.2	ND	ND	2.85	0.1	ND	4.6	20.1	ND	37	3.31
Mar-2010	5.5	5.5	ND	ND	2.85	0.1	ND	5.54	42	ND	28	2.81
Oct-2010	4.8	4.8	ND	ND	3.4	0.07	ND	4.8	19.4	ND	18	3.11
Apr-2011	4	4	ND	ND	2.98	0.14	ND	4.8	19.5	ND	49	2.9
Sep-2011	3.9	3.9	0.24	ND	2.97	0.13	ND	4.8	31.9	ND	14	3.32
Mar-2012	3.4	3.4	ND	ND	3.05	0.16	ND	4.8	21.9	ND	ND	3.27
Sep-2012	3.48	3.48	ND	ND	3.07	0.157	ND	3.9	19.6	ND	ND	3.16

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-15***											
Mar-2013	4.36	4.36	*ND*	*ND*	3.38	0.193	*ND*	3.8	16.8	*0.601 J*	23	2.59
Oct-2013	3.8	3.8	*ND*	*ND*	3.25	0.165	*ND*	3.1	18.9	*ND*	*ND*	2.92
Mar-2014	3.64	3.64	*ND*	22	3.3	0.174	*ND*	5.4	23.8	*ND*	*ND*	2.74
Oct-2014	*ND*	*ND*	*ND*	*7 J*	3.59	0.158	*ND*	4.9	19.6	*ND*	*ND*	3.32
Apr-2015	4.64	4.64	*ND*	*ND*	3.25	0.168	*ND*	4.2	21.5	*ND*	*ND*	3.24
Nov-2015	3.48	3.48	*ND*	*ND*	3.48	0.169	*ND*	5.3	27.6	*ND*	*ND*	3.68
May-2016	*ND*	*ND*	*ND*	*ND*	3.37	0.197	*ND*	5.3	33.8	*ND*	*15 J*	3.3
Oct-2016	*ND*	*ND*	*ND*	*ND*	3.27	*NA*	*NA*	5.7	30.3	*0.742 J*	32	3.2
May-2017	2.68	2.68	*ND*	*ND*	3.18	0.192	*ND*	5.2	81.3	*0.512 J*	*ND*	3.2
Oct-2017	3.88	3.88	*ND*	*7 J*	3.23	0.209	*ND*	5.5	36.8	*ND*	*15 J*	3
May-2018	*8 J*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	4.3	97.4	*ND*	39	*3.6 J*
Nov-2018	24	24	*0.052 J*	*ND*	3.4	*0.038 J*	*ND*	6.01	65.5	*ND*	39	*3.7 J*
May-2019	40	*NA*	*ND*	*ND*	3.4	*ND*	*ND*	6.14	72.3	*ND*	20	*ND*
Oct-2019	*2.5 JH1*	*NA*	*ND*	*14.8 J*	3.1	0.13	0.011	5.83	67.3	*ND*	34	3.8
May-2020	12	*NA*	*ND*	*ND*	3.4	*ND*	*ND*	5.98	74.1	*ND*	*ND*	4.1
Oct-2020	*ND*	*NA*	*ND*	*ND*	3.4	*ND*	0.07	6.07	66.2	*ND*	21	3.9
Apr-2021	*ND*	*NA*	*ND*	*10.5 J*	3.5	0.14	*ND*	6.32	106.8	*ND*	25	3.8
Oct-2021	14	*NA*	*ND*	*ND*	3.5	*ND*	*ND*	6.49	126.3	*ND*	*ND*	3.85
May-2022	10	*NA*	*ND*	*ND*	3.4 ML	0.15	0.016	6.32	114.2	*ND*	39	4.3 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15***													
Nov-1993	NA	ND	ND	NA	ND	0.38	NA	ND	NA	ND	67	3	ND	0.36	NA
Apr-1994	NA	ND	ND	NA	ND	0.38	NA	ND	NA	ND	1.5	1	ND	0.25	NA
Aug-1994	NA	ND	ND	NA	ND	0.46	NA	ND	NA	ND	7.1	0.31	ND	0.33	NA
Sep-1994	NA	ND	ND	NA	ND	0.34	NA	ND	NA	ND	6.5	1.7	ND	0.37	NA
Nov-1994	NA	ND	ND	NA	ND	0.45	NA	ND	NA	0.02	4.8	1.6	ND	0.35	NA
Apr-1995	ND	ND	0.7	ND	ND	0.36	NA	ND	ND	ND	8.1	ND	ND	0.35	NA
Oct-1996	ND	ND	0.015	ND	ND	0.55	0.62	ND	ND	ND	26	0.94	0.002	ND	ND
Apr-1997	ND	ND	ND	ND	ND	0.6	0.69	ND	ND	ND	0.6	0.45	ND	ND	ND
Oct-1997	ND	ND	0.011	ND	ND	0.495	0.587	ND	ND	ND	5.37	0.273	ND	0.328	0.322
Apr-1998	ND	ND	0.01	ND	ND	0.5	0.491	ND	ND	ND	26.2	0.201	ND	0.331	0.326
Apr-1999	ND	ND	0.011	ND	ND	0.551	0.543	ND	ND	ND	7.77	0.245	ND	0.372	0.355
Oct-1999	ND	ND	ND	ND	ND	0.508	0.471	ND	ND	ND	12.1	0.396	ND	0.345	0.318
Apr-2000	ND	ND	ND	ND	ND	0.716	0.452	ND	ND	ND	9.48	0.476	ND	0.378	0.304
Oct-2000	ND	ND	ND	ND	ND	0.728	0.667	ND	ND	ND	23.5	16.8	ND	0.43	0.425
Apr-2001	ND	ND	0.012	ND	ND	0.602	NA	ND	ND	ND	7.97	NA	ND	0.401	NA
Sep-2001	ND	ND	0.012	ND	ND	0.738	0.569	ND	ND	ND	24	0.88	ND	0.431	0.386
Mar-2002	ND	ND	0.012	ND	ND	0.713	0.552	ND	ND	ND	15.3	1.81	ND	0.388	0.376
Sep-2002	ND	ND	0.011	ND	ND	0.544	0.513	ND	ND	ND	12.2	0.425	ND	0.366	0.351
Mar-2003	ND	ND	0.012	ND	ND	0.565	0.528	ND	ND	ND	7.18	0.178	ND	0.373	0.349
Oct-2003	ND	ND	0.013	ND	ND	0.956	0.603	ND	ND	0.012	21.5	1.12	ND	0.47	0.408
Apr-2004	ND	ND	ND	ND	ND	0.754	0.548	ND	ND	ND	11.4	0.306	ND	0.415	0.359

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15***													
Oct-2004	*ND*	*ND*	0.013	*ND*	*ND*	0.978	0.536	*ND*	*ND*	*ND*	50.2	0.81	*ND*	0.426	0.366
Apr-2005	*ND*	*ND*	0.012	*ND*	*ND*	0.574	0.566	*ND*	*ND*	*ND*	13.1	0.214	*ND*	0.384	0.371
Oct-2005	*ND*	*ND*	0.012	*ND*	*ND*	0.758	0.559	*ND*	*ND*	*ND*	18.4	0.378	*ND*	0.35	0.324
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	0.271	0.26	*ND*	*ND*	*ND*	10.8	0.27	*ND*	0.285	0.302
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	0.542	0.532	*ND*	*ND*	*ND*	6.1	0.274	*ND*	0.353	0.351
Mar-2007	*ND*	*ND*	0.011	*ND*	*ND*	0.543	0.512	*ND*	*ND*	*ND*	14.6	1.12	*ND*	0.354	0.345
Sep-2007	*ND*	*ND*	0.011	*ND*	*ND*	0.563	0.527	*ND*	*ND*	*ND*	19.1	0.483	*ND*	0.379	0.364
Mar-2008	*ND*	*ND*	0.015	*ND*	*ND*	0.649	0.626	*ND*	*ND*	*ND*	28.5	3.92	*ND*	0.416	0.393
Sep-2008	*ND*	*ND*	0.011	*ND*	*ND*	0.507	0.466	*ND*	*ND*	*ND*	16.8	0.914	*ND*	0.386	0.389
Mar-2009	*ND*	*ND*	0.013	*ND*	*ND*	0.655	0.562	*ND*	*ND*	*ND*	44	2.06	*ND*	0.37	0.352
Oct-2009	*ND*	*ND*	0.012	*ND*	*ND*	0.605	0.558	*ND*	*ND*	*ND*	29.2	12	*ND*	0.436	0.385
Mar-2010	*ND*	*ND*	0.013	*ND*	*ND*	0.541	0.504	*ND*	*ND*	0.011	28	4.21	*ND*	0.354	0.335
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	0.581	0.526	*ND*	*ND*	*ND*	5.14	1.88	*ND*	0.404	0.391
Apr-2011	*ND*	*ND*	0.012	*ND*	*ND*	0.543	0.528	*ND*	*ND*	*ND*	8.19	0.312	*ND*	0.362	0.369
Sep-2011	*ND*	*ND*	0.012	*ND*	*ND*	0.693	0.692	*ND*	*ND*	*ND*	20.6	0.252	*ND*	0.387	0.383
Mar-2012	*ND*	*ND*	0.011	*ND*	*ND*	0.574	0.567	*ND*	*ND*	*ND*	7.42	0.296	*ND*	0.448	0.434
Sep-2012	*ND*	*ND*	0.0117	*0.000263 J*	*ND*	0.636	0.606	*ND*	*0.0042 J*	*0.0053 J*	10.3	0.217	*ND*	0.381	0.372
Mar-2013	*ND*	*ND*	0.0114	*0.000278 J*	*ND*	0.537	0.614	*ND*	*0.004 J*	*0.0076 J*	27.6	0.115	*0.0014 J*	0.303	0.335
Oct-2013	*ND*	*ND*	0.0115	*0.000213 J*	*ND*	0.573	0.508	*0.0025 J*	*0.0044 J*	*0.0033 J*	0.449	0.118	*ND*	0.362	0.345
Mar-2014	*0.000418 J*	*ND*	0.0109	*ND*	*ND*	0.534	0.538	*0.0017 J*	*0.0044 J*	*0.0074 J*	28.4	0.123	*ND*	0.341	0.343
Oct-2014	*0.00056 J*	*ND*	0.0125	*0.000239 J*	*ND*	0.672	0.69	*0.000523 J*	*0.0043 J*	*0.0044 J*	6.7	0.216	*ND*	0.399	0.412
Apr-2015	*0.000993 J*	*ND*	0.0126	*0.000209 J*	*0.000102 J*	0.638	0.648	*0.001 J*	*0.0047 J*	*0.0044 J*	11.6	0.175	*ND*	0.4	0.412
Nov-2015	*ND*	*ND*	0.0132	*0.000321 J*	*0.000099 J*	0.781	0.752	*0.00054 J*	*0.0044 J*	0.0124	26.7	0.234	*0.000304 J*	0.421	0.446
May-2016	*ND*	*ND*	0.0114	*0.00021 J*	*ND*	0.613	0.6	*0.001 J*	0.0042	0.0045	15.5	*0.151 J*	*ND*	0.424	0.381

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15***													
Oct-2016	*ND*	*ND*	0.0129	*0.00022 J*	*ND*	0.644	0.573	*0.0011 J*	0.0041	0.0044	10.6	*0.19 J+*	*ND*	0.378	0.409
May-2017	*ND*	*ND*	0.0124	*0.00019 J*	*ND*	0.58	0.711	*0.0006 J*	0.0044	*0.0032 J*	1.08	0.892	*ND*	0.415	0.428
Oct-2017	*ND*	*ND*	0.0116	*0.00018 J*	*ND*	0.527	0.648	*ND*	0.0042	*0.003 J*	1.43	1.08	*ND*	0.414	0.426
May-2018	*0.000047 J*	*ND*	0.013	*0.0002 J*	*0.000068 J*	*0.73 J*	*0.68 J*	*0.00059 J*	0.0039	0.0056	1.8	1.6	*0.000031 JB*	*0.44 J*	*0.43 J*
Nov-2018	*ND*	*ND*	0.012	*0.000097 J*	*0.000034 J*	*0.71 J*	*0.74 J*	*0.0018 J*	0.0028	0.0022	15.3	13.6	*0.000079 J*	*0.46 J*	*0.46 J*
May-2019	*ND*	*ND*	0.014	*ND*	*ND*	*ND*	*ND*	*ND*	0.0037	*ND*	22	21	*ND*	*ND*	*ND*
Oct-2019	*0.00012 J*	*ND*	0.014	*0.0002 J*	*0.00015 J*	0.75	*0.78 J*	0.0074	0.0031	0.0028	24.1	13.8	*0.000074 J*	0.48	*0.49 J*
May-2020	*0.00022 J*	*0.00032 J*	0.017	0.00034	*0.00011 J*	0.78	*0.78 J*	*0.0046 J*	0.0032	0.0066	52.2	16.9	*ND*	0.51	*0.52 J*
Oct-2020	*0.00046 J*	*ND*	0.019	*0.00062 J*	*ND*	0.76	*0.72 J*	*0.0048 J*	0.0044	0.012	60.9	9.5	*ND*	0.49	*0.47 J*
Apr-2021	*ND*	*ND*	0.016	*ND*	*ND*	*0.73 J*	*0.72 J*	*0.00041 J*	*0.0029 J*	*ND*	25	24.9	*ND*	0.48	0.5
Oct-2021	*0.000049 JB*	*ND*	0.015	*ND*	*ND*	0.75	0.79	*0.0017 J*	0.0027	*0.001 J*	22.9	20.6	*ND*	*0.48 J*	0.51
May-2022	*ND*	*ND*	0.015	*ND*	*ND*	0.83	0.87	*0.0015 J*	0.0029	*0.0023 J*	31.7	21.3	*ND*	0.54	0.57

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-15*												
Nov-1993	0.08	NA	ND	NA	0.58	NA	ND	NA	1.6	NA	NA	NA	ND
Apr-1994	0.05	NA	ND	NA	0.34	NA	ND	NA	1.2	NA	NA	NA	ND
Aug-1994	0.01	NA	ND	NA	0.49	NA	ND	NA	1.1	NA	NA	NA	ND
Sep-1994	0.02	NA	ND	NA	0.4	NA	ND	NA	1.3	NA	NA	NA	0.03
Nov-1994	0.04	NA	ND	NA	0.47	NA	ND	NA	1.2	NA	NA	NA	0.02
Apr-1995	0.04	NA	ND	ND	0.06	NA	ND	ND	1.2	NA	ND	ND	0.02
Oct-1996	0.02	0.01	NA	ND	ND	ND	ND	ND	1.9	1.8	ND	ND	0.049
Apr-1997	0.011	ND	ND	ND	ND	2	ND	ND	1.9	1.4	ND	ND	ND
Oct-1997	ND	0.011	NA	ND	0.922	ND	ND	ND	1.29	1.36	ND	ND	ND
Apr-1998	ND	0.011	NA	ND	1.64	ND	ND	ND	1.4	1.33	ND	ND	0.03
Apr-1999	ND	ND	NA	ND	0.972	0.732	ND	ND	1.52	1.45	ND	ND	ND
Oct-1999	ND	ND	NA	ND	ND	0.831	ND	ND	1.43	1.32	ND	ND	ND
Apr-2000	0.012	0.01	NA	ND	ND	ND	ND	ND	2.95	1.33	ND	ND	ND
Oct-2000	0.184	0.176	NA	ND	0.782	0.661	ND	ND	1.69	1.69	ND	ND	ND
Apr-2001	0.014	NA	NA	ND	1.08	NA	ND	ND	1.62	NA	ND	ND	ND
Sep-2001	0.01	0.013	NA	ND	0.816	0.478	ND	ND	2.38	1.5	ND	ND	ND
Mar-2002	0.022	0.024	NA	ND	1.95	1.06	ND	ND	2.33	1.47	ND	ND	ND
Sep-2002	ND	ND	NA	ND	0.583	0.568	ND	ND	1.48	1.44	ND	ND	ND
Mar-2003	ND	ND	NA	ND	1.16	1.1	ND	ND	1.5	1.4	ND	ND	ND
Oct-2003	0.016	0.015	NA	ND	2.54	1	ND	ND	2.4	1.52	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.67	1	ND	ND	1.33	1.43	ND	ND	ND
Oct-2004	ND	0.014	0.0002	ND	1.26	0.739	ND	ND	2	1.52	ND	ND	0.014

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-15***												
Apr-2005	ND	ND	ND	ND	0.74	0.74	ND	ND	1.46	1.43	ND	ND	ND
Oct-2005	0.01	ND	ND	ND	0.712	0.665	ND	ND	1.85	1.23	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	1.14	1.11	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.633	0.694	ND	ND	1.29	1.27	ND	ND	ND
Mar-2007	0.016	0.013	ND	ND	0.621	0.563	ND	ND	1.3	1.24	ND	ND	ND
Sep-2007	ND	ND	ND	ND	0.574	ND	ND	ND	1.48	1.38	ND	ND	ND
Mar-2008	0.031	0.041	ND	ND	0.809	0.745	ND	ND	1.59	1.43	ND	ND	ND
Sep-2008	ND	ND	ND	ND	0.567	0.557	ND	ND	1.32	1.3	ND	ND	0.023
Mar-2009	0.018	0.019	ND	ND	0.665	0.684	ND	ND	1.48	1.36	ND	ND	0.047
Oct-2009	0.152	0.135	ND	ND	0.576	0.573	ND	ND	1.47	1.57	ND	ND	ND
Mar-2010	0.086	0.052	0.0002	0.018	0.806	0.714	ND	ND	1.21	1.47	ND	ND	ND
Oct-2010	0.017	0.023	ND	ND	0.592	0.542	ND	ND	1.42	1.38	ND	ND	0.014
Apr-2011	0.01	ND	ND	ND	ND	ND	ND	ND	1.33	1.28	ND	ND	ND
Sep-2011	0.013	ND	ND	ND	0.753	0.735	ND	ND	1.64	1.58	ND	ND	0.012
Mar-2012	ND	ND	ND	ND	0.65	0.63	ND	ND	1.45	1.39	ND	ND	ND
Sep-2012	0.01 J	0.0077 J	ND	0.0062 J	0.692	0.666	ND	ND	1.43	1.37	ND	ND	0.0068 J
Mar-2013	0.0122	0.0069 J	0.000141 J	0.0059 J	0.546	0.605	ND	ND	1.18	1.27	ND	ND	0.0155
Oct-2013	0.0074 J	0.0068 J	ND	0.0065 J	0.686	0.644	ND	ND	1.36	1.31	0.000103 J	0.0011 J	0.014
Mar-2014	0.0137	0.007 J	ND	0.0066 J	0.646	0.666	ND	ND	1.35	1.39	ND	ND	0.0084 J
Oct-2014	0.0095 J	0.008 J	0.000027 J	0.0061 J	0.711	0.721	ND	ND	1.65	1.69	ND	ND	0.009 J
Apr-2015	0.0101	0.0079 J	ND	0.0067 J	0.764	0.774	0.001 J	ND	1.59	1.63	ND	ND	0.0125
Nov-2015	0.0151	0.009 J	ND	0.0065 J	0.739	0.779	ND	ND	1.61	1.67	0.000123 J	ND	0.0148
May-2016	0.0109	0.0071	ND	0.0067	0.901	0.764	ND	ND	1.57	1.38	ND	ND	0.0075 J,B
Oct-2016	0.0101	0.0083 J+	ND	0.0061	0.688	0.757	ND	ND	1.44	1.57	ND	ND	0.009 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-15***												
May-2017	0.0119	0.0149	*ND*	0.006	0.794	0.801	*ND*	*ND*	1.48	1.5	*ND*	*ND*	*0.006 J*
Oct-2017	0.0175	0.0191	*ND*	0.006	0.81	0.815	*ND*	*ND*	1.53	1.57	*ND*	*ND*	*0.006 J*
May-2018	0.022	0.023	*ND*	0.007	*0.94 J*	*ND*	*0.00012 J*	*0.0008 J*	*1.8 J*	*1.5 J*	*ND*	0.0025	0.012
Nov-2018	0.16	0.16	*ND*	0.005	*ND*	*ND*	*0.00014 J*	*ND*	*1.5 J*	*1.6 J*	*ND*	*ND*	0.012
May-2019	0.17	0.16	*ND*	0.0052	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.011
Oct-2019	0.19	0.16	*ND*	0.0057	*ND*	*ND*	*ND*	*ND*	*ND*	*2 J*	*ND*	0.006	0.011
May-2020	0.25	0.22	*ND*	0.0053	*ND*	*ND*	*ND*	*ND*	*1.7 J*	*1.8 J*	0.00059	0.0034	0.0099
Oct-2020	0.18	0.15	*ND*	0.0074	*ND*	*ND*	*ND*	*ND*	*1.8 J*	*ND*	*ND*	*0.00064 J*	*0.013 J*
Apr-2021	0.17	0.18	*ND*	*0.0027 J*	0.79	0.88	*ND*	*ND*	2	2	*ND*	*0.00061 J*	*ND*
Oct-2021	0.22	0.234	*ND*	0.005	0.75	0.81	*ND*	*ND*	1.7	1.9	*ND*	*ND*	*0.0019 J*
May-2022	0.25	0.25	*ND*	0.0047	0.94	0.83	*ND*	*ND*	2.1	2	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.7	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.7	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	5.1	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	7.2	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	37	ND
Apr-2005	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7	ND
Mar-2006	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.48 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.51 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.51 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	0.67 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*0.74 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.368 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-15*															
Nov-1993	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	1.5	NA	1.2	NA	ND	ND	ND	NA	ND	NA	0.7 J	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	0.7 J
Sep-2001	ND	ND	ND	0.9 J	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.5 J
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15***															
Oct-2004	ND	ND	ND	1.5	ND	1.4	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	0.8 J	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	1.3
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	1
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.9 J
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	1.1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	0.8 J
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	1.4
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	1.9
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	1.1
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	1.2
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	0.9 J
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.68 J	0.44 J
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.77 J	0.58 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	0.73 J	0.59 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.85 J	0.57 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.73 J	0.76 J
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.69 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*0.78 J*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.6 J*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.6 J*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.6 J*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.6 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.1	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	1.3 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.1	2.1 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.463 J*	*0.419 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15***															
Nov-1993	*ND*	*ND*	3.7	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Aug-1994	*0.5 J*	*ND*	3.1	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*0.8 J*	*NA*	*ND*	*0.9 J*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15***															
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1.7 R	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	2	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.74 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.52 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.68 J*	*ND*	*ND*	*ND*	*ND*	*0.22 J*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.84 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.61 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.611 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-15B***											
Nov-1993	ND	ND	0.3	75.6	5.3	ND	ND	4.53	39.5	6.6	46	5.78
Apr-1994	ND	ND	ND	ND	5.1	ND	ND	4.8	30.3	1.6	7	0.8
Aug-1994	ND	ND	0.1	ND	6.3	0.3	ND	4.5	42.7	5.8	40	5.9
Sep-1994	ND	ND	ND	ND	5.5	0.3	ND	4.9	32.6	5.1	36	4.4
Nov-1994	ND	ND	ND	ND	6.1	ND	ND	4.6	43.3	6.6	12	5.6
Apr-1995	ND	ND	0.2	ND	6.2	ND	ND	4.7	37.3	4.4	5	4.8
Apr-1997	ND	5	ND	ND	5	0.06	ND	NA	NA	6.7	51	7.7
Oct-1997	ND	ND	0.92	ND	4.17	ND	ND	5.48	50.3	7.77	37	7.5
Apr-1998	ND	ND	ND	ND	4.2	ND	ND	6.72	51.3	1.35	29	5.7
Apr-1999	ND	ND	0.17	ND	7.53	ND	ND	4.38	40.2	1.18	41	6.8
Oct-1999	ND	ND	0.14	ND	5.43	ND	ND	4.32	44.8	5.53	33	6.1
Apr-2000	2	2	ND	ND	8.41	ND	ND	5.55	38	ND	35	7.9
Oct-2000	30	NA	ND	ND	8.09	ND	ND	4.69	40.5	4.93	36	7.36
Apr-2001	2.6	NA	ND	ND	9.2	ND	ND	NA	NA	ND	39	9.4
Sep-2001	2.2	2.2	ND	ND	16	ND	ND	4.89	71	7.37	53	13.1
Mar-2002	ND	ND	ND	ND	20.6	ND	ND	4.9	72.8	1.15	35	13.9
Sep-2002	3.2	3.2	ND	ND	16	ND	ND	5.5	64.1	1.57	57	12
Mar-2003	5.4	5.4	ND	ND	161	ND	ND	5.8	74.9	14.5	73	12.3
Oct-2003	2.9	2.9	ND	ND	10.4	ND	ND	5.4	54.8	1.98	14	9.25
Apr-2004	3.3	3.3	ND	ND	7.79	ND	ND	4.6	46.3	1.97	37	6.99
Oct-2004	2	2	ND	ND	7.13	ND	ND	4.8	46.1	5	47	7.2
Apr-2005	4.1	4.1	ND	ND	9.37	ND	ND	4.4	50.1	5.11	59	9.2
Oct-2005	3.7	3.7	ND	ND	8.61	ND	ND	4.2	41.9	2.79	48	6.13
Mar-2006	5.2	5.2	ND	ND	12.3	ND	ND	7.1	51.7	4.13	47	8.93
Sep-2006	4.4	4.4	ND	ND	10.2	ND	ND	7.1	51.7	4.11	26	8.95
Mar-2007	4.5	4.5	ND	ND	9.49	ND	ND	4.3	49.6	3.44	14	8.09
Sep-2007	1.3	1.3	0.31	ND	9.97	ND	ND	5.3	45.8	8.48	41	6.17
Mar-2008	3.9	3.9	0.47	ND	11.7	ND	ND	4.2	51.2	14.4	20	8.23
Sep-2008	3.8	3.8	ND	ND	8.06	ND	ND	4.3	52.7	8.14	40	8.1
Mar-2009	4.6	4.6	ND	ND	10	ND	ND	4.2	57.5	8.04	ND	7.71
Oct-2009	2.8	2.8	ND	ND	11.2	ND	ND	4.3	60.7	4.44	35	9.12
Mar-2010	2.8	2.8	ND	ND	14.8	ND	ND	4.42	83	5.87	53	9.44
Oct-2010	1.6	1.6	ND	ND	9.94	ND	ND	4.2	58.9	8.79	30	9.04
Apr-2011	3.2	3.2	ND	ND	7.25	0.18	0.08	4	51.3	5.24	31	8
Sep-2011	3.1	3.1	ND	ND	11.9	ND	ND	4.1	58.7	4.46	46	8.71
Mar-2012	1.9	1.9	ND	ND	13.5	ND	ND	3.5	71.4	7.38	38	8.96
Sep-2012	1.4	1.4	ND	ND	10.7	ND	ND	3.2	57.5	5.83	42	8.62

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-15B***											
Mar-2013	3.8	3.8	*ND*	*ND*	8.6	0.731	*0.0348 J*	3.1	46.3	3	37	7.63
Oct-2013	3.56	3.56	*ND*	*ND*	14.8	0.072	*ND*	3	66.4	3.33	*ND*	10.9
Mar-2014	3.6	3.6	*ND*	21	13	0.119	*ND*	4.8	77.2	3.59	46	9.57
Oct-2014	*ND*	*ND*	*ND*	*ND*	9.14	*ND*	*ND*	4.3	47.3	6.05	*ND*	7.47
Apr-2015	1	1	*ND*	*ND*	13.3	0.0959	*ND*	3.5	65.7	7.62	37	8.89
Nov-2015	*ND*	*ND*	*ND*	*8 J*	15.5	*ND*	*ND*	4.6	90.5	7.22	26	10.4
May-2016	*ND*	*ND*	*ND*	*ND*	14	0.107	*ND*	4.6	105	7.39	44	9.9
Oct-2016	*ND*	*ND*	*ND*	*ND*	16.8	*NA*	*NA*	4.6	109.3	4.72	48	10.7
May-2017	*ND*	*ND*	*ND*	*ND*	14.9	0.157	*ND*	4.5	111.2	5.24	38	11.2
Oct-2017	*ND*	*ND*	*0.0868 J*	*ND*	15.8	0.0769	*ND*	4.7	118.5	6.26	46	13.4
May-2018	*1 J*	*ND*	*0.086 J*	*ND*	15.7	*ND*	*ND*	5	33.9	*5.1 J*	60	13.6
Nov-2018	*2 JB*	*ND*	*0.071 J*	*7.9 J*	15.5	*0.083 J*	*ND*	4.31	76.9	*ND*	44	10.4
May-2019	*ND*	*NA*	*ND*	*ND*	17.2	*ND*	*ND*	4.21	62.6	*ND*	20	9
Oct-2019	*ND*	*NA*	*ND*	*6 J*	12.8	0.2	*0.0074 J*	4.11	74.2	*5.5 J*	42	8.9
May-2020	*ND*	*NA*	*ND*	*6.9 J*	30.5	0.56	*ND*	3.97	126	*ND*	48	20.8
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	23.7	0.25	*0.0065 J*	3.99	107.1	5.4	66	16.7
Apr-2021	*ND*	*NA*	*ND*	*6.1 J*	14.7	0.34	*ND*	4.36	90	*ND*	19	9.9
Oct-2021	*ND*	*NA*	*ND*	*ND*	18.7	0.27	*ND*	4.35	137.7	*ND*	29	12.2
May-2022	*ND*	*NA*	*ND*	*5.6 J*	47.9	0.56	*ND*	4.02	252.8	*ND*	113	27.9 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15B***													
Nov-1993	NA	ND	ND	NA	ND	0.5	NA	ND	NA	ND	1.3	0.08	ND	1.1	NA
Apr-1994	NA	ND	ND	NA	ND	0.6	NA	ND	NA	ND	ND	ND	ND	ND	NA
Aug-1994	NA	ND	ND	NA	ND	0.75	NA	ND	NA	ND	ND	ND	ND	0.97	NA
Sep-1994	NA	ND	ND	NA	ND	0.51	NA	ND	NA	ND	ND	ND	ND	0.75	NA
Nov-1994	NA	ND	ND	NA	ND	0.61	NA	ND	NA	0.03	ND	ND	ND	1	NA
Apr-1995	ND	ND	0.8	ND	ND	0.36	NA	ND	ND	ND	0.23	ND	ND	0.95	NA
Oct-1996	ND	ND	0.13	0.002	ND	1.2	1.2	ND	ND	ND	ND	ND	ND	0.87	0.87
Apr-1997	ND	ND	0.086	0.002	ND	1.4	1	ND	ND	ND	ND	ND	ND	0.96	0.75
Oct-1997	ND	ND	0.157	0.004	ND	1.19	1.21	ND	0.013	0.015	ND	ND	ND	1.26	1.26
Apr-1998	ND	ND	0.031	ND	ND	1.09	1.09	ND	ND	ND	0.124	0.226	ND	0.72	0.831
Apr-1999	ND	ND	0.032	ND	ND	1.22	1.2	ND	ND	0.018	0.303	0.3	ND	0.913	0.891
Oct-1999	ND	ND	0.028	ND	ND	0.906	0.902	ND	ND	0.012	0.445	0.263	ND	0.849	0.817
Apr-2000	ND	ND	0.027	ND	ND	1.77	1.57	ND	ND	0.012	0.054	0.053	ND	0.835	0.906
Oct-2000	ND	ND	0.052	ND	ND	1.13	1.12	ND	ND	0.123	0.083	0.077	ND	1.1	1.06
Apr-2001	ND	ND	0.038	ND	ND	1.64	NA	ND	0.01	ND	0.234	NA	ND	1.28	NA
Sep-2001	ND	ND	0.051	ND	ND	2.16	1.96	ND	0.013	0.011	0.556	0.326	ND	1.86	1.76
Mar-2002	ND	ND	0.052	ND	ND	2.3	2.21	ND	0.019	0.013	0.48	0.469	ND	1.99	1.91
Sep-2002	ND	ND	0.045	ND	ND	2.01	1.97	ND	0.015	ND	0.505	0.447	ND	1.69	1.69
Mar-2003	ND	ND	0.046	ND	ND	2.19	2.18	ND	0.015	0.01	0.24	0.245	ND	1.65	1.72
Oct-2003	ND	ND	0.038	ND	ND	1.69	1.41	ND	0.011	0.011	0.242	0.171	ND	1.22	1.21
Apr-2004	ND	ND	0.041	ND	ND	1.15	1.12	ND	ND	0.013	0.088	0.075	ND	1	1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15B***													
Oct-2004	ND	ND	0.061	ND	ND	1.13	1.06	ND	0.01	ND	0.089	ND	ND	1.06	1.05
Apr-2005	ND	ND	0.056	ND	ND	1.54	1.48	ND	0.011	ND	0.126	0.108	ND	1.3	1.26
Oct-2005	ND	ND	0.034	ND	ND	1.01	0.974	ND	ND	ND	0.098	0.095	ND	0.874	0.819
Mar-2006	ND	ND	0.037	ND	ND	1.34	1.22	ND	0.01	ND	ND	ND	ND	1.35	1.29
Sep-2006	ND	ND	0.034	ND	ND	1.44	1.39	ND	0.013	ND	0.214	0.214	ND	1.3	1.29
Mar-2007	ND	ND	0.042	ND	ND	1.31	1.27	ND	0.012	0.012	0.174	0.17	ND	1.17	1.17
Sep-2007	ND	ND	0.035	ND	ND	0.839	0.801	0.012	ND	ND	0.561	0.498	ND	0.991	0.967
Mar-2008	ND	ND	0.034	ND	ND	1.2	1.1	ND	0.011	ND	0.943	0.85	ND	1.27	1.16
Sep-2008	ND	ND	0.037	ND	ND	1.18	1.04	ND	0.01	ND	1.49	1.36	ND	1.26	1.22
Mar-2009	ND	ND	0.032	ND	ND	1.19	1.17	ND	ND	0.013	1.52	1.58	ND	1.15	1.24
Oct-2009	ND	ND	0.037	ND	ND	1.23	1.2	ND	0.01	ND	1.87	1.74	ND	1.47	1.43
Mar-2010	ND	ND	0.059	ND	ND	1.34	1.3	ND	0.012	0.019	1.82	1.54	ND	1.48	1.43
Oct-2010	ND	ND	0.069	0.002	ND	1.23	1.16	ND	0.011	0.012	1.44	1.38	ND	1.45	1.36
Apr-2011	ND	ND	0.05	ND	ND	1.16	1.15	ND	0.011	ND	1.16	1.17	ND	1.24	1.26
Sep-2011	ND	ND	0.057	ND	ND	1.33	1.35	ND	0.012	ND	1.58	1.54	ND	1.31	1.35
Mar-2012	ND	ND	0.08	0.003	ND	1.13	1.16	ND	0.012	0.011	1.22	1.22	ND	1.49	1.5
Sep-2012	ND	ND	0.0504	0.0018 J	ND	1.21	1.19	0.0012 J	0.0122	0.0087 J	1.29	1.3	ND	1.36	1.38
Mar-2013	ND	ND	0.039	0.000838 J	ND	1.11	1.21	ND	0.0114	0.0078 J	0.125	0.126	0.0013 J	1.18	1.24
Oct-2013	ND	ND	0.0564	0.000901 J	0.000222 J	1.35	1.3	0.0115	0.0157	0.0089 J	0.104	0.0962	ND	1.83	1.76
Mar-2014	0.000563 J	ND	0.0422	ND	0.000177 J	1.27	1.32	0.0013 J	0.0143	0.0103	0.116	0.108	ND	1.55	1.59
Oct-2014	0.000751 J	ND	0.0443	0.000845 J	0.000166 J	1.07	1.04	0.000391 J	0.0109	0.0084 J	0.55	0.551	ND	1.17	1.16
Apr-2015	0.0011 J	ND	0.0609	0.0013 J	0.000297 J	1.25	1.25	0.000321 J	0.0144	0.0095 J	1.13	1.16	ND	1.4	1.45
Nov-2015	0.000315 J	ND	0.0639	0.0018 J	0.000282 J	1.48	1.46	0.000671 J	0.0158	0.0109	1.35	1.34	0.000298 J	1.63	1.63
May-2016	ND	ND	0.0709	0.0017	0.00024 J	1.41	1.24	ND	0.0165	0.0093	1.21	1.18	ND	1.56	1.51

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15B***													
Oct-2016	*ND*	*ND*	0.0517	*0.00095 J*	*0.00025 J*	1.47	1.37	*0.00062 J*	0.0178	0.0082	0.731	*0.738 J+*	*ND*	1.71	1.76
May-2017	*ND*	*ND*	0.0556	*0.00068 J*	*0.00026 J*	1.38	1.67	*0.0017 J*	0.0181	0.0075	*0.116 J*	*0.103 J*	*ND*	1.89	1.87
Oct-2017	*ND*	*ND*	0.0613	*0.00069 J*	*0.00025 J*	1.69	1.67	*ND*	0.0187	0.0075	*ND*	*ND*	*ND*	2.22	2.2
May-2018	*0.00011 J*	*ND*	0.06	0.00065	*0.00029 J*	1.9	1.8	*0.00051 J*	0.0136	0.0068	*0.013 J*	*ND*	*0.00014 JB*	2.1	2
Nov-2018	*ND*	*ND*	0.052	0.00073	*0.00022 J*	1.3	1.4	*0.0018 J*	0.013	0.0049	0.022	*0.018 J*	*0.000077 J*	1.7	1.8
May-2019	*ND*	*ND*	0.045	0.00088	*ND*	1.3	1.4	*ND*	0.011	0.0056	*ND*	0.042	*ND*	1.4	1.4
Oct-2019	*0.0001 J*	*ND*	0.046	0.00091	*0.00032 J*	1.3	1.3	*0.0049 J*	0.01	0.007	*0.02 J*	*0.011 J*	*0.000095 J*	1.4	1.3
May-2020	*0.000085 J*	*ND*	0.078	0.0011	*0.00037 J*	2.8	2.7	*0.0055 J*	0.024	0.011	*0.015 J*	0.063	*ND*	3.4	3.2
Oct-2020	*ND*	*ND*	0.087	*0.0011 JM1*	*ND*	2.2	2.1	*0.0034 JM1*	0.021	*0.0095 J*	*0.017 JB*	*0.02 J*	*ND*	2.7	2.6
Apr-2021	*ND*	*ND*	0.054	*0.00056 J*	*ND*	1.2	1.3	*0.00054 J*	0.013	0.0052	*ND*	*ND*	*ND*	1.7	1.7
Oct-2021	*0.000053 JB*	*ND*	0.075	0.0013	*0.00007 J*	1.5	1.6	*0.0015 J*	0.017	0.011	*0.011 J*	*0.016 J*	*0.000046 J*	2	2.1
May-2022	*ND*	*ND*	0.15	0.0015	0.00057	3.8	4	0.0026	0.038	0.014	*ND*	*ND*	0.0019	4.5	4.7

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-15B*												
Nov-1993	0.18	NA	ND	NA	0.82	NA	ND	NA	2.1	NA	NA	NA	0.03
Apr-1994	0.06	NA	ND	NA	0.85	NA	ND	NA	2.9	NA	NA	NA	0.01
Aug-1994	0.1	NA	ND	NA	0.98	NA	ND	NA	2.3	NA	NA	NA	0.06
Sep-1994	0.11	NA	ND	NA	0.67	NA	ND	NA	2.2	NA	NA	NA	0.05
Nov-1994	0.14	NA	ND	NA	0.72	NA	ND	NA	2.1	NA	NA	NA	0.05
Apr-1995	ND	NA	ND	ND	1	NA	ND	ND	2	NA	ND	ND	0.05
Oct-1996	0.25	0.23	NA	ND	ND	ND	ND	ND	2.5	2.4	ND	ND	0.082
Apr-1997	0.095	0.079	ND	ND	ND	ND	ND	ND	3.1	2.3	ND	ND	0.05
Oct-1997	0.271	0.272	NA	0.011	ND	ND	ND	ND	1.96	1.9	ND	ND	0.079
Apr-1998	0.013	0.033	NA	0.013	0.811	1.07	ND	ND	2.54	2.55	ND	ND	0.023
Apr-1999	0.015	0.018	NA	ND	1.07	1.59	ND	ND	3.18	2.92	ND	ND	0.016
Oct-1999	ND	0.01	NA	ND	ND	0.839	ND	ND	3.1	2.89	ND	ND	0.019
Apr-2000	ND	ND	NA	ND	0.814	0.739	ND	ND	3.15	3.18	ND	ND	0.012
Oct-2000	0.041	0.039	NA	ND	1.37	1.26	ND	ND	3.58	3.38	ND	ND	0.027
Apr-2001	0.012	NA	NA	ND	1.18	NA	ND	ND	4.07	NA	ND	ND	0.021
Sep-2001	0.021	0.018	NA	0.025	1.4	1.14	ND	ND	7.22	5.84	ND	ND	0.028
Mar-2002	0.02	0.019	NA	0.023	1.69	1.17	ND	ND	7.55	7.17	ND	ND	0.034
Sep-2002	0.017	0.017	NA	0.02	1.23	1.12	ND	ND	7.03	6.93	ND	ND	0.025
Mar-2003	0.018	0.018	NA	0.018	1.27	1.41	ND	ND	7.33	7.02	ND	ND	0.026
Oct-2003	0.018	0.015	NA	ND	2.98	1.34	ND	ND	6.29	5.35	ND	ND	0.024
Apr-2004	0.034	0.044	ND	ND	1.57	1.55	ND	ND	4.37	4.11	ND	ND	0.019
Oct-2004	0.095	0.108	0.0003	ND	1.5	1.43	ND	ND	3.97	3.44	ND	ND	0.033

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-15B***												
Apr-2005	0.054	0.074	ND	ND	1.21	1.16	ND	ND	4.38	4.11	ND	ND	0.027
Oct-2005	0.02	0.031	ND	ND	0.945	0.886	ND	ND	3.35	3.04	ND	ND	0.017
Mar-2006	ND	ND	ND	0.014	0.917	0.9	ND	ND	5	4.67	ND	ND	ND
Sep-2006	0.018	0.019	ND	0.015	1.04	1.03	ND	ND	4.26	4.19	ND	ND	0.018
Mar-2007	0.025	0.029	ND	0.014	0.933	0.866	ND	ND	3.9	3.78	ND	ND	0.025
Sep-2007	0.035	0.034	ND	ND	0.564	0.521	ND	ND	2.6	2.52	ND	ND	0.022
Mar-2008	0.024	0.022	0.0004	ND	0.877	0.808	ND	ND	3	2.74	ND	ND	0.023
Sep-2008	0.03	0.029	ND	0.013	0.678	0.678	ND	ND	3.02	2.95	ND	ND	0.031
Mar-2009	0.017	0.018	0.0008	ND	0.799	0.807	ND	ND	3.36	3.59	ND	ND	0.029
Oct-2009	0.035	0.032	ND	0.011	0.618	0.641	ND	ND	4.09	3.99	ND	ND	0.026
Mar-2010	0.052	0.049	ND	0.014	0.912	0.839	ND	ND	4.64	4.99	ND	ND	0.033
Oct-2010	0.128	0.126	ND	0.017	0.628	0.549	ND	ND	4.3	4.05	ND	ND	0.049
Apr-2011	0.049	0.049	ND	0.011	0.552	0.536	ND	ND	3.05	3.09	ND	ND	0.028
Sep-2011	0.051	0.05	ND	0.012	0.82	0.796	ND	ND	4.91	4.99	ND	ND	0.033
Mar-2012	0.07	0.071	ND	0.013	0.728	0.707	ND	ND	5.61	5.52	ND	ND	0.037
Sep-2012	0.0504	0.0502	ND	0.0129	0.757	0.733	ND	ND	4.49	4.55	ND	ND	0.032
Mar-2013	0.0289	0.0296	0.000082 J	0.012	0.649	0.672	ND	ND	2.93	3.15	ND	ND	0.0331
Oct-2013	0.0302	0.0294	ND	0.0167	0.862	0.828	ND	ND	5.82	5.49	0.000162 J	0.004 J	0.0442
Mar-2014	0.0259	0.0257	ND	0.0144	0.765	0.789	ND	ND	4.44	4.48	ND	ND	0.0281
Oct-2014	0.0562	0.0563	0.00004 J	0.012	0.663	0.649	0.0012 J	ND	3.91	3.89	ND	ND	0.0331
Apr-2015	0.0585	0.0623	ND	0.0141	0.788	0.811	0.0013 J	ND	4.81	4.97	ND	ND	0.0382
Nov-2015	0.0561	0.0561	0.00007 J	0.0146	0.84	0.82	0.000647 J	ND	5.71	5.55	0.000173 J	ND	0.0375
May-2016	0.0698	0.0652	ND	0.0134	0.893	0.892	ND	ND	5.76	5.46	ND	ND	0.0361
Oct-2016	0.0398	0.0409 J+	0.000073 J	0.0156	0.898	1.01	ND	ND	6.46	6.52	ND	ND	0.0299 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-15B***												
May-2017	0.0311	0.033	*0.00012 J*	0.0155	0.989	1.03	*ND*	*ND*	6.21	6.24	*ND*	*ND*	*0.0286 J*
Oct-2017	0.0336	0.0361	*ND*	0.0161	1.05	1.1	*ND*	*ND*	6.86	6.73	*ND*	*ND*	*0.0288 J*
May-2018	0.028	0.026	*0.00017 JB*	0.014	*1.2 J*	*ND*	*0.0005 J*	*ND*	7.5	6.6	*0.000073 J*	0.0032	0.024
Nov-2018	0.028	0.025	*0.00016 J*	0.011	*1 J*	*1 J*	*0.00021 J*	*ND*	6.5	6.8	*ND*	*ND*	0.02
May-2019	0.027	0.028	*ND*	0.0087	*ND*	*ND*	*ND*	*ND*	7.1	6.8	*ND*	*ND*	0.039
Oct-2019	0.04	0.036	0.00046	0.012	*ND*	*ND*	*0.00039 J*	*ND*	5.8	6	*ND*	0.0061	0.024
May-2020	0.053	0.049	0.00045	0.022	*1.4 J*	*1.4 J*	*0.00041 J*	*ND*	11.6	11.2	*ND*	0.004	0.035
Oct-2020	0.052	0.043	0.0003	0.019	*ND*	*1.1 J*	*ND*	*ND*	10	9	*ND*	*0.00052 JM1*	0.04 M1
Apr-2021	0.026	0.029	0.00086	0.012	1.1	1.1	*ND*	*ND*	7.3	7.6	*ND*	*ND*	0.016
Oct-2021	0.055	0.0579	0.00022	0.016	1	1.1	*ND*	*ND*	8.1	8.4	*0.000078 J*	*ND*	0.029
May-2022	0.076	0.078	*ND*	0.038	1.4	1.4	*ND*	*ND*	22.8	22.7	*0.00011 J*	*ND*	0.069

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-15B***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	3.3	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	1.8	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	6.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	9.2	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	9.9	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	6.7	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	6.3	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	5.3	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15B*																
Oct-2004	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	7	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2007	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	5.7	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	3.4	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	2.71	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.92	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	4.79	ND	ND	ND	ND	ND	ND	0.72 J	0.81 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	2.87	ND	ND	ND	ND	ND	ND	0.34 J	0.52 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15B*																
Apr-2015	ND	ND	ND	ND	1.71	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.23	ND	ND	ND	ND	ND	ND	0.26 J	0.31 J	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	0.2 J	0.3 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4 JB	ND
Nov-2018	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9 JBIH	ND
May-2019	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.23	ND	ND	ND	ND	ND	ND	ND	0.131 J	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.7
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	2.4
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	0.6 J	ND	ND	ND	ND	ND	3.2	4.2
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	3.4
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	4.8	16
Apr-1998	0.8 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	4.1	4.8
Apr-1999	0.8 J	NA	NA	NA	NA	ND	NA	ND	0.8 J	ND	NA	ND	NA	NA	NA	2.7	4.3
Oct-1999	2.3	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	1.5	ND	ND	ND	2	6.3
Apr-2000	0.5 J	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	1.2	1.9
Oct-2000	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	4
Apr-2001	2	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	4.6	6.5
Sep-2001	3.2	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	1.1	ND	ND	ND	6.9	8.3
Mar-2002	4.3	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	1.5	ND	ND	ND	8.9	9
Sep-2002	2.8	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	1.2	ND	ND	ND	11	8.9
Mar-2003	2.7	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.3	ND	ND	ND	8.4	6.7
Oct-2003	2	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	0.6 J	0.8 J	ND	ND	ND	2.8	5.2
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3	2.7

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15B***															
Oct-2004	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	0.7 J	ND	ND	ND	4.7	3.3
Apr-2005	2.4	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.5	ND	ND	ND	7.9	7.1
Oct-2005	0.6 J	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	2.9
Mar-2006	3.3	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.7	ND	ND	ND	8.4	7
Sep-2006	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	8.4	6.2
Mar-2007	2.5	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	1.8	ND	ND	ND	5.9	6.3
May-2007	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	5.8	6.1
Sep-2007	2.8	ND	ND	ND	ND	ND	ND	ND	0.7 J	1.2	ND	1.8	ND	ND	ND	5.8	2.2
Mar-2008	2.2	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	5.2	7
Sep-2008	3.7	ND	ND	ND	ND	ND	ND	ND	1.5	1	ND	2.5	ND	ND	ND	6.6	6.9
Mar-2009	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND	ND	3.2	3.5
Oct-2009	3	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	2.1	ND	ND	ND	6.1	6.2
Mar-2010	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	1.5	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	1.1	ND	ND	ND	4.6	2.6
Apr-2011	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	1.9	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	1.5	ND	ND	ND	9.5	3.5
Mar-2012	1.9	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	1.7	ND	ND	ND	7.4	3.7
Sep-2012	1.45	ND	ND	ND	ND	ND	ND	ND	ND	0.81 J	ND	1.16	ND	ND	ND	3.04	2.08
Mar-2013	1.04	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	0.74 J	ND	ND	ND	3.04	2.01
Oct-2013	2.39	ND	ND	ND	ND	ND	ND	ND	0.51 J	0.33 J	ND	1.89	ND	ND	ND	3.83	3.94
Mar-2014	1.34	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	1.02	ND	ND	ND	4.14	2.7
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	1.87	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15B***															
Apr-2015	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.38 J*	*ND*	*0.55 J*	*ND*	*ND*	*ND*	2.42	*ND*
Nov-2015	*0.82 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.47 B	*ND*	*0.61 J*	*ND*	*ND*	*ND*	1.48	1.87
May-2016	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.6 J*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	2.2	1.6
Oct-2016	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.5 J*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	2.8	2.4
May-2017	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	2.5	1.8
Oct-2017	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	2.5	1.6
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5	1.6
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.1	1.9 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.9	1.9 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.8	*0.7 J*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.123 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.76 J*	*0.881 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	2.1	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	**6**	ND	ND	3	ND	ND	ND	ND	1.1	0.6 J	ND	1.3	NA
Apr-1998	ND	ND	0.5 J	NA	**7.6**	ND	ND	2.3	ND	ND	ND	ND	1	ND	ND	1.1	NA
Apr-1999	ND	NA	0.6 J	NA	**8.5**	ND	NA	2	ND	ND	NA	NA	0.9 J	ND	NA	1	NA
Oct-1999	ND	ND	0.6 J	NA	**22**	1	ND	4.1	ND	ND	ND	ND	2.1	ND	ND	1.5	NA
Apr-2000	ND	NA	ND	NA	2.6	ND	NA	1.2	ND	ND	NA	NA	0.7 J	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	**6.3**	ND	ND	3.1	ND	ND	ND	ND	1.4	ND	ND	1.1	NA
Apr-2001	ND	ND	1.2	NA	**5.6**	0.6 J	ND	4.9	ND	ND	ND	ND	2.4	ND	ND	1.7	NA
Sep-2001	ND	ND	0.9 J	NA	**12**	1.3	ND	**8.9**	ND	ND	ND	ND	3.9	0.6 J	ND	**3.3**	NA
Mar-2002	ND	ND	1.1	NA	**18**	2	ND	**9.1**	ND	ND	ND	ND	4.2	0.6 J	ND	**3.8**	NA
Sep-2002	ND	ND	ND	NA	**12**	2.2	ND	**7.2**	ND	ND	ND	ND	3	0.7 J	ND	**3.4**	NA
Mar-2003	ND	ND	ND	NA	**12**	0.8 J	ND	**6.3**	ND	ND	ND	ND	2.8	ND	ND	**2.4**	NA
Oct-2003	ND	ND	1.6	NA	**8.5**	2	ND	3.8	ND	ND	ND	ND	1.9	ND	ND	1.1	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-15B*															
Apr-2004	ND	ND	ND	NA	2.6	ND	ND	2.5	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	3.6	ND	ND	2.8	ND	ND	ND	ND	1.1	ND	ND	0.8 J	NA
Apr-2005	ND	ND	ND	ND	**12**	0.6 J	ND	4.9	ND	ND	ND	ND	2.4	ND	ND	**2.6**	NA
Oct-2005	ND	ND	ND	ND	2.2	ND	ND	3	ND	ND	ND	ND	1	ND	ND	0.9 J	NA
Mar-2006	ND	ND	ND	ND	**15**	0.8 J	ND	**6.8**	ND	ND	ND	ND	2.8	0.5 J	ND	**3.3**	NA
Sep-2006	ND	ND	ND	ND	**18.7**	0.6 J	ND	**5.8**	ND	ND	ND	ND	2.4	ND	ND	**3.9**	NA
Mar-2007	ND	ND	ND	ND	**13.3 R**	0.7 J	ND	**5.3**	ND	ND	ND	ND	2.4	ND	ND	**2.3**	NA
May-2007	ND	ND	ND	ND	**11.4**	0.7 J	ND	**5.7**	ND	ND	ND	ND	2.2	ND	ND	**2.3**	NA
Sep-2007	ND	ND	ND	ND	**12.1**	1.1	ND	4.3	ND	ND	ND	ND	2.2	ND	ND	1.9	NA
Mar-2008	ND	ND	ND	ND	**15.4**	1.3	ND	**6.6**	ND	ND	ND	ND	3.1	0.5 J	ND	ND	NA
Sep-2008	ND	ND	ND	ND	**17.6**	3.7	ND	**7.8**	ND	ND	ND	ND	3.4	4.5	ND	**3.7**	NA
Mar-2009	ND	ND	ND	ND	**14.6**	1.3	ND	**5.6**	ND	ND	ND	ND	2.8	ND	ND	**2.9**	NA
Oct-2009	ND	ND	ND	ND	**12.7**	1.1	ND	**5.3**	ND	ND	ND	ND	2.5	ND	ND	**3.2**	NA
Mar-2010	ND	ND	ND	ND	**12.5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**3**	NA
Oct-2010	ND	ND	ND	ND	**5.3**	0.8 J	ND	3.3	ND	ND	ND	ND	ND	ND	ND	1.5	NA
Apr-2011	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	NA
Sep-2011	ND	ND	ND	ND	**5.3**	0.8 J	ND	3.9	ND	ND	ND	ND	1.5	ND	ND	**2.1**	NA
Mar-2012	ND	ND	ND	ND	**5.2**	1 J	ND	4.3	ND	ND	ND	ND	1.9	ND	ND	2	NA
Sep-2012	ND	ND	ND	ND	3.86	ND	ND	3.35	ND	ND	ND	ND	1.39	ND	ND	1.08	ND
Mar-2013	ND	ND	ND	ND	2.65	0.43 J	ND	1.57	ND	ND	ND	ND	0.8 J	ND	ND	0.66 J	ND
Oct-2013	ND	ND	0.48 J	ND	**5.49**	1.52	ND	3.65	ND	ND	ND	ND	2.01	ND	ND	1.75	2
Mar-2014	ND	ND	ND	ND	3.24	0.8 J	ND	3.53	ND	ND	ND	ND	1.34	ND	ND	1.05	0.8 J

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15B***															
Oct-2014	ND	ND	ND	ND	ND	ND	ND	1.01	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.97	0.33 J	ND	1.76	ND	ND	ND	ND	0.71 J	ND	ND	0.55 J	ND
Nov-2015	ND	ND	ND	ND	1.68	0.46 J	ND	2.25	ND	ND	ND	ND	0.88 J	ND	ND	0.46 J	0.46 J
May-2016	ND	ND	ND	ND	1.6	0.2 J	ND	1.8	ND	ND	ND	ND	0.7 J	ND	ND	0.5 J	0.2 J
Oct-2016	ND	ND	ND	ND	1.6	0.2 J	ND	2	ND	ND	ND	ND	0.7 J	0.1 J	ND	0.6 J	0.2 J
May-2017	ND	ND	ND	ND	1.4	0.1 J	ND	1.9	ND	ND	ND	ND	0.6 J	ND	ND	0.5 J	0.1 J
Oct-2017	ND	ND	ND	ND	1.1	0.2 J	ND	1.8	ND	ND	ND	ND	0.6 J	ND	ND	0.4 J	0.2 J
May-2018	ND	ND	ND	ND	1.9 B	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	1.6 CH	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	1	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.641 JB	ND	ND	1.02	ND	ND	ND	ND	0.254 J	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-16***											
Nov-1993	ND	ND	0.2	31.5	18.3	0.4	0.3	3.7	20.4	74.6	60	37.9
Apr-1994	ND	ND	0.1	ND	14.9	ND	ND	3.6	311	64.9	128	32.56
Aug-1994	ND	ND	0.2	ND	13.6	0.3	ND	3.4	252	59.1	163	25.6
Sep-1994	ND	ND	ND	ND	11.2	0.3	ND	3.7	233	53.5	93	22.5
Nov-1994	ND	ND	0.2	ND	19.5	ND	ND	3.6	326	87.3	148	27.5
Apr-1995	ND	ND	ND	ND	16.6	0.3	ND	3.6	298	74.9	ND	27.7
Apr-1997	ND	ND	ND	ND	18	0.05	ND	NA	NA	78	172	52
Oct-1997	ND	ND	0.49	ND	14.5	ND	ND	5.62	285	60.4	128	47
Apr-1998	ND	ND	ND	ND	14.2	0.114	ND	5.79	229	68.3	120	36
Apr-1999	ND	ND	0.25	ND	14.7	ND	ND	3.4	287	67.1	150	42
Oct-1999	ND	ND	0.12	ND	18	ND	ND	3.52	284	75.1	141	42
Apr-2000	ND	ND	ND	ND	22.2	ND	ND	3.6	315	96.7	211	66
Oct-2000	ND	NA	ND	ND	14.9	ND	ND	3.64	326	80	162	56.7
Apr-2001	ND	NA	ND	ND	16	ND	ND	NA	NA	74	148	54
Sep-2001	ND	ND	0.24	ND	16.4	1.28	ND	3.47	330	72.7	146	46.4
Mar-2002	ND	ND	ND	ND	16	ND	ND	3.8	308	75.7	155	54.1
Sep-2002	ND	ND	ND	ND	20.2	ND	ND	3.8	364	97.7	176	58.9
Mar-2003	ND	ND	ND	ND	25.8	ND	ND	3.7	413	90.4	215	71.6
Oct-2003	ND	ND	ND	ND	12.8	0.146	ND	4.2	295	69.1	97	41.3
Apr-2004	ND	ND	ND	ND	15.8	ND	ND	3.7	395	91.5	149	53.2
Oct-2004	ND	ND	ND	ND	11.2	0.111	ND	3.7	246	63.2	112	38.7
Apr-2005	ND	ND	ND	ND	13.1	0.13	ND	3.7	295	58.4	133	36.6
Oct-2005	ND	ND	0.21	ND	6.61	0.13	ND	3.4	116.1	26.4	84	20.8
Mar-2006	5.1	5.1	ND	ND	6.63	0.16	ND	5.1	83.1	25.4	61	18.1
Sep-2006	4.1	4.1	ND	ND	6.41	0.16	ND	5.1	83.1	22.8	68	20
Mar-2007	2.8	2.8	ND	ND	9.81	0.14	ND	4.7	114.8	43.4	109	30.4
Sep-2007	3.1	3.1	0.3	ND	12.5	ND	ND	5.9	86.2	24.1	57	21.1
Mar-2008	5.2	5.2	ND	ND	5.76	0.16	ND	5.2	72.8	15.6	55	15.4
Sep-2008	4.7	4.7	ND	ND	6.5	0.13	ND	4.8	65.4	20.7	69	19.8
Mar-2009	5.5	5.5	ND	ND	6.25	0.12	ND	4.4	89.3	19.1	65	17.4
Oct-2009	5	5	ND	ND	5.77	0.11	ND	4.6	66	16.6	54	19.9
Apr-2010	5	5	ND	ND	7.36	0.1	ND	4.1	734	25.8	102	22.8
Oct-2010	2.8	2.8	ND	ND	8.61	0.08	ND	4.6	90.7	30.1	77	25.5
Apr-2011	5.5	5.5	ND	ND	6	0.13	ND	4.7	88.4	15.1	61	16.9
Sep-2011	6.1	6.1	0.27	ND	5.61	0.13	ND	4.8	57.6	11.9	40	15
Mar-2012	5.3	5.3	ND	ND	8.01	0.11	ND	4.5	111.4	25	106	27.1
Sep-2012	6.08	6.08	ND	ND	5.34	0.115	ND	4.6	68.9	11.1	55	14.7

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-16***											
Mar-2013	6.72	6.72	*ND*	*ND*	7.78	0.122	*ND*	3.9	78.7	22.4	78	20.6
Oct-2013	6.92	6.92	*ND*	*ND*	5.55	0.122	*ND*	3.9	69.6	12.2	36	17.4
Mar-2014	7.68	7.68	*ND*	21	5.95	0.114	*ND*	5.6	73.3	14.3	44	17.6
Oct-2014	2.2	2.2	*ND*	*6 J*	6.01	0.134	*ND*	5.1	57.4	13.4	29	16.9
Apr-2015	4.64	4.64	*ND*	*ND*	9.61	0.0957	*ND*	4.1	115.7	36.5	76	31.4
Nov-2015	3.48	3.48	*ND*	*ND*	9.77	0.0997	*ND*	5.2	124.9	35	77	31.9
May-2016	4.44	4.44	*ND*	*ND*	7.85	0.104	*ND*	5.3	157.7	23.8	59	23.8
Oct-2016	4.56	4.56	*ND*	*ND*	6.98	*NA*	*NA*	5.6	98.3	16.9	78	18.5
May-2017	4.52	4.52	*ND*	*ND*	6.67	0.126	*ND*	5.2	102.4	15.5	38	20.3
Oct-2017	4.64	4.64	*ND*	*ND*	7	0.127	*ND*	5.5	119.3	18.8	68	21.4
May-2018	*4 J*	*ND*	*ND*	*ND*	10.4	*ND*	*0.0062 J*	4.8	248	40.2	114	37.4
Nov-2018	*ND*	*ND*	*ND*	*5.7 J*	23.4	*0.044 J*	*ND*	4.05	275.7	87.6	193	67.2
May-2019	*ND*	*NA*	*ND*	*ND*	24.8	*ND*	*ND*	4.1	227.9	84.4	153	66.7
Oct-2019	*ND*	*NA*	*ND*	*8.2 J*	23.4	*0.045 J*	*ND*	4.07	326.3	158	224	74.5
May-2020	*ND*	*NA*	*ND*	*9.1 J*	24	*ND*	*ND*	3.82	294.7	92.5	182	75.5
Oct-2020	*ND*	*NA*	*ND*	*9.3 J*	22.2	*0.055 J*	*ND*	3.94	283.7	95.2	182	72.4
Apr-2021	*ND*	*NA*	*ND*	*6.1 J*	25.7	*0.026 J*	*ND*	3.99	348.7	81.5 MH	190	72.2
Oct-2021	*ND*	*NA*	*ND*	*6.1 J*	23.6	*ND*	*ND*	4.05	396.7	99.1	195	71.5
May-2022	*ND*	*NA*	*ND*	*ND*	21.6	*ND*	*ND*	3.96	363.4	129	219	77.3 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-16*													
Nov-1993	NA	ND	ND	NA	ND	4.8	NA	0.008	NA	ND	1.2	1.3	ND	6.3	NA
Apr-1994	NA	ND	ND	NA	ND	2.98	NA	ND	NA	ND	0.46	0.14	ND	6.1	NA
Aug-1994	NA	ND	ND	NA	ND	3	NA	ND	NA	ND	0.21	0.04	ND	4.4	NA
Sep-1994	NA	ND	ND	NA	ND	2.1	NA	ND	NA	ND	0.86	0.08	ND	4.2	NA
Nov-1994	NA	ND	ND	NA	ND	3.1	NA	ND	NA	ND	ND	1	ND	4.8	NA
Apr-1995	ND	ND	0.8	ND	ND	2.2	NA	ND	ND	ND	0.11	0.03	ND	5.4	NA
Oct-1996	ND	ND	0.013	ND	ND	4.1	4.2	ND	ND	ND	0.23	0.21	ND	4	4.2
Apr-1997	ND	ND	0.013	ND	ND	7	6.7	ND	0.18	ND	8.3	7.4	ND	6.9	6.6
Oct-1997	ND	ND	0.012	ND	ND	6.43	5.58	ND	0.163	ND	9.98	7.88	ND	6.56	5.64
Apr-1998	ND	ND	0.01	ND	ND	5.54	5.49	ND	0.13	ND	8.98	2.65	ND	5.5	5.42
Apr-1999	ND	ND	0.014	ND	ND	6.45	6.64	ND	0.143	ND	1.99	0.075	ND	6.2	6.29
Oct-1999	ND	ND	0.01	ND	ND	5.53	5	ND	0.125	ND	0.589	0.077	ND	5.55	5.01
Apr-2000	ND	ND	0.017	ND	ND	9.8	9.27	ND	0.236	ND	0.881	0.078	ND	10	9.46
Oct-2000	ND	ND	0.014	ND	ND	8.67	8.03	ND	0.2	ND	1.02	0.125	ND	8.51	7.91
Apr-2001	ND	ND	0.016	ND	ND	8.09	NA	ND	0.187	ND	2.89	NA	ND	8.12	NA
Sep-2001	ND	ND	0.013	ND	ND	7.02	6.93	ND	0.163	ND	1.6	0.051	ND	7.03	7.06
Mar-2002	ND	ND	0.016	ND	ND	8.37	8.21	ND	0.183	0.01	0.337	0.076	ND	8.05	8.09
Sep-2002	ND	ND	0.021	ND	ND	9.1	8.56	ND	0.199	ND	5.45	0.1	ND	8.79	8.64
Mar-2003	ND	ND	0.023	ND	ND	10.8	10.6	ND	0.256	ND	0.816	0.126	ND	10.8	10.6
Oct-2003	ND	ND	0.015	ND	ND	6.46	6.24	ND	0.142	ND	6.58	0.185	0.003	6.12	6.16
Apr-2004	ND	0.002	0.017	ND	ND	8.41	8.92	ND	0.182	ND	1.29	0.081	ND	7.82	8.29

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-16***													
Oct-2004	*ND*	*ND*	0.014	*ND*	*ND*	6.13	5.54	*ND*	0.14	*ND*	1.48	0.267	*ND*	5.69	5.18
Apr-2005	*ND*	*ND*	0.014	*ND*	*ND*	5.83	5.59	*ND*	0.134	*ND*	1.53	0.203	*ND*	5.36	5.11
Oct-2005	*ND*	*ND*	0.016	*ND*	*ND*	4.03	3.17	0.022	0.08	*ND*	10.7	0.421	0.003	2.61	1.99
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	3.87	4.26	*ND*	0.045	*ND*	0.706	*ND*	*ND*	2.04	2.43
Sep-2006	*ND*	*ND*	0.011	*ND*	*ND*	4.91	4.79	*ND*	0.044	*ND*	0.6	*ND*	*ND*	1.86	2.59
Mar-2007	*ND*	*ND*	0.016	*ND*	*ND*	6.47	5.73	*ND*	0.078	*ND*	2.12	0.066	*ND*	3.46	3.16
Sep-2007	*ND*	*ND*	0.012	*ND*	*ND*	4.49	4.16	*ND*	0.053	*ND*	0.535	0.066	*ND*	2.4	2.08
Mar-2008	*ND*	*ND*	0.014	*ND*	*ND*	3.88	3.75	*ND*	0.028	*ND*	0.721	*ND*	*ND*	1.39	1.52
Sep-2008	*ND*	*ND*	0.015	*ND*	*ND*	4.28	4.02	*ND*	0.048	*ND*	1.09	*ND*	*ND*	2.21	1.89
Mar-2009	*ND*	*ND*	0.013	*ND*	*ND*	4.18	4.09	*ND*	0.037	*ND*	0.806	0.101	*ND*	1.71	1.8
Oct-2009	*ND*	*ND*	0.015	*ND*	*ND*	4.49	4.18	*ND*	0.045	*ND*	1.23	0.232	*ND*	2.12	2.13
Apr-2010	*ND*	*ND*	0.015	*ND*	*ND*	5.49	5.41	*ND*	0.046	*ND*	1.86	0.184	*ND*	2.22	2.34
Oct-2010	*ND*	*ND*	0.01	*ND*	*ND*	5.59	5.83	*ND*	0.058	*ND*	0.998	0.853	*ND*	2.8	2.93
Apr-2011	*ND*	*ND*	0.017	*ND*	*ND*	4.16	3.84	*ND*	0.031	*ND*	1.96	0.487	*ND*	1.57	1.28
Sep-2011	*ND*	*ND*	0.019	*ND*	*ND*	3.93	3.47	*ND*	0.023	*ND*	2.41	0.192	*ND*	1.27	1.03
Mar-2012	*ND*	*ND*	0.019	*ND*	*ND*	5.79	5.15	*ND*	0.061	*ND*	1.99	0.475	*ND*	3.07	2.41
Sep-2012	*ND*	*ND*	0.0168	*0.000142 J*	*ND*	3.82	3.97	*0.0066 J*	0.0228	*0.0012 J*	1.94	0.593	*0.000893 J*	1.26	1.21
Mar-2013	*ND*	*ND*	0.0183	*0.000163 J*	*ND*	4.91	4.69	*0.0075 J*	0.0469	*0.0021 J*	1.97	0.542	*0.002 J*	2.03	1.83
Oct-2013	*ND*	*ND*	0.0174	*0.000136 J*	*ND*	4	3.89	*0.0047 J*	0.0341	*ND*	1.38	1.2	*0.000314 J*	1.81	1.77
Mar-2014	*0.000507 J*	*0.0001 J*	0.0158	*ND*	*ND*	4.23	3.97	*0.0034 J*	0.0311	*0.0027 J*	1.1	0.765	*ND*	1.71	1.5
Oct-2014	*0.000763 J*	*0.000465 J*	0.0185	*0.000205 J*	*ND*	4.29	4.34	*0.0032 J*	0.0265	*0.000607 J*	1.52	0.604	*ND*	1.51	1.53
Apr-2015	*0.000937 J*	*ND*	0.0205	*0.000285 J*	*ND*	6.36	6.7	*0.0021 J*	0.0749	*0.000363 J*	1.21	0.91	*ND*	3.77	3.91
Nov-2015	*0.000322 J*	*ND*	0.0214	*0.000315 J*	*ND*	6.8	6.75	*0.0024 J*	0.0721	*0.00064 J*	0.889	0.43	*0.000521 J*	3.61	3.38
May-2016	*ND*	*ND*	0.0201	*0.00025 J*	*ND*	5.29	5.21	0.0045	0.0439	*0.0007 J*	1.27	0.546	*0.00032 J*	2.58	2.42

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-16***													
Oct-2016	*ND*	*ND*	0.0207	*0.00022 J*	*ND*	4.29	4.92	0.0077	0.0309	*0.00059 J*	2.1	*1.07 J+*	*0.00025 J*	1.89	2.19
May-2017	*ND*	*ND*	0.0195	*0.0002 J*	*ND*	4.6	5.47	*0.003 J*	0.0319	*ND*	0.769	0.473	*ND*	2.13	2.01
Oct-2017	*ND*	*ND*	0.0184	*0.00025 J*	*ND*	4.79	4.7	0.0179	0.0343	*ND*	0.767	0.519	*ND*	2.29	2.3
May-2018	*0.000091 J*	*ND*	0.019	0.00033	*0.00007 J*	7.2	6.6	*0.0026 J*	0.0685	*0.0013 J*	1.3	0.14	*0.00021 J*	4.7	4.2
Nov-2018	*ND*	*ND*	0.022	*0.00058 J*	*0.000038 J*	11.5	11.4	0.024	0.18	*0.001 J*	1.3	0.81	*0.000064 J*	9.4	9.3
May-2019	*ND*	*ND*	0.028	0.00035	*ND*	11.9	11.9	0.0073	0.19	*ND*	3.7	0.9	*ND*	9	9
Oct-2019	*0.0001 J*	*ND*	0.028	0.00046	*0.00013 J*	13	12.2	*0.0053 J*	0.21	*ND*	2.7	1	*ND*	10.2	9.3
May-2020	*0.000091 J*	*ND*	0.027	0.00057	*ND*	13.1	12.4	0.0075	0.2	0.0025	3.6	0.67	*ND*	10.4	9.8
Oct-2020	*ND*	*ND*	0.028	*0.00078 J*	*ND*	12.3	11.7	*0.011 J*	0.22	*ND*	2.3	0.68	*ND*	10.1	9.5
Apr-2021	*ND*	*ND*	0.028	*0.0009 J*	*ND*	12.3	12.1	*0.0034 J*	0.21	*ND*	4.3	1.2	*ND*	10.1	10
Oct-2021	*0.000057 JB*	*ND*	0.027	0.00058	*ND*	12.2	13.1	0.0049	0.24	*ND*	3	0.95	*0.000031 J*	10	10.8
May-2022	*ND*	*ND*	0.028	0.00073	*ND*	12.8	13.5	0.0062	0.24	*ND*	6.3	0.89	*ND*	11	11.5

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-16*												
Nov-1993	1.4	NA	ND	NA	6.7	NA	ND	NA	21.8	NA	NA	NA	0.42
Apr-1994	0.8	NA	ND	NA	4.22	NA	ND	NA	11.37	NA	NA	NA	0.28
Aug-1994	0.68	NA	ND	NA	4.7	NA	ND	NA	8.8	NA	NA	NA	0.26
Sep-1994	0.66	NA	ND	NA	3.6	NA	ND	NA	8.7	NA	NA	NA	0.24
Nov-1994	0.97	NA	ND	NA	5.5	NA	ND	NA	10.7	NA	NA	NA	0.24
Apr-1995	0.08	NA	ND	0.06	4.9	NA	ND	0.01	9.5	NA	ND	ND	0.28
Oct-1996	0.56	0.57	NA	0.085	ND	ND	ND	ND	8.7	8.5	ND	ND	0.2
Apr-1997	1.2	1.1	ND	0.31	5.3	5.1	ND	ND	14	14	ND	ND	0.29
Oct-1997	1.04	0.91	NA	0.157	4.16	3.04	ND	ND	13.3	11.4	ND	ND	0.267
Apr-1998	0.804	0.811	NA	0.125	5.25	5.07	ND	ND	10.7	10.6	ND	ND	0.337
Apr-1999	0.858	0.871	NA	0.142	4.23	4.05	ND	ND	11.8	12.1	ND	ND	0.286
Oct-1999	0.751	0.677	NA	0.116	4.88	3.62	ND	ND	10.4	9.32	ND	ND	0.242
Apr-2000	1.42	1.34	NA	0.222	5.86	6.21	ND	ND	20.2	19.2	ND	ND	0.454
Oct-2000	1.2	1.11	NA	0.188	6	5.56	ND	ND	16.4	15.1	ND	ND	0.403
Apr-2001	1.12	NA	NA	0.183	6.01	NA	ND	ND	15.6	NA	ND	ND	0.365
Sep-2001	0.962	0.963	NA	0.161	5.66	5.25	ND	ND	14.6	13.3	ND	ND	0.313
Mar-2002	1.09	1.1	NA	0.173	7.03	6.6	ND	ND	16.4	15.4	ND	ND	0.34
Sep-2002	1.19	1.17	NA	0.198	5.89	6.09	ND	ND	18.1	17.9	ND	ND	0.382
Mar-2003	1.52	1.49	NA	0.251	6.94	7.24	ND	ND	21.5	20.9	ND	ND	0.491
Oct-2003	0.84	0.841	NA	0.143	5.97	5.21	ND	ND	12.5	11.8	ND	ND	0.314
Apr-2004	1.09	1.16	ND	0.188	6.55	5.88	ND	ND	15	16.3	ND	ND	0.322
Oct-2004	0.823	0.756	ND	0.141	5.11	4.74	ND	ND	11	9.79	ND	ND	0.241

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-16***												
Apr-2005	0.785	0.749	*ND*	0.132	4.43	4.01	*ND*	*ND*	10.1	9.66	*ND*	*ND*	0.225
Oct-2005	0.466	0.338	*ND*	0.072	2.51	1.93	*ND*	*ND*	5.64	3.89	*ND*	*ND*	0.132
Mar-2006	0.26	0.308	*ND*	0.053	1.84	2.04	*ND*	*ND*	4.3	4.88	*ND*	*ND*	0.058
Sep-2006	0.241	0.358	*ND*	0.048	1.92	2.4	*ND*	*ND*	4.15	5.25	*ND*	*ND*	0.123
Mar-2007	0.458	0.419	*ND*	0.082	2.97	2.71	*ND*	*ND*	6.86	6.32	*ND*	*ND*	0.154
Sep-2007	0.316	0.267	*ND*	0.054	2.02	1.7	*ND*	*ND*	5.22	4.59	*ND*	*ND*	0.1
Mar-2008	0.158	0.174	*ND*	0.034	1.64	1.6	*ND*	*ND*	3.19	3.47	*ND*	*ND*	0.067
Sep-2008	0.259	0.22	*ND*	0.057	1.82	1.63	*ND*	*ND*	4.49	3.98	*ND*	*ND*	0.091
Mar-2009	0.204	0.222	*ND*	0.043	1.77	1.74	*ND*	*ND*	3.97	4.18	*ND*	*ND*	0.075
Oct-2009	0.25	0.254	*ND*	0.052	1.79	1.63	*ND*	*ND*	4.5	4.42	*ND*	*ND*	0.088
Apr-2010	0.258	0.279	*ND*	0.053	2	1.99	*ND*	*ND*	4.88	5.04	*ND*	*ND*	0.09
Oct-2010	0.326	0.343	*ND*	0.061	2.15	2.2	*ND*	*ND*	5.88	6.18	*ND*	*ND*	0.092
Apr-2011	0.174	0.135	*ND*	0.039	1.49	1.16	*ND*	*ND*	3.55	3.06	*ND*	*ND*	0.06
Sep-2011	0.118	0.096	*ND*	0.038	1.69	1.04	*ND*	*ND*	3.13	2.87	*ND*	*ND*	0.055
Mar-2012	0.367	0.275	*ND*	0.068	2.46	1.94	*ND*	*ND*	6.41	5.25	*ND*	*ND*	0.104
Sep-2012	0.121	0.12	*ND*	0.0333	1.34	1.27	*ND*	*ND*	3.06	3.02	*0.0015 J*	*ND*	0.0492
Mar-2013	0.272	0.224	*0.000048 J*	0.0554	1.73	1.52	*ND*	*ND*	4.33	3.89	*ND*	*ND*	0.0989
Oct-2013	0.177	0.174	*ND*	0.0424	1.72	1.54	*ND*	*ND*	3.97	3.86	*0.000104 J*	*0.0028 J*	0.0741
Mar-2014	0.181	0.154	*ND*	0.0407	1.55	1.33	*ND*	*ND*	3.59	3.27	*ND*	*0.000622 J*	0.0629
Oct-2014	0.152	0.155	*ND*	0.0353	1.59	1.47	*ND*	*ND*	3.62	3.78	*ND*	*0.0013 J*	0.063
Apr-2015	0.435	0.458	*ND*	0.0863	2.79	2.84	*0.000895 J*	*ND*	7.45	7.8	*ND*	*ND*	0.139
Nov-2015	0.407	0.378	*ND*	0.0833	2.72	2.51	*ND*	*ND*	7.24	6.83	*0.00011 J*	*0.000842 J*	0.133
May-2016	0.258	0.257	*ND*	0.0549	2.19	1.92	*ND*	*ND*	5.36	4.96	*ND*	0.0012	0.0855
Oct-2016	0.191	0.223	*ND*	0.0439	1.62	1.86	*ND*	*ND*	4.42	4.9	*ND*	0.0011	0.0652

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-16***												
May-2017	0.176	0.169	*ND*	0.048	1.72	1.75	*ND*	*ND*	4.39	4.28	*ND*	*0.00034 J*	0.0754
Oct-2017	0.19	0.196	*ND*	0.0503	1.84	1.87	*ND*	*ND*	4.63	4.67	*ND*	*0.00037 J*	0.0795
May-2018	0.34	0.33	*ND*	0.099	*3.3 J*	*2.6 J*	*0.000095 J*	*ND*	9.4	7.8	*ND*	0.0036	0.17
Nov-2018	1.2	0.93	*ND*	0.21	6	6	*0.00012 J*	*ND*	18.5	18.6	*ND*	0.0056	0.34
May-2019	1.3	1.2	*ND*	0.21	5.9	5.4	*ND*	*ND*	17.6	17.2	*ND*	*ND*	0.34
Oct-2019	1.5	1.3	*ND*	0.22	6	5.9	*ND*	*ND*	19.3	18.6	*ND*	0.0068	0.34
May-2020	1.3	1.3	*ND*	0.21	6.4	6.4	*ND*	*ND*	19.6	18.8	*ND*	*ND*	0.35
Oct-2020	1.3	1.2	*ND*	0.23	6.1	6	*ND*	*ND*	19.6	18.1	*ND*	*0.00092 J*	0.37
Apr-2021	1.4	1.4	*ND*	0.24	6.3	6.2	*0.0055 J*	*ND*	19.6	19.5	*ND*	*ND*	0.35
Oct-2021	1.4	1.54	*ND*	0.24	6.2	6.9	*ND*	*ND*	19.6	21.5	*0.000044 J*	*ND*	0.36
May-2022	1.5	1.5	*ND*	0.25	6.7	6.5	*ND*	*ND*	20.8	20.6	*ND*	*ND*	0.39

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	33	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.3 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.4 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-16***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-16***															
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-16***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16***															
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.1 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-17***											
Nov-1993	62	62	0.2	24.8	6.7	ND	ND	5.94	172	15.4	45	63.1
Apr-1994	64	64	0.1	62.3	6.1	ND	ND	5.96	183	18.9	103	58.75
Apr-1995	58.7	58.7	ND	74.7	7.1	ND	ND	6	186	22.5	88	43.9
Apr-1997	ND	20	ND	ND	5	0.04	ND	NA	NA	14	88	15
Oct-1997	35	35	0.24	ND	4.39	ND	ND	6.48	170.5	14.3	107	46
Apr-1998	32	32	0.26	ND	4.22	ND	ND	7.6	164.7	19	64	39
Apr-1999	28	28	0.82	16	5.33	ND	ND	5.61	143.1	19.5	110	48
Oct-1999	38	38	0.08	ND	7.13	ND	ND	5.68	132	17.1	140	32
Apr-2000	31	31	ND	ND	3.42	ND	ND	6.01	74	29	117	48
Oct-2000	23	NA	0.22	56	6.06	ND	ND	5.88	137.9	27.3	87	37.8
Apr-2001	29	NA	ND	10	6	ND	ND	NA	NA	28.4	108	45
Sep-2001	26	26	ND	ND	8.69	ND	ND	5.74	165	34.4	105	36.7
Mar-2002	25	25	ND	38	4.51	ND	ND	5.8	68.5	27.1	122	37
Sep-2002	17	17	ND	ND	5.88	ND	ND	5.7	167.5	43.5	108	36.2
Mar-2003	22	22	ND	ND	15.2	ND	ND	5.8	157.9	33.9	110	42
Oct-2003	27	27	ND	ND	5.19	ND	ND	5.6	164.7	34.6	106	46.2
Apr-2004	31	31	ND	27	5.06	ND	ND	5.6	151.5	28.1	106	51.8
Oct-2004	45	45	ND	ND	5.21	0.08	ND	5.6	164.6	30.7	123	51.7
Apr-2005	33	33	ND	ND	5.68	ND	ND	5.7	127.4	26.3	113	41.8
Oct-2005	29	29	ND	ND	1.03	ND	ND	5.5	296	2.32	92	35.2
Mar-2006	27	27	ND	ND	5.6	ND	ND	7.7	104.8	21.9	105	26.3
Sep-2006	13	13	ND	ND	5.22	ND	ND	7.7	104.8	20.3	210	33.3
Mar-2007	8.2	8.2	0.6	ND	5.44	ND	ND	5.5	107.9	20	58	17.6
Sep-2007	6.1	6.1	ND	82	9.89	ND	ND	6.1	104.6	20.5	87	14
Mar-2008	13	13	0.25	ND	10.1	ND	ND	5.3	107.2	33.7	39	17.2
Sep-2008	13	13	ND	36	9.93	ND	ND	5.3	101.1	15	67	18
Mar-2009	10	10	ND	ND	5.52	ND	ND	5	113.4	31.4	85	19.4
Oct-2009	7	7	ND	ND	5.35	ND	ND	5.1	97.3	23.2	62	12.7
Apr-2010	6.2	6.2	ND	ND	5.67	ND	ND	4.8	119.7	25.7	133	13.6
Oct-2010	14	14	ND	ND	5.7	ND	ND	5.2	89.3	24.9	73	24.3
Apr-2011	106	106	ND	ND	5.38	ND	ND	5.1	103.4	22.5	70	16.7
Sep-2011	9.2	9.2	ND	ND	5.65	ND	ND	5.1	95.5	20.7	59	14.7
Mar-2012	15	15	ND	ND	5.53	ND	ND	5	111.4	26.6	72	27.4
Sep-2012	8.44	8.44	ND	ND	5.83	ND	ND	4.5	100.4	24.1	95	16.6
Mar-2013	8.72	8.72	ND	10.2	5.86	ND	ND	5.3	113	23	83	11.2
Oct-2013	14	14	ND	10.3	5.78	ND	ND	4.1	110.6	28.6	77	24.3
Mar-2014	6.8	6.8	ND	19	5.56	ND	ND	5.5	108.5	27.1	58	13.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-17***										
Oct-2014	2.2	2.2	*ND*	33	5.75	*ND*	*ND*	5.3	100.3	26.5	108	22.3
Apr-2015	13.2	13.2	*ND*	13	5.52	*ND*	*ND*	4.5	102.1	28.7	71	21.1
Nov-2015	5.56	5.56	*ND*	*ND*	5.95	0.0536	*ND*	5.5	122.9	25.5	53	14.9
May-2016	12.6	12.6	0.274	*7 J*	5.87	0.0852	*ND*	5.6	182.9	28.9	81	24.1
Oct-2016	18.3	18.3	*0.185 J*	45	5.86	*NA*	*NA*	5.5	190.5	34.1	140	29.6
May-2017	2.6	2.6	*ND*	*ND*	5.56	0.076	*ND*	5.2	162.4	30.6	64	17
Oct-2017	*ND*	*ND*	*0.0838 J*	*ND*	5.58	*ND*	*ND*	5.1	160.4	34.5	96	17.3
May-2018	*ND*	*ND*	*ND*	*ND*	5.9	*ND*	0.024	4.4	191.5	62.5	139	38.2
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	5.9	*0.038 J*	*ND*	4.63	169.6	63.6	95	39.3
May-2019	*ND*	*NA*	*ND*	*ND*	4.8	*ND*	*ND*	5.06	128.2	50.6	82	34.2
Oct-2019	*ND*	*NA*	*ND*	*ND*	5.4	*0.047 J*	*ND*	5.05	164	52.5	108	30
May-2020	*1 J*	*NA*	*ND*	*ND*	5.7	*ND*	*ND*	4.69	143.9	45.2	68	26.9
Oct-2020	*8 J*	*NA*	*ND*	*ND*	5.4	*ND*	*0.0064 J*	4.79	143.4	43.3	75	25.4
Apr-2021	*2 J3c*	*NA*	*ND*	38.6	5.7	*0.025 J*	*ND*	5.29	166.1	36.9	87	25.9
Oct-2021	*6 J5c*	*NA*	*ND*	*ND*	5	*ND*	*ND*	5.45	190.6	36.8	65	20.9
May-2022	10	*NA*	*ND*	*ND*	4.7	*ND*	*ND*	4.97	160.2	40.6	73	22.9 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17***													
Nov-1993	*NA*	*ND*	*ND*	*NA*	*ND*	22.5	*NA*	0.012	*NA*	*ND*	10	6.7	*ND*	1.7	*NA*
Apr-1994	*NA*	*ND*	*ND*	*NA*	*ND*	20.4	*NA*	*ND*	*NA*	*ND*	8.53	3.14	*ND*	1.89	*NA*
Apr-1995	*ND*	*ND*	1	*ND*	*ND*	14.6	*NA*	*ND*	*ND*	*ND*	7.6	7.6	*ND*	1.8	*NA*
Oct-1996	*ND*	*ND*	0.035	*ND*	*ND*	8.8	8.4	*ND*	*ND*	*ND*	6	8	*ND*	1.4	1.3
Apr-1997	*ND*	*ND*	0.016	*ND*	*ND*	8.4	8.7	*ND*	*ND*	*ND*	4.2	2.1	0.003	1.1	1.1
Oct-1997	*ND*	*ND*	0.053	*ND*	*ND*	12.2	10.9	0.014	0.019	0.053	14.3	7.52	*ND*	1.9	1.55
Apr-1998	*ND*	*ND*	0.116	*ND*	*ND*	11.5	2.12	0.031	0.018	0.033	23.9	4.46	*ND*	2.45	0.453
Apr-1999	*ND*	*ND*	0.179	*ND*	*ND*	13.7	10.1	0.054	0.026	0.042	38.5	7.9	*ND*	3.41	1.65
Oct-1999	*ND*	*ND*	0.025	*ND*	*ND*	6.94	6.54	*ND*	*ND*	0.011	6.29	1.08	*ND*	1.51	1.38
Apr-2000	*ND*	*ND*	0.034	*ND*	*ND*	15.9	15	*ND*	0.012	0.012	11.6	4.76	*ND*	2.04	1.89
Oct-2000	*ND*	*ND*	0.031	*ND*	*ND*	12	9.46	*ND*	0.011	0.018	17.2	6.64	*ND*	1.91	1.6
Apr-2001	*ND*	*ND*	0.084	*ND*	*ND*	14	*NA*	0.02	0.019	0.02	35.7	*NA*	0.004	2.32	*NA*
Sep-2001	*ND*	*ND*	0.04	*ND*	*ND*	11.5	10.4	0.011	0.011	0.012	24.1	6.29	0.003	1.91	1.61
Mar-2002	*ND*	*ND*	0.037	*ND*	*ND*	11.4	10.1	0.01	0.018	0.011	16.2	5.94	*ND*	2.08	1.85
Sep-2002	*ND*	*ND*	0.044	*ND*	*ND*	11.2	10.6	*ND*	0.027	0.014	22.6	15	0.003	1.98	1.8
Mar-2003	*ND*	*ND*	0.045	*ND*	*ND*	13.5	11.8	*ND*	0.05	0.01	47.7	3.79	0.002	2.02	1.85
Oct-2003	*ND*	0.005	0.05	*ND*	*ND*	14.9	12	0.016	0.04	0.025	24.7	4.81	0.006	2.15	1.69
Apr-2004	*ND*	**0.011**	0.088	*ND*	*ND*	16.8	14.2	0.041	0.056	0.045	45.1	3.94	0.01	2.37	1.9
Oct-2004	*ND*	0.003	0.041	*ND*	*ND*	17.2	15.7	0.012	0.037	0.017	16.3	3.7	0.004	2.11	1.94
Apr-2005	*ND*	0.002	0.04	*ND*	*ND*	13.6	12.8	0.012	0.03	0.02	12.4	4.46	0.002	1.9	1.74
Oct-2005	*ND*	*ND*	0.019	*ND*	*ND*	11.6	10.7	*ND*	0.011	*ND*	0.798	1.86	*ND*	1.54	1.49

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17***													
Mar-2006	*ND*	*ND*	0.016	*ND*	*ND*	8.36	8.68	*ND*	0.01	*ND*	2.02	3.39	*ND*	1.3	1.37
Sep-2006	*ND*	*ND*	0.042	*ND*	*ND*	10.8	9.11	*ND*	0.019	0.016	9.22	4.96	0.003	1.54	1.43
Mar-2007	*ND*	0.005	0.043	*ND*	*ND*	4.73	6.14	0.04	0.033	0.029	18.5	4.58	0.007	1.4	1.37
Sep-2007	*ND*	0.009	0.045	*ND*	*ND*	3.5	3.39	0.045	0.034	0.031	21.4	5.09	0.008	1.28	1.11
Mar-2008	*ND*	0.003	0.026	*ND*	*ND*	4.7	4.37	0.013	0.012	*ND*	8.65	3.43	0.002	1.33	1.28
Sep-2008	*ND*	0.003	0.03	*ND*	*ND*	4.66	4.35	0.013	0.01	*ND*	8.02	3.63	*ND*	1.56	1.41
Mar-2009	*ND*	0.005	0.051	*ND*	*ND*	5.16	3.43	0.049	0.038	0.029	38.5	4.56	0.008	1.57	1.25
Oct-2009	*ND*	0.003	0.03	*ND*	*ND*	3.16	3.27	0.023	0.014	0.016	17.6	4.26	0.003	1.16	1.21
Apr-2010	*ND*	0.006	0.034	*ND*	*ND*	3.26	2.33	0.023	0.022	0.018	20	5.97	0.005	1.33	1.07
Oct-2010	*ND*	0.003	0.031	*ND*	*ND*	6.87	6.32	0.02	0.02	0.012	12.3	3.91	0.003	1.73	1.54
Apr-2011	*ND*	*ND*	0.019	*ND*	*ND*	4.46	4.49	*ND*	*ND*	*ND*	3.83	4.49	*ND*	1.36	1.39
Sep-2011	*ND*	0.002	0.034	*ND*	*ND*	3.55	2.45	0.016	*ND*	0.014	11.5	5.9	0.003	1.42	1.16
Mar-2012	*ND*	0.002	0.038	*ND*	*ND*	7.74	5.95	0.014	*ND*	0.017	11.1	4.72	0.003	1.96	1.61
Sep-2012	*ND*	0.0036	0.035	*0.000401 J*	*ND*	4.15	4.04	0.0266	0.0172	0.0152	26.3	4.65	0.0042	1.52	1.47
Mar-2013	*ND*	*ND*	0.0298	*0.000333 J*	*ND*	2.73	3.13	0.0217	0.0158	0.0148	30.9	4.77	0.0052	1.07	1.19
Oct-2013	*ND*	*0.0018 J*	0.0414	*0.000309 J*	*0.000155 J*	6.69	5.28	*0.0154 J*	*0.0081 J*	*0.0089 J*	16	4.38	0.0025	1.84	1.65
Jan-2014	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	0.0252	*NA*	*NA*	*NA*	*NA*	0.0059	*NA*	*NA*
Mar-2014	*0.000701 J*	*0.0015 J*	0.0326	*0.000238 J*	*ND*	3.06	3.26	*0.0074 J*	*0.0048 J*	*0.0005 J*	8.91	4.5	*0.0018 J*	1.45	1.46
Oct-2014	*0.0012 J*	*0.0261 J*	0.166	*ND*	*0.000168 J*	5.24	4.81	*0.112 J*	*0.0474 J*	*0.0591 J*	78.3	4.4	**0.0239**	2.25	1.57
Apr-2015	*0.0013 J*	**0.013**	0.133	*0.000895 J*	*0.000127 J*	5.13	5.14	0.075	*0.0326 J*	*0.0353 J*	55.6	4.01	**0.0181**	2	1.63
Nov-2015	*0.00073 J*	0.0042	0.0658	*0.000416 J*	*0.000064 J*	3.51	4.08	0.022	0.0111	0.0124	16.4	5.09	0.0061	1.5	1.56
May-2016	*ND*	0.0099	0.064	*0.00059 J*	*ND*	6.17	5.41	0.0461	0.0247	0.0239	39.9	8.98	0.0082	2.11	1.83
Oct-2016	*ND*	*0.0024 J*	0.0367	*0.00028 J*	*ND*	8.2	7.35	0.0168	0.0074	0.0063	11.9	7.49	0.0021	2.23	2.19
May-2017	*ND*	*0.001 J*	0.0263	*0.00015 J*	*ND*	4.03	4.4	0.0067	0.0041	*0.0026 J*	8.35	4.65	*0.00079 J*	1.67	1.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17***													
Oct-2017	*ND*	*0.0016 J*	0.0297	*0.00017 J*	*ND*	4.22	3.55	0.0068	0.0057	*0.0022 J*	14.2	4.78	*0.00065 J*	1.65	1.64
May-2018	*0.00011 J*	*0.00026 J*	0.053	0.00086	*0.00049 J*	10.1	9.9	0.025	0.0433	0.0023	9.6	0.96	*0.00024 J*	3.1	3.1
Nov-2018	*ND*	*0.0007 J*	0.032	0.00044	*0.00025 J*	11.5	11.3	0.038	0.021	0.0029	7	0.79	*0.0006 J*	2.6	2.6
May-2019	*ND*	*ND*	0.026	*ND*	*ND*	9.8	9.9	0.049	0.029	*ND*	9.2	6.1	*ND*	2.4	2.4
Oct-2019	*0.00011 J*	*0.0005 J*	0.025	*0.000094 J*	*0.0002 J*	8.3	7.7	0.024	0.041	*ND*	8	6.3	*0.00014 J*	2.2	2
May-2020	*0.000083 J*	*0.0005 J*	0.024	*0.00014 J*	*ND*	7.2	7	0.063	0.036	0.003	13.5	3.6	*0.00024 J*	2.2	2.1
Oct-2020	*ND*	*ND*	0.021	*ND*	*ND*	6.8	6.8	*0.03 J*	0.022	*ND*	9.8	3.7	*ND*	2	2
Apr-2021	*ND*	*ND*	0.023	*ND*	*ND*	7	7	0.0088	0.019	*ND*	10	7.3	*ND*	2.1	2
Oct-2021	*0.000051 JB*	*ND*	0.022	*ND*	*ND*	5.6	6	0.0044	0.023	*0.00036 J*	8.2	7.3	*0.000042 J*	1.7	1.9
May-2022	*ND*	*0.00058 J*	0.023	*ND*	*ND*	6	6.3	0.022	0.019	*0.0014 J*	10	2.5	*ND*	2	2.2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-17*												
Nov-1993	0.27	NA	ND	NA	2	NA	ND	NA	11	NA	NA	NA	0.01
Apr-1994	0.31	NA	ND	NA	1.69	NA	ND	NA	12.97	NA	NA	NA	0.06
Apr-1995	0.28	NA	ND	ND	2.1	NA	ND	ND	8.4	NA	ND	ND	0.03
Oct-1996	0.21	0.19	NA	ND	ND	ND	ND	ND	9	8.4	ND	ND	0.27
Apr-1997	0.18	0.19	ND	ND	1.8	1.8	ND	ND	7.2	7.3	ND	ND	0.025
Oct-1997	0.259	0.244	NA	0.064	3.88	0.695	ND	ND	10.2	9.61	ND	0.018	0.08
Apr-1998	0.262	0.048	NA	0.1	6.8	1.61	ND	ND	10.6	1.99	ND	0.051	0.076
Apr-1999	0.348	0.243	NA	0.03	8.91	ND	ND	ND	13.1	10.6	ND	0.088	0.106
Oct-1999	0.214	0.204	NA	ND	1.78	1.28	ND	ND	10.8	10.2	ND	ND	0.032
Apr-2000	0.231	0.225	NA	ND	1.89	1.25	ND	ND	12.8	11.2	ND	ND	0.037
Oct-2000	0.237	0.21	NA	0.018	2.16	1.5	ND	ND	13.1	10.8	ND	0.011	0.041
Apr-2001	0.25	NA	NA	0.015	4.25	NA	ND	ND	12.5	NA	ND	0.037	0.059
Sep-2001	0.212	0.199	NA	0.022	2.82	1.91	ND	ND	13.4	10.4	ND	0.015	0.048
Mar-2002	0.255	0.236	NA	0.018	2.87	1.53	ND	ND	12	11.1	ND	0.014	0.046
Sep-2002	0.249	0.234	NA	0.029	2.39	2.13	ND	ND	12.4	11.6	ND	0.018	0.064
Mar-2003	0.236	0.233	NA	0.046	2.32	1.33	ND	ND	12.4	11.5	ND	ND	0.084
Oct-2003	0.22	0.209	NA	0.041	2.74	1.76	ND	ND	12.9	10.8	ND	0.03	0.08
Apr-2004	0.234	0.211	ND	0.055	4.63	2.15	ND	ND	12.6	11.9	ND	0.065	0.226
Oct-2004	0.244	0.232	ND	0.025	2.76	1.76	ND	ND	12.7	12	ND	0.017	0.079
Apr-2005	0.263	0.253	ND	0.03	2.66	1.68	ND	ND	11.9	11.5	ND	0.02	0.061
Oct-2005	0.216	0.216	ND	0.017	1.58	1.43	ND	ND	9.66	8.61	ND	ND	0.04
Mar-2006	0.174	0.194	ND	0.015	1.34	1.29	ND	ND	9.53	9.45	ND	ND	0.015

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-17***												
Sep-2006	0.244	0.221	ND	0.027	1.92	1.49	ND	ND	9.55	9.87	ND	0.01	0.096
Mar-2007	0.218	0.205	ND	0.04	2.2	1.36	ND	ND	9.08	9.56	ND	0.033	0.085
Sep-2007	0.183	0.172	ND	0.039	1.96	1.1	ND	ND	8.21	8.9	ND	0.038	0.088
Mar-2008	0.196	0.183	ND	0.019	1.69	1.36	ND	ND	9.11	9.26	ND	ND	0.052
Sep-2008	0.202	0.186	ND	0.017	1.84	1.32	ND	ND	9.74	9.32	ND	ND	0.043
Mar-2009	0.201	0.175	ND	0.045	2.36	1.38	ND	ND	9.67	9.75	ND	0.036	0.1
Oct-2009	0.157	0.176	ND	0.018	1.56	1.13	ND	ND	8.17	8.59	ND	0.019	0.05
Apr-2010	0.174	0.155	ND	0.022	2.05	1.18	ND	ND	8.91	8.64	ND	0.033	0.064
Oct-2010	0.224	0.204	ND	0.026	2.2	1.44	ND	ND	11.7	11.6	ND	0.013	0.052
Apr-2011	0.171	0.17	ND	0.016	1.26	1.24	ND	ND	10.4	10.3	ND	ND	0.032
Sep-2011	0.181	0.166	ND	0.017	2.44	1.28	ND	ND	9.96	9.42	ND	0.011	0.044
Mar-2012	0.276	0.252	0.0002	0.024	2.87	1.52	ND	ND	12.2	11.1	ND	0.012	0.065
Sep-2012	0.196	0.184	ND	0.0238	1.9	1.44	ND	ND	10.4	10.8	0.000409 J	0.0179	0.0513
Mar-2013	0.153	0.174	0.000142 J	0.0182	1.37	1.15	ND	0.000022 J	7.37	8.92	ND	0.0191	0.0512
Oct-2013	0.227	0.192	ND	0.015	2.27 J	1.52	ND	0.000018 J	10.8	11.4	0.000198 J	0.0205 J	0.0491
Mar-2014	0.157	0.17	ND	0.0106 J	1.8	1.37	ND	ND	9.13	10.1	0.000637 J	0.0083 J	0.0257
Oct-2014	0.203	0.17	0.000121 J	0.0665 J	5.72 J	1.61	ND	0.000089 J	9.92 J	11.6	ND	0.0981 J	0.104
Apr-2015	0.187	0.182	ND	0.0425 J	4.91	1.57	ND	0.00008 J	10.2	11.8	ND	0.0674	0.0674
Nov-2015	0.158	0.184	ND	0.0161	2.82	1.56	0.000942 J	ND	8.92	11.2	0.000327 J	0.0234	0.0383
May-2016	0.2	0.188	ND	0.0294	3.22	1.8	ND	ND	12.3	12	0.00017 J	0.0438	0.0732
Oct-2016	0.265	0.262	ND	0.019	2.11	1.94	ND	ND	13.7	13.8	ND	0.0106	0.0647
May-2017	0.2	0.191	ND	0.0091	1.67	1.62	ND	ND	11.3	11.2	ND	0.0044	0.039
Oct-2017	0.213	0.203	ND	0.0104	1.58	1.56	ND	ND	11	11	ND	0.0033	0.0382
May-2018	0.33	0.34	ND	0.062	2.1 J	1.7 J	0.00046 J	ND	15.1	13.8	0.000071 J	0.0041	0.15

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-17***												
Nov-2018	0.22	0.23	*ND*	0.048	*2.1 J*	*2 J*	*0.00019 J*	*ND*	13.8	13.9	*ND*	0.0055	0.089
May-2019	0.5	0.47	*ND*	0.04	*ND*	*ND*	*ND*	*ND*	13.5	13.4	*ND*	*ND*	0.077
Oct-2019	0.7	0.63	*ND*	0.034	*1.4 J*	*ND*	*ND*	*ND*	13.4	13.1	*ND*	0.0073	0.066
May-2020	0.57	0.58	*ND*	0.026	*1.8 J*	*1.8 J*	*ND*	*ND*	13.4	13.1	*ND*	*ND*	0.048
Oct-2020	0.42	0.4	*ND*	0.02	*ND*	*1.7 J*	*ND*	*ND*	13.4	12.9	*ND*	*0.0015 J*	0.041
Apr-2021	0.43	0.42	*ND*	0.016	1.8	1.7	*0.0056 J*	*ND*	13.6	13.4	*ND*	*0.00068 J*	0.034
Oct-2021	0.45	0.482	*ND*	0.016	1.6	1.7	*ND*	*ND*	12.2	13.5	*0.000029 J*	*ND*	0.035
May-2022	0.41	0.43	*ND*	0.016	1.8	1.8	*ND*	*ND*	13.3	13.9	*ND*	*0.0011 JB*	0.035

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	35	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.96 J	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 J	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 J	ND	11	22 J+	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.4 J*	7.9	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.4 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.6 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.5 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17***															
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-17A***											
Nov-1993	ND	ND	ND	21.3	2.6	0.3	ND	4.76	19.2	2.5	ND	2.47
Apr-1994	5	5	0.2	ND	2.4	0.3	ND	5	19	ND	20	3.79
Apr-1995	ND	ND	0.4	ND	2.7	0.3	ND	4.8	19.1	2.3	18	2
Apr-1997	ND	2	ND	ND	1.5	0.29	ND	NA	NA	ND	66	4.1
Oct-1997	2	2	0.33	30	2.6	0.294	ND	5.99	19.7	ND	22	ND
Apr-1998	3	ND	ND	ND	1.79	0.301	ND	7.35	18.75	ND	ND	3
Apr-1999	ND	ND	0.45	ND	2.04	0.18	ND	4.95	48.5	ND	20	3.2
Oct-1999	ND	ND	0.07	ND	2.76	0.563	ND	4.69	20.8	1.35	19	3.1
Apr-2000	ND	ND	ND	ND	1.62	0.26	ND	6.88	103	0.87	24	3.2
Oct-2000	1	NA	ND	ND	2.03	ND	ND	6.08	29.8	ND	33	3.31
Apr-2001	1.3	NA	ND	ND	2.23	0.292	ND	NA	NA	ND	25	3.3
Sep-2001	ND	ND	ND	ND	3.42	1.27	ND	5.04	19	ND	21	3.16
Mar-2002	ND	ND	ND	ND	3.6	0.426	ND	5.1	14.2	0.821	21	3.08
Sep-2002	1.8	1.8	ND	ND	2.62	0.3	ND	5	20.8	ND	16	2.97
Mar-2003	1.6	1.6	ND	ND	1.34	ND	ND	5.2	16.2	ND	36	3.15
Oct-2003	1.5	1.5	ND	ND	4.03	0.214	ND	4.8	20.9	ND	19	4.09
Apr-2004	1.7	1.7	ND	ND	2.44	0.189	ND	4.8	17.9	ND	21	3.39
Oct-2004	1.5	1.5	ND	ND	2.45	0.266	ND	4.8	15.7	ND	30	3.05
Apr-2005	1.8	1.8	ND	ND	2.63	0.3	ND	4.8	15.5	1.45	38	3.2
Oct-2005	2.7	2.7	ND	ND	2.68	0.27	ND	4.1	15.9	1.21	35	3.07
Mar-2006	2.8	2.8	ND	ND	2.51	0.29	ND	4.9	17.5	1.51	24	2.14
Sep-2006	2.7	2.7	ND	ND	2.54	0.3	ND	4.9	17.5	1.2	20	2.92
Mar-2007	2.8	2.8	ND	ND	2.73	0.29	ND	4.7	15.2	ND	ND	2.89
Sep-2007	2.4	2.4	ND	ND	2.5	0.3	ND	6.4	16.6	ND	17	2.7
Mar-2008	2.2	2.2	ND	ND	7.48	ND	ND	4.8	14.8	2.92	11	2.8
Sep-2008	2.9	2.9	0.22	ND	2.61	0.26	ND	4.5	14.6	ND	23	3
Mar-2009	2.6	2.6	ND	ND	2.69	0.3	ND	4.3	16.7	2.38	ND	2.97
Oct-2009	2.6	2.6	ND	ND	2.59	0.24	ND	4.5	15.5	ND	14	2.66
Apr-2010	2.5	2.5	ND	ND	2.98	0.22	ND	3.7	16.4	ND	54	3.1
Oct-2010	2.3	2.3	ND	ND	2.97	0.2	ND	4.8	12.2	ND	16	3.24
Apr-2011	2.6	2.6	ND	ND	2.55	0.26	ND	4.4	16.2	ND	16	2.8
Sep-2011	2.8	2.8	ND	ND	2.59	0.26	ND	4.6	16.2	ND	ND	3.57
Mar-2012	2.6	2.6	ND	ND	2.77	0.26	ND	4.5	21.3	ND	ND	2.68
Sep-2012	2.28	2.28	ND	ND	2.81	0.246	ND	3.9	16.3	ND	36	3.26
Mar-2013	3.08	3.08	0.0641	ND	2.94	0.253	ND	5	16.1	0.742 J	16	3.25
Oct-2013	2.76	2.76	ND	ND	2.89	0.246	ND	3.1	15.8	0.63 J	ND	3.12
Mar-2014	2.72	2.72	ND	18	2.89	0.251	ND	5.2	16.6	0.725 J	ND	3.08

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-17A***										
Oct-2014	ND	ND	ND	ND	3.23	0.197	ND	4.7	16	ND	ND	3.14
Apr-2015	3.72	3.72	ND	ND	2.93	0.214	ND	3.8	16.6	ND	ND	3.26
Nov-2015	ND	ND	ND	7 J	2.99	0.223	ND	5.2	56.1	ND	23 J	3.73
May-2016	ND	ND	ND	ND	2.97	0.233	ND	5.3	26.6	ND	12 J	3.4
Oct-2016	ND	ND	ND	6 J	2.87	NA	NA	5.3	24.2	0.922 J	23 J	3
May-2017	ND	ND	ND	ND	2.75	0.255	ND	4.9	26.9	ND	ND	3.1
Oct-2017	ND	ND	0.0677 J	ND	2.84	0.221	ND	4.9	30.4	ND	15 J	3.1
May-2018	2 J	ND	ND	ND	3.1	ND	ND	4.4	24.4	ND	60	3.2 J
Nov-2018	2 JB	ND	ND	ND	3	0.18	ND	4.64	19.4	ND	ND	3.2 J
May-2019	ND	NA	ND	ND	ND	0.17	ND	4.63	15.4	ND	ND	ND
Oct-2019	2.5 JH1	NA	ND	ND	2.6 J	0.2	ND	4.53	20.6	ND	38	3.5
May-2020	ND	NA	ND	ND	2.7 J	0.19	ND	4.4	20.7	ND	ND	3.5
Oct-2020	ND	NA	ND	ND	2.8 J	0.21	ND	4.48	19.4	ND	ND	3.4
Apr-2021	ND	NA	ND	ND	2.9 J	0.17	ND	4.86	22.4	ND	ND	3.4
Oct-2021	4 J4c	NA	ND	ND	2.4 J	0.25	ND	5.01	51.9	ND	ND	3.28 J
May-2022	4 J4c	NA	ND	ND	2.4 J	0.21	ND	4.8	48.5	ND	10	3.5 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17A***													
Nov-1993	NA	ND	ND	NA	ND	0.46	NA	ND	NA	ND	0.37	0.08	ND	0.32	NA
Apr-1994	NA	ND	ND	NA	ND	0.76	NA	ND	NA	ND	0.24	0.93	ND	0.46	NA
Apr-1995	ND	ND	0.8	ND	ND	0.27	NA	ND	ND	ND	0.03	ND	ND	0.33	NA
Oct-1996	ND	ND	0.013	ND	ND	0.65	0.61	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	**0.007**	ND	0.025	ND	ND	1.4	0.55	ND	ND	ND	ND	ND	ND	0.66	ND
Oct-1997	ND	ND	0.011	ND	ND	0.646	0.542	ND	ND	ND	0.115	ND	ND	0.338	0.279
Apr-1998	ND	ND	0.01	ND	ND	0.648	0.608	ND	ND	ND	0.097	ND	ND	0.341	0.315
Apr-1999	ND	ND	0.01	ND	ND	0.686	0.638	ND	ND	ND	0.196	ND	ND	0.369	0.34
Oct-1999	ND	ND	0.01	ND	ND	0.668	0.619	ND	ND	ND	ND	ND	ND	0.36	0.335
Apr-2000	ND	ND	ND	ND	ND	0.699	0.628	ND	ND	ND	0.361	ND	ND	0.346	0.317
Oct-2000	ND	ND	ND	ND	ND	0.722	0.682	ND	ND	ND	ND	ND	ND	0.366	0.347
Apr-2001	ND	ND	ND	ND	ND	0.699	NA	ND	ND	ND	ND	NA	ND	0.366	NA
Sep-2001	ND	ND	ND	ND	ND	0.675	0.677	ND	ND	ND	0.092	ND	ND	0.358	0.347
Mar-2002	ND	ND	0.011	ND	ND	0.661	0.662	ND	ND	ND	ND	ND	ND	0.348	0.349
Sep-2002	ND	ND	0.011	ND	ND	0.631	0.619	ND	ND	ND	0.067	ND	ND	0.341	0.337
Mar-2003	ND	ND	ND	ND	ND	0.657	0.621	ND	ND	ND	ND	ND	ND	0.368	0.341
Oct-2003	ND	ND	0.011	ND	ND	0.979	0.622	ND	ND	ND	0.086	ND	ND	0.401	0.349
Apr-2004	ND	ND	ND	ND	ND	0.723	0.711	ND	ND	ND	0.166	ND	ND	0.385	0.369
Oct-2004	ND	ND	ND	ND	ND	0.649	0.643	ND	ND	ND	ND	ND	ND	0.347	0.354
Apr-2005	ND	ND	0.011	ND	ND	0.674	0.664	ND	ND	ND	ND	ND	ND	0.367	0.36
Oct-2005	ND	ND	0.011	ND	ND	0.676	0.645	ND	ND	ND	ND	ND	ND	0.334	0.319

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17A***													
Mar-2006	ND	ND	ND	ND	ND	0.373	0.356	ND	ND	ND	ND	ND	ND	0.293	0.291
Sep-2006	ND	ND	ND	ND	ND	0.619	0.614	ND	ND	ND	ND	ND	ND	0.333	0.327
Mar-2007	ND	ND	ND	ND	ND	0.617	0.599	ND	ND	ND	ND	ND	ND	0.327	0.323
Sep-2007	ND	ND	ND	ND	ND	0.568	0.55	ND	ND	ND	ND	ND	ND	0.312	0.308
Mar-2008	ND	ND	0.01	ND	ND	0.603	0.606	ND	ND	ND	ND	ND	ND	0.313	0.316
Sep-2008	ND	ND	0.011	ND	ND	0.629	0.62	ND	ND	ND	ND	ND	ND	0.35	0.334
Mar-2009	ND	ND	ND	ND	ND	0.663	0.594	ND	ND	ND	ND	ND	ND	0.317	0.306
Oct-2009	ND	ND	ND	ND	ND	0.566	0.564	ND	ND	ND	ND	ND	ND	0.303	0.325
Apr-2010	ND	ND	ND	ND	ND	0.695	0.49	ND	ND	ND	ND	ND	ND	0.341	0.298
Oct-2010	ND	ND	ND	ND	ND	0.681	0.61	ND	ND	ND	ND	0.11	ND	0.373	0.349
Apr-2011	ND	ND	0.01	ND	ND	0.619	0.578	ND	ND	ND	ND	ND	ND	0.326	0.323
Sep-2011	ND	ND	ND	ND	ND	0.756	0.745	ND	ND	ND	ND	ND	ND	0.408	0.364
Mar-2012	ND	ND	0.011	ND	0.004	0.476	0.456	ND	0.016	0.029	ND	ND	ND	0.363	0.327
Sep-2012	ND	ND	0.0106	0.00024 J	ND	0.714	0.707	0.0012 J	0.0033 J	0.0019 J	0.0251 J	0.0327 J	ND	0.358	0.354
Mar-2013	ND	ND	0.0105	0.000213 J	ND	0.77	0.725	0.0017 J	0.0034 J	0.0018 J	0.0127 J	0.0068 J	0.0016 J	0.323	0.294
Oct-2013	ND	ND	0.0106	ND	ND	0.755	0.729	0.0024 J	0.0029 J	0.0017 J	ND	ND	ND	0.3	0.317
Mar-2014	0.000468 J	ND	0.0096 J	0.000304 J	ND	0.642	0.537	0.0012 J	0.0028 J	0.0025 J	0.0127 J	0.0046 J	ND	0.358	0.286
Oct-2014	0.000907 J	ND	0.0105	0.000251 J	ND	0.689	0.703	0.000956 J	0.0031 J	0.0017 J	0.0108 J	ND	ND	0.345	0.351
Apr-2015	0.000929 J	ND	0.0108	0.000254 J	ND	0.705	0.702	0.000605 J	0.0033 J	0.0017 J	0.011 J	0.0739	ND	0.365	0.357
Nov-2015	0.000479 J	ND	0.0113	0.000303 J	ND	0.854	0.817	0.000597 J	0.0033 J	0.0017 J	ND	0.0179 J	ND	0.389	0.389
May-2016	ND	ND	0.0108	0.00027 J	ND	0.725	0.626	0.0011 J	0.0029	0.0016 J	ND	ND	ND	0.381	0.347
Oct-2016	ND	ND	0.0097	0.00026 J	ND	0.653	0.688	ND	0.0028	0.0015 J	ND	ND	ND	0.335	0.356
May-2017	ND	ND	0.0108	0.00027 J	ND	0.666	0.649	0.0017 J	0.0031	0.0016 J	ND	ND	ND	0.354	0.35
Oct-2017	ND	ND	0.0095	0.00024 J	ND	0.673	0.699	0.0013 J	0.003	0.0016 J	ND	ND	ND	0.339	0.327

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17A***													
May-2018	*0.00004 J*	*ND*	0.011	*0.00027 J*	*0.000032 J*	*0.71 J*	*0.74 J*	*0.0025 J*	0.0035	*0.002 J*	0.028	*0.011 J*	*0.000043 JB*	*0.35 J*	*0.38 J*
Nov-2018	*ND*	*ND*	0.011	0.0003	*0.000034 J*	*0.7 J*	*0.7 J*	0.015	0.0065	0.0024	0.13	0.11	*0.000027 J*	*0.36 J*	*0.36 J*
May-2019	*ND*	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	0.017	0.0068	0.0022	0.13	0.094	*ND*	*ND*	*ND*
Oct-2019	*0.00011 J*	*ND*	0.01	*0.00027 J*	*0.00014 J*	0.76	*0.72 J*	*0.0062 J*	0.0032	*0.0019 J*	*0.03 J*	0.022	*ND*	0.39	*0.37 J*
May-2020	*0.000053 J*	*ND*	0.01	*0.00022 J*	*ND*	0.75	*0.72 J*	0.01	0.0043	0.0036	*0.055 J*	0.035	*ND*	0.39	*0.38 JB*
Oct-2020	*ND*	*ND*	*0.0087 J*	*ND*	*ND*	0.75	*0.72 J*	*0.0058 J*	0.0033	*ND*	*0.07 JB*	0.022	*ND*	0.37	*0.38 J*
Apr-2021	*ND*	*ND*	0.012	*0.00028 J*	*ND*	*0.75 J*	*0.72 J*	*0.0033 J*	*0.0035 J*	*0.0032 J*	*ND*	*ND*	*ND*	0.38	0.4
Oct-2021	*ND*	*ND*	0.011	*0.00021 J*	*ND*	0.71	0.77	0.0058	0.0049	*0.0022 J*	0.061	*0.031 J*	*ND*	*0.37 J*	*0.39 J*
May-2022	*ND*	*ND*	0.011	*0.00024 J*	*ND*	0.75	0.83	0.0043	0.0044	*0.0022 J*	*0.04 J*	*ND*	*ND*	*0.4 J*	*0.43 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-17A*												
Nov-1993	ND	NA	ND	NA	0.49	NA	ND	NA	1.2	NA	NA	NA	ND
Apr-1994	0.01	NA	ND	NA	0.57	NA	ND	NA	1.39	NA	NA	NA	0.19
Apr-1995	ND	NA	ND	ND	0.59	NA	ND	ND	0.96	NA	ND	ND	0.02
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	1.8	1.7	ND	ND	0.054
Apr-1997	0.011	ND	ND	0.044	1.9	1.4	ND	ND	1.2	1.6	ND	ND	0.065
Oct-1997	ND	ND	NA	ND	ND	ND	ND	ND	0.99	0.658	ND	ND	0.012
Apr-1998	ND	0.023	NA	ND	0.889	0.711	ND	ND	1.13	1.17	ND	ND	ND
Apr-1999	ND	ND	NA	ND	ND	ND	ND	ND	1.22	1.1	ND	ND	ND
Oct-1999	ND	ND	NA	ND	ND	ND	ND	ND	1.21	1.13	ND	ND	ND
Apr-2000	ND	ND	NA	ND	ND	ND	ND	ND	1.11	1.07	ND	ND	0.011
Oct-2000	ND	ND	NA	ND	0.771	0.842	ND	ND	1.35	1.15	ND	ND	ND
Apr-2001	ND	NA	NA	ND	1.05	NA	ND	ND	1.19	NA	ND	ND	ND
Sep-2001	ND	ND	NA	ND	ND	ND	ND	ND	1.16	1.14	ND	ND	ND
Mar-2002	ND	ND	NA	ND	ND	ND	ND	ND	1.2	1.15	ND	ND	ND
Sep-2002	ND	ND	NA	ND	0.837	ND	ND	ND	1.17	1.15	ND	ND	ND
Mar-2003	ND	ND	NA	ND	ND	ND	ND	ND	1.16	1.1	ND	ND	ND
Oct-2003	ND	ND	NA	ND	1.3	ND	ND	ND	2.06	1.12	ND	ND	0.012
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	1.18	1.22	ND	ND	ND
Oct-2004	ND	ND	ND	ND	0.83	ND	ND	ND	1.28	1.24	ND	ND	ND
Apr-2005	ND	ND	ND	ND	0.65	0.59	ND	ND	1.18	1.14	ND	ND	ND
Oct-2005	ND	ND	ND	ND	0.602	0.607	ND	ND	1.09	1.03	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	0.859	0.818	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-17A***												
Sep-2006	ND	ND	ND	ND	0.526	0.514	ND	ND	1.03	1.03	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	1.01	0.996	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	0.355	ND	ND	1.08	1.01	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.53	0.549	ND	ND	1.07	1.07	ND	ND	ND
Sep-2008	ND	ND	ND	ND	0.525	ND	ND	ND	1.13	1.08	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.07	1.04	ND	ND	0.018
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	0.995	0.944	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.2	1.04	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.2	1.08	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.03	1.01	ND	ND	ND
Sep-2011	ND	ND	ND	ND	0.517	ND	ND	ND	1.3	1.27	ND	ND	ND
Mar-2012	0.016	ND	ND	0.024	0.521	ND	ND	ND	1.18	1.12	ND	0.03	0.011
Sep-2012	0.0064 J	0.006 J	ND	0.0052 J	0.481 J	0.474 J	ND	ND	1.16	1.15	0.000259 J	ND	0.0074 J
Mar-2013	0.0065 J	0.0057 J	0.000048 J	0.0053 J	0.421 J	0.394 J	ND	ND	1.05	0.984	ND	ND	0.0197
Oct-2013	0.0057 J	0.0058 J	ND	0.0052 J	0.427 J	0.454 J	ND	ND	1.05	1.13	ND	ND	0.0169
Mar-2014	0.0056 J	0.0047 J	ND	0.0046 J	0.494 J	0.512	ND	ND	1.05	1.1	0.000376 J	ND	0.0071 J
Oct-2014	0.0059 J	0.0061 J	ND	0.0051 J	0.468 J	0.474 J	ND	ND	1.26	1.29	0.0012 J	ND	0.0088 J
Apr-2015	0.0063 J	0.0065 J	ND	0.0052 J	0.507	0.492 J	0.000917 J	ND	1.29	1.28	ND	ND	0.0093 J
Nov-2015	0.0065 J	0.0068 J	ND	0.0052 J	0.526	0.527	ND	ND	1.34	1.39	0.000182 J	ND	0.0081 J
May-2016	0.0058	0.0057	ND	0.0049	0.504	0.465	ND	ND	1.26	1.13	ND	ND	0.0083 J,B
Oct-2016	0.0056	0.0062 J+	ND	0.0048	0.439	0.507	ND	ND	1.13	1.22	ND	ND	0.0063 J
May-2017	0.0059	0.006	ND	0.0054	0.486	0.49	ND	ND	1.1	1.12	ND	ND	0.0066 J
Oct-2017	0.0062	0.0053	ND	0.0057	0.444	0.464	ND	ND	1.05	1.09	ND	ND	0.0059 J
May-2018	0.0064	0.0056	ND	0.0086	ND	ND	ND	ND	1.5 J	1.2 J	ND	0.0039	0.0077 B

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-17A***												
Nov-2018	0.0083	0.0069	*ND*	0.025	*ND*	*ND*	*0.00012 J*	*ND*	*1.1 J*	*1.2 J*	*ND*	0.0023	0.0098
May-2019	0.013	0.0073	*ND*	0.027	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.014
Oct-2019	0.0073	0.0065	*ND*	0.0074	*ND*	*ND*	*ND*	*ND*	*ND*	*1.4 J*	*ND*	0.0073	0.012
May-2020	0.009	0.0063	*ND*	0.013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0099	0.0073
Oct-2020	0.0068	0.0062	*ND*	0.008	*ND*	*ND*	*ND*	*ND*	*1.3 J*	*ND*	*ND*	*0.00063 J*	*ND*
Apr-2021	0.0068	0.006	*ND*	*0.0081 J*	*0.49 J*	0.5	*ND*	*ND*	1.2	1.2	*ND*	*ND*	*0.0058 J*
Oct-2021	0.0068	0.0069	*ND*	0.013	*0.44 J*	*0.46 J*	*ND*	*ND*	1.2	1.4 B	*ND*	*ND*	0.0061
May-2022	0.0073	0.0072	*ND*	0.01	0.56	*0.48 J*	*ND*	*ND*	1.3	1.3	*ND*	*ND*	0.0076

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	22	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17A*																
Feb-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17A*																
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.2 J*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.5 B	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17A***															
Feb-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17A***															
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-17A*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	NA
Feb-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17A***															
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.5 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1 BCH	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-21***											
Nov-1993	ND	ND	0.2	ND	14.9	0.8	0.2	4.76	116.2	19.6	34	12.8
Apr-1994	ND	ND	0.2	ND	14.5	1	ND	4.47	126	21.9	50	17.15
Apr-1995	ND	ND	ND	ND	17.4	0.9	ND	4.4	125	23.9	44	14.5
Apr-1997	ND	ND	ND	22	15	0.62	ND	NA	NA	22	71	11
Oct-1997	ND	ND	0.2	ND	15	0.382	ND	5.58	117.4	24.5	80	20
Apr-1998	ND	ND	ND	ND	14.8	0.52	ND	4.61	124.2	19.8	69	31
Apr-1999	ND	ND	0.19	ND	17.9	0.392	ND	4.03	125.6	23.3	83	22
Oct-1999	ND	ND	0.06	ND	14.4	0.374	ND	4.5	152.3	19.5	79	19
Apr-2000	ND	ND	ND	ND	19.3	0.95	ND	5.01	113	32.8	82	21
Oct-2000	ND	NA	ND	ND	12.1	0.37	ND	6.12	136.3	23.2	83	21.3
Apr-2001	ND	NA	ND	ND	15.4	0.785	ND	NA	NA	27.4	84	23
Sep-2001	ND	ND	ND	ND	16.8	1.83	ND	4.45	150	28.5	87	23.9
Mar-2002	ND	ND	ND	ND	19.1	0.896	ND	4.5	155	28.4	89	24.4
Sep-2002	ND	ND	ND	ND	20	1.04	ND	4.5	152.3	31.1	73	21.1
Mar-2003	ND	ND	ND	ND	22.8	1.01	ND	4.4	153.8	29.4	103	23.7
Oct-2003	ND	ND	ND	ND	12.8	1.69	ND	4.3	128.3	20.8	78	20.2
Apr-2004	ND	ND	ND	ND	16.1	0.575	ND	4.3	120.1	28.4	77	22.9
Oct-2004	ND	ND	ND	ND	11.3	0.504	ND	3.7	107.7	25.9	71	19
Apr-2005	ND	ND	ND	11	16.8	0.74	ND	4.4	108.9	24.1	85	21.2
Oct-2005	ND	ND	ND	ND	13.4	0.48	ND	3.9	103.8	32.5	74	17.3
Mar-2006	ND	ND	ND	ND	16	0.53	ND	4.5	125.8	36.2	71	19.4
Sep-2006	ND	ND	ND	ND	16	0.46	ND	4.3	119.1	28.6	75	20.1
Mar-2007	ND	ND	0.46	ND	16.5	0.51	ND	4.2	111.2	30.5	83	19.4
Sep-2007	ND	ND	ND	ND	16.4	0.96	ND	4.5	103.7	30.4	94	17.4
Mar-2008	ND	ND	0.47	ND	23.1	ND	ND	4.1	118.5	33.3	91	20.7
Sep-2008	ND	ND	ND	ND	21.8	0.74	ND	4.3	121.5	34.9	88	19
Mar-2009	ND	ND	ND	ND	23.7	0.89	ND	4	132.3	33.8	97	20.8
Oct-2009	ND	ND	ND	ND	29.7	0.83	ND	4.1	133	32.4	115	19.5
Apr-2010	ND	ND	ND	ND	30.5	1	ND	3.6	142.7	33	58	20.8
Oct-2010	ND	ND	ND	ND	21.4	0.88	ND	3.6	114.2	26.4	77	20.2
Apr-2011	2.9	2.9	ND	ND	23.9	0.75	ND	3.9	144.2	21	89	19.5
Sep-2011	ND	ND	0.26	ND	26.3	1.05	ND	4.5	126.1	27.2	95	20.7
Mar-2012	ND	ND	ND	ND	22	0.68	ND	3.6	125.4	30	100	20.3
Sep-2012	ND	ND	ND	ND	19.2	0.654	ND	4.2	115.1	29.6	97	20.1
Mar-2013	0.52 J	0.52 J	ND	ND	29.9	0.931	ND	4.3	147.6	26.8	102	18.5
Oct-2013	0.4	0.4	ND	ND	22.1	0.731	ND	3.2	103.7	26.6	86	19.6
Mar-2014	ND	ND	ND	10	24.4	0.754	ND	4.5	146.1	33.8	92	20.8

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-21***											
Oct-2014	*ND*	*ND*	*ND*	*ND*	17.2	0.523	*ND*	4.3	113.2	28.7	50	19.2
Apr-2015	0.96	0.96	*ND*	*ND*	23.7	0.887	*ND*	3.9	123.8	29.6	78	22.5
Nov-2015	*ND*	*ND*	*ND*	*8 J*	19.1	0.769	*ND*	4.5	156.8	27.4	62	22.8
May-2016	*ND*	*ND*	*ND*	*6 J*	22	1	*ND*	4.5	216	30.8	78	22.5
Oct-2016	*ND*	*ND*	*ND*	*ND*	21.7	*NA*	*NA*	4.5	181.9	24.2	93	21.1
May-2017	*ND*	*ND*	*ND*	*5 J*	24	1.27	*ND*	4.4	227	27	98	22
Oct-2017	*ND*	*ND*	*ND*	*7 J*	26.9	1.63	*ND*	4.5	262	30.4	89	23.8
May-2018	*ND*	*ND*	*ND*	*7.9 J*	32	0.46	*ND*	4.2	246	26.9	80	28.9
Nov-2018	*ND*	*ND*	*ND*	*ND*	32	2.2	*ND*	4.26	170.1	24.9	98	27.4
May-2019	*ND*	*NA*	*ND*	*ND*	22.8	1.6	*ND*	3.96	116.5	23.7	96	25.3
Oct-2019	*ND*	*NA*	*ND*	*6 J*	17.5	1.4	*ND*	4.06	138.7	24.3	73	22.8
May-2020	*ND*	*NA*	*ND*	*ND*	28.2	1.9	*ND*	4.1	158.5	26.6	74	27
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	28.1	2	*ND*	4.13	163.4	29.2	81	26.3
Apr-2021	*ND*	*NA*	*ND*	*ND*	23	1.9	*ND*	4.33	184.6	26.7	78	25.6
Oct-2021	*ND*	*NA*	*ND*	*6.1 J*	17.1	1.5	*ND*	4.44	196.8	26	84	23
May-2022	*1 J2c*	*NA*	*ND*	*ND*	22.6	2.1	*ND*	4.19	217.1	31	118	29.6 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-21***													
Nov-1993	NA	ND	ND	NA	ND	2	NA	ND	NA	ND	0.03	0.12	ND	1.9	NA
Apr-1994	NA	ND	ND	NA	ND	2.91	NA	ND	NA	ND	0.24	ND	ND	2.4	NA
Apr-1995	ND	ND	0.6	ND	ND	2	NA	ND	ND	ND	0.35	0.05	ND	2.3	NA
Oct-1996	ND	ND	0.12	ND	ND	4.5	4.9	ND	ND	ND	ND	ND	ND	2	2
Apr-1997	0.006	ND	0.11	ND	ND	4	4.1	ND	ND	ND	ND	ND	ND	1.8	2.1
Oct-1997	ND	ND	0.114	ND	ND	3.99	4.02	ND	0.014	ND	ND	ND	ND	2.07	2.09
Apr-1998	ND	ND	0.194	ND	ND	6.7	4.7	ND	0.019	ND	0.246	ND	ND	3.43	2.38
Apr-1999	ND	ND	0.13	ND	ND	4.66	4.35	ND	0.012	ND	0.179	ND	ND	2.39	2.24
Oct-1999	ND	ND	0.127	ND	ND	4.3	3.98	ND	0.014	0.031	0.068	ND	ND	2.25	2.08
Apr-2000	ND	ND	0.115	ND	ND	4.75	4.55	ND	0.012	ND	ND	ND	ND	2.3	2.2
Oct-2000	ND	ND	0.106	ND	ND	4.9	4.83	ND	0.012	ND	0.101	ND	ND	2.21	2.18
Apr-2001	ND	ND	0.115	ND	ND	5.22	NA	ND	0.014	ND	0.166	NA	ND	2.39	NA
Sep-2001	ND	ND	0.121	ND	ND	5.4	5.39	ND	0.012	ND	0.079	ND	ND	2.52	2.45
Mar-2002	ND	ND	0.11	ND	ND	5.71	5.39	ND	0.013	ND	0.078	ND	ND	2.47	2.43
Sep-2002	ND	ND	0.119	ND	ND	4.72	4.76	ND	0.01	ND	0.091	ND	ND	2.26	2.27
Mar-2003	ND	ND	0.123	ND	ND	5.42	5.3	ND	0.012	ND	ND	ND	ND	2.49	2.41
Oct-2003	ND	ND	0.105	ND	ND	4.72	4.45	ND	ND	ND	0.065	ND	ND	2.04	2
Apr-2004	ND	ND	0.105	ND	ND	5.53	5.53	ND	ND	ND	0.123	ND	ND	2.21	2.19
Oct-2004	ND	ND	0.102	ND	ND	4.2	4.19	ND	0.011	ND	0.128	ND	ND	2.06	2.05
Apr-2005	ND	ND	0.112	ND	ND	4.84	4.6	ND	ND	ND	0.122	ND	ND	2.21	2.17
Oct-2005	ND	0.002	0.099	ND	ND	4.04	3.74	ND	ND	ND	2.38	ND	ND	1.74	1.66

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-21***													
Mar-2006	ND	ND	0.103	ND	ND	4.46	4.36	ND	ND	ND	ND	ND	ND	2.01	1.94
Sep-2006	ND	ND	0.097	ND	ND	4.77	4.76	ND	0.011	ND	ND	ND	ND	1.98	1.99
Mar-2007	ND	ND	0.092	ND	ND	4.68	4.76	ND	0.012	ND	ND	ND	ND	1.86	1.87
Sep-2007	ND	0.002	0.084	ND	ND	4.13	4.07	ND	ND	ND	ND	ND	ND	1.72	1.71
Mar-2008	ND	ND	0.101	ND	ND	4.85	4.35	ND	0.012	ND	0.074	ND	ND	2.09	1.84
Sep-2008	ND	ND	0.086	ND	ND	4.38	4.37	ND	0.011	ND	0.067	ND	ND	1.97	1.96
Mar-2009	ND	ND	0.096	ND	ND	4.95	4.8	ND	ND	ND	0.078	ND	ND	2.05	2.01
Oct-2009	ND	ND	0.089	ND	ND	4.65	4.9	ND	ND	ND	0.898	ND	ND	1.91	2.01
Apr-2010	ND	ND	0.087	ND	ND	5.06	4.92	ND	0.01	ND	0.11	ND	ND	1.99	1.98
Oct-2010	ND	ND	0.086	ND	ND	4.73	4.72	ND	0.013	ND	1.28	ND	ND	2.03	2
Apr-2011	ND	ND	0.09	ND	ND	4.79	4.7	ND	ND	ND	0.165	ND	ND	1.83	1.82
Sep-2011	ND	ND	0.092	ND	ND	4.9	4.86	ND	ND	ND	ND	ND	ND	2.07	2.02
Mar-2012	ND	ND	0.088	ND	ND	4.69	4.62	ND	ND	ND	ND	ND	ND	2.08	2.05
Sep-2012	ND	ND	0.0898	0.000585 J	0.000276 J	4.72	4.71	0.0024 J	0.0096 J	0.0024 J	0.0469 J	0.0228 J	ND	2.03	1.98
Mar-2013	ND	ND	0.0813	0.000462 J	0.000305 J	4.47	5.23	0.0017 J	0.009 J	0.0025 J	0.0121 J	0.007 J	0.0013 J	1.78	2.01
Oct-2013	ND	ND	0.0899	0.000545 J	0.000395 J	4.8	4.87	0.0048 J	0.0098 J	0.0024 J	ND	ND	ND	1.85	1.94
Mar-2014	0.000344 J	0.00009 J	0.0884	0.000622 J	0.000346 J	4.93	4.93	0.0011 J	0.0089 J	0.0024 J	0.009 J	0.0072 J	ND	2.06	2.11
Oct-2014	0.000961 J	0.000473 J	0.0834	0.000457 J	0.000301 J	4.62	4.63	0.0016 J	0.0089 J	0.0023 J	0.0101 J	0.0082 J	ND	1.86	1.86
Apr-2015	0.000744 J	ND	0.0981	0.000598 J	0.000275 J	5.42	5.47	0.000653 J	0.0102	0.0025 J	ND	0.0108 J	ND	2.19	2.25
Nov-2015	0.000487 J	0.000599 J	0.0931	0.000635 J	0.000341 J	5.65	5.69	0.000609 J	0.0091 J	0.0024 J	ND	ND	ND	2.12	2.14
May-2016	ND	0.00086 J	0.0875	0.00053 J	0.00037 J	5.47	5.38	0.00086 J	0.0103	0.0025 J	ND	ND	ND	2.15	2.18
Oct-2016	ND	0.0016 J	0.0821	0.00049 J	0.00031 J	5.02	4.84	0.00085 J	0.01	0.0028 J	ND	ND	ND	2.08	2.04
May-2017	ND	0.0013 J	0.0866	0.0005 J	0.00024 J	5.27	5.76	0.0015 J	0.0088	0.0026 J	ND	ND	ND	2.14	2.26
Oct-2017	ND	0.00099 J	0.087	0.00053 J	0.00031 J	5.68	6.29	0.0014 J	0.0103	0.0026 J	ND	ND	ND	2.34	2.53

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-21***													
May-2018	*0.000059 J*	*ND*	0.076	0.00053	*0.00053 J*	7.2	6.8	*0.0019 JB*	0.0092	*0.00069 J*	*ND*	*ND*	*0.00011 JB*	2.7	2.5
Nov-2018	*ND*	*ND*	0.071	0.00054	*0.00042 J*	6.8	6.8	*0.0054 J*	0.0076	0.0024	0.04	*0.016 J*	*0.000092 J*	2.5	2.5
May-2019	*ND*	*ND*	0.068	0.00046	*ND*	6.3	6.1	*ND*	0.004	*ND*	*ND*	*ND*	*ND*	2.4	2.2
Oct-2019	*0.00011 J*	*ND*	0.074	0.00043	*0.00048 J*	5.6	5.4	*0.0058 J*	0.0084	0.0024	*0.014 J*	*0.0098 J*	*0.000069 J*	2.1	2
May-2020	*0.000068 J*	*ND*	0.084	0.00053	*0.00038 J*	6.6	6.4	*0.0052 J*	0.0093	*ND*	*0.015 J*	*0.012 J*	*ND*	2.6	2.5
Oct-2020	*ND*	*ND*	0.068	*0.00041 J*	*ND*	6.5	6.3	*0.0049 J*	0.0077	*ND*	*ND*	*ND*	*ND*	2.5	2.4
Apr-2021	*ND*	*ND*	0.077	*0.00054 J*	*ND*	6.4	6.5	*0.0011 J*	0.0083	*0.0035 J*	*ND*	*ND*	*ND*	2.3	2.4
Oct-2021	*0.0001 J*	*0.00032 J*	0.077	*0.00044 J*	*0.000081 J*	5.8	6.1	*0.0012 J*	0.0086	*0.0023 J*	*ND*	*0.021 JB*	*0.000055 J*	2.1	2.2
May-2022	*ND*	*ND*	0.089	0.00051	*0.00023 J*	7.3	7.9	*0.0018 J*	0.01	0.0028	*ND*	*ND*	*ND*	2.8	3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-21***												
Nov-1993	0.17	NA	ND	NA	2	NA	ND	NA	3	NA	NA	NA	0.04
Apr-1994	0.17	NA	ND	NA	2.59	NA	ND	NA	11.2	NA	NA	NA	0.09
Apr-1995	0.16	NA	ND	ND	2.2	NA	ND	ND	9.3	NA	ND	ND	0.08
Oct-1996	0.12	0.13	NA	ND	ND	ND	ND	ND	9.8	9.9	ND	ND	0.18
Apr-1997	0.13	0.13	ND	ND	3.7	3.1	ND	ND	8	9.1	0.002	ND	0.23
Oct-1997	0.149	0.151	NA	0.013	1.81	2.46	ND	ND	8.32	8.35	ND	ND	0.051
Apr-1998	0.22	0.153	NA	0.011	3.52	2.33	ND	ND	16	10.9	ND	ND	0.084
Apr-1999	0.158	0.149	NA	ND	1.58	2.01	ND	ND	11.5	10.8	ND	ND	0.05
Oct-1999	0.155	0.146	NA	0.018	2.71	2.75	ND	ND	10.8	9.99	ND	ND	0.062
Apr-2000	0.133	0.128	NA	ND	1.91	2.1	ND	ND	10.9	10.4	ND	ND	0.041
Oct-2000	0.134	0.131	NA	ND	2.3	1.94	ND	ND	10	9.79	ND	ND	0.039
Apr-2001	0.147	NA	NA	ND	3.52	NA	ND	ND	11.3	NA	ND	ND	0.044
Sep-2001	0.145	0.146	NA	ND	3.01	2.66	ND	ND	13.1	12.1	ND	ND	0.044
Mar-2002	0.137	0.139	NA	ND	3.65	3.48	ND	ND	14.2	13.1	ND	ND	0.047
Sep-2002	0.139	0.141	NA	ND	2.12	2.07	ND	ND	12.8	12.7	ND	ND	0.044
Mar-2003	0.147	0.145	NA	ND	2.47	2.14	ND	ND	13.4	12.7	ND	ND	0.045
Oct-2003	0.16	0.164	NA	ND	2.24	2.76	ND	ND	8.91	8.29	ND	ND	0.045
Apr-2004	0.154	0.152	ND	ND	2.12	2.14	ND	ND	10.3	10.7	ND	ND	0.043
Oct-2004	0.188	0.187	ND	ND	1.88	1.87	ND	ND	7.81	7.63	ND	ND	0.048
Apr-2005	0.175	0.176	ND	ND	2.21	1.86	ND	ND	10.5	9.96	ND	ND	0.053
Oct-2005	0.148	0.142	ND	ND	1.83	1.59	ND	ND	8.39	7.29	ND	0.013	0.044
Mar-2006	0.141	0.138	ND	ND	1.64	1.58	ND	ND	9.97	9.69	ND	ND	0.02

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-21***												
Sep-2006	0.154	0.156	ND	ND	1.79	1.82	ND	ND	9.83	9.95	ND	ND	0.039
Mar-2007	0.139	0.139	ND	ND	1.68	1.69	ND	ND	9.37	9.39	ND	ND	0.043
Sep-2007	0.137	0.137	ND	ND	1.42	1.33	ND	ND	8.11	8.01	ND	ND	0.05
Mar-2008	0.154	0.136	ND	ND	1.95	1.66	ND	ND	11.6	10.3	ND	ND	0.047
Sep-2008	0.137	0.136	ND	ND	1.63	1.6	ND	ND	11.7	11.6	ND	ND	0.038
Mar-2009	0.146	0.144	ND	ND	1.81	1.72	ND	ND	13.7	13.3	ND	ND	0.043
Oct-2009	0.135	0.141	ND	ND	1.56	1.5	ND	ND	14.6	14.9	ND	ND	ND
Apr-2010	0.132	0.131	ND	ND	1.71	1.66	ND	ND	17	16.8	ND	ND	0.038
Oct-2010	0.143	0.142	ND	ND	1.63	1.61	ND	ND	13	13.1	ND	ND	0.047
Apr-2011	0.127	0.124	ND	ND	1.35	1.29	ND	ND	14.2	14	ND	ND	0.049
Sep-2011	0.137	0.136	ND	ND	1.73	1.73	ND	ND	15.9	16	ND	ND	0.037
Mar-2012	0.13	0.128	ND	ND	1.6	1.57	ND	ND	13.3	13.3	ND	ND	0.036
Sep-2012	0.125	0.126	0.000024 J	0.0057 J	1.57	1.6	0.000692 J	ND	13.8	13.5	ND	ND	0.0393
Mar-2013	0.12	0.138	0.000061 J	0.0049 J	1.46	1.65	0.000602 J	ND	14.8	16.3	ND	ND	0.0415
Oct-2013	0.127	0.128	ND	0.0052 J	1.57	1.59	0.000675 J	ND	12.3	12.9	ND	0.002 J	0.0484
Mar-2014	0.111	0.113	ND	0.0043 J	1.66	1.69	ND	ND	13.1	13.4	ND	ND	0.033
Oct-2014	0.112	0.112	0.000023 J	0.0056 J	1.59	1.58	0.0028	ND	9.32	9.39	ND	ND	0.035
Apr-2015	0.133	0.135	ND	0.0051 J	1.71	1.77	0.0029	ND	12.9	13.2	ND	ND	0.0376
Nov-2015	0.124	0.127	ND	0.0048 J	1.73	1.74	0.0039	ND	11.1	11.2	0.000151 J	ND	0.0369
May-2016	0.123	0.125	ND	0.0048	1.75	1.75	ND	ND	13.4	14	ND	ND	0.04
Oct-2016	0.118	0.124	ND	0.0054	1.67	1.7	ND	ND	12.6	12.9	ND	ND	0.0371
May-2017	0.116	0.118	ND	0.0049	1.76	1.86	ND	ND	14.5	14.6	ND	ND	0.0347
Oct-2017	0.117	0.123	ND	0.005	1.9	2.07	ND	ND	13.3 J-	16.9	ND	ND	0.0361
May-2018	0.1	0.1	ND	0.00071 B	1.5 J	1.6 J	0.0013 J	ND	21.6	19.5	ND	0.0023	0.0066

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-21***												
Nov-2018	0.094	0.095	*ND*	0.0062	*2.1 J*	*2.1 J*	*0.00064 J*	*ND*	19.6	19.9	*ND*	0.002	0.026
May-2019	0.098	0.095	*ND*	0.0031	*ND*	*ND*	*ND*	*ND*	14.8	14.1	*ND*	*ND*	0.013
Oct-2019	0.11	0.1	*ND*	0.0054	*2.2 J*	*2 J*	*0.00062 J*	*ND*	14.2	12.6	*ND*	0.0075	0.036
May-2020	0.13	0.12	*ND*	0.0052	*2 J*	*2.1 J*	*ND*	*ND*	18	18	*ND*	0.0098	0.032
Oct-2020	0.13	0.11	*ND*	0.0039	*ND*	*1.9 J*	*ND*	*ND*	18.8	17.3	*ND*	0.016	0.025
Apr-2021	0.1	0.1	*ND*	*0.0036 J*	1.9	1.9	*ND*	*ND*	15.6	15.8	*ND*	*0.0008 J*	0.024
Oct-2021	0.1	0.11	*ND*	0.0044	1.7	1.8	*0.0016 J*	*ND*	13.5	14.4	*ND*	*ND*	0.028
May-2022	0.13	0.13	*ND*	0.0053	2	2	*0.0012 J*	*ND*	19.4	19.9	*ND*	*ND*	0.033

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-21*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	25	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-21*																
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.3 J*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-21*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.5 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-21***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.5	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*0.6 J*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-21***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.44 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.37 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.39 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*0.49 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.36 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-21***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.416 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-21***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	1.4	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	0.7 J	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-21***															
Oct-2005	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*0.29 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.29 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-21***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.1 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.4 BCH	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-22***											
Nov-1993	5	5	0.2	ND	7.1	0.8	ND	5.44	40.4	2.6	ND	5.18
Apr-1994	ND	ND	0.1	ND	4.6	0.8	ND	5.28	172	ND	22	63.1
Apr-1995	ND	ND	ND	4	4	0.7	ND	4.6	29.3	2.6	15	2.9
Apr-1997	ND	ND	ND	ND	5	0.79	ND	NA	NA	ND	78	6.2
Oct-1997	ND	ND	0.2	ND	4.85	0.733	ND	5.98	51.3	ND	30	5
Apr-1998	ND	ND	ND	ND	5.12	0.93	ND	6.28	28.3	0.7	28	5.1
Apr-1999	ND	ND	0.5	ND	3.51	0.591	ND	4.62	29.6	ND	14	4.6
Oct-1999	ND	ND	0.09	ND	4.81	0.987	ND	4.86	39.5	ND	32	4.5
Apr-2000	ND	ND	ND	ND	2.96	ND	ND	5.11	29	ND	30	4.2
Oct-2000	ND	NA	ND	ND	5.77	1.08	ND	5.3	24.1	ND	32	6.57
Apr-2001	1.2	NA	ND	ND	5.47	0.561	ND	NA	NA	ND	35	6.5
Sep-2001	ND	ND	ND	ND	7.55	1.84	ND	4.93	28	ND	32	6.77
Mar-2002	2.1	2.1	ND	13	6.11	1.15	ND	4.9	36.5	ND	54	6.65
Sep-2002	ND	ND	ND	ND	6.2	0.93	ND	4.9	35.3	ND	62	6.75
Mar-2003	ND	ND	ND	ND	15.6	1.07	ND	4.8	38.1	ND	48	5.84
Oct-2003	ND	ND	ND	ND	5.15	0.783	ND	5	44.3	ND	17	6.29
Apr-2004	ND	ND	ND	ND	4.93	0.709	ND	4.6	31.5	1.54	31	4.98
Oct-2004	ND	ND	ND	ND	4.68	0.71	ND	4.9	32.6	ND	23	4.81
Apr-2005	ND	ND	ND	ND	5.01	0.76	ND	4.6	29.4	3.61	45	5.7
Oct-2005	1.7	1.7	ND	ND	5.4	0.78	ND	4.6	28.7	1.77	43	4.51
Mar-2006	1.9	1.9	ND	ND	5.16	0.77	ND	5.1	33.3	3.93	18	3.88
Sep-2006	1.7	1.7	ND	ND	5.05	0.75	ND	5.1	33.3	1.78	21	5.56
Mar-2007	1.7	1.7	ND	ND	5.32	0.81	ND	4.8	32.3	1.33	ND	5.04
Sep-2007	1.6	1.6	ND	ND	5.14	0.81	ND	6.1	32.7	1.28	47	4.9
Mar-2008	1.4	1.4	ND	ND	16.6	1.72	ND	4.4	33.5	4.72	13	4.84
Sep-2008	1.6	1.6	0.25	ND	5.79	0.86	ND	4.5	35.6	ND	23	5.3
Mar-2009	1.9	1.9	ND	ND	5.91	0.85	ND	4.5	36.7	1.58	31	5.11
Oct-2009	2	2	ND	ND	5.94	0.76	ND	4.1	34.8	1.38	14	5.39
Apr-2010	1.8	1.8	ND	ND	6.68	0.81	ND	3.7	38.4	2.68	70	5
Oct-2010	1.8	1.8	ND	ND	7.32	0.82	ND	4.2	38.7	1.61	23	6.5
Apr-2011	1.8	1.8	ND	ND	7.03	0.81	ND	4.3	41	1.66	42	5.8
Sep-2011	1.6	1.6	ND	ND	7.71	0.86	ND	4.5	39	1.24	23	6.37
Mar-2012	1.6	1.6	ND	ND	8.18	0.86	ND	3.9	42.8	2.3	53	6.54
Sep-2012	1.32	1.32	ND	ND	8.79	0.849	ND	4.1	43.1	3.6	29	6.8
Mar-2013	1.92	1.92	ND	ND	9.97	1.03	ND	4.7	49.4	1.19	31	7.32
Oct-2013	1.96 J	1.96 J	0.134 J	ND	9.55	0.986	ND	5.8	48.3	1.19	37	7.05
Mar-2014	1.88	1.88	ND	ND	10.2	0.904	ND	4.9	54.1	2.71	29	7.67

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-22***										
Oct-2014	*ND*	*ND*	*ND*	*ND*	12.3	0.952	*ND*	4.8	54.5	2.86	29	8.6
Apr-2015	1.92	1.92	*ND*	*ND*	14.3	1.21	*ND*	3.7	61.4	2.75	32	10.3
Nov-2015	*ND*	*ND*	*ND*	*6 J*	14.6	1.19	*ND*	4.8	98.9	3.48	37	10.4
May-2016	*ND*	*ND*	*ND*	*ND*	13.9	1.14	*ND*	4.9	102.6	2.63	36	9.2
Oct-2016	*ND*	*ND*	*ND*	*ND*	14.2	*NA*	*NA*	4.7	95.7	1.88	41	8.4
May-2017	*ND*	*ND*	*ND*	*ND*	14.9	1.11	*ND*	4.6	98.6	2.56	29	8.9
Oct-2017	2.8	2.8	*ND*	*7 J*	16.2	1.2	*ND*	4.7	116.5	4.97	50	11.8
May-2018	16 B	16	*ND*	*10.1 J*	15.2	0.48	*ND*	4.6	94.6	29.8	79	54.2
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	14.7	0.97	*ND*	4.56	70.6	*5.6 J*	*ND*	9.1
May-2019	*ND*	*NA*	*ND*	*ND*	21.6	1.2	*ND*	4.47	74.7	*ND*	57	12.7
Oct-2019	*ND*	*NA*	*ND*	*6 J*	22.4	1.3	*ND*	4.16	113.4	*ND*	53	14.9
May-2020	*ND*	*NA*	*ND*	*ND*	22	1.2	*ND*	4.11	98.1	*ND*	48	13
Oct-2020	*ND*	*NA*	*ND*	*ND*	21.1	1	*ND*	4.36	91.7	2.8	38	11.9
Apr-2021	*ND*	*NA*	*0.072 J*	*ND*	21.5	1.1	*ND*	4.59	103.4	*ND*	35	12.1
Oct-2021	*2 J3c*	*NA*	*ND*	*ND*	21.6	1.2	*ND*	4.67	154.6	*ND*	45	14
May-2022	*ND*	*NA*	*ND*	*ND*	18.4	1.1	*ND*	4.34	129.7	*ND*	65	14.5 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22***													
Nov-1993	NA	ND	ND	NA	ND	0.82	NA	0.009	NA	ND	3.8	0.29	ND	0.76	NA
Apr-1994	NA	ND	ND	NA	ND	1.64	NA	ND	NA	ND	0.16	0.12	ND	0.68	NA
Apr-1995	ND	ND	0.9	ND	ND	0.41	NA	ND	ND	ND	ND	ND	ND	0.45	NA
Oct-1996	ND	ND	0.011	ND	ND	0.79	0.83	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	0.041	ND	ND	2.2	0.72	ND	0.023	ND	0.43	ND	ND	0.79	ND
Oct-1997	ND	ND	0.013	ND	ND	0.877	0.806	ND	ND	ND	0.656	ND	ND	0.49	0.465
Apr-1998	ND	ND	0.029	ND	ND	1.01	0.956	ND	ND	ND	1.7	ND	ND	0.613	0.506
Apr-1999	ND	ND	0.015	ND	ND	0.947	0.807	ND	ND	ND	0.482	ND	ND	0.546	0.502
Oct-1999	ND	ND	0.013	ND	ND	0.907	0.833	ND	ND	ND	ND	ND	ND	0.541	0.502
Apr-2000	ND	ND	0.011	ND	ND	0.81	0.773	ND	ND	ND	ND	ND	ND	0.529	0.495
Oct-2000	ND	ND	0.013	ND	ND	1.54	1.09	ND	ND	0.011	0.268	ND	ND	0.662	0.594
Apr-2001	ND	ND	0.02	ND	ND	1.46	NA	ND	ND	ND	2.25	NA	ND	0.686	NA
Sep-2001	ND	ND	0.014	ND	ND	1.42	1.11	ND	ND	ND	0.575	ND	ND	0.782	0.607
Mar-2002	ND	ND	0.016	ND	ND	1.49	1.09	ND	ND	ND	0.624	ND	ND	0.71	0.629
Sep-2002	ND	ND	0.016	ND	ND	1.59	1.08	ND	ND	ND	0.408	ND	ND	0.675	0.598
Mar-2003	ND	ND	0.015	ND	ND	1.21	1.1	ND	ND	ND	ND	ND	ND	0.686	0.636
Oct-2003	ND	ND	0.02	ND	ND	1.42	0.984	ND	ND	ND	1.14	ND	ND	0.668	0.612
Apr-2004	ND	ND	0.013	ND	ND	0.95	0.958	ND	ND	ND	ND	ND	ND	0.633	0.606
Oct-2004	ND	ND	0.013	ND	ND	0.878	0.886	ND	ND	ND	0.067	ND	ND	0.636	0.62
Apr-2005	ND	ND	0.018	ND	ND	1.22	0.874	ND	ND	ND	1.47	ND	ND	0.645	0.594
Oct-2005	ND	ND	0.013	ND	ND	0.911	0.862	ND	ND	ND	ND	ND	ND	0.544	0.534

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22***													
Mar-2006	ND	ND	0.01	ND	ND	0.736	0.66	ND	ND	ND	ND	ND	ND	0.496	0.486
Sep-2006	ND	ND	0.013	ND	ND	1.2	0.88	ND	ND	ND	ND	ND	ND	0.622	0.658
Mar-2007	ND	ND	0.015	ND	ND	0.931	0.874	ND	ND	ND	ND	ND	ND	0.661	0.64
Sep-2007	ND	ND	0.014	ND	ND	0.863	0.825	ND	ND	ND	ND	ND	ND	0.668	0.648
Mar-2008	ND	ND	0.015	ND	ND	0.936	0.846	ND	ND	ND	ND	ND	ND	0.608	0.617
Sep-2008	ND	ND	0.016	ND	ND	0.934	0.926	ND	ND	ND	ND	ND	ND	0.722	0.704
Mar-2009	ND	ND	0.014	ND	ND	0.913	0.893	ND	ND	ND	ND	ND	ND	0.688	0.666
Oct-2009	ND	ND	0.016	ND	ND	0.938	0.916	ND	ND	ND	ND	ND	ND	0.741	0.726
Apr-2010	ND	ND	0.014	ND	ND	0.878	0.881	ND	ND	ND	ND	ND	ND	0.684	0.688
Oct-2010	ND	ND	0.014	ND	ND	1.15	1.12	ND	ND	ND	ND	ND	ND	0.881	0.878
Apr-2011	ND	ND	0.018	ND	ND	1.04	1.01	ND	ND	ND	ND	ND	ND	0.768	0.754
Sep-2011	ND	ND	0.018	ND	ND	1.24	1.25	ND	ND	ND	ND	ND	ND	0.794	0.788
Mar-2012	ND	ND	0.019	ND	ND	1.12	1.13	ND	ND	ND	ND	ND	ND	0.908	0.902
Sep-2012	ND	ND	0.0187	0.000215 J	ND	1.23	1.26	ND	0.008 J	0.0037 J	0.0364 J	0.0396 J	ND	0.906	0.997
Mar-2013	ND	ND	0.0202	0.000232 J	ND	1.41	1.32	0.003 J	0.0088 J	0.0071 J	0.0383 J	0.0062 J	0.0016 J	0.923	0.759
Oct-2013	ND	ND	0.0223	0.000213 J	ND	1.4	1.46	0.0016 J	0.0087 J	0.004 J	ND	ND	ND	0.863	0.943
Mar-2014	ND	ND	0.0235	0.00026 J	0.000094 J	1.52	1.7	0.0027 J	0.0073 J	0.0054 J	0.073	0.0562	ND	0.94	1.08
Oct-2014	0.000768 J	ND	0.0281	0.000346 J	0.000097 J	1.55	1.62	0.0013 J	0.01	0.0051 J	0.0143 J	ND	ND	1.15	1.18
Apr-2015	0.000774 J	ND	0.0332	0.00028 J	0.00012 J	1.86	1.79	0.0012 J	0.0109	0.0058 J	0.0177 J	0.0262 J	ND	1.37	1.34
Nov-2015	0.000428 J	ND	0.0325	0.00035 J	0.000131 J	1.86	2.04	0.000665 J	0.0104	0.005 J	ND	ND	0.000458 J	1.41	1.38
May-2016	ND	ND	0.0304	0.0003 J	ND	1.56	1.78	ND	0.011	0.0051	ND	ND	ND	1.28	1.3
Oct-2016	ND	ND	0.0291	0.00026 J	ND	1.5	1.49	0.00075 J	0.0101	0.0052	ND	ND	ND	1.13	1.18
May-2017	ND	ND	0.0285	0.00025 J	ND	1.46	1.64	0.00087 J	0.0087	0.0044	ND	ND	ND	1.27	1.35
Oct-2017	ND	ND	0.0267	0.00026 J	0.00024 J	2.4	2.05	0.0013 J	0.0094	0.0191	0.539	0.0811 J	0.0044	1.41	1.37

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22***													
May-2018	*0.0001 J*	*ND*	0.036	*ND*	*0.0001 J*	15.9	1.6	*0.0066 JB*	0.0029	0.0043	0.24	*0.015 J*	*0.000079 JB*	3.5	1.4
Nov-2018	*ND*	*ND*	0.03	*0.00028 J*	*0.00011 J*	1.5	1.7	0.022	0.007	0.0037	0.13	0.079	*0.0001 J*	1.3	1.4
May-2019	*ND*	*ND*	0.04	0.00038	*ND*	2.1	2.1	0.017	0.0098	0.0051	*ND*	0.054	*ND*	1.8	1.8
Oct-2019	*0.00019 J*	*ND*	0.049	0.00037	*0.00063 J*	2.3	2.3	0.0094	0.0094	0.011	*0.046 J*	0.032	*0.00017 J*	2.2	2.1
May-2020	*0.000058 J*	*ND*	0.041	*0.00028 J*	*ND*	2.1	2.1	0.021	0.011	0.0066	0.11	0.042	*ND*	1.9	1.8
Oct-2020	*ND*	*ND*	0.032	*0.00027 J*	*ND*	2.1	2	*0.031 J*	0.01	*0.0098 J*	0.19	0.099	*ND*	1.6	1.6
Apr-2021	*ND*	*ND*	0.043	*0.00038 J*	*ND*	2	2	0.015	0.01	0.014	0.088	*0.05 J*	*ND*	1.7	1.7
Oct-2021	*0.000076 J*	*ND*	0.052	*0.00035 J*	*ND*	2.2	2.3	0.01	0.012	0.014	0.096	0.054 B	*ND*	2	2
May-2022	*ND*	*ND*	0.051	*0.00032 J*	*ND*	2.3	2.4	0.0043	0.013	0.011	*ND*	*ND*	*ND*	2.1	2.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-22*												
Nov-1993	ND	NA	ND	NA	1.6	NA	ND	NA	3.3	NA	NA	NA	0.01
Apr-1994	0.02	NA	ND	NA	0.85	NA	ND	NA	2.6	NA	NA	NA	0.04
Apr-1995	ND	NA	ND	ND	1	NA	ND	ND	1.8	NA	ND	ND	0.01
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	3.2	3.3	ND	ND	0.068
Apr-1997	0.012	ND	0.0014	ND	2.4	1.6	ND	ND	2.7	2.6	ND	ND	0.084
Oct-1997	ND	ND	NA	ND	0.802	0.886	ND	ND	2	1.98	ND	ND	0.014
Apr-1998	ND	0.018	NA	ND	2	0.939	ND	ND	2.23	2.25	ND	ND	0.014
Apr-1999	ND	ND	NA	ND	0.588	0.71	ND	ND	2.19	2.09	ND	ND	0.015
Oct-1999	ND	ND	NA	0.012	0.947	1.66	ND	ND	2.41	2.16	ND	ND	0.011
Apr-2000	ND	ND	NA	ND	0.605	ND	ND	ND	2.4	2.28	ND	ND	0.01
Oct-2000	ND	ND	NA	ND	1.2	0.734	ND	ND	3.23	2.67	ND	ND	0.019
Apr-2001	ND	NA	NA	ND	1.81	NA	ND	ND	3.35	NA	ND	ND	0.017
Sep-2001	ND	ND	NA	0.014	1.1	0.794	ND	ND	3.83	2.64	ND	ND	0.023
Mar-2002	ND	ND	NA	ND	0.932	0.822	ND	ND	4.13	2.84	ND	ND	0.017
Sep-2002	0.01	ND	NA	0.011	0.434	1.02	ND	ND	3.12	2.76	ND	ND	0.019
Mar-2003	ND	ND	NA	ND	0.908	0.713	ND	ND	3.04	2.88	ND	ND	0.013
Oct-2003	ND	ND	NA	0.014	0.771	ND	ND	ND	3.63	2.68	ND	ND	0.023
Apr-2004	ND	ND	ND	ND	1.4	1.28	ND	ND	2.5	2.47	ND	ND	ND
Oct-2004	ND	ND	ND	ND	1.23	0.7	ND	ND	2.41	2.24	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.26	1.03	ND	ND	3.27	2.38	ND	ND	0.015
Oct-2005	ND	ND	ND	0.011	0.933	0.89	ND	ND	2.43	2.25	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.644	0.584	ND	ND	2.54	2.36	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22***												
Sep-2006	ND	ND	ND	ND	0.893	0.959	ND	ND	2.31	2.4	ND	ND	0.042
Mar-2007	ND	ND	ND	ND	0.874	0.852	ND	ND	2.43	2.39	ND	ND	0.019
Sep-2007	ND	ND	ND	ND	0.778	0.729	ND	ND	2.57	2.44	ND	ND	ND
Mar-2008	ND	ND	ND	ND	1.06	1.02	ND	ND	2.57	2.21	ND	ND	ND
Sep-2008	ND	ND	ND	ND	0.847	0.819	ND	ND	2.66	2.53	ND	ND	ND
Mar-2009	ND	ND	ND	ND	0.951	0.933	ND	ND	2.73	2.68	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.705	0.627	ND	ND	2.69	2.52	ND	ND	ND
Apr-2010	ND	ND	ND	ND	0.79	0.783	ND	ND	3.02	2.96	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.907	0.926	ND	ND	3.43	3.64	ND	ND	0.012
Apr-2011	ND	ND	ND	ND	0.673	0.645	ND	ND	3.27	3.17	ND	ND	0.012
Sep-2011	ND	ND	ND	ND	0.909	0.928	ND	ND	3.9	3.84	ND	ND	0.011
Mar-2012	ND	ND	ND	ND	0.876	0.851	ND	ND	3.96	3.86	ND	ND	0.01
Sep-2012	0.0318	0.0101	0.000022 J	0.0099 J	0.877	0.879	ND	ND	3.96	4.02	ND	ND	0.009 J
Mar-2013	0.0101	0.0089 J	0.00003 J	0.0123	0.9	0.878	ND	0.000033 J	4.54	4.54	0.00046 J	ND	0.0264
Oct-2013	0.01 J	0.0111	ND	0.0109 J	0.881	0.908	ND	ND	4.39	4.49	ND	0.0014 J	0.0199
Mar-2014	0.0111	0.0117	ND	0.0136	0.923	0.966	ND	0.000054 J	4.34	4.81	0.000268 J	0.000699 J	0.0103
Oct-2014	0.0131	0.0136	ND	0.0138	1.03	1.02	ND	ND	6.03	5.97	ND	ND	0.0169
Apr-2015	0.0156	0.0153	ND	0.015	1.13	1.09	ND	ND	7.58	7.28	ND	ND	0.0202
Nov-2015	0.0153	0.015	ND	0.0137	1.19	1.17	0.000479 J	ND	7.46	7.24	0.000174 J	ND	0.0177
May-2016	0.0146	0.0158	ND	0.0145	1.07	1.15	ND	ND	7.28	7	ND	ND	0.0164 J
Oct-2016	0.0122	0.0146	ND	0.0133	1.03	1.06	ND	ND	6.75	6.99	ND	ND	0.0143 J
May-2017	0.0152	0.0157	ND	0.0121	1.06	1.09	ND	ND	7.54	7.91	ND	ND	0.0122 J
Oct-2017	0.0211	0.0231	0.000051 J	0.0229	1.09	1.09	ND	ND	9.27	9.11	ND	ND	0.134
May-2018	0.041	0.017	ND	0.0056	3.4 J	ND	0.0014 J	ND	11.9	8	ND	0.0021	0.0043 JB

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22***												
Nov-2018	0.018	0.017	*ND*	0.023	*0.99 J*	*1.2 J*	*0.00028 J*	*ND*	7.5	7.7	*ND*	0.0029	0.012
May-2019	0.024	0.024	*ND*	0.022	*ND*	*ND*	*ND*	*ND*	10.5	10	*ND*	*ND*	0.014
Oct-2019	0.026	0.029	*ND*	0.016	*1.7 J*	*1.5 J*	*0.00062 J*	*ND*	13.4	12.1	*ND*	0.0029	0.03
May-2020	0.028	0.027	*ND*	0.024	*ND*	*1.3 J*	*0.00062 JM1*	*ND*	11.6	10.1	*ND*	0.013 D6M1	0.015
Oct-2020	0.024	0.025	*ND*	0.031	*ND*	*1.1 J*	*ND*	*ND*	10.7	9.4	*ND*	*0.0023 J*	*0.015 J*
Apr-2021	0.027	0.025	*ND*	0.024	1.2	1.1	*ND*	*ND*	11.3	11	*ND*	*ND*	0.013
Oct-2021	0.035	0.036	*ND*	0.022	1.2	1.2	*ND*	*ND*	12.8	13	*0.000053 J*	*ND*	0.015
May-2022	0.034	0.034	*ND*	0.018	1.2	1.1	*ND*	*ND*	12.6	12.4	*ND*	*ND*	0.016

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-22***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5 J	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.9 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.3 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.25 J*	*0.37 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.6 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.401 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.23 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-22A***											
Nov-1993	50	50	0.2	ND	30	ND	ND	5.25	217	9.3	90	15.9
Apr-1994	69	69	2.2	20.2	61.7	ND	ND	5.62	341	7.5	182	30.36
Apr-1995	99.9	99.9	1.4	ND	44.4	ND	ND	5.5	379	16.6	ND	28.6
Apr-1997	ND	10	ND	ND	6	0.14	ND	NA	NA	5.6	113	15
Oct-1997	47	47	0.59	ND	7.36	0.228	ND	6.37	96.9	7.1	80	26
Apr-1998	92	92	1.2	15	16.8	ND	ND	6.24	75.2	7.17	150	28
Apr-1999	67	67	1.5	ND	15.2	ND	ND	5.14	57.1	4.99	96	17
Oct-1999	57	57	1.2	ND	21.3	ND	ND	5.89	92.7	8.3	140	21
Apr-2000	21	21	1.7	ND	32.3	ND	ND	6.31	131	10.4	102	17
Oct-2000	23	NA	2.8	16	31.8	ND	ND	6.07	98	10.1	108	17
Apr-2001	14	NA	1.9	ND	14.6	ND	ND	NA	NA	2.59	91	14
Sep-2001	11	11	4.8	14	83.3	1.21	ND	5.27	209	29.4	205	28.8
Mar-2002	12	12	2.6	ND	50.6	0.264	ND	5	58.7	25.2	137	21.4
Sep-2002	7	7	2	ND	42.4	0.76	ND	5	48.1	22.6	112	16.6
Mar-2003	2.5	2.5	ND	ND	14	ND	ND	4.9	52.1	12.7	52	14.1
Oct-2003	2.2	2.2	0.55	15	4.38	0.49	ND	5.4	66.4	8.49	17	15.3
Apr-2004	5.3	5.3	0.43	19	28.3	ND	ND	6	71.2	8.39	84	18.1
Oct-2004	4.8	4.8	0.55	ND	21.9	0.11	ND	4.3	67.4	10.4	72	14.1
Apr-2005	2.2	2.2	ND	ND	10.1	0.55	ND	4.6	78.8	11.6	55	13.6
Oct-2005	2.6	2.6	ND	ND	6	0.67	ND	4.9	46.6	10.4	55	12.2
Mar-2006	3	3	ND	ND	5.48	0.65	ND	5.1	48.1	11.4	31	11.2
Sep-2006	3	3	ND	ND	4.61	0.35	ND	4.7	44.5	8.85	31	11.7
Mar-2007	3.1	3.1	ND	ND	4.54	0.35	ND	4.5	38.9	8.38	19	10.8
Sep-2007	2.8	2.8	ND	ND	4.22	0.28	ND	6.1	40.5	7.67	55	10.8
Mar-2008	3.2	3.2	ND	ND	16.2	1.12	ND	4.5	43.5	16	22	10.5
Sep-2008	3.2	3.2	ND	ND	4.75	0.21	ND	4.6	41.9	10.7	25	11.2
Mar-2009	3.4	3.4	ND	ND	5.57	0.35	ND	4.4	46	7.32	36	11.5
Oct-2009	3.4	3.4	ND	ND	10.4	0.8	ND	4.3	61.1	7.43	43	14
Apr-2010	2.8	2.8	ND	ND	19.5	1.33	ND	3.9	86.7	8.81	113	16.9
Oct-2010	2.7	2.7	ND	ND	29.8	1.66	ND	4.6	113.5	7.86	84	21.2
Apr-2011	2.4	2.4	ND	ND	32.5	1.48	ND	4.3	129.1	8.18	94	18.9
Sep-2011	2.6	2.6	ND	ND	30.6	1.31	ND	4.4	115.3	10.1	83	21
Mar-2012	2.6	2.6	ND	ND	16.6	0.73	ND	3.6	80.8	10.5	84	18.4
Sep-2012	2.12	2.12	ND	ND	18.8	0.747	ND	4.1	79.8	11.1	62	18.9
Mar-2013	2.96	2.96	ND	ND	31.2	1.1	ND	4.7	121	8.15	77	18.5
Oct-2013	2.8	2.8	ND	ND	27.3	0.953	ND	6	110.7	9.18	67	19.5
Mar-2014	2.68	2.68	ND	ND	31.1	1.08	ND	4.9	129.8	9.94	91	22.3

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-22A***										
Oct-2014	*ND*	*ND*	*ND*	*ND*	44.4	1.37	*ND*	4.8	146.5	11.9	88	25
Apr-2015	2.84	2.84	*ND*	*ND*	49.8	1.68	*ND*	3.9	157.1	12.7	106	27.9
Nov-2015	*ND*	*ND*	*ND*	*6 J*	45.2	1.55	*ND*	4.9	205	13.1	96	26.2
May-2016	*ND*	*ND*	*ND*	*ND*	32.5	1.16	*ND*	4.8	203	12.6	74	21.9
Oct-2016	*ND*	*ND*	*ND*	*ND*	40.4	*NA*	*NA*	4.6	221	9.36	97	22.8
May-2017	*ND*	*ND*	*ND*	10	40.5	1.17	*ND*	4.7	240	10.8	76	24.4
Oct-2017	*ND*	*ND*	*ND*	*ND*	45.4	1.36	*ND*	4.8	264	11.1	96	27
May-2018	*2 JB*	*ND*	*ND*	*ND*	42.6	0.24	*ND*	4.4	228	10.4	78	27.1
Nov-2018	*1 JB*	*ND*	*ND*	*5.7 J*	57.2	1.6	*ND*	4.44	232.1	*9.3 J*	99	27.4
May-2019	*ND*	*NA*	*ND*	*ND*	56.8	1.7	*ND*	4.48	213.4	*ND*	135	32.7
Oct-2019	*ND*	*NA*	*ND*	*6 J*	61.4	1.9	*ND*	4.16	260.8	12.9	142	32.2
May-2020	*ND*	*NA*	*ND*	*6.9 J*	95.5	2.3	*ND*	4.03	350	12.6	182	33.8
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	94.5	2.4	*ND*	4.19	350.2	19	178	39.7
Apr-2021	*ND*	*NA*	*ND*	*8.3 J*	82.2	1.8	*ND*	4.42	339.7	15.7	160	34.8
Oct-2021	*ND*	*NA*	*ND*	*6.1 J*	65.4	1.4	*ND*	4.53	341.6	11.9	142	30.1
May-2022	*ND*	*NA*	*ND*	*ND*	71.1	1.7	*ND*	4.25	343.5	13.4	171	34.6 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-22A*													
Nov-1993	NA	ND	ND	NA	ND	3.4	NA	ND	NA	ND	18.4	18.3	ND	1.8	NA
Apr-1994	NA	ND	ND	NA	ND	5.89	NA	ND	NA	ND	27.7	22.7	ND	3.8	NA
Apr-1995	ND	ND	0.6	ND	ND	5.2	NA	ND	ND	ND	50.1	47	ND	3.8	NA
Oct-1996	ND	**0.12**	0.054	ND	ND	8.1	8.6	ND	ND	ND	40	37	ND	3.6	3.7
Apr-1997	ND	ND	0.055	ND	ND	3.4	2.4	ND	ND	ND	16	11	ND	2	1.5
Oct-1997	ND	**0.065**	0.043	ND	ND	2.76	2.44	ND	ND	ND	20	15	ND	1.69	1.61
Apr-1998	ND	ND	0.058	ND	ND	6.16	6.1	ND	ND	ND	57	56	ND	3.06	3.05
Apr-1999	ND	ND	0.04	ND	ND	3.66	3.55	ND	ND	ND	38.5	36.7	ND	1.82	1.78
Oct-1999	ND	ND	0.033	ND	ND	2.82	2.44	ND	ND	ND	0.597	0.083	ND	1.5	1.36
Apr-2000	ND	ND	0.042	ND	ND	3.55	3.3	ND	ND	ND	0.894	0.472	ND	1.95	1.81
Oct-2000	ND	ND	0.041	ND	ND	3.65	3.68	ND	ND	ND	4.38	4.02	ND	1.92	1.92
Apr-2001	ND	ND	0.039	ND	ND	2.83	NA	ND	ND	ND	1.01	NA	ND	1.77	NA
Sep-2001	ND	ND	0.069	ND	ND	5.81	6.18	ND	ND	ND	8.81	1.55	ND	3.47	3.64
Mar-2002	ND	ND	0.054	ND	ND	4.35	2.24	ND	ND	ND	3.46	ND	ND	2.55	1.83
Sep-2002	ND	ND	0.056	ND	ND	3.09	2.14	ND	ND	ND	1.44	ND	ND	2.15	1.78
Mar-2003	ND	ND	0.073	ND	ND	2.23	2.1	ND	ND	ND	1.58	ND	ND	2.08	1.97
Oct-2003	ND	ND	0.07	ND	ND	2.78	3.28	ND	ND	ND	1.13	1.71	ND	2.04	1.95
Apr-2004	ND	ND	0.066	ND	ND	3.66	3.05	ND	ND	ND	1.61	2.01	ND	2.18	1.95
Oct-2004	ND	ND	0.062	ND	ND	2.76	2.55	ND	ND	ND	1.6	0.842	ND	1.75	1.72
Apr-2005	ND	ND	0.073	ND	ND	2.26	2.12	ND	ND	ND	0.366	0.118	ND	1.93	1.88
Oct-2005	ND	ND	0.066	ND	ND	2.04	1.77	ND	ND	ND	0.222	ND	ND	1.72	1.63

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22A***													
Mar-2006	ND	ND	0.065	ND	ND	1.69	1.66	ND	ND	ND	ND	ND	ND	1.7	1.68
Sep-2006	ND	ND	0.062	ND	ND	1.85	1.87	ND	ND	ND	0.113	ND	ND	1.71	1.72
Mar-2007	ND	ND	0.059	ND	ND	1.68	1.66	ND	ND	ND	ND	ND	ND	1.61	1.6
Sep-2007	ND	0.002	0.058	ND	ND	1.62	1.57	ND	ND	ND	0.14	ND	ND	1.63	1.58
Mar-2008	ND	ND	0.061	ND	ND	1.65	1.56	ND	ND	ND	0.232	ND	ND	1.55	1.46
Sep-2008	ND	ND	0.061	ND	ND	1.65	1.58	ND	ND	ND	ND	ND	ND	1.72	1.62
Mar-2009	ND	ND	0.064	ND	ND	1.77	1.7	ND	ND	ND	ND	ND	ND	1.73	1.67
Oct-2009	ND	ND	0.81	ND	ND	2.18	2.11	ND	ND	ND	ND	ND	ND	2.08	2.02
Apr-2010	ND	ND	0.095	ND	ND	2.8	2.67	ND	ND	ND	0.051	ND	ND	2.41	2.33
Oct-2010	ND	ND	0.116	ND	ND	3.45	3.25	ND	ND	ND	ND	ND	ND	3.06	2.93
Apr-2011	ND	ND	0.125	ND	ND	3.13	3.09	ND	ND	ND	0.171	ND	ND	2.7	2.67
Sep-2011	ND	ND	0.131	ND	ND	3.59	3.54	ND	ND	ND	0.083	ND	ND	2.93	2.91
Mar-2012	ND	ND	0.118	ND	ND	3.12	3.05	ND	ND	ND	0.22	0.132	ND	2.57	2.5
Sep-2012	ND	ND	0.115	0.00023 J	0.000299 J	3.24	3.24	0.002 J	0.0069 J	0.0031 J	0.0642	0.0258 J	ND	2.62	2.52
Mar-2013	ND	ND	0.113	0.000199 J	0.00036 J	3.22	3.78	0.0041 J	0.0073 J	0.004 J	0.0516	0.0259 J	0.0014 J	2.54	3.03
Oct-2013	ND	ND	0.132	0.00029 J	0.000255 J	3.38	3.34	0.0099 J	0.008 J	0.0036 J	0.0763	0.0189 J	ND	2.69	2.8
Mar-2014	ND	ND	0.148	0.00036 J	0.00034 J	3.8	3.81	0.0017 J	0.0073 J	0.0043 J	0.0757	0.0336 J	ND	3.1	3.16
Oct-2014	0.000489 J	ND	0.155	0.000342 J	0.000317 J	4.03	4.11	0.000798 J	0.0094 J	0.0044 J	0.04 J	ND	ND	3.63	3.67
Apr-2015	0.000647 J	ND	0.171	0.000472 J	0.000416 J	4.42	4.28	0.0013 J	0.01	0.0061 J	0.0228 J	0.0465 J	ND	4.09	4.04
Nov-2015	0.000376 J	0.000221 J	0.17	0.000477 J	0.000345 J	4.75	5.01	0.0052 J	0.01	0.006 J	0.331	0.0372 J	0.000558 J	3.48	3.57
May-2016	ND	ND	0.136	0.00044 J	0.0003 J	3.67	3.91	0.0015 J	0.0087	0.0056	ND	ND	ND	3.1	3.17
Oct-2016	ND	ND	0.144	0.00041 J	0.00032 J	3.65	4.08	0.0011 J	0.0098	0.0056	0.038 J	ND	ND	3.32	3.49
May-2017	ND	ND	0.14	0.00038 J	0.00029 J	3.65	3.45	0.0012 J	0.009	0.0052	ND	ND	ND	3.71	3.59
Oct-2017	ND	ND	0.148	0.00035 J	0.0003 J	3.97	4.13	0.0027 J	0.0105	0.0049	0.372	ND	0.00016 J	4.15	4.28

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22A***													
May-2018	*0.00005 J*	*ND*	0.13	0.00045	*0.00036 J*	3.9	3.7	*0.0013 JB*	0.0084	0.0055	*ND*	*ND*	*0.000069 JB*	4.2	4
Nov-2018	*ND*	*ND*	0.15	0.00066	*0.00043 J*	4.2	4.2	*0.0058 J*	0.0094	0.0065	0.22	0.07	*0.000079 J*	4.1	4.2
May-2019	*ND*	*ND*	0.18	0.00067	*ND*	5.5	5.2	0.0071	0.0078	0.0048	0.16	0.095	*ND*	4.6	4.2
Oct-2019	*0.00014 J*	*ND*	0.17	0.00069	*0.00084 J*	5.4	5.2	*0.0065 J*	0.012	0.012	0.1	0.084	*0.00012 J*	4.5	4.3
May-2020	*0.000075 J*	*ND*	0.18	0.00071	*0.00055 J*	5.9	5.7	0.0091	0.013	*0.0095 J*	0.32	0.078	*ND*	4.6	4.4
Oct-2020	*ND*	*ND*	0.15	*0.00052 J*	*ND*	6.7	6.2	*0.0062 J*	0.013	*0.0077 J*	0.12	0.077	*ND*	5.6	5.2
Apr-2021	*ND*	*ND*	0.17	*0.00067 J*	*0.00034 J*	5.9	5.7	0.0067	0.017	0.011	0.19	0.11	*ND*	4.9	4.7
Oct-2021	*0.000077 J*	*0.00027 J*	0.15	0.00054	*0.0002 J*	5	5	*0.0022 J*	0.025	0.0072	0.089	0.075 B	*ND*	4.3	4.3
May-2022	*ND*	*ND*	0.17	0.00068	*0.00035 J*	5.9	5.9	*0.0022 J*	0.022	0.0098	0.057	*0.046 J*	*ND*	4.8	4.7

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22A***												
Nov-1993	0.08	NA	ND	NA	3.3	NA	ND	NA	35.8	NA	NA	NA	ND
Apr-1994	0.15	NA	ND	NA	3.69	NA	ND	NA	50.2	NA	NA	NA	0.06
Apr-1995	0.11	NA	ND	ND	3.7	NA	ND	ND	19.4	NA	ND	ND	0.02
Oct-1996	0.085	0.09	NA	ND	ND	ND	ND	ND	23	24	ND	ND	0.035
Apr-1997	0.053	0.037	ND	ND	3	2.1	ND	ND	4.2	4.1	ND	ND	0.16
Oct-1997	0.04	0.04	NA	ND	0.955	0.623	ND	ND	3.31	2.89	ND	ND	ND
Apr-1998	0.075	0.095	NA	ND	2.15	2.62	ND	ND	9.73	9.68	ND	ND	ND
Apr-1999	0.04	0.039	NA	ND	1.94	1.84	ND	ND	10.7	10.4	ND	ND	ND
Oct-1999	0.043	0.039	NA	ND	2.17	2.61	ND	ND	11.1	8.85	ND	ND	ND
Apr-2000	0.062	0.058	NA	ND	2.67	2.18	ND	ND	24.7	22.7	ND	ND	ND
Oct-2000	0.077	0.083	NA	ND	4.34	4.61	ND	ND	23	23.5	ND	ND	ND
Apr-2001	0.066	NA	NA	ND	4	NA	ND	ND	17.8	NA	ND	ND	ND
Sep-2001	0.159	0.172	NA	ND	6.76	7.11	ND	ND	70.2	68.7	ND	ND	ND
Mar-2002	0.103	0.061	NA	ND	4.88	1.97	ND	ND	30.2	7.09	ND	ND	ND
Sep-2002	0.079	0.061	NA	ND	2.91	2.05	ND	ND	20.4	6.92	ND	ND	ND
Mar-2003	0.065	0.062	NA	ND	1.46	0.736	ND	ND	2.74	2.41	ND	ND	ND
Oct-2003	0.07	0.084	NA	ND	0.914	2.92	ND	ND	6.56	16.5	ND	ND	0.021
Apr-2004	0.081	0.079	ND	ND	3.84	2.04	ND	ND	18.1	14.8	ND	ND	ND
Oct-2004	0.052	0.051	ND	ND	1.66	1.55	ND	ND	16.7	13.9	ND	ND	ND
Apr-2005	0.059	0.057	ND	ND	1.09	1.04	ND	ND	5.98	4.73	ND	ND	0.012
Oct-2005	0.052	0.049	ND	ND	1.01	0.935	ND	ND	3.18	2.44	ND	ND	0.012
Mar-2006	0.04	0.039	ND	ND	0.526	0.548	ND	ND	2.51	2.47	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22A***												
Sep-2006	0.054	0.056	ND	ND	0.808	0.82	ND	ND	2.14	2.1	ND	ND	ND
Mar-2007	0.044	0.043	ND	0.012	0.809	0.804	ND	ND	2.06	2.02	ND	ND	0.018
Sep-2007	0.044	0.043	ND	ND	0.743	0.604	ND	ND	2	1.94	ND	ND	0.01
Mar-2008	0.042	0.04	ND	ND	1	0.935	ND	ND	1.84	1.73	ND	ND	0.011
Sep-2008	0.044	0.041	ND	ND	0.843	0.804	ND	ND	2.08	1.96	ND	ND	0.01
Mar-2009	0.046	0.044	ND	ND	0.947	0.908	ND	ND	2.49	2.37	ND	ND	0.011
Oct-2009	0.055	0.053	ND	ND	0.736	0.703	ND	ND	4.58	4.31	ND	ND	0.012
Apr-2010	0.066	0.064	ND	ND	1	0.973	ND	ND	9.49	9.43	ND	ND	0.019
Oct-2010	0.1	0.094	ND	ND	1.1	1.12	ND	ND	16	16	ND	ND	0.029
Apr-2011	0.096	0.094	ND	ND	0.87	0.878	ND	ND	16.9	16.6	ND	ND	0.029
Sep-2011	0.119	0.117	ND	ND	1.07	1.13	ND	ND	16	15.7	ND	ND	0.034
Mar-2012	0.107	0.103	0.0002	0.026	1.02	1.01	ND	ND	7.66	7.5	ND	ND	0.029
Sep-2012	0.106	0.104	0.00005 J	0.0078 J	1.01	1.01	0.000507 J	ND	8.23	8.19	ND	ND	0.0338
Mar-2013	0.1	0.117	0.00009 J	0.0103 J	0.997	1.13	ND	0.000027 J	12.3	14.5	ND	ND	0.0439
Oct-2013	0.101	0.102	ND	0.012	1.19	1.16	0.000502 J	ND	12.4	12.9	ND	0.0024 J	0.0388
Mar-2014	0.117	0.11	ND	0.0083 J	1.26	1.28	0.000771 J	ND	13.4	13.6	0.000178 J	0.000816 J	0.0331
Oct-2014	0.116	0.117	0.000127 J	0.0092 J	1.42	1.43	0.0016 J	ND	20.2	20.5	ND	ND	0.0393
Apr-2015	0.126	0.124	0.000219	0.0107 J	1.36	1.36	0.0021	ND	26.2	25.7	ND	ND	0.0529
Nov-2015	0.129	0.131	0.000393	0.014	1.42	1.46	0.0021	ND	22.8	23.2	0.000133 J	ND	0.0427
May-2016	0.117	0.117	0.0001 J	0.009	1.24	1.3	ND	ND	15.6	15.8	ND	ND	0.0467
Oct-2016	0.115	0.127	0.000051 J	0.0095	1.28	1.34	0.00044 J	ND	18	19.2	ND	ND	0.0445
May-2017	0.114	0.109	ND	0.0082	1.52	1.43	0.00048 J	ND	21.5	20.3	ND	ND	0.0379
Oct-2017	0.117	0.119	ND	0.009	1.62	1.66	0.00057 J	ND	18.6 J-	22.9	ND	0.00038 J	0.0376
May-2018	0.078	0.078	0.00014 J	0.0069	0.97 J	1 J	0.00078 J	ND	23.4	21.8	ND	0.0022	0.016

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22A***												
Nov-2018	0.12	0.12	0.00054	0.011	*1.4 J*	*1.7 J*	*0.00071 J*	*ND*	27.5	28.3	*ND*	0.003	0.034
May-2019	0.13	0.15	0.00062	0.0095	*ND*	*ND*	*ND*	*ND*	33.9	31.1	*ND*	0.0017	0.03
Oct-2019	0.14	0.11	0.00046	0.012	*2 J*	*2 J*	*0.00097 J*	*ND*	34.3	32.6	*ND*	0.0025	0.056
May-2020	0.15	0.15	0.00056	0.014	*ND*	*1.9 J*	*0.0019 JM1*	*ND*	47.6	40.7	*ND*	0.0099	0.047
Oct-2020	0.18	0.15	*0.00013 J*	0.012	*ND*	*1.8 J*	*ND*	*ND*	52.6	45.6	*ND*	*0.0012 J*	0.037
Apr-2021	0.14	0.13	*0.00018 J*	0.017	1.8	1.7	*ND*	*ND*	41	40.8	*ND*	*ND*	0.038
Oct-2021	0.12	0.12	0.00027	0.012	1.6	1.6	0.0025	*ND*	37.6	38.9	*0.00003 J*	*ND*	0.037
May-2022	0.14	0.13	0.00034 M1	0.014	1.7	1.7	*0.002 J*	*ND*	40.3	38.8	*ND*	*ND*	0.044

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-22A***																
Nov-1993	ND	ND	ND	ND	39	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	33	ND
Apr-1994	ND	ND	ND	ND	21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	54	ND
Oct-1996	ND	ND	ND	ND	86	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	57	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	34	ND	ND	ND	ND	ND	ND	0.7 J	0.9 J	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	27	ND	ND	ND	ND	ND	ND	0.5 J	0.6 J	2.3 J	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	31	ND	NA	NA	NA	NA	ND	0.7 J	0.6 J	ND	NA	NA	7.6	NA
Oct-1999	ND	ND	ND	ND	19	ND	ND	ND	ND	0.6 J	ND	0.6 J	1.1	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	8.3	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	12	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	6.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	6.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	6.4	ND
Apr-2005	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22A*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22A*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.6 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-22A*															
Nov-1993	**9.6**	ND	ND	ND	ND	1.2	ND	ND	4.4	ND	ND	15	ND	ND	ND	8	33
Apr-1994	3.9	ND	ND	ND	ND	ND	ND	ND	1.9 J	ND	ND	6.8	ND	ND	ND	3.5	18
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	ND	ND	ND	9	51
Apr-1997	**17**	ND	ND	ND	2	ND	ND	ND	4	ND	2	ND	15	ND	ND	54	28
Oct-1997	**8.3**	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	7.5	ND	ND	ND	6.1	42
Apr-1998	**6.4**	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	6.6	ND	ND	ND	5.4	16
Apr-1999	4.4	NA	NA	NA	NA	ND	NA	ND	1 J	ND	NA	5.8	NA	NA	NA	1.7	17
Oct-1999	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	ND	ND	ND	1.4	8.9
Apr-2000	1.4	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	1.5	NA	ND	NA	0.9 J	4
Oct-2000	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.1	5.7
Apr-2001	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	5.1	4.9
Sep-2001	0.8 J	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	1.1	ND	ND	ND	1.6	2.5
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	1
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	1
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.3
Oct-2004	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	3.9	6.7
Apr-2005	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	2.7	3.5
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22A***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.9 J
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.37 J	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	0.52 J,B	ND	ND	ND	ND	0.4 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.36 J	0.4 J,B	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	0.2 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	0.2 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*0.2 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.252 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22A***															
Nov-1993	ND	ND	5.2	ND	ND	ND	ND	**9**	ND	ND	ND	ND	**7.5**	ND	ND	**2.2**	NA
Apr-1994	ND	ND	1.3 J	ND	ND	ND	ND	3.2	ND	ND	ND	ND	5	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	**11**	ND	1.5	ND	ND	**11**	ND	ND	**3.8**	ND
Apr-1997	ND	ND	NA	NA	1	NA	ND	**8**	ND	ND	1	ND	**11**	ND	ND	**7**	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	3.7	ND	0.9 J	ND	ND	**7.9**	ND	ND	2	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	4.5	ND	0.7 J	ND	ND	**6.7**	ND	ND	1.9	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	3.8	ND	0.6 J	NA	NA	**6**	ND	NA	1.2	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	3	ND	ND	ND	ND	3.7	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	2.8	ND	ND	NA	NA	2.3	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	4.6	ND	ND	ND	ND	4.2	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	4.3	ND	ND	ND	ND	1.8	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	3.5	ND	ND	ND	ND	2.4	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	1.4	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	0.7 J	ND	ND	3.4	ND	ND	ND	ND	2.1	ND	ND	0.8 J	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22A***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*0.45 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.21 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*0.14 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22A***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-22B***											
Nov-1993	69	69	1.5	ND	20	ND	ND	5.31	227	9.6	142	15.2
Apr-1994	367	367	19.6	109.6	524	ND	ND	6.06	2.1	5.6	948	125.86
Apr-1995	216	216	10.8	27.1	133	ND	ND	5.8	823	8.9	376	35.6
Apr-1997	ND	26	ND	ND	4.5	0.02	ND	NA	NA	9.1	141	16
Oct-1997	95	95	0.87	ND	5.06	ND	ND	6.07	208	7.36	114	42
Apr-1998	102	102	6.7	14	28.6	ND	ND	5.96	319	7.08	160	30
Apr-1999	80	80	5.1	20	81.4	0.61	ND	6.32	545	30	560	36
Oct-1999	52	58	0.88	ND	4.35	ND	ND	5.18	152.1	9.13	91	13
Apr-2000	65	65	5.2	ND	1.05	ND	ND	6.27	253	12.7	131	29
Oct-2000	33	NA	4.4	15	47.4	ND	ND	5.34	425	15	148	25.9
Apr-2001	25	NA	11	55	239	ND	ND	NA	NA	75.4	631	78
Sep-2001	39	39	8.4	24	77.1	ND	ND	5.86	657	45.3	247	31.8
Mar-2002	38	38	6.3	16	30.4	ND	ND	5.9	419	24.6	242	30
Sep-2002	8.2	8.2	2.3	13	54.4	ND	ND	5.9	310	22	146	12.3
Mar-2003	11	11	1.1	ND	36.2	ND	ND	5.7	253	13.5	111	13.2
Oct-2003	2	2	ND	13	30	1.15	ND	4.8	168.3	12.2	63	16.5
Apr-2004	7.8	7.8	ND	16	22.3	2.81	ND	4.8	120.8	7.45	97	31.7
Oct-2004	21	21	ND	ND	8.79	2.27	ND	5.1	69.6	6.68	76	27.1
Apr-2005	4	4	ND	ND	5.31	0.48	ND	5	65.8	7.66	50	10.3
Oct-2005	2.7	2.7	ND	ND	3.91	3.04	ND	4.8	47.8	3.43	47	12.1
Mar-2006	4.5	4.5	ND	ND	4.14	0.42	ND	5.2	36.4	6.42	28	4.87
Sep-2006	4.8	4.8	0.54	ND	12.8	1.21	ND	4.6	71.7	9.5	74	10.6
Mar-2007	8.7	8.7	0.97	ND	20.1	0.21	ND	3.1	674	18.6	69	15.4
Sep-2007	1.7	1.7	ND	ND	4.76	6.67	ND	6	80.1	2.82	87	20.4
Mar-2008	5.3	5.3	0.52	ND	28.3	2.82	ND	4.6	102	22.9	63	17.5
Sep-2008	4.1	4.1	0.72	13	18.4	1.61	ND	4.7	108.1	20.1	79	17
Mar-2009	5.3	5.3	0.99	ND	16.4	0.12	ND	4.7	133.7	34.9	95	17
Oct-2009	4.3	4.3	0.41	10	17.9	0.21	ND	4.6	112.9	27.5	87	14.9
Apr-2010	1.6	1.6	ND	ND	9.26	6.17	ND	4.1	98.2	10.9	113	22.8
Oct-2010	2.8	2.8	0.22	ND	6.07	6.15	ND	5.3	84.1	5.63	71	25
Apr-2011	3.5	3.5	ND	ND	9.27	2.43	ND	4.4	97.8	17.3	77	23.3
Sep-2011	2.2	2.2	ND	ND	14.4	2.09	ND	4.4	95.3	20.2	74	23.4
Mar-2012	1.4	1.4	ND	ND	8.89	5.28	ND	3.5	93.6	10.3	80	22.9
Sep-2012	1.24	1.24	ND	ND	8.83	4.42	ND	4.1	88.9	15.9	80	22.8
Mar-2013	2.96	2.96	ND	ND	12.6	1.43	ND	4.8	115.4	28	84	26.5
Oct-2013	3.2	3.2	ND	13.1	13	0.803	ND	5.3	104.6	25.2	69	21.9
Mar-2014	3.8	3.8	ND	8 J	18.5	1.17	ND	5	123.9	25.6	76	23.8

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-22B***										
Oct-2014	*ND*	*ND*	*ND*	*ND*	9.18	4.44	*ND*	4.5	96.3	16.2	58	22.2
Apr-2015	2.8	2.8	*ND*	*ND*	8.54	1.66	*ND*	4	103	33.8	63	28.6
Nov-2015	*ND*	*ND*	*ND*	*6 J*	7.57	3.95	*ND*	4.2	110	18.9	58	25.7
May-2016	*ND*	*ND*	*ND*	*ND*	8.05	2.18	*ND*	4.9	166.3	25.6	67	22.3
Oct-2016	*ND*	*ND*	*ND*	*ND*	7.44	*NA*	*NA*	4.9	144.3	26.2	80	26
May-2017	10	10	*ND*	13	7.53	1.39	*ND*	5.4	174.5	29.3	61	40.5
Oct-2017	14	14	*ND*	*ND*	13.7	2.63	*ND*	5.7	194.1	27.1	97	48.6
May-2018	*1 JB*	*ND*	*ND*	*10.1 J*	15.8	0.19	*ND*	4.9	87.1	*ND*	*ND*	10
Nov-2018	28	28	*ND*	*14.3 J*	7.9	1.8	*ND*	5.47	163.7	33.8	88	57.7
May-2019	*ND*	*NA*	*ND*	*ND*	10	3.5	*ND*	4.78	118.9	33.2	103	50.1
Oct-2019	*ND*	*NA*	*ND*	*6 J*	5.2	3.6	*ND*	4.71	100.1	14.6	54	28.7
May-2020	*4 J*	*NA*	*ND*	*6.9 J*	8.9	2.4	*ND*	4.54	123.2	23.9	63	32.6
Oct-2020	*4 J*	*NA*	*ND*	*7 J*	21.7	4.4	*ND*	4.87	165.7	18	93	49.5
Apr-2021	*ND*	*NA*	*ND*	*8.3 J*	9.3	5.1	*ND*	4.88	3.26	15.4	64	34.3
Oct-2021	22	*NA*	*ND*	*8.3 J*	6.1	2.4	*ND*	5.39	143.6	21.3	67	36.8
May-2022	28	*NA*	*0.062 J*	*ND*	4.9	2.5	*ND*	5.42	174.1	21.4	90	52.4 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22B***													
Nov-1993	NA	**0.018**	ND	NA	0.001	2.3	NA	ND	NA	ND	31.8	28.2	ND	2.3	NA
Apr-1994	NA	**0.014**	ND	NA	ND	20.7	NA	ND	NA	ND	125	126	ND	18	NA
Apr-1995	ND	ND	ND	ND	ND	5.7	NA	ND	ND	0.03	69.6	60.7	ND	5.2	NA
Oct-1996	ND	ND	0.032	ND	ND	3.5	3.2	ND	ND	ND	23	20	ND	1.9	1.7
Apr-1997	ND	ND	0.051	ND	ND	3.9	2.9	ND	0.021	ND	27	20	ND	2	1.7
Oct-1997	ND	ND	0.049	ND	ND	6.18	6.26	ND	ND	ND	43.1	43.6	ND	3.23	3.27
Apr-1998	ND	ND	0.056	ND	ND	6.96	6.64	ND	ND	ND	45.3	45.5	ND	3.05	3.05
Apr-1999	ND	ND	0.073	ND	ND	7.26	6.71	ND	ND	ND	70	67.2	ND	4.25	4.04
Oct-1999	ND	ND	0.073	ND	ND	8.7	8.09	ND	ND	ND	66.7	41.7	ND	4.27	3.92
Apr-2000	ND	ND	0.04	ND	ND	8.02	6.3	ND	ND	ND	34.9	29.9	ND	2.17	1.98
Oct-2000	ND	ND	0.049	ND	ND	5.84	5.26	ND	ND	ND	58.1	55.2	ND	2.75	2.65
Apr-2001	ND	ND	0.128	ND	ND	18.4	NA	ND	ND	ND	88.2	NA	ND	7.73	NA
Sep-2001	ND	ND	0.062	ND	ND	6.28	6.29	ND	ND	ND	52.2	52.1	ND	3.89	3.94
Mar-2002	ND	ND	0.054	ND	ND	6.76	6.05	ND	ND	ND	44.9	43.2	ND	3.18	3.21
Sep-2002	ND	ND	0.031	ND	ND	2.73	3.56	ND	ND	ND	25.8	23.4	ND	1.34	1.3
Mar-2003	ND	ND	0.021	ND	ND	3.84	6.09	ND	ND	ND	4.82	1.51	ND	0.867	0.812
Oct-2003	ND	ND	0.038	ND	ND	3.57	3.12	ND	ND	ND	0.742	ND	ND	1.83	1.72
Apr-2004	ND	ND	0.059	ND	ND	9.48	3.68	ND	ND	ND	0.233	ND	ND	1.95	1.87
Oct-2004	ND	ND	0.049	ND	ND	8.19	5.74	ND	ND	ND	0.343	ND	ND	1.6	1.5
Apr-2005	ND	ND	0.031	ND	ND	2.42	2.37	ND	ND	ND	0.99	0.05	ND	1.04	0.989
Oct-2005	ND	ND	0.041	ND	ND	2.71	2.31	0.03	ND	0.013	1.23	0.073	ND	1.29	1.19

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22B***													
Mar-2006	ND	ND	0.017	ND	ND	1.09	1.04	ND	ND	ND	0.34	ND	ND	0.519	0.487
Sep-2006	ND	ND	0.031	ND	ND	2.63	2.79	ND	ND	ND	0.27	0.219	ND	0.987	1.06
Mar-2007	ND	0.002	0.042	ND	ND	3.97	3.58	0.011	ND	ND	1.91	1.09	ND	1.33	1.28
Sep-2007	ND	0.003	0.063	ND	ND	4.49	4.06	0.017	0.011	0.012	1.38	0.054	ND	2.24	2.12
Mar-2008	ND	ND	0.055	ND	ND	4.12	3.83	ND	ND	0.013	0.161	ND	ND	1.74	1.63
Sep-2008	ND	0.002	0.058	ND	ND	3.68	3.45	0.014	ND	ND	1.92	1.04	ND	1.89	1.8
Mar-2009	ND	0.002	0.048	ND	ND	4.19	3.88	0.019	ND	ND	5.94	2.84	ND	1.57	1.49
Oct-2009	ND	ND	0.041	ND	ND	3.45	3.34	ND	ND	ND	3.17	2.83	ND	1.53	1.48
Apr-2010	ND	ND	0.062	ND	ND	5.13	4.97	0.017	ND	ND	1.46	0.063	ND	2.44	2.39
Oct-2010	ND	ND	0.068	ND	ND	5.83	5.81	0.01	0.011	0.025	0.615	ND	ND	2.52	2.53
Apr-2011	ND	ND	0.078	ND	ND	5.5	5.39	0.021	0.011	0.029	1.5	ND	ND	2.33	2.3
Sep-2011	ND	ND	0.082	ND	ND	5.14	5.04	0.025	0.013	0.042	2.64	ND	ND	2.57	2.53
Mar-2012	ND	ND	0.077	ND	ND	4.95	4.82	ND	0.011	0.043	0.909	ND	ND	2.55	2.46
Sep-2012	ND	ND	0.0823	0.000583 J	0.000553 J	5.05	4.81	0.0218	0.0129	0.0585	2.34	0.0587	0.000532 J	2.48	2.68
Mar-2013	ND	ND	0.0858	0.000419 J	0.000611 J	6.08	6.07	0.0213	0.016	0.0655	1.7	0.0317 J	0.0018 J	2.76	2.76
Oct-2013	ND	0.000692 J	0.0652	0.000203 J	0.000316 J	5.35	5.48	0.0081 J	0.0131	0.0273	0.323	ND	0.000304 J	2.07	2.11
Mar-2014	ND	ND	0.0552	0.000163 J	0.000285 J	5.99	6.09	0.012	0.0171	0.0324	1.59	0.103	ND	2.15	2.13
Oct-2014	0.00035 J	0.0011 J	0.0743	0.000259 J	0.000421 J	5.15	5.41	0.0149	0.0092 J	0.0221	1.75	0.0281 J	0.000845 J	2.28	2.34
Apr-2015	0.000643 J	0.000575 J	0.0723	0.000279 J	0.000368 J	7.01	6.97	0.0121	0.0102	0.0245	0.887	0.129	ND	2.68	2.62
Nov-2015	0.000394 J	0.0012 J	0.0753	0.000384 J	0.000372 J	6.29	6.92	0.0098 J	0.009 J	0.024	1.37	0.0313 J	0.001 J	2.44	2.6
May-2016	ND	ND	0.0561	0.00032 J	0.00038 J	5.43	5.63	0.0037 J	0.0088	0.0241	0.3	0.0419 J	ND	2.12	2.16
Oct-2016	ND	0.00094 J	0.0501	0.00018 J	0.00022 J	6.58	6.7	0.0039 J	0.0062	0.0102	0.654	0.0793 J	0.00017 J	2.32	2.46
May-2017	ND	0.0009 J	0.0418	ND	ND	11.2	10.4	0.0089	0.0036	0.0066	0.887	ND	0.00026 J	3.04	3.01
Oct-2017	ND	ND	0.0407	ND	ND	13.9	15.7	0.0024 J	0.0086	0.0045	0.0558 J	1.7	ND	3.35	3.75

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22B***													
May-2018	*0.000038 J*	*ND*	0.036	*0.00026 J*	*0.00011 J*	1.6	14.5	*0.0049 JB*	0.009	0.0042	0.044	*ND*	*0.000037 JB*	1.5	3.2
Nov-2018	*0.000032 J*	*0.0002 J*	0.037	*ND*	*0.0001 J*	16.8	16.6	0.042	0.004	0.0048	0.67	0.076	*0.00012 J*	3.8	3.8
May-2019	*ND*	*ND*	0.051	*ND*	*ND*	13.6	12.8	0.014	0.0044	0.0088	0.28	0.04	*ND*	3.9	3.6
Oct-2019	0.00054	*0.00042 J*	0.044	*0.00017 J*	*0.00053 J*	7.5	7	0.013	0.0053	0.016	0.38	0.026	*0.00039 J*	2.4	2.3
May-2020	*0.000094 J*	*ND*	0.042	*0.000095 J*	*0.0001 J*	8.7	7.8	0.016	0.014	0.0074	0.46	0.026	*ND*	2.6	2.4
Oct-2020	*ND*	*ND*	0.038	*ND*	*ND*	13.8	12.7	*0.022 J*	0.0094	*ND*	0.73	0.05	*ND*	3.6	3.4
Apr-2021	*ND*	*ND*	0.044	*0.00022 J*	*ND*	9.7	9.8	0.011	0.0084	0.018	0.42	*ND*	*ND*	2.5	2.6
Oct-2021	*0.000091 J*	*ND*	0.044	*ND*	*ND*	10	9.5	0.006	0.0089	0.0053	0.14	*0.04 JB*	*0.000033 J*	2.9	2.9
May-2022	*ND*	*0.00049 J*	0.042	*ND*	*ND*	14.8	14.9	0.012	0.01	0.0058	0.54	0.079	*ND*	3.7	3.7

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-22B*												
Nov-1993	0.13	NA	ND	NA	2.5	NA	ND	NA	18.2	NA	NA	NA	ND
Apr-1994	0.66	NA	ND	NA	17.95	NA	ND	NA	375	NA	NA	NA	0.03
Apr-1995	0.27	NA	ND	ND	10.1	NA	ND	ND	75.2	NA	ND	ND	0.04
Oct-1996	0.077	0.068	NA	ND	ND	ND	ND	ND	5.1	5	ND	ND	0.19
Apr-1997	0.064	0.047	**0.0031**	ND	3.2	2.5	ND	ND	3.1	3.2	ND	ND	0.027
Oct-1997	0.065	0.064	NA	ND	2.49	2.42	ND	ND	2.76	2.84	ND	ND	ND
Apr-1998	0.147	0.145	NA	ND	7.13	6.77	ND	ND	20.2	19.9	ND	ND	ND
Apr-1999	0.231	0.218	NA	ND	6.9	6.16	ND	ND	48.2	46	ND	ND	ND
Oct-1999	0.29	0.267	NA	ND	11.9	11.2	ND	ND	52.8	49.1	ND	ND	ND
Apr-2000	0.144	0.132	NA	ND	6.73	6.12	ND	ND	17.9	16.2	ND	ND	0.015
Oct-2000	0.208	0.202	NA	ND	5.69	5.34	ND	ND	30.9	30.1	ND	ND	ND
Apr-2001	0.481	NA	NA	ND	12.5	NA	ND	ND	199	NA	ND	ND	0.029
Sep-2001	0.202	0.206	NA	ND	9.37	8.75	ND	ND	58.1	54.3	ND	ND	ND
Mar-2002	0.178	0.181	NA	ND	8.72	9.26	ND	ND	39.6	39.6	ND	ND	ND
Sep-2002	0.098	0.094	NA	ND	3.93	5.05	ND	ND	30.9	30.8	ND	ND	ND
Mar-2003	0.072	0.067	NA	ND	4.66	3.82	ND	ND	26.9	24.9	ND	ND	0.013
Oct-2003	0.12	0.123	NA	ND	2.92	3.27	ND	ND	20.9	18.9	ND	ND	0.022
Apr-2004	0.129	0.126	ND	ND	3.66	2.91	ND	ND	16.2	15.9	ND	ND	0.019
Oct-2004	0.115	0.109	ND	ND	2.69	2.43	ND	ND	6.47	5.89	ND	ND	0.013
Apr-2005	0.072	0.065	ND	ND	1.9	1.77	ND	ND	3.32	3.52	ND	ND	ND
Oct-2005	0.06	0.054	ND	0.029	1.62	1.33	ND	ND	3.34	2.43	ND	ND	0.014
Mar-2006	0.012	0.01	ND	ND	0.981	0.85	ND	ND	2.34	2.23	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22B***												
Sep-2006	0.051	0.055	ND	ND	1.56	1.75	ND	ND	8.01	8.42	ND	ND	ND
Mar-2007	0.075	0.071	ND	0.016	2.84	2.7	ND	ND	13.9	13.4	ND	ND	0.015
Sep-2007	0.085	0.079	ND	0.021	2.16	1.95	ND	ND	3.58	3.55	ND	ND	0.016
Mar-2008	0.067	0.067	ND	ND	2.29	2.09	ND	ND	8.64	8.12	ND	ND	0.015
Sep-2008	0.081	0.078	ND	0.016	2.48	2.43	ND	ND	11.5	11.1	ND	ND	0.018
Mar-2009	0.105	0.102	ND	ND	3.41	3.39	ND	ND	12.9	12.8	ND	ND	0.012
Oct-2009	0.112	0.108	ND	ND	3.32	3.24	ND	ND	12.3	11.7	ND	ND	ND
Apr-2010	0.137	0.134	ND	0.017	3.16	3.05	ND	ND	6.23	6.02	ND	ND	0.014
Oct-2010	0.088	0.087	ND	0.014	2.04	2.16	ND	ND	4.27	4.55	ND	ND	0.016
Apr-2011	0.106	0.104	ND	0.018	2.26	2.16	ND	ND	6.75	6.67	ND	ND	0.013
Sep-2011	0.12	0.117	ND	0.02	2.76	2.54	ND	ND	10.4	10.3	ND	ND	0.015
Mar-2012	0.093	0.09	0.0002	0.014	2.34	2.24	ND	ND	6.23	5.9	ND	ND	0.013
Sep-2012	0.0894	0.0852	0.000076 J	0.0185	2.32	2.19	0.000538 J	ND	6.34	6.97	ND	ND	0.0138
Mar-2013	0.131	0.133	0.000096 J	0.0176	3.12	3.08	ND	0.000087 J	8.97	9.08	ND	ND	0.0275
Oct-2013	0.132	0.136	ND	0.0086 J	3.71	3.69	ND	0.000069 J	9.02	9.25	0.000169 J	0.0026 J	0.0152
Mar-2014	0.127	0.128	ND	0.0095 J	3.88	3.93	ND	0.00019 J	10.6	10.8	0.000166 J	0.0012 J	0.0048 J
Oct-2014	0.0756	0.0787	0.000077 J	0.0141	2.6	2.55	0.000825 J	ND	6.02	6.25	ND	0.003 J	0.0125
Apr-2015	0.113	0.112	0.000027 J	0.0153	3.81	3.79	0.000966 J	ND	8.21	8.08	ND	0.0012 J	0.0194
Nov-2015	0.0686	0.0749	ND	0.0111	2.87	2.92	0.0012 J	ND	5.56	5.95	0.00017 J	0.0039 J	0.0099 J
May-2016	0.0743	0.0756	0.000053 J	0.0089	3.1	2.97	ND	ND	6.96	6.43	ND	0.00071 J	0.0095 J
Oct-2016	0.0725	0.0807	ND	0.007	3.41	3.73	ND	ND	6.19	6.52	ND	0.00093 J	0.0054 J
May-2017	0.0811	0.0733	ND	0.005	4.28	4.09	0.00052 J	ND	6.01	5.56	ND	0.0014	0.0047 JB
Oct-2017	0.0631	0.0706	ND	0.0084	4.09	4.76	0.00052 J	ND	7.57 J-	8.44	ND	ND	0.0045 J
May-2018	0.019	0.042	ND	0.015	0.93 J	3.5 J	0.00088 J	ND	8.6	10.9	ND	0.0022	0.013

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22B***												
Nov-2018	0.037	0.034	*ND*	0.028	*4 J*	*4 J*	*0.00091 J*	*ND*	7.4	7.6	*ND*	0.0034	*0.0049 J*
May-2019	0.029	0.033	*ND*	0.0093	*ND*	*ND*	*ND*	*ND*	8	7.7	*ND*	0.0043	*ND*
Oct-2019	0.026	0.028	*ND*	0.0096	*2.5 J*	*2.2 J*	*0.00069 J*	*0.00045 J*	*4.8 J*	*4 J*	0.00051	0.0023	0.016
May-2020	0.046	0.044	*ND*	0.0097	*2.8 J*	*3.2 J*	*0.00062 J*	*ND*	7.5	6.4	*ND*	0.01	*0.0038 J*
Oct-2020	0.037	0.037	*ND*	0.013	*3.7 J*	*3.3 J*	*ND*	*ND*	12.8	11.5	*ND*	*0.0017 J*	*ND*
Apr-2021	0.021	0.022	*ND*	*0.0097 J*	2.2	2.2	*ND*	*ND*	6.8	7.6	*ND*	*0.00063 J*	*0.0037 J*
Oct-2021	0.037	0.042	*0.00003 J*	0.0064	3.2	3	*ND*	*ND*	7.6	9.3	*0.000089 J*	*ND*	*0.0022 J*
May-2022	0.026	0.026	*ND*	0.012	3.5	3.4	*ND*	*ND*	6.4	6.6	*0.00011 J*	*0.0013 J*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-22B***																
Nov-1993	ND	ND	ND	ND	75	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	72	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	47	ND
Oct-1996	ND	ND	ND	ND	97	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND
Apr-1997	ND	ND	9	ND	66	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	39	ND	ND	ND	ND	ND	ND	ND	1.1 J	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	80	ND	ND	ND	ND	ND	ND	1.8 J	1.9 J	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	24	ND	NA	NA	NA	NA	ND	ND	1	ND	NA	NA	7.3	NA
Oct-1999	ND	ND	ND	ND	21	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	6.7	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	20	ND	ND	ND	ND	ND	ND	0.7 J	1.7	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	16	ND	ND	ND	ND	ND	ND	0.5 J	0.8 J	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	15	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	7.1	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	8.4	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22B*																
Feb-2006	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2006	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	ND	NA	0.8 J	NA	NA	NA	ND	NA
Dec-2006	NA	ND	NA	NA	3.1	NA	NA	NA	NA	NA	ND	NA	ND	NA	NA	NA	ND	NA
Mar-2007	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.62 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.86 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	0.42 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.11 J	ND
Apr-2015	ND	ND	ND	ND	0.34 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22B*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.9 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.152 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-22B*															
Nov-1993	**19**	ND	ND	ND	ND	ND	ND	ND	7.7	ND	ND	28	ND	ND	ND	9.9	70
Apr-1994	**43**	ND	ND	ND	ND	ND	ND	ND	10	ND	ND	18	ND	ND	ND	5.9	47
Oct-1996	**49**	ND	ND	ND	ND	ND	ND	ND	3.4	ND	ND	18	ND	ND	ND	8	58
Apr-1997	**21**	ND	ND	ND	ND	ND	ND	ND	5	ND	ND	13	ND	ND	ND	39	33
Oct-1997	**12**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10	ND	ND	ND	4.9	56
Apr-1998	**45**	ND	ND	ND	ND	ND	ND	ND	4.1	ND	ND	16	ND	ND	ND	10	35
Apr-1999	**9.2**	NA	NA	NA	NA	ND	NA	0.5 J	ND	ND	NA	5	NA	NA	NA	3.3	17
Oct-1999	**5.5**	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	4.8	ND	ND	ND	2.6	15
Apr-2000	1.8	NA	NA	ND	NA	ND	NA	ND	0.5 J	ND	NA	1.2	NA	ND	NA	1.5	4.6
Oct-2000	4.2	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	2.4	ND	ND	ND	7	9.2
Apr-2001	**15**	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	2.7	ND	ND	ND	2.3	8
Sep-2001	**7.2**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	2.5	5.8
Mar-2002	**7.3**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	3.6	5.8
Sep-2002	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	1.5	2.7
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.6 J
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	1.6	2.1
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	1.1	1.4
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.6 J
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22B***															
Feb-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.2
Dec-2006	ND	NA	NA	ND	NA	NA	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND
Dec-2006	ND	NA	NA	ND	NA	NA	NA	ND	NA	ND	NA	ND	NA	ND	NA	1.3	1.4
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.9 J
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.9 J
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.6 J
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.32 J	0.27 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22B***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.129 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22B***															
Nov-1993	ND	ND	7.2	ND	**6.3**	ND	ND	**18**	ND	ND	ND	ND	**16**	ND	ND	**4.2**	NA
Apr-1994	13	ND	ND	ND	3.4	ND	ND	4.5	ND	ND	ND	ND	**6.6**	ND	ND	**3**	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	**16**	ND	1.7	ND	ND	**12**	ND	ND	**4**	2.1
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	2	ND	ND	ND	9	ND	**6**	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	**7.8**	ND	ND	ND	ND	**7.7**	ND	ND	1.9 J	NA
Apr-1998	ND	ND	1.5	NA	ND	ND	ND	**6.7**	ND	1.9 J	ND	ND	**7.3**	ND	ND	**2.9**	NA
Apr-1999	0.6 J	NA	ND	NA	ND	ND	NA	1.3	ND	0.8 J	NA	NA	1.6	ND	NA	1.6	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	1.3	ND	0.7 J	ND	ND	1.9	ND	ND	1.4	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	1.4	ND	ND	NA	NA	1	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	1.2	ND	ND	ND	ND	2.4	ND	ND	1.1	NA
Apr-2001	1.1	ND	0.5 J	NA	ND	ND	ND	0.5 J	ND	0.5 J	ND	ND	2.3	ND	ND	0.8 J	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	0.5 J	ND	ND	ND	ND	1.9	ND	ND	0.6 J	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	0.8 J	ND	ND	ND	ND	1.7	ND	ND	0.7 J	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	1.1	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22B***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	34.7	ND	ND	ND	ND	ND	ND	ND	NA
Feb-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Dec-2006	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Dec-2006	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	0.6 J	ND	NA	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22B***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.9 BCH	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.438 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

HISTORICAL TABLES –
On-site Non-regulated Wells

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-02***											
Nov-1993	ND	ND	ND	ND	2.5	ND	ND	4.9	14.8	ND	18	1.36
Apr-1994	13	13	ND	ND	2.2	0.9	ND	4.68	16.9	ND	19	ND
Apr-1995	ND	ND	ND	ND	2.3	ND	ND	4.9	17.2	1.9	12	1.3
Apr-1997	ND	2	ND	24	2	0.02	ND	NA	NA	ND	82	4
Apr-1998	5	5	0.24	ND	1.69	ND	ND	6.56	51.6	ND	ND	1.8
Apr-1999	ND	ND	0.14	ND	2.64	ND	ND	4.99	17.57	ND	18	1.8
Apr-2001	ND	NA	ND	ND	33.5	ND	ND	NA	NA	ND	ND	2.3
Mar-2002	ND	ND	ND	16	3.79	ND	ND	6.1	34.8	1.62	22	1.91
Mar-2003	1.9	1.9	ND	ND	12.8	ND	ND	5.3	16	ND	42	1.36
Apr-2004	2	2	ND	ND	2.1	ND	ND	5.5	13.3	ND	ND	2.19
Apr-2005	2.2	2.2	ND	ND	2.18	ND	ND	5.9	22.9	ND	45	3.12
Mar-2006	4.3	4.3	ND	ND	2.45	ND	ND	5.3	14.4	ND	29	2.01
Mar-2007	3.4	3.4	ND	ND	2.83	ND	ND	5	12.9	ND	26	1.69
Mar-2008	2.8	2.8	ND	ND	2.63	ND	ND	4.6	16	ND	14	2.6
Mar-2009	3.5	3.5	ND	ND	2.65	ND	ND	4.8	15.2	ND	29	2.4
Apr-2010	4.3	4.3	ND	ND	2.28	ND	ND	4.5	14.5	ND	18	1.6
Apr-2011	4.2	4.2	ND	ND	2.4	ND	ND	4.8	12.4	ND	ND	2.25
Mar-2012	3.3	3.3	ND	ND	2.46	ND	ND	4.1	12.1	ND	ND	2.38
Sep-2012	3.52	3.52	ND	ND	2.73	ND	ND	5.4	14.6	ND	35	2.73
Mar-2013	3.76	3.76	0.0847 J	ND	2.95	0.0243 J	ND	6	15.7	0.72 J	ND	2.84
Oct-2013	4.84	4.84	ND	ND	2.9	0.0353 J	ND	5.8	15.4	0.577 J	ND	2.28
Mar-2014	4.68	4.68	ND	ND	3.04	ND	ND	5.8	21.3	0.56 J	ND	2.33
Oct-2014	ND	ND	ND	ND	3.15	ND	ND	5	17.4	ND	ND	2.32
Apr-2015	7.8	7.8	ND	5 J	2.76	ND	ND	5	25.1	ND	ND	2.26
Nov-2015	2.76	2.76	ND	ND	2.54	ND	ND	5.8	28.6	ND	29	2.54
May-2016	4.8	4.8	ND	198	3.03 B	ND	ND	5.3	24.3	ND	93	3.5
Oct-2016	3.36	3.36	ND	8 J	3.2	NA	NA	5.4	27.1	1.03	37	3
May-2017	4.64	4.64	ND	ND	3.38	ND	ND	5.3	28.9	0.703 J	14 J	3.7
Oct-2017	22.6	22.6	ND	13	2.97	ND	ND	5.6	31.7	ND	30	3.2
May-2018	6 JB	ND	ND	5.8 J	3.7	0.063 J	ND	4.9	39.1	ND	ND	4.7
Nov-2018	18	18	0.099 J	ND	3.9	0.093 J	ND	6.05	42.6	ND	14	4.9
May-2019	ND	NA	ND	ND	ND	0.22	ND	5.72	26.5	ND	63	ND
Oct-2019	10 H1	NA	ND	ND	3.6	0.18	ND	5.79	51.7	ND	40	4.1
May-2020	14	NA	ND	6.9 J	4.6	ND	0.01	5.8	62.2	ND	11	4.1
Oct-2020	12	NA	ND	7 J	3.3	ND	ND	5.92	50.8	ND	46	3.3
Apr-2021	12	NA	ND	ND	3.5	0.065 J	ND	6.41	60.8	ND	16	2.8 J
Oct-2021	8 J3c	NA	ND	ND	2.8 J	ND	ND	6.21	75.4	ND	ND	3.17 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-02***										
May-2022	12	*NA*	*ND*	*ND*	*2.7 J*	*ND*	*ND*	6.23	71.1	*ND*	*ND*	*2.2 JN3*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-02***													
Nov-1993	NA	ND	ND	NA	ND	0.15	NA	ND	NA	ND	0.55	0.25	ND	0.24	NA
Apr-1994	NA	ND	ND	NA	ND	ND	NA	ND	NA	ND	0.11	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	0.14	NA	ND	ND	ND	0.62	1.8	ND	0.24	NA
Apr-1997	ND	ND	0.015	ND	ND	0.7	0.54	ND	ND	ND	0.26	0.24	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	0.296	0.317	ND	ND	ND	5.76	2.06	ND	0.266	0.266
Apr-1999	ND	ND	ND	ND	ND	0.263	0.285	ND	ND	ND	9.7	0.976	ND	0.268	0.276
Apr-2001	ND	ND	0.011	ND	ND	0.407	NA	0.019	ND	0.055	11.2	NA	0.002	0.311	NA
Mar-2002	ND	ND	0.011	ND	ND	0.455	0.17	ND	ND	0.015	20.2	1.69	ND	0.309	0.266
Mar-2003	ND	ND	ND	ND	ND	0.175	0.15	ND	ND	ND	0.609	0.421	ND	0.225	0.19
Apr-2004	ND	ND	ND	ND	ND	0.402	0.158	ND	ND	ND	3.89	0.572	ND	0.289	0.195
Apr-2005	ND	ND	0.011	ND	ND	0.695	0.247	ND	ND	ND	5.82	0.502	0.002	0.335	0.278
Mar-2006	ND	0.002	0.012	ND	ND	0.259	0.14	0.01	ND	0.013	18.5	ND	0.003	0.332	0.269
Mar-2007	ND	ND	0.013	ND	ND	0.165	0.158	ND	ND	0.02	3.08	0.175	ND	0.311	0.293
Mar-2008	ND	0.004	0.011	ND	ND	0.377	0.224	ND	ND	ND	2.93	0.165	ND	0.403	0.31
Mar-2009	ND	ND	ND	ND	ND	0.367	0.256	ND	ND	ND	4.14	0.325	ND	0.36	0.273
Apr-2010	ND	ND	ND	ND	ND	0.12	ND	ND	ND	ND	23.9	0.187	ND	0.32	0.213
Apr-2011	ND	ND	ND	ND	ND	0.257	0.227	ND	ND	ND	19.9	0.145	ND	0.391	0.264
Mar-2012	ND	ND	ND	ND	ND	0.226	0.223	ND	ND	ND	14.3	0.236	ND	0.441	0.411
Sep-2012	ND	ND	0.009 J	ND	ND	0.35	0.33	0.0016 J	0.000481 J	0.0028 J	5.6	0.278	0.000853 J	0.45	0.453
Mar-2013	ND	ND	0.0093 J	ND	ND	0.418	0.281	0.0017 J	0.000427 J	0.0031 J	5.84	0.18	ND	0.436	0.314
Oct-2013	ND	ND	0.0093	ND	ND	0.265	0.27	ND	0.000352 J	ND	1.11	0.371	ND	0.393	0.412

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-02***													
Mar-2014	0.000324 J	ND	0.0081 J	ND	ND	0.222	0.188	0.000473 J	0.000339 J	0.000538 J	1.18	0.422	ND	0.431	0.347
Oct-2014	0.000908 J	0.000509 J	0.0099 J	ND	ND	0.287	0.257	0.0024 J	0.000575 J	0.0077 J	11.2	0.255	ND	0.39	0.321
Apr-2015	0.000544 J	ND	0.0105	ND	ND	0.275	0.247	0.0022 J	0.000408 J	0.0024 J	8.26	0.743	ND	0.382	0.337
Nov-2015	0.000654 J	0.000454 J	0.0108	ND	ND	0.321	0.35	0.0048 J	0.000604 J	0.0047 J	11.9	0.395	0.000883 J	0.423	0.34
May-2016	0.0004 J	0.0017 J	0.0114	ND	ND	0.588	0.584	0.0046	0.003	0.0203	11.6	3.49	0.00099 J	0.49	0.498
Oct-2016	0.00058 J	0.0023 J	0.0095	ND	ND	0.382 J	0.368 J	0.008 J+	0.0029	0.035 J+	19.7	1.73	0.00036 J	0.498 J+	0.475
May-2017	ND	0.002 J	0.0088	ND	ND	0.546	0.42	0.0105	0.0025	0.0459	15	10.4	0.0006 J	0.568	0.555
Oct-2017	0.00059 J	0.0035 J	0.007	ND	ND	0.433	0.418	0.0161	0.0035	0.0677	19.8	12.2	0.00068 J	0.504	0.466
May-2018	0.00011 J	ND	0.014	0.000038 J	0.00005 J	0.51 J	0.52 J	0.0016 JB	0.00054	0.003	1.2	1.2	0.000091 JB	0.83 J	0.85 J
Nov-2018	ND	ND	0.011	ND	ND	0.52 J	0.49 J	0.0041 J	0.00049 J	0.00078 J	8.8	7.8	0.00016 J	0.87 J	0.82 J
May-2019	ND	ND	0.011	ND	ND	ND	ND	ND	0.00052	ND	4.4	3.9	ND	ND	ND
Oct-2019	0.000089 JB	ND	0.012	ND	0.00018 JB	0.41	0.41 J	0.0029 J	0.00056	0.0035	9.7	8.3	0.00014 JB	0.75	0.77 J
May-2020	0.000067 J	ND	0.01	ND	ND	0.51	0.51 J	0.0032 J	0.00064	0.002 J	16.2	13.9	ND	0.7	0.69 J
Oct-2020	0.00039 J	ND	0.011	ND	ND	0.36	0.31 J	0.01 JB	0.00064 J	ND	12.2	9.9	ND	0.59	0.53 J
Apr-2021	ND	ND	0.0085 J	ND	ND	0.26 J	0.27 J	0.0017 J	0.00062 J	ND	11.2	10.2	ND	0.53	0.53
Oct-2021	0.000084 JB	ND	0.0089	ND	ND	0.32 J	0.37 J	0.0027	0.00051 J	ND	8.2	7.3	ND	0.58	0.57
May-2022	ND	0.0014 JB	0.0085	ND	ND	0.29 J	0.43 J	0.0025 J	0.00049 J	ND	7.8	10.2	ND	0.35 J	0.48 J

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-02*												
Nov-1993	0.06	NA	ND	NA	0.62	NA	ND	NA	1.3	NA	NA	NA	ND
Apr-1994	0.007	NA	ND	NA	0.8	NA	ND	NA	1.6	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.73	NA	ND	ND	1.2	NA	ND	ND	0.01
Apr-1997	ND	0.012	ND	ND	2.1	1.8	ND	ND	1.1	1.9	ND	ND	0.039
Apr-1998	0.066	0.083	NA	ND	1.2	0.689	ND	ND	1.21	1.27	ND	ND	0.012
Apr-1999	0.036	0.037	NA	ND	ND	ND	ND	ND	1.19	1.21	ND	ND	ND
Apr-2001	0.039	NA	NA	0.026	1.57	NA	ND	ND	2.73	NA	ND	ND	0.031
Mar-2002	0.059	0.036	NA	ND	0.702	0.507	ND	ND	1.8	1.22	ND	ND	0.026
Mar-2003	0.015	0.017	NA	ND	1.09	ND	ND	ND	1.28	1.27	ND	ND	0.106
Apr-2004	0.044	0.024	ND	ND	0.983	ND	ND	ND	1.74	1.19	ND	ND	0.042
Apr-2005	0.028	0.013	ND	ND	0.8	0.72	ND	ND	1.52	1.29	ND	ND	0.064
Mar-2006	ND	ND	ND	ND	0.687	0.509	ND	ND	1.42	0.923	ND	ND	ND
Mar-2007	0.016	ND	ND	ND	ND	ND	ND	ND	1.13	1.06	ND	ND	0.019
Mar-2008	0.015	0.011	ND	ND	0.808	0.673	ND	ND	1.38	1.23	ND	ND	0.025
Mar-2009	0.017	ND	ND	ND	0.552	0.599	ND	ND	1.41	1.61	ND	ND	0.019
Apr-2010	0.021	ND	ND	ND	0.706	0.627	ND	ND	1.23	1.29	ND	ND	0.02
Apr-2011	0.018	ND	ND	ND	0.706	0.653	ND	ND	1.33	1.38	ND	ND	0.019
Mar-2012	0.018	ND	ND	ND	0.564	0.581	ND	ND	1.26	1.26	ND	ND	0.017
Sep-2012	0.0103	0.0076 J	ND	0.0016 J	0.656	0.635	ND	ND	1.33	1.3	0.000582 J	ND	0.0142
Mar-2013	0.0082 J	0.0054 J	0.000085 J	0.0014 J	0.66	0.591	ND	ND	1.33	1.25	ND	ND	0.0303
Oct-2013	0.0158	0.0143	ND	0.0014 J	0.616	0.619	ND	ND	1.38	1.44	0.000112 J	0.000996 J	0.0216
Mar-2014	0.0154	0.0099 J	ND	0.00098 J	0.652	0.703	ND	ND	1.38	1.46	ND	ND	0.0151

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-02***												
Oct-2014	0.0176	0.0112	*0.00005 J*	*0.0028 J*	0.691	0.717	*0.0013 J*	*ND*	1.41	1.48	*ND*	*ND*	0.0234
Apr-2015	0.0283	0.0204	*ND*	*0.0017 J*	0.76	0.721	*0.00072 J*	*ND*	1.42	1.46	*ND*	*0.000969 J*	0.0236
Nov-2015	0.0355	0.0112	*ND*	*0.004 J*	0.792	0.736	*0.000487 J*	*ND*	1.5	1.72	*ND*	*0.0011 J*	0.0201
May-2016	0.0867	0.0433	*ND*	0.0273	0.827	0.766	*ND*	*ND*	1.5	1.41	*ND*	0.001	0.13
Oct-2016	0.0331 R	0.0178	*ND*	*0.031 J+*	0.745	0.73	*ND*	*ND*	*1.63 J+*	1.59	*ND*	*0.00022 J*	*0.0191 J*
May-2017	0.109	0.0891	*ND*	0.029	0.755	0.763	*ND*	*ND*	1.38	1.63	*ND*	*ND*	*0.0162 J*
Oct-2017	0.14	0.117	*ND*	0.0432	0.739	0.685	*ND*	*ND*	1.32	1.27	*ND*	*ND*	*0.0241 J*
May-2018	0.016	0.017	*ND*	0.0023	*ND*	*ND*	*0.00046 J*	*ND*	*1.8 J*	*1.7 JB*	*ND*	0.0021	0.013
Nov-2018	0.15	0.18	*ND*	0.0043	*1.2 J*	*ND*	*0.00014 J*	*ND*	*1.8 J*	*1.8 J*	*ND*	*ND*	*0.0033 J*
May-2019	0.093	0.083	*ND*	0.0047	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	0.15	0.14	*ND*	0.0027	*ND*	*1.1 J*	*ND*	*ND*	*1.8 J*	*2.2 J*	*ND*	*ND*	0.0091 B
May-2020	0.19	0.19	*ND*	0.0031	*ND*	*ND*	*ND*	*ND*	*2.2 J*	*2.2 J*	*ND*	*0.00027 J*	*0.0047 J*
Oct-2020	0.17	0.15	*ND*	0.0032	*ND*	*ND*	*ND*	*ND*	*2.2 J*	*1.7 J*	*ND*	*0.0029 JB*	*ND*
Apr-2021	0.15	0.15	*ND*	*0.0019 J*	0.63	0.63	*ND*	*ND*	2.1	2	*ND*	*ND*	*ND*
Oct-2021	0.12	0.11	*ND*	*0.0023 J*	0.66	0.65	*ND*	*ND*	2	2	*0.000024 J*	*ND*	*ND*
May-2022	0.13	0.16	*ND*	*0.0021 J*	*0.45 J*	0.6	*ND*	*ND*	1.3	1.9	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-02*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.21 J	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.99 J,B	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-02*																
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.24 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.6 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.7 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-02***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.76 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.68 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-02***															
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.89 J*	*0.41 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.35 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.28 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.164 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-02***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-02*															
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	1 B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-03A***											
Nov-1993	ND	ND	0.5	ND	21.6	ND	ND	5.15	88.3	4.2	64	2.75
Apr-1994	ND	18	0.1	31.9	5.5	ND	ND	5.12	28.7	1.1	22	ND
Apr-1995	5.2	5.2	ND	ND	13.8	ND	ND	6	49.3	3.5	ND	2.8
Apr-1997	ND	5	ND	ND	38	0.07	ND	NA	NA	ND	91	12
Apr-1998	4	4	0.22	ND	14	0.15	ND	6.85	52.7	ND	43	2.5
Apr-1999	ND	ND	0.16	ND	8.58	0.13	ND	4.97	44.1	ND	44	3
Apr-2000	1	1	0.76	ND	190	0.28	ND	5.1	298	4.99	379	37
Apr-2001	ND	NA	ND	ND	22.8	ND	ND	NA	NA	4.16	42	6.97
Mar-2002	1.2	1.2	0.34	ND	219	ND	ND	5	711	9.53	353	31.8
Mar-2003	ND	ND	ND	ND	189	ND	ND	4.9	970	13.2	191	40.7
Apr-2004	3	3	ND	ND	32.7	0.07	ND	5.7	120.2	2.07	67	8.7
Apr-2005	2.3	2.3	ND	16	35.6	0.08	ND	5.1	114.5	3.25	88	5.45
Mar-2006	3.8	3.8	ND	ND	17.2	0.1	ND	5.1	74.3	3.54	ND	3.72
Mar-2007	1.1	1.1	ND	ND	233	0.17	ND	5.1	845	8.42	373	34.3
Mar-2008	4.8	4.8	ND	ND	12.8	0.09	ND	5.2	64.7	2.96	29	3.84
Mar-2009	17	17	0.23	ND	20.1	ND	ND	5.1	90.7	3.22	53	4.42
Apr-2010	11.4	11.4	ND	ND	45.5	ND	ND	4.8	188.5	1.11	91	10.3
Apr-2011	8.3	8.3	ND	ND	19.6	ND	ND	4.7	60	1.58	55	3.69
Mar-2012	8.3	8.3	ND	ND	42	ND	ND	4.8	134.7	2.09	78	9.69
Sep-2012	11.1	11.1	ND	ND	30.3	ND	ND	5.9	111.2	3.08	93	6.68
Mar-2013	4.72	4.72	0.0887 J	ND	7.13	0.0421 J	ND	5.7	38.9	2.13	ND	3.36
Oct-2013	17.1	17.1	ND	10.1	45.6	0.0428 J	ND	5.5	159.8	6.59	96	8.13
Mar-2014	6.32	6.32	ND	ND	56.8	0.0633	ND	5.4	166.3	10.5	115	9.28
Oct-2014	26.4	26.4	ND	9 J	51.8	0.0908	ND	5.5	176.8	4.91	104	8.6
Apr-2015	4.68	4.68	0.155 J	ND	6.83	0.0594	ND	4	41.9	3.66	25	3.93
Nov-2015	ND	ND	ND	5 J	62.5	ND	ND	5.7	328	2.14	112	11.5
May-2016	ND	ND	ND	6 J	168	0.0605	ND	5.1	491	2.36	254	19.6
Oct-2016	1.88	1.88	ND	17	155	NA	NA	6.1	524	1.92	254	16.9
May-2017	ND	ND	ND	ND	105	0.103	ND	5.1	487	5.61	185	15.6
Oct-2017	3.72	3.72	ND	ND	207	0.0842	ND	6	663	8.01	257	20.8
May-2018	8 JB	ND	ND	7.9 J	119	ND	ND	NA	NA	9 J	184	18.2
Nov-2018	8 JB	ND	ND	12.2 J	101	ND	0.046	6.7	386.2	ND	161	15.6
May-2019	14	NA	0.31 ML	ND	61.7	ND	0.019	6.14	229.1	ND	121	6.5
Oct-2019	4 JH1	NA	ND	8.2 J	45.8	0.064 J	0.012	6.1	260.6	ND	100	5.4
May-2020	2 J	NA	ND	11.3 J	39.6	ND	0.027	5.97	197.3	ND	61	4.4
Oct-2020	2 J	NA	ND	9.3 J	48.6	ND	ND	5.98	228.1	ND	113	4.6
Apr-2021	2 J3c	NA	ND	10.5 J	54.6	0.068 J	ND	7	328.6	ND	102	3.8

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-03A***											
Oct-2021	*ND*	*NA*	*ND*	*10.5 J*	40.6	*ND*	*ND*	6.88	309.9	*ND*	64	4.02
May-2022	*8 J3c*	*NA*	*ND*	*12.4 J*	48.3	0.15	*0.008 J*	6.87	322.3	*ND*	82	4.5 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-03A***													
Nov-1993	NA	ND	ND	NA	ND	0.36	NA	ND	NA	ND	3.7	2.4	ND	0.45	NA
Apr-1994	NA	ND	ND	NA	ND	ND	NA	ND	NA	ND	0.32	0.08	ND	7.3	NA
Apr-1995	ND	ND	ND	ND	ND	0.45	NA	ND	ND	ND	0.6	0.56	ND	0.4	NA
Apr-1997	ND	ND	0.057	ND	ND	1.8	1.3	ND	ND	ND	4.5	2.8	ND	1.4	1.2
Apr-1998	ND	ND	0.016	ND	ND	0.46	0.465	ND	ND	ND	7.02	3.87	ND	0.34	0.339
Apr-1999	ND	ND	0.014	ND	ND	0.587	0.591	ND	ND	ND	4.69	1.27	ND	0.361	0.334
Apr-2000	ND	ND	0.195	ND	ND	8.12	7.98	ND	ND	ND	4.54	3	ND	3.96	3.89
Apr-2001	ND	ND	0.039	ND	ND	1.47	NA	ND	ND	ND	8.19	NA	ND	0.802	NA
Mar-2002	ND	ND	0.183	ND	ND	7.3	7.51	ND	ND	ND	3.22	1.4	ND	3.3	3.33
Mar-2003	ND	ND	0.31	ND	ND	8.68	8.46	ND	ND	ND	2.32	1.61	ND	4.61	4.43
Apr-2004	ND	ND	0.038	ND	ND	1.83	1.62	ND	ND	ND	3.39	1.07	ND	1.01	0.924
Apr-2005	ND	ND	0.036	ND	ND	1.02	1.02	ND	ND	ND	5.4	2.96	ND	0.704	0.685
Mar-2006	ND	ND	0.014	ND	ND	0.898	0.683	ND	ND	ND	6.28	0.653	ND	0.36	0.343
Mar-2007	ND	ND	0.176	ND	ND	9.17	8.74	ND	ND	ND	3.13	1.55	ND	2.78	2.62
Mar-2008	ND	ND	0.017	ND	ND	0.878	0.84	ND	ND	ND	2.98	1.72	ND	0.399	0.377
Mar-2009	ND	ND	0.018	ND	ND	1.04	0.964	ND	ND	ND	14.6	7.91	ND	0.443	0.419
Apr-2010	ND	ND	0.031	ND	ND	0.654	1.77	ND	ND	ND	13.7	9.24	ND	1.02	0.971
Apr-2011	ND	ND	0.015	ND	ND	0.812	0.751	ND	ND	ND	15.9	14	ND	0.402	0.377
Mar-2012	ND	ND	0.033	ND	ND	2.13	1.97	ND	ND	ND	11.1	2.3	ND	1.06	0.98
Sep-2012	ND	ND	0.0218	0.000066 J	ND	1.6	1.49	0.0018 J	0.0012 J	0.0019 J	7.83	3.83	ND	0.651	0.6
Mar-2013	ND	ND	0.0133	0.000107 J	ND	0.784	0.638	0.0015 J	0.0011 J	0.0014 J	3.34	1.27	ND	0.34	0.278

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-03A***													
Oct-2013	ND	ND	0.0286	ND	ND	1.95	1.91	0.000793 J	0.0025	0.0014 J	16.3	17.6	0.000568 J	0.791	0.747
Mar-2014	ND	0.001 J	0.0289	ND	0.000177 J	2.63	2.43	0.0051 J	0.0021 J	0.0041 J	14.9	2.44	0.0024	0.658	0.799
Oct-2014	0.000393 J	0.0013 J	0.0271	ND	0.00013 J	2.02	1.97	0.000888 J	0.0014 J	0.0033 J	27.7	14.9	0.0011 J	0.865	0.848
Apr-2015	0.0016 J	0.000766 J	0.0135	ND	0.000106 J	0.858	0.839	0.000666 J	0.0013 J	0.0033 J	5.19	1.13	ND	0.434	0.393
Nov-2015	0.000548 J	0.000437 J	0.0321	ND	0.000323 J	2.79	2.71	0.000539 J	0.0015 J	0.0027 J	28.6	24.5	0.00049 J	1.1	1.06
May-2016	ND	0.00058 J	0.0897	0.00024 J,B	0.00024 J	4.38	4.07	0.00088 J	0.0043	0.0015 J,B	3.55	2.24	0.0011 J	2.1	2.09
Oct-2016	ND	0.0021 J	0.0614	ND	ND	4.02	4.19	0.0027 J+	0.0034	0.0093 J+	55.5	34.8	0.0022	1.68 J+	1.68
May-2017	ND	0.00098 J	0.0824	0.00016 J	ND	3.66	3.71	0.0013 J	0.0061	0.0046	7.74	2.93	0.00075 J	1.57	1.63
Oct-2017	ND	ND	0.0982	0.00014 J	ND	5.44	5.13	0.0046	0.0025	0.00065 J	3.11	2.21	0.00021 J	1.75	1.89
May-2018	0.000066 J	ND	0.079	0.00012 J	0.000094 J	4.5	4.4	0.0026 JB	0.0018	0.0017 J	2.7	2.8	0.00018 J	1.7	1.6
Nov-2018	ND	0.00017 J	0.056	ND	0.000022 J	3.5	3.4	0.0026 J	0.00044 J	0.0019 J	52	48.2	0.00013 J	1.6	1.5
May-2019	ND	ND	0.025	ND	ND	1.4	1.6	ND	ND	ND	54.2	53.4	ND	ND	ND
Oct-2019	0.00011 JB	ND	0.014	ND	0.00025 JB	1.2	1.2	0.002 JB	0.0002 J	0.0016 J	52	47.4	0.000067 JB	0.58	0.59 J
May-2020	0.00025 J	ND	0.011	ND	ND	1	1	0.0027 J	0.0002 J	0.0014 J	29.5	27.6	ND	0.44	0.44 J
Oct-2020	0.00042 J	ND	0.011	ND	ND	1.1	0.97 J	0.0078 JB	ND	ND	36.8	33	ND	0.46	0.4 J
Apr-2021	ND	ND	0.014	ND	ND	0.84 J	0.88 J	0.00071 J	ND	ND	64	62.9	ND	0.42	0.42
Oct-2021	0.00007 JB	ND	0.011	ND	ND	0.94	0.87	0.00094 J	0.00017 J	ND	59.3	52.9	ND	0.41 J	0.38 J
May-2022	ND	0.0023 JB	0.012	ND	ND	1	1.1	0.00097 J	0.00045 J	0.001 J	56.3	59	ND	0.45 J	0.48 J

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-03A*												
Nov-1993	0.12	NA	ND	NA	1.1	NA	ND	NA	26.1	NA	NA	NA	0.02
Apr-1994	0.038	NA	ND	NA	0.79	NA	ND	NA	4.1	NA	NA	NA	0.009
Apr-1995	0.02	NA	ND	ND	0.99	NA	ND	ND	5.7	NA	ND	ND	0.03
Apr-1997	0.13	0.095	ND	ND	2.8	2.8	ND	ND	26	26	ND	ND	ND
Apr-1998	0.099	0.099	NA	ND	0.643	1.57	ND	ND	6.95	7.43	ND	ND	0.01
Apr-1999	0.064	0.063	NA	ND	ND	1.09	ND	ND	4.03	4.01	ND	ND	ND
Apr-2000	0.195	0.201	NA	ND	2	2.15	ND	ND	114	112	ND	ND	0.01
Apr-2001	0.92	NA	NA	ND	1.35	NA	ND	ND	19.2	NA	ND	ND	ND
Mar-2002	0.134	0.131	NA	ND	2.72	2.54	ND	ND	108	103	ND	ND	0.015
Mar-2003	0.192	0.184	NA	ND	2.02	1.02	ND	ND	161	154	ND	ND	0.015
Apr-2004	0.061	0.057	ND	ND	1.31	ND	ND	ND	20.8	19.7	ND	ND	0.011
Apr-2005	0.09	0.084	ND	ND	1.19	1.19	ND	ND	21	20.2	ND	ND	ND
Mar-2006	0.01	ND	ND	ND	0.552	0.565	ND	ND	9.06	8.7	ND	ND	ND
Mar-2007	0.103	0.099	ND	ND	1.27	1.18	ND	ND	100	107	ND	ND	0.032
Mar-2008	0.046	0.037	ND	ND	0.776	0.728	ND	ND	8.12	7.66	ND	ND	ND
Mar-2009	0.125	0.104	ND	0.015	0.649	0.69	ND	ND	10.9	11.4	ND	ND	0.012
Apr-2010	0.736	0.233	ND	ND	1.35	1.16	ND	ND	26.4	37.7	ND	ND	ND
Apr-2011	0.184	0.157	ND	ND	0.895	0.887	ND	ND	12.6	12.4	ND	ND	0.013
Mar-2012	0.178	0.076	ND	ND	1.06	0.933	ND	ND	26.7	25.3	ND	ND	ND
Sep-2012	0.0886	0.0681	ND	0.0027 J	0.789	0.738	ND	ND	20	18.9	ND	ND	0.0048 J
Mar-2013	0.0367	0.0268	0.000069 J	0.0071 J	0.674	0.541	ND	ND	4.59	3.96	ND	ND	0.0143
Oct-2013	0.162	0.164	ND	0.0124	0.886	0.806	ND	ND	31.9	34.2	ND	0.0011 J	0.0143

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-03A***												
Mar-2014	0.0648	0.0499	ND	0.0078 J	1.07	0.939	ND	ND	38.7	38.3	ND	0.0122	0.0105
Oct-2014	0.24	0.193	ND	0.0045 J	1.17	1.14	0.0018 J	ND	32.8	32.5	ND	ND	0.0107
Apr-2015	0.0551	0.0339	ND	0.007 J	0.763	0.771	ND	ND	5.44	5.33	ND	ND	0.0076 J
Nov-2015	0.359	0.312	ND	0.0048 J	1.06	1.07	ND	ND	35.6	35.5	ND	ND	0.0084 J
May-2016	0.124	0.103	ND	0.0109	1.52	1.36	ND	ND	71.1	67.1	ND	0.00041 J	0.0163 J
Oct-2016	0.382 R	0.304	ND	0.0199 J+	1.22	1.23	ND	ND	68.1	62.4	ND	0.00053 J	0.0124 J
May-2017	0.111	0.0807	ND	0.0373	1.21	1.23	ND	ND	57.9	58.4	ND	ND	0.0075 J
Oct-2017	0.102	0.093	ND	0.0057 B	1.26	1.38	ND	ND	72.9	82	ND	ND	ND
May-2018	0.079	0.081	ND	0.0034	ND	0.95 J	0.00098 J	ND	81.7	74.2	0.00018 J	0.002	0.0073
Nov-2018	0.76	0.75	ND	0.0025	ND	ND	0.00012 J	ND	47.2	47.9	ND	ND	0.0032 J
May-2019	0.64	0.61	ND	0.00082	ND	ND	ND	ND	21	22.2	ND	ND	ND
Oct-2019	0.49	0.48	ND	0.00068	ND	ND	ND	ND	19.4	19.6	ND	ND	0.0088 B
May-2020	0.36	0.34	ND	0.0012	ND	ND	ND	ND	19.5	19.6	ND	ND	0.0044 J
Oct-2020	0.39	0.35	ND	ND	ND	ND	ND	ND	23	19	ND	0.0039 JB	ND
Apr-2021	0.45	0.46	ND	ND	0.54	0.57	ND	ND	16	16.8	ND	ND	ND
Oct-2021	0.51	0.47	ND	0.00071 J	0.57	0.53	ND	ND	15.4	14.7	ND	ND	ND
May-2022	0.53	0.55	ND	0.0025 J	0.68	0.65	ND	ND	21.6	24	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-03A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	18	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	5.8	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.14 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-03A*																
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.03 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.26 J*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.4 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-03A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*0.6 J*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.55 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.51 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-03A***															
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.76 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.68 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.36 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.48 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.22 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-03A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-03A***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.278 J*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05B***											
Nov-1993	ND	ND	0.1	ND	1.6	0.2	ND	3.73	44.6	3.8	32	1.54
Apr-1994	ND	ND	ND	ND	1.3	ND	ND	4.95	24.4	2.7	ND	ND
Aug-1994	ND	ND	ND	ND	1.6	0.4	ND	4.9	20.4	4.3	ND	2.61
Sep-1994	ND	ND	ND	ND	1.6	0.3	ND	4.8	19.3	4.8	10	2.8
Nov-1994	ND	ND	ND	ND	1.5	0.2	ND	4.5	19.5	4.3	42	1.7
Apr-1995	ND	ND	ND	ND	1.4	ND	ND	4.7	18.7	4.2	ND	1.3
Apr-1997	ND	ND	ND	ND	ND	0.15	ND	NA	NA	ND	35	3.8
Oct-1997	ND	ND	0.2	ND	1.06	ND	ND	5.58	19.8	1.86	21	ND
Apr-1998	3	3	0.22	ND	1.42	ND	ND	5.71	17.86	3.05	15	3.4
Apr-1999	ND	ND	0.27	ND	2.2	ND	ND	4.52	19.24	1.52	32	1.7
Oct-1999	ND	ND	0.06	ND	1.69	ND	ND	4.79	18.92	1.83	32	1.8
Apr-2000	ND	ND	ND	ND	2.52	0.15	ND	4.99	15	1.13	23	1.8
Oct-2000	ND	NA	ND	ND	1.54	ND	ND	4.57	15.62	5.31	14	2.71
Apr-2001	ND	NA	ND	ND	1.2	ND	ND	NA	NA	ND	10	1.92
Sep-2001	ND	ND	ND	ND	2.62	ND	ND	4.61	20	7.5	26	1.99
Mar-2002	ND	ND	ND	ND	1.34	ND	ND	4.7	18	1.9	ND	1.55
Sep-2002	ND	ND	ND	ND	1.34	ND	ND	4.4	19.8	3.95	27	2.95
Mar-2003	ND	ND	ND	ND	2.17	ND	ND	4.8	18.2	2.69	17	2.53
Oct-2003	ND	ND	ND	ND	1.51	0.142	ND	3.8	19.4	2.74	49	10.5
Apr-2004	ND	ND	ND	ND	1.7	0.12	ND	5	15.2	3.17	ND	3.01
Oct-2004	ND	ND	ND	15	1.61	0.11	ND	4.5	19.9	2.56	31	1.77
Apr-2005	3.2	3.2	ND	ND	2.53	0.09	ND	5.2	18.4	ND	44	3.32
Oct-2005	1.1	1.1	ND	ND	1.83	0.12	ND	4.7	14.7	4.29	33	1.76
Mar-2006	1.4	1.4	ND	ND	1.68	0.13	ND	4	16.1	4.73	ND	0.971
Sep-2006	1.2	1.2	ND	ND	1.78	0.12	ND	4.6	16.2	4.13	18	1.42
Mar-2007	1.8	1.8	ND	ND	1.91	0.14	ND	4.8	15.4	3.74	12	1.61
Sep-2007	ND	ND	0.31	ND	1.68	0.13	ND	4.2	14.6	3.39	28	1.33
Mar-2008	ND	ND	ND	10	1.9	0.12	ND	4.4	15.6	4.55	28	1.51
Sep-2008	1.8	1.8	ND	ND	1.74	0.06	ND	4.7	15	5.72	21	1.7
Mar-2009	1.2	1.2	ND	ND	1.65	0.1	ND	4.7	16.8	6.58	16	1.96
Oct-2009	1.4	1.4	ND	ND	1.58	0.14	ND	3.9	15.5	2.74	19	1.47
Apr-2010	1.5	1.5	ND	ND	1.53	0.12	ND	4.6	17.2	2.94	22	1.2
Oct-2010	ND	ND	ND	ND	1.95	0.08	ND	3.8	15.6	2.67	ND	1.62
Apr-2011	1.1	1.1	ND	ND	1.84	0.13	ND	4.1	16.8	2.11	27	1.54
Sep-2011	1.3	1.3	0.21	ND	1.62	0.1	ND	4.5	15.8	2.25	32	1.44
Mar-2012	1.2	1.2	ND	ND	1.82	0.1	ND	3.8	15.8	3.4	ND	1.72
Sep-2012	1	1	ND	ND	1.84	0.12	ND	3.8	16.4	1.9	22	1.59

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05B***											
Mar-2013	1.6	1.6	*ND*	*ND*	2.02	0.117	*ND*	4.8	16.6	2.39	12	1.75
Oct-2013	1.72	1.72	*ND*	*ND*	1.88	0.12	*ND*	4.8	16.4	2.52	*ND*	2.23
Mar-2014	1.4	1.4	*ND*	*ND*	1.87	0.115	*ND*	5.1	16.2	2.72	*ND*	1.59
Oct-2014	*ND*	*ND*	*ND*	*9 J*	2.1	0.129	*ND*	4.1	16.1	2.36	*ND*	1.61
Apr-2015	1.92	1.92	*ND*	*ND*	1.94	0.122	*ND*	4.4	15.3	2.86	*ND*	1.89
Nov-2015	*ND*	*ND*	*ND*	*ND*	1.93	0.144	*ND*	4.9	27.7	2.94	*ND*	1.52
May-2016	2.76	2.76	*ND*	*ND*	2.13 B	0.158	*ND*	4.7	26	3.66	57	3
Oct-2016	1.04	1.04	*ND*	*ND*	1.99	*NA*	*NA*	4.8	28.4	4.36	28	2.8
May-2017	2.6	2.6	*ND*	35	2.29	0.211	*ND*	4.5	32.1	4.68	*22 J*	3.5
Oct-2017	*ND*	*ND*	*ND*	*ND*	1.91	0.182	*ND*	4.9	33.5	2.97	*ND*	1.5
May-2018	*1 JB*	*ND*	*ND*	*7.9 J*	*2 J*	*ND*	*ND*	4.5	26.8	*ND*	*ND*	*1.8 J*
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	*1.8 J*	0.17	*ND*	4.27	18.5	*ND*	*ND*	*1.6 J*
May-2019	*ND*	*NA*	*ND*	*ND*	*ND*	0.18	*ND*	4.23	14.5	*ND*	27	*ND*
Oct-2019	*ND*	*NA*	*ND*	*ND*	*1.5 J*	0.19	*ND*	4.34	19.5	*ND*	20	1.2
May-2020	*ND*	*NA*	*ND*	*ND*	*1.7 J*	0.17	*ND*	4.4	18.9	*ND*	19	*1.8 J*
Oct-2020	*ND*	*NA*	*ND*	*ND*	*1.6 J*	0.18	*ND*	4.26	17.6	*ND*	11	1.6
Apr-2021	14	*NA*	*ND*	*ND*	*1.8 J*	0.2	*ND*	4.96	22.7	*ND*	*ND*	3.45
Oct-2021	*ND*	*NA*	*ND*	*ND*	*1.5 J*	0.22	*ND*	4.95	51.6	*ND*	*ND*	*1.78 J*
May-2022	*ND*	*NA*	*ND*	*ND*	*1.8 J*	0.18	*ND*	4.52	42.2	*ND*	*ND*	*2 JN3*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-05B*													
Nov-1993	NA	ND	ND	NA	ND	0.32	NA	ND	NA	ND	0.03	ND	ND	0.18	NA
Apr-1994	NA	ND	ND	NA	ND	0.011	NA	ND	NA	ND	67	3	ND	0.036	NA
Aug-1994	NA	ND	ND	NA	ND	0.78	NA	ND	NA	ND	ND	ND	ND	0.16	NA
Sep-1994	NA	ND	ND	NA	ND	0.82	NA	ND	NA	ND	0.11	0.04	**0.038**	0.19	NA
Nov-1994	NA	ND	ND	NA	ND	0.4	NA	ND	NA	0.03	ND	ND	ND	0.17	NA
Apr-1995	ND	ND	0.8	ND	ND	0.24	NA	ND	ND	ND	3.2	ND	ND	0.18	NA
Oct-1996	ND	ND	0.006	ND	ND	0.58	0.49	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	0.72	0.48	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	0.572	0.507	ND	ND	0.013	0.652	ND	ND	0.208	0.166
Apr-1998	ND	ND	ND	ND	ND	1.01	3.15	ND	ND	ND	0.378	0.019	ND	0.213	0.545
Apr-1999	ND	ND	ND	ND	ND	0.441	0.495	ND	ND	ND	ND	ND	ND	0.169	0.163
Oct-1999	ND	ND	ND	ND	ND	0.48	0.497	ND	ND	ND	0.11	ND	ND	0.176	0.168
Apr-2000	ND	ND	ND	ND	ND	0.451	0.457	ND	ND	ND	ND	ND	ND	0.169	0.157
Oct-2000	ND	ND	ND	ND	ND	0.716	0.417	ND	ND	0.015	0.104	ND	ND	0.224	0.16
Apr-2001	ND	ND	ND	ND	ND	0.471	NA	ND	ND	ND	0.075	NA	ND	0.18	NA
Sep-2001	ND	ND	ND	ND	ND	0.476	0.432	ND	ND	0.023	58.1	0.079	**0.02**	0.193	0.157
Mar-2002	ND	ND	ND	ND	ND	0.363	0.442	ND	ND	ND	0.144	ND	ND	0.157	0.168
Sep-2002	ND	ND	ND	ND	ND	0.829	0.368	ND	ND	0.014	0.136	ND	ND	0.214	0.159
Mar-2003	ND	ND	ND	ND	ND	0.699	0.673	ND	ND	ND	ND	ND	ND	0.192	0.178
Oct-2003	ND	ND	ND	ND	ND	0.807	0.504	ND	ND	0.028	0.194	ND	0.01	0.204	0.168
Apr-2004	ND	ND	ND	ND	ND	0.808	0.591	ND	ND	0.012	0.103	ND	ND	0.239	0.177

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05B***													
Oct-2004	ND	ND	ND	ND	ND	0.429	0.423	ND	ND	ND	0.094	ND	ND	0.169	0.157
Apr-2005	ND	ND	0.011	ND	ND	0.78	0.816	ND	ND	ND	30.5	0.897	0.007	0.333	0.342
Oct-2005	ND	ND	ND	ND	ND	0.431	0.428	ND	ND	ND	0.286	ND	ND	0.166	0.167
Mar-2006	ND	ND	ND	ND	ND	0.233	0.226	ND	ND	ND	ND	ND	ND	0.095	0.099
Sep-2006	ND	ND	ND	ND	ND	0.332	0.338	ND	ND	ND	0.158	ND	ND	0.144	0.138
Mar-2007	ND	ND	ND	ND	ND	0.417	0.409	ND	ND	ND	0.058	ND	ND	0.138	0.165
Sep-2007	ND	0.002	ND	ND	ND	0.319	0.327	ND	ND	ND	ND	ND	ND	0.13	0.126
Mar-2008	ND	0.003	ND	ND	ND	0.363	0.391	ND	ND	ND	0.082	ND	ND	0.147	0.153
Sep-2008	ND	ND	ND	ND	ND	0.42	0.263	ND	ND	ND	0.176	ND	ND	0.163	0.152
Mar-2009	ND	ND	ND	ND	ND	0.497	0.31	ND	ND	ND	0.175	ND	ND	0.175	0.125
Oct-2009	ND	ND	ND	ND	ND	0.323	0.35	ND	ND	ND	0.157	ND	ND	0.16	0.161
Apr-2010	ND	ND	ND	ND	ND	0.296	0.212	ND	ND	ND	0.165	ND	ND	0.113	0.094
Oct-2010	ND	ND	ND	ND	ND	0.392	0.289	ND	ND	ND	0.213	ND	ND	0.156	0.1
Apr-2011	ND	ND	ND	ND	ND	0.362	0.302	ND	ND	ND	0.101	ND	ND	1.55	0.123
Sep-2011	ND	ND	ND	ND	ND	0.356	0.381	ND	ND	ND	0.148	ND	ND	0.133	0.165
Mar-2012	ND	ND	ND	ND	ND	0.323	0.337	ND	ND	ND	0.062	ND	ND	0.222	0.216
Sep-2012	ND	ND	0.0043 J	0.000281 J	ND	0.381	0.372	ND	0.0035 J	0.0077 J	0.0666	0.0131 J	0.000497 J	0.154	0.16
Mar-2013	ND	ND	0.0059 J	0.000283 J	ND	0.468	0.464	0.0049 J	0.0034 J	0.0107	0.947	0.0082 J	0.0014 J	0.141	0.115
Oct-2013	0.000873 J	ND	0.0049 J	0.000283 J	ND	0.684	0.602	0.0084 J	0.0035 J	0.0072 J	0.253	0.0668	0.000971 J	0.126	0.11
Mar-2014	0.000335 J	ND	0.0036 J	0.000313 J	ND	0.371	0.336	0.000381 J	0.0031 J	0.0064 J	0.0871 J	0.0073 J	0.000355 J	0.161	0.142
Oct-2014	0.000609 J	ND	0.0077 J	0.00036 J	ND	0.374	0.308	0.0029 J	0.0033 J	0.008 J	0.828	0.0991	0.0011 J	0.165	0.101
Apr-2015	0.0013 J	ND	0.0047 J	0.00023 J	0.000094 J	0.479	0.324	0.000635 J	0.0035 J	0.0075 J	0.157	0.0084 J	ND	0.169	0.105
Nov-2015	0.000506 J	ND	0.0042 J	0.000288 J	ND	0.357	0.221	0.00062 J	0.0037 J	0.0093 J	0.0924	ND	0.000591 J	0.153	0.0846
May-2016	0.00052 J	ND	0.0051	0.00026 J,B	ND	0.857	0.608	0.0011 J	0.0031	0.0058	0.557	ND	0.0025	0.201	0.185 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05B***													
Oct-2016	*0.00069 J*	*ND*	0.0059	*0.00025 J*	*0.00074 J*	0.767	0.658	*0.0014 J+*	0.0033	*0.0044 J+*	0.734	*ND*	0.0027	*0.216 J+*	*0.191 J*
May-2017	*0.00076 J*	*ND*	0.0055	*0.00023 J*	*ND*	0.976	0.705	*0.0011 J*	0.0031	0.0043	0.423	*ND*	0.0027	0.264	0.209
Oct-2017	*ND*	*ND*	0.0045	*0.00023 J*	*ND*	*0.366 J*	*0.37 J*	*0.0015 J*	0.0035	*0.0031 J*	*ND*	*ND*	*ND*	*0.15 J*	*0.164 J*
May-2018	*0.000066 J*	*ND*	0.0044	*0.00022 J*	*0.000056 J*	*0.38 J*	*0.36 J*	*0.0047 J*	0.0033	0.0034 B	*0.017 J*	*ND*	*0.000041 J*	*0.22 J*	*0.17 J*
Nov-2018	*ND*	*0.000041 J*	0.0039	*0.00024 J*	*0.000062 J*	*0.47 J*	1.6	0.011	0.0034	**0.0037 D6**	0.086	0.026	*0.00014 J*	*0.11 J*	*0.19 J*
May-2019	*ND*	*ND*	0.0042	*ND*	*ND*	*ND*	*ND*	0.011	0.0041	0.004	*ND*	0.033	*ND*	*ND*	*ND*
Oct-2019	*0.000052 J*	*ND*	0.0041	*0.00022 J*	*0.0002 J*	0.31	*0.75 J*	0.017	0.0052	0.0086	0.11	0.058	*0.00011 J*	*0.11 J*	*0.17 J*
May-2020	*ND*	*ND*	*0.0049 J*	*0.00028 J*	*ND*	*0.49 J*	*0.68 J*	0.0073	*0.0034 J*	0.0085	0.072	*ND*	*ND*	*0.15 J*	*0.17 J*
Oct-2020	*0.0005 J*	*ND*	*0.0045 J*	*ND*	*ND*	0.48	*0.65 J*	*0.013 J*	0.0042	*ND*	*0.061 J*	0.03	*ND*	*0.11 J*	*0.18 J*
Apr-2021	*ND*	*ND*	*0.0043 J*	*0.00023 J*	*ND*	1	1.1	*0.0049 J*	*0.0034 J*	0.0059	*0.053 J*	*ND*	*ND*	0.23	0.23
Oct-2021	*0.000053 JB*	*ND*	0.0044	*0.00024 J*	*ND*	*0.44 J*	0.509	0.013	0.0048	0.011	0.14	0.0576	*0.000061 J*	*0.16 J*	*0.186 J*
May-2022	*ND*	*ND*	0.0056	*0.00033 J*	*ND*	*0.49 J*	0.61	0.011	0.0051	0.016	0.07	0.064	*ND*	*0.19 J*	*0.2 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-05B*												
Nov-1993	0.05	NA	ND	NA	0.47	NA	ND	NA	1.1	NA	NA	NA	0.01
Apr-1994	0.08	NA	ND	NA	0.58	NA	ND	NA	1.6	NA	NA	NA	ND
Aug-1994	0.01	NA	ND	NA	0.58	NA	ND	NA	0.76	NA	NA	NA	0.05
Sep-1994	0.01	NA	ND	NA	0.37	NA	ND	NA	0.85	NA	NA	NA	1.1
Nov-1994	ND	NA	ND	NA	0.3	NA	ND	NA	0.75	NA	NA	NA	0.02
Apr-1995	ND	NA	ND	ND	0.53	NA	ND	0.01	0.82	NA	ND	ND	0.04
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	2.2	1.7	ND	ND	0.13
Apr-1997	ND	ND	0.0018	ND	1.1	1.8	ND	ND	1.9	1	ND	ND	0.039
Oct-1997	ND	ND	NA	0.015	ND	ND	ND	ND	0.971	0.907	ND	ND	0.049
Apr-1998	ND	0.012	NA	0.022	1.16	ND	ND	ND	0.898	1.11	ND	ND	0.107
Apr-1999	ND	ND	NA	ND	ND	1.05	ND	ND	0.93	0.926	ND	ND	0.024
Oct-1999	ND	ND	NA	ND	ND	ND	ND	ND	0.95	0.91	ND	ND	0.027
Apr-2000	ND	ND	NA	ND	ND	ND	ND	ND	0.96	0.974	ND	ND	0.019
Oct-2000	ND	ND	NA	ND	0.712	0.457	ND	ND	1.74	0.939	ND	ND	0.023
Apr-2001	ND	NA	NA	ND	1.28	NA	ND	ND	0.993	NA	ND	ND	0.018
Sep-2001	0.125	ND	NA	ND	0.573	0.733	ND	ND	0.963	0.909	ND	ND	2.11
Mar-2002	ND	ND	NA	ND	0.773	ND	ND	ND	0.936	0.975	ND	ND	0.022
Sep-2002	ND	ND	NA	ND	1.26	ND	ND	ND	1.58	0.873	ND	ND	0.023
Mar-2003	ND	ND	NA	ND	ND	ND	ND	ND	0.92	0.941	ND	ND	0.033
Oct-2003	ND	ND	NA	ND	1.93	1.06	ND	ND	1.54	0.922	ND	ND	0.025
Apr-2004	ND	ND	ND	ND	0.668	ND	ND	ND	1.37	0.976	ND	ND	0.058
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	0.914	0.604	ND	ND	0.024

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05B***												
Apr-2005	0.018	0.016	ND	ND	ND	0.54	ND	ND	1.36	1.35	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	0.845	0.812	ND	ND	0.013
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	0.63	0.588	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.52	0.51	ND	ND	0.783	0.777	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	0.764	0.695	ND	ND	0.02
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	0.804	0.778	ND	ND	0.015
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	0.834	0.829	ND	ND	0.01
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	0.831	0.753	ND	ND	0.057
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.12	0.887	ND	ND	0.02
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	0.81	0.791	ND	ND	0.015
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	0.847	0.841	ND	ND	0.021
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	0.857	0.87	ND	ND	0.018
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	0.907	0.899	ND	ND	0.02
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	0.983	0.947	ND	ND	0.013
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	0.9	0.901	ND	ND	0.013
Sep-2012	0.0039 J	0.0036 J	ND	0.0055 J	0.39 J	0.321 J	ND	ND	0.948	0.903	ND	ND	0.0168
Mar-2013	0.0044 J	0.0027 J	0.000072 J	0.0068 J	0.48 J	0.435 J	ND	ND	0.909	1.02	ND	ND	0.0321
Oct-2013	0.0043 J	0.0035 J	ND	0.005 J	0.347 J	0.302 J	ND	ND	0.753	0.744	0.000122 J	0.0084 J	0.0276
Mar-2014	0.0032 J	0.003 J	ND	0.0052 J	0.396 J	0.401 J	ND	ND	0.903	0.932	ND	ND	0.02
Oct-2014	0.0046 J	0.0027 J	ND	0.0064 J	0.551	0.443 J	0.0012 J	ND	0.984	1.1	ND	0.0018 J	0.0197
Apr-2015	0.0039 J	0.0021 J	ND	0.0059 J	0.47 J	0.453 J	ND	ND	1.05	1.09	ND	ND	0.023
Nov-2015	0.004 J	0.002 J	ND	0.0062 J	0.414 J	0.42 J	ND	ND	1.09	1.15	ND	ND	0.0205
May-2016	0.0064	0.0043 B	ND	0.0062	0.464	0.451	ND	ND	2.4	1.98	ND	0.0003 J	0.809
Oct-2016	0.0079 R	0.0042	ND	0.0057 J+	0.515	0.52	ND	ND	2.49 J+	2.44	ND	0.00037 J	0.55

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05B***												
May-2017	0.008	*0.004 J*	*ND*	0.0055	0.488	0.477	*ND*	*ND*	4	3.23	*ND*	*0.00028 J*	0.835
Oct-2017	0.0042	*0.0035 J*	*ND*	0.0074	0.427	*0.395 J*	*ND*	*ND*	1.01	1.04	*ND*	*ND*	*0.0091 J*
May-2018	0.0036 B	0.0031	*ND*	0.008	*ND*	*ND*	*0.00048 JB*	*ND*	*1.5 J*	*1.2 J*	*ND*	*ND*	0.0088 B
Nov-2018	0.0037	0.0041	*ND*	0.015	*ND*	*ND*	*0.00013 J*	*ND*	*1.2 J*	*1.2 J*	*0.000076 J*	*0.00045 J*	0.0086 D6
May-2019	0.0048	0.0057	*ND*	0.013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0026	0.023
Oct-2019	0.006	0.0064	*ND*	0.018	*ND*	*ND*	*0.00054 J*	*0.00049 J*	*ND*	*ND*	*ND*	0.005	0.034
May-2020	*0.0041 J*	*0.0045 JB*	*ND*	0.011	*0.5 J*	*0.45 J*	*ND*	*ND*	1.2	1.3	*ND*	*ND*	0.017
Oct-2020	0.0049	0.0034	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.0035 J*	*ND*
Apr-2021	*0.0045 J*	*0.0042 J*	*0.00005 J*	*0.0092 J*	*0.47 J*	*0.49 J*	*ND*	*ND*	1.1	*0.98 J*	*ND*	*ND*	0.051
Oct-2021	0.0053	0.0062	*ND*	0.018	*0.4 J*	*0.424 J*	*ND*	*0.0003 J*	1.1	1.29 B	*0.000079 J*	*ND*	0.012
May-2022	*0.0048 J*	0.0065	*ND*	0.015	*0.44 J*	0.52	*ND*	*ND*	1.3	1.5	*0.00011 J*	*ND*	0.025

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05B*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05B*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05B*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.8 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.5	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05B***															
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.18 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05B***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05B***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Aug-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-05B*															
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.1 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05B***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.705 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-06A***											
Nov-1993	18	18	0.5	288	17.2	0.6	ND	5.42	381	136	246	144
Apr-1994	46	46	0.3	31	12.4	ND	ND	5.62	302	71.6	187	98.05
Apr-1995	55.6	55.6	ND	40.6	14.2	ND	ND	6.5	349	66.5	203	129
Apr-1997	ND	70	ND	27	6	ND	ND	NA	NA	30	166	98
Apr-1998	101	101	0.34	28	3.76	0.141	ND	6.93	230	28.7	170	118
Apr-1999	77	77	0.75	24	5.94	ND	ND	6.29	366	67.8	130	143
Apr-2000	96	96	ND	27	5.99	ND	ND	8.36	219	46	181	133
Apr-2001	98	NA	ND	24	2.58	ND	ND	NA	NA	18.8	186	140
Mar-2002	109	109	ND	28	1.77	1.55	ND	7.9	391	80.5	276	194
Mar-2003	82	82	ND	19	5.12	ND	ND	7	243	27.3	146	110
Apr-2004	94	94	ND	14	2.4	ND	ND	7.1	207	30.7	215	132
Apr-2005	88	88	ND	28	2.4	ND	ND	6.8	241	34.6	175	128
Mar-2006	62	62	ND	10	3.07	0.22	ND	5.7	258	50.4	170	115
Mar-2007	72	72	0.5	21	11.3	ND	ND	6.4	187.6	34.8	135	111
Mar-2008	91	91	ND	ND	7.34	ND	ND	7	192.8	29.3	190	54.2
Mar-2009	136	136	ND	ND	3.82	0.7	ND	6.9	315	47.5	237	177
Apr-2010	107	107	ND	18	4.68	ND	ND	6.3	207	27.5	220	142
Apr-2011	99	99	ND	16	4.6	ND	ND	6.2	201	22.3	159	119
Mar-2012	64	64	0.27	13	4.08	ND	ND	5.9	174.9	35.5	149	95.7
Mar-2013	57.9	57.9	ND	18.3	3.87	0.304	ND	6.5	178.3	46.3	150	110
Mar-2014	55.3	55.3	ND	ND	2.91	0.882	ND	6.2	179.9	49.8	148	122
Apr-2015	82.4	82.4	ND	9 J	4.07	0.531	ND	5.8	211	40.9	200	122
May-2016	70.5	70.5	ND	6 J	3.99	0.526	ND	7	276	43	159	126
May-2017	68.5	68.5	ND	17	6.15	0.734	0.0762	6.4	352	42.1	168	112
May-2018	82	82	ND	33.7	7	0.1	ND	NA	NA	42	78	136
May-2019	112	NA	ND	ND	3.8	0.1	ND	6.62	195.2	34.7	179	139
May-2020	100	NA	ND	13.5 J	3.1	1.1	ND	5.94	219.2	36	151	130
Apr-2021	120	NA	ND	12.6 J	2.7 J	0.1	ND	7.12	294.2	30.1 ML	170	141
May-2022	102	NA	ND	5.6 J	3 J	0.6	ND	7.04	309	33.2	166 H1	146 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06A***													
Nov-1993	NA	ND	ND	NA	ND	46	NA	ND	NA	ND	47.3	0.08	ND	7.3	NA
Apr-1994	NA	ND	0.019	NA	ND	33	NA	ND	NA	ND	13	8.9	ND	3.8	NA
Apr-1995	ND	ND	ND	ND	ND	43	NA	ND	ND	ND	15.1	ND	ND	5.3	NA
Apr-1997	ND	ND	0.02	ND	ND	29	32	ND	ND	ND	6.2	6.2	ND	3.6	3.9
Apr-1998	ND	ND	0.02	ND	ND	39.7	40	ND	ND	ND	3.05	0.84	ND	4.63	4.65
Apr-1999	ND	ND	0.02	ND	ND	47.5	48.9	ND	ND	ND	13	0.07	ND	5.99	6.18
Apr-2000	ND	ND	0.019	ND	ND	44.8	43.5	ND	ND	ND	5.16	0.908	ND	5.13	4.98
Apr-2001	ND	ND	0.017	ND	ND	47.2	NA	ND	ND	ND	2.56	NA	ND	5.34	NA
Mar-2002	ND	ND	0.034	ND	ND	64.7	67.3	ND	ND	ND	1.02	ND	ND	7.98	8.32
Mar-2003	ND	ND	0.017	ND	ND	37.1	35.6	ND	ND	ND	3.59	0.217	ND	4.23	3.98
Apr-2004	ND	ND	0.03	ND	ND	45.3	43.3	ND	ND	ND	5.38	0.766	ND	4.73	4.46
Apr-2005	ND	ND	0.027	ND	ND	43.8	40.2	ND	ND	ND	9.29	1.68	ND	4.6	4.2
Mar-2006	ND	ND	0.038	ND	ND	38.7	37.8	ND	ND	ND	2.26	ND	ND	4.44	4.32
Mar-2007	ND	ND	0.038	ND	ND	37.9	34.1	ND	ND	0.01	62.1	3.6	ND	3.95	3.44
Mar-2008	ND	ND	0.021	ND	ND	36.7	37.9	ND	ND	ND	15	0.105	ND	4.06	4.2
Mar-2009	ND	ND	0.025	ND	ND	60.4	57.3	ND	ND	0.013	0.865	ND	ND	6.36	6.03
Apr-2010	ND	ND	0.027	ND	ND	49	44.6	ND	ND	ND	5.95	2.17	ND	4.81	4.36
Apr-2011	ND	ND	0.024	ND	ND	40.5	39.3	ND	ND	0.014	2.14	0.952	ND	4.49	4.21
Mar-2012	ND	ND	0.029	ND	ND	32.4	31.6	ND	ND	0.011	1.28	0.362	ND	3.59	3.43
Mar-2013	ND	ND	0.0466	0.000079 J	ND	36.9	33.3	0.0036 J	0.0026 J	0.128	26.8	0.393	0.0013 J	4.29	3.71
Mar-2014	ND	ND	0.0305	ND	ND	43	41.1	0.0044 J	0.0021 J	0.0092 J	1.8	0.0827	ND	3.45	4.27

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06A***													
Apr-2015	*0.000223 J*	*ND*	0.0298	*ND*	*ND*	41.4	42.9	*0.000762 J*	*0.000611 J*	*0.0055 J*	2.11	0.244	*ND*	4.63	4.84
May-2016	*0.00042 J*	*0.00073 J*	0.0483	*0.00015 J*	*ND*	42.8	41.8	0.0111	0.0051	0.0826	67.2	*0.0234 J*	*0.0018 J*	4.68	4.57
May-2017	*ND*	*ND*	0.0346	*ND*	*ND*	37.4	38.9	*0.0019 J*	0.0026	0.0079	3.38	*0.059 J*	*0.00021 J*	4.46	4.67
May-2018	0.0012	*ND*	0.06	0.00075	*0.00079 J*	46.3	38.1	0.01	0.0015	0.022	110	0.099	0.013	4.9	4.2
May-2019	*ND*	*ND*	0.026	*ND*	*ND*	47.2	46.4	*ND*	0.003	*ND*	0.66	0.02	*ND*	5	5
May-2020	*ND*	*ND*	0.032	*ND*	*ND*	44.5	43.6	*0.0047 J*	*0.0047 J*	*0.0045 J*	3.8	*ND*	*ND*	4.6	4.8
Apr-2021	*ND*	*ND*	0.027	*ND*	*ND*	48.2 ML	48.4 MH	*0.0015 J*	*0.0015 J*	*ND*	0.67	*ND*	*ND*	5.1	5
May-2022	*ND*	*ND*	0.03	*ND*	*ND*	49.4	48.3	*0.0009 J*	*0.00073 J*	*0.00093 J*	0.26	*ND*	*ND*	5.5	5.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-06A*												
Nov-1993	0.78	NA	ND	NA	7.4	NA	ND	NA	9.3	NA	NA	NA	0.16
Apr-1994	0.27	NA	ND	NA	5.2	NA	ND	NA	5.3	NA	NA	NA	ND
Apr-1995	0.23	NA	ND	ND	5.6	NA	ND	ND	2.8	NA	ND	ND	0.04
Apr-1997	0.1	0.1	ND	ND	4.4	5	ND	ND	2.3	2.6	ND	ND	ND
Apr-1998	0.04	0.035	NA	ND	4.93	4.13	ND	ND	1.89	1.94	ND	ND	0.016
Apr-1999	0.087	0.079	NA	ND	4.97	4.93	ND	ND	2.29	2.36	ND	ND	ND
Apr-2000	0.063	0.059	NA	ND	4.27	3.89	ND	ND	1.9	1.82	ND	ND	ND
Apr-2001	0.014	NA	NA	ND	4.5	NA	ND	ND	1.63	NA	ND	ND	ND
Mar-2002	0.011	ND	NA	ND	5.16	5.13	ND	ND	1.35	1.4	ND	ND	0.015
Mar-2003	ND	ND	NA	ND	3.44	3.78	ND	ND	1.62	1.6	ND	ND	0.011
Apr-2004	0.087	0.067	ND	ND	4.24	3.99	ND	ND	1.38	1.37	ND	ND	ND
Apr-2005	0.077	0.059	ND	ND	3.67	3.18	ND	ND	1.54	1.3	ND	ND	0.026
Mar-2006	0.026	0.018	ND	ND	3.6	3.49	ND	ND	1.22	1.17	ND	ND	ND
Mar-2007	0.165	0.103	ND	ND	4.09	3.78	ND	ND	1.4	1.28	ND	ND	0.02
Mar-2008	0.065	0.023	ND	ND	3.69	3.71	ND	ND	1.82	1.41	ND	ND	0.01
Mar-2009	ND	ND	ND	ND	4.84	4.57	ND	ND	1.49	1.38	ND	ND	ND
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apr-2010	0.073	0.079	ND	ND	4.82	4.43	ND	ND	1.83	1.77	ND	ND	ND
Apr-2011	0.037	0.031	ND	ND	4.41	4.25	ND	ND	2.43	2.39	ND	ND	ND
Mar-2012	0.069	0.06	ND	ND	4.08	4.03	ND	ND	1.99	1.95	ND	ND	ND
Mar-2013	0.184	0.1	0.000113 J	0.0056 J	3.92	3.61	0.000429 J	0.000023 J	2.19	2.06	ND	ND	0.0211
Mar-2014	0.0308	0.029	ND	0.0017 J	4.3	4.05	ND	0.000079 J	1.53	1.95	ND	0.0041 J	0.0074 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-06A***												
Apr-2015	0.0163	0.0131	*ND*	*0.0014 J*	4.12	4.3	*0.00088 J*	*ND*	2.33	2.44	*ND*	*ND*	*0.0059 J*
May-2016	0.216	0.039	*ND*	0.0108	4.01	3.86	*ND*	*0.00016 J*	1.95	1.97	*ND*	0.0032	*0.0237 J*
May-2017	0.0408	0.034	*ND*	*0.0017 J*	4.78	4.89	*ND*	*ND*	2.55	2.49	*ND*	*0.00041 J*	*0.0036 J*
May-2018	0.24	0.0081	*ND*	0.005	*3.9 J*	*3.5 J*	*0.00018 JB*	*ND*	*2.8 J*	*2.4 J*	*ND*	0.012	0.017
May-2019	0.006	0.017	*ND*	0.0014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.002	*ND*
May-2020	0.013	0.0077 B	*ND*	*0.0038 J*	5.4	4.7	*ND*	*ND*	2.3	2.7	*ND*	*ND*	*ND*
Apr-2021	*0.005 J*	*ND*	*ND*	*ND*	5	5	*ND*	*ND*	2.3	2.4	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*0.00092 J*	5.2	5.1	*ND*	*ND*	2.2	2.3	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06A*																
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-06A*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-06A***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-06A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	2.6 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2013	*ND*	*0.53 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-06A***															
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-06B***											
Apr-2010	1.3	1.3	ND	ND	2.76	0.33	ND	3.8	22.1	3.09	26	1.9
Oct-2010	1.2	1.2	ND	ND	2.81	0.32	ND	3.6	22.4	3.58	10	2.24
Apr-2011	ND	ND	ND	ND	2.82	0.35	ND	4	24.1	1.7	17	2
Sep-2011	ND	ND	0.21	ND	2.69	0.34	ND	4.5	23.5	2.22	28	2.4
Mar-2012	ND	ND	ND	ND	3.17	0.35	ND	3.8	20.8	3.55	14	2.51
Sep-2012	ND	ND	ND	ND	2.95	0.335	ND	3.1	23.6	3.24	20	2.23
Mar-2013	0.92 J	0.92 J	ND	ND	3.22	0.341	ND	3.9	25.7	1.98	15	2.52
Oct-2013	1.56	1.56	ND	ND	3.09	0.324	ND	5.4	24.9	2.33	ND	2.77
Mar-2014	ND	ND	ND	ND	3.32	0.291	ND	4.6	24.1	2.84	ND	2.02
Oct-2014	ND	ND	ND	11	3.31	0.314	ND	4.4	23	2.8	ND	2.26
Apr-2015	0.96	0.96	ND	ND	3.16	0.357	ND	4.2	23.3	3.1	ND	2.28
Nov-2015	ND	ND	ND	ND	3.06	0.352	ND	4.8	37.5	1.95	20 J	2.2
May-2016	ND	ND	ND	ND	3.19	ND	ND	4.6	40.8	3.11	15 J	2.3
Oct-2016	ND	ND	ND	ND	3.36	NA	NA	4.8	36.1	2.17	31	2.1
May-2017	2.64	2.64	ND	ND	2.99	0.336	ND	4.5	43.8	2.15	13 J,B	3
Oct-2017	ND	ND	0.0676 J	ND	3.3	0.399	ND	4.4	44.2	2.88	25	2.3
May-2018	1 JB	ND	ND	5.8 J	2.7 J	0.073 J	ND	4.4	34.7	ND	ND	2.3 J
Nov-2018	1 JB	ND	ND	ND	2.9 J	0.31	ND	4.1	24.8	ND	ND	2.2 J
May-2019	ND	NA	ND	ND	ND	0.35	ND	3.86	20.3	ND	21	ND
Oct-2019	ND	NA	ND	ND	2.6 J	0.35	ND	4.14	24.6	ND	10	2.2
May-2020	ND	NA	ND	ND	2.9 J	0.33	ND	4.17	24.6	ND	ND	2.2 J
Oct-2020	ND	NA	ND	ND	3.2	0.35	ND	5.01	24.4	1.2	35	2.3
Apr-2021	ND	NA	ND	ND	3.1	0.34	ND	4.51	29.1	ND	17	2.3 J
Oct-2021	ND	NA	ND	ND	3 J	0.35	ND	4.57	38.5	ND	ND	2.5 J
May-2022	ND	NA	ND	ND	2.9 J	0.32	ND	4.45	49.4	ND	ND	2.3 JN3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06B***													
Apr-2010	ND	ND	ND	ND	ND	0.431	0.353	ND	ND	ND	ND	ND	ND	0.188	0.157
Oct-2010	ND	ND	ND	ND	ND	0.521	0.514	ND	ND	ND	0.052	ND	ND	0.229	0.226
Apr-2011	ND	ND	ND	ND	ND	0.446	0.484	ND	ND	ND	ND	ND	ND	0.216	0.236
Sep-2011	ND	ND	ND	ND	ND	0.578	0.606	ND	ND	ND	ND	ND	ND	0.233	0.233
Mar-2012	ND	ND	ND	ND	ND	0.507	0.501	ND	ND	ND	ND	ND	ND	0.301	0.299
Sep-2012	ND	ND	0.0065 J	0.000303 J	ND	0.522	0.602	0.0011 J	0.005 J	0.0032 J	0.0367 J	0.0319 J	ND	0.225	0.245
Mar-2013	ND	ND	0.0069 J	0.000275 J	ND	0.613	0.481	0.0016 J	0.0052 J	0.0028 J	0.011 J	0.0147 J	ND	0.241	0.195
Oct-2013	ND	ND	0.0066 J	0.000312 J	ND	0.801	0.791	0.0124 J	0.0049 J	0.0022 J	0.0756	0.0724	0.000335 J	0.186	0.215
Mar-2014	0.0025	ND	0.0056 J	0.000252 J	ND	0.481	0.501	0.0015 J	0.0044 J	0.0015 J	ND	ND	ND	0.199	0.207
Oct-2014	0.0012 J	ND	0.0067 J	0.000301 J	0.000074 J	0.526	0.553	0.000384 J	0.0048 J	0.003 J	ND	ND	ND	0.231	0.244
Apr-2015	0.000346 J	ND	0.0066 J	0.000287 J	0.000071 J	0.523	0.551	0.000417 J	0.0049 J	0.0029 J	0.143	0.0882	ND	0.237	0.241
Nov-2015	ND	ND	0.0062 J	0.000327 J	0.000108 J	0.504	0.567	0.000703 J	0.0049 J	0.0028 J	ND	ND	0.000426 J	0.229	0.238
May-2016	ND	ND	0.0068	0.00029 J	ND	0.522	0.455	0.00096 J	0.0048	0.0025 J	ND	ND	ND	0.249	0.227
Oct-2016	ND	ND	0.0069	0.00028 J	ND	0.439	0.451	0.00095 J	0.0053	0.0028 J	ND	ND	0.00011 J	0.236	0.244
May-2017	ND	0.00077 J	0.0053 B	0.00027 J	ND	0.738	0.78	0.00084 J,B	0.0053	0.0051	0.134 J	ND	0.001 J	0.283	0.256
Oct-2017	ND	ND	0.0067	0.0003 J	ND	0.512	0.509	ND	0.0051	0.0027 J	ND	ND	0.00012 J	0.24	0.247
May-2018	0.000054 J	ND	0.0068	0.00025 J	0.000078 J	0.51 J	0.49 J	0.0022 J	0.0048	0.0034 B	0.028	ND	0.00012 J	0.24 J	0.25 J
Nov-2018	ND	ND	0.0062	0.00028 J	0.00011 J	0.5 J	0.85 J	0.0018 J	0.0049	0.0087	ND	0.014 J	0.00039 J	0.24 J	0.24 J
May-2019	ND	ND	0.0063	ND	ND	ND	ND	ND	0.005	0.011	ND	ND	ND	ND	ND
Oct-2019	0.000055 J	ND	0.0065	0.00027 J	0.00022 J	0.52	0.5 J	0.0046 J	0.0054	0.0098	0.016 J	0.015 J	0.00017 J	0.23	0.23 J
May-2020	ND	ND	0.0067 J	0.00029 J	ND	0.5 J	0.5 J	0.004 J	0.0045 J	0.02	ND	ND	ND	0.22	0.23

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06B***													
Oct-2020	*ND*	*ND*	*0.0064 J*	*0.00031 J*	*ND*	0.52	*0.5 J*	*0.0039 J*	0.0066	0.016	*0.023 J*	0.03 D6	*ND*	0.24	*0.24 J*
Apr-2021	*ND*	*ND*	*0.007 J*	*0.00039 J*	*ND*	*0.52 J*	*0.54 J*	*0.0033 J*	0.0055	0.018	*ND*	*ND*	*ND*	0.24	0.24
Oct-2021	*ND*	*ND*	0.0064	*0.00023 J*	*ND*	0.56	0.58	0.0026	0.0058	0.015	*0.013 J*	*0.014 J*	*0.00014 J*	*0.27 J*	*0.28 J*
May-2022	*ND*	*ND*	0.0071	*0.00025 J*	*ND*	*0.49 J*	0.54	*0.0024 J*	0.0065	0.019	*ND*	*ND*	*ND*	*0.27 J*	*0.28 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-06B*												
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.27	1.23	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.17	1.15	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.28	1.25	ND	ND	ND
Sep-2011	ND	ND	ND	ND	0.534	ND	ND	ND	1.4	1.42	ND	ND	ND
Mar-2012	ND	ND	ND	ND	0.533	0.514	ND	ND	1.36	1.3	ND	ND	ND
Sep-2012	0.006 J	0.0065 J	ND	0.0076 J	0.465 J	0.493 J	ND	ND	1.32	1.32	ND	ND	0.0088 J
Mar-2013	0.0061 J	0.0047 J	0.000106 J	0.0075 J	0.53	0.521	ND	ND	1.53	1.57	ND	ND	0.018
Oct-2013	0.0064 J	0.0072 J	ND	0.0069 J	0.405 J	0.407 J	ND	ND	1.04	1.12	0.000409 J	0.004 J	0.0202
Mar-2014	0.0056	0.0058	ND	0.0069 J	0.556	0.545	ND	ND	1.68	1.64	0.000593 J	ND	0.0104
Oct-2014	0.0057 J	0.0061 J	ND	0.0077 J	0.529	0.516	0.0015 J	ND	1.45	1.41	ND	ND	0.0104
Apr-2015	0.0061 J	0.0064 J	ND	0.0076 J	0.523	0.502	0.000966 J	ND	1.47	1.49	ND	ND	0.0133
Nov-2015	0.0057 J	0.0061 J	ND	0.0082 J	0.517	0.496 J	0.000419 J	ND	1.55	1.53	0.000183 J	ND	0.01
May-2016	0.01	0.0053	ND	0.008	0.651	0.439	ND	ND	1.53	1.35	ND	ND	0.0091 J,B
Oct-2016	0.0055	0.006	ND	0.0086	0.529	0.535	ND	ND	1.49	1.55	ND	ND	0.0073 J
May-2017	0.0072	0.0068	ND	0.0095	0.564	0.599	ND	ND	2.54	2.45	ND	ND	0.0156 JB
Oct-2017	0.0063	0.0057	ND	0.0079	0.516	0.539	ND	ND	1.54	1.56	ND	ND	0.0076 J
May-2018	0.0058	0.0051	ND	0.0088	ND	ND	0.00044 JB	ND	1.8 J	1.6 J	ND	0.003	0.0092 B
Nov-2018	0.0091	0.0099	ND	0.0072	ND	ND	0.00019 J	ND	1.5 J	1.5 J	0.000069 J	0.0019	0.011
May-2019	0.0061	0.0058	ND	0.0096	ND	ND	ND	ND	ND	ND	ND	0.0049	0.01
Oct-2019	0.011	0.0078	ND	0.0099	ND	ND	0.00041 J	ND	1.5 J	ND	ND	0.0056	0.018
May-2020	0.0058	0.0061 B	ND	0.012	0.56	0.49 J	ND	ND	1.4	1.6	ND	ND	0.0094 J
Oct-2020	0.0095	0.0088	ND	0.0093	ND	ND	ND	ND	ND	ND	ND	0.00081 J	0.011 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-06B***												
Apr-2021	0.0067	0.0061	*ND*	*0.0094 J*	0.52	0.53	*ND*	*ND*	1.5	1.8	*ND*	*ND*	*0.0078 J*
Oct-2021	0.0059	0.0065	*ND*	0.0094	0.52	*0.47 J*	*ND*	*ND*	1.6 B	1.7	*0.000062 J*	*ND*	0.0089
May-2022	0.0078	0.0075	*ND*	0.0099	0.52	0.53	*ND*	*ND*	1.6	1.6	*ND*	*ND*	0.0092

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06B*																
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06B*																
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-06B*															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-06B***															
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-06B***															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-06B***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-09***											
Nov-1993	ND	ND	ND	22.8	2.1	ND	ND	4.73	36.8	11.9	44	2.72
Apr-1994	10	10	ND	ND	1.6	ND	ND	6.8	39.4	8.6	43	2.3
Apr-1995	ND	ND	ND	ND	1.8	ND	ND	4.5	38.8	11.3	19	1.8
Apr-1997	ND	2	ND	ND	1.5	0.02	ND	NA	NA	7.3	88	7.7
Apr-1998	7	7	0.21	ND	1.35	ND	ND	6.41	79.7	7.32	40	2.6
Apr-1999	ND	ND	0.15	ND	2.09	ND	ND	5.56	49.3	7.28	39	2.8
Apr-2000	ND	ND	ND	ND	ND	ND	ND	6.24	38	9.45	36	2.4
Apr-2001	ND	NA	ND	ND	1.12	ND	ND	NA	NA	10.2	33	2.59
Mar-2002	7.1	7.1	ND	ND	2.12	ND	ND	5.9	44.5	11.6	54	3.28
Mar-2003	ND	ND	ND	ND	14.8	0.961	ND	5.5	52.3	14.9	49	2.47
Apr-2004	ND	ND	ND	ND	1.47	ND	ND	5.8	43.7	11.4	58	2.5
Apr-2005	5.3	5.3	ND	ND	1.42	ND	ND	5.5	39.8	7.73	68	4.6
Mar-2006	ND	ND	ND	ND	1.58	ND	ND	5.7	41.8	16.2	23	1.84
Mar-2007	9.2	9.2	ND	ND	1.76	ND	ND	5.9	41.1	7.1	ND	2.25
Mar-2008	1.3	1.3	ND	ND	5.71	ND	ND	5.7	39.5	20.2	29	2.28
Mar-2009	1.2	1.2	ND	ND	1.47	ND	ND	5.8	40.7	18.2	19	2.56
Oct-2009	2.5	2.5	ND	ND	1.41	ND	ND	5.4	40.8	8.11	49	1.04
Apr-2010	1.8	1.8	ND	ND	1.35	ND	ND	5	39.1	11.7	ND	1.7
Oct-2010	11	11	ND	ND	1.76	ND	ND	5	38	7.69	40	2.47
Apr-2011	8.4	8.4	ND	ND	1.64	ND	ND	5.3	37.8	6.64	42	2.2
Sep-2011	4.7	4.7	ND	ND	1.42	ND	ND	5.8	39.2	6.7	29	2.26
Mar-2012	5.2	5.2	ND	ND	1.61	ND	ND	5	37.2	7.33	17	2.55
Sep-2012	6.16	6.16	ND	ND	1.6	ND	ND	4.9	37.9	6.8	28	2.33
Mar-2013	11.5	11.5	0.0707	ND	1.8	ND	ND	4.8	41.1	7.24	ND	2.53
Oct-2013	8.52	8.52	ND	ND	1.66	ND	ND	6.7	39.8	6.81	ND	2.68
Mar-2014	14.4	14.4	ND	ND	1.72	ND	ND	6	39.1	7.15	ND	2.21
Oct-2014	22	ND	ND	10	1.84	ND	ND	5.8	37.4	6.72	29	2.25
Apr-2015	9.4	9.4	ND	8 J	1.77	ND	ND	5	38.9	6.21	ND	2.33
Nov-2015	4	4	ND	ND	1.64	ND	ND	6.2	69.6	6.03	21 J	2.36
May-2016	4.64	4.64	ND	13	1.67 B	ND	ND	6	60.8	0.832 J	85	6.1
Oct-2016	ND	ND	ND	16	1.65	NA	NA	6.1	65.6	4.4	33	3.7
May-2017	5.32	5.32	ND	14	1.64	ND	ND	6.4	88.9	4.49	17 J	8
Oct-2017	27.3	27.3	ND	15	1.57	ND	ND	6.5	119.4	1.66	29	2.4
May-2018	4 J	ND	ND	18.7 J	3.2	ND	ND	5.7	59.2	ND	10	2.9 J
Nov-2018	18	18	ND	7.9 J	1.4 J	ND	ND	6.33	76.6	ND	12	2.1 J
May-2019	22	NA	ND	ND	ND	ND	0.017	5.87	62	ND	22	ND
Oct-2019	2.5 JH1	NA	ND	8.2 J	1.3 J	0.34 J	0.014	6.15	81.9	ND	13	2.1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-09***											
May-2020	12	*NA*	*ND*	*6.9 J*	*1.5 J*	*ND*	*ND*	5.76	75.2	*ND*	41	2.2
Oct-2020	*4 J*	*NA*	*ND*	*7 J*	*1.6 J*	*ND*	*ND*	5.32	74.2	1.4	59	2
Apr-2021	*8 J4c*	*NA*	*ND*	*17 J*	*1.6 J*	*0.14 J*	*ND*	6.77	94.5	*ND*	17	*2 J*
Oct-2021	20	*NA*	*ND*	*6.1 J*	*1.4 J*	*ND*	*ND*	6.85	125.2	*ND*	29	*2.1 J*
May-2022	20	*NA*	*ND*	*ND*	*1.5 JML*	*ND*	*ND*	6.7	117.5	*ND*	*ND*	*2 JN3*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-09*													
Nov-1993	NA	ND	ND	NA	ND	0.58	NA	ND	NA	ND	8.2	4	ND	0.31	NA
Apr-1994	NA	ND	0.56	NA	ND	0.51	NA	ND	NA	ND	3	9.22	ND	0.25	NA
Apr-1995	ND	ND	0.7	0.003	ND	0.19	NA	ND	ND	ND	3.4	2.7	ND	0.32	NA
Apr-1997	ND	ND	0.023	0.002	ND	0.68	0.79	ND	ND	ND	14	12	ND	ND	ND
Apr-1998	ND	ND	0.016	ND	ND	0.516	0.571	ND	ND	ND	8.83	7.96	ND	0.3	0.293
Apr-1999	ND	ND	0.016	ND	ND	0.615	0.637	ND	ND	ND	3.24	2.74	ND	0.295	0.27
Apr-2000	ND	ND	0.014	0.003	ND	0.522	0.506	ND	ND	ND	2.37	2.35	ND	0.271	0.257
Apr-2001	ND	ND	0.013	ND	ND	0.555	NA	ND	ND	ND	3.14	NA	ND	0.292	NA
Mar-2002	ND	ND	0.015	0.002	ND	0.774	1.41	ND	ND	ND	10.3	8.16	ND	0.327	0.38
Mar-2003	ND	ND	0.015	ND	ND	0.537	0.511	ND	ND	ND	3.16	2.67	ND	0.274	0.259
Apr-2004	ND	0.002	0.013	0.004	ND	0.55	0.542	ND	ND	ND	4.38	2.8	ND	0.276	0.272
Apr-2005	ND	ND	0.015	ND	ND	1.34	0.685	ND	ND	ND	9.81	8.11	ND	0.316	0.398
Mar-2006	ND	ND	0.012	ND	ND	0.385	0.358	ND	ND	ND	3.01	1.96	ND	0.214	0.183
Mar-2007	ND	ND	0.013	ND	ND	0.488	0.508	ND	ND	ND	11.7	9.23	ND	0.249	0.26
Mar-2008	ND	ND	0.013	0.003	ND	0.501	0.501	ND	ND	ND	4.74	4.29	ND	0.251	0.233
Mar-2009	ND	ND	0.012	ND	ND	0.617	0.434	ND	ND	ND	5.2	3.49	ND	0.248	0.215
Oct-2009	ND	ND	0.013	ND	ND	ND	ND	ND	ND	ND	9.66	8.16	ND	2.53	0.243
Apr-2010	ND	ND	0.012	ND	ND	0.351	0.374	ND	ND	ND	3.29	2.28	ND	0.203	0.205
Oct-2010	ND	ND	ND	ND	ND	0.538	0.495	ND	ND	ND	9.58	7.81	ND	0.274	0.264
Apr-2011	ND	ND	0.014	ND	ND	0.464	0.5	ND	ND	ND	9.56	8.44	ND	0.252	0.286
Sep-2011	ND	ND	0.014	0.002	ND	0.491	0.483	ND	ND	ND	10.4	7.33	ND	0.25	0.237

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09***													
Mar-2012	ND	ND	0.014	0.002	ND	0.47	0.467	ND	ND	ND	9.88	8.15	ND	0.336	0.323
Sep-2012	ND	ND	0.0141	0.0017 J	ND	0.52	0.472	ND	0.0058 J	0.000562 J	9.77	8.43	0.000735 J	0.25	0.251
Mar-2013	ND	ND	0.0132	0.002	ND	0.569	0.565	0.0018 J	0.0067 J	ND	11.4	8.56	ND	0.269	0.255
Oct-2013	ND	ND	0.0149	0.0021	ND	0.695	0.681	0.0068 J	0.0062 J	ND	10	8.6	0.000338 J	0.229	0.207
Mar-2014	0.000232 J	0.00068 J	0.0122	0.0021	0.000096 J	0.456	0.455	0.000821 J	0.0061 J	0.000268 J	10.9	8.75	0.000593 J	0.261	0.261
Oct-2014	0.000345 J	0.000869 J	0.0146	0.0021	ND	0.507	0.556	0.00094 J	0.0059 J	0.0011 J	10.8	9.4	ND	0.24	0.249
Apr-2015	0.000374 J	0.000603 J	0.0146	0.0018 J	0.000074 J	0.512	0.571	0.000714 J	0.0058 J	0.000342 J	11.5	10.7	ND	0.256	0.259
Nov-2015	0.00038 J	0.000334 J	0.0139	0.0016 J	ND	0.515	0.544	0.000373 J	0.0042 J	0.000839 J	11.6	11.9	ND	0.261	0.263
May-2016	ND	0.0007 J	0.0147	0.0019	0.00033 J	1.24	1.23	0.0012 J	0.0066	0.00068 J,B	27.6	14.3	0.0011 J	0.734	0.724
Oct-2016	ND	0.0069	0.0174	0.0027	0.00031 J	0.989	0.616	0.0031 J+	0.0156	0.0064 J+	38.3	14.2	0.002 J	0.291 J+	0.253
May-2017	ND	0.0031 J	0.0145	0.0022	0.00024 J	0.866	0.62	0.003 J	0.0085	0.0076	29.1	16.6	0.0053	1.42	0.268
Oct-2017	ND	0.001 J	0.0163	0.0022	ND	0.531	0.421	0.0014 J	0.0031	ND	33.6	22.5	0.00054 J	0.256	0.234
May-2018	0.00053	0.0043	0.013	0.0019	0.00016 J	0.79 J	0.63 J	0.0034 JB	0.0081	0.0061	41.5	24.4	0.0017	0.23 J	0.26 J
Nov-2018	ND	0.00045 J	0.012	0.0016	0.000048 J	0.47 J	0.47 J	0.0046 J	0.0024	0.0009 J	24.2	22.7	0.00012 JM1	0.23 J	0.24 J
May-2019	ND	ND	0.012	0.0012	ND	ND	ND	ND	0.0016	ND	27.2	24.8	ND	ND	ND
Oct-2019	0.00014 J	0.00065 J	0.013	0.0015	0.00018 J	0.47	0.49 J	0.0068 J	0.0015	ND	25.6	24.9	0.000099 J	0.23	0.23 J
May-2020	0.00023 J	0.00092 J	0.012	0.0015	0.00014 J	0.49	0.46 JB	0.0058 J	0.014	ND	38.8	23.9	ND	0.25	0.22 JB
Oct-2020	ND	ND	0.012	0.0014 J	ND	0.45	0.43 J	0.0033 J	0.0017 J	ND	24.9	23.6	ND	0.22	0.22 J
Apr-2021	ND	ND	0.013	0.0011	ND	0.43 J	0.38 J	0.00092 J	0.0014 J	ND	25.2	24.8	ND	0.23	0.21
Oct-2021	0.000047 J	0.00089 J	0.012	0.0014	ND	0.46 J	0.47 J	0.0015 J	0.0015 J	0.00062 J	25.7	26	ND	0.23 J	0.24 J
May-2022	ND	0.00099 J	0.012	0.0011	ND	0.41 J	0.53	0.001 J	0.0011 J	ND	27.5	26	ND	0.24 J	0.24 J

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-09*												
Nov-1993	0.07	NA	ND	NA	0.59	NA	ND	NA	0.95	NA	NA	NA	ND
Apr-1994	0.01	NA	ND	NA	0.29	NA	ND	NA	0.74	NA	NA	NA	ND
Apr-1995	0.09	NA	ND	ND	0.75	NA	ND	ND	0.98	NA	ND	ND	0.04
Apr-1997	0.073	0.064	ND	ND	1.9	1.4	ND	ND	1	1.3	ND	ND	0.034
Apr-1998	0.049	0.048	NA	ND	0.847	0.796	ND	ND	0.833	0.825	ND	ND	0.042
Apr-1999	0.02	0.019	NA	ND	0.677	0.81	ND	ND	0.995	0.831	ND	ND	0.041
Apr-2000	0.02	0.019	NA	0.016	ND	ND	ND	ND	0.788	0.746	ND	ND	0.039
Apr-2001	0.019	NA	NA	0.014	ND	NA	ND	ND	0.905	NA	ND	ND	0.03
Mar-2002	0.055	0.051	NA	0.012	1.16	0.947	ND	ND	1.81	0.891	ND	ND	0.055
Mar-2003	0.017	0.016	NA	0.015	ND	ND	ND	ND	0.888	0.861	ND	ND	0.04
Apr-2004	0.019	0.019	ND	0.022	1.33	1.08	ND	ND	0.889	0.87	ND	ND	0.081
Apr-2005	0.056	0.051	ND	0.018	0.52	ND	ND	ND	1.33	0.984	ND	ND	0.305
Mar-2006	ND	ND	ND	0.019	ND	ND	ND	ND	0.613	0.547	ND	ND	0.043
Mar-2007	0.061	0.056	ND	0.015	0.582	0.576	ND	ND	0.748	0.738	ND	ND	0.059
Mar-2008	0.025	0.025	ND	0.017	0.561	ND	ND	ND	0.792	0.677	ND	ND	0.026
Mar-2009	0.027	0.022	ND	0.016	0.819	0.618	ND	ND	1.2	0.803	ND	ND	0.039
Oct-2009	0.057	0.058	ND	0.015	ND	ND	ND	ND	0.749	0.672	ND	ND	0.031
Apr-2010	0.017	0.014	ND	0.013	ND	ND	ND	ND	0.806	0.758	ND	ND	0.025
Oct-2010	0.054	0.05	ND	0.018	ND	ND	ND	ND	0.784	0.72	ND	ND	0.032
Apr-2011	0.058	0.056	ND	0.01	ND	ND	ND	ND	0.766	0.792	ND	ND	0.026
Sep-2011	0.052	0.046	ND	0.016	0.53	ND	ND	ND	0.91	0.873	ND	ND	0.03
Mar-2012	0.054	0.053	ND	0.016	ND	ND	ND	ND	0.855	0.846	ND	ND	0.034

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09***												
Sep-2012	0.0572	0.0538	ND	0.0137	0.504	0.446 J	ND	ND	0.836	0.827	ND	ND	0.0362
Mar-2013	0.0543	0.0505	0.00009 J	0.0157	0.51	0.49 J	ND	ND	0.932	0.945	ND	ND	0.0424
Oct-2013	0.0597	0.0587	ND	0.0132	0.436 J	0.406 J	ND	ND	0.726	0.672	0.000144 J	0.0056 J	0.0406
Mar-2014	0.0552	0.0545	ND	0.0159	0.516	0.511	ND	ND	0.826	0.836	ND	0.0011 J	0.0372
Oct-2014	0.0531	0.055	ND	0.0153	0.528	0.522	0.000836 J	ND	0.9	0.938	ND	0.0013 J	0.0363
Apr-2015	0.0626	0.0655	0.000032 J	0.0137	0.558	0.54	ND	ND	0.899	0.917	ND	0.0013 J	0.0355
Nov-2015	0.0713	0.0691	ND	0.0102	0.568	0.569	ND	ND	1.11	1.01	ND	0.000282 J	0.0408
May-2016	0.398	0.358	ND	0.0285	0.887	0.845	ND	ND	1.3	1.2	ND	0.0014	0.0547
Oct-2016	0.226 R	0.116	ND	0.045 J+	0.739	0.6	ND	ND	1.05 J+	0.919	ND	0.0021	0.0587
May-2017	0.145	0.104	ND	0.0294	0.955	0.59	ND	ND	33.9	0.915	ND	0.002	0.0505
Oct-2017	0.144	0.132	ND	0.0162	0.526	0.516	ND	ND	0.84	0.84	ND	0.0013	0.0255 J
May-2018	0.22	0.15	ND	0.023	ND	ND	0.00042 J	ND	1.3 J	1 JB	ND	0.0029	0.028
Nov-2018	0.12	0.12	ND	0.0072	ND	ND	0.0001 JM1	ND	0.84 J	0.88 J	ND	0.0017	0.013 D6
May-2019	0.14	0.14	ND	0.004	ND	ND	ND	ND	ND	ND	ND	ND	0.0068
Oct-2019	0.13	0.13	ND	0.0054	ND	ND	ND	ND	ND	ND	ND	0.0096	0.018
May-2020	0.14	0.14	ND	0.036	1.3 J	ND	ND	ND	4.4 J	ND	0.00043	0.0059	0.02
Oct-2020	0.13	0.13	ND	0.0042	ND	ND	ND	ND	ND	ND	ND	0.0018 J	0.012 J
Apr-2021	0.13	0.13	ND	0.0031 J	0.5	0.51	ND	ND	0.85 J	0.99 J	ND	0.0011 J	ND
Oct-2021	0.14	0.14	ND	0.0037	0.48 J	0.44 J	ND	ND	0.85 B	0.93	ND	0.00092 J	0.0071
May-2022	0.15	0.14	ND	0.0026	0.49 J	0.49 J	ND	ND	0.86	0.87	ND	ND	0.0057

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	22	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09*																
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.6 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-09*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09***															
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.5 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-09*															
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.578 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-11A***											
Nov-1993	118	118	0.5	46.3	1	*ND*	*ND*	4.95	32.8	5	192	27
Apr-1994	153	153	0.4	35.8	13.2	*ND*	*ND*	5.77	358	11.8	102	35.43
Apr-1995	134	134	0.3	28.5	7.4	*ND*	*ND*	5.9	295	13.9	101	17.5
Apr-1997	*ND*	27	*ND*	39	19	0.05	*ND*	*NA*	*NA*	6	17600	28
Apr-1998	120	120	2.9	53	43	0.15	*ND*	6.81	737	1.93	160	39
Apr-1999	95	95	2.9	81	39.7	*ND*	*ND*	6.74	749	*ND*	246	50
Apr-2000	57	57	3.6	*ND*	63.9	*ND*	*ND*	6.76	450	5.03	156	43
Apr-2001	22	*NA*	2	24	24.8	*ND*	*ND*	*NA*	*NA*	18.6	82	34.3
Mar-2002	20	20	1.8	25	22.6	*ND*	*ND*	6.1	352	27.3	111	31.3
Mar-2003	12	12	8.8	10	25	*ND*	*ND*	6.6	393	29	109	29.4
Apr-2004	6.4	6.4	0.89	20	13.7	*ND*	*ND*	6.5	284	22	93	20
Apr-2005	4.6	4.6	0.65	13	16.6	*ND*	*ND*	6.2	264	27.4	105	18.8
Mar-2006	29	29	0.98	*ND*	19.5	0.1	*ND*	6	207	24.2	91	19.1
Mar-2007	15	15	0.71	*ND*	18.9	0.83	*ND*	6.2	181.6	22.4	79	17.5
Mar-2008	50	50	0.54	16	17.2	0.11	*ND*	6.1	175.6	26.3	87	16.5
Mar-2009	21	21	0.79	*ND*	38.4	0.08	*ND*	5.7	340	21.2	113	17.6
Apr-2010	8.9	8.9	1	*ND*	65.5	0.09	*ND*	5.6	406	27.7	125	23.8
Apr-2011	16	16	0.54	*ND*	40.7	0.14	*ND*	5.8	210	22.5	183	20.3
Mar-2012	17	17	0.53	*ND*	40.5	0.16	*ND*	5.2	312	31.7	132	22.9
Mar-2013	25.4	25.4	0.357	12.1	34.5	0.128	*ND*	4.9	305	27	113	20.8
Mar-2014	48.6	48.6	0.465	*ND*	28.2	0.0816	*ND*	6.1	152.6	26.5	112	17.4
Apr-2015	20.8	20.8	0.332	*9 J*	21.4	0.474	*ND*	5.6	168.3	25	106	19.6
May-2016	15	15	0.39	*ND*	24.5	0.544	*ND*	6	275	24.1	119	24.5
May-2017	15.8	15.8	0.255	*ND*	19.7	0.877	*ND*	5.9	279	24.3	99	22.6
May-2018	40	40	0.3	*7.9 J*	20.3	*0.074 J*	*ND*	5.9	266	22.5	118	24.3
May-2019	50	*NA*	0.36	*ND*	18.6	*ND*	*ND*	5.87	167.3	23.6	113	19.2
May-2020	28	*NA*	*0.071 J*	*13.5 J*	18	*ND*	*ND*	5.39	234	23.4	145	23.5
Apr-2021	*ND*	*NA*	0.21	*17 J*	30.2	0.1	*ND*	6.03	295.9	25.5	139	26.5
May-2022	34	*NA*	0.12	*5.6 J*	14.3	*0.06 J*	*ND*	5.98	256.4	20.6	88	16.1 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-11A*													
Nov-1993	*NA*	**0.025**	*ND*	*NA*	*ND*	3.7	*NA*	*ND*	*NA*	*ND*	154	139	*ND*	4.3	*NA*
Apr-1994	*NA*	*ND*	*ND*	*NA*	*ND*	4.13	*NA*	*ND*	*NA*	*ND*	176	122	*ND*	6.1	*NA*
Apr-1995	*ND*	**0.02**	0.6	*ND*	*ND*	1.9	*NA*	*ND*	*ND*	*ND*	126	88.2	*ND*	3.1	*NA*
Apr-1997	0.006	**0.23**	0.038	*ND*	*ND*	3.7	4	*ND*	*ND*	*ND*	110	12	0.003	2.8	2.8
Apr-1998	*ND*	*ND*	0.055	*ND*	*ND*	7.19	7.21	*ND*	*ND*	*ND*	200	192	*ND*	5.08	5.07
Apr-1999	*ND*	*ND*	0.052	*ND*	*ND*	9.53	9.53	*ND*	*ND*	*ND*	191	192	*ND*	6.4	6.41
Apr-2000	*ND*	*ND*	0.046	*ND*	*ND*	8.94	8.44	*ND*	*ND*	*ND*	124	118	*ND*	4.99	4.72
Apr-2001	*ND*	*ND*	0.039	*ND*	*ND*	7.53	*NA*	*ND*	*ND*	*ND*	96	*NA*	*ND*	3.75	*NA*
Mar-2002	*ND*	*ND*	0.044	*ND*	*ND*	6.41	6.19	*ND*	*ND*	*ND*	107	104	*ND*	3.71	3.65
Mar-2003	*ND*	**0.027**	0.057	*ND*	*ND*	6.02	5.62	*ND*	*ND*	*ND*	77.6	73.3	*ND*	3.5	3.27
Apr-2004	*ND*	**0.029**	0.032	*ND*	*ND*	4.56	4.36	*ND*	*ND*	*ND*	57	54.8	*ND*	2.09	2.02
Apr-2005	*ND*	**0.064**	0.042	*ND*	*ND*	3.93	3.84	*ND*	*ND*	*ND*	67.7	56.2	*ND*	2.38	2.34
Mar-2006	*ND*	**0.037**	0.043	*ND*	*ND*	3.88	3.53	*ND*	*ND*	*ND*	58	46.4	*ND*	2.28	2.16
Mar-2007	*ND*	**0.026**	0.049	*ND*	*ND*	3.58	3.6	*ND*	*ND*	*ND*	40.9	41.1	*ND*	2.08	2.09
Mar-2008	*ND*	**0.018**	0.064	*ND*	*ND*	3.02	3.01	*ND*	*ND*	*ND*	34.1	36.8	*ND*	2.17	2.07
Mar-2009	*ND*	**0.018**	0.048	*ND*	*ND*	3.65	3.63	*ND*	*ND*	*ND*	41	40.3	*ND*	2.05	2.04
Apr-2010	*ND*	**0.019**	0.068	*ND*	*ND*	5.26	5.11	*ND*	*ND*	*ND*	45.9	41	*ND*	2.61	2.66
Apr-2011	*ND*	**0.019**	0.077	*ND*	*ND*	4.22	4.1	*ND*	*ND*	*ND*	30.7	30.3	*ND*	2.37	2.32
Mar-2012	*ND*	**0.017**	0.075	*ND*	*ND*	4.61	4.61	*ND*	*ND*	*ND*	34.3	34.6	*ND*	2.77	2.78
Mar-2013	*ND*	**0.0202**	0.071	*0.000191 J*	*0.000291 J*	4.37	4.54	*0.0013 J*	*0.0046 J*	*0.0026 J*	32.2	30.7	*ND*	2.39	2.54
Mar-2014	*0.000209 J*	**0.0192**	0.0483	*0.000393 J*	*0.000149 J*	3.89	3.97	*0.0014 J*	*0.003 J*	*0.00897 J*	31.1	28.8	*ND*	1.87	2.07

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-11A***													
Apr-2015	*0.000273 J*	**0.0185**	0.0688	*0.000274 J*	*0.000278 J*	4.21	4.19	*0.000745 J*	*0.0052 J*	*0.0035 J*	26.7	25.2	*ND*	2.2	2.24
May-2016	*ND*	**0.0204**	0.0757	*0.00021 J*	*ND*	5.17	4.72	*0.0013 J*	0.0061	0.005	31	29.7	*ND*	2.81	2.61
May-2017	*ND*	**0.0198**	0.0678	*0.00022 J*	*0.00028 J*	4.65	4.94	*0.00099 J*	0.0065	0.0052	29.1	28.8	*ND*	2.67	2.49
May-2018	*ND*	**0.0174**	*0.0754 J*	*ND*	*ND*	5.2	5.2	*ND*	*0.0068 J*	*ND*	25	24.5	*ND*	2.7	2.7
May-2019	*ND*	**0.024**	0.041	*ND*	*ND*	4.6	4.7	*ND*	0.0014	*ND*	37.3	37.3	*ND*	1.9	2
May-2020	*0.000057 J*	**0.024**	0.048	*ND*	*ND*	5.5	5.4	*0.0047 J*	0.0016	*ND*	47	43.2	*ND*	2.4	2.3
Apr-2021	*ND*	**0.022**	0.072	*ND*	*ND*	6.2	6.2	*0.00037 J*	0.0081	*ND*	42.9	43.2	*ND*	2.7	2.7
May-2022	*ND*	**0.025**	0.061	*ND*	*ND*	3.6	3.9	*0.00098 J*	0.0074	*ND*	29.3	30.8	*ND*	1.7	1.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-11A*												
Nov-1993	0.36	NA	ND	NA	1.2	NA	ND	NA	9	NA	NA	NA	ND
Apr-1994	0.4	NA	ND	NA	1.41	NA	ND	NA	8.4	NA	NA	NA	0.06
Apr-1995	0.23	NA	ND	ND	1.3	NA	ND	0.01	5.4	NA	ND	ND	0.02
Apr-1997	0.22	0.23	ND	ND	2.7	2	ND	ND	8.7	10	ND	ND	0.023
Apr-1998	0.312	0.331	NA	ND	2.27	1.46	ND	ND	22.9	23	ND	ND	ND
Apr-1999	0.348	0.354	NA	ND	2.81	3.5	ND	ND	25.1	25.2	ND	ND	ND
Apr-2000	0.228	0.218	NA	ND	2.44	2.36	ND	ND	25.4	23.9	ND	ND	ND
Apr-2001	0.247	NA	NA	ND	2.45	NA	ND	ND	16.4	NA	ND	ND	ND
Mar-2002	0.385	0.373	NA	ND	3.13	2.12	ND	ND	15.4	15.2	ND	ND	ND
Mar-2003	0.4	0.387	NA	ND	2.21	2.7	ND	ND	14.2	13.1	ND	ND	ND
Apr-2004	0.332	0.331	ND	ND	2.07	1.95	ND	ND	10.1	9.94	ND	ND	ND
Apr-2005	0.384	0.383	ND	ND	1.82	1.62	ND	ND	12.2	12.3	ND	ND	ND
Mar-2006	0.38	0.373	ND	ND	2.07	1.94	ND	ND	11.9	11.3	ND	ND	ND
Mar-2007	0.41	0.418	ND	ND	2.52	2.59	ND	ND	11.4	11.5	ND	ND	ND
Mar-2008	0.428	0.422	ND	ND	2.43	2.22	ND	ND	11.9	10.8	ND	ND	ND
Mar-2009	0.523	0.51	ND	ND	2.36	2.4	ND	ND	15.3	15.1	ND	ND	ND
Apr-2010	0.606	0.599	ND	ND	2.61	2.59	ND	ND	33.7	32.4	ND	ND	ND
Apr-2011	0.542	0.507	ND	ND	2	1.96	ND	ND	23.2	22.7	ND	ND	0.012
Mar-2012	0.683	0.68	0.0004	ND	2.54	2.5	ND	ND	24.3	24.3	ND	ND	0.014
Mar-2013	0.561	0.593	0.00011 J	0.0035 J	2.13	2.16	ND	ND	19.1	19.3	ND	ND	0.017
Mar-2014	0.467	0.486	ND	0.0021 J	1.91	1.94	ND	ND	14.6	16	ND	ND	0.0088 J
Apr-2015	0.51	0.505	0.00006 J	0.0034 J	1.75	1.76	0.0012 J	ND	14.1	13.8	ND	ND	0.0375

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-11A***												
May-2016	0.594	0.572	*ND*	*0.0034 J*	2.13	2.05	*ND*	*ND*	18.1	16.8	*ND*	*ND*	*0.0098 J,B*
May-2017	0.508	0.497	*ND*	*0.0036 J*	1.98	2	*ND*	*ND*	13	12.8	*ND*	*0.00021 J*	*0.0097 J*
May-2018	0.484	0.476	*ND*	*0.0093 J*	*2.1 J*	*1.6 J*	*ND*	*ND*	14.1	13.2	*ND*	*ND*	*0.0141 J*
May-2019	0.4	0.4	*ND*	0.0017	*ND*	*ND*	*ND*	*ND*	13.2	13.1	*ND*	*ND*	*ND*
May-2020	0.53	0.53	*ND*	0.0011	*2.8 J*	*2.3 J*	*ND*	*ND*	11.9	10.3	*ND*	0.0042	*ND*
Apr-2021	0.57	0.58	*ND*	*ND*	2	2.1	*ND*	*ND*	17.1	17.5	*ND*	*0.0011 J*	*ND*
May-2022	0.39	0.42	*ND*	0.0032	2	2.2	*0.00098 J*	*ND*	10.9	11.7	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-11A***																
Nov-1993	ND	ND	ND	ND	55	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	40	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19	ND
Apr-1997	ND	ND	ND	ND	38	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	56	ND	ND	ND	ND	ND	ND	ND	ND	16	ND	ND	19	ND
Apr-1999	NA	ND	NA	NA	52	ND	NA	NA	NA	NA	ND	ND	ND	34	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	27	ND	NA	NA	NA	NA	ND	0.6 J	0.6 J	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	15	ND	ND	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	13	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-11A*																
Apr-2015	*ND*	*ND*	*ND*	*ND*	*0.82 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.2 JB*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.976 J*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*0.449 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-11A*															
Nov-1993	3.4	ND	ND	ND	ND	ND	ND	ND	6.5	ND	ND	5.8	ND	ND	ND	39	94
Apr-1994	2.6	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	4.5	ND	ND	ND	30	70
Apr-1997	4	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	16	ND	ND	ND	10	56
Apr-1998	**6.9**	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	25	ND	ND	ND	15	65
Apr-1999	**5.2**	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	3.7	NA	NA	NA	6.3	62
Apr-2000	3.3	NA	NA	ND	NA	ND	NA	ND	0.7 J	ND	NA	ND	NA	ND	NA	2.4	32
Apr-2001	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.1	18
Mar-2002	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.2	16
Mar-2003	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	6
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	7.2
Apr-2005	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	2.4	6.5
Mar-2006	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	5.9
Mar-2007	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	5.4
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	4.6
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	2.6
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	3.5
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	2.2
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND	ND	0.65 J	1.77
Mar-2014	0.17 J	ND	ND	ND	ND	ND	ND	ND	ND	0.16 J	ND	ND	ND	ND	ND	0.71 J	1.15

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-11A***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*0.3 J*	*0.8 J*
May-2017	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*0.6 J*	1.6
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	1.9
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3 N3
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	1.4
Apr-2021	*0.137 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.741 J*	*ND*	*ND*	*ND*	*0.506 J*	*1.22 J*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.9 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-11A***															
Nov-1993	6.8	*ND*	14	*ND*	*ND*	4.8	*ND*	**10**	25	*ND*	*ND*	*ND*	**6.1**	*ND*	*ND*	*ND*	*NA*
Apr-1994	4	*ND*	7.9	*ND*	*ND*	3.1	*ND*	**16**	9.2	*ND*	*ND*	*ND*	4.7	*ND*	*ND*	*ND*	*NA*
Apr-1997	4	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	2	5	*ND*	*ND*	*ND*	3	*ND*	*ND*	2	5
Apr-1998	5.9	*ND*	7.9	*NA*	2.6	2.3	*ND*	*ND*	28	*ND*	*ND*	*ND*	2.6	*ND*	*ND*	*ND*	*NA*
Apr-1999	3.5	*NA*	5.2	*NA*	*ND*	*1.6 J*	*NA*	*ND*	23	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	1	*NA*
Apr-2000	2.4	*NA*	2.3	*NA*	*ND*	1	*NA*	*ND*	5.7	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	1.1	*ND*	1	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*0.8 J*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*0.7 J*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.83 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-11A***															
Mar-2014	*ND*	*ND*	*ND*	*0.14 J*	*ND*	*ND*	*ND*	*0.28 J*	*ND*	*ND*	*ND*	*ND*	*0.28 J*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.24 J*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.717 J*	*ND*	*ND*	*ND*	*ND*	*0.551 J*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-12***											
Nov-1993	ND	ND	0.3	ND	3.2	0.3	ND	4.98	22.9	2.5	38	3.28
Apr-1994	5	5	0.1	ND	3.3	ND	ND	5.1	27.4	ND	8	1.07
Apr-1995	17.5	17.5	0.3	ND	4	0.2	ND	5.5	439	2	ND	3.8
Apr-1997	ND	3	ND	ND	3.5	0.13	ND	NA	NA	ND	86	6.2
Apr-1998	13	13	0.28	ND	3.72	0.18	ND	5.87	46.7	35.5	32	5.9
Apr-1999	ND	ND	0.17	ND	6.05	0.15	ND	5.62	69.8	ND	32	8.1
Apr-2000	4	4	ND	ND	6.34	0.22	ND	5.42	47	ND	21	9.1
Apr-2001	5.5	NA	ND	ND	7.7	ND	ND	NA	NA	ND	43	10.6
Mar-2002	5	5	ND	ND	9.07	ND	ND	5.4	72.7	1.42	47	12.1
Mar-2003	7.6	7.6	ND	ND	19.6	ND	ND	5.6	116.1	8.65	43	14
Apr-2004	22.1	22.1	ND	13	14.3	ND	ND	5.8	121.3	ND	133	12.7
Apr-2005	8.4	8.4	ND	ND	14.1	0.21	ND	5.3	88	1.39	68	12.4
Mar-2006	11	11	ND	ND	12.4	0.34	ND	5.8	103.8	3.66	40	11.6
Mar-2007	11	11	ND	ND	13.1	0.2	ND	5.6	91.8	3.43	41	13.9
Mar-2008	14	14	ND	ND	16.2	ND	ND	5.6	96.3	3.66	66	11.8
Mar-2009	34	34	ND	ND	10.6	0.1	ND	5.2	96.9	2.18	48	11.4
Mar-2010	14	14	ND	ND	12.6	0.26	ND	5.25	86	5.1	54	12.3
Apr-2011	15	15	ND	ND	8.27	0.28	0.03	5.2	74.6	2.39	61	9.1
Mar-2012	19	19	ND	ND	9.15	0.34	ND	4.9	78.3	3.7	35	11.7
Mar-2013	20.9	20.9	ND	ND	8.75	0.407	ND	4.6	81.9	4.8	49	13.5
Mar-2014	24	24	ND	ND	8.95	0.331	ND	6	79.1	4.41	54	12.5
Apr-2015	17	17	ND	ND	8.94	0.344	ND	5.1	79.4	4.05	42	11.6
May-2016	15.9	15.9	ND	ND	8.62	0.398	ND	6	120.6	2.68	48	12.6
May-2017	13.8	13.8	ND	ND	8.12	0.386	ND	5.9	124.7	4.68	24 J	12.1
May-2018	34	34	0.21	ND	7.8	ND	ND	5.8	119.4	ND	53	12.7
May-2019	20	NA	ND	ND	8.4	ND	ND	6.27	135.6	ND	51	15.7
May-2020	14	NA	ND	ND	7	ND	0.02	5.93	151.1	ND	61	15.8
Apr-2021	26	NA	ND	10.5 J	7.4	0.1	ND	6.84	178	ND	29	14.8
May-2022	28	NA	ND	ND	5.8	ND	0.027	6.64	192.1	ND	33	15.5 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-12***													
Nov-1993	*NA*	*ND*	*ND*	*NA*	*ND*	0.52	*NA*	*ND*	*NA*	*ND*	17.2	0.41	*ND*	0.48	*NA*
Apr-1994	*NA*	*ND*	*ND*	*NA*	*ND*	0.37	*NA*	*ND*	*NA*	*ND*	3.9	0.38	*ND*	*ND*	*NA*
Apr-1995	*ND*	*ND*	0.6	*ND*	*ND*	0.6	*NA*	*ND*	*ND*	*ND*	19.8	9.3	*ND*	0.55	*NA*
Apr-1997	*ND*	*ND*	0.034	*ND*	*ND*	1.6	0.93	*ND*	*ND*	*ND*	9.1	2.6	0.006	1	*ND*
Apr-1998	*ND*	*ND*	0.023	*ND*	*ND*	1.16	1.18	*ND*	*ND*	*ND*	34.9	11.7	*ND*	0.728	0.724
Apr-1999	*ND*	*ND*	0.032	*ND*	*ND*	1.49	1.36	*ND*	*ND*	0.021	84.2	1.39	*ND*	1.07	0.973
Apr-2000	*ND*	*ND*	0.025	*ND*	*ND*	1.75	1.4	*ND*	*ND*	0.01	38.2	1.06	*ND*	1.16	1.05
Apr-2001	*ND*	*ND*	0.035	*ND*	*ND*	1.98	*NA*	*ND*	*ND*	*ND*	50.2	*NA*	0.012	1.38	*NA*
Mar-2002	*ND*	*ND*	0.039	*ND*	*ND*	2.24	1.91	*ND*	*ND*	0.013	60.7	2.3	0.015	1.57	1.44
Mar-2003	*ND*	*ND*	0.049	*ND*	*ND*	2.46	2.24	*ND*	*ND*	0.013	11.9	2.53	0.015	1.9	1.74
Apr-2004	*ND*	*ND*	0.04	*ND*	*ND*	2.3	2.22	*ND*	*ND*	*ND*	39.8	13.3	0.008	1.69	1.65
Apr-2005	*ND*	*ND*	0.039	*ND*	*ND*	2.43	2.07	*ND*	*ND*	0.01	58.9	6.39	**0.023**	1.53	1.51
Mar-2006	*ND*	*ND*	0.035	*ND*	*ND*	2.23	1.92	*ND*	*ND*	0.013	112	4.16	**0.043**	1.48	1.48
Mar-2007	*ND*	*ND*	0.04	*ND*	*ND*	2.61	2.45	*ND*	*ND*	0.018	80.1	12.9	**0.034**	1.78	1.68
Mar-2008	*ND*	*ND*	0.039	*ND*	*ND*	2.14	1.95	*ND*	*ND*	0.017	87.7	4.93	**0.042**	1.58	1.48
Mar-2009	*ND*	*ND*	0.031	*ND*	*ND*	2.21	2.26	*ND*	*ND*	*ND*	41.9	19.1	0.003	1.42	1.43
Mar-2010	*ND*	*ND*	0.041	*ND*	*ND*	2.25	2.16	*ND*	*ND*	*ND*	7.94	5.22	0.002	1.62	1.57
Apr-2011	*ND*	*ND*	0.029	*ND*	*ND*	1.66	1.61	*ND*	*ND*	*ND*	14.8	7.72	0.004	1.21	1.15
Mar-2012	*ND*	*ND*	0.034	*ND*	*ND*	2.03	2	*ND*	*ND*	*ND*	12.7	10.2	0.002	1.6	1.58
Mar-2013	*ND*	*ND*	0.0378	*0.0001 J*	*ND*	2.52	2.31	*0.0021 J*	*0.0032 J*	*0.0019 J*	9.7	8.06	0.0038	1.74	1.59
Mar-2014	*0.0019 J*	*0.000176 J*	0.0325	*ND*	*ND*	2.28	2.15	*0.0023 J*	*0.0029 J*	*0.0038 J*	11.2	9.3	*0.0013 J*	1.64	1.55

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-12***													
Apr-2015	*0.000157 J*	*ND*	0.0373	*ND*	*ND*	2.1	2.29	*0.003 J*	*0.0036 J*	*0.0031 J*	13.8	11.4	0.0042	1.55	1.59
May-2016	*ND*	*ND*	0.0358	*0.00014 J*	*ND*	2.27	1.9	*0.0011 J*	0.0027	*0.0015 J*	12.2	11.6	*0.00063 J*	1.69	1.54
May-2017	*ND*	*ND*	0.0385	*0.00012 J*	*ND*	2.08	2.31	*0.0014 J*	0.0033	*0.0019 J*	8.38	8.25	*0.0018 J*	1.67	1.57
May-2018	*0.0032 J*	*ND*	*0.0353 J*	*ND*	*ND*	2.4	2.3	*0.0026 J*	*0.0021 J*	*ND*	14.1	13.8	*0.0013 J*	1.6	1.6
May-2019	*ND*	*ND*	0.04	*ND*	*ND*	3.4	3.3	*ND*	0.00058	*ND*	43.5	42.2	*ND*	1.8	1.8
May-2020	*ND*	*ND*	0.039	*ND*	*ND*	3.3	3.4	*0.0039 J*	*0.00043 J*	*ND*	39.3	38.5	*ND*	1.8	1.8
Apr-2021	*ND*	*0.0027 J*	0.041	*ND*	*ND*	3.1	3.2	*0.00094 J*	*ND*	*ND*	36.4	37.8	*ND*	1.7	1.8
May-2022	*ND*	*ND*	0.042	*ND*	*ND*	3.2	3.2	*0.00085 J*	*0.0004 J*	*ND*	40.3	40	*ND*	1.9	1.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-12***												
Nov-1993	0.06	*NA*	*ND*	*NA*	0.59	*NA*	*ND*	*NA*	1.8	*NA*	*NA*	*NA*	*ND*
Apr-1994	0.01	*NA*	*ND*	*NA*	0.62	*NA*	*ND*	*NA*	2.1	*NA*	*NA*	*NA*	0.018
Apr-1995	0.02	*NA*	*ND*	*ND*	0.62	*NA*	*ND*	*ND*	1.5	*NA*	*ND*	*ND*	0.02
Apr-1997	0.05	0.026	*ND*	*ND*	2.1	2.1	*ND*	*ND*	2.2	2.6	*ND*	*ND*	0.085
Apr-1998	0.063	0.071	*NA*	*ND*	1	*ND*	*ND*	*ND*	1.99	2.01	*ND*	*ND*	0.017
Apr-1999	*ND*	0.019	*NA*	0.069	0.733	*ND*	*ND*	*ND*	2.67	2.5	*ND*	*ND*	0.012
Apr-2000	0.019	0.022	*NA*	*ND*	1.14	*ND*	*ND*	*ND*	4.27	2.8	*ND*	*ND*	0.021
Apr-2001	0.021	*NA*	*NA*	*ND*	1.33	*NA*	*ND*	*ND*	4.38	*NA*	*ND*	*ND*	0.042
Mar-2002	0.017	0.03	*NA*	*ND*	1.98	1.94	*ND*	*ND*	5.18	4.46	*ND*	*ND*	0.037
Mar-2003	0.038	0.034	*NA*	*ND*	2.31	1.6	*ND*	*ND*	6.13	5.69	*ND*	*ND*	0.018
Apr-2004	0.068	0.072	0.0002	*ND*	1.81	0.973	*ND*	*ND*	7.03	7.01	*ND*	*ND*	*ND*
Apr-2005	0.054	0.058	0.0007	*ND*	0.93	0.85	*ND*	*ND*	8.28	8.83	*ND*	*ND*	0.045
Mar-2006	0.015	*ND*	0.0015	*ND*	0.947	0.85	*ND*	*ND*	5.51	5.4	*ND*	*ND*	0.038
Mar-2007	0.106	0.077	0.0011	*ND*	1.28	1.12	*ND*	*ND*	5.46	5.12	*ND*	*ND*	0.038
Mar-2008	0.06	0.043	0.0013	*ND*	1.13	0.976	*ND*	*ND*	6.52	5.45	*ND*	*ND*	0.013
Mar-2009	0.138	0.139	*ND*	*ND*	1.16	1.16	*ND*	*ND*	4.83	4.96	*ND*	*ND*	*ND*
Mar-2010	0.051	0.045	0.0002	*ND*	1.16	1.07	*ND*	*ND*	4.88	4.5	*ND*	*ND*	0.012
Apr-2011	0.066	0.057	0.0002	*ND*	0.723	0.654	*ND*	*ND*	4.57	4.34	*ND*	*ND*	*ND*
Mar-2012	0.076	0.078	0.0003	*ND*	0.994	1	*ND*	*ND*	4.84	4.89	*ND*	*ND*	*ND*
Mar-2013	0.081	0.0818	*0.000172 J*	*0.0037 J*	1.02	1.05	*ND*	*ND*	4	4.58	*ND*	*ND*	0.0122
Mar-2014	0.0906	0.0834	0.000249	*0.0034 J*	0.982	0.978	*ND*	*ND*	4.09	4.14	*ND*	*0.000446 J*	*0.0047 J*
Apr-2015	0.0792	0.095	*0.000183 J*	*0.0043 J*	1.11	1.04	*0.000857 J*	*ND*	4.54	4.66	*ND*	*0.0014 J*	*0.0088 J*

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-12***												
May-2016	0.0924	0.096	*ND*	*0.0033 J*	1.28	1	*ND*	*ND*	4.9	4.4	*ND*	*ND*	*ND*
May-2017	0.0757	0.0783	*0.000058 J*	*0.0037 J*	1.13	1.05	*ND*	*ND*	4.36	4.18	*ND*	*0.00024 J*	*0.0042 J*
May-2018	0.114	0.112	*0.00013 JB*	*0.0109 J*	*1.2 J*	*ND*	*ND*	*ND*	*4.9 JB*	*4.3 J*	*0.004 J*	*ND*	*0.0056 J*
May-2019	0.26	0.26	*ND*	0.0014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	0.27	0.25	*0.00011 J*	0.0012	*1.4 J*	*ND*	*ND*	*ND*	5.7	*4.5 J*	*ND*	0.0038	*ND*
Apr-2021	0.22	0.23	*ND*	*ND*	1.2	1.3	*ND*	*ND*	5.3	5.6	*ND*	*0.00069 J*	*ND*
May-2022	0.26	0.27	*ND*	*0.001 J*	1.2	1.2	*ND*	*ND*	5.3	5.3	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-12*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	ND
Apr-1997	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	0.6 J	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Apr-1999	NA	ND	NA	NA	10	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	10	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	0.7 J	ND	ND	15	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND
Mar-2002	ND	0.5 J	ND	ND	15	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	11	ND
Mar-2003	ND	ND	ND	ND	13	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Apr-2004	ND	0.6 J	ND	ND	23	ND	ND	ND	ND	ND	ND	1.1	0.6 J	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	8.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	5.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	4.39	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	4.36	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-12*																
Apr-2015	*ND*	*ND*	*ND*	*ND*	2.84	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	2.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.7 JB*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	1.74	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-12***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	2.7
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.6	ND
Apr-1997	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	94	8
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	2.5	ND	ND	ND	11	14
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	23	NA	NA	NA	8.6	18
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	26	NA	ND	NA	5.8	17
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	42	ND	ND	ND	12	24
Mar-2002	ND	ND	ND	ND	ND	1	ND	ND	0.6 J	ND	ND	26	ND	ND	ND	11	22
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	35	ND	ND	ND	19	18
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	59	ND	ND	ND	49	36
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	ND	ND	ND	30	14
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.9	ND	ND	ND	18	6.3
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.1	ND	ND	ND	20.7	10.2
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12.9	6.2
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.7	ND	ND	ND	10.3	4.5
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.3 J	7.5
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	ND	4.4
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	15.2	4.7
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.44	ND	ND	ND	6.27	3.38
Mar-2014	0.24 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.47	ND	ND	ND	6.73	3.46

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-12***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.84 J*	*ND*	*ND*	*ND*	4.62	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	3.9	2.1
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	4	2.3
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.1	2.1
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	4.7 CL	3.3 N3
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.2	1
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.776 J*	*ND*	*ND*	*ND*	*1.78 J*	*1.32 J*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	2.7	1.1

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-12***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	**40**	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*NA*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	**18**	*ND*	*ND*	*ND*	*ND*	**6**	2	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	2.2	*NA*	1.4	2.9	*ND*	**13**	*ND*	*ND*	*ND*	*ND*	**15**	*0.9 J*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	**19**	*ND*	*ND*	*NA*	*NA*	**51**	*1.3 J*	*NA*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*1.4 J*	*ND*	*NA*	**19**	*ND*	*ND*	*NA*	*NA*	**40**	*1.4 J*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	1.2	*ND*	*ND*	**25**	*ND*	*ND*	*ND*	*ND*	**31**	2.1	*ND*	*ND*	*NA*
Mar-2002	*0.6 J*	*ND*	3.1	*NA*	1.1	4.3	*ND*	**7.9**	*ND*	*ND*	*ND*	*ND*	**15**	*0.9 J*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*0.9 J*	*ND*	*ND*	4.9	*ND*	*ND*	*ND*	*ND*	**12**	*ND*	*ND*	*0.6 J*	*NA*
Apr-2004	*ND*	*ND*	*0.6 J*	*NA*	1.5	*0.5 J*	*ND*	**36**	*ND*	*ND*	*ND*	*ND*	**61**	1.8	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	**11**	*ND*	*ND*	*ND*	*ND*	**13**	1.3	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	**5.7**	*ND*	*ND*	*ND*	*ND*	4.7	*0.8 J*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1.9 R	*ND*	*ND*	**9.4**	*ND*	*ND*	*ND*	*ND*	**11.2**	*0.6 J*	*ND*	*0.9 J*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	**5.6**	*ND*	*ND*	*ND*	*ND*	4	*0.6 J*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	*NA*
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.8	*ND*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	1.2	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.8	*ND*	*ND*	*ND*	*ND*	2.5	*ND*	*ND*	*1 J*	*NA*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.97	*ND*	*ND*	*ND*	*ND*	2.23	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-12***															
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.2	*ND*	*ND*	*ND*	*ND*	1.65	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.65	*ND*	*ND*	*ND*	*ND*	*0.96 J*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	1.2	*0.1 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.257 J*	*0.508 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.59	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-13***											
Nov-1993	7	7	0.2	ND	3	ND	ND	5.31	24.4	2.6	54	3.2
Apr-1994	9	9	ND	ND	2.5	ND	ND	5.19	19.6	ND	ND	3.15
Apr-1995	12.4	12.4	0.2	46.2	3.2	ND	ND	5.7	34.7	2.8	13	3
Apr-1997	ND	4	ND	ND	5	0.08	ND	NA	NA	ND	92	12
Apr-1998	5	5	0.26	ND	5.36	ND	ND	6.04	35.1	0.84	29	6.9
Apr-1999	ND	ND	0.14	ND	5.34	ND	ND	5.46	37.7	ND	38	4.3
Apr-2000	12	12	ND	ND	4.46	0.17	ND	5.29	28	ND	ND	3.9
Apr-2001	ND	NA	ND	30	1.22	ND	ND	NA	NA	ND	33	4.87
Mar-2002	2.8	2.8	ND	19	5.04	ND	ND	5.4	36.4	ND	33	6.77
Mar-2003	2.7	2.7	ND	ND	15.1	ND	ND	5.4	39.7	7.67	23	5.55
Apr-2004	2.5	2.5	ND	14	4.36	0.19	ND	5.8	40.6	ND	59	5.72
Apr-2005	ND	ND	ND	ND	5.03	0.25	ND	5.6	38.7	ND	42	5.8
Mar-2006	11	11	ND	ND	7.24	0.18	ND	5.9	62.7	1.18	41	5.01
Mar-2007	3.6	3.6	ND	ND	8.07	0.18	ND	5.9	75.6	1.26	11	5.81
Mar-2008	22	22	ND	ND	13.9	ND	ND	5.9	88.8	ND	58	6.79
Mar-2009	14	14	ND	ND	9.62	0.08	ND	5.5	92	1.55	37	11.5
Mar-2010	3.8	3.8	ND	18.2	10.3	0.22	ND	5.46	69	1.49	33	6.17
Apr-2011	5	5	ND	ND	9.76	0.23	0.03	5.4	70	ND	62	6.7
Mar-2012	3.7	3.7	ND	ND	11.1	0.23	ND	5	64.5	ND	14	7.57
Mar-2013	5.08	5.08	ND	ND	11.8	0.224	ND	4.3	72.7	1.18	24	8.5
Mar-2014	23	23	ND	8 J	11.9	0.259	ND	5.9	77.2	0.873 J	43	7.21
Apr-2015	16.7	16.7	ND	ND	12.1	0.236	ND	5	82.5	ND	58	9.23
May-2016	15.4	15.4	ND	ND	12.6	0.176	ND	6.2	135.4	ND	57	11.2
May-2017	8.96	8.96	ND	ND	12.5	0.297	ND	5.8	126.5	1.37	41	9.2
May-2018	22	22	ND	5.7 J	15.8	0.2	0.0056 J	5.7	137.7	ND	59	15.3
May-2019	22	NA	ND	ND	13.2	ND	ND	5.94	105	ND	28	11.9
May-2020	10	NA	ND	ND	15.4	0.11	0.0097 J	5.35	101.9	ND	68	15.1
Apr-2021	ND	NA	ND	6.1 J	14.3	0.18	ND	5.9	123.6	ND	43	14.3
May-2022	26	NA	ND	ND	14.1	0.18	0.0069 J	5.62	149.6	ND	27	18.3 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-13***													
Nov-1993	*NA*	*ND*	*ND*	*NA*	*ND*	0.44	*NA*	*ND*	*NA*	*ND*	105	2.4	*ND*	0.51	*NA*
Apr-1994	*NA*	*ND*	*ND*	*NA*	*ND*	0.62	*NA*	*ND*	*NA*	*ND*	1.75	0.87	*ND*	0.39	*NA*
Apr-1995	*ND*	*ND*	0.7	*ND*	*ND*	0.43	*NA*	0.032	*ND*	*ND*	22.8	0.88	*ND*	0.48	*NA*
Apr-1997	*ND*	*ND*	0.038	*ND*	*ND*	2	1.5	*ND*	*ND*	*ND*	4.9	2.7	*ND*	1.1	0.83
Apr-1998	*ND*	*ND*	0.027	*ND*	*ND*	1.28	1.27	*ND*	*ND*	0.034	51	5.28	*ND*	0.89	0.871
Apr-1999	*ND*	*ND*	0.016	*ND*	*ND*	0.832	0.882	*ND*	*ND*	0.018	24.7	3.02	*ND*	0.546	0.538
Apr-2000	*ND*	*ND*	0.02	0.002	*ND*	0.868	0.498	0.042	*ND*	0.179	214	0.978	*ND*	0.42	0.328
Apr-2001	0.004	*ND*	0.023	*ND*	*ND*	1.04	*NA*	**0.211**	0.082	0.614	141	*NA*	0.003	0.555	*NA*
Mar-2002	0.005	*ND*	0.027	0.002	*ND*	1.46	1.03	**0.199**	0.06	0.668	154	3.85	0.003	0.759	0.66
Mar-2003	*ND*	*ND*	0.019	*ND*	*ND*	1.09	0.988	0.035	0.022	0.265	48.6	1.35	*ND*	0.688	0.626
Apr-2004	*ND*	0.007	0.015	*ND*	*ND*	1.4	0.862	0.06	0.017	0.182	52.1	6.71	*ND*	0.541	0.44
Apr-2005	0.004	0.01	0.019	*ND*	*ND*	1.62	0.672	**0.12**	0.028	0.386	80.9	5.02	0.003	0.433	0.36
Mar-2006	0.003	0.006	0.016	*ND*	*ND*	1.08	0.98	0.067	0.022	0.257	70.3	11.9	*ND*	0.559	0.56
Mar-2007	*ND*	0.003	0.023	*ND*	*ND*	1.3	1.11	0.067	*ND*	0.235	79.7	13.7	0.002	0.622	0.536
Mar-2008	*ND*	0.004	0.025	*ND*	*ND*	1.52	1.43	0.017	*ND*	0.064	26	17.7	*ND*	0.727	0.669
Mar-2009	*ND*	0.003	0.029	*ND*	*ND*	2.55	2.19	0.042	0.016	0.137	62.7	5.04	*ND*	1.24	1.05
Mar-2010	0.003	0.01	0.022	*ND*	*ND*	1.38	1.32	0.07	0.013	0.209	15	6.83	*ND*	0.66	0.638
Apr-2011	0.002	0.006	0.02	*ND*	*ND*	1.48	1.45	0.053	*ND*	0.166	22.6	8.96	*ND*	0.74	0.716
Mar-2012	*ND*	0.002	0.022	*ND*	*ND*	1.54	1.5	0.019	*ND*	0.064	29.1	10.1	*ND*	0.904	0.875
Mar-2013	*ND*	*0.0014 J*	0.0265	*0.000359 J*	*ND*	1.82	1.74	0.0203	*0.0066 J*	0.071	33.6	10.8	*ND*	0.96	0.863
Mar-2014	0.0021	0.0052	0.0211	*ND*	*0.000196 J*	1.56	1.56	0.0535	0.0124	0.172	35	13.6	*0.000968 J*	0.803	0.805

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-13***													
Apr-2015	*0.000337 J*	*0.001 J*	0.0266	*0.000171 J*	*ND*	2.03	2.08	*0.0085 J*	*0.0041 J*	0.0269	22.7	18	*ND*	1.01	1.04
May-2016	*ND*	*ND*	0.0275	*0.000096 J*	*ND*	2.43	2.24	*0.003 J*	0.0033	0.0073	19.6	16.3	*ND*	1.25	1.17
May-2017	*ND*	*0.0016 J*	0.0273	*0.00031 J*	*0.00021 J*	1.87	1.86	0.0097	0.0053	0.037	23.3	13.4	*0.00032 J*	1.11	1.02
May-2018	*0.000064 J*	*ND*	0.035	*0.00014 J*	*0.000053 J*	3.3	3.2	*0.0024 J*	0.0048	0.0044 B	13	11.6	*0.000031 J*	1.7	1.7
May-2019	*ND*	*ND*	0.023	*ND*	*ND*	2.8	2.8	*ND*	0.0056	0.013	23.3 M1	21.3	*ND*	1.2	1.2
May-2020	*ND*	*ND*	0.033	*0.00013 J*	*0.00014 J*	3.2	3.1	*0.0048 J*	0.006	0.0027	9.2	7.6	*ND*	1.8	1.7
Apr-2021	*ND*	*ND*	0.046	*ND*	*ND*	3.1	3.1	*0.0012 J*	*0.0043 J*	*ND*	15.9	12.5	*ND*	1.6	1.6
May-2022	*ND*	*ND*	0.051	*0.00021 J*	*ND*	3.6	3.1	*0.0015 J*	0.0091	0.0028	14	10.4	*ND*	2.3	1.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-13*												
Nov-1993	0.19	NA	ND	NA	0.64	NA	ND	NA	1.5	NA	NA	NA	0.01
Apr-1994	0.05	NA	ND	NA	0.97	NA	ND	NA	1.49	NA	NA	NA	0.04
Apr-1995	0.2	NA	ND	ND	0.73	NA	ND	ND	1.3	NA	ND	ND	0.03
Apr-1997	0.11	0.07	0.0014	ND	2.4	1.8	ND	ND	2.4	2.7	ND	ND	ND
Apr-1998	0.053	0.074	NA	ND	1.37	0.735	ND	ND	2.44	2.47	ND	ND	0.041
Apr-1999	0.044	0.049	NA	ND	ND	1.02	ND	ND	2.36	2.23	ND	ND	0.056
Apr-2000	ND	0.045	NA	0.013	0.705	ND	ND	ND	5	2.03	ND	ND	0.051
Apr-2001	0.252	NA	NA	0.265	1.07	NA	ND	ND	3.28	NA	ND	ND	0.101
Mar-2002	0.166	0.047	NA	0.224	1.94	0.48	ND	ND	3.81	2.53	ND	ND	0.09
Mar-2003	0.078	0.054	NA	0.098	0.655	0.83	ND	ND	2.5	2.45	ND	ND	0.05
Apr-2004	0.121	0.076	0.0012	0.072	1.47	1.31	ND	ND	2.96	2.47	ND	ND	0.076
Apr-2005	0.149	0.052	**0.0047**	0.133	0.66	0.54	ND	ND	3.33	2.89	ND	ND	0.162
Mar-2006	0.11	0.045	**0.0032**	0.073	0.528	0.556	ND	ND	3.13	3.05	ND	ND	0.018
Mar-2007	0.125	0.075	**0.0051**	0.046	0.846	0.761	ND	ND	3.87	3.6	ND	ND	0.019
Mar-2008	0.113	0.085	0.0005	0.029	0.904	0.817	ND	ND	4.94	4.23	ND	ND	ND
Mar-2009	0.118	0.074	0.0004	0.05	1.18	1.03	ND	ND	4.48	3.8	ND	ND	0.066
Mar-2010	0.155	0.088	0.0004	0.096	1.03	0.96	ND	ND	4.25	4.01	ND	ND	0.022
Apr-2011	0.112	0.06	0.0004	0.046	0.714	0.658	ND	ND	4.36	4.17	ND	ND	0.018
Mar-2012	0.096	0.084	0.0004	0.023	0.866	0.924	ND	ND	4.9	5.08	ND	ND	0.012
Mar-2013	0.111	0.0863	0.000377	0.0233	0.852	0.785	ND	ND	5.07	4.57	ND	ND	0.0159
Mar-2014	0.127	0.0813	0.000762	0.0559	0.849	0.84	ND	0.00007 J	5.07	5.1	ND	ND	0.0164
Apr-2015	0.0996	0.0988	0.000078 J	0.0097 J	0.94	0.989	ND	ND	5.73	5.98	ND	ND	0.011

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-13***												
May-2016	0.102	0.107	*ND*	0.0052	1.11	0.978	*ND*	*ND*	6.28	5.79	*ND*	*ND*	*ND*
May-2017	0.0982	0.089	0.00036	0.0152	0.963	0.947	*ND*	*ND*	5.82	5.78	*ND*	*ND*	*0.0074 J*
May-2018	0.088	0.086	*ND*	0.0064	*1.2 J*	*ND*	*0.00054 JB*	*ND*	7.5	7.8	*ND*	0.0029	0.007 B
May-2019	0.18	0.16	*ND*	0.0055	*ND*	*ND*	*ND*	*ND*	5.4	5.2	*ND*	*ND*	0.013
May-2020	0.076	0.072	*0.00016 J*	0.0075	*1.2 J*	*ND*	*0.00036 J*	*ND*	8.1	6.6	*ND*	*0.00053 J*	0.0077
Apr-2021	0.11	0.11	*ND*	*0.0055 J*	1	1.1	*ND*	*ND*	7.2	7.5	*0.0044 J*	*ND*	*0.0031 J*
Jun-2021	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*NA*
May-2022	0.11	0.096	*ND*	0.01	1.2	1.1	*ND*	*ND*	9.2	8.2	*ND*	*ND*	0.0096

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-13*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	43	ND
Apr-1997	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	1.1	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	4.39	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-13*																
Mar-2014	*ND*	*ND*	*ND*	*ND*	4.71	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.34 J*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	4.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	4.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	4.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.9 JB*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	4.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	3.99	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	3.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-13***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	10	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	1.2
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	1.4	1.4
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	1.5
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	1.1
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	1
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	7.2	3.1
Mar-2006	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	4.6	ND	ND	ND	8.4	4.7
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	5.4	2.8
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.5	ND	ND	ND	10.5	7.9
May-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND	ND	ND	10.5	2.9
Mar-2009	ND	ND	ND	ND	ND	2.2 B	ND	ND	ND	ND	ND	1.3	ND	ND	ND	5.4	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.6 J	4.5
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	11.9	4.3
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	11.1	3.5
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.95	ND	ND	ND	6.21	3.63

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-13***															
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.04	ND	ND	ND	8.47	4.03
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.37	ND	ND	ND	5.96	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	5.6	4.3
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	ND	ND	ND	5.9	4.1
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.2	ND	ND	ND	11.4	5.2
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.1	ND	ND	ND	8.2	6.4 N3
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2	ND	ND	ND	5.1	2.2
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.82	ND	ND	ND	4.95 J	4.41 J
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7	ND	ND	ND	8.5	2.7

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-13***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	2.1	ND	ND	NA	NA	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	ND	2.9	0.5 J	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	4.1	ND	ND	ND	ND	**5.3**	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	3.6	ND	ND	ND	ND	3.7	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	**7 C**	ND	ND	ND	ND	**10.4**	0.5 J	ND	ND	NA
May-2008	ND	ND	ND	ND	ND	ND	ND	**6.3**	ND	ND	ND	ND	5	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	4.1	ND	ND	ND	ND	2.1	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	3.7	ND	ND	ND	ND	2.5	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	ND	2.3	ND	ND	0.5 J	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-13***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.37	*ND*	*ND*	*ND*	*ND*	2.45	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.53	*ND*	*ND*	*ND*	*ND*	3.3	*0.34 J*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.34	*ND*	*ND*	*ND*	*ND*	4.15	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.9	*ND*	*ND*	*ND*	*ND*	**5.1**	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.8	*ND*	*ND*	*ND*	*ND*	4.6	*0.1 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	**6**	*ND*	*ND*	*ND*	*ND*	**9.6**	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	**8.4**	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.6	*ND*	*ND*	*ND*	*ND*	4.7	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.872 JB*	*ND*	*ND*	2.72	*ND*	*ND*	*ND*	*ND*	**5.59**	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	*ND*	**5.3**	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-14B***											
Apr-2010	ND	ND	ND	ND	1.71	0.17	ND	4	27.7	6.92	11	2.8
Oct-2010	ND	ND	ND	ND	1.82	0.18	ND	3.5	21.6	4.72	11	2.62
Apr-2011	ND	ND	ND	ND	1.61	0.2	ND	4	21	3.35	18	1.9
Sep-2011	ND	ND	ND	ND	1.56	0.2	ND	4.4	20.5	4.28	22	2.41
Mar-2012	ND	ND	ND	ND	1.74	0.21	ND	3.5	20.7	5.11	ND	2.36
Sep-2012	ND	ND	ND	ND	1.69	0.193	ND	3.4	21	5.08	ND	1.96
Mar-2013	0.92 J	0.92 J	ND	ND	1.88	0.202	ND	3.1	20.8	3.24	15	2.11
Oct-2013	1.72 J	1.72 J	ND	ND	1.8	0.196	ND	2.9	20.1	3.64	ND	2.16
Mar-2014	0.72	0.72	ND	24	1.75	0.208	ND	5.4	27.3	3.75	ND	1.85
Oct-2014	ND	ND	ND	ND	1.9	0.212	ND	4.1	20.7	4.02	ND	2.2
Apr-2015	5.64	5.64	ND	ND	1.92	0.234	ND	3.9	21.4	4.35	36	4.51
Nov-2015	1.92	1.92	ND	ND	1.78	0.221	ND	4.8	33.2	4.39	21 J	2.79
May-2016	ND	ND	ND	5 J	1.89 B	0.187	ND	4.7	28.3	3.78	73	2.9
Oct-2016	1.8	1.8	ND	5 J	1.77	NA	NA	4.6	34.4	3.98	133	2.6
May-2017	2.56	2.56	ND	12	1.72	0.227	ND	4.5	34.7	3.56	13 J	3.1
Oct-2017	ND	ND	ND	ND	1.71	0.243	ND	4.7	35.7	4.29	11 J	2.1
May-2018	ND	ND	ND	ND	1.5 J	0.24	ND	6.1	29.3	ND	ND	2.3 J
Nov-2018	ND	ND	ND	ND	1.5 J	0.25	ND	4.28	22.3	ND	ND	2.3 J
May-2019	ND	NA	ND	ND	ND	0.25	ND	4.31	17.8	ND	16	ND
Oct-2019	ND	NA	ND	ND	1.4 J	0.29	ND	3.6	23.9	ND	ND	2.3
May-2020	ND	NA	ND	ND	1.5 J	0.28	ND	4.02	22.8	ND	20	2.4
Oct-2020	ND	NA	ND	ND	1.9 J	0.27	ND	3.98	22.3	2.2	ND	2.3
Apr-2021	ND	NA	ND	ND	1.7 J	0.32	ND	4.43	26.4	ND	26	2.2 J
Oct-2021	ND	NA	ND	ND	1.3 J	0.34	ND	4.56	52.8	ND	ND	2.24 J
May-2022	ND	NA	ND	ND	1.6 J	0.32	ND	4.27	47.2	ND	ND	2.5 JN3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14B***													
Apr-2010	ND	ND	ND	ND	ND	0.674	0.553	ND	0.022	0.01	ND	ND	ND	0.271	0.225
Oct-2010	ND	ND	ND	ND	ND	0.62	0.551	ND	0.015	ND	ND	ND	ND	0.26	0.235
Apr-2011	ND	ND	ND	ND	ND	0.445	0.466	ND	0.011	ND	ND	ND	ND	0.205	0.23
Sep-2011	ND	ND	ND	ND	ND	0.608	0.61	ND	ND	ND	ND	ND	ND	0.216	0.262
Mar-2012	ND	ND	ND	ND	ND	0.462	0.445	ND	ND	ND	0.064	ND	ND	0.295	0.283
Sep-2012	ND	ND	0.0054 J	0.000317 J	ND	0.44	0.591	0.0023 J	0.0082 J	0.0051 J	0.0352 J	0.0702	ND	0.21	0.245
Mar-2013	ND	ND	0.0055 J	0.000399 J	ND	0.518	0.516	0.0022 J	0.008 J	0.0047 J	0.0052 J	0.0174 J	ND	0.199	0.202
Oct-2013	ND	ND	0.0053 J	0.000313 J	0.000151 J	0.586	0.483	0.0072 J	0.0071 J	0.0036 J	0.0542	ND	ND	0.169	0.225
Mar-2014	0.000742 J	ND	0.0047 J	ND	0.00012 J	0.428	0.342	0.0018 J	0.0071 J	0.0063 J	ND	ND	ND	0.19	0.133
Oct-2014	0.00092 J	0.000584 J	0.0055 J	0.000383 J	0.000144 J	0.531	0.523	0.000633 J	0.0071 J	0.0048 J	0.0109 J	0.0173 J	ND	0.213	0.224
Apr-2015	0.0026	0.000676 J	0.0083 J	0.000399 J	0.000295 J	1.27	0.831	0.000584 J	0.0089 J	0.0422	0.317	0.0251 J	0.0037	0.323	0.227
Nov-2015	0.000636 J	0.000194 J	0.0067 J	0.000425 J	0.000178 J	0.688	0.907	0.000423 J	0.0079 J	0.008 J	0.18	ND	0.000607 J	0.26	0.282
May-2016	ND	ND	0.007	0.00034 J,B	0.00021 J	0.762	0.654	ND	0.0071	0.0062	0.114 J	0.0412 J	0.0015 J	0.25	0.248
Oct-2016	ND	0.00075 J	0.0066	0.00036 J	ND	0.62	0.606	0.00086 J+	0.0069	0.0068 J+	0.176 J	ND	0.0016 J	0.26 J+	0.241
May-2017	0.0015 J	0.00076 J	0.006	0.00035 J	ND	0.766	0.732	0.00074 J	0.0068	0.007	0.107 J	ND	0.0012 J	0.279	0.25
Oct-2017	ND	ND	0.0052	0.00026 J	0.00021 J	0.48	0.465	0.0011 J	0.0058	0.0034 J	ND	ND	ND	0.209	0.221
May-2018	ND	ND	0.0055	0.00032	0.00017 J	0.5 J	0.48 J	0.0029 J	0.0052	0.0069	0.02 J	ND	0.000047 JB	0.24 J	0.23 J
Nov-2018	ND	ND	0.0056	0.00031	0.00016 J	0.52 J	0.5 J	0.0064 J	0.0049	0.005	0.035	0.02 J	0.00011 J	0.23 J	0.23 J
May-2019	ND	ND	0.0058	ND	ND	ND	ND	0.009	0.0052	0.0063	ND	0.026	ND	ND	ND
Oct-2019	0.0001 J	ND	0.0058	0.00029 J	0.00026 J	0.52	0.5 J	0.007 J	0.0051	0.0087	0.025 J	0.019 J	0.000056 J	0.25	0.2 J
May-2020	ND	ND	0.0055	0.00026 J	0.00013 J	0.53	0.49 JB	0.0065 J	0.0054	0.0047	0.02 J	0.016 J	ND	0.25	0.22 JB

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14B***													
Oct-2020	*ND*	*ND*	*0.0061 J*	*0.00029 J*	*ND*	0.5	*0.48 J*	*0.0063 J*	0.0057	0.013	*0.034 JB*	*0.019 J*	*ND*	0.25	*0.24 J*
Apr-2021	*ND*	*ND*	*0.0091 J*	*0.00026 J*	*ND*	*0.49 J*	*0.48 J*	*0.0029 J*	0.0055	*0.005 J*	*ND*	*ND*	*ND*	0.23	0.24
Oct-2021	*ND*	*ND*	0.006	*0.00032 J*	*ND*	*0.5 J*	0.53	0.0038	0.0058	0.0091	*0.021 J*	*0.014 J*	*0.000046 J*	*0.24 J*	*0.25 J*
May-2022	*ND*	*ND*	0.0064	*0.0003 J*	*ND*	0.51	*0.49 J*	0.0035	0.0064	0.0088	*ND*	*ND*	*ND*	*0.29 J*	*0.26 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-14B*												
Apr-2010	0.013	0.012	ND	0.028	ND	ND	ND	ND	0.89	0.777	ND	ND	0.071
Oct-2010	ND	ND	ND	0.019	ND	ND	ND	ND	0.835	0.817	ND	ND	0.037
Apr-2011	ND	ND	ND	0.015	ND	ND	ND	ND	0.758	0.741	ND	ND	0.025
Sep-2011	ND	ND	ND	0.015	0.51	ND	ND	ND	1.07	1.03	ND	ND	0.021
Mar-2012	ND	ND	ND	0.012	ND	ND	ND	ND	0.907	0.862	ND	ND	0.016
Sep-2012	0.0072 J	0.0086 J	ND	0.0128	0.387 J	0.419 J	ND	ND	0.861	0.908	ND	ND	0.0148
Mar-2013	0.0068 J	0.007 J	0.00006 J	0.0115	0.385 J	0.345 J	ND	ND	0.799	0.755	ND	ND	0.025
Oct-2013	0.0065 J	0.0073 J	ND	0.0089 J	0.351 J	0.412 J	ND	0.000036 J	0.653	0.851	0.000443 J	0.002 J	0.0563
Mar-2014	0.0064 J	0.0039 J	ND	0.0111	0.382 J	0.41 J	ND	ND	0.859	1.03	ND	ND	0.0151
Oct-2014	0.007 J	0.0073 J	ND	0.0108 J	0.423 J	0.409 J	0.0012 J	ND	0.958	0.942	0.00071 J	ND	0.0206
Apr-2015	0.0118	0.0068 J	ND	0.0135	0.59	0.58	ND	ND	3.48	3.31	ND	ND	0.0647
Nov-2015	0.0088 J	0.0097 J	ND	0.0125	0.524	0.618	ND	ND	1.75	2.98	ND	ND	0.0276
May-2016	0.0093	0.0093 B	ND	0.0117	0.496	0.516	ND	ND	1.63	1.37	ND	ND	0.0262 J
Oct-2016	0.0082 R	0.0069	ND	0.0112 J+	0.508	0.519	ND	ND	2.09 J+	1.82	ND	ND	0.045
May-2017	0.0094	0.0088	ND	0.0107	0.528	0.477	ND	ND	1.96	1.47	ND	ND	0.0591
Oct-2017	0.0061	0.0059	ND	0.0093	0.401	0.455	ND	ND	0.859	0.876	ND	ND	0.0104 J
May-2018	0.0059	0.0053	ND	0.0091	ND	ND	0.00012 J	ND	0.84 J	0.81 J	ND	ND	0.013
Nov-2018	0.015	0.0061	ND	0.012	ND	ND	0.00022 J	ND	0.81 J	0.91 J	ND	ND	0.014
May-2019	0.0073	0.0084	ND	0.013	ND	ND	ND	ND	ND	ND	ND	0.0024	0.013
Oct-2019	0.0078	0.0068	ND	0.011	ND	ND	ND	ND	ND	ND	ND	0.0068	0.016
May-2020	0.0077	0.0071	ND	0.01	ND	ND	ND	ND	ND	ND	ND	ND	0.011
Oct-2020	0.0079	0.0071	ND	0.012	ND	ND	ND	ND	ND	ND	ND	0.0014 J	0.013 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14B***												
Apr-2021	0.0074	0.0073	*ND*	0.01	*0.42 J*	*0.41 J*	*ND*	*ND*	*0.86 J*	1.1	*ND*	*ND*	0.01
Oct-2021	0.0075	0.008	*ND*	0.011	*0.38 J*	*0.4 J*	*ND*	*ND*	0.89	1 B	*0.000068 J*	*ND*	0.015
May-2022	0.0097	0.0086	*ND*	0.012	*0.49 J*	*0.44 J*	*ND*	*ND*	1.1	0.95	*ND*	*ND*	0.012

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-14B***																
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14B*																
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-14B*															
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14B***															
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14B***															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14B***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-16A***											
Oct-2009	2.9	2.9	ND	ND	2.93	0.2	ND	4.6	18.3	0.81	16	3.39
Apr-2010	2.9	2.9	ND	ND	3.33	0.2	ND	4.1	18.4	ND	44	3.1
Oct-2010	2.5	2.5	ND	ND	3.27	0.16	ND	4.6	18.2	ND	14	3.86
Apr-2011	2.9	2.9	ND	ND	3.06	0.2	ND	4.6	17	ND	12	3.5
Sep-2011	3.1	3.1	ND	ND	3.05	0.19	ND	4.6	17.5	ND	13	4
Mar-2012	3	3	ND	ND	3.13	0.2	ND	4.2	23.3	ND	39	3.9
Sep-2012	2.64	2.64	ND	ND	3.27	0.174	ND	3.8	18.3	ND	49	3.67
Mar-2013	3.32	3.32	ND	ND	3.44	0.19	ND	3.7	417.6	0.868 J	19	3.74
Oct-2013	3.72	3.72	ND	ND	3.38	0.169	ND	3.4	18.9	0.747 J	28	3.62
Mar-2014	3.08	3.08	ND	17	3.27	0.178	ND	5.4	20.5	0.581 J	ND	3.41
Oct-2014	ND	ND	ND	8 J	3.44	0.186	ND	5.1	17.9	0.224 J	ND	3.86
Apr-2015	3.76	3.76	ND	ND	3.3	0.173	ND	4.3	20.9	ND	ND	3.88
Nov-2015	2.56	2.56	ND	6 J	3.4	0.19	ND	5.1	44.9	1.08	ND	3.99
May-2016	2.56	2.56	ND	ND	3.37	0.187	ND	5.2	30.7	ND	14 J	4
Oct-2016	ND	ND	ND	ND	3.2	NA	NA	5.1	32.7	1.06	31	3.4
May-2017	ND	ND	ND	ND	3.07	0.19	ND	5	28.6	0.899 J	ND	3.3
Oct-2017	ND	ND	0.0787 J	ND	3.05	0.203	ND	5.2	34.5	0.501 J	33	3.8
May-2018	2 J	ND	0.056 J	ND	3.1	ND	ND	4.8	33.9	ND	45	4 J
Nov-2018	2 JB	ND	ND	ND	2.9 J	0.18	ND	4.66	20.4	ND	17	59.7
May-2019	ND	NA	ND	ND	ND	0.19	ND	4.7	14.9	ND	ND	ND
Oct-2019	ND	NA	ND	ND	2.6 J	0.19	ND	4.59	20.8	ND	21	3.9
May-2020	ND	NA	ND	ND	2.8 J	0.15	ND	4.38	19.2	ND	ND	4.1
Oct-2020	ND	NA	ND	ND	2.9 J	0.17	ND	4.45	20	ND	ND	4
Apr-2021	ND	NA	ND	ND	3 J	0.18	ND	4.91	25.6	ND	12	4
Oct-2021	2 J3c	NA	ND	ND	2.4 J	0.18	ND	5.02	52.4	ND	ND	3.79
May-2022	2 J3c	NA	ND	ND	2.4 J	0.17	ND	4.81	44.9	ND	16	3.9 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-16A***													
Oct-2009	ND	ND	ND	ND	ND	0.828	0.795	ND	ND	ND	ND	ND	ND	0.32	0.329
Apr-2010	ND	ND	ND	ND	ND	0.746	0.735	ND	ND	ND	0.152	ND	ND	0.299	0.296
Oct-2010	ND	ND	ND	ND	ND	0.92	0.864	ND	ND	ND	ND	ND	ND	0.378	0.359
Apr-2011	ND	ND	ND	ND	ND	0.833	0.811	ND	ND	ND	ND	ND	ND	0.348	0.329
Sep-2011	ND	ND	ND	ND	ND	0.973	0.98	ND	ND	ND	ND	ND	ND	0.381	0.382
Mar-2012	ND	ND	ND	ND	ND	0.86	0.85	ND	ND	ND	ND	ND	ND	0.424	0.409
Sep-2012	ND	ND	0.0064 J	0.000091 J	ND	0.889	0.905	ND	0.0034 J	0.0012 J	0.024 J	0.0281 J	ND	0.351	0.356
Mar-2013	ND	ND	0.0066 J	0.000067 J	ND	0.981	0.898	0.0021 J	0.0038 J	0.000806 J	0.0113 J	0.0061 J	0.0014 J	0.313	0.291
Oct-2013	ND	ND	0.0067 J	ND	ND	0.991	0.878	0.0088 J	0.0037 J	0.000741 J	0.062	ND	ND	0.279	0.35
Mar-2014	0.00052 J	ND	0.0057 J	ND	ND	0.845	0.875	0.0018 J	0.0034 J	0.0022 J	ND	ND	ND	0.315	0.319
Oct-2014	0.000784 J	ND	0.0069 J	ND	ND	0.966	0.975	0.000635 J	0.003 J	0.000772 J	ND	ND	ND	0.351	0.348
Apr-2015	0.0011 J	0.000376 J	0.007 J	ND	ND	0.945	0.93	0.00071 J	0.0038 J	0.001 J	ND	0.0106 J	ND	0.369	0.363
Nov-2015	0.000344 J	ND	0.0065 J	0.000083 J	0.000101 J	0.999	1.01	0.000304 J	0.0031 J	0.0012 J	0.0175 J	ND	0.000283 J	0.362	0.371
May-2016	ND	ND	0.0067	ND	ND	0.982	0.825	0.00082 J	0.0032	0.00098 J	ND	ND	ND	0.37	0.34
Oct-2016	ND	ND	0.0068	ND	ND	0.816	0.904	ND	0.003	0.00098 J	ND	ND	ND	0.339	0.366
May-2017	ND	ND	0.0074	ND	ND	0.749	0.796	0.001 J	0.003	0.00088 J	ND	ND	ND	0.35	0.344
Oct-2017	ND	ND	0.0055	0.000077 J	ND	0.944	0.901	0.00091 J	0.0041	0.0018 J	ND	ND	ND	0.352	0.344
May-2018	0.000063 J	ND	0.0067	0.0001 J	0.000079 J	0.97 J	0.96 J	0.00085 J	0.0053	0.0017 J	0.011 J	ND	0.000068 JB	0.38 J	0.37 J
Nov-2018	ND	ND	0.0058	0.000055 J	0.000072 J	13.4	1.1	0.0087	0.026	0.0061	0.31	0.04	0.00026 J	6.4	0.46 J
May-2019	ND	ND	0.0058	ND	ND	ND	1.4	0.0099	0.029	0.0024	ND	0.04	ND	ND	ND
Oct-2019	0.000096 J	ND	0.0059	0.000078 J	0.00016 J	0.96	0.93 J	0.012	0.032	0.0031	0.068 J	0.041	ND	0.37	0.37 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-16A***													
May-2020	*0.000058 J*	*ND*	0.006	*ND*	*ND*	1	*0.97 J*	0.014	0.045	0.0032	*0.095 J*	0.054	*ND*	0.38	*0.37 JB*
Oct-2020	*ND*	*ND*	*0.0065 J*	*ND*	*ND*	0.97	*0.93 J*	*0.0094 J*	0.034	*ND*	*0.057 JB*	0.042	*ND*	0.37	*0.36 J*
Apr-2021	*ND*	*ND*	*0.0071 J*	*0.00021 J*	*ND*	*0.98 J*	*0.93 J*	0.0061	0.028	*0.0045 J*	*0.051 J*	*ND*	*ND*	0.38	0.37
Oct-2021	*ND*	*ND*	0.0065	*ND*	*ND*	0.94	1	0.0025	0.017	*0.002 J*	*0.024 J*	*0.017 J*	*ND*	*0.35 J*	*0.38 J*
May-2022	*ND*	*ND*	0.0067	*ND*	*ND*	0.95	1	*0.0014 J*	0.024	*0.0022 J*	*ND*	*0.036 J*	*ND*	*0.37 J*	*0.4 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-16A*												
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.1	1.04	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.17	1.16	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.52	ND	ND	ND	1.28	1.21	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.21	1.16	ND	ND	ND
Sep-2011	ND	ND	ND	ND	0.525	0.536	ND	ND	1.48	1.45	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	1.3	1.27	ND	ND	ND
Sep-2012	0.0042 J	0.0043 J	ND	0.0046 J	0.472 J	0.464 J	ND	ND	1.28	1.33	0.000679 J	ND	0.0065 J
Mar-2013	0.0045 J	0.0042 J	0.000054 J	0.0048 J	0.424 J	0.376 J	ND	ND	1.19	1.12	ND	ND	0.0163
Oct-2013	0.0047 J	0.0045 J	ND	0.0038 J	0.409 J	0.489 J	ND	ND	1.01	1.32	0.001 J	0.0022 J	0.0123
Mar-2014	0.0036 J	0.0037 J	ND	0.0046 J	0.45 J	0.423 J	ND	ND	1.26	1.23	ND	ND	0.0064 J
Oct-2014	0.0039 J	0.0041 J	0.000024 J	0.0052 J	0.502	0.489 J	0.000965 J	ND	1.47	1.41	ND	ND	0.0095 J
Apr-2015	0.0045 J	0.0045 J	ND	0.005 J	0.529	0.516	0.0013 J	0.000034 J	1.51	1.48	0.000888 J	ND	0.0118
Nov-2015	0.004 J	0.0041 J	ND	0.0046 J	0.508	0.521	ND	ND	1.39	1.43	0.000103 J	ND	0.0044 J
May-2016	0.0046	0.0041	ND	0.0046	0.529	0.492	ND	ND	1.43	1.26	ND	ND	0.0076 J,B
Oct-2016	0.003 J	0.0038 J+	ND	0.0043	0.446	0.49	ND	ND	1.29	1.36	ND	ND	0.006 J
May-2017	0.0042	0.0032 J	ND	0.0051	0.484	0.485	ND	ND	1.21	1.23	ND	ND	0.0055 J
Oct-2017	0.0046	0.004	ND	0.0044	0.482	0.506	ND	ND	1.25	1.29	ND	ND	0.006 J
May-2018	0.0048	0.0034	ND	0.0062	ND	ND	ND	ND	1.6 J	1.2 J	ND	0.0039	0.0084 B
Nov-2018	0.0098	0.015	ND	0.009	2.3 J	ND	0.0002 J	ND	22.4	1.4 J	ND	ND	0.021
May-2019	0.025	0.064	ND	0.01	ND	ND	ND	ND	ND	ND	ND	ND	0.015
Oct-2019	0.0074	0.0091	ND	0.01	ND	ND	ND	ND	ND	1.4 J	ND	0.0072	0.011
May-2020	0.0093	0.0074	ND	0.011	ND	ND	ND	ND	ND	ND	ND	0.0081	0.0075

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-16A***												
Oct-2020	0.0071	0.0067	*ND*	0.01	*ND*	*ND*	*ND*	*ND*	*1.3 J*	*ND*	*ND*	*0.00089 J*	*ND*
Apr-2021	0.0066	0.0058	*ND*	*0.0095 J*	0.51	*0.5 J*	*0.0058 J*	*ND*	1.3	1.1	*ND*	*ND*	*0.005 J*
Oct-2021	*0.0045 J*	*0.0048 J*	*ND*	0.0068	*0.44 J*	*0.49 J*	*ND*	*ND*	1.2	1.4 B	*0.000053 J*	*ND*	0.0051
May-2022	0.0054	0.0057	*ND*	0.0083	0.56	*0.47 J*	*ND*	*ND*	1.2	1.3	*ND*	*ND*	0.006

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16A*																
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16A*																
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-16A*															
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-16A***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.123 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16A***															
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16A***															
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-18***											
Nov-1993	*ND*	*ND*	0.2	*ND*	16	*ND*	*ND*	4	184.1	48.4	112	26.5
Apr-1994	*ND*	*ND*	0.1	*ND*	14.8	*ND*	*ND*	4.44	189	51.8	108	37.42
Apr-1995	*ND*	*ND*	0.3	22.6	14.2	*ND*	*ND*	4.3	183	55.5	96	25.9
Apr-1997	*ND*	11	*ND*	*ND*	14	*ND*	*ND*	*NA*	*NA*	37	108	18.3
Apr-1998	*ND*	*ND*	1.1	*ND*	10.9	8.44	*ND*	5	199.8	23.9	93	42
Apr-1999	*ND*	*ND*	0.65	*ND*	14.3	5.01	*ND*	4.28	175.7	29.6	102	42
Apr-2000	*ND*	*ND*	2.4	*ND*	10.9	**38.6**	*ND*	4.05	353	9.27	205	83
Apr-2001	*ND*	*NA*	1.3	*ND*	9.89	**28.8**	*ND*	*NA*	*NA*	20.6	147	78
Mar-2002	*ND*	*ND*	*ND*	*ND*	8.8	3.78	*ND*	3.9	135	23.3	74	35.6
Mar-2003	*ND*	*ND*	0.8	13	16.8	**11.5**	*ND*	4	222	31.9	145	52.7
Apr-2004	*ND*	*ND*	0.38	*ND*	6.95	6.47	*ND*	4.2	166.4	42.4	102	44.6
Apr-2005	*ND*	*ND*	*ND*	*ND*	10.5	5.93	*ND*	4.4	136.3	29.4	72	43
Mar-2006	*ND*	*ND*	*ND*	*ND*	9.69	7.16	*ND*	4.5	162.9	42.9	118	43.3
Mar-2007	*ND*	*ND*	*ND*	*ND*	5.17	**12.6**	*ND*	4.2	168	45.6	128	52.1
Mar-2008	*ND*	*ND*	*ND*	*ND*	5.89	**14.9**	*ND*	4	183.3	38.3	143	54.5
Mar-2009	*ND*	*ND*	*ND*	*ND*	6.59	9.29	*ND*	3.8	166.2	47.9	114	42
Mar-2010	*ND*	*ND*	*ND*	10.8	7.05	7.06	*ND*	4.16	178	35.6	104	36.3
Apr-2011	*ND*	*ND*	*ND*	*ND*	5.12	5.67	*ND*	3.9	134	31.3	114	35.2
Mar-2012	*ND*	*ND*	*ND*	*ND*	8.46	4.25	*ND*	3.6	115.3	38.1	67	34
Mar-2013	*ND*	*ND*	*ND*	*ND*	7.18	2.97	*ND*	4.4	116.4	31.2	89	28.9
Mar-2014	*ND*	*ND*	*ND*	17	7.46	2.06	*ND*	4.5	110.7	32.5	56	27.5
Apr-2015	*ND*	*ND*	*ND*	*ND*	6.9	2.05	*ND*	3.7	101	33.5	68	27.8
May-2016	*ND*	*ND*	*ND*	*ND*	9.36	1.7	*ND*	4.5	186.9	37.3	66	31.6
May-2017	*ND*	*ND*	*ND*	*ND*	9.75	1.23	*ND*	4.5	157	27.5	51	29.4
May-2018	*ND*	*ND*	0.12	*5.8 J*	6.3	0.46	*ND*	4.3	147.2	34.2	126	32.6
May-2019	*ND*	*NA*	*ND*	*ND*	8.6	1.5	*ND*	4.33	89.7	27.5	79	30.7
May-2020	*ND*	*NA*	*ND*	*ND*	5.5	1.8	*ND*	3.94	114.9	33.2	60	33.3
Apr-2021	*ND*	*NA*	*ND*	*12.6 J*	7.2	1.4	*ND*	4.25	122	27.1	55	22.5
May-2022	*1 J2c*	*NA*	*ND*	*ND*	4.2	1.6	*ND*	4.2	147.1	26.3	66	28.4 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-18***													
Nov-1993	*NA*	*ND*	*ND*	*NA*	*ND*	3.7	*NA*	*ND*	*NA*	*ND*	4.2	3.7	*ND*	4.2	*NA*
Apr-1994	*NA*	*ND*	*ND*	*NA*	*ND*	4.1	*NA*	*ND*	*NA*	*ND*	3.9	4.34	*ND*	6.6	*NA*
Apr-1995	*ND*	*ND*	1	*ND*	*ND*	3.1	*NA*	*ND*	0.06	*ND*	9.4	9.2	*ND*	4.4	*NA*
Apr-1997	*ND*	*ND*	0.07	*ND*	**0.012**	4.6	4.9	*ND*	0.14	*ND*	12	9.7	*ND*	3.2	3.4
Apr-1998	*ND*	*ND*	0.145	*ND*	*ND*	7.7	7.78	*ND*	0.223	0.013	1.43	1.36	*ND*	5.65	5.67
Apr-1999	*ND*	*ND*	0.111	*ND*	*ND*	7.87	7.3	*ND*	0.153	0.01	0.261	*ND*	*ND*	5.51	5.04
Apr-2000	*ND*	*ND*	0.531	0.003	0.004	16.7	15.3	*ND*	0.657	0.019	0.211	0.071	*ND*	10	9.24
Apr-2001	*ND*	*ND*	0.388	0.004	0.005	16.4	*NA*	*ND*	0.488	0.018	0.135	*NA*	*ND*	9.03	*NA*
Mar-2002	*ND*	*ND*	0.085	*ND*	*ND*	6.6	6.61	*ND*	0.121	*ND*	0.262	0.138	*ND*	4.64	4.61
Mar-2003	*ND*	*ND*	0.225	*ND*	*ND*	11.7	10.8	*ND*	0.365	*ND*	0.333	*ND*	*ND*	5.74	5.32
Apr-2004	*ND*	*ND*	0.105	*ND*	*ND*	10.1	10.2	*ND*	0.256	*ND*	0.302	*ND*	*ND*	4.73	4.78
Apr-2005	*ND*	*ND*	0.111	*ND*	*ND*	9.29	9	*ND*	0.17	*ND*	*ND*	*ND*	*ND*	4.81	4.66
Mar-2006	*ND*	*ND*	0.091	*ND*	*ND*	9.75	9.47	*ND*	0.177	*ND*	*ND*	*ND*	*ND*	4.62	4.5
Mar-2007	*ND*	*ND*	0.112	*ND*	*ND*	13.1	12.5	*ND*	0.253	*ND*	0.08	*ND*	*ND*	4.72	4.54
Mar-2008	*ND*	*ND*	0.1	*ND*	*ND*	13.4	13.4	*ND*	0.25	*ND*	*ND*	*ND*	*ND*	5.1	5.03
Mar-2009	*ND*	*ND*	0.074	*ND*	*ND*	10.1	9.97	*ND*	0.201	0.01	0.05	*ND*	*ND*	4.08	4.02
Mar-2010	*ND*	*ND*	0.102	*ND*	*ND*	7.95	7.66	*ND*	0.163	*ND*	0.061	*ND*	*ND*	3.98	3.91
Apr-2011	*ND*	*ND*	0.093	*ND*	*ND*	8.38	8.21	*ND*	0.163	*ND*	0.077	*ND*	*ND*	3.46	3.41
Mar-2012	*ND*	*ND*	0.101	*ND*	*ND*	7.32	7.12	*ND*	0.151	*ND*	*ND*	*ND*	*ND*	3.82	3.73
Mar-2013	*ND*	*ND*	0.0717	*0.000707 J*	*0.0015 J*	6.76	6.92	*0.0047 J*	0.139	*0.0056 J*	*0.0466 J*	*0.0183 J*	*0.0015 J*	2.93	2.88
Mar-2014	*0.000269 J*	*ND*	0.0749	*0.000812 J*	*0.000947 J*	5.41	5.44	*0.0013 J*	0.0955	*0.0043 J*	*0.0209 J*	*0.0092 J*	*ND*	3.4	3.4

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-18***													
Apr-2015	*0.00061 J*	*ND*	0.0783	*0.00072 J*	*0.0011 J*	5.91	6.1	*0.001 J*	0.107	*0.0043 J*	*0.0148 J*	*ND*	*ND*	3.16	3.26
May-2016	*ND*	*ND*	0.0806	*0.00064 J*	0.001	6.58	6.03	*0.0022 J*	0.106	0.0041	*0.0541 J*	*ND*	*0.00018 J*	3.7	3.54
May-2017	*ND*	*ND*	0.0911	*0.00043 J*	*0.00067 J*	5.14	5.56	*0.0034 J*	0.0662	*0.0031 J*	*0.0381 J*	*ND*	*ND*	4.02	3.75
May-2018	*0.000049 J*	*ND*	0.053	0.00072	0.0014	7.9	7.8	*0.0014 J*	0.106	0.0041	*0.019 J*	*0.014 J*	*0.000087 JB*	3.1	3
May-2019	*ND*	*ND*	0.077	0.00076	0.0013	6.6	6.3	0.0082	0.066	0.0024	*ND*	0.033	*ND*	3.4	3.2
May-2020	*0.000087 J*	*ND*	0.055	0.00064	0.0012	8.2	7.9	0.022	0.1	0.0046	0.11	0.076	*ND*	3.1	3
Apr-2021	*ND*	*ND*	0.073	*0.00057 J*	*0.00087 J*	4.9	5.6	0.005	0.085	*0.0032 J*	*0.068 J*	*ND*	*ND*	2.5	2.9
May-2022	*ND*	*ND*	0.058	0.00064	0.00092	6.7	7.2	0.0036	0.11	0.0049	*ND*	0.062	0.00097	2.8	2.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-18*												
Nov-1993	1.8	NA	ND	NA	2.4	NA	ND	NA	4.9	NA	NA	NA	0.48
Apr-1994	2.25	NA	ND	NA	2.31	NA	ND	NA	3.87	NA	NA	NA	0.06
Apr-1995	2.1	NA	ND	0.17	2.9	NA	ND	ND	3	NA	ND	ND	0.58
Apr-1997	1.6	1.8	ND	0.1	3.7	3.6	ND	ND	4.3	5	ND	ND	0.18
Apr-1998	3.02	3.06	NA	0.137	3.06	3.67	ND	ND	4.3	4.31	ND	ND	0.332
Apr-1999	1.81	1.67	NA	0.094	3.46	3.33	ND	ND	5.5	4.98	ND	ND	0.229
Apr-2000	10.3	9.41	NA	0.38	5	4.8	ND	ND	2.67	2.48	ND	ND	0.933
Apr-2001	7.14	NA	NA	0.294	5.85	NA	ND	ND	2.85	NA	ND	ND	0.74
Mar-2002	1.49	1.46	NA	0.073	2.81	2.47	ND	ND	3.7	3.7	ND	ND	0.175
Mar-2003	4.21	3.88	NA	0.244	4.6	3.46	ND	ND	2.51	2.32	ND	ND	0.638
Apr-2004	2.32	2.32	ND	0.179	3.72	3.8	ND	ND	2.85	2.88	ND	ND	0.465
Apr-2005	1.52	1.48	ND	0.116	3.23	3.17	ND	ND	3.75	3.61	ND	ND	0.307
Mar-2006	1.46	1.41	ND	0.132	2.81	2.76	ND	ND	3.74	3.64	ND	ND	0.368
Mar-2007	1.58	1.52	ND	0.201	3.18	2.98	ND	ND	2.62	2.55	ND	ND	0.611
Mar-2008	1.71	1.7	ND	0.2	3.23	3.26	ND	ND	2.67	2.69	ND	ND	0.611
Mar-2009	1.29	1.27	ND	0.157	2.63	2.6	ND	ND	3.01	2.98	ND	ND	0.47
Mar-2010	1.18	1.17	ND	0.134	2.42	2.25	ND	ND	2.73	3.03	ND	ND	0.35
Apr-2011	0.895	0.868	ND	0.133	1.96	1.92	ND	ND	2.58	2.6	ND	ND	0.418
Mar-2012	0.898	0.88	ND	0.122	2.1	2.08	ND	ND	3.32	3.33	ND	ND	0.354
Mar-2013	0.738	0.721	0.000065 J	0.111	1.64	1.62	0.000574 J	ND	2.65	2.64	ND	ND	0.37
Mar-2014	0.607	0.616	ND	0.0714	1.93	1.95	ND	ND	3.57	3.61	0.000548 J	ND	0.226
Apr-2015	0.648	0.65	ND	0.088	1.81	1.88	0.0017 J	ND	3.15	3.28	ND	ND	0.273

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-18***												
May-2016	0.673	0.634	*ND*	0.084	2.19	2.26	*ND*	*ND*	4.44	4.22	*ND*	*ND*	0.267
May-2017	0.61	0.603	*ND*	0.0484	2.32	2.43	*ND*	*ND*	4.77	4.94	*ND*	*ND*	0.0967
May-2018	0.46	0.46	*0.00013 JB*	0.092	*1.8 J*	*1.6 J*	*0.00086 J*	*ND*	*3.5 J*	*3.1 J*	*ND*	0.0033	0.32
May-2019	0.5	0.51	*ND*	0.057	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.16
May-2020	0.49	0.46	*ND*	0.11	*1.6 J*	*1.5 J*	*0.00068 J*	*ND*	*3 J*	*2.9 J*	*ND*	0.0098	0.32
Apr-2021	0.37	0.41	*ND*	0.074	1.3	1.5	*ND*	*ND*	3.2	3.7	*ND*	*ND*	0.21
May-2022	0.37	0.38	*ND*	0.1	1.4	1.3	*ND*	*ND*	3.1	3	*ND*	*ND*	0.31

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-18*																
Nov-1993	ND	ND	ND	ND	103	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	204	ND	ND	ND	ND	ND	ND	**6.1**	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	84	ND	ND	ND	ND	ND	3	**7**	4	30	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	21	ND	ND	ND	ND	ND	ND	1.7 J	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	2.3	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	0.9 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	35	ND	ND	ND	ND	ND	0.5 J	1.7	2.1	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	15	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-18*																
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.9 JB*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-18*															
Nov-1993	**11**	ND	ND	ND	ND	ND	ND	ND	23	ND	ND	ND	ND	ND	ND	23	190
Apr-1994	**23**	ND	ND	ND	ND	ND	ND	ND	29	ND	ND	10	ND	ND	ND	16	306
Apr-1997	**10**	ND	1	ND	ND	ND	ND	ND	9	9	ND	**250**	ND	ND	ND	6	75
Apr-1998	2.3 J	ND	ND	ND	ND	ND	ND	ND	2 J	ND	ND	65	ND	ND	ND	5.8	18
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	4.7	NA	NA	NA	1	2.6
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	1.2	NA	ND	NA	0.5 J	0.9 J
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	0.7 J	3
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	1.9	ND	ND	ND	2.2	3.8
Mar-2003	2.3	ND	ND	ND	ND	ND	ND	ND	4.6	ND	ND	5.9	ND	ND	ND	6.2	21
Apr-2004	0.9 J	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	2.8	ND	ND	ND	6.1	9.7
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	0.8 J	ND	ND	ND	4.7	4
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	1.5
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-18***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-18***															
Nov-1993	ND	ND	ND	ND	**77**	ND	ND	**124**	ND	ND	ND	ND	**52**	ND	ND	ND	NA
Apr-1994	ND	ND	28	ND	**114**	34	ND	**200**	ND	ND	ND	ND	**104**	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	**10**	NA	ND	**18**	ND	2	ND	ND	**16**	1	ND	**4**	3
Apr-1998	ND	ND	1.6 J	NA	3.3	ND	ND	**5.9**	ND	ND	ND	ND	4.5	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	1.3	ND	NA	2.7	ND	ND	NA	NA	1	ND	NA	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	0.8 J	ND	ND	NA	NA	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	4.6	ND	ND	**17**	ND	ND	ND	ND	3.6	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	4.3	ND	ND	**18**	ND	ND	ND	ND	3.8	ND	ND	ND	NA
Mar-2003	ND	ND	3.1	NA	**39**	3.3	ND	**142**	ND	1.9	ND	ND	**33**	ND	ND	**3.2**	NA
Apr-2004	ND	ND	1.6	NA	**16**	0.9 J	ND	**63**	ND	ND	ND	ND	**14**	ND	ND	1.5	NA
Apr-2005	ND	ND	ND	ND	4.1	ND	ND	**21**	ND	ND	ND	ND	3.9	ND	ND	0.7 J	NA
Mar-2006	ND	ND	ND	ND	0.9 J	ND	ND	**7.5**	ND	ND	ND	ND	1.1	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.2 R	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2013	ND	ND	ND	ND	ND	ND	ND	0.52 J	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-18***															
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.86 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.1 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.513 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-21A***											
Nov-1993	ND	ND	0.2	ND	19.5	1.3	ND	4.41	144.7	22	36	12.7
Apr-1994	ND	ND	0.1	21.1	16.1	1.1	ND	4.43	135	23.1	71	15.64
Apr-1995	ND	ND	ND	ND	19	0.8	ND	4.3	140	26	83	13.8
Apr-1997	ND	ND	ND	ND	15	0.26	ND	NA	NA	20	ND	8
Apr-1998	ND	ND	0.26	ND	7.43	0.25	ND	5.17	80.1	14.2	36	12
Apr-1999	ND	ND	0.27	ND	22.3	0.364	ND	4.1	150.4	24.9	89	19
Apr-2000	ND	ND	ND	ND	18.5	0.97	ND	4.66	116	28.9	84	21
Apr-2001	ND	NA	ND	ND	14.4	0.818	ND	NA	NA	27.3	86	23
Mar-2002	ND	ND	ND	ND	27.2	1.49	ND	4.5	160.7	46.3	105	24.7
Mar-2003	ND	ND	ND	ND	23.3	1.22	ND	4.4	158.9	30.7	120	29.4
Apr-2004	ND	ND	ND	ND	12.1	0.462	ND	4.2	108.3	28.6	60	20.3
Apr-2005	ND	ND	ND	ND	23.8	0.44	ND	4.4	124.5	24.5	110	22
Mar-2006	ND	ND	ND	ND	15.8	0.58	ND	4.9	141.6	50.1	86	28.9
Mar-2007	ND	ND	ND	ND	19.6	0.67	ND	4.2	127.6	36	90	25.4
Mar-2008	ND	ND	0.51	ND	23.4	ND	ND	4.1	137.7	50.8	105	27.2
Mar-2009	ND	ND	ND	ND	21.5	1.13	ND	4	148.5	43.3	106	28.5
Apr-2010	2.5	2.5	ND	ND	24.2	1.58	ND	3.9	129.4	32.6	72	24.3
Apr-2011	2.5	2.5	ND	ND	31.7	1.4	ND	4	213	25.5	111	25.6
Mar-2012	ND	ND	ND	ND	19.2	0.99	ND	3.4	124.2	34	111	23.4
Mar-2013	0.68 J	0.68 J	ND	ND	61.6	2.47	ND	4.3	358	38.3	169	36.2
Mar-2014	0.72	0.72	ND	7 J	30.9	1.53	ND	4.5	175.4	42.6	118	32.6
Apr-2015	3.76	3.76	ND	ND	30.6	1.43	ND	3.9	144.4	31.5	99	35.2
May-2016	ND	ND	ND	ND	32.2	1.11	ND	4.6	264	32.7	105	28.8
May-2017	ND	ND	ND	7 J	31.7	1.59	ND	4.9	288	44.7	113	42.3
May-2018	10 B	10	0.049 J	22.9 J	38.7	0.7	ND	5	307	35.3	131	65.6
May-2019	ND	NA	ND	ND	20	0.99	ND	4.32	90.5	17.9	80	21.8
May-2020	36	NA	ND	9.1 J	18.5	1.5	ND	5.28	192	18.7	103	70
Apr-2021	ND	NA	ND	6.1 J	32	1.6	ND	4.64	186.2	22.1	87	25.2
May-2022	4 J4c	NA	ND	ND	17.3	2.4	ND	4.72	208.7	33.3	111	39.6 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-21A***													
Nov-1993	*NA*	*ND*	*ND*	*NA*	*ND*	2.3	*NA*	*ND*	*NA*	*ND*	*ND*	0.18	*ND*	1.7	*NA*
Apr-1994	*NA*	*ND*	*ND*	*NA*	*ND*	2.67	*NA*	*ND*	*NA*	*ND*	0.31	*ND*	*ND*	2.18	*NA*
Apr-1995	*ND*	*ND*	0.6	*ND*	*ND*	2.4	*NA*	*ND*	0.02	*ND*	0.14	0.05	*ND*	1.9	*NA*
Apr-1997	*ND*	*ND*	0.093	*ND*	*ND*	3.2	3.6	*ND*	*ND*	*ND*	*ND*	*ND*	0.003	1.5	1.6
Apr-1998	*ND*	*ND*	0.094	*ND*	*ND*	2.61	2.63	*ND*	*ND*	*ND*	0.105	*ND*	*ND*	1.45	1.45
Apr-1999	*ND*	*ND*	0.101	*ND*	*ND*	4.6	4.49	*ND*	0.012	*ND*	*ND*	*ND*	*ND*	1.81	1.77
Apr-2000	*ND*	*ND*	0.108	*ND*	*ND*	5.13	4.95	*ND*	0.01	*ND*	0.241	*ND*	*ND*	1.96	1.83
Apr-2001	*ND*	*ND*	0.099	*ND*	*ND*	5.77	*NA*	*ND*	0.01	*ND*	*ND*	*NA*	**0.024**	2	*NA*
Mar-2002	*ND*	*ND*	0.088	*ND*	*ND*	6.51	6.5	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	2.04	2.07
Mar-2003	*ND*	*ND*	0.107	*ND*	*ND*	7.43	6.84	*ND*	0.01	*ND*	*ND*	*ND*	*ND*	2.61	2.39
Apr-2004	*ND*	0.003	0.106	*ND*	*ND*	4.59	4.49	*ND*	0.013	*ND*	0.059	*ND*	*ND*	2.14	2.1
Apr-2005	*ND*	*ND*	0.109	*ND*	*ND*	5.52	5.22	*ND*	*ND*	0.01	0.078	*ND*	*ND*	1.99	1.92
Mar-2006	*ND*	*ND*	0.091	*ND*	*ND*	7.84	8.03	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.33	2.95
Mar-2007	*ND*	*ND*	0.085	*ND*	*ND*	6.88	6.75	*ND*	0.016	*ND*	*ND*	*ND*	*ND*	1.98	1.96
Mar-2008	*ND*	*ND*	0.077	*ND*	*ND*	7.08	6.59	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	2.31	2.1
Mar-2009	*ND*	*ND*	0.076	*ND*	*ND*	7.27	7.06	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.49	2.42
Apr-2010	*ND*	*ND*	0.068	*ND*	*ND*	6.72	6.58	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.81	1.78
Apr-2011	*ND*	*ND*	0.076	*ND*	*ND*	6.92	6.79	*ND*	0.01	*ND*	0.214	*ND*	*ND*	2.01	1.98
Mar-2012	*ND*	*ND*	0.07	*ND*	*ND*	6.02	5.67	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.03	1.94
Mar-2013	*ND*	*ND*	0.072	*0.000599 J*	*0.000306 J*	9.49	8.74	*0.0045 J*	*0.0092 J*	*0.0035 J*	0.0928	0.0519	*0.0016 J*	3.04	2.77
Mar-2014	*ND*	*ND*	0.0633	*0.000432 J*	*0.000365 J*	8.48	7.39	*0.0017 J*	*0.0077 J*	*0.0027 J*	*0.0422 J*	*ND*	*ND*	2.78	2.58

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-21A***													
Apr-2015	*0.000855 J*	*0.000423 J*	0.0835	*0.000523 J*	*0.000222 J*	9.43	9.38	*0.0013 J*	*0.0093 J*	*0.0026 J*	*0.0271 J*	*0.0111 J*	*ND*	2.84	2.84
May-2016	*ND*	*0.00072 J*	0.0712	*0.00045 J*	*ND*	7.74	7.61	*0.00094 J*	0.0083	*0.0022 J*	*ND*	*ND*	*ND*	2.3	2.37
May-2017	*ND*	*0.0021 J*	0.0701	*0.00048 J*	*ND*	10.9	11.1	*0.0023 J*	0.0067	*0.0017 J*	*ND*	*ND*	*ND*	3.65	3.56
May-2018	*0.000094 J*	*ND*	0.067	*0.00021 J*	*0.00032 J*	18.4	17	*0.0017 JB*	0.0069	*0.00082 J*	0.027	*ND*	*0.00014 J*	4.8	4.5
May-2019	*ND*	*ND*	0.053	*ND*	*ND*	5.9	5.8	*ND*	0.0032	*ND*	*ND*	*ND*	*ND*	1.7	1.7
May-2020	0.00066	*0.00078 J*	0.051	*0.0002 J*	*0.00018 J*	23.1	22.5	0.0073	0.0039	*ND*	*0.066 J*	0.027	*ND*	3	2.9
Apr-2021	*ND*	*ND*	0.073	*0.00037 J*	*ND*	6.8	7	*0.0024 J*	0.0056	*0.003 J*	*ND*	*ND*	*ND*	2	2
May-2022	*ND*	*ND*	0.068	*0.00041 J*	*ND*	10.9	11.8	0.0034	0.0088	*0.0015 J*	*0.042 J*	*ND*	*ND*	3	3.2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-21A***												
Nov-1993	0.16	*NA*	*ND*	*NA*	2	*NA*	*ND*	*NA*	12.4	*NA*	*NA*	*NA*	0.05
Apr-1994	0.17	*NA*	*ND*	*NA*	2.26	*NA*	*ND*	*NA*	12.8	*NA*	*NA*	*NA*	0.19
Apr-1995	0.12	*NA*	*ND*	*ND*	1.9	*NA*	*ND*	*ND*	10.2	*NA*	*ND*	*ND*	0.08
Apr-1997	0.14	0.15	*ND*	*ND*	2.8	2.7	*ND*	*ND*	7.4	8.7	*ND*	*ND*	0.061
Apr-1998	0.22	0.223	*NA*	*ND*	1.03	1.55	*ND*	*ND*	4.83	4.83	*ND*	*ND*	0.052
Apr-1999	0.124	0.123	*NA*	*ND*	2.19	1.48	*ND*	*ND*	12.4	12.2	*ND*	*ND*	0.052
Apr-2000	0.132	0.125	*NA*	*ND*	1.39	1.17	*ND*	*ND*	12.3	11.5	*ND*	*ND*	0.05
Apr-2001	0.125	*NA*	*NA*	*ND*	2.83	*NA*	*ND*	*ND*	12.2	*NA*	*ND*	*ND*	0.052
Mar-2002	0.103	0.107	*NA*	*ND*	3.01	2.71	*ND*	*ND*	13.1	12.9	*ND*	*ND*	0.051
Mar-2003	0.126	0.116	*NA*	*ND*	2.51	2.12	*ND*	*ND*	14.4	13	*ND*	*ND*	0.04
Apr-2004	0.179	0.179	*ND*	*ND*	2.85	2.13	*ND*	*ND*	8.72	8.41	*ND*	*ND*	0.044
Apr-2005	0.143	0.14	*ND*	*ND*	2.2	1.76	*ND*	*ND*	14.7	14.2	*ND*	*ND*	0.053
Mar-2006	0.08	0.101	*ND*	*ND*	1.86	2.34	*ND*	*ND*	10.8	11.1	*ND*	*ND*	0.016
Mar-2007	0.18	0.179	*ND*	*ND*	1.65	1.65	*ND*	*ND*	11.9	11.7	*ND*	*ND*	0.058
Mar-2008	0.108	0.099	*ND*	*ND*	2.02	1.75	*ND*	*ND*	11.4	10.5	*ND*	*ND*	0.032
Mar-2009	0.106	0.104	*ND*	*ND*	1.98	1.93	*ND*	*ND*	11.9	11.6	*ND*	*ND*	0.027
Apr-2010	0.118	0.115	*ND*	*ND*	1.63	1.57	*ND*	*ND*	14.5	14.1	*ND*	*ND*	0.031
Apr-2011	0.103	0.101	*ND*	*ND*	1.84	1.76	*ND*	*ND*	19	18.5	*ND*	*ND*	0.038
Mar-2012	0.106	0.1	*ND*	*ND*	1.7	1.63	*ND*	*ND*	12.7	12.2	*ND*	*ND*	0.027
Mar-2013	0.104	0.0972	*0.000082 J*	*0.0055 J*	2.46	2.27	*0.000622 J*	*0.000037 J*	31.2	31	*0.0015 J*	*ND*	0.0342
Mar-2014	0.0923	0.0908	*ND*	*0.0039 J*	2.35	2.02	*0.00063 J*	*ND*	19.7	19	*0.000454 J*	*0.001 J*	0.0192
Apr-2015	0.0966	0.0958	*ND*	*0.0042 J*	2.29	2.26	0.0036	*ND*	17	16.8	*ND*	*ND*	0.0296

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-21A***												
May-2016	0.073	0.0746	*ND*	*0.0031 J*	1.86	1.94	*ND*	*ND*	19.3	20.1	*ND*	*ND*	*0.027 J*
May-2017	0.0752	0.0775	*ND*	0.0041	2.7	2.6	*ND*	*ND*	22.2	21.3	*ND*	*ND*	*0.0214 J*
May-2018	0.08	0.097	*ND*	0.001 B	*2.4 J*	*2.6 J*	*0.00071 J*	*ND*	26.7	24.2	*ND*	0.0025	0.0052 B
May-2019	0.048	0.054	*ND*	0.0031	*ND*	*ND*	*ND*	*ND*	13.1	12.5	*ND*	*ND*	0.012
May-2020	0.039	0.036	*ND*	0.004	*2.4 J*	*2.5 J*	*ND*	*ND*	13.5	13.3	*ND*	0.006	0.04
Apr-2021	0.069	0.067	*ND*	*0.0037 J*	1.8	1.8	*0.0059 J*	*ND*	21.9	22	*ND*	*ND*	0.019
May-2022	0.062	0.064	*ND*	0.0047	2.3	2.3	*0.0017 J*	*ND*	15.8	16.4	*ND*	*ND*	0.021

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-21A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	3	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-21A*																
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.3 JB*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-21A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	2
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	1.2
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	0.7 J	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	0.5 J	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.69 J	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.54 J	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-21A***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.15	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.255 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-21A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	**6.1**	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	1.4	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	1.2	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*0.8 J*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-21A***															
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.1 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

HISTORICAL TABLES –
Off-site Non-regulated Wells

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P4*																
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P4*																
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.8 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P4***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.27 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.28 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.26 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.36 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P4***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.23 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.404 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P4***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P4***															
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***MW-P4***
Nov-2005	*ND*
Mar-2009	*ND*
Oct-2009	*ND*
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000031 J*
Mar-2013	*0.000056 J*
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*ND*
Apr-2015	*ND*
Nov-2015	*ND*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.000058 J*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00005 J*
Oct-2021	*ND*
May-2022	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***MW-P9***																
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	35	91	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	139	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	1 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	1 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P9*																
Oct-2004	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	*0.6 J*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	*0.8 J*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.45	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.53	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.36	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P9*																
Nov-2015	ND	ND	ND	ND	1.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	0.818 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P9***															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	1 J	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND
Sep-1994	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	3
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	2.2
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	1.4
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	0.7 J	2.2
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	1.8
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	0.6 J	1.8
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	2.5
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	2
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	2.1
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	2.2
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	3.5
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	2
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	3
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	3.2

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P9***															
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	3
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	2.6
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	2
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	3.1
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	2.3
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	2.1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	1.3
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	1.8
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	2.4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	2
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	2.1
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	2.3
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	2.8
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	2	ND	ND	ND	6.3	3.2
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.9	0.8 J
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	0.38 J	ND	ND	ND	1.14	1.56
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31 J	ND	0.32 J	ND	ND	ND	1.8	1.62
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.29 J	0.37 J,B	0.34 J	ND	ND	ND	2.09	1.86
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	0.25 J	ND	ND	ND	2.3	1.65
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	0.24 J	ND	ND	ND	2.09	1.73
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.22 J	ND	0.25 J	ND	ND	ND	2	1.26

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P9***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.47	1.47
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	1.9	1.8
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	1.5	1.5
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	1.5	1.3
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	1.7	1.6
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	1.6
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	1.4 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*0.9 J*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.806 J*	*0.982 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*0.9 J*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*0.6 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P9***															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	0.5 J	ND	0.6 J	ND	ND	0.6 J	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	0.8 J	ND	2.1	ND	ND	1	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	1	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	1.5	ND	NA	0.6 J	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	1.5	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	1.5	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	1.6	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	1.4	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	1.1	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	0.8 J	ND	ND	1.4	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P9***															
Apr-2004	ND	ND	ND	NA	0.9 J	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	1.1	ND	ND	1.7	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	0.9 J	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	0.9 J	ND	ND	1.8	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	0.5 J	ND	ND	1.3	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	1	ND	ND	2.7	ND	ND	ND	ND	1.8	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	0.86 J	ND	ND	2.44	ND	ND	ND	ND	0.68 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.66 J	ND	ND	1.75	ND	ND	ND	ND	0.59 J	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.71 J	ND	ND	1.62	ND	ND	ND	ND	0.62 J	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	0.61 J	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	2.06	ND	ND	ND	ND	0.58 J	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P9***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.51	*ND*	*ND*	*ND*	*ND*	*0.46 J*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.43	*ND*	*ND*	*ND*	*ND*	*0.51 J*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*0.2 J*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*0.1 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.13	*ND*	*ND*	*ND*	*ND*	*0.284 J*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID: MW-P9	
Jun-1994	*ND*
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	0.0013
Apr-1997	*ND*
Apr-2004	*ND*
Oct-2004	*ND*
Mar-2009	0.0012
Oct-2009	*ND*
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	0.0002
Sep-2012	0.00024
Mar-2013	0.000223
Oct-2013	0.000384
Mar-2014	0.000259
Oct-2014	0.00022
Apr-2015	*0.000126 J*
Nov-2015	*0.000117 J*
May-2016	*0.00013 J*
Oct-2016	*0.00016 J*
May-2017	0.00033
Oct-2017	*0.00013 J*
May-2018	0.00041 B
Nov-2018	0.00038
May-2019	0.00024
Oct-2019	*0.0002 J*
May-2020	0.00026
Oct-2020	*ND*
Apr-2021	0.00022
Oct-2021	*0.00014 J*
May-2022	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***MW-P106***																
Oct-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	0.7 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	1.5	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	1.7	NA	NA	6.5	0.5 J	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	1.4	ND	ND	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	1.3	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	0.5 J	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	0.6 J	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	0.6 J	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	0.7 J	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	0.6 J	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P106*																
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.78	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	0.23 J	ND	ND	7.16	ND	ND	ND	ND	ND	ND	ND	0.44 J	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	11.1	0.34 J	ND	ND	ND	ND	ND	0.34 J	0.56 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	9	0.27 J	ND	ND	ND	ND	ND	ND	0.54 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	0.58 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	3.43	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	0.1 J	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P106*																
Oct-2016	*ND*	*0.1 J*	*ND*	*ND*	5.1	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	4.5	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*0.1 J*	*ND*	*ND*	5	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.7 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	2.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	1.64	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	2.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*MW-P106*															
Oct-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	0.6 J	NA	NA	NA	2.5	1.2
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	5.7	ND	ND	ND	11	10
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	1 J	ND	NA	6.5	NA	ND	NA	10	11
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.9	ND	ND	ND	34	9.6
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	3.3	ND	ND	ND	16	6.9
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	6.3	1.8
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.7	1.4
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.7	1.8
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	14	3.3
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	6.3	3.1
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	8.6	2.1
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	0.9 J
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P106***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	6.4	4.7
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	7	8.1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	2.4	3.3
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	3.4	4.7
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	5.3
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.4	7.2
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.9	5
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	2.1
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.58 J	ND	ND	ND	1.81	1.93
Mar-2013	0.34 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.01	ND	ND	ND	6.99	8.26
Oct-2013	0.66 J	ND	ND	ND	ND	ND	ND	ND	0.7 J	0.28 J	ND	4.75	ND	ND	ND	8.57	13.1
Mar-2014	0.41 J	ND	ND	ND	ND	ND	ND	ND	0.36 J	ND	ND	3.44	ND	ND	ND	8.47	11.6
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.21 J	ND	ND	ND	0.51 J	0.76 J
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.16	ND	ND	ND	3.11	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.68 J	ND	ND	ND	1.17	2.59
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	3.8	4.7

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P106***															
Oct-2016	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.1 J*	*ND*	1.6	*ND*	*ND*	*ND*	5.5	6.6
May-2017	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.1 J*	*ND*	1.5	*ND*	*ND*	*ND*	4.4	5.4
Oct-2017	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	1.6	*ND*	*ND*	*ND*	6.4	6.3
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	6.4	3.8
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.5	1.3
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	3.3	2.3
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.588 J*	*ND*	*ND*	*ND*	*1.35 J*	*1.71 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	2.3	2
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	1.2	1.2

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P106***															
Oct-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	1 J	ND	ND	NA	NA	ND	0.8 J	NA	ND	NA
Oct-1999	ND	ND	ND	NA	1.1	ND	ND	**5.4**	ND	ND	ND	ND	2	2.8	ND	ND	NA
Apr-2000	ND	NA	ND	NA	1.9	ND	NA	**5.3**	ND	ND	NA	NA	2	2.9	ND	0.7 J	NA
Oct-2000	ND	ND	ND	NA	1.5	ND	ND	3.4	ND	ND	ND	ND	1.2	2.6	ND	ND	NA
Apr-2001	ND	ND	ND	NA	1.3	ND	ND	3	ND	ND	ND	ND	1	1.9	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	1.1	ND	ND	ND	ND	ND	0.9 J	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	1	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	1	ND	ND	NA
Mar-2003	ND	ND	ND	NA	0.9 J	ND	ND	1.5	ND	ND	ND	ND	ND	1.2	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	0.9 J	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	0.7 J	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P106***															
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	0.6 J	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.9 R	ND	ND	3.9	ND	ND	ND	ND	1.3	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	1.5	ND	ND	1.8	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	1	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	ND	1.5	1 J	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	1.1	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	0.51 J	ND	ND	1.11	ND	ND	ND	ND	0.93 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	2.45	ND	ND	3.21	ND	ND	ND	ND	2.58	ND	ND	ND	ND
Oct-2013	ND	ND	0.42 J	ND	**5.11**	0.24 J	ND	3.68	ND	ND	ND	ND	2.56	1.07	ND	0.42 J	0.66 J
Mar-2014	ND	ND	0.31 J	ND	3.21	ND	ND	4.64	ND	ND	ND	ND	2.81	0.92 J	ND	ND	0.31 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	0.78 J	ND	ND	1.81	ND	ND	ND	ND	1.36	0.51 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	1.11	ND	ND	ND	ND	0.91 J	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P106***															
May-2016	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	1.5	*0.6 J*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	2.2	*ND*	*ND*	*ND*	*ND*	1.5	*0.7 J*	*ND*	*0.1 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*1.8 J+*	*ND*	*ND*	*ND*	*ND*	1.2	*0.5 J*	*ND*	*0.1 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	1.5	*0.8 J*	*ND*	*0.1 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.608 JB*	*ND*	*ND*	*0.622 J*	*ND*	*ND*	*ND*	*ND*	*0.515 J*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***MW-P106***
Sep-1994	*ND*
Oct-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	**0.0027**
Apr-1997	0.0009
Apr-2004	0.001
Oct-2004	0.0005
Apr-2005	0.0005
Mar-2009	0.0003
Oct-2009	0.0002
Mar-2010	*ND*
Oct-2010	0.0004
Apr-2011	0.0002
Sep-2011	0.0004
Mar-2012	0.0002
Sep-2012	0.00029
Mar-2013	*0.000178 J*
Oct-2013	*0.000097 J*
Mar-2014	*0.000064 J*
Oct-2014	*0.000109 J*
Apr-2015	*0.000152 J*
Nov-2015	0.00043
May-2016	0.00024
Oct-2016	*0.00012 J*
May-2017	*0.00015 J*
Oct-2017	*0.00011 J*
May-2018	*0.00018 JB*
Nov-2018	*0.00016 J*
May-2019	*ND*
Oct-2019	*ND*
May-2020	0.00071
Oct-2020	0.0004
Apr-2021	0.00021
Oct-2021	*0.00011 J*
May-2022	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P417*																
Aug-1994	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	31	4.9 J	ND
Sep-1994	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	75	109	ND
Nov-1994	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	43	203 E	ND
Apr-1995	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	66	ND
Oct-1996	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	0.5 J	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	5.2	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	8.3	ND	NA	NA	NA	NA	ND	ND	0.5 J	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	4.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P417*																
Apr-2005	ND	ND	ND	ND	6.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	7.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	9.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	7.2	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
May-2007	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	7.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	5.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	5.86	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	7.47	ND	ND	ND	ND	ND	ND	ND	0.53 J	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	5.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	4.08	ND	ND	ND	ND	ND	ND	ND	0.29 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	4.15	ND	ND	ND	ND	ND	ND	ND	0.28 J	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	3.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P417*																
Nov-2015	ND	ND	ND	ND	3.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.6 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	0.309 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P417***															
Aug-1994	*0.6 J*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	18	*ND*	*ND*	*ND*	*ND*	*ND*	2.9	3.2
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	3.3	2.9
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	3.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.4	2.7
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	2
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.1	3
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	6	5
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.7	8.9
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	9.8	7.1
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	1.1	*ND*	*NA*	1.4	*NA*	*NA*	*NA*	5.9	10
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	1	*ND*	*ND*	*ND*	2.9	8.6
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	1.5	*ND*	*NA*	1.6	*NA*	*ND*	*NA*	2.9	13
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	16	16
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	1	*ND*	*ND*	*ND*	6.9	7
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	1	*ND*	*ND*	*ND*	8.9	5.2
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	6.5	3.8
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	7.1	4.6
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	8.7	4.3
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.2	6
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	9.1	6.7
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	11	7.2

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P417***															
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	1.7	ND	ND	ND	12	12
Oct-2005	ND	0.9 J	ND	ND	ND	ND	ND	ND	3	ND	ND	1.7	ND	ND	ND	7.4	8.4
Mar-2006	0.7 J	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	1.6	ND	ND	ND	8.9	19.7
Sep-2006	0.8 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.9	ND	ND	ND	11.2	12
Mar-2007	0.7 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.8	ND	ND	ND	7.5	9.6
May-2007	0.9 J	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	2	ND	ND	ND	9.7	12
Sep-2007	0.8 J	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	1.9	ND	ND	ND	10.5	7
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	10.8	8.4
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	1.4	ND	ND	ND	12.9	8.6
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.1	5.9
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	11.7	7.5
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.8 J	6.4
Oct-2010	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	21.7	7.2
Apr-2011	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND	ND	ND	17.5	8.4
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5	ND	ND	ND	15.5	9.9
Mar-2012	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	18.7	7.6
Sep-2012	0.64 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.75	ND	ND	ND	7.99	6.5
Mar-2013	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.15	ND	ND	ND	9.09	9.12
Oct-2013	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.84	ND	ND	ND	6.28	6.28
Mar-2014	0.32 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.89	ND	ND	ND	5.88	5.01
Oct-2014	0.31 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.94	ND	ND	ND	3.11	4.78
Apr-2015	0.23 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	3.5	3.08

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P417***															
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.27	ND	ND	ND	1.72	2.86
May-2016	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	2.2	2.7
Oct-2016	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	2.1	2.2
May-2017	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	1.8	2.2
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	1.3	1.2
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	1.2
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	1.4
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.229 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.6 J
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	0.5 J

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P417***															
Aug-1994	ND	ND	1.1	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	1	NA	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND
Oct-1997	ND	ND	ND	NA	1.5	ND	ND	1.2	ND	ND	ND	ND	0.6 J	0.8 J	ND	ND	NA
Apr-1998	ND	ND	ND	NA	2.9	ND	ND	1.6	ND	ND	ND	ND	0.9 J	1.2	ND	ND	NA
Apr-1999	ND	NA	ND	NA	3.4	ND	NA	2.6	ND	ND	NA	NA	1.3	0.9 J	NA	ND	NA
Oct-1999	ND	ND	ND	NA	2.7	ND	ND	3.3	ND	ND	ND	ND	1.2	0.6 J	ND	ND	NA
Apr-2000	ND	NA	ND	NA	**5.3**	ND	NA	3.9	ND	ND	NA	NA	1.7	0.8 J	ND	0.5 J	NA
Oct-2000	ND	ND	ND	NA	**9.6**	ND	ND	4.6	ND	ND	ND	ND	2	1.5	ND	1.2	NA
Apr-2001	ND	ND	ND	NA	3.9	ND	ND	2.7	ND	ND	ND	ND	1	0.8 J	ND	ND	NA
Sep-2001	ND	ND	ND	NA	2.6	ND	ND	2.3	ND	ND	ND	ND	0.9 J	0.8 J	ND	ND	NA
Mar-2002	ND	ND	ND	NA	1.8	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	1.5	ND	ND	1.5	ND	ND	ND	ND	0.6 J	0.6 J	ND	ND	NA
Mar-2003	ND	ND	ND	NA	4.1	ND	ND	1.3	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	3.7	ND	ND	1.5	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	2.6	ND	3.2	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*MW-P417*															
Oct-2004	ND	ND	ND	NA	2.9	ND	ND	4	ND	ND	ND	ND	1.4	0.7 J	ND	ND	NA
Apr-2005	ND	ND	ND	ND	4.7	ND	ND	**6.7**	ND	ND	ND	ND	2.3	1.1	ND	0.9 J	NA
Oct-2005	ND	ND	ND	ND	**6.2**	ND	ND	**10.3**	ND	ND	ND	ND	3.1	0.7 J	ND	1.5	NA
Mar-2006	ND	ND	ND	ND	**9.7**	1.2	ND	**14**	ND	ND	ND	ND	4.1	0.9 J	ND	**2.7**	NA
Sep-2006	ND	ND	ND	ND	**10.9**	ND	ND	**15.3**	ND	ND	ND	ND	5	ND	ND	**3.2**	NA
Mar-2007	ND	ND	ND	ND	**7.1 R**	ND	ND	**10.8**	ND	ND	ND	ND	3.6	ND	ND	**3**	NA
May-2007	ND	ND	ND	0.9 J	**6.5**	ND	ND	**11.3**	ND	ND	ND	ND	3.2	0.7 J	ND	**3.6**	NA
Sep-2007	ND	ND	ND	ND	**9.2**	ND	ND	**8.6**	ND	ND	ND	ND	3.5	0.8 J	ND	**2.8**	NA
Mar-2008	ND	ND	ND	ND	4.1	ND	ND	**7.6**	ND	ND	ND	ND	2.3	1 J	ND	1.7	NA
Sep-2008	ND	ND	ND	ND	**6**	ND	ND	**5.1**	ND	ND	ND	ND	2	1.1	ND	1.5	NA
Mar-2009	ND	ND	ND	ND	4.4	ND	ND	5	ND	ND	ND	ND	1.7	0.7 J	ND	ND	NA
Oct-2009	ND	ND	ND	ND	4	ND	ND	4	ND	ND	ND	ND	1.9	0.9 J	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	3.3	ND	ND	4.9	ND	ND	ND	ND	ND	0.6 J	ND	0.7 J	NA
Apr-2011	ND	ND	ND	ND	3	ND	ND	**5.6**	ND	ND	ND	ND	**6.4 C**	ND	ND	0.6 J	NA
May-2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**8.5**	NA	NA	NA	NA
Sep-2011	ND	ND	ND	ND	4.1	ND	ND	3.5	ND	ND	ND	ND	**5.9**	ND	ND	0.8 J	NA
Mar-2012	ND	ND	ND	ND	2.6	ND	ND	3.9	ND	ND	ND	ND	4.9	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	2.27	ND	ND	**6.84**	ND	ND	ND	ND	**7.36**	0.63 J	ND	0.3 J	ND
Mar-2013	ND	ND	ND	ND	1.95	0.26 J	ND	**7.97**	ND	ND	ND	ND	**9.29**	ND	ND	0.34 J	ND
Oct-2013	ND	ND	ND	0.17 J	2.64	ND	ND	3.17	ND	ND	ND	ND	4.37	0.42 J	ND	0.36 J	ND
Mar-2014	ND	ND	ND	0.16 J	2.02	ND	ND	3.17	ND	ND	ND	ND	3.31	0.26 J	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P417***															
Oct-2014	ND	ND	ND	0.13 J	2.03	ND	ND	3.24	ND	ND	ND	ND	3.37	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.74	ND	ND	2.04	ND	ND	ND	ND	2.35	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	1.4	ND	ND	1.49	ND	ND	ND	ND	1.78	ND	ND	ND	ND
May-2016	ND	ND	ND	0.1 J	1.5	ND	ND	1.4	ND	ND	ND	ND	1.4	0.1 J	ND	0.1 J	ND
Oct-2016	ND	ND	ND	ND	0.9 J	ND	ND	1.2	ND	ND	ND	ND	1.3	0.1 J	ND	ND	ND
May-2017	ND	ND	ND	ND	1	ND	ND	1.1 J+	ND	ND	ND	ND	1.1	ND	ND	0.1 J	ND
Oct-2017	ND	ND	ND	ND	0.7 J	ND	ND	0.5 J	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***MW-P417***
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	*ND*
Apr-1997	0.0012
Apr-2004	*ND*
Oct-2004	*ND*
Mar-2009	*ND*
Oct-2009	*ND*
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000035 J*
Mar-2013	*0.000077 J*
Oct-2013	*0.000173 J*
Mar-2014	*0.000171 J*
Oct-2014	*0.000136 J*
Apr-2015	*0.00014 J*
Nov-2015	0.000344
May-2016	0.00026
Oct-2016	0.00054
May-2017	0.00055
Oct-2017	0.00081
May-2018	0.0018
Nov-2018	0.001
May-2019	0.0011
Oct-2019	0.00021
May-2020	*0.00018 J*
Oct-2020	0.00035
Apr-2021	0.00023
Oct-2021	*0.00006 J*
May-2022	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P440*																
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	36	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	0.7 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P440*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.43 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.32 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P440*																
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.1 J	ND
Nov-2018	ND	ND	ND	ND	1.1 L2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P440***															
Aug-1994	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*0.8 J*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*0.7 J*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	1.2
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	1.3	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	3.8	7
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	20	9.4
Feb-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.7	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	13	10
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	4.1	4.5
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.9	5.3
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	5.9	3.7
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	2.4	1.8
Mar-2003	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	9	5.9
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.7	*0.6 J*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P440***															
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	3.2	0.9 J
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	5	1.6
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3	0.9 J
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.7	1.3
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	4.1	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	0.7 J
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	0.8 J
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	0.5 J
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.6	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.79 J	ND	ND	ND	ND	ND	1.21	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	0.54 J	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	ND	ND	ND	ND	1.62	0.56 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND	ND	1.48	0.29 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.91 J	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.71 J	ND	0.44 J	ND	ND	ND	2.3	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P440***															
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J,B	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	0.1 J	ND	ND	ND	0.4 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	0.3 J	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	0.3 J	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	0.5 J	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.96 JN3
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.383 J	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P440***															
Aug-1994	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	3.9	*ND*	*ND*	*NA*	*NA*	*0.6 J*	*0.9 J*	*ND*	**2.8**	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.7	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	**4.4**	*NA*
Feb-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	**6.4**	*ND*	*ND*	*ND*	*ND*	1.4	1.1	*ND*	**3.6**	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*0.5 J*	*ND*	1.1	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*0.6 J*	*ND*	1.6	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*0.9 J*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.4	*ND*	*ND*	*ND*	*ND*	1.3	*0.6 J*	*ND*	**2.4**	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P440***															
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.42 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.37 J*	*ND*	*ND*	*ND*	*ND*	*0.21 J*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.31 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P440***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.77 J*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*0.37 J*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.96 J*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***MW-P440***
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	*ND*
Apr-1997	*ND*
Apr-2004	*ND*
Oct-2004	*ND*
Mar-2009	*ND*
Oct-2009	*ND*
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000092 J*
Mar-2013	*0.000085 J*
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*ND*
Apr-2015	*ND*
Nov-2015	*ND*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.000065 J*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00006 J*
Oct-2021	*ND*
May-2022	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P109*																
Jan-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P109*																
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	2.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.91	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	0.1 J	0.1 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9 J	ND
Nov-2018	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P109*																
Apr-2021	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P109*															
Jan-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.5 J
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	0.6 J
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	1.1
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	0.9 J
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.1	2.2
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	3.7
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	6.3	4.5
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	5.6	3.7
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	3.2	4.1
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	7.8	4
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	3.8	2.9
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	5.8	2.1
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P109***															
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	1.8
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	0.7 J
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	0.5 J	ND	ND	ND	2.87	1.85
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	0.56 J	ND	ND	ND	2.89	2.11
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	0.83 J	ND	ND	ND	3.54	2.55
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.28 J	ND	0.8 J	ND	ND	ND	3.84	2.52
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.32 J	ND	0.9 J	ND	ND	ND	2.95	2.61
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	0.84 J	ND	ND	ND	2.86	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.28	ND	ND	ND	1.8	2.21
May-2016	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	1.6	ND	ND	ND	3	2.9
Oct-2016	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	1.9	ND	ND	ND	3.4	3.2
May-2017	0.2 J	ND	ND	ND	ND	ND	ND	ND	0.1 J	0.3 J	ND	1.7	ND	ND	ND	3.2	3.5
Oct-2017	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	2	ND	ND	ND	3.3	3.3
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	5.5	2.7
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5 CL	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	1.3 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	0.7 J

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P109***															
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.302 J*	*ND*	*ND*	*ND*	*1.27 J*	*1.01 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.5	*0.9 J*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.6	*0.7 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P109***															
Jan-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Feb-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	0.8 J	2.1	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	0.5 J	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P109***															
Oct-2009	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	2.09	ND	ND	ND	ND	1.42	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.86	ND	ND	ND	ND	1.56	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	1.45	ND	ND	ND	ND	1.73	0.36 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	2.16	0.29 J	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	2.05	ND	ND	ND	ND	2.57	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	1.41	ND	ND	ND	ND	2.46	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	1.41	ND	ND	ND	ND	2.99	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	3.7	0.3 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	4.2	0.3 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	1.7 J+	ND	ND	ND	ND	4	0.3 J	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	4	0.3 J	ND	ND	ND
May-2018	ND	ND	ND	ND	1.3	ND	ND	1.2	ND	ND	ND	ND	3.2	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P109***															
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.823 J*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P109***
Apr-2004	0.0003
Oct-2004	0.0006
Mar-2009	0.0003
Oct-2009	0.0005
Mar-2010	0.0003
Oct-2010	*ND*
Apr-2011	0.0005
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000086 J*
Mar-2013	*0.000088 J*
Oct-2013	*0.000084 J*
Mar-2014	*0.000066 J*
Oct-2014	*0.000101 J*
Apr-2015	*0.000071 J*
Nov-2015	*0.000081 J*
May-2016	*0.000051 J*
Oct-2016	*ND*
May-2017	*0.00013 J*
Oct-2017	*ND*
May-2018	0.00021 B
Nov-2018	*0.00013 J*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00007 J*
Oct-2021	*ND*
May-2022	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P165*																
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.46	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.76	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3 J	ND
Nov-2018	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P165*																
Oct-2019	*ND*	*ND*	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	2.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	3.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	3.16	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	3.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P165*															
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.7 J
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	0.9 J
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.57	1.34
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	ND	ND	ND	ND	2.17	1.97
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	2.48	2.33
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	3.11	2.41
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.29 J	ND	ND	ND	ND	ND	2.5	2.7
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.23 J	ND	ND	ND	2.72	2.47
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.64	2.81
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	2.9	3.3
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	3.4	3.6
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	0.3 J
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	0.3 J	ND	ND	ND	4.8	4.2
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8	5
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8 CL	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	4.1 N3

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P165***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.4	3.2
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.3	2.9
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	6.4	3.8
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.292 J*	*ND*	*0.728 J*	*ND*	*ND*	*ND*	*3.94 J*	5.51
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	6.3	5
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	7	3.7

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P165***															
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	0.46 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.16 J	ND	ND	ND	0.42 J	ND	ND	ND	ND	0.22 J	0.43 J	ND	ND	ND
Mar-2014	ND	ND	ND	0.17 J	ND	ND	ND	0.61 J	ND	ND	ND	ND	0.24 J	0.4 J	ND	ND	ND
Oct-2014	ND	ND	ND	0.21 J	ND	ND	ND	0.78 J	ND	ND	ND	ND	0.32 J	0.38 J	ND	ND	ND
Apr-2015	ND	ND	ND	0.17 J	ND	ND	ND	0.75 J	ND	ND	ND	ND	0.28 J	0.36 J	ND	ND	ND
Nov-2015	ND	ND	ND	0.26 J	ND	ND	ND	0.66 J	ND	ND	ND	ND	0.29 J	0.36 J	ND	ND	ND
May-2016	ND	ND	ND	0.2 J	ND	ND	ND	0.8 J	ND	ND	ND	ND	0.3 J	0.4 J	ND	ND	ND
Oct-2016	ND	ND	ND	0.2 J	ND	ND	ND	1 J	ND	ND	ND	ND	0.4 J	0.5 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	0.2 J	ND	ND	ND	1.1	ND	ND	ND	ND	0.4 J	0.6 J	ND	ND	ND
May-2018	ND	ND	ND	ND	1.3	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P165***															
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.202 J*	*ND*	*ND*	*ND*	2.39	*ND*	*ND*	*ND*	*ND*	*0.719 J*	*0.429 J*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.6 J*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P165***
Oct-2009	*ND*
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000047 J*
Mar-2013	*0.000073 J*
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*0.000033 J*
Apr-2015	*ND*
Nov-2015	*0.00003 J*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.0001 J*
Oct-2017	*0.000064 J*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00007 J*
Oct-2021	*ND*
May-2022	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P171-1*																
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P171-1*																
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P171-1***															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.54 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.47 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.48 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.51 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P171-1***															
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.405 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P171-1***															
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P171-1***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P171-1***
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000071 J*
Mar-2013	*0.000076 J*
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*0.000025 J*
Apr-2015	*ND*
Nov-2015	*ND*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.00015 J*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00005 J*
Oct-2021	*ND*
May-2022	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P264*																
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.91 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.55	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P264*																
Mar-2014	ND	ND	ND	ND	1.61	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	1.85	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 J	ND
Nov-2018	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	3.02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P264*															
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	0.7 J
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	0.8 J
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.8 J
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	1.1
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	1.1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	0.7
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	1.1
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	3.8
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	1
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.3
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	1.3
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	0.6 J
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.76	1.57
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	ND	ND	ND	ND	2.33	2.28
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	0.22 J	ND	ND	ND	2.69	2.79

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P264***															
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	0.22 J	ND	ND	ND	3.3	3.41
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.24 J	ND	0.22 J	ND	ND	ND	2.27	3.23
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.24 J	ND	0.22 J	ND	ND	ND	2.64	2.76
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.61	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	2.6	3.4
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	3	3.8
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	0.3 J	0.2 J	ND	ND	ND	3	4.2
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	3.2	4.3
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.3	5
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 CL	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	4.9 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	3.6
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	2.5
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	6	3.5
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.464 J	ND	0.343 J	ND	ND	ND	4.29 J	5.38
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	6.4	4.6
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	7.1	3.6

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P264***															
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.61 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.44 J*	*ND*	*ND*	*ND*	*ND*	*0.28 J*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P264***															
Oct-2013	ND	ND	ND	ND	ND	ND	ND	0.55 J	ND	ND	ND	ND	0.35 J	0.37 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	0.74 J	ND	ND	ND	ND	0.39 J	0.43 J	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	0.91 J	ND	ND	ND	ND	0.47 J	0.36 J	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	0.65 J	ND	ND	ND	ND	0.37 J	0.31 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	0.74 J	ND	ND	ND	ND	0.36 J	0.28 J	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	0.4 J	0.4 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	1 J+	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
May-2018	ND	ND	ND	ND	1.2	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	NA
Apr-2021	ND	ND	ND	0.164 J	0.543 JB	ND	ND	2.27	ND	ND	ND	ND	0.789 J	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	0.7 J	0.6 J	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P264***
Apr-2004	0.0003
Oct-2004	0.0003
Mar-2009	*ND*
Oct-2009	*ND*
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000109 J*
Mar-2013	*0.000094 J*
Oct-2013	*0.000065 J*
Mar-2014	*0.000056 J*
Oct-2014	*0.000083 J*
Apr-2015	*ND*
Nov-2015	*0.000059 J*
May-2016	*0.000068 J*
Oct-2016	*0.000059 J*
May-2017	0.00021
Oct-2017	*0.00013 J*
May-2018	*0.00019 JB*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00007 J*
Oct-2021	*ND*
May-2022	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P440*																
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	ND
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	0.7 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jan-2001	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2 J	ND
Apr-2001	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P440*																
Mar-2003	ND	ND	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	*1.6 J*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	*0.7 J*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	*0.98 J*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P440*																
Mar-2014	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	1.56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	0.512 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P440*															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	1.2	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	1 J	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	1.3	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	1.5	NA	ND	NA	NA	NA	1.1	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	1.3	0.7 J
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	1	NA	ND	NA	ND	NA	1.9	2.4
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	12	7.5
Jan-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.67 J	ND	ND	ND	ND	14	9
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.3	0.5 J	ND	ND	ND	ND	ND	10	7.7
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	7.4	7
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.1	0.7 J	ND	ND	ND	ND	ND	9.5	6.4
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	1	1.6	ND	ND	ND	ND	ND	8.6	6.2
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	0.7 J	ND	ND	ND	ND	ND	8.7	5.3

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P440***															
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	0.6 J	ND	ND	ND	ND	ND	7.3	5.2
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	5.5	4.4
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	8.1	4.8
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	4.3	3.4
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	4.1	2.8
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	2.6	1.6
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	4.5	4.8
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	6.3	2.7
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	4.5 J	3 J
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	5.3	1.7
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	3.4	2.2
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	6.3	4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	2.6
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	4.8	3.8
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	6.7	1.9
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	6.1	3
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND	ND	ND	ND	ND	ND	2.9
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.88 J	ND	ND	ND	ND	ND	2.14	1.1
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.95 J	ND	0.45 J	ND	ND	ND	3.92	2.15
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.22	ND	0.36 J	ND	ND	ND	3.25	1.54

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P440***															
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.85 J	ND	0.31 J	ND	ND	ND	4.18 J	1.92
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.91 J	ND	0.34 J	ND	ND	ND	2.39	1.52
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.86 J	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.89 J,B	ND	0.78 J	ND	ND	ND	1.42	1.57
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	0.5 J	ND	ND	ND	1.4	0.9 J
Oct-2016	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	0.9 J	ND	ND	ND	2.3	1.6
May-2017	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	0.9 J	ND	ND	ND	2.2	1.7
Oct-2017	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	0.8 J	ND	ND	ND	2	1.4
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	1.2	ND	ND	ND	3.6	1.6
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.2 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	0.7 J	ND	ND	ND	2	0.8 J
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.09 J	ND	0.134 J	ND	ND	ND	0.433 J	0.398 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 JB	ND	ND	ND	ND	ND	1.4	0.6 J
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	1.6	0.6 J

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P440***															
Jun-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jun-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Aug-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	1.2	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	**2.3**	*NA*
Jan-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	*ND*	1.1	*0.78 J*	*ND*	**3.2**	*NA*
Feb-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.2	*ND*	*ND*	*ND*	*ND*	1	*0.7 J*	*ND*	**2.6**	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.4	*ND*	*ND*	*ND*	*ND*	1	*0.7 J*	*ND*	**2.3**	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.8	*ND*	*ND*	*ND*	*ND*	1	*0.8 J*	*ND*	**2.2**	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*0.6 J*	*ND*	1.7	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*RW-P440*															
Sep-2002	ND	ND	ND	NA	ND	ND	ND	2.9	ND	ND	ND	ND	0.9 J	ND	ND	1.5	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	3.1	ND	ND	ND	ND	0.9 J	0.5 J	ND	1.4	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	2.2	ND	ND	ND	ND	0.7 J	ND	ND	1	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	1.3	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	0.7 J	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	0.6 J	ND	ND	0.9 J	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	2.2 J	ND	ND	ND	ND	0.7 J	ND	ND	0.8 J	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.5 J	ND	ND	1.1	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	0.5 J	ND	ND	2.4	ND	ND	ND	ND	0.6 J	ND	ND	1.6	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	0.6 J	ND	ND	**2.1**	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	1.8	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	1.1	ND	ND	1.3	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	0.7 J	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	1.13	ND	ND	ND	ND	0.6 J	ND	ND	0.51 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.28	ND	ND	ND	ND	0.93 J	ND	ND	0.55 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P440***															
Oct-2013	ND	ND	ND	ND	ND	ND	ND	0.92 J	ND	ND	ND	ND	0.73 J	0.24 J	ND	0.54 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.23	ND	ND	ND	ND	0.55 J	0.23 J	ND	0.32 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	1.17	ND	ND	ND	ND	0.65 J	ND	ND	0.46 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	1.05	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.6 J	ND	ND	0.1 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	1.2	ND	ND	0.2 J	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	1.3	0.1 J	ND	0.3 J	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	1	ND	ND	0.2 J	ND
May-2018	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	1.9	NA
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.272 J	ND	ND	0.867 J	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	1.1	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P440***
Jun-1994	*ND*
Jun-1994	*ND*
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	0.001
Apr-1997	*ND*
Apr-2004	0.001
Oct-2004	0.0005
Mar-2009	*ND*
Oct-2009	*ND*
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000056 J*
Mar-2013	0.000101
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*0.000051 J*
Apr-2015	*ND*
Nov-2015	*0.000036 J*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.00012 J*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00006 J*
Oct-2021	*ND*
May-2022	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P441*																
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	0.9 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P441*																
Oct-2004	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	1.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.44	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.58	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	2.14	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	2.12	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	2.01	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.74	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P441*																
Nov-2015	ND	ND	ND	ND	2.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	0.332 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P441*															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	1	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	0.6 J	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	0.7 J	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	4.1	1.5
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	2	1
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	1.4	1.8
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	1.6	0.9 J
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	0.5 J	NA	ND	NA	NA	NA	0.9 J	1
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	1.7
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	2.7	3.1
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	2.9
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	1.9
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.7	2.8
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.4	2.2
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.6	3.2
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	3.1
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	7.3	5.5
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.1	3.2

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P441***															
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.1	3.6
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.7	1.7
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	4.6	2
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	5.6	4.4
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.5	1.9
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*5.6 J*	*3.3 J*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.6	1.6
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.6	1.8
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	8.7	3
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.3	1.8
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.6	3
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.1	2.2
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	10.6	1.6
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.5	1.9
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	11.3	1.7
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.4	1.8
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.06	1.02
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.34 J*	*ND*	*ND*	*ND*	*ND*	*ND*	3.54	1.31
Oct-2013	*0.28 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.27 J*	*ND*	*ND*	*ND*	4.49	1.8
Mar-2014	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.17 J*	*ND*	*0.33 J*	*ND*	*ND*	*ND*	*5.54 J*	1.91
Oct-2014	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	3.67	1.8
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*0.34 J*	*ND*	*ND*	*ND*	3.41	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P441***															
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	2.18	1.32
May-2016	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.4 J	ND	ND	ND	2.7	1.3
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.5 J	ND	ND	ND	3.5	1.5
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.4 J	ND	ND	ND	2.9	1.3
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	0.5 J	ND	ND	ND	3.7	1.5
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	1.4
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6 CL	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	1.1 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.412 J	0.223 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	0.5 J
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P441***															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	1.3	ND	ND	NA	NA	ND	0.7 J	ND	0.5 J	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	0.5 J	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	1	ND	ND	1.5	ND	ND	ND	ND	0.5 J	0.5 J	ND	0.5 J	NA
Mar-2002	ND	ND	ND	NA	0.7 J	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	1.3	ND	ND	1.9	ND	ND	ND	ND	0.6 J	ND	ND	1.1	NA
Mar-2003	ND	ND	ND	NA	1.3	ND	ND	2.1	ND	ND	ND	ND	0.7 J	ND	ND	1.2	NA
Oct-2003	ND	ND	ND	NA	2.4	ND	ND	3.3	ND	ND	ND	ND	1.1	ND	ND	1.9	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P441***															
Apr-2004	ND	ND	ND	NA	1.4	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	1.1	ND	ND	2.2	ND	ND	ND	ND	0.7 J	ND	ND	0.9 J	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	1.5	0.8 J	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.3 R	ND	ND	2.3 J	ND	ND	ND	ND	0.7 J	ND	ND	1.2 J	NA
Sep-2007	ND	ND	ND	ND	1.3	ND	ND	2	ND	ND	ND	ND	0.6 J	ND	ND	0.9 J	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	0.9 J	ND	ND	2.5	ND	ND	ND	ND	0.5 J	ND	ND	1.3	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	1.3	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	0.6 J	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.5 J	ND	ND	0.6 J	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	1.69	ND	ND	ND	ND	0.54 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.07	ND	ND	ND	ND	0.36 J	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	0.5 J	0.26 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	0.6 J	0.35 J	ND	0.33 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	2.22	ND	ND	ND	ND	0.91 J	ND	ND	0.28 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P441***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.32	*ND*	*ND*	*ND*	*ND*	*0.63 J*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.34	*ND*	*ND*	*ND*	*ND*	*0.69 J*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.2 J*	*ND*	*0.1 J*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.1 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P441***
Jun-1994	*ND*
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	0.0017
Apr-1997	0.0008
Apr-2004	0.0018
Oct-2004	0.0007
Mar-2009	0.0003
Oct-2009	0.0003
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	0.0005
Sep-2011	0.0002
Mar-2012	0.0006
Sep-2012	0.00086
Mar-2013	0.0013
Oct-2013	*0.000198 J*
Mar-2014	*ND*
Oct-2014	*0.00006 J*
Apr-2015	*0.000081 J*
Nov-2015	0.000206
May-2016	*ND*
Oct-2016	*0.000071 J*
May-2017	0.00032
Oct-2017	*0.000061 J*
May-2018	0.00042 B
Nov-2018	0.00022
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00014 J*
Oct-2021	*ND*
May-2022	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P584*																
Apr-1995	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	0.6 J	NA	NA	3.2	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	0.7 J	NA	NA	4	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	9.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jan-2001	ND	0.76 J	ND	ND	9.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	0.9 J	ND	ND	13	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND
Apr-2001	ND	1	ND	ND	16	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2001	ND	0.7 J	ND	ND	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	0.7 J	ND	ND	15	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2002	ND	0.6 J	ND	ND	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	ND
Mar-2003	ND	ND	ND	ND	9.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	7.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	5.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P584*																
Oct-2005	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	4.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	5.49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	6.76	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	6.59	0.24 J	ND	ND	ND	ND	ND	ND	0.38 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	5.01	ND	ND	ND	ND	ND	ND	ND	0.32 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	4.26	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	3.91	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	4.74	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	4.2	0.1 J	ND	ND	ND	ND	ND	0.1 J	0.2 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P584*																
Oct-2016	ND	ND	ND	ND	3.4	ND	ND	ND	ND	ND	0.1 J+	0.1 J	0.2 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	3.7	ND	ND	ND	ND	ND	ND	0.1 J	0.2 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	3.4	ND	ND	ND	ND	ND	ND	0.1 J	0.2 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2 J	ND
Nov-2018	ND	ND	ND	ND	1.7 L2M0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	2.64	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P584*															
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	2.1
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	4
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	4.7
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	2.3
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	0.9 J	NA	NA	NA	1.3	6.7
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	1.6	4.4
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	0.8 J	ND	NA	0.8 J	NA	ND	NA	4.5	11
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	1.7	ND	ND	ND	22	20
Jan-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	1.7	ND	ND	ND	ND	21
Feb-2001	0.7 J	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND	2.2	ND	ND	ND	18	23
Apr-2001	1	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	2.6	ND	ND	ND	12	25
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	1.9	ND	ND	ND	8.8	16
Mar-2002	0.9 J	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	3.1	ND	ND	ND	12	20
Sep-2002	0.7 J	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	2.7	ND	ND	ND	13	18
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	2.1	ND	ND	ND	7.9	12
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	1.2	ND	ND	ND	12	11
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	15	9.2
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	14	8.4
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	15	9

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P584***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	12.4	5.5
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	9	5.8
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	13.2	5.3
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 J	ND	ND	ND	10 J	6.8 J
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	1.4	ND	ND	ND	11.8	3.9
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	9.4	5.2
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	9.9	5.4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	9.4	5.5
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	11.6	6.5
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.9 J	6.3
Oct-2010	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	18.7	7.2
Apr-2011	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.1	ND	ND	ND	20.7	9.4
Sep-2011	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5	ND	ND	ND	25.4	9.1
Mar-2012	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND	ND	ND	22.7	9.3
Sep-2012	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.59	ND	ND	ND	8.55	5.98
Mar-2013	0.55 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.11	ND	ND	ND	10.7	8.85
Oct-2013	0.58 J	ND	ND	ND	ND	ND	ND	ND	0.34 J	ND	ND	4.36	ND	ND	ND	10.4	8.15
Mar-2014	0.37 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.16	ND	ND	ND	10.6	8.31
Oct-2014	0.34 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.55	ND	ND	ND	7.23	6.15
Apr-2015	0.32 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.36	ND	ND	ND	6.98	4.91
Nov-2015	0.31 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.74	ND	ND	ND	3.83	5.33
May-2016	0.3 J	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	3	ND	ND	ND	6.4	5.7

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P584***															
Oct-2016	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	4.9	4.6
May-2017	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	2.3	*ND*	*ND*	*ND*	5.6	4.6
Oct-2017	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	2.1	*ND*	*ND*	*ND*	5.1	4.4
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	9	4.5
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3 CL	2.1 N3M1
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	5	3.8 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	5.7	2.5
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	4.8	2.2
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	6.2	2.6
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.886 J*	*ND*	*ND*	*ND*	*2.74 J*	*2.5 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	4.4	2.3
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	3.1	1.1

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P584***															
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	1.1	*ND*	*NA*	2	*ND*	*ND*	*NA*	*NA*	*0.8 J*	1.3	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	1.8	*ND*	*NA*	4.4	*ND*	*ND*	*NA*	*NA*	1.2	1.4	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	**8.3**	*ND*	*ND*	**10**	*ND*	*ND*	*ND*	*ND*	3.1	2.1	*ND*	*ND*	*NA*
Jan-2001	*ND*	*ND*	*ND*	*NA*	**9.8**	*ND*	*ND*	**6.3**	*ND*	*ND*	*ND*	*ND*	2.5	1.6	*ND*	*0.73 J*	*NA*
Feb-2001	*0.6 J*	*ND*	*0.9 J*	*NA*	**14**	*1 J*	*ND*	**15**	*ND*	*ND*	*ND*	*ND*	4.7	1.8	*ND*	1.4	*NA*
Apr-2001	*ND*	*ND*	1.2	*NA*	**19**	1.4	*ND*	**18**	*ND*	*ND*	*ND*	*ND*	**5.8**	1.6	*ND*	1.5	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	**12**	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	2.2	1.2	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*0.8 J*	*NA*	**16**	*0.9 J*	*ND*	**15**	*ND*	*ND*	*ND*	*ND*	4.9	1.3	*ND*	1.7	*NA*
Sep-2002	*ND*	*ND*	*0.5 J*	*NA*	**11**	*ND*	*ND*	**11**	*ND*	*ND*	*ND*	*ND*	3.5	1.2	*ND*	1.2	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	**7**	*ND*	*ND*	4.7	*ND*	*ND*	*ND*	*ND*	2.5	1	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	**7.1**	*ND*	*ND*	4.8	*ND*	*ND*	*ND*	*ND*	1.7	1	*ND*	*0.6 J*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	4.8	*ND*	*ND*	4.9	*ND*	*ND*	*ND*	*ND*	1.8	1.1	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	4.4	*ND*	*ND*	2.8	*ND*	*ND*	*ND*	*ND*	1.4	1.4	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*RW-P584*															
Apr-2005	ND	ND	ND	ND	3.9	ND	ND	4.6	ND	ND	ND	ND	1.7	1.5	ND	ND	NA
Oct-2005	ND	ND	ND	ND	1.6	ND	ND	3.9	ND	ND	ND	ND	1.8	1	ND	0.6 J	NA
Mar-2006	ND	ND	ND	ND	1.8	ND	ND	**5.4**	ND	ND	ND	ND	2.1	1.1	ND	ND	NA
Sep-2006	ND	ND	ND	ND	0.6 J	ND	ND	4.9	ND	ND	ND	ND	2.4	1.9	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.6 R	ND	ND	6.8 J	ND	ND	ND	ND	3 J	ND	ND	0.7 J	NA
Sep-2007	ND	ND	ND	ND	2.5	ND	ND	**8.6**	0.5 J	ND	ND	ND	2.9	1.2	ND	1.5	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	**9.5**	ND	ND	ND	ND	2.5	0.9 J	ND	1.8	NA
Sep-2008	ND	ND	ND	ND	1.8	ND	ND	**7.7**	ND	ND	ND	ND	2.6	1.1	ND	1.7	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	**7.6**	ND	ND	ND	ND	2.7	0.9 J	ND	ND	NA
Oct-2009	ND	ND	ND	ND	1.6	ND	ND	**7.2**	ND	ND	ND	ND	3.7	0.9 J	ND	1.3	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	NA
Oct-2010	ND	ND	ND	ND	2.5	ND	ND	**5.5**	ND	ND	ND	ND	ND	ND	ND	0.9 J	NA
Apr-2011	ND	ND	ND	ND	2.5	ND	ND	**5.4**	ND	ND	ND	ND	**5.6**	ND	ND	0.8 J	NA
Sep-2011	ND	ND	ND	ND	2.3	ND	ND	**5.1**	ND	ND	ND	ND	**6.6**	ND	ND	0.7 J	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	**5.1**	ND	ND	ND	ND	**7.2**	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	1.33	ND	ND	**6.13**	ND	ND	ND	ND	**7.44**	0.85 J	ND	0.29 J	ND
Mar-2013	ND	ND	ND	ND	1.02	ND	ND	**6.48**	ND	ND	ND	ND	**8.3**	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.84 J	ND	ND	**5.5**	ND	ND	ND	ND	**7.22**	0.88 J	ND	0.32 J	ND
Mar-2014	ND	ND	ND	ND	0.58 J	ND	ND	**6.17**	ND	ND	ND	ND	**5.89**	0.74 J	ND	0.23 J	ND
Oct-2014	ND	ND	ND	0.13 J	ND	ND	ND	**6.23**	ND	ND	ND	ND	4.83	0.6 J	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	ND	3.56	0.53 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	ND	3.54	0.42 J	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P584***															
May-2016	ND	ND	ND	0.1 J	0.4 J	ND	ND	4.5	ND	ND	ND	ND	3.9	0.5 J	ND	0.2 J	ND
Oct-2016	ND	ND	ND	0.1 J	0.3 J	ND	ND	3.3	ND	ND	ND	ND	2.8	0.4 J	ND	0.1 J	ND
May-2017	ND	ND	ND	ND	0.3 J	ND	ND	3.6	ND	ND	ND	ND	3	0.2 J	ND	0.1 J	ND
Oct-2017	ND	ND	ND	ND	0.3 J	ND	ND	3.4	ND	ND	ND	ND	2.6	0.4 J	ND	0.1 J	ND
May-2018	ND	ND	ND	ND	1.7	ND	ND	2.7	ND	ND	ND	ND	2.6	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	1.3 M1	ND	ND	ND	ND	0.99 JM1	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND	ND	ND	1.8	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	1.5	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	ND	1.8	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	1.3	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	ND	ND	ND	2.34	ND	ND	ND	ND	1.23	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	1 J	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P584***
Apr-1995	*ND*
Oct-1996	0.0013
Apr-1997	0.0017
Apr-2004	*ND*
Oct-2004	*ND*
Mar-2009	*ND*
Oct-2009	*ND*
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000119 J*
Mar-2013	0.000103
Oct-2013	*0.000073 J*
Mar-2014	*ND*
Oct-2014	*0.000041 J*
Apr-2015	*ND*
Nov-2015	*0.000043 J*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*ND*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	0.00028
Oct-2021	*0.00005 J*
May-2022	0.00045

MCLs and Results are in mg/L unless indicated otherwise

HISTORICAL TABLES –
Surface Water Monitoring Locations

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-1***											
Nov-1993	17	17	0.2	30.9	21.7	8.3	ND	NA	192	15.8	146	58
Apr-1994	42	42	0.1	ND	25.3	3.6	ND	5.9	233	28.8	135	71.77
Apr-1995	12.4	12.4	ND	ND	18	3.1	ND	6	157	17.2	95	36.2
Apr-1997	ND	84	ND	ND	32	0.63	ND	NA	NA	37	229	120
Oct-1997	10	10	0.64	ND	8.4	0.255	ND	6.76	146	ND	80	33
Apr-1998	ND	ND	0.2	ND	2	ND	ND	6.4	242	4.71	22	1.8
Apr-1999	21	21	0.16	ND	125	0.901	ND	5.92	573	27.6	340	111
Oct-1999	30	30	0.1	32	13.6	2.34	ND	5.92	150.3	23.6	99	49
Oct-2000	13	NA	ND	10	67.6	2.21	ND	6.32	302	27.2	184	50.5
Apr-2001	7.5	NA	ND	ND	90.3	1.9	ND	NA	NA	15.3	206	60
Sep-2001	6	6	0.35	ND	63.4	3.51	ND	5.8	176	21.9	156	44.2
Mar-2002	8.5	8.5	ND	26	32.7	ND	ND	5.8	302	21.1	254	46.4
Sep-2002	15	15	ND	ND	55	2.09	ND	5.9	355	14.1	165	46.1
Mar-2003	18	18	ND	ND	93.9	2.02	ND	5.8	469	19.6	244	73.6
Oct-2003	22	22	ND	16	168	1.7	ND	6	691	20.8	378	101
Apr-2004	26	26	ND	ND	130	1.28	ND	6.6	619	18.9	350	73.4
Oct-2004	45	45	ND	19	37.6	1.03	ND	6.8	256	15.5	147	69.8
Apr-2005	23	23	ND	10	102	1.85	ND	6.2	399	15.6	274	65.8
Mar-2006	11	11	ND	ND	109	1.94	ND	5.7	421	17.4	224	51.9
Mar-2007	21	21	ND	ND	133	2.11	ND	6.2	606	18.3	298	59.4
Mar-2008	11	11	ND	12	126	2.23	ND	6	586	16.6	280	55.3
Mar-2009	12	12	ND	ND	118	1.16	ND	5.7	489	13.6	257	42.5
Apr-2010	27	27	ND	ND	115	1.5	ND	7.6	523	27.8	279	64.3
Oct-2010	43	43	0.27	11	42.4	0.55	ND	7	271	16.9	151	51
Apr-2011	24	24	ND	17	167	1.73	ND	7.2	532	16.2	311	57.4
Sep-2011	27	27	0.22	ND	15.1	0.57	ND	7.2	89.8	3.49	75	33.5
Mar-2012	21	21	ND	16	95.9	1.48	ND	6.1	417	18.1	213	50.9
Sep-2012	12.8	12.8	ND	ND	90.3	1.79	ND	5.6	412	13.2	191	41
Mar-2013	14.8	14.8	ND	ND	82.2	1.81	ND	7.1	386	15.1	188	43.1
Oct-2013	14.5	14.5	ND	ND	99.2	1.52	ND	6.7	459	15.4	238	44.5
Mar-2014	25.7	25.7	ND	18	489	1.62	ND	6.1	1139	19	710	60.5
Oct-2014	37.4	37.4	ND	14	187	1.58	ND	6.3	514	16	307	61.9
Apr-2015	21.9	21.9	ND	13	157	1.59	ND	6.5	501	17.1	263	61.3
Nov-2015	23.8	23.8	ND	ND	158	1.36	ND	6.5	482	15.4	285	63.3
May-2016	25.3	25.3	ND	19	109	1.32	ND	6.9	558	14.8	250	51.9
Oct-2016	13.2	13.2	ND	8 J	108	NA	NA	6.9	540	14.1	242	42.4
May-2017	11.7	11.7	ND	9 J	136	1.78	ND	6.8	650	13.3	286	50.4

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-1***											
Oct-2017	14.9	14.9	*ND*	*6 J*	106	2.12	*ND*	6.5	521	13.2	223	42
May-2018	20	20	*ND*	*20.8 J*	109	0.33	*ND*	6.9	474	15.2	187	53.5
Nov-2018	30	30	*ND*	*7.9 J*	120	1.3	*ND*	6.37	610	17.9	270	63.7
May-2019	60	*NA*	*ND*	28.4	35.8	0.2	*ND*	7.2	393	10.3	157	73.3
Oct-2019	16	*NA*	*ND*	*19.3 J*	143	1.3	*ND*	6.92	631	21.8	296	60.5
May-2020	12	12	*ND*	31.4	63.6	1.9	*ND*	6.8	406	11.6	185	48.3
Oct-2020	26	*NA*	*ND*	*ND*	61.7	1.9	*ND*	6.21	375	14.7	146	43.6
Apr-2021	40	*NA*	*ND*	*6.1 J*	69.3	1.6	*ND*	6.61	321	16.4	152	59.8
Oct-2021	*8 J5c*	*NA*	*ND*	*12.6 J*	74.7	2	*ND*	7.02	436	12	177	46.1
May-2022	20	*NA*	*ND*	*ND*	65.9	2	*ND*	6.96	362	13.5	173	46.8 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-1***													
Nov-1993	NA	ND	ND	NA	0.002	14	NA	ND	NA	ND	1.2	NA	**0.034**	5.6	NA
Apr-1994	NA	ND	ND	NA	ND	20	NA	ND	NA	ND	0.42	NA	**0.034**	5.3	NA
Apr-1995	ND	ND	0.5	ND	ND	9.4	NA	ND	ND	ND	0.31	NA	ND	3.1	NA
Oct-1996	ND	ND	0.1	ND	ND	66	58	ND	ND	ND	6.5	1.1	ND	12	11
Apr-1997	ND	ND	0.038	ND	ND	36	35	ND	ND	ND	0.74	0.52	ND	8.8	8.4
Oct-1997	ND	ND	0.041	ND	ND	8.89	NA	ND	ND	ND	0.292	NA	ND	2.77	NA
Apr-1998	ND	ND	0.044	ND	ND	23.7	NA	ND	ND	ND	1.04	NA	ND	6.21	NA
Apr-1999	ND	ND	0.086	ND	ND	31.3	NA	ND	ND	ND	0.345	NA	ND	7.97	NA
Oct-1999	ND	ND	0.067	ND	ND	11.9	NA	ND	ND	ND	0.337	NA	ND	3.67	NA
Oct-2000	ND	ND	0.043	ND	ND	14.2	NA	ND	ND	ND	0.366	NA	ND	3.65	NA
Apr-2001	ND	ND	0.084	ND	ND	16.1	NA	ND	ND	ND	0.546	NA	ND	4.78	NA
Sep-2001	ND	ND	0.056	ND	ND	10.1	NA	ND	ND	ND	1.82	NA	0.003	4.59	NA
Mar-2002	ND	ND	0.044	ND	ND	12.8	NA	ND	ND	ND	0.573	NA	ND	3.51	NA
Sep-2002	ND	ND	0.052	ND	ND	13.2	NA	ND	ND	ND	0.171	NA	ND	3.19	NA
Mar-2003	ND	ND	0.094	ND	ND	19.9	NA	ND	ND	ND	0.258	NA	ND	5.8	NA
Oct-2003	ND	ND	0.126	ND	ND	28.1	NA	ND	ND	ND	0.594	NA	ND	7.54	NA
Apr-2004	ND	ND	0.072	ND	ND	21	NA	ND	ND	ND	0.701	NA	ND	5.11	NA
Oct-2004	ND	ND	0.032	ND	ND	20.1	NA	ND	ND	ND	1.23	NA	0.003	4.73	NA
Apr-2005	ND	0.004	0.058	ND	ND	18.6	NA	ND	ND	ND	1.12	NA	ND	4.69	NA
Mar-2006	ND	ND	0.056	ND	ND	14.4	NA	ND	ND	ND	0.471	NA	ND	3.84	NA
Mar-2007	ND	ND	0.055	ND	ND	17.7	NA	ND	ND	ND	0.116	NA	ND	3.68	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-1***													
Mar-2008	ND	0.002	0.071	ND	ND	15.4	NA	ND	ND	ND	0.208	NA	ND	4.07	NA
Mar-2009	ND	ND	0.055	ND	ND	11.7	NA	ND	ND	ND	0.496	NA	ND	3.22	NA
Apr-2010	ND	ND	0.049	ND	ND	18.7	NA	ND	ND	ND	ND	NA	ND	4.27	NA
Oct-2010	ND	ND	0.02	ND	ND	15	NA	ND	ND	ND	0.339	NA	ND	3.5	NA
Apr-2011	ND	ND	0.054	ND	ND	16.8	NA	ND	ND	ND	0.657	NA	ND	3.77	NA
Sep-2011	ND	ND	0.014	ND	ND	10.4	NA	ND	ND	ND	0.519	NA	ND	1.82	NA
Mar-2012	ND	ND	0.044	ND	ND	14.2	NA	ND	ND	ND	ND	NA	ND	3.74	NA
Sep-2012	ND	ND	0.0428	0.000066 J	ND	11.3	NA	ND	0.000981 J	ND	0.0847	NA	ND	3.1	NA
Mar-2013	ND	ND	0.0436	ND	ND	11.8	NA	0.0022 J	0.0011 J	0.00083 J	0.0408 J	NA	0.0012 J	3.31	NA
Oct-2013	0.000594 J	ND	0.0516	ND	ND	13.1	NA	0.0065 J	0.0012 J	0.00074 J	0.142	NA	0.000333 J	2.86	NA
Mar-2014	0.000455 J	0.000116 J	0.0655	ND	ND	18.1	NA	0.0009 J	0.001 J	0.0012 J	0.185	NA	0.000482 J	3.73	NA
Oct-2014	0.000432 J	0.000397 J	0.0661	ND	ND	17.5	NA	0.000625 J	0.0008 J	0.000969 J	0.169	NA	ND	4.41	NA
Apr-2015	0.000634 J	0.000521 J	0.0611	ND	ND	17.3	NA	0.0013 J	0.0017 J	0.0013 J	0.496	NA	0.0012 J	4.4	NA
Nov-2015	0.000471 J	0.000477 J	0.0549	ND	ND	18.7	NA	0.0012 J	0.0013 J	0.000996 J	0.682	NA	0.000705 J	4.02	NA
May-2016	ND	0.00074 J	0.0542	ND	ND	14.5	NA	0.00081 J	0.00063 J	0.0014 J	0.19 J	NA	0.00055 J	3.81	NA
Oct-2016	ND	ND	0.0552	ND	ND	11.5	NA	0.00074 J	0.0021	0.00078 J	0.34	NA	0.001 J	3.31	NA
May-2017	ND	ND	0.0641	ND	ND	13.8	NA	0.0018 J	0.002	0.0012 J,B	0.248	NA	0.00094 J	3.88	NA
Oct-2017	ND	ND	0.0482	ND	ND	11.8	NA	ND	0.00081 J	ND	ND	NA	ND	3.02	NA
May-2018	0.0001 J	ND	0.057	0.000038 J	0.000065 J	15.1	NA	0.0052 J	0.001	0.003 B	0.42	NA	0.00071 J	3.8	NA
Nov-2018	0.00033 J	0.000072 J	0.04	0.000047 J	0.000054 J	18.3	NA	0.0035 J	0.0016	0.0033	0.91	NA	0.0013	4.4	NA
May-2019	ND	ND	0.021	ND	ND	24.6	NA	ND	0.00069	0.0024	2.5	NA	0.0018	2.9	NA
Oct-2019	0.00016 J	0.00018 J	0.056	0.000096 J	0.00032 J	16.9	NA	0.004 J	0.0016	0.0039	0.92	NA	0.0018	4.4	NA
May-2020	0.00036 J	0.00034 J	0.044	0.00011 J	0.00012 J	13.4	NA	0.0079	0.0022	**0.0026 D6**	0.84	NA	0.0021	3.6	NA
Oct-2020	ND	ND	0.037	ND	ND	12.4	NA	0.0095 J	0.00053 J	ND	0.037 J	NA	ND	3.1	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-1***													
Apr-2021	*ND*	*ND*	0.038	*ND*	*ND*	17.7	*NA*	*0.00043 J*	*ND*	*ND*	0.2	*NA*	*ND*	3.8	*NA*
Oct-2021	*0.000076 J*	*ND*	0.042	*ND*	*ND*	13.1	*NA*	*ND*	*0.00037 J*	*0.00042 J*	0.076	*NA*	*0.00012 J*	3.2	*NA*
May-2022	*ND*	*ND*	0.047	*ND*	*ND*	13.4	*NA*	*0.00054 J*	*0.00054 J*	*ND*	*0.046 J*	*NA*	*ND*	3.3	*NA*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*SW-1*												
Nov-1993	0.2	NA	ND	NA	4.1	NA	ND	NA	16.9	NA	NA	NA	0.02
Apr-1994	0.064	NA	ND	NA	2.7	NA	ND	NA	11	NA	NA	NA	0.022
Apr-1995	0.05	NA	ND	ND	1.7	NA	ND	ND	7.1	NA	ND	ND	0.04
Oct-1996	0.57	0.076	NA	ND	ND	ND	ND	ND	7.7	8.7	ND	ND	0.43
Apr-1997	0.14	0.13	ND	ND	4.2	4	ND	ND	19	18	ND	ND	0.047
Oct-1997	0.049	NA	NA	ND	1.98	NA	ND	ND	13.6	NA	ND	ND	ND
Apr-1998	0.041	NA	ND	3.09	ND	NA	ND	17.5	ND	NA	ND	0.025	NA
Apr-1999	0.07	NA	NA	ND	3.91	NA	ND	ND	67.9	NA	ND	ND	0.01
Oct-1999	0.076	NA	NA	ND	2.93	NA	ND	ND	44.8	NA	ND	ND	ND
Oct-2000	0.036	NA	NA	ND	3.15	NA	ND	ND	40.6	NA	ND	ND	ND
Apr-2001	0.1	NA	NA	ND	2.48	NA	ND	ND	46.3	NA	ND	ND	ND
Sep-2001	0.052	NA	NA	0.023	3.79	NA	ND	ND	37.4	NA	ND	ND	0.015
Mar-2002	0.025	NA	NA	ND	2.64	NA	ND	ND	66.9	NA	ND	ND	0.012
Sep-2002	0.059	NA	NA	ND	2.4	NA	ND	ND	35.1	NA	ND	ND	0.012
Mar-2003	0.116	NA	NA	ND	2.77	NA	ND	ND	62.9	NA	ND	ND	ND
Oct-2003	0.182	NA	NA	ND	2.28	NA	ND	ND	91.7	NA	ND	ND	0.021
Apr-2004	0.116	NA	ND	ND	2.42	NA	ND	ND	103	NA	ND	ND	0.035
Oct-2004	0.042	NA	ND	ND	3.49	NA	ND	ND	28.5	NA	ND	ND	0.048
Apr-2005	0.063	NA	ND	ND	3.17	NA	ND	ND	66.4	NA	ND	ND	0.011
Mar-2006	0.026	NA	ND	ND	2.28	NA	ND	ND	52.1	NA	ND	ND	0.048
Mar-2007	0.039	NA	ND	ND	2.78	NA	ND	ND	73	NA	ND	ND	ND
Mar-2008	0.051	NA	ND	ND	2.96	NA	ND	ND	79.3	NA	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-1***												
Mar-2009	0.06	NA	0.0002	ND	2.26	NA	ND	ND	63	NA	ND	ND	0.01
Apr-2010	0.038	NA	ND	ND	2.52	NA	ND	ND	62	NA	ND	ND	ND
Oct-2010	0.014	NA	ND	ND	2.74	NA	ND	ND	29.2	NA	ND	ND	ND
Apr-2011	0.049	NA	ND	ND	2.46	NA	ND	ND	76.7	NA	ND	ND	ND
Sep-2011	0.015	NA	ND	ND	1.16	NA	ND	ND	10.1	NA	ND	ND	ND
Mar-2012	0.038	NA	ND	ND	2.41	NA	ND	ND	55.8	NA	ND	ND	ND
Sep-2012	0.0339	NA	ND	0.0014 J	2.43	NA	0.000504 J	ND	51.5	NA	ND	ND	0.0053 J
Mar-2013	0.0335	NA	0.000055 J	0.0015 J	2.4	NA	0.000445 J	0.00002 J	41.3	NA	ND	ND	0.0172
Oct-2013	0.0329	NA	ND	0.0017 J	2.19	NA	ND	0.000026 J	58.8	NA	0.000724 J	ND	0.0162
Mar-2014	0.0326	NA	ND	0.0016 J	2.34	NA	0.0011 J	ND	216	NA	ND	0.000342 J	0.0106
Oct-2014	0.0244	NA	0.00004 J	0.0033 J	2.62	NA	0.0014 J	ND	82.5	NA	ND	ND	0.0073 J
Apr-2015	0.0572	NA	ND	0.0034 J	2.76	NA	0.0013 J	ND	76.8	NA	ND	0.0011 J	0.0153
Nov-2015	0.0414	NA	ND	0.0027 J	2.95	NA	0.0012 J	ND	74.5	NA	0.000195 J	0.00091 J	0.0067 J
May-2016	0.0216	NA	ND	0.0021 J	2.66	NA	0.0006 J	ND	64.3	NA	ND	0.00049 J	0.0123 J
Oct-2016	0.0512	NA	ND	0.0025 J	2.34	NA	0.0006 J	ND	66.7	NA	ND	0.00064 J	0.0079 J
May-2017	0.0382	NA	ND	0.0019 J,B	2.47	NA	0.00068 J	ND	76	NA	ND	0.00047 J	0.0144 JB
Oct-2017	0.0203	NA	ND	0.0013 JB	2.31	NA	0.00059 J	ND	59.6	NA	ND	ND	0.0062 J
May-2018	0.043	NA	ND	0.0034	2.2 J	NA	0.0013 JB	ND	73.2	NA	ND	ND	0.0092 B
Nov-2018	0.057	NA	ND	0.0035	1.9 J	NA	0.00075 J	ND	80.2	NA	0.000095 J	0.0041	0.01
May-2019	0.063	NA	ND	0.0035	ND	NA	ND	ND	24.1	NA	ND	0.0059	0.019
Oct-2019	0.05	NA	ND	0.0037	2.6 J	NA	0.0013 J	ND	96.3	NA	ND	ND	0.015
May-2020	0.056	NA	ND	0.0054	2.3 J	NA	0.001 J	ND	38.6	NA	ND	0.0012 D6	0.011 D6
Oct-2020	0.011	NA	ND	ND	2.3 J	NA	ND	ND	39.7	NA	ND	0.0027 J	ND
Apr-2021	0.013	NA	ND	ND	2.3	NA	ND	ND	43.4	NA	ND	ND	0.0066 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-1***												
Oct-2021	0.009	*NA*	*ND*	*0.0012 J*	2.2	*NA*	*ND*	*ND*	48.4	*NA*	*ND*	*0.00028 J*	*0.0035 J*
May-2022	0.012	*NA*	*ND*	*0.0014 J*	2.3	*NA*	*ND*	*ND*	42.6	*NA*	*ND*	*ND*	0.0055

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***SW-1***																
Nov-1993	NA	ND	ND	ND	ND	ND	NA	NA	NA	NA	ND	ND	NA	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	23	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.5	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-1*																
Jun-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.46 J*	*ND*	*ND*	*4.84 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.09 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.25 J,B*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-1*																
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.4 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-1***															
Nov-1993	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA	NA	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-1***															
Jun-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-1***															
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-1***															
Nov-1993	ND	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-1***															
May-2005	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jun-2005	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	1.7	2.1 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-1***															
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-2***											
Nov-1993	28	28	ND	39.3	18.4	1.3	ND	5.8	306	80	200	104
Apr-1994	30	30	0.2	22.7	8.6	0.5	ND	6.15	164	26.1	107	61.88
Apr-1995	23.7	23.7	ND	ND	13.7	0.7	ND	6.5	140	23.7	70	47
Apr-1997	ND	24	ND	ND	11	0.21	ND	NA	NA	32	192	54
Apr-1997	ND	17	ND	ND	14	0.22	ND	NA	NA	27	164	21
Oct-1997	23	23	0.39	ND	25.8	2.54	ND	6.83	92.2	15.1	17	36
Apr-1998	13	13	0.33	11	6.7	0.2	ND	6.29	164.7	18.4	72	37
Apr-1999	31	31	0.29	14	20.4	0.503	ND	5.99	296	46.6	480	89
Oct-1999	4	4	0.2	ND	4.95	ND	ND	5.62	62.2	13.8	40	15
Oct-2000	30	NA	ND	16	18.1	ND	ND	6.69	130.4	10.5	90	50.3
Apr-2001	36	NA	ND	17	14.9	ND	ND	NA	NA	15.5	151	77.2
Sep-2001	45	45	0.25	22	16.2	ND	ND	7.2	202	22.2	121	70.5
Mar-2002	46	46	ND	28	13.7	ND	ND	7.1	388	116	256	104
Sep-2002	80	80	ND	21	10.3	ND	ND	7.4	327	49.2	206	140
Mar-2003	45	45	ND	25	19	0.254	ND	7.1	212	23.6	133	71.6
Oct-2003	39	39	ND	23	29.4	0.358	ND	6.7	233	10.3	174	59.6
Apr-2004	110	110	ND	46	30	1.63	ND	7.7	372	31	248	143
Oct-2004	35	35	ND	26	23.1	0.53	ND	6.95	160.2	15.7	121	60.4
Apr-2005	42	42	ND	21	13.9	0.36	ND	6.5	131.7	14.2	185	61.9
Mar-2006	30	30	ND	ND	31.7	0.42	ND	6.9	192.3	24.6	146	58.6
Mar-2007	49	49	ND	19	54.6	0.44	ND	6.9	401	20.1	165	72.8
Mar-2008	43	43	ND	26	60.8	0.29	ND	7.1	392	25.3	199	74.3
Mar-2009	28	28	ND	ND	45.5	0.26	ND	6	320	19.3	160	51
Apr-2010	32	32	ND	23	42.9	0.39	ND	7	188.5	16.9	132	50.6
Oct-2010	59	59	ND	26	45.7	0.15	ND	7.6	309	26.2	214	96.1
Apr-2011	37	37	ND	20	53.7	0.47	ND	6.8	210	19.8	160	59.4
Sep-2011	89	89	ND	43	26	0.44	0.03	7.2	279	21.3	208	109
Mar-2012	23	23	ND	ND	56.6	0.43	0.02	6.1	202	12.9	140	45.7
Sep-2012	32.8	32.8	ND	81.1	24.5	0.212	ND	5.7	146.9	11.4	116	50.3
Mar-2013	31.9	31.9	ND	19.5	43.9	0.229	ND	6.9	310	19.7	162	52.6
Oct-2013	48.6	48.6	ND	42.8	11.4	0.293	ND	7.2	174.5	29.7	161	74.3
Mar-2014	33.2	33.2	ND	37	73.9	0.246	ND	6.5	354	22.7	204	62.1
Oct-2014	44	44	ND	23	45.2	0.0948	ND	6.9	177.5	11.7	131	49.9
Apr-2015	108	108	0.195 J	53	81.9	0.987	ND	6.4	528	25.1	338	137
Nov-2015	60	60	ND	33	37.5	0.362	ND	7.4	310	27.7	250	95.2
May-2016	53.8	53.8	ND	21	56.4	0.104	ND	6.2	354	12.8	194	77.4
Oct-2016	112	112	ND	97	32.6	NA	NA	7.1	565	55	356	154

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-2***											
May-2017	51.8	51.8	*ND*	20	37.4	0.504	*ND*	6.9	368	15	151	74
Oct-2017	63.2	63.2	*ND*	30	4.97	*ND*	*ND*	6.9	238	9.23	102	71.5
May-2018	60	60	0.16	42.3	33.2	*ND*	0.021	6	234	13.7	68	81.7
Nov-2018	88	88	*0.052 J*	*20.8 J*	24.2	0.21	*0.0069 J*	7.99	328	17.1	147	104
May-2019	78	*NA*	*ND*	*ND*	53.6	0.38	0.013	7.49	374	15.8	206	93.8
Oct-2019	122	*NA*	*ND*	*12.6 J*	8.9	0.29	*ND*	7.24	872	*5.1 J*	122	134
May-2020	68	68	*ND*	55.9	46.9	0.46	*0.0057 J*	7.25	530	10.9	199	84.5
Oct-2020	92	*NA*	*ND*	29.6	15.1	0.21	*ND*	6.93	327	16.1	146	121
Apr-2021	80	*NA*	*ND*	*14.8 J*	41	0.44	*ND*	8.19	304	16.6	150	97.8
Oct-2021	20	*NA*	*ND*	*17 J*	27.8	0.61	*ND*	6.55	365	10.5	164	113
May-2022	72	*NA*	*ND*	26	38.8	*0.095 J*	*ND*	7.11	362	12.8	172	99.3 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-2***													
Nov-1993	NA	ND	ND	NA	ND	32.3	NA	ND	NA	ND	0.2	NA	ND	5.8	NA
Apr-1994	NA	ND	0.008	NA	ND	20	NA	ND	NA	ND	0.37	NA	ND	2.9	NA
Apr-1995	ND	ND	ND	ND	ND	14.7	NA	ND	ND	ND	0.6	NA	0.006	2.5	NA
Oct-1996	ND	ND	0.028	ND	ND	15	14	ND	ND	ND	1.1	1.1	ND	3.1	2.8
Apr-1997	ND	ND	0.029	ND	ND	15	16	ND	ND	ND	0.71	0.7	ND	3.2	3.5
Apr-1997	ND	ND	0.035	ND	ND	11	12	ND	ND	ND	0.79	0.56	ND	3	3.1
Oct-1997	ND	ND	0.031	ND	ND	9.35	NA	ND	ND	ND	1.46	NA	ND	2.19	NA
Apr-1998	ND	ND	0.03	ND	ND	10.4	NA	ND	ND	ND	1.01	NA	ND	2.63	NA
Apr-1999	ND	ND	0.066	ND	ND	25.4	NA	0.03	0.013	0.015	12.5	NA	ND	6.09	NA
Oct-1999	ND	ND	0.045	ND	ND	22.5	NA	ND	ND	ND	1.03	NA	ND	5.03	NA
Oct-2000	ND	ND	0.036	ND	ND	14.4	NA	ND	ND	ND	0.311	NA	ND	3.48	NA
Apr-2001	ND	ND	0.03	ND	ND	22.7	NA	ND	ND	ND	0.326	NA	ND	4.98	NA
Sep-2001	ND	ND	0.031	ND	ND	21.1	NA	ND	ND	ND	0.502	NA	ND	4.35	NA
Mar-2002	ND	ND	0.039	ND	ND	31	NA	ND	ND	ND	0.68	NA	ND	6.53	NA
Sep-2002	ND	ND	0.025	ND	ND	43.8	NA	ND	ND	ND	0.286	NA	ND	7.55	NA
Mar-2003	ND	ND	0.026	ND	ND	21.9	NA	ND	ND	0.01	0.257	NA	ND	4.11	NA
Oct-2003	ND	ND	0.04	ND	ND	17.2	NA	ND	ND	ND	0.8	NA	ND	4.06	NA
Apr-2004	ND	0.002	0.034	ND	ND	44.5	NA	ND	ND	0.012	0.378	NA	0.003	7.88	NA
Oct-2004	ND	ND	0.041	ND	ND	17.5	NA	ND	ND	ND	0.271	NA	ND	4.06	NA
Apr-2005	ND	0.003	0.03	ND	ND	18.9	NA	ND	ND	ND	1.69	NA	0.003	3.57	NA
Mar-2006	ND	ND	0.038	ND	ND	16.2	NA	ND	ND	ND	0.071	NA	ND	4.41	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-2***													
Mar-2007	ND	ND	0.029	ND	ND	23.7	NA	ND	ND	ND	0.478	NA	ND	4.1	NA
Mar-2008	ND	0.003	0.032	ND	ND	22	NA	ND	ND	ND	0.399	NA	ND	4.7	NA
Mar-2009	ND	ND	0.028	ND	ND	14.5	NA	ND	ND	ND	0.391	NA	ND	3.59	NA
Apr-2010	ND	ND	0.039	ND	ND	14.8	NA	ND	ND	ND	0.329	NA	ND	3.31	NA
Oct-2010	ND	ND	0.038	ND	ND	29	NA	ND	ND	ND	0.311	NA	ND	6.09	NA
Apr-2011	ND	ND	0.041	ND	ND	17.5	NA	ND	ND	ND	0.436	NA	ND	3.82	NA
Sep-2011	ND	0.003	0.035	ND	ND	33.8	NA	ND	ND	ND	1.18	NA	ND	5.94	NA
Mar-2012	ND	ND	0.046	ND	ND	12.5	NA	ND	ND	ND	0.727	NA	ND	3.51	NA
Sep-2012	ND	0.0013 J	0.0369	0.00007 J	ND	14.3	NA	ND	0.0016 J	0.0013 J	1.13	NA	ND	3.55	NA
Mar-2013	ND	ND	0.0303	ND	ND	15.1	NA	0.0027 J	0.0017 J	0.0018 J	0.671	NA	0.0014 J	3.62	NA
Oct-2013	0.000546 J	ND	0.033	ND	0.000306 J	23.5	NA	0.0066 J	0.0013 J	0.0045 J	1.03	NA	0.004	3.79	NA
Mar-2014	0.000427 J	0.000355 J	0.0333	ND	ND	18.2	NA	0.0014 J	0.0017 J	0.002 J	0.43	NA	ND	4.04	NA
Oct-2014	0.00048 J	0.000872 J	0.0412	ND	ND	13.6	NA	0.001 J	0.000988 J	0.000866 J	0.549	NA	ND	3.88	NA
Apr-2015	0.000938 J	0.0022	0.039	ND	0.000074 J	42.4	NA	0.002 J	0.0015 J	0.0053 J	0.66	NA	0.0012 J	7.44	NA
Nov-2015	0.000754 J	0.0036	0.0675	0.000225 J	0.000081 J	30.1	NA	0.0201	0.0017 J	0.0051 J	6.97	NA	0.0079	4.86	NA
May-2016	ND	0.0011 J	0.0403	ND	ND	22.7	NA	0.0015 J	0.0014	0.00071 J	1.93	NA	0.00028 J	5.06	NA
Oct-2016	0.00066 J	0.0036 J	0.0535	ND	ND	41.8	NA	0.0021 J	0.0009 J	0.0042	1.14	NA	0.00083 J	12.1	NA
May-2017	ND	0.0013 J	0.0195	ND	ND	22.5	NA	0.0017 J	0.00081 J	0.0016 J	1.44	NA	0.00055 J	4.3	NA
Oct-2017	ND	0.0017 J	0.0128	ND	ND	21.6	NA	0.0012 J	0.00043 J	0.0012 J	0.619	NA	0.00046 J	4.28	NA
May-2018	0.0003 J	0.00094 JB	0.02	ND	0.000022 J	24.4	NA	0.0042 J	0.0012	0.0038 B	1.3	NA	0.00042 J	5.1	NA
Nov-2018	0.00015 J	0.00032 J	0.026	0.00003 J	ND	32	NA	0.0025 J	0.00058	0.0027	0.93	NA	0.00032 J	5.8	NA
May-2019	ND	ND	0.035	ND	ND	28.2	NA	ND	0.0011	ND	1.2	NA	ND	5.7	NA
Oct-2019	0.00014 J	0.00036 J	0.033	ND	0.00019 J	38.1	NA	0.0018 J	0.0004 J	0.0062	0.84	NA	0.0002 J	9.4	NA
May-2020	0.00013 J	ND	0.033	ND	ND	24.8	NA	0.0043 J	0.00092	0.0017 J	0.9	NA	ND	5.5	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-2***													
Oct-2020	*0.00031 J*	*ND*	0.032	*ND*	*ND*	37.5	*NA*	*0.0092 J*	*0.00061 J*	*ND*	0.84	*NA*	*ND*	6.6	*NA*
Apr-2021	*ND*	*ND*	0.035	*ND*	*ND*	29.2	*NA*	*0.0011 J*	*0.00087 J*	*ND*	1.1	*NA*	*ND*	6	*NA*
Oct-2021	*0.00012 J*	*0.00067 J*	0.039	*ND*	*ND*	32.1	*NA*	*ND*	*0.00032 J*	*0.00031 J*	0.43	*NA*	*0.000066 J*	7.9	*NA*
May-2022	*ND*	*0.0013 J*	0.03	*ND*	*ND*	29.7	*NA*	*0.0014 J*	*0.00074 J*	*0.0015 J*	1.5	*NA*	0.00056	6.1	*NA*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-2***												
Nov-1993	0.1	NA	ND	NA	6.2	NA	ND	NA	6.7	NA	NA	NA	ND
Apr-1994	0.061	NA	ND	NA	3.3	NA	ND	NA	4.8	NA	NA	NA	0.014
Apr-1995	0.02	NA	ND	ND	3.6	NA	ND	ND	4.7	NA	ND	ND	0.03
Oct-1996	0.062	0.047	NA	ND	ND	ND	ND	ND	4.9	4.7	ND	ND	0.04
Apr-1997	0.062	0.065	ND	ND	3.1	3.6	ND	ND	5.7	6.3	ND	ND	0.037
Apr-1997	0.059	0.065	ND	ND	3.4	3.5	ND	ND	6.1	7.2	ND	ND	ND
Oct-1997	0.105	NA	NA	ND	2.16	NA	ND	ND	1.65	NA	ND	ND	0.017
Apr-1998	0.069	NA	ND	2.16	ND	NA	ND	3.59	ND	NA	ND	0.05	NA
Apr-1999	0.141	NA	NA	0.047	5.54	NA	ND	ND	11.7	NA	ND	0.046	0.11
Oct-1999	0.138	NA	NA	0.016	11.3	NA	ND	ND	8.72	NA	ND	ND	0.011
Oct-2000	0.057	NA	NA	ND	3.63	NA	ND	ND	8.6	NA	ND	ND	ND
Apr-2001	0.071	NA	NA	0.011	4.57	NA	ND	ND	17.6	NA	ND	ND	0.015
Sep-2001	0.059	NA	NA	ND	4.39	NA	ND	ND	11.1	NA	ND	ND	0.012
Mar-2002	0.054	NA	NA	ND	5.48	NA	ND	ND	37.7	NA	ND	ND	0.012
Sep-2002	0.023	NA	NA	0.022	6.52	NA	ND	ND	5.22	NA	ND	ND	0.032
Mar-2003	0.063	NA	NA	0.014	5.32	NA	ND	ND	14	NA	ND	ND	0.023
Oct-2003	0.052	NA	NA	ND	4.41	NA	ND	ND	17	NA	ND	ND	0.012
Apr-2004	0.029	NA	ND	ND	14	NA	ND	ND	25.6	NA	ND	ND	0.023
Oct-2004	0.028	NA	ND	ND	7.12	NA	ND	ND	14.8	NA	ND	ND	ND
Apr-2005	0.048	NA	ND	ND	3.92	NA	ND	ND	10.2	NA	ND	ND	0.039
Mar-2006	ND	NA	ND	ND	2.75	NA	ND	ND	17	NA	ND	ND	ND
Mar-2007	0.039	NA	ND	ND	3.53	NA	ND	ND	27.7	NA	ND	ND	0.014

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-2***												
Mar-2008	0.048	NA	ND	ND	3.57	NA	ND	ND	34.8	NA	ND	ND	ND
Mar-2009	0.052	NA	ND	ND	2.57	NA	ND	ND	21.4	NA	ND	ND	ND
Apr-2010	0.03	NA	ND	ND	3.25	NA	ND	ND	23.2	NA	ND	ND	0.011
Oct-2010	0.026	NA	ND	ND	6.05	NA	ND	ND	25.2	NA	ND	ND	ND
Apr-2011	0.044	NA	ND	ND	2.7	NA	ND	ND	26.1	NA	ND	ND	ND
Sep-2011	0.037	NA	ND	ND	9.74	NA	ND	ND	16.3	NA	ND	ND	ND
Mar-2012	0.043	NA	ND	ND	3.2	NA	ND	ND	29.9	NA	ND	ND	ND
Sep-2012	0.06	NA	ND	0.0027 J	5.93	NA	0.000415 J	ND	14.2	NA	ND	ND	0.0057 J
Mar-2013	0.0394	NA	0.000056 J	0.0039 J	3.39	NA	ND	ND	22.6	NA	ND	ND	0.0193
Oct-2013	0.0259	NA	ND	0.0071 J	8.3	NA	ND	0.000018 J	6.88	NA	ND	0.0079 J	0.0186
Mar-2014	0.0396	NA	ND	0.0036 J	3.26	NA	ND	ND	38.9	NA	ND	0.0021 J	0.0106
Oct-2014	0.0312	NA	0.000022 J	0.0019 J	4.19	NA	ND	ND	23.2	NA	ND	0.0011 J	0.0051 J
Apr-2015	0.0453	NA	ND	0.0067 J	12.1	NA	ND	ND	58.6	NA	ND	0.0043 J	0.0131
Nov-2015	0.0381	NA	ND	0.0051 J	6.95	NA	0.0013 J	ND	19.4	NA	0.000222 J	0.0234	0.0103
May-2016	0.058	NA	ND	0.0018 J	2.7	NA	ND	ND	30.6	NA	ND	0.0011	0.0129 J
Oct-2016	0.0327	NA	ND	0.0061	23.1	NA	ND	ND	19.4	NA	ND	0.0033	0.0059 J
May-2017	0.0309	NA	ND	0.0019 J,B	3.42	NA	ND	ND	21.6	NA	ND	0.0018	0.0072 JB
Oct-2017	0.0125	NA	ND	0.0012 JB	4.86	NA	ND	ND	3.68	NA	ND	0.0021	ND
May-2018	0.062	NA	ND	0.005	3.9 J	NA	0.0011 JB	ND	19.7	NA	ND	0.00034 J	0.007 B
Nov-2018	0.026	NA	ND	0.0039	4 J	NA	0.00019 J	ND	14.8	NA	ND	0.0048	0.0052
May-2019	0.067	NA	ND	0.0021	ND	NA	ND	ND	29.4	NA	ND	0.0045	0.0051
Oct-2019	0.026	NA	ND	0.00074	2.4 J	NA	ND	ND	5.9	NA	ND	0.0032	0.011
May-2020	0.042	NA	ND	0.0016	2.8 J	NA	ND	ND	25.5	NA	ND	0.0027	0.0029 J
Oct-2020	0.019	NA	ND	0.0029	4.8 J	NA	ND	ND	9.9	NA	ND	0.0051	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-2***												
Apr-2021	0.032	*NA*	*ND*	*0.0016 J*	4	*NA*	*ND*	*ND*	24.6	*NA*	*ND*	*0.0021 J*	*0.0043 J*
Oct-2021	0.017	*NA*	*ND*	*0.00075 J*	4.9	*NA*	*ND*	*ND*	17.8	*NA*	*ND*	*0.00056 J*	*ND*
May-2022	0.031	*NA*	*ND*	*0.0018 J*	6.3	*NA*	*ND*	*ND*	28.1	*NA*	*ND*	*0.0024 J*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***SW-2***																
Nov-1993	NA	ND	ND	ND	ND	ND	NA	NA	NA	NA	ND	ND	NA	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5 J	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2002	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jan-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-2*																
Apr-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.93 J*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.72 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.67 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.47 J*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.36 J,B*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-2*																
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.7	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.5	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.3	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.2 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*SW-2*															
Nov-1993	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA	NA	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jan-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-2***															
Apr-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-2***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-2***															
Nov-1993	*ND*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jul-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jun-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Dec-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jan-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-2***															
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.1 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 R	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-2***															
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-3***											
Apr-1995	10.3	10.3	*ND*	*ND*	14.4	0.8	*ND*	6.2	157	18.5	66	19.2
Apr-1997	*ND*	15	*ND*	*ND*	22	0.35	*ND*	*NA*	*NA*	13	109	35
Oct-1997	12	12	0.44	17	4.53	*ND*	*ND*	6.7	121	15.4	41	28
Apr-1998	43	43	0.25	26	3.22	*ND*	*ND*	7.23	212	36.3	140	88
Apr-1999	20	20	0.14	*ND*	103	0.416	*ND*	6.18	369	13.6	260	51
Oct-2000	23	*NA*	*ND*	27	39.4	*ND*	*ND*	7.2	170.6	21	105	42.5
Apr-2001	15	*NA*	*ND*	12	18.9	0.395	*ND*	*NA*	*NA*	6.13	131	40
Sep-2001	28	28	0.26	33	35.3	1.38	*ND*	7.1	318	13.3	123	48
Mar-2002	88	88	*ND*	29	187	3.74	*ND*	7.1	444	61.7	353	210
Sep-2002	14	14	*ND*	*ND*	29.8	*ND*	*ND*	6.4	231	14.6	111	44.1
Mar-2003	13	13	*ND*	14	49.1	0.239	*ND*	5.8	209	14.1	118	34.7
Oct-2003	26	26	*ND*	21	47.4	0.398	*ND*	6.3	268	9	131	51.5
Apr-2004	15	15	*ND*	11	53.7	0.49	*ND*	7.1	252	11.3	130	40.1
Oct-2004	20	20	*ND*	18	45.4	0.61	*ND*	7	179.6	8.04	128	45
Apr-2005	13	13	*ND*	12	45.4	0.48	*ND*	6.5	176	11.5	150	39.1
Mar-2006	13	13	*ND*	*ND*	59.5	0.65	*ND*	6.7	209	12.1	148	38.2
Mar-2007	14	14	0.51	11	131	0.56	*ND*	5.9	544	13.3	220	45.9
Mar-2008	15	15	0.38	12	104	0.35	*ND*	6.5	445	12.6	210	40.2
Mar-2009	13	13	*ND*	*ND*	85.8	0.26	*ND*	6.1	387	9.7	206	39.7
Apr-2010	21	21	*ND*	17	62.4	0.44	*ND*	7.4	359	14.8	157	39.6
Oct-2010	116	116	*ND*	45	22.7	0.26	*ND*	7.4	375	56.3	294	174
Apr-2011	104	104	*ND*	38	6.96	*ND*	*ND*	8.1	301	46.7	244	65.5
Sep-2011	130	130	*ND*	57	18.4	0.51	0.05	7.3	311	27.5	277	139
Mar-2012	20	20	*ND*	*ND*	90.2	0.45	0.03	6.3	400	13.8	206	48.1
Sep-2012	131	131	*ND*	32.9	17.7	0.304	*ND*	6.4	440	27.6	258	167
Mar-2013	94.2	94.2	*ND*	93.1	1.78	*ND*	*ND*	8.4	323	45.1	196	126
Oct-2013	55.2	55.2	*0.113 J*	46.7	4.53	0.522	*ND*	7.4	151.7	23.1	172	77
Mar-2014	15	15	*ND*	25	162	0.415	*ND*	6.2	543	22.2	274	48.3
Oct-2014	30.8	30.8	*ND*	21	88.6	0.123	*ND*	6.9	356	14	201	59.3
Apr-2015	24.6	24.6	*ND*	12	107	0.332	*ND*	6.1	404	17	250	56.5
Nov-2015	46.3	46.3	*ND*	18	108	0.299	*ND*	7.4	510	15.6	275	98
May-2016	50.6	50.6	*ND*	15	100	0.323	*ND*	6.8	515	18.7	258	87.4
Oct-2016	81.3	81.3	*ND*	47	7.37	*NA*	*NA*	7.1	332	25.8	213	107
May-2017	43.8	43.8	*ND*	14	80.8	0.357	0.132	7	547	23.5	218	82.1
Oct-2017	30.2	30.2	*ND*	13	12.2	0.063	*ND*	6.5	167.7	14.1	74	41.8
May-2018	30	30	*0.045 J*	27.2	49.1	*ND*	*ND*	5.3	275	25.6	68	62.4
Nov-2018	114	114	*ND*	31.5	3	*0.063 J*	*ND*	8.58	313	19.8	63	124

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-3***											
May-2019	70	*NA*	*ND*	*ND*	71.3	*ND*	*ND*	7.06	433	18.4	228	93.1
Oct-2019	100	*NA*	*ND*	30.3	53.5	0.11	0.014	7.35	439	17.2	226	131
May-2020	98	98	*ND*	29.1	4.9	1.2	**0.017 D6D8**	7.61	354	17.4	181	120
Oct-2020	140	*NA*	*ND*	36.4	*1.8 J*	0.1	*ND*	7.96	380	20.6	146	138
Apr-2021	100	*NA*	*ND*	27.8	4.1	0.42	*0.0095 J*	9.55	232	12	119	111
Oct-2021	110	*NA*	*ND*	*ND*	77.1 ML	0.87	*ND*	7.07	562	*9.8 J*	241	107
May-2022	116	*NA*	0.17	28.3	4	0.53	*0.0078 J*	7.1	352	15.9	159	138 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*SW-3*													
Apr-1995	ND	ND	ND	ND	ND	4.4	NA	ND	ND	ND	0.44	NA	ND	2	NA
Oct-1996	ND	ND	0.037	ND	ND	9.5	8.8	ND	ND	ND	0.7	0.42	ND	2.8	2.8
Apr-1997	ND	ND	0.049	ND	ND	9.1	7.9	ND	ND	ND	1.6	0.34	0.008	2.8	2.5
Oct-1997	ND	ND	0.04	ND	ND	7.1	NA	ND	ND	ND	0.784	NA	ND	2.63	NA
Apr-1998	ND	ND	0.017	ND	ND	27	NA	ND	0.041	ND	1.2	NA	ND	4.94	NA
Apr-1999	ND	ND	0.052	ND	ND	14.3	NA	ND	ND	ND	1.64	NA	ND	3.68	NA
Oct-1999	ND	ND	0.059	ND	ND	11.9	NA	ND	ND	ND	1.18	NA	ND	3.71	NA
Oct-2000	ND	ND	0.038	ND	ND	11.3	NA	ND	ND	ND	0.687	NA	ND	3.49	NA
Apr-2001	ND	ND	0.044	ND	ND	10.4	NA	ND	ND	ND	0.287	NA	ND	3.41	NA
Sep-2001	ND	ND	0.044	ND	ND	13.1	NA	ND	ND	ND	0.495	NA	ND	3.7	NA
Mar-2002	ND	ND	0.043	ND	ND	63.2	NA	ND	ND	ND	0.974	NA	ND	12.7	NA
Sep-2002	ND	ND	0.046	ND	ND	11.8	NA	ND	ND	ND	0.141	NA	ND	3.58	NA
Mar-2003	ND	ND	0.038	ND	ND	9.34	NA	ND	ND	ND	0.171	NA	ND	2.78	NA
Oct-2003	ND	ND	0.049	ND	ND	13.9	NA	ND	ND	ND	1.5	NA	ND	4.04	NA
Apr-2004	ND	ND	0.047	ND	ND	10.5	NA	ND	ND	ND	0.536	NA	ND	3.35	NA
Oct-2004	ND	ND	0.045	ND	ND	11.7	NA	ND	ND	ND	0.28	NA	ND	3.8	NA
Apr-2005	ND	0.003	0.043	ND	ND	10.2	NA	ND	ND	ND	0.411	NA	ND	3.3	NA
Mar-2006	ND	ND	0.051	ND	ND	9.61	NA	ND	ND	ND	0.145	NA	ND	3.46	NA
Mar-2007	ND	ND	0.056	ND	ND	13.2	NA	ND	ND	ND	0.139	NA	ND	3.62	NA
Mar-2008	ND	ND	0.046	ND	ND	10.5	NA	ND	ND	ND	0.161	NA	ND	3.39	NA
Mar-2009	ND	ND	0.045	ND	ND	10.3	NA	ND	ND	ND	0.124	NA	ND	3.4	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-3***													
Apr-2010	ND	ND	0.044	ND	ND	10.8	NA	ND	ND	ND	0.39	NA	ND	3.05	NA
Oct-2010	ND	ND	0.023	ND	ND	55.6	NA	ND	ND	ND	0.251	NA	ND	8.88	NA
Apr-2011	ND	ND	ND	ND	ND	43.2	NA	ND	ND	ND	0.695	NA	ND	6.06	NA
Sep-2011	ND	0.003	0.026	ND	ND	44	NA	ND	ND	ND	0.298	NA	ND	7.07	NA
Mar-2012	ND	ND	0.061	ND	ND	12.5	NA	ND	ND	ND	0.639	NA	ND	4.11	NA
Sep-2012	ND	ND	0.0583 J	ND	ND	53.8	NA	0.0111 J	0.011 J	0.009 J	2.96	NA	ND	8.01	NA
Mar-2013	ND	0.0012 J	0.293	0.000214 J	ND	40.5	NA	0.0029 J	0.0112	0.0044 J	0.811	NA	0.0022	5.97	NA
Oct-2013	0.000514 J	ND	0.0183	ND	ND	25.6	NA	0.0053 J	0.0024 J	0.0056 J	0.67	NA	0.000659 J	3.17	NA
Mar-2014	0.000334 J	ND	0.0506	ND	ND	12.4	NA	0.000922 J	0.0029 J	0.000955 J	0.116	NA	ND	4.23	NA
Oct-2014	0.000416 J	0.000399 J	0.0703	ND	ND	15.5	NA	0.000492 J	0.0042 J	0.000492 J	0.469	NA	ND	5.02	NA
Apr-2015	0.000671 J	0.0004 J	0.0576	ND	ND	15.2	NA	0.000947 J	0.0028 J	0.0014 J	0.557	NA	0.000675 J	4.48	NA
Nov-2015	0.000352 J	0.000599 J	0.0701	ND	ND	28.8	NA	0.000715 J	0.0065 J	0.000868 J	0.758	NA	0.000331 J	6.3	NA
May-2016	ND	0.0006 J	0.059	ND	ND	25	NA	ND	0.0006 J	0.0005 J	0.255	NA	0.00017 J	6.09	NA
Oct-2016	ND	0.0012 J	0.0232	ND	ND	35.3	NA	0.00086 J	0.0012	0.0052	0.395	NA	0.00022 J	4.56	NA
May-2017	ND	ND	0.0512	ND	ND	23.2	NA	0.0012 J,B	0.0061	ND	0.773	NA	0.00012 J	5.88	NA
Oct-2017	ND	ND	0.0392	ND	ND	11	NA	ND	0.0044	ND	1.14	NA	0.00027 J	3.46	NA
May-2018	0.00011 J	ND	0.045	ND	ND	16.8	NA	0.0029 J	0.0017	0.0018 JB	0.39	NA	0.000067 J	4.9	NA
Nov-2018	0.00036 J	ND	0.02	0.00011 J	0.000033 J	41.4	NA	0.0025 J	0.0011	0.0048	0.35	NA	0.00035 J	5	NA
May-2019	ND	ND	0.027	ND	ND	28.1	NA	ND	0.0018	0.0021	0.38	NA	ND	5.6	NA
Oct-2019	0.00018 J	0.00054 J	0.063	ND	0.00023 J	39.9	NA	0.0023 J	0.0021	0.0051	0.85	NA	0.00082 J	7.6	NA
May-2020	0.00017 J	0.00019 J	0.028	ND	ND	35.4	NA	0.0042 J	0.00057	0.0039	0.2	NA	ND	7.7	NA
Oct-2020	0.00026 J	ND	0.033	ND	ND	42.9	NA	0.0092 J	0.00046 J	ND	0.26	NA	ND	7.6	NA
Apr-2021	ND	ND	0.023	0.00018 J	ND	31.7	NA	0.00079 J	ND	0.0027 J	0.33	NA	ND	7.7	NA
Oct-2021	0.00009 J	ND	0.053	ND	ND	32.4	NA	ND	0.0013 J	ND	0.47	NA	0.00006 J	6.3	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-3***													
May-2022	*ND*	*0.00069 J*	0.026	*ND*	*ND*	41.5	*NA*	*0.00067 J*	*0.00086 J*	0.0044	0.26	*NA*	*0.00049 J*	8.3	*NA*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*SW-3*												
Apr-1995	0.1	NA	ND	ND	1.2	NA	ND	ND	4.6	NA	ND	ND	0.04
Oct-1996	0.045	0.027	NA	ND	ND	ND	ND	ND	7.8	8	ND	ND	0.23
Apr-1997	0.047	ND	ND	ND	2.3	2.3	ND	ND	11	11	ND	ND	0.028
Oct-1997	0.038	NA	NA	ND	1.85	NA	ND	ND	10.4	NA	ND	ND	ND
Apr-1998	0.295	NA	**0.102**	3.58	ND	NA	ND	2.21	ND	NA	ND	0.248	NA
Apr-1999	0.028	NA	NA	ND	4.72	NA	ND	ND	49.2	NA	ND	ND	0.014
Oct-1999	0.083	NA	NA	0.013	3.49	NA	ND	ND	15.2	NA	ND	ND	ND
Oct-2000	0.026	NA	NA	ND	2.76	NA	ND	ND	19.9	NA	ND	ND	ND
Apr-2001	0.022	NA	NA	ND	2.5	NA	ND	ND	24.9	NA	ND	ND	ND
Sep-2001	0.03	NA	NA	ND	2.7	NA	ND	ND	21.5	NA	ND	ND	ND
Mar-2002	0.128	NA	NA	0.028	10.8	NA	ND	ND	7.24	NA	ND	ND	0.045
Sep-2002	0.011	NA	NA	ND	3.09	NA	ND	ND	19.4	NA	ND	ND	ND
Mar-2003	ND	NA	NA	ND	2.84	NA	ND	ND	31.3	NA	ND	ND	0.013
Oct-2003	0.075	NA	NA	ND	2.35	NA	ND	ND	26.4	NA	ND	ND	0.014
Apr-2004	0.025	NA	ND	ND	2.26	NA	ND	ND	33.2	NA	ND	ND	0.016
Oct-2004	0.011	NA	ND	ND	3.49	NA	ND	ND	27.4	NA	ND	ND	ND
Apr-2005	0.028	NA	ND	ND	2.15	NA	ND	ND	28.9	NA	ND	ND	ND
Mar-2006	ND	NA	ND	ND	1.94	NA	ND	ND	29.4	NA	ND	ND	ND
Mar-2007	0.018	NA	ND	ND	2.15	NA	ND	ND	67.7	NA	ND	ND	ND
Mar-2008	0.012	NA	ND	ND	2.18	NA	ND	ND	54.1	NA	ND	ND	ND
Mar-2009	ND	NA	ND	ND	2.21	NA	ND	ND	46.4	NA	ND	ND	ND
Apr-2010	0.022	NA	ND	ND	2.32	NA	ND	ND	31	NA	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-3***												
Oct-2010	0.021	NA	ND	ND	13.1	NA	ND	ND	14	NA	ND	ND	ND
Apr-2011	0.125	NA	ND	0.026	3.67	NA	ND	ND	4.63	NA	ND	ND	0.023
Sep-2011	0.029	NA	ND	ND	13.4	NA	ND	ND	13.8	NA	ND	0.01	ND
Mar-2012	0.042	NA	ND	ND	3.44	NA	ND	ND	48.2	NA	ND	ND	ND
Sep-2012	0.237	NA	ND	0.0209 J	18.5	NA	ND	ND	13.2	NA	ND	ND	0.0519 J
Mar-2013	0.0573	NA	0.000088 J	0.0265	3.23	NA	ND	0.000031 J	2.2	NA	ND	0.0043 J	0.0718
Oct-2013	0.0343	NA	ND	0.0114	6.69	NA	ND	0.000019 J	2.15	NA	ND	0.00094 J	0.0261
Mar-2014	0.115	NA	ND	0.0015 J	2.81	NA	ND	ND	74.8	NA	ND	ND	0.0064 J
Oct-2014	0.219	NA	ND	0.0022 J	4.18	NA	0.000787 J	ND	44.4	NA	ND	ND	0.0051 J
Apr-2015	0.136	NA	ND	0.0022 J	3.19	NA	ND	ND	61.8	NA	ND	0.0011 J	0.0093 J
Nov-2015	0.333	NA	ND	0.0024 J	4.25	NA	0.000606 J	ND	61.7	NA	0.000161 J	0.000718 J	0.0035 J
May-2016	0.0913	NA	ND	0.0015 J	3.04	NA	ND	ND	55.5	NA	ND	0.00025 J	0.0152 J
Oct-2016	0.0153	NA	ND	0.0162	9.17	NA	ND	ND	4.53	NA	ND	0.002	0.0073 J
May-2017	0.532	NA	ND	0.0011 J,B	2.76	NA	ND	ND	42.5	NA	ND	ND	ND
Oct-2017	0.45	NA	ND	ND	2.67	NA	ND	ND	8.68	NA	ND	0.00042 J	ND
May-2018	0.35	NA	ND	0.0019	2.1 J	NA	0.00066 JB	ND	27.6	NA	ND	0.0048	0.0035 JB
Nov-2018	0.015	NA	ND	0.014	2.9 J	NA	0.00014 J	ND	1.6 J	NA	ND	0.0047	0.013
May-2019	0.08	NA	ND	0.0044	ND	NA	ND	ND	40.1	NA	ND	0.0068	0.0067
Oct-2019	0.37	NA	ND	0.003	5.8	NA	0.00055 J	ND	31.4	NA	ND	0.0046	0.013
May-2020	0.015	NA	ND	0.0022	5.5	NA	ND	ND	5.1	NA	ND	0.0014	0.003 J
Oct-2020	0.01	NA	ND	0.0043	5.5	NA	ND	ND	2.6 J	NA	ND	0.0056	ND
Apr-2021	0.0095	NA	ND	0.0018 J	4.4	NA	ND	ND	4.2	NA	ND	0.0021 J	0.0033 J
Oct-2021	0.4	NA	ND	ND	4	NA	ND	ND	45.8	NA	ND	ND	ND
May-2022	0.019	NA	ND	0.0026	4.1	NA	ND	ND	5.6	NA	ND	0.0018 J	0.0053

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-3*																
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7 J	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-3*																
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.15 J*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.65 J*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.47 J*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.14 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.25 J,B*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.3 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.4	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.6 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.1 JBIH*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-3*																
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	10	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*SW-3*															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-3***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-3***															
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-3***															
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jul-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jun-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Dec-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-3***															
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.5 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 R	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-3***															
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

HISTORICAL TABLES –
Z4 Residential Wells

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*P-160-Z4*																
Apr-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*P-160-Z4*															
Apr-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***P-160-Z4***															
Apr-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*P-162-Z4*																
Apr-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*P-162-Z4*															
Apr-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***P-162-Z4***															
Apr-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***P-164-Z4***																
May-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.91 J*	*ND*	*ND*	*1.58 J*	*ND*
May-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Jun-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*P-164-Z4*															
May-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.24 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2014	*ND*	*ND*	*ND*	*ND*	*0.72 J*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Jun-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***P-164-Z4***															
May-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Jun-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Millersville Landfill and Resource Recovery Facility

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*P-165-Z4*																
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*P-165-Z4*															
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***P-165-Z4***															
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*P-166-Z4*																
Jan-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jan-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*P-166-Z4*															
Jan-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jan-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***P-166-Z4***															
Jan-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jan-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***P-168-Z4***																
Apr-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Jun-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*P-168-Z4*															
Apr-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***P-168-Z4***															
Apr-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Jun-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*P-169-Z4*																
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.33 J*	*ND*	*ND*	29.1	*ND*	*ND*	7.83	*ND*
May-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*
May-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Jun-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***P-169-Z4***															
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2014	*ND*	*ND*	*ND*	*ND*	*0.55 J*	*ND*	*ND*	*ND*	*ND*	*0.33 J*	*0.98 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Jun-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***P-169-Z4***															
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.25 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Jun-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*P-257-Z4*																
May-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*P-257-Z4*															
May-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***P-257-Z4***															
May-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*P-261-Z4*																
May-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	338	ND	ND	293	ND
Apr-2012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	ND	NA
May-2012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	ND	NA
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*P-261-Z4*															
May-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***P-261-Z4***															
May-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*0.4 J*	*ND*	3	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.2
Jun-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Millersville Landfill and Resource Recovery Facility

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***P-264-Z4***																
Nov-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Dec-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Jan-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*P-264-Z4*															
Nov-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Dec-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Jan-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***P-264-Z4***															
Nov-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Dec-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jan-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*P-323-Z4*																
Apr-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*P-323-Z4*															
Apr-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***P-323-Z4***															
Apr-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*P-383-Z4*																
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*P-383-Z4*															
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Jun-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***P-383-Z4***															
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2012	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
May-2012	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Jun-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*P-412-Z4*																
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***P-412-Z4***															
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***P-412-Z4***															
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*P-417-Z4*																
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.02 J,B	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*P-417-Z4*															
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.28 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***P-417-Z4***															
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Jun-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jun-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Millersville Landfill and Resource Recovery Facility

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*P-440-Z4*																
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Jun-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*0.12 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*P-440-Z4*															
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***P-440-Z4***															
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Jun-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***P-441-Z4***																
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*0.28 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2014	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2014	*ND*	*ND*	*ND*	*ND*	*0.29 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Jun-2014	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.24 J*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*P-441-Z4*															
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.58 J*	*0.29 J*
May-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*
May-2014	*ND*	*ND*	*ND*	*ND*	*0.52 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.75 J*	*ND*	*ND*	*ND*	*ND*	*0.55 J*	*ND*
Jun-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***P-441-Z4***															
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*0.55 J*	*ND*	*ND*	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2014	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Jun-2014	*ND*	*ND*	*ND*	*ND*	1.6 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*P-478-Z4*																
May-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Jun-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Jul-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Aug-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Jun-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.22 J*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*P-478-Z4*															
May-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Jun-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Jul-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Aug-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Jun-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

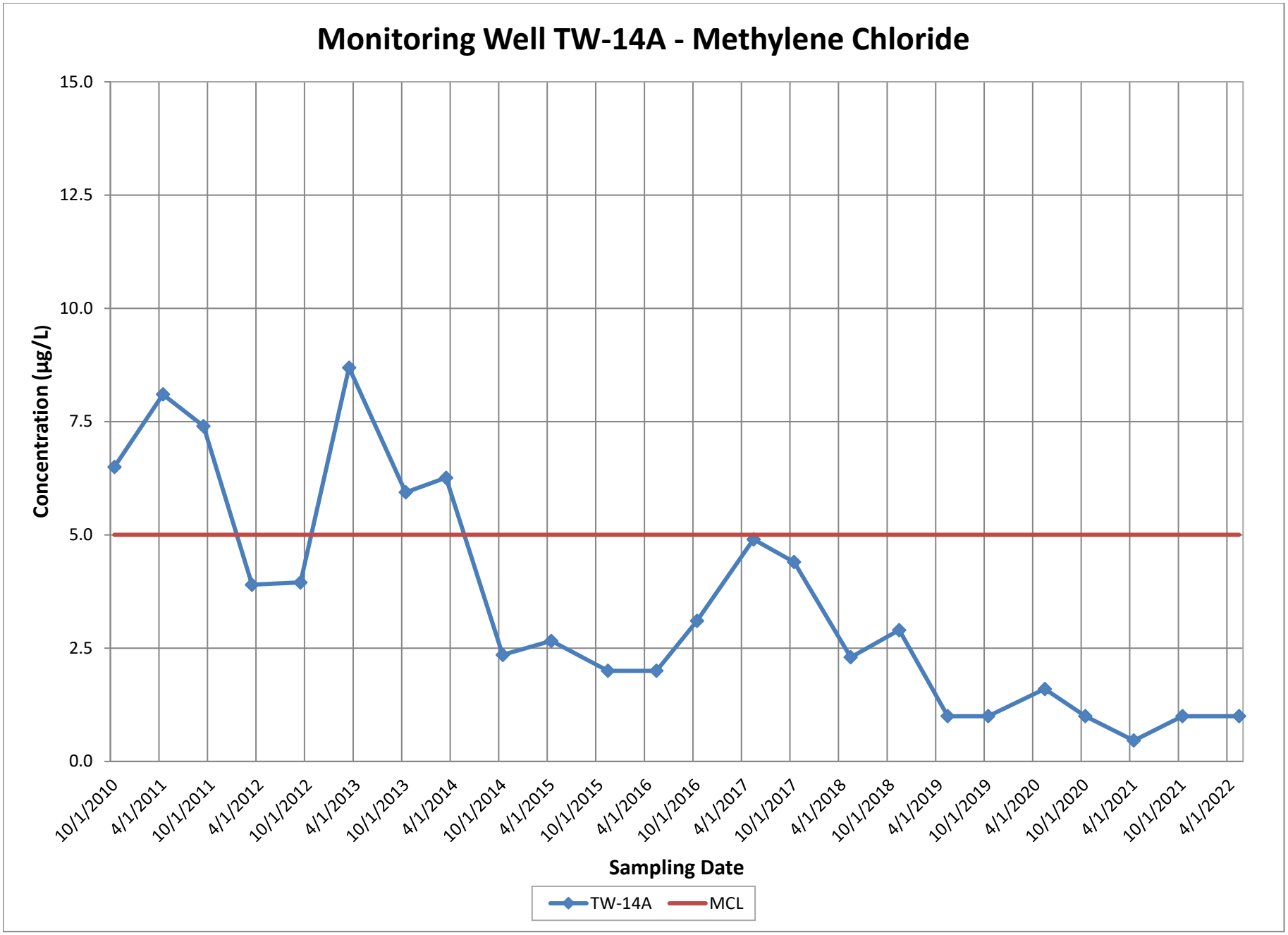
MCLs and Results are in ug/L unless indicated otherwise

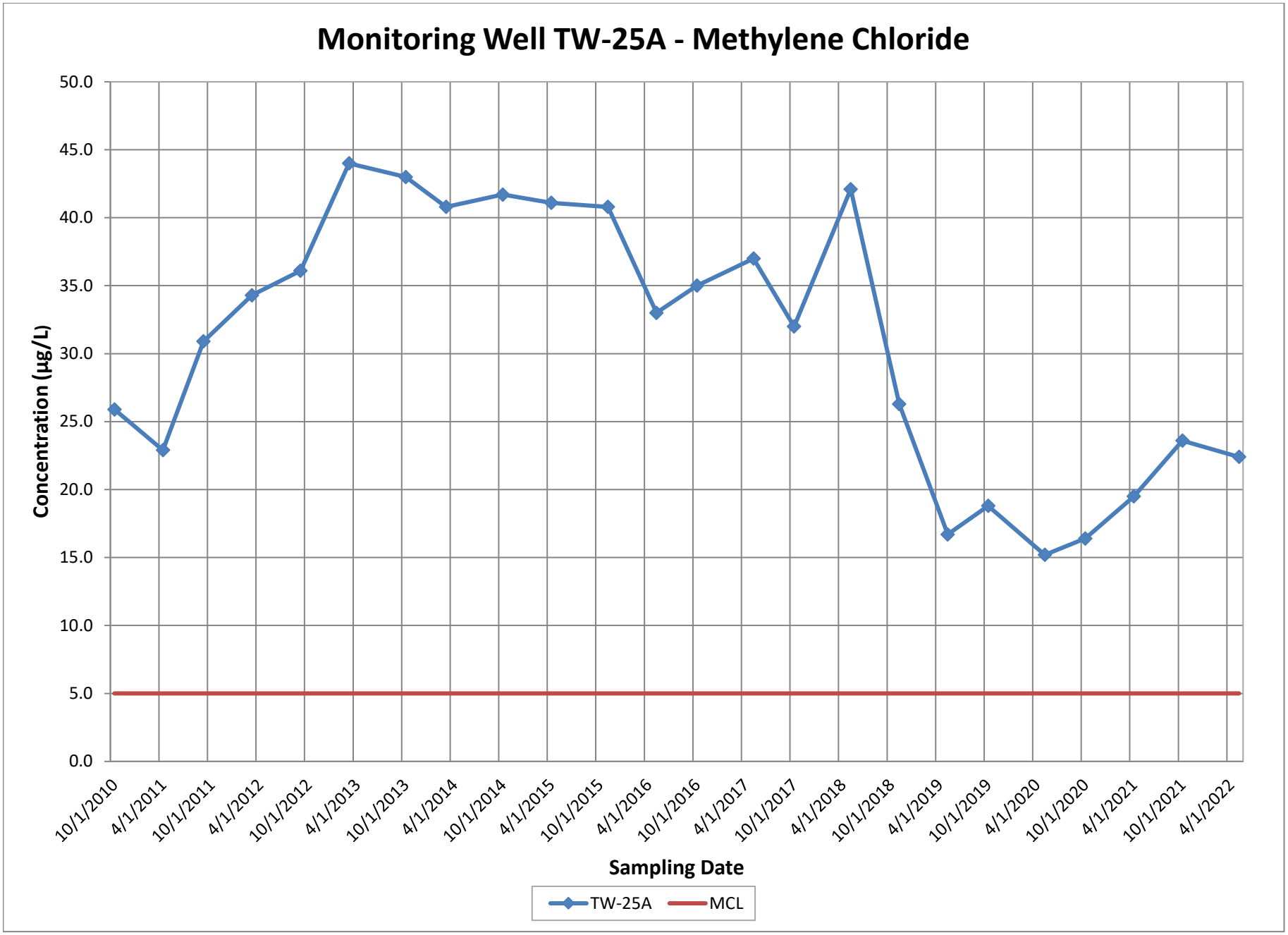
Historical VOC Concentrations (µg/L)

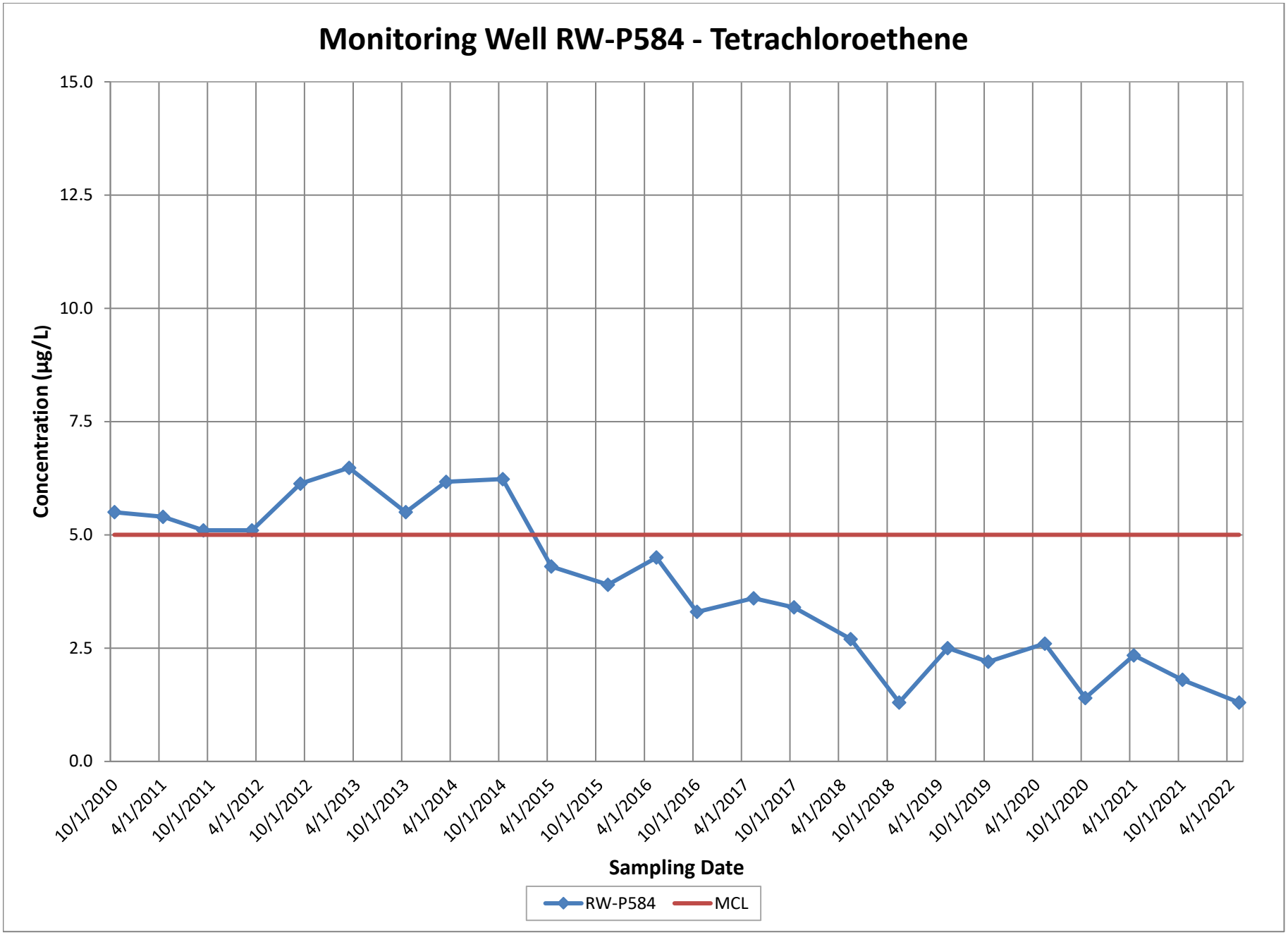
Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***P-478-Z4***															
May-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jun-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jul-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Aug-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Jun-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

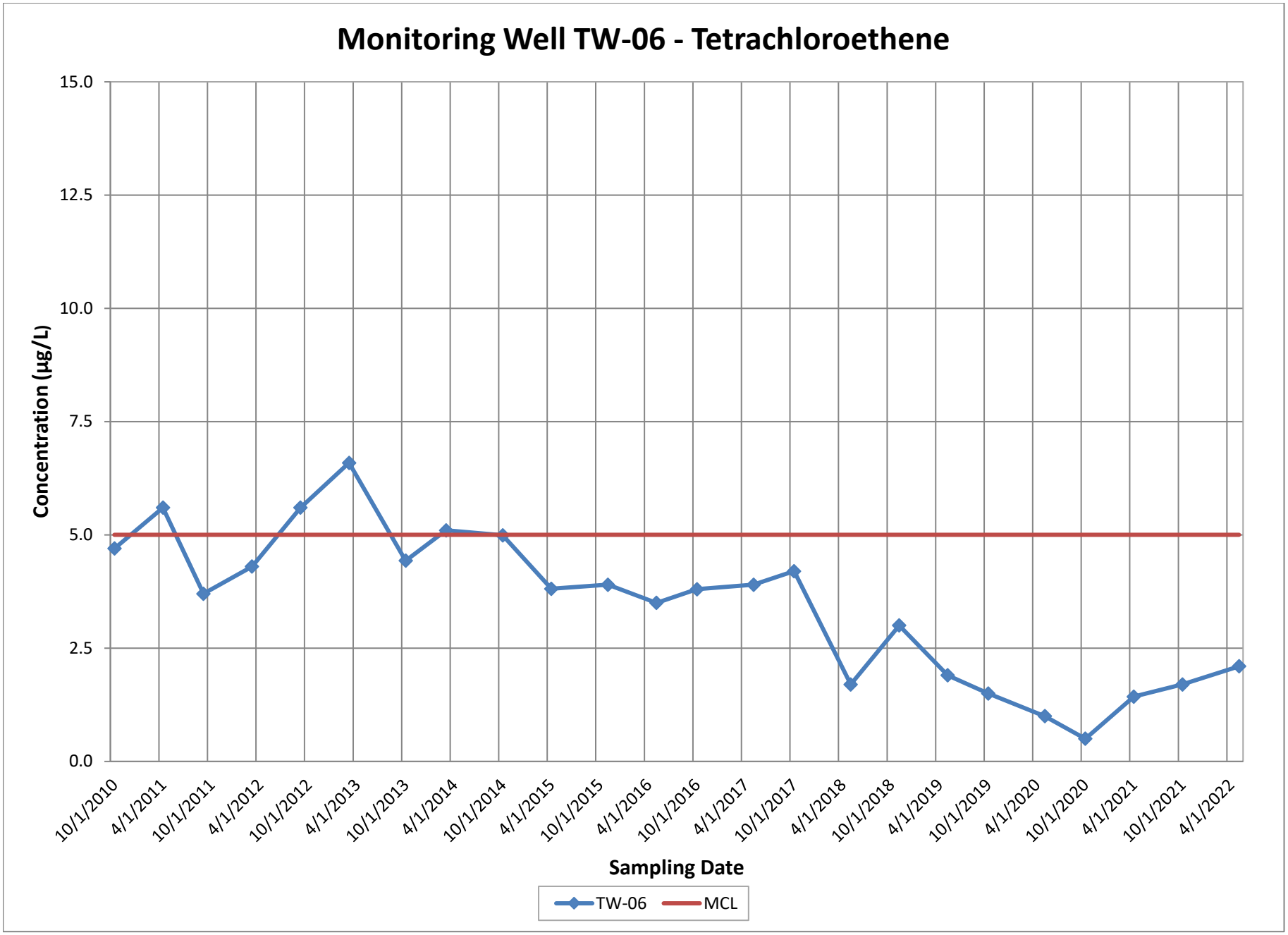
MCLs and Results are in ug/L unless indicated otherwise

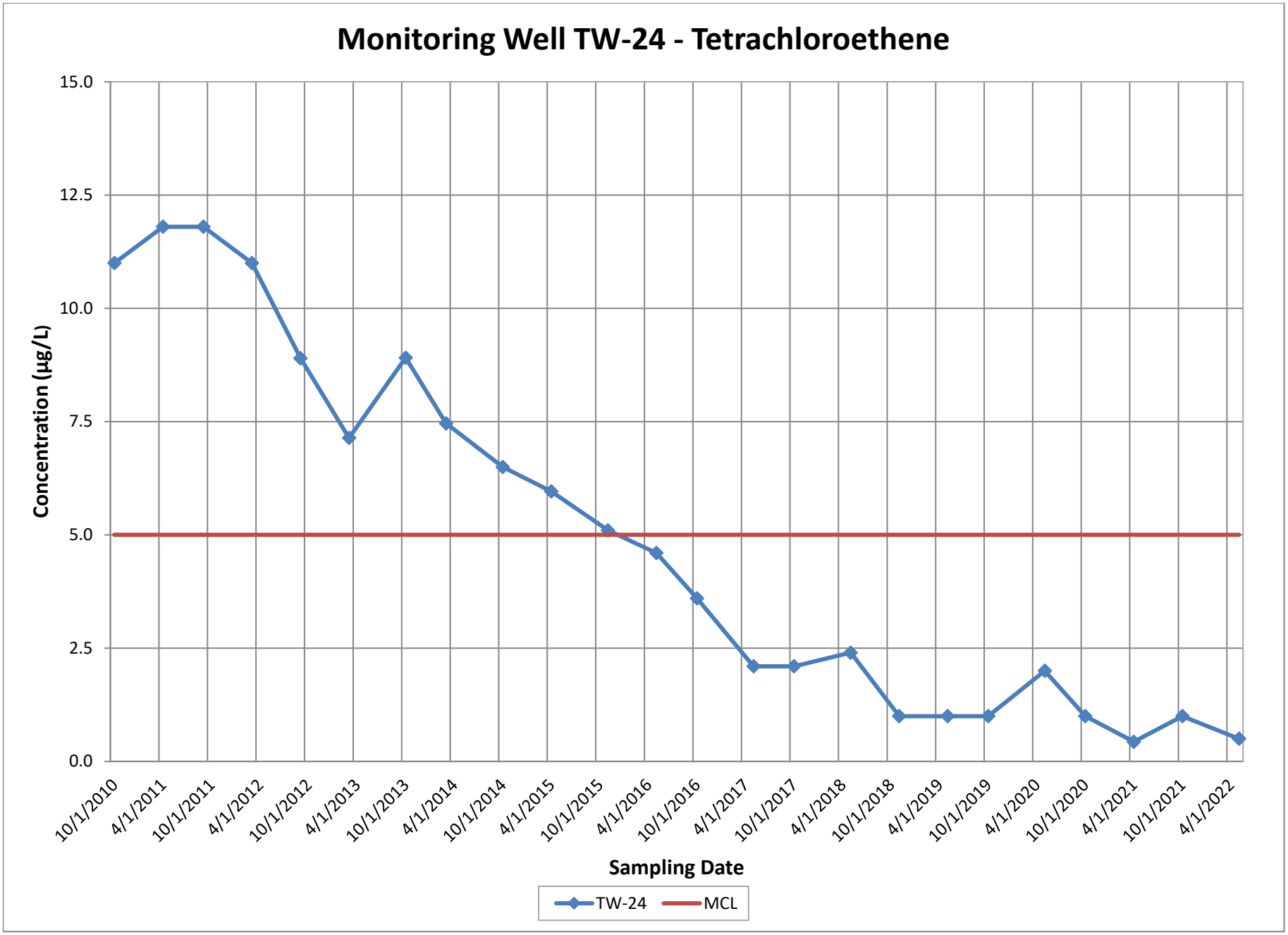
APPENDIX B
Historical MCL Exceedance
Time-Series Plots

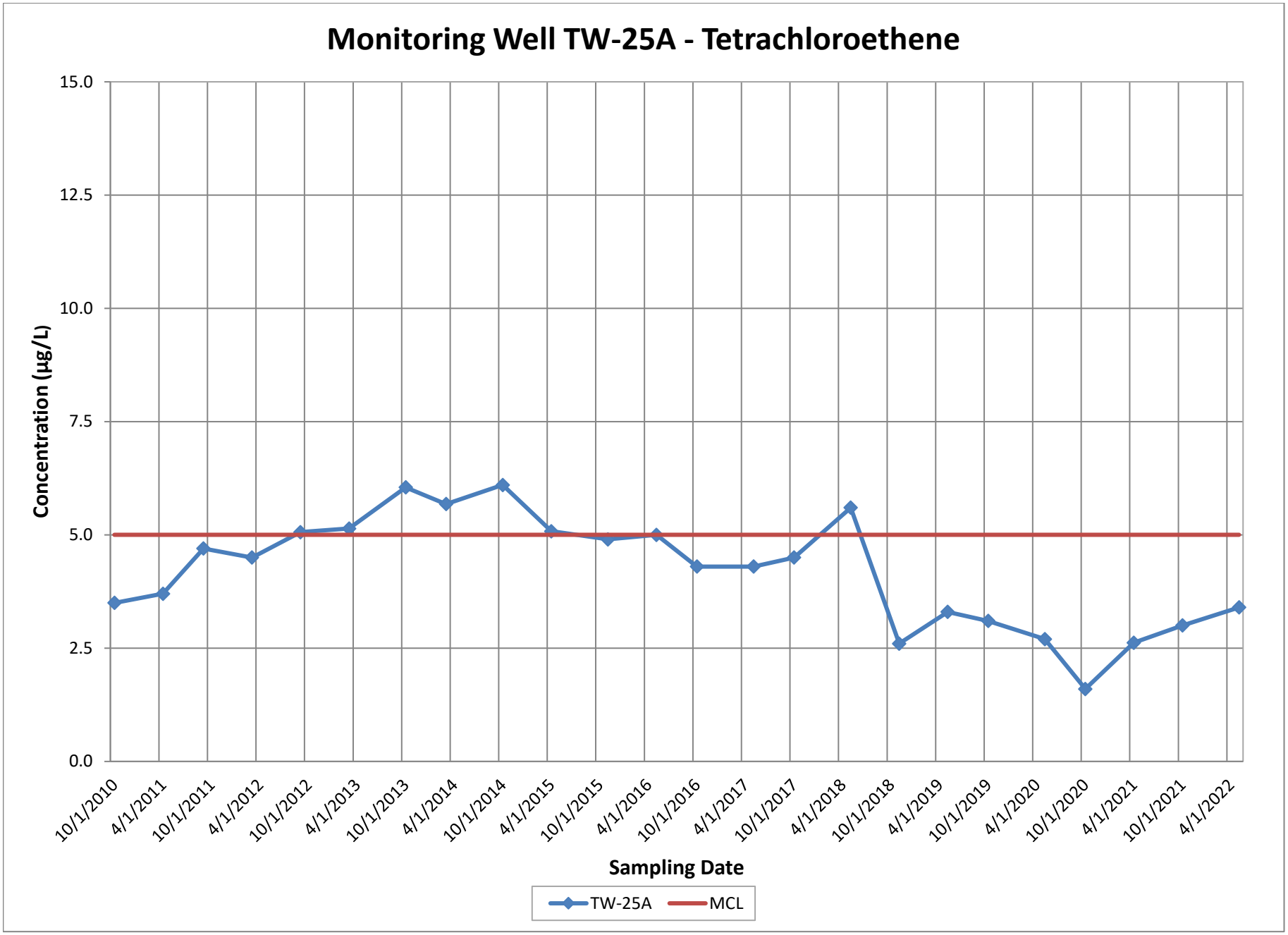

Monitoring Well TW-14A - Methylene Chloride
15.0
12.5
10.0
7.5
5.0
2.5
0.0
Concentration (µg/L)
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
Sampling Date
TW-14A
MCL

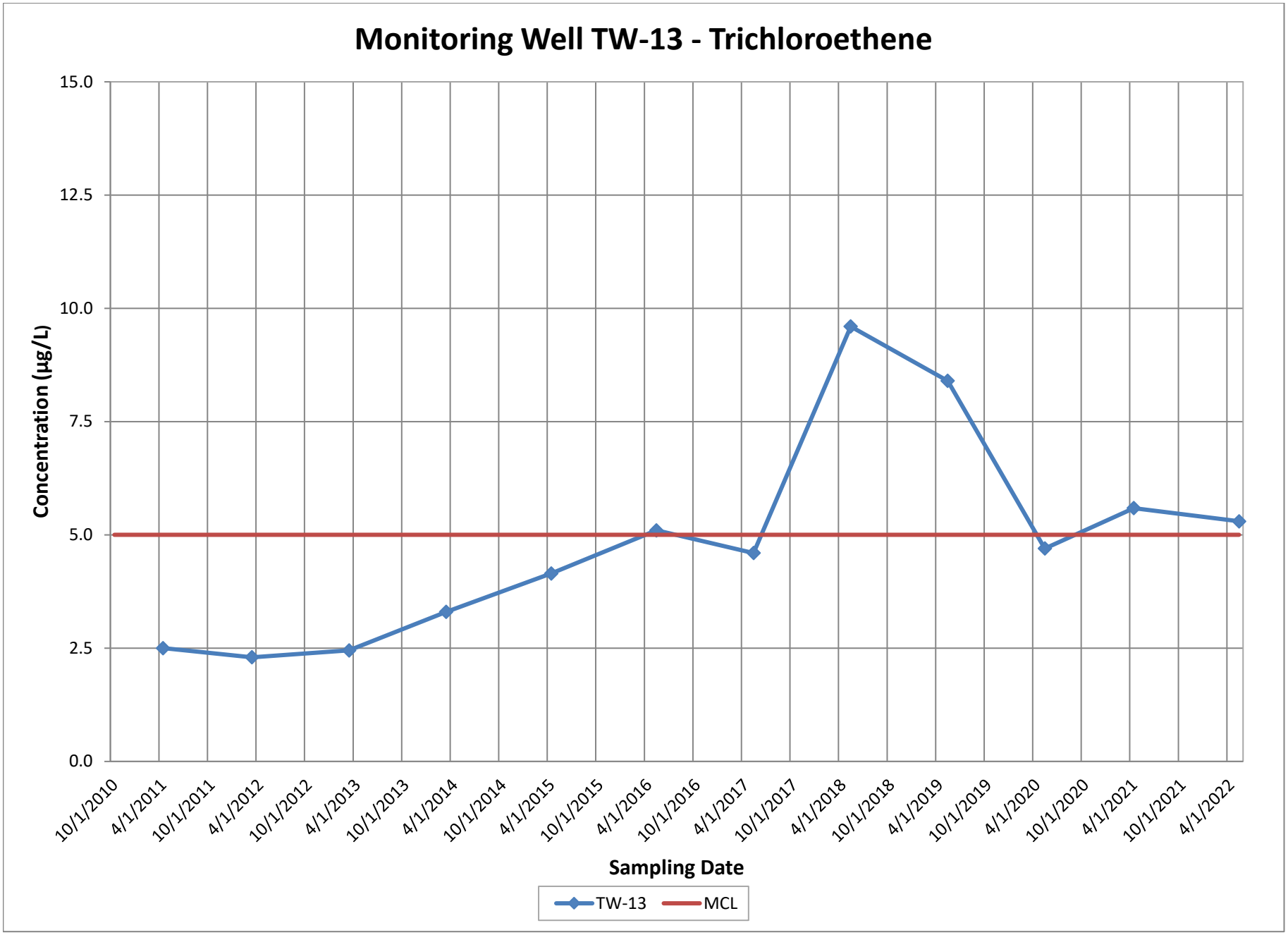

Monitoring Well TW-25A - Methylene Chloride
Concentration (µg/L)
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
Sampling Date
TW-25A
MCL

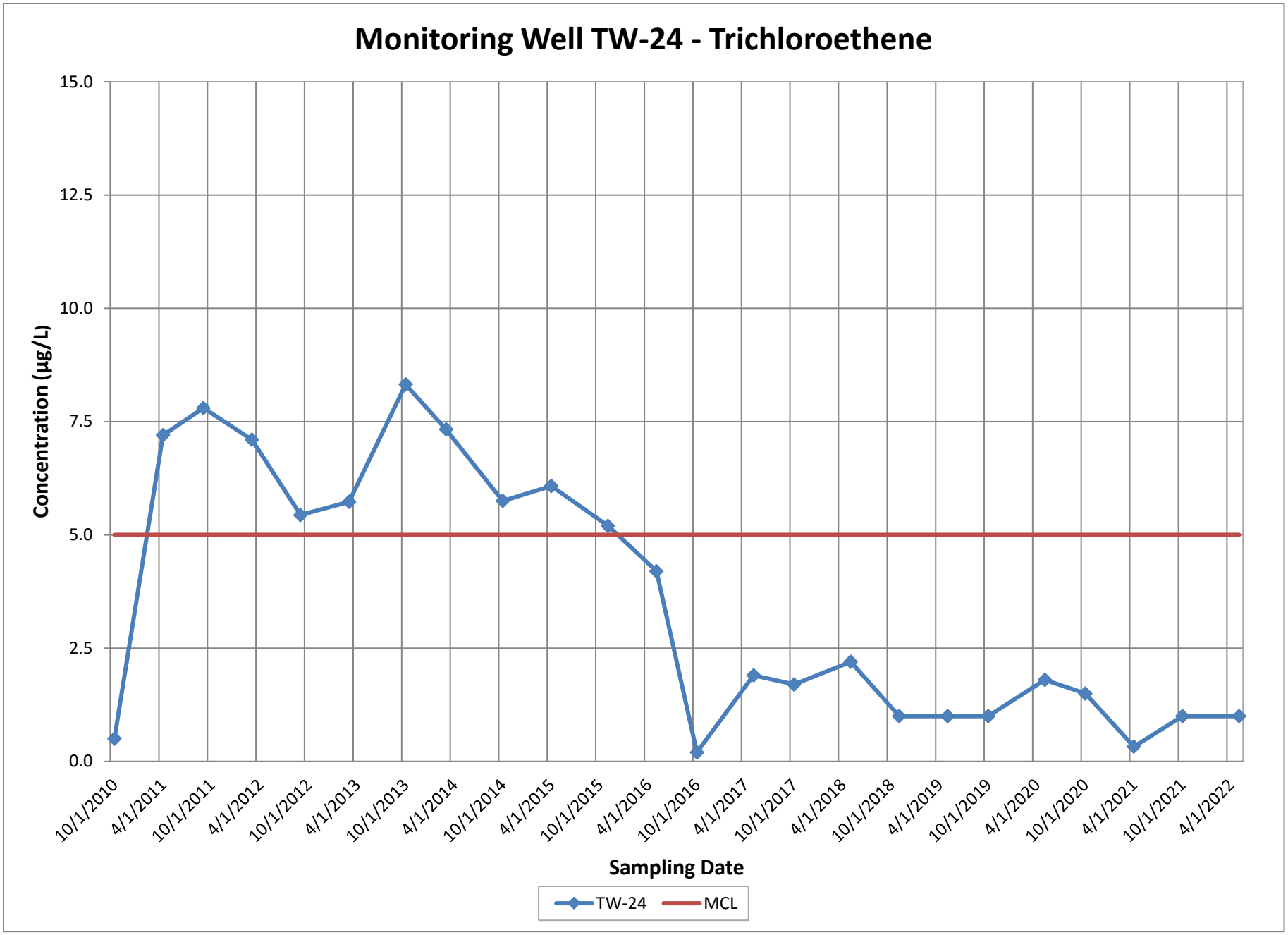

Monitoring Well RW-P584 - Tetrachloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
Sampling Date
RW-P584
MCL

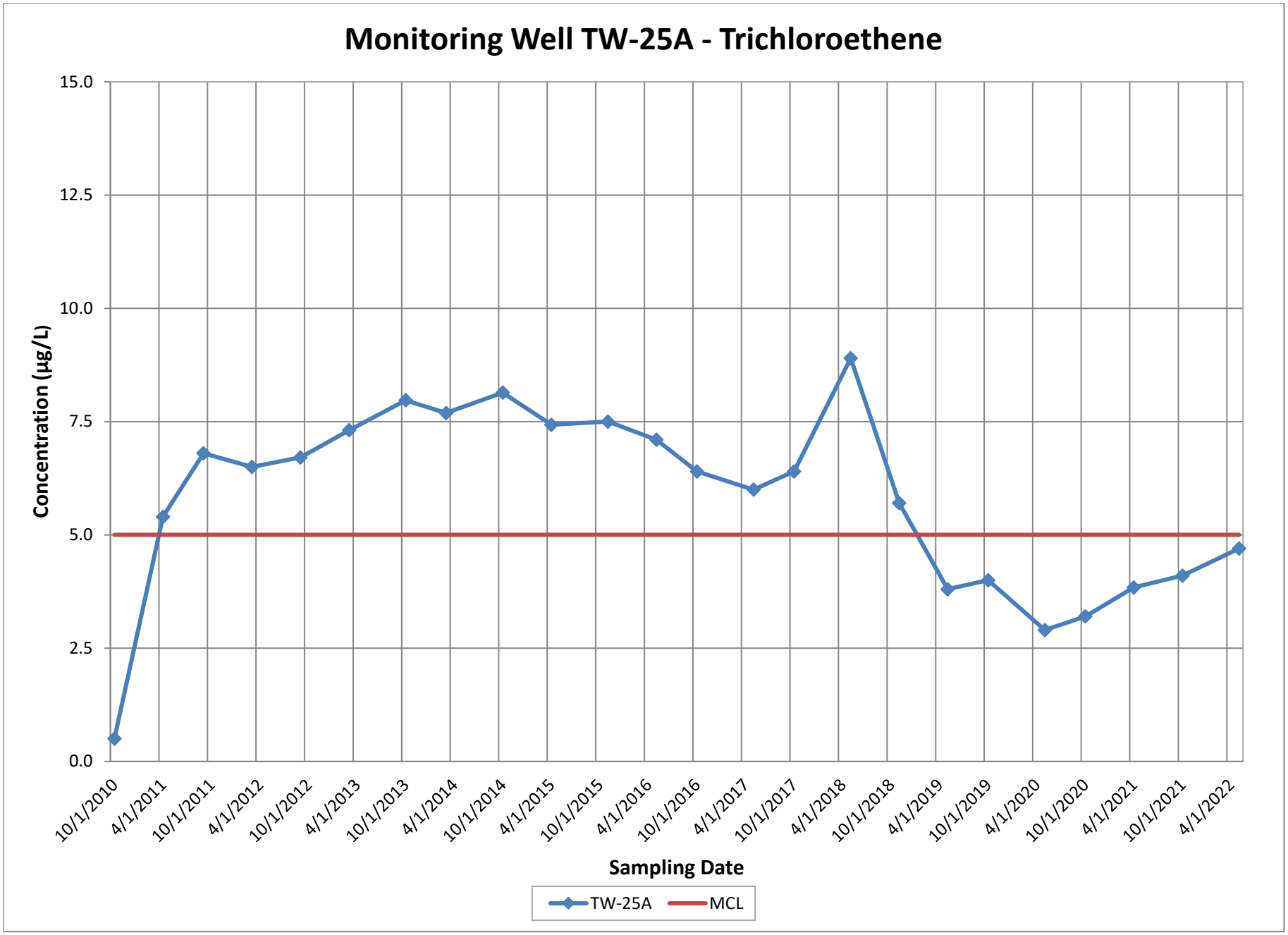

Monitoring Well TW-06 - Tetrachloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
Sampling Date
TW-06
MCL

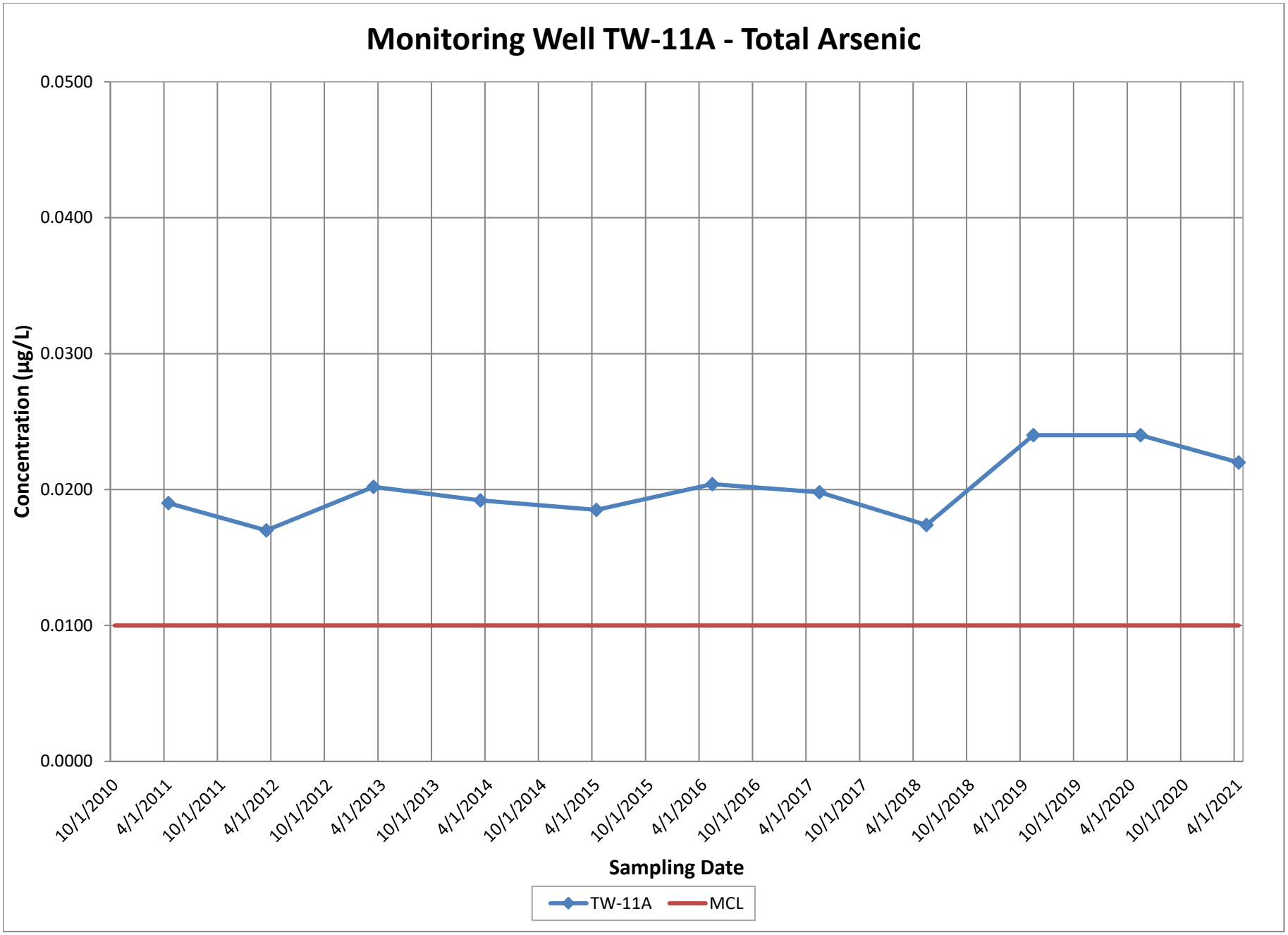

Monitoring Well TW-24 - Tetrachloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
Sampling Date
TW-24
MCL

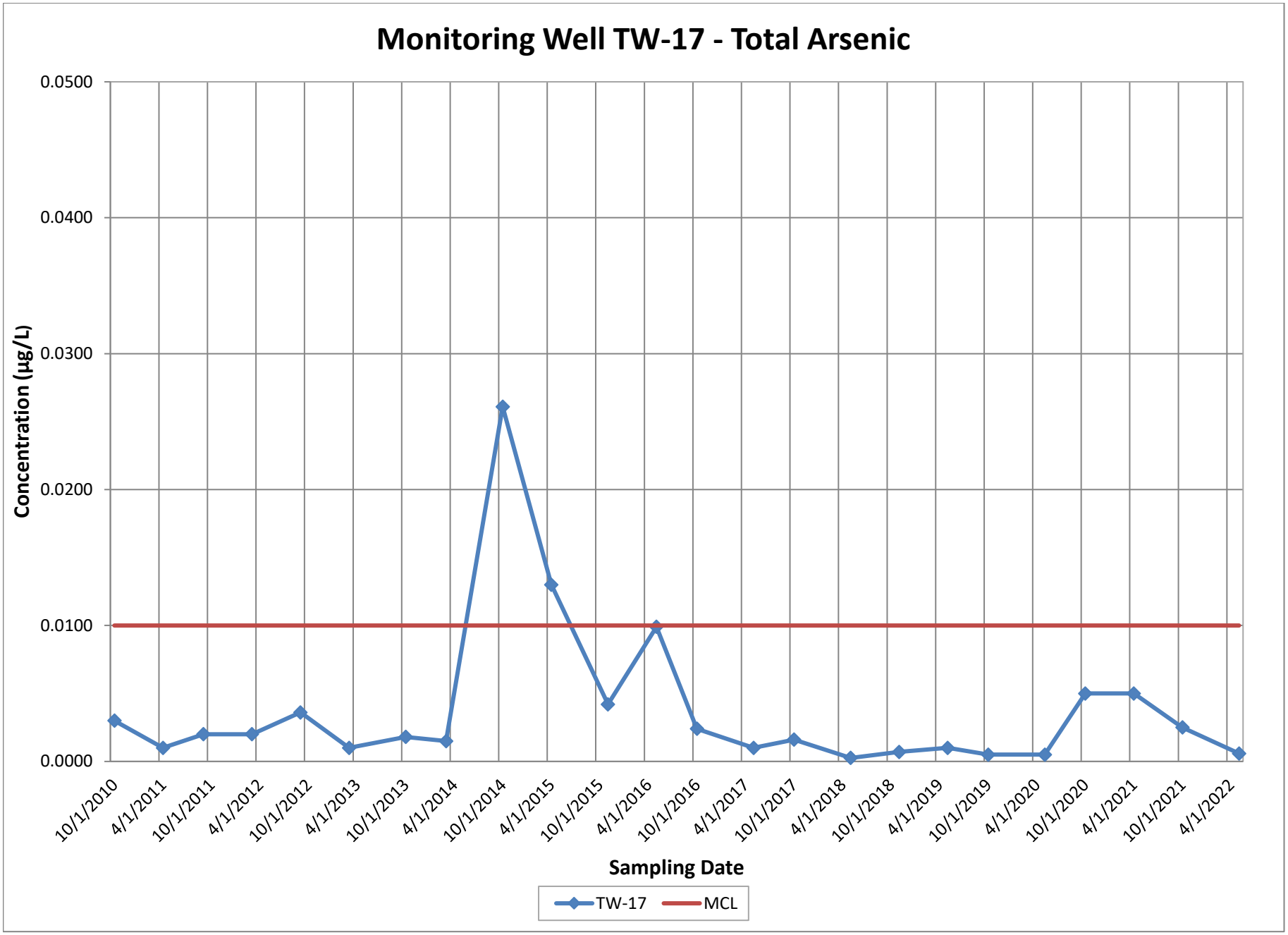

Monitoring Well TW-25A - Tetrachloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
Sampling Date
TW-25A
MCL

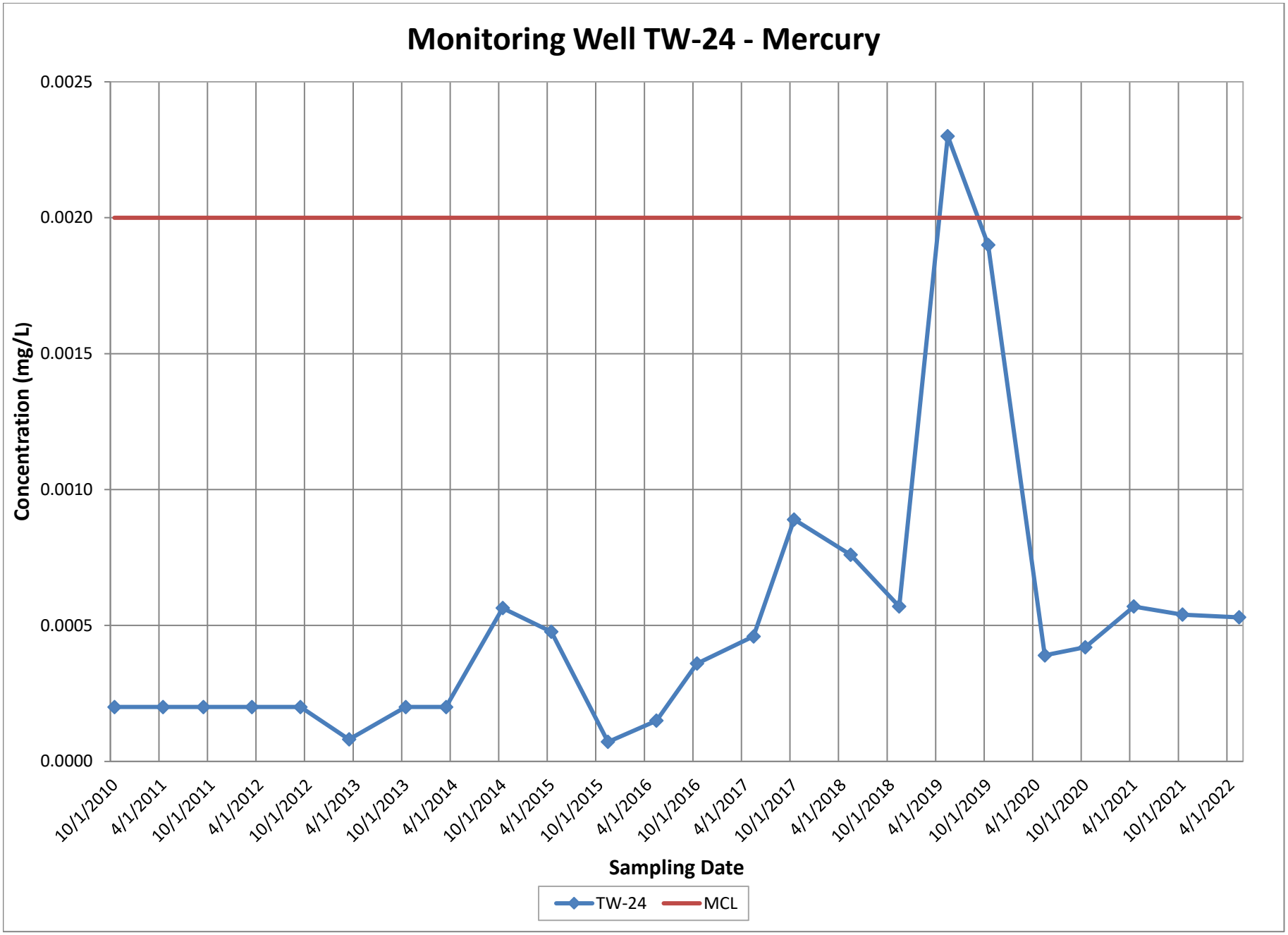

Monitoring Well TW-13 - Trichloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
Sampling Date
TW-13
MCL

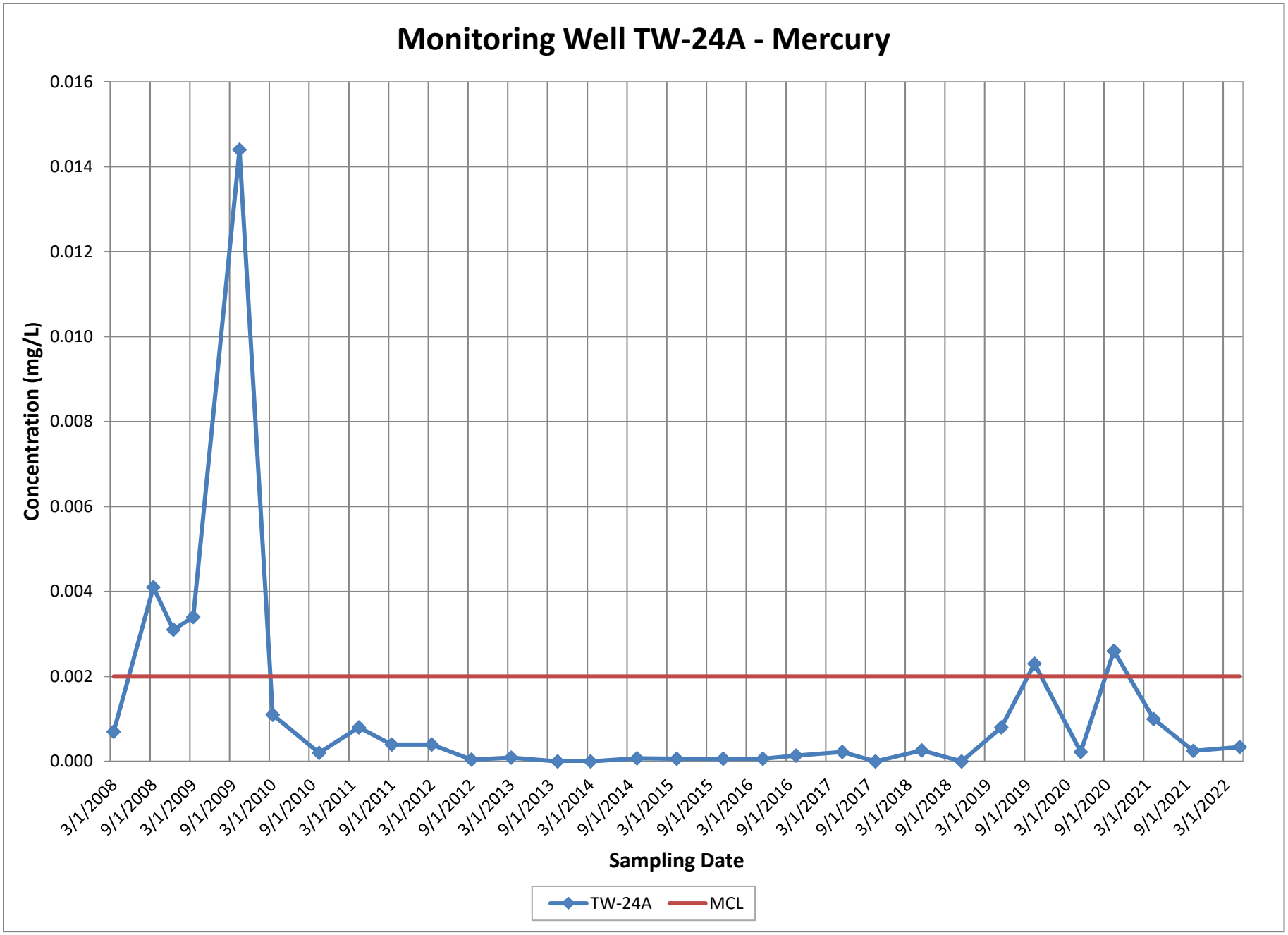

Monitoring Well TW-24 - Trichloroethene
15.0
12.5
10.0
7.5
5.0
2.5
0.0
Concentration (µg/L)
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
Sampling Date
TW-24
MCL


Monitoring Well TW-25A - Trichloroethene
15.0
12.5
10.0
7.5
5.0
2.5
0.0
Concentration (µg/L)
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
Sampling Date
TW-25A
MCL


Monitoring Well TW-11A - Total Arsenic
Concentration (µg/L)
0.0500
0.0400
0.0300
0.0200
0.0100
0.0000
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
Sampling Date
TW-11A
MCL


Monitoring Well TW-17 - Total Arsenic
Concentration (µg/L)
0.0500
0.0400
0.0300
0.0200
0.0100
0.0000
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
Sampling Date
TW-17
MCL


Monitoring Well TW-24 - Mercury
Concentration (mg/L)
0.0025
0.0020
0.0015
0.0010
0.0005
0.0000
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
Sampling Date
TW-24
MCL


Monitoring Well TW-24A - Mercury
Concentration (mg/L)
0.016
0.014
0.012
0.010
0.008
0.006
0.004
0.002
0.000
3/1/2008
9/1/2008
3/1/2009
9/1/2009
3/1/2010
9/1/2010
3/1/2011
9/1/2011
3/1/2012
9/1/2012
3/1/2013
9/1/2013
3/1/2014
9/1/2014
3/1/2015
9/1/2015
3/1/2016
9/1/2016
3/1/2017
9/1/2017
3/1/2018
9/1/2018
3/1/2019
9/1/2019
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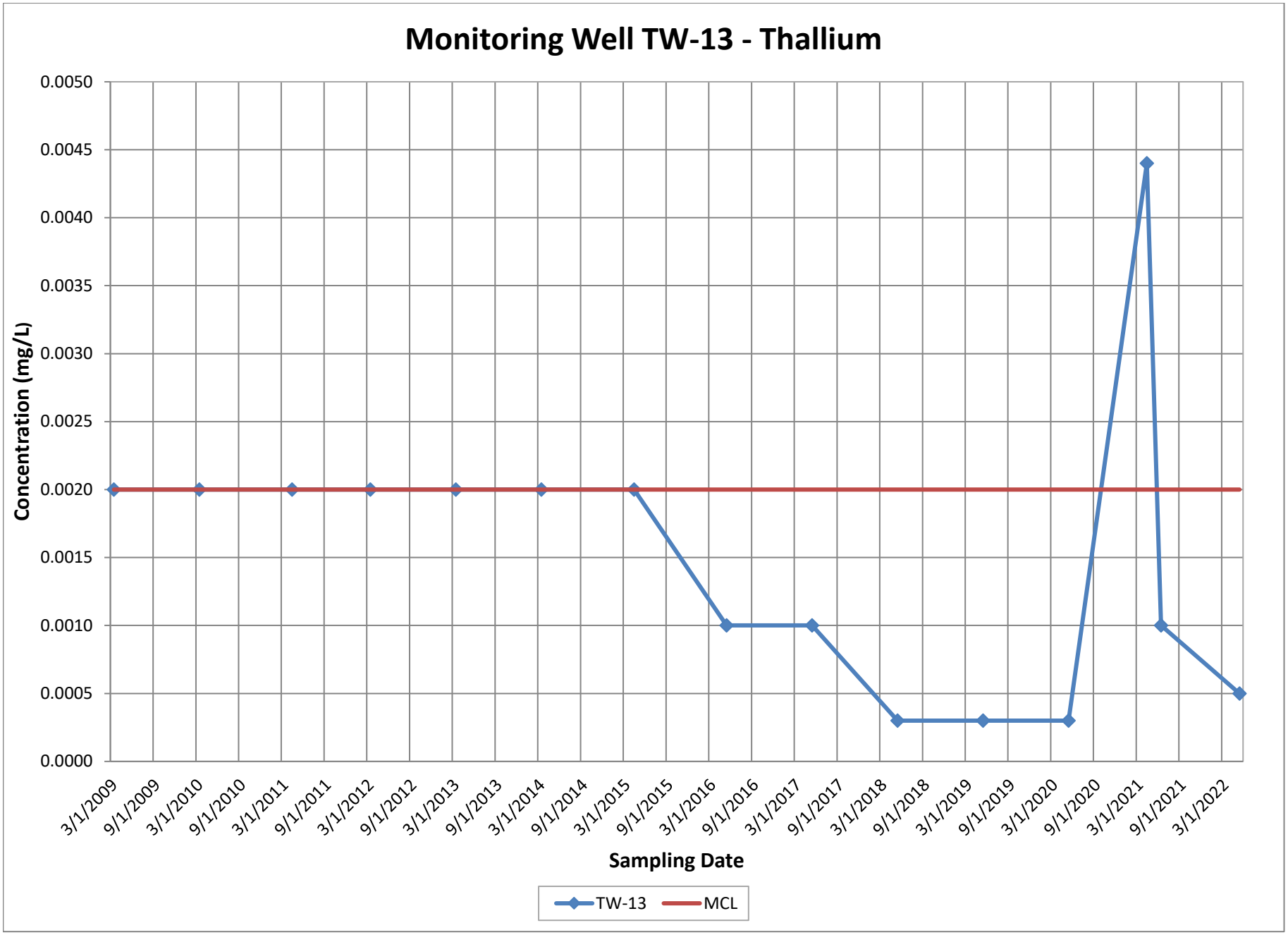
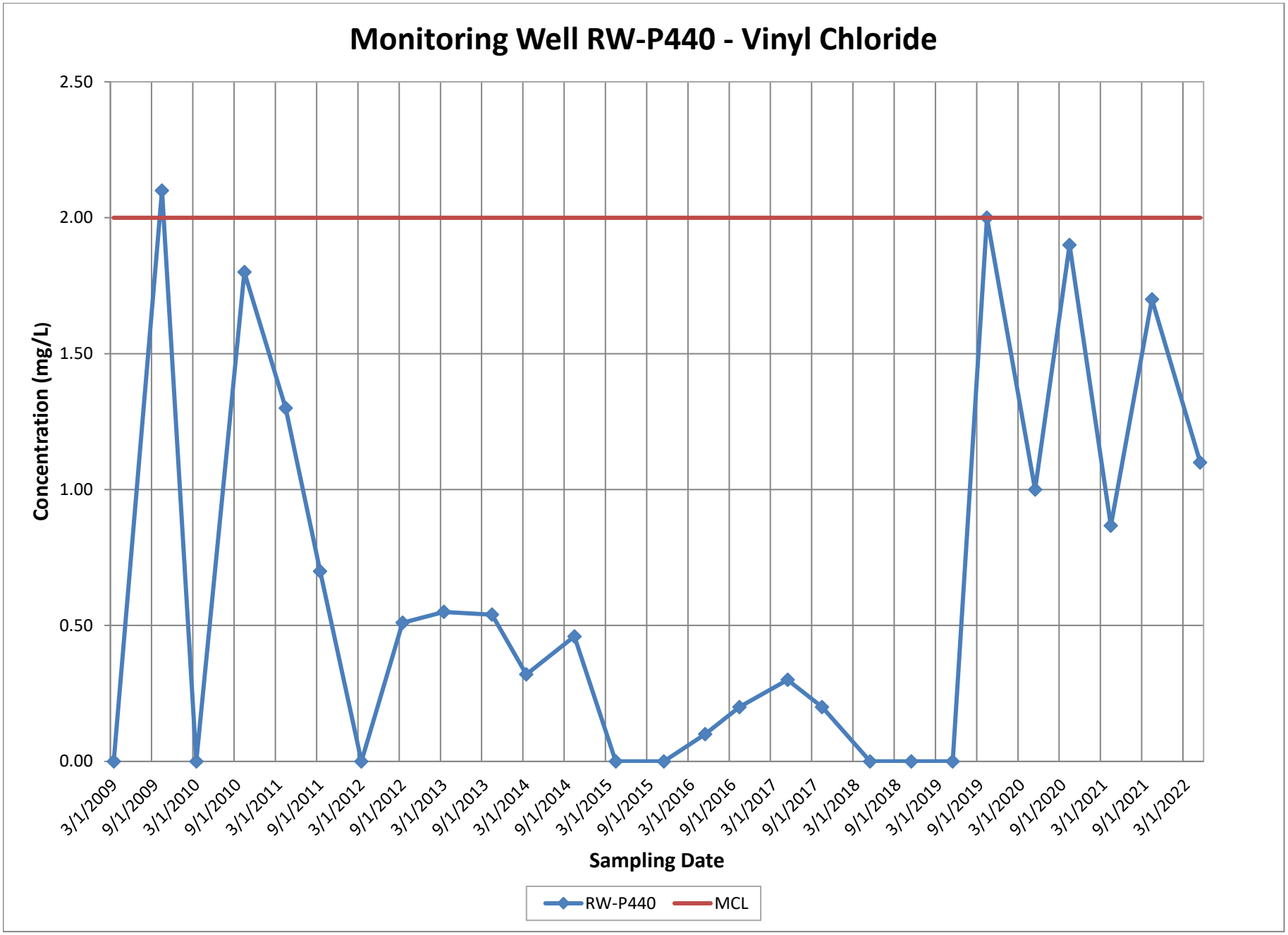
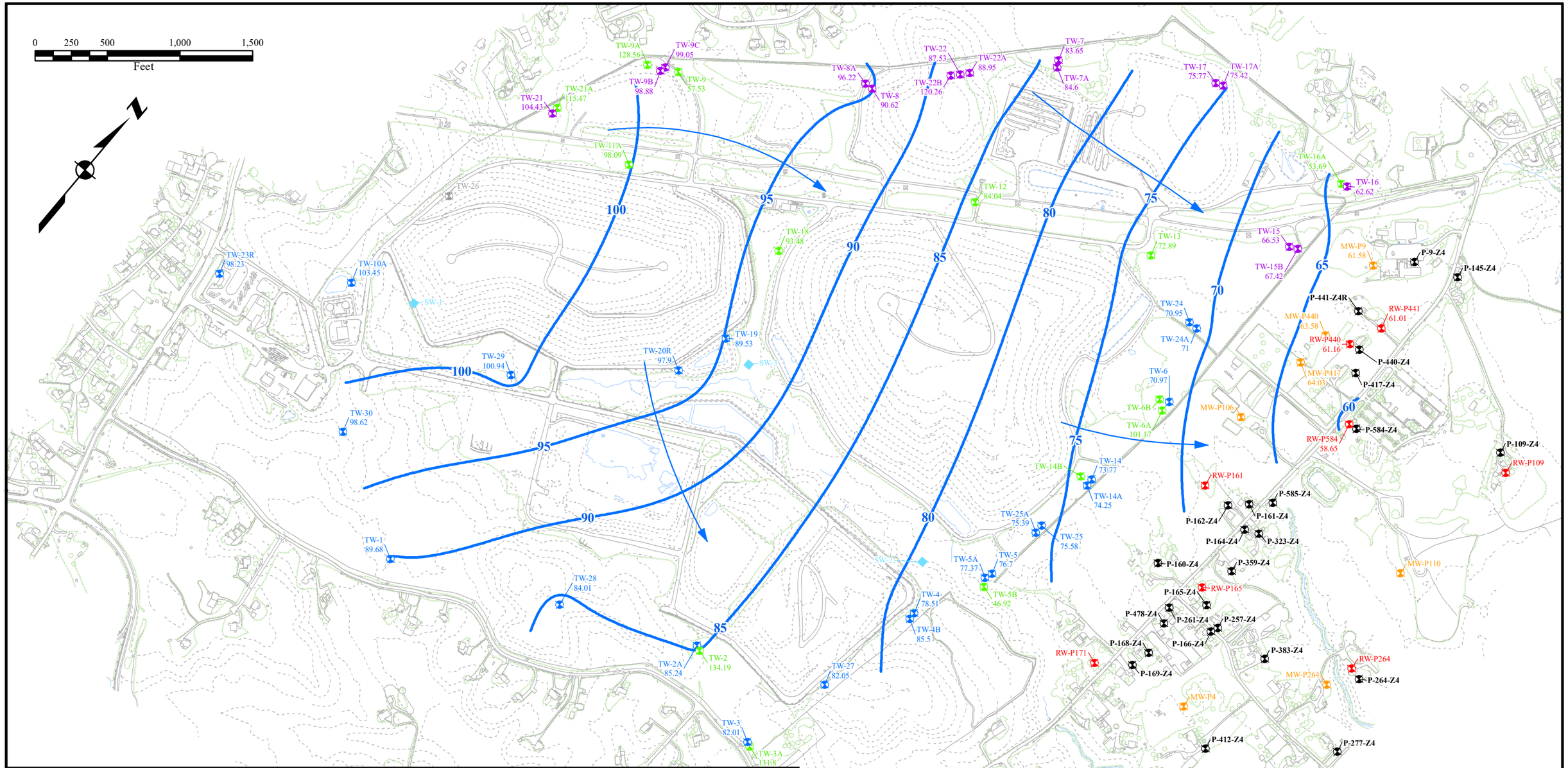
9/1/2020
3/1/2021
9/1/2021
3/1/2022
Sampling Date
TW-24A
MCL


Monitoring Well TW-13 - Thallium
Concentration (mg/L)
0.0050
0.0045
0.0040
0.0035
0.0030
0.0025
0.0020
0.0015
0.0010
0.0005
0.0000
3/1/2009
9/1/2009
3/1/2010
9/1/2010
3/1/2011
9/1/2011
3/1/2012
9/1/2012
3/1/2013
9/1/2013
3/1/2014
9/1/2014
3/1/2015
9/1/2015
3/1/2016
9/1/2016
3/1/2017
9/1/2017
3/1/2018
9/1/2018
3/1/2019
9/1/2019
3/1/2020
9/1/2020
3/1/2021
9/1/2021
3/1/2022
Sampling Date
TW-13
MCL


Monitoring Well RW-P440 - Vinyl Chloride
Concentration (mg/L)
2.50
2.00
1.50
1.00
0.50
0.00
3/1/2009
9/1/2009
3/1/2010
9/1/2010
3/1/2011
9/1/2011
3/1/2012
9/1/2012
3/1/2013
9/1/2013
3/1/2014
9/1/2014
3/1/2015
9/1/2015
3/1/2016
9/1/2016
3/1/2017
9/1/2017
3/1/2018
9/1/2018
3/1/2019
9/1/2019
3/1/2020
9/1/2020
3/1/2021
9/1/2021
3/1/2022
Sampling Date
RW-P440
MCL

APPENDIX C
Groundwater Elevations



LEGEND

TW-1 89.06	WELL NAME, GROUNDWATER ELEVATION (FT AMSL)
TW-30	ONSITE REGULATED MONITORING WELL (SUBTITLE D)
SW-1	SURFACE WATER SAMPLE LOCATION
TW-26	ONSITE REGULATED MONITORING WELL (RPD)
TW-06	ONSITE REGULATED MONITORING WELL (COMAR)
TW-02	ONSITE NON-REGULATED MONITORING WELL
MW-417	OFFSITE NON-REGULATED MONITORING WELL
RW-P165	OFFSITE RESIDENTIAL WATER SUPPLY WELL
P-277-Z4	OFFSITE RESIDENTIAL ZONE 4 WELL
90	GROUNDWATER ELEVATION CONTOUR (FT AMSL)
	GROUNDWATER FLOW DIRECTION

GROUNDWATER ELEVATIONS MEASURED MAY 2022

CONTOURS DEVELOPED BASED ON ZONE 3 WELL GROUND-WATER ELEVATIONS

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ARM Group LLC
Engineers and Scientists

GROUNDWATER CONTOUR MAP

MILLERSVILLE LANDFILL
ANNE ARUNDEL COUNTY, MD

July 2022

21011025

Figure
C-1

C:\Users\SKahls\Desktop\MLF GIS\MLF GW Contour Map.mxd

APPENDIX C - MILLERSVILLE LANDFILL GROUNDWATER LEVEL MEASUREMENTS (May 2022)

WELL ID	DATE	MEASURING POINT ELEV. (FEET)	DEPTH TO WATER (FEET)	ELEV. (FEET)
MW-MB	5/25	236.81	138.94	97.87
MW-P106	5/4	107.62	---	NA
MW-P417	5/4	112.75	48.72	64.03
MW-P440	5/4	115.25	51.40	63.85
MW-P9	5/25	112.32	50.74	61.58
N	5/31	195.48	105.11	90.37
P-564	5/25	176.31	100.29	76.02
RW-P440	5/5	117.11	55.95	61.16
RW-P441	5/25	117.58	56.57	61.01
RW-P584	5/25	118.56	59.91	58.65
TW1	5/4	193.42	103.74	89.68
TW10A	5/31	194.52	91.07	103.45
TW10B	5/31	195.96	93.56	102.40
TW11A	5/31	138.52	40.43	98.09
TW12	5/25	141.99	57.95	84.04
TW13	5/25	117.71	44.82	72.89
TW14	5/17	123.07	49.30	73.77
TW14A	5/17	123.26	49.01	74.25
TW15	5/17	116.98	50.45	66.53
TW15B	5/17	116.30	48.88	67.42
TW16	5/17	115.07	52.45	62.62
TW16A	5/17	115.44	61.75	53.69
TW17	5/17	131.99	56.22	75.77
TW17A	5/17	131.55	56.13	75.42
TW18	5/25	128.09	34.61	93.48
TW19	5/25	116.19	26.66	89.53
TW2	5/3	197.71	63.52	134.19
TW20R	5/31	129.97	32.07	97.90
TW21	5/18	158.75	54.32	104.43
TW21A	5/18	158.83	43.36	115.47
TW22	5/18	189.15	101.62	87.53
TW22A	5/18	188.24	99.29	88.95
TW22B	5/18	189.58	69.32	120.26
TW23R	5/25	236.64	138.41	98.23
TW24	5/17	109.19	38.24	70.95
TW24A	5/17	108.69	37.69	71.00
TW25	5/17	117.42	41.84	75.58
TW25A	5/17	117.05	41.66	75.39
TW27	5/3	182.90	100.85	82.05
TW28	5/4	211.73	127.72	84.01

APPENDIX C - MILLERSVILLE LANDFILL GROUNDWATER LEVEL MEASUREMENTS (May 2022)

WELL ID	DATE	MEASURING POINT ELEV. (FEET)	DEPTH TO WATER (FEET)	ELEV. (FEET)
TW29	5/4	143.89	42.95	100.94
TW2A	5/3	197.92	112.68	85.24
TW3	5/3	180.75	98.74	82.01
TW30	5/4	221.00	122.38	98.62
TW31	5/31	186.47	100.41	86.06
TW32	5/31	190.09	72.19	117.90
TW3A	5/3	181.45	49.65	131.80
TW4	5/31	112.56	34.05	78.51
TW4B	5/31	113.60	28.10	85.50
TW5	5/17	104.77	28.07	76.70
TW5A	5/17	105.31	27.94	77.37
TW5B	5/17	103.98	57.06	46.92
TW6	5/17	107.41	36.44	70.97
TW6A	5/17	106.29	5.12	101.17
TW7	5/17	126.85	43.20	83.65
TW7A	5/17	127.56	42.96	84.60
TW8	5/18	139.49	48.87	90.62
TW8A	5/18	139.67	43.45	96.22
TW9	5/18	131.24	73.71	57.53
TW9A	5/18	134.68	6.12	128.56
TW9B	5/18	133.81	34.93	98.88
TW9C	5/18	133.95	34.90	99.05
W	5/31	203.57	113.65	89.92

Note: MW-P106 was unable to be accessed for measurement in May 2022

APPENDIX D
Data Validation

APPENDIX D
LABORATORY DATA VALIDATION

1.1 INTRODUCTION

This document presents the summary of data validation performed on the laboratory analytical data associated with the 1st semi-annual 2022 groundwater monitoring event at the Millersville Landfill and Resource Recovery Facility (MLFRRF) in Anne Arundel County, Maryland. Groundwater samples were collected pursuant to the Annotated Code of Maryland (COMAR) Title 26, Chapter 4; the Code of Federal Regulations (CFR) Title 40, Chapter Part 258; and the MLFRRF Environmental Monitoring Plan (EMP).

Groundwater and surface water sampling for the 1st semi-annual 2022 event was performed on April 19-21, April 26-28, May 1, and May 3-5, 2022. Environmental Monitoring and Assessment (EMA), LLC of Lititz, Pennsylvania conducted the sampling. Laboratory analysis for volatile organic compounds (VOCs) was performed by Maryland Spectral Services (MSS) of Baltimore, Maryland and for laboratory analysis for inorganic compounds was performed by Pace Analytical Service (Pace) of Greensburg, Pennsylvania.

Quality Assurance/Quality Control (QA/QC) protocols employed during this event included the analysis of matrix spike (MS) and matrix spike duplicate (MSD) samples, laboratory control samples (LCS), laboratory method blanks, and laboratory preparation blanks. These protocols also included the analysis of two blind duplicate samples obtained from TW-24 (DUP-1) and TW-25 (DUP-2). In addition, the QA/QC protocols included the preparation of four trip blanks and one field blank.

Samples were analyzed for VOCs, total and dissolved metals, and general chemistry parameters.

1.2 SAMPLE PACKAGE COMPLETENESS AND DELIVERABLES

Chains of custody were present in the data packages for all samples, along with statements from the laboratory attesting to the validity of the data. All requested analyses were accounted for in the data report. Sample receipt forms were present for all samples.

1.3 VOLATILE ORGANIC COMPOUND ANALYSES

1.3.1 General Information

<u>Groundwater Sampling Locations (62):</u>

TW-01, TW-02, TW-02A, TW-03, TW-03A, TW-04, TW-04B, TW-05, TW-05A, TW-05B, TW-06, TW-06A, TW-06B, TW-07, TW-07A, TW-08, TW-08A, TW-09, TW-09B, TW-09C, TW-10A, TW-11A, TW-12, TW-13, TW-14, TW-14A, TW-14B, TW-15, TW-15B, TW-16,

TW-16A, TW-17, TW-17A, TW-18, TW-19, TW-20R, TW-21, TW-21A, TW-22, TW-22A, TW-22B, TW-23R, TW-24, TW-24A, TW-25, TW-25A, TW-27, TW-28, TW-29, TW-30, MW-P4, MW-P9, MW-P106, MW-P417, MW-P440, RW-P109, RW-P165, RW-P171-1, RW-P264, RW-P440, RW-P441, and RW-P584.

Surface Water Sampling Locations (3):

SW-1, SW-2, and SW-3.

Residential Sampling Locations (18):

P-160-Z4, P-162-Z4, P-164-Z4, P-165-Z4, P-166-Z4, P-168-Z4, P-169-Z4, P-257-Z4, P-261-Z4, P-264-Z4, P-323-Z4, P-383-Z4, P-412-Z4, P-417-Z4, P-440-Z4, P-441-Z4, P-471-Z4, P-478-Z4.

QA/QC Samples:

Field blank, all trip blanks, laboratory control samples, laboratory method blanks, and laboratory MS/MSDs.

1.3.2 **Analytical Method**

The samples were analyzed for VOCs following the United States Environmental Protection Agency (USEPA) Methods 8260B and 8011. The target analyte list was that established as Appendix I by 40 CFR Part 258, "Constituents for Detection Monitoring" and Appendix II (40 CFR Part 258) parameters – dichlorodifluoromethane and dichlorofluoromethane, and methyl tertiary-butyl ether (MTBE).

Field and Trip Blanks

One field blank and nine trip blanks were prepared and analyzed for this sampling event. There were three VOC parameters detected in two of the eight trip blanks: acetone, chloroform, and methylene chloride. However, there were no detections of these parameters in the samples associated with the affected trip blanks. All of the noted parameters are also recognized as possible laboratory contaminants and all detections were given "L" flags by the lab. There were no VOC parameters detected in the field blank. Therefore, no concentrations were flagged with "B" qualifiers.

Blind Duplicate Samples

The blind duplicate samples were collected from wells TW-24 (DUP-1) and TW-25 (DUP-2). Analyses were performed to calculate the RPD of duplicate samples in obtaining an estimate of laboratory method precision. Table D-1 summarizes the RPD of constituents detected above the

RL. The agreement between the detected VOCs in the duplicate and corresponding sample was within QC standards.

Quality Control Sample Review

Quality Control samples for each laboratory report were reviewed to verify proper documentation of any analysis issues. Notable observations from the quality control samples are summarized below.

- Surrogates: For all projects, all surrogates were within quality control limits.
- Method Blanks: For all projects, there were no analytes detected in method blanks, with a few exceptions. For the following projects, there were analytes detected in the method blanks: 2042233 and 2042913,
- Continuing Calibration: For all projects, all criteria were within method requirements, with the exception of both method 8011 analytes. The results were flagged with a "CH" qualifier if the continuing calibration for the compound was outside of laboratory acceptance limits. The results might be biased high.
- Laboratory Control Spike: For all projects, recoveries in the laboratory control samples were within quality control limits, with a few exceptions. For the following projects, recoveries in the laboratory control samples were outside quality control limits: 30486932, 30482889, 30482496, 2042129, 2042733, 2022109, 2041324, 2042233, and 2042913. Proper qualification was added where appropriate.
- Matrix Spikes: For all projects, recoveries in matrix spikes and matrix spike duplicates were within quality control limits, with a few exceptions. The following projects had matrix spike or matrix spike duplicate recoveries that were outside control limits: 2042129, 2042733, 2042912, and 2050521. No additional qualification was necessary.
- Laboratory Duplicate: For all projects, the precision between the sample and laboratory sample duplicate was within control limits. No additional qualification was necessary.

1.4 INORGANIC ANALYSIS

1.4.1 General Information

Groundwater Sampling Locations (62):

TW-01, TW-02, TW-02A, TW-03, TW-03A, TW-04, TW-04B, TW-05, TW-05A, TW-05B, TW-06, TW-06B, TW-07, TW-07A, TW-08, TW-08A, TW-09, TW-09B, TW-09C, TW-10A, TW-14, TW-14A, TW-14B, TW-15, TW-15B, TW-16, TW-16A, TW-17, TW-17A, TW-19, TW-20R, TW-21, TW-22, TW-22A, TW-22B, TW-23R, TW-24, TW-24A, TW-25, TW-25A, TW-27, TW-28, TW-29, TW-30, MW-P106, MW-P4, MW-P417, MW-P440, MW-P9, RW-P109, RW-P165, RW-P171-1, RW-P264, RW-P440, RW-P441, and RW-P584.

Surface Water Sampling Locations (3):

SW-1, SW-2, and SW-3.

QA/QC Samples:

Field Blank, laboratory control samples, laboratory method blanks, laboratory duplicates, and laboratory MS/MSDs.

1.4.2 **Analytical Methods**

On-site samples were analyzed for antimony, arsenic, barium, beryllium, cadmium, calcium (total and dissolved), chromium, cobalt, copper, iron (total and dissolved), lead, magnesium (total and dissolved), manganese (total and dissolved), mercury, nickel, potassium (total and dissolved), selenium, silver, sodium (total and dissolved), thallium, vanadium, and zinc using the Inductively Coupled Plasma Optical Emission Spectrometry/Mass Spectrometer (ICP/MS) (USEPA Method 6010D and 6020B). Mercury was analyzed using the Cold Vapor Atomic Absorption Spectrometry method (CVAA) (USEPA Method 7470A).

Additionally, samples were analyzed for chloride (Standard Method [SM]4500CIE), nitrate and nitrite (SM4500NO3-F and SM4500NO2-B), ammonia (USEPA Method 350.1), chemical oxygen demand (USEPA Method 410.4), hardness (SM2340B), alkalinity (SM2320B), sulfate (USEPA Method 9038), total dissolved solids (SM2540C), and turbidity (SM2130B).

Off-site samples (MW and RW) were analyzed for mercury (total) only. All QC data were compared with quality control criteria for drinking water analysis in the USEPA Analytical Procedures for Determination of Metals under 40 CFR Part 136.

Field Blank

One field blank was prepared and analyzed for this sampling event as part of work order 30485831. There were "J" flagged detections for arsenic and vanadium in the field blank in work order 30485831. Comparable concentrations of arsenic were flagged with a "B" qualifier in six samples (TW-02, TW-02A, TW-03, TW-03A, TW-23, TW-27) and comparable concentrations of vanadium were flagged with a "B" qualifier in one sample (TW-27).

Blind Duplicate Samples

Table D1 summarizes the RPD of the detected inorganic constituents in duplicate samples. RPD's were generally within control limits. The highest RPD was 20.6% for concentrations of total dissolved solids in TW-24 and DUP-1. The RPD for most analytes was less than 13%.

Charge-Balance Error

The charge-balance error of samples collected in the field can be used to evaluate whether all ionic species that exist in the groundwater sample have been identified. Table D2 provides a summary of the calculated charge-balance errors. Thirteen out of 53 samples had a charge-balance error greater than the 20%. Charge-balance errors greater than 20% may indicate that ions are present in the groundwater sample that were not used in the calculations.

Project Narrative Review

Project narratives for each data package were reviewed to verify proper documentation of any analysis issues. Notable observations from the project narratives are summarized below.

- Holding Time: All samples in all projects were prepared and analyzed within the method required holding times, except for a few analyses using method EPA SM2540C in project 30482496. Proper qualification was added for the associated sample results.
- Initial Calibration: For all projects, all criteria were within method requirements.
- Continuing Calibration: For all projects, all criteria were within method requirements.
- Internal Standards: For all projects, all internal standards were within quality control limits.
- Method Blanks: The following projects had at least one analyte detected above the reporting limit in the associated method blank: 30485831, 30483865. The results were flagged with a "B" qualifier if an analyte was detected above the reporting limit in a method blank.
- Laboratory Control Spike: For all projects, all analytes in the lab control spike were recovered within the quality control limits.
- Matrix Spikes: For the following projects, at least one analyte in a matrix spike or matrix spike duplicate was recovered outside the quality control limits: 30486932, 30486387, 30485831, 30484621, 30482889, 30483865, 30484272, 30482496. For the following projects, the RPD value for at least one analyte in a matrix spike or matrix spike duplicate was outside the quality control limits: 30486932, 30484621, 30482889, 30483865, 30484272, and 30482496. The associated batch was either accepted based on LCS recovery or proper qualification was added for the associated sample results.
- Laboratory Duplicate: For all projects, the precision between the sample and laboratory sample duplicate was within control limits.
- Dilutions: For the following projects, at least one sample was diluted due to the presence of high levels of non-target analytes, high levels of target analytes, or other matrix interferences: 30486387, 30485831, 30484621, 30484272, 30482496. The results were flagged with a "D3" qualifier if the sample was diluted due to presence of high levels of non-target analytes or other matrix interference. The results were flagged with a "D4" qualifier if the dilution was run for the presence of high levels of target analytes.

TABLE D1 MLFRRF LABORATORY DATA VALIDATION - SPRING 2022 Duplicate Comparison - Detected Parameters							
Parameter	**Unit**	**TW-24 Result**	**Dup 1 Result**	**Relative Percent Difference**	**TW-25 Result**	**Dup 2 Result**	**Relative Percent Difference**
1,1-Dichloroethane	µg/L	1.8	1.8	0.0%	1.6	1.6	0.0%
Dichlorodifluoromethane	µg/L	2.5	2.5	0.0%	6.4	6.5	1.6%
Dichlorofluoromethane	µg/L	0.9 J	0.9 J	NA	2.4	2.4	0.0%
Tetrachloroethene	µg/L	1 U	1 U	NA	1.2	1.2	0.0%
Barium	mg/L	0.075	0.083	10.1%	0.022	0.021	4.7%
Calcium	mg/L	4	3.9	2.5%	1.5	1.7	12.5%
Calcium, Dissolved	mg/L	4.1	4.1	0.0%	1.4	1.4	0.0%
Chloride	mg/L	20.2	20.1	0.5%	5.1	5.1	0.0%
Cobalt	mg/L	0.0097	0.011	12.6%	0.0051	0.0049	4.0%
Copper	mg/L	0.004	0.0041	2.5%	0.0034	0.0033	3.0%
Magnesium	mg/L	3.8	3.7	2.7%	0.86	0.88	2.3%
Magnesium, Dissolved	mg/L	3.8	3.8	0.0%	0.84	0.83	1.2%
Manganese	mg/L	0.049	0.048	2.1%	0.017	0.017	0.0%
Manganese, Dissolved	mg/L	0.049	0.048	2.1%	0.017	0.017	0.0%
Mercury	mg/L	0.00053	0.0006	12.4%	0.0002 U	0.0002 U	NA
Nickel	mg/L	0.01	0.011	9.5%	0.0039	0.0038	2.6%
Nitrate as N	mg/L	1	1	0.0%	0.23	0.23	0.0%
Nitrogen, NO2 plus NO3	mg/L	1	1	0.0%	0.23	0.23	0.0%
Potassium	mg/L	1.3	1.3	0.0%	0.58	0.6	3.4%
Potassium, Dissolved	mg/L	1.3	1.3	0.0%	0.63	0.62	1.6%
Sodium	mg/L	12.2	12	1.7%	2.6	2.6	0.0%
Sodium, Dissolved	mg/L	12	12	0.0%	2.6	2.5	3.9%
Total Dissolved Solids	mg/L	74	91	20.6%	19	19	0.0%
Total Hardness	mg/L	25.7	25.3	1.6%	7.2	7.9	9.3%
Zinc	mg/L	0.012	0.013	8.0%	0.0057	0.0056	1.8%

TABLE D2
MLFRRF DATA EVALUATION - SPRING 2022
Cation/Anion Balance Worksheet

	ION	M.W. (g/mol)	*Subtite D Regulated Wells* Concentration (mg/L)														
			TW-01	TW-02A	TW-03	TW-04	TW-04B	TW-05	TW-05A	TW-06	TW-10A	TW-14	TW-14A	TW-19	TW-20R	TW-23R	TW-24
CATIONS	Ca^{2+}	40.08	17.5	5.5	1.2	3.9	2.7	3.4	1.8	4.1	5.6	1.3	3	24.5	24	2.9	4.1
	Mg^{2+}	24.31	1.7	3.1	0.61	1.3	2.9	1.1	0.81	3.7	3.5	1	3	6.1	5.9	1	3.8
	K^{+}	39.10	0.8	1.1	0.46	8.70	5.70	7.70	4.80	1.7	2.3	0.71	1.2	6.4	3.3	1.1	1.3
	Na^{+}	22.99	3.2	16	2.9	3.9	3.1	3.4	2.5	5.5	23.6	3.7	7.9	13.2	10.9	4.8	12
Cations (meq/L)			1.17	1.25	0.25	0.69	0.65	0.60	0.39	0.79	1.65	0.33	0.77	2.46	2.24	0.47	1.07
ANIONS	HCO_3^-	61.01	26.8	9.76	6.1	17.1	1.2	15.9	8.5	15.9	1.2	1.2	30.5	35.4	22.0	1.2	1.2
	Cl^-	35.45	5.9	31.5	4.3	8.2	4.3	7.2	5.5	11.4	39.2	7.3	11.1	17.9	8.7	6.6	20.2
	NO_3^-	62.00	0.44	0	0.31	0.66	1.2	0	0	0	8.9	0	0	4.4	3.9	8.0	4.4
	SO_4^{2-}	96.06	0	0	0	0	10.2	0	0	10.3	8.1	0	0	22.2	54.1	0	8.4
Anions (meq/L)			0.61	1.05	0.23	0.52	0.37	0.46	0.30	0.80	1.44	0.23	0.81	1.62	1.80	0.33	0.84
CBE (%)			***31.3***	*8.9*	*4.6*	*14.1*	***27.3***	*13.3*	*13.6*	*0.3*	*7.0*	*19.4*	*2.7*	***20.7***	*11.1*	*17.0*	*12.4*

	ION	M.W. (g/mol)	*Subtite D Regulated Wells* Concentration (mg/L)							*Surface Water*		
			TW-24A	TW-25	TW-25A	TW-27	TW-28	TW-29	TW-30	SW-1	SW-2	SW-3
CATIONS	Ca^{2+}	40.08	26.9	1.4	3.9	0.90	5.9	2.3	5.4	13.4	29.7	41.5
	Mg^{2+}	24.31	5	0.84	2.1	0.40	3.1	1.3	2.1	3.3	6.1	8.3
	K^{+}	39.10	3.2	0.63	1.10	0.37	1.2	0.84	1.6	2.3	6.3	4.1
	Na^{+}	22.99	3.1	2.6	4	2.5	23.7	4.8	12	42.6	28.1	5.6
Cations (meq/L)			1.97	0.27	0.57	0.20	1.61	0.45	1.01	2.85	3.37	3.10
ANIONS	HCO_3^-	61.01	37.8	0	0	1.2	0.61	0	1.2	12.2	43.9	70.8
	Cl^-	35.45	4	5.1	8.5	3.8	48.5	9.8	22.8	65.9	38.8	4
	NO_3^-	62.00	6.6	1.0	3.2	0	0.27	2.7	9.3	8.9	0.42	2.3
	SO_4^{2-}	96.06	19.1	0	0	0	0	0	0	13.5	12.8	15.9
Anions (meq/L)			1.24	0.16	0.29	0.13	1.38	0.32	0.81	2.48	2.09	1.64
CBE (%)			***22.8***	***25.2***	***32.2***	***21.3***	*7.6*	*17.2*	*10.6*	*6.9*	***23.5***	***30.8***

TABLE D2
MLFRRF DATA EVALUATION - SPRING 2022
Cation/Anion Balance Worksheet

	ION	M.W. (g/mol)	*COMAR Regulated Wells* Concentration (mg/L)														
			TW-07	TW-07A	TW-08	TW-08A	TW-09B	TW-09C	TW-15	TW-15B	TW-16	TW-17	TW-17A	TW-21	TW-22	TW-22A	TW-22B
CATIONS	Ca^{2+}	40.08	6.9	2.6	6.5	4.9	5	4.4	0.87	4	13.5	6.3	0.83	7.9	2.4	5.9	14.9
	Mg^{2+}	24.31	1.1	1.5	4.4	3.4	2.5	3.8	0.6	4.7	11.5	2.2	0.4	3	2.1	4.7	3.7
	K^{+}	39.10	2.2	0.77	1.4	1.4	1.5	2	0.83	1.4	6.5	1.8	0.5	2	1.1	1.7	3.4
	Na^{+}	22.99	5.2	1.8	24.3	18.4	13	15.6	2	22.7	20.6	13.9	1.3	19.9	12.4	38.8	6.6
Cations (meq/L)			**0.72**	**0.35**	**1.78**	**1.36**	**1.06**	**1.26**	**0.20**	**1.61**	**2.68**	**1.15**	**0.15**	**1.56**	**0.86**	**2.41**	**1.42**
ANIONS	HCO_3^-	61.01	14.6	1.2	18.3	0	4.9	2.4	6	0	0	6.1	2.4	0.61	0	0	17.1
	Cl^-	35.45	8.7	3.4	45.9	25.6	17.4	22.6	3.4	47.9	21.6	4.7	2.4	22.6	18.4	71.1	4.9
	NO_3^-	62.00	0.28	1.0	0.44	6.2	9.3	13.7	0.66	2.5	0	0	0.9	9.3	4.9	7.5	11.1
	SO_4^{2-}	96.06	0	7.5	0	12.5	5.6	9.6	0	0	129	40.6	0	31	0	13.4	21.4
Anions (meq/L)			**0.49**	**0.29**	**1.60**	**1.08**	**0.84**	**1.10**	**0.21**	**1.39**	**3.30**	**1.08**	**0.12**	**1.44**	**0.60**	**2.41**	**1.04**
CBE (%)			*18.8*	*9.8*	*5.2*	*11.4*	*11.7*	*6.9*	*2.0*	*7.3*	*10.3*	*3.1*	*8.5*	*3.8*	*18.0*	*0.1*	*15.4*

	ION	M.W. (g/mol)	*On-site Non-Regulated Wells* Concentration (mg/L)												
			TW-02	TW-03A	TW-05B	TW-06A	TW-06B	TW-09	TW-11A	TW-12	TW-13	TW-14B	TW-16A	TW-18	TW-21A
CATIONS	Ca^{2+}	40.08	0.43	1.1	0.61	48.3	0.54	0.53	3.9	3.2	3.1	0.49	1	7.2	11.8
	Mg^{2+}	24.31	0.48	0.48	0.20	5	0.28	0.24	1.9	1.9	1.9	0.26	0.4	2.9	3.2
	K^{+}	39.10	0.6	0.65	0.5	5	0.53	0.49	2.2	1.2	1.1	0.44	0.47	1.3	2.3
	Na^{+}	22.99	1.9	24	1.5	2.3	1.6	0.87	11.7	5.3	8.2	0.95	1.3	3	16.4
Cations (meq/L)			**0.16**	**1.15**	**0.13**	**3.08**	**0.13**	**0.10**	**0.92**	**0.58**	**0.70**	**0.10**	**0.15**	**0.76**	**1.62**
ANIONS	HCO_3^-	61.01	7.3	4.9	0	62.2	0	12.2	20.7	17.1	15.9	0	1.2	0.61	2.4
	Cl^-	35.45	2.7	48.3	1.8	3	2.9	1.5	14.3	5.8	14.1	1.6	2.4	4.2	17.3
	NO_3^-	62.00	0	0.66	0.80	2.7	1.4	0	0.27	0	0.80	1.4	0.75	7.1	10.6
	SO_4^{2-}	96.06	0	0	0	33.2	0	0	20.6	0	0	0	0	26.3	33.3
Anions (meq/L)			**0.20**	**1.45**	**0.06**	**1.84**	**0.10**	**0.24**	**1.18**	**0.44**	**0.67**	**0.07**	**0.10**	**0.79**	**1.39**
CBE (%)			*10.5*	*11.4*	***32.7***	***25.3***	*12.0*	***43.0***	*12.4*	*13.1*	*1.8*	*18.3*	***20.5***	*1.9*	*7.7*

APPENDIX E
Laboratory Analytical Data Packages

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

June 01, 2022

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-SPRING 2022
Pace Project No.: 30486932

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on May 05, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Steven L. Smith
steve.l.smith@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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Pace Analytical Services, LLC
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Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: MLF-SPRING 2022
Pace Project No.: 30486932

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver

225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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SAMPLE SUMMARY

Project: MLF-SPRING 2022
Pace Project No.: 30486932

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30486932001	**MW-P4**	Water	05/05/22 12:00	05/05/22 22:45
30486932002	**MW-P9**	Water	05/05/22 17:30	05/05/22 22:45
30486932003	**MW-P106**	Water	05/04/22 16:10	05/05/22 22:45
30486932004	**MW-P417**	Water	05/04/22 14:30	05/05/22 22:45
30486932005	**MW-P440**	Water	05/04/22 15:15	05/05/22 22:45
30486932006	**RW-P109**	Water	05/05/22 09:15	05/05/22 22:45
30486932007	**RW-P165**	Water	05/05/22 11:20	05/05/22 22:45
30486932008	**RW-P171-1**	Water	05/05/22 12:50	05/05/22 22:45
30486932009	**RW-P264**	Water	05/04/22 17:00	05/05/22 22:45
30486932010	**RW-P440**	Water	05/05/22 10:40	05/05/22 22:45
30486932011	**RW-P441**	Water	05/05/22 10:00	05/05/22 22:45
30486932012	**RW-P584**	Water	05/03/22 18:10	05/05/22 22:45

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2022
Pace Project No.: 30486932

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30486932001	**MW-P4**	EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30486932002	**MW-P9**	EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30486932003	**MW-P106**	EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30486932004	**MW-P417**	EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30486932005	**MW-P440**	EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30486932006	**RW-P109**	EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30486932007	**RW-P165**	EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30486932008	**RW-P171-1**	EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30486932009	**RW-P264**	EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30486932010	**RW-P440**	EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30486932011	**RW-P441**	EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30486932012	**RW-P584**	EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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Greensburg, PA 15601
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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30486932

Date: June 01, 2022

MW-P4 (Lab ID: 30486932001)

- Sample pH for 8011 is 6

MW-P9 (Lab ID: 30486932002)

- Sample pH for 8011 is 5

MW-P106 (Lab ID: 30486932003)

- Sample pH for 8011 is 5

MW-P417 (Lab ID: 30486932004)

- Sample pH for 8011 is 5

MW-P440 (Lab ID: 30486932005)

- Sample pH for 8011 is 5

RW-P109 (Lab ID: 30486932006)

- Sample pH for 8011 is 5

RW-P165 (Lab ID: 30486932007)

- Sample pH for 8011 is 5

RW-P171-1 (Lab ID: 30486932008)

- Sample pH for 8011 is 5

RW-P264 (Lab ID: 30486932009)

- Sample pH for 8011 is 5

RW-P440 (Lab ID: 30486932010)

- Sample pH for 8011 is 5

RW-P441 (Lab ID: 30486932011)

- Sample pH for 8011 is 6

RW-P584 (Lab ID: 30486932012)

- Sample pH for 8011 is 5

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Greensburg, PA 15601
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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30486932

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
12 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 503330

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30486665003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2437265)
  - Mercury
- MSD (Lab ID: 2437266)
  - Mercury

R1: RPD value was outside control limits.

- MSD (Lab ID: 2437266)
  - Mercury

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30486932

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30486932

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
12 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 503199

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- BLANK (Lab ID: 2436783)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- LCS (Lab ID: 2436784)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MS (Lab ID: 2436785)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MSD (Lab ID: 2436786)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MW-P106 (Lab ID: 30486932003)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MW-P4 (Lab ID: 30486932001)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MW-P417 (Lab ID: 30486932004)
  - 1,1,1,2-Tetrachloroethane (S)

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30486932

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

QC Batch: 503199

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- 1,2-Dibromo-3-chloropropane
- 1,2-Dibromoethane (EDB)

- MW-P440 (Lab ID: 30486932005)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MW-P9 (Lab ID: 30486932002)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- RW-P109 (Lab ID: 30486932006)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- RW-P165 (Lab ID: 30486932007)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- RW-P171-1 (Lab ID: 30486932008)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- RW-P264 (Lab ID: 30486932009)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- RW-P440 (Lab ID: 30486932010)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- RW-P441 (Lab ID: 30486932011)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- RW-P584 (Lab ID: 30486932012)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30486932

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 503199

L1: Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.

- LCS (Lab ID: 2436784)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30486932

Sample: MW-P4 **Lab ID: 30486932001** Collected: 05/05/22 12:00 Received: 05/05/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/10/22 12:15	05/11/22 16:03	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/10/22 07:45	05/11/22 17:46	96-12-8	CH,L1
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/10/22 07:45	05/11/22 17:46	106-93-4	CH,L1
Surrogates									
1,1,1,2-Tetrachloroethane (S)	119	%.	60-140		1	05/10/22 07:45	05/11/22 17:46	630-20-6	CH

Sample: MW-P9 **Lab ID: 30486932002** Collected: 05/05/22 17:30 Received: 05/05/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/10/22 12:15	05/11/22 16:04	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.023	1	05/10/22 07:45	05/11/22 18:26	96-12-8	CH,L1
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/10/22 07:45	05/11/22 18:26	106-93-4	CH,L1
Surrogates									
1,1,1,2-Tetrachloroethane (S)	119	%.	60-140		1	05/10/22 07:45	05/11/22 18:26	630-20-6	CH

Sample: MW-P106 **Lab ID: 30486932003** Collected: 05/04/22 16:10 Received: 05/05/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/10/22 12:15	05/11/22 16:06	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.042 U**	ug/L	0.042	0.023	1	05/10/22 07:45	05/11/22 18:39	96-12-8	CH,L1
1,2-Dibromoethane (EDB)	**0.042 U**	ug/L	0.042	0.032	1	05/10/22 07:45	05/11/22 18:39	106-93-4	CH,L1
Surrogates									
1,1,1,2-Tetrachloroethane (S)	128	%.	60-140		1	05/10/22 07:45	05/11/22 18:39	630-20-6	CH

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30486932

Sample: MW-P417 **Lab ID: 30486932004** Collected: 05/04/22 14:30 Received: 05/05/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/10/22 12:15	05/11/22 16:11	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.023	1	05/10/22 07:45	05/11/22 18:52	96-12-8	CH,L1
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/10/22 07:45	05/11/22 18:52	106-93-4	CH,L1
Surrogates									
1,1,1,2-Tetrachloroethane (S)	126	%.	60-140		1	05/10/22 07:45	05/11/22 18:52	630-20-6	CH

Sample: MW-P440 **Lab ID: 30486932005** Collected: 05/04/22 15:15 Received: 05/05/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/10/22 12:15	05/11/22 16:13	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.023	1	05/10/22 07:45	05/11/22 19:05	96-12-8	CH,L1
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/10/22 07:45	05/11/22 19:05	106-93-4	CH,L1
Surrogates									
1,1,1,2-Tetrachloroethane (S)	132	%.	60-140		1	05/10/22 07:45	05/11/22 19:05	630-20-6	CH

Sample: RW-P109 **Lab ID: 30486932006** Collected: 05/05/22 09:15 Received: 05/05/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/10/22 12:15	05/11/22 16:15	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.023	1	05/10/22 07:45	05/11/22 19:19	96-12-8	CH,L1
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/10/22 07:45	05/11/22 19:19	106-93-4	CH,L1
Surrogates									
1,1,1,2-Tetrachloroethane (S)	124	%.	60-140		1	05/10/22 07:45	05/11/22 19:19	630-20-6	CH

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30486932

Sample: RW-P165 **Lab ID: 30486932007** Collected: 05/05/22 11:20 Received: 05/05/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/10/22 12:15	05/11/22 16:17	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.023	1	05/10/22 07:45	05/11/22 19:32	96-12-8	CH,L1
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/10/22 07:45	05/11/22 19:32	106-93-4	CH,L1
Surrogates									
1,1,1,2-Tetrachloroethane (S)	127	%.	60-140		1	05/10/22 07:45	05/11/22 19:32	630-20-6	CH

Sample: RW-P171-1 **Lab ID: 30486932008** Collected: 05/05/22 12:50 Received: 05/05/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/10/22 12:15	05/11/22 16:19	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.042 U**	ug/L	0.042	0.023	1	05/10/22 07:45	05/11/22 19:45	96-12-8	CH,L1
1,2-Dibromoethane (EDB)	**0.042 U**	ug/L	0.042	0.032	1	05/10/22 07:45	05/11/22 19:45	106-93-4	CH,L1
Surrogates									
1,1,1,2-Tetrachloroethane (S)	121	%.	60-140		1	05/10/22 07:45	05/11/22 19:45	630-20-6	CH

Sample: RW-P264 **Lab ID: 30486932009** Collected: 05/04/22 17:00 Received: 05/05/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/10/22 12:15	05/11/22 16:20	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.023	1	05/10/22 07:45	05/11/22 19:58	96-12-8	CH,L1
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/10/22 07:45	05/11/22 19:58	106-93-4	CH,L1
Surrogates									
1,1,1,2-Tetrachloroethane (S)	127	%.	60-140		1	05/10/22 07:45	05/11/22 19:58	630-20-6	CH

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30486932

Sample: RW-P440 **Lab ID: 30486932010** Collected: 05/05/22 10:40 Received: 05/05/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/26/22 10:15	05/31/22 16:56	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.023	1	05/10/22 07:45	05/11/22 20:11	96-12-8	CH,L1
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/10/22 07:45	05/11/22 20:11	106-93-4	CH,L1
Surrogates									
1,1,1,2-Tetrachloroethane (S)	123	%.	60-140		1	05/10/22 07:45	05/11/22 20:11	630-20-6	CH

Sample: RW-P441 **Lab ID: 30486932011** Collected: 05/05/22 10:00 Received: 05/05/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/26/22 10:15	05/31/22 16:58	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.042 U**	ug/L	0.042	0.023	1	05/10/22 07:45	05/11/22 20:24	96-12-8	CH,L1
1,2-Dibromoethane (EDB)	**0.042 U**	ug/L	0.042	0.032	1	05/10/22 07:45	05/11/22 20:24	106-93-4	CH,L1
Surrogates									
1,1,1,2-Tetrachloroethane (S)	124	%.	60-140		1	05/10/22 07:45	05/11/22 20:24	630-20-6	CH

Sample: RW-P584 **Lab ID: 30486932012** Collected: 05/03/22 18:10 Received: 05/05/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00045**	mg/L	0.00020	0.00020	1	05/26/22 10:15	05/31/22 16:59	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/10/22 07:45	05/11/22 20:37	96-12-8	CH,L1
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/10/22 07:45	05/11/22 20:37	106-93-4	CH,L1
Surrogates									
1,1,1,2-Tetrachloroethane (S)	125	%.	60-140		1	05/10/22 07:45	05/11/22 20:37	630-20-6	CH

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30486932

QC Batch: 503330
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30486932001, 30486932002, 30486932003, 30486932004, 30486932005, 30486932006, 30486932007, 30486932008, 30486932009

METHOD BLANK: 2437232 Matrix: Water
Associated Lab Samples: 30486932001, 30486932002, 30486932003, 30486932004, 30486932005, 30486932006, 30486932007, 30486932008, 30486932009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	05/11/22 15:33	

LABORATORY CONTROL SAMPLE: 2437233

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.010	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2437265 2437266

Parameter	Units	30486665003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.01	0.01	0.0014	0.0042	13	42	80-120	103	20	M1,R1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30486932

QC Batch: 507143
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30486932010, 30486932011, 30486932012

METHOD BLANK: 2457069 Matrix: Water
Associated Lab Samples: 30486932010, 30486932011, 30486932012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	05/31/22 16:17	

LABORATORY CONTROL SAMPLE: 2457070

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.0085	85	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2457114 2457115

Parameter	Units	30485831002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00020 U	0.01	0.01	0.0086	0.0084	86	84	80-120	2	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30486932

QC Batch: 503199
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30486932001, 30486932002, 30486932003, 30486932004, 30486932005, 30486932006, 30486932007, 30486932008, 30486932009, 30486932010, 30486932011, 30486932012

METHOD BLANK: 2436783
Matrix: Water
Associated Lab Samples: 30486932001, 30486932002, 30486932003, 30486932004, 30486932005, 30486932006, 30486932007, 30486932008, 30486932009, 30486932010, 30486932011, 30486932012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.022	05/11/22 17:20	CH
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	05/11/22 17:20	CH
1,1,1,2-Tetrachloroethane (S)	%.	135	60-140		05/11/22 17:20	CH

LABORATORY CONTROL SAMPLE: 2436784

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.33	129	85-115	CH,L1
1,2-Dibromoethane (EDB)	ug/L	0.25	0.32	129	85-115	CH,L1
1,1,1,2-Tetrachloroethane (S)	%.			139	60-140	CH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2436785 2436786

Parameter	Units	30486932001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.041 U	0.42	0.41	0.46	0.48	109	118	60-140	6	25	CH
1,2-Dibromoethane (EDB)	ug/L	0.041 U	0.42	0.41	0.50	0.50	119	121	60-140	0	25	CH
1,1,1,2-Tetrachloroethane (S)	%.						123	127	60-140			CH

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: MLF-SPRING 2022
Pace Project No.: 30486932

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30486932001
[1] Sample pH for 8011 is 6

Sample: 30486932002
[1] Sample pH for 8011 is 5

Sample: 30486932003
[1] Sample pH for 8011 is 5

Sample: 30486932004
[1] Sample pH for 8011 is 5

Sample: 30486932005
[1] Sample pH for 8011 is 5

Sample: 30486932006
[1] Sample pH for 8011 is 5

Sample: 30486932007
[1] Sample pH for 8011 is 5

Sample: 30486932008
[1] Sample pH for 8011 is 5

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QUALIFIERS

Project: MLF-SPRING 2022
Pace Project No.: 30486932

SAMPLE QUALIFIERS

Sample: 30486932009
[1] Sample pH for 8011 is 5
Sample: 30486932010
[1] Sample pH for 8011 is 5
Sample: 30486932011
[1] Sample pH for 8011 is 6
Sample: 30486932012
[1] Sample pH for 8011 is 5

ANALYTE QUALIFIERS

CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2022
Pace Project No.: 30486932

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30486932001	**MW-P4**	EPA 7470A	503330	EPA 7470A	503695
30486932002	**MW-P9**	EPA 7470A	503330	EPA 7470A	503695
30486932003	**MW-P106**	EPA 7470A	503330	EPA 7470A	503695
30486932004	**MW-P417**	EPA 7470A	503330	EPA 7470A	503695
30486932005	**MW-P440**	EPA 7470A	503330	EPA 7470A	503695
30486932006	**RW-P109**	EPA 7470A	503330	EPA 7470A	503695
30486932007	**RW-P165**	EPA 7470A	503330	EPA 7470A	503695
30486932008	**RW-P171-1**	EPA 7470A	503330	EPA 7470A	503695
30486932009	**RW-P264**	EPA 7470A	503330	EPA 7470A	503695
30486932010	**RW-P440**	EPA 7470A	507143	EPA 7470A	508469
30486932011	**RW-P441**	EPA 7470A	507143	EPA 7470A	508469
30486932012	**RW-P584**	EPA 7470A	507143	EPA 7470A	508469
30486932001	**MW-P4**	EPA 8011	503199	EPA 8011	503313
30486932002	**MW-P9**	EPA 8011	503199	EPA 8011	503313
30486932003	**MW-P106**	EPA 8011	503199	EPA 8011	503313
30486932004	**MW-P417**	EPA 8011	503199	EPA 8011	503313
30486932005	**MW-P440**	EPA 8011	503199	EPA 8011	503313
30486932006	**RW-P109**	EPA 8011	503199	EPA 8011	503313
30486932007	**RW-P165**	EPA 8011	503199	EPA 8011	503313
30486932008	**RW-P171-1**	EPA 8011	503199	EPA 8011	503313
30486932009	**RW-P264**	EPA 8011	503199	EPA 8011	503313
30486932010	**RW-P440**	EPA 8011	503199	EPA 8011	503313
30486932011	**RW-P441**	EPA 8011	503199	EPA 8011	503313
30486932012	**RW-P584**	EPA 8011	503199	EPA 8011	503313

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WO#: 30486932

EMA ENVIRONMENTAL LLC

207 East Sixth Street ▪ Lititz, Pennsylvania

30486932

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF-SPRING 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Mercury		MEthod 8011 - EDB+ DBCP									
1	MW-P4	4	5.5.22	1200	✓		GW	✓		✓									001
2	MW-P9		5.5.22	1730															002
3	MW-P406		5.4.22	1610															003
4	MW-P417			1430															004
5	MW-P440			1515															005
6	RW-P109		5.5.22	915															006
7	RW-P165		5.5.22	1120															007
8	RW-P171-1		5.5.22	1250															008
9	RW-P264		5.4.22	1700															009
10	RW-P440		5.5.22	1040															010
11	RW-P441			1000															011
12	RW-P584		5.3.22	1010															012

	Signature	Date	Time	Comments
Relinquished by	DABrown	5.5.22	14:48	
Received by	[illegible]	5.5.22	1448	PACE - WV - Hg
Relinquished by	[illegible]	05/05/22	1815	PACE - G-BUMP - 8011
Received by	RDS PACE	5-5-22	1850	
Relinquished by	RDS PACE	5-5-22	2245	LEVEL 2 REPORT
Received by	[illegible]	5-5-22	2245	

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: CMA Project # 30486933

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Label MJS
LIMS Login MJS

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Thermometer Used 17 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 3.3 °C Correction Factor: +0.0 °C Final Temp: 3.3 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# 100281	Date and Initials of person examining contents: MJS 5-6-22
Chain of Custody Present:	✓			1.	
Chain of Custody Filled Out:	✓			2.	
Chain of Custody Relinquished:	✓			3.	
Sampler Name & Signature on COC:		✓		4.	
Sample Labels match COC: -Includes date/time/ID Matrix: WA	✓			5.	
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):		✓		7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used:	✓			10.	
-Pace Containers Used:	✓				
Containers Intact:	✓			11.	
Orthophosphate field filtered			✓	12.	
Hex Cr Aqueous sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.	
All containers meet method preservation requirements.	✓			Initial when completed MJS	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:		✓		18.	
Trip Blank Custody Seals Present			✓		
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed:	Date: / Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

WO# : 30486932

30486932

LIMS30 Internal Shipping Manifest

COOLER 22

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	22	Cooler temp (rcvd) °C	
Packaged on Ice (Y/N)	Yes	Correction Factor	
Shipping Method	Courier	Cooler temp (corr) °C	
Tracking #	N/A	IR GUN ID	
PWS* Drinking water?	No	Received on ice?	

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished		GBUR	5-6-22	1745
Received		BEAV	5-7-22	211
Relinquished				
Received				
Relinquished				
Received				

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	5/6/2022	30486751003 CG3H1/1	CG3H	30486751003	30486751
MF	5/6/2022	30486751001 CG3H1/1	CG3H	30486751001	30486751
MF	5/6/2022	30486885003 WGFU1/2	WGFU	30486885003	30486885
MF	5/6/2022	30486886001 WGFU1/2	WGFU	30486886001	30486886
MF	5/6/2022	30486886002 WGFU2/2	WGFU	30486886002	30486886
MF	5/6/2022	30486751001 BP3C1/1	BP3C	30486751001	30486751
MF	5/6/2022	30486885004 WGFU1/2	WGFU	30486885004	30486885
MF	5/6/2022	30486885003 WGFU2/2	WGFU	30486885003	30486885
MF	5/6/2022	30486885002 WGFU2/2	WGFU	30486885002	30486885
MF	5/6/2022	30486885004 WGFU2/2	WGFU	30486885004	30486885
MF	5/6/2022	30486885005 WGFU1/2	WGFU	30486885005	30486885
MF	5/6/2022	30486885006 WGFU2/2	WGFU	30486885006	30486885
MF	5/6/2022	30486885006 WGFU1/2	WGFU	30486885006	30486885
MF	5/6/2022	30486885002 WGFU1/2	WGFU	30486885002	30486885
MF	5/6/2022	30486885001 WGFU1/2	WGFU	30486885001	30486885
MF	5/6/2022	30487109007 BP3N1/1	BP3N	30487109007	30487109
MF	5/6/2022	30486932008 BP3N1/1	BP3N	30486932008	30486932
MF	5/6/2022	30486932011 BP3N1/1	BP3N	30486932011	30486932
MF	5/6/2022	30486932006 BP3N1/1	BP3N	30486932006	30486932
MF	5/6/2022	30486932009 BP3N1/1	BP3N	30486932009	30486932
MF	5/6/2022	30487010001 BP3N2/2	BP3N	30487010001	30487010
MF	5/6/2022	30486932004 BP3N1/1	BP3N	30486932004	30486932
MF	5/6/2022	30486932002 BP3N1/1	BP3N	30486932002	30486932
MF	5/6/2022	30487010001 BP3N1/2	BP3N	30487010001	30487010
MF	5/6/2022	30486932007 BP3N1/1	BP3N	30486932007	30486932
MF	5/6/2022	30486932001 BP3N1/1	BP3N	30486932001	30486932
MF	5/6/2022	30486932010 BP3N1/1	BP3N	30486932010	30486932
MF	5/6/2022	30486932012 BP3N1/1	BP3N	30486932012	30486932
MF	5/6/2022	30486932005 BP3N1/1	BP3N	30486932005	30486932
MF	5/6/2022	30486932003 BP3N1/1	BP3N	30486932003	30486932
MF	5/6/2022	30487010001 BP3U2/2	BP3U	30487010001	30487010

WO#: 30486932
PM: SLS **Due Date: 05/20/22**
CLIENT: ENV MONITOR

LIMS73 Lab Sample Condition Upon Receipt (West Virgin

Pace Analytical

Client Name: _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☑ Other: 3rd Party

Tracking #: _____

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 23 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** 1.9 °C Correction Factor: .0 °C Final Temp: 1.9 °C

Comments:

pH paper Lot#	Date and Initials of person examining contents:
223419	CDW 5-9-22

	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:			✓	4. Sub from Pitt
Sample Labels match COC:	✓			5.
-Includes date/time/ID Matrix: WT				Lab Labeled by: CDW Checked by: CDW
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered:			✓	13.
-pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓	
Filtered volume received for Dissolved tests:			✓	14.
All containers have been checked for preservation:	✓			15.
exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix				
All containers meet method preservation requirements:	✓			Initial when completed: CDW Date: 5-9-22
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present:			✓	17.
Trip Blank Custody Seals Present:			✓	
				Initial when completed: CDW Date: 5-9-22

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

***PM review** is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

June 01, 2022

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-Spring 2022
Pace Project No.: 30486387

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on May 04, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Steven L. Smith
steve.l.smith@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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CERTIFICATIONS

Project: MLF-Spring 2022
Pace Project No.: 30486387

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver
225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: MLF-Spring 2022
Pace Project No.: 30486387

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30486387001	**TW-1**	Water	05/04/22 11:50	05/04/22 22:15
30486387002	**TW-28**	Water	05/04/22 09:50	05/04/22 22:15
30486387003	**TW-29**	Water	05/04/22 10:40	05/04/22 22:15
30486387004	**TW-30**	Water	05/04/22 12:30	05/04/22 22:15

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SAMPLE ANALYTE COUNT

Project: MLF-Spring 2022
Pace Project No.: 30486387

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30486387001	**TW-1**	EPA 6010D	MEH	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30486387002	**TW-28**	EPA 6010D	MEH	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30486387003	**TW-29**	EPA 6010D	MEH	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF-Spring 2022
Pace Project No.: 30486387

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30486387004	**TW-30**	EPA 6010D	MEH	7	PASI-BV
		EPA 6010D	MEH	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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(724)850-5600

PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30486387

Date: June 01, 2022

TW-1 (Lab ID: 30486387001)

- Sample pH for 8011 is 7

TW-28 (Lab ID: 30486387002)

- Sample pH for 8011 is 6

TW-29 (Lab ID: 30486387003)

- Sample pH for 8011 is 6

TW-30 (Lab ID: 30486387004)

- Sample pH for 8011 is 6

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30486387

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
4 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30486387

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
4 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30486387

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
4 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30486387

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
4 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30486387

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
4 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 503590

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- BLANK (Lab ID: 2438604)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- LCS (Lab ID: 2438605)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MS (Lab ID: 2438606)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MSD (Lab ID: 2438607)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-1 (Lab ID: 30486387001)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-28 (Lab ID: 30486387002)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-29 (Lab ID: 30486387003)
  - 1,1,1,2-Tetrachloroethane (S)

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30486387

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

QC Batch: 503590

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- 1,2-Dibromo-3-chloropropane
- 1,2-Dibromoethane (EDB)

- TW-30 (Lab ID: 30486387004)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30486387

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
4 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 505321

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30486387001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2447897)
  - Alkalinity,Total (CaCO3 pH4.5)

Additional Comments:

Analyte Comments:

QC Batch: 505321

1c: Alk TV: 0 mg/L
- TW-29 (Lab ID: 30486387003)
  - Alkalinity,Total (CaCO3 pH4.5)

2c: Alk TV: 1 mg/L
- TW-28 (Lab ID: 30486387002)
  - Alkalinity,Total (CaCO3 pH4.5)

3c: Alk TV: 2 mg/L
- TW-30 (Lab ID: 30486387004)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30486387

Method: **SM 2540C-2011**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
4 samples were analyzed for SM 2540C-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30486387

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
4 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30486387

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
4 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 502936

D4: Sample was diluted due to the presence of high levels of target analytes.

- MS (Lab ID: 2435461)
  - Chemical Oxygen Demand
- MSD (Lab ID: 2435462)
  - Chemical Oxygen Demand

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30486387

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
4 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30486387

Method: **SM 4500NO3-F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
4 samples were analyzed for SM 4500NO3-F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30486387

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
4 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30486387

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
4 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30486387

Sample: TW-1 **Lab ID: 30486387001** Collected: 05/04/22 11:50 Received: 05/04/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**17.1**	mg/L	0.50	0.083	1	05/11/22 07:37	05/26/22 15:35	7440-70-2	
Iron	**37.3**	mg/L	0.050	0.035	1	05/11/22 07:37	05/26/22 15:35	7439-89-6	
Magnesium	**1.5**	mg/L	0.50	0.047	1	05/11/22 07:37	05/26/22 15:35	7439-95-4	
Manganese	**0.18**	mg/L	0.0050	0.0027	1	05/11/22 07:37	05/26/22 15:35	7439-96-5	
Potassium	**0.69**	mg/L	0.50	0.26	1	05/11/22 07:37	05/26/22 15:35	7440-09-7	
Sodium	**3.0**	mg/L	0.50	0.34	1	05/11/22 07:37	05/26/22 15:35	7440-23-5	
Total Hardness	**48.9**	mg/L	3.3	0.27	1	05/11/22 07:37	05/26/22 15:35		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**17.5**	mg/L	0.50	0.083	1	05/20/22 15:04	05/27/22 16:21	7440-70-2	
Iron, Dissolved	**29.0**	mg/L	0.050	0.035	1	05/20/22 15:04	05/27/22 16:21	7439-89-6	
Magnesium, Dissolved	**1.7**	mg/L	0.50	0.047	1	05/20/22 15:04	05/27/22 16:21	7439-95-4	
Manganese, Dissolved	**0.19**	mg/L	0.0050	0.0027	1	05/20/22 15:04	05/27/22 16:21	7439-96-5	
Potassium, Dissolved	**0.80**	mg/L	0.50	0.26	1	05/20/22 15:04	05/27/22 16:21	7440-09-7	
Sodium, Dissolved	**3.2**	mg/L	0.50	0.34	1	05/20/22 15:04	05/27/22 16:21	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/09/22 10:57	05/21/22 18:44	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/09/22 10:57	05/21/22 18:44	7440-38-2	
Barium	**0.016**	mg/L	0.0025	0.00098	1	05/09/22 10:57	05/21/22 18:44	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	05/09/22 10:57	05/21/22 18:44	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/09/22 10:57	05/21/22 18:44	7440-43-9	
Chromium	**0.0040**	mg/L	0.0025	0.00050	1	05/09/22 10:57	05/21/22 18:44	7440-47-3	
Cobalt	**0.00093J**	mg/L	0.0025	0.00031	1	05/09/22 10:57	05/21/22 18:44	7440-48-4	
Copper	**0.00080J**	mg/L	0.0025	0.00064	1	05/09/22 10:57	05/21/22 18:44	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/09/22 10:57	05/21/22 18:44	7439-92-1	
Nickel	**0.0053**	mg/L	0.0025	0.00065	1	05/09/22 10:57	05/21/22 18:44	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/09/22 10:57	05/21/22 18:44	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/09/22 10:57	05/21/22 18:44	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/09/22 10:57	05/21/22 18:44	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	05/09/22 10:57	05/21/22 18:44	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0049	1	05/09/22 10:57	05/21/22 18:44	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/09/22 17:00	05/11/22 11:56	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/11/22 08:30	05/12/22 01:07	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/11/22 08:30	05/12/22 01:07	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	128	%.	60-140		1	05/11/22 08:30	05/12/22 01:07	630-20-6	CH

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30486387

Sample: TW-1 **Lab ID: 30486387001** Collected: 05/04/22 11:50 Received: 05/04/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**44.0**	mg/L	10.0	1.0	1		05/18/22 16:27		ML
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**48.0**	mg/L	10.0	10.0	1		05/09/22 18:52		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/10/22 09:31	05/10/22 13:36		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/09/22 13:52	05/09/22 17:37		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**5.9**	mg/L	3.0	0.67	1		05/18/22 14:43	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.099J**	mg/L	0.10	0.053	1		05/17/22 18:47	14797-55-8	
Nitrogen, NO2 plus NO3	**0.11**	mg/L	0.10	0.053	1		05/17/22 18:47		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/05/22 16:32	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.0066J**	mg/L	0.010	0.0055	1		05/05/22 16:12	14797-65-0	

Sample: TW-28 **Lab ID: 30486387002** Collected: 05/04/22 09:50 Received: 05/04/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**5.8**	mg/L	0.50	0.083	1	05/11/22 07:37	05/26/22 15:37	7440-70-2	
Iron	**0.18**	mg/L	0.050	0.035	1	05/11/22 07:37	05/26/22 15:37	7439-89-6	
Magnesium	**2.9**	mg/L	0.50	0.047	1	05/11/22 07:37	05/26/22 15:37	7439-95-4	
Manganese	**0.028**	mg/L	0.0050	0.0027	1	05/11/22 07:37	05/26/22 15:37	7439-96-5	
Potassium	**1.0**	mg/L	0.50	0.26	1	05/11/22 07:37	05/26/22 15:37	7440-09-7	

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30486387

Sample: TW-28 **Lab ID: 30486387002** Collected: 05/04/22 09:50 Received: 05/04/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**22.7**	mg/L	0.50	0.34	1	05/11/22 07:37	05/26/22 15:37	7440-23-5	
Total Hardness	**26.7**	mg/L	3.3	0.27	1	05/11/22 07:37	05/26/22 15:37		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**5.9**	mg/L	0.50	0.083	1	05/20/22 15:04	05/27/22 16:23	7440-70-2	
Iron, Dissolved	**0.067**	mg/L	0.050	0.035	1	05/20/22 15:04	05/27/22 16:23	7439-89-6	
Magnesium, Dissolved	**3.1**	mg/L	0.50	0.047	1	05/20/22 15:04	05/27/22 16:23	7439-95-4	
Manganese, Dissolved	**0.029**	mg/L	0.0050	0.0027	1	05/20/22 15:04	05/27/22 16:23	7439-96-5	
Potassium, Dissolved	**1.2**	mg/L	0.50	0.26	1	05/20/22 15:04	05/27/22 16:23	7440-09-7	
Sodium, Dissolved	**23.7**	mg/L	0.50	0.34	1	05/20/22 15:04	05/27/22 16:23	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/09/22 10:57	05/21/22 18:47	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/09/22 10:57	05/21/22 18:47	7440-38-2	
Barium	**0.070**	mg/L	0.0025	0.00098	1	05/09/22 10:57	05/21/22 18:47	7440-39-3	
Beryllium	**0.00016J**	mg/L	0.00050	0.00015	1	05/09/22 10:57	05/21/22 18:47	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/09/22 10:57	05/21/22 18:47	7440-43-9	
Chromium	**0.0063**	mg/L	0.0025	0.00050	1	05/09/22 10:57	05/21/22 18:47	7440-47-3	
Cobalt	**0.0076**	mg/L	0.0025	0.00031	1	05/09/22 10:57	05/21/22 18:47	7440-48-4	
Copper	**0.0020J**	mg/L	0.0025	0.00064	1	05/09/22 10:57	05/21/22 18:47	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/09/22 10:57	05/21/22 18:47	7439-92-1	
Nickel	**0.013**	mg/L	0.0025	0.00065	1	05/09/22 10:57	05/21/22 18:47	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/09/22 10:57	05/21/22 18:47	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/09/22 10:57	05/21/22 18:47	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/09/22 10:57	05/21/22 18:47	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	05/09/22 10:57	05/21/22 18:47	7440-62-2	
Zinc	**0.0085**	mg/L	0.0050	0.0049	1	05/09/22 10:57	05/21/22 18:47	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/09/22 17:00	05/11/22 11:58	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.023	1	05/11/22 08:30	05/12/22 01:20	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/11/22 08:30	05/12/22 01:20	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	129	%.	60-140		1	05/11/22 08:30	05/12/22 01:20	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**1.0J**	mg/L	10.0	1.0	1		05/18/22 16:44		2c

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30486387

Sample: TW-28 **Lab ID: 30486387002** Collected: 05/04/22 09:50 Received: 05/04/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**100**	mg/L	10.0	10.0	1		05/09/22 18:52		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/10/22 09:31	05/10/22 13:38		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/09/22 13:52	05/09/22 17:38		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**48.5**	mg/L	3.0	0.67	1		05/18/22 14:44	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.061J**	mg/L	0.10	0.053	1		05/17/22 18:49	14797-55-8	
Nitrogen, NO2 plus NO3	**0.062J**	mg/L	0.10	0.053	1		05/17/22 18:49		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/05/22 16:34	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/05/22 16:12	14797-65-0	

Sample: TW-29 **Lab ID: 30486387003** Collected: 05/04/22 10:40 Received: 05/04/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**2.1**	mg/L	0.50	0.083	1	05/11/22 07:37	05/26/22 15:38	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	05/11/22 07:37	05/26/22 15:38	7439-89-6	
Magnesium	**1.2**	mg/L	0.50	0.047	1	05/11/22 07:37	05/26/22 15:38	7439-95-4	
Manganese	**0.0098**	mg/L	0.0050	0.0027	1	05/11/22 07:37	05/26/22 15:38	7439-96-5	
Potassium	**0.76**	mg/L	0.50	0.26	1	05/11/22 07:37	05/26/22 15:38	7440-09-7	
Sodium	**4.4**	mg/L	0.50	0.34	1	05/11/22 07:37	05/26/22 15:38	7440-23-5	
Total Hardness	**10.2**	mg/L	3.3	0.27	1	05/11/22 07:37	05/26/22 15:38		N3

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30486387

Sample: TW-29 **Lab ID: 30486387003** Collected: 05/04/22 10:40 Received: 05/04/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**2.3**	mg/L	0.50	0.083	1	05/20/22 15:04	05/27/22 16:29	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/20/22 15:04	05/27/22 16:29	7439-89-6	
Magnesium, Dissolved	**1.3**	mg/L	0.50	0.047	1	05/20/22 15:04	05/27/22 16:29	7439-95-4	
Manganese, Dissolved	**0.011**	mg/L	0.0050	0.0027	1	05/20/22 15:04	05/27/22 16:29	7439-96-5	
Potassium, Dissolved	**0.84**	mg/L	0.50	0.26	1	05/20/22 15:04	05/27/22 16:29	7440-09-7	
Sodium, Dissolved	**4.8**	mg/L	0.50	0.34	1	05/20/22 15:04	05/27/22 16:29	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/09/22 10:57	05/21/22 18:50	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/09/22 10:57	05/21/22 18:50	7440-38-2	
Barium	**0.030**	mg/L	0.0025	0.00098	1	05/09/22 10:57	05/21/22 18:50	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	05/09/22 10:57	05/21/22 18:50	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/09/22 10:57	05/21/22 18:50	7440-43-9	
Chromium	**0.0026**	mg/L	0.0025	0.00050	1	05/09/22 10:57	05/21/22 18:50	7440-47-3	
Cobalt	**0.0019J**	mg/L	0.0025	0.00031	1	05/09/22 10:57	05/21/22 18:50	7440-48-4	
Copper	**0.0019J**	mg/L	0.0025	0.00064	1	05/09/22 10:57	05/21/22 18:50	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/09/22 10:57	05/21/22 18:50	7439-92-1	
Nickel	**0.0032**	mg/L	0.0025	0.00065	1	05/09/22 10:57	05/21/22 18:50	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/09/22 10:57	05/21/22 18:50	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/09/22 10:57	05/21/22 18:50	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/09/22 10:57	05/21/22 18:50	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	05/09/22 10:57	05/21/22 18:50	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0049	1	05/09/22 10:57	05/21/22 18:50	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/09/22 17:00	05/11/22 11:59	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/11/22 08:30	05/12/22 01:33	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/11/22 08:30	05/12/22 01:33	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	121	%.	60-140		1	05/11/22 08:30	05/12/22 01:33	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/18/22 16:46		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**14.0**	mg/L	10.0	10.0	1		05/09/22 18:52		

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30486387

Sample: TW-29 **Lab ID: 30486387003** Collected: 05/04/22 10:40 Received: 05/04/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/10/22 09:31	05/10/22 13:44		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/09/22 13:52	05/09/22 17:38		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**9.8**	mg/L	3.0	0.67	1		05/18/22 14:45	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.60**	mg/L	0.10	0.053	1		05/17/22 18:50	14797-55-8	
Nitrogen, NO2 plus NO3	**0.60**	mg/L	0.10	0.053	1		05/17/22 18:50		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/05/22 16:35	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/05/22 16:13	14797-65-0	

Sample: TW-30 **Lab ID: 30486387004** Collected: 05/04/22 12:30 Received: 05/04/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**4.8**	mg/L	0.50	0.083	1	05/11/22 07:37	05/26/22 15:40	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	05/11/22 07:37	05/26/22 15:40	7439-89-6	
Magnesium	**1.9**	mg/L	0.50	0.047	1	05/11/22 07:37	05/26/22 15:40	7439-95-4	
Manganese	**0.012**	mg/L	0.0050	0.0027	1	05/11/22 07:37	05/26/22 15:40	7439-96-5	
Potassium	**1.4**	mg/L	0.50	0.26	1	05/11/22 07:37	05/26/22 15:40	7440-09-7	
Sodium	**11.1**	mg/L	0.50	0.34	1	05/11/22 07:37	05/26/22 15:40	7440-23-5	
Total Hardness	**20.0**	mg/L	3.3	0.27	1	05/11/22 07:37	05/26/22 15:40		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**5.4**	mg/L	0.50	0.083	1	05/24/22 12:31	05/26/22 17:41	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/24/22 12:31	05/26/22 17:41	7439-89-6	
Magnesium, Dissolved	**2.1**	mg/L	0.50	0.047	1	05/24/22 12:31	05/26/22 17:41	7439-95-4	

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30486387

Sample: TW-30 **Lab ID: 30486387004** Collected: 05/04/22 12:30 Received: 05/04/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Manganese, Dissolved	**0.013**	mg/L	0.0050	0.0027	1	05/24/22 12:31	05/26/22 17:41	7439-96-5	
Potassium, Dissolved	**1.6**	mg/L	0.50	0.26	1	05/24/22 12:31	05/26/22 17:41	7440-09-7	
Sodium, Dissolved	**12.0**	mg/L	0.50	0.34	1	05/24/22 12:31	05/26/22 17:41	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/09/22 10:57	05/21/22 18:52	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/09/22 10:57	05/21/22 18:52	7440-38-2	
Barium	**0.036**	mg/L	0.0025	0.00098	1	05/09/22 10:57	05/21/22 18:52	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	05/09/22 10:57	05/21/22 18:52	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/09/22 10:57	05/21/22 18:52	7440-43-9	
Chromium	**0.0018J**	mg/L	0.0025	0.00050	1	05/09/22 10:57	05/21/22 18:52	7440-47-3	
Cobalt	**0.0023J**	mg/L	0.0025	0.00031	1	05/09/22 10:57	05/21/22 18:52	7440-48-4	
Copper	**0.0015J**	mg/L	0.0025	0.00064	1	05/09/22 10:57	05/21/22 18:52	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/09/22 10:57	05/21/22 18:52	7439-92-1	
Nickel	**0.0042**	mg/L	0.0025	0.00065	1	05/09/22 10:57	05/21/22 18:52	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/09/22 10:57	05/21/22 18:52	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/09/22 10:57	05/21/22 18:52	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/09/22 10:57	05/21/22 18:52	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	05/09/22 10:57	05/21/22 18:52	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0049	1	05/09/22 10:57	05/21/22 18:52	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/09/22 17:00	05/11/22 12:01	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/11/22 08:30	05/12/22 01:45	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/11/22 08:30	05/12/22 01:45	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	118	%.	60-140		1	05/11/22 08:30	05/12/22 01:45	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		05/18/22 16:47		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**61.0**	mg/L	10.0	10.0	1		05/09/22 18:52		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/10/22 09:31	05/10/22 13:50		

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30486387

Sample: TW-30 **Lab ID: 30486387004** Collected: 05/04/22 12:30 Received: 05/04/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/09/22 13:52	05/09/22 17:38		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**22.8**	mg/L	3.0	0.67	1		05/18/22 14:45	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**2.1**	mg/L	0.10	0.053	1		05/17/22 18:51	14797-55-8	
Nitrogen, NO2 plus NO3	**2.1**	mg/L	0.10	0.053	1		05/17/22 18:51		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/05/22 16:37	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/05/22 16:13	14797-65-0	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30486387

QC Batch: 503523
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30486387001, 30486387002, 30486387003, 30486387004

METHOD BLANK: 2438376 Matrix: Water
Associated Lab Samples: 30486387001, 30486387002, 30486387003, 30486387004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	05/26/22 14:47	
Iron	mg/L	0.050 U	0.050	0.035	05/26/22 14:47	
Magnesium	mg/L	0.50 U	0.50	0.047	05/26/22 14:47	
Manganese	mg/L	0.0050 U	0.0050	0.0027	05/26/22 14:47	
Potassium	mg/L	0.50 U	0.50	0.26	05/26/22 14:47	
Sodium	mg/L	0.50 U	0.50	0.34	05/26/22 14:47	

LABORATORY CONTROL SAMPLE: 2438377

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	42.5	106	80-120	
Iron	mg/L	2	2.1	105	80-120	
Magnesium	mg/L	20	21.2	106	80-120	
Manganese	mg/L	2	2.2	108	80-120	
Potassium	mg/L	20	20.6	103	80-120	
Sodium	mg/L	20	20.6	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2438378 2438379

Parameter	Units	30485586001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	39500 ug/L	40	40	80.5	84.5	102	113	80-120	5	20	
Iron	mg/L	0.24	2	2	2.3	2.4	103	109	80-120	5	20	
Magnesium	mg/L	7660 ug/L	20	20	28.6	29.9	104	111	80-120	5	20	
Manganese	mg/L	0.099	2	2	2.2	2.3	106	111	80-120	4	20	
Potassium	mg/L	1200 ug/L	20	20	21.7	22.6	102	107	80-120	4	20	
Sodium	mg/L	9650 ug/L	20	20	29.9	31.3	101	108	80-120	5	20	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30486387

QC Batch: 505890
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30486387001, 30486387002, 30486387003

METHOD BLANK: 2450935 Matrix: Water
Associated Lab Samples: 30486387001, 30486387002, 30486387003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	05/27/22 15:30	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	05/27/22 15:30	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	05/27/22 15:30	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	05/27/22 15:30	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	05/27/22 15:30	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	05/27/22 15:30	

LABORATORY CONTROL SAMPLE: 2450936

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	41.1	103	80-120	
Iron, Dissolved	mg/L	2	2.2	108	80-120	
Magnesium, Dissolved	mg/L	20	21.3	106	80-120	
Manganese, Dissolved	mg/L	2	2.1	107	80-120	
Potassium, Dissolved	mg/L	20	20.3	102	80-120	
Sodium, Dissolved	mg/L	20	20.2	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2450960 2450961

Parameter	Units	30481281003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	54500 ug/L	40	40	94.5	97.9	100	109	80-120	4	20	
Iron, Dissolved	mg/L	0.050 U	2	2	2.2	2.2	107	111	80-120	3	20	
Magnesium, Dissolved	mg/L	10300 ug/L	20	20	31.4	32.5	106	111	80-120	3	20	
Manganese, Dissolved	mg/L	0.15	2	2	2.3	2.3	105	109	80-120	3	20	
Potassium, Dissolved	mg/L	1120 ug/L	20	20	22.2	22.4	105	106	80-120	1	20	
Sodium, Dissolved	mg/L	55100 ug/L	20	20	74.6	76.3	97	106	80-120	2	20	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30486387

QC Batch: 506522
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30486387004

METHOD BLANK: 2453850
Matrix: Water
Associated Lab Samples: 30486387004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	05/26/22 17:37	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	05/26/22 17:37	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	05/26/22 17:37	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	05/26/22 17:37	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	05/26/22 17:37	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	05/26/22 17:37	

LABORATORY CONTROL SAMPLE: 2453851

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	42.7	107	80-120	
Iron, Dissolved	mg/L	2	2.1	105	80-120	
Magnesium, Dissolved	mg/L	20	21.3	107	80-120	
Manganese, Dissolved	mg/L	2	2.2	111	80-120	
Potassium, Dissolved	mg/L	20	20.6	103	80-120	
Sodium, Dissolved	mg/L	20	20.7	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2453940 2453941

Parameter	Units	30486387004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	5.4	40	40	51.2	47.3	115	105	80-120	8	20	
Iron, Dissolved	mg/L	0.050 U	2	2	2.3	2.1	114	105	80-120	8	20	
Magnesium, Dissolved	mg/L	2.1	20	20	25.0	23.2	114	105	80-120	8	20	
Manganese, Dissolved	mg/L	0.013	2	2	2.4	2.2	119	110	80-120	8	20	
Potassium, Dissolved	mg/L	1.6	20	20	23.4	22.1	109	102	80-120	6	20	
Sodium, Dissolved	mg/L	12.0	20	20	34.0	32.1	110	101	80-120	6	20	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30486387

QC Batch: 502964
QC Batch Method: EPA 3020A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30486387001, 30486387002, 30486387003, 30486387004

METHOD BLANK: 2435512 Matrix: Water
Associated Lab Samples: 30486387001, 30486387002, 30486387003, 30486387004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00030	05/21/22 18:03	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	05/21/22 18:03	
Barium	mg/L	0.0025 U	0.0025	0.00098	05/21/22 18:03	
Beryllium	mg/L	0.00050 U	0.00050	0.00015	05/21/22 18:03	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	05/21/22 18:03	
Chromium	mg/L	0.0025 U	0.0025	0.00050	05/21/22 18:03	
Cobalt	mg/L	0.0025 U	0.0025	0.00031	05/21/22 18:03	
Copper	mg/L	0.0025 U	0.0025	0.00064	05/21/22 18:03	
Lead	mg/L	0.00050 U	0.00050	0.00045	05/21/22 18:03	
Nickel	mg/L	0.0025 U	0.0025	0.00065	05/21/22 18:03	
Selenium	mg/L	0.0025 U	0.0025	0.00084	05/21/22 18:03	
Silver	mg/L	0.0025 U	0.0025	0.00053	05/21/22 18:03	
Thallium	mg/L	0.00050 U	0.00050	0.000081	05/21/22 18:03	
Vanadium	mg/L	0.0025 U	0.0025	0.00042	05/21/22 18:03	
Zinc	mg/L	0.0050 U	0.0050	0.0049	05/21/22 18:03	

LABORATORY CONTROL SAMPLE: 2435513

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.021	107	80-120	
Arsenic	mg/L	0.1	0.10	104	80-120	
Barium	mg/L	0.1	0.11	106	80-120	
Beryllium	mg/L	0.02	0.021	103	80-120	
Cadmium	mg/L	0.02	0.021	105	80-120	
Chromium	mg/L	0.1	0.10	104	80-120	
Cobalt	mg/L	0.1	0.11	106	80-120	
Copper	mg/L	0.1	0.10	104	80-120	
Lead	mg/L	0.02	0.021	105	80-120	
Nickel	mg/L	0.1	0.10	105	80-120	
Selenium	mg/L	0.1	0.10	103	80-120	
Silver	mg/L	0.1	0.10	104	80-120	
Thallium	mg/L	0.02	0.021	105	80-120	
Vanadium	mg/L	0.1	0.10	104	80-120	
Zinc	mg/L	0.2	0.21	104	80-120	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30486387

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2435514 2435515

Parameter	Units	30468466001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.02	0.02	0.022	0.022	112	109	75-125	3	20	
Arsenic	mg/L	ND	0.1	0.1	0.11	0.11	108	104	75-125	3	20	
Barium	mg/L	65.3 ug/L	0.1	0.1	0.17	0.17	108	104	75-125	2	20	
Beryllium	mg/L	ND	0.02	0.02	0.021	0.021	106	103	75-125	2	20	
Cadmium	mg/L	ND	0.02	0.02	0.021	0.020	104	101	75-125	4	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.10	107	104	75-125	3	20	
Cobalt	mg/L	ND	0.1	0.1	0.11	0.10	107	104	75-125	3	20	
Copper	mg/L	ND	0.1	0.1	0.10	0.10	103	100	75-125	3	20	
Lead	mg/L	ND	0.02	0.02	0.022	0.021	108	105	75-125	3	20	
Nickel	mg/L	ND	0.1	0.1	0.11	0.10	105	102	75-125	3	20	
Selenium	mg/L	ND	0.1	0.1	0.11	0.10	107	103	75-125	4	20	
Silver	mg/L	ND	0.1	0.1	0.10	0.10	104	101	75-125	3	20	
Thallium	mg/L	ND	0.02	0.02	0.022	0.021	109	106	75-125	3	20	
Vanadium	mg/L	ND	0.1	0.1	0.11	0.11	109	106	75-125	3	20	
Zinc	mg/L	ND	0.2	0.2	0.21	0.21	105	103	75-125	3	20	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30486387

QC Batch: 503096
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30486387001, 30486387002, 30486387003, 30486387004

METHOD BLANK: 2436210 Matrix: Water
Associated Lab Samples: 30486387001, 30486387002, 30486387003, 30486387004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	05/11/22 11:28	

LABORATORY CONTROL SAMPLE: 2436211

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.0094	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2436258 2436259

Parameter	Units	30486898001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.01	0.01	0.0094	0.0093	93	92	80-120	1	20	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30486387

QC Batch: 503590
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30486387001, 30486387002, 30486387003, 30486387004

METHOD BLANK: 2438604 Matrix: Water
Associated Lab Samples: 30486387001, 30486387002, 30486387003, 30486387004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.022	05/11/22 20:50	CH
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	05/11/22 20:50	CH
1,1,1,2-Tetrachloroethane (S)	%.	96	60-140		05/11/22 20:50	CH

LABORATORY CONTROL SAMPLE: 2438605

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.25	99	85-115	CH
1,2-Dibromoethane (EDB)	ug/L	0.25	0.27	107	85-115	CH
1,1,1,2-Tetrachloroethane (S)	%.			108	60-140	CH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2438606 2438607

Parameter	Units	30486745001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	ND	0.4	0.4	0.39	0.40	99	101	60-140	3	25	CH
1,2-Dibromoethane (EDB)	ug/L	ND	0.4	0.4	0.41	0.42	104	104	60-140	1	25	CH
1,1,1,2-Tetrachloroethane (S)	%.						111	110	60-140			CH

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30486387

QC Batch: 505321
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30486387001, 30486387002, 30486387003, 30486387004

METHOD BLANK: 2447566 Matrix: Water
Associated Lab Samples: 30486387001, 30486387002, 30486387003, 30486387004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	1.0J	10.0	1.0	05/18/22 16:18	

LABORATORY CONTROL SAMPLE: 2447567

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	22.0	110	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2447897 2447898

Parameter	Units	30486387001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	44.0	50	50	78.0	90.0	68	92	85-115	14	20	ML

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30486387

QC Batch: 502908
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30486387001, 30486387002, 30486387003, 30486387004

METHOD BLANK: 2435380 Matrix: Water
Associated Lab Samples: 30486387001, 30486387002, 30486387003, 30486387004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	05/09/22 18:52	

LABORATORY CONTROL SAMPLE: 2435381

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	947	95	85-115	

SAMPLE DUPLICATE: 2435382

Parameter	Units	30485921001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	317	306	4	5	

SAMPLE DUPLICATE: 2435383

Parameter	Units	30486387003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	14.0	14.0	0	5	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30486387

QC Batch: 503251
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30486387001, 30486387002, 30486387003, 30486387004

METHOD BLANK: 2436916 Matrix: Water
Associated Lab Samples: 30486387001, 30486387002, 30486387003, 30486387004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.044	05/10/22 13:13	

LABORATORY CONTROL SAMPLE: 2436917

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	3.9	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2436918 2436919

Parameter	Units	30486566001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.44	4	4	4.5	4.5	102	101	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2436920 2436921

Parameter	Units	30486387003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.1	4.1	103	103	90-110	0	20	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30486387

QC Batch: 502936
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30486387001, 30486387002, 30486387003, 30486387004

METHOD BLANK: 2435455 Matrix: Water
Associated Lab Samples: 30486387001, 30486387002, 30486387003, 30486387004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	05/09/22 17:31	

METHOD BLANK: 2435456 Matrix: Water
Associated Lab Samples: 30486387001, 30486387002, 30486387003, 30486387004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	05/09/22 17:31	

METHOD BLANK: 2435457 Matrix: Water
Associated Lab Samples: 30486387001, 30486387002, 30486387003, 30486387004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	05/09/22 17:31	

METHOD BLANK: 2436030 Matrix: Water
Associated Lab Samples: 30486387001, 30486387002, 30486387003, 30486387004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	05/09/22 17:31	

LABORATORY CONTROL SAMPLE: 2435458

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	317	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2435459 2435460

Parameter	Units	30485209002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	25.0 U	150	150	158	153	104	101	90-110	3	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30486387

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2435461 2435462

Parameter	Units	30486705002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	15500	7500	7500	22600	22400	95	92	90-110	1	10	D4

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30486387

QC Batch: 505281
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30486387001, 30486387002, 30486387003, 30486387004

METHOD BLANK: 2447438 Matrix: Water
Associated Lab Samples: 30486387001, 30486387002, 30486387003, 30486387004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/18/22 14:34	

LABORATORY CONTROL SAMPLE: 2447439

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.6	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2447440 2447441

Parameter	Units	30486244001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	4.4	20	20	22.8	23.0	92	93	85-115	1	20	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30486387

QC Batch: 505100
QC Batch Method: SM 4500NO3-F-2011
Analysis Method: SM 4500NO3-F-2011
Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30486387001, 30486387002, 30486387003, 30486387004

METHOD BLANK: 2446348 Matrix: Water
Associated Lab Samples: 30486387001, 30486387002, 30486387003, 30486387004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	05/17/22 18:21	

LABORATORY CONTROL SAMPLE: 2446349

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	4.2	105	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2446350 2446351

Parameter	Units	30486957001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	ND	5	5	5.1	5.0	101	101	85-115	0	20	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30486387

QC Batch: 502420
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30486387001, 30486387002, 30486387003, 30486387004

METHOD BLANK: 2432497 Matrix: Water
Associated Lab Samples: 30486387001, 30486387002, 30486387003, 30486387004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	05/05/22 15:44	

LABORATORY CONTROL SAMPLE: 2432498

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	27.5	92	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2432499 2432500

Parameter	Units	30485831001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.0 U	20	20	19.1	20.5	87	94	85-115	7	20	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30486387

QC Batch: 502432
QC Batch Method: SM 4500NO2-B-2011
Analysis Method: SM 4500NO2-B-2011
Analysis Description: SM4500-NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30486387001, 30486387002, 30486387003, 30486387004

METHOD BLANK: 2432517 Matrix: Water
Associated Lab Samples: 30486387001, 30486387002, 30486387003, 30486387004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	05/05/22 16:05	

METHOD BLANK: 2432518 Matrix: Water
Associated Lab Samples: 30486387001, 30486387002, 30486387003, 30486387004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	05/05/22 16:06	

LABORATORY CONTROL SAMPLE: 2432519

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.10	104	90-110	

MATRIX SPIKE SAMPLE: 2432521

Parameter	Units	30484190002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.055	0.1	0.15	98	85-115	

SAMPLE DUPLICATE: 2432520

Parameter	Units	30484190002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	0.055	0.053	5	20	

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QUALIFIERS

Project: MLF-Spring 2022
Pace Project No.: 30486387

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30486387001

[1] Sample pH for 8011 is 7

Sample: 30486387002

[1] Sample pH for 8011 is 6

Sample: 30486387003

[1] Sample pH for 8011 is 6

Sample: 30486387004

[1] Sample pH for 8011 is 6

ANALYTE QUALIFIERS

1c	Alk TV: 0 mg/L
2c	Alk TV: 1 mg/L
3c	Alk TV: 2 mg/L
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
D4	Sample was diluted due to the presence of high levels of target analytes.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

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QUALIFIERS

Project: MLF-Spring 2022
Pace Project No.: 30486387

ANALYTE QUALIFIERS

N3 Accreditation is not offered by the relevant laboratory accrediting body for this parameter.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-Spring 2022
Pace Project No.: 30486387

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30486387001	**TW-1**	EPA 3010A	503523	EPA 6010D	506198
30486387002	**TW-28**	EPA 3010A	503523	EPA 6010D	506198
30486387003	**TW-29**	EPA 3010A	503523	EPA 6010D	506198
30486387004	**TW-30**	EPA 3010A	503523	EPA 6010D	506198
30486387001	**TW-1**	EPA 3010A	505890	EPA 6010D	507392
30486387002	**TW-28**	EPA 3010A	505890	EPA 6010D	507392
30486387003	**TW-29**	EPA 3010A	505890	EPA 6010D	507392
30486387004	**TW-30**	EPA 3010A	506522	EPA 6010D	507291
30486387001	**TW-1**	EPA 3020A	502964	EPA 6020B	506020
30486387002	**TW-28**	EPA 3020A	502964	EPA 6020B	506020
30486387003	**TW-29**	EPA 3020A	502964	EPA 6020B	506020
30486387004	**TW-30**	EPA 3020A	502964	EPA 6020B	506020
30486387001	**TW-1**	EPA 7470A	503096	EPA 7470A	503466
30486387002	**TW-28**	EPA 7470A	503096	EPA 7470A	503466
30486387003	**TW-29**	EPA 7470A	503096	EPA 7470A	503466
30486387004	**TW-30**	EPA 7470A	503096	EPA 7470A	503466
30486387001	**TW-1**	EPA 8011	503590	EPA 8011	503684
30486387002	**TW-28**	EPA 8011	503590	EPA 8011	503684
30486387003	**TW-29**	EPA 8011	503590	EPA 8011	503684
30486387004	**TW-30**	EPA 8011	503590	EPA 8011	503684
30486387001	**TW-1**	SM 2320B-2011	505321		
30486387002	**TW-28**	SM 2320B-2011	505321		
30486387003	**TW-29**	SM 2320B-2011	505321		
30486387004	**TW-30**	SM 2320B-2011	505321		
30486387001	**TW-1**	SM 2540C-2011	502908		
30486387002	**TW-28**	SM 2540C-2011	502908		
30486387003	**TW-29**	SM 2540C-2011	502908		
30486387004	**TW-30**	SM 2540C-2011	502908		
30486387001	**TW-1**	EPA 350.1	503251	EPA 350.1	503307
30486387002	**TW-28**	EPA 350.1	503251	EPA 350.1	503307
30486387003	**TW-29**	EPA 350.1	503251	EPA 350.1	503307
30486387004	**TW-30**	EPA 350.1	503251	EPA 350.1	503307
30486387001	**TW-1**	EPA 410.4	502936	EPA 410.4	503155
30486387002	**TW-28**	EPA 410.4	502936	EPA 410.4	503155
30486387003	**TW-29**	EPA 410.4	502936	EPA 410.4	503155
30486387004	**TW-30**	EPA 410.4	502936	EPA 410.4	503155
30486387001	**TW-1**	SM 4500-Cl-E-2011	505281		
30486387002	**TW-28**	SM 4500-Cl-E-2011	505281		
30486387003	**TW-29**	SM 4500-Cl-E-2011	505281		
30486387004	**TW-30**	SM 4500-Cl-E-2011	505281		
30486387001	**TW-1**	SM 4500NO3-F-2011	505100		
30486387002	**TW-28**	SM 4500NO3-F-2011	505100		
30486387003	**TW-29**	SM 4500NO3-F-2011	505100		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-Spring 2022
Pace Project No.: 30486387

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30486387004	**TW-30**	SM 4500NO3-F-2011	505100		
30486387001	**TW-1**	EPA 9038	502420		
30486387002	**TW-28**	EPA 9038	502420		
30486387003	**TW-29**	EPA 9038	502420		
30486387004	**TW-30**	EPA 9038	502420		
30486387001	**TW-1**	SM 4500NO2-B-2011	502432		
30486387002	**TW-28**	SM 4500NO2-B-2011	502432		
30486387003	**TW-29**	SM 4500NO2-B-2011	502432		
30486387004	**TW-30**	SM 4500NO2-B-2011	502432		

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - SPRING 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	TOTAL METALS ①	TOTAL + DISS. METALS ②	ALKALINITY, TDS	HARDNESS, Cl	AMMONIA	NITRATE	SO4, COD		METHOD 8011 - EDB + DBCP		
1	TW-1	7	5.4.22	1150	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓		04
2	TW-28	↓	↓	950	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓		02
3	TW-29			1040														03
4	TW-30			1230														04
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		

WO#: 30486387
30486387

	Signature	Date	Time	Comments
Relinquished by	S A Brown	5/4/22	14:18	① TOTAL METALS - 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb
Received by	[illegible]	5/4/22	14:18	Ni, Se, Ag, Tl, V, ZN / 7470 - Hg
Relinquished by	[illegible]	05/04/22	17:20	② TOTAL + DISS. METALS - 6010 - Ca, Fe, Mg, MN, K, Na
Received by	RDS PACE	5-4-22	1730	PACE WV - METALS
Relinquished by	RDS PACE	5-4-22	2215	PACE - G - BURL - WET CHEM + 8011
Received by	[illegible] Pace	[illegible]	[illegible]	LEVEL 2 REPORT

Cooler Temp on Arrival: _____ Deg. C

SEE ATTACHED LIST OF METHODS + PARAMETERS

Rev. Aug. 2018

Millersville Landfill, Anne Arundel County, MD		
	Pace, Beaver, WV	
	Method 6020 - ICPMS	
Parameter	RL	MDL
	(mg/l)	
TOTAL METALS - mg/l		
Antimony	0.0005	
Arsenic	0.0025	0.0002473
Barium	0.0025	
Beryllium	0.0005	
Cadmium	0.0005	
Chromium	0.0025	
Cobalt	0.0025	
Copper	0.0025	
Lead	0.0005	
Nickel	0.0025	
Selenium	0.0025	
Silver	0.0025	
Thallium	0.0005	
Vanadium	0.0025	
Zinc	0.005	
	Pace, Beaver, WV	
TOTAL MERCURY - mg/l	Method 7470A	
Mercury	0.0005	0.00025
	Pace, Beaver, WV	
TOTAL AND DISSOLVED METALS - mg/l	Method 6010 - ICP	
Calcium	0.5	0.028
Iron	0.05	0.0076
Magnesium	0.5	0.047
Manganese	0.005	0.00043
Potassium	0.5	0.19
Sodium	0.5	0.148
	Pace - Greensburg, PA	
Volatile Organics - ug/l	Method 8011 - ug/l	
DBCP	0.041	
EDB	0.041	
GENERAL CHEMISTRY - mg/l	Pace - Greensburg, PA	
Alkalinity - SM 2320B	10	1
Ammonia - EPA 350.1	0.1	0.0445
COD - EPA 410.4	25	4.6532
Chloride - EPA 300.0	3	0.06683
Hardness - 2340B		
Nitrate - EPA 300.0	0.1	0.0238
Sulfate - EPA 300.0	10	4.6702
Total dissolved solids - SM2540C	10	10

WO#: 30486387
PM: SLS
Due Date: 05/19/22
CLIENT: ENV MONITOR

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EMA Project #

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other

Tracking #: —

Label LIMS Login

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 17 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 3.4 °C Correction Factor: 0 °C Final Temp: 3.4 °C

Temp should be above freezing to 6°C

WO#: 30486387
PM: SLS Due Date: 05/19/22
CLIENT: ENV MONITOR

Comments:	Yes	No	N/A	pH paper Lot# (CD)>811	Date and Initials of person examining contents: JR 5-5-22
Chain of Custody Present:	✓			1.	
Chain of Custody Filled Out:	✓			2.	
Chain of Custody Relinquished:	✓			3.	
Sampler Name & Signature on COC:		✓		4.	
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.	
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):	✓			7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.	
Containers Intact:	✓			11.	
Orthophosphate field filtered			✓	12.	
Hex Cr Aqueous sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.	
All containers meet method preservation requirements.	✓			Initial when completed JR / Lot # of added preservative	Date/time of preservation
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:		✓		18.	
Trip Blank Custody Seals Present			✓		
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: JR	Date: / Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

WO# : 30486387

30486387

LIMS30 Internal Shipping Manifest

COOLER 21

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	21	Cooler temp (rcvd) °C	1.0
Packaged on Ice (Y/N)	Yes	Correction Factor	0
Shipping Method	Courier	Cooler temp (corr) °C	1.0
Tracking #	N/A	IR GUN ID	23
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[signature]	GBUR	5-5-22	1700
Received	[signature]	BEAV	5-6-22	1:18
Relinquished				
Received				
Relinquished				
Received				

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	5/5/2022	30486184003 BP2N1/1	BP2N	30486184003	30486184
MF	5/5/2022	30486184001 BP2N1/1	BP2N	30486184001	30486184
MF	5/5/2022	30486184002 BP2N1/1	BP2N	30486184002	30486184
MF	5/5/2022	30486184004 BP2N1/1	BP2N	30486184004	30486184
MF	5/5/2022	30486184004 BP3N1/1	BP3N	30486184004	30486184
MF	5/5/2022	30486184001 BP3N1/1	BP3N	30486184001	30486184
MF	5/5/2022	30486184002 BP3N1/1	BP3N	30486184002	30486184
MF	5/5/2022	30486184003 BP3N1/1	BP3N	30486184003	30486184
MF	5/5/2022	30486185001 BP2N1/1	BP2N	30486185001	30486185
MF	5/5/2022	30486185002 BP2N1/1	BP2N	30486185002	30486185
MF	5/5/2022	30486227001 BP3U1/1	BP3U	30486227001	30486227
MF	5/5/2022	30486226001 BP3N1/1	BP3N	30486226001	30486226
MF	5/5/2022	30486244005 BP3N1/1	BP3N	30486244005	30486244
MF	5/5/2022	30486256002 BP2N1/1	BP2N	30486256002	30486256
MF	5/5/2022	30486256004 BP3N1/1	BP3N	30486256004	30486256
MF	5/5/2022	30486223003 BP3N1/1	BP3N	30486223003	30486223
MF	5/5/2022	30486281001 BP3N1/1	BP3N	30486281001	30486281
MF	5/5/2022	30486223001 BP3N1/1	BP3N	30486223001	30486223
MF	5/5/2022	30486484001 BP3N3/5	BP3N	30486484001	30486484
MF	5/5/2022	30486484001 BP3N2/5	BP3N	30486484001	30486484
MF	5/5/2022	30486484001 BP3N4/5	BP3N	30486484001	30486484
MF	5/5/2022	30486484001 BP3N1/5	BP3N	30486484001	30486484
MF	5/5/2022	30486594004 BP3N1/1	BP3N	30486594004	30486594
MF	5/5/2022	30486594003 BP3N1/1	BP3N	30486594003	30486594
MF	5/5/2022	30486594001 BP3N1/1	BP3N	30486594001	30486594
MF	5/5/2022	30486594002 BP3N1/1	BP3N	30486594002	30486594
MF	5/5/2022	30486594006 BP3N1/1	BP3N	30486594006	30486594
MF	5/5/2022	30486594005 BP3N1/1	BP3N	30486594005	30486594
MF	5/5/2022	30486721002 BP3N1/1	BP3N	30486721002	30486721
MF	5/5/2022	30486387004 BP3N1/2	BP3N	30486387004	30486387
MF	5/5/2022	30486387004 BP3N2/2	BP3N	30486387004	30486387
MF	5/5/2022	30486387003 BP3N2/2	BP3N	30486387003	30486387
MF	5/5/2022	30486387003 BP3N1/2	BP3N	30486387003	30486387
MF	5/5/2022	30486387002 BP3N2/2	BP3N	30486387002	30486387

LIMS30 Internal Shipping Manifest

COOLER 21

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	21	Cooler temp (rcvd) °C	1.0
Packaged on Ice (Y/N)	Yes	Correction Factor	0
Shipping Method	Courier	Cooler temp (corr) °C	1.0
Tracking #	N/A	IR GUN ID	33
PWS* Drinking water?	No	Received on ice?	Y

*

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished		GBUR		
Received	[illegible]	BEAV	5-6-22	1:18
Relinquished				
Received				
Relinquished				
Received				

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	5/5/2022	30486387002 BP3N1/2	BP3N	30486387002	30486387
MF	5/5/2022	30486387001 BP3N2/2	BP3N	30486387001	30486387
MF	5/5/2022	30486387001 BP3N1/2	BP3N	30486387001	30486387

LIMS73 Lab Sample Condition Upon Receipt (West Vir

WO#: 30486387

PM: SLS **Due Date: 05/19/22**

CLIENT: ENV MONITOR

Pace Analytical

Client Name:

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace

Tracking #:

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☐ no Seals intact: ☐ yes ☐ no

Thermometer Used 23 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** 1.0 °C Correction Factor: 0 °C Final Temp: 1.0 °C

Comments:

pH paper Lot#	Date and Initials of person examining contents:
225370	SL 5/6/22

	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:				2. manifest
Chain of Custody Relinquished:				3.
Sampler Name & Signature on COC:				4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT				5. Lab Labeled by: N/A Checked by: NA
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered:			✓	13.
-pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓	
Filtered volume received for Dissolved tests:	✓			14.
All containers have been checked for preservation: exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix	✓			15.
All containers meet method preservation requirements:	✓			Initial when completed SL Date: 5/6/22
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present:			✓	17.
Trip Blank Custody Seals Present:			✓	
				Initial when completed: SL Date: 5/6/22

Client Notification/ Resolution:

Person Contacted: Date/Time: Contacted By:

Comments/ Resolution:

☐ **A check in this box indicates that additional information has been stored in ereports.**

***PM review** is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

June 01, 2022

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-Spring 2022
Pace Project No.: 30485831

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on May 03, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Steven L. Smith
steve.l.smith@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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Pace Analytical Services, LLC
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Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: MLF-Spring 2022
Pace Project No.: 30485831

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Florida: Cert E871149 SEKS WET
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver
225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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Greensburg, PA 15601
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SAMPLE SUMMARY

Project: MLF-Spring 2022
Pace Project No.: 30485831

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30485831001	**TW-2**	Water	05/03/22 11:50	05/03/22 22:00
30485831002	**TW-2A**	Water	05/03/22 11:15	05/03/22 22:00
30485831003	**TW-3**	Water	05/03/22 12:45	05/03/22 22:00
30485831004	**TW-3a**	Water	05/03/22 13:20	05/03/22 22:00
30485831005	**TW-27**	Water	05/03/22 14:00	05/03/22 22:00
30485831006	**field blank**	Water	05/03/22 12:00	05/03/22 22:00
30485831007	**TW-23R**	Water	05/03/22 10:20	05/03/22 22:00

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SAMPLE ANALYTE COUNT

Project: MLF-Spring 2022
Pace Project No.: 30485831

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30485831001	**TW-2**	EPA 6010D	MEH	7	PASI-BV
		EPA 6010D	MEH	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30485831002	**TW-2A**	EPA 6010D	MEH	7	PASI-BV
		EPA 6010D	MEH	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30485831003	**TW-3**	EPA 6010D	MEH	7	PASI-BV
		EPA 6010D	MEH	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF-Spring 2022
Pace Project No.: 30485831

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30485831004	**TW-3a**	EPA 6010D	MEH	7	PASI-BV
		EPA 6010D	MEH	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30485831005	**TW-27**	EPA 6010D	MEH	7	PASI-BV
		EPA 6010D	MEH	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30485831006	**field blank**	EPA 6010D	MEH	7	PASI-BV
		EPA 6010D	MEH	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF-Spring 2022
Pace Project No.: 30485831

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30485831007	**TW-23R**	EPA 6010D	MEH	7	PASI-BV
		EPA 6010D	MEH	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30485831

Date: June 01, 2022

TW-2 (Lab ID: 30485831001)

- Sample pH for 8011 is 6

TW-2A (Lab ID: 30485831002)

- Sample pH for 8011 is 6

TW-3 (Lab ID: 30485831003)

- Sample pH for 8011 is 6

TW-3a (Lab ID: 30485831004)

- Sample pH for 8011 is 6

TW-27 (Lab ID: 30485831005)

- Sample pH for 8011 is 7

TW-23R (Lab ID: 30485831007)

- Sample pH for 8011 is 6

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30485831

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
7 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30485831

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
7 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30485831

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
7 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 502650

B: Analyte was detected in the associated method blank.
- BLANK for HBN 502650 [BMPR/293 (Lab ID: 2433765)
  - Arsenic

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30485831

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
7 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 502370

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30484870001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2432355)
  - Mercury
- MSD (Lab ID: 2432356)
  - Mercury

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30485831

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
6 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 502931

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- BLANK (Lab ID: 2435447)
  - 1,2-Dibromoethane (EDB)
- LCS (Lab ID: 2435448)
  - 1,2-Dibromoethane (EDB)
- MS (Lab ID: 2435449)
  - 1,2-Dibromoethane (EDB)
- MSD (Lab ID: 2435450)
  - 1,2-Dibromoethane (EDB)
- TW-2 (Lab ID: 30485831001)
  - 1,2-Dibromoethane (EDB)
- TW-23R (Lab ID: 30485831007)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromoethane (EDB)
- TW-27 (Lab ID: 30485831005)
  - 1,2-Dibromoethane (EDB)
- TW-2A (Lab ID: 30485831002)
  - 1,2-Dibromoethane (EDB)
- TW-3 (Lab ID: 30485831003)
  - 1,2-Dibromoethane (EDB)
- TW-3a (Lab ID: 30485831004)
  - 1,2-Dibromoethane (EDB)

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30485831

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30485831

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
7 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 505026

1c: Alk TV: 0 mg/L
- field blank (Lab ID: 30485831006)
  - Alkalinity,Total (CaCO3 pH4.5)

2c: Alk TV: 2 mg/L
- TW-23R (Lab ID: 30485831007)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-27 (Lab ID: 30485831005)
  - Alkalinity,Total (CaCO3 pH4.5)

3c: Alk TV: 8 mg/L
- TW-3a (Lab ID: 30485831004)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30485831

Method: **SM 2540C-2011**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
7 samples were analyzed for SM 2540C-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30485831

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
7 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30485831

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
7 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 502245

4c: As per client request, sample was filtered & then preserved to <2 in lab at bench prior to analysis.

- MS (Lab ID: 2431435)
  - Chemical Oxygen Demand
- MSD (Lab ID: 2431436)
  - Chemical Oxygen Demand

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30485831

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
7 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30485831

Method: **SM 4500NO3-F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
7 samples were analyzed for SM 4500NO3-F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 504796

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30487109008

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2444751)
  - Nitrogen, NO2 plus NO3
- MSD (Lab ID: 2444752)
  - Nitrogen, NO2 plus NO3

Additional Comments:

Analyte Comments:

QC Batch: 504796

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- TW-2A (Lab ID: 30485831002)
  - Nitrogen, NO2 plus NO3

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30485831

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
7 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30485831

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
7 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30485831

Sample: TW-2 **Lab ID: 30485831001** Collected: 05/03/22 11:50 Received: 05/03/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.29J**	mg/L	0.50	0.083	1	05/11/22 07:37	05/26/22 15:13	7440-70-2	
Iron	**7.8**	mg/L	0.050	0.035	1	05/11/22 07:37	05/26/22 15:13	7439-89-6	
Magnesium	**0.35J**	mg/L	0.50	0.047	1	05/11/22 07:37	05/26/22 15:13	7439-95-4	
Manganese	**0.13**	mg/L	0.0050	0.0027	1	05/11/22 07:37	05/26/22 15:13	7439-96-5	
Potassium	**0.45J**	mg/L	0.50	0.26	1	05/11/22 07:37	05/26/22 15:13	7440-09-7	
Sodium	**1.3**	mg/L	0.50	0.34	1	05/11/22 07:37	05/26/22 15:13	7440-23-5	
Total Hardness	**2.2J**	mg/L	3.3	0.27	1	05/11/22 07:37	05/26/22 15:13		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.43J**	mg/L	0.50	0.083	1	05/14/22 04:21	05/24/22 22:14	7440-70-2	
Iron, Dissolved	**10.2**	mg/L	0.050	0.035	1	05/14/22 04:21	05/24/22 22:14	7439-89-6	
Magnesium, Dissolved	**0.48J**	mg/L	0.50	0.047	1	05/14/22 04:21	05/24/22 22:14	7439-95-4	
Manganese, Dissolved	**0.16**	mg/L	0.0050	0.0027	1	05/14/22 04:21	05/24/22 22:14	7439-96-5	
Potassium, Dissolved	**0.60**	mg/L	0.50	0.26	1	05/14/22 04:21	05/24/22 22:14	7440-09-7	
Sodium, Dissolved	**1.9**	mg/L	0.50	0.34	1	05/14/22 04:21	05/24/22 22:14	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/06/22 12:49	05/09/22 20:47	7440-36-0	
Arsenic	**0.0014J**	mg/L	0.0025	0.00044	1	05/06/22 12:49	05/09/22 20:47	7440-38-2	B
Barium	**0.0085**	mg/L	0.0025	0.00098	1	05/06/22 12:49	05/09/22 20:47	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	05/06/22 12:49	05/09/22 20:47	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/06/22 12:49	05/09/22 20:47	7440-43-9	
Chromium	**0.0025J**	mg/L	0.0025	0.00050	1	05/06/22 12:49	05/09/22 20:47	7440-47-3	
Cobalt	**0.00049J**	mg/L	0.0025	0.00031	1	05/06/22 12:49	05/09/22 20:47	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.00064	1	05/06/22 12:49	05/09/22 20:47	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/06/22 12:49	05/09/22 20:47	7439-92-1	
Nickel	**0.0021J**	mg/L	0.0025	0.00065	1	05/06/22 12:49	05/09/22 20:47	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/06/22 12:49	05/09/22 20:47	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/06/22 12:49	05/09/22 20:47	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/06/22 12:49	05/09/22 20:47	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	05/06/22 12:49	05/09/22 20:47	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0049	1	05/06/22 12:49	05/09/22 20:47	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/05/22 14:56	05/06/22 16:26	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/09/22 09:45	05/10/22 21:26	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/09/22 09:45	05/10/22 21:26	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	127	%.	60-140		1	05/09/22 09:45	05/10/22 21:26	630-20-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30485831

Sample: TW-2 **Lab ID: 30485831001** Collected: 05/03/22 11:50 Received: 05/03/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**12.0**	mg/L	10.0	1.0	1		05/17/22 16:32		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		05/05/22 17:48		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/05/22 08:59	05/05/22 10:49		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/05/22 13:50	05/05/22 17:11		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**2.7J**	mg/L	3.0	0.67	1		05/16/22 15:18	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		05/17/22 14:52	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		05/17/22 14:52		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/05/22 15:47	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/04/22 19:30	14797-65-0	

Sample: TW-2A **Lab ID: 30485831002** Collected: 05/03/22 11:15 Received: 05/03/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**5.2**	mg/L	0.50	0.083	1	05/11/22 07:37	05/26/22 15:15	7440-70-2	
Iron	**32.7**	mg/L	0.050	0.035	1	05/11/22 07:37	05/26/22 15:15	7439-89-6	
Magnesium	**2.9**	mg/L	0.50	0.047	1	05/11/22 07:37	05/26/22 15:15	7439-95-4	
Manganese	**0.23**	mg/L	0.0050	0.0027	1	05/11/22 07:37	05/26/22 15:15	7439-96-5	
Potassium	**1.1**	mg/L	0.50	0.26	1	05/11/22 07:37	05/26/22 15:15	7440-09-7	

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30485831

Sample: TW-2A **Lab ID: 30485831002** Collected: 05/03/22 11:15 Received: 05/03/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**14.5**	mg/L	0.50	0.34	1	05/11/22 07:37	05/26/22 15:15	7440-23-5	
Total Hardness	**24.9**	mg/L	3.3	0.27	1	05/11/22 07:37	05/26/22 15:15		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**5.5**	mg/L	0.50	0.083	1	05/14/22 04:21	05/24/22 22:16	7440-70-2	
Iron, Dissolved	**34.6**	mg/L	0.050	0.035	1	05/14/22 04:21	05/24/22 22:16	7439-89-6	
Magnesium, Dissolved	**3.1**	mg/L	0.50	0.047	1	05/14/22 04:21	05/24/22 22:16	7439-95-4	
Manganese, Dissolved	**0.24**	mg/L	0.0050	0.0027	1	05/14/22 04:21	05/24/22 22:16	7439-96-5	
Potassium, Dissolved	**1.1**	mg/L	0.50	0.26	1	05/14/22 04:21	05/24/22 22:16	7440-09-7	
Sodium, Dissolved	**16.0**	mg/L	0.50	0.34	1	05/14/22 04:21	05/24/22 22:16	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/06/22 12:49	05/09/22 20:50	7440-36-0	
Arsenic	**0.0014J**	mg/L	0.0025	0.00044	1	05/06/22 12:49	05/09/22 20:50	7440-38-2	B
Barium	**0.064**	mg/L	0.0025	0.00098	1	05/06/22 12:49	05/09/22 20:50	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	05/06/22 12:49	05/09/22 20:50	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/06/22 12:49	05/09/22 20:50	7440-43-9	
Chromium	**0.0019J**	mg/L	0.0025	0.00050	1	05/06/22 12:49	05/09/22 20:50	7440-47-3	
Cobalt	**0.0016J**	mg/L	0.0025	0.00031	1	05/06/22 12:49	05/09/22 20:50	7440-48-4	
Copper	**0.0024J**	mg/L	0.0025	0.00064	1	05/06/22 12:49	05/09/22 20:50	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/06/22 12:49	05/09/22 20:50	7439-92-1	
Nickel	**0.0035**	mg/L	0.0025	0.00065	1	05/06/22 12:49	05/09/22 20:50	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/06/22 12:49	05/09/22 20:50	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/06/22 12:49	05/09/22 20:50	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/06/22 12:49	05/09/22 20:50	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	05/06/22 12:49	05/09/22 20:50	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0049	1	05/06/22 12:49	05/09/22 20:50	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/26/22 10:15	05/31/22 16:21	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/09/22 09:45	05/10/22 21:38	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/09/22 09:45	05/10/22 21:38	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	133	%.	60-140		1	05/09/22 09:45	05/10/22 21:38	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**16.0**	mg/L	10.0	1.0	1		05/17/22 16:50		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30485831

Sample: TW-2A **Lab ID: 30485831002** Collected: 05/03/22 11:15 Received: 05/03/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**73.0**	mg/L	10.0	10.0	1		05/05/22 17:48		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/05/22 08:59	05/05/22 10:51		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/05/22 13:50	05/05/22 17:11		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**31.5**	mg/L	3.0	0.67	1		05/16/22 15:19	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.0 U**	mg/L	1.0	0.53	10		05/17/22 14:53	14797-55-8	
Nitrogen, NO2 plus NO3	**1.0 U**	mg/L	1.0	0.53	10		05/17/22 14:53		D3
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/05/22 15:51	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.051**	mg/L	0.010	0.0055	1		05/04/22 19:32	14797-65-0	

Sample: TW-3 **Lab ID: 30485831003** Collected: 05/03/22 12:45 Received: 05/03/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**1.1**	mg/L	0.50	0.083	1	05/11/22 07:37	05/26/22 15:17	7440-70-2	
Iron	**7.9**	mg/L	0.050	0.035	1	05/11/22 07:37	05/26/22 15:17	7439-89-6	
Magnesium	**0.56**	mg/L	0.50	0.047	1	05/11/22 07:37	05/26/22 15:17	7439-95-4	
Manganese	**0.13**	mg/L	0.0050	0.0027	1	05/11/22 07:37	05/26/22 15:17	7439-96-5	
Potassium	**0.50J**	mg/L	0.50	0.26	1	05/11/22 07:37	05/26/22 15:17	7440-09-7	
Sodium	**2.4**	mg/L	0.50	0.34	1	05/11/22 07:37	05/26/22 15:17	7440-23-5	
Total Hardness	**5.1**	mg/L	3.3	0.27	1	05/11/22 07:37	05/26/22 15:17		N3

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30485831

Sample: TW-3 **Lab ID: 30485831003** Collected: 05/03/22 12:45 Received: 05/03/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**1.2**	mg/L	0.50	0.083	1	05/14/22 04:21	05/24/22 22:18	7440-70-2	
Iron, Dissolved	**7.5**	mg/L	0.050	0.035	1	05/14/22 04:21	05/24/22 22:18	7439-89-6	
Magnesium, Dissolved	**0.61**	mg/L	0.50	0.047	1	05/14/22 04:21	05/24/22 22:18	7439-95-4	
Manganese, Dissolved	**0.13**	mg/L	0.0050	0.0027	1	05/14/22 04:21	05/24/22 22:18	7439-96-5	
Potassium, Dissolved	**0.46J**	mg/L	0.50	0.26	1	05/14/22 04:21	05/24/22 22:18	7440-09-7	
Sodium, Dissolved	**2.9**	mg/L	0.50	0.34	1	05/14/22 04:21	05/24/22 22:18	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/06/22 12:49	05/09/22 20:53	7440-36-0	
Arsenic	**0.0015J**	mg/L	0.0025	0.00044	1	05/06/22 12:49	05/09/22 20:53	7440-38-2	B
Barium	**0.0078**	mg/L	0.0025	0.00098	1	05/06/22 12:49	05/09/22 20:53	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	05/06/22 12:49	05/09/22 20:53	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/06/22 12:49	05/09/22 20:53	7440-43-9	
Chromium	**0.0045**	mg/L	0.0025	0.00050	1	05/06/22 12:49	05/09/22 20:53	7440-47-3	
Cobalt	**0.0016J**	mg/L	0.0025	0.00031	1	05/06/22 12:49	05/09/22 20:53	7440-48-4	
Copper	**0.0014J**	mg/L	0.0025	0.00064	1	05/06/22 12:49	05/09/22 20:53	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/06/22 12:49	05/09/22 20:53	7439-92-1	
Nickel	**0.010**	mg/L	0.0025	0.00065	1	05/06/22 12:49	05/09/22 20:53	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/06/22 12:49	05/09/22 20:53	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/06/22 12:49	05/09/22 20:53	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/06/22 12:49	05/09/22 20:53	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	05/06/22 12:49	05/09/22 20:53	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0049	1	05/06/22 12:49	05/09/22 20:53	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/26/22 10:15	05/31/22 16:26	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/09/22 09:45	05/10/22 21:51	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/09/22 09:45	05/10/22 21:51	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	133	%.	60-140		1	05/09/22 09:45	05/10/22 21:51	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0**	mg/L	10.0	1.0	1		05/17/22 16:52		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		05/05/22 17:48		

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30485831

Sample: TW-3 **Lab ID: 30485831003** Collected: 05/03/22 12:45 Received: 05/03/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/05/22 08:59	05/05/22 10:53		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/05/22 13:50	05/05/22 17:11		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**4.3**	mg/L	3.0	0.67	1		05/16/22 15:20	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.071J**	mg/L	0.10	0.053	1		05/17/22 14:55	14797-55-8	
Nitrogen, NO2 plus NO3	**0.071J**	mg/L	0.10	0.053	1		05/17/22 14:55		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/05/22 15:51	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/04/22 19:32	14797-65-0	

Sample: TW-3a **Lab ID: 30485831004** Collected: 05/03/22 13:20 Received: 05/03/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**1.0**	mg/L	0.50	0.083	1	05/11/22 07:37	05/26/22 15:19	7440-70-2	
Iron	**56.3**	mg/L	0.050	0.035	1	05/11/22 07:37	05/26/22 15:19	7439-89-6	
Magnesium	**0.45J**	mg/L	0.50	0.047	1	05/11/22 07:37	05/26/22 15:19	7439-95-4	
Manganese	**0.53**	mg/L	0.0050	0.0027	1	05/11/22 07:37	05/26/22 15:19	7439-96-5	
Potassium	**0.68**	mg/L	0.50	0.26	1	05/11/22 07:37	05/26/22 15:19	7440-09-7	
Sodium	**21.6**	mg/L	0.50	0.34	1	05/11/22 07:37	05/26/22 15:19	7440-23-5	
Total Hardness	**4.5**	mg/L	3.3	0.27	1	05/11/22 07:37	05/26/22 15:19		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**1.1**	mg/L	0.50	0.083	1	05/14/22 04:21	05/24/22 22:20	7440-70-2	
Iron, Dissolved	**59.0**	mg/L	0.050	0.035	1	05/14/22 04:21	05/24/22 22:20	7439-89-6	
Magnesium, Dissolved	**0.48J**	mg/L	0.50	0.047	1	05/14/22 04:21	05/24/22 22:20	7439-95-4	

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30485831

Sample: TW-3a **Lab ID: 30485831004** Collected: 05/03/22 13:20 Received: 05/03/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Manganese, Dissolved	**0.55**	mg/L	0.0050	0.0027	1	05/14/22 04:21	05/24/22 22:20	7439-96-5	
Potassium, Dissolved	**0.65**	mg/L	0.50	0.26	1	05/14/22 04:21	05/24/22 22:20	7440-09-7	
Sodium, Dissolved	**24.0**	mg/L	0.50	0.34	1	05/14/22 04:21	05/24/22 22:20	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/06/22 12:49	05/09/22 20:56	7440-36-0	
Arsenic	**0.0023J**	mg/L	0.0025	0.00044	1	05/06/22 12:49	05/09/22 20:56	7440-38-2	B
Barium	**0.012**	mg/L	0.0025	0.00098	1	05/06/22 12:49	05/09/22 20:56	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	05/06/22 12:49	05/09/22 20:56	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/06/22 12:49	05/09/22 20:56	7440-43-9	
Chromium	**0.00097J**	mg/L	0.0025	0.00050	1	05/06/22 12:49	05/09/22 20:56	7440-47-3	
Cobalt	**0.00045J**	mg/L	0.0025	0.00031	1	05/06/22 12:49	05/09/22 20:56	7440-48-4	
Copper	**0.0010J**	mg/L	0.0025	0.00064	1	05/06/22 12:49	05/09/22 20:56	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/06/22 12:49	05/09/22 20:56	7439-92-1	
Nickel	**0.0025J**	mg/L	0.0025	0.00065	1	05/06/22 12:49	05/09/22 20:56	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/06/22 12:49	05/09/22 20:56	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/06/22 12:49	05/09/22 20:56	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/06/22 12:49	05/09/22 20:56	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	05/06/22 12:49	05/09/22 20:56	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0049	1	05/06/22 12:49	05/09/22 20:56	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/26/22 10:15	05/31/22 16:28	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/09/22 09:45	05/10/22 22:04	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/09/22 09:45	05/10/22 22:04	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	129	%.	60-140		1	05/09/22 09:45	05/10/22 22:04	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**8.0J**	mg/L	10.0	1.0	1		05/17/22 16:53		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**82.0**	mg/L	10.0	10.0	1		05/05/22 17:48		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/05/22 08:59	05/05/22 10:55		

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30485831

Sample: TW-3a **Lab ID: 30485831004** Collected: 05/03/22 13:20 Received: 05/03/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**12.4J**	mg/L	25.0	4.7	1	05/05/22 13:50	05/05/22 17:12		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**48.3**	mg/L	3.0	0.67	1		05/16/22 15:21	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.15**	mg/L	0.10	0.053	1		05/17/22 15:04	14797-55-8	
Nitrogen, NO2 plus NO3	**0.15**	mg/L	0.10	0.053	1		05/17/22 15:04		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/05/22 15:53	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.0080J**	mg/L	0.010	0.0055	1		05/04/22 19:33	14797-65-0	

Sample: TW-27 **Lab ID: 30485831005** Collected: 05/03/22 14:00 Received: 05/03/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.79**	mg/L	0.50	0.083	1	05/11/22 07:37	05/26/22 15:21	7440-70-2	
Iron	**0.036J**	mg/L	0.050	0.035	1	05/11/22 07:37	05/26/22 15:21	7439-89-6	
Magnesium	**0.37J**	mg/L	0.50	0.047	1	05/11/22 07:37	05/26/22 15:21	7439-95-4	
Manganese	**0.0052**	mg/L	0.0050	0.0027	1	05/11/22 07:37	05/26/22 15:21	7439-96-5	
Potassium	**0.44J**	mg/L	0.50	0.26	1	05/11/22 07:37	05/26/22 15:21	7440-09-7	
Sodium	**2.2**	mg/L	0.50	0.34	1	05/11/22 07:37	05/26/22 15:21	7440-23-5	
Total Hardness	**3.5**	mg/L	3.3	0.27	1	05/11/22 07:37	05/26/22 15:21		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.90**	mg/L	0.50	0.083	1	05/14/22 04:21	05/24/22 22:26	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/14/22 04:21	05/24/22 22:26	7439-89-6	
Magnesium, Dissolved	**0.40J**	mg/L	0.50	0.047	1	05/14/22 04:21	05/24/22 22:26	7439-95-4	
Manganese, Dissolved	**0.0057**	mg/L	0.0050	0.0027	1	05/14/22 04:21	05/24/22 22:26	7439-96-5	
Potassium, Dissolved	**0.37J**	mg/L	0.50	0.26	1	05/14/22 04:21	05/24/22 22:26	7440-09-7	
Sodium, Dissolved	**2.5**	mg/L	0.50	0.34	1	05/14/22 04:21	05/24/22 22:26	7440-23-5	

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30485831

Sample: TW-27 **Lab ID: 30485831005** Collected: 05/03/22 14:00 Received: 05/03/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/06/22 12:49	05/09/22 20:58	7440-36-0	
Arsenic	**0.0015J**	mg/L	0.0025	0.00044	1	05/06/22 12:49	05/09/22 20:58	7440-38-2	B
Barium	**0.0077**	mg/L	0.0025	0.00098	1	05/06/22 12:49	05/09/22 20:58	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	05/06/22 12:49	05/09/22 20:58	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/06/22 12:49	05/09/22 20:58	7440-43-9	
Chromium	**0.0018J**	mg/L	0.0025	0.00050	1	05/06/22 12:49	05/09/22 20:58	7440-47-3	
Cobalt	**0.00091J**	mg/L	0.0025	0.00031	1	05/06/22 12:49	05/09/22 20:58	7440-48-4	
Copper	**0.0071**	mg/L	0.0025	0.00064	1	05/06/22 12:49	05/09/22 20:58	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/06/22 12:49	05/09/22 20:58	7439-92-1	
Nickel	**0.0026**	mg/L	0.0025	0.00065	1	05/06/22 12:49	05/09/22 20:58	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/06/22 12:49	05/09/22 20:58	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/06/22 12:49	05/09/22 20:58	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/06/22 12:49	05/09/22 20:58	7440-28-0	
Vanadium	**0.00066J**	mg/L	0.0025	0.00042	1	05/06/22 12:49	05/09/22 20:58	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0049	1	05/06/22 12:49	05/09/22 20:58	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/26/22 10:15	05/31/22 16:30	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/09/22 09:45	05/10/22 22:17	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/09/22 09:45	05/10/22 22:17	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	128	%.	60-140		1	05/09/22 09:45	05/10/22 22:17	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		05/17/22 16:55		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		05/05/22 17:48		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/05/22 08:59	05/05/22 10:57		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/05/22 13:50	05/05/22 17:12		

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30485831

Sample: TW-27 **Lab ID: 30485831005** Collected: 05/03/22 14:00 Received: 05/03/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**3.8**	mg/L	3.0	0.67	1		05/16/22 15:22	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		05/17/22 15:06	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		05/17/22 15:06		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/05/22 15:54	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/04/22 19:33	14797-65-0	

Sample: field blank **Lab ID: 30485831006** Collected: 05/03/22 12:00 Received: 05/03/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.50 U**	mg/L	0.50	0.083	1	05/11/22 07:37	05/26/22 15:23	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	05/11/22 07:37	05/26/22 15:23	7439-89-6	
Magnesium	**0.50 U**	mg/L	0.50	0.047	1	05/11/22 07:37	05/26/22 15:23	7439-95-4	
Manganese	**0.0050 U**	mg/L	0.0050	0.0027	1	05/11/22 07:37	05/26/22 15:23	7439-96-5	
Potassium	**0.50 U**	mg/L	0.50	0.26	1	05/11/22 07:37	05/26/22 15:23	7440-09-7	
Sodium	**0.50 U**	mg/L	0.50	0.34	1	05/11/22 07:37	05/26/22 15:23	7440-23-5	
Total Hardness	**3.3 U**	mg/L	3.3	0.27	1	05/11/22 07:37	05/26/22 15:23		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.50 U**	mg/L	0.50	0.083	1	05/14/22 04:21	05/24/22 22:28	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/14/22 04:21	05/24/22 22:28	7439-89-6	
Magnesium, Dissolved	**0.50 U**	mg/L	0.50	0.047	1	05/14/22 04:21	05/24/22 22:28	7439-95-4	
Manganese, Dissolved	**0.0050 U**	mg/L	0.0050	0.0027	1	05/14/22 04:21	05/24/22 22:28	7439-96-5	
Potassium, Dissolved	**0.50 U**	mg/L	0.50	0.26	1	05/14/22 04:21	05/24/22 22:28	7440-09-7	
Sodium, Dissolved	**0.50 U**	mg/L	0.50	0.34	1	05/14/22 04:21	05/24/22 22:28	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/06/22 12:49	05/09/22 21:01	7440-36-0	
Arsenic	**0.0014J**	mg/L	0.0025	0.00044	1	05/06/22 12:49	05/09/22 21:01	7440-38-2	B
Barium	**0.0025 U**	mg/L	0.0025	0.00098	1	05/06/22 12:49	05/09/22 21:01	7440-39-3	

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30485831

Sample: field blank **Lab ID: 30485831006** Collected: 05/03/22 12:00 Received: 05/03/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	05/06/22 12:49	05/09/22 21:01	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/06/22 12:49	05/09/22 21:01	7440-43-9	
Chromium	**0.0025 U**	mg/L	0.0025	0.00050	1	05/06/22 12:49	05/09/22 21:01	7440-47-3	
Cobalt	**0.0025 U**	mg/L	0.0025	0.00031	1	05/06/22 12:49	05/09/22 21:01	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.00064	1	05/06/22 12:49	05/09/22 21:01	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/06/22 12:49	05/09/22 21:01	7439-92-1	
Nickel	**0.0025 U**	mg/L	0.0025	0.00065	1	05/06/22 12:49	05/09/22 21:01	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/06/22 12:49	05/09/22 21:01	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/06/22 12:49	05/09/22 21:01	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/06/22 12:49	05/09/22 21:01	7440-28-0	
Vanadium	**0.00044J**	mg/L	0.0025	0.00042	1	05/06/22 12:49	05/09/22 21:01	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0049	1	05/06/22 12:49	05/09/22 21:01	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/26/22 10:15	05/31/22 16:31	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/17/22 16:58		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		05/05/22 17:48		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/05/22 08:59	05/05/22 11:06		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/05/22 13:50	05/05/22 17:12		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**3.0 U**	mg/L	3.0	0.67	1		05/16/22 15:23	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		05/17/22 15:07	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		05/17/22 15:07		

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30485831

Sample: field blank **Lab ID: 30485831006** Collected: 05/03/22 12:00 Received: 05/03/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/05/22 15:56	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/04/22 19:34	14797-65-0	

Sample: TW-23R **Lab ID: 30485831007** Collected: 05/03/22 10:20 Received: 05/03/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**2.8**	mg/L	0.50	0.083	1	05/11/22 07:37	05/26/22 15:25	7440-70-2	
Iron	**0.16**	mg/L	0.050	0.035	1	05/11/22 07:37	05/26/22 15:25	7439-89-6	
Magnesium	**1.1**	mg/L	0.50	0.047	1	05/11/22 07:37	05/26/22 15:25	7439-95-4	
Manganese	**0.014**	mg/L	0.0050	0.0027	1	05/11/22 07:37	05/26/22 15:25	7439-96-5	
Potassium	**1.0**	mg/L	0.50	0.26	1	05/11/22 07:37	05/26/22 15:25	7440-09-7	
Sodium	**4.3**	mg/L	0.50	0.34	1	05/11/22 07:37	05/26/22 15:25	7440-23-5	
Total Hardness	**11.3**	mg/L	3.3	0.27	1	05/11/22 07:37	05/26/22 15:25		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**2.9**	mg/L	0.50	0.083	1	05/14/22 04:21	05/24/22 22:30	7440-70-2	
Iron, Dissolved	**0.095**	mg/L	0.050	0.035	1	05/14/22 04:21	05/24/22 22:30	7439-89-6	
Magnesium, Dissolved	**1.1**	mg/L	0.50	0.047	1	05/14/22 04:21	05/24/22 22:30	7439-95-4	
Manganese, Dissolved	**0.014**	mg/L	0.0050	0.0027	1	05/14/22 04:21	05/24/22 22:30	7439-96-5	
Potassium, Dissolved	**1.1**	mg/L	0.50	0.26	1	05/14/22 04:21	05/24/22 22:30	7440-09-7	
Sodium, Dissolved	**4.8**	mg/L	0.50	0.34	1	05/14/22 04:21	05/24/22 22:30	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/06/22 12:49	05/09/22 21:21	7440-36-0	
Arsenic	**0.0017J**	mg/L	0.0025	0.00044	1	05/06/22 12:49	05/09/22 21:21	7440-38-2	B
Barium	**0.015**	mg/L	0.0025	0.00098	1	05/06/22 12:49	05/09/22 21:21	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	05/06/22 12:49	05/09/22 21:21	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/06/22 12:49	05/09/22 21:21	7440-43-9	
Chromium	**0.015**	mg/L	0.0025	0.00050	1	05/06/22 12:49	05/09/22 21:21	7440-47-3	
Cobalt	**0.0040**	mg/L	0.0025	0.00031	1	05/06/22 12:49	05/09/22 21:21	7440-48-4	
Copper	**0.011**	mg/L	0.0025	0.00064	1	05/06/22 12:49	05/09/22 21:21	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/06/22 12:49	05/09/22 21:21	7439-92-1	
Nickel	**0.030**	mg/L	0.0025	0.00065	1	05/06/22 12:49	05/09/22 21:21	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/06/22 12:49	05/09/22 21:21	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/06/22 12:49	05/09/22 21:21	7440-22-4	

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30485831

Sample: TW-23R **Lab ID: 30485831007** Collected: 05/03/22 10:20 Received: 05/03/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/06/22 12:49	05/09/22 21:21	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	05/06/22 12:49	05/09/22 21:21	7440-62-2	
Zinc	**0.0055**	mg/L	0.0050	0.0049	1	05/06/22 12:49	05/09/22 21:21	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/26/22 10:15	05/31/22 16:33	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/09/22 09:45	05/10/22 22:56	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/09/22 09:45	05/10/22 22:56	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	128	%.	60-140		1	05/09/22 09:45	05/10/22 22:56	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		05/17/22 17:01		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**12.0**	mg/L	10.0	10.0	1		05/05/22 17:48		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/05/22 08:59	05/05/22 11:08		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/05/22 13:50	05/05/22 17:13		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**6.6**	mg/L	3.0	0.67	1		05/16/22 15:23	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.8**	mg/L	0.10	0.053	1		05/17/22 15:08	14797-55-8	
Nitrogen, NO2 plus NO3	**1.8**	mg/L	0.10	0.053	1		05/17/22 15:08		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/05/22 15:59	14808-79-8	

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30485831

Sample: TW-23R **Lab ID: 30485831007** Collected: 05/03/22 10:20 Received: 05/03/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/04/22 19:35	14797-65-0	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30485831

QC Batch: 503523
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30485831001, 30485831002, 30485831003, 30485831004, 30485831005, 30485831006, 30485831007

METHOD BLANK: 2438376
Matrix: Water
Associated Lab Samples: 30485831001, 30485831002, 30485831003, 30485831004, 30485831005, 30485831006, 30485831007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	05/26/22 14:47	
Iron	mg/L	0.050 U	0.050	0.035	05/26/22 14:47	
Magnesium	mg/L	0.50 U	0.50	0.047	05/26/22 14:47	
Manganese	mg/L	0.0050 U	0.0050	0.0027	05/26/22 14:47	
Potassium	mg/L	0.50 U	0.50	0.26	05/26/22 14:47	
Sodium	mg/L	0.50 U	0.50	0.34	05/26/22 14:47	

LABORATORY CONTROL SAMPLE: 2438377

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	42.5	106	80-120	
Iron	mg/L	2	2.1	105	80-120	
Magnesium	mg/L	20	21.2	106	80-120	
Manganese	mg/L	2	2.2	108	80-120	
Potassium	mg/L	20	20.6	103	80-120	
Sodium	mg/L	20	20.6	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2438378 2438379

Parameter	Units	30485586001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	39500 ug/L	40	40	80.5	84.5	102	113	80-120	5	20	
Iron	mg/L	0.24	2	2	2.3	2.4	103	109	80-120	5	20	
Magnesium	mg/L	7660 ug/L	20	20	28.6	29.9	104	111	80-120	5	20	
Manganese	mg/L	0.099	2	2	2.2	2.3	106	111	80-120	4	20	
Potassium	mg/L	1200 ug/L	20	20	21.7	22.6	102	107	80-120	4	20	
Sodium	mg/L	9650 ug/L	20	20	29.9	31.3	101	108	80-120	5	20	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30485831

QC Batch: 504445
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30485831001, 30485831002, 30485831003, 30485831004, 30485831005, 30485831006, 30485831007

METHOD BLANK: 2443429 Matrix: Water
Associated Lab Samples: 30485831001, 30485831002, 30485831003, 30485831004, 30485831005, 30485831006, 30485831007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	05/24/22 21:44	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	05/24/22 21:44	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	05/24/22 21:44	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	05/24/22 21:44	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	05/24/22 21:44	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	05/24/22 21:44	

LABORATORY CONTROL SAMPLE: 2443430

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	44.0	110	80-120	
Iron, Dissolved	mg/L	2	2.2	110	80-120	
Magnesium, Dissolved	mg/L	20	22.2	111	80-120	
Manganese, Dissolved	mg/L	2	2.2	109	80-120	
Potassium, Dissolved	mg/L	20	22.0	110	80-120	
Sodium, Dissolved	mg/L	20	21.9	110	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2443431 2443432

Parameter	Units	30486109001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	123000 ug/L	40	40	162	162	98	98	80-120	0	20	
Iron, Dissolved	mg/L	ND	2	2	2.1	2.1	105	105	80-120	0	20	
Magnesium, Dissolved	mg/L	34200 ug/L	20	20	55.0	55.0	104	104	80-120	0	20	
Manganese, Dissolved	mg/L	192 ug/L	2	2	2.3	2.3	105	105	80-120	0	20	
Potassium, Dissolved	mg/L	2170 ug/L	20	20	24.7	24.8	113	113	80-120	0	20	
Sodium, Dissolved	mg/L	36600 ug/L	20	20	57.3	57.3	104	104	80-120	0	20	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30485831

QC Batch: 502650
QC Batch Method: EPA 3020A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30485831001, 30485831002, 30485831003, 30485831004, 30485831005, 30485831006, 30485831007

METHOD BLANK: 2433765
Matrix: Water
Associated Lab Samples: 30485831001, 30485831002, 30485831003, 30485831004, 30485831005, 30485831006, 30485831007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00030	05/09/22 20:22	
Arsenic	mg/L	0.00088J	0.0025	0.00044	05/09/22 20:22	
Barium	mg/L	0.0025 U	0.0025	0.00098	05/09/22 20:22	
Beryllium	mg/L	0.00050 U	0.00050	0.00015	05/09/22 20:22	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	05/09/22 20:22	
Chromium	mg/L	0.0025 U	0.0025	0.00050	05/09/22 20:22	
Cobalt	mg/L	0.0025 U	0.0025	0.00031	05/09/22 20:22	
Copper	mg/L	0.0025 U	0.0025	0.00064	05/09/22 20:22	
Lead	mg/L	0.00050 U	0.00050	0.00045	05/09/22 20:22	
Nickel	mg/L	0.0025 U	0.0025	0.00065	05/09/22 20:22	
Selenium	mg/L	0.0025 U	0.0025	0.00084	05/09/22 20:22	
Silver	mg/L	0.0025 U	0.0025	0.00053	05/09/22 20:22	
Thallium	mg/L	0.00050 U	0.00050	0.000081	05/09/22 20:22	
Vanadium	mg/L	0.0025 U	0.0025	0.00042	05/09/22 20:22	
Zinc	mg/L	0.0050 U	0.0050	0.0049	05/09/22 20:22	

LABORATORY CONTROL SAMPLE: 2433766

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.021	107	80-120	
Arsenic	mg/L	0.1	0.095	95	80-120	
Barium	mg/L	0.1	0.095	95	80-120	
Beryllium	mg/L	0.02	0.021	105	80-120	
Cadmium	mg/L	0.02	0.019	95	80-120	
Chromium	mg/L	0.1	0.096	96	80-120	
Cobalt	mg/L	0.1	0.095	95	80-120	
Copper	mg/L	0.1	0.096	96	80-120	
Lead	mg/L	0.02	0.019	96	80-120	
Nickel	mg/L	0.1	0.099	99	80-120	
Selenium	mg/L	0.1	0.095	95	80-120	
Silver	mg/L	0.1	0.097	97	80-120	
Thallium	mg/L	0.02	0.019	94	80-120	
Vanadium	mg/L	0.1	0.095	95	80-120	
Zinc	mg/L	0.2	0.19	97	80-120	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30485831

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2433887 2433888

Parameter	Units	30485831006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00050 U	0.02	0.02	0.023	0.023	115	115	75-125	0	20	
Arsenic	mg/L	0.0014J	0.1	0.1	0.10	0.10	101	101	75-125	0	20	
Barium	mg/L	0.0025 U	0.1	0.1	0.10	0.10	103	104	75-125	1	20	
Beryllium	mg/L	0.00050 U	0.02	0.02	0.022	0.022	108	108	75-125	0	20	
Cadmium	mg/L	0.00050 U	0.02	0.02	0.020	0.020	101	102	75-125	1	20	
Chromium	mg/L	0.0025 U	0.1	0.1	0.10	0.11	104	105	75-125	1	20	
Cobalt	mg/L	0.0025 U	0.1	0.1	0.10	0.10	103	104	75-125	1	20	
Copper	mg/L	0.0025 U	0.1	0.1	0.10	0.11	105	106	75-125	1	20	
Lead	mg/L	0.00050 U	0.02	0.02	0.021	0.021	104	103	75-125	0	20	
Nickel	mg/L	0.0025 U	0.1	0.1	0.11	0.11	105	106	75-125	0	20	
Selenium	mg/L	0.0025 U	0.1	0.1	0.10	0.097	100	97	75-125	3	20	
Silver	mg/L	0.0025 U	0.1	0.1	0.10	0.10	101	101	75-125	1	20	
Thallium	mg/L	0.00050 U	0.02	0.02	0.020	0.020	102	101	75-125	1	20	
Vanadium	mg/L	0.00044J	0.1	0.1	0.10	0.10	104	104	75-125	0	20	
Zinc	mg/L	0.0050 U	0.2	0.2	0.21	0.21	103	103	75-125	0	20	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30485831

QC Batch: 502370
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30485831001

METHOD BLANK: 2432295 Matrix: Water
Associated Lab Samples: 30485831001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	05/06/22 15:37	

LABORATORY CONTROL SAMPLE: 2432296

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.010	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2432355 2432356

Parameter	Units	30484870001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.01	0.01	0.0035	0.0040	35	40	80-120	12	20	M1

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30485831

QC Batch: 507143
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30485831002, 30485831003, 30485831004, 30485831005, 30485831006, 30485831007

METHOD BLANK: 2457069 Matrix: Water
Associated Lab Samples: 30485831002, 30485831003, 30485831004, 30485831005, 30485831006, 30485831007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	05/31/22 16:17	

LABORATORY CONTROL SAMPLE: 2457070

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.0085	85	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2457114 2457115

Parameter	Units	30485831002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00020 U	0.01	0.01	0.0086	0.0084	86	84	80-120	2	20	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30485831

QC Batch: 502931
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30485831001, 30485831002, 30485831003, 30485831004, 30485831005, 30485831007

METHOD BLANK: 2435447 Matrix: Water
Associated Lab Samples: 30485831001, 30485831002, 30485831003, 30485831004, 30485831005, 30485831007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.022	05/10/22 18:10	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	05/10/22 18:10	CH
1,1,1,2-Tetrachloroethane (S)	%.	102	60-140		05/10/22 18:10	

LABORATORY CONTROL SAMPLE: 2435448

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.23	90	85-115	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.25	100	85-115	CH
1,1,1,2-Tetrachloroethane (S)	%.			105	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2435449 2435450

Parameter	Units	30485739002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	ND	0.4	0.4	0.31	0.35	78	87	60-140	11	25	
1,2-Dibromoethane (EDB)	ug/L	ND	0.4	0.4	0.36	0.39	90	98	60-140	8	25	CH
1,1,1,2-Tetrachloroethane (S)	%.						89	99	60-140			

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30485831

QC Batch: 505026
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30485831001, 30485831002, 30485831003, 30485831004, 30485831005, 30485831006, 30485831007

METHOD BLANK: 2446040 Matrix: Water
Associated Lab Samples: 30485831001, 30485831002, 30485831003, 30485831004, 30485831005, 30485831006, 30485831007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	05/17/22 16:20	

LABORATORY CONTROL SAMPLE: 2446041

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	22.0	110	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2446042 2446043

Parameter	Units	30485831001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	12.0	50	50	56.0	56.0	88	88	85-115	0	20	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30485831

QC Batch: 502188
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30485831001, 30485831002, 30485831003, 30485831004, 30485831005, 30485831006, 30485831007

METHOD BLANK: 2431312 Matrix: Water
Associated Lab Samples: 30485831001, 30485831002, 30485831003, 30485831004, 30485831005, 30485831006, 30485831007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	05/05/22 17:48	

LABORATORY CONTROL SAMPLE: 2431313

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	956	96	85-115	

SAMPLE DUPLICATE: 2431314

Parameter	Units	30485831002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	73.0	75.0	3	5	

SAMPLE DUPLICATE: 2431315

Parameter	Units	30486244004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	94.0	94.0	0	5	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30485831

QC Batch: 502215
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30485831001, 30485831002, 30485831003, 30485831004, 30485831005

METHOD BLANK: 2431377
Matrix: Water
Associated Lab Samples: 30485831001, 30485831002, 30485831003, 30485831004, 30485831005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.044	05/05/22 10:04	

LABORATORY CONTROL SAMPLE: 2431378

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	3.8	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2431379 2431380

Parameter	Units	30485845002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	ND	4	4	3.9	3.8	96	96	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2431381 2431382

Parameter	Units	30486035002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	ND	4	4	4.0	4.0	98	98	90-110	0	20	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30485831

QC Batch: 502218
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30485831006, 30485831007

METHOD BLANK: 2431388
Matrix: Water
Associated Lab Samples: 30485831006, 30485831007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.044	05/05/22 11:03	

LABORATORY CONTROL SAMPLE: 2431389

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	3.8	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2431390 2431391

Parameter	Units	30485831007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	3.8	3.8	95	96	90-110	0	20	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30485831

QC Batch: 502245
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30485831001, 30485831002, 30485831003, 30485831004, 30485831005, 30485831006, 30485831007

METHOD BLANK: 2431433
Matrix: Water
Associated Lab Samples: 30485831001, 30485831002, 30485831003, 30485831004, 30485831005, 30485831006, 30485831007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	05/05/22 17:06	

LABORATORY CONTROL SAMPLE: 2431434

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	317	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2431435 2431436

Parameter	Units	30485355002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	96.4	150	150	235	251	92	103	90-110	7	10	4c

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2431437 2431438

Parameter	Units	30485385004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	98.6	150	150	253	262	103	109	90-110	4	10	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30485831

QC Batch: 504712
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30485831001, 30485831002, 30485831003, 30485831004, 30485831005, 30485831006, 30485831007

METHOD BLANK: 2444484 Matrix: Water
Associated Lab Samples: 30485831001, 30485831002, 30485831003, 30485831004, 30485831005, 30485831006, 30485831007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/16/22 15:03	

LABORATORY CONTROL SAMPLE: 2444485

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	21.3	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2444486 2444487

Parameter	Units	30484870001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.0	20	20	21.1	21.1	90	91	85-115	0	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30485831

QC Batch: 504796
QC Batch Method: SM 4500NO3-F-2011
Analysis Method: SM 4500NO3-F-2011
Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30485831001, 30485831002, 30485831003, 30485831004, 30485831005, 30485831006, 30485831007

METHOD BLANK: 2444749 Matrix: Water
Associated Lab Samples: 30485831001, 30485831002, 30485831003, 30485831004, 30485831005, 30485831006, 30485831007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	05/17/22 14:37	

LABORATORY CONTROL SAMPLE: 2444750

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	4.2	104	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2444751 2444752

Parameter	Units	30487109008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	2.2	5	5	12.2	12.1	199	196	85-115	1	20	MH

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30485831

QC Batch: 502420 | Analysis Method: EPA 9038
QC Batch Method: EPA 9038 | Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30485831001, 30485831002, 30485831003, 30485831004, 30485831005, 30485831006, 30485831007

METHOD BLANK: 2432497 | Matrix: Water
Associated Lab Samples: 30485831001, 30485831002, 30485831003, 30485831004, 30485831005, 30485831006, 30485831007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	05/05/22 15:44	

LABORATORY CONTROL SAMPLE: 2432498

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	27.5	92	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2432499 2432500

Parameter	Units	30485831001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.0 U	20	20	19.1	20.5	87	94	85-115	7	20	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30485831

QC Batch: 502142 | Analysis Method: SM 4500NO2-B-2011
QC Batch Method: SM 4500NO2-B-2011 | Analysis Description: SM4500-NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30485831001, 30485831002, 30485831003, 30485831004, 30485831005, 30485831006, 30485831007

METHOD BLANK: 2430821 Matrix: Water
Associated Lab Samples: 30485831001, 30485831002, 30485831003, 30485831004, 30485831005, 30485831006, 30485831007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	05/04/22 19:29	

LABORATORY CONTROL SAMPLE: 2430822

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.11	108	90-110	

MATRIX SPIKE SAMPLE: 2430824

Parameter	Units	30485831001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.010 U	0.1	0.11	110	85-115	

SAMPLE DUPLICATE: 2430823

Parameter	Units	30485831001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010 U		20	

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QUALIFIERS

Project: MLF-Spring 2022
Pace Project No.: 30485831

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30485831001
[1] Sample pH for 8011 is 6

Sample: 30485831002
[1] Sample pH for 8011 is 6

Sample: 30485831003
[1] Sample pH for 8011 is 6

Sample: 30485831004
[1] Sample pH for 8011 is 6

Sample: 30485831005
[1] Sample pH for 8011 is 7

Sample: 30485831007
[1] Sample pH for 8011 is 6

ANALYTE QUALIFIERS

1c Alk TV: 0 mg/L
2c Alk TV: 2 mg/L
3c Alk TV: 8 mg/L

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QUALIFIERS

Project: MLF-Spring 2022
Pace Project No.: 30485831

ANALYTE QUALIFIERS

4c	As per client request, sample was filtered & then preserved to <2 in lab at bench prior to analysis.
B	Analyte was detected in the associated method blank.
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-Spring 2022
Pace Project No.: 30485831

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30485831001	**TW-2**	EPA 3010A	503523	EPA 6010D	506198
30485831002	**TW-2A**	EPA 3010A	503523	EPA 6010D	506198
30485831003	**TW-3**	EPA 3010A	503523	EPA 6010D	506198
30485831004	**TW-3a**	EPA 3010A	503523	EPA 6010D	506198
30485831005	**TW-27**	EPA 3010A	503523	EPA 6010D	506198
30485831006	**field blank**	EPA 3010A	503523	EPA 6010D	506198
30485831007	**TW-23R**	EPA 3010A	503523	EPA 6010D	506198
30485831001	**TW-2**	EPA 3010A	504445	EPA 6010D	506449
30485831002	**TW-2A**	EPA 3010A	504445	EPA 6010D	506449
30485831003	**TW-3**	EPA 3010A	504445	EPA 6010D	506449
30485831004	**TW-3a**	EPA 3010A	504445	EPA 6010D	506449
30485831005	**TW-27**	EPA 3010A	504445	EPA 6010D	506449
30485831006	**field blank**	EPA 3010A	504445	EPA 6010D	506449
30485831007	**TW-23R**	EPA 3010A	504445	EPA 6010D	506449
30485831001	**TW-2**	EPA 3020A	502650	EPA 6020B	503107
30485831002	**TW-2A**	EPA 3020A	502650	EPA 6020B	503107
30485831003	**TW-3**	EPA 3020A	502650	EPA 6020B	503107
30485831004	**TW-3a**	EPA 3020A	502650	EPA 6020B	503107
30485831005	**TW-27**	EPA 3020A	502650	EPA 6020B	503107
30485831006	**field blank**	EPA 3020A	502650	EPA 6020B	503107
30485831007	**TW-23R**	EPA 3020A	502650	EPA 6020B	503107
30485831001	**TW-2**	EPA 7470A	502370	EPA 7470A	502745
30485831002	**TW-2A**	EPA 7470A	507143	EPA 7470A	508469
30485831003	**TW-3**	EPA 7470A	507143	EPA 7470A	508469
30485831004	**TW-3a**	EPA 7470A	507143	EPA 7470A	508469
30485831005	**TW-27**	EPA 7470A	507143	EPA 7470A	508469
30485831006	**field blank**	EPA 7470A	507143	EPA 7470A	508469
30485831007	**TW-23R**	EPA 7470A	507143	EPA 7470A	508469
30485831001	**TW-2**	EPA 8011	502931	EPA 8011	503052
30485831002	**TW-2A**	EPA 8011	502931	EPA 8011	503052
30485831003	**TW-3**	EPA 8011	502931	EPA 8011	503052
30485831004	**TW-3a**	EPA 8011	502931	EPA 8011	503052
30485831005	**TW-27**	EPA 8011	502931	EPA 8011	503052
30485831007	**TW-23R**	EPA 8011	502931	EPA 8011	503052
30485831001	**TW-2**	SM 2320B-2011	505026		
30485831002	**TW-2A**	SM 2320B-2011	505026		
30485831003	**TW-3**	SM 2320B-2011	505026		
30485831004	**TW-3a**	SM 2320B-2011	505026		
30485831005	**TW-27**	SM 2320B-2011	505026		
30485831006	**field blank**	SM 2320B-2011	505026		
30485831007	**TW-23R**	SM 2320B-2011	505026		
30485831001	**TW-2**	SM 2540C-2011	502188		
30485831002	**TW-2A**	SM 2540C-2011	502188		
30485831003	**TW-3**	SM 2540C-2011	502188		
30485831004	**TW-3a**	SM 2540C-2011	502188		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-Spring 2022
Pace Project No.: 30485831

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30485831005	**TW-27**	SM 2540C-2011	502188		
30485831006	**field blank**	SM 2540C-2011	502188		
30485831007	**TW-23R**	SM 2540C-2011	502188		
30485831001	**TW-2**	EPA 350.1	502215	EPA 350.1	502253
30485831002	**TW-2A**	EPA 350.1	502215	EPA 350.1	502253
30485831003	**TW-3**	EPA 350.1	502215	EPA 350.1	502253
30485831004	**TW-3a**	EPA 350.1	502215	EPA 350.1	502253
30485831005	**TW-27**	EPA 350.1	502215	EPA 350.1	502253
30485831006	**field blank**	EPA 350.1	502218	EPA 350.1	502254
30485831007	**TW-23R**	EPA 350.1	502218	EPA 350.1	502254
30485831001	**TW-2**	EPA 410.4	502245	EPA 410.4	502498
30485831002	**TW-2A**	EPA 410.4	502245	EPA 410.4	502498
30485831003	**TW-3**	EPA 410.4	502245	EPA 410.4	502498
30485831004	**TW-3a**	EPA 410.4	502245	EPA 410.4	502498
30485831005	**TW-27**	EPA 410.4	502245	EPA 410.4	502498
30485831006	**field blank**	EPA 410.4	502245	EPA 410.4	502498
30485831007	**TW-23R**	EPA 410.4	502245	EPA 410.4	502498
30485831001	**TW-2**	SM 4500-Cl-E-2011	504712		
30485831002	**TW-2A**	SM 4500-Cl-E-2011	504712		
30485831003	**TW-3**	SM 4500-Cl-E-2011	504712		
30485831004	**TW-3a**	SM 4500-Cl-E-2011	504712		
30485831005	**TW-27**	SM 4500-Cl-E-2011	504712		
30485831006	**field blank**	SM 4500-Cl-E-2011	504712		
30485831007	**TW-23R**	SM 4500-Cl-E-2011	504712		
30485831001	**TW-2**	SM 4500NO3-F-2011	504796		
30485831002	**TW-2A**	SM 4500NO3-F-2011	504796		
30485831003	**TW-3**	SM 4500NO3-F-2011	504796		
30485831004	**TW-3a**	SM 4500NO3-F-2011	504796		
30485831005	**TW-27**	SM 4500NO3-F-2011	504796		
30485831006	**field blank**	SM 4500NO3-F-2011	504796		
30485831007	**TW-23R**	SM 4500NO3-F-2011	504796		
30485831001	**TW-2**	EPA 9038	502420		
30485831002	**TW-2A**	EPA 9038	502420		
30485831003	**TW-3**	EPA 9038	502420		
30485831004	**TW-3a**	EPA 9038	502420		
30485831005	**TW-27**	EPA 9038	502420		
30485831006	**field blank**	EPA 9038	502420		
30485831007	**TW-23R**	EPA 9038	502420		
30485831001	**TW-2**	SM 4500NO2-B-2011	502142		
30485831002	**TW-2A**	SM 4500NO2-B-2011	502142		
30485831003	**TW-3**	SM 4500NO2-B-2011	502142		
30485831004	**TW-3a**	SM 4500NO2-B-2011	502142		
30485831005	**TW-27**	SM 4500NO2-B-2011	502142		
30485831006	**field blank**	SM 4500NO2-B-2011	502142		
30485831007	**TW-23R**	SM 4500NO2-B-2011	502142		

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF-SPRING 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	① TOTAL METALS	② TOTAL + DISS. METALS	ALKALINITY, TDS	HARDNESS, Cl	AMMONIA	NITRATE	SO_4, COD		METHOD 8011 - EDB + DBCP			
1	TW-2	7	5.3.22	1150	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓			
2	TW-2A			1115															
3	TW-3			1245															
4	TW-3A			1320															
5	TW-27			1400															
6	FIELD BLANK	4		1200	—		QA												
7	TW-23R	7		1020	✓		GW									✓			
8																			

WO#: 30485831

30485831

	Signature	Date	Time	Comments
Relinquished by	N A Brown	5.3-22	1435	① TOTAL METALS - 6020 - Sb, As, Ba, Be, Cd, CR, Co, Cu, Pb,
Received by	[illegible]	5.3.22	1435	Ni, Se, Ag, Tl, V, ZN / 7470 - Hg
Relinquished by	[illegible]	05/03/22	1800	② TOTAL + DISS METALS - 6010 - Ca, Fe, Mg, MN, K Na
Received by	RDS PACE	5-3-22	1810	PACE - WV - METALS
Relinquished by	RDS PACE	5-3-22	2200	PACE - GBURG - WET CHEM + 8011
Received by	BR Pace	5-3-22	2200	LEVEL 2 REPORT

Cooler Temp on Arrival: _____ Deg. C

SEE ATTACHED LIST OF METHODS + PARAMETERS

Rev. Aug. 2018

WO#:30485831
PM: SLS Due Date: 05/18/22
CLIENT: ENV MONITOR

Millersville Landfill, Anne Arundel County, MD		
	Pace, Beaver, WV	
	Method 6020 - ICPMS	
Parameter	RL	MDL
	(mg/l)	
TOTAL METALS - mg/l		
Antimony	0.0005	
Arsenic	0.0025	0.0002473
Barium	0.0025	
Beryllium	0.0005	
Cadmium	0.0005	
Chromium	0.0025	
Cobalt	0.0025	
Copper	0.0025	
Lead	0.0005	
Nickel	0.0025	
Selenium	0.0025	
Silver	0.0025	
Thallium	0.0005	
Vanadium	0.0025	
Zinc	0.005	
	Pace, Beaver, WV	
TOTAL MERCURY - mg/l	Method 7470A	
Mercury	0.0005	0.00025
	Pace, Beaver, WV	
TOTAL AND DISSOLVED METALS - mg/l	Method 6010 - ICP	
Calcium	0.5	0.028
Iron	0.05	0.0076
Magnesium	0.5	0.047
Manganese	0.005	0.00043
Potassium	0.5	0.19
Sodium	0.5	0.148
	Pace - Greensburg, PA	
Volatile Organics - ug/l	Method 8011 - ug/l	
DBCP	0.041	
EDB	0.041	
GENERAL CHEMISTRY - mg/l	Pace - Greensburg, PA	
Alkalinity - SM 2320B	10	1
Ammonia - EPA 350.1	0.1	0.0445
COD - EPA 410.4	25	4.6532
Chloride - EPA 300.0	3	0.06683
Hardness - 2340B		
Nitrate - EPA 300.0	0.1	0.0238
Sulfate - EPA 300.0	10	4.6702
Total dissolved solids - SM2540C	10	10

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EMA Project #

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other

Label BL
LIMS Login

Tracking #: -

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 17 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 2.7 °C Correction Factor: 0 °C Final Temp: 2.7 °C

Temp should be above freezing to 6°C

WO#: 30485831
PM: SLS Due Date: 05/18/22
CLIENT: ENV MONITOR

Comments:	Yes	No	N/A	pH paper Lot# 100284	Date and Initials of person examining contents: JR 5-4-22
Chain of Custody Present:	✓			1.	
Chain of Custody Filled Out:	✓			2.	
Chain of Custody Relinquished:	✓			3.	
Sampler Name & Signature on COC:		✓		4.	
Sample Labels match COC: -Includes date/time/ID Matrix: Wt	✓			5.	
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):	✓			7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used: -Pace Containers Used:	✓			10.	
Containers Intact:	✓			11.	
Orthophosphate field filtered			✓	12.	
Hex Cr Aqueous sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: (VOA) coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.	
All containers meet method preservation requirements.	✓			Initial when completed	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:			✓	18.	
Trip Blank Custody Seals Present			✓		
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: JR	Date: / Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: Date/Time: Contacted By:

Comments/ Resolution:

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

WO# : 30485831

30485831

LIMS30 Internal Shipping Manifest

COOLER 21

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	21	Cooler temp (rcvd) °C	
Packaged on Ice (Y/N)	Yes	Correction Factor	
Shipping Method	Courier	Cooler temp (corr) °C	
Tracking #	N/A	IR GUN ID	
PWS* Drinking water?	No	Received on ice?	

11

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[illegible]	GBUR	5-4-22	1720
Received	[illegible]	BEAV	5-5-22	1135
Relinquished				
Received				
Relinquished				
Received				

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	5/4/2022	30485831007 BP3N1/2	BP3N	30485831007	30485831
MF	5/4/2022	30485831003 BP3N1/2	BP3N	30485831003	30485831
MF	5/4/2022	30485831006 BP3N1/2	BP3N	30485831006	30485831
MF	5/4/2022	30485831001 BP3N1/2	BP3N	30485831001	30485831
MF	5/4/2022	30485831006 BP3N2/2	BP3N	30485831006	30485831
MF	5/4/2022	30485831007 BP3N2/2	BP3N	30485831007	30485831
MF	5/4/2022	30485777001 BP3N1/1	BP3N	30485777001	30485777
MF	5/4/2022	30485831001 BP3N2/2	BP3N	30485831001	30485831
MF	5/4/2022	30485831005 BP3N1/2	BP3N	30485831005	30485831
MF	5/4/2022	30485831002 BP3N2/2	BP3N	30485831002	30485831
MF	5/4/2022	30485831004 BP3N1/2	BP3N	30485831004	30485831
MF	5/4/2022	30485831002 BP3N1/2	BP3N	30485831002	30485831
MF	5/4/2022	30485831005 BP3N2/2	BP3N	30485831005	30485831
MF	5/4/2022	30485831003 BP3N2/2	BP3N	30485831003	30485831
MF	5/4/2022	30485831004 BP3N2/2	BP3N	30485831004	30485831
MF	5/4/2022	30486109005 BP3N1/1	BP3N	30486109005	30486109
MF	5/4/2022	30486109006 BP3N1/1	BP3N	30486109006	30486109
MF	5/4/2022	30486109004 BP3N1/1	BP3N	30486109004	30486109
MF	5/4/2022	30486109007 BP3N1/1	BP3N	30486109007	30486109
MF	5/4/2022	30486109001 BP3N1/1	BP3N	30486109001	30486109
MF	5/4/2022	30486109003 BP3N1/1	BP3N	30486109003	30486109
MF	5/4/2022	30486109002 BP3N1/1	BP3N	30486109002	30486109
MF	5/4/2022	30485659002 BP3N1/1	BP3N	30485659002	30485659
MF	5/4/2022	30485659003 BP3U1/1	BP3U	30485659003	30485659
MF	5/4/2022	30486011004 BP2N1/1	BP2N	30486011004	30486011
MF	5/4/2022	30486011001 BP2N1/1	BP2N	30486011001	30486011
MF	5/4/2022	30486011002 BP2N1/1	BP2N	30486011002	30486011
MF	5/4/2022	30486011003 BP2N1/1	BP2N	30486011003	30486011
MF	5/4/2022	30485836002 BP3N1/1	BP3N	30485836002	30485836
MF	5/4/2022	30486034001 BP3N1/1	BP3N	30486034001	30486034
MF	5/4/2022	30486029001 BP3N1/1	BP3N	30486029001	30486029
MF	5/4/2022	30486178002 BP3N1/1	BP3N	30486178002	30486178
MF	5/4/2022	30486178001 BP3N1/1	BP3N	30486178001	30486178
MF	5/4/2022	30486172001 BP3N1/1	BP3N	30486172001	30486172

WO#: 30485831
PM: SLS **Due Date: 05/18/22**
CLIENT: ENV MONITOR

LIMS73 Lab Sample Condition Upon Receipt (West Vi

Pace Analytical

Client Name: _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other: _____

Tracking #: _____

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used T3TM0U **Type of Ice:** Wet Blue None

Cooler Temperature **Observed Temp** 0.3 °C Correction Factor: 0.0 °C Final Temp: 0.3 °C

Comments:

pH paper Lot#	Date and Initials of person examining contents:
225320	SM 5822

	Yes	No	N/A	
Chain of Custody Present:				1.
Chain of Custody Filled Out:				2. manifest
Chain of Custody Relinquished:				3.
Sampler Name & Signature on COC:				4.
Sample Labels match COC:				5.
-Includes date/time/ID Matrix: WT				Lab Labeled by: NA Checked by: NA
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered:			✓	13.
-pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓	
Filtered volume received for Dissolved tests:			✓	14.
All containers have been checked for preservation:	✓			15.
exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix				
All containers meet method preservation requirements:	✓			Initial when completed: SM Date: 5522
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present:			✓	17.
Trip Blank Custody Seals Present:			✓	
				Initial when completed: SM Date: 5522

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

***PM review** is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

May 20, 2022

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF SPRING 2022
Pace Project No.: 30484621

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on April 28, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Bobby Adams for
Steven L. Smith
steve.l.smith@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: MLF SPRING 2022
Pace Project No.: 30484621

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Florida: Cert E871149 SEKS WET
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver

225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: MLF SPRING 2022
Pace Project No.: 30484621

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30484621001	**TW-4**	Water	04/28/22 14:00	04/28/22 22:45
30484621002	**TW-4B**	Water	04/28/22 13:20	04/28/22 22:45
30484621003	**TW-25**	Water	04/28/22 11:40	04/28/22 22:45
30484621004	**TW-25A**	Water	04/28/22 12:15	04/28/22 22:45
30484621005	**Dup-2**	Water	04/28/22 00:01	04/28/22 22:45
30484621006	**SW-1**	Water	04/28/22 10:40	04/28/22 22:45
30484621007	**SW-2**	Water	04/28/22 14:10	04/28/22 22:45
30484621008	**SW-3**	Water	04/28/22 12:30	04/28/22 22:45

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF SPRING 2022
Pace Project No.: 30484621

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30484621001	**TW-4**	EPA 6010D	MEH	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	SEF	1	PASI-PA
30484621002	**TW-4B**	EPA 6010D	MEH	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	SEF	1	PASI-PA
30484621003	**TW-25**	EPA 6010D	MEH	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF SPRING 2022
Pace Project No.: 30484621

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	SEF	1	PASI-PA
30484621004	**TW-25A**	EPA 6010D	MEH	8	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	SEF	1	PASI-PA
30484621005	**Dup-2**	EPA 6010D	MEH	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	SEF	1	PASI-PA
30484621006	**SW-1**	EPA 6010D	MEH	7	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF SPRING 2022
Pace Project No.: 30484621

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	SEF	1	PASI-PA
30484621007	**SW-2**	EPA 6010D	MEH	7	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	SEF	1	PASI-PA
30484621008	**SW-3**	EPA 6010D	MEH	7	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	SEF	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: MLF SPRING 2022
Pace Project No.: 30484621

Date: May 20, 2022

TW-4 (Lab ID: 30484621001)

- Sample pH for 8011 is 7

TW-4B (Lab ID: 30484621002)

- Sample pH for 8011 is 5

TW-25 (Lab ID: 30484621003)

- Sample pH for 8011 is 5

TW-25A (Lab ID: 30484621004)

- Sample pH for 8011 is 5

Dup-2 (Lab ID: 30484621005)

- Sample pH for 8011 is 5

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PROJECT NARRATIVE

Project: MLF SPRING 2022
Pace Project No.: 30484621

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: May 20, 2022

General Information:
8 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 502828

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30483167004

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2435168)
  - Calcium
  - Iron
  - Magnesium
  - Sodium
- MSD (Lab ID: 2435169)
  - Calcium
  - Iron
  - Magnesium

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PROJECT NARRATIVE

Project: MLF SPRING 2022
Pace Project No.: 30484621

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: May 20, 2022

QC Batch: 502828

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30483167004

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- Potassium
- Sodium

Additional Comments:

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PROJECT NARRATIVE

Project: MLF SPRING 2022
Pace Project No.: 30484621

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: May 20, 2022

General Information:
5 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 504361

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30481281003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2442528)
  - Calcium, Dissolved
  - Magnesium, Dissolved
  - Sodium, Dissolved
- MSD (Lab ID: 2442529)
  - Calcium, Dissolved
  - Magnesium, Dissolved
  - Sodium, Dissolved

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PROJECT NARRATIVE

Project: MLF SPRING 2022
Pace Project No.: 30484621

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: May 20, 2022

Additional Comments:

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PROJECT NARRATIVE

Project: MLF SPRING 2022
Pace Project No.: 30484621

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: May 20, 2022

General Information:
8 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF SPRING 2022
Pace Project No.: 30484621

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: May 20, 2022

General Information:
8 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 501903

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30484621002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2429348)
  - Mercury

Additional Comments:

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PROJECT NARRATIVE

Project: MLF SPRING 2022
Pace Project No.: 30484621

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: May 20, 2022

General Information:
5 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

QC Batch: 502304

IH: This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.

- BLANK (Lab ID: 2431871)
  - 1,1,1,2-Tetrachloroethane (S)
- Dup-2 (Lab ID: 30484621005)
  - 1,1,1,2-Tetrachloroethane (S)
- LCS (Lab ID: 2431872)
  - 1,1,1,2-Tetrachloroethane (S)
- MS (Lab ID: 2431873)
  - 1,1,1,2-Tetrachloroethane (S)
- MSD (Lab ID: 2431874)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-25 (Lab ID: 30484621003)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-25A (Lab ID: 30484621004)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-4 (Lab ID: 30484621001)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-4B (Lab ID: 30484621002)
  - 1,1,1,2-Tetrachloroethane (S)

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 502304

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- BLANK (Lab ID: 2431871)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- Dup-2 (Lab ID: 30484621005)

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PROJECT NARRATIVE

Project: MLF SPRING 2022
Pace Project No.: 30484621

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: May 20, 2022

QC Batch: 502304

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- 1,1,1,2-Tetrachloroethane (S)
- 1,2-Dibromo-3-chloropropane
- 1,2-Dibromoethane (EDB)

- LCS (Lab ID: 2431872)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MS (Lab ID: 2431873)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MSD (Lab ID: 2431874)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-25 (Lab ID: 30484621003)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-25A (Lab ID: 30484621004)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-4 (Lab ID: 30484621001)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-4B (Lab ID: 30484621002)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

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PROJECT NARRATIVE

Project: MLF SPRING 2022
Pace Project No.: 30484621

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: May 20, 2022

Additional Comments:

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PROJECT NARRATIVE

Project: MLF SPRING 2022
Pace Project No.: 30484621

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: May 20, 2022

General Information:
8 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 504058

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30484621001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2440946)
  - Alkalinity,Total (CaCO3 pH4.5)
- MSD (Lab ID: 2440947)
  - Alkalinity,Total (CaCO3 pH4.5)

Additional Comments:

Analyte Comments:

QC Batch: 504058

1c: Alk TV: 0 mg/L

- TW-25 (Lab ID: 30484621003)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-25A (Lab ID: 30484621004)
  - Alkalinity,Total (CaCO3 pH4.5)

2c: Alk TV: 2 mg/L

- Dup-2 (Lab ID: 30484621005)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-4B (Lab ID: 30484621002)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF SPRING 2022
Pace Project No.: 30484621

Method: **SM 2540C-2011**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: May 20, 2022

General Information:
8 samples were analyzed for SM 2540C-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF SPRING 2022
Pace Project No.: 30484621

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: May 20, 2022

General Information:
8 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF SPRING 2022
Pace Project No.: 30484621

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: May 20, 2022

General Information:
8 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 501547

D4: Sample was diluted due to the presence of high levels of target analytes.

- MS (Lab ID: 2427593)
  - Chemical Oxygen Demand
- MSD (Lab ID: 2427594)
  - Chemical Oxygen Demand

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PROJECT NARRATIVE

Project: MLF SPRING 2022
Pace Project No.: 30484621

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: May 20, 2022

General Information:
8 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 503374

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30484490001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2437420)
  - Chloride
- MSD (Lab ID: 2437421)
  - Chloride

Additional Comments:

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PROJECT NARRATIVE

Project: MLF SPRING 2022
Pace Project No.: 30484621

Method: **SM 4500NO3-F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: May 20, 2022

General Information:
8 samples were analyzed for SM 4500NO3-F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 503498

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30484621001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2438002)
  - Nitrogen, NO2 plus NO3
- MSD (Lab ID: 2438003)
  - Nitrogen, NO2 plus NO3

Additional Comments:

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PROJECT NARRATIVE

Project: MLF SPRING 2022
Pace Project No.: 30484621

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: May 20, 2022

General Information:
8 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 501579

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30484621001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2427686)
  - Sulfate
- MSD (Lab ID: 2427687)
  - Sulfate

Additional Comments:

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PROJECT NARRATIVE

Project: MLF SPRING 2022
Pace Project No.: 30484621

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: May 20, 2022

General Information:
8 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 500867

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30484620004

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2424584)
  - Nitrite as N
- MSD (Lab ID: 2424585)
  - Nitrite as N

R1: RPD value was outside control limits.

- MSD (Lab ID: 2424585)
  - Nitrite as N

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF SPRING 2022
Pace Project No.: 30484621

Sample: TW-4 **Lab ID: 30484621001** Collected: 04/28/22 14:00 Received: 04/28/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**4.3**	mg/L	0.50	0.083	1	05/03/22 14:58	05/04/22 14:08	7440-70-2	
Iron	**28.3**	mg/L	0.050	0.035	1	05/03/22 14:58	05/04/22 14:08	7439-89-6	
Magnesium	**1.4**	mg/L	0.50	0.047	1	05/03/22 14:58	05/04/22 14:08	7439-95-4	
Manganese	**0.16**	mg/L	0.0050	0.0027	1	05/03/22 14:58	05/04/22 14:08	7439-96-5	
Potassium	**0.83**	mg/L	0.50	0.26	1	05/03/22 14:58	05/04/22 14:08	7440-09-7	
Sodium	**4.3**	mg/L	0.50	0.34	1	05/03/22 14:58	05/04/22 14:08	7440-23-5	
Total Hardness	**16.5**	mg/L	3.3	0.27	1	05/03/22 14:58	05/04/22 14:08		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**3.9**	mg/L	0.50	0.083	1	05/13/22 14:41	05/17/22 17:49	7440-70-2	
Iron, Dissolved	**22.7**	mg/L	0.050	0.035	1	05/13/22 14:41	05/17/22 17:49	7439-89-6	
Magnesium, Dissolved	**1.3**	mg/L	0.50	0.047	1	05/13/22 14:41	05/17/22 17:49	7439-95-4	
Manganese, Dissolved	**0.16**	mg/L	0.0050	0.0027	1	05/13/22 14:41	05/17/22 17:49	7439-96-5	
Potassium, Dissolved	**0.80**	mg/L	0.50	0.26	1	05/13/22 14:41	05/17/22 17:49	7440-09-7	
Sodium, Dissolved	**3.9**	mg/L	0.50	0.34	1	05/13/22 14:41	05/17/22 17:49	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/02/22 13:35	05/02/22 18:41	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/02/22 13:35	05/02/22 18:41	7440-38-2	
Barium	**0.030**	mg/L	0.0025	0.00098	1	05/02/22 13:35	05/02/22 18:41	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	05/02/22 13:35	05/02/22 18:41	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/02/22 13:35	05/02/22 18:41	7440-43-9	
Chromium	**0.0011J**	mg/L	0.0025	0.00050	1	05/02/22 13:35	05/02/22 18:41	7440-47-3	
Cobalt	**0.0020J**	mg/L	0.0025	0.00031	1	05/02/22 13:35	05/02/22 18:41	7440-48-4	
Copper	**0.0017J**	mg/L	0.0025	0.00064	1	05/02/22 13:35	05/02/22 18:41	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/02/22 13:35	05/02/22 18:41	7439-92-1	
Nickel	**0.0025J**	mg/L	0.0025	0.00065	1	05/02/22 13:35	05/02/22 18:41	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/02/22 13:35	05/02/22 18:41	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/02/22 13:35	05/02/22 18:41	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/02/22 13:35	05/02/22 18:41	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	05/02/22 13:35	05/02/22 18:41	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0049	1	05/02/22 13:35	05/02/22 18:41	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/04/22 10:30	05/05/22 12:40	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/05/22 10:00	05/06/22 10:10	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/05/22 10:00	05/06/22 10:10	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	126	%.	60-140		1	05/05/22 10:00	05/06/22 10:10	630-20-6	CH,IH

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF SPRING 2022
Pace Project No.: 30484621

Sample: TW-4 **Lab ID: 30484621001** Collected: 04/28/22 14:00 Received: 04/28/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**28.0**	mg/L	10.0	1.0	1		05/12/22 16:55		ML
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**64.0**	mg/L	10.0	10.0	1		05/03/22 14:45		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/04/22 10:52	05/04/22 12:40		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/03/22 12:47	05/03/22 16:15		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**8.7**	mg/L	3.0	0.67	1		05/10/22 16:12	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.15**	mg/L	0.10	0.053	1		05/11/22 16:30	14797-55-8	
Nitrogen, NO2 plus NO3	**0.16**	mg/L	0.10	0.053	1		05/11/22 16:30		ML
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/03/22 11:38	14808-79-8	ML
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.0073J**	mg/L	0.010	0.0055	1		04/29/22 19:17	14797-65-0	

Sample: TW-4B **Lab ID: 30484621002** Collected: 04/28/22 13:20 Received: 04/28/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**2.9**	mg/L	0.50	0.083	1	05/03/22 14:58	05/04/22 14:10	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	05/03/22 14:58	05/04/22 14:10	7439-89-6	
Magnesium	**3.1**	mg/L	0.50	0.047	1	05/03/22 14:58	05/04/22 14:10	7439-95-4	
Manganese	**0.094**	mg/L	0.0050	0.0027	1	05/03/22 14:58	05/04/22 14:10	7439-96-5	
Potassium	**1.1**	mg/L	0.50	0.26	1	05/03/22 14:58	05/04/22 14:10	7440-09-7	

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ANALYTICAL RESULTS

Project: MLF SPRING 2022
Pace Project No.: 30484621

Sample: TW-4B **Lab ID: 30484621002** Collected: 04/28/22 13:20 Received: 04/28/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**3.3**	mg/L	0.50	0.34	1	05/03/22 14:58	05/04/22 14:10	7440-23-5	
Total Hardness	**19.9**	mg/L	3.3	0.27	1	05/03/22 14:58	05/04/22 14:10		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**2.7**	mg/L	0.50	0.083	1	05/13/22 14:41	05/17/22 17:51	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/13/22 14:41	05/17/22 17:51	7439-89-6	
Magnesium, Dissolved	**2.9**	mg/L	0.50	0.047	1	05/13/22 14:41	05/17/22 17:51	7439-95-4	
Manganese, Dissolved	**0.093**	mg/L	0.0050	0.0027	1	05/13/22 14:41	05/17/22 17:51	7439-96-5	
Potassium, Dissolved	**1.1**	mg/L	0.50	0.26	1	05/13/22 14:41	05/17/22 17:51	7440-09-7	
Sodium, Dissolved	**3.1**	mg/L	0.50	0.34	1	05/13/22 14:41	05/17/22 17:51	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/02/22 13:35	05/02/22 18:44	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/02/22 13:35	05/02/22 18:44	7440-38-2	
Barium	**0.076**	mg/L	0.0025	0.00098	1	05/02/22 13:35	05/02/22 18:44	7440-39-3	
Beryllium	**0.00024J**	mg/L	0.00050	0.00015	1	05/02/22 13:35	05/02/22 18:44	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/02/22 13:35	05/02/22 18:44	7440-43-9	
Chromium	**0.0024J**	mg/L	0.0025	0.00050	1	05/02/22 13:35	05/02/22 18:44	7440-47-3	
Cobalt	**0.0088**	mg/L	0.0025	0.00031	1	05/02/22 13:35	05/02/22 18:44	7440-48-4	
Copper	**0.0025**	mg/L	0.0025	0.00064	1	05/02/22 13:35	05/02/22 18:44	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/02/22 13:35	05/02/22 18:44	7439-92-1	
Nickel	**0.0063**	mg/L	0.0025	0.00065	1	05/02/22 13:35	05/02/22 18:44	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/02/22 13:35	05/02/22 18:44	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/02/22 13:35	05/02/22 18:44	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/02/22 13:35	05/02/22 18:44	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	05/02/22 13:35	05/02/22 18:44	7440-62-2	
Zinc	**0.0098**	mg/L	0.0050	0.0049	1	05/02/22 13:35	05/02/22 18:44	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00082**	mg/L	0.00020	0.00020	1	05/04/22 10:30	05/05/22 12:42	7439-97-6	M1
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/05/22 10:00	05/06/22 10:48	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/05/22 10:00	05/06/22 10:48	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	100	%.	60-140		1	05/05/22 10:00	05/06/22 10:48	630-20-6	CH,IH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		05/12/22 16:59		2c

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ANALYTICAL RESULTS

Project: MLF SPRING 2022
Pace Project No.: 30484621

Sample: TW-4B **Lab ID: 30484621002** Collected: 04/28/22 13:20 Received: 04/28/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**43.0**	mg/L	10.0	10.0	1		05/03/22 14:45		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/04/22 10:52	05/04/22 12:46		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/03/22 12:47	05/03/22 16:15		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**5.7**	mg/L	3.0	0.67	1		05/10/22 16:12	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.28**	mg/L	0.10	0.053	1		05/11/22 16:34	14797-55-8	
Nitrogen, NO2 plus NO3	**0.28**	mg/L	0.10	0.053	1		05/11/22 16:34		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.2**	mg/L	10.0	4.7	1		05/03/22 11:42	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/29/22 19:17	14797-65-0	

Sample: TW-25 **Lab ID: 30484621003** Collected: 04/28/22 11:40 Received: 04/28/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**1.5**	mg/L	0.50	0.083	1	05/03/22 14:58	05/04/22 14:12	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	05/03/22 14:58	05/04/22 14:12	7439-89-6	
Magnesium	**0.86**	mg/L	0.50	0.047	1	05/03/22 14:58	05/04/22 14:12	7439-95-4	
Manganese	**0.017**	mg/L	0.0050	0.0027	1	05/03/22 14:58	05/04/22 14:12	7439-96-5	
Potassium	**0.58**	mg/L	0.50	0.26	1	05/03/22 14:58	05/04/22 14:12	7440-09-7	
Sodium	**2.6**	mg/L	0.50	0.34	1	05/03/22 14:58	05/04/22 14:12	7440-23-5	
Total Hardness	**7.2**	mg/L	3.3	0.27	1	05/03/22 14:58	05/04/22 14:12		N3

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ANALYTICAL RESULTS

Project: MLF SPRING 2022
Pace Project No.: 30484621

Sample: TW-25 **Lab ID: 30484621003** Collected: 04/28/22 11:40 Received: 04/28/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**1.4**	mg/L	0.50	0.083	1	05/13/22 14:41	05/17/22 17:53	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/13/22 14:41	05/17/22 17:53	7439-89-6	
Magnesium, Dissolved	**0.84**	mg/L	0.50	0.047	1	05/13/22 14:41	05/17/22 17:53	7439-95-4	
Manganese, Dissolved	**0.017**	mg/L	0.0050	0.0027	1	05/13/22 14:41	05/17/22 17:53	7439-96-5	
Potassium, Dissolved	**0.63**	mg/L	0.50	0.26	1	05/13/22 14:41	05/17/22 17:53	7440-09-7	
Sodium, Dissolved	**2.6**	mg/L	0.50	0.34	1	05/13/22 14:41	05/17/22 17:53	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/02/22 13:35	05/02/22 18:56	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/02/22 13:35	05/02/22 18:56	7440-38-2	
Barium	**0.022**	mg/L	0.0025	0.00098	1	05/02/22 13:35	05/02/22 18:56	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	05/02/22 13:35	05/02/22 18:56	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/02/22 13:35	05/02/22 18:56	7440-43-9	
Chromium	**0.0024J**	mg/L	0.0025	0.00050	1	05/02/22 13:35	05/02/22 18:56	7440-47-3	
Cobalt	**0.0051**	mg/L	0.0025	0.00031	1	05/02/22 13:35	05/02/22 18:56	7440-48-4	
Copper	**0.0034**	mg/L	0.0025	0.00064	1	05/02/22 13:35	05/02/22 18:56	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/02/22 13:35	05/02/22 18:56	7439-92-1	
Nickel	**0.0039**	mg/L	0.0025	0.00065	1	05/02/22 13:35	05/02/22 18:56	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/02/22 13:35	05/02/22 18:56	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/02/22 13:35	05/02/22 18:56	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/02/22 13:35	05/02/22 18:56	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	05/02/22 13:35	05/02/22 18:56	7440-62-2	
Zinc	**0.0057**	mg/L	0.0050	0.0049	1	05/02/22 13:35	05/02/22 18:56	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/04/22 10:30	05/05/22 12:47	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/05/22 10:00	05/06/22 11:01	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/05/22 10:00	05/06/22 11:01	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	119	%.	60-140		1	05/05/22 10:00	05/06/22 11:01	630-20-6	CH,IH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/12/22 17:01		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**19.0**	mg/L	10.0	10.0	1		05/03/22 14:45		

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ANALYTICAL RESULTS

Project: MLF SPRING 2022
Pace Project No.: 30484621

Sample: TW-25 **Lab ID: 30484621003** Collected: 04/28/22 11:40 Received: 04/28/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/04/22 10:52	05/04/22 12:48		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/03/22 12:47	05/03/22 16:16		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**5.1**	mg/L	3.0	0.67	1		05/10/22 16:15	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.23**	mg/L	0.10	0.053	1		05/11/22 16:36	14797-55-8	
Nitrogen, NO2 plus NO3	**0.23**	mg/L	0.10	0.053	1		05/11/22 16:36		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/03/22 11:43	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/29/22 19:13	14797-65-0	

Sample: TW-25A **Lab ID: 30484621004** Collected: 04/28/22 12:15 Received: 04/28/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**4.2**	mg/L	0.50	0.083	1	05/03/22 14:58	05/04/22 14:14	7440-70-2	
Iron	**0.045J**	mg/L	0.050	0.035	1	05/03/22 14:58	05/04/22 14:14	7439-89-6	
Magnesium	**2.1**	mg/L	0.50	0.047	1	05/03/22 14:58	05/04/22 14:14	7439-95-4	
Manganese	**0.047**	mg/L	0.0050	0.0027	1	05/03/22 14:58	05/04/22 14:14	7439-96-5	
Potassium	**1.0**	mg/L	0.50	0.26	1	05/03/22 14:58	05/04/22 14:14	7440-09-7	
Sodium	**4.1**	mg/L	0.50	0.34	1	05/03/22 14:58	05/04/22 14:14	7440-23-5	
Total Hardness	**19.1**	mg/L	3.3	0.27	1	05/03/22 14:58	05/04/22 14:14		N3
Yttrium (IS1)	**111**	%.			1	05/03/22 14:58	05/04/22 14:14		
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**3.9**	mg/L	0.50	0.083	1	05/13/22 14:41	05/17/22 17:55	7440-70-2	
Iron, Dissolved	**0.038J**	mg/L	0.050	0.035	1	05/13/22 14:41	05/17/22 17:55	7439-89-6	

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ANALYTICAL RESULTS

Project: MLF SPRING 2022
Pace Project No.: 30484621

Sample: TW-25A **Lab ID: 30484621004** Collected: 04/28/22 12:15 Received: 04/28/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Magnesium, Dissolved	**2.1**	mg/L	0.50	0.047	1	05/13/22 14:41	05/17/22 17:55	7439-95-4	
Manganese, Dissolved	**0.048**	mg/L	0.0050	0.0027	1	05/13/22 14:41	05/17/22 17:55	7439-96-5	
Potassium, Dissolved	**1.1**	mg/L	0.50	0.26	1	05/13/22 14:41	05/17/22 17:55	7440-09-7	
Sodium, Dissolved	**4.0**	mg/L	0.50	0.34	1	05/13/22 14:41	05/17/22 17:55	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/02/22 13:35	05/02/22 19:05	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/02/22 13:35	05/02/22 19:05	7440-38-2	
Barium	**0.082**	mg/L	0.0025	0.00098	1	05/02/22 13:35	05/02/22 19:05	7440-39-3	
Beryllium	**0.0011**	mg/L	0.00050	0.00015	1	05/02/22 13:35	05/02/22 19:05	7440-41-7	
Cadmium	**0.00017J**	mg/L	0.00050	0.00013	1	05/02/22 13:35	05/02/22 19:05	7440-43-9	
Chromium	**0.0010J**	mg/L	0.0025	0.00050	1	05/02/22 13:35	05/02/22 19:05	7440-47-3	
Cobalt	**0.011**	mg/L	0.0025	0.00031	1	05/02/22 13:35	05/02/22 19:05	7440-48-4	
Copper	**0.056**	mg/L	0.0025	0.00064	1	05/02/22 13:35	05/02/22 19:05	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/02/22 13:35	05/02/22 19:05	7439-92-1	
Nickel	**0.010**	mg/L	0.0025	0.00065	1	05/02/22 13:35	05/02/22 19:05	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/02/22 13:35	05/02/22 19:05	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/02/22 13:35	05/02/22 19:05	7440-22-4	
Thallium	**0.00017J**	mg/L	0.00050	0.000081	1	05/02/22 13:35	05/02/22 19:05	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	05/02/22 13:35	05/02/22 19:05	7440-62-2	
Zinc	**0.014**	mg/L	0.0050	0.0049	1	05/02/22 13:35	05/02/22 19:05	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/04/22 10:30	05/05/22 12:49	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.042 U**	ug/L	0.042	0.023	1	05/05/22 10:00	05/06/22 11:14	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.042 U**	ug/L	0.042	0.032	1	05/05/22 10:00	05/06/22 11:14	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	108	%.	60-140		1	05/05/22 10:00	05/06/22 11:14	630-20-6	CH,IH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/12/22 17:03		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**33.0**	mg/L	10.0	10.0	1		05/03/22 14:45		

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ANALYTICAL RESULTS

Project: MLF SPRING 2022
Pace Project No.: 30484621

Sample: TW-25A **Lab ID: 30484621004** Collected: 04/28/22 12:15 Received: 04/28/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/04/22 10:52	05/04/22 12:50		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/03/22 12:47	05/03/22 16:16		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**8.5**	mg/L	3.0	0.67	1		05/10/22 16:16	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.73**	mg/L	0.10	0.053	1		05/11/22 16:37	14797-55-8	
Nitrogen, NO2 plus NO3	**0.81**	mg/L	0.10	0.053	1		05/11/22 16:37		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/03/22 11:45	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.086**	mg/L	0.010	0.0055	1		04/29/22 19:14	14797-65-0	

Sample: Dup-2 **Lab ID: 30484621005** Collected: 04/28/22 00:01 Received: 04/28/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**1.7**	mg/L	0.50	0.083	1	05/03/22 14:58	05/04/22 14:16	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	05/03/22 14:58	05/04/22 14:16	7439-89-6	
Magnesium	**0.88**	mg/L	0.50	0.047	1	05/03/22 14:58	05/04/22 14:16	7439-95-4	
Manganese	**0.017**	mg/L	0.0050	0.0027	1	05/03/22 14:58	05/04/22 14:16	7439-96-5	
Potassium	**0.60**	mg/L	0.50	0.26	1	05/03/22 14:58	05/04/22 14:16	7440-09-7	
Sodium	**2.6**	mg/L	0.50	0.34	1	05/03/22 14:58	05/04/22 14:16	7440-23-5	
Total Hardness	**7.9**	mg/L	3.3	0.27	1	05/03/22 14:58	05/04/22 14:16		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**1.4**	mg/L	0.50	0.083	1	05/13/22 14:41	05/17/22 17:57	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/13/22 14:41	05/17/22 17:57	7439-89-6	
Magnesium, Dissolved	**0.83**	mg/L	0.50	0.047	1	05/13/22 14:41	05/17/22 17:57	7439-95-4	

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ANALYTICAL RESULTS

Project: MLF SPRING 2022
Pace Project No.: 30484621

Sample: Dup-2 **Lab ID: 30484621005** Collected: 04/28/22 00:01 Received: 04/28/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Manganese, Dissolved	**0.017**	mg/L	0.0050	0.0027	1	05/13/22 14:41	05/17/22 17:57	7439-96-5	
Potassium, Dissolved	**0.62**	mg/L	0.50	0.26	1	05/13/22 14:41	05/17/22 17:57	7440-09-7	
Sodium, Dissolved	**2.5**	mg/L	0.50	0.34	1	05/13/22 14:41	05/17/22 17:57	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/02/22 13:35	05/02/22 19:08	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/02/22 13:35	05/02/22 19:08	7440-38-2	
Barium	**0.021**	mg/L	0.0025	0.00098	1	05/02/22 13:35	05/02/22 19:08	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	05/02/22 13:35	05/02/22 19:08	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/02/22 13:35	05/02/22 19:08	7440-43-9	
Chromium	**0.0021J**	mg/L	0.0025	0.00050	1	05/02/22 13:35	05/02/22 19:08	7440-47-3	
Cobalt	**0.0049**	mg/L	0.0025	0.00031	1	05/02/22 13:35	05/02/22 19:08	7440-48-4	
Copper	**0.0033**	mg/L	0.0025	0.00064	1	05/02/22 13:35	05/02/22 19:08	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/02/22 13:35	05/02/22 19:08	7439-92-1	
Nickel	**0.0038**	mg/L	0.0025	0.00065	1	05/02/22 13:35	05/02/22 19:08	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/02/22 13:35	05/02/22 19:08	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/02/22 13:35	05/02/22 19:08	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/02/22 13:35	05/02/22 19:08	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	05/02/22 13:35	05/02/22 19:08	7440-62-2	
Zinc	**0.0056**	mg/L	0.0050	0.0049	1	05/02/22 13:35	05/02/22 19:08	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/04/22 10:30	05/05/22 12:51	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.042 U**	ug/L	0.042	0.023	1	05/05/22 10:00	05/06/22 11:27	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.042 U**	ug/L	0.042	0.032	1	05/05/22 10:00	05/06/22 11:27	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	119	%.	60-140		1	05/05/22 10:00	05/06/22 11:27	630-20-6	CH,IH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		05/12/22 17:07		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**19.0**	mg/L	10.0	10.0	1		05/03/22 14:45		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/04/22 10:52	05/04/22 12:52		

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ANALYTICAL RESULTS

Project: MLF SPRING 2022
Pace Project No.: 30484621

Sample: Dup-2 **Lab ID: 30484621005** Collected: 04/28/22 00:01 Received: 04/28/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/03/22 12:47	05/03/22 16:16		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**5.1**	mg/L	3.0	0.67	1		05/10/22 16:17	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.23**	mg/L	0.10	0.053	1		05/11/22 16:39	14797-55-8	
Nitrogen, NO2 plus NO3	**0.23**	mg/L	0.10	0.053	1		05/11/22 16:39		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/03/22 11:45	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/29/22 19:10	14797-65-0	

Sample: SW-1 **Lab ID: 30484621006** Collected: 04/28/22 10:40 Received: 04/28/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**13.4**	mg/L	0.50	0.083	1	05/07/22 11:09	05/12/22 10:31	7440-70-2	
Iron	**0.046J**	mg/L	0.050	0.035	1	05/07/22 11:09	05/12/22 10:31	7439-89-6	
Magnesium	**3.3**	mg/L	0.50	0.047	1	05/07/22 11:09	05/12/22 10:31	7439-95-4	
Manganese	**0.012**	mg/L	0.0050	0.0027	1	05/07/22 11:09	05/12/22 10:31	7439-96-5	
Potassium	**2.3**	mg/L	0.50	0.26	1	05/07/22 11:09	05/12/22 10:31	7440-09-7	
Sodium	**42.6**	mg/L	0.50	0.34	1	05/07/22 11:09	05/12/22 10:31	7440-23-5	
Total Hardness	**46.8**	mg/L	3.3	0.27	1	05/07/22 11:09	05/12/22 10:31		N3
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/02/22 13:35	05/02/22 19:10	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/02/22 13:35	05/02/22 19:10	7440-38-2	
Barium	**0.047**	mg/L	0.0025	0.00098	1	05/02/22 13:35	05/02/22 19:10	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	05/02/22 13:35	05/02/22 19:10	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/02/22 13:35	05/02/22 19:10	7440-43-9	
Chromium	**0.00054J**	mg/L	0.0025	0.00050	1	05/02/22 13:35	05/02/22 19:10	7440-47-3	
Cobalt	**0.00054J**	mg/L	0.0025	0.00031	1	05/02/22 13:35	05/02/22 19:10	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.00064	1	05/02/22 13:35	05/02/22 19:10	7440-50-8	

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ANALYTICAL RESULTS

Project: MLF SPRING 2022
Pace Project No.: 30484621

Sample: SW-1 **Lab ID: 30484621006** Collected: 04/28/22 10:40 Received: 04/28/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/02/22 13:35	05/02/22 19:10	7439-92-1	
Nickel	**0.0014J**	mg/L	0.0025	0.00065	1	05/02/22 13:35	05/02/22 19:10	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/02/22 13:35	05/02/22 19:10	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/02/22 13:35	05/02/22 19:10	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/02/22 13:35	05/02/22 19:10	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	05/02/22 13:35	05/02/22 19:10	7440-62-2	
Zinc	**0.0055**	mg/L	0.0050	0.0049	1	05/02/22 13:35	05/02/22 19:10	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/04/22 10:30	05/05/22 12:56	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**20.0**	mg/L	10.0	1.0	1		05/12/22 17:09		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**173**	mg/L	10.0	10.0	1		05/03/22 14:45		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/04/22 10:52	05/04/22 12:54		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/03/22 12:47	05/03/22 16:16		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**65.9**	mg/L	3.0	0.67	1		05/10/22 16:18	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**2.0**	mg/L	0.10	0.053	1		05/11/22 16:40	14797-55-8	
Nitrogen, NO2 plus NO3	**2.0**	mg/L	0.10	0.053	1		05/11/22 16:40		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**13.5**	mg/L	10.0	4.7	1		05/03/22 11:47	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/29/22 19:13	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF SPRING 2022
Pace Project No.: 30484621

Sample: SW-2 **Lab ID: 30484621007** Collected: 04/28/22 14:10 Received: 04/28/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**29.7**	mg/L	0.50	0.083	1	05/07/22 11:09	05/12/22 10:33	7440-70-2	
Iron	**1.5**	mg/L	0.050	0.035	1	05/07/22 11:09	05/12/22 10:33	7439-89-6	
Magnesium	**6.1**	mg/L	0.50	0.047	1	05/07/22 11:09	05/12/22 10:33	7439-95-4	
Manganese	**0.031**	mg/L	0.0050	0.0027	1	05/07/22 11:09	05/12/22 10:33	7439-96-5	
Potassium	**6.3**	mg/L	0.50	0.26	1	05/07/22 11:09	05/12/22 10:33	7440-09-7	
Sodium	**28.1**	mg/L	0.50	0.34	1	05/07/22 11:09	05/12/22 10:33	7440-23-5	
Total Hardness	**99.3**	mg/L	3.3	0.27	1	05/07/22 11:09	05/12/22 10:33		N3
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/02/22 13:35	05/02/22 19:13	7440-36-0	
Arsenic	**0.0013J**	mg/L	0.0025	0.00044	1	05/02/22 13:35	05/02/22 19:13	7440-38-2	
Barium	**0.030**	mg/L	0.0025	0.00098	1	05/02/22 13:35	05/02/22 19:13	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	05/02/22 13:35	05/02/22 19:13	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/02/22 13:35	05/02/22 19:13	7440-43-9	
Chromium	**0.0014J**	mg/L	0.0025	0.00050	1	05/02/22 13:35	05/02/22 19:13	7440-47-3	
Cobalt	**0.00074J**	mg/L	0.0025	0.00031	1	05/02/22 13:35	05/02/22 19:13	7440-48-4	
Copper	**0.0015J**	mg/L	0.0025	0.00064	1	05/02/22 13:35	05/02/22 19:13	7440-50-8	
Lead	**0.00056**	mg/L	0.00050	0.00045	1	05/02/22 13:35	05/02/22 19:13	7439-92-1	
Nickel	**0.0018J**	mg/L	0.0025	0.00065	1	05/02/22 13:35	05/02/22 19:13	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/02/22 13:35	05/02/22 19:13	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/02/22 13:35	05/02/22 19:13	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/02/22 13:35	05/02/22 19:13	7440-28-0	
Vanadium	**0.0024J**	mg/L	0.0025	0.00042	1	05/02/22 13:35	05/02/22 19:13	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0049	1	05/02/22 13:35	05/02/22 19:13	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/04/22 10:30	05/05/22 12:58	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**72.0**	mg/L	10.0	1.0	1		05/12/22 17:11		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**172**	mg/L	10.0	10.0	1		05/03/22 14:45		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/04/22 10:52	05/04/22 12:56		

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ANALYTICAL RESULTS

Project: MLF SPRING 2022
Pace Project No.: 30484621

Sample: SW-2 **Lab ID: 30484621007** Collected: 04/28/22 14:10 Received: 04/28/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**26.0**	mg/L	25.0	4.7	1	05/03/22 12:47	05/03/22 16:17		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**38.8**	mg/L	3.0	0.67	1		05/10/22 16:19	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.095J**	mg/L	0.10	0.053	1		05/11/22 16:41	14797-55-8	
Nitrogen, NO2 plus NO3	**0.095J**	mg/L	0.10	0.053	1		05/11/22 16:41		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**12.8**	mg/L	10.0	4.7	1		05/03/22 14:38	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/29/22 19:18	14797-65-0	

Sample: SW-3 **Lab ID: 30484621008** Collected: 04/28/22 12:30 Received: 04/28/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**41.5**	mg/L	0.50	0.083	1	05/07/22 11:09	05/12/22 10:35	7440-70-2	
Iron	**0.26**	mg/L	0.050	0.035	1	05/07/22 11:09	05/12/22 10:35	7439-89-6	
Magnesium	**8.3**	mg/L	0.50	0.047	1	05/07/22 11:09	05/12/22 10:35	7439-95-4	
Manganese	**0.019**	mg/L	0.0050	0.0027	1	05/07/22 11:09	05/12/22 10:35	7439-96-5	
Potassium	**4.1**	mg/L	0.50	0.26	1	05/07/22 11:09	05/12/22 10:35	7440-09-7	
Sodium	**5.6**	mg/L	0.50	0.34	1	05/07/22 11:09	05/12/22 10:35	7440-23-5	
Total Hardness	**138**	mg/L	3.3	0.27	1	05/07/22 11:09	05/12/22 10:35		N3
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/02/22 13:35	05/02/22 19:16	7440-36-0	
Arsenic	**0.00069J**	mg/L	0.0025	0.00044	1	05/02/22 13:35	05/02/22 19:16	7440-38-2	
Barium	**0.026**	mg/L	0.0025	0.00098	1	05/02/22 13:35	05/02/22 19:16	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	05/02/22 13:35	05/02/22 19:16	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/02/22 13:35	05/02/22 19:16	7440-43-9	
Chromium	**0.00067J**	mg/L	0.0025	0.00050	1	05/02/22 13:35	05/02/22 19:16	7440-47-3	
Cobalt	**0.00086J**	mg/L	0.0025	0.00031	1	05/02/22 13:35	05/02/22 19:16	7440-48-4	
Copper	**0.0044**	mg/L	0.0025	0.00064	1	05/02/22 13:35	05/02/22 19:16	7440-50-8	

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ANALYTICAL RESULTS

Project: MLF SPRING 2022
Pace Project No.: 30484621

Sample: SW-3 **Lab ID: 30484621008** Collected: 04/28/22 12:30 Received: 04/28/22 22:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Lead	**0.00049J**	mg/L	0.00050	0.00045	1	05/02/22 13:35	05/02/22 19:16	7439-92-1	
Nickel	**0.0026**	mg/L	0.0025	0.00065	1	05/02/22 13:35	05/02/22 19:16	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/02/22 13:35	05/02/22 19:16	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/02/22 13:35	05/02/22 19:16	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/02/22 13:35	05/02/22 19:16	7440-28-0	
Vanadium	**0.0018J**	mg/L	0.0025	0.00042	1	05/02/22 13:35	05/02/22 19:16	7440-62-2	
Zinc	**0.0053**	mg/L	0.0050	0.0049	1	05/02/22 13:35	05/02/22 19:16	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/04/22 10:30	05/05/22 13:00	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**116**	mg/L	10.0	1.0	1		05/12/22 17:12		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**159**	mg/L	10.0	10.0	1		05/03/22 14:45		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.17**	mg/L	0.10	0.044	1	05/04/22 10:52	05/04/22 12:58		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**28.3**	mg/L	25.0	4.7	1	05/03/22 12:47	05/03/22 16:17		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**4.0**	mg/L	3.0	0.67	1		05/10/22 16:19	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.53**	mg/L	0.10	0.053	1		05/11/22 16:43	14797-55-8	
Nitrogen, NO2 plus NO3	**0.54**	mg/L	0.10	0.053	1		05/11/22 16:43		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**15.9**	mg/L	10.0	4.7	1		05/03/22 14:41	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.0078J**	mg/L	0.010	0.0055	1		04/29/22 19:17	14797-65-0	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF SPRING 2022
Pace Project No.: 30484621

QC Batch: 501727
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30484621001, 30484621002, 30484621003, 30484621004, 30484621005

METHOD BLANK: 2428238 Matrix: Water
Associated Lab Samples: 30484621001, 30484621002, 30484621003, 30484621004, 30484621005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	05/04/22 13:22	
Iron	mg/L	0.050 U	0.050	0.035	05/04/22 13:22	
Magnesium	mg/L	0.50 U	0.50	0.047	05/04/22 13:22	
Manganese	mg/L	0.0050 U	0.0050	0.0027	05/04/22 13:22	
Potassium	mg/L	0.50 U	0.50	0.26	05/04/22 13:22	
Sodium	mg/L	0.50 U	0.50	0.34	05/04/22 13:22	

LABORATORY CONTROL SAMPLE: 2428239

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	42.6	106	80-120	
Iron	mg/L	2	2.1	107	80-120	
Magnesium	mg/L	20	21.3	106	80-120	
Manganese	mg/L	2	2.1	104	80-120	
Potassium	mg/L	20	21.4	107	80-120	
Sodium	mg/L	20	21.4	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2428283 2428284

Parameter	Units	30480547002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	68600 ug/L	40	40	111	112	107	109	80-120	1	20	
Iron	mg/L	312 ug/L	2	2	2.5	2.5	108	107	80-120	1	20	
Magnesium	mg/L	21500 ug/L	20	20	43.1	43.1	108	108	80-120	0	20	
Manganese	mg/L	399 ug/L	2	2	2.5	2.5	104	103	80-120	1	20	
Potassium	mg/L	2230 ug/L	20	20	25.5	25.2	116	115	80-120	1	20	
Sodium	mg/L	117000 ug/L	20	20	139	141	110	117	80-120	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: MLF SPRING 2022
Pace Project No.: 30484621

QC Batch: 502828
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30484621006, 30484621007, 30484621008

METHOD BLANK: 2435118 Matrix: Water
Associated Lab Samples: 30484621006, 30484621007, 30484621008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	05/12/22 10:03	
Iron	mg/L	0.050 U	0.050	0.035	05/12/22 10:03	
Magnesium	mg/L	0.50 U	0.50	0.047	05/12/22 10:03	
Manganese	mg/L	0.0050 U	0.0050	0.0027	05/12/22 10:03	
Potassium	mg/L	0.50 U	0.50	0.26	05/12/22 10:03	
Sodium	mg/L	0.50 U	0.50	0.34	05/12/22 10:03	

LABORATORY CONTROL SAMPLE: 2435119

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	42.4	106	80-120	
Iron	mg/L	2	2.1	106	80-120	
Magnesium	mg/L	20	21.1	105	80-120	
Manganese	mg/L	2	2.1	104	80-120	
Potassium	mg/L	20	21.3	107	80-120	
Sodium	mg/L	20	21.6	108	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2435168 2435169

Parameter	Units	30483167004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L		40	40	316	326	127	151	80-120	3	20	M1
Iron	mg/L		2	2	9.8	10.1	131	147	80-120	3	20	M1
Magnesium	mg/L		20	20	119	123	137	153	80-120	3	20	M1
Manganese	mg/L		2	2	2.8	2.8	107	111	80-120	3	20	
Potassium	mg/L		20	20	29.6	30.3	119	123	80-120	2	20	M1
Sodium	mg/L		20	20	142	146	128	145	80-120	2	20	M1

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QUALITY CONTROL DATA

Project: MLF SPRING 2022
Pace Project No.: 30484621

QC Batch: 504361
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30484621001, 30484621002, 30484621003, 30484621004, 30484621005

METHOD BLANK: 2442500 Matrix: Water
Associated Lab Samples: 30484621001, 30484621002, 30484621003, 30484621004, 30484621005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	05/17/22 16:58	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	05/17/22 16:58	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	05/17/22 16:58	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	05/17/22 16:58	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	05/17/22 16:58	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	05/17/22 16:58	

LABORATORY CONTROL SAMPLE: 2442501

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	37.3	93	80-120	
Iron, Dissolved	mg/L	2	2.0	100	80-120	
Magnesium, Dissolved	mg/L	20	19.4	97	80-120	
Manganese, Dissolved	mg/L	2	2.0	100	80-120	
Potassium, Dissolved	mg/L	20	19.4	97	80-120	
Sodium, Dissolved	mg/L	20	19.2	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2442528 2442529

Parameter	Units	30481281003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	386J ug/L	40	40	87.0	89.4	217	223	80-120	3	20	M1
Iron, Dissolved	mg/L	0.050 U	2	2	2.0	2.0	98	100	80-120	2	20	
Magnesium, Dissolved	mg/L	500 U ug/L	20	20	28.7	29.3	143	147	80-120	2	20	M1
Manganese, Dissolved	mg/L	0.0050 U	2	2	2.1	2.1	104	106	80-120	2	20	
Potassium, Dissolved	mg/L	500 U ug/L	20	20	20.9	21.2	105	106	80-120	1	20	
Sodium, Dissolved	mg/L	500 U ug/L	20	20	72.4	73.5	362	368	80-120	2	20	M1

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QUALITY CONTROL DATA

Project: MLF SPRING 2022
Pace Project No.: 30484621

QC Batch: 501343
QC Batch Method: EPA 3020A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30484621001, 30484621002, 30484621003, 30484621004, 30484621005, 30484621006, 30484621007, 30484621008

METHOD BLANK: 2426563
Matrix: Water
Associated Lab Samples: 30484621001, 30484621002, 30484621003, 30484621004, 30484621005, 30484621006, 30484621007, 30484621008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00030	05/02/22 17:47	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	05/02/22 17:47	
Barium	mg/L	0.0025 U	0.0025	0.00098	05/02/22 17:47	
Beryllium	mg/L	0.00050 U	0.00050	0.00015	05/02/22 17:47	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	05/02/22 17:47	
Chromium	mg/L	0.0025 U	0.0025	0.00050	05/02/22 17:47	
Cobalt	mg/L	0.0025 U	0.0025	0.00031	05/02/22 17:47	
Copper	mg/L	0.0025 U	0.0025	0.00064	05/02/22 17:47	
Lead	mg/L	0.00050 U	0.00050	0.00045	05/02/22 17:47	
Nickel	mg/L	0.0025 U	0.0025	0.00065	05/02/22 17:47	
Selenium	mg/L	0.0025 U	0.0025	0.00084	05/02/22 17:47	
Silver	mg/L	0.0025 U	0.0025	0.00053	05/02/22 17:47	
Thallium	mg/L	0.00050 U	0.00050	0.000081	05/02/22 17:47	
Vanadium	mg/L	0.0025 U	0.0025	0.00042	05/02/22 17:47	
Zinc	mg/L	0.0050 U	0.0050	0.0049	05/02/22 17:47	

LABORATORY CONTROL SAMPLE: 2426564

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.022	111	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.098	98	80-120	
Beryllium	mg/L	0.02	0.019	96	80-120	
Cadmium	mg/L	0.02	0.020	101	80-120	
Chromium	mg/L	0.1	0.11	105	80-120	
Cobalt	mg/L	0.1	0.11	107	80-120	
Copper	mg/L	0.1	0.11	109	80-120	
Lead	mg/L	0.02	0.020	100	80-120	
Nickel	mg/L	0.1	0.10	104	80-120	
Selenium	mg/L	0.1	0.10	101	80-120	
Silver	mg/L	0.1	0.099	99	80-120	
Thallium	mg/L	0.02	0.020	100	80-120	
Vanadium	mg/L	0.1	0.10	105	80-120	
Zinc	mg/L	0.2	0.21	105	80-120	

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QUALITY CONTROL DATA

Project: MLF SPRING 2022
Pace Project No.: 30484621

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2426594 2426595

Parameter	Units	30484620003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	5.0 U ug/L	0.02	0.02	0.022	0.022	110	110	75-125	0	20	
Arsenic	mg/L	25.0 U ug/L	0.1	0.1	0.10	0.10	99	101	75-125	2	20	
Barium	mg/L	141 ug/L	0.1	0.1	0.25	0.25	104	108	75-125	2	20	
Beryllium	mg/L	5.0 U ug/L	0.02	0.02	0.019	0.020	94	97	75-125	4	20	
Cadmium	mg/L	5.0 U ug/L	0.02	0.02	0.019	0.020	96	98	75-125	1	20	
Chromium	mg/L	25.0 U ug/L	0.1	0.1	0.10	0.11	104	107	75-125	3	20	
Cobalt	mg/L	25.0 U ug/L	0.1	0.1	0.10	0.11	104	107	75-125	2	20	
Copper	mg/L	25.0 U ug/L	0.1	0.1	0.10	0.11	105	108	75-125	3	20	
Lead	mg/L	5.0 U ug/L	0.02	0.02	0.022	0.022	87	89	75-125	2	20	
Nickel	mg/L	25.0 U ug/L	0.1	0.1	0.10	0.11	103	106	75-125	3	20	
Selenium	mg/L	25.0 U ug/L	0.1	0.1	0.077	0.078	77	78	75-125	1	20	
Silver	mg/L	25.0 U ug/L	0.1	0.1	0.098	0.10	98	100	75-125	2	20	
Thallium	mg/L	5.0 U ug/L	0.02	0.02	0.021	0.021	101	102	75-125	1	20	
Vanadium	mg/L	25.0 U ug/L	0.1	0.1	0.11	0.11	104	107	75-125	3	20	
Zinc	mg/L	50.0 U ug/L	0.2	0.2	0.21	0.22	101	104	75-125	3	20	

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QUALITY CONTROL DATA

Project: MLF SPRING 2022
Pace Project No.: 30484621

QC Batch: 501903
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30484621001, 30484621002, 30484621003, 30484621004, 30484621005, 30484621006, 30484621007, 30484621008

METHOD BLANK: 2429263 Matrix: Water
Associated Lab Samples: 30484621001, 30484621002, 30484621003, 30484621004, 30484621005, 30484621006, 30484621007, 30484621008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	05/05/22 12:21	

LABORATORY CONTROL SAMPLE: 2429264

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.0093	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2429348 2429349

Parameter	Units	30484621002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00082	0.01	0.01	0.0078	0.0089	70	81	80-120	13	20	M1

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QUALITY CONTROL DATA

Project: MLF SPRING 2022
Pace Project No.: 30484621

QC Batch: 502304 | Analysis Method: EPA 8011
QC Batch Method: EPA 8011 | Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30484621001, 30484621002, 30484621003, 30484621004, 30484621005

METHOD BLANK: 2431871 Matrix: Water
Associated Lab Samples: 30484621001, 30484621002, 30484621003, 30484621004, 30484621005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.022	05/06/22 09:44	CH
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	05/06/22 09:44	CH
1,1,1,2-Tetrachloroethane (S)	%.	114	60-140		05/06/22 09:44	CH,IH

LABORATORY CONTROL SAMPLE: 2431872

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.22	88	85-115	CH
1,2-Dibromoethane (EDB)	ug/L	0.25	0.27	108	85-115	CH
1,1,1,2-Tetrachloroethane (S)	%.			120	60-140	CH,IH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2431873 2431874

Parameter	Units	30484621001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.041 U	0.41	0.41	0.42	0.44	100	106	60-140	4	25	CH
1,2-Dibromoethane (EDB)	ug/L	0.041 U	0.41	0.41	0.49	0.48	117	117	60-140	1	25	CH
1,1,1,2-Tetrachloroethane (S)	%.						113	115	60-140			CH,IH

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QUALITY CONTROL DATA

Project: MLF SPRING 2022
Pace Project No.: 30484621

QC Batch: 504058
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30484621001, 30484621002, 30484621003, 30484621004, 30484621005, 30484621006, 30484621007, 30484621008

METHOD BLANK: 2440944
Matrix: Water
Associated Lab Samples: 30484621001, 30484621002, 30484621003, 30484621004, 30484621005, 30484621006, 30484621007, 30484621008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	05/12/22 16:51	

LABORATORY CONTROL SAMPLE: 2440945

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	22.0	110	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2440946 2440947

Parameter	Units	30484621001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	28.0	50	50	60.0	62.0	64	68	85-115	3	20	ML

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QUALITY CONTROL DATA

Project: MLF SPRING 2022
Pace Project No.: 30484621

QC Batch: 501513
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30484621001, 30484621002, 30484621003, 30484621004, 30484621005, 30484621006, 30484621007, 30484621008

METHOD BLANK: 2427484 Matrix: Water
Associated Lab Samples: 30484621001, 30484621002, 30484621003, 30484621004, 30484621005, 30484621006, 30484621007, 30484621008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	05/03/22 14:45	

LABORATORY CONTROL SAMPLE: 2427485

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	951	95	85-115	

SAMPLE DUPLICATE: 2427486

Parameter	Units	30484620004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1040	1020	1	5	

SAMPLE DUPLICATE: 2427487

Parameter	Units	30484750004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	32.0	33.0	3	5	

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QUALITY CONTROL DATA

Project: MLF SPRING 2022
Pace Project No.: 30484621

QC Batch: 501843
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30484621001, 30484621002, 30484621003, 30484621004, 30484621005, 30484621006, 30484621007, 30484621008

METHOD BLANK: 2429111
Matrix: Water
Associated Lab Samples: 30484621001, 30484621002, 30484621003, 30484621004, 30484621005, 30484621006, 30484621007, 30484621008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.044	05/04/22 16:10	

LABORATORY CONTROL SAMPLE: 2429112

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.0	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2429113 2429114

Parameter	Units	30484621001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.1	4.1	102	102	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2429115 2429116

Parameter	Units	30484819001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	6.8	4	4	10.8	10.7	99	98	90-110	0	20	

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QUALITY CONTROL DATA

Project: MLF SPRING 2022
Pace Project No.: 30484621

QC Batch: 501547
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30484621001, 30484621002, 30484621003, 30484621004, 30484621005, 30484621006, 30484621007, 30484621008

METHOD BLANK: 2427589
Matrix: Water
Associated Lab Samples: 30484621001, 30484621002, 30484621003, 30484621004, 30484621005, 30484621006, 30484621007, 30484621008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	05/03/22 16:11	

LABORATORY CONTROL SAMPLE: 2427590

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	314	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2427591 2427592

Parameter	Units	30484272009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	25.0 U	150	150	167	162	109	106	90-110	3	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2427593 2427594

Parameter	Units	30484771001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	510	1500	1500	2100	2100	106	106	90-110	0	10	D4

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QUALITY CONTROL DATA

Project: MLF SPRING 2022
Pace Project No.: 30484621

QC Batch: 503374
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30484621001, 30484621002, 30484621003, 30484621004, 30484621005, 30484621006, 30484621007, 30484621008

METHOD BLANK: 2437418 Matrix: Water
Associated Lab Samples: 30484621001, 30484621002, 30484621003, 30484621004, 30484621005, 30484621006, 30484621007, 30484621008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/10/22 16:01	

LABORATORY CONTROL SAMPLE: 2437419

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	18.5	92	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2437420 2437421

Parameter	Units	30484490001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	ND	20	20	16.2	16.4	76	78	85-115	2	20	ML

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QUALITY CONTROL DATA

Project: MLF SPRING 2022
Pace Project No.: 30484621

QC Batch: 503498
QC Batch Method: SM 4500NO3-F-2011
Analysis Method: SM 4500NO3-F-2011
Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30484621001, 30484621002, 30484621003, 30484621004, 30484621005, 30484621006, 30484621007, 30484621008

METHOD BLANK: 2438000
Matrix: Water
Associated Lab Samples: 30484621001, 30484621002, 30484621003, 30484621004, 30484621005, 30484621006, 30484621007, 30484621008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	05/11/22 16:28	

LABORATORY CONTROL SAMPLE: 2438001

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	3.7	92	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2438002 2438003

Parameter	Units	30484621001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.16	5	5	3.6	3.6	68	68	85-115	1	20	ML

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: MLF SPRING 2022
Pace Project No.: 30484621

QC Batch: 501579
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30484621001, 30484621002, 30484621003, 30484621004, 30484621005, 30484621006, 30484621007, 30484621008

METHOD BLANK: 2427684
Matrix: Water
Associated Lab Samples: 30484621001, 30484621002, 30484621003, 30484621004, 30484621005, 30484621006, 30484621007, 30484621008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	05/03/22 11:35	

LABORATORY CONTROL SAMPLE: 2427685

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	28.6	95	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2427686 2427687

Parameter	Units	30484621001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.0 U	20	20	18.2	17.8	82	80	85-115	2	20	ML

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF SPRING 2022
Pace Project No.: 30484621

QC Batch: 500867 | Analysis Method: SM 4500NO2-B-2011
QC Batch Method: SM 4500NO2-B-2011 | Analysis Description: SM4500-NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30484621001, 30484621002, 30484621003, 30484621004, 30484621005, 30484621006, 30484621007, 30484621008

METHOD BLANK: 2424582 | Matrix: Water
Associated Lab Samples: 30484621001, 30484621002, 30484621003, 30484621004, 30484621005, 30484621006, 30484621007, 30484621008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	04/29/22 19:09	

LABORATORY CONTROL SAMPLE: 2424583

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.10	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2424584 2424585

Parameter	Units	30484620004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrite as N	mg/L	0.50	0.1	0.1	0.62	1.0	122	526	85-115	49	20	ML,R1

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QUALIFIERS

Project: MLF SPRING 2022
Pace Project No.: 30484621

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30484621001

[1] Sample pH for 8011 is 7

Sample: 30484621002

[1] Sample pH for 8011 is 5

Sample: 30484621003

[1] Sample pH for 8011 is 5

Sample: 30484621004

[1] Sample pH for 8011 is 5

Sample: 30484621005

[1] Sample pH for 8011 is 5

ANALYTE QUALIFIERS

1c	Alk TV: 0 mg/L
2c	Alk TV: 2 mg/L
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
D4	Sample was diluted due to the presence of high levels of target analytes.

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QUALIFIERS

Project: MLF SPRING 2022
Pace Project No.: 30484621

ANALYTE QUALIFIERS

IH	This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF SPRING 2022
Pace Project No.: 30484621

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30484621001	**TW-4**	EPA 3010A	501727	EPA 6010D	501921
30484621002	**TW-4B**	EPA 3010A	501727	EPA 6010D	501921
30484621003	**TW-25**	EPA 3010A	501727	EPA 6010D	501921
30484621004	**TW-25A**	EPA 3010A	501727	EPA 6010D	501921
30484621005	**Dup-2**	EPA 3010A	501727	EPA 6010D	501921
30484621006	**SW-1**	EPA 3010A	502828	EPA 6010D	503878
30484621007	**SW-2**	EPA 3010A	502828	EPA 6010D	503878
30484621008	**SW-3**	EPA 3010A	502828	EPA 6010D	503878
30484621001	**TW-4**	EPA 3010A	504361	EPA 6010D	504740
30484621002	**TW-4B**	EPA 3010A	504361	EPA 6010D	504740
30484621003	**TW-25**	EPA 3010A	504361	EPA 6010D	504740
30484621004	**TW-25A**	EPA 3010A	504361	EPA 6010D	504740
30484621005	**Dup-2**	EPA 3010A	504361	EPA 6010D	504740
30484621001	**TW-4**	EPA 3020A	501343	EPA 6020B	501464
30484621002	**TW-4B**	EPA 3020A	501343	EPA 6020B	501464
30484621003	**TW-25**	EPA 3020A	501343	EPA 6020B	501464
30484621004	**TW-25A**	EPA 3020A	501343	EPA 6020B	501464
30484621005	**Dup-2**	EPA 3020A	501343	EPA 6020B	501464
30484621006	**SW-1**	EPA 3020A	501343	EPA 6020B	501464
30484621007	**SW-2**	EPA 3020A	501343	EPA 6020B	501464
30484621008	**SW-3**	EPA 3020A	501343	EPA 6020B	501464
30484621001	**TW-4**	EPA 7470A	501903	EPA 7470A	502265
30484621002	**TW-4B**	EPA 7470A	501903	EPA 7470A	502265
30484621003	**TW-25**	EPA 7470A	501903	EPA 7470A	502265
30484621004	**TW-25A**	EPA 7470A	501903	EPA 7470A	502265
30484621005	**Dup-2**	EPA 7470A	501903	EPA 7470A	502265
30484621006	**SW-1**	EPA 7470A	501903	EPA 7470A	502265
30484621007	**SW-2**	EPA 7470A	501903	EPA 7470A	502265
30484621008	**SW-3**	EPA 7470A	501903	EPA 7470A	502265
30484621001	**TW-4**	EPA 8011	502304	EPA 8011	502351
30484621002	**TW-4B**	EPA 8011	502304	EPA 8011	502351
30484621003	**TW-25**	EPA 8011	502304	EPA 8011	502351
30484621004	**TW-25A**	EPA 8011	502304	EPA 8011	502351
30484621005	**Dup-2**	EPA 8011	502304	EPA 8011	502351
30484621001	**TW-4**	SM 2320B-2011	504058		
30484621002	**TW-4B**	SM 2320B-2011	504058		
30484621003	**TW-25**	SM 2320B-2011	504058		
30484621004	**TW-25A**	SM 2320B-2011	504058		
30484621005	**Dup-2**	SM 2320B-2011	504058		
30484621006	**SW-1**	SM 2320B-2011	504058		
30484621007	**SW-2**	SM 2320B-2011	504058		
30484621008	**SW-3**	SM 2320B-2011	504058		
30484621001	**TW-4**	SM 2540C-2011	501513		
30484621002	**TW-4B**	SM 2540C-2011	501513		
30484621003	**TW-25**	SM 2540C-2011	501513		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF SPRING 2022
Pace Project No.: 30484621

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30484621004	**TW-25A**	SM 2540C-2011	501513		
30484621005	**Dup-2**	SM 2540C-2011	501513		
30484621006	**SW-1**	SM 2540C-2011	501513		
30484621007	**SW-2**	SM 2540C-2011	501513		
30484621008	**SW-3**	SM 2540C-2011	501513		
30484621001	**TW-4**	EPA 350.1	501843	EPA 350.1	501966
30484621002	**TW-4B**	EPA 350.1	501843	EPA 350.1	501966
30484621003	**TW-25**	EPA 350.1	501843	EPA 350.1	501966
30484621004	**TW-25A**	EPA 350.1	501843	EPA 350.1	501966
30484621005	**Dup-2**	EPA 350.1	501843	EPA 350.1	501966
30484621006	**SW-1**	EPA 350.1	501843	EPA 350.1	501966
30484621007	**SW-2**	EPA 350.1	501843	EPA 350.1	501966
30484621008	**SW-3**	EPA 350.1	501843	EPA 350.1	501966
30484621001	**TW-4**	EPA 410.4	501547	EPA 410.4	501791
30484621002	**TW-4B**	EPA 410.4	501547	EPA 410.4	501791
30484621003	**TW-25**	EPA 410.4	501547	EPA 410.4	501791
30484621004	**TW-25A**	EPA 410.4	501547	EPA 410.4	501791
30484621005	**Dup-2**	EPA 410.4	501547	EPA 410.4	501791
30484621006	**SW-1**	EPA 410.4	501547	EPA 410.4	501791
30484621007	**SW-2**	EPA 410.4	501547	EPA 410.4	501791
30484621008	**SW-3**	EPA 410.4	501547	EPA 410.4	501791
30484621001	**TW-4**	SM 4500-Cl-E-2011	503374		
30484621002	**TW-4B**	SM 4500-Cl-E-2011	503374		
30484621003	**TW-25**	SM 4500-Cl-E-2011	503374		
30484621004	**TW-25A**	SM 4500-Cl-E-2011	503374		
30484621005	**Dup-2**	SM 4500-Cl-E-2011	503374		
30484621006	**SW-1**	SM 4500-Cl-E-2011	503374		
30484621007	**SW-2**	SM 4500-Cl-E-2011	503374		
30484621008	**SW-3**	SM 4500-Cl-E-2011	503374		
30484621001	**TW-4**	SM 4500NO3-F-2011	503498		
30484621002	**TW-4B**	SM 4500NO3-F-2011	503498		
30484621003	**TW-25**	SM 4500NO3-F-2011	503498		
30484621004	**TW-25A**	SM 4500NO3-F-2011	503498		
30484621005	**Dup-2**	SM 4500NO3-F-2011	503498		
30484621006	**SW-1**	SM 4500NO3-F-2011	503498		
30484621007	**SW-2**	SM 4500NO3-F-2011	503498		
30484621008	**SW-3**	SM 4500NO3-F-2011	503498		
30484621001	**TW-4**	EPA 9038	501579		
30484621002	**TW-4B**	EPA 9038	501579		
30484621003	**TW-25**	EPA 9038	501579		
30484621004	**TW-25A**	EPA 9038	501579		
30484621005	**Dup-2**	EPA 9038	501579		
30484621006	**SW-1**	EPA 9038	501579		
30484621007	**SW-2**	EPA 9038	501579		
30484621008	**SW-3**	EPA 9038	501579		
30484621001	**TW-4**	SM 4500NO2-B-2011	500867		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF SPRING 2022
Pace Project No.: 30484621

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30484621002	**TW-4B**	SM 4500NO2-B-2011	500867		
30484621003	**TW-25**	SM 4500NO2-B-2011	500867		
30484621004	**TW-25A**	SM 4500NO2-B-2011	500867		
30484621005	**Dup-2**	SM 4500NO2-B-2011	500867		
30484621006	**SW-1**	SM 4500NO2-B-2011	500867		
30484621007	**SW-2**	SM 4500NO2-B-2011	500867		
30484621008	**SW-3**	SM 4500NO2-B-2011	500867		

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WO# : 30484621

30484621

1 of 2

EM

207 East Si

IG AND ASSESSMENT, LLC

6-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE CANOPUS	Lab	PACS
Project	MLF - SPRING 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	① TOTAL METALS	② TOTAL + DISS. METALS	ALKALINITY, TDS	HARDNESS, Cl	AMMONIA	NITRATE	SO_4, COD		METHOD 8011 - EDB + DBCP			
1	TW-4	7	4/28/22	1400	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓			001
2	TW-4B			1320															002
3	TW-25			1140															003
4	TW-25A			1215															004
5	Dup-2																		005
6																			
7																			
8																			
9																			
10																			
11																			
12																			

	Signature	Date	Time	Comments
Relinquished by	SABrown	4/28/22	1435	① TOTAL METALS - 6020 - Sb, As, Ba, Be, Cd, Ca, Co, Cu,
Received by	[illegible]	4/28/22	1435	Pb, Ni, Se, Ag, Tl, V, Zn / 7470 - Hg
Relinquished by	[illegible]	04/28/22	1755	② TOTAL + DISS. METALS - 6010 - Ca, Fe, Mg, Mn, K, Na
Received by	RDS PACE	4-28-22	1810	PACE WV - METALS
Relinquished by	RDS PACE	4-28-22	2245	PACE - BULL - WET CHEM + 8011
Received by	[illegible]	4-28-22	2245	LEVEL 2 REPORT

Cooler Temp on Arrival: _____ Deg. C

SEE ATTACHED LIST FOR METHODS + PARAMETERS

Rev. Aug. 2018

30484621 2 of 2 SW

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - SPRING 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	TOTAL METALS ①	ALKALINITY	TDS	HARDNESS, Cl	AMMONIA	NITRATE	SO4, COD					
1	SW-1	3	4/28/22	1040	✓		SW	✓	✓	✓	✓	✓	✓	✓					06
2	SW-2	3	↓	1410	✓		↓	↓	↓	↓	↓	↓	↓	↓					07
3	SW-3	3	↓	1230	✓		↓	↓	↓	↓	↓	↓	↓	↓					08
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

	Signature	Date	Time
Relinquished by	[signature]	4/28/22	1435
Received by	[signature]	4/28/22	1435
Relinquished by	[signature]	04/28/22	1755
Received by	RDS PACE	4/28/22	1810
Relinquished by	RDS PACE	4/28/22	2245
Received by	[signature]	4/28/22	2045

Comments

① TOTAL METALS - (6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn)
(7470 - Hg)
(6010 - Ca, Fe, Mg, Mn, K, Na)
PACE - NV - METALS
PACE - G - BULK - WET CHEM

Cooler Temp on Arrival: _____ Deg. C

LEVEL 2 REPORT

Rev. Aug. 2018

30484621

Millersville Landfill, Anne Arundel County, MD		
	Pace, Beaver, WV	
	Method 6020 - ICPMS	
Parameter	RL	MDL
	(mg/l)	
TOTAL METALS - mg/l		
Antimony	0.0005	
Arsenic	0.0025	0.0002473
Barium	0.0025	
Beryllium	0.0005	
Cadmium	0.0005	
Chromium	0.0025	
Cobalt	0.0025	
Copper	0.0025	
Lead	0.0005	
Nickel	0.0025	
Selenium	0.0025	
Silver	0.0025	
Thallium	0.0005	
Vanadium	0.0025	
Zinc	0.005	
	Pace, Beaver, WV	
TOTAL MERCURY - mg/l	Method 7470A	
Mercury	0.0005	0.00025
	Pace, Beaver, WV	
TOTAL AND DISSOLVED METALS - mg/l	Method 6010 - ICP	
Calcium	0.5	0.028
Iron	0.05	0.0076
Magnesium	0.5	0.047
Manganese	0.005	0.00043
Potassium	0.5	0.19
Sodium	0.5	0.148
	Pace - Greensburg, PA	
Volatile Organics - ug/l	Method 8011 - ug/l	
DBCP	0.041	
EDB	0.041	
GENERAL CHEMISTRY - mg/l	Pace - Greensburg, PA	
Alkalinity - SM 2320B	10	1
Ammonia - EPA 350.1	0.1	0.0445
COD - EPA 410.4	25	4.6532
Chloride - EPA 300.0	3	0.06683
Hardness - 2340B		
Nitrate - EPA 300.0	0.1	0.0238
Sulfate - EPA 300.0	10	4.6702
Total dissolved solids - SM2540C	10	10

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EMA Project # 30484621

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Label MJS
LIMS Login MJS

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Thermometer Used 16 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 1.8, 1.5 °C Correction Factor: 10.0 °C Final Temp: 1.8, 1.5 °C

Temp should be above freezing to 6°C

pH paper Lot# 1002811

Date and Initials of person examining contents: MJS 4-27-22

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC: -Includes date/time/ID Matrix: wt	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):	✓			7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests	✓			15.
All containers have been checked for preservation. exceptions: (VOA) coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.
All containers meet method preservation requirements.	✓			Initial when completed MJS / Date/time of preservation / Lot # of added preservative
Headspace in VOA Vials (>6mm):		✓		17.
Trip Blank Present:		✓		18.
Trip Blank Custody Seals Present			✓	
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: / Date: / Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

May 12, 2022

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on April 21, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Steven L. Smith
steve.l.smith@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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CERTIFICATIONS

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver
225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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SAMPLE SUMMARY

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30482889001	**TW-9**	Water	04/20/22 14:40	04/21/22 22:35
30482889002	**TW-9B**	Water	04/20/22 15:20	04/21/22 22:35
30482889003	**TW-9C**	Water	04/20/22 16:00	04/21/22 22:35
30482889004	**TW-10A**	Water	04/21/22 08:45	04/21/22 22:35
30482889005	**TW-11A**	Water	04/21/22 09:30	04/21/22 22:35
30482889006	**TW-12**	Water	04/21/22 10:50	04/21/22 22:35
30482889007	**TW-13**	Water	04/21/22 11:35	04/21/22 22:35
30482889008	**TW-14**	Water	04/21/22 14:10	04/21/22 22:35
30482889009	**TW-14A**	Water	04/21/22 13:30	04/21/22 22:35
30482889010	**TW-14B**	Water	04/21/22 12:50	04/21/22 22:35

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SAMPLE ANALYTE COUNT

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30482889001	**TW-9**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30482889002	**TW-9B**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30482889003	**TW-9C**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30482889004	**TW-10A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	SAC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30482889005	**TW-11A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	SAC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30482889006	**TW-12**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	SAC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30482889007	**TW-13**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	SAC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30482889008	**TW-14**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	SAC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30482889009	**TW-14A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	SAC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30482889010	**TW-14B**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	SAC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Date: May 12, 2022

TW-9 (Lab ID: 30482889001)

- Sample pH for 8011 is 6

TW-9B (Lab ID: 30482889002)

- Sample pH for 8011 is 6

TW-9C (Lab ID: 30482889003)

- Sample pH for 8011 is 5

TW-10A (Lab ID: 30482889004)

- Sample pH for 8011 is 6

TW-11A (Lab ID: 30482889005)

- Sample pH for 8011 is 6

TW-12 (Lab ID: 30482889006)

- Sample pH for 8011 is 6

TW-13 (Lab ID: 30482889007)

- Sample pH for 8011 is 5

TW-14 (Lab ID: 30482889008)

- Sample pH for 8011 is 5

TW-14A (Lab ID: 30482889009)

- Sample pH for 8011 is 6

TW-14B (Lab ID: 30482889010)

- Sample pH for 8011 is 6

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PROJECT NARRATIVE

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: May 12, 2022

General Information:
10 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 500216

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30482496001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2421178)
  - Iron
- MSD (Lab ID: 2421179)
  - Iron

Additional Comments:

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PROJECT NARRATIVE

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: May 12, 2022

General Information:
10 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 500220

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30482496001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2421243)
  - Iron, Dissolved
- MSD (Lab ID: 2421244)
  - Iron, Dissolved

Additional Comments:

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PROJECT NARRATIVE

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: May 12, 2022

General Information:
10 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: May 12, 2022

General Information:
10 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 500929

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30482845002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 2424826)
  - Mercury

R1: RPD value was outside control limits.
- MSD (Lab ID: 2424827)
  - Mercury

Additional Comments:

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PROJECT NARRATIVE

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: May 12, 2022

General Information:
10 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H2: Extraction or preparation conducted outside EPA method holding time.
- TW-9B (Lab ID: 30482889002)
- TW-9C (Lab ID: 30482889003)

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

QC Batch: 501255

IH: This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.
- BLANK (Lab ID: 2426136)
  - 1,1,1,2-Tetrachloroethane (S)
- LCS (Lab ID: 2426137)
  - 1,1,1,2-Tetrachloroethane (S)
- MS (Lab ID: 2426138)
  - 1,1,1,2-Tetrachloroethane (S)
- MSD (Lab ID: 2426139)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-9B (Lab ID: 30482889002)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-9C (Lab ID: 30482889003)
  - 1,1,1,2-Tetrachloroethane (S)

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 500239

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
- LCS (Lab ID: 2421308)
  - 1,1,1,2-Tetrachloroethane (S)

QC Batch: 500713

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
- BLANK (Lab ID: 2423763)
  - 1,1,1,2-Tetrachloroethane (S)

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PROJECT NARRATIVE

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: May 12, 2022

QC Batch: 500713

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- 1,2-Dibromo-3-chloropropane
- 1,2-Dibromoethane (EDB)

- LCS (Lab ID: 2423764)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MS (Lab ID: 2423765)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MSD (Lab ID: 2423766)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-10A (Lab ID: 30482889004)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-11A (Lab ID: 30482889005)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-12 (Lab ID: 30482889006)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-13 (Lab ID: 30482889007)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-14 (Lab ID: 30482889008)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-14A (Lab ID: 30482889009)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-14B (Lab ID: 30482889010)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

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PROJECT NARRATIVE

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: May 12, 2022

QC Batch: 501255

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- BLANK (Lab ID: 2426136)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- LCS (Lab ID: 2426137)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MS (Lab ID: 2426138)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MSD (Lab ID: 2426139)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-9B (Lab ID: 30482889002)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-9C (Lab ID: 30482889003)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 500239

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

- LCS (Lab ID: 2421308)
  - 1,2-Dibromo-3-chloropropane

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

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PROJECT NARRATIVE

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: May 12, 2022

Additional Comments:

Analyte Comments:

QC Batch: 500239

P2: Re-extraction or re-analysis could not be performed due to insufficient sample amount.

- TW-9 (Lab ID: 30482889001)
  - 1,2-Dibromo-3-chloropropane

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PROJECT NARRATIVE

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: May 12, 2022

General Information:
10 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 501814

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30483110002

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2428681)
  - Alkalinity,Total (CaCO3 pH4.5)
- MSD (Lab ID: 2428682)
  - Alkalinity,Total (CaCO3 pH4.5)

R1: RPD value was outside control limits.

- MS (Lab ID: 2428681)
  - Alkalinity,Total (CaCO3 pH4.5)
- MSD (Lab ID: 2428682)
  - Alkalinity,Total (CaCO3 pH4.5)

Additional Comments:

Analyte Comments:

QC Batch: 501814

3c: Alk TV: 4mg/L

- TW-9C (Lab ID: 30482889003)
  - Alkalinity,Total (CaCO3 pH4.5)

4c: Alk TV: 8mg/L

- TW-9B (Lab ID: 30482889002)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: May 12, 2022

Analyte Comments:

QC Batch: 502453

1c: ALK TV: 0 mg/L
- TW-14B (Lab ID: 30482889010)
  - Alkalinity,Total (CaCO3 pH4.5)

2c: ALK TV: 2 mg/L
- TW-14 (Lab ID: 30482889008)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Method: **SM 2540C-2011**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: May 12, 2022

General Information:
10 samples were analyzed for SM 2540C-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: May 12, 2022

General Information:
10 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: May 12, 2022

General Information:
10 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 500595

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30482889005,30483872002

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MSD (Lab ID: 2423015)
  - Chemical Oxygen Demand

Additional Comments:

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PROJECT NARRATIVE

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: May 12, 2022

General Information:
10 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 502321

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30482889001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2431999)
  - Chloride
- MSD (Lab ID: 2432000)
  - Chloride

Additional Comments:

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PROJECT NARRATIVE

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Method: **SM 4500NO3-F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: May 12, 2022

General Information:
10 samples were analyzed for SM 4500NO3-F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 502042

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30482889001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2430137)
  - Nitrogen, NO2 plus NO3
- MSD (Lab ID: 2430138)
  - Nitrogen, NO2 plus NO3

Additional Comments:

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PROJECT NARRATIVE

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: May 12, 2022

General Information:
10 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: May 12, 2022

General Information:
10 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 499263

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30482889008

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2416645)
  - Nitrite as N

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Sample: TW-9 **Lab ID: 30482889001** Collected: 04/20/22 14:40 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.41J**	mg/L	0.50	0.083	1	04/27/22 04:03	04/29/22 20:19	7440-70-2	
Iron	**27.5**	mg/L	0.050	0.035	1	04/27/22 04:03	04/29/22 20:19	7439-89-6	
Magnesium	**0.24J**	mg/L	0.50	0.047	1	04/27/22 04:03	04/29/22 20:19	7439-95-4	
Manganese	**0.15**	mg/L	0.0050	0.0027	1	04/27/22 04:03	04/29/22 20:19	7439-96-5	
Potassium	**0.49J**	mg/L	0.50	0.26	1	04/27/22 04:03	04/29/22 20:19	7440-09-7	
Sodium	**0.86**	mg/L	0.50	0.34	1	04/27/22 04:03	04/29/22 20:19	7440-23-5	
Total Hardness	**2.0J**	mg/L	3.3	0.27	1	04/27/22 04:03	04/29/22 20:19		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.53**	mg/L	0.50	0.083	1	04/27/22 08:24	04/29/22 17:10	7440-70-2	
Iron, Dissolved	**26.0**	mg/L	0.050	0.035	1	04/27/22 08:24	04/29/22 17:10	7439-89-6	
Magnesium, Dissolved	**0.24J**	mg/L	0.50	0.047	1	04/27/22 08:24	04/29/22 17:10	7439-95-4	
Manganese, Dissolved	**0.14**	mg/L	0.0050	0.0027	1	04/27/22 08:24	04/29/22 17:10	7439-96-5	
Potassium, Dissolved	**0.49J**	mg/L	0.50	0.26	1	04/27/22 08:24	04/29/22 17:10	7440-09-7	
Sodium, Dissolved	**0.87**	mg/L	0.50	0.34	1	04/27/22 08:24	04/29/22 17:10	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	04/26/22 12:29	04/27/22 12:53	7440-36-0	
Arsenic	**0.00099J**	mg/L	0.0025	0.00044	1	04/26/22 12:29	04/27/22 12:53	7440-38-2	
Barium	**0.012**	mg/L	0.0025	0.00098	1	04/26/22 12:29	04/27/22 12:53	7440-39-3	
Beryllium	**0.0011**	mg/L	0.00050	0.00015	1	04/26/22 12:29	04/27/22 12:53	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	04/26/22 12:29	04/27/22 12:53	7440-43-9	
Chromium	**0.0010J**	mg/L	0.0025	0.00050	1	04/26/22 12:29	04/27/22 12:53	7440-47-3	
Cobalt	**0.0011J**	mg/L	0.0025	0.00031	1	04/26/22 12:29	04/27/22 12:53	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.00064	1	04/26/22 12:29	04/27/22 12:53	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	04/26/22 12:29	04/27/22 12:53	7439-92-1	
Nickel	**0.0026**	mg/L	0.0025	0.00065	1	04/26/22 12:29	04/27/22 12:53	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	04/26/22 12:29	04/27/22 12:53	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	04/26/22 12:29	04/27/22 12:53	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	04/26/22 12:29	04/27/22 12:53	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	04/26/22 12:29	04/27/22 12:53	7440-62-2	
Zinc	**0.0057**	mg/L	0.0050	0.0049	1	04/26/22 12:29	04/27/22 12:53	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	04/29/22 12:25	05/04/22 15:42	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.042 U**	ug/L	0.042	0.023	1	04/27/22 07:25	04/27/22 20:06	96-12-8	L2,P2
1,2-Dibromoethane (EDB)	**0.042 U**	ug/L	0.042	0.032	1	04/27/22 07:25	04/27/22 20:06	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	101	%.	60-140		1	04/27/22 07:25	04/27/22 20:06	630-20-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Sample: TW-9 **Lab ID: 30482889001** Collected: 04/20/22 14:40 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**20.0**	mg/L	10.0	1.0	1		05/03/22 20:35		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		04/25/22 14:06		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	04/25/22 07:44	04/25/22 12:10		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/28/22 13:46	04/28/22 17:31		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**1.5J**	mg/L	3.0	0.67	1		05/05/22 15:10	16887-00-6	ML
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		05/04/22 15:48	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		05/04/22 15:48		ML
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/22/22 19:33	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/22/22 10:46	14797-65-0	

Sample: TW-9B **Lab ID: 30482889002** Collected: 04/20/22 15:20 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**5.6**	mg/L	0.50	0.083	1	04/27/22 04:03	04/29/22 20:21	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	04/27/22 04:03	04/29/22 20:21	7439-89-6	
Magnesium	**3.1**	mg/L	0.50	0.047	1	04/27/22 04:03	04/29/22 20:21	7439-95-4	
Manganese	**0.031**	mg/L	0.0050	0.0027	1	04/27/22 04:03	04/29/22 20:21	7439-96-5	
Potassium	**1.7**	mg/L	0.50	0.26	1	04/27/22 04:03	04/29/22 20:21	7440-09-7	

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ANALYTICAL RESULTS

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Sample: TW-9B **Lab ID: 30482889002** Collected: 04/20/22 15:20 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**15.4**	mg/L	0.50	0.34	1	04/27/22 04:03	04/29/22 20:21	7440-23-5	
Total Hardness	**26.7**	mg/L	3.3	0.27	1	04/27/22 04:03	04/29/22 20:21		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**5.0**	mg/L	0.50	0.083	1	04/27/22 08:24	04/29/22 17:12	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	04/27/22 08:24	04/29/22 17:12	7439-89-6	
Magnesium, Dissolved	**2.5**	mg/L	0.50	0.047	1	04/27/22 08:24	04/29/22 17:12	7439-95-4	
Manganese, Dissolved	**0.027**	mg/L	0.0050	0.0027	1	04/27/22 08:24	04/29/22 17:12	7439-96-5	
Potassium, Dissolved	**1.5**	mg/L	0.50	0.26	1	04/27/22 08:24	04/29/22 17:12	7440-09-7	
Sodium, Dissolved	**13.0**	mg/L	0.50	0.34	1	04/27/22 08:24	04/29/22 17:12	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	04/26/22 12:29	04/27/22 13:14	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	04/26/22 12:29	04/27/22 13:14	7440-38-2	
Barium	**0.048**	mg/L	0.0025	0.00098	1	04/26/22 12:29	04/27/22 13:14	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	04/26/22 12:29	04/27/22 13:14	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	04/26/22 12:29	04/27/22 13:14	7440-43-9	
Chromium	**0.0031**	mg/L	0.0025	0.00050	1	04/26/22 12:29	04/27/22 13:14	7440-47-3	
Cobalt	**0.0048**	mg/L	0.0025	0.00031	1	04/26/22 12:29	04/27/22 13:14	7440-48-4	
Copper	**0.0026**	mg/L	0.0025	0.00064	1	04/26/22 12:29	04/27/22 13:14	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	04/26/22 12:29	04/27/22 13:14	7439-92-1	
Nickel	**0.012**	mg/L	0.0025	0.00065	1	04/26/22 12:29	04/27/22 13:14	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	04/26/22 12:29	04/27/22 13:14	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	04/26/22 12:29	04/27/22 13:14	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	04/26/22 12:29	04/27/22 13:14	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	04/26/22 12:29	04/27/22 13:14	7440-62-2	
Zinc	**0.017**	mg/L	0.0050	0.0049	1	04/26/22 12:29	04/27/22 13:14	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	04/29/22 12:25	05/04/22 15:43	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	04/27/22 07:25	04/27/22 20:45	96-12-8	L2
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.022	1	05/02/22 09:00	05/05/22 18:30	96-12-8	CH,H2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	04/27/22 07:25	04/27/22 20:45	106-93-4	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	05/02/22 09:00	05/05/22 18:30	106-93-4	CH,H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	96	%.	60-140		1	04/27/22 07:25	04/27/22 20:45	630-20-6	
1,1,1,2-Tetrachloroethane (S)	122	%.	60-140		1	05/02/22 09:00	05/05/22 18:30	630-20-6	CH,IH

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ANALYTICAL RESULTS

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Sample: TW-9B **Lab ID: 30482889002** Collected: 04/20/22 15:20 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**8.0J**	mg/L	10.0	1.0	1		05/03/22 20:37		4c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**49.0**	mg/L	10.0	10.0	1		04/25/22 14:06		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	04/25/22 07:44	04/25/22 12:16		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/28/22 13:46	04/28/22 17:31		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**17.4**	mg/L	3.0	0.67	1		05/05/22 15:13	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**2.1**	mg/L	0.10	0.053	1		05/04/22 15:53	14797-55-8	
Nitrogen, NO2 plus NO3	**2.1**	mg/L	0.10	0.053	1		05/04/22 15:53		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**5.6J**	mg/L	10.0	4.7	1		04/22/22 19:38	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/22/22 10:46	14797-65-0	

Sample: TW-9C **Lab ID: 30482889003** Collected: 04/20/22 16:00 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**4.6**	mg/L	0.50	0.083	1	04/27/22 04:03	04/29/22 20:23	7440-70-2	
Iron	**0.036J**	mg/L	0.050	0.035	1	04/27/22 04:03	04/29/22 20:23	7439-89-6	
Magnesium	**3.9**	mg/L	0.50	0.047	1	04/27/22 04:03	04/29/22 20:23	7439-95-4	
Manganese	**0.091**	mg/L	0.0050	0.0027	1	04/27/22 04:03	04/29/22 20:23	7439-96-5	
Potassium	**2.1**	mg/L	0.50	0.26	1	04/27/22 04:03	04/29/22 20:23	7440-09-7	

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ANALYTICAL RESULTS

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Sample: TW-9C **Lab ID: 30482889003** Collected: 04/20/22 16:00 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**16.1**	mg/L	0.50	0.34	1	04/27/22 04:03	04/29/22 20:23	7440-23-5	
Total Hardness	**27.7**	mg/L	3.3	0.27	1	04/27/22 04:03	04/29/22 20:23		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**4.4**	mg/L	0.50	0.083	1	04/27/22 08:24	04/29/22 17:14	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	04/27/22 08:24	04/29/22 17:14	7439-89-6	
Magnesium, Dissolved	**3.8**	mg/L	0.50	0.047	1	04/27/22 08:24	04/29/22 17:14	7439-95-4	
Manganese, Dissolved	**0.086**	mg/L	0.0050	0.0027	1	04/27/22 08:24	04/29/22 17:14	7439-96-5	
Potassium, Dissolved	**2.0**	mg/L	0.50	0.26	1	04/27/22 08:24	04/29/22 17:14	7440-09-7	
Sodium, Dissolved	**15.6**	mg/L	0.50	0.34	1	04/27/22 08:24	04/29/22 17:14	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	04/26/22 12:29	04/27/22 13:16	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	04/26/22 12:29	04/27/22 13:16	7440-38-2	
Barium	**0.12**	mg/L	0.0025	0.00098	1	04/26/22 12:29	04/27/22 13:16	7440-39-3	
Beryllium	**0.00039J**	mg/L	0.00050	0.00015	1	04/26/22 12:29	04/27/22 13:16	7440-41-7	
Cadmium	**0.00017J**	mg/L	0.00050	0.00013	1	04/26/22 12:29	04/27/22 13:16	7440-43-9	
Chromium	**0.0059**	mg/L	0.0025	0.00050	1	04/26/22 12:29	04/27/22 13:16	7440-47-3	
Cobalt	**0.015**	mg/L	0.0025	0.00031	1	04/26/22 12:29	04/27/22 13:16	7440-48-4	
Copper	**0.0044**	mg/L	0.0025	0.00064	1	04/26/22 12:29	04/27/22 13:16	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	04/26/22 12:29	04/27/22 13:16	7439-92-1	
Nickel	**0.017**	mg/L	0.0025	0.00065	1	04/26/22 12:29	04/27/22 13:16	7440-02-0	
Selenium	**0.0016J**	mg/L	0.0025	0.00084	1	04/26/22 12:29	04/27/22 13:16	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	04/26/22 12:29	04/27/22 13:16	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	04/26/22 12:29	04/27/22 13:16	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	04/26/22 12:29	04/27/22 13:16	7440-62-2	
Zinc	**0.020**	mg/L	0.0050	0.0049	1	04/26/22 12:29	04/27/22 13:16	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	04/29/22 12:25	05/04/22 15:49	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.022	1	04/27/22 07:25	04/27/22 20:58	96-12-8	L2
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/02/22 09:00	05/05/22 19:09	96-12-8	CH,H2
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	04/27/22 07:25	04/27/22 20:58	106-93-4	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/02/22 09:00	05/05/22 19:09	106-93-4	CH,H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	122	%.	60-140		1	05/02/22 09:00	05/05/22 19:09	630-20-6	CH,IH
1,1,1,2-Tetrachloroethane (S)	91	%.	60-140		1	04/27/22 07:25	04/27/22 20:58	630-20-6	

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ANALYTICAL RESULTS

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Sample: TW-9C **Lab ID: 30482889003** Collected: 04/20/22 16:00 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**4.0J**	mg/L	10.0	1.0	1		05/03/22 20:38		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**61.0**	mg/L	10.0	10.0	1		04/25/22 14:06		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	04/25/22 07:44	04/25/22 12:18		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/28/22 13:46	04/28/22 17:31		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**22.6**	mg/L	3.0	0.67	1		05/05/22 15:14	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**3.1**	mg/L	0.10	0.053	1		05/04/22 15:54	14797-55-8	
Nitrogen, NO2 plus NO3	**3.1**	mg/L	0.10	0.053	1		05/04/22 15:54		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**9.6J**	mg/L	10.0	4.7	1		04/22/22 19:38	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/22/22 10:47	14797-65-0	

Sample: TW-10A **Lab ID: 30482889004** Collected: 04/21/22 08:45 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**5.6**	mg/L	0.50	0.083	1	04/27/22 04:03	04/29/22 20:25	7440-70-2	
Iron	**0.097**	mg/L	0.050	0.035	1	04/27/22 04:03	04/29/22 20:25	7439-89-6	
Magnesium	**3.6**	mg/L	0.50	0.047	1	04/27/22 04:03	04/29/22 20:25	7439-95-4	
Manganese	**0.064**	mg/L	0.0050	0.0027	1	04/27/22 04:03	04/29/22 20:25	7439-96-5	
Potassium	**2.3**	mg/L	0.50	0.26	1	04/27/22 04:03	04/29/22 20:25	7440-09-7	

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ANALYTICAL RESULTS

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Sample: TW-10A **Lab ID: 30482889004** Collected: 04/21/22 08:45 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**23.9**	mg/L	0.50	0.34	1	04/27/22 04:03	04/29/22 20:25	7440-23-5	
Total Hardness	**28.9**	mg/L	3.3	0.27	1	04/27/22 04:03	04/29/22 20:25		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**5.6**	mg/L	0.50	0.083	1	04/27/22 08:24	04/29/22 17:16	7440-70-2	
Iron, Dissolved	**0.082**	mg/L	0.050	0.035	1	04/27/22 08:24	04/29/22 17:16	7439-89-6	
Magnesium, Dissolved	**3.5**	mg/L	0.50	0.047	1	04/27/22 08:24	04/29/22 17:16	7439-95-4	
Manganese, Dissolved	**0.061**	mg/L	0.0050	0.0027	1	04/27/22 08:24	04/29/22 17:16	7439-96-5	
Potassium, Dissolved	**2.3**	mg/L	0.50	0.26	1	04/27/22 08:24	04/29/22 17:16	7440-09-7	
Sodium, Dissolved	**23.6**	mg/L	0.50	0.34	1	04/27/22 08:24	04/29/22 17:16	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	04/26/22 12:29	04/27/22 13:19	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	04/26/22 12:29	04/27/22 13:19	7440-38-2	
Barium	**0.094**	mg/L	0.0025	0.00098	1	04/26/22 12:29	04/27/22 13:19	7440-39-3	
Beryllium	**0.00052**	mg/L	0.00050	0.00015	1	04/26/22 12:29	04/27/22 13:19	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	04/26/22 12:29	04/27/22 13:19	7440-43-9	
Chromium	**0.0042**	mg/L	0.0025	0.00050	1	04/26/22 12:29	04/27/22 13:19	7440-47-3	
Cobalt	**0.014**	mg/L	0.0025	0.00031	1	04/26/22 12:29	04/27/22 13:19	7440-48-4	
Copper	**0.0054**	mg/L	0.0025	0.00064	1	04/26/22 12:29	04/27/22 13:19	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	04/26/22 12:29	04/27/22 13:19	7439-92-1	
Nickel	**0.016**	mg/L	0.0025	0.00065	1	04/26/22 12:29	04/27/22 13:19	7440-02-0	
Selenium	**0.0012J**	mg/L	0.0025	0.00084	1	04/26/22 12:29	04/27/22 13:19	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	04/26/22 12:29	04/27/22 13:19	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	04/26/22 12:29	04/27/22 13:19	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	04/26/22 12:29	04/27/22 13:19	7440-62-2	
Zinc	**0.021**	mg/L	0.0050	0.0049	1	04/26/22 12:29	04/27/22 13:19	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	04/29/22 12:25	05/04/22 15:51	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.022	1	04/28/22 14:38	04/29/22 09:29	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	04/28/22 14:38	04/29/22 09:29	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	103	%.	60-140		1	04/28/22 14:38	04/29/22 09:29	630-20-6	CH
1,1,1,2-Tetrachloroethane (S)	95	%.	60-140		1	04/27/22 07:25	04/27/22 21:10	630-20-6	

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ANALYTICAL RESULTS

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Sample: TW-10A **Lab ID: 30482889004** Collected: 04/21/22 08:45 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		05/05/22 16:12		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**85.0**	mg/L	10.0	10.0	1		04/25/22 14:06		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	04/25/22 07:44	04/25/22 12:24		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/28/22 13:46	04/28/22 17:31		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**39.2**	mg/L	3.0	0.67	1		05/05/22 15:14	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**2.0**	mg/L	0.10	0.053	1		05/04/22 15:55	14797-55-8	
Nitrogen, NO2 plus NO3	**2.0**	mg/L	0.10	0.053	1		05/04/22 15:55		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**8.1J**	mg/L	10.0	4.7	1		04/22/22 19:40	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/22/22 10:47	14797-65-0	

Sample: TW-11A **Lab ID: 30482889005** Collected: 04/21/22 09:30 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**3.6**	mg/L	0.50	0.083	1	04/27/22 04:03	04/29/22 20:27	7440-70-2	
Iron	**29.3**	mg/L	0.050	0.035	1	04/27/22 04:03	04/29/22 20:27	7439-89-6	
Magnesium	**1.7**	mg/L	0.50	0.047	1	04/27/22 04:03	04/29/22 20:27	7439-95-4	
Manganese	**0.39**	mg/L	0.0050	0.0027	1	04/27/22 04:03	04/29/22 20:27	7439-96-5	
Potassium	**2.0**	mg/L	0.50	0.26	1	04/27/22 04:03	04/29/22 20:27	7440-09-7	

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ANALYTICAL RESULTS

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Sample: TW-11A **Lab ID: 30482889005** Collected: 04/21/22 09:30 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**10.9**	mg/L	0.50	0.34	1	04/27/22 04:03	04/29/22 20:27	7440-23-5	
Total Hardness	**16.1**	mg/L	3.3	0.27	1	04/27/22 04:03	04/29/22 20:27		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**3.9**	mg/L	0.50	0.083	1	04/27/22 08:24	04/29/22 17:22	7440-70-2	
Iron, Dissolved	**30.8**	mg/L	0.050	0.035	1	04/27/22 08:24	04/29/22 17:22	7439-89-6	
Magnesium, Dissolved	**1.9**	mg/L	0.50	0.047	1	04/27/22 08:24	04/29/22 17:22	7439-95-4	
Manganese, Dissolved	**0.42**	mg/L	0.0050	0.0027	1	04/27/22 08:24	04/29/22 17:22	7439-96-5	
Potassium, Dissolved	**2.2**	mg/L	0.50	0.26	1	04/27/22 08:24	04/29/22 17:22	7440-09-7	
Sodium, Dissolved	**11.7**	mg/L	0.50	0.34	1	04/27/22 08:24	04/29/22 17:22	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	04/26/22 12:29	04/27/22 13:22	7440-36-0	
Arsenic	**0.025**	mg/L	0.0025	0.00044	1	04/26/22 12:29	04/27/22 13:22	7440-38-2	
Barium	**0.061**	mg/L	0.0025	0.00098	1	04/26/22 12:29	04/27/22 13:22	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	04/26/22 12:29	04/27/22 13:22	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	04/26/22 12:29	04/27/22 13:22	7440-43-9	
Chromium	**0.00098J**	mg/L	0.0025	0.00050	1	04/26/22 12:29	04/27/22 13:22	7440-47-3	
Cobalt	**0.0074**	mg/L	0.0025	0.00031	1	04/26/22 12:29	04/27/22 13:22	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.00064	1	04/26/22 12:29	04/27/22 13:22	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	04/26/22 12:29	04/27/22 13:22	7439-92-1	
Nickel	**0.0032**	mg/L	0.0025	0.00065	1	04/26/22 12:29	04/27/22 13:22	7440-02-0	
Selenium	**0.00098J**	mg/L	0.0025	0.00084	1	04/26/22 12:29	04/27/22 13:22	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	04/26/22 12:29	04/27/22 13:22	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	04/26/22 12:29	04/27/22 13:22	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	04/26/22 12:29	04/27/22 13:22	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0049	1	04/26/22 12:29	04/27/22 13:22	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	04/29/22 12:25	05/04/22 15:52	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	04/28/22 14:38	04/29/22 09:42	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	04/28/22 14:38	04/29/22 09:42	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	106	%.	60-140		1	04/28/22 14:38	04/29/22 09:42	630-20-6	CH
1,1,1,2-Tetrachloroethane (S)	103	%.	60-140		1	04/27/22 07:25	04/27/22 21:23	630-20-6	

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ANALYTICAL RESULTS

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Sample: TW-11A **Lab ID: 30482889005** Collected: 04/21/22 09:30 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**34.0**	mg/L	10.0	1.0	1		05/05/22 16:19		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**88.0**	mg/L	10.0	10.0	1		04/25/22 14:06		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.12**	mg/L	0.10	0.044	1	04/25/22 07:44	04/25/22 12:25		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**5.6J**	mg/L	25.0	4.7	1	04/28/22 13:46	04/28/22 17:32		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**14.3**	mg/L	3.0	0.67	1		05/05/22 15:15	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.060J**	mg/L	0.10	0.053	1		05/04/22 15:57	14797-55-8	
Nitrogen, NO2 plus NO3	**0.060J**	mg/L	0.10	0.053	1		05/04/22 15:57		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**20.6**	mg/L	10.0	4.7	1		04/22/22 19:41	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/22/22 10:47	14797-65-0	

Sample: TW-12 **Lab ID: 30482889006** Collected: 04/21/22 10:50 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**3.2**	mg/L	0.50	0.083	1	04/27/22 04:03	04/29/22 20:33	7440-70-2	
Iron	**40.3**	mg/L	0.050	0.035	1	04/27/22 04:03	04/29/22 20:33	7439-89-6	
Magnesium	**1.9**	mg/L	0.50	0.047	1	04/27/22 04:03	04/29/22 20:33	7439-95-4	
Manganese	**0.26**	mg/L	0.0050	0.0027	1	04/27/22 04:03	04/29/22 20:33	7439-96-5	
Potassium	**1.2**	mg/L	0.50	0.26	1	04/27/22 04:03	04/29/22 20:33	7440-09-7	

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ANALYTICAL RESULTS

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Sample: TW-12 **Lab ID: 30482889006** Collected: 04/21/22 10:50 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**5.3**	mg/L	0.50	0.34	1	04/27/22 04:03	04/29/22 20:33	7440-23-5	
Total Hardness	**15.5**	mg/L	3.3	0.27	1	04/27/22 04:03	04/29/22 20:33		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**3.2**	mg/L	0.50	0.083	1	04/27/22 08:24	04/29/22 17:24	7440-70-2	
Iron, Dissolved	**40.0**	mg/L	0.050	0.035	1	04/27/22 08:24	04/29/22 17:24	7439-89-6	
Magnesium, Dissolved	**1.9**	mg/L	0.50	0.047	1	04/27/22 08:24	04/29/22 17:24	7439-95-4	
Manganese, Dissolved	**0.27**	mg/L	0.0050	0.0027	1	04/27/22 08:24	04/29/22 17:24	7439-96-5	
Potassium, Dissolved	**1.2**	mg/L	0.50	0.26	1	04/27/22 08:24	04/29/22 17:24	7440-09-7	
Sodium, Dissolved	**5.3**	mg/L	0.50	0.34	1	04/27/22 08:24	04/29/22 17:24	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	04/26/22 12:29	04/27/22 13:25	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	04/26/22 12:29	04/27/22 13:25	7440-38-2	
Barium	**0.042**	mg/L	0.0025	0.00098	1	04/26/22 12:29	04/27/22 13:25	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	04/26/22 12:29	04/27/22 13:25	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	04/26/22 12:29	04/27/22 13:25	7440-43-9	
Chromium	**0.00085J**	mg/L	0.0025	0.00050	1	04/26/22 12:29	04/27/22 13:25	7440-47-3	
Cobalt	**0.00040J**	mg/L	0.0025	0.00031	1	04/26/22 12:29	04/27/22 13:25	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.00064	1	04/26/22 12:29	04/27/22 13:25	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	04/26/22 12:29	04/27/22 13:25	7439-92-1	
Nickel	**0.0010J**	mg/L	0.0025	0.00065	1	04/26/22 12:29	04/27/22 13:25	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	04/26/22 12:29	04/27/22 13:25	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	04/26/22 12:29	04/27/22 13:25	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	04/26/22 12:29	04/27/22 13:25	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	04/26/22 12:29	04/27/22 13:25	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0049	1	04/26/22 12:29	04/27/22 13:25	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	04/29/22 12:25	05/04/22 15:54	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.042 U**	ug/L	0.042	0.023	1	04/28/22 14:38	04/29/22 09:55	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.042 U**	ug/L	0.042	0.032	1	04/28/22 14:38	04/29/22 09:55	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	102	%.	60-140		1	04/28/22 14:38	04/29/22 09:55	630-20-6	CH
1,1,1,2-Tetrachloroethane (S)	103	%.	60-140		1	04/27/22 07:25	04/27/22 21:36	630-20-6	

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ANALYTICAL RESULTS

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Sample: TW-12 **Lab ID: 30482889006** Collected: 04/21/22 10:50 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**28.0**	mg/L	10.0	1.0	1		05/05/22 16:22		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**33.0**	mg/L	10.0	10.0	1		04/25/22 14:06		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	04/25/22 07:44	04/25/22 12:27		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/28/22 13:46	04/28/22 17:33		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**5.8**	mg/L	3.0	0.67	1		05/05/22 15:16	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		05/04/22 15:58	14797-55-8	
Nitrogen, NO2 plus NO3	**0.059J**	mg/L	0.10	0.053	1		05/04/22 15:58		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/22/22 19:43	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.027**	mg/L	0.010	0.0055	1		04/22/22 10:48	14797-65-0	

Sample: TW-13 **Lab ID: 30482889007** Collected: 04/21/22 11:35 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**3.6**	mg/L	0.50	0.083	1	04/27/22 04:03	04/29/22 20:35	7440-70-2	
Iron	**14.0**	mg/L	0.050	0.035	1	04/27/22 04:03	04/29/22 20:35	7439-89-6	
Magnesium	**2.3**	mg/L	0.50	0.047	1	04/27/22 04:03	04/29/22 20:35	7439-95-4	
Manganese	**0.11**	mg/L	0.0050	0.0027	1	04/27/22 04:03	04/29/22 20:35	7439-96-5	
Potassium	**1.2**	mg/L	0.50	0.26	1	04/27/22 04:03	04/29/22 20:35	7440-09-7	

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ANALYTICAL RESULTS

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Sample: TW-13 **Lab ID: 30482889007** Collected: 04/21/22 11:35 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**9.2**	mg/L	0.50	0.34	1	04/27/22 04:03	04/29/22 20:35	7440-23-5	
Total Hardness	**18.3**	mg/L	3.3	0.27	1	04/27/22 04:03	04/29/22 20:35		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**3.1**	mg/L	0.50	0.083	1	04/27/22 08:24	04/29/22 17:26	7440-70-2	
Iron, Dissolved	**10.4**	mg/L	0.050	0.035	1	04/27/22 08:24	04/29/22 17:26	7439-89-6	
Magnesium, Dissolved	**1.9**	mg/L	0.50	0.047	1	04/27/22 08:24	04/29/22 17:26	7439-95-4	
Manganese, Dissolved	**0.096**	mg/L	0.0050	0.0027	1	04/27/22 08:24	04/29/22 17:26	7439-96-5	
Potassium, Dissolved	**1.1**	mg/L	0.50	0.26	1	04/27/22 08:24	04/29/22 17:26	7440-09-7	
Sodium, Dissolved	**8.2**	mg/L	0.50	0.34	1	04/27/22 08:24	04/29/22 17:26	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	04/26/22 12:29	04/27/22 13:28	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	04/26/22 12:29	04/27/22 13:28	7440-38-2	
Barium	**0.051**	mg/L	0.0025	0.00098	1	04/26/22 12:29	04/27/22 13:28	7440-39-3	
Beryllium	**0.00021J**	mg/L	0.00050	0.00015	1	04/26/22 12:29	04/27/22 13:28	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	04/26/22 12:29	04/27/22 13:28	7440-43-9	
Chromium	**0.0015J**	mg/L	0.0025	0.00050	1	04/26/22 12:29	04/27/22 13:28	7440-47-3	
Cobalt	**0.0091**	mg/L	0.0025	0.00031	1	04/26/22 12:29	04/27/22 13:28	7440-48-4	
Copper	**0.0028**	mg/L	0.0025	0.00064	1	04/26/22 12:29	04/27/22 13:28	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	04/26/22 12:29	04/27/22 13:28	7439-92-1	
Nickel	**0.010**	mg/L	0.0025	0.00065	1	04/26/22 12:29	04/27/22 13:28	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	04/26/22 12:29	04/27/22 13:28	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	04/26/22 12:29	04/27/22 13:28	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	04/26/22 12:29	04/27/22 13:28	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	04/26/22 12:29	04/27/22 13:28	7440-62-2	
Zinc	**0.0096**	mg/L	0.0050	0.0049	1	04/26/22 12:29	04/27/22 13:28	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	04/29/22 12:25	05/04/22 15:56	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	04/28/22 14:38	04/29/22 10:07	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	04/28/22 14:38	04/29/22 10:07	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	95	%.	60-140		1	04/27/22 07:25	04/27/22 21:49	630-20-6	
1,1,1,2-Tetrachloroethane (S)	102	%.	60-140		1	04/28/22 14:38	04/29/22 10:07	630-20-6	CH

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ANALYTICAL RESULTS

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Sample: TW-13 **Lab ID: 30482889007** Collected: 04/21/22 11:35 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**26.0**	mg/L	10.0	1.0	1		05/05/22 16:24		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**27.0**	mg/L	10.0	10.0	1		04/25/22 14:06		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	04/25/22 07:44	04/25/22 12:29		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/28/22 13:46	04/28/22 17:33		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**14.1**	mg/L	3.0	0.67	1		05/05/22 15:17	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.18**	mg/L	0.10	0.053	1		05/04/22 15:59	14797-55-8	
Nitrogen, NO2 plus NO3	**0.18**	mg/L	0.10	0.053	1		05/04/22 15:59		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/22/22 19:45	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.0069J**	mg/L	0.010	0.0055	1		04/22/22 10:48	14797-65-0	

Sample: TW-14 **Lab ID: 30482889008** Collected: 04/21/22 14:10 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**1.3**	mg/L	0.50	0.083	1	04/27/22 04:03	04/29/22 20:37	7440-70-2	
Iron	**60.3**	mg/L	0.050	0.035	1	04/27/22 04:03	04/29/22 20:37	7439-89-6	
Magnesium	**1.2**	mg/L	0.50	0.047	1	04/27/22 04:03	04/29/22 20:37	7439-95-4	
Manganese	**0.18**	mg/L	0.0050	0.0027	1	04/27/22 04:03	04/29/22 20:37	7439-96-5	
Potassium	**0.77**	mg/L	0.50	0.26	1	04/27/22 04:03	04/29/22 20:37	7440-09-7	

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ANALYTICAL RESULTS

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Sample: TW-14 **Lab ID: 30482889008** Collected: 04/21/22 14:10 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**3.8**	mg/L	0.50	0.34	1	04/27/22 04:03	04/29/22 20:37	7440-23-5	
Total Hardness	**8.4**	mg/L	3.3	0.27	1	04/27/22 04:03	04/29/22 20:37		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**1.3**	mg/L	0.50	0.083	1	04/27/22 08:24	04/29/22 17:28	7440-70-2	
Iron, Dissolved	**12.1**	mg/L	0.050	0.035	1	04/27/22 08:24	04/29/22 17:28	7439-89-6	
Magnesium, Dissolved	**1.2**	mg/L	0.50	0.047	1	04/27/22 08:24	04/29/22 17:28	7439-95-4	
Manganese, Dissolved	**0.18**	mg/L	0.0050	0.0027	1	04/27/22 08:24	04/29/22 17:28	7439-96-5	
Potassium, Dissolved	**0.71**	mg/L	0.50	0.26	1	04/27/22 08:24	04/29/22 17:28	7440-09-7	
Sodium, Dissolved	**3.7**	mg/L	0.50	0.34	1	04/27/22 08:24	04/29/22 17:28	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	04/26/22 12:29	04/27/22 13:30	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	04/26/22 12:29	04/27/22 13:30	7440-38-2	
Barium	**0.037**	mg/L	0.0025	0.00098	1	04/26/22 12:29	04/27/22 13:30	7440-39-3	
Beryllium	**0.00060**	mg/L	0.00050	0.00015	1	04/26/22 12:29	04/27/22 13:30	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	04/26/22 12:29	04/27/22 13:30	7440-43-9	
Chromium	**0.015**	mg/L	0.0025	0.00050	1	04/26/22 12:29	04/27/22 13:30	7440-47-3	
Cobalt	**0.011**	mg/L	0.0025	0.00031	1	04/26/22 12:29	04/27/22 13:30	7440-48-4	
Copper	**0.022**	mg/L	0.0025	0.00064	1	04/26/22 12:29	04/27/22 13:30	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	04/26/22 12:29	04/27/22 13:30	7439-92-1	
Nickel	**0.023**	mg/L	0.0025	0.00065	1	04/26/22 12:29	04/27/22 13:30	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	04/26/22 12:29	04/27/22 13:30	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	04/26/22 12:29	04/27/22 13:30	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	04/26/22 12:29	04/27/22 13:30	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	04/26/22 12:29	04/27/22 13:30	7440-62-2	
Zinc	**0.0062**	mg/L	0.0050	0.0049	1	04/26/22 12:29	04/27/22 13:30	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	04/29/22 12:25	05/04/22 15:58	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.042 U**	ug/L	0.042	0.023	1	04/28/22 14:38	04/29/22 10:20	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.042 U**	ug/L	0.042	0.032	1	04/28/22 14:38	04/29/22 10:20	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	101	%.	60-140		1	04/27/22 07:25	04/27/22 22:02	630-20-6	
1,1,1,2-Tetrachloroethane (S)	97	%.	60-140		1	04/28/22 14:38	04/29/22 10:20	630-20-6	CH

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ANALYTICAL RESULTS

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Sample: TW-14 **Lab ID: 30482889008** Collected: 04/21/22 14:10 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		05/05/22 16:26		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**14.0**	mg/L	10.0	10.0	1		04/25/22 14:06		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	04/25/22 07:44	04/25/22 12:31		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/28/22 13:46	04/28/22 17:33		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**7.3**	mg/L	3.0	0.67	1		05/05/22 15:18	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		05/04/22 16:01	14797-55-8	
Nitrogen, NO2 plus NO3	**0.059J**	mg/L	0.10	0.053	1		05/04/22 16:01		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/22/22 19:48	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.024**	mg/L	0.010	0.0055	1		04/22/22 10:51	14797-65-0	MH

Sample: TW-14A **Lab ID: 30482889009** Collected: 04/21/22 13:30 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**3.1**	mg/L	0.50	0.083	1	04/27/22 04:03	04/29/22 20:39	7440-70-2	
Iron	**53.5**	mg/L	0.050	0.035	1	04/27/22 04:03	04/29/22 20:39	7439-89-6	
Magnesium	**3.1**	mg/L	0.50	0.047	1	04/27/22 04:03	04/29/22 20:39	7439-95-4	
Manganese	**0.32**	mg/L	0.0050	0.0027	1	04/27/22 04:03	04/29/22 20:39	7439-96-5	
Potassium	**1.3**	mg/L	0.50	0.26	1	04/27/22 04:03	04/29/22 20:39	7440-09-7	

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ANALYTICAL RESULTS

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Sample: TW-14A **Lab ID: 30482889009** Collected: 04/21/22 13:30 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**8.2**	mg/L	0.50	0.34	1	04/27/22 04:03	04/29/22 20:39	7440-23-5	
Total Hardness	**20.5**	mg/L	3.3	0.27	1	04/27/22 04:03	04/29/22 20:39		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**3.0**	mg/L	0.50	0.083	1	04/27/22 08:24	04/29/22 17:30	7440-70-2	
Iron, Dissolved	**49.6**	mg/L	0.050	0.035	1	04/27/22 08:24	04/29/22 17:30	7439-89-6	
Magnesium, Dissolved	**3.0**	mg/L	0.50	0.047	1	04/27/22 08:24	04/29/22 17:30	7439-95-4	
Manganese, Dissolved	**0.30**	mg/L	0.0050	0.0027	1	04/27/22 08:24	04/29/22 17:30	7439-96-5	
Potassium, Dissolved	**1.2**	mg/L	0.50	0.26	1	04/27/22 08:24	04/29/22 17:30	7440-09-7	
Sodium, Dissolved	**7.9**	mg/L	0.50	0.34	1	04/27/22 08:24	04/29/22 17:30	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	04/26/22 12:29	04/27/22 13:33	7440-36-0	
Arsenic	**0.0014J**	mg/L	0.0025	0.00044	1	04/26/22 12:29	04/27/22 13:33	7440-38-2	
Barium	**0.093**	mg/L	0.0025	0.00098	1	04/26/22 12:29	04/27/22 13:33	7440-39-3	
Beryllium	**0.00032J**	mg/L	0.00050	0.00015	1	04/26/22 12:29	04/27/22 13:33	7440-41-7	
Cadmium	**0.00023J**	mg/L	0.00050	0.00013	1	04/26/22 12:29	04/27/22 13:33	7440-43-9	
Chromium	**0.0030**	mg/L	0.0025	0.00050	1	04/26/22 12:29	04/27/22 13:33	7440-47-3	
Cobalt	**0.013**	mg/L	0.0025	0.00031	1	04/26/22 12:29	04/27/22 13:33	7440-48-4	
Copper	**0.0026**	mg/L	0.0025	0.00064	1	04/26/22 12:29	04/27/22 13:33	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	04/26/22 12:29	04/27/22 13:33	7439-92-1	
Nickel	**0.013**	mg/L	0.0025	0.00065	1	04/26/22 12:29	04/27/22 13:33	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	04/26/22 12:29	04/27/22 13:33	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	04/26/22 12:29	04/27/22 13:33	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	04/26/22 12:29	04/27/22 13:33	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	04/26/22 12:29	04/27/22 13:33	7440-62-2	
Zinc	**0.019**	mg/L	0.0050	0.0049	1	04/26/22 12:29	04/27/22 13:33	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	04/29/22 12:25	05/04/22 15:59	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.042 U**	ug/L	0.042	0.023	1	04/28/22 14:38	04/29/22 10:33	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.042 U**	ug/L	0.042	0.032	1	04/28/22 14:38	04/29/22 10:33	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	103	%.	60-140		1	04/28/22 14:38	04/29/22 10:33	630-20-6	CH
1,1,1,2-Tetrachloroethane (S)	101	%.	60-140		1	04/27/22 07:25	04/27/22 22:14	630-20-6	

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ANALYTICAL RESULTS

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Sample: TW-14A **Lab ID: 30482889009** Collected: 04/21/22 13:30 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**50.0**	mg/L	10.0	1.0	1		05/05/22 16:27		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**96.0**	mg/L	10.0	10.0	1		04/25/22 14:06		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.26**	mg/L	0.10	0.044	1	04/25/22 07:44	04/25/22 12:33		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/28/22 13:46	04/28/22 17:33		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**11.1**	mg/L	3.0	0.67	1		05/05/22 15:19	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		05/04/22 16:02	14797-55-8	
Nitrogen, NO2 plus NO3	**0.059J**	mg/L	0.10	0.053	1		05/04/22 16:02		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/22/22 19:48	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.024**	mg/L	0.010	0.0055	1		04/22/22 10:51	14797-65-0	

Sample: TW-14B **Lab ID: 30482889010** Collected: 04/21/22 12:50 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.51**	mg/L	0.50	0.083	1	04/27/22 04:03	04/29/22 20:41	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	04/27/22 04:03	04/29/22 20:41	7439-89-6	
Magnesium	**0.29J**	mg/L	0.50	0.047	1	04/27/22 04:03	04/29/22 20:41	7439-95-4	
Manganese	**0.0097**	mg/L	0.0050	0.0027	1	04/27/22 04:03	04/29/22 20:41	7439-96-5	
Potassium	**0.49J**	mg/L	0.50	0.26	1	04/27/22 04:03	04/29/22 20:41	7440-09-7	

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ANALYTICAL RESULTS

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Sample: TW-14B **Lab ID: 30482889010** Collected: 04/21/22 12:50 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**1.1**	mg/L	0.50	0.34	1	04/27/22 04:03	04/29/22 20:41	7440-23-5	
Total Hardness	**2.5J**	mg/L	3.3	0.27	1	04/27/22 04:03	04/29/22 20:41		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.49J**	mg/L	0.50	0.083	1	04/27/22 08:24	04/29/22 17:32	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	04/27/22 08:24	04/29/22 17:32	7439-89-6	
Magnesium, Dissolved	**0.26J**	mg/L	0.50	0.047	1	04/27/22 08:24	04/29/22 17:32	7439-95-4	
Manganese, Dissolved	**0.0086**	mg/L	0.0050	0.0027	1	04/27/22 08:24	04/29/22 17:32	7439-96-5	
Potassium, Dissolved	**0.44J**	mg/L	0.50	0.26	1	04/27/22 08:24	04/29/22 17:32	7440-09-7	
Sodium, Dissolved	**0.95**	mg/L	0.50	0.34	1	04/27/22 08:24	04/29/22 17:32	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	04/26/22 12:29	04/27/22 13:36	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	04/26/22 12:29	04/27/22 13:36	7440-38-2	
Barium	**0.0064**	mg/L	0.0025	0.00098	1	04/26/22 12:29	04/27/22 13:36	7440-39-3	
Beryllium	**0.00030J**	mg/L	0.00050	0.00015	1	04/26/22 12:29	04/27/22 13:36	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	04/26/22 12:29	04/27/22 13:36	7440-43-9	
Chromium	**0.0035**	mg/L	0.0025	0.00050	1	04/26/22 12:29	04/27/22 13:36	7440-47-3	
Cobalt	**0.0064**	mg/L	0.0025	0.00031	1	04/26/22 12:29	04/27/22 13:36	7440-48-4	
Copper	**0.0088**	mg/L	0.0025	0.00064	1	04/26/22 12:29	04/27/22 13:36	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	04/26/22 12:29	04/27/22 13:36	7439-92-1	
Nickel	**0.012**	mg/L	0.0025	0.00065	1	04/26/22 12:29	04/27/22 13:36	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	04/26/22 12:29	04/27/22 13:36	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	04/26/22 12:29	04/27/22 13:36	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	04/26/22 12:29	04/27/22 13:36	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	04/26/22 12:29	04/27/22 13:36	7440-62-2	
Zinc	**0.012**	mg/L	0.0050	0.0049	1	04/26/22 12:29	04/27/22 13:36	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	04/29/22 12:25	05/04/22 16:01	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	04/28/22 14:38	04/29/22 10:46	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	04/27/22 07:25	04/27/22 22:27	106-93-4	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	04/28/22 14:38	04/29/22 10:46	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	107	%.	60-140		1	04/28/22 14:38	04/29/22 10:46	630-20-6	CH
1,1,1,2-Tetrachloroethane (S)	97	%.	60-140		1	04/27/22 07:25	04/27/22 22:27	630-20-6	

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ANALYTICAL RESULTS

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Sample: TW-14B **Lab ID: 30482889010** Collected: 04/21/22 12:50 Received: 04/21/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/05/22 16:28		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		04/25/22 14:06		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	04/25/22 07:44	04/25/22 12:35		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/28/22 13:46	04/28/22 17:33		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**1.6J**	mg/L	3.0	0.67	1		05/05/22 15:20	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.32**	mg/L	0.10	0.053	1		05/04/22 16:04	14797-55-8	
Nitrogen, NO2 plus NO3	**0.32**	mg/L	0.10	0.053	1		05/04/22 16:04		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/22/22 19:50	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/22/22 10:50	14797-65-0	

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QUALITY CONTROL DATA

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

QC Batch: 500216
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30482889001, 30482889002, 30482889003, 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

METHOD BLANK: 2421176
Matrix: Water
Associated Lab Samples: 30482889001, 30482889002, 30482889003, 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	04/29/22 19:39	
Iron	mg/L	0.050 U	0.050	0.035	04/29/22 19:39	
Magnesium	mg/L	0.50 U	0.50	0.047	04/29/22 19:39	
Manganese	mg/L	0.0050 U	0.0050	0.0027	04/29/22 19:39	
Potassium	mg/L	0.50 U	0.50	0.26	04/29/22 19:39	
Sodium	mg/L	0.50 U	0.50	0.34	04/29/22 19:39	

LABORATORY CONTROL SAMPLE: 2421177

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	40.9	102	80-120	
Iron	mg/L	2	2.2	111	80-120	
Magnesium	mg/L	20	21.3	106	80-120	
Manganese	mg/L	2	2.2	110	80-120	
Potassium	mg/L	20	20.5	103	80-120	
Sodium	mg/L	20	20.4	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2421178 2421179

Parameter	Units	30482496001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	3.5	40	40	44.2	47.5	102	110	80-120	7	20	
Iron	mg/L	29.4	2	2	30.8	33.0	70	183	80-120	7	20	M1
Magnesium	mg/L	1.1	20	20	22.4	24.2	106	115	80-120	8	20	
Manganese	mg/L	0.17	2	2	2.4	2.5	110	118	80-120	7	20	
Potassium	mg/L	0.99	20	20	21.8	23.1	104	111	80-120	6	20	
Sodium	mg/L	3.5	20	20	24.1	25.5	103	110	80-120	6	20	

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QUALITY CONTROL DATA

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

QC Batch: 500220
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30482889001, 30482889002, 30482889003, 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

METHOD BLANK: 2421241 Matrix: Water
Associated Lab Samples: 30482889001, 30482889002, 30482889003, 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	04/29/22 16:36	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	04/29/22 16:36	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	04/29/22 16:36	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	04/29/22 16:36	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	04/29/22 16:36	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	04/29/22 16:36	

LABORATORY CONTROL SAMPLE: 2421242

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	42.6	107	80-120	
Iron, Dissolved	mg/L	2	2.3	113	80-120	
Magnesium, Dissolved	mg/L	20	22.0	110	80-120	
Manganese, Dissolved	mg/L	2	2.2	112	80-120	
Potassium, Dissolved	mg/L	20	21.3	107	80-120	
Sodium, Dissolved	mg/L	20	21.1	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2421243 2421244

Parameter	Units	30482496001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	3.4	40	40	42.9	42.8	99	98	80-120	0	20	
Iron, Dissolved	mg/L	27.3	2	2	28.9	28.4	79	54	80-120	2	20	M1
Magnesium, Dissolved	mg/L	1.1	20	20	21.5	21.6	102	102	80-120	0	20	
Manganese, Dissolved	mg/L	0.16	2	2	2.2	2.2	104	104	80-120	0	20	
Potassium, Dissolved	mg/L	0.93	20	20	20.9	20.9	100	100	80-120	0	20	
Sodium, Dissolved	mg/L	3.4	20	20	23.1	23.1	99	98	80-120	0	20	

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QUALITY CONTROL DATA

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

QC Batch: 500036
QC Batch Method: EPA 3020A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30482889001, 30482889002, 30482889003, 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

METHOD BLANK: 2420175
Matrix: Water
Associated Lab Samples: 30482889001, 30482889002, 30482889003, 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00030	04/27/22 12:46	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	04/27/22 12:46	
Barium	mg/L	0.0025 U	0.0025	0.00098	04/27/22 12:46	
Beryllium	mg/L	0.00050 U	0.00050	0.00015	04/27/22 12:46	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	04/27/22 12:46	
Chromium	mg/L	0.0025 U	0.0025	0.00050	04/27/22 12:46	
Cobalt	mg/L	0.0025 U	0.0025	0.00031	04/27/22 12:46	
Copper	mg/L	0.0025 U	0.0025	0.00064	04/27/22 12:46	
Lead	mg/L	0.00050 U	0.00050	0.00045	04/27/22 12:46	
Nickel	mg/L	0.0025 U	0.0025	0.00065	04/27/22 12:46	
Selenium	mg/L	0.0025 U	0.0025	0.00084	04/27/22 12:46	
Silver	mg/L	0.0025 U	0.0025	0.00053	04/27/22 12:46	
Thallium	mg/L	0.00050 U	0.00050	0.000081	04/27/22 12:46	
Vanadium	mg/L	0.0025 U	0.0025	0.00042	04/27/22 12:46	
Zinc	mg/L	0.0050 U	0.0050	0.0049	04/27/22 12:46	

LABORATORY CONTROL SAMPLE: 2420176

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.021	104	80-120	
Arsenic	mg/L	0.1	0.098	98	80-120	
Barium	mg/L	0.1	0.096	96	80-120	
Beryllium	mg/L	0.02	0.020	98	80-120	
Cadmium	mg/L	0.02	0.019	94	80-120	
Chromium	mg/L	0.1	0.094	94	80-120	
Cobalt	mg/L	0.1	0.093	93	80-120	
Copper	mg/L	0.1	0.093	93	80-120	
Lead	mg/L	0.02	0.019	96	80-120	
Nickel	mg/L	0.1	0.094	94	80-120	
Selenium	mg/L	0.1	0.10	100	80-120	
Silver	mg/L	0.1	0.096	96	80-120	
Thallium	mg/L	0.02	0.019	96	80-120	
Vanadium	mg/L	0.1	0.095	95	80-120	
Zinc	mg/L	0.2	0.19	95	80-120	

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QUALITY CONTROL DATA

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2420177 2420178

Parameter	Units	30482889001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00050 U	0.02	0.02	0.021	0.021	107	107	75-125	0	20	
Arsenic	mg/L	0.00099J	0.1	0.1	0.099	0.099	98	98	75-125	1	20	
Barium	mg/L	0.012	0.1	0.1	0.11	0.11	99	99	75-125	0	20	
Beryllium	mg/L	0.0011	0.02	0.02	0.021	0.021	99	101	75-125	2	20	
Cadmium	mg/L	0.00050 U	0.02	0.02	0.019	0.019	97	96	75-125	1	20	
Chromium	mg/L	0.0010J	0.1	0.1	0.10	0.098	100	97	75-125	2	20	
Cobalt	mg/L	0.0011J	0.1	0.1	0.10	0.099	99	98	75-125	2	20	
Copper	mg/L	0.0025 U	0.1	0.1	0.099	0.097	98	97	75-125	2	20	
Lead	mg/L	0.00050 U	0.02	0.02	0.020	0.020	99	99	75-125	1	20	
Nickel	mg/L	0.0026	0.1	0.1	0.099	0.10	96	97	75-125	1	20	
Selenium	mg/L	0.0025 U	0.1	0.1	0.10	0.099	103	98	75-125	5	20	
Silver	mg/L	0.0025 U	0.1	0.1	0.097	0.098	97	98	75-125	1	20	
Thallium	mg/L	0.00050 U	0.02	0.02	0.017	0.017	85	85	75-125	0	20	
Vanadium	mg/L	0.0025 U	0.1	0.1	0.099	0.098	99	98	75-125	1	20	
Zinc	mg/L	0.0057	0.2	0.2	0.20	0.20	96	97	75-125	1	20	

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QUALITY CONTROL DATA

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

QC Batch: 500929
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30482889001, 30482889002, 30482889003, 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

METHOD BLANK: 2424770
Matrix: Water
Associated Lab Samples: 30482889001, 30482889002, 30482889003, 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	05/04/22 15:20	

LABORATORY CONTROL SAMPLE: 2424771

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.0091	91	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2424826 2424827

Parameter	Units	30482845002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.01	0.01	0.0052	0.0090	52	90	80-120	53	20	M1,R1

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QUALITY CONTROL DATA

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

QC Batch: 500239
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30482889001, 30482889002, 30482889003, 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

METHOD BLANK: 2421307
Matrix: Water
Associated Lab Samples: 30482889001, 30482889002, 30482889003, 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.022	04/27/22 19:41	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	04/27/22 19:41	
1,1,1,2-Tetrachloroethane (S)	%.	98	60-140		04/27/22 19:41	

LABORATORY CONTROL SAMPLE: 2421308

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.20	81	85-115	L2
1,2-Dibromoethane (EDB)	ug/L	0.25	0.22	86	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			102	60-140	CH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2421309 2421310

Parameter	Units	30482889001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.042 U	0.41	0.42	0.34	0.33	81	81	60-140	0	25	
1,2-Dibromoethane (EDB)	ug/L	0.042 U	0.41	0.42	0.37	0.37	90	89	60-140	0	25	
1,1,1,2-Tetrachloroethane (S)	%.						99	93	60-140			

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QUALITY CONTROL DATA

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

QC Batch: 500713
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

METHOD BLANK: 2423763
Matrix: Water
Associated Lab Samples: 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.022	04/29/22 09:04	CH
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	04/29/22 09:04	CH
1,1,1,2-Tetrachloroethane (S)	%.	113	60-140		04/29/22 09:04	CH

LABORATORY CONTROL SAMPLE: 2423764

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.24	95	85-115	CH
1,2-Dibromoethane (EDB)	ug/L	0.25	0.25	98	85-115	CH
1,1,1,2-Tetrachloroethane (S)	%.			116	60-140	CH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2423765 2423766

Parameter	Units	30483480001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.041 U	0.4	0.41	0.36	0.35	88	85	60-140	2	25	CH
1,2-Dibromoethane (EDB)	ug/L	0.041 U	0.4	0.41	0.36	0.37	88	89	60-140	3	25	CH
1,1,1,2-Tetrachloroethane (S)	%.						104	106	60-140			CH

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QUALITY CONTROL DATA

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

QC Batch: 501255
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30482889002, 30482889003

METHOD BLANK: 2426136 Matrix: Water
Associated Lab Samples: 30482889002, 30482889003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.022	05/05/22 14:13	CH
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	05/05/22 14:13	CH
1,1,1,2-Tetrachloroethane (S)	%.	125	60-140		05/05/22 14:13	CH,IH

LABORATORY CONTROL SAMPLE: 2426137

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.23	91	85-115	CH
1,2-Dibromoethane (EDB)	ug/L	0.25	0.26	102	85-115	CH
1,1,1,2-Tetrachloroethane (S)	%.			110	60-140	CH,IH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2426138 2426139

Parameter	Units	30483775001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	ND	0.41	0.4	0.33	0.36	80	90	60-140	11	25	CH
1,2-Dibromoethane (EDB)	ug/L	ND	0.41	0.4	0.36	0.39	89	96	60-140	6	25	CH
1,1,1,2-Tetrachloroethane (S)	%.						91	101	60-140			CH,IH

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QUALITY CONTROL DATA

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

QC Batch: 501814
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30482889001, 30482889002, 30482889003

METHOD BLANK: 2428679 Matrix: Water
Associated Lab Samples: 30482889001, 30482889002, 30482889003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	1.0J	10.0	1.0	05/03/22 20:03	

LABORATORY CONTROL SAMPLE: 2428680

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2428681 2428682

Parameter	Units	30483110002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	12.0	50	50	40.0	64.0	56	104	85-115	46	20	ML,R1

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QUALITY CONTROL DATA

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

QC Batch: 502453
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

METHOD BLANK: 2432582 Matrix: Water
Associated Lab Samples: 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	05/05/22 15:25	

LABORATORY CONTROL SAMPLE: 2432583

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2432584 2432585

Parameter	Units	30482889004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	2.0J	50	50	48.0	46.0	92	88	85-115	4	20	

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QUALITY CONTROL DATA

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

QC Batch: 499651
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30482889001, 30482889002, 30482889003, 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

METHOD BLANK: 2418487
Matrix: Water
Associated Lab Samples: 30482889001, 30482889002, 30482889003, 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	04/25/22 14:06	

LABORATORY CONTROL SAMPLE: 2418488

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	946	95	85-115	

SAMPLE DUPLICATE: 2418489

Parameter	Units	30482809015 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	134	137	2	5	

SAMPLE DUPLICATE: 2418490

Parameter	Units	30482889009 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	96.0	96.0	0	5	

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QUALITY CONTROL DATA

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

QC Batch: 499637
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30482889001, 30482889002, 30482889003, 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

METHOD BLANK: 2418457
Matrix: Water
Associated Lab Samples: 30482889001, 30482889002, 30482889003, 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.044	04/25/22 11:45	

LABORATORY CONTROL SAMPLE: 2418458

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.1	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2418459 2418460

Parameter	Units	30483071002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	4.8	4	4	9.0	9.1	106	108	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2418483 2418484

Parameter	Units	30482889003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.1	4.2	103	105	90-110	2	20	

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QUALITY CONTROL DATA

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

QC Batch: 500595
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30482889001, 30482889002, 30482889003, 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

METHOD BLANK: 2423009
Matrix: Water
Associated Lab Samples: 30482889001, 30482889002, 30482889003, 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	04/28/22 17:29	

METHOD BLANK: 2423010
Matrix: Water
Associated Lab Samples: 30482889001, 30482889002, 30482889003, 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	04/28/22 17:29	

LABORATORY CONTROL SAMPLE: 2423011

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	307	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2423012 2423013

Parameter	Units	30483872002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	55.5	150	150	214	226	106	113	90-110	5	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2423014 2423015

Parameter	Units	30482889005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	5.6J	150	150	162	160	104	103	90-110	1	10	MH

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QUALITY CONTROL DATA

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

QC Batch: 502321
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30482889001, 30482889002, 30482889003, 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

METHOD BLANK: 2431997
Matrix: Water
Associated Lab Samples: 30482889001, 30482889002, 30482889003, 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/05/22 15:08	

LABORATORY CONTROL SAMPLE: 2431998

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	18.4	92	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2431999 2432000

Parameter	Units	30482889001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1.5J	20	20	17.1	16.9	78	77	85-115	1	20	ML

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QUALITY CONTROL DATA

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

QC Batch: 502042
QC Batch Method: SM 4500NO3-F-2011
Analysis Method: SM 4500NO3-F-2011
Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30482889001, 30482889002, 30482889003, 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

METHOD BLANK: 2430135 Matrix: Water
Associated Lab Samples: 30482889001, 30482889002, 30482889003, 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	05/04/22 15:44	

METHOD BLANK: 2430187 Matrix: Water
Associated Lab Samples: 30482889001, 30482889002, 30482889003, 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	05/04/22 15:47	

LABORATORY CONTROL SAMPLE: 2430136

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	3.7	93	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2430137 2430138

Parameter	Units	30482889001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.10 U	5	5	3.5	3.6	70	70	85-115	0	20	ML

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QUALITY CONTROL DATA

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

QC Batch: 499496
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30482889001, 30482889002, 30482889003, 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

METHOD BLANK: 2417715
Matrix: Water
Associated Lab Samples: 30482889001, 30482889002, 30482889003, 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	04/22/22 19:31	

LABORATORY CONTROL SAMPLE: 2417716

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	27.3	91	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2417717 2417718

Parameter	Units	30482889001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.0 U	20	20	19.6	19.8	96	96	85-115	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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(724)850-5600

QUALITY CONTROL DATA

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

QC Batch: 499263
QC Batch Method: SM 4500NO2-B-2011
Analysis Method: SM 4500NO2-B-2011
Analysis Description: SM4500-NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30482889001, 30482889002, 30482889003, 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

METHOD BLANK: 2416643 Matrix: Water
Associated Lab Samples: 30482889001, 30482889002, 30482889003, 30482889004, 30482889005, 30482889006, 30482889007, 30482889008, 30482889009, 30482889010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	04/22/22 10:44	

LABORATORY CONTROL SAMPLE: 2416644

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.10	104	90-110	

MATRIX SPIKE SAMPLE: 2416645

Parameter	Units	30482889008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.024	0.1	0.15	127	85-115	MH

SAMPLE DUPLICATE: 2416721

Parameter	Units	30482889008 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	0.024	0.024	1	20	

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QUALIFIERS

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30482889001
[1] Sample pH for 8011 is 6

Sample: 30482889002
[1] Sample pH for 8011 is 6

Sample: 30482889003
[1] Sample pH for 8011 is 5

Sample: 30482889004
[1] Sample pH for 8011 is 6

Sample: 30482889005
[1] Sample pH for 8011 is 6

Sample: 30482889006
[1] Sample pH for 8011 is 6

Sample: 30482889007
[1] Sample pH for 8011 is 5

Sample: 30482889008
[1] Sample pH for 8011 is 5

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QUALIFIERS

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

SAMPLE QUALIFIERS

Sample: 30482889009

[1] Sample pH for 8011 is 6

Sample: 30482889010

[1] Sample pH for 8011 is 6

ANALYTE QUALIFIERS

1c	ALK TV: 0 mg/L
2c	ALK TV: 2 mg/L
3c	Alk TV: 4mg/L
4c	Alk TV: 8mg/L
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
H2	Extraction or preparation conducted outside EPA method holding time.
IH	This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.
P2	Re-extraction or re-analysis could not be performed due to insufficient sample amount.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30482889001	**TW-9**	EPA 3010A	500216	EPA 6010D	501003
30482889002	**TW-9B**	EPA 3010A	500216	EPA 6010D	501003
30482889003	**TW-9C**	EPA 3010A	500216	EPA 6010D	501003
30482889004	**TW-10A**	EPA 3010A	500216	EPA 6010D	501003
30482889005	**TW-11A**	EPA 3010A	500216	EPA 6010D	501003
30482889006	**TW-12**	EPA 3010A	500216	EPA 6010D	501003
30482889007	**TW-13**	EPA 3010A	500216	EPA 6010D	501003
30482889008	**TW-14**	EPA 3010A	500216	EPA 6010D	501003
30482889009	**TW-14A**	EPA 3010A	500216	EPA 6010D	501003
30482889010	**TW-14B**	EPA 3010A	500216	EPA 6010D	501003
30482889001	**TW-9**	EPA 3010A	500220	EPA 6010D	500997
30482889002	**TW-9B**	EPA 3010A	500220	EPA 6010D	500997
30482889003	**TW-9C**	EPA 3010A	500220	EPA 6010D	500997
30482889004	**TW-10A**	EPA 3010A	500220	EPA 6010D	500997
30482889005	**TW-11A**	EPA 3010A	500220	EPA 6010D	500997
30482889006	**TW-12**	EPA 3010A	500220	EPA 6010D	500997
30482889007	**TW-13**	EPA 3010A	500220	EPA 6010D	500997
30482889008	**TW-14**	EPA 3010A	500220	EPA 6010D	500997
30482889009	**TW-14A**	EPA 3010A	500220	EPA 6010D	500997
30482889010	**TW-14B**	EPA 3010A	500220	EPA 6010D	500997
30482889001	**TW-9**	EPA 3020A	500036	EPA 6020B	500354
30482889002	**TW-9B**	EPA 3020A	500036	EPA 6020B	500354
30482889003	**TW-9C**	EPA 3020A	500036	EPA 6020B	500354
30482889004	**TW-10A**	EPA 3020A	500036	EPA 6020B	500354
30482889005	**TW-11A**	EPA 3020A	500036	EPA 6020B	500354
30482889006	**TW-12**	EPA 3020A	500036	EPA 6020B	500354
30482889007	**TW-13**	EPA 3020A	500036	EPA 6020B	500354
30482889008	**TW-14**	EPA 3020A	500036	EPA 6020B	500354
30482889009	**TW-14A**	EPA 3020A	500036	EPA 6020B	500354
30482889010	**TW-14B**	EPA 3020A	500036	EPA 6020B	500354
30482889001	**TW-9**	EPA 7470A	500929	EPA 7470A	502024
30482889002	**TW-9B**	EPA 7470A	500929	EPA 7470A	502024
30482889003	**TW-9C**	EPA 7470A	500929	EPA 7470A	502024
30482889004	**TW-10A**	EPA 7470A	500929	EPA 7470A	502024
30482889005	**TW-11A**	EPA 7470A	500929	EPA 7470A	502024
30482889006	**TW-12**	EPA 7470A	500929	EPA 7470A	502024
30482889007	**TW-13**	EPA 7470A	500929	EPA 7470A	502024
30482889008	**TW-14**	EPA 7470A	500929	EPA 7470A	502024
30482889009	**TW-14A**	EPA 7470A	500929	EPA 7470A	502024
30482889010	**TW-14B**	EPA 7470A	500929	EPA 7470A	502024
30482889001	**TW-9**	EPA 8011	500239	EPA 8011	500437
30482889002	**TW-9B**	EPA 8011	500239	EPA 8011	500437
30482889002	**TW-9B**	EPA 8011	501255	EPA 8011	501392
30482889003	**TW-9C**	EPA 8011	500239	EPA 8011	500437
30482889003	**TW-9C**	EPA 8011	501255	EPA 8011	501392

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30482889004	**TW-10A**	EPA 8011	500239	EPA 8011	500437
30482889004	**TW-10A**	EPA 8011	500713	EPA 8011	500810
30482889005	**TW-11A**	EPA 8011	500239	EPA 8011	500437
30482889005	**TW-11A**	EPA 8011	500713	EPA 8011	500810
30482889006	**TW-12**	EPA 8011	500239	EPA 8011	500437
30482889006	**TW-12**	EPA 8011	500713	EPA 8011	500810
30482889007	**TW-13**	EPA 8011	500239	EPA 8011	500437
30482889007	**TW-13**	EPA 8011	500713	EPA 8011	500810
30482889008	**TW-14**	EPA 8011	500239	EPA 8011	500437
30482889008	**TW-14**	EPA 8011	500713	EPA 8011	500810
30482889009	**TW-14A**	EPA 8011	500239	EPA 8011	500437
30482889009	**TW-14A**	EPA 8011	500713	EPA 8011	500810
30482889010	**TW-14B**	EPA 8011	500239	EPA 8011	500437
30482889010	**TW-14B**	EPA 8011	500713	EPA 8011	500810
30482889001	**TW-9**	SM 2320B-2011	501814		
30482889002	**TW-9B**	SM 2320B-2011	501814		
30482889003	**TW-9C**	SM 2320B-2011	501814		
30482889004	**TW-10A**	SM 2320B-2011	502453		
30482889005	**TW-11A**	SM 2320B-2011	502453		
30482889006	**TW-12**	SM 2320B-2011	502453		
30482889007	**TW-13**	SM 2320B-2011	502453		
30482889008	**TW-14**	SM 2320B-2011	502453		
30482889009	**TW-14A**	SM 2320B-2011	502453		
30482889010	**TW-14B**	SM 2320B-2011	502453		
30482889001	**TW-9**	SM 2540C-2011	499651		
30482889002	**TW-9B**	SM 2540C-2011	499651		
30482889003	**TW-9C**	SM 2540C-2011	499651		
30482889004	**TW-10A**	SM 2540C-2011	499651		
30482889005	**TW-11A**	SM 2540C-2011	499651		
30482889006	**TW-12**	SM 2540C-2011	499651		
30482889007	**TW-13**	SM 2540C-2011	499651		
30482889008	**TW-14**	SM 2540C-2011	499651		
30482889009	**TW-14A**	SM 2540C-2011	499651		
30482889010	**TW-14B**	SM 2540C-2011	499651		
30482889001	**TW-9**	EPA 350.1	499637	EPA 350.1	499664
30482889002	**TW-9B**	EPA 350.1	499637	EPA 350.1	499664
30482889003	**TW-9C**	EPA 350.1	499637	EPA 350.1	499664
30482889004	**TW-10A**	EPA 350.1	499637	EPA 350.1	499664
30482889005	**TW-11A**	EPA 350.1	499637	EPA 350.1	499664
30482889006	**TW-12**	EPA 350.1	499637	EPA 350.1	499664

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30482889007	**TW-13**	EPA 350.1	499637	EPA 350.1	499664
30482889008	**TW-14**	EPA 350.1	499637	EPA 350.1	499664
30482889009	**TW-14A**	EPA 350.1	499637	EPA 350.1	499664
30482889010	**TW-14B**	EPA 350.1	499637	EPA 350.1	499664
30482889001	**TW-9**	EPA 410.4	500595	EPA 410.4	500768
30482889002	**TW-9B**	EPA 410.4	500595	EPA 410.4	500768
30482889003	**TW-9C**	EPA 410.4	500595	EPA 410.4	500768
30482889004	**TW-10A**	EPA 410.4	500595	EPA 410.4	500768
30482889005	**TW-11A**	EPA 410.4	500595	EPA 410.4	500768
30482889006	**TW-12**	EPA 410.4	500595	EPA 410.4	500768
30482889007	**TW-13**	EPA 410.4	500595	EPA 410.4	500768
30482889008	**TW-14**	EPA 410.4	500595	EPA 410.4	500768
30482889009	**TW-14A**	EPA 410.4	500595	EPA 410.4	500768
30482889010	**TW-14B**	EPA 410.4	500595	EPA 410.4	500768
30482889001	**TW-9**	SM 4500-Cl-E-2011	502321		
30482889002	**TW-9B**	SM 4500-Cl-E-2011	502321		
30482889003	**TW-9C**	SM 4500-Cl-E-2011	502321		
30482889004	**TW-10A**	SM 4500-Cl-E-2011	502321		
30482889005	**TW-11A**	SM 4500-Cl-E-2011	502321		
30482889006	**TW-12**	SM 4500-Cl-E-2011	502321		
30482889007	**TW-13**	SM 4500-Cl-E-2011	502321		
30482889008	**TW-14**	SM 4500-Cl-E-2011	502321		
30482889009	**TW-14A**	SM 4500-Cl-E-2011	502321		
30482889010	**TW-14B**	SM 4500-Cl-E-2011	502321		
30482889001	**TW-9**	SM 4500NO3-F-2011	502042		
30482889002	**TW-9B**	SM 4500NO3-F-2011	502042		
30482889003	**TW-9C**	SM 4500NO3-F-2011	502042		
30482889004	**TW-10A**	SM 4500NO3-F-2011	502042		
30482889005	**TW-11A**	SM 4500NO3-F-2011	502042		
30482889006	**TW-12**	SM 4500NO3-F-2011	502042		
30482889007	**TW-13**	SM 4500NO3-F-2011	502042		
30482889008	**TW-14**	SM 4500NO3-F-2011	502042		
30482889009	**TW-14A**	SM 4500NO3-F-2011	502042		
30482889010	**TW-14B**	SM 4500NO3-F-2011	502042		
30482889001	**TW-9**	EPA 9038	499496		
30482889002	**TW-9B**	EPA 9038	499496		
30482889003	**TW-9C**	EPA 9038	499496		
30482889004	**TW-10A**	EPA 9038	499496		
30482889005	**TW-11A**	EPA 9038	499496		
30482889006	**TW-12**	EPA 9038	499496		
30482889007	**TW-13**	EPA 9038	499496		
30482889008	**TW-14**	EPA 9038	499496		
30482889009	**TW-14A**	EPA 9038	499496		
30482889010	**TW-14B**	EPA 9038	499496		
30482889001	**TW-9**	SM 4500NO2-B-2011	499263		
30482889002	**TW-9B**	SM 4500NO2-B-2011	499263		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MILLERSVILLE LANDFILL
Pace Project No.: 30482889

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30482889003	**TW-9C**	SM 4500NO2-B-2011	499263		
30482889004	**TW-10A**	SM 4500NO2-B-2011	499263		
30482889005	**TW-11A**	SM 4500NO2-B-2011	499263		
30482889006	**TW-12**	SM 4500NO2-B-2011	499263		
30482889007	**TW-13**	SM 4500NO2-B-2011	499263		
30482889008	**TW-14**	SM 4500NO2-B-2011	499263		
30482889009	**TW-14A**	SM 4500NO2-B-2011	499263		
30482889010	**TW-14B**	SM 4500NO2-B-2011	499263		

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WO#: 30482889

30482889

EMA ENVIRONMENTA LLC

207 East Sixth Street ▪ Lititz, Pennsylvan .com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - SPRING 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	(1) TOTAL METALS	(2) TOTAL + DISS. METALS	ALKALINITY, TDS	HARDNESS, Cl	AMMONIA	NITRATE	SO4, COD		METHOD 8011 - EDB + DBCP			
1	TW-9	7	4/20/22	1440	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓			001
2	TW-9B			1520															002
3	TW-9C			1600															003
4	TW-10A		4/21/22	845															004
5	TW-11A			930															005
6	TW-12			1050															006
7	TW-13			1135															007
8	TW-14			1410															008
9	TW-14A			1330															009
10	TW-14B			1250															010
11																			
12																			

	Signature	Date	Time	Comments
Relinquished by	[illegible]	4/21/22		(1) TOTAL METALS - 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni,
Received by	[illegible]	4/21/22	15:00	Se, Ag, Tl, V, Zn / 7470 - Hg
Relinquished by	[illegible]	04/21/22	1740	(2) TOTAL + DISS. METALS: 6010 - Ca, Fe, Mg, Mn, K, Na
Received by	RDS PACE	4-21-22	1810	PACE - WV - METALS
Relinquished by	RDS PACE	4-21-22	2235	PACE - G-BURG - WET CHEM + 8011
Received by	[illegible]	4-21-22	2235	LEVEL 2 REPORT

Cooler Temp on Arrival: 1.6, 1.1 Deg. C

Rev. Aug. 2018

WO#: 30482889

PM: SLS Due Date: 05/06/22
CLIENT: ENV MONITOR

EMA EN ASSESSMENT, LLC
207 East Sixth Street • brownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - SPRING 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	(1) Total Metals	(2) Total + Diss. Metals	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO_4, COD	Method Boil - COD + DRCP		
1	TW-9	7	4/20/22	1440	✓		GW	✓	✓	✓	✓	✓	✓	✓	✓		
2	TW-9B			1520													
3	TW-9C		↓	1600													
4	TW-10A		4/21/22	845													
5	TW-11A			930													
6	TW-12			1050													
7	TW-13			1135													
8	TW-14			1410													
9	TW-14A			1330													
10	TW-14B	↓	↓	1250	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓		
11																	
12	THIS IS COPY OF COC FROM 4/21/22							TW-9 - 8011 MALS NOT SHIPPED ON 4/20/22									

	Signature	Date	Time
Relinquished by	[illegible]	4/21/22	
Received by	[illegible]	4/21/22	14:43
Relinquished by	[illegible]	04/22/22	11:00
Received by	ROS PACE	4-22-22	1235
Relinquished by	ROS PACE	4-22-22	2215
Received by	[illegible]	4-22-22	2215

Comments

(1) TOTAL METALS - 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn / 7470 - Hg
(2) TOTAL + DISS. METALS: 6010 - Ca, Fe, Mg, Mn, K, Na
PACE - NW - METALS
PACE - G BUILD - WET CHEM + BOIL
LEVEL 2 REPORT

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

30482889

Millersville Landfill, Anne Arundel County, MD		
	Pace, Beaver, WV	
	Method 6020 - ICPMS	
Parameter	RL	MDL
	(mg/l)	
TOTAL METALS - mg/l		
Antimony	0.0005	
Arsenic	0.0025	0.0002473
Barium	0.0025	
Beryllium	0.0005	
Cadmium	0.0005	
Chromium	0.0025	
Cobalt	0.0025	
Copper	0.0025	
Lead	0.0005	
Nickel	0.0025	
Selenium	0.0025	
Silver	0.0025	
Thallium	0.0005	
Vanadium	0.0025	
Zinc	0.005	
	Pace, Beaver, WV	
TOTAL METALS - mg/l	Method 6010 - ICP	
Calcium	0.5	0.028
Iron	0.05	0.0076
Magnesium	0.5	0.047
Manganese	0.005	0.00043
Potassium	0.5	0.19
Sodium	0.5	0.148
	Pace, Beaver, WV	
	Method 7470A	
Mercury	0.0005	0.00025
	Pace - Greensburg, PA	
Volatile Organics - ug/l	Method 8011 - ug/l	
DBCP	0.041	
EDB	0.041	
GENERAL CHEMISTRY - mg/l	Pace - Greensburg, PA	
Alkalinity - SM 2320B	10	1
Ammonia - EPA 350.1	0.1	0.0445
COD - EPA 410.4	25	4.6532
Chloride - EPA 300.0	3	0.06683
Hardness - 2340B		
Nitrate - EPA 300.0	0.1	0.0238
Sulfate - EPA 300.0	10	4.6702
Total dissolved solids - SM2540C	10	10

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EMA Project # 30482889

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Label MJS
LIMS Login MJS

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Thermometer Used 116 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 1.6, 1.1 °C Correction Factor: 10.0 °C Final Temp: 1.6, 1.1 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# 10D2811	Date and Initials of person examining contents: MJS 4-22-22
Chain of Custody Present:	✓			1.	
Chain of Custody Filled Out:	✓			2.	
Chain of Custody Relinquished:	✓			3.	
Sampler Name & Signature on COC:		✓		4.	
Sample Labels match COC: -Includes date/time/ID Matrix: WA	✓			5.	
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):	✓			7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.	
Containers Intact:	✓			11.	
Orthophosphate field filtered			✓	12.	
Hex Cr Aqueous sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.	
All containers meet method preservation requirements.	✓			Initial when completed MJS	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:		✓		18.	
Trip Blank Custody Seals Present			✓		
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed:	Date: / Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: No EDB vials were received for sample TW-9

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EMA Project # 30482889

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Label MJS
LIMS Login MJS

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Thermometer Used 16 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 3.8 °C Correction Factor: 0.0 °C Final Temp: 3.8 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# NA	Date and Initials of person examining contents: MJS 4-25-00
Chain of Custody Present:	✓			1.	
Chain of Custody Filled Out:	✓			2.	
Chain of Custody Relinquished:	✓			3.	
Sampler Name & Signature on COC:	✓			4.	
Sample Labels match COC: -Includes date/time/ID Matrix: Wt	✓			5.	
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):		✓		7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.	
Containers Intact:	✓			11.	
Orthophosphate field filtered			✓	12.	
Hex Cr Aqueous sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix			✓	16.	
All containers meet method preservation requirements.	✓			Initial when completed MJS	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:			✓	18.	
Trip Blank Custody Seals Present			✓		
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed:	Date: / Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

WO# : 30482889

30482889

LIMS30 Internal Shipping Manifest

COOLER 22

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	22	Cooler temp (rcvd) °C	4.0
Packaged on Ice (Y/N)	Yes	Correction Factor	0
Shipping Method	Courier	Cooler temp (corr) °C	4.0
Tracking #	N/A	IR GUN ID	25
PWS* Drinking water?	No	Received on ice?	Y

4

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[signature]	GBUR	4-22-22	1730
Received	[signature]	BEAV	4-23-22	1:19
Relinquished				
Received				
Relinquished				
Received				

Loader	Scan Date	Container ID	Type	LIMS Lab ID	LIMS Work Order
MF	4/22/2022	30482889001 BP3N1/2	BP3N	30482889001	30482889
MF	4/22/2022	30482889001 BP3N2/2	BP3N	30482889001	30482889
MF	4/22/2022	30482889002 BP3N1/2	BP3N	30482889002	30482889
MF	4/22/2022	30482889002 BP3N2/2	BP3N	30482889002	30482889
MF	4/22/2022	30482889003 BP3N1/2	BP3N	30482889003	30482889
MF	4/22/2022	30482889003 BP3N2/2	BP3N	30482889003	30482889
MF	4/22/2022	30482889004 BP3N1/2	BP3N	30482889004	30482889
MF	4/22/2022	30482889004 BP3N2/2	BP3N	30482889004	30482889
MF	4/22/2022	30482889005 BP3N1/2	BP3N	30482889005	30482889
MF	4/22/2022	30482889005 BP3N2/2	BP3N	30482889005	30482889
MF	4/22/2022	30482889006 BP3N1/2	BP3N	30482889006	30482889
MF	4/22/2022	30482889006 BP3N2/2	BP3N	30482889006	30482889
MF	4/22/2022	30482889007 BP3N1/2	BP3N	30482889007	30482889
MF	4/22/2022	30482889007 BP3N2/2	BP3N	30482889007	30482889
MF	4/22/2022	30482889008 BP3N1/2	BP3N	30482889008	30482889
MF	4/22/2022	30482889008 BP3N2/2	BP3N	30482889008	30482889
MF	4/22/2022	30482891002 BP1U1/1	BP1U	30482891002	30482891
MF	4/22/2022	30482891001 BP1U1/1	BP1U	30482891001	30482891
MF	4/22/2022	30482889010 BP3N2/2	BP3N	30482889010	30482889
MF	4/22/2022	30482889010 BP3N1/2	BP3N	30482889010	30482889
MF	4/22/2022	30482889009 BP3N1/2	BP3N	30482889009	30482889
MF	4/22/2022	30482889009 BP3N2/2	BP3N	30482889009	30482889
MF	4/22/2022	30482966007 BP3N1/1	BP3N	30482966007	30482966
MF	4/22/2022	30482957005 BP3U1/1	BP3U	30482957005	30482957
MF	4/22/2022	30482957007 BP3U1/1	BP3U	30482957007	30482957
MF	4/22/2022	30482957001 BP3U1/1	BP3U	30482957001	30482957
MF	4/22/2022	30482957004 BP3U1/1	BP3U	30482957004	30482957
MF	4/22/2022	30482957006 BP3U1/1	BP3U	30482957006	30482957
MF	4/22/2022	30482957003 BP3U1/1	BP3U	30482957003	30482957
MF	4/22/2022	30482957002 BP3U1/1	BP3U	30482957002	30482957

LIMS73 Lab Sample Condition Upon Receipt (West V

WO#: 30482889
PM: SLS **Due Date: 05/06/22**
CLIENT: ENV MONITOR

Pace Analytical

Client Name: _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☑ Other: 3rd party courier

Tracking #: _____

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 23 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** 4.6 °C Correction Factor: 0 °C Final Temp: 4.6 °C

Comments:

pH paper Lot#	Date and Initials of person examining contents:
325326	SC 4/25/22

COOLER 22

	Yes	No	N/A	
Chain of Custody Present:			✓	1.
Chain of Custody Filled Out:			✓	2. } Manifest
Chain of Custody Relinquished:			✓	3.
Sampler Name & Signature on COC:			✓	4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT			✓	5. Lab Labeled by: NK Checked by: NK
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered:			✓	13.
-pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓	
Filtered volume received for Dissolved tests:	✓			14.
All containers have been checked for preservation:	✓			15.
exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix				
All containers meet method preservation requirements:	✓			Initial when completed: SC Date: 4/25/22
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present:			✓	17.
Trip Blank Custody Seals Present:			✓	
				Initial when completed: SC Date: 4/25/22

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

***PM review** is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

ENV-FRM-BEAV-0058rev.01
Revision Date: 3/8/2021

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

June 01, 2022

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-SPRING 2022
Pace Project No.: 30483865

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on April 26, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Rachel D Christner

Rachel Christner for
Steven L. Smith
steve.l.smith@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Florida: Cert E871149 SEKS WET
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver

225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30483865001	**TW-15**	Water	04/26/22 09:50	04/26/22 22:15
30483865002	**TW-15B**	Water	04/26/22 10:25	04/26/22 22:15
30483865003	**TW-16**	Water	04/26/22 11:45	04/26/22 22:15
30483865004	**TW-17**	Water	04/26/22 12:45	04/26/22 22:15
30483865005	**TW-17A**	Water	04/26/22 13:20	04/26/22 22:15
30483865006	**TW-18**	Water	04/26/22 14:15	04/26/22 22:15
30483865007	**TW-19**	Water	04/26/22 15:00	04/26/22 22:15
30483865008	**TW-16A**	Water	04/26/22 11:10	04/26/22 22:15

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30483865001	**TW-15**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30483865002	**TW-15B**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30483865003	**TW-16**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30483865004	**TW-17**	EPA 6010D	MEH, MFC	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30483865005	**TW-17A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30483865006	**TW-18**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30483865007	**TW-19**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30483865008	**TW-16A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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(724)850-5600

PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Date: June 01, 2022

TW-15 (Lab ID: 30483865001)

- Sample pH for 8011 is 6

TW-15B (Lab ID: 30483865002)

- Sample pH for 8011 is 5

TW-16 (Lab ID: 30483865003)

- Sample pH for 8011 is 5

TW-17 (Lab ID: 30483865004)

- Sample pH for 8011 is 5

TW-17A (Lab ID: 30483865005)

- Sample pH for 8011 is 5

TW-18 (Lab ID: 30483865006)

- Sample pH for 8011 is 5

TW-19 (Lab ID: 30483865007)

- Sample pH for 8011 is 6

TW-16A (Lab ID: 30483865008)

- Sample pH for 8011 is 6

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
8 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
8 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
8 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 501193

B: Analyte was detected in the associated method blank.
- BLANK for HBN 501193 [BMPR/279 (Lab ID: 2426005)
  - Vanadium

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
8 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 501346

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30483865005

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2426590)
  - Mercury
- MSD (Lab ID: 2426591)
  - Mercury

R1: RPD value was outside control limits.

- MSD (Lab ID: 2426591)
  - Mercury

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
8 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

QC Batch: 501238

IH: This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.

- BLANK (Lab ID: 2426104)
  - 1,1,1,2-Tetrachloroethane (S)
- LCS (Lab ID: 2426105)
  - 1,1,1,2-Tetrachloroethane (S)
- MS (Lab ID: 2426106)
  - 1,1,1,2-Tetrachloroethane (S)
- MSD (Lab ID: 2426107)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-15 (Lab ID: 30483865001)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-15B (Lab ID: 30483865002)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-16 (Lab ID: 30483865003)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-16A (Lab ID: 30483865008)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-17 (Lab ID: 30483865004)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-17A (Lab ID: 30483865005)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-18 (Lab ID: 30483865006)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-19 (Lab ID: 30483865007)
  - 1,1,1,2-Tetrachloroethane (S)

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

QC Batch: 501238

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- BLANK (Lab ID: 2426104)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- LCS (Lab ID: 2426105)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MS (Lab ID: 2426106)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MSD (Lab ID: 2426107)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-15 (Lab ID: 30483865001)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-15B (Lab ID: 30483865002)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-16 (Lab ID: 30483865003)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-16A (Lab ID: 30483865008)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-17 (Lab ID: 30483865004)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-17A (Lab ID: 30483865005)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-18 (Lab ID: 30483865006)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

QC Batch: 501238

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- TW-19 (Lab ID: 30483865007)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

QC Batch: 501238

S3: Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated sample.

- TW-17 (Lab ID: 30483865004)
  - 1,1,1,2-Tetrachloroethane (S)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
8 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 503165

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30483706001

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2436492)
  - Alkalinity,Total (CaCO3 pH4.5)
- MSD (Lab ID: 2436493)
  - Alkalinity,Total (CaCO3 pH4.5)

Additional Comments:

Analyte Comments:

QC Batch: 503165

1c: Alk TV: -2 mg/L
- TW-15B (Lab ID: 30483865002)
  - Alkalinity,Total (CaCO3 pH4.5)

2c: Alk TV: 1 mg/L
- TW-18 (Lab ID: 30483865006)
  - Alkalinity,Total (CaCO3 pH4.5)

3c: Alk TV: 2 mg/L
- TW-16A (Lab ID: 30483865008)
  - Alkalinity,Total (CaCO3 pH4.5)

4c: Alk TV: 4 mg/L
- TW-17A (Lab ID: 30483865005)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

Analyte Comments:

QC Batch: 503165

- TW-16 (Lab ID: 30483865003)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Method: **SM 2540C-2011**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
8 samples were analyzed for SM 2540C-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
8 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
8 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 501258

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30483865005,30484620002

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MSD (Lab ID: 2426146)
  - Chemical Oxygen Demand

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
8 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 503372

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30483865001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2437414)
  - Chloride
- MSD (Lab ID: 2437415)
  - Chloride

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Method: **SM 4500NO3-F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
8 samples were analyzed for SM 4500NO3-F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
8 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 500427

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30483985001

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2422013)
  - Sulfate
- MSD (Lab ID: 2422014)
  - Sulfate

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: June 01, 2022

General Information:
8 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Sample: TW-15 **Lab ID: 30483865001** Collected: 04/26/22 09:50 Received: 04/26/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.83**	mg/L	0.50	0.083	1	05/02/22 12:17	05/11/22 19:51	7440-70-2	
Iron	**31.7**	mg/L	0.050	0.035	1	05/02/22 12:17	05/11/22 19:51	7439-89-6	
Magnesium	**0.54**	mg/L	0.50	0.047	1	05/02/22 12:17	05/11/22 19:51	7439-95-4	
Manganese	**0.25**	mg/L	0.0050	0.0027	1	05/02/22 12:17	05/11/22 19:51	7439-96-5	
Potassium	**0.94**	mg/L	0.50	0.26	1	05/02/22 12:17	05/11/22 19:51	7440-09-7	
Sodium	**2.1**	mg/L	0.50	0.34	1	05/02/22 12:17	05/11/22 19:51	7440-23-5	
Total Hardness	**4.3**	mg/L	3.3	0.27	1	05/02/22 12:17	05/11/22 19:51		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.87**	mg/L	0.50	0.083	1	05/02/22 09:06	05/12/22 08:22	7440-70-2	
Iron, Dissolved	**21.3**	mg/L	0.050	0.035	1	05/02/22 09:06	05/12/22 08:22	7439-89-6	
Magnesium, Dissolved	**0.57**	mg/L	0.50	0.047	1	05/02/22 09:06	05/12/22 08:22	7439-95-4	
Manganese, Dissolved	**0.25**	mg/L	0.0050	0.0027	1	05/02/22 09:06	05/12/22 08:22	7439-96-5	
Potassium, Dissolved	**0.83**	mg/L	0.50	0.26	1	05/02/22 09:06	05/12/22 08:22	7440-09-7	
Sodium, Dissolved	**2.0**	mg/L	0.50	0.34	1	05/02/22 09:06	05/12/22 08:22	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/02/22 07:59	05/02/22 14:55	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/02/22 07:59	05/02/22 14:55	7440-38-2	
Barium	**0.015**	mg/L	0.0025	0.00098	1	05/02/22 07:59	05/02/22 14:55	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	05/02/22 07:59	05/02/22 14:55	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/02/22 07:59	05/02/22 14:55	7440-43-9	
Chromium	**0.0015J**	mg/L	0.0025	0.00050	1	05/02/22 07:59	05/02/22 14:55	7440-47-3	
Cobalt	**0.0029**	mg/L	0.0025	0.00031	1	05/02/22 07:59	05/02/22 14:55	7440-48-4	
Copper	**0.0023J**	mg/L	0.0025	0.00064	1	05/02/22 07:59	05/02/22 14:55	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/02/22 07:59	05/02/22 14:55	7439-92-1	
Nickel	**0.0047**	mg/L	0.0025	0.00065	1	05/02/22 07:59	05/02/22 14:55	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/02/22 07:59	05/02/22 14:55	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/02/22 07:59	05/02/22 14:55	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/02/22 07:59	05/02/22 14:55	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	05/02/22 07:59	05/02/22 14:55	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0049	1	05/02/22 07:59	05/02/22 14:55	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/02/22 12:15	05/05/22 10:04	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/02/22 08:30	05/05/22 21:19	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/02/22 08:30	05/05/22 21:19	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	120	%.	60-140		1	05/02/22 08:30	05/05/22 21:19	630-20-6	CH,IH

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Sample: TW-15 **Lab ID: 30483865001** Collected: 04/26/22 09:50 Received: 04/26/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0**	mg/L	10.0	1.0	1		05/09/22 20:11		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**39.0**	mg/L	10.0	10.0	1		04/29/22 08:36		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/04/22 10:52	05/04/22 11:40		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/02/22 14:00	05/02/22 17:14		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**3.4**	mg/L	3.0	0.67	1		05/10/22 15:23	16887-00-6	ML
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.15**	mg/L	0.10	0.053	1		05/09/22 18:42	14797-55-8	
Nitrogen, NO2 plus NO3	**0.17**	mg/L	0.10	0.053	1		05/09/22 18:42		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/27/22 15:24	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.016**	mg/L	0.010	0.0055	1		04/27/22 10:33	14797-65-0	

Sample: TW-15B **Lab ID: 30483865002** Collected: 04/26/22 10:25 Received: 04/26/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**3.8**	mg/L	0.50	0.083	1	05/02/22 12:17	05/11/22 19:57	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	05/02/22 12:17	05/11/22 19:57	7439-89-6	
Magnesium	**4.5**	mg/L	0.50	0.047	1	05/02/22 12:17	05/11/22 19:57	7439-95-4	
Manganese	**0.076**	mg/L	0.0050	0.0027	1	05/02/22 12:17	05/11/22 19:57	7439-96-5	
Potassium	**1.4**	mg/L	0.50	0.26	1	05/02/22 12:17	05/11/22 19:57	7440-09-7	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Sample: TW-15B **Lab ID: 30483865002** Collected: 04/26/22 10:25 Received: 04/26/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**22.8**	mg/L	0.50	0.34	1	05/02/22 12:17	05/11/22 19:57	7440-23-5	
Total Hardness	**27.9**	mg/L	3.3	0.27	1	05/02/22 12:17	05/11/22 19:57		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**4.0**	mg/L	0.50	0.083	1	05/02/22 09:06	05/12/22 08:36	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/02/22 09:06	05/12/22 08:36	7439-89-6	
Magnesium, Dissolved	**4.7**	mg/L	0.50	0.047	1	05/02/22 09:06	05/12/22 08:36	7439-95-4	
Manganese, Dissolved	**0.078**	mg/L	0.0050	0.0027	1	05/02/22 09:06	05/12/22 08:36	7439-96-5	
Potassium, Dissolved	**1.4**	mg/L	0.50	0.26	1	05/02/22 09:06	05/12/22 08:36	7440-09-7	
Sodium, Dissolved	**22.7**	mg/L	0.50	0.34	1	05/02/22 09:06	05/12/22 08:36	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/02/22 07:59	05/02/22 15:04	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/02/22 07:59	05/02/22 15:04	7440-38-2	
Barium	**0.15**	mg/L	0.0025	0.00098	1	05/02/22 07:59	05/02/22 15:04	7440-39-3	
Beryllium	**0.0015**	mg/L	0.00050	0.00015	1	05/02/22 07:59	05/02/22 15:04	7440-41-7	
Cadmium	**0.00057**	mg/L	0.00050	0.00013	1	05/02/22 07:59	05/02/22 15:04	7440-43-9	
Chromium	**0.0026**	mg/L	0.0025	0.00050	1	05/02/22 07:59	05/02/22 15:04	7440-47-3	
Cobalt	**0.038**	mg/L	0.0025	0.00031	1	05/02/22 07:59	05/02/22 15:04	7440-48-4	
Copper	**0.014**	mg/L	0.0025	0.00064	1	05/02/22 07:59	05/02/22 15:04	7440-50-8	
Lead	**0.0019**	mg/L	0.00050	0.00045	1	05/02/22 07:59	05/02/22 15:04	7439-92-1	
Nickel	**0.038**	mg/L	0.0025	0.00065	1	05/02/22 07:59	05/02/22 15:04	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/02/22 07:59	05/02/22 15:04	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/02/22 07:59	05/02/22 15:04	7440-22-4	
Thallium	**0.00011J**	mg/L	0.00050	0.000081	1	05/02/22 07:59	05/02/22 15:04	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	05/02/22 07:59	05/02/22 15:04	7440-62-2	
Zinc	**0.069**	mg/L	0.0050	0.0049	1	05/02/22 07:59	05/02/22 15:04	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/02/22 12:15	05/05/22 10:06	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.023	1	05/02/22 08:30	05/05/22 21:32	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/02/22 08:30	05/05/22 21:32	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	114	%.	60-140		1	05/02/22 08:30	05/05/22 21:32	630-20-6	CH,IH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/09/22 20:12		1c

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Sample: TW-15B **Lab ID: 30483865002** Collected: 04/26/22 10:25 Received: 04/26/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**113**	mg/L	10.0	10.0	1		04/29/22 08:36		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/04/22 10:52	05/04/22 11:46		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**5.6J**	mg/L	25.0	4.7	1	05/02/22 14:00	05/02/22 17:14		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**47.9**	mg/L	15.0	3.3	5		05/10/22 15:26	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.56**	mg/L	0.10	0.053	1		05/09/22 18:44	14797-55-8	
Nitrogen, NO2 plus NO3	**0.56**	mg/L	0.10	0.053	1		05/09/22 18:44		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/27/22 15:26	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/27/22 10:33	14797-65-0	

Sample: TW-16 **Lab ID: 30483865003** Collected: 04/26/22 11:45 Received: 04/26/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**12.8**	mg/L	0.50	0.083	1	05/02/22 12:17	05/11/22 19:59	7440-70-2	
Iron	**6.3**	mg/L	0.050	0.035	1	05/02/22 12:17	05/11/22 19:59	7439-89-6	
Magnesium	**11.0**	mg/L	0.50	0.047	1	05/02/22 12:17	05/11/22 19:59	7439-95-4	
Manganese	**1.5**	mg/L	0.0050	0.0027	1	05/02/22 12:17	05/11/22 19:59	7439-96-5	
Potassium	**6.7**	mg/L	0.50	0.26	1	05/02/22 12:17	05/11/22 19:59	7440-09-7	
Sodium	**20.8**	mg/L	0.50	0.34	1	05/02/22 12:17	05/11/22 19:59	7440-23-5	
Total Hardness	**77.3**	mg/L	3.3	0.27	1	05/02/22 12:17	05/11/22 19:59		N3

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Sample: TW-16 **Lab ID: 30483865003** Collected: 04/26/22 11:45 Received: 04/26/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**13.5**	mg/L	0.50	0.083	1	05/02/22 09:06	05/12/22 08:38	7440-70-2	
Iron, Dissolved	**0.89**	mg/L	0.050	0.035	1	05/02/22 09:06	05/12/22 08:38	7439-89-6	
Magnesium, Dissolved	**11.5**	mg/L	0.50	0.047	1	05/02/22 09:06	05/12/22 08:38	7439-95-4	
Manganese, Dissolved	**1.5**	mg/L	0.0050	0.0027	1	05/02/22 09:06	05/12/22 08:38	7439-96-5	
Potassium, Dissolved	**6.5**	mg/L	0.50	0.26	1	05/02/22 09:06	05/12/22 08:38	7440-09-7	
Sodium, Dissolved	**20.6**	mg/L	0.50	0.34	1	05/02/22 09:06	05/12/22 08:38	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/02/22 07:59	05/02/22 15:06	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/02/22 07:59	05/02/22 15:06	7440-38-2	
Barium	**0.028**	mg/L	0.0025	0.00098	1	05/02/22 07:59	05/02/22 15:06	7440-39-3	
Beryllium	**0.00073**	mg/L	0.00050	0.00015	1	05/02/22 07:59	05/02/22 15:06	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/02/22 07:59	05/02/22 15:06	7440-43-9	
Chromium	**0.0062**	mg/L	0.0025	0.00050	1	05/02/22 07:59	05/02/22 15:06	7440-47-3	
Cobalt	**0.24**	mg/L	0.0025	0.00031	1	05/02/22 07:59	05/02/22 15:06	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.00064	1	05/02/22 07:59	05/02/22 15:06	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/02/22 07:59	05/02/22 15:06	7439-92-1	
Nickel	**0.25**	mg/L	0.0025	0.00065	1	05/02/22 07:59	05/02/22 15:06	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/02/22 07:59	05/02/22 15:06	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/02/22 07:59	05/02/22 15:06	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/02/22 07:59	05/02/22 15:06	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	05/02/22 07:59	05/02/22 15:06	7440-62-2	
Zinc	**0.39**	mg/L	0.0050	0.0049	1	05/02/22 07:59	05/02/22 15:06	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/02/22 12:15	05/05/22 10:08	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.042 U**	ug/L	0.042	0.023	1	05/02/22 08:30	05/05/22 21:45	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.042 U**	ug/L	0.042	0.032	1	05/02/22 08:30	05/05/22 21:45	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	128	%.	60-140		1	05/02/22 08:30	05/05/22 21:45	630-20-6	CH,IH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/09/22 20:13		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**219**	mg/L	10.0	10.0	1		04/29/22 08:36		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Sample: TW-16 **Lab ID: 30483865003** Collected: 04/26/22 11:45 Received: 04/26/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/04/22 10:52	05/04/22 11:48		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/02/22 14:00	05/02/22 17:14		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**21.6**	mg/L	3.0	0.67	1		05/10/22 15:26	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		05/09/22 18:45	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		05/09/22 18:45		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**129**	mg/L	20.0	9.3	2		04/27/22 19:51	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/27/22 10:34	14797-65-0	

Sample: TW-17 **Lab ID: 30483865004** Collected: 04/26/22 12:45 Received: 04/26/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**6.0**	mg/L	0.50	0.083	1	05/20/22 10:51	05/26/22 16:10	7440-70-2	
Iron	**10**	mg/L	0.050	0.035	1	05/20/22 10:51	05/26/22 16:10	7439-89-6	
Magnesium	**2.0**	mg/L	0.50	0.047	1	05/20/22 10:51	05/26/22 16:10	7439-95-4	
Manganese	**0.41**	mg/L	0.0050	0.0027	1	05/20/22 10:51	05/26/22 16:10	7439-96-5	
Potassium	**1.8**	mg/L	0.50	0.26	1	05/20/22 10:51	05/26/22 16:10	7440-09-7	
Sodium	**13.3**	mg/L	0.50	0.34	1	05/20/22 10:51	05/26/22 16:10	7440-23-5	
Total Hardness	**22.9**	mg/L	3.3	0.27	1	05/02/22 12:17	05/11/22 20:01		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**6.3**	mg/L	0.50	0.083	1	05/20/22 15:04	05/27/22 15:56	7440-70-2	
Iron, Dissolved	**2.5**	mg/L	0.050	0.035	1	05/20/22 15:04	05/27/22 15:56	7439-89-6	
Magnesium, Dissolved	**2.2**	mg/L	0.50	0.047	1	05/20/22 15:04	05/27/22 15:56	7439-95-4	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Sample: TW-17 **Lab ID: 30483865004** Collected: 04/26/22 12:45 Received: 04/26/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Manganese, Dissolved	**0.43**	mg/L	0.0050	0.0027	1	05/20/22 15:04	05/27/22 15:56	7439-96-5	
Potassium, Dissolved	**1.8**	mg/L	0.50	0.26	1	05/20/22 15:04	05/27/22 15:56	7440-09-7	
Sodium, Dissolved	**13.9**	mg/L	0.50	0.34	1	05/20/22 15:04	05/27/22 15:56	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/02/22 07:59	05/02/22 15:09	7440-36-0	
Arsenic	**0.00058J**	mg/L	0.0025	0.00044	1	05/02/22 07:59	05/02/22 15:09	7440-38-2	
Barium	**0.023**	mg/L	0.0025	0.00098	1	05/02/22 07:59	05/02/22 15:09	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	05/02/22 07:59	05/02/22 15:09	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/02/22 07:59	05/02/22 15:09	7440-43-9	
Chromium	**0.022**	mg/L	0.0025	0.00050	1	05/02/22 07:59	05/02/22 15:09	7440-47-3	
Cobalt	**0.019**	mg/L	0.0025	0.00031	1	05/02/22 07:59	05/02/22 15:09	7440-48-4	
Copper	**0.0014J**	mg/L	0.0025	0.00064	1	05/02/22 07:59	05/02/22 15:09	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/02/22 07:59	05/02/22 15:09	7439-92-1	
Nickel	**0.016**	mg/L	0.0025	0.00065	1	05/02/22 07:59	05/02/22 15:09	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/02/22 07:59	05/02/22 15:09	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/02/22 07:59	05/02/22 15:09	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/02/22 07:59	05/02/22 15:09	7440-28-0	
Vanadium	**0.0011J**	mg/L	0.0025	0.00042	1	05/02/22 07:59	05/02/22 15:09	7440-62-2	B
Zinc	**0.035**	mg/L	0.0050	0.0049	1	05/02/22 07:59	05/02/22 15:09	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/02/22 12:15	05/05/22 10:10	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.023	1	05/02/22 08:30	05/05/22 21:58	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/02/22 08:30	05/05/22 21:58	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	145	%.	60-140		1	05/02/22 08:30	05/05/22 21:58	630-20-6	CH,IH, S3
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0**	mg/L	10.0	1.0	1		05/09/22 20:14		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**73.0**	mg/L	10.0	10.0	1		05/02/22 14:46		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/04/22 10:52	05/04/22 11:50		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Sample: TW-17 **Lab ID: 30483865004** Collected: 04/26/22 12:45 Received: 04/26/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/02/22 14:00	05/02/22 17:14		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**4.7**	mg/L	3.0	0.67	1		05/10/22 15:27	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		05/09/22 18:46	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		05/09/22 18:46		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**40.6**	mg/L	10.0	4.7	1		04/27/22 15:29	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/27/22 10:34	14797-65-0	

Sample: TW-17A **Lab ID: 30483865005** Collected: 04/26/22 13:20 Received: 04/26/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.75**	mg/L	0.50	0.083	1	05/02/22 12:17	05/11/22 20:03	7440-70-2	
Iron	**0.040J**	mg/L	0.050	0.035	1	05/02/22 12:17	05/11/22 20:03	7439-89-6	
Magnesium	**0.40J**	mg/L	0.50	0.047	1	05/02/22 12:17	05/11/22 20:03	7439-95-4	
Manganese	**0.0073**	mg/L	0.0050	0.0027	1	05/02/22 12:17	05/11/22 20:03	7439-96-5	
Potassium	**0.56**	mg/L	0.50	0.26	1	05/02/22 12:17	05/11/22 20:03	7440-09-7	
Sodium	**1.3**	mg/L	0.50	0.34	1	05/02/22 12:17	05/11/22 20:03	7440-23-5	
Total Hardness	**3.5**	mg/L	3.3	0.27	1	05/02/22 12:17	05/11/22 20:03		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.83**	mg/L	0.50	0.083	1	05/02/22 09:06	05/12/22 08:42	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/02/22 09:06	05/12/22 08:42	7439-89-6	
Magnesium, Dissolved	**0.43J**	mg/L	0.50	0.047	1	05/02/22 09:06	05/12/22 08:42	7439-95-4	
Manganese, Dissolved	**0.0072**	mg/L	0.0050	0.0027	1	05/02/22 09:06	05/12/22 08:42	7439-96-5	
Potassium, Dissolved	**0.48J**	mg/L	0.50	0.26	1	05/02/22 09:06	05/12/22 08:42	7440-09-7	
Sodium, Dissolved	**1.3**	mg/L	0.50	0.34	1	05/02/22 09:06	05/12/22 08:42	7440-23-5	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Sample: TW-17A **Lab ID: 30483865005** Collected: 04/26/22 13:20 Received: 04/26/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/02/22 07:59	05/02/22 15:12	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/02/22 07:59	05/02/22 15:12	7440-38-2	
Barium	**0.011**	mg/L	0.0025	0.00098	1	05/02/22 07:59	05/02/22 15:12	7440-39-3	
Beryllium	**0.00024J**	mg/L	0.00050	0.00015	1	05/02/22 07:59	05/02/22 15:12	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/02/22 07:59	05/02/22 15:12	7440-43-9	
Chromium	**0.0043**	mg/L	0.0025	0.00050	1	05/02/22 07:59	05/02/22 15:12	7440-47-3	
Cobalt	**0.0044**	mg/L	0.0025	0.00031	1	05/02/22 07:59	05/02/22 15:12	7440-48-4	
Copper	**0.0022J**	mg/L	0.0025	0.00064	1	05/02/22 07:59	05/02/22 15:12	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/02/22 07:59	05/02/22 15:12	7439-92-1	
Nickel	**0.010**	mg/L	0.0025	0.00065	1	05/02/22 07:59	05/02/22 15:12	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/02/22 07:59	05/02/22 15:12	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/02/22 07:59	05/02/22 15:12	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/02/22 07:59	05/02/22 15:12	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	05/02/22 07:59	05/02/22 15:12	7440-62-2	
Zinc	**0.0076**	mg/L	0.0050	0.0049	1	05/02/22 07:59	05/02/22 15:12	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/02/22 13:57	05/03/22 16:43	7439-97-6	M1,R1
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/02/22 08:30	05/05/22 22:11	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/02/22 08:30	05/05/22 22:11	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	123	%.	60-140		1	05/02/22 08:30	05/05/22 22:11	630-20-6	CH,IH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**4.0J**	mg/L	10.0	1.0	1		05/09/22 20:16		4c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0**	mg/L	10.0	10.0	1		05/02/22 14:46		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/04/22 10:52	05/04/22 11:52		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/02/22 14:00	05/02/22 17:15		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Sample: TW-17A **Lab ID: 30483865005** Collected: 04/26/22 13:20 Received: 04/26/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**2.4J**	mg/L	3.0	0.67	1		05/10/22 15:28	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.21**	mg/L	0.10	0.053	1		05/09/22 18:48	14797-55-8	
Nitrogen, NO2 plus NO3	**0.21**	mg/L	0.10	0.053	1		05/09/22 18:48		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/27/22 15:29	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/27/22 10:35	14797-65-0	

Sample: TW-18 **Lab ID: 30483865006** Collected: 04/26/22 14:15 Received: 04/26/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**6.7**	mg/L	0.50	0.083	1	05/02/22 12:17	05/11/22 20:05	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	05/02/22 12:17	05/11/22 20:05	7439-89-6	
Magnesium	**2.8**	mg/L	0.50	0.047	1	05/02/22 12:17	05/11/22 20:05	7439-95-4	
Manganese	**0.37**	mg/L	0.0050	0.0027	1	05/02/22 12:17	05/11/22 20:05	7439-96-5	
Potassium	**1.4**	mg/L	0.50	0.26	1	05/02/22 12:17	05/11/22 20:05	7440-09-7	
Sodium	**3.1**	mg/L	0.50	0.34	1	05/02/22 12:17	05/11/22 20:05	7440-23-5	
Total Hardness	**28.4**	mg/L	3.3	0.27	1	05/02/22 12:17	05/11/22 20:05		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**7.2**	mg/L	0.50	0.083	1	05/02/22 09:06	05/12/22 08:44	7440-70-2	
Iron, Dissolved	**0.062**	mg/L	0.050	0.035	1	05/02/22 09:06	05/12/22 08:44	7439-89-6	
Magnesium, Dissolved	**2.9**	mg/L	0.50	0.047	1	05/02/22 09:06	05/12/22 08:44	7439-95-4	
Manganese, Dissolved	**0.38**	mg/L	0.0050	0.0027	1	05/02/22 09:06	05/12/22 08:44	7439-96-5	
Potassium, Dissolved	**1.3**	mg/L	0.50	0.26	1	05/02/22 09:06	05/12/22 08:44	7440-09-7	
Sodium, Dissolved	**3.0**	mg/L	0.50	0.34	1	05/02/22 09:06	05/12/22 08:44	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/02/22 07:59	05/02/22 15:15	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/02/22 07:59	05/02/22 15:15	7440-38-2	
Barium	**0.058**	mg/L	0.0025	0.00098	1	05/02/22 07:59	05/02/22 15:15	7440-39-3	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Sample: TW-18 **Lab ID: 30483865006** Collected: 04/26/22 14:15 Received: 04/26/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Beryllium	**0.00064**	mg/L	0.00050	0.00015	1	05/02/22 07:59	05/02/22 15:15	7440-41-7	
Cadmium	**0.00092**	mg/L	0.00050	0.00013	1	05/02/22 07:59	05/02/22 15:15	7440-43-9	
Chromium	**0.0036**	mg/L	0.0025	0.00050	1	05/02/22 07:59	05/02/22 15:15	7440-47-3	
Cobalt	**0.11**	mg/L	0.0025	0.00031	1	05/02/22 07:59	05/02/22 15:15	7440-48-4	
Copper	**0.0049**	mg/L	0.0025	0.00064	1	05/02/22 07:59	05/02/22 15:15	7440-50-8	
Lead	**0.00097**	mg/L	0.00050	0.00045	1	05/02/22 07:59	05/02/22 15:15	7439-92-1	
Nickel	**0.10**	mg/L	0.0025	0.00065	1	05/02/22 07:59	05/02/22 15:15	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/02/22 07:59	05/02/22 15:15	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/02/22 07:59	05/02/22 15:15	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/02/22 07:59	05/02/22 15:15	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	05/02/22 07:59	05/02/22 15:15	7440-62-2	
Zinc	**0.31**	mg/L	0.0050	0.0049	1	05/02/22 07:59	05/02/22 15:15	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/02/22 13:57	05/03/22 16:48	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/02/22 08:30	05/05/22 22:24	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/02/22 08:30	05/05/22 22:24	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	122	%.	60-140		1	05/02/22 08:30	05/05/22 22:24	630-20-6	CH,IH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**1.0J**	mg/L	10.0	1.0	1		05/09/22 20:18		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**66.0**	mg/L	10.0	10.0	1		05/02/22 14:46		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/04/22 10:52	05/04/22 11:54		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/02/22 14:00	05/02/22 17:15		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**4.2**	mg/L	3.0	0.67	1		05/10/22 15:29	16887-00-6	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Sample: TW-18 **Lab ID: 30483865006** Collected: 04/26/22 14:15 Received: 04/26/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.6**	mg/L	0.10	0.053	1		05/09/22 18:49	14797-55-8	
Nitrogen, NO2 plus NO3	**1.6**	mg/L	0.10	0.053	1		05/09/22 18:49		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**26.3**	mg/L	10.0	4.7	1		04/27/22 15:31	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/27/22 10:36	14797-65-0	

Sample: TW-19 **Lab ID: 30483865007** Collected: 04/26/22 15:00 Received: 04/26/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**22.7**	mg/L	0.50	0.083	1	05/02/22 12:17	05/11/22 20:07	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	05/02/22 12:17	05/11/22 20:07	7439-89-6	
Magnesium	**5.6**	mg/L	0.50	0.047	1	05/02/22 12:17	05/11/22 20:07	7439-95-4	
Manganese	**0.0037J**	mg/L	0.0050	0.0027	1	05/02/22 12:17	05/11/22 20:07	7439-96-5	
Potassium	**6.4**	mg/L	0.50	0.26	1	05/02/22 12:17	05/11/22 20:07	7440-09-7	
Sodium	**13.0**	mg/L	0.50	0.34	1	05/02/22 12:17	05/11/22 20:07	7440-23-5	
Total Hardness	**79.8**	mg/L	3.3	0.27	1	05/02/22 12:17	05/11/22 20:07		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**24.5**	mg/L	0.50	0.083	1	05/02/22 09:06	05/12/22 08:46	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/02/22 09:06	05/12/22 08:46	7439-89-6	
Magnesium, Dissolved	**6.1**	mg/L	0.50	0.047	1	05/02/22 09:06	05/12/22 08:46	7439-95-4	
Manganese, Dissolved	**0.0038J**	mg/L	0.0050	0.0027	1	05/02/22 09:06	05/12/22 08:46	7439-96-5	
Potassium, Dissolved	**6.4**	mg/L	0.50	0.26	1	05/02/22 09:06	05/12/22 08:46	7440-09-7	
Sodium, Dissolved	**13.2**	mg/L	0.50	0.34	1	05/02/22 09:06	05/12/22 08:46	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/02/22 07:59	05/02/22 15:18	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/02/22 07:59	05/02/22 15:18	7440-38-2	
Barium	**0.059**	mg/L	0.0025	0.00098	1	05/02/22 07:59	05/02/22 15:18	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	05/02/22 07:59	05/02/22 15:18	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/02/22 07:59	05/02/22 15:18	7440-43-9	
Chromium	**0.00073J**	mg/L	0.0025	0.00050	1	05/02/22 07:59	05/02/22 15:18	7440-47-3	
Cobalt	**0.00073J**	mg/L	0.0025	0.00031	1	05/02/22 07:59	05/02/22 15:18	7440-48-4	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Sample: TW-19 **Lab ID: 30483865007** Collected: 04/26/22 15:00 Received: 04/26/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Copper	**0.0018J**	mg/L	0.0025	0.00064	1	05/02/22 07:59	05/02/22 15:18	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/02/22 07:59	05/02/22 15:18	7439-92-1	
Nickel	**0.0024J**	mg/L	0.0025	0.00065	1	05/02/22 07:59	05/02/22 15:18	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/02/22 07:59	05/02/22 15:18	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/02/22 07:59	05/02/22 15:18	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/02/22 07:59	05/02/22 15:18	7440-28-0	
Vanadium	**0.00054J**	mg/L	0.0025	0.00042	1	05/02/22 07:59	05/02/22 15:18	7440-62-2	B
Zinc	**0.0050 U**	mg/L	0.0050	0.0049	1	05/02/22 07:59	05/02/22 15:18	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/02/22 13:57	05/03/22 16:50	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/02/22 08:30	05/05/22 22:37	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/02/22 08:30	05/05/22 22:37	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	119	%.	60-140		1	05/02/22 08:30	05/05/22 22:37	630-20-6	CH,IH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**58.0**	mg/L	10.0	1.0	1		05/09/22 20:19		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**136**	mg/L	10.0	10.0	1		05/02/22 14:46		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/04/22 10:52	05/04/22 11:56		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/02/22 14:00	05/02/22 17:16		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**17.9**	mg/L	3.0	0.67	1		05/10/22 15:30	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.99**	mg/L	0.10	0.053	1		05/09/22 18:50	14797-55-8	
Nitrogen, NO2 plus NO3	**0.99**	mg/L	0.10	0.053	1		05/09/22 18:50		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Sample: TW-19 **Lab ID: 30483865007** Collected: 04/26/22 15:00 Received: 04/26/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**22.2**	mg/L	10.0	4.7	1		04/27/22 15:32	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/27/22 10:37	14797-65-0	

Sample: TW-16A **Lab ID: 30483865008** Collected: 04/26/22 11:10 Received: 04/26/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.95**	mg/L	0.50	0.083	1	05/02/22 12:17	05/11/22 20:09	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	05/02/22 12:17	05/11/22 20:09	7439-89-6	
Magnesium	**0.37J**	mg/L	0.50	0.047	1	05/02/22 12:17	05/11/22 20:09	7439-95-4	
Manganese	**0.0054**	mg/L	0.0050	0.0027	1	05/02/22 12:17	05/11/22 20:09	7439-96-5	
Potassium	**0.56**	mg/L	0.50	0.26	1	05/02/22 12:17	05/11/22 20:09	7440-09-7	
Sodium	**1.2**	mg/L	0.50	0.34	1	05/02/22 12:17	05/11/22 20:09	7440-23-5	
Total Hardness	**3.9**	mg/L	3.3	0.27	1	05/02/22 12:17	05/11/22 20:09		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**1.0**	mg/L	0.50	0.083	1	05/02/22 09:06	05/12/22 08:48	7440-70-2	
Iron, Dissolved	**0.036J**	mg/L	0.050	0.035	1	05/02/22 09:06	05/12/22 08:48	7439-89-6	
Magnesium, Dissolved	**0.40J**	mg/L	0.50	0.047	1	05/02/22 09:06	05/12/22 08:48	7439-95-4	
Manganese, Dissolved	**0.0057**	mg/L	0.0050	0.0027	1	05/02/22 09:06	05/12/22 08:48	7439-96-5	
Potassium, Dissolved	**0.47J**	mg/L	0.50	0.26	1	05/02/22 09:06	05/12/22 08:48	7440-09-7	
Sodium, Dissolved	**1.3**	mg/L	0.50	0.34	1	05/02/22 09:06	05/12/22 08:48	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/02/22 07:59	05/02/22 15:20	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/02/22 07:59	05/02/22 15:20	7440-38-2	
Barium	**0.0067**	mg/L	0.0025	0.00098	1	05/02/22 07:59	05/02/22 15:20	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	05/02/22 07:59	05/02/22 15:20	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/02/22 07:59	05/02/22 15:20	7440-43-9	
Chromium	**0.0014J**	mg/L	0.0025	0.00050	1	05/02/22 07:59	05/02/22 15:20	7440-47-3	
Cobalt	**0.024**	mg/L	0.0025	0.00031	1	05/02/22 07:59	05/02/22 15:20	7440-48-4	
Copper	**0.0022J**	mg/L	0.0025	0.00064	1	05/02/22 07:59	05/02/22 15:20	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/02/22 07:59	05/02/22 15:20	7439-92-1	
Nickel	**0.0083**	mg/L	0.0025	0.00065	1	05/02/22 07:59	05/02/22 15:20	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/02/22 07:59	05/02/22 15:20	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/02/22 07:59	05/02/22 15:20	7440-22-4	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Sample: TW-16A **Lab ID: 30483865008** Collected: 04/26/22 11:10 Received: 04/26/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/02/22 07:59	05/02/22 15:20	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	05/02/22 07:59	05/02/22 15:20	7440-62-2	
Zinc	**0.0060**	mg/L	0.0050	0.0049	1	05/02/22 07:59	05/02/22 15:20	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/02/22 13:57	05/03/22 16:51	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/02/22 08:30	05/05/22 22:50	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/02/22 08:30	05/05/22 22:50	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	129	%.	60-140		1	05/02/22 08:30	05/05/22 22:50	630-20-6	CH,IH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		05/09/22 20:21		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**16.0**	mg/L	10.0	10.0	1		05/02/22 14:46		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/04/22 10:52	05/04/22 11:58		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/02/22 14:00	05/02/22 17:16		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**2.4J**	mg/L	3.0	0.67	1		05/10/22 15:31	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.17**	mg/L	0.10	0.053	1		05/09/22 18:52	14797-55-8	
Nitrogen, NO2 plus NO3	**0.17**	mg/L	0.10	0.053	1		05/09/22 18:52		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/27/22 15:34	14808-79-8	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Sample: TW-16A **Lab ID: 30483865008** Collected: 04/26/22 11:10 Received: 04/26/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/27/22 10:37	14797-65-0	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30483865

QC Batch: 501261
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30483865001, 30483865002, 30483865003, 30483865004, 30483865005, 30483865006, 30483865007, 30483865008

METHOD BLANK: 2426154 Matrix: Water
Associated Lab Samples: 30483865001, 30483865002, 30483865003, 30483865004, 30483865005, 30483865006, 30483865007, 30483865008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	05/11/22 19:33	
Iron	mg/L	0.050 U	0.050	0.035	05/11/22 19:33	
Magnesium	mg/L	0.50 U	0.50	0.047	05/11/22 19:33	
Manganese	mg/L	0.0050 U	0.0050	0.0027	05/11/22 19:33	
Potassium	mg/L	0.50 U	0.50	0.26	05/11/22 19:33	
Sodium	mg/L	0.50 U	0.50	0.34	05/11/22 19:33	

LABORATORY CONTROL SAMPLE: 2426155

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	42.2	106	80-120	
Iron	mg/L	2	2.2	108	80-120	
Magnesium	mg/L	20	21.5	107	80-120	
Manganese	mg/L	2	2.1	107	80-120	
Potassium	mg/L	20	20.8	104	80-120	
Sodium	mg/L	20	20.8	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2426370 2426371

Parameter	Units	30484620003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	26500 ug/L	40	40	68.8	70.5	106	110	80-120	2	20	
Iron	mg/L	101 ug/L	2	2	2.2	2.3	106	111	80-120	4	20	
Magnesium	mg/L	12300 ug/L	20	20	34.0	34.9	109	113	80-120	3	20	
Manganese	mg/L	15.7 ug/L	2	2	2.1	2.2	106	111	80-120	4	20	
Potassium	mg/L	14600 ug/L	20	20	36.2	37.2	108	113	80-120	3	20	
Sodium	mg/L	30400 ug/L	20	20	51.4	52.4	105	110	80-120	2	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30483865

QC Batch: 505819
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30483865004

METHOD BLANK: 2450528 Matrix: Water
Associated Lab Samples: 30483865004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	05/30/22 16:07	
Iron	mg/L	0.050 U	0.050	0.035	05/30/22 16:07	
Magnesium	mg/L	0.50 U	0.50	0.047	05/30/22 16:07	
Manganese	mg/L	0.0050 U	0.0050	0.0027	05/30/22 16:07	
Potassium	mg/L	0.50 U	0.50	0.26	05/30/22 16:07	
Sodium	mg/L	0.50 U	0.50	0.34	05/30/22 16:07	

LABORATORY CONTROL SAMPLE: 2450529

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	41.1	103	80-120	
Iron	mg/L	2	2.0	102	80-120	
Magnesium	mg/L	20	20.6	103	80-120	
Manganese	mg/L	2	2.1	107	80-120	
Potassium	mg/L	20	19.9	99	80-120	
Sodium	mg/L	20	19.9	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2450572 2450573

Parameter	Units	30483386009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	74500 ug/L	40	40	114	115	100	101	80-120	0	20	
Iron	mg/L	0.49	2	2	2.5	2.5	103	102	80-120	1	20	
Magnesium	mg/L	19600 ug/L	20	20	40.1	40.2	102	103	80-120	0	20	
Manganese	mg/L	0.021	2	2	2.2	2.2	107	107	80-120	0	20	
Potassium	mg/L	1970 ug/L	20	20	23.3	23.2	107	106	80-120	0	20	
Sodium	mg/L	104000 ug/L	20	20	123	124	95	98	80-120	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30483865

QC Batch: 501192
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30483865001, 30483865002, 30483865003, 30483865005, 30483865006, 30483865007, 30483865008

METHOD BLANK: 2426001 Matrix: Water
Associated Lab Samples: 30483865001, 30483865002, 30483865003, 30483865005, 30483865006, 30483865007, 30483865008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	05/12/22 08:18	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	05/12/22 08:18	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	05/12/22 08:18	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	05/12/22 08:18	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	05/12/22 08:18	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	05/12/22 08:18	

LABORATORY CONTROL SAMPLE: 2426002

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	44.7	112	80-120	
Iron, Dissolved	mg/L	2	2.2	112	80-120	
Magnesium, Dissolved	mg/L	20	23.0	115	80-120	
Manganese, Dissolved	mg/L	2	2.2	111	80-120	
Potassium, Dissolved	mg/L	20	21.1	105	80-120	
Sodium, Dissolved	mg/L	20	21.0	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2426003 2426004

Parameter	Units	30483865001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	0.87	40	40	46.1	46.3	113	114	80-120	0	20	
Iron, Dissolved	mg/L	21.3	2	2	23.7	23.6	115	112	80-120	0	20	
Magnesium, Dissolved	mg/L	0.57	20	20	23.6	23.5	115	115	80-120	0	20	
Manganese, Dissolved	mg/L	0.25	2	2	2.5	2.5	110	110	80-120	0	20	
Potassium, Dissolved	mg/L	0.83	20	20	22.1	22.0	106	106	80-120	0	20	
Sodium, Dissolved	mg/L	2.0	20	20	23.2	23.2	106	106	80-120	0	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30483865

QC Batch: 505890
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30483865004

METHOD BLANK: 2450935 Matrix: Water
Associated Lab Samples: 30483865004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	05/27/22 15:30	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	05/27/22 15:30	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	05/27/22 15:30	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	05/27/22 15:30	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	05/27/22 15:30	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	05/27/22 15:30	

LABORATORY CONTROL SAMPLE: 2450936

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	41.1	103	80-120	
Iron, Dissolved	mg/L	2	2.2	108	80-120	
Magnesium, Dissolved	mg/L	20	21.3	106	80-120	
Manganese, Dissolved	mg/L	2	2.1	107	80-120	
Potassium, Dissolved	mg/L	20	20.3	102	80-120	
Sodium, Dissolved	mg/L	20	20.2	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2450960 2450961

Parameter	Units	30481281003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	54500 ug/L	40	40	94.5	97.9	100	109	80-120	4	20	
Iron, Dissolved	mg/L	0.050 U	2	2	2.2	2.2	107	111	80-120	3	20	
Magnesium, Dissolved	mg/L	10300 ug/L	20	20	31.4	32.5	106	111	80-120	3	20	
Manganese, Dissolved	mg/L	0.15	2	2	2.3	2.3	105	109	80-120	3	20	
Potassium, Dissolved	mg/L	1120 ug/L	20	20	22.2	22.4	105	106	80-120	1	20	
Sodium, Dissolved	mg/L	55100 ug/L	20	20	74.6	76.3	97	106	80-120	2	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30483865

QC Batch: 501193
QC Batch Method: EPA 3020A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30483865001, 30483865002, 30483865003, 30483865004, 30483865005, 30483865006, 30483865007, 30483865008

METHOD BLANK: 2426005
Matrix: Water
Associated Lab Samples: 30483865001, 30483865002, 30483865003, 30483865004, 30483865005, 30483865006, 30483865007, 30483865008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00030	05/02/22 14:32	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	05/02/22 14:32	
Barium	mg/L	0.0025 U	0.0025	0.00098	05/02/22 14:32	
Beryllium	mg/L	0.00050 U	0.00050	0.00015	05/02/22 14:32	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	05/02/22 14:32	
Chromium	mg/L	0.0025 U	0.0025	0.00050	05/02/22 14:32	
Cobalt	mg/L	0.0025 U	0.0025	0.00031	05/02/22 14:32	
Copper	mg/L	0.0025 U	0.0025	0.00064	05/02/22 14:32	
Lead	mg/L	0.00050 U	0.00050	0.00045	05/02/22 14:32	
Nickel	mg/L	0.0025 U	0.0025	0.00065	05/02/22 14:32	
Selenium	mg/L	0.0025 U	0.0025	0.00084	05/02/22 14:32	
Silver	mg/L	0.0025 U	0.0025	0.00053	05/02/22 14:32	
Thallium	mg/L	0.00050 U	0.00050	0.000081	05/02/22 14:32	
Vanadium	mg/L	0.00049J	0.0025	0.00042	05/02/22 14:32	
Zinc	mg/L	0.0050 U	0.0050	0.0049	05/02/22 14:32	

LABORATORY CONTROL SAMPLE: 2426006

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.022	109	80-120	
Arsenic	mg/L	0.1	0.10	101	80-120	
Barium	mg/L	0.1	0.10	100	80-120	
Beryllium	mg/L	0.02	0.019	96	80-120	
Cadmium	mg/L	0.02	0.020	100	80-120	
Chromium	mg/L	0.1	0.10	104	80-120	
Cobalt	mg/L	0.1	0.11	105	80-120	
Copper	mg/L	0.1	0.11	109	80-120	
Lead	mg/L	0.02	0.020	100	80-120	
Nickel	mg/L	0.1	0.11	106	80-120	
Selenium	mg/L	0.1	0.091	91	80-120	
Silver	mg/L	0.1	0.10	100	80-120	
Thallium	mg/L	0.02	0.020	100	80-120	
Vanadium	mg/L	0.1	0.10	105	80-120	
Zinc	mg/L	0.2	0.21	105	80-120	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30483865

QC Batch: 501302
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30483865001, 30483865002, 30483865003, 30483865004

METHOD BLANK: 2426340 Matrix: Water
Associated Lab Samples: 30483865001, 30483865002, 30483865003, 30483865004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	05/05/22 09:22	

LABORATORY CONTROL SAMPLE: 2426341

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.0090	90	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2426408 2426409

Parameter	Units	30483773001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.01	0.01	0.0089	0.0093	88	92	80-120	4	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30483865

QC Batch: 501346
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30483865005, 30483865006, 30483865007, 30483865008

METHOD BLANK: 2426570 Matrix: Water
Associated Lab Samples: 30483865005, 30483865006, 30483865007, 30483865008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	05/03/22 16:39	

LABORATORY CONTROL SAMPLE: 2426571

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.0095	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2426590 2426591

Parameter	Units	30483865005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00020 U	0.01	0.01	0.0052	0.0029	52	29	80-120	57	20	M1,R1

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30483865

QC Batch: 501238
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30483865001, 30483865002, 30483865003, 30483865004, 30483865005, 30483865006, 30483865007, 30483865008

METHOD BLANK: 2426104
Matrix: Water
Associated Lab Samples: 30483865001, 30483865002, 30483865003, 30483865004, 30483865005, 30483865006, 30483865007, 30483865008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.022	05/05/22 19:22	CH
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	05/05/22 19:22	CH
1,1,1,2-Tetrachloroethane (S)	%.	123	60-140		05/05/22 19:22	CH,IH

LABORATORY CONTROL SAMPLE: 2426105

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.25	101	85-115	CH
1,2-Dibromoethane (EDB)	ug/L	0.25	0.25	100	85-115	CH
1,1,1,2-Tetrachloroethane (S)	%.			107	60-140	CH,IH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2426106 2426107

Parameter	Units	30483773001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	ND	0.39	0.4	0.36	0.36	91	90	60-140	0	25	CH
1,2-Dibromoethane (EDB)	ug/L	ND	0.39	0.4	0.38	0.38	97	96	60-140	0	25	CH
1,1,1,2-Tetrachloroethane (S)	%.						105	105	60-140			CH,IH

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30483865

QC Batch: 503165
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30483865001, 30483865002, 30483865003, 30483865004, 30483865005, 30483865006, 30483865007, 30483865008

METHOD BLANK: 2436490
Matrix: Water
Associated Lab Samples: 30483865001, 30483865002, 30483865003, 30483865004, 30483865005, 30483865006, 30483865007, 30483865008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	1.0J	10.0	1.0	05/09/22 19:31	

LABORATORY CONTROL SAMPLE: 2436491

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	22.0	110	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2436492 2436493

Parameter	Units	30483706001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	76.0	50	50	142	150	132	148	85-115	5	20	MH

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30483865

QC Batch: 500812
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30483865001, 30483865002, 30483865003

METHOD BLANK: 2424438 Matrix: Water
Associated Lab Samples: 30483865001, 30483865002, 30483865003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	04/29/22 08:36	

LABORATORY CONTROL SAMPLE: 2424439

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	989	99	85-115	

SAMPLE DUPLICATE: 2424440

Parameter	Units	30484038001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	454	455	0	5	

SAMPLE DUPLICATE: 2424441

Parameter	Units	30484490003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	157	156	1	5	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30483865

QC Batch: 501197
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30483865004, 30483865005, 30483865006, 30483865007, 30483865008

METHOD BLANK: 2426017 Matrix: Water
Associated Lab Samples: 30483865004, 30483865005, 30483865006, 30483865007, 30483865008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	05/02/22 14:46	

LABORATORY CONTROL SAMPLE: 2426018

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	975	98	85-115	

SAMPLE DUPLICATE: 2426019

Parameter	Units	30483865005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	10.0	10.0	0	5	

SAMPLE DUPLICATE: 2426020

Parameter	Units	30484272007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	74.0	77.0	4	5	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30483865

QC Batch: 501842
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30483865001, 30483865002, 30483865003, 30483865004, 30483865005, 30483865006, 30483865007, 30483865008

METHOD BLANK: 2429105
Matrix: Water
Associated Lab Samples: 30483865001, 30483865002, 30483865003, 30483865004, 30483865005, 30483865006, 30483865007, 30483865008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.044	05/04/22 11:36	

LABORATORY CONTROL SAMPLE: 2429106

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	3.9	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2429107 2429108

Parameter	Units	30483865001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	3.9	3.9	96	96	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2429109 2429110

Parameter	Units	30484272002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.0	4.1	101	102	90-110	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30483865

QC Batch: 501258
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30483865001, 30483865002, 30483865003, 30483865004, 30483865005, 30483865006, 30483865007, 30483865008

METHOD BLANK: 2426143
Matrix: Water
Associated Lab Samples: 30483865001, 30483865002, 30483865003, 30483865004, 30483865005, 30483865006, 30483865007, 30483865008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	05/02/22 17:12	

LABORATORY CONTROL SAMPLE: 2426144

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	326	109	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2426145 2426146

Parameter	Units	30484620002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	82.8	150	150	244	253	107	113	90-110	4	10	MH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2426147 2426148

Parameter	Units	30483865005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	25.0 U	150	150	158	158	105	105	90-110	0	10	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30483865

QC Batch: 503372
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30483865001, 30483865002, 30483865003, 30483865004, 30483865005, 30483865006, 30483865007, 30483865008

METHOD BLANK: 2437412 Matrix: Water
Associated Lab Samples: 30483865001, 30483865002, 30483865003, 30483865004, 30483865005, 30483865006, 30483865007, 30483865008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/10/22 15:19	

METHOD BLANK: 2437741 Matrix: Water
Associated Lab Samples: 30483865001, 30483865002, 30483865003, 30483865004, 30483865005, 30483865006, 30483865007, 30483865008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.70J	3.0	0.67	05/10/22 15:21	

METHOD BLANK: 2437742 Matrix: Water
Associated Lab Samples: 30483865001, 30483865002, 30483865003, 30483865004, 30483865005, 30483865006, 30483865007, 30483865008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/10/22 15:22	

LABORATORY CONTROL SAMPLE: 2437413

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	19.1	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2437414 2437415

Parameter	Units	30483865001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.4	20	20	20.0	19.7	83	82	85-115	1	20	ML

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30483865

QC Batch: 503032
QC Batch Method: SM 4500NO3-F-2011
Analysis Method: SM 4500NO3-F-2011
Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30483865001, 30483865002, 30483865003, 30483865004, 30483865005, 30483865006, 30483865007, 30483865008

METHOD BLANK: 2435896
Matrix: Water
Associated Lab Samples: 30483865001, 30483865002, 30483865003, 30483865004, 30483865005, 30483865006, 30483865007, 30483865008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	05/09/22 17:18	

LABORATORY CONTROL SAMPLE: 2435897

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	3.7	93	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2435898 2435899

Parameter	Units	30484477002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	7.2	5	5	12.0	12.0	96	96	85-115	0	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30483865

QC Batch: 500427
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30483865001, 30483865002, 30483865003, 30483865004, 30483865005, 30483865006, 30483865007, 30483865008

METHOD BLANK: 2422011
Matrix: Water
Associated Lab Samples: 30483865001, 30483865002, 30483865003, 30483865004, 30483865005, 30483865006, 30483865007, 30483865008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	04/27/22 15:17	

LABORATORY CONTROL SAMPLE: 2422012

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	32.0	107	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2422013 2422014

Parameter	Units	30483985001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	28900	20000	20000	56300	57200	137	142	85-115	2	20	MH

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30483865

QC Batch: 500326
QC Batch Method: SM 4500NO2-B-2011
Analysis Method: SM 4500NO2-B-2011
Analysis Description: SM4500-NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30483865001, 30483865002, 30483865003, 30483865004, 30483865005, 30483865006, 30483865007, 30483865008

METHOD BLANK: 2421541 Matrix: Water
Associated Lab Samples: 30483865001, 30483865002, 30483865003, 30483865004, 30483865005, 30483865006, 30483865007, 30483865008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	04/27/22 10:30	

LABORATORY CONTROL SAMPLE: 2421542

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.11	110	90-110	

MATRIX SPIKE SAMPLE: 2421544

Parameter	Units	30483774001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	ND	0.1	0.10	104	85-115	

SAMPLE DUPLICATE: 2421543

Parameter	Units	30483774001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	ND	0.010 U		20	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: MLF-SPRING 2022
Pace Project No.: 30483865

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30483865001
[1] Sample pH for 8011 is 6

Sample: 30483865002
[1] Sample pH for 8011 is 5

Sample: 30483865003
[1] Sample pH for 8011 is 5

Sample: 30483865004
[1] Sample pH for 8011 is 5

Sample: 30483865005
[1] Sample pH for 8011 is 5

Sample: 30483865006
[1] Sample pH for 8011 is 5

Sample: 30483865007
[1] Sample pH for 8011 is 6

Sample: 30483865008
[1] Sample pH for 8011 is 6

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QUALIFIERS

Project: MLF-SPRING 2022
Pace Project No.: 30483865

ANALYTE QUALIFIERS

1c	Alk TV: -2 mg/L
2c	Alk TV: 1 mg/L
3c	Alk TV: 2 mg/L
4c	Alk TV: 4 mg/L
B	Analyte was detected in the associated method blank.
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
IH	This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.
R1	RPD value was outside control limits.
S3	Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated sample.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30483865001	**TW-15**	EPA 3010A	501261	EPA 6010D	503687
30483865002	**TW-15B**	EPA 3010A	501261	EPA 6010D	503687
30483865003	**TW-16**	EPA 3010A	501261	EPA 6010D	503687
30483865004	**TW-17**	EPA 3010A	501261	EPA 6010D	503687
30483865004	**TW-17**	EPA 3010A	505819	EPA 6010D	506587
30483865005	**TW-17A**	EPA 3010A	501261	EPA 6010D	503687
30483865006	**TW-18**	EPA 3010A	501261	EPA 6010D	503687
30483865007	**TW-19**	EPA 3010A	501261	EPA 6010D	503687
30483865008	**TW-16A**	EPA 3010A	501261	EPA 6010D	503687
30483865001	**TW-15**	EPA 3010A	501192	EPA 6010D	503690
30483865002	**TW-15B**	EPA 3010A	501192	EPA 6010D	503690
30483865003	**TW-16**	EPA 3010A	501192	EPA 6010D	503690
30483865004	**TW-17**	EPA 3010A	505890	EPA 6010D	507392
30483865005	**TW-17A**	EPA 3010A	501192	EPA 6010D	503690
30483865006	**TW-18**	EPA 3010A	501192	EPA 6010D	503690
30483865007	**TW-19**	EPA 3010A	501192	EPA 6010D	503690
30483865008	**TW-16A**	EPA 3010A	501192	EPA 6010D	503690
30483865001	**TW-15**	EPA 3020A	501193	EPA 6020B	501307
30483865002	**TW-15B**	EPA 3020A	501193	EPA 6020B	501307
30483865003	**TW-16**	EPA 3020A	501193	EPA 6020B	501307
30483865004	**TW-17**	EPA 3020A	501193	EPA 6020B	501307
30483865005	**TW-17A**	EPA 3020A	501193	EPA 6020B	501307
30483865006	**TW-18**	EPA 3020A	501193	EPA 6020B	501307
30483865007	**TW-19**	EPA 3020A	501193	EPA 6020B	501307
30483865008	**TW-16A**	EPA 3020A	501193	EPA 6020B	501307
30483865001	**TW-15**	EPA 7470A	501302	EPA 7470A	502200
30483865002	**TW-15B**	EPA 7470A	501302	EPA 7470A	502200
30483865003	**TW-16**	EPA 7470A	501302	EPA 7470A	502200
30483865004	**TW-17**	EPA 7470A	501302	EPA 7470A	502200
30483865005	**TW-17A**	EPA 7470A	501346	EPA 7470A	501907
30483865006	**TW-18**	EPA 7470A	501346	EPA 7470A	501907
30483865007	**TW-19**	EPA 7470A	501346	EPA 7470A	501907
30483865008	**TW-16A**	EPA 7470A	501346	EPA 7470A	501907
30483865001	**TW-15**	EPA 8011	501238	EPA 8011	501390
30483865002	**TW-15B**	EPA 8011	501238	EPA 8011	501390
30483865003	**TW-16**	EPA 8011	501238	EPA 8011	501390
30483865004	**TW-17**	EPA 8011	501238	EPA 8011	501390
30483865005	**TW-17A**	EPA 8011	501238	EPA 8011	501390
30483865006	**TW-18**	EPA 8011	501238	EPA 8011	501390
30483865007	**TW-19**	EPA 8011	501238	EPA 8011	501390
30483865008	**TW-16A**	EPA 8011	501238	EPA 8011	501390
30483865001	**TW-15**	SM 2320B-2011	503165		
30483865002	**TW-15B**	SM 2320B-2011	503165		
30483865003	**TW-16**	SM 2320B-2011	503165		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30483865004	**TW-17**	SM 2320B-2011	503165		
30483865005	**TW-17A**	SM 2320B-2011	503165		
30483865006	**TW-18**	SM 2320B-2011	503165		
30483865007	**TW-19**	SM 2320B-2011	503165		
30483865008	**TW-16A**	SM 2320B-2011	503165		
30483865001	**TW-15**	SM 2540C-2011	500812		
30483865002	**TW-15B**	SM 2540C-2011	500812		
30483865003	**TW-16**	SM 2540C-2011	500812		
30483865004	**TW-17**	SM 2540C-2011	501197		
30483865005	**TW-17A**	SM 2540C-2011	501197		
30483865006	**TW-18**	SM 2540C-2011	501197		
30483865007	**TW-19**	SM 2540C-2011	501197		
30483865008	**TW-16A**	SM 2540C-2011	501197		
30483865001	**TW-15**	EPA 350.1	501842	EPA 350.1	501965
30483865002	**TW-15B**	EPA 350.1	501842	EPA 350.1	501965
30483865003	**TW-16**	EPA 350.1	501842	EPA 350.1	501965
30483865004	**TW-17**	EPA 350.1	501842	EPA 350.1	501965
30483865005	**TW-17A**	EPA 350.1	501842	EPA 350.1	501965
30483865006	**TW-18**	EPA 350.1	501842	EPA 350.1	501965
30483865007	**TW-19**	EPA 350.1	501842	EPA 350.1	501965
30483865008	**TW-16A**	EPA 350.1	501842	EPA 350.1	501965
30483865001	**TW-15**	EPA 410.4	501258	EPA 410.4	501481
30483865002	**TW-15B**	EPA 410.4	501258	EPA 410.4	501481
30483865003	**TW-16**	EPA 410.4	501258	EPA 410.4	501481
30483865004	**TW-17**	EPA 410.4	501258	EPA 410.4	501481
30483865005	**TW-17A**	EPA 410.4	501258	EPA 410.4	501481
30483865006	**TW-18**	EPA 410.4	501258	EPA 410.4	501481
30483865007	**TW-19**	EPA 410.4	501258	EPA 410.4	501481
30483865008	**TW-16A**	EPA 410.4	501258	EPA 410.4	501481
30483865001	**TW-15**	SM 4500-Cl-E-2011	503372		
30483865002	**TW-15B**	SM 4500-Cl-E-2011	503372		
30483865003	**TW-16**	SM 4500-Cl-E-2011	503372		
30483865004	**TW-17**	SM 4500-Cl-E-2011	503372		
30483865005	**TW-17A**	SM 4500-Cl-E-2011	503372		
30483865006	**TW-18**	SM 4500-Cl-E-2011	503372		
30483865007	**TW-19**	SM 4500-Cl-E-2011	503372		
30483865008	**TW-16A**	SM 4500-Cl-E-2011	503372		
30483865001	**TW-15**	SM 4500NO3-F-2011	503032		
30483865002	**TW-15B**	SM 4500NO3-F-2011	503032		
30483865003	**TW-16**	SM 4500NO3-F-2011	503032		
30483865004	**TW-17**	SM 4500NO3-F-2011	503032		
30483865005	**TW-17A**	SM 4500NO3-F-2011	503032		
30483865006	**TW-18**	SM 4500NO3-F-2011	503032		
30483865007	**TW-19**	SM 4500NO3-F-2011	503032		
30483865008	**TW-16A**	SM 4500NO3-F-2011	503032		

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2022
Pace Project No.: 30483865

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30483865001	**TW-15**	EPA 9038	500427		
30483865002	**TW-15B**	EPA 9038	500427		
30483865003	**TW-16**	EPA 9038	500427		
30483865004	**TW-17**	EPA 9038	500427		
30483865005	**TW-17A**	EPA 9038	500427		
30483865006	**TW-18**	EPA 9038	500427		
30483865007	**TW-19**	EPA 9038	500427		
30483865008	**TW-16A**	EPA 9038	500427		
30483865001	**TW-15**	SM 4500NO2-B-2011	500326		
30483865002	**TW-15B**	SM 4500NO2-B-2011	500326		
30483865003	**TW-16**	SM 4500NO2-B-2011	500326		
30483865004	**TW-17**	SM 4500NO2-B-2011	500326		
30483865005	**TW-17A**	SM 4500NO2-B-2011	500326		
30483865006	**TW-18**	SM 4500NO2-B-2011	500326		
30483865007	**TW-19**	SM 4500NO2-B-2011	500326		
30483865008	**TW-16A**	SM 4500NO2-B-2011	500326		

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WO#: 30483865

30483865

EMA ENVIRONMENTAL ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, ... ma@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF-SPRING 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	(1) Total Metals	(2) Total + Diss. Metals	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO4, COD		Method 8011 - EDB + DBCP			
1	TW-15	7	4/26/22	950	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓			001
2	TW-15B	↓	↓	1025	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			002
3	TW-16	↓	↓	1145	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			003
4	TW-16A	↓	↓	1110	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			~~004~~ 008
5	TW-17	↓	↓	1245	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			~~005~~ 004
6	TW-17A	↓	↓	1320	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			~~006~~ 005
7	TW-18	↓	↓	1415	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			~~007~~ 006
8	TW-19	↓	↓	1500	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			~~008~~ 007
9																			MSP 42727
10																			
11																			
12																			

	Signature	Date	Time	Comments
Relinquished by	[signature]	4/26/22	1505	(1) TOTAL METALS - 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni,
Received by	[signature]	4/26/22	1505	Se, Ag, Tl, V, Zn / 7470 - Hg
Relinquished by	[signature]	04/26/22	1800	(2) TOTAL + DISS. METALS: 6010 - Ca, Fe, Mg, Mn, K, Na
Received by	RDS PACE	4-26-22	1805	PACE - WV - METALS
Relinquished by	RDS PACE	4-26-22	2215	PACE - G-BURG - WET CHEM + 8011
Received by				LEVEL 2 REPORT

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

30483865

Millersville Landfill, Anne Arundel County, MD		
	Pace, Beaver, WV	
	Method 6020 - ICPMS	
Parameter	RL	MDL
	(mg/l)	
TOTAL METALS - mg/l		
Antimony	0.0005	
Arsenic	0.0025	0.0002473
Barium	0.0025	
Beryllium	0.0005	
Cadmium	0.0005	
Chromium	0.0025	
Cobalt	0.0025	
Copper	0.0025	
Lead	0.0005	
Nickel	0.0025	
Selenium	0.0025	
Silver	0.0025	
Thallium	0.0005	
Vanadium	0.0025	
Zinc	0.005	
	Pace, Beaver, WV	
TOTAL MERCURY - mg/l	Method 7470A	
Mercury	0.0005	0.00025
	Pace, Beaver, WV	
TOTAL AND DISSOLVED METALS - mg/l	Method 6010 - ICP	
Calcium	0.5	0.028
Iron	0.05	0.0076
Magnesium	0.5	0.047
Manganese	0.005	0.00043
Potassium	0.5	0.19
Sodium	0.5	0.148
	Pace - Greensburg, PA	
Volatile Organics - ug/l	Method 8011 - ug/l	
DBCP	0.041	
EDB	0.041	
GENERAL CHEMISTRY - mg/l	Pace - Greensburg, PA	
Alkalinity - SM 2320B	10	1
Ammonia - EPA 350.1	0.1	0.0445
COD - EPA 410.4	25	4.6532
Chloride - EPA 300.0	3	0.06683
Hardness - 2340B		
Nitrate - EPA 300.0	0.1	0.0238
Sulfate - EPA 300.0	10	4.6702
Total dissolved solids - SM2540C	10	10

#30483865

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EMA Project # 30483865

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Tracking #: —

Label LIMS Login

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 16 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 1.1 °C Correction Factor: 0 °C Final Temp: 1.1 °C

Temp should be above freezing to 6°C

#30483865

Comments:	Yes	No	N/A	pH paper Lot# 100811	Date and Initials of person examining contents: 4-22-22
Chain of Custody Present:	—			1.	
Chain of Custody Filled Out:	—			2.	
Chain of Custody Relinquished:	—			3.	
Sampler Name & Signature on COC:		—		4.	
Sample Labels match COC: -Includes date/time/ID Matrix: WA	—			5.	
Samples Arrived within Hold Time:	—			6.	
Short Hold Time Analysis (<72hr remaining):	—			7.	
Rush Turn Around Time Requested:		—		8.	
Sufficient Volume:	—			9.	
Correct Containers Used: -Pace Containers Used:	—			10.	
Containers Intact:	—			11.	
Orthophosphate field filtered			—	12.	
Hex Cr Aqueous sample field filtered			—	13.	
Organic Samples checked for dechlorination:			—	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	—			16.	
All containers meet method preservation requirements.	—			Initial when completed:	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		—		17.	
Trip Blank Present:		—		18.	
Trip Blank Custody Seals Present		—			
Rad Samples Screened < 0.5 mrem/hr			—	Initial when completed:	Date: / Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

WO# : 30483865

30483865

LIMS30 Internal Shipping Manifest

10

COOLER 21

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	21	Cooler temp (rcvd) °C	2.2
Packaged on Ice (Y/N)	Yes	Correction Factor	0
Shipping Method	Courier	Cooler temp (corr) °C	2.2
Tracking #	N/A	IR GUN ID	23
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished		GBUR	4-27-22	1645
Received		BEAV	4-28-22	1:01
Relinquished				
Received				
Relinquished				
Received				

Logger	Scan Date	Container ID	Type	LIMS Lab ID	LIMS Work Order
MF	4/27/2022	30483865004 BP3N1/2	BP3N	30483865004	30483865
MF	4/27/2022	30483865003 BP3N1/2	BP3N	30483865003	30483865
MF	4/27/2022	30483865002 BP3N2/2	BP3N	30483865002	30483865
MF	4/27/2022	30483865002 BP3N1/2	BP3N	30483865002	30483865
MF	4/27/2022	30483865008 BP3N2/2	BP3N	30483865008	30483865
MF	4/27/2022	30483865001 BP3N1/2	BP3N	30483865001	30483865
MF	4/27/2022	30483865003 BP3N2/2	BP3N	30483865003	30483865
MF	4/27/2022	30483865001 BP3N2/2	BP3N	30483865001	30483865
MF	4/27/2022	30483865005 BP3N1/2	BP3N	30483865005	30483865
MF	4/27/2022	30483865005 BP3N2/2	BP3N	30483865005	30483865
MF	4/27/2022	30483865004 BP3N2/2	BP3N	30483865004	30483865
MF	4/27/2022	30483865008 BP3N1/1	BP3N	30483865008	30483865
MF	4/27/2022	30483865006 BP3N2/2	BP3N	30483865006	30483865
MF	4/27/2022	30483865006 BP3N1/2	BP3N	30483865006	30483865
MF	4/27/2022	30483865007 BP3N1/2	BP3N	30483865007	30483865
MF	4/27/2022	30483865007 BP3N2/2	BP3N	30483865007	30483865
MF	4/27/2022	30484161001 BP3N2/2	BP3N	30484161001	30484161
MF	4/27/2022	30484147001 BP3N1/1	BP3N	30484147001	30484147
MF	4/27/2022	30484160001 BP3U1/1	BP3U	30484160001	30484160
MF	4/27/2022	30484151002 BP3N1/1	BP3N	30484151002	30484151
MF	4/27/2022	30484151001 BP3N1/1	BP3N	30484151001	30484151
MF	4/27/2022	30484162001 BP3N1/1	BP3N	30484162001	30484162
MF	4/27/2022	30484157002 BP3N1/1	BP3N	30484157002	30484157
MF	4/27/2022	30484157003 BP3N1/1	BP3N	30484157003	30484157
MF	4/27/2022	30484157001 BP3N1/1	BP3N	30484157001	30484157
MF	4/27/2022	30484149001 BP3N1/1	BP3N	30484149001	30484149
MF	4/27/2022	30484149003 BP3N1/1	BP3N	30484149003	30484149
MF	4/27/2022	30483946002 BP3N1/1	BP3N	30483946002	30483946
MF	4/27/2022	30483946003 BP3U1/1	BP3U	30483946003	30483946
MF	4/27/2022	30483872002 BP3N1/1	BP3N	30483872002	30483872
MF	4/27/2022	30483872003 BP3N1/1	BP3N	30483872003	30483872
MF	4/27/2022	30483872006 BP3N1/1	BP3N	30483872006	30483872
MF	4/27/2022	30483872005 BP3N1/1	BP3N	30483872005	30483872
MF	4/27/2022	30483872004 BP3N1/1	BP3N	30483872004	30483872

WO#: 30483865
PM: SLS Due Date: 05/11/22
CLIENT: ENV MONITOR

LIMS73 Lab Sample Condition Upon Receipt (West Vir

Pace Analytical

Client Name: _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☑ Other: 3rd party courier

Tracking #: _____

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 23 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** 2.2 °C Correction Factor: 0 °C Final Temp: 2.2 °C

Comments:

pH paper Lot#	Date and Initials of person examining contents:
228220	SC 4/28/22

	Yes	No	N/A	
Chain of Custody Present:			✓	1.
Chain of Custody Filled Out:			✓	2. 3 Manifest
Chain of Custody Relinquished:			✓	3.
Sampler Name & Signature on COC:			✓	4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT			✓	5. Lab Labeled by: N/A Checked by: N/A
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:				8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered:			✓	13.
-pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓	
Filtered volume received for Dissolved tests:			✓	14.
All containers have been checked for preservation:	✓			15.
exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix				
All containers meet method preservation requirements:	✓			Initial when completed SC Date: 4/28/22
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present:			✓	17.
Trip Blank Custody Seals Present:			✓	
				Initial when completed: SC Date: 4/28/22

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

***PM review** is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

June 02, 2022

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-SPRING 2022
Pace Project No.: 30484272

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on April 27, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Scott Gross for
Steven L. Smith
steve.l.smith@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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Greensburg, PA 15601
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CERTIFICATIONS

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Florida: Cert E871149 SEKS WET
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver

225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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SAMPLE SUMMARY

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30484272001	**TW-20R**	Water	04/27/22 08:50	04/27/22 22:35
30484272002	**TW-21**	Water	04/27/22 09:45	04/27/22 22:35
30484272003	**TW-21A**	Water	04/27/22 10:20	04/27/22 22:35
30484272004	**TW-22**	Water	04/27/22 12:15	04/27/22 22:35
30484272005	**TW-22A**	Water	04/27/22 12:50	04/27/22 22:35
30484272006	**TW-22B**	Water	04/27/22 11:40	04/27/22 22:35
30484272007	**TW-24**	Water	04/27/22 14:00	04/27/22 22:35
30484272008	**TW-24A**	Water	04/27/22 14:35	04/27/22 22:35
30484272009	**Dup-1**	Water	04/27/22 00:01	04/27/22 22:35

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30484272001	**TW-20R**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30484272002	**TW-21**	EPA 6010D	MEH	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30484272003	**TW-21A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA

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(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30484272004	**TW-22**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30484272005	**TW-22A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30484272006	**TW-22B**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30484272007	**TW-24**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30484272008	**TW-24A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30484272009	**Dup-1**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Date: June 02, 2022

TW-20R (Lab ID: 30484272001)

- Sample pH for 8011 is 6

TW-21 (Lab ID: 30484272002)

- Sample pH for 8011 is 6

TW-21A (Lab ID: 30484272003)

- Sample pH for 8011 is 6

TW-22 (Lab ID: 30484272004)

- Sample pH for 8011 is 6

TW-22A (Lab ID: 30484272005)

- Sample pH for 8011 is 6

TW-22B (Lab ID: 30484272006)

- Sample pH for 8011 is 6

TW-24 (Lab ID: 30484272007)

- Sample pH for 8011 is 6

TW-24A (Lab ID: 30484272008)

- Sample pH for 8011 is 6

Dup-1 (Lab ID: 30484272009)

- Sample pH for 8011 is 6

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: June 02, 2022

General Information:
9 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: June 02, 2022

General Information:
9 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: June 02, 2022

General Information:
9 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 501194

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30484272001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2426011)
  - Antimony
- MSD (Lab ID: 2426012)
  - Antimony
  - Barium
  - Nickel

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: June 02, 2022

General Information:
9 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 501346

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30483865005

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2426590)
  - Mercury
- MSD (Lab ID: 2426591)
  - Mercury

R1: RPD value was outside control limits.

- MSD (Lab ID: 2426591)
  - Mercury

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: June 02, 2022

QC Batch: 501401

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30484272005

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2426818)
  - Mercury
- MSD (Lab ID: 2426819)
  - Mercury

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: June 02, 2022

General Information:
9 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

QC Batch: 501860

IH: This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.

- BLANK (Lab ID: 2429178)
  - 1,1,1,2-Tetrachloroethane (S)
- Dup-1 (Lab ID: 30484272009)
  - 1,1,1,2-Tetrachloroethane (S)
- LCS (Lab ID: 2429179)
  - 1,1,1,2-Tetrachloroethane (S)
- MS (Lab ID: 2429180)
  - 1,1,1,2-Tetrachloroethane (S)
- MSD (Lab ID: 2429181)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-20R (Lab ID: 30484272001)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-21 (Lab ID: 30484272002)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-21A (Lab ID: 30484272003)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-22 (Lab ID: 30484272004)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-22A (Lab ID: 30484272005)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-22B (Lab ID: 30484272006)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-24 (Lab ID: 30484272007)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-24A (Lab ID: 30484272008)
  - 1,1,1,2-Tetrachloroethane (S)

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: June 02, 2022

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 501860

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- BLANK (Lab ID: 2429178)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- Dup-1 (Lab ID: 30484272009)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- LCS (Lab ID: 2429179)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MS (Lab ID: 2429180)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MSD (Lab ID: 2429181)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-20R (Lab ID: 30484272001)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-21 (Lab ID: 30484272002)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-21A (Lab ID: 30484272003)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-22 (Lab ID: 30484272004)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-22A (Lab ID: 30484272005)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-22B (Lab ID: 30484272006)

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: June 02, 2022

QC Batch: 501860

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- 1,1,1,2-Tetrachloroethane (S)
- 1,2-Dibromo-3-chloropropane
- 1,2-Dibromoethane (EDB)

- TW-24 (Lab ID: 30484272007)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-24A (Lab ID: 30484272008)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: June 02, 2022

General Information:
9 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 503165

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30483706001

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2436492)
  - Alkalinity,Total (CaCO3 pH4.5)
- MSD (Lab ID: 2436493)
  - Alkalinity,Total (CaCO3 pH4.5)

Additional Comments:

Analyte Comments:

QC Batch: 503165

2c: Alk TV: 1 mg/L

- TW-21 (Lab ID: 30484272002)
  - Alkalinity,Total (CaCO3 pH4.5)

4c: Alk TV: 4 mg/L

- TW-21A (Lab ID: 30484272003)
  - Alkalinity,Total (CaCO3 pH4.5)

QC Batch: 503778

1c: Alk TV: 0 mg/L

- TW-22 (Lab ID: 30484272004)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-22A (Lab ID: 30484272005)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: June 02, 2022

Analyte Comments:

QC Batch: 503778

3c: Alk TV: 2 mg/L

- Dup-1 (Lab ID: 30484272009)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-24 (Lab ID: 30484272007)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Method: **SM 2540C-2011**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: June 02, 2022

General Information:
9 samples were analyzed for SM 2540C-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: June 02, 2022

General Information:
9 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: June 02, 2022

General Information:
9 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 501547

D4: Sample was diluted due to the presence of high levels of target analytes.

- MS (Lab ID: 2427593)
  - Chemical Oxygen Demand
- MSD (Lab ID: 2427594)
  - Chemical Oxygen Demand

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: June 02, 2022

General Information:
9 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 503372

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30483865001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2437414)
  - Chloride
- MSD (Lab ID: 2437415)
  - Chloride

QC Batch: 503374

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30484490001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2437420)
  - Chloride
- MSD (Lab ID: 2437421)
  - Chloride

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Method: **SM 4500NO3-F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: June 02, 2022

General Information:
9 samples were analyzed for SM 4500NO3-F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: June 02, 2022

General Information:
9 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: June 02, 2022

General Information:
9 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 500667

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30483926001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2423460)
  - Nitrite as N

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Sample: TW-20R **Lab ID: 30484272001** Collected: 04/27/22 08:50 Received: 04/27/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**22.1**	mg/L	0.50	0.083	1	05/02/22 12:17	05/11/22 20:11	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	05/02/22 12:17	05/11/22 20:11	7439-89-6	
Magnesium	**5.4**	mg/L	0.50	0.047	1	05/02/22 12:17	05/11/22 20:11	7439-95-4	
Manganese	**0.028**	mg/L	0.0050	0.0027	1	05/02/22 12:17	05/11/22 20:11	7439-96-5	
Potassium	**3.3**	mg/L	0.50	0.26	1	05/02/22 12:17	05/11/22 20:11	7440-09-7	
Sodium	**10.7**	mg/L	0.50	0.34	1	05/02/22 12:17	05/11/22 20:11	7440-23-5	
Total Hardness	**77.4**	mg/L	3.3	0.27	1	05/02/22 12:17	05/11/22 20:11		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**24.0**	mg/L	0.50	0.083	1	05/02/22 09:06	05/12/22 08:54	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/02/22 09:06	05/12/22 08:54	7439-89-6	
Magnesium, Dissolved	**5.9**	mg/L	0.50	0.047	1	05/02/22 09:06	05/12/22 08:54	7439-95-4	
Manganese, Dissolved	**0.039**	mg/L	0.0050	0.0027	1	05/02/22 09:06	05/12/22 08:54	7439-96-5	
Potassium, Dissolved	**3.3**	mg/L	0.50	0.26	1	05/02/22 09:06	05/12/22 08:54	7440-09-7	
Sodium, Dissolved	**10.9**	mg/L	0.50	0.34	1	05/02/22 09:06	05/12/22 08:54	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/02/22 07:56	05/02/22 16:13	7440-36-0	M1
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/02/22 07:56	05/02/22 16:13	7440-38-2	
Barium	**0.039**	mg/L	0.0025	0.00098	1	05/02/22 07:56	05/02/22 16:13	7440-39-3	M1
Beryllium	**0.00021J**	mg/L	0.00050	0.00015	1	05/02/22 07:56	05/02/22 16:13	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/02/22 07:56	05/02/22 16:13	7440-43-9	
Chromium	**0.0014J**	mg/L	0.0025	0.00050	1	05/02/22 07:56	05/02/22 16:13	7440-47-3	
Cobalt	**0.0033**	mg/L	0.0025	0.00031	1	05/02/22 07:56	05/02/22 16:13	7440-48-4	
Copper	**0.0033**	mg/L	0.0025	0.00064	1	05/02/22 07:56	05/02/22 16:13	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/02/22 07:56	05/02/22 16:13	7439-92-1	
Nickel	**0.0027**	mg/L	0.0025	0.00065	1	05/02/22 07:56	05/02/22 16:13	7440-02-0	M1
Selenium	**0.0012J**	mg/L	0.0025	0.00084	1	05/02/22 07:56	05/02/22 16:13	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/02/22 07:56	05/02/22 16:13	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/02/22 07:56	05/02/22 16:13	7440-28-0	
Vanadium	**0.0043**	mg/L	0.0025	0.00042	1	05/02/22 07:56	05/02/22 16:13	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0049	1	05/02/22 07:56	05/02/22 16:13	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/02/22 13:57	05/03/22 17:21	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.022	1	05/04/22 07:30	05/06/22 05:02	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	05/04/22 07:30	05/06/22 05:02	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	97	%.	60-140		1	05/04/22 07:30	05/06/22 05:02	630-20-6	CH,IH

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Sample: TW-20R **Lab ID: 30484272001** Collected: 04/27/22 08:50 Received: 04/27/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**36.0**	mg/L	10.0	1.0	1		05/09/22 20:32		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**135**	mg/L	10.0	10.0	1		05/02/22 14:46		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/04/22 10:52	05/04/22 12:01		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**5.6J**	mg/L	25.0	4.7	1	05/03/22 12:47	05/03/22 16:12		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**8.7**	mg/L	3.0	0.67	1		05/10/22 15:54	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.89**	mg/L	0.10	0.053	1		05/11/22 15:57	14797-55-8	
Nitrogen, NO2 plus NO3	**0.89**	mg/L	0.10	0.053	1		05/11/22 15:57		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**54.1**	mg/L	10.0	4.7	1		04/28/22 14:39	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/28/22 13:32	14797-65-0	

Sample: TW-21 **Lab ID: 30484272002** Collected: 04/27/22 09:45 Received: 04/27/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**7.3**	mg/L	0.50	0.083	1	05/20/22 10:51	05/26/22 16:12	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	05/20/22 10:51	05/26/22 16:12	7439-89-6	
Magnesium	**2.8**	mg/L	0.50	0.047	1	05/20/22 10:51	05/26/22 16:12	7439-95-4	
Manganese	**0.13**	mg/L	0.0050	0.0027	1	05/20/22 10:51	05/26/22 16:12	7439-96-5	
Potassium	**2.0**	mg/L	0.50	0.26	1	05/20/22 10:51	05/26/22 16:12	7440-09-7	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Sample: TW-21 **Lab ID: 30484272002** Collected: 04/27/22 09:45 Received: 04/27/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**19.4**	mg/L	0.50	0.34	1	05/20/22 10:51	05/26/22 16:12	7440-23-5	
Total Hardness	**29.6**	mg/L	3.3	0.27	1	05/20/22 10:51	05/26/22 16:12		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**7.9**	mg/L	0.50	0.083	1	05/02/22 09:06	05/12/22 08:57	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/02/22 09:06	05/12/22 08:57	7439-89-6	
Magnesium, Dissolved	**3.0**	mg/L	0.50	0.047	1	05/02/22 09:06	05/12/22 08:57	7439-95-4	
Manganese, Dissolved	**0.13**	mg/L	0.0050	0.0027	1	05/02/22 09:06	05/12/22 08:57	7439-96-5	
Potassium, Dissolved	**2.0**	mg/L	0.50	0.26	1	05/02/22 09:06	05/12/22 08:57	7440-09-7	
Sodium, Dissolved	**19.9**	mg/L	0.50	0.34	1	05/02/22 09:06	05/12/22 08:57	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/02/22 07:56	05/02/22 16:27	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/02/22 07:56	05/02/22 16:27	7440-38-2	
Barium	**0.089**	mg/L	0.0025	0.00098	1	05/02/22 07:56	05/02/22 16:27	7440-39-3	
Beryllium	**0.00051**	mg/L	0.00050	0.00015	1	05/02/22 07:56	05/02/22 16:27	7440-41-7	
Cadmium	**0.00023J**	mg/L	0.00050	0.00013	1	05/02/22 07:56	05/02/22 16:27	7440-43-9	
Chromium	**0.0018J**	mg/L	0.0025	0.00050	1	05/02/22 07:56	05/02/22 16:27	7440-47-3	
Cobalt	**0.010**	mg/L	0.0025	0.00031	1	05/02/22 07:56	05/02/22 16:27	7440-48-4	
Copper	**0.0028**	mg/L	0.0025	0.00064	1	05/02/22 07:56	05/02/22 16:27	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/02/22 07:56	05/02/22 16:27	7439-92-1	
Nickel	**0.0053**	mg/L	0.0025	0.00065	1	05/02/22 07:56	05/02/22 16:27	7440-02-0	
Selenium	**0.0012J**	mg/L	0.0025	0.00084	1	05/02/22 07:56	05/02/22 16:27	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/02/22 07:56	05/02/22 16:27	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/02/22 07:56	05/02/22 16:27	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	05/02/22 07:56	05/02/22 16:27	7440-62-2	
Zinc	**0.033**	mg/L	0.0050	0.0049	1	05/02/22 07:56	05/02/22 16:27	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/02/22 13:57	05/03/22 17:23	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.022	1	05/04/22 07:30	05/06/22 05:41	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	05/04/22 07:30	05/06/22 05:41	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	89	%.	60-140		1	05/04/22 07:30	05/06/22 05:41	630-20-6	CH,IH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**1.0J**	mg/L	10.0	1.0	1		05/09/22 20:34		2c

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Sample: TW-21 **Lab ID: 30484272002** Collected: 04/27/22 09:45 Received: 04/27/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**118**	mg/L	10.0	10.0	1		05/02/22 14:46		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/04/22 10:52	05/04/22 12:07		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/03/22 12:47	05/03/22 16:12		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**22.6**	mg/L	3.0	0.67	1		05/10/22 15:55	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**2.1**	mg/L	0.10	0.053	1		05/11/22 16:01	14797-55-8	
Nitrogen, NO2 plus NO3	**2.1**	mg/L	0.10	0.053	1		05/11/22 16:01		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**31.0**	mg/L	10.0	4.7	1		04/28/22 14:45	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/28/22 13:33	14797-65-0	

Sample: TW-21A **Lab ID: 30484272003** Collected: 04/27/22 10:20 Received: 04/27/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**10.9**	mg/L	0.50	0.083	1	05/02/22 12:17	05/12/22 08:00	7440-70-2	
Iron	**0.042J**	mg/L	0.050	0.035	1	05/02/22 12:17	05/12/22 08:00	7439-89-6	
Magnesium	**3.0**	mg/L	0.50	0.047	1	05/02/22 12:17	05/12/22 08:00	7439-95-4	
Manganese	**0.062**	mg/L	0.0050	0.0027	1	05/02/22 12:17	05/12/22 08:00	7439-96-5	
Potassium	**2.3**	mg/L	0.50	0.26	1	05/02/22 12:17	05/12/22 08:00	7440-09-7	
Sodium	**15.8**	mg/L	0.50	0.34	1	05/02/22 12:17	05/12/22 08:00	7440-23-5	
Total Hardness	**39.6**	mg/L	3.3	0.27	1	05/02/22 12:17	05/12/22 08:00		N3

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Sample: TW-21A **Lab ID: 30484272003** Collected: 04/27/22 10:20 Received: 04/27/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**11.8**	mg/L	0.50	0.083	1	05/02/22 09:06	05/12/22 08:59	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/02/22 09:06	05/12/22 08:59	7439-89-6	
Magnesium, Dissolved	**3.2**	mg/L	0.50	0.047	1	05/02/22 09:06	05/12/22 08:59	7439-95-4	
Manganese, Dissolved	**0.064**	mg/L	0.0050	0.0027	1	05/02/22 09:06	05/12/22 08:59	7439-96-5	
Potassium, Dissolved	**2.3**	mg/L	0.50	0.26	1	05/02/22 09:06	05/12/22 08:59	7440-09-7	
Sodium, Dissolved	**16.4**	mg/L	0.50	0.34	1	05/02/22 09:06	05/12/22 08:59	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/02/22 07:56	05/02/22 16:30	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/02/22 07:56	05/02/22 16:30	7440-38-2	
Barium	**0.068**	mg/L	0.0025	0.00098	1	05/02/22 07:56	05/02/22 16:30	7440-39-3	
Beryllium	**0.00041J**	mg/L	0.00050	0.00015	1	05/02/22 07:56	05/02/22 16:30	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/02/22 07:56	05/02/22 16:30	7440-43-9	
Chromium	**0.0034**	mg/L	0.0025	0.00050	1	05/02/22 07:56	05/02/22 16:30	7440-47-3	
Cobalt	**0.0088**	mg/L	0.0025	0.00031	1	05/02/22 07:56	05/02/22 16:30	7440-48-4	
Copper	**0.0015J**	mg/L	0.0025	0.00064	1	05/02/22 07:56	05/02/22 16:30	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/02/22 07:56	05/02/22 16:30	7439-92-1	
Nickel	**0.0047**	mg/L	0.0025	0.00065	1	05/02/22 07:56	05/02/22 16:30	7440-02-0	
Selenium	**0.0017J**	mg/L	0.0025	0.00084	1	05/02/22 07:56	05/02/22 16:30	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/02/22 07:56	05/02/22 16:30	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/02/22 07:56	05/02/22 16:30	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	05/02/22 07:56	05/02/22 16:30	7440-62-2	
Zinc	**0.021**	mg/L	0.0050	0.0049	1	05/02/22 07:56	05/02/22 16:30	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/02/22 13:57	05/03/22 17:25	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.022	1	05/04/22 07:30	05/06/22 05:53	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	05/04/22 07:30	05/06/22 05:53	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	100	%.	60-140		1	05/04/22 07:30	05/06/22 05:53	630-20-6	CH,IH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**4.0J**	mg/L	10.0	1.0	1		05/09/22 20:35		4c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**111**	mg/L	10.0	10.0	1		05/02/22 14:46		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Sample: TW-21A **Lab ID: 30484272003** Collected: 04/27/22 10:20 Received: 04/27/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/04/22 10:52	05/04/22 12:13		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/03/22 12:47	05/03/22 16:12		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**17.3**	mg/L	3.0	0.67	1		05/10/22 15:56	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**2.4**	mg/L	0.10	0.053	1		05/11/22 16:03	14797-55-8	
Nitrogen, NO2 plus NO3	**2.4**	mg/L	0.10	0.053	1		05/11/22 16:03		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**33.3**	mg/L	10.0	4.7	1		04/28/22 14:47	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/28/22 13:33	14797-65-0	

Sample: TW-22 **Lab ID: 30484272004** Collected: 04/27/22 12:15 Received: 04/27/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**2.3**	mg/L	0.50	0.083	1	05/02/22 12:17	05/12/22 08:06	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	05/02/22 12:17	05/12/22 08:06	7439-89-6	
Magnesium	**2.1**	mg/L	0.50	0.047	1	05/02/22 12:17	05/12/22 08:06	7439-95-4	
Manganese	**0.034**	mg/L	0.0050	0.0027	1	05/02/22 12:17	05/12/22 08:06	7439-96-5	
Potassium	**1.2**	mg/L	0.50	0.26	1	05/02/22 12:17	05/12/22 08:06	7440-09-7	
Sodium	**12.6**	mg/L	0.50	0.34	1	05/02/22 12:17	05/12/22 08:06	7440-23-5	
Total Hardness	**14.5**	mg/L	3.3	0.27	1	05/02/22 12:17	05/12/22 08:06		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**2.4**	mg/L	0.50	0.083	1	05/02/22 09:06	05/12/22 09:01	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/02/22 09:06	05/12/22 09:01	7439-89-6	
Magnesium, Dissolved	**2.1**	mg/L	0.50	0.047	1	05/02/22 09:06	05/12/22 09:01	7439-95-4	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Sample: TW-22 **Lab ID: 30484272004** Collected: 04/27/22 12:15 Received: 04/27/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Manganese, Dissolved	**0.034**	mg/L	0.0050	0.0027	1	05/02/22 09:06	05/12/22 09:01	7439-96-5	
Potassium, Dissolved	**1.1**	mg/L	0.50	0.26	1	05/02/22 09:06	05/12/22 09:01	7440-09-7	
Sodium, Dissolved	**12.4**	mg/L	0.50	0.34	1	05/02/22 09:06	05/12/22 09:01	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/02/22 07:56	05/02/22 16:33	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/02/22 07:56	05/02/22 16:33	7440-38-2	
Barium	**0.051**	mg/L	0.0025	0.00098	1	05/02/22 07:56	05/02/22 16:33	7440-39-3	
Beryllium	**0.00032J**	mg/L	0.00050	0.00015	1	05/02/22 07:56	05/02/22 16:33	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/02/22 07:56	05/02/22 16:33	7440-43-9	
Chromium	**0.0043**	mg/L	0.0025	0.00050	1	05/02/22 07:56	05/02/22 16:33	7440-47-3	
Cobalt	**0.013**	mg/L	0.0025	0.00031	1	05/02/22 07:56	05/02/22 16:33	7440-48-4	
Copper	**0.011**	mg/L	0.0025	0.00064	1	05/02/22 07:56	05/02/22 16:33	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/02/22 07:56	05/02/22 16:33	7439-92-1	
Nickel	**0.018**	mg/L	0.0025	0.00065	1	05/02/22 07:56	05/02/22 16:33	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/02/22 07:56	05/02/22 16:33	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/02/22 07:56	05/02/22 16:33	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/02/22 07:56	05/02/22 16:33	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	05/02/22 07:56	05/02/22 16:33	7440-62-2	
Zinc	**0.016**	mg/L	0.0050	0.0049	1	05/02/22 07:56	05/02/22 16:33	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/02/22 13:57	05/03/22 17:27	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/04/22 07:30	05/06/22 06:06	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/04/22 07:30	05/06/22 06:06	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	107	%.	60-140		1	05/04/22 07:30	05/06/22 06:06	630-20-6	CH,IH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/11/22 21:32		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**65.0**	mg/L	10.0	10.0	1		05/02/22 14:46		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/04/22 10:52	05/04/22 12:15		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Sample: TW-22 **Lab ID: 30484272004** Collected: 04/27/22 12:15 Received: 04/27/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/03/22 12:47	05/03/22 16:12		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**18.4**	mg/L	3.0	0.67	1		05/10/22 15:57	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.1**	mg/L	0.10	0.053	1		05/11/22 16:04	14797-55-8	
Nitrogen, NO2 plus NO3	**1.1**	mg/L	0.10	0.053	1		05/11/22 16:04		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/28/22 14:48	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/28/22 13:35	14797-65-0	

Sample: TW-22A **Lab ID: 30484272005** Collected: 04/27/22 12:50 Received: 04/27/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**5.9**	mg/L	0.50	0.083	1	05/02/22 12:17	05/12/22 08:08	7440-70-2	
Iron	**0.057**	mg/L	0.050	0.035	1	05/02/22 12:17	05/12/22 08:08	7439-89-6	
Magnesium	**4.8**	mg/L	0.50	0.047	1	05/02/22 12:17	05/12/22 08:08	7439-95-4	
Manganese	**0.14**	mg/L	0.0050	0.0027	1	05/02/22 12:17	05/12/22 08:08	7439-96-5	
Potassium	**1.7**	mg/L	0.50	0.26	1	05/02/22 12:17	05/12/22 08:08	7440-09-7	
Sodium	**40.3**	mg/L	0.50	0.34	1	05/02/22 12:17	05/12/22 08:08	7440-23-5	
Total Hardness	**34.6**	mg/L	3.3	0.27	1	05/02/22 12:17	05/12/22 08:08		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**5.9**	mg/L	0.50	0.083	1	05/02/22 09:06	05/12/22 09:03	7440-70-2	
Iron, Dissolved	**0.046J**	mg/L	0.050	0.035	1	05/02/22 09:06	05/12/22 09:03	7439-89-6	
Magnesium, Dissolved	**4.7**	mg/L	0.50	0.047	1	05/02/22 09:06	05/12/22 09:03	7439-95-4	
Manganese, Dissolved	**0.13**	mg/L	0.0050	0.0027	1	05/02/22 09:06	05/12/22 09:03	7439-96-5	
Potassium, Dissolved	**1.7**	mg/L	0.50	0.26	1	05/02/22 09:06	05/12/22 09:03	7440-09-7	
Sodium, Dissolved	**38.8**	mg/L	0.50	0.34	1	05/02/22 09:06	05/12/22 09:03	7440-23-5	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Sample: TW-22A **Lab ID: 30484272005** Collected: 04/27/22 12:50 Received: 04/27/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/02/22 07:56	05/02/22 16:41	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/02/22 07:56	05/02/22 16:41	7440-38-2	
Barium	**0.17**	mg/L	0.0025	0.00098	1	05/02/22 07:56	05/02/22 16:41	7440-39-3	
Beryllium	**0.00068**	mg/L	0.00050	0.00015	1	05/02/22 07:56	05/02/22 16:41	7440-41-7	
Cadmium	**0.00035J**	mg/L	0.00050	0.00013	1	05/02/22 07:56	05/02/22 16:41	7440-43-9	
Chromium	**0.0022J**	mg/L	0.0025	0.00050	1	05/02/22 07:56	05/02/22 16:41	7440-47-3	
Cobalt	**0.022**	mg/L	0.0025	0.00031	1	05/02/22 07:56	05/02/22 16:41	7440-48-4	
Copper	**0.0098**	mg/L	0.0025	0.00064	1	05/02/22 07:56	05/02/22 16:41	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/02/22 07:56	05/02/22 16:41	7439-92-1	
Nickel	**0.014**	mg/L	0.0025	0.00065	1	05/02/22 07:56	05/02/22 16:41	7440-02-0	
Selenium	**0.0020J**	mg/L	0.0025	0.00084	1	05/02/22 07:56	05/02/22 16:41	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/02/22 07:56	05/02/22 16:41	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/02/22 07:56	05/02/22 16:41	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	05/02/22 07:56	05/02/22 16:41	7440-62-2	
Zinc	**0.044**	mg/L	0.0050	0.0049	1	05/02/22 07:56	05/02/22 16:41	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00034**	mg/L	0.00020	0.00020	1	05/02/22 15:30	05/04/22 14:34	7439-97-6	M1
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.042 U**	ug/L	0.042	0.023	1	05/04/22 07:30	05/06/22 06:19	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.042 U**	ug/L	0.042	0.032	1	05/04/22 07:30	05/06/22 06:19	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	124	%.	60-140		1	05/04/22 07:30	05/06/22 06:19	630-20-6	CH,IH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/11/22 21:34		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**171**	mg/L	10.0	10.0	1		05/02/22 14:46		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/04/22 10:52	05/04/22 12:17		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/03/22 12:47	05/03/22 16:12		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Sample: TW-22A **Lab ID: 30484272005** Collected: 04/27/22 12:50 Received: 04/27/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**71.1**	mg/L	3.0	0.67	1		05/10/22 15:57	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.7**	mg/L	0.10	0.053	1		05/11/22 16:06	14797-55-8	
Nitrogen, NO2 plus NO3	**1.7**	mg/L	0.10	0.053	1		05/11/22 16:06		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**13.4**	mg/L	10.0	4.7	1		04/28/22 14:50	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/28/22 13:35	14797-65-0	

Sample: TW-22B **Lab ID: 30484272006** Collected: 04/27/22 11:40 Received: 04/27/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**14.8**	mg/L	0.50	0.083	1	05/02/22 12:17	05/12/22 08:10	7440-70-2	
Iron	**0.54**	mg/L	0.050	0.035	1	05/02/22 12:17	05/12/22 08:10	7439-89-6	
Magnesium	**3.7**	mg/L	0.50	0.047	1	05/02/22 12:17	05/12/22 08:10	7439-95-4	
Manganese	**0.026**	mg/L	0.0050	0.0027	1	05/02/22 12:17	05/12/22 08:10	7439-96-5	
Potassium	**3.5**	mg/L	0.50	0.26	1	05/02/22 12:17	05/12/22 08:10	7440-09-7	
Sodium	**6.4**	mg/L	0.50	0.34	1	05/02/22 12:17	05/12/22 08:10	7440-23-5	
Total Hardness	**52.4**	mg/L	3.3	0.27	1	05/02/22 12:17	05/12/22 08:10		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**14.9**	mg/L	0.50	0.083	1	05/02/22 09:06	05/12/22 09:05	7440-70-2	
Iron, Dissolved	**0.079**	mg/L	0.050	0.035	1	05/02/22 09:06	05/12/22 09:05	7439-89-6	
Magnesium, Dissolved	**3.7**	mg/L	0.50	0.047	1	05/02/22 09:06	05/12/22 09:05	7439-95-4	
Manganese, Dissolved	**0.026**	mg/L	0.0050	0.0027	1	05/02/22 09:06	05/12/22 09:05	7439-96-5	
Potassium, Dissolved	**3.4**	mg/L	0.50	0.26	1	05/02/22 09:06	05/12/22 09:05	7440-09-7	
Sodium, Dissolved	**6.6**	mg/L	0.50	0.34	1	05/02/22 09:06	05/12/22 09:05	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/02/22 07:56	05/02/22 16:44	7440-36-0	
Arsenic	**0.00049J**	mg/L	0.0025	0.00044	1	05/02/22 07:56	05/02/22 16:44	7440-38-2	
Barium	**0.042**	mg/L	0.0025	0.00098	1	05/02/22 07:56	05/02/22 16:44	7440-39-3	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Sample: TW-22B **Lab ID: 30484272006** Collected: 04/27/22 11:40 Received: 04/27/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	05/02/22 07:56	05/02/22 16:44	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/02/22 07:56	05/02/22 16:44	7440-43-9	
Chromium	**0.012**	mg/L	0.0025	0.00050	1	05/02/22 07:56	05/02/22 16:44	7440-47-3	
Cobalt	**0.010**	mg/L	0.0025	0.00031	1	05/02/22 07:56	05/02/22 16:44	7440-48-4	
Copper	**0.0058**	mg/L	0.0025	0.00064	1	05/02/22 07:56	05/02/22 16:44	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/02/22 07:56	05/02/22 16:44	7439-92-1	
Nickel	**0.012**	mg/L	0.0025	0.00065	1	05/02/22 07:56	05/02/22 16:44	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/02/22 07:56	05/02/22 16:44	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/02/22 07:56	05/02/22 16:44	7440-22-4	
Thallium	**0.00011J**	mg/L	0.00050	0.000081	1	05/02/22 07:56	05/02/22 16:44	7440-28-0	
Vanadium	**0.0013J**	mg/L	0.0025	0.00042	1	05/02/22 07:56	05/02/22 16:44	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0049	1	05/02/22 07:56	05/02/22 16:44	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/02/22 15:30	05/04/22 14:39	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.022	1	05/04/22 07:30	05/06/22 06:32	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	05/04/22 07:30	05/06/22 06:32	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	113	%.	60-140		1	05/04/22 07:30	05/06/22 06:32	630-20-6	CH,IH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**28.0**	mg/L	10.0	1.0	1		05/11/22 21:36		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**90.0**	mg/L	10.0	10.0	1		05/02/22 14:46		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.062J**	mg/L	0.10	0.044	1	05/04/22 10:52	05/04/22 12:19		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/03/22 12:47	05/03/22 16:13		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**4.9**	mg/L	3.0	0.67	1		05/10/22 15:58	16887-00-6	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Sample: TW-22B **Lab ID: 30484272006** Collected: 04/27/22 11:40 Received: 04/27/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**2.5**	mg/L	0.10	0.053	1		05/11/22 16:07	14797-55-8	
Nitrogen, NO2 plus NO3	**2.5**	mg/L	0.10	0.053	1		05/11/22 16:07		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**21.4**	mg/L	10.0	4.7	1		04/28/22 14:50	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/28/22 13:36	14797-65-0	

Sample: TW-24 **Lab ID: 30484272007** Collected: 04/27/22 14:00 Received: 04/27/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**4.0**	mg/L	0.50	0.083	1	05/02/22 12:17	05/12/22 08:12	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	05/02/22 12:17	05/12/22 08:12	7439-89-6	
Magnesium	**3.8**	mg/L	0.50	0.047	1	05/02/22 12:17	05/12/22 08:12	7439-95-4	
Manganese	**0.049**	mg/L	0.0050	0.0027	1	05/02/22 12:17	05/12/22 08:12	7439-96-5	
Potassium	**1.3**	mg/L	0.50	0.26	1	05/02/22 12:17	05/12/22 08:12	7440-09-7	
Sodium	**12.2**	mg/L	0.50	0.34	1	05/02/22 12:17	05/12/22 08:12	7440-23-5	
Total Hardness	**25.7**	mg/L	3.3	0.27	1	05/02/22 12:17	05/12/22 08:12		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**4.1**	mg/L	0.50	0.083	1	05/02/22 09:06	05/12/22 09:07	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/02/22 09:06	05/12/22 09:07	7439-89-6	
Magnesium, Dissolved	**3.8**	mg/L	0.50	0.047	1	05/02/22 09:06	05/12/22 09:07	7439-95-4	
Manganese, Dissolved	**0.049**	mg/L	0.0050	0.0027	1	05/02/22 09:06	05/12/22 09:07	7439-96-5	
Potassium, Dissolved	**1.3**	mg/L	0.50	0.26	1	05/02/22 09:06	05/12/22 09:07	7440-09-7	
Sodium, Dissolved	**12.0**	mg/L	0.50	0.34	1	05/02/22 09:06	05/12/22 09:07	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/02/22 07:56	05/02/22 16:47	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/02/22 07:56	05/02/22 16:47	7440-38-2	
Barium	**0.075**	mg/L	0.0025	0.00098	1	05/02/22 07:56	05/02/22 16:47	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	05/02/22 07:56	05/02/22 16:47	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/02/22 07:56	05/02/22 16:47	7440-43-9	
Chromium	**0.00084J**	mg/L	0.0025	0.00050	1	05/02/22 07:56	05/02/22 16:47	7440-47-3	
Cobalt	**0.0097**	mg/L	0.0025	0.00031	1	05/02/22 07:56	05/02/22 16:47	7440-48-4	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Sample: TW-24 **Lab ID: 30484272007** Collected: 04/27/22 14:00 Received: 04/27/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Copper	**0.0040**	mg/L	0.0025	0.00064	1	05/02/22 07:56	05/02/22 16:47	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/02/22 07:56	05/02/22 16:47	7439-92-1	
Nickel	**0.010**	mg/L	0.0025	0.00065	1	05/02/22 07:56	05/02/22 16:47	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/02/22 07:56	05/02/22 16:47	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/02/22 07:56	05/02/22 16:47	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/02/22 07:56	05/02/22 16:47	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	05/02/22 07:56	05/02/22 16:47	7440-62-2	
Zinc	**0.012**	mg/L	0.0050	0.0049	1	05/02/22 07:56	05/02/22 16:47	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00053**	mg/L	0.00020	0.00020	1	05/02/22 15:30	05/04/22 14:45	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/04/22 07:30	05/06/22 06:45	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/04/22 07:30	05/06/22 06:45	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	113	%.	60-140		1	05/04/22 07:30	05/06/22 06:45	630-20-6	CH,IH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		05/11/22 21:38		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**74.0**	mg/L	10.0	10.0	1		05/02/22 14:46		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/04/22 10:52	05/04/22 12:21		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/03/22 12:47	05/03/22 16:13		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**20.2**	mg/L	3.0	0.67	1		05/10/22 16:03	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.0**	mg/L	0.10	0.053	1		05/11/22 16:08	14797-55-8	
Nitrogen, NO2 plus NO3	**1.0**	mg/L	0.10	0.053	1		05/11/22 16:08		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Sample: TW-24 **Lab ID: 30484272007** Collected: 04/27/22 14:00 Received: 04/27/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**8.4J**	mg/L	10.0	4.7	1		04/28/22 14:52	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/28/22 13:36	14797-65-0	

Sample: TW-24A **Lab ID: 30484272008** Collected: 04/27/22 14:35 Received: 04/27/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**26.2**	mg/L	0.50	0.083	1	05/02/22 12:17	05/12/22 08:14	7440-70-2	
Iron	**0.051**	mg/L	0.050	0.035	1	05/02/22 12:17	05/12/22 08:14	7439-89-6	
Magnesium	**4.9**	mg/L	0.50	0.047	1	05/02/22 12:17	05/12/22 08:14	7439-95-4	
Manganese	**0.12**	mg/L	0.0050	0.0027	1	05/02/22 12:17	05/12/22 08:14	7439-96-5	
Potassium	**3.3**	mg/L	0.50	0.26	1	05/02/22 12:17	05/12/22 08:14	7440-09-7	
Sodium	**3.0**	mg/L	0.50	0.34	1	05/02/22 12:17	05/12/22 08:14	7440-23-5	
Total Hardness	**85.7**	mg/L	3.3	0.27	1	05/02/22 12:17	05/12/22 08:14		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**26.9**	mg/L	0.50	0.083	1	05/02/22 09:06	05/12/22 09:09	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/02/22 09:06	05/12/22 09:09	7439-89-6	
Magnesium, Dissolved	**5.0**	mg/L	0.50	0.047	1	05/02/22 09:06	05/12/22 09:09	7439-95-4	
Manganese, Dissolved	**0.12**	mg/L	0.0050	0.0027	1	05/02/22 09:06	05/12/22 09:09	7439-96-5	
Potassium, Dissolved	**3.2**	mg/L	0.50	0.26	1	05/02/22 09:06	05/12/22 09:09	7440-09-7	
Sodium, Dissolved	**3.1**	mg/L	0.50	0.34	1	05/02/22 09:06	05/12/22 09:09	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/02/22 07:56	05/02/22 16:50	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/02/22 07:56	05/02/22 16:50	7440-38-2	
Barium	**0.062**	mg/L	0.0025	0.00098	1	05/02/22 07:56	05/02/22 16:50	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	05/02/22 07:56	05/02/22 16:50	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/02/22 07:56	05/02/22 16:50	7440-43-9	
Chromium	**0.0037**	mg/L	0.0025	0.00050	1	05/02/22 07:56	05/02/22 16:50	7440-47-3	
Cobalt	**0.0041**	mg/L	0.0025	0.00031	1	05/02/22 07:56	05/02/22 16:50	7440-48-4	
Copper	**0.0040**	mg/L	0.0025	0.00064	1	05/02/22 07:56	05/02/22 16:50	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/02/22 07:56	05/02/22 16:50	7439-92-1	
Nickel	**0.0040**	mg/L	0.0025	0.00065	1	05/02/22 07:56	05/02/22 16:50	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/02/22 07:56	05/02/22 16:50	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/02/22 07:56	05/02/22 16:50	7440-22-4	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Sample: TW-24A **Lab ID: 30484272008** Collected: 04/27/22 14:35 Received: 04/27/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/02/22 07:56	05/02/22 16:50	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	05/02/22 07:56	05/02/22 16:50	7440-62-2	
Zinc	**0.0050J**	mg/L	0.0050	0.0049	1	05/02/22 07:56	05/02/22 16:50	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00034**	mg/L	0.00020	0.00020	1	05/02/22 15:30	05/04/22 14:46	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/04/22 07:30	05/06/22 06:57	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/04/22 07:30	05/06/22 06:57	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	115	%.	60-140		1	05/04/22 07:30	05/06/22 06:57	630-20-6	CH,IH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**62.0**	mg/L	10.0	1.0	1		05/11/22 21:40		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**110**	mg/L	10.0	10.0	1		05/02/22 14:46		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/04/22 10:52	05/04/22 12:23		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/03/22 12:47	05/03/22 16:13		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**4.0**	mg/L	3.0	0.67	1		05/10/22 16:04	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.5**	mg/L	0.10	0.053	1		05/11/22 16:10	14797-55-8	
Nitrogen, NO2 plus NO3	**1.6**	mg/L	0.10	0.053	1		05/11/22 16:10		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**19.1**	mg/L	10.0	4.7	1		04/28/22 14:52	14808-79-8	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Sample: TW-24A **Lab ID: 30484272008** Collected: 04/27/22 14:35 Received: 04/27/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.016**	mg/L	0.010	0.0055	1		04/28/22 13:37	14797-65-0	

Sample: Dup-1 **Lab ID: 30484272009** Collected: 04/27/22 00:01 Received: 04/27/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**3.9**	mg/L	0.50	0.083	1	05/02/22 12:17	05/12/22 08:16	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	05/02/22 12:17	05/12/22 08:16	7439-89-6	
Magnesium	**3.7**	mg/L	0.50	0.047	1	05/02/22 12:17	05/12/22 08:16	7439-95-4	
Manganese	**0.048**	mg/L	0.0050	0.0027	1	05/02/22 12:17	05/12/22 08:16	7439-96-5	
Potassium	**1.3**	mg/L	0.50	0.26	1	05/02/22 12:17	05/12/22 08:16	7440-09-7	
Sodium	**12.0**	mg/L	0.50	0.34	1	05/02/22 12:17	05/12/22 08:16	7440-23-5	
Total Hardness	**25.3**	mg/L	3.3	0.27	1	05/02/22 12:17	05/12/22 08:16		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**4.1**	mg/L	0.50	0.083	1	05/02/22 09:06	05/12/22 09:11	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/02/22 09:06	05/12/22 09:11	7439-89-6	
Magnesium, Dissolved	**3.8**	mg/L	0.50	0.047	1	05/02/22 09:06	05/12/22 09:11	7439-95-4	
Manganese, Dissolved	**0.048**	mg/L	0.0050	0.0027	1	05/02/22 09:06	05/12/22 09:11	7439-96-5	
Potassium, Dissolved	**1.3**	mg/L	0.50	0.26	1	05/02/22 09:06	05/12/22 09:11	7440-09-7	
Sodium, Dissolved	**12.0**	mg/L	0.50	0.34	1	05/02/22 09:06	05/12/22 09:11	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/02/22 07:56	05/02/22 16:52	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/02/22 07:56	05/02/22 16:52	7440-38-2	
Barium	**0.083**	mg/L	0.0025	0.00098	1	05/02/22 07:56	05/02/22 16:52	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	05/02/22 07:56	05/02/22 16:52	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/02/22 07:56	05/02/22 16:52	7440-43-9	
Chromium	**0.00076J**	mg/L	0.0025	0.00050	1	05/02/22 07:56	05/02/22 16:52	7440-47-3	
Cobalt	**0.011**	mg/L	0.0025	0.00031	1	05/02/22 07:56	05/02/22 16:52	7440-48-4	
Copper	**0.0041**	mg/L	0.0025	0.00064	1	05/02/22 07:56	05/02/22 16:52	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	05/02/22 07:56	05/02/22 16:52	7439-92-1	
Nickel	**0.011**	mg/L	0.0025	0.00065	1	05/02/22 07:56	05/02/22 16:52	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/02/22 07:56	05/02/22 16:52	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/02/22 07:56	05/02/22 16:52	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/02/22 07:56	05/02/22 16:52	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	05/02/22 07:56	05/02/22 16:52	7440-62-2	
Zinc	**0.013**	mg/L	0.0050	0.0049	1	05/02/22 07:56	05/02/22 16:52	7440-66-6	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Sample: Dup-1 **Lab ID: 30484272009** Collected: 04/27/22 00:01 Received: 04/27/22 22:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00060**	mg/L	0.00020	0.00020	1	05/02/22 15:30	05/04/22 14:48	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.022	1	05/04/22 07:30	05/06/22 07:10	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	05/04/22 07:30	05/06/22 07:10	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	105	%.	60-140		1	05/04/22 07:30	05/06/22 07:10	630-20-6	CH,IH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		05/11/22 21:41		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**91.0**	mg/L	10.0	10.0	1		05/02/22 14:46		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	05/04/22 10:52	05/04/22 12:25		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/03/22 12:47	05/03/22 16:14		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**20.1**	mg/L	3.0	0.67	1		05/10/22 16:04	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.0**	mg/L	0.10	0.053	1		05/11/22 16:14	14797-55-8	
Nitrogen, NO2 plus NO3	**1.0**	mg/L	0.10	0.053	1		05/11/22 16:14		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**7.9J**	mg/L	10.0	4.7	1		04/28/22 14:55	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/28/22 13:37	14797-65-0	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30484272

QC Batch: 501261
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30484272001, 30484272003, 30484272004, 30484272005, 30484272006, 30484272007, 30484272008, 30484272009

METHOD BLANK: 2426154 Matrix: Water
Associated Lab Samples: 30484272001, 30484272003, 30484272004, 30484272005, 30484272006, 30484272007, 30484272008, 30484272009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	05/11/22 19:33	
Iron	mg/L	0.050 U	0.050	0.035	05/11/22 19:33	
Magnesium	mg/L	0.50 U	0.50	0.047	05/11/22 19:33	
Manganese	mg/L	0.0050 U	0.0050	0.0027	05/11/22 19:33	
Potassium	mg/L	0.50 U	0.50	0.26	05/11/22 19:33	
Sodium	mg/L	0.50 U	0.50	0.34	05/11/22 19:33	

LABORATORY CONTROL SAMPLE: 2426155

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	42.2	106	80-120	
Iron	mg/L	2	2.2	108	80-120	
Magnesium	mg/L	20	21.5	107	80-120	
Manganese	mg/L	2	2.1	107	80-120	
Potassium	mg/L	20	20.8	104	80-120	
Sodium	mg/L	20	20.8	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2426370 2426371

Parameter	Units	30484620003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	26500 ug/L	40	40	68.8	70.5	106	110	80-120	2	20	
Iron	mg/L	101 ug/L	2	2	2.2	2.3	106	111	80-120	4	20	
Magnesium	mg/L	12300 ug/L	20	20	34.0	34.9	109	113	80-120	3	20	
Manganese	mg/L	15.7 ug/L	2	2	2.1	2.2	106	111	80-120	4	20	
Potassium	mg/L	14600 ug/L	20	20	36.2	37.2	108	113	80-120	3	20	
Sodium	mg/L	30400 ug/L	20	20	51.4	52.4	105	110	80-120	2	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30484272

QC Batch: 505819
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30484272002

METHOD BLANK: 2450528 Matrix: Water
Associated Lab Samples: 30484272002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	05/30/22 16:07	
Iron	mg/L	0.050 U	0.050	0.035	05/30/22 16:07	
Magnesium	mg/L	0.50 U	0.50	0.047	05/30/22 16:07	
Manganese	mg/L	0.0050 U	0.0050	0.0027	05/30/22 16:07	
Potassium	mg/L	0.50 U	0.50	0.26	05/30/22 16:07	
Sodium	mg/L	0.50 U	0.50	0.34	05/30/22 16:07	

LABORATORY CONTROL SAMPLE: 2450529

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	41.1	103	80-120	
Iron	mg/L	2	2.0	102	80-120	
Magnesium	mg/L	20	20.6	103	80-120	
Manganese	mg/L	2	2.1	107	80-120	
Potassium	mg/L	20	19.9	99	80-120	
Sodium	mg/L	20	19.9	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2450572 2450573

Parameter	Units	30483386009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	74500 ug/L	40	40	114	115	100	101	80-120	0	20	
Iron	mg/L	0.49	2	2	2.5	2.5	103	102	80-120	1	20	
Magnesium	mg/L	19600 ug/L	20	20	40.1	40.2	102	103	80-120	0	20	
Manganese	mg/L	0.021	2	2	2.2	2.2	107	107	80-120	0	20	
Potassium	mg/L	1970 ug/L	20	20	23.3	23.2	107	106	80-120	0	20	
Sodium	mg/L	104000 ug/L	20	20	123	124	95	98	80-120	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30484272

QC Batch: 501192
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30484272001, 30484272002, 30484272003, 30484272004, 30484272005, 30484272006, 30484272007, 30484272008, 30484272009

METHOD BLANK: 2426001 Matrix: Water
Associated Lab Samples: 30484272001, 30484272002, 30484272003, 30484272004, 30484272005, 30484272006, 30484272007, 30484272008, 30484272009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	05/12/22 08:18	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	05/12/22 08:18	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	05/12/22 08:18	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	05/12/22 08:18	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	05/12/22 08:18	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	05/12/22 08:18	

LABORATORY CONTROL SAMPLE: 2426002

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	44.7	112	80-120	
Iron, Dissolved	mg/L	2	2.2	112	80-120	
Magnesium, Dissolved	mg/L	20	23.0	115	80-120	
Manganese, Dissolved	mg/L	2	2.2	111	80-120	
Potassium, Dissolved	mg/L	20	21.1	105	80-120	
Sodium, Dissolved	mg/L	20	21.0	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2426003 2426004

Parameter	Units	30483865001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	0.87	40	40	46.1	46.3	113	114	80-120	0	20	
Iron, Dissolved	mg/L	21.3	2	2	23.7	23.6	115	112	80-120	0	20	
Magnesium, Dissolved	mg/L	0.57	20	20	23.6	23.5	115	115	80-120	0	20	
Manganese, Dissolved	mg/L	0.25	2	2	2.5	2.5	110	110	80-120	0	20	
Potassium, Dissolved	mg/L	0.83	20	20	22.1	22.0	106	106	80-120	0	20	
Sodium, Dissolved	mg/L	2.0	20	20	23.2	23.2	106	106	80-120	0	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30484272

QC Batch: 501194
QC Batch Method: EPA 3020A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30484272001, 30484272002, 30484272003, 30484272004, 30484272005, 30484272006, 30484272007, 30484272008, 30484272009

METHOD BLANK: 2426009
Matrix: Water
Associated Lab Samples: 30484272001, 30484272002, 30484272003, 30484272004, 30484272005, 30484272006, 30484272007, 30484272008, 30484272009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00030	05/02/22 16:08	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	05/02/22 16:08	
Barium	mg/L	0.0025 U	0.0025	0.00098	05/02/22 16:08	
Beryllium	mg/L	0.00050 U	0.00050	0.00015	05/02/22 16:08	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	05/02/22 16:08	
Chromium	mg/L	0.0025 U	0.0025	0.00050	05/02/22 16:08	
Cobalt	mg/L	0.0025 U	0.0025	0.00031	05/02/22 16:08	
Copper	mg/L	0.0025 U	0.0025	0.00064	05/02/22 16:08	
Lead	mg/L	0.00050 U	0.00050	0.00045	05/02/22 16:08	
Nickel	mg/L	0.0025 U	0.0025	0.00065	05/02/22 16:08	
Selenium	mg/L	0.0025 U	0.0025	0.00084	05/02/22 16:08	
Silver	mg/L	0.0025 U	0.0025	0.00053	05/02/22 16:08	
Thallium	mg/L	0.00050 U	0.00050	0.000081	05/02/22 16:08	
Vanadium	mg/L	0.0025 U	0.0025	0.00042	05/02/22 16:08	
Zinc	mg/L	0.0050 U	0.0050	0.0049	05/02/22 16:08	

LABORATORY CONTROL SAMPLE: 2426010

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.023	113	80-120	
Arsenic	mg/L	0.1	0.10	103	80-120	
Barium	mg/L	0.1	0.10	103	80-120	
Beryllium	mg/L	0.02	0.019	97	80-120	
Cadmium	mg/L	0.02	0.021	104	80-120	
Chromium	mg/L	0.1	0.11	106	80-120	
Cobalt	mg/L	0.1	0.11	106	80-120	
Copper	mg/L	0.1	0.11	108	80-120	
Lead	mg/L	0.02	0.021	103	80-120	
Nickel	mg/L	0.1	0.11	106	80-120	
Selenium	mg/L	0.1	0.098	98	80-120	
Silver	mg/L	0.1	0.10	103	80-120	
Thallium	mg/L	0.02	0.021	103	80-120	
Vanadium	mg/L	0.1	0.10	105	80-120	
Zinc	mg/L	0.2	0.21	105	80-120	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30484272

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2426011 2426012

Parameter	Units	30484272001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00050 U	0.02	0.02	0.026	0.027	130	135	75-125	4	20	M1
Arsenic	mg/L	0.0025 U	0.1	0.1	0.11	0.11	106	112	75-125	6	20	
Barium	mg/L	0.039	0.1	0.1	0.16	0.17	120	126	75-125	4	20	M1
Beryllium	mg/L	0.00021J	0.02	0.02	0.023	0.024	113	118	75-125	4	20	
Cadmium	mg/L	0.00050 U	0.02	0.02	0.023	0.025	117	123	75-125	5	20	
Chromium	mg/L	0.0014J	0.1	0.1	0.12	0.12	120	123	75-125	3	20	
Cobalt	mg/L	0.0033	0.1	0.1	0.12	0.13	120	125	75-125	4	20	
Copper	mg/L	0.0033	0.1	0.1	0.12	0.13	119	125	75-125	4	20	
Lead	mg/L	0.00050 U	0.02	0.02	0.024	0.025	118	123	75-125	4	20	
Nickel	mg/L	0.0027	0.1	0.1	0.12	0.13	121	126	75-125	4	20	M1
Selenium	mg/L	0.0012J	0.1	0.1	0.10	0.11	103	104	75-125	1	20	
Silver	mg/L	0.0025 U	0.1	0.1	0.12	0.12	117	123	75-125	5	20	
Thallium	mg/L	0.00050 U	0.02	0.02	0.024	0.024	118	122	75-125	4	20	
Vanadium	mg/L	0.0043	0.1	0.1	0.12	0.13	120	125	75-125	4	20	
Zinc	mg/L	0.0050 U	0.2	0.2	0.24	0.25	118	124	75-125	5	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30484272

QC Batch: 501346
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30484272001, 30484272002, 30484272003, 30484272004

METHOD BLANK: 2426570 Matrix: Water
Associated Lab Samples: 30484272001, 30484272002, 30484272003, 30484272004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	05/03/22 16:39	

LABORATORY CONTROL SAMPLE: 2426571

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.0095	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2426590 2426591

Parameter	Units	30483865005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00020 U	0.01	0.01	0.0052	0.0029	52	29	80-120	57	20	M1,R1

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30484272

QC Batch: 501401
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30484272005, 30484272006, 30484272007, 30484272008, 30484272009

METHOD BLANK: 2426736 Matrix: Water
Associated Lab Samples: 30484272005, 30484272006, 30484272007, 30484272008, 30484272009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	05/04/22 14:31	

LABORATORY CONTROL SAMPLE: 2426737

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.0092	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2426818 2426819

Parameter	Units	30484272005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00034	0.01	0.01	0.0075	0.0081	72	78	80-120	8	20	M1

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30484272

QC Batch: 501860
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30484272001, 30484272002, 30484272003, 30484272004, 30484272005, 30484272006, 30484272007, 30484272008, 30484272009

METHOD BLANK: 2429178
Matrix: Water
Associated Lab Samples: 30484272001, 30484272002, 30484272003, 30484272004, 30484272005, 30484272006, 30484272007, 30484272008, 30484272009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.022	05/06/22 04:36	CH
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	05/06/22 04:36	CH
1,1,1,2-Tetrachloroethane (S)	%.	110	60-140		05/06/22 04:36	CH,IH

LABORATORY CONTROL SAMPLE: 2429179

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.22	87	85-115	CH
1,2-Dibromoethane (EDB)	ug/L	0.25	0.23	93	85-115	CH
1,1,1,2-Tetrachloroethane (S)	%.			107	60-140	CH,IH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2429180 2429181

Parameter	Units	30484272001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.39	0.39	0.24	0.25	62	65	60-140	5	25	CH
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.39	0.39	0.30	0.31	77	80	60-140	4	25	CH
1,1,1,2-Tetrachloroethane (S)	%.						80	82	60-140			CH,IH

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30484272

QC Batch: 503165
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30484272001, 30484272002, 30484272003

METHOD BLANK: 2436490 Matrix: Water
Associated Lab Samples: 30484272001, 30484272002, 30484272003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	1.0J	10.0	1.0	05/09/22 19:31	

LABORATORY CONTROL SAMPLE: 2436491

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	22.0	110	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2436492 2436493

Parameter	Units	30483706001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	76.0	50	50	142	150	132	148	85-115	5	20	MH

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30484272

QC Batch: 503778
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30484272004, 30484272005, 30484272006, 30484272007, 30484272008, 30484272009

METHOD BLANK: 2439507 Matrix: Water
Associated Lab Samples: 30484272004, 30484272005, 30484272006, 30484272007, 30484272008, 30484272009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	05/11/22 20:51	

LABORATORY CONTROL SAMPLE: 2439508

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	22.0	110	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2439509 2439510

Parameter	Units	30485069017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	ND	50	50	48.0	46.0	96	92	85-115	4	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30484272

QC Batch: 501197
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30484272001, 30484272002, 30484272003, 30484272004, 30484272005, 30484272006, 30484272007, 30484272008, 30484272009

METHOD BLANK: 2426017
Matrix: Water
Associated Lab Samples: 30484272001, 30484272002, 30484272003, 30484272004, 30484272005, 30484272006, 30484272007, 30484272008, 30484272009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	05/02/22 14:46	

LABORATORY CONTROL SAMPLE: 2426018

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	975	98	85-115	

SAMPLE DUPLICATE: 2426019

Parameter	Units	30483865005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	10.0	10.0	0	5	

SAMPLE DUPLICATE: 2426020

Parameter	Units	30484272007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	74.0	77.0	4	5	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30484272

QC Batch: 501842
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30484272001, 30484272002, 30484272003, 30484272004, 30484272005, 30484272006, 30484272007, 30484272008, 30484272009

METHOD BLANK: 2429105
Matrix: Water
Associated Lab Samples: 30484272001, 30484272002, 30484272003, 30484272004, 30484272005, 30484272006, 30484272007, 30484272008, 30484272009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.044	05/04/22 11:36	

LABORATORY CONTROL SAMPLE: 2429106

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	3.9	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2429107 2429108

Parameter	Units	30483865001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	3.9	3.9	96	96	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2429109 2429110

Parameter	Units	30484272002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.0	4.1	101	102	90-110	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30484272

QC Batch: 501547
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30484272001, 30484272002, 30484272003, 30484272004, 30484272005, 30484272006, 30484272007, 30484272008, 30484272009

METHOD BLANK: 2427589 Matrix: Water
Associated Lab Samples: 30484272001, 30484272002, 30484272003, 30484272004, 30484272005, 30484272006, 30484272007, 30484272008, 30484272009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	05/03/22 16:11	

LABORATORY CONTROL SAMPLE: 2427590

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	314	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2427591 2427592

Parameter	Units	30484272009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	25.0 U	150	150	167	162	109	106	90-110	3	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2427593 2427594

Parameter	Units	30484771001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	510	1500	1500	2100	2100	106	106	90-110	0	10	D4

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30484272

QC Batch: 503372
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30484272001, 30484272002, 30484272003, 30484272004, 30484272005, 30484272006

METHOD BLANK: 2437412 Matrix: Water
Associated Lab Samples: 30484272001, 30484272002, 30484272003, 30484272004, 30484272005, 30484272006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/10/22 15:19	

METHOD BLANK: 2437741 Matrix: Water
Associated Lab Samples: 30484272001, 30484272002, 30484272003, 30484272004, 30484272005, 30484272006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.70J	3.0	0.67	05/10/22 15:21	

METHOD BLANK: 2437742 Matrix: Water
Associated Lab Samples: 30484272001, 30484272002, 30484272003, 30484272004, 30484272005, 30484272006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/10/22 15:22	

LABORATORY CONTROL SAMPLE: 2437413

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	19.1	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2437414 2437415

Parameter	Units	30483865001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.4	20	20	20.0	19.7	83	82	85-115	1	20	ML

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30484272

QC Batch: 503374
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30484272007, 30484272008, 30484272009

METHOD BLANK: 2437418 Matrix: Water
Associated Lab Samples: 30484272007, 30484272008, 30484272009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/10/22 16:01	

LABORATORY CONTROL SAMPLE: 2437419

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	18.5	92	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2437420 2437421

Parameter	Units	30484490001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	ND	20	20	16.2	16.4	76	78	85-115	2	20	ML

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30484272

QC Batch: 503496
QC Batch Method: SM 4500NO3-F-2011
Analysis Method: SM 4500NO3-F-2011
Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30484272001, 30484272002, 30484272003, 30484272004, 30484272005, 30484272006, 30484272007, 30484272008, 30484272009

METHOD BLANK: 2437995 Matrix: Water
Associated Lab Samples: 30484272001, 30484272002, 30484272003, 30484272004, 30484272005, 30484272006, 30484272007, 30484272008, 30484272009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	05/11/22 15:50	

METHOD BLANK: 2439294 Matrix: Water
Associated Lab Samples: 30484272001, 30484272002, 30484272003, 30484272004, 30484272005, 30484272006, 30484272007, 30484272008, 30484272009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	05/11/22 15:53	

LABORATORY CONTROL SAMPLE: 2437996

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	3.7	92	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2437997 2437998

Parameter	Units	30484272001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.89	5	5	5.7	5.7	96	96	85-115	0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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(724)850-5600

QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30484272

QC Batch: 501556
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30484272001, 30484272002, 30484272003, 30484272004, 30484272005, 30484272006, 30484272007, 30484272008, 30484272009

METHOD BLANK: 2427613
Matrix: Water
Associated Lab Samples: 30484272001, 30484272002, 30484272003, 30484272004, 30484272005, 30484272006, 30484272007, 30484272008, 30484272009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	04/28/22 14:37	

LABORATORY CONTROL SAMPLE: 2427614

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	30.1	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2427615 2427616

Parameter	Units	30484272001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	54.1	20	20	73.1	72.2	95	90	85-115	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2022
Pace Project No.: 30484272

QC Batch: 500667
QC Batch Method: SM 4500NO2-B-2011
Analysis Method: SM 4500NO2-B-2011
Analysis Description: SM4500-NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30484272001, 30484272002, 30484272003, 30484272004, 30484272005, 30484272006, 30484272007, 30484272008, 30484272009

METHOD BLANK: 2423457 Matrix: Water
Associated Lab Samples: 30484272001, 30484272002, 30484272003, 30484272004, 30484272005, 30484272006, 30484272007, 30484272008, 30484272009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	04/28/22 13:29	

LABORATORY CONTROL SAMPLE: 2423458

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.11	108	90-110	

MATRIX SPIKE SAMPLE: 2423460

Parameter	Units	30483926001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	2.5	1	3.1	60	85-115	H1,ML

SAMPLE DUPLICATE: 2423459

Parameter	Units	30483926001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	2.5	2.7	11	20	H1

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QUALIFIERS

Project: MLF-SPRING 2022
Pace Project No.: 30484272

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30484272001
[1] Sample pH for 8011 is 6

Sample: 30484272002
[1] Sample pH for 8011 is 6

Sample: 30484272003
[1] Sample pH for 8011 is 6

Sample: 30484272004
[1] Sample pH for 8011 is 6

Sample: 30484272005
[1] Sample pH for 8011 is 6

Sample: 30484272006
[1] Sample pH for 8011 is 6

Sample: 30484272007
[1] Sample pH for 8011 is 6

Sample: 30484272008
[1] Sample pH for 8011 is 6

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QUALIFIERS

Project: MLF-SPRING 2022
Pace Project No.: 30484272

SAMPLE QUALIFIERS

Sample: 30484272009

[1]	Sample pH for 8011 is 6

ANALYTE QUALIFIERS

1c	Alk TV: 0 mg/L
2c	Alk TV: 1 mg/L
3c	Alk TV: 2 mg/L
4c	Alk TV: 4 mg/L
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
D4	Sample was diluted due to the presence of high levels of target analytes.
H1	Analysis conducted outside the EPA method holding time.
IH	This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30484272001	**TW-20R**	EPA 3010A	501261	EPA 6010D	503687
30484272002	**TW-21**	EPA 3010A	505819	EPA 6010D	506587
30484272003	**TW-21A**	EPA 3010A	501261	EPA 6010D	503687
30484272004	**TW-22**	EPA 3010A	501261	EPA 6010D	503687
30484272005	**TW-22A**	EPA 3010A	501261	EPA 6010D	503687
30484272006	**TW-22B**	EPA 3010A	501261	EPA 6010D	503687
30484272007	**TW-24**	EPA 3010A	501261	EPA 6010D	503687
30484272008	**TW-24A**	EPA 3010A	501261	EPA 6010D	503687
30484272009	**Dup-1**	EPA 3010A	501261	EPA 6010D	503687
30484272001	**TW-20R**	EPA 3010A	501192	EPA 6010D	503690
30484272002	**TW-21**	EPA 3010A	501192	EPA 6010D	503690
30484272003	**TW-21A**	EPA 3010A	501192	EPA 6010D	503690
30484272004	**TW-22**	EPA 3010A	501192	EPA 6010D	503690
30484272005	**TW-22A**	EPA 3010A	501192	EPA 6010D	503690
30484272006	**TW-22B**	EPA 3010A	501192	EPA 6010D	503690
30484272007	**TW-24**	EPA 3010A	501192	EPA 6010D	503690
30484272008	**TW-24A**	EPA 3010A	501192	EPA 6010D	503690
30484272009	**Dup-1**	EPA 3010A	501192	EPA 6010D	503690
30484272001	**TW-20R**	EPA 3020A	501194	EPA 6020B	501342
30484272002	**TW-21**	EPA 3020A	501194	EPA 6020B	501342
30484272003	**TW-21A**	EPA 3020A	501194	EPA 6020B	501342
30484272004	**TW-22**	EPA 3020A	501194	EPA 6020B	501342
30484272005	**TW-22A**	EPA 3020A	501194	EPA 6020B	501342
30484272006	**TW-22B**	EPA 3020A	501194	EPA 6020B	501342
30484272007	**TW-24**	EPA 3020A	501194	EPA 6020B	501342
30484272008	**TW-24A**	EPA 3020A	501194	EPA 6020B	501342
30484272009	**Dup-1**	EPA 3020A	501194	EPA 6020B	501342
30484272001	**TW-20R**	EPA 7470A	501346	EPA 7470A	501907
30484272002	**TW-21**	EPA 7470A	501346	EPA 7470A	501907
30484272003	**TW-21A**	EPA 7470A	501346	EPA 7470A	501907
30484272004	**TW-22**	EPA 7470A	501346	EPA 7470A	501907
30484272005	**TW-22A**	EPA 7470A	501401	EPA 7470A	502023
30484272006	**TW-22B**	EPA 7470A	501401	EPA 7470A	502023
30484272007	**TW-24**	EPA 7470A	501401	EPA 7470A	502023
30484272008	**TW-24A**	EPA 7470A	501401	EPA 7470A	502023
30484272009	**Dup-1**	EPA 7470A	501401	EPA 7470A	502023
30484272001	**TW-20R**	EPA 8011	501860	EPA 8011	501991
30484272002	**TW-21**	EPA 8011	501860	EPA 8011	501991
30484272003	**TW-21A**	EPA 8011	501860	EPA 8011	501991
30484272004	**TW-22**	EPA 8011	501860	EPA 8011	501991
30484272005	**TW-22A**	EPA 8011	501860	EPA 8011	501991
30484272006	**TW-22B**	EPA 8011	501860	EPA 8011	501991
30484272007	**TW-24**	EPA 8011	501860	EPA 8011	501991
30484272008	**TW-24A**	EPA 8011	501860	EPA 8011	501991
30484272009	**Dup-1**	EPA 8011	501860	EPA 8011	501991

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30484272001	**TW-20R**	SM 2320B-2011	503165		
30484272002	**TW-21**	SM 2320B-2011	503165		
30484272003	**TW-21A**	SM 2320B-2011	503165		
30484272004	**TW-22**	SM 2320B-2011	503778		
30484272005	**TW-22A**	SM 2320B-2011	503778		
30484272006	**TW-22B**	SM 2320B-2011	503778		
30484272007	**TW-24**	SM 2320B-2011	503778		
30484272008	**TW-24A**	SM 2320B-2011	503778		
30484272009	**Dup-1**	SM 2320B-2011	503778		
30484272001	**TW-20R**	SM 2540C-2011	501197		
30484272002	**TW-21**	SM 2540C-2011	501197		
30484272003	**TW-21A**	SM 2540C-2011	501197		
30484272004	**TW-22**	SM 2540C-2011	501197		
30484272005	**TW-22A**	SM 2540C-2011	501197		
30484272006	**TW-22B**	SM 2540C-2011	501197		
30484272007	**TW-24**	SM 2540C-2011	501197		
30484272008	**TW-24A**	SM 2540C-2011	501197		
30484272009	**Dup-1**	SM 2540C-2011	501197		
30484272001	**TW-20R**	EPA 350.1	501842	EPA 350.1	501965
30484272002	**TW-21**	EPA 350.1	501842	EPA 350.1	501965
30484272003	**TW-21A**	EPA 350.1	501842	EPA 350.1	501965
30484272004	**TW-22**	EPA 350.1	501842	EPA 350.1	501965
30484272005	**TW-22A**	EPA 350.1	501842	EPA 350.1	501965
30484272006	**TW-22B**	EPA 350.1	501842	EPA 350.1	501965
30484272007	**TW-24**	EPA 350.1	501842	EPA 350.1	501965
30484272008	**TW-24A**	EPA 350.1	501842	EPA 350.1	501965
30484272009	**Dup-1**	EPA 350.1	501842	EPA 350.1	501965
30484272001	**TW-20R**	EPA 410.4	501547	EPA 410.4	501791
30484272002	**TW-21**	EPA 410.4	501547	EPA 410.4	501791
30484272003	**TW-21A**	EPA 410.4	501547	EPA 410.4	501791
30484272004	**TW-22**	EPA 410.4	501547	EPA 410.4	501791
30484272005	**TW-22A**	EPA 410.4	501547	EPA 410.4	501791
30484272006	**TW-22B**	EPA 410.4	501547	EPA 410.4	501791
30484272007	**TW-24**	EPA 410.4	501547	EPA 410.4	501791
30484272008	**TW-24A**	EPA 410.4	501547	EPA 410.4	501791
30484272009	**Dup-1**	EPA 410.4	501547	EPA 410.4	501791
30484272001	**TW-20R**	SM 4500-Cl-E-2011	503372		
30484272002	**TW-21**	SM 4500-Cl-E-2011	503372		
30484272003	**TW-21A**	SM 4500-Cl-E-2011	503372		
30484272004	**TW-22**	SM 4500-Cl-E-2011	503372		
30484272005	**TW-22A**	SM 4500-Cl-E-2011	503372		
30484272006	**TW-22B**	SM 4500-Cl-E-2011	503372		
30484272007	**TW-24**	SM 4500-Cl-E-2011	503374		
30484272008	**TW-24A**	SM 4500-Cl-E-2011	503374		
30484272009	**Dup-1**	SM 4500-Cl-E-2011	503374		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2022
Pace Project No.: 30484272

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30484272001	**TW-20R**	SM 4500NO3-F-2011	503496		
30484272002	**TW-21**	SM 4500NO3-F-2011	503496		
30484272003	**TW-21A**	SM 4500NO3-F-2011	503496		
30484272004	**TW-22**	SM 4500NO3-F-2011	503496		
30484272005	**TW-22A**	SM 4500NO3-F-2011	503496		
30484272006	**TW-22B**	SM 4500NO3-F-2011	503496		
30484272007	**TW-24**	SM 4500NO3-F-2011	503496		
30484272008	**TW-24A**	SM 4500NO3-F-2011	503496		
30484272009	**Dup-1**	SM 4500NO3-F-2011	503496		
30484272001	**TW-20R**	EPA 9038	501556		
30484272002	**TW-21**	EPA 9038	501556		
30484272003	**TW-21A**	EPA 9038	501556		
30484272004	**TW-22**	EPA 9038	501556		
30484272005	**TW-22A**	EPA 9038	501556		
30484272006	**TW-22B**	EPA 9038	501556		
30484272007	**TW-24**	EPA 9038	501556		
30484272008	**TW-24A**	EPA 9038	501556		
30484272009	**Dup-1**	EPA 9038	501556		
30484272001	**TW-20R**	SM 4500NO2-B-2011	500667		
30484272002	**TW-21**	SM 4500NO2-B-2011	500667		
30484272003	**TW-21A**	SM 4500NO2-B-2011	500667		
30484272004	**TW-22**	SM 4500NO2-B-2011	500667		
30484272005	**TW-22A**	SM 4500NO2-B-2011	500667		
30484272006	**TW-22B**	SM 4500NO2-B-2011	500667		
30484272007	**TW-24**	SM 4500NO2-B-2011	500667		
30484272008	**TW-24A**	SM 4500NO2-B-2011	500667		
30484272009	**Dup-1**	SM 4500NO2-B-2011	500667		

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WO# : 30484272

30484272

LIMS30 Internal Shipping Manifest

COOLER 21

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	21	Cooler temp (rcvd) °C	1.5
Packaged on Ice (Y/N)	Yes	Correction Factor	0
Shipping Method	Courier	Cooler temp (corr) °C	1.5
Tracking #	N/A	IR GUN ID	23
PWS* Drinking water?	No	Received on ice?	Y

4

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished		GBUR	4-28-22	1650
Received		BEAV	4-29-22	251
Relinquished				
Received				
Relinquished				
Received				

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	4/28/2022	30484519001 BP4O1/1	BP4O	30484519001	30484519
MF	4/28/2022	30484519002 BP4O1/1	BP4O	30484519002	30484519
MF	4/28/2022	30484282005 BP3N1/1	BP3N	30484282005	30484282
MF	4/28/2022	30484282004 BP3N1/1	BP3N	30484282004	30484282
MF	4/28/2022	30484282007 BP3N1/1	BP3N	30484282007	30484282
MF	4/28/2022	30484282006 BP3N1/1	BP3N	30484282006	30484282
MF	4/28/2022	30484282002 BP3N1/1	BP3N	30484282002	30484282
MF	4/28/2022	30484282003 BP3N1/1	BP3N	30484282003	30484282
MF	4/28/2022	30484272002 BP3N2/2	BP3N	30484272002	30484272
MF	4/28/2022	30484272003 BP3N2/2	BP3N	30484272003	30484272
MF	4/28/2022	30484272002 BP3N1/2	BP3N	30484272002	30484272
MF	4/28/2022	30484272001 BP3N1/2	BP3N	30484272001	30484272
MF	4/28/2022	30484272001 BP3N2/2	BP3N	30484272001	30484272
MF	4/28/2022	30484272007 BP3N2/2	BP3N	30484272007	30484272
MF	4/28/2022	30484272006 BP3N1/2	BP3N	30484272006	30484272
MF	4/28/2022	30484272005 BP3N1/2	BP3N	30484272005	30484272
MF	4/28/2022	30484272006 BP3N2/2	BP3N	30484272006	30484272
MF	4/28/2022	30484272005 BP3N2/2	BP3N	30484272005	30484272
MF	4/28/2022	30484272004 BP3N2/2	BP3N	30484272004	30484272
MF	4/28/2022	30484272007 BP3N1/2	BP3N	30484272007	30484272
MF	4/28/2022	30484272008 BP3N1/2	BP3N	30484272008	30484272
MF	4/28/2022	30484272008 BP3N2/2	BP3N	30484272008	30484272
MF	4/28/2022	30484272004 BP3N1/2	BP3N	30484272004	30484272
MF	4/28/2022	30484272003 BP3N1/2	BP3N	30484272009	30484272
MF	4/28/2022	30484272009 BP3N2/2	BP3N	30484272009	30484272
MF	4/28/2022	30484272009 BP3N1/2	BP3N	30484272009	30484272
MF	4/28/2022	30484533005 BP3N1/1	BP3N	30484533005	30484533
MF	4/28/2022	30484533004 BP3N1/1	BP3N	30484533004	30484533
MF	4/28/2022	30484533003 BP3N1/1	BP3N	30484533003	30484533
MF	4/28/2022	30484533006 BP3N1/1	BP3N	30484533006	30484533
MF	4/28/2022	30484533001 BP3N1/1	BP3N	30484533001	30484533
MF	4/28/2022	30484533007 BP3N1/1	BP3N	30484533007	30484533
MF	4/28/2022	30484533002 BP3N1/1	BP3N	30484533002	30484533

WO#: 30484272

PM: SLS **Due Date: 05/12/22**

CLIENT: ENV MONITOR

LIMS73 Lab Sample Condition Upon Receipt (West Vir

Pace Analytical

Client Name: _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☒ Other: 3rd pty courier

Tracking #: _____

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☒ no **Seals intact:** ☐ yes ☒ no

Thermometer Used 23 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** 1.5 °C Correction Factor: Ø °C Final Temp: 1.5 °C

Comments:

pH paper Lot#	Date and Initials of person examining contents:
225320	4-29-22

	Yes	No	N/A	
Chain of Custody Present:			✓	1.
Chain of Custody Filled Out:			✓	2.
Chain of Custody Relinquished:			✓	3. manifest
Sampler Name & Signature on COC:			✓	4.
Sample Labels match COC:			✓	5.
-Includes date/time/ID Matrix: WT				Lab Labeled by: N/A Checked by: N/A
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered:			✓	13.
-pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓	
Filtered volume received for Dissolved tests:	✓			14.
All containers have been checked for preservation:	✓			15.
exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix				
All containers meet method preservation requirements:	✓			Initial when completed: @ Date: 4-29-22
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present:			✓	17.
Trip Blank Custody Seals Present:			✓	
				Initial when completed: @ Date: 4-29-22

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

***PM review** is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

ENV-FRM-BEAV-0058rev.01
Revision Date: 3/8/2021

WO# : 30484272

30484272

LIMS30 Internal Shipping Manifest

COOLER 21

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	21	Cooler temp (rcvd) °C	1.5
Packaged on Ice (Y/N)	Yes	Correction Factor	0
Shipping Method	Courier	Cooler temp (corr) °C	1.5
Tracking #	N/A	IR GUN ID	23
PWS* Drinking water?	No	Received on ice?	Y

4

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[signature]	GBUR	4-28-22	1650
Received	[signature]	BEAV	4-29-22	251
Relinquished				
Received				
Relinquished				
Received				

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	4/28/2022	30484519001 BP4O1/1	BP4O	30484519001	30484519
MF	4/28/2022	30484519002 BP4O1/1	BP4O	30484519002	30484519
MF	4/28/2022	30484282005 BP3N1/1	BP3N	30484282005	30484282
MF	4/28/2022	30484282004 BP3N1/1	BP3N	30484282004	30484282
MF	4/28/2022	30484282007 BP3N1/1	BP3N	30484282007	30484282
MF	4/28/2022	30484282006 BP3N1/1	BP3N	30484282006	30484282
MF	4/28/2022	30484282002 BP3N1/1	BP3N	30484282002	30484282
MF	4/28/2022	30484282003 BP3N1/1	BP3N	30484282003	30484282
MF	4/28/2022	30484272002 BP3N2/2	BP3N	30484272002	30484272
MF	4/28/2022	30484272003 BP3N2/2	BP3N	30484272003	30484272
MF	4/28/2022	30484272002 BP3N1/2	BP3N	30484272002	30484272
MF	4/28/2022	30484272001 BP3N1/2	BP3N	30484272001	30484272
MF	4/28/2022	30484272001 BP3N2/2	BP3N	30484272001	30484272
MF	4/28/2022	30484272007 BP3N2/2	BP3N	30484272007	30484272
MF	4/28/2022	30484272006 BP3N1/2	BP3N	30484272006	30484272
MF	4/28/2022	30484272005 BP3N1/2	BP3N	30484272005	30484272
MF	4/28/2022	30484272006 BP3N2/2	BP3N	30484272006	30484272
MF	4/28/2022	30484272005 BP3N2/2	BP3N	30484272005	30484272
MF	4/28/2022	30484272004 BP3N2/2	BP3N	30484272004	30484272
MF	4/28/2022	30484272007 BP3N1/2	BP3N	30484272007	30484272
MF	4/28/2022	30484272008 BP3N1/2	BP3N	30484272008	30484272
MF	4/28/2022	30484272008 BP3N2/2	BP3N	30484272008	30484272
MF	4/28/2022	30484272004 BP3N1/2	BP3N	30484272004	30484272
MF	4/28/2022	30484272003 BP3N1/2	BP3N	30484272009	30484272
MF	4/28/2022	30484272009 BP3N2/2	BP3N	30484272009	30484272
MF	4/28/2022	30484272009 BP3N1/2	BP3N	30484272009	30484272
MF	4/28/2022	30484533005 BP3N1/1	BP3N	30484533005	30484533
MF	4/28/2022	30484533004 BP3N1/1	BP3N	30484533004	30484533
MF	4/28/2022	30484533003 BP3N1/1	BP3N	30484533003	30484533
MF	4/28/2022	30484533006 BP3N1/1	BP3N	30484533006	30484533
MF	4/28/2022	30484533001 BP3N1/1	BP3N	30484533001	30484533
MF	4/28/2022	30484533007 BP3N1/1	BP3N	30484533007	30484533
MF	4/28/2022	30484533002 BP3N1/1	BP3N	30484533002	30484533

WO#: 30484272
PM: SLS **Due Date: 05/12/22**
CLIENT: ENV MONITOR

LIMS73 Lab Sample Condition Upon Receipt (West Vir

Pace Analytical

Client Name: _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☒ Other: 3rd pty courier

Tracking #: _____

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☒ no Seals intact: ☐ yes ☒ no

Thermometer Used 23 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** 1.5 °C Correction Factor: Ø °C Final Temp: 1.5 °C

Comments:

pH paper Lot#	Date and Initials of person examining contents:
225320	4-29-22

	Yes	No	N/A	
Chain of Custody Present:			✓	1.
Chain of Custody Filled Out:			✓	2.
Chain of Custody Relinquished:			✓	3. manifest
Sampler Name & Signature on COC:			✓	4.
Sample Labels match COC:			✓	5.
-Includes date/time/ID Matrix: WT				Lab Labeled by: N/A Checked by: N/A
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered:			✓	13.
-pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓	
Filtered volume received for Dissolved tests:	✓			14.
All containers have been checked for preservation:	✓			15.
exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix				
All containers meet method preservation requirements:	✓			Initial when completed: @ Date: 4-29-22
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present:			✓	17.
Trip Blank Custody Seals Present:			✓	
				Initial when completed: @ Date: 4-29-22

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

June 10, 2022

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-Spring 2022
Pace Project No.: 30482496

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on April 20, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

Revision 1 - This report replaces the May 20, 2022 report. This project was revised on June 06, 2022 to include dissolved metals for sample 002. (Greensburg, PA)

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Rachel D Christner

Rachel Christner for
Steven L. Smith
steve.l.smith@pacelabs.com
(724)850-5600
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

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(724)850-5600

CERTIFICATIONS

Project: MLF-Spring 2022
Pace Project No.: 30482496

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Florida: Cert E871149 SEKS WET
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver

225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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SAMPLE SUMMARY

Project: MLF-Spring 2022
Pace Project No.: 30482496

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30482496001	**TW-5**	Water	04/19/22 12:50	04/20/22 22:25
30482496002	**TW-5A**	Water	04/19/22 13:20	04/20/22 22:25
30482496003	**TW-5B**	Water	04/19/22 12:15	04/20/22 22:25
30482496004	**TW-6**	Water	04/19/22 15:30	04/20/22 22:25
30482496005	**TW-6A**	Water	04/19/22 14:50	04/20/22 22:25
30482496006	**TW-6B**	Water	04/19/22 14:15	04/20/22 22:25
30482496007	**TW-7**	Water	04/20/22 10:30	04/20/22 22:25
30482496008	**TW-7A**	Water	04/20/22 10:00	04/20/22 22:25
30482496009	**TW-8**	Water	04/20/22 11:10	04/20/22 22:25
30482496010	**TW-8A**	Water	04/20/22 11:45	04/20/22 22:25

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SAMPLE ANALYTE COUNT

Project: MLF-Spring 2022
Pace Project No.: 30482496

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30482496001	**TW-5**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	SAC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	SEF	1	PASI-PA
30482496002	**TW-5A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MEH	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	SAC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	SEF	1	PASI-PA
30482496003	**TW-5B**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	SAC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-Spring 2022
Pace Project No.: 30482496

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	SEF	1	PASI-PA
30482496004	**TW-6**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	SAC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	SEF	1	PASI-PA
30482496005	**TW-6A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	SAC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	SEF	1	PASI-PA
30482496006	**TW-6B**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	SAC	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-Spring 2022
Pace Project No.: 30482496

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	SEF	1	PASI-PA
30482496007	**TW-7**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	SEF	1	PASI-PA
30482496008	**TW-7A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	SEF	1	PASI-PA
30482496009	**TW-8**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF-Spring 2022
Pace Project No.: 30482496

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	SEF	1	PASI-PA
30482496010	**TW-8A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	RCH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	JRM	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	SEF	1	PASI-PA
		SM 4500-Cl-E-2011	SAC	1	PASI-PA
		SM 4500NO3-F-2011	SAC	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	SEF	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30482496

Date: June 10, 2022

TW-5 (Lab ID: 30482496001)

- Sample pH for 8011 is 7

TW-5A (Lab ID: 30482496002)

- Sample pH for 8011 is 7

TW-5B (Lab ID: 30482496003)

- Sample pH for 8011 is 7

TW-6 (Lab ID: 30482496004)

- Sample pH for 8011 is 6

TW-6A (Lab ID: 30482496005)

- Sample pH for 8011 is 7

TW-6B (Lab ID: 30482496006)

- Sample pH for 8011 is 6

TW-7 (Lab ID: 30482496007)

- Sample pH for 8011 is 6

TW-7A (Lab ID: 30482496008)

- Sample pH for 8011 is 5

TW-8 (Lab ID: 30482496009)

- Sample pH for 8011 is 6

TW-8A (Lab ID: 30482496010)

- Sample pH for 8011 is 5

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30482496

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: June 10, 2022

General Information:
10 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 500216

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30482496001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2421178)
  - Iron
- MSD (Lab ID: 2421179)
  - Iron

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30482496

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: June 10, 2022

General Information:
10 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 500220

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30482496001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2421243)
  - Iron, Dissolved
- MSD (Lab ID: 2421244)
  - Iron, Dissolved

QC Batch: 504361

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30481281003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2442528)

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30482496

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: June 10, 2022

QC Batch: 504361

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30481281003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- Calcium, Dissolved
- Magnesium, Dissolved
- Sodium, Dissolved

- MSD (Lab ID: 2442529)
  - Calcium, Dissolved
  - Magnesium, Dissolved
  - Sodium, Dissolved

QC Batch: 509632

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30482496002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 2469796)
  - Iron, Dissolved

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30482496

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: June 10, 2022

General Information:
10 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 500784

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30482496001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2424281)
  - Antimony
  - Arsenic
  - Barium
  - Beryllium
  - Chromium
  - Cobalt
  - Copper
  - Lead

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30482496

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: June 10, 2022

QC Batch: 500784

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30482496001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- Nickel
- Selenium
- Silver
- Thallium
- Vanadium
- Zinc

R1: RPD value was outside control limits.

- MSD (Lab ID: 2424282)
  - Chromium
  - Cobalt
  - Copper
  - Vanadium

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30482496

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: June 10, 2022

General Information:
10 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 500717

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30482496001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2423809)
  - Mercury
- MSD (Lab ID: 2423810)
  - Mercury

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30482496

Method: **EPA 7470A**
Description: BVR 7470 Mercury, Dissolved
Client: Environmental Monitoring and Assessment LLC
Date: June 10, 2022

General Information:
1 sample was analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 502061

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30474805002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2431373)
  - Mercury, Dissolved
- MSD (Lab ID: 2431374)
  - Mercury, Dissolved

R1: RPD value was outside control limits.

- MSD (Lab ID: 2431374)
  - Mercury, Dissolved

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30482496

Method: **EPA 7470A**
Description: BVR 7470 Mercury, Dissolved
Client: Environmental Monitoring and Assessment LLC
Date: June 10, 2022

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30482496

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: June 10, 2022

General Information:
10 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H2: Extraction or preparation conducted outside EPA method holding time.
- TW-5 (Lab ID: 30482496001)
- TW-5A (Lab ID: 30482496002)
- TW-5B (Lab ID: 30482496003)
- TW-6 (Lab ID: 30482496004)
- TW-6A (Lab ID: 30482496005)
- TW-6B (Lab ID: 30482496006)
- TW-7A (Lab ID: 30482496008)
- TW-8 (Lab ID: 30482496009)
- TW-8A (Lab ID: 30482496010)

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

QC Batch: 501255

IH: This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.
- BLANK (Lab ID: 2426136)
  - 1,1,1,2-Tetrachloroethane (S)
- LCS (Lab ID: 2426137)
  - 1,1,1,2-Tetrachloroethane (S)
- MS (Lab ID: 2426138)
  - 1,1,1,2-Tetrachloroethane (S)
- MSD (Lab ID: 2426139)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-5 (Lab ID: 30482496001)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-5A (Lab ID: 30482496002)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-5B (Lab ID: 30482496003)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-6 (Lab ID: 30482496004)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-6A (Lab ID: 30482496005)
  - 1,1,1,2-Tetrachloroethane (S)

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30482496

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: June 10, 2022

QC Batch: 501255

IH: This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.

- TW-6B (Lab ID: 30482496006)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-7A (Lab ID: 30482496008)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-8 (Lab ID: 30482496009)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-8A (Lab ID: 30482496010)
  - 1,1,1,2-Tetrachloroethane (S)

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 501255

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- BLANK (Lab ID: 2426136)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- LCS (Lab ID: 2426137)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MS (Lab ID: 2426138)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MSD (Lab ID: 2426139)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-5 (Lab ID: 30482496001)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-5A (Lab ID: 30482496002)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-5B (Lab ID: 30482496003)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-6 (Lab ID: 30482496004)

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30482496

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: June 10, 2022

QC Batch: 501255

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- 1,1,1,2-Tetrachloroethane (S)
- 1,2-Dibromo-3-chloropropane
- 1,2-Dibromoethane (EDB)

- TW-6A (Lab ID: 30482496005)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-6B (Lab ID: 30482496006)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-7A (Lab ID: 30482496008)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-8 (Lab ID: 30482496009)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-8A (Lab ID: 30482496010)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 500238

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

- LCS (Lab ID: 2421304)
  - 1,2-Dibromo-3-chloropropane

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30482496

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: June 10, 2022

Analyte Comments:

QC Batch: 500238

P2: Re-extraction or re-analysis could not be performed due to insufficient sample amount.

- TW-7 (Lab ID: 30482496007)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

- TW-7 (Lab ID: 30482496007)
  - 1,2-Dibromoethane (EDB)

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30482496

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: June 10, 2022

General Information:
10 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 501814

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30483110002

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2428681)
  - Alkalinity,Total (CaCO3 pH4.5)
- MSD (Lab ID: 2428682)
  - Alkalinity,Total (CaCO3 pH4.5)

R1: RPD value was outside control limits.

- MS (Lab ID: 2428681)
  - Alkalinity,Total (CaCO3 pH4.5)
- MSD (Lab ID: 2428682)
  - Alkalinity,Total (CaCO3 pH4.5)

Additional Comments:

Analyte Comments:

QC Batch: 501772

1c: ALK TV: 0 mg/L

- TW-5B (Lab ID: 30482496003)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-6B (Lab ID: 30482496006)
  - Alkalinity,Total (CaCO3 pH4.5)

QC Batch: 501814

2c: Alk TV: 0mg/L

- TW-8A (Lab ID: 30482496010)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30482496

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: June 10, 2022

Analyte Comments:

QC Batch: 501814

3c: Alk TV: 2 mg/L

- TW-7A (Lab ID: 30482496008)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30482496

Method: **SM 2540C-2011**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: June 10, 2022

General Information:
10 samples were analyzed for SM 2540C-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the EPA method holding time.
- TW-5 (Lab ID: 30482496001)
- TW-5A (Lab ID: 30482496002)
- TW-5B (Lab ID: 30482496003)
- TW-6 (Lab ID: 30482496004)
- TW-6A (Lab ID: 30482496005)
- TW-6B (Lab ID: 30482496006)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30482496

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: June 10, 2022

General Information:
10 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30482496

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: June 10, 2022

General Information:
10 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 500287

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30482496007,30483160001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2421415)
  - Chemical Oxygen Demand
- MSD (Lab ID: 2421416)
  - Chemical Oxygen Demand

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30482496

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: June 10, 2022

General Information:
10 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30482496

Method: **SM 4500NO3-F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: June 10, 2022

General Information:
10 samples were analyzed for SM 4500NO3-F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 501348

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30482496001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2426582)
  - Nitrogen, NO2 plus NO3
- MSD (Lab ID: 2426583)
  - Nitrogen, NO2 plus NO3

Additional Comments:

Analyte Comments:

QC Batch: 501348

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- TW-6 (Lab ID: 30482496004)
  - Nitrogen, NO2 plus NO3

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30482496

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: June 10, 2022

General Information:
10 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 500108

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30482496001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2420519)
  - Sulfate
- MSD (Lab ID: 2420520)
  - Sulfate

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Spring 2022
Pace Project No.: 30482496

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: June 10, 2022

General Information:
10 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30482496

Sample: TW-5 **Lab ID: 30482496001** Collected: 04/19/22 12:50 Received: 04/20/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**3.5**	mg/L	0.50	0.083	1	04/27/22 04:03	04/29/22 19:47	7440-70-2	
Iron	**29.4**	mg/L	0.050	0.035	1	04/27/22 04:03	04/29/22 19:47	7439-89-6	M1
Magnesium	**1.1**	mg/L	0.50	0.047	1	04/27/22 04:03	04/29/22 19:47	7439-95-4	
Manganese	**0.17**	mg/L	0.0050	0.0027	1	04/27/22 04:03	04/29/22 19:47	7439-96-5	
Potassium	**0.99**	mg/L	0.50	0.26	1	04/27/22 04:03	04/29/22 19:47	7440-09-7	
Sodium	**3.5**	mg/L	0.50	0.34	1	04/27/22 04:03	04/29/22 19:47	7440-23-5	
Total Hardness	**13.4**	mg/L	3.3	0.27	1	04/27/22 04:03	04/29/22 19:47		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**3.4**	mg/L	0.50	0.083	1	04/27/22 08:24	04/29/22 16:40	7440-70-2	
Iron, Dissolved	**27.3**	mg/L	0.050	0.035	1	04/27/22 08:24	04/29/22 16:40	7439-89-6	M1
Magnesium, Dissolved	**1.1**	mg/L	0.50	0.047	1	04/27/22 08:24	04/29/22 16:40	7439-95-4	
Manganese, Dissolved	**0.16**	mg/L	0.0050	0.0027	1	04/27/22 08:24	04/29/22 16:40	7439-96-5	
Potassium, Dissolved	**0.93**	mg/L	0.50	0.26	1	04/27/22 08:24	04/29/22 16:40	7440-09-7	
Sodium, Dissolved	**3.4**	mg/L	0.50	0.34	1	04/27/22 08:24	04/29/22 16:40	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	04/29/22 06:09	04/29/22 13:42	7440-36-0	M1
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	04/29/22 06:09	04/29/22 13:42	7440-38-2	M1
Barium	**0.028**	mg/L	0.0025	0.00098	1	04/29/22 06:09	04/29/22 13:42	7440-39-3	M1
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	04/29/22 06:09	04/29/22 13:42	7440-41-7	M1
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	04/29/22 06:09	04/29/22 13:42	7440-43-9	
Chromium	**0.0022J**	mg/L	0.0025	0.00050	1	04/29/22 06:09	04/29/22 13:42	7440-47-3	M1,R1
Cobalt	**0.0011J**	mg/L	0.0025	0.00031	1	04/29/22 06:09	04/29/22 13:42	7440-48-4	M1,R1
Copper	**0.00066J**	mg/L	0.0025	0.00064	1	04/29/22 06:09	04/29/22 13:42	7440-50-8	M1,R1
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	04/29/22 06:09	04/29/22 13:42	7439-92-1	M1
Nickel	**0.0036**	mg/L	0.0025	0.00065	1	04/29/22 06:09	04/29/22 13:42	7440-02-0	M1
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	04/29/22 06:09	04/29/22 13:42	7782-49-2	M1
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	04/29/22 06:09	04/29/22 13:42	7440-22-4	M1
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	04/29/22 06:09	04/29/22 13:42	7440-28-0	M1
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	04/29/22 06:09	04/29/22 13:42	7440-62-2	M1,R1
Zinc	**0.0050 U**	mg/L	0.0050	0.0049	1	04/29/22 06:09	04/29/22 13:42	7440-66-6	M1
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00033**	mg/L	0.00020	0.00020	1	04/28/22 16:02	05/02/22 09:35	7439-97-6	M1
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.023	1	04/27/22 07:25	04/27/22 15:12	96-12-8	H2,L2
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/02/22 09:00	05/05/22 16:33	96-12-8	CH,H2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	04/27/22 07:25	04/27/22 15:12	106-93-4	H2

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30482496

Sample: TW-5 **Lab ID: 30482496001** Collected: 04/19/22 12:50 Received: 04/20/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/02/22 09:00	05/05/22 16:33	106-93-4	CH,H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	127	%.	60-140		1	05/02/22 09:00	05/05/22 16:33	630-20-6	CH,IH
1,1,1,2-Tetrachloroethane (S)	107	%.	60-140		1	04/27/22 07:25	04/27/22 15:12	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011								
	Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**26.0**	mg/L	10.0	1.0	1		05/03/22 17:27		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011								
	Pace Analytical Services - Greensburg								
Total Dissolved Solids	**42.0**	mg/L	10.0	10.0	1		04/27/22 15:02		H1
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1								
	Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	04/28/22 07:58	04/28/22 08:42		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
	Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/27/22 13:48	04/27/22 17:10		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
	Pace Analytical Services - Greensburg								
Chloride	**7.7**	mg/L	3.0	0.67	1		05/03/22 15:19	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011								
	Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		05/02/22 16:10	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		05/02/22 16:10		ML
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/26/22 20:30	14808-79-8	ML
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011								
	Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/21/22 10:43	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30482496

Sample: TW-5A **Lab ID: 30482496002** Collected: 04/19/22 13:20 Received: 04/20/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**1.7**	mg/L	0.50	0.083	1	04/27/22 04:03	04/29/22 19:57	7440-70-2	
Iron	**56.8**	mg/L	0.050	0.035	1	04/27/22 04:03	04/29/22 19:57	7439-89-6	
Magnesium	**0.81**	mg/L	0.50	0.047	1	04/27/22 04:03	04/29/22 19:57	7439-95-4	
Manganese	**0.25**	mg/L	0.0050	0.0027	1	04/27/22 04:03	04/29/22 19:57	7439-96-5	
Potassium	**0.71**	mg/L	0.50	0.26	1	04/27/22 04:03	04/29/22 19:57	7440-09-7	
Sodium	**2.5**	mg/L	0.50	0.34	1	04/27/22 04:03	04/29/22 19:57	7440-23-5	
Total Hardness	**7.7**	mg/L	3.3	0.27	1	04/27/22 04:03	04/29/22 19:57		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**1.8**	mg/L	0.50	0.083	1	06/07/22 09:21	06/07/22 16:15	7440-70-2	
Iron, Dissolved	**55.1**	mg/L	0.050	0.035	1	06/07/22 09:21	06/07/22 16:15	7439-89-6	M1
Magnesium, Dissolved	**0.81**	mg/L	0.50	0.047	1	06/07/22 09:21	06/07/22 16:15	7439-95-4	
Manganese, Dissolved	**0.24**	mg/L	0.0050	0.0027	1	06/07/22 09:21	06/07/22 16:15	7439-96-5	
Potassium, Dissolved	**0.67**	mg/L	0.50	0.26	1	06/07/22 09:21	06/07/22 16:15	7440-09-7	
Sodium, Dissolved	**2.5**	mg/L	0.50	0.34	1	06/07/22 09:21	06/07/22 16:15	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	04/29/22 06:09	04/29/22 14:02	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	04/29/22 06:09	04/29/22 14:02	7440-38-2	
Barium	**0.018**	mg/L	0.0025	0.00098	1	04/29/22 06:09	04/29/22 14:02	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	04/29/22 06:09	04/29/22 14:02	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	04/29/22 06:09	04/29/22 14:02	7440-43-9	
Chromium	**0.0025 U**	mg/L	0.0025	0.00050	1	04/29/22 06:09	04/29/22 14:02	7440-47-3	
Cobalt	**0.00065J**	mg/L	0.0025	0.00031	1	04/29/22 06:09	04/29/22 14:02	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.00064	1	04/29/22 06:09	04/29/22 14:02	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	04/29/22 06:09	04/29/22 14:02	7439-92-1	
Nickel	**0.0012J**	mg/L	0.0025	0.00065	1	04/29/22 06:09	04/29/22 14:02	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	04/29/22 06:09	04/29/22 14:02	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	04/29/22 06:09	04/29/22 14:02	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	04/29/22 06:09	04/29/22 14:02	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	04/29/22 06:09	04/29/22 14:02	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0049	1	04/29/22 06:09	04/29/22 14:02	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	04/28/22 16:02	05/02/22 09:39	7439-97-6	
BVR 7470 Mercury, Dissolved	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury, Dissolved	**0.00050 U**	mg/L	0.00050	0.00025	1	05/06/22 11:00	05/09/22 13:03	7439-97-6	

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30482496

Sample: TW-5A **Lab ID: 30482496002** Collected: 04/19/22 13:20 Received: 04/20/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.042 U**	ug/L	0.042	0.023	1	04/27/22 07:25	04/27/22 15:24	96-12-8	H2,L2
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/02/22 09:00	05/05/22 16:46	96-12-8	CH,H2
1,2-Dibromoethane (EDB)	**0.042 U**	ug/L	0.042	0.032	1	04/27/22 07:25	04/27/22 15:24	106-93-4	H2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/02/22 09:00	05/05/22 16:46	106-93-4	CH,H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	125	%.	60-140		1	05/02/22 09:00	05/05/22 16:46	630-20-6	CH,IH
1,1,1,2-Tetrachloroethane (S)	99	%.	60-140		1	04/27/22 07:25	04/27/22 15:24	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011								
	Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**14.0**	mg/L	10.0	1.0	1		05/03/22 17:33		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011								
	Pace Analytical Services - Greensburg								
Total Dissolved Solids	**14.0**	mg/L	10.0	10.0	1		04/27/22 15:02		H1
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1								
	Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	04/28/22 07:58	04/28/22 08:48		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
	Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**7.9J**	mg/L	25.0	4.7	1	04/27/22 13:48	04/27/22 17:10		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
	Pace Analytical Services - Greensburg								
Chloride	**4.8**	mg/L	3.0	0.67	1		05/03/22 15:22	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011								
	Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		05/02/22 16:14	14797-55-8	
Nitrogen, NO2 plus NO3	**0.058J**	mg/L	0.10	0.053	1		05/02/22 16:14		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/26/22 20:32	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011								
	Pace Analytical Services - Greensburg								
Nitrite as N	**0.017**	mg/L	0.010	0.0055	1		04/21/22 10:43	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30482496

Sample: TW-5B **Lab ID: 30482496003** Collected: 04/19/22 12:15 Received: 04/20/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.49J**	mg/L	0.50	0.083	1	04/27/22 04:03	04/29/22 19:59	7440-70-2	
Iron	**0.070**	mg/L	0.050	0.035	1	04/27/22 04:03	04/29/22 19:59	7439-89-6	
Magnesium	**0.19J**	mg/L	0.50	0.047	1	04/27/22 04:03	04/29/22 19:59	7439-95-4	
Manganese	**0.0048J**	mg/L	0.0050	0.0027	1	04/27/22 04:03	04/29/22 19:59	7439-96-5	
Potassium	**0.44J**	mg/L	0.50	0.26	1	04/27/22 04:03	04/29/22 19:59	7440-09-7	
Sodium	**1.3**	mg/L	0.50	0.34	1	04/27/22 04:03	04/29/22 19:59	7440-23-5	
Total Hardness	**2.0J**	mg/L	3.3	0.27	1	04/27/22 04:03	04/29/22 19:59		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.61**	mg/L	0.50	0.083	1	05/13/22 14:41	05/17/22 17:31	7440-70-2	
Iron, Dissolved	**0.064**	mg/L	0.050	0.035	1	05/13/22 14:41	05/17/22 17:31	7439-89-6	
Magnesium, Dissolved	**0.20J**	mg/L	0.50	0.047	1	05/13/22 14:41	05/17/22 17:31	7439-95-4	
Manganese, Dissolved	**0.0065**	mg/L	0.0050	0.0027	1	05/13/22 14:41	05/17/22 17:31	7439-96-5	
Potassium, Dissolved	**0.52**	mg/L	0.50	0.26	1	05/13/22 14:41	05/17/22 17:31	7440-09-7	
Sodium, Dissolved	**1.5**	mg/L	0.50	0.34	1	05/13/22 14:41	05/17/22 17:31	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	04/29/22 06:09	04/29/22 14:05	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	04/29/22 06:09	04/29/22 14:05	7440-38-2	
Barium	**0.0056**	mg/L	0.0025	0.00098	1	04/29/22 06:09	04/29/22 14:05	7440-39-3	
Beryllium	**0.00033J**	mg/L	0.00050	0.00015	1	04/29/22 06:09	04/29/22 14:05	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	04/29/22 06:09	04/29/22 14:05	7440-43-9	
Chromium	**0.011**	mg/L	0.0025	0.00050	1	04/29/22 06:09	04/29/22 14:05	7440-47-3	
Cobalt	**0.0051**	mg/L	0.0025	0.00031	1	04/29/22 06:09	04/29/22 14:05	7440-48-4	
Copper	**0.016**	mg/L	0.0025	0.00064	1	04/29/22 06:09	04/29/22 14:05	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	04/29/22 06:09	04/29/22 14:05	7439-92-1	
Nickel	**0.015**	mg/L	0.0025	0.00065	1	04/29/22 06:09	04/29/22 14:05	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	04/29/22 06:09	04/29/22 14:05	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	04/29/22 06:09	04/29/22 14:05	7440-22-4	
Thallium	**0.00011J**	mg/L	0.00050	0.000081	1	04/29/22 06:09	04/29/22 14:05	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	04/29/22 06:09	04/29/22 14:05	7440-62-2	
Zinc	**0.025**	mg/L	0.0050	0.0049	1	04/29/22 06:09	04/29/22 14:05	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	04/28/22 16:02	05/02/22 09:41	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	04/27/22 07:25	04/27/22 15:37	96-12-8	H2,L2
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/02/22 09:00	05/05/22 16:59	96-12-8	CH,H2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	04/27/22 07:25	04/27/22 15:37	106-93-4	H2

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30482496

Sample: TW-5B **Lab ID: 30482496003** Collected: 04/19/22 12:15 Received: 04/20/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/02/22 09:00	05/05/22 16:59	106-93-4	CH,H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	121	%.	60-140		1	05/02/22 09:00	05/05/22 16:59	630-20-6	CH,IH
1,1,1,2-Tetrachloroethane (S)	104	%.	60-140		1	04/27/22 07:25	04/27/22 15:37	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011								
	Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/03/22 17:37		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011								
	Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		04/27/22 15:02		H1
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1								
	Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	04/28/22 07:58	04/28/22 08:50		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
	Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/27/22 13:48	04/27/22 17:10		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
	Pace Analytical Services - Greensburg								
Chloride	**1.8J**	mg/L	3.0	0.67	1		05/03/22 15:23	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011								
	Pace Analytical Services - Greensburg								
Nitrate as N	**0.18**	mg/L	0.10	0.053	1		05/02/22 16:15	14797-55-8	
Nitrogen, NO2 plus NO3	**0.18**	mg/L	0.10	0.053	1		05/02/22 16:15		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/26/22 20:35	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011								
	Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/21/22 10:42	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30482496

Sample: TW-6 **Lab ID: 30482496004** Collected: 04/19/22 15:30 Received: 04/20/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**4.0**	mg/L	0.50	0.083	1	04/27/22 04:03	04/29/22 20:01	7440-70-2	
Iron	**15.7**	mg/L	0.050	0.035	1	04/27/22 04:03	04/29/22 20:01	7439-89-6	
Magnesium	**3.8**	mg/L	0.50	0.047	1	04/27/22 04:03	04/29/22 20:01	7439-95-4	
Manganese	**0.31**	mg/L	0.0050	0.0027	1	04/27/22 04:03	04/29/22 20:01	7439-96-5	
Potassium	**1.7**	mg/L	0.50	0.26	1	04/27/22 04:03	04/29/22 20:01	7440-09-7	
Sodium	**5.5**	mg/L	0.50	0.34	1	04/27/22 04:03	04/29/22 20:01	7440-23-5	
Total Hardness	**25.7**	mg/L	3.3	0.27	1	04/27/22 04:03	04/29/22 20:01		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**4.1**	mg/L	0.50	0.083	1	04/27/22 08:24	04/29/22 16:56	7440-70-2	
Iron, Dissolved	**15.1**	mg/L	0.050	0.035	1	04/27/22 08:24	04/29/22 16:56	7439-89-6	
Magnesium, Dissolved	**3.7**	mg/L	0.50	0.047	1	04/27/22 08:24	04/29/22 16:56	7439-95-4	
Manganese, Dissolved	**0.30**	mg/L	0.0050	0.0027	1	04/27/22 08:24	04/29/22 16:56	7439-96-5	
Potassium, Dissolved	**1.7**	mg/L	0.50	0.26	1	04/27/22 08:24	04/29/22 16:56	7440-09-7	
Sodium, Dissolved	**5.5**	mg/L	0.50	0.34	1	04/27/22 08:24	04/29/22 16:56	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	04/29/22 06:09	04/29/22 14:08	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	04/29/22 06:09	04/29/22 14:08	7440-38-2	
Barium	**0.14**	mg/L	0.0025	0.00098	1	04/29/22 06:09	04/29/22 14:08	7440-39-3	
Beryllium	**0.00023J**	mg/L	0.00050	0.00015	1	04/29/22 06:09	04/29/22 14:08	7440-41-7	
Cadmium	**0.00040J**	mg/L	0.00050	0.00013	1	04/29/22 06:09	04/29/22 14:08	7440-43-9	
Chromium	**0.0035**	mg/L	0.0025	0.00050	1	04/29/22 06:09	04/29/22 14:08	7440-47-3	
Cobalt	**0.023**	mg/L	0.0025	0.00031	1	04/29/22 06:09	04/29/22 14:08	7440-48-4	
Copper	**0.0074**	mg/L	0.0025	0.00064	1	04/29/22 06:09	04/29/22 14:08	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	04/29/22 06:09	04/29/22 14:08	7439-92-1	
Nickel	**0.013**	mg/L	0.0025	0.00065	1	04/29/22 06:09	04/29/22 14:08	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	04/29/22 06:09	04/29/22 14:08	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	04/29/22 06:09	04/29/22 14:08	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	04/29/22 06:09	04/29/22 14:08	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	04/29/22 06:09	04/29/22 14:08	7440-62-2	
Zinc	**0.022**	mg/L	0.0050	0.0049	1	04/29/22 06:09	04/29/22 14:08	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00024**	mg/L	0.00020	0.00020	1	04/28/22 16:02	05/02/22 09:43	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	04/27/22 07:25	04/27/22 15:50	96-12-8	H2,L2
1,2-Dibromo-3-chloropropane	**0.042 U**	ug/L	0.042	0.023	1	05/02/22 09:00	05/05/22 17:12	96-12-8	CH,H2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	04/27/22 07:25	04/27/22 15:50	106-93-4	H2

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30482496

Sample: TW-6 **Lab ID: 30482496004** Collected: 04/19/22 15:30 Received: 04/20/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.042 U**	ug/L	0.042	0.032	1	05/02/22 09:00	05/05/22 17:12	106-93-4	CH,H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	102	%.	60-140		1	04/27/22 07:25	04/27/22 15:50	630-20-6	
1,1,1,2-Tetrachloroethane (S)	117	%.	60-140		1	05/02/22 09:00	05/05/22 17:12	630-20-6	CH,IH
2320B Alkalinity	Analytical Method: SM 2320B-2011								
	Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**26.0**	mg/L	10.0	1.0	1		05/03/22 17:45		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011								
	Pace Analytical Services - Greensburg								
Total Dissolved Solids	**69.0**	mg/L	10.0	10.0	1		04/27/22 15:02		H1
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1								
	Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	04/28/22 07:58	04/28/22 08:52		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
	Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**10.1J**	mg/L	25.0	4.7	1	04/27/22 13:48	04/27/22 17:11		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
	Pace Analytical Services - Greensburg								
Chloride	**11.4**	mg/L	3.0	0.67	1		05/03/22 15:26	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011								
	Pace Analytical Services - Greensburg								
Nitrate as N	**1.0 U**	mg/L	1.0	0.53	10		05/02/22 16:16	14797-55-8	
Nitrogen, NO2 plus NO3	**1.0 U**	mg/L	1.0	0.53	10		05/02/22 16:16		D3
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**10.3**	mg/L	10.0	4.7	1		04/26/22 20:35	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011								
	Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/21/22 10:45	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30482496

Sample: TW-6A **Lab ID: 30482496005** Collected: 04/19/22 14:50 Received: 04/20/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**49.4**	mg/L	0.50	0.083	1	04/27/22 04:03	04/29/22 20:03	7440-70-2	
Iron	**0.26**	mg/L	0.050	0.035	1	04/27/22 04:03	04/29/22 20:03	7439-89-6	
Magnesium	**5.5**	mg/L	0.50	0.047	1	04/27/22 04:03	04/29/22 20:03	7439-95-4	
Manganese	**0.0050 U**	mg/L	0.0050	0.0027	1	04/27/22 04:03	04/29/22 20:03	7439-96-5	
Potassium	**5.2**	mg/L	0.50	0.26	1	04/27/22 04:03	04/29/22 20:03	7440-09-7	
Sodium	**2.2**	mg/L	0.50	0.34	1	04/27/22 04:03	04/29/22 20:03	7440-23-5	
Total Hardness	**146**	mg/L	3.3	0.27	1	04/27/22 04:03	04/29/22 20:03		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**48.3**	mg/L	0.50	0.083	1	04/27/22 08:24	04/29/22 16:58	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	04/27/22 08:24	04/29/22 16:58	7439-89-6	
Magnesium, Dissolved	**5.4**	mg/L	0.50	0.047	1	04/27/22 08:24	04/29/22 16:58	7439-95-4	
Manganese, Dissolved	**0.0050 U**	mg/L	0.0050	0.0027	1	04/27/22 08:24	04/29/22 16:58	7439-96-5	
Potassium, Dissolved	**5.1**	mg/L	0.50	0.26	1	04/27/22 08:24	04/29/22 16:58	7440-09-7	
Sodium, Dissolved	**2.3**	mg/L	0.50	0.34	1	04/27/22 08:24	04/29/22 16:58	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	04/29/22 06:09	04/29/22 14:10	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	04/29/22 06:09	04/29/22 14:10	7440-38-2	
Barium	**0.030**	mg/L	0.0025	0.00098	1	04/29/22 06:09	04/29/22 14:10	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00015	1	04/29/22 06:09	04/29/22 14:10	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	04/29/22 06:09	04/29/22 14:10	7440-43-9	
Chromium	**0.00090J**	mg/L	0.0025	0.00050	1	04/29/22 06:09	04/29/22 14:10	7440-47-3	
Cobalt	**0.00073J**	mg/L	0.0025	0.00031	1	04/29/22 06:09	04/29/22 14:10	7440-48-4	
Copper	**0.00093J**	mg/L	0.0025	0.00064	1	04/29/22 06:09	04/29/22 14:10	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	04/29/22 06:09	04/29/22 14:10	7439-92-1	
Nickel	**0.00092J**	mg/L	0.0025	0.00065	1	04/29/22 06:09	04/29/22 14:10	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	04/29/22 06:09	04/29/22 14:10	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	04/29/22 06:09	04/29/22 14:10	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	04/29/22 06:09	04/29/22 14:10	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	04/29/22 06:09	04/29/22 14:10	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0049	1	04/29/22 06:09	04/29/22 14:10	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	04/28/22 16:02	05/02/22 09:44	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	04/27/22 07:25	04/27/22 16:03	96-12-8	H2,L2
1,2-Dibromo-3-chloropropane	**0.042 U**	ug/L	0.042	0.023	1	05/02/22 09:00	05/05/22 17:25	96-12-8	CH,H2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	04/27/22 07:25	04/27/22 16:03	106-93-4	H2

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30482496

Sample: TW-6A **Lab ID: 30482496005** Collected: 04/19/22 14:50 Received: 04/20/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.042 U**	ug/L	0.042	0.032	1	05/02/22 09:00	05/05/22 17:25	106-93-4	CH,H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	99	%.	60-140		1	04/27/22 07:25	04/27/22 16:03	630-20-6	
1,1,1,2-Tetrachloroethane (S)	119	%.	60-140		1	05/02/22 09:00	05/05/22 17:25	630-20-6	CH,IH
2320B Alkalinity	Analytical Method: SM 2320B-2011								
	Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**102**	mg/L	10.0	1.0	1		05/03/22 17:50		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011								
	Pace Analytical Services - Greensburg								
Total Dissolved Solids	**166**	mg/L	10.0	10.0	1		04/27/22 15:02		H1
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1								
	Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	04/28/22 07:58	04/28/22 08:54		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
	Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**5.6J**	mg/L	25.0	4.7	1	04/27/22 13:48	04/27/22 17:12		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
	Pace Analytical Services - Greensburg								
Chloride	**3.0J**	mg/L	3.0	0.67	1		05/03/22 15:26	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011								
	Pace Analytical Services - Greensburg								
Nitrate as N	**0.60**	mg/L	0.10	0.053	1		05/02/22 16:18	14797-55-8	
Nitrogen, NO2 plus NO3	**0.60**	mg/L	0.10	0.053	1		05/02/22 16:18		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**33.2**	mg/L	10.0	4.7	1		04/26/22 20:37	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011								
	Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/21/22 10:44	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30482496

Sample: TW-6B **Lab ID: 30482496006** Collected: 04/19/22 14:15 Received: 04/20/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.49J**	mg/L	0.50	0.083	1	04/27/22 04:03	04/29/22 20:09	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	04/27/22 04:03	04/29/22 20:09	7439-89-6	
Magnesium	**0.27J**	mg/L	0.50	0.047	1	04/27/22 04:03	04/29/22 20:09	7439-95-4	
Manganese	**0.0078**	mg/L	0.0050	0.0027	1	04/27/22 04:03	04/29/22 20:09	7439-96-5	
Potassium	**0.52**	mg/L	0.50	0.26	1	04/27/22 04:03	04/29/22 20:09	7440-09-7	
Sodium	**1.6**	mg/L	0.50	0.34	1	04/27/22 04:03	04/29/22 20:09	7440-23-5	
Total Hardness	**2.3J**	mg/L	3.3	0.27	1	04/27/22 04:03	04/29/22 20:09		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.54**	mg/L	0.50	0.083	1	04/27/22 08:24	04/29/22 17:00	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	04/27/22 08:24	04/29/22 17:00	7439-89-6	
Magnesium, Dissolved	**0.28J**	mg/L	0.50	0.047	1	04/27/22 08:24	04/29/22 17:00	7439-95-4	
Manganese, Dissolved	**0.0075**	mg/L	0.0050	0.0027	1	04/27/22 08:24	04/29/22 17:00	7439-96-5	
Potassium, Dissolved	**0.53**	mg/L	0.50	0.26	1	04/27/22 08:24	04/29/22 17:00	7440-09-7	
Sodium, Dissolved	**1.6**	mg/L	0.50	0.34	1	04/27/22 08:24	04/29/22 17:00	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	04/29/22 06:09	04/29/22 14:13	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	04/29/22 06:09	04/29/22 14:13	7440-38-2	
Barium	**0.0071**	mg/L	0.0025	0.00098	1	04/29/22 06:09	04/29/22 14:13	7440-39-3	
Beryllium	**0.00025J**	mg/L	0.00050	0.00015	1	04/29/22 06:09	04/29/22 14:13	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	04/29/22 06:09	04/29/22 14:13	7440-43-9	
Chromium	**0.0024J**	mg/L	0.0025	0.00050	1	04/29/22 06:09	04/29/22 14:13	7440-47-3	
Cobalt	**0.0065**	mg/L	0.0025	0.00031	1	04/29/22 06:09	04/29/22 14:13	7440-48-4	
Copper	**0.019**	mg/L	0.0025	0.00064	1	04/29/22 06:09	04/29/22 14:13	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	04/29/22 06:09	04/29/22 14:13	7439-92-1	
Nickel	**0.0099**	mg/L	0.0025	0.00065	1	04/29/22 06:09	04/29/22 14:13	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	04/29/22 06:09	04/29/22 14:13	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	04/29/22 06:09	04/29/22 14:13	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	04/29/22 06:09	04/29/22 14:13	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	04/29/22 06:09	04/29/22 14:13	7440-62-2	
Zinc	**0.0092**	mg/L	0.0050	0.0049	1	04/29/22 06:09	04/29/22 14:13	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	04/28/22 16:02	05/02/22 09:46	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.023	1	04/27/22 07:25	04/27/22 16:16	96-12-8	H2,L2
1,2-Dibromo-3-chloropropane	**0.042 U**	ug/L	0.042	0.023	1	05/02/22 09:00	05/05/22 17:38	96-12-8	CH,H2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	04/27/22 07:25	04/27/22 16:16	106-93-4	H2

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30482496

Sample: TW-6B **Lab ID: 30482496006** Collected: 04/19/22 14:15 Received: 04/20/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.042 U**	ug/L	0.042	0.033	1	05/02/22 09:00	05/05/22 17:38	106-93-4	CH,H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	124	%.	60-140		1	05/02/22 09:00	05/05/22 17:38	630-20-6	CH,IH
1,1,1,2-Tetrachloroethane (S)	100	%.	60-140		1	04/27/22 07:25	04/27/22 16:16	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/03/22 17:55		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		04/27/22 15:02		H1
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	04/28/22 07:58	04/28/22 08:56		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/27/22 13:48	04/27/22 17:12		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**2.9J**	mg/L	3.0	0.67	1		05/03/22 15:27	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.32**	mg/L	0.10	0.053	1		05/02/22 16:19	14797-55-8	
Nitrogen, NO2 plus NO3	**0.32**	mg/L	0.10	0.053	1		05/02/22 16:19		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/26/22 20:37	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/21/22 10:44	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30482496

Sample: TW-7 **Lab ID: 30482496007** Collected: 04/20/22 10:30 Received: 04/20/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**6.8**	mg/L	0.50	0.083	1	04/27/22 04:03	04/29/22 20:11	7440-70-2	
Iron	**17.6**	mg/L	0.050	0.035	1	04/27/22 04:03	04/29/22 20:11	7439-89-6	
Magnesium	**1.1**	mg/L	0.50	0.047	1	04/27/22 04:03	04/29/22 20:11	7439-95-4	
Manganese	**0.17**	mg/L	0.0050	0.0027	1	04/27/22 04:03	04/29/22 20:11	7439-96-5	
Potassium	**2.1**	mg/L	0.50	0.26	1	04/27/22 04:03	04/29/22 20:11	7440-09-7	
Sodium	**5.0**	mg/L	0.50	0.34	1	04/27/22 04:03	04/29/22 20:11	7440-23-5	
Total Hardness	**21.2**	mg/L	3.3	0.27	1	04/27/22 04:03	04/29/22 20:11		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**6.9**	mg/L	0.50	0.083	1	04/27/22 08:24	04/29/22 17:02	7440-70-2	
Iron, Dissolved	**12.3**	mg/L	0.050	0.035	1	04/27/22 08:24	04/29/22 17:02	7439-89-6	
Magnesium, Dissolved	**1.1**	mg/L	0.50	0.047	1	04/27/22 08:24	04/29/22 17:02	7439-95-4	
Manganese, Dissolved	**0.17**	mg/L	0.0050	0.0027	1	04/27/22 08:24	04/29/22 17:02	7439-96-5	
Potassium, Dissolved	**2.2**	mg/L	0.50	0.26	1	04/27/22 08:24	04/29/22 17:02	7440-09-7	
Sodium, Dissolved	**5.2**	mg/L	0.50	0.34	1	04/27/22 08:24	04/29/22 17:02	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	04/29/22 06:09	04/29/22 14:16	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	04/29/22 06:09	04/29/22 14:16	7440-38-2	
Barium	**0.052**	mg/L	0.0025	0.00098	1	04/29/22 06:09	04/29/22 14:16	7440-39-3	
Beryllium	**0.00043J**	mg/L	0.00050	0.00015	1	04/29/22 06:09	04/29/22 14:16	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	04/29/22 06:09	04/29/22 14:16	7440-43-9	
Chromium	**0.0056**	mg/L	0.0025	0.00050	1	04/29/22 06:09	04/29/22 14:16	7440-47-3	
Cobalt	**0.0032**	mg/L	0.0025	0.00031	1	04/29/22 06:09	04/29/22 14:16	7440-48-4	
Copper	**0.0077**	mg/L	0.0025	0.00064	1	04/29/22 06:09	04/29/22 14:16	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	04/29/22 06:09	04/29/22 14:16	7439-92-1	
Nickel	**0.0078**	mg/L	0.0025	0.00065	1	04/29/22 06:09	04/29/22 14:16	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	04/29/22 06:09	04/29/22 14:16	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	04/29/22 06:09	04/29/22 14:16	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	04/29/22 06:09	04/29/22 14:16	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	04/29/22 06:09	04/29/22 14:16	7440-62-2	
Zinc	**0.0054**	mg/L	0.0050	0.0049	1	04/29/22 06:09	04/29/22 14:16	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	04/28/22 16:02	05/02/22 09:51	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.023	1	04/27/22 07:25	04/27/22 16:29	96-12-8	L2,P2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	04/27/22 07:25	04/27/22 16:29	106-93-4	P2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	103	%.	60-140		1	04/27/22 07:25	04/27/22 16:29	630-20-6	P2

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30482496

Sample: TW-7 **Lab ID: 30482496007** Collected: 04/20/22 10:30 Received: 04/20/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**24.0**	mg/L	10.0	1.0	1		05/03/22 20:19		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**38.0**	mg/L	10.0	10.0	1		04/27/22 15:02		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	04/28/22 07:58	04/28/22 08:58		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/27/22 13:48	04/27/22 17:13		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**8.7**	mg/L	3.0	0.67	1		05/03/22 15:28	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.063J**	mg/L	0.10	0.053	1		05/02/22 16:21	14797-55-8	
Nitrogen, NO2 plus NO3	**0.080J**	mg/L	0.10	0.053	1		05/02/22 16:21		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/26/22 20:39	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.017**	mg/L	0.010	0.0055	1		04/21/22 10:48	14797-65-0	

Sample: TW-7A **Lab ID: 30482496008** Collected: 04/20/22 10:00 Received: 04/20/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**2.7**	mg/L	0.50	0.083	1	04/27/22 04:03	04/29/22 20:13	7440-70-2	
Iron	**0.069**	mg/L	0.050	0.035	1	04/27/22 04:03	04/29/22 20:13	7439-89-6	
Magnesium	**1.6**	mg/L	0.50	0.047	1	04/27/22 04:03	04/29/22 20:13	7439-95-4	
Manganese	**0.035**	mg/L	0.0050	0.0027	1	04/27/22 04:03	04/29/22 20:13	7439-96-5	
Potassium	**0.80**	mg/L	0.50	0.26	1	04/27/22 04:03	04/29/22 20:13	7440-09-7	

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30482496

Sample: TW-7A **Lab ID: 30482496008** Collected: 04/20/22 10:00 Received: 04/20/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**1.9**	mg/L	0.50	0.34	1	04/27/22 04:03	04/29/22 20:13	7440-23-5	
Total Hardness	**13.5**	mg/L	3.3	0.27	1	04/27/22 04:03	04/29/22 20:13		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**2.6**	mg/L	0.50	0.083	1	04/27/22 08:24	04/29/22 17:04	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	04/27/22 08:24	04/29/22 17:04	7439-89-6	
Magnesium, Dissolved	**1.5**	mg/L	0.50	0.047	1	04/27/22 08:24	04/29/22 17:04	7439-95-4	
Manganese, Dissolved	**0.032**	mg/L	0.0050	0.0027	1	04/27/22 08:24	04/29/22 17:04	7439-96-5	
Potassium, Dissolved	**0.77**	mg/L	0.50	0.26	1	04/27/22 08:24	04/29/22 17:04	7440-09-7	
Sodium, Dissolved	**1.8**	mg/L	0.50	0.34	1	04/27/22 08:24	04/29/22 17:04	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	04/29/22 06:09	04/29/22 14:19	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	04/29/22 06:09	04/29/22 14:19	7440-38-2	
Barium	**0.055**	mg/L	0.0025	0.00098	1	04/29/22 06:09	04/29/22 14:19	7440-39-3	
Beryllium	**0.00018J**	mg/L	0.00050	0.00015	1	04/29/22 06:09	04/29/22 14:19	7440-41-7	
Cadmium	**0.00017J**	mg/L	0.00050	0.00013	1	04/29/22 06:09	04/29/22 14:19	7440-43-9	
Chromium	**0.0051**	mg/L	0.0025	0.00050	1	04/29/22 06:09	04/29/22 14:19	7440-47-3	
Cobalt	**0.0050**	mg/L	0.0025	0.00031	1	04/29/22 06:09	04/29/22 14:19	7440-48-4	
Copper	**0.0054**	mg/L	0.0025	0.00064	1	04/29/22 06:09	04/29/22 14:19	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	04/29/22 06:09	04/29/22 14:19	7439-92-1	
Nickel	**0.0070**	mg/L	0.0025	0.00065	1	04/29/22 06:09	04/29/22 14:19	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	04/29/22 06:09	04/29/22 14:19	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	04/29/22 06:09	04/29/22 14:19	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	04/29/22 06:09	04/29/22 14:19	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	04/29/22 06:09	04/29/22 14:19	7440-62-2	
Zinc	**0.0096**	mg/L	0.0050	0.0049	1	04/29/22 06:09	04/29/22 14:19	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	04/28/22 16:02	05/02/22 09:53	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	04/27/22 07:25	04/27/22 17:07	96-12-8	L2
1,2-Dibromo-3-chloropropane	**0.042 U**	ug/L	0.042	0.023	1	05/02/22 09:00	05/05/22 17:51	96-12-8	CH,H2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	04/27/22 07:25	04/27/22 17:07	106-93-4	
1,2-Dibromoethane (EDB)	**0.042 U**	ug/L	0.042	0.032	1	05/02/22 09:00	05/05/22 17:51	106-93-4	CH,H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	122	%.	60-140		1	05/02/22 09:00	05/05/22 17:51	630-20-6	CH,IH
1,1,1,2-Tetrachloroethane (S)	105	%.	60-140		1	04/27/22 07:25	04/27/22 17:07	630-20-6	

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30482496

Sample: TW-7A **Lab ID: 30482496008** Collected: 04/20/22 10:00 Received: 04/20/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		05/03/22 20:20		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**31.0**	mg/L	10.0	10.0	1		04/27/22 15:02		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	04/28/22 07:58	04/28/22 09:00		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/27/22 13:48	04/27/22 17:14		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**3.4**	mg/L	3.0	0.67	1		05/03/22 15:29	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.23**	mg/L	0.10	0.053	1		05/02/22 16:22	14797-55-8	
Nitrogen, NO2 plus NO3	**0.23**	mg/L	0.10	0.053	1		05/02/22 16:22		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**7.5J**	mg/L	10.0	4.7	1		04/26/22 20:42	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/21/22 10:47	14797-65-0	

Sample: TW-8 **Lab ID: 30482496009** Collected: 04/20/22 11:10 Received: 04/20/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**6.7**	mg/L	0.50	0.083	1	04/27/22 04:03	04/29/22 20:15	7440-70-2	
Iron	**39.1**	mg/L	0.050	0.035	1	04/27/22 04:03	04/29/22 20:15	7439-89-6	
Magnesium	**4.6**	mg/L	0.50	0.047	1	04/27/22 04:03	04/29/22 20:15	7439-95-4	
Manganese	**0.72**	mg/L	0.0050	0.0027	1	04/27/22 04:03	04/29/22 20:15	7439-96-5	
Potassium	**1.5**	mg/L	0.50	0.26	1	04/27/22 04:03	04/29/22 20:15	7440-09-7	

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30482496

Sample: TW-8 **Lab ID: 30482496009** Collected: 04/20/22 11:10 Received: 04/20/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**25.3**	mg/L	0.50	0.34	1	04/27/22 04:03	04/29/22 20:15	7440-23-5	
Total Hardness	**35.9**	mg/L	3.3	0.27	1	04/27/22 04:03	04/29/22 20:15		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**6.5**	mg/L	0.50	0.083	1	04/27/22 08:24	04/29/22 17:06	7440-70-2	
Iron, Dissolved	**33.0**	mg/L	0.050	0.035	1	04/27/22 08:24	04/29/22 17:06	7439-89-6	
Magnesium, Dissolved	**4.4**	mg/L	0.50	0.047	1	04/27/22 08:24	04/29/22 17:06	7439-95-4	
Manganese, Dissolved	**0.67**	mg/L	0.0050	0.0027	1	04/27/22 08:24	04/29/22 17:06	7439-96-5	
Potassium, Dissolved	**1.4**	mg/L	0.50	0.26	1	04/27/22 08:24	04/29/22 17:06	7440-09-7	
Sodium, Dissolved	**24.3**	mg/L	0.50	0.34	1	04/27/22 08:24	04/29/22 17:06	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	04/29/22 06:09	04/29/22 14:22	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	04/29/22 06:09	04/29/22 14:22	7440-38-2	
Barium	**0.20**	mg/L	0.0025	0.00098	1	04/29/22 06:09	04/29/22 14:22	7440-39-3	
Beryllium	**0.00029J**	mg/L	0.00050	0.00015	1	04/29/22 06:09	04/29/22 14:22	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	04/29/22 06:09	04/29/22 14:22	7440-43-9	
Chromium	**0.00098J**	mg/L	0.0025	0.00050	1	04/29/22 06:09	04/29/22 14:22	7440-47-3	
Cobalt	**0.0051**	mg/L	0.0025	0.00031	1	04/29/22 06:09	04/29/22 14:22	7440-48-4	
Copper	**0.0043**	mg/L	0.0025	0.00064	1	04/29/22 06:09	04/29/22 14:22	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	04/29/22 06:09	04/29/22 14:22	7439-92-1	
Nickel	**0.0053**	mg/L	0.0025	0.00065	1	04/29/22 06:09	04/29/22 14:22	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	04/29/22 06:09	04/29/22 14:22	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	04/29/22 06:09	04/29/22 14:22	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	04/29/22 06:09	04/29/22 14:22	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	04/29/22 06:09	04/29/22 14:22	7440-62-2	
Zinc	**0.011**	mg/L	0.0050	0.0049	1	04/29/22 06:09	04/29/22 14:22	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	04/28/22 16:02	05/02/22 09:54	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	04/27/22 07:25	04/27/22 17:20	96-12-8	L2
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/02/22 09:00	05/05/22 18:04	96-12-8	CH,H2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	04/27/22 07:25	04/27/22 17:20	106-93-4	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/02/22 09:00	05/05/22 18:04	106-93-4	CH,H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	119	%.	60-140		1	05/02/22 09:00	05/05/22 18:04	630-20-6	CH,IH
1,1,1,2-Tetrachloroethane (S)	100	%.	60-140		1	04/27/22 07:25	04/27/22 17:20	630-20-6	

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30482496

Sample: TW-8 **Lab ID: 30482496009** Collected: 04/20/22 11:10 Received: 04/20/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**30.0**	mg/L	10.0	1.0	1		05/03/22 20:22		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**121**	mg/L	10.0	10.0	1		04/27/22 15:02		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.14**	mg/L	0.10	0.044	1	04/28/22 07:58	04/28/22 09:02		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**5.6J**	mg/L	25.0	4.7	1	04/27/22 13:48	04/27/22 17:14		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**45.9**	mg/L	3.0	0.67	1		05/03/22 15:30	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10**	mg/L	0.10	0.053	1		05/02/22 16:23	14797-55-8	
Nitrogen, NO2 plus NO3	**0.14**	mg/L	0.10	0.053	1		05/02/22 16:23		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/26/22 20:44	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.032**	mg/L	0.010	0.0055	1		04/21/22 10:48	14797-65-0	

Sample: TW-8A **Lab ID: 30482496010** Collected: 04/20/22 11:45 Received: 04/20/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**4.7**	mg/L	0.50	0.083	1	04/27/22 04:03	04/29/22 20:17	7440-70-2	
Iron	**0.094**	mg/L	0.050	0.035	1	04/27/22 04:03	04/29/22 20:17	7439-89-6	
Magnesium	**3.2**	mg/L	0.50	0.047	1	04/27/22 04:03	04/29/22 20:17	7439-95-4	
Manganese	**0.13**	mg/L	0.0050	0.0027	1	04/27/22 04:03	04/29/22 20:17	7439-96-5	
Potassium	**1.4**	mg/L	0.50	0.26	1	04/27/22 04:03	04/29/22 20:17	7440-09-7	

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30482496

Sample: TW-8A **Lab ID: 30482496010** Collected: 04/20/22 11:45 Received: 04/20/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**17.6**	mg/L	0.50	0.34	1	04/27/22 04:03	04/29/22 20:17	7440-23-5	
Total Hardness	**25.0**	mg/L	3.3	0.27	1	04/27/22 04:03	04/29/22 20:17		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**4.9**	mg/L	0.50	0.083	1	04/27/22 08:24	04/29/22 17:08	7440-70-2	
Iron, Dissolved	**0.27**	mg/L	0.050	0.035	1	04/27/22 08:24	04/29/22 17:08	7439-89-6	
Magnesium, Dissolved	**3.4**	mg/L	0.50	0.047	1	04/27/22 08:24	04/29/22 17:08	7439-95-4	
Manganese, Dissolved	**0.14**	mg/L	0.0050	0.0027	1	04/27/22 08:24	04/29/22 17:08	7439-96-5	
Potassium, Dissolved	**1.4**	mg/L	0.50	0.26	1	04/27/22 08:24	04/29/22 17:08	7440-09-7	
Sodium, Dissolved	**18.4**	mg/L	0.50	0.34	1	04/27/22 08:24	04/29/22 17:08	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	04/29/22 06:09	04/29/22 14:30	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	04/29/22 06:09	04/29/22 14:30	7440-38-2	
Barium	**0.086**	mg/L	0.0025	0.00098	1	04/29/22 06:09	04/29/22 14:30	7440-39-3	
Beryllium	**0.00024J**	mg/L	0.00050	0.00015	1	04/29/22 06:09	04/29/22 14:30	7440-41-7	
Cadmium	**0.00014J**	mg/L	0.00050	0.00013	1	04/29/22 06:09	04/29/22 14:30	7440-43-9	
Chromium	**0.0048**	mg/L	0.0025	0.00050	1	04/29/22 06:09	04/29/22 14:30	7440-47-3	
Cobalt	**0.0074**	mg/L	0.0025	0.00031	1	04/29/22 06:09	04/29/22 14:30	7440-48-4	
Copper	**0.0070**	mg/L	0.0025	0.00064	1	04/29/22 06:09	04/29/22 14:30	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00045	1	04/29/22 06:09	04/29/22 14:30	7439-92-1	
Nickel	**0.0074**	mg/L	0.0025	0.00065	1	04/29/22 06:09	04/29/22 14:30	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	04/29/22 06:09	04/29/22 14:30	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	04/29/22 06:09	04/29/22 14:30	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	04/29/22 06:09	04/29/22 14:30	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.00042	1	04/29/22 06:09	04/29/22 14:30	7440-62-2	
Zinc	**0.020**	mg/L	0.0050	0.0049	1	04/29/22 06:09	04/29/22 14:30	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	04/28/22 16:02	05/02/22 09:56	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	04/27/22 07:25	04/27/22 17:33	96-12-8	L2
1,2-Dibromo-3-chloropropane	**0.042 U**	ug/L	0.042	0.023	1	05/02/22 09:00	05/05/22 18:17	96-12-8	CH,H2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	04/27/22 07:25	04/27/22 17:33	106-93-4	
1,2-Dibromoethane (EDB)	**0.042 U**	ug/L	0.042	0.032	1	05/02/22 09:00	05/05/22 18:17	106-93-4	CH,H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	99	%.	60-140		1	04/27/22 07:25	04/27/22 17:33	630-20-6	
1,1,1,2-Tetrachloroethane (S)	118	%.	60-140		1	05/02/22 09:00	05/05/22 18:17	630-20-6	CH,IH

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ANALYTICAL RESULTS

Project: MLF-Spring 2022
Pace Project No.: 30482496

Sample: TW-8A **Lab ID: 30482496010** Collected: 04/20/22 11:45 Received: 04/20/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/03/22 20:23		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**84.0**	mg/L	10.0	10.0	1		04/27/22 15:02		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.044	1	04/28/22 07:58	04/28/22 09:04		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	04/27/22 13:48	04/27/22 17:14		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**25.6**	mg/L	3.0	0.67	1		05/03/22 15:31	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.4**	mg/L	0.10	0.053	1		05/02/22 16:28	14797-55-8	
Nitrogen, NO2 plus NO3	**1.4**	mg/L	0.10	0.053	1		05/02/22 16:28		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**12.5**	mg/L	10.0	4.7	1		04/26/22 20:44	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/21/22 10:49	14797-65-0	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30482496

QC Batch: 500216
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30482496001, 30482496002, 30482496003, 30482496004, 30482496005, 30482496006, 30482496007, 30482496008, 30482496009, 30482496010

METHOD BLANK: 2421176
Matrix: Water
Associated Lab Samples: 30482496001, 30482496002, 30482496003, 30482496004, 30482496005, 30482496006, 30482496007, 30482496008, 30482496009, 30482496010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	04/29/22 19:39	
Iron	mg/L	0.050 U	0.050	0.035	04/29/22 19:39	
Magnesium	mg/L	0.50 U	0.50	0.047	04/29/22 19:39	
Manganese	mg/L	0.0050 U	0.0050	0.0027	04/29/22 19:39	
Potassium	mg/L	0.50 U	0.50	0.26	04/29/22 19:39	
Sodium	mg/L	0.50 U	0.50	0.34	04/29/22 19:39	

LABORATORY CONTROL SAMPLE: 2421177

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	40.9	102	80-120	
Iron	mg/L	2	2.2	111	80-120	
Magnesium	mg/L	20	21.3	106	80-120	
Manganese	mg/L	2	2.2	110	80-120	
Potassium	mg/L	20	20.5	103	80-120	
Sodium	mg/L	20	20.4	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2421178 2421179

Parameter	Units	30482496001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	3.5	40	40	44.2	47.5	102	110	80-120	7	20	
Iron	mg/L	29.4	2	2	30.8	33.0	70	183	80-120	7	20	M1
Magnesium	mg/L	1.1	20	20	22.4	24.2	106	115	80-120	8	20	
Manganese	mg/L	0.17	2	2	2.4	2.5	110	118	80-120	7	20	
Potassium	mg/L	0.99	20	20	21.8	23.1	104	111	80-120	6	20	
Sodium	mg/L	3.5	20	20	24.1	25.5	103	110	80-120	6	20	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30482496

QC Batch: 500220
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30482496001, 30482496004, 30482496005, 30482496006, 30482496007, 30482496008, 30482496009, 30482496010

METHOD BLANK: 2421241 Matrix: Water
Associated Lab Samples: 30482496001, 30482496004, 30482496005, 30482496006, 30482496007, 30482496008, 30482496009, 30482496010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	04/29/22 16:36	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	04/29/22 16:36	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	04/29/22 16:36	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	04/29/22 16:36	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	04/29/22 16:36	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	04/29/22 16:36	

LABORATORY CONTROL SAMPLE: 2421242

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	42.6	107	80-120	
Iron, Dissolved	mg/L	2	2.3	113	80-120	
Magnesium, Dissolved	mg/L	20	22.0	110	80-120	
Manganese, Dissolved	mg/L	2	2.2	112	80-120	
Potassium, Dissolved	mg/L	20	21.3	107	80-120	
Sodium, Dissolved	mg/L	20	21.1	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2421243 2421244

Parameter	Units	30482496001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	3.4	40	40	42.9	42.8	99	98	80-120	0	20	
Iron, Dissolved	mg/L	27.3	2	2	28.9	28.4	79	54	80-120	2	20	M1
Magnesium, Dissolved	mg/L	1.1	20	20	21.5	21.6	102	102	80-120	0	20	
Manganese, Dissolved	mg/L	0.16	2	2	2.2	2.2	104	104	80-120	0	20	
Potassium, Dissolved	mg/L	0.93	20	20	20.9	20.9	100	100	80-120	0	20	
Sodium, Dissolved	mg/L	3.4	20	20	23.1	23.1	99	98	80-120	0	20	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30482496

QC Batch: 504361
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30482496003

METHOD BLANK: 2442500 Matrix: Water
Associated Lab Samples: 30482496003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	05/17/22 16:58	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	05/17/22 16:58	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	05/17/22 16:58	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	05/17/22 16:58	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	05/17/22 16:58	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	05/17/22 16:58	

LABORATORY CONTROL SAMPLE: 2442501

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	37.3	93	80-120	
Iron, Dissolved	mg/L	2	2.0	100	80-120	
Magnesium, Dissolved	mg/L	20	19.4	97	80-120	
Manganese, Dissolved	mg/L	2	2.0	100	80-120	
Potassium, Dissolved	mg/L	20	19.4	97	80-120	
Sodium, Dissolved	mg/L	20	19.2	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2442528 2442529

Parameter	Units	30481281003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	54500 ug/L			87.0	89.4				3	20	M1
Iron, Dissolved	mg/L	0.050 U			2.0	2.0				2	20	
Magnesium, Dissolved	mg/L	10300 ug/L			28.7	29.3				2	20	M1
Manganese, Dissolved	mg/L	0.15	2	2	2.1	2.1	104	106	80-120	2	20	
Potassium, Dissolved	mg/L	1120 ug/L			20.9	21.2				1	20	
Sodium, Dissolved	mg/L	55100 ug/L			72.4	73.5				2	20	M1

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30482496

QC Batch: 509632
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30482496002

METHOD BLANK: 2469793 Matrix: Water
Associated Lab Samples: 30482496002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	06/07/22 16:11	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	06/07/22 16:11	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	06/07/22 16:11	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	06/07/22 16:11	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	06/07/22 16:11	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	06/07/22 16:11	

LABORATORY CONTROL SAMPLE: 2469794

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	42.6	107	80-120	
Iron, Dissolved	mg/L	2	2.2	111	80-120	
Magnesium, Dissolved	mg/L	20	22.3	111	80-120	
Manganese, Dissolved	mg/L	2	2.2	108	80-120	
Potassium, Dissolved	mg/L	20	21.5	108	80-120	
Sodium, Dissolved	mg/L	20	21.4	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2469795 2469796

Parameter	Units	30482496002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	1.8	40	40	44.2	46.6	106	112	80-120	5	20	
Iron, Dissolved	mg/L	55.1	2	2	56.8	60.1	86	250	80-120	6	20	M1
Magnesium, Dissolved	mg/L	0.81	20	20	22.7	24.2	109	117	80-120	6	20	
Manganese, Dissolved	mg/L	0.24	2	2	2.4	2.5	106	113	80-120	6	20	
Potassium, Dissolved	mg/L	0.67	20	20	22.3	23.7	108	115	80-120	6	20	
Sodium, Dissolved	mg/L	2.5	20	20	23.9	25.4	107	114	80-120	6	20	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30482496

QC Batch: 500784
QC Batch Method: EPA 3020A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30482496001, 30482496002, 30482496003, 30482496004, 30482496005, 30482496006, 30482496007, 30482496008, 30482496009, 30482496010

METHOD BLANK: 2424279
Matrix: Water
Associated Lab Samples: 30482496001, 30482496002, 30482496003, 30482496004, 30482496005, 30482496006, 30482496007, 30482496008, 30482496009, 30482496010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00030	04/29/22 13:37	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	04/29/22 13:37	
Barium	mg/L	0.0025 U	0.0025	0.00098	04/29/22 13:37	
Beryllium	mg/L	0.00050 U	0.00050	0.00015	04/29/22 13:37	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	04/29/22 13:37	
Chromium	mg/L	0.0025 U	0.0025	0.00050	04/29/22 13:37	
Cobalt	mg/L	0.0025 U	0.0025	0.00031	04/29/22 13:37	
Copper	mg/L	0.0025 U	0.0025	0.00064	04/29/22 13:37	
Lead	mg/L	0.00050 U	0.00050	0.00045	04/29/22 13:37	
Nickel	mg/L	0.0025 U	0.0025	0.00065	04/29/22 13:37	
Selenium	mg/L	0.0025 U	0.0025	0.00084	04/29/22 13:37	
Silver	mg/L	0.0025 U	0.0025	0.00053	04/29/22 13:37	
Thallium	mg/L	0.00050 U	0.00050	0.000081	04/29/22 13:37	
Vanadium	mg/L	0.0025 U	0.0025	0.00042	04/29/22 13:37	
Zinc	mg/L	0.0050 U	0.0050	0.0049	04/29/22 13:37	

LABORATORY CONTROL SAMPLE: 2424280

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.021	106	80-120	
Arsenic	mg/L	0.1	0.10	103	80-120	
Barium	mg/L	0.1	0.10	102	80-120	
Beryllium	mg/L	0.02	0.021	103	80-120	
Cadmium	mg/L	0.02	0.020	99	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Copper	mg/L	0.1	0.10	102	80-120	
Lead	mg/L	0.02	0.020	100	80-120	
Nickel	mg/L	0.1	0.10	102	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	
Silver	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.02	0.020	100	80-120	
Vanadium	mg/L	0.1	0.10	102	80-120	
Zinc	mg/L	0.2	0.20	102	80-120	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30482496

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2424281 2424282

Parameter	Units	30482496001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00050 U	0.02	0.02	0.028	0.023	138	113	75-125	20	20	M1
Arsenic	mg/L	0.0025 U	0.1	0.1	0.13	0.11	131	107	75-125	20	20	M1
Barium	mg/L	0.028	0.1	0.1	0.16	0.14	134	107	75-125	18	20	M1
Beryllium	mg/L	0.00050 U	0.02	0.02	0.026	0.022	131	111	75-125	17	20	M1
Cadmium	mg/L	0.00050 U	0.02	0.02	0.025	0.021	125	105	75-125	18	20	
Chromium	mg/L	0.0022J	0.1	0.1	0.13	0.11	132	106	75-125	21	20	M1,R1
Cobalt	mg/L	0.0011J	0.1	0.1	0.13	0.11	132	108	75-125	21	20	M1,R1
Copper	mg/L	0.00066J	0.1	0.1	0.13	0.11	132	106	75-125	21	20	M1,R1
Lead	mg/L	0.00050 U	0.02	0.02	0.026	0.022	130	107	75-125	19	20	M1
Nickel	mg/L	0.0036	0.1	0.1	0.13	0.11	130	108	75-125	19	20	M1
Selenium	mg/L	0.0025 U	0.1	0.1	0.13	0.11	129	108	75-125	18	20	M1
Silver	mg/L	0.0025 U	0.1	0.1	0.13	0.11	129	106	75-125	19	20	M1
Thallium	mg/L	0.00050 U	0.02	0.02	0.026	0.022	130	108	75-125	18	20	M1
Vanadium	mg/L	0.0025 U	0.1	0.1	0.13	0.11	132	106	75-125	22	20	M1,R1
Zinc	mg/L	0.0050 U	0.2	0.2	0.26	0.22	130	106	75-125	20	20	M1

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30482496

QC Batch: 500717
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30482496001, 30482496002, 30482496003, 30482496004, 30482496005, 30482496006, 30482496007, 30482496008, 30482496009, 30482496010

METHOD BLANK: 2423774
Matrix: Water
Associated Lab Samples: 30482496001, 30482496002, 30482496003, 30482496004, 30482496005, 30482496006, 30482496007, 30482496008, 30482496009, 30482496010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	05/02/22 09:31	

LABORATORY CONTROL SAMPLE: 2423775

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.0086	86	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2423809 2423810

Parameter	Units	30482496001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00033	0.01	0.01	0.0068	0.0058	64	55	80-120	15	20	M1

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30482496

QC Batch: 502061
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30482496002

METHOD BLANK: 2430215 Matrix: Water
Associated Lab Samples: 30482496002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury, Dissolved	mg/L	0.00050 U	0.00050	0.00025	05/09/22 12:54	

LABORATORY CONTROL SAMPLE: 2430216

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	mg/L	0.01	0.0083	83	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2431373 2431374

Parameter	Units	30474805002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury, Dissolved	mg/L	0.00050 U	0.01	0.01	0.0043	0.0067	43	67	80-120	44	20	H1,M1, R1

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30482496

QC Batch: 500238
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30482496001, 30482496002, 30482496003, 30482496004, 30482496005, 30482496006, 30482496007, 30482496008, 30482496009, 30482496010

METHOD BLANK: 2421303
Matrix: Water
Associated Lab Samples: 30482496001, 30482496002, 30482496003, 30482496004, 30482496005, 30482496006, 30482496007, 30482496008, 30482496009, 30482496010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.022	04/27/22 14:46	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	04/27/22 14:46	
1,1,1,2-Tetrachloroethane (S)	%.	90	60-140		04/27/22 14:46	

LABORATORY CONTROL SAMPLE: 2421304

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.20	79	85-115	L2
1,2-Dibromoethane (EDB)	ug/L	0.25	0.22	86	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			101	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2421305 2421306

Parameter	Units	30482496007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.041 U	0.42	0.41	0.35	0.33	83	80	60-140	4	25	
1,2-Dibromoethane (EDB)	ug/L	0.041 U	0.42	0.41	0.38	0.36	90	87	60-140	4	25	
1,1,1,2-Tetrachloroethane (S)	%.						103	102	60-140			

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30482496

QC Batch: 501255
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30482496001, 30482496002, 30482496003, 30482496004, 30482496005, 30482496006, 30482496008, 30482496009, 30482496010

METHOD BLANK: 2426136
Matrix: Water
Associated Lab Samples: 30482496001, 30482496002, 30482496003, 30482496004, 30482496005, 30482496006, 30482496008, 30482496009, 30482496010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.022	05/05/22 14:13	CH
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	05/05/22 14:13	CH
1,1,1,2-Tetrachloroethane (S)	%.	125	60-140		05/05/22 14:13	CH,IH

LABORATORY CONTROL SAMPLE: 2426137

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.23	91	85-115	CH
1,2-Dibromoethane (EDB)	ug/L	0.25	0.26	102	85-115	CH
1,1,1,2-Tetrachloroethane (S)	%.			110	60-140	CH,IH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2426138 2426139

Parameter	Units	30483775001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	ND	0.41	0.4	0.33	0.36	80	90	60-140	11	25	CH
1,2-Dibromoethane (EDB)	ug/L	ND	0.41	0.4	0.36	0.39	89	96	60-140	6	25	CH
1,1,1,2-Tetrachloroethane (S)	%.						91	101	60-140			CH,IH

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30482496

QC Batch: 501772
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30482496001, 30482496002, 30482496003, 30482496004, 30482496005, 30482496006

METHOD BLANK: 2428415 Matrix: Water
Associated Lab Samples: 30482496001, 30482496002, 30482496003, 30482496004, 30482496005, 30482496006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	05/03/22 17:12	

LABORATORY CONTROL SAMPLE: 2428416

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2428417 2428418

Parameter	Units	30482574001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	124	50	50	168	172	88	96	85-115	2	20	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30482496

QC Batch: 501814
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30482496007, 30482496008, 30482496009, 30482496010

METHOD BLANK: 2428679 Matrix: Water
Associated Lab Samples: 30482496007, 30482496008, 30482496009, 30482496010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	1.0J	10.0	1.0	05/03/22 20:03	

LABORATORY CONTROL SAMPLE: 2428680

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2428681 2428682

Parameter	Units	30483110002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	12.0	50	50	40.0	64.0	56	104	85-115	46	20	ML,R1

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30482496

QC Batch: 500237
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30482496001, 30482496002, 30482496003, 30482496004, 30482496005, 30482496006, 30482496007, 30482496008, 30482496009, 30482496010

METHOD BLANK: 2421299
Matrix: Water
Associated Lab Samples: 30482496001, 30482496002, 30482496003, 30482496004, 30482496005, 30482496006, 30482496007, 30482496008, 30482496009, 30482496010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	04/27/22 15:02	

LABORATORY CONTROL SAMPLE: 2421300

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	962	96	85-115	

SAMPLE DUPLICATE: 2421301

Parameter	Units	30483796001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	150	146	3	5	H3

SAMPLE DUPLICATE: 2421302

Parameter	Units	30482496009 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	121	124	2	5	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30482496

QC Batch: 500533
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30482496001, 30482496002, 30482496003, 30482496004, 30482496005, 30482496006, 30482496007, 30482496008, 30482496009, 30482496010

METHOD BLANK: 2422839
Matrix: Water
Associated Lab Samples: 30482496001, 30482496002, 30482496003, 30482496004, 30482496005, 30482496006, 30482496007, 30482496008, 30482496009, 30482496010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.044	04/28/22 08:38	

LABORATORY CONTROL SAMPLE: 2422840

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	3.9	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2422841 2422842

Parameter	Units	30482496001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.0	4.1	101	101	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2422843 2422844

Parameter	Units	30482930001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.34	4	4	4.3	4.3	100	99	90-110	1	20	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30482496

QC Batch: 500287
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30482496001, 30482496002, 30482496003, 30482496004, 30482496005, 30482496006, 30482496007, 30482496008, 30482496009, 30482496010

METHOD BLANK: 2421413
Matrix: Water
Associated Lab Samples: 30482496001, 30482496002, 30482496003, 30482496004, 30482496005, 30482496006, 30482496007, 30482496008, 30482496009, 30482496010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	04/27/22 17:04	

LABORATORY CONTROL SAMPLE: 2421414

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	314	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2421415 2421416

Parameter	Units	30483160001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	466	150	150	584	591	79	83	90-110	1	10	ML

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2421417 2421418

Parameter	Units	30482496007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	25.0 U	150	150	155	158	101	103	90-110	1	10	

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30482496

QC Batch: 501710
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30482496001, 30482496002, 30482496003, 30482496004, 30482496005, 30482496006, 30482496007, 30482496008, 30482496009, 30482496010

METHOD BLANK: 2428193
Matrix: Water
Associated Lab Samples: 30482496001, 30482496002, 30482496003, 30482496004, 30482496005, 30482496006, 30482496007, 30482496008, 30482496009, 30482496010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/03/22 15:12	

LABORATORY CONTROL SAMPLE: 2428194

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	18.4	92	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2428195 2428196

Parameter	Units	30482496001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	7.7	20	20	25.2	25.6	88	89	85-115	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30482496

QC Batch: 501348
QC Batch Method: SM 4500NO3-F-2011
Analysis Method: SM 4500NO3-F-2011
Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30482496001, 30482496002, 30482496003, 30482496004, 30482496005, 30482496006, 30482496007, 30482496008, 30482496009, 30482496010

METHOD BLANK: 2426580
Matrix: Water
Associated Lab Samples: 30482496001, 30482496002, 30482496003, 30482496004, 30482496005, 30482496006, 30482496007, 30482496008, 30482496009, 30482496010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	05/02/22 16:05	

LABORATORY CONTROL SAMPLE: 2426581

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	3.8	95	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2426582 2426583

Parameter	Units	30482496001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.10 U	5	5	3.6	3.6	71	70	85-115	1	20	ML

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30482496

QC Batch: 500108
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30482496001, 30482496002, 30482496003, 30482496004, 30482496005, 30482496006, 30482496007, 30482496008, 30482496009, 30482496010

METHOD BLANK: 2420517
Matrix: Water
Associated Lab Samples: 30482496001, 30482496002, 30482496003, 30482496004, 30482496005, 30482496006, 30482496007, 30482496008, 30482496009, 30482496010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	04/26/22 20:25	

LABORATORY CONTROL SAMPLE: 2420518

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	28.6	95	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2420519 2420520

Parameter	Units	30482496001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.0 U	20	20	17.4	17.7	80	82	85-115	2	20	ML

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QUALITY CONTROL DATA

Project: MLF-Spring 2022
Pace Project No.: 30482496

QC Batch: 498972
QC Batch Method: SM 4500NO2-B-2011
Analysis Method: SM 4500NO2-B-2011
Analysis Description: SM4500-NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30482496001, 30482496002, 30482496003, 30482496004, 30482496005, 30482496006, 30482496007, 30482496008, 30482496009, 30482496010

METHOD BLANK: 2414985
Matrix: Water
Associated Lab Samples: 30482496001, 30482496002, 30482496003, 30482496004, 30482496005, 30482496006, 30482496007, 30482496008, 30482496009, 30482496010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	04/21/22 10:41	

LABORATORY CONTROL SAMPLE: 2414986

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.10	101	90-110	

MATRIX SPIKE SAMPLE: 2414988

Parameter	Units	30482496010 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.010 U	0.1	0.098	98	85-115	

SAMPLE DUPLICATE: 2414987

Parameter	Units	30482496010 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010 U		20	

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QUALIFIERS

Project: MLF-Spring 2022
Pace Project No.: 30482496

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30482496001
[1] Sample pH for 8011 is 7

Sample: 30482496002
[1] Sample pH for 8011 is 7

Sample: 30482496003
[1] Sample pH for 8011 is 7

Sample: 30482496004
[1] Sample pH for 8011 is 6

Sample: 30482496005
[1] Sample pH for 8011 is 7

Sample: 30482496006
[1] Sample pH for 8011 is 6

Sample: 30482496007
[1] Sample pH for 8011 is 6

Sample: 30482496008
[1] Sample pH for 8011 is 5

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QUALIFIERS

Project: MLF-Spring 2022
Pace Project No.: 30482496

SAMPLE QUALIFIERS

Sample: 30482496009

[1] Sample pH for 8011 is 6

Sample: 30482496010

[1] Sample pH for 8011 is 5

ANALYTE QUALIFIERS

1c	ALK TV: 0 mg/L
2c	Alk TV: 0mg/L
3c	Alk TV: 2 mg/L
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
H1	Analysis conducted outside the EPA method holding time.
H2	Extraction or preparation conducted outside EPA method holding time.
H3	Sample was received or analysis requested beyond the recognized method holding time.
IH	This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.
P2	Re-extraction or re-analysis could not be performed due to insufficient sample amount.
R1	RPD value was outside control limits.

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-Spring 2022
Pace Project No.: 30482496

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30482496001	**TW-5**	EPA 3010A	500216	EPA 6010D	501003
30482496002	**TW-5A**	EPA 3010A	500216	EPA 6010D	501003
30482496003	**TW-5B**	EPA 3010A	500216	EPA 6010D	501003
30482496004	**TW-6**	EPA 3010A	500216	EPA 6010D	501003
30482496005	**TW-6A**	EPA 3010A	500216	EPA 6010D	501003
30482496006	**TW-6B**	EPA 3010A	500216	EPA 6010D	501003
30482496007	**TW-7**	EPA 3010A	500216	EPA 6010D	501003
30482496008	**TW-7A**	EPA 3010A	500216	EPA 6010D	501003
30482496009	**TW-8**	EPA 3010A	500216	EPA 6010D	501003
30482496010	**TW-8A**	EPA 3010A	500216	EPA 6010D	501003
30482496001	**TW-5**	EPA 3010A	500220	EPA 6010D	500997
30482496002	**TW-5A**	EPA 3010A	509632	EPA 6010D	509808
30482496003	**TW-5B**	EPA 3010A	504361	EPA 6010D	504740
30482496004	**TW-6**	EPA 3010A	500220	EPA 6010D	500997
30482496005	**TW-6A**	EPA 3010A	500220	EPA 6010D	500997
30482496006	**TW-6B**	EPA 3010A	500220	EPA 6010D	500997
30482496007	**TW-7**	EPA 3010A	500220	EPA 6010D	500997
30482496008	**TW-7A**	EPA 3010A	500220	EPA 6010D	500997
30482496009	**TW-8**	EPA 3010A	500220	EPA 6010D	500997
30482496010	**TW-8A**	EPA 3010A	500220	EPA 6010D	500997
30482496001	**TW-5**	EPA 3020A	500784	EPA 6020B	500941
30482496002	**TW-5A**	EPA 3020A	500784	EPA 6020B	500941
30482496003	**TW-5B**	EPA 3020A	500784	EPA 6020B	500941
30482496004	**TW-6**	EPA 3020A	500784	EPA 6020B	500941
30482496005	**TW-6A**	EPA 3020A	500784	EPA 6020B	500941
30482496006	**TW-6B**	EPA 3020A	500784	EPA 6020B	500941
30482496007	**TW-7**	EPA 3020A	500784	EPA 6020B	500941
30482496008	**TW-7A**	EPA 3020A	500784	EPA 6020B	500941
30482496009	**TW-8**	EPA 3020A	500784	EPA 6020B	500941
30482496010	**TW-8A**	EPA 3020A	500784	EPA 6020B	500941
30482496001	**TW-5**	EPA 7470A	500717	EPA 7470A	501044
30482496002	**TW-5A**	EPA 7470A	500717	EPA 7470A	501044
30482496003	**TW-5B**	EPA 7470A	500717	EPA 7470A	501044
30482496004	**TW-6**	EPA 7470A	500717	EPA 7470A	501044
30482496005	**TW-6A**	EPA 7470A	500717	EPA 7470A	501044
30482496006	**TW-6B**	EPA 7470A	500717	EPA 7470A	501044
30482496007	**TW-7**	EPA 7470A	500717	EPA 7470A	501044
30482496008	**TW-7A**	EPA 7470A	500717	EPA 7470A	501044
30482496009	**TW-8**	EPA 7470A	500717	EPA 7470A	501044
30482496010	**TW-8A**	EPA 7470A	500717	EPA 7470A	501044
30482496002	**TW-5A**	EPA 7470A	502061	EPA 7470A	503020
30482496001	**TW-5**	EPA 8011	500238	EPA 8011	500434
30482496001	**TW-5**	EPA 8011	501255	EPA 8011	501392
30482496002	**TW-5A**	EPA 8011	500238	EPA 8011	500434

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-Spring 2022
Pace Project No.: 30482496

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30482496002	**TW-5A**	EPA 8011	501255	EPA 8011	501392
30482496003	**TW-5B**	EPA 8011	500238	EPA 8011	500434
30482496003	**TW-5B**	EPA 8011	501255	EPA 8011	501392
30482496004	**TW-6**	EPA 8011	500238	EPA 8011	500434
30482496004	**TW-6**	EPA 8011	501255	EPA 8011	501392
30482496005	**TW-6A**	EPA 8011	500238	EPA 8011	500434
30482496005	**TW-6A**	EPA 8011	501255	EPA 8011	501392
30482496006	**TW-6B**	EPA 8011	500238	EPA 8011	500434
30482496006	**TW-6B**	EPA 8011	501255	EPA 8011	501392
30482496007	**TW-7**	EPA 8011	500238	EPA 8011	500434
30482496008	**TW-7A**	EPA 8011	500238	EPA 8011	500434
30482496008	**TW-7A**	EPA 8011	501255	EPA 8011	501392
30482496009	**TW-8**	EPA 8011	500238	EPA 8011	500434
30482496009	**TW-8**	EPA 8011	501255	EPA 8011	501392
30482496010	**TW-8A**	EPA 8011	500238	EPA 8011	500434
30482496010	**TW-8A**	EPA 8011	501255	EPA 8011	501392
30482496001	**TW-5**	SM 2320B-2011	501772		
30482496002	**TW-5A**	SM 2320B-2011	501772		
30482496003	**TW-5B**	SM 2320B-2011	501772		
30482496004	**TW-6**	SM 2320B-2011	501772		
30482496005	**TW-6A**	SM 2320B-2011	501772		
30482496006	**TW-6B**	SM 2320B-2011	501772		
30482496007	**TW-7**	SM 2320B-2011	501814		
30482496008	**TW-7A**	SM 2320B-2011	501814		
30482496009	**TW-8**	SM 2320B-2011	501814		
30482496010	**TW-8A**	SM 2320B-2011	501814		
30482496001	**TW-5**	SM 2540C-2011	500237		
30482496002	**TW-5A**	SM 2540C-2011	500237		
30482496003	**TW-5B**	SM 2540C-2011	500237		
30482496004	**TW-6**	SM 2540C-2011	500237		
30482496005	**TW-6A**	SM 2540C-2011	500237		
30482496006	**TW-6B**	SM 2540C-2011	500237		
30482496007	**TW-7**	SM 2540C-2011	500237		
30482496008	**TW-7A**	SM 2540C-2011	500237		
30482496009	**TW-8**	SM 2540C-2011	500237		
30482496010	**TW-8A**	SM 2540C-2011	500237		
30482496001	**TW-5**	EPA 350.1	500533	EPA 350.1	500554
30482496002	**TW-5A**	EPA 350.1	500533	EPA 350.1	500554
30482496003	**TW-5B**	EPA 350.1	500533	EPA 350.1	500554

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-Spring 2022
Pace Project No.: 30482496

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30482496004	**TW-6**	EPA 350.1	500533	EPA 350.1	500554
30482496005	**TW-6A**	EPA 350.1	500533	EPA 350.1	500554
30482496006	**TW-6B**	EPA 350.1	500533	EPA 350.1	500554
30482496007	**TW-7**	EPA 350.1	500533	EPA 350.1	500554
30482496008	**TW-7A**	EPA 350.1	500533	EPA 350.1	500554
30482496009	**TW-8**	EPA 350.1	500533	EPA 350.1	500554
30482496010	**TW-8A**	EPA 350.1	500533	EPA 350.1	500554
30482496001	**TW-5**	EPA 410.4	500287	EPA 410.4	500498
30482496002	**TW-5A**	EPA 410.4	500287	EPA 410.4	500498
30482496003	**TW-5B**	EPA 410.4	500287	EPA 410.4	500498
30482496004	**TW-6**	EPA 410.4	500287	EPA 410.4	500498
30482496005	**TW-6A**	EPA 410.4	500287	EPA 410.4	500498
30482496006	**TW-6B**	EPA 410.4	500287	EPA 410.4	500498
30482496007	**TW-7**	EPA 410.4	500287	EPA 410.4	500498
30482496008	**TW-7A**	EPA 410.4	500287	EPA 410.4	500498
30482496009	**TW-8**	EPA 410.4	500287	EPA 410.4	500498
30482496010	**TW-8A**	EPA 410.4	500287	EPA 410.4	500498
30482496001	**TW-5**	SM 4500-Cl-E-2011	501710		
30482496002	**TW-5A**	SM 4500-Cl-E-2011	501710		
30482496003	**TW-5B**	SM 4500-Cl-E-2011	501710		
30482496004	**TW-6**	SM 4500-Cl-E-2011	501710		
30482496005	**TW-6A**	SM 4500-Cl-E-2011	501710		
30482496006	**TW-6B**	SM 4500-Cl-E-2011	501710		
30482496007	**TW-7**	SM 4500-Cl-E-2011	501710		
30482496008	**TW-7A**	SM 4500-Cl-E-2011	501710		
30482496009	**TW-8**	SM 4500-Cl-E-2011	501710		
30482496010	**TW-8A**	SM 4500-Cl-E-2011	501710		
30482496001	**TW-5**	SM 4500NO3-F-2011	501348		
30482496002	**TW-5A**	SM 4500NO3-F-2011	501348		
30482496003	**TW-5B**	SM 4500NO3-F-2011	501348		
30482496004	**TW-6**	SM 4500NO3-F-2011	501348		
30482496005	**TW-6A**	SM 4500NO3-F-2011	501348		
30482496006	**TW-6B**	SM 4500NO3-F-2011	501348		
30482496007	**TW-7**	SM 4500NO3-F-2011	501348		
30482496008	**TW-7A**	SM 4500NO3-F-2011	501348		
30482496009	**TW-8**	SM 4500NO3-F-2011	501348		
30482496010	**TW-8A**	SM 4500NO3-F-2011	501348		
30482496001	**TW-5**	EPA 9038	500108		
30482496002	**TW-5A**	EPA 9038	500108		
30482496003	**TW-5B**	EPA 9038	500108		
30482496004	**TW-6**	EPA 9038	500108		
30482496005	**TW-6A**	EPA 9038	500108		
30482496006	**TW-6B**	EPA 9038	500108		
30482496007	**TW-7**	EPA 9038	500108		
30482496008	**TW-7A**	EPA 9038	500108		
30482496009	**TW-8**	EPA 9038	500108		
30482496010	**TW-8A**	EPA 9038	500108		

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(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-Spring 2022
Pace Project No.: 30482496

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30482496001	**TW-5**	SM 4500NO2-B-2011	498972		
30482496002	**TW-5A**	SM 4500NO2-B-2011	498972		
30482496003	**TW-5B**	SM 4500NO2-B-2011	498972		
30482496004	**TW-6**	SM 4500NO2-B-2011	498972		
30482496005	**TW-6A**	SM 4500NO2-B-2011	498972		
30482496006	**TW-6B**	SM 4500NO2-B-2011	498972		
30482496007	**TW-7**	SM 4500NO2-B-2011	498972		
30482496008	**TW-7A**	SM 4500NO2-B-2011	498972		
30482496009	**TW-8**	SM 4500NO2-B-2011	498972		
30482496010	**TW-8A**	SM 4500NO2-B-2011	498972		

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - SPRING 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control

Other _____

WO# : 30482496

30482496

		# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals ①	Total + Diss. Metals ②	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO_4, COD		Method 8011 - EDB + DBCP			
1	TW-5	7	4/19/22	1250	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓			
2	TW-5A			1320															
3	TW-5B			1215															
4	TW-6			1530															
5	TW-6A			1450															
6	TW-6B			1415															
7	TW-7		4/20/22	1030															
8	TW-7A			1000															
9	TW-8			1110															
10	TW-8A			1145															
11																			
12																			

	Signature	Date	Time	Comments
Relinquished by	[signature]	4/20/22	1400	① TOTAL METALS - 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni,
Received by	[signature]	4/20/22	1400	Se, Ag, Tl, V, Zn / 7470 - Hg
Relinquished by	[signature]	04/20/22	1805	② TOTAL + DISS. METALS: 6010 - Ca, Fe, Mg, Mn, K, Na
Received by	RDS PACE	4-20-22	1825	PACE WV - METALS
Relinquished by	RDS PACE	4-20-22	2225	PACE - G-BUNC - WET CHEM + BOII
Received by				LEVEL 2 REPORT

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

Millersville Landfill, Anne Arundel County, MD		
	Pace, Beaver, WV	
	Method 6020 - ICPMS	
Parameter	RL	MDL
	(mg/l)	
TOTAL METALS - mg/l		
Antimony	0.0005	
Arsenic	0.0025	0.0002473
Barium	0.0025	
Beryllium	0.0005	
Cadmium	0.0005	
Chromium	0.0025	
Cobalt	0.0025	
Copper	0.0025	
Lead	0.0005	
Nickel	0.0025	
Selenium	0.0025	
Silver	0.0025	
Thallium	0.0005	
Vanadium	0.0025	
Zinc	0.005	
	Pace, Beaver, WV	
TOTAL METALS - mg/l	Method 6010 - ICP	
Calcium	0.5	0.028
Iron	0.05	0.0076
Magnesium	0.5	0.047
Manganese	0.005	0.00043
Potassium	0.5	0.19
Sodium	0.5	0.148
	Pace, Beaver, WV	
	Method 7470A	
Mercury	0.0005	0.00025
	Pace - Greensburg, PA	
Volatile Organics - ug/l	Method 8011 - ug/l	
DBCP	0.041	
EDB	0.041	
GENERAL CHEMISTRY - mg/l	Pace - Greensburg, PA	
Alkalinity - SM 2320B	10	1
Ammonia - EPA 350.1	0.1	0.0445
COD - EPA 410.4	25	4.6532
Chloride - EPA 300.0	3	0.06683
Hardness - 2340B		
Nitrate - EPA 300.0	0.1	0.0238
Sulfate - EPA 300.0	10	4.6702
Total dissolved solids - SM2540C	10	10

WO#: 30482496
PM: SLS Due Date: 05/05/22
CLIENT: ENV MONITOR

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: EMA Project # _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace Other _____

Label: BL
LIMS Login

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☒ no

Thermometer Used 15 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 3.1 °C Correction Factor: .6 °C Final Temp: 2.5 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# 1CD2811	Date and Initials of person examining contents: JM 4-21-22
Chain of Custody Present:	✓			1.	
Chain of Custody Filled Out:	✓			2.	
Chain of Custody Relinquished:	✓			3.	
Sampler Name & Signature on COC:		✓		4.	
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.	
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):	✓			7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.	
Containers Intact:	✓			11.	
Orthophosphate field filtered			✓	12.	
Hex Cr Aqueous sample field filtered			✓	13.	
Organic Samples checked for dechlorination:			✓	14.	
Filtered volume received for Dissolved tests			✓	15.	
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16.	
All containers meet method preservation requirements.	✓			Initial when completed JL	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:	✓			18.	
Trip Blank Custody Seals Present	✓				
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed:	Date: / Survey Meter SN:

WO#: 30482496
Due Date: 05/05/22
PM: SLS
CLIENT: ENV MONITOR

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

WO# : 30482496

30482496

5

LIMS30 Internal Shipping Manifest

COOLER 22

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	22	Cooler temp (rcvd) °C	0.0
Packaged on Ice (Y/N)	Yes	Correction Factor	0
Shipping Method	Courier	Cooler temp (corr) °C	0.0
Tracking #	N/A	IR GUN ID	23
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[illegible]	GBUR	4-21-22	1755
Received	SC	Beav	4/21/22	1755 SC
Relinquished				05:40
Received				
Relinquished				
Received				

Logger	Scan Date	Container ID	Type	LIMS Lab ID	LIMS Work Order
MF	4/21/2022	30482496005 BP2N1/2	BP2N	30482496005	30482496
MF	4/21/2022	30482496004 BP2N2/2	BP2N	30482496004	30482496
MF	4/21/2022	30482496003 BP2N1/2	BP2N	30482496003	30482496
MF	4/21/2022	30482496003 BP2N2/2	BP2N	30482496003	30482496
MF	4/21/2022	30482496001 BP2N1/2	BP2N	30482496001	30482496
MF	4/21/2022	30482496001 BP2N2/2	BP2N	30482496001	30482496
MF	4/21/2022	30482496002 BP2N2/2	BP2N	30482496002	30482496
MF	4/21/2022	30482496010 BP2N2/2	BP2N	30482496010	30482496
MF	4/21/2022	30482496010 BP2N1/2	BP2N	30482496010	30482496
MF	4/21/2022	30482496008 BP2N2/2	BP2N	30482496008	30482496
MF	4/21/2022	30482496006 BP2N2/2	BP2N	30482496006	30482496
MF	4/21/2022	30482496007 BP2N2/2	BP2N	30482496007	30482496
MF	4/21/2022	30482496006 BP2N1/2	BP2N	30482496006	30482496
MF	4/21/2022	30482496005 BP2N2/2	BP2N	30482496005	30482496
MF	4/21/2022	30482496004 BP2N1/2	BP2N	30482496004	30482496
MF	4/21/2022	30482496007 BP2N1/2	BP2N	30482496007	30482496
MF	4/21/2022	30482496009 BP2N2/2	BP2N	30482496009	30482496
MF	4/21/2022	30482496009 BP2N1/2	BP2N	30482496009	30482496
MF	4/21/2022	30482496008 BP2N1/2	BP2N	30482496008	30482496
MF	4/21/2022	30482496002 BP2N1/2	BP2N	30482496002	30482496
MF	4/21/2022	30482753003 BP3N1/1	BP3N	30482753003	30482753
MF	4/21/2022	30482753002 BP3N1/1	BP3N	30482753002	30482753
MF	4/21/2022	30482679001 BP3N1/1	BP3N	30482679001	30482679
MF	4/21/2022	30482679002 BP3N1/1	BP3N	30482679002	30482679
MF	4/21/2022	30482765002 BP3N1/2	BP3N	30482765002	30482765
MF	4/21/2022	30482765002 BP3N2/2	BP3N	30482765002	30482765
MF	4/21/2022	30482753001 BP3N1/1	BP3N	30482753001	30482753
MF	4/21/2022	30482753004 BP3N1/1	BP3N	30482753004	30482753
1/22/00 0:00					

WO#: 30482496
PM: SLS **Due Date: 05/05/22**
CLIENT: ENV MONITOR

LIMS73 Lab Sample Condition Upon Receipt (West Virg

Pace Analytical

Client Name: _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☑ Other: 3rd party courier

Tracking #: _____

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Thermometer Used 73 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** 0 °C Correction Factor: 0 °C Final Temp: 0 °C

Comments:

pH paper Lot#	Date and Initials of person examining contents:
205300	SC 4/20/22

	Yes	No	N/A	
Chain of Custody Present:			✓	1.
Chain of Custody Filled Out:			✓	2. manifest
Chain of Custody Relinquished:			✓	3.
Sampler Name & Signature on COC:			✓	4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT				5. Lab Labeled by: N/A Checked by: N/A
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered: -pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓ ✓	13.
Filtered volume received for Dissolved tests:	✓			14.
All containers have been checked for preservation: exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix	✓			15.
All containers meet method preservation requirements:	✓			Initial when completed: SC Date: 4/20/22
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present: Trip Blank Custody Seals Present:			✓ ✓	17.
				Initial when completed: SC Date: 4/20/22

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

***PM review** is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

16 May 2022

Steve Brown
Environmental Monitoring and Assessment
207 East Sixth Street
Lititz, PA 17543
RE: MILLERSVILLE LANDFILL

Enclosed are the results of analyses for samples received by the laboratory on 05/05/22 14:35.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TW-1		2050521-01	Nonpotable Water	05/04/22 11:50	05/05/22 14:35
TW-2		2050521-02	Nonpotable Water	05/03/22 11:50	05/05/22 14:35
TW-2A		2050521-03	Nonpotable Water	05/03/22 11:15	05/05/22 14:35
TW-3		2050521-04	Nonpotable Water	05/03/22 13:20	05/05/22 14:35
TW-3A		2050521-05	Nonpotable Water	05/03/22 12:45	05/05/22 14:35
TW-23R		2050521-06	Nonpotable Water	05/03/22 10:20	05/05/22 14:35
TW-27		2050521-07	Nonpotable Water	05/03/22 14:00	05/05/22 14:35
TW-28		2050521-08	Nonpotable Water	05/04/22 09:50	05/05/22 14:35
TW-29		2050521-09	Nonpotable Water	05/04/22 10:40	05/05/22 14:35
TW-30		2050521-10	Nonpotable Water	05/04/22 12:30	05/05/22 14:35
MW-P4		2050521-11	Nonpotable Water	05/05/22 12:00	05/05/22 14:35
MW-P9		2050521-12	Nonpotable Water	05/03/22 17:30	05/05/22 14:35
MW-P106		2050521-13	Nonpotable Water	05/04/22 16:10	05/05/22 14:35
MW-P417		2050521-14	Nonpotable Water	05/04/22 14:30	05/05/22 14:35
MW-P440		2050521-15	Nonpotable Water	05/04/22 15:15	05/05/22 14:35
RW-P109		2050521-16	Nonpotable Water	05/05/22 09:15	05/05/22 14:35
RW-P165		2050521-17	Nonpotable Water	05/05/22 11:20	05/05/22 14:35
RW-P171-1		2050521-18	Nonpotable Water	05/05/22 12:50	05/05/22 14:35
RW-P264		2050521-19	Nonpotable Water	05/04/22 17:00	05/05/22 14:35
RW-P440		2050521-20	Nonpotable Water	05/05/22 10:40	05/05/22 14:35
RW-P441		2050521-21	Nonpotable Water	05/05/22 10:00	05/05/22 14:35
RW-P584		2050521-22	Nonpotable Water	05/03/22 18:10	05/05/22 14:35
TRIP BLANK		2050521-23	Nonpotable Water	05/05/22 00:00	05/05/22 14:35
FIELD BLANK		2050521-24	Nonpotable Water	05/03/22 12:00	05/05/22 14:35

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Will Brewington, President

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

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Will Brewington, President

Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

TW-1

2050521-01 (Nonpotable Water)
Sample Date: 05/04/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 13:26	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 13:26	LL
Benzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 13:26	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 13:26	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 13:26	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 13:26	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 13:26	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 13:26	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
Dichlorodifluoromethane	**10.2**		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
1,1-Dichloroethane	**1.7**		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
Dichlorofluoromethane	**2.4**		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 13:26	LL

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

TW-1

2050521-01 (Nonpotable Water)
Sample Date: 05/04/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 13:26	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 13:26	LL
Styrene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
Toluene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
Trichloroethene	**0.7**	J	ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 13:26	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 13:26	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 13:26	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:26	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*96 %*	*05/09/22*	*05/09/22 13:26*
Surrogate: Toluene-d8	*75-120*	*94 %*	*05/09/22*	*05/09/22 13:26*
Surrogate: 4-Bromofluorobenzene	*75-120*	*96 %*	*05/09/22*	*05/09/22 13:26*

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Baltimore MD 21227
410-247-7600
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

TW-2

2050521-02 (Nonpotable Water)
Sample Date: 05/03/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 13:50	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 13:50	LL
Benzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 13:50	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 13:50	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 13:50	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 13:50	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 13:50	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 13:50	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

TW-2

2050521-02 (Nonpotable Water)
Sample Date: 05/03/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 13:50	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 13:50	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 13:50	LL
Styrene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
Toluene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 13:50	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 13:50	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 13:50	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 13:50	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*96 %*	*05/09/22*		*05/09/22 13:50*		
Surrogate: Toluene-d8			*75-120*	*95 %*	*05/09/22*		*05/09/22 13:50*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*	*05/09/22*		*05/09/22 13:50*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

TW-2A

2050521-03 (Nonpotable Water)
Sample Date: 05/03/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 14:15	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 14:15	LL
Benzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 14:15	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 14:15	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 14:15	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 14:15	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 14:15	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 14:15	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
Dichlorodifluoromethane	**1.0**	J	ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
Dichlorofluoromethane	**0.6**	J	ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

TW-2A

2050521-03 (Nonpotable Water)
Sample Date: 05/03/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 14:15	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 14:15	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 14:15	LL
Styrene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
Toluene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 14:15	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 14:15	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 14:15	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:15	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*96 %*	*05/09/22*		*05/09/22 14:15*		
Surrogate: Toluene-d8			*75-120*	*94 %*	*05/09/22*		*05/09/22 14:15*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*	*05/09/22*		*05/09/22 14:15*		

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Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

TW-3

2050521-04 (Nonpotable Water)
Sample Date: 05/03/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 14:40	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 14:40	LL
Benzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 14:40	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 14:40	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 14:40	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 14:40	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 14:40	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 14:40	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

TW-3

2050521-04 (Nonpotable Water)
Sample Date: 05/03/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 14:40	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 14:40	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 14:40	LL
Styrene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
Toluene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 14:40	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 14:40	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 14:40	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 14:40	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*97 %*	*05/09/22*		*05/09/22 14:40*		
Surrogate: Toluene-d8			*75-120*	*95 %*	*05/09/22*		*05/09/22 14:40*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*	*05/09/22*		*05/09/22 14:40*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

TW-3A

2050521-05 (Nonpotable Water)
Sample Date: 05/03/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 15:04	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 15:04	LL
Benzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 15:04	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 15:04	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 15:04	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 15:04	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 15:04	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 15:04	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

TW-3A

2050521-05 (Nonpotable Water)
Sample Date: 05/03/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 15:04	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 15:04	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 15:04	LL
Styrene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
Toluene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 15:04	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 15:04	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 15:04	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:04	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*97 %*	*05/09/22*		*05/09/22 15:04*		
Surrogate: Toluene-d8			*75-120*	*95 %*	*05/09/22*		*05/09/22 15:04*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*97 %*	*05/09/22*		*05/09/22 15:04*		

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Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

TW-23R

2050521-06 (Nonpotable Water)
Sample Date: 05/03/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 15:30	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 15:30	LL
Benzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 15:30	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 15:30	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 15:30	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 15:30	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 15:30	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 15:30	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

TW-23R

2050521-06 (Nonpotable Water)
Sample Date: 05/03/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 15:30	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 15:30	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 15:30	LL
Styrene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
Toluene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 15:30	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 15:30	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 15:30	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:30	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*98 %*	*05/09/22*		*05/09/22 15:30*		
Surrogate: Toluene-d8			*75-120*	*94 %*	*05/09/22*		*05/09/22 15:30*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*97 %*	*05/09/22*		*05/09/22 15:30*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

TW-27

2050521-07 (Nonpotable Water)
Sample Date: 05/03/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 15:55	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 15:55	LL
Benzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 15:55	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 15:55	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 15:55	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 15:55	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 15:55	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 15:55	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

TW-27

2050521-07 (Nonpotable Water)
Sample Date: 05/03/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 15:55	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 15:55	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 15:55	LL
Styrene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
Toluene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 15:55	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 15:55	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 15:55	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 15:55	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*97 %*	*05/09/22*		*05/09/22 15:55*		
Surrogate: Toluene-d8			*75-120*	*94 %*	*05/09/22*		*05/09/22 15:55*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*97 %*	*05/09/22*		*05/09/22 15:55*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

TW-28

2050521-08 (Nonpotable Water)
Sample Date: 05/04/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 16:20	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 16:20	LL
Benzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 16:20	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 16:20	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 16:20	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 16:20	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 16:20	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 16:20	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
Dichlorodifluoromethane	**5.7**		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
1,1-Dichloroethane	**1.6**		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
Dichlorofluoromethane	**3.5**		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 16:20	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

TW-28

2050521-08 (Nonpotable Water)
Sample Date: 05/04/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 16:20	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 16:20	LL
Styrene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
Tetrachloroethene	**1.0**		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
Toluene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
Trichlorofluoromethane (Freon 11)	**1.3**		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 16:20	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 16:20	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 16:20	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:20	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*97 %*	*05/09/22*		*05/09/22 16:20*		
Surrogate: Toluene-d8			*75-120*	*94 %*	*05/09/22*		*05/09/22 16:20*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*97 %*	*05/09/22*		*05/09/22 16:20*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

TW-29

2050521-09 (Nonpotable Water)
Sample Date: 05/04/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 16:45	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 16:45	LL
Benzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 16:45	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 16:45	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 16:45	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 16:45	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 16:45	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 16:45	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
Dichlorodifluoromethane	**4.2**		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
1,1-Dichloroethane	**0.9**	J	ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
Dichlorofluoromethane	**1.0**		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 16:45	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

TW-29

2050521-09 (Nonpotable Water)
Sample Date: 05/04/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 16:45	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 16:45	LL
Styrene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
Tetrachloroethene	**1.3**		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
Toluene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 16:45	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 16:45	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 16:45	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 16:45	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*98 %*	*05/09/22*	*05/09/22 16:45*
Surrogate: Toluene-d8	*75-120*	*94 %*	*05/09/22*	*05/09/22 16:45*
Surrogate: 4-Bromofluorobenzene	*75-120*	*96 %*	*05/09/22*	*05/09/22 16:45*

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

TW-30

2050521-10 (Nonpotable Water)
Sample Date: 05/04/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 17:10	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 17:10	LL
Benzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 17:10	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 17:10	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 17:10	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 17:10	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 17:10	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 17:10	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

TW-30

2050521-10 (Nonpotable Water)
Sample Date: 05/04/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 17:10	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 17:10	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 17:10	LL
Styrene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
Toluene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 17:10	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 17:10	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 17:10	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:10	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*98 %*	*05/09/22*		*05/09/22 17:10*		
Surrogate: Toluene-d8			*75-120*	*95 %*	*05/09/22*		*05/09/22 17:10*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*05/09/22*		*05/09/22 17:10*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

MW-P4

2050521-11 (Nonpotable Water)
Sample Date: 05/05/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 17:35	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 17:35	LL
Benzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 17:35	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 17:35	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 17:35	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 17:35	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 17:35	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 17:35	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

MW-P4

2050521-11 (Nonpotable Water)
Sample Date: 05/05/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 17:35	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 17:35	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 17:35	LL
Styrene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
Toluene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 17:35	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 17:35	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 17:35	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 17:35	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*97 %*	*05/09/22*		*05/09/22 17:35*		
Surrogate: Toluene-d8			*75-120*	*95 %*	*05/09/22*		*05/09/22 17:35*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*	*05/09/22*		*05/09/22 17:35*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

MW-P9

2050521-12 (Nonpotable Water)
Sample Date: 05/03/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 18:00	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 18:00	LL
Benzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 18:00	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 18:00	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 18:00	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 18:00	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 18:00	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 18:00	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
Dichlorodifluoromethane	**1.3**		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
1,1-Dichloroethane	**0.7**	J	ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
Dichlorofluoromethane	**0.6**	J	ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 18:00	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

MW-P9

2050521-12 (Nonpotable Water)
Sample Date: 05/03/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/09/22	05/09/22 18:00	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 18:00	LL
Styrene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
Tetrachloroethene	**0.9**	J	ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
Toluene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 18:00	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 18:00	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/09/22	05/09/22 18:00	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/09/22	05/09/22 18:00	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*96 %*	*05/09/22*	*05/09/22 18:00*
Surrogate: Toluene-d8	*75-120*	*94 %*	*05/09/22*	*05/09/22 18:00*
Surrogate: 4-Bromofluorobenzene	*75-120*	*95 %*	*05/09/22*	*05/09/22 18:00*

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Maryland spectral Services

Analytical Chemistry Services

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

MW-P106

2050521-13 (Nonpotable Water)
Sample Date: 05/04/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 13:38	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 13:38	LL
Benzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 13:38	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 13:38	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 13:38	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 13:38	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 13:38	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 13:38	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
Dichlorodifluoromethane	**1.2**		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
1,1-Dichloroethane	**1.9**		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
cis-1,2-Dichloroethene	**0.9**	J	ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
Dichlorofluoromethane	**1.2**		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 13:38	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

MW-P106

2050521-13 (Nonpotable Water)
Sample Date: 05/04/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 13:38	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 13:38	LL
Styrene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
Tetrachloroethene	**0.7**	J	ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
Toluene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
Trichloroethene	**0.6**	J	ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 13:38	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 13:38	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 13:38	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 13:38	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*98 %*	*05/10/22*		*05/10/22 13:38*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*05/10/22*		*05/10/22 13:38*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*94 %*	*05/10/22*		*05/10/22 13:38*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

MW-P417

2050521-14 (Nonpotable Water)
Sample Date: 05/04/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 14:02	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 14:02	LL
Benzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 14:02	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 14:02	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 14:02	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 14:02	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 14:02	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 14:02	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
Dichlorodifluoromethane	**1.6**		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
1,1-Dichloroethane	**1.1**		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
Dichlorofluoromethane	**0.5**	J	ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 14:02	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

MW-P417

2050521-14 (Nonpotable Water)
Sample Date: 05/04/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 14:02	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 14:02	LL
Styrene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
Toluene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 14:02	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 14:02	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 14:02	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:02	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*97 %*		*05/10/22*	*05/10/22 14:02*		
Surrogate: Toluene-d8			*75-120*	*98 %*		*05/10/22*	*05/10/22 14:02*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*94 %*		*05/10/22*	*05/10/22 14:02*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

MW-P440

2050521-15 (Nonpotable Water)
Sample Date: 05/04/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 14:27	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 14:27	LL
Benzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 14:27	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 14:27	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 14:27	LL
Chloroform	**0.7**	J	ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 14:27	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 14:27	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 14:27	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

MW-P440

2050521-15 (Nonpotable Water)
Sample Date: 05/04/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 14:27	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 14:27	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 14:27	LL
Styrene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
Toluene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 14:27	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 14:27	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 14:27	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:27	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*	*05/10/22*		*05/10/22 14:27*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*05/10/22*		*05/10/22 14:27*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*94 %*	*05/10/22*		*05/10/22 14:27*		

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Maryland spectral Services

Analytical Chemistry Services

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

RW-P109

2050521-16 (Nonpotable Water)
Sample Date: 05/05/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 14:53	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 14:53	LL
Benzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 14:53	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 14:53	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 14:53	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 14:53	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 14:53	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 14:53	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
Dichlorodifluoromethane	**2.6**		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
1,1-Dichloroethane	**1.1**		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
Dichlorofluoromethane	**0.7**	J	ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 14:53	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

RW-P109

2050521-16 (Nonpotable Water)
Sample Date: 05/05/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 14:53	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 14:53	LL
Styrene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
Tetrachloroethene	**0.8**	J	ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
Toluene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
Trichloroethene	**1.2**		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 14:53	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 14:53	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 14:53	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 14:53	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*98 %*		*05/10/22*	*05/10/22 14:53*		
Surrogate: Toluene-d8			*75-120*	*97 %*		*05/10/22*	*05/10/22 14:53*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*94 %*		*05/10/22*	*05/10/22 14:53*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

RW-P165

2050521-17 (Nonpotable Water)
Sample Date: 05/05/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 16:56	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 16:56	LL
Benzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 16:56	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 16:56	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 16:56	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 16:56	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 16:56	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 16:56	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
Dichlorodifluoromethane	**7.0**		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
1,1-Dichloroethane	**3.1**		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
cis-1,2-Dichloroethene	**0.9**	J	ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
Dichlorofluoromethane	**3.7**		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 16:56	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

RW-P165

2050521-17 (Nonpotable Water)
Sample Date: 05/05/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 16:56	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 16:56	LL
Styrene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
Tetrachloroethene	**2.7**		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
Toluene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
Trichloroethene	**0.7**	J	ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 16:56	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 16:56	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 16:56	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 16:56	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*98 %*	*05/10/22*	*05/10/22 16:56*
Surrogate: Toluene-d8	*75-120*	*98 %*	*05/10/22*	*05/10/22 16:56*
Surrogate: 4-Bromofluorobenzene	*75-120*	*94 %*	*05/10/22*	*05/10/22 16:56*

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

RW-P171-1

2050521-18 (Nonpotable Water)
Sample Date: 05/05/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 17:20	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 17:20	LL
Benzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 17:20	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 17:20	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 17:20	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 17:20	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 17:20	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 17:20	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

RW-P171-1

2050521-18 (Nonpotable Water)
Sample Date: 05/05/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 17:20	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 17:20	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 17:20	LL
Styrene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
Toluene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 17:20	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 17:20	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 17:20	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:20	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*97 %*	*05/10/22*		*05/10/22 17:20*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*05/10/22*		*05/10/22 17:20*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*93 %*	*05/10/22*		*05/10/22 17:20*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

RW-P264

2050521-19 (Nonpotable Water)
Sample Date: 05/04/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 17:44	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 17:44	LL
Benzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 17:44	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 17:44	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 17:44	LL
Chloroform	**0.8**	J	ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 17:44	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 17:44	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 17:44	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
Dichlorodifluoromethane	**7.1**		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
1,1-Dichloroethane	**3.0**		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
Dichlorofluoromethane	**3.6**		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 17:44	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

RW-P264

2050521-19 (Nonpotable Water)
Sample Date: 05/04/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 17:44	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 17:44	LL
Styrene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
Tetrachloroethene	**2.0**		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
Toluene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
Trichloroethene	**0.7**	J	ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 17:44	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 17:44	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 17:44	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 17:44	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*98 %*	*05/10/22*	*05/10/22 17:44*
Surrogate: Toluene-d8	*75-120*	*97 %*	*05/10/22*	*05/10/22 17:44*
Surrogate: 4-Bromofluorobenzene	*75-120*	*94 %*	*05/10/22*	*05/10/22 17:44*

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

RW-P440

2050521-20 (Nonpotable Water)
Sample Date: 05/05/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 18:09	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 18:09	LL
Benzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 18:09	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 18:09	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 18:09	LL
Chloroform	**0.7**	J	ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 18:09	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 18:09	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 18:09	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
Dichlorodifluoromethane	**1.6**		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
1,1-Dichloroethane	**1.1**		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
Dichlorofluoromethane	**0.6**	J	ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 18:09	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

RW-P440

2050521-20 (Nonpotable Water)
Sample Date: 05/05/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 18:09	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 18:09	LL
Styrene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
Toluene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
Trichloroethene	**0.6**	J	ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 18:09	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 18:09	LL
Vinyl chloride	**1.1**		ug/L	1.0	1.0	1	05/10/22	05/10/22 18:09	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:09	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*97 %*		*05/10/22*	*05/10/22 18:09*		
Surrogate: Toluene-d8			*75-120*	*98 %*		*05/10/22*	*05/10/22 18:09*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*94 %*		*05/10/22*	*05/10/22 18:09*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

RW-P441

2050521-21 (Nonpotable Water)
Sample Date: 05/05/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 18:34	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 18:34	LL
Benzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 18:34	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 18:34	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 18:34	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 18:34	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 18:34	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 18:34	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
Dichlorodifluoromethane	**1.9**		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
1,1-Dichloroethane	**0.6**	J	ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

RW-P441

2050521-21 (Nonpotable Water)
Sample Date: 05/05/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 18:34	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 18:34	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 18:34	LL
Styrene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
Tetrachloroethene	**0.5**	J	ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
Toluene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 18:34	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 18:34	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 18:34	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:34	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*98 %*	*05/10/22*		*05/10/22 18:34*		
Surrogate: Toluene-d8			*75-120*	*96 %*	*05/10/22*		*05/10/22 18:34*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*92 %*	*05/10/22*		*05/10/22 18:34*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

RW-P584

2050521-22 (Nonpotable Water)
Sample Date: 05/03/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 18:59	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 18:59	LL
Benzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 18:59	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 18:59	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 18:59	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 18:59	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 18:59	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 18:59	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
Dichlorodifluoromethane	**3.1**		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
1,1-Dichloroethane	**1.7**		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
cis-1,2-Dichloroethene	**0.5**	J	ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
Dichlorofluoromethane	**1.1**		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 18:59	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

RW-P584

2050521-22 (Nonpotable Water)
Sample Date: 05/03/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 18:59	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 18:59	LL
Styrene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
Tetrachloroethene	**1.3**		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
Toluene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
Trichloroethene	**0.6**	J	ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 18:59	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 18:59	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 18:59	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 18:59	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*98 %*	*05/10/22*		*05/10/22 18:59*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*05/10/22*		*05/10/22 18:59*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*94 %*	*05/10/22*		*05/10/22 18:59*		

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Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

TRIP BLANK

2050521-23 (Nonpotable Water)
Sample Date: 05/05/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 19:24	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 19:24	LL
Benzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 19:24	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 19:24	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 19:24	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 19:24	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 19:24	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 19:24	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL

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Baltimore MD 21227
410-247-7600
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

TRIP BLANK

2050521-23 (Nonpotable Water)
Sample Date: 05/05/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 19:24	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 19:24	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 19:24	LL
Styrene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
Toluene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 19:24	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 19:24	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 19:24	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:24	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*98 %*	*05/10/22*		*05/10/22 19:24*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*05/10/22*		*05/10/22 19:24*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*94 %*	*05/10/22*		*05/10/22 19:24*		

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Maryland spectral Services

Analytical Chemistry Services

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

FIELD BLANK

2050521-24 (Nonpotable Water)
Sample Date: 05/03/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 19:48	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 19:48	LL
Benzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 19:48	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 19:48	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 19:48	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 19:48	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 19:48	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 19:48	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

FIELD BLANK

2050521-24 (Nonpotable Water)
Sample Date: 05/03/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 19:48	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/10/22	05/10/22 19:48	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 19:48	LL
Styrene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
Toluene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 19:48	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 19:48	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/10/22	05/10/22 19:48	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/10/22	05/10/22 19:48	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*98 %*	*05/10/22*		*05/10/22 19:48*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*05/10/22*		*05/10/22 19:48*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*93 %*	*05/10/22*		*05/10/22 19:48*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205124 - GCMS-WATER-VOLATILES										
Blank (B205124-BLK1)					Prepared & Analyzed: 05/09/22					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205124 - GCMS-WATER-VOLATILES										
Blank (B205124-BLK1)					Prepared & Analyzed: 05/09/22					
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*48.36*			ug/L	*50.00*		*97*	*70-130*		
Surrogate: Toluene-d8	*47.16*			ug/L	*50.00*		*94*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.14*			ug/L	*50.00*		*98*	*75-120*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205124 - GCMS-WATER-VOLATILES										
LCS (B205124-BS1)					Prepared & Analyzed: 05/09/22					
Acetone	8.7		5.0	ug/L	10.00		87	50-150		
Acrylonitrile	4.5	J	5.0	ug/L	5.000		89	50-150		
Benzene	5.1		1.0	ug/L	5.000		101	50-150		
Bromochloromethane	5.5		1.0	ug/L	5.000		111	50-150		
Bromodichloromethane	4.7		1.0	ug/L	5.000		94	50-150		
Bromoform	5.0		1.0	ug/L	5.000		101	50-150		
Bromomethane	6.1		1.0	ug/L	5.000		121	50-150		
2-Butanone (MEK)	9.6		5.0	ug/L	10.00		96	50-150		
Carbon disulfide	5.2		1.0	ug/L	5.000		103	50-150		
Carbon tetrachloride	5.1		1.0	ug/L	5.000		101	50-150		
Chlorobenzene	5.3		1.0	ug/L	5.000		107	50-150		
Chloroethane	4.8		1.0	ug/L	5.000		95	50-150		
Chloroform	4.9		1.0	ug/L	5.000		97	50-150		
Chloromethane	5.4		1.0	ug/L	5.000		107	50-150		
Dibromochloromethane	4.8		1.0	ug/L	5.000		97	50-150		
1,2-Dibromo-3-chloropropane	4.9		1.0	ug/L	5.000		98	50-150		
1,2-Dibromoethane (EDB)	4.7		1.0	ug/L	5.000		94	50-150		
Dibromomethane	4.6		1.0	ug/L	5.000		93	50-150		
1,2-Dichlorobenzene	5.4		1.0	ug/L	5.000		107	50-150		
1,4-Dichlorobenzene	5.4		1.0	ug/L	5.000		108	50-150		
1,1-Dichloroethane	4.8		1.0	ug/L	5.000		95	50-150		
1,2-Dichloroethane	4.9		1.0	ug/L	5.000		97	50-150		
1,1-Dichloroethene	5.0		1.0	ug/L	5.000		99	50-150		
cis-1,2-Dichloroethene	4.7		1.0	ug/L	5.000		94	50-150		
trans-1,2-Dichloroethene	4.9		1.0	ug/L	5.000		98	50-150		
1,2-Dichloropropane	4.6		1.0	ug/L	5.000		92	50-150		
1,3-Dichloropropane	4.5		1.0	ug/L	5.000		90	50-150		
2,2-Dichloropropane	4.7		1.0	ug/L	5.000		95	50-150		
1,1-Dichloropropene	4.9		1.0	ug/L	5.000		99	50-150		
cis-1,3-Dichloropropene	4.4		1.0	ug/L	5.000		88	50-150		
trans-1,3-Dichloropropene	4.7		1.0	ug/L	5.000		94	50-150		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205124 - GCMS-WATER-VOLATILES										
LCS (B205124-BS1)					Prepared & Analyzed: 05/09/22					
Ethylbenzene	5.0		1.0	ug/L	5.000		101	50-150		
2-Hexanone	8.2		5.0	ug/L	10.00		82	50-150		
Methyl tert-butyl ether (MTBE)	4.7		1.0	ug/L	5.000		95	50-150		
4-Methyl-2-pentanone	8.3		5.0	ug/L	10.00		83	50-150		
Methylene chloride	5.5		1.0	ug/L	5.000		110	0-200		
Methyl methacrylate	4.4	J	5.0	ug/L	5.000		89	50-150		
Styrene	4.8		1.0	ug/L	5.000		96	50-150		
1,1,1,2-Tetrachloroethane	5.0		1.0	ug/L	5.000		101	50-150		
1,1,2,2-Tetrachloroethane	4.7		1.0	ug/L	5.000		94	50-150		
Tetrachloroethene	5.0		1.0	ug/L	5.000		100	50-150		
Toluene	5.0		1.0	ug/L	5.000		99	50-150		
1,1,1-Trichloroethane	4.9		1.0	ug/L	5.000		98	50-150		
1,1,2-Trichloroethane	4.6		1.0	ug/L	5.000		91	50-150		
Trichloroethene	5.3		1.0	ug/L	5.000		106	50-150		
Trichlorofluoromethane (Freon 11)	5.1		1.0	ug/L	5.000		102	50-150		
1,2,3-Trichloropropane	4.6		1.0	ug/L	5.000		91	50-150		
Vinyl acetate	3.5		1.0	ug/L	5.000		70	50-150		
Vinyl chloride	5.4		1.0	ug/L	5.000		109	50-150		
o-Xylene	4.9		1.0	ug/L	5.000		98	50-150		
m- & p-Xylenes	10.2		1.0	ug/L	10.00		102	50-150		
Surrogate: 1,2-Dichloroethane-d4	*47.77*			ug/L	*50.00*		*96*	*70-130*		
Surrogate: Toluene-d8	*47.31*			ug/L	*50.00*		*95*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.13*			ug/L	*50.00*		*98*	*75-120*		
Duplicate (B205124-DUP1)			**Source: 2050521-02**		Prepared & Analyzed: 05/09/22					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205124 - GCMS-WATER-VOLATILES										
Duplicate (B205124-DUP1)			**Source: 2050521-02**		Prepared & Analyzed: 05/09/22					
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	ND		1.0	ug/L		ND				20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205124 - GCMS-WATER-VOLATILES										
Duplicate (B205124-DUP1)		**Source: 2050521-02**		Prepared & Analyzed: 05/09/22						
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	ND		1.0	ug/L		ND				20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	ND		1.0	ug/L		ND				20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*48.18*			ug/L	*50.00*		*96*	*70-130*		
Surrogate: Toluene-d8	*47.31*			ug/L	*50.00*		*95*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.38*			ug/L	*50.00*		*97*	*75-120*		
Matrix Spike (B205124-MS1)		**Source: 2050521-03**		Prepared & Analyzed: 05/09/22						
Acetone	9.7		5.0	ug/L	10.00	2.5	72	60-120		
Acrylonitrile	10.6		5.0	ug/L	10.00	ND	106	0-200		
Benzene	11.8		1.0	ug/L	10.00	ND	118	60-120		
Bromochloromethane	12.5		1.0	ug/L	10.00	ND	125	60-120		
Bromodichloromethane	11.2		1.0	ug/L	10.00	ND	112	60-120		
Bromoform	11.0		1.0	ug/L	10.00	ND	110	60-120		
Bromomethane	16.8		1.0	ug/L	10.00	ND	168	60-120		
2-Butanone (MEK)	10.7		5.0	ug/L	10.00	ND	107	60-120		

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Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205124 - GCMS-WATER-VOLATILES										
Matrix Spike (B205124-MS1)			**Source: 2050521-03**		Prepared & Analyzed: 05/09/22					
Carbon disulfide	12.2		1.0	ug/L	10.00	ND	122	60-120		
Carbon tetrachloride	12.4		1.0	ug/L	10.00	ND	124	60-120		
Chlorobenzene	11.6		1.0	ug/L	10.00	ND	116	60-120		
Chloroethane	13.5		1.0	ug/L	10.00	ND	135	60-120		
Chloroform	11.5		1.0	ug/L	10.00	ND	115	60-120		
Chloromethane	14.4		1.0	ug/L	10.00	ND	144	60-120		
Dibromochloromethane	11.2		1.0	ug/L	10.00	ND	112	60-120		
1,2-Dibromo-3-chloropropane	9.6		1.0	ug/L	10.00	ND	96	60-120		
1,2-Dibromoethane (EDB)	10.5		1.0	ug/L	10.00	ND	105	60-120		
Dibromomethane	10.6		1.0	ug/L	10.00	ND	106	60-120		
1,2-Dichlorobenzene	11.4		1.0	ug/L	10.00	ND	114	60-120		
1,4-Dichlorobenzene	11.2		1.0	ug/L	10.00	ND	112	60-120		
1,1-Dichloroethane	11.3		1.0	ug/L	10.00	ND	113	60-120		
1,2-Dichloroethane	11.3		1.0	ug/L	10.00	ND	113	60-120		
1,1-Dichloroethene	11.3		1.0	ug/L	10.00	ND	113	60-120		
cis-1,2-Dichloroethene	11.1		1.0	ug/L	10.00	ND	111	60-120		
trans-1,2-Dichloroethene	11.1		1.0	ug/L	10.00	ND	111	60-120		
1,2-Dichloropropane	10.6		1.0	ug/L	10.00	ND	106	60-120		
1,3-Dichloropropane	10.5		1.0	ug/L	10.00	ND	105	60-120		
2,2-Dichloropropane	9.3		1.0	ug/L	10.00	ND	93	60-120		
1,1-Dichloropropene	11.4		1.0	ug/L	10.00	ND	114	60-120		
cis-1,3-Dichloropropene	9.8		1.0	ug/L	10.00	ND	98	60-120		
trans-1,3-Dichloropropene	9.7		1.0	ug/L	10.00	ND	97	60-120		
Ethylbenzene	11.3		1.0	ug/L	10.00	ND	113	60-120		
2-Hexanone	8.2		5.0	ug/L	10.00	ND	82	60-120		
Methyl tert-butyl ether (MTBE)	10.7		1.0	ug/L	10.00	ND	107	60-120		
4-Methyl-2-pentanone	8.4		5.0	ug/L	10.00	ND	84	60-120		
Methylene chloride	11.4		1.0	ug/L	10.00	ND	114	60-120		
Methyl methacrylate	9.5		5.0	ug/L	10.00	ND	95	60-120		
Styrene	11.0		1.0	ug/L	10.00	ND	110	60-120		
1,1,1,2-Tetrachloroethane	11.3		1.0	ug/L	10.00	ND	113	60-120		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205124 - GCMS-WATER-VOLATILES										
Matrix Spike (B205124-MS1)			**Source: 2050521-03**		Prepared & Analyzed: 05/09/22					
1,1,2,2-Tetrachloroethane	10.1		1.0	ug/L	10.00	ND	101	60-120		
Tetrachloroethene	12.0		1.0	ug/L	10.00	ND	120	60-120		
Toluene	11.1		1.0	ug/L	10.00	ND	111	60-120		
1,1,1-Trichloroethane	11.3		1.0	ug/L	10.00	ND	113	60-120		
1,1,2-Trichloroethane	10.2		1.0	ug/L	10.00	ND	102	60-120		
Trichloroethene	12.1		1.0	ug/L	10.00	ND	121	60-120		
Trichlorofluoromethane (Freon 11)	13.7		1.0	ug/L	10.00	ND	137	60-120		
1,2,3-Trichloropropane	9.8		1.0	ug/L	10.00	ND	98	60-120		
Vinyl acetate	8.7		1.0	ug/L	10.00	ND	87	60-120		
Vinyl chloride	14.4		1.0	ug/L	10.00	ND	144	60-120		
o-Xylene	11.0		1.0	ug/L	10.00	ND	110	60-120		
m- & p-Xylenes	23.0		1.0	ug/L	20.00	ND	115	60-120		
Surrogate: 1,2-Dichloroethane-d4	*48.61*			ug/L	*50.00*		*97*	*70-130*		
Surrogate: Toluene-d8	*47.45*			ug/L	*50.00*		*95*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.82*			ug/L	*50.00*		*98*	*75-120*		
Batch B205156 - GCMS-WATER-VOLATILES										
Blank (B205156-BLK1)					Prepared & Analyzed: 05/10/22					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205156 - GCMS-WATER-VOLATILES										
Blank (B205156-BLK1)					Prepared & Analyzed: 05/10/22					
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						

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Reported:
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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205156 - GCMS-WATER-VOLATILES										
Blank (B205156-BLK1)					Prepared & Analyzed: 05/10/22					
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*49.93*			ug/L	*50.00*		*100*	*70-130*		
Surrogate: Toluene-d8	*48.78*			ug/L	*50.00*		*98*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*47.37*			ug/L	*50.00*		*95*	*75-120*		
LCS (B205156-BS1)					Prepared & Analyzed: 05/10/22					
Acetone	9.8		5.0	ug/L	10.00		98	50-150		
Acrylonitrile	4.2	J	5.0	ug/L	5.000		83	50-150		
Benzene	4.8		1.0	ug/L	5.000		96	50-150		
Bromochloromethane	4.9		1.0	ug/L	5.000		98	50-150		
Bromodichloromethane	4.3		1.0	ug/L	5.000		85	50-150		
Bromoform	4.8		1.0	ug/L	5.000		96	50-150		
Bromomethane	7.3		1.0	ug/L	5.000		145	50-150		
2-Butanone (MEK)	8.6		5.0	ug/L	10.00		86	50-150		
Carbon disulfide	4.8		1.0	ug/L	5.000		97	50-150		
Carbon tetrachloride	4.9		1.0	ug/L	5.000		98	50-150		
Chlorobenzene	5.1		1.0	ug/L	5.000		102	50-150		
Chloroethane	5.0		1.0	ug/L	5.000		101	50-150		
Chloroform	4.6		1.0	ug/L	5.000		92	50-150		
Chloromethane	4.7		1.0	ug/L	5.000		94	50-150		

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205156 - GCMS-WATER-VOLATILES										
LCS (B205156-BS1)					Prepared & Analyzed: 05/10/22					
Dibromochloromethane	4.7		1.0	ug/L	5.000		94	50-150		
1,2-Dibromo-3-chloropropane	4.6		1.0	ug/L	5.000		92	50-150		
1,2-Dibromoethane (EDB)	4.4		1.0	ug/L	5.000		87	50-150		
Dibromomethane	4.5		1.0	ug/L	5.000		89	50-150		
1,2-Dichlorobenzene	5.6		1.0	ug/L	5.000		112	50-150		
1,4-Dichlorobenzene	5.5		1.0	ug/L	5.000		109	50-150		
1,1-Dichloroethane	4.4		1.0	ug/L	5.000		89	50-150		
1,2-Dichloroethane	4.5		1.0	ug/L	5.000		91	50-150		
1,1-Dichloroethene	4.6		1.0	ug/L	5.000		91	50-150		
cis-1,2-Dichloroethene	4.5		1.0	ug/L	5.000		90	50-150		
trans-1,2-Dichloroethene	4.6		1.0	ug/L	5.000		92	50-150		
1,2-Dichloropropane	4.3		1.0	ug/L	5.000		87	50-150		
1,3-Dichloropropane	4.5		1.0	ug/L	5.000		90	50-150		
2,2-Dichloropropane	4.3		1.0	ug/L	5.000		86	50-150		
1,1-Dichloropropene	4.5		1.0	ug/L	5.000		89	50-150		
cis-1,3-Dichloropropene	4.4		1.0	ug/L	5.000		88	50-150		
trans-1,3-Dichloropropene	4.3		1.0	ug/L	5.000		85	50-150		
Ethylbenzene	5.0		1.0	ug/L	5.000		100	50-150		
2-Hexanone	7.8		5.0	ug/L	10.00		78	50-150		
Methyl tert-butyl ether (MTBE)	4.3		1.0	ug/L	5.000		86	50-150		
4-Methyl-2-pentanone	7.6		5.0	ug/L	10.00		76	50-150		
Methylene chloride	4.9		1.0	ug/L	5.000		98	0-200		
Methyl methacrylate	3.5	J	5.0	ug/L	5.000		70	50-150		
Styrene	4.8		1.0	ug/L	5.000		96	50-150		
1,1,1,2-Tetrachloroethane	4.9		1.0	ug/L	5.000		99	50-150		
1,1,2,2-Tetrachloroethane	4.5		1.0	ug/L	5.000		90	50-150		
Tetrachloroethene	5.2		1.0	ug/L	5.000		104	50-150		
Toluene	4.9		1.0	ug/L	5.000		97	50-150		
1,1,1-Trichloroethane	4.8		1.0	ug/L	5.000		96	50-150		
1,1,2-Trichloroethane	4.2		1.0	ug/L	5.000		85	50-150		
Trichloroethene	5.0		1.0	ug/L	5.000		100	50-150		

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Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205156 - GCMS-WATER-VOLATILES										
LCS (B205156-BS1)					Prepared & Analyzed: 05/10/22					
Trichlorofluoromethane (Freon 11)	5.1		1.0	ug/L	5.000		102	50-150		
1,2,3-Trichloropropane	4.6		1.0	ug/L	5.000		92	50-150		
Vinyl acetate	2.9		1.0	ug/L	5.000		59	50-150		
Vinyl chloride	4.9		1.0	ug/L	5.000		98	50-150		
o-Xylene	4.9		1.0	ug/L	5.000		98	50-150		
m- & p-Xylenes	10.0		1.0	ug/L	10.00		100	50-150		
Surrogate: 1,2-Dichloroethane-d4	*49.00*			ug/L	*50.00*		*98*	*70-130*		
Surrogate: Toluene-d8	*49.05*			ug/L	*50.00*		*98*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*47.97*			ug/L	*50.00*		*96*	*75-120*		
Duplicate (B205156-DUP1)		**Source: 2050521-13**			Prepared & Analyzed: 05/10/22					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205156 - GCMS-WATER-VOLATILES										
Duplicate (B205156-DUP1)		**Source: 2050521-13**		Prepared & Analyzed: 05/10/22						
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	1.9		1.0	ug/L		1.9			0	20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	0.8	J	1.0	ug/L		0.9			4	20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	0.7	J	1.0	ug/L		0.7			0	20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	0.6	J	1.0	ug/L		0.6			12	20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205156 - GCMS-WATER-VOLATILES										
Duplicate (B205156-DUP1)		**Source: 2050521-13**		Prepared & Analyzed: 05/10/22						
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*48.61*			ug/L	*50.00*		*97*	*70-130*		
Surrogate: Toluene-d8	*48.82*			ug/L	*50.00*		*98*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*46.48*			ug/L	*50.00*		*93*	*75-120*		
Matrix Spike (B205156-MS1)		**Source: 2050521-14**		Prepared & Analyzed: 05/10/22						
Acetone	8.8		5.0	ug/L	10.00	ND	88	60-120		
Acrylonitrile	9.9		5.0	ug/L	10.00	ND	99	0-200		
Benzene	10.9		1.0	ug/L	10.00	ND	109	60-120		
Bromochloromethane	11.1		1.0	ug/L	10.00	ND	111	60-120		
Bromodichloromethane	10.2		1.0	ug/L	10.00	ND	102	60-120		
Bromoform	10.8		1.0	ug/L	10.00	ND	108	60-120		
Bromomethane	16.8		1.0	ug/L	10.00	ND	168	60-120		
2-Butanone (MEK)	10.4		5.0	ug/L	10.00	ND	104	60-120		
Carbon disulfide	11.4		1.0	ug/L	10.00	ND	114	60-120		
Carbon tetrachloride	11.5		1.0	ug/L	10.00	ND	115	60-120		
Chlorobenzene	11.2		1.0	ug/L	10.00	ND	112	60-120		
Chloroethane	12.5		1.0	ug/L	10.00	ND	125	60-120		
Chloroform	11.1		1.0	ug/L	10.00	ND	111	60-120		
Chloromethane	13.4		1.0	ug/L	10.00	ND	134	60-120		
Dibromochloromethane	10.4		1.0	ug/L	10.00	ND	104	60-120		
1,2-Dibromo-3-chloropropane	9.2		1.0	ug/L	10.00	ND	92	60-120		
1,2-Dibromoethane (EDB)	10.2		1.0	ug/L	10.00	ND	102	60-120		
Dibromomethane	9.9		1.0	ug/L	10.00	ND	99	60-120		
1,2-Dichlorobenzene	11.1		1.0	ug/L	10.00	ND	111	60-120		
1,4-Dichlorobenzene	11.3		1.0	ug/L	10.00	ND	113	60-120		
1,1-Dichloroethane	11.6		1.0	ug/L	10.00	1.1	105	60-120		
1,2-Dichloroethane	10.3		1.0	ug/L	10.00	ND	103	60-120		

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205156 - GCMS-WATER-VOLATILES										
Matrix Spike (B205156-MS1)		**Source: 2050521-14**		Prepared & Analyzed: 05/10/22						
1,1-Dichloroethene	10.4		1.0	ug/L	10.00	ND	104	60-120		
cis-1,2-Dichloroethene	10.5		1.0	ug/L	10.00	ND	105	60-120		
trans-1,2-Dichloroethene	11.0		1.0	ug/L	10.00	ND	110	60-120		
1,2-Dichloropropane	10.3		1.0	ug/L	10.00	ND	103	60-120		
1,3-Dichloropropane	10.3		1.0	ug/L	10.00	ND	103	60-120		
2,2-Dichloropropane	8.8		1.0	ug/L	10.00	ND	88	60-120		
1,1-Dichloropropene	11.0		1.0	ug/L	10.00	ND	110	60-120		
cis-1,3-Dichloropropene	9.6		1.0	ug/L	10.00	ND	96	60-120		
trans-1,3-Dichloropropene	9.3		1.0	ug/L	10.00	ND	93	60-120		
Ethylbenzene	11.2		1.0	ug/L	10.00	ND	112	60-120		
2-Hexanone	8.3		5.0	ug/L	10.00	ND	83	60-120		
Methyl tert-butyl ether (MTBE)	9.8		1.0	ug/L	10.00	ND	98	60-120		
4-Methyl-2-pentanone	8.2		5.0	ug/L	10.00	ND	82	60-120		
Methylene chloride	10.4		1.0	ug/L	10.00	ND	104	60-120		
Methyl methacrylate	8.9		5.0	ug/L	10.00	ND	89	60-120		
Styrene	10.6		1.0	ug/L	10.00	ND	106	60-120		
1,1,1,2-Tetrachloroethane	11.1		1.0	ug/L	10.00	ND	111	60-120		
1,1,2,2-Tetrachloroethane	10.0		1.0	ug/L	10.00	ND	100	60-120		
Tetrachloroethene	12.7		1.0	ug/L	10.00	ND	127	60-120		
Toluene	11.1		1.0	ug/L	10.00	ND	111	60-120		
1,1,1-Trichloroethane	11.0		1.0	ug/L	10.00	ND	110	60-120		
1,1,2-Trichloroethane	10.0		1.0	ug/L	10.00	ND	100	60-120		
Trichloroethene	11.9		1.0	ug/L	10.00	ND	119	60-120		
Trichlorofluoromethane (Freon 11)	13.0		1.0	ug/L	10.00	ND	130	60-120		
1,2,3-Trichloropropane	9.7		1.0	ug/L	10.00	ND	97	60-120		
Vinyl acetate	7.5		1.0	ug/L	10.00	ND	75	60-120		
Vinyl chloride	13.3		1.0	ug/L	10.00	ND	133	60-120		
o-Xylene	10.9		1.0	ug/L	10.00	ND	109	60-120		
m- & p-Xylenes	23.0		1.0	ug/L	20.00	ND	115	60-120		
Surrogate: 1,2-Dichloroethane-d4	*48.20*			ug/L	*50.00*		*96*	*70-130*		
Surrogate: Toluene-d8	*48.54*			ug/L	*50.00*		*97*	*75-120*		

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Will Brewington, President

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410-247-7600
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205156 - GCMS-WATER-VOLATILES										
Matrix Spike (B205156-MS1)			**Source: 2050521-14**		Prepared & Analyzed: 05/10/22					
Surrogate: 4-Bromofluorobenzene	*46.72*			ug/L	*50.00*		*93*	*75-120*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/16/22 10:53

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MSS
Project	MLF - SPMNL 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - MSMW 8260											
1	TRIP BLANK	2	5.5.22	—	✓		QA	✓											2050521-23 A
2	FIELD BLANK	2	5.3.22	1200			QA												2050521-24 A
3	TW-1	3	5.4.22	1150			GW												2050521-01 A
4	TW-2		5.3.22	1150															2050521-02 A
5	TW-2A			1115															2050521-03 A
6	TW-3			1320															2050521-04 A
7	TW-3A			1245															2050521-05 A
8	TW-23R			1020															2050521-06 A
9	TW-27			1400															2050521-07 A
10	TW-28		5.4.22	950															2050521-08 A
11	TW-29			1040															2050521-09 A
12	TW-30			1230															2050521-10 A

Analytical Parameters

	Signature	Date	Time	Comments
Relinquished by	[signature]	5.5.22	1435	① APPENDIX I LIST OF 47 VOCs, MTBE
Received by	[signature]	5.5.22	1435	2 TRAINS (DCOFM + OCFM)
Relinquished by				
Received by				
Relinquished by				STD. RPT
Received by				

Cooler Temp on Arrival: 5.0 Deg. C

Rev. Aug. 2018

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	Millersville Landfill	Lab	MSS
Project	MLF - Spring 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

2050521-11 A

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - Method 8260										
1	MW-P4	3	5.5.22	1200	✓		GW	✓										
2	MW-P9		5.3.22	1730													-	12
3	MW-P106		5.4.22	1610													-	13
4	MW-P417			1430													-	14
5	MW-P440			1515													-	15
6	RW-P109		5.5.22	915													-	16
7	RW-P165			1120													-	17
8	RW-P171-1			1250													-	18
9	RW-P264		5.4.22	1700													-	19
10	RW-P440		5.5.22	1040													-	20
11	RW-P441			1000													-	21
12	RW-P584			1810													-	22

	Signature	Date	Time	Comments
Relinquished by	[signature]	5.5.22	1435	
Received by	[signature]	5-5-22	1435	
Relinquished by				
Received by				
Relinquished by				
Received by				

Cooler Temp on Arrival: 5.8 Deg. C

Rev. Aug. 2018

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

10 May 2022

Steve Brown
Environmental Monitoring and Assessment
207 East Sixth Street
Lititz, PA 17543
RE: MILLERSVILLE LANDFILL

Enclosed are the results of analyses for samples received by the laboratory on 04/29/22 12:00.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
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410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/10/22 10:41

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TW-4		2042912-01	Nonpotable Water	04/28/22 14:00	04/29/22 12:00
TW-4B		2042912-02	Nonpotable Water	04/28/22 13:20	04/29/22 12:00
TW-25		2042912-03	Nonpotable Water	04/28/22 11:40	04/29/22 12:00
TW-25A		2042912-04	Nonpotable Water	04/28/22 12:15	04/29/22 12:00
SW-1		2042912-05	Nonpotable Water	04/28/22 10:40	04/29/22 12:00
SW-2		2042912-06	Nonpotable Water	04/28/22 14:10	04/29/22 12:00
SW-3		2042912-07	Nonpotable Water	04/28/22 12:30	04/29/22 12:00
DUP-2		2042912-08	Nonpotable Water	04/28/22 00:00	04/29/22 12:00
TRIP BLANK		2042912-09	Nonpotable Water	04/28/22 00:00	04/29/22 12:00

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Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/10/22 10:41

TW-4

2042912-01 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 13:06	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 13:06	LL
Benzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 13:06	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 13:06	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 13:06	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 13:06	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 13:06	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 13:06	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
Dichlorodifluoromethane	**2.3**		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
1,1-Dichloroethane	**2.3**		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
Dichlorofluoromethane	**3.5**		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 13:06	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/10/22 10:41

TW-4

2042912-01 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 13:06	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 13:06	LL
Styrene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
Toluene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 13:06	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 13:06	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 13:06	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:06	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*101 %*			*05/02/22*	*05/02/22 13:06*	
Surrogate: Toluene-d8			*75-120*	*97 %*			*05/02/22*	*05/02/22 13:06*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*			*05/02/22*	*05/02/22 13:06*	

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/10/22 10:41

TW-4B

2042912-02 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 18:30	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 18:30	LL
Benzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 18:30	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 18:30	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 18:30	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 18:30	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 18:30	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 18:30	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/10/22 10:41

TW-4B

2042912-02 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 18:30	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 18:30	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 18:30	LL
Styrene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
Toluene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 18:30	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 18:30	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 18:30	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:30	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*102 %*		*05/02/22*	*05/02/22 18:30*		
Surrogate: Toluene-d8			*75-120*	*97 %*		*05/02/22*	*05/02/22 18:30*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*		*05/02/22*	*05/02/22 18:30*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/10/22 10:41

TW-25

2042912-03 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 18:55	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 18:55	LL
Benzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 18:55	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 18:55	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 18:55	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 18:55	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 18:55	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 18:55	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
Dichlorodifluoromethane	**6.4**		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
1,1-Dichloroethane	**1.6**		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
cis-1,2-Dichloroethene	**0.6**	J	ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
Dichlorofluoromethane	**2.4**		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 18:55	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/10/22 10:41

TW-25

2042912-03 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 18:55	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 18:55	LL
Styrene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
Tetrachloroethene	**1.2**		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
Toluene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 18:55	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 18:55	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 18:55	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 18:55	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*101 %*	*05/02/22*	*05/02/22 18:55*
Surrogate: Toluene-d8	*75-120*	*96 %*	*05/02/22*	*05/02/22 18:55*
Surrogate: 4-Bromofluorobenzene	*75-120*	*99 %*	*05/02/22*	*05/02/22 18:55*

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Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/10/22 10:41

TW-25A

2042912-04 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 19:19	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 19:19	LL
Benzene	**2.3**		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 19:19	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 19:19	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 19:19	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 19:19	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 19:19	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 19:19	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
1,4-Dichlorobenzene	**1.5**		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
Dichlorodifluoromethane	**12.9**		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
1,1-Dichloroethane	**25.5**		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
1,2-Dichloroethane	**1.6**		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
1,1-Dichloroethene	**0.7**	J	ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
cis-1,2-Dichloroethene	**5.0**		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
Dichlorofluoromethane	**22.7**		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
1,2-Dichloropropane	**1.1**		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 19:19	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/10/22 10:41

TW-25A

2042912-04 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
Methyl tert-butyl ether (MTBE)	**3.9**		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 19:19	LL
Methylene chloride	**22.4**	L	ug/L	1.0	1.0	1	05/02/22	05/02/22 19:19	LL
Styrene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
Tetrachloroethene	**3.4**		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
Toluene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
Trichloroethene	**4.7**		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
Trichlorofluoromethane (Freon 11)	**1.8**		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 19:19	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 19:19	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 19:19	LL
o-Xylene	**0.8**	J	ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:19	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*100 %*	*05/02/22*	*05/02/22 19:19*
Surrogate: Toluene-d8	*75-120*	*97 %*	*05/02/22*	*05/02/22 19:19*
Surrogate: 4-Bromofluorobenzene	*75-120*	*96 %*	*05/02/22*	*05/02/22 19:19*

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/10/22 10:41

SW-1

2042912-05 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 19:44	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 19:44	LL
Benzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 19:44	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 19:44	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 19:44	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 19:44	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 19:44	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 19:44	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/10/22 10:41

SW-1

2042912-05 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 19:44	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 19:44	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 19:44	LL
Styrene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
Toluene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 19:44	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 19:44	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 19:44	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 19:44	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*102 %*	*05/02/22*		*05/02/22 19:44*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*05/02/22*		*05/02/22 19:44*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*97 %*	*05/02/22*		*05/02/22 19:44*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/10/22 10:41

SW-2

2042912-06 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 20:08	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 20:08	LL
Benzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 20:08	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 20:08	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 20:08	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 20:08	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 20:08	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 20:08	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/10/22 10:41

SW-2

2042912-06 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 20:08	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 20:08	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 20:08	LL
Styrene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
Toluene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 20:08	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 20:08	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 20:08	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:08	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*102 %*		*05/02/22*	*05/02/22 20:08*		
Surrogate: Toluene-d8			*75-120*	*97 %*		*05/02/22*	*05/02/22 20:08*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*97 %*		*05/02/22*	*05/02/22 20:08*		

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Will Brewington, President

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Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/10/22 10:41

SW-3

2042912-07 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 20:33	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 20:33	LL
Benzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 20:33	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 20:33	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 20:33	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 20:33	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 20:33	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 20:33	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/10/22 10:41

SW-3

2042912-07 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 20:33	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 20:33	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 20:33	LL
Styrene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
Toluene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 20:33	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 20:33	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 20:33	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:33	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*101 %*		*05/02/22*	*05/02/22 20:33*		
Surrogate: Toluene-d8			*75-120*	*97 %*		*05/02/22*	*05/02/22 20:33*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*97 %*		*05/02/22*	*05/02/22 20:33*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/10/22 10:41

DUP-2

2042912-08 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 20:58	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 20:58	LL
Benzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 20:58	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 20:58	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 20:58	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 20:58	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 20:58	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 20:58	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
Dichlorodifluoromethane	**6.5**		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
1,1-Dichloroethane	**1.6**		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
cis-1,2-Dichloroethene	**0.6**	J	ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
Dichlorofluoromethane	**2.4**		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 20:58	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/10/22 10:41

DUP-2

2042912-08 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 20:58	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 20:58	LL
Styrene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
Tetrachloroethene	**1.2**		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
Toluene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 20:58	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 20:58	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 20:58	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 20:58	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*101 %*	*05/02/22*	*05/02/22 20:58*
Surrogate: Toluene-d8	*75-120*	*98 %*	*05/02/22*	*05/02/22 20:58*
Surrogate: 4-Bromofluorobenzene	*75-120*	*97 %*	*05/02/22*	*05/02/22 20:58*

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Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/10/22 10:41

TRIP BLANK

2042912-09 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 21:22	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 21:22	LL
Benzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 21:22	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 21:22	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 21:22	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 21:22	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 21:22	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 21:22	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL

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www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/10/22 10:41

TRIP BLANK

2042912-09 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 21:22	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 21:22	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 21:22	LL
Styrene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
Toluene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 21:22	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 21:22	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 21:22	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 21:22	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*	*05/02/22*		*05/02/22 21:22*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*05/02/22*		*05/02/22 21:22*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*	*05/02/22*		*05/02/22 21:22*		

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Project Manager: Steve Brown

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05/10/22 10:41

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205008 - GCMS-WATER-VOLATILES										
Blank (B205008-BLK1)					Prepared & Analyzed: 05/02/22					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205008 - GCMS-WATER-VOLATILES										
Blank (B205008-BLK1)					Prepared & Analyzed: 05/02/22					
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*49.39*			ug/L	*50.00*		*99*	*70-130*		
Surrogate: Toluene-d8	*48.32*			ug/L	*50.00*		*97*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.61*			ug/L	*50.00*		*99*	*75-120*		

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205008 - GCMS-WATER-VOLATILES										
LCS (B205008-BS1)					Prepared & Analyzed: 05/02/22					
Acetone	9.4		1.0	ug/L	10.00		94	50-150		
Acrylonitrile	4.7		1.0	ug/L	5.000		94	50-150		
Benzene	5.0		1.0	ug/L	5.000		99	50-150		
Bromochloromethane	5.0		1.0	ug/L	5.000		100	50-150		
Bromodichloromethane	4.9		1.0	ug/L	5.000		97	50-150		
Bromoform	5.0		1.0	ug/L	5.000		99	50-150		
Bromomethane	7.4		1.0	ug/L	5.000		147	50-150		
2-Butanone (MEK)	10.3		1.0	ug/L	10.00		103	50-150		
Carbon disulfide	5.0		1.0	ug/L	5.000		101	50-150		
Carbon tetrachloride	5.2		1.0	ug/L	5.000		104	50-150		
Chlorobenzene	5.3		1.0	ug/L	5.000		105	50-150		
Chloroethane	4.9		1.0	ug/L	5.000		97	50-150		
Chloroform	4.9		1.0	ug/L	5.000		99	50-150		
Chloromethane	5.4		1.0	ug/L	5.000		108	50-150		
Dibromochloromethane	5.1		1.0	ug/L	5.000		102	50-150		
1,2-Dibromo-3-chloropropane	5.1		1.0	ug/L	5.000		101	50-150		
1,2-Dibromoethane (EDB)	4.7		1.0	ug/L	5.000		94	50-150		
Dibromomethane	4.6		1.0	ug/L	5.000		92	50-150		
1,2-Dichlorobenzene	5.6		1.0	ug/L	5.000		113	50-150		
1,4-Dichlorobenzene	5.5		1.0	ug/L	5.000		109	50-150		
1,1-Dichloroethane	4.9		1.0	ug/L	5.000		97	50-150		
1,2-Dichloroethane	5.0		1.0	ug/L	5.000		100	50-150		
1,1-Dichloroethene	4.7		1.0	ug/L	5.000		93	50-150		
cis-1,2-Dichloroethene	4.9		1.0	ug/L	5.000		98	50-150		
trans-1,2-Dichloroethene	4.8		1.0	ug/L	5.000		97	50-150		
1,2-Dichloropropane	4.7		1.0	ug/L	5.000		93	50-150		
1,3-Dichloropropane	4.9		1.0	ug/L	5.000		98	50-150		
2,2-Dichloropropane	4.8		1.0	ug/L	5.000		97	50-150		
1,1-Dichloropropene	4.9		1.0	ug/L	5.000		99	50-150		
cis-1,3-Dichloropropene	4.7		1.0	ug/L	5.000		94	50-150		
trans-1,3-Dichloropropene	4.6		1.0	ug/L	5.000		92	50-150		

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205008 - GCMS-WATER-VOLATILES										
LCS (B205008-BS1)					Prepared & Analyzed: 05/02/22					
Ethylbenzene	5.2		1.0	ug/L	5.000		103	50-150		
2-Hexanone	9.6		1.0	ug/L	10.00		96	50-150		
Methyl tert-butyl ether (MTBE)	4.8		1.0	ug/L	5.000		95	50-150		
4-Methyl-2-pentanone	9.4		1.0	ug/L	10.00		94	50-150		
Methylene chloride	5.4		1.0	ug/L	5.000		108	0-200		
Methyl methacrylate	4.9		1.0	ug/L	5.000		98	50-150		
Styrene	5.0		1.0	ug/L	5.000		101	50-150		
1,1,1,2-Tetrachloroethane	5.0		1.0	ug/L	5.000		100	50-150		
1,1,2,2-Tetrachloroethane	4.7		1.0	ug/L	5.000		93	50-150		
Tetrachloroethene	5.1		1.0	ug/L	5.000		101	50-150		
Toluene	5.0		1.0	ug/L	5.000		100	50-150		
1,1,1-Trichloroethane	4.8		1.0	ug/L	5.000		95	50-150		
1,1,2-Trichloroethane	4.7		1.0	ug/L	5.000		93	50-150		
Trichloroethene	5.0		1.0	ug/L	5.000		101	50-150		
Trichlorofluoromethane (Freon 11)	5.3		1.0	ug/L	5.000		106	50-150		
1,2,3-Trichloropropane	4.9		1.0	ug/L	5.000		98	50-150		
Vinyl acetate	2.9		1.0	ug/L	5.000		59	50-150		
Vinyl chloride	5.1		1.0	ug/L	5.000		103	50-150		
o-Xylene	5.2		1.0	ug/L	5.000		104	50-150		
m- & p-Xylenes	10.8		1.0	ug/L	10.00		108	50-150		
Surrogate: 1,2-Dichloroethane-d4	*50.00*			ug/L	*50.00*		*100*	*70-130*		
Surrogate: Toluene-d8	*48.34*			ug/L	*50.00*		*97*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*50.09*			ug/L	*50.00*		*100*	*75-120*		
Duplicate (B205008-DUP1)			**Source: 2042912-01**		Prepared & Analyzed: 05/02/22					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205008 - GCMS-WATER-VOLATILES										
Duplicate (B205008-DUP1)			**Source: 2042912-01**	Prepared & Analyzed: 05/02/22						
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	2.4		1.0	ug/L		2.3			6	20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20

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Reported:
05/10/22 10:41

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205008 - GCMS-WATER-VOLATILES										
Duplicate (B205008-DUP1)		**Source: 2042912-01**		Prepared & Analyzed: 05/02/22						
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	ND		1.0	ug/L		ND				20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	ND		1.0	ug/L		ND				20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*50.00*			ug/L	*50.00*		*100*	*70-130*		
Surrogate: Toluene-d8	*48.42*			ug/L	*50.00*		*97*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.78*			ug/L	*50.00*		*98*	*75-120*		
Matrix Spike (B205008-MS1)		**Source: 2042804-01**		Prepared & Analyzed: 05/02/22						
Acetone	8.2		5.0	ug/L	10.00	ND	82	60-120		
Acrylonitrile	11.4		5.0	ug/L	10.00	ND	114	0-200		
Benzene	11.9		1.0	ug/L	10.00	ND	119	60-120		
Bromochloromethane	11.6		1.0	ug/L	10.00	ND	116	60-120		
Bromodichloromethane	11.1		1.0	ug/L	10.00	ND	111	60-120		
Bromoform	11.2		1.0	ug/L	10.00	ND	112	60-120		
Bromomethane	18.2		1.0	ug/L	10.00	ND	182	60-120		
2-Butanone (MEK)	11.0		5.0	ug/L	10.00	ND	110	60-120		

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05/10/22 10:41

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205008 - GCMS-WATER-VOLATILES										
Matrix Spike (B205008-MS1)			**Source: 2042804-01**		Prepared & Analyzed: 05/02/22					
Carbon disulfide	12.3		1.0	ug/L	10.00	ND	123	60-120		
Carbon tetrachloride	12.5		1.0	ug/L	10.00	ND	125	60-120		
Chlorobenzene	11.7		1.0	ug/L	10.00	ND	117	60-120		
Chloroethane	13.2		1.0	ug/L	10.00	ND	132	60-120		
Chloroform	11.5		1.0	ug/L	10.00	ND	115	60-120		
Chloromethane	15.5		1.0	ug/L	10.00	ND	155	60-120		
Dibromochloromethane	10.8		1.0	ug/L	10.00	ND	108	60-120		
1,2-Dibromo-3-chloropropane	9.6		1.0	ug/L	10.00	ND	96	60-120		
1,2-Dibromoethane (EDB)	10.3		1.0	ug/L	10.00	ND	103	60-120		
Dibromomethane	10.4		1.0	ug/L	10.00	ND	104	60-120		
1,2-Dichlorobenzene	11.5		1.0	ug/L	10.00	ND	115	60-120		
1,4-Dichlorobenzene	11.4		1.0	ug/L	10.00	ND	114	60-120		
1,1-Dichloroethane	11.5		1.0	ug/L	10.00	ND	115	60-120		
1,2-Dichloroethane	11.5		1.0	ug/L	10.00	ND	115	60-120		
1,1-Dichloroethene	11.6		1.0	ug/L	10.00	ND	116	60-120		
cis-1,2-Dichloroethene	10.9		1.0	ug/L	10.00	ND	109	60-120		
trans-1,2-Dichloroethene	11.7		1.0	ug/L	10.00	ND	117	60-120		
1,2-Dichloropropane	11.1		1.0	ug/L	10.00	ND	111	60-120		
1,3-Dichloropropane	10.7		1.0	ug/L	10.00	ND	107	60-120		
2,2-Dichloropropane	9.8		1.0	ug/L	10.00	ND	98	60-120		
1,1-Dichloropropene	12.1		1.0	ug/L	10.00	ND	121	60-120		
cis-1,3-Dichloropropene	10.1		1.0	ug/L	10.00	ND	101	60-120		
trans-1,3-Dichloropropene	10.0		1.0	ug/L	10.00	ND	100	60-120		
Ethylbenzene	11.8		1.0	ug/L	10.00	ND	118	60-120		
2-Hexanone	8.6		5.0	ug/L	10.00	ND	86	60-120		
Methyl tert-butyl ether (MTBE)	11.1		1.0	ug/L	10.00	ND	111	60-120		
4-Methyl-2-pentanone	8.7		5.0	ug/L	10.00	ND	87	60-120		
Methylene chloride	11.0		1.0	ug/L	10.00	ND	110	60-120		
Methyl methacrylate	9.8		5.0	ug/L	10.00	ND	98	60-120		
Styrene	10.6		1.0	ug/L	10.00	ND	106	60-120		
1,1,1,2-Tetrachloroethane	11.2		1.0	ug/L	10.00	ND	112	60-120		

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Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/10/22 10:41

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205008 - GCMS-WATER-VOLATILES										
Matrix Spike (B205008-MS1)			**Source: 2042804-01**		Prepared & Analyzed: 05/02/22					
1,1,2,2-Tetrachloroethane	10.3		1.0	ug/L	10.00	ND	103	60-120		
Tetrachloroethene	12.1		1.0	ug/L	10.00	ND	121	60-120		
Toluene	11.3		1.0	ug/L	10.00	ND	113	60-120		
1,1,1-Trichloroethane	11.6		1.0	ug/L	10.00	ND	116	60-120		
1,1,2-Trichloroethane	10.2		1.0	ug/L	10.00	ND	102	60-120		
Trichloroethene	12.1		1.0	ug/L	10.00	ND	121	60-120		
Trichlorofluoromethane (Freon 11)	14.1		1.0	ug/L	10.00	ND	141	60-120		
1,2,3-Trichloropropane	10.2		1.0	ug/L	10.00	ND	102	60-120		
Vinyl acetate	8.9		1.0	ug/L	10.00	ND	89	60-120		
Vinyl chloride	14.9		1.0	ug/L	10.00	ND	149	60-120		
o-Xylene	11.4		1.0	ug/L	10.00	ND	114	60-120		
m- & p-Xylenes	23.7		1.0	ug/L	20.00	ND	118	60-120		
Surrogate: 1,2-Dichloroethane-d4	*48.91*			ug/L	*50.00*		*98*	*70-130*		
Surrogate: Toluene-d8	*48.15*			ug/L	*50.00*		*96*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.70*			ug/L	*50.00*		*97*	*75-120*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/10/22 10:41

Notes and Definitions

L	Analyte is a possible laboratory contaminant
J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

8260

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MO. SPECTRAL
Project	MLF- SPRING 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260 ①											
1	TW-4	3	4.28.22	1400	✓		GW	✓										2042912-01 A	
2	TW-4B			1320														-	02
3	TW-25			1140														-	03
4	TW-25A			1215														-	04
5	SW-1			1040			SW											-	05
6	SW-2			1410														-	06
7	SW-3			1230														-	07
8	DUP-2			—			QA											-	08
9	TRIP BLANK	2	4/28/22 4/29/22	—			QA											-	09
10																			
11		SAB.																	
12																			

	Signature	Date	Time	Comments
Relinquished by	DA Brown	4.29.22	1200	① APPENDIX I LIST OF 47 VOCs, MTBE,
Received by	[illegible]	4.29.22	1200	+ 2 FREONS (DCDFM + DCFM)
Relinquished by				
Received by				STANDARD REPORT
Relinquished by				
Received by				

Cooler Temp on Arrival: 5.6 Deg. C

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
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MD DW LabID 153

02 May 2022

Steve Brown
Environmental Monitoring and Assessment
207 East Sixth Street
Lititz, PA 17543
RE: MILLERSVILLE LANDFILL

Enclosed are the results of analyses for samples received by the laboratory on 04/21/22 17:00.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Rabecka Koons
Quality Assurance Officer

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TW-5		2042129-01	Nonpotable Water	04/19/22 12:50	04/21/22 17:00
TW-5A		2042129-02	Nonpotable Water	04/19/22 13:20	04/21/22 17:00
TW-5B		2042129-03	Nonpotable Water	04/19/22 12:15	04/21/22 17:00
TW-6		2042129-04	Nonpotable Water	04/19/22 15:30	04/21/22 17:00
TW-6A		2042129-05	Nonpotable Water	04/19/22 14:50	04/21/22 17:00
TW-6B		2042129-06	Nonpotable Water	04/19/22 14:15	04/21/22 17:00
TW-7		2042129-07	Nonpotable Water	04/20/22 10:30	04/21/22 17:00
TW-7A		2042129-08	Nonpotable Water	04/20/22 10:00	04/21/22 17:00
TW-8		2042129-09	Nonpotable Water	04/20/22 11:10	04/21/22 17:00
TW-8A		2042129-10	Nonpotable Water	04/20/22 11:45	04/21/22 17:00
TW-9		2042129-11	Nonpotable Water	04/20/22 14:40	04/21/22 17:00
TW-9B		2042129-12	Nonpotable Water	04/20/22 15:20	04/21/22 17:00
TW-9C		2042129-13	Nonpotable Water	04/20/22 16:00	04/21/22 17:00
TW-10A		2042129-14	Nonpotable Water	04/21/22 08:45	04/21/22 17:00
TW-11A		2042129-15	Nonpotable Water	04/21/22 09:30	04/21/22 17:00
TW-12		2042129-16	Nonpotable Water	04/21/22 10:50	04/21/22 17:00
TW-13		2042129-17	Nonpotable Water	04/21/22 11:35	04/21/22 17:00
TW-14		2042129-18	Nonpotable Water	04/21/22 14:10	04/21/22 17:00
TW-14A		2042129-19	Nonpotable Water	04/21/22 13:30	04/21/22 17:00
TW-14B		2042129-20	Nonpotable Water	04/21/22 12:50	04/21/22 17:00
TRIP BLANK		2042129-21	Nonpotable Water	04/21/22 00:00	04/21/22 17:00

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-5

2042129-01 (Nonpotable Water)
Sample Date: 04/19/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 13:22	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 13:22	LL
Benzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 13:22	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 13:22	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 13:22	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 13:22	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 13:22	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 13:22	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
Dichlorodifluoromethane	**3.4**		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
1,1-Dichloroethane	**2.5**		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
cis-1,2-Dichloroethene	**1.1**		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
Dichlorofluoromethane	**3.7**		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 13:22	LL

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Rabecka Koons, Quality Assurance Officer

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-5

2042129-01 (Nonpotable Water)
Sample Date: 04/19/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 13:22	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 13:22	LL
Styrene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
Toluene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 13:22	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 13:22	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 13:22	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 13:22	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*113 %*			*04/22/22*	*04/22/22 13:22*	
Surrogate: Toluene-d8			*75-120*	*90 %*			*04/22/22*	*04/22/22 13:22*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*97 %*			*04/22/22*	*04/22/22 13:22*	

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-5A

2042129-02 (Nonpotable Water)
Sample Date: 04/19/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 16:26	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 16:26	LL
Benzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 16:26	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 16:26	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 16:26	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 16:26	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 16:26	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 16:26	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
1,1-Dichloroethane	**1.3**		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
Dichlorofluoromethane	**1.1**		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-5A

2042129-02 (Nonpotable Water)
Sample Date: 04/19/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 16:26	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 16:26	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 16:26	LL
Styrene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
Toluene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 16:26	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 16:26	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 16:26	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:26	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*112 %*	*04/22/22*		*04/22/22 16:26*		
Surrogate: Toluene-d8			*75-120*	*91 %*	*04/22/22*		*04/22/22 16:26*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*	*04/22/22*		*04/22/22 16:26*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-5B

2042129-03 (Nonpotable Water)
Sample Date: 04/19/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 16:49	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 16:49	LL
Benzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 16:49	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 16:49	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 16:49	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 16:49	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 16:49	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 16:49	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-5B

2042129-03 (Nonpotable Water)
Sample Date: 04/19/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 16:49	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 16:49	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 16:49	LL
Styrene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
Toluene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 16:49	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 16:49	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 16:49	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 16:49	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*111 %*	*04/22/22*		*04/22/22 16:49*		
Surrogate: Toluene-d8			*75-120*	*90 %*	*04/22/22*		*04/22/22 16:49*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*97 %*	*04/22/22*		*04/22/22 16:49*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-6

2042129-04 (Nonpotable Water)
Sample Date: 04/19/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 17:12	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 17:12	LL
Benzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 17:12	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 17:12	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 17:12	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 17:12	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 17:12	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 17:12	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
Dichlorodifluoromethane	**7.0**		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
1,1-Dichloroethane	**7.6**		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
cis-1,2-Dichloroethene	**4.2**		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
Dichlorofluoromethane	**5.3**		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 17:12	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-6

2042129-04 (Nonpotable Water)
Sample Date: 04/19/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 17:12	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 17:12	LL
Styrene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
Tetrachloroethene	**2.1**		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
Toluene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
Trichloroethene	**1.3**		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 17:12	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 17:12	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 17:12	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:12	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*112 %*		*04/22/22*	*04/22/22 17:12*		
Surrogate: Toluene-d8			*75-120*	*91 %*		*04/22/22*	*04/22/22 17:12*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*		*04/22/22*	*04/22/22 17:12*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-6A

2042129-05 (Nonpotable Water)
Sample Date: 04/19/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	**5.0**		ug/L	5.0	5.0	1	04/22/22	04/22/22 17:35	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 17:35	LL
Benzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 17:35	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 17:35	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 17:35	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 17:35	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 17:35	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 17:35	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-6A

2042129-05 (Nonpotable Water)
Sample Date: 04/19/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 17:35	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 17:35	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 17:35	LL
Styrene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
Toluene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 17:35	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 17:35	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 17:35	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:35	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*111 %*		*04/22/22*	*04/22/22 17:35*		
Surrogate: Toluene-d8			*75-120*	*90 %*		*04/22/22*	*04/22/22 17:35*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*		*04/22/22*	*04/22/22 17:35*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-6B

2042129-06 (Nonpotable Water)
Sample Date: 04/19/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 17:58	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 17:58	LL
Benzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 17:58	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 17:58	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 17:58	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 17:58	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 17:58	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 17:58	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-6B

2042129-06 (Nonpotable Water)
Sample Date: 04/19/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 17:58	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 17:58	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 17:58	LL
Styrene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
Toluene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 17:58	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 17:58	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 17:58	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 17:58	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*112 %*	*04/22/22*		*04/22/22 17:58*		
Surrogate: Toluene-d8			*75-120*	*90 %*	*04/22/22*		*04/22/22 17:58*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*	*04/22/22*		*04/22/22 17:58*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-7

2042129-07 (Nonpotable Water)
Sample Date: 04/20/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 18:21	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 18:21	LL
Benzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 18:21	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 18:21	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 18:21	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 18:21	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 18:21	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 18:21	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-7

2042129-07 (Nonpotable Water)
Sample Date: 04/20/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 18:21	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/22/22	04/22/22 18:21	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 18:21	LL
Styrene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
Toluene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 18:21	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 18:21	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/22/22	04/22/22 18:21	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/22/22	04/22/22 18:21	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*108 %*	*04/22/22*		*04/22/22 18:21*		
Surrogate: Toluene-d8			*75-120*	*94 %*	*04/22/22*		*04/22/22 18:21*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*	*04/22/22*		*04/22/22 18:21*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-7A

2042129-08 (Nonpotable Water)
Sample Date: 04/20/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/26/22	04/26/22 13:39	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/26/22	04/26/22 13:39	LL
Benzene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 13:39	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/26/22	04/26/22 13:39	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 13:39	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 13:39	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 13:39	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 13:39	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-7A

2042129-08 (Nonpotable Water)
Sample Date: 04/20/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/26/22	04/26/22 13:39	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/26/22	04/26/22 13:39	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 13:39	LL
Styrene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
Toluene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 13:39	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 13:39	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 13:39	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 13:39	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*101 %*	*04/26/22*		*04/26/22 13:39*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*04/26/22*		*04/26/22 13:39*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*04/26/22*		*04/26/22 13:39*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-8

2042129-09 (Nonpotable Water)
Sample Date: 04/20/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/26/22	04/26/22 14:03	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/26/22	04/26/22 14:03	LL
Benzene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 14:03	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/26/22	04/26/22 14:03	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 14:03	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 14:03	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 14:03	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 14:03	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-8

2042129-09 (Nonpotable Water)
Sample Date: 04/20/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/26/22	04/26/22 14:03	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/26/22	04/26/22 14:03	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 14:03	LL
Styrene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
Toluene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 14:03	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 14:03	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 14:03	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:03	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*	*04/26/22*		*04/26/22 14:03*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*04/26/22*		*04/26/22 14:03*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*04/26/22*		*04/26/22 14:03*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-8A

2042129-10 (Nonpotable Water)
Sample Date: 04/20/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/26/22	04/26/22 14:28	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/26/22	04/26/22 14:28	LL
Benzene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 14:28	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/26/22	04/26/22 14:28	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 14:28	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 14:28	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 14:28	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 14:28	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-8A

2042129-10 (Nonpotable Water)
Sample Date: 04/20/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/26/22	04/26/22 14:28	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/26/22	04/26/22 14:28	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 14:28	LL
Styrene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
Toluene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 14:28	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 14:28	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 14:28	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:28	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*98 %*	*04/26/22*		*04/26/22 14:28*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*04/26/22*		*04/26/22 14:28*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*97 %*	*04/26/22*		*04/26/22 14:28*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-9

2042129-11 (Nonpotable Water)
Sample Date: 04/20/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/26/22	04/26/22 14:52	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/26/22	04/26/22 14:52	LL
Benzene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 14:52	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/26/22	04/26/22 14:52	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 14:52	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 14:52	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 14:52	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 14:52	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-9

2042129-11 (Nonpotable Water)
Sample Date: 04/20/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/26/22	04/26/22 14:52	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/26/22	04/26/22 14:52	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 14:52	LL
Styrene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
Toluene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 14:52	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 14:52	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/26/22	04/26/22 14:52	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/26/22	04/26/22 14:52	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*	*04/26/22*		*04/26/22 14:52*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*04/26/22*		*04/26/22 14:52*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*04/26/22*		*04/26/22 14:52*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-9B

2042129-12 (Nonpotable Water)
Sample Date: 04/20/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 13:20	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 13:20	LL
Benzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 13:20	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 13:20	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 13:20	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 13:20	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 13:20	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 13:20	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-9B

2042129-12 (Nonpotable Water)
Sample Date: 04/20/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 13:20	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
Methyl tert-butyl ether (MTBE)	**0.5**	J	ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 13:20	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 13:20	LL
Styrene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
Toluene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 13:20	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 13:20	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 13:20	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:20	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*	*04/25/22*		*04/25/22 13:20*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*04/25/22*		*04/25/22 13:20*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*04/25/22*		*04/25/22 13:20*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-9C

2042129-13 (Nonpotable Water)
Sample Date: 04/20/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 13:46	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 13:46	LL
Benzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 13:46	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 13:46	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 13:46	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 13:46	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 13:46	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 13:46	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-9C

2042129-13 (Nonpotable Water)
Sample Date: 04/20/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 13:46	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
Methyl tert-butyl ether (MTBE)	**0.6**	J	ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 13:46	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 13:46	LL
Styrene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
Toluene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 13:46	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 13:46	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 13:46	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 13:46	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*104 %*	*04/25/22*		*04/25/22 13:46*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*04/25/22*		*04/25/22 13:46*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*	*04/25/22*		*04/25/22 13:46*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-10A

2042129-14 (Nonpotable Water)
Sample Date: 04/21/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 14:11	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 14:11	LL
Benzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 14:11	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 14:11	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 14:11	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 14:11	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 14:11	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 14:11	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-10A

2042129-14 (Nonpotable Water)
Sample Date: 04/21/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 14:11	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 14:11	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 14:11	LL
Styrene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
Toluene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 14:11	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 14:11	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 14:11	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:11	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*		*04/25/22*	*04/25/22 14:11*		
Surrogate: Toluene-d8			*75-120*	*97 %*		*04/25/22*	*04/25/22 14:11*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*		*04/25/22*	*04/25/22 14:11*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-11A

2042129-15 (Nonpotable Water)
Sample Date: 04/21/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 14:36	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 14:36	LL
Benzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 14:36	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 14:36	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 14:36	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 14:36	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 14:36	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 14:36	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
Dichlorodifluoromethane	**0.8**	J	ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
1,1-Dichloroethane	**0.7**	J	ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
Dichlorofluoromethane	**0.9**	J	ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 14:36	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-11A

2042129-15 (Nonpotable Water)
Sample Date: 04/21/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 14:36	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 14:36	LL
Styrene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
Toluene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 14:36	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 14:36	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 14:36	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 14:36	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*102 %*			*04/25/22*	*04/25/22 14:36*	
Surrogate: Toluene-d8			*75-120*	*97 %*			*04/25/22*	*04/25/22 14:36*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*			*04/25/22*	*04/25/22 14:36*	

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Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-12

2042129-16 (Nonpotable Water)
Sample Date: 04/21/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 15:01	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 15:01	LL
Benzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 15:01	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 15:01	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 15:01	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 15:01	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 15:01	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 15:01	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
Dichlorodifluoromethane	**2.7**		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
1,1-Dichloroethane	**1.5**		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
cis-1,2-Dichloroethene	**0.9**	J	ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
Dichlorofluoromethane	**1.1**		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 15:01	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-12

2042129-16 (Nonpotable Water)
Sample Date: 04/21/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 15:01	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 15:01	LL
Styrene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
Toluene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
Trichloroethene	**1.8**		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 15:01	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 15:01	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 15:01	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:01	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*101 %*	*04/25/22*	*04/25/22 15:01*
Surrogate: Toluene-d8	*75-120*	*97 %*	*04/25/22*	*04/25/22 15:01*
Surrogate: 4-Bromofluorobenzene	*75-120*	*99 %*	*04/25/22*	*04/25/22 15:01*

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-13

2042129-17 (Nonpotable Water)
Sample Date: 04/21/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 15:26	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 15:26	LL
Benzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 15:26	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 15:26	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 15:26	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 15:26	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 15:26	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 15:26	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
Dichlorodifluoromethane	**8.5**		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
1,1-Dichloroethane	**3.5**		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
cis-1,2-Dichloroethene	**3.7**		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
Dichlorofluoromethane	**2.7**		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 15:26	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-13

2042129-17 (Nonpotable Water)
Sample Date: 04/21/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 15:26	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 15:26	LL
Styrene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
Tetrachloroethene	**3.6**		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
Toluene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
Trichloroethene	**5.3**		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 15:26	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 15:26	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 15:26	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:26	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*102 %*			*04/25/22*	*04/25/22 15:26*	
Surrogate: Toluene-d8			*75-120*	*97 %*			*04/25/22*	*04/25/22 15:26*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*			*04/25/22*	*04/25/22 15:26*	

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-14

2042129-18 (Nonpotable Water)
Sample Date: 04/21/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 15:50	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 15:50	LL
Benzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 15:50	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 15:50	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 15:50	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 15:50	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 15:50	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 15:50	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
Dichlorodifluoromethane	**7.3**		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
1,1-Dichloroethane	**3.2**		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
cis-1,2-Dichloroethene	**1.2**		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
Dichlorofluoromethane	**4.1**		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 15:50	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-14

2042129-18 (Nonpotable Water)
Sample Date: 04/21/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 15:50	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 15:50	LL
Styrene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
Tetrachloroethene	**3.6**		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
Toluene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
Trichloroethene	**1.2**		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 15:50	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 15:50	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 15:50	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 15:50	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*101 %*	*04/25/22*	*04/25/22 15:50*
Surrogate: Toluene-d8	*75-120*	*97 %*	*04/25/22*	*04/25/22 15:50*
Surrogate: 4-Bromofluorobenzene	*75-120*	*98 %*	*04/25/22*	*04/25/22 15:50*

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-14A

2042129-19 (Nonpotable Water)
Sample Date: 04/21/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 16:15	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 16:15	LL
Benzene	**1.4**		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 16:15	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 16:15	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 16:15	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 16:15	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 16:15	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 16:15	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
Dichlorodifluoromethane	**4.6**		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
1,1-Dichloroethane	**6.0**		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
cis-1,2-Dichloroethene	**1.9**		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
Dichlorofluoromethane	**5.2**		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 16:15	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-14A

2042129-19 (Nonpotable Water)
Sample Date: 04/21/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
Methyl tert-butyl ether (MTBE)	**0.6**	J	ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 16:15	LL
Methylene chloride	**1.5**	L	ug/L	1.0	1.0	1	04/25/22	04/25/22 16:15	LL
Styrene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
Tetrachloroethene	**1.3**		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
Toluene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
Trichloroethene	**1.1**		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 16:15	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 16:15	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 16:15	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:15	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*101 %*	*04/25/22*	*04/25/22 16:15*
Surrogate: Toluene-d8	*75-120*	*98 %*	*04/25/22*	*04/25/22 16:15*
Surrogate: 4-Bromofluorobenzene	*75-120*	*99 %*	*04/25/22*	*04/25/22 16:15*

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Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-14B

2042129-20 (Nonpotable Water)
Sample Date: 04/21/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 16:40	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 16:40	LL
Benzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 16:40	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 16:40	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 16:40	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 16:40	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 16:40	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 16:40	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

TW-14B

2042129-20 (Nonpotable Water)
Sample Date: 04/21/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 16:40	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 16:40	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 16:40	LL
Styrene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
Toluene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 16:40	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 16:40	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 16:40	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 16:40	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*		*04/25/22*	*04/25/22 16:40*		
Surrogate: Toluene-d8			*75-120*	*98 %*		*04/25/22*	*04/25/22 16:40*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*		*04/25/22*	*04/25/22 16:40*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

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2042129-21 (Nonpotable Water)
Sample Date: 04/21/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 17:04	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 17:04	LL
Benzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 17:04	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 17:04	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 17:04	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 17:04	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 17:04	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 17:04	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

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2042129-21 (Nonpotable Water)
Sample Date: 04/21/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 17:04	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/25/22	04/25/22 17:04	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 17:04	LL
Styrene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
Toluene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 17:04	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 17:04	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/25/22	04/25/22 17:04	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/25/22	04/25/22 17:04	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*101 %*		*04/25/22*	*04/25/22 17:04*		
Surrogate: Toluene-d8			*75-120*	*98 %*		*04/25/22*	*04/25/22 17:04*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*		*04/25/22*	*04/25/22 17:04*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204433 - GCMS-WATER-VOLATILES										
Blank (B204433-BLK1)					Prepared & Analyzed: 04/22/22					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204433 - GCMS-WATER-VOLATILES										
Blank (B204433-BLK1)					Prepared & Analyzed: 04/22/22					
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*54.75*			ug/L	*50.00*		*110*	*70-130*		
Surrogate: Toluene-d8	*45.47*			ug/L	*50.00*		*91*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*51.58*			ug/L	*50.00*		*103*	*75-120*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204433 - GCMS-WATER-VOLATILES										
LCS (B204433-BS1)					Prepared & Analyzed: 04/22/22					
Acetone	17.2		5.0	ug/L	10.00		172	50-150		
Acrylonitrile	5.6		5.0	ug/L	5.000		111	50-150		
Benzene	5.7		1.0	ug/L	5.000		114	50-150		
Bromochloromethane	5.6		1.0	ug/L	5.000		113	50-150		
Bromodichloromethane	4.4		1.0	ug/L	5.000		87	50-150		
Bromoform	3.3		1.0	ug/L	5.000		65	50-150		
Bromomethane	10.6		1.0	ug/L	5.000		212	50-150		
2-Butanone (MEK)	9.9		5.0	ug/L	10.00		99	50-150		
Carbon disulfide	4.6		1.0	ug/L	5.000		93	50-150		
Carbon tetrachloride	4.4		1.0	ug/L	5.000		87	50-150		
Chlorobenzene	5.5		1.0	ug/L	5.000		110	50-150		
Chloroethane	5.8		1.0	ug/L	5.000		116	50-150		
Chloroform	5.3		1.0	ug/L	5.000		107	50-150		
Chloromethane	5.4		1.0	ug/L	5.000		108	50-150		
Dibromochloromethane	3.8		1.0	ug/L	5.000		75	50-150		
1,2-Dibromo-3-chloropropane	3.9		1.0	ug/L	5.000		77	50-150		
1,2-Dibromoethane (EDB)	5.0		1.0	ug/L	5.000		101	50-150		
Dibromomethane	5.4		1.0	ug/L	5.000		108	50-150		
1,2-Dichlorobenzene	5.7		1.0	ug/L	5.000		113	50-150		
1,4-Dichlorobenzene	5.6		1.0	ug/L	5.000		112	50-150		
1,1-Dichloroethane	5.8		1.0	ug/L	5.000		116	50-150		
1,2-Dichloroethane	6.2		1.0	ug/L	5.000		124	50-150		
1,1-Dichloroethene	5.3		1.0	ug/L	5.000		106	50-150		
cis-1,2-Dichloroethene	5.6		1.0	ug/L	5.000		111	50-150		
trans-1,2-Dichloroethene	5.7		1.0	ug/L	5.000		114	50-150		
1,2-Dichloropropane	5.6		1.0	ug/L	5.000		113	50-150		
1,3-Dichloropropane	5.4		1.0	ug/L	5.000		107	50-150		
2,2-Dichloropropane	4.6		1.0	ug/L	5.000		92	50-150		
1,1-Dichloropropene	5.3		1.0	ug/L	5.000		106	50-150		
cis-1,3-Dichloropropene	3.9		1.0	ug/L	5.000		78	50-150		
trans-1,3-Dichloropropene	4.2		1.0	ug/L	5.000		85	50-150		

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Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204433 - GCMS-WATER-VOLATILES										
LCS (B204433-BS1)					Prepared & Analyzed: 04/22/22					
Ethylbenzene	5.2		1.0	ug/L	5.000		105	50-150		
2-Hexanone	12.5		5.0	ug/L	10.00		125	50-150		
Methyl tert-butyl ether (MTBE)	5.1		1.0	ug/L	5.000		102	50-150		
4-Methyl-2-pentanone	12.8		5.0	ug/L	10.00		128	50-150		
Methylene chloride	6.2		1.0	ug/L	5.000		125	0-200		
Methyl methacrylate	6.9		5.0	ug/L	5.000		137	50-150		
Styrene	4.8		1.0	ug/L	5.000		97	50-150		
1,1,1,2-Tetrachloroethane	4.2		1.0	ug/L	5.000		83	50-150		
1,1,2,2-Tetrachloroethane	5.5		1.0	ug/L	5.000		109	50-150		
Tetrachloroethene	5.3		1.0	ug/L	5.000		106	50-150		
Toluene	5.1		1.0	ug/L	5.000		103	50-150		
1,1,1-Trichloroethane	5.0		1.0	ug/L	5.000		100	50-150		
1,1,2-Trichloroethane	5.1		1.0	ug/L	5.000		102	50-150		
Trichloroethene	5.3		1.0	ug/L	5.000		106	50-150		
Trichlorofluoromethane (Freon 11)	5.6		1.0	ug/L	5.000		111	50-150		
1,2,3-Trichloropropane	5.6		1.0	ug/L	5.000		112	50-150		
Vinyl acetate	4.6		1.0	ug/L	5.000		93	50-150		
Vinyl chloride	6.0		1.0	ug/L	5.000		119	50-150		
o-Xylene	5.5		1.0	ug/L	5.000		110	50-150		
m- & p-Xylenes	10.7		1.0	ug/L	10.00		107	50-150		
Surrogate: 1,2-Dichloroethane-d4	*53.33*			ug/L	*50.00*		*107*	*70-130*		
Surrogate: Toluene-d8	*45.12*			ug/L	*50.00*		*90*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.66*			ug/L	*50.00*		*97*	*75-120*		
Duplicate (B204433-DUP1)		**Source: 2042129-01**			Prepared & Analyzed: 04/22/22					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204433 - GCMS-WATER-VOLATILES										
Duplicate (B204433-DUP1)		**Source: 2042129-01**		Prepared & Analyzed: 04/22/22						
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	2.5		1.0	ug/L		2.5			0.4	20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	1.1		1.0	ug/L		1.1			3	20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204433 - GCMS-WATER-VOLATILES										
Duplicate (B204433-DUP1)		**Source: 2042129-01**		Prepared & Analyzed: 04/22/22						
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	ND		1.0	ug/L		ND				20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	ND		1.0	ug/L		ND				20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*55.66*			ug/L	*50.00*		*111*	*70-130*		
Surrogate: Toluene-d8	*45.39*			ug/L	*50.00*		*91*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.36*			ug/L	*50.00*		*99*	*75-120*		
Matrix Spike (B204433-MS1)		**Source: 2042101-02**		Prepared & Analyzed: 04/22/22						
Acetone	13.6		5.0	ug/L	10.00	3.7	99	60-120		
Acrylonitrile	13.3		5.0	ug/L	10.00	ND	133	0-200		
Benzene	12.8		1.0	ug/L	10.00	ND	128	60-120		
Bromochloromethane	11.5		1.0	ug/L	10.00	ND	115	60-120		
Bromodichloromethane	9.3		1.0	ug/L	10.00	ND	93	60-120		
Bromoform	6.7		1.0	ug/L	10.00	ND	67	60-120		
Bromomethane	14.9		1.0	ug/L	10.00	ND	149	60-120		
2-Butanone (MEK)	13.0		5.0	ug/L	10.00	ND	130	60-120		

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Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204433 - GCMS-WATER-VOLATILES										
Matrix Spike (B204433-MS1)		**Source: 2042101-02**		Prepared & Analyzed: 04/22/22						
Carbon disulfide	9.6		1.0	ug/L	10.00	ND	96	60-120		
Carbon tetrachloride	10.6		1.0	ug/L	10.00	ND	106	60-120		
Chlorobenzene	12.0		1.0	ug/L	10.00	ND	120	60-120		
Chloroethane	14.8		1.0	ug/L	10.00	ND	148	60-120		
Chloroform	11.7		1.0	ug/L	10.00	ND	117	60-120		
Chloromethane	11.1		1.0	ug/L	10.00	ND	111	60-120		
Dibromochloromethane	7.7		1.0	ug/L	10.00	ND	77	60-120		
1,2-Dibromo-3-chloropropane	6.9		1.0	ug/L	10.00	ND	69	60-120		
1,2-Dibromoethane (EDB)	10.3		1.0	ug/L	10.00	ND	103	60-120		
Dibromomethane	11.4		1.0	ug/L	10.00	ND	114	60-120		
1,2-Dichlorobenzene	11.9		1.0	ug/L	10.00	ND	119	60-120		
1,4-Dichlorobenzene	11.7		1.0	ug/L	10.00	ND	117	60-120		
1,1-Dichloroethane	12.9		1.0	ug/L	10.00	ND	129	60-120		
1,2-Dichloroethane	13.3		1.0	ug/L	10.00	ND	133	60-120		
1,1-Dichloroethene	11.9		1.0	ug/L	10.00	ND	119	60-120		
cis-1,2-Dichloroethene	11.9		1.0	ug/L	10.00	ND	119	60-120		
trans-1,2-Dichloroethene	12.3		1.0	ug/L	10.00	ND	123	60-120		
1,2-Dichloropropane	12.4		1.0	ug/L	10.00	ND	124	60-120		
1,3-Dichloropropane	12.1		1.0	ug/L	10.00	ND	121	60-120		
2,2-Dichloropropane	9.0		1.0	ug/L	10.00	ND	90	60-120		
1,1-Dichloropropene	12.9		1.0	ug/L	10.00	ND	129	60-120		
cis-1,3-Dichloropropene	7.8		1.0	ug/L	10.00	ND	78	60-120		
trans-1,3-Dichloropropene	8.3		1.0	ug/L	10.00	ND	83	60-120		
Ethylbenzene	12.2		1.0	ug/L	10.00	ND	122	60-120		
2-Hexanone	11.6		5.0	ug/L	10.00	ND	116	60-120		
Methyl tert-butyl ether (MTBE)	10.0		1.0	ug/L	10.00	ND	100	60-120		
4-Methyl-2-pentanone	12.6		5.0	ug/L	10.00	ND	126	60-120		
Methylene chloride	11.1		1.0	ug/L	10.00	ND	111	60-120		
Methyl methacrylate	13.9		5.0	ug/L	10.00	ND	139	60-120		
Styrene	11.1		1.0	ug/L	10.00	ND	111	60-120		
1,1,1,2-Tetrachloroethane	9.4		1.0	ug/L	10.00	ND	94	60-120		

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Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204433 - GCMS-WATER-VOLATILES										
Matrix Spike (B204433-MS1)		**Source: 2042101-02**		Prepared & Analyzed: 04/22/22						
1,1,2,2-Tetrachloroethane	10.9		1.0	ug/L	10.00	ND	109	60-120		
Tetrachloroethene	12.2		1.0	ug/L	10.00	ND	122	60-120		
Toluene	11.1		1.0	ug/L	10.00	ND	111	60-120		
1,1,1-Trichloroethane	11.8		1.0	ug/L	10.00	ND	118	60-120		
1,1,2-Trichloroethane	10.8		1.0	ug/L	10.00	ND	108	60-120		
Trichloroethene	12.1		1.0	ug/L	10.00	ND	121	60-120		
Trichlorofluoromethane (Freon 11)	12.7		1.0	ug/L	10.00	ND	127	60-120		
1,2,3-Trichloropropane	11.4		1.0	ug/L	10.00	ND	114	60-120		
Vinyl acetate	12.3		1.0	ug/L	10.00	ND	123	60-120		
Vinyl chloride	13.3		1.0	ug/L	10.00	ND	133	60-120		
o-Xylene	11.9		1.0	ug/L	10.00	ND	119	60-120		
m- & p-Xylenes	24.4		1.0	ug/L	20.00	ND	122	60-120		
Surrogate: 1,2-Dichloroethane-d4	*53.34*			ug/L	*50.00*		*107*	*70-130*		
Surrogate: Toluene-d8	*43.56*			ug/L	*50.00*		*87*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*47.10*			ug/L	*50.00*		*94*	*75-120*		
Batch B204464 - GCMS-WATER-VOLATILES										
Blank (B204464-BLK1)				Prepared & Analyzed: 04/25/22						
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						

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Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204464 - GCMS-WATER-VOLATILES										
Blank (B204464-BLK1)					Prepared & Analyzed: 04/25/22					
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						

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410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204464 - GCMS-WATER-VOLATILES										
Blank (B204464-BLK1)					Prepared & Analyzed: 04/25/22					
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*50.21*			ug/L	*50.00*		*100*	*70-130*		
Surrogate: Toluene-d8	*48.61*			ug/L	*50.00*		*97*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*50.17*			ug/L	*50.00*		*100*	*75-120*		
LCS (B204464-BS1)					Prepared & Analyzed: 04/25/22					
Acetone	10.6		5.0	ug/L	10.00		106	50-150		
Acrylonitrile	5.0	J	5.0	ug/L	5.000		100	50-150		
Benzene	5.3		1.0	ug/L	5.000		105	50-150		
Bromochloromethane	5.3		1.0	ug/L	5.000		107	50-150		
Bromodichloromethane	5.1		1.0	ug/L	5.000		102	50-150		
Bromoform	4.9		1.0	ug/L	5.000		99	50-150		
Bromomethane	7.4		1.0	ug/L	5.000		148	50-150		
2-Butanone (MEK)	9.8		5.0	ug/L	10.00		98	50-150		
Carbon disulfide	5.5		1.0	ug/L	5.000		110	50-150		
Carbon tetrachloride	5.2		1.0	ug/L	5.000		104	50-150		
Chlorobenzene	5.2		1.0	ug/L	5.000		105	50-150		
Chloroethane	5.5		1.0	ug/L	5.000		110	50-150		
Chloroform	5.4		1.0	ug/L	5.000		107	50-150		
Chloromethane	6.0		1.0	ug/L	5.000		119	50-150		

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Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204464 - GCMS-WATER-VOLATILES										
LCS (B204464-BS1)					Prepared & Analyzed: 04/25/22					
Dibromochloromethane	5.0		1.0	ug/L	5.000		99	50-150		
1,2-Dibromo-3-chloropropane	4.8		1.0	ug/L	5.000		95	50-150		
1,2-Dibromoethane (EDB)	4.8		1.0	ug/L	5.000		97	50-150		
Dibromomethane	4.9		1.0	ug/L	5.000		98	50-150		
1,2-Dichlorobenzene	5.5		1.0	ug/L	5.000		110	50-150		
1,4-Dichlorobenzene	5.6		1.0	ug/L	5.000		112	50-150		
1,1-Dichloroethane	5.1		1.0	ug/L	5.000		101	50-150		
1,2-Dichloroethane	5.2		1.0	ug/L	5.000		103	50-150		
1,1-Dichloroethene	5.1		1.0	ug/L	5.000		102	50-150		
cis-1,2-Dichloroethene	5.0		1.0	ug/L	5.000		99	50-150		
trans-1,2-Dichloroethene	5.2		1.0	ug/L	5.000		105	50-150		
1,2-Dichloropropane	4.9		1.0	ug/L	5.000		98	50-150		
1,3-Dichloropropane	5.0		1.0	ug/L	5.000		99	50-150		
2,2-Dichloropropane	5.1		1.0	ug/L	5.000		103	50-150		
1,1-Dichloropropene	5.1		1.0	ug/L	5.000		103	50-150		
cis-1,3-Dichloropropene	4.9		1.0	ug/L	5.000		98	50-150		
trans-1,3-Dichloropropene	4.9		1.0	ug/L	5.000		99	50-150		
Ethylbenzene	5.4		1.0	ug/L	5.000		109	50-150		
2-Hexanone	9.2		5.0	ug/L	10.00		92	50-150		
Methyl tert-butyl ether (MTBE)	5.2		1.0	ug/L	5.000		104	50-150		
4-Methyl-2-pentanone	9.6		5.0	ug/L	10.00		96	50-150		
Methylene chloride	5.5		1.0	ug/L	5.000		111	0-200		
Methyl methacrylate	4.9	J	5.0	ug/L	5.000		98	50-150		
Styrene	5.3		1.0	ug/L	5.000		105	50-150		
1,1,1,2-Tetrachloroethane	5.2		1.0	ug/L	5.000		104	50-150		
1,1,2,2-Tetrachloroethane	4.8		1.0	ug/L	5.000		97	50-150		
Tetrachloroethene	5.1		1.0	ug/L	5.000		101	50-150		
Toluene	5.2		1.0	ug/L	5.000		104	50-150		
1,1,1-Trichloroethane	5.2		1.0	ug/L	5.000		105	50-150		
1,1,2-Trichloroethane	4.6		1.0	ug/L	5.000		92	50-150		
Trichloroethene	5.3		1.0	ug/L	5.000		105	50-150		

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Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204464 - GCMS-WATER-VOLATILES										
LCS (B204464-BS1)					Prepared & Analyzed: 04/25/22					
Trichlorofluoromethane (Freon 11)	5.6		1.0	ug/L	5.000		112	50-150		
1,2,3-Trichloropropane	5.2		1.0	ug/L	5.000		104	50-150		
Vinyl acetate	3.3		1.0	ug/L	5.000		66	50-150		
Vinyl chloride	5.6		1.0	ug/L	5.000		111	50-150		
o-Xylene	5.1		1.0	ug/L	5.000		102	50-150		
m- & p-Xylenes	10.9		1.0	ug/L	10.00		109	50-150		
Surrogate: 1,2-Dichloroethane-d4	*49.54*			ug/L	*50.00*		*99*	*70-130*		
Surrogate: Toluene-d8	*48.49*			ug/L	*50.00*		*97*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*50.74*			ug/L	*50.00*		*101*	*75-120*		
Duplicate (B204464-DUP1)		**Source: 2042129-12**			Prepared & Analyzed: 04/25/22					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204464 - GCMS-WATER-VOLATILES										
Duplicate (B204464-DUP1)		**Source: 2042129-12**		Prepared & Analyzed: 04/25/22						
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	ND		1.0	ug/L		ND				20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	0.5	J	1.0	ug/L		0.5			2	20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	ND		1.0	ug/L		ND				20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	ND		1.0	ug/L		ND				20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20

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Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204464 - GCMS-WATER-VOLATILES										
Duplicate (B204464-DUP1)		**Source: 2042129-12**		Prepared & Analyzed: 04/25/22						
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*50.28*			ug/L	*50.00*		*101*	*70-130*		
Surrogate: Toluene-d8	*48.40*			ug/L	*50.00*		*97*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.91*			ug/L	*50.00*		*98*	*75-120*		
Matrix Spike (B204464-MS1)		**Source: 2042129-13**		Prepared & Analyzed: 04/25/22						
Acetone	12.0		5.0	ug/L	10.00	1.2	108	60-120		
Acrylonitrile	10.7		5.0	ug/L	10.00	ND	107	0-200		
Benzene	11.2		1.0	ug/L	10.00	ND	112	60-120		
Bromochloromethane	10.9		1.0	ug/L	10.00	ND	109	60-120		
Bromodichloromethane	10.3		1.0	ug/L	10.00	ND	103	60-120		
Bromoform	10.8		1.0	ug/L	10.00	ND	108	60-120		
Bromomethane	12.9		1.0	ug/L	10.00	ND	129	60-120		
2-Butanone (MEK)	12.8		5.0	ug/L	10.00	ND	128	60-120		
Carbon disulfide	10.6		1.0	ug/L	10.00	ND	106	60-120		
Carbon tetrachloride	11.2		1.0	ug/L	10.00	ND	112	60-120		
Chlorobenzene	11.0		1.0	ug/L	10.00	ND	110	60-120		
Chloroethane	10.6		1.0	ug/L	10.00	ND	106	60-120		
Chloroform	10.8		1.0	ug/L	10.00	ND	108	60-120		
Chloromethane	10.1		1.0	ug/L	10.00	ND	101	60-120		
Dibromochloromethane	10.4		1.0	ug/L	10.00	ND	104	60-120		
1,2-Dibromo-3-chloropropane	9.8		1.0	ug/L	10.00	ND	98	60-120		
1,2-Dibromoethane (EDB)	10.5		1.0	ug/L	10.00	ND	105	60-120		
Dibromomethane	9.9		1.0	ug/L	10.00	ND	99	60-120		
1,2-Dichlorobenzene	10.8		1.0	ug/L	10.00	ND	108	60-120		
1,4-Dichlorobenzene	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,1-Dichloroethane	10.8		1.0	ug/L	10.00	ND	108	60-120		
1,2-Dichloroethane	10.5		1.0	ug/L	10.00	ND	105	60-120		

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Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204464 - GCMS-WATER-VOLATILES										
Matrix Spike (B204464-MS1)		**Source: 2042129-13**		Prepared & Analyzed: 04/25/22						
1,1-Dichloroethene	10.5		1.0	ug/L	10.00	ND	105	60-120		
cis-1,2-Dichloroethene	10.3		1.0	ug/L	10.00	ND	103	60-120		
trans-1,2-Dichloroethene	10.5		1.0	ug/L	10.00	ND	105	60-120		
1,2-Dichloropropane	10.5		1.0	ug/L	10.00	ND	105	60-120		
1,3-Dichloropropane	10.4		1.0	ug/L	10.00	ND	104	60-120		
2,2-Dichloropropane	8.8		1.0	ug/L	10.00	ND	88	60-120		
1,1-Dichloropropene	10.9		1.0	ug/L	10.00	ND	109	60-120		
cis-1,3-Dichloropropene	10.1		1.0	ug/L	10.00	ND	101	60-120		
trans-1,3-Dichloropropene	9.9		1.0	ug/L	10.00	ND	99	60-120		
Ethylbenzene	11.3		1.0	ug/L	10.00	ND	113	60-120		
2-Hexanone	10.0		5.0	ug/L	10.00	ND	100	60-120		
Methyl tert-butyl ether (MTBE)	10.9		1.0	ug/L	10.00	0.6	103	60-120		
4-Methyl-2-pentanone	10.2		5.0	ug/L	10.00	ND	102	60-120		
Methylene chloride	10.2		1.0	ug/L	10.00	ND	102	60-120		
Methyl methacrylate	10.9		5.0	ug/L	10.00	ND	109	60-120		
Styrene	10.3		1.0	ug/L	10.00	ND	103	60-120		
1,1,1,2-Tetrachloroethane	11.1		1.0	ug/L	10.00	ND	111	60-120		
1,1,2,2-Tetrachloroethane	10.2		1.0	ug/L	10.00	ND	102	60-120		
Tetrachloroethene	12.1		1.0	ug/L	10.00	ND	121	60-120		
Toluene	10.9		1.0	ug/L	10.00	ND	109	60-120		
1,1,1-Trichloroethane	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,1,2-Trichloroethane	10.0		1.0	ug/L	10.00	ND	100	60-120		
Trichloroethene	11.3		1.0	ug/L	10.00	ND	113	60-120		
Trichlorofluoromethane (Freon 11)	11.6		1.0	ug/L	10.00	ND	116	60-120		
1,2,3-Trichloropropane	9.7		1.0	ug/L	10.00	ND	97	60-120		
Vinyl acetate	8.5		1.0	ug/L	10.00	ND	85	60-120		
Vinyl chloride	11.0		1.0	ug/L	10.00	ND	110	60-120		
o-Xylene	10.9		1.0	ug/L	10.00	ND	109	60-120		
m- & p-Xylenes	22.6		1.0	ug/L	20.00	ND	113	60-120		
Surrogate: 1,2-Dichloroethane-d4	*49.44*			ug/L	*50.00*		*99*	*70-130*		
Surrogate: Toluene-d8	*48.91*			ug/L	*50.00*		*98*	*75-120*		

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204464 - GCMS-WATER-VOLATILES										
Matrix Spike (B204464-MS1)		**Source: 2042129-13**			Prepared & Analyzed: 04/25/22					
Surrogate: 4-Bromofluorobenzene	*49.38*			ug/L	*50.00*		*99*	*75-120*		
Batch B204494 - GCMS-WATER-VOLATILES										
Blank (B204494-BLK1)					Prepared & Analyzed: 04/26/22					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204494 - GCMS-WATER-VOLATILES										
Blank (B204494-BLK1)					Prepared & Analyzed: 04/26/22					
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*49.93*			ug/L	*50.00*		*100*	*70-130*		

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Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204494 - GCMS-WATER-VOLATILES										
Blank (B204494-BLK1)					Prepared & Analyzed: 04/26/22					
Surrogate: Toluene-d8	*48.83*			ug/L	*50.00*		*98*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.64*			ug/L	*50.00*		*97*	*75-120*		
LCS (B204494-BS1)					Prepared & Analyzed: 04/26/22					
Acetone	9.2		5.0	ug/L	10.00		92	50-150		
Acrylonitrile	4.4	J	5.0	ug/L	5.000		87	50-150		
Benzene	4.8		1.0	ug/L	5.000		96	50-150		
Bromochloromethane	4.8		1.0	ug/L	5.000		97	50-150		
Bromodichloromethane	4.5		1.0	ug/L	5.000		90	50-150		
Bromoform	4.9		1.0	ug/L	5.000		97	50-150		
Bromomethane	6.0		1.0	ug/L	5.000		121	50-150		
2-Butanone (MEK)	11.5		5.0	ug/L	10.00		115	50-150		
Carbon disulfide	4.7		1.0	ug/L	5.000		94	50-150		
Carbon tetrachloride	4.6		1.0	ug/L	5.000		93	50-150		
Chlorobenzene	5.3		1.0	ug/L	5.000		106	50-150		
Chloroethane	4.5		1.0	ug/L	5.000		91	50-150		
Chloroform	4.7		1.0	ug/L	5.000		95	50-150		
Chloromethane	4.8		1.0	ug/L	5.000		96	50-150		
Dibromochloromethane	4.7		1.0	ug/L	5.000		93	50-150		
1,2-Dibromo-3-chloropropane	5.1		1.0	ug/L	5.000		103	50-150		
1,2-Dibromoethane (EDB)	4.6		1.0	ug/L	5.000		93	50-150		
Dibromomethane	4.4		1.0	ug/L	5.000		88	50-150		
1,2-Dichlorobenzene	5.9		1.0	ug/L	5.000		117	50-150		
1,4-Dichlorobenzene	5.8		1.0	ug/L	5.000		116	50-150		
1,1-Dichloroethane	4.6		1.0	ug/L	5.000		92	50-150		
1,2-Dichloroethane	4.9		1.0	ug/L	5.000		97	50-150		
1,1-Dichloroethene	4.4		1.0	ug/L	5.000		89	50-150		
cis-1,2-Dichloroethene	4.4		1.0	ug/L	5.000		87	50-150		
trans-1,2-Dichloroethene	4.6		1.0	ug/L	5.000		92	50-150		
1,2-Dichloropropane	4.6		1.0	ug/L	5.000		93	50-150		
1,3-Dichloropropane	4.6		1.0	ug/L	5.000		92	50-150		
2,2-Dichloropropane	4.5		1.0	ug/L	5.000		90	50-150		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204494 - GCMS-WATER-VOLATILES										
LCS (B204494-BS1)					Prepared & Analyzed: 04/26/22					
1,1-Dichloropropene	4.5		1.0	ug/L	5.000		91	50-150		
cis-1,3-Dichloropropene	4.5		1.0	ug/L	5.000		90	50-150		
trans-1,3-Dichloropropene	4.6		1.0	ug/L	5.000		93	50-150		
Ethylbenzene	4.8		1.0	ug/L	5.000		96	50-150		
2-Hexanone	9.5		5.0	ug/L	10.00		95	50-150		
Methyl tert-butyl ether (MTBE)	4.7		1.0	ug/L	5.000		94	50-150		
4-Methyl-2-pentanone	9.2		5.0	ug/L	10.00		92	50-150		
Methylene chloride	5.0		1.0	ug/L	5.000		99	0-200		
Methyl methacrylate	4.9	J	5.0	ug/L	5.000		98	50-150		
Styrene	4.9		1.0	ug/L	5.000		98	50-150		
1,1,1,2-Tetrachloroethane	4.8		1.0	ug/L	5.000		96	50-150		
1,1,2,2-Tetrachloroethane	4.4		1.0	ug/L	5.000		89	50-150		
Tetrachloroethene	4.7		1.0	ug/L	5.000		94	50-150		
Toluene	4.7		1.0	ug/L	5.000		94	50-150		
1,1,1-Trichloroethane	4.5		1.0	ug/L	5.000		89	50-150		
1,1,2-Trichloroethane	4.5		1.0	ug/L	5.000		89	50-150		
Trichloroethene	4.9		1.0	ug/L	5.000		98	50-150		
Trichlorofluoromethane (Freon 11)	5.0		1.0	ug/L	5.000		99	50-150		
1,2,3-Trichloropropane	4.6		1.0	ug/L	5.000		92	50-150		
Vinyl acetate	3.3		1.0	ug/L	5.000		66	50-150		
Vinyl chloride	4.8		1.0	ug/L	5.000		96	50-150		
o-Xylene	4.8		1.0	ug/L	5.000		96	50-150		
m- & p-Xylenes	10.1		1.0	ug/L	10.00		101	50-150		
Surrogate: 1,2-Dichloroethane-d4	*49.71*			ug/L	*50.00*		*99*	*70-130*		
Surrogate: Toluene-d8	*48.53*			ug/L	*50.00*		*97*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.24*			ug/L	*50.00*		*98*	*75-120*		
Duplicate (B204494-DUP1)			**Source: 2042129-08**		Prepared & Analyzed: 04/26/22					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204494 - GCMS-WATER-VOLATILES										
Duplicate (B204494-DUP1)			**Source: 2042129-08**		Prepared & Analyzed: 04/26/22					
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	ND		1.0	ug/L		ND				20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204494 - GCMS-WATER-VOLATILES										
Duplicate (B204494-DUP1)		**Source: 2042129-08**		Prepared & Analyzed: 04/26/22						
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	ND		1.0	ug/L		ND				20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	ND		1.0	ug/L		ND				20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*49.02*			ug/L	*50.00*		*98*	*70-130*		
Surrogate: Toluene-d8	*48.81*			ug/L	*50.00*		*98*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.24*			ug/L	*50.00*		*96*	*75-120*		
Matrix Spike (B204494-MS1)		**Source: 2042129-09**		Prepared & Analyzed: 04/26/22						
Acetone	8.5		5.0	ug/L	10.00	1.0	74	60-120		
Acrylonitrile	10.4		5.0	ug/L	10.00	ND	104	0-200		
Benzene	11.1		1.0	ug/L	10.00	ND	111	60-120		
Bromochloromethane	10.8		1.0	ug/L	10.00	ND	108	60-120		
Bromodichloromethane	10.3		1.0	ug/L	10.00	ND	103	60-120		

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204494 - GCMS-WATER-VOLATILES										
Matrix Spike (B204494-MS1)		**Source: 2042129-09**		Prepared & Analyzed: 04/26/22						
Bromoform	10.1		1.0	ug/L	10.00	ND	101	60-120		
Bromomethane	13.4		1.0	ug/L	10.00	ND	134	60-120		
2-Butanone (MEK)	10.8		5.0	ug/L	10.00	ND	108	60-120		
Carbon disulfide	11.0		1.0	ug/L	10.00	ND	110	60-120		
Carbon tetrachloride	11.4		1.0	ug/L	10.00	ND	114	60-120		
Chlorobenzene	11.2		1.0	ug/L	10.00	ND	112	60-120		
Chloroethane	10.7		1.0	ug/L	10.00	ND	107	60-120		
Chloroform	10.8		1.0	ug/L	10.00	ND	108	60-120		
Chloromethane	10.9		1.0	ug/L	10.00	ND	109	60-120		
Dibromochloromethane	10.0		1.0	ug/L	10.00	ND	100	60-120		
1,2-Dibromo-3-chloropropane	8.9		1.0	ug/L	10.00	ND	89	60-120		
1,2-Dibromoethane (EDB)	9.9		1.0	ug/L	10.00	ND	99	60-120		
Dibromomethane	9.5		1.0	ug/L	10.00	ND	95	60-120		
1,2-Dichlorobenzene	11.1		1.0	ug/L	10.00	ND	111	60-120		
1,4-Dichlorobenzene	11.0		1.0	ug/L	10.00	ND	110	60-120		
1,1-Dichloroethane	10.9		1.0	ug/L	10.00	ND	109	60-120		
1,2-Dichloroethane	10.4		1.0	ug/L	10.00	ND	104	60-120		
1,1-Dichloroethene	10.6		1.0	ug/L	10.00	ND	106	60-120		
cis-1,2-Dichloroethene	10.3		1.0	ug/L	10.00	ND	103	60-120		
trans-1,2-Dichloroethene	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,2-Dichloropropane	10.5		1.0	ug/L	10.00	ND	105	60-120		
1,3-Dichloropropane	10.2		1.0	ug/L	10.00	ND	102	60-120		
2,2-Dichloropropane	10.8		1.0	ug/L	10.00	ND	108	60-120		
1,1-Dichloropropene	11.1		1.0	ug/L	10.00	ND	111	60-120		
cis-1,3-Dichloropropene	10.3		1.0	ug/L	10.00	ND	103	60-120		
trans-1,3-Dichloropropene	9.9		1.0	ug/L	10.00	ND	99	60-120		
Ethylbenzene	11.4		1.0	ug/L	10.00	ND	114	60-120		
2-Hexanone	8.8		5.0	ug/L	10.00	ND	88	60-120		
Methyl tert-butyl ether (MTBE)	10.0		1.0	ug/L	10.00	ND	100	60-120		
4-Methyl-2-pentanone	9.2		5.0	ug/L	10.00	ND	92	60-120		
Methylene chloride	10.5		1.0	ug/L	10.00	ND	105	60-120		

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Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204494 - GCMS-WATER-VOLATILES										
Matrix Spike (B204494-MS1)			**Source: 2042129-09**		Prepared & Analyzed: 04/26/22					
Methyl methacrylate	9.7		5.0	ug/L	10.00	ND	97	60-120		
Styrene	11.0		1.0	ug/L	10.00	ND	110	60-120		
1,1,1,2-Tetrachloroethane	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,1,2,2-Tetrachloroethane	9.7		1.0	ug/L	10.00	ND	97	60-120		
Tetrachloroethene	11.5		1.0	ug/L	10.00	ND	115	60-120		
Toluene	11.0		1.0	ug/L	10.00	ND	110	60-120		
1,1,1-Trichloroethane	10.8		1.0	ug/L	10.00	ND	108	60-120		
1,1,2-Trichloroethane	9.8		1.0	ug/L	10.00	ND	98	60-120		
Trichloroethene	11.2		1.0	ug/L	10.00	ND	112	60-120		
Trichlorofluoromethane (Freon 11)	11.7		1.0	ug/L	10.00	ND	117	60-120		
1,2,3-Trichloropropane	9.5		1.0	ug/L	10.00	ND	95	60-120		
Vinyl acetate	10.8		1.0	ug/L	10.00	ND	108	60-120		
Vinyl chloride	11.1		1.0	ug/L	10.00	ND	111	60-120		
o-Xylene	11.0		1.0	ug/L	10.00	ND	110	60-120		
m- & p-Xylenes	23.0		1.0	ug/L	20.00	ND	115	60-120		
Surrogate: 1,2-Dichloroethane-d4	*49.36*			ug/L	*50.00*		*99*	*70-130*		
Surrogate: Toluene-d8	*49.19*			ug/L	*50.00*		*98*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.51*			ug/L	*50.00*		*99*	*75-120*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/02/22 10:29

Notes and Definitions

L	Analyte is a possible laboratory contaminant
J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MD. SPECTRA
Project	MLF- SPRING 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260												
1	TW-5	3	4/19/22	1250	✓		GW	✓												2042129-01 A
2	TW-5A			1320															-	02
3	TW-5B			1215															-	03
4	TW-6			1530															-	04
5	TW-6A			1450															-	05
6	TW-6B			1415															-	06
7	TW-7		4/20/22	1030															-	07
8	TW-7A			1000															-	08
9	TW-8			1110															-	09
10	TW-8A			1145															-	10
11	TW-9			1440															-	11
12	TW-9B			1520															-	12

	Signature	Date	Time	Comments
Relinquished by	DA Brown	4/21/22	1700	① APPENDIX I LIST of 47 VOCs, MTBE +
Received by		4/21/22	1700	2 FREONS (DCDFM + DCFM)
Relinquished by				
Received by				
Relinquished by				STANDARD REPORT
Received by	[illegible]	4/22/22	1700	

Cooler Temp on Arrival: 6.0 Deg. C

Rev. Aug. 2018

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

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Site	MILLERSVILLE LANDFILL	Lab	MD. SPECTRAL
Project	MLF-SPRING 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260											
1	TW-9C	3	4/20/22	1600	✓		GW	✓							20421			29	-13
2	TW-10A		4/21/22	845														-	14
3	TW-11A			930														-	15
4	TW-12			1050														-	16
5	TW-13			1135														-	17
6	TW-14			1410														-	18
7	TW-14A			1330														-	19
8	TW-14B			1250														-	20
9	TRIP BLANK	2		—	—		QA											21	
10																			
11																			
12																			

	Signature	Date	Time	Comments
Relinquished by	S A Brown	4/21/22	1700	(1) APPENDIX I LIST OF 47 VOCs MTBE, +
Received by		4/21/22	1700	2 FREONS (DCDFM + DCFM)
Relinquished by				
Received by				
Relinquished by				STANDARD REPORT
Received by	[illegible]	4/21/22	1700	

Cooler Temp on Arrival: 6.0 Deg. C

Rev. Aug. 2018

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

04 May 2022

Steve Brown
Environmental Monitoring and Assessment
207 East Sixth Street
Lititz, PA 17543
RE: MILLERSVILLE LANDFILL

Enclosed are the results of analyses for samples received by the laboratory on 04/27/22 16:40.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TW-15		2042733-01	Nonpotable Water	04/26/22 09:50	04/27/22 16:40
TW-15B		2042733-02	Nonpotable Water	04/26/22 10:25	04/27/22 16:40
TW-16		2042733-03	Nonpotable Water	04/26/22 11:45	04/27/22 16:40
TW-16A		2042733-04	Nonpotable Water	04/26/22 11:10	04/27/22 16:40
TW-17		2042733-05	Nonpotable Water	04/26/22 12:45	04/27/22 16:40
TW-17A		2042733-06	Nonpotable Water	04/26/22 13:20	04/27/22 16:40
TW-18		2042733-07	Nonpotable Water	04/26/22 14:15	04/27/22 16:40
TW-19		2042733-08	Nonpotable Water	04/26/22 15:00	04/27/22 16:40
TW-20R		2042733-09	Nonpotable Water	04/27/22 08:50	04/27/22 16:40
TW-21		2042733-10	Nonpotable Water	04/27/22 09:45	04/27/22 16:40
TW-21A		2042733-11	Nonpotable Water	04/27/22 10:20	04/27/22 16:40
TW-22		2042733-12	Nonpotable Water	04/27/22 12:15	04/27/22 16:40
TW-22A		2042733-13	Nonpotable Water	04/27/22 12:50	04/27/22 16:40
TW-22B		2042733-14	Nonpotable Water	04/27/22 11:40	04/27/22 16:40
TW-24		2042733-15	Nonpotable Water	04/27/22 14:00	04/27/22 16:40
TW-24A		2042733-16	Nonpotable Water	04/27/22 14:35	04/27/22 16:40
DUP-1		2042733-17	Nonpotable Water	04/27/22 00:00	04/27/22 16:40
TRIP BLANK		2042733-18	Nonpotable Water	04/27/22 00:00	04/27/22 16:40

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Will Brewington, President

Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-15

2042733-01RE1 (Nonpotable Water)
Sample Date: 04/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 12:03	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 12:03	LL
Benzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 12:03	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 12:03	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 12:03	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 12:03	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 12:03	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 12:03	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
Dichlorodifluoromethane	**0.8**	J	ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL

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Will Brewington, President

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Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-15

2042733-01RE1 (Nonpotable Water)
Sample Date: 04/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 12:03	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 12:03	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 12:03	LL
Styrene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
Toluene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 12:03	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 12:03	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 12:03	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:03	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*	*04/29/22*		*04/29/22 12:03*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*04/29/22*		*04/29/22 12:03*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*04/29/22*		*04/29/22 12:03*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-15B

2042733-02 (Nonpotable Water)
Sample Date: 04/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 14:37	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 14:37	LL
Benzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 14:37	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 14:37	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 14:37	LL
Chloroform	**0.6**	J	ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 14:37	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 14:37	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 14:37	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
Dichlorodifluoromethane	**1.3**		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-15B

2042733-02 (Nonpotable Water)
Sample Date: 04/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 14:37	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 14:37	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 14:37	LL
Styrene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
Tetrachloroethene	**0.8**	J	ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
Toluene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 14:37	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 14:37	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 14:37	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 14:37	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*		*04/28/22*	*04/28/22 14:37*		
Surrogate: Toluene-d8			*75-120*	*97 %*		*04/28/22*	*04/28/22 14:37*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*97 %*		*04/28/22*	*04/28/22 14:37*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-16

2042733-03 (Nonpotable Water)
Sample Date: 04/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 15:02	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 15:02	LL
Benzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 15:02	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 15:02	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 15:02	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 15:02	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 15:02	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 15:02	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-16

2042733-03 (Nonpotable Water)
Sample Date: 04/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 15:02	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 15:02	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 15:02	LL
Styrene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
Toluene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 15:02	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 15:02	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 15:02	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:02	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*	*04/28/22*		*04/28/22 15:02*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*04/28/22*		*04/28/22 15:02*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*04/28/22*		*04/28/22 15:02*		

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Will Brewington, President

Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-16A

2042733-04 (Nonpotable Water)
Sample Date: 04/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 15:27	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 15:27	LL
Benzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 15:27	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 15:27	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 15:27	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 15:27	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 15:27	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 15:27	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-16A

2042733-04 (Nonpotable Water)
Sample Date: 04/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 15:27	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 15:27	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 15:27	LL
Styrene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
Toluene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 15:27	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 15:27	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 15:27	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:27	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*	*04/28/22*		*04/28/22 15:27*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*04/28/22*		*04/28/22 15:27*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*04/28/22*		*04/28/22 15:27*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-17

2042733-05 (Nonpotable Water)
Sample Date: 04/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 15:51	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 15:51	LL
Benzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 15:51	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 15:51	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 15:51	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 15:51	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 15:51	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 15:51	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-17

2042733-05 (Nonpotable Water)
Sample Date: 04/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 15:51	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 15:51	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 15:51	LL
Styrene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
Toluene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 15:51	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 15:51	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 15:51	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 15:51	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*	*04/28/22*		*04/28/22 15:51*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*04/28/22*		*04/28/22 15:51*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*04/28/22*		*04/28/22 15:51*		

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-17A

2042733-06 (Nonpotable Water)
Sample Date: 04/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 16:16	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 16:16	LL
Benzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 16:16	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 16:16	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 16:16	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 16:16	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 16:16	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 16:16	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-17A

2042733-06 (Nonpotable Water)
Sample Date: 04/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 16:16	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 16:16	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 16:16	LL
Styrene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
Toluene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 16:16	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 16:16	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 16:16	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:16	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*			*04/28/22*	*04/28/22 16:16*	
Surrogate: Toluene-d8			*75-120*	*97 %*			*04/28/22*	*04/28/22 16:16*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*			*04/28/22*	*04/28/22 16:16*	

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-18

2042733-07 (Nonpotable Water)
Sample Date: 04/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 16:41	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 16:41	LL
Benzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 16:41	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 16:41	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 16:41	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 16:41	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 16:41	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 16:41	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-18

2042733-07 (Nonpotable Water)
Sample Date: 04/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 16:41	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 16:41	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 16:41	LL
Styrene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
Toluene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 16:41	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 16:41	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 16:41	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 16:41	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*99 %*	*04/28/22*	*04/28/22 16:41*
Surrogate: Toluene-d8	*75-120*	*98 %*	*04/28/22*	*04/28/22 16:41*
Surrogate: 4-Bromofluorobenzene	*75-120*	*98 %*	*04/28/22*	*04/28/22 16:41*

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-19

2042733-08 (Nonpotable Water)
Sample Date: 04/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 17:05	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 17:05	LL
Benzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 17:05	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 17:05	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 17:05	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 17:05	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 17:05	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 17:05	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-19

2042733-08 (Nonpotable Water)
Sample Date: 04/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 17:05	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 17:05	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 17:05	LL
Styrene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
Toluene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 17:05	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 17:05	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 17:05	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:05	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*	*04/28/22*		*04/28/22 17:05*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*04/28/22*		*04/28/22 17:05*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*04/28/22*		*04/28/22 17:05*		

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Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-20R

2042733-09 (Nonpotable Water)
Sample Date: 04/27/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 17:30	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 17:30	LL
Benzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 17:30	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 17:30	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 17:30	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 17:30	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 17:30	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 17:30	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-20R

2042733-09 (Nonpotable Water)
Sample Date: 04/27/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 17:30	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 17:30	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 17:30	LL
Styrene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
Toluene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 17:30	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 17:30	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 17:30	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:30	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*	*04/28/22*		*04/28/22 17:30*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*04/28/22*		*04/28/22 17:30*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*04/28/22*		*04/28/22 17:30*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-21

2042733-10 (Nonpotable Water)
Sample Date: 04/27/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 17:54	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 17:54	LL
Benzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 17:54	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 17:54	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 17:54	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 17:54	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 17:54	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 17:54	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-21

2042733-10 (Nonpotable Water)
Sample Date: 04/27/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 17:54	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 17:54	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 17:54	LL
Styrene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
Toluene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 17:54	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 17:54	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 17:54	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 17:54	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*	*04/28/22*		*04/28/22 17:54*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*04/28/22*		*04/28/22 17:54*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*97 %*	*04/28/22*		*04/28/22 17:54*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-21A

2042733-11 (Nonpotable Water)
Sample Date: 04/27/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 18:19	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 18:19	LL
Benzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 18:19	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 18:19	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 18:19	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 18:19	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 18:19	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 18:19	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-21A

2042733-11 (Nonpotable Water)
Sample Date: 04/27/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 18:19	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/28/22	04/28/22 18:19	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 18:19	LL
Styrene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
Toluene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 18:19	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 18:19	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/28/22	04/28/22 18:19	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/28/22	04/28/22 18:19	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*	*04/28/22*		*04/28/22 18:19*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*04/28/22*		*04/28/22 18:19*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*	*04/28/22*		*04/28/22 18:19*		

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Will Brewington, President

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410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-22

2042733-12 (Nonpotable Water)
Sample Date: 04/27/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 12:27	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 12:27	LL
Benzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 12:27	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 12:27	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 12:27	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 12:27	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 12:27	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 12:27	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-22

2042733-12 (Nonpotable Water)
Sample Date: 04/27/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 12:27	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 12:27	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 12:27	LL
Styrene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
Toluene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 12:27	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 12:27	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 12:27	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:27	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*98 %*	*04/29/22*		*04/29/22 12:27*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*04/29/22*		*04/29/22 12:27*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*04/29/22*		*04/29/22 12:27*		

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Will Brewington, President

Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-22A

2042733-13 (Nonpotable Water)
Sample Date: 04/27/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 12:52	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 12:52	LL
Benzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 12:52	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 12:52	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 12:52	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 12:52	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 12:52	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 12:52	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-22A

2042733-13 (Nonpotable Water)
Sample Date: 04/27/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 12:52	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 12:52	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 12:52	LL
Styrene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
Toluene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 12:52	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 12:52	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 12:52	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 12:52	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*98 %*	*04/29/22*		*04/29/22 12:52*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*04/29/22*		*04/29/22 12:52*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*04/29/22*		*04/29/22 12:52*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-22B

2042733-14 (Nonpotable Water)
Sample Date: 04/27/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 13:16	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 13:16	LL
Benzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 13:16	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 13:16	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 13:16	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 13:16	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 13:16	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 13:16	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-22B

2042733-14 (Nonpotable Water)
Sample Date: 04/27/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 13:16	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 13:16	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 13:16	LL
Styrene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
Toluene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 13:16	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 13:16	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 13:16	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:16	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*	*04/29/22*		*04/29/22 13:16*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*04/29/22*		*04/29/22 13:16*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*04/29/22*		*04/29/22 13:16*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-24

2042733-15 (Nonpotable Water)
Sample Date: 04/27/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 13:41	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 13:41	LL
Benzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 13:41	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 13:41	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 13:41	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 13:41	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 13:41	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 13:41	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
Dichlorodifluoromethane	**2.5**		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
1,1-Dichloroethane	**1.8**		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
Dichlorofluoromethane	**0.9**	J	ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 13:41	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-24

2042733-15 (Nonpotable Water)
Sample Date: 04/27/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 13:41	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 13:41	LL
Styrene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
Tetrachloroethene	**0.5**	J	ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
Toluene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 13:41	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 13:41	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 13:41	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 13:41	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*98 %*	*04/29/22*	*04/29/22 13:41*
Surrogate: Toluene-d8	*75-120*	*97 %*	*04/29/22*	*04/29/22 13:41*
Surrogate: 4-Bromofluorobenzene	*75-120*	*98 %*	*04/29/22*	*04/29/22 13:41*

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-24A

2042733-16 (Nonpotable Water)
Sample Date: 04/27/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 14:07	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 14:07	LL
Benzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
Bromoform	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
Bromomethane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 14:07	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 14:07	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
Chloroethane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 14:07	LL
Chloroform	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
Chloromethane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 14:07	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 14:07	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 14:07	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TW-24A

2042733-16 (Nonpotable Water)
Sample Date: 04/27/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 14:07	LL
Iodomethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	04/29/22	04/29/22 14:07	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 14:07	LL
Styrene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
Toluene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 14:07	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 14:07	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	04/29/22	04/29/22 14:07	LL
o-Xylene	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	04/29/22	04/29/22 14:07	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*98 %*	*04/29/22*		*04/29/22 14:07*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*04/29/22*		*04/29/22 14:07*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*04/29/22*		*04/29/22 14:07*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

DUP-1

2042733-17 (Nonpotable Water)
Sample Date: 04/27/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 13:56	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 13:56	LL
Benzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 13:56	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 13:56	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 13:56	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 13:56	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 13:56	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 13:56	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
Dichlorodifluoromethane	**2.5**		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
1,1-Dichloroethane	**1.8**		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
Dichlorofluoromethane	**0.9**	J	ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 13:56	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

DUP-1

2042733-17 (Nonpotable Water)
Sample Date: 04/27/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 13:56	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 13:56	LL
Styrene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
Toluene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 13:56	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 13:56	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 13:56	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 13:56	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*101 %*		*05/02/22*	*05/02/22 13:56*		
Surrogate: Toluene-d8			*75-120*	*97 %*		*05/02/22*	*05/02/22 13:56*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*		*05/02/22*	*05/02/22 13:56*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TRIP BLANK

2042733-18 (Nonpotable Water)
Sample Date: 04/27/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 14:20	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 14:20	LL
Benzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 14:20	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 14:20	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 14:20	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 14:20	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 14:20	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 14:20	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

TRIP BLANK

2042733-18 (Nonpotable Water)
Sample Date: 04/27/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 14:20	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/02/22	05/02/22 14:20	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 14:20	LL
Styrene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
Toluene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 14:20	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 14:20	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/02/22	05/02/22 14:20	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/02/22	05/02/22 14:20	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*101 %*	*05/02/22*		*05/02/22 14:20*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*05/02/22*		*05/02/22 14:20*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*	*05/02/22*		*05/02/22 14:20*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204555 - GCMS-WATER-VOLATILES										
Blank (B204555-BLK1)					Prepared & Analyzed: 04/28/22					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204555 - GCMS-WATER-VOLATILES										
Blank (B204555-BLK1)					Prepared & Analyzed: 04/28/22					
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*50.08*			ug/L	*50.00*		*100*	*70-130*		
Surrogate: Toluene-d8	*48.54*			ug/L	*50.00*		*97*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.69*			ug/L	*50.00*		*97*	*75-120*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204555 - GCMS-WATER-VOLATILES										
LCS (B204555-BS1)					Prepared & Analyzed: 04/28/22					
Acetone	10.1		5.0	ug/L	10.00		101	50-150		
Acrylonitrile	4.6	J	5.0	ug/L	5.000		92	50-150		
Benzene	5.1		1.0	ug/L	5.000		101	50-150		
Bromochloromethane	5.3		1.0	ug/L	5.000		105	50-150		
Bromodichloromethane	4.7		1.0	ug/L	5.000		94	50-150		
Bromoform	4.8		1.0	ug/L	5.000		97	50-150		
Bromomethane	7.5		1.0	ug/L	5.000		151	50-150		
2-Butanone (MEK)	10.8		5.0	ug/L	10.00		108	50-150		
Carbon disulfide	5.1		1.0	ug/L	5.000		102	50-150		
Carbon tetrachloride	5.1		1.0	ug/L	5.000		102	50-150		
Chlorobenzene	5.2		1.0	ug/L	5.000		103	50-150		
Chloroethane	4.9		1.0	ug/L	5.000		99	50-150		
Chloroform	5.0		1.0	ug/L	5.000		99	50-150		
Chloromethane	6.4		1.0	ug/L	5.000		128	50-150		
Dibromochloromethane	4.7		1.0	ug/L	5.000		93	50-150		
1,2-Dibromo-3-chloropropane	4.6		1.0	ug/L	5.000		93	50-150		
1,2-Dibromoethane (EDB)	4.5		1.0	ug/L	5.000		90	50-150		
Dibromomethane	4.8		1.0	ug/L	5.000		96	50-150		
1,2-Dichlorobenzene	5.7		1.0	ug/L	5.000		113	50-150		
1,4-Dichlorobenzene	5.6		1.0	ug/L	5.000		112	50-150		
1,1-Dichloroethane	5.0		1.0	ug/L	5.000		101	50-150		
1,2-Dichloroethane	4.9		1.0	ug/L	5.000		98	50-150		
1,1-Dichloroethene	5.2		1.0	ug/L	5.000		103	50-150		
cis-1,2-Dichloroethene	4.7		1.0	ug/L	5.000		95	50-150		
trans-1,2-Dichloroethene	5.0		1.0	ug/L	5.000		99	50-150		
1,2-Dichloropropane	4.8		1.0	ug/L	5.000		97	50-150		
1,3-Dichloropropane	4.7		1.0	ug/L	5.000		94	50-150		
2,2-Dichloropropane	4.8		1.0	ug/L	5.000		96	50-150		
1,1-Dichloropropene	5.1		1.0	ug/L	5.000		102	50-150		
cis-1,3-Dichloropropene	4.7		1.0	ug/L	5.000		93	50-150		
trans-1,3-Dichloropropene	4.7		1.0	ug/L	5.000		94	50-150		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204555 - GCMS-WATER-VOLATILES										
LCS (B204555-BS1)					Prepared & Analyzed: 04/28/22					
Ethylbenzene	5.3		1.0	ug/L	5.000		106	50-150		
2-Hexanone	9.3		5.0	ug/L	10.00		93	50-150		
Methyl tert-butyl ether (MTBE)	4.6		1.0	ug/L	5.000		92	50-150		
4-Methyl-2-pentanone	9.1		5.0	ug/L	10.00		91	50-150		
Methylene chloride	5.6		1.0	ug/L	5.000		111	0-200		
Methyl methacrylate	4.9	J	5.0	ug/L	5.000		97	50-150		
Styrene	5.0		1.0	ug/L	5.000		100	50-150		
1,1,1,2-Tetrachloroethane	4.7		1.0	ug/L	5.000		94	50-150		
1,1,2,2-Tetrachloroethane	4.6		1.0	ug/L	5.000		93	50-150		
Tetrachloroethene	5.1		1.0	ug/L	5.000		102	50-150		
Toluene	5.1		1.0	ug/L	5.000		102	50-150		
1,1,1-Trichloroethane	4.9		1.0	ug/L	5.000		97	50-150		
1,1,2-Trichloroethane	4.4		1.0	ug/L	5.000		88	50-150		
Trichloroethene	5.3		1.0	ug/L	5.000		105	50-150		
Trichlorofluoromethane (Freon 11)	5.4		1.0	ug/L	5.000		108	50-150		
1,2,3-Trichloropropane	4.8		1.0	ug/L	5.000		95	50-150		
Vinyl acetate	3.1		1.0	ug/L	5.000		62	50-150		
Vinyl chloride	5.2		1.0	ug/L	5.000		104	50-150		
o-Xylene	5.3		1.0	ug/L	5.000		105	50-150		
m- & p-Xylenes	10.6		1.0	ug/L	10.00		106	50-150		
Surrogate: 1,2-Dichloroethane-d4	*49.85*			ug/L	*50.00*		*100*	*70-130*		
Surrogate: Toluene-d8	*49.02*			ug/L	*50.00*		*98*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.69*			ug/L	*50.00*		*99*	*75-120*		
Duplicate (B204555-DUP1)			**Source: 2042702-02**		Prepared & Analyzed: 04/28/22					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204555 - GCMS-WATER-VOLATILES										
Duplicate (B204555-DUP1)			**Source: 2042702-02**		Prepared & Analyzed: 04/28/22					
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	ND		1.0	ug/L		ND				20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204555 - GCMS-WATER-VOLATILES										
Duplicate (B204555-DUP1)		**Source: 2042702-02**		Prepared & Analyzed: 04/28/22						
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	ND		1.0	ug/L		ND				20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	ND		1.0	ug/L		ND				20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*49.64*			ug/L	*50.00*		*99*	*70-130*		
Surrogate: Toluene-d8	*48.67*			ug/L	*50.00*		*97*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.38*			ug/L	*50.00*		*97*	*75-120*		
Matrix Spike (B204555-MS1)		**Source: 2042733-02**		Prepared & Analyzed: 04/28/22						
Acetone	11.0		5.0	ug/L	10.00	1.7	94	60-120		
Acrylonitrile	10.4		5.0	ug/L	10.00	ND	104	0-200		
Benzene	11.0		1.0	ug/L	10.00	ND	110	60-120		
Bromochloromethane	11.2		1.0	ug/L	10.00	ND	112	60-120		
Bromodichloromethane	10.4		1.0	ug/L	10.00	ND	104	60-120		
Bromoform	10.5		1.0	ug/L	10.00	ND	105	60-120		
Bromomethane	13.7		1.0	ug/L	10.00	ND	137	60-120		
2-Butanone (MEK)	11.4		5.0	ug/L	10.00	ND	114	60-120		

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204555 - GCMS-WATER-VOLATILES										
Matrix Spike (B204555-MS1)			**Source: 2042733-02**		Prepared & Analyzed: 04/28/22					
Carbon disulfide	10.7		1.0	ug/L	10.00	ND	107	60-120		
Carbon tetrachloride	11.3		1.0	ug/L	10.00	ND	113	60-120		
Chlorobenzene	11.5		1.0	ug/L	10.00	ND	115	60-120		
Chloroethane	10.4		1.0	ug/L	10.00	ND	104	60-120		
Chloroform	11.3		1.0	ug/L	10.00	0.6	106	60-120		
Chloromethane	10.0		1.0	ug/L	10.00	ND	100	60-120		
Dibromochloromethane	10.5		1.0	ug/L	10.00	ND	105	60-120		
1,2-Dibromo-3-chloropropane	9.4		1.0	ug/L	10.00	ND	94	60-120		
1,2-Dibromoethane (EDB)	10.3		1.0	ug/L	10.00	ND	103	60-120		
Dibromomethane	9.8		1.0	ug/L	10.00	ND	98	60-120		
1,2-Dichlorobenzene	11.0		1.0	ug/L	10.00	ND	110	60-120		
1,4-Dichlorobenzene	10.9		1.0	ug/L	10.00	ND	109	60-120		
1,1-Dichloroethane	11.1		1.0	ug/L	10.00	ND	111	60-120		
1,2-Dichloroethane	10.8		1.0	ug/L	10.00	ND	108	60-120		
1,1-Dichloroethene	10.5		1.0	ug/L	10.00	ND	105	60-120		
cis-1,2-Dichloroethene	10.5		1.0	ug/L	10.00	ND	105	60-120		
trans-1,2-Dichloroethene	10.6		1.0	ug/L	10.00	ND	106	60-120		
1,2-Dichloropropane	10.4		1.0	ug/L	10.00	ND	104	60-120		
1,3-Dichloropropane	10.4		1.0	ug/L	10.00	ND	104	60-120		
2,2-Dichloropropane	9.5		1.0	ug/L	10.00	ND	95	60-120		
1,1-Dichloropropene	11.1		1.0	ug/L	10.00	ND	111	60-120		
cis-1,3-Dichloropropene	10.3		1.0	ug/L	10.00	ND	103	60-120		
trans-1,3-Dichloropropene	10.0		1.0	ug/L	10.00	ND	100	60-120		
Ethylbenzene	11.3		1.0	ug/L	10.00	ND	113	60-120		
2-Hexanone	9.5		5.0	ug/L	10.00	ND	95	60-120		
Methyl tert-butyl ether (MTBE)	10.1		1.0	ug/L	10.00	ND	101	60-120		
4-Methyl-2-pentanone	9.6		5.0	ug/L	10.00	ND	96	60-120		
Methylene chloride	10.2		1.0	ug/L	10.00	ND	102	60-120		
Methyl methacrylate	10.1		5.0	ug/L	10.00	ND	101	60-120		
Styrene	10.3		1.0	ug/L	10.00	ND	103	60-120		
1,1,1,2-Tetrachloroethane	11.0		1.0	ug/L	10.00	ND	110	60-120		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204555 - GCMS-WATER-VOLATILES										
Matrix Spike (B204555-MS1)		**Source: 2042733-02**		Prepared & Analyzed: 04/28/22						
1,1,2,2-Tetrachloroethane	9.9		1.0	ug/L	10.00	ND	99	60-120		
Tetrachloroethene	12.6		1.0	ug/L	10.00	0.8	118	60-120		
Toluene	11.2		1.0	ug/L	10.00	ND	112	60-120		
1,1,1-Trichloroethane	10.9		1.0	ug/L	10.00	ND	109	60-120		
1,1,2-Trichloroethane	10.1		1.0	ug/L	10.00	ND	101	60-120		
Trichloroethene	11.8		1.0	ug/L	10.00	ND	118	60-120		
Trichlorofluoromethane (Freon 11)	11.7		1.0	ug/L	10.00	ND	117	60-120		
1,2,3-Trichloropropane	10.3		1.0	ug/L	10.00	ND	103	60-120		
Vinyl acetate	9.0		1.0	ug/L	10.00	ND	90	60-120		
Vinyl chloride	10.4		1.0	ug/L	10.00	ND	104	60-120		
o-Xylene	11.1		1.0	ug/L	10.00	ND	111	60-120		
m- & p-Xylenes	22.6		1.0	ug/L	20.00	ND	113	60-120		
Surrogate: 1,2-Dichloroethane-d4	*48.94*			ug/L	*50.00*		*98*	*70-130*		
Surrogate: Toluene-d8	*48.62*			ug/L	*50.00*		*97*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.07*			ug/L	*50.00*		*98*	*75-120*		
Batch B204578 - GCMS-WATER-VOLATILES										
Blank (B204578-BLK1)				Prepared & Analyzed: 04/29/22						
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204578 - GCMS-WATER-VOLATILES										
Blank (B204578-BLK1)					Prepared & Analyzed: 04/29/22					
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204578 - GCMS-WATER-VOLATILES										
Blank (B204578-BLK1)					Prepared & Analyzed: 04/29/22					
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*49.03*			ug/L	*50.00*		*98*	*70-130*		
Surrogate: Toluene-d8	*48.64*			ug/L	*50.00*		*97*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.33*			ug/L	*50.00*		*97*	*75-120*		
LCS (B204578-BS1)					Prepared & Analyzed: 04/29/22					
Acetone	6.9		5.0	ug/L	10.00		69	50-150		
Acrylonitrile	4.5	J	5.0	ug/L	5.000		90	50-150		
Benzene	4.9		1.0	ug/L	5.000		99	50-150		
Bromochloromethane	4.8		1.0	ug/L	5.000		96	50-150		
Bromodichloromethane	4.7		1.0	ug/L	5.000		93	50-150		
Bromoform	4.9		1.0	ug/L	5.000		98	50-150		
Bromomethane	7.3		1.0	ug/L	5.000		145	50-150		
2-Butanone (MEK)	10.3		5.0	ug/L	10.00		103	50-150		
Carbon disulfide	4.9		1.0	ug/L	5.000		97	50-150		
Carbon tetrachloride	4.9		1.0	ug/L	5.000		97	50-150		
Chlorobenzene	5.0		1.0	ug/L	5.000		100	50-150		
Chloroethane	4.8		1.0	ug/L	5.000		95	50-150		
Chloroform	4.8		1.0	ug/L	5.000		96	50-150		
Chloromethane	5.1		1.0	ug/L	5.000		102	50-150		

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204578 - GCMS-WATER-VOLATILES										
LCS (B204578-BS1)					Prepared & Analyzed: 04/29/22					
Dibromochloromethane	4.8		1.0	ug/L	5.000		95	50-150		
1,2-Dibromo-3-chloropropane	4.8		1.0	ug/L	5.000		97	50-150		
1,2-Dibromoethane (EDB)	4.6		1.0	ug/L	5.000		91	50-150		
Dibromomethane	4.6		1.0	ug/L	5.000		92	50-150		
1,2-Dichlorobenzene	5.5		1.0	ug/L	5.000		110	50-150		
1,4-Dichlorobenzene	5.4		1.0	ug/L	5.000		109	50-150		
1,1-Dichloroethane	4.8		1.0	ug/L	5.000		96	50-150		
1,2-Dichloroethane	4.9		1.0	ug/L	5.000		98	50-150		
1,1-Dichloroethene	4.7		1.0	ug/L	5.000		93	50-150		
cis-1,2-Dichloroethene	4.5		1.0	ug/L	5.000		90	50-150		
trans-1,2-Dichloroethene	4.8		1.0	ug/L	5.000		95	50-150		
1,2-Dichloropropane	4.7		1.0	ug/L	5.000		93	50-150		
1,3-Dichloropropane	4.5		1.0	ug/L	5.000		90	50-150		
2,2-Dichloropropane	4.8		1.0	ug/L	5.000		95	50-150		
1,1-Dichloropropene	4.8		1.0	ug/L	5.000		95	50-150		
cis-1,3-Dichloropropene	4.6		1.0	ug/L	5.000		93	50-150		
trans-1,3-Dichloropropene	4.5		1.0	ug/L	5.000		90	50-150		
Ethylbenzene	5.0		1.0	ug/L	5.000		100	50-150		
2-Hexanone	9.0		5.0	ug/L	10.00		90	50-150		
Methyl tert-butyl ether (MTBE)	4.7		1.0	ug/L	5.000		93	50-150		
4-Methyl-2-pentanone	9.0		5.0	ug/L	10.00		90	50-150		
Methylene chloride	5.5		1.0	ug/L	5.000		111	0-200		
Methyl methacrylate	4.7	J	5.0	ug/L	5.000		94	50-150		
Styrene	4.8		1.0	ug/L	5.000		96	50-150		
1,1,1,2-Tetrachloroethane	4.7		1.0	ug/L	5.000		94	50-150		
1,1,2,2-Tetrachloroethane	4.7		1.0	ug/L	5.000		94	50-150		
Tetrachloroethene	5.0		1.0	ug/L	5.000		99	50-150		
Toluene	4.9		1.0	ug/L	5.000		98	50-150		
1,1,1-Trichloroethane	4.8		1.0	ug/L	5.000		96	50-150		
1,1,2-Trichloroethane	4.4		1.0	ug/L	5.000		88	50-150		
Trichloroethene	5.0		1.0	ug/L	5.000		100	50-150		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204578 - GCMS-WATER-VOLATILES										
LCS (B204578-BS1)					Prepared & Analyzed: 04/29/22					
Trichlorofluoromethane (Freon 11)	5.2		1.0	ug/L	5.000		104	50-150		
1,2,3-Trichloropropane	4.9		1.0	ug/L	5.000		97	50-150		
Vinyl acetate	3.1		1.0	ug/L	5.000		61	50-150		
Vinyl chloride	5.3		1.0	ug/L	5.000		105	50-150		
o-Xylene	4.9		1.0	ug/L	5.000		98	50-150		
m- & p-Xylenes	10.0		1.0	ug/L	10.00		100	50-150		
Surrogate: 1,2-Dichloroethane-d4	*49.17*			ug/L	*50.00*		*98*	*70-130*		
Surrogate: Toluene-d8	*48.70*			ug/L	*50.00*		*97*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.66*			ug/L	*50.00*		*97*	*75-120*		
Duplicate (B204578-DUP1)		**Source: 2042733-12**			Prepared & Analyzed: 04/29/22					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20

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Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204578 - GCMS-WATER-VOLATILES										
Duplicate (B204578-DUP1)			**Source: 2042733-12**		Prepared & Analyzed: 04/29/22					
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	ND		1.0	ug/L		ND				20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	ND		1.0	ug/L		ND				20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	ND		1.0	ug/L		ND				20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20

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Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204578 - GCMS-WATER-VOLATILES										
Duplicate (B204578-DUP1)		**Source: 2042733-12**		Prepared & Analyzed: 04/29/22						
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*50.25*			ug/L	*50.00*		*101*	*70-130*		
Surrogate: Toluene-d8	*48.33*			ug/L	*50.00*		*97*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.39*			ug/L	*50.00*		*97*	*75-120*		
Matrix Spike (B204578-MS1)		**Source: 2042733-13**		Prepared & Analyzed: 04/29/22						
Acetone	8.3		5.0	ug/L	10.00	ND	83	60-120		
Acrylonitrile	10.8		5.0	ug/L	10.00	ND	108	0-200		
Benzene	11.3		1.0	ug/L	10.00	ND	113	60-120		
Bromochloromethane	11.1		1.0	ug/L	10.00	ND	111	60-120		
Bromodichloromethane	10.9		1.0	ug/L	10.00	ND	109	60-120		
Bromoform	10.7		1.0	ug/L	10.00	ND	107	60-120		
Bromomethane	14.5		1.0	ug/L	10.00	ND	145	60-120		
2-Butanone (MEK)	11.0		5.0	ug/L	10.00	ND	110	60-120		
Carbon disulfide	10.7		1.0	ug/L	10.00	ND	107	60-120		
Carbon tetrachloride	11.6		1.0	ug/L	10.00	ND	116	60-120		
Chlorobenzene	11.6		1.0	ug/L	10.00	ND	116	60-120		
Chloroethane	10.6		1.0	ug/L	10.00	ND	106	60-120		
Chloroform	11.3		1.0	ug/L	10.00	ND	113	60-120		
Chloromethane	10.0		1.0	ug/L	10.00	ND	100	60-120		
Dibromochloromethane	10.9		1.0	ug/L	10.00	ND	109	60-120		
1,2-Dibromo-3-chloropropane	9.5		1.0	ug/L	10.00	ND	95	60-120		
1,2-Dibromoethane (EDB)	10.5		1.0	ug/L	10.00	ND	105	60-120		
Dibromomethane	10.3		1.0	ug/L	10.00	ND	103	60-120		
1,2-Dichlorobenzene	11.3		1.0	ug/L	10.00	ND	113	60-120		
1,4-Dichlorobenzene	11.0		1.0	ug/L	10.00	ND	110	60-120		
1,1-Dichloroethane	11.1		1.0	ug/L	10.00	ND	111	60-120		
1,2-Dichloroethane	11.0		1.0	ug/L	10.00	ND	110	60-120		

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Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204578 - GCMS-WATER-VOLATILES										
Matrix Spike (B204578-MS1)		**Source: 2042733-13**		Prepared & Analyzed: 04/29/22						
1,1-Dichloroethene	10.7		1.0	ug/L	10.00	ND	107	60-120		
cis-1,2-Dichloroethene	10.9		1.0	ug/L	10.00	ND	109	60-120		
trans-1,2-Dichloroethene	10.8		1.0	ug/L	10.00	ND	108	60-120		
1,2-Dichloropropane	10.6		1.0	ug/L	10.00	ND	106	60-120		
1,3-Dichloropropane	10.8		1.0	ug/L	10.00	ND	108	60-120		
2,2-Dichloropropane	10.4		1.0	ug/L	10.00	ND	104	60-120		
1,1-Dichloropropene	11.4		1.0	ug/L	10.00	ND	114	60-120		
cis-1,3-Dichloropropene	10.3		1.0	ug/L	10.00	ND	103	60-120		
trans-1,3-Dichloropropene	10.1		1.0	ug/L	10.00	ND	101	60-120		
Ethylbenzene	11.7		1.0	ug/L	10.00	ND	117	60-120		
2-Hexanone	9.7		5.0	ug/L	10.00	ND	97	60-120		
Methyl tert-butyl ether (MTBE)	10.4		1.0	ug/L	10.00	ND	104	60-120		
4-Methyl-2-pentanone	9.7		5.0	ug/L	10.00	ND	97	60-120		
Methylene chloride	10.8		1.0	ug/L	10.00	ND	108	60-120		
Methyl methacrylate	10.5		5.0	ug/L	10.00	ND	105	60-120		
Styrene	10.5		1.0	ug/L	10.00	ND	105	60-120		
1,1,1,2-Tetrachloroethane	11.2		1.0	ug/L	10.00	ND	112	60-120		
1,1,2,2-Tetrachloroethane	10.3		1.0	ug/L	10.00	ND	103	60-120		
Tetrachloroethene	12.0		1.0	ug/L	10.00	ND	120	60-120		
Toluene	11.4		1.0	ug/L	10.00	ND	114	60-120		
1,1,1-Trichloroethane	11.1		1.0	ug/L	10.00	ND	111	60-120		
1,1,2-Trichloroethane	10.4		1.0	ug/L	10.00	ND	104	60-120		
Trichloroethene	11.8		1.0	ug/L	10.00	ND	118	60-120		
Trichlorofluoromethane (Freon 11)	11.8		1.0	ug/L	10.00	ND	118	60-120		
1,2,3-Trichloropropane	10.6		1.0	ug/L	10.00	ND	106	60-120		
Vinyl acetate	9.4		1.0	ug/L	10.00	ND	94	60-120		
Vinyl chloride	10.6		1.0	ug/L	10.00	ND	106	60-120		
o-Xylene	11.3		1.0	ug/L	10.00	ND	113	60-120		
m- & p-Xylenes	23.3		1.0	ug/L	20.00	ND	116	60-120		
Surrogate: 1,2-Dichloroethane-d4	*48.94*			ug/L	*50.00*		*98*	*70-130*		
Surrogate: Toluene-d8	*49.00*			ug/L	*50.00*		*98*	*75-120*		

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Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204578 - GCMS-WATER-VOLATILES										
Matrix Spike (B204578-MS1)		**Source: 2042733-13**			Prepared & Analyzed: 04/29/22					
Surrogate: 4-Bromofluorobenzene	*49.13*			ug/L	*50.00*		*98*	*75-120*		
Batch B205008 - GCMS-WATER-VOLATILES										
Blank (B205008-BLK1)					Prepared & Analyzed: 05/02/22					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						

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Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205008 - GCMS-WATER-VOLATILES										
Blank (B205008-BLK1)					Prepared & Analyzed: 05/02/22					
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*49.39*			ug/L	*50.00*		*99*	*70-130*		

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205008 - GCMS-WATER-VOLATILES										
Blank (B205008-BLK1)					Prepared & Analyzed: 05/02/22					
Surrogate: Toluene-d8	*48.32*			ug/L	*50.00*		*97*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.61*			ug/L	*50.00*		*99*	*75-120*		
LCS (B205008-BS1)					Prepared & Analyzed: 05/02/22					
Acetone	9.4		1.0	ug/L	10.00		94	50-150		
Acrylonitrile	4.7		1.0	ug/L	5.000		94	50-150		
Benzene	5.0		1.0	ug/L	5.000		99	50-150		
Bromochloromethane	5.0		1.0	ug/L	5.000		100	50-150		
Bromodichloromethane	4.9		1.0	ug/L	5.000		97	50-150		
Bromoform	5.0		1.0	ug/L	5.000		99	50-150		
Bromomethane	7.4		1.0	ug/L	5.000		147	50-150		
2-Butanone (MEK)	10.3		1.0	ug/L	10.00		103	50-150		
Carbon disulfide	5.0		1.0	ug/L	5.000		101	50-150		
Carbon tetrachloride	5.2		1.0	ug/L	5.000		104	50-150		
Chlorobenzene	5.3		1.0	ug/L	5.000		105	50-150		
Chloroethane	4.9		1.0	ug/L	5.000		97	50-150		
Chloroform	4.9		1.0	ug/L	5.000		99	50-150		
Chloromethane	5.4		1.0	ug/L	5.000		108	50-150		
Dibromochloromethane	5.1		1.0	ug/L	5.000		102	50-150		
1,2-Dibromo-3-chloropropane	5.1		1.0	ug/L	5.000		101	50-150		
1,2-Dibromoethane (EDB)	4.7		1.0	ug/L	5.000		94	50-150		
Dibromomethane	4.6		1.0	ug/L	5.000		92	50-150		
1,2-Dichlorobenzene	5.6		1.0	ug/L	5.000		113	50-150		
1,4-Dichlorobenzene	5.5		1.0	ug/L	5.000		109	50-150		
1,1-Dichloroethane	4.9		1.0	ug/L	5.000		97	50-150		
1,2-Dichloroethane	5.0		1.0	ug/L	5.000		100	50-150		
1,1-Dichloroethene	4.7		1.0	ug/L	5.000		93	50-150		
cis-1,2-Dichloroethene	4.9		1.0	ug/L	5.000		98	50-150		
trans-1,2-Dichloroethene	4.8		1.0	ug/L	5.000		97	50-150		
1,2-Dichloropropane	4.7		1.0	ug/L	5.000		93	50-150		
1,3-Dichloropropane	4.9		1.0	ug/L	5.000		98	50-150		
2,2-Dichloropropane	4.8		1.0	ug/L	5.000		97	50-150		

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Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205008 - GCMS-WATER-VOLATILES										
LCS (B205008-BS1)					Prepared & Analyzed: 05/02/22					
1,1-Dichloropropene	4.9		1.0	ug/L	5.000		99	50-150		
cis-1,3-Dichloropropene	4.7		1.0	ug/L	5.000		94	50-150		
trans-1,3-Dichloropropene	4.6		1.0	ug/L	5.000		92	50-150		
Ethylbenzene	5.2		1.0	ug/L	5.000		103	50-150		
2-Hexanone	9.6		1.0	ug/L	10.00		96	50-150		
Methyl tert-butyl ether (MTBE)	4.8		1.0	ug/L	5.000		95	50-150		
4-Methyl-2-pentanone	9.4		1.0	ug/L	10.00		94	50-150		
Methylene chloride	5.4		1.0	ug/L	5.000		108	0-200		
Methyl methacrylate	4.9		1.0	ug/L	5.000		98	50-150		
Styrene	5.0		1.0	ug/L	5.000		101	50-150		
1,1,1,2-Tetrachloroethane	5.0		1.0	ug/L	5.000		100	50-150		
1,1,2,2-Tetrachloroethane	4.7		1.0	ug/L	5.000		93	50-150		
Tetrachloroethene	5.1		1.0	ug/L	5.000		101	50-150		
Toluene	5.0		1.0	ug/L	5.000		100	50-150		
1,1,1-Trichloroethane	4.8		1.0	ug/L	5.000		95	50-150		
1,1,2-Trichloroethane	4.7		1.0	ug/L	5.000		93	50-150		
Trichloroethene	5.0		1.0	ug/L	5.000		101	50-150		
Trichlorofluoromethane (Freon 11)	5.3		1.0	ug/L	5.000		106	50-150		
1,2,3-Trichloropropane	4.9		1.0	ug/L	5.000		98	50-150		
Vinyl acetate	2.9		1.0	ug/L	5.000		59	50-150		
Vinyl chloride	5.1		1.0	ug/L	5.000		103	50-150		
o-Xylene	5.2		1.0	ug/L	5.000		104	50-150		
m- & p-Xylenes	10.8		1.0	ug/L	10.00		108	50-150		
Surrogate: 1,2-Dichloroethane-d4	*50.00*			ug/L	*50.00*		*100*	*70-130*		
Surrogate: Toluene-d8	*48.34*			ug/L	*50.00*		*97*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*50.09*			ug/L	*50.00*		*100*	*75-120*		
Duplicate (B205008-DUP1)		**Source: 2042912-01**			Prepared & Analyzed: 05/02/22					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20

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Will Brewington, President

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205008 - GCMS-WATER-VOLATILES										
Duplicate (B205008-DUP1)			**Source: 2042912-01**		Prepared & Analyzed: 05/02/22					
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	2.4		1.0	ug/L		2.3			6	20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205008 - GCMS-WATER-VOLATILES										
Duplicate (B205008-DUP1)		**Source: 2042912-01**		Prepared & Analyzed: 05/02/22						
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	ND		1.0	ug/L		ND				20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	ND		1.0	ug/L		ND				20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*50.00*			ug/L	*50.00*		*100*	*70-130*		
Surrogate: Toluene-d8	*48.42*			ug/L	*50.00*		*97*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.78*			ug/L	*50.00*		*98*	*75-120*		
Matrix Spike (B205008-MS1)		**Source: 2042804-01**		Prepared & Analyzed: 05/02/22						
Acetone	8.2		5.0	ug/L	10.00	ND	82	60-120		
Acrylonitrile	11.4		5.0	ug/L	10.00	ND	114	0-200		
Benzene	11.9		1.0	ug/L	10.00	ND	119	60-120		
Bromochloromethane	11.6		1.0	ug/L	10.00	ND	116	60-120		
Bromodichloromethane	11.1		1.0	ug/L	10.00	ND	111	60-120		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205008 - GCMS-WATER-VOLATILES										
Matrix Spike (B205008-MS1)		**Source: 2042804-01**		Prepared & Analyzed: 05/02/22						
Bromoform	11.2		1.0	ug/L	10.00	ND	112	60-120		
Bromomethane	18.2		1.0	ug/L	10.00	ND	182	60-120		
2-Butanone (MEK)	11.0		5.0	ug/L	10.00	ND	110	60-120		
Carbon disulfide	12.3		1.0	ug/L	10.00	ND	123	60-120		
Carbon tetrachloride	12.5		1.0	ug/L	10.00	ND	125	60-120		
Chlorobenzene	11.7		1.0	ug/L	10.00	ND	117	60-120		
Chloroethane	13.2		1.0	ug/L	10.00	ND	132	60-120		
Chloroform	11.5		1.0	ug/L	10.00	ND	115	60-120		
Chloromethane	15.5		1.0	ug/L	10.00	ND	155	60-120		
Dibromochloromethane	10.8		1.0	ug/L	10.00	ND	108	60-120		
1,2-Dibromo-3-chloropropane	9.6		1.0	ug/L	10.00	ND	96	60-120		
1,2-Dibromoethane (EDB)	10.3		1.0	ug/L	10.00	ND	103	60-120		
Dibromomethane	10.4		1.0	ug/L	10.00	ND	104	60-120		
1,2-Dichlorobenzene	11.5		1.0	ug/L	10.00	ND	115	60-120		
1,4-Dichlorobenzene	11.4		1.0	ug/L	10.00	ND	114	60-120		
1,1-Dichloroethane	11.5		1.0	ug/L	10.00	ND	115	60-120		
1,2-Dichloroethane	11.5		1.0	ug/L	10.00	ND	115	60-120		
1,1-Dichloroethene	11.6		1.0	ug/L	10.00	ND	116	60-120		
cis-1,2-Dichloroethene	10.9		1.0	ug/L	10.00	ND	109	60-120		
trans-1,2-Dichloroethene	11.7		1.0	ug/L	10.00	ND	117	60-120		
1,2-Dichloropropane	11.1		1.0	ug/L	10.00	ND	111	60-120		
1,3-Dichloropropane	10.7		1.0	ug/L	10.00	ND	107	60-120		
2,2-Dichloropropane	9.8		1.0	ug/L	10.00	ND	98	60-120		
1,1-Dichloropropene	12.1		1.0	ug/L	10.00	ND	121	60-120		
cis-1,3-Dichloropropene	10.1		1.0	ug/L	10.00	ND	101	60-120		
trans-1,3-Dichloropropene	10.0		1.0	ug/L	10.00	ND	100	60-120		
Ethylbenzene	11.8		1.0	ug/L	10.00	ND	118	60-120		
2-Hexanone	8.6		5.0	ug/L	10.00	ND	86	60-120		
Methyl tert-butyl ether (MTBE)	11.1		1.0	ug/L	10.00	ND	111	60-120		
4-Methyl-2-pentanone	8.7		5.0	ug/L	10.00	ND	87	60-120		
Methylene chloride	11.0		1.0	ug/L	10.00	ND	110	60-120		

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205008 - GCMS-WATER-VOLATILES										
Matrix Spike (B205008-MS1)			**Source: 2042804-01**		Prepared & Analyzed: 05/02/22					
Methyl methacrylate	9.8		5.0	ug/L	10.00	ND	98	60-120		
Styrene	10.6		1.0	ug/L	10.00	ND	106	60-120		
1,1,1,2-Tetrachloroethane	11.2		1.0	ug/L	10.00	ND	112	60-120		
1,1,2,2-Tetrachloroethane	10.3		1.0	ug/L	10.00	ND	103	60-120		
Tetrachloroethene	12.1		1.0	ug/L	10.00	ND	121	60-120		
Toluene	11.3		1.0	ug/L	10.00	ND	113	60-120		
1,1,1-Trichloroethane	11.6		1.0	ug/L	10.00	ND	116	60-120		
1,1,2-Trichloroethane	10.2		1.0	ug/L	10.00	ND	102	60-120		
Trichloroethene	12.1		1.0	ug/L	10.00	ND	121	60-120		
Trichlorofluoromethane (Freon 11)	14.1		1.0	ug/L	10.00	ND	141	60-120		
1,2,3-Trichloropropane	10.2		1.0	ug/L	10.00	ND	102	60-120		
Vinyl acetate	8.9		1.0	ug/L	10.00	ND	89	60-120		
Vinyl chloride	14.9		1.0	ug/L	10.00	ND	149	60-120		
o-Xylene	11.4		1.0	ug/L	10.00	ND	114	60-120		
m- & p-Xylenes	23.7		1.0	ug/L	20.00	ND	118	60-120		
Surrogate: 1,2-Dichloroethane-d4	*48.91*			ug/L	*50.00*		*98*	*70-130*		
Surrogate: Toluene-d8	*48.15*			ug/L	*50.00*		*96*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.70*			ug/L	*50.00*		*97*	*75-120*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/04/22 16:31

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MP. SPECTRAL
Project	MLF-SPRING 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

2042733-01 A

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260 (1)											
1	TW-15	3	4/26/22	950	✓		GW	✓											
2	TW-15B			1025													-	0	2
3	TW-16			1145													-	0	3
4	TW-16A			1110													-	0	4
5	TW-17			1245													-	0	5
6	TW-17A			1320													-	0	6
7	TW-18			1415													-	0	7
8	TW-19			1500													-	0	8
9	TW-20R		4/27/22	950													-	0	9
10	TW-21			945													-	1	0
11	TW-21A			1020													-	1	1
12	TW-22			1215													-	1	2

	Signature	Date	Time	Comments
Relinquished by	S A Brown	4/27/22	1640	(1) APPENDIX I LIST OF 47 VOCs, MTBE +
Received by	[illegible]	4/27/22	1640	2 FREONS
Relinquished by				
Received by				
Relinquished by				
Received by				

Cooler Temp on Arrival: 6.0 Deg. C

Rev. Aug. 2018

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MD. SPECTRAL
Project	MLF- SPRING 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Analytical Parameters: VOCs - METHOD 8260												
1	TW-22A	3	4/27/22	1250	✓		GW	✓										-	1	3
2	TW-22B	↓	↓	1140	↓		↓	↓										-	1	4
3	TW-24			1400														-	1	5
4	TW-24A			1435														-	1	6
5	DUP-1			—			QA											-	1	7
6	TRIP BLANK	2		—			QA											-	1	8
7																				
8																				
9																				
10																				
11																				
12																				

	Signature	Date	Time	Comments
Relinquished by	DABrown	4/27/22	1640	① APPENDIX I LIST OF 47 VOCs, MTBE +
Received by	[illegible]	4/27/22	1640	2 FREONS (DCDFM + DCFM)
Relinquished by				
Received by				
Relinquished by				STANDARD REPORT
Received by				

Cooler Temp on Arrival: 6.0 Deg. C

Rev. Aug. 2018

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

01 March 2022

Steve Brown
Environmental Monitoring and Assessment
207 East Sixth Street
Lititz, PA 17543
RE: MILLERSVILLE LANDFILL

Enclosed are the results of analyses for samples received by the laboratory on 02/21/22 15:39.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Rabecka Koons
Quality Assurance Officer

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: P-417-Z4
Project Manager: Steve Brown

Reported:
03/01/22 16:16

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
P-417-Z4		2022109-01	Drinking Water	02/21/22 15:00	02/21/22 15:39
TRIP BLANK		2022109-02	Drinking Water	02/21/22 00:00	02/21/22 15:39

Rabecka Koons

Rabecka Koons, Quality Assurance Officer

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: P-417-Z4
Project Manager: Steve Brown

Reported:
03/01/22 16:16

P-417-Z4

2022109-01 (Drinking Water)
Sample Date: 02/21/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	02/24/22	02/24/22 11:38	WB
Acrylonitrile	ND		ug/L	10.0	2.00	1	02/24/22	02/24/22 11:38	WB
Benzene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
Bromochloromethane	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
Bromodichloromethane	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
Bromoform	ND		ug/L	0.500	0.200	1	02/24/22	02/24/22 11:38	WB
Bromomethane	ND		ug/L	0.500	0.500	1	02/24/22	02/24/22 11:38	WB
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	02/24/22	02/24/22 11:38	WB
Carbon disulfide	ND		ug/L	0.500	0.400	1	02/24/22	02/24/22 11:38	WB
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
Chlorobenzene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
Chloroethane	ND		ug/L	0.500	0.200	1	02/24/22	02/24/22 11:38	WB
Chloroform	ND		ug/L	0.500	0.500	1	02/24/22	02/24/22 11:38	WB
Chloromethane	ND		ug/L	0.500	0.200	1	02/24/22	02/24/22 11:38	WB
Dibromochloromethane	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	02/24/22	02/24/22 11:38	WB
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
Dibromomethane	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	02/24/22	02/24/22 11:38	WB
Dichlorodifluoromethane	**0.270**	J	ug/L	0.500	0.200	1	02/24/22	02/24/22 11:38	WB
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	02/24/22	02/24/22 11:38	WB
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
Ethylbenzene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: P-417-Z4
Project Manager: Steve Brown

Reported:
03/01/22 16:16

P-417-Z4

2022109-01 (Drinking Water)
Sample Date: 02/21/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	02/24/22	02/24/22 11:38	WB
Iodomethane	ND		ug/L	0.500	0.500	1	02/24/22	02/24/22 11:38	WB
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	02/24/22	02/24/22 11:38	WB
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
Methylene chloride	ND		ug/L	0.500	0.500	1	02/24/22	02/24/22 11:38	WB
Styrene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
Tetrachloroethene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
Toluene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
Trichloroethene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	02/24/22	02/24/22 11:38	WB
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	02/24/22	02/24/22 11:38	WB
Vinyl acetate	ND		ug/L	0.500	0.500	1	02/24/22	02/24/22 11:38	WB
Vinyl chloride	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
o-Xylene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 11:38	WB
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	02/24/22	02/24/22 11:38	WB
Surrogate: 4-Bromofluorobenzene			*80-120*	*97 %*		*02/24/22*	*02/24/22 11:38*		
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*101 %*		*02/24/22*	*02/24/22 11:38*		

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Maryland spectral Services

Analytical Chemistry Services

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Project: MILLERSVILLE LANDFILL

Project Number: P-417-Z4
Project Manager: Steve Brown

Reported:
03/01/22 16:16

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2022109-02 (Drinking Water)
Sample Date: 02/21/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	**3.45**	L, J	ug/L	5.00	3.00	1	02/24/22	02/24/22 12:01	WB
Acrylonitrile	ND		ug/L	10.0	2.00	1	02/24/22	02/24/22 12:01	WB
Benzene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
Bromochloromethane	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
Bromodichloromethane	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
Bromoform	ND		ug/L	0.500	0.200	1	02/24/22	02/24/22 12:01	WB
Bromomethane	ND		ug/L	0.500	0.500	1	02/24/22	02/24/22 12:01	WB
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	02/24/22	02/24/22 12:01	WB
Carbon disulfide	ND		ug/L	0.500	0.400	1	02/24/22	02/24/22 12:01	WB
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
Chlorobenzene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
Chloroethane	ND		ug/L	0.500	0.200	1	02/24/22	02/24/22 12:01	WB
Chloroform	**0.680**	L	ug/L	0.500	0.500	1	02/24/22	02/24/22 12:01	WB
Chloromethane	ND		ug/L	0.500	0.200	1	02/24/22	02/24/22 12:01	WB
Dibromochloromethane	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	02/24/22	02/24/22 12:01	WB
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
Dibromomethane	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	02/24/22	02/24/22 12:01	WB
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	02/24/22	02/24/22 12:01	WB
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	02/24/22	02/24/22 12:01	WB
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
Ethylbenzene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB

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Project: MILLERSVILLE LANDFILL

Project Number: P-417-Z4
Project Manager: Steve Brown

Reported:
03/01/22 16:16

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2022109-02 (Drinking Water)
Sample Date: 02/21/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	02/24/22	02/24/22 12:01	WB
Iodomethane	ND		ug/L	0.500	0.500	1	02/24/22	02/24/22 12:01	WB
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	02/24/22	02/24/22 12:01	WB
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
Methylene chloride	**0.680**	L	ug/L	0.500	0.500	1	02/24/22	02/24/22 12:01	WB
Styrene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
Tetrachloroethene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
Toluene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
Trichloroethene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	02/24/22	02/24/22 12:01	WB
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	02/24/22	02/24/22 12:01	WB
Vinyl acetate	ND		ug/L	0.500	0.500	1	02/24/22	02/24/22 12:01	WB
Vinyl chloride	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
o-Xylene	ND		ug/L	0.500	0.100	1	02/24/22	02/24/22 12:01	WB
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	02/24/22	02/24/22 12:01	WB
Surrogate: 4-Bromofluorobenzene			*80-120*	*96 %*		*02/24/22*	*02/24/22 12:01*		
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*104 %*		*02/24/22*	*02/24/22 12:01*		

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Project: MILLERSVILLE LANDFILL

Project Number: P-417-Z4
Project Manager: Steve Brown

Reported:
03/01/22 16:16

Volatile Organics by EPA 524.2 (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B202427 - GCMS-WATER-VOLATILES										
Blank (B202427-BLK1)					Prepared & Analyzed: 02/24/22					
Acetone	ND		5.00	ug/L						
Acrylonitrile	ND		10.0	ug/L						
Benzene	ND		0.500	ug/L						
Bromochloromethane	ND		0.500	ug/L						
Bromodichloromethane	ND		0.500	ug/L						
Bromoform	ND		0.500	ug/L						
Bromomethane	ND		0.500	ug/L						
2-Butanone (MEK)	ND		5.00	ug/L						
Carbon disulfide	ND		0.500	ug/L						
Carbon tetrachloride	ND		0.500	ug/L						
Chlorobenzene	ND		0.500	ug/L						
Chloroethane	ND		0.500	ug/L						
Chloroform	ND		0.500	ug/L						
Chloromethane	ND		0.500	ug/L						
Dibromochloromethane	ND		0.500	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.00	ug/L						
1,2-Dibromoethane (EDB)	ND		0.500	ug/L						
Dibromomethane	ND		0.500	ug/L						
1,2-Dichlorobenzene	ND		0.500	ug/L						
1,4-Dichlorobenzene	ND		0.500	ug/L						
trans-1,4-Dichloro-2-butene	ND		5.00	ug/L						
Dichlorodifluoromethane	ND		0.500	ug/L						
1,1-Dichloroethane	ND		0.500	ug/L						
1,2-Dichloroethane	ND		0.500	ug/L						
1,1-Dichloroethene	ND		0.500	ug/L						
cis-1,2-Dichloroethene	ND		0.500	ug/L						
trans-1,2-Dichloroethene	ND		0.500	ug/L						
Dichlorofluoromethane	ND		0.500	ug/L						
1,2-Dichloropropane	ND		0.500	ug/L						
cis-1,3-Dichloropropene	ND		0.500	ug/L						
trans-1,3-Dichloropropene	ND		0.500	ug/L						

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: P-417-Z4
Project Manager: Steve Brown

Reported:
03/01/22 16:16

Volatile Organics by EPA 524.2 (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B202427 - GCMS-WATER-VOLATILES										
Blank (B202427-BLK1)					Prepared & Analyzed: 02/24/22					
Ethylbenzene	ND		0.500	ug/L						
2-Hexanone	ND		5.00	ug/L						
Iodomethane	ND		0.500	ug/L						
Methyl tert-butyl ether (MTBE)	ND		0.500	ug/L						
4-Methyl-2-pentanone	ND		5.00	ug/L						
Methylene chloride	ND		0.500	ug/L						
Styrene	ND		0.500	ug/L						
1,1,1,2-Tetrachloroethane	ND		0.500	ug/L						
1,1,2,2-Tetrachloroethane	ND		0.500	ug/L						
Tetrachloroethene	ND		0.500	ug/L						
Toluene	ND		0.500	ug/L						
1,1,1-Trichloroethane	ND		0.500	ug/L						
1,1,2-Trichloroethane	ND		0.500	ug/L						
Trichloroethene	ND		0.500	ug/L						
Trichlorofluoromethane (Freon 11)	ND		0.500	ug/L						
1,2,3-Trichloropropane	ND		0.500	ug/L						
Vinyl acetate	ND		0.500	ug/L						
Vinyl chloride	ND		0.500	ug/L						
o-Xylene	ND		0.500	ug/L						
m- & p-Xylenes	ND		0.500	ug/L						
Surrogate: 4-Bromofluorobenzene	*4.81*			ug/L	*5.000*		*96*	*80-120*		
Surrogate: 1,2-Dichlorobenzene-d4	*5.13*			ug/L	*5.000*		*103*	*80-120*		
LCS (B202427-BS1)					Prepared & Analyzed: 02/24/22					
Acetone	2.05	J	5.00	ug/L	1.000		205	50-150		
Acrylonitrile	0.600	J	10.0	ug/L	0.5000		120	50-150		
Benzene	0.560		0.500	ug/L	0.5000		112	50-150		
Bromochloromethane	0.630		0.500	ug/L	0.5000		126	50-150		
Bromodichloromethane	0.580		0.500	ug/L	0.5000		116	50-150		
Bromoform	0.520		0.500	ug/L	0.5000		104	50-150		
Bromomethane	0.580		0.500	ug/L	0.5000		116	50-150		
2-Butanone (MEK)	0.110	J	5.00	ug/L	1.000		11	50-150		

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Project: MILLERSVILLE LANDFILL

Project Number: P-417-Z4
Project Manager: Steve Brown

Reported:
03/01/22 16:16

Volatile Organics by EPA 524.2 (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B202427 - GCMS-WATER-VOLATILES										
LCS (B202427-BS1)					Prepared & Analyzed: 02/24/22					
Carbon disulfide	0.670		0.500	ug/L	0.5000		134	50-150		
Carbon tetrachloride	0.580		0.500	ug/L	0.5000		116	50-150		
Chlorobenzene	0.540		0.500	ug/L	0.5000		108	50-150		
Chloroethane	0.640		0.500	ug/L	0.5000		128	50-150		
Chloroform	0.620		0.500	ug/L	0.5000		124	50-150		
Chloromethane	0.770		0.500	ug/L	0.5000		154	50-150		
Dibromochloromethane	0.480	J	0.500	ug/L	0.5000		96	50-150		
1,2-Dibromo-3-chloropropane	0.580	J	1.00	ug/L	0.5000		116	50-150		
1,2-Dibromoethane (EDB)	0.560		0.500	ug/L	0.5000		112	50-150		
Dibromomethane	0.620		0.500	ug/L	0.5000		124	50-150		
1,2-Dichlorobenzene	0.600		0.500	ug/L	0.5000		120	50-150		
1,4-Dichlorobenzene	0.580		0.500	ug/L	0.5000		116	50-150		
trans-1,4-Dichloro-2-butene	0.650	J	5.00	ug/L	0.5000		130	50-150		
Dichlorodifluoromethane	0.580		0.500	ug/L	0.5000		116	50-150		
1,1-Dichloroethane	0.580		0.500	ug/L	0.5000		116	50-150		
1,2-Dichloroethane	0.630		0.500	ug/L	0.5000		126	50-150		
1,1-Dichloroethene	0.640		0.500	ug/L	0.5000		128	50-150		
cis-1,2-Dichloroethene	0.620		0.500	ug/L	0.5000		124	50-150		
trans-1,2-Dichloroethene	0.670		0.500	ug/L	0.5000		134	50-150		
Dichlorofluoromethane	0.520		0.500	ug/L	0.5000		104	50-150		
1,2-Dichloropropane	0.570		0.500	ug/L	0.5000		114	50-150		
cis-1,3-Dichloropropene	0.530		0.500	ug/L	0.5000		106	50-150		
trans-1,3-Dichloropropene	0.500		0.500	ug/L	0.5000		100	50-150		
Ethylbenzene	0.520		0.500	ug/L	0.5000		104	50-150		
2-Hexanone	0.900	J	5.00	ug/L	1.000		90	50-150		
Iodomethane	0.200	J	0.500	ug/L	0.5000		40	50-150		
Methyl tert-butyl ether (MTBE)	0.450	J	0.500	ug/L	0.5000		90	50-150		
4-Methyl-2-pentanone	1.03	J	5.00	ug/L	1.000		103	50-150		
Methylene chloride	0.980		0.500	ug/L	0.5000		196	50-150		
Styrene	0.490	J	0.500	ug/L	0.5000		98	50-150		
1,1,1,2-Tetrachloroethane	0.520		0.500	ug/L	0.5000		104	50-150		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: P-417-Z4
Project Manager: Steve Brown

Reported:
03/01/22 16:16

Volatile Organics by EPA 524.2 (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B202427 - GCMS-WATER-VOLATILES										
LCS (B202427-BS1)					Prepared & Analyzed: 02/24/22					
1,1,2,2-Tetrachloroethane	0.530		0.500	ug/L	0.5000		106	50-150		
Tetrachloroethene	0.620		0.500	ug/L	0.5000		124	50-150		
Toluene	0.540		0.500	ug/L	0.5000		108	50-150		
1,1,1-Trichloroethane	0.610		0.500	ug/L	0.5000		122	50-150		
1,1,2-Trichloroethane	0.580		0.500	ug/L	0.5000		116	50-150		
Trichloroethene	0.570		0.500	ug/L	0.5000		114	50-150		
Trichlorofluoromethane (Freon 11)	0.640		0.500	ug/L	0.5000		128	50-150		
1,2,3-Trichloropropane	0.530		0.500	ug/L	0.5000		106	50-150		
Vinyl acetate	0.430	J	0.500	ug/L	0.5000		86	50-150		
Vinyl chloride	0.610		0.500	ug/L	0.5000		122	50-150		
o-Xylene	0.520		0.500	ug/L	0.5000		104	50-150		
m- & p-Xylenes	0.990		0.500	ug/L	1.000		99	50-150		
Surrogate: 4-Bromofluorobenzene	*5.12*			ug/L	*5.000*		*102*	*80-120*		
Surrogate: 1,2-Dichlorobenzene-d4	*5.34*			ug/L	*5.000*		*107*	*80-120*		

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Rabecka Koons, Quality Assurance Officer

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: P-417-Z4
Project Manager: Steve Brown

Reported:
03/01/22 16:16

Notes and Definitions

L	Analyte is a possible laboratory contaminant
J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MD. SPECTRAL
Project	P-417-Z4	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date 2/21/22	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 524.2											
1	P-417-Z4	3	~~1500~~ 58	1500	✓		DW	✓									2022109-01		
2	TRIP BLANK	2	—	—			QA	✓									↓		-02
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

	Signature	Date	Time	Comments
Relinquished by	[signature]	2/21/22	1530	① APPENDIX I LIST OF 47 VOCs, MTBE,
Received by		2/21/22	1530	2 FREONS (DCDFM + DCFM) AND ROUTINE LIST
Relinquished by				of VOCs on METHOD 524.2 LIST
Received by	[signature]	2/21/22	1539	
Relinquished by				
Received by				

Cooler Temp on Arrival: 14.0 Deg. C

Rev. Aug. 2018

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

20 April 2022

Steve Brown
Environmental Monitoring and Assessment
207 East Sixth Street
Lititz, PA 17543
RE: MILLERSVILLE LANDFILL

Enclosed are the results of analyses for samples received by the laboratory on 04/13/22 15:10.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Will Brewington
President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: RESAMPLING
Project Manager: Steve Brown

Reported:
04/20/22 15:51

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
P-417-Z4		2041324-01	Drinking Water	04/13/22 12:00	04/13/22 15:10
TRIP BLANK		2041324-02	Drinking Water	04/13/22 00:00	04/13/22 15:10

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
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410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: RESAMPLING
Project Manager: Steve Brown

Reported:
04/20/22 15:51

P-417-Z4

2041324-01 (Drinking Water)
Sample Date: 04/13/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	04/18/22	04/18/22 19:49	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	04/18/22	04/18/22 19:49	LL
Benzene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
Bromoform	ND		ug/L	0.500	0.200	1	04/18/22	04/18/22 19:49	LL
Bromomethane	ND		ug/L	0.500	0.500	1	04/18/22	04/18/22 19:49	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	04/18/22	04/18/22 19:49	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	04/18/22	04/18/22 19:49	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
Chloroethane	ND		ug/L	0.500	0.200	1	04/18/22	04/18/22 19:49	LL
Chloroform	ND		ug/L	0.500	0.500	1	04/18/22	04/18/22 19:49	LL
Chloromethane	ND		ug/L	0.500	0.200	1	04/18/22	04/18/22 19:49	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	04/18/22	04/18/22 19:49	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	04/18/22	04/18/22 19:49	LL
Dichlorodifluoromethane	**0.280**	J	ug/L	0.500	0.200	1	04/18/22	04/18/22 19:49	LL
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	04/18/22	04/18/22 19:49	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL

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Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: RESAMPLING
Project Manager: Steve Brown

Reported:
04/20/22 15:51

P-417-Z4

2041324-01 (Drinking Water)
Sample Date: 04/13/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	04/18/22	04/18/22 19:49	LL
Iodomethane	ND		ug/L	0.500	0.500	1	04/18/22	04/18/22 19:49	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	04/18/22	04/18/22 19:49	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
Methylene chloride	ND		ug/L	0.500	0.500	1	04/18/22	04/18/22 19:49	LL
Styrene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
Tetrachloroethene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
Toluene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	04/18/22	04/18/22 19:49	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	04/18/22	04/18/22 19:49	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	04/18/22	04/18/22 19:49	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
o-Xylene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:49	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	04/18/22	04/18/22 19:49	LL
Surrogate: 4-Bromofluorobenzene			*80-120*	*102 %*		*04/18/22*	*04/18/22 19:49*		
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*104 %*		*04/18/22*	*04/18/22 19:49*		

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Will Brewington, President

Maryland spectral Services

Analytical Chemistry Services

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Baltimore MD 21227
410-247-7600
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: RESAMPLING
Project Manager: Steve Brown

Reported:
04/20/22 15:51

TRIP BLANK

2041324-02 (Drinking Water)
Sample Date: 04/13/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	04/18/22	04/18/22 19:25	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	04/18/22	04/18/22 19:25	LL
Benzene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
Bromoform	ND		ug/L	0.500	0.200	1	04/18/22	04/18/22 19:25	LL
Bromomethane	ND		ug/L	0.500	0.500	1	04/18/22	04/18/22 19:25	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	04/18/22	04/18/22 19:25	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	04/18/22	04/18/22 19:25	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
Chloroethane	ND		ug/L	0.500	0.200	1	04/18/22	04/18/22 19:25	LL
Chloroform	ND		ug/L	0.500	0.500	1	04/18/22	04/18/22 19:25	LL
Chloromethane	ND		ug/L	0.500	0.200	1	04/18/22	04/18/22 19:25	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	04/18/22	04/18/22 19:25	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	04/18/22	04/18/22 19:25	LL
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	04/18/22	04/18/22 19:25	LL
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	04/18/22	04/18/22 19:25	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL

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Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: RESAMPLING
Project Manager: Steve Brown

Reported:
04/20/22 15:51

TRIP BLANK

2041324-02 (Drinking Water)
Sample Date: 04/13/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	04/18/22	04/18/22 19:25	LL
Iodomethane	ND		ug/L	0.500	0.500	1	04/18/22	04/18/22 19:25	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	04/18/22	04/18/22 19:25	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
Methylene chloride	ND		ug/L	0.500	0.500	1	04/18/22	04/18/22 19:25	LL
Styrene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
Tetrachloroethene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
Toluene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	04/18/22	04/18/22 19:25	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	04/18/22	04/18/22 19:25	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	04/18/22	04/18/22 19:25	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
o-Xylene	ND		ug/L	0.500	0.100	1	04/18/22	04/18/22 19:25	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	04/18/22	04/18/22 19:25	LL
Surrogate: 4-Bromofluorobenzene			*80-120*	*103 %*			*04/18/22*	*04/18/22 19:25*	
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*102 %*			*04/18/22*	*04/18/22 19:25*	

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Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: RESAMPLING
Project Manager: Steve Brown

Reported:
04/20/22 15:51

Volatile Organics by EPA 524.2 (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204320 - GCMS-WATER-VOLATILES										
Blank (B204320-BLK1)					Prepared & Analyzed: 04/18/22					
Acetone	ND		5.00	ug/L						
Acrylonitrile	ND		10.0	ug/L						
Benzene	ND		0.500	ug/L						
Bromochloromethane	ND		0.500	ug/L						
Bromodichloromethane	ND		0.500	ug/L						
Bromoform	ND		0.500	ug/L						
Bromomethane	ND		0.500	ug/L						
2-Butanone (MEK)	ND		5.00	ug/L						
Carbon disulfide	ND		0.500	ug/L						
Carbon tetrachloride	ND		0.500	ug/L						
Chlorobenzene	ND		0.500	ug/L						
Chloroethane	ND		0.500	ug/L						
Chloroform	ND		0.500	ug/L						
Chloromethane	ND		0.500	ug/L						
Dibromochloromethane	ND		0.500	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.00	ug/L						
1,2-Dibromoethane (EDB)	ND		0.500	ug/L						
Dibromomethane	ND		0.500	ug/L						
1,2-Dichlorobenzene	ND		0.500	ug/L						
1,4-Dichlorobenzene	ND		0.500	ug/L						
trans-1,4-Dichloro-2-butene	ND		5.00	ug/L						
Dichlorodifluoromethane	ND		0.500	ug/L						
1,1-Dichloroethane	ND		0.500	ug/L						
1,2-Dichloroethane	ND		0.500	ug/L						
1,1-Dichloroethene	ND		0.500	ug/L						
cis-1,2-Dichloroethene	ND		0.500	ug/L						
trans-1,2-Dichloroethene	ND		0.500	ug/L						
Dichlorofluoromethane	ND		0.500	ug/L						
1,2-Dichloropropane	ND		0.500	ug/L						
cis-1,3-Dichloropropene	ND		0.500	ug/L						
trans-1,3-Dichloropropene	ND		0.500	ug/L						

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Will Brewington, President

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Baltimore MD 21227
410-247-7600
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: RESAMPLING
Project Manager: Steve Brown

Reported:
04/20/22 15:51

Volatile Organics by EPA 524.2 (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204320 - GCMS-WATER-VOLATILES										
Blank (B204320-BLK1)					Prepared & Analyzed: 04/18/22					
Ethylbenzene	ND		0.500	ug/L						
2-Hexanone	ND		5.00	ug/L						
Iodomethane	ND		0.500	ug/L						
Methyl tert-butyl ether (MTBE)	ND		0.500	ug/L						
4-Methyl-2-pentanone	ND		5.00	ug/L						
Methylene chloride	ND		0.500	ug/L						
Styrene	ND		0.500	ug/L						
1,1,1,2-Tetrachloroethane	ND		0.500	ug/L						
1,1,2,2-Tetrachloroethane	ND		0.500	ug/L						
Tetrachloroethene	ND		0.500	ug/L						
Toluene	ND		0.500	ug/L						
1,1,1-Trichloroethane	ND		0.500	ug/L						
1,1,2-Trichloroethane	ND		0.500	ug/L						
Trichloroethene	ND		0.500	ug/L						
Trichlorofluoromethane (Freon 11)	ND		0.500	ug/L						
1,2,3-Trichloropropane	ND		0.500	ug/L						
Vinyl acetate	ND		0.500	ug/L						
Vinyl chloride	ND		0.500	ug/L						
o-Xylene	ND		0.500	ug/L						
m- & p-Xylenes	ND		0.500	ug/L						
Surrogate: 4-Bromofluorobenzene	*5.04*			ug/L	*5.000*		*101*	*80-120*		
Surrogate: 1,2-Dichlorobenzene-d4	*5.06*			ug/L	*5.000*		*101*	*80-120*		
LCS (B204320-BS1)					Prepared & Analyzed: 04/18/22					
Acetone	1.81	J	5.00	ug/L	1.000		181	50-150		
Acrylonitrile	0.570	J	10.0	ug/L	0.5000		114	50-150		
Benzene	0.540		0.500	ug/L	0.5000		108	50-150		
Bromochloromethane	0.540		0.500	ug/L	0.5000		108	50-150		
Bromodichloromethane	0.470	J	0.500	ug/L	0.5000		94	50-150		
Bromoform	0.410	J	0.500	ug/L	0.5000		82	50-150		
Bromomethane	0.780		0.500	ug/L	0.5000		156	50-150		
2-Butanone (MEK)	0.300	J	5.00	ug/L	1.000		30	50-150		

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: RESAMPLING
Project Manager: Steve Brown

Reported:
04/20/22 15:51

Volatile Organics by EPA 524.2 (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204320 - GCMS-WATER-VOLATILES										
LCS (B204320-BS1)					Prepared & Analyzed: 04/18/22					
Carbon disulfide	0.630		0.500	ug/L	0.5000		126	50-150		
Carbon tetrachloride	0.510		0.500	ug/L	0.5000		102	50-150		
Chlorobenzene	0.540		0.500	ug/L	0.5000		108	50-150		
Chloroethane	0.690		0.500	ug/L	0.5000		138	50-150		
Chloroform	0.560		0.500	ug/L	0.5000		112	50-150		
Chloromethane	0.690		0.500	ug/L	0.5000		138	50-150		
Dibromochloromethane	0.460	J	0.500	ug/L	0.5000		92	50-150		
1,2-Dibromo-3-chloropropane	0.470	J	1.00	ug/L	0.5000		94	50-150		
1,2-Dibromoethane (EDB)	0.450	J	0.500	ug/L	0.5000		90	50-150		
Dibromomethane	0.530		0.500	ug/L	0.5000		106	50-150		
1,2-Dichlorobenzene	0.580		0.500	ug/L	0.5000		116	50-150		
1,4-Dichlorobenzene	0.570		0.500	ug/L	0.5000		114	50-150		
trans-1,4-Dichloro-2-butene	0.390	J	5.00	ug/L	0.5000		78	50-150		
Dichlorodifluoromethane	0.710		0.500	ug/L	0.5000		142	50-150		
1,1-Dichloroethane	0.590		0.500	ug/L	0.5000		118	50-150		
1,2-Dichloroethane	0.530		0.500	ug/L	0.5000		106	50-150		
1,1-Dichloroethene	0.590		0.500	ug/L	0.5000		118	50-150		
cis-1,2-Dichloroethene	0.580		0.500	ug/L	0.5000		116	50-150		
trans-1,2-Dichloroethene	0.560		0.500	ug/L	0.5000		112	50-150		
Dichlorofluoromethane	0.500		0.500	ug/L	0.5000		100	50-150		
1,2-Dichloropropane	0.590		0.500	ug/L	0.5000		118	50-150		
cis-1,3-Dichloropropene	0.450	J	0.500	ug/L	0.5000		90	50-150		
trans-1,3-Dichloropropene	0.420	J	0.500	ug/L	0.5000		84	50-150		
Ethylbenzene	0.520		0.500	ug/L	0.5000		104	50-150		
2-Hexanone	1.15	J	5.00	ug/L	1.000		115	50-150		
Iodomethane	0.660		0.500	ug/L	0.5000		132	50-150		
Methyl tert-butyl ether (MTBE)	0.520		0.500	ug/L	0.5000		104	50-150		
4-Methyl-2-pentanone	0.920	J	5.00	ug/L	1.000		92	50-150		
Methylene chloride	1.18		0.500	ug/L	0.5000		236	50-150		
Styrene	0.460	J	0.500	ug/L	0.5000		92	50-150		
1,1,1,2-Tetrachloroethane	0.420	J	0.500	ug/L	0.5000		84	50-150		

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: RESAMPLING
Project Manager: Steve Brown

Reported:
04/20/22 15:51

Volatile Organics by EPA 524.2 (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204320 - GCMS-WATER-VOLATILES										
LCS (B204320-BS1)					Prepared & Analyzed: 04/18/22					
1,1,2,2-Tetrachloroethane	0.460	J	0.500	ug/L	0.5000		92	50-150		
Tetrachloroethene	0.550		0.500	ug/L	0.5000		110	50-150		
Toluene	0.530		0.500	ug/L	0.5000		106	50-150		
1,1,1-Trichloroethane	0.530		0.500	ug/L	0.5000		106	50-150		
1,1,2-Trichloroethane	0.530		0.500	ug/L	0.5000		106	50-150		
Trichloroethene	0.530		0.500	ug/L	0.5000		106	50-150		
Trichlorofluoromethane (Freon 11)	0.620		0.500	ug/L	0.5000		124	50-150		
1,2,3-Trichloropropane	0.520		0.500	ug/L	0.5000		104	50-150		
Vinyl acetate	0.250	J	0.500	ug/L	0.5000		50	50-150		
Vinyl chloride	0.570		0.500	ug/L	0.5000		114	50-150		
o-Xylene	0.520		0.500	ug/L	0.5000		104	50-150		
m- & p-Xylenes	1.01		0.500	ug/L	1.000		101	50-150		
Surrogate: 4-Bromofluorobenzene	*5.23*			ug/L	*5.000*		*105*	*80-120*		
Surrogate: 1,2-Dichlorobenzene-d4	*5.27*			ug/L	*5.000*		*105*	*80-120*		

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: RESAMPLING
Project Manager: Steve Brown

Reported:
04/20/22 15:51

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MD. SPECTRUM
Project	P-417-Z4 RESAMPLING	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 524.2											
1	P-417-Z4	3	4/13/22	1200	✓		DW	✓											
2	TRIP BLANK	2	4/13/22	—	—		QA	✓										-	02
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Analytical Parameters

2041324-01 A

	Signature	Date	Time
Relinquished by	D A Brown	4/13/22	1510
Received by	Rachel [illegible]	4/13/22	1510
Relinquished by			
Received by			
Relinquished by			
Received by			

Comments

① APPENDIX I LIST OF 47 VOCs, MTBE + 2 FREONS (DCDFM + DCFM)

RESAMPLING EVENT

STANDARD REPORT

SPLIT SAMPLING EVENT - MSS / PHASE SEP. / EUROFINS

Cooler Temp on Arrival: 19.3 Deg. C

Rev. Aug. 2018

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

03 May 2022

Steve Brown
Environmental Monitoring and Assessment
207 East Sixth Street
Lititz, PA 17543
RE: MILLERSVILLE LANDFILL

Enclosed are the results of analyses for samples received by the laboratory on 04/22/22 14:40.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
P-162-Z4		2042233-01	Drinking Water	04/22/22 11:30	04/22/22 14:40
P-164-Z4		2042233-02	Drinking Water	04/22/22 12:00	04/22/22 14:40
P-165-Z4		2042233-03	Drinking Water	04/22/22 12:15	04/22/22 14:40
P-168-Z4		2042233-04	Drinking Water	04/22/22 13:40	04/22/22 14:40
P-261-Z4		2042233-05	Drinking Water	04/22/22 13:20	04/22/22 14:40
P-323-Z4		2042233-06	Drinking Water	04/22/22 11:45	04/22/22 14:40
P-412-Z4		2042233-07	Drinking Water	04/22/22 12:30	04/22/22 14:40
P-440-Z4		2042233-08	Drinking Water	04/22/22 11:10	04/22/22 14:40
P-441-Z4R		2042233-09	Drinking Water	04/22/22 10:50	04/22/22 14:40
P-478-Z4		2042233-10	Drinking Water	04/22/22 13:10	04/22/22 14:40
1722-SD-Z4		2042233-11	Drinking Water	04/22/22 12:50	04/22/22 14:40
TRIP BLANK		2042233-12	Drinking Water	04/22/22 00:00	04/22/22 14:40

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Will Brewington, President

Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

P-162-Z4

2042233-01RE1 (Drinking Water)
Sample Date: 04/22/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	04/26/22	04/26/22 13:50	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	04/26/22	04/26/22 13:50	LL
Benzene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
Bromoform	ND		ug/L	0.500	0.200	1	04/26/22	04/26/22 13:50	LL
Bromomethane	ND		ug/L	0.500	0.500	1	04/26/22	04/26/22 13:50	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	04/26/22	04/26/22 13:50	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	04/26/22	04/26/22 13:50	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
Chloroethane	ND		ug/L	0.500	0.200	1	04/26/22	04/26/22 13:50	LL
Chloroform	ND		ug/L	0.500	0.500	1	04/26/22	04/26/22 13:50	LL
Chloromethane	ND		ug/L	0.500	0.200	1	04/26/22	04/26/22 13:50	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	04/26/22	04/26/22 13:50	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	04/26/22	04/26/22 13:50	LL
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	04/26/22	04/26/22 13:50	LL
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	04/26/22	04/26/22 13:50	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL

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Will Brewington, President

1500 Caton Center Dr Suite G
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410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

P-162-Z4

2042233-01RE1 (Drinking Water)
Sample Date: 04/22/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	04/26/22	04/26/22 13:50	LL
Iodomethane	ND		ug/L	0.500	0.500	1	04/26/22	04/26/22 13:50	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	04/26/22	04/26/22 13:50	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
Methylene chloride	ND		ug/L	0.500	0.500	1	04/26/22	04/26/22 13:50	LL
Styrene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
Tetrachloroethene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
Toluene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	04/26/22	04/26/22 13:50	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	04/26/22	04/26/22 13:50	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	04/26/22	04/26/22 13:50	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
o-Xylene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:50	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	04/26/22	04/26/22 13:50	LL
Surrogate: 4-Bromofluorobenzene			*80-120*	*103 %*			*04/26/22*	*04/26/22 13:50*	
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*115 %*			*04/26/22*	*04/26/22 13:50*	

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Will Brewington, President

Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

P-164-Z4

2042233-02RE2 (Drinking Water)
Sample Date: 04/22/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	05/02/22	05/02/22 15:23	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	05/02/22	05/02/22 15:23	LL
Benzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
Bromoform	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 15:23	LL
Bromomethane	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 15:23	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	05/02/22	05/02/22 15:23	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	05/02/22	05/02/22 15:23	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
Chloroethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 15:23	LL
Chloroform	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 15:23	LL
Chloromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 15:23	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	05/02/22	05/02/22 15:23	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	05/02/22	05/02/22 15:23	LL
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 15:23	LL
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 15:23	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

P-164-Z4

2042233-02RE2 (Drinking Water)
Sample Date: 04/22/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	05/02/22	05/02/22 15:23	LL
Iodomethane	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 15:23	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	05/02/22	05/02/22 15:23	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
Methylene chloride	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 15:23	LL
Styrene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
Tetrachloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
Toluene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 15:23	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 15:23	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 15:23	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
o-Xylene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:23	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 15:23	LL
Surrogate: 4-Bromofluorobenzene			*80-120*	*97 %*		*05/02/22*	*05/02/22 15:23*		
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*98 %*		*05/02/22*	*05/02/22 15:23*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

P-165-Z4

2042233-03RE2 (Drinking Water)
Sample Date: 04/22/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	05/02/22	05/02/22 15:46	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	05/02/22	05/02/22 15:46	LL
Benzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
Bromoform	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 15:46	LL
Bromomethane	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 15:46	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	05/02/22	05/02/22 15:46	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	05/02/22	05/02/22 15:46	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
Chloroethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 15:46	LL
Chloroform	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 15:46	LL
Chloromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 15:46	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	05/02/22	05/02/22 15:46	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	05/02/22	05/02/22 15:46	LL
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 15:46	LL
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 15:46	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

P-165-Z4

2042233-03RE2 (Drinking Water)
Sample Date: 04/22/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	05/02/22	05/02/22 15:46	LL
Iodomethane	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 15:46	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	05/02/22	05/02/22 15:46	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
Methylene chloride	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 15:46	LL
Styrene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
Tetrachloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
Toluene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 15:46	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 15:46	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 15:46	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
o-Xylene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 15:46	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 15:46	LL
Surrogate: 4-Bromofluorobenzene			*80-120*	*99 %*		*05/02/22*	*05/02/22 15:46*		
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*99 %*		*05/02/22*	*05/02/22 15:46*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

P-168-Z4

2042233-04RE2 (Drinking Water)
Sample Date: 04/22/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	05/02/22	05/02/22 16:09	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	05/02/22	05/02/22 16:09	LL
Benzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
Bromoform	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 16:09	LL
Bromomethane	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 16:09	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	05/02/22	05/02/22 16:09	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	05/02/22	05/02/22 16:09	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
Chloroethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 16:09	LL
Chloroform	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 16:09	LL
Chloromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 16:09	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	05/02/22	05/02/22 16:09	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	05/02/22	05/02/22 16:09	LL
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 16:09	LL
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 16:09	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

P-168-Z4

2042233-04RE2 (Drinking Water)
Sample Date: 04/22/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	05/02/22	05/02/22 16:09	LL
Iodomethane	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 16:09	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	05/02/22	05/02/22 16:09	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
Methylene chloride	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 16:09	LL
Styrene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
Tetrachloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
Toluene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 16:09	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 16:09	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 16:09	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
o-Xylene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:09	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 16:09	LL
Surrogate: 4-Bromofluorobenzene			*80-120*	*100 %*		*05/02/22*	*05/02/22 16:09*		
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*99 %*		*05/02/22*	*05/02/22 16:09*		

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Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

P-261-Z4

2042233-05RE2 (Drinking Water)
Sample Date: 04/22/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	05/02/22	05/02/22 16:32	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	05/02/22	05/02/22 16:32	LL
Benzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
Bromoform	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 16:32	LL
Bromomethane	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 16:32	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	05/02/22	05/02/22 16:32	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	05/02/22	05/02/22 16:32	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
Chloroethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 16:32	LL
Chloroform	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 16:32	LL
Chloromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 16:32	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	05/02/22	05/02/22 16:32	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	05/02/22	05/02/22 16:32	LL
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 16:32	LL
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 16:32	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

P-261-Z4

2042233-05RE2 (Drinking Water)
Sample Date: 04/22/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	05/02/22	05/02/22 16:32	LL
Iodomethane	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 16:32	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	05/02/22	05/02/22 16:32	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
Methylene chloride	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 16:32	LL
Styrene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
Tetrachloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
Toluene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 16:32	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 16:32	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 16:32	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
o-Xylene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:32	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 16:32	LL
Surrogate: 4-Bromofluorobenzene			*80-120*	*99 %*		*05/02/22*	*05/02/22 16:32*		
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*101 %*		*05/02/22*	*05/02/22 16:32*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

P-323-Z4

2042233-06RE2 (Drinking Water)
Sample Date: 04/22/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	05/02/22	05/02/22 16:55	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	05/02/22	05/02/22 16:55	LL
Benzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
Bromoform	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 16:55	LL
Bromomethane	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 16:55	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	05/02/22	05/02/22 16:55	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	05/02/22	05/02/22 16:55	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
Chloroethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 16:55	LL
Chloroform	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 16:55	LL
Chloromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 16:55	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	05/02/22	05/02/22 16:55	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	05/02/22	05/02/22 16:55	LL
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 16:55	LL
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 16:55	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

P-323-Z4

2042233-06RE2 (Drinking Water)
Sample Date: 04/22/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	05/02/22	05/02/22 16:55	LL
Iodomethane	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 16:55	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	05/02/22	05/02/22 16:55	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
Methylene chloride	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 16:55	LL
Styrene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
Tetrachloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
Toluene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 16:55	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 16:55	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 16:55	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
o-Xylene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 16:55	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 16:55	LL
Surrogate: 4-Bromofluorobenzene			*80-120*	*100 %*		*05/02/22*	*05/02/22 16:55*		
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*97 %*		*05/02/22*	*05/02/22 16:55*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

P-412-Z4

2042233-07RE2 (Drinking Water)
Sample Date: 04/22/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	05/02/22	05/02/22 17:18	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	05/02/22	05/02/22 17:18	LL
Benzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
Bromoform	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 17:18	LL
Bromomethane	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 17:18	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	05/02/22	05/02/22 17:18	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	05/02/22	05/02/22 17:18	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
Chloroethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 17:18	LL
Chloroform	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 17:18	LL
Chloromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 17:18	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	05/02/22	05/02/22 17:18	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	05/02/22	05/02/22 17:18	LL
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 17:18	LL
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 17:18	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

P-412-Z4

2042233-07RE2 (Drinking Water)
Sample Date: 04/22/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	05/02/22	05/02/22 17:18	LL
Iodomethane	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 17:18	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	05/02/22	05/02/22 17:18	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
Methylene chloride	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 17:18	LL
Styrene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
Tetrachloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
Toluene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 17:18	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 17:18	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 17:18	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
o-Xylene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:18	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 17:18	LL
Surrogate: 4-Bromofluorobenzene			*80-120*	*98 %*		*05/02/22*	*05/02/22 17:18*		
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*101 %*		*05/02/22*	*05/02/22 17:18*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

P-440-Z4

2042233-08RE2 (Drinking Water)
Sample Date: 04/22/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	05/02/22	05/02/22 17:41	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	05/02/22	05/02/22 17:41	LL
Benzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
Bromoform	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 17:41	LL
Bromomethane	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 17:41	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	05/02/22	05/02/22 17:41	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	05/02/22	05/02/22 17:41	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
Chloroethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 17:41	LL
Chloroform	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 17:41	LL
Chloromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 17:41	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	05/02/22	05/02/22 17:41	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	05/02/22	05/02/22 17:41	LL
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 17:41	LL
1,1-Dichloroethane	**0.120**	J	ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 17:41	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

P-440-Z4

2042233-08RE2 (Drinking Water)
Sample Date: 04/22/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	05/02/22	05/02/22 17:41	LL
Iodomethane	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 17:41	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	05/02/22	05/02/22 17:41	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
Methylene chloride	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 17:41	LL
Styrene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
Tetrachloroethene	**0.150**	J	ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
Toluene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 17:41	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 17:41	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 17:41	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
o-Xylene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 17:41	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 17:41	LL
Surrogate: 4-Bromofluorobenzene			*80-120*	*97 %*		*05/02/22*	*05/02/22 17:41*		
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*97 %*		*05/02/22*	*05/02/22 17:41*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

P-441-Z4R

2042233-09RE2 (Drinking Water)
Sample Date: 04/22/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	**3.24**	J	ug/L	5.00	3.00	1	05/02/22	05/02/22 18:05	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	05/02/22	05/02/22 18:05	LL
Benzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
Bromoform	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 18:05	LL
Bromomethane	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 18:05	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	05/02/22	05/02/22 18:05	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	05/02/22	05/02/22 18:05	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
Chloroethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 18:05	LL
Chloroform	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 18:05	LL
Chloromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 18:05	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	05/02/22	05/02/22 18:05	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	05/02/22	05/02/22 18:05	LL
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 18:05	LL
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 18:05	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

P-441-Z4R

2042233-09RE2 (Drinking Water)
Sample Date: 04/22/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	05/02/22	05/02/22 18:05	LL
Iodomethane	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 18:05	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	05/02/22	05/02/22 18:05	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
Methylene chloride	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 18:05	LL
Styrene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
Tetrachloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
Toluene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 18:05	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 18:05	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 18:05	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
o-Xylene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:05	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 18:05	LL
Surrogate: 4-Bromofluorobenzene			*80-120*	*97 %*		*05/02/22*	*05/02/22 18:05*		
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*100 %*		*05/02/22*	*05/02/22 18:05*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

P-478-Z4

2042233-10RE2 (Drinking Water)
Sample Date: 04/22/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	**3.22**	J	ug/L	5.00	3.00	1	05/02/22	05/02/22 18:28	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	05/02/22	05/02/22 18:28	LL
Benzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
Bromoform	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 18:28	LL
Bromomethane	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 18:28	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	05/02/22	05/02/22 18:28	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	05/02/22	05/02/22 18:28	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
Chloroethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 18:28	LL
Chloroform	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 18:28	LL
Chloromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 18:28	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	05/02/22	05/02/22 18:28	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	05/02/22	05/02/22 18:28	LL
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 18:28	LL
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 18:28	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

P-478-Z4

2042233-10RE2 (Drinking Water)
Sample Date: 04/22/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	05/02/22	05/02/22 18:28	LL
Iodomethane	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 18:28	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	05/02/22	05/02/22 18:28	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
Methylene chloride	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 18:28	LL
Styrene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
Tetrachloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
Toluene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 18:28	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 18:28	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 18:28	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
o-Xylene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:28	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 18:28	LL
Surrogate: 4-Bromofluorobenzene			*80-120*	*96 %*		*05/02/22*	*05/02/22 18:28*		
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*98 %*		*05/02/22*	*05/02/22 18:28*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

1722-SD-Z4

2042233-11RE2 (Drinking Water)
Sample Date: 04/22/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	05/02/22	05/02/22 18:51	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	05/02/22	05/02/22 18:51	LL
Benzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
Bromoform	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 18:51	LL
Bromomethane	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 18:51	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	05/02/22	05/02/22 18:51	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	05/02/22	05/02/22 18:51	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
Chloroethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 18:51	LL
Chloroform	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 18:51	LL
Chloromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 18:51	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	05/02/22	05/02/22 18:51	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	05/02/22	05/02/22 18:51	LL
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 18:51	LL
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 18:51	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

1722-SD-Z4

2042233-11RE2 (Drinking Water)
Sample Date: 04/22/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	05/02/22	05/02/22 18:51	LL
Iodomethane	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 18:51	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	05/02/22	05/02/22 18:51	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
Methylene chloride	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 18:51	LL
Styrene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
Tetrachloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
Toluene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 18:51	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 18:51	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	05/02/22	05/02/22 18:51	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
o-Xylene	ND		ug/L	0.500	0.100	1	05/02/22	05/02/22 18:51	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	05/02/22	05/02/22 18:51	LL
Surrogate: 4-Bromofluorobenzene			*80-120*	*102 %*		*05/02/22*	*05/02/22 18:51*		
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*101 %*		*05/02/22*	*05/02/22 18:51*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

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2042233-12RE1 (Drinking Water)
Sample Date: 04/22/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	04/26/22	04/26/22 13:27	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	04/26/22	04/26/22 13:27	LL
Benzene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
Bromoform	ND		ug/L	0.500	0.200	1	04/26/22	04/26/22 13:27	LL
Bromomethane	ND		ug/L	0.500	0.500	1	04/26/22	04/26/22 13:27	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	04/26/22	04/26/22 13:27	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	04/26/22	04/26/22 13:27	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
Chloroethane	ND		ug/L	0.500	0.200	1	04/26/22	04/26/22 13:27	LL
Chloroform	ND		ug/L	0.500	0.500	1	04/26/22	04/26/22 13:27	LL
Chloromethane	ND		ug/L	0.500	0.200	1	04/26/22	04/26/22 13:27	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	04/26/22	04/26/22 13:27	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	04/26/22	04/26/22 13:27	LL
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	04/26/22	04/26/22 13:27	LL
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	04/26/22	04/26/22 13:27	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

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2042233-12RE1 (Drinking Water)
Sample Date: 04/22/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	04/26/22	04/26/22 13:27	LL
Iodomethane	ND		ug/L	0.500	0.500	1	04/26/22	04/26/22 13:27	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	04/26/22	04/26/22 13:27	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
Methylene chloride	**0.700**	L	ug/L	0.500	0.500	1	04/26/22	04/26/22 13:27	LL
Styrene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
Tetrachloroethene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
Toluene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	04/26/22	04/26/22 13:27	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	04/26/22	04/26/22 13:27	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	04/26/22	04/26/22 13:27	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
o-Xylene	ND		ug/L	0.500	0.100	1	04/26/22	04/26/22 13:27	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	04/26/22	04/26/22 13:27	LL
Surrogate: 4-Bromofluorobenzene		*80-120*		*104 %*		*04/26/22*	*04/26/22 13:27*		
Surrogate: 1,2-Dichlorobenzene-d4		*80-120*		*115 %*		*04/26/22*	*04/26/22 13:27*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

Volatile Organics by EPA 524.2 (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204471 - GCMS-WATER-VOLATILES										
Blank (B204471-BLK1)					Prepared & Analyzed: 04/25/22					
Acetone	5.08		5.00	ug/L						
Acrylonitrile	ND		10.0	ug/L						
Benzene	ND		0.500	ug/L						
Bromochloromethane	ND		0.500	ug/L						
Bromodichloromethane	ND		0.500	ug/L						
Bromoform	ND		0.500	ug/L						
Bromomethane	ND		0.500	ug/L						
2-Butanone (MEK)	ND		5.00	ug/L						
Carbon disulfide	ND		0.500	ug/L						
Carbon tetrachloride	ND		0.500	ug/L						
Chlorobenzene	ND		0.500	ug/L						
Chloroethane	ND		0.500	ug/L						
Chloroform	ND		0.500	ug/L						
Chloromethane	ND		0.500	ug/L						
Dibromochloromethane	ND		0.500	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.00	ug/L						
1,2-Dibromoethane (EDB)	ND		0.500	ug/L						
Dibromomethane	ND		0.500	ug/L						
1,2-Dichlorobenzene	0.140	J	0.500	ug/L						
1,4-Dichlorobenzene	ND		0.500	ug/L						
trans-1,4-Dichloro-2-butene	ND		5.00	ug/L						
Dichlorodifluoromethane	ND		0.500	ug/L						
1,1-Dichloroethane	ND		0.500	ug/L						
1,2-Dichloroethane	ND		0.500	ug/L						
1,1-Dichloroethene	ND		0.500	ug/L						
cis-1,2-Dichloroethene	ND		0.500	ug/L						
trans-1,2-Dichloroethene	ND		0.500	ug/L						
Dichlorofluoromethane	ND		0.500	ug/L						
1,2-Dichloropropane	ND		0.500	ug/L						
cis-1,3-Dichloropropene	ND		0.500	ug/L						
trans-1,3-Dichloropropene	ND		0.500	ug/L						

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

Volatile Organics by EPA 524.2 (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204471 - GCMS-WATER-VOLATILES										
Blank (B204471-BLK1)					Prepared & Analyzed: 04/25/22					
Ethylbenzene	ND		0.500	ug/L						
2-Hexanone	ND		5.00	ug/L						
Iodomethane	ND		0.500	ug/L						
Methyl tert-butyl ether (MTBE)	ND		0.500	ug/L						
4-Methyl-2-pentanone	ND		5.00	ug/L						
Methylene chloride	ND		0.500	ug/L						
Styrene	ND		0.500	ug/L						
1,1,1,2-Tetrachloroethane	ND		0.500	ug/L						
1,1,2,2-Tetrachloroethane	ND		0.500	ug/L						
Tetrachloroethene	ND		0.500	ug/L						
Toluene	ND		0.500	ug/L						
1,1,1-Trichloroethane	ND		0.500	ug/L						
1,1,2-Trichloroethane	ND		0.500	ug/L						
Trichloroethene	ND		0.500	ug/L						
Trichlorofluoromethane (Freon 11)	ND		0.500	ug/L						
1,2,3-Trichloropropane	ND		0.500	ug/L						
Vinyl acetate	ND		0.500	ug/L						
Vinyl chloride	ND		0.500	ug/L						
o-Xylene	ND		0.500	ug/L						
m- & p-Xylenes	ND		0.500	ug/L						
Surrogate: 4-Bromofluorobenzene	*5.42*			ug/L	*5.000*		*108*	*80-120*		
Surrogate: 1,2-Dichlorobenzene-d4	*5.68*			ug/L	*5.000*		*114*	*80-120*		
LCS (B204471-BS1)					Prepared & Analyzed: 04/25/22					
Acetone	5.28		5.00	ug/L	1.000		528	50-150		
Acrylonitrile	0.210	J	10.0	ug/L	0.5000		42	50-150		
Benzene	0.600		0.500	ug/L	0.5000		120	50-150		
Bromochloromethane	0.670		0.500	ug/L	0.5000		134	50-150		
Bromodichloromethane	0.610		0.500	ug/L	0.5000		122	50-150		
Bromoform	0.540		0.500	ug/L	0.5000		108	50-150		
Bromomethane	0.870		0.500	ug/L	0.5000		174	50-150		
2-Butanone (MEK)	0.270	J	5.00	ug/L	1.000		27	50-150		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

Volatile Organics by EPA 524.2 (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204471 - GCMS-WATER-VOLATILES										
LCS (B204471-BS1)					Prepared & Analyzed: 04/25/22					
Carbon disulfide	0.820		0.500	ug/L	0.5000		164	50-150		
Carbon tetrachloride	0.650		0.500	ug/L	0.5000		130	50-150		
Chlorobenzene	0.860		0.500	ug/L	0.5000		172	50-150		
Chloroethane	1.01		0.500	ug/L	0.5000		202	50-150		
Chloroform	0.700		0.500	ug/L	0.5000		140	50-150		
Chloromethane	1.08		0.500	ug/L	0.5000		216	50-150		
Dibromochloromethane	0.480	J	0.500	ug/L	0.5000		96	50-150		
1,2-Dibromo-3-chloropropane	0.550	J	1.00	ug/L	0.5000		110	50-150		
1,2-Dibromoethane (EDB)	0.590		0.500	ug/L	0.5000		118	50-150		
Dibromomethane	0.670		0.500	ug/L	0.5000		134	50-150		
1,2-Dichlorobenzene	0.880		0.500	ug/L	0.5000		176	50-150		
1,4-Dichlorobenzene	0.620		0.500	ug/L	0.5000		124	50-150		
trans-1,4-Dichloro-2-butene	0.620	J	5.00	ug/L	0.5000		124	50-150		
Dichlorodifluoromethane	0.860		0.500	ug/L	0.5000		172	50-150		
1,1-Dichloroethane	0.660		0.500	ug/L	0.5000		132	50-150		
1,2-Dichloroethane	0.650		0.500	ug/L	0.5000		130	50-150		
1,1-Dichloroethene	0.720		0.500	ug/L	0.5000		144	50-150		
cis-1,2-Dichloroethene	0.690		0.500	ug/L	0.5000		138	50-150		
trans-1,2-Dichloroethene	0.640		0.500	ug/L	0.5000		128	50-150		
Dichlorofluoromethane	0.580		0.500	ug/L	0.5000		116	50-150		
1,2-Dichloropropane	0.670		0.500	ug/L	0.5000		134	50-150		
cis-1,3-Dichloropropene	0.460	J	0.500	ug/L	0.5000		92	50-150		
trans-1,3-Dichloropropene	0.460	J	0.500	ug/L	0.5000		92	50-150		
Ethylbenzene	0.550		0.500	ug/L	0.5000		110	50-150		
2-Hexanone	1.05	J	5.00	ug/L	1.000		105	50-150		
Iodomethane	0.300	J	0.500	ug/L	0.5000		60	50-150		
Methyl tert-butyl ether (MTBE)	0.520		0.500	ug/L	0.5000		104	50-150		
4-Methyl-2-pentanone	1.03	J	5.00	ug/L	1.000		103	50-150		
Methylene chloride	1.18		0.500	ug/L	0.5000		236	50-150		
Styrene	0.480	J	0.500	ug/L	0.5000		96	50-150		
1,1,1,2-Tetrachloroethane	0.490	J	0.500	ug/L	0.5000		98	50-150		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

Volatile Organics by EPA 524.2 (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204471 - GCMS-WATER-VOLATILES										
LCS (B204471-BS1)					Prepared & Analyzed: 04/25/22					
1,1,2,2-Tetrachloroethane	0.610		0.500	ug/L	0.5000		122	50-150		
Tetrachloroethene	0.610		0.500	ug/L	0.5000		122	50-150		
Toluene	0.590		0.500	ug/L	0.5000		118	50-150		
1,1,1-Trichloroethane	0.610		0.500	ug/L	0.5000		122	50-150		
1,1,2-Trichloroethane	0.610		0.500	ug/L	0.5000		122	50-150		
Trichloroethene	0.580		0.500	ug/L	0.5000		116	50-150		
Trichlorofluoromethane (Freon 11)	0.710		0.500	ug/L	0.5000		142	50-150		
1,2,3-Trichloropropane	0.640		0.500	ug/L	0.5000		128	50-150		
Vinyl acetate	ND		0.500	ug/L	0.5000			50-150		
Vinyl chloride	0.800		0.500	ug/L	0.5000		160	50-150		
o-Xylene	0.490	J	0.500	ug/L	0.5000		98	50-150		
m- & p-Xylenes	1.03		0.500	ug/L	1.000		103	50-150		
Surrogate: 4-Bromofluorobenzene	*5.50*			ug/L	*5.000*		*110*	*80-120*		
Surrogate: 1,2-Dichlorobenzene-d4	*5.74*			ug/L	*5.000*		*115*	*80-120*		
Batch B204495 - GCMS-WATER-VOLATILES										
Blank (B204495-BLK1)					Prepared & Analyzed: 04/26/22					
Acetone	ND		5.00	ug/L						
Acrylonitrile	ND		10.0	ug/L						
Benzene	ND		0.500	ug/L						
Bromochloromethane	ND		0.500	ug/L						
Bromodichloromethane	ND		0.500	ug/L						
Bromoform	ND		0.500	ug/L						
Bromomethane	ND		0.500	ug/L						
2-Butanone (MEK)	ND		5.00	ug/L						
Carbon disulfide	ND		0.500	ug/L						
Carbon tetrachloride	ND		0.500	ug/L						
Chlorobenzene	0.400	J	0.500	ug/L						
Chloroethane	ND		0.500	ug/L						
Chloroform	ND		0.500	ug/L						
Chloromethane	ND		0.500	ug/L						

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

Volatile Organics by EPA 524.2 (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204495 - GCMS-WATER-VOLATILES										
Blank (B204495-BLK1)					Prepared & Analyzed: 04/26/22					
Dibromochloromethane	ND		0.500	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.00	ug/L						
1,2-Dibromoethane (EDB)	ND		0.500	ug/L						
Dibromomethane	ND		0.500	ug/L						
1,2-Dichlorobenzene	0.750		0.500	ug/L						
1,4-Dichlorobenzene	0.550		0.500	ug/L						
trans-1,4-Dichloro-2-butene	ND		5.00	ug/L						
Dichlorodifluoromethane	ND		0.500	ug/L						
1,1-Dichloroethane	ND		0.500	ug/L						
1,2-Dichloroethane	ND		0.500	ug/L						
1,1-Dichloroethene	ND		0.500	ug/L						
cis-1,2-Dichloroethene	ND		0.500	ug/L						
trans-1,2-Dichloroethene	ND		0.500	ug/L						
Dichlorofluoromethane	ND		0.500	ug/L						
1,2-Dichloropropane	ND		0.500	ug/L						
cis-1,3-Dichloropropene	ND		0.500	ug/L						
trans-1,3-Dichloropropene	ND		0.500	ug/L						
Ethylbenzene	ND		0.500	ug/L						
2-Hexanone	ND		5.00	ug/L						
Iodomethane	ND		0.500	ug/L						
Methyl tert-butyl ether (MTBE)	ND		0.500	ug/L						
4-Methyl-2-pentanone	ND		5.00	ug/L						
Methylene chloride	ND		0.500	ug/L						
Styrene	ND		0.500	ug/L						
1,1,1,2-Tetrachloroethane	ND		0.500	ug/L						
1,1,2,2-Tetrachloroethane	ND		0.500	ug/L						
Tetrachloroethene	ND		0.500	ug/L						
Toluene	ND		0.500	ug/L						
1,1,1-Trichloroethane	ND		0.500	ug/L						
1,1,2-Trichloroethane	ND		0.500	ug/L						
Trichloroethene	ND		0.500	ug/L						

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

Volatile Organics by EPA 524.2 (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204495 - GCMS-WATER-VOLATILES										
Blank (B204495-BLK1)					Prepared & Analyzed: 04/26/22					
Trichlorofluoromethane (Freon 11)	ND		0.500	ug/L						
1,2,3-Trichloropropane	ND		0.500	ug/L						
Vinyl acetate	ND		0.500	ug/L						
Vinyl chloride	ND		0.500	ug/L						
o-Xylene	ND		0.500	ug/L						
m- & p-Xylenes	ND		0.500	ug/L						
Surrogate: 4-Bromofluorobenzene	*5.20*			ug/L	*5.000*		*104*	*80-120*		
Surrogate: 1,2-Dichlorobenzene-d4	*5.96*			ug/L	*5.000*		*119*	*80-120*		
LCS (B204495-BS1)					Prepared & Analyzed: 04/26/22					
Acetone	2.52	J	5.00	ug/L	1.000		252	50-150		
Acrylonitrile	0.890	J	10.0	ug/L	0.5000		178	50-150		
Benzene	0.680		0.500	ug/L	0.5000		136	50-150		
Bromochloromethane	0.730		0.500	ug/L	0.5000		146	50-150		
Bromodichloromethane	0.670		0.500	ug/L	0.5000		134	50-150		
Bromoform	0.460	J	0.500	ug/L	0.5000		92	50-150		
Bromomethane	0.690		0.500	ug/L	0.5000		138	50-150		
2-Butanone (MEK)	0.560	J	5.00	ug/L	1.000		56	50-150		
Carbon disulfide	0.840		0.500	ug/L	0.5000		168	50-150		
Carbon tetrachloride	0.640		0.500	ug/L	0.5000		128	50-150		
Chlorobenzene	1.02		0.500	ug/L	0.5000		204	50-150		
Chloroethane	0.920		0.500	ug/L	0.5000		184	50-150		
Chloroform	0.660		0.500	ug/L	0.5000		132	50-150		
Chloromethane	1.00		0.500	ug/L	0.5000		200	50-150		
Dibromochloromethane	0.540		0.500	ug/L	0.5000		108	50-150		
1,2-Dibromo-3-chloropropane	0.600	J	1.00	ug/L	0.5000		120	50-150		
1,2-Dibromoethane (EDB)	0.680		0.500	ug/L	0.5000		136	50-150		
Dibromomethane	0.730		0.500	ug/L	0.5000		146	50-150		
1,2-Dichlorobenzene	1.53		0.500	ug/L	0.5000		306	50-150		
1,4-Dichlorobenzene	1.32		0.500	ug/L	0.5000		264	50-150		
trans-1,4-Dichloro-2-butene	0.450	J	5.00	ug/L	0.5000		90	50-150		
Dichlorodifluoromethane	0.820		0.500	ug/L	0.5000		164	50-150		

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Volatile Organics by EPA 524.2 (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204495 - GCMS-WATER-VOLATILES										
LCS (B204495-BS1)					Prepared & Analyzed: 04/26/22					
1,1-Dichloroethane	0.690		0.500	ug/L	0.5000		138	50-150		
1,2-Dichloroethane	0.710		0.500	ug/L	0.5000		142	50-150		
1,1-Dichloroethene	0.720		0.500	ug/L	0.5000		144	50-150		
cis-1,2-Dichloroethene	0.720		0.500	ug/L	0.5000		144	50-150		
trans-1,2-Dichloroethene	0.760		0.500	ug/L	0.5000		152	50-150		
Dichlorofluoromethane	0.620		0.500	ug/L	0.5000		124	50-150		
1,2-Dichloropropane	0.710		0.500	ug/L	0.5000		142	50-150		
cis-1,3-Dichloropropene	0.510		0.500	ug/L	0.5000		102	50-150		
trans-1,3-Dichloropropene	0.450	J	0.500	ug/L	0.5000		90	50-150		
Ethylbenzene	0.530		0.500	ug/L	0.5000		106	50-150		
2-Hexanone	1.26	J	5.00	ug/L	1.000		126	50-150		
Iodomethane	0.350	J	0.500	ug/L	0.5000		70	50-150		
Methyl tert-butyl ether (MTBE)	0.540		0.500	ug/L	0.5000		108	50-150		
4-Methyl-2-pentanone	1.03	J	5.00	ug/L	1.000		103	50-150		
Methylene chloride	1.51		0.500	ug/L	0.5000		302	50-150		
Styrene	0.510		0.500	ug/L	0.5000		102	50-150		
1,1,1,2-Tetrachloroethane	0.530		0.500	ug/L	0.5000		106	50-150		
1,1,2,2-Tetrachloroethane	0.730		0.500	ug/L	0.5000		146	50-150		
Tetrachloroethene	0.720		0.500	ug/L	0.5000		144	50-150		
Toluene	0.600		0.500	ug/L	0.5000		120	50-150		
1,1,1-Trichloroethane	0.620		0.500	ug/L	0.5000		124	50-150		
1,1,2-Trichloroethane	0.700		0.500	ug/L	0.5000		140	50-150		
Trichloroethene	0.640		0.500	ug/L	0.5000		128	50-150		
Trichlorofluoromethane (Freon 11)	0.770		0.500	ug/L	0.5000		154	50-150		
1,2,3-Trichloropropane	0.740		0.500	ug/L	0.5000		148	50-150		
Vinyl acetate	ND		0.500	ug/L	0.5000			50-150		
Vinyl chloride	0.820		0.500	ug/L	0.5000		164	50-150		
o-Xylene	0.500		0.500	ug/L	0.5000		100	50-150		
m- & p-Xylenes	1.00		0.500	ug/L	1.000		100	50-150		
Surrogate: 4-Bromofluorobenzene	*5.29*			ug/L	*5.000*		*106*	*80-120*		
Surrogate: 1,2-Dichlorobenzene-d4	*5.98*			ug/L	*5.000*		*120*	*80-120*		

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Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

Volatile Organics by EPA 524.2 (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205012 - GCMS-WATER-VOLATILES										
Blank (B205012-BLK1)					Prepared & Analyzed: 05/02/22					
Acetone	ND		5.00	ug/L						
Acrylonitrile	ND		10.0	ug/L						
Benzene	ND		0.500	ug/L						
Bromochloromethane	ND		0.500	ug/L						
Bromodichloromethane	ND		0.500	ug/L						
Bromoform	ND		0.500	ug/L						
Bromomethane	ND		0.500	ug/L						
2-Butanone (MEK)	ND		5.00	ug/L						
Carbon disulfide	ND		0.500	ug/L						
Carbon tetrachloride	ND		0.500	ug/L						
Chlorobenzene	ND		0.500	ug/L						
Chloroethane	ND		0.500	ug/L						
Chloroform	ND		0.500	ug/L						
Chloromethane	ND		0.500	ug/L						
Dibromochloromethane	ND		0.500	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.00	ug/L						
1,2-Dibromoethane (EDB)	ND		0.500	ug/L						
Dibromomethane	ND		0.500	ug/L						
1,2-Dichlorobenzene	ND		0.500	ug/L						
1,4-Dichlorobenzene	ND		0.500	ug/L						
trans-1,4-Dichloro-2-butene	ND		5.00	ug/L						
Dichlorodifluoromethane	ND		0.500	ug/L						
1,1-Dichloroethane	ND		0.500	ug/L						
1,2-Dichloroethane	ND		0.500	ug/L						
1,1-Dichloroethene	ND		0.500	ug/L						
cis-1,2-Dichloroethene	ND		0.500	ug/L						
trans-1,2-Dichloroethene	ND		0.500	ug/L						
Dichlorofluoromethane	ND		0.500	ug/L						
1,2-Dichloropropane	ND		0.500	ug/L						
cis-1,3-Dichloropropene	ND		0.500	ug/L						
trans-1,3-Dichloropropene	ND		0.500	ug/L						

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Volatile Organics by EPA 524.2 (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205012 - GCMS-WATER-VOLATILES										
Blank (B205012-BLK1)					Prepared & Analyzed: 05/02/22					
Ethylbenzene	ND		0.500	ug/L						
2-Hexanone	ND		5.00	ug/L						
Iodomethane	ND		0.500	ug/L						
Methyl tert-butyl ether (MTBE)	ND		0.500	ug/L						
4-Methyl-2-pentanone	ND		5.00	ug/L						
Methylene chloride	ND		0.500	ug/L						
Styrene	ND		0.500	ug/L						
1,1,1,2-Tetrachloroethane	ND		0.500	ug/L						
1,1,2,2-Tetrachloroethane	ND		0.500	ug/L						
Tetrachloroethene	ND		0.500	ug/L						
Toluene	ND		0.500	ug/L						
1,1,1-Trichloroethane	ND		0.500	ug/L						
1,1,2-Trichloroethane	ND		0.500	ug/L						
Trichloroethene	ND		0.500	ug/L						
Trichlorofluoromethane (Freon 11)	ND		0.500	ug/L						
1,2,3-Trichloropropane	ND		0.500	ug/L						
Vinyl acetate	ND		0.500	ug/L						
Vinyl chloride	ND		0.500	ug/L						
o-Xylene	ND		0.500	ug/L						
m- & p-Xylenes	ND		0.500	ug/L						
Surrogate: 4-Bromofluorobenzene	*4.88*			ug/L	*5.000*		*98*	*80-120*		
Surrogate: 1,2-Dichlorobenzene-d4	*4.73*			ug/L	*5.000*		*95*	*80-120*		
LCS (B205012-BS1)					Prepared & Analyzed: 05/02/22					
Acetone	2.03	J	5.00	ug/L	1.000		203	50-150		
Acrylonitrile	0.620	J	10.0	ug/L	0.5000		124	50-150		
Benzene	0.490	J	0.500	ug/L	0.5000		98	50-150		
Bromochloromethane	0.630		0.500	ug/L	0.5000		126	50-150		
Bromodichloromethane	0.490	J	0.500	ug/L	0.5000		98	50-150		
Bromoform	0.480	J	0.500	ug/L	0.5000		96	50-150		
Bromomethane	0.940		0.500	ug/L	0.5000		188	50-150		
2-Butanone (MEK)	0.140	J	5.00	ug/L	1.000		14	50-150		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

Volatile Organics by EPA 524.2 (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205012 - GCMS-WATER-VOLATILES										
LCS (B205012-BS1)					Prepared & Analyzed: 05/02/22					
Carbon disulfide	0.660		0.500	ug/L	0.5000		132	50-150		
Carbon tetrachloride	0.570		0.500	ug/L	0.5000		114	50-150		
Chlorobenzene	0.530		0.500	ug/L	0.5000		106	50-150		
Chloroethane	0.660		0.500	ug/L	0.5000		132	50-150		
Chloroform	0.600		0.500	ug/L	0.5000		120	50-150		
Chloromethane	0.640		0.500	ug/L	0.5000		128	50-150		
Dibromochloromethane	0.460	J	0.500	ug/L	0.5000		92	50-150		
1,2-Dibromo-3-chloropropane	0.510	J	1.00	ug/L	0.5000		102	50-150		
1,2-Dibromoethane (EDB)	0.490	J	0.500	ug/L	0.5000		98	50-150		
Dibromomethane	0.600		0.500	ug/L	0.5000		120	50-150		
1,2-Dichlorobenzene	0.570		0.500	ug/L	0.5000		114	50-150		
1,4-Dichlorobenzene	0.500		0.500	ug/L	0.5000		100	50-150		
trans-1,4-Dichloro-2-butene	0.530	J	5.00	ug/L	0.5000		106	50-150		
Dichlorodifluoromethane	0.400	J	0.500	ug/L	0.5000		80	50-150		
1,1-Dichloroethane	0.580		0.500	ug/L	0.5000		116	50-150		
1,2-Dichloroethane	0.540		0.500	ug/L	0.5000		108	50-150		
1,1-Dichloroethene	0.610		0.500	ug/L	0.5000		122	50-150		
cis-1,2-Dichloroethene	0.560		0.500	ug/L	0.5000		112	50-150		
trans-1,2-Dichloroethene	0.560		0.500	ug/L	0.5000		112	50-150		
Dichlorofluoromethane	0.500		0.500	ug/L	0.5000		100	50-150		
1,2-Dichloropropane	0.560		0.500	ug/L	0.5000		112	50-150		
cis-1,3-Dichloropropene	0.460	J	0.500	ug/L	0.5000		92	50-150		
trans-1,3-Dichloropropene	0.400	J	0.500	ug/L	0.5000		80	50-150		
Ethylbenzene	0.470	J	0.500	ug/L	0.5000		94	50-150		
2-Hexanone	0.920	J	5.00	ug/L	1.000		92	50-150		
Iodomethane	0.230	J	0.500	ug/L	0.5000		46	50-150		
Methyl tert-butyl ether (MTBE)	0.450	J	0.500	ug/L	0.5000		90	50-150		
4-Methyl-2-pentanone	0.990	J	5.00	ug/L	1.000		99	50-150		
Methylene chloride	2.16		0.500	ug/L	0.5000		432	50-150		
Styrene	0.360	J	0.500	ug/L	0.5000		72	50-150		
1,1,1,2-Tetrachloroethane	0.450	J	0.500	ug/L	0.5000		90	50-150		

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Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

Volatile Organics by EPA 524.2 (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205012 - GCMS-WATER-VOLATILES										
LCS (B205012-BS1)					Prepared & Analyzed: 05/02/22					
1,1,2,2-Tetrachloroethane	0.500		0.500	ug/L	0.5000		100	50-150		
Tetrachloroethene	0.530		0.500	ug/L	0.5000		106	50-150		
Toluene	0.470	J	0.500	ug/L	0.5000		94	50-150		
1,1,1-Trichloroethane	0.510		0.500	ug/L	0.5000		102	50-150		
1,1,2-Trichloroethane	0.540		0.500	ug/L	0.5000		108	50-150		
Trichloroethene	0.540		0.500	ug/L	0.5000		108	50-150		
Trichlorofluoromethane (Freon 11)	0.580		0.500	ug/L	0.5000		116	50-150		
1,2,3-Trichloropropane	0.520		0.500	ug/L	0.5000		104	50-150		
Vinyl acetate	ND		0.500	ug/L	0.5000			50-150		
Vinyl chloride	0.490	J	0.500	ug/L	0.5000		98	50-150		
o-Xylene	0.420	J	0.500	ug/L	0.5000		84	50-150		
m- & p-Xylenes	0.860		0.500	ug/L	1.000		86	50-150		
Surrogate: 4-Bromofluorobenzene	*5.03*			ug/L	*5.000*		*101*	*80-120*		
Surrogate: 1,2-Dichlorobenzene-d4	*5.02*			ug/L	*5.000*		*100*	*80-120*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/03/22 09:52

Notes and Definitions

L	Analyte is a possible laboratory contaminant
J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

524.2

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MD. SPECTRAL
Project	MLF - SPRING 2022	Turnaround Time	☑ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 524.2 (1)											
1	P-162-Z4	3	4/22/22	1130	✓		DW	✓											2042233-01 A
2	P-164-Z4			1200														-	02
3	P-165-Z4			1215														-	03
4	P-168-Z4			1340														-	04
5	P-261-Z4			1320														-	05
6	P-323-Z4			1145														-	06
7	P-412-Z4			1230														-	07
8	P-440-Z4			1110														-	08
9	P-441-Z4R			1050														-	09
10	P-478-Z4			1310														-	10
11	1722-SP-Z4			1250														-	11
12	TRIP BLANK	2		—			QC											-	12

	Signature	Date	Time	Comments
Relinquished by	DA Brown	4/22/22	1440	① APPENDIX I LIST OF 47 VOCs MTBE +
Received by	[signature]	4/22/22	1440	2 FREONS (DCDFM + DCFM)
Relinquished by				
Received by				
Relinquished by				STANDARD REPORT
Received by				

Cooler Temp on Arrival: 5.5 Deg. C

Rev. Aug. 2018

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

17 May 2022

Steve Brown
Environmental Monitoring and Assessment
207 East Sixth Street
Lititz, PA 17543
RE: MILLERSVILLE LANDFILL

Enclosed are the results of analyses for samples received by the laboratory on 04/29/22 12:30.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
1363-DMR-Z4		2042913-01	Nonpotable Water	04/28/22 17:30	04/29/22 12:30
1365-DMR-Z4		2042913-02	Nonpotable Water	04/28/22 17:45	04/29/22 12:30
1371-DMR-Z4		2042913-03	Nonpotable Water	04/28/22 18:00	04/29/22 12:30
1373-DMR-Z4		2042913-04	Nonpotable Water	04/28/22 18:15	04/29/22 12:30
1375-DMR-Z4		2042913-05	Nonpotable Water	04/28/22 17:10	04/29/22 12:30
1377-DMR-Z4		2042913-06	Nonpotable Water	04/28/22 16:50	04/29/22 12:30
1718-SD-Z4		2042913-07	Nonpotable Water	04/28/22 16:30	04/29/22 12:30
1730-SD-Z4		2042913-08	Nonpotable Water	04/28/22 16:10	04/29/22 12:30
P-160-Z4		2042913-09	Nonpotable Water	04/29/22 11:20	04/29/22 12:30
P-166-Z4		2042913-10	Nonpotable Water	04/29/22 10:15	04/29/22 12:30
P-169-Z4		2042913-11	Nonpotable Water	04/29/22 10:00	04/29/22 12:30
P-257-Z4		2042913-12	Nonpotable Water	04/29/22 10:30	04/29/22 12:30
P-264-Z4		2042913-13	Nonpotable Water	04/29/22 10:45	04/29/22 12:30
P-383-Z4		2042913-14	Nonpotable Water	04/29/22 11:00	04/29/22 12:30
TRIP BLANK		2042913-15	Nonpotable Water	04/29/22 00:00	04/29/22 12:30

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Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

1363-DMR-Z4

2042913-01 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	04/29/22	04/29/22 23:25	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	04/29/22	04/29/22 23:25	LL
Benzene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
Bromoform	ND		ug/L	0.500	0.200	1	04/29/22	04/29/22 23:25	LL
Bromomethane	ND		ug/L	0.500	0.500	1	04/29/22	04/29/22 23:25	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	04/29/22	04/29/22 23:25	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	04/29/22	04/29/22 23:25	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
Chloroethane	ND		ug/L	0.500	0.200	1	04/29/22	04/29/22 23:25	LL
Chloroform	ND		ug/L	0.500	0.500	1	04/29/22	04/29/22 23:25	LL
Chloromethane	ND		ug/L	0.500	0.200	1	04/29/22	04/29/22 23:25	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	04/29/22	04/29/22 23:25	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	04/29/22	04/29/22 23:25	LL
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	04/29/22	04/29/22 23:25	LL
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	04/29/22	04/29/22 23:25	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

1363-DMR-Z4

2042913-01 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	04/29/22	04/29/22 23:25	LL
Iodomethane	ND		ug/L	0.500	0.500	1	04/29/22	04/29/22 23:25	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	04/29/22	04/29/22 23:25	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
Methylene chloride	ND		ug/L	0.500	0.500	1	04/29/22	04/29/22 23:25	LL
Styrene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
Tetrachloroethene	**0.260**	J	ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
Toluene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	04/29/22	04/29/22 23:25	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	04/29/22	04/29/22 23:25	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	04/29/22	04/29/22 23:25	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
o-Xylene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:25	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	04/29/22	04/29/22 23:25	LL
Surrogate: 4-Bromofluorobenzene			*80-120*	*93 %*		*04/29/22*	*04/29/22 23:25*		
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*95 %*		*04/29/22*	*04/29/22 23:25*		

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Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

1363-DMR-Z4

2042913-01RE1 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	05/11/22	05/11/22 12:23	WB
Acrylonitrile	ND		ug/L	10.0	2.00	1	05/11/22	05/11/22 12:23	WB
Benzene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
Bromochloromethane	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
Bromodichloromethane	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
Bromoform	ND		ug/L	0.500	0.200	1	05/11/22	05/11/22 12:23	WB
Bromomethane	ND		ug/L	0.500	0.500	1	05/11/22	05/11/22 12:23	WB
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	05/11/22	05/11/22 12:23	WB
Carbon disulfide	ND		ug/L	0.500	0.400	1	05/11/22	05/11/22 12:23	WB
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
Chlorobenzene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
Chloroethane	ND		ug/L	0.500	0.200	1	05/11/22	05/11/22 12:23	WB
Chloroform	ND		ug/L	0.500	0.500	1	05/11/22	05/11/22 12:23	WB
Chloromethane	ND		ug/L	0.500	0.200	1	05/11/22	05/11/22 12:23	WB
Dibromochloromethane	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	05/11/22	05/11/22 12:23	WB
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
Dibromomethane	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	05/11/22	05/11/22 12:23	WB
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	05/11/22	05/11/22 12:23	WB
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	05/11/22	05/11/22 12:23	WB
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
Ethylbenzene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

1363-DMR-Z4

2042913-01RE1 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	05/11/22	05/11/22 12:23	WB
Iodomethane	ND		ug/L	0.500	0.500	1	05/11/22	05/11/22 12:23	WB
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	05/11/22	05/11/22 12:23	WB
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
Methylene chloride	ND		ug/L	0.500	0.500	1	05/11/22	05/11/22 12:23	WB
Styrene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
Tetrachloroethene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
Toluene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
Trichloroethene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	05/11/22	05/11/22 12:23	WB
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	05/11/22	05/11/22 12:23	WB
Vinyl acetate	ND		ug/L	0.500	0.500	1	05/11/22	05/11/22 12:23	WB
Vinyl chloride	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
o-Xylene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:23	WB
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	05/11/22	05/11/22 12:23	WB
Surrogate: 4-Bromofluorobenzene			*80-120*	*95 %*		*05/11/22*	*05/11/22 12:23*		
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*97 %*		*05/11/22*	*05/11/22 12:23*		

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Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

1365-DMR-Z4

2042913-02 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	04/29/22	04/29/22 23:48	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	04/29/22	04/29/22 23:48	LL
Benzene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
Bromoform	ND		ug/L	0.500	0.200	1	04/29/22	04/29/22 23:48	LL
Bromomethane	ND		ug/L	0.500	0.500	1	04/29/22	04/29/22 23:48	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	04/29/22	04/29/22 23:48	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	04/29/22	04/29/22 23:48	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
Chloroethane	ND		ug/L	0.500	0.200	1	04/29/22	04/29/22 23:48	LL
Chloroform	ND		ug/L	0.500	0.500	1	04/29/22	04/29/22 23:48	LL
Chloromethane	ND		ug/L	0.500	0.200	1	04/29/22	04/29/22 23:48	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	04/29/22	04/29/22 23:48	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	04/29/22	04/29/22 23:48	LL
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	04/29/22	04/29/22 23:48	LL
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	04/29/22	04/29/22 23:48	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL

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Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

1365-DMR-Z4

2042913-02 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	04/29/22	04/29/22 23:48	LL
Iodomethane	ND		ug/L	0.500	0.500	1	04/29/22	04/29/22 23:48	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	04/29/22	04/29/22 23:48	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
Methylene chloride	ND		ug/L	0.500	0.500	1	04/29/22	04/29/22 23:48	LL
Styrene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
Tetrachloroethene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
Toluene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	04/29/22	04/29/22 23:48	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	04/29/22	04/29/22 23:48	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	04/29/22	04/29/22 23:48	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
o-Xylene	ND		ug/L	0.500	0.100	1	04/29/22	04/29/22 23:48	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	04/29/22	04/29/22 23:48	LL
Surrogate: 4-Bromofluorobenzene			*80-120*	*94 %*		*04/29/22*	*04/29/22 23:48*		
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*95 %*		*04/29/22*	*04/29/22 23:48*		

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Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

1371-DMR-Z4

2042913-03 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	04/30/22	04/30/22 00:11	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	04/30/22	04/30/22 00:11	LL
Benzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
Bromoform	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 00:11	LL
Bromomethane	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 00:11	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	04/30/22	04/30/22 00:11	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	04/30/22	04/30/22 00:11	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
Chloroethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 00:11	LL
Chloroform	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 00:11	LL
Chloromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 00:11	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	04/30/22	04/30/22 00:11	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	04/30/22	04/30/22 00:11	LL
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 00:11	LL
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 00:11	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL

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Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

1371-DMR-Z4

2042913-03 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	04/30/22	04/30/22 00:11	LL
Iodomethane	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 00:11	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	04/30/22	04/30/22 00:11	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
Methylene chloride	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 00:11	LL
Styrene	**0.190**	J	ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
Tetrachloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
Toluene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 00:11	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 00:11	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 00:11	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
o-Xylene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:11	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 00:11	LL
Surrogate: 4-Bromofluorobenzene			*80-120*	*95 %*			*04/30/22*	*04/30/22 00:11*	
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*92 %*			*04/30/22*	*04/30/22 00:11*	

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Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

1371-DMR-Z4

2042913-03RE1 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	05/11/22	05/11/22 12:46	WB
Acrylonitrile	ND		ug/L	10.0	2.00	1	05/11/22	05/11/22 12:46	WB
Benzene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
Bromochloromethane	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
Bromodichloromethane	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
Bromoform	ND		ug/L	0.500	0.200	1	05/11/22	05/11/22 12:46	WB
Bromomethane	ND		ug/L	0.500	0.500	1	05/11/22	05/11/22 12:46	WB
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	05/11/22	05/11/22 12:46	WB
Carbon disulfide	ND		ug/L	0.500	0.400	1	05/11/22	05/11/22 12:46	WB
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
Chlorobenzene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
Chloroethane	ND		ug/L	0.500	0.200	1	05/11/22	05/11/22 12:46	WB
Chloroform	ND		ug/L	0.500	0.500	1	05/11/22	05/11/22 12:46	WB
Chloromethane	ND		ug/L	0.500	0.200	1	05/11/22	05/11/22 12:46	WB
Dibromochloromethane	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	05/11/22	05/11/22 12:46	WB
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
Dibromomethane	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	05/11/22	05/11/22 12:46	WB
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	05/11/22	05/11/22 12:46	WB
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	05/11/22	05/11/22 12:46	WB
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
Ethylbenzene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

1371-DMR-Z4

2042913-03RE1 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	05/11/22	05/11/22 12:46	WB
Iodomethane	ND		ug/L	0.500	0.500	1	05/11/22	05/11/22 12:46	WB
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	05/11/22	05/11/22 12:46	WB
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
Methylene chloride	ND		ug/L	0.500	0.500	1	05/11/22	05/11/22 12:46	WB
Styrene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
Tetrachloroethene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
Toluene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
Trichloroethene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	05/11/22	05/11/22 12:46	WB
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	05/11/22	05/11/22 12:46	WB
Vinyl acetate	ND		ug/L	0.500	0.500	1	05/11/22	05/11/22 12:46	WB
Vinyl chloride	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
o-Xylene	ND		ug/L	0.500	0.100	1	05/11/22	05/11/22 12:46	WB
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	05/11/22	05/11/22 12:46	WB
Surrogate: 4-Bromofluorobenzene			*80-120*	*96 %*		*05/11/22*	*05/11/22 12:46*		
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*97 %*		*05/11/22*	*05/11/22 12:46*		

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

1373-DMR-Z4

2042913-04 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	04/30/22	04/30/22 00:35	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	04/30/22	04/30/22 00:35	LL
Benzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
Bromoform	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 00:35	LL
Bromomethane	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 00:35	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	04/30/22	04/30/22 00:35	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	04/30/22	04/30/22 00:35	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
Chloroethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 00:35	LL
Chloroform	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 00:35	LL
Chloromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 00:35	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	04/30/22	04/30/22 00:35	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	04/30/22	04/30/22 00:35	LL
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 00:35	LL
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 00:35	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

1373-DMR-Z4

2042913-04 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	04/30/22	04/30/22 00:35	LL
Iodomethane	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 00:35	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	04/30/22	04/30/22 00:35	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
Methylene chloride	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 00:35	LL
Styrene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
Tetrachloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
Toluene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 00:35	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 00:35	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 00:35	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
o-Xylene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:35	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 00:35	LL
Surrogate: 4-Bromofluorobenzene			*80-120*	*98 %*			*04/30/22*	*04/30/22 00:35*	
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*97 %*			*04/30/22*	*04/30/22 00:35*	

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Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

1375-DMR-Z4

2042913-05 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	04/30/22	04/30/22 00:58	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	04/30/22	04/30/22 00:58	LL
Benzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
Bromoform	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 00:58	LL
Bromomethane	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 00:58	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	04/30/22	04/30/22 00:58	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	04/30/22	04/30/22 00:58	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
Chloroethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 00:58	LL
Chloroform	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 00:58	LL
Chloromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 00:58	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	04/30/22	04/30/22 00:58	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	04/30/22	04/30/22 00:58	LL
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 00:58	LL
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 00:58	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

1375-DMR-Z4

2042913-05 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	04/30/22	04/30/22 00:58	LL
Iodomethane	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 00:58	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	04/30/22	04/30/22 00:58	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
Methylene chloride	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 00:58	LL
Styrene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
Tetrachloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
Toluene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 00:58	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 00:58	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 00:58	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
o-Xylene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 00:58	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 00:58	LL
Surrogate: 4-Bromofluorobenzene			*80-120*	*93 %*			*04/30/22*	*04/30/22 00:58*	
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*95 %*			*04/30/22*	*04/30/22 00:58*	

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Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

1377-DMR-Z4

2042913-06 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	04/30/22	04/30/22 01:21	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	04/30/22	04/30/22 01:21	LL
Benzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
Bromoform	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 01:21	LL
Bromomethane	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 01:21	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	04/30/22	04/30/22 01:21	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	04/30/22	04/30/22 01:21	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
Chloroethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 01:21	LL
Chloroform	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 01:21	LL
Chloromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 01:21	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	04/30/22	04/30/22 01:21	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	04/30/22	04/30/22 01:21	LL
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 01:21	LL
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 01:21	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL

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Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

1377-DMR-Z4

2042913-06 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	04/30/22	04/30/22 01:21	LL
Iodomethane	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 01:21	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	04/30/22	04/30/22 01:21	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
Methylene chloride	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 01:21	LL
Styrene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
Tetrachloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
Toluene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 01:21	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 01:21	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 01:21	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
o-Xylene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:21	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 01:21	LL
Surrogate: 4-Bromofluorobenzene			*80-120*	*96 %*			*04/30/22*	*04/30/22 01:21*	
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*98 %*			*04/30/22*	*04/30/22 01:21*	

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Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

1718-SD-Z4

2042913-07 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	04/30/22	04/30/22 01:44	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	04/30/22	04/30/22 01:44	LL
Benzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
Bromoform	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 01:44	LL
Bromomethane	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 01:44	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	04/30/22	04/30/22 01:44	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	04/30/22	04/30/22 01:44	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
Chloroethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 01:44	LL
Chloroform	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 01:44	LL
Chloromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 01:44	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	04/30/22	04/30/22 01:44	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	04/30/22	04/30/22 01:44	LL
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 01:44	LL
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 01:44	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL

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Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

1718-SD-Z4

2042913-07 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	04/30/22	04/30/22 01:44	LL
Iodomethane	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 01:44	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	04/30/22	04/30/22 01:44	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
Methylene chloride	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 01:44	LL
Styrene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
Tetrachloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
Toluene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 01:44	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 01:44	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 01:44	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
o-Xylene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 01:44	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 01:44	LL
Surrogate: 4-Bromofluorobenzene			*80-120*	*97 %*			*04/30/22*	*04/30/22 01:44*	
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*97 %*			*04/30/22*	*04/30/22 01:44*	

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Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

1730-SD-Z4

2042913-08 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	04/30/22	04/30/22 02:07	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	04/30/22	04/30/22 02:07	LL
Benzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
Bromoform	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 02:07	LL
Bromomethane	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 02:07	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	04/30/22	04/30/22 02:07	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	04/30/22	04/30/22 02:07	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
Chloroethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 02:07	LL
Chloroform	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 02:07	LL
Chloromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 02:07	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	04/30/22	04/30/22 02:07	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	04/30/22	04/30/22 02:07	LL
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 02:07	LL
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 02:07	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL

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Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

1730-SD-Z4

2042913-08 (Nonpotable Water)
Sample Date: 04/28/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	04/30/22	04/30/22 02:07	LL
Iodomethane	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 02:07	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	04/30/22	04/30/22 02:07	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
Methylene chloride	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 02:07	LL
Styrene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
Tetrachloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
Toluene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 02:07	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 02:07	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 02:07	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
o-Xylene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:07	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 02:07	LL
Surrogate: 4-Bromofluorobenzene			*80-120*	*97 %*			*04/30/22*	*04/30/22 02:07*	
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*95 %*			*04/30/22*	*04/30/22 02:07*	

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Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

P-160-Z4

2042913-09 (Nonpotable Water)
Sample Date: 04/29/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	04/30/22	04/30/22 02:30	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	04/30/22	04/30/22 02:30	LL
Benzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
Bromoform	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 02:30	LL
Bromomethane	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 02:30	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	04/30/22	04/30/22 02:30	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	04/30/22	04/30/22 02:30	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
Chloroethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 02:30	LL
Chloroform	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 02:30	LL
Chloromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 02:30	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	04/30/22	04/30/22 02:30	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	04/30/22	04/30/22 02:30	LL
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 02:30	LL
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 02:30	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

P-160-Z4

2042913-09 (Nonpotable Water)
Sample Date: 04/29/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	04/30/22	04/30/22 02:30	LL
Iodomethane	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 02:30	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	04/30/22	04/30/22 02:30	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
Methylene chloride	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 02:30	LL
Styrene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
Tetrachloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
Toluene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 02:30	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 02:30	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 02:30	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
o-Xylene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:30	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 02:30	LL
Surrogate: 4-Bromofluorobenzene			*80-120*	*98 %*			*04/30/22*	*04/30/22 02:30*	
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*97 %*			*04/30/22*	*04/30/22 02:30*	

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Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

P-166-Z4

2042913-10 (Nonpotable Water)
Sample Date: 04/29/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	04/30/22	04/30/22 02:53	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	04/30/22	04/30/22 02:53	LL
Benzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
Bromoform	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 02:53	LL
Bromomethane	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 02:53	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	04/30/22	04/30/22 02:53	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	04/30/22	04/30/22 02:53	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
Chloroethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 02:53	LL
Chloroform	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 02:53	LL
Chloromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 02:53	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	04/30/22	04/30/22 02:53	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	04/30/22	04/30/22 02:53	LL
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 02:53	LL
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 02:53	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL

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Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

P-166-Z4

2042913-10 (Nonpotable Water)
Sample Date: 04/29/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	04/30/22	04/30/22 02:53	LL
Iodomethane	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 02:53	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	04/30/22	04/30/22 02:53	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
Methylene chloride	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 02:53	LL
Styrene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
Tetrachloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
Toluene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 02:53	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 02:53	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 02:53	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
o-Xylene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 02:53	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 02:53	LL
Surrogate: 4-Bromofluorobenzene			*80-120*	*95 %*		*04/30/22*	*04/30/22 02:53*		
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*96 %*		*04/30/22*	*04/30/22 02:53*		

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Project: MILLERSVILLE LANDFILL

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Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

P-169-Z4

2042913-11 (Nonpotable Water)
Sample Date: 04/29/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	04/30/22	04/30/22 03:16	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	04/30/22	04/30/22 03:16	LL
Benzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
Bromoform	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 03:16	LL
Bromomethane	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 03:16	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	04/30/22	04/30/22 03:16	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	04/30/22	04/30/22 03:16	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
Chloroethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 03:16	LL
Chloroform	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 03:16	LL
Chloromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 03:16	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	04/30/22	04/30/22 03:16	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	04/30/22	04/30/22 03:16	LL
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 03:16	LL
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 03:16	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL

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Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

P-169-Z4

2042913-11 (Nonpotable Water)
Sample Date: 04/29/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	04/30/22	04/30/22 03:16	LL
Iodomethane	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 03:16	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	04/30/22	04/30/22 03:16	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
Methylene chloride	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 03:16	LL
Styrene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
Tetrachloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
Toluene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 03:16	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 03:16	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 03:16	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
o-Xylene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:16	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 03:16	LL
Surrogate: 4-Bromofluorobenzene			*80-120*	*97 %*			*04/30/22*	*04/30/22 03:16*	
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*98 %*			*04/30/22*	*04/30/22 03:16*	

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Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

P-257-Z4

2042913-12 (Nonpotable Water)
Sample Date: 04/29/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	04/30/22	04/30/22 03:40	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	04/30/22	04/30/22 03:40	LL
Benzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
Bromoform	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 03:40	LL
Bromomethane	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 03:40	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	04/30/22	04/30/22 03:40	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	04/30/22	04/30/22 03:40	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
Chloroethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 03:40	LL
Chloroform	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 03:40	LL
Chloromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 03:40	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	04/30/22	04/30/22 03:40	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	04/30/22	04/30/22 03:40	LL
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 03:40	LL
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 03:40	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL

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Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

P-257-Z4

2042913-12 (Nonpotable Water)
Sample Date: 04/29/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	04/30/22	04/30/22 03:40	LL
Iodomethane	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 03:40	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	04/30/22	04/30/22 03:40	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
Methylene chloride	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 03:40	LL
Styrene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
Tetrachloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
Toluene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 03:40	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 03:40	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 03:40	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
o-Xylene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 03:40	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 03:40	LL
Surrogate: 4-Bromofluorobenzene			*80-120*	*98 %*			*04/30/22*	*04/30/22 03:40*	
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*96 %*			*04/30/22*	*04/30/22 03:40*	

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Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

P-264-Z4

2042913-13 (Nonpotable Water)
Sample Date: 04/29/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	04/30/22	04/30/22 04:03	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	04/30/22	04/30/22 04:03	LL
Benzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
Bromoform	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 04:03	LL
Bromomethane	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 04:03	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	04/30/22	04/30/22 04:03	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	04/30/22	04/30/22 04:03	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
Chloroethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 04:03	LL
Chloroform	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 04:03	LL
Chloromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 04:03	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	04/30/22	04/30/22 04:03	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	04/30/22	04/30/22 04:03	LL
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 04:03	LL
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 04:03	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL

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Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

P-264-Z4

2042913-13 (Nonpotable Water)
Sample Date: 04/29/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	04/30/22	04/30/22 04:03	LL
Iodomethane	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 04:03	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	04/30/22	04/30/22 04:03	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
Methylene chloride	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 04:03	LL
Styrene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
Tetrachloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
Toluene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 04:03	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 04:03	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 04:03	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
o-Xylene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:03	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 04:03	LL
Surrogate: 4-Bromofluorobenzene			*80-120*	*96 %*		*04/30/22*	*04/30/22 04:03*		
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*96 %*		*04/30/22*	*04/30/22 04:03*		

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Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

P-383-Z4

2042913-14 (Nonpotable Water)
Sample Date: 04/29/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	04/30/22	04/30/22 04:26	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	04/30/22	04/30/22 04:26	LL
Benzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
Bromoform	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 04:26	LL
Bromomethane	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 04:26	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	04/30/22	04/30/22 04:26	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	04/30/22	04/30/22 04:26	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
Chloroethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 04:26	LL
Chloroform	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 04:26	LL
Chloromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 04:26	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	04/30/22	04/30/22 04:26	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	04/30/22	04/30/22 04:26	LL
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 04:26	LL
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 04:26	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL

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Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

P-383-Z4

2042913-14 (Nonpotable Water)
Sample Date: 04/29/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	04/30/22	04/30/22 04:26	LL
Iodomethane	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 04:26	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	04/30/22	04/30/22 04:26	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
Methylene chloride	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 04:26	LL
Styrene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
Tetrachloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
Toluene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 04:26	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 04:26	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 04:26	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
o-Xylene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:26	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 04:26	LL
Surrogate: 4-Bromofluorobenzene			*80-120*	*97 %*			*04/30/22*	*04/30/22 04:26*	
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*96 %*			*04/30/22*	*04/30/22 04:26*	

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Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

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2042913-15 (Nonpotable Water)
Sample Date: 04/29/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.00	3.00	1	04/30/22	04/30/22 04:49	LL
Acrylonitrile	ND		ug/L	10.0	2.00	1	04/30/22	04/30/22 04:49	LL
Benzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
Bromochloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
Bromodichloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
Bromoform	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 04:49	LL
Bromomethane	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 04:49	LL
2-Butanone (MEK)	ND		ug/L	5.00	2.00	1	04/30/22	04/30/22 04:49	LL
Carbon disulfide	ND		ug/L	0.500	0.400	1	04/30/22	04/30/22 04:49	LL
Carbon tetrachloride	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
Chlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
Chloroethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 04:49	LL
Chloroform	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 04:49	LL
Chloromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 04:49	LL
Dibromochloromethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.00	0.400	1	04/30/22	04/30/22 04:49	LL
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
Dibromomethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
1,2-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
1,4-Dichlorobenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	5.00	1.00	1	04/30/22	04/30/22 04:49	LL
Dichlorodifluoromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 04:49	LL
1,1-Dichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
1,2-Dichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
1,1-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
cis-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
trans-1,2-Dichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
Dichlorofluoromethane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 04:49	LL
1,2-Dichloropropane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
cis-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
trans-1,3-Dichloropropene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
Ethylbenzene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL

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Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

TRIP BLANK

2042913-15 (Nonpotable Water)
Sample Date: 04/29/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 524.2 (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.00	0.600	1	04/30/22	04/30/22 04:49	LL
Iodomethane	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 04:49	LL
4-Methyl-2-pentanone	ND		ug/L	5.00	0.600	1	04/30/22	04/30/22 04:49	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
Methylene chloride	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 04:49	LL
Styrene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
Tetrachloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
Toluene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
1,1,1-Trichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
1,1,2-Trichloroethane	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
Trichloroethene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 04:49	LL
1,2,3-Trichloropropane	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 04:49	LL
Vinyl acetate	ND		ug/L	0.500	0.500	1	04/30/22	04/30/22 04:49	LL
Vinyl chloride	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
o-Xylene	ND		ug/L	0.500	0.100	1	04/30/22	04/30/22 04:49	LL
m- & p-Xylenes	ND		ug/L	0.500	0.200	1	04/30/22	04/30/22 04:49	LL
Surrogate: 4-Bromofluorobenzene			*80-120*	*94 %*		*04/30/22*	*04/30/22 04:49*		
Surrogate: 1,2-Dichlorobenzene-d4			*80-120*	*95 %*		*04/30/22*	*04/30/22 04:49*		

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Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

Volatile Organics by EPA 524.2 (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204598 - GCMS-WATER-VOLATILES										
Blank (B204598-BLK1)					Prepared & Analyzed: 04/29/22					
Acetone	ND		5.00	ug/L						
Acrylonitrile	ND		10.0	ug/L						
Benzene	ND		0.500	ug/L						
Bromochloromethane	ND		0.500	ug/L						
Bromodichloromethane	ND		0.500	ug/L						
Bromoform	ND		0.500	ug/L						
Bromomethane	ND		0.500	ug/L						
2-Butanone (MEK)	ND		5.00	ug/L						
Carbon disulfide	ND		0.500	ug/L						
Carbon tetrachloride	ND		0.500	ug/L						
Chlorobenzene	ND		0.500	ug/L						
Chloroethane	ND		0.500	ug/L						
Chloroform	ND		0.500	ug/L						
Chloromethane	ND		0.500	ug/L						
Dibromochloromethane	ND		0.500	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.00	ug/L						
1,2-Dibromoethane (EDB)	ND		0.500	ug/L						
Dibromomethane	ND		0.500	ug/L						
1,2-Dichlorobenzene	ND		0.500	ug/L						
1,4-Dichlorobenzene	ND		0.500	ug/L						
trans-1,4-Dichloro-2-butene	ND		5.00	ug/L						
Dichlorodifluoromethane	ND		0.500	ug/L						
1,1-Dichloroethane	ND		0.500	ug/L						
1,2-Dichloroethane	ND		0.500	ug/L						
1,1-Dichloroethene	ND		0.500	ug/L						
cis-1,2-Dichloroethene	ND		0.500	ug/L						
trans-1,2-Dichloroethene	ND		0.500	ug/L						
Dichlorofluoromethane	ND		0.500	ug/L						
1,2-Dichloropropane	ND		0.500	ug/L						
cis-1,3-Dichloropropene	ND		0.500	ug/L						
trans-1,3-Dichloropropene	ND		0.500	ug/L						

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Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

Volatile Organics by EPA 524.2 (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204598 - GCMS-WATER-VOLATILES										
Blank (B204598-BLK1)					Prepared & Analyzed: 04/29/22					
Ethylbenzene	ND		0.500	ug/L						
2-Hexanone	ND		5.00	ug/L						
Iodomethane	ND		0.500	ug/L						
Methyl tert-butyl ether (MTBE)	ND		0.500	ug/L						
4-Methyl-2-pentanone	ND		5.00	ug/L						
Methylene chloride	ND		0.500	ug/L						
Styrene	ND		0.500	ug/L						
1,1,1,2-Tetrachloroethane	ND		0.500	ug/L						
1,1,2,2-Tetrachloroethane	ND		0.500	ug/L						
Tetrachloroethene	ND		0.500	ug/L						
Toluene	ND		0.500	ug/L						
1,1,1-Trichloroethane	ND		0.500	ug/L						
1,1,2-Trichloroethane	ND		0.500	ug/L						
Trichloroethene	ND		0.500	ug/L						
Trichlorofluoromethane (Freon 11)	ND		0.500	ug/L						
1,2,3-Trichloropropane	ND		0.500	ug/L						
Vinyl acetate	ND		0.500	ug/L						
Vinyl chloride	ND		0.500	ug/L						
o-Xylene	ND		0.500	ug/L						
m- & p-Xylenes	ND		0.500	ug/L						
Surrogate: 4-Bromofluorobenzene	*5.02*			ug/L	*5.000*		*100*	*80-120*		
Surrogate: 1,2-Dichlorobenzene-d4	*4.95*			ug/L	*5.000*		*99*	*80-120*		
LCS (B204598-BS1)					Prepared & Analyzed: 04/29/22					
Acetone	1.45	J	5.00	ug/L	1.000		145	50-150		
Acrylonitrile	ND		10.0	ug/L	0.5000			50-150		
Benzene	0.490	J	0.500	ug/L	0.5000		98	50-150		
Bromochloromethane	0.690		0.500	ug/L	0.5000		138	50-150		
Bromodichloromethane	0.500		0.500	ug/L	0.5000		100	50-150		
Bromoform	0.390	J	0.500	ug/L	0.5000		78	50-150		
Bromomethane	0.950		0.500	ug/L	0.5000		190	50-150		
2-Butanone (MEK)	0.190	J	5.00	ug/L	1.000		19	50-150		

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Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

Volatile Organics by EPA 524.2 (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204598 - GCMS-WATER-VOLATILES										
LCS (B204598-BS1)					Prepared & Analyzed: 04/29/22					
Carbon disulfide	0.590		0.500	ug/L	0.5000		118	50-150		
Carbon tetrachloride	0.510		0.500	ug/L	0.5000		102	50-150		
Chlorobenzene	0.530		0.500	ug/L	0.5000		106	50-150		
Chloroethane	0.630		0.500	ug/L	0.5000		126	50-150		
Chloroform	0.600		0.500	ug/L	0.5000		120	50-150		
Chloromethane	0.640		0.500	ug/L	0.5000		128	50-150		
Dibromochloromethane	0.450	J	0.500	ug/L	0.5000		90	50-150		
1,2-Dibromo-3-chloropropane	0.620	J	1.00	ug/L	0.5000		124	50-150		
1,2-Dibromoethane (EDB)	0.440	J	0.500	ug/L	0.5000		88	50-150		
Dibromomethane	0.620		0.500	ug/L	0.5000		124	50-150		
1,2-Dichlorobenzene	0.610		0.500	ug/L	0.5000		122	50-150		
1,4-Dichlorobenzene	0.580		0.500	ug/L	0.5000		116	50-150		
trans-1,4-Dichloro-2-butene	0.520	J	5.00	ug/L	0.5000		104	50-150		
Dichlorodifluoromethane	0.400	J	0.500	ug/L	0.5000		80	50-150		
1,1-Dichloroethane	0.570		0.500	ug/L	0.5000		114	50-150		
1,2-Dichloroethane	0.630		0.500	ug/L	0.5000		126	50-150		
1,1-Dichloroethene	0.560		0.500	ug/L	0.5000		112	50-150		
cis-1,2-Dichloroethene	0.540		0.500	ug/L	0.5000		108	50-150		
trans-1,2-Dichloroethene	0.560		0.500	ug/L	0.5000		112	50-150		
Dichlorofluoromethane	0.520		0.500	ug/L	0.5000		104	50-150		
1,2-Dichloropropane	0.540		0.500	ug/L	0.5000		108	50-150		
cis-1,3-Dichloropropene	0.450	J	0.500	ug/L	0.5000		90	50-150		
trans-1,3-Dichloropropene	0.460	J	0.500	ug/L	0.5000		92	50-150		
Ethylbenzene	0.450	J	0.500	ug/L	0.5000		90	50-150		
2-Hexanone	0.690	J	5.00	ug/L	1.000		69	50-150		
Iodomethane	0.410	J	0.500	ug/L	0.5000		82	50-150		
Methyl tert-butyl ether (MTBE)	0.430	J	0.500	ug/L	0.5000		86	50-150		
4-Methyl-2-pentanone	0.850	J	5.00	ug/L	1.000		85	50-150		
Methylene chloride	1.08		0.500	ug/L	0.5000		216	50-150		
Styrene	0.420	J	0.500	ug/L	0.5000		84	50-150		
1,1,1,2-Tetrachloroethane	0.470	J	0.500	ug/L	0.5000		94	50-150		

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Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

Volatile Organics by EPA 524.2 (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B204598 - GCMS-WATER-VOLATILES										
LCS (B204598-BS1)					Prepared & Analyzed: 04/29/22					
1,1,2,2-Tetrachloroethane	0.550		0.500	ug/L	0.5000		110	50-150		
Tetrachloroethene	0.520		0.500	ug/L	0.5000		104	50-150		
Toluene	0.520		0.500	ug/L	0.5000		104	50-150		
1,1,1-Trichloroethane	0.490	J	0.500	ug/L	0.5000		98	50-150		
1,1,2-Trichloroethane	0.520		0.500	ug/L	0.5000		104	50-150		
Trichloroethene	0.530		0.500	ug/L	0.5000		106	50-150		
Trichlorofluoromethane (Freon 11)	0.540		0.500	ug/L	0.5000		108	50-150		
1,2,3-Trichloropropane	0.540		0.500	ug/L	0.5000		108	50-150		
Vinyl acetate	0.120	J	0.500	ug/L	0.5000		24	50-150		
Vinyl chloride	0.510		0.500	ug/L	0.5000		102	50-150		
o-Xylene	0.450	J	0.500	ug/L	0.5000		90	50-150		
m- & p-Xylenes	0.880		0.500	ug/L	1.000		88	50-150		
Surrogate: 4-Bromofluorobenzene	*5.08*			ug/L	*5.000*		*102*	*80-120*		
Surrogate: 1,2-Dichlorobenzene-d4	*5.24*			ug/L	*5.000*		*105*	*80-120*		
Batch B205172 - GCMS-WATER-VOLATILES										
Blank (B205172-BLK1)					Prepared & Analyzed: 05/11/22					
Acetone	3.51	J	5.00	ug/L						
Acrylonitrile	ND		10.0	ug/L						
Benzene	ND		0.500	ug/L						
Bromochloromethane	ND		0.500	ug/L						
Bromodichloromethane	ND		0.500	ug/L						
Bromoform	ND		0.500	ug/L						
Bromomethane	ND		0.500	ug/L						
2-Butanone (MEK)	ND		5.00	ug/L						
Carbon disulfide	ND		0.500	ug/L						
Carbon tetrachloride	ND		0.500	ug/L						
Chlorobenzene	ND		0.500	ug/L						
Chloroethane	ND		0.500	ug/L						
Chloroform	ND		0.500	ug/L						
Chloromethane	ND		0.500	ug/L						

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Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

Volatile Organics by EPA 524.2 (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205172 - GCMS-WATER-VOLATILES										
Blank (B205172-BLK1)					Prepared & Analyzed: 05/11/22					
Dibromochloromethane	ND		0.500	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.00	ug/L						
1,2-Dibromoethane (EDB)	ND		0.500	ug/L						
Dibromomethane	ND		0.500	ug/L						
1,2-Dichlorobenzene	ND		0.500	ug/L						
1,4-Dichlorobenzene	ND		0.500	ug/L						
trans-1,4-Dichloro-2-butene	ND		5.00	ug/L						
Dichlorodifluoromethane	ND		0.500	ug/L						
1,1-Dichloroethane	ND		0.500	ug/L						
1,2-Dichloroethane	ND		0.500	ug/L						
1,1-Dichloroethene	ND		0.500	ug/L						
cis-1,2-Dichloroethene	ND		0.500	ug/L						
trans-1,2-Dichloroethene	ND		0.500	ug/L						
Dichlorofluoromethane	ND		0.500	ug/L						
1,2-Dichloropropane	ND		0.500	ug/L						
cis-1,3-Dichloropropene	ND		0.500	ug/L						
trans-1,3-Dichloropropene	ND		0.500	ug/L						
Ethylbenzene	ND		0.500	ug/L						
2-Hexanone	ND		5.00	ug/L						
Iodomethane	ND		0.500	ug/L						
Methyl tert-butyl ether (MTBE)	ND		0.500	ug/L						
4-Methyl-2-pentanone	ND		5.00	ug/L						
Methylene chloride	ND		0.500	ug/L						
Styrene	ND		0.500	ug/L						
1,1,1,2-Tetrachloroethane	ND		0.500	ug/L						
1,1,2,2-Tetrachloroethane	ND		0.500	ug/L						
Tetrachloroethene	ND		0.500	ug/L						
Toluene	ND		0.500	ug/L						
1,1,1-Trichloroethane	ND		0.500	ug/L						
1,1,2-Trichloroethane	ND		0.500	ug/L						
Trichloroethene	ND		0.500	ug/L						

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Maryland spectral Services

Analytical Chemistry Services

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Project: MILLERSVILLE LANDFILL

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Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

Volatile Organics by EPA 524.2 (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205172 - GCMS-WATER-VOLATILES										
Blank (B205172-BLK1)					Prepared & Analyzed: 05/11/22					
Trichlorofluoromethane (Freon 11)	ND		0.500	ug/L						
1,2,3-Trichloropropane	ND		0.500	ug/L						
Vinyl acetate	ND		0.500	ug/L						
Vinyl chloride	ND		0.500	ug/L						
o-Xylene	ND		0.500	ug/L						
m- & p-Xylenes	ND		0.500	ug/L						
Surrogate: 4-Bromofluorobenzene	*4.70*			ug/L	*5.000*		*94*	*80-120*		
Surrogate: 1,2-Dichlorobenzene-d4	*4.81*			ug/L	*5.000*		*96*	*80-120*		
LCS (B205172-BS1)					Prepared & Analyzed: 05/11/22					
Acetone	3.20	J	5.00	ug/L	1.000		320	50-150		
Acrylonitrile	0.520	J	10.0	ug/L	0.5000		104	50-150		
Benzene	0.500		0.500	ug/L	0.5000		100	50-150		
Bromochloromethane	0.660		0.500	ug/L	0.5000		132	50-150		
Bromodichloromethane	0.560		0.500	ug/L	0.5000		112	50-150		
Bromoform	0.530		0.500	ug/L	0.5000		106	50-150		
Bromomethane	0.840		0.500	ug/L	0.5000		168	50-150		
2-Butanone (MEK)	0.330	J	5.00	ug/L	1.000		33	50-150		
Carbon disulfide	0.690		0.500	ug/L	0.5000		138	50-150		
Carbon tetrachloride	0.630		0.500	ug/L	0.5000		126	50-150		
Chlorobenzene	0.530		0.500	ug/L	0.5000		106	50-150		
Chloroethane	0.730		0.500	ug/L	0.5000		146	50-150		
Chloroform	0.610		0.500	ug/L	0.5000		122	50-150		
Chloromethane	0.640		0.500	ug/L	0.5000		128	50-150		
Dibromochloromethane	0.520		0.500	ug/L	0.5000		104	50-150		
1,2-Dibromo-3-chloropropane	0.580	J	1.00	ug/L	0.5000		116	50-150		
1,2-Dibromoethane (EDB)	0.500		0.500	ug/L	0.5000		100	50-150		
Dibromomethane	0.570		0.500	ug/L	0.5000		114	50-150		
1,2-Dichlorobenzene	0.580		0.500	ug/L	0.5000		116	50-150		
1,4-Dichlorobenzene	0.510		0.500	ug/L	0.5000		102	50-150		
trans-1,4-Dichloro-2-butene	0.630	J	5.00	ug/L	0.5000		126	50-150		
Dichlorodifluoromethane	0.470	J	0.500	ug/L	0.5000		94	50-150		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

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410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022
Project Manager: Steve Brown

Reported:
05/17/22 11:21

Volatile Organics by EPA 524.2 (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B205172 - GCMS-WATER-VOLATILES										
LCS (B205172-BS1)					Prepared & Analyzed: 05/11/22					
1,1-Dichloroethane	0.670		0.500	ug/L	0.5000		134	50-150		
1,2-Dichloroethane	0.640		0.500	ug/L	0.5000		128	50-150		
1,1-Dichloroethene	0.620		0.500	ug/L	0.5000		124	50-150		
cis-1,2-Dichloroethene	0.580		0.500	ug/L	0.5000		116	50-150		
trans-1,2-Dichloroethene	0.680		0.500	ug/L	0.5000		136	50-150		
Dichlorofluoromethane	0.580		0.500	ug/L	0.5000		116	50-150		
1,2-Dichloropropane	0.580		0.500	ug/L	0.5000		116	50-150		
cis-1,3-Dichloropropene	0.480	J	0.500	ug/L	0.5000		96	50-150		
trans-1,3-Dichloropropene	0.470	J	0.500	ug/L	0.5000		94	50-150		
Ethylbenzene	0.470	J	0.500	ug/L	0.5000		94	50-150		
2-Hexanone	1.03	J	5.00	ug/L	1.000		103	50-150		
Iodomethane	0.260	J	0.500	ug/L	0.5000		52	50-150		
Methyl tert-butyl ether (MTBE)	0.460	J	0.500	ug/L	0.5000		92	50-150		
4-Methyl-2-pentanone	0.950	J	5.00	ug/L	1.000		95	50-150		
Methylene chloride	1.20		0.500	ug/L	0.5000		240	50-150		
Styrene	0.410	J	0.500	ug/L	0.5000		82	50-150		
1,1,1,2-Tetrachloroethane	0.550		0.500	ug/L	0.5000		110	50-150		
1,1,2,2-Tetrachloroethane	0.680		0.500	ug/L	0.5000		136	50-150		
Tetrachloroethene	0.580		0.500	ug/L	0.5000		116	50-150		
Toluene	0.470	J	0.500	ug/L	0.5000		94	50-150		
1,1,1-Trichloroethane	0.600		0.500	ug/L	0.5000		120	50-150		
1,1,2-Trichloroethane	0.570		0.500	ug/L	0.5000		114	50-150		
Trichloroethene	0.520		0.500	ug/L	0.5000		104	50-150		
Trichlorofluoromethane (Freon 11)	0.670		0.500	ug/L	0.5000		134	50-150		
1,2,3-Trichloropropane	0.610		0.500	ug/L	0.5000		122	50-150		
Vinyl acetate	0.450	J	0.500	ug/L	0.5000		90	50-150		
Vinyl chloride	0.560		0.500	ug/L	0.5000		112	50-150		
o-Xylene	0.430	J	0.500	ug/L	0.5000		86	50-150		
m- & p-Xylenes	0.850		0.500	ug/L	1.000		85	50-150		
Surrogate: 4-Bromofluorobenzene	*4.91*			ug/L	*5.000*		*98*	*80-120*		
Surrogate: 1,2-Dichlorobenzene-d4	*5.20*			ug/L	*5.000*		*104*	*80-120*		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

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www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Project Number: MLF-SPRING 2022

Project Manager: Steve Brown

Reported:
05/17/22 11:21

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

1 of 2 524.2

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MD. SPECTRAL
Project	MLF-SPMNL 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	① VOCs - METHOD 524.2										
																		2042913-01 A
1	1363-DMR-Z4	3	4.28.22	1730	✓		DW	✓										
2	1365-DMR-Z4			1745													-	02
3	1371-DMR-Z4			1800													-	03
4	1373-DMR-Z4			1815													-	04
5	1375-DMR-Z4			1710													-	05
6	1377-DMR-Z4			1650													-	06
7	1718-SD-Z4			1630													-	07
8	1730-SD-Z4			1610													-	08
9	P-160-Z4		4.29.22	1120													-	09
10	P-166-Z4			1015													-	10
11	P-169-Z4			1000													-	11
12	P-257-Z4			1030													-	12

	Signature	Date	Time	Comments
Relinquished by	[signature]	4.29.22	1230	① APPENDIX I LIST OF 47 VOCs, MTBE +
Received by	[signature]	4.29.22	1230	2 FREONS (DCDFM + DCFM)
Relinquished by				
Received by				
Relinquished by				STANDARD REPORT
Received by				

Cooler Temp on Arrival: 5.6 Deg. C

Rev. Aug. 2018

524.2
2 of 2

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MD. SPECTRAL
Project	MLF-SPMNL 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Report revised to include sample reanalyses. Original report ID 2042913 05 10 22 1050

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 524.2 (1)											
1	P-264-24	3	4.29.22	1045	✓		DW	✓										-	13
2	P-383-24	3	↓	1100	✓		DW	✓										-	14
3	TRIP BLANK	2	↓	—	—		QA	✓										-	15
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

	Signature	Date	Time	Comments
Relinquished by	[signature]	4.29.22	1230	(1) APPENDIX I LIST of 47 VOCs MTBE, +
Received by	[signature]	4.29.22	1230	2 FREONS (DCDFM + DCFM)
Relinquished by				
Received by				
Relinquished by				STANDARD REPORT
Received by				

Cooler Temp on Arrival: 5.6 Deg. C

Rev. Aug. 2018

Appendix C.4
Fall 2022

Bureau of Waste Management Services
389 Burns Crossing Road
Severn, Maryland 21144
Phone (410) 222-6108

January 31, 2023

Mr. Andrew Grenzer, Chief
Solid Waste Operations Division
Land and Materials Administration
Maryland Department of the Environment
1800 Washington Blvd., Suite 605
Baltimore, MD 21230-1720

RE: Semi-Annual Groundwater and Surface Water Reports, July 1 – December 31, 2022, Millersville Landfill and Resource Recovery Facility and Sudley Closed Landfill

Dear Mr. Grenzer:

Enclosed are the Semi-Annual Groundwater and Surface Water Data Evaluation Reports for the Millersville Landfill and Resource Recovery Facility and the Sudley Landfill. The analytical results (raw data reports) for the monitoring events are also enclosed. The text, tables, and appendices are included as hard copies. The appendix containing the raw analytical data results is included electronically on the accompanying CDs.

Should you have any questions regarding the information covered in this document, please contact me or Mark Morris on (410) 222-6108.

Sincerely,

Stephen J. Krajcsik
Solid Waste Operations Administrator

Enclosure

bcc: Bill Dehn, AACo. Health Department (Mail Stop 3101), w/enclosures
Rhody Holthaus, w/enclosures
Michael Porath, w/enclosures
Mark Morris, w/enclosures
Stewart Kabis, ARM Group (cover letter only)
File# OR-O-MLF-551E w/enclosures; OR-O-MCC/MLF-506 (cover letter only) for Millersville
File# OR-O-SLF-651C w/enclosures; OR-O-SCC/SLF-606 (cover letter only) for Sudley

ANNE ARUNDEL COUNTY

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY

GROUNDWATER MONITORING REPORT
2nd SEMI-ANNUAL 2022

ARM Project 22011183

Prepared for:

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS
WASTE MANAGEMENT SERVICES
389 Burns Crossing Road
Severn, Maryland 21144

Prepared by:

ARM Group LLC
9175 Guilford Road
Suite 310
Columbia, MD 21046

January 2023

ANNE ARUNDEL COUNTY

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY

GROUNDWATER MONITORING REPORT
2nd SEMI-ANNUAL 2022

ARM Project 22011183

Prepared for:

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WASTE MANAGEMENT SERVICES
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Prepared by:

ARM Group LLC
9175 Guilford Road
Suite 310
Columbia, MD 21046

January 2023

Lauren Parker, G.I.T.
Project Geologist I

Stewart Kabis, P.G.
Project Geologist II/Q.A. Reviewer

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Appendix B Historical MCL Exceedance Time-Series Plots

Appendix C Groundwater Elevations

Appendix D Data Validation

Appendix E Laboratory Analytical Reports

EXECUTIVE SUMMARY

The Maryland Department of Environment (MDE) has developed groundwater and surface water monitoring requirements to detect pollutant releases from landfills that could have adverse impacts on public health and the environment. To fulfill these requirements, landfills must be monitored to address three issues: (i) whether a release of chemicals from the landfill has occurred; (ii) whether conditions potentially adverse to public health and the environment were created as a result of a release; and (iii) whether the results of a statistical evaluation of groundwater data require that additional sampling and/or corrective measures be implemented. This executive summary presents the findings of the 2nd semi-annual 2022 (Fall 2022) groundwater sampling event, performed at the Millersville Landfill and Resource Recovery Facility (MLFRRF) located in Anne Arundel County. The findings are summarized with respect to these three issues.

The sampling results are evaluated for compliance with regulatory standards, including: (i) U.S. Environmental Protection Agency (USEPA) maximum contaminant levels (MCLs) and secondary maximum contaminant levels (SMCLs); (ii) Maryland health-based standards; and (iii) groundwater protection standards (GWPS) established for the site. MCLs and groundwater protection standards are established based on health concerns, whereas SMCLs are based on aesthetic concerns, such as taste, color, and odor.

The groundwater and surface water monitoring strategy for the MLFRRF was first identified in the Environmental Monitoring Plan (EMP), prepared for the Anne Arundel County Department of Public Works (the County) by Stearns & Wheeler [June 1995, Revised June 1996]. An updated EMP for MLFRRF prepared by ERM, dated November 5, 2002, was conditionally approved by MDE with their June 7, 2004 letter, contingent upon the County adding methyl tertiary butyl ether (MTBE) analysis to the monitoring program. The EMP was updated by ERM and approved by MDE in a letter dated March 25, 2010. The EMP defines two separate portions of the MLFRRF. Closed portions (Cells 1 East, 2, and 4) that stopped receiving waste prior to October 9, 1991, are subject to the requirements of the Code of Maryland (COMAR). The closed portions (Cells 5, 6, and 7) that stopped receiving waste prior to October 9, 1993, are subject to the provisions of 40 CFR Part 258 related to final cover requirements only. The recently-closed Cell 8 and currently active Cell 9 are subject to 40 CFR Part 258. However, for the purposes of monitoring, the closed portion (Cells 5, 6, and 7) are included in the monitoring and analysis requirements pursuant to 40 CFR Part 258 along with Cell 8 and Cell 9. Each of these portions of the MLFRRF are monitored by a comprehensive monitoring network, on-site regulated monitoring wells (Subtitle D), on-site regulated monitoring wells (COMAR), on-site non-regulated monitoring wells, off-site non-regulated monitoring wells, and other off-site monitoring locations. The monitoring networks were defined according to strategies that comply with the applicable regulatory requirements.

At the request of MDE, additional monitoring was performed for a select list of parameters from the Appendix II list in 40 CFR Part 258 for the on-site Subtitle D regulated monitoring wells.

OVERVIEW OF FINDINGS

Overall, the sampling event did not reveal substantial changes in groundwater quality and the results for inorganic parameters are consistent with historical results. Given the data for the MLFRRF, the site-specific hydrogeology, and the corrective actions implemented by the County, the potential for adverse effects to human health and the environment continues to be minimal.

Of all samples collected for the Fall 2022 sampling event, there were two MCL exceedances, shown on **Table 3.** One of the these was a first time exceedance, that of lead in TW-29. The MDE was notified of the exceedance. However, when TW-29 was resampled to confirm the detection, the concentration of lead in TW-29 was below detection limits. Therefore, the initial detection was deemed invalid. The other MCL exceedance during this sampling event was for methylene chloride in TW-25A, which is routinely measured above its applicable MCL in this well. The two MCL exceedances are further discussed below in **Section 3.3.1**.

The groundwater elevations and flow directions observed in the Zone 3 aquifer during this sampling event are generally consistent with historical data and seasonal variations.

The following summarizes the results of the Fall 2022 groundwater sampling event.

On-Site Regulated Monitoring Wells (Subtitle D)

All of the Appendix I VOC detections above the reporting limit (RL) are listed in **Table 4.** The Appendix II VOC detections are listed in **Table 5**. The concentration of methylene chloride in TW-25A exceeded its applicable MCL, as is typical. A first-time MCL exceedance was identified for lead in well TW-29 which, as mentioned above, was determined to be an invalid result due to the concentration of lead in the confirmation sample being below reporting limits.

In general, concentrations of Appendix I and Appendix II VOCs in the on-site Subtitle D regulated wells are consistent with historical concentrations. All VOC results for Subtitle D wells are discussed below in **Section 3.3.2**.

While iron and manganese continue to exceed SMCLs and pH is below the SMCL range in several wells, concentrations are generally consistent with historical levels.

On-site Regulated Monitoring Wells (COMAR)

Detections of Appendix I VOCs above the RL in COMAR wells are listed in **Table 6**. The Appendix II VOC detections above the RL are listed in **Table 7.** There were no GWPS or MCL exceedances for VOCs. The concentrations measured for Appendix I and Appendix II VOCs in the on-site COMAR-regulated wells are generally consistent with historical records.

While iron and manganese continue to exceed SMCLs and pH is below the SMCL range in several wells, concentrations are generally consistent with historical levels.

On-site Non-regulated Monitoring Wells

Appendix I VOC detections above the RL are typically listed in **Table 8**; however, there were no Appendix I VOCs detected above RL in these wells during the Fall 2022 event**.** Appendix II VOC detections above the RL are typically listed in **Table 9**; however, there were no Appendix II VOCs detected above RL in these wells during the Fall 2022 event.

While iron and manganese continue to exceed SMCLs and pH is below the SMCL range in several wells, concentrations are generally consistent with historical levels.

Off-site Non-regulated Monitoring Wells

Appendix I VOC detections above the RL are listed in **Table 10.** Appendix II VOC detections above the RL are listed in **Table 11.** There were no MCL or GWPS exceedances. Appendix I and Appendix II VOC concentrations in these wells are generally consistent with historical concentrations. Mercury concentrations in the off-site non-regulated monitoring wells are generally consistent with the historical record.

Off-site Residential Zone 4 Water Supply Wells

As shown on **Table 12** and **Table 13**, there were no Zone 4 residential water supply wells sampled during the Fall 2022 event.

Surface Water Sampling Locations

Appendix I VOC detections above the RL are listed in **Table 14.** Appendix II VOC detections above the RL are typically listed in **Table 15**, but there were no detections above the RL at surface water locations during this sampling event. There were no MCL or GWPS exceedances.

Concentrations of inorganic parameters were generally consistent with the historical record for surface water sampling locations.

Statistical Evaluation

The results of the statistical evaluation of the Fall 2022 groundwater data are generally consistent with historical results. The findings indicate that downgradient samples show constituent concentrations that are statistically significant increases (SSIs) above background levels for several VOCs and inorganic parameters. There was one new SSI for parameters detected above the RL during the Fall 2022 sampling event that was not identified during the Spring 2022 event: manganese in TW-02A.

Concentrations of most parameters that exhibited SSIs have generally been consistent with their historical data set; that is, no trend is apparent in the concentrations.

1 INTRODUCTION

1.1 BACKGROUND

In accordance with the requirements of the Solid Waste Management Regulations provided in Title 40 of the Code of Federal Regulations, Part 258 (40 CFR Part 258) and the Maryland Department of the Environment (MDE), the Anne Arundel County Department of Public Works (County) monitors groundwater and surface water at the Millersville Landfill and Resource Recovery Facility (MLFRRF), located in Anne Arundel County, Maryland. The monitoring requirements are provided in the Environmental Monitoring Plan (EMP), prepared by Stearns & Wheeler [June 1995, Revised June 1996]. An updated EMP for MLFRRF prepared by ERM, dated November 5, 2002, was conditionally approved by MDE with their June 7, 2004 letter, contingent upon the County adding methyl tertiary butyl ether (MTBE) analysis to the monitoring program. The EMP was revised by ERM and approved by MDE in a letter dated March 25, 2010. The primary objectives of the compliance monitoring program for the MLFRRF are: (i) to determine if leachate from the landfill affects groundwater quality; (ii) to evaluate whether or not conditions that are potentially adverse to public health and the environment have been caused in groundwater or surface water by the operation of the landfill; and (iii) to determine whether the results of a statistical evaluation of the sampling data indicate that the County needs to perform additional groundwater sampling or implement corrective measures.

This semi-annual report summarizes the findings of the evaluation performed on the data obtained during the Fall 2022 groundwater sampling event. The sampling performed during this event was conducted to fulfill the monitoring requirements of 40 CFR Part 258 and the approved EMP. This report also provides an overview of groundwater quality based on current and historical data.

The sampling data were evaluated through: (i) data validation; (ii) an evaluation of the ion balances of the samples that were collected, and an evaluation of the relative percent differences (RPDs) between sampling locations and corresponding duplicates (**Appendix D**); (iii) a statistical comparison of laboratory data between designated upgradient and downgradient groundwater on-site Subtitle D regulated monitoring wells; (iv) a comparison of laboratory results for each groundwater monitoring well with historical groundwater quality information; and (v) a comparison of laboratory results for each groundwater monitoring well with United States Environmental Protection Agency (USEPA) and MDE regulatory criteria, as well as with site-specific groundwater protection standards (GWPS).

There are three sets of rules that govern how the MLFRRF monitoring data are evaluated: 40 CFR Part 258 regulations apply to those portions of the MLFRRF that continued to receive waste after October 9th, 1993; 40 CFR Part 258 regulations related to final cover requirements apply to those portions of the MLFRRF that stopped receiving waste prior to October 9, 1993; and State Code of Maryland (COMAR) regulations apply to those closed portions of the MLFRRF that stopped

receiving waste before October 9, 1991. Closed disposal Cells 1 East, 2, and 4 are monitored in compliance with COMAR standards. The closed Cells 5, 6, and 7 that stopped receiving waste prior to October 9, 1993, are subject to the provisions of 40 CFR Part 258 related to final cover requirements only. Recently-closed Cell 8 and currently active Cell 9 are subject to 40 CFR Part 258. However, for the purposes of monitoring, the closed Cells 5, 6, and 7 are included in the monitoring and analysis requirements pursuant to 40 CFR Part 258 along with Cell 8 and Cell 9.

Table 1 provides a summary of the groundwater monitoring network for the MLFRRF. As shown in **Table 1**, the wells are designated according to whether they are used to monitor the older (Cells 1 East, 2, and 4) or newer (combined Cells 5, 6, and 7, Cell 8, and Cell 9) portions of the MLFRRF. The groundwater and surface water monitoring network for the MLFRRF is illustrated in **Figure C-1** in **Appendix C**. In general, the older and newer portions are separated by the Baltimore Gas Electric right-of-way.

In accordance with the EMP and in conformance with applicable regulations, 22 of the 50 on-site monitoring wells at the MLFRRF are classified as on-site regulated monitoring wells (Subtitle D). Eleven are located along the Eastern Boundary, two are near Cell 8, two are near the facility entrance serving as background wells, and seven are near Cell 9. Additionally, another 15 of the 50 on-site monitoring wells are classified as on-site regulated monitoring wells (COMAR). These monitoring wells are governed by COMAR for the closed portion of the MLFRRF. One monitoring well, TW-26R, is regulated by the facility's refuse disposal permit and is not covered by this semi-annual report. The remaining 13 on-site monitoring wells are classified as non-regulated. In conjunction with the regulated wells, numerous off-site monitoring locations have been established by the County to take proactive measures that comply with 40 CFR Part 258 groundwater monitoring requirements.

The regulated monitoring wells (Subtitle D) consist of the wells at the site that provide information on the quality of groundwater passing the relevant point of compliance and that are downgradient of combined Cells 5, 6, and 7, Cell 8 and Cell 9. **Table 1** summarizes the sampling locations used to monitor these cells. The on-site monitoring wells are designated as "TW". Wells designated as "MW" are off-site monitoring wells installed by the County to monitor off-site chemical concentrations in the groundwater. Wells designated as "RW" are also off-site monitoring wells and were converted from drinking water supply wells to monitoring wells by the County. Off-site residential water supply wells drilled into either the Zone 3 or Zone 4 aquifer are designated by the County parcel number with the prefix "P". Off-site residential water supply wells which have been drilled into the Zone 4 aquifer by the County have the suffix "Z4". Zone 4 residential wells are sampled biennially, with the exception of well P-417-Z4. This well is sampled annually in the spring as a conservative measure because there is no sentry monitoring point between the landfill and Parcel 417. **Table 2** lists the residential water supply wells. The residential water supply wells were not sampled during the Fall 2022 sampling event.

Regulated monitoring well (Subtitle D) TW-20 was abandoned on April 8, 2010, by a licensed well driller in accordance with COMAR 26.04.04.11. The well was placed to monitor groundwater downgradient of Cell 8 but was placed where a stormwater management pond was designated for Cell 9. Zone 3 monitoring well TW-20R was installed February 3-5, 2010, adjacent to Cell 8 as a replacement for abandoned monitoring well TW-20 per the approved EMP.

In addition to TW-20R, two non-regulated on-site Zone 4 monitoring wells were installed prior to the Spring 2010 sampling event. The installation of non-regulated on-site Zone 4 monitoring wells TW-14B and TW-6B were completed per the approved EMP on January 21, 2010 and February 2, 2010, respectively.

In accordance with the EMP, four on-site Zone 3 monitoring wells, TW-27, TW-28, TW-29, and TW-30, were installed prior to the Spring 2013 sampling event for incorporation into the regulatory monitoring well network for Cell 9. Additionally, existing monitoring wells TW-01, TW-02A, and TW-03, located south of Cell 9, are now considered part of the regulatory monitoring well network. Two years of background monitoring were completed prior to Cell 9 becoming operational in January 2017.

During the Fall 2020, construction activity for Cell 9 of the landfill involved significant earthwork in the immediate vicinity of TW-28, including raising the ground surface by 10-12 feet. As a result, new sections of well pipe were added to the top of TW-28 in order to vertically extend the well.

1.2 GROUNDWATER SAMPLING AND LABORATORY ANALYSIS

1.2.1 Groundwater Sampling

The County contracted with Environmental Monitoring and Assessment, LLC (EMA) of Lititz, Pennsylvania, to conduct the semi-annual groundwater sampling at the MLFRRF for the Fall 2022 sampling event. The sampling event included the collection of samples from 22 regulated on-site monitoring wells (Subtitle D), 15 regulated on-site monitoring wells (COMAR), 7 on-site non-regulated monitoring wells, and 12 off-site monitoring wells. The sampling locations are listed in **Table 1.**

Prior to collecting the groundwater samples, the depth to the water table was measured at each well. Once the water table measurement was recorded, the monitoring wells were purged and sampled in accordance with 40 CFR Part 258, MDE requirements, and the EMP. As the monitoring wells were purged, measurements of groundwater dissolved oxygen, pH, conductivity, temperature, oxidation-reduction potential, turbidity, and appearance were recorded.

1.2.2 Groundwater Sample Analysis

The groundwater analytical program for the MLFRRF includes the analysis of samples for parameters used to monitor both the existing and closed portion of the MLFRRF. For the purpose of uniformity and ease of implementation, the samples that are collected from the wells used to monitor the closed portion of the MLFRRF are analyzed in accordance with the detection monitoring requirements (defined by 40 CFR Part 258) for the existing portion of the MLFRRF, as specified in the EMP. In accordance with these detection monitoring requirements, the samples are analyzed for the parameters listed in Appendix I of 40 CFR Part 258 (Appendix I parameters). The Appendix I parameters include inorganic constituents (metals) and organic constituents (volatile organic compounds or VOCs).

In addition to these analytical requirements, the samples collected at the site are also analyzed for parameters historically monitored at the site. These parameters include dichlorodifluoromethane and dichlorofluoromethane, which are listed in Appendix II of 40 CFR Part 258 (Appendix II parameters), methyl tertiary butyl ether (MTBE), and general chemistry parameters such as chloride and total dissolved solids that can sometimes be indicators of landfill leachate (indicator parameters).

In accordance with this analytical program described above, the groundwater samples were analyzed for VOCs, total and dissolved metals, and general chemistry indicator parameters. The methods used to analyze the samples included USEPA Methods 8260 and 8011 for VOCs; USEPA Methods 6010D, 6020B, and 7470A for metals; and 40 CFR Part 136 methods for the indicator parameters. The full laboratory analytical results and data packages are presented as **Appendix E.**

1.3 SURFACE WATER SAMPLING AND LABORATORY ANALYSIS

1.3.1 Surface Water Sampling

During the Fall 2022 sampling event, three surface water samples, SW-1, SW-2, and SW-3 were collected by EMA from Wells Branch, which flows west to east across the site (see Figure C-1). The surface water samples were collected from the stream locations that are representative of upgradient and downgradient conditions. Sample location SW-1 is an upgradient location between Cell 8 and the leachate pretreatment plant, approximately 200 feet downgradient of monitoring well TW-10A. Sample location SW-2 is a downgradient location near the TW-4 well cluster. Surface water collected at this location is representative of surface water conditions prior to discharging off-site. Sample location SW-3 is a mid-stream location that is downgradient of Stormwater Pond 8-1 and is located between combined Cells 5-7, Cell 8, and Cell 9. This location is approximately equal distance from sample locations SW-1 and SW-2.

1.3.2 Surface Water Sample Analysis

The surface water samples were analyzed for VOCs, total metals, and indicator parameters. The methods used to analyze the samples included USEPA Method 8260 for VOCs; USEPA Methods 6010D, 6020B, and 7470A for metals; and 40 CFR Part 136 methods for the indicator parameters.

1.4 QUALITY ASSURANCE/QUALITY CONTROL SAMPLING AND ANALYSIS

1.4.1 Quality Assurance/Quality Control Sampling (QA/QC)

Field and laboratory QA/QC protocols were employed during the sampling event to ensure that QA/QC criteria were met. The field QA/QC protocols included the collection and analysis of two blind duplicate samples from wells TW-24 and TW-25. In addition, one field blank and four trip blanks were prepared and analyzed. The laboratory QA/QC protocols included the analysis of method blanks and matrix spike (MS) and matrix spike duplicate (MSD) samples for GC/MS runs. These protocols help identify possible sources of VOC contamination that may cause elevated or false positive parameter levels to be reported.

1.4.2 Quality Assurance/Quality Control Sample Analysis

To ensure that the field QC criteria were met, blind duplicate samples were analyzed for all parameters for which the groundwater samples were analyzed. These parameters include VOCs by USEPA Method 8260 and 8011; total and dissolved metals by USEPA Methods 6010D, 6020B, and 7470A; and the indicator parameters by 40 CFR Part 136 methods. The field blank was also analyzed for all parameters for which the Subtitle D regulated monitoring wells were analyzed. These parameters include VOCs by USEPA Method 8260; total and dissolved metals by USEPA Methods 6010D, 6020B, and 7470A; and indicator parameters by 40 CFR Part 136 methods. The trip blanks were analyzed for VOCs according to USEPA Method 8260 and 8011.

To ensure that the laboratory QA criteria were met, project-specific MS and MSD samples were analyzed at the rate of one MS/MSD sample for every 20 field samples, as specified in the EMP. The MS and MSD samples were used by the laboratory to evaluate possible matrix effects that could have interfered with the analytical method, and to estimate the method precision. The analysis of laboratory method blanks was performed to identify possible sources of contamination that may have caused elevated or false positive parameter levels to be reported.

1.5 DATA ANALYSIS METHODOLOGY

The analysis of the data obtained during this sampling event included: validation of the laboratory data, determination of USEPA National Primary Drinking Water Standards (MCLs) exceedances,

statistical evaluation of upgradient versus downgradient parameter concentrations, identification of GWPS exceedances, and assessment of groundwater elevations.

The laboratory sample data and QA/QC data were validated to verify proper analytical procedures and checks were performed by the analytical laboratory. The laboratory data validation is discussed further in **Appendix D** of this report. The laboratory analytical data packages are presented as **Appendix E** of this report.

The data were evaluated to determine whether or not concentrations exceeded MCLs and National Secondary Drinking Water Standards (SMCLs), state health-based standards, and site-specific GWPS. The GWPS for the site were established in 1997. This evaluation is included in **Section 3** of this report.

The data analysis included a statistical evaluation of the detection monitoring data obtained from the on-site regulated monitoring wells (Subtitle D). This evaluation was used to determine if there is a statistically significant change in groundwater quality for the portions of the site subject to 40 CFR Part 258.54 that may be attributed to the MLFRRF. The historical concentrations of the parameters detected in the groundwater samples from each on-site regulated monitoring well (Subtitle D) were compared to the historical background data using statistical methods described in the EMP and 40 CFR Part 258.53(g). The statistical analysis is discussed further in **Section 4** of this report.

2 SUMMARY OF SAMPLING EVENT

2.1 OVERVIEW

The County contracted with EMA to conduct the Fall 2022 sampling event at the MLFRRF. VOC sample analysis was performed by Maryland Spectral Services of Baltimore, Maryland, and inorganic sample analysis was performed by Pace Analytical Service (Pace), of Greensburg, Pennsylvania and Beaver, West Virginia.

The groundwater monitoring wells were purged and sampled in accordance with the EMP and 40 CFR Part 258. **Figure C-1** shows the locations of the sampling points and the corresponding sampling classifications. Quality control blanks and blind duplicates were obtained, as discussed in **Section 1.4.1** of this report. The groundwater samples were submitted to the laboratory for analyses of total and specific dissolved metals, Appendix I VOCs, and inorganic indicators of leachate (chloride, ammonia, nitrite and nitrate-nitrogen, chemical oxygen demand, total alkalinity, sulfate, dissolved solids, and hardness).

2.2 DATA ANALYSIS

The methods used to collect and analyze the groundwater, surface water and QA/QC samples for this sampling event were evaluated to determine compliance with the EMP for the site and 40 CFR Part 258. The following procedures were followed to evaluate the compliance of the field sampling activities and the laboratory methods:

- Review of the appropriateness of the analytical methods;
- Review of the appropriateness of sample bottle types, preservatives, and holding times for each analytical method;
- Review of reports and analytical data for trip blanks, field blanks, duplicate samples, and laboratory method blanks to identify possible evidence of contamination;
- Review of Chain-of-Custody documentation for accuracy and completeness; and
- Review of field methods described in the field sampling reports.

The field and laboratory results were also evaluated to determine the validity of the data. The following procedures were followed to assess the validity of the data:

- Calculation of charge balance errors on the samples collected in the field;

- Review of MS and MSD samples to evaluate possible matrix effects that may interfere with the analytical method;

- Review of MS, MSD, and blind duplicate samples to calculate the relative percent difference (RPD) of duplicate samples in obtaining an estimate of laboratory method precision;

- Review of laboratory reports on instrument tuning, instrument calibration, and recoveries of spiked samples for each analytical method; and

- Comparison of the analytical data and groundwater elevations to historical values at each sampling location.

The results obtained from this evaluation satisfy the project QA/QC objectives. The results of the evaluation of the analytical data are provided in **Appendix D.** The full laboratory analytical data packages are presented as **Appendix E** of this report.

A comparison of the analytical data to MCLs, SMCLs, State standards, and established GWPS, as well as to historical data, is discussed in **Section 3.**

3 SUMMARY OF ANALYTICAL RESULTS

3.1 INTRODUCTION

Groundwater elevations were measured by the County on a monthly basis and are included in this report in **Appendix C**. The field and laboratory analytical results were evaluated by comparing the current data to historical data. The laboratory results were also evaluated for compliance with regulatory standards. In assessing the laboratory data, each parameter was evaluated for compliance with: (i) MCLs and SMCLs; (ii) Maryland health-based standards; and (iii) GWPS established for the site. MCLs and GWPS are established based on health concerns, whereas SMCLs are based on aesthetic concerns, such as taste, color, and odor. A statistical evaluation of the laboratory results is presented in **Section 4**.

3.2 GROUNDWATER ELEVATION DATA

The monthly water table measurements recorded during November 2022 are provided in **Appendix C.** The groundwater elevations are generally consistent with historical data.

Potentiometric surface contours for groundwater levels measured in wells screened within the Zone 3 aquifer during Fall 2022 are illustrated on **Figure C-1** in **Appendix C**. As shown on the drawing, the general direction of groundwater flow in the Zone 3 aquifer at the MLFRRF is toward the northeast. Groundwater flow direction is consistent with historical data.

3.3 ANALYTICAL RESULTS

The results of the comparison of the analytical data to regulatory standards and to historical trends are discussed below for the volatile organic and inorganic data. In assessing the data, each parameter was evaluated for compliance with the MCLs and SMCLs, with Maryland health-based standards, and with GWPS established for the site.

The current analytical data and the historical analytical data are included in tables in **Appendix A.** The tables present the concentrations over time for organic and inorganic parameters. They provide a simple means of evaluating trends in the concentrations. The “J” qualifier associated with a concentration indicates the compound was detected at a trace concentration below the laboratory RL but above the MDL and as such is an estimated value. The “U” qualifier associated with a concentration indicates the compound was not detected. The “B” qualifier indicates possible laboratory contamination due to the compound being detected in the method or field blank sample analysis. An “L” qualifier indicates possible laboratory contaminant. An “M1” qualifier indicates that the matrix spike recovery analysis performed by the lab exceeded quality control limits, but the result was accepted based on laboratory control sample (LCS) recovery.

3.3.1 **MCL Exceedances**

Table 3 lists the MCL exceedances at the site for this sampling event. As shown in **Table 3**, there were two parameters that exceeded their applicable MCLs. Time-series plots for parameter concentrations with historic MCL exceedances for on-site monitoring wells have been constructed to identify potential trends in concentrations over time. These plots are included in **Appendix B**.

One of the MCL exceedances was consistent with the historical record. There was one first-time MCL exceedance during the Fall 2022 sampling event. The concentration of lead, 0.041 M1 mg/L, in Subtitle D well TW-29 exceeded the applicable MCL of 0.015 mg/L. The MDE was notified of the exceedance. A confirmation sample was collected from TW-29 on December 1, 2022 and analyzed for lead. The concentration of lead in the confirmation sample was below reporting limits, indicating that the initial detection was invalid.

3.3.2 **On-site Regulated Monitoring Wells (Subtitle D)**

Appendix I Volatile Organic Compounds

As shown on **Table 4**, ten different VOCs were detected above the RL across 11 different monitoring locations. The concentration of methylene chloride in TW-25A exceeded its applicable MCL, as it has done over the past several years.

All detections of VOCs above the RL were generally consistent with the historical record. No Appendix I VOCs were detected above the RL in the following Subtitle D wells during the Fall 2022 sampling event: TW-02A, TW-03, TW-04B, TW-05A, TW-10A, TW-19, TW-20R, TW-23, TW-24A, TW-27, and TW-30.

Appendix II Volatile Organic Compounds and MTBE

As shown in **Table 5**, detections above the RL of dichlorodifluoromethane, dichlorofluoromethane, and MTBE were noted for 11 different locations. There were no GWPS or Maryland State Action Level exceedances. In general, concentrations of these parameters are consistent with concentrations measured over the past 10 years.

No Appendix II VOCs were detected above the reporting limit in the following Subtitle D wells during the Fall 2022 sampling event: TW-02A, TW-03, TW-04B, TW-05A, TW-10A, TW-19, TW-20R, TW-23, TW-24A, TW-27, and TW-30.

Inorganics

Mercury was detected at concentrations above the RL only in Subtitle D well TW-24. The concentration of mercury in TW-24 was below the applicable MCL.

Iron (total and dissolved), manganese (total and dissolved), and turbidity were detected in many of the regulated monitoring wells (Subtitle D) at concentrations that exceeded the applicable SMCLs. Iron and manganese are typical naturally occurring metals found in groundwater and are not necessarily indicative of contamination from the landfill. Measurements of pH were below the SMCL range for most on-site Subtitle D regulated monitoring wells. Low pH is also typical of groundwater and is believed to be a natural property of groundwater at the MLFRRF. Furthermore, pH concentrations in the downgradient monitoring wells are consistent with those measured in upgradient background groundwater.

Concentrations of inorganic parameters measured during the Fall 2022 sampling event—including those of iron, manganese, and pH—are generally consistent with the historical record, except for turbidity in TW-14. During the Fall 2022 sampling event, turbidity at TW-14 was reported as "overrange" based on field measurements. Based on the upper limit for high turbidity levels on the turbidity meter, this "overrange" equates to a measurement of greater than 2000 NTU.

3.3.3 **On-site Regulated Monitoring Wells (COMAR)**

Appendix I Volatile Organic Compounds

As shown on **Table 6,** there was a detection above the RL for chloroform in TW-15B. The concentration of the detection was below the applicable GWPS for the site and consistent with the historical record. There were no Appendix II VOCs detected above the RL in COMAR regulated wells TW-07, TW-07A, TW-08, TW-08A, TW-09B, TW-09C, TW-15, TW-16, TW-17, TW-17A, TW-21, TW-22, TW-22A, and TW-22B.

Appendix II Volatile Organic Compounds and MTBE

As shown in **Table 7**, there was only one detection above the RL of an Appendix II VOC in a COMAR regulated on-site monitoring well, dichlorodifluoromethane in TW-15B. The concentration of the detection was below GWPS or Maryland State Action Levels. The concentration was consistent with the historical record. There were no Appendix II VOCs detected above the RL in COMAR regulated wells TW-07, TW-07A, TW-08, TW-08A, TW-09B, TW-09C, TW-15, TW-16, TW-17, TW-17A, TW-21, TW-22, TW-22A, and TW-22B.

Inorganics

Mercury was not detected at a concentration above the RL in any COMAR regulated wells during the Fall 2022 sampling event. Iron (total and dissolved), manganese (total and dissolved), and turbidity were detected in several of the COMAR regulated monitoring wells at concentrations that exceeded their applicable SMCLs. Iron and manganese are typical naturally occurring metals found in groundwater and are not necessarily indicative of contamination from the landfill. Measurements of pH were below the SMCL range for all on-site COMAR regulated monitoring

wells. Low pH is also typical of groundwater and is believed to be a natural property of groundwater at the MLFRRF. Furthermore, pH concentrations measured in the downgradient wells are comparable to upgradient background concentrations.

Concentrations of inorganic parameters measured in COMAR regulated monitoring wells during the Fall 2022 sampling event—including those of iron, manganese, and pH—were consistent with the historical record.

3.3.4 **On-site Non-regulated Monitoring Wells**

Appendix I Volatile Organic Compounds

As shown on **Table 8**, there were no Appendix I VOCs detected above the RL across all on-site non-regulated monitoring wells during the Fall 2022 sampling event. As such, there were no MCL or GWPS exceedances.

Appendix II Volatile Organic Compounds and MTBE

As shown on **Table 9**, there were no Appendix II VOCs detected above the RL across all on-site non-regulated monitoring wells during the Fall 2022 sampling event. As such, there were no GWPS or Maryland State Action Level exceedances.

Inorganics

Mercury was not detected above the RL in any on-site non-regulated monitoring wells. Iron (total and dissolved), manganese (total and dissolved), and turbidity were detected in a few of the on-site non-regulated monitoring wells at concentrations that exceeded their applicable SMCLs. Iron and manganese are typical naturally-occurring metals found in groundwater and are not necessarily indicative of contamination from the landfill. Measurements of pH were below the SMCL range for most on-site non-regulated monitoring wells. Low pH is also typical of groundwater and is believed to be a natural property of groundwater at the MLFRRF. Furthermore, pH concentrations measured in the downgradient wells are comparable to upgradient background concentrations.

Concentrations of inorganic parameters measured in on-site non-regulated monitoring wells during the Fall 2022 sampling event—including those of iron, manganese, and pH—are generally consistent with the historical record.

3.3.5 **Off-site Non-regulated Monitoring Wells**

Appendix I Volatile Organic Compounds

As shown on **Table 10**, six different Appendix I VOCs were detected above the RL across six different off-site non-regulated monitoring well locations. There were no MCL or GWPS

exceedances. In general, VOC concentrations detected above the RL in these wells are consistent with historical concentrations. There were no Appendix I VOCs detected above the RL in wells MW-P4, MW-P9, MW-P417, MW-P440, RW-P171-1, and RW-P441.

Appendix II Volatile Organic Compounds and MTBE

As shown in **Table 11**, detections of dichlorodifluoromethane and dichlorofluoromethane above the RL were observed at eight off-site non-regulated monitoring wells. There were no detections of MTBE above the RL. There were no GWPS or Maryland State Action Level exceedances. The detected concentrations of dichlorodifluoromethane and dichlorofluoromethane are generally consistent with the historical record. There were no Appendix II VOCs detected above the RL in wells MW-P4, MW-P417, MW-P440, and RW-P171-1.

Inorganics

All off-site monitoring wells were analyzed for mercury. There were no concentrations of mercury detected above the RL in any off-site non-regulated monitoring wells during the Fall 2022 sampling event.

3.3.6 **Off-site Residential Zone 4 Water Supply Wells**

As shown on **Table 12** and **Table 13**, there were no off-site residential Zone 4 water supply wells sampled during the Fall 2022 sampling event.

3.3.7 **Surface Water Sampling Locations**

Appendix I and Appendix II Volatile Organic Compounds

As shown on **Table 14**, there was a detection above the RL for acetone in SW-3. There is no standardized concentration limit for acetone in surface water and the concentration is consistent with the historical record. There were no Appendix I VOCs detected above the RL at surface water sampling locations SW-1 and SW-2.

As shown on **Table 15**, there were no Appendix II VOCs detected above the RL at any surface water monitoring locations during the Fall 2022 sampling event.

Inorganics

There were no MCL exceedances of inorganic parameters at the surface water sampling locations. SMCL exceedances were observed for iron and manganese at SW-2 and SW-3, while turbidity exceeded its SMCL at SW-3. Concentrations of all detected inorganic parameters at surface water locations were consistent with historical values.

4 STATISTICAL EVALUATION

4.1 INTRODUCTION

In accordance with the EMP and 40 CFR Part 258.53, groundwater sampling and analysis requirements, the groundwater parameters at the MLFRRF have been statistically analyzed. Listed below are the objective of the analysis, the procedures used, and the summary of results. The detailed results of the statistical analysis are included after the text.

4.2 OBJECTIVE

According to the Code of Federal Regulations (40 CFR Part 258), groundwater monitoring data must be statistically analyzed to determine if parameter levels are exceeding background groundwater quality levels at each downgradient well. This goal is met by statistically analyzing the groundwater data that have been collected on the site since 1993. The analyses will determine if the land use may be contributing to groundwater contamination.

4.3 PROCEDURE

Samples have been collected since 1993 and tested for the constituents specified in the EMP. The concentrations observed in the downgradient wells are compared to the concentrations observed in the upgradient wells. If the downgradient samples show significantly higher concentrations than the upgradient samples statistically, it indicates that land use practices are likely affecting the groundwater quality.

The groundwater data were analyzed using the Mann-Whitney Test (Wilcoxon Rank Sum Test) to determine whether the downgradient data differed from the upgradient data with statistical significance. The Mann-Whitney analysis is nonparametric, that is, it assumes no underlying distribution (like the normal distribution) and compares two groups of data and determines whether both groups come from the same population with a certain confidence.

Individual statistical tests have a certain amount of uncertainty associated with them. When multiple tests are combined (from different wells and different constituents), that uncertainty is compounded. An overall network-wide Type I error rate of 5% is required by 40 CFR Part 258.53(h)(2); however, an error rate no less than 1% shall be applied to any single test. A 5% Type I error rate means 5% of the recognized exceedances are in reality not actually elevated above background levels; that is, they represent false positives.

Statistical analyses are performed for all parameters detected over the RL during the Fall 2022 sampling event at downgradient wells. Using the Bonferroni adjustment to account for multiple

statistical comparisons, a Type I error rate of much less than 1% per analysis would result, so a Type I error rate of 1% was used as the minimum allowable under 40 CFR Part 258.52(h)(2).

For each sampling event, an average concentration from the upgradient wells was calculated. The collection of average concentrations for all sampling events was then compared to the concentrations for all sampling events at each of the downgradient wells. For each downgradient well, the upgradient and downgradient concentrations are combined and ranked (the lowest concentration is assigned a rank of 1). Tied concentrations are ranked equally by averaging the ranks that would be assigned to the tied group if they were not tied.

The sum of the ranks, the number of upgradient observations, and the number of downgradient observations are used to calculate the Mann-Whitney Test Statistic (U). The calculated U for each well/parameter pair is compared to a critical U value which is published in tables in statistical texts. Critical U values are based on the number of samples in the upgradient group and at each downgradient well. Therefore, the critical U values vary from parameter-to-parameter and from well-to-well. If the calculated U is greater than the critical U, there is no exceedance at 99% confidence (a 1% Type I error rate for each analysis). Likewise, if the calculated U is less than the critical U, there is an exceedance.

Because the upgradient (background) condition is compared to each downgradient well separately, each well/parameter combination is tested. The results of all of the tests are included following the report text. There may be exceedances in some downgradient wells for a particular parameter, but not in other downgradient wells.

4.4 SUMMARY OF RESULTS

The results of the statistical analysis are shown on **Table 16.** The findings indicated that downgradient samples show constituent concentrations that are statistically significant increases (SSIs) above background levels in all 20 of the downgradient on-site regulated wells. While there were a few new SSIs identified during the Fall 2022 sampling event for which concentrations are below the RL, these are not of major concern because the parameters were detected at trace levels.

There was one new SSI identified for which the parameter was detected above the RL during this sampling event that was not identified during the previous sampling event. This new SSI consists of manganese in TW-02A. Manganese has been detected in TW-02A at concentrations greater than background well concentrations since 2017. However, manganese in this well has remained relatively stable since the Fall 2020 sampling event.

The statistical exceedances are generally consistent with historical exceedances. Concentrations of most parameters that exhibited SSIs have generally been consistent with their historical data set; that is, no trend is apparent in the concentrations.

5 RECOMMENDATIONS

The results of the Fall 2022 groundwater sampling event indicate that overall, groundwater conditions are generally consistent with historical data for the MLFRRF. Many monitoring wells continue to show VOC concentrations lower than historical data. While the data and statistical evaluations indicate that a release of landfill constituents to groundwater may have occurred, the site-specific hydrogeology and the corrective measures already implemented by the County have limited the potential for any adverse effects on human health and the environment. It is recommended that regular groundwater monitoring be continued in accordance with the EMP.

TABLES

Table 1 - MLFRRF SAMPLING LOCATIONS						
Sampling Locations Used to Monitor Cells 5, 6, 7, 8, and 9				**Sampling Locations Used to Monitor Cells 1 east, 2, and 4**		
On Site Regulated Monitoring Wells (Subtitle D)	Off-Site Non-Regulated Monitoring Wells	On-Site Non-Regulated Monitoring Wells	Surface Water Sampling Locations	On-Site Regulated Monitoring Wells (COMAR)	On-Site Non-Regulated Monitoring Wells	Surface Water Sampling Locations
TW-01	MW-P4	TW-02	SW-1	TW-07	TW-09	SW-1
TW-02A	MW-P9	TW-03A	SW-2	TW-07A	TW-16A	SW-2
TW-03	MW-P106	TW-05B	SW-3	TW-08		SW-3
TW-04	MW-P417	TW-06A*		TW-08A		
TW-04B	MW-P440	TW-06B		TW-09B		
TW-05	RW-P109	TW-11A*		TW-09C		
TW-05A	RW-P165	TW-12*		TW-15		
TW-06	RW-P171-1	TW-13*		TW-15B		
TW-10A	RW-P264	TW-14B		TW-16		
TW-14	RW-P440	TW-18*		TW-17		
TW-14A	RW-P441	TW-21A*		TW-17A		
TW-19	RW-P584			TW-21		
TW-20R				TW-22		
TW-23				TW-22A		
TW-24				TW-22B		
TW-24A						
TW-25						
TW-25A						
TW-27						
TW-28						
TW-29						
TW-30						

*Note: As specified in the EMP, the wells with an * are sampled annually only during the spring events.*

Table 2 - RESIDENTIAL SUPPLY WELL SAMPLING LOCATIONS			
Sampling Location	Aquifer	Sampling Location	Aquifer
P-109-Z4	Zone 4	P-417-Z4	Zone 4
P-145-Z4	Zone 4	P-261-Z4	Zone 4
P-160-Z4	Zone 4	P-264-Z4	Zone 4
P-161-Z4	Zone 4	P-277-Z4	Zone 4
P-162-Z4	Zone 4	P-323-Z4	Zone 4
P-164-Z4	Zone 4	P-359-Z4	Zone 4
P-165-Z4	Zone 4	P-383-Z4	Zone 4
P-166-Z4	Zone 4	P-412-Z4	Zone 4
P-168-Z4	Zone 4	P-440-Z4	Zone 4
P-169-Z4	Zone 4	P-441-Z4R	Zone 4
P-257-Z4	Zone 4	P-478-Z4	Zone 4

Residential wells were not sampled during the Fall 2022 sampling event.

Table 3 - Current MCL Exceedances						
Well Group	Location	Parameter	Result	Qualifier	MCL	Units
Subtitle D	**TW-25A**	Methylene chloride	23.4	L	5	µg/L
	TW-29	Lead	0.041	M1	0.015	mg/L

Confirmation Samples for First-Time Exceedances						
Well Group	Location	Parameter	Result	Qualifier	MCL	Units
Subtitle D	**TW-29**	Lead	0.0005	U	0.015	mg/L

Notes:

- *L flag - Analyte is a possible laboratory contaminant.*
- *M1 flag - Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.*
- *U flag - Compound was analyzed for, but not detected.*

Table 4 - APPENDIX I VOC DETECTIONS IN REGULATED WELLS (SUBTITLE D)					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
TW-01	1,1-Dichloroethane	1.9		1370	µg/L
TW-04	1,1-Dichloroethane	2.8		1370	µg/L
TW-05	1,1-Dichloroethane	2.2		1370	µg/L
	cis-1,2-Dichloroethene	1		70	µg/L
TW-06	1,1-Dichloroethane	8.7		1370	µg/L
	cis-1,2-Dichloroethene	5.2		70	µg/L
	Tetrachloroethene	2.2		5	µg/L
	Trichloroethene	1.5		5	µg/L
TW-14	1,1-Dichloroethane	3.5		1370	µg/L
	cis-1,2-Dichloroethene	1.3		70	µg/L
	Tetrachloroethene	4.2		5	µg/L
	Trichloroethene	1.4		5	µg/L
TW-14A	1,1-Dichloroethane	6.3		1370	µg/L
	Benzene	1.5		5	µg/L
	cis-1,2-Dichloroethene	1.8		70	µg/L
	Methylene Chloride	1.1		5	µg/L
	Tetrachloroethene	1.3		5	µg/L
	Trichloroethene	1.1		5	µg/L
TW-24	1,1-Dichloroethane	2.4		1370	µg/L
TW-25	1,1-Dichloroethane	2.1		1370	µg/L
	Tetrachloroethene	1.4		5	µg/L
TW-25A	1,1-Dichloroethane	27.3		1370	µg/L
	1,2-Dichloroethane	1.7		5	µg/L
	1,2-Dichloropropane	1.1		5	µg/L
	1,4-Dichlorobenzene	1.5		75	µg/L
	Benzene	2.3		5	µg/L
	cis-1,2-Dichloroethene	5.3		70	µg/L
	Methylene Chloride	**23.4**	**L**	**5**	**µg/L**
	Tetrachloroethene	3.3		5	µg/L
	Trichloroethene	4.5		5	µg/L
	Trichlorofluoromethane	1.8		1920	µg/L
TW-28	1,1-Dichloroethane	1.7		1370	µg/L
	Tetrachloroethene	1.1		5	µg/L
	Trichlorofluoromethane	1.3		1920	µg/L
TW-29	Tetrachloroethene	1.2		5	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*
- *L flag - Analyte is a possible laboratory contaminant.*

Table 5 - APPENDIX II VOC DETECTIONS IN REGULATED WELLS (SUBTITLE D)					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
TW-01	Dichlorodifluoromethane	8		1000	µg/L
	Dichlorofluoromethane	2.8		550	µg/L
TW-04	Dichlorodifluoromethane	2.1		1000	µg/L
	Dichlorofluoromethane	4.5		550	µg/L
TW-05	Dichlorodifluoromethane	2.8		1000	µg/L
	Dichlorofluoromethane	3.1		550	µg/L
TW-06	Dichlorodifluoromethane	5.1		1000	µg/L
	Dichlorofluoromethane	5.4		550	µg/L
TW-14	Dichlorodifluoromethane	6.2		1000	µg/L
	Dichlorofluoromethane	4.1		550	µg/L
TW-14A	Dichlorodifluoromethane	3.5		1000	µg/L
	Dichlorofluoromethane	5.4		550	µg/L
TW-24	Dichlorodifluoromethane	2.3		1000	µg/L
	Dichlorofluoromethane	1.3		550	µg/L
TW-25	Dichlorodifluoromethane	5.7		1000	µg/L
	Dichlorofluoromethane	3		550	µg/L
TW-25A	Dichlorodifluoromethane	10.4		1000	µg/L
	Dichlorofluoromethane	25.2		550	µg/L
	Methyl-tert-butyl ether	4.2		20	µg/L
TW-28	Dichlorodifluoromethane	5		1000	µg/L
	Dichlorofluoromethane	4.1		550	µg/L
TW-29	Dichlorodifluoromethane	3.1		1000	µg/L
	Dichlorofluoromethane	1.1		550	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 6 - APPENDIX I VOC DETECTIONS IN REGULATED WELLS (COMAR)					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
TW-15B	Chloroform	1.1		80	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 7 - APPENDIX II VOC DETECTIONS IN REGULATED WELLS (COMAR)					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
TW-15B	Dichlorodifluoromethane	1.4		1000	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 8 - APPENDIX I VOC DETECTIONS IN ON-SITE NON-REGULATED WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
No Appendix I VOCs detected above the Reporting Limit.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 9 - APPENDIX II VOC DETECTIONS IN ON-SITE NON-REGULATED WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
No Appendix II VOCs detected above the Reporting Limit.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 10 - APPENDIX I VOC DETECTIONS IN OFF-SITE NON-REGULATED WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
MW-P106	1,1-Dichloroethane	2.9		1370	µg/L
	cis-1,2-Dichloroethene	1.3		70	µg/L
RW-P109	Trichloroethene	1.1		5	µg/L
RW-P165	1,1-Dichloroethane	3		1370	µg/L
	cis-1,2-Dichloroethene	1		70	µg/L
	Tetrachloroethene	2.5		5	µg/L
RW-P264	1,1-Dichloroethane	3.3		1370	µg/L
	Tetrachloroethene	2		5	µg/L
RW-P440	1,1-Dichloroethane	1.2		1370	µg/L
	Chloroform	1.7		80	µg/L
	Vinyl chloride	1.1		2	µg/L
RW-P584	1,1-Dichloroethane	2.8		1370	µg/L
	Tetrachloroethene	1.9		5	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 11 - APPENDIX II VOC DETECTIONS IN OFF-SITE NON-REGULATED WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
MW-P106	Dichlorodifluoromethane	1.6		1000	µg/L
	Dichlorofluoromethane	1.8		550	µg/L
MW-P9	Dichlorodifluoromethane	1.5		1000	µg/L
RW-P109	Dichlorodifluoromethane	2		1000	µg/L
RW-P165	Dichlorodifluoromethane	5.4		1000	µg/L
	Dichlorofluoromethane	4		550	µg/L
RW-P264	Dichlorodifluoromethane	6		1000	µg/L
	Dichlorofluoromethane	4.1		550	µg/L
RW-P440	Dichlorodifluoromethane	1		1000	µg/L
RW-P441	Dichlorodifluoromethane	1.8		1000	µg/L
RW-P584	Dichlorodifluoromethane	3.7		1000	µg/L
	Dichlorofluoromethane	2		550	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 12 - APPENDIX I VOC DETECTIONS IN RESIDENTIAL SUPPLY WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
Residential Wells not sampled during the Fall 2022 Sampling Event.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 13 - APPENDIX II VOC DETECTIONS IN RESIDENTIAL SUPPLY WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
Residential Wells not sampled during the Fall 2022 Sampling Event.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 14 - APPENDIX I VOC DETECTIONS AT SURFACE WATER LOCATIONS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
SW-3	Acetone	7.7		--	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 15 - APPENDIX II VOC DETECTIONS AT SURFACE WATER LOCATIONS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
No Appendix II VOCs detected above the Reporting Limit.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 16 - STATISTICAL EXCEEDANCES OF BACKGROUND CONCENTRATIONS																				
		Regulated Wells (Subtitle D)																		
	Parameter	TW-01	TW-02A	TW-03	TW-04	TW-04B	TW-05	TW-05A	TW-06	TW-14	TW-14A	TW-19	TW-20R	TW-24	TW-24A	TW-25	TW-25A	TW-27	TW-28	TW-29	TW-30
Volatile Organic Compounds (VOCs)	1,1-Dichloroethane	X			X		X	*	X	X	X	*		X	‡	X	X		X	*	
	1,2-Dichloroethane													‡	‡		X				
	1,2-Dichloropropane								‡		‡			‡			X				
	1,4-Dichlorobenzene								‡		‡			‡	‡		X				
	Benzene								‡		X			‡	‡		X				
	cis-1,2-Dichloroethene	*			*		X	‡	X	X	X	‡		‡	‡	*	X			*	
	Dichlorodifluoromethane	X	*		X		X	‡	X	X	X	‡		X	‡	X	X		X	X	
	Dichlorofluoromethane	X	*		X		X	*	X	X	X	‡		X	‡	X	X		X	X	
	Methylene Chloride								‡		X			‡	‡		X				
	Methyl tert-butyl ether										*						X				
	Tetrachloroethene	‡			‡			‡	X	X	X	‡		*	‡	X	X		X	X	
	Trichloroethene	*			‡			‡	X	X	X	‡		‡	‡	‡	X		‡	‡	
	Trichlorofluoromethane	‡	‡						‡	‡	‡			‡		*	X		X	‡	
Inorganics	Barium, total														X						
	Beryllium												*				X				
	Calcium, total	X										X	X		X						X
	Chromium, total																	X	X		
	Cobalt, total												X		*				X		
	Copper, total			*						X	X	X	X		X		X	X			
	Iron, total	X	X	X	X		X	X	X	X	X				X						
	Magnesium, total											X	X		X						
	Manganese, total	X	**X**	X					X	X	X		X		X						
	Mercury, total							‡	‡	‡	‡		‡	X	‡		‡				
	Nickel, total												X								
	Potassium, total											X	X		X						
	Sodium, total												X								
	Vanadium, total											‡	X			‡		‡			
General Chemistry	Alkalinity	X		X	X				X	*		X			X		*				
	Ammonia								‡		X				‡						
	Chloride											X	X								
	Nitrate																				X
	Nitrite	‡	X	‡	*		*	X	*	X	‡						X				
	pH	X	X	X	X		X	X		X	X	X									
	Specific Conductivity											X	X		X						
	Sulfate					X						X	X		X						
	Total Dissolved Solids											X	X		X						
	Total Hardness	X										X	X		X						
	Turbidity	X	X	X	X	X	X	X		X	X					X					

An X indicates an SSI over background. A ‡ indicates an SSI was identified during this event, but the parameter was not detected during this event. An asterisk (*) indicates an SSI was identified during this event, but the parameter was detected below the reporting limit or was flagged with a B qualifier during this event. A bold character indicates an SSI that was not identified during the previous event.

APPENDIX A
Historical Data Tables

HISTORICAL TABLES –
Subtitle D Wells

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-01***											
Nov-1993	36	36	ND	ND	2.6	0.2	ND	5.71	76.8	3.7	76	29.9
Apr-1994	34	34	0.1	42.3	2.5	ND	ND	6.15	62.5	3.9	57	23.37
Apr-1995	22.7	22.7	ND	ND	2.4	ND	ND	6.6	56.5	3.6	31	18.2
Apr-1997	ND	26	ND	ND	1.5	0.09	ND	NA	NA	ND	59	33
Apr-1998	25	25	0.27	ND	2.56	ND	ND	7.29	53.1	2.36	44	35
Apr-1999	21	21	0.13	ND	3.11	0.07	ND	7	61.6	1.84	63	26
Apr-2000	23	23	ND	ND	2.4	0.101	ND	7.07	52	3.92	32	25
Apr-2001	20	NA	ND	ND	2.57	ND	ND	NA	NA	67.1	30	21.5
Mar-2002	16	16	ND	ND	2.36	ND	ND	6.2	55.4	ND	43	22.3
Mar-2003	18	18	ND	ND	17.7	ND	ND	6.3	56.5	ND	34	20.7
Apr-2004	21	21	ND	ND	2.84	ND	ND	6.3	54.5	ND	49	24.6
Apr-2005	29	29	ND	ND	2.74	0.08	ND	6.5	66.3	2.38	120	33.5
Mar-2006	28	28	ND	ND	3.44	0.13	ND	6.4	64.1	2	69	30.5
Mar-2007	24	24	0.61	ND	4.15	0.18	ND	6.3	56.8	1.64	53	27.2
Mar-2008	24	24	ND	ND	4.32	0.2	ND	6.1	62.7	1.75	42	26.7
Mar-2009	23	23	ND	ND	4.4	0.16	ND	5.7	61.6	ND	56	23.9
Mar-2010	65	65	ND	ND	4.22	ND	ND	7.26	170	4.34	62	70.4
Apr-2011	21	21	ND	ND	4.49	0.16	ND	5.6	56.9	1.1	57	23.5
Mar-2012	18	18	ND	ND	4.81	0.17	ND	4.8	56.4	ND	62	20
Sep-2012	19.7	19.7	ND	ND	4.84	0.175	ND	6.2	54.6	ND	66	23.4
Mar-2013	20.4	20.4	0.123 J	ND	5.36	0.2	ND	6.4	58.2	1.14	31	21.4
Oct-2013	21.3	21.3	ND	ND	5.51	0.2	ND	6.1	62.7	1.5	41	25
Mar-2014	22.7	22.7	ND	ND	5.27	0.157	ND	6.1	58.7	0.915 J	50	23.1
Oct-2014	33	33	ND	ND	5.71	0.198	ND	5.9	55.6	ND	49	24.1
Apr-2015	21.6	21.6	ND	ND	5.71	0.206	ND	5.1	60.7	ND	51	26.8
Nov-2015	25.6	25.6	ND	ND	5.77	0.223	ND	6.4	105.4	ND	44	26.9
May-2016	21.7	21.7	ND	ND	6.02	0.227	ND	6.4	79.9	ND	40	27.8
Oct-2016	23.6	23.6	ND	ND	6.46	NA	NA	6.2	110.6	2.07	48	27.8
May-2017	20.1	20.1	ND	ND	6.17	0.231	ND	6.1	100.7	0.71 J	35	23.6
Oct-2017	27	27	ND	5 J	6.37	0.224	ND	6.3	113.3	ND	36	22.4
May-2018	30	30	ND	5.7 J	6.1	0.17	0.007 J	5.6	111.8	ND	55	25.7
Nov-2018	40	40	ND	ND	6.6	ND	0.018	6.77	149.5	ND	46	47.6
May-2019	52	NA	ND	ND	7.3	ND	ND	6.39	114.8	ND	68	50.3
Oct-2019	48 H1	NA	ND	ND	5.7	0.056 JB	0.028	6.22	153.3	48.2	82	49.3
May-2020	50	NA	ND	9.1 J	6.6	ND	0.0087 JMH	5.9	148.9	ND	51	53.7
Oct-2020	40	NA	ND	4.8 J	6.2	ND	ND	5.85	147.7	ND	132	49.9

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-01***											
Apr-2021	42	*NA*	*ND*	*6.1 J*	7.1	*0.048 J*	*ND*	7.17	193.3	*ND*	53	49.6
Oct-2021	50	*NA*	*ND*	*ND*	6.5	*ND*	*ND*	7.09	227.4	*ND*	45	51.3
May-2022	44 ML	*NA*	*ND*	*ND*	5.9	*0.099 J*	*0.0066 J*	6.7	205.1	*ND*	48	48.9 N3
Oct-2022	46	*NA*	*ND*	*6.1 J*	7	*0.076 J*	*ND*	6.64	215.4	*ND*	47	47.9 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-01***													
Nov-1993	*NA*	*ND*	*ND*	*NA*	*ND*	11.3	*NA*	*ND*	*NA*	*ND*	0.08	0.12	*ND*	0.42	*NA*
Apr-1994	*NA*	*ND*	*ND*	*NA*	*ND*	9.3	*NA*	*ND*	*NA*	*ND*	0.64	*ND*	*ND*	*ND*	*NA*
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	6.6	*NA*	*ND*	*ND*	0.02	0.65	*ND*	*ND*	0.41	*NA*
Apr-1997	0.006	*ND*	0.016	*ND*	*ND*	13	9	*ND*	*ND*	*ND*	1.1	0.43	0.003	0.6	0.63
Apr-1998	*ND*	*ND*	0.041	*ND*	*ND*	12.5	9.96	0.052	*ND*	0.01	14.2	0.259	*ND*	1.04	0.456
Apr-1999	*ND*	*ND*	*ND*	*ND*	*ND*	9.67	9.79	*ND*	*ND*	*ND*	1.49	0.197	*ND*	0.564	0.491
Apr-2000	*ND*	*ND*	*ND*	*ND*	*ND*	9.04	7.45	0.018	*ND*	0.035	3.35	0.183	*ND*	0.601	0.442
Apr-2001	*ND*	*ND*	0.014	*ND*	*ND*	7.62	*NA*	*ND*	*ND*	*ND*	4.21	*NA*	*ND*	0.61	*NA*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	8	8.82	*ND*	*ND*	*ND*	3.62	0.64	*ND*	0.577	0.548
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	7.43	7.85	*ND*	*ND*	*ND*	0.716	*ND*	*ND*	0.504	0.466
Apr-2004	*ND*	0.002	0.014	*ND*	*ND*	8.52	11.1	*ND*	*ND*	*ND*	2.75	0.378	0.002	0.839	0.578
Apr-2005	*ND*	0.004	0.017	*ND*	*ND*	11.8	10.2	0.029	*ND*	0.011	7.16	0.279	0.006	1.01	0.504
Mar-2006	*ND*	0.003	0.015	*ND*	*ND*	10.8	9.72	*ND*	*ND*	*ND*	3.86	0.077	0.003	0.827	0.507
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	9.95	8.75	*ND*	*ND*	*ND*	0.916	0.346	*ND*	0.574	0.51
Mar-2008	*ND*	0.003	0.012	*ND*	*ND*	9.61	8.12	*ND*	*ND*	*ND*	12.8	0.358	*ND*	0.655	0.559
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	8.67	7.75	*ND*	*ND*	*ND*	3.36	0.541	*ND*	0.554	0.521
Mar-2010	*ND*	0.006	0.019	*ND*	*ND*	26.4	24.8	0.033	*ND*	0.017	44.1	1.58	0.01	1.09	0.65
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	8.29	8.23	*ND*	*ND*	*ND*	2.43	1.64	*ND*	0.688	0.678
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	6.77	6.84	*ND*	*ND*	*ND*	1.56	1.2	*ND*	0.753	0.749
Sep-2012	*ND*	*ND*	0.0101	*0.000181 J*	*ND*	8.15	7.91	*0.0025 J*	*0.000625 J*	*ND*	2.48	2.29	*0.000533 J*	0.749	0.707
Mar-2013	*ND*	*ND*	*0.0098 J*	*ND*	*ND*	7.39	7.3	*0.0026 J*	*0.000621 J*	*0.000478 J*	1.6	1.39	*ND*	0.724	0.753

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-01***													
Oct-2013	ND	ND	0.0113	ND	ND	8.7	8.9	0.0017 J	0.000632 J	ND	1.68	1.68	ND	0.794	0.824
Mar-2014	ND	ND	0.0103	ND	ND	8.09	9.7	0.0064 J	0.00061 J	0.000338 J	2.32	2.51	ND	0.712	0.86
Oct-2014	0.000689 J	ND	0.0116	ND	ND	8.35	8.86	0.0014 J	0.000654 J	ND	2.43	2.76	ND	0.796	0.826
Apr-2015	0.000671 J	ND	0.0128	ND	ND	9.14	9.46	0.0046 J	0.000818 J	0.000868 J	4.77	3.89	ND	0.962	0.952
Nov-2015	ND	ND	0.0121	ND	ND	9.24	8.94	0.0024 J	0.000698 J	ND	3.97	3.58	ND	0.928	0.927
May-2016	ND	ND	0.0126	ND	ND	9.47	9.13	0.0019 J	0.00072 J	0.00068 J	3.53	3.37	ND	1.01	0.989
Oct-2016	ND	ND	0.0121	ND	ND	9.44	9.71	0.00087 J	0.00071 J	ND	3.95	3.67	ND	1.03	1.02
May-2017	ND	ND	0.012	ND	ND	7.74	7.2	0.00096 J,B	0.0011	0.00054 J,B	4.07	3.43	ND	1.03	0.999
Oct-2017	ND	ND	0.0155	ND	ND	7.45	6.97	0.0017 J	0.00087 J	ND	8.05	7.72	ND	0.919	0.961
May-2018	0.000048 J	ND	0.016	0.000027 J	ND	8.7	8.6	0.0027 J	0.00072	0.00089 JB	11.5	10.5	ND	0.97 J	0.98 J
Nov-2018	ND	ND	0.012	ND	ND	16.7	15.7	0.002 J	0.00018 J	0.00043 J	31.8	25.7	0.000039 J	1.4	1.3
May-2019	ND	ND	0.011	ND	ND	17.9	17.7	ND	0.00058	ND	22.9	18	ND	1.4	1.4
Oct-2019	0.00012 JB	ND	0.013	ND	0.00018 JB	17.5	17	0.0043 J	0.0013	0.0043	31.9	18.4	0.00012 JB	1.4	1.3
May-2020	0.00016 J	ND	0.015	ND	ND	19	18.3	0.0087	0.00072	0.0032	39	20.9	0.00021 J	1.5	1.4
Oct-2020	0.00044 J	ND	0.013	ND	ND	17.5	16.5	0.0082 JB	0.0006 J	ND	25.6	23.5	ND	1.5	1.4
Apr-2021	ND	ND	0.014	ND	ND	17.4	18.1	0.0048 J	0.00089 J	ND	28	22.8	ND	1.5	1.6
Oct-2021	0.000089 JB	ND	0.015	ND	ND	18	17.4	0.0056	0.0016 J	0.00094 J	35.6	26.4 M1	0.00004 J	1.6	1.5
May-2022	ND	ND	0.016	ND	ND	17.1	17.5	0.004	0.00093 J	0.0008 J	37.3	29	ND	1.5	1.7
Oct-2022	ND	ND	0.017	ND	ND	16.7	18.9	0.0018 J	ND	0.0009 J	39	28.7	ND	1.5	1.6

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-01*												
Nov-1993	0.05	NA	ND	NA	0.49	NA	ND	NA	1.3	NA	NA	NA	ND
Apr-1994	0.019	NA	ND	NA	0.55	NA	ND	NA	1.7	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.65	NA	ND	ND	0.94	NA	ND	ND	0.06
Apr-1997	0.06	0.043	ND	ND	2.5	2.2	ND	ND	1.2	1.4	0.002	ND	0.028
Apr-1998	0.226	0.02	NA	0.019	2.16	0.95	ND	ND	1.22	1.16	ND	0.023	0.1
Apr-1999	0.028	0.019	NA	ND	ND	0.722	ND	ND	1.24	1.22	ND	ND	0.027
Apr-2000	0.037	0.017	NA	0.015	1.47	0.759	ND	ND	2.06	1.19	ND	ND	0.321
Apr-2001	0.059	NA	NA	ND	1.39	NA	ND	ND	2.65	NA	ND	ND	0.131
Mar-2002	0.037	0.028	NA	ND	1.24	ND	ND	ND	1.82	1.27	ND	ND	0.05
Mar-2003	0.022	0.019	NA	ND	ND	0.706	ND	ND	1.29	1.33	ND	ND	0.023
Apr-2004	0.069	0.026	ND	ND	0.534	ND	ND	ND	1.72	1.34	ND	ND	0.038
Apr-2005	0.163	0.019	ND	0.018	1.07	0.66	ND	ND	1.78	1.4	ND	0.014	0.112
Mar-2006	ND	ND	ND	ND	0.828	ND	ND	ND	1.59	1.14	ND	ND	0.014
Mar-2007	0.018	0.015	ND	ND	ND	ND	ND	ND	1.43	1.36	ND	ND	0.033
Mar-2008	0.031	0.013	ND	ND	0.809	0.663	ND	ND	2.11	1.61	ND	ND	0.038
Mar-2009	0.019	0.014	ND	ND	ND	ND	ND	ND	1.62	1.84	ND	ND	0.024
Mar-2010	0.134	0.078	ND	0.031	0.809	0.596	ND	ND	1.25	1.38	ND	0.019	0.033
Apr-2011	0.038	0.037	ND	ND	0.608	0.621	ND	ND	1.75	1.8	ND	ND	ND
Mar-2012	0.028	0.027	ND	ND	0.573	0.537	ND	ND	1.89	1.84	ND	ND	ND
Sep-2012	0.0426	0.0427	ND	0.0018 J	0.553	0.531	ND	ND	2.02	1.98	0.0014 J	ND	ND
Mar-2013	0.0247	0.0248	0.000109 J	0.0033 J	0.554	0.543	ND	ND	1.83	1.84	0.000233 J	ND	0.0116
Oct-2013	0.0387	0.0397	ND	0.0022	0.563	0.579	ND	ND	2.12	2.22	0.000271 J	0.0014 J	0.0111

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-01***												
Mar-2014	0.0351	0.0331	ND	0.0029 J	0.518	0.645	ND	ND	1.77	2.12	0.000265 J	0.006 J	0.0043 J
Oct-2014	0.0314	0.0384	ND	0.0025 J	0.599	0.618	0.0012 J	ND	2.16	2.25	ND	ND	ND
Apr-2015	0.0436	0.0494	ND	0.0045 J	0.674	0.669	ND	ND	2.37	2.37	ND	ND	ND
Nov-2015	0.0469	0.0454	ND	0.0039 J	0.647	0.63	ND	ND	2.55	2.54	ND	ND	0.0033 J
May-2016	0.0394	0.0391	ND	0.0026 J	0.676	0.643	ND	ND	2.49	2.41	ND	ND	ND
Oct-2016	0.0558	0.056	ND	0.0016 J	0.647	0.68	ND	ND	2.49	2.51	ND	ND	ND
May-2017	0.0382	0.0419	ND	0.0043	0.62	0.629	ND	ND	2.52	2.4	ND	0.00023 J	ND
Oct-2017	0.0676	0.0715	ND	0.0024 JB	0.628	0.663	ND	ND	2.63	2.68	ND	ND	ND
May-2018	0.079	0.079	ND	0.0024	ND	ND	0.00028 JB	ND	2.8 J	2.9 J	ND	0.0028	0.003 JB
Nov-2018	0.18	0.17	ND	0.0011	ND	ND	ND	ND	3 J	2.9 J	ND	ND	0.0033 J
May-2019	0.18	0.17	ND	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	0.16	0.15	ND	0.0038	ND	ND	ND	ND	2.8 J	3.3 J	ND	0.0009 J	0.01 B
May-2020	0.17	0.15	ND	0.0064	ND	ND	ND	ND	2.9 J	2.9 J	ND	0.0018	0.0061
Oct-2020	0.18	0.16	ND	ND	ND	ND	0.0017 J	ND	3.2 J	2.6 J	ND	0.0024 JB	ND
Apr-2021	0.16	0.17	0.00005 J	0.0058 J	0.73	0.74	ND	ND	2.8	3	ND	ND	ND
Oct-2021	0.18	0.17	ND	0.0077	0.71	0.71	ND	ND	3.2	3.2	ND	ND	ND
May-2022	0.18	0.19	ND	0.0053	0.69	0.8	ND	ND	3	3.2	ND	ND	ND
Oct-2022	0.17	0.18	ND	0.0017 J	0.72	0.8	ND	ND	3.1	3.6	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-01*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.63 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-01*																
Mar-2013	ND	ND	ND	ND	0.73 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.63 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.81 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.1	0.22 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	0.2 J	ND	ND	1.2	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	0.2 J	ND	ND	1.5	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	0.2 J	ND	ND	1.4	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	0.1 J	ND	ND	1.5	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8 JB	ND
Nov-2018	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1.3 M1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.75	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-01***															
Nov-1993	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	3.7
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	0.7 J
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	1.7
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2	1.1
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.5	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	14.1	2.3
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.45 J	ND	ND	ND	ND	ND	4.38	1.68

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-01***															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.56 J	ND	ND	ND	ND	ND	8.81	2.83
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.49 J	ND	ND	ND	ND	ND	7.27	2.41
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.56 J	ND	ND	ND	ND	ND	8.99	2.7
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.55 J	ND	ND	ND	ND	ND	7.38	3.83
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.53 J	ND	ND	ND	ND	ND	6.99	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J,B	ND	ND	ND	ND	ND	15.6 J	3.4
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	6.5	3.7
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	0.1 J	ND	ND	ND	8.4	4.5
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J,B	ND	0.1 J	ND	ND	ND	7.7	4.3
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	0.2 J	ND	ND	ND	8.4	5.1
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.5	4.7
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.9 CL	3.7 N3
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5 CL	3.6 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.2	2.5
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.9	2.5
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.2	2.8
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.167 J	ND	0.349 J	ND	ND	ND	5.48	2.94 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	13.3	3.5
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.2	2.4
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	8	2.8

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-01***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	1	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-01*															
Sep-2012	ND	ND	ND	ND	ND	ND	ND	2.96	ND	ND	ND	ND	0.28 J	0.71 J	ND	ND	ND
Mar-2013	ND	ND	ND	0.15 J	ND	ND	ND	3.44	ND	ND	ND	ND	0.41 J	1 J	ND	ND	ND
Oct-2013	ND	ND	ND	0.21 J	ND	ND	ND	2.81	ND	ND	ND	ND	0.38 J	0.97 J	ND	ND	ND
Mar-2014	ND	ND	ND	0.17 J	ND	ND	ND	3.73	ND	ND	ND	ND	0.46 J	1	ND	ND	ND
Oct-2014	ND	ND	ND	0.21 J	ND	ND	ND	4.14	ND	ND	ND	ND	0.5 J	0.73 J	ND	ND	ND
Apr-2015	ND	ND	ND	0.18 J	ND	ND	ND	3.57 J	ND	ND	ND	ND	0.43 J	0.95 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	ND	0.5 J	0.9 J	ND	ND	ND
May-2016	ND	ND	ND	0.1 J	0.2 J	ND	ND	4.3	ND	ND	ND	ND	0.5 J	0.8 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	0.2 J	ND	ND	4.4	ND	ND	ND	ND	0.4 J	0.9 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	4.7	ND	ND	ND	ND	0.5 J	0.4 J	ND	ND	ND
Oct-2017	ND	ND	ND	0.1 J	0.2 J	ND	ND	3.7	ND	ND	ND	ND	0.4 J	0.7 J	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	1.2 B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Apr-2021	ND	ND	ND	0.431 J	0.653 JB	ND	ND	0.507 J	ND	ND	ND	ND	0.632 J	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Oct-2022	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-02A***											
Nov-1993	ND	ND	ND	ND	3.8	ND	ND	4.93	22.5	ND	90	3.52
Apr-1994	ND	ND	ND	23.4	3.6	ND	ND	4.94	22.2	ND	17	0.9
Apr-1995	10.3	10.3	ND	ND	5.5	0.2	0.3	5.6	30.9	2.2	38	4.7
Apr-1997	ND	2	ND	ND	7	0.08	ND	NA	NA	ND	28	6
Apr-1998	ND	ND	0.27	ND	8.76	0.22	ND	6.33	36.8	ND	21	5.8
Apr-1999	ND	ND	0.16	ND	6.58	ND	ND	5.04	35.5	ND	35	5.7
Apr-2000	2	2	ND	ND	6.4	ND	ND	5.28	29	ND	36	5.7
Apr-2001	ND	NA	ND	ND	5.43	1.65	ND	NA	NA	ND	11	6.47
Mar-2002	2.4	2.4	ND	ND	7	ND	ND	5.4	42.9	ND	30	6.94
Mar-2003	2.7	2.7	ND	ND	14.6	ND	ND	5.3	41.7	ND	25	6.69
Apr-2004	2.8	2.8	ND	ND	7.95	0.08	ND	5.3	40.5	1.31	40	9.39
Apr-2005	3.1	3.1	ND	ND	7.57	ND	ND	5.1	20.9	1.26	56	8.76
Mar-2006	7.8	7.8	ND	ND	9.04	0.1	ND	5.3	48.5	1.26	57	8.76
Mar-2007	3.8	3.8	ND	ND	9.84	0.11	ND	5.1	45.7	1.89	37	8.57
Mar-2008	5.3	5.3	ND	ND	9.58	0.09	ND	4.9	57.9	2.52	41	8.56
Mar-2009	4.9	4.9	ND	ND	9.98	0.07	ND	4.5	51.1	1.25	45	9.24
Apr-2010	3.7	3.7	ND	ND	10.1	0.08	ND	4.6	48.4	2.66	31	9.5
Apr-2011	5.2	5.2	ND	ND	10.4	0.08	ND	4.6	46.4	2.34	29	9.74
Mar-2012	4	4	ND	ND	11.6	ND	ND	4.5	51.2	2.34	12	11.2
Sep-2012	4.4	4.4	ND	ND	12.8	ND	ND	5.4	53.4	2.85	69	11.8
Mar-2013	6	6	0.106 J	ND	13.9	0.0653	ND	6.1	62.1	3	20	12.4
Oct-2013	5.72	5.72	ND	ND	14	0.0613	ND	5.7	62.3	3.15	31	13.6
Mar-2014	5.6	5.6	ND	ND	14.9	0.0668	ND	5.3	62.5	3.19	36	13.1
Oct-2014	4.4	4.4	ND	10	17.1	0.094	ND	5	68.2	2.88	64	15.6
Apr-2015	5.56	5.56	ND	5 J	17.3	0.061	ND	4.5	67.5	3.26	54	16.5
Nov-2015	4.4	4.4	ND	ND	19.1	0.0607	ND	5.9	136.2	2.63	55	18.4
May-2016	2.8	2.8	0.129 J	21	22.3	ND	ND	5.8	112.3	1.91	90	19.2
Oct-2016	3.4	3.4	ND	21	16.9	NA	NA	5.5	105.1	3.01	71	14.8
May-2017	4.48	4.48	ND	7 J	15.3	0.0687	ND	5.4	101.7	2.09	50	14.9
Oct-2017	30.9	30.9	ND	13	14.7	0.0511	ND	5.8	129.4	0.67 J	38	15.8
May-2018	16	16	ND	7.9 J	16.2	ND	ND	5	96	ND	26	15.1
Nov-2018	22	22	ND	7.9 J	19.5	ND	0.015	6.54	136.9	ND	55	18.6
May-2019	46	NA	ND	ND	21.8	ND	ND	6.43	123.6	ND	58	19.2
Oct-2019	16 H1	NA	ND	ND	22.6	0.083 J	0.0093 J	5.99	168.1	ND	90	19.6
May-2020	20	NA	ND	9.1 J	25.8	ND	0.074	5.93	168.3	ND	74	23.5
Oct-2020	20	NA	ND	7 J	27.2	ND	ND	6.52	172.1	ND	113	23.2
Apr-2021	20	NA	ND	6.1 J	35.6	0.075 J	ND	7.02	239.3	ND	92	23.8

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-02A***											
Oct-2021	22	*NA*	*ND*	*12.6 J*	32.2	*NA*	*ND*	7.02	273.5	*ND*	82	25.9
Dec-2021	*NA*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
May-2022	16	*NA*	*ND*	*ND*	31.5	*ND*	0.051	6.76	252	*ND*	73	24.9 N3
Oct-2022	32	*NA*	*ND*	*10.7 J*	40.2	*0.13 J*	0.011	6.84	271.3	*ND*	82	27.1 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-02A***													
Nov-1993	NA	ND	ND	NA	ND	0.7	NA	ND	NA	ND	4.4	0.69	ND	0.43	NA
Apr-1994	NA	ND	ND	NA	ND	0.3	NA	ND	NA	ND	1.8	0.059	ND	0.35	NA
Apr-1995	ND	ND	ND	ND	ND	0.88	NA	ND	ND	ND	3.2	0.31	ND	0.6	NA
Apr-1997	ND	ND	0.02	ND	ND	1.3	1.3	ND	ND	ND	0.5	ND	0.002	0.54	0.54
Apr-1998	ND	ND	0.016	ND	ND	1.23	1.18	ND	ND	ND	1.58	0.101	ND	0.651	0.626
Apr-1999	ND	ND	0.015	ND	ND	1.21	1.27	ND	ND	ND	1.13	0.121	ND	0.646	0.667
Apr-2000	ND	ND	0.014	ND	ND	1.21	1.19	ND	ND	ND	3.54	0.08	ND	0.65	0.626
Apr-2001	ND	ND	0.016	ND	ND	1.45	NA	ND	ND	ND	3.08	NA	ND	0.695	NA
Mar-2002	ND	ND	0.019	ND	ND	1.47	1.53	ND	ND	ND	8.67	1.81	ND	0.795	0.798
Mar-2003	ND	ND	0.018	ND	ND	1.44	1.53	ND	ND	ND	6.22	0.282	ND	0.754	0.804
Apr-2004	ND	ND	0.023	ND	ND	2.06	1.82	ND	ND	ND	1.91	0.124	ND	1.03	0.943
Apr-2005	ND	ND	0.021	ND	ND	1.9	1.94	ND	ND	ND	4.1	0.2	ND	0.973	0.983
Mar-2006	ND	0.003	0.025	ND	ND	2.02	1.52	ND	ND	0.022	11.4	3.53	0.005	0.902	0.783
Mar-2007	ND	ND	0.025	ND	ND	1.93	1.9	ND	ND	ND	1.49	1.03	ND	0.911	0.876
Mar-2008	ND	ND	0.021	ND	ND	1.86	1.95	ND	ND	ND	2	1.62	ND	0.952	0.995
Mar-2009	ND	ND	0.025	ND	ND	2.11	2.32	ND	ND	ND	20.1	2.18	ND	0.964	0.967
Apr-2010	ND	ND	0.025	ND	ND	2.13	1.97	ND	ND	ND	25.9	2.03	ND	1.02	0.925
Apr-2011	ND	ND	0.027	ND	ND	2.12	2.15	ND	ND	0.02	41.9	1.51	ND	1.08	1.1
Mar-2012	ND	ND	0.027	ND	ND	2.36	2.3	ND	ND	ND	4.29	0.7	ND	1.3	1.26
Sep-2012	ND	ND	0.0298	0.000292 J	ND	2.58	2.49	0.0026 J	0.0027 J	0.0136	16.7	1.5	0.0016 J	1.31	1.31
Mar-2013	ND	ND	0.0316	0.000205 J	ND	2.78	2.7	0.0019 J	0.0026 J	0.0078 J	6.93	2.41	0.000514 J	1.33	1.24

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-02A***													
Oct-2013	ND	ND	0.0347	ND	ND	2.96	2.94	0.0018 J	0.0026	0.0067	3.49	2	0.000652 J	1.5	1.52
Mar-2014	0.000337 J	0.00014 J	0.028	0.00015 J	ND	2.8	2.85	0.0014 J	0.0025 J	0.0059 J	4.47	1.46	0.000364 J	1.49	1.5
Oct-2014	0.000589 J	0.000473 J	0.04	0.000176 J	0.000095 J	3.51	3.51	0.0023 J	0.0042 J	0.0087 J	9.19	2.4	0.000763 J	1.65	1.72
Apr-2015	0.000574 J	ND	0.0405	ND	ND	3.64	3.65	0.0017 J	0.0039 J	0.007 J	5.1	2	ND	1.8	1.8
Nov-2015	0.000674 J	0.000571 J	0.0442	0.000294 J	0.000111 J	3.97	3.8	0.0035 J	0.0047 J	0.0157	14.4	2.05	0.0012 J	2.07	1.93
May-2016	ND	ND	0.0709	ND	ND	4.72	4.64	0.0022 J	0.0014	0.0059	10.8	5.19	0.00095 J	1.8	1.84
Oct-2016	0.00068 J	0.0025 J	0.0372	0.00012 J	0.0002 J	3.09	3.25	0.0103 J+	0.0063	0.0368 J+	9.84	3.1	0.0016 J	1.73 J+	1.72
May-2017	ND	0.0012 J	0.0357	ND	ND	3.17	3.17	0.0037 J	0.0047	0.0181	14	9.1	0.0012 J	1.68	1.7
Oct-2017	ND	ND	0.0357	ND	ND	3.55	3	0.003 J	0.0036	0.012	21.1	16.6	0.002	1.69	1.57
May-2018	0.00045	0.0013	0.035	0.00011 J	0.00015 J	3.3	3.2	0.0046 JB	0.0054	0.02	12.1	5.6	0.0014	1.6	1.6
Nov-2018	ND	ND	0.045	0.000024 J	0.000029 J	4	3.9	0.004 J	0.00095	0.0028	28	27.4	0.00046 J	2.1	2
May-2019	ND	ND	0.05	ND	ND	4.1	4	ND	0.00093	0.004	30.4	28.5	ND	2.2	2.1
Oct-2019	0.00018 JB	ND	0.05	0.000052 J	0.00042 JB	4.2	4.1	0.0061 J	0.0017	0.0055	28.8	27.1	0.00018 JB	2.2	2.2
May-2020	0.00014 J	ND	0.055	0.000063 J	0.0001 J	5	4.6	0.0054 J	0.0014	0.0055	33.6	29.7	ND	2.7	2.5
Oct-2020	0.00056 J	ND	0.063	ND	ND	4.9	4.6	0.011 JB	0.0018 J	ND	32.3	29.5	ND	2.7	2.5
Apr-2021	ND	ND	0.063	0.0002 J	ND	5	5.1	0.0018 J	0.0012 J	0.0049 J	31.6	31.1	ND	2.8	2.9
Oct-2021	0.000074 JB	ND	0.065	ND	ND	5.4	5.3	0.0025 J	0.0018 J	0.0027	35	33.7	ND	3	3
May-2022	ND	0.0014 JB	0.064	ND	ND	5.2	5.5	0.0019 J	0.0016 J	0.0024 J	32.7	34.6	ND	2.9	3.1
Oct-2022	ND	ND	0.068	ND	ND	5.7	5.8	0.0023 J	0.0019 J	0.0027 J	34.6	32.4	ND	3.1	3.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-02A*												
Nov-1993	0.06	NA	ND	NA	0.44	NA	ND	NA	1.5	NA	NA	NA	ND
Apr-1994	0.07	NA	ND	NA	ND	NA	ND	NA	2.4	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.59	NA	ND	ND	1.7	NA	ND	ND	0.07
Apr-1997	0.01	0.013	ND	ND	1.7	1.6	ND	ND	2.1	2.6	ND	ND	ND
Apr-1998	0.01	0.024	NA	ND	1.06	1.53	ND	ND	2.28	2.31	ND	ND	0.034
Apr-1999	ND	ND	NA	ND	ND	ND	ND	ND	2.46	2.52	ND	ND	ND
Apr-2000	0.011	0.01	NA	ND	ND	0.83	ND	ND	2.46	2.41	ND	ND	ND
Apr-2001	0.011	NA	NA	ND	0.981	NA	ND	ND	3.65	NA	ND	ND	0.01
Mar-2002	0.019	0.025	NA	ND	ND	0.975	ND	ND	2.5	2.34	ND	ND	0.016
Mar-2003	0.018	0.011	NA	ND	1.48	ND	ND	ND	2.49	2.53	ND	ND	ND
Apr-2004	0.016	0.012	ND	ND	1.76	0.597	ND	ND	3.87	3.29	ND	ND	0.014
Apr-2005	0.02	0.015	ND	ND	0.81	0.77	ND	ND	3.58	3.91	ND	ND	ND
Mar-2006	ND	ND	ND	0.018	0.889	0.523	ND	ND	3.88	3.26	ND	ND	0.013
Mar-2007	0.016	0.016	ND	ND	ND	ND	ND	ND	3.57	3.44	ND	ND	0.019
Mar-2008	0.016	0.02	ND	ND	0.702	0.783	ND	ND	3.52	3.8	ND	ND	0.016
Mar-2009	0.019	0.024	ND	ND	0.596	0.636	ND	ND	3.79	3.93	ND	ND	0.03
Apr-2010	0.024	0.021	ND	ND	0.708	0.653	ND	ND	3.94	3.86	ND	ND	0.027
Apr-2011	0.025	0.023	ND	ND	0.716	0.694	ND	ND	4.34	4.33	ND	ND	0.036
Mar-2012	0.025	0.018	ND	ND	0.687	0.622	ND	ND	5.08	4.9	ND	ND	0.027
Sep-2012	0.0259	0.0243	ND	0.0042 J	0.717	0.68	0.000797 J	ND	5.33	5.26	0.000232 J	ND	0.0305
Mar-2013	0.0322	0.0295	0.000113 J	0.004 J	0.761	0.724	0.000652 J	ND	5.44	5.24	ND	ND	0.0434
Oct-2013	0.0299	0.0301	ND	0.0041	0.78	0.755	0.000848 J	ND	5.88	6.06	ND	0.0014 J	0.0452

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-02A***												
Mar-2014	0.0246	0.0247	ND	0.0042 J	0.77	0.792	ND	ND	5.7	5.82	ND	ND	0.0394
Oct-2014	0.0372	0.0346	0.000034 J	0.0065 J	0.866	0.876	0.0019 J	ND	6.43	6.55	ND	ND	0.0465
Apr-2015	0.0353	0.0334	ND	0.0058 J	0.917	0.923	0.0014 J	ND	6.77	6.88	ND	ND	0.0404
Nov-2015	0.048	0.0369	ND	0.008 J	0.988	0.931	0.0013 J	ND	7.94	7.9	ND	0.000203 J	0.045
May-2016	0.246	0.26	ND	0.0101	1.01	1.1	ND	ND	7.41	6.97	ND	ND	0.0868
Oct-2016	0.107 R	0.0689	ND	0.037 J+	0.944	0.887	0.00071 J-	ND	6.71 J+	6.72	ND	0.0013	0.076
May-2017	0.122	0.0983	ND	0.0205	0.946	0.931	ND	ND	6.8	6.41	ND	0.0003 J	0.0455
Oct-2017	0.169	0.152	ND	0.0184	0.92	0.857	ND	ND	6.33	6.08	ND	ND	0.0516
May-2018	0.12	0.074	ND	0.027	ND	ND	0.00065 J	ND	6.8	6.3	ND	0.002	0.032
Nov-2018	0.18	0.18	ND	0.0038	0.93 J	ND	0.00009 J	ND	7.6	7.8	ND	ND	0.0044 J
May-2019	0.22	0.2	ND	0.0025	ND	ND	ND	ND	8.1	7.4	ND	ND	ND
Oct-2019	0.19	0.18	ND	0.0052	1.1 J	1.1 J	ND	ND	8.4	8.7	ND	0.0021 D6	0.012 B
May-2020	0.21	0.2	ND	0.0042	ND	1.1 J	ND	ND	10.1	9.4	ND	0.0023	0.0065
Oct-2020	0.23	0.2	ND	0.0042	ND	ND	ND	ND	11.4	9.6	ND	0.0029 JB	ND
Apr-2021	0.21	0.22	ND	0.0028 J	1	1.1	ND	ND	12.4	13.1	ND	ND	ND
Oct-2021	0.23	0.23	ND	0.0035	1.1	1.1	ND	ND	14.4	14.4	ND	ND	0.0027 J
May-2022	0.23	0.24	ND	0.0035	1.1	1.1	ND	ND	14.5	16	ND	ND	ND
Oct-2022	0.23	0.22	ND	0.0035 J	1.2	1.2	ND	ND	16.5	16.9	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-02A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-02A*																
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7 J	200	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.8 B	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-02A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-02A***															
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.42 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*0.66 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*0.2 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.344 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*0.6 J*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*0.8 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-02A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.2 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-02A***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-03***											
Nov-1993	7	7	ND	ND	3.7	ND	ND	3.47	24.8	2.6	106	3.21
Apr-1994	5	5	ND	161	2.8	ND	ND	5.36	29.2	ND	25	2.12
Apr-1995	9.3	9.3	ND	ND	2.8	ND	ND	6.6	26.3	2	9	4
Apr-1997	ND	5	ND	ND	3.5	0.09	ND	NA	NA	ND	57	25
Apr-1998	2	2	0.95	ND	3.1	ND	ND	7.06	32	ND	23	4.7
Apr-1999	4	4	0.16	ND	3.94	ND	ND	5.41	38.6	ND	31	5.1
Apr-2000	3	3	ND	ND	3.67	0.16	ND	5.68	45	ND	25	5.7
Apr-2001	3.5	NA	0.28	ND	3.11	ND	ND	NA	NA	ND	ND	5.86
Mar-2002	2	2	ND	ND	4.01	ND	ND	5.6	62.7	ND	40	6.05
Mar-2003	3.4	3.4	ND	ND	13.7	ND	ND	5.6	31.8	ND	12	5.14
Apr-2004	6.5	6.5	ND	ND	4.53	ND	ND	5.6	26.9	ND	28	6.35
Apr-2005	4	4	ND	ND	4.92	0.08	ND	6.1	43.5	1.65	49	5.25
Mar-2006	6.4	6.4	ND	ND	5.27	0.12	ND	5.6	36.7	ND	13	4.72
Mar-2007	3.7	3.7	ND	ND	5.47	ND	ND	5.6	42.7	ND	39	6.21
Mar-2008	5.4	5.4	ND	ND	5.45	0.11	ND	5.2	33.1	ND	17	4.81
Mar-2009	14	14	ND	ND	6.19	0.06	ND	5.3	34.8	14.3	18	5.01
Apr-2010	11.1	11.1	ND	ND	6.96	ND	ND	4.8	34.2	ND	40	7.3
Apr-2011	6.2	6.2	ND	ND	6.95	0.08	ND	4.6	33.2	ND	39	6.57
Mar-2012	7.6	7.6	ND	ND	6.59	0.1	ND	4.4	34.9	ND	14	7.58
Sep-2012	7.64	7.64	ND	ND	6.11	ND	ND	5.4	34.4	ND	43	6.36
Mar-2013	15.3	15.3	0.236 J	ND	7.05	0.0585	ND	6	38.2	0.415 J	24	6.96
Oct-2013	14.2	14.2	ND	ND	7.85	0.0937	ND	5.3	39.4	ND	29	7.08
Mar-2014	13.6	13.6	ND	6 J	6.84	ND	ND	5.3	36	ND	ND	6.49
Oct-2014	35.2	35.2	ND	8 J	7.49	ND	ND	5	38.5	ND	ND	7.66
Apr-2015	4.72	4.72	ND	ND	8.49	0.16	ND	4.5	30.3	ND	ND	7.56
Nov-2015	3.52	3.52	ND	ND	8.33	0.127	ND	5.6	66.5	ND	34	7.43
May-2016	4.6	4.6	ND	6 J	5.74 B	ND	ND	5.5	44.6	ND	96	5.7
Oct-2016	4.6	4.6	ND	11	6.14	NA	NA	5.5	49.3	0.678 J	41	5.5
May-2017	3.52	3.52	ND	18	5.38	ND	ND	5.3	46.2	ND	ND	5.1
Oct-2017	14	14	ND	7 J	5.54	ND	ND	5.5	54.1	ND	16 J	5.5
May-2018	14	14	ND	12.2 J	5.5	ND	0.015	5.1	52	ND	ND	5.7
Nov-2018	6 JB	ND	ND	ND	5.4	0.041 J	0.0084 J	5.2	26.1	ND	10	5.2
May-2019	ND	NA	ND	ND	5.3	ND	ND	4.87	22.3	ND	17	5
Oct-2019	4 JH1	NA	ND	ND	4.7	0.11	ND	5.01	28.9	ND	25	4.6
May-2020	ND	NA	ND	ND	5.3	ND	0.02	5.51	39.6	ND	12	5.6
Oct-2020	4 J	NA	ND	ND	4.9	0.049 JB	ND	5.69	45.7	ND	37	5.5
Apr-2021	2 J3c	NA	ND	ND	4.6	0.059 J	ND	6.22	50.9	ND	13	5

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-03***											
Oct-2021	*6 J2c*	*NA*	*ND*	*ND*	4.1	*0.07 J*	*ND*	6.34	83.5	*ND*	*ND*	5.34
May-2022	10	*NA*	*ND*	*ND*	4.3	*0.071 J*	*ND*	6.38	79.1	*ND*	*ND*	5.1 N3
Oct-2022	14	*NA*	*ND*	*6.1 J*	6	*0.065 J*	*ND*	6.43	83.3	*ND*	*ND*	6 N3

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-03***													
Nov-1993	NA	ND	ND	NA	ND	0.61	NA	ND	NA	ND	4.2	1.9	ND	0.41	NA
Apr-1994	NA	ND	ND	NA	ND	0.79	NA	ND	NA	ND	ND	0.66	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	0.94	NA	ND	ND	ND	1.6	1.6	ND	0.41	NA
Apr-1997	ND	ND	0.019	ND	ND	1.8	0.8	ND	ND	ND	4.5	1.6	0.003	0.63	ND
Apr-1998	ND	ND	0.016	ND	ND	1.04	1.01	ND	ND	ND	1.28	0.593	ND	0.517	0.455
Apr-1999	ND	ND	ND	ND	ND	1.14	0.977	ND	ND	ND	6.94	1.18	ND	0.555	0.444
Apr-2000	ND	ND	ND	ND	ND	1.36	1.06	ND	ND	ND	13.6	1.09	ND	0.56	0.497
Apr-2001	ND	ND	0.016	ND	ND	1.36	NA	0.012	ND	ND	34.5	NA	0.009	0.597	NA
Mar-2002	ND	ND	0.013	ND	ND	1.46	1.17	ND	ND	ND	53.8	0.367	0.007	0.586	0.543
Mar-2003	ND	ND	ND	ND	ND	1.16	1.21	ND	ND	0.012	7.65	1.54	0.005	0.545	0.558
Apr-2004	ND	ND	0.015	ND	ND	1.47	1.25	ND	ND	0.012	141	7.86	0.009	0.654	0.596
Apr-2005	ND	ND	0.02	ND	ND	1.56	1.31	ND	ND	ND	92.8	1.3	0.013	0.627	0.589
Mar-2006	ND	ND	ND	ND	ND	1.13	0.987	ND	ND	0.011	20.5	1.04	0.006	0.458	0.442
Mar-2007	ND	ND	0.017	ND	ND	1.48	1.3	ND	ND	ND	19.1	7.55	0.007	0.609	0.524
Mar-2008	ND	0.002	ND	ND	ND	1.11	1.15	ND	ND	ND	9.41	0.532	ND	0.496	0.509
Mar-2009	ND	ND	ND	ND	ND	1.2	1.23	ND	ND	0.1	7.56	5.53	ND	0.487	0.504
Apr-2010	ND	ND	ND	ND	ND	1.92	1.75	ND	ND	0.01	10.4	7.4	ND	0.618	0.585
Apr-2011	ND	ND	ND	ND	ND	1.55	1.55	ND	ND	0.041	15.3	8.29	ND	0.655	0.65
Mar-2012	ND	ND	0.01	ND	ND	1.66	1.61	ND	ND	ND	11.4	3.66	ND	0.832	0.807
Sep-2012	ND	0.003	0.0074 J	ND	ND	1.45	1.39	0.0189	0.0026 J	0.0368	23.1	12.2	ND	0.666	0.632
Mar-2013	0.000835 J	0.0036	0.0104	ND	0.000273 J	1.62	1.58	0.0296	0.0056 J	0.0555	26.9	7.99	0.000874 J	0.709	0.678

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-03***													
Oct-2013	*ND*	*ND*	0.0127	*ND*	*0.000247 J*	1.61	1.46	0.0053	0.0024	0.0154	8.54	7.41	*0.000425 J*	0.742	0.693
Mar-2014	*0.000669 J*	0.0023	*0.0075 J*	*ND*	*0.000144 J*	1.75	1.64	0.019	*0.0032 J*	0.0282	26.8	16	*0.000588 J*	0.516	0.609
Oct-2014	0.0023	0.005	0.0112	*ND*	*0.000642 J*	1.81	1.6	0.0266	*0.0057 J*	0.0498	37.3	14.1	0.002	0.766	0.72
Apr-2015	0.002	0.0031	0.013	*ND*	*0.000276 J*	1.75	1.6	0.0133	*0.004 J*	0.0253	19.2	1.14	*0.0014 J*	0.775	0.718
Nov-2015	0.0036	**0.021 R,C**	0.0143	*0.000084 J*	*0.000979 J*	1.72	1.56	**0.133 R,C**	0.0252	0.245	75.4	2.2	0.0031	0.76	0.698
Dec-2015	*NA*	0.0052	*NA*	*NA*	*NA*	*NA*	*NA*	0.0261	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
May-2016	*ND*	*0.0022 J*	0.0076	*ND*	*0.00022 J*	1.32	1.23	0.0133	0.003	0.04	15.7	14.6	0.0036	0.59	0.599
Oct-2016	*0.00093 J*	*0.0033 J*	0.0075	*ND*	*0.00022 J*	1.22	1.2	*0.0245 J+*	0.0058	*0.0495 J+*	32.8	15.8	*0.0013 J*	*0.588 J+*	0.598
May-2017	*ND*	0.0045	0.0075	*ND*	*0.00036 J*	1.11	1.17	0.0304	0.0058	0.0716	23.9	13.6	0.002	0.575	0.55
Oct-2017	*ND*	*0.0034 J*	0.0091	*ND*	*0.00019 J*	1.31	1.07	0.0196	0.0048	0.0499	35.6	10.8	0.0024	0.535	0.507
May-2018	0.001	0.0052	0.0071	*0.000029 J*	*0.00032 J*	1.3	1.2	0.03	0.0071	0.065	26.8	11.9	0.002	*0.59 J*	*0.55 J*
Nov-2018	*ND*	*ND*	0.0096	*0.000053 J*	*0.00013 J*	1.1	1.1	*0.0037 J*	0.001	0.0034	20.6	0.84	*0.00056 J*	*0.59 J*	*0.54 J*
May-2019	*ND*	*ND*	0.011	*ND*	*ND*	1.1	1.1	*ND*	0.0011	0.0021	22.6	0.5	*ND*	*ND*	*ND*
Oct-2019	*0.0003 JB*	*ND*	0.03	*0.00045 J*	*0.0012 J*	1.1	1.1	*0.017 J*	*0.002 J*	0.015	195	1.7	*0.0027 J*	0.46	*0.54 J*
May-2020	0.00056	0.0011	0.0099	*ND*	*0.00013 J*	1.2	1.2	0.022	0.0042	0.0088	19.2	5.1	0.0019	0.61	*0.6 J*
Oct-2020	*0.00044 J*	*ND*	*0.0098 J*	*ND*	*ND*	1.2	1.1	*0.017 JB*	0.0038	*ND*	7.4	5.5	*ND*	0.63	*0.54 J*
Apr-2021	*ND*	*ND*	*0.008 J*	*ND*	*ND*	1.1	1.1	0.006	*0.0013 J*	*ND*	9.4	5.3	*ND*	0.54	0.54
Oct-2021	*0.000055 JB*	*ND*	0.0076	*ND*	*ND*	1.2	1.1	*0.0018 J*	*0.00072 J*	*0.00061 J*	10.6	7	*ND*	0.58	0.56
May-2022	*ND*	*0.0015 JB*	0.0078	*ND*	*ND*	1.1	1.2	0.0045	*0.0016 J*	*0.0014 J*	7.9	7.5	*ND*	0.56	0.61
Oct-2022	*ND*	*ND*	0.0084	*ND*	*ND*	1.3	1.3	0.011	*0.0019 J*	*0.0045 J*	12.9	9.4	*ND*	0.66	0.68

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-03*												
Nov-1993	0.12	NA	ND	NA	0.58	NA	ND	NA	1.5	NA	NA	NA	ND
Apr-1994	ND	NA	ND	NA	ND	NA	ND	NA	1.1	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.52	NA	ND	ND	1.4	NA	ND	ND	0.02
Apr-1997	0.066	0.026	ND	ND	2	2	ND	ND	1.8	1.7	ND	ND	0.066
Apr-1998	0.031	0.031	NA	ND	1.2	0.97	ND	ND	1.56	1.59	ND	ND	0.011
Apr-1999	0.043	0.023	NA	ND	1.49	0.644	ND	ND	2.03	1.56	ND	ND	ND
Apr-2000	0.023	0.03	NA	ND	0.653	ND	ND	ND	2.55	1.61	0.002	ND	0.011
Apr-2001	0.015	NA	NA	ND	1.51	NA	ND	ND	2.89	NA	ND	0.011	0.015
Mar-2002	0.015	0.015	NA	ND	0.806	1.14	ND	ND	2.48	1.76	ND	ND	0.026
Mar-2003	0.012	0.039	NA	ND	1.73	ND	ND	ND	1.92	1.96	ND	ND	0.026
Apr-2004	0.138	0.15	ND	ND	0.898	ND	ND	ND	2.6	2.23	ND	ND	0.028
Apr-2005	0.046	0.029	ND	ND	0.86	0.64	ND	ND	2.42	2.21	ND	ND	0.018
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	1.85	1.83	ND	ND	ND
Mar-2007	0.077	0.082	ND	ND	ND	ND	ND	ND	2.25	2	ND	ND	0.018
Mar-2008	0.033	0.012	ND	ND	0.575	0.598	ND	ND	2.17	2.22	ND	ND	ND
Mar-2009	0.097	0.088	ND	ND	ND	ND	ND	ND	2.41	2.72	ND	ND	ND
Apr-2010	0.146	0.116	ND	ND	0.638	0.623	ND	ND	2.83	2.79	ND	ND	ND
Apr-2011	0.156	0.162	ND	0.029	0.606	0.625	ND	ND	2.9	2.92	ND	ND	0.01
Mar-2012	0.12	0.1	ND	ND	0.735	0.708	ND	ND	3.68	3.55	ND	ND	ND
Sep-2012	0.249	0.217	ND	0.0133	0.796	0.764	ND	ND	3.52	3.48	ND	ND	0.0035 J
Mar-2013	0.152	0.101	0.000134 J	0.0242	0.812	0.748	ND	0.000022 J	3.48	3.28	ND	ND	0.019
Oct-2013	0.102	0.0916	ND	0.0073	0.646	0.592	ND	ND	3.52	3.41	0.000098 J	0.001 J	0.0166

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-03***												
Mar-2014	0.206	0.192	ND	0.0131	0.726	0.682	ND	0.000041 J	2.64	3.27	0.000185 J	0.0042 J	0.01
Oct-2014	0.38	0.247	0.00003 J	0.0253	0.864	0.816	ND	0.000086 J	3.85	3.83	ND	ND	0.0121
Apr-2015	0.0779	0.0368	ND	0.0164	0.765	0.736	0.000801 J	0.000033 J	3.95	4.01	ND	ND	0.0092 J
Nov-2015	0.278	0.0454	ND	0.111	0.804	0.714	0.000367 J	0.000192 J	4.19	4.09	0.000278 J	ND	0.0273
May-2016	0.24	0.234	ND	0.0191	0.874	0.828	ND	ND	3.33	3.09	ND	ND	0.0309
Oct-2016	0.272 R	0.217	ND	0.0249 J+	0.727	0.715	ND	ND	2.75 J+	2.77	ND	0.00032 J	0.0173 J
May-2017	0.242	0.217	ND	0.0324	0.766	0.729	ND	ND	2.73	2.68	ND	0.0003 J	0.0154 J
Oct-2017	0.269	0.186	ND	0.0217	0.628	0.603	ND	ND	2.57	2.39	ND	0.00025 J	0.0403
May-2018	0.27	0.21	ND	0.034	ND	ND	0.00027 J	ND	2.8 J	2.4 J	ND	0.0026	0.025
Nov-2018	0.018	0.019	ND	0.0045	ND	ND	ND	ND	2.2 J	2.3 J	ND	ND	0.0058
May-2019	0.02	0.016	ND	0.004	ND	ND	ND	ND	ND	ND	ND	ND	0.0057
Oct-2019	0.15	0.054	ND	0.012	ND	ND	ND	ND	2 J	2.4 J	ND	ND	0.065
May-2020	0.1	0.078	ND	0.028	ND	ND	ND	ND	2.3 J	2.3 J	ND	0.0013	0.0068
Oct-2020	0.093	0.08	ND	0.015	ND	ND	ND	ND	2.5 J	1.9 J	ND	0.0043 JB	ND
Apr-2021	0.11	0.12	ND	0.011	0.5	0.52	ND	ND	2.6	2.7	ND	ND	ND
Oct-2021	0.14	0.13	ND	0.0039	0.51	0.5	ND	ND	2.5	2.5	ND	ND	ND
May-2022	0.13	0.13	ND	0.01	0.5 J	0.46 J	ND	ND	2.4	2.9	ND	ND	ND
Oct-2022	0.16	0.18	ND	0.049	0.58	0.6	ND	ND	3.2	3.3	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-03*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.5	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.8	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.23	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.06 J	ND	ND	4.68 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-03*																
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.63 J,B*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.84 J*	*ND*	*ND*	7.02	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.19 J*	*ND*	*ND*	5.12	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.41 J*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.1	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.3 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.1	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.1	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.4	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-03*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-03***															
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.172 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-03***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-03***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-04***											
Nov-1993	6	6	0.5	ND	21.6	ND	ND	5.25	21.8	4.2	34	5.14
Apr-1994	6	6	ND	ND	2.2	ND	ND	5.3	21	ND	18	4.39
Apr-1995	8.2	8.2	ND	ND	2.3	ND	ND	6.1	20.7	1.9	ND	4.2
Apr-1997	ND	4	ND	ND	2	0.09	ND	NA	NA	ND	50	11
Oct-1997	4	4	0.5	ND	1.51	0.28	ND	8.07	21.5	ND	ND	16
Apr-1998	3	3	ND	ND	2.03	ND	ND	6.81	19.53	ND	ND	5
Apr-1999	ND	ND	0.24	ND	2.61	ND	ND	5.26	22.5	ND	32	5.7
Oct-1999	ND	ND	0.08	ND	2.88	ND	ND	5.6	20.1	ND	18	5.3
Apr-2000	4	4	ND	ND	3.25	ND	ND	5.7	17	ND	23	5.9
Oct-2000	6.4	NA	ND	ND	1.96	ND	ND	5.6	17.05	ND	19	5.63
Apr-2001	5.5	NA	ND	ND	1.96	ND	ND	NA	NA	ND	ND	7
Sep-2001	4.9	4.9	ND	ND	5.92	ND	ND	5.6	21	ND	22	6.2
Mar-2002	3.2	3.2	ND	ND	1.71	ND	ND	4.5	16	ND	20	5.03
Sep-2002	5.8	5.8	ND	ND	1.99	ND	ND	5.5	20.1	ND	22	6.44
Mar-2003	5.4	5.4	ND	ND	12	ND	ND	5.3	21.6	ND	12	5.53
Oct-2003	5.2	5.2	ND	ND	7.09	ND	ND	4.1	21.6	ND	48	7.6
Apr-2004	4.2	4.2	ND	ND	2.28	0.1	ND	5.5	16.6	ND	21	9.54
Oct-2004	5.4	5.4	ND	ND	2.39	0.12	ND	5.6	16.6	ND	13	9.5
Apr-2005	4.9	4.9	ND	ND	2.45	0.1	ND	5.3	15.4	1.58	35	5.33
Oct-2005	6.4	6.4	ND	ND	2.42	0.11	ND	4.6	13.7	ND	27	5.76
Mar-2006	7.5	7.5	ND	ND	2.27	ND	ND	5.3	17.6	ND	ND	4.15
Sep-2006	6.1	6.1	ND	ND	2.6	0.12	ND	5.5	17.9	ND	15	5.94
Mar-2007	6.2	6.2	ND	ND	2.72	ND	ND	5.7	20	ND	27	5.01
Sep-2007	4.9	4.9	0.39	ND	8.92	ND	ND	5.5	18.3	ND	29	4.52
Mar-2008	6.5	6.5	ND	ND	2.62	0.1	ND	5.5	18.8	ND	ND	4.66
Sep-2008	6.5	6.5	0.2	ND	2.77	0.06	ND	5.5	18.1	ND	19	5.6
Mar-2009	6	6	ND	ND	2.71	0.08	ND	5.2	23.2	ND	22	4.7
Oct-2009	5.9	5.9	ND	ND	2.58	0.09	ND	5	18	ND	37	5.25
Mar-2010	6	6	ND	ND	2.64	ND	ND	5.48	27	ND	32	5.19
Oct-2010	5.5	5.5	ND	ND	3.16	0.06	ND	5	18.8	ND	ND	4.93
Apr-2011	7	7	ND	ND	2.92	0.09	ND	5.3	15.7	ND	13	4.72
Sep-2011	7.5	7.5	ND	ND	7.53	0.38	ND	5.5	20.6	ND	36	5.78
Mar-2012	5.3	5.3	ND	ND	3.12	0.08	ND	4.8	18.9	ND	ND	5.87
Sep-2012	6.12	6.12	ND	ND	3.38	0.11	ND	4.3	21.4	ND	53	6.25
Mar-2013	5.84	5.84	0.055 J	ND	3.76	0.0899	ND	5.6	21.2	0.359 J	25	6.49
Oct-2013	6.2	6.2	ND	ND	3.87	0.0901	ND	5.9	24.7	ND	ND	6.18
Mar-2014	6.24	6.24	ND	ND	4.1	0.0804	ND	5.6	24.8	ND	38	7.94

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-04***											
Oct-2014	*ND*	*ND*	*ND*	*5 J*	4.42	0.119	*ND*	5.2	24.4	*ND*	*ND*	6.5
Apr-2015	4.68	4.68	*ND*	*ND*	4.59	0.091	*ND*	4.4	23.7	*ND*	*ND*	5.68
Nov-2015	5.4	5.4	*ND*	*ND*	4.6	0.111	*ND*	5.7	45.6	*ND*	25	7.79
May-2016	4.64	4.64	*ND*	*ND*	4.99	0.103	*ND*	5.7	33.9	*ND*	46	7.6
Oct-2016	3.76	3.76	*ND*	*ND*	5.4	*NA*	*NA*	5.6	43.5	*0.708 J*	44	7.2
May-2017	4.28	4.28	*ND*	*ND*	6.43	0.137	*ND*	5.5	53.6	*ND*	27	6.5
Oct-2017	6.36	6.36	*ND*	*6 J+*	7.26	0.114	*ND*	6.1	59	*ND*	*16 J*	7.4
May-2018	10	10	*ND*	*18.6 J*	8.2	0.1	*ND*	5.9	54.3	*ND*	*ND*	8.4
Nov-2018	18	18	*ND*	*ND*	8.2	*ND*	*0.0075 J*	6.2	79.3	*ND*	77	8.6
May-2019	24	*NA*	*ND*	*ND*	9.1	*ND*	*ND*	5.9	62.7	*ND*	38	9.2
Oct-2019	10 H1	*NA*	*ND*	*ND*	7.1	*0.084 J*	0.017	5.84	87.3	*ND*	47	13
May-2020	26	*NA*	*ND*	*6.9 J*	9.9	*ND*	*ND*	5.64	94.7	*ND*	40	17.7
Oct-2020	26	*NA*	*ND*	*ND*	7.8	*ND*	*0.0072 J*	5.66	108	*ND*	68	27
Apr-2021	10	*NA*	*0.064 J*	*ND*	9.4	*0.073 J*	*ND*	6.53	131.1	*ND*	55 D6	16.7
Oct-2021	30	*NA*	*ND*	*8.3 J*	8.2	*0.063 J*	*ND*	6.69	170.9	*ND*	41	24.8
May-2022	28 ML	*NA*	*ND*	*ND*	8.7	0.15	*0.0073 J*	6.27	154.3	*ND*	64	16.5 N3
Oct-2022	32	*NA*	*ND*	*22.1 J*	13.4	*0.088 J*	*0.0075 J*	6.48	163.3	*ND*	48	12.3 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-04*													
Nov-1993	NA	ND	ND	NA	ND	1.4	NA	ND	NA	ND	1.1	0.13	ND	0.4	NA
Apr-1994	NA	ND	ND	NA	ND	1.7	NA	ND	NA	ND	0.072	ND	ND	0.45	NA
Apr-1995	ND	ND	ND	ND	ND	1.1	NA	ND	ND	ND	0.49	ND	ND	0.36	NA
Oct-1996	ND	ND	0.008	ND	ND	1.6	1.6	ND	ND	ND	0.82	0.22	ND	ND	ND
Apr-1997	ND	ND	0.021	ND	ND	2.5	0.86	ND	ND	ND	0.82	0.25	ND	0.55	ND
Oct-1997	ND	ND	ND	ND	ND	1.39	1.29	ND	ND	ND	20.7	0.786	ND	0.349	0.33
Apr-1998	ND	ND	0.01	ND	ND	1.37	1.29	ND	ND	ND	25.9	0.456	ND	0.374	0.366
Apr-1999	ND	ND	0.011	ND	ND	1.58	1.43	ND	ND	ND	19.3	0.422	ND	0.418	0.398
Oct-1999	ND	ND	ND	ND	ND	1.46	1.33	ND	ND	ND	15	0.465	ND	0.421	0.38
Apr-2000	ND	ND	ND	ND	ND	1.64	1.65	ND	ND	ND	5.3	0.212	ND	0.445	0.429
Oct-2000	ND	ND	ND	ND	ND	1.57	1.56	ND	ND	0.004	12	0.477	ND	0.415	0.416
Apr-2001	ND	ND	0.012	ND	ND	2	NA	ND	ND	ND	34.9	NA	ND	0.485	NA
Sep-2001	ND	ND	ND	ND	ND	1.65	1.58	ND	ND	ND	10.9	0.145	ND	0.5	0.422
Mar-2002	ND	ND	0.011	ND	ND	1.35	1.37	ND	ND	ND	29.7	0.607	ND	0.403	0.422
Sep-2002	ND	ND	0.011	ND	ND	1.82	1.35	ND	ND	ND	59.6	0.703	ND	0.462	0.414
Mar-2003	ND	ND	ND	ND	ND	1.49	1.41	ND	ND	ND	7.57	0.379	ND	0.441	0.412
Oct-2003	ND	ND	0.013	ND	ND	2.09	1.36	ND	ND	0.011	55.9	0.527	ND	0.579	0.402
Apr-2004	0.004	0.003	0.014	0.003	ND	1.89	1.04	ND	ND	ND	30.5	0.142	0.004	1.17	0.4
Oct-2004	ND	ND	0.01	ND	ND	2.86	1.45	ND	ND	0.014	36.3	0.288	ND	0.571	0.426
Apr-2005	ND	ND	0.013	ND	ND	1.41	1.38	ND	ND	ND	81.5	0.537	ND	0.437	0.424
Oct-2005	ND	ND	0.01	ND	ND	1.58	1.23	ND	ND	ND	39.4	0.379	ND	0.449	0.414

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-04***													
Mar-2006	ND	ND	ND	ND	ND	1.08	0.996	ND	ND	ND	43.7	0.372	ND	0.352	0.338
Sep-2006	ND	ND	ND	ND	ND	1.61	1.36	ND	ND	ND	38.2	0.206	ND	0.467	0.431
Mar-2007	ND	ND	0.014	ND	ND	1.33	1.22	ND	ND	ND	41.8	0.151	ND	0.41	0.376
Sep-2007	ND	ND	ND	ND	ND	1.14	1.11	ND	ND	ND	17.1	0.705	ND	0.406	0.372
Mar-2008	ND	ND	0.011	ND	ND	1.17	1.14	ND	ND	ND	40.9	0.576	ND	0.423	0.416
Sep-2008	ND	ND	ND	ND	ND	1.41	1.19	ND	ND	ND	23.6	0.24	ND	0.501	0.454
Mar-2009	ND	ND	ND	ND	ND	1.25	1.31	ND	ND	ND	26.9	0.4	ND	0.383	0.41
Oct-2009	ND	ND	ND	ND	ND	1.32	1.27	ND	ND	ND	10	0.243	ND	0.474	0.467
Mar-2010	ND	ND	ND	ND	ND	1.37	1.27	ND	ND	ND	2.48	0.155	ND	0.429	0.407
Oct-2010	ND	ND	ND	ND	ND	1.17	1.13	ND	ND	ND	11.3	0.91	ND	0.488	0.458
Apr-2011	ND	ND	0.012	ND	ND	1.11	1.1	ND	ND	ND	57.8	0.317	ND	0.473	0.462
Sep-2011	ND	ND	0.015	ND	ND	1.44	1.48	ND	ND	ND	90.5	0.469	ND	0.53	0.47
Mar-2012	ND	ND	0.01	ND	ND	1.36	1.33	ND	ND	ND	8.58	0.191	ND	0.599	0.576
Sep-2012	ND	ND	0.014	0.000181 J	ND	1.62	1.5	ND	0.00098 J	0.0044 J	68.2	0.274	0.000594 J	0.536	0.551
Mar-2013	ND	ND	0.0133	0.000126 J	ND	1.66	1.49	0.0021 J	0.0012 J	0.0025 J	20.2	0.251	ND	0.57	0.534
Oct-2013	ND	ND	0.0128	ND	ND	1.56	1.58	ND	0.000945 J	0.0018 J	9.53	0.335	ND	0.555	0.585
Mar-2014	ND	ND	0.0123	ND	ND	2.34	2.3	0.0049 J	0.000947 J	0.0026 J	17.5	0.389	ND	0.509	0.652
Oct-2014	0.000253 J	ND	0.0139	ND	ND	1.58	1.66	0.00074 J	0.001 J	0.0027 J	17.7	0.275	ND	0.621	0.62
Apr-2015	0.0012 J	ND	0.0148	ND	ND	1.27	1.31	0.000412 J	0.0012 J	0.0028 J	13.6	0.382	ND	0.611	0.631
Nov-2015	ND	ND	0.0144	ND	ND	1.94	1.82	0.000332 J	0.0012 J	0.002 J	5.46	0.512	0.000478 J	0.717	0.67
May-2016	ND	ND	0.0162	0.00019 J	ND	1.83	1.91	0.00071 J	0.0013	0.0032 J	25.4	0.285	0.00015 J	0.741	0.734
Oct-2016	ND	ND	0.0166	ND	ND	1.62	1.64	0.00071 J	0.0013	0.0021 J	1.62	0.824	0.00011 J	0.763	0.784
May-2017	ND	ND	0.0185	0.00019 J	ND	1.37	1.58	0.00083 JB	0.0016	0.0038 J	14.4	1.64	0.00018 J	0.745	0.751
Oct-2017	ND	ND	0.0183	0.00015 J	ND	1.62	1.62	ND	0.0016	0.0035 J	11.2	2.68	0.00019 J	0.811	0.844

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-04***													
May-2018	*0.00013 J*	*ND*	0.023	*0.00021 J*	*0.000078 J*	1.8	1.7	*0.0022 J*	0.0018	0.014	14.1	2.4	*0.00023 J*	*0.94 J*	*0.91 J*
Nov-2018	*ND*	*ND*	0.023	*0.00018 J*	*0.000032 J*	1.9	1.9	*0.0024 J*	0.0015	0.0041	44	17.7 M1	*0.000076 J*	*0.96 J*	*0.99 J*
May-2019	*ND*	*ND*	0.023	*ND*	*ND*	2.1	2.2	*ND*	0.0015	0.0028	23.4	14.1	*ND*	*ND*	1
Oct-2019	*ND*	*ND*	0.038	*0.00086 J*	*0.00076 J*	3.6	3.5	*0.0036 J*	0.0026	0.017	152	11.6	*0.00037 J*	1	1
May-2020	*0.00032 J*	*ND*	0.025	*0.00015 J*	*0.00016 J*	5.2	5.4	*0.003 J*	0.0026	0.0063	27.5	17.5	*ND*	1.2	1.2
Oct-2020	*0.00072 J*	*ND*	0.028	*ND*	*ND*	8.8	8.4	*0.01 J*	*0.0018 J*	*ND*	22.4 M1	19.5	*ND*	1.2	1.2
Apr-2021	*ND*	*ND*	0.028	*ND*	*ND*	4.6	4.5	*0.0009 J*	*0.0013 J*	*ND*	30.4	21.8	*ND*	1.2	1.2
Oct-2021	*0.000053 JB*	*ND*	0.027	*ND*	*ND*	7.5	7.2	*ND*	*0.0013 J*	*0.0014 J*	29.8	21.5	*ND*	1.5	1.4
May-2022	*ND*	*ND*	0.03	*ND*	*ND*	4.3	3.9	*0.0011 J*	*0.002 J*	*0.0017 J*	28.3	22.7	*ND*	1.4	1.3
Oct-2022	*0.00031 JB*	*ND*	0.029	*0.00015 J*	*ND*	2.6	2.8	*0.00078 J*	*0.0022 J*	0.0028	36	28	*ND*	1.4	1.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-04*												
Nov-1993	0.07	NA	ND	NA	0.36	NA	ND	NA	1.1	NA	NA	NA	ND
Apr-1994	0.012	NA	ND	NA	ND	NA	ND	NA	1.9	NA	NA	NA	0.014
Apr-1995	0.01	NA	ND	ND	0.46	NA	ND	ND	1	NA	ND	ND	0.02
Oct-1996	0.019	0.016	NA	ND	ND	ND	ND	ND	2.1	2.5	ND	ND	ND
Apr-1997	0.025	ND	ND	ND	2	1.8	ND	ND	1.3	1.2	ND	ND	0.044
Oct-1997	0.011	0.015	ND	ND	ND	0.552	ND	ND	1.08	1.02	ND	ND	0.01
Apr-1998	ND	0.033	ND	ND	ND	ND	ND	ND	1.09	1.18	ND	ND	ND
Apr-1999	0.01	0.015	NA	ND	0.875	ND	ND	ND	1.18	1.12	ND	ND	ND
Oct-1999	0.01	0.015	NA	ND	ND	ND	ND	ND	1.1	1.01	ND	ND	ND
Apr-2000	0.011	0.012	NA	ND	0.547	ND	ND	ND	1.12	1.04	ND	ND	ND
Oct-2000	0.012	0.015	NA	ND	0.514	ND	ND	ND	1.05	1.16	ND	ND	ND
Apr-2001	ND	NA	NA	ND	1.11	NA	ND	ND	2.15	NA	ND	ND	ND
Sep-2001	ND	ND	NA	ND	ND	0.641	ND	ND	1.18	1.1	ND	ND	ND
Mar-2002	0.015	0.017	NA	ND	1.03	0.901	ND	ND	1.16	1.15	ND	ND	ND
Sep-2002	ND	0.017	NA	ND	0.843	0.821	ND	ND	1.43	1.11	ND	ND	ND
Mar-2003	0.013	0.012	NA	ND	0.646	ND	ND	ND	1.18	1.13	ND	ND	ND
Oct-2003	ND	0.017	NA	ND	1.18	1.53	ND	ND	2.74	1.13	ND	0.044	ND
Apr-2004	ND	ND	ND	ND	1.48	ND	ND	ND	2.17	1.13	**0.003**	ND	0.021
Oct-2004	ND	0.011	ND	ND	ND	ND	ND	ND	1.56	0.833	ND	ND	0.073
Apr-2005	0.017	0.014	ND	ND	ND	ND	ND	ND	1.21	1.15	ND	ND	ND
Oct-2005	0.016	0.011	ND	ND	0.58	ND	ND	ND	1.97	1.06	ND	ND	0.012
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	0.919	0.81	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-04*												
Sep-2006	0.01	ND	ND	ND	0.514	ND	ND	ND	1.27	0.989	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	1.09	0.925	ND	ND	ND
Sep-2007	0.022	0.019	ND	ND	ND	ND	ND	ND	1.1	1.05	ND	ND	0.015
Mar-2008	0.019	0.014	ND	ND	ND	ND	ND	ND	1.18	1.13	ND	ND	ND
Sep-2008	0.01	ND	ND	ND	ND	ND	ND	ND	1.13	1.02	ND	ND	0.021
Mar-2009	ND	ND	**0.0072 R,C**	ND	ND	ND	ND	ND	1.14	1.17	ND	ND	0.011
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Jul-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.14	1.14	ND	ND	ND
Mar-2010	ND	ND	ND	ND	0.562	0.512	ND	ND	1.07	1.04	ND	ND	ND
Oct-2010	0.028	0.021	ND	ND	ND	ND	ND	ND	1.22	1.17	ND	ND	ND
Apr-2011	0.015	0.012	ND	ND	ND	ND	ND	ND	1.32	1.26	ND	ND	ND
Sep-2011	0.021	0.012	ND	ND	ND	ND	ND	ND	1.34	1.31	ND	ND	0.012
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	1.34	1.34	ND	ND	ND
Sep-2012	0.0153	0.011	ND	0.0019 J	0.45 J	0.54	ND	ND	1.38	1.39	ND	ND	0.006 J
Mar-2013	0.0122	0.0103	0.00018 J	0.0029 J	0.524	0.467 J	ND	ND	1.56	1.45	0.000555 J	ND	0.0128
Oct-2013	0.0132	0.0121	ND	0.0017 J	0.427	0.44	ND	ND	1.46	1.57	ND	0.000803 J	0.0114
Mar-2014	0.0108	0.0101	ND	0.0019 J	0.558	0.539	ND	ND	1.27	1.61	ND	0.0048 J	0.0098 J
Oct-2014	0.0144	0.012	0.000022 J	0.0018 J	0.518	0.529	0.0013 J	ND	1.69	1.71	ND	ND	ND
Apr-2015	0.0165	0.0146	ND	0.0017 J	0.545	0.548	0.000983 J	ND	1.83	1.88	ND	ND	0.0098 J
Nov-2015	0.0184	0.0167	ND	0.0017 J	0.557	0.516	ND	ND	2.03	1.92	0.000116 J	ND	0.0095 J
May-2016	0.0186	0.0122	ND	0.002 J	0.57	0.562	ND	ND	1.95	1.93	ND	ND	ND
Oct-2016	0.0193	0.0195	ND	0.002 J	0.546	0.582	ND	ND	2	2.1	ND	ND	ND
May-2017	0.0472	0.0279	0.00023	0.0021 J	0.575	0.588	ND	ND	2.25	2.24	ND	ND	0.0036 JB

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-04***												
Oct-2017	0.0403	0.0357	*0.00015 J*	*0.002 JB*	0.626	0.625	*ND*	*ND*	2.5	2.64	*ND*	*ND*	*ND*
May-2018	0.032	0.029	*0.00015 J*	0.0027	*ND*	*ND*	*0.00013 J*	*ND*	*2.9 J*	*2.7 J*	*0.000076 J*	*ND*	0.0065
Nov-2018	0.15	0.15	0.00032	0.0036	*ND*	*ND*	*0.0002 J*	*ND*	*3.5 J*	*3 J*	*ND*	*ND*	0.0057
May-2019	0.18	0.16	*ND*	0.0026	7.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	0.17	0.11	0.0006	0.0042	*ND*	*ND*	*ND*	*ND*	*2.6 J*	*3 J*	*ND*	*ND*	0.025
May-2020	0.1	0.16	*ND*	0.0032	*ND*	*ND*	*ND*	*ND*	*3.1 J*	*3.2 J*	*ND*	0.003	0.01
Oct-2020	0.15	0.12	*ND*	0.0042	*ND*	*ND*	*0.0017 J*	*ND*	*1.8 J*	*2.5 J*	*ND*	*0.0025 J*	*ND*
Apr-2021	0.16	0.16	*ND*	*ND*	0.76	0.77	*ND*	*ND*	3.7	3.4	*ND*	*ND*	*ND*
Oct-2021	0.16	0.16	*ND*	*0.0013 J*	0.8	0.77	*ND*	*ND*	3.6	3.6	*ND*	*ND*	*ND*
May-2022	0.16	0.16	*ND*	*0.0025 J*	0.83	0.8	*ND*	*ND*	4.3	3.9	*ND*	*ND*	*ND*
Oct-2022	0.19	0.19	*ND*	*0.002 J*	0.91	0.89	*ND*	*ND*	4.7	4.8	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.5	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04*																
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*0.21 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*0.24 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*0.25 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04*																
May-2017	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.9 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	2.35	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	2.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.48 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.62 J	0.4 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.18 J	ND	ND	ND	ND	ND	0.71 J	0.47 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.18 J	ND	ND	ND	ND	ND	0.81 J	0.33 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	0.64 J	0.45 J
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8 J	0.9 J
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	0.8 J	1.3
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.1 J	ND	ND	ND	1.3	2.3

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	1.2	3
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	1.5	4.1
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	4.7
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.3 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1 CL	4 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	2.9
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	3
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2	3.1
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*1.36 J*	*4.77 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	2.6	4.4
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	3.5
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	2.1	4.5

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-04B***											
Nov-1993	ND	ND	ND	30	3.1	ND	ND	4.82	25.8	4.2	42	3.93
Apr-1994	4.27	ND	ND	21.1	2.7	ND	ND	5.2	28.6	3.6	17	3.93
Apr-1995	ND	ND	ND	ND	3	ND	ND	5.4	27.5	8	16	5.6
Apr-1997	ND	5	ND	ND	2.5	0.03	ND	NA	NA	ND	54	5.7
Oct-1997	ND	ND	0.6	ND	1.54	ND	ND	8.34	51.6	2.5	18	ND
Apr-1998	ND	ND	0.34	ND	2.67	ND	ND	6.57	29.4	7.4	16	9.3
Apr-1999	ND	ND	0.13	ND	3.66	ND	ND	4.87	29.3	4.79	39	7.8
Oct-1999	ND	ND	0.07	ND	2.52	ND	ND	5.13	29.4	5.33	29	8.4
Apr-2000	1	1	ND	ND	2.8	ND	ND	5.47	25	4.27	42	9
Oct-2000	1	NA	ND	ND	3.58	ND	ND	5.06	34.2	11.7	364	7.72
Apr-2001	1.3	NA	ND	ND	2.33	ND	ND	NA	NA	8.7	37	8.47
Sep-2001	ND	ND	ND	ND	11.7	1.25	ND	4.9	48	11.4	33	10.5
Mar-2002	1	1	ND	ND	3.75	ND	ND	4.6	30	5.04	35	9.56
Sep-2002	1.4	1.4	ND	ND	3.03	ND	ND	5	41.1	7.73	83	10.8
Mar-2003	1.9	1.9	ND	ND	12.5	ND	ND	4.8	38.2	14.2	33	9.6
Oct-2003	2.1	2.1	ND	ND	2.72	ND	ND	3.8	39.9	7.67	55	10.5
Apr-2004	1.7	1.7	ND	ND	2.23	ND	ND	5.1	35.6	11.1	31	11.8
Oct-2004	1.9	1.9	ND	ND	3.14	ND	ND	4.9	37.6	8.58	28	10.1
Apr-2005	1.6	1.6	ND	ND	2.43	ND	ND	4.8	33	9.86	70	11.6
Oct-2005	2.7	2.7	0.22	ND	2.3	ND	ND	4.1	29.7	8.56	46	8.69
Mar-2006	3	3	ND	ND	2.16	0.08	ND	5	32.3	9.06	15	7.49
Sep-2006	2.8	2.8	ND	ND	2.6	ND	ND	4.8	33.5	8.32	34	9.31
Mar-2007	2.8	2.8	ND	ND	3.02	0.08	ND	5.1	35.1	8.73	41	8.47
Sep-2007	2.6	2.6	0.36	ND	2.57	ND	ND	5.5	35.9	7.63	45	9.1
Mar-2008	3	3	ND	ND	2.77	0.08	ND	5	36	9.24	29	9.43
Sep-2008	3.2	3.2	ND	43	2.86	ND	ND	5.1	33.6	9.75	37	10.2
Mar-2009	3.1	3.1	ND	ND	2.71	ND	ND	4.5	35.4	7.43	47	9.18
Oct-2009	3	3	ND	ND	2.73	ND	ND	4.5	31.7	10.3	60	10.4
Apr-2010	3.3	3.3	ND	ND	2.59	ND	ND	4.2	37.7	11.5	54	9.5
Oct-2010	2.6	2.6	ND	ND	3.08	ND	ND	4.4	34.9	8.6	29	11.1
Apr-2011	3.5	3.5	ND	ND	2.62	ND	ND	4.5	36.2	8.96	42	10.3
Sep-2011	3.6	3.6	ND	ND	3.02	ND	ND	4.7	36.6	7.53	19	10.7
Mar-2012	2.7	2.7	ND	ND	2.55	ND	ND	4.4	35.8	10	ND	11.1
Sep-2012	2.88	2.88	ND	ND	3.14	0.0613	ND	3.8	36.4	9.39	34	10.9
Mar-2013	3.4	3.4	ND	ND	3.44	0.0421 J	ND	5.1	39.1	9.35	28	11.4
Oct-2013	3.48	3.48	ND	ND	3.56	0.0428 J	ND	5.2	40.3	9.26	ND	11.1
Mar-2014	3	3	ND	ND	3.05	ND	ND	5	37.2	11.2	ND	10.9

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-04B***										
Oct-2014	ND	ND	ND	5 J	3.14	ND	ND	4.6	35.9	8.82	ND	11.2
Apr-2015	3.76	3.76	ND	ND	2.84	ND	ND	4.7	35.1	11.2	32	11.7
Nov-2015	2.64	2.64	ND	ND	2.72	ND	ND	5.1	60.9	10.8	27	11.7
May-2016	ND	ND	ND	ND	2.82	ND	ND	4.9	47.4	9.84	19 J	11.2
Oct-2016	ND	ND	ND	ND	3.03	NA	NA	5.1	53.1	9.28	41	10.9
May-2017	2.6	2.6	ND	ND	3.83	0.181	ND	4.9	66.7	8.3	24 J	12.4
Oct-2017	ND	ND	ND	ND	3.67	0.159	ND	5.1	65.4	9.23	35	12.3
May-2018	4 J	ND	ND	ND	3.3	0.16	ND	5.8	52.4	7 J	ND	11.6
Nov-2018	6 JB	ND	ND	ND	2.8 J	0.076 J	ND	4.63	40.9	9.7 J	93	11.6
May-2019	ND	NA	ND	ND	ND	ND	ND	4.53	32.5	11.3	23	10.9
Oct-2019	1 JH1	NA	ND	ND	2.7 J	0.19	ND	4.32	46.2	8.7 J	231	11.9
May-2020	ND	NA	ND	ND	5.8	0.16	ND	4.41	55.9	9.1 J	46	16.2
Oct-2020	ND	NA	ND	ND	4.2	0.15	ND	4.41	50.3	10.4	27	14.9
Apr-2021	ND	NA	ND	ND	2.3 J	0.11	ND	4.82	47.3	9.6 J	34	11.3
Oct-2021	ND	NA	ND	ND	4.3	0.23	ND	4.79	88.6	8.1 J	14	16.4
May-2022	2 J2c	NA	ND	ND	5.7	0.28	ND	4.54	95.7	10.2	43	19.9 N3
Oct-2022	2 J2c	NA	ND	13 J	9.3	0.28	ND	4.62	105.2	12.4	48	20.7 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-04B*													
Nov-1993	NA	ND	ND	NA	ND	0.37	NA	0.007	NA	ND	2.2	0.04	ND	0.73	NA
Apr-1994	NA	ND	ND	NA	ND	1.1	NA	ND	NA	ND	ND	ND	ND	0.37	NA
Apr-1995	ND	ND	ND	ND	ND	0.66	NA	ND	ND	ND	ND	ND	ND	0.95	NA
Oct-1996	ND	ND	0.026	ND	ND	1.4	1.5	ND	ND	ND	ND	ND	0.002	1.4	1.4
Apr-1997	ND	ND	0.042	ND	ND	2.7	1.6	ND	ND	ND	0.26	ND	ND	1.9	1.1
Oct-1997	ND	ND	0.022	ND	ND	0.982	0.948	ND	ND	ND	0.418	ND	ND	0.961	0.918
Apr-1998	ND	ND	0.03	ND	ND	1.72	1.59	ND	ND	ND	1.16	ND	ND	1.22	1.11
Apr-1999	ND	ND	0.039	ND	ND	1.2	1.18	ND	ND	ND	2.96	ND	ND	1.17	1.01
Oct-1999	ND	ND	0.022	ND	ND	1.27	0.964	ND	ND	ND	0.678	ND	ND	1.01	0.832
Apr-2000	ND	ND	0.023	ND	ND	1.54	1.22	ND	ND	ND	0.503	ND	ND	1.26	1.16
Oct-2000	ND	ND	0.022	ND	ND	1.26	1.27	ND	ND	ND	0.286	ND	ND	1.11	1.09
Apr-2001	ND	ND	0.024	ND	ND	1.48	NA	ND	ND	ND	0.556	NA	ND	1.16	NA
Sep-2001	ND	ND	0.027	ND	ND	1.83	1.38	ND	ND	ND	0.623	ND	ND	1.45	1.26
Mar-2002	ND	ND	0.026	ND	ND	1.67	1.53	ND	ND	ND	0.352	ND	ND	1.31	1.34
Sep-2002	ND	ND	0.035	ND	ND	1.95	1.44	ND	ND	0.013	4.57	ND	ND	1.45	1.33
Mar-2003	ND	ND	0.029	ND	ND	1.45	1.33	ND	ND	ND	0.257	ND	ND	1.46	1.28
Oct-2003	ND	ND	0.029	ND	ND	1.81	1.4	ND	ND	ND	0.68	ND	ND	1.46	1.36
Apr-2004	ND	ND	0.032	ND	ND	1.85	1.59	ND	ND	ND	0.599	ND	ND	1.74	1.67
Oct-2004	ND	ND	0.031	ND	ND	1.51	1.51	ND	ND	ND	0.609	ND	ND	1.53	1.52
Apr-2005	ND	ND	0.033	ND	ND	1.98	1.54	ND	ND	ND	0.998	ND	ND	1.62	1.58
Oct-2005	ND	ND	0.024	ND	ND	1.45	1.17	ND	ND	ND	0.491	ND	ND	1.32	1.23

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-04B***													
Mar-2006	ND	ND	0.019	ND	ND	1.19	1.07	ND	ND	ND	0.295	ND	ND	1.1	1.16
Sep-2006	ND	ND	0.023	ND	ND	1.57	1.39	ND	ND	ND	0.375	ND	ND	1.31	1.3
Mar-2007	ND	ND	0.031	ND	ND	1.36	1.28	ND	ND	ND	0.299	ND	ND	1.23	1.16
Sep-2007	ND	ND	0.027	ND	ND	1.4	1.4	ND	ND	ND	0.312	ND	ND	1.36	1.33
Mar-2008	ND	0.002	0.028	ND	ND	1.55	1.37	ND	ND	ND	0.63	ND	ND	1.35	1.24
Sep-2008	ND	ND	0.035	ND	ND	1.6	1.3	0.012	ND	ND	4.91	ND	ND	1.5	1.38
Mar-2009	ND	ND	0.029	ND	ND	1.58	1.5	ND	ND	ND	0.627	ND	ND	1.27	1.31
Oct-2009	ND	ND	0.031	ND	ND	1.79	1.44	ND	ND	ND	1.82	0.051	ND	1.44	1.46
Apr-2010	ND	ND	0.026	ND	ND	1.72	1.6	ND	ND	ND	0.816	ND	ND	1.27	1.52
Oct-2010	ND	ND	0.036	ND	ND	1.7	1.65	ND	ND	ND	0.659	ND	ND	1.67	1.64
Apr-2011	ND	ND	0.031	ND	ND	1.52	1.39	ND	ND	ND	0.543	ND	ND	1.59	1.41
Sep-2011	ND	ND	0.033	ND	ND	1.6	1.55	ND	ND	ND	ND	ND	ND	1.63	1.6
Mar-2012	ND	ND	0.032	ND	ND	1.55	1.57	ND	ND	ND	0.053	ND	ND	1.76	1.77
Sep-2012	ND	ND	0.0355	0.000114 J	ND	1.73	1.6	0.0018 J	0.0041 J	0.0015 J	0.108	0.0208 J	ND	1.61	1.57
Mar-2013	ND	ND	0.0368	0.000116 J	ND	1.81	1.8	0.002 J	0.004 J	0.0015 J	0.0309 J	0.0064 J	ND	1.66	1.66
Oct-2013	ND	ND	0.0404	ND	0.000097 J	1.77	1.69	0.0018 J	0.0042	0.0025	ND	ND	ND	1.62	1.64
Mar-2014	ND	ND	0.0319	ND	ND	2.2	2.06	0.0063 J	0.0035 J	0.0025 J	0.076	0.0586	ND	1.32	1.58
Oct-2014	0.000469 J	ND	0.0403	ND	0.000087 J	1.76	1.83	0.0025 J	0.0042 J	0.0021 J	0.0811	0.0111 J	ND	1.66	1.68
Apr-2015	0.0011 J	ND	0.0397	0.000169 J	0.000106 J	1.82	1.79	0.0016 J	0.0042 J	0.0019 J	0.0405 J	0.0639	ND	1.74	1.68
Nov-2015	ND	ND	0.0399	0.000126 J	0.000113 J	1.82	1.77	0.000929 J	0.0044 J	0.0017 J	0.0292 J	ND	0.000337 J	1.74	1.74
May-2016	ND	ND	0.0385	0.00013 J	ND	1.7	1.72	0.0019 J	0.004	0.0014 J	0.04 J	ND	ND	1.69	1.73
Oct-2016	ND	ND	0.0464	0.00015 J	ND	1.68	1.65	0.0022 J	0.0053	0.0019 J	0.035 J	ND	ND	1.63	1.65
May-2017	ND	ND	0.0528	0.00015 J	ND	2.08	1.83	0.0016 J	0.0055	0.002 J	ND	ND	ND	1.75	1.84
Oct-2017	ND	ND	0.0521	0.00013 J	0.00019 J	2.04	1.98	0.0015 J	0.0056	0.0021 J	0.0858 J	ND	ND	1.75	1.87

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-04B***													
May-2018	*ND*	*ND*	0.044	*0.00016 J*	*0.00012 J*	1.8	1.8	*0.0027 J*	0.0039	0.0064	*0.016 J*	*ND*	*0.000021 JB*	1.7	1.7
Nov-2018	*ND*	*ND*	0.036	*0.00013 J*	*0.000092 J*	1.8	1.8	*0.0034 J*	0.0031	*0.0013 J*	*0.017 J*	*ND*	*0.00021 J*	1.7	1.7
May-2019	*ND*	*ND*	0.034	*ND*	*ND*	1.8	1.8	*ND*	0.0036	*ND*	*ND*	*ND*	*ND*	1.6	1.6
Oct-2019	*0.00011 JB*	*ND*	0.038	*0.00015 J*	*0.00034 JB*	1.8	1.7	*0.0034 J*	0.0041	0.0022	*0.037 J*	*0.014 J*	*0.000079 JB*	1.8	1.8
May-2020	*0.000093 J*	*ND*	0.054	*0.00018 J*	*0.00025 J*	2.4	2.4	*0.0045 J*	0.0058	0.0031	*0.024 J*	*0.013 J*	*ND*	2.5	2.5
Oct-2020	*0.00049 J*	*ND*	0.055	*ND*	*ND*	2.4	2.2	*0.012 J*	0.006	*ND*	*0.024 J*	*0.013 J*	*ND*	2.2	2.1
Apr-2021	*ND*	*ND*	0.036	*ND*	*ND*	1.8	1.8	*0.0021 J*	*0.0037 J*	*ND*	*ND*	*ND*	*ND*	1.7	1.6
Oct-2021	*0.000071 JB*	*ND*	0.059	*0.00023 J*	*ND*	2.4	2.4	0.0027	0.0062	*0.002 J*	*0.029 J*	*0.013 J*	*ND*	2.5	2.4
May-2022	*ND*	*ND*	0.076	*0.00024 J*	*ND*	2.9	2.7	*0.0024 J*	0.0088	0.0025	*ND*	*ND*	*ND*	3.1	2.9
Oct-2022	*ND*	*ND*	0.077	*0.00022 J*	*ND*	3.2	3.4	0.0027	0.008	0.0032	*ND*	0.064	*ND*	3.1	3.2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-04B*												
Nov-1993	0.07	NA	ND	NA	1.2	NA	ND	NA	1.6	NA	NA	NA	0.02
Apr-1994	0.008	NA	ND	NA	1.2	NA	ND	NA	2.6	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	1	NA	ND	ND	1.4	NA	ND	ND	0.02
Oct-1996	0.016	0.014	NA	ND	ND	ND	ND	ND	2.5	3.1	ND	ND	0.043
Apr-1997	0.019	0.01	ND	ND	2.9	2.5	ND	ND	1.6	1.7	ND	ND	0.045
Oct-1997	0.012	0.012	ND	ND	0.711	0.907	ND	ND	1.52	1.49	ND	ND	0.018
Apr-1998	0.017	0.014	ND	ND	1.59	0.81	ND	ND	1.57	2.88	ND	ND	ND
Apr-1999	0.027	0.013	NA	ND	1.6	1.27	ND	ND	1.63	1.47	ND	0.014	ND
Oct-1999	0.018	0.011	NA	ND	1.65	1.05	ND	ND	1.84	1.31	ND	ND	ND
Apr-2000	0.017	0.014	NA	ND	1.44	1.17	ND	ND	2.42	1.52	ND	ND	ND
Oct-2000	0.018	0.015	NA	ND	0.911	0.926	ND	ND	1.8	1.86	ND	ND	ND
Apr-2001	0.025	NA	NA	ND	1.77	NA	ND	ND	2.62	NA	ND	ND	ND
Sep-2001	0.027	0.016	NA	0.013	1.02	0.835	ND	ND	2.29	1.49	ND	ND	0.012
Mar-2002	0.021	0.019	NA	ND	0.839	0.869	ND	ND	2.03	1.56	ND	ND	0.013
Sep-2002	0.048	0.019	NA	ND	1.62	1.01	ND	ND	2.09	1.72	ND	ND	ND
Mar-2003	0.022	0.017	NA	ND	1.79	ND	ND	ND	1.74	1.73	ND	ND	ND
Oct-2003	0.023	0.018	NA	ND	1.81	1.88	ND	ND	2.25	1.54	ND	ND	ND
Apr-2004	0.025	0.023	ND	ND	1.41	1.48	ND	ND	1.81	1.43	ND	ND	0.038
Oct-2004	0.022	0.022	ND	ND	1.07	0.963	ND	ND	1.46	1.4	ND	ND	ND
Apr-2005	0.028	0.022	ND	ND	1.23	1.05	ND	ND	1.9	1.52	ND	ND	0.04
Oct-2005	0.018	0.015	ND	ND	0.937	0.81	ND	ND	1.96	1.15	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.574	0.567	ND	ND	0.949	0.942	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-04B***												
Sep-2006	0.019	0.018	*ND*	*ND*	0.985	0.957	*ND*	*ND*	1.031	1.12	*ND*	*ND*	*ND*
Mar-2007	0.018	0.016	*ND*	*ND*	0.676	0.589	*ND*	*ND*	1.29	1.21	*ND*	*ND*	*ND*
Sep-2007	0.022	0.021	*ND*	*ND*	0.894	0.796	*ND*	*ND*	1.39	1.35	*ND*	*ND*	*ND*
Mar-2008	0.023	0.02	*ND*	*ND*	1.01	0.862	*ND*	*ND*	1.64	1.42	*ND*	*ND*	*ND*
Sep-2008	0.057	0.023	*ND*	*ND*	1.1	0.806	*ND*	*ND*	1.41	1.29	*ND*	*ND*	0.024
Mar-2009	0.027	0.024	*ND*	*ND*	0.856	0.823	*ND*	*ND*	1.51	1.47	*ND*	*ND*	0.011
Oct-2009	0.051	0.026	*ND*	*ND*	0.835	0.757	*ND*	*ND*	1.45	1.7	*ND*	*ND*	0.03
Apr-2010	0.021	0.019	*ND*	*ND*	1.18	1.33	*ND*	*ND*	1.91	1.52	*ND*	*ND*	0.022
Oct-2010	0.033	0.029	*ND*	*ND*	1.11	0.936	*ND*	*ND*	1.46	1.43	*ND*	*ND*	*ND*
Apr-2011	0.025	0.021	*ND*	*ND*	1.16	1.07	*ND*	*ND*	1.58	1.58	*ND*	*ND*	*ND*
Sep-2011	0.03	0.029	*ND*	*ND*	0.867	0.955	*ND*	*ND*	1.65	1.65	*ND*	*ND*	*ND*
Mar-2012	0.025	0.025	*ND*	*ND*	0.93	0.913	*ND*	*ND*	1.49	1.5	*ND*	*ND*	*ND*
Sep-2012	0.0364	0.0344	*ND*	*0.0035 J*	0.959	0.884	*ND*	*ND*	1.69	1.69	*ND*	*ND*	*0.007 J*
Mar-2013	0.0368	0.0358	*0.000061 J*	*0.0035 J*	0.938	0.971	*ND*	*ND*	1.82	1.86	*ND*	*ND*	0.0131
Oct-2013	0.0419	0.041	*ND*	0.0036	0.881	0.862	*ND*	*ND*	1.94	1.96	*ND*	*0.0012 J*	0.0168
Mar-2014	0.0319	0.0323	*ND*	*0.0028 J*	1.16	1.12	*ND*	*ND*	1.36	1.89	*ND*	*0.0037 J*	*0.006 J*
Oct-2014	0.0461	0.0462	*ND*	*0.004 J*	0.991	0.984	*ND*	*ND*	1.8	1.82	*ND*	*ND*	*0.0086 J*
Apr-2015	0.0426	0.0405	*ND*	*0.0036 J*	1.08	1.02	*0.0011 J*	*ND*	1.83	1.73	*0.00079 J*	*ND*	0.0117
Nov-2015	0.0465	0.0458	*ND*	*0.0033 J*	0.907	0.891	*ND*	*ND*	1.73	1.74	*0.000083 J*	*ND*	0.0107
May-2016	0.0428	0.0456	*ND*	*0.0035 J*	0.943	0.954	*ND*	*ND*	1.64	1.74	*ND*	*ND*	*ND*
Oct-2016	0.0638	0.0613	*ND*	0.0044	0.935	0.949	*ND*	*ND*	1.7	1.76	*ND*	*ND*	*0.0059 J*
May-2017	0.0649	0.0629	*ND*	*0.0035 J*	0.9	0.936	*ND*	*ND*	1.81	1.92	*ND*	*ND*	*0.0068 JB*
Oct-2017	0.0662	0.0713	*0.00012 J*	*0.0039 JB*	0.913	0.999	*ND*	*ND*	1.78	1.89	*ND*	*ND*	*0.0057 J*
May-2018	0.057	0.045	**0.0025**	0.003	*0.95 J*	*0.98 J*	*0.00057 J*	*ND*	*1.7 J*	*1.7 J*	*0.00025 J*	*ND*	0.029

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-04B***												
Nov-2018	0.036	0.036	*ND*	0.0034	*1.2 J*	*ND*	*0.00024 J*	*ND*	*2 JB*	*1.6 J*	*ND*	*ND*	0.0063
May-2019	0.049	0.032	*ND*	0.0039	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0029	0.0051
Oct-2019	0.043	0.041	*ND*	0.0034	*ND*	*ND*	*ND*	*ND*	*ND*	*1.9 J*	*ND*	*ND*	0.013 B
May-2020	0.063	0.061	0.0002 B	0.0049	*ND*	*1.1 J*	*ND*	*ND*	*2.4 J*	*2.3 J*	*ND*	0.0031	0.012
Oct-2020	0.064	0.058	*ND*	0.006	*ND*	*ND*	*ND*	*ND*	*ND*	*1.7 J*	*ND*	*0.0024 J*	*ND*
Apr-2021	0.039	0.04	*ND*	*0.0037 J*	1.1	1.1	*ND*	*ND*	1.7	1.7	*ND*	*ND*	*0.0043 J*
Oct-2021	0.083	0.08	*0.00017 J*	0.0046	0.98	0.96	*ND*	*ND*	2.5	2.5	*ND*	*ND*	0.0073
May-2022	0.094	0.093	0.00082 M1	0.0063	1.1	1.1	*ND*	*ND*	3.3	3.1	*ND*	*ND*	0.0098
Oct-2022	0.11	0.11	*ND*	0.0052	1.2	1.2	*ND*	*ND*	4.1	4.4	*ND*	*ND*	0.013

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04B*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.9	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04B*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04B*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.9 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04B***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04B***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04B***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-04B*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04B***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05***											
Nov-1993	ND	ND	0.1	ND	2.2	ND	ND	5.24	18	ND	ND	2.86
Apr-1994	ND	ND	0.1	ND	2.4	ND	ND	5.03	18.2	ND	44	0.92
Aug-1994	7.5	7.5	ND	ND	2.2	0.3	ND	5.7	17.8	ND	ND	2.92
Sep-1994	ND	ND	ND	ND	2.5	0.2	ND	5.3	16.2	2.8	12	3.4
Nov-1994	ND	ND	ND	ND	2.2	ND	ND	5	16.5	1.9	40	3.3
Apr-1995	ND	ND	ND	43.7	2.2	ND	ND	5.3	17.2	ND	16	2.6
Apr-1997	ND	3	ND	ND	1.5	0.08	ND	NA	NA	ND	42	3.8
Oct-1997	ND	ND	0.53	ND	1.83	0.138	ND	5.56	18.62	ND	ND	7.5
Apr-1998	2	2	0.27	ND	1.91	0.15	ND	6.93	18.02	0.68	ND	3.2
Apr-1999	ND	ND	0.28	ND	2.69	ND	ND	5.43	18.79	ND	32	3.1
Oct-1999	ND	ND	0.08	ND	3.2	0.159	ND	5.38	18.07	ND	23	3.5
Apr-2000	4	4	ND	ND	1.86	ND	ND	6.76	14	ND	ND	4.2
Oct-2000	3.7	NA	ND	ND	2.43	0.8	ND	5.43	19.68	1.72	22	3.31
Apr-2001	2.8	NA	ND	ND	1.58	ND	ND	NA	NA	ND	13	3.97
Mar-2002	ND	ND	ND	ND	4.46	0.337	ND	5.5	19	1.58	33	3.8
Sep-2002	3	3	ND	ND	2.31	ND	ND	5.6	20.7	ND	33	4.36
Mar-2003	3.3	3.3	ND	ND	2.79	ND	ND	5.6	23.4	ND	20	3.23
Oct-2003	3.4	3.4	ND	11	2.24	0.122	ND	4.5	21	ND	51	4.28
Apr-2004	3.6	3.6	ND	ND	2.83	0.12	ND	5.5	19.9	ND	16	4.79
Oct-2004	3.4	3.4	ND	ND	2.83	0.1	ND	5.6	20	ND	13	6.17
Apr-2005	ND	ND	ND	ND	1.56	0.11	ND	4.6	15.7	4.59	46	1.79
Oct-2005	4.8	4.8	ND	ND	2.79	0.1	ND	5.5	15.3	ND	22	3.81
Mar-2006	4.6	4.6	ND	10	2.43	0.12	ND	4.8	17.7	ND	17	2.81
Sep-2006	4	4	ND	ND	2.29	0.11	ND	5.2	15.4	ND	20	3.49
Mar-2007	3.8	3.8	ND	ND	2.42	0.12	ND	5.2	15.8	ND	ND	2.65
Sep-2007	3.8	3.8	0.38	ND	2.16	ND	ND	5.3	18.6	ND	10	2.98
Mar-2008	5.1	5.1	ND	ND	2.57	0.1	ND	5.2	16.6	ND	20	2.7
Sep-2008	4.4	4.4	0.27	ND	2.33	0.07	ND	5.3	15.3	ND	33	3
Mar-2009	5.2	5.2	ND	ND	2.25	ND	ND	5	19	ND	20	3.31
Oct-2009	5.1	5.1	ND	ND	2.67	0.11	ND	5.4	19.5	ND	26	4.41
Apr-2010	4.2	4.2	ND	ND	2.77	0.1	ND	4.7	19.1	ND	31	3
Oct-2010	4.7	4.7	ND	ND	3.32	ND	ND	4.7	19.4	ND	10	3.77
Apr-2011	6	6	ND	ND	3.13	0.1	ND	5	17.6	ND	36	3.7
Sep-2011	5.8	5.8	0.23	ND	2.54	0.08	ND	4.8	17.2	ND	17	3.31
Mar-2012	4.7	4.7	ND	ND	2.81	0.07	ND	4.7	17.2	ND	ND	3.83
Sep-2012	4.88	4.88	ND	ND	2.76	0.1	ND	4.3	18.1	ND	ND	3.83
Mar-2013	6.4	6.4	0.061 J	ND	2.82	0.0898	ND	5.7	17.5	0.268 J	ND	3.84

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05***											
Oct-2013	6.68	6.68	*ND*	*ND*	2.72	0.0764	*ND*	5.4	17.8	*ND*	*ND*	3.63
Mar-2014	5.76	5.76	*ND*	*6 J*	3.21	0.068	*ND*	5.6	18.8	*ND*	30	4.53
Oct-2014	2.2	2.2	*ND*	13	3.74	0.102	*ND*	5.1	22.7	*ND*	*ND*	4.45
Apr-2015	9.8	9.8	*ND*	*ND*	3.83	0.0738	*ND*	4.2	24.9	*ND*	*ND*	4.39
Nov-2015	4.64	4.64	*ND*	*ND*	3.84	0.0896	*ND*	5.9	35.9	*ND*	*18 J*	4.41
May-2016	4.48	4.48	*ND*	10	3.73	0.0895	*ND*	5.7	31	*ND*	*16 J*	4.3
Oct-2016	3.88	3.88	*ND*	*ND*	3.33	*NA*	*NA*	5.6	31.6	*0.593 J*	*23 J*	4
May-2017	5.32	5.32	*ND*	*ND*	3.7	0.103	*ND*	5.8	43.5	*ND*	*12 J*	4.4
Oct-2017	10.1	10.1	*ND*	*ND*	3.83	0.0896	*ND*	5.9	48.9	*ND*	34	5
May-2018	16	16	*ND*	*5.7 J*	4.8	*0.093 J*	*ND*	5.9	50.2	*ND*	*ND*	6.4
Nov-2018	24 ML	24	*ND*	*ND*	6.8	*ND*	*0.0079 J*	6.46	105.2	*ND*	36	14.7
May-2019	36	*NA*	*ND*	*ND*	10.2	*ND*	0.012	6.36	99.3	*ND*	77	15.6
Oct-2019	*2.5 JH1*	*NA*	*ND*	*ND*	7.3	0.11	*0.0071 J*	6.27	85	*ND*	56	9.1
May-2020	22	*NA*	*ND*	*ND*	7.5	*ND*	*ND*	5.69	91.9	*ND*	33	12.3
Oct-2020	24	*NA*	*ND*	*7 J*	6.7	*0.048 J*	*ND*	5.76	86.8	*ND*	47	11.3
Apr-2021	20	*NA*	*ND*	*ND*	6.2	*0.074 J*	*ND*	6.38	105.1	*ND*	*ND*	10
Oct-2021	36	*NA*	*ND*	*6.1 J*	7.2	*ND*	*ND*	6.59	156.7	*ND*	30	14
May-2022	26	*NA*	*ND*	*ND*	7.7	*ND*	*ND*	6.88	208.8	*ND*	42 H1	13.4 N3
Oct-2022	38	*NA*	*ND*	*8.4 J*	10.1	*ND*	*0.0067 J*	6.52	149.1	*ND*	97	12.5 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-05*													
Nov-1993	NA	ND	ND	NA	ND	0.6	NA	ND	NA	ND	14.6	9.6	ND	0.33	NA
Apr-1994	NA	ND	ND	NA	ND	0.31	NA	ND	NA	ND	1.5	0.16	ND	1.1	NA
Aug-1994	NA	ND	ND	NA	ND	0.74	NA	ND	NA	ND	10.2	0.73	**0.016**	0.26	NA
Sep-1994	NA	ND	ND	NA	ND	0.85	NA	ND	NA	ND	0.84	0.17	ND	0.3	NA
Nov-1994	NA	ND	ND	NA	ND	0.75	NA	ND	NA	0.02	2.7	0.18	0.009	0.35	NA
Apr-1995	ND	ND	0.9	ND	ND	0.53	NA	ND	ND	ND	2.8	0.2	0.005	0.32	NA
Oct-1996	ND	ND	0.019	ND	ND	0.73	0.72	ND	ND	ND	14	1.5	ND	ND	ND
Apr-1997	ND	ND	0.01	ND	ND	0.83	0.8	ND	ND	ND	2.6	0.22	0.005	ND	ND
Oct-1997	ND	ND	0.01	ND	0.004	0.642	1.5	ND	ND	ND	6.76	2.38	ND	0.293	0.456
Apr-1998	ND	ND	ND	ND	ND	0.798	0.794	ND	ND	ND	27.9	0.544	ND	0.291	0.287
Apr-1999	ND	ND	0.01	ND	ND	0.762	0.728	ND	ND	ND	46.2	0.622	ND	0.296	0.278
Oct-1999	ND	ND	0.011	ND	ND	1.06	0.711	ND	ND	ND	29	0.62	ND	0.338	0.262
Apr-2000	ND	ND	0.012	ND	ND	1.07	0.658	ND	ND	ND	37.3	0.475	ND	0.368	0.271
Oct-2000	ND	ND	ND	ND	ND	0.793	0.747	ND	ND	ND	41.1	0.618	ND	0.322	0.3
Apr-2001	ND	ND	0.011	ND	ND	1.02	NA	ND	ND	ND	28.1	NA	0.006	0.346	NA
Mar-2002	ND	ND	ND	ND	ND	0.973	0.79	0.014	ND	0.039	50.1	0.789	0.011	0.333	0.317
Sep-2002	ND	ND	0.011	ND	ND	1.16	0.722	ND	ND	0.022	31.9	0.816	0.007	0.356	0.309
Mar-2003	ND	ND	ND	ND	ND	0.767	0.723	ND	ND	0.017	5.11	0.967	0.01	0.321	0.297
Oct-2003	ND	ND	0.01	ND	ND	1.11	0.757	ND	ND	ND	22.3	0.901	0.007	0.367	0.317
Apr-2004	ND	ND	0.013	ND	ND	1.21	0.761	ND	ND	0.012	31.7	0.889	0.006	0.43	0.326
Oct-2004	ND	ND	0.01	ND	ND	1.76	0.797	ND	ND	ND	24.2	0.924	0.006	0.431	0.338

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05***													
Apr-2005	ND	ND	ND	ND	ND	0.454	0.491	ND	ND	ND	ND	ND	ND	0.16	0.174
Oct-2005	ND	ND	0.01	ND	ND	1.03	0.719	ND	ND	0.022	45.5	0.602	0.009	0.312	0.292
Mar-2006	ND	ND	ND	ND	ND	0.695	0.504	ND	ND	0.01	105	0.819	0.011	0.26	0.208
Sep-2006	ND	ND	0.01	ND	ND	0.908	0.612	ND	ND	0.013	68.8	0.899	0.011	0.296	0.266
Mar-2007	ND	ND	0.012	ND	ND	0.642	0.554	ND	ND	ND	34.1	0.622	0.009	0.256	0.226
Sep-2007	ND	ND	ND	ND	ND	0.739	0.64	ND	ND	ND	21.1	0.7	0.006	0.275	0.236
Mar-2008	ND	ND	ND	ND	ND	0.631	0.631	ND	ND	ND	11.5	0.735	0.004	0.271	0.275
Sep-2008	ND	ND	0.007	ND	ND	0.699	0.509	ND	ND	ND	22.4	0.601	0.004	0.314	0.278
Mar-2009	ND	ND	0.011	ND	ND	0.787	0.697	ND	ND	ND	81.6	0.914	0.012	0.326	0.288
Oct-2009	ND	ND	ND	ND	ND	1.15	0.839	ND	ND	ND	26.3	2.54	0.003	0.374	0.344
Apr-2010	ND	ND	ND	ND	ND	0.671	0.584	ND	ND	ND	34.9	0.762	0.004	0.304	0.292
Oct-2010	ND	ND	ND	ND	ND	0.859	0.811	ND	ND	ND	51.6	1.05	0.008	0.396	0.374
Apr-2011	ND	ND	ND	ND	ND	0.889	0.803	ND	ND	ND	13.9	1.2	0.005	0.36	0.334
Sep-2011	ND	ND	ND	ND	ND	0.82	0.82	ND	ND	ND	15.2	1.72	0.005	0.306	0.327
Mar-2012	ND	ND	ND	ND	ND	0.829	0.824	ND	ND	ND	11.4	1.36	0.005	0.428	0.415
Sep-2012	ND	ND	0.0083 J	ND	ND	0.971	0.958	ND	0.000838 J	0.0011 J	2.43	1.42	0.0036	0.341	0.311
Mar-2013	ND	ND	0.0087 J	ND	ND	1	0.961	0.0018 J	0.000789 J	0.002 J	6.24	1.95	0.003	0.326	0.283
Oct-2013	ND	ND	0.0091	ND	ND	0.904	0.885	0.0011 J	0.000728 J	0.000891 J	1.58	1.48	0.0044	0.334	0.333
Mar-2014	ND	ND	0.0081 J	ND	ND	1.33	1.31	0.0064 J	0.000768 J	0.0011 J	5.65	1.83	0.0047	0.294	0.372
Oct-2014	0.000461 J	ND	0.0104	ND	ND	1.12	1.13	0.000704 J	0.000804 J	0.000686 J	4.25	2.54	0.0029	0.401	0.406
Apr-2015	0.0011 J	ND	0.0113	ND	ND	1.06	1.13	0.0014 J	0.000967 J	0.0018 J	11.2	2.16	0.0044	0.425	0.442
Nov-2015	ND	ND	0.0109	ND	ND	1.05	1.02	0.000637 J	0.000944 J	ND	2.53	1.76	0.002	0.432	0.425
May-2016	ND	ND	0.0108	ND	ND	1.02	1.1	0.00084 J	0.00086 J	0.00054 J	2.93	2.42	0.0022	0.43	0.442
Oct-2016	ND	ND	0.0118	ND	ND	0.922	0.91	0.0014 J	0.00088 J	0.0012 J	5.81	2.24	0.0028	0.407	0.409

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05***													
May-2017	*ND*	*ND*	0.011	*ND*	*ND*	1.1	1.13	*0.002 J*	*0.00093 J*	*ND*	2.76	2.59	*0.0018 J*	0.398	0.427
Oct-2017	*ND*	*ND*	0.0123	*ND*	*ND*	1.26	1.22	*ND*	*0.00087 J*	*ND*	4.82	4.01	*0.0014 J*	0.452	0.44
May-2018	*ND*	*ND*	0.015	*0.000077 J*	*0.000046 J*	1.6	1.5	*0.0025 J*	0.0011	0.0056	7.7	5.3	0.0012	*0.55 J*	*0.52 J*
Nov-2018	*ND*	*ND*	0.025	*0.00015 J*	*ND*	4.4	4.2	*0.0059 J*	0.00098	0.0026	49.7 M1	22.3 M1	*0.0009 J*	*0.92 J*	*0.92 J*
May-2019	*ND*	*ND*	0.027	*ND*	*ND*	4.6	4.6	*ND*	0.0013	0.0028	34.5 M1	25.8 M1	*ND*	1	1
Oct-2019	*0.000056 J*	*ND*	0.021	*0.000073 J*	*0.00018 J*	2.4	2.5	*0.0042 J*	0.0014	*0.0014 J*	23	13.5	*0.00086 J*	0.73	*0.7 J*
May-2020	*ND*	*ND*	0.024	*ND*	*ND*	3.6	3.6	**0.01 D6**	*0.0015 J*	0.012	29 ML	19.7	*ND*	0.82	0.85
Oct-2020	*0.00048 J*	*ND*	0.021	*ND*	*ND*	3.2	3.3	*0.011 J*	*0.0013 J*	*ND*	19.3	18.2	*ND*	0.79	*0.81 J*
Apr-2021	*ND*	*ND*	0.018	*ND*	*ND*	2.7	2.8	*0.0013 J*	*0.00054 J*	*ND*	18.7	17.9	*ND*	0.78	0.76
Oct-2021	*0.00006 JB*	*ND*	0.023	*ND*	*ND*	3.8	3.6	*0.0015 J*	*0.00088 J*	*0.00045 J*	27.4	25.2	*0.00015 J*	1.1	1
May-2022	*ND*	*ND*	0.028 M1	*ND*	*ND*	3.5	3.4	*0.0022 JR1M1*	*0.0011 JR1M1*	*0.00066 JR1M1*	29.4 M1	27.3 M1	*ND*	1.1	1.1
Oct-2022	*ND*	*ND*	0.026	*ND*	*ND*	3.3	3.7	*0.0017 J*	*0.00084 J*	*ND*	26.6	27.7	*ND*	1	1.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-05*												
Nov-1993	0.06	NA	ND	NA	0.37	NA	ND	NA	1.2	NA	NA	NA	ND
Apr-1994	0.18	NA	ND	NA	ND	NA	ND	NA	1.6	NA	NA	NA	ND
Aug-1994	0.02	NA	ND	NA	0.48	NA	ND	NA	0.88	NA	NA	NA	ND
Sep-1994	0.01	NA	ND	NA	0.38	NA	ND	NA	1.1	NA	NA	NA	0.03
Nov-1994	0.03	NA	ND	NA	0.53	NA	ND	NA	1.1	NA	NA	NA	0.01
Apr-1995	ND	NA	ND	ND	0.53	NA	ND	0.01	0.96	NA	ND	ND	0.02
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	1.2	1.3	ND	ND	0.026
Apr-1997	0.011	0.01	ND	ND	ND	ND	ND	ND	1.6	1.4	ND	ND	0.024
Oct-1997	0.026	0.03	0.0005	ND	ND	ND	ND	ND	1.35	1.35	ND	ND	0.016
Apr-1998	0.015	0.016	ND	ND	ND	ND	ND	ND	1.11	1.11	ND	ND	ND
Apr-1999	0.01	0.017	NA	ND	ND	ND	ND	ND	1.09	1.02	ND	ND	ND
Oct-1999	0.014	0.016	NA	ND	0.879	0.631	ND	ND	1.38	0.952	ND	ND	ND
Apr-2000	0.019	0.014	NA	ND	ND	ND	ND	ND	3.38	1.03	ND	ND	0.018
Oct-2000	ND	0.018	NA	ND	0.455	0.217	ND	ND	1.06	1.06	ND	ND	ND
Apr-2001	0.015	NA	NA	ND	1.16	NA	ND	ND	2.31	NA	ND	ND	ND
Mar-2002	0.015	0.018	NA	0.012	0.651	0.751	ND	ND	1.78	1.17	ND	ND	0.016
Sep-2002	0.016	0.019	NA	ND	1.43	ND	ND	ND	1.7	1.12	ND	ND	ND
Mar-2003	0.02	0.018	NA	ND	0.792	ND	ND	ND	1.18	1.16	ND	ND	ND
Oct-2003	0.014	0.018	NA	ND	0.663	0.638	ND	ND	1.52	1.16	ND	ND	ND
Apr-2004	0.015	0.019	ND	ND	0.753	ND	ND	ND	1.74	1.24	ND	ND	0.044
Oct-2004	0.02	0.018	ND	ND	1.15	ND	ND	ND	1.83	0.991	ND	ND	0.055
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	0.949	0.955	ND	ND	0.019

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05***												
Oct-2005	0.02	0.013	ND	ND	ND	ND	ND	ND	1.76	1.08	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	0.973	0.827	ND	ND	ND
Sep-2006	0.021	0.016	ND	ND	0.508	ND	ND	ND	1.14	0.883	ND	ND	ND
Mar-2007	0.019	0.012	ND	ND	ND	ND	ND	ND	0.981	0.81	ND	ND	ND
Sep-2007	0.023	0.015	ND	ND	ND	ND	ND	ND	0.967	0.953	ND	ND	ND
Mar-2008	0.017	0.014	ND	ND	ND	ND	ND	ND	0.963	0.976	ND	ND	ND
Sep-2008	0.017	0.013	ND	ND	ND	ND	ND	ND	0.964	0.899	ND	ND	0.016
Mar-2009	0.026	0.015	ND	ND	ND	ND	ND	ND	1.14	1.08	ND	ND	0.016
Oct-2009	0.04	0.036	ND	ND	ND	ND	ND	ND	1.24	1.17	ND	ND	0.027
Apr-2010	0.023	0.013	ND	ND	ND	ND	ND	ND	1.24	1.22	ND	ND	ND
Oct-2010	0.03	0.018	ND	ND	ND	ND	ND	ND	1.27	1.22	ND	ND	ND
Apr-2011	0.025	0.02	ND	ND	ND	ND	ND	ND	1.32	1.37	ND	ND	0.01
Sep-2011	0.03	0.027	ND	ND	ND	ND	ND	ND	1.27	1.28	ND	ND	ND
Mar-2012	0.024	0.022	ND	ND	ND	ND	ND	ND	1.29	1.26	ND	ND	0.011
Sep-2012	0.0343	0.0323	ND	0.0016 J	0.458 J	0.551	ND	ND	1.21	1.14	ND	ND	0.0043 J
Mar-2013	0.0306	0.0327	0.000055 J	0.0015 J	0.505	0.459 J	ND	ND	1.25	1.12	ND	ND	0.0624
Oct-2013	0.0274	0.0285	ND	0.0019 J	0.427	0.427	ND	ND	1.19	1.22	ND	0.0011 J	0.0121
Mar-2014	0.0224	0.0243	ND	0.0015 J	0.529	0.515	ND	ND	1.01	1.32	ND	0.0026 J	0.0041 J
Oct-2014	0.0369	0.0387	ND	0.0016 J	0.518	0.53	0.001 J	ND	1.53	1.56	ND	ND	0.0053 J
Apr-2015	0.0303	0.0323	ND	0.0019 J	0.506	0.542	ND	ND	1.57	1.66	ND	ND	0.0069 J
Nov-2015	0.0303	0.0265	ND	0.0015 J	0.508	0.487 J	ND	ND	1.75	1.74	0.000064 J	ND	0.0027 J
May-2016	0.0294	0.0324	ND	0.0016 J	0.528	0.512	ND	ND	1.58	1.6	ND	ND	0.0078 J
Oct-2016	0.0278	0.0271	ND	0.0024 J	0.5	0.489	ND	ND	1.48	1.52	ND	ND	ND
May-2017	0.0298	0.0294	ND	0.0021 J	0.495	0.495	ND	ND	1.45	1.55	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05***												
Oct-2017	0.0416	0.0396	*ND*	*0.0013 J*	0.516	0.538	*ND*	*ND*	1.63	1.65	*ND*	*ND*	*ND*
May-2018	0.049	0.04	*ND*	0.0022	*ND*	*ND*	*ND*	*ND*	*1.9 J*	*1.8 J*	*0.000077 J*	*ND*	*0.0047 J*
Nov-2018	0.18	0.17	*ND*	0.0049	*ND*	*1 J*	*ND*	*ND*	*2.8 J*	*2.7 J*	*ND*	*ND*	0.0065
May-2019	0.17	0.16	*ND*	0.0032	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0075
Oct-2019	0.085	0.085	*ND*	0.003	*ND*	*ND*	*ND*	*ND*	*2.8 J*	*2.8 J*	*ND*	0.0056	0.015
May-2020	0.11	0.11	*ND*	*0.009 J*	1	0.89	*ND*	*ND*	3	3.1	*ND*	*ND*	*ND*
Oct-2020	0.14	0.12	*ND*	0.0037	*ND*	*ND*	*0.0017 J*	*ND*	*2.4 J*	*2.2 J*	*ND*	*0.0031 J*	*ND*
Apr-2021	0.12	0.12	*0.00005 J*	*0.0021 J*	0.72	0.75	*ND*	*ND*	2.5	2.5	*ND*	*ND*	*ND*
Oct-2021	0.16	0.16	*ND*	*0.0023 J*	0.94	0.92	*ND*	*ND*	3.4	3.3	*ND*	*ND*	*ND*
May-2022	0.17	0.16	0.00033 M1	0.0036 M1	0.99	0.93	*ND*	*ND*	3.5	3.4	*ND*	*ND*	*ND*
Oct-2022	0.16	0.17	*ND*	*0.0023 J*	0.8	0.95	*ND*	*ND*	3.5	3.9	*ND*	*ND*	*0.005 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.8	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4 J	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.6 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.4 L2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.2 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	1.58	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	2.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	2.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	2.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-05*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05***															
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.46 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.39 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.51 J*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*0.6 J*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*0.5 J*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*0.7 J*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.9 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	1.9
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	3.1 CLN3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	4.9 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	2.3
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	2.3
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	2.5	2.5
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.113 J*	*ND*	*0.544 J*	*ND*	*ND*	*ND*	*1.25 J*	*4.18 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	4	4.1
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	3.4	3.7
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	2.8	3.1

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	1.2	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05***															
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.5 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.483 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05A***											
Nov-1993	6	6	ND	ND	2.5	ND	ND	5.43	18.1	ND	26	1.98
Apr-1994	ND	ND	0.1	ND	2.4	ND	ND	5	19.3	ND	48	0.75
Apr-1995	5	5	0.2	ND	2.9	ND	ND	5.4	21.8	2.3	ND	2.4
Apr-1997	ND	2	ND	ND	3	0.09	ND	NA	NA	ND	ND	7.8
Oct-1997	4	4	0.28	ND	ND	ND	ND	5.93	19.8	ND	ND	5
Apr-1998	ND	ND	ND	ND	2.24	ND	ND	6	62.1	ND	ND	3.1
Apr-1999	ND	ND	0.19	ND	4.41	ND	ND	5.32	19.8	ND	23	2.9
Oct-1999	20	20	0.08	ND	3.24	ND	ND	5.16	19.5	ND	18	3.1
Apr-2000	1	1	ND	ND	3.12	ND	ND	5.61	17	ND	19	3
Oct-2000	2.7	NA	ND	ND	5.19	ND	ND	5.26	21.8	5.48	25	3.12
Apr-2001	1.9	NA	ND	ND	3.51	0.498	ND	NA	NA	ND	ND	3.23
Sep-2001	1.9	1.9	ND	ND	4.28	ND	ND	5.49	25	ND	27	3.27
Mar-2002	ND	ND	ND	ND	3.28	ND	ND	5.5	22	ND	36	2.99
Sep-2002	3	3	ND	ND	2.96	ND	ND	5.5	24.5	ND	38	4.99
Mar-2003	4.2	4.2	ND	ND	3.59	ND	ND	5.3	25.1	ND	25	3.06
Oct-2003	3.6	3.6	ND	ND	3.23	0.093	ND	4.8	28.5	ND	62	10.3
Apr-2004	3.8	3.8	ND	ND	3.46	0.07	ND	5.5	23.5	ND	20	4.72
Oct-2004	3.6	3.6	ND	ND	36	0.74	ND	5.2	22.8	4.56	36	3.8
Apr-2005	3.6	3.6	ND	ND	3.27	0.08	ND	5.3	22.4	ND	62	4.39
Oct-2005	3.7	3.7	ND	ND	3.95	0.09	ND	5.3	18	ND	33	4.04
Mar-2006	4.7	4.7	ND	ND	3.83	0.11	ND	4.6	24.2	ND	36	3.64
Sep-2006	4.4	4.4	ND	ND	3.88	0.1	ND	5.2	24.1	ND	31	3.44
Mar-2007	4.7	4.7	0.38	ND	4.05	0.14	ND	5.4	25.5	ND	27	3.21
Sep-2007	3.4	3.4	0.35	ND	3.86	0.16	ND	5.3	26.6	ND	94	3.53
Mar-2008	4	4	ND	ND	4.03	0.15	ND	5.7	28.1	ND	18	3.4
Sep-2008	4	4	ND	14	4.22	0.1	ND	5.3	27.1	ND	23	3.7
Mar-2009	13	13	ND	ND	4.14	0.11	ND	4.5	26.6	ND	31	3.51
Oct-2009	3.9	3.9	ND	ND	4.08	0.13	ND	4.7	24	ND	44	4.3
Apr-2010	4.5	4.5	ND	ND	3.61	0.13	ND	5.2	25.8	ND	25	3
Oct-2010	3.2	3.2	ND	ND	4.2	0.09	ND	4.5	25.6	ND	ND	3.45
Apr-2011	4.4	4.4	ND	ND	3.88	0.11	ND	4.7	25.6	ND	30	3.65
Sep-2011	4.8	4.8	ND	ND	4.25	0.1	ND	5.5	20.1	ND	25	3.67
Mar-2012	3.8	3.8	ND	ND	4.14	0.12	ND	4.5	22.3	ND	ND	3.77
Sep-2012	3.32	3.32	ND	ND	4.24	0.142	ND	4.2	23.3	ND	27	3.74
Mar-2013	4.68	4.68	0.096 J	ND	4.58	0.127	ND	5.3	26	0.562 J	25	4.07
Oct-2013	5.12	5.12	ND	ND	4.66	0.119	ND	5.8	28.8	0.581 J	ND	4.29
Mar-2014	4.88	4.88	ND	ND	4.77	0.103	ND	5.3	26.6	0.869 J	ND	5.22

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05A***											
Oct-2014	ND	ND	ND	10	4.92	0.148	ND	4.6	27.3	ND	ND	5.18
Apr-2015	4.84	4.84	ND	ND	5.04	0.171	ND	4.2	27.2	0.515 J	ND	5.43
Nov-2015	3.48	3.48	ND	ND	5.05	0.236	ND	5.4	53.6	ND	12 J	5.52
May-2016	4.44	4.44	ND	ND	4.92	0.263	ND	5.6	36.6	ND	27	5.1
Oct-2016	2.8	2.8	ND	ND	5.3	NA	NA	5.2	43	1.42	31	5.5
May-2017	2.64	2.64	ND	7 J	5.1	0.314	ND	5.3	50.2	1.08	22 J	6.2
Oct-2017	5.76	5.76	ND	ND	5.13	0.354	ND	5.6	53.7	0.753 J	34	5.8
May-2018	22	22	ND	ND	4.3	0.32	0.0063 J	6.1	61.4	ND	10	6.1
Nov-2018	22	22	ND	5.7 J	5.4	ND	0.013	6.58	149.6	ND	32	6.3
May-2019	14	NA	ND	ND	4.9	ND	0.033	6.69	98.8	ND	45	7.8
Oct-2019	2.5 JH1	NA	ND	10.4 JMH	4.6	0.079 J	0.016	6.19	153.5	ND	65	7.1
May-2020	6 J	NA	ND	9.1 J	4.9	ND	0.0071 J	5.83	157.7	ND	18	6.2
Oct-2020	8 J	NA	ND	9.3 J	5	ND	0.014	5.8	142.4	ND	44	7.5
Apr-2021	14	NA	ND	8.3 J	5.7	0.077 J	ND	7.02	187.8	ND	ND	7.35
Oct-2021	24	NA	ND	10.5 J	5.5	ND	ND	6.92	212.5	ND	ND	7.95
May-2022	14	NA	ND	7.9 J	4.8	ND	0.017	6.47	153.3	ND	14 H1	7.7 N3
Oct-2022	20	NA	ND	15.2 J	9.3	ND	0.024	6.59	181.9	ND	39	6.9 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05A***													
Nov-1993	NA	ND	ND	NA	ND	0.38	NA	ND	NA	ND	1.5	1	ND	0.25	NA
Apr-1994	NA	ND	ND	NA	ND	0.24	NA	ND	NA	ND	1.7	0.84	ND	4.3	NA
Apr-1995	ND	ND	0.6	ND	ND	0.5	NA	ND	ND	ND	3	1.3	ND	0.29	NA
Oct-1996	ND	ND	0.021	ND	ND	0.73	0.93	ND	ND	ND	8.2	3.7	ND	ND	ND
Apr-1997	ND	ND	0.016	ND	ND	1.6	0.84	ND	ND	ND	2.4	2.1	0.002	ND	ND
Oct-1997	ND	ND	0.011	ND	0.004	1.01	0.743	ND	ND	ND	19.9	0.371	ND	0.343	0.257
Apr-1998	ND	ND	0.012	ND	ND	0.696	0.751	ND	ND	ND	4.85	1.28	ND	0.331	0.306
Apr-1999	ND	ND	0.011	ND	ND	0.629	0.615	ND	ND	ND	1.93	0.436	ND	0.328	0.303
Oct-1999	ND	ND	0.011	ND	ND	0.666	0.601	ND	ND	ND	2.21	0.506	ND	0.338	0.295
Apr-2000	ND	ND	ND	ND	ND	0.657	0.647	ND	ND	ND	1.49	0.663	ND	0.332	0.311
Oct-2000	ND	ND	ND	ND	ND	0.678	0.653	ND	ND	ND	2.22	0.79	ND	0.347	0.329
Apr-2001	ND	ND	ND	ND	ND	0.698	NA	ND	ND	ND	1.15	NA	ND	0.361	NA
Sep-2001	ND	ND	ND	ND	ND	0.714	0.654	ND	ND	ND	5.08	1.46	ND	0.361	0.326
Mar-2002	ND	ND	0.012	ND	ND	0.638	0.684	ND	ND	ND	2.39	0.628	ND	0.338	0.343
Sep-2002	ND	ND	0.011	ND	ND	1.36	0.63	ND	ND	ND	11.3	1.35	ND	0.385	0.32
Mar-2003	ND	ND	ND	ND	ND	0.681	0.641	ND	ND	ND	1.36	0.966	ND	0.33	0.315
Oct-2003	ND	ND	0.013	ND	ND	1.06	0.668	ND	ND	ND	4.65	1.01	ND	0.419	0.357
Apr-2004	ND	ND	0.012	ND	ND	1.13	0.736	ND	ND	ND	2.63	0.712	ND	0.46	0.379
Oct-2004	ND	ND	0.013	ND	ND	0.788	0.708	ND	ND	ND	4.33	1.61	ND	0.443	0.398
Apr-2005	ND	ND	0.016	ND	ND	1.03	0.57	ND	ND	ND	4.97	0.373	0.003	0.444	0.294
Oct-2005	ND	ND	0.011	ND	ND	0.93	0.718	ND	ND	ND	1.82	0.515	ND	0.418	0.384

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05A***													
Mar-2006	ND	ND	ND	ND	ND	0.917	0.544	ND	ND	ND	1.9	0.34	ND	0.329	0.324
Sep-2006	ND	ND	0.011	ND	ND	0.723	0.741	ND	ND	ND	1.26	1.45	ND	0.395	0.402
Mar-2007	ND	ND	0.015	ND	ND	0.701	0.684	ND	ND	ND	1.11	0.338	ND	0.355	0.34
Sep-2007	ND	ND	0.011	ND	ND	0.741	0.72	ND	ND	ND	1.46	0.548	ND	0.408	0.408
Mar-2008	ND	ND	0.011	ND	ND	0.708	0.728	ND	ND	ND	1.27	1.51	ND	0.396	0.395
Sep-2008	ND	ND	0.012	ND	ND	0.721	0.585	ND	ND	ND	2.18	1.19	ND	0.453	0.416
Mar-2009	ND	ND	0.01	ND	ND	0.815	0.87	ND	ND	ND	6.91	6.48	ND	0.356	0.394
Oct-2009	ND	ND	0.011	ND	ND	0.974	0.648	ND	ND	ND	3.48	0.517	ND	0.455	0.416
Apr-2010	ND	ND	0.011	ND	ND	0.614	0.578	ND	ND	ND	3.23	0.768	ND	0.353	0.342
Oct-2010	ND	ND	0.011	ND	ND	0.698	0.698	ND	ND	ND	2.54	0.739	ND	0.416	0.431
Apr-2011	ND	ND	0.013	ND	ND	0.776	0.685	ND	ND	ND	8.66	1.94	ND	0.416	0.367
Sep-2011	ND	ND	0.013	ND	ND	0.788	0.792	ND	ND	ND	4.34	0.979	0.002	0.412	0.424
Mar-2012	ND	ND	0.012	ND	ND	0.703	0.695	ND	ND	ND	1.65	0.712	ND	0.488	0.488
Sep-2012	ND	ND	0.0124	0.000105 J	ND	0.779	0.703	0.0016 J	0.0013 J	0.0021 J	1.67	0.756	0.000612 J	0.436	0.425
Mar-2013	ND	ND	0.0131	0.000106 J	ND	0.889	0.969	0.0062 J	0.0017 J	0.0035 J	1.29	0.617	ND	0.449	0.457
Oct-2013	ND	ND	0.0156	ND	ND	0.864	0.886	0.0018 J	0.0015 J	0.0019 J	1.54	1.24	0.000467 J	0.517	0.554
Mar-2014	ND	ND	0.0151	ND	ND	1.33	1.37	0.0072 J	0.0016 J	0.0018 J	2.12	1.18	0.000372 J	0.46	0.587
Oct-2014	0.000634 J	ND	0.0181	ND	ND	1.07	1.03	0.000965 J	0.0019 J	0.0021 J	1.76	0.824	ND	0.609	0.588
Apr-2015	0.0011 J	ND	0.0192	ND	0.000076 J	1.08	1.02	0.0011 J	0.002 J	0.0022 J	3.18	0.994	ND	0.663	0.616
Nov-2015	ND	ND	0.019	0.000121 J	ND	1.09	1.06	0.000455 J	0.002 J	0.0019 J	1.73	0.715	0.000719 J	0.681	0.671
May-2016	ND	ND	0.0191	0.00012 J	ND	0.929	1.05	ND	0.002	0.0019 J	1.71	1.02	0.00031 J	0.674	0.669
Oct-2016	ND	ND	0.02	0.00012 J	ND	1.1	0.969	ND	0.0022	0.0017 J	1.13	0.861	0.00032 J	0.657	0.708
May-2017	ND	ND	0.0212	0.00012 J	ND	1.28	1.1	0.0017 J	0.0022	0.0017 J	1.07	0.809	0.00026 J	0.721	0.69
Oct-2017	ND	ND	0.02	0.00012 J	ND	1.1	1.03	ND	0.0018	0.0017 J	2.31	1.8	0.00024 J	0.743	0.721

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05A***													
May-2018	*0.000044 J*	*ND*	0.018	*0.00011 J*	*0.000033 J*	1.3	1.3	*0.0028 J*	0.0016	0.0065	16.5	8.8	*0.00034 J*	*0.69 J*	*0.67 J*
Nov-2018	*ND*	*0.00028 J*	0.014	*0.00002 J*	*0.00018 J*	1.4	1.4	*0.0026 J*	*0.0004 J*	*0.0016 J*	41.1	41.8 M1	*0.000085 J*	*0.67 J*	*0.67 J*
May-2019	*ND*	*ND*	0.015	*ND*	*ND*	1.8	1.9	*ND*	*ND*	**0.0033 D6**	31.7	32.1	*ND*	*ND*	*ND*
Oct-2019	*0.000052 J*	*ND*	0.016	*ND*	*0.00015 J*	1.6	1.6	*0.0027 J*	*0.00036 J*	*ND*	42.9	40.6	*0.000057 J*	0.73	*0.67 J*
May-2020	*ND*	*ND*	0.018	*ND*	*0.00035 J*	1.4	1.5	*ND*	*ND*	*0.0024 J*	53.6	43.7	*ND*	0.68	0.76
Oct-2020	*0.00046 J*	*ND*	0.018	*ND*	*ND*	1.8	1.7	*0.0087 J*	*0.0007 J*	*ND*	50.6	45.8	*ND*	0.72	*0.71 J*
Apr-2021	*ND*	*ND*	0.018	*0.00018 J*	*ND*	1.7	1.7	*ND*	*ND*	*ND*	47.6	45.9	*ND*	0.78	0.76
Oct-2021	*0.000063 JB*	*ND*	0.018	*ND*	*ND*	1.8	1.8	*ND*	*0.00056 J*	*0.00052 J*	53.4	48.4	*ND*	0.82	0.8
May-2022	*ND*	*ND*	0.018	*ND*	*ND*	1.7	1.8	*ND*	*0.00065 J*	*ND*	56.8	55.1	*ND*	0.81	0.81
Oct-2022	*ND*	*ND*	0.016	*ND*	*ND*	1.6	1.6	*0.00066 J*	*ND*	*ND*	47	44.9	*ND*	0.71	0.73

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-05A*												
Nov-1993	0.05	NA	ND	NA	0.34	NA	ND	NA	1.2	NA	NA	NA	ND
Apr-1994	0.36	NA	ND	NA	0.7	NA	ND	NA	1.9	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.65	NA	ND	ND	1.1	NA	ND	ND	0.03
Oct-1996	0.031	0.026	NA	ND	ND	ND	ND	ND	1.8	1.7	ND	ND	0.021
Apr-1997	0.034	0.023	ND	ND	2	2.1	ND	ND	1.9	1.7	ND	ND	0.075
Oct-1997	0.014	0.016	ND	0.012	ND	1.14	ND	ND	1.23	1.1	ND	ND	0.032
Apr-1998	0.023	0.023	ND	ND	0.927	ND	ND	ND	1.45	1.46	ND	ND	ND
Apr-1999	0.014	0.012	NA	ND	0.575	0.847	ND	ND	1.48	1.39	ND	ND	ND
Oct-1999	0.014	0.011	NA	ND	ND	0.601	ND	ND	1.46	1.29	ND	ND	ND
Apr-2000	0.015	0.014	NA	ND	ND	ND	ND	ND	1.58	1.53	ND	ND	ND
Oct-2000	0.016	0.016	NA	ND	0.409	0.71	ND	ND	1.56	1.55	ND	ND	0.01
Apr-2001	0.015	NA	NA	ND	1.4	NA	ND	ND	1.69	NA	ND	ND	ND
Sep-2001	0.043	0.028	NA	ND	0.682	0.896	ND	ND	1.65	1.63	ND	ND	ND
Mar-2002	0.015	0.014	NA	ND	1.75	1.72	ND	ND	1.72	1.69	ND	ND	ND
Sep-2002	0.046	0.022	NA	ND	0.951	0.789	ND	ND	1.98	1.71	ND	ND	ND
Mar-2003	0.018	0.016	NA	ND	2.85	ND	ND	ND	1.86	1.79	ND	ND	ND
Oct-2003	0.023	0.02	NA	0.658	1.86	1.21	ND	ND	2.72	1.83	ND	ND	0.012
Apr-2004	0.019	0.021	ND	ND	2.08	1.12	ND	ND	2.43	1.94	ND	ND	0.091
Oct-2004	0.039	0.04	ND	ND	1.25	0.517	ND	ND	1.98	1.6	ND	ND	ND
Apr-2005	0.023	0.014	ND	ND	1.46	1.52	ND	ND	2.32	1.76	ND	ND	0.021
Oct-2005	0.017	0.015	ND	ND	0.699	0.664	ND	ND	2.27	1.62	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.789	0.718	ND	ND	1.69	1.66	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05A***												
Sep-2006	0.014	0.025	0.0003	ND	1.15	1.11	ND	ND	1.85	1.82	ND	ND	ND
Mar-2007	0.014	0.012	0.0003	ND	0.703	0.641	ND	ND	1.75	1.67	ND	ND	ND
Sep-2007	0.017	0.016	0.0003	ND	0.641	0.604	ND	ND	1.83	1.82	ND	ND	0.012
Mar-2008	0.016	0.019	0.0003	ND	0.757	0.734	ND	ND	1.94	1.99	ND	ND	ND
Sep-2008	0.018	0.018	0.0003	ND	0.691	0.67	ND	ND	1.86	1.82	ND	ND	0.014
Mar-2009	0.037	0.043	ND	ND	0.659	0.719	ND	ND	1.91	2.04	ND	ND	ND
Oct-2009	0.017	0.014	ND	ND	0.692	0.701	ND	ND	2.02	2	ND	ND	0.022
Apr-2010	0.017	0.014	ND	ND	0.9	0.794	ND	ND	1.92	1.86	ND	ND	ND
Oct-2010	0.014	0.014	ND	ND	0.611	0.574	ND	ND	1.91	1.87	ND	ND	ND
Apr-2011	0.04	0.028	ND	0.033	0.841	0.798	ND	ND	2.1	2.11	ND	ND	ND
Sep-2011	0.019	0.015	ND	ND	0.858	0.826	ND	ND	2.32	2.27	ND	ND	ND
Mar-2012	0.015	0.015	ND	ND	0.602	0.658	ND	ND	2.1	2.13	ND	ND	ND
Sep-2012	0.0173	0.0155	0.000106 J	0.0025 J	0.601	0.639	ND	ND	2.04	2.12	ND	ND	0.0037 J
Mar-2013	0.0171	0.0164	0.000226	0.008 J	0.713	0.745	ND	ND	2.01	2.11	ND	ND	0.011
Oct-2013	0.0197	0.0213	0.000268	0.003	0.65	0.688	ND	ND	2.21	2.37	ND	0.0013 J	0.0214
Mar-2014	0.0185	0.0184	0.000251	0.0027 J	0.904	0.916	ND	ND	1.88	2.44	ND	0.0043 J	0.0054 J
Oct-2014	0.0219	0.0206	0.000253	0.01 J	0.934	0.895	0.0014 J	ND	2.47	2.37	ND	ND	0.0079 J
Apr-2015	0.0235	0.0216	0.000245	0.0039 J	0.971	0.86	0.000772 J	ND	2.75	2.52	ND	ND	0.008 J
Nov-2015	0.0224	0.0218	0.000413	0.003 J	0.788	0.756	ND	ND	2.71	2.69	0.000065 J	ND	0.0034 J
May-2016	0.0233	0.0216	0.0003	0.003 J	0.807	0.8	ND	ND	2.47	2.48	ND	ND	ND
Oct-2016	0.0213	0.0242	0.00032	0.0039 J	0.77	0.83	ND	ND	2.35	2.59	ND	ND	ND
May-2017	0.022	0.0235	0.00046	0.0043	0.784	0.818	ND	ND	2.43	2.5	ND	ND	0.0038 JB
Oct-2017	0.0275	0.0278	0.00054	0.0024 J	0.823	0.8	ND	ND	2.57	2.56	ND	ND	ND
May-2018	0.093	0.075	0.00088	0.0037	0.91 J	ND	0.00036 J	ND	2.4 J	2.2 J	ND	ND	0.005 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05A***												
Nov-2018	0.22	0.23	*ND*	0.002	*ND*	*0.96 J*	*ND*	*ND*	*2.4 J*	*2.5 J*	*ND*	*ND*	*0.0036 J*
May-2019	0.31 M1	0.3	*ND*	0.0013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0054 D6
Oct-2019	0.32	0.31	*ND*	0.0013	*ND*	*ND*	*0.00039 J*	*ND*	*2.7 J*	*2.4 J*	*ND*	0.0049	0.012
May-2020	0.24	0.24	*ND*	*ND*	0.78	0.73	*ND*	*ND*	2.2	2.6	*ND*	*ND*	*ND*
Oct-2020	0.25	0.22	*ND*	0.0028	*ND*	*ND*	*ND*	*ND*	*1.2 J*	*1.9 J*	*ND*	*0.0026 J*	*ND*
Apr-2021	0.24	0.23	*0.00006 J*	*ND*	0.67	0.69	*ND*	*ND*	2.6	2.4	*ND*	*ND*	*ND*
Oct-2021	0.32	0.31	*ND*	*0.00094 J*	0.69	0.67	*ND*	*ND*	2.5	2.6	*ND*	*ND*	*ND*
May-2022	0.25	0.24	*ND*	*0.0012 J*	0.71	0.67	*ND*	*ND*	2.5	2.5	*ND*	*ND*	*ND*
Oct-2022	0.19	0.2	*ND*	0.0051	0.61	0.7	*ND*	*ND*	2.4	2.6	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	42	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05A*																
Mar-2006	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*0.87 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	1.18	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	1.12	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	1.13	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	1.47	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	1.28	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05A*																
May-2017	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 J	ND
Nov-2018	ND	ND	ND	ND	1.1 L2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*0.5 J*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05A***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	0.9 J
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	1.4
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	2.1
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	2.2
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	1.1
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.94 J
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.52 J	1.41
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.21 J	ND	ND	ND	ND	ND	0.87 J	2.38
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	0.73 J	1.31
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	0.25 J	ND	ND	ND	0.62 J	2.1
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.16 J	ND	0.22 J	ND	ND	ND	0.58 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4 J	2.2
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	0.6 J	2.3
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.2 J	ND	ND	ND	0.7 J	2.7

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*0.7 J*	2.7
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*0.8 J*	2.8
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	3
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3 CLN3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.128 J*	*ND*	*ND*	*ND*	*ND*	*1.58 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	1.2	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05A***															
Oct-2005	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1.7 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*0.14 J*	*ND*	*ND*	*ND*	*0.23 J*	*ND*	*ND*	*ND*	*ND*	*0.22 J*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*0.13 J*	*ND*	*ND*	*ND*	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.1 J*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05A***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.132 J*	*0.83 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-06***											
Nov-1993	6	6	0.2	ND	12.6	0.2	ND	5.44	49.9	2.6	60	8.1
Apr-1994	ND	ND	ND	ND	11.9	ND	ND	4.82	50.3	ND	45	5.34
Aug-1994	ND	ND	ND	ND	11.7	0.4	0.4	4.5	49.5	3.2	57	7.9
Sep-1994	ND	ND	ND	ND	12.2	0.3	ND	5.1	52.8	2.8	35	8.7
Nov-1994	ND	ND	ND	ND	13.2	0.2	ND	5.2	53.6	2.6	33	12
Apr-1995	8.2	8.2	ND	ND	14.1	ND	ND	5.4	62.8	2.2	9	10
Apr-1997	ND	16	ND	ND	11	0.06	ND	NA	NA	ND	52	12
Apr-1997	ND	8	ND	ND	9.5	0.06	ND	NA	NA	ND	36	6.1
Oct-1997	14	14	0.21	ND	10.9	ND	ND	6.65	75.3	ND	32	17
Apr-1998	17	17	ND	ND	8.13	ND	ND	6.32	64.9	ND	27	7.7
Apr-1999	11	11	0.31	ND	8.56	ND	ND	5.71	75.1	ND	65	12
Oct-1999	16	16	0.13	ND	7.73	0.172	ND	5.39	72.8	ND	52	8.4
Apr-2000	14	14	ND	ND	16.5	ND	ND	5.63	65	ND	31	11
Oct-2000	14	NA	ND	ND	14.9	ND	ND	5.39	78.4	3.52	55	12.8
Apr-2001	11	NA	ND	ND	12.2	ND	ND	NA	NA	ND	43	14.3
Sep-2001	8.7	8.7	ND	ND	16.5	ND	ND	5.04	89	ND	65	15.7
Mar-2002	17	17	ND	ND	24.6	ND	ND	6	143	ND	74	19.9
Sep-2002	14	14	ND	ND	19.3	ND	ND	5.9	141.3	ND	73	19.6
Mar-2003	13	13	ND	ND	16.4	ND	ND	5.4	112.1	ND	46	15.2
Oct-2003	11	11	ND	ND	18.1	0.122	ND	4.1	118.9	ND	101	18.7
Apr-2004	21	21	ND	ND	17.6	0.08	ND	5.6	102.9	ND	96	18.6
Oct-2004	7.2	7.2	ND	ND	13.4	0.11	ND	5.7	79.4	ND	60	13.8
Apr-2005	6.9	6.9	ND	ND	11.6	0.1	ND	5.2	63.8	1.44	69	12.5
Oct-2005	13	13	ND	ND	15.2	0.1	ND	4.8	82.1	2.83	67	12.9
Mar-2006	9.2	9.2	ND	ND	14.7	0.13	ND	4.8	92.4	4.02	49	13.7
Sep-2006	14	14	ND	ND	12.2	0.16	ND	5.6	91.7	1.55	74	12
Mar-2007	20	20	ND	ND	12.9	0.14	ND	6	97.8	1.59	52	11.5
Sep-2007	7.2	7.2	0.4	ND	12.9	0.15	ND	4.9	66.8	2.67	103	11.9
Mar-2008	7.8	7.8	0.35	ND	16.1	ND	ND	5	69.6	ND	55	11.5
Sep-2008	9.1	9.1	0.32	ND	14.2	0.28	ND	4.7	67.9	ND	60	11.8
Mar-2009	7.5	7.5	ND	ND	14.3	0.32	ND	4.9	71.9	1.1	49	10.2
Oct-2009	9	9	ND	ND	15.5	0.26	ND	4.6	69.5	1.64	53	12.1
Mar-2010	9.8	9.8	ND	ND	17.1	0.22	ND	5	93	2.53	37	11.8
Oct-2010	9.6	9.6	ND	ND	14.2	0.28	ND	4.5	69.8	2.47	38	13.7
Apr-2011	9.1	9.1	ND	ND	15.8	0.35	0.02	4.6	69.2	2.57	50	13.5
Sep-2011	5.5	5.5	ND	ND	14	0.41	ND	4.8	70.3	2.14	61	13.2
Mar-2012	6.4	6.4	ND	ND	14.8	0.42	ND	4.6	60.3	2.8	46	13.4

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-06***											
Sep-2012	7.72	7.72	ND	ND	14.6	0.389	ND	3.8	72.6	2.83	59	13.9
Mar-2013	10.6	10.6	0.258	ND	15.7	0.297	ND	5.1	85.7	4.27	44	14.7
Oct-2013	8.96	8.96	0.212	ND	15	0.418	ND	5.7	76.3	3.92	46	14
Mar-2014	9.2	9.2	0.197 J	ND	15.8	0.362	ND	5.3	74.6	4.95	54	16.9
Oct-2014	ND	ND	0.23	14	15.4	0.4	ND	4.8	73.2	3.96	39	16.5
Apr-2015	8.36	8.36	0.231	ND	15.6	0.427	ND	4.1	74.7	4.56	47	15.6
Nov-2015	7.8	7.8	0.216	ND	15.2	0.412	ND	5.5	131.2	2.08	50	18.5
May-2016	17.7	17.7	0.186 J	ND	16.3	0.195	0.0897	5.6	97.2	6.32	68	16.9
Oct-2016	5.56	5.56	ND	ND	14.7	NA	NA	5.6	101.1	4.1	44	16.4
May-2017	6.2	6.2	0.182 J	ND	14.5	0.419	ND	5.1	117.2	4.67	49	16.7
Oct-2017	7.36	7.36	0.196 J	13	14.2	0.453	ND	5.2	124.3	3.7	60	16.1
May-2018	14	14	0.21	ND	13.7	0.077 J	ND	5.84	147	6.6 J	ND	16.9
Nov-2018	70	70	0.29	ND	17.1	ND	0.024	5.88	183.2	5.8 J	70	19.2
May-2019	72	NA	0.35	ND	19.4	ND	0.024	5.96	155.6	ND	127	18.1
Oct-2019	25 H1	NA	0.26	8.2 J	12.9	0.067 J	0.044	5.8	194.2	ND	111	18.4
May-2020	30	NA	0.46	6.9 J	11.5	ND	0.054	5.66	164.7	ND	84	15
Oct-2020	40	NA	0.17	11.6 J	10.9	ND	0.055	5.67	156.1	4.9	105	17.8
Apr-2021	8 J6c	NA	0.16	ND	12.4	1.2	0.0063 J	5.27	120.5	10	66	21.2
Oct-2021	6 J2c	NA	ND	6.1 JMH	12.8	0.086 J	0.049 H1	5.6	168.7	17.7 MH	102	30.2
May-2022	26	NA	ND	10.1 J	11.4	ND	ND	5.45	161.9	10.3	69 H1	25.7 N3
Oct-2022	46	NA	ND	24.4 J	17.1	0.066 J	0.0069 J	5.7	182.4	8.1 J	65	23.8 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-06*													
Nov-1993	NA	ND	ND	NA	ND	1.1	NA	ND	NA	ND	8	2.7	ND	1.3	NA
Apr-1994	NA	ND	0.012	NA	ND	1.1	NA	ND	NA	ND	0.37	2.7	ND	0.63	NA
Aug-1994	NA	ND	ND	NA	ND	1.2	NA	ND	NA	ND	1.2	0.7	ND	1.2	NA
Sep-1994	NA	ND	ND	NA	ND	1	NA	ND	NA	ND	0.53	0.1	ND	1.5	NA
Nov-1994	NA	ND	ND	NA	ND	2	NA	ND	NA	0.04	6.8	0.69	ND	1.7	NA
Apr-1995	ND	ND	ND	ND	ND	1.7	NA	ND	ND	ND	3.4	3.4	ND	1.4	NA
Oct-1996	ND	ND	0.076	ND	ND	1.9	1.8	ND	ND	ND	11	10	ND	1.8	1.8
Apr-1997	ND	ND	0.058	ND	ND	1.6	1.5	ND	ND	ND	7.2	5.8	0.004	1.4	1.4
Apr-1997	ND	ND	0.054	ND	ND	1.5	1.5	ND	ND	ND	5.1	3.2	ND	1.1	1.2
Oct-1997	ND	ND	0.053	ND	ND	1.24	1.26	ND	ND	ND	13	11.9	ND	1.22	1.23
Apr-1998	ND	ND	0.049	ND	ND	1.2	1.21	ND	ND	ND	17.6	9.85	ND	1.15	1.17
Apr-1999	ND	ND	0.075	ND	ND	1.8	1.61	ND	ND	0.016	10.5	8.17	ND	1.69	1.54
Oct-1999	ND	ND	0.06	ND	ND	1.65	1.47	ND	ND	ND	9.57	8.57	ND	1.52	1.38
Apr-2000	ND	ND	0.061	ND	ND	1.71	1.62	ND	ND	ND	9.73	9.18	ND	1.68	1.58
Oct-2000	ND	ND	0.069	ND	ND	1.95	1.95	ND	ND	ND	10.7	8.59	ND	1.93	1.95
Apr-2001	ND	ND	0.076	ND	ND	2.12	NA	ND	0.012	0.022	11.5	NA	0.002	2.19	NA
Sep-2001	ND	ND	0.086	ND	ND	2.26	2.18	ND	0.011	0.014	6.46	6.78	0.004	2.45	2.34
Mar-2002	ND	ND	0.099	ND	ND	2.71	2.67	ND	0.023	0.048	19.6	12.4	0.005	3.19	3.15
Sep-2002	ND	ND	0.091	ND	ND	2.82	2.27	ND	0.011	0.028	17.3	14.5	0.004	3.04	2.85
Mar-2003	ND	ND	0.072	ND	ND	2.01	1.89	ND	0.011	0.018	11.5	8.47	0.006	2.48	2.31
Oct-2003	ND	ND	0.084	ND	ND	2.33	2.28	ND	0.012	0.02	10.3	9.31	0.004	3.13	3.1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06***													
Apr-2004	ND	ND	ND	ND	ND	2.23	2.06	ND	0.016	0.037	19.7	16.6	0.003	3.17	2.98
Oct-2004	ND	ND	0.055	ND	ND	1.65	1.69	ND	ND	0.017	8.42	7.62	0.004	2.35	2.44
Apr-2005	ND	ND	0.047	ND	ND	1.63	1.62	ND	ND	0.01	5.5	4.89	0.007	2.05	2.02
Oct-2005	ND	ND	0.046	ND	0.004	1.74	1.74	ND	ND	0.043	9.53	7.71	0.004	2.07	2.08
Mar-2006	ND	ND	0.043	ND	ND	2.29	1.55	0.017	0.03	0.062	12.5	6.7	0.005	1.93	1.93
Sep-2006	0.002	ND	0.037	ND	ND	1.74	1.56	0.044	0.024	0.146	24.4	14.7	0.007	1.87	1.83
Mar-2007	ND	ND	0.039	ND	ND	1.6	1.62	ND	ND	ND	14.1	14.6	ND	1.83	1.84
Sep-2007	ND	0.002	0.035	ND	ND	2.12	2.17	ND	ND	ND	2.61	2.61	ND	1.61	1.65
Mar-2008	ND	0.003	0.034	ND	ND	1.94	1.78	ND	ND	0.01	2.78	2.9	0.006	1.61	1.62
Sep-2008	ND	ND	0.036	ND	ND	1.96	1.99	ND	ND	ND	2.53	2.53	0.003	1.67	1.76
Mar-2009	ND	ND	0.029	ND	ND	1.88	1.92	ND	ND	ND	1.75	2.1	0.003	1.35	1.44
Oct-2009	ND	ND	0.036	ND	ND	1.91	1.81	ND	ND	ND	2.77	2.59	ND	1.78	1.63
Mar-2010	ND	ND	0.043	ND	ND	1.89	1.83	ND	ND	ND	3.26	3.01	ND	1.72	1.68
Oct-2010	ND	ND	0.044	ND	ND	2.19	2.12	ND	ND	ND	2.77	2.58	ND	2	1.95
Apr-2011	ND	ND	0.044	ND	ND	2.09	2.02	ND	ND	ND	2.69	2.44	ND	2.01	1.92
Sep-2011	ND	ND	0.04	ND	ND	2.3	2.33	ND	ND	ND	1.28	1.41	0.002	1.82	1.98
Mar-2012	ND	ND	0.04	ND	ND	2.13	2.09	ND	ND	ND	1.92	1.93	ND	1.97	2.02
Sep-2012	ND	ND	0.0404	0.00056 J	0.00049 J	2.3	2.39	0.0022 J	0.0071 J	0.0047 J	2.37	2.61	0.0018 J	1.99	2.14
Mar-2013	ND	ND	0.0425	0.000544 J	0.000483 J	2.49	2.46	0.0041 J	0.0078 J	0.0035 J	3.1	3.07	0.0013 J	2.07	2
Oct-2013	0.000242 J	ND	0.0454	0.000534 J	0.000554 J	2.57	2.52	0.0096 J	0.0091 J	0.0029 J	2.3	2.28	0.0024	1.85	1.8
Mar-2014	ND	ND	0.0427	0.000407 J	0.000494 J	3.47	3.31	0.0086 J	0.01	0.0027 J	2.38	2.92	0.0013 J	2	2.53
Oct-2014	0.000382 J	0.000409 J	0.0535	0.000408 J	0.000392 J	2.57	2.57	0.0017 J	0.0105	0.0029 J	2.46	2.35	0.00099 J	2.46	2.41
Apr-2015	0.000488 J	0.000426 J	0.0502	0.000489 J	0.000465 J	2.59	2.63	0.0019 J	0.0114	0.0027 J	2.17	2.08	0.00085 J	2.21	2.22
Nov-2015	ND	0.000534 J	0.0582	0.000527 J	0.000548 J	2.96	2.86	0.0024 J	0.014	0.0032 J	4.66	4.32	0.001 J	2.7	2.58

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06***													
May-2016	*ND*	*ND*	0.0532	*0.00033 J*	*0.00032 J*	2.76	2.67	*0.0036 J*	0.0122	*0.0024 J*	1.97	1.95	*0.00098 J*	2.43	2.41
Oct-2016	*ND*	*ND*	0.054	*0.00036 J*	*0.00029 J*	2.73	2.82	*0.0017 J*	0.0131	*0.0028 J*	2.01	2.07	*0.00074 J*	2.32	2.18
May-2017	*ND*	*0.001 J*	0.0609	*0.00038 J*	*0.0006 J*	2.61	2.76	*0.0025 J*	0.0131	*0.0027 J*	2.55	2.41	*0.00081 J*	2.48	2.44
Oct-2017	*ND*	*ND*	0.0581	*0.00043 J*	*0.00054 J*	2.8	2.72	*0.0024 J*	0.0117	*0.0027 J*	2.39	2.38	*0.0011 J*	2.21	2.23
May-2018	*0.000091 J*	*ND*	0.069	0.00039	*0.00048 J*	2.9	2.6	*0.0041 J*	0.006	*0.0015 JB*	2.5	2.4	*0.00075 J*	2.3	2.2
Nov-2018	*ND*	*ND*	0.095	*0.00014 J*	*0.00027 J*	3.2	3.1	*0.0039 J*	0.0092	0.0037	39.2	36.7	*0.000026 J*	2.7	2.7
May-2019	*ND*	*ND*	0.091	*ND*	*ND*	3	3.5	*ND*	0.0087	0.0036	40.3	41.2	*ND*	2.6	2.6
Oct-2019	*0.000069 J*	*ND*	0.09	*0.00013 J*	*0.00021 J*	3.2	3	*0.0044 J*	0.0075	*ND*	42.1	39.7	*0.000085 J*	2.6	2.4
May-2020	*ND*	*ND*	0.096	*ND*	*0.00056 J*	2.3	2.3	*0.0027 J*	0.0073	0.007	38.1	36	*ND*	2.2	2.3
Oct-2020	*0.00034 J*	*ND*	0.087	*0.00032 J*	*ND*	3	2.7	*0.0035 J*	0.0079	*ND*	36.5	34	*ND*	2.5	2.4
Apr-2021	*ND*	*ND*	0.11	*0.00026 J*	*0.0017 J*	3.4	3.5	*0.0033 J*	0.022	0.02	6.2	6	*ND*	3.1	3.4
Oct-2021	*ND*	*ND*	0.15	*0.00021 J*	*0.00015 J*	4.8	4.9	0.0031	0.024	0.0077	14.6	15.4	*0.000055 J*	4.4	4.6
May-2022	*ND*	*ND*	0.14	*0.00023 J*	*0.0004 J*	4	4.1	0.0035	0.023	0.0074	15.7	15.1	*ND*	3.8	3.7
Oct-2022	*ND*	*ND*	0.13	*0.0002 J*	*ND*	4.1	4.4	*0.0024 J*	0.018	*ND*	21.3	23	*ND*	3.3	3.7

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-06*												
Nov-1993	0.08	NA	ND	NA	1.4	NA	ND	NA	2.7	NA	NA	NA	ND
Apr-1994	0.023	NA	ND	NA	0.93	NA	ND	NA	2.8	NA	NA	NA	ND
Aug-1994	0.03	NA	ND	NA	2.3	NA	ND	NA	2.2	NA	NA	NA	0.02
Sep-1994	0.03	NA	ND	NA	1.4	NA	ND	NA	2.6	NA	NA	NA	0.04
Nov-1994	0.15	NA	ND	NA	1.5	NA	ND	NA	2.7	NA	NA	NA	0.03
Apr-1995	0.03	NA	ND	ND	1.8	NA	ND	ND	2.7	NA	ND	ND	0.02
Oct-1996	0.074	0.073	NA	ND	ND	ND	ND	ND	3.7	3.8	ND	ND	0.037
Apr-1997	0.089	0.084	**0.005**	ND	1.5	1.2	ND	ND	3.5	3.2	ND	ND	0.024
Apr-1997	0.05	0.052	0.0016	ND	2.7	2.4	ND	ND	4.2	3	ND	ND	0.036
Oct-1997	0.067	0.068	0.0012	ND	1.73	1.32	ND	ND	2.6	2.61	ND	ND	0.014
Apr-1998	0.06	0.062	0.0015	ND	0.683	1.08	ND	ND	2.36	2.38	ND	ND	0.01
Apr-1999	0.06	0.051	NA	ND	0.856	ND	ND	ND	3.31	3.06	ND	ND	0.016
Oct-1999	0.056	0.053	NA	ND	1.79	1.14	ND	ND	3	2.78	ND	ND	ND
Apr-2000	0.053	0.051	NA	ND	1.04	1.02	ND	ND	3.3	3.14	ND	ND	ND
Oct-2000	0.048	0.047	NA	ND	1.38	1.06	ND	ND	3.57	3.58	ND	ND	ND
Apr-2001	0.06	NA	NA	ND	1.98	NA	ND	ND	4.1	NA	ND	ND	0.018
Sep-2001	0.049	0.046	NA	0.022	1.58	0.692	ND	ND	4.51	4.27	ND	ND	0.016
Mar-2002	0.078	0.073	NA	0.044	2.11	1.13	ND	ND	5.59	5.41	ND	ND	0.041
Sep-2002	0.083	0.071	NA	0.018	1.23	1.11	ND	ND	5.04	4.6	ND	ND	0.021
Mar-2003	0.054	0.054	NA	0.013	2.4	0.954	ND	ND	4.29	4.11	ND	ND	0.012
Oct-2003	0.068	0.066	NA	0.013	2.55	2.47	ND	ND	5.16	4.96	ND	ND	0.014
Apr-2004	0.11	0.099	0.0009	0.037	2.23	1.49	ND	ND	5.43	5.17	ND	ND	0.02

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-06*												
Oct-2004	0.054	0.054	0.0006	ND	1.88	1.65	ND	ND	4.47	4.37	ND	ND	ND
Apr-2005	0.052	0.051	0.0003	ND	1.17	1.12	ND	ND	4.35	4.32	ND	ND	ND
Oct-2005	0.069	0.062	0.0003	0.027	1.23	1.24	ND	ND	4.81	4.73	ND	ND	ND
Mar-2006	0.03	0.015	0.00097	0.123	0.952	0.955	ND	ND	4.83	4.79	ND	ND	0.052
Sep-2006	0.11	0.092	**0.0025**	0.084	1.29	1.29	ND	ND	5.14	4.91	ND	ND	0.043
Mar-2007	0.08	0.083	ND	ND	1.24	1.3	ND	ND	4.89	4.91	ND	ND	ND
Sep-2007	0.036	0.038	ND	ND	1.02	0.953	ND	ND	5.04	5.16	ND	ND	0.011
Mar-2008	0.037	0.036	ND	ND	0.997	1.28	ND	ND	5.14	5.16	ND	ND	ND
Sep-2008	0.038	0.044	ND	0.005	1.07	1.08	ND	ND	5.39	6.11	ND	ND	ND
Mar-2009	0.032	0.037	ND	ND	1.13	1.19	ND	ND	5.46	5.93	ND	ND	ND
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	0.046	0.042	ND	ND	1.07	0.965	ND	ND	6.95	6.27	ND	ND	ND
Mar-2010	0.05	0.049	ND	ND	1.28	1.17	ND	ND	6.45	6.09	ND	ND	ND
Oct-2010	0.054	0.052	ND	ND	1.38	1.27	ND	ND	6.22	6.03	ND	ND	ND
Apr-2011	0.062	0.057	ND	ND	1.39	1.32	ND	ND	6.49	5.99	ND	ND	ND
Sep-2011	0.052	0.056	ND	ND	1.25	1.34	ND	ND	5.43	5.57	ND	ND	ND
Mar-2012	0.062	0.065	ND	ND	1.33	1.3	ND	ND	5.77	5.79	ND	ND	ND
Sep-2012	0.0717	0.0771	ND	0.0073 J	1.35	1.43	ND	ND	5.96	6.31	ND	ND	0.0075 J
Mar-2013	0.0785	0.0727	0.000119 J	0.0082 J	1.33	1.33	ND	ND	6.68	6.44	ND	ND	0.0171
Oct-2013	0.0901	0.0902	ND	0.0072 J	1.16	1.15	ND	ND	5.22	5.06	0.000745 J	0.0088 J	0.0158
Mar-2014	0.0864	0.0903	ND	0.0081 J	1.61	1.56	ND	ND	5.28	6.77	ND	0.0067 J	0.0085 J
Oct-2014	0.107	0.104	ND	0.0083 J	1.4	1.39	0.0016 J	ND	6	5.95	ND	ND	0.0107
Apr-2015	0.0949	0.0914	0.000032 J	0.0098 J	1.31	1.33	0.0012 J	ND	5.83	5.88	ND	ND	0.0119
Nov-2015	0.132	0.125	ND	0.0107	1.51	1.45	0.0017 J	ND	6.82	6.51	ND	ND	0.013

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-06***												
May-2016	0.0965	0.0994	*ND*	0.0108	1.45	1.39	*ND*	*ND*	6.23	6.1	*ND*	*ND*	*0.0087 J*
Oct-2016	0.0951	0.0881	*ND*	0.0089	1.44	1.4	*ND*	*ND*	5.9	5.6	*ND*	*ND*	*0.0087 J*
May-2017	0.103	0.103	*ND*	0.0101	1.48	1.55	*ND*	*ND*	6.08	5.73	*ND*	*ND*	*0.01 J*
Oct-2017	0.0965	0.0976	*ND*	0.0104	1.39	1.47	*ND*	*ND*	5.55	5.59	*ND*	*ND*	*0.0108 J*
May-2018	0.098	0.089	*ND*	0.0049	*0.97 J*	*0.94 J*	*0.00022 JB*	*ND*	6.4	5.9	*ND*	0.0047	0.0059 B
Nov-2018	0.27	0.26	*ND*	0.0047	*1.3 J*	*2 J*	*0.0004 J*	*ND*	7.2	8.1	*ND*	*ND*	0.0068
May-2019	0.33	0.32	*ND*	0.0049	*ND*	*ND*	*ND*	*ND*	6.9	7.1	*ND*	0.0029	0.0083
Oct-2019	0.31	0.31	*ND*	0.0039	*ND*	*1.6 J*	*0.00047 J*	*ND*	6.8	5.9	*ND*	0.005	0.011
May-2020	0.29	0.29	*ND*	*0.0047 J*	1.7	1.5	*ND*	*ND*	6.1	5.9	*ND*	*ND*	0.012
Oct-2020	0.3	0.29	*ND*	0.0043	*1.5 J*	*1.4 J*	*ND*	*ND*	5.6	5.1	*0.00084 J*	*0.00079 J*	*ND*
Apr-2021	0.22	0.23	0.0002	0.015	1.7	1.6	*ND*	*ND*	6	6.2	*ND*	*ND*	0.049
Oct-2021	0.31	0.32	0.00051	0.013	1.7	1.7	*0.0011 J*	*ND*	5.6	5.7	*0.000025 J*	*ND*	0.024
May-2022	0.31	0.3	0.00024	0.013	1.7	1.7	*ND*	*ND*	5.5	5.5	*ND*	*ND*	0.022
Oct-2022	0.31	0.33	*ND*	0.009	1.5	1.7	*0.0009 J*	*ND*	6.5	7.2	*ND*	*ND*	0.014

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06*																
Nov-1993	ND	1.6	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	1.8	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	ND
Aug-1994	ND	1.5	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	2.1	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	2.9	ND	ND	2.4	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	9.2	ND	ND	8.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	1	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	1	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	1.2	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	0.9 J	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	0.9 J	NA	NA	5.3	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	4.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	0.7 J	NA	NA	5.2	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	1.5	ND	ND	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	1.1	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	1.2	ND	ND	14	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Mar-2002	ND	1.4	ND	ND	18	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Sep-2002	ND	2.3	ND	ND	23	1.2	ND	ND	ND	ND	ND	1	1.5	ND	ND	ND	ND	ND
Mar-2003	ND	1	ND	ND	13	0.5 J	ND	ND	ND	ND	ND	0.6 J	0.8 J	ND	ND	ND	ND	ND
Oct-2003	ND	1.2	ND	ND	20	0.8 J	ND	ND	ND	ND	ND	1	1.3	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06*																
Apr-2004	ND	0.9 J	ND	ND	16	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	7.2	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	8.5	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	5.8	0.6 J	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Sep-2006	ND	1.7	ND	ND	7.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	7.5	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2007	ND	0.6 J	ND	ND	11.2	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	5.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	8	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	6.9	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	7.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	8.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	8.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	4.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	6.54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	9.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	6.98	0.31 J	ND	ND	ND	ND	ND	0.25 J	0.36 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	6.42	0.21 J	ND	ND	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	7.14	ND	ND	ND	ND	ND	ND	ND	0.28 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06*																
Apr-2015	ND	ND	ND	ND	5.67	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	5.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	4.8	0.1 J	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	5.7	0.2 J	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	4.8	0.1 J	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	5.6	0.2 J	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	8.5 L2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4 JBIH	ND
May-2019	ND	ND	ND	ND	6.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	4.74	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	9.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	7.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	8.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-06*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	3.2
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	5.2
Aug-1994	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	7	4.8
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	4.9
Nov-1994	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.4	6
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	49	22
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	22	4
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	ND	2	ND	ND	ND	13	9
Oct-1997	ND	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	1.1	ND	ND	ND	10	12
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	20	5.6
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	0.7 J	ND	NA	3.8	NA	NA	NA	6	9.3
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND	ND	ND	4.3	6.3
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	0.8 J	ND	NA	2.9	NA	ND	NA	5.1	7.4
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	6	ND	ND	ND	38	15
Apr-2001	0.6 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	5.7	ND	ND	ND	22	14
Sep-2001	0.8 J	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	6.9	ND	ND	ND	24	18
Mar-2002	0.6 J	ND	ND	ND	ND	2.4	ND	ND	1.5	ND	0.8 J	5.8	ND	ND	ND	16	21
Sep-2002	1.3	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	9.6	ND	ND	ND	74	52
Mar-2003	0.6 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	7	ND	ND	ND	33	22
Oct-2003	1.3	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	12	ND	ND	ND	41	36

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-06***															
Apr-2004	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	9.8	*ND*	*ND*	*ND*	40	28
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	4.9	*ND*	*ND*	*ND*	24	23
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	15	14
Oct-2005	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	5.1	*ND*	*ND*	*ND*	13.6	15.9
Mar-2006	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	12.1	26.3
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.5	*ND*	*ND*	*ND*	17.8	21.9
Mar-2007	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	11.7	14.9
Sep-2007	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	4.5	*ND*	*ND*	*ND*	16.3	11.2
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	12.1	15.7
Sep-2008	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	14.5	13
Mar-2009	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	10.8	10.1
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	9.4	11.9
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*11.8 J*	13.5
Oct-2010	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	11.7	9.3
Apr-2011	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	14.4	11.9
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7	*ND*	*ND*	*ND*	15	6.6
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7	*ND*	*ND*	*ND*	11.5	6.4
Sep-2012	*0.42 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.81	*ND*	*ND*	*ND*	5.56	7.44
Mar-2013	*0.58 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.44 J*	*ND*	*ND*	7.25	*ND*	*ND*	*ND*	8.15	12.6
Oct-2013	*0.29 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.59 J*	*0.22 J*	*ND*	4.34	*ND*	*ND*	*ND*	8.76	13.6
Mar-2014	*0.28 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	3.85	*ND*	*ND*	*ND*	9.56	9.22
Oct-2014	*0.28 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.23 J*	*ND*	4.45	*ND*	*ND*	*ND*	7.33	9.85

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-06***															
Apr-2015	*0.25 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	3.26	*ND*	*ND*	*ND*	6	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.1	*ND*	*ND*	*ND*	*12.6 J*	6.3
May-2016	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	3.3	*ND*	*ND*	*ND*	4.7	5.5
Oct-2016	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	2.9	*ND*	*ND*	*ND*	6.3	7.7
May-2017	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J,B*	*ND*	3	*ND*	*ND*	*ND*	5.1	5.7
Oct-2017	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	3.9	*ND*	*ND*	*ND*	6.8	8
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.2	*ND*	*ND*	*ND*	6.5	4.5
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.3	*ND*	*ND*	*ND*	11.5	9.2 CLN3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	6.9	8.3 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	7.5	4.6
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	3.4	2.3
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	4.3	2.1
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.19	*ND*	*ND*	*ND*	*1.48 J*	*3.62 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	9.8	6.8
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.2	*ND*	*ND*	*ND*	7	5.3
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.2	*ND*	*ND*	*ND*	5.1	5.4

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-06***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*NA*
Aug-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	2.8	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*0.5 J*	3	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	**7.4**	*ND*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	3	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	4	*ND*	*ND*	*ND*	*ND*	1	3	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*0.7 J*	2.3	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*0.9 J*	1.9	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	2	*ND*	*NA*	3.7	*ND*	*ND*	*NA*	*NA*	1.5	1.4	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	1.7	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*0.9 J*	1.2	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	1.3	*ND*	*NA*	2.9	*ND*	*ND*	*NA*	*NA*	*1 J*	1.4	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	3.2	*ND*	*ND*	**5.8**	*ND*	*ND*	*ND*	*ND*	2.1	2.6	*ND*	1.1	*NA*
Apr-2001	*ND*	*ND*	*0.5 J*	*NA*	3.3	*0.5 J*	*ND*	**5.2**	*ND*	*ND*	*ND*	*ND*	1.9	2.1	*ND*	1.1	*NA*
Sep-2001	*ND*	*ND*	*0.7 J*	*NA*	**7.3**	*0.8 J*	*ND*	**8.1**	*ND*	*ND*	*ND*	*ND*	2.8	2.5	*ND*	1.3	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	**6.9**	*ND*	*ND*	4.2	*ND*	*ND*	*ND*	*ND*	1.8	2.1	*ND*	1	*NA*
Sep-2002	*ND*	*ND*	1.5	*NA*	**24**	3.5	*ND*	**18**	*ND*	*ND*	*ND*	*ND*	**5.1**	6.9	*ND*	**2.5**	*NA*
Mar-2003	*ND*	*ND*	*0.6 J*	*NA*	**9.9**	*0.7 J*	*ND*	**9.9**	*ND*	*ND*	*ND*	*ND*	3	2.5	*ND*	1.2	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-06*															
Oct-2003	ND	ND	1.1	NA	**17**	1.2	ND	**15**	ND	ND	ND	ND	4.5	3.6	ND	**2.7**	NA
Apr-2004	ND	ND	0.6 J	NA	0.6 J	0.6 J	ND	**12**	ND	ND	ND	ND	3.5	2.5	ND	1.9	NA
Oct-2004	ND	ND	ND	NA	4.9	ND	ND	**5.7**	ND	ND	ND	ND	2.1	2.5	ND	1	NA
Apr-2005	ND	ND	ND	ND	2.9	ND	ND	**5.5**	ND	ND	ND	ND	1.7	1.1	ND	0.7 J	NA
Oct-2005	ND	ND	ND	ND	2.2	ND	ND	**6.9**	ND	ND	ND	ND	2.3	1.1	ND	1	NA
Mar-2006	ND	ND	ND	ND	2.6	1	ND	**6.4**	ND	ND	ND	ND	2.1	1.5	ND	1.1	NA
Sep-2006	ND	ND	ND	ND	1.7	ND	ND	**7.9**	ND	ND	ND	ND	2.9	0.7 J	ND	ND	NA
Mar-2007	ND	ND	ND	ND	4.1 R	ND	ND	**5.6**	ND	ND	ND	ND	2.2	1.3	ND	ND	NA
Sep-2007	ND	ND	0.5 J	ND	4.7	ND	ND	**6.9**	ND	ND	ND	ND	3.1	2	ND	1.1	NA
Mar-2008	ND	ND	ND	ND	2	ND	ND	**5.4**	ND	ND	ND	ND	2.3	1.4	ND	ND	NA
Sep-2008	ND	ND	ND	ND	3.9	ND	ND	**5.7**	ND	ND	ND	ND	2.3	1.2	ND	0.7 J	NA
Mar-2009	ND	ND	ND	ND	4.5	ND	ND	5	ND	ND	ND	ND	2	0.8 J	ND	0.5 J	NA
Oct-2009	ND	ND	ND	ND	**5.5**	ND	ND	4.8	ND	ND	ND	ND	2.1	0.8 J	ND	ND	NA
Mar-2010	ND	ND	ND	ND	**6.2**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	4.3	ND	ND	4.7	ND	ND	ND	ND	ND	0.7 J	ND	ND	NA
Apr-2011	ND	ND	ND	ND	**6.6**	ND	ND	**5.6**	ND	ND	ND	ND	2.2	ND	ND	0.6 J	NA
Sep-2011	ND	ND	ND	ND	2.1	ND	ND	3.7	ND	ND	ND	ND	1.5	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	2	ND	ND	4.3	ND	ND	ND	ND	1.6	0.5 J	ND	0.9 J	NA
Sep-2012	ND	ND	ND	ND	3.52	ND	ND	**5.6**	ND	ND	ND	ND	2.5	0.63 J	ND	0.48 J	ND
Mar-2013	ND	0.58 J,B	ND	ND	4.91	ND	ND	**6.59**	ND	ND	ND	ND	3.32	ND	ND	0.93 J	ND
Oct-2013	ND	ND	ND	ND	2.79	0.19 J	ND	4.43	ND	ND	ND	ND	2.73	1.25	ND	0.41 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-06*															
Mar-2014	ND	ND	ND	ND	2.49	ND	ND	**5.1**	ND	ND	ND	ND	2.43	1.04	ND	0.35 J	ND
Oct-2014	ND	ND	ND	ND	2.61	ND	ND	4.99	ND	ND	ND	ND	2.43	0.76 J	ND	0.24 J	ND
Apr-2015	ND	ND	ND	ND	2.5	ND	ND	3.81	ND	ND	ND	ND	1.96	0.66 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.7	ND	ND	3.9	ND	ND	ND	ND	2.1	0.7 J	ND	ND	ND
May-2016	ND	ND	ND	ND	2.2	ND	ND	3.5	ND	ND	ND	ND	1.9	ND	ND	0.2 J	ND
Oct-2016	ND	ND	ND	ND	2.6	ND	ND	3.8	ND	ND	ND	ND	1.8	0.8 J	ND	0.3 J	ND
May-2017	ND	ND	ND	ND	NA	ND	ND	3.9	ND	ND	ND	ND	1.7	0.3 J	ND	0.2 J	ND
Oct-2017	ND	ND	ND	ND	1.8	ND	ND	4.2	ND	ND	ND	ND	2	0.8 J	ND	0.2 J	ND
May-2018	ND	ND	ND	ND	2.4 B	ND	ND	1.7	ND	ND	ND	ND	1.4	0.61 J	ND	ND	NA
Nov-2018	ND	ND	ND	ND	3.6	ND	ND	3	ND	ND	ND	ND	1.9	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	2.5	ND	ND	1.9	ND	ND	ND	ND	1.3	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	2.4	ND	ND	1.5	ND	ND	ND	ND	1.2	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.722 J	ND	ND	1.43	ND	ND	ND	ND	1.07	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	1.4	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	1.3	ND	ND	ND	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	1.5	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-10A***											
Nov-1993	11	11	0.3	ND	18.8	2.6	ND	5.54	108	4.2	18	16.7
Apr-1994	7	7	0.2	ND	19.9	2.8	ND	5.26	112	3.1	91	21.05
Apr-1995	ND	ND	ND	ND	21.1	3.3	ND	5.1	120	5.1	44	18.8
Apr-1997	ND	10	ND	ND	27	2.5	ND	NA	NA	12	79	24
Oct-1997	5	5	0.21	ND	20.6	3.11	ND	7.8	149.8	3.17	51	22
Apr-1998	4	4	ND	ND	19.8	2.41	ND	5.26	162.2	5.6	62	27
Apr-1999	1	1	0.19	ND	18.2	2.34	ND	5.15	142.8	4	81	25
Oct-1999	6	6	0.11	ND	19.2	2.95	ND	5.68	148.1	5.86	98	25
Apr-2000	4	ND	ND	ND	26.2	3.28	ND	5.62	115	5.79	86	24
Oct-2000	6.6	NA	ND	ND	26.2	2.76	ND	5.63	141.8	4.79	93	28.9
Apr-2001	4.1	NA	ND	ND	25	2.9	ND	NA	NA	15.3	85	28.1
Sep-2001	5.7	5.7	ND	ND	24.1	3.18	ND	5.35	131	10.2	91	26.1
Mar-2002	4.6	4.6	ND	ND	41.7	3.23	ND	5.2	159.5	8.1	99	27.5
Sep-2002	4.2	4.2	ND	ND	32.1	2.73	ND	5.2	157.3	6.23	80	25.4
Mar-2003	4.4	4.4	ND	ND	29.2	2.27	ND	5.2	164.5	10.7	101	25
Oct-2003	5.1	5.1	ND	ND	26.9	2.62	ND	5.2	169.1	5.07	73	24.4
Apr-2004	5.9	5.9	ND	ND	24.2	2.61	ND	5.1	141.6	5.56	134	25.8
Oct-2004	5.9	5.9	ND	ND	22.5	2.47	ND	5.2	142	6.46	79	15.4
Apr-2005	6.1	6.1	ND	ND	22.3	2.41	ND	5.1	136.2	7.48	94	25.9
Oct-2005	6.1	6.1	0.21	ND	31.2	1.92	ND	4.7	126.6	8.34	112	21.1
Mar-2006	5.7	5.7	ND	ND	29.7	1.99	ND	5.3	136.2	8.1	79	20.8
Sep-2006	5.5	5.5	ND	ND	29.7	1.8	ND	5.1	129.4	8.63	105	21.5
Mar-2007	5.9	5.9	ND	ND	31.2	2.35	ND	5	123.9	6.69	72	20.8
Sep-2007	6.1	6.1	ND	ND	28.4	2	ND	5.2	113.2	10.7	90	21.6
Mar-2008	5.7	5.7	ND	ND	31	1.6	ND	5.2	128.2	9	107	21.3
Sep-2008	6.5	6.5	ND	ND	32.1	1.76	ND	4.8	116.7	6.1	112	21.6
Mar-2009	7	7	ND	ND	35.8	1.53	ND	4.9	138.9	5.17	101	22.5
Oct-2009	5.7	5.7	ND	ND	39.8	1.44	ND	4.9	138.7	5.45	95	24.3
Apr-2010	5.4	5.4	ND	ND	45.1	1.41	ND	4.5	139.1	6.43	73	24.6
Oct-2010	6	6	ND	ND	46	1.46	ND	4.8	143	5.77	117	26.7
Apr-2011	4.5	4.5	ND	ND	48	1.38	ND	4.7	154.6	5.68	117	26
Sep-2011	4.7	4.7	0.25	ND	47.6	1.51	ND	5.3	162.7	5.5	120	25.8
Mar-2012	4.6	4.6	ND	ND	45.7	1.48	ND	4.2	160.8	6.59	94	25.3
Sep-2012	4.96	4.96	ND	ND	48.5	1.48	ND	4.1	175.1	8.12	121	26.7
Mar-2013	4.64	4.64	ND	ND	42.2	1.7	ND	4.3	155.9	6.58	102	25.2
Oct-2013	4.8	4.8	ND	ND	43.2	1.65	ND	4.1	158	7.02	94	24.8
Mar-2014	3.84	3.84	ND	ND	48.8	1.49	ND	5.2	155.3	8.62	114	22.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-10A***										
Oct-2014	*ND*	*ND*	*ND*	*ND*	45.7	1.81	*ND*	4.8	148.1	6.76	102	25.5
Apr-2015	4.64	4.64	*ND*	*ND*	44.3	1.93	*ND*	4.6	175.1	8.7	104	25.9
Nov-2015	3.76	3.76	*ND*	*ND*	44.6	1.99	*ND*	5.1	199	8.64	109	28.6
May-2016	2.88	2.88	*ND*	*ND*	44.1	1.83	*ND*	5.2	259	9.58	113	28.3
Oct-2016	2.84	2.84	*ND*	*ND*	42.3	*NA*	*NA*	5.3	254	7.49	115	25.8
May-2017	2.64	2.64	*ND*	*ND*	43	1.93	*ND*	5	275	8.4	102	25.3
Oct-2017	2.04	2.04	*ND*	*ND*	44.5	1.98	*ND*	5.5	247	8.93	103	25.6
May-2018	*2 JB*	*ND*	*ND*	*5.8 J*	45.9	0.33	*ND*	4.8	253	*9 J*	112	27.4
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	42.6	1.9	*ND*	4.72	178.6	*9.3 J*	98	26.3
May-2019	*ND*	*NA*	*ND*	*ND*	44.3	2	*ND*	4.57	152.2	*ND*	90	26.5
Oct-2019	*ND*	*NA*	*ND*	*8.2 J*	44.9	2	*ND*	4.51	203.9	12.1	85	28.3
May-2020	*1 J*	*NA*	*ND*	*ND*	43.5	2.4	*ND*	4.43	189.7	10.8	118	28.2
Oct-2020	*ND*	*NA*	*ND*	*ND*	41.5	2.3	*ND*	4.34	177.9	10.7	95	29.8
Apr-2021	*2 J5c*	*NA*	*ND*	*ND*	45	2.2	*ND*	4.7	213	*8.6 J*	106	28
Oct-2021	*ND*	*NA*	*ND*	*ND*	43.3	2.2	*ND*	4.84	251.8	*9.3 J*	93	28.9
May-2022	*2 J*	*NA*	*ND*	*ND*	39.2	2	*ND*	4.67	225.6	*8.1 J*	85	28.9 N3
Oct-2022	*ND*	*NA*	*ND*	*8.4 J*	47.9	2.1	*ND*	4.74	228.7	11	100	28.5 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-10A***													
Nov-1993	NA	ND	ND	NA	ND	3.4	NA	0.006	NA	ND	0.18	0.28	ND	2	NA
Apr-1994	NA	ND	ND	NA	ND	3.6	NA	ND	NA	ND	0.63	0.09	ND	2.93	NA
Apr-1995	ND	ND	0.6	ND	ND	2.9	NA	ND	0.02	ND	0.3	0.06	ND	2.8	NA
Oct-1996	ND	ND	0.066	ND	ND	5.9	5.6	ND	ND	ND	ND	ND	ND	2.8	2.9
Apr-1997	ND	ND	0.065	ND	ND	7	6	ND	ND	ND	ND	ND	0.002	3	2.6
Oct-1997	ND	ND	0.056	ND	ND	4.98	4.82	ND	ND	ND	0.226	ND	ND	3.08	3.03
Apr-1998	ND	ND	0.057	ND	ND	5.45	4.88	ND	ND	ND	0.248	ND	ND	3.25	3.18
Apr-1999	ND	ND	0.061	ND	ND	4.86	4.81	ND	ND	ND	0.099	ND	ND	3.04	2.92
Oct-1999	ND	ND	0.074	ND	ND	5.75	5.02	ND	ND	ND	0.164	ND	ND	3.14	2.84
Apr-2000	ND	ND	0.068	ND	ND	4.57	4.34	ND	ND	ND	ND	ND	ND	3.14	2.96
Oct-2000	ND	ND	0.075	ND	ND	6.1	5.79	ND	0.011	ND	0.389	ND	ND	3.31	3.11
Apr-2001	ND	ND	0.077	ND	ND	5.39	NA	ND	0.012	ND	0.184	NA	ND	3.57	NA
Sep-2001	ND	ND	0.074	ND	ND	5.23	5.11	ND	ND	ND	0.159	ND	ND	3.17	3.12
Mar-2002	ND	ND	0.073	ND	ND	5.76	5.44	ND	ND	ND	0.068	ND	ND	3.18	3.13
Sep-2002	ND	ND	0.075	ND	ND	5.09	4.53	ND	ND	0.016	0.073	ND	ND	3.1	3.04
Mar-2003	ND	ND	0.081	ND	ND	4.64	4.35	ND	ND	ND	ND	ND	ND	3.27	3.07
Oct-2003	ND	ND	0.078	ND	ND	4.47	4.05	ND	ND	0.012	0.074	ND	ND	3.2	3.12
Apr-2004	ND	0.002	0.081	ND	ND	4.79	4.68	ND	0.012	ND	0.125	ND	ND	3.38	3.25
Oct-2004	ND	ND	0.085	ND	ND	4.7	4.55	ND	0.01	ND	ND	ND	ND	3.46	3.34
Apr-2005	ND	0.002	0.084	ND	ND	4.98	5.09	ND	ND	ND	0.14	ND	ND	3.26	3.28
Oct-2005	ND	ND	0.066	ND	ND	4.44	3.96	ND	ND	ND	0.18	ND	ND	2.44	2.26

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-10A***													
Mar-2006	ND	ND	0.061	ND	ND	4.23	4.14	ND	ND	ND	ND	ND	ND	2.49	2.5
Sep-2006	ND	ND	0.057	ND	ND	4.68	4.8	ND	ND	ND	ND	ND	ND	2.38	2.58
Mar-2007	ND	ND	0.06	ND	ND	4.6	4.73	ND	ND	ND	ND	ND	ND	2.27	2.44
Sep-2007	ND	ND	0.061	ND	ND	4.86	4.71	ND	ND	ND	ND	ND	ND	2.31	2.32
Mar-2008	ND	0.002	0.063	ND	ND	4.73	4.47	ND	ND	ND	ND	ND	ND	2.31	2.19
Sep-2008	ND	ND	0.06	ND	ND	4.73	4.43	ND	ND	ND	ND	ND	ND	2.37	2.22
Mar-2009	ND	ND	0.061	ND	ND	5.15	4.92	ND	ND	ND	ND	ND	ND	2.32	2.25
Oct-2009	ND	ND	0.072	ND	ND	5.24	5.03	ND	ND	ND	0.065	ND	ND	2.72	2.62
Apr-2010	ND	ND	0.076	ND	ND	5.33	5.13	ND	ND	ND	ND	ND	ND	2.75	2.67
Oct-2010	ND	ND	0.072	ND	ND	5.56	5.48	ND	0.011	ND	ND	ND	ND	3.11	3.03
Apr-2011	ND	ND	0.087	ND	ND	5.41	4.57	ND	0.01	ND	0.059	ND	ND	3.3	2.66
Sep-2011	ND	ND	0.083	ND	ND	5.36	5.33	ND	ND	ND	0.053	ND	ND	3.01	2.99
Mar-2012	ND	ND	0.081	ND	ND	4.97	5.1	ND	ND	ND	ND	ND	ND	3.14	3.24
Sep-2012	ND	ND	0.0803	0.000438 J	ND	5.04	4.89	0.0019 J	0.01	0.0034 J	0.0379 J	0.051	ND	3.43	3.26
Mar-2013	ND	ND	0.0846	0.000432 J	ND	4.96	4.78	0.0033 J	0.0101	0.0042 J	0.0142 J	0.0094 J	ND	3.11	2.94
Oct-2013	ND	ND	0.0847	0.000355 J	0.000148 J	4.66	4.35	0.0037 J	0.0105	0.0046 J	ND	ND	ND	3.19	2.88
Mar-2014	0.00033 J	ND	0.0719	0.000412 J	0.000127 J	4.6	4.43	0.0025 J	0.0097 J	0.0024 J	0.0374 J	0.01 J	ND	2.71	2.69
Oct-2014	0.000857 J	ND	0.0862	0.000448 J	0.00013 J	4.96	5.08	0.000907 J	0.0106	0.0047 J	ND	ND	ND	3.19	3.27
Apr-2015	0.000433 J	ND	0.0874	0.000393 J	0.000126 J	4.99	4.9	0.0015 J	0.0116	0.0044 J	0.0426 J	0.0169 J	ND	3.26	3.21
Nov-2015	0.000357 J	ND	0.093	0.000553 J	0.000155 J	5.87	5.7	0.0011 J	0.0118	0.0038 J	ND	0.0514	0.000188 J	3.39	3.34
May-2016	ND	ND	0.0921	0.00041 J	0.00022 J	5.45	4.52	0.0016 J	0.0118	0.0035 J	ND	ND	ND	3.56	3.17
Oct-2016	ND	ND	0.095	0.00038 J	ND	5.06	5.21 J+	0.0029 J	0.0135	0.0032 J	0.0705 J	ND	0.00013 J	3.2	3.47 J+
May-2017	ND	ND	0.0907	0.00042 J	ND	4.7	5.32	0.0035 J	0.0239	0.004 J	0.102 J	ND	0.0003 J	3.28	3.31
Oct-2017	ND	ND	0.0849	0.00046 J	0.0002 J	5.27	5.07	ND	0.0117	0.0036 J	ND	ND	ND	3.02	3.15

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-10A***													
May-2018	*ND*	*ND*	*0.0891 J*	*ND*	*0.0002 J*	5.4	5.2	*0.0054 J*	*0.0126 J*	*ND*	0.03	*ND*	*ND*	3.4	3.3
Nov-2018	*ND*	*ND*	0.085	0.00062	*0.00019 J*	5.3	5.2	*0.0064 J*	0.011	0.0047	0.085	0.07	*0.000068 J*	3.2	3.1
May-2019	*ND*	*ND*	0.081	0.00055	*ND*	5.4	5.5	*ND*	0.01	0.004	*ND*	0.037	*ND*	3.2	3.3
Oct-2019	*0.00012 J*	*0.00021 J*	0.089	0.00052	*0.0003 J*	5.8	5.5	0.0078	0.01	0.0047	*0.05 J*	0.049	*0.000069 J*	3.4	3.3
May-2020	*ND*	*ND*	0.087	0.00052	*0.00016 J*	5.7	5.6	*0.005 J*	0.012	0.0045	*0.028 J*	*0.02 J*	*ND*	3.4	3.3
Oct-2020	*ND*	*ND*	0.087	*0.0006 J*	*ND*	5.9	5.4	*0.0034 J*	0.012	*0.0074 J*	*0.038 J*	0.027	*ND*	3.6	3.2
Apr-2021	*ND*	*ND*	0.093	*0.00055 J*	*ND*	5.6	5.7	*0.003 J*	0.012	*0.0049 J*	*ND*	*ND*	*ND*	3.4	3.6
Oct-2021	*ND*	*ND*	0.095	0.00061	*ND*	5.6	6.1	0.0032	0.015	0.0057	*0.048 J*	*0.033 J*	*0.000037 J*	3.6	3.8
May-2022	*ND*	*ND*	0.094	0.00052	*ND*	5.6	5.6	0.0042	0.014	0.0054	0.097	0.082	*ND*	3.6	3.5
Oct-2022	*ND*	*ND*	0.09	0.00058	*ND*	5.6	6.2	0.0029	0.013	0.0044	0.093	0.087	*ND*	3.5	3.8

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-10A*												
Nov-1993	0.05	NA	ND	NA	2.7	NA	ND	NA	9.5	NA	NA	NA	0.02
Apr-1994	0.04	NA	ND	NA	2.39	NA	ND	NA	10.8	NA	NA	NA	0.07
Apr-1995	0.02	NA	ND	ND	2	NA	ND	ND	10.8	NA	ND	0.2	0.06
Oct-1996	0.028	0.026	NA	ND	ND	ND	ND	ND	13	13	ND	ND	0.53
Apr-1997	0.035	0.026	ND	ND	3.4	3.5	ND	ND	16	14	ND	ND	0.048
Oct-1997	0.041	0.03	0.0004	ND	2.43	1.52	ND	ND	12.7	12.7	ND	ND	0.021
Apr-1998	0.038	0.032	ND	ND	2.52	2.3	ND	ND	12.5	12.3	ND	ND	0.016
Apr-1999	0.035	0.03	NA	ND	2.29	2.18	ND	ND	12.6	12.2	ND	ND	0.013
Oct-1999	0.046	0.031	NA	0.02	2.61	2.37	ND	ND	14.1	12.7	ND	ND	0.013
Apr-2000	0.037	0.033	NA	ND	1.16	1.68	ND	ND	13.6	12.9	ND	ND	0.01
Oct-2000	0.06	0.035	NA	ND	2.44	2.27	ND	ND	14.8	14.1	ND	ND	0.013
Apr-2001	0.05	NA	NA	ND	2.48	NA	ND	ND	15.4	NA	ND	ND	0.015
Sep-2001	0.044	0.034	NA	0.011	2.17	2.11	ND	ND	14.7	14.2	ND	ND	0.014
Mar-2002	0.04	0.036	NA	0.012	3.27	2.47	ND	ND	17.8	17	ND	ND	0.02
Sep-2002	0.045	0.039	NA	0.012	3.36	2.92	ND	ND	16.4	16	ND	ND	0.016
Mar-2003	0.045	0.04	NA	ND	1.99	2.32	ND	ND	16.9	15.6	ND	ND	0.011
Oct-2003	0.049	0.047	NA	ND	4.57	2.88	ND	ND	15.8	15	ND	ND	0.011
Apr-2004	0.062	0.047	ND	ND	2.71	2.53	ND	ND	14.2	14.5	ND	ND	ND
Oct-2004	0.057	0.054	ND	ND	2.54	2.47	ND	ND	14.4	13.6	ND	ND	ND
Apr-2005	0.05	0.046	ND	ND	2.19	2.17	ND	ND	14.6	15.5	ND	ND	ND
Oct-2005	0.037	0.028	ND	ND	2.26	2.04	ND	ND	15.9	14.2	ND	ND	0.012
Mar-2006	ND	ND	ND	ND	2.14	2.17	ND	ND	16.8	15.9	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-10A***												
Sep-2006	0.027	0.034	*ND*	*ND*	2.3	2.33	*ND*	*ND*	16.5	14.9	*ND*	*ND*	*ND*
Mar-2007	0.024	0.029	*ND*	*ND*	2.18	2.15	*ND*	*ND*	16.8	15.6	*ND*	*ND*	0.011
Sep-2007	0.025	0.027	*ND*	*ND*	2.07	1.89	*ND*	*ND*	17.1	15.7	*ND*	*ND*	0.011
Mar-2008	0.025	0.024	*ND*	*ND*	2.19	2.04	*ND*	*ND*	18.6	16.6	*ND*	*ND*	0.011
Sep-2008	0.025	0.024	*ND*	*ND*	2.04	1.93	*ND*	*ND*	16.5	15.5	*ND*	*ND*	0.01
Mar-2009	0.026	0.025	*ND*	*ND*	2.14	2.09	*ND*	*ND*	17.4	17	*ND*	0.012	*ND*
Oct-2009	0.03	0.029	*ND*	*ND*	2.13	2.04	*ND*	*ND*	19.7	19.1	*ND*	*ND*	0.014
Apr-2010	0.032	0.029	*ND*	0.011	2.48	2.33	*ND*	*ND*	21.5	20.5	*ND*	*ND*	0.014
Oct-2010	0.038	0.037	*ND*	0.014	2.46	2.36	*ND*	*ND*	22.3	21.9	*ND*	*ND*	0.018
Apr-2011	0.042	0.04	*ND*	0.014	2.41	2.06	*ND*	*ND*	22.3	19	*ND*	*ND*	0.014
Sep-2011	0.041	0.039	*ND*	0.012	2.48	2.41	*ND*	*ND*	22.3	22	*ND*	*ND*	0.015
Mar-2012	0.041	0.043	*ND*	*ND*	2.34	2.41	*ND*	*ND*	22.3	22.9	*ND*	*ND*	0.015
Sep-2012	0.0422	0.0415	*0.000024 J*	0.0117	2.58	2.43	*ND*	*ND*	25.8	24.9	*0.0011 J*	*ND*	0.0128
Mar-2013	0.0507	0.0489	*0.000052 J*	0.0113	2.25	2.2	*0.000642 J*	*ND*	20.8	19.5	*ND*	*ND*	0.0218
Oct-2013	0.0521	0.0442	*ND*	0.0115	2.46	2.25	*0.000744 J*	*ND*	22.5	21.6	*0.000099 J*	*0.0016 J*	0.0246
Mar-2014	0.0489	0.0513	*ND*	*0.0108 J*	2.18	2.13	*ND*	*ND*	20.2	18.9	*ND*	*ND*	0.0163
Oct-2014	0.053	0.0518	*0.000023 J*	0.0111	2.37	2.48	*0.0018 J*	*ND*	22.9	24.1	*0.0017 J*	*ND*	0.018
Apr-2015	0.0569	0.0564	*0.000043 J*	0.0121	2.38	2.33	*0.0017 J*	*ND*	23.7	23.4	*ND*	*ND*	0.0197
Nov-2015	0.0577	0.0559	*ND*	0.0124	2.63	2.56	*0.001 J*	*ND*	26.3	25.6	*0.000146 J*	*ND*	0.0165
May-2016	0.0622	0.0596	*ND*	0.0119	2.62	2.45	*0.00079 J*	*ND*	26.9	23.9	*ND*	*ND*	*0.016 J,B*
Oct-2016	*0.0707 J+*	*0.0636 J+*	*ND*	0.0139	2.53	2.62	0.0008	*ND*	22.2	23.6	*ND*	*ND*	*0.015 J*
May-2017	0.135	0.0595	*ND*	0.0133	2.38	2.42	*0.00073 J*	*ND*	22.5	23.2	*ND*	*ND*	*0.0157 J*
Oct-2017	0.0555	0.0538	*ND*	0.0122 B	2.15	2.27	*0.00051 J*	*ND*	21.1	22.8	*ND*	*ND*	*0.0173 J*
May-2018	0.063	0.0558	*ND*	*0.022 J*	*2.5 J*	*2 J*	*ND*	*ND*	26.9	25.7	*ND*	*ND*	0.0227

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-10A***												
Nov-2018	0.053	0.05	*ND*	0.015	*2.3 J*	*2.2 J*	*0.00074 J*	*ND*	23	22.8	*ND*	*ND*	0.021
May-2019	0.058	0.055	*ND*	0.012	*ND*	*ND*	*ND*	*ND*	22.5	21.5	*ND*	0.0033	0.018
Oct-2019	0.073	0.06	*ND*	0.013	*2.2 J*	*ND*	*0.00055 J*	*ND*	24.5	24.7	*ND*	*ND*	0.024
May-2020	0.06	0.056	*ND*	0.013	*2.6 J*	*1.8 J*	*0.00082 J*	*ND*	25	22.3	*ND*	*ND*	0.02
Oct-2020	0.058	0.055	*ND*	0.013	*ND*	*2.1 J*	*ND*	*ND*	23.6	21.9	*ND*	*0.001 J*	*0.025 J*
Apr-2021	0.059	0.061	*0.00006 J*	0.015	2.3	2.3	*ND*	*ND*	23.3	24.6	*ND*	*ND*	0.021
Oct-2021	0.06	0.064	*ND*	0.016	2.1	2.1	*0.0012 J*	*ND*	22.9	24.1	*0.000039 J*	*ND*	0.022
May-2022	0.064	0.061	*ND*	0.016	2.3	2.3	*0.0012 J*	*ND*	23.9	23.6	*ND*	*ND*	0.021
Oct-2022	0.062	0.064	*ND*	0.016	2.2	2.5	*ND*	*ND*	24.3	26.4	*ND*	*ND*	0.024

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-10A***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	28	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-10A*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-10A*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.9 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.9 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-10A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-10A***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	0.63 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.32 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.27 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.21 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.22 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-10A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.163 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-10A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-10A***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.14 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-10A***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.3 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-14***											
Nov-1993	7	7	ND	ND	2.3	ND	ND	5.2	20.2	ND	10	1.41
Apr-1994	ND	ND	ND	ND	2	ND	ND	4.99	16.5	ND	38	ND
Aug-1994	9.5	9.5	ND	ND	2.2	0.3	ND	4.9	25.2	2.6	ND	1.69
Sep-1994	10	10	ND	ND	2.3	0.2	ND	5.9	25.6	2.4	18	1.6
Nov-1994	ND	ND	ND	ND	2.2	ND	ND	5.4	18.4	ND	ND	1.5
Apr-1995	ND	ND	0.3	ND	2.1	ND	ND	5.3	20.3	ND	22	1.4
Apr-1997	ND	5	ND	ND	3	0.06	ND	NA	NA	ND	32	5.8
Oct-1997	3	3	0.23	ND	1	ND	ND	7.68	21.1	ND	ND	11
Apr-1998	2	2	0.52	ND	1.92	0.12	ND	6.51	20.1	ND	16	1.7
Apr-1999	9	9	0.28	ND	3.77	ND	ND	6.11	35.1	ND	38	2.6
Oct-1999	4	4	0.21	ND	2.56	ND	ND	5.62	28.2	ND	29	2
Apr-2000	13	13	ND	ND	4.29	ND	ND	7.28	28	ND	20	3.7
Oct-2000	4	NA	ND	11	3.01	ND	ND	6.16	45.9	5.5	26	2.77
Apr-2001	2	NA	ND	ND	2.4	ND	ND	NA	NA	ND	28	3.43
Sep-2001	32	32	1.1	109	3.88	ND	ND	6.09	43	ND	45	2.52
Mar-2002	ND	ND	ND	ND	3.44	ND	ND	6	42	ND	ND	3.81
Sep-2002	2.8	2.8	ND	60	2.99	ND	ND	5.9	40.2	1.15	24	3.82
Mar-2003	3.5	3.5	ND	ND	31.9	ND	ND	5.8	34.2	7.67	22	2.43
Oct-2003	3.1	3	ND	ND	2.48	ND	ND	5.6	35.2	ND	15	2.86
Apr-2004	2.8	2.8	ND	ND	2.58	ND	ND	5.7	26.6	ND	37	3.02
Oct-2004	2.8	2.8	ND	ND	2.38	ND	ND	5.9	28.2	ND	31	3.22
Apr-2005	2.7	2.7	ND	ND	2.62	ND	ND	5.6	24.6	ND	33	2.1
Oct-2005	3.2	3.2	0.23	ND	3.47	0.08	ND	4.7	16.8	ND	40	3.14
Mar-2006	4.2	4.2	ND	ND	3.49	0.1	ND	6.7	19.8	ND	30	2.18
Sep-2006	4.4	4.4	ND	ND	3.79	ND	ND	5.2	23.7	ND	ND	2.66
Mar-2007	9.7	9.7	0.6	ND	3.47	1.9	ND	5.6	32.1	ND	ND	2.55
Sep-2007	8.5	8.5	0.29	ND	10.3	ND	ND	6.3	38.9	ND	40	2.47
Mar-2008	8.9	8.9	ND	ND	4.4	ND	ND	5.9	46.2	ND	18	1.36
Sep-2008	3.2	3.2	ND	19	5.01	ND	ND	5.6	37.5	ND	15	2.9
Mar-2009	21	21	ND	ND	5.18	ND	ND	5.8	56.9	ND	15	3.76
Oct-2009	13	13	ND	ND	5.95	ND	ND	5.5	50.9	ND	39	5.29
Apr-2010	18.9	18.9	ND	ND	6.5	ND	ND	5.1	57.6	ND	46	27.2
Oct-2010	19	19	ND	ND	7.52	ND	ND	4.9	46.4	ND	59	5.99
Apr-2011	6.7	6.7	ND	ND	6.4	ND	ND	4.6	34.7	ND	25	4.7
Sep-2011	8.9	8.9	ND	ND	6.57	ND	ND	5.8	47.8	ND	43	5.24
Mar-2012	7.7	7.7	ND	ND	5.75	ND	ND	4.7	33.8	ND	ND	6.78
Sep-2012	7.76	7.76	ND	ND	5.16	0.115	ND	4.5	31.8	ND	19	3.53

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-14***											
Mar-2013	9.68	9.68	*ND*	*ND*	5.46	0.107	*ND*	4.1	37.1	*0.385 J*	16	3.62
Oct-2013	9.6	9.6	*ND*	*ND*	5.5	0.101	*ND*	4.2	40.5	*ND*	*ND*	3.04
Mar-2014	10.7	10.7	*ND*	*ND*	5.75	0.113	*ND*	5.8	35.9	*ND*	32	3.23
Oct-2014	5.5	5.5	*ND*	*ND*	6.06	0.136	*ND*	5.3	38.3	*ND*	*ND*	3.86
Apr-2015	7.52	7.52	*ND*	*ND*	5.98	0.105	*ND*	5.2	48.2	*ND*	30	4.07
Nov-2015	6.68	6.68	*ND*	*ND*	5.88	0.129	*ND*	5.8	55.3	*ND*	*19 J*	4.08
May-2016	7.24	7.24	*ND*	*ND*	6.39	0.12	*ND*	6	67.4	*ND*	*21 J*	4.1
Oct-2016	7.68	7.68	*ND*	*5 J*	6.46	*NA*	*NA*	5.9	73.2	*ND*	31	4
May-2017	7.28	7.28	*ND*	*ND*	7.17	0.131	*ND*	5	68.5	*ND*	*24 J*	4.2
Oct-2017	14	14	*ND*	*ND*	7.41	0.118	*ND*	6.1	92.5	*ND*	*21 J*	4.5
May-2018	34	34	*ND*	*ND*	8.6	0.1	*ND*	6.2	96.8	*ND*	*ND*	6.8
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	9.8	*ND*	0.02	5.96	100.7	*ND*	16	6.7
May-2019	*ND*	*NA*	*ND*	*ND*	10.1	*ND*	0.016 H1	5.89	71.3	*ND*	24	6.2
Oct-2019	*2.5 JH1*	*NA*	*ND*	*10.4 J*	6.9	*0.053 J*	0.053 H1	6.09	81.5	*ND*	*ND*	5.7
May-2020	12	*NA*	*ND*	*ND*	8.1	*ND*	*0.0067 J*	5.3	71.1	*ND*	48	7.3
Oct-2020	*ND*	*NA*	*ND*	*ND*	8.4	*ND*	0.019 H1	5.26	74.7	*ND*	*ND*	7.1
Apr-2021	*1 J4c*	*NA*	*ND*	*ND*	8.8	*0.074 J*	*ND*	5.59	67.7	*ND*	30	6.9
Oct-2021	*8 J6c*	*NA*	*ND*	*6.1 JMH*	7.7	*ND*	*ND*	5.75	93.5	*ND*	*ND*	7.26
May-2022	*2 J2c*	*NA*	*ND*	*ND*	7.3	*ND*	0.024 MH	5.67	106	*ND*	14	8.4 N3
Oct-2022	*2 JB3c*	*NA*	*ND*	*6.1 J*	10.9	*0.075 J*	0.043	5.73	105.7	*ND*	29	7.9 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14***													
Nov-1993	NA	ND	ND	NA	ND	0.2	NA	ND	NA	ND	8.8	2.7	ND	0.22	NA
Apr-1994	NA	ND	ND	NA	ND	ND	NA	ND	NA	ND	1.6	1	ND	ND	NA
Aug-1994	NA	ND	ND	NA	ND	0.33	NA	ND	NA	ND	5	3.9	ND	0.21	NA
Sep-1994	NA	ND	ND	NA	ND	0.22	NA	ND	NA	ND	6.2	4.9	ND	0.25	NA
Nov-1994	NA	ND	ND	NA	ND	0.25	NA	ND	NA	0.04	2.5	2.7	ND	0.2	NA
Apr-1995	ND	ND	0.7	ND	ND	0.2	NA	ND	ND	ND	2.4	1.3	ND	0.23	NA
Oct-1996	ND	ND	0.011	ND	ND	0.43	0.33	ND	ND	ND	5	0.48	ND	ND	ND
Apr-1997	ND	ND	0.014	ND	ND	0.32	0.48	ND	ND	ND	3.6	2.8	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	0.274	0.289	ND	ND	ND	10.2	3.66	ND	0.211	0.216
Apr-1998	ND	ND	ND	ND	ND	0.298	0.391	ND	ND	ND	16.2	2.8	ND	0.237	0.237
Apr-1999	ND	ND	0.012	ND	ND	0.447	0.436	ND	ND	ND	19.1	7.85	ND	0.364	0.345
Oct-1999	ND	ND	0.013	ND	ND	0.498	0.438	ND	ND	ND	12.7	9.24	ND	0.383	0.34
Apr-2000	ND	ND	0.013	ND	ND	0.747	0.442	ND	ND	0.008	15.1	8.34	ND	0.437	0.351
Oct-2000	ND	ND	0.018	ND	ND	0.5	0.458	ND	ND	ND	122	12.3	ND	0.369	0.35
Apr-2001	ND	ND	0.018	ND	ND	0.704	NA	ND	ND	ND	87	NA	0.003	0.405	NA
Sep-2001	ND	ND	0.106	ND	ND	1.01	0.5	0.02	ND	0.121	1140	10.3	**0.046**	0.543	0.371
Mar-2002	ND	ND	0.022	ND	ND	0.816	0.478	0.014	ND	0.015	118	9.94	0.007	0.431	0.368
Sep-2002	ND	ND	0.024	ND	ND	0.867	0.415	ND	ND	0.044	43.9	8.96	0.005	0.404	0.341
Mar-2003	ND	ND	0.017	ND	ND	0.427	0.429	ND	ND	0.017	48.7	3.58	0.004	0.331	0.311
Oct-2003	ND	ND	0.024	ND	ND	0.648	0.316	ND	ND	0.043	195	6.42	0.004	0.302	0.24
Apr-2004	ND	ND	0.014	ND	ND	0.603	0.311	ND	ND	ND	80.4	7.38	0.002	0.37	0.236

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14***													
Oct-2004	ND	ND	0.014	ND	ND	0.788	0.286	ND	ND	0.043	59.3	6.44	0.002	0.303	0.232
Apr-2005	ND	ND	0.012	ND	ND	0.36	0.363	ND	ND	ND	14.3	5.68	ND	0.287	0.267
Oct-2005	ND	ND	0.011	ND	ND	0.659	0.47	ND	ND	0.014	3.11	0.264	ND	0.363	0.321
Mar-2006	ND	ND	ND	ND	ND	0.269	0.231	ND	ND	ND	5.84	0.262	ND	0.367	0.357
Sep-2006	ND	ND	ND	ND	ND	0.454	0.448	ND	ND	ND	1.96	1.22	ND	0.371	0.369
Mar-2007	ND	ND	0.01	ND	ND	0.459	0.421	ND	ND	ND	21.9	6.27	ND	0.341	0.331
Sep-2007	ND	0.002	ND	ND	ND	0.421	0.394	ND	ND	ND	14.3	11.3	ND	0.346	0.33
Mar-2008	ND	ND	0.016	ND	ND	0.547	0.49	ND	ND	0.013	45.6	7.07	ND	0.435	0.382
Sep-2008	ND	ND	0.016	0.002	ND	0.495	0.292	0.012	ND	0.029	70.7	10.4	ND	0.393	0.306
Mar-2009	ND	ND	0.012	ND	ND	0.72	0.612	ND	ND	0.013	27.7	16.4	ND	0.477	0.494
Oct-2009	ND	ND	0.017	ND	ND	0.957	0.624	0.043	ND	0.066	39	10.2	ND	0.705	0.585
Apr-2010	ND	ND	0.018	ND	ND	0.974	0.76	ND	ND	ND	22	19.8	ND	0.707	0.568
Oct-2010	ND	0.003	0.016	ND	ND	0.985	0.927	0.02	ND	0.039	39.9	28.2	ND	0.857	0.82
Apr-2011	ND	ND	0.018	ND	ND	0.787	0.779	ND	ND	ND	23.3	18.5	ND	0.666	0.655
Sep-2011	ND	0.005	0.02	ND	ND	0.851	0.903	0.047	0.012	0.09	54.1	22.1	ND	0.741	0.728
Mar-2012	ND	ND	0.017	ND	ND	1.09	0.917	0.015	ND	0.032	29.6	20.4	ND	0.987	0.86
Sep-2012	ND	ND	0.0156	0.00008 J	ND	0.608	0.614	0.0021 J	0.0024 J	0.0028 J	5	4.43	ND	0.488	0.511
Mar-2013	ND	ND	0.0158	0.000123 J	ND	0.691	0.695	0.0026 J	0.0026 J	0.0038 J	13.7	5	ND	0.46	0.457
Oct-2013	ND	ND	0.0143	ND	ND	0.544	0.533	0.0024 J	0.0023 J	0.0016 J	5.94	6	ND	0.409	0.431
Mar-2014	0.000447 J	ND	0.0139	ND	ND	0.572	0.583	0.0021 J	0.0025 J	0.0065 J	16.8	5.61	ND	0.438	0.435
Oct-2014	0.000554 J	ND	0.0185	0.000226 J	0.000111 J	0.716	0.679	0.000749 J	0.003 J	0.0047 J	19.3	6.29	ND	0.504	0.493
Apr-2015	0.0011 J	ND	0.0186	ND	0.000104 J	0.726	0.767	0.0031 J	0.0034 J	0.0041 J	21.3	8.53	ND	0.547	0.586
Nov-2015	ND	0.004	0.0216	0.000682 J	0.000281 J	0.783	0.782	0.0016 J	0.0037 J	0.0171	69.1	7.37	0.00054 J	0.516	0.506
May-2016	ND	ND	0.0169	0.00011 J	ND	0.709	0.715	0.0012 J	0.003	0.0024 J	10.9	7.06	ND	0.564	0.512

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14***													
Oct-2016	*ND*	*ND*	0.0199	*0.00032 J*	*ND*	0.701	*0.727 J+*	*0.0013 J*	0.0036	0.0084	40.9	10.1	*0.00015 J*	0.544	*0.55 J+*
May-2017	*ND*	*ND*	0.0221	*0.00012 J*	*ND*	0.731	0.807	*0.00073 J*	0.0038	*0.0018 J*	8.84	9.11	*ND*	0.576	0.594
Oct-2017	*ND*	*ND*	0.0207	*0.00012 J*	*ND*	0.713	0.948	*ND*	0.0054	*0.0015 J*	10.4	11.4	*ND*	0.664	0.698
May-2018	*ND*	*ND*	0.026	*0.000097 J*	*0.000043 J*	1.2	1.1	*0.0018 J*	0.0077	0.006	21.4	18.3	*0.000044 JB*	*0.95 J*	*0.89 J*
Nov-2018	*ND*	*ND*	0.025	*0.000065 J*	*0.000045 J*	1.1	1.1	*0.002 J*	0.0075	0.0022	22.4	20	*0.00012 J*	*0.93 J*	*0.94 J*
May-2019	*ND*	*ND*	0.024	*ND*	*ND*	1.1	1.1	*ND*	0.0079	*ND*	21.2	16.6	*ND*	*ND*	*ND*
Oct-2019	0.00059	0.0034	0.053	0.0021	*0.00033 J*	1.1	1.1	0.016	0.011	0.065	251	15.7	*0.00051 J*	0.74	*0.84 J*
May-2020	*ND*	*ND*	0.027	*0.000072 J*	*ND*	1.3	1.2	*0.0041 J*	0.0061	*0.0015 J*	12.2	11.4	*ND*	1	*0.95 J*
Oct-2020	*ND*	*ND*	0.026	*ND*	*ND*	1.2	1.3	*0.006 J*	0.0052	*ND*	23	13.4	*ND*	0.99	1
Apr-2021	*ND*	*ND*	0.026	*0.00018 J*	*ND*	1.2	1.3	*0.0017 J*	0.0062	0.0052	20.4	7.9	*ND*	0.96	1.1
Oct-2021	*0.000063 JB*	*ND*	0.028	*0.00016 J*	*ND*	1.2	1.3	*0.0022 J*	0.0084	0.0033	26.6	8.5	*ND*	1	1.1
May-2022	*ND*	*ND*	0.037	0.0006	*ND*	1.3	1.3	0.015	0.011	0.022	60.3	12.1	*ND*	1.2	1.2
Oct-2022	*ND*	*ND*	0.035	0.00079	*ND*	1.3	1.5	0.0026	0.0094	0.031	45.6	10.5	*ND*	1.1	1.3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-14*												
Nov-1993	0.09	NA	ND	NA	0.29	NA	ND	NA	1.2	NA	NA	NA	ND
Apr-1994	0.029	NA	ND	NA	ND	NA	ND	NA	1.4	NA	NA	NA	ND
Aug-1994	0.06	NA	ND	NA	0.39	NA	ND	NA	0.94	NA	NA	NA	0.01
Sep-1994	0.08	NA	ND	NA	0.26	NA	ND	NA	1.1	NA	NA	NA	0.04
Nov-1994	0.07	NA	ND	NA	0.22	NA	ND	NA	0.91	NA	NA	NA	0.01
Apr-1995	0.02	NA	ND	ND	0.42	NA	ND	0.01	0.92	NA	ND	ND	0.03
Oct-1996	0.034	0.038	NA	ND	ND	ND	ND	ND	1.7	1.6	ND	ND	0.087
Apr-1997	0.062	0.055	**0.0045**	ND	1.8	ND	ND	ND	1.1	1.7	ND	ND	ND
Oct-1997	0.063	0.065	ND	ND	0.711	0.711	ND	ND	1.12	1.16	ND	ND	ND
Apr-1998	0.043	0.043	ND	ND	ND	0.566	ND	ND	1.16	1.16	ND	ND	ND
Apr-1999	0.091	0.091	NA	ND	ND	0.711	ND	ND	1.45	1.43	ND	ND	ND
Oct-1999	0.091	0.087	NA	ND	ND	0.594	ND	ND	1.53	1.37	ND	ND	ND
Apr-2000	0.078	0.071	NA	ND	ND	ND	ND	ND	3.04	1.63	ND	ND	0.011
Oct-2000	0.071	0.096	NA	ND	0.607	0.517	ND	ND	1.53	1.52	ND	ND	ND
Apr-2001	0.075	NA	NA	ND	0.514	NA	ND	ND	3.27	NA	ND	ND	ND
Sep-2001	ND	0.087	NA	0.016	ND	ND	ND	ND	2.94	1.57	ND	ND	0.183
Mar-2002	0.058	0.084	NA	ND	2.48	1.35	ND	ND	2.66	1.51	ND	ND	ND
Sep-2002	0.075	0.077	NA	ND	1.15	ND	ND	ND	1.8	1.44	ND	ND	0.012
Mar-2003	0.042	0.05	NA	ND	1.19	ND	ND	ND	1.57	1.48	ND	ND	0.019
Oct-2003	0.022	0.069	NA	ND	1.47	1.21	ND	ND	2.28	1.29	ND	ND	ND
Apr-2004	0.063	0.074	0.0002	ND	0.63	ND	ND	ND	1.95	1.26	ND	ND	0.03
Oct-2004	0.071	0.071	0.0004	ND	0.875	ND	ND	ND	1.86	1.33	ND	ND	0.016

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14***												
Apr-2005	0.067	0.064	*ND*	*ND*	0.59	0.51	*ND*	*ND*	1.31	1.27	*ND*	*ND*	*ND*
Oct-2005	0.045	0.041	*ND*	*ND*	0.63	0.558	*ND*	*ND*	2.06	1.43	*ND*	*ND*	*ND*
Mar-2006	0.047	0.04	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.57	1.57	*ND*	*ND*	*ND*
Sep-2006	0.054	0.053	*ND*	*ND*	*ND*	0.502	*ND*	*ND*	1.88	1.9	*ND*	*ND*	*ND*
Mar-2007	0.065	0.059	0.0002	*ND*	*ND*	*ND*	*ND*	*ND*	1.81	1.72	*ND*	*ND*	*ND*
Sep-2007	0.091	0.087	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.96	1.82	*ND*	*ND*	*ND*
Mar-2008	0.074	0.067	0.0004	*ND*	0.586	*ND*	*ND*	*ND*	2.29	2.05	*ND*	*ND*	0.014
Sep-2008	0.082	0.068	0.0005	*ND*	*ND*	*ND*	*ND*	*ND*	2.45	2.04	*ND*	*ND*	0.011
Mar-2009	0.137	0.136	*ND*	0.011	0.527	0.555	*ND*	*ND*	2.41	2.65	*ND*	*ND*	0.019
Oct-2009	0.247	0.079	0.0002	0.063	*ND*	*ND*	*ND*	*ND*	3.11	2.63	*ND*	*ND*	0.032
Apr-2010	0.28	0.152	*ND*	*ND*	0.648	0.541	*ND*	*ND*	3.26	3.08	*ND*	*ND*	0.013
Oct-2010	0.244	0.218	*ND*	0.029	0.515	0.524	*ND*	*ND*	3.55	3.45	*ND*	*ND*	0.011
Apr-2011	0.171	0.166	*ND*	0.012	*ND*	*ND*	*ND*	*ND*	2.91	2.9	*ND*	*ND*	*ND*
Sep-2011	0.227	0.17	*ND*	0.057	0.515	0.533	*ND*	*ND*	2.99	2.89	*ND*	*ND*	0.02
Mar-2012	0.203	0.188	*ND*	0.017	0.707	0.575	*ND*	*ND*	3.97	3.39	*ND*	*ND*	0.011
Sep-2012	0.049	0.0501	*ND*	*0.0023 J*	*0.491 J*	0.501	*ND*	*ND*	2.45	2.47	*0.000477 J*	*ND*	*ND*
Mar-2013	0.0575	0.0526	*0.000145 J*	*0.0027 J*	*0.491 J*	*0.48 J*	*ND*	*ND*	2.3	2.3	*ND*	*ND*	0.0101
Oct-2013	0.056	0.0606	*ND*	*0.0021 J*	*0.427 J*	*0.452 J*	*ND*	*ND*	2.02	2.17	*0.000108 J*	*ND*	0.0105
Mar-2014	0.0556	0.0557	*ND*	*0.0031 J*	*0.456 J*	*0.458 J*	*ND*	*ND*	2.17	2.18	*ND*	*ND*	*0.0027 J*
Oct-2014	0.062	0.0581	*0.000081 J*	*0.0028 J*	0.506	*0.499 J*	*0.000906 J*	*ND*	2.58	2.55	*0.000972 J*	*ND*	*0.0091 J*
Apr-2015	0.0748	0.0748	*ND*	*0.0037 J*	0.546	0.584	*0.000938 J*	*ND*	2.67	2.84	*ND*	*ND*	*0.0067 J*
Nov-2015	0.0735	0.0661	*0.000137 J*	*0.004 J*	0.567	0.56	0.004	*ND*	2.57	2.55	**0.0025 R,C**	*ND*	0.0101
Dec-2015	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*0.000588 J*	*NA*	*NA*
May-2016	0.0651	0.0658	*ND*	*0.0028 J*	0.584	0.509	*ND*	*ND*	2.64	2.37	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14***												
Oct-2016	*0.0756 J+*	*0.0811 J+*	*ND*	*0.0034 J*	0.579	0.557	*ND*	*ND*	2.57	2.6	*ND*	*ND*	*0.0062 J*
May-2017	0.0645	0.0693	*ND*	*0.0028 J*	0.561	0.596	*ND*	*ND*	2.59	2.64	*ND*	*ND*	*ND*
Oct-2017	0.0768	0.0811	*ND*	*0.0036 J*	0.58	0.616	*ND*	*ND*	3.06	3.16	*ND*	*ND*	*ND*
May-2018	0.13	0.12	*ND*	0.0066	*ND*	*ND*	*0.00038 J*	*ND*	*4 J*	*3.6 J*	*ND*	*ND*	0.006
Nov-2018	0.17	0.16	*ND*	0.0071	*ND*	*ND*	*0.00016 J*	*ND*	*4.3 J*	*4.4 J*	*ND*	*ND*	0.011
May-2019	0.2	0.24 M1	*ND*	0.0068	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0056
Oct-2019	0.22	0.17	*0.00017 J*	0.019	*1.3 J*	*ND*	*ND*	*ND*	*3.3 J*	*3.5 J*	*ND*	0.0057	0.03
May-2020	0.098	0.092	*ND*	0.0053	*ND*	*ND*	*ND*	*ND*	*4 J*	*2.8 J*	*ND*	*ND*	*0.0045 J*
Oct-2020	0.16	0.15	*ND*	0.0084	*ND*	*ND*	*ND*	*ND*	*3.7 J*	*3.3 J*	*ND*	0.0065	*ND*
Apr-2021	0.14	0.15	*0.00007 J*	*0.0069 J*	0.71	0.68	*ND*	*ND*	3.5	3.3	*ND*	*ND*	*0.0035 J*
Oct-2021	0.16	0.163	*ND*	0.0086	0.64	0.68	*ND*	*ND*	3.2	3.5	*ND*	*ND*	*0.0034 J*
May-2022	0.18	0.18	*ND*	0.023	0.77	0.71	*ND*	*ND*	3.8	3.7	*ND*	*ND*	0.0062
Oct-2022	0.14	0.14	*ND*	0.013	0.72	0.8	*ND*	*ND*	3.5	4.2	*ND*	*ND*	0.0074 B

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7 J	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	2.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	2.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	3.1	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	3.5	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	3.8	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	4.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.4 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	4.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	2.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	3.48	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	3.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	3.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Aug-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	1.6	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*0.6 J*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14***															
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	0.6 J
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	1.2
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	1.4
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	1.1
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	1.6
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	2
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	1.9
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.69	2
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.34 J	ND	ND	ND	ND	ND	4.61	3.3
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.36 J	ND	ND	ND	ND	ND	6.33	4.38
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND	ND	6.94	4.58
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.27	4.48
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.8	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14***															
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12.9 J	5.1
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	6.4	6.3
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	0.1 J	ND	ND	ND	6.6	7.6
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J,B	ND	0.2 J	ND	ND	ND	6.3	7.4
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	0.2 J	ND	ND	ND	6	6.8
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11.4	7.5
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.8	9.4 N3
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3 CL	6.5 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.1	4.5
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.6	3.8
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	7.8	4.3
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.29 J	ND	0.912 J	ND	ND	ND	4.73 J	6.33
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	6.5	4.4
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	7.3	4.1
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	6.2	4.1

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14***															
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	1.52	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.56	ND	ND	ND	ND	0.37 J	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	1.86	ND	ND	ND	ND	0.5 J	0.47 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	2.87	ND	ND	ND	ND	0.6 J	0.51 J	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	0.54 J	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.64	*ND*	*ND*	*ND*	*ND*	*0.54 J*	*0.42 J*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.5	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	4.1	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.5 J*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.9	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*0.6 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	4.8	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.5 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	4.4	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.9	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.494 J*	*ND*	*ND*	4.19	*ND*	*ND*	*ND*	*ND*	*0.91 J*	*0.35 J*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.2	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.2	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-14A***											
Nov-1993	ND	ND	0.2	ND	3.1	ND	ND	5.07	15.8	2.3	ND	1.31
Apr-1994	ND	ND	0.1	ND	2.5	ND	ND	4.84	17.8	ND	12	ND
Apr-1995	10.3	10.3	ND	ND	3.3	ND	ND	5.3	28.5	2.4	18	2.1
Apr-1997	ND	4	ND	ND	3	0.03	ND	NA	NA	ND	40	4.8
Oct-1997	ND	ND	0.27	ND	2.16	ND	ND	7.1	18.21	ND	ND	ND
Apr-1998	ND	ND	0.22	ND	2.6	0.1	ND	6.78	126.4	0.69	15	3.2
Apr-1999	ND	ND	0.29	ND	4.77	ND	ND	5.74	29.6	ND	46	2.9
Oct-1999	12	12	0.14	ND	4.26	ND	ND	4.85	26.2	ND	36	2.9
Apr-2000	3	3	ND	ND	6.79	ND	ND	6.99	52	ND	24	4.7
Oct-2000	2.5	NA	ND	ND	4.66	ND	ND	6.08	28.8	15	16	4.46
Apr-2001	2.8	NA	ND	ND	4.67	ND	ND	NA	NA	ND	29	3.92
Sep-2001	3.4	3.4	ND	ND	5.92	ND	ND	5.59	35	ND	26	3.58
Mar-2002	2	2	ND	ND	7.48	ND	ND	5.8	37	ND	14	4.37
Sep-2002	4	4	ND	ND	6.88	ND	ND	6.3	42.9	ND	27	3.38
Mar-2003	6.5	6.5	ND	ND	60.7	ND	ND	6.5	54.4	7.43	59	3.79
Oct-2003	4.6	4.6	ND	ND	4.89	ND	ND	5.7	38.3	ND	34	4.24
Apr-2004	2.1	2.1	ND	11	4.01	ND	ND	6.2	22.8	ND	32	2.71
Oct-2004	1.9	1.9	ND	ND	5.22	ND	ND	4.8	30.1	ND	47	4.51
Apr-2005	2.6	2.6	ND	ND	5.11	ND	ND	4.8	26.1	ND	37	4
Oct-2005	4.2	4.2	0.21	ND	6.87	ND	ND	4.4	33.1	ND	48	4.36
Mar-2006	6.7	6.7	ND	ND	6.89	ND	ND	6.8	40.7	1.15	34	2.69
Sep-2006	6.4	6.4	ND	ND	7.87	ND	ND	5	45	ND	31	4.51
Mar-2007	4.7	4.7	ND	ND	6.58	ND	ND	5.5	47.2	ND	ND	3.4
Sep-2007	3.8	3.8	0.31	ND	89.5	ND	ND	5.8	43.5	29.9	24	4.47
Mar-2008	16	16	ND	ND	13.9	ND	ND	5.2	62.4	1.93	37	4.15
Sep-2008	13	13	ND	27	9.82	ND	ND	5.1	55.7	ND	39	4.9
Mar-2009	12	12	ND	ND	9.92	ND	ND	5	74.6	ND	31	4.64
Oct-2009	9.9	9.9	ND	ND	10.1	ND	ND	5.1	66.7	ND	19	5.84
Mar-2010	11	11	ND	10.1	8.05	ND	ND	5.31	71	0.97	ND	3.26
Oct-2010	9.3	9.3	ND	ND	8.46	ND	ND	4.2	46.8	ND	32	3.83
Apr-2011	13	13	ND	ND	9.4	ND	0.02	5	51.9	ND	40	4.1
Sep-2011	15	15	0.22	ND	8.85	ND	ND	5.3	56.7	ND	47	7.08
Mar-2012	5.9	5.9	0.26	ND	9.58	0.06	ND	4.4	44.7	ND	18	4.53
Sep-2012	11.2	11.2	ND	ND	10.7	ND	ND	4.1	58.1	ND	46	3.24
Mar-2013	10.6	10.6	ND	ND	11.8	0.0417 J	ND	3.9	65.1	0.595 J	38	5.14
Oct-2013	20.5	20.5	ND	ND	12.7	0.0382 J	ND	4.4	115.8	ND	47	4.31
Mar-2014	15	15	ND	23	13.7	0.0274 J	ND	5.3	65	ND	54	4.82

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-14A***											
Oct-2014	2.2	2.2	*ND*	*ND*	10.7	0.0948	*ND*	4.9	51	*ND*	*ND*	4
Apr-2015	4.44	4.44	*ND*	*8 J*	11.1	0.0572	*ND*	4.4	51.9	*ND*	44	4.34
Nov-2015	*ND*	*ND*	*ND*	13	9.08	*ND*	*ND*	5.3	71.1	3.34	45	5.31
May-2016	3.72	3.72	*ND*	*5 J*	10.3	*ND*	*ND*	5.5	105.6	5.35	60	10.6
Oct-2016	1.92	1.92	*ND*	*6 J*	14.8	*NA*	*NA*	5.8	130.3	8.02	66	7.1
May-2017	7.2	7.2	*0.154 J*	10	15.6	*ND*	*ND*	5.2	157.9	11.7	66	18.4
Oct-2017	16.5	16.5	0.228	*8 J+*	17	*ND*	*ND*	5.5	165.2	15.5	135	22.6
May-2018	56	56	0.35	*16.5 J*	18.8	*0.064 J*	*ND*	5.75	207.6	*ND*	104	39.1
Nov-2018	74	74	0.2	*16.5 J*	14.1	*ND*	*0.007 J*	6.07	257.7	*ND*	149	28.4
May-2019	12 H1	*NA*	*ND*	*ND*	4.5	*ND*	*ND*	6.04	57.2	*ND*	31	*ND*
Oct-2019	*ND*	*NA*	*ND*	*ND*	4	*0.039 J*	0.034	5.99	59.4	*ND*	28	2.1
May-2020	30	*NA*	*0.074 J*	*6.9 J*	10.6	*ND*	0.02	5.58	235.7	*ND*	109	21.5
Oct-2020	*2 J*	*NA*	*ND*	*4.8 J*	9.5	*ND*	0.068 H1	5.62	134.9	1.2	10	8.5
Apr-2021	*ND*	*NA*	*ND*	*ND*	4.9	*0.058 J*	*ND*	6.49	97	*ND*	16	*1.8 J*
Oct-2021	*ND*	*NA*	*ND*	*ND*	6	*ND*	*ND*	6.47	109.8	*ND*	*ND*	3.82
May-2022	50	*NA*	0.26	*ND*	11.1	*ND*	0.024	6.08	274.2	*ND*	96	20.5 N3
Oct-2022	36	*NA*	0.14	*17.5 J*	12.6	*0.079 J*	*ND*	6.03	222.8	*ND*	72	17.4 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14A***													
Nov-1993	NA	ND	ND	NA	ND	0.03	NA	0.007	NA	ND	6.9	0.34	ND	0.3	NA
Apr-1994	NA	ND	ND	NA	ND	ND	NA	ND	NA	ND	0.89	0.29	ND	ND	NA
Apr-1995	ND	ND	1	ND	ND	0.3	NA	ND	ND	ND	5.7	2.3	ND	0.32	NA
Oct-1996	ND	ND	0.014	ND	ND	0.81	0.53	ND	ND	ND	3.3	3.7	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	0.64	0.66	ND	ND	ND	2.7	0.71	ND	ND	ND
Oct-1997	ND	ND	0.031	ND	ND	0.514	0.403	ND	ND	ND	4.32	0.628	ND	0.354	0.217
Apr-1998	ND	ND	0.044	ND	ND	0.497	0.424	0.012	ND	0.016	9.35	1.6	ND	0.48	0.263
Apr-1999	ND	ND	0.023	ND	ND	0.485	0.52	ND	ND	0.011	6.6	4.72	ND	0.405	0.359
Oct-1999	ND	ND	0.025	ND	ND	0.652	0.62	ND	ND	0.01	3.6	2.31	ND	0.52	0.472
Apr-2000	ND	ND	0.019	ND	ND	0.951	0.619	ND	ND	0.012	4.08	1.94	ND	0.564	0.449
Oct-2000	ND	ND	0.02	ND	ND	0.935	0.543	ND	ND	0.013	4.02	3.19	ND	0.516	0.4
Apr-2001	ND	ND	0.019	ND	ND	0.743	NA	ND	ND	ND	4.46	NA	ND	0.502	NA
Sep-2001	ND	ND	0.017	ND	ND	0.696	0.519	ND	ND	0.01	3.47	2.12	ND	0.446	0.397
Mar-2002	ND	ND	0.018	ND	ND	0.883	0.574	ND	ND	0.012	4.28	3.52	ND	0.527	0.465
Sep-2002	ND	ND	0.019	ND	ND	0.569	0.594	ND	ND	ND	5.86	5.07	ND	0.477	0.479
Mar-2003	ND	ND	0.018	ND	ND	0.655	0.608	ND	ND	ND	3.65	3.01	ND	0.523	0.501
Oct-2003	ND	ND	0.021	ND	ND	0.867	0.546	ND	ND	0.014	7.09	3.56	ND	0.504	0.452
Apr-2004	ND	ND	0.021	ND	ND	0.552	0.542	ND	ND	0.012	4.52	1.08	ND	0.322	0.268
Oct-2004	ND	ND	0.02	ND	ND	1.09	0.662	ND	ND	0.018	5.17	0.752	ND	0.434	0.359
Apr-2005	ND	ND	0.016	ND	ND	1.04	0.703	ND	ND	0.019	5.87	2.26	ND	0.347	0.282
Oct-2005	ND	ND	0.02	ND	ND	1.04	0.799	ND	ND	0.014	5.53	1.6	ND	0.427	0.389

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14A***													
Mar-2006	ND	ND	0.016	ND	ND	0.429	0.333	ND	ND	ND	5.67	2.51	ND	0.394	0.393
Sep-2006	ND	ND	0.021	ND	ND	0.886	0.689	ND	ND	0.014	6.2	4.04	ND	0.559	0.535
Mar-2007	ND	ND	0.017	ND	ND	0.746	0.728	ND	ND	0.013	2.78	1.63	ND	0.374	0.368
Sep-2007	ND	0.002	0.015	ND	ND	1.18	0.586	0.034	ND	0.017	10.7	4.72	0.002	0.37	0.292
Mar-2008	ND	ND	0.029	ND	ND	0.701	0.648	ND	ND	ND	10	8.37	ND	0.583	0.524
Sep-2008	ND	ND	0.033	ND	ND	0.835	0.565	ND	ND	0.013	12.6	7.3	0.002	0.685	0.58
Mar-2009	ND	ND	0.032	ND	ND	0.84	0.691	ND	ND	0.024	17	9.93	ND	0.616	0.599
Oct-2009	ND	ND	0.035	ND	ND	1.14	0.711	ND	ND	0.017	15.5	10.5	ND	0.727	0.68
Mar-2010	ND	ND	0.029	ND	ND	0.572	0.568	ND	ND	0.012	11.6	12.1	ND	0.445	0.43
Oct-2010	ND	ND	0.02	ND	ND	0.681	0.655	ND	ND	0.016	5.71	5.21	ND	0.518	0.519
Apr-2011	ND	ND	0.029	ND	ND	0.722	0.691	ND	ND	0.013	6.77	5.66	ND	0.559	0.549
Sep-2011	ND	ND	0.03	ND	ND	1.59	0.82	ND	ND	0.023	9.09	7.51	ND	0.756	0.583
Mar-2012	ND	ND	0.026	ND	ND	0.726	0.729	ND	ND	0.011	3.33	4.84	ND	0.661	0.668
Sep-2012	ND	ND	0.0188	0.000445 J	ND	0.543	0.53	0.0021 J	0.0051 J	0.0068 J	5.3	4.6	ND	0.457	0.438
Mar-2013	ND	ND	0.0358	0.000832 J	ND	0.906	0.92	0.0029 J	0.0086 J	0.0114	6.88	6.75	ND	0.699	0.666
Oct-2013	ND	ND	0.0292	0.000643 J	0.000239 J	0.702	0.599	0.0092 J	0.0079 J	0.0138	27.5	24	ND	0.621	0.568
Mar-2014	0.000526 J	ND	0.0293	0.000653 J	0.000211 J	0.771	0.758	0.0021 J	0.0083 J	0.0143	7.53	7.79	ND	0.703	0.68
Oct-2014	0.000546 J	ND	0.0281	0.000749 J	0.000238 J	0.713	0.708	0.000747 J	0.0068 J	0.0183	5.65	5.31	ND	0.539	0.541
Apr-2015	0.001 J	0.0019 J	0.0358	0.000875 J	0.000381 J	0.752	0.754	0.0137	0.0179	0.0435	6.62	4.29	ND	0.597	0.589
Nov-2015	0.0012 J	0.0023	0.0333	0.0013 J	0.000551 J	0.918	0.944	0.0254	0.0155	0.0883	13.9	3.29	0.000848 J	0.734	0.733
May-2016	ND	0.0015 J	0.0638	0.00082 J	0.00052 J	1.66	1.63	0.0107	0.0202	0.0387	9.96	6.77	0.00051 J	1.56	1.64
Oct-2016	0.00075 J	0.0022 J	0.0399	0.00064 J	0.00039 J	1.16	1.88	0.0148 J+	0.0167	0.0511 J+	12.7	5.76	0.00087 J	1.02 J+	1.85
May-2017	0.0011 J	0.0065	0.107	0.00091 J	0.00047 J	2.73	2.64	0.0456	0.0505	0.106	14	7.92	0.0003 J	2.82	2.71
Oct-2017	0.00051 J	0.0016 J	0.119	0.00086 J	0.00086 J	3.48	3.51	0.0079	0.0358	0.0291	9.45	8.96	ND	3.37	3.58

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14A***													
May-2018	*0.00039 J*	0.0012	0.2	0.00093	0.0019	6	5.8	*0.0065 J*	0.042	0.045	27.4	24.7	*0.00026 J*	5.9	5.7
Nov-2018	*0.000045 J*	*0.00073 J*	0.16	0.00057	*0.00054 J*	4.3	4.6	*0.0052 J*	0.02	0.012	52.1	50.1	*0.00016 J*	4.3	4.5
May-2019	*ND*	*ND*	0.019	0.00036	0.0022	*ND*	*ND*	0.012	0.0027	0.026	14.2	12.9	*ND*	*ND*	*ND*
Oct-2019	*0.00015 J*	*0.0003 J*	0.014	*0.00029 J*	*0.00043 J*	0.46	*0.43 J*	0.0085	0.0017	0.0094	13.2	10.4	*0.00011 J*	0.22	*0.23 J*
May-2020	*0.000095 J*	0.0014	0.086	*0.00025 J*	*0.00035 J*	3.3	3.2	0.011	0.012	0.0071	50.8	46.7	*ND*	3.2	3.1
Oct-2020	*ND*	*ND*	0.042	*ND*	*ND*	1.4	1.4	*0.0024 J*	0.0035	*ND*	32.3	26.3	*ND*	1.2	1.3
Apr-2021	*ND*	*0.0028 J*	0.016	*0.00043 J*	*ND*	*0.4 J*	*0.38 J*	0.0051	*0.0009 J*	0.0098	23.3	17.3	*ND*	*0.19 J*	0.22
Oct-2021	*0.00012 JB*	*0.0013 J*	0.02	*0.00037 J*	*ND*	0.73	0.84	0.0039	0.0032	0.0079	21.8	13.3	*0.00012 J*	*0.48 J*	0.56
May-2022	*ND*	*0.0014 J*	0.093	*0.00032 J*	*0.00023 J*	3.1	3	0.003	0.013	0.0026	53.5	49.6	*ND*	3.1	3
Oct-2022	*ND*	*0.0019 J*	0.078	*0.0002 J*	*ND*	2.7	3.2	*0.0023 J*	0.0037	0.0027	55.2	59	*ND*	2.6	2.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-14A*												
Nov-1993	0.07	NA	ND	NA	1.1	NA	ND	NA	1.4	NA	NA	NA	ND
Apr-1994	0.036	NA	ND	NA	ND	NA	ND	NA	1.9	NA	NA	NA	ND
Apr-1995	0.02	NA	ND	ND	0.61	NA	ND	0.01	1.6	NA	ND	ND	0.03
Oct-1996	0.053	0.05	NA	ND	ND	ND	ND	ND	2.3	2.3	ND	ND	0.18
Apr-1997	0.084	0.029	ND	ND	ND	ND	ND	ND	2.3	2.1	ND	ND	0.021
Oct-1997	0.025	0.026	ND	ND	1.57	ND	ND	ND	1.67	1.61	ND	0.01	0.02
Apr-1998	0.03	0.033	0.0005	ND	1.68	ND	ND	ND	2.03	1.93	ND	0.013	0.012
Apr-1999	0.043	0.043	NA	ND	1.16	0.659	ND	ND	2.36	2.32	ND	ND	0.01
Oct-1999	0.02	0.024	NA	ND	ND	0.541	ND	ND	2.57	2.42	ND	ND	ND
Apr-2000	0.029	0.024	NA	ND	ND	ND	ND	ND	4.08	2.53	ND	ND	0.015
Oct-2000	0.023	0.03	NA	ND	0.572	0.95	ND	ND	3.57	2.53	ND	ND	0.015
Apr-2001	0.03	NA	NA	ND	ND	NA	ND	ND	3.58	NA	ND	ND	0.015
Sep-2001	0.019	0.019	NA	0.012	0.722	ND	ND	ND	3.97	2.61	ND	ND	0.01
Mar-2002	0.039	0.037	NA	ND	1.32	0.388	ND	ND	4.13	2.98	ND	ND	0.012
Sep-2002	0.054	0.056	NA	ND	0.696	ND	ND	ND	3.26	3.27	ND	ND	ND
Mar-2003	0.073	0.067	NA	0.012	1.2	ND	ND	ND	3.54	3.37	ND	ND	ND
Oct-2003	0.083	0.075	NA	0.014	0.986	0.533	ND	ND	3.85	2.98	ND	ND	0.011
Apr-2004	0.025	0.023	0.0008	ND	1.21	1.28	ND	ND	3.3	2.31	ND	ND	ND
Oct-2004	0.037	0.031	0.0006	ND	1.17	ND	ND	ND	3.45	2.92	ND	ND	0.018
Apr-2005	0.046	0.045	0.0003	ND	0.95	0.69	ND	ND	3.47	2.95	ND	ND	0.026
Oct-2005	0.032	0.034	0.0006	ND	0.823	0.675	ND	ND	3.86	3	ND	ND	0.01
Mar-2006	ND	ND	0.0004	ND	ND	ND	ND	ND	3.94	3.3	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14A***												
Sep-2006	0.027	0.023	0.0002	0.013	0.692	0.6	ND	ND	3.99	3.87	ND	ND	0.015
Mar-2007	0.014	0.013	0.0004	ND	0.57	0.529	ND	ND	3.17	3.17	ND	ND	ND
Sep-2007	0.059	0.043	0.0004	0.022	0.518	ND	ND	ND	3.22	3.19	ND	ND	0.034
Mar-2008	0.052	0.047	ND	ND	0.802	0.577	ND	ND	4.14	3.88	ND	ND	0.012
Sep-2008	0.05	0.043	ND	ND	0.798	0.503	ND	ND	4.26	3.9	ND	ND	0.025
Mar-2009	0.054	0.056	ND	0.014	0.839	0.668	ND	ND	4.4	4.45	ND	ND	0.027
Oct-2009	0.061	0.06	ND	0.014	0.777	0.526	ND	ND	4.72	4.81	ND	ND	0.041
Mar-2010	0.069	0.067	ND	ND	0.715	0.622	ND	ND	3.71	4.15	ND	ND	ND
Oct-2010	0.047	0.044	ND	0.011	0.526	0.525	ND	ND	4.61	4.58	ND	ND	0.019
Apr-2011	0.037	0.033	ND	ND	ND	ND	ND	ND	4.13	3.96	ND	ND	0.014
Sep-2011	0.042	0.249	ND	0.023	1.36	0.832	ND	ND	4.96	4.7	ND	ND	0.026
Mar-2012	0.028	0.035	ND	ND	0.536	0.525	ND	ND	4.44	4.61	ND	ND	0.012
Sep-2012	0.0341	0.0312	ND	0.0056 J	0.573	0.556	ND	ND	7.85	7.89	0.000238 J	ND	0.0055 J
Mar-2013	0.0391	0.0391	0.000072 J	0.0102 J	0.66	0.645	ND	ND	6.06	6.03	ND	ND	0.0219
Oct-2013	0.121	0.111	0.000061 J	0.0084 J	0.634	0.56	ND	ND	7	6.52	0.000189 J	0.0021 J	0.0168
Mar-2014	0.0448	0.0469	ND	0.0084 J	0.606	0.582	ND	ND	6.34	6.27	ND	ND	0.0132
Oct-2014	0.032	0.0313	0.000073 J	0.0072 J	0.601	0.597	0.000986 J	ND	5.62	5.55	0.000758 J	ND	0.013
Apr-2015	0.0648	0.0478	0.000064 J	0.0724	0.794	0.732	ND	ND	5.24	5.45	ND	0.000833 J	0.0203
Nov-2015	0.125	0.104	0.000039 J	0.0332	0.996	0.908	0.000688 J	ND	4.76	4.85	ND	0.0011 J	0.0265
May-2016	0.0836	0.0492	0.00011 J	0.0365	1.11	1.14	0.00051 J	ND	5.37	5.13	0.00018 J	0.00067 J	0.0443
Oct-2016	0.0642 R	0.0627	0.000056 J	0.0329 J+	0.833	1.25	ND	ND	3.45 J+	6.37	0.00017 J	0.0032	0.0322
May-2017	0.133	0.0909	ND	0.109	1.57	1.51	0.00067 J	ND	7.75	7.42	0.00025 J	0.00046 J	0.0535
Oct-2017	0.106	0.0998	ND	0.0436	1.61	1.67	0.00057 J	ND	7.65	8.26	0.0002 J	ND	0.0431
May-2018	0.17	0.078	ND	0.046	2.2 J	1.6 J	0.00079 J	ND	10.1	10.1	0.00031	0.0031 B	0.0528

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14A***												
Nov-2018	0.27	0.25	*ND*	0.023	*1.7 J*	*1.8 J*	*0.00024 J*	*ND*	7.5	7.9	*0.00008 J*	*ND*	0.029
May-2019	0.13	0.12	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.00031	*ND*	0.022
Oct-2019	0.23	0.21	*ND*	0.0055	*ND*	*ND*	*ND*	*ND*	*2.9 J*	*3 J*	*ND*	0.0062	0.012
May-2020	0.28	0.26	*0.00016 J*	0.015	*1.5 J*	*1.1 J*	*ND*	*ND*	7.3	6.1	*ND*	0.0047	0.017
Oct-2020	0.17	0.16	*ND*	0.0058	*ND*	*ND*	*ND*	*ND*	*4.2 J*	*3.9 J*	*ND*	*0.0014 J*	*ND*
Apr-2021	0.2	0.19	*0.00008 J*	*0.0062 J*	0.54	*0.47 J*	*ND*	*ND*	3	2.8	*ND*	*ND*	*0.0062 J*
Oct-2021	0.29	0.29	*ND*	0.006	0.61	0.7	*ND*	*ND*	3.8	4.3	*0.000068 J*	*ND*	0.0077
May-2022	0.32	0.3	*ND*	0.013	1.3	1.2	*ND*	*ND*	8.2	7.9	*ND*	*ND*	0.019
Oct-2022	0.28	0.32	*ND*	0.0052	1.2	1.4	*ND*	*ND*	7.3	8.2	*ND*	*ND*	0.01

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-14A***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	0.8 J	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	0.8 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	0.7 J	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	1.2	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	0.5 J	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14A*																
Mar-2006	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2007	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	6.2	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	10	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	9.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	7.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	4.72	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	9.59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	9.97	0.32 J	ND	ND	ND	ND	ND	0.39 J	0.37 J	ND	ND	ND	1.09 J,B	ND
Mar-2014	ND	ND	ND	ND	8.29	0.24 J	ND	ND	ND	ND	ND	0.28 J	0.43 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	3.77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	3.82	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	0.1 J	0.2 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14A*																
Oct-2016	ND	ND	ND	ND	5.1	0.1 J	ND	ND	ND	ND	ND	0.2 J	0.2 J	1.4 J	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	8.5	0.2 J	ND	ND	ND	ND	0.1 J	0.3 J	0.4 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	7.8	0.2 J	ND	ND	ND	ND	0.1 J	0.3 J	0.4 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	6.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.1 JB	ND
Nov-2018	ND	ND	ND	ND	10.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	6.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	2.9
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	4.1
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	7.1	4
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.3	7.2
Apr-2000	ND	NA	NA	ND	NA	2.4	NA	ND	ND	ND	NA	ND	NA	ND	NA	1.4	4
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	6
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	8.3
Sep-2001	ND	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.7	5.1
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	3.4
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	6.2
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	3.5
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.8	5.6
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.2	3.5
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	8.3
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.3	7.2
Oct-2005	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	13.2	10.5

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14A***															
Mar-2006	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	22.8	11.9
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	22.6	13.3
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	9.8	9.9
May-2007	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	7.5	10.8
Sep-2007	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	12.5	5.2
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	22.5	16.9
Sep-2008	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	14.2	19.4
Mar-2009	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	16.5	20.8
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	14.7	19.9
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*10.9 J*	11.4
Oct-2010	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	8.5	7.8
Apr-2011	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	10.6	10.5
Sep-2011	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	17.8	11.7
Mar-2012	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	7.6	6.7
Sep-2012	*0.76 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.86 J*	*ND*	*ND*	*ND*	3.17	4.82
Mar-2013	1.39	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.84	*ND*	*ND*	*ND*	6.7	12
Oct-2013	2.01	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.98	*ND*	*ND*	*ND*	5.13	12.4
Mar-2014	1.68	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.95	*ND*	*ND*	*ND*	5.67	10
Oct-2014	*0.92 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.01	*ND*	*ND*	*ND*	1.88	4.45
Apr-2015	*0.88 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.89 J*	*ND*	*ND*	*ND*	1.95	4.21
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*2.7 J*	2.9
May-2016	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	1.3	3.5

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14A***															
Oct-2016	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	2	6.3
May-2017	2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	3.7	10
Oct-2017	2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	2.5	*ND*	*ND*	*ND*	3.7	11
May-2018	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	4.5	6.5
Nov-2018	2.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	6.3	14.9 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	2.4	3.7
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	1.1	1.6
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*
May-2022	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	4.6	5.2
Oct-2022	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	3.5	5.4

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	2.5	NA	ND	NA
Oct-1999	ND	ND	ND	NA	3.3	ND	ND	1.7	ND	ND	ND	ND	1.1	4.4	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	1	ND	ND	NA
Oct-2000	ND	ND	ND	NA	2.8	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	NA
Apr-2001	ND	ND	ND	NA	4	ND	ND	1.1	ND	ND	ND	ND	0.7 J	3.5	ND	ND	NA
Sep-2001	ND	ND	ND	NA	2.9	ND	ND	0.5 J	ND	ND	ND	ND	ND	1.7	ND	ND	NA
Mar-2002	ND	ND	ND	NA	3.9	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	NA
Sep-2002	ND	ND	ND	NA	**6.4**	ND	ND	0.6 J	ND	ND	ND	ND	0.5 J	1.1	ND	ND	NA
Mar-2003	ND	ND	ND	NA	**5.3**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	2.7	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	NA
Apr-2004	ND	ND	ND	NA	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	4.9	ND	ND	0.7 J	ND	ND	ND	ND	ND	2.3	ND	ND	NA
Apr-2005	ND	ND	ND	ND	**5.9**	ND	ND	0.9 J	ND	ND	ND	ND	0.6 J	1.5	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14A***															
Oct-2005	*ND*	*ND*	*0.7 J*	*ND*	**9.5**	*0.5 J*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	1.3	2.3	*ND*	*0.7 J*	*NA*
Mar-2006	*ND*	*ND*	*0.9 J*	*ND*	**11.6**	*0.6 J*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	1.6	3.1	*ND*	*0.5 J*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	**7.6**	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	1.6	1.7	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*0.5 J*	*ND*	**6.5 R**	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*0.9 J*	1.5	*ND*	*ND*	*NA*
May-2007	*ND*	*ND*	*0.6 J*	1.7	5	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*0.9 J*	1.3	*ND*	*0.7 J*	*NA*
Sep-2007	*ND*	*ND*	*0.6 J*	*0.6 J*	**7.7**	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	1.1	2	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*0.9 J*	*ND*	**8.9**	*0.7 J*	*ND*	2.3	*ND*	*ND*	*ND*	*ND*	2	3.6	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*0.7 J*	*ND*	**12**	*0.7 J*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	1.8	6.5	*ND*	1.5	*NA*
Mar-2009	*ND*	*ND*	1.1	*ND*	**16.3**	1.1	*ND*	2.6	*ND*	*ND*	*ND*	*ND*	*2.5 J*	*0.5 J*	*ND*	*0.8 J*	*NA*
Oct-2009	*ND*	*ND*	*0.7 J*	*ND*	**14.2**	*0.8 J*	*ND*	2.6	*ND*	*ND*	*ND*	*ND*	2.3	2.1	*ND*	*0.6 J*	*NA*
Mar-2010	*ND*	*ND*	*ND*	*ND*	**8.4**	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	**6.5**	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	**8.1**	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*0.7 J*	*ND*	**7.4**	*0.5 J*	*ND*	2	*ND*	*ND*	*ND*	*ND*	1.4	1.3	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	3.9	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*0.6 J*	*ND*	*0.7 J*	*NA*
Sep-2012	*ND*	*ND*	*0.81 J*	*0.28 J*	3.95	*0.36 J*	*ND*	1.48	*ND*	*ND*	*ND*	*ND*	1.05	*0.48 J*	*ND*	*ND*	1.17
Mar-2013	*0.5 J*	*ND*	*1 J*	*0.37 J*	**8.69**	*0.68 J*	*ND*	2.09	*ND*	*ND*	*ND*	*ND*	1.77	*ND*	*ND*	*0.34 J*	1.68
Oct-2013	*ND*	*ND*	*0.7 J*	*ND*	**5.94**	*0.53 J*	*ND*	2.02	*ND*	*ND*	*ND*	*ND*	1.67	*0.7 J*	*ND*	*ND*	1.23
Mar-2014	*ND*	*ND*	1.08	*0.53 J*	**6.26**	*0.41 J*	*ND*	2.75	*ND*	*ND*	*ND*	*ND*	1.89	*0.74 J*	*ND*	*0.34 J*	1.49
Oct-2014	*ND*	*ND*	*0.52 J*	*0.29 J*	2.35	*ND*	*ND*	1.34	*ND*	*ND*	*ND*	*ND*	*0.83 J*	*ND*	*ND*	*ND*	*0.52 J*
Apr-2015	*ND*	*ND*	*0.59 J*	*0.28 J*	2.66	*ND*	*ND*	1.32	*ND*	*ND*	*ND*	*ND*	*0.93 J*	*ND*	*ND*	*ND*	*0.59 J*
Nov-2015	*ND*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14A***															
May-2016	ND	ND	0.3 J	0.2 J	2	ND	ND	1.1	ND	ND	ND	ND	0.7 J	0.1 J	ND	0.1 J	0.3 J
Oct-2016	ND	ND	0.4 J	0.3 J	3.1	ND	ND	1.5	ND	ND	ND	ND	1	0.4 J	ND	0.3 J	0.4 J
May-2017	ND	ND	0.7 J	0.7 J	4.9	0.2 J	ND	2.5	ND	ND	ND	ND	1.8	0.2 J	ND	0.4 J	0.9 J
Oct-2017	ND	ND	0.5 J	0.6 J	4.4	0.1 J	ND	2.5	ND	ND	ND	ND	1.7	ND	ND	0.5 J	0.6 J
May-2018	ND	ND	ND	ND	2.3 B	ND	ND	1.5	ND	ND	ND	ND	1.3	ND	ND	ND	NA
Nov-2018	ND	ND	ND	1.1	2.9 CH	ND	ND	1.9	ND	ND	ND	ND	2.1	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.46 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	0.6 J	1.5 L	ND	ND	1.3	ND	ND	ND	ND	1.1	ND	ND	ND	NA
Oct-2022	ND	ND	ND	0.7 J	1.1	ND	ND	1.3	ND	ND	ND	ND	1.1	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-19***											
Nov-1993	ND	ND	0.1	ND	7.6	0.9	ND	4.68	74.7	12.4	50	13
Apr-1994	ND	ND	0.2	ND	17.3	2.7	ND	4.5	201	45.6	181	52.2
Apr-1995	ND	ND	0.2	ND	19.5	2.2	ND	4.7	176	40.2	112	38.6
Apr-1997	ND	3	ND	ND	12	0.46	ND	NA	NA	32	80	21
Apr-1998	ND	ND	1.1	ND	14.6	0.196	ND	6.19	156.4	16.2	96	51
Apr-1999	ND	ND	0.13	ND	13.5	0.68	ND	4.49	204	52.8	110	63
Apr-2000	12	12	ND	ND	29.6	1.48	ND	5.64	252	71.8	196	102
Apr-2001	16	NA	ND	ND	26.4	ND	ND	NA	NA	45.1	119	86
Mar-2002	6.8	6.8	ND	40	11	0.29	ND	5.4	87.6	15.7	88	34.3
Mar-2003	22	22	ND	ND	25.8	0.75	ND	6	206	35.8	143	65.3
Apr-2004	13	13	ND	ND	22.4	ND	ND	5.3	160.1	19.3	90	47.2
Apr-2005	11	11	ND	ND	26.8	0.45	ND	5.3	154.9	30	108	56.1
Mar-2006	9.8	9.8	ND	ND	21.4	0.72	ND	5.3	142.8	27.3	112	40.8
Mar-2007	13	13	0.46	ND	25.5	0.78	ND	5.4	158.3	41.9	142	56.5
Mar-2008	13	13	ND	ND	22.8	0.91	ND	5.5	145.3	27.8	114	49
Mar-2009	14	14	ND	ND	18.2	0.34	ND	4.9	118.3	15.7	86	32.5
Mar-2010	45	45	ND	ND	56.9	0.42	ND	5.84	390	51.8	183	96.2
Oct-2010	28	28	ND	ND	31.8	0.64	ND	5.3	189.9	34.9	154	72
Apr-2011	43	43	ND	ND	38.5	0.67	ND	5.6	312	46.5	207	89.2
Sep-2011	39	39	ND	ND	54	0.52	ND	6	321	45.6	229	99.1
Mar-2012	33	33	ND	ND	43.2	0.46	ND	5.3	354	44.4	164	78.1
Sep-2012	40.6	40.6	ND	ND	29.8	0.733	ND	5.5	199.6	37.3	156	76.4
Mar-2013	32.6	32.6	ND	ND	32.8	0.829	ND	5.8	201	36	145	68.3
Oct-2013	19.5	19.5	ND	ND	21.1	0.462	ND	4.8	138.9	22.3	105	44.3
Mar-2014	51.4	51.4	ND	30	62.1	1.07	ND	6.2	429	58.5	253	106
Oct-2014	35.2	35.2	ND	6 J	73	0.581	ND	5.9	404	29.1	220	83.4
Apr-2015	89.2	89.2	ND	8 J	80.4	0.763	ND	5.9	532	44.7	299	116
Nov-2015	37.6	37.6	ND	6 J	44.9	0.573	ND	6	329	25.8	152	73.5
May-2016	51.2	51.2	ND	12	41.4	0.701	ND	6.3	410	30.8	178	77.7
Oct-2016	50.4	50.4	ND	ND	34.1	NA	NA	6.4	340	30	170	74.4
May-2017	74.5	74.5	ND	ND	49.1	0.847	ND	6.3	510	40.4	225	104
Oct-2017	55.8	55.8	ND	9 J	35.4	0.699	ND	6.1	426	29.5	172	88.5
May-2018	28	28	ND	ND	22.8	0.082 J	ND	5.4	174.5	16.6	149	52
Nov-2018	66	66	ND	ND	30.5	0.84	ND	5.94	283	41.4	163	96.5
May-2019	22 H1	NA	0.19	ND	27.7	1.4	ND	5.27	159.3	31.9	129	60.7
Oct-2019	7.5 J	NA	ND	ND	22.7	1	0.0086 J	5.03	165.3	23.9	290	44.7
May-2020	12	NA	ND	9.1 J	8.7	2.3	ND	5.26	205.8	40.3	123	84.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-19***											
Oct-2020	40	*NA*	*ND*	*9.3 J*	12.3	1.8	*0.0099 J*	5.38	190.4	33.2	126	79.6
Apr-2021	60	*NA*	*ND*	*12.6 J*	14.4	0.78	*ND*	5.9	246.4	31.9	139	80.6
Oct-2021	36	*NA*	*ND*	*8.3 J*	13.5	0.8	*ND*	5.7	218.9	19.5	82	56.4
May-2022	58	*NA*	*ND*	*ND*	17.9	0.99	*ND*	5.79	266.7	22.2	136	79.8 N3
Oct-2022	38	*NA*	*ND*	*6.1 J*	18.4	0.93	*ND*	5.64	219.1	22.7	106	63.8 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-19***													
Nov-1993	NA	ND	ND	NA	ND	1.6	NA	ND	NA	ND	1.9	0.07	ND	2.2	NA
Apr-1994	NA	ND	0.19	NA	ND	12	NA	ND	NA	0.02	ND	ND	ND	5.4	NA
Apr-1995	ND	ND	1.3	ND	ND	8.2	NA	ND	ND	ND	0.29	ND	ND	4.4	NA
Apr-1997	ND	ND	0.068	ND	ND	9.7	9.8	ND	ND	ND	1.9	0.33	ND	2.9	2.9
Apr-1998	ND	ND	0.103	ND	ND	13.8	13.5	0.01	0.012	0.021	3.35	ND	ND	3.96	3.84
Apr-1999	ND	ND	0.1	ND	0.004	17.9	17.1	ND	0.01	0.022	3.36	ND	ND	4.52	4.29
Apr-2000	ND	ND	0.076	ND	ND	31.8	29.3	0.012	ND	0.033	10	ND	ND	5.51	5.02
Apr-2001	ND	ND	0.081	ND	ND	25.7	NA	0.05	ND	0.086	40.5	NA	0.005	5.23	NA
Mar-2002	ND	ND	0.043	ND	ND	9.42	8.88	0.02	ND	0.045	14.6	ND	ND	2.63	2.49
Mar-2003	ND	ND	0.051	ND	ND	20.1	19.4	ND	ND	ND	0.799	ND	ND	3.68	3.52
Apr-2004	ND	0.003	0.068	ND	ND	12.1	11.6	ND	ND	0.018	4.63	ND	0.002	4.1	3.88
Apr-2005	ND	ND	0.09	ND	ND	14.3	14	ND	ND	0.02	2.98	ND	ND	4.96	4.86
Mar-2006	ND	ND	0.067	ND	ND	10.1	10.5	ND	ND	ND	2.41	ND	ND	3.79	3.91
Mar-2007	ND	0.007	0.072	ND	ND	15.5	15.6	ND	ND	0.019	7.26	ND	ND	4.33	4.32
Mar-2008	ND	ND	0.058	ND	ND	13.5	12.5	ND	ND	ND	ND	ND	ND	3.71	3.34
Mar-2009	ND	ND	0.035	ND	ND	9.17	9.05	ND	ND	0.014	0.104	ND	ND	2.34	2.31
Mar-2010	ND	ND	0.073	ND	ND	28.2	26.7	ND	ND	ND	0.101	ND	ND	6.26	6.02
Oct-2010	ND	ND	0.067	ND	ND	19.9	18.3	ND	ND	0.006	ND	ND	ND	5.42	5.28
Apr-2011	ND	ND	0.075	ND	ND	26	25	ND	ND	ND	0.189	ND	ND	5.91	5.69
Sep-2011	ND	ND	0.078	ND	ND	29.1	28.7	ND	ND	ND	ND	ND	ND	6.42	6.3
Mar-2012	ND	ND	0.069	ND	ND	22.2	21.6	ND	ND	ND	ND	ND	ND	5.52	5.41

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-19***													
Sep-2012	ND	ND	0.0644	0.000086 J	ND	21.3	20.9	0.002 J	0.0022 J	0.0051 J	0.0256 J	0.0777	ND	5.64	5.69
Mar-2013	ND	ND	0.0634	ND	ND	19.9	18.1	0.0014 J	0.0025 J	0.0055 J	0.0275 J	0.0053 J	0.0016 J	4.51	4.06
Oct-2013	ND	ND	0.0482	0.000147 J	ND	12.7	12.4	0.0082 J	0.0063 J	0.0122	ND	ND	ND	3.05	3.04
Mar-2014	0.000279 J	ND	0.0654	ND	ND	31.6	32.2	0.0011 J	0.0012 J	0.0037 J	0.0845	0.0447 J	ND	6.47	6.6
Oct-2014	0.000873 J	ND	0.0629	ND	ND	24.5	24.3	0.000605 J	0.0025 J	0.0056 J	0.0105 J	0.0212 J	ND	5.4	5.29
Apr-2015	0.000587 J	ND	0.0642	ND	ND	35.4	35.9	0.000881 J	0.000674 J	0.0023 J	0.0386 J	0.0145 J	ND	6.73	6.77
Nov-2015	ND	ND	0.0547	ND	0.000073 J	21.6	20.8	0.000527 J	0.0026 J	0.0058 J	ND	ND	ND	4.78	4.76
May-2016	ND	ND	0.0483	ND	ND	22.9	24.1	0.00078 J	0.0019	0.0039 J	ND	ND	ND	4.96	5.09
Oct-2016	ND	ND	0.0469	ND	ND	22.1	21.9	0.00074 J	0.0024	0.0066	ND	ND	0.00011 J	4.66	4.85 J+
May-2017	ND	ND	0.0502	ND	ND	31.1	33.3	0.0011 J	0.0024	0.0046	0.0414 J	ND	ND	6.52	6.15
Oct-2017	ND	ND	0.0456	0.00011 J	ND	27.2	24.8	ND	0.0046	0.0098	0.0378 J	ND	0.00075 J	4.97	4.86
May-2018	0.000062 J	ND	0.047	0.00024 J	0.00019 J	14.6	13.4	0.0008 J	0.0103	0.017	0.11	ND	0.00013 JB	3.8	3.4
Nov-2018	ND	ND	0.042	0.000022 J	0.000051 J	29.8	30.6	0.0029 J	0.0013	0.0033	0.034	ND	0.000086 J	5.4	5.5
May-2019	ND	ND	0.071	ND	ND	15.9	16.7	ND	0.0013	0.0021	ND	ND	ND	5.1	5.2
Oct-2019	0.00011 J	ND	0.051	0.000072 J	0.00018 J	11.3	10.7	0.0048 J	0.0023	0.004	0.007 J	ND	ND	4	3.8
May-2020	0.000075 J	ND	0.061	ND	ND	22.9	22.9	0.0049 J	0.00049 J	0.0026	ND	ND	ND	6.7	6.6
Oct-2020	ND	ND	0.038	ND	ND	21.8	21.4	0.0025 J	0.00056 J	ND	ND	ND	ND	6.1	5.9
Apr-2021	ND	ND	0.062	ND	ND	22.7	24	0.00088 J	0.00079 J	ND	ND	ND	ND	5.8	6.2
Oct-2021	0.000065 JB	ND	0.05	ND	ND	15.2	16.5	ND	0.0033	0.0059	ND	ND	ND	4.5	4.9
May-2022	ND	ND	0.059	ND	ND	22.7	24.5	0.00073 J	0.00073 J	0.0018 J	ND	ND	ND	5.6	6.1
Oct-2022	ND	ND	0.051	ND	ND	17.8	18.8	0.0016 J	0.0044	0.0049	ND	ND	ND	4.7	5

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-19*												
Nov-1993	0.12	NA	ND	NA	1.1	NA	ND	NA	2.3	NA	NA	NA	0.01
Apr-1994	0.05	NA	ND	NA	2.1	NA	ND	NA	7.4	NA	NA	NA	0.037
Apr-1995	0.12	NA	ND	1.1	2.8	NA	ND	ND	5.5	NA	ND	ND	0.04
Apr-1997	0.082	0.087	**0.003**	ND	3.5	3.4	ND	ND	4.9	5.6	ND	ND	0.025
Apr-1998	0.095	0.115	NA	ND	4.38	3.11	ND	ND	6.97	6.97	ND	0.012	0.024
Apr-1999	0.091	0.084	NA	ND	3.93	3.1	ND	ND	6.12	5.85	ND	ND	0.015
Apr-2000	0.065	0.049	NA	ND	6.11	5.89	ND	ND	15.5	13	ND	0.029	0.02
Apr-2001	0.083	NA	NA	ND	6.53	NA	ND	ND	12.2	NA	ND	0.141	0.035
Mar-2002	0.039	0.026	NA	ND	3.14	3.05	ND	ND	6.41	5.25	ND	0.055	0.016
Mar-2003	0.018	0.011	NA	ND	6.64	6.93	ND	ND	11	10.5	ND	ND	ND
Apr-2004	0.05	0.04	ND	ND	4.03	3.83	ND	ND	11	10.3	ND	0.014	0.068
Apr-2005	0.048	0.044	ND	ND	3.85	3.62	ND	ND	11.9	11.6	ND	ND	0.029
Mar-2006	0.021	0.017	ND	ND	2.49	2.49	ND	ND	8.93	8.97	ND	ND	ND
Mar-2007	0.035	0.025	ND	ND	4.15	4.11	ND	ND	11.1	11.2	ND	0.02	0.01
Mar-2008	0.018	0.016	ND	ND	3.76	3.47	ND	ND	10.2	9.4	ND	ND	ND
Mar-2009	0.01	ND	ND	ND	2.33	2.28	ND	ND	7.65	7.48	ND	ND	ND
Mar-2010	ND	ND	ND	ND	6.71	6.35	ND	ND	26.8	27.9	ND	ND	ND
Oct-2010	0.017	0.014	ND	ND	4.55	4.32	ND	ND	17.6	17.4	ND	ND	ND
Apr-2011	0.01	ND	ND	ND	5.85	5.61	ND	ND	22.8	21.9	ND	ND	ND
Sep-2011	ND	ND	ND	ND	6.14	6	ND	ND	24.6	24.2	ND	ND	ND
Mar-2012	0.011	0.011	ND	ND	5.36	5.21	ND	ND	23.1	22.2	ND	ND	0.014
Sep-2012	0.0091 J	0.01 J	0.000032 J	0.0049 J	4.53	4.62	ND	ND	21.5	20.7	0.00054 J	ND	0.0026 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-19***												
Mar-2013	0.01 J	0.0088 J	0.000031 J	0.0044 J	4.85	4.33	ND	ND	18.9	17	ND	ND	0.0145
Oct-2013	0.0146	0.0141	ND	0.0059 J	2.87	2.79	ND	ND	10.6	10.8	ND	0.0033 J	0.0127
Mar-2014	0.0054 J	0.0051 J	ND	0.0024 J	7.14	7.25	ND	ND	32.4	33.1	ND	ND	0.0028 J
Oct-2014	0.0097 J	0.0096 J	0.000023 J	0.004 J	5.08	4.97	0.0016 J	ND	31.9	31.5	ND	ND	0.007 J
Apr-2015	0.0046 J	0.0036 J	ND	0.002 J	9.82	9.94	0.000992 J	ND	55.7	56.4	ND	ND	ND
Nov-2015	0.0086 J	0.0083 J	ND	0.0042 J	5.31	5.22	0.001 J	ND	27.5	26.9	ND	0.000161 J	0.0035 J
May-2016	0.0071	0.0057	ND	0.0031 J	6.27	6.31	ND	ND	26.2	26.6	ND	0.00034 J	ND
Oct-2016	0.0044	0.0061 B	ND	0.0039 J	5.75	5.86	ND	ND	20.4	21.2	ND	0.00035 J	ND
May-2017	0.0049	0.0042	ND	0.0037 J	9.06	9.41	ND	ND	30.2	30	ND	0.00037 J	ND
Oct-2017	0.0067	0.0054	ND	0.0049	6.24	6.29	ND	ND	19.6	18.4	ND	0.00031 J	ND
May-2018	0.021	0.019	0.00018 JB	0.011	3.5 J	2.9 J	0.00032 J	ND	13.7	11.7	ND	0.0037	0.0091 B
Nov-2018	0.004	0.0026	ND	0.0028	7.1	7.3	0.00017 J	ND	19.5	20.2	ND	0.0022	0.0047 J
May-2019	0.039	0.037	ND	0.0059	ND	ND	ND	ND	15.6	15.5	ND	0.0035 B	0.0072
Oct-2019	0.016	0.015	ND	0.0045	3.7 J	3.5 J	0.00051 J	ND	14.7	12.1	ND	0.0088	0.0075
May-2020	0.0057	0.005	ND	0.0023	6.5	6.8	ND	ND	9.1	9.2	ND	0.01	0.0034 J
Oct-2020	0.0045	0.0042	ND	ND	5.7	5.8	ND	ND	9.1	8.4	ND	0.0012 J	ND
Apr-2021	0.0067	0.0062	ND	0.0024 J	6.1	6.6	ND	ND	10.3	11.1	ND	ND	0.0025 J
Oct-2021	0.0071	0.0075	ND	0.0041	4.2	4.6	ND	ND	8.9	9.8	0.000028 J	0.00035 J	0.0027 J
May-2022	0.0037 J	0.0038 J	ND	0.0024 J	6.4	6.4	ND	ND	13	13.2	ND	0.00054 JB	ND
Oct-2022	0.007	0.0077	ND	0.0058	4.9	4.8	ND	ND	11.6	11.4	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-19***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	6.5	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2002	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2002	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	7.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-19*																
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.93 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.81 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	7.73	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	2.73	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-19*																
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-19***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.2	10
Jul-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	1.2
Jul-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	1.9
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	13	15
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5	8.3
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-19***															
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.97 J
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.96 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	3.39	ND	ND	ND	2.84	9.26
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.89 J	ND	ND	ND	0.75 J	3.18
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	2.3 J	3.5
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	0.5 J	ND	ND	ND	0.8 J	2.9
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.6 J	ND	ND	ND	0.7 J	3.4
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	0.3 J
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.8 J	ND	ND	ND	0.9 J	3.2
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	4.4	7
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.755 J	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	1.5

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-19***															
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-19***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.8	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*NA*
Jul-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jul-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	**6.4**	*ND*	*ND*	*ND*	*ND*	2.7	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1.2 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*NA*
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-19***															
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	0.95 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	0.46 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	3.48	ND	ND	ND	ND	1.06	0.47 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	1.73	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	0.3 J	0.2 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.6 B	ND	ND	3.1	ND	ND	ND	ND	1.1	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	1.2 BCH	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.611 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-19***															
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-20R***											
Apr-2010	3.2	3.2	*ND*	*ND*	105	0.81	*ND*	4.3	604	211	352	143
Oct-2010	*ND*	*ND*	*ND*	*ND*	102	0.87	*ND*	4.1	556	153	349	128
Apr-2011	*ND*	*ND*	*ND*	13	119	0.86	*ND*	4	573	115	386	123
Sep-2011	*ND*	*ND*	*ND*	*ND*	94.8	0.79	*ND*	4.3	520	115	363	124
Mar-2012	*ND*	*ND*	*ND*	10	121	0.86	*ND*	3.6	660	204	391	138
Sep-2012	*ND*	*ND*	*ND*	10.3	107	0.794	*ND*	3.9	511	177	365	135
Mar-2013	*ND*	*ND*	*ND*	14.6	108	0.902	*ND*	4.1	633	124	358	104
Oct-2013	*ND*	*ND*	*ND*	15.7	106	0.874	*ND*	3.6	658	161	401	109
Mar-2014	*ND*	*ND*	*ND*	22	104	0.902	*ND*	4.5	578	179	371	105
Oct-2014	*ND*	*ND*	*ND*	*9 J*	96.9	0.831	*ND*	4.3	633	209	326	119
Apr-2015	0.96	0.96	*ND*	*5 J*	91.1	1.04	*ND*	3.9	548	180	346	112
Nov-2015	*ND*	*ND*	*ND*	*9 J*	96.4	0.979	*ND*	4.4	650	214	343	87
May-2016	*ND*	*ND*	*ND*	14	82.6	1.25	*ND*	4.5	767	163	341	114
Oct-2016	*ND*	*ND*	*ND*	11	75.4	*NA*	*NA*	4.3	670	186	376	114
May-2017	*ND*	*ND*	*ND*	*ND*	81.9	1.27	*ND*	4.2	714	189	341	114
Oct-2017	*ND*	*ND*	*0.078 J*	*6 J*	75.7	1.82	*ND*	4.4	785	204	330	94.3
May-2018	*ND*	*ND*	*ND*	*18.7 J*	65.4	0.58	0.013	4	603	133	311	110
Nov-2018	*ND*	*ND*	*ND*	*14.3 J*	59.4	1.8	*ND*	4.15	473.8	144	272	110
May-2019	16 H1	*NA*	*ND*	*ND*	44	1.2	*ND*	5.13	355	139	284	139
Oct-2019	*2.5 J*	*NA*	*ND*	*14.8 J*	48.1	1.5	*ND*	4.56	472.6	126	276	115
May-2020	*ND*	*NA*	*ND*	*13.5 J*	32.2	1.1	*ND*	4.83	320.4	84.4	197	106
Oct-2020	*4 J*	*NA*	*ND*	*11.6 J*	20.3	0.98	*ND*	5.05	246.8	79.6	158	67.2
Apr-2021	44	*NA*	*ND*	*14.8 J*	12.9	0.98	*ND*	5.7	270.8	53.8	157 D6	85.8
Oct-2021	30	*NA*	*ND*	*8.3 J*	11	0.93	*ND*	5.54	277.7	60.5 ML	139	80.7
May-2022	36	*NA*	*ND*	*5.6 J*	8.7	0.89	*ND*	5.46	238	54.1	135	77.4 N3
Oct-2022	*4 J5c*	*NA*	*ND*	*19.8 J*	12.1	0.91	*ND*	4.9	230.1	56.2	123	54.4 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-20R*													
Apr-2010	ND	ND	0.04	ND	ND	37.3	36.5	ND	0.017	0.018	0.076	ND	ND	12.1	11.8
Oct-2010	ND	ND	0.032	0.002	ND	29.9	29	ND	0.025	0.027	0.062	ND	ND	13	12.8
Apr-2011	ND	ND	0.036	0.002	ND	30.1	29.7	ND	0.02	0.022	0.357	0.031	ND	11.6	11.3
Sep-2011	ND	ND	0.041	ND	ND	27	25.2	ND	0.027	0.035	0.436	ND	ND	13.7	13.1
Mar-2012	ND	ND	0.035	0.003	ND	33.4	32.3	ND	0.019	0.025	0.122	ND	ND	13.2	12.7
Sep-2012	ND	ND	0.0383	0.0027	0.000685 J	31.6	31.7	0.0064 J	0.0225	0.0301	0.155	0.0323 J	ND	13.7	13.2
Mar-2013	ND	ND	0.0307	0.0017 J	0.000583 J	25.1	29.2	ND	0.0197 J	0.0259	0.0963	0.0261 J	0.0014 J	10.1	11.9
Oct-2013	ND	0.000794 J	0.0358	0.0019 J	0.0012 J	28	29.3	0.0085 J	0.0188 J	0.0266	ND	ND	0.000426 J	9.6	10.4
Mar-2014	0.00044 J	ND	0.0478 J	ND	ND	25.7	26	0.0094 J	0.0159 J	0.0249 J	2.02	0.0426 J	ND	10	10.3
Oct-2014	0.0013 J	0.0043 J	0.0574	0.0025 J	0.000866 J	28.9	28.9	0.0117 J	0.0229 J	0.0263 J	1.87	ND	0.003	11.4	11.6
Apr-2015	0.000541 J	0.0018 J	0.0334	0.0014 J	0.000605 J	27.3	26.8	ND	0.0173 J	0.0209	0.0507 J	ND	ND	10.7	10.6
Nov-2015	ND	0.0041	0.0364	0.0019 J	0.00099 J	20.6	20.7	0.0011 J	0.0158	0.0314	0.0486 J	0.0265 J	ND	8.67	8.66
May-2016	ND	0.0012 J	0.0342	0.0019	0.00046 J	28.1	28.6	0.0022 J	0.0229	0.0257	ND	ND	ND	10.6	10.7
Oct-2016	ND	0.0028 J	0.0216	0.0021	0.00052 J	26	28.2	0.0022 J	0.0276	0.0282	ND	0.0395 J	0.00013 J	11.8	13
May-2017	ND	0.0024 J	0.0342	0.0023	0.00062 J	23.4	24.5	0.0032 J	0.0323	0.0294	0.263	ND	0.00035 J	13.6	13.2
Oct-2017	ND	0.0013 J	0.0293	0.0018	0.00057 J	19.7	20.3	0.0044	0.0304	0.0263	0.147 J	0.0387 J	0.00021 J	11	11.4
May-2018	0.000035 J	ND	0.027	0.0021	0.0019	25.7	22.1	0.0036 JB	0.0223	0.018	0.24	0.022	0.00045 J	11.1	9.8
Nov-2018	0.000054 J	ND	0.024	0.00092	0.00084 J	31.1	31.5	0.0068 J	0.0072 J	0.025 J	0.07	0.018 J	0.00049 J	7.9	8
May-2019	ND	ND	0.025	0.00071	ND	40.2	41.1	ND	ND	ND	ND	ND	ND	9.5	9.6
Oct-2019	0.00011 J	ND	0.022	0.001	0.00082 J	32.1	31.2	0.0064 J	0.008	0.013	0.021 J	0.014 J	ND	8.4	8.2
May-2020	0.000086 J	ND	0.026	0.00043	0.00027 J	31.1	30.5	0.0064 J	0.0034	ND	0.055 J	0.015 J	ND	6.8	6.7

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-20R***													
Oct-2020	*ND*	*ND*	0.018	*0.00035 J*	*ND*	18.9	18.5	*0.0043 J*	*0.0021 J*	*ND*	0.13	*ND*	*ND*	4.9	4.6
Apr-2021	*ND*	*ND*	0.035	*0.00022 J*	*ND*	25.4	27.2	*0.0015 J*	*0.0017 J*	*0.0033 J*	*ND*	*ND*	*ND*	5.4	5.8
Oct-2021	*ND*	*ND*	0.031 M1	*0.0003 J*	*ND*	22.9 M1	21.2	*0.002 J*	0.0042	0.0037 M1	*0.041 JM1*	*0.025 JB*	*0.000049 JR1M1*	5.7 M1	5.3
May-2022	*ND*	*ND*	0.039 M1	*0.00021 J*	*ND*	22.1	24	*0.0014 J*	0.0033	0.0033	*ND*	*ND*	*ND*	5.4	5.9
Oct-2022	*ND*	*ND*	0.04	*0.0003 J*	*ND*	14.7	15.8	*0.0017 J*	0.0056	0.0085	*ND*	*ND*	*ND*	4.3	4.8

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-20R*												
Apr-2010	0.298	0.292	ND	0.013	3.77	3.74	ND	ND	35.4	34.9	ND	ND	0.019
Oct-2010	0.269	0.263	ND	0.019	3.4	3.36	ND	ND	37.7	37.1	ND	ND	0.024
Apr-2011	0.238	0.232	ND	0.015	3.53	3.43	ND	ND	44.6	44	ND	ND	0.019
Sep-2011	0.291	0.278	0.0002	0.028	3.84	3.18	ND	ND	41.7	39.2	ND	ND	0.037
Mar-2012	0.239	0.233	0.0003	0.014	3.87	3.77	ND	ND	50.1	48.7	ND	ND	0.019
Sep-2012	0.227	0.228	0.000349	0.0195	3.67	3.67	0.0026	ND	56.1	55.3	0.000296 J	ND	0.022
Mar-2013	0.229	0.261	0.000199 J	0.015	2.56 J	3.06 J	0.002 J	ND	42	49.6	ND	ND	0.0264
Oct-2013	0.239	0.265	ND	0.0124	3.47 J	3.16 J	0.0023	0.000025 J	53.5	57	ND	0.0135 J	0.0252
Mar-2014	0.198	0.195	ND	0.0128 J	3.48 J	3.14	ND	ND	48.6	48.9	ND	0.0147 J	0.0738 J
Oct-2014	0.233	0.234	0.000118 J	0.0194 J	3.62 J	3.18 J	0.0184 J	0.000032 J	48.5	50.4	ND	0.0141 J	ND
Apr-2015	0.186	0.192	0.000095 J	0.0128	3.09	3.08	0.0118	ND	41.8	41.5	ND	ND	0.0245
Nov-2015	0.167	0.166	0.000325	0.0154	2.51	2.52	0.0267	ND	36.8	37.5	ND	0.0018 J	0.0235
May-2016	0.18	0.175	0.00024	0.0136	3.46	3.37	0.0011 J	ND	44.3	44.2	ND	0.0022	0.0195 J
Oct-2016	0.19	0.215	0.00016 J	0.0177	3.09	3.51	0.00058 J	ND	39	45.3	ND	0.0025	0.0254 J
May-2017	0.246	0.248	0.00039	0.0208	3.14	3.08	0.00063 J	ND	47	45.3	ND	0.0059	0.0309
Oct-2017	0.205	0.206	0.000077 J	0.0179	2.99	2.96	0.00057 J	ND	50.7 J-	50.4	ND	0.0044	0.0227 J
May-2018	0.19	0.22	0.00015 J	0.011 B	2.5 J	2.6 J	0.0033	ND	55.1	45.8	ND	0.0032 J	0.0016 JB
Nov-2018	0.11	0.13	ND	0.0052 J	4 J	4 J	ND	ND	40.3	41.5	ND	0.0014 J	ND
May-2019	0.055	0.057	ND	ND	ND	ND	ND	ND	26.8	27	ND	ND	ND
Oct-2019	0.063	0.022	ND	0.0055	4.3 J	4.3 J	0.0021	ND	36.4	34.5	ND	0.01	0.01
May-2020	0.028	0.03	ND	0.0032	3.7 J	3.7 J	ND	ND	23.6	23.4	ND	0.0054	ND
Oct-2020	0.055	0.03	ND	ND	2.9 J	3 J	ND	ND	22.7	20.3	ND	0.0028 J	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-20R***												
Apr-2021	0.02	0.02	*ND*	*0.0017 J*	3.1	3.4	*ND*	*ND*	12.5	13.6	*ND*	*0.004 J*	*ND*
Oct-2021	0.033 M1	0.031	*ND*	0.0028 M1	3.5 M1	3.3	*0.0015 J*	*ND*	14.6 M1	14.4	*0.000032 J*	0.0031	*0.0022 JR1M1*
May-2022	0.028	0.039	*ND*	0.0027 M1	3.3	3.3	*0.0012 J*	*ND*	10.7	10.9	*ND*	0.0043	*ND*
Oct-2022	0.041	0.044	*ND*	0.0034	3.3	3.4	*0.0022 J*	*ND*	10.9	11.1	*ND*	0.0031	*0.0041 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-20R*																
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-20R*																
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-20R*															
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-20R***															
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-20R***															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.56 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*0.31 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-20R***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.516 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-23***											
Apr-1995	10.3	10.3	ND	34.7	3.4	0.6	ND	5.8	40.6	5.3	34	8.5
Apr-1997	ND	2	ND	ND	4	0.42	ND	NA	NA	ND	57	12
Oct-1997	2	2	ND	ND	3.52	0.695	ND	8.92	34.2	ND	ND	ND
Apr-1998	ND	ND	0.21	ND	2.44	0.36	ND	6.73	20.3	ND	12	4.6
Apr-1999	ND	ND	0.25	ND	13.9	0.24	ND	5.36	68.4	ND	33	4.7
Oct-1999	ND	ND	0.16	ND	3.42	0.38	ND	5.6	23.2	0.93	33	4.5
Apr-2000	10	10	ND	ND	2.75	0.32	ND	6.02	20	ND	29	7.3
Oct-2000	9.5	NA	ND	14	3.06	0.31	ND	6.06	23.4	ND	27	5.76
Apr-2001	2.2	NA	ND	ND	2.57	0.44	ND	NA	NA	ND	31	4.8
Sep-2001	1.6	1.6	ND	ND	3.87	1.4	ND	5.22	19	ND	25	4.81
Mar-2002	ND	ND	ND	27	4.35	0.522	ND	5.2	15.6	ND	36	5
Sep-2002	2	2	ND	ND	3.9	0.56	ND	5.2	26.2	ND	ND	5
Mar-2003	4.4	4.4	ND	ND	16	ND	ND	5.4	35.5	ND	42	6.69
Oct-2003	4.2	4.2	ND	11	3.33	0.384	ND	4.5	27.8	ND	ND	7.79
Apr-2004	7.8	7.8	ND	10	14.9	0.435	ND	5.6	75.3	ND	96	6.26
Oct-2004	3.7	3.7	ND	14	3.68	0.48	ND	5.2	24.7	ND	31	8.08
Apr-2005	4.1	4.1	ND	ND	8.81	0.48	ND	5.4	40.4	ND	ND	5.1
Oct-2005	3.8	3.8	ND	ND	3.51	0.4	ND	5.1	19.6	ND	34	5.22
Mar-2006	4.7	4.7	ND	ND	8.69	0.41	ND	5.3	42.1	ND	19	2.45
Sep-2006	3.5	3.5	ND	43	3.52	0.39	ND	5.2	26.1	ND	30	5.88
Mar-2007	6.1	6.1	ND	ND	32.6	0.45	ND	5.4	99.8	ND	52	3.24
Sep-2007	3	3	ND	ND	8.75	0.94	ND	5.1	21.2	ND	37	4.27
Mar-2008	2.9	2.9	ND	15	13	1.39	ND	5	26	4.86	18	5.05
Sep-2008	3.9	3.9	ND	11	3.44	0.42	ND	4.7	19.1	ND	22	5.1
Mar-2009	4.6	4.6	ND	37	4.22	0.45	ND	4.8	27.3	ND	26	3.81
Oct-2009	3.7	3.7	ND	13	3.88	0.58	ND	4.7	24.4	ND	30	9.1
Apr-2010	7	7	ND	ND	6.3	0.67	ND	4.9	40	ND	27	3.9
Oct-2010	4.4	4.4	ND	ND	3.81	0.57	ND	4.6	21.6	1.31	39	6.87
Apr-2011	10	10	ND	22	15.9	0.76	ND	5.6	73.2	ND	89	5.9
Sep-2011	14	14	ND	ND	1.98	0.36	ND	6	31.4	ND	34	15.4
Mar-2012	14	14	ND	ND	10	0.6	ND	5.3	58	ND	37	10.7
Sep-2012	10.4	10.4	ND	ND	3.42	0.562	ND	5	30.4	ND	43	12.6
Mar-2013	20.7	20.7	ND	11.7	38.1	0.717	ND	6.1	148.4	0.922 J	99	15.5
Oct-2013	17	17	0.101 J	50.6	1.89	0.277	ND	6	29.8	1.45	ND	16.8
Mar-2014	7.56	7.56	ND	ND	3.88	0.596	ND	6.1	33.7	0.498 J	ND	9.85
Oct-2014	ND	ND	ND	ND	7.73	1.2	ND	5.1	44.6	2	50	8.03
Apr-2015	6.52	6.52	ND	ND	7.01	1.34	ND	4.4	42.5	0.879 J	60	10.8

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-23***										
Nov-2015	4.28	4.28	*ND*	*ND*	6.66	1.35	*ND*	5.5	68.1	*ND*	112	17.6
May-2016	2.68	2.68	*ND*	*8 J*	6.53	*ND*	*ND*	5.3	56.2	*ND*	27	8.2
Oct-2016	3.68	3.68	*ND*	*ND*	6.72	*NA*	*NA*	5.2	57.5	*0.895 J*	35	8.7
May-2017	*ND*	*ND*	*ND*	*ND*	7.43	1.41	*ND*	5.2	60.9	*0.749 J*	*15 J*	8.3
Oct-2017	3.56	3.56	*ND*	*ND*	7.17	1.55	*ND*	5	72	*0.567 J*	*20 J*	8.8
May-2018	*4 J*	*ND*	*ND*	*ND*	6.7	1.5	*ND*	5.8	51.1	*ND*	31	9.5
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	6.3	1.4	*ND*	4.79	47.4	*ND*	11	9.5
May-2019	*ND*	*NA*	*ND*	*ND*	6.3	1.2	*ND*	4.84	33	*ND*	16	8.6
Oct-2019	*ND*	*NA*	*ND*	*ND*	5.3	1.5	*ND*	4.56	4.14	*ND*	18	9.7
May-2020	*ND*	*NA*	*ND*	*ND*	6.7	1.4	*ND*	5.23	55.1	*ND*	*ND*	9.6
Oct-2020	*ND*	*NA*	*ND*	*ND*	6.5	1.5	*ND*	5.01	44.3	*ND*	39	10
Apr-2021	*ND*	*NA*	*ND*	*ND*	6.9	1.6	*ND*	4.95	51.4	*ND*	23	10.1
Oct-2021	*ND*	*NA*	*0.061 J*	*ND*	6.5	1.4	*ND*	4.97	87.2	*ND*	20	10.9
May-2022	*2 J2c*	*NA*	*ND*	*ND*	6.6	1.8	*ND*	4.87	75.2	*ND*	12	11.3 N3
Oct-2022	*ND*	*NA*	*ND*	*6.1 J*	8	1.9	*ND*	4.96	74.2	*ND*	34	12.3 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-23***													
Apr-1995	ND	ND	ND	ND	ND	2.2	NA	ND	ND	ND	0.57	0.05	ND	0.72	NA
Oct-1996	ND	ND	0.019	ND	ND	1.4	1.5	0.026	ND	ND	0.91	0.5	ND	ND	ND
Apr-1997	ND	ND	0.024	ND	ND	2.6	1.3	ND	ND	ND	0.26	ND	0.005	0.76	ND
Oct-1997	ND	ND	ND	ND	ND	1.08	1.06	ND	ND	ND	0.092	ND	ND	0.387	0.377
Apr-1998	ND	ND	ND	ND	ND	1.15	1.15	ND	ND	ND	0.13	ND	ND	0.421	0.396
Apr-1999	ND	ND	ND	ND	ND	1.25	1.32	ND	ND	ND	0.164	ND	ND	0.394	0.385
Oct-1999	ND	ND	ND	ND	ND	1.24	1.15	ND	ND	ND	0.113	ND	ND	0.406	0.352
Apr-2000	ND	ND	ND	ND	ND	1.42	1.26	ND	ND	0.017	0.795	ND	ND	0.91	0.389
Oct-2000	ND	ND	ND	ND	ND	1.48	1.46	ND	ND	ND	0.285	ND	ND	0.499	0.428
Apr-2001	ND	ND	ND	ND	ND	1.17	NA	ND	ND	ND	0.199	NA	ND	0.447	NA
Sep-2001	ND	ND	ND	ND	ND	1.19	1.29	ND	ND	ND	0.4	0.128	ND	0.448	0.436
Mar-2002	ND	ND	ND	ND	ND	1.27	1.11	ND	ND	ND	0.156	ND	ND	0.443	0.403
Sep-2002	ND	ND	ND	ND	ND	1.26	1.19	ND	ND	ND	0.565	ND	ND	0.482	0.4
Mar-2003	ND	ND	ND	ND	ND	1.81	1.28	ND	ND	ND	0.173	ND	ND	0.53	0.391
Oct-2003	ND	ND	0.011	ND	ND	2.04	1.56	ND	ND	ND	1.59	ND	0.003	0.656	0.434
Apr-2004	ND	ND	0.033	ND	ND	1.29	0.335	0.034	ND	0.024	13.6	ND	0.01	0.737	0.166
Oct-2004	ND	ND	0.011	ND	ND	2.22	1.22	0.011	ND	0.015	3.11	0.122	0.005	0.617	0.375
Apr-2005	ND	ND	ND	ND	ND	1.29	0.986	ND	ND	0.011	0.829	ND	ND	0.464	0.374
Oct-2005	ND	ND	ND	ND	ND	1.33	1.04	ND	ND	ND	0.527	ND	ND	0.46	0.372
Mar-2006	ND	ND	ND	ND	ND	0.683	0.497	ND	ND	ND	0.523	ND	ND	0.18	0.14
Sep-2006	ND	ND	ND	ND	ND	1.42	1.12	0.021	ND	ND	0.758	ND	0.004	0.565	0.383

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-23***													
Mar-2007	ND	ND	ND	ND	ND	0.708	0.573	0.014	ND	ND	2.05	ND	0.004	0.356	0.211
Sep-2007	ND	ND	ND	ND	ND	1.03	0.921	ND	ND	ND	0.628	ND	ND	0.414	0.358
Mar-2008	ND	ND	ND	ND	ND	1.19	0.977	0.046	ND	0.026	1.35	ND	0.006	0.505	0.349
Sep-2008	ND	ND	ND	ND	ND	1.25	1.08	ND	ND	ND	0.427	ND	ND	0.484	0.396
Mar-2009	ND	ND	ND	ND	ND	0.931	0.826	ND	ND	ND	0.243	ND	ND	0.363	0.299
Oct-2009	ND	ND	0.015	ND	ND	1.83	1.12	0.021	ND	0.014	2.17	0.19	0.011	1.1	0.382
Apr-2010	ND	ND	ND	ND	ND	1.33	1.52	ND	ND	ND	3.62	0.182	ND	0.395	0.247
Oct-2010	ND	ND	ND	ND	ND	1.89	1.8	ND	ND	ND	0.508	ND	ND	0.523	0.437
Apr-2011	ND	ND	0.02	ND	ND	1.24	0.396	0.014	ND	ND	4.31	0.121	0.007	0.689	0.135
Sep-2011	ND	ND	0.012	ND	ND	4.88	3.75	ND	ND	0.011	0.959	ND	0.002	0.771	0.469
Mar-2012	ND	ND	0.012	ND	ND	3.02	2.25	ND	ND	ND	2	0.088	0.003	0.764	0.411
Sep-2012	ND	ND	0.0158	ND	ND	3.9	3.58	0.0072 J	0.000829 J	0.003 J	1.07	0.163	0.0018 J	0.706	0.568
Mar-2013	ND	ND	0.0101	ND	ND	4.83	4.79	0.0107	0.000515 J	0.0043 J	1.31	0.365	0.0035	0.829	0.624
Oct-2013	0.001 J	0.0011 J	0.0255	0.000179 J	0.000162 J	4.9	4.8	0.0189	0.000838 J	0.0101	5.28	0.112	0.0083	1.11	0.552
Mar-2014	0.00041 J	0.001 J	0.0144	0.000128 J	ND	2.9	2.76	0.0058 J	0.0022 J	0.0049 J	3.69	0.161	0.0016 J	0.631	0.535
Oct-2014	0.000466 J	ND	0.0207	ND	ND	1.88	1.84	0.0012 J	0.0035 J	0.0023 J	0.0652	0.012 J	ND	0.811	0.775
Apr-2015	0.000661 J	0.000492 J	0.0376	0.000279 J	0.000075 J	2.33	1.49	0.0056 J	0.0027 J	0.0041 J	2.26	0.0177 J	0.0022	1.21	0.505
Nov-2015	ND	0.00087 J	0.0601	0.000503 J	0.000116 J	3.56	1.5	0.0071 J	0.0032 J	0.0077 J	5.46	0.031 J	0.0049	2.11	0.539
May-2016	ND	ND	0.0135	0.000088 J	ND	2	1.98	0.0013 J	0.0022	0.0024 J	0.0559 J	ND	ND	0.77	0.721
Oct-2016	ND	ND	0.0137	ND	ND	2.22	2.11	0.00082 J	0.0022	0.0021 J	ND	ND	ND	0.775	0.795
May-2017	ND	ND	0.0143	ND	ND	2.02	2.14	0.00095 J	0.0023	0.0026 J	ND	ND	ND	0.787	0.857
Oct-2017	ND	ND	0.0134	0.000084 J	ND	2.17	2.3	ND	0.0025	0.004	ND	ND	ND	0.824	0.893
May-2018	0.000055 J	ND	0.015	0.0001 J	0.000053 J	2.3	2.2	0.0072	0.005	0.0079	0.078	0.023	0.00004 J	0.91 J	0.85 J
Nov-2018	ND	ND	0.011	0.000097 J	0.000061 J	2.4	2.4	0.0047 J	0.0028	0.0052	0.13	0.022	0.00011 JB	0.86 J	0.88 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-23***													
May-2019	*ND*	*ND*	0.01	*ND*	*ND*	2.2	2.2	0.016	0.0068	0.0092	0.26	0.19	*ND*	*ND*	*ND*
Oct-2019	*0.00011 J*	*ND*	0.01	*0.00011 J*	*0.00026 J*	2.4	2.4	*0.0069 J*	0.0032	0.014	*0.059 J*	0.023	*0.000074 J*	0.88	*0.87 J*
May-2020	*0.00007 J*	*ND*	0.012	*0.000059 J*	*ND*	2.4	2.3	0.046	0.0055	0.015	0.39	0.16	*ND*	0.86	*0.85 J*
Oct-2020	*0.00032 J*	*ND*	0.015	*ND*	*ND*	2.5	2.5	*0.017 J*	0.0042	*ND*	0.12	0.055	*ND*	0.91	*0.91 J*
Apr-2021	*ND*	*ND*	0.014	*ND*	*ND*	2.5	2.4	0.006	*0.0036 J*	0.0096	0.076	*0.062 J*	*ND*	0.93	0.97
Oct-2021	*0.000089 J*	*ND*	0.016	*ND*	*ND*	2.7	2.7	0.0081	0.0041	0.0073	0.067	*0.047 J*	*0.000042 J*	1	1
May-2022	*ND*	*0.0017 JB*	0.015	*ND*	*ND*	2.8	2.9	0.015	0.004	0.011	0.16	0.095	*ND*	1.1	1.1
Oct-2022	*ND*	*ND*	0.015	*0.00011 J*	*ND*	3.1	3	0.012	0.0043	0.011	0.092	*0.05 J*	*ND*	1.1	1.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-23*												
Apr-1995	0.03	NA	ND	ND	1.2	NA	ND	0.02	3.1	NA	ND	ND	0.07
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	1.7	1.8	ND	ND	0.099
Apr-1997	0.011	ND	ND	ND	2.1	2.3	ND	ND	1.2	1.9	ND	ND	0.073
Oct-1997	ND	ND	ND	ND	0.907	1.32	ND	ND	1.33	1.38	ND	ND	0.015
Apr-1998	ND	ND	ND	0.016	ND	ND	ND	ND	1.61	1.4	ND	ND	0.013
Apr-1999	ND	ND	NA	ND	ND	1.12	ND	ND	8.54	8.47	ND	ND	0.027
Oct-1999	ND	0.01	NA	ND	0.759	ND	ND	ND	1.51	1.37	ND	ND	0.016
Apr-2000	ND	ND	NA	ND	ND	ND	ND	ND	2.26	2.21	ND	ND	0.044
Oct-2000	ND	ND	NA	ND	0.712	0.577	ND	ND	1.42	1.37	ND	ND	0.023
Apr-2001	ND	NA	NA	ND	1.66	NA	ND	ND	1.53	NA	ND	ND	0.016
Sep-2001	ND	ND	NA	ND	0.9	1.09	ND	ND	1.72	1.67	ND	ND	0.019
Mar-2002	ND	ND	NA	ND	0.948	0.868	ND	ND	2.74	1.78	ND	ND	0.02
Sep-2002	ND	ND	NA	ND	0.833	ND	ND	ND	1.68	1.65	ND	ND	0.022
Mar-2003	ND	ND	NA	ND	1.42	0.569	ND	ND	3.83	3.32	ND	ND	0.035
Oct-2003	ND	0.012	NA	0.012	ND	ND	ND	ND	2.35	1.61	ND	ND	0.122
Apr-2004	0.01	ND	ND	0.017	1.35	0.73	ND	ND	15.1	16	ND	0.034	0.081
Oct-2004	ND	ND	ND	ND	1.55	0.598	ND	ND	2.9	2.08	ND	ND	0.064
Apr-2005	ND	ND	ND	ND	0.83	0.69	ND	ND	6.96	6.52	ND	ND	0.082
Oct-2005	ND	ND	ND	ND	0.686	0.545	ND	ND	2.05	1.3	ND	ND	0.039
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	6.12	7.09	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.75	0.694	ND	ND	1.7	1.43	ND	ND	0.039
Mar-2007	ND	ND	ND	ND	0.74	0.512	ND	ND	21.4	21.3	ND	ND	0.037

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-23***												
Sep-2007	ND	ND	ND	ND	0.873	0.671	ND	ND	1.82	1.79	ND	ND	0.016
Mar-2008	ND	ND	ND	ND	0.915	0.793	ND	ND	1.84	1.58	ND	ND	0.058
Sep-2008	ND	ND	ND	ND	0.706	0.652	ND	ND	1.49	1.4	ND	ND	0.026
Mar-2009	ND	ND	ND	ND	0.775	0.721	ND	ND	2.38	2.36	ND	ND	0.023
Oct-2009	0.016	ND	ND	ND	0.722	ND	ND	ND	1.67	1.51	ND	ND	0.12
Apr-2010	ND	ND	ND	ND	0.752	0.579	ND	ND	5.28	5.44	ND	ND	0.036
Oct-2010	ND	ND	ND	ND	0.735	0.653	ND	ND	2.03	1.97	ND	ND	0.041
Apr-2011	0.011	ND	ND	ND	0.801	ND	ND	ND	13.3	12.4	ND	0.013	0.066
Sep-2011	0.013	ND	ND	0.013	0.985	0.574	ND	ND	2.52	2.06	ND	ND	0.042
Mar-2012	0.014	ND	ND	ND	0.68	ND	ND	ND	10.5	10.5	ND	ND	0.057
Sep-2012	0.0157	0.0131	ND	0.0032 J	1	0.679	ND	ND	1.84	1.85	ND	ND	0.0594
Mar-2013	0.024	0.0208	0.000095 J	0.0051 J	1.57	1.58	ND	0.000036 J	26	26.8	ND	ND	0.111
Oct-2013	0.0286	0.0171	ND	0.0058 J	0.933	0.397 J	ND	ND	1.32	1.55	0.000312 J	0.0149	0.134
Mar-2014	0.026	0.0181	ND	0.0101 J	0.856	0.752	ND	0.000044 J	1.57	1.65	ND	0.0063 J	0.0335
Oct-2014	0.0115	0.0125	ND	0.0051 J	0.936	0.923	ND	ND	5	5.16	ND	ND	0.0084 J
Apr-2015	0.0492	0.029	ND	0.0055 J	1.25	1.02	ND	ND	6.82	6.98	ND	0.0034 J	0.014
Nov-2015	0.0908	0.0381	ND	0.0062 J	1.65	0.943	0.0014 J	ND	7.18	7.04	ND	0.0088 J	0.0284
May-2016	0.0427	0.0402	ND	0.0036 J	0.987	1	ND	ND	4.26	4.26	ND	ND	0.0144 J
Oct-2016	0.0339	0.0342	ND	0.0038 J	0.988	1.02	ND	ND	3.95	4.07	ND	ND	0.0099 J
May-2017	0.0212	0.0215	ND	0.0037 J	0.923	1.02	ND	ND	3.98	4.11	ND	ND	0.0089 J
Oct-2017	0.0189	0.0193	ND	0.0035 J	0.971	1.06	ND	ND	4.17 J-	4.32	ND	ND	0.0101 J
May-2018	0.019	0.017	ND	0.0092	1.1 J	ND	0.0006 JB	ND	4.2 J	4.2 J	ND	0.0035	0.011
Nov-2018	0.02	0.017	ND	0.0069	1.2 J	1.6 J	0.00012 J	ND	2.4 J	4 JB	ND	0.0026	0.011
May-2019	0.024	0.021	ND	0.022	ND	ND	ND	ND	ND	ND	ND	0.0034	0.012

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-23***												
Oct-2019	0.019	0.016	*ND*	0.0094	*1.1 J*	*1.1 J*	*ND*	*ND*	*3.2 J*	*3.2 J*	*ND*	*ND*	0.022
May-2020	0.032	0.028	*ND*	0.055	*ND*	*1.4 J*	*ND*	*ND*	*3.3 J*	*3.1 J*	*ND*	0.012	0.0097
Oct-2020	0.019	0.016	*ND*	0.026	*ND*	*ND*	*ND*	*ND*	*2.5 J*	*2.9 J*	*ND*	*0.0025 J*	*ND*
Apr-2021	0.014	0.012	*0.00006 J*	0.014	1.1	0.96	*ND*	*ND*	3.9	3.4	*ND*	*ND*	*0.0068 J*
Oct-2021	0.012	0.012	*ND*	0.016	1	1.1	*ND*	*ND*	4.4	4.6	*ND*	*ND*	0.0059
May-2022	0.014	0.014	*ND*	0.03	1	1.1	*ND*	*ND*	4.3	4.8	*ND*	*ND*	0.0055
Oct-2022	0.014	0.012	*ND*	0.022	1.1	1.1	*ND*	*ND*	4.8	4.8	*ND*	*ND*	0.0073

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-23***																
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-23*																
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1 J	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-23*																
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-23***															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-23***															
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.44 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-23***															
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.189 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-23***															
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Feb-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-23***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*0.66 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*0.26 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-23***															
May-2017	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.292 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-24***											
Apr-1995	47.4	31	ND	30.1	9.4	ND	ND	8.8	125	7	77	17.9
Apr-1997	ND	2	ND	ND	7	0.17	ND	NA	NA	0.1	51	12
Oct-1997	3	3	0.26	ND	7.44	ND	ND	5.58	40.5	ND	16	ND
Apr-1998	ND	ND	0.23	ND	5.44	0.14	ND	5.65	47.7	ND	10	7.4
Apr-1999	ND	ND	0.46	ND	24.7	0.125	ND	5.03	39.3	ND	37	6
Oct-1999	ND	ND	0.08	ND	6.98	0.299	ND	5.39	36.8	ND	32	7.2
Apr-2000	5	5	0.61	ND	7.27	0.227	ND	5.84	33	ND	28	10
Oct-2000	7.9	NA	ND	ND	5.45	ND	ND	5.18	29.1	5	28	6.34
Apr-2001	4.1	NA	0.26	ND	6.18	ND	ND	NA	NA	ND	25	8.5
Sep-2001	2	2	ND	ND	9.87	1.38	ND	4.81	42	38.6	38	6.77
Mar-2002	3.6	3.6	ND	ND	9.49	ND	ND	5.1	49	ND	37	7.42
Sep-2002	4	4	ND	ND	9.42	ND	ND	6.1	46.1	ND	24	8.25
Mar-2003	3.6	3.6	ND	ND	7.39	0.256	ND	5.1	45	ND	50	8.22
Oct-2003	4.2	4.2	ND	ND	7.42	0.24	ND	4.6	51.7	ND	17	9.13
Apr-2004	4.2	4.2	ND	ND	8.28	0.174	ND	4.7	51.2	ND	45	13.1
Oct-2004	4.2	4.2	ND	ND	9.13	0.223	ND	4.85	47.8	ND	42	9.83
Apr-2005	18	18	ND	ND	10.2	0.25	ND	5.5	66.4	ND	65	13.6
Oct-2005	5	5	ND	ND	6.25	0.28	ND	4.4	38.4	ND	38	6.16
Mar-2006	4.9	4.9	ND	ND	7.6	0.28	ND	5.6	60.3	1.16	42	5.83
Sep-2006	4.3	4.3	ND	ND	6.63	0.25	ND	4.9	43	1.07	37	6.71
Mar-2007	4.7	4.7	ND	ND	8.12	0.2	ND	4.7	45.9	ND	ND	7.64
Sep-2007	5.3	5.3	ND	ND	8.37	0.14	ND	5.6	41.8	ND	57	7.71
Mar-2008	16	16	ND	ND	21.1	1.01	ND	4.8	44.6	6.71	37	11.9
Sep-2008	6.3	6.3	ND	ND	9.79	0.09	ND	4.8	45.9	1.15	34	8.4
Mar-2009	5.8	5.8	ND	ND	15.8	0.07	ND	4.7	73.6	1.67	43	13.4
Oct-2009	7	7	ND	ND	12.5	0.08	ND	4.7	60.3	2.3	64	11.7
Mar-2010	7.5	7.5	0.44	11.8	13.9	0.07	ND	4.82	75	4.01	62	12
Oct-2010	6	6	ND	ND	12.2	ND	ND	4.6	59.2	4.05	37	11.6
Apr-2011	7.1	7.1	ND	ND	11.4	0.07	ND	4.5	62.6	3.6	66	10.4
Sep-2011	7.1	7.1	ND	ND	11.7	0.08	ND	4.7	57.6	3.44	52	12
Mar-2012	6.8	6.8	ND	ND	12	0.09	ND	4.1	61.4	3.98	46	12.3
Sep-2012	6	6	ND	ND	11.9	0.125	ND	3.6	59.3	3.23	46	12.1
Mar-2013	5.84	5.84	ND	ND	12.1	0.135	ND	4.9	60.9	3.23	51	9.7
Oct-2013	6.76	6.76	ND	ND	13	0.109	ND	5.7	62.3	3.7	46	13.5
Mar-2014	6.52	6.52	ND	ND	13.5	0.138	ND	5	66.7	3.68	460	13.4
Oct-2014	ND	ND	ND	ND	13.3	0.137	ND	4.9	67.8	4.81	34	14.7
Apr-2015	7.44	7.44	ND	ND	14.7	0.0722	ND	3.9	66	4.46	48	15.2

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-24***											
Nov-2015	4.52	4.52	*ND*	*6 J*	14.7	0.0738	*ND*	5	94.1	5.42	55	14.9
May-2016	4.4	4.4	*ND*	*ND*	13.7	0.0732	*ND*	5	89.7	4.15	47	14.7
Oct-2016	5.48	5.48	*ND*	*ND*	14.9	*NA*	*NA*	4.9	97.2	4.7	51	14.2
May-2017	3.56	3.56	*ND*	*ND*	14.7	0.334	*ND*	4.9	105.5	5.01	*21 J*	15.5
Oct-2017	2	2	*0.144 J*	*ND*	15.2	0.408	*ND*	5.1	110.4	3.28	53	16.2
May-2018	*4 J*	*ND*	*ND*	*7.9 J*	14.5	0.41	*ND*	5.3	97.5	*5.5 J*	43	17.4
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	16.5	0.73	*ND*	4.58	86.7	*7.1 J*	47	19.4
May-2019	*ND*	*NA*	*ND*	*ND*	19.8	0.61	*ND*	4.56	78.3	*ND*	61	21.2
Oct-2019	*4 J*	*NA*	*ND*	*ND*	18.2	0.63	*ND*	4.21	102.8	*8.4 J*	104	23.9
May-2020	*ND*	*NA*	*ND*	*ND*	16.1	0.25	*ND*	4.29	89.6	*9.2 J*	30	19.2
Oct-2020	*2 J*	*NA*	*ND*	*ND*	15.8	0.28	*ND*	4.47	82.2	8.2	38	19.8
Apr-2021	*ND*	*NA*	*ND*	*ND*	24.4	1.1	*ND*	4.61	129.3	*ND*	72	22.2
Oct-2021	12	*NA*	*ND*	*ND*	22.1	1	*ND*	4.8	165	*5.2 J*	55	22.6
May-2022	*2 J3c*	*NA*	*ND*	*ND*	20.2	1	*ND*	4.6	155.1	*8.4 J*	74	25.7 N3
Oct-2022	*2 J4c*	*NA*	*ND*	*8.4 J*	26.4	1	*ND*	4.65	161.2	10.4	71	28.7 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24***													
Apr-1995	ND	ND	ND	ND	ND	43.2	NA	0.01	ND	ND	1.7	0.07	ND	2.4	NA
Oct-1996	ND	ND	0.026	ND	ND	1.9	1.6	ND	ND	ND	0.22	ND	ND	0.87	0.71
Apr-1997	ND	ND	0.018	ND	ND	1.4	1.8	ND	ND	ND	ND	ND	ND	0.85	1.1
Oct-1997	ND	ND	0.019	ND	ND	1.36	1.39	ND	ND	ND	0.201	ND	ND	0.886	0.897
Apr-1998	ND	ND	0.021	ND	ND	1.44	1.41	ND	ND	ND	0.198	ND	ND	0.918	0.908
Apr-1999	ND	ND	0.015	ND	ND	1.16	1.19	ND	ND	ND	ND	ND	ND	0.747	0.759
Oct-1999	ND	ND	0.018	ND	ND	1.28	1.2	ND	ND	ND	0.085	0.058	ND	0.836	0.776
Apr-2000	ND	ND	0.018	ND	ND	2.77	1.23	0.021	ND	ND	3.87	0.571	ND	0.828	0.694
Oct-2000	ND	ND	0.014	ND	ND	1.23	1.23	ND	ND	ND	0.053	ND	ND	0.792	0.81
Apr-2001	ND	ND	0.017	ND	ND	2.03	NA	ND	ND	ND	1.27	NA	ND	0.842	NA
Sep-2001	ND	ND	0.016	ND	ND	1.29	1.41	ND	ND	ND	0.175	0.111	ND	0.863	0.9
Mar-2002	ND	ND	0.02	ND	ND	1.44	1.44	ND	ND	ND	0.132	0.121	ND	0.929	0.919
Sep-2002	ND	ND	0.022	ND	ND	1.68	1.58	ND	ND	ND	0.251	0.189	ND	0.987	0.97
Mar-2003	ND	ND	0.02	ND	ND	1.73	1.41	ND	ND	ND	0.185	0.083	ND	0.945	0.943
Oct-2003	ND	ND	0.022	ND	ND	1.87	1.47	ND	ND	ND	0.161	0.089	ND	1.08	1.01
Apr-2004	ND	ND	0.027	ND	ND	3.01	1.85	ND	ND	ND	1.65	0.177	ND	1.36	1.25
Oct-2004	ND	ND	0.025	ND	ND	1.85	1.84	ND	ND	ND	0.379	0.275	ND	1.27	1.26
Apr-2005	ND	ND	0.024	ND	ND	3.6	1.85	ND	ND	ND	4.47	1.07	ND	1.12	0.975
Oct-2005	ND	ND	0.017	ND	ND	1.15	1.11	ND	ND	ND	0.199	0.112	ND	0.801	0.773
Mar-2006	ND	ND	0.015	ND	ND	1.08	0.969	ND	ND	ND	ND	ND	ND	0.765	0.723
Sep-2006	ND	ND	0.017	ND	ND	1.24	1.23	ND	ND	ND	0.077	0.051	ND	0.876	0.921

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24***													
Mar-2007	ND	ND	0.022	ND	ND	1.33	1.36	ND	ND	0.118 J	ND	ND	ND	1.05	1.06
Sep-2007	ND	ND	0.02	ND	ND	1.42	1.29	ND	ND	ND	0.066	0.052	ND	1.01	0.956
Mar-2008	ND	0.002	0.024	ND	ND	2.9	1.93	ND	ND	ND	3.09	1.41	ND	1.13	0.988
Sep-2008	ND	ND	0.022	ND	ND	1.43	1.37	ND	ND	ND	0.128	0.096	ND	1.17	1.13
Mar-2009	ND	ND	0.036	ND	ND	2.39	2.32	ND	ND	ND	0.103	0.074	ND	1.8	1.76
Oct-2009	ND	ND	0.033	ND	ND	2.1	1.93	ND	ND	ND	0.189	0.137	ND	1.56	1.45
Mar-2010	ND	ND	0.04	ND	ND	2.08	1.85	ND	ND	ND	0.079	ND	ND	1.66	1.47
Oct-2010	ND	ND	0.027	ND	ND	1.99	1.98	ND	ND	ND	ND	ND	ND	1.62	1.63
Apr-2011	ND	ND	0.033	ND	ND	1.78	1.74	ND	ND	ND	0.064	ND	ND	1.45	1.42
Sep-2011	ND	ND	0.034	ND	ND	2.07	2.03	ND	ND	ND	ND	ND	ND	1.66	1.61
Mar-2012	ND	ND	0.039	ND	ND	1.95	1.86	ND	ND	ND	ND	ND	ND	1.8	1.73
Sep-2012	ND	ND	0.0356	0.000072 J	ND	2.02	2.16	ND	0.0038 J	0.0027 J	0.0281 J	0.0308 J	ND	1.71	1.79
Mar-2013	ND	ND	0.0295	ND	ND	1.69	2.07	ND	0.0031 J	0.002 J	0.0085 J	0.007 J	0.0013 J	1.33	1.65
Oct-2013	ND	ND	0.0423	ND	ND	2.28	2.19	0.0025 J	0.0045 J	0.0021 J	ND	ND	ND	1.9	1.79
Mar-2014	ND	ND	0.0438	ND	0.000104 J	2.35	2.36	0.0012 J	0.0039 J	0.0021 J	0.041 J	0.0637	ND	1.84	1.82
Oct-2014	0.000819 J	ND	0.0449	ND	0.000131 J	2.43	2.4	ND	0.0047 J	0.0033 J	0.0107 J	0.0112 J	ND	2.1	2.07
Apr-2015	0.000837 J	ND	0.0467	ND	0.000153 J	2.5	2.56	ND	0.0049 J	0.0027 J	0.371	0.101	ND	2.19	2.21
Nov-2015	ND	ND	0.0444	ND	0.000201 J	2.45	2.52	ND	0.0049 J	0.0022 J	ND	ND	ND	2.13	2.2
May-2016	ND	ND	0.0444	0.000079 J	ND	2.34	2.37	ND	0.0052	0.002 J	ND	ND	ND	2.15	2.17
Oct-2016	ND	ND	0.0422	ND	ND	2.44	2.37	ND	0.0051	0.0022 J	ND	ND	ND	1.98	2.16
May-2017	ND	ND	0.0461	ND	ND	2.42	2.49	0.00069 J	0.0054	0.0022 J	ND	ND	ND	2.29	2.39
Oct-2017	ND	ND	0.0494	0.000072 J	ND	2.64	2.59	ND	0.0058	0.0024 J	ND	ND	ND	2.34	2.34
May-2018	0.000084 J	ND	0.053	0.000074 J	0.00015 J	2.8	2.6	0.0025 J	0.0056	0.003 B	ND	ND	0.000018 J	2.5	2.3
Nov-2018	ND	ND	0.06	0.000089 J	0.00017 J	3.1	3	0.0024 J	0.0062	0.0038	ND	ND	0.00014 JB	2.8	2.9

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24***													
May-2019	*ND*	*ND*	0.068	*ND*	*ND*	3.4	3.6	*ND*	0.0075	0.0031	*ND*	*ND*	*ND*	3.1	3.3
Oct-2019	*0.00011 J*	*ND*	0.072	*0.00012 J*	*0.00044 J*	3.8	3.7	*0.0034 J*	0.0082	0.0067	*ND*	*ND*	*0.000058 J*	3.5	3.4
May-2020	*0.000059 J*	*ND*	0.059	*ND*	*ND*	3.4	3.1	*0.0054 J*	0.0069	0.0027	*ND*	*ND*	*ND*	3.2	3
Oct-2020	*ND*	*ND*	0.045	*ND*	*ND*	3.2	3.1	*0.0034 J*	0.0054	*ND*	*ND*	*ND*	*ND*	2.9	2.9
Apr-2021	*ND*	*ND*	0.074	*ND*	*ND*	3.5	3.5	*ND*	0.0086	*0.0049 J*	*ND*	*ND*	*ND*	3.3	3.4
Oct-2021	*ND*	*ND*	0.071	*ND*	*ND*	3.6	3.7	*ND*	0.009	0.0038	*ND*	*ND*	*ND*	3.3	3.4
May-2022	*ND*	*ND*	0.075	*ND*	*ND*	4	4.1	*0.00084 J*	0.0097	0.004	*ND*	*ND*	*ND*	3.8	3.8
Oct-2022	0.00054	*ND*	0.088	*0.00016 J*	*0.0002 J*	4.6	4.5	*0.00066 J*	0.011	0.0052	*ND*	*ND*	*ND*	4.2	4.3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-24*												
Apr-1995	0.1	NA	ND	ND	4.6	NA	ND	ND	2.8	NA	ND	ND	0.07
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	2.6	2.7	ND	ND	0.023
Apr-1997	ND	0.011	**0.0023**	ND	ND	1.3	ND	ND	2.5	2.6	ND	ND	ND
Oct-1997	ND	ND	0.0007	ND	1.47	1.28	ND	ND	2.09	2.09	ND	ND	0.013
Apr-1998	0.01	0.011	0.0006	ND	1.13	ND	ND	ND	2.19	2.18	ND	ND	0.011
Apr-1999	ND	ND	NA	ND	ND	1.44	ND	ND	1.94	1.9	ND	ND	ND
Oct-1999	ND	ND	NA	ND	1.03	1.26	ND	ND	2.14	1.97	ND	ND	ND
Apr-2000	0.032	0.011	NA	ND	0.764	ND	ND	ND	2.49	2.14	ND	ND	ND
Oct-2000	ND	ND	NA	ND	0.887	0.986	ND	ND	2.27	2.33	ND	ND	ND
Apr-2001	0.017	NA	NA	ND	1.51	NA	ND	ND	2.57	NA	ND	ND	ND
Sep-2001	0.011	0.01	NA	ND	0.638	2.07	ND	ND	2.97	2.99	ND	ND	ND
Mar-2002	0.011	0.011	NA	ND	1.65	1.54	ND	ND	3.09	2.93	ND	ND	ND
Sep-2002	0.012	0.011	NA	ND	1.06	1.12	ND	ND	3.57	3.34	ND	ND	ND
Mar-2003	0.011	0.01	NA	ND	2.14	1.47	ND	ND	3.11	3.07	ND	ND	ND
Oct-2003	0.012	ND	NA	ND	0.645	0.609	ND	ND	4.39	3.25	ND	ND	0.015
Apr-2004	0.026	0.015	0.0012	ND	2.08	1.14	ND	ND	3.57	3.42	ND	ND	ND
Oct-2004	0.016	0.015	0.0007	ND	1.48	1.3	ND	ND	3.6	3.55	ND	ND	ND
Apr-2005	0.036	0.016	0.0002	ND	1.17	1.08	ND	ND	3.72	3.35	ND	ND	ND
Oct-2005	ND	ND	0.0002	ND	0.827	0.771	ND	ND	2.84	2.96	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.774	0.75	ND	ND	3.4	3.19	ND	ND	ND
Sep-2006	ND	ND	0.0002	ND	0.908	1.02	ND	ND	3.02	3.22	ND	ND	ND
Mar-2007	ND	ND	0.0012	0.057 J	1.02	1.04	ND	ND	3.14	3.36	ND	ND	0.102 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-24*												
Sep-2007	ND	ND	0.0016	ND	1.09	1.03	ND	ND	3.73	3.74	ND	ND	ND
Mar-2008	0.027	0.017	0.0008	ND	1.2	1.12	ND	ND	3.85	3.24	ND	ND	ND
Sep-2008	0.012	0.012	0.0003	ND	0.999	0.976	ND	ND	3.75	3.75	ND	ND	ND
Mar-2009	0.02	0.019	0.0008	ND	1.47	1.42	ND	ND	5.32	5.22	ND	ND	ND
Oct-2009	0.018	0.016	0.0002	ND	1.15	1.04	ND	ND	4.82	4.62	ND	ND	ND
Mar-2010	0.018	0.016	ND	ND	1.44	1.31	ND	ND	5.88	6.35	ND	ND	ND
Oct-2010	0.018	0.019	ND	ND	1.3	1.3	ND	ND	7.13	7.13	ND	ND	ND
Apr-2011	0.016	0.016	0.0002	ND	1.03	0.997	ND	ND	6.32	6.2	ND	ND	ND
Sep-2011	0.018	0.018	ND	ND	1.25	1.22	ND	ND	6.48	6.42	ND	ND	ND
Mar-2012	0.02	0.019	ND	ND	1.25	1.2	ND	ND	6	5.87	ND	ND	ND
Sep-2012	0.0197	0.0208	ND	0.0044 J	1.14	1.23	ND	ND	5.64	5.82	ND	ND	0.0074 J
Mar-2013	0.0165	0.0195	0.000081 J	0.0035 J	0.848	1.07	ND	ND	4.31	5.26	ND	ND	0.0123
Oct-2013	0.0225	0.0215	ND	0.0049 J	1.15	1.09	ND	ND	6.2	5.73	0.0004 J	0.000639 J	0.0189
Mar-2014	0.0238	0.0219	ND	0.0049 J	1.15	1.15	ND	ND	5.94	5.79	0.000109 J	0.000843 J	0.0051 J
Oct-2014	0.0236	0.0234	0.000564	0.0054 J	1.31	1.29	ND	ND	7.18	7.14	ND	ND	0.0085 J
Apr-2015	0.025	0.0252	0.000477	0.0055 J	1.24	1.27	ND	ND	7.05	7.19	ND	ND	0.0112
Nov-2015	0.0252	0.0259	0.000072 J	0.0056 J	1.26	1.31	ND	ND	7.23	7.46	ND	ND	0.0126
May-2016	0.0243	0.024	0.00015 J	0.005	1.24	1.22	ND	ND	7.02	7.03	ND	ND	0.0076 J
Oct-2016	0.0232	0.0284	0.00036	0.0059	1.15	1.25	ND	ND	6.59	7.01	ND	ND	0.0064 J
May-2017	0.0264	0.0264	0.00046	0.0061	1.18	1.24	ND	ND	6.51	6.79	ND	ND	0.008 J
Oct-2017	0.0278	0.0283	0.00089	0.0051	1.27	1.33	ND	ND	6.67 J-	6.66	ND	ND	0.0078 J
May-2018	0.026	0.027	0.00076	0.0066	ND	ND	0.0012 JB	ND	7.9	7.3	ND	0.0044	0.01
Nov-2018	0.038	0.032	0.00057	0.0071	1.4 J	1.9 J	0.00019 J	ND	6.5	8.1 B	ND	0.003	0.011
May-2019	0.041	0.041	**0.0023**	0.0084	ND	ND	ND	ND	7.9	8.2	ND	0.0042 B	0.011

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-24***												
Oct-2019	0.041	0.04	0.0019 M1	0.0083	*1.5 J*	*1.5 J*	*ND*	*ND*	8.8	8.7	*ND*	*ND*	0.02
May-2020	0.038	0.35	0.00039	0.0074	*ND*	*ND*	*0.00036 J*	*ND*	7.7	7.4	*ND*	0.011	0.0082
Oct-2020	0.038	0.037	0.00042	0.0056	*ND*	*1.1 J*	*ND*	*ND*	7.3	6.7	*ND*	*0.00082 J*	*ND*
Apr-2021	0.044	0.045	0.00057	0.01	1.3	1.2	*ND*	*ND*	10.1	9.9	*ND*	*ND*	0.01
Oct-2021	0.045	0.046	0.00054	0.0089	1.3	1.3	*ND*	*ND*	12	12.7	*0.000027 J*	*ND*	0.01
May-2022	0.049	0.049	0.00053	0.01	1.3	1.3	*ND*	*ND*	12.2	12	*ND*	*ND*	0.012
Oct-2022	0.058	0.056	0.0016	0.011	1.5	1.6	*ND*	0.003	13.3	13.3	*ND*	*ND*	0.013

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24*																
Oct-1996	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	0.6 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	1.5	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7 J	ND
Apr-2004	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24*																
Mar-2007	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	5.8	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Jun-2009	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.8	ND
Mar-2010	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	6.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	6.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	4.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	5.59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	6.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	7.35	ND	ND	ND	ND	ND	ND	0.27 J	0.55 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	6.96	ND	ND	ND	ND	ND	ND	0.27 J	0.47 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	6.14	ND	ND	ND	ND	ND	ND	0.25 J	0.44 J	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	7.87	ND	ND	ND	ND	ND	ND	0.29 J	0.32 J	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	6.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	6.7	0.1 J	ND	ND	ND	ND	0.1 J	0.3 J	0.3 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	7	0.1 J	ND	ND	ND	ND	0.1 J	0.2 J	0.3 J	1.4 J	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	0.1 J	0.2 J	0.3 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24*																
Oct-2017	*ND*	*ND*	*ND*	*ND*	4.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.3 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	3.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	5.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	5.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	2.07	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.126 J*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24***															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	9.5	4.4
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	9	1
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	5	6.5
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	5	2.4
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	0.9 J	NA	NA	NA	ND	0.8 J
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	1.3	1
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	1.9	NA	ND	NA	2	2
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	7.1	1.6
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	4.8	2
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	5.8	2.4
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	5.7	2.3
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	9.7	5.3
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	4.8	2.8
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	12	7.4
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3	ND	ND	ND	15	7.8
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	6.2	6.4
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2	ND	ND	ND	6.6	7.4
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	6	2.1
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	7.6	2.4
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	7.6	1.6

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24***															
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	7.2	2.5
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	15.2	2.3
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	7.2	2.9
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	10.7	7.4
Mar-2009	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	ND	ND	ND	17.6	10.4
Jun-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	17.4	8
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	9.7	6.1
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4 J	12.2
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND	ND	ND	24.1	10
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	ND	ND	ND	ND	10
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	24	12.3
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	20.1	11.3
Sep-2012	0.27 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.39	ND	ND	ND	10.4	6.77
Mar-2013	0.28 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	12.4	9.38
Oct-2013	0.49 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.41 J,B	4.95	ND	ND	ND	11.8	10.7
Mar-2014	0.47 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	ND	ND	ND	14.9 J	10.1
Oct-2014	0.37 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.59 J,B	3.92	ND	ND	ND	9.73	7.49
Apr-2015	0.61 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.68	ND	ND	ND	9.67	9.41
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.4	ND	ND	ND	20.3 J	8.2
May-2016	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	3.5	ND	ND	ND	9.4	9.3
Oct-2016	0.3 J	ND	ND	ND	ND	ND	ND	ND	0.1 J	0.2 J	0.8 J	2.3	ND	ND	ND	9.2	9.9
May-2017	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J,B	ND	1.7	ND	ND	ND	5.8	5.6

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24***															
Oct-2017	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	1.5	*ND*	*ND*	*ND*	5.1	4.9
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	9.2	4.7
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*0.86 JN3*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2 CL	2.2 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.7	2.1
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	7.3	4.5
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	9	4.7
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.282 J*	*ND*	*ND*	*ND*	*1.54 J*	*1.49 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*1 J*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.5	*0.9 J*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	1.3

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24***															
Oct-1996	ND	ND	NA	NA	ND	NA	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	2.5	ND	ND	ND	ND	0.9 J	0.7 J	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	1.9	ND	ND	ND	ND	0.8 J	0.7 J	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	0.7 J	ND	ND	NA	NA	ND	0.5 J	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	0.6 J	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	1.6	ND	ND	NA	NA	0.6 J	0.9 J	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	2.1	ND	ND	ND	ND	0.6 J	0.6 J	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	2.8	ND	ND	ND	ND	0.7 J	0.7 J	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	2.7	ND	ND	ND	ND	0.6 J	0.6 J	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	4.4	ND	ND	ND	ND	1.2	1.2	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	2.8	ND	ND	ND	ND	0.6 J	0.6 J	ND	ND	NA
Oct-2003	ND	ND	ND	NA	1.1	ND	ND	4.6	ND	ND	ND	ND	1.6	1.1	ND	ND	NA
Apr-2004	ND	ND	ND	NA	2.3	ND	ND	5	ND	ND	ND	ND	1.8	1.1	ND	0.9 J	NA
Oct-2004	ND	ND	ND	NA	1.6	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	0.6 J	ND	ND	4.2	ND	ND	ND	ND	1.5	1.1	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	3.4	ND	ND	ND	ND	0.8 J	0.7 J	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	ND	0.8 J	0.9 J	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24***															
Sep-2006	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	3.6	ND	ND	ND	ND	1.2	0.9 J	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	3.7	ND	ND	ND	ND	1.5	1.9	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	1.1	1.1	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	5	ND	ND	ND	ND	3.1	5.1	ND	1.1	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	**9.2 C**	ND	ND	ND	ND	**8.4 C**	ND	ND	ND	NA
Jun-2009	ND	ND	ND	ND	ND	ND	ND	**8**	ND	ND	ND	ND	**5.9**	1.1	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	**6**	ND	ND	ND	ND	4.1	1 J	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	**11.7**	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	**11**	ND	ND	ND	ND	ND	1.5	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	**11.8**	ND	ND	ND	ND	**7.2**	1.3	ND	1.4	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	**11.8**	ND	ND	ND	ND	**7.8**	1.4	ND	ND	NA
Mar-2012	ND	ND	ND	ND	0.5 J	ND	ND	**11**	ND	ND	ND	ND	**7.1**	1.3	ND	0.8 J	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	**8.9**	ND	ND	ND	ND	**5.44**	1.04	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	**7.14**	ND	ND	ND	ND	**5.73**	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.16 J	ND	ND	ND	**8.91**	ND	ND	ND	ND	**8.32**	1.08	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	**7.46**	ND	ND	ND	ND	**7.33**	0.88 J	ND	ND	ND
Oct-2014	ND	ND	ND	0.13 J	ND	ND	ND	**6.5**	ND	ND	ND	ND	**5.75**	0.76 J	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	**6.29**	ND	ND	ND	ND	**6.48**	0.69 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	**5.1**	ND	ND	ND	ND	**5.2**	0.6 J	ND	ND	ND
May-2016	ND	ND	ND	0.1 J	0.3 J	ND	ND	4.6	ND	ND	ND	ND	4.2	0.6 J	ND	0.2 J	ND
Oct-2016	ND	ND	ND	0.1 J	0.3 J	ND	ND	3.6	ND	ND	ND	ND	3.1	0.6 J	ND	0.2 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24***															
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	1.9	*0.1 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	1.7	*0.3 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2 B	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	2.2	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*0.98 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.106 J*	*ND*	*ND*	*ND*	*0.434 J*	*ND*	*ND*	*ND*	*ND*	*0.326 J*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-24A***											
Apr-1995	33	33	ND	94.6	5	ND	ND	5.4	472	137	278	19.3
Apr-1997	ND	4	ND	ND	16	ND	ND	NA	NA	16	79	21
Oct-1997	ND	ND	0.51	ND	18	ND	ND	5.1	125.9	9.64	70	26
Apr-1998	ND	ND	0.3	ND	11.1	0.19	ND	4.71	119.6	21.7	55	24
Apr-1999	ND	ND	1.3	ND	12	ND	ND	4.29	264	47.6	170	68
Oct-1999	ND	ND	0.43	ND	19.6	ND	ND	4.67	174	43.3	120	46
Apr-2000	ND	ND	0.92	ND	16.4	ND	ND	4.55	143	55.3	82	35
Oct-2000	ND	NA	0.75	15	13.1	ND	ND	4.27	154	43.4	102	30.6
Apr-2001	ND	NA	0.9	13	11	ND	ND	NA	NA	40	96	32
Sep-2001	ND	ND	0.48	ND	13.8	ND	ND	4.06	159	35.5	91	23.5
Mar-2002	ND	ND	0.64	ND	14.6	ND	ND	4.5	180	44.4	116	26.1
Sep-2002	ND	ND	0.69	ND	11.1	ND	ND	4.4	155.6	43.6	101	25.7
Mar-2003	ND	ND	0.78	ND	17.9	ND	ND	4.3	163.9	43.5	100	30
Oct-2003	ND	ND	0.31	12	12.2	0.086	ND	4.3	133.3	26.3	45	20.8
Apr-2004	1.2	1.2	0.41	14	11.8	ND	ND	4.4	106.5	29.6	96	18.2
Oct-2004	2	2	0.34	19	10.4	ND	ND	4.56	96.9	25.9	110	18.6
Apr-2005	4.3	4.3	0.55	17	8.3	ND	ND	4.7	107.4	36.4	90	26.3
Oct-2005	9.5	9.5	0.48	ND	9.29	ND	ND	4.4	108.9	32.9	76	25.4
Mar-2006	13	13	ND	ND	8.34	ND	ND	4.8	124.6	38.8	92	31.9
Sep-2006	4.8	4.8	0.46	ND	8.04	ND	ND	4.7	104.9	31.9	78	29.1
Mar-2007	7.6	7.6	ND	ND	8.51	ND	ND	4.7	92.7	25.8	71	26.2
Sep-2007	8.6	8.6	0.21	13	7.69	ND	ND	5.5	102.1	24.3	95	31.2
Mar-2008	23	23	0.56	16	11.4	ND	ND	5.2	117	35.2	78	38.7
Sep-2008	26	26	0.63	ND	7.48	ND	ND	5.3	109.6	23.2	97	40.6
Mar-2009	35	35	0.88	ND	6.32	ND	ND	5	133.6	27.1	82	45.9
Oct-2009	31	31	0.64	ND	6.74	ND	ND	5	119.3	23.4	86	42.2
Mar-2010	28	28	0.6	11.4	6.85	ND	ND	5.4	144	21.4	82	38.8
Oct-2010	31	31	0.46	ND	6.6	ND	ND	4.9	102.6	18.7	76	40.5
Apr-2011	28	28	0.72	ND	5.81	ND	ND	5	113.1	20.2	95	35.3
Sep-2011	18	18	0.26	ND	6.49	0.08	ND	5.1	92.1	15.3	75	29.7
Mar-2012	14	14	0.42	ND	5.81	0.27	ND	4.5	88.7	18.1	55	27.6
Sep-2012	14.7	14.7	0.29	ND	5.31	0.251	ND	4	108.9	32.9	84	47.1
Mar-2013	12	12	ND	ND	5.39	0.993	ND	5.2	98.8	26.1	74	36
Oct-2013	17	17	0.187 J	12	5.7	0.88	ND	5.7	103.4	27.5	80	45.1
Mar-2014	28	28	ND	6 J	5.32	0.992	ND	5.6	118.5	24.7	57	54.2
Oct-2014	37.4	37.4	ND	5 J	5.17	1.29	ND	5.7	115	18.2	78	58.2
Apr-2015	43.2	43.2	ND	ND	4.84	1.32	ND	5	121.9	18.5	80	72.7

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-24A***											
Nov-2015	33.2	33.2	*0.108 J*	*9 J*	5.49	1.41	*ND*	5.8	143	16.7	89	57.5
May-2016	43	43	*ND*	*6 J*	4.61	1.31	*ND*	6	168.5	16.2	84	62.2
Oct-2016	44.8	44.8	*ND*	*ND*	4.63	*NA*	*NA*	5.9	183.7	14	141	62.6
May-2017	50.2	50.2	*ND*	*5 J*	4.55	1.22	*ND*	5.9	214	15.3	75	63.2
Oct-2017	46.2	46.2	*0.125 J*	*ND*	4.83	1.35	*ND*	6.1	196	14.3	93	60.3
May-2018	42	42	*ND*	*ND*	6	1.5	*ND*	5.2	141.5	13.1	30	63
Nov-2018	26	26	*ND*	*7.9 J*	10	0.95	*ND*	5.43	116.4	10.7	72	46.4
May-2019	22 H1	*NA*	*ND*	*ND*	11.5	1.3	*ND*	5.34	96.9	14.7	91	42
Oct-2019	20	*NA*	*ND*	*6 J*	9	1	0.018	4.85	118.3	16.3	25	40.1
May-2020	36	*NA*	*ND*	*ND*	6.8	1.5	*ND*	5.12	132	15.2	66	56.3
Oct-2020	36	*NA*	*ND*	*ND*	7	1.6	*ND*	5.23	132.1	17.6	71	63.7
Apr-2021	40	*NA*	*ND*	*12.6 J*	6.4	1.9	*ND*	5.79	163	12.3	91	61.8
Oct-2021	*4 J4c*	*NA*	*0.059 J*	*8.3 J*	4.7	1.6	*ND*	5.83	203.2	17.9	84	69.7
May-2022	62	*NA*	*ND*	*ND*	4	1.5	0.016	5.72	189.2	19.1	110	85.7 N3
Oct-2022	52	*NA*	*ND*	*19.8 J*	6.2	1.2	*ND*	5.74	168.5	17.1	91	66.4 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24A***													
Apr-1995	ND	ND	ND	ND	ND	4.6	NA	**0.156**	ND	ND	1.7	1.4	ND	1.9	NA
Oct-1996	ND	ND	0.14	ND	ND	3.3	3.2	ND	ND	ND	ND	ND	ND	2.4	2.3
Apr-1997	ND	ND	0.13	ND	ND	3.7	3.5	ND	ND	0.033	1.5	0.38	ND	2.6	2.4
Oct-1997	ND	ND	0.128	ND	ND	3.14	3.21	ND	0.012	0.019	4.55	4.5	ND	2.61	2.6
Apr-1998	ND	ND	0.144	ND	ND	4.11	4.09	ND	0.019	0.013	2.07	2.08	ND	3.45	3.42
Apr-1999	ND	ND	0.222	ND	ND	12.5	11.6	ND	0.079	0.017	3.29	3.04	ND	8.85	8.24
Oct-1999	ND	ND	0.139	ND	0.004	12.7	11.8	ND	0.066	0.032	1.83	1.71	ND	6.61	6.15
Apr-2000	ND	ND	0.114	ND	ND	8.15	7.71	ND	0.033	0.027	1.25	1.22	ND	3.61	3.42
Oct-2000	ND	ND	0.105	0.003	ND	7.02	6.68	ND	0.025	0.1	3.7	3.61	ND	3.16	3.04
Apr-2001	ND	ND	0.086	**0.005**	ND	7.41	NA	ND	0.024	0.111	4.67	NA	ND	3.26	NA
Sep-2001	ND	ND	0.075	ND	ND	5.4	6.14	ND	0.021	0.065	4.79	5.02	ND	2.44	2.61
Mar-2002	ND	ND	0.063	ND	ND	6.07	6.01	ND	0.02	0.069	5.4	5.53	ND	2.66	2.7
Sep-2002	ND	ND	0.061	ND	ND	5.94	5.94	ND	0.019	0.071	5.24	5.19	ND	2.64	2.64
Mar-2003	ND	ND	0.067	ND	ND	6.92	7.04	ND	0.019	0.052	5.66	5.67	ND	3.09	3.09
Oct-2003	ND	ND	0.079	ND	ND	4.5	3.99	ND	0.014	0.045	5.75	5.55	ND	2.33	2.23
Apr-2004	ND	ND	0.079	ND	ND	3.6	3.29	ND	0.015	0.045	8.23	7.57	ND	2.23	2.06
Oct-2004	ND	ND	0.088	ND	ND	3.56	3.5	ND	0.013	0.032	8.94	8.7	ND	2.36	2.31
Apr-2005	ND	ND	0.082	ND	ND	6.09	5.65	ND	0.013	0.072	7.77	7.8	ND	2.69	2.5
Oct-2005	ND	ND	0.075	ND	ND	5.94	5.6	ND	0.014	0.061	8.83	8.31	ND	2.56	2.42
Mar-2006	ND	ND	0.064	ND	ND	8	7.68	ND	ND	0.03	6.43	6.12	ND	2.89	2.78
Sep-2006	ND	ND	0.051	ND	ND	7.39	6.99	ND	ND	0.04	5.16	4.92	ND	2.58	2.46

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24A***													
Mar-2007	ND	ND	0.046	ND	ND	6.97	6.76	ND	ND	0.051	4.1	3.98	ND	2.13	2.08
Sep-2007	ND	ND	0.053	ND	ND	8.51	7.65	ND	ND	0.031	4.5	4.23	ND	2.44	2.27
Mar-2008	ND	ND	0.04	ND	ND	10.8	10.3	ND	ND	0.012	4.73	4.57	ND	2.83	2.74
Sep-2008	ND	ND	0.035	ND	ND	11.3	10.7	ND	ND	0.023	4.65	4.41	ND	3	2.84
Mar-2009	ND	ND	0.038	ND	ND	13	13.6	ND	ND	0.018	5.66	5.47	ND	3.26	3.2
Oct-2009	ND	ND	0.042	ND	ND	12.1	11.4	ND	ND	0.033	5.54	4.9	ND	2.91	2.68
Mar-2010	ND	ND	0.053	ND	ND	10.9	10.2	ND	ND	ND	4.81	4.91	ND	2.82	2.69
Oct-2010	ND	ND	0.053	ND	ND	11.4	11.3	ND	ND	ND	5.71	5.89	ND	2.91	2.9
Apr-2011	ND	ND	0.051	ND	ND	10.4	10.1	ND	ND	ND	6.16	5.92	ND	2.27	2.21
Sep-2011	ND	ND	0.057	ND	ND	8.4	8.51	ND	ND	ND	4.29	4.25	ND	2.11	2.1
Mar-2012	ND	ND	0.048	ND	ND	7.73	7.53	ND	ND	ND	4	3.8	ND	2.01	2
Sep-2012	ND	ND	0.0636	0.00011 J	ND	13.3	13.1	ND	0.0047 J	0.0081 J	0.498	0.509	ND	3.37	3.26
Mar-2013	ND	ND	0.0452	ND	0.000734 J	10.2	10.5	0.0023 J	0.0054 J	0.0141	0.546	0.531	0.0015 J	2.56	2.54
Oct-2013	ND	ND	0.0562	ND	0.000263 J	12.5	12.3	0.0034 J	0.0049 J	0.0172	ND	ND	ND	3.38	3.35
Mar-2014	ND	ND	0.048	ND	0.000148 J	15.7	15.6	0.0013 J	0.0023 J	0.0049 J	0.0821	0.0516	ND	3.65	3.67
Oct-2014	ND	ND	0.0448	ND	0.000135 J	17.2	17.5	ND	0.0016 J	0.0069 J	0.0096 J	0.008 J	ND	3.7	3.74
Apr-2015	0.000526 J	ND	0.0497	ND	ND	21.7	21.3	0.000514 J	0.0015 J	0.011	0.0228 J	0.0095 J	ND	4.5	4.4
Nov-2015	ND	ND	0.0481	ND	0.000106 J	17.2	16.7	0.000487 J	0.0021 J	0.0168	0.0671	ND	ND	3.52	3.45
May-2016	ND	ND	0.0506	ND	ND	18.3	18.6	0.00085 J	0.0018	0.0151	ND	ND	ND	3.99	3.95
Oct-2016	ND	ND	0.0425	ND	ND	18.9	18.3	0.00098 J	0.0015	0.0097	ND	ND	ND	3.74	3.78
May-2017	ND	ND	0.0383	ND	ND	19.1	19.9	0.00099 J	0.00092 J	0.0053	ND	ND	ND	3.77	4.06
Oct-2017	ND	ND	0.0364	ND	ND	18.6	20.8	ND	0.0015	0.0033 J	ND	ND	ND	3.34	3.6
May-2018	0.000079 J	ND	0.047	ND	0.000085 J	19.5	17.4	0.0035 J	0.002	0.0037 B	0.014 J	ND	ND	3.4	3.13
Nov-2018	ND	ND	0.042	ND	0.000096 J	14.4	14.3	0.0037 J	0.0024	0.0032	0.023	0.076	0.00008 JB	2.5	2.7

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24A***													
May-2019	*ND*	*ND*	0.065	*ND*	*ND*	12.7	13.4	0.0088	0.0061	0.0062	*ND*	*ND*	*ND*	2.5	2.6
Oct-2019	*0.00012 J*	*ND*	0.064	*0.0002 J*	*0.00047 J*	12	11.9	*0.0067 J*	0.0061	0.0086	*0.077 J*	*0.017 J*	*0.000096 J*	2.5	2.4
May-2020	*0.000074 J*	*ND*	0.059	*0.00011 J*	*ND*	16.4	16.6	*0.0064 J*	0.006	0.004	*0.02 J*	*ND*	*ND*	3.7	3.7
Oct-2020	*ND*	*ND*	0.073	*ND*	*ND*	18.9	18.2	*0.011 J*	0.0072	*ND*	0.16	*0.016 J*	*ND*	4	3.8
Apr-2021	*ND*	*ND*	0.064	*ND*	*ND*	19.2	19.3	*0.0027 J*	*0.0034 J*	*ND*	*0.067 J*	*ND*	*ND*	3.4	3.4
Oct-2021	*0.000073 J*	*ND*	0.068	*0.00018 J*	*ND*	21.5	21.5	0.0034	0.005	0.0044	0.066	*0.012 J*	*0.000033 J*	3.9	3.9
May-2022	*ND*	*ND*	0.062	*ND*	*ND*	26.2	26.9	0.0037	0.0041	0.004	0.051	*ND*	*ND*	4.9	5
Oct-2022	*0.00033 J*	*ND*	0.047	*ND*	*ND*	21.1	23.3	0.0028	*0.0025 J*	0.003	0.056	*ND*	*ND*	3.3	3.7

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-24A***												
Apr-1995	0.13	NA	ND	ND	135	NA	ND	0.02	18.1	NA	ND	ND	0.08
Oct-1996	0.1	0.096	NA	ND	ND	ND	ND	ND	3.4	5.1	ND	ND	0.074
Apr-1997	0.11	0.1	0.0005	ND	2	2	ND	ND	5.7	5.3	ND	ND	0.057
Oct-1997	0.13	0.131	ND	0.013	1.72	2.39	ND	ND	6.64	6.66	ND	ND	0.032
Apr-1998	0.14	0.156	0.0002	0.03	1.23	2.17	ND	ND	3.95	3.96	ND	ND	0.037
Apr-1999	0.804	0.746	NA	0.064	2.99	3.55	ND	ND	6.23	5.86	ND	ND	0.088
Oct-1999	0.862	0.805	NA	0.04	2.84	2.98	ND	ND	5.07	4.66	ND	ND	0.097
Apr-2000	0.442	0.424	NA	ND	2.65	1.56	ND	ND	4.89	4.64	ND	ND	0.061
Oct-2000	0.348	0.334	NA	ND	2.06	2.35	ND	ND	5.08	5.03	ND	ND	0.043
Apr-2001	0.357	NA	NA	0.013	2.61	NA	ND	ND	4.85	NA	ND	ND	0.038
Sep-2001	0.251	0.261	NA	0.02	1.65	2.26	ND	ND	4.65	4.61	ND	ND	0.028
Mar-2002	0.26	0.267	NA	ND	3.09	1.51	ND	ND	5.2	4.49	ND	ND	0.028
Sep-2002	0.252	0.25	NA	ND	2.85	2.46	ND	ND	4.53	4.51	ND	ND	0.023
Mar-2003	0.289	0.292	NA	ND	2.21	2.01	ND	ND	4.18	4.17	ND	ND	0.026
Oct-2003	0.211	0.202	NA	ND	1.18	1.42	ND	ND	5.56	4.31	ND	ND	0.047
Apr-2004	0.188	0.174	ND	ND	3.21	1.86	ND	ND	4.71	4.33	ND	ND	0.019
Oct-2004	0.179	0.173	0.0002	ND	2.61	1.55	ND	ND	4.64	4.36	ND	ND	0.017
Apr-2005	0.215	0.199	ND	ND	2.12	2.03	ND	ND	3.79	3.69	ND	ND	0.016
Oct-2005	0.21	0.2	0.0002	ND	2.23	2.02	ND	ND	3.62	3.38	ND	ND	0.016
Mar-2006	0.217	0.207	ND	ND	2.03	1.96	ND	ND	3.3	3.16	ND	ND	ND
Sep-2006	0.179	0.17	ND	ND	2.01	1.89	ND	ND	3.29	3.07	ND	ND	ND
Mar-2007	0.147	0.143	0.0003	ND	1.89	1.89	ND	ND	3.32	3.21	ND	ND	0.014

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-24A***												
Sep-2007	0.166	0.153	0.0006	ND	2.05	1.81	ND	ND	3.16	3.05	ND	ND	ND
Mar-2008	0.185	0.178	0.0007	ND	2.21	2.14	ND	ND	2.48	2.39	ND	ND	ND
Sep-2008	0.189	0.179	**0.0041 C**	ND	1.97	1.87	ND	ND	2.87	2.71	ND	ND	0.01
Dec-2008	NA	NA	**0.0031**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mar-2009	0.212	0.209	**0.0034**	ND	2.21	2.14	ND	ND	2.78	2.7	ND	ND	0.012
Oct-2009	0.194	0.181	**0.0144**	ND	2.16	1.97	ND	ND	2.71	2.65	ND	ND	ND
Mar-2010	0.196	0.189	0.0011	ND	2.36	2.13	ND	ND	2.8	3.1	ND	ND	ND
Oct-2010	0.187	0.183	0.0002	ND	2.76	2.68	ND	ND	2.83	2.8	ND	ND	0.012
Apr-2011	0.153	0.147	0.0008	ND	2	1.96	ND	ND	2.76	2.67	ND	ND	ND
Sep-2011	0.155	0.157	0.0004	ND	2.3	2.29	ND	ND	3.28	3.29	ND	ND	ND
Mar-2012	0.131	0.13	0.0004	ND	2.4	2.35	ND	ND	3.19	3.14	ND	ND	ND
Sep-2012	0.192	0.19	0.000044 J	0.0043 J	2.65	2.63	ND	ND	2.9	2.82	ND	ND	0.0042 J
Mar-2013	0.15	0.155	0.000091 J	0.0044 J	2.25	2.28	ND	0.000025 J	2.3	2.35	0.00035 J	ND	0.0163
Oct-2013	0.155	0.152	ND	0.0034 J	2.26	2.19	ND	ND	2.94	2.88	0.000199 J	0.000806 J	0.0133
Mar-2014	0.155	0.158	ND	0.002 J	2.26	2.22	ND	ND	2.38	2.39	0.000203 J	0.000563 J	ND
Oct-2014	0.151	0.154	0.000071 J	0.00099 J	2.61	2.64	ND	ND	2.53	2.55	ND	ND	ND
Apr-2015	0.172	0.169	0.000063 J	0.0011 J	2.95	2.93	ND	ND	2.75	2.69	ND	ND	0.0051 J
Nov-2015	0.17	0.162	0.000063 J	0.0014 J	2.77	2.74	0.000746 J	ND	2.85	2.84	ND	ND	0.0038 J
May-2016	0.16	0.153	0.000065 J	ND	2.73	2.78	ND	ND	2.51	2.47	ND	ND	ND
Oct-2016	0.142	0.148	0.00014 J	0.0012 J	2.71	2.82	ND	ND	2.34	2.34	ND	ND	ND
May-2017	0.128	0.134	0.00022	0.00099 J	2.84	3.06	ND	ND	2.32	2.37	ND	ND	ND
Oct-2017	0.117	0.126	ND	ND	3.05	3.33	ND	ND	2.55 J-	2.6	ND	ND	ND
May-2018	0.11	0.1	0.00026	0.0024	2.6 J	2.51 J	0.00076 JB	ND	3.6 J	3.34 J	ND	0.0037	0.0035 JB
Nov-2018	0.091	0.094	ND	0.0038	3.2 J	3.7 J	0.00033 J	ND	2.6 J	4.3 JB	0.000092 J	0.003	0.004 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-24A***												
May-2019	0.13	0.13	0.0008	0.0068	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0036 B	0.0089
Oct-2019	0.13	0.14	**0.0023**	0.0051	*3.8 J*	*3.7 J*	*0.00035 J*	*ND*	*4.1 J*	*4 J*	*ND*	*ND*	0.019
May-2020	0.16	0.1	0.00022	0.0033	*3 J*	*2.9 J*	*0.00056 J*	*ND*	*2.9 J*	*2.8 J*	*ND*	0.0098	*0.0045 J*
Oct-2020	0.14	0.13	**0.0026**	0.007	*3.4 J*	*3 J*	*ND*	*ND*	*3.9 J*	*3.2 J*	*ND*	*0.0014 J*	*ND*
Apr-2021	0.11	0.1	0.001	*0.0028 J*	3	3.1	*ND*	*ND*	3.2	3.3	*ND*	*ND*	*0.0034 J*
Oct-2021	0.13	0.12	0.00025	0.0036	3.4	3.4	*ND*	*ND*	3.5	3.6	*0.000078 J*	*ND*	0.0058
May-2022	0.12	0.12	0.00034	0.004	3.3	3.2	*ND*	*ND*	3	3.1	*ND*	*ND*	*0.005 J*
Oct-2022	0.086	0.089	*ND*	0.0026	3.1	3.3	*ND*	*ND*	3.7	3.9	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-24A***																
Oct-1996	ND	3.3	ND	ND	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	1	ND	ND	28	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	3	ND
Oct-1997	ND	1.8	ND	ND	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	1.2 J	ND	ND	35	ND	ND	ND	ND	ND	1.7	0.8 J	1.3 J	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	22	ND	NA	NA	NA	NA	1	ND	1.7	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	12	ND	ND	ND	ND	ND	0.6 J	ND	0.9 J	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	5.3	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	4.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24A*																
Mar-2007	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.45	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.93 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.56 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.58 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	0.33 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24A*																
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.3 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-24A*															
Oct-1996	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	39
Apr-1997	3	ND	ND	ND	ND	ND	ND	ND	13	ND	ND	2	ND	ND	ND	17	15
Oct-1997	2.6	ND	ND	ND	ND	ND	ND	ND	8.1	ND	ND	2.8	ND	ND	ND	6.7	47
Apr-1998	2.9	ND	ND	ND	ND	1.7	ND	ND	8.8	ND	ND	5.4	ND	ND	ND	15	35
Apr-1999	1.9	NA	NA	NA	NA	ND	NA	ND	4.3	ND	NA	3.4	NA	NA	NA	4	18
Oct-1999	1.1	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	1.8	ND	ND	ND	4	12
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	1	ND	NA	0.7 J	NA	ND	NA	2.5	5.4
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	5.1
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	5.5	5
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	2.1
Mar-2002	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	7.5	3
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	0.7 J	ND	ND	ND	8.6	4.1
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	0.6 J	ND	ND	ND	5.9	3.2
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	8.3	2.1
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	0.9 J	ND	ND	ND	12	3.1
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	0.6 J	ND	ND	ND	8.9	3.5
Apr-2005	0.5 J	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	1.1	ND	ND	ND	8.4	4.7
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	0.9 J	ND	ND	ND	8.3	3.1
Mar-2006	0.7 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.2	ND	ND	ND	8	5.2
Sep-2006	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	9.5	3.5

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24A***															
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	1.5
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.6	1.2
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	3
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	0.9 J
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.9 J
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.29 J	ND	ND	ND	0.6 J	1.17
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.47 J	0.86 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43 J	0.5 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.36 J	0.43 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.41 J,B	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	0.2 J	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J,B	ND	ND	ND	ND	ND	0.2 J	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	0.2 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24A***															
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.444 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24A***															
Oct-1996	ND	ND	NA	NA	**24**	NA	ND	3.2	ND	ND	ND	ND	3.7	ND	ND	ND	2.4
Apr-1997	ND	ND	NA	NA	**38**	NA	ND	4	ND	ND	ND	ND	5	ND	ND	**7**	4
Oct-1997	ND	ND	3.4	NA	**44**	3.5	ND	**8.3**	ND	ND	ND	ND	**7.5**	ND	ND	**4.8**	NA
Apr-1998	ND	ND	2.6	NA	**46**	4.3	ND	**8.8**	ND	ND	ND	ND	**6.2**	1.1 J	ND	**4.9**	NA
Apr-1999	ND	NA	0.7 J	NA	**15**	1	NA	3.1	ND	ND	NA	NA	3.2	ND	NA	**2.8**	NA
Oct-1999	ND	ND	ND	NA	**9.3**	ND	ND	2.3	ND	ND	ND	ND	1.7	0.5 J	ND	1.4	NA
Apr-2000	ND	NA	ND	NA	4.1	ND	NA	1.2	ND	ND	NA	NA	0.7 J	ND	ND	0.7 J	NA
Oct-2000	ND	ND	ND	NA	3.3	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	1.1	NA
Apr-2001	ND	ND	ND	NA	4.9	ND	ND	1.1	ND	ND	ND	ND	0.7 J	ND	ND	0.7 J	NA
Sep-2001	ND	ND	ND	NA	1.8	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	0.6 J	NA
Mar-2002	ND	ND	ND	NA	2.7	ND	ND	0.8 J	0.6 J	ND	ND	ND	ND	ND	ND	1.1	NA
Sep-2002	ND	ND	ND	NA	2.8	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	**2.4**	NA
Mar-2003	ND	ND	ND	NA	2.2	ND	ND	2.4	ND	ND	ND	ND	0.7 J	ND	ND	**2.2**	NA
Oct-2003	ND	ND	ND	NA	1.1	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	**2.8**	NA
Apr-2004	ND	ND	ND	NA	1.9	0.6 J	ND	3.6	ND	ND	ND	ND	1.4	ND	ND	**5.1**	NA
Oct-2004	ND	ND	ND	NA	1.1	ND	ND	3.2	ND	ND	ND	ND	1.3	ND	ND	**7.7**	NA
Apr-2005	ND	ND	ND	ND	2.2	ND	ND	4.4	ND	ND	ND	ND	1.6	ND	ND	**8.1**	NA
Oct-2005	ND	ND	ND	ND	3.2	ND	ND	4.5	ND	ND	ND	ND	1.5	ND	ND	**5.4**	NA
Mar-2006	ND	ND	ND	ND	**6.3**	ND	ND	**5.7**	ND	ND	ND	ND	2	ND	ND	**4.7**	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24A***															
Sep-2006	ND	ND	ND	ND	5	ND	ND	3.1	ND	ND	ND	ND	1.2	ND	ND	**3.7**	NA
Mar-2007	ND	ND	ND	ND	2.1 R	ND	ND	1.5	ND	ND	ND	ND	0.7 J	ND	ND	1.3	NA
Sep-2007	ND	ND	ND	ND	2.3	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	1.4	NA
Mar-2008	ND	ND	ND	ND	0.7 J	ND	ND	2.6	ND	ND	ND	ND	0.9 J	ND	ND	1.1	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	1.5	NA
Mar-2009	ND	ND	ND	ND	1.9	ND	ND	0.9 J	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	1.79	ND	ND	0.69 J	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.81 J	ND	ND	0.26 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.69 J	ND	ND	0.22 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24A***															
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-25***											
Apr-1995	13.4	13.4	ND	ND	2.6	0.4	ND	5.8	37.3	2.5	15	11.6
Apr-1997	ND	40	ND	ND	2	0.06	ND	NA	NA	ND	51	1.9
Oct-1997	1	1	0.47	ND	1.7	ND	ND	6.83	13.71	ND	14	ND
Apr-1998	ND	ND	0.27	ND	1.86	0.1	ND	5.87	23.9	0.76	29	5.6
Apr-1999	ND	ND	0.35	ND	1.86	ND	ND	5.29	16.52	ND	ND	7
Oct-1999	ND	ND	0.11	ND	2.33	ND	ND	5.24	16.1	ND	29	5.6
Apr-2000	2	2	ND	ND	2.03	0.147	ND	5.17	12	ND	17	4.9
Oct-2000	3	NA	ND	ND	1.76	ND	ND	5.34	12.9	ND	47	4.89
Apr-2001	2.2	NA	0.2	ND	1.6	ND	ND	NA	NA	ND	28	4.4
Sep-2001	2.6	2.6	ND	ND	3.74	ND	ND	5.03	17	ND	51	4.67
Mar-2002	5.8	5.8	ND	28	3.08	ND	ND	5.1	15	ND	38	4.39
Sep-2002	2.8	2.8	ND	ND	2.15	ND	ND	5	17.3	ND	115	5.12
Mar-2003	2.8	2.8	ND	ND	2.67	0.099	ND	5.1	16.8	ND	36	4.47
Oct-2003	2.4	2.4	ND	ND	7.17	ND	ND	4.8	16.5	ND	ND	4.87
Apr-2004	2.5	2.5	ND	ND	2.18	ND	ND	4.9	13.7	ND	46	3.2
Oct-2004	2.4	2.4	ND	11	2.29	0.13	ND	4.8	14.1	ND	20	2.66
Apr-2005	2.5	2.5	ND	ND	2.36	0.13	ND	5	12.5	2.02	23	4.2
Oct-2005	3.6	3.6	0.21	ND	2.34	0.12	ND	4.7	13.9	ND	21	4.21
Mar-2006	3.6	3.6	ND	ND	2.38	0.14	ND	5	16.4	1.04	52	3.21
Sep-2006	3.4	3.4	ND	ND	2.5	0.13	ND	5	14.2	ND	48	2.9
Mar-2007	3.5	3.5	ND	ND	2.63	0.15	ND	4.9	12	ND	36	2.87
Sep-2007	3.3	3.3	ND	ND	7.59	ND	ND	6.5	13.7	ND	69	4.77
Mar-2008	3.5	3.5	ND	29	14.9	ND	ND	4.9	13.9	ND	15	3.23
Sep-2008	3.5	3.5	ND	25	3.03	0.09	ND	5.4	15.3	ND	22	4.2
Mar-2009	3.6	3.6	ND	ND	2.72	0.11	ND	4.5	15.5	ND	19	2.88
Oct-2009	3.4	3.4	ND	ND	2.71	0.13	ND	4.5	15	ND	62	3.51
Apr-2010	3.3	3.3	ND	11	2.75	0.15	ND	4.6	14.6	ND	ND	4.1
Oct-2010	3	3	ND	ND	3.31	0.12	ND	4.3	14.9	ND	24	4.16
Apr-2011	5.2	5.2	ND	ND	2.93	0.15	ND	4.7	16.5	ND	16	4.6
Sep-2011	3.5	3.5	0.22	ND	3.06	0.13	ND	4.7	16.6	ND	35	3.61
Mar-2012	3.4	3.4	ND	ND	3.26	0.13	ND	3.5	43.2	ND	19	2.85
Sep-2012	ND	ND	ND	12.2	3.39	0.15	ND	4.3	17.2	ND	16	3.57
Mar-2013	3.56	3.56	ND	ND	3.5	0.137	ND	5.1	18.1	0.482 J	14	3.65
Oct-2013	3.64	3.64	ND	ND	3.58	0.156	ND	5.8	17	0.487 J	ND	3.75
Mar-2014	3.44	3.44	ND	ND	3.75	0.154	ND	5.2	20.3	ND	ND	4.32
Oct-2014	ND	ND	ND	ND	3.96	0.126	ND	5	22.9	0.324 J	ND	4.29
Apr-2015	3.8	3.8	ND	ND	4.06	0.177	ND	4.2	20	ND	ND	4.64

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-25***											
Nov-2015	*ND*	*ND*	*ND*	*ND*	4.2	0.189	*ND*	5.2	27.7	*ND*	29	4.73
May-2016	*ND*	*ND*	*ND*	*5 J*	4.27	0.2	*ND*	5.2	28.4	*ND*	*ND*	4.3
Oct-2016	*ND*	*ND*	*ND*	*ND*	4.46	*NA*	*NA*	5.4	31.8	*0.627 J*	26	4.7
May-2017	2.4	2.4	*ND*	*ND*	4.73	0.21	*ND*	4.9	34.6	*ND*	*9 J*	4.9
Oct-2017	2	2	*ND*	*ND*	4.88	0.229	*ND*	5	40	*ND*	*21 J*	5.2
May-2018	*2 J*	*ND*	*0.052 J*	*ND*	4.9	0.22	*ND*	5.1	46.3	*ND*	*ND*	5.7
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	5.6	0.22	*ND*	4.64	29.5	*ND*	73	6.2
May-2019	*ND*	*NA*	*ND*	*ND*	6.2	0.18	*ND*	4.56	23.4	*ND*	*ND*	5.7
Oct-2019	*ND*	*NA*	*ND*	*ND*	4.8	0.23	*ND*	4.34	29.5	*ND*	14	5.8
May-2020	*ND*	*NA*	*ND*	*ND*	6.3	0.22	*ND*	4.28	33.7	*ND*	26	6.5
Oct-2020	*ND*	*NA*	*ND*	*ND*	6.2	0.23	*ND*	4.44	31.4	*ND*	11	6.9
Apr-2021	*ND*	*NA*	*ND*	*6.1 J*	7.3	0.26	*ND*	4.81	40.7	*ND*	14	7.3
Oct-2021	*ND*	*NA*	*ND*	*ND*	6.2	0.28	*ND*	4.95	72	*ND*	*ND*	7.9
May-2022	*ND*	*NA*	*ND*	*ND*	5.1	0.23	*ND*	4.74	54.9	*ND*	19	7.2 N3
Oct-2022	*3 J3c*	*NA*	*ND*	*ND*	7.4	0.28	*ND*	4.83	58.4	*ND*	39	8.4 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25***													
Apr-1995	ND	ND	ND	ND	ND	3.6	NA	ND	ND	ND	0.46	0.33	ND	0.63	NA
Oct-1996	ND	ND	0.03	ND	ND	1.6	2.2	0.041	ND	ND	5.5	0.52	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	0.7	0.69	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	0.034	ND	ND	0.921	0.827	ND	ND	ND	3.92	0.075	ND	0.487	0.309
Apr-1998	ND	ND	0.055	ND	ND	1.18	1.07	0.019	ND	ND	8.41	ND	ND	0.649	0.334
Apr-1999	ND	ND	0.04	ND	ND	1.63	0.995	0.019	ND	0.013	7.21	ND	ND	0.706	0.32
Oct-1999	ND	ND	0.023	ND	ND	1.21	0.802	0.012	ND	0.011	4.98	ND	ND	0.505	0.303
Apr-2000	ND	ND	0.018	ND	ND	1.18	0.708	ND	ND	ND	3.2	ND	ND	0.481	0.288
Oct-2000	ND	ND	0.012	ND	ND	1.25	0.778	ND	ND	0.012	1.39	ND	ND	0.432	0.312
Apr-2001	ND	ND	0.012	ND	ND	1.13	NA	ND	ND	0.011	0.753	NA	ND	0.381	NA
Sep-2001	ND	ND	0.02	ND	ND	1.04	0.703	0.011	ND	ND	4.31	ND	0.003	0.504	0.293
Mar-2002	ND	ND	0.016	ND	ND	1.04	0.78	ND	ND	ND	2.44	ND	0.002	0.436	0.308
Sep-2002	ND	ND	0.02	ND	ND	1.28	0.724	ND	ND	ND	3.66	0.073	0.003	0.468	0.294
Mar-2003	ND	ND	0.012	ND	ND	1.14	0.609	ND	ND	ND	0.374	ND	ND	0.397	0.303
Oct-2003	ND	ND	0.022	ND	ND	1.1	0.607	0.012	ND	ND	5.65	ND	0.004	0.518	0.299
Apr-2004	ND	ND	0.011	ND	ND	0.704	0.608	ND	ND	ND	0.408	ND	ND	0.351	0.298
Oct-2004	ND	ND	ND	ND	ND	0.543	0.531	ND	ND	ND	0.231	ND	ND	0.319	0.31
Apr-2005	ND	ND	0.018	ND	ND	0.963	0.614	ND	ND	ND	3.85	ND	ND	0.446	0.302
Oct-2005	ND	ND	0.021	ND	ND	0.94	0.602	0.012	ND	0.011	4.8	ND	0.003	0.452	0.273
Mar-2006	ND	ND	0.022	ND	ND	0.668	0.373	ND	ND	ND	6.83	ND	0.005	0.374	0.179
Sep-2006	ND	ND	ND	ND	ND	0.633	0.505	ND	ND	ND	0.496	ND	ND	0.321	0.292

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25***													
Mar-2007	ND	ND	0.012	ND	ND	0.586	0.543	ND	ND	ND	1.17	ND	ND	0.343	0.296
Sep-2007	ND	0.004	0.012	ND	ND	1.16	0.531	ND	ND	ND	1.08	ND	ND	0.455	0.302
Mar-2008	ND	ND	0.014	ND	ND	0.726	0.615	ND	ND	ND	2.29	ND	ND	0.344	0.291
Sep-2008	ND	ND	0.021	0.002 R	ND	0.814	0.49	0.018	ND	ND	5.7	ND	0.003	0.536	0.337
Mar-2009	ND	ND	ND	ND	ND	0.629	0.538	ND	ND	ND	0.268	ND	ND	0.318	0.326
Oct-2009	ND	ND	0.016	ND	ND	0.712	0.561	ND	ND	ND	2.95	ND	ND	0.419	0.319
Apr-2010	ND	ND	0.02	ND	ND	0.806	0.527	0.014	ND	ND	7.96	ND	0.003	0.521	0.306
Oct-2010	ND	0.003	0.017	ND	ND	0.757	0.676	0.014	ND	ND	5.19	ND	0.003	0.551	0.385
Apr-2011	ND	ND	0.011	ND	ND	1.25	0.907	ND	ND	ND	0.355	ND	ND	0.357	0.294
Sep-2011	ND	ND	ND	ND	ND	0.781	0.797	ND	ND	ND	ND	ND	ND	0.402	0.426
Mar-2012	ND	ND	0.011	ND	ND	0.485	0.477	ND	ND	ND	ND	ND	ND	0.399	0.385
Sep-2012	ND	ND	0.0103	ND	ND	0.736	0.698	ND	0.0015 J	0.0018 J	0.0253 J	0.0118 J	ND	0.421	0.411
Mar-2013	ND	ND	0.0103	ND	ND	0.829	0.792	0.0034 J	0.0015 J	0.0022 J	0.0107 J	0.0049 J	0.0017 J	0.384	0.367
Oct-2013	ND	ND	0.0119	ND	ND	0.777	0.857	0.0012 J	0.0016 J	0.0016 J	ND	ND	ND	0.439	0.453
Mar-2014	ND	ND	0.011	ND	ND	1.02	0.921	0.0013 J	0.0012 J	0.0016 J	0.0546	0.041 J	ND	0.431	0.388
Oct-2014	0.001 J	ND	0.0136	ND	ND	0.932	0.924	0.000551 J	0.0019 J	0.0017 J	ND	0.0119 J	ND	0.482	0.488
Apr-2015	0.000883 J	ND	0.0135	ND	ND	0.986	0.959	0.000597 J	0.0019 J	0.0018 J	ND	ND	ND	0.53	0.528
Nov-2015	ND	ND	0.0127	ND	0.000095 J	1.06	0.908	0.000538 J	0.0018 J	0.0015 J	ND	ND	ND	0.506	0.521
May-2016	ND	ND	0.0168	0.000072 J	ND	0.86	0.85	0.0013 J	0.0021	0.0016 J	ND	ND	ND	0.53	0.553
Oct-2016	ND	ND	0.0131	ND	ND	0.985	0.841	0.00085 J	0.002	0.0021 J	ND	ND	ND	0.533	0.567
May-2017	ND	ND	0.0159	ND	ND	0.946	1.02	0.0014 J	0.002	0.0018 J	ND	ND	ND	0.606	0.609
Oct-2017	ND	ND	0.0159	0.000081 J	ND	1.01	1.12	ND	0.0023	0.0018 J	ND	ND	ND	0.648	0.674
May-2018	0.000052 J	ND	0.017	0.000075 J	0.000042 J	1.2	1.07	0.0027 J	0.0022	0.0052 B	ND	ND	0.000068 J	0.67 J	0.644 J
Nov-2018	ND	ND	0.016	0.000086 J	0.000056 J	1.3	1.2	0.0027 JB	0.0022	0.0065	ND	ND	0.00019 JB	0.72 J	0.7 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25***													
May-2019	*ND*	*ND*	0.017	*ND*	*ND*	1.2	1.2	*ND*	0.0046	0.0068	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*0.00011 J*	*ND*	0.017	*0.000096 J*	*0.00027 J*	1.2	1.2	*0.0045 J*	0.0029	0.0058	*0.0085 J*	*ND*	*0.0001 J*	0.68	*0.67 J*
May-2020	*0.000052 J*	*ND*	0.018	*ND*	*ND*	1.4	1.3	*0.0054 J*	0.0028	0.0056	*ND*	*0.0098 J*	*ND*	0.76	*0.72 J*
Oct-2020	*ND*	*ND*	0.015	*ND*	*ND*	1.4	1.4	*0.0056 J*	0.0038	*ND*	*0.016 J*	*ND*	*ND*	0.8	*0.74 J*
Apr-2021	*ND*	*ND*	0.024	*ND*	*ND*	1.5	1.6	*0.0025 J*	0.0051	*ND*	*ND*	*ND*	*ND*	0.85	0.93
Oct-2021	*0.00007 J*	*ND*	0.023	*ND*	*ND*	1.7	1.8	0.0044	0.0074	0.0085	*0.025 JB*	*0.02 J*	*0.00011 J*	0.88	0.91
May-2022	*ND*	*ND*	0.022	*ND*	*ND*	1.5	1.4	*0.0024 J*	0.0051	0.0034	*ND*	*ND*	*ND*	0.86	0.84
Oct-2022	*ND*	*ND*	0.022	*0.0001 J*	*ND*	1.8	1.7	*0.0015 J*	0.0039	0.0032	*ND*	*ND*	*ND*	0.97	1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-25*												
Apr-1995	0.03	NA	ND	ND	0.1	NA	ND	0.01	1.5	NA	ND	ND	0.1
Oct-1996	0.017	0.023	NA	ND	ND	ND	ND	ND	2	1.7	ND	ND	0.32
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	1.8	1.6	ND	ND	0.035
Oct-1997	0.014	ND	ND	ND	1.08	0.735	ND	ND	1.16	1.09	ND	0.016	0.01
Apr-1998	0.019	0.012	ND	ND	2.34	ND	ND	ND	1.21	1.11	ND	0.03	0.013
Apr-1999	0.017	0.01	NA	0.013	1.25	ND	ND	ND	1.49	1.09	ND	0.022	0.032
Oct-1999	0.015	0.01	NA	ND	1.38	0.661	ND	ND	1.52	1.05	ND	0.019	0.013
Apr-2000	0.012	ND	NA	ND	0.957	ND	ND	ND	2.46	1.02	ND	0.012	0.011
Oct-2000	0.013	ND	NA	ND	0.642	ND	ND	ND	1.73	1.14	ND	ND	0.011
Apr-2001	ND	NA	NA	ND	1.23	NA	ND	ND	1.92	NA	ND	ND	0.017
Sep-2001	0.012	ND	NA	ND	0.652	ND	ND	ND	2.5	1.1	ND	0.016	ND
Mar-2002	0.01	ND	NA	ND	1.14	0.988	ND	ND	2.27	1.23	ND	0.01	ND
Sep-2002	0.014	ND	NA	ND	0.738	ND	ND	ND	1.44	1.16	ND	0.017	ND
Mar-2003	ND	ND	NA	ND	0.517	ND	ND	ND	1.6	1.14	ND	ND	ND
Oct-2003	0.011	ND	NA	ND	ND	ND	ND	ND	2.43	1.09	ND	0.022	0.014
Apr-2004	ND	ND	ND	ND	1.22	ND	ND	ND	1.23	1.17	ND	ND	ND
Oct-2004	ND	ND	ND	ND	1.07	ND	ND	ND	1.03	0.936	ND	ND	ND
Apr-2005	0.011	ND	ND	ND	0.83	0.43	ND	ND	2	1.09	ND	0.016	0.011
Oct-2005	0.013	ND	ND	ND	0.757	ND	ND	ND	1.94	0.997	ND	0.02	0.012
Mar-2006	ND	ND	ND	ND	0.699	ND	ND	ND	1.19	0.939	ND	0.015	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	1.44	1.08	ND	ND	ND
Mar-2007	ND	ND	ND	ND	0.559	ND	ND	ND	1.17	1.13	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-25***												
Sep-2007	ND	ND	ND	0.014	0.547	ND	ND	ND	1.41	1.12	ND	ND	0.028
Mar-2008	ND	ND	0.0004	ND	0.798	0.536	ND	ND	1.29	1.05	ND	ND	ND
Sep-2008	0.013	ND	ND	ND	0.754	ND	ND	ND	1.25	1.11	ND	ND	0.022
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.17	1.17	ND	ND	0.016
Oct-2009	ND	ND	ND	ND	0.665	ND	ND	ND	1.33	1.06	ND	0.012	0.012
Apr-2010	0.013	ND	ND	ND	0.896	ND	ND	ND	1.53	1.25	ND	0.023	0.013
Oct-2010	0.016	ND	ND	ND	0.995	ND	ND	ND	1.44	1.4	ND	0.023	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.46	1.45	ND	ND	0.014
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.58	1.58	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	1.44	1.41	ND	ND	ND
Sep-2012	0.0085 J	0.008 J	ND	0.0016 J	0.41 J	0.387 J	ND	ND	1.48	1.48	ND	ND	0.005 J
Mar-2013	0.0083 J	0.0081 J	0.000044 J	0.0019 J	0.412 J	0.392 J	ND	0.000026 J	1.42	1.36	ND	ND	0.0153
Oct-2013	0.0089 J	0.0089 J	ND	0.0017 J	0.399 J	0.398 J	ND	ND	1.56	1.61	0.0001525 J	0.000873 J	0.013
Mar-2014	0.0084 J	0.0082 J	ND	0.0018 J	0.452 J	0.412 J	ND	ND	1.53	1.4	ND	ND	ND
Oct-2014	0.0102	0.0103	ND	0.002 J	0.535	0.536	0.0021	ND	1.92	1.92	ND	ND	0.0069 J
Apr-2015	0.0106	0.0104	ND	0.0024 J	0.503	0.496 J	ND	ND	1.94	1.93	ND	ND	0.0096 J
Nov-2015	0.0102	0.0106	ND	0.0021 J	0.51	0.523	ND	ND	1.88	1.93	ND	ND	0.0064 J
May-2016	0.0091	0.0111	ND	0.003 J	0.483	0.483	ND	ND	1.83	1.85	ND	ND	ND
Oct-2016	0.01	0.0131	ND	0.0026 J	0.478	0.499	ND	ND	1.76	1.89	ND	ND	ND
May-2017	0.0118	0.0119	ND	0.0026 J	0.528	0.529	ND	ND	1.94	1.9	ND	ND	0.0036 JB
Oct-2017	0.0117	0.0126	ND	0.0016 J	0.543	0.607	ND	ND	1.99 J-	2.13	ND	ND	0.0058 J
May-2018	0.011	0.01	ND	0.0027	ND	ND	0.00028 JB	ND	2.5 J	2.24 J	ND	0.0034	0.0053 B
Nov-2018	0.013	0.012	ND	0.0028	ND	1.3 J	0.00013 JB	ND	0.95 J	2.7 JB	ND	0.0034 B	0.0077
May-2019	0.014	0.013	ND	0.0037	ND	ND	ND	ND	ND	ND	ND	0.0039 B	0.0072

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-25***												
Oct-2019	0.014	0.012	*ND*	0.0031	*ND*	*ND*	*ND*	*ND*	*2.2 J*	*2.1 J*	*ND*	*ND*	0.015
May-2020	0.014	0.013	*ND*	0.0027	*ND*	*ND*	*ND*	*ND*	*2.3 J*	*2.2 J*	*ND*	0.0084	0.0051
Oct-2020	0.015	0.015	*ND*	0.0045	*ND*	*ND*	*ND*	*ND*	*2.4 J*	*2.1 J*	*ND*	*0.001 J*	*ND*
Apr-2021	0.017	0.017	*ND*	*0.0036 J*	0.64	0.68	*ND*	*ND*	2.6	3.1	*ND*	*ND*	*0.0051 J*
Oct-2021	0.017	0.018	*ND*	0.0051	0.59	0.605	*ND*	*0.00027 J*	2.8	2.8	*ND*	*ND*	0.0061
May-2022	0.017	0.017	*ND*	0.0039	0.58	0.63	*ND*	*ND*	2.6	2.6	*ND*	*ND*	0.0057
Oct-2022	0.018	0.018	*ND*	0.0034	0.65	0.74	*ND*	*ND*	3	3.1	*ND*	*ND*	0.006

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25*																
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25*																
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	1 R	1 R	1 R	1 R	7.4 R	1 R	1 R	**1 R**	**1 R**	1 R	0.7 R	1 R	1 R	5 R	5 R	5 R	5 R	5 R
Dec-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*0.42 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*0.45 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*0.42 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*0.66 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25*																
Oct-2017	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.7 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*0.94 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	2.07	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25***															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25***															
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	0.9 R	1 R	1 R	1 R	1 R	11.4 R
Dec-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.6 J
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.7 J
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.05	0.46 J
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.11	0.62 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	1.25	0.84 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.19 J	ND	ND	ND	ND	ND	1.83 J	0.77 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	0.5 J,B	ND	ND	ND	ND	1.67	0.83 J
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	1.11
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8 J	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	2.7	1.9
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	3	2.4
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J,B	ND	ND	ND	ND	ND	2.7	2

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25***															
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	3	2.2
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.5	2.5
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	**3 D6**	2.2 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3 CL	2.2 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	1.4
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.8	1.7
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	5.8	2.5
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.235 J*	*ND*	*0.674 J*	*ND*	*ND*	*ND*	*3.6 J*	*3.7 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	5	2.9
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	6.4	2.4
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	5.7	3

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25***															
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-25*															
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	1 R	1 R	1 R	1.5 R	**9 R**	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1.1 R	1 R	1 R	1 R	NA
Dec-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	ND	ND	ND	ND	0.31 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	ND	ND	ND	ND	0.36 J	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	0.34 J	ND	ND	ND	ND	ND	0.34 J	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	0.39 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	0.2 J	0.4 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.2 J	0.5 J	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.4 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.4 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.41	*ND*	*ND*	*ND*	*ND*	*0.343 J*	*0.446 J*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-25A***											
Apr-1995	52.5	52.5	ND	59.7	2.7	ND	ND	8.9	100	3.2	70	99.7
Apr-1997	ND	36	ND	ND	3	0.06	ND	NA	NA	ND	82	33
Oct-1997	21	21	ND	ND	2.33	ND	ND	8.38	50.7	ND	ND	18
Apr-1998	37	37	ND	ND	2.64	0.22	ND	6.65	110.9	2.25	50	41
Apr-1999	25	25	0.8	ND	2.64	ND	ND	5.89	91.2	1.44	35	32
Oct-1999	32	32	0.07	ND	4.37	ND	ND	5.72	44.9	2.75	35	18
Apr-2000	16	16	ND	ND	3	ND	ND	6.32	43	2.16	45	19
Oct-2000	16	NA	ND	ND	2.03	ND	ND	5.77	42.4	4.37	33	21.7
Apr-2001	20	NA	ND	ND	2.85	ND	ND	NA	NA	1.57	33	23
Sep-2001	5.9	5.9	0.32	ND	5.01	ND	ND	5.71	43	7.52	28	15
Mar-2002	8	8	ND	ND	3.88	ND	ND	5.5	36	2.16	13	12
Sep-2002	5.2	5.2	ND	ND	3.55	ND	ND	5.4	34	3.13	20	8.49
Mar-2003	22	22	ND	ND	14.4	ND	ND	5.8	59.9	5.65	30	22.6
Oct-2003	14	14	ND	ND	4.24	0.118	ND	5.2	56.1	1.43	11	98.6
Apr-2004	12	12	ND	ND	4.85	ND	ND	5.5	48.6	1.34	50	17.5
Oct-2004	15	15	ND	ND	5.7	ND	ND	3.2	50.8	1.43	41	19.6
Apr-2005	18	18	ND	ND	5.64	ND	ND	5.2	49.8	3.51	ND	22.6
Oct-2005	11	11	0.22	ND	5.94	ND	ND	4.7	42.8	2.62	43	13.5
Mar-2006	11	11	ND	ND	6.33	ND	ND	5.3	51.5	2.99	26	13
Sep-2006	7.1	7.1	ND	ND	6.05	ND	ND	4.9	37.7	2.83	42	10.7
Mar-2007	6.9	6.9	ND	ND	5.9	ND	ND	4.9	37.5	2.17	42	9.64
Sep-2007	11	11	0.23	ND	5.45	ND	ND	6.2	42.6	1.87	38	14.1
Mar-2008	17	17	ND	11	17.5	ND	ND	6.2	52.7	5.13	53	18.2
Sep-2008	7.5	7.5	0.27	ND	5.59	ND	ND	5.7	33.5	2.25	30	9.2
Mar-2009	6	6	ND	ND	5.78	ND	ND	5.1	35.8	1.52	ND	8.57
Oct-2009	5.2	5.2	ND	ND	5.98	ND	ND	4.9	31.8	1.6	34	7.53
Mar-2010	8.8	8.8	ND	ND	6.41	ND	ND	4.59	45	2.01	14	9.74
Oct-2010	1.8	1.8	ND	ND	6.58	ND	ND	3.6	37.8	2.54	22	7.13
Apr-2011	3	3	ND	ND	6.57	ND	0.04	4.1	41.5	1.8	42	6.4
Sep-2011	4.7	4.7	0.22	ND	7.04	ND	0.03	4.3	40.7	1.56	44	8.48
Mar-2012	4.3	4.3	ND	ND	7.23	0.06	0.04	3.6	41	1.98	24	8.01
Sep-2012	4.2	4.2	ND	ND	7.96	0.104	ND	3.5	42.8	2.47	28	8.53
Mar-2013	3.8	3.8	ND	ND	8.59	0.103	0.0377 J	4.5	48.8	1.79	31	8.47
Oct-2013	3.64	3.64	ND	ND	8.62	0.127	0.134	5.3	46.9	2.29	ND	9.02
Mar-2014	3.52	3.52	ND	ND	8.88	0.131	ND	4.6	48.2	2.66	26	8.9
Oct-2014	ND	ND	ND	ND	9.57	0.106	ND	4.5	46	3.2	25	9.8
Apr-2015	3.72	3.72	ND	ND	8.62	0.116	ND	3.6	46	1.75	ND	8.86

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-25A***										
Nov-2015	*ND*	*ND*	*ND*	*5 J*	9.48	0.125	0.0657	4.7	60.8	1.9	*22 J*	9.15
May-2016	*ND*	*ND*	*ND*	*ND*	8.67	0.132	0.0891	4.5	61.3	3.23	*13 J*	8.7
Oct-2016	*ND*	*ND*	*ND*	*ND*	9.05	*NA*	*NA*	4.6	69.9	2.81	42	9.7
May-2017	*ND*	*ND*	*ND*	13	9.61	0.235	0.106	4.5	76.2	3.52	*13 J*	9.8
Oct-2017	*ND*	*ND*	*ND*	*ND*	8.92	0.244	0.0755	4.6	84.6	2.31	33	11.3
May-2018	*ND*	*ND*	*ND*	*5.8 J*	8.4	0.24	0.023	4.8	67.3	*ND*	23	11.2
Nov-2018	18	18	*ND*	*ND*	10.1	0.16	0.04	5.03	87.7	*6.2 J*	90	30.8
May-2019	*ND*	*NA*	*ND*	*ND*	10.4	0.23	0.066	4.67	53.8	*ND*	48	18.3
Oct-2019	*6 J*	*NA*	*ND*	*6 J*	62.8	0.58	0.093	4.33	70.1	*ND*	44	17.2
May-2020	*4 J*	*NA*	*ND*	*ND*	11.2	0.77	0.11	4.32	76.5	*5 J*	46	19.4
Oct-2020	*2 J*	*NA*	*ND*	*ND*	10.5	0.76	0.096	4.62	74.3	4	35	21.4
Apr-2021	20	*NA*	*ND*	*ND*	10.7	0.71	0.12	5.29	113.9	*ND*	55	36.5
Oct-2021	12	*NA*	*ND*	*ND*	9.4	0.82	0.1	4.98	116.8	*ND*	22	22.1
May-2022	*ND*	*NA*	*ND*	*ND*	8.5	0.73	0.086	4.63	97.5	*ND*	33	19.1 N3
Oct-2022	*6 J4c*	*NA*	*ND*	*8.4 J*	11.7	0.77	0.12	4.78	101.7	*ND*	50	23 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25A***													
Apr-1995	ND	ND	ND	ND	ND	38.8	NA	ND	ND	ND	0.82	0.05	ND	0.68	NA
Oct-1996	ND	ND	0.041	ND	ND	8	7.7	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	0.048	ND	ND	12	NA	ND	ND	ND	ND	NA	ND	ND	ND
Oct-1997	ND	ND	0.028	ND	ND	7.09	6.38	ND	ND	ND	0.108	ND	ND	0.491	0.47
Apr-1998	ND	ND	0.06	ND	ND	15	15.7	ND	ND	ND	ND	ND	ND	0.743	0.732
Apr-1999	ND	ND	0.048	ND	ND	11.6	11.1	ND	ND	ND	0.104	ND	ND	0.629	0.567
Oct-1999	ND	ND	0.028	ND	ND	1.23	1.09	ND	ND	0.017	0.057	ND	ND	0.643	0.589
Apr-2000	ND	ND	0.043	ND	ND	6.43	5.88	ND	ND	ND	ND	ND	ND	0.729	0.691
Oct-2000	ND	ND	0.029	ND	ND	7.46	7.78	ND	ND	0.02	0.065	ND	ND	0.758	0.614
Apr-2001	ND	ND	0.044	ND	ND	7.78	NA	ND	ND	0.012	ND	NA	ND	0.812	NA
Sep-2001	ND	ND	0.029	ND	ND	4.89	4.23	ND	ND	0.014	0.067	ND	ND	0.679	0.585
Mar-2002	ND	ND	0.031	ND	ND	3.67	3.47	ND	ND	0.019	0.051	ND	ND	0.702	0.678
Sep-2002	ND	ND	0.034	ND	ND	2.2	2.05	ND	ND	0.013	0.097	ND	ND	0.728	0.715
Mar-2003	ND	ND	0.051	ND	ND	7.8	5.8	ND	ND	0.012	0.08	ND	ND	0.753	0.708
Oct-2003	ND	ND	0.213	ND	0.005	32.3	5.95	ND	0.02	0.094	0.252	ND	ND	4.37	0.762
Apr-2004	ND	ND	0.047	ND	ND	5.54	4.82	ND	ND	0.02	ND	ND	ND	0.901	0.887
Oct-2004	ND	ND	0.053	ND	ND	6.17	5.84	ND	ND	0.021	ND	ND	ND	1.03	1.03
Apr-2005	ND	ND	0.055	ND	ND	7.35	6.71	ND	ND	0.017	ND	ND	ND	1.04	0.995
Oct-2005	ND	ND	0.052	ND	ND	3.81	3.58	ND	ND	0.024	ND	ND	ND	0.97	0.913
Mar-2006	ND	ND	0.047	ND	ND	3.85	3.77	ND	ND	0.013	ND	ND	ND	0.812	0.778
Sep-2006	ND	ND	0.049	ND	ND	2.7	2.69	ND	ND	0.021	ND	ND	ND	0.964	0.915

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25A***													
Mar-2007	ND	ND	0.046	ND	ND	2.35	2.36	ND	ND	0.023	ND	ND	ND	0.916	0.878
Sep-2007	ND	ND	0.045	ND	ND	4.12	3.41	ND	ND	0.022	ND	ND	ND	0.932	0.873
Mar-2008	ND	ND	0.048	ND	ND	5.75	5	ND	ND	0.02	ND	ND	ND	0.922	0.87
Sep-2008	ND	ND	0.047	0.002	ND	2.03	2.02	ND	ND	0.023	ND	ND	0.003	1.01	0.977
Mar-2009	ND	ND	0.05	ND	ND	1.65	1.34	ND	ND	0.025	ND	ND	ND	1.08	0.968
Oct-2009	ND	ND	0.048	ND	ND	1.35	1.24	ND	ND	0.025	0.052	ND	ND	1.01	0.997
Mar-2010	ND	ND	0.054	ND	ND	2.25	2.4	ND	ND	0.021	0.069	ND	ND	1	0.981
Oct-2010	ND	ND	0.049	ND	ND	0.845	0.803	ND	ND	0.024	ND	ND	ND	1.22	1.2
Apr-2011	ND	ND	0.058	ND	ND	0.744	0.756	ND	ND	0.016	ND	ND	ND	1.09	1.16
Sep-2011	ND	ND	0.056	ND	ND	1.3	1.32	ND	ND	0.022	ND	ND	ND	1.27	1.28
Mar-2012	ND	ND	0.062	ND	ND	1.08	1.19	ND	ND	0.024	ND	ND	ND	1.29	1.26
Sep-2012	ND	ND	0.0669	0.0011 J	ND	0.993	1.18	ND	0.007 J	0.0276	0.0538	0.0413 J	ND	1.47	1.41
Mar-2013	ND	ND	0.0556	0.000842 J	0.000248 J	1.33	1.46	0.0017 J	0.0065 J	0.0231	0.0754	0.0186 J	0.0015 J	1.25	1.3
Oct-2013	ND	ND	0.0704	ND	0.000199 J	1.19	1.16	0.004 J	0.0075 J	0.0262	ND	ND	ND	1.47	1.43
Mar-2014	ND	ND	0.0629	0.000979 J	0.000205 J	1.32	1.4	0.0013 J	0.0056 J	0.0243	0.0595	0.0542	ND	1.36	1.43
Oct-2014	0.000772 J	ND	0.078	0.0011 J	0.000284 J	1.47	1.47	0.000361 J	0.0075 J	0.0309	0.0403 J	0.0371 J	0.0011 J	1.49	1.49
Apr-2015	0.00058 J	ND	0.0698	0.0011 J	0.000246 J	1.12	1.13	0.000575 J	0.0071 J	0.0328	0.239	0.0264 J	ND	1.47	1.5
Nov-2015	ND	ND	0.0647	0.0011 J	0.000276 J	1.18	1.21	0.000316 J	0.0071 J	0.0265	0.0234 J	ND	ND	1.5	1.57
May-2016	ND	ND	0.0645	0.001 J	0.0002 J	1.05	1.24	ND	0.0067	0.0232	ND	ND	ND	1.49	1.48
Oct-2016	ND	ND	0.0683	0.001	ND	1.27	1.28	ND	0.0075	0.0248	ND	ND	ND	1.58	1.68
May-2017	ND	ND	0.0625	0.00092 J	0.00022 J	1.15	1.1	ND	0.0073	0.0225	ND	ND	ND	1.67	1.71
Oct-2017	ND	ND	0.0661	0.00097 J	0.00026 J	1.73	1.66	ND	0.0078	0.0258	0.0551 J	ND	0.00028 J	1.71	1.77
May-2018	0.000062 J	ND	0.072	0.00099	0.00027 J	1.3	1.21	0.002 J	0.0065	0.02	0.012 J	ND	0.000018 J	1.9	1.76
Nov-2018	ND	ND	0.063	0.00074	0.00023 J	9.9	9.9	0.0019 JB	0.0056	0.046	0.017 J	ND	0.000088 JB	1.5	1.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25A***													
May-2019	*ND*	*ND*	0.066	0.001	*ND*	4.7	4.8	*ND*	0.0059	0.035	*ND*	*ND*	*ND*	1.6	1.6
Oct-2019	*0.0002 J*	*0.00016 J*	0.066	0.0012	*0.00049 J*	4	3.8	*0.0029 J*	0.0059	0.039	*0.015 J*	*0.013 J*	*0.000086 J*	1.8	1.7
May-2020	*0.000059 J*	*ND*	0.067	0.00086	*0.00014 J*	4.8	4.6	*0.0049 J*	0.0076	0.048	*0.017 J*	*0.016 J*	*ND*	1.8	1.8
Oct-2020	*ND*	*ND*	0.058	*0.00068 J*	*ND*	5.5	5.2	*0.0035 J*	0.0063	0.03	*ND*	*ND*	*ND*	1.9	1.8
Apr-2021	*ND*	*ND*	0.073	*0.00061 J*	*ND*	11.8	11.8	*0.00036 J*	0.0073	0.026	*ND*	*ND*	*ND*	1.7	1.9
Oct-2021	*0.000079 J*	*ND*	0.076	0.0012	*0.0001 J*	5.6	5.7	*0.0011 J*	0.0085	0.055	0.076	*0.011 J*	*0.000082 J*	2	2
May-2022	*ND*	*ND*	0.082	0.0011	*0.00017 J*	4.2	3.9	*0.001 J*	0.011	0.056	*0.045 J*	*0.038 J*	*ND*	2.1	2.1
Oct-2022	*ND*	*ND*	0.075	0.00094	*0.00022 J*	5.5	5.2	*0.0011 J*	0.0093	0.061	*ND*	*ND*	*ND*	2.2	2.2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-25A*												
Apr-1995	0.01	NA	ND	ND	2.8	NA	ND	0.02	2.1	NA	ND	ND	0.05
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	1.6	1.8	ND	ND	0.04
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	2	2	ND	ND	0.03
Oct-1997	ND	ND	ND	ND	0.821	ND	ND	ND	1.37	1.35	ND	ND	0.013
Apr-1998	ND	ND	ND	0.015	0.799	0.749	ND	ND	1.48	1.46	ND	ND	0.024
Apr-1999	ND	ND	NA	ND	ND	ND	ND	ND	1.5	1.39	ND	ND	ND
Oct-1999	ND	ND	NA	ND	1.04	ND	ND	ND	1.37	1.29	ND	ND	0.01
Apr-2000	ND	ND	NA	ND	1.02	0.621	ND	ND	1.47	1.34	ND	ND	ND
Oct-2000	ND	ND	NA	ND	0.759	0.625	ND	ND	2.35	1.47	ND	ND	0.011
Apr-2001	NA	NA	NA	ND	1.23	NA	ND	ND	1.6	NA	ND	ND	ND
Sep-2001	ND	ND	NA	ND	0.504	0.935	ND	ND	1.55	1.42	ND	ND	ND
Mar-2002	ND	ND	NA	ND	1.61	0.754	ND	ND	1.65	1.5	ND	ND	ND
Sep-2002	ND	ND	NA	ND	0.682	ND	ND	ND	1.6	1.57	ND	ND	ND
Mar-2003	ND	ND	NA	ND	0.768	ND	ND	ND	1.65	1.62	ND	ND	ND
Oct-2003	0.039	ND	NA	0.032	ND	ND	ND	ND	13.7	1.84	ND	ND	0.074
Apr-2004	0.011	0.011	**0.0036**	ND	0.833	0.931	ND	ND	2.19	2.1	ND	ND	ND
Oct-2004	0.012	0.011	0.002	ND	1.62	1.11	ND	ND	2.39	2.12	ND	ND	0.012
Apr-2005	0.011	ND	ND	ND	0.75	0.68	ND	ND	2.23	2.11	ND	ND	ND
Oct-2005	0.011	0.01	**0.0037**	ND	0.521	ND	ND	ND	2.25	2.11	ND	ND	0.012
Mar-2006	ND	ND	**0.0033**	ND	ND	ND	ND	ND	2.19	2.12	ND	ND	ND
Sep-2006	0.011	0.01	**0.0042**	ND	0.657	0.666	ND	ND	2.3	2.17	ND	ND	ND
Mar-2007	ND	ND	**0.0065**	ND	0.671	0.646	ND	ND	2.26	2.19	ND	ND	0.011

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-25A***												
Sep-2007	0.01	*ND*	**0.0089**	*ND*	0.632	0.545	*ND*	*ND*	2.1	2.07	*ND*	*ND*	0.01
Mar-2008	0.012	0.011	**0.0065**	*ND*	0.815	0.778	*ND*	*ND*	2.06	1.94	*ND*	*ND*	*ND*
Sep-2008	0.013	0.013	**0.0036**	*ND*	0.617	0.62	*ND*	*ND*	2.12	2.05	*ND*	*ND*	0.015
Mar-2009	0.014	0.012	**0.0021**	*ND*	0.652	0.646	*ND*	*ND*	2.29	2.4	*ND*	*ND*	*ND*
Oct-2009	0.013	0.013	**0.0024**	*ND*	0.516	*ND*	*ND*	*ND*	1.96	2.1	*ND*	*ND*	*ND*
Mar-2010	0.013	0.013	0.0019	*ND*	0.742	0.695	*ND*	*ND*	2.07	2.36	*ND*	*ND*	0.011
Oct-2010	0.017	0.017	0.0012	*ND*	0.71	0.689	*ND*	*ND*	2.53	2.5	*ND*	*ND*	*ND*
Apr-2011	0.016	0.016	0.0011	*ND*	0.513	*ND*	*ND*	*ND*	2.26	2.24	*ND*	*ND*	*ND*
Sep-2011	0.018	0.018	0.0011	*ND*	0.848	0.872	*ND*	*ND*	2.69	2.69	*ND*	*ND*	*ND*
Mar-2012	0.019	0.019	0.0011	*ND*	0.719	0.726	*ND*	*ND*	2.57	2.56	*ND*	*ND*	*ND*
Sep-2012	0.0236	0.0231	0.00087	*0.0067 J*	0.835	0.793	*ND*	*ND*	2.88	2.94	*0.000481 J*	*ND*	0.0105
Mar-2013	0.0224	0.0223	0.000742	*0.0065 J*	0.748	0.754	*ND*	*0.000028 J*	2.52	2.58	*ND*	*ND*	0.0192
Oct-2013	0.0257	0.0241	0.000652	*0.007 J*	0.833	0.776	*0.00058 J*	*ND*	3.02	2.95	*0.000124 J*	*0.00095 J*	0.02
Mar-2014	0.024	0.0269	0.000517	*0.006 J*	0.851	0.897	*0.000457 J*	*ND*	2.72	2.86	*0.000144 J*	*0.000758 J*	*0.0056 J*
Oct-2014	0.0284	0.0285	0.000379	*0.0075 J*	0.996	0.991	*0.0019 J*	*0.003 J*	3.37	3.37	*ND*	*ND*	0.0112
Apr-2015	0.0277	0.0283	0.000377	*0.0071 J*	0.937	0.934	*ND*	*ND*	3.29	3.22	*ND*	*ND*	0.0107
Nov-2015	0.0284	0.0298	0.000269	*0.007 J*	1.02	1.06	*0.000731 J*	*ND*	3.34	3.48	*ND*	*ND*	*0.0083 J*
May-2016	0.0294	0.0284	0.00023	0.0064	0.969	0.966	*ND*	*ND*	3.1	3.09	*ND*	*ND*	*0.0094 J*
Oct-2016	0.0319	0.0365	*0.00015 J*	0.0071	1.02	1.09	*ND*	*ND*	3.15	3.32	*ND*	*ND*	*0.007 J*
May-2017	0.0343	0.0346	*0.00016 J*	0.0065	1.02	1.04	*ND*	*ND*	3.2	3.13	*ND*	*ND*	*0.0085 J*
Oct-2017	0.0335	0.0408	*0.000059 J*	0.0056	1.06	1.13	*ND*	*ND*	*3.2 J-*	3.36	*0.00013 J*	*ND*	*0.0105 J*
May-2018	0.032	0.031	*0.00018 J*	0.0061	*ND*	*ND*	*0.00094 JB*	*ND*	*3.9 J*	*3.54 J*	*0.00008 J*	0.0036	0.0082 B
Nov-2018	0.028	0.028	0.00027	0.0061	*1.1 J*	*1.4 J*	*0.00066 J*	*ND*	*1.7 J*	*3.7 JB*	*0.000078 J*	0.0029 B	0.0091
May-2019	0.034	0.034	*ND*	0.0062	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0041 B	0.0086

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-25A***												
Oct-2019	0.032	0.036	*ND*	0.0053	*1.2 J*	*1.2 J*	*0.00053 J*	*ND*	*4.1 J*	*4 J*	*ND*	*ND*	0.064
May-2020	0.041	0.04	*ND*	0.0077	*ND*	*1.1 J*	*0.00064 J*	*ND*	*4.4 J*	*3.9 J*	*ND*	0.01	0.011
Oct-2020	0.043	0.042	*ND*	0.0059	*ND*	*ND*	*ND*	*ND*	*4.1 J*	*3.7 J*	*ND*	*0.00092 J*	*ND*
Apr-2021	0.041	0.042	*0.00011 J*	*0.0078 J*	1	1	*ND*	*ND*	3.9	4	*ND*	*ND*	*0.0093 J*
Oct-2021	0.046	0.045	*0.00009 J*	0.008	1.1	0.977	*ND*	*ND*	4.2	4.1	*0.00014 J*	*ND*	0.012
May-2022	0.047	0.048	*ND*	0.01	1	1.1	*ND*	*ND*	4.1	4	*0.00017 J*	*ND*	0.014
Oct-2022	0.051	0.049	*ND*	0.0091	1.1	1.2	*0.001 J*	*ND*	4.3	4.4	*0.00014 J*	*ND*	0.016

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-25A***																
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	0.5 J	NA	NA	0.7 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	1	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	0.7 J	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	0.7 J	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	0.9 J	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	0.5 J	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	0.7 J	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	0.9 J	ND	ND	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	0.8 J	ND	ND	4.4	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	1	ND	ND	5.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	0.9 J	ND	ND	6.4	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	0.7 J	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	1.2	ND	ND	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25A*																
Mar-2007	ND	1.1	ND	ND	13.1	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	2	ND	ND	20	0.7 J	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	0.6 J	ND	ND	6.8	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Sep-2008	1 R	1 R	1 R	1 R	1 R	1 R	1 R	**1 R**	**1 R**	1 R	1 R	1 R	1 R	5 R	5 R	5 R	5 R	5 R
Dec-2008	ND	ND	ND	ND	12.5	ND	ND	ND	ND	ND	1.1	ND	0.6 J	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	7.4	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	9.6	ND	ND	ND	ND	ND	0.9 J	ND	0.6 J	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	21.3	ND	ND	ND	ND	ND	ND	ND	0.97 J	ND	ND	ND	ND	ND
Oct-2010	ND	1.4	ND	ND	27.5	ND	ND	ND	ND	ND	1.4	0.8 J	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	14.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	34.1	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	24.8	1.1	ND	ND	ND	ND	2.4	1	1.6	ND	ND	ND	ND	ND
Sep-2012	ND	1.16	ND	ND	35	0.95 J	ND	ND	ND	ND	2.01	1.16	1.69	ND	ND	ND	ND	ND
Mar-2013	ND	1.14	ND	ND	42.1	1.28	ND	ND	ND	ND	2.9	1.12	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	41.9	1.14	ND	ND	ND	ND	2.5	1.34	2.17	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	39.7	1.2	ND	ND	ND	ND	2.47	1.1	2.13	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	40.1	1.16	ND	ND	ND	ND	2.35	1.36	2.17	ND	ND	ND	ND	ND
Apr-2015	ND	0.94 J	ND	ND	37.3	1.17	ND	ND	ND	ND	2.28	1.26	1.7	ND	ND	ND	ND	ND
Nov-2015	ND	1 J	ND	ND	35.1	1.4	ND	ND	ND	ND	2.3	1.3	1.9	ND	ND	ND	ND	ND
May-2016	ND	0.8 J	ND	ND	27	1.2	ND	ND	ND	ND	2	1.2	1.8	ND	ND	ND	ND	ND
Oct-2016	ND	0.8 J	ND	ND	32	1	ND	ND	ND	ND	2.4	1.2	1.9	ND	ND	ND	ND	ND
May-2017	ND	0.6 J	ND	ND	33	1 J	ND	ND	ND	ND	2.2	1	1.7	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25A*																
Oct-2017	ND	0.6 J	ND	ND	28	1.2	ND	ND	ND	ND	2	1.2	1.7	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	37.4	1.3	ND	ND	ND	ND	2.4	1.4	2.2	ND	ND	ND	2.5 JB	ND
Nov-2018	ND	0.59 J	ND	ND	30.3	1 J	ND	ND	ND	ND	1.8	1.1	1.3	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	19.5	ND	ND	ND	ND	ND	1.2	ND	1.4	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	23.3	ND	ND	ND	ND	ND	1.4	ND	1.3	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	18.4	ND	ND	ND	ND	ND	1.4	ND	1.4	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	24.2	0.7 J	ND	ND	ND	ND	1.5	1	ND	ND	ND	ND	ND	ND
Apr-2021	ND	0.295 J	ND	ND	28	0.718 J	ND	ND	ND	ND	1.95	1.02	1.01	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	30.6	0.8 J	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	25.5	0.7 J	ND	ND	ND	ND	1.6	1.1	1.5	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	27.3	0.8 J	ND	ND	ND	ND	1.7	1.1	1.5	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25A***															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	1.4
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	2.6
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	1.4	2.8
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.2	5.7
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.4	5.3
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	4.3
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	5.5
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	9.8
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19	5.4
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	28	12
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	61	11
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	24	14
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	36	18
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	32.3	22.2
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21.9	16.9
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	22.1	21.9

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25A***															
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	0.8 J	ND	ND	ND	16.1	31.7
Sep-2007	0.5 J	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	1	ND	ND	ND	24.2	23.6
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	1	15.4
Sep-2008	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1.8 R	3 R
Dec-2008	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	1	16.2
Mar-2009	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	7.5
Oct-2009	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	12.8	2.5
Mar-2010	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	30.5 J	46.9
Oct-2010	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	ND	ND	ND	33.5	47.9
Apr-2011	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7	ND	ND	ND	43.7	42.7
Sep-2011	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	28.8	57.6
Mar-2012	3	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	ND	ND	ND	25.6	59.1
Sep-2012	3.57	ND	ND	ND	ND	ND	ND	ND	0.83 J	ND	ND	5.6	ND	ND	ND	15.2	42
Mar-2013	3.82	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.5	ND	ND	ND	19.6	60.8
Oct-2013	4.24	0.24 J	ND	ND	ND	ND	ND	ND	0.94 J	0.23 J	ND	6.43	ND	ND	ND	16.7	61.4
Mar-2014	3.79	ND	ND	ND	ND	ND	ND	ND	0.8 J	0.24 J	ND	5.87	ND	ND	ND	22 J	62.3
Oct-2014	3.98	ND	ND	ND	ND	ND	ND	ND	0.53 J	0.24 J	ND	6.16	ND	ND	ND	19.3	57.7
Apr-2015	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.79	ND	ND	ND	16.9	51.4
Nov-2015	3.4	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	6.4	ND	ND	ND	32.3 J	48.4
May-2016	3.3	ND	ND	ND	ND	ND	ND	ND	0.5 J	0.2 J	ND	6.1	ND	ND	ND	17	41
Oct-2016	3.3	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.3 J	ND	5.5	ND	ND	ND	16	53
May-2017	3	ND	ND	ND	ND	ND	ND	ND	0.4 J	0.2 J,B	ND	5.5	ND	ND	ND	13	47

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25A***															
Oct-2017	3.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*0.2 J*	*ND*	5.9	*ND*	*ND*	*ND*	13	48
May-2018	3.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.2	*ND*	*ND*	*ND*	26.9	52.3
Nov-2018	2.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.1	*ND*	*ND*	*ND*	11.7	44.3 N3
May-2019	1.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	8.5 CL	32 N3
Oct-2019	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.9	*ND*	*ND*	*ND*	12.2	20.4
May-2020	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	7.6	15.5
Oct-2020	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.1	*ND*	*ND*	*ND*	12.9	21.4
Apr-2021	1.88	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.233 J*	*0.187 J*	*ND*	4.75	*ND*	*ND*	*ND*	6.82	35.8
Oct-2021	2.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.1	*ND*	*ND*	*ND*	9.1	26
May-2022	2.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5	*ND*	*ND*	*ND*	12.9	22.7
Oct-2022	2.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.3	*ND*	*ND*	*ND*	10.4	25.2

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25A***															
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	1.4	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	1.6	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	NA
Apr-2000	ND	NA	ND	NA	1.6	ND	NA	ND	ND	ND	NA	NA	ND	0.7 J	ND	ND	NA
Oct-2000	ND	ND	ND	NA	2	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	NA
Apr-2001	ND	ND	ND	NA	1.4	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	NA
Sep-2001	ND	ND	ND	NA	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	NA
Mar-2002	ND	ND	ND	NA	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	NA
Sep-2002	ND	ND	ND	NA	1.2	ND	ND	ND	ND	ND	ND	ND	0.7 J	1.8	ND	ND	NA
Mar-2003	ND	ND	ND	NA	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	NA
Oct-2003	ND	ND	ND	NA	1.1	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	NA
Apr-2004	ND	ND	ND	NA	1	ND	ND	0.6 J	ND	ND	ND	ND	0.8 J	2.3	ND	ND	NA
Oct-2004	ND	ND	ND	NA	2.4	ND	ND	ND	ND	ND	ND	ND	ND	3.1	ND	ND	NA
Apr-2005	ND	ND	ND	ND	2.3	ND	ND	0.9 J	ND	ND	ND	ND	1.2	2.7	ND	ND	NA
Oct-2005	ND	ND	ND	ND	3.3	ND	ND	1.6	ND	ND	ND	ND	1.4	2.5	ND	ND	NA
Mar-2006	ND	ND	ND	ND	2.5	ND	ND	1.4	ND	ND	ND	ND	1.1	1.8	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25A***															
Sep-2006	ND	ND	ND	ND	**5.4**	ND	ND	1.4	ND	ND	ND	ND	1.7	3.9	ND	ND	NA
Mar-2007	ND	ND	ND	1	6.1 J	ND	ND	1.9	ND	ND	ND	ND	2.6	3	ND	ND	NA
Sep-2007	ND	ND	ND	1.5	**12.1**	ND	ND	2.1	ND	ND	ND	ND	3.6	3.9	ND	ND	NA
Mar-2008	ND	ND	ND	1.6	**9**	ND	ND	1.1	ND	ND	ND	ND	1.8	ND	ND	0.6 J	NA
Sep-2008	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	NA
Dec-2008	ND	ND	0.6 J	2.2	**14.1**	ND	ND	0.9 J	0.5 J	ND	ND	ND	2	ND	ND	ND	NA
Mar-2009	ND	ND	ND	2.4	**11.4**	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA
Oct-2009	ND	ND	0.7 J	ND	**12.1**	0.6 J	ND	0.8 J	ND	ND	ND	ND	1.8	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	**20.7**	ND	ND	ND	ND	ND	ND	ND	ND	3.6	ND	ND	NA
Oct-2010	ND	ND	1.1	3.4	**25.9**	1.2	ND	3.5	ND	ND	ND	ND	ND	3.6	ND	1.2	NA
Apr-2011	ND	ND	1.1	2.8	**22.9**	1.2	ND	3.7	ND	ND	ND	ND	**5.4 C**	3	ND	**5.5 R,C**	NA
May-2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**5.5**	NA	NA	1	NA
Sep-2011	ND	ND	1.1	5.3	**30.9**	1.2	ND	4.7	ND	ND	ND	ND	**6.8**	4	ND	1.4	NA
Mar-2012	ND	ND	1.2	4.8	**34.3**	1.4	ND	4.5	ND	ND	ND	ND	**6.5**	3.6	ND	**4.3 R,C**	NA
May-2012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5	NA
Sep-2012	ND	ND	1.9	5.97	**36.1**	1.88	ND	**5.06 C**	ND	ND	ND	ND	**6.71**	3.53	ND	1.36	3.78
Nov-2012	NA	NA	NA	NA	NA	NA	NA	**5.44**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mar-2013	ND	ND	1.73	6.33	**44**	1.94	ND	**5.14**	ND	ND	ND	ND	**7.31**	ND	ND	1.55	3.67
Oct-2013	ND	ND	2.07	6.05	**43**	2.28	ND	**6.05**	ND	0.18 J	ND	ND	**7.97**	3.34	ND	1.66	4.35
Mar-2014	ND	ND	1.9	6.01	**40.8**	2.26	ND	**5.68**	ND	ND	ND	ND	**7.69**	3.2	ND	1.52	4.16
Oct-2014	ND	ND	0.94 J	5.65	**41.7**	2.17	ND	**6.1**	ND	ND	ND	ND	**8.14**	3.64	ND	1.45	3.11

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-25A*															
Apr-2015	*0.28 J*	*ND*	*ND*	5.65	**41.1**	1.94	*ND*	**5.08**	*ND*	*ND*	*ND*	*ND*	**7.43**	3.61	*ND*	1.42	1.94
Nov-2015	*ND*	*ND*	*ND*	5.5	**40.8**	1.8	*ND*	4.9	*ND*	*ND*	*ND*	*ND*	**7.5**	3.3	*ND*	2	1.8
May-2016	*ND*	*ND*	*0.1 J*	4.6	**33**	1.7	*ND*	5	*ND*	*0.1 J*	*ND*	*ND*	**7.1**	3.7	*ND*	1.3	1.8
Oct-2016	*ND*	*ND*	*ND*	4	**35**	1.2	*ND*	4.3	*ND*	*0.2 J*	*ND*	*ND*	**6.4**	4	*ND*	1.5	1.2
May-2017	*ND*	*ND*	*ND*	4.6	**37**	1.6	*ND*	4.3	*ND*	*0.1 J*	*ND*	*ND*	**6**	1.5	*ND*	1.2	1.6
Oct-2017	*ND*	*ND*	*ND*	4.6	**32**	1.6	*ND*	4.5	*ND*	*0.1 J*	*ND*	*ND*	**6.4**	3.4	*ND*	1.3	1.6
May-2018	*ND*	*ND*	*ND*	5.2	**42.1**	2.1	*ND*	**5.6**	*ND*	*ND*	*ND*	*ND*	**8.9**	4.4	*ND*	1.7	*NA*
Nov-2018	*ND*	*ND*	*ND*	4.4	**26.3**	1	*ND*	2.6 CL	*ND*	*ND*	*ND*	*ND*	**5.7**	3.4	*ND*	*0.98 J*	*NA*
May-2019	*ND*	*ND*	*ND*	2.8	**16.7**	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	3.8	2.2	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	2.9	**18.8**	*ND*	*ND*	3.1	*ND*	*ND*	*ND*	*ND*	4	1.6	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	2.2	**15.2**	*ND*	*ND*	2.7	*ND*	*ND*	*ND*	*ND*	2.9	1.2	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	3.1	**16.4**	*0.6 J*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	3.2	1.7	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	3.98	**19.5**	*0.526 J*	*ND*	2.62	*ND*	*ND*	*ND*	*ND*	3.84	*2.1 J*	*ND*	*0.693 J*	*NA*
Oct-2021	*ND*	*ND*	*ND*	4.1	**23.6**	*0.7 J*	*ND*	3	*ND*	*ND*	*ND*	*ND*	4.1	1.9	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	3.9	**22.4 L**	*0.8 J*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	4.7	1.8	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	4.2	**23.4 L**	*0.9 J*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	4.5	1.8	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-27***											
Mar-2013	4.24	4.24	*0.0847 J*	*ND*	3.16	0.0583	*ND*	6.2	17.5	*0.63 J*	*ND*	3.43
Oct-2013	4.36	4.36	*ND*	*ND*	3.03	0.0804	*ND*	5.8	18.4	*0.615 J*	32	3.37
Mar-2014	4.28	4.28	*ND*	*ND*	2.96	0.0592	*ND*	5.5	20.1	*ND*	*ND*	3.56
Oct-2014	24.2	24.2	*ND*	*ND*	3.09	0.0724	*ND*	5.8	18.2	*ND*	*ND*	3.72
Apr-2015	4.48	4.48	*ND*	*5 J*	2.92	0.0554	*ND*	3.9	18.6	*ND*	31	3.57
Nov-2015	*ND*	*ND*	*ND*	*ND*	3.16	0.053	*ND*	5.4	23.2	*ND*	32	4.25
May-2016	3.6	3.6	*ND*	*ND*	3.93	0.0614	*ND*	5.3	22.9	*ND*	*20 J*	3.6
Oct-2016	*ND*	*ND*	*ND*	*ND*	3.72	*NA*	*NA*	5.2	26.9	*0.701 J*	*23 J*	3.3
May-2017	*ND*	*ND*	*ND*	*ND*	3.1	0.0707	*ND*	5.1	37.8	*ND*	*ND*	3.6
Oct-2017	*ND*	*ND*	*ND*	*ND*	3.63	0.0788	*ND*	5.3	31.3	*ND*	*21 J*	3.5
May-2018	*6 J*	*ND*	*ND*	*ND*	3.3	*0.063 J*	*ND*	6.5	225	*ND*	15	*3.4 J*
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	4.7	*0.076 J*	*ND*	4.7	24	*ND*	80	*3.7 J*
May-2019	*ND*	*NA*	*ND*	*ND*	4.7	*ND*	*ND*	4.45	19.7	*ND*	*ND*	*ND*
Oct-2019	*2.5 J*	*NA*	*ND*	*ND*	4	*0.095 J*	*ND*	4.5	25.3	*ND*	24	3.5
May-2020	*ND*	*NA*	*ND*	*ND*	4.7	*0.056 J*	*ND*	4.5	22	*ND*	25	3.5
Oct-2020	*ND*	*NA*	*ND*	*ND*	4.4	*0.068 J*	*ND*	4.69	22.1	*ND*	20	3.8
Apr-2021	20	*NA*	*ND*	*ND*	4.3	*0.089 J*	*ND*	6.08	25.1	*ND*	*ND*	3.7
Oct-2021	20	*NA*	*ND*	*ND*	3.8	*0.055 J*	*ND*	5.48	21.1	*ND*	*ND*	3.5
May-2022	*2 J2c*	*NA*	*ND*	*ND*	3.8	*ND*	*ND*	6.2	92.4	*ND*	*ND*	3.5 N3
Oct-2022	*ND*	*NA*	*ND*	*8.4 J*	10	*0.055 J*	*ND*	5.25	84.8	*ND*	*ND*	3.9 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-27***													
Mar-2013	ND	ND	0.006 J	ND	ND	0.877	0.928	0.0074 J	0.000939 J	0.0023 J	0.0538	0.0056	ND	0.302	0.311
Oct-2013	ND	ND	0.006 J	ND	ND	0.835	0.803	0.0034 J	0.00098 J	0.0019 J	0.0606	ND	0.000286 J	0.313	0.307
Mar-2014	0.0017 J	0.000343 J	0.007 J	ND	ND	0.869	0.872	0.0039 J	0.000823 J	0.0025 J	0.287	0.0077 J	ND	0.337	0.328
Oct-2014	0.0012 J	0.000421 J	0.0173	ND	ND	0.915	0.82	0.0062 J	0.000869 J	0.0024 J	0.737	ND	0.0012 J	0.348	0.273
Apr-2015	0.000396 J	ND	0.0065 J	ND	ND	0.899	0.887	0.0015 J	0.000804 J	0.0019 J	0.0623	ND	ND	0.323	0.326
Nov-2015	ND	ND	0.0065 J	ND	0.00008 J	1.13	0.872	0.0014 J	0.000764 J	0.0023 J	0.0973	ND	ND	0.346	0.337
May-2016	ND	ND	0.0065	ND	ND	0.875	0.926	0.0024 J	0.00078 J	0.0023 J	0.385	ND	ND	0.34	0.34
Oct-2016	ND	ND	0.0073	ND	ND	0.77	0.8	0.00062 J	0.0008 J	0.0022 J	ND	ND	ND	0.332	0.35
May-2017	ND	ND	0.0064	ND	ND	0.902	0.721	0.0015 J	0.00084 J	0.0025 J	0.0661 J	ND	ND	0.338	0.327
Oct-2017	ND	ND	0.006	ND	ND	0.8	0.764	0.00092 J	0.00075 J	0.0023 J	ND	ND	ND	0.358	0.305
May-2018	0.000039 J	ND	0.0065	ND	0.000025 J	0.8 J	0.76 J	0.0027 J	0.00077	0.0048 B	ND	ND	ND	0.34 J	0.32 J
Nov-2018	ND	ND	0.0064	0.000027 J	0.000046 J	0.88 J	0.86 J	0.0033 J	0.00082	0.0068	0.026	ND	0.00018 J	0.37 J	0.34 J
May-2019	ND	ND	0.0069	ND	ND	ND	ND	ND	0.00091	0.0074	ND	ND	ND	ND	ND
Oct-2019	0.00011 J	ND	0.0067	ND	0.00025 J	0.8	0.79 J	0.0055 J	0.00093	0.021	0.035 J	0.0088 J	0.000054 J	0.36	0.34 J
May-2020	0.000078 J	ND	0.0064	ND	0.0001 J	0.8	0.82 J	0.0068 J	0.00097	0.022	0.039 J	0.014 J	ND	0.36	0.36 J
Oct-2020	0.00052 J	ND	0.028	ND	ND	0.92	0.78 J	0.054	0.0084	ND	4.2	0.06	ND	0.38	0.36 J
Apr-2021	ND	ND	0.011	ND	ND	0.85 J	0.72 J	0.013	0.0018 J	0.02	0.76	ND	ND	0.38	0.33
Oct-2021	ND	ND	0.0074	ND	ND	0.81	0.84	0.0022 J	0.0011 J	0.0146	0.54	0.014 J	0.00011 J	0.36 J	0.37 J
May-2022	ND	0.0015 JB	0.0077	ND	ND	0.79	0.9	0.0018 J	0.00091 J	0.0071	0.036 J	ND	ND	0.37 J	0.4 J
Oct-2022	ND	ND	0.0079	ND	ND	0.88	0.85	0.0028	0.001 J	0.0058	ND	0.14	ND	0.4 J	0.4 J

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-27*												
Mar-2013	0.0078 J	0.0079 J	0.000098 J	0.0045 J	0.437 J	0.45	ND	ND	1.41	1.46	ND	ND	0.0177
Oct-2013	0.0079 J	0.0073 J	ND	0.0031 J	0.377 J	0.344 J	ND	ND	1.45	1.43	ND	0.000916 J	0.0184
Mar-2014	0.0078 J	0.0071 J	ND	0.0028 J	0.491 J	0.441 J	ND	ND	1.53	1.63	0.000579 J	0.0011 J	0.0086 J
Oct-2014	0.0111	0.0087 J	ND	0.0035 J	0.58	0.372 J	ND	ND	1.62	1.65	ND	0.003 J	0.0089 J
Apr-2015	0.0078 J	0.0078 J	ND	0.0018 J	0.377 J	0.389 J	ND	ND	1.51	1.6	ND	ND	0.0094 J
Nov-2015	0.0074 J	0.007 J	ND	0.0017 J	0.444 J	0.422 J	ND	ND	1.64	1.64	ND	0.000256 J	0.0086 J
May-2016	0.007	0.0067	ND	0.0022 J	0.383 J	0.363 J	ND	ND	1.49	1.48	ND	0.00039 J	0.008 J
Oct-2016	0.0067	0.006	ND	0.0013 J	0.427	0.415	ND	ND	1.71	1.76	ND	ND	0.0037 J
May-2017	0.0073	0.0054	ND	0.005	0.418	0.38 J	ND	ND	1.52	1.36	ND	0.00024 J	0.0049 JB
Oct-2017	0.0062	0.0056	ND	0.0016 J	0.444	0.416	ND	ND	1.82	1.86	ND	ND	0.0051 J
May-2018	0.0053	0.0049	ND	0.0024	ND	ND	0.00045 JB	ND	1.7 J	1.9 J	ND	0.0041	0.0061 B
Nov-2018	0.0073	0.0054	ND	0.0028	ND	ND	0.00013 J	ND	2.5 JB	2.2 J	ND	0.0028	0.0069
May-2019	0.0062	0.0051	ND	0.0028	ND	ND	ND	ND	ND	ND	ND	0.0038	0.0053
Oct-2019	0.0051	0.0046	ND	0.0033	ND	ND	ND	ND	2.2 J	2 J	ND	0.0008 J	0.014
May-2020	0.005	0.0045	ND	0.0044	ND	ND	ND	ND	2.1 J	2.1 J	ND	0.003	0.0077
Oct-2020	0.024	0.012	ND	0.045	ND	ND	ND	ND	ND	ND	ND	0.0065	ND
Apr-2021	0.0077	0.0058	ND	0.013	0.53	0.41 J	ND	ND	2.4	2.3	ND	0.0012 J	0.0033 J
Oct-2021	0.0067	0.0074	ND	0.0042	0.51	0.446 J	ND	ND	2.2	2.2	ND	0.00036 J	0.0028 J
May-2022	0.0052	0.0057	ND	0.0026	0.44 J	0.37 J	ND	ND	2.2	2.5	ND	0.00066 JB	ND
Oct-2022	0.006	0.0056	ND	0.0062	0.51	0.49 J	ND	ND	2.4	2.4	ND	ND	0.0071

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-27*																
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-27*															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.18 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.206 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-27***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-27***															
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-28***											
Mar-2013	4.52	4.52	*0.0847 J*	*ND*	4.04	0.0805	*ND*	6.2	20	*0.533 J*	*ND*	4.82
Oct-2013	4.4	4.4	*ND*	*ND*	3.95	0.112	*ND*	5.6	21.4	*0.517 J*	46	4.9
Mar-2014	4.32	4.32	*ND*	*ND*	4.19	0.0818	*ND*	5.4	23.5	*ND*	*ND*	5.44
Oct-2014	*ND*	*ND*	*0.106 J*	*ND*	4.85	0.0941	*ND*	4.7	28.3	*ND*	36	5.31
Apr-2015	4.64	4.64	*ND*	*ND*	5.29	0.0508	*ND*	4.1	25.7	*ND*	*ND*	6
Nov-2015	3.72	3.72	*ND*	*ND*	6.06	0.0781	*ND*	5.2	47.9	*ND*	*12 J*	6.59
May-2016	2.24	2.24	*ND*	*ND*	6.46	0.0791	*ND*	5.2	39	*ND*	27	6.4
Oct-2016	*ND*	*ND*	*ND*	*ND*	7.83	*NA*	*NA*	5.3	47.6	*0.717 J*	31	6.8
May-2017	2.68	2.68	*ND*	*5 J*	9.52	0.16	*ND*	5	58.6	*0.545 J*	*22 J*	7.7
Oct-2017	*ND*	*ND*	*ND*	*ND*	12.3	0.101	*ND*	5	79.6	*0.542 J*	29	9.6
May-2018	*2 JB*	*ND*	*0.066 J*	*ND*	14.6	*0.086 J*	*ND*	5.4	79.2	*ND*	37	10.7
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	19.5	*0.079 J*	*ND*	4.68	70.1	*ND*	83	13.2
May-2019	*ND*	*NA*	*ND*	*ND*	28.6	*ND*	*ND*	4.28	78.8	*ND*	67	16.8
Oct-2019	*2.5 J*	*NA*	*ND*	*ND*	40.6	*0.098 J*	*ND*	4.29	139.3	*ND*	85	22.3
May-2020	*ND*	*NA*	*ND*	*ND*	45.1	*0.087 J*	*ND*	4.44	141.9	*ND*	94	20.3
Oct-2020	*ND*	*NA*	*ND*	*6.1 J*	43.5	*0.058 J*	*ND*	5.03	170.4	*ND*	90	23.8
Apr-2021	*1 J3c*	*NA*	*ND*	*ND*	54.5	*0.076 J*	*ND*	4.63	204.2	*ND*	80	25
Oct-2021	*1 J2c*	*NA*	*ND*	*ND*	51.6	*0.075 J*	*ND*	4.82	235.9	*ND*	86	25.4
May-2022	*1 J2c*	*NA*	*ND*	*ND*	48.5	*0.061 J*	*ND*	4.66	213.3	*ND*	100	26.7 N3
Oct-2022	*2 JB3c*	*NA*	*ND*	*ND*	50.3	*0.08 J*	*ND*	4.73	204.2	*ND*	116	26.3 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-28***													
Mar-2013	ND	ND	0.0103	ND	ND	1.16	1.27	0.0017 J	0.0025 J	0.0013 J	0.0052 J	0.0051 J	ND	0.466	0.522
Oct-2013	ND	ND	0.0118	ND	ND	1.16	1.14	0.0013 J	0.0027 J	0.000921 J	ND	ND	ND	0.487	0.485
Mar-2014	0.000945 J	ND	0.0116	ND	ND	1.26	1.23	0.000968 J	0.0028 J	0.0013 J	0.0131 J	0.0044 J	ND	0.56	0.549
Oct-2014	0.000718 J	ND	0.0125	ND	ND	1.28	1.29	0.0021 J	0.0027 J	0.000985 J	0.0179 J	ND	ND	0.515	0.499
Apr-2015	0.000611 J	ND	0.0142	ND	ND	1.41	1.42	0.0027 J	0.0028 J	0.0013 J	0.0482 J	ND	ND	0.602	0.611
Nov-2015	ND	0.000252 J	0.0154	ND	ND	1.51	1.51	0.000811 J	0.0029 J	0.0011 J	ND	ND	0.000474 J	0.683	0.695
May-2016	ND	ND	0.0181	0.000071 J	ND	1.4	1.59	0.002 J	0.0026	0.0011 J	ND	ND	ND	0.695	0.716
Oct-2016	ND	ND	0.0175	ND	ND	1.54	1.54	0.003 J	0.0029	0.0013 J	0.0662 J	ND	ND	0.726	0.756
May-2017	ND	ND	0.0172	ND	ND	1.71	1.7	0.0018 J	0.003	0.0013 J	ND	ND	ND	0.829	0.832
Oct-2017	ND	ND	0.0216	0.000092 J	ND	2.19	1.9	0.0014 J	0.003	0.001 J	ND	ND	ND	1.01	0.986
May-2018	0.000045 J	ND	0.028	0.0001 J	0.000029 J	2.4	2.4	0.0039 J	0.003	0.0025 B	0.044	ND	ND	1.1	1.1
Nov-2018	ND	ND	0.029	0.00012 J	0.000039 J	3	2.9	0.0098	0.0028	0.0015 J	0.072	0.029	0.00014 J	1.4	1.4
May-2019	ND	ND	0.041	ND	ND	3.8	3.9	0.0087	0.0038	0.0025	ND	0.021	ND	1.8	1.8
Oct-2019	0.000099 J	ND	0.052	0.00021 J	0.00026 J	5.1	5	0.011	0.0045	0.0057	0.098 J	0.048	0.000073 J	2.3	2.3
May-2020	0.000088 J	ND	0.05	0.00018 J	ND	4.6	3.2	0.0071	0.0045	0.0026	0.062 J	ND	ND	2.2	3
Oct-2020	ND	ND	0.068	0.00029 J	ND	5.3	5.1	0.081	0.013	0.0062	2.2	0.29	ND	2.6	2.5
Apr-2021	ND	ND	0.064	0.00018 J	ND	5.6	5.8	0.0085	0.006	ND	0.11	0.06 J	ND	2.7	2.8
Oct-2021	0.000063 J	ND	0.066	0.0002 J	ND	5.6	6.2	0.0043	0.0059	0.0018 J	0.2	0.036 J	0.000051 J	2.8	3
May-2022	ND	ND	0.07	0.00016 J	ND	5.8	5.9	0.0063	0.0076	0.002 J	0.18	0.067	ND	2.9	3.1
Oct-2022	ND	ND	0.067	ND	ND	5.8	6.5	0.01	0.022	0.0025 J	0.72	0.14	ND	2.9	3.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-28***												
Mar-2013	0.0077 J	0.0086 J	0.000105 J	0.0014 J	0.39 J	0.412 J	ND	ND	1.47	1.7	ND	ND	0.0154
Oct-2013	0.0074 J	0.0071 J	ND	0.0019 J	0.36 J	0.349 J	ND	ND	1.7	1.71	ND	0.001 J	0.0136
Mar-2014	0.0072 J	0.0072 J	ND	0.0018 J	0.477 J	0.469 J	ND	ND	1.86	1.81	ND	ND	0.0087 J
Oct-2014	0.0072 J	0.0069 J	ND	0.0028 J	0.431 J	0.43 J	ND	ND	1.98	1.97	ND	ND	0.0093 J
Apr-2015	0.013	0.0077 J	ND	0.0032 J	0.452 J	0.464 J	ND	ND	2.19	2.24	ND	ND	0.0079 J
Nov-2015	0.0085 J	0.0087 J	ND	0.0023 J	0.497 J	0.497 J	ND	ND	2.6	2.69	0.000168 J	ND	0.0065 J
May-2016	0.0087	0.0089	ND	0.0027 J	0.465	0.454	ND	ND	2.62	2.69	ND	ND	0.0075 J
Oct-2016	0.0091	0.0083	ND	0.0036 J	0.504	0.533	ND	ND	3.2	3.24	ND	ND	ND
May-2017	0.0098	0.0092	ND	0.0033 J	0.537	0.577	ND	ND	3.8	3.62	ND	ND	0.0045 JB
Oct-2017	0.0096	0.0107	ND	0.003 J	0.613	0.641	ND	ND	4.85	4.65	ND	ND	0.0049 J
May-2018	0.012	0.011	ND	0.0047	ND	ND	0.00018 JB	ND	5.9	6.2	ND	0.0036	0.007 B
Nov-2018	0.015	0.014	ND	0.0087	0.84 J	ND	0.00012 J	ND	8	7.5	ND	0.0024	0.0081
May-2019	0.02	0.019	ND	0.0079	ND	ND	ND	ND	9.5	9.2	ND	0.0056	0.0092
Oct-2019	0.03	0.024	ND	0.011	ND	1.1 J	ND	ND	16.7	16.2	ND	ND	0.017
May-2020	0.026	0.023	ND	0.0084	ND	1.2 J	ND	ND	15.3	7.3	ND	0.0029	0.011
Oct-2020	0.037	0.032	ND	0.072	1.5	1.1	ND	ND	20	19.1	ND	0.007	0.02
Apr-2021	0.027	0.028	0.00006 J	0.015	1.1	1.1	ND	ND	23.2	24.2	ND	ND	0.009 J
Oct-2021	0.026	0.028	ND	0.0097	1.1	1.12	ND	ND	24.4	26.2	ND	ND	0.0082
May-2022	0.028	0.029	ND	0.013	1	1.2	ND	ND	22.7	23.7	ND	ND	0.0085
Oct-2022	0.03	0.03	ND	0.018	1.1	1.2	ND	ND	20.9	23.7	ND	ND	0.014

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-28***																
Mar-2013	ND	ND	ND	ND	1.08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	2.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	0.1 J	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	0.1 J	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	0.1 J	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2 JB	ND
Nov-2018	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.63	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-28***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.42 J*	*ND*	*ND*	*ND*	*ND*	*ND*	8.46	6.37
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.41 J*	*ND*	*ND*	*ND*	*ND*	*ND*	5.9	6.23
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*9.82 J*	7.38
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.39 J*	*ND*	*ND*	*ND*	*ND*	*ND*	6.82	7.55
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.37 J*	*ND*	*ND*	*ND*	*ND*	*ND*	8.14	8.59
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*18.1 J*	9
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	4.2	4.5
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	4.5	4.7
May-2017	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	3.8	4.6
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	4	4.8
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	8.3	5.1
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4 CL	4.4 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7 CL	4.6 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.3	3.6
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.3	3.4
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	2.3
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.22 J*	*ND*	*0.213 J*	*ND*	*ND*	*ND*	*3.49 J*	5.5
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.1	4.4
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.7	3.5
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5	4.1

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-28***															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.3	0.16 J	ND	ND	ND	0.29 J	3.88	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	1.58	ND	ND	ND	ND	0.33 J	3.32	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.56	ND	ND	ND	ND	0.34 J	4.15	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	0.33 J	3.09	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	2.04	ND	ND	ND	ND	0.43 J	3.43	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	0.5 J	3.9	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	0.2 J	1.8	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	0.8 J	0.1 J	ND	ND	ND	0.2 J	1.9	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	0.2 J	1.8	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	0.2 J	1.6	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	2.3	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	1.4	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	0.6 J	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.481 JB	ND	ND	0.849 J	0.563 J	ND	ND	ND	0.227 J	1.31 J	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	1.7	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	1.3	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-28***															
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-29***											
Mar-2013	3.68	3.68	*0.0847 J*	*ND*	7.45	0.345	*ND*	6.1	39.4	1.38	19	7.56
Oct-2013	3.84	3.84	*ND*	*ND*	7.1	0.338	*ND*	5.8	39.2	*0.95 J*	44	8.02
Mar-2014	3.64	3.64	*0.108 J*	*ND*	7.5	0.378	*ND*	5.1	40	*0.635 J*	*ND*	8.99
Oct-2014	*ND*	*ND*	*ND*	*ND*	7.85	0.352	*ND*	4.5	37.1	*ND*	32	8.22
Apr-2015	4.76	4.76	*ND*	*ND*	7.91	0.401	*ND*	4.9	39.6	*ND*	27	8.83
Nov-2015	*ND*	*ND*	*ND*	*ND*	8.47	0.453	*ND*	5.1	66.3	*ND*	28	10
May-2016	*ND*	*ND*	*ND*	*ND*	9.01	0.442	*ND*	5	57.4	*0.644 J*	29	9
Oct-2016	*ND*	*ND*	*ND*	*ND*	8.1	*NA*	*NA*	4.9	57.9	*0.951 J*	28	7.9
May-2017	*ND*	*ND*	*ND*	*ND*	8.33	0.438	*ND*	4.9	59.4	*0.855 J*	25	8.3
Oct-2017	*ND*	*ND*	*ND*	*ND*	9.03	0.498	*ND*	5.3	69.4	*0.69 J*	26	8.6
May-2018	*2 JB*	*ND*	*ND*	*ND*	8.6	0.49	*ND*	5.7	59.2	*ND*	27	9.1
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	9.8	0.51	*ND*	4.64	43.1	*ND*	33	10.1
May-2019	*ND*	*NA*	*ND*	*ND*	9.4	0.54	*ND*	4.44	38.1	*ND*	81	9.3
Oct-2019	*ND*	*NA*	*ND*	161 ML	10.1	0.58	*ND*	4.35	48.8	*ND*	44	9.2
May-2020	*ND*	*NA*	*ND*	*ND*	10.5	0.57	*ND*	4.4	49.7	*ND*	30	9.8
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	9.4	0.55	*ND*	4.83	48.3	*ND*	39	9.9
Apr-2021	*1 J3c*	*NA*	*ND*	*ND*	10.7	0.58	*ND*	4.73	62.4	*ND*	21	9.5
Oct-2021	*ND*	*NA*	*ND*	*ND*	9.1	0.66	*ND*	4.84	89.8	*ND*	*ND*	10.4
May-2022	*ND*	*NA*	*ND*	*ND*	9.8	0.6	*ND*	4.64	80.8	*ND*	14	10.2 N3
Oct-2022	*2 JB3c*	*NA*	*ND*	*ND*	11.3	0.61	*ND*	4.74	79.4	*ND*	39	10.1 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-29***													
Mar-2013	ND	ND	0.0168	0.000171 J	ND	1.73	2.1	0.0039 J	0.0172	0.004 J	0.0493 J	0.0085 J	ND	0.786	0.903
Oct-2013	ND	ND	0.0214	ND	ND	1.77	1.86	0.0018 J	0.0117	0.0024 J	ND	ND	ND	0.874	0.936
Mar-2014	0.000625 J	0.00023 J	0.0219	ND	ND	1.96	1.99	0.0044 J	0.0078 J	0.0026 J	0.11	0.0084 J	ND	0.992	0.996
Oct-2014	0.000547 J	ND	0.0225	ND	ND	1.86	1.88	0.000879 J	0.0057 J	0.0018 J	0.0223 J	ND	ND	0.867	0.869
Apr-2015	0.000537 J	ND	0.0258	0.000165 J	ND	1.96	1.98	0.000867 J	0.0047 J	0.0019 J	0.0169 J	ND	ND	0.955	0.983
Nov-2015	ND	ND	0.0276	0.000158 J	ND	2.14	1.96	0.00074 J	0.0051 J	0.0022 J	0.0248 J	0.0151 J	0.000367 J	1.13	1.07
May-2016	ND	ND	0.0237	0.00014 J	ND	1.99	1.87	0.0015 J	0.0035	0.0018 J	ND	ND	0.00025 J	0.985	0.93
Oct-2016	ND	ND	0.0209	0.00013 J	ND	1.66	1.71	0.00068 J	0.0032	0.0015 J	ND	ND	ND	0.919	0.971
May-2017	ND	ND	0.0228	0.00013 J	ND	1.7	1.74	0.0017 J	0.0024	0.0017 J	0.0474 J	ND	0.000095 J	0.975	0.988
Oct-2017	ND	ND	0.0241	0.00016 J	ND	1.68	1.84	ND	0.0024	0.0016 J	ND	ND	ND	1.07	1.04
May-2018	0.000048 J	ND	0.028	0.00014 J	0.000033 J	2	1.9	0.0022 J	0.0018	0.0024 B	ND	ND	0.000018 J	1	1
Nov-2018	ND	ND	0.028	0.00017 J	0.000042 J	2.1	2.1	0.0057 J	0.0019	0.0071	0.041	0.019 J	0.00009 J	1.2	1.1
May-2019	ND	ND	0.027	ND	ND	2	2	ND	0.0018	0.0045	ND	ND	ND	1	1.1
Oct-2019	0.00009 J	ND	0.026	0.00016 J	0.00022 J	2	2	0.0047 J	0.0018	0.009	0.013 J	0.0068 J	0.000065 J	1	1.1
May-2020	0.000068 J	ND	0.027	0.00014 J	ND	2.1	1.4	0.0047 J	0.0018	0.0072	0.015 J	ND	ND	1.1	0.75 J
Oct-2020	ND	ND	0.028	ND	ND	2.1	2	0.012 J	0.0019 J	0.0076 J	0.02 J	0.0063 J	ND	1.2	1.1
Apr-2021	ND	ND	0.029	ND	ND	2	2	0.002 J	0.0015 J	ND	ND	ND	ND	1.1	1.1
Oct-2021	ND	ND	0.031	0.00019 J	ND	2.2	2.3	0.002 J	0.002 J	0.0016 J	0.015 J	ND	0.000033 J	1.2	1.2
May-2022	ND	ND	0.03	ND	ND	2.1	2.3	0.0026	0.0019 J	0.0019 J	ND	ND	ND	1.2	1.3
Oct-2022	ND	ND	0.036	0.0002 J	ND	2.1	2.3	0.013	0.0019 J	0.0018 J	0.037 J	ND	ND	1.2	1.2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-29***												
Mar-2013	0.0086 J	0.0094 J	0.000099 J	0.0165	0.594	0.681	ND	ND	2.65	3.01	ND	ND	0.0155
Oct-2013	0.0075 J	0.0078 J	ND	0.0081 J	0.569	0.588	ND	ND	2.93	3.13	ND	ND	0.0127
Mar-2014	0.0073 J	0.0072 J	ND	0.0079 J	0.775	0.729	ND	ND	3.09	3.18	ND	ND	0.006 J
Oct-2014	0.0072 J	0.0072 J	ND	0.0041 J	0.672	0.653	0.00076 J	ND	3.14	3.14	ND	ND	ND
Apr-2015	0.0078 J	0.008 J	ND	0.0037 J	0.683	0.703	ND	ND	3.63	3.73	ND	ND	0.0072 J
Nov-2015	0.0085 J	0.0082 J	ND	0.0041 J	0.744	0.686	ND	ND	3.98	3.76	ND	ND	0.0111
May-2016	0.0075	0.0067	ND	0.0032 J	0.688	0.655	ND	ND	3.29	3.28	ND	ND	ND
Oct-2016	0.0069	0.0068	ND	0.0027 J	0.655	0.688	ND	ND	3.23	3.34	ND	ND	ND
May-2017	0.0074	0.0069	ND	0.0032 J	0.731	0.711	ND	ND	3.38	3.18	ND	0.00044 J	ND
Oct-2017	0.0068	0.0074	ND	0.0025 J	0.716	0.741	ND	ND	3.79	3.68	ND	ND	ND
May-2018	0.0071	0.007	ND	0.0031	ND	ND	0.00037 JB	ND	3.7 J	3.9 J	ND	0.0033	0.0044 JB
Nov-2018	0.0097	0.009	ND	0.0054	ND	ND	0.00022 J	ND	4.2 J	4.2 J	ND	0.0024	0.0049 J
May-2019	0.0085	0.008	ND	0.0034	ND	ND	ND	ND	ND	ND	ND	0.0054	ND
Oct-2019	0.008	0.0079	ND	0.003	ND	ND	ND	ND	3.8 J	3.9 J	ND	ND	0.011
May-2020	0.0092	0.0079	ND	0.0036	1.1 J	ND	ND	ND	3.2 J	2.2 J	ND	0.0032	0.0053
Oct-2020	0.0089	0.0085	ND	0.0038	ND	ND	ND	ND	4.2 J	3.7 J	ND	0.0039 J	ND
Apr-2021	0.0089	0.0087	0.00007 J	0.0042 J	0.8	0.75	ND	ND	4.2	4.3	ND	ND	ND
Oct-2021	0.0095	0.0089	ND	0.0031	0.79	0.743	ND	ND	4.5	4.5	ND	ND	0.002 J
May-2022	0.0098	0.011	ND	0.0032	0.76	0.84	ND	ND	4.4	4.8	ND	ND	ND
Oct-2022	0.0097	0.0096	ND	0.0034	0.79	0.83	ND	ND	4.5	5	ND	ND	0.0054 B

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-29*																
Mar-2013	ND	ND	ND	ND	1.48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.96	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.68	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.51	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.6	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	0.1 J	ND	ND	1.7	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	0.1 J	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8 J	ND
Nov-2018	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-29***															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.88 J	ND	0.45 J	ND	ND	ND	9.31	4.23
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.99 J	ND	0.66 J	ND	ND	ND	6.72	4.54
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.97 J	0.45 J,B	0.54 J	ND	ND	ND	9.34 J	4.81
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.86 J	ND	0.51 J	ND	ND	ND	6.19	3.62
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.72 J	ND	0.53 J	ND	ND	ND	5.59	3.13
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J,B	ND	0.9 J	ND	ND	ND	12.1 J	3.4
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	0.8 J	ND	ND	ND	5.6	3.7
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	0.7 J	ND	ND	ND	6.4	3.9
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	0.9 J	ND	ND	ND	5.3	3.7
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	0.9 J	ND	ND	ND	5	3.5
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	9.1	3.2
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.54 J	ND	0.71 J	ND	ND	ND	4.3 CL	2.3 N3
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3 CL	2.4 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	1.9
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	1.4
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	0.7 J	ND	ND	ND	5.1	1.6
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.571 J	ND	0.751 J	ND	ND	ND	3.23 J	2.34 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	0.7 J	ND	ND	ND	3.9	1.5
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	1
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	0.6 J	ND	ND	ND	3.1	1.1

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-29***															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	3.78	0.36 J	ND	ND	ND	0.5 J	0.92 J	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	4.65	ND	ND	ND	ND	0.6 J	0.79 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	4.04	ND	ND	ND	ND	0.57 J	0.94 J	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	3.8	ND	ND	ND	ND	0.51 J	0.48 J	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	3.29	ND	ND	ND	ND	0.44 J	0.45 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND
May-2016	ND	ND	ND	0.1 J	ND	ND	ND	3.1	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	0.5 J	0.6 J	ND	ND	ND
May-2017	ND	ND	ND	0.1 J	ND	ND	ND	2.9	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
Oct-2017	ND	ND	ND	0.2 J	ND	ND	ND	2.5	ND	ND	ND	ND	0.4 J	0.4 J	ND	ND	ND
May-2018	ND	ND	ND	ND	1.2	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	0.75 J	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	**1.9 D6**	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	0.274 J	0.46 JB	ND	ND	1.36	ND	ND	ND	ND	0.326 J	0.277 J	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-29***															
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-30***											
Mar-2013	13.4	13.4	*0.107 J*	*ND*	20.6	1.75	*ND*	6.2	108.6	4.07	71	25.2
Oct-2013	12.5	12.5	*ND*	*ND*	21	1.71	*ND*	6.6	99.2	1.24	72	25.2
Mar-2014	8.92	8.92	*ND*	*ND*	21.8	1.8	*ND*	5.8	94.7	*0.863 J*	58	24.2
Oct-2014	3.3	3.3	*ND*	*ND*	21.3	1.82	*ND*	5.5	83	*ND*	70	21.4
Apr-2015	6.52	6.52	*ND*	*ND*	21.5	1.88	*ND*	4.6	84.5	*ND*	68	20.9
Nov-2015	2.84	2.84	*ND*	*ND*	20.9	1.93	*ND*	5.4	129.7	*ND*	45	18.4
May-2016	2.72	2.72	*ND*	*ND*	22.8	1.86	*ND*	5	114.9	*ND*	77	18.9
Oct-2016	*ND*	*ND*	*ND*	*ND*	22.9	*NA*	*NA*	5.3	126.3	1.03	88	17.4
May-2017	*ND*	*ND*	*ND*	*6 J*	23.5	1.84	*ND*	5.1	133.9	*0.765 J*	50	17.3
Oct-2017	*ND*	*ND*	*ND*	*7 J*	23.1	2.02	*ND*	5.3	146.2	*0.73 J*	73	17.5
May-2018	*2 JB*	*ND*	*ND*	*ND*	21.5	2	*ND*	5	131.8	28.6	*ND*	18
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	23.5	2.1	*ND*	4.78	98.3	*ND*	69	18.8
May-2019	*ND*	*NA*	*ND*	*ND*	23.2	2.2	*ND*	4.77	75.9	*ND*	55	18.3
Oct-2019	*2 JH1*	*NA*	*ND*	*ND*	22.7	2.1	*ND*	4.76	100.1	*ND*	72	19.7
May-2020	*2 J*	*NA*	*ND*	*ND*	25.6	2.2	0.01	4.42	99.5	*ND*	73	19.6
Oct-2020	*ND*	*NA*	*ND*	*ND*	23.6	1.9	*ND*	4.77	102.4	*ND*	86	18.3
Apr-2021	*4 J4c*	*NA*	*ND*	*ND*	26	2.2	*ND*	4.84	121.2	*ND*	56	19.3
Oct-2021	*2 J3c*	*NA*	*0.047 J*	*ND*	22.1	2.3	*ND*	4.97	151.4	*ND*	56	18.9
May-2022	*2 J3c*	*NA*	*ND*	*ND*	22.8	2.1	*ND*	4.82	138.6	*ND*	61	20 N3
Oct-2022	*2 J3c*	*NA*	*ND*	*ND*	26.4	2.1	*ND*	4.89	140.8	*ND*	50	19.9 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-30***													
Mar-2013	ND	ND	0.026	ND	ND	7.64	7.6	0.007 J	0.0023 J	0.0013 J	0.29	0.0067 J	ND	1.48	1.48
Oct-2013	ND	ND	0.0302	ND	ND	7.39	7.55	0.0022 J	0.0019 J	0.000525 J	0.0226 J	ND	ND	1.63	1.69
Mar-2014	0.000575 J	0.000086 J	0.0279	ND	ND	7	7.06	0.0013 J	0.0017 J	0.0013 J	0.0734	0.0057 J	ND	1.64	1.63
Oct-2014	0.0004 J	ND	0.0289	ND	ND	5.96	5.94	0.0011 J	0.0018 J	0.000821 J	0.0747	ND	ND	1.57	1.4
Apr-2015	0.000927 J	ND	0.031	ND	ND	5.79	5.78	0.000877 J	0.0019 J	0.0015 J	0.0312 J	0.0135 J	ND	1.57	1.57
Nov-2015	ND	ND	0.0284	0.000066 J	0.000064 J	4.82	4.68	0.000609 J	0.0017 J	0.0016 J	0.0353 J	ND	0.00038 J	1.55	1.53
May-2016	ND	ND	0.0307	0.00012 J	ND	4.89	4.64	0.0015 J	0.002	0.002 J	ND	ND	ND	1.61	1.58
Oct-2016	ND	ND	0.0274	ND	ND	4.41	4.47	0.0017 J	0.002	0.0014 J	ND	ND	ND	1.55	1.54
May-2017	ND	ND	0.0317	0.00011 J	ND	4.28	4.33	0.00079 J	0.002	0.002 J	ND	ND	ND	1.61	1.6
Oct-2017	ND	ND	0.0263	0.00011 J	ND	4.27	4.48	ND	0.0018	0.0014 J	ND	ND	ND	1.66	1.58
May-2018	0.000036 JB	ND	0.032	0.0001 J	0.000058 J	4.5	4.5	0.0027 JB	0.0019	0.0026 B	0.013 J	ND	ND	1.6	1.7
Nov-2018	ND	ND	0.032	0.00012 J	0.000064 J	4.6	4.6	0.0032 J	0.002	0.0018 J	0.016 J	ND	0.000033 J	1.8	1.7
May-2019	ND	ND	0.032	ND	ND	4.5	4.5	ND	0.0021	0.0033	ND	ND	ND	1.7	1.7
Oct-2019	0.000094 JB	ND	0.031	0.000099 J	0.00028 JB	4.9	4.5	0.0042 J	0.0021	0.0039	0.021 J	0.018 J	0.000075 JB	1.8	1.7
May-2020	0.000061 J	ND	0.033	0.0001 J	ND	4.8	4.8	0.0047 J	0.0022	0.014	0.024 J	0.011 J	ND	1.8	1.8
Oct-2020	ND	ND	0.033	ND	ND	4.5	4.5	0.0073 JB	0.0025 J	ND	0.0093 J	ND	ND	1.7	1.8
Apr-2021	ND	ND	0.034	ND	ND	4.7	4.3	0.00081 J	0.0023 J	0.0053	ND	ND	ND	1.9	1.7
Oct-2021	ND	ND	0.036	ND	ND	4.6	4.7	0.0019 J	0.0025 J	0.0015 J	0.012 J	ND	ND	1.8	1.8
May-2022	ND	ND	0.036	ND	ND	4.8	5.4	0.0018 J	0.0023 J	0.0015 J	ND	ND	ND	1.9	2.1
Oct-2022	ND	ND	0.035	0.00012 J	ND	4.8	5.3	0.002 J	0.0025 J	0.0019 J	ND	ND	ND	1.9	2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-30*												
Mar-2013	0.0145	0.0146	0.000097 J	0.0055 J	1.45	1.35	ND	ND	12.1	12.3	0.000257 J	ND	0.019
Oct-2013	0.0106	0.0108	ND	0.0032 J	1.18	1.2	ND	ND	10.4	10.6	ND	ND	0.0156
Mar-2014	0.0087 J	0.0085 J	ND	0.0031 J	1.39	1.4	ND	ND	10.3	10.4	0.000698 J	ND	0.0077 J
Oct-2014	0.0086 J	0.0083 J	ND	0.003 J	1.38	1.37	ND	ND	10.2	10.1	ND	ND	0.0073 J
Apr-2015	0.009 J	0.0092 J	ND	0.0031 J	1.35	1.35	ND	ND	10.8	10.8	ND	ND	0.0106
Nov-2015	0.0086 J	0.0088 J	ND	0.0029 J	1.32	1.31	ND	ND	10.6	10.5	ND	ND	0.0071 J
May-2016	0.0097	0.0096	ND	0.0035 J	1.26	1.25	ND	ND	10.8	10.5	ND	ND	ND
Oct-2016	0.0114	0.0087	ND	0.0042	1.35	1.34	ND	ND	10.5	10.7	ND	ND	0.0049 J
May-2017	0.0096	0.0092	ND	0.0032 J	1.37	1.36	ND	ND	10.5	10.4	ND	ND	0.0051 JB
Oct-2017	0.0089	0.0095	ND	0.0032 J	1.34	1.38	ND	ND	10.9	10.4	ND	ND	ND
May-2018	0.009	0.0093	ND	0.004	1.4 J	0.88 J	ND	ND	10.2	10.7	0.00023 J	0.0032 B	0.0061
Nov-2018	0.01	0.0099	ND	0.0043	1.5 J	1 J	0.00016 J	ND	9.9	10.7	ND	0.0025	0.0062
May-2019	0.01	0.01	ND	0.006	ND	ND	ND	ND	9.6	9	ND	0.0051	0.0057
Oct-2019	0.011	0.01	ND	0.005	1.6 J	1.6 J	ND	ND	10.9	10.5	ND	ND	0.011 B
May-2020	0.012	0.01	ND	0.0054	1.6 J	1.4 J	ND	ND	9.8	10.6	ND	0.0033	0.007
Oct-2020	0.01	0.01	ND	0.004	1.4 J	1.3 J	ND	ND	10.2	10.3	ND	0.0032 JB	ND
Apr-2021	0.011	0.01	ND	0.0041 J	1.5	1.4	ND	ND	12.4	11.8	ND	ND	0.0042 J
Oct-2021	0.011	0.011	ND	0.0043	1.5	1.41	ND	ND	11.8	11.5	ND	ND	0.0036 J
May-2022	0.012	0.013	ND	0.0042	1.4	1.6	ND	ND	11.1	12	ND	ND	ND
Oct-2022	0.012	0.012	ND	0.0047	1.5	1.7	ND	ND	11.3	12.9	ND	ND	0.0054

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-30*																
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-30***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.34 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*0.39 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.181 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-30***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*0.89 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-30*															
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

HISTORICAL TABLES –
COMAR Wells

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-07***											
Nov-1993	10	10	0.1	ND	2.9	0.3	ND	5.75	31.5	ND	ND	3.38
Apr-1994	10	10	0.1	ND	3	0.3	ND	5.61	22.3	3	20	3.4
Apr-1995	ND	ND	ND	ND	2.7	0.3	ND	5.2	21.6	2.1	33	2.3
Apr-1997	ND	8	ND	ND	2.5	0.17	ND	NA	NA	ND	80	9.6
Oct-1997	2	2	0.23	ND	ND	ND	ND	6.17	39.7	ND	40	6.5
Apr-1998	ND	ND	0.21	ND	2.17	0.38	ND	6.37	41.9	0.65	12	3.1
Apr-1999	ND	ND	0.74	ND	3.88	0.34	ND	5.32	25.7	ND	28	3.7
Oct-1999	ND	ND	0.08	ND	3.12	0.433	ND	5.12	23.1	ND	47	3.1
Apr-2000	2	2	ND	ND	2.3	0.4	ND	5.85	20	ND	19	4.2
Oct-2000	3	NA	ND	ND	2.61	ND	ND	5.41	27.5	ND	ND	3.45
Apr-2001	3.3	NA	ND	ND	1.49	ND	ND	NA	NA	ND	22	3.49
Sep-2001	6	6	ND	ND	4.04	1.3	ND	5.17	24	ND	25	4.7
Mar-2002	4	4	ND	ND	1.49	0.282	ND	5.6	28.1	ND	21	3.79
Sep-2002	5	5	ND	ND	3.19	ND	ND	5.6	28.3	ND	32	5.2
Mar-2003	5	5	ND	ND	3.37	ND	ND	5.5	31.2	ND	21	5.64
Oct-2003	4.3	4.3	ND	ND	2.69	0.289	ND	5.3	25.7	ND	42	4.97
Apr-2004	3.2	3.2	ND	ND	2.69	0.27	ND	5.5	22.3	ND	41	3.71
Oct-2004	8.1	8.1	ND	ND	2.94	0.32	ND	5.7	22.4	ND	19	11
Apr-2005	3.6	3.6	ND	ND	2.63	0.32	ND	5.7	22.4	ND	36	4.3
Oct-2005	11	11	ND	ND	3.06	0.3	ND	4.8	34.5	ND	34	10
Mar-2006	7.1	7.1	ND	ND	2.84	0.32	ND	5.1	28.9	0.58	22	5.45
Sep-2006	4.3	4.3	ND	ND	2.9	0.41	ND	5.5	25.5	ND	27	3.85
Mar-2007	5.1	5.1	ND	ND	3.03	0.38	ND	5.2	23.3	ND	ND	3.98
Sep-2007	6.3	6.3	ND	ND	7.78	ND	ND	5.2	25.6	ND	21	5.54
Mar-2008	6.3	6.3	ND	ND	7.05	ND	ND	5.4	27.1	ND	31	5.67
Sep-2008	7.3	7.3	ND	ND	3.16	ND	ND	5.2	24.2	ND	31	4.4
Mar-2009	20	20	ND	ND	2.44	0.11	ND	5.6	31.9	ND	11	13.9
Oct-2009	35	35	ND	ND	2.29	0.08	ND	5.1	26	ND	49	24.9
Apr-2010	22.5	22.5	ND	ND	3.07	0.08	ND	4.8	21.7	ND	39	18.2
Oct-2010	30	30	ND	ND	2.91	ND	ND	4.5	25.4	ND	27	27.6
Apr-2011	24	24	ND	ND	2.82	0.1	ND	4.3	26.6	ND	34	27.4
Sep-2011	26	26	ND	ND	2.58	ND	ND	5.7	24.9	ND	28	18.8
Mar-2012	32	32	ND	ND	2.51	ND	ND	4.7	24.8	ND	42	22.4
Sep-2012	7.04	7.04	ND	ND	2.93	0.285	ND	4.1	24.4	ND	20	4.27
Mar-2013	11.4	11.4	0.159 J	79.5	3.17	0.245	ND	4.8	38.7	0.983 J	42	7.08
Oct-2013	7.2	7.2	ND	ND	3.38	0.278	ND	6.2	29.8	0.521 J	ND	4.86
Mar-2014	8.8	8.8	ND	ND	3.88	0.193	ND	5.9	30.5	ND	32	4.85

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-07***											
Oct-2014	ND	ND	ND	5 J	4.4	0.261	ND	5.3	27.1	ND	ND	4.89
Apr-2015	7.56	7.56	ND	ND	3.93	0.33	ND	4.5	31.5	ND	ND	5.34
Nov-2015	5.56	5.56	ND	10	5.09	0.342	ND	5.9	55.3	ND	20 J	5.1
May-2016	8.16	8.16	ND	ND	6.53	ND	ND	5.9	68.3	ND	28	7.2
Oct-2016	5.6	5.6	ND	ND	6.47	NA	NA	5.7	61.3	0.538 J	30	7.2
May-2017	17.3	17.3	ND	ND	4.48	0.0902	ND	5.9	84.5	0.515 J	30	19.1
Oct-2017	8.2	8.2	0.0707 J	ND	11.2	0.378	ND	6.1	89.2	ND	35	9.3
May-2018	10 B	10	ND	ND	14	ND	0.029	5.8	95.4	ND	53	10.7
Nov-2018	10 B	10	ND	ND	14.4	ND	0.1	6.09	92.5	ND	ND	10.1
May-2019	ND	NA	ND	ND	11.2	ND	0.16	5.72	59	ND	18	11.4
Oct-2019	2.5 JH1	NA	ND	6 J	10.5	0.25	0.032 H1	5.86	78.4	ND	68	11.4
May-2020	24	NA	ND	6.9 J	11.1	ND	0.012	5.57	111.6	ND	57	14.2
Oct-2020	28	NA	ND	4.8 J	11.2	0.16	0.0094 J	5.61	99.7	ND	65	18
Apr-2021	20	NA	ND	ND	12.3	0.17	ND	6.19	123	ND	ND	17.2
Oct-2021	20	NA	ND	ND	9.3	0.13	ND	6.22	112.7	ND	51	17.1
May-2022	24	NA	ND	ND	8.7	0.063 J	0.017	6.2	130.2	ND	38	21.2 N3
Oct-2022	24	NA	ND	6.1 J	12.4	0.12	ND	6.14	126.2	ND	41	18.8 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-07*													
Nov-1993	NA	ND	ND	NA	ND	0.94	NA	ND	NA	ND	25.5	0.82	ND	0.25	NA
Apr-1994	NA	ND	ND	NA	ND	0.9	NA	ND	NA	ND	1.79	0.26	ND	0.28	NA
Apr-1995	ND	ND	0.7	ND	ND	0.54	NA	ND	ND	ND	5.3	0.41	ND	0.24	NA
Oct-1996	ND	ND	0.011	ND	ND	0.7	0.7	ND	ND	ND	0.55	0.22	ND	ND	0.17
Apr-1997	ND	ND	0.034	ND	ND	3	1.4	ND	ND	ND	4.3	2.1	ND	0.56	ND
Oct-1997	ND	ND	0.014	ND	ND	0.842	0.83	ND	ND	ND	23.9	0.846	ND	0.239	0.234
Apr-1998	ND	ND	0.014	ND	ND	0.841	0.821	ND	ND	ND	23.1	0.767	ND	0.249	0.246
Apr-1999	ND	ND	0.014	ND	ND	1.03	1.01	ND	ND	ND	22	0.77	ND	0.268	0.26
Oct-1999	ND	ND	0.017	ND	ND	1.35	0.995	ND	ND	ND	45	0.831	ND	0.323	0.251
Apr-2000	ND	ND	0.015	ND	ND	1.11	0.823	ND	ND	0.011	33.1	0.885	ND	0.357	0.262
Oct-2000	ND	ND	0.014	ND	ND	0.911	0.869	ND	ND	ND	24.3	0.718	ND	0.284	0.286
Apr-2001	ND	ND	0.014	ND	ND	0.916	NA	ND	ND	ND	20.7	NA	ND	0.292	NA
Sep-2001	ND	ND	0.027	ND	ND	1.38	0.964	ND	ND	ND	97.5	0.65	0.003	0.305	0.276
Mar-2002	ND	ND	0.015	ND	ND	1.11	1.04	ND	ND	ND	22.5	1.11	ND	0.249	0.26
Sep-2002	ND	ND	0.021	ND	ND	1.6	1.11	ND	ND	ND	59.5	1.35	0.002	0.296	0.244
Mar-2003	ND	ND	0.019	ND	ND	1.81	0.994	ND	ND	ND	23.3	0.984	0.002	0.275	0.242
Oct-2003	ND	ND	0.018	ND	ND	1.47	1.08	ND	ND	0.012	10.8	0.173	0.003	0.314	0.267
Apr-2004	ND	ND	0.014	ND	ND	1.01	0.894	ND	ND	ND	8.44	0.651	ND	0.286	0.266
Oct-2004	ND	ND	0.051	ND	ND	3.81	0.928	ND	ND	ND	152	0.561	0.011	0.349	0.267
Apr-2005	ND	ND	0.022	ND	ND	1.29	1.04	ND	ND	ND	30.6	1.14	0.004	0.271	0.258
Oct-2005	ND	ND	0.013	ND	ND	3.47	3.53	ND	ND	ND	1.25	0.248	ND	0.333	0.306

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-07***													
Mar-2006	ND	ND	0.01	ND	ND	1.86	1.86	ND	ND	ND	0.886	0.886	ND	0.2	0.2
Sep-2006	ND	ND	0.012	ND	ND	1.13	1.37	ND	ND	ND	6.85	0.43	ND	0.249	0.257
Mar-2007	ND	ND	0.016	ND	ND	1.16	1.37	ND	ND	ND	12.6	0.521	ND	0.261	0.252
Sep-2007	ND	0.003	0.013	ND	ND	1.79	1.71	ND	ND	ND	0.933	0.662	ND	0.261	0.258
Mar-2008	ND	ND	0.015	ND	ND	1.85	1.78	ND	ND	ND	9.16	0.848	ND	0.255	0.23
Sep-2008	ND	ND	0.013	ND	ND	1.35	1.25	ND	ND	ND	4.05	0.759	ND	0.251	0.247
Mar-2009	ND	ND	0.012	ND	ND	5.02	4.37	ND	ND	ND	8.26	4.53	ND	0.33	0.298
Oct-2009	ND	ND	0.018	ND	ND	9.1	1.41	ND	ND	ND	14.3	1.06	ND	0.532	0.259
Apr-2010	ND	ND	0.024	ND	ND	6.56	5.83	ND	ND	ND	10.4	7.39	ND	0.444	0.396
Oct-2010	ND	0.002	0.018	ND	ND	9.96	9.5	ND	ND	0.018	11.4	9.55	ND	0.644	0.573
Apr-2011	ND	ND	0.016	ND	ND	6.14	5.15	ND	ND	ND	8.2	6.96	ND	0.516	0.4
Sep-2011	ND	ND	0.017	ND	ND	6.66	5.28	ND	ND	ND	10.3	8.49	ND	0.526	0.424
Mar-2012	ND	ND	0.019	ND	ND	7.91	8.26	ND	ND	ND	7.03	6.67	ND	0.634	0.652
Sep-2012	ND	ND	0.0161	0.000286 J	ND	1.24	1.39	ND	0.0018 J	0.0045 J	16.6	1.6	0.000551 J	0.285	0.29
Mar-2013	ND	ND	0.243	**0.0092 R,C**	0.0025 J	2.41	2.33	0.0533	0.0095 J	0.146	1940	2.71	0.0067	0.259	0.338
Jun-2013	NA	NA	NA	0.00015 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2013	0.000272 J	ND	0.0273	0.000789 J	0.000091 J	1.53	1.31	0.0069 J	0.0022 J	0.0085 J	103	1.37	0.000725 J	0.253	0.228
Mar-2014	0.000677 J	ND	0.0137	0.000208 J	ND	1.49	1.22	0.0013 J	0.0015 J	0.000861 J	3.46	1.62	ND	0.273	0.275
Oct-2014	0.00029 J	ND	0.0199	0.000316 J	ND	1.36	1.55	0.000384 J	0.0019 J	0.0035 J	8.18	1.76	ND	0.364	0.34
Apr-2015	0.000734 J	ND	0.0175	0.000333 J	ND	1.59	1.52	0.000813 J	0.0017 J	0.0026 J	5.64	1.98	ND	0.33	0.326
Nov-2015	0.000416 J	ND	0.0193	0.000401 J	0.000074 J	1.37	1.3	0.000686 J	0.0026 J	0.0039 J	3.67	1.07	0.000705 J	0.406	0.405
May-2016	ND	ND	0.0228	0.00034 J	ND	2.07	2	0.0011 J	0.0026	0.0038 J	6.63	2.68	0.00032 J	0.499	0.449
Oct-2016	ND	ND	0.0228	0.00039 J	ND	2.14	2.17 J+	0.0012 J	0.0022	0.004 J	9.41	2.92 J+	0.00052 J	0.44	0.44 J+
May-2017	ND	ND	0.0384	0.00043 J	ND	6.49	6.38	0.0151	0.0018	0.0216	30.2	10.3	0.00051 J	0.692	0.608

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-07***													
Oct-2017	*ND*	*ND*	0.0387	*0.00049 J*	*ND*	2.56	3.06	0.0334	0.0048	0.0255	10.3	5.47	*0.00033 J*	0.704	0.695
May-2018	*ND*	*ND*	*0.0439 J*	*0.00063 J*	*ND*	2.8	2.7	*0.0021 J*	*0.0023 J*	*ND*	25.8	5.1	*ND*	*0.89 J*	*0.93 J*
Nov-2018	*ND*	*ND*	0.051	0.001	*0.0001 J*	2.6	2.5	*0.0024 J*	0.0033	0.0082	70.1	6	*0.00038 J*	*0.91 J*	*0.98 J*
May-2019	*ND*	*ND*	0.046	0.00044	*ND*	3.3	3.3	*ND*	0.0029	0.0068	82.2	7.7	*ND*	*ND*	*ND*
Oct-2019	*0.00033 J*	*0.0005 J*	0.042	0.00074	*0.00038 J*	3.3	3.3	0.0072	0.0039	0.0077	42.7	5.4	*0.00058 J*	0.79	*0.78 J*
May-2020	*ND*	*ND*	0.046	*0.00038 J*	*0.00046 J*	4.2	4.5	0.014	*0.0026 J*	0.0088	32.9	17.4	*ND*	0.91	1
Oct-2020	*ND*	*ND*	0.038	*ND*	*ND*	5.6	5.5	*0.0021 J*	0.0025	*ND*	11.6	11.4	*ND*	0.98	*0.96 J*
Apr-2021	*ND*	*ND*	0.043	*0.00018 J*	*ND*	5.2	4.9	*0.0015 J*	*0.0023 J*	*0.0033 J*	16.1	12.3	*ND*	1	0.94
Oct-2021	*0.000051 J*	*ND*	0.042	*0.00035 J*	*ND*	5.4	5.7	*0.0019 J*	0.0036	0.0032	12.4	8.7	*0.000035 J*	0.88	0.91
May-2022	*ND*	*ND*	0.052	*0.00043 J*	*ND*	6.8	6.9	0.0056	0.0032	0.0077	17.6	12.3	*ND*	1.1	1.1
Oct-2022	*ND*	*ND*	0.049	*0.0004 J*	*ND*	6.1	6.3	*0.0013 J*	0.0044	0.003	29.3	10.4	*ND*	0.87	1.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-07*												
Nov-1993	0.06	NA	ND	NA	1.2	NA	ND	NA	1.5	NA	NA	NA	0.05
Apr-1994	0.03	NA	ND	NA	1.46	NA	ND	NA	1.69	NA	NA	NA	0.05
Apr-1995	ND	NA	ND	ND	1.3	NA	ND	ND	1.3	NA	ND	ND	0.03
Oct-1996	0.015	0.011	NA	ND	ND	ND	ND	ND	2.2	2.4	ND	ND	0.035
Apr-1997	0.099	0.048	ND	ND	4.4	3	ND	ND	2.3	2.3	ND	ND	0.082
Oct-1997	0.024	0.024	NA	0.011	1.3	0.83	ND	ND	1.36	1.37	ND	ND	ND
Apr-1998	0.025	0.04	NA	ND	1.15	1.06	ND	ND	1.56	1.58	ND	ND	0.03
Apr-1999	0.027	0.029	NA	ND	1.82	1.09	ND	ND	1.65	1.61	ND	ND	ND
Oct-1999	0.029	0.026	NA	ND	0.847	1.17	ND	ND	2.14	1.51	ND	ND	0.011
Apr-2000	0.019	0.025	NA	ND	1.2	1.22	ND	ND	2.42	1.56	ND	ND	0.031
Oct-2000	0.022	0.02	NA	ND	1.64	1.23	ND	ND	1.69	1.65	ND	ND	ND
Apr-2001	0.022	NA	NA	ND	1.09	NA	ND	ND	1.61	NA	ND	ND	ND
Sep-2001	0.016	0.02	NA	ND	1.1	1.19	ND	ND	1.59	1.57	ND	ND	ND
Mar-2002	0.03	0.027	NA	ND	1.51	1.66	ND	ND	1.63	1.6	ND	ND	ND
Sep-2002	0.024	0.031	NA	ND	1.74	1.77	ND	ND	2.06	1.47	ND	ND	ND
Mar-2003	0.029	0.021	NA	ND	1.99	0.928	ND	ND	1.54	1.46	ND	ND	ND
Oct-2003	0.014	0.013	NA	ND	2.58	1.25	ND	ND	2.16	1.54	ND	ND	ND
Apr-2004	0.019	0.017	ND	1.58	1.89	1.09	ND	ND	1.58	1.48	ND	ND	ND
Oct-2004	0.082	0.018	ND	ND	1.35	1.13	ND	ND	1.97	1.23	ND	ND	0.023
Apr-2005	0.046	0.022	ND	ND	0.92	0.9	ND	ND	1.6	1.58	ND	ND	ND
Oct-2005	0.032	0.033	ND	ND	0.731	0.761	ND	ND	1.34	1.3	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.662	0.662	ND	ND	1.18	1.18	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-07***												
Sep-2006	0.014	0.015	ND	ND	0.953	1.01	ND	ND	1.31	1.34	ND	ND	ND
Mar-2007	0.014	0.015	ND	ND	0.945	1	ND	ND	1.36	1.37	ND	ND	0.011
Sep-2007	0.02	0.02	ND	ND	0.97	0.977	ND	ND	1.31	1.32	ND	ND	0.018
Mar-2008	0.025	0.022	ND	ND	1.17	1.01	ND	ND	1.47	1.27	ND	ND	ND
Sep-2008	0.023	0.021	ND	ND	1.04	1	ND	ND	1.29	1.25	ND	ND	0.014
Mar-2009	0.125	0.1	ND	ND	1.98	1.76	ND	ND	1.69	1.64	ND	ND	ND
Oct-2009	0.177	0.024	ND	0.012	3.98	0.878	ND	ND	2.62	1.23	ND	ND	ND
Apr-2010	0.321	0.247	ND	ND	2.21	2.08	ND	ND	1.77	1.75	ND	ND	ND
Oct-2010	0.142	0.155	ND	0.019	3.26	3.13	ND	ND	2.19	1.96	ND	ND	ND
Apr-2011	0.119	0.125	ND	ND	3.54	2.78	ND	ND	2.09	1.8	ND	ND	ND
Sep-2011	0.146	0.138	ND	ND	3.59	2.62	ND	ND	2.43	1.92	ND	ND	ND
Mar-2012	0.109	0.092	ND	ND	4.12	4.26	ND	ND	2.51	2.63	ND	ND	ND
Sep-2012	0.0289	0.0286	0.000023 J	0.0032 J	0.949	1.03	ND	ND	1.31	1.35	ND	ND	0.0044 J
Mar-2013	0.32	0.0668	0.00014 J	0.04 J	1.09	1.38	ND	0.000269 J	1.16	1.66	ND	ND	0.109
Oct-2013	0.0542	0.0314	0.000077 J	0.0043 J	0.955	0.85	ND	0.0022 J	1.27	1.15	0.00018 J	0.006 J	0.0175 J
Mar-2014	0.0393	0.0307	ND	0.0027 J	1.28	1.2	ND	0.000154 J	1.79	1.82	ND	ND	0.0071 J
Oct-2014	0.0309	0.0354	0.000025 J	0.0032 J	1.38	1.42	ND	ND	1.95	1.88	ND	ND	0.0118
Apr-2015	0.0384	0.0367	0.000029 J	0.003 J	1.3	1.28	0.000802 J	0.000065 J	1.99	1.98	ND	ND	0.0068 J
Nov-2015	0.0277	0.0259	ND	0.0047 J	1.22	1.21	ND	ND	2.44	2.46	0.000251 J	ND	0.0073 J
May-2016	0.0571	0.0497	ND	0.0049	1.54	1.23	ND	0.00012 J	3.33	3.09	ND	ND	ND
Oct-2016	0.0502 J+	0.0477 J+	ND	0.0051	1.43	1.43	ND	0.00025 J	3.18	3.13	ND	ND	0.0046 J
May-2017	0.184	0.171	ND	0.0518	2.44	2.42	ND	0.0117	2.59	2.41	ND	ND	0.0181 J
Oct-2017	0.0857	0.0849	ND	0.0889	1.72	1.77	ND	0.0312	5.21	5.09	ND	ND	0.0289 J
May-2018	0.0801	0.0711	ND	0.0139 J	2.2 J	1.7 J	ND	ND	7 B	6.7	ND	ND	0.009 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-07***												
Nov-2018	0.09	0.083	*ND*	0.0069	*1.6 J*	*2.5 J*	*0.00011 J*	*ND*	6.8	7.8	*ND*	*ND*	0.014
May-2019	0.12	0.14 M1	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	6.6	5.5	*ND*	*ND*	0.01
Oct-2019	0.099	0.096	*ND*	0.0086	*1.8 J*	*ND*	*0.00043 J*	*0.00046 J*	5.8	6.1	*0.00015 J*	0.0073	0.023
May-2020	0.15	0.16	*ND*	0.028	1.7	1.6	*ND*	0.0077	5.8	6	*ND*	*ND*	*0.01 J*
Oct-2020	0.11	0.11	*ND*	0.0061	*1.6 J*	*1.6 J*	*ND*	*ND*	6	5.8	*ND*	*0.00083 J*	*ND*
Apr-2021	0.14	0.12	*0.00005 J*	*0.0059 J*	1.8	1.7	*ND*	*ND*	6.5	6.2	*ND*	*ND*	*0.0037 J*
Oct-2021	0.12	0.12	*ND*	0.0072	1.7	1.6	*ND*	*ND*	4.7	4.9	*ND*	*ND*	0.0058
May-2022	0.17	0.17	*ND*	0.0078	2.1	2.2	*ND*	*ND*	5	5.2	*ND*	*ND*	0.0054
Oct-2022	0.15	0.16	*ND*	0.0062	2.1	2	*ND*	*ND*	5.9	6	*ND*	*ND*	0.0072

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.7 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.5 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-07*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-07***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.37 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-07***															
May-2017	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-07*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-07*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	4.3 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-07***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.583 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-07A***											
Nov-1993	ND	ND	ND	ND	3.3	ND	ND	4.43	51	7.4	ND	5.54
Apr-1994	5	5	0.1	ND	3	ND	ND	5.11	34.7	5.1	27	3.18
Apr-1995	ND	ND	ND	ND	3.8	ND	ND	4.7	46.1	9.1	45	8.8
Apr-1997	ND	ND	ND	ND	4	0.04	ND	NA	NA	12	58	23
Oct-1997	2	2	0.24	ND	2.73	ND	ND	5.66	46.6	13.7	33	12
Apr-1998	ND	ND	0.21	ND	4.39	ND	ND	6.07	40.7	9.48	16	11
Apr-1999	ND	ND	0.2	ND	4.49	ND	ND	4.47	47.3	6.03	43	12
Oct-1999	ND	ND	0.08	ND	5.12	0.128	ND	4.45	53.6	9.36	40	14
Apr-2000	2	2	ND	ND	3.34	ND	ND	5.01	37	7.01	38	10
Oct-2000	3	NA	ND	ND	3.37	ND	ND	4.74	41.9	6.71	38	10.6
Apr-2001	1.4	NA	ND	ND	3.54	ND	ND	NA	NA	5.02	45	10.1
Sep-2001	ND	ND	0.33	ND	6.41	1.19	ND	4.1	46	12.8	35	9.4
Mar-2002	2.2	2.2	ND	ND	3.85	ND	ND	4.9	44.3	7.58	31	9.01
Sep-2002	1.8	1.8	ND	ND	3.2	ND	ND	4.8	44.1	8.01	26	9.24
Mar-2003	2.3	2.3	ND	ND	3.57	ND	ND	4.8	47.2	6.71	27	9.41
Oct-2003	2	2	ND	ND	2.73	0.135	ND	5.4	54.5	8.97	64	11.8
Apr-2004	2.1	2.1	ND	ND	3.21	0.11	ND	4.9	44.2	11.2	54	14
Oct-2004	2.4	2.4	ND	14	3.49	0.15	ND	4.6	46	9.99	35	13.5
Apr-2005	1.9	1.9	ND	10	3.24	0.17	ND	4.6	46	11.2	54	12.5
Oct-2005	3.3	3.3	ND	ND	3.78	0.3	ND	4.3	41.4	13.3	45	11.7
Mar-2006	3.5	3.5	ND	ND	3.57	0.3	ND	4.3	51.8	11.4	36	11.3
Sep-2006	3	3	ND	ND	3.6	0.3	ND	4.6	40.8	9.94	32	11.4
Mar-2007	2.6	2.6	ND	ND	3.67	0.21	ND	4.8	44.3	9.24	16	9.95
Sep-2007	2.4	2.4	0.21	ND	7.81	ND	ND	4.7	42.4	10.9	43	11.1
Mar-2008	3	3	0.24	ND	8.04	ND	ND	4.7	43.9	8.72	29	10.4
Sep-2008	2.6	2.6	ND	ND	3.48	ND	ND	4.8	38	6.93	61	9.7
Mar-2009	2.5	2.5	ND	ND	3.2	0.15	ND	4.3	40.5	8.29	35	9.12
Oct-2009	2.4	2.4	ND	ND	3.2	0.16	ND	4.3	40.6	11.8	38	10.4
Apr-2010	2.6	2.6	ND	ND	3.5	0.31	ND	4	41	10.6	12	12
Oct-2010	1.6	1.6	ND	ND	3.76	0.52	ND	4.1	41.3	8.51	30	13.3
Apr-2011	14	14	ND	ND	3.3	0.2	ND	4.4	40.6	7.49	65	26
Sep-2011	2	2	0.23	ND	3.45	0.38	ND	4.7	41.8	8.03	48	11.6
Mar-2012	2.1	2.1	ND	ND	3.7	0.58	ND	3.8	44.2	10.3	18	12.8
Sep-2012	2.04	2.04	ND	ND	3.69	0.58	ND	3.8	41.6	11.1	60	12.4
Mar-2013	2.56	2.56	0.07 J	ND	4.28	0.458	ND	4.1	48	12.1	24	12.3
Oct-2013	2.64	2.64	ND	ND	5	0.3	ND	5.6	46.4	9.52	ND	11.5
Mar-2014	2.28	2.28	ND	ND	5.67	0.234	ND	4.8	43.6	9.91	47	9.82

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-07A***											
Oct-2014	*ND*	*ND*	*ND*	*6 J*	4.67	0.428	*ND*	4.3	42.5	9.81	37	12
Apr-2015	2.84	2.84	*ND*	*ND*	5.25	0.336	*ND*	3.8	48.2	8.7	*ND*	11.8
Nov-2015	2.64	2.64	*ND*	11	4.8	0.397	*ND*	4.8	59.7	11.2	*16 J*	13.3
May-2016	*ND*	*ND*	*ND*	*ND*	6.04	*ND*	*ND*	4.8	80.1	10.9	28	13.3
Oct-2016	*ND*	*ND*	*ND*	*7 J*	7.07	*NA*	*NA*	5	79.7	9.27	28	12.1
May-2017	*ND*	*ND*	*ND*	*ND*	7.33	0.348	*ND*	4.7	823	8.89	36	13
Oct-2017	*ND*	*ND*	*ND*	*ND*	8.52	0.369	*ND*	4.8	87	9.63	30	12.7
May-2018	*2 JB*	*ND*	*ND*	*ND*	8.2	*0.06 J*	*ND*	4.6	81.6	*8.6 J*	42	13.3
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	3.9	0.33	*ND*	4.39	47.4	*9.9 J*	*ND*	12.9
May-2019	*ND*	*NA*	*ND*	*ND*	3.6	0.24	*ND*	4.46	39.5	*ND*	15	13.2
Oct-2019	*2.5 JH1*	*NA*	*ND*	*ND*	3.5	0.29	*ND*	4.3	48.1	*6.8 J*	24	11.7
May-2020	*ND*	*NA*	*ND*	*ND*	4.5	0.31	*ND*	4.32	48.1	*9.9 J*	21	11.7
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	4.3	0.31	*ND*	4.26	48	9.9	46	12.1
Apr-2021	*ND*	*NA*	*ND*	*ND*	3.4	0.24	*ND*	4.51	54.2	*8.5 J*	*ND*	11.9
Oct-2021	*ND*	*NA*	*ND*	*ND*	3.1	0.23	*ND*	4.66	67.2	*8.3 J*	36	12.5
May-2022	*2 J3c*	*NA*	*ND*	*ND*	3.4	0.23	*ND*	4.49	72.1	*7.5 J*	31	13.5 N3
Oct-2022	*ND*	*NA*	*ND*	*8.4 J*	5.3	0.26	*ND*	4.42	74.2	10.5	36	13.1 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-07A*													
Nov-1993	NA	ND	ND	NA	ND	0.46	NA	0.009	NA	ND	3.7	0.09	ND	1.2	NA
Apr-1994	NA	ND	ND	NA	ND	1.24	NA	ND	NA	ND	0.34	0.1	ND	1.09	NA
Apr-1995	ND	ND	0.8	ND	ND	1.2	NA	ND	ND	ND	0.16	0.09	ND	1.4	NA
Oct-1996	ND	ND	0.048	ND	ND	2	2	ND	ND	ND	ND	ND	ND	1.7	1.7
Apr-1997	ND	ND	0.055	ND	ND	2.4	2.6	ND	ND	ND	ND	ND	0.003	1.7	1.9
Oct-1997	ND	ND	0.057	ND	ND	2.49	2.44	ND	ND	ND	ND	ND	ND	1.7	1.71
Apr-1998	ND	ND	0.046	ND	ND	1.88	1.92	ND	ND	ND	ND	ND	ND	1.46	1.48
Apr-1999	ND	ND	0.053	ND	ND	2.14	1.92	ND	ND	ND	ND	ND	ND	1.72	1.55
Oct-1999	ND	ND	0.05	ND	ND	1.8	1.61	ND	ND	ND	ND	ND	ND	1.54	1.38
Apr-2000	ND	ND	0.044	ND	ND	1.7	1.68	ND	ND	ND	ND	ND	ND	1.44	1.42
Oct-2000	ND	ND	0.043	ND	ND	1.88	1.86	ND	ND	ND	ND	ND	ND	1.45	1.46
Apr-2001	ND	ND	0.044	ND	ND	1.63	NA	ND	ND	ND	ND	NA	ND	1.47	NA
Sep-2001	ND	ND	0.037	ND	ND	1.46	1.36	ND	ND	ND	0.037	ND	ND	1.39	1.26
Mar-2002	ND	ND	0.037	ND	ND	1.57	1.36	ND	ND	0.011	ND	ND	ND	1.23	1.2
Sep-2002	ND	ND	0.043	ND	ND	1.43	1.47	ND	ND	ND	0.055	ND	ND	1.38	1.36
Mar-2003	ND	ND	0.041	ND	ND	1.56	1.42	ND	ND	ND	ND	ND	ND	1.34	1.25
Oct-2003	ND	ND	0.05	ND	ND	2.06	2.02	ND	ND	ND	ND	ND	ND	1.61	1.54
Apr-2004	ND	ND	0.056	ND	ND	2.81	2.58	ND	ND	ND	0.121	ND	ND	1.7	1.62
Oct-2004	ND	ND	0.056	ND	ND	2.75	2.64	ND	ND	ND	ND	ND	ND	1.61	1.57
Apr-2005	ND	ND	0.054	ND	ND	2.49	2.24	ND	ND	ND	ND	ND	ND	1.52	1.39
Oct-2005	ND	ND	0.048	ND	ND	2.36	2.27	ND	ND	ND	ND	ND	ND	1.42	1.34

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-07A***													
Mar-2006	ND	ND	0.047	ND	ND	2.14	2.02	ND	ND	ND	ND	ND	ND	1.45	1.39
Sep-2006	ND	ND	0.045	ND	ND	2.12	2.11	ND	ND	ND	ND	ND	ND	1.48	1.45
Mar-2007	ND	ND	0.044	ND	ND	1.78	1.77	ND	ND	ND	ND	ND	ND	1.34	1.31
Sep-2007	ND	ND	0.048	ND	ND	2.15	2.16	ND	ND	ND	ND	ND	ND	1.39	1.4
Mar-2008	ND	ND	0.046	ND	ND	1.62	1.56	ND	ND	ND	ND	ND	ND	1.55	1.47
Sep-2008	ND	ND	0.04	ND	ND	1.41	1.35	ND	ND	ND	0.062	ND	ND	1.5	1.49
Mar-2009	ND	ND	0.037	ND	ND	1.31	1.3	ND	ND	ND	ND	ND	ND	1.42	1.38
Oct-2009	ND	ND	0.04	ND	ND	1.36	1.33	ND	ND	ND	0.069	ND	ND	1.71	1.67
Apr-2010	ND	ND	0.052	ND	ND	2.22	2.14	ND	ND	ND	ND	ND	ND	1.59	1.5
Oct-2010	ND	ND	0.054	ND	ND	2.66	2.58	ND	ND	ND	0.067	ND	ND	1.62	1.59
Apr-2011	ND	ND	0.046	ND	ND	7.67	4.47	ND	ND	ND	0.283	ND	ND	1.65	1.58
Sep-2011	ND	ND	0.049	ND	ND	2.26	2.22	ND	ND	ND	ND	ND	ND	1.44	1.44
Mar-2012	ND	ND	0.055	ND	ND	2.46	2.55	ND	ND	ND	0.15	ND	ND	1.62	1.66
Sep-2012	ND	ND	0.0542	0.000101 J	ND	2.49	2.47	ND	0.0037 J	0.0038 J	0.023 J	0.0225 J	ND	1.5	1.49
Mar-2013	ND	ND	0.0477	0.000121 J	ND	2.27	2.42	0.0012 J	0.003 J	0.003 J	0.0153 J	ND	ND	1.6	1.71
Oct-2013	ND	ND	0.0501	0.00013 J	0.000118 J	2.32	2.13	0.0072 J	0.0031 J	0.0028 J	0.0514	0.0672	ND	1.39	1.15
Mar-2014	0.000707 J	ND	0.039	0.000209 J	ND	1.85	1.97	0.0019 J	0.0026 J	0.0012 J	0.0071 J	0.0049 J	ND	1.26	1.35
Oct-2014	0.000751 J	ND	0.0542	ND	0.000186 J	2.4	2.49	0.0014 J	0.0036 J	0.0036 J	0.0178 J	ND	ND	1.47	1.52
Apr-2015	0.000315 J	ND	0.0521	ND	0.000144 J	2.29	2.43	0.0014 J	0.0036 J	0.0037 J	0.014 J	0.0178 J	ND	1.47	1.53
Nov-2015	0.000487 J	ND	0.056	0.000112 J	0.000199 J	2.85	2.85	0.000928 J	0.0041 J	0.0041 J	0.0983	0.04 J	0.000348 J	1.5	1.51
May-2016	ND	ND	0.0543	0.00014 J	0.0002 J	2.63	2.17	0.0016 J	0.0036	0.0036 J	ND	ND	ND	1.64	1.51
Oct-2016	ND	ND	0.0553	0.00012 J	ND	2.28	2.54 J+	0.0021 J	0.0032	0.0032 J	ND	ND	ND	1.57	1.77 J+
May-2017	ND	ND	0.0512	0.00013 J	ND	2.28	2.47	0.0015 J	0.003	0.0034 J	ND	ND	ND	1.77	1.83
Oct-2017	ND	ND	0.0491	0.000096 J	0.00015 J	2.28	2.26	ND	0.0032	0.0031 J	ND	ND	ND	1.71	1.68

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-07A***													
May-2018	*ND*	*ND*	*0.0524 J*	*ND*	*ND*	2.5	2.5	*0.0018 J*	*0.0029 J*	*0.0026 J*	*0.012 J*	*ND*	*ND*	1.7	1.7
Nov-2018	*ND*	*ND*	0.052	*0.00018 J*	*0.00021 J*	2.8	2.6	*0.0038 J*	0.0038	0.004	*0.016 J*	*ND*	*0.000016 J*	1.5	1.5
May-2019	*ND*	*ND*	0.055	*ND*	*ND*	2.8	2.6	*ND*	0.0041	0.0053	*ND*	*ND*	*ND*	1.5	1.4
Oct-2019	*0.00019 J*	*0.00047 J*	0.052	*0.00018 J*	*0.00041 J*	2.6	2.6	*0.0065 J*	0.0039	0.0051	*0.015 J*	*0.0096 J*	*0.00009 J*	1.3	1.3
May-2020	*ND*	*ND*	0.058	*ND*	*ND*	2.5	2.5	*0.0036 J*	*0.004 J*	0.0056	*ND*	*ND*	*ND*	1.3	1.4
Oct-2020	*ND*	*ND*	0.049	*ND*	*ND*	2.5	2.5	*0.0031 J*	0.0041	*ND*	*0.014 J*	*0.018 J*	*ND*	1.4	1.4
Apr-2021	*ND*	*ND*	0.053	*ND*	*0.00041 J*	2.5	2.4	*0.0024 J*	*0.0045 J*	*0.0045 J*	*ND*	*ND*	*ND*	1.4	1.3
Oct-2021	*ND*	*ND*	0.054	*0.00017 J*	*0.000082 J*	2.6	2.7	*0.0025 J*	0.005	0.0044	*0.012 J*	*ND*	*ND*	1.4	1.4
May-2022	*ND*	*ND*	0.055	*0.00018 J*	*0.00017 J*	2.7	2.6	0.0051	0.005	0.0054	0.069	*ND*	*ND*	1.6	1.5
Oct-2022	*ND*	*ND*	0.06	*0.00019 J*	*ND*	2.7	2.9	*0.0016 J*	0.005	0.0049	*ND*	*ND*	*ND*	1.5	1.6

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-07A*												
Nov-1993	ND	NA	ND	NA	1.6	NA	ND	NA	1.5	NA	NA	NA	0.01
Apr-1994	0.02	NA	ND	NA	1.26	NA	ND	NA	1.67	NA	NA	NA	0.03
Apr-1995	ND	NA	ND	ND	1.4	NA	ND	ND	1.3	NA	ND	ND	0.02
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	2.3	2.6	ND	ND	0.13
Apr-1997	0.015	0.014	0.0011	ND	1.1	2.5	ND	ND	2	1.5	ND	ND	ND
Oct-1997	0.017	0.017	NA	ND	0.733	0.589	ND	ND	1.51	1.47	ND	ND	0.01
Apr-1998	0.012	0.012	NA	0.011	0.918	0.928	ND	ND	1.52	1.51	ND	ND	ND
Apr-1999	0.013	0.013	NA	ND	1.51	0.878	ND	ND	1.86	1.68	ND	ND	ND
Oct-1999	0.011	0.012	NA	ND	0.597	0.869	ND	ND	1.88	1.63	ND	ND	ND
Apr-2000	0.011	0.011	NA	0.014	1.74	1.21	ND	ND	1.77	1.75	ND	ND	ND
Oct-2000	0.01	0.011	NA	ND	1.26	1.07	ND	ND	1.89	1.81	ND	ND	ND
Apr-2001	0.011	NA	NA	ND	1.1	NA	ND	ND	1.76	NA	ND	ND	ND
Sep-2001	0.011	0.01	NA	ND	1.32	0.875	ND	ND	1.72	1.53	ND	ND	ND
Mar-2002	0.011	ND	NA	ND	2.68	1.5	ND	ND	2.48	1.51	ND	ND	ND
Sep-2002	0.01	0.011	NA	ND	1.05	1.04	ND	ND	1.63	1.6	ND	ND	ND
Mar-2003	ND	ND	NA	ND	0.707	0.588	ND	ND	1.47	1.44	ND	ND	ND
Oct-2003	0.011	0.015	NA	ND	1.52	1.53	ND	ND	1.52	1.45	ND	ND	ND
Apr-2004	0.021	0.021	0.0005	ND	1.26	1.23	ND	ND	1.61	1.51	ND	ND	ND
Oct-2004	0.022	0.021	0.0007	ND	1.01	0.89	ND	ND	1.57	1.27	ND	ND	ND
Apr-2005	0.019	0.016	0.0006	ND	0.82	0.71	ND	ND	1.67	1.55	ND	ND	ND
Oct-2005	0.017	0.016	0.0008	ND	0.83	0.912	ND	ND	1.41	1.38	ND	ND	ND
Mar-2006	ND	ND	0.00093	ND	0.801	0.779	ND	ND	1.28	1.18	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-07A*												
Sep-2006	0.014	0.015	0.0009	ND	1.19	1.2	ND	ND	1.39	1.35	ND	ND	ND
Mar-2007	0.011	0.011	0.0004	ND	1.05	1.03	ND	ND	1.36	1.34	ND	ND	0.03
Sep-2007	0.017	0.017	0.0007	ND	0.989	0.951	ND	ND	1.37	1.37	ND	ND	0.011
Mar-2008	0.016	0.015	0.0004	ND	1.11	0.958	ND	ND	1.49	1.3	ND	ND	ND
Sep-2008	0.016	0.016	ND	ND	0.92	0.941	ND	ND	1.31	1.28	ND	ND	ND
Mar-2009	0.016	0.015	ND	ND	1.05	1.04	ND	ND	1.32	1.3	ND	ND	ND
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	0.019	0.018	ND	ND	0.834	0.801	ND	ND	1.33	1.3	ND	ND	ND
Apr-2010	0.017	0.016	ND	ND	0.85	0.792	ND	ND	1.57	1.53	ND	ND	ND
Oct-2010	0.021	0.021	0.0002	ND	0.784	0.75	ND	ND	1.43	1.45	ND	ND	ND
Apr-2011	0.022	0.02	ND	ND	1.69	1.6	ND	ND	1.97	1.87	ND	ND	0.016
Sep-2011	0.02	0.02	ND	ND	0.84	0.785	ND	ND	1.66	1.63	ND	ND	ND
Mar-2012	0.024	0.024	ND	ND	0.74	0.727	ND	ND	1.57	1.57	ND	ND	ND
Sep-2012	0.0227	0.0228	0.000199 J	0.0037 J	0.8	0.795	ND	ND	1.41	1.44	ND	ND	0.006 J
Mar-2013	0.0217	0.0225	0.000197 J	0.0028 J	0.892	0.95	0.000665 J	ND	1.8	1.93	ND	ND	0.0139
Oct-2013	0.0226	0.0217	ND	0.0029 J	0.775	0.695	0.000413 J	ND	1.79	1.49	0.000154 J	0.0062 J	0.0146
Mar-2014	0.02	0.0214	ND	0.0031 J	0.894	0.94	ND	ND	2.27	2.4	ND	ND	0.0077 J
Oct-2014	0.0229	0.0241	0.000077 J	0.0041 J	0.833	0.839	0.0013 J	ND	1.81	1.83	ND	ND	0.0069 J
Apr-2015	0.0241	0.0252	0.000047 J	0.004 J	0.898	0.906	0.0014 J	ND	2.26	2.29	ND	ND	0.0113
Nov-2015	0.0261	0.0264	ND	0.004 J	0.824	0.811	0.00099 J	ND	2.11	2.04	0.000247 J	ND	0.0124
May-2016	0.0267	0.0243	ND	0.004	0.936	0.772	ND	ND	3.03	2.75	ND	ND	ND
Oct-2016	0.0258 J+	0.0285 J+	ND	0.0044	0.935	0.979	0.00057	ND	3.56	3.63	ND	ND	0.0052 J
May-2017	0.0272	0.0289	ND	0.0034 J	0.981	1	0.00054 J	ND	3.5	3.38	ND	ND	0.0051 J
Oct-2017	0.0265	0.0286	ND	0.0031 J	0.932	0.919	0.00057 J	ND	4.1	4.17	ND	ND	0.0041 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-07A***												
May-2018	0.0284	0.0273	*0.00012 JB*	*0.0102 J*	*1.2 J*	*ND*	*ND*	*ND*	5.1 B	*4.5 J*	*0.0061 J*	*ND*	*0.0061 J*
Nov-2018	0.026	0.028	*ND*	0.005	*ND*	*1.1 J*	*0.00058 J*	*ND*	*1.8 J*	*2.6 JB*	*ND*	*0.00005 J*	0.0095
May-2019	0.025	0.025	*ND*	0.006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.01
Oct-2019	0.028	0.028	*ND*	0.0057	*ND*	*ND*	*0.00079 J*	*ND*	*1.8 J*	*2 J*	*ND*	0.0074 D6	0.017
May-2020	0.025	0.026	*ND*	*0.0064 J*	0.82	0.71	*ND*	*ND*	1.9	2.2	*ND*	*ND*	*0.0094 J*
Oct-2020	0.026	0.027	*ND*	0.0052	*ND*	*ND*	*ND*	*ND*	*2.3 J*	*2.1 J*	*ND*	*0.00068 J*	*ND*
Apr-2021	0.029	0.027	*0.00006 J*	*0.0055 J*	0.65	0.65	*ND*	*ND*	1.7	1.5	*ND*	*ND*	*0.008 J*
Oct-2021	0.029	0.029	*ND*	0.0057	0.64	0.6	*0.00089 J*	*ND*	1.6 B	1.7	*0.000049 J*	*ND*	0.0099
May-2022	0.035	0.032	*ND*	0.007	0.8	0.77	*ND*	*ND*	1.9	1.8	*ND*	*ND*	0.0096
Oct-2022	0.032	0.033	*ND*	0.0055	0.77	0.81	*ND*	*ND*	2.2	2.3	*ND*	*ND*	0.012

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Oct-1996	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	3.9	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	4.6	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07A*																
Mar-2006	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.32 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.82 J	ND	ND	1.63 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07A*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.8 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.7 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-07A*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	4.7
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	14
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	2.2
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	1 J	NA	NA	NA	1.5	5.9
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	1.1	5.5
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	1.3	NA	ND	NA	1.3	6.6
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	4.8	6.7
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	2.7	5.8
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	1.7	4.3
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.7 J
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	3
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	1.7
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	1.9
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	2.5
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.4	4.5
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	1.8
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.1	2.5

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-07A***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	1.9
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	0.6 J
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	0.9 J
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	1.3
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.68 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	ND	ND	ND	ND	0.77 J	0.37 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	ND	ND	ND	ND	0.41 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.24 J	ND	ND	ND	ND	ND	0.42 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.34 J	ND	ND	ND	ND	ND	0.6 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	0.34 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J,B	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	0.4 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	0.3 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-07A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.13 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.481 J*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-07A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	**6.6**	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	**5.1**	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	3.6	*ND*	*ND*	*NA*	*NA*	1.1	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.5	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	4.7	*ND*	*ND*	*NA*	*NA*	1.5	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.9	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*0.6 J*	*ND*	*ND*	2.9	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	2.5	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	2.2	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-07A***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	2.4	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.8 R	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	0.38 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	0.22 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-07A***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.507 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-08***										
Nov-1993	8	8	ND	33.8	6.2	0.4	ND	6.34	49	5.4	ND	6.55
Apr-1994	9	9	0.1	ND	6.5	0.4	ND	5.57	20.4	5.4	28	48.2
Apr-1995	5	5	ND	ND	7.1	0.5	ND	5.3	49.6	5.7	26	7.8
Apr-1997	ND	2	ND	ND	6	0.35	ND	NA	NA	5.7	42	7.6
Oct-1997	4	4	0.44	ND	5.05	0.195	ND	5.55	83.2	4.4	34	11
Apr-1998	4	4	0.2	ND	4.82	0.3	ND	6.14	45.7	3.58	31	9.5
Apr-1999	4	4	0.17	ND	10.1	ND	ND	5.05	45.6	5.74	64	12
Oct-1999	5	5	0.1	ND	5.83	0.334	ND	5.25	47.1	5.12	36	11
Apr-2000	7	7	ND	ND	3.92	0.39	ND	5.99	39	5.81	33	11
Oct-2000	7	NA	ND	ND	4.11	ND	ND	5.83	51.8	6.75	17	11.6
Apr-2001	5.2	NA	ND	ND	4.59	ND	ND	NA	NA	6.13	35	12.1
Sep-2001	5.3	5.3	ND	ND	5.67	ND	ND	5.16	52	11	37	11.9
Mar-2002	6.9	6.9	ND	ND	6.38	0.317	ND	5.3	46.3	6.43	35	13
Sep-2002	5.2	5.2	ND	ND	4.5	0.49	ND	5.4	46.8	8.3	36	11.2
Mar-2003	7.5	7.5	ND	ND	46.9	0.881	ND	5.3	55.2	46	ND	12.1
Oct-2003	6.1	6.1	ND	ND	4.33	0.168	ND	5.5	54.3	5.5	59	13.5
Apr-2004	7.8	7.8	ND	ND	4.12	0.17	ND	5.4	45	5.7	56	13
Oct-2004	6.6	6.6	ND	10	4.44	0.23	ND	5.5	45.8	5.08	37	16.9
Apr-2005	5.9	5.9	ND	ND	4.42	0.3	ND	5.1	40.6	4.95	66	12.1
Oct-2005	8.3	8.3	ND	ND	4.98	0.29	ND	4.9	38.3	4.73	40	10.2
Mar-2006	7	7	ND	ND	4.89	0.2	ND	4.7	41	5.72	40	10
Sep-2006	6.8	6.8	ND	ND	4.87	0.34	ND	5.2	42.6	4.57	27	10.8
Mar-2007	7.3	7.3	ND	ND	4.74	0.22	ND	5.2	46.7	5.12	18	10.7
Sep-2007	6.6	6.6	ND	ND	9.98	ND	ND	5.9	48.3	8.74	38	10.9
Mar-2008	9.5	9.5	ND	ND	9.91	0.79	ND	5.2	43.9	4.42	36	11.2
Sep-2008	11	11	ND	ND	5.84	0.32	ND	5.1	45.3	4.54	39	10.8
Mar-2009	12	12	ND	ND	6.71	0.35	ND	4.8	47.1	3.21	41	10.8
Oct-2009	8.2	8.2	ND	ND	5.79	0.21	ND	4.8	47.1	4.48	37	13
Apr-2010	10	10	ND	ND	6.69	0.29	ND	4.3	56.9	4.16	ND	13.1
Oct-2010	14	14	ND	ND	8.15	0.43	ND	4.2	50.3	3.63	35	14.8
Apr-2011	7.2	7.2	ND	ND	9.96	0.53	ND	5	61.9	7.95	63	16.7
Sep-2011	6.3	6.3	ND	ND	10.4	0.6	ND	5.1	64.9	7.82	58	17.6
Mar-2012	6.8	6.8	ND	ND	16	0.93	ND	4.6	82.4	10.5	52	20.2
Sep-2012	11.7	11.7	ND	ND	16.6	0.931	ND	4.9	83.9	11.3	64	21.4
Mar-2013	11.8	11.8	0.128 J	ND	16.6	1.05	ND	4.5	100.2	10.9	58	22.2
Oct-2013	9.24	9.24	ND	ND	19.6	1.29	ND	6.1	105.1	10.8	59	21.3
Mar-2014	10.4	10.4	ND	ND	17.9	1.24	ND	5.7	105	12.5	85	21.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-08***											
Oct-2014	37.4	37.4	*0.141 J*	14	17.3	0.07	*ND*	5.7	107.9	1.82	56	30.8
Apr-2015	22.9	22.9	0.33	12	16.6	*ND*	*ND*	4.7	115.1	*ND*	28	21.2
Nov-2015	11.4	11.4	*ND*	10	24.7	1.13	*ND*	5.7	174.3	6.94	72	27.3
May-2016	8.92	8.92	1.17	*ND*	22.3	*ND*	*ND*	5.7	205	*ND*	66	12
Oct-2016	11.2	11.2	1.09	13	22.4	*NA*	*NA*	5.7	228	*0.93 J*	69	14.1
May-2017	15.8	15.8	0.852	24	21.3	*ND*	*ND*	5.5	233	*0.612 J*	52	18.3
Oct-2017	16	16	0.699	16	25.7	*ND*	*ND*	5.9	275	*ND*	58	16.8
May-2018	30	30	0.34	27.2	34.8	*ND*	0.035	5.4	243	*ND*	49	24.6
Nov-2018	46	46	0.12	*ND*	44.6	*0.038 J*	0.028	6.21	257.7	*ND*	88	34
May-2019	50	*NA*	*ND*	*ND*	50.5	0.13	0.03	6.14	224.3	*ND*	146	37.4
Oct-2019	20 H1	*NA*	*0.08 J*	*14.8 J*	47.2	0.18	0.028	6.15	282.5	*ND*	97	34.8
May-2020	36	*NA*	0.2	*11.3 J*	43.5	*ND*	0.023	5.64	257.4	*ND*	137	31.5
Oct-2020	110	*NA*	0.14	*11.6 J*	43.5	*0.084 J*	0.021	5.9	249.7	3.8	147	32.8
Apr-2021	14	*NA*	0.18	*10.5 J*	47.3	0.22	*ND*	6.37	325.7	*ND*	93	35.7
Oct-2021	36	*NA*	0.17	*10.5 J*	50.7	*0.075 J*	0.014	6.57	357.8	*ND*	130	34.4
May-2022	30	*NA*	0.14	*5.6 J*	45.9	0.1	0.032	6.32	322.5	*ND*	121	35.9 N3
Oct-2022	38	*NA*	*0.099 J*	*8.4 J*	52.7	*0.086 J*	0.049	6.34	317.4	*ND*	128	29.6 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-08*													
Nov-1993	NA	ND	ND	NA	ND	0.81	NA	ND	NA	ND	14.2	2.2	ND	1.1	NA
Apr-1994	NA	ND	ND	NA	ND	1.17	NA	ND	NA	ND	3.23	2.24	ND	1.49	NA
Apr-1995	ND	ND	0.7	ND	ND	0.82	NA	ND	0.03	ND	2.2	2	ND	1.4	NA
Oct-1996	ND	ND	0.053	ND	ND	1.7	1.6	ND	ND	ND	3.7	1.8	ND	1.2	1.2
Apr-1997	ND	ND	0.059	ND	ND	2.1	1.8	ND	ND	ND	0.89	0.63	ND	1.5	1.2
Oct-1997	ND	ND	0.047	ND	ND	1.68	1.73	ND	ND	ND	3.91	1.3	ND	1.39	1.4
Apr-1998	ND	ND	0.049	ND	ND	1.62	1.68	ND	ND	0.014	19	1.33	ND	1.32	1.38
Apr-1999	ND	ND	0.052	ND	ND	1.97	1.93	ND	ND	ND	6.45	4.05	ND	1.64	1.59
Oct-1999	ND	ND	0.059	ND	ND	1.87	1.7	ND	ND	ND	9.14	1.44	ND	1.56	1.42
Apr-2000	ND	ND	0.055	ND	ND	1.89	1.84	ND	ND	ND	4.64	1.94	ND	1.56	1.49
Oct-2000	ND	ND	0.057	ND	ND	1.99	2.01	ND	ND	ND	6.68	2.52	ND	1.62	1.63
Apr-2001	ND	ND	0.066	ND	ND	2.02	NA	ND	ND	ND	11.3	NA	ND	1.7	NA
Sep-2001	ND	ND	0.065	ND	ND	1.98	1.89	ND	ND	ND	4.89	3.36	ND	1.7	1.6
Mar-2002	ND	ND	0.065	ND	ND	2.3	1.93	ND	ND	0.016	10.5	2.21	ND	1.77	1.7
Sep-2002	ND	ND	0.066	ND	ND	1.83	1.88	ND	ND	0.013	13.4	2.13	ND	1.61	1.67
Mar-2003	ND	ND	0.067	ND	ND	2.02	1.96	ND	ND	ND	3.26	2.24	ND	1.72	1.63
Oct-2003	ND	ND	0.07	ND	ND	2.39	2.06	ND	ND	0.011	7.7	2.2	ND	1.84	1.79
Apr-2004	ND	ND	0.068	ND	ND	2.16	2.11	ND	ND	ND	3.16	1.75	ND	1.84	1.83
Oct-2004	ND	ND	0.073	ND	ND	3.5	2.13	ND	ND	0.015	13.1	2.67	ND	1.98	1.84
Apr-2005	ND	ND	0.076	ND	ND	2.11	1.95	ND	ND	ND	13.2	1.82	ND	1.67	1.55
Oct-2005	ND	ND	0.064	ND	ND	1.8	1.7	ND	ND	ND	4.74	1.86	ND	1.38	1.31

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-08***													
Mar-2006	ND	ND	0.054	ND	ND	1.91	1.6	ND	ND	ND	11.7	2.29	ND	1.28	1.31
Sep-2006	ND	ND	0.059	ND	ND	1.97	1.89	ND	ND	0.021	19.1	1.92	ND	1.43	1.45
Mar-2007	ND	ND	0.064	ND	ND	1.91	1.87	ND	ND	ND	4.12	2.64	ND	1.45	1.45
Sep-2007	ND	0.003	0.068	ND	ND	1.91	1.86	ND	ND	ND	10.2	2.06	ND	1.49	1.44
Mar-2008	ND	ND	0.074	ND	ND	1.93	1.82	ND	ND	ND	3.68	1.89	ND	1.54	1.42
Sep-2008	ND	ND	0.068	ND	ND	1.9	1.79	ND	ND	ND	5.49	2.41	ND	1.48	1.47
Mar-2009	ND	ND	0.073	ND	ND	2	1.84	ND	ND	ND	4.88	2.66	ND	1.41	1.38
Oct-2009	ND	ND	0.08	ND	ND	2.19	2.06	ND	ND	ND	11.7	4.86	ND	1.84	1.72
Apr-2010	ND	ND	0.089	ND	ND	2.49	2.31	ND	ND	ND	9.78	5.06	ND	1.68	1.65
Oct-2010	ND	ND	0.102	ND	ND	2.58	2.47	ND	ND	ND	7.8	5.13	ND	2.04	1.94
Apr-2011	ND	ND	0.108	ND	ND	2.89	2.69	ND	0.015	0.023	19.6	2.12	ND	2.3	2.1
Sep-2011	ND	ND	0.106	ND	ND	3.01	2.91	0.013	0.016	0.028	26.1	2.12	ND	2.44	2.34
Mar-2012	ND	0.005	0.132	ND	ND	3.41	3.57	0.076	0.041	0.168	132	2	ND	2.83	3.08
Sep-2012	ND	ND	0.116	0.000371 J	0.000301 J	3.67	3.81	0.0031 J	0.0146	0.007 J	5.82	4.27	ND	2.98	3.1
Mar-2013	ND	ND	0.144	0.00032 J	ND	3.93	3.93	0.0023 J	0.01	0.0067 J	8.35	7.68	ND	3.01	3.03
Oct-2013	ND	ND	0.155	0.00045 J	0.000277 J	4.02	4.06	0.0108	0.0128	0.0094 J	11.5	6.37	ND	2.73	2.59
Mar-2014	0.000428 J	0.000546 J	0.135	ND	0.000305 J	3.91	3.9	0.0049 J	0.0141	0.0165	15.1	8.32	ND	2.87	2.8
Oct-2014	0.000647 J	0.0013 J	0.147	ND	0.000338 J	5.49	5.45	0.0056 J	0.0111	0.0102	48.1	27.9	0.0012 J	4.16	4.14
Apr-2015	0.000966 J	0.0016 J	0.0912	0.000178 J	0.000209 J	3.74	3.87	0.0031 J	0.0064 J	0.0176	48.9	19.2	0.0011 J	2.87	3.08
Nov-2015	0.000355 J	0.000813 J	0.175	0.000355 J	0.000252 J	5.16	5.3	0.0016 J	0.0123	0.0089 J	15	10.6	0.000386 J	3.51	3.65
May-2016	ND	0.00064 J	0.0467	ND	ND	2.18	2.12	0.0024 J	0.0018	0.0028 J,B	3.81	0.392	0.00056 J	1.59	1.67
Oct-2016	0.00058 J	0.004	0.0573	ND	ND	2.57	2.44	0.0035 J+	0.0035	0.0125 J+	23.5	2.98	0.00084 J	1.85 J+	1.85
May-2017	ND	0.0023 J	0.0693	ND	ND	3.8	3.41	0.0036 J	0.0049	0.0098	17.9	10.2	0.0008 J	2.13	2.27
Oct-2017	ND	0.001 J	0.0619	ND	0.00032 J	3.23	3.22	0.0028 J	0.0039	0.0027 J	13.6	9.96	0.0005 J	2.11	2.17

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-08***													
May-2018	0.00068	0.0028	0.1	*0.00012 J*	*0.00044 J*	4.9	4.8	*0.0044 JB*	0.0059	0.012	27.7	23	0.0014	3	3
Nov-2018	*0.000056 J*	*0.00011 J*	0.19	*0.00022 J*	*0.00012 J*	6.3	6.2	*0.0029 J*	0.0047	0.0068	33.2	31.4	*0.00004 J*	4.4	4.6
May-2019	*ND*	*ND*	0.23	0.00038	*ND*	7	6.6	*ND*	0.0068	0.0087	35.6	31.2	*ND*	4.9	4.6
Oct-2019	*0.00021 J*	*0.00042 J*	0.22	*0.00023 J*	*0.00026 J*	6.6	6.7	*0.0054 J*	0.0053	0.0041	36.1	35.3	*0.000081 J*	4.4	4.5
May-2020	*ND*	*ND*	0.22	*0.00032 J*	*0.00037 J*	5.9	6.1	*0.0021 J*	*0.0048 J*	0.0098	40.5	36.4	*ND*	4.1	4.5
Oct-2020	*ND*	*ND*	0.19	*0.00028 J*	*ND*	6.3	6.2	*0.0033 J*	0.0047	*0.0072 J*	36.1	32	*ND*	4.2	4.2
Apr-2021	*ND*	*ND*	0.2	*0.00024 J*	*ND*	6.7	6.4	*ND*	0.0056	*0.0049 J*	36	30.1	*ND*	4.6	4.3
Oct-2021	*ND*	*ND*	0.2	*0.00024 J*	*ND*	6.5	7	*ND*	0.0056	0.0045	33.5	31.9	*ND*	4.4	4.7
May-2022	*ND*	*ND*	0.2	*0.00029 J*	*ND*	6.7	6.5	*0.00098 J*	0.0051	0.0043	39.1	33	*ND*	4.6	4.4
Oct-2022	*ND*	*ND*	0.18	*0.00029 J*	*ND*	5.4	6.6	*0.00089 J*	0.0048	0.0046	33.9	31	*ND*	3.9	4.3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-08*												
Nov-1993	0.08	NA	ND	NA	0.73	NA	ND	NA	2.5	NA	NA	NA	ND
Apr-1994	0.1	NA	ND	NA	0.9	NA	ND	NA	3.28	NA	NA	NA	0.06
Apr-1995	ND	NA	ND	ND	1.1	NA	ND	ND	2.7	NA	ND	ND	0.03
Oct-1996	0.075	0.068	NA	ND	ND	ND	ND	ND	3.2	3.3	ND	ND	0.082
Apr-1997	0.054	0.053	ND	ND	2.4	ND	ND	ND	2.5	2.9	ND	ND	0.037
Oct-1997	0.087	0.087	NA	ND	ND	0.748	ND	ND	2.65	2.77	ND	ND	0.014
Apr-1998	0.101	0.081	NA	0.013	ND	0.719	ND	ND	2.68	2.44	ND	ND	0.017
Apr-1999	0.148	0.143	NA	ND	0.763	0.544	ND	ND	2.21	2.13	ND	ND	ND
Oct-1999	0.099	0.092	NA	0.013	0.564	0.714	ND	ND	2.85	2.53	ND	ND	0.011
Apr-2000	0.138	0.132	NA	ND	1.53	1.13	ND	ND	2.69	2.63	ND	ND	ND
Oct-2000	0.136	0.133	NA	ND	0.887	1.05	ND	ND	2.67	2.6	ND	ND	ND
Apr-2001	0.148	NA	NA	ND	0.545	NA	ND	ND	2.67	NA	ND	ND	ND
Sep-2001	0.133	0.143	NA	0.01	0.639	0.947	ND	ND	2.66	2.62	ND	ND	ND
Mar-2002	0.119	0.116	NA	ND	1.64	ND	ND	ND	3.74	2.66	ND	ND	0.012
Sep-2002	0.113	0.109	NA	ND	1.81	1.43	ND	ND	2.34	2.35	ND	ND	ND
Mar-2003	0.128	0.119	NA	ND	1.2	1.28	ND	ND	2.5	2.36	ND	ND	ND
Oct-2003	0.134	0.131	NA	ND	1.95	2	ND	ND	2.82	2.22	ND	ND	0.01
Apr-2004	0.13	0.12	ND	ND	0.636	ND	ND	ND	2.36	2.25	ND	ND	ND
Oct-2004	0.142	0.138	ND	ND	0.94	0.81	ND	ND	3.22	2.32	ND	ND	0.073
Apr-2005	0.127	0.116	ND	ND	0.7	0.62	ND	ND	2.83	2.7	ND	ND	0.01
Oct-2005	0.111	0.104	ND	ND	0.833	0.717	ND	ND	2.4	2.27	ND	ND	ND
Mar-2006	0.104	0.088	ND	ND	ND	ND	ND	ND	2.05	2.11	ND	ND	0.019

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-08***												
Sep-2006	0.127	0.117	ND	0.011	0.84	0.839	ND	ND	2.48	2.34	ND	ND	0.017
Mar-2007	0.137	0.13	ND	ND	0.782	0.785	ND	ND	2.33	2.33	ND	ND	0.011
Sep-2007	0.144	0.121	ND	ND	0.744	0.683	ND	ND	2.67	2.76	ND	ND	0.015
Mar-2008	0.123	0.111	ND	ND	0.781	0.703	ND	ND	2.84	2.5	ND	ND	0.01
Sep-2008	0.125	0.121	ND	ND	0.758	0.734	ND	ND	2.71	2.6	ND	ND	0.034
Mar-2009	0.127	0.12	ND	ND	0.943	0.853	ND	ND	3.17	3.11	ND	ND	0.021
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	0.21	0.181	ND	ND	0.632	0.642	ND	ND	2.74	2.76	ND	ND	0.016
Apr-2010	0.163	0.162	ND	ND	0.765	0.747	ND	ND	3.29	3.17	ND	ND	0.019
Oct-2010	0.178	0.169	ND	ND	0.789	0.77	ND	ND	3.66	3.66	ND	ND	0.015
Apr-2011	0.143	0.123	ND	0.016	0.742	0.691	ND	ND	4.44	4.34	ND	ND	0.052
Sep-2011	0.15	0.132	ND	0.019	0.86	0.777	ND	ND	4.63	4.51	ND	ND	0.051
Mar-2012	0.24	0.152	0.0003	0.088	0.824	0.855	ND	ND	7.75	8.15	ND	ND	0.141
Sep-2012	0.173	0.178	0.000044 J	0.0146	0.875	0.931	0.000466 J	ND	7.63	7.82	ND	ND	0.0343
Mar-2013	0.193	0.191	0.000079 J	0.0108 J	0.933	0.919	ND	ND	7.9	7.86	ND	ND	0.0408
Oct-2013	0.195	0.189	ND	0.0112	0.812	0.798	ND	ND	7.68	7.21	0.000106 J	0.0082 J	0.0383
Mar-2014	0.202	0.213	ND	0.0139	0.952	0.962	ND	ND	7.38	7.52	ND	ND	0.0488
Oct-2014	0.715	0.58	0.000082 J	0.0217	1.18	1.22	0.000855 J	ND	10.9	11.2	ND	ND	0.0362
Apr-2015	0.396	0.348	0.000074 J	0.0146	1.19	1.21	ND	0.000058 J	10.7	10.7	ND	ND	0.0262
Nov-2015	0.306	0.31	ND	0.0111	1.14	1.2	0.000756 J	ND	12.1	12.6	0.000181 J	ND	0.0366
May-2016	0.152	0.102	ND	0.0066	1.13	1.09	ND	ND	11.7	11.9	ND	ND	0.0162 J
Oct-2016	0.231 R	0.152	ND	0.008 J+	1.17	1.14	ND	ND	11.9 J+	11	ND	ND	0.0131 J
May-2017	0.363	0.337	ND	0.0112	1.17	1.16	ND	ND	12.7	12.7	ND	ND	0.0177 J
Oct-2017	0.305	0.289	ND	0.0075	1.15	1.17	ND	ND	13.1	12.9	ND	ND	0.0175 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-08***												
May-2018	0.58	0.52	*ND*	0.011	*ND*	*0.86 J*	*0.00045 J*	*ND*	17.1	16.1	*ND*	0.002	0.03
Nov-2018	0.53	0.52	*ND*	0.0049	*1.1 J*	*1.6 J*	*0.0002 J*	*ND*	22.2	23.8	*ND*	*ND*	0.015
May-2019	0.61	0.62	*ND*	0.005	*ND*	*ND*	*ND*	*ND*	24.4	23.9	*ND*	*ND*	0.02
Oct-2019	0.64	0.63	*ND*	0.0044	*1.5 J*	*ND*	*ND*	*ND*	25	26.4	*ND*	0.0088	0.019
May-2020	0.59	0.62	*ND*	*0.0068 J*	1.5	1.4	*ND*	*ND*	22.6	22.1	*ND*	*ND*	0.016
Oct-2020	0.62	0.57	*ND*	0.0045	*1.3 J*	*1.3 J*	*ND*	*ND*	21.6	21.6	*ND*	*0.00092 J*	*0.014 J*
Apr-2021	0.72	0.66	*0.00006 J*	*0.0042 J*	1.4	1.4	*ND*	*ND*	25.9	24.3	*ND*	*ND*	0.014
Oct-2021	0.66	0.71	*ND*	0.0038	1.3	1.3	*ND*	*ND*	25.7	27.5	*ND*	*ND*	0.013
May-2022	0.72	0.67	*ND*	0.0053	1.5	1.4	*ND*	*ND*	25.3	24.3	*ND*	*ND*	0.011
Oct-2022	0.61	0.64	*ND*	0.0042	1.4	1.5	*ND*	*ND*	26.8	28.9	*ND*	*ND*	0.013

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	23	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08*																
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.59 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.8 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.94 J*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.7 J*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.2 J*	*ND*	*ND*	5.2	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.5 B	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.8 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-08*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-08***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	0.58 J	ND	ND	ND	ND	0.64 J,B	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	0.45 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-08***															
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-08***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-08*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-08***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.551 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-08A***											
Nov-1993	ND	ND	ND	ND	3.5	ND	ND	4.61	51.3	11.8	18	10.4
Apr-1994	10	10	0.1	67.6	3.5	ND	ND	4.74	50.5	12.1	34	13.46
Apr-1995	ND	ND	ND	ND	4.2	ND	ND	4.4	54.9	13.1	ND	10.2
Apr-1997	ND	2	ND	ND	4.5	0.07	ND	NA	NA	13	96	29
Oct-1997	ND	ND	0.24	ND	2.76	ND	ND	5.62	50.7	11.7	45	15
Apr-1998	ND	ND	ND	ND	3.8	ND	ND	5.38	47.9	11.9	26	14
Apr-1999	ND	ND	0.19	ND	3.8	ND	ND	4.16	54.1	9.69	67	15
Oct-1999	ND	ND	0.2	ND	3.98	ND	ND	4.82	78.5	11	38	15
Apr-2000	ND	ND	ND	ND	2.42	ND	ND	5.39	44	11	45	13
Oct-2000	2.8	NA	ND	ND	4.56	ND	ND	5.29	59.2	14.6	45	14.5
Apr-2001	ND	NA	ND	ND	3.62	ND	ND	NA	NA	12.1	20	15.1
Sep-2001	ND	ND	ND	ND	4.78	ND	ND	4.32	60	17.1	41	15.4
Mar-2002	ND	ND	ND	ND	4.39	ND	ND	4.7	57	17.8	58	16.3
Sep-2002	ND	ND	ND	ND	4	ND	ND	4.8	56.5	17.9	27	16.2
Mar-2003	ND	ND	ND	ND	39.5	ND	ND	4.7	64.8	128	23	14.9
Oct-2003	ND	ND	ND	ND	3.93	0.086	ND	4.7	79.2	18.3	72	18.8
Apr-2004	ND	ND	ND	ND	3.32	ND	ND	4.8	53.9	16.6	66	19.4
Oct-2004	1.1	1.1	ND	ND	2.78	ND	ND	4.7	42.5	11.6	41	17
Apr-2005	ND	ND	ND	ND	3.92	0.1	ND	4.6	42.6	16.3	81	17.4
Oct-2005	1.7	1.7	ND	ND	3.74	0.09	ND	4.6	41.9	15.8	51	13.3
Mar-2006	1.8	1.8	ND	ND	5.66	0.16	ND	4.1	54.8	18.8	40	14.9
Sep-2006	1.7	1.7	ND	ND	4.79	0.23	ND	4.5	53.5	16.7	49	16.6
Mar-2007	1.1	1.1	0.3	ND	17.6	2.22	ND	4.6	93.6	15.8	47	26.8
Sep-2007	ND	ND	0.23	ND	10	ND	ND	4.8	63.1	19	51	16.3
Mar-2008	ND	ND	ND	ND	24.2	3.29	ND	4.4	77.1	19	73	22.8
Sep-2008	1.5	1.5	ND	12	8.63	0.83	ND	4.4	77.3	21.4	54	18.2
Mar-2009	1.1	1.1	ND	ND	11.8	0.57	ND	4.2	77	18	60	18.1
Oct-2009	1	1	ND	ND	27.5	1.14	ND	4.1	119.2	18.4	87	25.3
Apr-2010	1.2	1.2	ND	ND	34.6	1.18	ND	3.9	129.1	19.7	58	27.6
Oct-2010	ND	ND	ND	ND	56.8	2.15	ND	4	121.8	19.1	166	37.4
Apr-2011	1.4	1.4	ND	ND	23	2	ND	4.3	130	20.8	109	21
Sep-2011	ND	ND	0.21	ND	45.6	4.16	ND	4.5	179.2	20.4	142	37.1
Mar-2012	ND	ND	ND	ND	43.7	2.89	ND	3.5	183.8	27.1	101	36.4
Sep-2012	ND	ND	ND	ND	18.9	0.982	ND	3.9	95.4	23.3	62	21.7
Mar-2013	1.16	1.16	0.167 J	ND	42.1	2.72	ND	3.7	177.1	25	108	33.7
Oct-2013	1.16 J	1.16 J	ND	ND	62	4.01	ND	5.3	352	25.1	176	36.6
Mar-2014	ND	ND	ND	6 J	66.7	3.38	ND	4.5	308	30.3	173	31.1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-08A***										
Oct-2014	*ND*	*ND*	*ND*	*6 J*	63	3.52	*ND*	4.3	353	30.7	152	35.7
Apr-2015	1.92	1.92	*ND*	*7 J*	33.8	2.36	*ND*	3.9	157.2	24.7	90	26.6
Nov-2015	*ND*	*ND*	*ND*	*5 J*	55.6	3.65	*ND*	4.6	292	24.6	132	38.8
May-2016	*ND*	*ND*	*ND*	*ND*	57.3	2.11	*ND*	4.6	383	27	160	32.8
Oct-2016	*ND*	*ND*	*ND*	*ND*	83.9	*NA*	*NA*	4.5	416	20.9	177	44.7
May-2017	*ND*	*ND*	*ND*	*5 J*	109	4.81	*ND*	4.4	590	33.1	237	47.1
Oct-2017	*ND*	*ND*	*0.103 J*	*5 J+*	181	5.05	*ND*	4.7	625	27.9	271	47.6
May-2018	*4 JB*	*ND*	0.12	*5.8 J*	94	1.5	*ND*	4.2	494	25.4	190	44.5
Nov-2018	*1 JB*	*ND*	*ND*	*ND*	76.1	5.3	*ND*	4.3	342.1	24.4	157	42.8
May-2019	*ND*	*NA*	*ND*	*ND*	30.6	0.58	*ND*	4.25	116.4	14.9	73	31.1
Oct-2019	*2.5 JH1*	*NA*	*ND*	*6 J*	15.5	0.62	*ND*	4.31	97	10.9	33	19.5
May-2020	*ND*	*NA*	*ND*	*6.9 J*	63	1.5	*ND*	4.24	261.7	18.4	143	28.7
Oct-2020	240	*NA*	*ND*	*ND*	58.8	3.1	*ND*	4.36	246.4	19.4	160	39.1
Apr-2021	*ND*	*NA*	*ND*	*ND*	46.1	2.7	*ND*	4.34	271.6	26.3	132	35.9
Oct-2021	*ND*	*NA*	*ND*	*ND*	30.2	0.85	*ND*	4.54	200	12.9	71	26
May-2022	*ND*	*NA*	*ND*	*ND*	25.6	1.4	*ND*	4.44	182.4	12.5	84	25 N3
Oct-2022	*ND*	*NA*	*ND*	*8.4 J*	88.9	4.6	*ND*	4.42	419.2	19.5	193	45.8 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-08A*													
Nov-1993	NA	ND	ND	NA	ND	1.7	NA	0.005	NA	ND	0.99	0.06	ND	1.5	NA
Apr-1994	NA	ND	ND	NA	ND	2.8	NA	ND	NA	ND	1.15	0.15	ND	1.57	NA
Apr-1995	ND	ND	ND	ND	0.005	1.3	NA	ND	0.02	ND	0.84	0.06	0.006	1.7	NA
Oct-1996	ND	ND	0.055	ND	ND	2.3	2.6	ND	ND	ND	0.31	ND	ND	1.5	1.4
Apr-1997	ND	ND	0.074	ND	ND	5.4	4	ND	ND	ND	ND	ND	0.006	2	1.7
Oct-1997	ND	ND	0.06	ND	ND	3.15	3.19	ND	ND	0.015	1.31	ND	ND	1.72	1.67
Apr-1998	ND	ND	0.066	ND	ND	2.61	2.56	0.011	ND	0.017	4.87	ND	ND	1.93	1.76
Apr-1999	ND	ND	0.063	ND	ND	2.79	2.65	ND	ND	0.01	1.47	ND	ND	1.95	1.8
Oct-1999	ND	ND	0.06	ND	ND	2.84	2.5	ND	ND	0.011	0.894	ND	ND	1.96	1.77
Apr-2000	ND	ND	0.056	ND	ND	2.57	2.43	ND	ND	ND	ND	ND	ND	1.7	1.6
Oct-2000	ND	ND	0.049	ND	ND	2.79	2.6	ND	ND	0.018	2.39	ND	ND	1.84	1.74
Apr-2001	ND	ND	0.055	ND	ND	2.91	NA	ND	ND	ND	0.562	NA	ND	1.89	NA
Sep-2001	ND	ND	0.054	ND	ND	2.85	2.54	ND	ND	ND	0.924	ND	ND	2.01	1.97
Mar-2002	ND	ND	0.053	ND	ND	3.06	2.68	ND	ND	0.011	0.434	ND	ND	2.11	1.96
Sep-2002	ND	ND	0.057	ND	ND	3.18	2.53	ND	ND	0.015	2.22	ND	ND	1.99	1.86
Mar-2003	ND	ND	0.054	ND	ND	2.58	2.49	ND	ND	ND	0.094	ND	ND	2.05	1.94
Oct-2003	ND	ND	0.066	ND	ND	3.53	3.12	ND	ND	0.012	0.305	ND	ND	2.42	2.28
Apr-2004	ND	0.002	0.067	ND	ND	3.59	3.04	ND	ND	0.015	2.43	ND	ND	2.54	2.26
Oct-2004	ND	ND	0.055	ND	ND	3.77	2.53	ND	ND	ND	0.797	0.365	ND	1.83	1.67
Apr-2005	ND	ND	0.067	ND	ND	3.69	3.14	ND	ND	0.014	1.01	ND	ND	1.99	1.87
Oct-2005	ND	ND	0.054	ND	ND	2.69	2.34	ND	ND	0.011	0.57	ND	ND	1.59	1.48

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-08A***													
Mar-2006	ND	ND	0.058	ND	ND	2.91	2.89	ND	ND	ND	1.43	ND	ND	1.86	1.95
Sep-2006	ND	ND	0.063	ND	ND	3.29	3.27	ND	ND	ND	0.834	ND	ND	2.03	2.04
Mar-2007	ND	ND	0.106	ND	ND	5.05	4.62	ND	0.011	ND	0.384	ND	ND	3.46	2.92
Sep-2007	ND	0.002	0.068	ND	ND	3.18	3.24	ND	ND	0.011	1.89	ND	ND	2.04	2.07
Mar-2008	ND	ND	0.095	ND	ND	4.15	4.18	ND	ND	0.01	1.05	ND	ND	3.02	3.03
Sep-2008	ND	0.003	0.071	ND	ND	3.3	3.22	ND	ND	ND	1.33	ND	ND	2.41	2.37
Mar-2009	ND	ND	0.071	ND	ND	3.36	3.3	ND	ND	0.011	0.553	ND	ND	2.35	2.32
Oct-2009	ND	ND	0.097	ND	ND	4.58	4.51	ND	ND	ND	2.32	0.053	ND	3.38	3.58
Apr-2010	ND	ND	0.117	ND	ND	5.07	4.86	ND	0.01	0.013	2.89	ND	ND	3.62	3.53
Oct-2010	ND	ND	0.142	ND	ND	6.65	6.27	ND	0.013	ND	1.17	ND	ND	5.05	4.78
Apr-2011	ND	ND	0.112	ND	ND	5.25	5.16	ND	ND	0.01	1.71	ND	ND	4	3.85
Sep-2011	ND	ND	0.15	ND	ND	6.9	6.93	ND	0.012	0.015	0.292	ND	ND	4.84	4.87
Mar-2012	ND	ND	0.145	ND	ND	6.61	6.6	ND	0.011	0.015	0.319	ND	ND	4.84	4.85
Sep-2012	ND	ND	0.0894	0.00034 J	0.000282 J	3.9	3.86	0.0013 J	0.0071 J	0.0144	0.0248 J	0.0324 J	ND	2.91	2.84
Mar-2013	ND	ND	0.127	0.000413 J	0.0003 J	6.11	5.96	0.0091 J	0.0099 J	0.0132	0.0782	0.0589	ND	4.48	4.44
Oct-2013	ND	ND	0.16	0.000546 J	0.000533 J	7.32	7.19	0.0176	0.0113	0.0125	0.133	0.0672	ND	4.45	4.03
Mar-2014	0.000446 J	ND	0.124	0.000413 J	0.000432 J	6.16	6.15	0.0028 J	0.0092 J	0.01	0.0305 J	0.0142 J	ND	3.83	3.82
Oct-2014	0.000379 J	0.000519 J	0.15	0.000413 J	0.000427 J	6.79	6.68	0.0026 J	0.0099 J	0.013	0.0319 J	0.0146 J	ND	4.55	4.47
Apr-2015	0.000529 J	0.000397 J	0.096	0.000215 J	0.000305 J	4.91	5.3	0.003 J	0.0078 J	0.0086 J	0.0457 J	0.018 J	ND	3.48	3.76
Nov-2015	0.000371 J	0.000482 J	0.145	0.000405 J	0.000439 J	7.77	7.73	0.002 J	0.0111	0.0124	0.0202 J	0.0164 J	0.000371 J	4.72	4.75
May-2016	ND	ND	0.117	0.0003 J	0.0003 J	6.21	5.79	0.0019 J	0.0102	0.009	ND	ND	ND	4.2	4
Oct-2016	ND	0.0017 J	0.167	0.00044 J	0.00055 J	8.84	8.77 J+	0.0044	0.0135	0.0146	0.058 J	ND	ND	5.5	5.77 J+
May-2017	ND	0.0012 J	0.159	0.00039 J	0.00045 J	9.1	8.72	0.0084	0.0147	0.0156	0.379	ND	0.00026 J	5.93	5.98
Oct-2017	ND	ND	0.166	0.00033 J	0.00059 J	9.29	8.97	0.0021 J	0.0151	0.0119	ND	ND	ND	5.92	6.25

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-08A***													
May-2018	*ND*	*ND*	*0.157 J*	*ND*	*0.00052 J*	8.7	8.8	*0.0026 J*	*0.0129 J*	*0.0106 J*	0.024	*0.011 J*	*ND*	5.5	5.6
Nov-2018	*ND*	*ND*	0.13	0.00041	*0.00058 J*	8.3	8.1	0.0076	0.011	0.009	0.052	0.032	*0.000046 J*	5.3	5.5
May-2019	*ND*	*ND*	0.099	0.00032	*ND*	6.1	5.7	0.0081	0.0076	0.015	*ND*	*ND*	*ND*	3.8	3.6
Oct-2019	*0.00016 J*	*ND*	0.074	*0.00027 J*	*0.00041 J*	3.7	3.8	0.0094	0.0064	0.012	*0.034 J*	*0.015 J*	*0.00007 J*	2.5	2.5
May-2020	*ND*	*ND*	0.11	*0.00031 J*	*0.00051 J*	5.6	5.9	0.0079	0.0089	0.0091	0.086	*ND*	*ND*	3.6	3.9
Oct-2020	*ND*	*ND*	0.13	*0.0003 J*	*ND*	7.4	7.3	*0.0066 J*	0.011	*0.0099 J*	*0.059 J*	0.029	*ND*	5	4.9
Apr-2021	*ND*	*ND*	0.14	*0.00028 J*	*0.00067 J*	6.8	6.6	*0.0036 J*	0.011	0.0096	*ND*	*ND*	*ND*	4.6	4.2
Oct-2021	*ND*	*ND*	0.12	*0.00042 J*	*0.00018 J*	4.6	5.1	0.0039	0.01	0.019	*0.024 J*	*0.024 J*	*ND*	3.5	3.8
May-2022	*ND*	*ND*	0.086	*0.00024 J*	*0.00014 J*	4.7	4.9	0.0048	0.0074	0.007	0.094	0.27	*ND*	3.2	3.4
Oct-2022	*ND*	*ND*	0.17	*0.00042 J*	*0.00046 J*	9	9.1	0.0052	0.015	0.011	0.07	*0.045 J*	*ND*	5.6	5.8

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-08A*												
Nov-1993	0.1	NA	ND	NA	0.87	NA	ND	NA	2.1	NA	NA	NA	ND
Apr-1994	0.07	NA	ND	NA	0.78	NA	ND	NA	1.51	NA	NA	NA	0.03
Apr-1995	0.03	NA	ND	ND	0.89	NA	ND	ND	1.5	NA	ND	ND	0.06
Oct-1996	0.054	0.056	NA	ND	ND	ND	ND	ND	2.2	2	ND	ND	0.034
Apr-1997	0.081	0.064	0.0009	ND	2.3	1.6	ND	ND	2.1	2.6	ND	ND	0.032
Oct-1997	0.066	0.063	NA	ND	ND	ND	ND	ND	1.47	1.54	ND	ND	0.021
Apr-1998	0.055	0.055	NA	0.016	2.17	ND	ND	ND	1.73	1.63	ND	0.015	0.031
Apr-1999	0.069	0.068	NA	ND	1.43	1.06	ND	ND	2.02	1.75	ND	ND	0.018
Oct-1999	0.062	0.06	NA	ND	0.97	1.05	ND	ND	2.16	1.72	ND	ND	0.021
Apr-2000	0.068	0.064	NA	ND	ND	ND	ND	ND	1.82	1.7	ND	ND	0.014
Oct-2000	0.056	0.06	NA	ND	1.18	1.24	ND	ND	4.19	2.8	ND	ND	0.016
Apr-2001	0.068	NA	NA	ND	1.32	NA	ND	ND	3.02	NA	ND	ND	0.016
Sep-2001	0.058	0.055	NA	0.018	1.06	0.662	ND	ND	2.62	1.81	ND	ND	0.019
Mar-2002	0.066	0.066	NA	ND	1.43	1.7	ND	ND	2.51	1.61	ND	ND	0.015
Sep-2002	0.072	0.062	NA	ND	1.21	ND	ND	ND	2.14	1.75	ND	ND	0.015
Mar-2003	0.055	0.054	NA	ND	1.52	ND	ND	ND	1.89	1.8	ND	ND	0.01
Oct-2003	0.086	0.081	NA	ND	1.64	1.56	ND	ND	3.23	2.72	ND	ND	0.019
Apr-2004	0.082	0.078	ND	ND	1.81	0.922	ND	ND	2.26	1.77	ND	ND	0.044
Oct-2004	0.091	0.083	ND	ND	0.817	ND	ND	ND	1.78	1.25	ND	ND	0.063
Apr-2005	0.1	0.093	ND	ND	0.72	0.62	ND	ND	2.26	1.86	ND	ND	0.046
Oct-2005	0.066	0.058	ND	ND	0.979	0.922	ND	ND	2.38	1.47	ND	ND	0.015
Mar-2006	0.041	0.038	ND	ND	0.672	0.637	ND	ND	1.75	1.7	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-08A***												
Sep-2006	0.091	0.091	ND	ND	0.991	0.975	ND	ND	2.13	2.09	ND	ND	0.021
Mar-2007	0.134	0.124	ND	ND	1.26	1.13	ND	ND	8.06	6.5	ND	ND	0.032
Sep-2007	0.091	0.091	ND	ND	0.922	0.759	ND	ND	2.61	2.71	ND	ND	0.024
Mar-2008	0.105	0.106	ND	ND	1.13	1.02	ND	ND	7.26	6.57	ND	ND	0.023
Sep-2008	0.088	0.09	ND	ND	1	0.896	ND	ND	3.38	3.57	ND	ND	0.035
Mar-2009	0.084	0.085	ND	ND	1.13	1.02	ND	ND	4.71	4.77	ND	ND	0.022
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	0.105	0.11	ND	ND	1.12	1	ND	ND	11.2	12.1	ND	ND	0.049
Apr-2010	0.119	0.116	ND	ND	1.3	1.08	ND	ND	16.3	15.4	ND	ND	0.036
Oct-2010	0.16	0.153	ND	ND	1.54	1.29	ND	ND	29.3	27.7	ND	ND	0.032
Apr-2011	0.131	0.118	ND	ND	1.16	0.97	ND	ND	13.3	13	ND	ND	0.024
Sep-2011	0.182	0.183	ND	ND	1.5	1.4	ND	ND	22.8	22.8	ND	ND	0.036
Mar-2012	0.181	0.18	ND	0.012	1.38	1.34	ND	ND	22.9	23	ND	ND	0.033
Sep-2012	0.1	0.0963	0.000033 J	0.006 J	1.06	1.07	0.000578 J	ND	9.79	9.35	ND	ND	0.0168
Mar-2013	0.161	0.155	0.000077 J	0.0119	1.3	1.32	0.000678 J	ND	23	22.6	ND	ND	0.0394
Oct-2013	0.186	0.184	ND	0.0086 J	1.3	1.25	ND	ND	33.2	33	0.000098 J	ND	0.0371
Mar-2014	0.173	0.174	ND	0.0072 J	1.27	1.25	ND	ND	28.8	28.8	ND	ND	0.0272
Oct-2014	0.166	0.163	ND	0.0088 J	1.51	1.49	0.0038	ND	33	31.9	ND	ND	0.0289
Apr-2015	0.129	0.139	0.000032 J	0.0068 J	1.19	1.28	0.0021	ND	18.5	19.8	ND	ND	0.0201
Nov-2015	0.194	0.197	ND	0.0088 J	1.53	1.52	0.0036	ND	34.3	34.2	0.000192 J	ND	0.0356
May-2016	0.185	0.177	ND	0.0071	1.4	1.44	ND	ND	38.9	36.8	ND	ND	0.024 J,B
Oct-2016	0.252 J+	0.254 J+	ND	0.0117	1.75	1.84	ND	ND	45.8	46.6	ND	ND	0.0382
May-2017	0.259	0.265	ND	0.0135	1.9	1.84	0.00058 J	ND	65	64.1	ND	0.0011	0.0329
Oct-2017	0.275	0.273	ND	0.0099	1.74	1.88	ND	ND	65.9	72.2	ND	ND	0.0335

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-08A***												
May-2018	0.248	0.25	*ND*	*0.0163 J*	*2 J*	*1.7 J*	*ND*	*ND*	53.3	54.3	*0.0038 J*	*ND*	0.0395
Nov-2018	0.19	0.26	*ND*	0.0098	*1.6 J*	*2.5 J*	*0.00077 J*	*ND*	46.2	46.7	*ND*	0.0014	0.029
May-2019	0.077	0.081	*ND*	0.0098	*ND*	*ND*	*ND*	*ND*	15	14.5	*ND*	*ND*	0.014
Oct-2019	0.083	0.082	*ND*	0.008	*1.4 J*	*ND*	*0.0005 J*	*ND*	7.2	7.8	*ND*	0.0081	0.023
May-2020	0.15	0.16	*ND*	0.011	1.7	1.6	*ND*	*ND*	37.1	36.2	*ND*	*ND*	0.026
Oct-2020	0.17	0.17	*ND*	0.0095	*1.8 J*	*1.7 J*	*ND*	*ND*	30.8	30.5	*ND*	*0.00091 J*	0.033
Apr-2021	0.18	0.17	*0.00005 J*	*0.009 J*	1.7	1.7	*ND*	*ND*	29.7	27.2	*ND*	*ND*	0.03
Oct-2021	0.068	0.076	*ND*	0.01	1.5	1.6	*0.0015 J*	*ND*	15	16.5	*0.000026 J*	*ND*	0.015
May-2022	0.13	0.14	*ND*	0.0074	1.4	1.4	*ND*	*ND*	17.6	18.4	*ND*	*ND*	0.02
Oct-2022	0.23	0.22	*ND*	0.012	2.1	2	*0.0022 J*	*ND*	56.4	55.8	*ND*	*ND*	0.038

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-08A***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	33	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5 J	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08A*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08A*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.7 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-08A*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.1	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	63	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	1
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	2.3	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	25	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.3	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.4	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-08A***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.23	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.63	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.16 J	ND	ND	ND	ND	ND	1.83	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.21	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.38 J,B	ND	ND	ND	ND	1.45	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.19 J	ND	ND	ND	ND	ND	1.13	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	0.56 J	ND	ND	ND	ND	ND	ND	0.64 J	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.9 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-08A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.518 J*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-08A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-08A*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	0.7 J,B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.16 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	0.13 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-08A***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.4 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.538 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-09B***											
Nov-1993	ND	ND	ND	26.8	17.3	2	ND	4.61	78.9	2.8	ND	7.38
Apr-1994	ND	ND	ND	74.5	1.4	2	ND	4.88	81.2	2.5	41	10.47
Apr-1995	ND	ND	ND	ND	17.9	2.2	ND	4.6	87.2	2.4	37	2.7
Apr-1997	ND	13	ND	24	13	1.7	ND	NA	NA	ND	74	11
Oct-1997	ND	ND	0.6	ND	22.5	2.48	ND	5.62	95.1	ND	85	11
Apr-1998	ND	ND	0.21	ND	20.1	2	ND	5.91	86.2	ND	67	13
Apr-1999	ND	ND	0.24	ND	22.4	2.07	ND	4.52	89.2	ND	74	20
Oct-1999	ND	ND	0.14	ND	17.7	1.97	ND	4.99	94.2	0.883	390	17
Apr-2000	ND	3	ND	ND	19.3	1.9	ND	5.62	73	ND	71	14
Oct-2000	ND	NA	ND	32	21.9	2.52	ND	4.86	91.2	ND	92	15.1
Apr-2001	ND	NA	ND	ND	18.9	1.96	ND	NA	NA	ND	62	13.4
Sep-2001	ND	ND	ND	ND	18.7	2.59	ND	6.78	103	ND	166	12
Mar-2002	ND	ND	ND	45	20.9	2.32	ND	4.9	97.3	ND	356	16.6
Sep-2002	1	1	ND	11	23.3	2.11	ND	4.9	139.3	ND	124	15.4
Mar-2003	1.3	1.3	ND	ND	23.1	2.18	ND	4.9	114.3	ND	114	14.5
Oct-2003	1.9	1.9	ND	ND	22.6	2.25	ND	5.1	115.1	1.06	114	15.6
Apr-2004	1.6	1.6	ND	ND	21	1.98	ND	4.8	94.9	1.38	116	15.1
Oct-2004	1.6	1.6	ND	ND	21	2.01	ND	4.9	90.5	ND	72	12.9
Apr-2005	ND	ND	ND	39	22.7	2.1	ND	4.8	91.3	2.12	212	18.3
Oct-2005	2	2	ND	54	24	2.15	ND	5	92.5	1.65	155	18.1
Mar-2006	3	3	ND	ND	21.8	2.2	ND	6	95.1	2.01	96	11
Sep-2006	2	2	ND	ND	19.7	2.31	ND	4.8	88.4	1.66	152	16.3
Mar-2007	3.3	3.3	ND	ND	19.3	2.36	ND	5.4	90	1.58	71	14.1
Sep-2007	2.1	2.1	ND	ND	21.8	2.77	ND	5	89.6	ND	101	12.4
Mar-2008	2.1	2.1	ND	ND	25.1	3.26	ND	4.9	87.1	1.19	155	12.4
Sep-2008	3.1	3.1	ND	34	20.4	2.55	ND	4.7	81.6	2.03	109	12.5
Mar-2009	2.6	2.6	ND	ND	19.6	2.56	ND	4.7	87.5	2.01	42	11.3
Oct-2009	2.4	2.4	ND	23	20.1	2.34	ND	4.6	80.8	1.35	173	15.1
Apr-2010	2.9	2.9	ND	35	19.7	2.26	ND	4.3	80.1	1.97	200	16.7
Oct-2010	3	3	ND	ND	17.8	2.06	ND	4.3	76.2	2.3	72	11.4
Apr-2011	10	10	ND	ND	17.2	1.72	ND	4.5	79.7	2.65	73	18.3
Sep-2011	3.4	3.4	ND	ND	20.6	2.36	ND	5	68.1	ND	60	12.1
Mar-2012	3.2	3.2	ND	ND	14.7	1.54	ND	4	79.5	10.6	24	17.4
Sep-2012	3.4	3.4	ND	ND	19.7	2.23	ND	3.7	84.1	1.79	66	12.1
Mar-2013	3.56	3.56	ND	ND	19.3	2.39	ND	4.1	87.8	1.6	44	11.9
Oct-2013	3.8	3.8	ND	ND	19.7	2.43	ND	3.6	89.8	1.51	54	12
Mar-2014	3.44	3.44	ND	6 J	20.3	2.4	ND	5	81.3	1.56	75	14.4

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-09B***										
Oct-2014	ND	ND	ND	ND	21.3	2.39	ND	4.8	85.7	2.11	72	13.7
Apr-2015	3.76	3.76	ND	ND	21.1	2.53	ND	4.4	89.8	0.855 J	42	13.6
Nov-2015	ND	ND	ND	ND	20.8	2.37	ND	5.1	134.8	3	33	14.2
May-2016	3.16	3.16	ND	ND	19.7	2.23	ND	5.1	145.9	3.53	62	14.7
Oct-2016	3.72	3.72	ND	ND	21.3	NA	NA	5.1	140.5	2.91	82	14.5
May-2017	2.24	2.24	ND	7 J	22.3	2.69	ND	5.1	143.8	2.85	76	21
Oct-2017	ND	ND	ND	ND	22	2.96	ND	5.1	139.9	2.84	52	14.7
May-2018	3 JB	ND	ND	ND	23	0.52	ND	4.8	143.8	ND	62	17.2
Nov-2018	4 JB	ND	ND	ND	21.4	2.5	ND	4.85	106.3	ND	57	16.2
May-2019	ND	NA	ND	ND	22.6	2.4	ND	4.75	86	ND	53	17.5
Oct-2019	ND	NA	ND	6 J	18.7	2.3	ND	4.66	103.2	5.3 J	67	16.4
May-2020	6 J	NA	ND	ND	20.2	2.2	ND	5.36	107.7	5.2 J	64	18.3
Oct-2020	ND	NA	ND	4.8 J	20.5	2.1	ND	5.24	110.2	6.4	86	22.5
Apr-2021	2 J3c	NA	ND	6.1 J	23.7	2.5	ND	6.43	136.2	ND	62	23.3
Oct-2021	12	NA	0.12	ND	20.9	2.4	ND	5.53	161.5	ND	63	22.7
May-2022	8 J4c	NA	ND	ND	17.4	2.1	ND	5.2	156.1	5.6 J	49	26.7 N3
Oct-2022	4 J3c	NA	ND	ND	26.8	2.8	ND	5.04	153.6	7.1 J	126	23 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-09B*													
Nov-1993	NA	0.005	ND	NA	ND	0.15	NA	0.018	NA	ND	4.6	0.13	ND	1.7	NA
Apr-1994	NA	ND	ND	NA	ND	1.72	NA	ND	NA	ND	0.27	ND	ND	1.5	NA
Apr-1995	ND	ND	0.7	ND	ND	1	NA	ND	ND	ND	0.25	ND	ND	1.5	NA
Oct-1996	ND	ND	0.09	0.001	ND	2.5	2.3	ND	0.021	ND	3.3	0.46	ND	1.7	1.6
Apr-1997	ND	ND	0.05	ND	ND	5.4	6.9	ND	ND	ND	ND	ND	0.003	1.5	1.6
Oct-1997	ND	ND	0.063	ND	ND	2.21	2.08	ND	0.01	ND	1.58	ND	ND	1.92	1.69
Apr-1998	ND	ND	0.057	ND	ND	2.21	2.12	ND	ND	ND	1.1	ND	ND	1.74	1.56
Apr-1999	ND	ND	0.182	ND	ND	3	2.07	0.047	0.02	0.052	9.09	ND	ND	2.97	1.52
Oct-1999	ND	ND	0.087	ND	ND	2.73	1.93	0.028	0.017	0.056	5.02	ND	ND	1.91	1.38
Apr-2000	ND	ND	0.055	ND	ND	2.54	1.92	ND	0.012	0.022	1.6	0.219	ND	1.77	1.52
Oct-2000	ND	ND	0.067	ND	ND	2.77	2.22	0.014	0.015	0.028	2.54	ND	ND	1.98	1.67
Apr-2001	ND	ND	0.046	ND	ND	2.49	NA	ND	0.012	ND	0.856	NA	ND	1.75	NA
Sep-2001	ND	ND	0.097	ND	ND	2.92	2.21	0.031	0.015	0.053	7.62	ND	0.013	2.19	1.65
Mar-2002	ND	ND	0.079	ND	ND	3.01	2.23	0.023	0.017	0.043	4.51	0.059	0.009	2.2	1.71
Sep-2002	ND	ND	0.073	ND	ND	2.9	2.14	0.015	0.012	0.038	3.78	ND	0.007	1.98	1.63
Mar-2003	ND	0.002	0.051	ND	ND	2.63	2.3	ND	0.017	0.039	0.907	0.118	0.003	1.92	1.67
Oct-2003	ND	0.004	0.074	ND	ND	2.85	2.19	0.015	0.012	0.066	3.45	ND	0.008	2.07	1.7
Apr-2004	ND	0.004	0.069	ND	ND	2.74	2.03	0.014	0.01	0.024	3.02	ND	0.006	2.01	1.65
Oct-2004	ND	ND	0.042	ND	ND	2.31	1.86	ND	ND	ND	0.71	ND	ND	1.73	1.62
Apr-2005	ND	0.009	0.123	0.002	ND	3.35	2.22	0.047	0.02	0.085	9.19	ND	**0.018**	2.41	1.78
Oct-2005	ND	**0.014**	0.149	ND	0.004	3.09	1.86	0.064	0.025	0.116	11.5	ND	**0.028**	2.52	1.49

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09B***													
Mar-2006	ND	ND	0.031	ND	ND	2.07	1.93	ND	ND	ND	0.277	ND	ND	1.42	1.49
Sep-2006	ND	ND	0.081	ND	ND	3.1	2.21	0.039	0.019	0.079	7.79	ND	**0.016**	2.05	1.55
Mar-2007	ND	0.003	0.058	ND	ND	2.66	2.48	ND	0.012	0.021	1.4	ND	0.003	1.81	1.59
Sep-2007	ND	ND	0.046	ND	ND	2.26	2.2	ND	ND	ND	0.88	ND	0.003	1.65	1.56
Mar-2008	ND	0.004	0.062	ND	ND	2.27	2.1	0.013	0.011	0.023	2.38	ND	0.006	1.64	1.5
Sep-2008	ND	0.003	0.063	ND	ND	2.17	1.92	0.018	0.014	0.02	2.31	ND	0.005	1.71	1.48
Mar-2009	ND	ND	0.046	ND	ND	2.09	1.88	ND	ND	0.017	1.51	ND	0.003	1.48	1.35
Oct-2009	ND	0.005	0.09	ND	ND	2.82	1.93	0.031	0.016	0.061	4.87	0.052	0.011	1.96	1.52
Apr-2010	ND	0.006	0.094	ND	ND	3.34	2.45	0.039	0.017	0.066	11	ND	0.014	2.05	1.38
Oct-2010	ND	ND	0.037	ND	ND	1.94	1.97	ND	ND	ND	0.516	ND	ND	1.59	1.59
Apr-2011	ND	ND	0.034	ND	ND	4.56	4.07	ND	0.022	ND	4.41	ND	ND	1.67	1.53
Sep-2011	ND	ND	0.04	ND	ND	2.12	2.05	ND	ND	ND	0.211	ND	ND	1.65	1.61
Mar-2012	ND	ND	0.066	ND	ND	2.82	2.86	ND	ND	ND	ND	ND	ND	2.51	2.54
Sep-2012	ND	ND	0.0335	0.000191 J	ND	2.09	2.03	ND	0.0068 J	0.0015 J	0.0749	0.0223 J	ND	1.66	1.67
Mar-2013	ND	ND	0.0379	0.000152 J	ND	2.13	2.19	0.0029 J	0.0069 J	0.0016 J	0.0186 J	0.0078 J	ND	1.61	1.62
Oct-2013	ND	ND	0.0414	0.000199 J	ND	2.39	2.43	0.0095 J	0.0074 J	0.0012 J	0.101	0.0559	0.000275 J	1.47	1.42
Mar-2014	0.000599 J	ND	0.0436	0.000386 J	ND	2.67	2.23	0.0046 J	0.0069 J	0.00041 J	0.194	0.003 J	ND	1.87	1.58
Oct-2014	0.000623 J	ND	0.0454	0.00016 J	0.000098 J	2.39	2.4	0.0025 J	0.0074 J	0.0017 J	0.0974	ND	ND	1.89	1.89
Apr-2015	0.000723 J	ND	0.0449	0.00016 J	0.000093 J	2.42	2.49	0.002 J	0.0079 J	0.0022 J	0.137	ND	0.00099 J	1.83	1.9
Nov-2015	0.000329 J	ND	0.041	0.000183 J	0.0001 J	2.56	2.52	0.000845 J	0.0068 J	0.0023 J	0.054	ND	0.000315 J	1.89	1.95
May-2016	ND	ND	0.0411	0.00021 J	ND	2.43	2.18	0.0014 J	0.0065	0.003 J	0.265	ND	ND	2.11	1.89
Oct-2016	ND	ND	0.0474	0.00017 J	ND	2.5	2.55 J+	0.0021 J	0.0066	0.0022 J	0.128 J	ND	0.00017 J	2	2.23 J+
May-2017	ND	ND	0.0508	0.0002 J	ND	2.83	2.32	0.0024 J	0.0085	0.0068	0.177 J	ND	0.00054 J	3.39	2.14
Oct-2017	ND	ND	0.0464	0.00014 J	ND	2.47	2.45	ND	0.0075	0.0017 J	ND	ND	ND	2.07	2.14

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09B***													
May-2018	*ND*	*ND*	*0.0507 J*	*ND*	*ND*	2.9	2.9	*ND*	*0.0078 J*	*ND*	*0.017 J*	*ND*	*ND*	2.4	2.4
Nov-2018	*ND*	*ND*	0.043	*0.00014 JM1*	*0.000091 J*	2.9	2.8	*0.0041 J*	0.0057	0.0029	*0.014 J*	*ND*	*0.000081 J*	2.2	2.2
May-2019	*ND*	*ND*	0.048	*ND*	*ND*	2.8	2.6	*ND*	0.0058	0.0035	*ND*	*ND*	*ND*	2.6	2.4
Oct-2019	*0.00014 J*	*0.00044 J*	0.05	*0.00012 J*	*0.0002 J*	2.5	2.5	*0.0056 J*	0.0056	0.0022	*0.017 J*	*ND*	*ND*	2.5	2.5
May-2020	*0.000061 J*	*ND*	0.047	*0.000093 J*	*ND*	3.1	3	*0.0041 J*	0.0046	0.0023	*0.017 J*	*0.013 J*	*ND*	2.5	2.4
Oct-2020	*ND*	*ND*	0.045	*ND*	*ND*	4.6	4.3	*0.0031 J*	0.0045	*ND*	*0.021 J*	*0.01 J*	*ND*	2.7	2.5
Apr-2021	*ND*	*ND*	0.052	*ND*	*ND*	4.9	4.8	*0.0014 J*	*0.0046 J*	*ND*	*0.053 J*	*ND*	*ND*	2.7	2.8
Oct-2021	*ND*	*ND*	0.051	*ND*	*ND*	4.3	4.6	0.0034	0.0051	*0.002 J*	*0.031 J*	*0.013 J*	*0.000034 J*	2.9	3.1
May-2022	*ND*	*ND*	0.048	*ND*	*ND*	5.6	5	0.0031	0.0048	0.0026	*ND*	*ND*	*ND*	3.1	2.5
Oct-2022	*ND*	*ND*	0.056	*0.00011 J*	*ND*	4.2	3.8	*0.0018 J*	0.0078	*0.0019 J*	0.083	*ND*	*ND*	3	2.8

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-09B*												
Nov-1993	0.05	NA	ND	NA	4.7	NA	ND	NA	8	NA	NA	NA	0.04
Apr-1994	0.03	NA	ND	NA	1.2	NA	ND	NA	8.28	NA	NA	NA	0.08
Apr-1995	ND	NA	ND	ND	1.7	NA	ND	ND	7.2	NA	ND	ND	0.03
Oct-1996	0.019	0.017	NA	ND	ND	ND	ND	ND	8.9	9.1	ND	0.026	0.16
Apr-1997	0.019	0.017	ND	ND	2.3	4.4	ND	ND	8.4	9.2	ND	ND	0.031
Oct-1997	0.02	0.018	NA	0.018	1.49	ND	ND	ND	11.1	10.9	ND	0.012	0.025
Apr-1998	0.019	0.017	NA	0.018	2.09	1.85	ND	ND	10.2	10.2	ND	ND	0.026
Apr-1999	0.03	0.018	NA	0.025	8.15	1.24	ND	ND	11.8	10.5	ND	0.079	0.056
Oct-1999	0.02	0.017	NA	0.035	2.97	1.29	ND	ND	10.3	9.04	ND	0.055	0.06
Apr-2000	0.02	0.017	NA	0.018	1.88	1.31	ND	ND	10.9	9.63	ND	0.017	0.033
Oct-2000	0.021	0.017	NA	0.025	2.6	1.53	ND	ND	12.6	11.1	ND	0.025	0.036
Apr-2001	0.02	NA	NA	0.012	1.92	NA	ND	ND	12.3	NA	ND	ND	0.015
Sep-2001	0.026	0.018	NA	0.036	3.42	1.42	ND	ND	13.2	11.7	ND	0.061	0.038
Mar-2002	0.025	0.02	NA	0.019	3.42	2.01	ND	ND	14.3	12.2	ND	0.047	0.038
Sep-2002	0.025	0.018	NA	0.015	2.03	1.56	ND	ND	13.2	12.3	ND	0.034	0.028
Mar-2003	0.021	0.018	NA	0.019	2.98	1.45	ND	ND	13.4	12.5	ND	0.025	0.027
Oct-2003	0.028	0.02	NA	0.016	3.2	2.95	ND	ND	14.1	12.9	ND	0.036	0.047
Apr-2004	0.026	0.02	ND	0.016	3.46	2.34	ND	ND	13.3	12.8	ND	0.028	0.108
Oct-2004	0.021	0.02	ND	ND	2.49	ND	ND	ND	13.6	13.1	ND	ND	0.02
Apr-2005	0.03	0.019	ND	0.033	3.31	1.33	ND	ND	15.2	15.1	ND	0.086	0.1
Oct-2005	0.031	0.016	ND	0.034	4.29	1.35	ND	ND	14.3	11.9	ND	0.12	0.069
Mar-2006	ND	ND	ND	ND	1.25	1.15	ND	ND	11	11.8	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09B***												
Sep-2006	0.027	0.017	0.0002	0.024	2.93	1.41	ND	ND	11.4	10.9	ND	0.07	0.046
Mar-2007	0.02	0.016	ND	0.014	2.3	1.48	ND	ND	10.5	10.7	ND	0.019	0.02
Sep-2007	0.02	0.019	ND	0.012	1.66	1.23	ND	ND	11.5	11.6	ND	ND	0.017
Mar-2008	0.021	0.017	ND	0.015	2.29	1.26	ND	ND	11.9	11.4	ND	0.019	0.023
Sep-2008	0.022	0.017	ND	0.019	2.63	1.24	ND	ND	10.2	10.1	ND	0.016	0.049
Mar-2009	0.019	0.016	ND	ND	2.08	1.36	ND	ND	10.6	10.3	ND	ND	0.018
Oct-2009	0.031	0.017	ND	0.023	2.9	1.16	ND	ND	10.7	11	ND	0.058	0.062
Apr-2010	0.029	0.014	ND	0.023	3.54	1.37	ND	ND	11	10.9	ND	0.08	0.043
Oct-2010	0.024	0.02	ND	ND	1.91	1.49	ND	ND	11.1	11.3	ND	ND	0.015
Apr-2011	0.239	0.012	ND	0.011	1.56	1.42	ND	ND	10.6	10.2	ND	ND	0.022
Sep-2011	0.019	0.018	ND	ND	1.71	1.52	ND	ND	11.7	11.3	ND	ND	0.01
Mar-2012	0.045	0.045	ND	ND	1.5	1.51	ND	ND	8.98	9.28	ND	ND	ND
Sep-2012	0.0202	0.02	ND	0.0083 J	1.47	1.37	ND	ND	11.6	11.5	ND	ND	0.0074 J
Mar-2013	0.0199	0.0206	0.000063 J	0.0091 J	1.33	1.36	ND	ND	11	10.9	ND	ND	0.0167
Oct-2013	0.0238	0.0241	ND	0.0081 J	1.24	1.21	ND	ND	9.63	9.33	0.000127 J	0.0052 J	0.0169
Mar-2014	0.0211	0.0218	ND	0.0091 J	1.85	1.44	ND	ND	12.7	10.6	ND	0.000972 J	0.0119
Oct-2014	0.0233	0.0232	0.000034 J	0.0099 J	1.65	1.6	0.00081 J	ND	12.6	12.6	ND	ND	0.0117
Apr-2015	0.0251	0.0248	ND	0.0097 J	1.66	1.61	0.0014 J	ND	12.9	13.2	0.000871 J	ND	0.0152
Nov-2015	0.0223	0.0226	ND	0.0087 J	1.68	1.71	0.000537 J	ND	12.5	12.7	0.00018 J	ND	0.0133
May-2016	0.0235	0.0224	ND	0.0081	1.84	1.65	ND	ND	14.9	12.3	ND	ND	0.0088 J,B
Oct-2016	0.0236 J+	0.0256 J+	ND	0.0099	1.83	1.79	ND	ND	13.1	14.1	ND	0.00068 J	0.0122 J
May-2017	0.0309	0.0254	ND	0.0127	2.25	1.69	ND	ND	50.3	13.2	ND	0.00067 J	0.0208 J
Oct-2017	0.0261	0.0267	ND	0.0084	1.56	1.63	ND	ND	12.9	13.3	ND	ND	0.0092 J
May-2018	0.0293	0.0279	ND	0.0178 J	1.9 J	1.4 J	ND	ND	14.8	14	ND	ND	0.0124 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09B***												
Nov-2018	0.022	0.02	*ND*	0.0093	*1.9 J*	*1.7 J*	*0.0004 J*	*ND*	13.4	13.4	*ND*	0.002	0.011 D6
May-2019	0.026	0.024	*ND*	0.008	*ND*	*ND*	*ND*	*ND*	13.3	12.8	*ND*	*ND*	0.0086
Oct-2019	0.029	0.03	*ND*	0.0073	*1.9 J*	*ND*	*0.00065 J*	*ND*	12.5	13	*ND*	0.0087	0.015
May-2020	0.021	0.02	*ND*	0.0098	*2.2 J*	*1.3 J*	*0.00043 J*	*ND*	15.2	11.8	*ND*	0.0044	0.01
Oct-2020	0.023	0.022	*ND*	0.0084	*ND*	*1.5 J*	*ND*	*ND*	13	12.9	*ND*	*0.0012 J*	*0.015 J*
Apr-2021	0.026	0.029	*ND*	*0.0084 J*	1.7	1.8	*ND*	*ND*	14.5	15.1	*ND*	*0.00073 J*	*0.0078 J*
Oct-2021	0.026	0.028	*ND*	0.0098	1.6	1.6	*0.0011 J*	*ND*	13.1	14	*0.000034 J*	*ND*	0.0097
May-2022	0.031	0.027	*ND*	0.012	1.7	1.5	*ND*	*ND*	15.4	13	*ND*	*ND*	0.017
Oct-2022	0.038	0.036	*ND*	0.012	1.9	1.8	*ND*	*ND*	16.6	16.6	*ND*	*ND*	0.014

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09B*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	6	5	4	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	17	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09B*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09B*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.6 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-09B*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	2.1	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	0.6 J	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.1	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.3	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09B***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.49 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	0.39 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.32 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.4 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.3 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09B***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	5.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-09B*															
Oct-2005	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	0.5 J	0.5 J	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.44 J	ND	ND	ND	0.18 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	0.34 J	ND	ND	ND	0.21 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	0.38 J	ND	ND	ND	0.19 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	0.29 J	ND	ND	ND	0.19 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	0.3 J	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09B***															
Oct-2016	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.455 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-09C***											
Nov-1993	9	9	ND	ND	13.3	1.6	ND	5.05	78.9	3.5	38	14.7
Apr-1994	57	31	0.2	ND	14.1	1.5	ND	8.94	143	3.3	71	91.14
Apr-1995	19.6	19.6	ND	17.6	17.6	2.1	ND	5.6	114	3	68	28
Apr-1997	ND	1	ND	ND	18	2.1	ND	NA	NA	ND	68	8
Oct-1997	6	6	0.42	ND	17.2	1.74	ND	5.8	94.5	1.1	59	17
Apr-1998	15	15	0.23	ND	15	1.45	ND	6.66	86.2	1.26	63	25
Apr-1999	ND	ND	0.17	ND	18.2	1.52	ND	5.07	87.3	2.12	88	17
Oct-1999	5	5	0.1	ND	15.6	1.73	ND	5.37	111.2	2.12	110	21
Apr-2000	3	4	ND	ND	17.1	1.8	ND	5.73	79	4.23	83	20
Oct-2000	10.2	NA	ND	ND	17	1.94	ND	5.49	98	5.69	91	26.1
Apr-2001	3.1	NA	ND	ND	15.2	1.36	ND	NA	NA	6.39	68	18.7
Sep-2001	5.1	5.1	ND	ND	16.9	2.63	ND	6.91	100	10.5	90	20.5
Mar-2002	2.8	2.8	ND	ND	17	2.16	ND	5.2	88.3	4.78	95	17.5
Sep-2002	2.8	2.8	ND	ND	17.3	1.85	ND	5.1	99.2	6.62	197	17.8
Mar-2003	5.7	5.7	ND	ND	20.8	1.82	ND	5.4	111.5	11.2	94	18.9
Oct-2003	29	29	ND	ND	17.9	1.98	ND	5.9	113.3	4.71	105	42.5
Apr-2004	7.2	7.2	ND	ND	18.4	1.91	ND	5.4	95.1	2.6	112	18.9
Oct-2004	9.6	9.6	ND	ND	17.9	1.83	ND	5.3	86.8	2.45	74	26.9
Apr-2005	23	23	ND	ND	17.1	1.84	ND	5	92.8	2.97	120	30.5
Oct-2005	5.4	5.4	ND	ND	19.3	1.96	ND	5.4	82.8	4.26	78	14.6
Mar-2006	4.8	4.8	ND	ND	15.5	1.6	ND	5.2	97.9	8.46	72	16.3
Sep-2006	3.8	3.8	ND	ND	16.5	1.83	ND	4.9	92.6	8.75	91	17.6
Mar-2007	4	4	ND	ND	17.2	1.97	ND	5.2	94.1	7.75	73	17.6
Sep-2007	3.2	3.2	ND	ND	18.4	2.35	ND	5.1	85	10.8	80	16.2
Mar-2008	3.5	3.5	ND	ND	19.9	2.49	ND	5.2	84.3	9.06	88	15.3
Sep-2008	4.2	4.2	ND	ND	15.2	1.76	ND	4.9	82.5	9.79	67	15.1
Mar-2009	3.5	3.5	ND	ND	14.4	1.87	ND	4.8	83.5	10	35	14.2
Oct-2009	3.4	3.4	ND	ND	15	1.66	ND	4.9	79.7	9.35	86	16.2
Apr-2010	6.1	6.1	ND	ND	17.5	2.2	ND	4.6	81.1	5.77	62	18.9
Oct-2010	3	3	ND	ND	15.9	2.11	ND	4.2	608	5.13	131	14.5
Apr-2011	33	33	ND	ND	16.1	1.88	0.03	4.5	81.2	5.33	110	38
Sep-2011	2.7	2.7	0.29	ND	16.7	1.77	ND	4.9	72.6	6.5	59	15.4
Mar-2012	3.1	3.1	ND	ND	19.5	2.25	ND	15.4	80.7	ND	76	12
Sep-2012	3.04	3.04	ND	ND	14.3	1.46	ND	4.1	86.3	12.8	72	18
Mar-2013	2.84	2.84	ND	ND	16.7	1.54	ND	3.9	97.1	11.9	65	16.4
Oct-2013	3.32	3.32	ND	ND	16.2	1.6	ND	3.6	94.3	12.5	65	18.1
Mar-2014	2.68	2.68	ND	ND	16.6	1.55	ND	5	91.3	13.5	63	17.1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-09C***										
Oct-2014	ND	ND	ND	11	17	1.57	ND	4.7	90.7	12.4	62	20.6
Apr-2015	2.84	2.84	ND	ND	18.1	2.11	ND	4.2	95.2	11.2	50	19.3
Nov-2015	ND	ND	ND	8 J	19.6	2.29	ND	5	129.4	10.2	58	18.7
May-2016	ND	ND	ND	ND	18.1	2.15	ND	5	151	9.71	66	18.4
Oct-2016	ND	ND	ND	ND	19.3	NA	NA	4.9	149.5	8.32	64	17.5
May-2017	ND	ND	ND	7 J	18.7	2.23	ND	4.9	147.7	10.4	64	24.3
Oct-2017	ND	ND	ND	7 J+	16.7	2.14	ND	4.9	138.3	11.9	50	20
May-2018	4 JB	ND	0.088 J	ND	17.4	0.39	ND	4.6	139.4	12.7	68	22.1
Nov-2018	4 JB	ND	ND	ND	22.5	2.8	ND	4.69	125.1	12	31	23.6
May-2019	20	NA	ND	ND	19.9	2.6	ND	5.6	112.6	11.7	84	39.4
Oct-2019	ND	NA	ND	8.2 J	16.7	2.3	ND	4.77	121.8	15.4	60	25.3
May-2020	ND	NA	ND	ND	19.4	2.6	ND	4.56	123	13.1	89	25.5
Oct-2020	ND	NA	ND	ND	20	2.7	ND	4.53	124.4	13.4	93	27.5
Apr-2021	22	NA	ND	6.1 J	23.3	2.9	ND	4.88	155.3	12.9	80	27.4
Oct-2021	6 J2c	NA	ND	ND	25.5	3.5	ND	4.85	201.4	10.1	67	26.3
May-2022	4 J3c	NA	ND	ND	22.6	3.1	ND	4.62	190.7	9.6 J	61	27.7 N3
Oct-2022	ND	NA	ND	6.1 J	24.1	2.5	ND	4.72	166.4	15.6	66	25.4 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-09C*													
Nov-1993	NA	ND	ND	NA	ND	2.6	NA	0.015	NA	ND	6.4	0.14	ND	2	NA
Apr-1994	NA	ND	ND	NA	ND	33.5	NA	ND	NA	ND	0.25	1.59	ND	1.82	NA
Apr-1995	ND	ND	ND	ND	ND	7.9	NA	ND	ND	ND	ND	ND	ND	2	NA
Oct-1996	ND	ND	0.065	ND	ND	10	6.4	ND	ND	ND	ND	ND	ND	1.7	1.8
Apr-1997	ND	ND	0.042	ND	ND	2.3	2.2	ND	ND	ND	0.22	ND	0.002	1.5	1.5
Oct-1997	ND	ND	0.049	ND	ND	4.65	3.92	ND	0.013	ND	0.49	ND	ND	1.59	1.48
Apr-1998	ND	ND	0.053	ND	ND	7.37	6.97	ND	ND	ND	0.338	ND	ND	1.6	1.48
Apr-1999	ND	ND	0.06	ND	ND	3.68	3	ND	0.016	0.016	0.881	ND	ND	1.99	1.59
Oct-1999	ND	ND	0.061	ND	ND	3.2	2.57	ND	0.013	0.015	0.387	ND	ND	2.24	2.19
Apr-2000	ND	ND	0.072	ND	ND	3.92	3.13	ND	0.015	0.017	1.27	0.11	ND	2.37	2.11
Oct-2000	ND	ND	0.071	ND	ND	6.62	5.77	ND	0.012	0.013	0.777	ND	ND	2.32	2.08
Apr-2001	ND	ND	0.067	ND	ND	3.39	NA	ND	0.012	ND	0.154	NA	ND	2.5	NA
Sep-2001	ND	ND	0.071	ND	ND	4.36	3.13	ND	0.011	0.012	0.366	ND	ND	2.33	2.19
Mar-2002	ND	ND	0.063	ND	ND	3.27	2.67	ND	0.01	ND	0.54	ND	ND	2.26	2.16
Sep-2002	ND	ND	0.072	ND	ND	3.47	2.66	ND	ND	0.017	1.42	0.329	0.002	2.23	2.1
Mar-2003	ND	ND	0.061	ND	ND	4.11	3.51	ND	0.013	ND	0.059	ND	ND	2.09	2.14
Oct-2003	ND	ND	0.07	ND	ND	13.5	8.39	ND	ND	0.012	0.43	ND	ND	2.13	2.09
Apr-2004	ND	0.002	0.059	ND	ND	4.28	3.25	ND	ND	ND	0.312	ND	ND	1.98	1.86
Oct-2004	ND	ND	0.054	ND	ND	7.84	3.16	ND	0.016	0.016	0.676	ND	0.002	1.76	1.61
Apr-2005	ND	0.005	0.091	ND	ND	8.6	3.38	0.023	0.035	0.049	5.71	ND	0.011	2.18	1.56
Oct-2005	ND	ND	0.047	ND	ND	3.15	2.53	ND	0.011	0.012	0.965	ND	0.002	1.65	1.55

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09C***													
Mar-2006	ND	ND	0.053	ND	ND	3.13	3.08	ND	0.011	ND	0.608	ND	ND	2.06	2.12
Sep-2006	ND	ND	0.059	ND	ND	3.21	2.94	ND	0.011	ND	0.373	ND	ND	2.32	2.31
Mar-2007	ND	0.003	0.076	ND	ND	3.32	2.92	ND	0.016	0.014	1.44	ND	0.002	2.25	2.13
Sep-2007	ND	ND	0.066	ND	ND	2.87	2.71	ND	0.011	ND	0.377	ND	ND	2.2	2.18
Mar-2008	ND	0.002	0.066	ND	ND	2.74	2.6	ND	0.01	ND	0.477	ND	ND	2.05	2.1
Sep-2008	ND	0.002	0.06	ND	ND	2.68	2.46	ND	ND	ND	0.492	ND	ND	2.04	2.12
Mar-2009	ND	ND	0.062	ND	ND	2.53	2.35	ND	ND	0.015	1.53	ND	ND	1.91	1.87
Oct-2009	ND	ND	0.063	ND	ND	3.08	2.62	ND	0.012	0.013	1.35	ND	ND	2.06	2.22
Apr-2010	ND	ND	0.069	ND	ND	4	3.41	ND	0.014	0.012	2.1	ND	ND	2.15	1.91
Oct-2010	ND	ND	0.056	ND	ND	2.49	2.42	ND	ND	ND	0.207	ND	ND	2.01	1.91
Apr-2011	ND	ND	0.061	ND	ND	11.3	8.91	ND	0.019	0.014	0.202	ND	ND	2.38	1.85
Sep-2011	ND	ND	0.064	ND	ND	2.56	2.56	ND	ND	ND	0.177	ND	ND	2.18	2.15
Mar-2012	ND	ND	0.036	ND	ND	1.93	1.93	ND	ND	ND	ND	ND	ND	1.75	1.75
Sep-2012	ND	ND	0.0637	0.000327 J	ND	2.89	2.96	0.0023 J	0.0081 J	0.0042 J	0.227	0.0343 J	ND	2.62	2.65
Mar-2013	ND	ND	0.0686	0.00029 J	ND	2.6	3.15	0.0023 J	0.0071 J	0.0027 J	0.0286 J	0.0103 J	ND	2.41	2.82
Oct-2013	ND	ND	0.0751	0.000345 J	0.00013 J	2.72	2.76	0.0028 J	0.008 J	0.0031 J	ND	ND	ND	2.75	2.73
Mar-2014	0.000518 J	ND	0.0717	0.000333 J	0.000115 J	2.95	3.05	0.0025 J	0.008 J	0.0015 J	0.241	0.0045 J	ND	2.37	2.44
Oct-2014	0.001 J	ND	0.0893	0.000437 J	0.000143 J	3.42	3.31	0.0011 J	0.0086 J	0.0042 J	0.102	ND	ND	2.94	2.86
Apr-2015	0.000486 J	ND	0.0873	0.000482 J	0.000129 J	3.26	3.17	0.0016 J	0.0089 J	0.0034 J	0.0461 J	0.009 J	ND	2.72	2.67
Nov-2015	0.000371 J	0.000239 J	0.0776	0.00042 J	0.000141 J	3.3	3.29	0.0013 J	0.0082 J	0.0042 J	0.17	ND	0.000519 J	2.53	2.55
May-2016	ND	ND	0.0732	0.00041 J	ND	3.11	2.77	0.0013 J	0.0081	0.0034 J	0.036 J	ND	ND	2.59	2.32
Oct-2016	ND	ND	0.0711	0.00041 J	ND	3.03	2.97 J+	0.0017 J	0.0084	0.0036 J	0.0493 J	ND	ND	2.4	2.55 J+
May-2017	ND	ND	0.085	0.00039 J	ND	3.62	3.25	0.0017 J	0.01	0.0079	0.159 J	ND	0.00054 J	3.7	2.73
Oct-2017	ND	ND	0.0807	0.00033 J	ND	3.46	3.31	ND	0.0096	0.0031 J	ND	ND	ND	2.76	2.93

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09C***													
May-2018	*ND*	*ND*	*0.0871 J*	*ND*	*0.00014 J*	3.8	3.7	*0.0022 J*	*0.0097 J*	*0.0032 J*	*0.02 J*	*ND*	*ND*	3.1	3
Nov-2018	*ND*	*ND*	0.086	0.0004	*0.00017 J*	4.2	4.1	*0.0064 J*	0.0086	0.0043	0.026	*0.014 J*	*0.000046 J*	3.2	3.2
May-2019	*ND*	*ND*	0.075	*ND*	*ND*	10.3	9.4	*ND*	0.0071	0.0031	*ND*	*ND*	*ND*	3.3	3.1
Oct-2019	*0.00013 J*	*ND*	0.083	*0.00029 J*	*0.00028 J*	4.5	4.7	0.0074	0.0082	0.0033	*0.018 J*	*0.011 J*	*ND*	3.4	3.4
May-2020	*0.000054 J*	*ND*	0.089	*0.0003 J*	*0.00017 J*	4.2	4.2	0.0094	0.011	0.0037	*0.06 J*	*0.019 J*	*ND*	3.7	3.6
Oct-2020	*0.00026 J*	*ND*	0.11	*0.00038 J*	*0.0007 J*	4.5	4.3	0.099	0.0098	0.57	*0.028 J*	*0.014 J*	*0.0014 J*	4	3.7
Apr-2021	*ND*	*0.0029 J*	0.1	*0.00028 J*	*0.00035 J*	4.8	5	*0.0035 J*	0.011	*0.0044 J*	*ND*	*ND*	*ND*	3.7	3.9
Oct-2021	*ND*	*ND*	0.1	*0.00032 J*	*ND*	4.3	4.6	0.0037	0.013	0.0033	*0.016 J*	*0.01 J*	*ND*	3.8	4
May-2022	*ND*	*ND*	0.12	*0.00039 J*	*0.00017 J*	4.6	4.4	0.0059	0.015	0.0044	*0.036 J*	*ND*	*ND*	3.9	3.8
Oct-2022	*ND*	*ND*	0.097	*0.00032 J*	*ND*	4.3	4.9	0.0033	0.012	0.0038	*ND*	*ND*	*ND*	3.5	4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-09C*												
Nov-1993	0.06	NA	ND	NA	4.3	NA	ND	NA	6.5	NA	NA	NA	0.04
Apr-1994	0.03	NA	ND	NA	3.26	NA	ND	NA	8.87	NA	NA	NA	0.05
Apr-1995	0.01	NA	ND	ND	7.8	NA	ND	ND	7.3	NA	ND	ND	0.02
Oct-1996	0.024	0.023	NA	ND	ND	ND	ND	ND	8	8.1	ND	ND	0.096
Apr-1997	0.018	0.015	ND	ND	2.6	2.3	ND	ND	9.5	10	ND	ND	0.043
Oct-1997	0.023	0.02	NA	0.016	1.74	0.969	ND	ND	9.14	8.95	ND	ND	0.02
Apr-1998	0.019	0.015	NA	ND	1.99	1.61	ND	ND	9.25	8.96	ND	ND	0.017
Apr-1999	0.029	0.02	NA	ND	3.16	1.65	ND	ND	10	9.15	ND	ND	0.028
Oct-1999	0.032	0.031	NA	0.025	1.91	1.78	ND	ND	9.38	8.42	ND	ND	0.033
Apr-2000	0.039	0.035	NA	0.017	1.39	0.689	ND	ND	10.6	9.28	ND	ND	0.032
Oct-2000	0.041	0.032	NA	ND	1.94	1.58	ND	ND	11.5	9.91	ND	ND	0.024
Apr-2001	0.045	NA	NA	ND	1.86	NA	ND	ND	10.7	NA	ND	ND	0.012
Sep-2001	0.042	0.036	NA	0.02	1.79	1.44	ND	ND	11.5	9.26	ND	ND	0.023
Mar-2002	0.039	0.036	NA	ND	1.98	1.34	ND	ND	10.4	9.3	ND	ND	0.019
Sep-2002	0.041	0.034	NA	ND	2.08	1.79	ND	ND	9.83	9.67	ND	ND	0.021
Mar-2003	0.032	0.034	NA	0.012	2.47	1.03	ND	ND	10.1	9.64	ND	ND	0.017
Oct-2003	0.036	0.029	NA	ND	2.86	1.49	ND	ND	12.7	11.9	ND	ND	0.018
Apr-2004	0.032	0.03	ND	ND	2.5	1.95	ND	ND	12.2	12.4	ND	ND	0.01
Oct-2004	0.027	0.022	ND	0.045	3.34	2.15	ND	ND	12.9	11.5	ND	ND	0.086
Apr-2005	0.045	0.018	ND	0.044	3.36	1.23	ND	ND	13.5	11.9	ND	0.035	0.096
Oct-2005	0.023	0.019	ND	0.013	1.79	1.45	ND	ND	11.1	9.58	ND	ND	0.022
Mar-2006	ND	ND	ND	0.012	1.69	1.42	ND	ND	8.26	8.69	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09C***												
Sep-2006	0.047	0.044	ND	ND	1.83	1.69	ND	ND	9.88	9.84	ND	ND	0.017
Mar-2007	0.045	0.042	ND	0.016	2.37	1.51	ND	ND	10.3	9.87	ND	0.012	0.029
Sep-2007	0.046	0.047	ND	ND	1.61	1.41	ND	ND	9.72	9.14	ND	ND	0.018
Mar-2008	0.043	0.044	ND	ND	1.64	1.43	ND	ND	9.61	8.98	ND	ND	0.022
Sep-2008	0.041	0.043	ND	0.012	1.54	1.43	ND	ND	7.7	7.86	ND	ND	0.038
Mar-2009	0.04	0.039	ND	ND	2.02	1.57	ND	ND	8	7.76	ND	ND	0.02
Oct-2009	0.044	0.043	ND	0.017	1.6	1.42	ND	ND	8.01	8.5	ND	ND	0.055
Apr-2010	0.039	0.031	ND	0.016	1.9	1.47	ND	ND	10.5	10	ND	ND	0.03
Oct-2010	0.038	0.035	ND	ND	1.68	1.51	ND	ND	10.1	10.3	ND	ND	0.014
Apr-2011	0.076	0.032	ND	0.014	1.62	1.46	ND	ND	10.2	9.47	ND	ND	0.033
Sep-2011	0.041	0.04	ND	ND	1.77	1.66	ND	ND	9.56	9.44	ND	ND	ND
Mar-2012	0.018	0.019	ND	ND	1.35	1.34	ND	ND	11.8	11.8	ND	ND	ND
Sep-2012	0.0536	0.0546	0.000045 J	0.0081 J	1.6	1.65	ND	ND	8.42	8.5	ND	ND	0.0075 J
Mar-2013	0.0558	0.0621	0.000083 J	0.0074 J	1.38	1.68	0.000739 J	ND	8.32	9.93	ND	ND	0.0144
Oct-2013	0.0658	0.066	ND	0.0076 J	1.6	1.62	0.000585 J	ND	9.71	9.88	0.00019 J	0.0016 J	0.018
Mar-2014	0.0707	0.0719	ND	0.0074 J	1.59	1.57	ND	ND	8.71	8.98	ND	0.000889 J	0.0108
Oct-2014	0.0739	0.0722	ND	0.0079 J	1.76	1.72	0.0016 J	ND	10.2	10.2	ND	ND	0.0176
Apr-2015	0.0757	0.0749	0.000028 J	0.0085 J	1.66	1.61	0.0013 J	ND	10.8	10.6	ND	ND	0.0286
Nov-2015	0.0616	0.0611	ND	0.0079 J	1.75	1.71	0.0012 J	ND	11.5	11.9	0.000156 J	0.000737 J	0.018
May-2016	0.0629	0.0571	ND	0.0084	1.81	1.76	ND	ND	13.3	11.2	ND	ND	0.0099 J,B
Oct-2016	0.0504 J+	0.0559 J+	ND	0.0096	1.81	1.86	ND	ND	12.2	12.7	ND	0.0002 J	0.0108 J
May-2017	0.0644	0.064	ND	0.0112	2.21	1.73	0.00046 J	ND	43	11	ND	0.0005 J	0.0211 J
Oct-2017	0.0721	0.0727	ND	0.0093	1.74	1.82	ND	ND	9.91	10.3	ND	ND	0.0104 J
May-2018	0.0804	0.0772	ND	0.0163 J	2 J	1.4 J	ND	ND	11.2	10.4	ND	ND	0.0128 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09C***												
Nov-2018	0.067	0.065	*ND*	0.011	*1.8 J*	*2.4 J*	*0.00065 J*	*ND*	13.5	14.4	*ND*	0.0021	0.012
May-2019	0.055	0.058	*ND*	0.01	*ND*	*ND*	*ND*	*ND*	12.2	11.9	*ND*	0.01	0.0097
Oct-2019	0.068	0.065	*ND*	0.0095	*2 J*	*ND*	*0.00086 J*	*ND*	11.2	12.1	*ND*	0.0044	0.015
May-2020	0.074	0.069	*ND*	0.013	*2.5 J*	*1.6 J*	*0.00086 J*	*ND*	13.7	11.3	*ND*	*ND*	0.012
Oct-2020	0.6	0.068	*ND*	0.1	*ND*	*2 J*	*ND*	*ND*	11.6	11.9	*ND*	*ND*	0.93
Apr-2021	0.078	0.08	*ND*	0.012	2.1	2.2	*ND*	*ND*	13.8	14.7	*ND*	*ND*	*0.009 J*
Oct-2021	0.079	0.084	*ND*	0.014	1.8	1.9	*ND*	*ND*	15.1	16	*0.00004 J*	*ND*	0.013
May-2022	0.091	0.086	*ND*	0.017	2.1	2	*0.0016 J*	*ND*	16.1	15.6	*ND*	*ND*	0.02
Oct-2022	0.089	0.097	*ND*	0.012	2	2.2	*0.00097 J*	*ND*	14	15.2	*ND*	*ND*	0.019

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09C*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	1	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09C*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09C*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.1 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-09C*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.1	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.6	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.4	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	2.9	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	2	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.5	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.6	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.9	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.5	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.2	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.2	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.6	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09C***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.77 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.44 J	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	0.61 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.21 J	ND	ND	ND	ND	ND	0.34 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	0.34 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.16 J	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	0.3 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	0.2 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09C***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.324 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09C***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-09C*															
Oct-2005	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	4.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	1.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	0.89 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.78 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	0.55 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	0.69 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	0.37 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	0.48 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	0.4 J	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09C***															
Oct-2016	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.51 J*	*0.561 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-15***											
Nov-1993	7	7	0.2	ND	3	ND	ND	5.12	24.4	ND	34	2.43
Apr-1994	ND	ND	0.1	ND	3.1	ND	ND	4.89	20.5	1.8	ND	0.33
Aug-1994	ND	ND	ND	ND	2.9	0.3	ND	4.7	21.8	2.6	ND	2.51
Sep-1994	ND	ND	ND	ND	3.2	0.3	ND	5.4	21.8	3.9	46	2.4
Nov-1994	ND	ND	ND	ND	3.1	0.2	ND	5.1	21.6	1.8	27	2.6
Apr-1995	ND	ND	ND	ND	2.9	0.4	ND	5.1	19.3	2.9	7	2.3
Apr-1997	ND	ND	ND	ND	2	0.15	ND	NA	NA	ND	26	1.8
Oct-1997	ND	ND	0.26	ND	2.75	ND	ND	5.68	22.8	7.77	18	ND
Apr-1998	ND	ND	0.24	ND	1.71	0.133	ND	7.32	20	ND	ND	2.6
Apr-1999	ND	ND	0.14	ND	3.45	ND	ND	4.94	19.59	ND	13	2.9
Oct-1999	ND	ND	0.07	ND	3.03	ND	ND	4.85	24.3	ND	29	2.9
Apr-2000	2	2	ND	ND	3.31	ND	ND	5.29	17	ND	ND	3.3
Oct-2000	24	NA	ND	13	2.48	ND	ND	5.17	20.6	ND	41	3.59
Apr-2001	2.2	NA	ND	ND	2.51	ND	ND	NA	NA	ND	26	3.2
Sep-2001	2.2	2.2	ND	ND	11.7	ND	ND	5.07	22	ND	29	3.61
Mar-2002	2	2	ND	ND	2.72	ND	ND	5.3	173.6	ND	42	3.38
Sep-2002	2.8	2.8	ND	ND	3.05	ND	ND	5.2	19.4	ND	16	2.87
Mar-2003	2.5	2.5	ND	ND	31.7	ND	ND	5.1	24.3	8.11	58	2.94
Oct-2003	4	4	ND	ND	3	0.124	ND	5.3	25.7	ND	30	4.33
Apr-2004	2.7	2.7	ND	ND	2.71	0.148	ND	5.1	20.2	ND	28	3.59
Oct-2004	2.7	2.7	ND	ND	2.69	0.113	ND	5.3	17.2	ND	25	4.2
Apr-2005	2.5	2.5	ND	ND	2.86	0.16	ND	5	16.7	ND	32	3
Oct-2005	4.4	4.4	0.21	ND	3.08	0.14	ND	4.4	17.8	ND	37	3.33
Mar-2006	4.2	4.2	ND	ND	2.85	0.16	ND	7.2	21	1.05	83	1.85
Sep-2006	3.4	3.4	ND	ND	2.97	0.16	ND	5	20.7	ND	22	2.8
Mar-2007	4.4	4.4	0.62	ND	3.07	0.16	ND	4.9	18.6	ND	ND	2.82
Sep-2007	4.2	4.2	0.33	ND	9.64	ND	ND	5.6	21.2	ND	33	2.96
Mar-2008	6.7	6.7	0.47	ND	8.02	0.48	ND	4.9	24.8	1.69	56	3.33
Sep-2008	4.4	4.4	ND	ND	3.11	ND	ND	4.9	20.2	ND	22	2.9
Mar-2009	5.2	5.2	ND	ND	3.11	0.11	ND	4.5	21.9	ND	ND	3.16
Oct-2009	5.2	5.2	ND	ND	2.85	0.1	ND	4.6	20.1	ND	37	3.31
Mar-2010	5.5	5.5	ND	ND	2.85	0.1	ND	5.54	42	ND	28	2.81
Oct-2010	4.8	4.8	ND	ND	3.4	0.07	ND	4.8	19.4	ND	18	3.11
Apr-2011	4	4	ND	ND	2.98	0.14	ND	4.8	19.5	ND	49	2.9
Sep-2011	3.9	3.9	0.24	ND	2.97	0.13	ND	4.8	31.9	ND	14	3.32
Mar-2012	3.4	3.4	ND	ND	3.05	0.16	ND	4.8	21.9	ND	ND	3.27
Sep-2012	3.48	3.48	ND	ND	3.07	0.157	ND	3.9	19.6	ND	ND	3.16

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-15***											
Mar-2013	4.36	4.36	*ND*	*ND*	3.38	0.193	*ND*	3.8	16.8	*0.601 J*	23	2.59
Oct-2013	3.8	3.8	*ND*	*ND*	3.25	0.165	*ND*	3.1	18.9	*ND*	*ND*	2.92
Mar-2014	3.64	3.64	*ND*	22	3.3	0.174	*ND*	5.4	23.8	*ND*	*ND*	2.74
Oct-2014	*ND*	*ND*	*ND*	*7 J*	3.59	0.158	*ND*	4.9	19.6	*ND*	*ND*	3.32
Apr-2015	4.64	4.64	*ND*	*ND*	3.25	0.168	*ND*	4.2	21.5	*ND*	*ND*	3.24
Nov-2015	3.48	3.48	*ND*	*ND*	3.48	0.169	*ND*	5.3	27.6	*ND*	*ND*	3.68
May-2016	*ND*	*ND*	*ND*	*ND*	3.37	0.197	*ND*	5.3	33.8	*ND*	*15 J*	3.3
Oct-2016	*ND*	*ND*	*ND*	*ND*	3.27	*NA*	*NA*	5.7	30.3	*0.742 J*	32	3.2
May-2017	2.68	2.68	*ND*	*ND*	3.18	0.192	*ND*	5.2	81.3	*0.512 J*	*ND*	3.2
Oct-2017	3.88	3.88	*ND*	*7 J*	3.23	0.209	*ND*	5.5	36.8	*ND*	*15 J*	3
May-2018	*8 J*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	4.3	97.4	*ND*	39	*3.6 J*
Nov-2018	24	24	*0.052 J*	*ND*	3.4	*0.038 J*	*ND*	6.01	65.5	*ND*	39	*3.7 J*
May-2019	40	*NA*	*ND*	*ND*	3.4	*ND*	*ND*	6.14	72.3	*ND*	20	*ND*
Oct-2019	*2.5 JH1*	*NA*	*ND*	*14.8 J*	3.1	0.13	0.011	5.83	67.3	*ND*	34	3.8
May-2020	12	*NA*	*ND*	*ND*	3.4	*ND*	*ND*	5.98	74.1	*ND*	*ND*	4.1
Oct-2020	*ND*	*NA*	*ND*	*ND*	3.4	*ND*	0.07	6.07	66.2	*ND*	21	3.9
Apr-2021	*ND*	*NA*	*ND*	*10.5 J*	3.5	0.14	*ND*	6.32	106.8	*ND*	25	3.8
Oct-2021	14	*NA*	*ND*	*ND*	3.5	*ND*	*ND*	6.49	126.3	*ND*	*ND*	3.85
May-2022	10	*NA*	*ND*	*ND*	3.4 ML	0.15	0.016	6.32	114.2	*ND*	39	4.3 N3
Oct-2022	26	*NA*	*ND*	*8.4 J*	4.6	0.11	*ND*	6.35	116.1	*ND*	33	3.9 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15***													
Nov-1993	NA	ND	ND	NA	ND	0.38	NA	ND	NA	ND	67	3	ND	0.36	NA
Apr-1994	NA	ND	ND	NA	ND	0.38	NA	ND	NA	ND	1.5	1	ND	0.25	NA
Aug-1994	NA	ND	ND	NA	ND	0.46	NA	ND	NA	ND	7.1	0.31	ND	0.33	NA
Sep-1994	NA	ND	ND	NA	ND	0.34	NA	ND	NA	ND	6.5	1.7	ND	0.37	NA
Nov-1994	NA	ND	ND	NA	ND	0.45	NA	ND	NA	0.02	4.8	1.6	ND	0.35	NA
Apr-1995	ND	ND	0.7	ND	ND	0.36	NA	ND	ND	ND	8.1	ND	ND	0.35	NA
Oct-1996	ND	ND	0.015	ND	ND	0.55	0.62	ND	ND	ND	26	0.94	0.002	ND	ND
Apr-1997	ND	ND	ND	ND	ND	0.6	0.69	ND	ND	ND	0.6	0.45	ND	ND	ND
Oct-1997	ND	ND	0.011	ND	ND	0.495	0.587	ND	ND	ND	5.37	0.273	ND	0.328	0.322
Apr-1998	ND	ND	0.01	ND	ND	0.5	0.491	ND	ND	ND	26.2	0.201	ND	0.331	0.326
Apr-1999	ND	ND	0.011	ND	ND	0.551	0.543	ND	ND	ND	7.77	0.245	ND	0.372	0.355
Oct-1999	ND	ND	ND	ND	ND	0.508	0.471	ND	ND	ND	12.1	0.396	ND	0.345	0.318
Apr-2000	ND	ND	ND	ND	ND	0.716	0.452	ND	ND	ND	9.48	0.476	ND	0.378	0.304
Oct-2000	ND	ND	ND	ND	ND	0.728	0.667	ND	ND	ND	23.5	16.8	ND	0.43	0.425
Apr-2001	ND	ND	0.012	ND	ND	0.602	NA	ND	ND	ND	7.97	NA	ND	0.401	NA
Sep-2001	ND	ND	0.012	ND	ND	0.738	0.569	ND	ND	ND	24	0.88	ND	0.431	0.386
Mar-2002	ND	ND	0.012	ND	ND	0.713	0.552	ND	ND	ND	15.3	1.81	ND	0.388	0.376
Sep-2002	ND	ND	0.011	ND	ND	0.544	0.513	ND	ND	ND	12.2	0.425	ND	0.366	0.351
Mar-2003	ND	ND	0.012	ND	ND	0.565	0.528	ND	ND	ND	7.18	0.178	ND	0.373	0.349
Oct-2003	ND	ND	0.013	ND	ND	0.956	0.603	ND	ND	0.012	21.5	1.12	ND	0.47	0.408
Apr-2004	ND	ND	ND	ND	ND	0.754	0.548	ND	ND	ND	11.4	0.306	ND	0.415	0.359

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15***													
Oct-2004	*ND*	*ND*	0.013	*ND*	*ND*	0.978	0.536	*ND*	*ND*	*ND*	50.2	0.81	*ND*	0.426	0.366
Apr-2005	*ND*	*ND*	0.012	*ND*	*ND*	0.574	0.566	*ND*	*ND*	*ND*	13.1	0.214	*ND*	0.384	0.371
Oct-2005	*ND*	*ND*	0.012	*ND*	*ND*	0.758	0.559	*ND*	*ND*	*ND*	18.4	0.378	*ND*	0.35	0.324
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	0.271	0.26	*ND*	*ND*	*ND*	10.8	0.27	*ND*	0.285	0.302
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	0.542	0.532	*ND*	*ND*	*ND*	6.1	0.274	*ND*	0.353	0.351
Mar-2007	*ND*	*ND*	0.011	*ND*	*ND*	0.543	0.512	*ND*	*ND*	*ND*	14.6	1.12	*ND*	0.354	0.345
Sep-2007	*ND*	*ND*	0.011	*ND*	*ND*	0.563	0.527	*ND*	*ND*	*ND*	19.1	0.483	*ND*	0.379	0.364
Mar-2008	*ND*	*ND*	0.015	*ND*	*ND*	0.649	0.626	*ND*	*ND*	*ND*	28.5	3.92	*ND*	0.416	0.393
Sep-2008	*ND*	*ND*	0.011	*ND*	*ND*	0.507	0.466	*ND*	*ND*	*ND*	16.8	0.914	*ND*	0.386	0.389
Mar-2009	*ND*	*ND*	0.013	*ND*	*ND*	0.655	0.562	*ND*	*ND*	*ND*	44	2.06	*ND*	0.37	0.352
Oct-2009	*ND*	*ND*	0.012	*ND*	*ND*	0.605	0.558	*ND*	*ND*	*ND*	29.2	12	*ND*	0.436	0.385
Mar-2010	*ND*	*ND*	0.013	*ND*	*ND*	0.541	0.504	*ND*	*ND*	0.011	28	4.21	*ND*	0.354	0.335
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	0.581	0.526	*ND*	*ND*	*ND*	5.14	1.88	*ND*	0.404	0.391
Apr-2011	*ND*	*ND*	0.012	*ND*	*ND*	0.543	0.528	*ND*	*ND*	*ND*	8.19	0.312	*ND*	0.362	0.369
Sep-2011	*ND*	*ND*	0.012	*ND*	*ND*	0.693	0.692	*ND*	*ND*	*ND*	20.6	0.252	*ND*	0.387	0.383
Mar-2012	*ND*	*ND*	0.011	*ND*	*ND*	0.574	0.567	*ND*	*ND*	*ND*	7.42	0.296	*ND*	0.448	0.434
Sep-2012	*ND*	*ND*	0.0117	*0.000263 J*	*ND*	0.636	0.606	*ND*	*0.0042 J*	*0.0053 J*	10.3	0.217	*ND*	0.381	0.372
Mar-2013	*ND*	*ND*	0.0114	*0.000278 J*	*ND*	0.537	0.614	*ND*	*0.004 J*	*0.0076 J*	27.6	0.115	*0.0014 J*	0.303	0.335
Oct-2013	*ND*	*ND*	0.0115	*0.000213 J*	*ND*	0.573	0.508	*0.0025 J*	*0.0044 J*	*0.0033 J*	0.449	0.118	*ND*	0.362	0.345
Mar-2014	*0.000418 J*	*ND*	0.0109	*ND*	*ND*	0.534	0.538	*0.0017 J*	*0.0044 J*	*0.0074 J*	28.4	0.123	*ND*	0.341	0.343
Oct-2014	*0.00056 J*	*ND*	0.0125	*0.000239 J*	*ND*	0.672	0.69	*0.000523 J*	*0.0043 J*	*0.0044 J*	6.7	0.216	*ND*	0.399	0.412
Apr-2015	*0.000993 J*	*ND*	0.0126	*0.000209 J*	*0.000102 J*	0.638	0.648	*0.001 J*	*0.0047 J*	*0.0044 J*	11.6	0.175	*ND*	0.4	0.412
Nov-2015	*ND*	*ND*	0.0132	*0.000321 J*	*0.000099 J*	0.781	0.752	*0.00054 J*	*0.0044 J*	0.0124	26.7	0.234	*0.000304 J*	0.421	0.446
May-2016	*ND*	*ND*	0.0114	*0.00021 J*	*ND*	0.613	0.6	*0.001 J*	0.0042	0.0045	15.5	*0.151 J*	*ND*	0.424	0.381

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15***													
Oct-2016	*ND*	*ND*	0.0129	*0.00022 J*	*ND*	0.644	0.573	*0.0011 J*	0.0041	0.0044	10.6	*0.19 J+*	*ND*	0.378	0.409
May-2017	*ND*	*ND*	0.0124	*0.00019 J*	*ND*	0.58	0.711	*0.0006 J*	0.0044	*0.0032 J*	1.08	0.892	*ND*	0.415	0.428
Oct-2017	*ND*	*ND*	0.0116	*0.00018 J*	*ND*	0.527	0.648	*ND*	0.0042	*0.003 J*	1.43	1.08	*ND*	0.414	0.426
May-2018	*0.000047 J*	*ND*	0.013	*0.0002 J*	*0.000068 J*	*0.73 J*	*0.68 J*	*0.00059 J*	0.0039	0.0056	1.8	1.6	*0.000031 JB*	*0.44 J*	*0.43 J*
Nov-2018	*ND*	*ND*	0.012	*0.000097 J*	*0.000034 J*	*0.71 J*	*0.74 J*	*0.0018 J*	0.0028	0.0022	15.3	13.6	*0.000079 J*	*0.46 J*	*0.46 J*
May-2019	*ND*	*ND*	0.014	*ND*	*ND*	*ND*	*ND*	*ND*	0.0037	*ND*	22	21	*ND*	*ND*	*ND*
Oct-2019	*0.00012 J*	*ND*	0.014	*0.0002 J*	*0.00015 J*	0.75	*0.78 J*	0.0074	0.0031	0.0028	24.1	13.8	*0.000074 J*	0.48	*0.49 J*
May-2020	*0.00022 J*	*0.00032 J*	0.017	0.00034	*0.00011 J*	0.78	*0.78 J*	*0.0046 J*	0.0032	0.0066	52.2	16.9	*ND*	0.51	*0.52 J*
Oct-2020	*0.00046 J*	*ND*	0.019	*0.00062 J*	*ND*	0.76	*0.72 J*	*0.0048 J*	0.0044	0.012	60.9	9.5	*ND*	0.49	*0.47 J*
Apr-2021	*ND*	*ND*	0.016	*ND*	*ND*	*0.73 J*	*0.72 J*	*0.00041 J*	*0.0029 J*	*ND*	25	24.9	*ND*	0.48	0.5
Oct-2021	*0.000049 JB*	*ND*	0.015	*ND*	*ND*	0.75	0.79	*0.0017 J*	0.0027	*0.001 J*	22.9	20.6	*ND*	*0.48 J*	0.51
May-2022	*ND*	*ND*	0.015	*ND*	*ND*	0.83	0.87	*0.0015 J*	0.0029	*0.0023 J*	31.7	21.3	*ND*	0.54	0.57
Oct-2022	*ND*	*ND*	0.014	*ND*	*ND*	0.75	0.87	*0.0012 J*	0.0025	*0.0019 J*	42.4	23.8	*ND*	*0.49 J*	0.55

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-15*												
Nov-1993	0.08	NA	ND	NA	0.58	NA	ND	NA	1.6	NA	NA	NA	ND
Apr-1994	0.05	NA	ND	NA	0.34	NA	ND	NA	1.2	NA	NA	NA	ND
Aug-1994	0.01	NA	ND	NA	0.49	NA	ND	NA	1.1	NA	NA	NA	ND
Sep-1994	0.02	NA	ND	NA	0.4	NA	ND	NA	1.3	NA	NA	NA	0.03
Nov-1994	0.04	NA	ND	NA	0.47	NA	ND	NA	1.2	NA	NA	NA	0.02
Apr-1995	0.04	NA	ND	ND	0.06	NA	ND	ND	1.2	NA	ND	ND	0.02
Oct-1996	0.02	0.01	NA	ND	ND	ND	ND	ND	1.9	1.8	ND	ND	0.049
Apr-1997	0.011	ND	ND	ND	ND	2	ND	ND	1.9	1.4	ND	ND	ND
Oct-1997	ND	0.011	NA	ND	0.922	ND	ND	ND	1.29	1.36	ND	ND	ND
Apr-1998	ND	0.011	NA	ND	1.64	ND	ND	ND	1.4	1.33	ND	ND	0.03
Apr-1999	ND	ND	NA	ND	0.972	0.732	ND	ND	1.52	1.45	ND	ND	ND
Oct-1999	ND	ND	NA	ND	ND	0.831	ND	ND	1.43	1.32	ND	ND	ND
Apr-2000	0.012	0.01	NA	ND	ND	ND	ND	ND	2.95	1.33	ND	ND	ND
Oct-2000	0.184	0.176	NA	ND	0.782	0.661	ND	ND	1.69	1.69	ND	ND	ND
Apr-2001	0.014	NA	NA	ND	1.08	NA	ND	ND	1.62	NA	ND	ND	ND
Sep-2001	0.01	0.013	NA	ND	0.816	0.478	ND	ND	2.38	1.5	ND	ND	ND
Mar-2002	0.022	0.024	NA	ND	1.95	1.06	ND	ND	2.33	1.47	ND	ND	ND
Sep-2002	ND	ND	NA	ND	0.583	0.568	ND	ND	1.48	1.44	ND	ND	ND
Mar-2003	ND	ND	NA	ND	1.16	1.1	ND	ND	1.5	1.4	ND	ND	ND
Oct-2003	0.016	0.015	NA	ND	2.54	1	ND	ND	2.4	1.52	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.67	1	ND	ND	1.33	1.43	ND	ND	ND
Oct-2004	ND	0.014	0.0002	ND	1.26	0.739	ND	ND	2	1.52	ND	ND	0.014

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-15***												
Apr-2005	ND	ND	ND	ND	0.74	0.74	ND	ND	1.46	1.43	ND	ND	ND
Oct-2005	0.01	ND	ND	ND	0.712	0.665	ND	ND	1.85	1.23	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	1.14	1.11	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.633	0.694	ND	ND	1.29	1.27	ND	ND	ND
Mar-2007	0.016	0.013	ND	ND	0.621	0.563	ND	ND	1.3	1.24	ND	ND	ND
Sep-2007	ND	ND	ND	ND	0.574	ND	ND	ND	1.48	1.38	ND	ND	ND
Mar-2008	0.031	0.041	ND	ND	0.809	0.745	ND	ND	1.59	1.43	ND	ND	ND
Sep-2008	ND	ND	ND	ND	0.567	0.557	ND	ND	1.32	1.3	ND	ND	0.023
Mar-2009	0.018	0.019	ND	ND	0.665	0.684	ND	ND	1.48	1.36	ND	ND	0.047
Oct-2009	0.152	0.135	ND	ND	0.576	0.573	ND	ND	1.47	1.57	ND	ND	ND
Mar-2010	0.086	0.052	0.0002	0.018	0.806	0.714	ND	ND	1.21	1.47	ND	ND	ND
Oct-2010	0.017	0.023	ND	ND	0.592	0.542	ND	ND	1.42	1.38	ND	ND	0.014
Apr-2011	0.01	ND	ND	ND	ND	ND	ND	ND	1.33	1.28	ND	ND	ND
Sep-2011	0.013	ND	ND	ND	0.753	0.735	ND	ND	1.64	1.58	ND	ND	0.012
Mar-2012	ND	ND	ND	ND	0.65	0.63	ND	ND	1.45	1.39	ND	ND	ND
Sep-2012	0.01 J	0.0077 J	ND	0.0062 J	0.692	0.666	ND	ND	1.43	1.37	ND	ND	0.0068 J
Mar-2013	0.0122	0.0069 J	0.000141 J	0.0059 J	0.546	0.605	ND	ND	1.18	1.27	ND	ND	0.0155
Oct-2013	0.0074 J	0.0068 J	ND	0.0065 J	0.686	0.644	ND	ND	1.36	1.31	0.000103 J	0.0011 J	0.014
Mar-2014	0.0137	0.007 J	ND	0.0066 J	0.646	0.666	ND	ND	1.35	1.39	ND	ND	0.0084 J
Oct-2014	0.0095 J	0.008 J	0.000027 J	0.0061 J	0.711	0.721	ND	ND	1.65	1.69	ND	ND	0.009 J
Apr-2015	0.0101	0.0079 J	ND	0.0067 J	0.764	0.774	0.001 J	ND	1.59	1.63	ND	ND	0.0125
Nov-2015	0.0151	0.009 J	ND	0.0065 J	0.739	0.779	ND	ND	1.61	1.67	0.000123 J	ND	0.0148
May-2016	0.0109	0.0071	ND	0.0067	0.901	0.764	ND	ND	1.57	1.38	ND	ND	0.0075 J,B
Oct-2016	0.0101	0.0083 J+	ND	0.0061	0.688	0.757	ND	ND	1.44	1.57	ND	ND	0.009 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-15***												
May-2017	0.0119	0.0149	*ND*	0.006	0.794	0.801	*ND*	*ND*	1.48	1.5	*ND*	*ND*	*0.006 J*
Oct-2017	0.0175	0.0191	*ND*	0.006	0.81	0.815	*ND*	*ND*	1.53	1.57	*ND*	*ND*	*0.006 J*
May-2018	0.022	0.023	*ND*	0.007	*0.94 J*	*ND*	*0.00012 J*	*0.0008 J*	*1.8 J*	*1.5 J*	*ND*	0.0025	0.012
Nov-2018	0.16	0.16	*ND*	0.005	*ND*	*ND*	*0.00014 J*	*ND*	*1.5 J*	*1.6 J*	*ND*	*ND*	0.012
May-2019	0.17	0.16	*ND*	0.0052	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.011
Oct-2019	0.19	0.16	*ND*	0.0057	*ND*	*ND*	*ND*	*ND*	*ND*	*2 J*	*ND*	0.006	0.011
May-2020	0.25	0.22	*ND*	0.0053	*ND*	*ND*	*ND*	*ND*	*1.7 J*	*1.8 J*	0.00059	0.0034	0.0099
Oct-2020	0.18	0.15	*ND*	0.0074	*ND*	*ND*	*ND*	*ND*	*1.8 J*	*ND*	*ND*	*0.00064 J*	*0.013 J*
Apr-2021	0.17	0.18	*ND*	*0.0027 J*	0.79	0.88	*ND*	*ND*	2	2	*ND*	*0.00061 J*	*ND*
Oct-2021	0.22	0.234	*ND*	0.005	0.75	0.81	*ND*	*ND*	1.7	1.9	*ND*	*ND*	*0.0019 J*
May-2022	0.25	0.25	*ND*	0.0047	0.94	0.83	*ND*	*ND*	2.1	2	*ND*	*ND*	*ND*
Oct-2022	0.24	0.27	*ND*	0.0042	0.76	0.92	*ND*	*ND*	2	2.2	*ND*	*ND*	0.005

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.7	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.7	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	5.1	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	7.2	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	37	ND
Apr-2005	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7	ND
Mar-2006	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.48 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.51 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.51 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	0.67 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*0.74 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.368 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-15*															
Nov-1993	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	1.5	NA	1.2	NA	ND	ND	ND	NA	ND	NA	0.7 J	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	0.7 J
Sep-2001	ND	ND	ND	0.9 J	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.5 J
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15***															
Oct-2004	ND	ND	ND	1.5	ND	1.4	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	0.8 J	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	1.3
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	1
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.9 J
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	1.1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	0.8 J
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	1.4
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	1.9
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	1.1
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	1.2
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	0.9 J
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.68 J	0.44 J
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.77 J	0.58 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	0.73 J	0.59 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.85 J	0.57 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.73 J	0.76 J
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.69 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*0.78 J*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.6 J*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.6 J*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.6 J*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.6 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.1	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	1.3 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.1	2.1 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.463 J*	*0.419 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15***															
Nov-1993	*ND*	*ND*	3.7	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Aug-1994	*0.5 J*	*ND*	3.1	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*0.8 J*	*NA*	*ND*	*0.9 J*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15***															
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1.7 R	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	2	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.74 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.52 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.68 J*	*ND*	*ND*	*ND*	*ND*	*0.22 J*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.84 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.61 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.611 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-15B***											
Nov-1993	ND	ND	0.3	75.6	5.3	ND	ND	4.53	39.5	6.6	46	5.78
Apr-1994	ND	ND	ND	ND	5.1	ND	ND	4.8	30.3	1.6	7	0.8
Aug-1994	ND	ND	0.1	ND	6.3	0.3	ND	4.5	42.7	5.8	40	5.9
Sep-1994	ND	ND	ND	ND	5.5	0.3	ND	4.9	32.6	5.1	36	4.4
Nov-1994	ND	ND	ND	ND	6.1	ND	ND	4.6	43.3	6.6	12	5.6
Apr-1995	ND	ND	0.2	ND	6.2	ND	ND	4.7	37.3	4.4	5	4.8
Apr-1997	ND	5	ND	ND	5	0.06	ND	NA	NA	6.7	51	7.7
Oct-1997	ND	ND	0.92	ND	4.17	ND	ND	5.48	50.3	7.77	37	7.5
Apr-1998	ND	ND	ND	ND	4.2	ND	ND	6.72	51.3	1.35	29	5.7
Apr-1999	ND	ND	0.17	ND	7.53	ND	ND	4.38	40.2	1.18	41	6.8
Oct-1999	ND	ND	0.14	ND	5.43	ND	ND	4.32	44.8	5.53	33	6.1
Apr-2000	2	2	ND	ND	8.41	ND	ND	5.55	38	ND	35	7.9
Oct-2000	30	NA	ND	ND	8.09	ND	ND	4.69	40.5	4.93	36	7.36
Apr-2001	2.6	NA	ND	ND	9.2	ND	ND	NA	NA	ND	39	9.4
Sep-2001	2.2	2.2	ND	ND	16	ND	ND	4.89	71	7.37	53	13.1
Mar-2002	ND	ND	ND	ND	20.6	ND	ND	4.9	72.8	1.15	35	13.9
Sep-2002	3.2	3.2	ND	ND	16	ND	ND	5.5	64.1	1.57	57	12
Mar-2003	5.4	5.4	ND	ND	161	ND	ND	5.8	74.9	14.5	73	12.3
Oct-2003	2.9	2.9	ND	ND	10.4	ND	ND	5.4	54.8	1.98	14	9.25
Apr-2004	3.3	3.3	ND	ND	7.79	ND	ND	4.6	46.3	1.97	37	6.99
Oct-2004	2	2	ND	ND	7.13	ND	ND	4.8	46.1	5	47	7.2
Apr-2005	4.1	4.1	ND	ND	9.37	ND	ND	4.4	50.1	5.11	59	9.2
Oct-2005	3.7	3.7	ND	ND	8.61	ND	ND	4.2	41.9	2.79	48	6.13
Mar-2006	5.2	5.2	ND	ND	12.3	ND	ND	7.1	51.7	4.13	47	8.93
Sep-2006	4.4	4.4	ND	ND	10.2	ND	ND	7.1	51.7	4.11	26	8.95
Mar-2007	4.5	4.5	ND	ND	9.49	ND	ND	4.3	49.6	3.44	14	8.09
Sep-2007	1.3	1.3	0.31	ND	9.97	ND	ND	5.3	45.8	8.48	41	6.17
Mar-2008	3.9	3.9	0.47	ND	11.7	ND	ND	4.2	51.2	14.4	20	8.23
Sep-2008	3.8	3.8	ND	ND	8.06	ND	ND	4.3	52.7	8.14	40	8.1
Mar-2009	4.6	4.6	ND	ND	10	ND	ND	4.2	57.5	8.04	ND	7.71
Oct-2009	2.8	2.8	ND	ND	11.2	ND	ND	4.3	60.7	4.44	35	9.12
Mar-2010	2.8	2.8	ND	ND	14.8	ND	ND	4.42	83	5.87	53	9.44
Oct-2010	1.6	1.6	ND	ND	9.94	ND	ND	4.2	58.9	8.79	30	9.04
Apr-2011	3.2	3.2	ND	ND	7.25	0.18	0.08	4	51.3	5.24	31	8
Sep-2011	3.1	3.1	ND	ND	11.9	ND	ND	4.1	58.7	4.46	46	8.71
Mar-2012	1.9	1.9	ND	ND	13.5	ND	ND	3.5	71.4	7.38	38	8.96
Sep-2012	1.4	1.4	ND	ND	10.7	ND	ND	3.2	57.5	5.83	42	8.62

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-15B***											
Mar-2013	3.8	3.8	*ND*	*ND*	8.6	0.731	*0.0348 J*	3.1	46.3	3	37	7.63
Oct-2013	3.56	3.56	*ND*	*ND*	14.8	0.072	*ND*	3	66.4	3.33	*ND*	10.9
Mar-2014	3.6	3.6	*ND*	21	13	0.119	*ND*	4.8	77.2	3.59	46	9.57
Oct-2014	*ND*	*ND*	*ND*	*ND*	9.14	*ND*	*ND*	4.3	47.3	6.05	*ND*	7.47
Apr-2015	1	1	*ND*	*ND*	13.3	0.0959	*ND*	3.5	65.7	7.62	37	8.89
Nov-2015	*ND*	*ND*	*ND*	*8 J*	15.5	*ND*	*ND*	4.6	90.5	7.22	26	10.4
May-2016	*ND*	*ND*	*ND*	*ND*	14	0.107	*ND*	4.6	105	7.39	44	9.9
Oct-2016	*ND*	*ND*	*ND*	*ND*	16.8	*NA*	*NA*	4.6	109.3	4.72	48	10.7
May-2017	*ND*	*ND*	*ND*	*ND*	14.9	0.157	*ND*	4.5	111.2	5.24	38	11.2
Oct-2017	*ND*	*ND*	*0.0868 J*	*ND*	15.8	0.0769	*ND*	4.7	118.5	6.26	46	13.4
May-2018	*1 J*	*ND*	*0.086 J*	*ND*	15.7	*ND*	*ND*	5	33.9	*5.1 J*	60	13.6
Nov-2018	*2 JB*	*ND*	*0.071 J*	*7.9 J*	15.5	*0.083 J*	*ND*	4.31	76.9	*ND*	44	10.4
May-2019	*ND*	*NA*	*ND*	*ND*	17.2	*ND*	*ND*	4.21	62.6	*ND*	20	9
Oct-2019	*ND*	*NA*	*ND*	*6 J*	12.8	0.2	*0.0074 J*	4.11	74.2	*5.5 J*	42	8.9
May-2020	*ND*	*NA*	*ND*	*6.9 J*	30.5	0.56	*ND*	3.97	126	*ND*	48	20.8
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	23.7	0.25	*0.0065 J*	3.99	107.1	5.4	66	16.7
Apr-2021	*ND*	*NA*	*ND*	*6.1 J*	14.7	0.34	*ND*	4.36	90	*ND*	19	9.9
Oct-2021	*ND*	*NA*	*ND*	*ND*	18.7	0.27	*ND*	4.35	137.7	*ND*	29	12.2
May-2022	*ND*	*NA*	*ND*	*5.6 J*	47.9	0.56	*ND*	4.02	252.8	*ND*	113	27.9 N3
Oct-2022	*ND*	*NA*	*ND*	*13 J*	58.1	0.68	*ND*	4.15	248.7	*7.7 J*	109	27.5 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15B***													
Nov-1993	NA	ND	ND	NA	ND	0.5	NA	ND	NA	ND	1.3	0.08	ND	1.1	NA
Apr-1994	NA	ND	ND	NA	ND	0.6	NA	ND	NA	ND	ND	ND	ND	ND	NA
Aug-1994	NA	ND	ND	NA	ND	0.75	NA	ND	NA	ND	ND	ND	ND	0.97	NA
Sep-1994	NA	ND	ND	NA	ND	0.51	NA	ND	NA	ND	ND	ND	ND	0.75	NA
Nov-1994	NA	ND	ND	NA	ND	0.61	NA	ND	NA	0.03	ND	ND	ND	1	NA
Apr-1995	ND	ND	0.8	ND	ND	0.36	NA	ND	ND	ND	0.23	ND	ND	0.95	NA
Oct-1996	ND	ND	0.13	0.002	ND	1.2	1.2	ND	ND	ND	ND	ND	ND	0.87	0.87
Apr-1997	ND	ND	0.086	0.002	ND	1.4	1	ND	ND	ND	ND	ND	ND	0.96	0.75
Oct-1997	ND	ND	0.157	0.004	ND	1.19	1.21	ND	0.013	0.015	ND	ND	ND	1.26	1.26
Apr-1998	ND	ND	0.031	ND	ND	1.09	1.09	ND	ND	ND	0.124	0.226	ND	0.72	0.831
Apr-1999	ND	ND	0.032	ND	ND	1.22	1.2	ND	ND	0.018	0.303	0.3	ND	0.913	0.891
Oct-1999	ND	ND	0.028	ND	ND	0.906	0.902	ND	ND	0.012	0.445	0.263	ND	0.849	0.817
Apr-2000	ND	ND	0.027	ND	ND	1.77	1.57	ND	ND	0.012	0.054	0.053	ND	0.835	0.906
Oct-2000	ND	ND	0.052	ND	ND	1.13	1.12	ND	ND	0.123	0.083	0.077	ND	1.1	1.06
Apr-2001	ND	ND	0.038	ND	ND	1.64	NA	ND	0.01	ND	0.234	NA	ND	1.28	NA
Sep-2001	ND	ND	0.051	ND	ND	2.16	1.96	ND	0.013	0.011	0.556	0.326	ND	1.86	1.76
Mar-2002	ND	ND	0.052	ND	ND	2.3	2.21	ND	0.019	0.013	0.48	0.469	ND	1.99	1.91
Sep-2002	ND	ND	0.045	ND	ND	2.01	1.97	ND	0.015	ND	0.505	0.447	ND	1.69	1.69
Mar-2003	ND	ND	0.046	ND	ND	2.19	2.18	ND	0.015	0.01	0.24	0.245	ND	1.65	1.72
Oct-2003	ND	ND	0.038	ND	ND	1.69	1.41	ND	0.011	0.011	0.242	0.171	ND	1.22	1.21
Apr-2004	ND	ND	0.041	ND	ND	1.15	1.12	ND	ND	0.013	0.088	0.075	ND	1	1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15B***													
Oct-2004	ND	ND	0.061	ND	ND	1.13	1.06	ND	0.01	ND	0.089	ND	ND	1.06	1.05
Apr-2005	ND	ND	0.056	ND	ND	1.54	1.48	ND	0.011	ND	0.126	0.108	ND	1.3	1.26
Oct-2005	ND	ND	0.034	ND	ND	1.01	0.974	ND	ND	ND	0.098	0.095	ND	0.874	0.819
Mar-2006	ND	ND	0.037	ND	ND	1.34	1.22	ND	0.01	ND	ND	ND	ND	1.35	1.29
Sep-2006	ND	ND	0.034	ND	ND	1.44	1.39	ND	0.013	ND	0.214	0.214	ND	1.3	1.29
Mar-2007	ND	ND	0.042	ND	ND	1.31	1.27	ND	0.012	0.012	0.174	0.17	ND	1.17	1.17
Sep-2007	ND	ND	0.035	ND	ND	0.839	0.801	0.012	ND	ND	0.561	0.498	ND	0.991	0.967
Mar-2008	ND	ND	0.034	ND	ND	1.2	1.1	ND	0.011	ND	0.943	0.85	ND	1.27	1.16
Sep-2008	ND	ND	0.037	ND	ND	1.18	1.04	ND	0.01	ND	1.49	1.36	ND	1.26	1.22
Mar-2009	ND	ND	0.032	ND	ND	1.19	1.17	ND	ND	0.013	1.52	1.58	ND	1.15	1.24
Oct-2009	ND	ND	0.037	ND	ND	1.23	1.2	ND	0.01	ND	1.87	1.74	ND	1.47	1.43
Mar-2010	ND	ND	0.059	ND	ND	1.34	1.3	ND	0.012	0.019	1.82	1.54	ND	1.48	1.43
Oct-2010	ND	ND	0.069	0.002	ND	1.23	1.16	ND	0.011	0.012	1.44	1.38	ND	1.45	1.36
Apr-2011	ND	ND	0.05	ND	ND	1.16	1.15	ND	0.011	ND	1.16	1.17	ND	1.24	1.26
Sep-2011	ND	ND	0.057	ND	ND	1.33	1.35	ND	0.012	ND	1.58	1.54	ND	1.31	1.35
Mar-2012	ND	ND	0.08	0.003	ND	1.13	1.16	ND	0.012	0.011	1.22	1.22	ND	1.49	1.5
Sep-2012	ND	ND	0.0504	0.0018 J	ND	1.21	1.19	0.0012 J	0.0122	0.0087 J	1.29	1.3	ND	1.36	1.38
Mar-2013	ND	ND	0.039	0.000838 J	ND	1.11	1.21	ND	0.0114	0.0078 J	0.125	0.126	0.0013 J	1.18	1.24
Oct-2013	ND	ND	0.0564	0.000901 J	0.000222 J	1.35	1.3	0.0115	0.0157	0.0089 J	0.104	0.0962	ND	1.83	1.76
Mar-2014	0.000563 J	ND	0.0422	ND	0.000177 J	1.27	1.32	0.0013 J	0.0143	0.0103	0.116	0.108	ND	1.55	1.59
Oct-2014	0.000751 J	ND	0.0443	0.000845 J	0.000166 J	1.07	1.04	0.000391 J	0.0109	0.0084 J	0.55	0.551	ND	1.17	1.16
Apr-2015	0.0011 J	ND	0.0609	0.0013 J	0.000297 J	1.25	1.25	0.000321 J	0.0144	0.0095 J	1.13	1.16	ND	1.4	1.45
Nov-2015	0.000315 J	ND	0.0639	0.0018 J	0.000282 J	1.48	1.46	0.000671 J	0.0158	0.0109	1.35	1.34	0.000298 J	1.63	1.63
May-2016	ND	ND	0.0709	0.0017	0.00024 J	1.41	1.24	ND	0.0165	0.0093	1.21	1.18	ND	1.56	1.51

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15B***													
Oct-2016	*ND*	*ND*	0.0517	*0.00095 J*	*0.00025 J*	1.47	1.37	*0.00062 J*	0.0178	0.0082	0.731	*0.738 J+*	*ND*	1.71	1.76
May-2017	*ND*	*ND*	0.0556	*0.00068 J*	*0.00026 J*	1.38	1.67	*0.0017 J*	0.0181	0.0075	*0.116 J*	*0.103 J*	*ND*	1.89	1.87
Oct-2017	*ND*	*ND*	0.0613	*0.00069 J*	*0.00025 J*	1.69	1.67	*ND*	0.0187	0.0075	*ND*	*ND*	*ND*	2.22	2.2
May-2018	*0.00011 J*	*ND*	0.06	0.00065	*0.00029 J*	1.9	1.8	*0.00051 J*	0.0136	0.0068	*0.013 J*	*ND*	*0.00014 JB*	2.1	2
Nov-2018	*ND*	*ND*	0.052	0.00073	*0.00022 J*	1.3	1.4	*0.0018 J*	0.013	0.0049	0.022	*0.018 J*	*0.000077 J*	1.7	1.8
May-2019	*ND*	*ND*	0.045	0.00088	*ND*	1.3	1.4	*ND*	0.011	0.0056	*ND*	0.042	*ND*	1.4	1.4
Oct-2019	*0.0001 J*	*ND*	0.046	0.00091	*0.00032 J*	1.3	1.3	*0.0049 J*	0.01	0.007	*0.02 J*	*0.011 J*	*0.000095 J*	1.4	1.3
May-2020	*0.000085 J*	*ND*	0.078	0.0011	*0.00037 J*	2.8	2.7	*0.0055 J*	0.024	0.011	*0.015 J*	0.063	*ND*	3.4	3.2
Oct-2020	*ND*	*ND*	0.087	*0.0011 JM1*	*ND*	2.2	2.1	*0.0034 JM1*	0.021	*0.0095 J*	*0.017 JB*	*0.02 J*	*ND*	2.7	2.6
Apr-2021	*ND*	*ND*	0.054	*0.00056 J*	*ND*	1.2	1.3	*0.00054 J*	0.013	0.0052	*ND*	*ND*	*ND*	1.7	1.7
Oct-2021	*0.000053 JB*	*ND*	0.075	0.0013	*0.00007 J*	1.5	1.6	*0.0015 J*	0.017	0.011	*0.011 J*	*0.016 J*	*0.000046 J*	2	2.1
May-2022	*ND*	*ND*	0.15	0.0015	0.00057	3.8	4	0.0026	0.038	0.014	*ND*	*ND*	0.0019	4.5	4.7
Oct-2022	*ND*	*ND*	0.16	0.002	0.00053	4	4.6	*0.0014 J*	0.033	0.012	*ND*	0.055	*ND*	4.3	4.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-15B*												
Nov-1993	0.18	NA	ND	NA	0.82	NA	ND	NA	2.1	NA	NA	NA	0.03
Apr-1994	0.06	NA	ND	NA	0.85	NA	ND	NA	2.9	NA	NA	NA	0.01
Aug-1994	0.1	NA	ND	NA	0.98	NA	ND	NA	2.3	NA	NA	NA	0.06
Sep-1994	0.11	NA	ND	NA	0.67	NA	ND	NA	2.2	NA	NA	NA	0.05
Nov-1994	0.14	NA	ND	NA	0.72	NA	ND	NA	2.1	NA	NA	NA	0.05
Apr-1995	ND	NA	ND	ND	1	NA	ND	ND	2	NA	ND	ND	0.05
Oct-1996	0.25	0.23	NA	ND	ND	ND	ND	ND	2.5	2.4	ND	ND	0.082
Apr-1997	0.095	0.079	ND	ND	ND	ND	ND	ND	3.1	2.3	ND	ND	0.05
Oct-1997	0.271	0.272	NA	0.011	ND	ND	ND	ND	1.96	1.9	ND	ND	0.079
Apr-1998	0.013	0.033	NA	0.013	0.811	1.07	ND	ND	2.54	2.55	ND	ND	0.023
Apr-1999	0.015	0.018	NA	ND	1.07	1.59	ND	ND	3.18	2.92	ND	ND	0.016
Oct-1999	ND	0.01	NA	ND	ND	0.839	ND	ND	3.1	2.89	ND	ND	0.019
Apr-2000	ND	ND	NA	ND	0.814	0.739	ND	ND	3.15	3.18	ND	ND	0.012
Oct-2000	0.041	0.039	NA	ND	1.37	1.26	ND	ND	3.58	3.38	ND	ND	0.027
Apr-2001	0.012	NA	NA	ND	1.18	NA	ND	ND	4.07	NA	ND	ND	0.021
Sep-2001	0.021	0.018	NA	0.025	1.4	1.14	ND	ND	7.22	5.84	ND	ND	0.028
Mar-2002	0.02	0.019	NA	0.023	1.69	1.17	ND	ND	7.55	7.17	ND	ND	0.034
Sep-2002	0.017	0.017	NA	0.02	1.23	1.12	ND	ND	7.03	6.93	ND	ND	0.025
Mar-2003	0.018	0.018	NA	0.018	1.27	1.41	ND	ND	7.33	7.02	ND	ND	0.026
Oct-2003	0.018	0.015	NA	ND	2.98	1.34	ND	ND	6.29	5.35	ND	ND	0.024
Apr-2004	0.034	0.044	ND	ND	1.57	1.55	ND	ND	4.37	4.11	ND	ND	0.019
Oct-2004	0.095	0.108	0.0003	ND	1.5	1.43	ND	ND	3.97	3.44	ND	ND	0.033

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-15B***												
Apr-2005	0.054	0.074	ND	ND	1.21	1.16	ND	ND	4.38	4.11	ND	ND	0.027
Oct-2005	0.02	0.031	ND	ND	0.945	0.886	ND	ND	3.35	3.04	ND	ND	0.017
Mar-2006	ND	ND	ND	0.014	0.917	0.9	ND	ND	5	4.67	ND	ND	ND
Sep-2006	0.018	0.019	ND	0.015	1.04	1.03	ND	ND	4.26	4.19	ND	ND	0.018
Mar-2007	0.025	0.029	ND	0.014	0.933	0.866	ND	ND	3.9	3.78	ND	ND	0.025
Sep-2007	0.035	0.034	ND	ND	0.564	0.521	ND	ND	2.6	2.52	ND	ND	0.022
Mar-2008	0.024	0.022	0.0004	ND	0.877	0.808	ND	ND	3	2.74	ND	ND	0.023
Sep-2008	0.03	0.029	ND	0.013	0.678	0.678	ND	ND	3.02	2.95	ND	ND	0.031
Mar-2009	0.017	0.018	0.0008	ND	0.799	0.807	ND	ND	3.36	3.59	ND	ND	0.029
Oct-2009	0.035	0.032	ND	0.011	0.618	0.641	ND	ND	4.09	3.99	ND	ND	0.026
Mar-2010	0.052	0.049	ND	0.014	0.912	0.839	ND	ND	4.64	4.99	ND	ND	0.033
Oct-2010	0.128	0.126	ND	0.017	0.628	0.549	ND	ND	4.3	4.05	ND	ND	0.049
Apr-2011	0.049	0.049	ND	0.011	0.552	0.536	ND	ND	3.05	3.09	ND	ND	0.028
Sep-2011	0.051	0.05	ND	0.012	0.82	0.796	ND	ND	4.91	4.99	ND	ND	0.033
Mar-2012	0.07	0.071	ND	0.013	0.728	0.707	ND	ND	5.61	5.52	ND	ND	0.037
Sep-2012	0.0504	0.0502	ND	0.0129	0.757	0.733	ND	ND	4.49	4.55	ND	ND	0.032
Mar-2013	0.0289	0.0296	0.000082 J	0.012	0.649	0.672	ND	ND	2.93	3.15	ND	ND	0.0331
Oct-2013	0.0302	0.0294	ND	0.0167	0.862	0.828	ND	ND	5.82	5.49	0.000162 J	0.004 J	0.0442
Mar-2014	0.0259	0.0257	ND	0.0144	0.765	0.789	ND	ND	4.44	4.48	ND	ND	0.0281
Oct-2014	0.0562	0.0563	0.00004 J	0.012	0.663	0.649	0.0012 J	ND	3.91	3.89	ND	ND	0.0331
Apr-2015	0.0585	0.0623	ND	0.0141	0.788	0.811	0.0013 J	ND	4.81	4.97	ND	ND	0.0382
Nov-2015	0.0561	0.0561	0.00007 J	0.0146	0.84	0.82	0.000647 J	ND	5.71	5.55	0.000173 J	ND	0.0375
May-2016	0.0698	0.0652	ND	0.0134	0.893	0.892	ND	ND	5.76	5.46	ND	ND	0.0361
Oct-2016	0.0398	0.0409 J+	0.000073 J	0.0156	0.898	1.01	ND	ND	6.46	6.52	ND	ND	0.0299 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-15B***												
May-2017	0.0311	0.033	*0.00012 J*	0.0155	0.989	1.03	*ND*	*ND*	6.21	6.24	*ND*	*ND*	*0.0286 J*
Oct-2017	0.0336	0.0361	*ND*	0.0161	1.05	1.1	*ND*	*ND*	6.86	6.73	*ND*	*ND*	*0.0288 J*
May-2018	0.028	0.026	*0.00017 JB*	0.014	*1.2 J*	*ND*	*0.0005 J*	*ND*	7.5	6.6	*0.000073 J*	0.0032	0.024
Nov-2018	0.028	0.025	*0.00016 J*	0.011	*1 J*	*1 J*	*0.00021 J*	*ND*	6.5	6.8	*ND*	*ND*	0.02
May-2019	0.027	0.028	*ND*	0.0087	*ND*	*ND*	*ND*	*ND*	7.1	6.8	*ND*	*ND*	0.039
Oct-2019	0.04	0.036	0.00046	0.012	*ND*	*ND*	*0.00039 J*	*ND*	5.8	6	*ND*	0.0061	0.024
May-2020	0.053	0.049	0.00045	0.022	*1.4 J*	*1.4 J*	*0.00041 J*	*ND*	11.6	11.2	*ND*	0.004	0.035
Oct-2020	0.052	0.043	0.0003	0.019	*ND*	*1.1 J*	*ND*	*ND*	10	9	*ND*	*0.00052 JM1*	0.04 M1
Apr-2021	0.026	0.029	0.00086	0.012	1.1	1.1	*ND*	*ND*	7.3	7.6	*ND*	*ND*	0.016
Oct-2021	0.055	0.0579	0.00022	0.016	1	1.1	*ND*	*ND*	8.1	8.4	*0.000078 J*	*ND*	0.029
May-2022	0.076	0.078	*ND*	0.038	1.4	1.4	*ND*	*ND*	22.8	22.7	*0.00011 J*	*ND*	0.069
Oct-2022	0.073	0.083	*ND*	0.031	1.4	1.6	*0.0022 J*	*ND*	21.4	23.7	*0.000099 J*	*ND*	0.069

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-15B***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	3.3	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	1.8	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	6.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	9.2	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	9.9	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	6.7	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	6.3	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	5.3	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15B*																
Oct-2004	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	7	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2007	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	5.7	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	3.4	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	2.71	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.92	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	4.79	ND	ND	ND	ND	ND	ND	0.72 J	0.81 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	2.87	ND	ND	ND	ND	ND	ND	0.34 J	0.52 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15B*																
Apr-2015	ND	ND	ND	ND	1.71	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.23	ND	ND	ND	ND	ND	ND	0.26 J	0.31 J	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	0.2 J	0.3 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4 JB	ND
Nov-2018	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9 JBIH	ND
May-2019	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.23	ND	ND	ND	ND	ND	ND	ND	0.131 J	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.7
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	2.4
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	0.6 J	ND	ND	ND	ND	ND	3.2	4.2
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	3.4
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	4.8	16
Apr-1998	0.8 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	4.1	4.8
Apr-1999	0.8 J	NA	NA	NA	NA	ND	NA	ND	0.8 J	ND	NA	ND	NA	NA	NA	2.7	4.3
Oct-1999	2.3	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	1.5	ND	ND	ND	2	6.3
Apr-2000	0.5 J	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	1.2	1.9
Oct-2000	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	4
Apr-2001	2	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	4.6	6.5
Sep-2001	3.2	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	1.1	ND	ND	ND	6.9	8.3
Mar-2002	4.3	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	1.5	ND	ND	ND	8.9	9
Sep-2002	2.8	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	1.2	ND	ND	ND	11	8.9
Mar-2003	2.7	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.3	ND	ND	ND	8.4	6.7
Oct-2003	2	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	0.6 J	0.8 J	ND	ND	ND	2.8	5.2
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3	2.7

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15B***															
Oct-2004	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	0.7 J	ND	ND	ND	4.7	3.3
Apr-2005	2.4	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.5	ND	ND	ND	7.9	7.1
Oct-2005	0.6 J	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	2.9
Mar-2006	3.3	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.7	ND	ND	ND	8.4	7
Sep-2006	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	8.4	6.2
Mar-2007	2.5	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	1.8	ND	ND	ND	5.9	6.3
May-2007	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	5.8	6.1
Sep-2007	2.8	ND	ND	ND	ND	ND	ND	ND	0.7 J	1.2	ND	1.8	ND	ND	ND	5.8	2.2
Mar-2008	2.2	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	5.2	7
Sep-2008	3.7	ND	ND	ND	ND	ND	ND	ND	1.5	1	ND	2.5	ND	ND	ND	6.6	6.9
Mar-2009	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND	ND	3.2	3.5
Oct-2009	3	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	2.1	ND	ND	ND	6.1	6.2
Mar-2010	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	1.5	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	1.1	ND	ND	ND	4.6	2.6
Apr-2011	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	1.9	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	1.5	ND	ND	ND	9.5	3.5
Mar-2012	1.9	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	1.7	ND	ND	ND	7.4	3.7
Sep-2012	1.45	ND	ND	ND	ND	ND	ND	ND	ND	0.81 J	ND	1.16	ND	ND	ND	3.04	2.08
Mar-2013	1.04	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	0.74 J	ND	ND	ND	3.04	2.01
Oct-2013	2.39	ND	ND	ND	ND	ND	ND	ND	0.51 J	0.33 J	ND	1.89	ND	ND	ND	3.83	3.94
Mar-2014	1.34	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	1.02	ND	ND	ND	4.14	2.7
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	1.87	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15B***															
Apr-2015	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.38 J*	*ND*	*0.55 J*	*ND*	*ND*	*ND*	2.42	*ND*
Nov-2015	*0.82 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.47 B	*ND*	*0.61 J*	*ND*	*ND*	*ND*	1.48	1.87
May-2016	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.6 J*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	2.2	1.6
Oct-2016	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.5 J*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	2.8	2.4
May-2017	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	2.5	1.8
Oct-2017	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	2.5	1.6
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5	1.6
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.1	1.9 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.9	1.9 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.8	*0.7 J*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.123 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.76 J*	*0.881 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	2.1	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	**6**	ND	ND	3	ND	ND	ND	ND	1.1	0.6 J	ND	1.3	NA
Apr-1998	ND	ND	0.5 J	NA	**7.6**	ND	ND	2.3	ND	ND	ND	ND	1	ND	ND	1.1	NA
Apr-1999	ND	NA	0.6 J	NA	**8.5**	ND	NA	2	ND	ND	NA	NA	0.9 J	ND	NA	1	NA
Oct-1999	ND	ND	0.6 J	NA	**22**	1	ND	4.1	ND	ND	ND	ND	2.1	ND	ND	1.5	NA
Apr-2000	ND	NA	ND	NA	2.6	ND	NA	1.2	ND	ND	NA	NA	0.7 J	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	**6.3**	ND	ND	3.1	ND	ND	ND	ND	1.4	ND	ND	1.1	NA
Apr-2001	ND	ND	1.2	NA	**5.6**	0.6 J	ND	4.9	ND	ND	ND	ND	2.4	ND	ND	1.7	NA
Sep-2001	ND	ND	0.9 J	NA	**12**	1.3	ND	**8.9**	ND	ND	ND	ND	3.9	0.6 J	ND	**3.3**	NA
Mar-2002	ND	ND	1.1	NA	**18**	2	ND	**9.1**	ND	ND	ND	ND	4.2	0.6 J	ND	**3.8**	NA
Sep-2002	ND	ND	ND	NA	**12**	2.2	ND	**7.2**	ND	ND	ND	ND	3	0.7 J	ND	**3.4**	NA
Mar-2003	ND	ND	ND	NA	**12**	0.8 J	ND	**6.3**	ND	ND	ND	ND	2.8	ND	ND	**2.4**	NA
Oct-2003	ND	ND	1.6	NA	**8.5**	2	ND	3.8	ND	ND	ND	ND	1.9	ND	ND	1.1	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15B***															
Apr-2004	ND	ND	ND	NA	2.6	ND	ND	2.5	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	3.6	ND	ND	2.8	ND	ND	ND	ND	1.1	ND	ND	0.8 J	NA
Apr-2005	ND	ND	ND	ND	**12**	0.6 J	ND	4.9	ND	ND	ND	ND	2.4	ND	ND	**2.6**	NA
Oct-2005	ND	ND	ND	ND	2.2	ND	ND	3	ND	ND	ND	ND	1	ND	ND	0.9 J	NA
Mar-2006	ND	ND	ND	ND	**15**	0.8 J	ND	**6.8**	ND	ND	ND	ND	2.8	0.5 J	ND	**3.3**	NA
Sep-2006	ND	ND	ND	ND	**18.7**	0.6 J	ND	**5.8**	ND	ND	ND	ND	2.4	ND	ND	**3.9**	NA
Mar-2007	ND	ND	ND	ND	**13.3 R**	0.7 J	ND	**5.3**	ND	ND	ND	ND	2.4	ND	ND	**2.3**	NA
May-2007	ND	ND	ND	ND	**11.4**	0.7 J	ND	**5.7**	ND	ND	ND	ND	2.2	ND	ND	**2.3**	NA
Sep-2007	ND	ND	ND	ND	**12.1**	1.1	ND	4.3	ND	ND	ND	ND	2.2	ND	ND	1.9	NA
Mar-2008	ND	ND	ND	ND	**15.4**	1.3	ND	**6.6**	ND	ND	ND	ND	3.1	0.5 J	ND	ND	NA
Sep-2008	ND	ND	ND	ND	**17.6**	3.7	ND	**7.8**	ND	ND	ND	ND	3.4	4.5	ND	**3.7**	NA
Mar-2009	ND	ND	ND	ND	**14.6**	1.3	ND	**5.6**	ND	ND	ND	ND	2.8	ND	ND	**2.9**	NA
Oct-2009	ND	ND	ND	ND	**12.7**	1.1	ND	**5.3**	ND	ND	ND	ND	2.5	ND	ND	**3.2**	NA
Mar-2010	ND	ND	ND	ND	**12.5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**3**	NA
Oct-2010	ND	ND	ND	ND	**5.3**	0.8 J	ND	3.3	ND	ND	ND	ND	ND	ND	ND	1.5	NA
Apr-2011	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	NA
Sep-2011	ND	ND	ND	ND	**5.3**	0.8 J	ND	3.9	ND	ND	ND	ND	1.5	ND	ND	**2.1**	NA
Mar-2012	ND	ND	ND	ND	**5.2**	1 J	ND	4.3	ND	ND	ND	ND	1.9	ND	ND	2	NA
Sep-2012	ND	ND	ND	ND	3.86	ND	ND	3.35	ND	ND	ND	ND	1.39	ND	ND	1.08	ND
Mar-2013	ND	ND	ND	ND	2.65	0.43 J	ND	1.57	ND	ND	ND	ND	0.8 J	ND	ND	0.66 J	ND
Oct-2013	ND	ND	0.48 J	ND	**5.49**	1.52	ND	3.65	ND	ND	ND	ND	2.01	ND	ND	1.75	2
Mar-2014	ND	ND	ND	ND	3.24	0.8 J	ND	3.53	ND	ND	ND	ND	1.34	ND	ND	1.05	0.8 J

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15B***															
Oct-2014	ND	ND	ND	ND	ND	ND	ND	1.01	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.97	0.33 J	ND	1.76	ND	ND	ND	ND	0.71 J	ND	ND	0.55 J	ND
Nov-2015	ND	ND	ND	ND	1.68	0.46 J	ND	2.25	ND	ND	ND	ND	0.88 J	ND	ND	0.46 J	0.46 J
May-2016	ND	ND	ND	ND	1.6	0.2 J	ND	1.8	ND	ND	ND	ND	0.7 J	ND	ND	0.5 J	0.2 J
Oct-2016	ND	ND	ND	ND	1.6	0.2 J	ND	2	ND	ND	ND	ND	0.7 J	0.1 J	ND	0.6 J	0.2 J
May-2017	ND	ND	ND	ND	1.4	0.1 J	ND	1.9	ND	ND	ND	ND	0.6 J	ND	ND	0.5 J	0.1 J
Oct-2017	ND	ND	ND	ND	1.1	0.2 J	ND	1.8	ND	ND	ND	ND	0.6 J	ND	ND	0.4 J	0.2 J
May-2018	ND	ND	ND	ND	1.9 B	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	1.6 CH	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	1	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.641 JB	ND	ND	1.02	ND	ND	ND	ND	0.254 J	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-16***											
Nov-1993	ND	ND	0.2	31.5	18.3	0.4	0.3	3.7	20.4	74.6	60	37.9
Apr-1994	ND	ND	0.1	ND	14.9	ND	ND	3.6	311	64.9	128	32.56
Aug-1994	ND	ND	0.2	ND	13.6	0.3	ND	3.4	252	59.1	163	25.6
Sep-1994	ND	ND	ND	ND	11.2	0.3	ND	3.7	233	53.5	93	22.5
Nov-1994	ND	ND	0.2	ND	19.5	ND	ND	3.6	326	87.3	148	27.5
Apr-1995	ND	ND	ND	ND	16.6	0.3	ND	3.6	298	74.9	ND	27.7
Apr-1997	ND	ND	ND	ND	18	0.05	ND	NA	NA	78	172	52
Oct-1997	ND	ND	0.49	ND	14.5	ND	ND	5.62	285	60.4	128	47
Apr-1998	ND	ND	ND	ND	14.2	0.114	ND	5.79	229	68.3	120	36
Apr-1999	ND	ND	0.25	ND	14.7	ND	ND	3.4	287	67.1	150	42
Oct-1999	ND	ND	0.12	ND	18	ND	ND	3.52	284	75.1	141	42
Apr-2000	ND	ND	ND	ND	22.2	ND	ND	3.6	315	96.7	211	66
Oct-2000	ND	NA	ND	ND	14.9	ND	ND	3.64	326	80	162	56.7
Apr-2001	ND	NA	ND	ND	16	ND	ND	NA	NA	74	148	54
Sep-2001	ND	ND	0.24	ND	16.4	1.28	ND	3.47	330	72.7	146	46.4
Mar-2002	ND	ND	ND	ND	16	ND	ND	3.8	308	75.7	155	54.1
Sep-2002	ND	ND	ND	ND	20.2	ND	ND	3.8	364	97.7	176	58.9
Mar-2003	ND	ND	ND	ND	25.8	ND	ND	3.7	413	90.4	215	71.6
Oct-2003	ND	ND	ND	ND	12.8	0.146	ND	4.2	295	69.1	97	41.3
Apr-2004	ND	ND	ND	ND	15.8	ND	ND	3.7	395	91.5	149	53.2
Oct-2004	ND	ND	ND	ND	11.2	0.111	ND	3.7	246	63.2	112	38.7
Apr-2005	ND	ND	ND	ND	13.1	0.13	ND	3.7	295	58.4	133	36.6
Oct-2005	ND	ND	0.21	ND	6.61	0.13	ND	3.4	116.1	26.4	84	20.8
Mar-2006	5.1	5.1	ND	ND	6.63	0.16	ND	5.1	83.1	25.4	61	18.1
Sep-2006	4.1	4.1	ND	ND	6.41	0.16	ND	5.1	83.1	22.8	68	20
Mar-2007	2.8	2.8	ND	ND	9.81	0.14	ND	4.7	114.8	43.4	109	30.4
Sep-2007	3.1	3.1	0.3	ND	12.5	ND	ND	5.9	86.2	24.1	57	21.1
Mar-2008	5.2	5.2	ND	ND	5.76	0.16	ND	5.2	72.8	15.6	55	15.4
Sep-2008	4.7	4.7	ND	ND	6.5	0.13	ND	4.8	65.4	20.7	69	19.8
Mar-2009	5.5	5.5	ND	ND	6.25	0.12	ND	4.4	89.3	19.1	65	17.4
Oct-2009	5	5	ND	ND	5.77	0.11	ND	4.6	66	16.6	54	19.9
Apr-2010	5	5	ND	ND	7.36	0.1	ND	4.1	734	25.8	102	22.8
Oct-2010	2.8	2.8	ND	ND	8.61	0.08	ND	4.6	90.7	30.1	77	25.5
Apr-2011	5.5	5.5	ND	ND	6	0.13	ND	4.7	88.4	15.1	61	16.9
Sep-2011	6.1	6.1	0.27	ND	5.61	0.13	ND	4.8	57.6	11.9	40	15
Mar-2012	5.3	5.3	ND	ND	8.01	0.11	ND	4.5	111.4	25	106	27.1
Sep-2012	6.08	6.08	ND	ND	5.34	0.115	ND	4.6	68.9	11.1	55	14.7

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-16***											
Mar-2013	6.72	6.72	*ND*	*ND*	7.78	0.122	*ND*	3.9	78.7	22.4	78	20.6
Oct-2013	6.92	6.92	*ND*	*ND*	5.55	0.122	*ND*	3.9	69.6	12.2	36	17.4
Mar-2014	7.68	7.68	*ND*	21	5.95	0.114	*ND*	5.6	73.3	14.3	44	17.6
Oct-2014	2.2	2.2	*ND*	*6 J*	6.01	0.134	*ND*	5.1	57.4	13.4	29	16.9
Apr-2015	4.64	4.64	*ND*	*ND*	9.61	0.0957	*ND*	4.1	115.7	36.5	76	31.4
Nov-2015	3.48	3.48	*ND*	*ND*	9.77	0.0997	*ND*	5.2	124.9	35	77	31.9
May-2016	4.44	4.44	*ND*	*ND*	7.85	0.104	*ND*	5.3	157.7	23.8	59	23.8
Oct-2016	4.56	4.56	*ND*	*ND*	6.98	*NA*	*NA*	5.6	98.3	16.9	78	18.5
May-2017	4.52	4.52	*ND*	*ND*	6.67	0.126	*ND*	5.2	102.4	15.5	38	20.3
Oct-2017	4.64	4.64	*ND*	*ND*	7	0.127	*ND*	5.5	119.3	18.8	68	21.4
May-2018	*4 J*	*ND*	*ND*	*ND*	10.4	*ND*	*0.0062 J*	4.8	248	40.2	114	37.4
Nov-2018	*ND*	*ND*	*ND*	*5.7 J*	23.4	*0.044 J*	*ND*	4.05	275.7	87.6	193	67.2
May-2019	*ND*	*NA*	*ND*	*ND*	24.8	*ND*	*ND*	4.1	227.9	84.4	153	66.7
Oct-2019	*ND*	*NA*	*ND*	*8.2 J*	23.4	*0.045 J*	*ND*	4.07	326.3	158	224	74.5
May-2020	*ND*	*NA*	*ND*	*9.1 J*	24	*ND*	*ND*	3.82	294.7	92.5	182	75.5
Oct-2020	*ND*	*NA*	*ND*	*9.3 J*	22.2	*0.055 J*	*ND*	3.94	283.7	95.2	182	72.4
Apr-2021	*ND*	*NA*	*ND*	*6.1 J*	25.7	*0.026 J*	*ND*	3.99	348.7	81.5 MH	190	72.2
Oct-2021	*ND*	*NA*	*ND*	*6.1 J*	23.6	*ND*	*ND*	4.05	396.7	99.1	195	71.5
May-2022	*ND*	*NA*	*ND*	*ND*	21.6	*ND*	*ND*	3.96	363.4	129	219	77.3 N3
Oct-2022	*ND*	*NA*	*ND*	*8.4 J*	25	*ND*	*ND*	4.12	353.1	105	204	70.7 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-16*													
Nov-1993	NA	ND	ND	NA	ND	4.8	NA	0.008	NA	ND	1.2	1.3	ND	6.3	NA
Apr-1994	NA	ND	ND	NA	ND	2.98	NA	ND	NA	ND	0.46	0.14	ND	6.1	NA
Aug-1994	NA	ND	ND	NA	ND	3	NA	ND	NA	ND	0.21	0.04	ND	4.4	NA
Sep-1994	NA	ND	ND	NA	ND	2.1	NA	ND	NA	ND	0.86	0.08	ND	4.2	NA
Nov-1994	NA	ND	ND	NA	ND	3.1	NA	ND	NA	ND	ND	1	ND	4.8	NA
Apr-1995	ND	ND	0.8	ND	ND	2.2	NA	ND	ND	ND	0.11	0.03	ND	5.4	NA
Oct-1996	ND	ND	0.013	ND	ND	4.1	4.2	ND	ND	ND	0.23	0.21	ND	4	4.2
Apr-1997	ND	ND	0.013	ND	ND	7	6.7	ND	0.18	ND	8.3	7.4	ND	6.9	6.6
Oct-1997	ND	ND	0.012	ND	ND	6.43	5.58	ND	0.163	ND	9.98	7.88	ND	6.56	5.64
Apr-1998	ND	ND	0.01	ND	ND	5.54	5.49	ND	0.13	ND	8.98	2.65	ND	5.5	5.42
Apr-1999	ND	ND	0.014	ND	ND	6.45	6.64	ND	0.143	ND	1.99	0.075	ND	6.2	6.29
Oct-1999	ND	ND	0.01	ND	ND	5.53	5	ND	0.125	ND	0.589	0.077	ND	5.55	5.01
Apr-2000	ND	ND	0.017	ND	ND	9.8	9.27	ND	0.236	ND	0.881	0.078	ND	10	9.46
Oct-2000	ND	ND	0.014	ND	ND	8.67	8.03	ND	0.2	ND	1.02	0.125	ND	8.51	7.91
Apr-2001	ND	ND	0.016	ND	ND	8.09	NA	ND	0.187	ND	2.89	NA	ND	8.12	NA
Sep-2001	ND	ND	0.013	ND	ND	7.02	6.93	ND	0.163	ND	1.6	0.051	ND	7.03	7.06
Mar-2002	ND	ND	0.016	ND	ND	8.37	8.21	ND	0.183	0.01	0.337	0.076	ND	8.05	8.09
Sep-2002	ND	ND	0.021	ND	ND	9.1	8.56	ND	0.199	ND	5.45	0.1	ND	8.79	8.64
Mar-2003	ND	ND	0.023	ND	ND	10.8	10.6	ND	0.256	ND	0.816	0.126	ND	10.8	10.6
Oct-2003	ND	ND	0.015	ND	ND	6.46	6.24	ND	0.142	ND	6.58	0.185	0.003	6.12	6.16
Apr-2004	ND	0.002	0.017	ND	ND	8.41	8.92	ND	0.182	ND	1.29	0.081	ND	7.82	8.29

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-16***													
Oct-2004	*ND*	*ND*	0.014	*ND*	*ND*	6.13	5.54	*ND*	0.14	*ND*	1.48	0.267	*ND*	5.69	5.18
Apr-2005	*ND*	*ND*	0.014	*ND*	*ND*	5.83	5.59	*ND*	0.134	*ND*	1.53	0.203	*ND*	5.36	5.11
Oct-2005	*ND*	*ND*	0.016	*ND*	*ND*	4.03	3.17	0.022	0.08	*ND*	10.7	0.421	0.003	2.61	1.99
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	3.87	4.26	*ND*	0.045	*ND*	0.706	*ND*	*ND*	2.04	2.43
Sep-2006	*ND*	*ND*	0.011	*ND*	*ND*	4.91	4.79	*ND*	0.044	*ND*	0.6	*ND*	*ND*	1.86	2.59
Mar-2007	*ND*	*ND*	0.016	*ND*	*ND*	6.47	5.73	*ND*	0.078	*ND*	2.12	0.066	*ND*	3.46	3.16
Sep-2007	*ND*	*ND*	0.012	*ND*	*ND*	4.49	4.16	*ND*	0.053	*ND*	0.535	0.066	*ND*	2.4	2.08
Mar-2008	*ND*	*ND*	0.014	*ND*	*ND*	3.88	3.75	*ND*	0.028	*ND*	0.721	*ND*	*ND*	1.39	1.52
Sep-2008	*ND*	*ND*	0.015	*ND*	*ND*	4.28	4.02	*ND*	0.048	*ND*	1.09	*ND*	*ND*	2.21	1.89
Mar-2009	*ND*	*ND*	0.013	*ND*	*ND*	4.18	4.09	*ND*	0.037	*ND*	0.806	0.101	*ND*	1.71	1.8
Oct-2009	*ND*	*ND*	0.015	*ND*	*ND*	4.49	4.18	*ND*	0.045	*ND*	1.23	0.232	*ND*	2.12	2.13
Apr-2010	*ND*	*ND*	0.015	*ND*	*ND*	5.49	5.41	*ND*	0.046	*ND*	1.86	0.184	*ND*	2.22	2.34
Oct-2010	*ND*	*ND*	0.01	*ND*	*ND*	5.59	5.83	*ND*	0.058	*ND*	0.998	0.853	*ND*	2.8	2.93
Apr-2011	*ND*	*ND*	0.017	*ND*	*ND*	4.16	3.84	*ND*	0.031	*ND*	1.96	0.487	*ND*	1.57	1.28
Sep-2011	*ND*	*ND*	0.019	*ND*	*ND*	3.93	3.47	*ND*	0.023	*ND*	2.41	0.192	*ND*	1.27	1.03
Mar-2012	*ND*	*ND*	0.019	*ND*	*ND*	5.79	5.15	*ND*	0.061	*ND*	1.99	0.475	*ND*	3.07	2.41
Sep-2012	*ND*	*ND*	0.0168	*0.000142 J*	*ND*	3.82	3.97	*0.0066 J*	0.0228	*0.0012 J*	1.94	0.593	*0.000893 J*	1.26	1.21
Mar-2013	*ND*	*ND*	0.0183	*0.000163 J*	*ND*	4.91	4.69	*0.0075 J*	0.0469	*0.0021 J*	1.97	0.542	*0.002 J*	2.03	1.83
Oct-2013	*ND*	*ND*	0.0174	*0.000136 J*	*ND*	4	3.89	*0.0047 J*	0.0341	*ND*	1.38	1.2	*0.000314 J*	1.81	1.77
Mar-2014	*0.000507 J*	*0.0001 J*	0.0158	*ND*	*ND*	4.23	3.97	*0.0034 J*	0.0311	*0.0027 J*	1.1	0.765	*ND*	1.71	1.5
Oct-2014	*0.000763 J*	*0.000465 J*	0.0185	*0.000205 J*	*ND*	4.29	4.34	*0.0032 J*	0.0265	*0.000607 J*	1.52	0.604	*ND*	1.51	1.53
Apr-2015	*0.000937 J*	*ND*	0.0205	*0.000285 J*	*ND*	6.36	6.7	*0.0021 J*	0.0749	*0.000363 J*	1.21	0.91	*ND*	3.77	3.91
Nov-2015	*0.000322 J*	*ND*	0.0214	*0.000315 J*	*ND*	6.8	6.75	*0.0024 J*	0.0721	*0.00064 J*	0.889	0.43	*0.000521 J*	3.61	3.38
May-2016	*ND*	*ND*	0.0201	*0.00025 J*	*ND*	5.29	5.21	0.0045	0.0439	*0.0007 J*	1.27	0.546	*0.00032 J*	2.58	2.42

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-16***													
Oct-2016	*ND*	*ND*	0.0207	*0.00022 J*	*ND*	4.29	4.92	0.0077	0.0309	*0.00059 J*	2.1	*1.07 J+*	*0.00025 J*	1.89	2.19
May-2017	*ND*	*ND*	0.0195	*0.0002 J*	*ND*	4.6	5.47	*0.003 J*	0.0319	*ND*	0.769	0.473	*ND*	2.13	2.01
Oct-2017	*ND*	*ND*	0.0184	*0.00025 J*	*ND*	4.79	4.7	0.0179	0.0343	*ND*	0.767	0.519	*ND*	2.29	2.3
May-2018	*0.000091 J*	*ND*	0.019	0.00033	*0.00007 J*	7.2	6.6	*0.0026 J*	0.0685	*0.0013 J*	1.3	0.14	*0.00021 J*	4.7	4.2
Nov-2018	*ND*	*ND*	0.022	*0.00058 J*	*0.000038 J*	11.5	11.4	0.024	0.18	*0.001 J*	1.3	0.81	*0.000064 J*	9.4	9.3
May-2019	*ND*	*ND*	0.028	0.00035	*ND*	11.9	11.9	0.0073	0.19	*ND*	3.7	0.9	*ND*	9	9
Oct-2019	*0.0001 J*	*ND*	0.028	0.00046	*0.00013 J*	13	12.2	*0.0053 J*	0.21	*ND*	2.7	1	*ND*	10.2	9.3
May-2020	*0.000091 J*	*ND*	0.027	0.00057	*ND*	13.1	12.4	0.0075	0.2	0.0025	3.6	0.67	*ND*	10.4	9.8
Oct-2020	*ND*	*ND*	0.028	*0.00078 J*	*ND*	12.3	11.7	*0.011 J*	0.22	*ND*	2.3	0.68	*ND*	10.1	9.5
Apr-2021	*ND*	*ND*	0.028	*0.0009 J*	*ND*	12.3	12.1	*0.0034 J*	0.21	*ND*	4.3	1.2	*ND*	10.1	10
Oct-2021	*0.000057 JB*	*ND*	0.027	0.00058	*ND*	12.2	13.1	0.0049	0.24	*ND*	3	0.95	*0.000031 J*	10	10.8
May-2022	*ND*	*ND*	0.028	0.00073	*ND*	12.8	13.5	0.0062	0.24	*ND*	6.3	0.89	*ND*	11	11.5
Oct-2022	*ND*	*ND*	0.025	0.00078	*ND*	12.2	12	0.0046	0.23	*ND*	0.46	0.2	*ND*	9.7	9.6

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-16*												
Nov-1993	1.4	NA	ND	NA	6.7	NA	ND	NA	21.8	NA	NA	NA	0.42
Apr-1994	0.8	NA	ND	NA	4.22	NA	ND	NA	11.37	NA	NA	NA	0.28
Aug-1994	0.68	NA	ND	NA	4.7	NA	ND	NA	8.8	NA	NA	NA	0.26
Sep-1994	0.66	NA	ND	NA	3.6	NA	ND	NA	8.7	NA	NA	NA	0.24
Nov-1994	0.97	NA	ND	NA	5.5	NA	ND	NA	10.7	NA	NA	NA	0.24
Apr-1995	0.08	NA	ND	0.06	4.9	NA	ND	0.01	9.5	NA	ND	ND	0.28
Oct-1996	0.56	0.57	NA	0.085	ND	ND	ND	ND	8.7	8.5	ND	ND	0.2
Apr-1997	1.2	1.1	ND	0.31	5.3	5.1	ND	ND	14	14	ND	ND	0.29
Oct-1997	1.04	0.91	NA	0.157	4.16	3.04	ND	ND	13.3	11.4	ND	ND	0.267
Apr-1998	0.804	0.811	NA	0.125	5.25	5.07	ND	ND	10.7	10.6	ND	ND	0.337
Apr-1999	0.858	0.871	NA	0.142	4.23	4.05	ND	ND	11.8	12.1	ND	ND	0.286
Oct-1999	0.751	0.677	NA	0.116	4.88	3.62	ND	ND	10.4	9.32	ND	ND	0.242
Apr-2000	1.42	1.34	NA	0.222	5.86	6.21	ND	ND	20.2	19.2	ND	ND	0.454
Oct-2000	1.2	1.11	NA	0.188	6	5.56	ND	ND	16.4	15.1	ND	ND	0.403
Apr-2001	1.12	NA	NA	0.183	6.01	NA	ND	ND	15.6	NA	ND	ND	0.365
Sep-2001	0.962	0.963	NA	0.161	5.66	5.25	ND	ND	14.6	13.3	ND	ND	0.313
Mar-2002	1.09	1.1	NA	0.173	7.03	6.6	ND	ND	16.4	15.4	ND	ND	0.34
Sep-2002	1.19	1.17	NA	0.198	5.89	6.09	ND	ND	18.1	17.9	ND	ND	0.382
Mar-2003	1.52	1.49	NA	0.251	6.94	7.24	ND	ND	21.5	20.9	ND	ND	0.491
Oct-2003	0.84	0.841	NA	0.143	5.97	5.21	ND	ND	12.5	11.8	ND	ND	0.314
Apr-2004	1.09	1.16	ND	0.188	6.55	5.88	ND	ND	15	16.3	ND	ND	0.322
Oct-2004	0.823	0.756	ND	0.141	5.11	4.74	ND	ND	11	9.79	ND	ND	0.241

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-16***												
Apr-2005	0.785	0.749	*ND*	0.132	4.43	4.01	*ND*	*ND*	10.1	9.66	*ND*	*ND*	0.225
Oct-2005	0.466	0.338	*ND*	0.072	2.51	1.93	*ND*	*ND*	5.64	3.89	*ND*	*ND*	0.132
Mar-2006	0.26	0.308	*ND*	0.053	1.84	2.04	*ND*	*ND*	4.3	4.88	*ND*	*ND*	0.058
Sep-2006	0.241	0.358	*ND*	0.048	1.92	2.4	*ND*	*ND*	4.15	5.25	*ND*	*ND*	0.123
Mar-2007	0.458	0.419	*ND*	0.082	2.97	2.71	*ND*	*ND*	6.86	6.32	*ND*	*ND*	0.154
Sep-2007	0.316	0.267	*ND*	0.054	2.02	1.7	*ND*	*ND*	5.22	4.59	*ND*	*ND*	0.1
Mar-2008	0.158	0.174	*ND*	0.034	1.64	1.6	*ND*	*ND*	3.19	3.47	*ND*	*ND*	0.067
Sep-2008	0.259	0.22	*ND*	0.057	1.82	1.63	*ND*	*ND*	4.49	3.98	*ND*	*ND*	0.091
Mar-2009	0.204	0.222	*ND*	0.043	1.77	1.74	*ND*	*ND*	3.97	4.18	*ND*	*ND*	0.075
Oct-2009	0.25	0.254	*ND*	0.052	1.79	1.63	*ND*	*ND*	4.5	4.42	*ND*	*ND*	0.088
Apr-2010	0.258	0.279	*ND*	0.053	2	1.99	*ND*	*ND*	4.88	5.04	*ND*	*ND*	0.09
Oct-2010	0.326	0.343	*ND*	0.061	2.15	2.2	*ND*	*ND*	5.88	6.18	*ND*	*ND*	0.092
Apr-2011	0.174	0.135	*ND*	0.039	1.49	1.16	*ND*	*ND*	3.55	3.06	*ND*	*ND*	0.06
Sep-2011	0.118	0.096	*ND*	0.038	1.69	1.04	*ND*	*ND*	3.13	2.87	*ND*	*ND*	0.055
Mar-2012	0.367	0.275	*ND*	0.068	2.46	1.94	*ND*	*ND*	6.41	5.25	*ND*	*ND*	0.104
Sep-2012	0.121	0.12	*ND*	0.0333	1.34	1.27	*ND*	*ND*	3.06	3.02	*0.0015 J*	*ND*	0.0492
Mar-2013	0.272	0.224	*0.000048 J*	0.0554	1.73	1.52	*ND*	*ND*	4.33	3.89	*ND*	*ND*	0.0989
Oct-2013	0.177	0.174	*ND*	0.0424	1.72	1.54	*ND*	*ND*	3.97	3.86	*0.000104 J*	*0.0028 J*	0.0741
Mar-2014	0.181	0.154	*ND*	0.0407	1.55	1.33	*ND*	*ND*	3.59	3.27	*ND*	*0.000622 J*	0.0629
Oct-2014	0.152	0.155	*ND*	0.0353	1.59	1.47	*ND*	*ND*	3.62	3.78	*ND*	*0.0013 J*	0.063
Apr-2015	0.435	0.458	*ND*	0.0863	2.79	2.84	*0.000895 J*	*ND*	7.45	7.8	*ND*	*ND*	0.139
Nov-2015	0.407	0.378	*ND*	0.0833	2.72	2.51	*ND*	*ND*	7.24	6.83	*0.00011 J*	*0.000842 J*	0.133
May-2016	0.258	0.257	*ND*	0.0549	2.19	1.92	*ND*	*ND*	5.36	4.96	*ND*	0.0012	0.0855
Oct-2016	0.191	0.223	*ND*	0.0439	1.62	1.86	*ND*	*ND*	4.42	4.9	*ND*	0.0011	0.0652

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-16***												
May-2017	0.176	0.169	*ND*	0.048	1.72	1.75	*ND*	*ND*	4.39	4.28	*ND*	*0.00034 J*	0.0754
Oct-2017	0.19	0.196	*ND*	0.0503	1.84	1.87	*ND*	*ND*	4.63	4.67	*ND*	*0.00037 J*	0.0795
May-2018	0.34	0.33	*ND*	0.099	*3.3 J*	*2.6 J*	*0.000095 J*	*ND*	9.4	7.8	*ND*	0.0036	0.17
Nov-2018	1.2	0.93	*ND*	0.21	6	6	*0.00012 J*	*ND*	18.5	18.6	*ND*	0.0056	0.34
May-2019	1.3	1.2	*ND*	0.21	5.9	5.4	*ND*	*ND*	17.6	17.2	*ND*	*ND*	0.34
Oct-2019	1.5	1.3	*ND*	0.22	6	5.9	*ND*	*ND*	19.3	18.6	*ND*	0.0068	0.34
May-2020	1.3	1.3	*ND*	0.21	6.4	6.4	*ND*	*ND*	19.6	18.8	*ND*	*ND*	0.35
Oct-2020	1.3	1.2	*ND*	0.23	6.1	6	*ND*	*ND*	19.6	18.1	*ND*	*0.00092 J*	0.37
Apr-2021	1.4	1.4	*ND*	0.24	6.3	6.2	*0.0055 J*	*ND*	19.6	19.5	*ND*	*ND*	0.35
Oct-2021	1.4	1.54	*ND*	0.24	6.2	6.9	*ND*	*ND*	19.6	21.5	*0.000044 J*	*ND*	0.36
May-2022	1.5	1.5	*ND*	0.25	6.7	6.5	*ND*	*ND*	20.8	20.6	*ND*	*ND*	0.39
Oct-2022	1.3	1.3	*ND*	0.24	6.6	5.9	*ND*	*ND*	20.2	18.4	*ND*	*ND*	0.36

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	33	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.3 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.4 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-16***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-16***															
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-16***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16***															
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.1 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-17***											
Nov-1993	62	62	0.2	24.8	6.7	ND	ND	5.94	172	15.4	45	63.1
Apr-1994	64	64	0.1	62.3	6.1	ND	ND	5.96	183	18.9	103	58.75
Apr-1995	58.7	58.7	ND	74.7	7.1	ND	ND	6	186	22.5	88	43.9
Apr-1997	ND	20	ND	ND	5	0.04	ND	NA	NA	14	88	15
Oct-1997	35	35	0.24	ND	4.39	ND	ND	6.48	170.5	14.3	107	46
Apr-1998	32	32	0.26	ND	4.22	ND	ND	7.6	164.7	19	64	39
Apr-1999	28	28	0.82	16	5.33	ND	ND	5.61	143.1	19.5	110	48
Oct-1999	38	38	0.08	ND	7.13	ND	ND	5.68	132	17.1	140	32
Apr-2000	31	31	ND	ND	3.42	ND	ND	6.01	74	29	117	48
Oct-2000	23	NA	0.22	56	6.06	ND	ND	5.88	137.9	27.3	87	37.8
Apr-2001	29	NA	ND	10	6	ND	ND	NA	NA	28.4	108	45
Sep-2001	26	26	ND	ND	8.69	ND	ND	5.74	165	34.4	105	36.7
Mar-2002	25	25	ND	38	4.51	ND	ND	5.8	68.5	27.1	122	37
Sep-2002	17	17	ND	ND	5.88	ND	ND	5.7	167.5	43.5	108	36.2
Mar-2003	22	22	ND	ND	15.2	ND	ND	5.8	157.9	33.9	110	42
Oct-2003	27	27	ND	ND	5.19	ND	ND	5.6	164.7	34.6	106	46.2
Apr-2004	31	31	ND	27	5.06	ND	ND	5.6	151.5	28.1	106	51.8
Oct-2004	45	45	ND	ND	5.21	0.08	ND	5.6	164.6	30.7	123	51.7
Apr-2005	33	33	ND	ND	5.68	ND	ND	5.7	127.4	26.3	113	41.8
Oct-2005	29	29	ND	ND	1.03	ND	ND	5.5	296	2.32	92	35.2
Mar-2006	27	27	ND	ND	5.6	ND	ND	7.7	104.8	21.9	105	26.3
Sep-2006	13	13	ND	ND	5.22	ND	ND	7.7	104.8	20.3	210	33.3
Mar-2007	8.2	8.2	0.6	ND	5.44	ND	ND	5.5	107.9	20	58	17.6
Sep-2007	6.1	6.1	ND	82	9.89	ND	ND	6.1	104.6	20.5	87	14
Mar-2008	13	13	0.25	ND	10.1	ND	ND	5.3	107.2	33.7	39	17.2
Sep-2008	13	13	ND	36	9.93	ND	ND	5.3	101.1	15	67	18
Mar-2009	10	10	ND	ND	5.52	ND	ND	5	113.4	31.4	85	19.4
Oct-2009	7	7	ND	ND	5.35	ND	ND	5.1	97.3	23.2	62	12.7
Apr-2010	6.2	6.2	ND	ND	5.67	ND	ND	4.8	119.7	25.7	133	13.6
Oct-2010	14	14	ND	ND	5.7	ND	ND	5.2	89.3	24.9	73	24.3
Apr-2011	106	106	ND	ND	5.38	ND	ND	5.1	103.4	22.5	70	16.7
Sep-2011	9.2	9.2	ND	ND	5.65	ND	ND	5.1	95.5	20.7	59	14.7
Mar-2012	15	15	ND	ND	5.53	ND	ND	5	111.4	26.6	72	27.4
Sep-2012	8.44	8.44	ND	ND	5.83	ND	ND	4.5	100.4	24.1	95	16.6
Mar-2013	8.72	8.72	ND	10.2	5.86	ND	ND	5.3	113	23	83	11.2
Oct-2013	14	14	ND	10.3	5.78	ND	ND	4.1	110.6	28.6	77	24.3
Mar-2014	6.8	6.8	ND	19	5.56	ND	ND	5.5	108.5	27.1	58	13.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-17***										
Oct-2014	2.2	2.2	ND	33	5.75	ND	ND	5.3	100.3	26.5	108	22.3
Apr-2015	13.2	13.2	ND	13	5.52	ND	ND	4.5	102.1	28.7	71	21.1
Nov-2015	5.56	5.56	ND	ND	5.95	0.0536	ND	5.5	122.9	25.5	53	14.9
May-2016	12.6	12.6	0.274	7 J	5.87	0.0852	ND	5.6	182.9	28.9	81	24.1
Oct-2016	18.3	18.3	0.185 J	45	5.86	NA	NA	5.5	190.5	34.1	140	29.6
May-2017	2.6	2.6	ND	ND	5.56	0.076	ND	5.2	162.4	30.6	64	17
Oct-2017	ND	ND	0.0838 J	ND	5.58	ND	ND	5.1	160.4	34.5	96	17.3
May-2018	ND	ND	ND	ND	5.9	ND	0.024	4.4	191.5	62.5	139	38.2
Nov-2018	2 JB	ND	ND	ND	5.9	0.038 J	ND	4.63	169.6	63.6	95	39.3
May-2019	ND	NA	ND	ND	4.8	ND	ND	5.06	128.2	50.6	82	34.2
Oct-2019	ND	NA	ND	ND	5.4	0.047 J	ND	5.05	164	52.5	108	30
May-2020	1 J	NA	ND	ND	5.7	ND	ND	4.69	143.9	45.2	68	26.9
Oct-2020	8 J	NA	ND	ND	5.4	ND	0.0064 J	4.79	143.4	43.3	75	25.4
Apr-2021	2 J3c	NA	ND	38.6	5.7	0.025 J	ND	5.29	166.1	36.9	87	25.9
Oct-2021	6 J5c	NA	ND	ND	5	ND	ND	5.45	190.6	36.8	65	20.9
May-2022	10	NA	ND	ND	4.7	ND	ND	4.97	160.2	40.6	73	22.9 N3
Oct-2022	6 J4c	NA	ND	10.7 J	7.6	ND	ND	4.99	155.9	34.9	73	23.5 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17***													
Nov-1993	*NA*	*ND*	*ND*	*NA*	*ND*	22.5	*NA*	0.012	*NA*	*ND*	10	6.7	*ND*	1.7	*NA*
Apr-1994	*NA*	*ND*	*ND*	*NA*	*ND*	20.4	*NA*	*ND*	*NA*	*ND*	8.53	3.14	*ND*	1.89	*NA*
Apr-1995	*ND*	*ND*	1	*ND*	*ND*	14.6	*NA*	*ND*	*ND*	*ND*	7.6	7.6	*ND*	1.8	*NA*
Oct-1996	*ND*	*ND*	0.035	*ND*	*ND*	8.8	8.4	*ND*	*ND*	*ND*	6	8	*ND*	1.4	1.3
Apr-1997	*ND*	*ND*	0.016	*ND*	*ND*	8.4	8.7	*ND*	*ND*	*ND*	4.2	2.1	0.003	1.1	1.1
Oct-1997	*ND*	*ND*	0.053	*ND*	*ND*	12.2	10.9	0.014	0.019	0.053	14.3	7.52	*ND*	1.9	1.55
Apr-1998	*ND*	*ND*	0.116	*ND*	*ND*	11.5	2.12	0.031	0.018	0.033	23.9	4.46	*ND*	2.45	0.453
Apr-1999	*ND*	*ND*	0.179	*ND*	*ND*	13.7	10.1	0.054	0.026	0.042	38.5	7.9	*ND*	3.41	1.65
Oct-1999	*ND*	*ND*	0.025	*ND*	*ND*	6.94	6.54	*ND*	*ND*	0.011	6.29	1.08	*ND*	1.51	1.38
Apr-2000	*ND*	*ND*	0.034	*ND*	*ND*	15.9	15	*ND*	0.012	0.012	11.6	4.76	*ND*	2.04	1.89
Oct-2000	*ND*	*ND*	0.031	*ND*	*ND*	12	9.46	*ND*	0.011	0.018	17.2	6.64	*ND*	1.91	1.6
Apr-2001	*ND*	*ND*	0.084	*ND*	*ND*	14	*NA*	0.02	0.019	0.02	35.7	*NA*	0.004	2.32	*NA*
Sep-2001	*ND*	*ND*	0.04	*ND*	*ND*	11.5	10.4	0.011	0.011	0.012	24.1	6.29	0.003	1.91	1.61
Mar-2002	*ND*	*ND*	0.037	*ND*	*ND*	11.4	10.1	0.01	0.018	0.011	16.2	5.94	*ND*	2.08	1.85
Sep-2002	*ND*	*ND*	0.044	*ND*	*ND*	11.2	10.6	*ND*	0.027	0.014	22.6	15	0.003	1.98	1.8
Mar-2003	*ND*	*ND*	0.045	*ND*	*ND*	13.5	11.8	*ND*	0.05	0.01	47.7	3.79	0.002	2.02	1.85
Oct-2003	*ND*	0.005	0.05	*ND*	*ND*	14.9	12	0.016	0.04	0.025	24.7	4.81	0.006	2.15	1.69
Apr-2004	*ND*	**0.011**	0.088	*ND*	*ND*	16.8	14.2	0.041	0.056	0.045	45.1	3.94	0.01	2.37	1.9
Oct-2004	*ND*	0.003	0.041	*ND*	*ND*	17.2	15.7	0.012	0.037	0.017	16.3	3.7	0.004	2.11	1.94
Apr-2005	*ND*	0.002	0.04	*ND*	*ND*	13.6	12.8	0.012	0.03	0.02	12.4	4.46	0.002	1.9	1.74
Oct-2005	*ND*	*ND*	0.019	*ND*	*ND*	11.6	10.7	*ND*	0.011	*ND*	0.798	1.86	*ND*	1.54	1.49

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17***													
Mar-2006	*ND*	*ND*	0.016	*ND*	*ND*	8.36	8.68	*ND*	0.01	*ND*	2.02	3.39	*ND*	1.3	1.37
Sep-2006	*ND*	*ND*	0.042	*ND*	*ND*	10.8	9.11	*ND*	0.019	0.016	9.22	4.96	0.003	1.54	1.43
Mar-2007	*ND*	0.005	0.043	*ND*	*ND*	4.73	6.14	0.04	0.033	0.029	18.5	4.58	0.007	1.4	1.37
Sep-2007	*ND*	0.009	0.045	*ND*	*ND*	3.5	3.39	0.045	0.034	0.031	21.4	5.09	0.008	1.28	1.11
Mar-2008	*ND*	0.003	0.026	*ND*	*ND*	4.7	4.37	0.013	0.012	*ND*	8.65	3.43	0.002	1.33	1.28
Sep-2008	*ND*	0.003	0.03	*ND*	*ND*	4.66	4.35	0.013	0.01	*ND*	8.02	3.63	*ND*	1.56	1.41
Mar-2009	*ND*	0.005	0.051	*ND*	*ND*	5.16	3.43	0.049	0.038	0.029	38.5	4.56	0.008	1.57	1.25
Oct-2009	*ND*	0.003	0.03	*ND*	*ND*	3.16	3.27	0.023	0.014	0.016	17.6	4.26	0.003	1.16	1.21
Apr-2010	*ND*	0.006	0.034	*ND*	*ND*	3.26	2.33	0.023	0.022	0.018	20	5.97	0.005	1.33	1.07
Oct-2010	*ND*	0.003	0.031	*ND*	*ND*	6.87	6.32	0.02	0.02	0.012	12.3	3.91	0.003	1.73	1.54
Apr-2011	*ND*	*ND*	0.019	*ND*	*ND*	4.46	4.49	*ND*	*ND*	*ND*	3.83	4.49	*ND*	1.36	1.39
Sep-2011	*ND*	0.002	0.034	*ND*	*ND*	3.55	2.45	0.016	*ND*	0.014	11.5	5.9	0.003	1.42	1.16
Mar-2012	*ND*	0.002	0.038	*ND*	*ND*	7.74	5.95	0.014	*ND*	0.017	11.1	4.72	0.003	1.96	1.61
Sep-2012	*ND*	0.0036	0.035	*0.000401 J*	*ND*	4.15	4.04	0.0266	0.0172	0.0152	26.3	4.65	0.0042	1.52	1.47
Mar-2013	*ND*	*ND*	0.0298	*0.000333 J*	*ND*	2.73	3.13	0.0217	0.0158	0.0148	30.9	4.77	0.0052	1.07	1.19
Oct-2013	*ND*	*0.0018 J*	0.0414	*0.000309 J*	*0.000155 J*	6.69	5.28	*0.0154 J*	*0.0081 J*	*0.0089 J*	16	4.38	0.0025	1.84	1.65
Jan-2014	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	0.0252	*NA*	*NA*	*NA*	*NA*	0.0059	*NA*	*NA*
Mar-2014	*0.000701 J*	*0.0015 J*	0.0326	*0.000238 J*	*ND*	3.06	3.26	*0.0074 J*	*0.0048 J*	*0.0005 J*	8.91	4.5	*0.0018 J*	1.45	1.46
Oct-2014	*0.0012 J*	*0.0261 J*	0.166	*ND*	*0.000168 J*	5.24	4.81	*0.112 J*	*0.0474 J*	*0.0591 J*	78.3	4.4	**0.0239**	2.25	1.57
Apr-2015	*0.0013 J*	**0.013**	0.133	*0.000895 J*	*0.000127 J*	5.13	5.14	0.075	*0.0326 J*	*0.0353 J*	55.6	4.01	**0.0181**	2	1.63
Nov-2015	*0.00073 J*	0.0042	0.0658	*0.000416 J*	*0.000064 J*	3.51	4.08	0.022	0.0111	0.0124	16.4	5.09	0.0061	1.5	1.56
May-2016	*ND*	0.0099	0.064	*0.00059 J*	*ND*	6.17	5.41	0.0461	0.0247	0.0239	39.9	8.98	0.0082	2.11	1.83
Oct-2016	*ND*	*0.0024 J*	0.0367	*0.00028 J*	*ND*	8.2	7.35	0.0168	0.0074	0.0063	11.9	7.49	0.0021	2.23	2.19
May-2017	*ND*	*0.001 J*	0.0263	*0.00015 J*	*ND*	4.03	4.4	0.0067	0.0041	*0.0026 J*	8.35	4.65	*0.00079 J*	1.67	1.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17***													
Oct-2017	*ND*	*0.0016 J*	0.0297	*0.00017 J*	*ND*	4.22	3.55	0.0068	0.0057	*0.0022 J*	14.2	4.78	*0.00065 J*	1.65	1.64
May-2018	*0.00011 J*	*0.00026 J*	0.053	0.00086	*0.00049 J*	10.1	9.9	0.025	0.0433	0.0023	9.6	0.96	*0.00024 J*	3.1	3.1
Nov-2018	*ND*	*0.0007 J*	0.032	0.00044	*0.00025 J*	11.5	11.3	0.038	0.021	0.0029	7	0.79	*0.0006 J*	2.6	2.6
May-2019	*ND*	*ND*	0.026	*ND*	*ND*	9.8	9.9	0.049	0.029	*ND*	9.2	6.1	*ND*	2.4	2.4
Oct-2019	*0.00011 J*	*0.0005 J*	0.025	*0.000094 J*	*0.0002 J*	8.3	7.7	0.024	0.041	*ND*	8	6.3	*0.00014 J*	2.2	2
May-2020	*0.000083 J*	*0.0005 J*	0.024	*0.00014 J*	*ND*	7.2	7	0.063	0.036	0.003	13.5	3.6	*0.00024 J*	2.2	2.1
Oct-2020	*ND*	*ND*	0.021	*ND*	*ND*	6.8	6.8	*0.03 J*	0.022	*ND*	9.8	3.7	*ND*	2	2
Apr-2021	*ND*	*ND*	0.023	*ND*	*ND*	7	7	0.0088	0.019	*ND*	10	7.3	*ND*	2.1	2
Oct-2021	*0.000051 JB*	*ND*	0.022	*ND*	*ND*	5.6	6	0.0044	0.023	*0.00036 J*	8.2	7.3	*0.000042 J*	1.7	1.9
May-2022	*ND*	*0.00058 J*	0.023	*ND*	*ND*	6	6.3	0.022	0.019	*0.0014 J*	10	2.5	*ND*	2	2.2
Oct-2022	*ND*	*0.0008 J*	0.023	*ND*	*ND*	6	6.1	0.016	0.013	*ND*	20.6	3.3	*ND*	2	2.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-17*												
Nov-1993	0.27	NA	ND	NA	2	NA	ND	NA	11	NA	NA	NA	0.01
Apr-1994	0.31	NA	ND	NA	1.69	NA	ND	NA	12.97	NA	NA	NA	0.06
Apr-1995	0.28	NA	ND	ND	2.1	NA	ND	ND	8.4	NA	ND	ND	0.03
Oct-1996	0.21	0.19	NA	ND	ND	ND	ND	ND	9	8.4	ND	ND	0.27
Apr-1997	0.18	0.19	ND	ND	1.8	1.8	ND	ND	7.2	7.3	ND	ND	0.025
Oct-1997	0.259	0.244	NA	0.064	3.88	0.695	ND	ND	10.2	9.61	ND	0.018	0.08
Apr-1998	0.262	0.048	NA	0.1	6.8	1.61	ND	ND	10.6	1.99	ND	0.051	0.076
Apr-1999	0.348	0.243	NA	0.03	8.91	ND	ND	ND	13.1	10.6	ND	0.088	0.106
Oct-1999	0.214	0.204	NA	ND	1.78	1.28	ND	ND	10.8	10.2	ND	ND	0.032
Apr-2000	0.231	0.225	NA	ND	1.89	1.25	ND	ND	12.8	11.2	ND	ND	0.037
Oct-2000	0.237	0.21	NA	0.018	2.16	1.5	ND	ND	13.1	10.8	ND	0.011	0.041
Apr-2001	0.25	NA	NA	0.015	4.25	NA	ND	ND	12.5	NA	ND	0.037	0.059
Sep-2001	0.212	0.199	NA	0.022	2.82	1.91	ND	ND	13.4	10.4	ND	0.015	0.048
Mar-2002	0.255	0.236	NA	0.018	2.87	1.53	ND	ND	12	11.1	ND	0.014	0.046
Sep-2002	0.249	0.234	NA	0.029	2.39	2.13	ND	ND	12.4	11.6	ND	0.018	0.064
Mar-2003	0.236	0.233	NA	0.046	2.32	1.33	ND	ND	12.4	11.5	ND	ND	0.084
Oct-2003	0.22	0.209	NA	0.041	2.74	1.76	ND	ND	12.9	10.8	ND	0.03	0.08
Apr-2004	0.234	0.211	ND	0.055	4.63	2.15	ND	ND	12.6	11.9	ND	0.065	0.226
Oct-2004	0.244	0.232	ND	0.025	2.76	1.76	ND	ND	12.7	12	ND	0.017	0.079
Apr-2005	0.263	0.253	ND	0.03	2.66	1.68	ND	ND	11.9	11.5	ND	0.02	0.061
Oct-2005	0.216	0.216	ND	0.017	1.58	1.43	ND	ND	9.66	8.61	ND	ND	0.04
Mar-2006	0.174	0.194	ND	0.015	1.34	1.29	ND	ND	9.53	9.45	ND	ND	0.015

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-17***												
Sep-2006	0.244	0.221	ND	0.027	1.92	1.49	ND	ND	9.55	9.87	ND	0.01	0.096
Mar-2007	0.218	0.205	ND	0.04	2.2	1.36	ND	ND	9.08	9.56	ND	0.033	0.085
Sep-2007	0.183	0.172	ND	0.039	1.96	1.1	ND	ND	8.21	8.9	ND	0.038	0.088
Mar-2008	0.196	0.183	ND	0.019	1.69	1.36	ND	ND	9.11	9.26	ND	ND	0.052
Sep-2008	0.202	0.186	ND	0.017	1.84	1.32	ND	ND	9.74	9.32	ND	ND	0.043
Mar-2009	0.201	0.175	ND	0.045	2.36	1.38	ND	ND	9.67	9.75	ND	0.036	0.1
Oct-2009	0.157	0.176	ND	0.018	1.56	1.13	ND	ND	8.17	8.59	ND	0.019	0.05
Apr-2010	0.174	0.155	ND	0.022	2.05	1.18	ND	ND	8.91	8.64	ND	0.033	0.064
Oct-2010	0.224	0.204	ND	0.026	2.2	1.44	ND	ND	11.7	11.6	ND	0.013	0.052
Apr-2011	0.171	0.17	ND	0.016	1.26	1.24	ND	ND	10.4	10.3	ND	ND	0.032
Sep-2011	0.181	0.166	ND	0.017	2.44	1.28	ND	ND	9.96	9.42	ND	0.011	0.044
Mar-2012	0.276	0.252	0.0002	0.024	2.87	1.52	ND	ND	12.2	11.1	ND	0.012	0.065
Sep-2012	0.196	0.184	ND	0.0238	1.9	1.44	ND	ND	10.4	10.8	0.000409 J	0.0179	0.0513
Mar-2013	0.153	0.174	0.000142 J	0.0182	1.37	1.15	ND	0.000022 J	7.37	8.92	ND	0.0191	0.0512
Oct-2013	0.227	0.192	ND	0.015	2.27 J	1.52	ND	0.000018 J	10.8	11.4	0.000198 J	0.0205 J	0.0491
Mar-2014	0.157	0.17	ND	0.0106 J	1.8	1.37	ND	ND	9.13	10.1	0.000637 J	0.0083 J	0.0257
Oct-2014	0.203	0.17	0.000121 J	0.0665 J	5.72 J	1.61	ND	0.000089 J	9.92 J	11.6	ND	0.0981 J	0.104
Apr-2015	0.187	0.182	ND	0.0425 J	4.91	1.57	ND	0.00008 J	10.2	11.8	ND	0.0674	0.0674
Nov-2015	0.158	0.184	ND	0.0161	2.82	1.56	0.000942 J	ND	8.92	11.2	0.000327 J	0.0234	0.0383
May-2016	0.2	0.188	ND	0.0294	3.22	1.8	ND	ND	12.3	12	0.00017 J	0.0438	0.0732
Oct-2016	0.265	0.262	ND	0.019	2.11	1.94	ND	ND	13.7	13.8	ND	0.0106	0.0647
May-2017	0.2	0.191	ND	0.0091	1.67	1.62	ND	ND	11.3	11.2	ND	0.0044	0.039
Oct-2017	0.213	0.203	ND	0.0104	1.58	1.56	ND	ND	11	11	ND	0.0033	0.0382
May-2018	0.33	0.34	ND	0.062	2.1 J	1.7 J	0.00046 J	ND	15.1	13.8	0.000071 J	0.0041	0.15

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-17***												
Nov-2018	0.22	0.23	*ND*	0.048	*2.1 J*	*2 J*	*0.00019 J*	*ND*	13.8	13.9	*ND*	0.0055	0.089
May-2019	0.5	0.47	*ND*	0.04	*ND*	*ND*	*ND*	*ND*	13.5	13.4	*ND*	*ND*	0.077
Oct-2019	0.7	0.63	*ND*	0.034	*1.4 J*	*ND*	*ND*	*ND*	13.4	13.1	*ND*	0.0073	0.066
May-2020	0.57	0.58	*ND*	0.026	*1.8 J*	*1.8 J*	*ND*	*ND*	13.4	13.1	*ND*	*ND*	0.048
Oct-2020	0.42	0.4	*ND*	0.02	*ND*	*1.7 J*	*ND*	*ND*	13.4	12.9	*ND*	*0.0015 J*	0.041
Apr-2021	0.43	0.42	*ND*	0.016	1.8	1.7	*0.0056 J*	*ND*	13.6	13.4	*ND*	*0.00068 J*	0.034
Oct-2021	0.45	0.482	*ND*	0.016	1.6	1.7	*ND*	*ND*	12.2	13.5	*0.000029 J*	*ND*	0.035
May-2022	0.41	0.43	*ND*	0.016	1.8	1.8	*ND*	*ND*	13.3	13.9	*ND*	*0.0011 JB*	0.035
Oct-2022	0.35	0.34	*ND*	0.015	1.9	1.7	*ND*	*ND*	14.3	13.5	*ND*	*ND*	0.03

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	35	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.96 J	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 J	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 J	ND	11	22 J+	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.4 J*	7.9	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.4 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.6 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.5 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17***															
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-17A***											
Nov-1993	ND	ND	ND	21.3	2.6	0.3	ND	4.76	19.2	2.5	ND	2.47
Apr-1994	5	5	0.2	ND	2.4	0.3	ND	5	19	ND	20	3.79
Apr-1995	ND	ND	0.4	ND	2.7	0.3	ND	4.8	19.1	2.3	18	2
Apr-1997	ND	2	ND	ND	1.5	0.29	ND	NA	NA	ND	66	4.1
Oct-1997	2	2	0.33	30	2.6	0.294	ND	5.99	19.7	ND	22	ND
Apr-1998	3	ND	ND	ND	1.79	0.301	ND	7.35	18.75	ND	ND	3
Apr-1999	ND	ND	0.45	ND	2.04	0.18	ND	4.95	48.5	ND	20	3.2
Oct-1999	ND	ND	0.07	ND	2.76	0.563	ND	4.69	20.8	1.35	19	3.1
Apr-2000	ND	ND	ND	ND	1.62	0.26	ND	6.88	103	0.87	24	3.2
Oct-2000	1	NA	ND	ND	2.03	ND	ND	6.08	29.8	ND	33	3.31
Apr-2001	1.3	NA	ND	ND	2.23	0.292	ND	NA	NA	ND	25	3.3
Sep-2001	ND	ND	ND	ND	3.42	1.27	ND	5.04	19	ND	21	3.16
Mar-2002	ND	ND	ND	ND	3.6	0.426	ND	5.1	14.2	0.821	21	3.08
Sep-2002	1.8	1.8	ND	ND	2.62	0.3	ND	5	20.8	ND	16	2.97
Mar-2003	1.6	1.6	ND	ND	1.34	ND	ND	5.2	16.2	ND	36	3.15
Oct-2003	1.5	1.5	ND	ND	4.03	0.214	ND	4.8	20.9	ND	19	4.09
Apr-2004	1.7	1.7	ND	ND	2.44	0.189	ND	4.8	17.9	ND	21	3.39
Oct-2004	1.5	1.5	ND	ND	2.45	0.266	ND	4.8	15.7	ND	30	3.05
Apr-2005	1.8	1.8	ND	ND	2.63	0.3	ND	4.8	15.5	1.45	38	3.2
Oct-2005	2.7	2.7	ND	ND	2.68	0.27	ND	4.1	15.9	1.21	35	3.07
Mar-2006	2.8	2.8	ND	ND	2.51	0.29	ND	4.9	17.5	1.51	24	2.14
Sep-2006	2.7	2.7	ND	ND	2.54	0.3	ND	4.9	17.5	1.2	20	2.92
Mar-2007	2.8	2.8	ND	ND	2.73	0.29	ND	4.7	15.2	ND	ND	2.89
Sep-2007	2.4	2.4	ND	ND	2.5	0.3	ND	6.4	16.6	ND	17	2.7
Mar-2008	2.2	2.2	ND	ND	7.48	ND	ND	4.8	14.8	2.92	11	2.8
Sep-2008	2.9	2.9	0.22	ND	2.61	0.26	ND	4.5	14.6	ND	23	3
Mar-2009	2.6	2.6	ND	ND	2.69	0.3	ND	4.3	16.7	2.38	ND	2.97
Oct-2009	2.6	2.6	ND	ND	2.59	0.24	ND	4.5	15.5	ND	14	2.66
Apr-2010	2.5	2.5	ND	ND	2.98	0.22	ND	3.7	16.4	ND	54	3.1
Oct-2010	2.3	2.3	ND	ND	2.97	0.2	ND	4.8	12.2	ND	16	3.24
Apr-2011	2.6	2.6	ND	ND	2.55	0.26	ND	4.4	16.2	ND	16	2.8
Sep-2011	2.8	2.8	ND	ND	2.59	0.26	ND	4.6	16.2	ND	ND	3.57
Mar-2012	2.6	2.6	ND	ND	2.77	0.26	ND	4.5	21.3	ND	ND	2.68
Sep-2012	2.28	2.28	ND	ND	2.81	0.246	ND	3.9	16.3	ND	36	3.26
Mar-2013	3.08	3.08	0.0641	ND	2.94	0.253	ND	5	16.1	0.742 J	16	3.25
Oct-2013	2.76	2.76	ND	ND	2.89	0.246	ND	3.1	15.8	0.63 J	ND	3.12
Mar-2014	2.72	2.72	ND	18	2.89	0.251	ND	5.2	16.6	0.725 J	ND	3.08

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-17A***										
Oct-2014	*ND*	*ND*	*ND*	*ND*	3.23	0.197	*ND*	4.7	16	*ND*	*ND*	3.14
Apr-2015	3.72	3.72	*ND*	*ND*	2.93	0.214	*ND*	3.8	16.6	*ND*	*ND*	3.26
Nov-2015	*ND*	*ND*	*ND*	*7 J*	2.99	0.223	*ND*	5.2	56.1	*ND*	*23 J*	3.73
May-2016	*ND*	*ND*	*ND*	*ND*	2.97	0.233	*ND*	5.3	26.6	*ND*	*12 J*	3.4
Oct-2016	*ND*	*ND*	*ND*	*6 J*	2.87	*NA*	*NA*	5.3	24.2	*0.922 J*	*23 J*	3
May-2017	*ND*	*ND*	*ND*	*ND*	2.75	0.255	*ND*	4.9	26.9	*ND*	*ND*	3.1
Oct-2017	*ND*	*ND*	*0.0677 J*	*ND*	2.84	0.221	*ND*	4.9	30.4	*ND*	*15 J*	3.1
May-2018	*2 J*	*ND*	*ND*	*ND*	3.1	*ND*	*ND*	4.4	24.4	*ND*	60	*3.2 J*
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	3	0.18	*ND*	4.64	19.4	*ND*	*ND*	*3.2 J*
May-2019	*ND*	*NA*	*ND*	*ND*	*ND*	0.17	*ND*	4.63	15.4	*ND*	*ND*	*ND*
Oct-2019	*2.5 JH1*	*NA*	*ND*	*ND*	*2.6 J*	0.2	*ND*	4.53	20.6	*ND*	38	3.5
May-2020	*ND*	*NA*	*ND*	*ND*	*2.7 J*	0.19	*ND*	4.4	20.7	*ND*	*ND*	3.5
Oct-2020	*ND*	*NA*	*ND*	*ND*	*2.8 J*	0.21	*ND*	4.48	19.4	*ND*	*ND*	3.4
Apr-2021	*ND*	*NA*	*ND*	*ND*	*2.9 J*	0.17	*ND*	4.86	22.4	*ND*	*ND*	3.4
Oct-2021	*4 J4c*	*NA*	*ND*	*ND*	*2.4 J*	0.25	*ND*	5.01	51.9	*ND*	*ND*	*3.28 J*
May-2022	*4 J4c*	*NA*	*ND*	*ND*	*2.4 J*	0.21	*ND*	4.8	48.5	*ND*	10	3.5 N3
Oct-2022	*3 J3c*	*NA*	*ND*	*10.7 J*	3.4	0.22	*ND*	4.83	40	*ND*	15	3.6 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17A***													
Nov-1993	NA	ND	ND	NA	ND	0.46	NA	ND	NA	ND	0.37	0.08	ND	0.32	NA
Apr-1994	NA	ND	ND	NA	ND	0.76	NA	ND	NA	ND	0.24	0.93	ND	0.46	NA
Apr-1995	ND	ND	0.8	ND	ND	0.27	NA	ND	ND	ND	0.03	ND	ND	0.33	NA
Oct-1996	ND	ND	0.013	ND	ND	0.65	0.61	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	**0.007**	ND	0.025	ND	ND	1.4	0.55	ND	ND	ND	ND	ND	ND	0.66	ND
Oct-1997	ND	ND	0.011	ND	ND	0.646	0.542	ND	ND	ND	0.115	ND	ND	0.338	0.279
Apr-1998	ND	ND	0.01	ND	ND	0.648	0.608	ND	ND	ND	0.097	ND	ND	0.341	0.315
Apr-1999	ND	ND	0.01	ND	ND	0.686	0.638	ND	ND	ND	0.196	ND	ND	0.369	0.34
Oct-1999	ND	ND	0.01	ND	ND	0.668	0.619	ND	ND	ND	ND	ND	ND	0.36	0.335
Apr-2000	ND	ND	ND	ND	ND	0.699	0.628	ND	ND	ND	0.361	ND	ND	0.346	0.317
Oct-2000	ND	ND	ND	ND	ND	0.722	0.682	ND	ND	ND	ND	ND	ND	0.366	0.347
Apr-2001	ND	ND	ND	ND	ND	0.699	NA	ND	ND	ND	ND	NA	ND	0.366	NA
Sep-2001	ND	ND	ND	ND	ND	0.675	0.677	ND	ND	ND	0.092	ND	ND	0.358	0.347
Mar-2002	ND	ND	0.011	ND	ND	0.661	0.662	ND	ND	ND	ND	ND	ND	0.348	0.349
Sep-2002	ND	ND	0.011	ND	ND	0.631	0.619	ND	ND	ND	0.067	ND	ND	0.341	0.337
Mar-2003	ND	ND	ND	ND	ND	0.657	0.621	ND	ND	ND	ND	ND	ND	0.368	0.341
Oct-2003	ND	ND	0.011	ND	ND	0.979	0.622	ND	ND	ND	0.086	ND	ND	0.401	0.349
Apr-2004	ND	ND	ND	ND	ND	0.723	0.711	ND	ND	ND	0.166	ND	ND	0.385	0.369
Oct-2004	ND	ND	ND	ND	ND	0.649	0.643	ND	ND	ND	ND	ND	ND	0.347	0.354
Apr-2005	ND	ND	0.011	ND	ND	0.674	0.664	ND	ND	ND	ND	ND	ND	0.367	0.36
Oct-2005	ND	ND	0.011	ND	ND	0.676	0.645	ND	ND	ND	ND	ND	ND	0.334	0.319

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17A***													
Mar-2006	ND	ND	ND	ND	ND	0.373	0.356	ND	ND	ND	ND	ND	ND	0.293	0.291
Sep-2006	ND	ND	ND	ND	ND	0.619	0.614	ND	ND	ND	ND	ND	ND	0.333	0.327
Mar-2007	ND	ND	ND	ND	ND	0.617	0.599	ND	ND	ND	ND	ND	ND	0.327	0.323
Sep-2007	ND	ND	ND	ND	ND	0.568	0.55	ND	ND	ND	ND	ND	ND	0.312	0.308
Mar-2008	ND	ND	0.01	ND	ND	0.603	0.606	ND	ND	ND	ND	ND	ND	0.313	0.316
Sep-2008	ND	ND	0.011	ND	ND	0.629	0.62	ND	ND	ND	ND	ND	ND	0.35	0.334
Mar-2009	ND	ND	ND	ND	ND	0.663	0.594	ND	ND	ND	ND	ND	ND	0.317	0.306
Oct-2009	ND	ND	ND	ND	ND	0.566	0.564	ND	ND	ND	ND	ND	ND	0.303	0.325
Apr-2010	ND	ND	ND	ND	ND	0.695	0.49	ND	ND	ND	ND	ND	ND	0.341	0.298
Oct-2010	ND	ND	ND	ND	ND	0.681	0.61	ND	ND	ND	ND	0.11	ND	0.373	0.349
Apr-2011	ND	ND	0.01	ND	ND	0.619	0.578	ND	ND	ND	ND	ND	ND	0.326	0.323
Sep-2011	ND	ND	ND	ND	ND	0.756	0.745	ND	ND	ND	ND	ND	ND	0.408	0.364
Mar-2012	ND	ND	0.011	ND	0.004	0.476	0.456	ND	0.016	0.029	ND	ND	ND	0.363	0.327
Sep-2012	ND	ND	0.0106	0.00024 J	ND	0.714	0.707	0.0012 J	0.0033 J	0.0019 J	0.0251 J	0.0327 J	ND	0.358	0.354
Mar-2013	ND	ND	0.0105	0.000213 J	ND	0.77	0.725	0.0017 J	0.0034 J	0.0018 J	0.0127 J	0.0068 J	0.0016 J	0.323	0.294
Oct-2013	ND	ND	0.0106	ND	ND	0.755	0.729	0.0024 J	0.0029 J	0.0017 J	ND	ND	ND	0.3	0.317
Mar-2014	0.000468 J	ND	0.0096 J	0.000304 J	ND	0.642	0.537	0.0012 J	0.0028 J	0.0025 J	0.0127 J	0.0046 J	ND	0.358	0.286
Oct-2014	0.000907 J	ND	0.0105	0.000251 J	ND	0.689	0.703	0.000956 J	0.0031 J	0.0017 J	0.0108 J	ND	ND	0.345	0.351
Apr-2015	0.000929 J	ND	0.0108	0.000254 J	ND	0.705	0.702	0.000605 J	0.0033 J	0.0017 J	0.011 J	0.0739	ND	0.365	0.357
Nov-2015	0.000479 J	ND	0.0113	0.000303 J	ND	0.854	0.817	0.000597 J	0.0033 J	0.0017 J	ND	0.0179 J	ND	0.389	0.389
May-2016	ND	ND	0.0108	0.00027 J	ND	0.725	0.626	0.0011 J	0.0029	0.0016 J	ND	ND	ND	0.381	0.347
Oct-2016	ND	ND	0.0097	0.00026 J	ND	0.653	0.688	ND	0.0028	0.0015 J	ND	ND	ND	0.335	0.356
May-2017	ND	ND	0.0108	0.00027 J	ND	0.666	0.649	0.0017 J	0.0031	0.0016 J	ND	ND	ND	0.354	0.35
Oct-2017	ND	ND	0.0095	0.00024 J	ND	0.673	0.699	0.0013 J	0.003	0.0016 J	ND	ND	ND	0.339	0.327

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17A***													
May-2018	*0.00004 J*	*ND*	0.011	*0.00027 J*	*0.000032 J*	*0.71 J*	*0.74 J*	*0.0025 J*	0.0035	*0.002 J*	0.028	*0.011 J*	*0.000043 JB*	*0.35 J*	*0.38 J*
Nov-2018	*ND*	*ND*	0.011	0.0003	*0.000034 J*	*0.7 J*	*0.7 J*	0.015	0.0065	0.0024	0.13	0.11	*0.000027 J*	*0.36 J*	*0.36 J*
May-2019	*ND*	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	0.017	0.0068	0.0022	0.13	0.094	*ND*	*ND*	*ND*
Oct-2019	*0.00011 J*	*ND*	0.01	*0.00027 J*	*0.00014 J*	0.76	*0.72 J*	*0.0062 J*	0.0032	*0.0019 J*	*0.03 J*	0.022	*ND*	0.39	*0.37 J*
May-2020	*0.000053 J*	*ND*	0.01	*0.00022 J*	*ND*	0.75	*0.72 J*	0.01	0.0043	0.0036	*0.055 J*	0.035	*ND*	0.39	*0.38 JB*
Oct-2020	*ND*	*ND*	*0.0087 J*	*ND*	*ND*	0.75	*0.72 J*	*0.0058 J*	0.0033	*ND*	*0.07 JB*	0.022	*ND*	0.37	*0.38 J*
Apr-2021	*ND*	*ND*	0.012	*0.00028 J*	*ND*	*0.75 J*	*0.72 J*	*0.0033 J*	*0.0035 J*	*0.0032 J*	*ND*	*ND*	*ND*	0.38	0.4
Oct-2021	*ND*	*ND*	0.011	*0.00021 J*	*ND*	0.71	0.77	0.0058	0.0049	*0.0022 J*	0.061	*0.031 J*	*ND*	*0.37 J*	*0.39 J*
May-2022	*ND*	*ND*	0.011	*0.00024 J*	*ND*	0.75	0.83	0.0043	0.0044	*0.0022 J*	*0.04 J*	*ND*	*ND*	*0.4 J*	*0.43 J*
Oct-2022	*ND*	*ND*	0.012	*0.00023 J*	*ND*	0.78	0.79	0.0064	0.0052	*0.0013 J*	0.06	*0.036 J*	*ND*	*0.41 J*	*0.39 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-17A*												
Nov-1993	ND	NA	ND	NA	0.49	NA	ND	NA	1.2	NA	NA	NA	ND
Apr-1994	0.01	NA	ND	NA	0.57	NA	ND	NA	1.39	NA	NA	NA	0.19
Apr-1995	ND	NA	ND	ND	0.59	NA	ND	ND	0.96	NA	ND	ND	0.02
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	1.8	1.7	ND	ND	0.054
Apr-1997	0.011	ND	ND	0.044	1.9	1.4	ND	ND	1.2	1.6	ND	ND	0.065
Oct-1997	ND	ND	NA	ND	ND	ND	ND	ND	0.99	0.658	ND	ND	0.012
Apr-1998	ND	0.023	NA	ND	0.889	0.711	ND	ND	1.13	1.17	ND	ND	ND
Apr-1999	ND	ND	NA	ND	ND	ND	ND	ND	1.22	1.1	ND	ND	ND
Oct-1999	ND	ND	NA	ND	ND	ND	ND	ND	1.21	1.13	ND	ND	ND
Apr-2000	ND	ND	NA	ND	ND	ND	ND	ND	1.11	1.07	ND	ND	0.011
Oct-2000	ND	ND	NA	ND	0.771	0.842	ND	ND	1.35	1.15	ND	ND	ND
Apr-2001	ND	NA	NA	ND	1.05	NA	ND	ND	1.19	NA	ND	ND	ND
Sep-2001	ND	ND	NA	ND	ND	ND	ND	ND	1.16	1.14	ND	ND	ND
Mar-2002	ND	ND	NA	ND	ND	ND	ND	ND	1.2	1.15	ND	ND	ND
Sep-2002	ND	ND	NA	ND	0.837	ND	ND	ND	1.17	1.15	ND	ND	ND
Mar-2003	ND	ND	NA	ND	ND	ND	ND	ND	1.16	1.1	ND	ND	ND
Oct-2003	ND	ND	NA	ND	1.3	ND	ND	ND	2.06	1.12	ND	ND	0.012
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	1.18	1.22	ND	ND	ND
Oct-2004	ND	ND	ND	ND	0.83	ND	ND	ND	1.28	1.24	ND	ND	ND
Apr-2005	ND	ND	ND	ND	0.65	0.59	ND	ND	1.18	1.14	ND	ND	ND
Oct-2005	ND	ND	ND	ND	0.602	0.607	ND	ND	1.09	1.03	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	0.859	0.818	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-17A***												
Sep-2006	ND	ND	ND	ND	0.526	0.514	ND	ND	1.03	1.03	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	1.01	0.996	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	0.355	ND	ND	1.08	1.01	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.53	0.549	ND	ND	1.07	1.07	ND	ND	ND
Sep-2008	ND	ND	ND	ND	0.525	ND	ND	ND	1.13	1.08	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.07	1.04	ND	ND	0.018
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	0.995	0.944	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.2	1.04	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.2	1.08	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.03	1.01	ND	ND	ND
Sep-2011	ND	ND	ND	ND	0.517	ND	ND	ND	1.3	1.27	ND	ND	ND
Mar-2012	0.016	ND	ND	0.024	0.521	ND	ND	ND	1.18	1.12	ND	0.03	0.011
Sep-2012	0.0064 J	0.006 J	ND	0.0052 J	0.481 J	0.474 J	ND	ND	1.16	1.15	0.000259 J	ND	0.0074 J
Mar-2013	0.0065 J	0.0057 J	0.000048 J	0.0053 J	0.421 J	0.394 J	ND	ND	1.05	0.984	ND	ND	0.0197
Oct-2013	0.0057 J	0.0058 J	ND	0.0052 J	0.427 J	0.454 J	ND	ND	1.05	1.13	ND	ND	0.0169
Mar-2014	0.0056 J	0.0047 J	ND	0.0046 J	0.494 J	0.512	ND	ND	1.05	1.1	0.000376 J	ND	0.0071 J
Oct-2014	0.0059 J	0.0061 J	ND	0.0051 J	0.468 J	0.474 J	ND	ND	1.26	1.29	0.0012 J	ND	0.0088 J
Apr-2015	0.0063 J	0.0065 J	ND	0.0052 J	0.507	0.492 J	0.000917 J	ND	1.29	1.28	ND	ND	0.0093 J
Nov-2015	0.0065 J	0.0068 J	ND	0.0052 J	0.526	0.527	ND	ND	1.34	1.39	0.000182 J	ND	0.0081 J
May-2016	0.0058	0.0057	ND	0.0049	0.504	0.465	ND	ND	1.26	1.13	ND	ND	0.0083 J,B
Oct-2016	0.0056	0.0062 J+	ND	0.0048	0.439	0.507	ND	ND	1.13	1.22	ND	ND	0.0063 J
May-2017	0.0059	0.006	ND	0.0054	0.486	0.49	ND	ND	1.1	1.12	ND	ND	0.0066 J
Oct-2017	0.0062	0.0053	ND	0.0057	0.444	0.464	ND	ND	1.05	1.09	ND	ND	0.0059 J
May-2018	0.0064	0.0056	ND	0.0086	ND	ND	ND	ND	1.5 J	1.2 J	ND	0.0039	0.0077 B

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-17A***												
Nov-2018	0.0083	0.0069	*ND*	0.025	*ND*	*ND*	*0.00012 J*	*ND*	*1.1 J*	*1.2 J*	*ND*	0.0023	0.0098
May-2019	0.013	0.0073	*ND*	0.027	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.014
Oct-2019	0.0073	0.0065	*ND*	0.0074	*ND*	*ND*	*ND*	*ND*	*ND*	*1.4 J*	*ND*	0.0073	0.012
May-2020	0.009	0.0063	*ND*	0.013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0099	0.0073
Oct-2020	0.0068	0.0062	*ND*	0.008	*ND*	*ND*	*ND*	*ND*	*1.3 J*	*ND*	*ND*	*0.00063 J*	*ND*
Apr-2021	0.0068	0.006	*ND*	*0.0081 J*	*0.49 J*	0.5	*ND*	*ND*	1.2	1.2	*ND*	*ND*	*0.0058 J*
Oct-2021	0.0068	0.0069	*ND*	0.013	*0.44 J*	*0.46 J*	*ND*	*ND*	1.2	1.4 B	*ND*	*ND*	0.0061
May-2022	0.0073	0.0072	*ND*	0.01	0.56	*0.48 J*	*ND*	*ND*	1.3	1.3	*ND*	*ND*	0.0076
Oct-2022	0.0073	0.0072	*ND*	0.014	0.55	*0.42 J*	*ND*	*ND*	1.4	1.3	*ND*	*ND*	0.007

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	22	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17A*																
Feb-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17A*																
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.2 J*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.5 B	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17A***															
Feb-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17A***															
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-17A*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	NA
Feb-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17A***															
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.5 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1 BCH	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-21***											
Nov-1993	ND	ND	0.2	ND	14.9	0.8	0.2	4.76	116.2	19.6	34	12.8
Apr-1994	ND	ND	0.2	ND	14.5	1	ND	4.47	126	21.9	50	17.15
Apr-1995	ND	ND	ND	ND	17.4	0.9	ND	4.4	125	23.9	44	14.5
Apr-1997	ND	ND	ND	22	15	0.62	ND	NA	NA	22	71	11
Oct-1997	ND	ND	0.2	ND	15	0.382	ND	5.58	117.4	24.5	80	20
Apr-1998	ND	ND	ND	ND	14.8	0.52	ND	4.61	124.2	19.8	69	31
Apr-1999	ND	ND	0.19	ND	17.9	0.392	ND	4.03	125.6	23.3	83	22
Oct-1999	ND	ND	0.06	ND	14.4	0.374	ND	4.5	152.3	19.5	79	19
Apr-2000	ND	ND	ND	ND	19.3	0.95	ND	5.01	113	32.8	82	21
Oct-2000	ND	NA	ND	ND	12.1	0.37	ND	6.12	136.3	23.2	83	21.3
Apr-2001	ND	NA	ND	ND	15.4	0.785	ND	NA	NA	27.4	84	23
Sep-2001	ND	ND	ND	ND	16.8	1.83	ND	4.45	150	28.5	87	23.9
Mar-2002	ND	ND	ND	ND	19.1	0.896	ND	4.5	155	28.4	89	24.4
Sep-2002	ND	ND	ND	ND	20	1.04	ND	4.5	152.3	31.1	73	21.1
Mar-2003	ND	ND	ND	ND	22.8	1.01	ND	4.4	153.8	29.4	103	23.7
Oct-2003	ND	ND	ND	ND	12.8	1.69	ND	4.3	128.3	20.8	78	20.2
Apr-2004	ND	ND	ND	ND	16.1	0.575	ND	4.3	120.1	28.4	77	22.9
Oct-2004	ND	ND	ND	ND	11.3	0.504	ND	3.7	107.7	25.9	71	19
Apr-2005	ND	ND	ND	11	16.8	0.74	ND	4.4	108.9	24.1	85	21.2
Oct-2005	ND	ND	ND	ND	13.4	0.48	ND	3.9	103.8	32.5	74	17.3
Mar-2006	ND	ND	ND	ND	16	0.53	ND	4.5	125.8	36.2	71	19.4
Sep-2006	ND	ND	ND	ND	16	0.46	ND	4.3	119.1	28.6	75	20.1
Mar-2007	ND	ND	0.46	ND	16.5	0.51	ND	4.2	111.2	30.5	83	19.4
Sep-2007	ND	ND	ND	ND	16.4	0.96	ND	4.5	103.7	30.4	94	17.4
Mar-2008	ND	ND	0.47	ND	23.1	ND	ND	4.1	118.5	33.3	91	20.7
Sep-2008	ND	ND	ND	ND	21.8	0.74	ND	4.3	121.5	34.9	88	19
Mar-2009	ND	ND	ND	ND	23.7	0.89	ND	4	132.3	33.8	97	20.8
Oct-2009	ND	ND	ND	ND	29.7	0.83	ND	4.1	133	32.4	115	19.5
Apr-2010	ND	ND	ND	ND	30.5	1	ND	3.6	142.7	33	58	20.8
Oct-2010	ND	ND	ND	ND	21.4	0.88	ND	3.6	114.2	26.4	77	20.2
Apr-2011	2.9	2.9	ND	ND	23.9	0.75	ND	3.9	144.2	21	89	19.5
Sep-2011	ND	ND	0.26	ND	26.3	1.05	ND	4.5	126.1	27.2	95	20.7
Mar-2012	ND	ND	ND	ND	22	0.68	ND	3.6	125.4	30	100	20.3
Sep-2012	ND	ND	ND	ND	19.2	0.654	ND	4.2	115.1	29.6	97	20.1
Mar-2013	0.52 J	0.52 J	ND	ND	29.9	0.931	ND	4.3	147.6	26.8	102	18.5
Oct-2013	0.4	0.4	ND	ND	22.1	0.731	ND	3.2	103.7	26.6	86	19.6
Mar-2014	ND	ND	ND	10	24.4	0.754	ND	4.5	146.1	33.8	92	20.8

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-21***										
Oct-2014	*ND*	*ND*	*ND*	*ND*	17.2	0.523	*ND*	4.3	113.2	28.7	50	19.2
Apr-2015	0.96	0.96	*ND*	*ND*	23.7	0.887	*ND*	3.9	123.8	29.6	78	22.5
Nov-2015	*ND*	*ND*	*ND*	*8 J*	19.1	0.769	*ND*	4.5	156.8	27.4	62	22.8
May-2016	*ND*	*ND*	*ND*	*6 J*	22	1	*ND*	4.5	216	30.8	78	22.5
Oct-2016	*ND*	*ND*	*ND*	*ND*	21.7	*NA*	*NA*	4.5	181.9	24.2	93	21.1
May-2017	*ND*	*ND*	*ND*	*5 J*	24	1.27	*ND*	4.4	227	27	98	22
Oct-2017	*ND*	*ND*	*ND*	*7 J*	26.9	1.63	*ND*	4.5	262	30.4	89	23.8
May-2018	*ND*	*ND*	*ND*	*7.9 J*	32	0.46	*ND*	4.2	246	26.9	80	28.9
Nov-2018	*ND*	*ND*	*ND*	*ND*	32	2.2	*ND*	4.26	170.1	24.9	98	27.4
May-2019	*ND*	*NA*	*ND*	*ND*	22.8	1.6	*ND*	3.96	116.5	23.7	96	25.3
Oct-2019	*ND*	*NA*	*ND*	*6 J*	17.5	1.4	*ND*	4.06	138.7	24.3	73	22.8
May-2020	*ND*	*NA*	*ND*	*ND*	28.2	1.9	*ND*	4.1	158.5	26.6	74	27
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	28.1	2	*ND*	4.13	163.4	29.2	81	26.3
Apr-2021	*ND*	*NA*	*ND*	*ND*	23	1.9	*ND*	4.33	184.6	26.7	78	25.6
Oct-2021	*ND*	*NA*	*ND*	*6.1 J*	17.1	1.5	*ND*	4.44	196.8	26	84	23
May-2022	*1 J2c*	*NA*	*ND*	*ND*	22.6	2.1	*ND*	4.19	217.1	31	118	29.6 N3
Oct-2022	*ND*	*NA*	*ND*	*10.7 J*	33.4	2.4	*ND*	4.28	232.3	29.5	116	30.7 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-21***													
Nov-1993	NA	ND	ND	NA	ND	2	NA	ND	NA	ND	0.03	0.12	ND	1.9	NA
Apr-1994	NA	ND	ND	NA	ND	2.91	NA	ND	NA	ND	0.24	ND	ND	2.4	NA
Apr-1995	ND	ND	0.6	ND	ND	2	NA	ND	ND	ND	0.35	0.05	ND	2.3	NA
Oct-1996	ND	ND	0.12	ND	ND	4.5	4.9	ND	ND	ND	ND	ND	ND	2	2
Apr-1997	0.006	ND	0.11	ND	ND	4	4.1	ND	ND	ND	ND	ND	ND	1.8	2.1
Oct-1997	ND	ND	0.114	ND	ND	3.99	4.02	ND	0.014	ND	ND	ND	ND	2.07	2.09
Apr-1998	ND	ND	0.194	ND	ND	6.7	4.7	ND	0.019	ND	0.246	ND	ND	3.43	2.38
Apr-1999	ND	ND	0.13	ND	ND	4.66	4.35	ND	0.012	ND	0.179	ND	ND	2.39	2.24
Oct-1999	ND	ND	0.127	ND	ND	4.3	3.98	ND	0.014	0.031	0.068	ND	ND	2.25	2.08
Apr-2000	ND	ND	0.115	ND	ND	4.75	4.55	ND	0.012	ND	ND	ND	ND	2.3	2.2
Oct-2000	ND	ND	0.106	ND	ND	4.9	4.83	ND	0.012	ND	0.101	ND	ND	2.21	2.18
Apr-2001	ND	ND	0.115	ND	ND	5.22	NA	ND	0.014	ND	0.166	NA	ND	2.39	NA
Sep-2001	ND	ND	0.121	ND	ND	5.4	5.39	ND	0.012	ND	0.079	ND	ND	2.52	2.45
Mar-2002	ND	ND	0.11	ND	ND	5.71	5.39	ND	0.013	ND	0.078	ND	ND	2.47	2.43
Sep-2002	ND	ND	0.119	ND	ND	4.72	4.76	ND	0.01	ND	0.091	ND	ND	2.26	2.27
Mar-2003	ND	ND	0.123	ND	ND	5.42	5.3	ND	0.012	ND	ND	ND	ND	2.49	2.41
Oct-2003	ND	ND	0.105	ND	ND	4.72	4.45	ND	ND	ND	0.065	ND	ND	2.04	2
Apr-2004	ND	ND	0.105	ND	ND	5.53	5.53	ND	ND	ND	0.123	ND	ND	2.21	2.19
Oct-2004	ND	ND	0.102	ND	ND	4.2	4.19	ND	0.011	ND	0.128	ND	ND	2.06	2.05
Apr-2005	ND	ND	0.112	ND	ND	4.84	4.6	ND	ND	ND	0.122	ND	ND	2.21	2.17
Oct-2005	ND	0.002	0.099	ND	ND	4.04	3.74	ND	ND	ND	2.38	ND	ND	1.74	1.66

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-21***													
Mar-2006	ND	ND	0.103	ND	ND	4.46	4.36	ND	ND	ND	ND	ND	ND	2.01	1.94
Sep-2006	ND	ND	0.097	ND	ND	4.77	4.76	ND	0.011	ND	ND	ND	ND	1.98	1.99
Mar-2007	ND	ND	0.092	ND	ND	4.68	4.76	ND	0.012	ND	ND	ND	ND	1.86	1.87
Sep-2007	ND	0.002	0.084	ND	ND	4.13	4.07	ND	ND	ND	ND	ND	ND	1.72	1.71
Mar-2008	ND	ND	0.101	ND	ND	4.85	4.35	ND	0.012	ND	0.074	ND	ND	2.09	1.84
Sep-2008	ND	ND	0.086	ND	ND	4.38	4.37	ND	0.011	ND	0.067	ND	ND	1.97	1.96
Mar-2009	ND	ND	0.096	ND	ND	4.95	4.8	ND	ND	ND	0.078	ND	ND	2.05	2.01
Oct-2009	ND	ND	0.089	ND	ND	4.65	4.9	ND	ND	ND	0.898	ND	ND	1.91	2.01
Apr-2010	ND	ND	0.087	ND	ND	5.06	4.92	ND	0.01	ND	0.11	ND	ND	1.99	1.98
Oct-2010	ND	ND	0.086	ND	ND	4.73	4.72	ND	0.013	ND	1.28	ND	ND	2.03	2
Apr-2011	ND	ND	0.09	ND	ND	4.79	4.7	ND	ND	ND	0.165	ND	ND	1.83	1.82
Sep-2011	ND	ND	0.092	ND	ND	4.9	4.86	ND	ND	ND	ND	ND	ND	2.07	2.02
Mar-2012	ND	ND	0.088	ND	ND	4.69	4.62	ND	ND	ND	ND	ND	ND	2.08	2.05
Sep-2012	ND	ND	0.0898	0.000585 J	0.000276 J	4.72	4.71	0.0024 J	0.0096 J	0.0024 J	0.0469 J	0.0228 J	ND	2.03	1.98
Mar-2013	ND	ND	0.0813	0.000462 J	0.000305 J	4.47	5.23	0.0017 J	0.009 J	0.0025 J	0.0121 J	0.007 J	0.0013 J	1.78	2.01
Oct-2013	ND	ND	0.0899	0.000545 J	0.000395 J	4.8	4.87	0.0048 J	0.0098 J	0.0024 J	ND	ND	ND	1.85	1.94
Mar-2014	0.000344 J	0.00009 J	0.0884	0.000622 J	0.000346 J	4.93	4.93	0.0011 J	0.0089 J	0.0024 J	0.009 J	0.0072 J	ND	2.06	2.11
Oct-2014	0.000961 J	0.000473 J	0.0834	0.000457 J	0.000301 J	4.62	4.63	0.0016 J	0.0089 J	0.0023 J	0.0101 J	0.0082 J	ND	1.86	1.86
Apr-2015	0.000744 J	ND	0.0981	0.000598 J	0.000275 J	5.42	5.47	0.000653 J	0.0102	0.0025 J	ND	0.0108 J	ND	2.19	2.25
Nov-2015	0.000487 J	0.000599 J	0.0931	0.000635 J	0.000341 J	5.65	5.69	0.000609 J	0.0091 J	0.0024 J	ND	ND	ND	2.12	2.14
May-2016	ND	0.00086 J	0.0875	0.00053 J	0.00037 J	5.47	5.38	0.00086 J	0.0103	0.0025 J	ND	ND	ND	2.15	2.18
Oct-2016	ND	0.0016 J	0.0821	0.00049 J	0.00031 J	5.02	4.84	0.00085 J	0.01	0.0028 J	ND	ND	ND	2.08	2.04
May-2017	ND	0.0013 J	0.0866	0.0005 J	0.00024 J	5.27	5.76	0.0015 J	0.0088	0.0026 J	ND	ND	ND	2.14	2.26
Oct-2017	ND	0.00099 J	0.087	0.00053 J	0.00031 J	5.68	6.29	0.0014 J	0.0103	0.0026 J	ND	ND	ND	2.34	2.53

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-21***													
May-2018	*0.000059 J*	*ND*	0.076	0.00053	*0.00053 J*	7.2	6.8	*0.0019 JB*	0.0092	*0.00069 J*	*ND*	*ND*	*0.00011 JB*	2.7	2.5
Nov-2018	*ND*	*ND*	0.071	0.00054	*0.00042 J*	6.8	6.8	*0.0054 J*	0.0076	0.0024	0.04	*0.016 J*	*0.000092 J*	2.5	2.5
May-2019	*ND*	*ND*	0.068	0.00046	*ND*	6.3	6.1	*ND*	0.004	*ND*	*ND*	*ND*	*ND*	2.4	2.2
Oct-2019	*0.00011 J*	*ND*	0.074	0.00043	*0.00048 J*	5.6	5.4	*0.0058 J*	0.0084	0.0024	*0.014 J*	*0.0098 J*	*0.000069 J*	2.1	2
May-2020	*0.000068 J*	*ND*	0.084	0.00053	*0.00038 J*	6.6	6.4	*0.0052 J*	0.0093	*ND*	*0.015 J*	*0.012 J*	*ND*	2.6	2.5
Oct-2020	*ND*	*ND*	0.068	*0.00041 J*	*ND*	6.5	6.3	*0.0049 J*	0.0077	*ND*	*ND*	*ND*	*ND*	2.5	2.4
Apr-2021	*ND*	*ND*	0.077	*0.00054 J*	*ND*	6.4	6.5	*0.0011 J*	0.0083	*0.0035 J*	*ND*	*ND*	*ND*	2.3	2.4
Oct-2021	*0.0001 J*	*0.00032 J*	0.077	*0.00044 J*	*0.000081 J*	5.8	6.1	*0.0012 J*	0.0086	*0.0023 J*	*ND*	*0.021 JB*	*0.000055 J*	2.1	2.2
May-2022	*ND*	*ND*	0.089	0.00051	*0.00023 J*	7.3	7.9	*0.0018 J*	0.01	0.0028	*ND*	*ND*	*ND*	2.8	3
Oct-2022	*ND*	*0.00048 J*	0.086	0.00051	*0.00027 J*	7.8	8.2	*0.0021 J*	0.011	*0.0021 J*	*ND*	*ND*	*ND*	2.8	3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-21***												
Nov-1993	0.17	NA	ND	NA	2	NA	ND	NA	3	NA	NA	NA	0.04
Apr-1994	0.17	NA	ND	NA	2.59	NA	ND	NA	11.2	NA	NA	NA	0.09
Apr-1995	0.16	NA	ND	ND	2.2	NA	ND	ND	9.3	NA	ND	ND	0.08
Oct-1996	0.12	0.13	NA	ND	ND	ND	ND	ND	9.8	9.9	ND	ND	0.18
Apr-1997	0.13	0.13	ND	ND	3.7	3.1	ND	ND	8	9.1	0.002	ND	0.23
Oct-1997	0.149	0.151	NA	0.013	1.81	2.46	ND	ND	8.32	8.35	ND	ND	0.051
Apr-1998	0.22	0.153	NA	0.011	3.52	2.33	ND	ND	16	10.9	ND	ND	0.084
Apr-1999	0.158	0.149	NA	ND	1.58	2.01	ND	ND	11.5	10.8	ND	ND	0.05
Oct-1999	0.155	0.146	NA	0.018	2.71	2.75	ND	ND	10.8	9.99	ND	ND	0.062
Apr-2000	0.133	0.128	NA	ND	1.91	2.1	ND	ND	10.9	10.4	ND	ND	0.041
Oct-2000	0.134	0.131	NA	ND	2.3	1.94	ND	ND	10	9.79	ND	ND	0.039
Apr-2001	0.147	NA	NA	ND	3.52	NA	ND	ND	11.3	NA	ND	ND	0.044
Sep-2001	0.145	0.146	NA	ND	3.01	2.66	ND	ND	13.1	12.1	ND	ND	0.044
Mar-2002	0.137	0.139	NA	ND	3.65	3.48	ND	ND	14.2	13.1	ND	ND	0.047
Sep-2002	0.139	0.141	NA	ND	2.12	2.07	ND	ND	12.8	12.7	ND	ND	0.044
Mar-2003	0.147	0.145	NA	ND	2.47	2.14	ND	ND	13.4	12.7	ND	ND	0.045
Oct-2003	0.16	0.164	NA	ND	2.24	2.76	ND	ND	8.91	8.29	ND	ND	0.045
Apr-2004	0.154	0.152	ND	ND	2.12	2.14	ND	ND	10.3	10.7	ND	ND	0.043
Oct-2004	0.188	0.187	ND	ND	1.88	1.87	ND	ND	7.81	7.63	ND	ND	0.048
Apr-2005	0.175	0.176	ND	ND	2.21	1.86	ND	ND	10.5	9.96	ND	ND	0.053
Oct-2005	0.148	0.142	ND	ND	1.83	1.59	ND	ND	8.39	7.29	ND	0.013	0.044
Mar-2006	0.141	0.138	ND	ND	1.64	1.58	ND	ND	9.97	9.69	ND	ND	0.02

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-21***												
Sep-2006	0.154	0.156	ND	ND	1.79	1.82	ND	ND	9.83	9.95	ND	ND	0.039
Mar-2007	0.139	0.139	ND	ND	1.68	1.69	ND	ND	9.37	9.39	ND	ND	0.043
Sep-2007	0.137	0.137	ND	ND	1.42	1.33	ND	ND	8.11	8.01	ND	ND	0.05
Mar-2008	0.154	0.136	ND	ND	1.95	1.66	ND	ND	11.6	10.3	ND	ND	0.047
Sep-2008	0.137	0.136	ND	ND	1.63	1.6	ND	ND	11.7	11.6	ND	ND	0.038
Mar-2009	0.146	0.144	ND	ND	1.81	1.72	ND	ND	13.7	13.3	ND	ND	0.043
Oct-2009	0.135	0.141	ND	ND	1.56	1.5	ND	ND	14.6	14.9	ND	ND	ND
Apr-2010	0.132	0.131	ND	ND	1.71	1.66	ND	ND	17	16.8	ND	ND	0.038
Oct-2010	0.143	0.142	ND	ND	1.63	1.61	ND	ND	13	13.1	ND	ND	0.047
Apr-2011	0.127	0.124	ND	ND	1.35	1.29	ND	ND	14.2	14	ND	ND	0.049
Sep-2011	0.137	0.136	ND	ND	1.73	1.73	ND	ND	15.9	16	ND	ND	0.037
Mar-2012	0.13	0.128	ND	ND	1.6	1.57	ND	ND	13.3	13.3	ND	ND	0.036
Sep-2012	0.125	0.126	0.000024 J	0.0057 J	1.57	1.6	0.000692 J	ND	13.8	13.5	ND	ND	0.0393
Mar-2013	0.12	0.138	0.000061 J	0.0049 J	1.46	1.65	0.000602 J	ND	14.8	16.3	ND	ND	0.0415
Oct-2013	0.127	0.128	ND	0.0052 J	1.57	1.59	0.000675 J	ND	12.3	12.9	ND	0.002 J	0.0484
Mar-2014	0.111	0.113	ND	0.0043 J	1.66	1.69	ND	ND	13.1	13.4	ND	ND	0.033
Oct-2014	0.112	0.112	0.000023 J	0.0056 J	1.59	1.58	0.0028	ND	9.32	9.39	ND	ND	0.035
Apr-2015	0.133	0.135	ND	0.0051 J	1.71	1.77	0.0029	ND	12.9	13.2	ND	ND	0.0376
Nov-2015	0.124	0.127	ND	0.0048 J	1.73	1.74	0.0039	ND	11.1	11.2	0.000151 J	ND	0.0369
May-2016	0.123	0.125	ND	0.0048	1.75	1.75	ND	ND	13.4	14	ND	ND	0.04
Oct-2016	0.118	0.124	ND	0.0054	1.67	1.7	ND	ND	12.6	12.9	ND	ND	0.0371
May-2017	0.116	0.118	ND	0.0049	1.76	1.86	ND	ND	14.5	14.6	ND	ND	0.0347
Oct-2017	0.117	0.123	ND	0.005	1.9	2.07	ND	ND	13.3 J-	16.9	ND	ND	0.0361
May-2018	0.1	0.1	ND	0.00071 B	1.5 J	1.6 J	0.0013 J	ND	21.6	19.5	ND	0.0023	0.0066

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-21***												
Nov-2018	0.094	0.095	*ND*	0.0062	*2.1 J*	*2.1 J*	*0.00064 J*	*ND*	19.6	19.9	*ND*	0.002	0.026
May-2019	0.098	0.095	*ND*	0.0031	*ND*	*ND*	*ND*	*ND*	14.8	14.1	*ND*	*ND*	0.013
Oct-2019	0.11	0.1	*ND*	0.0054	*2.2 J*	*2 J*	*0.00062 J*	*ND*	14.2	12.6	*ND*	0.0075	0.036
May-2020	0.13	0.12	*ND*	0.0052	*2 J*	*2.1 J*	*ND*	*ND*	18	18	*ND*	0.0098	0.032
Oct-2020	0.13	0.11	*ND*	0.0039	*ND*	*1.9 J*	*ND*	*ND*	18.8	17.3	*ND*	0.016	0.025
Apr-2021	0.1	0.1	*ND*	*0.0036 J*	1.9	1.9	*ND*	*ND*	15.6	15.8	*ND*	*0.0008 J*	0.024
Oct-2021	0.1	0.11	*ND*	0.0044	1.7	1.8	*0.0016 J*	*ND*	13.5	14.4	*ND*	*ND*	0.028
May-2022	0.13	0.13	*ND*	0.0053	2	2	*0.0012 J*	*ND*	19.4	19.9	*ND*	*ND*	0.033
Oct-2022	0.13	0.13	*ND*	0.0053	2	2	0.0032	*ND*	22	22.1	*ND*	*ND*	0.031

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-21*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	25	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-21*																
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.3 J*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-21*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.5 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-21***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.5	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*0.6 J*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-21***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.44 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.37 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.39 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*0.49 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.36 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-21***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.416 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-21***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	1.4	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	0.7 J	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-21***															
Oct-2005	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*0.29 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.29 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-21***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.1 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.4 BCH	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-22***											
Nov-1993	5	5	0.2	ND	7.1	0.8	ND	5.44	40.4	2.6	ND	5.18
Apr-1994	ND	ND	0.1	ND	4.6	0.8	ND	5.28	172	ND	22	63.1
Apr-1995	ND	ND	ND	4	4	0.7	ND	4.6	29.3	2.6	15	2.9
Apr-1997	ND	ND	ND	ND	5	0.79	ND	NA	NA	ND	78	6.2
Oct-1997	ND	ND	0.2	ND	4.85	0.733	ND	5.98	51.3	ND	30	5
Apr-1998	ND	ND	ND	ND	5.12	0.93	ND	6.28	28.3	0.7	28	5.1
Apr-1999	ND	ND	0.5	ND	3.51	0.591	ND	4.62	29.6	ND	14	4.6
Oct-1999	ND	ND	0.09	ND	4.81	0.987	ND	4.86	39.5	ND	32	4.5
Apr-2000	ND	ND	ND	ND	2.96	ND	ND	5.11	29	ND	30	4.2
Oct-2000	ND	NA	ND	ND	5.77	1.08	ND	5.3	24.1	ND	32	6.57
Apr-2001	1.2	NA	ND	ND	5.47	0.561	ND	NA	NA	ND	35	6.5
Sep-2001	ND	ND	ND	ND	7.55	1.84	ND	4.93	28	ND	32	6.77
Mar-2002	2.1	2.1	ND	13	6.11	1.15	ND	4.9	36.5	ND	54	6.65
Sep-2002	ND	ND	ND	ND	6.2	0.93	ND	4.9	35.3	ND	62	6.75
Mar-2003	ND	ND	ND	ND	15.6	1.07	ND	4.8	38.1	ND	48	5.84
Oct-2003	ND	ND	ND	ND	5.15	0.783	ND	5	44.3	ND	17	6.29
Apr-2004	ND	ND	ND	ND	4.93	0.709	ND	4.6	31.5	1.54	31	4.98
Oct-2004	ND	ND	ND	ND	4.68	0.71	ND	4.9	32.6	ND	23	4.81
Apr-2005	ND	ND	ND	ND	5.01	0.76	ND	4.6	29.4	3.61	45	5.7
Oct-2005	1.7	1.7	ND	ND	5.4	0.78	ND	4.6	28.7	1.77	43	4.51
Mar-2006	1.9	1.9	ND	ND	5.16	0.77	ND	5.1	33.3	3.93	18	3.88
Sep-2006	1.7	1.7	ND	ND	5.05	0.75	ND	5.1	33.3	1.78	21	5.56
Mar-2007	1.7	1.7	ND	ND	5.32	0.81	ND	4.8	32.3	1.33	ND	5.04
Sep-2007	1.6	1.6	ND	ND	5.14	0.81	ND	6.1	32.7	1.28	47	4.9
Mar-2008	1.4	1.4	ND	ND	16.6	1.72	ND	4.4	33.5	4.72	13	4.84
Sep-2008	1.6	1.6	0.25	ND	5.79	0.86	ND	4.5	35.6	ND	23	5.3
Mar-2009	1.9	1.9	ND	ND	5.91	0.85	ND	4.5	36.7	1.58	31	5.11
Oct-2009	2	2	ND	ND	5.94	0.76	ND	4.1	34.8	1.38	14	5.39
Apr-2010	1.8	1.8	ND	ND	6.68	0.81	ND	3.7	38.4	2.68	70	5
Oct-2010	1.8	1.8	ND	ND	7.32	0.82	ND	4.2	38.7	1.61	23	6.5
Apr-2011	1.8	1.8	ND	ND	7.03	0.81	ND	4.3	41	1.66	42	5.8
Sep-2011	1.6	1.6	ND	ND	7.71	0.86	ND	4.5	39	1.24	23	6.37
Mar-2012	1.6	1.6	ND	ND	8.18	0.86	ND	3.9	42.8	2.3	53	6.54
Sep-2012	1.32	1.32	ND	ND	8.79	0.849	ND	4.1	43.1	3.6	29	6.8
Mar-2013	1.92	1.92	ND	ND	9.97	1.03	ND	4.7	49.4	1.19	31	7.32
Oct-2013	1.96 J	1.96 J	0.134 J	ND	9.55	0.986	ND	5.8	48.3	1.19	37	7.05
Mar-2014	1.88	1.88	ND	ND	10.2	0.904	ND	4.9	54.1	2.71	29	7.67

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-22***											
Oct-2014	*ND*	*ND*	*ND*	*ND*	12.3	0.952	*ND*	4.8	54.5	2.86	29	8.6
Apr-2015	1.92	1.92	*ND*	*ND*	14.3	1.21	*ND*	3.7	61.4	2.75	32	10.3
Nov-2015	*ND*	*ND*	*ND*	*6 J*	14.6	1.19	*ND*	4.8	98.9	3.48	37	10.4
May-2016	*ND*	*ND*	*ND*	*ND*	13.9	1.14	*ND*	4.9	102.6	2.63	36	9.2
Oct-2016	*ND*	*ND*	*ND*	*ND*	14.2	*NA*	*NA*	4.7	95.7	1.88	41	8.4
May-2017	*ND*	*ND*	*ND*	*ND*	14.9	1.11	*ND*	4.6	98.6	2.56	29	8.9
Oct-2017	2.8	2.8	*ND*	*7 J*	16.2	1.2	*ND*	4.7	116.5	4.97	50	11.8
May-2018	16 B	16	*ND*	*10.1 J*	15.2	0.48	*ND*	4.6	94.6	29.8	79	54.2
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	14.7	0.97	*ND*	4.56	70.6	*5.6 J*	*ND*	9.1
May-2019	*ND*	*NA*	*ND*	*ND*	21.6	1.2	*ND*	4.47	74.7	*ND*	57	12.7
Oct-2019	*ND*	*NA*	*ND*	*6 J*	22.4	1.3	*ND*	4.16	113.4	*ND*	53	14.9
May-2020	*ND*	*NA*	*ND*	*ND*	22	1.2	*ND*	4.11	98.1	*ND*	48	13
Oct-2020	*ND*	*NA*	*ND*	*ND*	21.1	1	*ND*	4.36	91.7	2.8	38	11.9
Apr-2021	*ND*	*NA*	*0.072 J*	*ND*	21.5	1.1	*ND*	4.59	103.4	*ND*	35	12.1
Oct-2021	*2 J3c*	*NA*	*ND*	*ND*	21.6	1.2	*ND*	4.67	154.6	*ND*	45	14
May-2022	*ND*	*NA*	*ND*	*ND*	18.4	1.1	*ND*	4.34	129.7	*ND*	65	14.5 N3
Oct-2022	*2 J4c*	*NA*	*ND*	*10.7 J*	22.6	1.1	*ND*	4.55	123.2	*ND*	41	14 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22***													
Nov-1993	NA	ND	ND	NA	ND	0.82	NA	0.009	NA	ND	3.8	0.29	ND	0.76	NA
Apr-1994	NA	ND	ND	NA	ND	1.64	NA	ND	NA	ND	0.16	0.12	ND	0.68	NA
Apr-1995	ND	ND	0.9	ND	ND	0.41	NA	ND	ND	ND	ND	ND	ND	0.45	NA
Oct-1996	ND	ND	0.011	ND	ND	0.79	0.83	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	0.041	ND	ND	2.2	0.72	ND	0.023	ND	0.43	ND	ND	0.79	ND
Oct-1997	ND	ND	0.013	ND	ND	0.877	0.806	ND	ND	ND	0.656	ND	ND	0.49	0.465
Apr-1998	ND	ND	0.029	ND	ND	1.01	0.956	ND	ND	ND	1.7	ND	ND	0.613	0.506
Apr-1999	ND	ND	0.015	ND	ND	0.947	0.807	ND	ND	ND	0.482	ND	ND	0.546	0.502
Oct-1999	ND	ND	0.013	ND	ND	0.907	0.833	ND	ND	ND	ND	ND	ND	0.541	0.502
Apr-2000	ND	ND	0.011	ND	ND	0.81	0.773	ND	ND	ND	ND	ND	ND	0.529	0.495
Oct-2000	ND	ND	0.013	ND	ND	1.54	1.09	ND	ND	0.011	0.268	ND	ND	0.662	0.594
Apr-2001	ND	ND	0.02	ND	ND	1.46	NA	ND	ND	ND	2.25	NA	ND	0.686	NA
Sep-2001	ND	ND	0.014	ND	ND	1.42	1.11	ND	ND	ND	0.575	ND	ND	0.782	0.607
Mar-2002	ND	ND	0.016	ND	ND	1.49	1.09	ND	ND	ND	0.624	ND	ND	0.71	0.629
Sep-2002	ND	ND	0.016	ND	ND	1.59	1.08	ND	ND	ND	0.408	ND	ND	0.675	0.598
Mar-2003	ND	ND	0.015	ND	ND	1.21	1.1	ND	ND	ND	ND	ND	ND	0.686	0.636
Oct-2003	ND	ND	0.02	ND	ND	1.42	0.984	ND	ND	ND	1.14	ND	ND	0.668	0.612
Apr-2004	ND	ND	0.013	ND	ND	0.95	0.958	ND	ND	ND	ND	ND	ND	0.633	0.606
Oct-2004	ND	ND	0.013	ND	ND	0.878	0.886	ND	ND	ND	0.067	ND	ND	0.636	0.62
Apr-2005	ND	ND	0.018	ND	ND	1.22	0.874	ND	ND	ND	1.47	ND	ND	0.645	0.594
Oct-2005	ND	ND	0.013	ND	ND	0.911	0.862	ND	ND	ND	ND	ND	ND	0.544	0.534

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22***													
Mar-2006	ND	ND	0.01	ND	ND	0.736	0.66	ND	ND	ND	ND	ND	ND	0.496	0.486
Sep-2006	ND	ND	0.013	ND	ND	1.2	0.88	ND	ND	ND	ND	ND	ND	0.622	0.658
Mar-2007	ND	ND	0.015	ND	ND	0.931	0.874	ND	ND	ND	ND	ND	ND	0.661	0.64
Sep-2007	ND	ND	0.014	ND	ND	0.863	0.825	ND	ND	ND	ND	ND	ND	0.668	0.648
Mar-2008	ND	ND	0.015	ND	ND	0.936	0.846	ND	ND	ND	ND	ND	ND	0.608	0.617
Sep-2008	ND	ND	0.016	ND	ND	0.934	0.926	ND	ND	ND	ND	ND	ND	0.722	0.704
Mar-2009	ND	ND	0.014	ND	ND	0.913	0.893	ND	ND	ND	ND	ND	ND	0.688	0.666
Oct-2009	ND	ND	0.016	ND	ND	0.938	0.916	ND	ND	ND	ND	ND	ND	0.741	0.726
Apr-2010	ND	ND	0.014	ND	ND	0.878	0.881	ND	ND	ND	ND	ND	ND	0.684	0.688
Oct-2010	ND	ND	0.014	ND	ND	1.15	1.12	ND	ND	ND	ND	ND	ND	0.881	0.878
Apr-2011	ND	ND	0.018	ND	ND	1.04	1.01	ND	ND	ND	ND	ND	ND	0.768	0.754
Sep-2011	ND	ND	0.018	ND	ND	1.24	1.25	ND	ND	ND	ND	ND	ND	0.794	0.788
Mar-2012	ND	ND	0.019	ND	ND	1.12	1.13	ND	ND	ND	ND	ND	ND	0.908	0.902
Sep-2012	ND	ND	0.0187	0.000215 J	ND	1.23	1.26	ND	0.008 J	0.0037 J	0.0364 J	0.0396 J	ND	0.906	0.997
Mar-2013	ND	ND	0.0202	0.000232 J	ND	1.41	1.32	0.003 J	0.0088 J	0.0071 J	0.0383 J	0.0062 J	0.0016 J	0.923	0.759
Oct-2013	ND	ND	0.0223	0.000213 J	ND	1.4	1.46	0.0016 J	0.0087 J	0.004 J	ND	ND	ND	0.863	0.943
Mar-2014	ND	ND	0.0235	0.00026 J	0.000094 J	1.52	1.7	0.0027 J	0.0073 J	0.0054 J	0.073	0.0562	ND	0.94	1.08
Oct-2014	0.000768 J	ND	0.0281	0.000346 J	0.000097 J	1.55	1.62	0.0013 J	0.01	0.0051 J	0.0143 J	ND	ND	1.15	1.18
Apr-2015	0.000774 J	ND	0.0332	0.00028 J	0.00012 J	1.86	1.79	0.0012 J	0.0109	0.0058 J	0.0177 J	0.0262 J	ND	1.37	1.34
Nov-2015	0.000428 J	ND	0.0325	0.00035 J	0.000131 J	1.86	2.04	0.000665 J	0.0104	0.005 J	ND	ND	0.000458 J	1.41	1.38
May-2016	ND	ND	0.0304	0.0003 J	ND	1.56	1.78	ND	0.011	0.0051	ND	ND	ND	1.28	1.3
Oct-2016	ND	ND	0.0291	0.00026 J	ND	1.5	1.49	0.00075 J	0.0101	0.0052	ND	ND	ND	1.13	1.18
May-2017	ND	ND	0.0285	0.00025 J	ND	1.46	1.64	0.00087 J	0.0087	0.0044	ND	ND	ND	1.27	1.35
Oct-2017	ND	ND	0.0267	0.00026 J	0.00024 J	2.4	2.05	0.0013 J	0.0094	0.0191	0.539	0.0811 J	0.0044	1.41	1.37

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22***													
May-2018	*0.0001 J*	*ND*	0.036	*ND*	*0.0001 J*	15.9	1.6	*0.0066 JB*	0.0029	0.0043	0.24	*0.015 J*	*0.000079 JB*	3.5	1.4
Nov-2018	*ND*	*ND*	0.03	*0.00028 J*	*0.00011 J*	1.5	1.7	0.022	0.007	0.0037	0.13	0.079	*0.0001 J*	1.3	1.4
May-2019	*ND*	*ND*	0.04	0.00038	*ND*	2.1	2.1	0.017	0.0098	0.0051	*ND*	0.054	*ND*	1.8	1.8
Oct-2019	*0.00019 J*	*ND*	0.049	0.00037	*0.00063 J*	2.3	2.3	0.0094	0.0094	0.011	*0.046 J*	0.032	*0.00017 J*	2.2	2.1
May-2020	*0.000058 J*	*ND*	0.041	*0.00028 J*	*ND*	2.1	2.1	0.021	0.011	0.0066	0.11	0.042	*ND*	1.9	1.8
Oct-2020	*ND*	*ND*	0.032	*0.00027 J*	*ND*	2.1	2	*0.031 J*	0.01	*0.0098 J*	0.19	0.099	*ND*	1.6	1.6
Apr-2021	*ND*	*ND*	0.043	*0.00038 J*	*ND*	2	2	0.015	0.01	0.014	0.088	*0.05 J*	*ND*	1.7	1.7
Oct-2021	*0.000076 J*	*ND*	0.052	*0.00035 J*	*ND*	2.2	2.3	0.01	0.012	0.014	0.096	0.054 B	*ND*	2	2
May-2022	*ND*	*ND*	0.051	*0.00032 J*	*ND*	2.3	2.4	0.0043	0.013	0.011	*ND*	*ND*	*ND*	2.1	2.1
Oct-2022	*ND*	*ND*	0.047	*0.00029 J*	*ND*	2.3	2.4	0.011	0.012	0.013	0.092	*0.039 J*	*ND*	2	2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-22*												
Nov-1993	ND	NA	ND	NA	1.6	NA	ND	NA	3.3	NA	NA	NA	0.01
Apr-1994	0.02	NA	ND	NA	0.85	NA	ND	NA	2.6	NA	NA	NA	0.04
Apr-1995	ND	NA	ND	ND	1	NA	ND	ND	1.8	NA	ND	ND	0.01
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	3.2	3.3	ND	ND	0.068
Apr-1997	0.012	ND	0.0014	ND	2.4	1.6	ND	ND	2.7	2.6	ND	ND	0.084
Oct-1997	ND	ND	NA	ND	0.802	0.886	ND	ND	2	1.98	ND	ND	0.014
Apr-1998	ND	0.018	NA	ND	2	0.939	ND	ND	2.23	2.25	ND	ND	0.014
Apr-1999	ND	ND	NA	ND	0.588	0.71	ND	ND	2.19	2.09	ND	ND	0.015
Oct-1999	ND	ND	NA	0.012	0.947	1.66	ND	ND	2.41	2.16	ND	ND	0.011
Apr-2000	ND	ND	NA	ND	0.605	ND	ND	ND	2.4	2.28	ND	ND	0.01
Oct-2000	ND	ND	NA	ND	1.2	0.734	ND	ND	3.23	2.67	ND	ND	0.019
Apr-2001	ND	NA	NA	ND	1.81	NA	ND	ND	3.35	NA	ND	ND	0.017
Sep-2001	ND	ND	NA	0.014	1.1	0.794	ND	ND	3.83	2.64	ND	ND	0.023
Mar-2002	ND	ND	NA	ND	0.932	0.822	ND	ND	4.13	2.84	ND	ND	0.017
Sep-2002	0.01	ND	NA	0.011	0.434	1.02	ND	ND	3.12	2.76	ND	ND	0.019
Mar-2003	ND	ND	NA	ND	0.908	0.713	ND	ND	3.04	2.88	ND	ND	0.013
Oct-2003	ND	ND	NA	0.014	0.771	ND	ND	ND	3.63	2.68	ND	ND	0.023
Apr-2004	ND	ND	ND	ND	1.4	1.28	ND	ND	2.5	2.47	ND	ND	ND
Oct-2004	ND	ND	ND	ND	1.23	0.7	ND	ND	2.41	2.24	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.26	1.03	ND	ND	3.27	2.38	ND	ND	0.015
Oct-2005	ND	ND	ND	0.011	0.933	0.89	ND	ND	2.43	2.25	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.644	0.584	ND	ND	2.54	2.36	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22***												
Sep-2006	ND	ND	ND	ND	0.893	0.959	ND	ND	2.31	2.4	ND	ND	0.042
Mar-2007	ND	ND	ND	ND	0.874	0.852	ND	ND	2.43	2.39	ND	ND	0.019
Sep-2007	ND	ND	ND	ND	0.778	0.729	ND	ND	2.57	2.44	ND	ND	ND
Mar-2008	ND	ND	ND	ND	1.06	1.02	ND	ND	2.57	2.21	ND	ND	ND
Sep-2008	ND	ND	ND	ND	0.847	0.819	ND	ND	2.66	2.53	ND	ND	ND
Mar-2009	ND	ND	ND	ND	0.951	0.933	ND	ND	2.73	2.68	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.705	0.627	ND	ND	2.69	2.52	ND	ND	ND
Apr-2010	ND	ND	ND	ND	0.79	0.783	ND	ND	3.02	2.96	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.907	0.926	ND	ND	3.43	3.64	ND	ND	0.012
Apr-2011	ND	ND	ND	ND	0.673	0.645	ND	ND	3.27	3.17	ND	ND	0.012
Sep-2011	ND	ND	ND	ND	0.909	0.928	ND	ND	3.9	3.84	ND	ND	0.011
Mar-2012	ND	ND	ND	ND	0.876	0.851	ND	ND	3.96	3.86	ND	ND	0.01
Sep-2012	0.0318	0.0101	0.000022 J	0.0099 J	0.877	0.879	ND	ND	3.96	4.02	ND	ND	0.009 J
Mar-2013	0.0101	0.0089 J	0.00003 J	0.0123	0.9	0.878	ND	0.000033 J	4.54	4.54	0.00046 J	ND	0.0264
Oct-2013	0.01 J	0.0111	ND	0.0109 J	0.881	0.908	ND	ND	4.39	4.49	ND	0.0014 J	0.0199
Mar-2014	0.0111	0.0117	ND	0.0136	0.923	0.966	ND	0.000054 J	4.34	4.81	0.000268 J	0.000699 J	0.0103
Oct-2014	0.0131	0.0136	ND	0.0138	1.03	1.02	ND	ND	6.03	5.97	ND	ND	0.0169
Apr-2015	0.0156	0.0153	ND	0.015	1.13	1.09	ND	ND	7.58	7.28	ND	ND	0.0202
Nov-2015	0.0153	0.015	ND	0.0137	1.19	1.17	0.000479 J	ND	7.46	7.24	0.000174 J	ND	0.0177
May-2016	0.0146	0.0158	ND	0.0145	1.07	1.15	ND	ND	7.28	7	ND	ND	0.0164 J
Oct-2016	0.0122	0.0146	ND	0.0133	1.03	1.06	ND	ND	6.75	6.99	ND	ND	0.0143 J
May-2017	0.0152	0.0157	ND	0.0121	1.06	1.09	ND	ND	7.54	7.91	ND	ND	0.0122 J
Oct-2017	0.0211	0.0231	0.000051 J	0.0229	1.09	1.09	ND	ND	9.27	9.11	ND	ND	0.134
May-2018	0.041	0.017	ND	0.0056	3.4 J	ND	0.0014 J	ND	11.9	8	ND	0.0021	0.0043 JB

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22***												
Nov-2018	0.018	0.017	*ND*	0.023	*0.99 J*	*1.2 J*	*0.00028 J*	*ND*	7.5	7.7	*ND*	0.0029	0.012
May-2019	0.024	0.024	*ND*	0.022	*ND*	*ND*	*ND*	*ND*	10.5	10	*ND*	*ND*	0.014
Oct-2019	0.026	0.029	*ND*	0.016	*1.7 J*	*1.5 J*	*0.00062 J*	*ND*	13.4	12.1	*ND*	0.0029	0.03
May-2020	0.028	0.027	*ND*	0.024	*ND*	*1.3 J*	*0.00062 JM1*	*ND*	11.6	10.1	*ND*	0.013 D6M1	0.015
Oct-2020	0.024	0.025	*ND*	0.031	*ND*	*1.1 J*	*ND*	*ND*	10.7	9.4	*ND*	*0.0023 J*	*0.015 J*
Apr-2021	0.027	0.025	*ND*	0.024	1.2	1.1	*ND*	*ND*	11.3	11	*ND*	*ND*	0.013
Oct-2021	0.035	0.036	*ND*	0.022	1.2	1.2	*ND*	*ND*	12.8	13	*0.000053 J*	*ND*	0.015
May-2022	0.034	0.034	*ND*	0.018	1.2	1.1	*ND*	*ND*	12.6	12.4	*ND*	*ND*	0.016
Oct-2022	0.034	0.035	*ND*	0.023	1.2	1.1	*0.00096 J*	*ND*	12.4	11.9	*ND*	*ND*	0.016

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-22***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5 J	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.9 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.3 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.25 J*	*0.37 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.6 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.401 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.23 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-22A***											
Nov-1993	50	50	0.2	ND	30	ND	ND	5.25	217	9.3	90	15.9
Apr-1994	69	69	2.2	20.2	61.7	ND	ND	5.62	341	7.5	182	30.36
Apr-1995	99.9	99.9	1.4	ND	44.4	ND	ND	5.5	379	16.6	ND	28.6
Apr-1997	ND	10	ND	ND	6	0.14	ND	NA	NA	5.6	113	15
Oct-1997	47	47	0.59	ND	7.36	0.228	ND	6.37	96.9	7.1	80	26
Apr-1998	92	92	1.2	15	16.8	ND	ND	6.24	75.2	7.17	150	28
Apr-1999	67	67	1.5	ND	15.2	ND	ND	5.14	57.1	4.99	96	17
Oct-1999	57	57	1.2	ND	21.3	ND	ND	5.89	92.7	8.3	140	21
Apr-2000	21	21	1.7	ND	32.3	ND	ND	6.31	131	10.4	102	17
Oct-2000	23	NA	2.8	16	31.8	ND	ND	6.07	98	10.1	108	17
Apr-2001	14	NA	1.9	ND	14.6	ND	ND	NA	NA	2.59	91	14
Sep-2001	11	11	4.8	14	83.3	1.21	ND	5.27	209	29.4	205	28.8
Mar-2002	12	12	2.6	ND	50.6	0.264	ND	5	58.7	25.2	137	21.4
Sep-2002	7	7	2	ND	42.4	0.76	ND	5	48.1	22.6	112	16.6
Mar-2003	2.5	2.5	ND	ND	14	ND	ND	4.9	52.1	12.7	52	14.1
Oct-2003	2.2	2.2	0.55	15	4.38	0.49	ND	5.4	66.4	8.49	17	15.3
Apr-2004	5.3	5.3	0.43	19	28.3	ND	ND	6	71.2	8.39	84	18.1
Oct-2004	4.8	4.8	0.55	ND	21.9	0.11	ND	4.3	67.4	10.4	72	14.1
Apr-2005	2.2	2.2	ND	ND	10.1	0.55	ND	4.6	78.8	11.6	55	13.6
Oct-2005	2.6	2.6	ND	ND	6	0.67	ND	4.9	46.6	10.4	55	12.2
Mar-2006	3	3	ND	ND	5.48	0.65	ND	5.1	48.1	11.4	31	11.2
Sep-2006	3	3	ND	ND	4.61	0.35	ND	4.7	44.5	8.85	31	11.7
Mar-2007	3.1	3.1	ND	ND	4.54	0.35	ND	4.5	38.9	8.38	19	10.8
Sep-2007	2.8	2.8	ND	ND	4.22	0.28	ND	6.1	40.5	7.67	55	10.8
Mar-2008	3.2	3.2	ND	ND	16.2	1.12	ND	4.5	43.5	16	22	10.5
Sep-2008	3.2	3.2	ND	ND	4.75	0.21	ND	4.6	41.9	10.7	25	11.2
Mar-2009	3.4	3.4	ND	ND	5.57	0.35	ND	4.4	46	7.32	36	11.5
Oct-2009	3.4	3.4	ND	ND	10.4	0.8	ND	4.3	61.1	7.43	43	14
Apr-2010	2.8	2.8	ND	ND	19.5	1.33	ND	3.9	86.7	8.81	113	16.9
Oct-2010	2.7	2.7	ND	ND	29.8	1.66	ND	4.6	113.5	7.86	84	21.2
Apr-2011	2.4	2.4	ND	ND	32.5	1.48	ND	4.3	129.1	8.18	94	18.9
Sep-2011	2.6	2.6	ND	ND	30.6	1.31	ND	4.4	115.3	10.1	83	21
Mar-2012	2.6	2.6	ND	ND	16.6	0.73	ND	3.6	80.8	10.5	84	18.4
Sep-2012	2.12	2.12	ND	ND	18.8	0.747	ND	4.1	79.8	11.1	62	18.9
Mar-2013	2.96	2.96	ND	ND	31.2	1.1	ND	4.7	121	8.15	77	18.5
Oct-2013	2.8	2.8	ND	ND	27.3	0.953	ND	6	110.7	9.18	67	19.5
Mar-2014	2.68	2.68	ND	ND	31.1	1.08	ND	4.9	129.8	9.94	91	22.3

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-22A***										
Oct-2014	*ND*	*ND*	*ND*	*ND*	44.4	1.37	*ND*	4.8	146.5	11.9	88	25
Apr-2015	2.84	2.84	*ND*	*ND*	49.8	1.68	*ND*	3.9	157.1	12.7	106	27.9
Nov-2015	*ND*	*ND*	*ND*	*6 J*	45.2	1.55	*ND*	4.9	205	13.1	96	26.2
May-2016	*ND*	*ND*	*ND*	*ND*	32.5	1.16	*ND*	4.8	203	12.6	74	21.9
Oct-2016	*ND*	*ND*	*ND*	*ND*	40.4	*NA*	*NA*	4.6	221	9.36	97	22.8
May-2017	*ND*	*ND*	*ND*	10	40.5	1.17	*ND*	4.7	240	10.8	76	24.4
Oct-2017	*ND*	*ND*	*ND*	*ND*	45.4	1.36	*ND*	4.8	264	11.1	96	27
May-2018	*2 JB*	*ND*	*ND*	*ND*	42.6	0.24	*ND*	4.4	228	10.4	78	27.1
Nov-2018	*1 JB*	*ND*	*ND*	*5.7 J*	57.2	1.6	*ND*	4.44	232.1	*9.3 J*	99	27.4
May-2019	*ND*	*NA*	*ND*	*ND*	56.8	1.7	*ND*	4.48	213.4	*ND*	135	32.7
Oct-2019	*ND*	*NA*	*ND*	*6 J*	61.4	1.9	*ND*	4.16	260.8	12.9	142	32.2
May-2020	*ND*	*NA*	*ND*	*6.9 J*	95.5	2.3	*ND*	4.03	350	12.6	182	33.8
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	94.5	2.4	*ND*	4.19	350.2	19	178	39.7
Apr-2021	*ND*	*NA*	*ND*	*8.3 J*	82.2	1.8	*ND*	4.42	339.7	15.7	160	34.8
Oct-2021	*ND*	*NA*	*ND*	*6.1 J*	65.4	1.4	*ND*	4.53	341.6	11.9	142	30.1
May-2022	*ND*	*NA*	*ND*	*ND*	71.1	1.7	*ND*	4.25	343.5	13.4	171	34.6 N3
Oct-2022	*ND*	*NA*	*ND*	*17.5 J*	87.5	2.1	*ND*	4.42	377.3	17.6 MH	163	40.9 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-22A*													
Nov-1993	NA	ND	ND	NA	ND	3.4	NA	ND	NA	ND	18.4	18.3	ND	1.8	NA
Apr-1994	NA	ND	ND	NA	ND	5.89	NA	ND	NA	ND	27.7	22.7	ND	3.8	NA
Apr-1995	ND	ND	0.6	ND	ND	5.2	NA	ND	ND	ND	50.1	47	ND	3.8	NA
Oct-1996	ND	**0.12**	0.054	ND	ND	8.1	8.6	ND	ND	ND	40	37	ND	3.6	3.7
Apr-1997	ND	ND	0.055	ND	ND	3.4	2.4	ND	ND	ND	16	11	ND	2	1.5
Oct-1997	ND	**0.065**	0.043	ND	ND	2.76	2.44	ND	ND	ND	20	15	ND	1.69	1.61
Apr-1998	ND	ND	0.058	ND	ND	6.16	6.1	ND	ND	ND	57	56	ND	3.06	3.05
Apr-1999	ND	ND	0.04	ND	ND	3.66	3.55	ND	ND	ND	38.5	36.7	ND	1.82	1.78
Oct-1999	ND	ND	0.033	ND	ND	2.82	2.44	ND	ND	ND	0.597	0.083	ND	1.5	1.36
Apr-2000	ND	ND	0.042	ND	ND	3.55	3.3	ND	ND	ND	0.894	0.472	ND	1.95	1.81
Oct-2000	ND	ND	0.041	ND	ND	3.65	3.68	ND	ND	ND	4.38	4.02	ND	1.92	1.92
Apr-2001	ND	ND	0.039	ND	ND	2.83	NA	ND	ND	ND	1.01	NA	ND	1.77	NA
Sep-2001	ND	ND	0.069	ND	ND	5.81	6.18	ND	ND	ND	8.81	1.55	ND	3.47	3.64
Mar-2002	ND	ND	0.054	ND	ND	4.35	2.24	ND	ND	ND	3.46	ND	ND	2.55	1.83
Sep-2002	ND	ND	0.056	ND	ND	3.09	2.14	ND	ND	ND	1.44	ND	ND	2.15	1.78
Mar-2003	ND	ND	0.073	ND	ND	2.23	2.1	ND	ND	ND	1.58	ND	ND	2.08	1.97
Oct-2003	ND	ND	0.07	ND	ND	2.78	3.28	ND	ND	ND	1.13	1.71	ND	2.04	1.95
Apr-2004	ND	ND	0.066	ND	ND	3.66	3.05	ND	ND	ND	1.61	2.01	ND	2.18	1.95
Oct-2004	ND	ND	0.062	ND	ND	2.76	2.55	ND	ND	ND	1.6	0.842	ND	1.75	1.72
Apr-2005	ND	ND	0.073	ND	ND	2.26	2.12	ND	ND	ND	0.366	0.118	ND	1.93	1.88
Oct-2005	ND	ND	0.066	ND	ND	2.04	1.77	ND	ND	ND	0.222	ND	ND	1.72	1.63

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22A***													
Mar-2006	ND	ND	0.065	ND	ND	1.69	1.66	ND	ND	ND	ND	ND	ND	1.7	1.68
Sep-2006	ND	ND	0.062	ND	ND	1.85	1.87	ND	ND	ND	0.113	ND	ND	1.71	1.72
Mar-2007	ND	ND	0.059	ND	ND	1.68	1.66	ND	ND	ND	ND	ND	ND	1.61	1.6
Sep-2007	ND	0.002	0.058	ND	ND	1.62	1.57	ND	ND	ND	0.14	ND	ND	1.63	1.58
Mar-2008	ND	ND	0.061	ND	ND	1.65	1.56	ND	ND	ND	0.232	ND	ND	1.55	1.46
Sep-2008	ND	ND	0.061	ND	ND	1.65	1.58	ND	ND	ND	ND	ND	ND	1.72	1.62
Mar-2009	ND	ND	0.064	ND	ND	1.77	1.7	ND	ND	ND	ND	ND	ND	1.73	1.67
Oct-2009	ND	ND	0.81	ND	ND	2.18	2.11	ND	ND	ND	ND	ND	ND	2.08	2.02
Apr-2010	ND	ND	0.095	ND	ND	2.8	2.67	ND	ND	ND	0.051	ND	ND	2.41	2.33
Oct-2010	ND	ND	0.116	ND	ND	3.45	3.25	ND	ND	ND	ND	ND	ND	3.06	2.93
Apr-2011	ND	ND	0.125	ND	ND	3.13	3.09	ND	ND	ND	0.171	ND	ND	2.7	2.67
Sep-2011	ND	ND	0.131	ND	ND	3.59	3.54	ND	ND	ND	0.083	ND	ND	2.93	2.91
Mar-2012	ND	ND	0.118	ND	ND	3.12	3.05	ND	ND	ND	0.22	0.132	ND	2.57	2.5
Sep-2012	ND	ND	0.115	0.00023 J	0.000299 J	3.24	3.24	0.002 J	0.0069 J	0.0031 J	0.0642	0.0258 J	ND	2.62	2.52
Mar-2013	ND	ND	0.113	0.000199 J	0.00036 J	3.22	3.78	0.0041 J	0.0073 J	0.004 J	0.0516	0.0259 J	0.0014 J	2.54	3.03
Oct-2013	ND	ND	0.132	0.00029 J	0.000255 J	3.38	3.34	0.0099 J	0.008 J	0.0036 J	0.0763	0.0189 J	ND	2.69	2.8
Mar-2014	ND	ND	0.148	0.00036 J	0.00034 J	3.8	3.81	0.0017 J	0.0073 J	0.0043 J	0.0757	0.0336 J	ND	3.1	3.16
Oct-2014	0.000489 J	ND	0.155	0.000342 J	0.000317 J	4.03	4.11	0.000798 J	0.0094 J	0.0044 J	0.04 J	ND	ND	3.63	3.67
Apr-2015	0.000647 J	ND	0.171	0.000472 J	0.000416 J	4.42	4.28	0.0013 J	0.01	0.0061 J	0.0228 J	0.0465 J	ND	4.09	4.04
Nov-2015	0.000376 J	0.000221 J	0.17	0.000477 J	0.000345 J	4.75	5.01	0.0052 J	0.01	0.006 J	0.331	0.0372 J	0.000558 J	3.48	3.57
May-2016	ND	ND	0.136	0.00044 J	0.0003 J	3.67	3.91	0.0015 J	0.0087	0.0056	ND	ND	ND	3.1	3.17
Oct-2016	ND	ND	0.144	0.00041 J	0.00032 J	3.65	4.08	0.0011 J	0.0098	0.0056	0.038 J	ND	ND	3.32	3.49
May-2017	ND	ND	0.14	0.00038 J	0.00029 J	3.65	3.45	0.0012 J	0.009	0.0052	ND	ND	ND	3.71	3.59
Oct-2017	ND	ND	0.148	0.00035 J	0.0003 J	3.97	4.13	0.0027 J	0.0105	0.0049	0.372	ND	0.00016 J	4.15	4.28

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22A***													
May-2018	*0.00005 J*	*ND*	0.13	0.00045	*0.00036 J*	3.9	3.7	*0.0013 JB*	0.0084	0.0055	*ND*	*ND*	*0.000069 JB*	4.2	4
Nov-2018	*ND*	*ND*	0.15	0.00066	*0.00043 J*	4.2	4.2	*0.0058 J*	0.0094	0.0065	0.22	0.07	*0.000079 J*	4.1	4.2
May-2019	*ND*	*ND*	0.18	0.00067	*ND*	5.5	5.2	0.0071	0.0078	0.0048	0.16	0.095	*ND*	4.6	4.2
Oct-2019	*0.00014 J*	*ND*	0.17	0.00069	*0.00084 J*	5.4	5.2	*0.0065 J*	0.012	0.012	0.1	0.084	*0.00012 J*	4.5	4.3
May-2020	*0.000075 J*	*ND*	0.18	0.00071	*0.00055 J*	5.9	5.7	0.0091	0.013	*0.0095 J*	0.32	0.078	*ND*	4.6	4.4
Oct-2020	*ND*	*ND*	0.15	*0.00052 J*	*ND*	6.7	6.2	*0.0062 J*	0.013	*0.0077 J*	0.12	0.077	*ND*	5.6	5.2
Apr-2021	*ND*	*ND*	0.17	*0.00067 J*	*0.00034 J*	5.9	5.7	0.0067	0.017	0.011	0.19	0.11	*ND*	4.9	4.7
Oct-2021	*0.000077 J*	*0.00027 J*	0.15	0.00054	*0.0002 J*	5	5	*0.0022 J*	0.025	0.0072	0.089	0.075 B	*ND*	4.3	4.3
May-2022	*ND*	*ND*	0.17	0.00068	*0.00035 J*	5.9	5.9	*0.0022 J*	0.022	0.0098	0.057	*0.046 J*	*ND*	4.8	4.7
Oct-2022	*ND*	*0.00046 J*	0.18	*0.00035 J*	*0.00029 J*	6.5	6.7	*0.002 J*	0.02	0.0072	0.062	*0.04 J*	*ND*	6	6.3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22A***												
Nov-1993	0.08	NA	ND	NA	3.3	NA	ND	NA	35.8	NA	NA	NA	ND
Apr-1994	0.15	NA	ND	NA	3.69	NA	ND	NA	50.2	NA	NA	NA	0.06
Apr-1995	0.11	NA	ND	ND	3.7	NA	ND	ND	19.4	NA	ND	ND	0.02
Oct-1996	0.085	0.09	NA	ND	ND	ND	ND	ND	23	24	ND	ND	0.035
Apr-1997	0.053	0.037	ND	ND	3	2.1	ND	ND	4.2	4.1	ND	ND	0.16
Oct-1997	0.04	0.04	NA	ND	0.955	0.623	ND	ND	3.31	2.89	ND	ND	ND
Apr-1998	0.075	0.095	NA	ND	2.15	2.62	ND	ND	9.73	9.68	ND	ND	ND
Apr-1999	0.04	0.039	NA	ND	1.94	1.84	ND	ND	10.7	10.4	ND	ND	ND
Oct-1999	0.043	0.039	NA	ND	2.17	2.61	ND	ND	11.1	8.85	ND	ND	ND
Apr-2000	0.062	0.058	NA	ND	2.67	2.18	ND	ND	24.7	22.7	ND	ND	ND
Oct-2000	0.077	0.083	NA	ND	4.34	4.61	ND	ND	23	23.5	ND	ND	ND
Apr-2001	0.066	NA	NA	ND	4	NA	ND	ND	17.8	NA	ND	ND	ND
Sep-2001	0.159	0.172	NA	ND	6.76	7.11	ND	ND	70.2	68.7	ND	ND	ND
Mar-2002	0.103	0.061	NA	ND	4.88	1.97	ND	ND	30.2	7.09	ND	ND	ND
Sep-2002	0.079	0.061	NA	ND	2.91	2.05	ND	ND	20.4	6.92	ND	ND	ND
Mar-2003	0.065	0.062	NA	ND	1.46	0.736	ND	ND	2.74	2.41	ND	ND	ND
Oct-2003	0.07	0.084	NA	ND	0.914	2.92	ND	ND	6.56	16.5	ND	ND	0.021
Apr-2004	0.081	0.079	ND	ND	3.84	2.04	ND	ND	18.1	14.8	ND	ND	ND
Oct-2004	0.052	0.051	ND	ND	1.66	1.55	ND	ND	16.7	13.9	ND	ND	ND
Apr-2005	0.059	0.057	ND	ND	1.09	1.04	ND	ND	5.98	4.73	ND	ND	0.012
Oct-2005	0.052	0.049	ND	ND	1.01	0.935	ND	ND	3.18	2.44	ND	ND	0.012
Mar-2006	0.04	0.039	ND	ND	0.526	0.548	ND	ND	2.51	2.47	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22A***												
Sep-2006	0.054	0.056	ND	ND	0.808	0.82	ND	ND	2.14	2.1	ND	ND	ND
Mar-2007	0.044	0.043	ND	0.012	0.809	0.804	ND	ND	2.06	2.02	ND	ND	0.018
Sep-2007	0.044	0.043	ND	ND	0.743	0.604	ND	ND	2	1.94	ND	ND	0.01
Mar-2008	0.042	0.04	ND	ND	1	0.935	ND	ND	1.84	1.73	ND	ND	0.011
Sep-2008	0.044	0.041	ND	ND	0.843	0.804	ND	ND	2.08	1.96	ND	ND	0.01
Mar-2009	0.046	0.044	ND	ND	0.947	0.908	ND	ND	2.49	2.37	ND	ND	0.011
Oct-2009	0.055	0.053	ND	ND	0.736	0.703	ND	ND	4.58	4.31	ND	ND	0.012
Apr-2010	0.066	0.064	ND	ND	1	0.973	ND	ND	9.49	9.43	ND	ND	0.019
Oct-2010	0.1	0.094	ND	ND	1.1	1.12	ND	ND	16	16	ND	ND	0.029
Apr-2011	0.096	0.094	ND	ND	0.87	0.878	ND	ND	16.9	16.6	ND	ND	0.029
Sep-2011	0.119	0.117	ND	ND	1.07	1.13	ND	ND	16	15.7	ND	ND	0.034
Mar-2012	0.107	0.103	0.0002	0.026	1.02	1.01	ND	ND	7.66	7.5	ND	ND	0.029
Sep-2012	0.106	0.104	0.00005 J	0.0078 J	1.01	1.01	0.000507 J	ND	8.23	8.19	ND	ND	0.0338
Mar-2013	0.1	0.117	0.00009 J	0.0103 J	0.997	1.13	ND	0.000027 J	12.3	14.5	ND	ND	0.0439
Oct-2013	0.101	0.102	ND	0.012	1.19	1.16	0.000502 J	ND	12.4	12.9	ND	0.0024 J	0.0388
Mar-2014	0.117	0.11	ND	0.0083 J	1.26	1.28	0.000771 J	ND	13.4	13.6	0.000178 J	0.000816 J	0.0331
Oct-2014	0.116	0.117	0.000127 J	0.0092 J	1.42	1.43	0.0016 J	ND	20.2	20.5	ND	ND	0.0393
Apr-2015	0.126	0.124	0.000219	0.0107 J	1.36	1.36	0.0021	ND	26.2	25.7	ND	ND	0.0529
Nov-2015	0.129	0.131	0.000393	0.014	1.42	1.46	0.0021	ND	22.8	23.2	0.000133 J	ND	0.0427
May-2016	0.117	0.117	0.0001 J	0.009	1.24	1.3	ND	ND	15.6	15.8	ND	ND	0.0467
Oct-2016	0.115	0.127	0.000051 J	0.0095	1.28	1.34	0.00044 J	ND	18	19.2	ND	ND	0.0445
May-2017	0.114	0.109	ND	0.0082	1.52	1.43	0.00048 J	ND	21.5	20.3	ND	ND	0.0379
Oct-2017	0.117	0.119	ND	0.009	1.62	1.66	0.00057 J	ND	18.6 J-	22.9	ND	0.00038 J	0.0376
May-2018	0.078	0.078	0.00014 J	0.0069	0.97 J	1 J	0.00078 J	ND	23.4	21.8	ND	0.0022	0.016

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22A***												
Nov-2018	0.12	0.12	0.00054	0.011	*1.4 J*	*1.7 J*	*0.00071 J*	*ND*	27.5	28.3	*ND*	0.003	0.034
May-2019	0.13	0.15	0.00062	0.0095	*ND*	*ND*	*ND*	*ND*	33.9	31.1	*ND*	0.0017	0.03
Oct-2019	0.14	0.11	0.00046	0.012	*2 J*	*2 J*	*0.00097 J*	*ND*	34.3	32.6	*ND*	0.0025	0.056
May-2020	0.15	0.15	0.00056	0.014	*ND*	*1.9 J*	*0.0019 JM1*	*ND*	47.6	40.7	*ND*	0.0099	0.047
Oct-2020	0.18	0.15	*0.00013 J*	0.012	*ND*	*1.8 J*	*ND*	*ND*	52.6	45.6	*ND*	*0.0012 J*	0.037
Apr-2021	0.14	0.13	*0.00018 J*	0.017	1.8	1.7	*ND*	*ND*	41	40.8	*ND*	*ND*	0.038
Oct-2021	0.12	0.12	0.00027	0.012	1.6	1.6	0.0025	*ND*	37.6	38.9	*0.00003 J*	*ND*	0.037
May-2022	0.14	0.13	0.00034 M1	0.014	1.7	1.7	*0.002 J*	*ND*	40.3	38.8	*ND*	*ND*	0.044
Oct-2022	0.16	0.15	*ND*	0.012	2.1	2.1	0.0039	*ND*	48.1	47.4	*ND*	*ND*	0.038

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-22A***																
Nov-1993	ND	ND	ND	ND	39	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	33	ND
Apr-1994	ND	ND	ND	ND	21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	54	ND
Oct-1996	ND	ND	ND	ND	86	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	57	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	34	ND	ND	ND	ND	ND	ND	0.7 J	0.9 J	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	27	ND	ND	ND	ND	ND	ND	0.5 J	0.6 J	2.3 J	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	31	ND	NA	NA	NA	NA	ND	0.7 J	0.6 J	ND	NA	NA	7.6	NA
Oct-1999	ND	ND	ND	ND	19	ND	ND	ND	ND	0.6 J	ND	0.6 J	1.1	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	8.3	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	12	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	6.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	6.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	6.4	ND
Apr-2005	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22A*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22A*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.6 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-22A*															
Nov-1993	**9.6**	ND	ND	ND	ND	1.2	ND	ND	4.4	ND	ND	15	ND	ND	ND	8	33
Apr-1994	3.9	ND	ND	ND	ND	ND	ND	ND	1.9 J	ND	ND	6.8	ND	ND	ND	3.5	18
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	ND	ND	ND	9	51
Apr-1997	**17**	ND	ND	ND	2	ND	ND	ND	4	ND	2	ND	15	ND	ND	54	28
Oct-1997	**8.3**	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	7.5	ND	ND	ND	6.1	42
Apr-1998	**6.4**	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	6.6	ND	ND	ND	5.4	16
Apr-1999	4.4	NA	NA	NA	NA	ND	NA	ND	1 J	ND	NA	5.8	NA	NA	NA	1.7	17
Oct-1999	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	ND	ND	ND	1.4	8.9
Apr-2000	1.4	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	1.5	NA	ND	NA	0.9 J	4
Oct-2000	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.1	5.7
Apr-2001	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	5.1	4.9
Sep-2001	0.8 J	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	1.1	ND	ND	ND	1.6	2.5
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	1
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	1
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.3
Oct-2004	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	3.9	6.7
Apr-2005	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	2.7	3.5
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22A***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.9 J
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.37 J	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	0.52 J,B	ND	ND	ND	ND	0.4 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.36 J	0.4 J,B	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	0.2 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	0.2 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*0.2 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.252 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22A***															
Nov-1993	ND	ND	5.2	ND	ND	ND	ND	**9**	ND	ND	ND	ND	**7.5**	ND	ND	**2.2**	NA
Apr-1994	ND	ND	1.3 J	ND	ND	ND	ND	3.2	ND	ND	ND	ND	5	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	**11**	ND	1.5	ND	ND	**11**	ND	ND	**3.8**	ND
Apr-1997	ND	ND	NA	NA	1	NA	ND	**8**	ND	ND	1	ND	**11**	ND	ND	**7**	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	3.7	ND	0.9 J	ND	ND	**7.9**	ND	ND	2	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	4.5	ND	0.7 J	ND	ND	**6.7**	ND	ND	1.9	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	3.8	ND	0.6 J	NA	NA	**6**	ND	NA	1.2	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	3	ND	ND	ND	ND	3.7	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	2.8	ND	ND	NA	NA	2.3	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	4.6	ND	ND	ND	ND	4.2	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	4.3	ND	ND	ND	ND	1.8	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	3.5	ND	ND	ND	ND	2.4	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	1.4	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	0.7 J	ND	ND	3.4	ND	ND	ND	ND	2.1	ND	ND	0.8 J	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22A***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*0.45 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.21 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*0.14 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22A***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-22B***											
Nov-1993	69	69	1.5	ND	20	ND	ND	5.31	227	9.6	142	15.2
Apr-1994	367	367	19.6	109.6	524	ND	ND	6.06	2.1	5.6	948	125.86
Apr-1995	216	216	10.8	27.1	133	ND	ND	5.8	823	8.9	376	35.6
Apr-1997	ND	26	ND	ND	4.5	0.02	ND	NA	NA	9.1	141	16
Oct-1997	95	95	0.87	ND	5.06	ND	ND	6.07	208	7.36	114	42
Apr-1998	102	102	6.7	14	28.6	ND	ND	5.96	319	7.08	160	30
Apr-1999	80	80	5.1	20	81.4	0.61	ND	6.32	545	30	560	36
Oct-1999	52	58	0.88	ND	4.35	ND	ND	5.18	152.1	9.13	91	13
Apr-2000	65	65	5.2	ND	1.05	ND	ND	6.27	253	12.7	131	29
Oct-2000	33	NA	4.4	15	47.4	ND	ND	5.34	425	15	148	25.9
Apr-2001	25	NA	11	55	239	ND	ND	NA	NA	75.4	631	78
Sep-2001	39	39	8.4	24	77.1	ND	ND	5.86	657	45.3	247	31.8
Mar-2002	38	38	6.3	16	30.4	ND	ND	5.9	419	24.6	242	30
Sep-2002	8.2	8.2	2.3	13	54.4	ND	ND	5.9	310	22	146	12.3
Mar-2003	11	11	1.1	ND	36.2	ND	ND	5.7	253	13.5	111	13.2
Oct-2003	2	2	ND	13	30	1.15	ND	4.8	168.3	12.2	63	16.5
Apr-2004	7.8	7.8	ND	16	22.3	2.81	ND	4.8	120.8	7.45	97	31.7
Oct-2004	21	21	ND	ND	8.79	2.27	ND	5.1	69.6	6.68	76	27.1
Apr-2005	4	4	ND	ND	5.31	0.48	ND	5	65.8	7.66	50	10.3
Oct-2005	2.7	2.7	ND	ND	3.91	3.04	ND	4.8	47.8	3.43	47	12.1
Mar-2006	4.5	4.5	ND	ND	4.14	0.42	ND	5.2	36.4	6.42	28	4.87
Sep-2006	4.8	4.8	0.54	ND	12.8	1.21	ND	4.6	71.7	9.5	74	10.6
Mar-2007	8.7	8.7	0.97	ND	20.1	0.21	ND	3.1	674	18.6	69	15.4
Sep-2007	1.7	1.7	ND	ND	4.76	6.67	ND	6	80.1	2.82	87	20.4
Mar-2008	5.3	5.3	0.52	ND	28.3	2.82	ND	4.6	102	22.9	63	17.5
Sep-2008	4.1	4.1	0.72	13	18.4	1.61	ND	4.7	108.1	20.1	79	17
Mar-2009	5.3	5.3	0.99	ND	16.4	0.12	ND	4.7	133.7	34.9	95	17
Oct-2009	4.3	4.3	0.41	10	17.9	0.21	ND	4.6	112.9	27.5	87	14.9
Apr-2010	1.6	1.6	ND	ND	9.26	6.17	ND	4.1	98.2	10.9	113	22.8
Oct-2010	2.8	2.8	0.22	ND	6.07	6.15	ND	5.3	84.1	5.63	71	25
Apr-2011	3.5	3.5	ND	ND	9.27	2.43	ND	4.4	97.8	17.3	77	23.3
Sep-2011	2.2	2.2	ND	ND	14.4	2.09	ND	4.4	95.3	20.2	74	23.4
Mar-2012	1.4	1.4	ND	ND	8.89	5.28	ND	3.5	93.6	10.3	80	22.9
Sep-2012	1.24	1.24	ND	ND	8.83	4.42	ND	4.1	88.9	15.9	80	22.8
Mar-2013	2.96	2.96	ND	ND	12.6	1.43	ND	4.8	115.4	28	84	26.5
Oct-2013	3.2	3.2	ND	13.1	13	0.803	ND	5.3	104.6	25.2	69	21.9
Mar-2014	3.8	3.8	ND	8 J	18.5	1.17	ND	5	123.9	25.6	76	23.8

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-22B***											
Oct-2014	*ND*	*ND*	*ND*	*ND*	9.18	4.44	*ND*	4.5	96.3	16.2	58	22.2
Apr-2015	2.8	2.8	*ND*	*ND*	8.54	1.66	*ND*	4	103	33.8	63	28.6
Nov-2015	*ND*	*ND*	*ND*	*6 J*	7.57	3.95	*ND*	4.2	110	18.9	58	25.7
May-2016	*ND*	*ND*	*ND*	*ND*	8.05	2.18	*ND*	4.9	166.3	25.6	67	22.3
Oct-2016	*ND*	*ND*	*ND*	*ND*	7.44	*NA*	*NA*	4.9	144.3	26.2	80	26
May-2017	10	10	*ND*	13	7.53	1.39	*ND*	5.4	174.5	29.3	61	40.5
Oct-2017	14	14	*ND*	*ND*	13.7	2.63	*ND*	5.7	194.1	27.1	97	48.6
May-2018	*1 JB*	*ND*	*ND*	*10.1 J*	15.8	0.19	*ND*	4.9	87.1	*ND*	*ND*	10
Nov-2018	28	28	*ND*	*14.3 J*	7.9	1.8	*ND*	5.47	163.7	33.8	88	57.7
May-2019	*ND*	*NA*	*ND*	*ND*	10	3.5	*ND*	4.78	118.9	33.2	103	50.1
Oct-2019	*ND*	*NA*	*ND*	*6 J*	5.2	3.6	*ND*	4.71	100.1	14.6	54	28.7
May-2020	*4 J*	*NA*	*ND*	*6.9 J*	8.9	2.4	*ND*	4.54	123.2	23.9	63	32.6
Oct-2020	*4 J*	*NA*	*ND*	*7 J*	21.7	4.4	*ND*	4.87	165.7	18	93	49.5
Apr-2021	*ND*	*NA*	*ND*	*8.3 J*	9.3	5.1	*ND*	4.88	3.26	15.4	64	34.3
Oct-2021	22	*NA*	*ND*	*8.3 J*	6.1	2.4	*ND*	5.39	143.6	21.3	67	36.8
May-2022	28	*NA*	*0.062 J*	*ND*	4.9	2.5	*ND*	5.42	174.1	21.4	90	52.4 N3
Oct-2022	38	*NA*	*ND*	*17.5 JMH*	10.9	3.3	*0.0088 J*	5.65	191	19.5	92	65.5 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-22B*													
Nov-1993	NA	**0.018**	ND	NA	0.001	2.3	NA	ND	NA	ND	31.8	28.2	ND	2.3	NA
Apr-1994	NA	**0.014**	ND	NA	ND	20.7	NA	ND	NA	ND	125	126	ND	18	NA
Apr-1995	ND	ND	ND	ND	ND	5.7	NA	ND	ND	0.03	69.6	60.7	ND	5.2	NA
Oct-1996	ND	ND	0.032	ND	ND	3.5	3.2	ND	ND	ND	23	20	ND	1.9	1.7
Apr-1997	ND	ND	0.051	ND	ND	3.9	2.9	ND	0.021	ND	27	20	ND	2	1.7
Oct-1997	ND	ND	0.049	ND	ND	6.18	6.26	ND	ND	ND	43.1	43.6	ND	3.23	3.27
Apr-1998	ND	ND	0.056	ND	ND	6.96	6.64	ND	ND	ND	45.3	45.5	ND	3.05	3.05
Apr-1999	ND	ND	0.073	ND	ND	7.26	6.71	ND	ND	ND	70	67.2	ND	4.25	4.04
Oct-1999	ND	ND	0.073	ND	ND	8.7	8.09	ND	ND	ND	66.7	41.7	ND	4.27	3.92
Apr-2000	ND	ND	0.04	ND	ND	8.02	6.3	ND	ND	ND	34.9	29.9	ND	2.17	1.98
Oct-2000	ND	ND	0.049	ND	ND	5.84	5.26	ND	ND	ND	58.1	55.2	ND	2.75	2.65
Apr-2001	ND	ND	0.128	ND	ND	18.4	NA	ND	ND	ND	88.2	NA	ND	7.73	NA
Sep-2001	ND	ND	0.062	ND	ND	6.28	6.29	ND	ND	ND	52.2	52.1	ND	3.89	3.94
Mar-2002	ND	ND	0.054	ND	ND	6.76	6.05	ND	ND	ND	44.9	43.2	ND	3.18	3.21
Sep-2002	ND	ND	0.031	ND	ND	2.73	3.56	ND	ND	ND	25.8	23.4	ND	1.34	1.3
Mar-2003	ND	ND	0.021	ND	ND	3.84	6.09	ND	ND	ND	4.82	1.51	ND	0.867	0.812
Oct-2003	ND	ND	0.038	ND	ND	3.57	3.12	ND	ND	ND	0.742	ND	ND	1.83	1.72
Apr-2004	ND	ND	0.059	ND	ND	9.48	3.68	ND	ND	ND	0.233	ND	ND	1.95	1.87
Oct-2004	ND	ND	0.049	ND	ND	8.19	5.74	ND	ND	ND	0.343	ND	ND	1.6	1.5
Apr-2005	ND	ND	0.031	ND	ND	2.42	2.37	ND	ND	ND	0.99	0.05	ND	1.04	0.989
Oct-2005	ND	ND	0.041	ND	ND	2.71	2.31	0.03	ND	0.013	1.23	0.073	ND	1.29	1.19

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22B***													
Mar-2006	ND	ND	0.017	ND	ND	1.09	1.04	ND	ND	ND	0.34	ND	ND	0.519	0.487
Sep-2006	ND	ND	0.031	ND	ND	2.63	2.79	ND	ND	ND	0.27	0.219	ND	0.987	1.06
Mar-2007	ND	0.002	0.042	ND	ND	3.97	3.58	0.011	ND	ND	1.91	1.09	ND	1.33	1.28
Sep-2007	ND	0.003	0.063	ND	ND	4.49	4.06	0.017	0.011	0.012	1.38	0.054	ND	2.24	2.12
Mar-2008	ND	ND	0.055	ND	ND	4.12	3.83	ND	ND	0.013	0.161	ND	ND	1.74	1.63
Sep-2008	ND	0.002	0.058	ND	ND	3.68	3.45	0.014	ND	ND	1.92	1.04	ND	1.89	1.8
Mar-2009	ND	0.002	0.048	ND	ND	4.19	3.88	0.019	ND	ND	5.94	2.84	ND	1.57	1.49
Oct-2009	ND	ND	0.041	ND	ND	3.45	3.34	ND	ND	ND	3.17	2.83	ND	1.53	1.48
Apr-2010	ND	ND	0.062	ND	ND	5.13	4.97	0.017	ND	ND	1.46	0.063	ND	2.44	2.39
Oct-2010	ND	ND	0.068	ND	ND	5.83	5.81	0.01	0.011	0.025	0.615	ND	ND	2.52	2.53
Apr-2011	ND	ND	0.078	ND	ND	5.5	5.39	0.021	0.011	0.029	1.5	ND	ND	2.33	2.3
Sep-2011	ND	ND	0.082	ND	ND	5.14	5.04	0.025	0.013	0.042	2.64	ND	ND	2.57	2.53
Mar-2012	ND	ND	0.077	ND	ND	4.95	4.82	ND	0.011	0.043	0.909	ND	ND	2.55	2.46
Sep-2012	ND	ND	0.0823	0.000583 J	0.000553 J	5.05	4.81	0.0218	0.0129	0.0585	2.34	0.0587	0.000532 J	2.48	2.68
Mar-2013	ND	ND	0.0858	0.000419 J	0.000611 J	6.08	6.07	0.0213	0.016	0.0655	1.7	0.0317 J	0.0018 J	2.76	2.76
Oct-2013	ND	0.000692 J	0.0652	0.000203 J	0.000316 J	5.35	5.48	0.0081 J	0.0131	0.0273	0.323	ND	0.000304 J	2.07	2.11
Mar-2014	ND	ND	0.0552	0.000163 J	0.000285 J	5.99	6.09	0.012	0.0171	0.0324	1.59	0.103	ND	2.15	2.13
Oct-2014	0.00035 J	0.0011 J	0.0743	0.000259 J	0.000421 J	5.15	5.41	0.0149	0.0092 J	0.0221	1.75	0.0281 J	0.000845 J	2.28	2.34
Apr-2015	0.000643 J	0.000575 J	0.0723	0.000279 J	0.000368 J	7.01	6.97	0.0121	0.0102	0.0245	0.887	0.129	ND	2.68	2.62
Nov-2015	0.000394 J	0.0012 J	0.0753	0.000384 J	0.000372 J	6.29	6.92	0.0098 J	0.009 J	0.024	1.37	0.0313 J	0.001 J	2.44	2.6
May-2016	ND	ND	0.0561	0.00032 J	0.00038 J	5.43	5.63	0.0037 J	0.0088	0.0241	0.3	0.0419 J	ND	2.12	2.16
Oct-2016	ND	0.00094 J	0.0501	0.00018 J	0.00022 J	6.58	6.7	0.0039 J	0.0062	0.0102	0.654	0.0793 J	0.00017 J	2.32	2.46
May-2017	ND	0.0009 J	0.0418	ND	ND	11.2	10.4	0.0089	0.0036	0.0066	0.887	ND	0.00026 J	3.04	3.01
Oct-2017	ND	ND	0.0407	ND	ND	13.9	15.7	0.0024 J	0.0086	0.0045	0.0558 J	1.7	ND	3.35	3.75

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22B***													
May-2018	*0.000038 J*	*ND*	0.036	*0.00026 J*	*0.00011 J*	1.6	14.5	*0.0049 JB*	0.009	0.0042	0.044	*ND*	*0.000037 JB*	1.5	3.2
Nov-2018	*0.000032 J*	*0.0002 J*	0.037	*ND*	*0.0001 J*	16.8	16.6	0.042	0.004	0.0048	0.67	0.076	*0.00012 J*	3.8	3.8
May-2019	*ND*	*ND*	0.051	*ND*	*ND*	13.6	12.8	0.014	0.0044	0.0088	0.28	0.04	*ND*	3.9	3.6
Oct-2019	0.00054	*0.00042 J*	0.044	*0.00017 J*	*0.00053 J*	7.5	7	0.013	0.0053	0.016	0.38	0.026	*0.00039 J*	2.4	2.3
May-2020	*0.000094 J*	*ND*	0.042	*0.000095 J*	*0.0001 J*	8.7	7.8	0.016	0.014	0.0074	0.46	0.026	*ND*	2.6	2.4
Oct-2020	*ND*	*ND*	0.038	*ND*	*ND*	13.8	12.7	*0.022 J*	0.0094	*ND*	0.73	0.05	*ND*	3.6	3.4
Apr-2021	*ND*	*ND*	0.044	*0.00022 J*	*ND*	9.7	9.8	0.011	0.0084	0.018	0.42	*ND*	*ND*	2.5	2.6
Oct-2021	*0.000091 J*	*ND*	0.044	*ND*	*ND*	10	9.5	0.006	0.0089	0.0053	0.14	*0.04 JB*	*0.000033 J*	2.9	2.9
May-2022	*ND*	*0.00049 J*	0.042	*ND*	*ND*	14.8	14.9	0.012	0.01	0.0058	0.54	0.079	*ND*	3.7	3.7
Oct-2022	*ND*	*0.0019 J*	0.046	*ND*	*ND*	19.4	20.7	0.021	0.02	0.01	2.7	*ND*	*0.0004 J*	4.1	4.5

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-22B*												
Nov-1993	0.13	NA	ND	NA	2.5	NA	ND	NA	18.2	NA	NA	NA	ND
Apr-1994	0.66	NA	ND	NA	17.95	NA	ND	NA	375	NA	NA	NA	0.03
Apr-1995	0.27	NA	ND	ND	10.1	NA	ND	ND	75.2	NA	ND	ND	0.04
Oct-1996	0.077	0.068	NA	ND	ND	ND	ND	ND	5.1	5	ND	ND	0.19
Apr-1997	0.064	0.047	**0.0031**	ND	3.2	2.5	ND	ND	3.1	3.2	ND	ND	0.027
Oct-1997	0.065	0.064	NA	ND	2.49	2.42	ND	ND	2.76	2.84	ND	ND	ND
Apr-1998	0.147	0.145	NA	ND	7.13	6.77	ND	ND	20.2	19.9	ND	ND	ND
Apr-1999	0.231	0.218	NA	ND	6.9	6.16	ND	ND	48.2	46	ND	ND	ND
Oct-1999	0.29	0.267	NA	ND	11.9	11.2	ND	ND	52.8	49.1	ND	ND	ND
Apr-2000	0.144	0.132	NA	ND	6.73	6.12	ND	ND	17.9	16.2	ND	ND	0.015
Oct-2000	0.208	0.202	NA	ND	5.69	5.34	ND	ND	30.9	30.1	ND	ND	ND
Apr-2001	0.481	NA	NA	ND	12.5	NA	ND	ND	199	NA	ND	ND	0.029
Sep-2001	0.202	0.206	NA	ND	9.37	8.75	ND	ND	58.1	54.3	ND	ND	ND
Mar-2002	0.178	0.181	NA	ND	8.72	9.26	ND	ND	39.6	39.6	ND	ND	ND
Sep-2002	0.098	0.094	NA	ND	3.93	5.05	ND	ND	30.9	30.8	ND	ND	ND
Mar-2003	0.072	0.067	NA	ND	4.66	3.82	ND	ND	26.9	24.9	ND	ND	0.013
Oct-2003	0.12	0.123	NA	ND	2.92	3.27	ND	ND	20.9	18.9	ND	ND	0.022
Apr-2004	0.129	0.126	ND	ND	3.66	2.91	ND	ND	16.2	15.9	ND	ND	0.019
Oct-2004	0.115	0.109	ND	ND	2.69	2.43	ND	ND	6.47	5.89	ND	ND	0.013
Apr-2005	0.072	0.065	ND	ND	1.9	1.77	ND	ND	3.32	3.52	ND	ND	ND
Oct-2005	0.06	0.054	ND	0.029	1.62	1.33	ND	ND	3.34	2.43	ND	ND	0.014
Mar-2006	0.012	0.01	ND	ND	0.981	0.85	ND	ND	2.34	2.23	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22B***												
Sep-2006	0.051	0.055	ND	ND	1.56	1.75	ND	ND	8.01	8.42	ND	ND	ND
Mar-2007	0.075	0.071	ND	0.016	2.84	2.7	ND	ND	13.9	13.4	ND	ND	0.015
Sep-2007	0.085	0.079	ND	0.021	2.16	1.95	ND	ND	3.58	3.55	ND	ND	0.016
Mar-2008	0.067	0.067	ND	ND	2.29	2.09	ND	ND	8.64	8.12	ND	ND	0.015
Sep-2008	0.081	0.078	ND	0.016	2.48	2.43	ND	ND	11.5	11.1	ND	ND	0.018
Mar-2009	0.105	0.102	ND	ND	3.41	3.39	ND	ND	12.9	12.8	ND	ND	0.012
Oct-2009	0.112	0.108	ND	ND	3.32	3.24	ND	ND	12.3	11.7	ND	ND	ND
Apr-2010	0.137	0.134	ND	0.017	3.16	3.05	ND	ND	6.23	6.02	ND	ND	0.014
Oct-2010	0.088	0.087	ND	0.014	2.04	2.16	ND	ND	4.27	4.55	ND	ND	0.016
Apr-2011	0.106	0.104	ND	0.018	2.26	2.16	ND	ND	6.75	6.67	ND	ND	0.013
Sep-2011	0.12	0.117	ND	0.02	2.76	2.54	ND	ND	10.4	10.3	ND	ND	0.015
Mar-2012	0.093	0.09	0.0002	0.014	2.34	2.24	ND	ND	6.23	5.9	ND	ND	0.013
Sep-2012	0.0894	0.0852	0.000076 J	0.0185	2.32	2.19	0.000538 J	ND	6.34	6.97	ND	ND	0.0138
Mar-2013	0.131	0.133	0.000096 J	0.0176	3.12	3.08	ND	0.000087 J	8.97	9.08	ND	ND	0.0275
Oct-2013	0.132	0.136	ND	0.0086 J	3.71	3.69	ND	0.000069 J	9.02	9.25	0.000169 J	0.0026 J	0.0152
Mar-2014	0.127	0.128	ND	0.0095 J	3.88	3.93	ND	0.00019 J	10.6	10.8	0.000166 J	0.0012 J	0.0048 J
Oct-2014	0.0756	0.0787	0.000077 J	0.0141	2.6	2.55	0.000825 J	ND	6.02	6.25	ND	0.003 J	0.0125
Apr-2015	0.113	0.112	0.000027 J	0.0153	3.81	3.79	0.000966 J	ND	8.21	8.08	ND	0.0012 J	0.0194
Nov-2015	0.0686	0.0749	ND	0.0111	2.87	2.92	0.0012 J	ND	5.56	5.95	0.00017 J	0.0039 J	0.0099 J
May-2016	0.0743	0.0756	0.000053 J	0.0089	3.1	2.97	ND	ND	6.96	6.43	ND	0.00071 J	0.0095 J
Oct-2016	0.0725	0.0807	ND	0.007	3.41	3.73	ND	ND	6.19	6.52	ND	0.00093 J	0.0054 J
May-2017	0.0811	0.0733	ND	0.005	4.28	4.09	0.00052 J	ND	6.01	5.56	ND	0.0014	0.0047 JB
Oct-2017	0.0631	0.0706	ND	0.0084	4.09	4.76	0.00052 J	ND	7.57 J-	8.44	ND	ND	0.0045 J
May-2018	0.019	0.042	ND	0.015	0.93 J	3.5 J	0.00088 J	ND	8.6	10.9	ND	0.0022	0.013

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22B***												
Nov-2018	0.037	0.034	*ND*	0.028	*4 J*	*4 J*	*0.00091 J*	*ND*	7.4	7.6	*ND*	0.0034	*0.0049 J*
May-2019	0.029	0.033	*ND*	0.0093	*ND*	*ND*	*ND*	*ND*	8	7.7	*ND*	0.0043	*ND*
Oct-2019	0.026	0.028	*ND*	0.0096	*2.5 J*	*2.2 J*	*0.00069 J*	*0.00045 J*	*4.8 J*	*4 J*	0.00051	0.0023	0.016
May-2020	0.046	0.044	*ND*	0.0097	*2.8 J*	*3.2 J*	*0.00062 J*	*ND*	7.5	6.4	*ND*	0.01	*0.0038 J*
Oct-2020	0.037	0.037	*ND*	0.013	*3.7 J*	*3.3 J*	*ND*	*ND*	12.8	11.5	*ND*	*0.0017 J*	*ND*
Apr-2021	0.021	0.022	*ND*	*0.0097 J*	2.2	2.2	*ND*	*ND*	6.8	7.6	*ND*	*0.00063 J*	*0.0037 J*
Oct-2021	0.037	0.042	*0.00003 J*	0.0064	3.2	3	*ND*	*ND*	7.6	9.3	*0.000089 J*	*ND*	*0.0022 J*
May-2022	0.026	0.026	*ND*	0.012	3.5	3.4	*ND*	*ND*	6.4	6.6	*0.00011 J*	*0.0013 J*	*ND*
Oct-2022	0.021	0.031	*ND*	0.0095	4.2	4.5	*0.0015 J*	*ND*	6.8	7.6	*ND*	0.004	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-22B***																
Nov-1993	ND	ND	ND	ND	75	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	72	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	47	ND
Oct-1996	ND	ND	ND	ND	97	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND
Apr-1997	ND	ND	9	ND	66	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	39	ND	ND	ND	ND	ND	ND	ND	1.1 J	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	80	ND	ND	ND	ND	ND	ND	1.8 J	1.9 J	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	24	ND	NA	NA	NA	NA	ND	ND	1	ND	NA	NA	7.3	NA
Oct-1999	ND	ND	ND	ND	21	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	6.7	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	20	ND	ND	ND	ND	ND	ND	0.7 J	1.7	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	16	ND	ND	ND	ND	ND	ND	0.5 J	0.8 J	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	15	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	7.1	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	8.4	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22B*																
Feb-2006	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2006	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	ND	NA	0.8 J	NA	NA	NA	ND	NA
Dec-2006	NA	ND	NA	NA	3.1	NA	NA	NA	NA	NA	ND	NA	ND	NA	NA	NA	ND	NA
Mar-2007	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.62 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.86 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	0.42 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.11 J	ND
Apr-2015	ND	ND	ND	ND	0.34 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22B*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.9 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.152 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-22B*															
Nov-1993	**19**	ND	ND	ND	ND	ND	ND	ND	7.7	ND	ND	28	ND	ND	ND	9.9	70
Apr-1994	**43**	ND	ND	ND	ND	ND	ND	ND	10	ND	ND	18	ND	ND	ND	5.9	47
Oct-1996	**49**	ND	ND	ND	ND	ND	ND	ND	3.4	ND	ND	18	ND	ND	ND	8	58
Apr-1997	**21**	ND	ND	ND	ND	ND	ND	ND	5	ND	ND	13	ND	ND	ND	39	33
Oct-1997	**12**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10	ND	ND	ND	4.9	56
Apr-1998	**45**	ND	ND	ND	ND	ND	ND	ND	4.1	ND	ND	16	ND	ND	ND	10	35
Apr-1999	**9.2**	NA	NA	NA	NA	ND	NA	0.5 J	ND	ND	NA	5	NA	NA	NA	3.3	17
Oct-1999	**5.5**	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	4.8	ND	ND	ND	2.6	15
Apr-2000	1.8	NA	NA	ND	NA	ND	NA	ND	0.5 J	ND	NA	1.2	NA	ND	NA	1.5	4.6
Oct-2000	4.2	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	2.4	ND	ND	ND	7	9.2
Apr-2001	**15**	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	2.7	ND	ND	ND	2.3	8
Sep-2001	**7.2**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	2.5	5.8
Mar-2002	**7.3**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	3.6	5.8
Sep-2002	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	1.5	2.7
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.6 J
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	1.6	2.1
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	1.1	1.4
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.6 J
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22B***															
Feb-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.2
Dec-2006	ND	NA	NA	ND	NA	NA	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND
Dec-2006	ND	NA	NA	ND	NA	NA	NA	ND	NA	ND	NA	ND	NA	ND	NA	1.3	1.4
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.9 J
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.9 J
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.6 J
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.32 J	0.27 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22B***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.129 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22B***															
Nov-1993	ND	ND	7.2	ND	**6.3**	ND	ND	**18**	ND	ND	ND	ND	**16**	ND	ND	**4.2**	NA
Apr-1994	13	ND	ND	ND	3.4	ND	ND	4.5	ND	ND	ND	ND	**6.6**	ND	ND	**3**	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	**16**	ND	1.7	ND	ND	**12**	ND	ND	**4**	2.1
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	2	ND	ND	ND	9	ND	**6**	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	**7.8**	ND	ND	ND	ND	**7.7**	ND	ND	1.9 J	NA
Apr-1998	ND	ND	1.5	NA	ND	ND	ND	**6.7**	ND	1.9 J	ND	ND	**7.3**	ND	ND	**2.9**	NA
Apr-1999	0.6 J	NA	ND	NA	ND	ND	NA	1.3	ND	0.8 J	NA	NA	1.6	ND	NA	1.6	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	1.3	ND	0.7 J	ND	ND	1.9	ND	ND	1.4	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	1.4	ND	ND	NA	NA	1	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	1.2	ND	ND	ND	ND	2.4	ND	ND	1.1	NA
Apr-2001	1.1	ND	0.5 J	NA	ND	ND	ND	0.5 J	ND	0.5 J	ND	ND	2.3	ND	ND	0.8 J	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	0.5 J	ND	ND	ND	ND	1.9	ND	ND	0.6 J	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	0.8 J	ND	ND	ND	ND	1.7	ND	ND	0.7 J	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	1.1	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22B***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	34.7	ND	ND	ND	ND	ND	ND	ND	NA
Feb-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Dec-2006	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Dec-2006	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	0.6 J	ND	NA	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22B***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.9 BCH	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.438 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

HISTORICAL TABLES –
On-site Non-regulated Wells

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-02***											
Nov-1993	ND	ND	ND	ND	2.5	ND	ND	4.9	14.8	ND	18	1.36
Apr-1994	13	13	ND	ND	2.2	0.9	ND	4.68	16.9	ND	19	ND
Apr-1995	ND	ND	ND	ND	2.3	ND	ND	4.9	17.2	1.9	12	1.3
Apr-1997	ND	2	ND	24	2	0.02	ND	NA	NA	ND	82	4
Apr-1998	5	5	0.24	ND	1.69	ND	ND	6.56	51.6	ND	ND	1.8
Apr-1999	ND	ND	0.14	ND	2.64	ND	ND	4.99	17.57	ND	18	1.8
Apr-2001	ND	NA	ND	ND	33.5	ND	ND	NA	NA	ND	ND	2.3
Mar-2002	ND	ND	ND	16	3.79	ND	ND	6.1	34.8	1.62	22	1.91
Mar-2003	1.9	1.9	ND	ND	12.8	ND	ND	5.3	16	ND	42	1.36
Apr-2004	2	2	ND	ND	2.1	ND	ND	5.5	13.3	ND	ND	2.19
Apr-2005	2.2	2.2	ND	ND	2.18	ND	ND	5.9	22.9	ND	45	3.12
Mar-2006	4.3	4.3	ND	ND	2.45	ND	ND	5.3	14.4	ND	29	2.01
Mar-2007	3.4	3.4	ND	ND	2.83	ND	ND	5	12.9	ND	26	1.69
Mar-2008	2.8	2.8	ND	ND	2.63	ND	ND	4.6	16	ND	14	2.6
Mar-2009	3.5	3.5	ND	ND	2.65	ND	ND	4.8	15.2	ND	29	2.4
Apr-2010	4.3	4.3	ND	ND	2.28	ND	ND	4.5	14.5	ND	18	1.6
Apr-2011	4.2	4.2	ND	ND	2.4	ND	ND	4.8	12.4	ND	ND	2.25
Mar-2012	3.3	3.3	ND	ND	2.46	ND	ND	4.1	12.1	ND	ND	2.38
Sep-2012	3.52	3.52	ND	ND	2.73	ND	ND	5.4	14.6	ND	35	2.73
Mar-2013	3.76	3.76	0.0847 J	ND	2.95	0.0243 J	ND	6	15.7	0.72 J	ND	2.84
Oct-2013	4.84	4.84	ND	ND	2.9	0.0353 J	ND	5.8	15.4	0.577 J	ND	2.28
Mar-2014	4.68	4.68	ND	ND	3.04	ND	ND	5.8	21.3	0.56 J	ND	2.33
Oct-2014	ND	ND	ND	ND	3.15	ND	ND	5	17.4	ND	ND	2.32
Apr-2015	7.8	7.8	ND	5 J	2.76	ND	ND	5	25.1	ND	ND	2.26
Nov-2015	2.76	2.76	ND	ND	2.54	ND	ND	5.8	28.6	ND	29	2.54
May-2016	4.8	4.8	ND	198	3.03 B	ND	ND	5.3	24.3	ND	93	3.5
Oct-2016	3.36	3.36	ND	8 J	3.2	NA	NA	5.4	27.1	1.03	37	3
May-2017	4.64	4.64	ND	ND	3.38	ND	ND	5.3	28.9	0.703 J	14 J	3.7
Oct-2017	22.6	22.6	ND	13	2.97	ND	ND	5.6	31.7	ND	30	3.2
May-2018	6 JB	ND	ND	5.8 J	3.7	0.063 J	ND	4.9	39.1	ND	ND	4.7
Nov-2018	18	18	0.099 J	ND	3.9	0.093 J	ND	6.05	42.6	ND	14	4.9
May-2019	ND	NA	ND	ND	ND	0.22	ND	5.72	26.5	ND	63	ND
Oct-2019	10 H1	NA	ND	ND	3.6	0.18	ND	5.79	51.7	ND	40	4.1
May-2020	14	NA	ND	6.9 J	4.6	ND	0.01	5.8	62.2	ND	11	4.1
Oct-2020	12	NA	ND	7 J	3.3	ND	ND	5.92	50.8	ND	46	3.3
Apr-2021	12	NA	ND	ND	3.5	0.065 J	ND	6.41	60.8	ND	16	2.8 J
Oct-2021	8 J3c	NA	ND	ND	2.8 J	ND	ND	6.21	75.4	ND	ND	3.17 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-02***										
May-2022	12	*NA*	*ND*	*ND*	*2.7 J*	*ND*	*ND*	6.23	71.1	*ND*	*ND*	*2.2 JN3*
Oct-2022	24	*NA*	*ND*	*6.1 J*	3.3	*0.056 J*	*ND*	6.36	79.8	*ND*	15	*2.8 JN3*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-02***													
Nov-1993	NA	ND	ND	NA	ND	0.15	NA	ND	NA	ND	0.55	0.25	ND	0.24	NA
Apr-1994	NA	ND	ND	NA	ND	ND	NA	ND	NA	ND	0.11	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	0.14	NA	ND	ND	ND	0.62	1.8	ND	0.24	NA
Apr-1997	ND	ND	0.015	ND	ND	0.7	0.54	ND	ND	ND	0.26	0.24	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	0.296	0.317	ND	ND	ND	5.76	2.06	ND	0.266	0.266
Apr-1999	ND	ND	ND	ND	ND	0.263	0.285	ND	ND	ND	9.7	0.976	ND	0.268	0.276
Apr-2001	ND	ND	0.011	ND	ND	0.407	NA	0.019	ND	0.055	11.2	NA	0.002	0.311	NA
Mar-2002	ND	ND	0.011	ND	ND	0.455	0.17	ND	ND	0.015	20.2	1.69	ND	0.309	0.266
Mar-2003	ND	ND	ND	ND	ND	0.175	0.15	ND	ND	ND	0.609	0.421	ND	0.225	0.19
Apr-2004	ND	ND	ND	ND	ND	0.402	0.158	ND	ND	ND	3.89	0.572	ND	0.289	0.195
Apr-2005	ND	ND	0.011	ND	ND	0.695	0.247	ND	ND	ND	5.82	0.502	0.002	0.335	0.278
Mar-2006	ND	0.002	0.012	ND	ND	0.259	0.14	0.01	ND	0.013	18.5	ND	0.003	0.332	0.269
Mar-2007	ND	ND	0.013	ND	ND	0.165	0.158	ND	ND	0.02	3.08	0.175	ND	0.311	0.293
Mar-2008	ND	0.004	0.011	ND	ND	0.377	0.224	ND	ND	ND	2.93	0.165	ND	0.403	0.31
Mar-2009	ND	ND	ND	ND	ND	0.367	0.256	ND	ND	ND	4.14	0.325	ND	0.36	0.273
Apr-2010	ND	ND	ND	ND	ND	0.12	ND	ND	ND	ND	23.9	0.187	ND	0.32	0.213
Apr-2011	ND	ND	ND	ND	ND	0.257	0.227	ND	ND	ND	19.9	0.145	ND	0.391	0.264
Mar-2012	ND	ND	ND	ND	ND	0.226	0.223	ND	ND	ND	14.3	0.236	ND	0.441	0.411
Sep-2012	ND	ND	0.009 J	ND	ND	0.35	0.33	0.0016 J	0.000481 J	0.0028 J	5.6	0.278	0.000853 J	0.45	0.453
Mar-2013	ND	ND	0.0093 J	ND	ND	0.418	0.281	0.0017 J	0.000427 J	0.0031 J	5.84	0.18	ND	0.436	0.314
Oct-2013	ND	ND	0.0093	ND	ND	0.265	0.27	ND	0.000352 J	ND	1.11	0.371	ND	0.393	0.412

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-02***													
Mar-2014	0.000324 J	ND	0.0081 J	ND	ND	0.222	0.188	0.000473 J	0.000339 J	0.000538 J	1.18	0.422	ND	0.431	0.347
Oct-2014	0.000908 J	0.000509 J	0.0099 J	ND	ND	0.287	0.257	0.0024 J	0.000575 J	0.0077 J	11.2	0.255	ND	0.39	0.321
Apr-2015	0.000544 J	ND	0.0105	ND	ND	0.275	0.247	0.0022 J	0.000408 J	0.0024 J	8.26	0.743	ND	0.382	0.337
Nov-2015	0.000654 J	0.000454 J	0.0108	ND	ND	0.321	0.35	0.0048 J	0.000604 J	0.0047 J	11.9	0.395	0.000883 J	0.423	0.34
May-2016	0.0004 J	0.0017 J	0.0114	ND	ND	0.588	0.584	0.0046	0.003	0.0203	11.6	3.49	0.00099 J	0.49	0.498
Oct-2016	0.00058 J	0.0023 J	0.0095	ND	ND	0.382 J	0.368 J	0.008 J+	0.0029	0.035 J+	19.7	1.73	0.00036 J	0.498 J+	0.475
May-2017	ND	0.002 J	0.0088	ND	ND	0.546	0.42	0.0105	0.0025	0.0459	15	10.4	0.0006 J	0.568	0.555
Oct-2017	0.00059 J	0.0035 J	0.007	ND	ND	0.433	0.418	0.0161	0.0035	0.0677	19.8	12.2	0.00068 J	0.504	0.466
May-2018	0.00011 J	ND	0.014	0.000038 J	0.00005 J	0.51 J	0.52 J	0.0016 JB	0.00054	0.003	1.2	1.2	0.000091 JB	0.83 J	0.85 J
Nov-2018	ND	ND	0.011	ND	ND	0.52 J	0.49 J	0.0041 J	0.00049 J	0.00078 J	8.8	7.8	0.00016 J	0.87 J	0.82 J
May-2019	ND	ND	0.011	ND	ND	ND	ND	ND	0.00052	ND	4.4	3.9	ND	ND	ND
Oct-2019	0.000089 JB	ND	0.012	ND	0.00018 JB	0.41	0.41 J	0.0029 J	0.00056	0.0035	9.7	8.3	0.00014 JB	0.75	0.77 J
May-2020	0.000067 J	ND	0.01	ND	ND	0.51	0.51 J	0.0032 J	0.00064	0.002 J	16.2	13.9	ND	0.7	0.69 J
Oct-2020	0.00039 J	ND	0.011	ND	ND	0.36	0.31 J	0.01 JB	0.00064 J	ND	12.2	9.9	ND	0.59	0.53 J
Apr-2021	ND	ND	0.0085 J	ND	ND	0.26 J	0.27 J	0.0017 J	0.00062 J	ND	11.2	10.2	ND	0.53	0.53
Oct-2021	0.000084 JB	ND	0.0089	ND	ND	0.32 J	0.37 J	0.0027	0.00051 J	ND	8.2	7.3	ND	0.58	0.57
May-2022	ND	0.0014 JB	0.0085	ND	ND	0.29 J	0.43 J	0.0025 J	0.00049 J	ND	7.8	10.2	ND	0.35 J	0.48 J
Oct-2022	ND	ND	0.0083	ND	ND	0.33 J	0.32 J	0.0011 J	ND	ND	13.3	13.2	ND	0.48 J	0.48 J

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-02*												
Nov-1993	0.06	NA	ND	NA	0.62	NA	ND	NA	1.3	NA	NA	NA	ND
Apr-1994	0.007	NA	ND	NA	0.8	NA	ND	NA	1.6	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.73	NA	ND	ND	1.2	NA	ND	ND	0.01
Apr-1997	ND	0.012	ND	ND	2.1	1.8	ND	ND	1.1	1.9	ND	ND	0.039
Apr-1998	0.066	0.083	NA	ND	1.2	0.689	ND	ND	1.21	1.27	ND	ND	0.012
Apr-1999	0.036	0.037	NA	ND	ND	ND	ND	ND	1.19	1.21	ND	ND	ND
Apr-2001	0.039	NA	NA	0.026	1.57	NA	ND	ND	2.73	NA	ND	ND	0.031
Mar-2002	0.059	0.036	NA	ND	0.702	0.507	ND	ND	1.8	1.22	ND	ND	0.026
Mar-2003	0.015	0.017	NA	ND	1.09	ND	ND	ND	1.28	1.27	ND	ND	0.106
Apr-2004	0.044	0.024	ND	ND	0.983	ND	ND	ND	1.74	1.19	ND	ND	0.042
Apr-2005	0.028	0.013	ND	ND	0.8	0.72	ND	ND	1.52	1.29	ND	ND	0.064
Mar-2006	ND	ND	ND	ND	0.687	0.509	ND	ND	1.42	0.923	ND	ND	ND
Mar-2007	0.016	ND	ND	ND	ND	ND	ND	ND	1.13	1.06	ND	ND	0.019
Mar-2008	0.015	0.011	ND	ND	0.808	0.673	ND	ND	1.38	1.23	ND	ND	0.025
Mar-2009	0.017	ND	ND	ND	0.552	0.599	ND	ND	1.41	1.61	ND	ND	0.019
Apr-2010	0.021	ND	ND	ND	0.706	0.627	ND	ND	1.23	1.29	ND	ND	0.02
Apr-2011	0.018	ND	ND	ND	0.706	0.653	ND	ND	1.33	1.38	ND	ND	0.019
Mar-2012	0.018	ND	ND	ND	0.564	0.581	ND	ND	1.26	1.26	ND	ND	0.017
Sep-2012	0.0103	0.0076 J	ND	0.0016 J	0.656	0.635	ND	ND	1.33	1.3	0.000582 J	ND	0.0142
Mar-2013	0.0082 J	0.0054 J	0.000085 J	0.0014 J	0.66	0.591	ND	ND	1.33	1.25	ND	ND	0.0303
Oct-2013	0.0158	0.0143	ND	0.0014 J	0.616	0.619	ND	ND	1.38	1.44	0.000112 J	0.000996 J	0.0216
Mar-2014	0.0154	0.0099 J	ND	0.00098 J	0.652	0.703	ND	ND	1.38	1.46	ND	ND	0.0151

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-02***												
Oct-2014	0.0176	0.0112	*0.00005 J*	*0.0028 J*	0.691	0.717	*0.0013 J*	*ND*	1.41	1.48	*ND*	*ND*	0.0234
Apr-2015	0.0283	0.0204	*ND*	*0.0017 J*	0.76	0.721	*0.00072 J*	*ND*	1.42	1.46	*ND*	*0.000969 J*	0.0236
Nov-2015	0.0355	0.0112	*ND*	*0.004 J*	0.792	0.736	*0.000487 J*	*ND*	1.5	1.72	*ND*	*0.0011 J*	0.0201
May-2016	0.0867	0.0433	*ND*	0.0273	0.827	0.766	*ND*	*ND*	1.5	1.41	*ND*	0.001	0.13
Oct-2016	0.0331 R	0.0178	*ND*	*0.031 J+*	0.745	0.73	*ND*	*ND*	*1.63 J+*	1.59	*ND*	*0.00022 J*	*0.0191 J*
May-2017	0.109	0.0891	*ND*	0.029	0.755	0.763	*ND*	*ND*	1.38	1.63	*ND*	*ND*	*0.0162 J*
Oct-2017	0.14	0.117	*ND*	0.0432	0.739	0.685	*ND*	*ND*	1.32	1.27	*ND*	*ND*	*0.0241 J*
May-2018	0.016	0.017	*ND*	0.0023	*ND*	*ND*	*0.00046 J*	*ND*	*1.8 J*	*1.7 JB*	*ND*	0.0021	0.013
Nov-2018	0.15	0.18	*ND*	0.0043	*1.2 J*	*ND*	*0.00014 J*	*ND*	*1.8 J*	*1.8 J*	*ND*	*ND*	*0.0033 J*
May-2019	0.093	0.083	*ND*	0.0047	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	0.15	0.14	*ND*	0.0027	*ND*	*1.1 J*	*ND*	*ND*	*1.8 J*	*2.2 J*	*ND*	*ND*	0.0091 B
May-2020	0.19	0.19	*ND*	0.0031	*ND*	*ND*	*ND*	*ND*	*2.2 J*	*2.2 J*	*ND*	*0.00027 J*	*0.0047 J*
Oct-2020	0.17	0.15	*ND*	0.0032	*ND*	*ND*	*ND*	*ND*	*2.2 J*	*1.7 J*	*ND*	*0.0029 JB*	*ND*
Apr-2021	0.15	0.15	*ND*	*0.0019 J*	0.63	0.63	*ND*	*ND*	2.1	2	*ND*	*ND*	*ND*
Oct-2021	0.12	0.11	*ND*	*0.0023 J*	0.66	0.65	*ND*	*ND*	2	2	*0.000024 J*	*ND*	*ND*
May-2022	0.13	0.16	*ND*	*0.0021 J*	*0.45 J*	0.6	*ND*	*ND*	1.3	1.9	*ND*	*ND*	*ND*
Oct-2022	0.18	0.18	*ND*	*0.001 J*	0.63	0.65	*ND*	*ND*	1.7	1.6	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-02*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.21 J	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.99 J,B	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-02*																
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.24 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.6 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.7 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-02***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.76 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.68 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-02***															
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.89 J*	*0.41 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.35 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.28 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.164 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-02***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-02***															
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	1 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-03A***											
Nov-1993	ND	ND	0.5	ND	21.6	ND	ND	5.15	88.3	4.2	64	2.75
Apr-1994	ND	18	0.1	31.9	5.5	ND	ND	5.12	28.7	1.1	22	ND
Apr-1995	5.2	5.2	ND	ND	13.8	ND	ND	6	49.3	3.5	ND	2.8
Apr-1997	ND	5	ND	ND	38	0.07	ND	NA	NA	ND	91	12
Apr-1998	4	4	0.22	ND	14	0.15	ND	6.85	52.7	ND	43	2.5
Apr-1999	ND	ND	0.16	ND	8.58	0.13	ND	4.97	44.1	ND	44	3
Apr-2000	1	1	0.76	ND	190	0.28	ND	5.1	298	4.99	379	37
Apr-2001	ND	NA	ND	ND	22.8	ND	ND	NA	NA	4.16	42	6.97
Mar-2002	1.2	1.2	0.34	ND	219	ND	ND	5	711	9.53	353	31.8
Mar-2003	ND	ND	ND	ND	189	ND	ND	4.9	970	13.2	191	40.7
Apr-2004	3	3	ND	ND	32.7	0.07	ND	5.7	120.2	2.07	67	8.7
Apr-2005	2.3	2.3	ND	16	35.6	0.08	ND	5.1	114.5	3.25	88	5.45
Mar-2006	3.8	3.8	ND	ND	17.2	0.1	ND	5.1	74.3	3.54	ND	3.72
Mar-2007	1.1	1.1	ND	ND	233	0.17	ND	5.1	845	8.42	373	34.3
Mar-2008	4.8	4.8	ND	ND	12.8	0.09	ND	5.2	64.7	2.96	29	3.84
Mar-2009	17	17	0.23	ND	20.1	ND	ND	5.1	90.7	3.22	53	4.42
Apr-2010	11.4	11.4	ND	ND	45.5	ND	ND	4.8	188.5	1.11	91	10.3
Apr-2011	8.3	8.3	ND	ND	19.6	ND	ND	4.7	60	1.58	55	3.69
Mar-2012	8.3	8.3	ND	ND	42	ND	ND	4.8	134.7	2.09	78	9.69
Sep-2012	11.1	11.1	ND	ND	30.3	ND	ND	5.9	111.2	3.08	93	6.68
Mar-2013	4.72	4.72	0.0887 J	ND	7.13	0.0421 J	ND	5.7	38.9	2.13	ND	3.36
Oct-2013	17.1	17.1	ND	10.1	45.6	0.0428 J	ND	5.5	159.8	6.59	96	8.13
Mar-2014	6.32	6.32	ND	ND	56.8	0.0633	ND	5.4	166.3	10.5	115	9.28
Oct-2014	26.4	26.4	ND	9 J	51.8	0.0908	ND	5.5	176.8	4.91	104	8.6
Apr-2015	4.68	4.68	0.155 J	ND	6.83	0.0594	ND	4	41.9	3.66	25	3.93
Nov-2015	ND	ND	ND	5 J	62.5	ND	ND	5.7	328	2.14	112	11.5
May-2016	ND	ND	ND	6 J	168	0.0605	ND	5.1	491	2.36	254	19.6
Oct-2016	1.88	1.88	ND	17	155	NA	NA	6.1	524	1.92	254	16.9
May-2017	ND	ND	ND	ND	105	0.103	ND	5.1	487	5.61	185	15.6
Oct-2017	3.72	3.72	ND	ND	207	0.0842	ND	6	663	8.01	257	20.8
May-2018	8 JB	ND	ND	7.9 J	119	ND	ND	NA	NA	9 J	184	18.2
Nov-2018	8 JB	ND	ND	12.2 J	101	ND	0.046	6.7	386.2	ND	161	15.6
May-2019	14	NA	0.31 ML	ND	61.7	ND	0.019	6.14	229.1	ND	121	6.5
Oct-2019	4 JH1	NA	ND	8.2 J	45.8	0.064 J	0.012	6.1	260.6	ND	100	5.4
May-2020	2 J	NA	ND	11.3 J	39.6	ND	0.027	5.97	197.3	ND	61	4.4
Oct-2020	2 J	NA	ND	9.3 J	48.6	ND	ND	5.98	228.1	ND	113	4.6
Apr-2021	2 J3c	NA	ND	10.5 J	54.6	0.068 J	ND	7	328.6	ND	102	3.8

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-03A***											
Oct-2021	*ND*	*NA*	*ND*	*10.5 J*	40.6	*ND*	*ND*	6.88	309.9	*ND*	64	4.02
May-2022	*8 J3c*	*NA*	*ND*	*12.4 J*	48.3	0.15	*0.008 J*	6.87	322.3	*ND*	82	4.5 N3
Oct-2022	22	*NA*	*ND*	*19.8 J*	171	*0.09 J*	*0.0079 J*	6.77	590.4	*ND*	204	12.2 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-03A***													
Nov-1993	NA	ND	ND	NA	ND	0.36	NA	ND	NA	ND	3.7	2.4	ND	0.45	NA
Apr-1994	NA	ND	ND	NA	ND	ND	NA	ND	NA	ND	0.32	0.08	ND	7.3	NA
Apr-1995	ND	ND	ND	ND	ND	0.45	NA	ND	ND	ND	0.6	0.56	ND	0.4	NA
Apr-1997	ND	ND	0.057	ND	ND	1.8	1.3	ND	ND	ND	4.5	2.8	ND	1.4	1.2
Apr-1998	ND	ND	0.016	ND	ND	0.46	0.465	ND	ND	ND	7.02	3.87	ND	0.34	0.339
Apr-1999	ND	ND	0.014	ND	ND	0.587	0.591	ND	ND	ND	4.69	1.27	ND	0.361	0.334
Apr-2000	ND	ND	0.195	ND	ND	8.12	7.98	ND	ND	ND	4.54	3	ND	3.96	3.89
Apr-2001	ND	ND	0.039	ND	ND	1.47	NA	ND	ND	ND	8.19	NA	ND	0.802	NA
Mar-2002	ND	ND	0.183	ND	ND	7.3	7.51	ND	ND	ND	3.22	1.4	ND	3.3	3.33
Mar-2003	ND	ND	0.31	ND	ND	8.68	8.46	ND	ND	ND	2.32	1.61	ND	4.61	4.43
Apr-2004	ND	ND	0.038	ND	ND	1.83	1.62	ND	ND	ND	3.39	1.07	ND	1.01	0.924
Apr-2005	ND	ND	0.036	ND	ND	1.02	1.02	ND	ND	ND	5.4	2.96	ND	0.704	0.685
Mar-2006	ND	ND	0.014	ND	ND	0.898	0.683	ND	ND	ND	6.28	0.653	ND	0.36	0.343
Mar-2007	ND	ND	0.176	ND	ND	9.17	8.74	ND	ND	ND	3.13	1.55	ND	2.78	2.62
Mar-2008	ND	ND	0.017	ND	ND	0.878	0.84	ND	ND	ND	2.98	1.72	ND	0.399	0.377
Mar-2009	ND	ND	0.018	ND	ND	1.04	0.964	ND	ND	ND	14.6	7.91	ND	0.443	0.419
Apr-2010	ND	ND	0.031	ND	ND	0.654	1.77	ND	ND	ND	13.7	9.24	ND	1.02	0.971
Apr-2011	ND	ND	0.015	ND	ND	0.812	0.751	ND	ND	ND	15.9	14	ND	0.402	0.377
Mar-2012	ND	ND	0.033	ND	ND	2.13	1.97	ND	ND	ND	11.1	2.3	ND	1.06	0.98
Sep-2012	ND	ND	0.0218	0.000066 J	ND	1.6	1.49	0.0018 J	0.0012 J	0.0019 J	7.83	3.83	ND	0.651	0.6
Mar-2013	ND	ND	0.0133	0.000107 J	ND	0.784	0.638	0.0015 J	0.0011 J	0.0014 J	3.34	1.27	ND	0.34	0.278

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-03A***													
Oct-2013	ND	ND	0.0286	ND	ND	1.95	1.91	0.000793 J	0.0025	0.0014 J	16.3	17.6	0.000568 J	0.791	0.747
Mar-2014	ND	0.001 J	0.0289	ND	0.000177 J	2.63	2.43	0.0051 J	0.0021 J	0.0041 J	14.9	2.44	0.0024	0.658	0.799
Oct-2014	0.000393 J	0.0013 J	0.0271	ND	0.00013 J	2.02	1.97	0.000888 J	0.0014 J	0.0033 J	27.7	14.9	0.0011 J	0.865	0.848
Apr-2015	0.0016 J	0.000766 J	0.0135	ND	0.000106 J	0.858	0.839	0.000666 J	0.0013 J	0.0033 J	5.19	1.13	ND	0.434	0.393
Nov-2015	0.000548 J	0.000437 J	0.0321	ND	0.000323 J	2.79	2.71	0.000539 J	0.0015 J	0.0027 J	28.6	24.5	0.00049 J	1.1	1.06
May-2016	ND	0.00058 J	0.0897	0.00024 J,B	0.00024 J	4.38	4.07	0.00088 J	0.0043	0.0015 J,B	3.55	2.24	0.0011 J	2.1	2.09
Oct-2016	ND	0.0021 J	0.0614	ND	ND	4.02	4.19	0.0027 J+	0.0034	0.0093 J+	55.5	34.8	0.0022	1.68 J+	1.68
May-2017	ND	0.00098 J	0.0824	0.00016 J	ND	3.66	3.71	0.0013 J	0.0061	0.0046	7.74	2.93	0.00075 J	1.57	1.63
Oct-2017	ND	ND	0.0982	0.00014 J	ND	5.44	5.13	0.0046	0.0025	0.00065 J	3.11	2.21	0.00021 J	1.75	1.89
May-2018	0.000066 J	ND	0.079	0.00012 J	0.000094 J	4.5	4.4	0.0026 JB	0.0018	0.0017 J	2.7	2.8	0.00018 J	1.7	1.6
Nov-2018	ND	0.00017 J	0.056	ND	0.000022 J	3.5	3.4	0.0026 J	0.00044 J	0.0019 J	52	48.2	0.00013 J	1.6	1.5
May-2019	ND	ND	0.025	ND	ND	1.4	1.6	ND	ND	ND	54.2	53.4	ND	ND	ND
Oct-2019	0.00011 JB	ND	0.014	ND	0.00025 JB	1.2	1.2	0.002 JB	0.0002 J	0.0016 J	52	47.4	0.000067 JB	0.58	0.59 J
May-2020	0.00025 J	ND	0.011	ND	ND	1	1	0.0027 J	0.0002 J	0.0014 J	29.5	27.6	ND	0.44	0.44 J
Oct-2020	0.00042 J	ND	0.011	ND	ND	1.1	0.97 J	0.0078 JB	ND	ND	36.8	33	ND	0.46	0.4 J
Apr-2021	ND	ND	0.014	ND	ND	0.84 J	0.88 J	0.00071 J	ND	ND	64	62.9	ND	0.42	0.42
Oct-2021	0.00007 JB	ND	0.011	ND	ND	0.94	0.87	0.00094 J	0.00017 J	ND	59.3	52.9	ND	0.41 J	0.38 J
May-2022	ND	0.0023 JB	0.012	ND	ND	1	1.1	0.00097 J	0.00045 J	0.001 J	56.3	59	ND	0.45 J	0.48 J
Oct-2022	0.00033 JB	ND	0.028	ND	ND	3	3.1	0.00089 J	ND	0.00074 J	76.3	77	ND	1.1	1.2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-03A*												
Nov-1993	0.12	NA	ND	NA	1.1	NA	ND	NA	26.1	NA	NA	NA	0.02
Apr-1994	0.038	NA	ND	NA	0.79	NA	ND	NA	4.1	NA	NA	NA	0.009
Apr-1995	0.02	NA	ND	ND	0.99	NA	ND	ND	5.7	NA	ND	ND	0.03
Apr-1997	0.13	0.095	ND	ND	2.8	2.8	ND	ND	26	26	ND	ND	ND
Apr-1998	0.099	0.099	NA	ND	0.643	1.57	ND	ND	6.95	7.43	ND	ND	0.01
Apr-1999	0.064	0.063	NA	ND	ND	1.09	ND	ND	4.03	4.01	ND	ND	ND
Apr-2000	0.195	0.201	NA	ND	2	2.15	ND	ND	114	112	ND	ND	0.01
Apr-2001	0.92	NA	NA	ND	1.35	NA	ND	ND	19.2	NA	ND	ND	ND
Mar-2002	0.134	0.131	NA	ND	2.72	2.54	ND	ND	108	103	ND	ND	0.015
Mar-2003	0.192	0.184	NA	ND	2.02	1.02	ND	ND	161	154	ND	ND	0.015
Apr-2004	0.061	0.057	ND	ND	1.31	ND	ND	ND	20.8	19.7	ND	ND	0.011
Apr-2005	0.09	0.084	ND	ND	1.19	1.19	ND	ND	21	20.2	ND	ND	ND
Mar-2006	0.01	ND	ND	ND	0.552	0.565	ND	ND	9.06	8.7	ND	ND	ND
Mar-2007	0.103	0.099	ND	ND	1.27	1.18	ND	ND	100	107	ND	ND	0.032
Mar-2008	0.046	0.037	ND	ND	0.776	0.728	ND	ND	8.12	7.66	ND	ND	ND
Mar-2009	0.125	0.104	ND	0.015	0.649	0.69	ND	ND	10.9	11.4	ND	ND	0.012
Apr-2010	0.736	0.233	ND	ND	1.35	1.16	ND	ND	26.4	37.7	ND	ND	ND
Apr-2011	0.184	0.157	ND	ND	0.895	0.887	ND	ND	12.6	12.4	ND	ND	0.013
Mar-2012	0.178	0.076	ND	ND	1.06	0.933	ND	ND	26.7	25.3	ND	ND	ND
Sep-2012	0.0886	0.0681	ND	0.0027 J	0.789	0.738	ND	ND	20	18.9	ND	ND	0.0048 J
Mar-2013	0.0367	0.0268	0.000069 J	0.0071 J	0.674	0.541	ND	ND	4.59	3.96	ND	ND	0.0143
Oct-2013	0.162	0.164	ND	0.0124	0.886	0.806	ND	ND	31.9	34.2	ND	0.0011 J	0.0143

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-03A***												
Mar-2014	0.0648	0.0499	ND	0.0078 J	1.07	0.939	ND	ND	38.7	38.3	ND	0.0122	0.0105
Oct-2014	0.24	0.193	ND	0.0045 J	1.17	1.14	0.0018 J	ND	32.8	32.5	ND	ND	0.0107
Apr-2015	0.0551	0.0339	ND	0.007 J	0.763	0.771	ND	ND	5.44	5.33	ND	ND	0.0076 J
Nov-2015	0.359	0.312	ND	0.0048 J	1.06	1.07	ND	ND	35.6	35.5	ND	ND	0.0084 J
May-2016	0.124	0.103	ND	0.0109	1.52	1.36	ND	ND	71.1	67.1	ND	0.00041 J	0.0163 J
Oct-2016	0.382 R	0.304	ND	0.0199 J+	1.22	1.23	ND	ND	68.1	62.4	ND	0.00053 J	0.0124 J
May-2017	0.111	0.0807	ND	0.0373	1.21	1.23	ND	ND	57.9	58.4	ND	ND	0.0075 J
Oct-2017	0.102	0.093	ND	0.0057 B	1.26	1.38	ND	ND	72.9	82	ND	ND	ND
May-2018	0.079	0.081	ND	0.0034	ND	0.95 J	0.00098 J	ND	81.7	74.2	0.00018 J	0.002	0.0073
Nov-2018	0.76	0.75	ND	0.0025	ND	ND	0.00012 J	ND	47.2	47.9	ND	ND	0.0032 J
May-2019	0.64	0.61	ND	0.00082	ND	ND	ND	ND	21	22.2	ND	ND	ND
Oct-2019	0.49	0.48	ND	0.00068	ND	ND	ND	ND	19.4	19.6	ND	ND	0.0088 B
May-2020	0.36	0.34	ND	0.0012	ND	ND	ND	ND	19.5	19.6	ND	ND	0.0044 J
Oct-2020	0.39	0.35	ND	ND	ND	ND	ND	ND	23	19	ND	0.0039 JB	ND
Apr-2021	0.45	0.46	ND	ND	0.54	0.57	ND	ND	16	16.8	ND	ND	ND
Oct-2021	0.51	0.47	ND	0.00071 J	0.57	0.53	ND	ND	15.4	14.7	ND	ND	ND
May-2022	0.53	0.55	ND	0.0025 J	0.68	0.65	ND	ND	21.6	24	ND	ND	ND
Oct-2022	0.66	0.67	ND	0.0009 J	1.1	1.2	ND	ND	58.7	61.7	ND	ND	0.0042 J

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-03A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	18	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	5.8	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.14 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-03A*																
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.03 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.26 J*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.4 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-03A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*0.6 J*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.55 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.51 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-03A***															
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.76 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.68 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.36 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.48 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.22 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-03A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-03A***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.278 J*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05B***											
Nov-1993	ND	ND	0.1	ND	1.6	0.2	ND	3.73	44.6	3.8	32	1.54
Apr-1994	ND	ND	ND	ND	1.3	ND	ND	4.95	24.4	2.7	ND	ND
Aug-1994	ND	ND	ND	ND	1.6	0.4	ND	4.9	20.4	4.3	ND	2.61
Sep-1994	ND	ND	ND	ND	1.6	0.3	ND	4.8	19.3	4.8	10	2.8
Nov-1994	ND	ND	ND	ND	1.5	0.2	ND	4.5	19.5	4.3	42	1.7
Apr-1995	ND	ND	ND	ND	1.4	ND	ND	4.7	18.7	4.2	ND	1.3
Apr-1997	ND	ND	ND	ND	ND	0.15	ND	NA	NA	ND	35	3.8
Oct-1997	ND	ND	0.2	ND	1.06	ND	ND	5.58	19.8	1.86	21	ND
Apr-1998	3	3	0.22	ND	1.42	ND	ND	5.71	17.86	3.05	15	3.4
Apr-1999	ND	ND	0.27	ND	2.2	ND	ND	4.52	19.24	1.52	32	1.7
Oct-1999	ND	ND	0.06	ND	1.69	ND	ND	4.79	18.92	1.83	32	1.8
Apr-2000	ND	ND	ND	ND	2.52	0.15	ND	4.99	15	1.13	23	1.8
Oct-2000	ND	NA	ND	ND	1.54	ND	ND	4.57	15.62	5.31	14	2.71
Apr-2001	ND	NA	ND	ND	1.2	ND	ND	NA	NA	ND	10	1.92
Sep-2001	ND	ND	ND	ND	2.62	ND	ND	4.61	20	7.5	26	1.99
Mar-2002	ND	ND	ND	ND	1.34	ND	ND	4.7	18	1.9	ND	1.55
Sep-2002	ND	ND	ND	ND	1.34	ND	ND	4.4	19.8	3.95	27	2.95
Mar-2003	ND	ND	ND	ND	2.17	ND	ND	4.8	18.2	2.69	17	2.53
Oct-2003	ND	ND	ND	ND	1.51	0.142	ND	3.8	19.4	2.74	49	10.5
Apr-2004	ND	ND	ND	ND	1.7	0.12	ND	5	15.2	3.17	ND	3.01
Oct-2004	ND	ND	ND	15	1.61	0.11	ND	4.5	19.9	2.56	31	1.77
Apr-2005	3.2	3.2	ND	ND	2.53	0.09	ND	5.2	18.4	ND	44	3.32
Oct-2005	1.1	1.1	ND	ND	1.83	0.12	ND	4.7	14.7	4.29	33	1.76
Mar-2006	1.4	1.4	ND	ND	1.68	0.13	ND	4	16.1	4.73	ND	0.971
Sep-2006	1.2	1.2	ND	ND	1.78	0.12	ND	4.6	16.2	4.13	18	1.42
Mar-2007	1.8	1.8	ND	ND	1.91	0.14	ND	4.8	15.4	3.74	12	1.61
Sep-2007	ND	ND	0.31	ND	1.68	0.13	ND	4.2	14.6	3.39	28	1.33
Mar-2008	ND	ND	ND	10	1.9	0.12	ND	4.4	15.6	4.55	28	1.51
Sep-2008	1.8	1.8	ND	ND	1.74	0.06	ND	4.7	15	5.72	21	1.7
Mar-2009	1.2	1.2	ND	ND	1.65	0.1	ND	4.7	16.8	6.58	16	1.96
Oct-2009	1.4	1.4	ND	ND	1.58	0.14	ND	3.9	15.5	2.74	19	1.47
Apr-2010	1.5	1.5	ND	ND	1.53	0.12	ND	4.6	17.2	2.94	22	1.2
Oct-2010	ND	ND	ND	ND	1.95	0.08	ND	3.8	15.6	2.67	ND	1.62
Apr-2011	1.1	1.1	ND	ND	1.84	0.13	ND	4.1	16.8	2.11	27	1.54
Sep-2011	1.3	1.3	0.21	ND	1.62	0.1	ND	4.5	15.8	2.25	32	1.44
Mar-2012	1.2	1.2	ND	ND	1.82	0.1	ND	3.8	15.8	3.4	ND	1.72
Sep-2012	1	1	ND	ND	1.84	0.12	ND	3.8	16.4	1.9	22	1.59

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05B***											
Mar-2013	1.6	1.6	*ND*	*ND*	2.02	0.117	*ND*	4.8	16.6	2.39	12	1.75
Oct-2013	1.72	1.72	*ND*	*ND*	1.88	0.12	*ND*	4.8	16.4	2.52	*ND*	2.23
Mar-2014	1.4	1.4	*ND*	*ND*	1.87	0.115	*ND*	5.1	16.2	2.72	*ND*	1.59
Oct-2014	*ND*	*ND*	*ND*	*9 J*	2.1	0.129	*ND*	4.1	16.1	2.36	*ND*	1.61
Apr-2015	1.92	1.92	*ND*	*ND*	1.94	0.122	*ND*	4.4	15.3	2.86	*ND*	1.89
Nov-2015	*ND*	*ND*	*ND*	*ND*	1.93	0.144	*ND*	4.9	27.7	2.94	*ND*	1.52
May-2016	2.76	2.76	*ND*	*ND*	2.13 B	0.158	*ND*	4.7	26	3.66	57	3
Oct-2016	1.04	1.04	*ND*	*ND*	1.99	*NA*	*NA*	4.8	28.4	4.36	28	2.8
May-2017	2.6	2.6	*ND*	35	2.29	0.211	*ND*	4.5	32.1	4.68	*22 J*	3.5
Oct-2017	*ND*	*ND*	*ND*	*ND*	1.91	0.182	*ND*	4.9	33.5	2.97	*ND*	1.5
May-2018	*1 JB*	*ND*	*ND*	*7.9 J*	*2 J*	*ND*	*ND*	4.5	26.8	*ND*	*ND*	*1.8 J*
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	*1.8 J*	0.17	*ND*	4.27	18.5	*ND*	*ND*	*1.6 J*
May-2019	*ND*	*NA*	*ND*	*ND*	*ND*	0.18	*ND*	4.23	14.5	*ND*	27	*ND*
Oct-2019	*ND*	*NA*	*ND*	*ND*	*1.5 J*	0.19	*ND*	4.34	19.5	*ND*	20	1.2
May-2020	*ND*	*NA*	*ND*	*ND*	*1.7 J*	0.17	*ND*	4.4	18.9	*ND*	19	*1.8 J*
Oct-2020	*ND*	*NA*	*ND*	*ND*	*1.6 J*	0.18	*ND*	4.26	17.6	*ND*	11	1.6
Apr-2021	14	*NA*	*ND*	*ND*	*1.8 J*	0.2	*ND*	4.96	22.7	*ND*	*ND*	3.45
Oct-2021	*ND*	*NA*	*ND*	*ND*	*1.5 J*	0.22	*ND*	4.95	51.6	*ND*	*ND*	*1.78 J*
May-2022	*ND*	*NA*	*ND*	*ND*	*1.8 J*	0.18	*ND*	4.52	42.2	*ND*	*ND*	*2 JN3*
Oct-2022	*ND*	*NA*	*ND*	*ND*	*2.2 J*	0.2	*ND*	4.28	39.4	*ND*	*ND*	*1.6 JN3*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-05B*													
Nov-1993	NA	ND	ND	NA	ND	0.32	NA	ND	NA	ND	0.03	ND	ND	0.18	NA
Apr-1994	NA	ND	ND	NA	ND	0.011	NA	ND	NA	ND	67	3	ND	0.036	NA
Aug-1994	NA	ND	ND	NA	ND	0.78	NA	ND	NA	ND	ND	ND	ND	0.16	NA
Sep-1994	NA	ND	ND	NA	ND	0.82	NA	ND	NA	ND	0.11	0.04	**0.038**	0.19	NA
Nov-1994	NA	ND	ND	NA	ND	0.4	NA	ND	NA	0.03	ND	ND	ND	0.17	NA
Apr-1995	ND	ND	0.8	ND	ND	0.24	NA	ND	ND	ND	3.2	ND	ND	0.18	NA
Oct-1996	ND	ND	0.006	ND	ND	0.58	0.49	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	0.72	0.48	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	0.572	0.507	ND	ND	0.013	0.652	ND	ND	0.208	0.166
Apr-1998	ND	ND	ND	ND	ND	1.01	3.15	ND	ND	ND	0.378	0.019	ND	0.213	0.545
Apr-1999	ND	ND	ND	ND	ND	0.441	0.495	ND	ND	ND	ND	ND	ND	0.169	0.163
Oct-1999	ND	ND	ND	ND	ND	0.48	0.497	ND	ND	ND	0.11	ND	ND	0.176	0.168
Apr-2000	ND	ND	ND	ND	ND	0.451	0.457	ND	ND	ND	ND	ND	ND	0.169	0.157
Oct-2000	ND	ND	ND	ND	ND	0.716	0.417	ND	ND	0.015	0.104	ND	ND	0.224	0.16
Apr-2001	ND	ND	ND	ND	ND	0.471	NA	ND	ND	ND	0.075	NA	ND	0.18	NA
Sep-2001	ND	ND	ND	ND	ND	0.476	0.432	ND	ND	0.023	58.1	0.079	**0.02**	0.193	0.157
Mar-2002	ND	ND	ND	ND	ND	0.363	0.442	ND	ND	ND	0.144	ND	ND	0.157	0.168
Sep-2002	ND	ND	ND	ND	ND	0.829	0.368	ND	ND	0.014	0.136	ND	ND	0.214	0.159
Mar-2003	ND	ND	ND	ND	ND	0.699	0.673	ND	ND	ND	ND	ND	ND	0.192	0.178
Oct-2003	ND	ND	ND	ND	ND	0.807	0.504	ND	ND	0.028	0.194	ND	0.01	0.204	0.168
Apr-2004	ND	ND	ND	ND	ND	0.808	0.591	ND	ND	0.012	0.103	ND	ND	0.239	0.177

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05B***													
Oct-2004	ND	ND	ND	ND	ND	0.429	0.423	ND	ND	ND	0.094	ND	ND	0.169	0.157
Apr-2005	ND	ND	0.011	ND	ND	0.78	0.816	ND	ND	ND	30.5	0.897	0.007	0.333	0.342
Oct-2005	ND	ND	ND	ND	ND	0.431	0.428	ND	ND	ND	0.286	ND	ND	0.166	0.167
Mar-2006	ND	ND	ND	ND	ND	0.233	0.226	ND	ND	ND	ND	ND	ND	0.095	0.099
Sep-2006	ND	ND	ND	ND	ND	0.332	0.338	ND	ND	ND	0.158	ND	ND	0.144	0.138
Mar-2007	ND	ND	ND	ND	ND	0.417	0.409	ND	ND	ND	0.058	ND	ND	0.138	0.165
Sep-2007	ND	0.002	ND	ND	ND	0.319	0.327	ND	ND	ND	ND	ND	ND	0.13	0.126
Mar-2008	ND	0.003	ND	ND	ND	0.363	0.391	ND	ND	ND	0.082	ND	ND	0.147	0.153
Sep-2008	ND	ND	ND	ND	ND	0.42	0.263	ND	ND	ND	0.176	ND	ND	0.163	0.152
Mar-2009	ND	ND	ND	ND	ND	0.497	0.31	ND	ND	ND	0.175	ND	ND	0.175	0.125
Oct-2009	ND	ND	ND	ND	ND	0.323	0.35	ND	ND	ND	0.157	ND	ND	0.16	0.161
Apr-2010	ND	ND	ND	ND	ND	0.296	0.212	ND	ND	ND	0.165	ND	ND	0.113	0.094
Oct-2010	ND	ND	ND	ND	ND	0.392	0.289	ND	ND	ND	0.213	ND	ND	0.156	0.1
Apr-2011	ND	ND	ND	ND	ND	0.362	0.302	ND	ND	ND	0.101	ND	ND	1.55	0.123
Sep-2011	ND	ND	ND	ND	ND	0.356	0.381	ND	ND	ND	0.148	ND	ND	0.133	0.165
Mar-2012	ND	ND	ND	ND	ND	0.323	0.337	ND	ND	ND	0.062	ND	ND	0.222	0.216
Sep-2012	ND	ND	0.0043 J	0.000281 J	ND	0.381	0.372	ND	0.0035 J	0.0077 J	0.0666	0.0131 J	0.000497 J	0.154	0.16
Mar-2013	ND	ND	0.0059 J	0.000283 J	ND	0.468	0.464	0.0049 J	0.0034 J	0.0107	0.947	0.0082 J	0.0014 J	0.141	0.115
Oct-2013	0.000873 J	ND	0.0049 J	0.000283 J	ND	0.684	0.602	0.0084 J	0.0035 J	0.0072 J	0.253	0.0668	0.000971 J	0.126	0.11
Mar-2014	0.000335 J	ND	0.0036 J	0.000313 J	ND	0.371	0.336	0.000381 J	0.0031 J	0.0064 J	0.0871 J	0.0073 J	0.000355 J	0.161	0.142
Oct-2014	0.000609 J	ND	0.0077 J	0.00036 J	ND	0.374	0.308	0.0029 J	0.0033 J	0.008 J	0.828	0.0991	0.0011 J	0.165	0.101
Apr-2015	0.0013 J	ND	0.0047 J	0.00023 J	0.000094 J	0.479	0.324	0.000635 J	0.0035 J	0.0075 J	0.157	0.0084 J	ND	0.169	0.105
Nov-2015	0.000506 J	ND	0.0042 J	0.000288 J	ND	0.357	0.221	0.00062 J	0.0037 J	0.0093 J	0.0924	ND	0.000591 J	0.153	0.0846
May-2016	0.00052 J	ND	0.0051	0.00026 J,B	ND	0.857	0.608	0.0011 J	0.0031	0.0058	0.557	ND	0.0025	0.201	0.185 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05B***													
Oct-2016	*0.00069 J*	*ND*	0.0059	*0.00025 J*	*0.00074 J*	0.767	0.658	*0.0014 J+*	0.0033	*0.0044 J+*	0.734	*ND*	0.0027	*0.216 J+*	*0.191 J*
May-2017	*0.00076 J*	*ND*	0.0055	*0.00023 J*	*ND*	0.976	0.705	*0.0011 J*	0.0031	0.0043	0.423	*ND*	0.0027	0.264	0.209
Oct-2017	*ND*	*ND*	0.0045	*0.00023 J*	*ND*	*0.366 J*	*0.37 J*	*0.0015 J*	0.0035	*0.0031 J*	*ND*	*ND*	*ND*	*0.15 J*	*0.164 J*
May-2018	*0.000066 J*	*ND*	0.0044	*0.00022 J*	*0.000056 J*	*0.38 J*	*0.36 J*	*0.0047 J*	0.0033	0.0034 B	*0.017 J*	*ND*	*0.000041 J*	*0.22 J*	*0.17 J*
Nov-2018	*ND*	*0.000041 J*	0.0039	*0.00024 J*	*0.000062 J*	*0.47 J*	1.6	0.011	0.0034	**0.0037 D6**	0.086	0.026	*0.00014 J*	*0.11 J*	*0.19 J*
May-2019	*ND*	*ND*	0.0042	*ND*	*ND*	*ND*	*ND*	0.011	0.0041	0.004	*ND*	0.033	*ND*	*ND*	*ND*
Oct-2019	*0.000052 J*	*ND*	0.0041	*0.00022 J*	*0.0002 J*	0.31	*0.75 J*	0.017	0.0052	0.0086	0.11	0.058	*0.00011 J*	*0.11 J*	*0.17 J*
May-2020	*ND*	*ND*	*0.0049 J*	*0.00028 J*	*ND*	*0.49 J*	*0.68 J*	0.0073	*0.0034 J*	0.0085	0.072	*ND*	*ND*	*0.15 J*	*0.17 J*
Oct-2020	*0.0005 J*	*ND*	*0.0045 J*	*ND*	*ND*	0.48	*0.65 J*	*0.013 J*	0.0042	*ND*	*0.061 J*	0.03	*ND*	*0.11 J*	*0.18 J*
Apr-2021	*ND*	*ND*	*0.0043 J*	*0.00023 J*	*ND*	1	1.1	*0.0049 J*	*0.0034 J*	0.0059	*0.053 J*	*ND*	*ND*	0.23	0.23
Oct-2021	*0.000053 JB*	*ND*	0.0044	*0.00024 J*	*ND*	*0.44 J*	0.509	0.013	0.0048	0.011	0.14	0.0576	*0.000061 J*	*0.16 J*	*0.186 J*
May-2022	*ND*	*ND*	0.0056	*0.00033 J*	*ND*	*0.49 J*	0.61	0.011	0.0051	0.016	0.07	0.064	*ND*	*0.19 J*	*0.2 J*
Oct-2022	*ND*	*ND*	0.0044	*0.00024 J*	*ND*	*0.39 J*	*0.43 J*	0.01	0.0044	0.012	0.1	0.062	*ND*	*0.15 J*	*0.18 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-05B*												
Nov-1993	0.05	NA	ND	NA	0.47	NA	ND	NA	1.1	NA	NA	NA	0.01
Apr-1994	0.08	NA	ND	NA	0.58	NA	ND	NA	1.6	NA	NA	NA	ND
Aug-1994	0.01	NA	ND	NA	0.58	NA	ND	NA	0.76	NA	NA	NA	0.05
Sep-1994	0.01	NA	ND	NA	0.37	NA	ND	NA	0.85	NA	NA	NA	1.1
Nov-1994	ND	NA	ND	NA	0.3	NA	ND	NA	0.75	NA	NA	NA	0.02
Apr-1995	ND	NA	ND	ND	0.53	NA	ND	0.01	0.82	NA	ND	ND	0.04
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	2.2	1.7	ND	ND	0.13
Apr-1997	ND	ND	0.0018	ND	1.1	1.8	ND	ND	1.9	1	ND	ND	0.039
Oct-1997	ND	ND	NA	0.015	ND	ND	ND	ND	0.971	0.907	ND	ND	0.049
Apr-1998	ND	0.012	NA	0.022	1.16	ND	ND	ND	0.898	1.11	ND	ND	0.107
Apr-1999	ND	ND	NA	ND	ND	1.05	ND	ND	0.93	0.926	ND	ND	0.024
Oct-1999	ND	ND	NA	ND	ND	ND	ND	ND	0.95	0.91	ND	ND	0.027
Apr-2000	ND	ND	NA	ND	ND	ND	ND	ND	0.96	0.974	ND	ND	0.019
Oct-2000	ND	ND	NA	ND	0.712	0.457	ND	ND	1.74	0.939	ND	ND	0.023
Apr-2001	ND	NA	NA	ND	1.28	NA	ND	ND	0.993	NA	ND	ND	0.018
Sep-2001	0.125	ND	NA	ND	0.573	0.733	ND	ND	0.963	0.909	ND	ND	2.11
Mar-2002	ND	ND	NA	ND	0.773	ND	ND	ND	0.936	0.975	ND	ND	0.022
Sep-2002	ND	ND	NA	ND	1.26	ND	ND	ND	1.58	0.873	ND	ND	0.023
Mar-2003	ND	ND	NA	ND	ND	ND	ND	ND	0.92	0.941	ND	ND	0.033
Oct-2003	ND	ND	NA	ND	1.93	1.06	ND	ND	1.54	0.922	ND	ND	0.025
Apr-2004	ND	ND	ND	ND	0.668	ND	ND	ND	1.37	0.976	ND	ND	0.058
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	0.914	0.604	ND	ND	0.024

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05B***												
Apr-2005	0.018	0.016	ND	ND	ND	0.54	ND	ND	1.36	1.35	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	0.845	0.812	ND	ND	0.013
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	0.63	0.588	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.52	0.51	ND	ND	0.783	0.777	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	0.764	0.695	ND	ND	0.02
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	0.804	0.778	ND	ND	0.015
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	0.834	0.829	ND	ND	0.01
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	0.831	0.753	ND	ND	0.057
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.12	0.887	ND	ND	0.02
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	0.81	0.791	ND	ND	0.015
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	0.847	0.841	ND	ND	0.021
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	0.857	0.87	ND	ND	0.018
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	0.907	0.899	ND	ND	0.02
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	0.983	0.947	ND	ND	0.013
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	0.9	0.901	ND	ND	0.013
Sep-2012	0.0039 J	0.0036 J	ND	0.0055 J	0.39 J	0.321 J	ND	ND	0.948	0.903	ND	ND	0.0168
Mar-2013	0.0044 J	0.0027 J	0.000072 J	0.0068 J	0.48 J	0.435 J	ND	ND	0.909	1.02	ND	ND	0.0321
Oct-2013	0.0043 J	0.0035 J	ND	0.005 J	0.347 J	0.302 J	ND	ND	0.753	0.744	0.000122 J	0.0084 J	0.0276
Mar-2014	0.0032 J	0.003 J	ND	0.0052 J	0.396 J	0.401 J	ND	ND	0.903	0.932	ND	ND	0.02
Oct-2014	0.0046 J	0.0027 J	ND	0.0064 J	0.551	0.443 J	0.0012 J	ND	0.984	1.1	ND	0.0018 J	0.0197
Apr-2015	0.0039 J	0.0021 J	ND	0.0059 J	0.47 J	0.453 J	ND	ND	1.05	1.09	ND	ND	0.023
Nov-2015	0.004 J	0.002 J	ND	0.0062 J	0.414 J	0.42 J	ND	ND	1.09	1.15	ND	ND	0.0205
May-2016	0.0064	0.0043 B	ND	0.0062	0.464	0.451	ND	ND	2.4	1.98	ND	0.0003 J	0.809
Oct-2016	0.0079 R	0.0042	ND	0.0057 J+	0.515	0.52	ND	ND	2.49 J+	2.44	ND	0.00037 J	0.55

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05B***												
May-2017	0.008	*0.004 J*	*ND*	0.0055	0.488	0.477	*ND*	*ND*	4	3.23	*ND*	*0.00028 J*	0.835
Oct-2017	0.0042	*0.0035 J*	*ND*	0.0074	0.427	*0.395 J*	*ND*	*ND*	1.01	1.04	*ND*	*ND*	*0.0091 J*
May-2018	0.0036 B	0.0031	*ND*	0.008	*ND*	*ND*	*0.00048 JB*	*ND*	*1.5 J*	*1.2 J*	*ND*	*ND*	0.0088 B
Nov-2018	0.0037	0.0041	*ND*	0.015	*ND*	*ND*	*0.00013 J*	*ND*	*1.2 J*	*1.2 J*	*0.000076 J*	*0.00045 J*	0.0086 D6
May-2019	0.0048	0.0057	*ND*	0.013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0026	0.023
Oct-2019	0.006	0.0064	*ND*	0.018	*ND*	*ND*	*0.00054 J*	*0.00049 J*	*ND*	*ND*	*ND*	0.005	0.034
May-2020	*0.0041 J*	*0.0045 JB*	*ND*	0.011	*0.5 J*	*0.45 J*	*ND*	*ND*	1.2	1.3	*ND*	*ND*	0.017
Oct-2020	0.0049	0.0034	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.0035 J*	*ND*
Apr-2021	*0.0045 J*	*0.0042 J*	*0.00005 J*	*0.0092 J*	*0.47 J*	*0.49 J*	*ND*	*ND*	1.1	*0.98 J*	*ND*	*ND*	0.051
Oct-2021	0.0053	0.0062	*ND*	0.018	*0.4 J*	*0.424 J*	*ND*	*0.0003 J*	1.1	1.29 B	*0.000079 J*	*ND*	0.012
May-2022	*0.0048 J*	0.0065	*ND*	0.015	*0.44 J*	0.52	*ND*	*ND*	1.3	1.5	*0.00011 J*	*ND*	0.025
Oct-2022	0.0054	0.0075	*ND*	0.014	*0.39 J*	*0.47 J*	*ND*	*ND*	1.3	1.4	*ND*	*ND*	0.01

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05B*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05B*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05B*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.8 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.5	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05B***															
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.18 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05B***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05B***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Aug-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-05B*															
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.1 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05B***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.705 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-06B***											
Apr-2010	1.3	1.3	ND	ND	2.76	0.33	ND	3.8	22.1	3.09	26	1.9
Oct-2010	1.2	1.2	ND	ND	2.81	0.32	ND	3.6	22.4	3.58	10	2.24
Apr-2011	ND	ND	ND	ND	2.82	0.35	ND	4	24.1	1.7	17	2
Sep-2011	ND	ND	0.21	ND	2.69	0.34	ND	4.5	23.5	2.22	28	2.4
Mar-2012	ND	ND	ND	ND	3.17	0.35	ND	3.8	20.8	3.55	14	2.51
Sep-2012	ND	ND	ND	ND	2.95	0.335	ND	3.1	23.6	3.24	20	2.23
Mar-2013	0.92 J	0.92 J	ND	ND	3.22	0.341	ND	3.9	25.7	1.98	15	2.52
Oct-2013	1.56	1.56	ND	ND	3.09	0.324	ND	5.4	24.9	2.33	ND	2.77
Mar-2014	ND	ND	ND	ND	3.32	0.291	ND	4.6	24.1	2.84	ND	2.02
Oct-2014	ND	ND	ND	11	3.31	0.314	ND	4.4	23	2.8	ND	2.26
Apr-2015	0.96	0.96	ND	ND	3.16	0.357	ND	4.2	23.3	3.1	ND	2.28
Nov-2015	ND	ND	ND	ND	3.06	0.352	ND	4.8	37.5	1.95	20 J	2.2
May-2016	ND	ND	ND	ND	3.19	ND	ND	4.6	40.8	3.11	15 J	2.3
Oct-2016	ND	ND	ND	ND	3.36	NA	NA	4.8	36.1	2.17	31	2.1
May-2017	2.64	2.64	ND	ND	2.99	0.336	ND	4.5	43.8	2.15	13 J,B	3
Oct-2017	ND	ND	0.0676 J	ND	3.3	0.399	ND	4.4	44.2	2.88	25	2.3
May-2018	1 JB	ND	ND	5.8 J	2.7 J	0.073 J	ND	4.4	34.7	ND	ND	2.3 J
Nov-2018	1 JB	ND	ND	ND	2.9 J	0.31	ND	4.1	24.8	ND	ND	2.2 J
May-2019	ND	NA	ND	ND	ND	0.35	ND	3.86	20.3	ND	21	ND
Oct-2019	ND	NA	ND	ND	2.6 J	0.35	ND	4.14	24.6	ND	10	2.2
May-2020	ND	NA	ND	ND	2.9 J	0.33	ND	4.17	24.6	ND	ND	2.2 J
Oct-2020	ND	NA	ND	ND	3.2	0.35	ND	5.01	24.4	1.2	35	2.3
Apr-2021	ND	NA	ND	ND	3.1	0.34	ND	4.51	29.1	ND	17	2.3 J
Oct-2021	ND	NA	ND	ND	3 J	0.35	ND	4.57	38.5	ND	ND	2.5 J
May-2022	ND	NA	ND	ND	2.9 J	0.32	ND	4.45	49.4	ND	ND	2.3 JN3
Oct-2022	ND	NA	ND	6.1 J	3.7 J	0.34	ND	4.44	44.7	ND	ND	2.5 JN3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06B***													
Apr-2010	ND	ND	ND	ND	ND	0.431	0.353	ND	ND	ND	ND	ND	ND	0.188	0.157
Oct-2010	ND	ND	ND	ND	ND	0.521	0.514	ND	ND	ND	0.052	ND	ND	0.229	0.226
Apr-2011	ND	ND	ND	ND	ND	0.446	0.484	ND	ND	ND	ND	ND	ND	0.216	0.236
Sep-2011	ND	ND	ND	ND	ND	0.578	0.606	ND	ND	ND	ND	ND	ND	0.233	0.233
Mar-2012	ND	ND	ND	ND	ND	0.507	0.501	ND	ND	ND	ND	ND	ND	0.301	0.299
Sep-2012	ND	ND	0.0065 J	0.000303 J	ND	0.522	0.602	0.0011 J	0.005 J	0.0032 J	0.0367 J	0.0319 J	ND	0.225	0.245
Mar-2013	ND	ND	0.0069 J	0.000275 J	ND	0.613	0.481	0.0016 J	0.0052 J	0.0028 J	0.011 J	0.0147 J	ND	0.241	0.195
Oct-2013	ND	ND	0.0066 J	0.000312 J	ND	0.801	0.791	0.0124 J	0.0049 J	0.0022 J	0.0756	0.0724	0.000335 J	0.186	0.215
Mar-2014	0.0025	ND	0.0056 J	0.000252 J	ND	0.481	0.501	0.0015 J	0.0044 J	0.0015 J	ND	ND	ND	0.199	0.207
Oct-2014	0.0012 J	ND	0.0067 J	0.000301 J	0.000074 J	0.526	0.553	0.000384 J	0.0048 J	0.003 J	ND	ND	ND	0.231	0.244
Apr-2015	0.000346 J	ND	0.0066 J	0.000287 J	0.000071 J	0.523	0.551	0.000417 J	0.0049 J	0.0029 J	0.143	0.0882	ND	0.237	0.241
Nov-2015	ND	ND	0.0062 J	0.000327 J	0.000108 J	0.504	0.567	0.000703 J	0.0049 J	0.0028 J	ND	ND	0.000426 J	0.229	0.238
May-2016	ND	ND	0.0068	0.00029 J	ND	0.522	0.455	0.00096 J	0.0048	0.0025 J	ND	ND	ND	0.249	0.227
Oct-2016	ND	ND	0.0069	0.00028 J	ND	0.439	0.451	0.00095 J	0.0053	0.0028 J	ND	ND	0.00011 J	0.236	0.244
May-2017	ND	0.00077 J	0.0053 B	0.00027 J	ND	0.738	0.78	0.00084 J,B	0.0053	0.0051	0.134 J	ND	0.001 J	0.283	0.256
Oct-2017	ND	ND	0.0067	0.0003 J	ND	0.512	0.509	ND	0.0051	0.0027 J	ND	ND	0.00012 J	0.24	0.247
May-2018	0.000054 J	ND	0.0068	0.00025 J	0.000078 J	0.51 J	0.49 J	0.0022 J	0.0048	0.0034 B	0.028	ND	0.00012 J	0.24 J	0.25 J
Nov-2018	ND	ND	0.0062	0.00028 J	0.00011 J	0.5 J	0.85 J	0.0018 J	0.0049	0.0087	ND	0.014 J	0.00039 J	0.24 J	0.24 J
May-2019	ND	ND	0.0063	ND	ND	ND	ND	ND	0.005	0.011	ND	ND	ND	ND	ND
Oct-2019	0.000055 J	ND	0.0065	0.00027 J	0.00022 J	0.52	0.5 J	0.0046 J	0.0054	0.0098	0.016 J	0.015 J	0.00017 J	0.23	0.23 J
May-2020	ND	ND	0.0067 J	0.00029 J	ND	0.5 J	0.5 J	0.004 J	0.0045 J	0.02	ND	ND	ND	0.22	0.23

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06B***													
Oct-2020	*ND*	*ND*	*0.0064 J*	*0.00031 J*	*ND*	0.52	*0.5 J*	*0.0039 J*	0.0066	0.016	*0.023 J*	0.03 D6	*ND*	0.24	*0.24 J*
Apr-2021	*ND*	*ND*	*0.007 J*	*0.00039 J*	*ND*	*0.52 J*	*0.54 J*	*0.0033 J*	0.0055	0.018	*ND*	*ND*	*ND*	0.24	0.24
Oct-2021	*ND*	*ND*	0.0064	*0.00023 J*	*ND*	0.56	0.58	0.0026	0.0058	0.015	*0.013 J*	*0.014 J*	*0.00014 J*	*0.27 J*	*0.28 J*
May-2022	*ND*	*ND*	0.0071	*0.00025 J*	*ND*	*0.49 J*	0.54	*0.0024 J*	0.0065	0.019	*ND*	*ND*	*ND*	*0.27 J*	*0.28 J*
Oct-2022	*ND*	*ND*	0.0077	*0.0003 J*	*ND*	0.57	0.62	0.0036	0.0063	0.017	*ND*	*ND*	*ND*	*0.26 J*	*0.32 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-06B*												
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.27	1.23	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.17	1.15	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.28	1.25	ND	ND	ND
Sep-2011	ND	ND	ND	ND	0.534	ND	ND	ND	1.4	1.42	ND	ND	ND
Mar-2012	ND	ND	ND	ND	0.533	0.514	ND	ND	1.36	1.3	ND	ND	ND
Sep-2012	0.006 J	0.0065 J	ND	0.0076 J	0.465 J	0.493 J	ND	ND	1.32	1.32	ND	ND	0.0088 J
Mar-2013	0.0061 J	0.0047 J	0.000106 J	0.0075 J	0.53	0.521	ND	ND	1.53	1.57	ND	ND	0.018
Oct-2013	0.0064 J	0.0072 J	ND	0.0069 J	0.405 J	0.407 J	ND	ND	1.04	1.12	0.000409 J	0.004 J	0.0202
Mar-2014	0.0056	0.0058	ND	0.0069 J	0.556	0.545	ND	ND	1.68	1.64	0.000593 J	ND	0.0104
Oct-2014	0.0057 J	0.0061 J	ND	0.0077 J	0.529	0.516	0.0015 J	ND	1.45	1.41	ND	ND	0.0104
Apr-2015	0.0061 J	0.0064 J	ND	0.0076 J	0.523	0.502	0.000966 J	ND	1.47	1.49	ND	ND	0.0133
Nov-2015	0.0057 J	0.0061 J	ND	0.0082 J	0.517	0.496 J	0.000419 J	ND	1.55	1.53	0.000183 J	ND	0.01
May-2016	0.01	0.0053	ND	0.008	0.651	0.439	ND	ND	1.53	1.35	ND	ND	0.0091 J,B
Oct-2016	0.0055	0.006	ND	0.0086	0.529	0.535	ND	ND	1.49	1.55	ND	ND	0.0073 J
May-2017	0.0072	0.0068	ND	0.0095	0.564	0.599	ND	ND	2.54	2.45	ND	ND	0.0156 JB
Oct-2017	0.0063	0.0057	ND	0.0079	0.516	0.539	ND	ND	1.54	1.56	ND	ND	0.0076 J
May-2018	0.0058	0.0051	ND	0.0088	ND	ND	0.00044 JB	ND	1.8 J	1.6 J	ND	0.003	0.0092 B
Nov-2018	0.0091	0.0099	ND	0.0072	ND	ND	0.00019 J	ND	1.5 J	1.5 J	0.000069 J	0.0019	0.011
May-2019	0.0061	0.0058	ND	0.0096	ND	ND	ND	ND	ND	ND	ND	0.0049	0.01
Oct-2019	0.011	0.0078	ND	0.0099	ND	ND	0.00041 J	ND	1.5 J	ND	ND	0.0056	0.018
May-2020	0.0058	0.0061 B	ND	0.012	0.56	0.49 J	ND	ND	1.4	1.6	ND	ND	0.0094 J
Oct-2020	0.0095	0.0088	ND	0.0093	ND	ND	ND	ND	ND	ND	ND	0.00081 J	0.011 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-06B***												
Apr-2021	0.0067	0.0061	*ND*	*0.0094 J*	0.52	0.53	*ND*	*ND*	1.5	1.8	*ND*	*ND*	*0.0078 J*
Oct-2021	0.0059	0.0065	*ND*	0.0094	0.52	*0.47 J*	*ND*	*ND*	1.6 B	1.7	*0.000062 J*	*ND*	0.0089
May-2022	0.0078	0.0075	*ND*	0.0099	0.52	0.53	*ND*	*ND*	1.6	1.6	*ND*	*ND*	0.0092
Oct-2022	0.0074	0.0076	*ND*	0.01	*0.45 J*	0.52	*0.00089 J*	*ND*	1.6	1.9	*ND*	*ND*	0.011

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06B*																
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06B*																
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-06B*															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-06B***															
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-06B***															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-06B***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-09***											
Nov-1993	ND	ND	ND	22.8	2.1	ND	ND	4.73	36.8	11.9	44	2.72
Apr-1994	10	10	ND	ND	1.6	ND	ND	6.8	39.4	8.6	43	2.3
Apr-1995	ND	ND	ND	ND	1.8	ND	ND	4.5	38.8	11.3	19	1.8
Apr-1997	ND	2	ND	ND	1.5	0.02	ND	NA	NA	7.3	88	7.7
Apr-1998	7	7	0.21	ND	1.35	ND	ND	6.41	79.7	7.32	40	2.6
Apr-1999	ND	ND	0.15	ND	2.09	ND	ND	5.56	49.3	7.28	39	2.8
Apr-2000	ND	ND	ND	ND	ND	ND	ND	6.24	38	9.45	36	2.4
Apr-2001	ND	NA	ND	ND	1.12	ND	ND	NA	NA	10.2	33	2.59
Mar-2002	7.1	7.1	ND	ND	2.12	ND	ND	5.9	44.5	11.6	54	3.28
Mar-2003	ND	ND	ND	ND	14.8	0.961	ND	5.5	52.3	14.9	49	2.47
Apr-2004	ND	ND	ND	ND	1.47	ND	ND	5.8	43.7	11.4	58	2.5
Apr-2005	5.3	5.3	ND	ND	1.42	ND	ND	5.5	39.8	7.73	68	4.6
Mar-2006	ND	ND	ND	ND	1.58	ND	ND	5.7	41.8	16.2	23	1.84
Mar-2007	9.2	9.2	ND	ND	1.76	ND	ND	5.9	41.1	7.1	ND	2.25
Mar-2008	1.3	1.3	ND	ND	5.71	ND	ND	5.7	39.5	20.2	29	2.28
Mar-2009	1.2	1.2	ND	ND	1.47	ND	ND	5.8	40.7	18.2	19	2.56
Oct-2009	2.5	2.5	ND	ND	1.41	ND	ND	5.4	40.8	8.11	49	1.04
Apr-2010	1.8	1.8	ND	ND	1.35	ND	ND	5	39.1	11.7	ND	1.7
Oct-2010	11	11	ND	ND	1.76	ND	ND	5	38	7.69	40	2.47
Apr-2011	8.4	8.4	ND	ND	1.64	ND	ND	5.3	37.8	6.64	42	2.2
Sep-2011	4.7	4.7	ND	ND	1.42	ND	ND	5.8	39.2	6.7	29	2.26
Mar-2012	5.2	5.2	ND	ND	1.61	ND	ND	5	37.2	7.33	17	2.55
Sep-2012	6.16	6.16	ND	ND	1.6	ND	ND	4.9	37.9	6.8	28	2.33
Mar-2013	11.5	11.5	0.0707	ND	1.8	ND	ND	4.8	41.1	7.24	ND	2.53
Oct-2013	8.52	8.52	ND	ND	1.66	ND	ND	6.7	39.8	6.81	ND	2.68
Mar-2014	14.4	14.4	ND	ND	1.72	ND	ND	6	39.1	7.15	ND	2.21
Oct-2014	22	ND	ND	10	1.84	ND	ND	5.8	37.4	6.72	29	2.25
Apr-2015	9.4	9.4	ND	8 J	1.77	ND	ND	5	38.9	6.21	ND	2.33
Nov-2015	4	4	ND	ND	1.64	ND	ND	6.2	69.6	6.03	21 J	2.36
May-2016	4.64	4.64	ND	13	1.67 B	ND	ND	6	60.8	0.832 J	85	6.1
Oct-2016	ND	ND	ND	16	1.65	NA	NA	6.1	65.6	4.4	33	3.7
May-2017	5.32	5.32	ND	14	1.64	ND	ND	6.4	88.9	4.49	17 J	8
Oct-2017	27.3	27.3	ND	15	1.57	ND	ND	6.5	119.4	1.66	29	2.4
May-2018	4 J	ND	ND	18.7 J	3.2	ND	ND	5.7	59.2	ND	10	2.9 J
Nov-2018	18	18	ND	7.9 J	1.4 J	ND	ND	6.33	76.6	ND	12	2.1 J
May-2019	22	NA	ND	ND	ND	ND	0.017	5.87	62	ND	22	ND
Oct-2019	2.5 JH1	NA	ND	8.2 J	1.3 J	0.34 J	0.014	6.15	81.9	ND	13	2.1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-09***											
May-2020	12	*NA*	*ND*	*6.9 J*	*1.5 J*	*ND*	*ND*	5.76	75.2	*ND*	41	2.2
Oct-2020	*4 J*	*NA*	*ND*	*7 J*	*1.6 J*	*ND*	*ND*	5.32	74.2	1.4	59	2
Apr-2021	*8 J4c*	*NA*	*ND*	*17 J*	*1.6 J*	*0.14 J*	*ND*	6.77	94.5	*ND*	17	*2 J*
Oct-2021	20	*NA*	*ND*	*6.1 J*	*1.4 J*	*ND*	*ND*	6.85	125.2	*ND*	29	*2.1 J*
May-2022	20	*NA*	*ND*	*ND*	*1.5 JML*	*ND*	*ND*	6.7	117.5	*ND*	*ND*	*2 JN3*
Oct-2022	*6 J4c*	*NA*	*ND*	*10.7 J*	*1.8 J*	*0.065 J*	*ND*	6.55	107.5	*ND*	28	*2 JN3*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-09*													
Nov-1993	NA	ND	ND	NA	ND	0.58	NA	ND	NA	ND	8.2	4	ND	0.31	NA
Apr-1994	NA	ND	0.56	NA	ND	0.51	NA	ND	NA	ND	3	9.22	ND	0.25	NA
Apr-1995	ND	ND	0.7	0.003	ND	0.19	NA	ND	ND	ND	3.4	2.7	ND	0.32	NA
Apr-1997	ND	ND	0.023	0.002	ND	0.68	0.79	ND	ND	ND	14	12	ND	ND	ND
Apr-1998	ND	ND	0.016	ND	ND	0.516	0.571	ND	ND	ND	8.83	7.96	ND	0.3	0.293
Apr-1999	ND	ND	0.016	ND	ND	0.615	0.637	ND	ND	ND	3.24	2.74	ND	0.295	0.27
Apr-2000	ND	ND	0.014	0.003	ND	0.522	0.506	ND	ND	ND	2.37	2.35	ND	0.271	0.257
Apr-2001	ND	ND	0.013	ND	ND	0.555	NA	ND	ND	ND	3.14	NA	ND	0.292	NA
Mar-2002	ND	ND	0.015	0.002	ND	0.774	1.41	ND	ND	ND	10.3	8.16	ND	0.327	0.38
Mar-2003	ND	ND	0.015	ND	ND	0.537	0.511	ND	ND	ND	3.16	2.67	ND	0.274	0.259
Apr-2004	ND	0.002	0.013	0.004	ND	0.55	0.542	ND	ND	ND	4.38	2.8	ND	0.276	0.272
Apr-2005	ND	ND	0.015	ND	ND	1.34	0.685	ND	ND	ND	9.81	8.11	ND	0.316	0.398
Mar-2006	ND	ND	0.012	ND	ND	0.385	0.358	ND	ND	ND	3.01	1.96	ND	0.214	0.183
Mar-2007	ND	ND	0.013	ND	ND	0.488	0.508	ND	ND	ND	11.7	9.23	ND	0.249	0.26
Mar-2008	ND	ND	0.013	0.003	ND	0.501	0.501	ND	ND	ND	4.74	4.29	ND	0.251	0.233
Mar-2009	ND	ND	0.012	ND	ND	0.617	0.434	ND	ND	ND	5.2	3.49	ND	0.248	0.215
Oct-2009	ND	ND	0.013	ND	ND	ND	ND	ND	ND	ND	9.66	8.16	ND	2.53	0.243
Apr-2010	ND	ND	0.012	ND	ND	0.351	0.374	ND	ND	ND	3.29	2.28	ND	0.203	0.205
Oct-2010	ND	ND	ND	ND	ND	0.538	0.495	ND	ND	ND	9.58	7.81	ND	0.274	0.264
Apr-2011	ND	ND	0.014	ND	ND	0.464	0.5	ND	ND	ND	9.56	8.44	ND	0.252	0.286
Sep-2011	ND	ND	0.014	0.002	ND	0.491	0.483	ND	ND	ND	10.4	7.33	ND	0.25	0.237

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09***													
Mar-2012	ND	ND	0.014	0.002	ND	0.47	0.467	ND	ND	ND	9.88	8.15	ND	0.336	0.323
Sep-2012	ND	ND	0.0141	0.0017 J	ND	0.52	0.472	ND	0.0058 J	0.000562 J	9.77	8.43	0.000735 J	0.25	0.251
Mar-2013	ND	ND	0.0132	0.002	ND	0.569	0.565	0.0018 J	0.0067 J	ND	11.4	8.56	ND	0.269	0.255
Oct-2013	ND	ND	0.0149	0.0021	ND	0.695	0.681	0.0068 J	0.0062 J	ND	10	8.6	0.000338 J	0.229	0.207
Mar-2014	0.000232 J	0.00068 J	0.0122	0.0021	0.000096 J	0.456	0.455	0.000821 J	0.0061 J	0.000268 J	10.9	8.75	0.000593 J	0.261	0.261
Oct-2014	0.000345 J	0.000869 J	0.0146	0.0021	ND	0.507	0.556	0.00094 J	0.0059 J	0.0011 J	10.8	9.4	ND	0.24	0.249
Apr-2015	0.000374 J	0.000603 J	0.0146	0.0018 J	0.000074 J	0.512	0.571	0.000714 J	0.0058 J	0.000342 J	11.5	10.7	ND	0.256	0.259
Nov-2015	0.00038 J	0.000334 J	0.0139	0.0016 J	ND	0.515	0.544	0.000373 J	0.0042 J	0.000839 J	11.6	11.9	ND	0.261	0.263
May-2016	ND	0.0007 J	0.0147	0.0019	0.00033 J	1.24	1.23	0.0012 J	0.0066	0.00068 J,B	27.6	14.3	0.0011 J	0.734	0.724
Oct-2016	ND	0.0069	0.0174	0.0027	0.00031 J	0.989	0.616	0.0031 J+	0.0156	0.0064 J+	38.3	14.2	0.002 J	0.291 J+	0.253
May-2017	ND	0.0031 J	0.0145	0.0022	0.00024 J	0.866	0.62	0.003 J	0.0085	0.0076	29.1	16.6	0.0053	1.42	0.268
Oct-2017	ND	0.001 J	0.0163	0.0022	ND	0.531	0.421	0.0014 J	0.0031	ND	33.6	22.5	0.00054 J	0.256	0.234
May-2018	0.00053	0.0043	0.013	0.0019	0.00016 J	0.79 J	0.63 J	0.0034 JB	0.0081	0.0061	41.5	24.4	0.0017	0.23 J	0.26 J
Nov-2018	ND	0.00045 J	0.012	0.0016	0.000048 J	0.47 J	0.47 J	0.0046 J	0.0024	0.0009 J	24.2	22.7	0.00012 JM1	0.23 J	0.24 J
May-2019	ND	ND	0.012	0.0012	ND	ND	ND	ND	0.0016	ND	27.2	24.8	ND	ND	ND
Oct-2019	0.00014 J	0.00065 J	0.013	0.0015	0.00018 J	0.47	0.49 J	0.0068 J	0.0015	ND	25.6	24.9	0.000099 J	0.23	0.23 J
May-2020	0.00023 J	0.00092 J	0.012	0.0015	0.00014 J	0.49	0.46 JB	0.0058 J	0.014	ND	38.8	23.9	ND	0.25	0.22 JB
Oct-2020	ND	ND	0.012	0.0014 J	ND	0.45	0.43 J	0.0033 J	0.0017 J	ND	24.9	23.6	ND	0.22	0.22 J
Apr-2021	ND	ND	0.013	0.0011	ND	0.43 J	0.38 J	0.00092 J	0.0014 J	ND	25.2	24.8	ND	0.23	0.21
Oct-2021	0.000047 J	0.00089 J	0.012	0.0014	ND	0.46 J	0.47 J	0.0015 J	0.0015 J	0.00062 J	25.7	26	ND	0.23 J	0.24 J
May-2022	ND	0.00099 J	0.012	0.0011	ND	0.41 J	0.53	0.001 J	0.0011 J	ND	27.5	26	ND	0.24 J	0.24 J
Oct-2022	ND	0.00087 J	0.012	0.0012	ND	0.45 J	0.49 J	0.00093 J	0.0012 J	0.0015 J	27.4	29.3 M1	ND	0.23 J	0.23 J

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-09*												
Nov-1993	0.07	NA	ND	NA	0.59	NA	ND	NA	0.95	NA	NA	NA	ND
Apr-1994	0.01	NA	ND	NA	0.29	NA	ND	NA	0.74	NA	NA	NA	ND
Apr-1995	0.09	NA	ND	ND	0.75	NA	ND	ND	0.98	NA	ND	ND	0.04
Apr-1997	0.073	0.064	ND	ND	1.9	1.4	ND	ND	1	1.3	ND	ND	0.034
Apr-1998	0.049	0.048	NA	ND	0.847	0.796	ND	ND	0.833	0.825	ND	ND	0.042
Apr-1999	0.02	0.019	NA	ND	0.677	0.81	ND	ND	0.995	0.831	ND	ND	0.041
Apr-2000	0.02	0.019	NA	0.016	ND	ND	ND	ND	0.788	0.746	ND	ND	0.039
Apr-2001	0.019	NA	NA	0.014	ND	NA	ND	ND	0.905	NA	ND	ND	0.03
Mar-2002	0.055	0.051	NA	0.012	1.16	0.947	ND	ND	1.81	0.891	ND	ND	0.055
Mar-2003	0.017	0.016	NA	0.015	ND	ND	ND	ND	0.888	0.861	ND	ND	0.04
Apr-2004	0.019	0.019	ND	0.022	1.33	1.08	ND	ND	0.889	0.87	ND	ND	0.081
Apr-2005	0.056	0.051	ND	0.018	0.52	ND	ND	ND	1.33	0.984	ND	ND	0.305
Mar-2006	ND	ND	ND	0.019	ND	ND	ND	ND	0.613	0.547	ND	ND	0.043
Mar-2007	0.061	0.056	ND	0.015	0.582	0.576	ND	ND	0.748	0.738	ND	ND	0.059
Mar-2008	0.025	0.025	ND	0.017	0.561	ND	ND	ND	0.792	0.677	ND	ND	0.026
Mar-2009	0.027	0.022	ND	0.016	0.819	0.618	ND	ND	1.2	0.803	ND	ND	0.039
Oct-2009	0.057	0.058	ND	0.015	ND	ND	ND	ND	0.749	0.672	ND	ND	0.031
Apr-2010	0.017	0.014	ND	0.013	ND	ND	ND	ND	0.806	0.758	ND	ND	0.025
Oct-2010	0.054	0.05	ND	0.018	ND	ND	ND	ND	0.784	0.72	ND	ND	0.032
Apr-2011	0.058	0.056	ND	0.01	ND	ND	ND	ND	0.766	0.792	ND	ND	0.026
Sep-2011	0.052	0.046	ND	0.016	0.53	ND	ND	ND	0.91	0.873	ND	ND	0.03
Mar-2012	0.054	0.053	ND	0.016	ND	ND	ND	ND	0.855	0.846	ND	ND	0.034

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09***												
Sep-2012	0.0572	0.0538	ND	0.0137	0.504	0.446 J	ND	ND	0.836	0.827	ND	ND	0.0362
Mar-2013	0.0543	0.0505	0.00009 J	0.0157	0.51	0.49 J	ND	ND	0.932	0.945	ND	ND	0.0424
Oct-2013	0.0597	0.0587	ND	0.0132	0.436 J	0.406 J	ND	ND	0.726	0.672	0.000144 J	0.0056 J	0.0406
Mar-2014	0.0552	0.0545	ND	0.0159	0.516	0.511	ND	ND	0.826	0.836	ND	0.0011 J	0.0372
Oct-2014	0.0531	0.055	ND	0.0153	0.528	0.522	0.000836 J	ND	0.9	0.938	ND	0.0013 J	0.0363
Apr-2015	0.0626	0.0655	0.000032 J	0.0137	0.558	0.54	ND	ND	0.899	0.917	ND	0.0013 J	0.0355
Nov-2015	0.0713	0.0691	ND	0.0102	0.568	0.569	ND	ND	1.11	1.01	ND	0.000282 J	0.0408
May-2016	0.398	0.358	ND	0.0285	0.887	0.845	ND	ND	1.3	1.2	ND	0.0014	0.0547
Oct-2016	0.226 R	0.116	ND	0.045 J+	0.739	0.6	ND	ND	1.05 J+	0.919	ND	0.0021	0.0587
May-2017	0.145	0.104	ND	0.0294	0.955	0.59	ND	ND	33.9	0.915	ND	0.002	0.0505
Oct-2017	0.144	0.132	ND	0.0162	0.526	0.516	ND	ND	0.84	0.84	ND	0.0013	0.0255 J
May-2018	0.22	0.15	ND	0.023	ND	ND	0.00042 J	ND	1.3 J	1 JB	ND	0.0029	0.028
Nov-2018	0.12	0.12	ND	0.0072	ND	ND	0.0001 JM1	ND	0.84 J	0.88 J	ND	0.0017	0.013 D6
May-2019	0.14	0.14	ND	0.004	ND	ND	ND	ND	ND	ND	ND	ND	0.0068
Oct-2019	0.13	0.13	ND	0.0054	ND	ND	ND	ND	ND	ND	ND	0.0096	0.018
May-2020	0.14	0.14	ND	0.036	1.3 J	ND	ND	ND	4.4 J	ND	0.00043	0.0059	0.02
Oct-2020	0.13	0.13	ND	0.0042	ND	ND	ND	ND	ND	ND	ND	0.0018 J	0.012 J
Apr-2021	0.13	0.13	ND	0.0031 J	0.5	0.51	ND	ND	0.85 J	0.99 J	ND	0.0011 J	ND
Oct-2021	0.14	0.14	ND	0.0037	0.48 J	0.44 J	ND	ND	0.85 B	0.93	ND	0.00092 J	0.0071
May-2022	0.15	0.14	ND	0.0026	0.49 J	0.49 J	ND	ND	0.86	0.87	ND	ND	0.0057
Oct-2022	0.14	0.16	ND	0.0031	0.56	0.59	ND	ND	1	1.1	ND	ND	0.0065

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	22	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09*																
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-09*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09***															
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.5 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-09*															
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.578 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09***															
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-14B***											
Apr-2010	ND	ND	ND	ND	1.71	0.17	ND	4	27.7	6.92	11	2.8
Oct-2010	ND	ND	ND	ND	1.82	0.18	ND	3.5	21.6	4.72	11	2.62
Apr-2011	ND	ND	ND	ND	1.61	0.2	ND	4	21	3.35	18	1.9
Sep-2011	ND	ND	ND	ND	1.56	0.2	ND	4.4	20.5	4.28	22	2.41
Mar-2012	ND	ND	ND	ND	1.74	0.21	ND	3.5	20.7	5.11	ND	2.36
Sep-2012	ND	ND	ND	ND	1.69	0.193	ND	3.4	21	5.08	ND	1.96
Mar-2013	0.92 J	0.92 J	ND	ND	1.88	0.202	ND	3.1	20.8	3.24	15	2.11
Oct-2013	1.72 J	1.72 J	ND	ND	1.8	0.196	ND	2.9	20.1	3.64	ND	2.16
Mar-2014	0.72	0.72	ND	24	1.75	0.208	ND	5.4	27.3	3.75	ND	1.85
Oct-2014	ND	ND	ND	ND	1.9	0.212	ND	4.1	20.7	4.02	ND	2.2
Apr-2015	5.64	5.64	ND	ND	1.92	0.234	ND	3.9	21.4	4.35	36	4.51
Nov-2015	1.92	1.92	ND	ND	1.78	0.221	ND	4.8	33.2	4.39	21 J	2.79
May-2016	ND	ND	ND	5 J	1.89 B	0.187	ND	4.7	28.3	3.78	73	2.9
Oct-2016	1.8	1.8	ND	5 J	1.77	NA	NA	4.6	34.4	3.98	133	2.6
May-2017	2.56	2.56	ND	12	1.72	0.227	ND	4.5	34.7	3.56	13 J	3.1
Oct-2017	ND	ND	ND	ND	1.71	0.243	ND	4.7	35.7	4.29	11 J	2.1
May-2018	ND	ND	ND	ND	1.5 J	0.24	ND	6.1	29.3	ND	ND	2.3 J
Nov-2018	ND	ND	ND	ND	1.5 J	0.25	ND	4.28	22.3	ND	ND	2.3 J
May-2019	ND	NA	ND	ND	ND	0.25	ND	4.31	17.8	ND	16	ND
Oct-2019	ND	NA	ND	ND	1.4 J	0.29	ND	3.6	23.9	ND	ND	2.3
May-2020	ND	NA	ND	ND	1.5 J	0.28	ND	4.02	22.8	ND	20	2.4
Oct-2020	ND	NA	ND	ND	1.9 J	0.27	ND	3.98	22.3	2.2	ND	2.3
Apr-2021	ND	NA	ND	ND	1.7 J	0.32	ND	4.43	26.4	ND	26	2.2 J
Oct-2021	ND	NA	ND	ND	1.3 J	0.34	ND	4.56	52.8	ND	ND	2.24 J
May-2022	ND	NA	ND	ND	1.6 J	0.32	ND	4.27	47.2	ND	ND	2.5 JN3
Oct-2022	ND	NA	ND	ND	2 J	0.35	ND	4.49	42.4	5.9 J	14	2.5 JN3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14B***													
Apr-2010	ND	ND	ND	ND	ND	0.674	0.553	ND	0.022	0.01	ND	ND	ND	0.271	0.225
Oct-2010	ND	ND	ND	ND	ND	0.62	0.551	ND	0.015	ND	ND	ND	ND	0.26	0.235
Apr-2011	ND	ND	ND	ND	ND	0.445	0.466	ND	0.011	ND	ND	ND	ND	0.205	0.23
Sep-2011	ND	ND	ND	ND	ND	0.608	0.61	ND	ND	ND	ND	ND	ND	0.216	0.262
Mar-2012	ND	ND	ND	ND	ND	0.462	0.445	ND	ND	ND	0.064	ND	ND	0.295	0.283
Sep-2012	ND	ND	0.0054 J	0.000317 J	ND	0.44	0.591	0.0023 J	0.0082 J	0.0051 J	0.0352 J	0.0702	ND	0.21	0.245
Mar-2013	ND	ND	0.0055 J	0.000399 J	ND	0.518	0.516	0.0022 J	0.008 J	0.0047 J	0.0052 J	0.0174 J	ND	0.199	0.202
Oct-2013	ND	ND	0.0053 J	0.000313 J	0.000151 J	0.586	0.483	0.0072 J	0.0071 J	0.0036 J	0.0542	ND	ND	0.169	0.225
Mar-2014	0.000742 J	ND	0.0047 J	ND	0.00012 J	0.428	0.342	0.0018 J	0.0071 J	0.0063 J	ND	ND	ND	0.19	0.133
Oct-2014	0.00092 J	0.000584 J	0.0055 J	0.000383 J	0.000144 J	0.531	0.523	0.000633 J	0.0071 J	0.0048 J	0.0109 J	0.0173 J	ND	0.213	0.224
Apr-2015	0.0026	0.000676 J	0.0083 J	0.000399 J	0.000295 J	1.27	0.831	0.000584 J	0.0089 J	0.0422	0.317	0.0251 J	0.0037	0.323	0.227
Nov-2015	0.000636 J	0.000194 J	0.0067 J	0.000425 J	0.000178 J	0.688	0.907	0.000423 J	0.0079 J	0.008 J	0.18	ND	0.000607 J	0.26	0.282
May-2016	ND	ND	0.007	0.00034 J,B	0.00021 J	0.762	0.654	ND	0.0071	0.0062	0.114 J	0.0412 J	0.0015 J	0.25	0.248
Oct-2016	ND	0.00075 J	0.0066	0.00036 J	ND	0.62	0.606	0.00086 J+	0.0069	0.0068 J+	0.176 J	ND	0.0016 J	0.26 J+	0.241
May-2017	0.0015 J	0.00076 J	0.006	0.00035 J	ND	0.766	0.732	0.00074 J	0.0068	0.007	0.107 J	ND	0.0012 J	0.279	0.25
Oct-2017	ND	ND	0.0052	0.00026 J	0.00021 J	0.48	0.465	0.0011 J	0.0058	0.0034 J	ND	ND	ND	0.209	0.221
May-2018	ND	ND	0.0055	0.00032	0.00017 J	0.5 J	0.48 J	0.0029 J	0.0052	0.0069	0.02 J	ND	0.000047 JB	0.24 J	0.23 J
Nov-2018	ND	ND	0.0056	0.00031	0.00016 J	0.52 J	0.5 J	0.0064 J	0.0049	0.005	0.035	0.02 J	0.00011 J	0.23 J	0.23 J
May-2019	ND	ND	0.0058	ND	ND	ND	ND	0.009	0.0052	0.0063	ND	0.026	ND	ND	ND
Oct-2019	0.0001 J	ND	0.0058	0.00029 J	0.00026 J	0.52	0.5 J	0.007 J	0.0051	0.0087	0.025 J	0.019 J	0.000056 J	0.25	0.2 J
May-2020	ND	ND	0.0055	0.00026 J	0.00013 J	0.53	0.49 JB	0.0065 J	0.0054	0.0047	0.02 J	0.016 J	ND	0.25	0.22 JB

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14B***													
Oct-2020	*ND*	*ND*	*0.0061 J*	*0.00029 J*	*ND*	0.5	*0.48 J*	*0.0063 J*	0.0057	0.013	*0.034 JB*	*0.019 J*	*ND*	0.25	*0.24 J*
Apr-2021	*ND*	*ND*	*0.0091 J*	*0.00026 J*	*ND*	*0.49 J*	*0.48 J*	*0.0029 J*	0.0055	*0.005 J*	*ND*	*ND*	*ND*	0.23	0.24
Oct-2021	*ND*	*ND*	0.006	*0.00032 J*	*ND*	*0.5 J*	0.53	0.0038	0.0058	0.0091	*0.021 J*	*0.014 J*	*0.000046 J*	*0.24 J*	*0.25 J*
May-2022	*ND*	*ND*	0.0064	*0.0003 J*	*ND*	0.51	*0.49 J*	0.0035	0.0064	0.0088	*ND*	*ND*	*ND*	*0.29 J*	*0.26 J*
Oct-2022	*ND*	*ND*	0.006	*0.00027 J*	*ND*	0.55	0.55	*0.0024 J*	0.0057	0.0079	*ND*	*ND*	*ND*	*0.28 J*	*0.27 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-14B*												
Apr-2010	0.013	0.012	ND	0.028	ND	ND	ND	ND	0.89	0.777	ND	ND	0.071
Oct-2010	ND	ND	ND	0.019	ND	ND	ND	ND	0.835	0.817	ND	ND	0.037
Apr-2011	ND	ND	ND	0.015	ND	ND	ND	ND	0.758	0.741	ND	ND	0.025
Sep-2011	ND	ND	ND	0.015	0.51	ND	ND	ND	1.07	1.03	ND	ND	0.021
Mar-2012	ND	ND	ND	0.012	ND	ND	ND	ND	0.907	0.862	ND	ND	0.016
Sep-2012	0.0072 J	0.0086 J	ND	0.0128	0.387 J	0.419 J	ND	ND	0.861	0.908	ND	ND	0.0148
Mar-2013	0.0068 J	0.007 J	0.00006 J	0.0115	0.385 J	0.345 J	ND	ND	0.799	0.755	ND	ND	0.025
Oct-2013	0.0065 J	0.0073 J	ND	0.0089 J	0.351 J	0.412 J	ND	0.000036 J	0.653	0.851	0.000443 J	0.002 J	0.0563
Mar-2014	0.0064 J	0.0039 J	ND	0.0111	0.382 J	0.41 J	ND	ND	0.859	1.03	ND	ND	0.0151
Oct-2014	0.007 J	0.0073 J	ND	0.0108 J	0.423 J	0.409 J	0.0012 J	ND	0.958	0.942	0.00071 J	ND	0.0206
Apr-2015	0.0118	0.0068 J	ND	0.0135	0.59	0.58	ND	ND	3.48	3.31	ND	ND	0.0647
Nov-2015	0.0088 J	0.0097 J	ND	0.0125	0.524	0.618	ND	ND	1.75	2.98	ND	ND	0.0276
May-2016	0.0093	0.0093 B	ND	0.0117	0.496	0.516	ND	ND	1.63	1.37	ND	ND	0.0262 J
Oct-2016	0.0082 R	0.0069	ND	0.0112 J+	0.508	0.519	ND	ND	2.09 J+	1.82	ND	ND	0.045
May-2017	0.0094	0.0088	ND	0.0107	0.528	0.477	ND	ND	1.96	1.47	ND	ND	0.0591
Oct-2017	0.0061	0.0059	ND	0.0093	0.401	0.455	ND	ND	0.859	0.876	ND	ND	0.0104 J
May-2018	0.0059	0.0053	ND	0.0091	ND	ND	0.00012 J	ND	0.84 J	0.81 J	ND	ND	0.013
Nov-2018	0.015	0.0061	ND	0.012	ND	ND	0.00022 J	ND	0.81 J	0.91 J	ND	ND	0.014
May-2019	0.0073	0.0084	ND	0.013	ND	ND	ND	ND	ND	ND	ND	0.0024	0.013
Oct-2019	0.0078	0.0068	ND	0.011	ND	ND	ND	ND	ND	ND	ND	0.0068	0.016
May-2020	0.0077	0.0071	ND	0.01	ND	ND	ND	ND	ND	ND	ND	ND	0.011
Oct-2020	0.0079	0.0071	ND	0.012	ND	ND	ND	ND	ND	ND	ND	0.0014 J	0.013 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14B***												
Apr-2021	0.0074	0.0073	*ND*	0.01	*0.42 J*	*0.41 J*	*ND*	*ND*	*0.86 J*	1.1	*ND*	*ND*	0.01
Oct-2021	0.0075	0.008	*ND*	0.011	*0.38 J*	*0.4 J*	*ND*	*ND*	0.89	1 B	*0.000068 J*	*ND*	0.015
May-2022	0.0097	0.0086	*ND*	0.012	*0.49 J*	*0.44 J*	*ND*	*ND*	1.1	0.95	*ND*	*ND*	0.012
Oct-2022	0.0084	0.0087	*ND*	0.01	*0.49 J*	0.5	*ND*	*ND*	1.2	1.2	*ND*	*ND*	0.012

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-14B***																
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14B*																
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-14B*															
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14B***															
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14B***															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14B***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-16A***											
Oct-2009	2.9	2.9	ND	ND	2.93	0.2	ND	4.6	18.3	0.81	16	3.39
Apr-2010	2.9	2.9	ND	ND	3.33	0.2	ND	4.1	18.4	ND	44	3.1
Oct-2010	2.5	2.5	ND	ND	3.27	0.16	ND	4.6	18.2	ND	14	3.86
Apr-2011	2.9	2.9	ND	ND	3.06	0.2	ND	4.6	17	ND	12	3.5
Sep-2011	3.1	3.1	ND	ND	3.05	0.19	ND	4.6	17.5	ND	13	4
Mar-2012	3	3	ND	ND	3.13	0.2	ND	4.2	23.3	ND	39	3.9
Sep-2012	2.64	2.64	ND	ND	3.27	0.174	ND	3.8	18.3	ND	49	3.67
Mar-2013	3.32	3.32	ND	ND	3.44	0.19	ND	3.7	417.6	0.868 J	19	3.74
Oct-2013	3.72	3.72	ND	ND	3.38	0.169	ND	3.4	18.9	0.747 J	28	3.62
Mar-2014	3.08	3.08	ND	17	3.27	0.178	ND	5.4	20.5	0.581 J	ND	3.41
Oct-2014	ND	ND	ND	8 J	3.44	0.186	ND	5.1	17.9	0.224 J	ND	3.86
Apr-2015	3.76	3.76	ND	ND	3.3	0.173	ND	4.3	20.9	ND	ND	3.88
Nov-2015	2.56	2.56	ND	6 J	3.4	0.19	ND	5.1	44.9	1.08	ND	3.99
May-2016	2.56	2.56	ND	ND	3.37	0.187	ND	5.2	30.7	ND	14 J	4
Oct-2016	ND	ND	ND	ND	3.2	NA	NA	5.1	32.7	1.06	31	3.4
May-2017	ND	ND	ND	ND	3.07	0.19	ND	5	28.6	0.899 J	ND	3.3
Oct-2017	ND	ND	0.0787 J	ND	3.05	0.203	ND	5.2	34.5	0.501 J	33	3.8
May-2018	2 J	ND	0.056 J	ND	3.1	ND	ND	4.8	33.9	ND	45	4 J
Nov-2018	2 JB	ND	ND	ND	2.9 J	0.18	ND	4.66	20.4	ND	17	59.7
May-2019	ND	NA	ND	ND	ND	0.19	ND	4.7	14.9	ND	ND	ND
Oct-2019	ND	NA	ND	ND	2.6 J	0.19	ND	4.59	20.8	ND	21	3.9
May-2020	ND	NA	ND	ND	2.8 J	0.15	ND	4.38	19.2	ND	ND	4.1
Oct-2020	ND	NA	ND	ND	2.9 J	0.17	ND	4.45	20	ND	ND	4
Apr-2021	ND	NA	ND	ND	3 J	0.18	ND	4.91	25.6	ND	12	4
Oct-2021	2 J3c	NA	ND	ND	2.4 J	0.18	ND	5.02	52.4	ND	ND	3.79
May-2022	2 J3c	NA	ND	ND	2.4 J	0.17	ND	4.81	44.9	ND	16	3.9 N3
Oct-2022	3 J3c	NA	ND	8.4 J	3.3	0.17	ND	4.83	45.2	ND	ND	4.1 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-16A***													
Oct-2009	ND	ND	ND	ND	ND	0.828	0.795	ND	ND	ND	ND	ND	ND	0.32	0.329
Apr-2010	ND	ND	ND	ND	ND	0.746	0.735	ND	ND	ND	0.152	ND	ND	0.299	0.296
Oct-2010	ND	ND	ND	ND	ND	0.92	0.864	ND	ND	ND	ND	ND	ND	0.378	0.359
Apr-2011	ND	ND	ND	ND	ND	0.833	0.811	ND	ND	ND	ND	ND	ND	0.348	0.329
Sep-2011	ND	ND	ND	ND	ND	0.973	0.98	ND	ND	ND	ND	ND	ND	0.381	0.382
Mar-2012	ND	ND	ND	ND	ND	0.86	0.85	ND	ND	ND	ND	ND	ND	0.424	0.409
Sep-2012	ND	ND	0.0064 J	0.000091 J	ND	0.889	0.905	ND	0.0034 J	0.0012 J	0.024 J	0.0281 J	ND	0.351	0.356
Mar-2013	ND	ND	0.0066 J	0.000067 J	ND	0.981	0.898	0.0021 J	0.0038 J	0.000806 J	0.0113 J	0.0061 J	0.0014 J	0.313	0.291
Oct-2013	ND	ND	0.0067 J	ND	ND	0.991	0.878	0.0088 J	0.0037 J	0.000741 J	0.062	ND	ND	0.279	0.35
Mar-2014	0.00052 J	ND	0.0057 J	ND	ND	0.845	0.875	0.0018 J	0.0034 J	0.0022 J	ND	ND	ND	0.315	0.319
Oct-2014	0.000784 J	ND	0.0069 J	ND	ND	0.966	0.975	0.000635 J	0.003 J	0.000772 J	ND	ND	ND	0.351	0.348
Apr-2015	0.0011 J	0.000376 J	0.007 J	ND	ND	0.945	0.93	0.00071 J	0.0038 J	0.001 J	ND	0.0106 J	ND	0.369	0.363
Nov-2015	0.000344 J	ND	0.0065 J	0.000083 J	0.000101 J	0.999	1.01	0.000304 J	0.0031 J	0.0012 J	0.0175 J	ND	0.000283 J	0.362	0.371
May-2016	ND	ND	0.0067	ND	ND	0.982	0.825	0.00082 J	0.0032	0.00098 J	ND	ND	ND	0.37	0.34
Oct-2016	ND	ND	0.0068	ND	ND	0.816	0.904	ND	0.003	0.00098 J	ND	ND	ND	0.339	0.366
May-2017	ND	ND	0.0074	ND	ND	0.749	0.796	0.001 J	0.003	0.00088 J	ND	ND	ND	0.35	0.344
Oct-2017	ND	ND	0.0055	0.000077 J	ND	0.944	0.901	0.00091 J	0.0041	0.0018 J	ND	ND	ND	0.352	0.344
May-2018	0.000063 J	ND	0.0067	0.0001 J	0.000079 J	0.97 J	0.96 J	0.00085 J	0.0053	0.0017 J	0.011 J	ND	0.000068 JB	0.38 J	0.37 J
Nov-2018	ND	ND	0.0058	0.000055 J	0.000072 J	13.4	1.1	0.0087	0.026	0.0061	0.31	0.04	0.00026 J	6.4	0.46 J
May-2019	ND	ND	0.0058	ND	ND	ND	1.4	0.0099	0.029	0.0024	ND	0.04	ND	ND	ND
Oct-2019	0.000096 J	ND	0.0059	0.000078 J	0.00016 J	0.96	0.93 J	0.012	0.032	0.0031	0.068 J	0.041	ND	0.37	0.37 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-16A***													
May-2020	*0.000058 J*	*ND*	0.006	*ND*	*ND*	1	*0.97 J*	0.014	0.045	0.0032	*0.095 J*	0.054	*ND*	0.38	*0.37 JB*
Oct-2020	*ND*	*ND*	*0.0065 J*	*ND*	*ND*	0.97	*0.93 J*	*0.0094 J*	0.034	*ND*	*0.057 JB*	0.042	*ND*	0.37	*0.36 J*
Apr-2021	*ND*	*ND*	*0.0071 J*	*0.00021 J*	*ND*	*0.98 J*	*0.93 J*	0.0061	0.028	*0.0045 J*	*0.051 J*	*ND*	*ND*	0.38	0.37
Oct-2021	*ND*	*ND*	0.0065	*ND*	*ND*	0.94	1	0.0025	0.017	*0.002 J*	*0.024 J*	*0.017 J*	*ND*	*0.35 J*	*0.38 J*
May-2022	*ND*	*ND*	0.0067	*ND*	*ND*	0.95	1	*0.0014 J*	0.024	*0.0022 J*	*ND*	*0.036 J*	*ND*	*0.37 J*	*0.4 J*
Oct-2022	*ND*	*ND*	0.0062	*ND*	*ND*	0.99	1.1	0.0034	0.013	*0.0016 J*	*ND*	*ND*	*ND*	*0.4 J*	*0.39 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-16A*												
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.1	1.04	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.17	1.16	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.52	ND	ND	ND	1.28	1.21	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.21	1.16	ND	ND	ND
Sep-2011	ND	ND	ND	ND	0.525	0.536	ND	ND	1.48	1.45	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	1.3	1.27	ND	ND	ND
Sep-2012	0.0042 J	0.0043 J	ND	0.0046 J	0.472 J	0.464 J	ND	ND	1.28	1.33	0.000679 J	ND	0.0065 J
Mar-2013	0.0045 J	0.0042 J	0.000054 J	0.0048 J	0.424 J	0.376 J	ND	ND	1.19	1.12	ND	ND	0.0163
Oct-2013	0.0047 J	0.0045 J	ND	0.0038 J	0.409 J	0.489 J	ND	ND	1.01	1.32	0.001 J	0.0022 J	0.0123
Mar-2014	0.0036 J	0.0037 J	ND	0.0046 J	0.45 J	0.423 J	ND	ND	1.26	1.23	ND	ND	0.0064 J
Oct-2014	0.0039 J	0.0041 J	0.000024 J	0.0052 J	0.502	0.489 J	0.000965 J	ND	1.47	1.41	ND	ND	0.0095 J
Apr-2015	0.0045 J	0.0045 J	ND	0.005 J	0.529	0.516	0.0013 J	0.000034 J	1.51	1.48	0.000888 J	ND	0.0118
Nov-2015	0.004 J	0.0041 J	ND	0.0046 J	0.508	0.521	ND	ND	1.39	1.43	0.000103 J	ND	0.0044 J
May-2016	0.0046	0.0041	ND	0.0046	0.529	0.492	ND	ND	1.43	1.26	ND	ND	0.0076 J,B
Oct-2016	0.003 J	0.0038 J+	ND	0.0043	0.446	0.49	ND	ND	1.29	1.36	ND	ND	0.006 J
May-2017	0.0042	0.0032 J	ND	0.0051	0.484	0.485	ND	ND	1.21	1.23	ND	ND	0.0055 J
Oct-2017	0.0046	0.004	ND	0.0044	0.482	0.506	ND	ND	1.25	1.29	ND	ND	0.006 J
May-2018	0.0048	0.0034	ND	0.0062	ND	ND	ND	ND	1.6 J	1.2 J	ND	0.0039	0.0084 B
Nov-2018	0.0098	0.015	ND	0.009	2.3 J	ND	0.0002 J	ND	22.4	1.4 J	ND	ND	0.021
May-2019	0.025	0.064	ND	0.01	ND	ND	ND	ND	ND	ND	ND	ND	0.015
Oct-2019	0.0074	0.0091	ND	0.01	ND	ND	ND	ND	ND	1.4 J	ND	0.0072	0.011
May-2020	0.0093	0.0074	ND	0.011	ND	ND	ND	ND	ND	ND	ND	0.0081	0.0075

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-16A***												
Oct-2020	0.0071	0.0067	*ND*	0.01	*ND*	*ND*	*ND*	*ND*	*1.3 J*	*ND*	*ND*	*0.00089 J*	*ND*
Apr-2021	0.0066	0.0058	*ND*	*0.0095 J*	0.51	*0.5 J*	*0.0058 J*	*ND*	1.3	1.1	*ND*	*ND*	*0.005 J*
Oct-2021	*0.0045 J*	*0.0048 J*	*ND*	0.0068	*0.44 J*	*0.49 J*	*ND*	*ND*	1.2	1.4 B	*0.000053 J*	*ND*	0.0051
May-2022	0.0054	0.0057	*ND*	0.0083	0.56	*0.47 J*	*ND*	*ND*	1.2	1.3	*ND*	*ND*	0.006
Oct-2022	*0.0048 J*	0.0052	*ND*	0.0066	0.55	*0.47 J*	*ND*	*ND*	1.5	1.4	*ND*	*ND*	0.0078

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16A*																
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16A*																
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-16A*															
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-16A***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.123 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16A***															
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16A***															
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

HISTORICAL TABLES –
Off-site Non-regulated Wells

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P4*																
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P4*																
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.8 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*MW-P4*															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.27 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.28 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.26 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.36 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P4***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.23 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.404 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P4***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*MW-P4*															
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***MW-P4***
Nov-2005	*ND*
Mar-2009	*ND*
Oct-2009	*ND*
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000031 J*
Mar-2013	*0.000056 J*
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*ND*
Apr-2015	*ND*
Nov-2015	*ND*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.000058 J*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00005 J*
Oct-2021	*ND*
May-2022	*ND*
Oct-2022	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***MW-P9***																
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	35	91	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	139	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	1 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	1 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P9*																
Oct-2004	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	*0.6 J*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	*0.8 J*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.45	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.53	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.36	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P9*																
Nov-2015	ND	ND	ND	ND	1.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	0.818 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P9***															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	1 J	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND
Sep-1994	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	3
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	2.2
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	1.4
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	0.7 J	2.2
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	1.8
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	0.6 J	1.8
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	2.5
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	2
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	2.1
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	2.2
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	3.5
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	2
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	3
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	3.2

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P9***															
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	3
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	2.6
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	2
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	3.1
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	2.3
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	2.1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	1.3
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	1.8
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	2.4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	2
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	2.1
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	2.3
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	2.8
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	2	ND	ND	ND	6.3	3.2
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.9	0.8 J
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	0.38 J	ND	ND	ND	1.14	1.56
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31 J	ND	0.32 J	ND	ND	ND	1.8	1.62
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.29 J	0.37 J,B	0.34 J	ND	ND	ND	2.09	1.86
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	0.25 J	ND	ND	ND	2.3	1.65
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	0.24 J	ND	ND	ND	2.09	1.73
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.22 J	ND	0.25 J	ND	ND	ND	2	1.26

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P9***															
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.47	1.47
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.2 J	ND	ND	ND	1.9	1.8
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.2 J	ND	ND	ND	1.5	1.5
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.2 J	ND	ND	ND	1.5	1.3
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.2 J	ND	ND	ND	1.7	1.6
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	1.6
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	1.4 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.9 J
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.806 J	0.982 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	0.9 J
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	0.6 J
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	0.7 J

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P9***															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	0.5 J	ND	0.6 J	ND	ND	0.6 J	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	0.8 J	ND	2.1	ND	ND	1	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	1	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	1.5	ND	NA	0.6 J	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	1.5	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	1.5	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	1.6	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	1.4	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	1.1	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	0.8 J	ND	ND	1.4	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P9***															
Apr-2004	ND	ND	ND	NA	0.9 J	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	1.1	ND	ND	1.7	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	0.9 J	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	0.9 J	ND	ND	1.8	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	0.5 J	ND	ND	1.3	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	1	ND	ND	2.7	ND	ND	ND	ND	1.8	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	0.86 J	ND	ND	2.44	ND	ND	ND	ND	0.68 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.66 J	ND	ND	1.75	ND	ND	ND	ND	0.59 J	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.71 J	ND	ND	1.62	ND	ND	ND	ND	0.62 J	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	0.61 J	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	2.06	ND	ND	ND	ND	0.58 J	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P9***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.51	*ND*	*ND*	*ND*	*ND*	*0.46 J*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.43	*ND*	*ND*	*ND*	*ND*	*0.51 J*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*0.2 J*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*0.1 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.13	*ND*	*ND*	*ND*	*ND*	*0.284 J*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID: MW-P9	
Jun-1994	*ND*
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	0.0013
Apr-1997	*ND*
Apr-2004	*ND*
Oct-2004	*ND*
Mar-2009	0.0012
Oct-2009	*ND*
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	0.0002
Sep-2012	0.00024
Mar-2013	0.000223
Oct-2013	0.000384
Mar-2014	0.000259
Oct-2014	0.00022
Apr-2015	*0.000126 J*
Nov-2015	*0.000117 J*
May-2016	*0.00013 J*
Oct-2016	*0.00016 J*
May-2017	0.00033
Oct-2017	*0.00013 J*
May-2018	0.00041 B
Nov-2018	0.00038
May-2019	0.00024
Oct-2019	*0.0002 J*
May-2020	0.00026
Oct-2020	*ND*
Apr-2021	0.00022
Oct-2021	*0.00014 J*
May-2022	*ND*
Oct-2022	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***MW-P106***																
Oct-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	0.7 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	1.5	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	1.7	NA	NA	6.5	0.5 J	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	1.4	ND	ND	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	1.3	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	0.5 J	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	0.6 J	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	0.6 J	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	0.7 J	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	0.6 J	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P106*																
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.78	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	0.23 J	ND	ND	7.16	ND	ND	ND	ND	ND	ND	ND	0.44 J	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	11.1	0.34 J	ND	ND	ND	ND	ND	0.34 J	0.56 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	9	0.27 J	ND	ND	ND	ND	ND	ND	0.54 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	0.58 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	3.43	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	0.1 J	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P106*																
Oct-2016	ND	0.1 J	ND	ND	5.1	0.1 J	ND	ND	ND	ND	ND	0.1 J	0.2 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	4.5	0.1 J	ND	ND	ND	ND	ND	0.1 J	0.2 J	ND	ND	ND	ND	ND
Oct-2017	ND	0.1 J	ND	ND	5	0.2 J	ND	ND	ND	ND	ND	0.1 J	0.2 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.64	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*MW-P106*															
Oct-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	0.6 J	NA	NA	NA	2.5	1.2
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	5.7	ND	ND	ND	11	10
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	1 J	ND	NA	6.5	NA	ND	NA	10	11
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.9	ND	ND	ND	34	9.6
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	3.3	ND	ND	ND	16	6.9
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	6.3	1.8
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.7	1.4
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.7	1.8
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	14	3.3
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	6.3	3.1
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	8.6	2.1
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	0.9 J
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P106***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	6.4	4.7
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	7	8.1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	2.4	3.3
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	3.4	4.7
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	5.3
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.4	7.2
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.9	5
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	2.1
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.58 J	ND	ND	ND	1.81	1.93
Mar-2013	0.34 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.01	ND	ND	ND	6.99	8.26
Oct-2013	0.66 J	ND	ND	ND	ND	ND	ND	ND	0.7 J	0.28 J	ND	4.75	ND	ND	ND	8.57	13.1
Mar-2014	0.41 J	ND	ND	ND	ND	ND	ND	ND	0.36 J	ND	ND	3.44	ND	ND	ND	8.47	11.6
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.21 J	ND	ND	ND	0.51 J	0.76 J
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.16	ND	ND	ND	3.11	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.68 J	ND	ND	ND	1.17	2.59
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	3.8	4.7

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P106***															
Oct-2016	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.1 J*	*ND*	1.6	*ND*	*ND*	*ND*	5.5	6.6
May-2017	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.1 J*	*ND*	1.5	*ND*	*ND*	*ND*	4.4	5.4
Oct-2017	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	1.6	*ND*	*ND*	*ND*	6.4	6.3
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	6.4	3.8
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.5	1.3
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	3.3	2.3
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.588 J*	*ND*	*ND*	*ND*	*1.35 J*	*1.71 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	2.3	2
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	1.2	1.2
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	1.6	1.8

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P106***															
Oct-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	1 J	ND	ND	NA	NA	ND	0.8 J	NA	ND	NA
Oct-1999	ND	ND	ND	NA	1.1	ND	ND	**5.4**	ND	ND	ND	ND	2	2.8	ND	ND	NA
Apr-2000	ND	NA	ND	NA	1.9	ND	NA	**5.3**	ND	ND	NA	NA	2	2.9	ND	0.7 J	NA
Oct-2000	ND	ND	ND	NA	1.5	ND	ND	3.4	ND	ND	ND	ND	1.2	2.6	ND	ND	NA
Apr-2001	ND	ND	ND	NA	1.3	ND	ND	3	ND	ND	ND	ND	1	1.9	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	1.1	ND	ND	ND	ND	ND	0.9 J	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	1	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	1	ND	ND	NA
Mar-2003	ND	ND	ND	NA	0.9 J	ND	ND	1.5	ND	ND	ND	ND	ND	1.2	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	0.9 J	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	0.7 J	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P106***															
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	0.6 J	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.9 R	ND	ND	3.9	ND	ND	ND	ND	1.3	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	1.5	ND	ND	1.8	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	1	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	ND	1.5	1 J	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	1.1	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	0.51 J	ND	ND	1.11	ND	ND	ND	ND	0.93 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	2.45	ND	ND	3.21	ND	ND	ND	ND	2.58	ND	ND	ND	ND
Oct-2013	ND	ND	0.42 J	ND	**5.11**	0.24 J	ND	3.68	ND	ND	ND	ND	2.56	1.07	ND	0.42 J	0.66 J
Mar-2014	ND	ND	0.31 J	ND	3.21	ND	ND	4.64	ND	ND	ND	ND	2.81	0.92 J	ND	ND	0.31 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	0.78 J	ND	ND	1.81	ND	ND	ND	ND	1.36	0.51 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	1.11	ND	ND	ND	ND	0.91 J	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P106***															
May-2016	ND	ND	ND	ND	0.7 J	ND	ND	2.1	ND	ND	ND	ND	1.5	0.6 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	1.5	ND	ND	2.2	ND	ND	ND	ND	1.5	0.7 J	ND	0.1 J	ND
May-2017	ND	ND	ND	ND	1.1	ND	ND	1.8 J+	ND	ND	ND	ND	1.2	0.5 J	ND	0.1 J	ND
Oct-2017	ND	ND	ND	ND	1.1	ND	ND	2.1	ND	ND	ND	ND	1.5	0.8 J	ND	0.1 J	ND
May-2018	ND	ND	ND	ND	1.5	ND	ND	1.4	ND	ND	ND	ND	1.5	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.608 JB	ND	ND	0.622 J	ND	ND	ND	ND	0.515 J	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***MW-P106***
Sep-1994	*ND*
Oct-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	**0.0027**
Apr-1997	0.0009
Apr-2004	0.001
Oct-2004	0.0005
Apr-2005	0.0005
Mar-2009	0.0003
Oct-2009	0.0002
Mar-2010	*ND*
Oct-2010	0.0004
Apr-2011	0.0002
Sep-2011	0.0004
Mar-2012	0.0002
Sep-2012	0.00029
Mar-2013	*0.000178 J*
Oct-2013	*0.000097 J*
Mar-2014	*0.000064 J*
Oct-2014	*0.000109 J*
Apr-2015	*0.000152 J*
Nov-2015	0.00043
May-2016	0.00024
Oct-2016	*0.00012 J*
May-2017	*0.00015 J*
Oct-2017	*0.00011 J*
May-2018	*0.00018 JB*
Nov-2018	*0.00016 J*
May-2019	*ND*
Oct-2019	*ND*
May-2020	0.00071
Oct-2020	0.0004
Apr-2021	0.00021
Oct-2021	*0.00011 J*
May-2022	*ND*
Oct-2022	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P417*																
Aug-1994	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	31	4.9 J	ND
Sep-1994	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	75	109	ND
Nov-1994	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	43	203 E	ND
Apr-1995	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	66	ND
Oct-1996	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	0.5 J	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	5.2	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	8.3	ND	NA	NA	NA	NA	ND	ND	0.5 J	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	4.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P417*																
Apr-2005	ND	ND	ND	ND	6.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	7.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	9.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	7.2	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
May-2007	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	7.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	5.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	5.86	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	7.47	ND	ND	ND	ND	ND	ND	ND	0.53 J	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	5.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	4.08	ND	ND	ND	ND	ND	ND	ND	0.29 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	4.15	ND	ND	ND	ND	ND	ND	ND	0.28 J	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	3.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P417*																
Nov-2015	ND	ND	ND	ND	3.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.6 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	0.309 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P417***															
Aug-1994	*0.6 J*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	18	*ND*	*ND*	*ND*	*ND*	*ND*	2.9	3.2
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	3.3	2.9
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	3.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.4	2.7
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	2
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.1	3
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	6	5
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.7	8.9
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	9.8	7.1
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	1.1	*ND*	*NA*	1.4	*NA*	*NA*	*NA*	5.9	10
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	1	*ND*	*ND*	*ND*	2.9	8.6
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	1.5	*ND*	*NA*	1.6	*NA*	*ND*	*NA*	2.9	13
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	16	16
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	1	*ND*	*ND*	*ND*	6.9	7
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	1	*ND*	*ND*	*ND*	8.9	5.2
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	6.5	3.8
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	7.1	4.6
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	8.7	4.3
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.2	6
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	9.1	6.7
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	11	7.2

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P417***															
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	1.7	ND	ND	ND	12	12
Oct-2005	ND	0.9 J	ND	ND	ND	ND	ND	ND	3	ND	ND	1.7	ND	ND	ND	7.4	8.4
Mar-2006	0.7 J	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	1.6	ND	ND	ND	8.9	19.7
Sep-2006	0.8 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.9	ND	ND	ND	11.2	12
Mar-2007	0.7 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.8	ND	ND	ND	7.5	9.6
May-2007	0.9 J	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	2	ND	ND	ND	9.7	12
Sep-2007	0.8 J	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	1.9	ND	ND	ND	10.5	7
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	10.8	8.4
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	1.4	ND	ND	ND	12.9	8.6
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.1	5.9
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	11.7	7.5
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.8 J	6.4
Oct-2010	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	21.7	7.2
Apr-2011	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND	ND	ND	17.5	8.4
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5	ND	ND	ND	15.5	9.9
Mar-2012	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	18.7	7.6
Sep-2012	0.64 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.75	ND	ND	ND	7.99	6.5
Mar-2013	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.15	ND	ND	ND	9.09	9.12
Oct-2013	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.84	ND	ND	ND	6.28	6.28
Mar-2014	0.32 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.89	ND	ND	ND	5.88	5.01
Oct-2014	0.31 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.94	ND	ND	ND	3.11	4.78
Apr-2015	0.23 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	3.5	3.08

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P417***															
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.27	ND	ND	ND	1.72	2.86
May-2016	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	2.2	2.7
Oct-2016	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	2.1	2.2
May-2017	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	1.8	2.2
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	1.3	1.2
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	1.2
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	1.4
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.229 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.6 J
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	0.5 J
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P417***															
Aug-1994	ND	ND	1.1	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	1	NA	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND
Oct-1997	ND	ND	ND	NA	1.5	ND	ND	1.2	ND	ND	ND	ND	0.6 J	0.8 J	ND	ND	NA
Apr-1998	ND	ND	ND	NA	2.9	ND	ND	1.6	ND	ND	ND	ND	0.9 J	1.2	ND	ND	NA
Apr-1999	ND	NA	ND	NA	3.4	ND	NA	2.6	ND	ND	NA	NA	1.3	0.9 J	NA	ND	NA
Oct-1999	ND	ND	ND	NA	2.7	ND	ND	3.3	ND	ND	ND	ND	1.2	0.6 J	ND	ND	NA
Apr-2000	ND	NA	ND	NA	**5.3**	ND	NA	3.9	ND	ND	NA	NA	1.7	0.8 J	ND	0.5 J	NA
Oct-2000	ND	ND	ND	NA	**9.6**	ND	ND	4.6	ND	ND	ND	ND	2	1.5	ND	1.2	NA
Apr-2001	ND	ND	ND	NA	3.9	ND	ND	2.7	ND	ND	ND	ND	1	0.8 J	ND	ND	NA
Sep-2001	ND	ND	ND	NA	2.6	ND	ND	2.3	ND	ND	ND	ND	0.9 J	0.8 J	ND	ND	NA
Mar-2002	ND	ND	ND	NA	1.8	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	1.5	ND	ND	1.5	ND	ND	ND	ND	0.6 J	0.6 J	ND	ND	NA
Mar-2003	ND	ND	ND	NA	4.1	ND	ND	1.3	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	3.7	ND	ND	1.5	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	2.6	ND	3.2	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P417***															
Oct-2004	ND	ND	ND	NA	2.9	ND	ND	4	ND	ND	ND	ND	1.4	0.7 J	ND	ND	NA
Apr-2005	ND	ND	ND	ND	4.7	ND	ND	**6.7**	ND	ND	ND	ND	2.3	1.1	ND	0.9 J	NA
Oct-2005	ND	ND	ND	ND	**6.2**	ND	ND	**10.3**	ND	ND	ND	ND	3.1	0.7 J	ND	1.5	NA
Mar-2006	ND	ND	ND	ND	**9.7**	1.2	ND	**14**	ND	ND	ND	ND	4.1	0.9 J	ND	**2.7**	NA
Sep-2006	ND	ND	ND	ND	**10.9**	ND	ND	**15.3**	ND	ND	ND	ND	5	ND	ND	**3.2**	NA
Mar-2007	ND	ND	ND	ND	**7.1 R**	ND	ND	**10.8**	ND	ND	ND	ND	3.6	ND	ND	**3**	NA
May-2007	ND	ND	ND	0.9 J	**6.5**	ND	ND	**11.3**	ND	ND	ND	ND	3.2	0.7 J	ND	**3.6**	NA
Sep-2007	ND	ND	ND	ND	**9.2**	ND	ND	**8.6**	ND	ND	ND	ND	3.5	0.8 J	ND	**2.8**	NA
Mar-2008	ND	ND	ND	ND	4.1	ND	ND	**7.6**	ND	ND	ND	ND	2.3	1 J	ND	1.7	NA
Sep-2008	ND	ND	ND	ND	**6**	ND	ND	**5.1**	ND	ND	ND	ND	2	1.1	ND	1.5	NA
Mar-2009	ND	ND	ND	ND	4.4	ND	ND	5	ND	ND	ND	ND	1.7	0.7 J	ND	ND	NA
Oct-2009	ND	ND	ND	ND	4	ND	ND	4	ND	ND	ND	ND	1.9	0.9 J	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	3.3	ND	ND	4.9	ND	ND	ND	ND	ND	0.6 J	ND	0.7 J	NA
Apr-2011	ND	ND	ND	ND	3	ND	ND	**5.6**	ND	ND	ND	ND	**6.4 C**	ND	ND	0.6 J	NA
May-2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**8.5**	NA	NA	NA	NA
Sep-2011	ND	ND	ND	ND	4.1	ND	ND	3.5	ND	ND	ND	ND	**5.9**	ND	ND	0.8 J	NA
Mar-2012	ND	ND	ND	ND	2.6	ND	ND	3.9	ND	ND	ND	ND	4.9	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	2.27	ND	ND	**6.84**	ND	ND	ND	ND	**7.36**	0.63 J	ND	0.3 J	ND
Mar-2013	ND	ND	ND	ND	1.95	0.26 J	ND	**7.97**	ND	ND	ND	ND	**9.29**	ND	ND	0.34 J	ND
Oct-2013	ND	ND	ND	0.17 J	2.64	ND	ND	3.17	ND	ND	ND	ND	4.37	0.42 J	ND	0.36 J	ND
Mar-2014	ND	ND	ND	0.16 J	2.02	ND	ND	3.17	ND	ND	ND	ND	3.31	0.26 J	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*MW-P417*															
Oct-2014	ND	ND	ND	0.13 J	2.03	ND	ND	3.24	ND	ND	ND	ND	3.37	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.74	ND	ND	2.04	ND	ND	ND	ND	2.35	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	1.4	ND	ND	1.49	ND	ND	ND	ND	1.78	ND	ND	ND	ND
May-2016	ND	ND	ND	0.1 J	1.5	ND	ND	1.4	ND	ND	ND	ND	1.4	0.1 J	ND	0.1 J	ND
Oct-2016	ND	ND	ND	ND	0.9 J	ND	ND	1.2	ND	ND	ND	ND	1.3	0.1 J	ND	ND	ND
May-2017	ND	ND	ND	ND	1	ND	ND	1.1 J+	ND	ND	ND	ND	1.1	ND	ND	0.1 J	ND
Oct-2017	ND	ND	ND	ND	0.7 J	ND	ND	0.5 J	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***MW-P417***
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	*ND*
Apr-1997	0.0012
Apr-2004	*ND*
Oct-2004	*ND*
Mar-2009	*ND*
Oct-2009	*ND*
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000035 J*
Mar-2013	*0.000077 J*
Oct-2013	*0.000173 J*
Mar-2014	*0.000171 J*
Oct-2014	*0.000136 J*
Apr-2015	*0.00014 J*
Nov-2015	0.000344
May-2016	0.00026
Oct-2016	0.00054
May-2017	0.00055
Oct-2017	0.00081
May-2018	0.0018
Nov-2018	0.001
May-2019	0.0011
Oct-2019	0.00021
May-2020	*0.00018 J*
Oct-2020	0.00035
Apr-2021	0.00023
Oct-2021	*0.00006 J*
May-2022	*ND*
Oct-2022	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P440*																
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	36	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	0.7 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P440*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.43 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.32 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P440*																
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.1 J	ND
Nov-2018	ND	ND	ND	ND	1.1 L2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P440***															
Aug-1994	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*0.8 J*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*0.7 J*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	1.2
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	1.3	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	3.8	7
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	20	9.4
Feb-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.7	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	13	10
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	4.1	4.5
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.9	5.3
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	5.9	3.7
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	2.4	1.8
Mar-2003	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	9	5.9
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.7	*0.6 J*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P440***															
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	3.2	0.9 J
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	5	1.6
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3	0.9 J
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.7	1.3
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	4.1	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	0.7 J
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	0.8 J
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	0.5 J
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.6	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.79 J	ND	ND	ND	ND	ND	1.21	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	0.54 J	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	ND	ND	ND	ND	1.62	0.56 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND	ND	1.48	0.29 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.91 J	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.71 J	ND	0.44 J	ND	ND	ND	2.3	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P440***															
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J,B	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	0.1 J	ND	ND	ND	0.4 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	0.3 J	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	0.3 J	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	0.5 J	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.96 JN3
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.383 J	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P440***															
Aug-1994	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	3.9	*ND*	*ND*	*NA*	*NA*	*0.6 J*	*0.9 J*	*ND*	**2.8**	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.7	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	**4.4**	*NA*
Feb-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	**6.4**	*ND*	*ND*	*ND*	*ND*	1.4	1.1	*ND*	**3.6**	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*0.5 J*	*ND*	1.1	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*0.6 J*	*ND*	1.6	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*0.9 J*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.4	*ND*	*ND*	*ND*	*ND*	1.3	*0.6 J*	*ND*	**2.4**	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P440***															
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.42 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.37 J*	*ND*	*ND*	*ND*	*ND*	*0.21 J*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.31 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P440***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.77 J*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*0.37 J*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.96 J*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***MW-P440***
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	*ND*
Apr-1997	*ND*
Apr-2004	*ND*
Oct-2004	*ND*
Mar-2009	*ND*
Oct-2009	*ND*
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000092 J*
Mar-2013	*0.000085 J*
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*ND*
Apr-2015	*ND*
Nov-2015	*ND*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.000065 J*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00006 J*
Oct-2021	*ND*
May-2022	*ND*
Oct-2022	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P109*																
Jan-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P109*																
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	2.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.91	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	0.1 J	0.1 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9 J	ND
Nov-2018	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P109*																
Apr-2021	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P109*															
Jan-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.5 J
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	0.6 J
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	1.1
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	0.9 J
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.1	2.2
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	3.7
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	6.3	4.5
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	5.6	3.7
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	3.2	4.1
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	7.8	4
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	3.8	2.9
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	5.8	2.1
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P109***															
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	1.8
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	0.7 J
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	0.5 J	ND	ND	ND	2.87	1.85
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	0.56 J	ND	ND	ND	2.89	2.11
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	0.83 J	ND	ND	ND	3.54	2.55
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.28 J	ND	0.8 J	ND	ND	ND	3.84	2.52
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.32 J	ND	0.9 J	ND	ND	ND	2.95	2.61
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	0.84 J	ND	ND	ND	2.86	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.28	ND	ND	ND	1.8	2.21
May-2016	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	1.6	ND	ND	ND	3	2.9
Oct-2016	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	1.9	ND	ND	ND	3.4	3.2
May-2017	0.2 J	ND	ND	ND	ND	ND	ND	ND	0.1 J	0.3 J	ND	1.7	ND	ND	ND	3.2	3.5
Oct-2017	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	2	ND	ND	ND	3.3	3.3
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	5.5	2.7
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5 CL	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	1.3 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	0.7 J

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P109***															
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.302 J*	*ND*	*ND*	*ND*	*1.27 J*	*1.01 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.5	*0.9 J*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.6	*0.7 J*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2	*0.7 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P109***															
Jan-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Feb-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	0.8 J	2.1	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	0.5 J	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P109***															
Oct-2009	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	2.09	ND	ND	ND	ND	1.42	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.86	ND	ND	ND	ND	1.56	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	1.45	ND	ND	ND	ND	1.73	0.36 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	2.16	0.29 J	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	2.05	ND	ND	ND	ND	2.57	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	1.41	ND	ND	ND	ND	2.46	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	1.41	ND	ND	ND	ND	2.99	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	3.7	0.3 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	4.2	0.3 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	1.7 J+	ND	ND	ND	ND	4	0.3 J	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	4	0.3 J	ND	ND	ND
May-2018	ND	ND	ND	ND	1.3	ND	ND	1.2	ND	ND	ND	ND	3.2	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P109***															
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.823 J*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P109***
Apr-2004	0.0003
Oct-2004	0.0006
Mar-2009	0.0003
Oct-2009	0.0005
Mar-2010	0.0003
Oct-2010	*ND*
Apr-2011	0.0005
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000086 J*
Mar-2013	*0.000088 J*
Oct-2013	*0.000084 J*
Mar-2014	*0.000066 J*
Oct-2014	*0.000101 J*
Apr-2015	*0.000071 J*
Nov-2015	*0.000081 J*
May-2016	*0.000051 J*
Oct-2016	*ND*
May-2017	*0.00013 J*
Oct-2017	*ND*
May-2018	0.00021 B
Nov-2018	*0.00013 J*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00007 J*
Oct-2021	*ND*
May-2022	*ND*
Oct-2022	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P165*																
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.46	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.76	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3 J	ND
Nov-2018	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P165*																
Oct-2019	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	3.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P165*															
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.7 J
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	0.9 J
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.57	1.34
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	ND	ND	ND	ND	2.17	1.97
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	2.48	2.33
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	3.11	2.41
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.29 J	ND	ND	ND	ND	ND	2.5	2.7
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.23 J	ND	ND	ND	2.72	2.47
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.64	2.81
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	2.9	3.3
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	3.4	3.6
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	0.3 J
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	0.3 J	ND	ND	ND	4.8	4.2
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8	5
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8 CL	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	4.1 N3

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P165***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.4	3.2
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.3	2.9
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	6.4	3.8
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.292 J*	*ND*	*0.728 J*	*ND*	*ND*	*ND*	*3.94 J*	5.51
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	6.3	5
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	7	3.7
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	5.4	4

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P165***															
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	0.46 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.16 J	ND	ND	ND	0.42 J	ND	ND	ND	ND	0.22 J	0.43 J	ND	ND	ND
Mar-2014	ND	ND	ND	0.17 J	ND	ND	ND	0.61 J	ND	ND	ND	ND	0.24 J	0.4 J	ND	ND	ND
Oct-2014	ND	ND	ND	0.21 J	ND	ND	ND	0.78 J	ND	ND	ND	ND	0.32 J	0.38 J	ND	ND	ND
Apr-2015	ND	ND	ND	0.17 J	ND	ND	ND	0.75 J	ND	ND	ND	ND	0.28 J	0.36 J	ND	ND	ND
Nov-2015	ND	ND	ND	0.26 J	ND	ND	ND	0.66 J	ND	ND	ND	ND	0.29 J	0.36 J	ND	ND	ND
May-2016	ND	ND	ND	0.2 J	ND	ND	ND	0.8 J	ND	ND	ND	ND	0.3 J	0.4 J	ND	ND	ND
Oct-2016	ND	ND	ND	0.2 J	ND	ND	ND	1 J	ND	ND	ND	ND	0.4 J	0.5 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	0.2 J	ND	ND	ND	1.1	ND	ND	ND	ND	0.4 J	0.6 J	ND	ND	ND
May-2018	ND	ND	ND	ND	1.3	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P165***															
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.202 J*	*ND*	*ND*	*ND*	2.39	*ND*	*ND*	*ND*	*ND*	*0.719 J*	*0.429 J*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.6 J*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.5	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.5 J*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P165***
Oct-2009	*ND*
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000047 J*
Mar-2013	*0.000073 J*
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*0.000033 J*
Apr-2015	*ND*
Nov-2015	*0.00003 J*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.0001 J*
Oct-2017	*0.000064 J*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00007 J*
Oct-2021	*ND*
May-2022	*ND*
Oct-2022	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P171-1*																
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P171-1*																
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P171-1***															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.54 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.47 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.48 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.51 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P171-1***															
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.405 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P171-1***															
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P171-1***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P171-1***
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000071 J*
Mar-2013	*0.000076 J*
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*0.000025 J*
Apr-2015	*ND*
Nov-2015	*ND*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.00015 J*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00005 J*
Oct-2021	*ND*
May-2022	*ND*
Oct-2022	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P264*																
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.91 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.55	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P264*																
Mar-2014	ND	ND	ND	ND	1.61	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	1.85	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 J	ND
Nov-2018	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	3.02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P264*															
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	0.7 J
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	0.8 J
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.8 J
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	1.1
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	1.1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	0.7
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	1.1
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	3.8
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	1
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.3
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	1.3
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	0.6 J
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.76	1.57
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	ND	ND	ND	ND	2.33	2.28
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	0.22 J	ND	ND	ND	2.69	2.79

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P264***															
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	0.22 J	ND	ND	ND	3.3	3.41
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.24 J	ND	0.22 J	ND	ND	ND	2.27	3.23
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.24 J	ND	0.22 J	ND	ND	ND	2.64	2.76
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.61	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	2.6	3.4
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	3	3.8
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	0.3 J	0.2 J	ND	ND	ND	3	4.2
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	3.2	4.3
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.3	5
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 CL	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	4.9 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	3.6
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	2.5
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	6	3.5
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.464 J	ND	0.343 J	ND	ND	ND	4.29 J	5.38
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	6.4	4.6
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	7.1	3.6
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	6	4.1

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P264***															
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.61 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.44 J*	*ND*	*ND*	*ND*	*ND*	*0.28 J*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P264***															
Oct-2013	ND	ND	ND	ND	ND	ND	ND	0.55 J	ND	ND	ND	ND	0.35 J	0.37 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	0.74 J	ND	ND	ND	ND	0.39 J	0.43 J	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	0.91 J	ND	ND	ND	ND	0.47 J	0.36 J	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	0.65 J	ND	ND	ND	ND	0.37 J	0.31 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	0.74 J	ND	ND	ND	ND	0.36 J	0.28 J	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	0.4 J	0.4 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	1 J+	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
May-2018	ND	ND	ND	ND	1.2	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	NA
Apr-2021	ND	ND	ND	0.164 J	0.543 JB	ND	ND	2.27	ND	ND	ND	ND	0.789 J	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	0.7 J	0.6 J	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P264***
Apr-2004	0.0003
Oct-2004	0.0003
Mar-2009	*ND*
Oct-2009	*ND*
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000109 J*
Mar-2013	*0.000094 J*
Oct-2013	*0.000065 J*
Mar-2014	*0.000056 J*
Oct-2014	*0.000083 J*
Apr-2015	*ND*
Nov-2015	*0.000059 J*
May-2016	*0.000068 J*
Oct-2016	*0.000059 J*
May-2017	0.00021
Oct-2017	*0.00013 J*
May-2018	*0.00019 JB*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00007 J*
Oct-2021	*ND*
May-2022	*ND*
Oct-2022	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P440*																
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	ND
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	0.7 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jan-2001	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2 J	ND
Apr-2001	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P440*																
Mar-2003	ND	ND	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	*1.6 J*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	*0.7 J*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	*0.98 J*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P440*																
Mar-2014	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	1.56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	0.512 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P440*															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	1.2	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	1 J	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	1.3	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	1.5	NA	ND	NA	NA	NA	1.1	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	1.3	0.7 J
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	1	NA	ND	NA	ND	NA	1.9	2.4
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	12	7.5
Jan-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.67 J	ND	ND	ND	ND	14	9
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.3	0.5 J	ND	ND	ND	ND	ND	10	7.7
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	7.4	7
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.1	0.7 J	ND	ND	ND	ND	ND	9.5	6.4
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	1	1.6	ND	ND	ND	ND	ND	8.6	6.2
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	0.7 J	ND	ND	ND	ND	ND	8.7	5.3

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P440***															
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	0.6 J	ND	ND	ND	ND	ND	7.3	5.2
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	5.5	4.4
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	8.1	4.8
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	4.3	3.4
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	4.1	2.8
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	2.6	1.6
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	4.5	4.8
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	6.3	2.7
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	4.5 J	3 J
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	5.3	1.7
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	3.4	2.2
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	6.3	4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	2.6
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	4.8	3.8
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	6.7	1.9
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	6.1	3
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND	ND	ND	ND	ND	ND	2.9
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.88 J	ND	ND	ND	ND	ND	2.14	1.1
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.95 J	ND	0.45 J	ND	ND	ND	3.92	2.15
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.22	ND	0.36 J	ND	ND	ND	3.25	1.54

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P440***															
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.85 J	ND	0.31 J	ND	ND	ND	4.18 J	1.92
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.91 J	ND	0.34 J	ND	ND	ND	2.39	1.52
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.86 J	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.89 J,B	ND	0.78 J	ND	ND	ND	1.42	1.57
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	0.5 J	ND	ND	ND	1.4	0.9 J
Oct-2016	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	0.9 J	ND	ND	ND	2.3	1.6
May-2017	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	0.9 J	ND	ND	ND	2.2	1.7
Oct-2017	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	0.8 J	ND	ND	ND	2	1.4
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	1.2	ND	ND	ND	3.6	1.6
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.2 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	0.7 J	ND	ND	ND	2	0.8 J
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.09 J	ND	0.134 J	ND	ND	ND	0.433 J	0.398 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 JB	ND	ND	ND	ND	ND	1.4	0.6 J
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	1.6	0.6 J
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	0.5 J	ND	ND	ND	1	0.7 J

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P440***															
Jun-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jun-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Aug-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	1.2	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	**2.3**	*NA*
Jan-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	*ND*	1.1	*0.78 J*	*ND*	**3.2**	*NA*
Feb-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.2	*ND*	*ND*	*ND*	*ND*	1	*0.7 J*	*ND*	**2.6**	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.4	*ND*	*ND*	*ND*	*ND*	1	*0.7 J*	*ND*	**2.3**	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.8	*ND*	*ND*	*ND*	*ND*	1	*0.8 J*	*ND*	**2.2**	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*0.6 J*	*ND*	1.7	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*RW-P440*															
Sep-2002	ND	ND	ND	NA	ND	ND	ND	2.9	ND	ND	ND	ND	0.9 J	ND	ND	1.5	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	3.1	ND	ND	ND	ND	0.9 J	0.5 J	ND	1.4	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	2.2	ND	ND	ND	ND	0.7 J	ND	ND	1	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	1.3	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	0.7 J	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	0.6 J	ND	ND	0.9 J	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	2.2 J	ND	ND	ND	ND	0.7 J	ND	ND	0.8 J	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.5 J	ND	ND	1.1	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	0.5 J	ND	ND	2.4	ND	ND	ND	ND	0.6 J	ND	ND	1.6	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	0.6 J	ND	ND	**2.1**	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	1.8	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	1.1	ND	ND	1.3	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	0.7 J	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	1.13	ND	ND	ND	ND	0.6 J	ND	ND	0.51 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.28	ND	ND	ND	ND	0.93 J	ND	ND	0.55 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P440***															
Oct-2013	ND	ND	ND	ND	ND	ND	ND	0.92 J	ND	ND	ND	ND	0.73 J	0.24 J	ND	0.54 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.23	ND	ND	ND	ND	0.55 J	0.23 J	ND	0.32 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	1.17	ND	ND	ND	ND	0.65 J	ND	ND	0.46 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	1.05	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.6 J	ND	ND	0.1 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	1.2	ND	ND	0.2 J	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	1.3	0.1 J	ND	0.3 J	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	1	ND	ND	0.2 J	ND
May-2018	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	1.9	NA
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.272 J	ND	ND	0.867 J	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	1.1	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	1.9	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P440***
Jun-1994	*ND*
Jun-1994	*ND*
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	0.001
Apr-1997	*ND*
Apr-2004	0.001
Oct-2004	0.0005
Mar-2009	*ND*
Oct-2009	*ND*
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000056 J*
Mar-2013	0.000101
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*0.000051 J*
Apr-2015	*ND*
Nov-2015	*0.000036 J*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.00012 J*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00006 J*
Oct-2021	*ND*
May-2022	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Mercury
MCL/GWPS	0.002
Location ID: RW-P440	
Oct-2022	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P441*																
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	0.9 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P441*																
Oct-2004	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	1.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.44	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.58	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	2.14	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	2.12	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	2.01	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.74	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P441*																
Nov-2015	ND	ND	ND	ND	2.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	0.332 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P441*															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	1	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	0.6 J	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	0.7 J	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	4.1	1.5
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	2	1
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	1.4	1.8
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	1.6	0.9 J
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	0.5 J	NA	ND	NA	NA	NA	0.9 J	1
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	1.7
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	2.7	3.1
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	2.9
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	1.9
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.7	2.8
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.4	2.2
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.6	3.2
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	3.1
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	7.3	5.5
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.1	3.2

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P441***															
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.1	3.6
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.7	1.7
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	4.6	2
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	5.6	4.4
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.5	1.9
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*5.6 J*	*3.3 J*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.6	1.6
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.6	1.8
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	8.7	3
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.3	1.8
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.6	3
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.1	2.2
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	10.6	1.6
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.5	1.9
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	11.3	1.7
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.4	1.8
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.06	1.02
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.34 J*	*ND*	*ND*	*ND*	*ND*	*ND*	3.54	1.31
Oct-2013	*0.28 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.27 J*	*ND*	*ND*	*ND*	4.49	1.8
Mar-2014	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.17 J*	*ND*	*0.33 J*	*ND*	*ND*	*ND*	*5.54 J*	1.91
Oct-2014	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	3.67	1.8
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*0.34 J*	*ND*	*ND*	*ND*	3.41	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P441***															
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	2.18	1.32
May-2016	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.4 J	ND	ND	ND	2.7	1.3
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.5 J	ND	ND	ND	3.5	1.5
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.4 J	ND	ND	ND	2.9	1.3
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	0.5 J	ND	ND	ND	3.7	1.5
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	1.4
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6 CL	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	1.1 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.412 J	0.223 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	0.5 J
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P441***															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	1.3	ND	ND	NA	NA	ND	0.7 J	ND	0.5 J	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	0.5 J	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	1	ND	ND	1.5	ND	ND	ND	ND	0.5 J	0.5 J	ND	0.5 J	NA
Mar-2002	ND	ND	ND	NA	0.7 J	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	1.3	ND	ND	1.9	ND	ND	ND	ND	0.6 J	ND	ND	1.1	NA
Mar-2003	ND	ND	ND	NA	1.3	ND	ND	2.1	ND	ND	ND	ND	0.7 J	ND	ND	1.2	NA
Oct-2003	ND	ND	ND	NA	2.4	ND	ND	3.3	ND	ND	ND	ND	1.1	ND	ND	1.9	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P441***															
Apr-2004	ND	ND	ND	NA	1.4	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	1.1	ND	ND	2.2	ND	ND	ND	ND	0.7 J	ND	ND	0.9 J	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	1.5	0.8 J	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.3 R	ND	ND	2.3 J	ND	ND	ND	ND	0.7 J	ND	ND	1.2 J	NA
Sep-2007	ND	ND	ND	ND	1.3	ND	ND	2	ND	ND	ND	ND	0.6 J	ND	ND	0.9 J	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	0.9 J	ND	ND	2.5	ND	ND	ND	ND	0.5 J	ND	ND	1.3	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	1.3	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	0.6 J	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.5 J	ND	ND	0.6 J	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	1.69	ND	ND	ND	ND	0.54 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.07	ND	ND	ND	ND	0.36 J	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	0.5 J	0.26 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	0.6 J	0.35 J	ND	0.33 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	2.22	ND	ND	ND	ND	0.91 J	ND	ND	0.28 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P441***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.32	*ND*	*ND*	*ND*	*ND*	*0.63 J*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.34	*ND*	*ND*	*ND*	*ND*	*0.69 J*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.2 J*	*ND*	*0.1 J*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.1 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P441***
Jun-1994	*ND*
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	0.0017
Apr-1997	0.0008
Apr-2004	0.0018
Oct-2004	0.0007
Mar-2009	0.0003
Oct-2009	0.0003
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	0.0005
Sep-2011	0.0002
Mar-2012	0.0006
Sep-2012	0.00086
Mar-2013	0.0013
Oct-2013	*0.000198 J*
Mar-2014	*ND*
Oct-2014	*0.00006 J*
Apr-2015	*0.000081 J*
Nov-2015	0.000206
May-2016	*ND*
Oct-2016	*0.000071 J*
May-2017	0.00032
Oct-2017	*0.000061 J*
May-2018	0.00042 B
Nov-2018	0.00022
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00014 J*
Oct-2021	*ND*
May-2022	*ND*
Oct-2022	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P584*																
Apr-1995	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	0.6 J	NA	NA	3.2	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	0.7 J	NA	NA	4	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	9.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jan-2001	ND	0.76 J	ND	ND	9.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	0.9 J	ND	ND	13	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND
Apr-2001	ND	1	ND	ND	16	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2001	ND	0.7 J	ND	ND	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	0.7 J	ND	ND	15	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2002	ND	0.6 J	ND	ND	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	ND
Mar-2003	ND	ND	ND	ND	9.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	7.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	5.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P584*																
Oct-2005	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	4.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	5.49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	6.76	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	6.59	0.24 J	ND	ND	ND	ND	ND	ND	0.38 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	5.01	ND	ND	ND	ND	ND	ND	ND	0.32 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	4.26	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	3.91	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	4.74	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	4.2	0.1 J	ND	ND	ND	ND	ND	0.1 J	0.2 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P584*																
Oct-2016	ND	ND	ND	ND	3.4	ND	ND	ND	ND	ND	0.1 J+	0.1 J	0.2 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	3.7	ND	ND	ND	ND	ND	ND	0.1 J	0.2 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	3.4	ND	ND	ND	ND	ND	ND	0.1 J	0.2 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2 J	ND
Nov-2018	ND	ND	ND	ND	1.7 L2M0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	2.64	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P584*															
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	2.1
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	4
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	4.7
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	2.3
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	0.9 J	NA	NA	NA	1.3	6.7
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	1.6	4.4
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	0.8 J	ND	NA	0.8 J	NA	ND	NA	4.5	11
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	1.7	ND	ND	ND	22	20
Jan-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	1.7	ND	ND	ND	ND	21
Feb-2001	0.7 J	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND	2.2	ND	ND	ND	18	23
Apr-2001	1	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	2.6	ND	ND	ND	12	25
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	1.9	ND	ND	ND	8.8	16
Mar-2002	0.9 J	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	3.1	ND	ND	ND	12	20
Sep-2002	0.7 J	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	2.7	ND	ND	ND	13	18
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	2.1	ND	ND	ND	7.9	12
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	1.2	ND	ND	ND	12	11
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	15	9.2
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	14	8.4
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	15	9

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P584***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	12.4	5.5
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	9	5.8
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	13.2	5.3
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 J	ND	ND	ND	10 J	6.8 J
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	1.4	ND	ND	ND	11.8	3.9
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	9.4	5.2
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	9.9	5.4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	9.4	5.5
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	11.6	6.5
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.9 J	6.3
Oct-2010	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	18.7	7.2
Apr-2011	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.1	ND	ND	ND	20.7	9.4
Sep-2011	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5	ND	ND	ND	25.4	9.1
Mar-2012	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND	ND	ND	22.7	9.3
Sep-2012	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.59	ND	ND	ND	8.55	5.98
Mar-2013	0.55 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.11	ND	ND	ND	10.7	8.85
Oct-2013	0.58 J	ND	ND	ND	ND	ND	ND	ND	0.34 J	ND	ND	4.36	ND	ND	ND	10.4	8.15
Mar-2014	0.37 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.16	ND	ND	ND	10.6	8.31
Oct-2014	0.34 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.55	ND	ND	ND	7.23	6.15
Apr-2015	0.32 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.36	ND	ND	ND	6.98	4.91
Nov-2015	0.31 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.74	ND	ND	ND	3.83	5.33
May-2016	0.3 J	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	3	ND	ND	ND	6.4	5.7

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P584***															
Oct-2016	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	4.9	4.6
May-2017	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	2.3	*ND*	*ND*	*ND*	5.6	4.6
Oct-2017	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	2.1	*ND*	*ND*	*ND*	5.1	4.4
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	9	4.5
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3 CL	2.1 N3M1
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	5	3.8 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	5.7	2.5
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	4.8	2.2
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	6.2	2.6
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.886 J*	*ND*	*ND*	*ND*	*2.74 J*	*2.5 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	4.4	2.3
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	3.1	1.1
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	3.7	2

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P584***															
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	1.1	*ND*	*NA*	2	*ND*	*ND*	*NA*	*NA*	*0.8 J*	1.3	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	1.8	*ND*	*NA*	4.4	*ND*	*ND*	*NA*	*NA*	1.2	1.4	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	**8.3**	*ND*	*ND*	**10**	*ND*	*ND*	*ND*	*ND*	3.1	2.1	*ND*	*ND*	*NA*
Jan-2001	*ND*	*ND*	*ND*	*NA*	**9.8**	*ND*	*ND*	**6.3**	*ND*	*ND*	*ND*	*ND*	2.5	1.6	*ND*	*0.73 J*	*NA*
Feb-2001	*0.6 J*	*ND*	*0.9 J*	*NA*	**14**	*1 J*	*ND*	**15**	*ND*	*ND*	*ND*	*ND*	4.7	1.8	*ND*	1.4	*NA*
Apr-2001	*ND*	*ND*	1.2	*NA*	**19**	1.4	*ND*	**18**	*ND*	*ND*	*ND*	*ND*	**5.8**	1.6	*ND*	1.5	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	**12**	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	2.2	1.2	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*0.8 J*	*NA*	**16**	*0.9 J*	*ND*	**15**	*ND*	*ND*	*ND*	*ND*	4.9	1.3	*ND*	1.7	*NA*
Sep-2002	*ND*	*ND*	*0.5 J*	*NA*	**11**	*ND*	*ND*	**11**	*ND*	*ND*	*ND*	*ND*	3.5	1.2	*ND*	1.2	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	**7**	*ND*	*ND*	4.7	*ND*	*ND*	*ND*	*ND*	2.5	1	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	**7.1**	*ND*	*ND*	4.8	*ND*	*ND*	*ND*	*ND*	1.7	1	*ND*	*0.6 J*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	4.8	*ND*	*ND*	4.9	*ND*	*ND*	*ND*	*ND*	1.8	1.1	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	4.4	*ND*	*ND*	2.8	*ND*	*ND*	*ND*	*ND*	1.4	1.4	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*RW-P584*															
Apr-2005	ND	ND	ND	ND	3.9	ND	ND	4.6	ND	ND	ND	ND	1.7	1.5	ND	ND	NA
Oct-2005	ND	ND	ND	ND	1.6	ND	ND	3.9	ND	ND	ND	ND	1.8	1	ND	0.6 J	NA
Mar-2006	ND	ND	ND	ND	1.8	ND	ND	**5.4**	ND	ND	ND	ND	2.1	1.1	ND	ND	NA
Sep-2006	ND	ND	ND	ND	0.6 J	ND	ND	4.9	ND	ND	ND	ND	2.4	1.9	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.6 R	ND	ND	6.8 J	ND	ND	ND	ND	3 J	ND	ND	0.7 J	NA
Sep-2007	ND	ND	ND	ND	2.5	ND	ND	**8.6**	0.5 J	ND	ND	ND	2.9	1.2	ND	1.5	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	**9.5**	ND	ND	ND	ND	2.5	0.9 J	ND	1.8	NA
Sep-2008	ND	ND	ND	ND	1.8	ND	ND	**7.7**	ND	ND	ND	ND	2.6	1.1	ND	1.7	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	**7.6**	ND	ND	ND	ND	2.7	0.9 J	ND	ND	NA
Oct-2009	ND	ND	ND	ND	1.6	ND	ND	**7.2**	ND	ND	ND	ND	3.7	0.9 J	ND	1.3	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	NA
Oct-2010	ND	ND	ND	ND	2.5	ND	ND	**5.5**	ND	ND	ND	ND	ND	ND	ND	0.9 J	NA
Apr-2011	ND	ND	ND	ND	2.5	ND	ND	**5.4**	ND	ND	ND	ND	**5.6**	ND	ND	0.8 J	NA
Sep-2011	ND	ND	ND	ND	2.3	ND	ND	**5.1**	ND	ND	ND	ND	**6.6**	ND	ND	0.7 J	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	**5.1**	ND	ND	ND	ND	**7.2**	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	1.33	ND	ND	**6.13**	ND	ND	ND	ND	**7.44**	0.85 J	ND	0.29 J	ND
Mar-2013	ND	ND	ND	ND	1.02	ND	ND	**6.48**	ND	ND	ND	ND	**8.3**	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.84 J	ND	ND	**5.5**	ND	ND	ND	ND	**7.22**	0.88 J	ND	0.32 J	ND
Mar-2014	ND	ND	ND	ND	0.58 J	ND	ND	**6.17**	ND	ND	ND	ND	**5.89**	0.74 J	ND	0.23 J	ND
Oct-2014	ND	ND	ND	0.13 J	ND	ND	ND	**6.23**	ND	ND	ND	ND	4.83	0.6 J	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	ND	3.56	0.53 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	ND	3.54	0.42 J	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*RW-P584*															
May-2016	ND	ND	ND	0.1 J	0.4 J	ND	ND	4.5	ND	ND	ND	ND	3.9	0.5 J	ND	0.2 J	ND
Oct-2016	ND	ND	ND	0.1 J	0.3 J	ND	ND	3.3	ND	ND	ND	ND	2.8	0.4 J	ND	0.1 J	ND
May-2017	ND	ND	ND	ND	0.3 J	ND	ND	3.6	ND	ND	ND	ND	3	0.2 J	ND	0.1 J	ND
Oct-2017	ND	ND	ND	ND	0.3 J	ND	ND	3.4	ND	ND	ND	ND	2.6	0.4 J	ND	0.1 J	ND
May-2018	ND	ND	ND	ND	1.7	ND	ND	2.7	ND	ND	ND	ND	2.6	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	1.3 M1	ND	ND	ND	ND	0.99 JM1	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND	ND	ND	1.8	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	1.5	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	ND	1.8	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	1.3	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	ND	ND	ND	2.34	ND	ND	ND	ND	1.23	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	1 J	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	1 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P584***
Apr-1995	*ND*
Oct-1996	0.0013
Apr-1997	0.0017
Apr-2004	*ND*
Oct-2004	*ND*
Mar-2009	*ND*
Oct-2009	*ND*
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000119 J*
Mar-2013	0.000103
Oct-2013	*0.000073 J*
Mar-2014	*ND*
Oct-2014	*0.000041 J*
Apr-2015	*ND*
Nov-2015	*0.000043 J*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*ND*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	0.00028
Oct-2021	*0.00005 J*
May-2022	0.00045
Oct-2022	*ND*

MCLs and Results are in mg/L unless indicated otherwise

HISTORICAL TABLES –
Surface Water Monitoring Locations

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-1***											
Nov-1993	17	17	0.2	30.9	21.7	8.3	ND	NA	192	15.8	146	58
Apr-1994	42	42	0.1	ND	25.3	3.6	ND	5.9	233	28.8	135	71.77
Apr-1995	12.4	12.4	ND	ND	18	3.1	ND	6	157	17.2	95	36.2
Apr-1997	ND	84	ND	ND	32	0.63	ND	NA	NA	37	229	120
Oct-1997	10	10	0.64	ND	8.4	0.255	ND	6.76	146	ND	80	33
Apr-1998	ND	ND	0.2	ND	2	ND	ND	6.4	242	4.71	22	1.8
Apr-1999	21	21	0.16	ND	125	0.901	ND	5.92	573	27.6	340	111
Oct-1999	30	30	0.1	32	13.6	2.34	ND	5.92	150.3	23.6	99	49
Oct-2000	13	NA	ND	10	67.6	2.21	ND	6.32	302	27.2	184	50.5
Apr-2001	7.5	NA	ND	ND	90.3	1.9	ND	NA	NA	15.3	206	60
Sep-2001	6	6	0.35	ND	63.4	3.51	ND	5.8	176	21.9	156	44.2
Mar-2002	8.5	8.5	ND	26	32.7	ND	ND	5.8	302	21.1	254	46.4
Sep-2002	15	15	ND	ND	55	2.09	ND	5.9	355	14.1	165	46.1
Mar-2003	18	18	ND	ND	93.9	2.02	ND	5.8	469	19.6	244	73.6
Oct-2003	22	22	ND	16	168	1.7	ND	6	691	20.8	378	101
Apr-2004	26	26	ND	ND	130	1.28	ND	6.6	619	18.9	350	73.4
Oct-2004	45	45	ND	19	37.6	1.03	ND	6.8	256	15.5	147	69.8
Apr-2005	23	23	ND	10	102	1.85	ND	6.2	399	15.6	274	65.8
Mar-2006	11	11	ND	ND	109	1.94	ND	5.7	421	17.4	224	51.9
Mar-2007	21	21	ND	ND	133	2.11	ND	6.2	606	18.3	298	59.4
Mar-2008	11	11	ND	12	126	2.23	ND	6	586	16.6	280	55.3
Mar-2009	12	12	ND	ND	118	1.16	ND	5.7	489	13.6	257	42.5
Apr-2010	27	27	ND	ND	115	1.5	ND	7.6	523	27.8	279	64.3
Oct-2010	43	43	0.27	11	42.4	0.55	ND	7	271	16.9	151	51
Apr-2011	24	24	ND	17	167	1.73	ND	7.2	532	16.2	311	57.4
Sep-2011	27	27	0.22	ND	15.1	0.57	ND	7.2	89.8	3.49	75	33.5
Mar-2012	21	21	ND	16	95.9	1.48	ND	6.1	417	18.1	213	50.9
Sep-2012	12.8	12.8	ND	ND	90.3	1.79	ND	5.6	412	13.2	191	41
Mar-2013	14.8	14.8	ND	ND	82.2	1.81	ND	7.1	386	15.1	188	43.1
Oct-2013	14.5	14.5	ND	ND	99.2	1.52	ND	6.7	459	15.4	238	44.5
Mar-2014	25.7	25.7	ND	18	489	1.62	ND	6.1	1139	19	710	60.5
Oct-2014	37.4	37.4	ND	14	187	1.58	ND	6.3	514	16	307	61.9
Apr-2015	21.9	21.9	ND	13	157	1.59	ND	6.5	501	17.1	263	61.3
Nov-2015	23.8	23.8	ND	ND	158	1.36	ND	6.5	482	15.4	285	63.3
May-2016	25.3	25.3	ND	19	109	1.32	ND	6.9	558	14.8	250	51.9
Oct-2016	13.2	13.2	ND	8 J	108	NA	NA	6.9	540	14.1	242	42.4
May-2017	11.7	11.7	ND	9 J	136	1.78	ND	6.8	650	13.3	286	50.4

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-1***											
Oct-2017	14.9	14.9	*ND*	*6 J*	106	2.12	*ND*	6.5	521	13.2	223	42
May-2018	20	20	*ND*	*20.8 J*	109	0.33	*ND*	6.9	474	15.2	187	53.5
Nov-2018	30	30	*ND*	*7.9 J*	120	1.3	*ND*	6.37	610	17.9	270	63.7
May-2019	60	*NA*	*ND*	28.4	35.8	0.2	*ND*	7.2	393	10.3	157	73.3
Oct-2019	16	*NA*	*ND*	*19.3 J*	143	1.3	*ND*	6.92	631	21.8	296	60.5
May-2020	12	12	*ND*	31.4	63.6	1.9	*ND*	6.8	406	11.6	185	48.3
Oct-2020	26	*NA*	*ND*	*ND*	61.7	1.9	*ND*	6.21	375	14.7	146	43.6
Apr-2021	40	*NA*	*ND*	*6.1 J*	69.3	1.6	*ND*	6.61	321	16.4	152	59.8
Oct-2021	*8 J5c*	*NA*	*ND*	*12.6 J*	74.7	2	*ND*	7.02	436	12	177	46.1
May-2022	20	*NA*	*ND*	*ND*	65.9	2	*ND*	6.96	362	13.5	173	46.8 N3
Oct-2022	22	*NA*	*ND*	*10.7 J*	71.4	1.9	*ND*	6.3	643	12.8	154	47.9 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-1***													
Nov-1993	*NA*	*ND*	*ND*	*NA*	0.002	14	*NA*	*ND*	*NA*	*ND*	1.2	*NA*	**0.034**	5.6	*NA*
Apr-1994	*NA*	*ND*	*ND*	*NA*	*ND*	20	*NA*	*ND*	*NA*	*ND*	0.42	*NA*	**0.034**	5.3	*NA*
Apr-1995	*ND*	*ND*	0.5	*ND*	*ND*	9.4	*NA*	*ND*	*ND*	*ND*	0.31	*NA*	*ND*	3.1	*NA*
Oct-1996	*ND*	*ND*	0.1	*ND*	*ND*	66	58	*ND*	*ND*	*ND*	6.5	1.1	*ND*	12	11
Apr-1997	*ND*	*ND*	0.038	*ND*	*ND*	36	35	*ND*	*ND*	*ND*	0.74	0.52	*ND*	8.8	8.4
Oct-1997	*ND*	*ND*	0.041	*ND*	*ND*	8.89	*NA*	*ND*	*ND*	*ND*	0.292	*NA*	*ND*	2.77	*NA*
Apr-1998	*ND*	*ND*	0.044	*ND*	*ND*	23.7	*NA*	*ND*	*ND*	*ND*	1.04	*NA*	*ND*	6.21	*NA*
Apr-1999	*ND*	*ND*	0.086	*ND*	*ND*	31.3	*NA*	*ND*	*ND*	*ND*	0.345	*NA*	*ND*	7.97	*NA*
Oct-1999	*ND*	*ND*	0.067	*ND*	*ND*	11.9	*NA*	*ND*	*ND*	*ND*	0.337	*NA*	*ND*	3.67	*NA*
Oct-2000	*ND*	*ND*	0.043	*ND*	*ND*	14.2	*NA*	*ND*	*ND*	*ND*	0.366	*NA*	*ND*	3.65	*NA*
Apr-2001	*ND*	*ND*	0.084	*ND*	*ND*	16.1	*NA*	*ND*	*ND*	*ND*	0.546	*NA*	*ND*	4.78	*NA*
Sep-2001	*ND*	*ND*	0.056	*ND*	*ND*	10.1	*NA*	*ND*	*ND*	*ND*	1.82	*NA*	0.003	4.59	*NA*
Mar-2002	*ND*	*ND*	0.044	*ND*	*ND*	12.8	*NA*	*ND*	*ND*	*ND*	0.573	*NA*	*ND*	3.51	*NA*
Sep-2002	*ND*	*ND*	0.052	*ND*	*ND*	13.2	*NA*	*ND*	*ND*	*ND*	0.171	*NA*	*ND*	3.19	*NA*
Mar-2003	*ND*	*ND*	0.094	*ND*	*ND*	19.9	*NA*	*ND*	*ND*	*ND*	0.258	*NA*	*ND*	5.8	*NA*
Oct-2003	*ND*	*ND*	0.126	*ND*	*ND*	28.1	*NA*	*ND*	*ND*	*ND*	0.594	*NA*	*ND*	7.54	*NA*
Apr-2004	*ND*	*ND*	0.072	*ND*	*ND*	21	*NA*	*ND*	*ND*	*ND*	0.701	*NA*	*ND*	5.11	*NA*
Oct-2004	*ND*	*ND*	0.032	*ND*	*ND*	20.1	*NA*	*ND*	*ND*	*ND*	1.23	*NA*	0.003	4.73	*NA*
Apr-2005	*ND*	0.004	0.058	*ND*	*ND*	18.6	*NA*	*ND*	*ND*	*ND*	1.12	*NA*	*ND*	4.69	*NA*
Mar-2006	*ND*	*ND*	0.056	*ND*	*ND*	14.4	*NA*	*ND*	*ND*	*ND*	0.471	*NA*	*ND*	3.84	*NA*
Mar-2007	*ND*	*ND*	0.055	*ND*	*ND*	17.7	*NA*	*ND*	*ND*	*ND*	0.116	*NA*	*ND*	3.68	*NA*

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-1***													
Mar-2008	ND	0.002	0.071	ND	ND	15.4	NA	ND	ND	ND	0.208	NA	ND	4.07	NA
Mar-2009	ND	ND	0.055	ND	ND	11.7	NA	ND	ND	ND	0.496	NA	ND	3.22	NA
Apr-2010	ND	ND	0.049	ND	ND	18.7	NA	ND	ND	ND	ND	NA	ND	4.27	NA
Oct-2010	ND	ND	0.02	ND	ND	15	NA	ND	ND	ND	0.339	NA	ND	3.5	NA
Apr-2011	ND	ND	0.054	ND	ND	16.8	NA	ND	ND	ND	0.657	NA	ND	3.77	NA
Sep-2011	ND	ND	0.014	ND	ND	10.4	NA	ND	ND	ND	0.519	NA	ND	1.82	NA
Mar-2012	ND	ND	0.044	ND	ND	14.2	NA	ND	ND	ND	ND	NA	ND	3.74	NA
Sep-2012	ND	ND	0.0428	0.000066 J	ND	11.3	NA	ND	0.000981 J	ND	0.0847	NA	ND	3.1	NA
Mar-2013	ND	ND	0.0436	ND	ND	11.8	NA	0.0022 J	0.0011 J	0.00083 J	0.0408 J	NA	0.0012 J	3.31	NA
Oct-2013	0.000594 J	ND	0.0516	ND	ND	13.1	NA	0.0065 J	0.0012 J	0.00074 J	0.142	NA	0.000333 J	2.86	NA
Mar-2014	0.000455 J	0.000116 J	0.0655	ND	ND	18.1	NA	0.0009 J	0.001 J	0.0012 J	0.185	NA	0.000482 J	3.73	NA
Oct-2014	0.000432 J	0.000397 J	0.0661	ND	ND	17.5	NA	0.000625 J	0.0008 J	0.000969 J	0.169	NA	ND	4.41	NA
Apr-2015	0.000634 J	0.000521 J	0.0611	ND	ND	17.3	NA	0.0013 J	0.0017 J	0.0013 J	0.496	NA	0.0012 J	4.4	NA
Nov-2015	0.000471 J	0.000477 J	0.0549	ND	ND	18.7	NA	0.0012 J	0.0013 J	0.000996 J	0.682	NA	0.000705 J	4.02	NA
May-2016	ND	0.00074 J	0.0542	ND	ND	14.5	NA	0.00081 J	0.00063 J	0.0014 J	0.19 J	NA	0.00055 J	3.81	NA
Oct-2016	ND	ND	0.0552	ND	ND	11.5	NA	0.00074 J	0.0021	0.00078 J	0.34	NA	0.001 J	3.31	NA
May-2017	ND	ND	0.0641	ND	ND	13.8	NA	0.0018 J	0.002	0.0012 J,B	0.248	NA	0.00094 J	3.88	NA
Oct-2017	ND	ND	0.0482	ND	ND	11.8	NA	ND	0.00081 J	ND	ND	NA	ND	3.02	NA
May-2018	0.0001 J	ND	0.057	0.000038 J	0.000065 J	15.1	NA	0.0052 J	0.001	0.003 B	0.42	NA	0.00071 J	3.8	NA
Nov-2018	0.00033 J	0.000072 J	0.04	0.000047 J	0.000054 J	18.3	NA	0.0035 J	0.0016	0.0033	0.91	NA	0.0013	4.4	NA
May-2019	ND	ND	0.021	ND	ND	24.6	NA	ND	0.00069	0.0024	2.5	NA	0.0018	2.9	NA
Oct-2019	0.00016 J	0.00018 J	0.056	0.000096 J	0.00032 J	16.9	NA	0.004 J	0.0016	0.0039	0.92	NA	0.0018	4.4	NA
May-2020	0.00036 J	0.00034 J	0.044	0.00011 J	0.00012 J	13.4	NA	0.0079	0.0022	**0.0026 D6**	0.84	NA	0.0021	3.6	NA
Oct-2020	ND	ND	0.037	ND	ND	12.4	NA	0.0095 J	0.00053 J	ND	0.037 J	NA	ND	3.1	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-1***													
Apr-2021	*ND*	*ND*	0.038	*ND*	*ND*	17.7	*NA*	*0.00043 J*	*ND*	*ND*	0.2	*NA*	*ND*	3.8	*NA*
Oct-2021	*0.000076 J*	*ND*	0.042	*ND*	*ND*	13.1	*NA*	*ND*	*0.00037 J*	*0.00042 J*	0.076	*NA*	*0.00012 J*	3.2	*NA*
May-2022	*ND*	*ND*	0.047	*ND*	*ND*	13.4	*NA*	*0.00054 J*	*0.00054 J*	*ND*	*0.046 J*	*NA*	*ND*	3.3	*NA*
Oct-2022	*ND*	*ND*	0.042	*ND*	*ND*	13.8	*NA*	*0.0006 J*	*ND*	*ND*	*0.048 J*	*NA*	*ND*	3.3	*NA*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*SW-1*												
Nov-1993	0.2	NA	ND	NA	4.1	NA	ND	NA	16.9	NA	NA	NA	0.02
Apr-1994	0.064	NA	ND	NA	2.7	NA	ND	NA	11	NA	NA	NA	0.022
Apr-1995	0.05	NA	ND	ND	1.7	NA	ND	ND	7.1	NA	ND	ND	0.04
Oct-1996	0.57	0.076	NA	ND	ND	ND	ND	ND	7.7	8.7	ND	ND	0.43
Apr-1997	0.14	0.13	ND	ND	4.2	4	ND	ND	19	18	ND	ND	0.047
Oct-1997	0.049	NA	NA	ND	1.98	NA	ND	ND	13.6	NA	ND	ND	ND
Apr-1998	0.041	NA	ND	3.09	ND	NA	ND	17.5	ND	NA	ND	0.025	NA
Apr-1999	0.07	NA	NA	ND	3.91	NA	ND	ND	67.9	NA	ND	ND	0.01
Oct-1999	0.076	NA	NA	ND	2.93	NA	ND	ND	44.8	NA	ND	ND	ND
Oct-2000	0.036	NA	NA	ND	3.15	NA	ND	ND	40.6	NA	ND	ND	ND
Apr-2001	0.1	NA	NA	ND	2.48	NA	ND	ND	46.3	NA	ND	ND	ND
Sep-2001	0.052	NA	NA	0.023	3.79	NA	ND	ND	37.4	NA	ND	ND	0.015
Mar-2002	0.025	NA	NA	ND	2.64	NA	ND	ND	66.9	NA	ND	ND	0.012
Sep-2002	0.059	NA	NA	ND	2.4	NA	ND	ND	35.1	NA	ND	ND	0.012
Mar-2003	0.116	NA	NA	ND	2.77	NA	ND	ND	62.9	NA	ND	ND	ND
Oct-2003	0.182	NA	NA	ND	2.28	NA	ND	ND	91.7	NA	ND	ND	0.021
Apr-2004	0.116	NA	ND	ND	2.42	NA	ND	ND	103	NA	ND	ND	0.035
Oct-2004	0.042	NA	ND	ND	3.49	NA	ND	ND	28.5	NA	ND	ND	0.048
Apr-2005	0.063	NA	ND	ND	3.17	NA	ND	ND	66.4	NA	ND	ND	0.011
Mar-2006	0.026	NA	ND	ND	2.28	NA	ND	ND	52.1	NA	ND	ND	0.048
Mar-2007	0.039	NA	ND	ND	2.78	NA	ND	ND	73	NA	ND	ND	ND
Mar-2008	0.051	NA	ND	ND	2.96	NA	ND	ND	79.3	NA	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-1***												
Mar-2009	0.06	NA	0.0002	ND	2.26	NA	ND	ND	63	NA	ND	ND	0.01
Apr-2010	0.038	NA	ND	ND	2.52	NA	ND	ND	62	NA	ND	ND	ND
Oct-2010	0.014	NA	ND	ND	2.74	NA	ND	ND	29.2	NA	ND	ND	ND
Apr-2011	0.049	NA	ND	ND	2.46	NA	ND	ND	76.7	NA	ND	ND	ND
Sep-2011	0.015	NA	ND	ND	1.16	NA	ND	ND	10.1	NA	ND	ND	ND
Mar-2012	0.038	NA	ND	ND	2.41	NA	ND	ND	55.8	NA	ND	ND	ND
Sep-2012	0.0339	NA	ND	0.0014 J	2.43	NA	0.000504 J	ND	51.5	NA	ND	ND	0.0053 J
Mar-2013	0.0335	NA	0.000055 J	0.0015 J	2.4	NA	0.000445 J	0.00002 J	41.3	NA	ND	ND	0.0172
Oct-2013	0.0329	NA	ND	0.0017 J	2.19	NA	ND	0.000026 J	58.8	NA	0.000724 J	ND	0.0162
Mar-2014	0.0326	NA	ND	0.0016 J	2.34	NA	0.0011 J	ND	216	NA	ND	0.000342 J	0.0106
Oct-2014	0.0244	NA	0.00004 J	0.0033 J	2.62	NA	0.0014 J	ND	82.5	NA	ND	ND	0.0073 J
Apr-2015	0.0572	NA	ND	0.0034 J	2.76	NA	0.0013 J	ND	76.8	NA	ND	0.0011 J	0.0153
Nov-2015	0.0414	NA	ND	0.0027 J	2.95	NA	0.0012 J	ND	74.5	NA	0.000195 J	0.00091 J	0.0067 J
May-2016	0.0216	NA	ND	0.0021 J	2.66	NA	0.0006 J	ND	64.3	NA	ND	0.00049 J	0.0123 J
Oct-2016	0.0512	NA	ND	0.0025 J	2.34	NA	0.0006 J	ND	66.7	NA	ND	0.00064 J	0.0079 J
May-2017	0.0382	NA	ND	0.0019 J,B	2.47	NA	0.00068 J	ND	76	NA	ND	0.00047 J	0.0144 JB
Oct-2017	0.0203	NA	ND	0.0013 JB	2.31	NA	0.00059 J	ND	59.6	NA	ND	ND	0.0062 J
May-2018	0.043	NA	ND	0.0034	2.2 J	NA	0.0013 JB	ND	73.2	NA	ND	ND	0.0092 B
Nov-2018	0.057	NA	ND	0.0035	1.9 J	NA	0.00075 J	ND	80.2	NA	0.000095 J	0.0041	0.01
May-2019	0.063	NA	ND	0.0035	ND	NA	ND	ND	24.1	NA	ND	0.0059	0.019
Oct-2019	0.05	NA	ND	0.0037	2.6 J	NA	0.0013 J	ND	96.3	NA	ND	ND	0.015
May-2020	0.056	NA	ND	0.0054	2.3 J	NA	0.001 J	ND	38.6	NA	ND	0.0012 D6	0.011 D6
Oct-2020	0.011	NA	ND	ND	2.3 J	NA	ND	ND	39.7	NA	ND	0.0027 J	ND
Apr-2021	0.013	NA	ND	ND	2.3	NA	ND	ND	43.4	NA	ND	ND	0.0066 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-1***												
Oct-2021	0.009	*NA*	*ND*	*0.0012 J*	2.2	*NA*	*ND*	*ND*	48.4	*NA*	*ND*	*0.00028 J*	*0.0035 J*
May-2022	0.012	*NA*	*ND*	*0.0014 J*	2.3	*NA*	*ND*	*ND*	42.6	*NA*	*ND*	*ND*	0.0055
Oct-2022	0.01	*NA*	*ND*	*0.0014 J*	2.5	*NA*	*ND*	*ND*	42.6	*NA*	*ND*	*ND*	0.006

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***SW-1***																
Nov-1993	NA	ND	ND	ND	ND	ND	NA	NA	NA	NA	ND	ND	NA	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	23	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.5	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-1*																
Jun-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.46 J*	*ND*	*ND*	*4.84 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.09 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.25 J,B*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***SW-1***																
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.4 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-1***															
Nov-1993	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA	NA	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-1***															
Jun-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-1***															
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-1***															
Nov-1993	ND	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-1***															
May-2005	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jun-2005	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	1.7	2.1 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-1***															
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-2***											
Nov-1993	28	28	ND	39.3	18.4	1.3	ND	5.8	306	80	200	104
Apr-1994	30	30	0.2	22.7	8.6	0.5	ND	6.15	164	26.1	107	61.88
Apr-1995	23.7	23.7	ND	ND	13.7	0.7	ND	6.5	140	23.7	70	47
Apr-1997	ND	24	ND	ND	11	0.21	ND	NA	NA	32	192	54
Apr-1997	ND	17	ND	ND	14	0.22	ND	NA	NA	27	164	21
Oct-1997	23	23	0.39	ND	25.8	2.54	ND	6.83	92.2	15.1	17	36
Apr-1998	13	13	0.33	11	6.7	0.2	ND	6.29	164.7	18.4	72	37
Apr-1999	31	31	0.29	14	20.4	0.503	ND	5.99	296	46.6	480	89
Oct-1999	4	4	0.2	ND	4.95	ND	ND	5.62	62.2	13.8	40	15
Oct-2000	30	NA	ND	16	18.1	ND	ND	6.69	130.4	10.5	90	50.3
Apr-2001	36	NA	ND	17	14.9	ND	ND	NA	NA	15.5	151	77.2
Sep-2001	45	45	0.25	22	16.2	ND	ND	7.2	202	22.2	121	70.5
Mar-2002	46	46	ND	28	13.7	ND	ND	7.1	388	116	256	104
Sep-2002	80	80	ND	21	10.3	ND	ND	7.4	327	49.2	206	140
Mar-2003	45	45	ND	25	19	0.254	ND	7.1	212	23.6	133	71.6
Oct-2003	39	39	ND	23	29.4	0.358	ND	6.7	233	10.3	174	59.6
Apr-2004	110	110	ND	46	30	1.63	ND	7.7	372	31	248	143
Oct-2004	35	35	ND	26	23.1	0.53	ND	6.95	160.2	15.7	121	60.4
Apr-2005	42	42	ND	21	13.9	0.36	ND	6.5	131.7	14.2	185	61.9
Mar-2006	30	30	ND	ND	31.7	0.42	ND	6.9	192.3	24.6	146	58.6
Mar-2007	49	49	ND	19	54.6	0.44	ND	6.9	401	20.1	165	72.8
Mar-2008	43	43	ND	26	60.8	0.29	ND	7.1	392	25.3	199	74.3
Mar-2009	28	28	ND	ND	45.5	0.26	ND	6	320	19.3	160	51
Apr-2010	32	32	ND	23	42.9	0.39	ND	7	188.5	16.9	132	50.6
Oct-2010	59	59	ND	26	45.7	0.15	ND	7.6	309	26.2	214	96.1
Apr-2011	37	37	ND	20	53.7	0.47	ND	6.8	210	19.8	160	59.4
Sep-2011	89	89	ND	43	26	0.44	0.03	7.2	279	21.3	208	109
Mar-2012	23	23	ND	ND	56.6	0.43	0.02	6.1	202	12.9	140	45.7
Sep-2012	32.8	32.8	ND	81.1	24.5	0.212	ND	5.7	146.9	11.4	116	50.3
Mar-2013	31.9	31.9	ND	19.5	43.9	0.229	ND	6.9	310	19.7	162	52.6
Oct-2013	48.6	48.6	ND	42.8	11.4	0.293	ND	7.2	174.5	29.7	161	74.3
Mar-2014	33.2	33.2	ND	37	73.9	0.246	ND	6.5	354	22.7	204	62.1
Oct-2014	44	44	ND	23	45.2	0.0948	ND	6.9	177.5	11.7	131	49.9
Apr-2015	108	108	0.195 J	53	81.9	0.987	ND	6.4	528	25.1	338	137
Nov-2015	60	60	ND	33	37.5	0.362	ND	7.4	310	27.7	250	95.2
May-2016	53.8	53.8	ND	21	56.4	0.104	ND	6.2	354	12.8	194	77.4
Oct-2016	112	112	ND	97	32.6	NA	NA	7.1	565	55	356	154

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-2***											
May-2017	51.8	51.8	*ND*	20	37.4	0.504	*ND*	6.9	368	15	151	74
Oct-2017	63.2	63.2	*ND*	30	4.97	*ND*	*ND*	6.9	238	9.23	102	71.5
May-2018	60	60	0.16	42.3	33.2	*ND*	0.021	6	234	13.7	68	81.7
Nov-2018	88	88	*0.052 J*	*20.8 J*	24.2	0.21	*0.0069 J*	7.99	328	17.1	147	104
May-2019	78	*NA*	*ND*	*ND*	53.6	0.38	0.013	7.49	374	15.8	206	93.8
Oct-2019	122	*NA*	*ND*	*12.6 J*	8.9	0.29	*ND*	7.24	872	*5.1 J*	122	134
May-2020	68	68	*ND*	55.9	46.9	0.46	*0.0057 J*	7.25	530	10.9	199	84.5
Oct-2020	92	*NA*	*ND*	29.6	15.1	0.21	*ND*	6.93	327	16.1	146	121
Apr-2021	80	*NA*	*ND*	*14.8 J*	41	0.44	*ND*	8.19	304	16.6	150	97.8
Oct-2021	20	*NA*	*ND*	*17 J*	27.8	0.61	*ND*	6.55	365	10.5	164	113
May-2022	72	*NA*	*ND*	26	38.8	*0.095 J*	*ND*	7.11	362	12.8	172	99.3 N3
Oct-2022	74	*NA*	*ND*	26.7	35.9	*0.065 J*	*ND*	6.82	362	19	131	95.5 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-2***													
Nov-1993	NA	ND	ND	NA	ND	32.3	NA	ND	NA	ND	0.2	NA	ND	5.8	NA
Apr-1994	NA	ND	0.008	NA	ND	20	NA	ND	NA	ND	0.37	NA	ND	2.9	NA
Apr-1995	ND	ND	ND	ND	ND	14.7	NA	ND	ND	ND	0.6	NA	0.006	2.5	NA
Oct-1996	ND	ND	0.028	ND	ND	15	14	ND	ND	ND	1.1	1.1	ND	3.1	2.8
Apr-1997	ND	ND	0.029	ND	ND	15	16	ND	ND	ND	0.71	0.7	ND	3.2	3.5
Apr-1997	ND	ND	0.035	ND	ND	11	12	ND	ND	ND	0.79	0.56	ND	3	3.1
Oct-1997	ND	ND	0.031	ND	ND	9.35	NA	ND	ND	ND	1.46	NA	ND	2.19	NA
Apr-1998	ND	ND	0.03	ND	ND	10.4	NA	ND	ND	ND	1.01	NA	ND	2.63	NA
Apr-1999	ND	ND	0.066	ND	ND	25.4	NA	0.03	0.013	0.015	12.5	NA	ND	6.09	NA
Oct-1999	ND	ND	0.045	ND	ND	22.5	NA	ND	ND	ND	1.03	NA	ND	5.03	NA
Oct-2000	ND	ND	0.036	ND	ND	14.4	NA	ND	ND	ND	0.311	NA	ND	3.48	NA
Apr-2001	ND	ND	0.03	ND	ND	22.7	NA	ND	ND	ND	0.326	NA	ND	4.98	NA
Sep-2001	ND	ND	0.031	ND	ND	21.1	NA	ND	ND	ND	0.502	NA	ND	4.35	NA
Mar-2002	ND	ND	0.039	ND	ND	31	NA	ND	ND	ND	0.68	NA	ND	6.53	NA
Sep-2002	ND	ND	0.025	ND	ND	43.8	NA	ND	ND	ND	0.286	NA	ND	7.55	NA
Mar-2003	ND	ND	0.026	ND	ND	21.9	NA	ND	ND	0.01	0.257	NA	ND	4.11	NA
Oct-2003	ND	ND	0.04	ND	ND	17.2	NA	ND	ND	ND	0.8	NA	ND	4.06	NA
Apr-2004	ND	0.002	0.034	ND	ND	44.5	NA	ND	ND	0.012	0.378	NA	0.003	7.88	NA
Oct-2004	ND	ND	0.041	ND	ND	17.5	NA	ND	ND	ND	0.271	NA	ND	4.06	NA
Apr-2005	ND	0.003	0.03	ND	ND	18.9	NA	ND	ND	ND	1.69	NA	0.003	3.57	NA
Mar-2006	ND	ND	0.038	ND	ND	16.2	NA	ND	ND	ND	0.071	NA	ND	4.41	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-2***													
Mar-2007	ND	ND	0.029	ND	ND	23.7	NA	ND	ND	ND	0.478	NA	ND	4.1	NA
Mar-2008	ND	0.003	0.032	ND	ND	22	NA	ND	ND	ND	0.399	NA	ND	4.7	NA
Mar-2009	ND	ND	0.028	ND	ND	14.5	NA	ND	ND	ND	0.391	NA	ND	3.59	NA
Apr-2010	ND	ND	0.039	ND	ND	14.8	NA	ND	ND	ND	0.329	NA	ND	3.31	NA
Oct-2010	ND	ND	0.038	ND	ND	29	NA	ND	ND	ND	0.311	NA	ND	6.09	NA
Apr-2011	ND	ND	0.041	ND	ND	17.5	NA	ND	ND	ND	0.436	NA	ND	3.82	NA
Sep-2011	ND	0.003	0.035	ND	ND	33.8	NA	ND	ND	ND	1.18	NA	ND	5.94	NA
Mar-2012	ND	ND	0.046	ND	ND	12.5	NA	ND	ND	ND	0.727	NA	ND	3.51	NA
Sep-2012	ND	0.0013 J	0.0369	0.00007 J	ND	14.3	NA	ND	0.0016 J	0.0013 J	1.13	NA	ND	3.55	NA
Mar-2013	ND	ND	0.0303	ND	ND	15.1	NA	0.0027 J	0.0017 J	0.0018 J	0.671	NA	0.0014 J	3.62	NA
Oct-2013	0.000546 J	ND	0.033	ND	0.000306 J	23.5	NA	0.0066 J	0.0013 J	0.0045 J	1.03	NA	0.004	3.79	NA
Mar-2014	0.000427 J	0.000355 J	0.0333	ND	ND	18.2	NA	0.0014 J	0.0017 J	0.002 J	0.43	NA	ND	4.04	NA
Oct-2014	0.00048 J	0.000872 J	0.0412	ND	ND	13.6	NA	0.001 J	0.000988 J	0.000866 J	0.549	NA	ND	3.88	NA
Apr-2015	0.000938 J	0.0022	0.039	ND	0.000074 J	42.4	NA	0.002 J	0.0015 J	0.0053 J	0.66	NA	0.0012 J	7.44	NA
Nov-2015	0.000754 J	0.0036	0.0675	0.000225 J	0.000081 J	30.1	NA	0.0201	0.0017 J	0.0051 J	6.97	NA	0.0079	4.86	NA
May-2016	ND	0.0011 J	0.0403	ND	ND	22.7	NA	0.0015 J	0.0014	0.00071 J	1.93	NA	0.00028 J	5.06	NA
Oct-2016	0.00066 J	0.0036 J	0.0535	ND	ND	41.8	NA	0.0021 J	0.0009 J	0.0042	1.14	NA	0.00083 J	12.1	NA
May-2017	ND	0.0013 J	0.0195	ND	ND	22.5	NA	0.0017 J	0.00081 J	0.0016 J	1.44	NA	0.00055 J	4.3	NA
Oct-2017	ND	0.0017 J	0.0128	ND	ND	21.6	NA	0.0012 J	0.00043 J	0.0012 J	0.619	NA	0.00046 J	4.28	NA
May-2018	0.0003 J	0.00094 JB	0.02	ND	0.000022 J	24.4	NA	0.0042 J	0.0012	0.0038 B	1.3	NA	0.00042 J	5.1	NA
Nov-2018	0.00015 J	0.00032 J	0.026	0.00003 J	ND	32	NA	0.0025 J	0.00058	0.0027	0.93	NA	0.00032 J	5.8	NA
May-2019	ND	ND	0.035	ND	ND	28.2	NA	ND	0.0011	ND	1.2	NA	ND	5.7	NA
Oct-2019	0.00014 J	0.00036 J	0.033	ND	0.00019 J	38.1	NA	0.0018 J	0.0004 J	0.0062	0.84	NA	0.0002 J	9.4	NA
May-2020	0.00013 J	ND	0.033	ND	ND	24.8	NA	0.0043 J	0.00092	0.0017 J	0.9	NA	ND	5.5	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-2***													
Oct-2020	*0.00031 J*	*ND*	0.032	*ND*	*ND*	37.5	*NA*	*0.0092 J*	*0.00061 J*	*ND*	0.84	*NA*	*ND*	6.6	*NA*
Apr-2021	*ND*	*ND*	0.035	*ND*	*ND*	29.2	*NA*	*0.0011 J*	*0.00087 J*	*ND*	1.1	*NA*	*ND*	6	*NA*
Oct-2021	*0.00012 J*	*0.00067 J*	0.039	*ND*	*ND*	32.1	*NA*	*ND*	*0.00032 J*	*0.00031 J*	0.43	*NA*	*0.000066 J*	7.9	*NA*
May-2022	*ND*	*0.0013 J*	0.03	*ND*	*ND*	29.7	*NA*	*0.0014 J*	*0.00074 J*	*0.0015 J*	1.5	*NA*	0.00056	6.1	*NA*
Oct-2022	*ND*	*0.00094 J*	0.033	*ND*	*ND*	28	*NA*	*0.00097 J*	*ND*	*0.00096 J*	0.83	*NA*	*ND*	6.2	*NA*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-2***												
Nov-1993	0.1	NA	ND	NA	6.2	NA	ND	NA	6.7	NA	NA	NA	ND
Apr-1994	0.061	NA	ND	NA	3.3	NA	ND	NA	4.8	NA	NA	NA	0.014
Apr-1995	0.02	NA	ND	ND	3.6	NA	ND	ND	4.7	NA	ND	ND	0.03
Oct-1996	0.062	0.047	NA	ND	ND	ND	ND	ND	4.9	4.7	ND	ND	0.04
Apr-1997	0.062	0.065	ND	ND	3.1	3.6	ND	ND	5.7	6.3	ND	ND	0.037
Apr-1997	0.059	0.065	ND	ND	3.4	3.5	ND	ND	6.1	7.2	ND	ND	ND
Oct-1997	0.105	NA	NA	ND	2.16	NA	ND	ND	1.65	NA	ND	ND	0.017
Apr-1998	0.069	NA	ND	2.16	ND	NA	ND	3.59	ND	NA	ND	0.05	NA
Apr-1999	0.141	NA	NA	0.047	5.54	NA	ND	ND	11.7	NA	ND	0.046	0.11
Oct-1999	0.138	NA	NA	0.016	11.3	NA	ND	ND	8.72	NA	ND	ND	0.011
Oct-2000	0.057	NA	NA	ND	3.63	NA	ND	ND	8.6	NA	ND	ND	ND
Apr-2001	0.071	NA	NA	0.011	4.57	NA	ND	ND	17.6	NA	ND	ND	0.015
Sep-2001	0.059	NA	NA	ND	4.39	NA	ND	ND	11.1	NA	ND	ND	0.012
Mar-2002	0.054	NA	NA	ND	5.48	NA	ND	ND	37.7	NA	ND	ND	0.012
Sep-2002	0.023	NA	NA	0.022	6.52	NA	ND	ND	5.22	NA	ND	ND	0.032
Mar-2003	0.063	NA	NA	0.014	5.32	NA	ND	ND	14	NA	ND	ND	0.023
Oct-2003	0.052	NA	NA	ND	4.41	NA	ND	ND	17	NA	ND	ND	0.012
Apr-2004	0.029	NA	ND	ND	14	NA	ND	ND	25.6	NA	ND	ND	0.023
Oct-2004	0.028	NA	ND	ND	7.12	NA	ND	ND	14.8	NA	ND	ND	ND
Apr-2005	0.048	NA	ND	ND	3.92	NA	ND	ND	10.2	NA	ND	ND	0.039
Mar-2006	ND	NA	ND	ND	2.75	NA	ND	ND	17	NA	ND	ND	ND
Mar-2007	0.039	NA	ND	ND	3.53	NA	ND	ND	27.7	NA	ND	ND	0.014

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-2***												
Mar-2008	0.048	NA	ND	ND	3.57	NA	ND	ND	34.8	NA	ND	ND	ND
Mar-2009	0.052	NA	ND	ND	2.57	NA	ND	ND	21.4	NA	ND	ND	ND
Apr-2010	0.03	NA	ND	ND	3.25	NA	ND	ND	23.2	NA	ND	ND	0.011
Oct-2010	0.026	NA	ND	ND	6.05	NA	ND	ND	25.2	NA	ND	ND	ND
Apr-2011	0.044	NA	ND	ND	2.7	NA	ND	ND	26.1	NA	ND	ND	ND
Sep-2011	0.037	NA	ND	ND	9.74	NA	ND	ND	16.3	NA	ND	ND	ND
Mar-2012	0.043	NA	ND	ND	3.2	NA	ND	ND	29.9	NA	ND	ND	ND
Sep-2012	0.06	NA	ND	0.0027 J	5.93	NA	0.000415 J	ND	14.2	NA	ND	ND	0.0057 J
Mar-2013	0.0394	NA	0.000056 J	0.0039 J	3.39	NA	ND	ND	22.6	NA	ND	ND	0.0193
Oct-2013	0.0259	NA	ND	0.0071 J	8.3	NA	ND	0.000018 J	6.88	NA	ND	0.0079 J	0.0186
Mar-2014	0.0396	NA	ND	0.0036 J	3.26	NA	ND	ND	38.9	NA	ND	0.0021 J	0.0106
Oct-2014	0.0312	NA	0.000022 J	0.0019 J	4.19	NA	ND	ND	23.2	NA	ND	0.0011 J	0.0051 J
Apr-2015	0.0453	NA	ND	0.0067 J	12.1	NA	ND	ND	58.6	NA	ND	0.0043 J	0.0131
Nov-2015	0.0381	NA	ND	0.0051 J	6.95	NA	0.0013 J	ND	19.4	NA	0.000222 J	0.0234	0.0103
May-2016	0.058	NA	ND	0.0018 J	2.7	NA	ND	ND	30.6	NA	ND	0.0011	0.0129 J
Oct-2016	0.0327	NA	ND	0.0061	23.1	NA	ND	ND	19.4	NA	ND	0.0033	0.0059 J
May-2017	0.0309	NA	ND	0.0019 J,B	3.42	NA	ND	ND	21.6	NA	ND	0.0018	0.0072 JB
Oct-2017	0.0125	NA	ND	0.0012 JB	4.86	NA	ND	ND	3.68	NA	ND	0.0021	ND
May-2018	0.062	NA	ND	0.005	3.9 J	NA	0.0011 JB	ND	19.7	NA	ND	0.00034 J	0.007 B
Nov-2018	0.026	NA	ND	0.0039	4 J	NA	0.00019 J	ND	14.8	NA	ND	0.0048	0.0052
May-2019	0.067	NA	ND	0.0021	ND	NA	ND	ND	29.4	NA	ND	0.0045	0.0051
Oct-2019	0.026	NA	ND	0.00074	2.4 J	NA	ND	ND	5.9	NA	ND	0.0032	0.011
May-2020	0.042	NA	ND	0.0016	2.8 J	NA	ND	ND	25.5	NA	ND	0.0027	0.0029 J
Oct-2020	0.019	NA	ND	0.0029	4.8 J	NA	ND	ND	9.9	NA	ND	0.0051	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-2***												
Apr-2021	0.032	*NA*	*ND*	*0.0016 J*	4	*NA*	*ND*	*ND*	24.6	*NA*	*ND*	*0.0021 J*	*0.0043 J*
Oct-2021	0.017	*NA*	*ND*	*0.00075 J*	4.9	*NA*	*ND*	*ND*	17.8	*NA*	*ND*	*0.00056 J*	*ND*
May-2022	0.031	*NA*	*ND*	*0.0018 J*	6.3	*NA*	*ND*	*ND*	28.1	*NA*	*ND*	*0.0024 J*	*ND*
Oct-2022	0.067	*NA*	*ND*	*0.0015 J*	7.4	*NA*	*0.00086 J*	*ND*	18.9	*NA*	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***SW-2***																
Nov-1993	NA	ND	ND	ND	ND	ND	NA	NA	NA	NA	ND	ND	NA	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5 J	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2002	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jan-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-2*																
Apr-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.93 J*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.72 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.67 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.47 J*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.36 J,B*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-2*																
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.7	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.5	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.3	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.2 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*SW-2*															
Nov-1993	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA	NA	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jan-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-2***															
Apr-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-2***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-2***															
Nov-1993	*ND*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jul-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jun-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Dec-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jan-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-2***															
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.1 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 R	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-2***															
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-3***											
Apr-1995	10.3	10.3	*ND*	*ND*	14.4	0.8	*ND*	6.2	157	18.5	66	19.2
Apr-1997	*ND*	15	*ND*	*ND*	22	0.35	*ND*	*NA*	*NA*	13	109	35
Oct-1997	12	12	0.44	17	4.53	*ND*	*ND*	6.7	121	15.4	41	28
Apr-1998	43	43	0.25	26	3.22	*ND*	*ND*	7.23	212	36.3	140	88
Apr-1999	20	20	0.14	*ND*	103	0.416	*ND*	6.18	369	13.6	260	51
Oct-2000	23	*NA*	*ND*	27	39.4	*ND*	*ND*	7.2	170.6	21	105	42.5
Apr-2001	15	*NA*	*ND*	12	18.9	0.395	*ND*	*NA*	*NA*	6.13	131	40
Sep-2001	28	28	0.26	33	35.3	1.38	*ND*	7.1	318	13.3	123	48
Mar-2002	88	88	*ND*	29	187	3.74	*ND*	7.1	444	61.7	353	210
Sep-2002	14	14	*ND*	*ND*	29.8	*ND*	*ND*	6.4	231	14.6	111	44.1
Mar-2003	13	13	*ND*	14	49.1	0.239	*ND*	5.8	209	14.1	118	34.7
Oct-2003	26	26	*ND*	21	47.4	0.398	*ND*	6.3	268	9	131	51.5
Apr-2004	15	15	*ND*	11	53.7	0.49	*ND*	7.1	252	11.3	130	40.1
Oct-2004	20	20	*ND*	18	45.4	0.61	*ND*	7	179.6	8.04	128	45
Apr-2005	13	13	*ND*	12	45.4	0.48	*ND*	6.5	176	11.5	150	39.1
Mar-2006	13	13	*ND*	*ND*	59.5	0.65	*ND*	6.7	209	12.1	148	38.2
Mar-2007	14	14	0.51	11	131	0.56	*ND*	5.9	544	13.3	220	45.9
Mar-2008	15	15	0.38	12	104	0.35	*ND*	6.5	445	12.6	210	40.2
Mar-2009	13	13	*ND*	*ND*	85.8	0.26	*ND*	6.1	387	9.7	206	39.7
Apr-2010	21	21	*ND*	17	62.4	0.44	*ND*	7.4	359	14.8	157	39.6
Oct-2010	116	116	*ND*	45	22.7	0.26	*ND*	7.4	375	56.3	294	174
Apr-2011	104	104	*ND*	38	6.96	*ND*	*ND*	8.1	301	46.7	244	65.5
Sep-2011	130	130	*ND*	57	18.4	0.51	0.05	7.3	311	27.5	277	139
Mar-2012	20	20	*ND*	*ND*	90.2	0.45	0.03	6.3	400	13.8	206	48.1
Sep-2012	131	131	*ND*	32.9	17.7	0.304	*ND*	6.4	440	27.6	258	167
Mar-2013	94.2	94.2	*ND*	93.1	1.78	*ND*	*ND*	8.4	323	45.1	196	126
Oct-2013	55.2	55.2	*0.113 J*	46.7	4.53	0.522	*ND*	7.4	151.7	23.1	172	77
Mar-2014	15	15	*ND*	25	162	0.415	*ND*	6.2	543	22.2	274	48.3
Oct-2014	30.8	30.8	*ND*	21	88.6	0.123	*ND*	6.9	356	14	201	59.3
Apr-2015	24.6	24.6	*ND*	12	107	0.332	*ND*	6.1	404	17	250	56.5
Nov-2015	46.3	46.3	*ND*	18	108	0.299	*ND*	7.4	510	15.6	275	98
May-2016	50.6	50.6	*ND*	15	100	0.323	*ND*	6.8	515	18.7	258	87.4
Oct-2016	81.3	81.3	*ND*	47	7.37	*NA*	*NA*	7.1	332	25.8	213	107
May-2017	43.8	43.8	*ND*	14	80.8	0.357	0.132	7	547	23.5	218	82.1
Oct-2017	30.2	30.2	*ND*	13	12.2	0.063	*ND*	6.5	167.7	14.1	74	41.8
May-2018	30	30	*0.045 J*	27.2	49.1	*ND*	*ND*	5.3	275	25.6	68	62.4
Nov-2018	114	114	*ND*	31.5	3	*0.063 J*	*ND*	8.58	313	19.8	63	124

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-3***											
May-2019	70	*NA*	*ND*	*ND*	71.3	*ND*	*ND*	7.06	433	18.4	228	93.1
Oct-2019	100	*NA*	*ND*	30.3	53.5	0.11	0.014	7.35	439	17.2	226	131
May-2020	98	98	*ND*	29.1	4.9	1.2	**0.017 D6D8**	7.61	354	17.4	181	120
Oct-2020	140	*NA*	*ND*	36.4	*1.8 J*	0.1	*ND*	7.96	380	20.6	146	138
Apr-2021	100	*NA*	*ND*	27.8	4.1	0.42	*0.0095 J*	9.55	232	12	119	111
Oct-2021	110	*NA*	*ND*	*ND*	77.1 ML	0.87	*ND*	7.07	562	*9.8 J*	241	107
May-2022	116	*NA*	0.17	28.3	4	0.53	*0.0078 J*	7.1	352	15.9	159	138 N3
Oct-2022	56	*NA*	*ND*	47.2	63.4	*ND*	*ND*	6.34	438	43.6	223	102 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*SW-3*													
Apr-1995	ND	ND	ND	ND	ND	4.4	NA	ND	ND	ND	0.44	NA	ND	2	NA
Oct-1996	ND	ND	0.037	ND	ND	9.5	8.8	ND	ND	ND	0.7	0.42	ND	2.8	2.8
Apr-1997	ND	ND	0.049	ND	ND	9.1	7.9	ND	ND	ND	1.6	0.34	0.008	2.8	2.5
Oct-1997	ND	ND	0.04	ND	ND	7.1	NA	ND	ND	ND	0.784	NA	ND	2.63	NA
Apr-1998	ND	ND	0.017	ND	ND	27	NA	ND	0.041	ND	1.2	NA	ND	4.94	NA
Apr-1999	ND	ND	0.052	ND	ND	14.3	NA	ND	ND	ND	1.64	NA	ND	3.68	NA
Oct-1999	ND	ND	0.059	ND	ND	11.9	NA	ND	ND	ND	1.18	NA	ND	3.71	NA
Oct-2000	ND	ND	0.038	ND	ND	11.3	NA	ND	ND	ND	0.687	NA	ND	3.49	NA
Apr-2001	ND	ND	0.044	ND	ND	10.4	NA	ND	ND	ND	0.287	NA	ND	3.41	NA
Sep-2001	ND	ND	0.044	ND	ND	13.1	NA	ND	ND	ND	0.495	NA	ND	3.7	NA
Mar-2002	ND	ND	0.043	ND	ND	63.2	NA	ND	ND	ND	0.974	NA	ND	12.7	NA
Sep-2002	ND	ND	0.046	ND	ND	11.8	NA	ND	ND	ND	0.141	NA	ND	3.58	NA
Mar-2003	ND	ND	0.038	ND	ND	9.34	NA	ND	ND	ND	0.171	NA	ND	2.78	NA
Oct-2003	ND	ND	0.049	ND	ND	13.9	NA	ND	ND	ND	1.5	NA	ND	4.04	NA
Apr-2004	ND	ND	0.047	ND	ND	10.5	NA	ND	ND	ND	0.536	NA	ND	3.35	NA
Oct-2004	ND	ND	0.045	ND	ND	11.7	NA	ND	ND	ND	0.28	NA	ND	3.8	NA
Apr-2005	ND	0.003	0.043	ND	ND	10.2	NA	ND	ND	ND	0.411	NA	ND	3.3	NA
Mar-2006	ND	ND	0.051	ND	ND	9.61	NA	ND	ND	ND	0.145	NA	ND	3.46	NA
Mar-2007	ND	ND	0.056	ND	ND	13.2	NA	ND	ND	ND	0.139	NA	ND	3.62	NA
Mar-2008	ND	ND	0.046	ND	ND	10.5	NA	ND	ND	ND	0.161	NA	ND	3.39	NA
Mar-2009	ND	ND	0.045	ND	ND	10.3	NA	ND	ND	ND	0.124	NA	ND	3.4	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-3***													
Apr-2010	ND	ND	0.044	ND	ND	10.8	NA	ND	ND	ND	0.39	NA	ND	3.05	NA
Oct-2010	ND	ND	0.023	ND	ND	55.6	NA	ND	ND	ND	0.251	NA	ND	8.88	NA
Apr-2011	ND	ND	ND	ND	ND	43.2	NA	ND	ND	ND	0.695	NA	ND	6.06	NA
Sep-2011	ND	0.003	0.026	ND	ND	44	NA	ND	ND	ND	0.298	NA	ND	7.07	NA
Mar-2012	ND	ND	0.061	ND	ND	12.5	NA	ND	ND	ND	0.639	NA	ND	4.11	NA
Sep-2012	ND	ND	0.0583 J	ND	ND	53.8	NA	0.0111 J	0.011 J	0.009 J	2.96	NA	ND	8.01	NA
Mar-2013	ND	0.0012 J	0.293	0.000214 J	ND	40.5	NA	0.0029 J	0.0112	0.0044 J	0.811	NA	0.0022	5.97	NA
Oct-2013	0.000514 J	ND	0.0183	ND	ND	25.6	NA	0.0053 J	0.0024 J	0.0056 J	0.67	NA	0.000659 J	3.17	NA
Mar-2014	0.000334 J	ND	0.0506	ND	ND	12.4	NA	0.000922 J	0.0029 J	0.000955 J	0.116	NA	ND	4.23	NA
Oct-2014	0.000416 J	0.000399 J	0.0703	ND	ND	15.5	NA	0.000492 J	0.0042 J	0.000492 J	0.469	NA	ND	5.02	NA
Apr-2015	0.000671 J	0.0004 J	0.0576	ND	ND	15.2	NA	0.000947 J	0.0028 J	0.0014 J	0.557	NA	0.000675 J	4.48	NA
Nov-2015	0.000352 J	0.000599 J	0.0701	ND	ND	28.8	NA	0.000715 J	0.0065 J	0.000868 J	0.758	NA	0.000331 J	6.3	NA
May-2016	ND	0.0006 J	0.059	ND	ND	25	NA	ND	0.0006 J	0.0005 J	0.255	NA	0.00017 J	6.09	NA
Oct-2016	ND	0.0012 J	0.0232	ND	ND	35.3	NA	0.00086 J	0.0012	0.0052	0.395	NA	0.00022 J	4.56	NA
May-2017	ND	ND	0.0512	ND	ND	23.2	NA	0.0012 J,B	0.0061	ND	0.773	NA	0.00012 J	5.88	NA
Oct-2017	ND	ND	0.0392	ND	ND	11	NA	ND	0.0044	ND	1.14	NA	0.00027 J	3.46	NA
May-2018	0.00011 J	ND	0.045	ND	ND	16.8	NA	0.0029 J	0.0017	0.0018 JB	0.39	NA	0.000067 J	4.9	NA
Nov-2018	0.00036 J	ND	0.02	0.00011 J	0.000033 J	41.4	NA	0.0025 J	0.0011	0.0048	0.35	NA	0.00035 J	5	NA
May-2019	ND	ND	0.027	ND	ND	28.1	NA	ND	0.0018	0.0021	0.38	NA	ND	5.6	NA
Oct-2019	0.00018 J	0.00054 J	0.063	ND	0.00023 J	39.9	NA	0.0023 J	0.0021	0.0051	0.85	NA	0.00082 J	7.6	NA
May-2020	0.00017 J	0.00019 J	0.028	ND	ND	35.4	NA	0.0042 J	0.00057	0.0039	0.2	NA	ND	7.7	NA
Oct-2020	0.00026 J	ND	0.033	ND	ND	42.9	NA	0.0092 J	0.00046 J	ND	0.26	NA	ND	7.6	NA
Apr-2021	ND	ND	0.023	0.00018 J	ND	31.7	NA	0.00079 J	ND	0.0027 J	0.33	NA	ND	7.7	NA
Oct-2021	0.00009 J	ND	0.053	ND	ND	32.4	NA	ND	0.0013 J	ND	0.47	NA	0.00006 J	6.3	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-3***													
May-2022	*ND*	*0.00069 J*	0.026	*ND*	*ND*	41.5	*NA*	*0.00067 J*	*0.00086 J*	0.0044	0.26	*NA*	*0.00049 J*	8.3	*NA*
Oct-2022	*ND*	*0.001 J*	0.05	*ND*	*ND*	30.2	*NA*	*0.0018 J*	0.0038	*0.0024 J*	0.88	*NA*	0.00089	6.5	*NA*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*SW-3*												
Apr-1995	0.1	NA	ND	ND	1.2	NA	ND	ND	4.6	NA	ND	ND	0.04
Oct-1996	0.045	0.027	NA	ND	ND	ND	ND	ND	7.8	8	ND	ND	0.23
Apr-1997	0.047	ND	ND	ND	2.3	2.3	ND	ND	11	11	ND	ND	0.028
Oct-1997	0.038	NA	NA	ND	1.85	NA	ND	ND	10.4	NA	ND	ND	ND
Apr-1998	0.295	NA	**0.102**	3.58	ND	NA	ND	2.21	ND	NA	ND	0.248	NA
Apr-1999	0.028	NA	NA	ND	4.72	NA	ND	ND	49.2	NA	ND	ND	0.014
Oct-1999	0.083	NA	NA	0.013	3.49	NA	ND	ND	15.2	NA	ND	ND	ND
Oct-2000	0.026	NA	NA	ND	2.76	NA	ND	ND	19.9	NA	ND	ND	ND
Apr-2001	0.022	NA	NA	ND	2.5	NA	ND	ND	24.9	NA	ND	ND	ND
Sep-2001	0.03	NA	NA	ND	2.7	NA	ND	ND	21.5	NA	ND	ND	ND
Mar-2002	0.128	NA	NA	0.028	10.8	NA	ND	ND	7.24	NA	ND	ND	0.045
Sep-2002	0.011	NA	NA	ND	3.09	NA	ND	ND	19.4	NA	ND	ND	ND
Mar-2003	ND	NA	NA	ND	2.84	NA	ND	ND	31.3	NA	ND	ND	0.013
Oct-2003	0.075	NA	NA	ND	2.35	NA	ND	ND	26.4	NA	ND	ND	0.014
Apr-2004	0.025	NA	ND	ND	2.26	NA	ND	ND	33.2	NA	ND	ND	0.016
Oct-2004	0.011	NA	ND	ND	3.49	NA	ND	ND	27.4	NA	ND	ND	ND
Apr-2005	0.028	NA	ND	ND	2.15	NA	ND	ND	28.9	NA	ND	ND	ND
Mar-2006	ND	NA	ND	ND	1.94	NA	ND	ND	29.4	NA	ND	ND	ND
Mar-2007	0.018	NA	ND	ND	2.15	NA	ND	ND	67.7	NA	ND	ND	ND
Mar-2008	0.012	NA	ND	ND	2.18	NA	ND	ND	54.1	NA	ND	ND	ND
Mar-2009	ND	NA	ND	ND	2.21	NA	ND	ND	46.4	NA	ND	ND	ND
Apr-2010	0.022	NA	ND	ND	2.32	NA	ND	ND	31	NA	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-3***												
Oct-2010	0.021	NA	ND	ND	13.1	NA	ND	ND	14	NA	ND	ND	ND
Apr-2011	0.125	NA	ND	0.026	3.67	NA	ND	ND	4.63	NA	ND	ND	0.023
Sep-2011	0.029	NA	ND	ND	13.4	NA	ND	ND	13.8	NA	ND	0.01	ND
Mar-2012	0.042	NA	ND	ND	3.44	NA	ND	ND	48.2	NA	ND	ND	ND
Sep-2012	0.237	NA	ND	0.0209 J	18.5	NA	ND	ND	13.2	NA	ND	ND	0.0519 J
Mar-2013	0.0573	NA	0.000088 J	0.0265	3.23	NA	ND	0.000031 J	2.2	NA	ND	0.0043 J	0.0718
Oct-2013	0.0343	NA	ND	0.0114	6.69	NA	ND	0.000019 J	2.15	NA	ND	0.00094 J	0.0261
Mar-2014	0.115	NA	ND	0.0015 J	2.81	NA	ND	ND	74.8	NA	ND	ND	0.0064 J
Oct-2014	0.219	NA	ND	0.0022 J	4.18	NA	0.000787 J	ND	44.4	NA	ND	ND	0.0051 J
Apr-2015	0.136	NA	ND	0.0022 J	3.19	NA	ND	ND	61.8	NA	ND	0.0011 J	0.0093 J
Nov-2015	0.333	NA	ND	0.0024 J	4.25	NA	0.000606 J	ND	61.7	NA	0.000161 J	0.000718 J	0.0035 J
May-2016	0.0913	NA	ND	0.0015 J	3.04	NA	ND	ND	55.5	NA	ND	0.00025 J	0.0152 J
Oct-2016	0.0153	NA	ND	0.0162	9.17	NA	ND	ND	4.53	NA	ND	0.002	0.0073 J
May-2017	0.532	NA	ND	0.0011 J,B	2.76	NA	ND	ND	42.5	NA	ND	ND	ND
Oct-2017	0.45	NA	ND	ND	2.67	NA	ND	ND	8.68	NA	ND	0.00042 J	ND
May-2018	0.35	NA	ND	0.0019	2.1 J	NA	0.00066 JB	ND	27.6	NA	ND	0.0048	0.0035 JB
Nov-2018	0.015	NA	ND	0.014	2.9 J	NA	0.00014 J	ND	1.6 J	NA	ND	0.0047	0.013
May-2019	0.08	NA	ND	0.0044	ND	NA	ND	ND	40.1	NA	ND	0.0068	0.0067
Oct-2019	0.37	NA	ND	0.003	5.8	NA	0.00055 J	ND	31.4	NA	ND	0.0046	0.013
May-2020	0.015	NA	ND	0.0022	5.5	NA	ND	ND	5.1	NA	ND	0.0014	0.003 J
Oct-2020	0.01	NA	ND	0.0043	5.5	NA	ND	ND	2.6 J	NA	ND	0.0056	ND
Apr-2021	0.0095	NA	ND	0.0018 J	4.4	NA	ND	ND	4.2	NA	ND	0.0021 J	0.0033 J
Oct-2021	0.4	NA	ND	ND	4	NA	ND	ND	45.8	NA	ND	ND	ND
May-2022	0.019	NA	ND	0.0026	4.1	NA	ND	ND	5.6	NA	ND	0.0018 J	0.0053

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-3***												
Oct-2022	0.24	*NA*	*ND*	0.0041	4.9	*NA*	*0.001 J*	*ND*	37.2	*NA*	*ND*	0.0037	0.014

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-3*																
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7 J	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-3*																
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.15 J*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.65 J*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.47 J*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.14 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.25 J,B*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.3 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.4	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.6 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.1 JBIH*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-3*																
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.7	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*SW-3*															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-3***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-3***															
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-3***															
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jul-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jun-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Dec-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

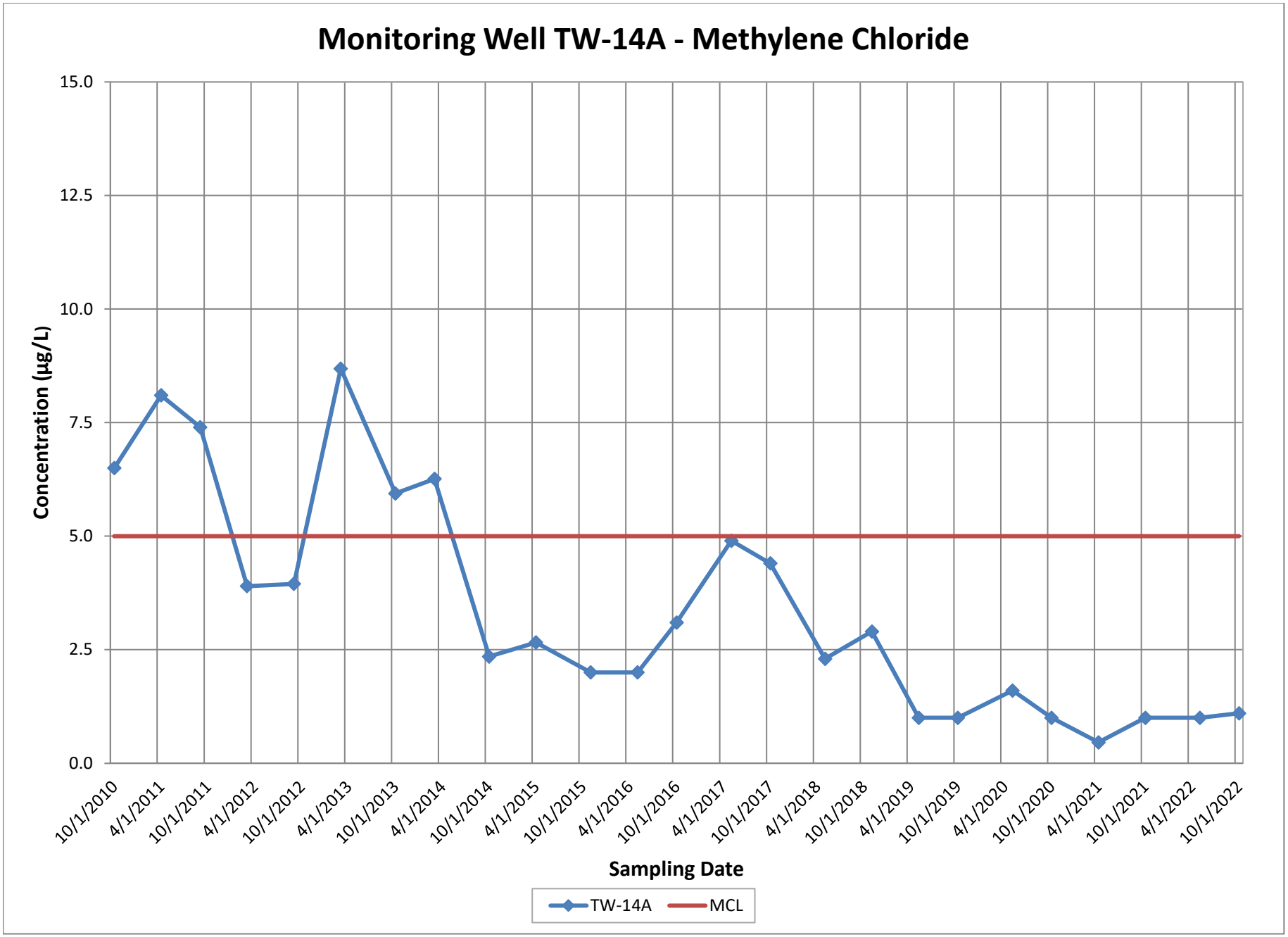
Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-3***															
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.5 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 R	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

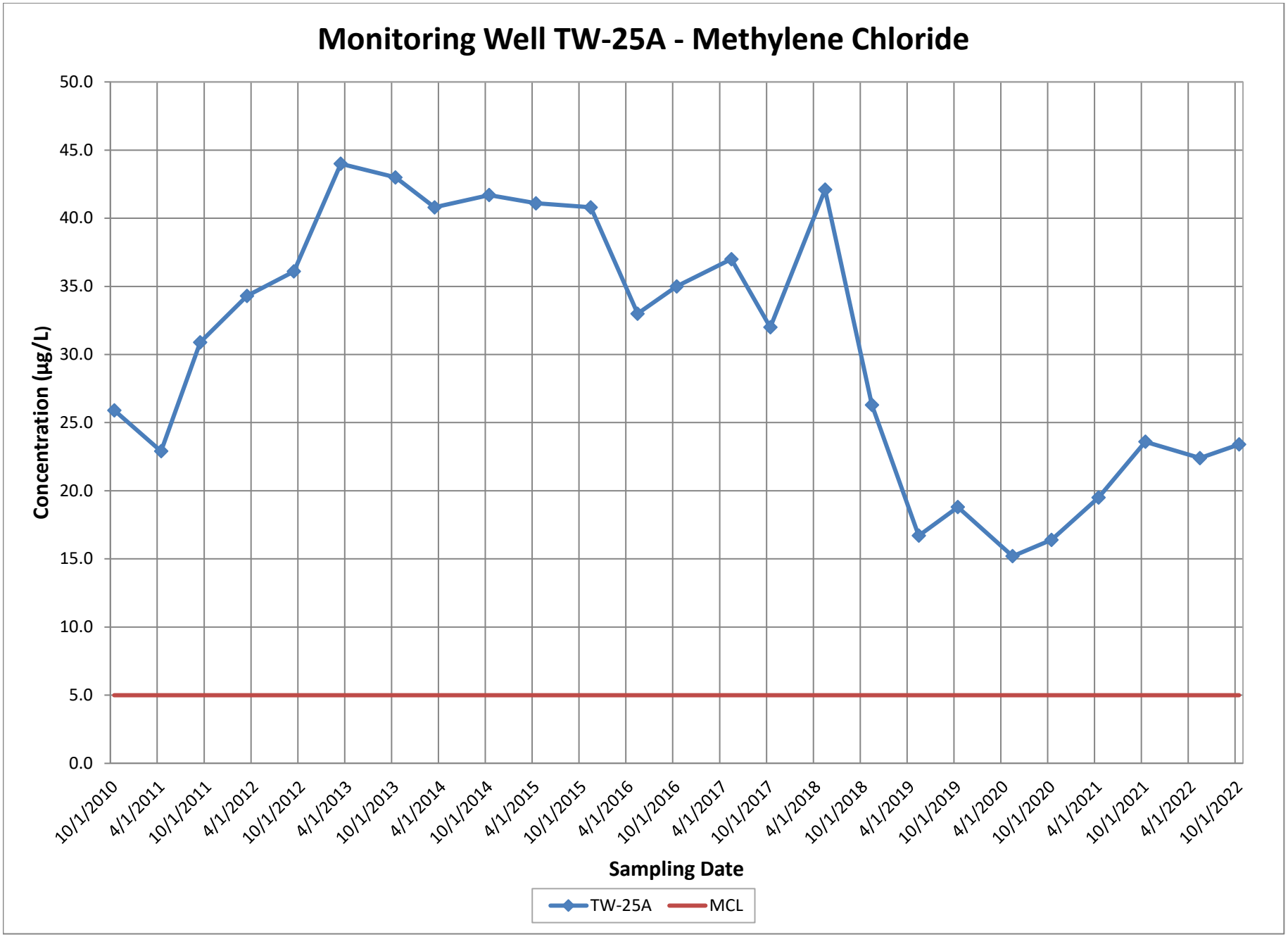
MCLs and Results are in ug/L unless indicated otherwise

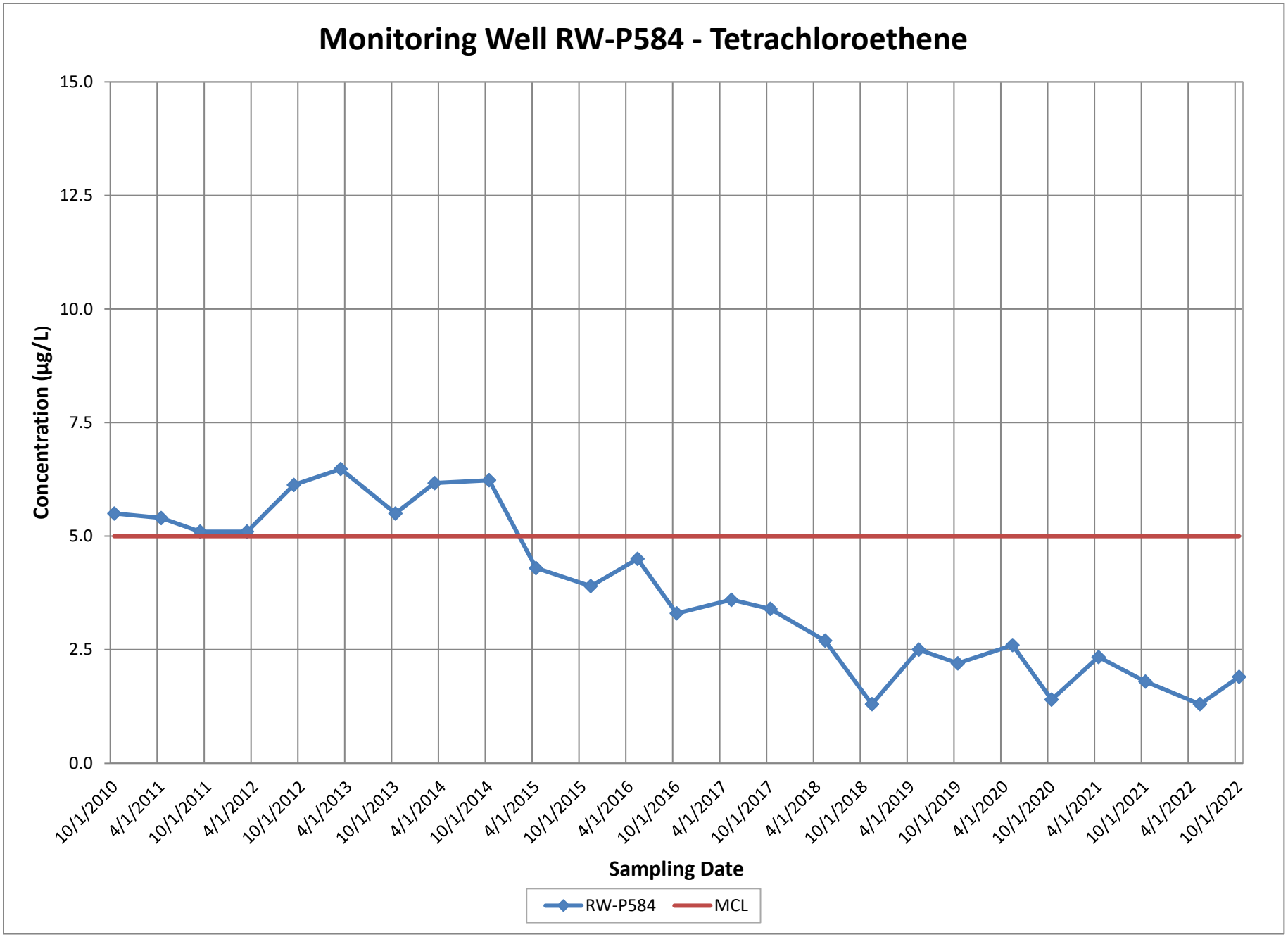
Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-3***															
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

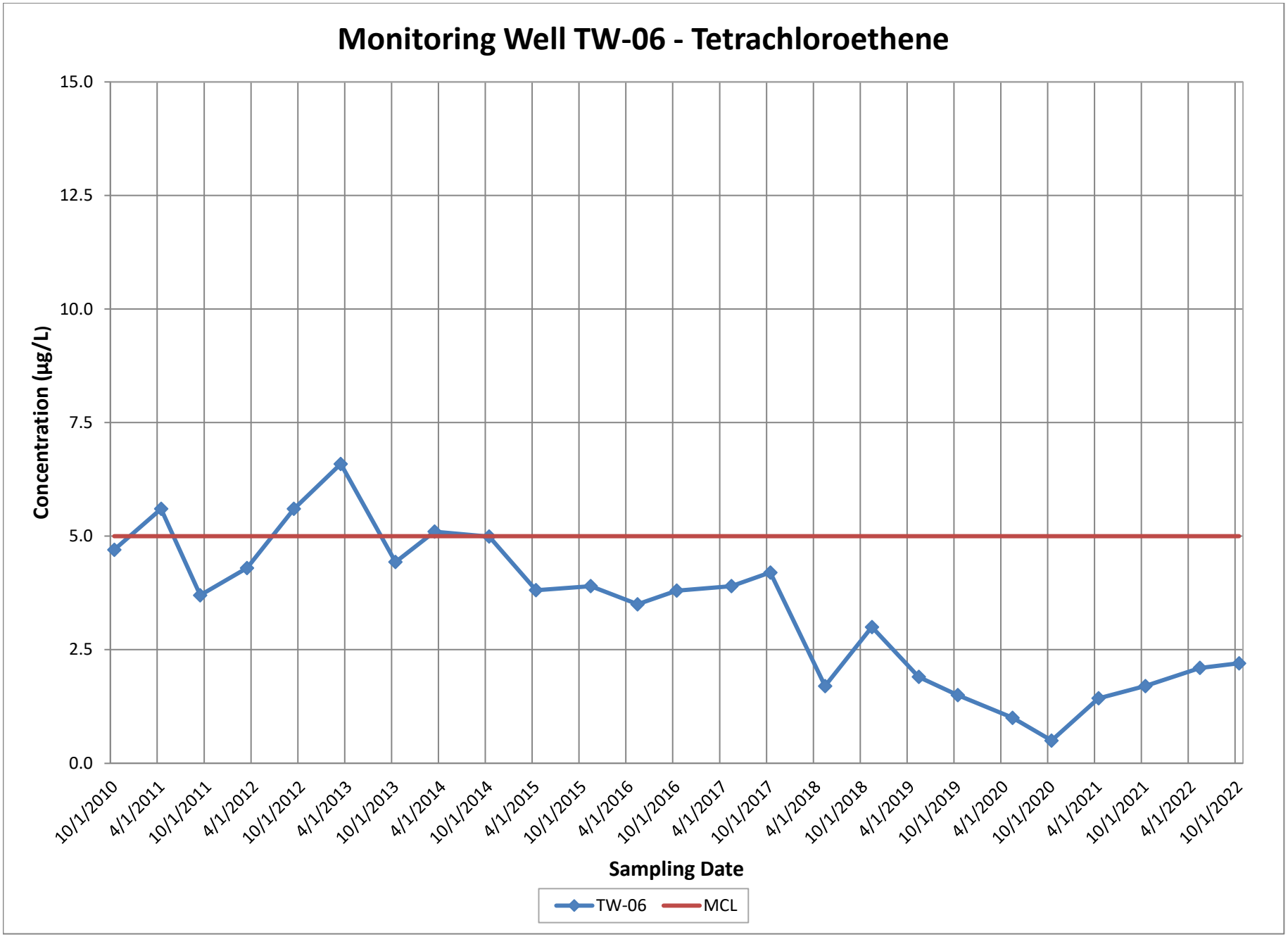
MCLs and Results are in ug/L unless indicated otherwise

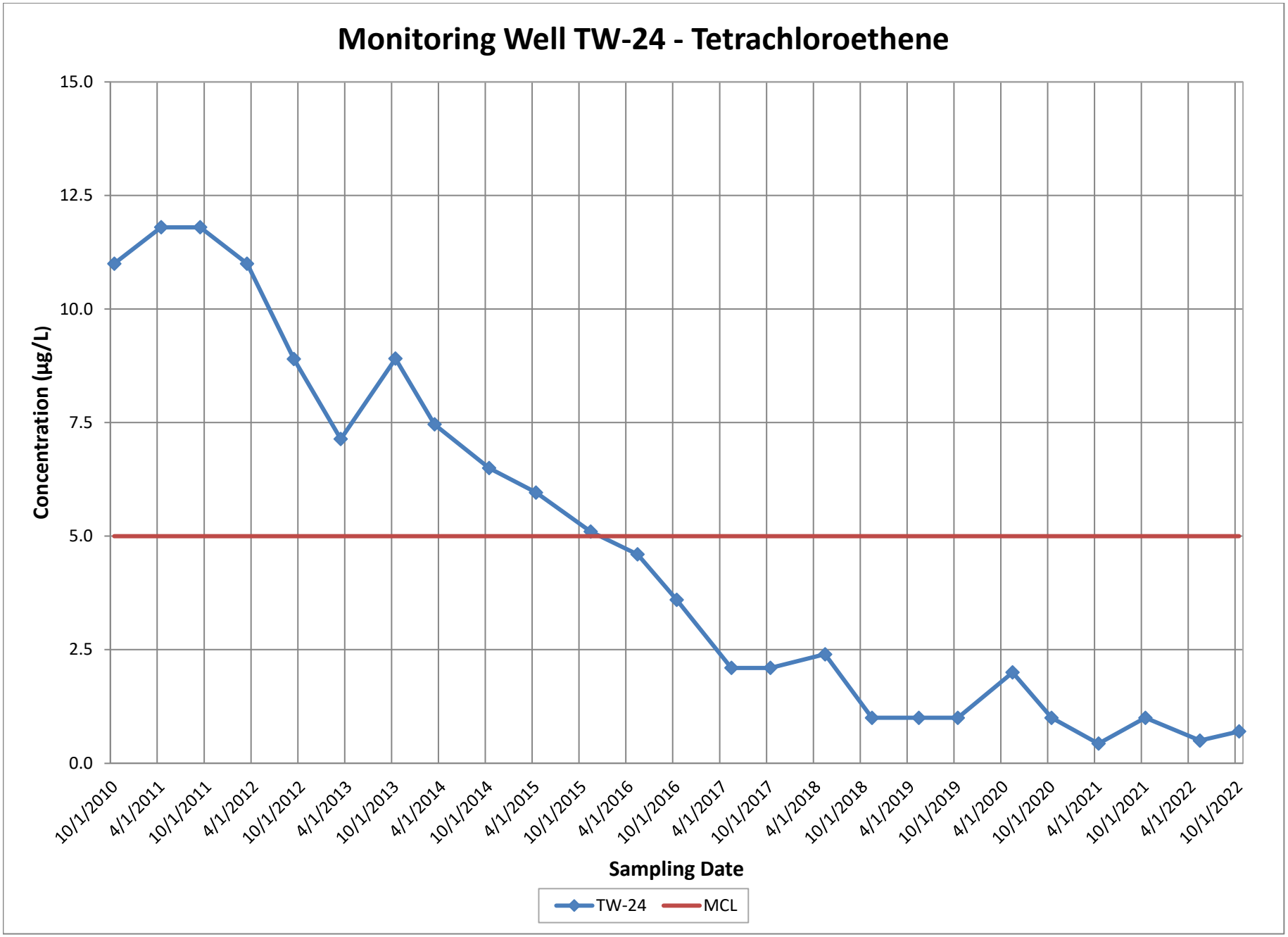
APPENDIX B
Historical MCL Exceedance
Time-Series Plots

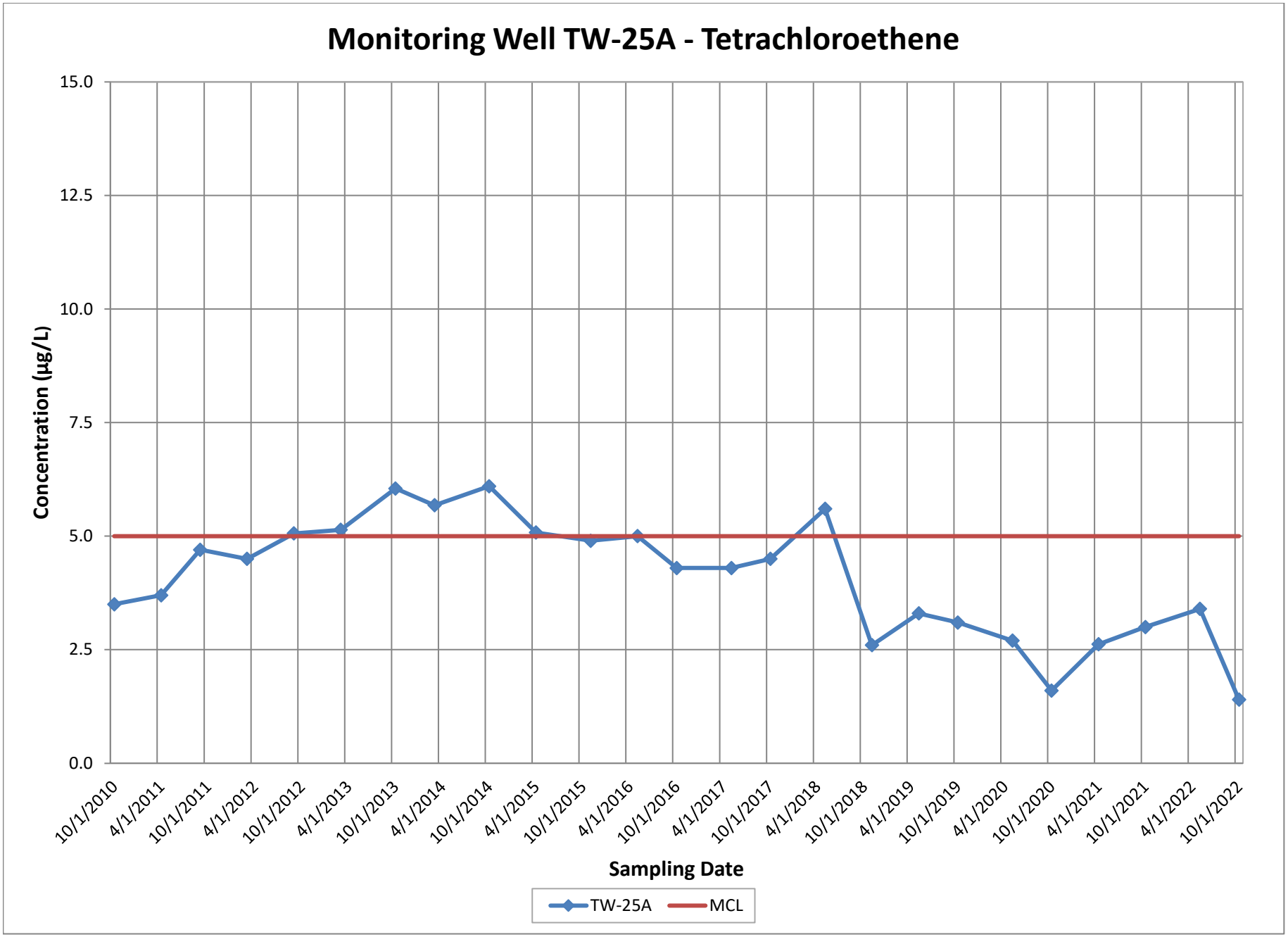

Monitoring Well TW-14A - Methylene Chloride
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
Sampling Date
TW-14A
MCL

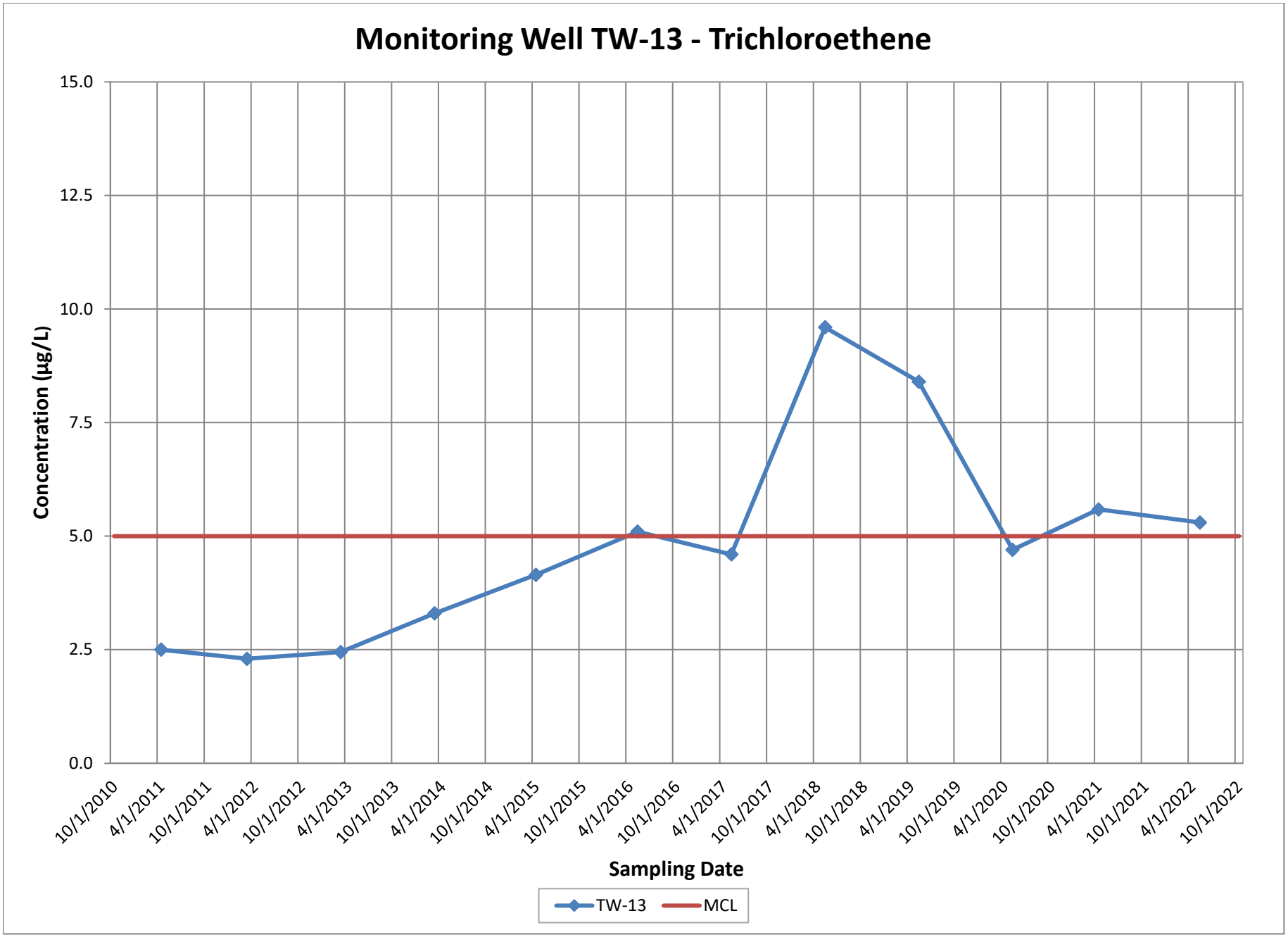

Monitoring Well TW-25A - Methylene Chloride
Concentration (µg/L)
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
Sampling Date
TW-25A
MCL

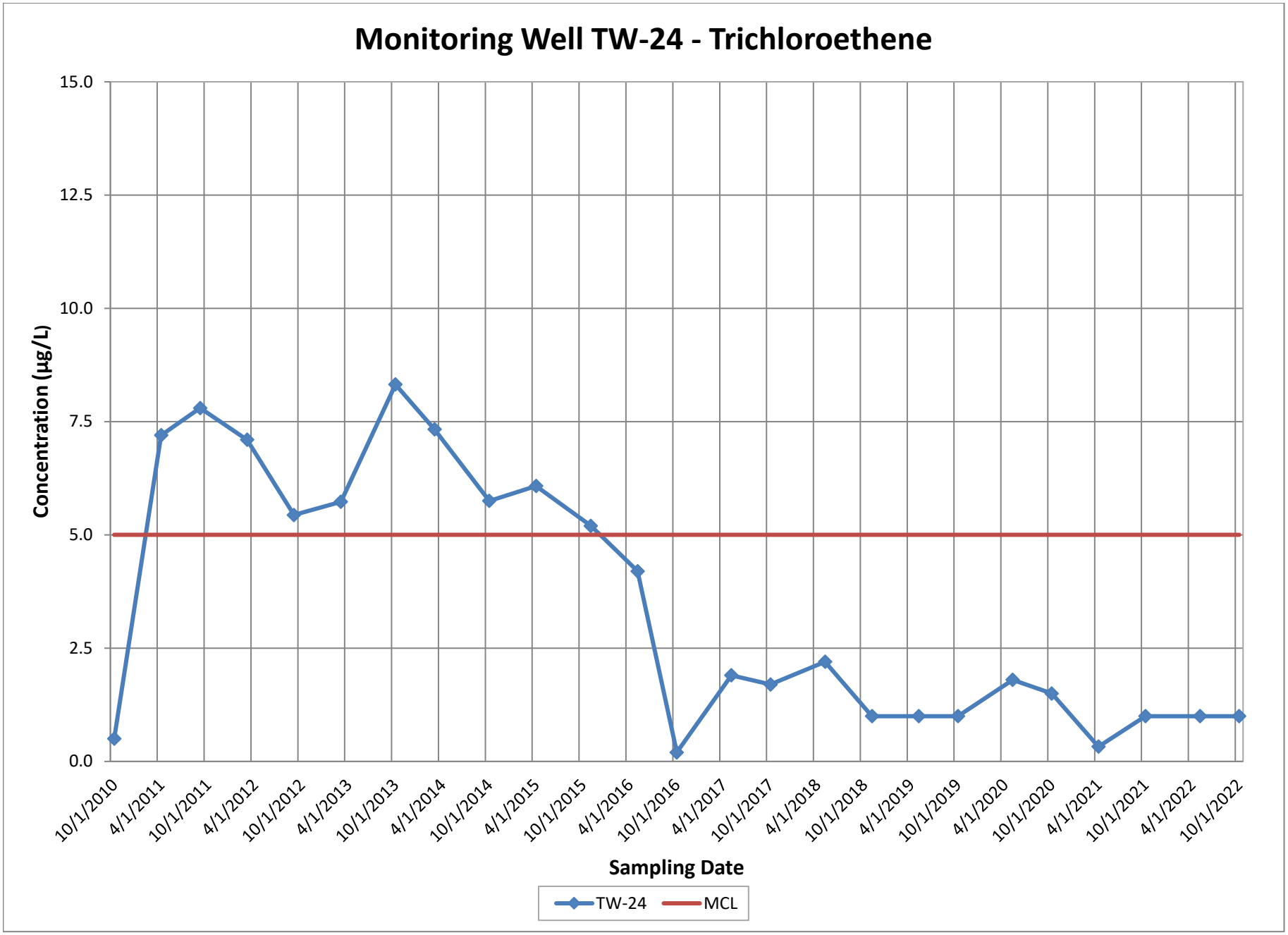

Monitoring Well RW-P584 - Tetrachloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
Sampling Date
RW-P584
MCL

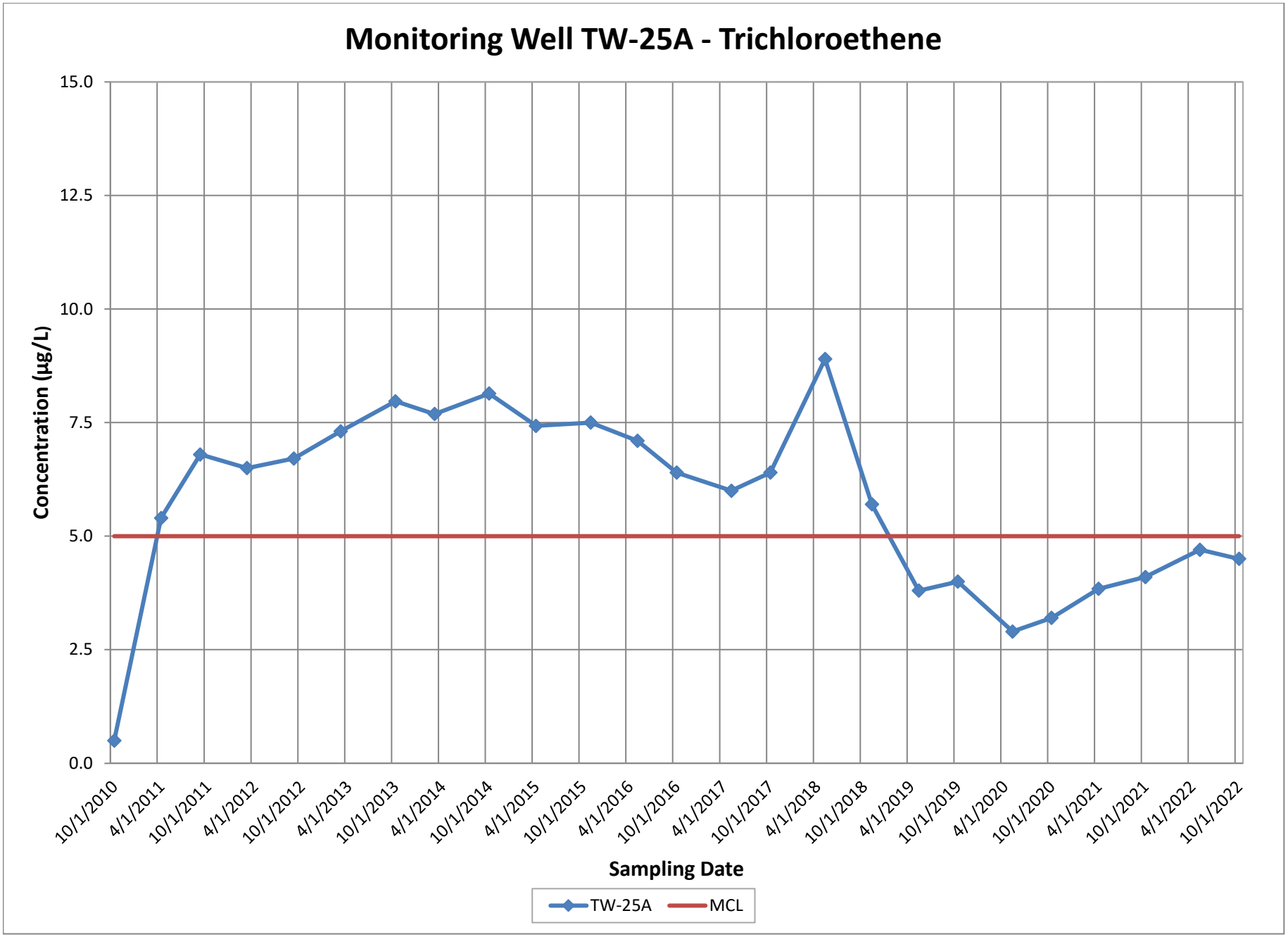

Monitoring Well TW-06 - Tetrachloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
Sampling Date
TW-06
MCL

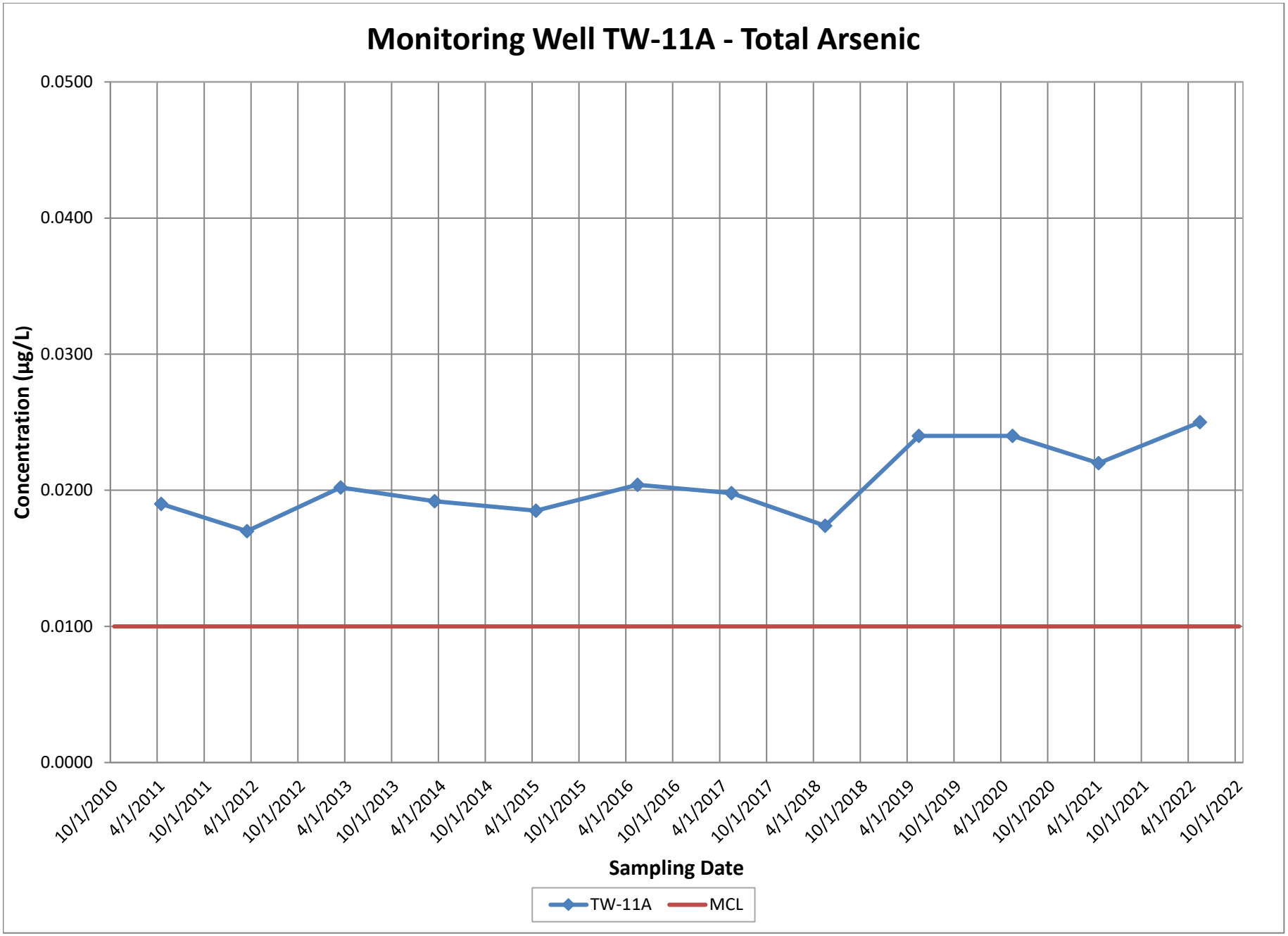

Monitoring Well TW-24 - Tetrachloroethene
15.0
12.5
10.0
7.5
5.0
2.5
0.0
Concentration (µg/L)
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
Sampling Date
TW-24
MCL

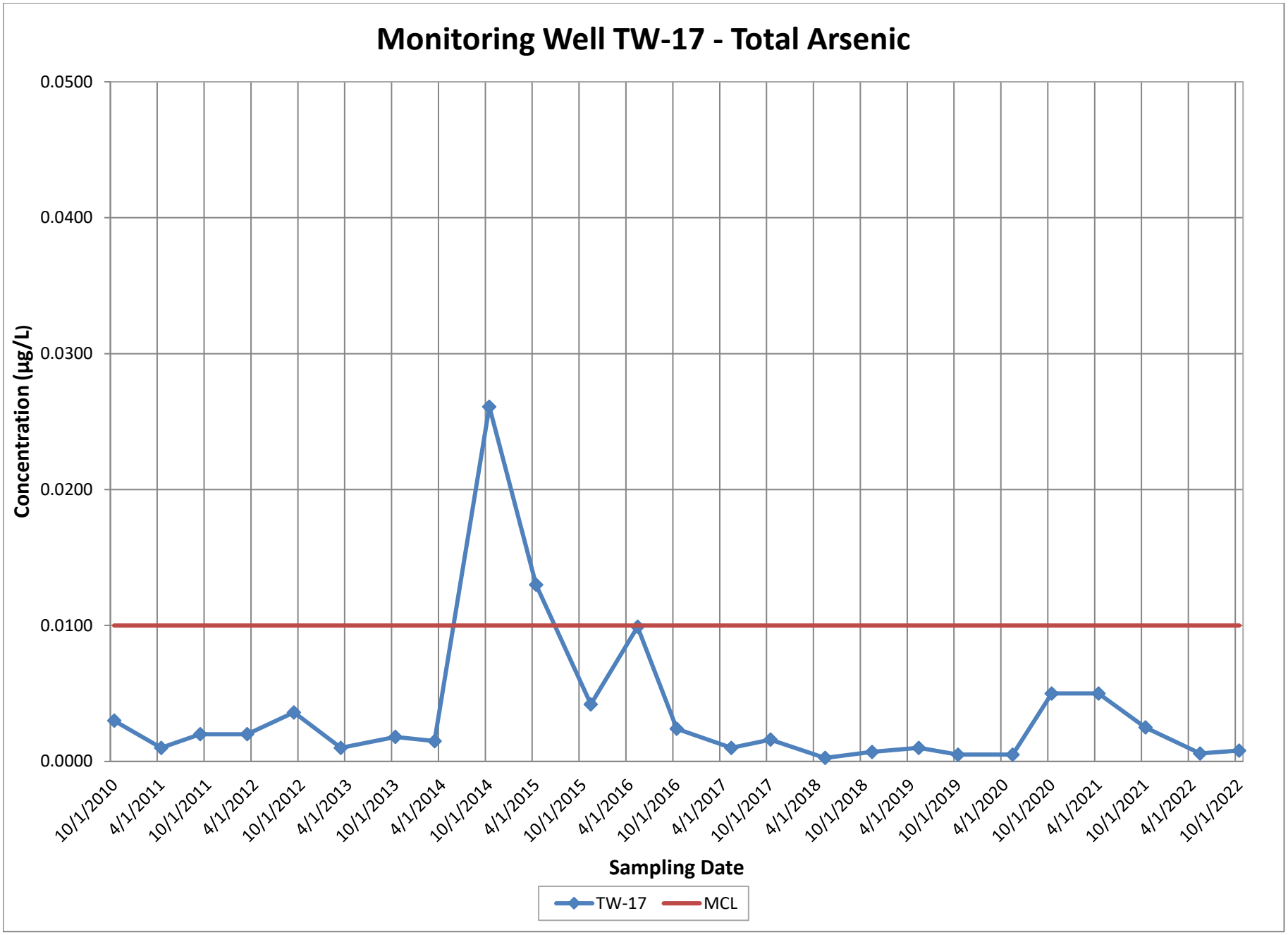

Monitoring Well TW-25A - Tetrachloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
Sampling Date
TW-25A
MCL

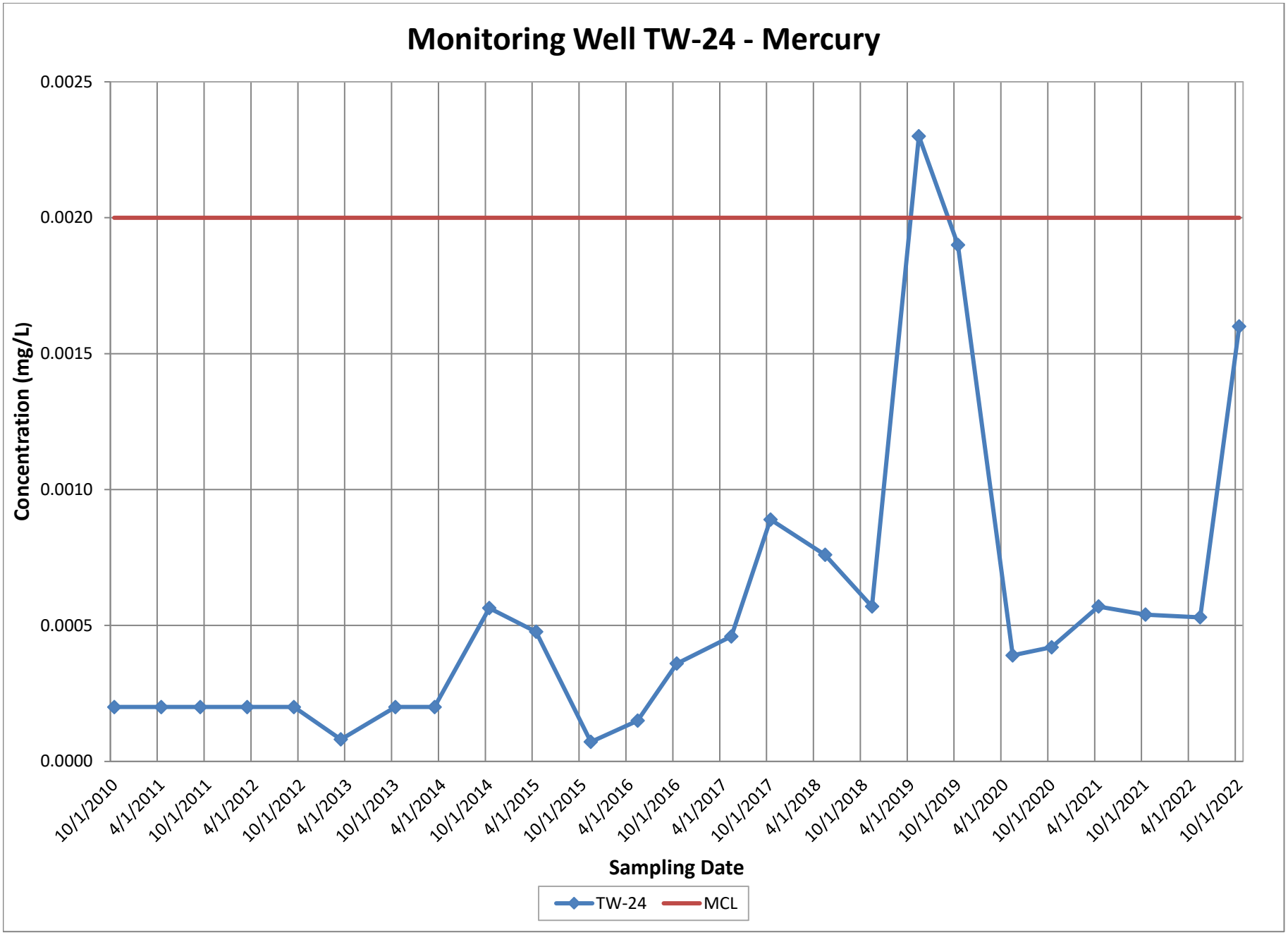

Monitoring Well TW-13 - Trichloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
Sampling Date
TW-13
MCL

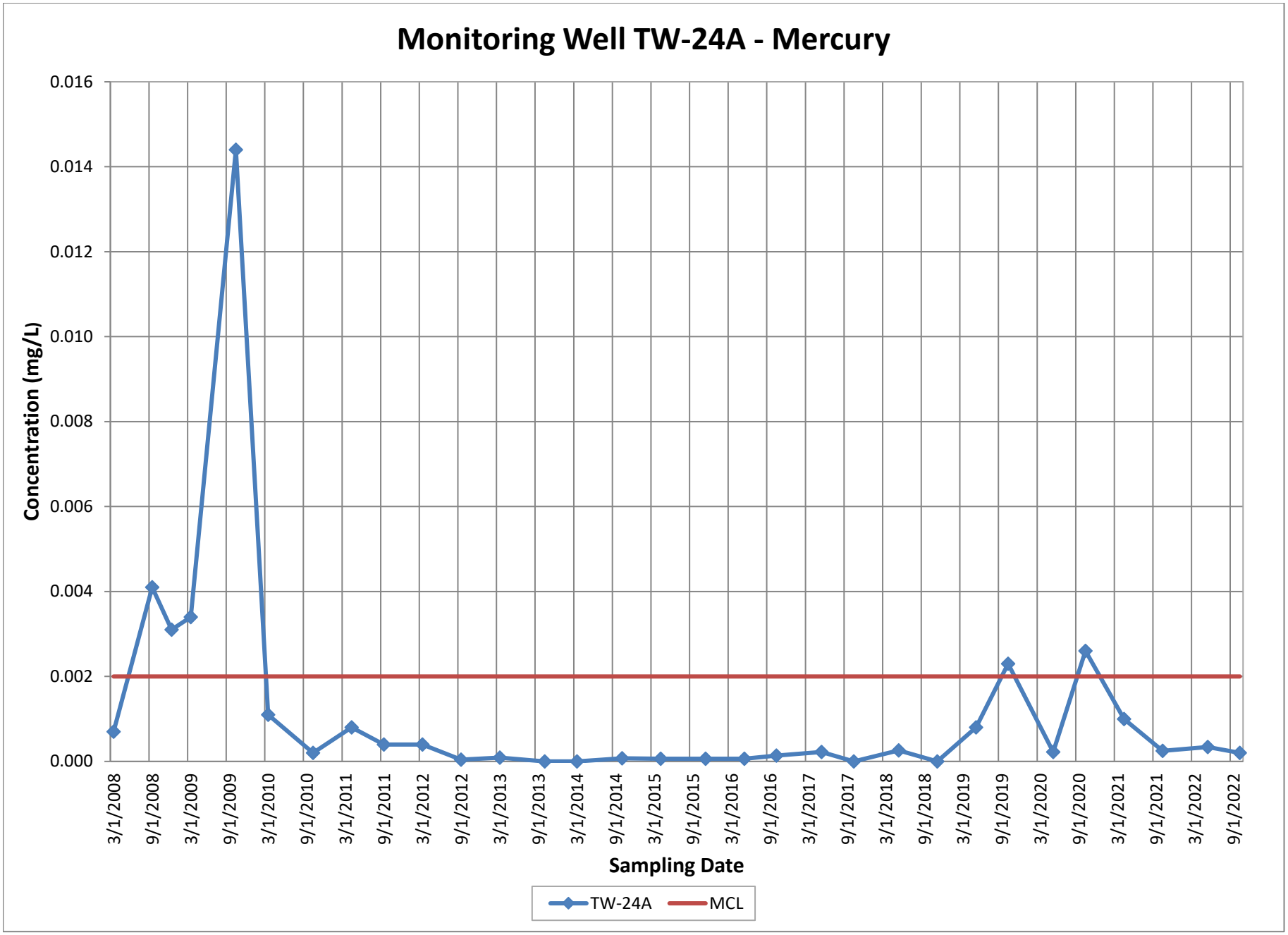

Monitoring Well TW-24 - Trichloroethene
15.0
12.5
10.0
7.5
5.0
2.5
0.0
Concentration (µg/L)
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
Sampling Date
TW-24
MCL

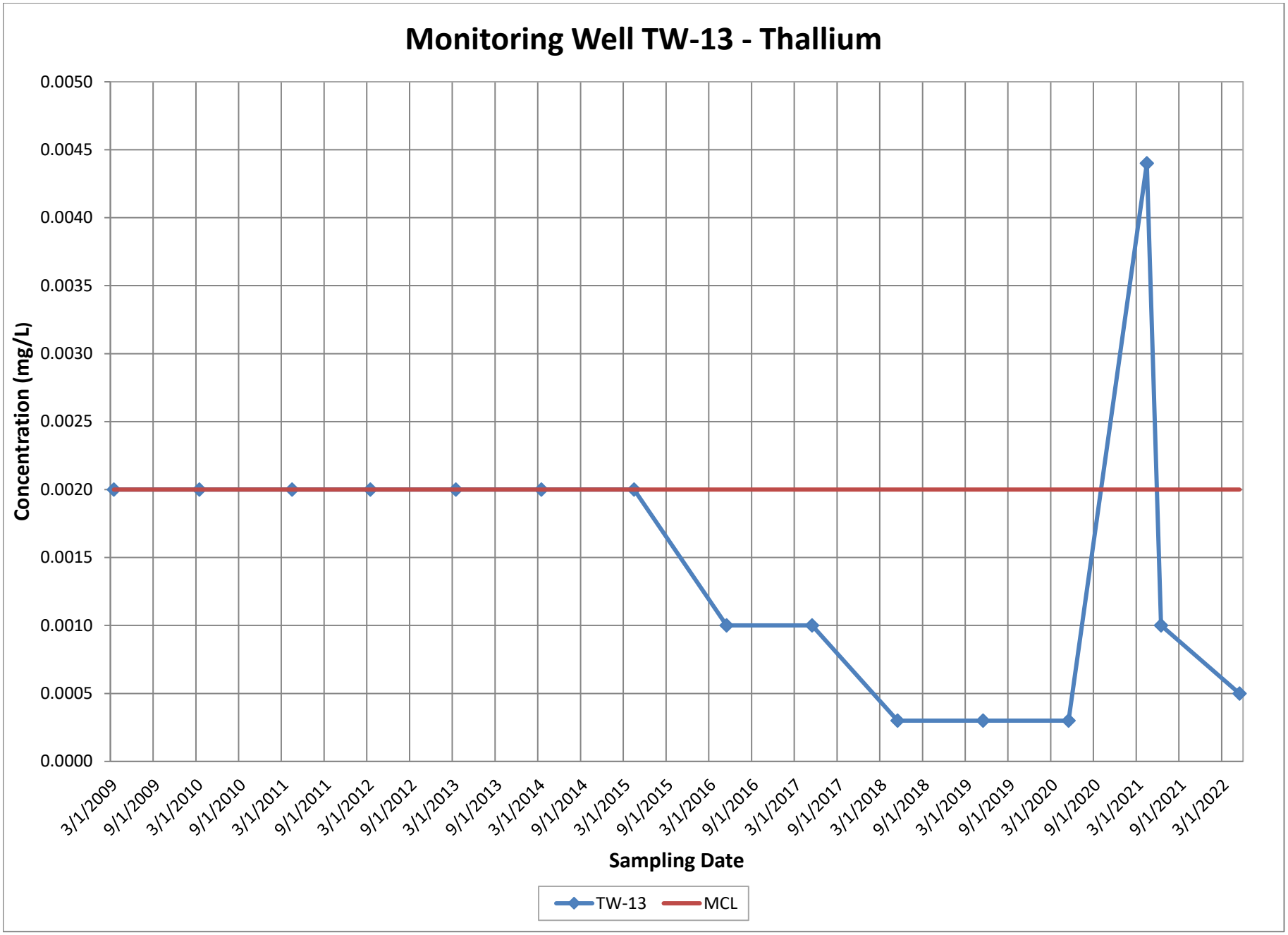

Monitoring Well TW-25A - Trichloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
Sampling Date
TW-25A
MCL

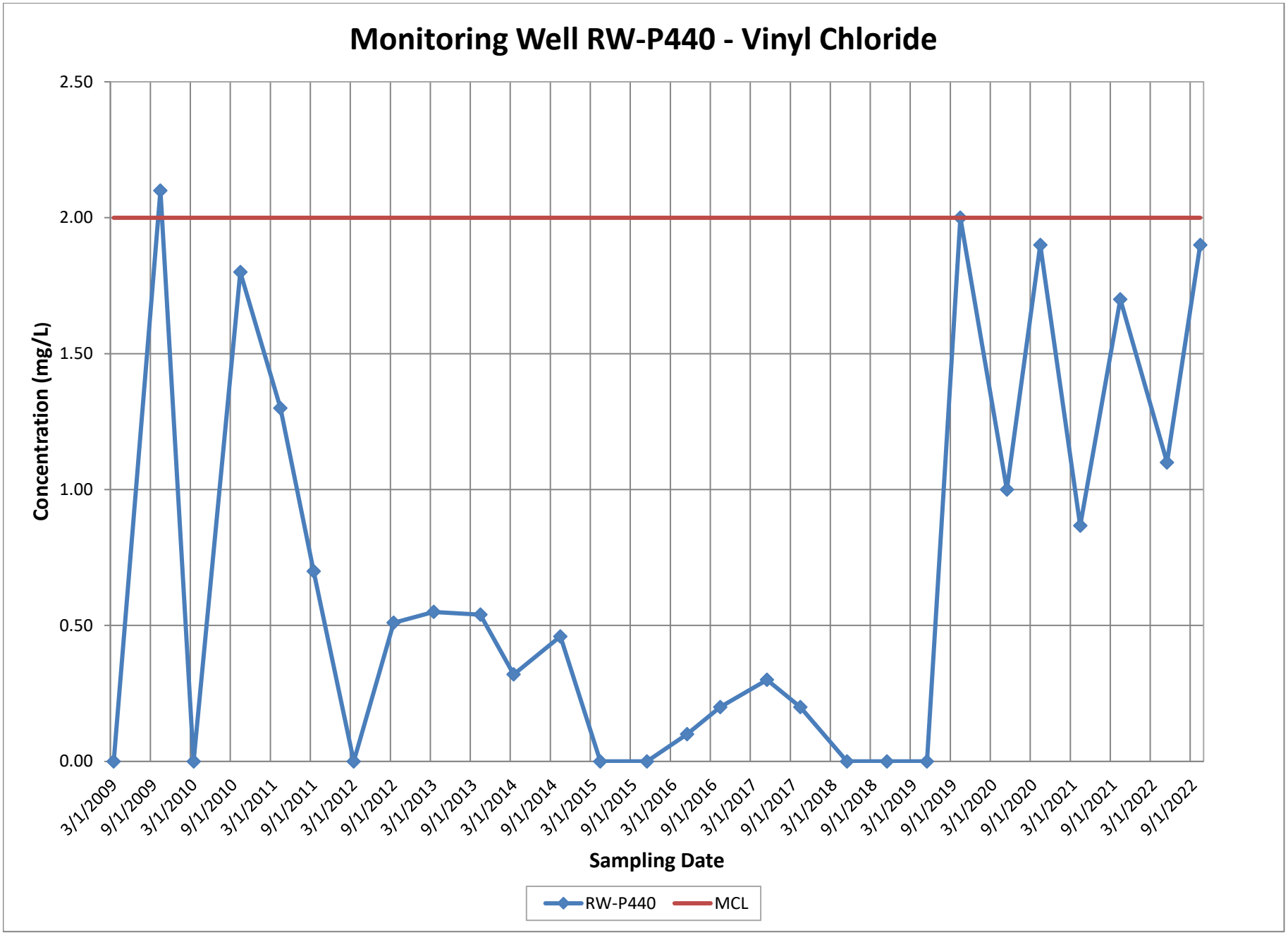

Monitoring Well TW-11A - Total Arsenic
Concentration (µg/L)
0.0500
0.0400
0.0300
0.0200
0.0100
0.0000
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
Sampling Date
TW-11A
MCL


Monitoring Well TW-17 - Total Arsenic
Concentration (µg/L)
0.0500
0.0400
0.0300
0.0200
0.0100
0.0000
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
Sampling Date
TW-17
MCL

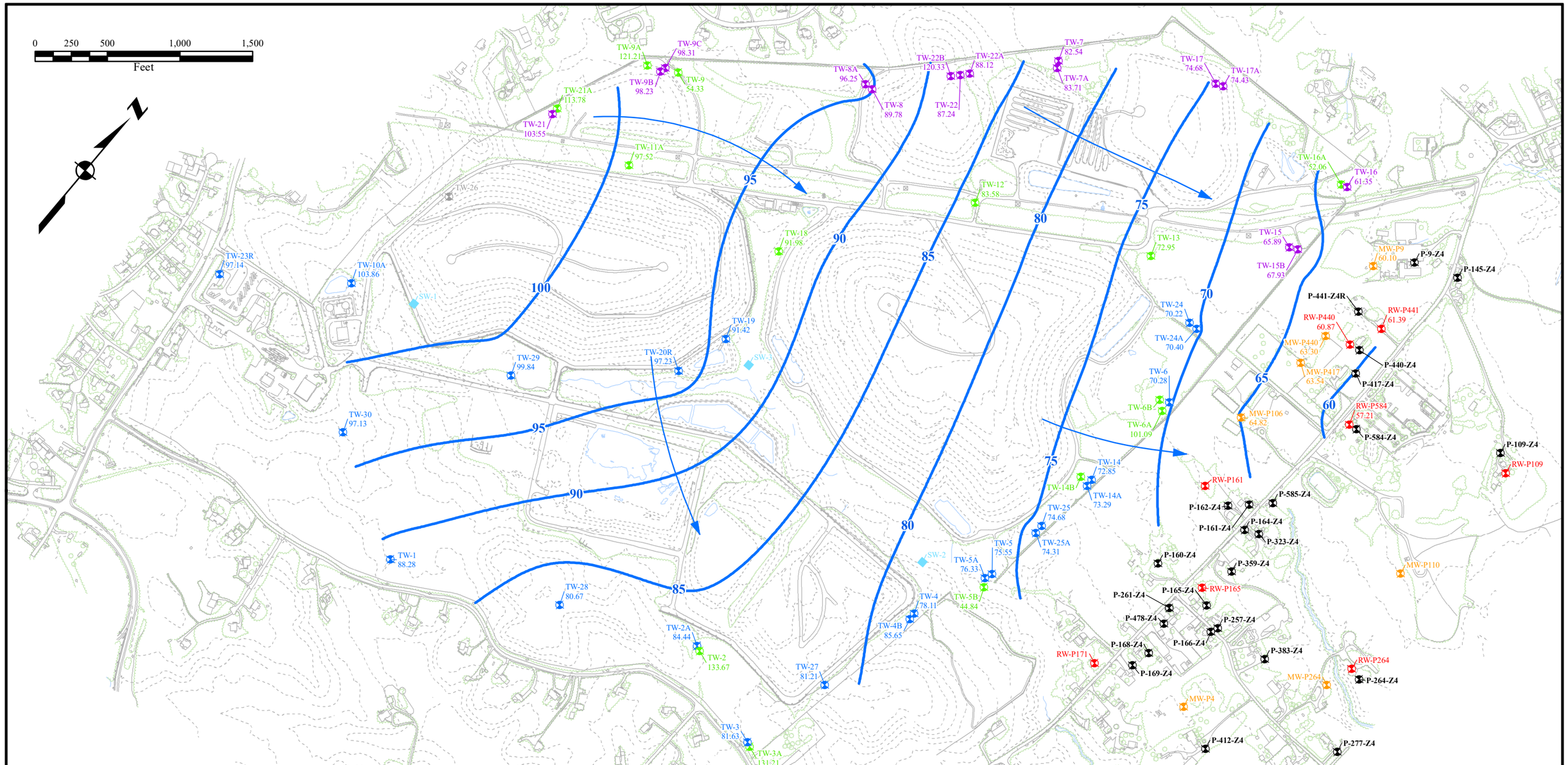

Monitoring Well TW-24 - Mercury
Concentration (mg/L)
0.0025
0.0020
0.0015
0.0010
0.0005
0.0000
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
Sampling Date
TW-24
MCL


Monitoring Well TW-24A - Mercury
Concentration (mg/L)
0.016
0.014
0.012
0.010
0.008
0.006
0.004
0.002
0.000
3/1/2008
9/1/2008
3/1/2009
9/1/2009
3/1/2010
9/1/2010
3/1/2011
9/1/2011
3/1/2012
9/1/2012
3/1/2013
9/1/2013
3/1/2014
9/1/2014
3/1/2015
9/1/2015
3/1/2016
9/1/2016
3/1/2017
9/1/2017
3/1/2018
9/1/2018
3/1/2019
9/1/2019
3/1/2020
9/1/2020
3/1/2021
9/1/2021
3/1/2022
9/1/2022
Sampling Date
TW-24A
MCL


Monitoring Well TW-13 - Thallium
Concentration (mg/L)
0.0050
0.0045
0.0040
0.0035
0.0030
0.0025
0.0020
0.0015
0.0010
0.0005
0.0000
3/1/2009
9/1/2009
3/1/2010
9/1/2010
3/1/2011
9/1/2011
3/1/2012
9/1/2012
3/1/2013
9/1/2013
3/1/2014
9/1/2014
3/1/2015
9/1/2015
3/1/2016
9/1/2016
3/1/2017
9/1/2017
3/1/2018
9/1/2018
3/1/2019
9/1/2019
3/1/2020
9/1/2020
3/1/2021
9/1/2021
3/1/2022
Sampling Date
TW-13
MCL


Monitoring Well RW-P440 - Vinyl Chloride
Concentration (mg/L)
2.50
2.00
1.50
1.00
0.50
0.00
3/1/2009
9/1/2009
3/1/2010
9/1/2010
3/1/2011
9/1/2011
3/1/2012
9/1/2012
3/1/2013
9/1/2013
3/1/2014
9/1/2014
3/1/2015
9/1/2015
3/1/2016
9/1/2016
3/1/2017
9/1/2017
3/1/2018
9/1/2018
3/1/2019
9/1/2019
3/1/2020
9/1/2020
3/1/2021
9/1/2021
3/1/2022
9/1/2022
Sampling Date
RW-P440
MCL

APPENDIX C
Groundwater Elevations



LEGEND

TW-1 88.28	WELL NAME, GROUNDWATER ELEVATION (FT AMSL)
TW-30	ONSITE REGULATED MONITORING WELL (SUBTITLE D)
SW-1	SURFACE WATER SAMPLE LOCATION
TW-26	ONSITE REGULATED MONITORING WELL (RPD)
TW-06	ONSITE REGULATED MONITORING WELL (COMAR)
TW-02	ONSITE NON-REGULATED MONITORING WELL
MW-417	OFFSITE NON-REGULATED MONITORING WELL
RW-P165	OFFSITE RESIDENTIAL WATER SUPPLY WELL
P-277-Z4	OFFSITE RESIDENTIAL ZONE 4 WELL
90	GROUNDWATER ELEVATION CONTOUR (FT AMSL)
	GROUNDWATER FLOW DIRECTION

GROUNDWATER ELEVATIONS MEASURED NOVEMBER 2022

CONTOURS DEVELOPED BASED ON ZONE 3 WELL GROUND-WATER ELEVATIONS

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ARM Group LLC
Engineers and Scientists

GROUNDWATER CONTOUR MAP
MILLERSVILLE LANDFILL
ANNE ARUNDEL COUNTY, MD

January 2023

22011183

Figure
C-1

P:\Anne Arundel County\22011183 FY2023 MLF & SLF GW Reporting\Fall 2022 Reports\MLF\GIS\MLF GW Contour Map.mxd

APPENDIX C - MILLERSVILLE LANDFILL GROUNDWATER LEVEL MEASUREMENTS (November 2022)

WELL ID	DATE	MEASURING POINT ELEV. (FEET)	DEPTH TO WATER (FEET)	ELEV. (FEET)
MW-MB	11/29	236.81	138.85	97.96
MW-P106	11/8	107.62	42.80	64.82
MW-P417	11/7	112.75	49.21	63.54
MW-P440	11/7	115.25	51.95	63.30
MW-P9	11/7	112.32	52.22	60.10
N	11/7	195.48	105.87	89.61
P-564	11/29	176.31	100.14	76.17
RW-P440	11/7	117.11	56.24	60.87
RW-P441	11/7	117.58	56.19	61.39
RW-P584	11/7	118.56	61.35	57.21
TW1	11/7	193.42	105.14	88.28
TW10A	11/7	194.52	90.66	103.86
TW10B	11/7	195.96	94.89	101.07
TW11A	11/7	138.52	41.00	97.52
TW12	11/7	141.99	58.41	83.58
TW13	11/7	117.71	44.76	72.95
TW14	11/29	123.07	50.22	72.85
TW14A	11/29	123.26	49.97	73.29
TW15	11/29	116.98	51.09	65.89
TW15B	11/29	116.30	48.37	67.93
TW16	11/29	115.07	53.72	61.35
TW16A	11/29	115.44	63.38	52.06
TW17	11/29	131.99	57.31	74.68
TW17A	11/29	131.55	57.12	74.43
TW18	11/7	128.09	36.11	91.98
TW19	11/7	116.19	24.77	91.42
TW2	11/7	197.71	64.04	133.67
TW20R	11/7	129.97	32.74	97.23
TW21	11/29	158.75	55.20	103.55
TW21A	11/29	158.83	45.05	113.78
TW22	11/29	189.15	101.91	87.24
TW22A	11/29	188.24	100.12	88.12
TW22B	11/29	189.58	69.25	120.33
TW23R	11/30	236.64	139.50	97.14
TW24	11/29	109.19	38.97	70.22
TW24A	11/29	108.69	38.29	70.40
TW25	11/29	117.42	42.74	74.68
TW25A	11/29	117.05	42.74	74.31
TW27	11/7	182.90	101.69	81.21
TW28	11/3	211.73	131.06	80.67

APPENDIX C - MILLERSVILLE LANDFILL GROUNDWATER LEVEL MEASUREMENTS (November 2022)

WELL ID	DATE	MEASURING POINT ELEV. (FEET)	DEPTH TO WATER (FEET)	ELEV. (FEET)
TW29	11/3	143.89	44.05	99.84
TW2A	11/7	197.92	113.48	84.44
TW3	11/7	180.75	99.12	81.63
TW30	11/7	221.00	123.87	97.13
TW31	11/7	186.47	101.35	85.12
TW32	11/7	190.09	73.16	116.93
TW3A	11/7	181.45	50.24	131.21
TW4	11/7	112.56	34.45	78.11
TW4B	11/7	113.60	27.95	85.65
TW5	11/29	104.77	29.22	75.55
TW5A	11/29	105.31	28.98	76.33
TW5B	11/29	103.98	59.14	44.84
TW6	11/29	107.41	37.13	70.28
TW6A	11/29	106.29	5.20	101.09
TW7	11/29	126.85	44.31	82.54
TW7A	11/29	127.56	43.85	83.71
TW8	11/29	139.49	49.71	89.78
TW8A	11/29	139.67	43.42	96.25
TW9	11/29	131.24	76.91	54.33
TW9A	11/29	134.68	13.47	121.21
TW9B	11/29	133.81	35.58	98.23
TW9C	11/29	133.95	35.64	98.31
W	11/7	203.57	114.89	88.68

APPENDIX D
Data Validation

APPENDIX D
LABORATORY DATA VALIDATION

1.1 INTRODUCTION

This document presents the summary of data validation performed on the laboratory analytical data associated with the 2nd semi-annual 2022 groundwater monitoring event at the Millersville Landfill and Resource Recovery Facility (MLFRRF) in Anne Arundel County, Maryland. Groundwater samples were collected pursuant to the Annotated Code of Maryland (COMAR) Title 26, Chapter 4; the Code of Federal Regulations (CFR) Title 40, Chapter Part 258; and the MLFRRF Environmental Monitoring Plan (EMP).

Groundwater and surface water sampling for the 2nd semi-annual 2022 event was performed on October 18-20, April 25-27, November 1-3, November 7-8, and December 1, 2022. Environmental Monitoring and Assessment (EMA), LLC of Lititz, Pennsylvania conducted the sampling. Laboratory analysis for volatile organic compounds (VOCs) was performed by Maryland Spectral Services (MSS) of Baltimore, Maryland and for laboratory analysis for inorganic compounds was performed by Pace Analytical Service (Pace) of Greensburg, Pennsylvania.

Quality Assurance/Quality Control (QA/QC) protocols employed during this event included the analysis of matrix spike (MS) and matrix spike duplicate (MSD) samples, laboratory control samples (LCS), laboratory method blanks, and laboratory preparation blanks. These protocols also included the analysis of two blind duplicate samples obtained from TW-24 (DUP-1) and TW-25 (DUP-2). In addition, the QA/QC protocols included the preparation of four trip blanks and one field blank.

Samples were analyzed for VOCs, total and dissolved metals, and general chemistry parameters.

1.2 SAMPLE PACKAGE COMPLETENESS AND DELIVERABLES

Chains of custody were present in the data packages for all samples, along with statements from the laboratory attesting to the validity of the data. All requested analyses were accounted for in the data report. Sample receipt forms were present for all samples.

1.3 VOLATILE ORGANIC COMPOUND ANALYSES

1.3.1 General Information

<u>Groundwater Sampling Locations (56):</u>

TW-01, TW-02, TW-02A, TW-03, TW-03A, TW-04, TW-04B, TW-05, TW-05A, TW-05B, TW-06, TW-06B, TW-07, TW-07A, TW-08, TW-08A, TW-09, TW-09B, TW-09C, TW-10A,

TW-14, TW-14A, TW-14B, TW-15, TW-15B, TW-16, TW-16A, TW-17, TW-17A, TW-19, TW-20R, TW-21, TW-22, TW-22A, TW-22B, TW-23R, TW-24, TW-24A, TW-25, TW-25A, TW-27, TW-28, TW-29, TW-30, MW-P4, MW-P9, MW-P106, MW-P417, MW-P440, RW-P109, RW-P165, RW-P171-1, RW-P264, RW-P440, RW-P441, and RW-P584.

Surface Water Sampling Locations (3):

SW-1, SW-2, and SW-3.

QA/QC Samples:

Field blank, all trip blanks, laboratory control samples, laboratory method blanks, and laboratory MS/MSDs.

1.3.2 **Analytical Method**

The samples were analyzed for VOCs following the United States Environmental Protection Agency (USEPA) Methods 8260B and 8011. The target analyte list was that established as Appendix I by 40 CFR Part 258, "Constituents for Detection Monitoring" and Appendix II (40 CFR Part 258) parameters – dichlorodifluoromethane and dichlorofluoromethane, and methyl tertiary-butyl ether (MTBE).

Field and Trip Blanks

One field blank and four trip blanks were prepared and analyzed for this sampling event. There were no VOC parameters detected in any of the four trip blanks or in the field blank. Therefore, no concentrations were flagged with "B" qualifiers.

Blind Duplicate Samples

The blind duplicate samples were collected from wells TW-24 (DUP-1) and TW-25 (DUP-2). Analyses were performed to calculate the RPD of duplicate samples in obtaining an estimate of laboratory method precision. Table D-1 summarizes the RPD of constituents detected above the RL. The agreement between the detected VOCs in the duplicate and corresponding sample was within QC standards.

Quality Control Sample Review

Quality Control samples for each laboratory report were reviewed to verify proper documentation of any analysis issues. Notable observations from the quality control samples are summarized below.

- Surrogates: For all projects, all surrogates were within quality control limits.
- Method Blanks: For all projects, there were no analytes detected in method blanks.

- Holding Time: All VOC samples in all projects were prepared and analyzed within the method required holding times, except for the analysis of 1,2-dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (EDB) using method 8011 in project 30536604. Concentrations for all impacted results were below detection limits. Proper qualification was added for the associated sample results.
- Continuing Calibration: For all projects, all criteria were within method requirements, with the exception of the analysis of DBCP in projects 30533104 and 30536604, and EDB in project 30533104. The results were flagged with a "CH" qualifier if the continuing calibration for the compound was outside of laboratory acceptance limits. The results might be biased high.
- Laboratory Control Spike: For all projects, recoveries in the laboratory control samples were within quality control limits, with a few exceptions. For the following projects, recoveries in some of the laboratory control samples were outside quality control limits: 30530933 and 30536604. In the case of sample MW-P4 from project 30536604, reanalysis was not possible due to insufficient sample amount. Proper qualification was added where appropriate.
- Matrix Spikes: For all projects, recoveries in matrix spikes and matrix spike duplicates were within quality control limits, with a few exceptions. The following projects had matrix spike or matrix spike duplicate recoveries that were outside control limits: 2102045 and 2110333. No additional qualification was necessary. For project 30536604, the laboratory was unable to perform a matrix spike/matrix spike duplicate due to insufficient sample volume. Proper qualification was added where appropriate.
- Laboratory Duplicate: For all projects, the precision between the sample and laboratory sample duplicate was within control limits, with the exception of project 2110333. One parameter was outside of control limits for one of the laboratory duplicates in project 2110333, though both the original and duplicate concentrations were J flagged. No additional qualification was necessary.

1.4 INORGANIC ANALYSIS

1.4.1 General Information

Groundwater Sampling Locations (56):

TW-01, TW-02, TW-02A, TW-03, TW-03A, TW-04, TW-04B, TW-05, TW-05A, TW-05B, TW-06, TW-06B, TW-07, TW-07A, TW-08, TW-08A, TW-09, TW-09B, TW-09C, TW-10A, TW-14, TW-14A, TW-14B, TW-15, TW-15B, TW-16, TW-16A, TW-17, TW-17A, TW-19, TW-20R, TW-21, TW-22, TW-22A, TW-22B, TW-23R, TW-24, TW-24A, TW-25, TW-25A, TW-27, TW-28, TW-29, TW-30, MW-P106, MW-P4, MW-P417, MW-P440, MW-P9, RW-P109, RW-P165, RW-P171-1, RW-P264, RW-P440, RW-P441, and RW-P584.

Surface Water Sampling Locations (3):

SW-1, SW-2, and SW-3.

QA/QC Samples:

Field Blank, laboratory control samples, laboratory method blanks, laboratory duplicates, and laboratory MS/MSDs.

1.4.2 **Analytical Methods**

On-site samples were analyzed for antimony, arsenic, barium, beryllium, cadmium, calcium (total and dissolved), chromium, cobalt, copper, iron (total and dissolved), lead, magnesium (total and dissolved), manganese (total and dissolved), mercury, nickel, potassium (total and dissolved), selenium, silver, sodium (total and dissolved), thallium, vanadium, and zinc using the Inductively Coupled Plasma Optical Emission Spectrometry/Mass Spectrometer (ICP/MS) (USEPA Method 6010D and 6020B). Mercury was analyzed using the Cold Vapor Atomic Absorption Spectrometry method (CVAA) (USEPA Method 7470A).

Additionally, samples were analyzed for chloride (Standard Method [SM]4500CIE), nitrate and nitrite (SM4500NO3-F and SM4500NO2-B), ammonia (USEPA Method 350.1), chemical oxygen demand (USEPA Method 410.4), hardness (SM2340B), alkalinity (SM2320B), sulfate (USEPA Method 9038), total dissolved solids (SM2540C), and turbidity (SM2130B).

Off-site samples (MW and RW) were analyzed for mercury (total) only. All QC data were compared with quality control criteria for drinking water analysis in the USEPA Analytical Procedures for Determination of Metals under 40 CFR Part 136.

Field Blank

One field blank was prepared and analyzed for this sampling event as part of work order 30535386. There were “J” flagged detections for alkalinity, chromium, and zinc in the field blank in work order 30535386. Comparable concentrations of alkalinity were flagged with a “B” qualifier in three samples (TW-14, TW-28, TW-29) and comparable concentrations of zinc were flagged with a “B” qualifier in two samples (TW-14 and TW-29).

Blind Duplicate Samples

Table D1 summarizes the RPD of the detected inorganic constituents in duplicate samples. RPD’s were generally within control limits. The highest RPD was 86.7% for concentrations of copper in TW-25 and DUP-2. There were two other parameters with RPD over 20%: mercury in TW-24 and DUP-1 at 47.1% and total dissolved solids in TW-25 and DUP-2 at 55.7%. The RPD for most analytes was less than 15%.

Charge-Balance Error

The charge-balance error of samples collected in the field can be used to evaluate whether all ionic species that exist in the groundwater sample have been identified. Table D2 provides a summary of the calculated charge-balance errors. Seven out of 47 samples had a charge-balance error greater than the 20%. Charge-balance errors greater than 20% may indicate that ions are present in the groundwater sample that were not used in the calculations.

Project Narrative Review

Project narratives for each data package were reviewed to verify proper documentation of any analysis issues. Notable observations from the project narratives are summarized below.

- Holding Time: All samples in all projects were prepared and analyzed within the method required holding times, except for a few analyses using method EPA SM4500NO2B in project 30533468. Proper qualification was added for the associated sample results.
- Initial Calibration: For all projects, all criteria were within method requirements.
- Continuing Calibration: For all projects, all criteria were within method requirements.
- Internal Standards: For all projects, all internal standards were within quality control limits.
- Method Blanks: The following project had at least one analyte detected above the reporting limit in the associated method blank: 30534938. The results were flagged with a “B” qualifier if an analyte was detected above the reporting limit in a method blank.
- Laboratory Control Spike: For all projects, all analytes in the lab control spike were recovered within the quality control limits.
- Matrix Spikes: For the following projects, the RPD value for at least one analyte in a matrix spike or matrix spike duplicate was outside the quality control limits: 30533104, 30533468, 30532667, 30530933, 30534938, 30535386, 30534444. The associated batch was either accepted based on LCS recovery or proper qualification was added for the associated sample results.
- Laboratory Duplicate: For all projects, the precision between the sample and laboratory sample duplicate was within control limits.
- Dilutions: For the following project, at least one sample was diluted due to the presence of high levels of non-target analytes, high levels of target analytes, or other matrix interferences: 30533104. The results were flagged with a “D3” qualifier if the sample was diluted due to presence of high levels of non-target analytes or other matrix interference.

TABLE D1 MLFRRF LABORATORY DATA VALIDATION - FALL 2022 Duplicate Comparison - Detected Parameters							
Parameter	**Unit**	**TW-24 Result**	**Dup 1 Result**	**Relative Percent Difference**	**TW-25 Result**	**Dup 2 Result**	**Relative Percent Difference**
1,1-Dichloroethane	µg/L	2.4	2.4	0.0%	2.1	2	4.9%
Dichlorodifluoromethane	µg/L	2.3	2.5	8.3%	5.7	5.8	1.7%
Dichlorofluoromethane	µg/L	1.3	1.3	NA	3	3.1	3.3%
Tetrachloroethene	µg/L	0.7 J	0.7 J	NA	1.4	1.6	13.3%
Barium	mg/L	0.088	0.086	2.3%	0.022	0.023	4.4%
Calcium	mg/L	4.6	4.4	4.4%	1.8	1.7	5.7%
Calcium, Dissolved	mg/L	4.5	4.8	6.5%	1.7	1.9	11.1%
Chloride	mg/L	26.4	26.4	0.0%	7.4	7.4	0.0%
Cobalt	mg/L	0.011	0.012	8.7%	0.0039	0.0042	7.4%
Copper	mg/L	0.0052	0.006	14.3%	0.0032	0.0081	86.7%
Magnesium	mg/L	4.2	4	4.9%	0.97	1	3.0%
Magnesium, Dissolved	mg/L	4.3	4.4	2.3%	1	0.98	2.0%
Manganese	mg/L	0.058	0.054	7.1%	0.018	0.019	5.4%
Manganese, Dissolved	mg/L	0.056	0.06	6.9%	0.018	0.018	0.0%
Mercury	mg/L	0.0016	0.00099	47.1%	0.0002 U	0.0002 U	NA
Nickel	mg/L	0.011	0.012	8.7%	0.0034	0.0035	2.9%
Nitrate as N	mg/L	1	1.1	9.5%	0.28	0.27	3.6%
Nitrogen, NO2 plus NO3	mg/L	1	1.1	9.5%	0.28	0.27	3.6%
Potassium	mg/L	1.5	1.4	6.9%	0.65	0.65	0.0%
Potassium, Dissolved	mg/L	1.6	1.6	0.0%	0.74	0.73	1.4%
Sodium	mg/L	13.3	12.6	5.4%	3	3	0.0%
Sodium, Dissolved	mg/L	13.3	13.6	2.2%	3.1	3	3.3%
Total Dissolved Solids	mg/L	71	62	13.5%	39	22	55.7%
Total Hardness	mg/L	28.7	27.2	5.4%	8.4	8.5	1.2%
Zinc	mg/L	0.013	0.013	0.0%	0.006	0.0067	11.0%

TABLE D2
MLFRRF DATA EVALUATION - FALL 2022
Cation/Anion Balance Worksheet

	ION	M.W. (g/mol)	*Subtite D Regulated Wells*														
			Concentration (mg/L)														
			TW-01	TW-02A	TW-03	TW-04	TW-04B	TW-05	TW-05A	TW-06	TW-10A	TW-14	TW-14A	TW-19	TW-20R	TW-23	TW-24
CATIONS	Ca^{2+}	40.08	18.9	5.8	1.3	2.8	3.4	3.7	1.6	4.4	6.2	1.5	3.2	18.8	15.8	3	4.5
	Mg^{2+}	24.31	1.6	3.1	0.68	1.4	3.2	1.1	0.73	3.7	3.8	1.3	2.9	5	4.8	1.1	4.3
	K^{+}	39.10	0.8	1.2	0.6	0.89	1.2	0.95	0.7	1.7	2.5	0.8	1.4	4.8	3.4	1.1	1.6
	Na^{+}	22.99	3.6	16.9	3.3	4.8	4.4	3.9	2.6	7.2	26.4	4.2	8.2	11.4	11.1	4.8	13.3
Cations (meq/L)			**1.25**	**1.31**	**0.28**	**0.49**	**0.66**	**0.47**	**0.27**	**0.88**	**1.83**	**0.38**	**0.79**	**1.97**	**1.75**	**0.48**	**1.20**
ANIONS	HCO_3^{-}	61.01	28.1	19.5	8.5	19.5	1.2	23.2	12.2	28.1	0	1.2	22.0	23.2	22.0	0	1.2
	Cl^{-}	35.45	7	40.2	6	13.4	9.3	10.1	9.3	17.1	47.9	10.9	12.6	18.4	12.1	8	26.4
	NO_3^{-}	62.00	0	1	0	0	1.2	0	0	0	9.3	0	0	4.1	4.0	8.4	4.4
	SO_4^{2-}	96.06	0	0	0	0	12.4	0	0	8.1	11	0	0	22.7	56.2	0	10.4
Anions (meq/L)			**0.66**	**1.46**	**0.31**	**0.70**	**0.56**	**0.66**	**0.46**	**1.12**	**1.73**	**0.33**	**0.72**	**1.44**	**1.94**	**0.36**	**1.05**
CBE (%)			***30.8***	*5.5*	*5.8*	*18.3*	*7.8*	*17.3*	***26.1***	*11.8*	*2.9*	*7.3*	*4.6*	*15.6*	*5.0*	*13.8*	*6.4*

	ION	M.W. (g/mol)	*Subtite D Regulated Wells*							*On-site Non-Regulated Wells*						
			Concentration (mg/L)													
			TW-24A	TW-25	TW-25A	TW-27	TW-28	TW-29	TW-30	TW-02	TW-03A	TW-05B	TW-06B	TW-09	TW-14B	TW-16A
CATIONS	Ca^{2+}	40.08	23.3	1.7	5.2	0.85	6.5	2.3	5.3	0.32	3.1	0.43	0.62	0.49	0.55	1.1
	Mg^{2+}	24.31	3.7	1	2.2	0.4	3.1	1.2	2	0.48	1.2	0.18	0.32	0.23	0.27	0.39
	K^{+}	39.10	3.3	0.74	1.2	0.49	1.2	0.83	1.7	0.65	1.2	0.47	0.5	0.59	0.5	0.47
	Na^{+}	22.99	3.9	3.1	4.4	2.4	23.7	5	12.9	1.6	61.7	1.4	1.9	1.1	1.2	1.4
Cations (meq/L)			**1.72**	**0.32**	**0.66**	**0.19**	**1.64**	**0.45**	**1.03**	**0.14**	**2.97**	**0.11**	**0.15**	**0.11**	**0.11**	**0.16**
ANIONS	HCO_3^{-}	61.01	31.7	1.8	3.7	0	1.2	1.2	1.2	14.6	13	0	0	3.7	0	1.8
	Cl^{-}	35.45	6.2	7.4	11.7	10	50.3	11.3	26.4	3.3	171	2.2	3.7	1.8	2	3.3
	NO_3^{-}	62.00	5.3	1.2	3.4	0.24	0.35	2.7	9.3	0.25	0.40	0.89	1.5	0.29	1.6	0.8
	SO_4^{2-}	96.06	17.1	0	0	0	0	0	0	0	0	0	0	0	5.9	0
Anions (meq/L)			**1.14**	**0.26**	**0.45**	**0.29**	**1.44**	**0.38**	**0.91**	**0.34**	**5.05**	**0.08**	**0.13**	**0.12**	**0.20**	**0.14**
CBE (%)			***20.5***	*10.7*	*19.6*	*19.6*	*6.4*	*8.4*	*6.1*	***40.8***	***26.0***	*17.7*	*8.7*	*4.1*	***28.1***	*8.4*

TABLE D2
MLFRRF DATA EVALUATION - FALL 2022
Cation/Anion Balance Worksheet

	ION	M.W. (g/mol)	*COMAR Regulated Wells* Concentration (mg/L)														
			TW-07	TW-07A	TW-08	TW-08A	TW-09B	TW-09C	TW-15	TW-15B	TW-16	TW-17	TW-17A	TW-21	TW-22	TW-22A	TW-22B
CATIONS	Ca^{2+}	40.08	6.3	2.9	6.6	9.1	3.8	4.9	0.87	4.6	12	6.1	0.79	8.2	2.4	6.7	20.7
	Mg^{2+}	24.31	1.1	1.6	4.3	5.8	2.8	4	0.55	4.9	9.6	2.1	0.39	3	2	6.3	4.5
	K^{+}	39.10	2	0.8	1.5	2	1.8	2.2	0.92	1.6	5.9	1.7	0.42	2	1.1	2.1	4.5
	Na^{+}	22.99	6	2.3	28.9	55.8	16.6	15.2	2.2	23.7	18.4	13.5	1.3	22.1	11.9	47.4	7.6
Cations (meq/L)			**0.72**	**0.40**	**1.98**	**3.41**	**1.19**	**1.29**	**0.21**	**1.70**	**2.34**	**1.11**	**0.14**	**1.67**	**0.83**	**2.97**	**1.85**
ANIONS	HCO_3^-	61.01	14.6	0	23.2	0	2.4	0	15.9	0	0	3.7	1.8	0	1.2	0	23.2
	Cl^-	35.45	12.4	5.3	52.7	88.9	26.8	24.1	4.6	58.1	25	7.6	3.4	33.4	22.6	87.5	10.9
	NO_3^-	62.00	0.53	1.2	0.38	20.4	12.4	11.1	0.49	3.0	0	0	0.97	10.6	4.9	9.3	14.6
	SO_4^{2-}	96.06	0	10.5	0	19.5	7.1	15.6	0	7.7	105	34.9	0	29.5	0	17.6	19.5
Anions (meq/L)			**0.60**	**0.39**	**1.87**	**3.24**	**1.14**	**1.18**	**0.40**	**1.85**	**2.89**	**1.00**	**0.14**	**1.73**	**0.74**	**2.98**	**1.33**
CBE (%)			*9.0*	*1.3*	*2.7*	*2.5*	*1.9*	*4.4*	***31.3***	*4.0*	*10.5*	*5.1*	*1.0*	*1.7*	*6.0*	*0.3*	*16.4*

	ION	M.W. (g/mol)	*Surface Water* Concentration (mg/L)		
			SW-1	SW-2	SW-3
CATIONS	Ca^{2+}	40.08	13.8	28	30.2
	Mg^{2+}	24.31	3.3	6.2	6.5
	K^{+}	39.10	2.5	7.4	4.9
	Na^{+}	22.99	42.6	18.9	37.2
Cations (meq/L)			**2.88**	**2.92**	**3.79**
ANIONS	HCO_3^-	61.01	13.4	45.1	34.2
	Cl^-	35.45	71.4	35.9	63.4
	NO_3^-	62.00	8.4	0.3	0.0
	SO_4^{2-}	96.06	12.8	19	43.6
Anions (meq/L)			**2.64**	**2.15**	**3.26**
CBE (%)			*4.4*	*15.1*	*7.5*

APPENDIX E
Laboratory Analytical Data Packages

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

November 03, 2022

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: Millersville Landfill
Pace Project No.: 30530933

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on October 18, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

David A. Pichette
david.pichette@pacelabs.com
(724)850-5617
Project Manager

Enclosures

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Pace Analytical Services, LLC
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Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Millersville Landfill
Pace Project No.: 30530933

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver

225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: Millersville Landfill
Pace Project No.: 30530933

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30530933001	**TW-5**	Water	10/18/22 12:40	10/18/22 22:15
30530933002	**TW-5A**	Water	10/18/22 12:05	10/18/22 22:15
30530933003	**TW-5B**	Water	10/18/22 11:30	10/18/22 22:15
30530933004	**TW-6**	Water	10/18/22 14:10	10/18/22 22:15
30530933005	**TW-6B**	Water	10/18/22 13:30	10/18/22 22:15

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SAMPLE ANALYTE COUNT

Project: Millersville Landfill
Pace Project No.: 30530933

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30530933001	**TW-5**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30530933002	**TW-5A**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30530933003	**TW-5B**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: Millersville Landfill
Pace Project No.: 30530933

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30530933004	**TW-6**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30530933005	**TW-6B**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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(724)850-5600

PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30530933

Date: November 03, 2022

TW-5 (Lab ID: 30530933001)

- Sanple pH for 8011 is 7

TW-5A (Lab ID: 30530933002)

- Sanple pH for 8011 is 7

TW-5B (Lab ID: 30530933003)

- Sanple pH for 8011 is 7

TW-6 (Lab ID: 30530933004)

- Sanple pH for 8011 is 7

TW-6B (Lab ID: 30530933005)

- Sanple pH for 8011 is 6

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30530933

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

General Information:
5 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30530933

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

General Information:
5 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30530933

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

General Information:
5 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30530933

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

General Information:
5 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 543161

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30530933001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2636379)
  - Mercury
- MSD (Lab ID: 2636380)
  - Mercury

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30530933

Method: **EPA 7470A**
Description: BVR 7470 Mercury, Dissolved
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

General Information:
5 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30530933

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

General Information:
5 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 542142

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- BLANK (Lab ID: 2631190)
  - 1,1,1,2-Tetrachloroethane (S)
- MS (Lab ID: 2631192)
  - 1,1,1,2-Tetrachloroethane (S)
- MSD (Lab ID: 2631193)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-5 (Lab ID: 30530933001)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-5A (Lab ID: 30530933002)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-5B (Lab ID: 30530933003)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-6 (Lab ID: 30530933004)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-6B (Lab ID: 30530933005)
  - 1,1,1,2-Tetrachloroethane (S)

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30530933

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

QC Batch: 542142

L1: Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.

- LCS (Lab ID: 2631191)
  - 1,2-Dibromo-3-chloropropane

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30530933

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

General Information:
5 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 541956

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30531027001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2630328)
  - Alkalinity,Total (CaCO3 pH4.5)
- MSD (Lab ID: 2630329)
  - Alkalinity,Total (CaCO3 pH4.5)

Additional Comments:

Analyte Comments:

QC Batch: 541956

1c: Alkalinity TV: -1.00 mg/L

- TW-6B (Lab ID: 30530933005)
  - Alkalinity,Total (CaCO3 pH4.5)

2c: Alkalinity TV: 0.00 mg/L

- BLANK (Lab ID: 2630326)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-5B (Lab ID: 30530933003)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30530933

Method: **SM 2540C-2011**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

General Information:
5 samples were analyzed for SM 2540C-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30530933

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

General Information:
5 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30530933

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

General Information:
5 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30530933

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

General Information:
5 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30530933

Method: **SM 4500NO3-F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

General Information:
5 samples were analyzed for SM 4500NO3-F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 541625

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30531093001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2628809)
  - Nitrogen, NO2 plus NO3
- MSD (Lab ID: 2628810)
  - Nitrogen, NO2 plus NO3

QC Batch: 541626

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30530933002

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2628813)
  - Nitrogen, NO2 plus NO3
- MSD (Lab ID: 2628814)
  - Nitrogen, NO2 plus NO3

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30530933

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

General Information:
5 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 542340

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30530713001,30531345005

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2631861)
  - Sulfate
- MSD (Lab ID: 2631862)
  - Sulfate

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30530933

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

General Information:
5 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30530933

Sample: TW-5 **Lab ID: 30530933001** Collected: 10/18/22 12:40 Received: 10/18/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**3.3**	mg/L	0.50	0.083	1	10/20/22 11:25	10/24/22 10:41	7440-70-2	
Iron	**26.6**	mg/L	0.050	0.035	1	10/20/22 11:25	10/24/22 10:41	7439-89-6	
Magnesium	**1.0**	mg/L	0.50	0.047	1	10/20/22 11:25	10/24/22 10:41	7439-95-4	
Manganese	**0.16**	mg/L	0.0050	0.0027	1	10/20/22 11:25	10/24/22 10:41	7439-96-5	
Potassium	**0.80**	mg/L	0.50	0.26	1	10/20/22 11:25	10/24/22 10:41	7440-09-7	
Sodium	**3.5**	mg/L	0.50	0.34	1	10/20/22 11:25	10/24/22 10:41	7440-23-5	
Total Hardness	**12.5**	mg/L	3.3	0.27	1	10/20/22 11:25	10/24/22 10:41		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**3.7**	mg/L	0.50	0.083	1	10/24/22 10:46	10/28/22 20:45	7440-70-2	
Iron, Dissolved	**27.7**	mg/L	0.050	0.035	1	10/24/22 10:46	10/28/22 20:45	7439-89-6	
Magnesium, Dissolved	**1.1**	mg/L	0.50	0.047	1	10/24/22 10:46	10/28/22 20:45	7439-95-4	
Manganese, Dissolved	**0.17**	mg/L	0.0050	0.0027	1	10/24/22 10:46	10/28/22 20:45	7439-96-5	
Potassium, Dissolved	**0.95**	mg/L	0.50	0.26	1	10/24/22 10:46	10/28/22 20:45	7440-09-7	
Sodium, Dissolved	**3.9**	mg/L	0.50	0.34	1	10/24/22 10:46	10/28/22 20:45	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/20/22 14:39	10/21/22 10:31	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	10/20/22 14:39	10/21/22 10:31	7440-38-2	
Barium	**0.026**	mg/L	0.0025	0.00098	1	10/20/22 14:39	10/21/22 10:31	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	10/20/22 14:39	10/21/22 10:31	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	10/20/22 14:39	10/21/22 10:31	7440-43-9	
Chromium	**0.0017J**	mg/L	0.0025	0.00050	1	10/20/22 14:39	10/21/22 10:31	7440-47-3	
Cobalt	**0.00084J**	mg/L	0.0025	0.00081	1	10/20/22 14:39	10/21/22 10:31	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.00064	1	10/20/22 14:39	10/21/22 10:31	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/20/22 14:39	10/21/22 10:31	7439-92-1	
Nickel	**0.0023J**	mg/L	0.0025	0.00065	1	10/20/22 14:39	10/21/22 10:31	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/20/22 14:39	10/21/22 10:31	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/20/22 14:39	10/21/22 10:31	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/20/22 14:39	10/21/22 10:31	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/20/22 14:39	10/21/22 10:31	7440-62-2	
Zinc	**0.0050J**	mg/L	0.0050	0.0040	1	10/20/22 14:39	10/21/22 10:31	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	10/28/22 11:30	10/31/22 16:47	7439-97-6	M1
BVR 7470 Mercury, Dissolved	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury, Dissolved	**0.00050 U**	mg/L	0.00050	0.00025	1	11/02/22 11:44	11/02/22 18:34	7439-97-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30530933

Sample: TW-5 **Lab ID: 30530933001** Collected: 10/18/22 12:40 Received: 10/18/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	10/25/22 06:30	10/26/22 13:56	96-12-8	L1
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/25/22 06:30	10/26/22 13:56	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	99	%.	60-140		1	10/25/22 06:30	10/26/22 13:56	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011								
	Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**38.0**	mg/L	10.0	1.0	1		10/24/22 16:36		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011								
	Pace Analytical Services - Greensburg								
Total Dissolved Solids	**97.0**	mg/L	10.0	10.0	1		10/20/22 16:11		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1								
	Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	10/24/22 09:40	10/24/22 11:52		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
	Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**8.4J**	mg/L	25.0	4.7	1	10/20/22 11:30	10/20/22 15:03		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
	Pace Analytical Services - Greensburg								
Chloride	**10.1**	mg/L	3.0	0.67	1		10/20/22 14:37	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011								
	Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		10/24/22 15:36	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		10/24/22 15:36		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/25/22 17:53	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011								
	Pace Analytical Services - Greensburg								
Nitrite as N	**0.0067J**	mg/L	0.010	0.0055	1		10/19/22 14:43	14797-65-0	

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30530933

Sample: TW-5A **Lab ID: 30530933002** Collected: 10/18/22 12:05 Received: 10/18/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**1.6**	mg/L	0.50	0.083	1	10/20/22 11:25	10/24/22 10:43	7440-70-2	
Iron	**47.0**	mg/L	0.050	0.035	1	10/20/22 11:25	10/24/22 10:43	7439-89-6	
Magnesium	**0.71**	mg/L	0.50	0.047	1	10/20/22 11:25	10/24/22 10:43	7439-95-4	
Manganese	**0.19**	mg/L	0.0050	0.0027	1	10/20/22 11:25	10/24/22 10:43	7439-96-5	
Potassium	**0.61**	mg/L	0.50	0.26	1	10/20/22 11:25	10/24/22 10:43	7440-09-7	
Sodium	**2.4**	mg/L	0.50	0.34	1	10/20/22 11:25	10/24/22 10:43	7440-23-5	
Total Hardness	**6.9**	mg/L	3.3	0.27	1	10/20/22 11:25	10/24/22 10:43		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**1.6**	mg/L	0.50	0.083	1	10/24/22 10:46	10/28/22 20:47	7440-70-2	
Iron, Dissolved	**44.9**	mg/L	0.050	0.035	1	10/24/22 10:46	10/28/22 20:47	7439-89-6	
Magnesium, Dissolved	**0.73**	mg/L	0.50	0.047	1	10/24/22 10:46	10/28/22 20:47	7439-95-4	
Manganese, Dissolved	**0.20**	mg/L	0.0050	0.0027	1	10/24/22 10:46	10/28/22 20:47	7439-96-5	
Potassium, Dissolved	**0.70**	mg/L	0.50	0.26	1	10/24/22 10:46	10/28/22 20:47	7440-09-7	
Sodium, Dissolved	**2.6**	mg/L	0.50	0.34	1	10/24/22 10:46	10/28/22 20:47	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/20/22 14:39	10/21/22 10:40	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	10/20/22 14:39	10/21/22 10:40	7440-38-2	
Barium	**0.016**	mg/L	0.0025	0.00098	1	10/20/22 14:39	10/21/22 10:40	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	10/20/22 14:39	10/21/22 10:40	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	10/20/22 14:39	10/21/22 10:40	7440-43-9	
Chromium	**0.00066J**	mg/L	0.0025	0.00050	1	10/20/22 14:39	10/21/22 10:40	7440-47-3	
Cobalt	**0.0025 U**	mg/L	0.0025	0.00081	1	10/20/22 14:39	10/21/22 10:40	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.00064	1	10/20/22 14:39	10/21/22 10:40	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/20/22 14:39	10/21/22 10:40	7439-92-1	
Nickel	**0.0051**	mg/L	0.0025	0.00065	1	10/20/22 14:39	10/21/22 10:40	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/20/22 14:39	10/21/22 10:40	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/20/22 14:39	10/21/22 10:40	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/20/22 14:39	10/21/22 10:40	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/20/22 14:39	10/21/22 10:40	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0040	1	10/20/22 14:39	10/21/22 10:40	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	10/28/22 11:30	10/31/22 16:56	7439-97-6	
BVR 7470 Mercury, Dissolved	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury, Dissolved	**0.00050 U**	mg/L	0.00050	0.00025	1	11/02/22 11:44	11/02/22 18:40	7439-97-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30530933

Sample: TW-5A **Lab ID: 30530933002** Collected: 10/18/22 12:05 Received: 10/18/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	10/25/22 06:30	10/26/22 14:34	96-12-8	L1
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/25/22 06:30	10/26/22 14:34	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	100	%.	60-140		1	10/25/22 06:30	10/26/22 14:34	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011								
	Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**20.0**	mg/L	10.0	1.0	1		10/24/22 16:39		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011								
	Pace Analytical Services - Greensburg								
Total Dissolved Solids	**39.0**	mg/L	10.0	10.0	1		10/20/22 16:11		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1								
	Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	10/24/22 09:40	10/24/22 11:54		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
	Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**15.2J**	mg/L	25.0	4.7	1	10/20/22 11:30	10/20/22 15:03		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
	Pace Analytical Services - Greensburg								
Chloride	**9.3**	mg/L	3.0	0.67	1		10/20/22 14:40	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011								
	Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		10/24/22 15:42	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		10/24/22 15:42		ML
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/25/22 17:53	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011								
	Pace Analytical Services - Greensburg								
Nitrite as N	**0.024**	mg/L	0.010	0.0055	1		10/19/22 14:46	14797-65-0	

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30530933

Sample: TW-5B **Lab ID: 30530933003** Collected: 10/18/22 11:30 Received: 10/18/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.39J**	mg/L	0.50	0.083	1	10/20/22 11:25	10/24/22 10:45	7440-70-2	
Iron	**0.10**	mg/L	0.050	0.035	1	10/20/22 11:25	10/24/22 10:45	7439-89-6	
Magnesium	**0.15J**	mg/L	0.50	0.047	1	10/20/22 11:25	10/24/22 10:45	7439-95-4	
Manganese	**0.0054**	mg/L	0.0050	0.0027	1	10/20/22 11:25	10/24/22 10:45	7439-96-5	
Potassium	**0.39J**	mg/L	0.50	0.26	1	10/20/22 11:25	10/24/22 10:45	7440-09-7	
Sodium	**1.3**	mg/L	0.50	0.34	1	10/20/22 11:25	10/24/22 10:45	7440-23-5	
Total Hardness	**1.6J**	mg/L	3.3	0.27	1	10/20/22 11:25	10/24/22 10:45		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.43J**	mg/L	0.50	0.083	1	10/24/22 10:46	10/28/22 20:49	7440-70-2	
Iron, Dissolved	**0.062**	mg/L	0.050	0.035	1	10/24/22 10:46	10/28/22 20:49	7439-89-6	
Magnesium, Dissolved	**0.18J**	mg/L	0.50	0.047	1	10/24/22 10:46	10/28/22 20:49	7439-95-4	
Manganese, Dissolved	**0.0075**	mg/L	0.0050	0.0027	1	10/24/22 10:46	10/28/22 20:49	7439-96-5	
Potassium, Dissolved	**0.47J**	mg/L	0.50	0.26	1	10/24/22 10:46	10/28/22 20:49	7440-09-7	
Sodium, Dissolved	**1.4**	mg/L	0.50	0.34	1	10/24/22 10:46	10/28/22 20:49	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/20/22 14:39	10/21/22 10:43	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	10/20/22 14:39	10/21/22 10:43	7440-38-2	
Barium	**0.0044**	mg/L	0.0025	0.00098	1	10/20/22 14:39	10/21/22 10:43	7440-39-3	
Beryllium	**0.00024J**	mg/L	0.00050	0.00010	1	10/20/22 14:39	10/21/22 10:43	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	10/20/22 14:39	10/21/22 10:43	7440-43-9	
Chromium	**0.010**	mg/L	0.0025	0.00050	1	10/20/22 14:39	10/21/22 10:43	7440-47-3	
Cobalt	**0.0044**	mg/L	0.0025	0.00081	1	10/20/22 14:39	10/21/22 10:43	7440-48-4	
Copper	**0.012**	mg/L	0.0025	0.00064	1	10/20/22 14:39	10/21/22 10:43	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/20/22 14:39	10/21/22 10:43	7439-92-1	
Nickel	**0.014**	mg/L	0.0025	0.00065	1	10/20/22 14:39	10/21/22 10:43	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/20/22 14:39	10/21/22 10:43	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/20/22 14:39	10/21/22 10:43	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/20/22 14:39	10/21/22 10:43	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/20/22 14:39	10/21/22 10:43	7440-62-2	
Zinc	**0.010**	mg/L	0.0050	0.0040	1	10/20/22 14:39	10/21/22 10:43	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	10/28/22 11:30	10/31/22 16:58	7439-97-6	
BVR 7470 Mercury, Dissolved	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury, Dissolved	**0.00050 U**	mg/L	0.00050	0.00025	1	11/02/22 11:44	11/02/22 18:43	7439-97-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30530933

Sample: TW-5B **Lab ID: 30530933003** Collected: 10/18/22 11:30 Received: 10/18/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	10/25/22 06:30	10/26/22 14:47	96-12-8	L1
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/25/22 06:30	10/26/22 14:47	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	92	%.	60-140		1	10/25/22 06:30	10/26/22 14:47	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011								
	Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		10/24/22 16:48		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011								
	Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		10/20/22 16:11		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1								
	Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	10/24/22 09:40	10/24/22 11:56		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
	Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/20/22 11:30	10/20/22 15:03		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
	Pace Analytical Services - Greensburg								
Chloride	**2.2J**	mg/L	3.0	0.67	1		10/20/22 14:41	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011								
	Pace Analytical Services - Greensburg								
Nitrate as N	**0.20**	mg/L	0.10	0.053	1		10/24/22 15:47	14797-55-8	
Nitrogen, NO2 plus NO3	**0.20**	mg/L	0.10	0.053	1		10/24/22 15:47		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/25/22 17:56	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011								
	Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/19/22 14:46	14797-65-0	

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30530933

Sample: TW-6 **Lab ID: 30530933004** Collected: 10/18/22 14:10 Received: 10/18/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**4.1**	mg/L	0.50	0.083	1	10/20/22 11:25	10/24/22 10:47	7440-70-2	
Iron	**21.3**	mg/L	0.050	0.035	1	10/20/22 11:25	10/24/22 10:47	7439-89-6	
Magnesium	**3.3**	mg/L	0.50	0.047	1	10/20/22 11:25	10/24/22 10:47	7439-95-4	
Manganese	**0.31**	mg/L	0.0050	0.0027	1	10/20/22 11:25	10/24/22 10:47	7439-96-5	
Potassium	**1.5**	mg/L	0.50	0.26	1	10/20/22 11:25	10/24/22 10:47	7440-09-7	
Sodium	**6.5**	mg/L	0.50	0.34	1	10/20/22 11:25	10/24/22 10:47	7440-23-5	
Total Hardness	**23.8**	mg/L	3.3	0.27	1	10/20/22 11:25	10/24/22 10:47		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**4.4**	mg/L	0.50	0.083	1	10/24/22 10:46	10/28/22 20:51	7440-70-2	
Iron, Dissolved	**23.0**	mg/L	0.050	0.035	1	10/24/22 10:46	10/28/22 20:51	7439-89-6	
Magnesium, Dissolved	**3.7**	mg/L	0.50	0.047	1	10/24/22 10:46	10/28/22 20:51	7439-95-4	
Manganese, Dissolved	**0.33**	mg/L	0.0050	0.0027	1	10/24/22 10:46	10/28/22 20:51	7439-96-5	
Potassium, Dissolved	**1.7**	mg/L	0.50	0.26	1	10/24/22 10:46	10/28/22 20:51	7440-09-7	
Sodium, Dissolved	**7.2**	mg/L	0.50	0.34	1	10/24/22 10:46	10/28/22 20:51	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/20/22 14:39	10/21/22 10:45	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	10/20/22 14:39	10/21/22 10:45	7440-38-2	
Barium	**0.13**	mg/L	0.0025	0.00098	1	10/20/22 14:39	10/21/22 10:45	7440-39-3	
Beryllium	**0.00020J**	mg/L	0.00050	0.00010	1	10/20/22 14:39	10/21/22 10:45	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	10/20/22 14:39	10/21/22 10:45	7440-43-9	
Chromium	**0.0024J**	mg/L	0.0025	0.00050	1	10/20/22 14:39	10/21/22 10:45	7440-47-3	
Cobalt	**0.018**	mg/L	0.0025	0.00081	1	10/20/22 14:39	10/21/22 10:45	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.00064	1	10/20/22 14:39	10/21/22 10:45	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/20/22 14:39	10/21/22 10:45	7439-92-1	
Nickel	**0.0090**	mg/L	0.0025	0.00065	1	10/20/22 14:39	10/21/22 10:45	7440-02-0	
Selenium	**0.00090J**	mg/L	0.0025	0.00084	1	10/20/22 14:39	10/21/22 10:45	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/20/22 14:39	10/21/22 10:45	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/20/22 14:39	10/21/22 10:45	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/20/22 14:39	10/21/22 10:45	7440-62-2	
Zinc	**0.014**	mg/L	0.0050	0.0040	1	10/20/22 14:39	10/21/22 10:45	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	10/28/22 11:30	10/31/22 17:00	7439-97-6	
BVR 7470 Mercury, Dissolved	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury, Dissolved	**0.00082**	mg/L	0.00050	0.00025	1	11/02/22 11:44	11/02/22 18:45	7439-97-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30530933

Sample: TW-6 **Lab ID: 30530933004** Collected: 10/18/22 14:10 Received: 10/18/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	10/25/22 06:30	10/26/22 15:00	96-12-8	L1
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/25/22 06:30	10/26/22 15:00	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	94	%.	60-140		1	10/25/22 06:30	10/26/22 15:00	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011								
	Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**46.0**	mg/L	10.0	1.0	1		10/24/22 16:51		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011								
	Pace Analytical Services - Greensburg								
Total Dissolved Solids	**65.0**	mg/L	10.0	10.0	1		10/20/22 16:11		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1								
	Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	10/24/22 09:40	10/24/22 11:58		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
	Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**24.4J**	mg/L	25.0	4.7	1	10/20/22 11:30	10/20/22 15:04		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
	Pace Analytical Services - Greensburg								
Chloride	**17.1**	mg/L	3.0	0.67	1		10/20/22 14:42	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011								
	Pace Analytical Services - Greensburg								
Nitrate as N	**0.066J**	mg/L	0.10	0.053	1		10/24/22 15:48	14797-55-8	
Nitrogen, NO2 plus NO3	**0.073J**	mg/L	0.10	0.053	1		10/24/22 15:48		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**8.1J**	mg/L	10.0	4.7	1		10/25/22 17:56	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011								
	Pace Analytical Services - Greensburg								
Nitrite as N	**0.0069J**	mg/L	0.010	0.0055	1		10/19/22 14:46	14797-65-0	

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30530933

Sample: TW-6B **Lab ID: 30530933005** Collected: 10/18/22 13:30 Received: 10/18/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.57**	mg/L	0.50	0.083	1	10/20/22 11:25	10/24/22 10:49	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	10/20/22 11:25	10/24/22 10:49	7439-89-6	
Magnesium	**0.26J**	mg/L	0.50	0.047	1	10/20/22 11:25	10/24/22 10:49	7439-95-4	
Manganese	**0.0074**	mg/L	0.0050	0.0027	1	10/20/22 11:25	10/24/22 10:49	7439-96-5	
Potassium	**0.45J**	mg/L	0.50	0.26	1	10/20/22 11:25	10/24/22 10:49	7440-09-7	
Sodium	**1.6**	mg/L	0.50	0.34	1	10/20/22 11:25	10/24/22 10:49	7440-23-5	
Total Hardness	**2.5J**	mg/L	3.3	0.27	1	10/20/22 11:25	10/24/22 10:49		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.62**	mg/L	0.50	0.083	1	10/24/22 10:46	10/28/22 20:57	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	10/24/22 10:46	10/28/22 20:57	7439-89-6	
Magnesium, Dissolved	**0.32J**	mg/L	0.50	0.047	1	10/24/22 10:46	10/28/22 20:57	7439-95-4	
Manganese, Dissolved	**0.0076**	mg/L	0.0050	0.0027	1	10/24/22 10:46	10/28/22 20:57	7439-96-5	
Potassium, Dissolved	**0.52**	mg/L	0.50	0.26	1	10/24/22 10:46	10/28/22 20:57	7440-09-7	
Sodium, Dissolved	**1.9**	mg/L	0.50	0.34	1	10/24/22 10:46	10/28/22 20:57	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/20/22 14:39	10/21/22 10:48	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	10/20/22 14:39	10/21/22 10:48	7440-38-2	
Barium	**0.0077**	mg/L	0.0025	0.00098	1	10/20/22 14:39	10/21/22 10:48	7440-39-3	
Beryllium	**0.00030J**	mg/L	0.00050	0.00010	1	10/20/22 14:39	10/21/22 10:48	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	10/20/22 14:39	10/21/22 10:48	7440-43-9	
Chromium	**0.0036**	mg/L	0.0025	0.00050	1	10/20/22 14:39	10/21/22 10:48	7440-47-3	
Cobalt	**0.0063**	mg/L	0.0025	0.00081	1	10/20/22 14:39	10/21/22 10:48	7440-48-4	
Copper	**0.017**	mg/L	0.0025	0.00064	1	10/20/22 14:39	10/21/22 10:48	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/20/22 14:39	10/21/22 10:48	7439-92-1	
Nickel	**0.010**	mg/L	0.0025	0.00065	1	10/20/22 14:39	10/21/22 10:48	7440-02-0	
Selenium	**0.00089J**	mg/L	0.0025	0.00084	1	10/20/22 14:39	10/21/22 10:48	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/20/22 14:39	10/21/22 10:48	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/20/22 14:39	10/21/22 10:48	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/20/22 14:39	10/21/22 10:48	7440-62-2	
Zinc	**0.011**	mg/L	0.0050	0.0040	1	10/20/22 14:39	10/21/22 10:48	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	10/28/22 11:30	10/31/22 17:03	7439-97-6	
BVR 7470 Mercury, Dissolved	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury, Dissolved	**0.00050 U**	mg/L	0.00050	0.00025	1	11/02/22 11:44	11/02/22 18:52	7439-97-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30530933

Sample: TW-6B **Lab ID: 30530933005** Collected: 10/18/22 13:30 Received: 10/18/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	10/25/22 06:30	10/26/22 15:12	96-12-8	L1
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/25/22 06:30	10/26/22 15:12	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	107	%.	60-140		1	10/25/22 06:30	10/26/22 15:12	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011								
	Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		10/24/22 16:53		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011								
	Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		10/20/22 16:11		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1								
	Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	10/24/22 09:40	10/24/22 12:00		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
	Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.1J**	mg/L	25.0	4.7	1	10/20/22 11:30	10/20/22 15:05		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
	Pace Analytical Services - Greensburg								
Chloride	**3.7**	mg/L	3.0	0.67	1		10/20/22 14:43	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011								
	Pace Analytical Services - Greensburg								
Nitrate as N	**0.34**	mg/L	0.10	0.053	1		10/24/22 15:49	14797-55-8	
Nitrogen, NO2 plus NO3	**0.34**	mg/L	0.10	0.053	1		10/24/22 15:49		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/25/22 17:58	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011								
	Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/19/22 14:47	14797-65-0	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30530933

QC Batch: 541220
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30530933001, 30530933002, 30530933003, 30530933004, 30530933005

METHOD BLANK: 2626849 Matrix: Water
Associated Lab Samples: 30530933001, 30530933002, 30530933003, 30530933004, 30530933005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	10/24/22 09:52	
Iron	mg/L	0.050 U	0.050	0.035	10/24/22 09:52	
Magnesium	mg/L	0.50 U	0.50	0.047	10/24/22 09:52	
Manganese	mg/L	0.0050 U	0.0050	0.0027	10/24/22 09:52	
Potassium	mg/L	0.50 U	0.50	0.26	10/24/22 09:52	
Sodium	mg/L	0.50 U	0.50	0.34	10/24/22 09:52	

LABORATORY CONTROL SAMPLE: 2626850

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	39.1	98	80-120	
Iron	mg/L	2	2.0	102	80-120	
Magnesium	mg/L	20	19.6	98	80-120	
Manganese	mg/L	2	1.9	96	80-120	
Potassium	mg/L	20	19.5	98	80-120	
Sodium	mg/L	20	19.6	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2626942 2626943

Parameter	Units	30530823001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	94900 ug/L	40	40	129	128	86	83	80-120	1	20	
Iron	mg/L	0.092	2	2	2.0	2.0	96	95	80-120	1	20	
Magnesium	mg/L	24400 ug/L	20	20	42.9	42.3	93	90	80-120	1	20	
Manganese	mg/L	0.0032J	2	2	1.9	1.8	93	91	80-120	2	20	
Potassium	mg/L	1520 ug/L	20	20	21.2	21.0	99	97	80-120	1	20	
Sodium	mg/L	10300 ug/L	20	20	29.6	29.3	96	95	80-120	1	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30530933

QC Batch: 541893
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30530933001, 30530933002, 30530933003, 30530933004, 30530933005

METHOD BLANK: 2630224 Matrix: Water
Associated Lab Samples: 30530933001, 30530933002, 30530933003, 30530933004, 30530933005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	10/24/22 21:00	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	10/24/22 21:00	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	10/24/22 21:00	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	10/24/22 21:00	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	10/24/22 21:00	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	10/24/22 21:00	

LABORATORY CONTROL SAMPLE: 2630225

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	36.0	90	80-120	
Iron, Dissolved	mg/L	2	2.0	99	80-120	
Magnesium, Dissolved	mg/L	20	18.0	90	80-120	
Manganese, Dissolved	mg/L	2	1.9	94	80-120	
Potassium, Dissolved	mg/L	20	20.4	102	80-120	
Sodium, Dissolved	mg/L	20	20.4	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2630226 2630227

Parameter	Units	30531895001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	8940 ug/L	40	40	50.3	43.5	103	86	80-120	14	20	
Iron, Dissolved	mg/L	ND	2	2	2.2	2.1	107	106	80-120	1	20	
Magnesium, Dissolved	mg/L	5970 ug/L	20	20	27.6	27.0	108	105	80-120	2	20	
Manganese, Dissolved	mg/L	5390 ug/L	2	2	7.7	7.6	116	110	80-120	2	20	
Potassium, Dissolved	mg/L	688 ug/L	20	20	22.9	22.9	111	111	80-120	0	20	
Sodium, Dissolved	mg/L	11000 ug/L	20	20	33.0	32.8	110	109	80-120	1	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30530933

QC Batch: 540982
QC Batch Method: EPA 3020A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30530933001, 30530933002, 30530933003, 30530933004, 30530933005

METHOD BLANK: 2625479
Matrix: Water
Associated Lab Samples: 30530933001, 30530933002, 30530933003, 30530933004, 30530933005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00030	10/21/22 09:36	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	10/21/22 09:36	
Barium	mg/L	0.0025 U	0.0025	0.00098	10/21/22 09:36	
Beryllium	mg/L	0.00050 U	0.00050	0.00010	10/21/22 09:36	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	10/21/22 09:36	
Chromium	mg/L	0.0025 U	0.0025	0.00050	10/21/22 09:36	
Cobalt	mg/L	0.0025 U	0.0025	0.00081	10/21/22 09:36	
Copper	mg/L	0.0025 U	0.0025	0.00064	10/21/22 09:36	
Lead	mg/L	0.00050 U	0.00050	0.00025	10/21/22 09:36	
Nickel	mg/L	0.0025 U	0.0025	0.00065	10/21/22 09:36	
Selenium	mg/L	0.0025 U	0.0025	0.00084	10/21/22 09:36	
Silver	mg/L	0.0025 U	0.0025	0.00053	10/21/22 09:36	
Thallium	mg/L	0.00050 U	0.00050	0.000081	10/21/22 09:36	
Vanadium	mg/L	0.0025 U	0.0025	0.0012	10/21/22 09:36	
Zinc	mg/L	0.0050 U	0.0050	0.0040	10/21/22 09:36	

LABORATORY CONTROL SAMPLE: 2625480

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.021	106	80-120	
Arsenic	mg/L	0.1	0.10	103	80-120	
Barium	mg/L	0.1	0.10	102	80-120	
Beryllium	mg/L	0.02	0.021	103	80-120	
Cadmium	mg/L	0.02	0.020	101	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Copper	mg/L	0.1	0.10	103	80-120	
Lead	mg/L	0.02	0.020	102	80-120	
Nickel	mg/L	0.1	0.10	102	80-120	
Selenium	mg/L	0.1	0.10	104	80-120	
Silver	mg/L	0.1	0.10	102	80-120	
Thallium	mg/L	0.02	0.020	102	80-120	
Vanadium	mg/L	0.1	0.10	102	80-120	
Zinc	mg/L	0.2	0.21	103	80-120	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30530933

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2627482 2627483

Parameter	Units	30528706010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.88 ug/L	0.02	0.02	0.023	0.023	109	109	75-125	0	20	
Arsenic	mg/L	ND	0.1	0.1	0.11	0.10	107	103	75-125	3	20	
Barium	mg/L	34.5 ug/L	0.1	0.1	0.14	0.14	103	104	75-125	0	20	
Beryllium	mg/L	ND	0.02	0.02	0.021	0.021	107	105	75-125	2	20	
Cadmium	mg/L	ND	0.02	0.02	0.020	0.020	102	102	75-125	0	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.10	106	104	75-125	2	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	1	20	
Copper	mg/L	ND	0.1	0.1	0.10	0.10	104	102	75-125	2	20	
Lead	mg/L	4.0 ug/L	0.02	0.02	0.025	0.025	105	105	75-125	0	20	
Nickel	mg/L	ND	0.1	0.1	0.11	0.11	106	103	75-125	3	20	
Selenium	mg/L	ND	0.1	0.1	0.11	0.10	104	101	75-125	3	20	
Silver	mg/L	ND	0.1	0.1	0.10	0.10	103	103	75-125	0	20	
Thallium	mg/L	ND	0.02	0.02	0.021	0.020	102	102	75-125	1	20	
Vanadium	mg/L	ND	0.1	0.1	0.11	0.10	106	104	75-125	2	20	
Zinc	mg/L	5.9 ug/L	0.2	0.2	0.22	0.21	105	102	75-125	2	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30530933

QC Batch: 543161
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30530933001, 30530933002, 30530933003, 30530933004, 30530933005

METHOD BLANK: 2636330 Matrix: Water
Associated Lab Samples: 30530933001, 30530933002, 30530933003, 30530933004, 30530933005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	10/31/22 16:41	

LABORATORY CONTROL SAMPLE: 2636331

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.011	115	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2636379 2636380

Parameter	Units	30530933001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00020 U	0.01	0.01	0.019	0.020	187	198	80-120	6	20	M1

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30530933

QC Batch: 544090
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30530933001, 30530933002, 30530933003, 30530933004, 30530933005

METHOD BLANK: 2640515 Matrix: Water
Associated Lab Samples: 30530933001, 30530933002, 30530933003, 30530933004, 30530933005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury, Dissolved	mg/L	0.00050 U	0.00050	0.00025	11/02/22 18:29	

LABORATORY CONTROL SAMPLE: 2640516

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	mg/L	0.01	0.010	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2640517 2640518

Parameter	Units	30530933001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury, Dissolved	mg/L	0.00050 U	0.01	0.01	0.011	0.011	107	113	80-120	6	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30530933

QC Batch: 542142
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30530933001, 30530933002, 30530933003, 30530933004, 30530933005

METHOD BLANK: 2631190 Matrix: Water
Associated Lab Samples: 30530933001, 30530933002, 30530933003, 30530933004, 30530933005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	10/26/22 13:31	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	10/26/22 13:31	
1,1,1,2-Tetrachloroethane (S)	%.	101	60-140		10/26/22 13:31	CH

LABORATORY CONTROL SAMPLE: 2631191

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.38	152	85-115	L1
1,2-Dibromoethane (EDB)	ug/L	0.25	0.24	94	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			125	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2631192 2631193

Parameter	Units	30530933001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.041 U	0.41	0.41	0.34	0.34	82	83	60-140	0	25	
1,2-Dibromoethane (EDB)	ug/L	0.041 U	0.41	0.41	0.34	0.34	83	83	60-140	0	25	
1,1,1,2-Tetrachloroethane (S)	%.						95	94	60-140			CH

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30530933

QC Batch: 541956
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30530933001, 30530933002, 30530933003, 30530933004, 30530933005

METHOD BLANK: 2630326 Matrix: Water
Associated Lab Samples: 30530933001, 30530933002, 30530933003, 30530933004, 30530933005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	10/24/22 14:11	2c

LABORATORY CONTROL SAMPLE: 2630327

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2630328 2630329

Parameter	Units	30531027001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	348	50	50	380	376	64	56	85-115	1	20	ML

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30530933

QC Batch: 541292
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30530933001, 30530933002, 30530933003, 30530933004, 30530933005

METHOD BLANK: 2627128
Matrix: Water
Associated Lab Samples: 30530933001, 30530933002, 30530933003, 30530933004, 30530933005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	10/20/22 16:11	

LABORATORY CONTROL SAMPLE: 2627129

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	954	95	85-115	

SAMPLE DUPLICATE: 2627130

Parameter	Units	30530989002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	315	300	5	5	

SAMPLE DUPLICATE: 2627131

Parameter	Units	30530933005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0 U		5	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30530933

QC Batch: 541825
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30530933001, 30530933002, 30530933003, 30530933004, 30530933005

METHOD BLANK: 2630040
Matrix: Water
Associated Lab Samples: 30530933001, 30530933002, 30530933003, 30530933004, 30530933005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	10/24/22 11:41	

LABORATORY CONTROL SAMPLE: 2630041

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.0	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2630042 2630043

Parameter	Units	30531169002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	ND	4	4	4.1	4.1	100	100	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2630044 2630045

Parameter	Units	30531089001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	1.4	4	4	5.4	5.4	98	98	90-110	0	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30530933

QC Batch: 541241
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30530933001, 30530933002, 30530933003, 30530933004, 30530933005

METHOD BLANK: 2626912 Matrix: Water
Associated Lab Samples: 30530933001, 30530933002, 30530933003, 30530933004, 30530933005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	10/20/22 15:01	

METHOD BLANK: 2626916 Matrix: Water
Associated Lab Samples: 30530933001, 30530933002, 30530933003, 30530933004, 30530933005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	10/20/22 15:01	

LABORATORY CONTROL SAMPLE: 2626913

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	323	108	90-110	

LABORATORY CONTROL SAMPLE: 2626917

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	319	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2626914 2626915

Parameter	Units	30530933003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	25.0 U	150	150	164	166	106	108	90-110	1	10	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30530933

QC Batch: 541306
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30530933001, 30530933002, 30530933003, 30530933004, 30530933005

METHOD BLANK: 2627204 Matrix: Water
Associated Lab Samples: 30530933001, 30530933002, 30530933003, 30530933004, 30530933005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	10/20/22 14:26	

LABORATORY CONTROL SAMPLE: 2627205

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	19.9	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2627453 2627454

Parameter	Units	30531052001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	19.3	20	20	39.8	39.7	103	102	85-115	0	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30530933

QC Batch: 541625
QC Batch Method: SM 4500NO3-F-2011
Analysis Method: SM 4500NO3-F-2011
Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30530933001

METHOD BLANK: 2628807 Matrix: Water
Associated Lab Samples: 30530933001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	10/24/22 15:01	

LABORATORY CONTROL SAMPLE: 2628808

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	3.8	94	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2628809 2628810

Parameter	Units	30531093001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	3.7	5	5	7.6	7.6	79	79	85-115	0	20	ML

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30530933

QC Batch: 541626
QC Batch Method: SM 4500NO3-F-2011
Analysis Method: SM 4500NO3-F-2011
Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30530933002, 30530933003, 30530933004, 30530933005

METHOD BLANK: 2628811 Matrix: Water
Associated Lab Samples: 30530933002, 30530933003, 30530933004, 30530933005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	10/24/22 15:40	

LABORATORY CONTROL SAMPLE: 2628812

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	3.8	94	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2628813 2628814

Parameter	Units	30530933002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.10 U	5	5	3.4	3.4	68	67	85-115	1	20	ML

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30530933

QC Batch: 542340 | Analysis Method: EPA 9038
QC Batch Method: EPA 9038 | Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30530933001, 30530933002, 30530933003, 30530933004, 30530933005

METHOD BLANK: 2631859 | Matrix: Water
Associated Lab Samples: 30530933001, 30530933002, 30530933003, 30530933004, 30530933005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	10/25/22 17:46	

LABORATORY CONTROL SAMPLE: 2631860

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	30.6	102	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2631861 2631862

Parameter	Units	30530713001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	30600	20000	20000	10000 U	10000 U	-153	-153	85-115		20	ML

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2631875 2631876

Parameter	Units	30531345005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	7.1J	20	20	28.0	27.3	104	101	85-115	2	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30530933

QC Batch: 540849
QC Batch Method: SM 4500NO2-B-2011
Analysis Method: SM 4500NO2-B-2011
Analysis Description: SM4500-NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30530933001, 30530933002, 30530933003, 30530933004, 30530933005

METHOD BLANK: 2624991 Matrix: Water
Associated Lab Samples: 30530933001, 30530933002, 30530933003, 30530933004, 30530933005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	10/19/22 14:42	

LABORATORY CONTROL SAMPLE: 2624992

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.10	102	90-110	

MATRIX SPIKE SAMPLE: 2625211

Parameter	Units	30530933001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.0067J	0.1	0.11	103	85-115	

SAMPLE DUPLICATE: 2625210

Parameter	Units	30530933001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	0.0067J	0.010 U		20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Millersville Landfill
Pace Project No.: 30530933

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30530933001

[1] Sanple pH for 8011 is 7

Sample: 30530933002

[1] Sanple pH for 8011 is 7

Sample: 30530933003

[1] Sanple pH for 8011 is 7

Sample: 30530933004

[1] Sanple pH for 8011 is 7

Sample: 30530933005

[1] Sanple pH for 8011 is 6

ANALYTE QUALIFIERS

1c	Alkalinity TV: -1.00 mg/L
2c	Alkalinity TV: 0.00 mg/L
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.

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(724)850-5600

QUALIFIERS

Project: Millersville Landfill
Pace Project No.: 30530933

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Millersville Landfill
Pace Project No.: 30530933

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30530933001	**TW-5**	EPA 3010A	541220	EPA 6010D	541880
30530933002	**TW-5A**	EPA 3010A	541220	EPA 6010D	541880
30530933003	**TW-5B**	EPA 3010A	541220	EPA 6010D	541880
30530933004	**TW-6**	EPA 3010A	541220	EPA 6010D	541880
30530933005	**TW-6B**	EPA 3010A	541220	EPA 6010D	541880
30530933001	**TW-5**	EPA 3010A	541893	EPA 6010D	542102
30530933002	**TW-5A**	EPA 3010A	541893	EPA 6010D	542102
30530933003	**TW-5B**	EPA 3010A	541893	EPA 6010D	542102
30530933004	**TW-6**	EPA 3010A	541893	EPA 6010D	542102
30530933005	**TW-6B**	EPA 3010A	541893	EPA 6010D	542102
30530933001	**TW-5**	EPA 3020A	540982	EPA 6020B	541517
30530933002	**TW-5A**	EPA 3020A	540982	EPA 6020B	541517
30530933003	**TW-5B**	EPA 3020A	540982	EPA 6020B	541517
30530933004	**TW-6**	EPA 3020A	540982	EPA 6020B	541517
30530933005	**TW-6B**	EPA 3020A	540982	EPA 6020B	541517
30530933001	**TW-5**	EPA 7470A	543161	EPA 7470A	543641
30530933002	**TW-5A**	EPA 7470A	543161	EPA 7470A	543641
30530933003	**TW-5B**	EPA 7470A	543161	EPA 7470A	543641
30530933004	**TW-6**	EPA 7470A	543161	EPA 7470A	543641
30530933005	**TW-6B**	EPA 7470A	543161	EPA 7470A	543641
30530933001	**TW-5**	EPA 7470A	544090	EPA 7470A	544439
30530933002	**TW-5A**	EPA 7470A	544090	EPA 7470A	544439
30530933003	**TW-5B**	EPA 7470A	544090	EPA 7470A	544439
30530933004	**TW-6**	EPA 7470A	544090	EPA 7470A	544439
30530933005	**TW-6B**	EPA 7470A	544090	EPA 7470A	544439
30530933001	**TW-5**	EPA 8011	542142	EPA 8011	542259
30530933002	**TW-5A**	EPA 8011	542142	EPA 8011	542259
30530933003	**TW-5B**	EPA 8011	542142	EPA 8011	542259
30530933004	**TW-6**	EPA 8011	542142	EPA 8011	542259
30530933005	**TW-6B**	EPA 8011	542142	EPA 8011	542259
30530933001	**TW-5**	SM 2320B-2011	541956		
30530933002	**TW-5A**	SM 2320B-2011	541956		
30530933003	**TW-5B**	SM 2320B-2011	541956		
30530933004	**TW-6**	SM 2320B-2011	541956		
30530933005	**TW-6B**	SM 2320B-2011	541956		
30530933001	**TW-5**	SM 2540C-2011	541292		
30530933002	**TW-5A**	SM 2540C-2011	541292		
30530933003	**TW-5B**	SM 2540C-2011	541292		
30530933004	**TW-6**	SM 2540C-2011	541292		
30530933005	**TW-6B**	SM 2540C-2011	541292		
30530933001	**TW-5**	EPA 350.1	541825	EPA 350.1	541888
30530933002	**TW-5A**	EPA 350.1	541825	EPA 350.1	541888
30530933003	**TW-5B**	EPA 350.1	541825	EPA 350.1	541888
30530933004	**TW-6**	EPA 350.1	541825	EPA 350.1	541888
30530933005	**TW-6B**	EPA 350.1	541825	EPA 350.1	541888

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Millersville Landfill
Pace Project No.: 30530933

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30530933001	**TW-5**	EPA 410.4	541241	EPA 410.4	541288
30530933002	**TW-5A**	EPA 410.4	541241	EPA 410.4	541288
30530933003	**TW-5B**	EPA 410.4	541241	EPA 410.4	541288
30530933004	**TW-6**	EPA 410.4	541241	EPA 410.4	541288
30530933005	**TW-6B**	EPA 410.4	541241	EPA 410.4	541288
30530933001	**TW-5**	SM 4500-Cl-E-2011	541306		
30530933002	**TW-5A**	SM 4500-Cl-E-2011	541306		
30530933003	**TW-5B**	SM 4500-Cl-E-2011	541306		
30530933004	**TW-6**	SM 4500-Cl-E-2011	541306		
30530933005	**TW-6B**	SM 4500-Cl-E-2011	541306		
30530933001	**TW-5**	SM 4500NO3-F-2011	541625		
30530933002	**TW-5A**	SM 4500NO3-F-2011	541626		
30530933003	**TW-5B**	SM 4500NO3-F-2011	541626		
30530933004	**TW-6**	SM 4500NO3-F-2011	541626		
30530933005	**TW-6B**	SM 4500NO3-F-2011	541626		
30530933001	**TW-5**	EPA 9038	542340		
30530933002	**TW-5A**	EPA 9038	542340		
30530933003	**TW-5B**	EPA 9038	542340		
30530933004	**TW-6**	EPA 9038	542340		
30530933005	**TW-6B**	EPA 9038	542340		
30530933001	**TW-5**	SM 4500NO2-B-2011	540849		
30530933002	**TW-5A**	SM 4500NO2-B-2011	540849		
30530933003	**TW-5B**	SM 4500NO2-B-2011	540849		
30530933004	**TW-6**	SM 4500NO2-B-2011	540849		
30530933005	**TW-6B**	SM 4500NO2-B-2011	540849		

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF-FALL 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals ①	Total + Diss. Metals ②	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO4, COD		Method 8011 - DBCP + EDB			
1	TW-5	7	10.18.22	1240	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓			
2	TW-5A	↓	↓	1205	↓		↓	↓	↓	↓	↓	↓	↓			↓			
3	TW-5B			1130															
4	TW-6			1410															
5	TW-6B.	↓	↓	1330	↓		↓	↓	↓	↓	↓	↓	↓			↓			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Cd
CB
03
Cu
Pb

WO#: 30530933
30530933

	Signature	Date	Time
Relinquished by	D.A. Brown	10.18.22	1430
Received by	TB/PACE	10.18.22	1430
Relinquished by	TB/PACE	10.18.22	1757
Received by	RDS/PACE	10.18.22	830
Relinquished by	RDS/PACE	10.18.22	2215
Received by			

Comments

① 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn
① 7470 - Hg
② 6010 - Ca, Fe, Mg, Mn, K, Na
PACE-WV-METALS / PACE-G-BURL-WET CHEM + 8011
LEVEL 2 REPORT
SEE ATTACHED LIST of METHODS / PARAMETERS / LABS FOR MORE INFO.

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-GBUR-0088 v02_Sample Condition Upon Receipt-Pittsburgh Effective Date: 10/03/2022	**WO#: 30530933** PM: DAP Due Date: 11/02/22 CLIENT: ENV MONITOR

Client Name: EMA

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking Number:

Examined By BR
Labeled By BR
Temped By BR

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

Thermometer Used: 18 **Type of Ice:** (Wet) Blue None

Cooler Temperature: Observed Temp 2.1 °C Correction Factor: .1 °C Final Temp: 2.3 °C
Temp should be above freezing to 6°C

Comments:	Yes	No	NA	pH paper Lot# 1004141	D.P.D. Residual Chlorine Lot # -
Chain of Custody Present	✓			1.	
Chain of Custody Filled Out:	✓			2.	
-Were client corrections present on COC		✓			
Chain of Custody Relinquished	✓			3.	
Sampler Name & Signature on COC:	✓			4.	
Sample Labels match COC:	✓			5.	
-Includes date/time/ID					
Matrix:	WT				
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):	✓			7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used:	✓			10.	
-Pace Containers Used	✓				
Containers Intact:	✓			11.	
Orthophosphate field filtered:			✓	12.	
Hex Cr Aqueous samples field filtered:			✓	13.	
Organic Samples checked for dechlorination			✓	14:	
Filtered volume received for dissolved tests:			✓	15:	
All containers checked for preservation: exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix	✓			16.	
All containers meet method preservation requirements:	✓			Initial when completed BR Lot# of added Preservative	Date/Time of Preservation
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:		✓		18.	
Trip Blank Custody Seals Present		✓			
Rad Samples Screened <0.5 mrem/hr.	✓		✗	Initial when completed BR	Date: 10-19-22 / Survey Meter SN: 1369

Comments: BR 10-19

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

WO# : 30530933

30530933

LIMS30 Internal Shipping Manifest

COOLER 22

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	22	Cooler temp (rcvd) °C	-.2
Packaged on Ice (Y/N)	Yes	Correction Factor	.0
Shipping Method	Courier	Cooler temp (corr) °C	-.2
Tracking #	N/A	IR GUN ID	23
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished		GBUR	10-19-22	1935
Received		BEAV	10-20-22	427
Relinquished				
Received				
Relinquished				
Received				

~~17~~ 18

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	10/19/2022	30530933001 BP3N2/2	BP3N	30530933001	30530933
MF	10/19/2022	30530933001 BP3N1/2	BP3N	30530933001	30530933
MF	10/19/2022	30530933002 BP3N1/2	BP3N	30530933002	30530933
MF	10/19/2022	30530933002 BP3N2/2	BP3N	30530933002	30530933
MF	10/19/2022	30530933003 BP3N2/2	BP3N	30530933003	30530933
MF	10/19/2022	30530933003 BP3N1/2	BP3N	30530933003	30530933
MF	10/19/2022	30530933005 BP3N1/2	BP3N	30530933005	30530933
MF	10/19/2022	30530933004 BP3N1/2	BP3N	30530933004	30530933
MF	10/19/2022	30530960002 BP3N4/4	BP3N	30530960002	30530960
MF	10/19/2022	30530933004 BP3N2/2	BP3N	30530933004	30530933
MF	10/19/2022	30530933005 BP3N2/2	BP3N	30530933005	30530933
MF	10/19/2022	30530960002 BP3N1/4	BP3N	30530960002	30530960
MF	10/19/2022	30530960002 BP3N2/4	BP3N	30530960002	30530960
MF	10/19/2022	30530960002 BP3N3/4	BP3N	30530960002	30530960
MF	10/19/2022	30530977001 BP3N1/1	BP3N	30530977001	30530977
MF	10/19/2022	30530989004 BP3N1/1	BP3N	30530989004	30530989
MF	10/19/2022	30530989008 BP3N1/1	BP3N	30530989008	30530989
MF	10/19/2022	30530989001 BP3N1/1	BP3N	30530989001	30530989
MF	10/19/2022	30530989003 BP3N1/1	BP3N	30530989003	30530989
MF	10/19/2022	30530989007 BP3N1/1	BP3N	30530989007	30530989
MF	10/19/2022	30530989002 BP3N1/1	BP3N	30530989002	30530989
MF	10/19/2022	30530989005 BP3N1/1	BP3N	30530989005	30530989
MF	10/19/2022	30530989006 BP3N1/1	BP3N	30530989006	30530989
MF	10/19/2022	30531092001 BP3N1/2	BP3N	30531092001	30531092
MF	10/19/2022	30531198001 BP3N1/1	BP3N	30531198001	30531198
MF	10/19/2022	30530949001 BP3N1/1	BP3N	30530949001	30530949
MF	10/19/2022	30531092001 BP3N2/2	BP3N	30531092001	30531092
MF	10/19/2022	30530976002 BP3N1/1	BP3N	30530976002	30530976
MF	10/19/2022	30530939001 BP3N1/1	BP3N	30530939001	30530939
MF	10/19/2022	30530939002 BP3N1/1	BP3N	30530939002	30530939
MF	10/19/2022	30530982001 BP3U1/1	BP3U	30530982001	30530982
MF	10/19/2022	30530982001 BP3N1/1	BP3N	30530982001	30530982
MF	10/19/2022	30531022003 BP3U1/1	BP3U	30531022003	30531022

LIMS30 Internal Shipping Manifest

COOLER 22

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	22	Cooler temp (rcvd) °C	-.2
Packaged on Ice (Y/N)	Yes	Correction Factor	.0
Shipping Method	Courier	Cooler temp (corr) °C	-.2
Tracking #	N/A	IR GUN ID	23
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[illegible]	GBUR	10-19-22	1935
Received	[illegible]	BEAV	10-20-22	427
Relinquished				
Received				
Relinquished				
Received				

17/18

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	10/19/2022	30531022002 BP3N1/1	BP3N	30531022002	30531022
MF	10/19/2022	30530984001 BP3N1/1	BP3N	30530984001	30530984*
MF	10/19/2022	30530984001 BP3U1/1	BP3U	30530984001	30530984
MF	10/19/2022	30529744001 BP3U1/1	BP3U	30529744001	30529744 *
MF	10/19/2022	30529763001 BP3N1/1	BP3N	30529763001	30529763
MF	10/19/2022	30529649001 BP3N1/1	BP3N	30529649001	30529649
MF	10/19/2022	30530974001 BP3N1/1	BP3N	30530974001	30530974**
MF	10/19/2022	30529359002 BP3U1/1	BP3U	30529359002	30529359*
MF	10/19/2022	30529359003 BP3U1/1	BP3U	30529359003	30529359
MF	10/19/2022	30529359001 BP3U1/1	BP3U	30529359001	30529359

WO#: 30530933
PM: DAP Due Date: 11/02/22
CLIENT: ENV MONITOR

LIMS73 Lab Sample Condition Upon Receipt (West Virgi

Pace Analytical

Client Name: _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☑ Other: 3rd Party

Tracking #: _____

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 23 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** -.2 °C Correction Factor: .0 °C Final Temp: -.2 °C

Comments:

pH paper Lot#	Date and Initials of person examining contents:
206722	CDW 10.20.22

	Yes	No	N/A	
Chain of Custody Present:				1.
Chain of Custody Filled Out:				2.
Chain of Custody Relinquished:				3. Manifest
Sampler Name & Signature on COC:				4.
Sample Labels match COC:				5.
-Includes date/time/ID Matrix: WT				Lab Labeled by: NA Checked by: NA
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:	✓	4 days		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered:			✓	13.
-pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓	
Filtered volume received for Dissolved tests:			✓	14.
All containers have been checked for preservation:	✓			15.
exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix				
All containers meet method preservation requirements:	✓			Initial when completed: CDW Date: 10.20.22
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present:			✓	17.
Trip Blank Custody Seals Present:			✓	
				Initial when completed: CDW Date: 10-20-22

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

***PM review** is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

November 03, 2022

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF Fall 2022
Pace Project No.: 30531345

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on October 19, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

David A. Pichette
david.pichette@pacelabs.com
(724)850-5617
Project Manager

Enclosures

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: MLF Fall 2022
Pace Project No.: 30531345

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver
225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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SAMPLE SUMMARY

Project: MLF Fall 2022
Pace Project No.: 30531345

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30531345001	**TW-7**	Water	10/19/22 12:15	10/19/22 22:00
30531345002	**TW-7A**	Water	10/19/22 11:40	10/19/22 22:00
30531345003	**TW-8**	Water	10/19/22 13:00	10/19/22 22:00
30531345004	**TW-8A**	Water	10/19/22 13:35	10/19/22 22:00
30531345005	**TW-9B**	Water	10/19/22 14:20	10/19/22 22:00

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SAMPLE ANALYTE COUNT

Project: MLF Fall 2022
Pace Project No.: 30531345

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30531345001	**TW-7**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30531345002	**TW-7A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30531345003	**TW-8**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF Fall 2022
Pace Project No.: 30531345

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30531345004	**TW-8A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30531345005	**TW-9B**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531345

Date: November 03, 2022

TW-7 (Lab ID: 30531345001)

- Sample pH for 8011 is 7

TW-7A (Lab ID: 30531345002)

- Sample pH for 8011 is 6

TW-8 (Lab ID: 30531345003)

- Sample pH for 8011 is 7

TW-8A (Lab ID: 30531345004)

- Sample pH for 8011 is 6

TW-9B (Lab ID: 30531345005)

- Sample pH for 8011 is 6

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PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531345

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

General Information:
5 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531345

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

General Information:
5 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531345

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

General Information:
5 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531345

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

General Information:
5 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 543161

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30530933001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2636379)
  - Mercury
- MSD (Lab ID: 2636380)
  - Mercury

Additional Comments:

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PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531345

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

General Information:
5 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 542491

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- BLANK (Lab ID: 2632847)
  - 1,1,1,2-Tetrachloroethane (S)
- LCS (Lab ID: 2632848)
  - 1,1,1,2-Tetrachloroethane (S)
- MS (Lab ID: 2632849)
  - 1,1,1,2-Tetrachloroethane (S)
- MSD (Lab ID: 2632850)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-7 (Lab ID: 30531345001)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-7A (Lab ID: 30531345002)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-8 (Lab ID: 30531345003)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-8A (Lab ID: 30531345004)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-9B (Lab ID: 30531345005)
  - 1,1,1,2-Tetrachloroethane (S)

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

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PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531345

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531345

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

General Information:
5 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 541956

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30531027001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2630328)
  - Alkalinity,Total (CaCO3 pH4.5)
- MSD (Lab ID: 2630329)
  - Alkalinity,Total (CaCO3 pH4.5)

Additional Comments:

Analyte Comments:

QC Batch: 541956

1c: Alkalinity TV: -2.00 mg/L
- TW-8A (Lab ID: 30531345004)
  - Alkalinity,Total (CaCO3 pH4.5)

2c: Alkalinity TV: 0.00 mg/L
- BLANK (Lab ID: 2630326)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-7A (Lab ID: 30531345002)
  - Alkalinity,Total (CaCO3 pH4.5)

3c: Alkalinity TV: 4.00 mg/L
- TW-9B (Lab ID: 30531345005)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531345

Method: **SM 2540C-2011**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

General Information:
5 samples were analyzed for SM 2540C-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531345

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

General Information:
5 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531345

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

General Information:
5 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 542392

4c: pH was adjusted to <2 at bench

- BLANK (Lab ID: 2632010)
  - Chemical Oxygen Demand
- LCS (Lab ID: 2632011)
  - Chemical Oxygen Demand

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PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531345

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

General Information:
5 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531345

Method: **SM 4500NO3-F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

General Information:
5 samples were analyzed for SM 4500NO3-F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 541626

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30530933002

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2628813)
  - Nitrogen, NO2 plus NO3
- MSD (Lab ID: 2628814)
  - Nitrogen, NO2 plus NO3

Additional Comments:

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PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531345

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

General Information:
5 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 542340

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30530713001,30531345005

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2631861)
  - Sulfate
- MSD (Lab ID: 2631862)
  - Sulfate

Additional Comments:

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PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531345

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: November 03, 2022

General Information:
5 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF Fall 2022
Pace Project No.: 30531345

Sample: TW-7 **Lab ID: 30531345001** Collected: 10/19/22 12:15 Received: 10/19/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**6.1**	mg/L	0.50	0.083	1	10/21/22 13:03	10/24/22 16:40	7440-70-2	
Iron	**29.3**	mg/L	0.050	0.035	1	10/21/22 13:03	10/24/22 16:40	7439-89-6	
Magnesium	**0.87**	mg/L	0.50	0.047	1	10/21/22 13:03	10/24/22 16:40	7439-95-4	
Manganese	**0.15**	mg/L	0.0050	0.0027	1	10/21/22 13:03	10/24/22 16:40	7439-96-5	
Potassium	**2.1**	mg/L	0.50	0.26	1	10/21/22 13:03	10/24/22 16:40	7440-09-7	
Sodium	**5.9**	mg/L	0.50	0.34	1	10/21/22 13:03	10/24/22 16:40	7440-23-5	
Total Hardness	**18.8**	mg/L	3.3	0.27	1	10/21/22 13:03	10/24/22 16:40		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**6.3**	mg/L	0.50	0.083	1	10/24/22 12:13	10/25/22 12:02	7440-70-2	
Iron, Dissolved	**10.4**	mg/L	0.050	0.035	1	10/24/22 12:13	10/25/22 12:02	7439-89-6	
Magnesium, Dissolved	**1.1**	mg/L	0.50	0.047	1	10/24/22 12:13	10/25/22 12:02	7439-95-4	
Manganese, Dissolved	**0.16**	mg/L	0.0050	0.0027	1	10/24/22 12:13	10/25/22 12:02	7439-96-5	
Potassium, Dissolved	**2.0**	mg/L	0.50	0.26	1	10/24/22 12:13	10/25/22 12:02	7440-09-7	
Sodium, Dissolved	**6.0**	mg/L	0.50	0.34	1	10/24/22 12:13	10/25/22 12:02	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/24/22 03:41	10/24/22 11:39	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	10/24/22 03:41	10/24/22 11:39	7440-38-2	
Barium	**0.049**	mg/L	0.0025	0.00098	1	10/24/22 03:41	10/24/22 11:39	7440-39-3	
Beryllium	**0.00040J**	mg/L	0.00050	0.00010	1	10/24/22 03:41	10/24/22 11:39	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	10/24/22 03:41	10/24/22 11:39	7440-43-9	
Chromium	**0.0013J**	mg/L	0.0025	0.00050	1	10/24/22 03:41	10/24/22 11:39	7440-47-3	
Cobalt	**0.0044**	mg/L	0.0025	0.00081	1	10/24/22 03:41	10/24/22 11:39	7440-48-4	
Copper	**0.0030**	mg/L	0.0025	0.00064	1	10/24/22 03:41	10/24/22 11:39	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/24/22 03:41	10/24/22 11:39	7439-92-1	
Nickel	**0.0062**	mg/L	0.0025	0.00065	1	10/24/22 03:41	10/24/22 11:39	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/24/22 03:41	10/24/22 11:39	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/24/22 03:41	10/24/22 11:39	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/24/22 03:41	10/24/22 11:39	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/24/22 03:41	10/24/22 11:39	7440-62-2	
Zinc	**0.0072**	mg/L	0.0050	0.0040	1	10/24/22 03:41	10/24/22 11:39	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	10/28/22 11:30	10/31/22 17:19	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	10/26/22 06:45	10/26/22 20:55	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/26/22 06:45	10/26/22 20:55	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	97	%.	60-140		1	10/26/22 06:45	10/26/22 20:55	630-20-6	CH

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ANALYTICAL RESULTS

Project: MLF Fall 2022
Pace Project No.: 30531345

Sample: TW-7 **Lab ID: 30531345001** Collected: 10/19/22 12:15 Received: 10/19/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**24.0**	mg/L	10.0	1.0	1		10/24/22 16:57		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**41.0**	mg/L	10.0	10.0	1		10/25/22 17:52		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	10/24/22 09:40	10/24/22 13:27		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.1J**	mg/L	25.0	4.7	1	10/24/22 11:54	10/24/22 16:11		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**12.4**	mg/L	3.0	0.67	1		10/25/22 13:36	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.12**	mg/L	0.10	0.053	1		10/24/22 16:04	14797-55-8	
Nitrogen, NO2 plus NO3	**0.12**	mg/L	0.10	0.053	1		10/24/22 16:04		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/25/22 18:01	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/20/22 11:31	14797-65-0	

Sample: TW-7A **Lab ID: 30531345002** Collected: 10/19/22 11:40 Received: 10/19/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**2.7**	mg/L	0.50	0.083	1	10/21/22 13:03	10/24/22 16:42	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	10/21/22 13:03	10/24/22 16:42	7439-89-6	
Magnesium	**1.5**	mg/L	0.50	0.047	1	10/21/22 13:03	10/24/22 16:42	7439-95-4	
Manganese	**0.032**	mg/L	0.0050	0.0027	1	10/21/22 13:03	10/24/22 16:42	7439-96-5	
Potassium	**0.77**	mg/L	0.50	0.26	1	10/21/22 13:03	10/24/22 16:42	7440-09-7	

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ANALYTICAL RESULTS

Project: MLF Fall 2022
Pace Project No.: 30531345

Sample: TW-7A **Lab ID: 30531345002** Collected: 10/19/22 11:40 Received: 10/19/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**2.2**	mg/L	0.50	0.34	1	10/21/22 13:03	10/24/22 16:42	7440-23-5	
Total Hardness	**13.1**	mg/L	3.3	0.27	1	10/21/22 13:03	10/24/22 16:42		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**2.9**	mg/L	0.50	0.083	1	10/24/22 12:13	10/25/22 12:04	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	10/24/22 12:13	10/25/22 12:04	7439-89-6	
Magnesium, Dissolved	**1.6**	mg/L	0.50	0.047	1	10/24/22 12:13	10/25/22 12:04	7439-95-4	
Manganese, Dissolved	**0.033**	mg/L	0.0050	0.0027	1	10/24/22 12:13	10/25/22 12:04	7439-96-5	
Potassium, Dissolved	**0.81**	mg/L	0.50	0.26	1	10/24/22 12:13	10/25/22 12:04	7440-09-7	
Sodium, Dissolved	**2.3**	mg/L	0.50	0.34	1	10/24/22 12:13	10/25/22 12:04	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/24/22 03:41	10/24/22 11:41	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	10/24/22 03:41	10/24/22 11:41	7440-38-2	
Barium	**0.060**	mg/L	0.0025	0.00098	1	10/24/22 03:41	10/24/22 11:41	7440-39-3	
Beryllium	**0.00019J**	mg/L	0.00050	0.00010	1	10/24/22 03:41	10/24/22 11:41	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	10/24/22 03:41	10/24/22 11:41	7440-43-9	
Chromium	**0.0016J**	mg/L	0.0025	0.00050	1	10/24/22 03:41	10/24/22 11:41	7440-47-3	
Cobalt	**0.0050**	mg/L	0.0025	0.00081	1	10/24/22 03:41	10/24/22 11:41	7440-48-4	
Copper	**0.0049**	mg/L	0.0025	0.00064	1	10/24/22 03:41	10/24/22 11:41	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/24/22 03:41	10/24/22 11:41	7439-92-1	
Nickel	**0.0055**	mg/L	0.0025	0.00065	1	10/24/22 03:41	10/24/22 11:41	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/24/22 03:41	10/24/22 11:41	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/24/22 03:41	10/24/22 11:41	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/24/22 03:41	10/24/22 11:41	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/24/22 03:41	10/24/22 11:41	7440-62-2	
Zinc	**0.012**	mg/L	0.0050	0.0040	1	10/24/22 03:41	10/24/22 11:41	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	10/28/22 11:30	10/31/22 17:21	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	10/26/22 06:45	10/26/22 21:33	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	10/26/22 06:45	10/26/22 21:33	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	89	%.	60-140		1	10/26/22 06:45	10/26/22 21:33	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		10/24/22 17:01		2c

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF Fall 2022
Pace Project No.: 30531345

Sample: TW-7A **Lab ID: 30531345002** Collected: 10/19/22 11:40 Received: 10/19/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**36.0**	mg/L	10.0	10.0	1		10/25/22 17:52		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	10/24/22 09:40	10/24/22 13:29		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**8.4J**	mg/L	25.0	4.7	1	10/24/22 11:54	10/24/22 16:11		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**5.3**	mg/L	3.0	0.67	1		10/25/22 13:37	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.26**	mg/L	0.10	0.053	1		10/24/22 16:06	14797-55-8	
Nitrogen, NO2 plus NO3	**0.26**	mg/L	0.10	0.053	1		10/24/22 16:06		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.5**	mg/L	10.0	4.7	1		10/25/22 18:03	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/20/22 11:32	14797-65-0	

Sample: TW-8 **Lab ID: 30531345003** Collected: 10/19/22 13:00 Received: 10/19/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**5.4**	mg/L	0.50	0.083	1	10/21/22 13:03	10/24/22 16:44	7440-70-2	
Iron	**33.9**	mg/L	0.050	0.035	1	10/21/22 13:03	10/24/22 16:44	7439-89-6	
Magnesium	**3.9**	mg/L	0.50	0.047	1	10/21/22 13:03	10/24/22 16:44	7439-95-4	
Manganese	**0.61**	mg/L	0.0050	0.0027	1	10/21/22 13:03	10/24/22 16:44	7439-96-5	
Potassium	**1.4**	mg/L	0.50	0.26	1	10/21/22 13:03	10/24/22 16:44	7440-09-7	
Sodium	**26.8**	mg/L	0.50	0.34	1	10/21/22 13:03	10/24/22 16:44	7440-23-5	
Total Hardness	**29.6**	mg/L	3.3	0.27	1	10/21/22 13:03	10/24/22 16:44		N3

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ANALYTICAL RESULTS

Project: MLF Fall 2022
Pace Project No.: 30531345

Sample: TW-8 **Lab ID: 30531345003** Collected: 10/19/22 13:00 Received: 10/19/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**6.6**	mg/L	0.50	0.083	1	10/24/22 12:13	10/25/22 12:06	7440-70-2	
Iron, Dissolved	**31.0**	mg/L	0.050	0.035	1	10/24/22 12:13	10/25/22 12:06	7439-89-6	
Magnesium, Dissolved	**4.3**	mg/L	0.50	0.047	1	10/24/22 12:13	10/25/22 12:06	7439-95-4	
Manganese, Dissolved	**0.64**	mg/L	0.0050	0.0027	1	10/24/22 12:13	10/25/22 12:06	7439-96-5	
Potassium, Dissolved	**1.5**	mg/L	0.50	0.26	1	10/24/22 12:13	10/25/22 12:06	7440-09-7	
Sodium, Dissolved	**28.9**	mg/L	0.50	0.34	1	10/24/22 12:13	10/25/22 12:06	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/24/22 03:41	10/24/22 11:56	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	10/24/22 03:41	10/24/22 11:56	7440-38-2	
Barium	**0.18**	mg/L	0.0025	0.00098	1	10/24/22 03:41	10/24/22 11:56	7440-39-3	
Beryllium	**0.00029J**	mg/L	0.00050	0.00010	1	10/24/22 03:41	10/24/22 11:56	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	10/24/22 03:41	10/24/22 11:56	7440-43-9	
Chromium	**0.00089J**	mg/L	0.0025	0.00050	1	10/24/22 03:41	10/24/22 11:56	7440-47-3	
Cobalt	**0.0048**	mg/L	0.0025	0.00081	1	10/24/22 03:41	10/24/22 11:56	7440-48-4	
Copper	**0.0046**	mg/L	0.0025	0.00064	1	10/24/22 03:41	10/24/22 11:56	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/24/22 03:41	10/24/22 11:56	7439-92-1	
Nickel	**0.0042**	mg/L	0.0025	0.00065	1	10/24/22 03:41	10/24/22 11:56	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/24/22 03:41	10/24/22 11:56	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/24/22 03:41	10/24/22 11:56	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/24/22 03:41	10/24/22 11:56	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/24/22 03:41	10/24/22 11:56	7440-62-2	
Zinc	**0.013**	mg/L	0.0050	0.0040	1	10/24/22 03:41	10/24/22 11:56	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	10/28/22 11:30	10/31/22 17:23	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	10/26/22 06:45	10/26/22 21:46	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/26/22 06:45	10/26/22 21:46	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	96	%.	60-140		1	10/26/22 06:45	10/26/22 21:46	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**38.0**	mg/L	10.0	1.0	1		10/24/22 17:04		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**128**	mg/L	10.0	10.0	1		10/25/22 17:52		

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ANALYTICAL RESULTS

Project: MLF Fall 2022
Pace Project No.: 30531345

Sample: TW-8 **Lab ID: 30531345003** Collected: 10/19/22 13:00 Received: 10/19/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.099J**	mg/L	0.10	0.090	1	10/24/22 09:40	10/24/22 13:31		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**8.4J**	mg/L	25.0	4.7	1	10/25/22 14:30	10/25/22 17:08		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**52.7**	mg/L	3.0	0.67	1		10/25/22 13:38	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.086J**	mg/L	0.10	0.053	1		10/24/22 16:07	14797-55-8	
Nitrogen, NO2 plus NO3	**0.13**	mg/L	0.10	0.053	1		10/24/22 16:07		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/25/22 18:03	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.049**	mg/L	0.010	0.0055	1		10/20/22 11:33	14797-65-0	

Sample: TW-8A **Lab ID: 30531345004** Collected: 10/19/22 13:35 Received: 10/19/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**9.0**	mg/L	0.50	0.083	1	10/21/22 13:03	10/24/22 16:46	7440-70-2	
Iron	**0.070**	mg/L	0.050	0.035	1	10/21/22 13:03	10/24/22 16:46	7439-89-6	
Magnesium	**5.6**	mg/L	0.50	0.047	1	10/21/22 13:03	10/24/22 16:46	7439-95-4	
Manganese	**0.23**	mg/L	0.0050	0.0027	1	10/21/22 13:03	10/24/22 16:46	7439-96-5	
Potassium	**2.1**	mg/L	0.50	0.26	1	10/21/22 13:03	10/24/22 16:46	7440-09-7	
Sodium	**56.4**	mg/L	0.50	0.34	1	10/21/22 13:03	10/24/22 16:46	7440-23-5	
Total Hardness	**45.8**	mg/L	3.3	0.27	1	10/21/22 13:03	10/24/22 16:46		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**9.1**	mg/L	0.50	0.083	1	10/24/22 12:13	10/25/22 12:08	7440-70-2	
Iron, Dissolved	**0.045J**	mg/L	0.050	0.035	1	10/24/22 12:13	10/25/22 12:08	7439-89-6	
Magnesium, Dissolved	**5.8**	mg/L	0.50	0.047	1	10/24/22 12:13	10/25/22 12:08	7439-95-4	

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ANALYTICAL RESULTS

Project: MLF Fall 2022
Pace Project No.: 30531345

Sample: TW-8A **Lab ID: 30531345004** Collected: 10/19/22 13:35 Received: 10/19/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Manganese, Dissolved	**0.22**	mg/L	0.0050	0.0027	1	10/24/22 12:13	10/25/22 12:08	7439-96-5	
Potassium, Dissolved	**2.0**	mg/L	0.50	0.26	1	10/24/22 12:13	10/25/22 12:08	7440-09-7	
Sodium, Dissolved	**55.8**	mg/L	0.50	0.34	1	10/24/22 12:13	10/25/22 12:08	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/24/22 03:41	10/24/22 11:59	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	10/24/22 03:41	10/24/22 11:59	7440-38-2	
Barium	**0.17**	mg/L	0.0025	0.00098	1	10/24/22 03:41	10/24/22 11:59	7440-39-3	
Beryllium	**0.00042J**	mg/L	0.00050	0.00010	1	10/24/22 03:41	10/24/22 11:59	7440-41-7	
Cadmium	**0.00046J**	mg/L	0.00050	0.00013	1	10/24/22 03:41	10/24/22 11:59	7440-43-9	
Chromium	**0.0052**	mg/L	0.0025	0.00050	1	10/24/22 03:41	10/24/22 11:59	7440-47-3	
Cobalt	**0.015**	mg/L	0.0025	0.00081	1	10/24/22 03:41	10/24/22 11:59	7440-48-4	
Copper	**0.011**	mg/L	0.0025	0.00064	1	10/24/22 03:41	10/24/22 11:59	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/24/22 03:41	10/24/22 11:59	7439-92-1	
Nickel	**0.012**	mg/L	0.0025	0.00065	1	10/24/22 03:41	10/24/22 11:59	7440-02-0	
Selenium	**0.0022J**	mg/L	0.0025	0.00084	1	10/24/22 03:41	10/24/22 11:59	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/24/22 03:41	10/24/22 11:59	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/24/22 03:41	10/24/22 11:59	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/24/22 03:41	10/24/22 11:59	7440-62-2	
Zinc	**0.038**	mg/L	0.0050	0.0040	1	10/24/22 03:41	10/24/22 11:59	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	10/28/22 11:30	10/31/22 17:26	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	10/26/22 06:45	10/26/22 21:58	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/26/22 06:45	10/26/22 21:58	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	104	%.	60-140		1	10/26/22 06:45	10/26/22 21:58	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		10/24/22 17:09		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**193**	mg/L	10.0	10.0	1		10/25/22 17:52		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	10/24/22 09:40	10/24/22 13:41		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF Fall 2022
Pace Project No.: 30531345

Sample: TW-8A **Lab ID: 30531345004** Collected: 10/19/22 13:35 Received: 10/19/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**8.4J**	mg/L	25.0	4.7	1	10/25/22 14:30	10/25/22 17:08		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**88.9**	mg/L	3.0	0.67	1		10/25/22 13:41	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**4.6**	mg/L	0.10	0.053	1		10/24/22 16:09	14797-55-8	
Nitrogen, NO2 plus NO3	**4.6**	mg/L	0.10	0.053	1		10/24/22 16:09		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**19.5**	mg/L	10.0	4.7	1		10/25/22 18:05	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/20/22 11:33	14797-65-0	

Sample: TW-9B **Lab ID: 30531345005** Collected: 10/19/22 14:20 Received: 10/19/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**4.2**	mg/L	0.50	0.083	1	10/25/22 12:45	10/28/22 21:21	7440-70-2	
Iron	**0.083**	mg/L	0.050	0.035	1	10/25/22 12:45	10/28/22 21:21	7439-89-6	
Magnesium	**3.0**	mg/L	0.50	0.047	1	10/25/22 12:45	10/28/22 21:21	7439-95-4	
Manganese	**0.038**	mg/L	0.0050	0.0027	1	10/25/22 12:45	10/28/22 21:21	7439-96-5	
Potassium	**1.9**	mg/L	0.50	0.26	1	10/25/22 12:45	10/28/22 21:21	7440-09-7	
Sodium	**16.6**	mg/L	0.50	0.34	1	10/25/22 12:45	10/28/22 21:21	7440-23-5	
Total Hardness	**23.0**	mg/L	3.3	0.27	1	10/25/22 12:45	10/28/22 21:21		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**3.8**	mg/L	0.50	0.083	1	10/24/22 12:13	10/25/22 12:10	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	10/24/22 12:13	10/25/22 12:10	7439-89-6	
Magnesium, Dissolved	**2.8**	mg/L	0.50	0.047	1	10/24/22 12:13	10/25/22 12:10	7439-95-4	
Manganese, Dissolved	**0.036**	mg/L	0.0050	0.0027	1	10/24/22 12:13	10/25/22 12:10	7439-96-5	
Potassium, Dissolved	**1.8**	mg/L	0.50	0.26	1	10/24/22 12:13	10/25/22 12:10	7440-09-7	
Sodium, Dissolved	**16.6**	mg/L	0.50	0.34	1	10/24/22 12:13	10/25/22 12:10	7440-23-5	

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ANALYTICAL RESULTS

Project: MLF Fall 2022
Pace Project No.: 30531345

Sample: TW-9B **Lab ID: 30531345005** Collected: 10/19/22 14:20 Received: 10/19/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/24/22 03:41	10/24/22 12:01	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	10/24/22 03:41	10/24/22 12:01	7440-38-2	
Barium	**0.056**	mg/L	0.0025	0.00098	1	10/24/22 03:41	10/24/22 12:01	7440-39-3	
Beryllium	**0.00011J**	mg/L	0.00050	0.00010	1	10/24/22 03:41	10/24/22 12:01	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	10/24/22 03:41	10/24/22 12:01	7440-43-9	
Chromium	**0.0018J**	mg/L	0.0025	0.00050	1	10/24/22 03:41	10/24/22 12:01	7440-47-3	
Cobalt	**0.0078**	mg/L	0.0025	0.00081	1	10/24/22 03:41	10/24/22 12:01	7440-48-4	
Copper	**0.0019J**	mg/L	0.0025	0.00064	1	10/24/22 03:41	10/24/22 12:01	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/24/22 03:41	10/24/22 12:01	7439-92-1	
Nickel	**0.012**	mg/L	0.0025	0.00065	1	10/24/22 03:41	10/24/22 12:01	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/24/22 03:41	10/24/22 12:01	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/24/22 03:41	10/24/22 12:01	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/24/22 03:41	10/24/22 12:01	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/24/22 03:41	10/24/22 12:01	7440-62-2	
Zinc	**0.014**	mg/L	0.0050	0.0040	1	10/24/22 03:41	10/24/22 12:01	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	10/28/22 11:30	10/31/22 17:28	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.042 U**	ug/L	0.042	0.022	1	10/26/22 06:45	10/26/22 22:11	96-12-8	
1,2-Dibromoethane (EDB)	**0.042 U**	ug/L	0.042	0.032	1	10/26/22 06:45	10/26/22 22:11	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	111	%.	60-140		1	10/26/22 06:45	10/26/22 22:11	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**4.0J**	mg/L	10.0	1.0	1		10/24/22 17:11		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**126**	mg/L	10.0	10.0	1		10/25/22 17:52		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	10/24/22 09:40	10/24/22 13:47		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/25/22 14:30	10/25/22 17:08		

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ANALYTICAL RESULTS

Project: MLF Fall 2022
Pace Project No.: 30531345

Sample: TW-9B **Lab ID: 30531345005** Collected: 10/19/22 14:20 Received: 10/19/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**26.8**	mg/L	3.0	0.67	1		10/25/22 13:42	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**2.8**	mg/L	0.10	0.053	1		10/24/22 16:10	14797-55-8	
Nitrogen, NO2 plus NO3	**2.8**	mg/L	0.10	0.053	1		10/24/22 16:10		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**7.1J**	mg/L	10.0	4.7	1		10/25/22 18:05	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/20/22 11:34	14797-65-0	

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531345

QC Batch: 541621
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30531345001, 30531345002, 30531345003, 30531345004

METHOD BLANK: 2628782 Matrix: Water
Associated Lab Samples: 30531345001, 30531345002, 30531345003, 30531345004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	10/25/22 18:07	
Iron	mg/L	0.050 U	0.050	0.035	10/25/22 18:07	
Magnesium	mg/L	0.50 U	0.50	0.047	10/25/22 18:07	
Manganese	mg/L	0.0050 U	0.0050	0.0027	10/25/22 18:07	
Potassium	mg/L	0.50 U	0.50	0.26	10/25/22 18:07	
Sodium	mg/L	0.50 U	0.50	0.34	10/25/22 18:07	

LABORATORY CONTROL SAMPLE: 2628783

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	40.4	101	80-120	
Iron	mg/L	2	2.1	105	80-120	
Magnesium	mg/L	20	20.7	103	80-120	
Manganese	mg/L	2	2.1	103	80-120	
Potassium	mg/L	20	21.0	105	80-120	
Sodium	mg/L	20	20.9	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2628840 2628841

Parameter	Units	30531395001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	ND	40	40	41.2	39.2	103	98	80-120	5	20	
Iron	mg/L	ND	2	2	2.1	2.1	105	107	80-120	2	20	
Magnesium	mg/L	ND	20	20	21.0	20.5	105	103	80-120	2	20	
Manganese	mg/L	ND	2	2	2.1	2.0	105	102	80-120	3	20	
Potassium	mg/L	ND	20	20	21.6	20.9	108	104	80-120	3	20	
Sodium	mg/L	ND	20	20	21.5	20.8	107	104	80-120	3	20	

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531345

QC Batch: 542186
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30531345005

METHOD BLANK: 2631332
Matrix: Water
Associated Lab Samples: 30531345005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	10/26/22 19:57	
Iron	mg/L	0.050 U	0.050	0.035	10/26/22 19:57	
Magnesium	mg/L	0.50 U	0.50	0.047	10/26/22 19:57	
Manganese	mg/L	0.0050 U	0.0050	0.0027	10/26/22 19:57	
Potassium	mg/L	0.50 U	0.50	0.26	10/26/22 19:57	
Sodium	mg/L	0.50 U	0.50	0.34	10/26/22 19:57	

LABORATORY CONTROL SAMPLE: 2631333

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	39.4	99	80-120	
Iron	mg/L	2	2.2	109	80-120	
Magnesium	mg/L	20	19.7	99	80-120	
Manganese	mg/L	2	2.1	103	80-120	
Potassium	mg/L	20	22.8	114	80-120	
Sodium	mg/L	20	22.4	112	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2631556 2631557

Parameter	Units	30531883001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	ND	40	40	37.5	37.6	94	94	80-120	0	20	
Iron	mg/L	ND	2	2	2.1	2.1	103	104	80-120	0	20	
Magnesium	mg/L	ND	20	20	18.5	18.6	93	93	80-120	0	20	
Manganese	mg/L	ND	2	2	2.0	2.0	98	99	80-120	0	20	
Potassium	mg/L	ND	20	20	21.7	21.8	109	109	80-120	0	20	
Sodium	mg/L	ND	20	20	21.3	21.3	106	106	80-120	0	20	

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531345

QC Batch: 541918
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30531345001, 30531345002, 30531345003, 30531345004, 30531345005

METHOD BLANK: 2630262 Matrix: Water
Associated Lab Samples: 30531345001, 30531345002, 30531345003, 30531345004, 30531345005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	10/25/22 11:33	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	10/25/22 11:33	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	10/25/22 11:33	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	10/25/22 11:33	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	10/25/22 11:33	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	10/25/22 11:33	

LABORATORY CONTROL SAMPLE: 2630263

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	41.7	104	80-120	
Iron, Dissolved	mg/L	2	2.1	106	80-120	
Magnesium, Dissolved	mg/L	20	21.0	105	80-120	
Manganese, Dissolved	mg/L	2	2.1	105	80-120	
Potassium, Dissolved	mg/L	20	21.5	108	80-120	
Sodium, Dissolved	mg/L	20	21.4	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2630276 2630277

Parameter	Units	30528863001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	173000 ug/L	40	40	214	212	104	100	80-120	1	20	
Iron, Dissolved	mg/L	0.050 U	2	2	2.2	2.2	109	107	80-120	2	20	
Magnesium, Dissolved	mg/L	45400 ug/L	20	20	67.6	67.1	111	109	80-120	1	20	
Manganese, Dissolved	mg/L	0.18	2	2	2.3	2.3	106	106	80-120	0	20	
Potassium, Dissolved	mg/L	4440 ug/L	20	20	28.4	28.2	120	119	80-120	1	20	
Sodium, Dissolved	mg/L	43700 ug/L	20	20	67.3	66.2	118	113	80-120	2	20	

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531345

QC Batch: 541808
QC Batch Method: EPA 3020A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30531345001, 30531345002, 30531345003, 30531345004, 30531345005

METHOD BLANK: 2629985
Matrix: Water
Associated Lab Samples: 30531345001, 30531345002, 30531345003, 30531345004, 30531345005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00030	10/24/22 11:27	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	10/24/22 11:27	
Barium	mg/L	0.0025 U	0.0025	0.00098	10/24/22 11:27	
Beryllium	mg/L	0.00050 U	0.00050	0.00010	10/24/22 11:27	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	10/24/22 11:27	
Chromium	mg/L	0.0025 U	0.0025	0.00050	10/24/22 11:27	
Cobalt	mg/L	0.0025 U	0.0025	0.00081	10/24/22 11:27	
Copper	mg/L	0.0025 U	0.0025	0.00064	10/24/22 11:27	
Lead	mg/L	0.00050 U	0.00050	0.00025	10/24/22 11:27	
Nickel	mg/L	0.0025 U	0.0025	0.00065	10/24/22 11:27	
Selenium	mg/L	0.0025 U	0.0025	0.00084	10/24/22 11:27	
Silver	mg/L	0.0025 U	0.0025	0.00053	10/24/22 11:27	
Thallium	mg/L	0.00050 U	0.00050	0.000081	10/24/22 11:27	
Vanadium	mg/L	0.0025 U	0.0025	0.0012	10/24/22 11:27	
Zinc	mg/L	0.0050 U	0.0050	0.0040	10/24/22 11:27	

LABORATORY CONTROL SAMPLE: 2629986

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.022	108	80-120	
Arsenic	mg/L	0.1	0.10	104	80-120	
Barium	mg/L	0.1	0.10	103	80-120	
Beryllium	mg/L	0.02	0.021	105	80-120	
Cadmium	mg/L	0.02	0.021	103	80-120	
Chromium	mg/L	0.1	0.10	104	80-120	
Cobalt	mg/L	0.1	0.10	104	80-120	
Copper	mg/L	0.1	0.10	104	80-120	
Lead	mg/L	0.02	0.021	103	80-120	
Nickel	mg/L	0.1	0.10	104	80-120	
Selenium	mg/L	0.1	0.11	107	80-120	
Silver	mg/L	0.1	0.10	105	80-120	
Thallium	mg/L	0.02	0.021	103	80-120	
Vanadium	mg/L	0.1	0.10	103	80-120	
Zinc	mg/L	0.2	0.21	104	80-120	

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531345

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2630001 2630002

Parameter	Units	30531345002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00050 U	0.02	0.02	0.022	0.021	108	106	75-125	2	20	
Arsenic	mg/L	0.0025 U	0.1	0.1	0.10	0.10	102	101	75-125	1	20	
Barium	mg/L	0.060	0.1	0.1	0.17	0.17	109	108	75-125	0	20	
Beryllium	mg/L	0.00019J	0.02	0.02	0.022	0.021	107	106	75-125	1	20	
Cadmium	mg/L	0.00050 U	0.02	0.02	0.021	0.020	103	101	75-125	1	20	
Chromium	mg/L	0.0016J	0.1	0.1	0.10	0.10	103	103	75-125	0	20	
Cobalt	mg/L	0.0050	0.1	0.1	0.11	0.11	103	103	75-125	0	20	
Copper	mg/L	0.0049	0.1	0.1	0.11	0.11	102	102	75-125	0	20	
Lead	mg/L	0.00050 U	0.02	0.02	0.021	0.020	103	102	75-125	1	20	
Nickel	mg/L	0.0055	0.1	0.1	0.11	0.11	103	102	75-125	1	20	
Selenium	mg/L	0.0025 U	0.1	0.1	0.10	0.099	102	98	75-125	4	20	
Silver	mg/L	0.0025 U	0.1	0.1	0.10	0.10	105	104	75-125	1	20	
Thallium	mg/L	0.00050 U	0.02	0.02	0.020	0.020	100	99	75-125	0	20	
Vanadium	mg/L	0.0025 U	0.1	0.1	0.10	0.10	103	102	75-125	1	20	
Zinc	mg/L	0.012	0.2	0.2	0.22	0.22	103	102	75-125	1	20	

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531345

QC Batch: 543161
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30531345001, 30531345002, 30531345003, 30531345004, 30531345005

METHOD BLANK: 2636330 Matrix: Water
Associated Lab Samples: 30531345001, 30531345002, 30531345003, 30531345004, 30531345005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	10/31/22 16:41	

LABORATORY CONTROL SAMPLE: 2636331

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.011	115	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2636379 2636380

Parameter	Units	30530933001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00020 U	0.01	0.01	0.019	0.020	187	198	80-120	6	20	M1

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531345

QC Batch: 542491
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30531345001, 30531345002, 30531345003, 30531345004, 30531345005

METHOD BLANK: 2632847 Matrix: Water
Associated Lab Samples: 30531345001, 30531345002, 30531345003, 30531345004, 30531345005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	10/26/22 20:30	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	10/26/22 20:30	
1,1,1,2-Tetrachloroethane (S)	%.	98	60-140		10/26/22 20:30	CH

LABORATORY CONTROL SAMPLE: 2632848

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.23	92	85-115	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.24	94	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			112	60-140	CH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2632849 2632850

Parameter	Units	30531345001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.041 U	0.41	0.41	0.33	0.34	81	84	60-140	4	25	
1,2-Dibromoethane (EDB)	ug/L	0.041 U	0.41	0.41	0.34	0.35	85	85	60-140	1	25	
1,1,1,2-Tetrachloroethane (S)	%.						96	94	60-140			CH

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531345

QC Batch: 541956
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30531345001, 30531345002, 30531345003, 30531345004, 30531345005

METHOD BLANK: 2630326 Matrix: Water
Associated Lab Samples: 30531345001, 30531345002, 30531345003, 30531345004, 30531345005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	10/24/22 14:11	2c

LABORATORY CONTROL SAMPLE: 2630327

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2630328 2630329

Parameter	Units	30531027001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	348	50	50	380	376	64	56	85-115	1	20	ML

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531345

QC Batch: 542151
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30531345001, 30531345002, 30531345003, 30531345004, 30531345005

METHOD BLANK: 2631212
Matrix: Water
Associated Lab Samples: 30531345001, 30531345002, 30531345003, 30531345004, 30531345005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	10/25/22 17:52	

LABORATORY CONTROL SAMPLE: 2631213

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	965	96	85-115	

SAMPLE DUPLICATE: 2631214

Parameter	Units	30531345001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	41.0	42.0	2	5	

SAMPLE DUPLICATE: 2631215

Parameter	Units	30531807005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	14.0	14.0	0	5	

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531345

QC Batch: 541826
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30531345001, 30531345002, 30531345003

METHOD BLANK: 2630050 Matrix: Water
Associated Lab Samples: 30531345001, 30531345002, 30531345003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	10/24/22 16:38	

LABORATORY CONTROL SAMPLE: 2630051

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.0	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2630052 2630053

Parameter	Units	30531403002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	ND	4	4	4.0	4.0	99	99	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2630054 2630055

Parameter	Units	30531499001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.13	4	4	4.2	4.1	102	100	90-110	1	20	

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531345

QC Batch: 541830
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30531345004, 30531345005

METHOD BLANK: 2630062
Matrix: Water
Associated Lab Samples: 30531345004, 30531345005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	10/24/22 13:37	

LABORATORY CONTROL SAMPLE: 2630063

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.0	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2630064 2630065

Parameter	Units	30531345004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.2	4.1	104	104	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2630066 2630067

Parameter	Units	30532093002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	ND	4	4	4.0	4.0	101	99	90-110	2	20	

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531345

QC Batch: 541833
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30531345001, 30531345002

METHOD BLANK: 2630074
Matrix: Water
Associated Lab Samples: 30531345001, 30531345002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	10/24/22 16:06	

LABORATORY CONTROL SAMPLE: 2630075

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	323	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2630078 2630079

Parameter	Units	30531345001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	6.1J	150	150	170	168	110	108	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2630248 2630249

Parameter	Units	30531472001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	5010	1500	1500	6500	6520	99	100	90-110	0	10	

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531345

QC Batch: 542392
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30531345003, 30531345004, 30531345005

METHOD BLANK: 2632001 Matrix: Water
Associated Lab Samples: 30531345003, 30531345004, 30531345005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	10/25/22 16:33	

METHOD BLANK: 2632003 Matrix: Water
Associated Lab Samples: 30531345003, 30531345004, 30531345005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	10/25/22 17:05	

METHOD BLANK: 2632010 Matrix: Water
Associated Lab Samples: 30531345003, 30531345004, 30531345005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	10/25/22 17:04	4c

LABORATORY CONTROL SAMPLE: 2632002

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	328	109	90-110	

LABORATORY CONTROL SAMPLE: 2632011

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	321	107	90-110	4c

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2632004 2632005

Parameter	Units	30531870001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	4830	1500	1500	6240	6270	94	96	90-110	0	10	

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531345

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2632006 2632007

Parameter	Units	30531807005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	25.0 U	150	150	166	164	108	106	90-110	1	10	

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531345

QC Batch: 542219
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30531345001, 30531345002, 30531345003, 30531345004, 30531345005

METHOD BLANK: 2631424 Matrix: Water
Associated Lab Samples: 30531345001, 30531345002, 30531345003, 30531345004, 30531345005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	10/25/22 13:27	

LABORATORY CONTROL SAMPLE: 2631425

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.2	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2631426 2631427

Parameter	Units	30531158007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	169	200	200	391	391	111	111	85-115	0	20	

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531345

QC Batch: 541626
QC Batch Method: SM 4500NO3-F-2011
Analysis Method: SM 4500NO3-F-2011
Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30531345001, 30531345002, 30531345003, 30531345004, 30531345005

METHOD BLANK: 2628811 Matrix: Water
Associated Lab Samples: 30531345001, 30531345002, 30531345003, 30531345004, 30531345005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	10/24/22 15:40	

LABORATORY CONTROL SAMPLE: 2628812

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	3.8	94	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2628813 2628814

Parameter	Units	30530933002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.10 U	5	5	3.4	3.4	68	67	85-115	1	20	ML

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531345

QC Batch: 542340
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30531345001, 30531345002, 30531345003, 30531345004, 30531345005

METHOD BLANK: 2631859 Matrix: Water
Associated Lab Samples: 30531345001, 30531345002, 30531345003, 30531345004, 30531345005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	10/25/22 17:46	

LABORATORY CONTROL SAMPLE: 2631860

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	30.6	102	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2631861 2631862

Parameter	Units	30530713001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	30600	20000	20000	10000 U	10000 U	-153	-153	85-115		20	ML

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2631875 2631876

Parameter	Units	30531345005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	7.1J	20	20	28.0	27.3	104	101	85-115	2	20	

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531345

QC Batch: 541262
QC Batch Method: SM 4500NO2-B-2011
Analysis Method: SM 4500NO2-B-2011
Analysis Description: SM4500-NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30531345001, 30531345002, 30531345003, 30531345004, 30531345005

METHOD BLANK: 2626997 Matrix: Water
Associated Lab Samples: 30531345001, 30531345002, 30531345003, 30531345004, 30531345005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	10/20/22 11:30	

LABORATORY CONTROL SAMPLE: 2626999

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.098	98	90-110	

MATRIX SPIKE SAMPLE: 2627001

Parameter	Units	30531345001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.010 U	0.1	0.12	114	85-115	

SAMPLE DUPLICATE: 2627000

Parameter	Units	30531345001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	0.010 U	0.014		20	

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QUALIFIERS

Project: MLF Fall 2022
Pace Project No.: 30531345

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30531345001

[1] Sample pH for 8011 is 7

Sample: 30531345002

[1] Sample pH for 8011 is 6

Sample: 30531345003

[1] Sample pH for 8011 is 7

Sample: 30531345004

[1] Sample pH for 8011 is 6

Sample: 30531345005

[1] Sample pH for 8011 is 6

ANALYTE QUALIFIERS

1c	Alkalinity TV: -2.00 mg/L
2c	Alkalinity TV: 0.00 mg/L
3c	Alkalinity TV: 4.00 mg/L
4c	pH was adjusted to <2 at bench
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

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QUALIFIERS

Project: MLF Fall 2022
Pace Project No.: 30531345

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF Fall 2022
Pace Project No.: 30531345

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30531345001	**TW-7**	EPA 3010A	541621	EPA 6010D	542068
30531345002	**TW-7A**	EPA 3010A	541621	EPA 6010D	542068
30531345003	**TW-8**	EPA 3010A	541621	EPA 6010D	542068
30531345004	**TW-8A**	EPA 3010A	541621	EPA 6010D	542068
30531345005	**TW-9B**	EPA 3010A	542186	EPA 6010D	542740
30531345001	**TW-7**	EPA 3010A	541918	EPA 6010D	542304
30531345002	**TW-7A**	EPA 3010A	541918	EPA 6010D	542304
30531345003	**TW-8**	EPA 3010A	541918	EPA 6010D	542304
30531345004	**TW-8A**	EPA 3010A	541918	EPA 6010D	542304
30531345005	**TW-9B**	EPA 3010A	541918	EPA 6010D	542304
30531345001	**TW-7**	EPA 3020A	541808	EPA 6020B	541854
30531345002	**TW-7A**	EPA 3020A	541808	EPA 6020B	541854
30531345003	**TW-8**	EPA 3020A	541808	EPA 6020B	541854
30531345004	**TW-8A**	EPA 3020A	541808	EPA 6020B	541854
30531345005	**TW-9B**	EPA 3020A	541808	EPA 6020B	541854
30531345001	**TW-7**	EPA 7470A	543161	EPA 7470A	543641
30531345002	**TW-7A**	EPA 7470A	543161	EPA 7470A	543641
30531345003	**TW-8**	EPA 7470A	543161	EPA 7470A	543641
30531345004	**TW-8A**	EPA 7470A	543161	EPA 7470A	543641
30531345005	**TW-9B**	EPA 7470A	543161	EPA 7470A	543641
30531345001	**TW-7**	EPA 8011	542491	EPA 8011	542632
30531345002	**TW-7A**	EPA 8011	542491	EPA 8011	542632
30531345003	**TW-8**	EPA 8011	542491	EPA 8011	542632
30531345004	**TW-8A**	EPA 8011	542491	EPA 8011	542632
30531345005	**TW-9B**	EPA 8011	542491	EPA 8011	542632
30531345001	**TW-7**	SM 2320B-2011	541956		
30531345002	**TW-7A**	SM 2320B-2011	541956		
30531345003	**TW-8**	SM 2320B-2011	541956		
30531345004	**TW-8A**	SM 2320B-2011	541956		
30531345005	**TW-9B**	SM 2320B-2011	541956		
30531345001	**TW-7**	SM 2540C-2011	542151		
30531345002	**TW-7A**	SM 2540C-2011	542151		
30531345003	**TW-8**	SM 2540C-2011	542151		
30531345004	**TW-8A**	SM 2540C-2011	542151		
30531345005	**TW-9B**	SM 2540C-2011	542151		
30531345001	**TW-7**	EPA 350.1	541826	EPA 350.1	541889
30531345002	**TW-7A**	EPA 350.1	541826	EPA 350.1	541889
30531345003	**TW-8**	EPA 350.1	541826	EPA 350.1	541889
30531345004	**TW-8A**	EPA 350.1	541830	EPA 350.1	541890
30531345005	**TW-9B**	EPA 350.1	541830	EPA 350.1	541890
30531345001	**TW-7**	EPA 410.4	541833	EPA 410.4	542084
30531345002	**TW-7A**	EPA 410.4	541833	EPA 410.4	542084
30531345003	**TW-8**	EPA 410.4	542392	EPA 410.4	542428

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF Fall 2022
Pace Project No.: 30531345

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30531345004	**TW-8A**	EPA 410.4	542392	EPA 410.4	542428
30531345005	**TW-9B**	EPA 410.4	542392	EPA 410.4	542428
30531345001	**TW-7**	SM 4500-Cl-E-2011	542219		
30531345002	**TW-7A**	SM 4500-Cl-E-2011	542219		
30531345003	**TW-8**	SM 4500-Cl-E-2011	542219		
30531345004	**TW-8A**	SM 4500-Cl-E-2011	542219		
30531345005	**TW-9B**	SM 4500-Cl-E-2011	542219		
30531345001	**TW-7**	SM 4500NO3-F-2011	541626		
30531345002	**TW-7A**	SM 4500NO3-F-2011	541626		
30531345003	**TW-8**	SM 4500NO3-F-2011	541626		
30531345004	**TW-8A**	SM 4500NO3-F-2011	541626		
30531345005	**TW-9B**	SM 4500NO3-F-2011	541626		
30531345001	**TW-7**	EPA 9038	542340		
30531345002	**TW-7A**	EPA 9038	542340		
30531345003	**TW-8**	EPA 9038	542340		
30531345004	**TW-8A**	EPA 9038	542340		
30531345005	**TW-9B**	EPA 9038	542340		
30531345001	**TW-7**	SM 4500NO2-B-2011	541262		
30531345002	**TW-7A**	SM 4500NO2-B-2011	541262		
30531345003	**TW-8**	SM 4500NO2-B-2011	541262		
30531345004	**TW-8A**	SM 4500NO2-B-2011	541262		
30531345005	**TW-9B**	SM 4500NO2-B-2011	541262		

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF-FALL 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	TOTAL METALS ①	TOTAL + DISS. METALS ②	ALKALINITY, TDS	HARDNESS, Cl	AMMONIA	NITRATE	SO_4, COD		METHOD 8011 - DBCP + EDB			
1	TW-7	7	10.19.22	1215	✓			✓	✓	✓	✓	✓	✓	✓		✓			001
2	TW-7A	↓	↓	1140	↓			↓	↓	↓	↓	↓	↓	↓		↓			002
3	TW-8	↓	↓	1300	↓			↓	↓	↓	↓	↓	↓	↓		↓			003
4	TW-8A	↓	↓	1335	↓			↓	↓	↓	↓	↓	↓	↓		↓			004
5	TW-9B	↓	↓	1420	↓			↓	↓	↓	↓	↓	↓	↓		↓			005
6																			
7																			
8																			
9																			
10																			
11																			
12																			

WO#: 30531345

30531345

	Signature	Date	Time	Comments
Relinquished by	D.A. Brown	10.19.22	1500	① 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn
Received by	TB/PACE	10.19.22	1500	① 7470 - Hg
Relinquished by	TB/PACE	10-19-22	1756	② 6010 - Ca, Fe, Mg, Mn, K, Na
Received by	RDS PACE	10/19/22	1805	PACE-WV - METALS / PACE - G-BURG - WETCHEM + 8011
Relinquished by	RDS PACE	10-19-22	2200	LEVEL 2 REPORT
Received by	[illegible]	10-19-22	2200	SEE ATTACHED LIST OF METHODS / PARAMETERS / LABS

Cooler Temp on Arrival: _____ Deg. C

for MORE INFO.

Rev. Aug. 2018

Millersville Landfill, Anne Arundel County, MD		
	Pace, Beaver, WV	
	Method 6020 - ICPMS	
Parameter	RL	MDL
	(mg/l)	
TOTAL METALS - mg/l		
Antimony	0.0005	
Arsenic	0.0025	0.0002473
Barium	0.0025	
Beryllium	0.0005	
Cadmium	0.0005	
Chromium	0.0025	
Cobalt	0.0025	
Copper	0.0025	
Lead	0.0005	
Nickel	0.0025	
Selenium	0.0025	
Silver	0.0025	
Thallium	0.0005	
Vanadium	0.0025	
Zinc	0.005	
	Pace, Beaver, WV	
TOTAL MERCURY - mg/l	Method 7470A	
Mercury	0.0005	0.00025
	Pace, Beaver, WV	
TOTAL AND DISSOLVED METALS - mg/l	Method 6010 - ICP	
Calcium	0.5	0.028
Iron	0.05	0.0076
Magnesium	0.5	0.047
Manganese	0.005	0.00043
Potassium	0.5	0.19
Sodium	0.5	0.148
	Pace - Greensburg, PA	
Volatile Organics - ug/l	Method 8011 - ug/l	
DBCP	0.041	
EDB	0.041	
GENERAL CHEMISTRY - mg/l	Pace - Greensburg, PA	
Alkalinity - SM 2320B	10	1
Ammonia - EPA 350.1	0.1	0.0445
COD - EPA 410.4	25	4.6532
Chloride - EPA 300.0	3	0.06683
Hardness - 2340B		
Nitrate - EPA 300.0	0.1	0.0238
Sulfate - EPA 300.0	10	4.6702
Total dissolved solids - SM2540C	10	10

WO#: 30531345
PM: DAP Due Date: 11/03/22
CLIENT: ENV MONITOR

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-GBUR-0088 v02_Sample Condition Upon Receipt-Pittsburgh Effective Date: 10/03/2022	WO# : 30531345 PM: DAP Due Date: 11/03/22 CLIENT: ENV MONITOR

Client Name: EMA

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking Number:

Examined By	BL
Labeled By	BL
Temped By	BL

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

Thermometer Used: 18 **Type of Ice:** Wet Blue None

Cooler Temperature: Observed Temp 2.9 °C Correction Factor: 0.1 °C Final Temp: 3.8 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	NA	pH paper Lot# 10001121	D.P.D. Residual Chlorine Lot # -
Chain of Custody Present	✓			1.	
Chain of Custody Filled Out:	✓			2.	
-Were client corrections present on COC		✓			
Chain of Custody Relinquished	✓			3.	
Sampler Name & Signature on COC:	✓			4.	
Sample Labels match COC:	✓			5.	
-Includes date/time/ID					
Matrix:	WT				
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):	✓			7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used:	✓			10.	
-Pace Containers Used	✓				
Containers Intact:	✓			11.	
Orthophosphate field filtered:			✓	12.	
Hex Cr Aqueous samples field filtered:			✓	13.	
Organic Samples checked for dechlorination			✓	14:	
Filtered volume received for dissolved tests:			✓	15:	
All containers checked for preservation: exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix	✓			16.	
All containers meet method preservation requirements:	✓			Initial when completed BL	Date/Time of Preservation
				Lot# of added Preservative	
Headspace in VOA Vials (>6mm):			✓	17.	
Trip Blank Present:			✓	18.	
Trip Blank Custody Seals Present			✓		
Rad Samples Screened <0.5 mrem/hr.	✓			Initial when completed BL	Date: 10-20-22 / Survey Meter SN: 1506

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

WO# : 30531345

30531345

LIMS30 Internal Shipping Manifest

COOLER 22

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	22	Cooler temp (rcvd) °C	-.5
Packaged on Ice (Y/N)	Yes	Correction Factor	.0
Shipping Method	Courier	Cooler temp (corr) °C	-.5
Tracking #	N/A	IR GUN ID	23
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[signature]	GBUR	10-20-22	1940
Received	[signature]	BEAV	10-21-22	418
Relinquished				
Received				
Relinquished				
Received				

14

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Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	10/20/2022	30531593003 BP3N1/1	BP3N	30531593003	30531593
MF	10/20/2022	30531593004 BP3N1/1	BP3N	30531593004	30531593
MF	10/20/2022	30531595001 BP3N1/1	BP3N	30531595001	30531595
MF	10/20/2022	30531593005 BP3N1/1	BP3N	30531593005	30531593
MF	10/20/2022	30531593002 BP3N1/1	BP3N	30531593002	30531593
MF	10/20/2022	30531593001 BP3N1/1	BP3N	30531593001	30531593
MF	10/20/2022	30531400001 BP3N1/1	BP3N	30531400001	30531400
MF	10/20/2022	30531537001 BP3N1/1	BP3N	30531537001	30531537
MF	10/20/2022	30531627001 BP3N1/1	BP3N	30531627001	30531627
MF	10/20/2022	30531627002 BP3N1/1	BP3N	30531627002	30531627
MF	10/20/2022	30531345005 BP3N2/2	BP3N	30531345005	30531345
MF	10/20/2022	30531345005 BP3N1/2	BP3N	30531345005	30531345
MF	10/20/2022	30531400001 BP3U1/1	BP3U	30531400001	30531400
MF	10/20/2022	30531396001 BP3N1/1	BP3N	30531396001	30531396
MF	10/20/2022	30531396001 BP3U1/1	BP3U	30531396001	30531396
MF	10/20/2022	30531389001 BP3U1/1	BP3U	30531389001	30531389
MF	10/20/2022	30531389001 BP3N1/1	BP3N	30531389001	30531389
MF	10/20/2022	30531416002 BP3N1/1	BP3N	30531416002	30531416
MF	10/20/2022	30531496001 BP3U1/1	BP3U	30531496001	30531496
MF	10/20/2022	30531496002 BP3U1/1	BP3U	30531496002	30531496
MF	10/20/2022	30531534004 BP3N1/1	BP3N	30531534004	30531534
MF	10/20/2022	30531471002 BP3N1/1	BP3N	30531471002	30531471
MF	10/20/2022	30531469001 BP3N1/1	BP3N	30531469001	30531469
MF	10/20/2022	30531591001 BP3N1/1	BP3N	30531591001	30531591
MF	10/20/2022	30531591003 BP3N1/1	BP3N	30531591003	30531591
MF	10/20/2022	30531534003 BP3N1/1	BP3N	30531534003	30531534
MF	10/20/2022	30531534002 BP3N1/1	BP3N	30531534002	30531534
MF	10/20/2022	30531534001 BP3N1/1	BP3N	30531534001	30531534
MF	10/20/2022	30531345003 BP3N2/2	BP3N	30531345003	30531345
MF	10/20/2022	30531345003 BP3N1/2	BP3N	30531345003	30531345
MF	10/20/2022	30531345004 BP3N2/2	BP3N	30531345004	30531345
MF	10/20/2022	30531345002 BP3N2/2	BP3N	30531345002	30531345
MF	10/20/2022	30531345004 BP3N1/2	BP3N	30531345004	30531345

LIMS30 Internal Shipping Manifest

COOLER 22

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	22	Cooler temp (rcvd) °C	-.5
Packaged on Ice (Y/N)	Yes	Correction Factor	.0
Shipping Method	Courier	Cooler temp (corr) °C	-.5
Tracking #	N/A	IR GUN ID	23
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[signature]	GBUR	10-20-22	1940
Received	[signature]	BEAV	10-21-22	410
Relinquished				
Received				
Relinquished				
Received				

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Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	10/20/2022	30531345002 BP3N1/2	BP3N	30531345002	30531345
MF	10/20/2022	30531345001 BP3N1/2	BP3N	30531345001	30531345
MF	10/20/2022	30531345001 BP3N2/2	BP3N	30531345001	30531345

WO#: 30531345
PM: DAP Due Date: 11/03/22
CLIENT: ENV MONITOR

LIMS73 Lab Sample Condition Upon Receipt (West Virgin

Pace Analytical

Client Name:

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☑ Other: 3rd Party

Tracking #:

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 23 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** -.5 °C Correction Factor: .0 °C Final Temp: -.5 °C

Comments:

pH paper Lot#	Date and Initials of person examining contents
206722	DW 10-21-22

	Yes	No	N/A	
Chain of Custody Present:				1.
Chain of Custody Filled Out:				2.
Chain of Custody Relinquished:				3.
Sampler Name & Signature on COC:				4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT				5. Lab Labeled by: N/A Checked by: N/A
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered: -pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓ ✓	13.
Filtered volume received for Dissolved tests:			✓	14.
All containers have been checked for preservation: exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix	✓			15.
All containers meet method preservation requirements:	✓			Initial when completed: DW Date: 10-21-22
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present:			✓	17.
Trip Blank Custody Seals Present:			✓	
				Initial when completed: DW Date: 10-21-22

Client Notification/ Resolution:

Person Contacted: Date/Time: Contacted By:

Comments/ Resolution:

☐ **A check in this box indicates that additional information has been stored in ereports.**

***PM review** is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

November 08, 2022

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF Fall 2022
Pace Project No.: 30531807

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on October 20, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

David A. Pichette
david.pichette@pacelabs.com
(724)850-5617
Project Manager

Enclosures

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: MLF Fall 2022
Pace Project No.: 30531807

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver

225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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SAMPLE SUMMARY

Project: MLF Fall 2022
Pace Project No.: 30531807

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30531807001	**TW-9**	Water	10/20/22 09:40	10/20/22 22:30
30531807002	**TW-9C**	Water	10/19/22 15:45	10/20/22 22:30
30531807003	**TW-10A**	Water	10/20/22 10:30	10/20/22 22:30
30531807004	**TW-14A**	Water	10/20/22 12:05	10/20/22 22:30
30531807005	**TW-14B**	Water	10/20/22 11:30	10/20/22 22:30
30531807006	**TW-15**	Water	10/20/22 13:30	10/20/22 22:30
30531807007	**TW-15B**	Water	10/20/22 14:05	10/20/22 22:30

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Greensburg, PA 15601
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SAMPLE ANALYTE COUNT

Project: MLF Fall 2022
Pace Project No.: 30531807

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30531807001	**TW-9**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30531807002	**TW-9C**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30531807003	**TW-10A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF Fall 2022
Pace Project No.: 30531807

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30531807004	**TW-14A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30531807005	**TW-14B**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30531807006	**TW-15**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF Fall 2022
Pace Project No.: 30531807

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30531807007	**TW-15B**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531807

Date: November 08, 2022

TW-9 (Lab ID: 30531807001)

- Sample pH for 8011 is 7

TW-9C (Lab ID: 30531807002)

- Sample pH for 8011 is 6

TW-10A (Lab ID: 30531807003)

- Sample pH for 8011 is 6

TW-14A (Lab ID: 30531807004)

- Sample pH for 8011 is 6

TW-14B (Lab ID: 30531807005)

- Sample pH for 8011 is 7

TW-15 (Lab ID: 30531807006)

- Sample pH for 8011 is 7

TW-15B (Lab ID: 30531807007)

- Sample pH for 8011 is 6

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531807

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 08, 2022

General Information:
7 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531807

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 08, 2022

General Information:
7 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 542601

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30531807001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2633205)
  - Iron, Dissolved
- MSD (Lab ID: 2633206)
  - Iron, Dissolved

Additional Comments:

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PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531807

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: November 08, 2022

General Information:
7 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531807

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: November 08, 2022

General Information:
7 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531807

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 08, 2022

General Information:
7 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 542491

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- BLANK (Lab ID: 2632847)
  - 1,1,1,2-Tetrachloroethane (S)
- LCS (Lab ID: 2632848)
  - 1,1,1,2-Tetrachloroethane (S)
- MS (Lab ID: 2632849)
  - 1,1,1,2-Tetrachloroethane (S)
- MSD (Lab ID: 2632850)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-10A (Lab ID: 30531807003)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-14A (Lab ID: 30531807004)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-14B (Lab ID: 30531807005)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-15 (Lab ID: 30531807006)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-15B (Lab ID: 30531807007)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-9 (Lab ID: 30531807001)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-9C (Lab ID: 30531807002)
  - 1,1,1,2-Tetrachloroethane (S)

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

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PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531807

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 08, 2022

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531807

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: November 08, 2022

General Information:
7 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 542311

1c: Alkalinity TV: -1.00 mg/L
- TW-14B (Lab ID: 30531807005)
  - Alkalinity,Total (CaCO3 pH4.5)

2c: Alkalinity TV: -2.00 mg/L
- TW-15B (Lab ID: 30531807007)
  - Alkalinity,Total (CaCO3 pH4.5)

3c: Alkalinity TV: 0.00 mg/L
- TW-10A (Lab ID: 30531807003)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-9C (Lab ID: 30531807002)
  - Alkalinity,Total (CaCO3 pH4.5)

4c: Alkalinity TV: 6.00 mg/L
- TW-9 (Lab ID: 30531807001)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531807

Method: **SM 2540C-2011**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: November 08, 2022

General Information:
7 samples were analyzed for SM 2540C-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531807

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: November 08, 2022

General Information:
7 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531807

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: November 08, 2022

General Information:
7 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 542807

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30531807007,30532551001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2634570)
  - Chemical Oxygen Demand
- MSD (Lab ID: 2634571)
  - Chemical Oxygen Demand

Additional Comments:

Analyte Comments:

QC Batch: 542392

5c: pH was adjusted to <2 at bench

- BLANK (Lab ID: 2632010)
  - Chemical Oxygen Demand
- LCS (Lab ID: 2632011)
  - Chemical Oxygen Demand

QC Batch: 542807

5c: pH was adjusted to <2 at bench

- BLANK (Lab ID: 2634567)
  - Chemical Oxygen Demand
- LCS (Lab ID: 2634568)
  - Chemical Oxygen Demand

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PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531807

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: November 08, 2022

General Information:
7 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531807

Method: **SM 4500NO3-F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: November 08, 2022

General Information:
7 samples were analyzed for SM 4500NO3-F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 542643

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30531807001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2633379)
  - Nitrogen, NO2 plus NO3
- MSD (Lab ID: 2633380)
  - Nitrogen, NO2 plus NO3

Additional Comments:

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PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531807

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: November 08, 2022

General Information:
7 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 542340

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30530713001,30531345005

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2631861)
  - Sulfate
- MSD (Lab ID: 2631862)
  - Sulfate

Additional Comments:

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PROJECT NARRATIVE

Project: MLF Fall 2022
Pace Project No.: 30531807

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: November 08, 2022

General Information:
7 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF Fall 2022
Pace Project No.: 30531807

Sample: TW-9 **Lab ID: 30531807001** Collected: 10/20/22 09:40 Received: 10/20/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.45J**	mg/L	0.50	0.083	1	10/25/22 12:45	10/28/22 21:31	7440-70-2	
Iron	**27.4**	mg/L	0.050	0.035	1	10/25/22 12:45	10/28/22 21:31	7439-89-6	
Magnesium	**0.23J**	mg/L	0.50	0.047	1	10/25/22 12:45	10/28/22 21:31	7439-95-4	
Manganese	**0.14**	mg/L	0.0050	0.0027	1	10/25/22 12:45	10/28/22 21:31	7439-96-5	
Potassium	**0.56**	mg/L	0.50	0.26	1	10/25/22 12:45	10/28/22 21:31	7440-09-7	
Sodium	**1.0**	mg/L	0.50	0.34	1	10/25/22 12:45	10/28/22 21:31	7440-23-5	
Total Hardness	**2.0J**	mg/L	3.3	0.27	1	10/25/22 12:45	10/28/22 21:31		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.49J**	mg/L	0.50	0.083	1	10/26/22 11:08	10/28/22 23:36	7440-70-2	
Iron, Dissolved	**29.3**	mg/L	0.050	0.035	1	10/26/22 11:08	10/28/22 23:36	7439-89-6	M1
Magnesium, Dissolved	**0.23J**	mg/L	0.50	0.047	1	10/26/22 11:08	10/28/22 23:36	7439-95-4	
Manganese, Dissolved	**0.16**	mg/L	0.0050	0.0027	1	10/26/22 11:08	10/28/22 23:36	7439-96-5	
Potassium, Dissolved	**0.59**	mg/L	0.50	0.26	1	10/26/22 11:08	10/28/22 23:36	7440-09-7	
Sodium, Dissolved	**1.1**	mg/L	0.50	0.34	1	10/26/22 11:08	10/28/22 23:36	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/25/22 07:33	10/25/22 10:33	7440-36-0	
Arsenic	**0.00087J**	mg/L	0.0025	0.00044	1	10/25/22 07:33	10/25/22 10:33	7440-38-2	
Barium	**0.012**	mg/L	0.0025	0.00098	1	10/25/22 07:33	10/25/22 10:33	7440-39-3	
Beryllium	**0.0012**	mg/L	0.00050	0.00010	1	10/25/22 07:33	10/25/22 10:33	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	10/25/22 07:33	10/25/22 10:33	7440-43-9	
Chromium	**0.00093J**	mg/L	0.0025	0.00050	1	10/25/22 07:33	10/25/22 10:33	7440-47-3	
Cobalt	**0.0012J**	mg/L	0.0025	0.00081	1	10/25/22 07:33	10/25/22 10:33	7440-48-4	
Copper	**0.0015J**	mg/L	0.0025	0.00064	1	10/25/22 07:33	10/25/22 10:33	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/25/22 07:33	10/25/22 10:33	7439-92-1	
Nickel	**0.0031**	mg/L	0.0025	0.00065	1	10/25/22 07:33	10/25/22 10:33	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/25/22 07:33	10/25/22 10:33	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/25/22 07:33	10/25/22 10:33	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/25/22 07:33	10/25/22 10:33	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/25/22 07:33	10/25/22 10:33	7440-62-2	
Zinc	**0.0065**	mg/L	0.0050	0.0040	1	10/25/22 07:33	10/25/22 10:33	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/01/22 11:00	11/01/22 14:32	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/26/22 06:45	10/26/22 23:02	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/26/22 06:45	10/26/22 23:02	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	123	%.	60-140		1	10/26/22 06:45	10/26/22 23:02	630-20-6	CH

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF Fall 2022
Pace Project No.: 30531807

Sample: TW-9 **Lab ID: 30531807001** Collected: 10/20/22 09:40 Received: 10/20/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**6.0J**	mg/L	10.0	1.0	1		10/25/22 13:22		4c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**28.0**	mg/L	10.0	10.0	1		10/25/22 17:52		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	10/26/22 08:34	10/26/22 11:26		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**10.7J**	mg/L	25.0	4.7	1	10/25/22 14:30	10/25/22 17:09		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**1.8J**	mg/L	3.0	0.67	1		10/25/22 13:45	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.065J**	mg/L	0.10	0.053	1		10/26/22 15:36	14797-55-8	
Nitrogen, NO2 plus NO3	**0.065J**	mg/L	0.10	0.053	1		10/26/22 15:36		ML
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/25/22 18:10	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/21/22 12:59	14797-65-0	

Sample: TW-9C **Lab ID: 30531807002** Collected: 10/19/22 15:45 Received: 10/20/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**4.3**	mg/L	0.50	0.083	1	11/03/22 14:43	11/04/22 17:47	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	11/03/22 14:43	11/04/22 17:47	7439-89-6	
Magnesium	**3.5**	mg/L	0.50	0.047	1	11/03/22 14:43	11/04/22 17:47	7439-95-4	
Manganese	**0.089**	mg/L	0.0050	0.0027	1	11/03/22 14:43	11/04/22 17:47	7439-96-5	
Potassium	**2.0**	mg/L	0.50	0.26	1	11/03/22 14:43	11/04/22 17:47	7440-09-7	

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ANALYTICAL RESULTS

Project: MLF Fall 2022
Pace Project No.: 30531807

Sample: TW-9C **Lab ID: 30531807002** Collected: 10/19/22 15:45 Received: 10/20/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**14.0**	mg/L	0.50	0.34	1	11/03/22 14:43	11/04/22 17:47	7440-23-5	
Total Hardness	**25.4**	mg/L	3.3	0.27	1	11/03/22 14:43	11/04/22 17:47		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**4.9**	mg/L	0.50	0.083	1	10/26/22 11:08	10/28/22 23:50	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	10/26/22 11:08	10/28/22 23:50	7439-89-6	
Magnesium, Dissolved	**4.0**	mg/L	0.50	0.047	1	10/26/22 11:08	10/28/22 23:50	7439-95-4	
Manganese, Dissolved	**0.097**	mg/L	0.0050	0.0027	1	10/26/22 11:08	10/28/22 23:50	7439-96-5	
Potassium, Dissolved	**2.2**	mg/L	0.50	0.26	1	10/26/22 11:08	10/28/22 23:50	7440-09-7	
Sodium, Dissolved	**15.2**	mg/L	0.50	0.34	1	10/26/22 11:08	10/28/22 23:50	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/25/22 07:33	10/25/22 10:47	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	10/25/22 07:33	10/25/22 10:47	7440-38-2	
Barium	**0.097**	mg/L	0.0025	0.00098	1	10/25/22 07:33	10/25/22 10:47	7440-39-3	
Beryllium	**0.00032J**	mg/L	0.00050	0.00010	1	10/25/22 07:33	10/25/22 10:47	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	10/25/22 07:33	10/25/22 10:47	7440-43-9	
Chromium	**0.0033**	mg/L	0.0025	0.00050	1	10/25/22 07:33	10/25/22 10:47	7440-47-3	
Cobalt	**0.012**	mg/L	0.0025	0.00081	1	10/25/22 07:33	10/25/22 10:47	7440-48-4	
Copper	**0.0038**	mg/L	0.0025	0.00064	1	10/25/22 07:33	10/25/22 10:47	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/25/22 07:33	10/25/22 10:47	7439-92-1	
Nickel	**0.012**	mg/L	0.0025	0.00065	1	10/25/22 07:33	10/25/22 10:47	7440-02-0	
Selenium	**0.00097J**	mg/L	0.0025	0.00084	1	10/25/22 07:33	10/25/22 10:47	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/25/22 07:33	10/25/22 10:47	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/25/22 07:33	10/25/22 10:47	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/25/22 07:33	10/25/22 10:47	7440-62-2	
Zinc	**0.019**	mg/L	0.0050	0.0040	1	10/25/22 07:33	10/25/22 10:47	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/01/22 11:00	11/01/22 14:35	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	10/26/22 06:45	10/26/22 23:14	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/26/22 06:45	10/26/22 23:14	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	107	%.	60-140		1	10/26/22 06:45	10/26/22 23:14	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		10/25/22 13:19		3c

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ANALYTICAL RESULTS

Project: MLF Fall 2022
Pace Project No.: 30531807

Sample: TW-9C **Lab ID: 30531807002** Collected: 10/19/22 15:45 Received: 10/20/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**66.0**	mg/L	10.0	10.0	1		10/25/22 17:52		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	10/26/22 08:34	10/26/22 11:28		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.1J**	mg/L	25.0	4.7	1	10/25/22 14:30	10/25/22 17:09		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**24.1**	mg/L	3.0	0.67	1		10/25/22 13:46	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**2.5**	mg/L	0.10	0.053	1		10/26/22 15:41	14797-55-8	
Nitrogen, NO2 plus NO3	**2.5**	mg/L	0.10	0.053	1		10/26/22 15:41		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**15.6**	mg/L	10.0	4.7	1		10/25/22 18:10	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/21/22 13:00	14797-65-0	

Sample: TW-10A **Lab ID: 30531807003** Collected: 10/20/22 10:30 Received: 10/20/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**5.6**	mg/L	0.50	0.083	1	11/03/22 14:43	11/04/22 17:57	7440-70-2	
Iron	**0.093**	mg/L	0.050	0.035	1	11/03/22 14:43	11/04/22 17:57	7439-89-6	
Magnesium	**3.5**	mg/L	0.50	0.047	1	11/03/22 14:43	11/04/22 17:57	7439-95-4	
Manganese	**0.062**	mg/L	0.0050	0.0027	1	11/03/22 14:43	11/04/22 17:57	7439-96-5	
Potassium	**2.2**	mg/L	0.50	0.26	1	11/03/22 14:43	11/04/22 17:57	7440-09-7	
Sodium	**24.3**	mg/L	0.50	0.34	1	11/03/22 14:43	11/04/22 17:57	7440-23-5	
Total Hardness	**28.5**	mg/L	3.3	0.27	1	11/03/22 14:43	11/04/22 17:57		N3

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ANALYTICAL RESULTS

Project: MLF Fall 2022
Pace Project No.: 30531807

Sample: TW-10A **Lab ID: 30531807003** Collected: 10/20/22 10:30 Received: 10/20/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**6.2**	mg/L	0.50	0.083	1	10/26/22 11:08	10/28/22 23:52	7440-70-2	
Iron, Dissolved	**0.087**	mg/L	0.050	0.035	1	10/26/22 11:08	10/28/22 23:52	7439-89-6	
Magnesium, Dissolved	**3.8**	mg/L	0.50	0.047	1	10/26/22 11:08	10/28/22 23:52	7439-95-4	
Manganese, Dissolved	**0.064**	mg/L	0.0050	0.0027	1	10/26/22 11:08	10/28/22 23:52	7439-96-5	
Potassium, Dissolved	**2.5**	mg/L	0.50	0.26	1	10/26/22 11:08	10/28/22 23:52	7440-09-7	
Sodium, Dissolved	**26.4**	mg/L	0.50	0.34	1	10/26/22 11:08	10/28/22 23:52	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/25/22 07:33	10/25/22 10:50	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	10/25/22 07:33	10/25/22 10:50	7440-38-2	
Barium	**0.090**	mg/L	0.0025	0.00098	1	10/25/22 07:33	10/25/22 10:50	7440-39-3	
Beryllium	**0.00058**	mg/L	0.00050	0.00010	1	10/25/22 07:33	10/25/22 10:50	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	10/25/22 07:33	10/25/22 10:50	7440-43-9	
Chromium	**0.0029**	mg/L	0.0025	0.00050	1	10/25/22 07:33	10/25/22 10:50	7440-47-3	
Cobalt	**0.013**	mg/L	0.0025	0.00081	1	10/25/22 07:33	10/25/22 10:50	7440-48-4	
Copper	**0.0044**	mg/L	0.0025	0.00064	1	10/25/22 07:33	10/25/22 10:50	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/25/22 07:33	10/25/22 10:50	7439-92-1	
Nickel	**0.016**	mg/L	0.0025	0.00065	1	10/25/22 07:33	10/25/22 10:50	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/25/22 07:33	10/25/22 10:50	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/25/22 07:33	10/25/22 10:50	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/25/22 07:33	10/25/22 10:50	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/25/22 07:33	10/25/22 10:50	7440-62-2	
Zinc	**0.024**	mg/L	0.0050	0.0040	1	10/25/22 07:33	10/25/22 10:50	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/01/22 11:00	11/01/22 14:42	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	10/26/22 06:45	10/26/22 23:27	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/26/22 06:45	10/26/22 23:27	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	115	%.	60-140		1	10/26/22 06:45	10/26/22 23:27	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		10/25/22 13:24		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**100**	mg/L	10.0	10.0	1		10/25/22 17:52		

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ANALYTICAL RESULTS

Project: MLF Fall 2022
Pace Project No.: 30531807

Sample: TW-10A **Lab ID: 30531807003** Collected: 10/20/22 10:30 Received: 10/20/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	10/26/22 08:34	10/26/22 11:30		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**8.4J**	mg/L	25.0	4.7	1	10/25/22 14:30	10/25/22 17:09		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**47.9**	mg/L	3.0	0.67	1		10/25/22 13:47	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**2.1**	mg/L	0.10	0.053	1		10/26/22 15:42	14797-55-8	
Nitrogen, NO2 plus NO3	**2.1**	mg/L	0.10	0.053	1		10/26/22 15:42		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**11.0**	mg/L	10.0	4.7	1		10/25/22 18:12	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/21/22 13:00	14797-65-0	

Sample: TW-14A **Lab ID: 30531807004** Collected: 10/20/22 12:05 Received: 10/20/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**2.7**	mg/L	0.50	0.083	1	11/03/22 14:43	11/04/22 18:03	7440-70-2	
Iron	**55.2**	mg/L	0.050	0.035	1	11/03/22 14:43	11/04/22 18:03	7439-89-6	
Magnesium	**2.6**	mg/L	0.50	0.047	1	11/03/22 14:43	11/04/22 18:03	7439-95-4	
Manganese	**0.28**	mg/L	0.0050	0.0027	1	11/03/22 14:43	11/04/22 18:03	7439-96-5	
Potassium	**1.2**	mg/L	0.50	0.26	1	11/03/22 14:43	11/04/22 18:03	7440-09-7	
Sodium	**7.3**	mg/L	0.50	0.34	1	11/03/22 14:43	11/04/22 18:03	7440-23-5	
Total Hardness	**17.4**	mg/L	3.3	0.27	1	11/03/22 14:43	11/04/22 18:03		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**3.2**	mg/L	0.50	0.083	1	10/26/22 11:08	10/28/22 23:54	7440-70-2	
Iron, Dissolved	**59.0**	mg/L	0.050	0.035	1	10/26/22 11:08	10/28/22 23:54	7439-89-6	
Magnesium, Dissolved	**2.9**	mg/L	0.50	0.047	1	10/26/22 11:08	10/28/22 23:54	7439-95-4	

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ANALYTICAL RESULTS

Project: MLF Fall 2022
Pace Project No.: 30531807

Sample: TW-14A **Lab ID: 30531807004** Collected: 10/20/22 12:05 Received: 10/20/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Manganese, Dissolved	**0.32**	mg/L	0.0050	0.0027	1	10/26/22 11:08	10/28/22 23:54	7439-96-5	
Potassium, Dissolved	**1.4**	mg/L	0.50	0.26	1	10/26/22 11:08	10/28/22 23:54	7440-09-7	
Sodium, Dissolved	**8.2**	mg/L	0.50	0.34	1	10/26/22 11:08	10/28/22 23:54	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/25/22 07:33	10/25/22 10:53	7440-36-0	
Arsenic	**0.0019J**	mg/L	0.0025	0.00044	1	10/25/22 07:33	10/25/22 10:53	7440-38-2	
Barium	**0.078**	mg/L	0.0025	0.00098	1	10/25/22 07:33	10/25/22 10:53	7440-39-3	
Beryllium	**0.00020J**	mg/L	0.00050	0.00010	1	10/25/22 07:33	10/25/22 10:53	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	10/25/22 07:33	10/25/22 10:53	7440-43-9	
Chromium	**0.0023J**	mg/L	0.0025	0.00050	1	10/25/22 07:33	10/25/22 10:53	7440-47-3	
Cobalt	**0.0037**	mg/L	0.0025	0.00081	1	10/25/22 07:33	10/25/22 10:53	7440-48-4	
Copper	**0.0027**	mg/L	0.0025	0.00064	1	10/25/22 07:33	10/25/22 10:53	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/25/22 07:33	10/25/22 10:53	7439-92-1	
Nickel	**0.0052**	mg/L	0.0025	0.00065	1	10/25/22 07:33	10/25/22 10:53	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/25/22 07:33	10/25/22 10:53	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/25/22 07:33	10/25/22 10:53	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/25/22 07:33	10/25/22 10:53	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/25/22 07:33	10/25/22 10:53	7440-62-2	
Zinc	**0.010**	mg/L	0.0050	0.0040	1	10/25/22 07:33	10/25/22 10:53	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/01/22 11:00	11/01/22 14:44	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	10/26/22 06:45	10/26/22 23:40	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/26/22 06:45	10/26/22 23:40	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	101	%.	60-140		1	10/26/22 06:45	10/26/22 23:40	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**36.0**	mg/L	10.0	1.0	1		10/25/22 13:27		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**72.0**	mg/L	10.0	10.0	1		10/25/22 17:52		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.14**	mg/L	0.10	0.090	1	10/26/22 08:34	10/26/22 11:32		

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ANALYTICAL RESULTS

Project: MLF Fall 2022
Pace Project No.: 30531807

Sample: TW-14A **Lab ID: 30531807004** Collected: 10/20/22 12:05 Received: 10/20/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**17.5J**	mg/L	25.0	4.7	1	10/25/22 14:30	10/25/22 17:09		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**12.6**	mg/L	3.0	0.67	1		10/25/22 13:48	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.079J**	mg/L	0.10	0.053	1		10/26/22 15:43	14797-55-8	
Nitrogen, NO2 plus NO3	**0.079J**	mg/L	0.10	0.053	1		10/26/22 15:43		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/25/22 18:15	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/21/22 13:02	14797-65-0	

Sample: TW-14B **Lab ID: 30531807005** Collected: 10/20/22 11:30 Received: 10/20/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.55**	mg/L	0.50	0.083	1	10/25/22 12:45	10/28/22 21:39	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	10/25/22 12:45	10/28/22 21:39	7439-89-6	
Magnesium	**0.28J**	mg/L	0.50	0.047	1	10/25/22 12:45	10/28/22 21:39	7439-95-4	
Manganese	**0.0084**	mg/L	0.0050	0.0027	1	10/25/22 12:45	10/28/22 21:39	7439-96-5	
Potassium	**0.49J**	mg/L	0.50	0.26	1	10/25/22 12:45	10/28/22 21:39	7440-09-7	
Sodium	**1.2**	mg/L	0.50	0.34	1	10/25/22 12:45	10/28/22 21:39	7440-23-5	
Total Hardness	**2.5J**	mg/L	3.3	0.27	1	10/25/22 12:45	10/28/22 21:39		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.55**	mg/L	0.50	0.083	1	10/26/22 11:08	10/28/22 23:56	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	10/26/22 11:08	10/28/22 23:56	7439-89-6	
Magnesium, Dissolved	**0.27J**	mg/L	0.50	0.047	1	10/26/22 11:08	10/28/22 23:56	7439-95-4	
Manganese, Dissolved	**0.0087**	mg/L	0.0050	0.0027	1	10/26/22 11:08	10/28/22 23:56	7439-96-5	
Potassium, Dissolved	**0.50**	mg/L	0.50	0.26	1	10/26/22 11:08	10/28/22 23:56	7440-09-7	
Sodium, Dissolved	**1.2**	mg/L	0.50	0.34	1	10/26/22 11:08	10/28/22 23:56	7440-23-5	

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ANALYTICAL RESULTS

Project: MLF Fall 2022
Pace Project No.: 30531807

Sample: TW-14B **Lab ID: 30531807005** Collected: 10/20/22 11:30 Received: 10/20/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/25/22 07:33	10/25/22 11:02	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	10/25/22 07:33	10/25/22 11:02	7440-38-2	
Barium	**0.0060**	mg/L	0.0025	0.00098	1	10/25/22 07:33	10/25/22 11:02	7440-39-3	
Beryllium	**0.00027J**	mg/L	0.00050	0.00010	1	10/25/22 07:33	10/25/22 11:02	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	10/25/22 07:33	10/25/22 11:02	7440-43-9	
Chromium	**0.0024J**	mg/L	0.0025	0.00050	1	10/25/22 07:33	10/25/22 11:02	7440-47-3	
Cobalt	**0.0057**	mg/L	0.0025	0.00081	1	10/25/22 07:33	10/25/22 11:02	7440-48-4	
Copper	**0.0079**	mg/L	0.0025	0.00064	1	10/25/22 07:33	10/25/22 11:02	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/25/22 07:33	10/25/22 11:02	7439-92-1	
Nickel	**0.010**	mg/L	0.0025	0.00065	1	10/25/22 07:33	10/25/22 11:02	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/25/22 07:33	10/25/22 11:02	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/25/22 07:33	10/25/22 11:02	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/25/22 07:33	10/25/22 11:02	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/25/22 07:33	10/25/22 11:02	7440-62-2	
Zinc	**0.012**	mg/L	0.0050	0.0040	1	10/25/22 07:33	10/25/22 11:02	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/01/22 11:00	11/01/22 14:46	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	10/26/22 06:45	10/26/22 23:53	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/26/22 06:45	10/26/22 23:53	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	116	%.	60-140		1	10/26/22 06:45	10/26/22 23:53	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		10/25/22 13:30		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**14.0**	mg/L	10.0	10.0	1		10/25/22 17:52		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	10/26/22 08:34	10/26/22 11:34		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	10/25/22 14:30	10/25/22 17:10		

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ANALYTICAL RESULTS

Project: MLF Fall 2022
Pace Project No.: 30531807

Sample: TW-14B **Lab ID: 30531807005** Collected: 10/20/22 11:30 Received: 10/20/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**2.0J**	mg/L	3.0	0.67	1		10/25/22 13:49	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.35**	mg/L	0.10	0.053	1		10/26/22 15:45	14797-55-8	
Nitrogen, NO2 plus NO3	**0.35**	mg/L	0.10	0.053	1		10/26/22 15:45		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**5.9J**	mg/L	10.0	4.7	1		10/25/22 18:17	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/21/22 13:03	14797-65-0	

Sample: TW-15 **Lab ID: 30531807006** Collected: 10/20/22 13:30 Received: 10/20/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.75**	mg/L	0.50	0.083	1	11/03/22 14:43	11/04/22 18:05	7440-70-2	
Iron	**42.4**	mg/L	0.050	0.035	1	11/03/22 14:43	11/04/22 18:05	7439-89-6	
Magnesium	**0.49J**	mg/L	0.50	0.047	1	11/03/22 14:43	11/04/22 18:05	7439-95-4	
Manganese	**0.24**	mg/L	0.0050	0.0027	1	11/03/22 14:43	11/04/22 18:05	7439-96-5	
Potassium	**0.76**	mg/L	0.50	0.26	1	11/03/22 14:43	11/04/22 18:05	7440-09-7	
Sodium	**2.0**	mg/L	0.50	0.34	1	11/03/22 14:43	11/04/22 18:05	7440-23-5	
Total Hardness	**3.9**	mg/L	3.3	0.27	1	11/03/22 14:43	11/04/22 18:05		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.87**	mg/L	0.50	0.083	1	10/26/22 11:08	10/28/22 23:58	7440-70-2	
Iron, Dissolved	**23.8**	mg/L	0.050	0.035	1	10/26/22 11:08	10/28/22 23:58	7439-89-6	
Magnesium, Dissolved	**0.55**	mg/L	0.50	0.047	1	10/26/22 11:08	10/28/22 23:58	7439-95-4	
Manganese, Dissolved	**0.27**	mg/L	0.0050	0.0027	1	10/26/22 11:08	10/28/22 23:58	7439-96-5	
Potassium, Dissolved	**0.92**	mg/L	0.50	0.26	1	10/26/22 11:08	10/28/22 23:58	7440-09-7	
Sodium, Dissolved	**2.2**	mg/L	0.50	0.34	1	10/26/22 11:08	10/28/22 23:58	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/25/22 07:33	10/25/22 11:04	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	10/25/22 07:33	10/25/22 11:04	7440-38-2	
Barium	**0.014**	mg/L	0.0025	0.00098	1	10/25/22 07:33	10/25/22 11:04	7440-39-3	

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ANALYTICAL RESULTS

Project: MLF Fall 2022
Pace Project No.: 30531807

Sample: TW-15 **Lab ID: 30531807006** Collected: 10/20/22 13:30 Received: 10/20/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	10/25/22 07:33	10/25/22 11:04	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	10/25/22 07:33	10/25/22 11:04	7440-43-9	
Chromium	**0.0012J**	mg/L	0.0025	0.00050	1	10/25/22 07:33	10/25/22 11:04	7440-47-3	
Cobalt	**0.0025**	mg/L	0.0025	0.00081	1	10/25/22 07:33	10/25/22 11:04	7440-48-4	
Copper	**0.0019J**	mg/L	0.0025	0.00064	1	10/25/22 07:33	10/25/22 11:04	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/25/22 07:33	10/25/22 11:04	7439-92-1	
Nickel	**0.0042**	mg/L	0.0025	0.00065	1	10/25/22 07:33	10/25/22 11:04	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/25/22 07:33	10/25/22 11:04	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/25/22 07:33	10/25/22 11:04	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/25/22 07:33	10/25/22 11:04	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/25/22 07:33	10/25/22 11:04	7440-62-2	
Zinc	**0.0050**	mg/L	0.0050	0.0040	1	10/25/22 07:33	10/25/22 11:04	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/01/22 11:00	11/01/22 14:48	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	10/26/22 06:45	10/27/22 00:06	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/26/22 06:45	10/27/22 00:06	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	105	%.	60-140		1	10/26/22 06:45	10/27/22 00:06	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**26.0**	mg/L	10.0	1.0	1		10/25/22 13:32		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**33.0**	mg/L	10.0	10.0	1		10/25/22 17:52		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	10/26/22 08:34	10/26/22 11:36		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**8.4J**	mg/L	25.0	4.7	1	10/25/22 14:30	10/25/22 17:10		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**4.6**	mg/L	3.0	0.67	1		10/25/22 13:53	16887-00-6	

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ANALYTICAL RESULTS

Project: MLF Fall 2022
Pace Project No.: 30531807

Sample: TW-15 **Lab ID: 30531807006** Collected: 10/20/22 13:30 Received: 10/20/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.11**	mg/L	0.10	0.053	1		10/26/22 15:46	14797-55-8	
Nitrogen, NO2 plus NO3	**0.11**	mg/L	0.10	0.053	1		10/26/22 15:46		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		10/25/22 18:17	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/21/22 13:03	14797-65-0	

Sample: TW-15B **Lab ID: 30531807007** Collected: 10/20/22 14:05 Received: 10/20/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**4.0**	mg/L	0.50	0.083	1	11/03/22 14:43	11/04/22 18:07	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	11/03/22 14:43	11/04/22 18:07	7439-89-6	
Magnesium	**4.3**	mg/L	0.50	0.047	1	11/03/22 14:43	11/04/22 18:07	7439-95-4	
Manganese	**0.073**	mg/L	0.0050	0.0027	1	11/03/22 14:43	11/04/22 18:07	7439-96-5	
Potassium	**1.4**	mg/L	0.50	0.26	1	11/03/22 14:43	11/04/22 18:07	7440-09-7	
Sodium	**21.4**	mg/L	0.50	0.34	1	11/03/22 14:43	11/04/22 18:07	7440-23-5	
Total Hardness	**27.5**	mg/L	3.3	0.27	1	11/03/22 14:43	11/04/22 18:07		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**4.6**	mg/L	0.50	0.083	1	10/26/22 11:08	10/29/22 00:00	7440-70-2	
Iron, Dissolved	**0.055**	mg/L	0.050	0.035	1	10/26/22 11:08	10/29/22 00:00	7439-89-6	
Magnesium, Dissolved	**4.9**	mg/L	0.50	0.047	1	10/26/22 11:08	10/29/22 00:00	7439-95-4	
Manganese, Dissolved	**0.083**	mg/L	0.0050	0.0027	1	10/26/22 11:08	10/29/22 00:00	7439-96-5	
Potassium, Dissolved	**1.6**	mg/L	0.50	0.26	1	10/26/22 11:08	10/29/22 00:00	7440-09-7	
Sodium, Dissolved	**23.7**	mg/L	0.50	0.34	1	10/26/22 11:08	10/29/22 00:00	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/25/22 07:33	10/25/22 11:07	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	10/25/22 07:33	10/25/22 11:07	7440-38-2	
Barium	**0.16**	mg/L	0.0025	0.00098	1	10/25/22 07:33	10/25/22 11:07	7440-39-3	
Beryllium	**0.0020**	mg/L	0.00050	0.00010	1	10/25/22 07:33	10/25/22 11:07	7440-41-7	
Cadmium	**0.00053**	mg/L	0.00050	0.00013	1	10/25/22 07:33	10/25/22 11:07	7440-43-9	
Chromium	**0.0014J**	mg/L	0.0025	0.00050	1	10/25/22 07:33	10/25/22 11:07	7440-47-3	
Cobalt	**0.033**	mg/L	0.0025	0.00081	1	10/25/22 07:33	10/25/22 11:07	7440-48-4	

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ANALYTICAL RESULTS

Project: MLF Fall 2022
Pace Project No.: 30531807

Sample: TW-15B **Lab ID: 30531807007** Collected: 10/20/22 14:05 Received: 10/20/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Copper	**0.012**	mg/L	0.0025	0.00064	1	10/25/22 07:33	10/25/22 11:07	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/25/22 07:33	10/25/22 11:07	7439-92-1	
Nickel	**0.031**	mg/L	0.0025	0.00065	1	10/25/22 07:33	10/25/22 11:07	7440-02-0	
Selenium	**0.0022J**	mg/L	0.0025	0.00084	1	10/25/22 07:33	10/25/22 11:07	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/25/22 07:33	10/25/22 11:07	7440-22-4	
Thallium	**0.000099J**	mg/L	0.00050	0.000081	1	10/25/22 07:33	10/25/22 11:07	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/25/22 07:33	10/25/22 11:07	7440-62-2	
Zinc	**0.069**	mg/L	0.0050	0.0040	1	10/25/22 07:33	10/25/22 11:07	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/01/22 11:00	11/01/22 14:51	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.042 U**	ug/L	0.042	0.022	1	10/26/22 06:45	10/27/22 00:18	96-12-8	
1,2-Dibromoethane (EDB)	**0.042 U**	ug/L	0.042	0.032	1	10/26/22 06:45	10/27/22 00:18	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	112	%.	60-140		1	10/26/22 06:45	10/27/22 00:18	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		10/25/22 13:35		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**109**	mg/L	10.0	10.0	1		10/25/22 17:52		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	10/26/22 08:34	10/26/22 11:38		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**13.0J**	mg/L	25.0	4.7	1	10/27/22 09:32	10/27/22 13:02		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**58.1**	mg/L	3.0	0.67	1		10/25/22 13:56	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.68**	mg/L	0.10	0.053	1		10/26/22 15:47	14797-55-8	
Nitrogen, NO2 plus NO3	**0.68**	mg/L	0.10	0.053	1		10/26/22 15:47		

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ANALYTICAL RESULTS

Project: MLF Fall 2022
Pace Project No.: 30531807

Sample: TW-15B **Lab ID: 30531807007** Collected: 10/20/22 14:05 Received: 10/20/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**7.7J**	mg/L	10.0	4.7	1		10/25/22 18:20	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/21/22 13:03	14797-65-0	

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531807

QC Batch: 542186
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30531807001, 30531807005

METHOD BLANK: 2631332
Matrix: Water
Associated Lab Samples: 30531807001, 30531807005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	10/26/22 19:57	
Iron	mg/L	0.050 U	0.050	0.035	10/26/22 19:57	
Magnesium	mg/L	0.50 U	0.50	0.047	10/26/22 19:57	
Manganese	mg/L	0.0050 U	0.0050	0.0027	10/26/22 19:57	
Potassium	mg/L	0.50 U	0.50	0.26	10/26/22 19:57	
Sodium	mg/L	0.50 U	0.50	0.34	10/26/22 19:57	

LABORATORY CONTROL SAMPLE: 2631333

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	39.4	99	80-120	
Iron	mg/L	2	2.2	109	80-120	
Magnesium	mg/L	20	19.7	99	80-120	
Manganese	mg/L	2	2.1	103	80-120	
Potassium	mg/L	20	22.8	114	80-120	
Sodium	mg/L	20	22.4	112	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2631556 2631557

Parameter	Units	30531883001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	ND	40	40	37.5	37.6	94	94	80-120	0	20	
Iron	mg/L	ND	2	2	2.1	2.1	103	104	80-120	0	20	
Magnesium	mg/L	ND	20	20	18.5	18.6	93	93	80-120	0	20	
Manganese	mg/L	ND	2	2	2.0	2.0	98	99	80-120	0	20	
Potassium	mg/L	ND	20	20	21.7	21.8	109	109	80-120	0	20	
Sodium	mg/L	ND	20	20	21.3	21.3	106	106	80-120	0	20	

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531807

QC Batch: 544524
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30531807002, 30531807003, 30531807004, 30531807006, 30531807007

METHOD BLANK: 2642943
Matrix: Water
Associated Lab Samples: 30531807002, 30531807003, 30531807004, 30531807006, 30531807007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	11/04/22 17:41	
Iron	mg/L	0.050 U	0.050	0.035	11/04/22 17:41	
Magnesium	mg/L	0.50 U	0.50	0.047	11/04/22 17:41	
Manganese	mg/L	0.0050 U	0.0050	0.0027	11/04/22 17:41	
Potassium	mg/L	0.50 U	0.50	0.26	11/04/22 17:41	
Sodium	mg/L	0.50 U	0.50	0.34	11/04/22 17:41	

LABORATORY CONTROL SAMPLE: 2642944

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	39.2	98	80-120	
Iron	mg/L	2	2.2	108	80-120	
Magnesium	mg/L	20	20.1	101	80-120	
Manganese	mg/L	2	2.0	102	80-120	
Potassium	mg/L	20	19.5	97	80-120	
Sodium	mg/L	20	19.8	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2643015 2643016

Parameter	Units	30531807002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	4.3	40	40	42.9	44.1	96	99	80-120	3	20	
Iron	mg/L	0.050 U	2	2	2.2	2.2	106	109	80-120	3	20	
Magnesium	mg/L	3.5	20	20	23.2	24.1	98	103	80-120	4	20	
Manganese	mg/L	0.089	2	2	2.1	2.2	101	104	80-120	2	20	
Potassium	mg/L	2.0	20	20	22.0	21.9	100	100	80-120	0	20	
Sodium	mg/L	14.0	20	20	34.2	33.9	101	100	80-120	1	20	

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531807

QC Batch: 542601
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30531807001, 30531807002, 30531807003, 30531807004, 30531807005, 30531807006, 30531807007

METHOD BLANK: 2633111 Matrix: Water
Associated Lab Samples: 30531807001, 30531807002, 30531807003, 30531807004, 30531807005, 30531807006, 30531807007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	10/28/22 23:32	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	10/28/22 23:32	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	10/28/22 23:32	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	10/28/22 23:32	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	10/28/22 23:32	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	10/28/22 23:32	

LABORATORY CONTROL SAMPLE: 2633112

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	44.3	111	80-120	
Iron, Dissolved	mg/L	2	2.3	116	80-120	
Magnesium, Dissolved	mg/L	20	22.3	112	80-120	
Manganese, Dissolved	mg/L	2	2.2	112	80-120	
Potassium, Dissolved	mg/L	20	21.8	109	80-120	
Sodium, Dissolved	mg/L	20	21.7	108	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2633205 2633206

Parameter	Units	30531807001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	0.49J	40	40	44.3	44.3	110	110	80-120	0	20	
Iron, Dissolved	mg/L	29.3	2	2	30.2	30.2	43	43	80-120	0	20	M1
Magnesium, Dissolved	mg/L	0.23J	20	20	22.3	22.3	110	110	80-120	0	20	
Manganese, Dissolved	mg/L	0.16	2	2	2.4	2.4	110	110	80-120	0	20	
Potassium, Dissolved	mg/L	0.59	20	20	22.2	22.2	108	108	80-120	0	20	
Sodium, Dissolved	mg/L	1.1	20	20	22.6	22.5	107	107	80-120	0	20	

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531807

QC Batch: 542138
QC Batch Method: EPA 3020A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30531807001, 30531807002, 30531807003, 30531807004, 30531807005, 30531807006, 30531807007

METHOD BLANK: 2631180
Matrix: Water
Associated Lab Samples: 30531807001, 30531807002, 30531807003, 30531807004, 30531807005, 30531807006, 30531807007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00030	10/25/22 10:27	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	10/25/22 10:27	
Barium	mg/L	0.0025 U	0.0025	0.00098	10/25/22 10:27	
Beryllium	mg/L	0.00050 U	0.00050	0.00010	10/25/22 10:27	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	10/25/22 10:27	
Chromium	mg/L	0.0025 U	0.0025	0.00050	10/25/22 10:27	
Cobalt	mg/L	0.0025 U	0.0025	0.00081	10/25/22 10:27	
Copper	mg/L	0.0025 U	0.0025	0.00064	10/25/22 10:27	
Lead	mg/L	0.00050 U	0.00050	0.00025	10/25/22 10:27	
Nickel	mg/L	0.0025 U	0.0025	0.00065	10/25/22 10:27	
Selenium	mg/L	0.0025 U	0.0025	0.00084	10/25/22 10:27	
Silver	mg/L	0.0025 U	0.0025	0.00053	10/25/22 10:27	
Thallium	mg/L	0.00050 U	0.00050	0.000081	10/25/22 10:27	
Vanadium	mg/L	0.0025 U	0.0025	0.0012	10/25/22 10:27	
Zinc	mg/L	0.0050 U	0.0050	0.0040	10/25/22 10:27	

LABORATORY CONTROL SAMPLE: 2631181

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.023	113	80-120	
Arsenic	mg/L	0.1	0.10	103	80-120	
Barium	mg/L	0.1	0.11	110	80-120	
Beryllium	mg/L	0.02	0.022	112	80-120	
Cadmium	mg/L	0.02	0.022	109	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Copper	mg/L	0.1	0.10	102	80-120	
Lead	mg/L	0.02	0.022	109	80-120	
Nickel	mg/L	0.1	0.10	102	80-120	
Selenium	mg/L	0.1	0.10	104	80-120	
Silver	mg/L	0.1	0.11	111	80-120	
Thallium	mg/L	0.02	0.022	109	80-120	
Vanadium	mg/L	0.1	0.10	101	80-120	
Zinc	mg/L	0.2	0.20	102	80-120	

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531807

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2631182 2631183

Parameter	Units	30531807001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00050 U	0.02	0.02	0.021	0.021	106	106	75-125	0	20	
Arsenic	mg/L	0.00087J	0.1	0.1	0.10	0.10	100	100	75-125	0	20	
Barium	mg/L	0.012	0.1	0.1	0.11	0.11	102	103	75-125	1	20	
Beryllium	mg/L	0.0012	0.02	0.02	0.022	0.022	103	105	75-125	2	20	
Cadmium	mg/L	0.00050 U	0.02	0.02	0.020	0.020	100	101	75-125	1	20	
Chromium	mg/L	0.00093J	0.1	0.1	0.10	0.10	103	102	75-125	1	20	
Cobalt	mg/L	0.0012J	0.1	0.1	0.10	0.10	103	102	75-125	1	20	
Copper	mg/L	0.0015J	0.1	0.1	0.10	0.10	102	100	75-125	1	20	
Lead	mg/L	0.00050 U	0.02	0.02	0.020	0.020	101	101	75-125	0	20	
Nickel	mg/L	0.0031	0.1	0.1	0.11	0.11	103	102	75-125	0	20	
Selenium	mg/L	0.0025 U	0.1	0.1	0.10	0.099	103	99	75-125	3	20	
Silver	mg/L	0.0025 U	0.1	0.1	0.10	0.10	103	103	75-125	0	20	
Thallium	mg/L	0.00050 U	0.02	0.02	0.019	0.019	94	93	75-125	1	20	
Vanadium	mg/L	0.0025 U	0.1	0.1	0.10	0.10	102	102	75-125	0	20	
Zinc	mg/L	0.0065	0.2	0.2	0.21	0.21	102	102	75-125	0	20	

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531807

QC Batch: 543579
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30531807001, 30531807002, 30531807003, 30531807004, 30531807005, 30531807006, 30531807007

METHOD BLANK: 2638194 Matrix: Water
Associated Lab Samples: 30531807001, 30531807002, 30531807003, 30531807004, 30531807005, 30531807006, 30531807007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	11/01/22 14:14	

LABORATORY CONTROL SAMPLE: 2638195

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.012	119	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2638788 2638789

Parameter	Units	30531619003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND			0.012	0.012				2	20	

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531807

QC Batch: 542491
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30531807001, 30531807002, 30531807003, 30531807004, 30531807005, 30531807006, 30531807007

METHOD BLANK: 2632847 Matrix: Water
Associated Lab Samples: 30531807001, 30531807002, 30531807003, 30531807004, 30531807005, 30531807006, 30531807007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	10/26/22 20:30	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	10/26/22 20:30	
1,1,1,2-Tetrachloroethane (S)	%.	98	60-140		10/26/22 20:30	CH

LABORATORY CONTROL SAMPLE: 2632848

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.23	92	85-115	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.24	94	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			112	60-140	CH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2632849 2632850

Parameter	Units	30531345001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.041 U	0.41	0.41	0.33	0.34	81	84	60-140	4	25	
1,2-Dibromoethane (EDB)	ug/L	0.041 U	0.41	0.41	0.34	0.35	85	85	60-140	1	25	
1,1,1,2-Tetrachloroethane (S)	%.						96	94	60-140			CH

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531807

QC Batch: 542311
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30531807001, 30531807002, 30531807003, 30531807004, 30531807005, 30531807006, 30531807007

METHOD BLANK: 2631717 Matrix: Water
Associated Lab Samples: 30531807001, 30531807002, 30531807003, 30531807004, 30531807005, 30531807006, 30531807007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	10/25/22 13:03	

LABORATORY CONTROL SAMPLE: 2631718

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2631719 2631720

Parameter	Units	30531470003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	152	50	50	202	195	100	86	85-115	4	20	

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531807

QC Batch: 542151
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30531807001, 30531807002, 30531807003, 30531807004, 30531807005, 30531807006, 30531807007

METHOD BLANK: 2631212 Matrix: Water
Associated Lab Samples: 30531807001, 30531807002, 30531807003, 30531807004, 30531807005, 30531807006, 30531807007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	10/25/22 17:52	

LABORATORY CONTROL SAMPLE: 2631213

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	965	96	85-115	

SAMPLE DUPLICATE: 2631214

Parameter	Units	30531345001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	41.0	42.0	2	5	

SAMPLE DUPLICATE: 2631215

Parameter	Units	30531807005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	14.0	14.0	0	5	

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531807

QC Batch: 542500
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30531807001, 30531807002, 30531807003, 30531807004, 30531807005, 30531807006, 30531807007

METHOD BLANK: 2632859 Matrix: Water
Associated Lab Samples: 30531807001, 30531807002, 30531807003, 30531807004, 30531807005, 30531807006, 30531807007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	10/26/22 10:55	

LABORATORY CONTROL SAMPLE: 2632860

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.0	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2632861 2632862

Parameter	Units	30531380001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	1.6	4	4	5.5	5.5	99	100	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2632863 2632864

Parameter	Units	30531768002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	ND	4	4	4.0	3.9	100	99	90-110	1	20	

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531807

QC Batch: 542392
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30531807001, 30531807002, 30531807003, 30531807004, 30531807005, 30531807006

METHOD BLANK: 2632001 Matrix: Water
Associated Lab Samples: 30531807001, 30531807002, 30531807003, 30531807004, 30531807005, 30531807006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	10/25/22 16:33	

METHOD BLANK: 2632003 Matrix: Water
Associated Lab Samples: 30531807001, 30531807002, 30531807003, 30531807004, 30531807005, 30531807006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	10/25/22 17:05	

METHOD BLANK: 2632010 Matrix: Water
Associated Lab Samples: 30531807001, 30531807002, 30531807003, 30531807004, 30531807005, 30531807006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	10/25/22 17:04	5c

LABORATORY CONTROL SAMPLE: 2632002

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	328	109	90-110	

LABORATORY CONTROL SAMPLE: 2632011

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	321	107	90-110	5c

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2632004 2632005

Parameter	Units	30531870001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	4830	1500	1500	6240	6270	94	96	90-110	0	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531807

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2632006 2632007

Parameter	Units	30531807005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	25.0 U	150	150	166	164	108	106	90-110	1	10	

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531807

QC Batch: 542807
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30531807007

METHOD BLANK: 2634565 Matrix: Water
Associated Lab Samples: 30531807007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	10/27/22 12:56	

METHOD BLANK: 2634567 Matrix: Water
Associated Lab Samples: 30531807007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	10/27/22 12:57	5c

METHOD BLANK: 2634569 Matrix: Water
Associated Lab Samples: 30531807007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	10/27/22 12:57	

LABORATORY CONTROL SAMPLE: 2634566

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	321	107	90-110	

LABORATORY CONTROL SAMPLE: 2634568

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	328	109	90-110	5c

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2634570 2634571

Parameter	Units	30532551001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	1030	150	150	1140	1130	68	67	90-110	0	10	ML

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531807

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2634572 2634573

Parameter	Units	30531807007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	13.0J	150	150	173	175	106	108	90-110	1	10	

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531807

QC Batch: 542219
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30531807001, 30531807002, 30531807003, 30531807004, 30531807005

METHOD BLANK: 2631424 Matrix: Water
Associated Lab Samples: 30531807001, 30531807002, 30531807003, 30531807004, 30531807005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	10/25/22 13:27	

LABORATORY CONTROL SAMPLE: 2631425

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.2	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2631426 2631427

Parameter	Units	30531158007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	169	200	200	391	391	111	111	85-115	0	20	

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531807

QC Batch: 542220
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30531807006, 30531807007

METHOD BLANK: 2631428
Matrix: Water
Associated Lab Samples: 30531807006, 30531807007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	10/25/22 13:51	

LABORATORY CONTROL SAMPLE: 2631429

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.5	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2631430 2631431

Parameter	Units	30531807006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	4.6	20	20	25.8	25.6	106	105	85-115	1	20	

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531807

QC Batch: 542643
QC Batch Method: SM 4500NO3-F-2011
Analysis Method: SM 4500NO3-F-2011
Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30531807001, 30531807002, 30531807003, 30531807004, 30531807005, 30531807006, 30531807007

METHOD BLANK: 2633377 Matrix: Water
Associated Lab Samples: 30531807001, 30531807002, 30531807003, 30531807004, 30531807005, 30531807006, 30531807007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	10/26/22 15:32	

LABORATORY CONTROL SAMPLE: 2633378

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	3.9	97	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2633379 2633380

Parameter	Units	30531807001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.065J	5	5	4.1	4.2	82	82	85-115	1	20	ML

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531807

QC Batch: 542340 | Analysis Method: EPA 9038
QC Batch Method: EPA 9038 | Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30531807001, 30531807002, 30531807003, 30531807004, 30531807005, 30531807006, 30531807007

METHOD BLANK: 2631859 | Matrix: Water
Associated Lab Samples: 30531807001, 30531807002, 30531807003, 30531807004, 30531807005, 30531807006, 30531807007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	10/25/22 17:46	

LABORATORY CONTROL SAMPLE: 2631860

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	30.6	102	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2631861 2631862

Parameter	Units	30530713001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	30600	20000	20000	10000 U	10000 U	-153	-153	85-115		20	ML

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2631875 2631876

Parameter	Units	30531345005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	7.1J	20	20	28.0	27.3	104	101	85-115	2	20	

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QUALITY CONTROL DATA

Project: MLF Fall 2022
Pace Project No.: 30531807

QC Batch: 541630
QC Batch Method: SM 4500NO2-B-2011
Analysis Method: SM 4500NO2-B-2011
Analysis Description: SM4500-NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30531807001, 30531807002, 30531807003, 30531807004, 30531807005, 30531807006, 30531807007

METHOD BLANK: 2628836 Matrix: Water
Associated Lab Samples: 30531807001, 30531807002, 30531807003, 30531807004, 30531807005, 30531807006, 30531807007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	10/21/22 12:57	

LABORATORY CONTROL SAMPLE: 2628837

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.10	102	90-110	

MATRIX SPIKE SAMPLE: 2628839

Parameter	Units	30531807001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.010 U	0.1	0.086	86	85-115	

SAMPLE DUPLICATE: 2628838

Parameter	Units	30531807001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010 U		20	

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QUALIFIERS

Project: MLF Fall 2022
Pace Project No.: 30531807

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30531807001
[1] Sample pH for 8011 is 7

Sample: 30531807002
[1] Sample pH for 8011 is 6

Sample: 30531807003
[1] Sample pH for 8011 is 6

Sample: 30531807004
[1] Sample pH for 8011 is 6

Sample: 30531807005
[1] Sample pH for 8011 is 7

Sample: 30531807006
[1] Sample pH for 8011 is 7

Sample: 30531807007
[1] Sample pH for 8011 is 6

ANALYTE QUALIFIERS

1c Alkalinity TV: -1.00 mg/L

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QUALIFIERS

Project: MLF Fall 2022
Pace Project No.: 30531807

ANALYTE QUALIFIERS

2c	Alkalinity TV: -2.00 mg/L
3c	Alkalinity TV: 0.00 mg/L
4c	Alkalinity TV: 6.00 mg/L
5c	pH was adjusted to <2 at bench
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF Fall 2022
Pace Project No.: 30531807

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30531807001	**TW-9**	EPA 3010A	542186	EPA 6010D	542740
30531807002	**TW-9C**	EPA 3010A	544524	EPA 6010D	544912
30531807003	**TW-10A**	EPA 3010A	544524	EPA 6010D	544912
30531807004	**TW-14A**	EPA 3010A	544524	EPA 6010D	544912
30531807005	**TW-14B**	EPA 3010A	542186	EPA 6010D	542740
30531807006	**TW-15**	EPA 3010A	544524	EPA 6010D	544912
30531807007	**TW-15B**	EPA 3010A	544524	EPA 6010D	544912
30531807001	**TW-9**	EPA 3010A	542601	EPA 6010D	543249
30531807002	**TW-9C**	EPA 3010A	542601	EPA 6010D	543249
30531807003	**TW-10A**	EPA 3010A	542601	EPA 6010D	543249
30531807004	**TW-14A**	EPA 3010A	542601	EPA 6010D	543249
30531807005	**TW-14B**	EPA 3010A	542601	EPA 6010D	543249
30531807006	**TW-15**	EPA 3010A	542601	EPA 6010D	543249
30531807007	**TW-15B**	EPA 3010A	542601	EPA 6010D	543249
30531807001	**TW-9**	EPA 3020A	542138	EPA 6020B	542239
30531807002	**TW-9C**	EPA 3020A	542138	EPA 6020B	542239
30531807003	**TW-10A**	EPA 3020A	542138	EPA 6020B	542239
30531807004	**TW-14A**	EPA 3020A	542138	EPA 6020B	542239
30531807005	**TW-14B**	EPA 3020A	542138	EPA 6020B	542239
30531807006	**TW-15**	EPA 3020A	542138	EPA 6020B	542239
30531807007	**TW-15B**	EPA 3020A	542138	EPA 6020B	542239
30531807001	**TW-9**	EPA 7470A	543579	EPA 7470A	543904
30531807002	**TW-9C**	EPA 7470A	543579	EPA 7470A	543904
30531807003	**TW-10A**	EPA 7470A	543579	EPA 7470A	543904
30531807004	**TW-14A**	EPA 7470A	543579	EPA 7470A	543904
30531807005	**TW-14B**	EPA 7470A	543579	EPA 7470A	543904
30531807006	**TW-15**	EPA 7470A	543579	EPA 7470A	543904
30531807007	**TW-15B**	EPA 7470A	543579	EPA 7470A	543904
30531807001	**TW-9**	EPA 8011	542491	EPA 8011	542632
30531807002	**TW-9C**	EPA 8011	542491	EPA 8011	542632
30531807003	**TW-10A**	EPA 8011	542491	EPA 8011	542632
30531807004	**TW-14A**	EPA 8011	542491	EPA 8011	542632
30531807005	**TW-14B**	EPA 8011	542491	EPA 8011	542632
30531807006	**TW-15**	EPA 8011	542491	EPA 8011	542632
30531807007	**TW-15B**	EPA 8011	542491	EPA 8011	542632
30531807001	**TW-9**	SM 2320B-2011	542311		
30531807002	**TW-9C**	SM 2320B-2011	542311		
30531807003	**TW-10A**	SM 2320B-2011	542311		
30531807004	**TW-14A**	SM 2320B-2011	542311		
30531807005	**TW-14B**	SM 2320B-2011	542311		
30531807006	**TW-15**	SM 2320B-2011	542311		
30531807007	**TW-15B**	SM 2320B-2011	542311		
30531807001	**TW-9**	SM 2540C-2011	542151		
30531807002	**TW-9C**	SM 2540C-2011	542151		

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF Fall 2022
Pace Project No.: 30531807

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30531807003	**TW-10A**	SM 2540C-2011	542151		
30531807004	**TW-14A**	SM 2540C-2011	542151		
30531807005	**TW-14B**	SM 2540C-2011	542151		
30531807006	**TW-15**	SM 2540C-2011	542151		
30531807007	**TW-15B**	SM 2540C-2011	542151		
30531807001	**TW-9**	EPA 350.1	542500	EPA 350.1	542550
30531807002	**TW-9C**	EPA 350.1	542500	EPA 350.1	542550
30531807003	**TW-10A**	EPA 350.1	542500	EPA 350.1	542550
30531807004	**TW-14A**	EPA 350.1	542500	EPA 350.1	542550
30531807005	**TW-14B**	EPA 350.1	542500	EPA 350.1	542550
30531807006	**TW-15**	EPA 350.1	542500	EPA 350.1	542550
30531807007	**TW-15B**	EPA 350.1	542500	EPA 350.1	542550
30531807001	**TW-9**	EPA 410.4	542392	EPA 410.4	542428
30531807002	**TW-9C**	EPA 410.4	542392	EPA 410.4	542428
30531807003	**TW-10A**	EPA 410.4	542392	EPA 410.4	542428
30531807004	**TW-14A**	EPA 410.4	542392	EPA 410.4	542428
30531807005	**TW-14B**	EPA 410.4	542392	EPA 410.4	542428
30531807006	**TW-15**	EPA 410.4	542392	EPA 410.4	542428
30531807007	**TW-15B**	EPA 410.4	542807	EPA 410.4	542865
30531807001	**TW-9**	SM 4500-Cl-E-2011	542219		
30531807002	**TW-9C**	SM 4500-Cl-E-2011	542219		
30531807003	**TW-10A**	SM 4500-Cl-E-2011	542219		
30531807004	**TW-14A**	SM 4500-Cl-E-2011	542219		
30531807005	**TW-14B**	SM 4500-Cl-E-2011	542219		
30531807006	**TW-15**	SM 4500-Cl-E-2011	542220		
30531807007	**TW-15B**	SM 4500-Cl-E-2011	542220		
30531807001	**TW-9**	SM 4500NO3-F-2011	542643		
30531807002	**TW-9C**	SM 4500NO3-F-2011	542643		
30531807003	**TW-10A**	SM 4500NO3-F-2011	542643		
30531807004	**TW-14A**	SM 4500NO3-F-2011	542643		
30531807005	**TW-14B**	SM 4500NO3-F-2011	542643		
30531807006	**TW-15**	SM 4500NO3-F-2011	542643		
30531807007	**TW-15B**	SM 4500NO3-F-2011	542643		
30531807001	**TW-9**	EPA 9038	542340		
30531807002	**TW-9C**	EPA 9038	542340		
30531807003	**TW-10A**	EPA 9038	542340		
30531807004	**TW-14A**	EPA 9038	542340		
30531807005	**TW-14B**	EPA 9038	542340		
30531807006	**TW-15**	EPA 9038	542340		
30531807007	**TW-15B**	EPA 9038	542340		
30531807001	**TW-9**	SM 4500NO2-B-2011	541630		
30531807002	**TW-9C**	SM 4500NO2-B-2011	541630		
30531807003	**TW-10A**	SM 4500NO2-B-2011	541630		
30531807004	**TW-14A**	SM 4500NO2-B-2011	541630		
30531807005	**TW-14B**	SM 4500NO2-B-2011	541630		

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF Fall 2022
Pace Project No.: 30531807

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30531807006	**TW-15**	SM 4500NO2-B-2011	541630		
30531807007	**TW-15B**	SM 4500NO2-B-2011	541630		

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WO#: 30531807

30531807

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF-FALL 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals ①	Total + Diss. Metals ②	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO4, COD		Method 8011 - DBCP + EDB			
1	TW-9	7	10.20.22	940	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓			
2	TW-9C	↓	10.19.22	1545	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
3	TW-10A	↓	10.20.22	1030	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
4	TW-14A	↓	↓	1205	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
5	TW-14B	↓	↓	1130	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
6	TW-15	↓	↓	1330	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
7	TW-15B	↓	↓	1405	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
8																			
9																			
10																			
11																			
12																			

	Signature	Date	Time	Comments
Relinquished by	[signature]	10.20.22	1440	①6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn
Received by	TB/PACE	10.20.22	1440	①7470 - Hg
Relinquished by	TB/PACE	10/20/22	1537	②6010 - Ca, Fe, Mg, Mn, K, Na
Received by	RDS PACE	10/20/22	1745	PACE-WV-METALS / PACE-G-BURL-WETCHEM + 8011
Relinquished by	RDS PACE	10/20/22	2230	LEVEL 2 REPORT
Received by				SEE ATTACHED LIST of METHODS / PARAMETERS / LABS

Cooler Temp on Arrival: _____ Deg. C

FOR MORE INFO.

Rev. Aug. 2018

WO# : 30531807
PM: DAP
Due Date: 11/04/22
CLIENT: ENV MONITOR

Millersville Landfill, Anne Arundel County, MD		
	Pace, Beaver, WV	
	Method 6020 - ICPMS	
Parameter	RL	MDL
	(mg/l)	
TOTAL METALS - mg/l		
Antimony	0.0005	
Arsenic	0.0025	0.0002473
Barium	0.0025	
Beryllium	0.0005	
Cadmium	0.0005	
Chromium	0.0025	
Cobalt	0.0025	
Copper	0.0025	
Lead	0.0005	
Nickel	0.0025	
Selenium	0.0025	
Silver	0.0025	
Thallium	0.0005	
Vanadium	0.0025	
Zinc	0.005	
	Pace, Beaver, WV	
TOTAL MERCURY - mg/l	Method 7470A	
Mercury	0.0005	0.00025
	Pace, Beaver, WV	
TOTAL AND DISSOLVED METALS - mg/l	Method 6010 - ICP	
Calcium	0.5	0.028
Iron	0.05	0.0076
Magnesium	0.5	0.047
Manganese	0.005	0.00043
Potassium	0.5	0.19
Sodium	0.5	0.148
	Pace - Greensburg, PA	
VOLATILE ORGANICS - ug/l	Method 8011 - ug/l	
DBCP	0.041	
EDB	0.041	
GENERAL CHEMISTRY - mg/l	Pace - Greensburg, PA	
Alkalinity - SM 2320B	10	1
Ammonia - EPA 350.1	0.1	0.0445
COD - EPA 410.4	25	4.6532
Chloride - EPA 300.0	3	0.06683
Hardness - 2340B		
Nitrate - EPA 300.0	0.1	0.0238
Sulfate - EPA 300.0	10	4.6702
Total dissolved solids - SM2540C	10	10

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-GBUR-0088 v02_Sample Condition Upon Receipt-Pittsburgh

Effective Date: 10/03/2022

WO# : 30531807

PM: DAP **Due Date: 11/04/22**

CLIENT: ENV MONITOR

Client Name: EMA

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking Number:

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

Thermometer Used: 18 **Type of Ice:** ~~Wet~~ Blue None

Cooler Temperature: Observed Temp 1.9 °C Correction Factor: 0.1 °C Final Temp: 1.8 °C

Temp should be above freezing to 6°C

Examined By BC
Labeled By BC
Temped By BC

Comments:	Yes	No	NA	pH paper Lot# 100421	D.P.D. Residual Chlorine Lot #
Chain of Custody Present	✓			1.	
Chain of Custody Filled Out:	✓			2.	
-Were client corrections present on COC		✓			
Chain of Custody Relinquished	✓			3.	
Sampler Name & Signature on COC:		✓		4.	
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.	
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):	✓			7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used:	✓			10.	
-Pace Containers Used	✓				
Containers Intact:	✓			11.	
Orthophosphate field filtered:			✓	12.	
Hex Cr Aqueous samples field filtered:			✓	13.	
Organic Samples checked for dechlorination			✓	14:	
Filtered volume received for dissolved tests:			✓	15:	
All containers checked for preservation: exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix	✓			16.	
All containers meet method preservation requirements:	✓			Initial when completed BC / Lot# of added Preservative	Date/Time of Preservation
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:			✓	18.	
Trip Blank Custody Seals Present			✓		
Rad Samples Screened <0.5 mrem/hr.	✓			Initial when completed BC	Date: 10-21 / Survey Meter SN: 1563

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Qualtrax ID: 55680

WO# : 30531807

30531807

LIMS30 Internal Shipping Manifest

COOLER 23

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		**BEAV**	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		**Received information**	
Cooler ID	23	Cooler temp (rcvd) °C	.2
Packaged on Ice (Y/N)	Yes	Correction Factor	.0
Shipping Method	Courier	Cooler temp (corr) °C	.2
Tracking #	N/A	IR GUN ID	23
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[signature]	GBUR	10-21-22	2110
Received	[signature]	BEAV	10-22-22	423
Relinquished				
Received				
Relinquished				
Received				

8

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	10/21/2022	30531807001 BP3N1/2	BP3N	30531807001	30531807
MF	10/21/2022	30531807007 BP3N1/2	BP3N	30531807007	30531807
MF	10/21/2022	30531807001 BP3N2/2	BP3N	30531807001	30531807
MF	10/21/2022	30531807002 BP3N1/2	BP3N	30531807002	30531807
MF	10/21/2022	30531807005 BP3N2/2	BP3N	30531807005	30531807
MF	10/21/2022	30531807007 BP3N2/2	BP3N	30531807007	30531807
MF	10/21/2022	30531807003 BP3N2/2	BP3N	30531807003	30531807
MF	10/21/2022	30531807003 BP3N1/2	BP3N	30531807003	30531807
MF	10/21/2022	30531807006 BP3N1/2	BP3N	30531807006	30531807
MF	10/21/2022	30531807006 BP3N2/2	BP3N	30531807006	30531807
MF	10/21/2022	30531850001 BP3N1/1	BP3N	30531850001	30531850
MF	10/21/2022	30531807004 BP3N1/2	BP3N	30531807004	30531807
MF	10/21/2022	30531807002 BP3N2/2	BP3N	30531807002	30531807
MF	10/21/2022	30531807005 BP3N1/2	BP3N	30531807005	30532027
MF	10/21/2022	30532027001 BP3N1/1	BP3N	30532027001	30532027
MF	10/21/2022	30531896001 BP3N1/1	BP3N	30531896001	30531896
MF	10/21/2022	30532015002 BP3N1/1	BP3N	30532015002	30532015
MF	10/21/2022	30531912001 BP3N1/1	BP3N	30531912001	30531912
MF	10/21/2022	30531807004 BP3N2/2	BP3N	30531807004	30531807
MF	10/21/2022	30531850001 BP3U1/1	BP3U	30531850001	30531850
MF	10/21/2022	30531912001 BP3U1/1	BP3U	30531912001	30531912
MF	10/21/2022	30531853001 BP3U1/1	BP3U	30531853001	30531853
MF	10/21/2022	30531896001 BP3U1/1	BP3U	30531896001	30531896
MF	10/21/2022	30532027001 BP3U1/1	BP3U	30532027001	30532027
MF	10/21/2022	30531793002 BP3N1/1	BP3N	30531793002	30531793

WO#: 30531807

PM: DAP **Due Date: 11/04/22**

CLIENT: ENV MONITOR

LIMS73 Lab Sample Condition Upon Receipt (West Virg

Pace Analytical

Client Name:

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☑ Other: 3rd Party

Tracking #:

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 23 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** 2 °C Correction Factor: 0 °C Final Temp: 2 °C

Comments:

pH paper Lot#	Date and Initials of person examining contents:
2016722	CDW 10-24-22

	Yes	No	N/A	
Chain of Custody Present:				1.
Chain of Custody Filled Out:				2. Manifest
Chain of Custody Relinquished:				3.
Sampler Name & Signature on COC:				4.
Sample Labels match COC:				5.
-Includes date/time/ID Matrix: WT				Lab Labeled by: N/A Checked by: N/A
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered:			✓	13.
-pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓	
Filtered volume received for Dissolved tests:			✓	14.
All containers have been checked for preservation:	✓			15.
exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix				
All containers meet method preservation requirements:	✓			Initial when completed CDW Date: 10-24-22
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present:			✓	17.
Trip Blank Custody Seals Present:			✓	
				Initial when completed: CDW Date: 10-24-22

Client Notification/ Resolution:

Person Contacted: Date/Time: Contacted By:

Comments/ Resolution:

☐ **A check in this box indicates that additional information has been stored in ereports.**

***PM review** is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

November 10, 2022

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-Fall 2022
Pace Project No.: 30532667

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on October 25, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

David A. Pichette
david.pichette@pacelabs.com
(724)850-5617
Project Manager

Enclosures

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Pace Analytical Services, LLC
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Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: MLF-Fall 2022
Pace Project No.: 30532667

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver
225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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(724)850-5600

SAMPLE SUMMARY

Project: MLF-Fall 2022
Pace Project No.: 30532667

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30532667001	**TW-16**	Water	10/25/22 12:15	10/25/22 20:30
30532667002	**TW-16A**	Water	10/25/22 11:40	10/25/22 20:30
30532667003	**TW-17**	Water	10/25/22 13:00	10/25/22 20:30
30532667004	**TW-17A**	Water	10/25/22 13:35	10/25/22 20:30
30532667005	**TW-19**	Water	10/25/22 14:15	10/25/22 20:30

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SAMPLE ANALYTE COUNT

Project: MLF-Fall 2022
Pace Project No.: 30532667

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30532667001	**TW-16**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30532667002	**TW-16A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30532667003	**TW-17**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-Fall 2022
Pace Project No.: 30532667

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30532667004	**TW-17A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30532667005	**TW-19**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30532667

Date: November 10, 2022

TW-16 (Lab ID: 30532667001)

- Sample pH for 8011 is 5.

TW-16A (Lab ID: 30532667002)

- Sample pH for 8011 is 6.

TW-17 (Lab ID: 30532667003)

- Sample pH for 8011 is 5.

TW-17A (Lab ID: 30532667004)

- Sample pH for 8011 is 6.

TW-19 (Lab ID: 30532667005)

- Sample pH for 8011 is 6.

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30532667

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 10, 2022

General Information:
5 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30532667

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 10, 2022

General Information:
5 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30532667

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: November 10, 2022

General Information:
5 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30532667

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: November 10, 2022

General Information:
5 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30532667

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 10, 2022

General Information:
5 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30532667

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: November 10, 2022

General Information:
5 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 544190

1c: Alkalinity TV: -1.00 mg/L
- TW-16 (Lab ID: 30532667001)
  - Alkalinity,Total (CaCO3 pH4.5)

2c: Alkalinity TV: 0.00 mg/L
- BLANK (Lab ID: 2641082)
  - Alkalinity,Total (CaCO3 pH4.5)

3c: Alkalinity TV: 3.00 mg/L
- TW-16A (Lab ID: 30532667002)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-17A (Lab ID: 30532667004)
  - Alkalinity,Total (CaCO3 pH4.5)

4c: Alkalinity TV: 6.00 mg/L
- TW-17 (Lab ID: 30532667003)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30532667

Method: **SM 2540C-2011**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: November 10, 2022

General Information:
5 samples were analyzed for SM 2540C-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30532667

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: November 10, 2022

General Information:
5 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30532667

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: November 10, 2022

General Information:
5 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 542807

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30531807007,30532551001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2634570)
  - Chemical Oxygen Demand
- MSD (Lab ID: 2634571)
  - Chemical Oxygen Demand

QC Batch: 543106

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30532667003,30533104005

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2636159)
  - Chemical Oxygen Demand
- MSD (Lab ID: 2636160)
  - Chemical Oxygen Demand

Additional Comments:

Analyte Comments:

QC Batch: 542807

5c: pH was adjusted to <2 at bench

- BLANK (Lab ID: 2634567)
  - Chemical Oxygen Demand

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30532667

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: November 10, 2022

Analyte Comments:

QC Batch: 542807

5c: pH was adjusted to <2 at bench

- LCS (Lab ID: 2634568)
  - Chemical Oxygen Demand

QC Batch: 543102

5c: pH was adjusted to <2 at bench

- BLANK (Lab ID: 2636139)
  - Chemical Oxygen Demand
- LCS (Lab ID: 2636140)
  - Chemical Oxygen Demand

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30532667

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: November 10, 2022

General Information:
5 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30532667

Method: **SM 4500NO3-F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: November 10, 2022

General Information:
5 samples were analyzed for SM 4500NO3-F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30532667

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: November 10, 2022

General Information:
5 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 544206

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30532438001,30533104004

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MSD (Lab ID: 2641130)
  - Sulfate

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2646969)
  - Sulfate

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30532667

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: November 10, 2022

General Information:
5 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30532667

Sample: TW-16 **Lab ID: 30532667001** Collected: 10/25/22 12:15 Received: 10/25/22 20:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**12.2**	mg/L	0.50	0.083	1	10/27/22 14:01	10/31/22 19:21	7440-70-2	
Iron	**0.46**	mg/L	0.050	0.035	1	10/27/22 14:01	10/31/22 19:21	7439-89-6	
Magnesium	**9.7**	mg/L	0.50	0.047	1	10/27/22 14:01	10/31/22 19:21	7439-95-4	
Manganese	**1.3**	mg/L	0.0050	0.0027	1	10/27/22 14:01	10/31/22 19:21	7439-96-5	
Potassium	**6.6**	mg/L	0.50	0.26	1	10/27/22 14:01	10/31/22 19:21	7440-09-7	
Sodium	**20.2**	mg/L	0.50	0.34	1	10/27/22 14:01	10/31/22 19:21	7440-23-5	
Total Hardness	**70.7**	mg/L	3.3	0.27	1	10/27/22 14:01	10/31/22 19:21		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**12.0**	mg/L	0.50	0.083	1	10/28/22 13:32	10/31/22 17:27	7440-70-2	
Iron, Dissolved	**0.20**	mg/L	0.050	0.035	1	10/28/22 13:32	10/31/22 17:27	7439-89-6	
Magnesium, Dissolved	**9.6**	mg/L	0.50	0.047	1	10/28/22 13:32	10/31/22 17:27	7439-95-4	
Manganese, Dissolved	**1.3**	mg/L	0.0050	0.0027	1	10/28/22 13:32	10/31/22 17:27	7439-96-5	
Potassium, Dissolved	**5.9**	mg/L	0.50	0.26	1	10/28/22 13:32	10/31/22 17:27	7440-09-7	
Sodium, Dissolved	**18.4**	mg/L	0.50	0.34	1	10/28/22 13:32	10/31/22 17:27	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/31/22 11:31	10/31/22 15:35	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	10/31/22 11:31	10/31/22 15:35	7440-38-2	
Barium	**0.025**	mg/L	0.0025	0.00098	1	10/31/22 11:31	10/31/22 15:35	7440-39-3	
Beryllium	**0.00078**	mg/L	0.00050	0.00010	1	10/31/22 11:31	10/31/22 15:35	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	10/31/22 11:31	10/31/22 15:35	7440-43-9	
Chromium	**0.0046**	mg/L	0.0025	0.00050	1	10/31/22 11:31	10/31/22 15:35	7440-47-3	
Cobalt	**0.23**	mg/L	0.0025	0.00081	1	10/31/22 11:31	10/31/22 15:35	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.00064	1	10/31/22 11:31	10/31/22 15:35	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/31/22 11:31	10/31/22 15:35	7439-92-1	
Nickel	**0.24**	mg/L	0.0025	0.00065	1	10/31/22 11:31	10/31/22 15:35	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/31/22 11:31	10/31/22 15:35	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/31/22 11:31	10/31/22 15:35	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/31/22 11:31	10/31/22 15:35	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/31/22 11:31	10/31/22 15:35	7440-62-2	
Zinc	**0.36**	mg/L	0.0050	0.0040	1	10/31/22 11:31	10/31/22 15:35	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/02/22 11:44	11/02/22 17:20	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	10/27/22 07:15	10/27/22 11:44	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	10/27/22 07:15	10/27/22 11:44	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	103	%.	60-140		1	10/27/22 07:15	10/27/22 11:44	630-20-6	

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30532667

Sample: TW-16 **Lab ID: 30532667001** Collected: 10/25/22 12:15 Received: 10/25/22 20:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		11/02/22 16:08		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**204**	mg/L	10.0	10.0	1		10/27/22 18:25		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	10/31/22 09:11	10/31/22 11:57		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**8.4J**	mg/L	25.0	4.7	1	10/27/22 09:32	10/27/22 13:03		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**25.0**	mg/L	3.0	0.67	1		10/31/22 14:28	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		10/28/22 16:59	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		10/28/22 16:59		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**105**	mg/L	20.0	9.3	2		11/07/22 18:19	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/26/22 11:04	14797-65-0	

Sample: TW-16A **Lab ID: 30532667002** Collected: 10/25/22 11:40 Received: 10/25/22 20:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.99**	mg/L	0.50	0.083	1	11/04/22 13:56	11/08/22 17:31	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	11/04/22 13:56	11/08/22 17:31	7439-89-6	
Magnesium	**0.40J**	mg/L	0.50	0.047	1	11/04/22 13:56	11/08/22 17:31	7439-95-4	
Manganese	**0.0048J**	mg/L	0.0050	0.0027	1	11/04/22 13:56	11/08/22 17:31	7439-96-5	
Potassium	**0.55**	mg/L	0.50	0.26	1	11/04/22 13:56	11/08/22 17:31	7440-09-7	

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30532667

Sample: TW-16A **Lab ID: 30532667002** Collected: 10/25/22 11:40 Received: 10/25/22 20:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**1.5**	mg/L	0.50	0.34	1	11/04/22 13:56	11/08/22 17:31	7440-23-5	
Total Hardness	**4.1**	mg/L	3.3	0.27	1	11/04/22 13:56	11/08/22 17:31		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**1.1**	mg/L	0.50	0.083	1	10/28/22 13:32	10/31/22 17:42	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	10/28/22 13:32	10/31/22 17:42	7439-89-6	
Magnesium, Dissolved	**0.39J**	mg/L	0.50	0.047	1	10/28/22 13:32	10/31/22 17:42	7439-95-4	
Manganese, Dissolved	**0.0052**	mg/L	0.0050	0.0027	1	10/28/22 13:32	10/31/22 17:42	7439-96-5	
Potassium, Dissolved	**0.47J**	mg/L	0.50	0.26	1	10/28/22 13:32	10/31/22 17:42	7440-09-7	
Sodium, Dissolved	**1.4**	mg/L	0.50	0.34	1	10/28/22 13:32	10/31/22 17:42	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/31/22 11:31	10/31/22 15:38	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	10/31/22 11:31	10/31/22 15:38	7440-38-2	
Barium	**0.0062**	mg/L	0.0025	0.00098	1	10/31/22 11:31	10/31/22 15:38	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	10/31/22 11:31	10/31/22 15:38	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	10/31/22 11:31	10/31/22 15:38	7440-43-9	
Chromium	**0.0034**	mg/L	0.0025	0.00050	1	10/31/22 11:31	10/31/22 15:38	7440-47-3	
Cobalt	**0.013**	mg/L	0.0025	0.00081	1	10/31/22 11:31	10/31/22 15:38	7440-48-4	
Copper	**0.0016J**	mg/L	0.0025	0.00064	1	10/31/22 11:31	10/31/22 15:38	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/31/22 11:31	10/31/22 15:38	7439-92-1	
Nickel	**0.0066**	mg/L	0.0025	0.00065	1	10/31/22 11:31	10/31/22 15:38	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/31/22 11:31	10/31/22 15:38	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/31/22 11:31	10/31/22 15:38	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/31/22 11:31	10/31/22 15:38	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/31/22 11:31	10/31/22 15:38	7440-62-2	
Zinc	**0.0078**	mg/L	0.0050	0.0040	1	10/31/22 11:31	10/31/22 15:38	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/02/22 11:44	11/02/22 17:22	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	10/27/22 07:15	10/27/22 12:22	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	10/27/22 07:15	10/27/22 12:22	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	100	%.	60-140		1	10/27/22 07:15	10/27/22 12:22	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**3.0J**	mg/L	10.0	1.0	1		11/02/22 16:20		3c

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30532667

Sample: TW-16A **Lab ID: 30532667002** Collected: 10/25/22 11:40 Received: 10/25/22 20:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		10/27/22 18:25		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	10/31/22 09:11	10/31/22 12:03		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**8.4J**	mg/L	25.0	4.7	1	10/28/22 09:46	10/28/22 14:55		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**3.3**	mg/L	3.0	0.67	1		10/31/22 14:29	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.17**	mg/L	0.10	0.053	1		10/28/22 17:00	14797-55-8	
Nitrogen, NO2 plus NO3	**0.17**	mg/L	0.10	0.053	1		10/28/22 17:00		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/07/22 18:21	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/26/22 11:05	14797-65-0	

Sample: TW-17 **Lab ID: 30532667003** Collected: 10/25/22 13:00 Received: 10/25/22 20:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**6.0**	mg/L	0.50	0.083	1	10/27/22 14:01	10/31/22 19:25	7440-70-2	
Iron	**20.6**	mg/L	0.050	0.035	1	10/27/22 14:01	10/31/22 19:25	7439-89-6	
Magnesium	**2.0**	mg/L	0.50	0.047	1	10/27/22 14:01	10/31/22 19:25	7439-95-4	
Manganese	**0.35**	mg/L	0.0050	0.0027	1	10/27/22 14:01	10/31/22 19:25	7439-96-5	
Potassium	**1.9**	mg/L	0.50	0.26	1	10/27/22 14:01	10/31/22 19:25	7440-09-7	
Sodium	**14.3**	mg/L	0.50	0.34	1	10/27/22 14:01	10/31/22 19:25	7440-23-5	
Total Hardness	**23.5**	mg/L	3.3	0.27	1	10/27/22 14:01	10/31/22 19:25		N3

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30532667

Sample: TW-17 **Lab ID: 30532667003** Collected: 10/25/22 13:00 Received: 10/25/22 20:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**6.1**	mg/L	0.50	0.083	1	10/28/22 13:32	10/31/22 17:44	7440-70-2	
Iron, Dissolved	**3.3**	mg/L	0.050	0.035	1	10/28/22 13:32	10/31/22 17:44	7439-89-6	
Magnesium, Dissolved	**2.1**	mg/L	0.50	0.047	1	10/28/22 13:32	10/31/22 17:44	7439-95-4	
Manganese, Dissolved	**0.34**	mg/L	0.0050	0.0027	1	10/28/22 13:32	10/31/22 17:44	7439-96-5	
Potassium, Dissolved	**1.7**	mg/L	0.50	0.26	1	10/28/22 13:32	10/31/22 17:44	7440-09-7	
Sodium, Dissolved	**13.5**	mg/L	0.50	0.34	1	10/28/22 13:32	10/31/22 17:44	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/31/22 11:31	10/31/22 15:41	7440-36-0	
Arsenic	**0.00080J**	mg/L	0.0025	0.00044	1	10/31/22 11:31	10/31/22 15:41	7440-38-2	
Barium	**0.023**	mg/L	0.0025	0.00098	1	10/31/22 11:31	10/31/22 15:41	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	10/31/22 11:31	10/31/22 15:41	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	10/31/22 11:31	10/31/22 15:41	7440-43-9	
Chromium	**0.016**	mg/L	0.0025	0.00050	1	10/31/22 11:31	10/31/22 15:41	7440-47-3	
Cobalt	**0.013**	mg/L	0.0025	0.00081	1	10/31/22 11:31	10/31/22 15:41	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.00064	1	10/31/22 11:31	10/31/22 15:41	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/31/22 11:31	10/31/22 15:41	7439-92-1	
Nickel	**0.015**	mg/L	0.0025	0.00065	1	10/31/22 11:31	10/31/22 15:41	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/31/22 11:31	10/31/22 15:41	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/31/22 11:31	10/31/22 15:41	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/31/22 11:31	10/31/22 15:41	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/31/22 11:31	10/31/22 15:41	7440-62-2	
Zinc	**0.030**	mg/L	0.0050	0.0040	1	10/31/22 11:31	10/31/22 15:41	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/02/22 11:44	11/02/22 17:25	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	10/27/22 07:15	10/27/22 12:35	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/27/22 07:15	10/27/22 12:35	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	109	%.	60-140		1	10/27/22 07:15	10/27/22 12:35	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**6.0J**	mg/L	10.0	1.0	1		11/02/22 16:32		4c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**73.0**	mg/L	10.0	10.0	1		10/27/22 18:25		

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30532667

Sample: TW-17 **Lab ID: 30532667003** Collected: 10/25/22 13:00 Received: 10/25/22 20:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	10/31/22 09:11	10/31/22 12:05		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**10.7J**	mg/L	25.0	4.7	1	10/28/22 09:46	10/28/22 14:57		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**7.6**	mg/L	3.0	0.67	1		10/31/22 14:34	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		10/28/22 17:05	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		10/28/22 17:05		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**34.9**	mg/L	10.0	4.7	1		11/07/22 18:22	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/26/22 11:08	14797-65-0	

Sample: TW-17A **Lab ID: 30532667004** Collected: 10/25/22 13:35 Received: 10/25/22 20:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.78**	mg/L	0.50	0.083	1	11/04/22 13:56	11/08/22 17:40	7440-70-2	
Iron	**0.060**	mg/L	0.050	0.035	1	11/04/22 13:56	11/08/22 17:40	7439-89-6	
Magnesium	**0.41J**	mg/L	0.50	0.047	1	11/04/22 13:56	11/08/22 17:40	7439-95-4	
Manganese	**0.0073**	mg/L	0.0050	0.0027	1	11/04/22 13:56	11/08/22 17:40	7439-96-5	
Potassium	**0.55**	mg/L	0.50	0.26	1	11/04/22 13:56	11/08/22 17:40	7440-09-7	
Sodium	**1.4**	mg/L	0.50	0.34	1	11/04/22 13:56	11/08/22 17:40	7440-23-5	
Total Hardness	**3.6**	mg/L	3.3	0.27	1	11/04/22 13:56	11/08/22 17:40		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.79**	mg/L	0.50	0.083	1	10/28/22 13:32	10/31/22 17:46	7440-70-2	
Iron, Dissolved	**0.036J**	mg/L	0.050	0.035	1	10/28/22 13:32	10/31/22 17:46	7439-89-6	
Magnesium, Dissolved	**0.39J**	mg/L	0.50	0.047	1	10/28/22 13:32	10/31/22 17:46	7439-95-4	

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30532667

Sample: TW-17A **Lab ID: 30532667004** Collected: 10/25/22 13:35 Received: 10/25/22 20:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Manganese, Dissolved	**0.0072**	mg/L	0.0050	0.0027	1	10/28/22 13:32	10/31/22 17:46	7439-96-5	
Potassium, Dissolved	**0.42J**	mg/L	0.50	0.26	1	10/28/22 13:32	10/31/22 17:46	7440-09-7	
Sodium, Dissolved	**1.3**	mg/L	0.50	0.34	1	10/28/22 13:32	10/31/22 17:46	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/31/22 11:31	10/31/22 15:45	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	10/31/22 11:31	10/31/22 15:45	7440-38-2	
Barium	**0.012**	mg/L	0.0025	0.00098	1	10/31/22 11:31	10/31/22 15:45	7440-39-3	
Beryllium	**0.00023J**	mg/L	0.00050	0.00010	1	10/31/22 11:31	10/31/22 15:45	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	10/31/22 11:31	10/31/22 15:45	7440-43-9	
Chromium	**0.0064**	mg/L	0.0025	0.00050	1	10/31/22 11:31	10/31/22 15:45	7440-47-3	
Cobalt	**0.0052**	mg/L	0.0025	0.00081	1	10/31/22 11:31	10/31/22 15:45	7440-48-4	
Copper	**0.0013J**	mg/L	0.0025	0.00064	1	10/31/22 11:31	10/31/22 15:45	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/31/22 11:31	10/31/22 15:45	7439-92-1	
Nickel	**0.014**	mg/L	0.0025	0.00065	1	10/31/22 11:31	10/31/22 15:45	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/31/22 11:31	10/31/22 15:45	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/31/22 11:31	10/31/22 15:45	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/31/22 11:31	10/31/22 15:45	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/31/22 11:31	10/31/22 15:45	7440-62-2	
Zinc	**0.0070**	mg/L	0.0050	0.0040	1	10/31/22 11:31	10/31/22 15:45	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/02/22 11:44	11/02/22 17:32	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	10/27/22 07:15	10/27/22 12:48	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	10/27/22 07:15	10/27/22 12:48	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	104	%.	60-140		1	10/27/22 07:15	10/27/22 12:48	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**3.0J**	mg/L	10.0	1.0	1		11/02/22 16:35		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**15.0**	mg/L	10.0	10.0	1		10/27/22 18:25		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	10/31/22 09:11	10/31/22 12:07		

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30532667

Sample: TW-17A **Lab ID: 30532667004** Collected: 10/25/22 13:35 Received: 10/25/22 20:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**10.7J**	mg/L	25.0	4.7	1	10/28/22 09:46	10/28/22 14:58		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**3.4**	mg/L	3.0	0.67	1		10/31/22 14:36	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.22**	mg/L	0.10	0.053	1		10/28/22 17:06	14797-55-8	
Nitrogen, NO2 plus NO3	**0.22**	mg/L	0.10	0.053	1		10/28/22 17:06		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/07/22 18:24	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/26/22 11:08	14797-65-0	

Sample: TW-19 **Lab ID: 30532667005** Collected: 10/25/22 14:15 Received: 10/25/22 20:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**17.8**	mg/L	0.50	0.083	1	10/27/22 14:01	10/31/22 19:33	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	10/27/22 14:01	10/31/22 19:33	7439-89-6	
Magnesium	**4.7**	mg/L	0.50	0.047	1	10/27/22 14:01	10/31/22 19:33	7439-95-4	
Manganese	**0.0070**	mg/L	0.0050	0.0027	1	10/27/22 14:01	10/31/22 19:33	7439-96-5	
Potassium	**4.9**	mg/L	0.50	0.26	1	10/27/22 14:01	10/31/22 19:33	7440-09-7	
Sodium	**11.6**	mg/L	0.50	0.34	1	10/27/22 14:01	10/31/22 19:33	7440-23-5	
Total Hardness	**63.8**	mg/L	3.3	0.27	1	10/27/22 14:01	10/31/22 19:33		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**18.8**	mg/L	0.50	0.083	1	10/28/22 13:32	10/31/22 17:48	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	10/28/22 13:32	10/31/22 17:48	7439-89-6	
Magnesium, Dissolved	**5.0**	mg/L	0.50	0.047	1	10/28/22 13:32	10/31/22 17:48	7439-95-4	
Manganese, Dissolved	**0.0077**	mg/L	0.0050	0.0027	1	10/28/22 13:32	10/31/22 17:48	7439-96-5	
Potassium, Dissolved	**4.8**	mg/L	0.50	0.26	1	10/28/22 13:32	10/31/22 17:48	7440-09-7	
Sodium, Dissolved	**11.4**	mg/L	0.50	0.34	1	10/28/22 13:32	10/31/22 17:48	7440-23-5	

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30532667

Sample: TW-19 **Lab ID: 30532667005** Collected: 10/25/22 14:15 Received: 10/25/22 20:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/31/22 11:31	10/31/22 15:47	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	10/31/22 11:31	10/31/22 15:47	7440-38-2	
Barium	**0.051**	mg/L	0.0025	0.00098	1	10/31/22 11:31	10/31/22 15:47	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	10/31/22 11:31	10/31/22 15:47	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	10/31/22 11:31	10/31/22 15:47	7440-43-9	
Chromium	**0.0016J**	mg/L	0.0025	0.00050	1	10/31/22 11:31	10/31/22 15:47	7440-47-3	
Cobalt	**0.0044**	mg/L	0.0025	0.00081	1	10/31/22 11:31	10/31/22 15:47	7440-48-4	
Copper	**0.0049**	mg/L	0.0025	0.00064	1	10/31/22 11:31	10/31/22 15:47	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/31/22 11:31	10/31/22 15:47	7439-92-1	
Nickel	**0.0058**	mg/L	0.0025	0.00065	1	10/31/22 11:31	10/31/22 15:47	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/31/22 11:31	10/31/22 15:47	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/31/22 11:31	10/31/22 15:47	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/31/22 11:31	10/31/22 15:47	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/31/22 11:31	10/31/22 15:47	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0040	1	10/31/22 11:31	10/31/22 15:47	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/02/22 11:44	11/02/22 17:34	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	10/27/22 07:15	10/27/22 13:01	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/27/22 07:15	10/27/22 13:01	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	104	%.	60-140		1	10/27/22 07:15	10/27/22 13:01	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**38.0**	mg/L	10.0	1.0	1		11/02/22 16:38		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**106**	mg/L	10.0	10.0	1		10/27/22 18:25		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	10/31/22 09:11	10/31/22 12:09		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.1J**	mg/L	25.0	4.7	1	10/28/22 09:46	10/28/22 14:58		

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30532667

Sample: TW-19 **Lab ID: 30532667005** Collected: 10/25/22 14:15 Received: 10/25/22 20:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**18.4**	mg/L	3.0	0.67	1		10/31/22 14:37	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.93**	mg/L	0.10	0.053	1		10/28/22 17:07	14797-55-8	
Nitrogen, NO2 plus NO3	**0.93**	mg/L	0.10	0.053	1		10/28/22 17:07		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**22.7**	mg/L	10.0	4.7	1		11/07/22 18:24	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/26/22 11:08	14797-65-0	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30532667

QC Batch: 542941
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30532667001, 30532667003, 30532667005

METHOD BLANK: 2635254 Matrix: Water
Associated Lab Samples: 30532667001, 30532667003, 30532667005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.23J	0.50	0.083	11/01/22 18:48	
Iron	mg/L	0.050 U	0.050	0.035	11/01/22 18:48	
Magnesium	mg/L	0.50 U	0.50	0.047	11/01/22 18:48	
Manganese	mg/L	0.0050 U	0.0050	0.0027	11/01/22 18:48	
Potassium	mg/L	0.50 U	0.50	0.26	11/01/22 18:48	
Sodium	mg/L	0.61	0.50	0.34	11/01/22 18:48	

LABORATORY CONTROL SAMPLE: 2635255

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	41.0	102	80-120	
Iron	mg/L	2	2.2	112	80-120	
Magnesium	mg/L	20	20.3	101	80-120	
Manganese	mg/L	2	2.1	106	80-120	
Potassium	mg/L	20	21.2	106	80-120	
Sodium	mg/L	20	21.1	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2635272 2635273

Parameter	Units	30533079003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	5810 ug/L			45.2	44.9				1	20	
Iron	mg/L	2260 ug/L			2.3	2.3				1	20	
Magnesium	mg/L	6160 ug/L			26.6	26.4				1	20	
Manganese	mg/L	468 ug/L	2	2	2.6	2.6	107	106	80-120	1	20	
Potassium	mg/L	1970 ug/L			22.4	22.6				0	20	
Sodium	mg/L	9050 ug/L			30.0	30.1				0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30532667

QC Batch: 544851
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30532667002, 30532667004

METHOD BLANK: 2644825
Matrix: Water
Associated Lab Samples: 30532667002, 30532667004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	11/08/22 17:27	
Iron	mg/L	0.050 U	0.050	0.035	11/08/22 17:27	
Magnesium	mg/L	0.50 U	0.50	0.047	11/08/22 17:27	
Manganese	mg/L	0.0050 U	0.0050	0.0027	11/08/22 17:27	
Potassium	mg/L	0.50 U	0.50	0.26	11/08/22 17:27	
Sodium	mg/L	0.50 U	0.50	0.34	11/08/22 17:27	

LABORATORY CONTROL SAMPLE: 2644826

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	43.5	109	80-120	
Iron	mg/L	2	2.2	108	80-120	
Magnesium	mg/L	20	21.3	106	80-120	
Manganese	mg/L	2	2.1	105	80-120	
Potassium	mg/L	20	21.5	107	80-120	
Sodium	mg/L	20	21.5	108	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2644877 2644878

Parameter	Units	30532667002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	0.99	40	40	44.4	44.3	109	108	80-120	0	20	
Iron	mg/L	0.050 U	2	2	2.2	2.2	108	108	80-120	1	20	
Magnesium	mg/L	0.40J	20	20	21.7	21.5	106	106	80-120	1	20	
Manganese	mg/L	0.0048J	2	2	2.1	2.1	105	105	80-120	0	20	
Potassium	mg/L	0.55	20	20	22.1	22.0	108	107	80-120	0	20	
Sodium	mg/L	1.5	20	20	23.0	22.9	108	107	80-120	0	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30532667

QC Batch: 543232
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30532667001, 30532667002, 30532667003, 30532667004, 30532667005

METHOD BLANK: 2636664
Matrix: Water
Associated Lab Samples: 30532667001, 30532667002, 30532667003, 30532667004, 30532667005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	10/31/22 17:23	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	10/31/22 17:23	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	10/31/22 17:23	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	10/31/22 17:23	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	10/31/22 17:23	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	10/31/22 17:23	

LABORATORY CONTROL SAMPLE: 2636665

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	41.1	103	80-120	
Iron, Dissolved	mg/L	2	2.1	104	80-120	
Magnesium, Dissolved	mg/L	20	20.5	103	80-120	
Manganese, Dissolved	mg/L	2	2.1	103	80-120	
Potassium, Dissolved	mg/L	20	19.7	99	80-120	
Sodium, Dissolved	mg/L	20	19.9	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2636693 2636694

Parameter	Units	30532667001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	12.0	40	40	54.9	55.2	107	108	80-120	1	20	
Iron, Dissolved	mg/L	0.20	2	2	2.3	2.4	107	109	80-120	2	20	
Magnesium, Dissolved	mg/L	9.6	20	20	31.5	31.8	109	111	80-120	1	20	
Manganese, Dissolved	mg/L	1.3	2	2	3.5	3.5	110	110	80-120	0	20	
Potassium, Dissolved	mg/L	5.9	20	20	27.1	27.2	106	107	80-120	0	20	
Sodium, Dissolved	mg/L	18.4	20	20	40.5	40.6	111	111	80-120	0	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30532667

QC Batch: 543483
QC Batch Method: EPA 3020A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30532667001, 30532667002, 30532667003, 30532667004, 30532667005

METHOD BLANK: 2637872
Matrix: Water
Associated Lab Samples: 30532667001, 30532667002, 30532667003, 30532667004, 30532667005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00030	10/31/22 15:09	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	10/31/22 15:09	
Barium	mg/L	0.0025 U	0.0025	0.00098	10/31/22 15:09	
Beryllium	mg/L	0.00050 U	0.00050	0.00010	10/31/22 15:09	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	10/31/22 15:09	
Chromium	mg/L	0.0025 U	0.0025	0.00050	10/31/22 15:09	
Cobalt	mg/L	0.0025 U	0.0025	0.00081	10/31/22 15:09	
Copper	mg/L	0.0025 U	0.0025	0.00064	10/31/22 15:09	
Lead	mg/L	0.00050 U	0.00050	0.00025	10/31/22 15:09	
Nickel	mg/L	0.0025 U	0.0025	0.00065	10/31/22 15:09	
Selenium	mg/L	0.0025 U	0.0025	0.00084	10/31/22 15:09	
Silver	mg/L	0.0025 U	0.0025	0.00053	10/31/22 15:09	
Thallium	mg/L	0.00050 U	0.00050	0.000081	10/31/22 15:09	
Vanadium	mg/L	0.0025 U	0.0025	0.0012	10/31/22 15:09	
Zinc	mg/L	0.0050 U	0.0050	0.0040	10/31/22 15:09	

LABORATORY CONTROL SAMPLE: 2637873

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.021	105	80-120	
Arsenic	mg/L	0.1	0.10	100	80-120	
Barium	mg/L	0.1	0.10	100	80-120	
Beryllium	mg/L	0.02	0.018	91	80-120	
Cadmium	mg/L	0.02	0.019	97	80-120	
Chromium	mg/L	0.1	0.10	103	80-120	
Cobalt	mg/L	0.1	0.10	103	80-120	
Copper	mg/L	0.1	0.10	104	80-120	
Lead	mg/L	0.02	0.020	101	80-120	
Nickel	mg/L	0.1	0.10	103	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	
Silver	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.02	0.020	100	80-120	
Vanadium	mg/L	0.1	0.10	103	80-120	
Zinc	mg/L	0.2	0.20	100	80-120	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30532667

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2637943 2637944

Parameter	Units	30532415001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.02	0.02	0.022	0.022	110	109	75-125	1	20	
Arsenic	mg/L	5.0 ug/L	0.1	0.1	0.11	0.11	105	105	75-125	0	20	
Barium	mg/L	92.1 ug/L	0.1	0.1	0.20	0.20	110	105	75-125	2	20	
Beryllium	mg/L	ND	0.02	0.02	0.019	0.019	96	95	75-125	1	20	
Cadmium	mg/L	ND	0.02	0.02	0.020	0.020	101	101	75-125	0	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.11	109	109	75-125	0	20	
Cobalt	mg/L	ND	0.1	0.1	0.11	0.11	109	108	75-125	1	20	
Copper	mg/L	40.1 ug/L	0.1	0.1	0.15	0.15	108	107	75-125	1	20	
Lead	mg/L	ND	0.02	0.02	0.021	0.021	107	107	75-125	0	20	
Nickel	mg/L	ND	0.1	0.1	0.11	0.11	107	107	75-125	0	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.098	102	98	75-125	4	20	
Silver	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	0	20	
Thallium	mg/L	ND	0.02	0.02	0.021	0.021	107	106	75-125	1	20	
Vanadium	mg/L	5.5 ug/L	0.1	0.1	0.12	0.11	110	109	75-125	1	20	
Zinc	mg/L	28.9 ug/L	0.2	0.2	0.24	0.24	104	104	75-125	0	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30532667

QC Batch: 544078
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30532667001, 30532667002, 30532667003, 30532667004, 30532667005

METHOD BLANK: 2640483 Matrix: Water
Associated Lab Samples: 30532667001, 30532667002, 30532667003, 30532667004, 30532667005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	11/02/22 16:37	

LABORATORY CONTROL SAMPLE: 2640484

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.010	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2640485 2640486

Parameter	Units	30531619003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.01	0.01	0.010	0.011	100	111	80-120	10	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30532667

QC Batch: 542787
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30532667001, 30532667002, 30532667003, 30532667004, 30532667005

METHOD BLANK: 2634504 Matrix: Water
Associated Lab Samples: 30532667001, 30532667002, 30532667003, 30532667004, 30532667005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	10/27/22 11:19	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	10/27/22 11:19	
1,1,1,2-Tetrachloroethane (S)	%.	109	60-140		10/27/22 11:19	

LABORATORY CONTROL SAMPLE: 2634505

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.25	98	85-115	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.23	93	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			107	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2634506 2634507

Parameter	Units	30532667001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.4	0.41	0.37	0.41	94	100	60-140	10	25	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.4	0.41	0.35	0.38	87	91	60-140	7	25	
1,1,1,2-Tetrachloroethane (S)	%.						98	105	60-140			

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30532667

QC Batch: 544190
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30532667001, 30532667002, 30532667003, 30532667004, 30532667005

METHOD BLANK: 2641082 Matrix: Water
Associated Lab Samples: 30532667001, 30532667002, 30532667003, 30532667004, 30532667005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	11/02/22 14:13	2c

LABORATORY CONTROL SAMPLE: 2641083

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2641185 2641186

Parameter	Units	30532667001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	50	50	49.0	46.0	98	92	85-115	6	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30532667

QC Batch: 542996
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30532667001, 30532667002, 30532667003, 30532667004, 30532667005

METHOD BLANK: 2635469
Matrix: Water
Associated Lab Samples: 30532667001, 30532667002, 30532667003, 30532667004, 30532667005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	10/27/22 18:25	

LABORATORY CONTROL SAMPLE: 2635470

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	935	94	85-115	

SAMPLE DUPLICATE: 2635471

Parameter	Units	30532667001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	204	203	0	5	

SAMPLE DUPLICATE: 2635472

Parameter	Units	30533219007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	381	387	2	5	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30532667

QC Batch: 543434
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30532667001, 30532667002, 30532667003, 30532667004, 30532667005

METHOD BLANK: 2637730
Matrix: Water
Associated Lab Samples: 30532667001, 30532667002, 30532667003, 30532667004, 30532667005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	10/31/22 11:26	

LABORATORY CONTROL SAMPLE: 2637731

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.0	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2637732 2637733

Parameter	Units	30532729002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.18	4	4	3.9	3.9	92	93	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2637734 2637735

Parameter	Units	30532667001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	3.8	3.9	96	97	90-110	1	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30532667

QC Batch: 542807
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30532667001

METHOD BLANK: 2634565 Matrix: Water
Associated Lab Samples: 30532667001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	10/27/22 12:56	

METHOD BLANK: 2634567 Matrix: Water
Associated Lab Samples: 30532667001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	10/27/22 12:57	5c

METHOD BLANK: 2634569 Matrix: Water
Associated Lab Samples: 30532667001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	10/27/22 12:57	

LABORATORY CONTROL SAMPLE: 2634566

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	321	107	90-110	

LABORATORY CONTROL SAMPLE: 2634568

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	328	109	90-110	5c

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2634570 2634571

Parameter	Units	30532551001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	1030	150	150	1140	1130	68	67	90-110	0	10	ML

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30532667

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2634572 2634573

Parameter	Units	30531807007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	13.0J	150	150	173	175	106	108	90-110	1	10	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30532667

QC Batch: 543102
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30532667002

METHOD BLANK: 2636137 Matrix: Water
Associated Lab Samples: 30532667002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	10/28/22 14:49	

METHOD BLANK: 2636139 Matrix: Water
Associated Lab Samples: 30532667002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	10/28/22 14:49	5c

LABORATORY CONTROL SAMPLE: 2636138

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	323	108	90-110	

LABORATORY CONTROL SAMPLE: 2636140

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	326	109	90-110	5c

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2636141 2636142

Parameter	Units	30532417001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	4850	1500	1500	6220	6380	91	102	90-110	3	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2636143 2636144

Parameter	Units	30532667002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	8.4J	150	150	148	150	93	94	90-110	2	10	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30532667

QC Batch: 543106
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30532667003, 30532667004, 30532667005

METHOD BLANK: 2636155
Matrix: Water
Associated Lab Samples: 30532667003, 30532667004, 30532667005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	10/28/22 14:56	

LABORATORY CONTROL SAMPLE: 2636156

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	321	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2636157 2636158

Parameter	Units	30532667003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	10.7J	150	150	175	173	110	108	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2636159 2636160

Parameter	Units	30533104005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	17.5J	150	150	186	184	113	111	90-110	1	10	MH

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30532667

QC Batch: 543573
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30532667001, 30532667002

METHOD BLANK: 2638136 Matrix: Water
Associated Lab Samples: 30532667001, 30532667002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	10/31/22 14:08	

LABORATORY CONTROL SAMPLE: 2638137

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2638138 2638139

Parameter	Units	30532350002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	9770	20000	20000	27200	26900	87	86	85-115	1	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30532667

QC Batch: 543574
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30532667003, 30532667004, 30532667005

METHOD BLANK: 2638140 Matrix: Water
Associated Lab Samples: 30532667003, 30532667004, 30532667005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	10/31/22 14:32	

LABORATORY CONTROL SAMPLE: 2638141

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.4	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2638142 2638143

Parameter	Units	30532667003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	7.6	20	20	30.3	30.3	113	113	85-115	0	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30532667

QC Batch: 543217
QC Batch Method: SM 4500NO3-F-2011
Analysis Method: SM 4500NO3-F-2011
Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30532667001, 30532667002, 30532667003, 30532667004, 30532667005

METHOD BLANK: 2636589 Matrix: Water
Associated Lab Samples: 30532667001, 30532667002, 30532667003, 30532667004, 30532667005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	10/28/22 16:42	

LABORATORY CONTROL SAMPLE: 2636590

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	3.7	93	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2636591 2636592

Parameter	Units	30533273001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.27	5	5	5.4	5.4	102	103	85-115	0	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30532667

QC Batch: 544206
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30532667001, 30532667002, 30532667003, 30532667004, 30532667005

METHOD BLANK: 2641125 Matrix: Water
Associated Lab Samples: 30532667001, 30532667002, 30532667003, 30532667004, 30532667005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	11/07/22 18:10	

LABORATORY CONTROL SAMPLE: 2641126

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	31.7	106	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2641129 2641130

Parameter	Units	30533104004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	17.6	20	20	38.8	41.7	106	120	85-115	7	20	MH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2646969 2646970

Parameter	Units	30532438001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	26700	20000	20000	42800	47500	81	104	85-115	10	20	ML

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30532667

QC Batch: 542598
QC Batch Method: SM 4500NO2-B-2011
Analysis Method: SM 4500NO2-B-2011
Analysis Description: SM4500-NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30532667001, 30532667002, 30532667003, 30532667004, 30532667005

METHOD BLANK: 2633107 Matrix: Water
Associated Lab Samples: 30532667001, 30532667002, 30532667003, 30532667004, 30532667005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	10/26/22 11:04	

LABORATORY CONTROL SAMPLE: 2633108

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.10	100	90-110	

MATRIX SPIKE SAMPLE: 2633110

Parameter	Units	30532667001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.010 U	0.1	0.10	103	85-115	

SAMPLE DUPLICATE: 2633109

Parameter	Units	30532667001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010 U		20	

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QUALIFIERS

Project: MLF-Fall 2022
Pace Project No.: 30532667

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30532667001

[1] Sample pH for 8011 is 5.

Sample: 30532667002

[1] Sample pH for 8011 is 6.

Sample: 30532667003

[1] Sample pH for 8011 is 5.

Sample: 30532667004

[1] Sample pH for 8011 is 6.

Sample: 30532667005

[1] Sample pH for 8011 is 6.

ANALYTE QUALIFIERS

1c	Alkalinity TV: -1.00 mg/L
2c	Alkalinity TV: 0.00 mg/L
3c	Alkalinity TV: 3.00 mg/L
4c	Alkalinity TV: 6.00 mg/L
5c	pH was adjusted to <2 at bench

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QUALIFIERS

Project: MLF-Fall 2022
Pace Project No.: 30532667

ANALYTE QUALIFIERS

MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-Fall 2022
Pace Project No.: 30532667

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30532667001	**TW-16**	EPA 3010A	542941	EPA 6010D	543693
30532667002	**TW-16A**	EPA 3010A	544851	EPA 6010D	545626
30532667003	**TW-17**	EPA 3010A	542941	EPA 6010D	543693
30532667004	**TW-17A**	EPA 3010A	544851	EPA 6010D	545626
30532667005	**TW-19**	EPA 3010A	542941	EPA 6010D	543693
30532667001	**TW-16**	EPA 3010A	543232	EPA 6010D	543615
30532667002	**TW-16A**	EPA 3010A	543232	EPA 6010D	543615
30532667003	**TW-17**	EPA 3010A	543232	EPA 6010D	543615
30532667004	**TW-17A**	EPA 3010A	543232	EPA 6010D	543615
30532667005	**TW-19**	EPA 3010A	543232	EPA 6010D	543615
30532667001	**TW-16**	EPA 3020A	543483	EPA 6020B	543650
30532667002	**TW-16A**	EPA 3020A	543483	EPA 6020B	543650
30532667003	**TW-17**	EPA 3020A	543483	EPA 6020B	543650
30532667004	**TW-17A**	EPA 3020A	543483	EPA 6020B	543650
30532667005	**TW-19**	EPA 3020A	543483	EPA 6020B	543650
30532667001	**TW-16**	EPA 7470A	544078	EPA 7470A	544437
30532667002	**TW-16A**	EPA 7470A	544078	EPA 7470A	544437
30532667003	**TW-17**	EPA 7470A	544078	EPA 7470A	544437
30532667004	**TW-17A**	EPA 7470A	544078	EPA 7470A	544437
30532667005	**TW-19**	EPA 7470A	544078	EPA 7470A	544437
30532667001	**TW-16**	EPA 8011	542787	EPA 8011	542856
30532667002	**TW-16A**	EPA 8011	542787	EPA 8011	542856
30532667003	**TW-17**	EPA 8011	542787	EPA 8011	542856
30532667004	**TW-17A**	EPA 8011	542787	EPA 8011	542856
30532667005	**TW-19**	EPA 8011	542787	EPA 8011	542856
30532667001	**TW-16**	SM 2320B-2011	544190		
30532667002	**TW-16A**	SM 2320B-2011	544190		
30532667003	**TW-17**	SM 2320B-2011	544190		
30532667004	**TW-17A**	SM 2320B-2011	544190		
30532667005	**TW-19**	SM 2320B-2011	544190		
30532667001	**TW-16**	SM 2540C-2011	542996		
30532667002	**TW-16A**	SM 2540C-2011	542996		
30532667003	**TW-17**	SM 2540C-2011	542996		
30532667004	**TW-17A**	SM 2540C-2011	542996		
30532667005	**TW-19**	SM 2540C-2011	542996		
30532667001	**TW-16**	EPA 350.1	543434	EPA 350.1	543482
30532667002	**TW-16A**	EPA 350.1	543434	EPA 350.1	543482
30532667003	**TW-17**	EPA 350.1	543434	EPA 350.1	543482
30532667004	**TW-17A**	EPA 350.1	543434	EPA 350.1	543482
30532667005	**TW-19**	EPA 350.1	543434	EPA 350.1	543482
30532667001	**TW-16**	EPA 410.4	542807	EPA 410.4	542865
30532667002	**TW-16A**	EPA 410.4	543102	EPA 410.4	543172

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-Fall 2022
Pace Project No.: 30532667

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30532667003	**TW-17**	EPA 410.4	543106	EPA 410.4	543173
30532667004	**TW-17A**	EPA 410.4	543106	EPA 410.4	543173
30532667005	**TW-19**	EPA 410.4	543106	EPA 410.4	543173
30532667001	**TW-16**	SM 4500-Cl-E-2011	543573		
30532667002	**TW-16A**	SM 4500-Cl-E-2011	543573		
30532667003	**TW-17**	SM 4500-Cl-E-2011	543574		
30532667004	**TW-17A**	SM 4500-Cl-E-2011	543574		
30532667005	**TW-19**	SM 4500-Cl-E-2011	543574		
30532667001	**TW-16**	SM 4500NO3-F-2011	543217		
30532667002	**TW-16A**	SM 4500NO3-F-2011	543217		
30532667003	**TW-17**	SM 4500NO3-F-2011	543217		
30532667004	**TW-17A**	SM 4500NO3-F-2011	543217		
30532667005	**TW-19**	SM 4500NO3-F-2011	543217		
30532667001	**TW-16**	EPA 9038	544206		
30532667002	**TW-16A**	EPA 9038	544206		
30532667003	**TW-17**	EPA 9038	544206		
30532667004	**TW-17A**	EPA 9038	544206		
30532667005	**TW-19**	EPA 9038	544206		
30532667001	**TW-16**	SM 4500NO2-B-2011	542598		
30532667002	**TW-16A**	SM 4500NO2-B-2011	542598		
30532667003	**TW-17**	SM 4500NO2-B-2011	542598		
30532667004	**TW-17A**	SM 4500NO2-B-2011	542598		
30532667005	**TW-19**	SM 4500NO2-B-2011	542598		

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF-FALL 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals ①	Total + Diss. Metals ②	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO4, COD	Method 8011 - DBCP + EDB				
1	TW-16	8	10.25.22	1215	✓		GW	✓	✓	✓	✓	✓	✓	✓	✓				01
2	TW-16A	↓	↓	1140	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓				02
3	TW-17	↓	↓	1300	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓				03
4	TW-17A	↓	↓	1335	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓				04
5	TW-19	↓	↓	1415	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓				05
6																			
7																			
8																			
9																			
10																			
11																			
12																			

WO#: 30532667
30532667

	Signature	Date	Time	Comments
Relinquished by	DA Brown	10.25.22	1430	① 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn
Received by	TB/PACE	10.25.22	1430	① 7470 - Hg
Relinquished by	TB/PACE	10/25/22	1658	② 6010 - Ca, Fe, Mg, Mn, K, Na
Received by	[illegible] 10/25/22	1900		PACE-WV-METALS / PACE-G-BURG-WET CHEM + 8011
Relinquished by	[illegible] 10/25/22	2030		LEVEL 2 REPORT
Received by	[illegible]	10-25-22	2030	SEE ATTACHED LIST OF METHODS / PARAMETERS / LABS

Cooler Temp on Arrival: _____ Deg. C

FOR MORE INFO.

Rev. Aug. 2018

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-GBUR-0088 v02_Sample Condition Upon Receipt-Pittsburgh

Effective Date: 10/03/2022

WO#: 30532667
PM: DAP
Due Date: 11/09/22
CLIENT: ENV MONITOR

Client Name: EMa

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking Number:

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

Thermometer Used: 17 **Type of Ice:** (Wet) Blue None

Cooler Temperature: Observed Temp 3.2 °C Correction Factor: -0.2 °C Final Temp: 3.0 °C
Temp should be above freezing to 6°C

Examined By: [illegible]
Labeled By: [illegible]
Temped By: [illegible]

Comments:	Yes	No	NA	pH paper Lot# 10D0421	D.P.D. Residual Chlorine Lot #
Chain of Custody Present	✓			1.	
Chain of Custody Filled Out:	✓			2.	
-Were client corrections present on COC		✓			
Chain of Custody Relinquished	✓			3.	
Sampler Name & Signature on COC:		✓		4.	
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.	
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):	✓			7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used:	✓			10.	
-Pace Containers Used	✓				
Containers Intact:	✓			11.	
Orthophosphate field filtered:			✓	12.	
Hex Cr Aqueous samples field filtered:			✓	13.	
Organic Samples checked for dechlorination			✓	14:	
Filtered volume received for dissolved tests:			✓	15:	
All containers checked for preservation: exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix	✓			16.	
All containers meet method preservation requirements:	✓			Initial when completed: [illegible] Lot# of added Preservative	Date/Time of Preservation
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:		✓		18.	
Trip Blank Custody Seals Present			✓		
Rad Samples Screened <0.5 mrem/hr.	✓			Initial when completed: [illegible]	Date: 10-26 Survey Meter SN: 1363

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Millersville Landfill, Anne Arundel County, MD		
	Pace, Beaver, WV	
	Method 6020 - ICPMS	
Parameter	RL	MDL
	(mg/l)	
TOTAL METALS - mg/l		
Antimony	0.0005	
Arsenic	0.0025	0.0002473
Barium	0.0025	
Beryllium	0.0005	
Cadmium	0.0005	
Chromium	0.0025	
Cobalt	0.0025	
Copper	0.0025	
Lead	0.0005	
Nickel	0.0025	
Selenium	0.0025	
Silver	0.0025	
Thallium	0.0005	
Vanadium	0.0025	
Zinc	0.005	
	Pace, Beaver, WV	
TOTAL MERCURY - mg/l	Method 7470A	
Mercury	0.0005	0.00025
	Pace, Beaver, WV	
TOTAL AND DISSOLVED METALS - mg/l	Method 6010 - ICP	
Calcium	0.5	0.028
Iron	0.05	0.0076
Magnesium	0.5	0.047
Manganese	0.005	0.00043
Potassium	0.5	0.19
Sodium	0.5	0.148
	Pace - Greensburg, PA	
VOLATILE ORGANICS - ug/l	Method 8011 - ug/l	
DBCP	0.041	
EDB	0.041	
GENERAL CHEMISTRY - mg/l	Pace - Greensburg, PA	
Alkalinity - SM 2320B	10	1
Ammonia - EPA 350.1	0.1	0.0445
COD - EPA 410.4	25	4.6532
Chloride - EPA 300.0	3	0.06683
Hardness - 2340B		
Nitrate - EPA 300.0	0.1	0.0238
Sulfate - EPA 300.0	10	4.6702
Total dissolved solids - SM2540C	10	10

WO#: 30532667
PM: DAP
Due Date: 11/09/22
CLIENT: ENV MONITOR

WO# : 30532667

30532667

LIMS30 Internal Shipping Manifest

COOLER 22

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	22	Cooler temp (rcvd) °C	-1.0
Packaged on Ice (Y/N)	Yes	Correction Factor	.0
Shipping Method	Courier	Cooler temp (corr) °C	-1.0
Tracking #	N/A	IR GUN ID	TM10
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[illegible]	GBUR	10-26-22	1900
Received	[illegible]	BEAV	10-27-22	442
Relinquished				
Received				
Relinquished				
Received				

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	10/26/2022	30532667002 BP3N2/3	BP3N	30532667002	30532667
MF	10/26/2022	30532667003 BP3N2/3	BP3N	30532667003	30532667
MF	10/26/2022	30532667003 BP3N1/3	BP3N	30532667003	30532667
MF	10/26/2022	30532667004 BP3N3/3	BP3N	30532667004	30532667
MF	10/26/2022	30532667001 BP3N1/3	BP3N	30532667001	30532667
MF	10/26/2022	30532667002 BP3N1/3	BP3N	30532667002	30532667
MF	10/26/2022	30532667001 BP3N2/3	BP3N	30532667001	30532667
MF	10/26/2022	30532667002 BP3N3/3	BP3N	30532667002	30532667
MF	10/26/2022	30532654001 BP3N1/1	BP3N	30532654001	30532654
MF	10/26/2022	30532662001 BP3N1/1	BP3N	30532662001	30532662
MF	10/26/2022	30532662002 BP3N1/1	BP3N	30532662002	30532662
MF	10/26/2022	30532667003 BP3N3/3	BP3N	30532667003	30532667
MF	10/26/2022	30532667004 BP3N1/3	BP3N	30532667004	30532667
MF	10/26/2022	30532667001 BP3N3/3	BP3N	30532667001	30532667
MF	10/26/2022	30532667004 BP3N2/3	BP3N	30532667004	30532667
MF	10/26/2022	30531641001 BP3U4/4	BP3U	30531641001	30531641
MF	10/26/2022	30532667005 BP3N1/3	BP3N	30532667005	30532667
MF	10/26/2022	30532667005 BP3N3/3	BP3N	30532667005	30532667
MF	10/26/2022	30532667005 BP3N2/3	BP3N	30532667005	30532667
MF	10/26/2022	30532674001 BP3N1/1	BP3N	30532674001	30532674
MF	10/26/2022	30532674002 BP3N1/1	BP3N	30532674002	30532674
MF	10/26/2022	30532674003 BP3N1/1	BP3N	30532674003	30532674
MF	10/26/2022	30532714001 BP3N1/1	BP3N	30532714001	30532714
MF	10/26/2022	30532714001 BP3U1/1	BP3U	30532714001	30532714
MF	10/26/2022	30532795005 BP3N1/2	BP3N	30532795005	30532795
MF	10/26/2022	30532795005 BP3N2/2	BP3N	30532795005	30532795
MF	10/26/2022	30532433002 ZPLC1/1	ZPLC	30532433002	30532433
MF	10/26/2022	30532433001 ZPLC1/1	ZPLC	30532433001	30532433
MF	10/26/2022	30532688007 BP3N1/1	BP3N	30532688007	30532688
MF	10/26/2022	30532720001 BP3N1/1	BP3N	30532720001	30532720
MF	10/26/2022	30532720001 BP3U1/1	BP3U	30532720001	30532720
MF	10/26/2022	30532718001 BP3N1/1	BP3N	30532718001	30532718
MF	10/26/2022	30532718001 BP3U1/1	BP3U	30532718001	30532718

11

WO#: 30532667
PM: DAP Due Date: 11/09/22
CLIENT: ENV MONITOR

LIMS73 Lab Sample Condition Upon Receipt (West Virginia

Pace Analytical

Client Name: _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☑ Other: 3rd Party

Tracking #: _____

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used BVTM10 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** -1.0 °C Correction Factor: .0 °C Final Temp: -1.0 °C

Comments:

pH paper Lot#	Date and Initials of person examining contents:
206722	CDW 10.27.22

	Yes	No	N/A	
Chain of Custody Present:				1.
Chain of Custody Filled Out:				2.
Chain of Custody Relinquished:				3.
Sampler Name & Signature on COC:				4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT				5. Lab Labeled by: NA Checked by: NA
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered: -pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓ ✓	13.
Filtered volume received for Dissolved tests:	✓			14.
All containers have been checked for preservation: exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix	✓			15.
All containers meet method preservation requirements:	✓			Initial when completed: CDW Date: 10.27.22
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present: Trip Blank Custody Seals Present:			✓ ✓	17.
				Initial when completed: CDW Date: 10.27.22

Manifest

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

***PM review** is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

November 23, 2022

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on October 26, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

(Greensburg PA) - Revision 1 - This report replaces the November 11, 2022 report. This project was revised on November 23, 2023 to add mercury to the results.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

David A. Pichette
david.pichette@pacelabs.com
(724)850-5617
Project Manager

Enclosures

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Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Florida: Cert E871149 SEKS WET
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver

225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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SAMPLE SUMMARY

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30533104001	**TW-20R**	Water	10/26/22 09:10	10/26/22 21:30
30533104002	**TW-21**	Water	10/26/22 09:55	10/26/22 21:30
30533104003	**TW-22**	Water	10/26/22 11:20	10/26/22 21:30
30533104004	**TW-22A**	Water	10/26/22 11:55	10/26/22 21:30
30533104005	**TW-22B**	Water	10/26/22 10:40	10/26/22 21:30
30533104006	**TW-24**	Water	10/26/22 13:00	10/26/22 21:30
30533104007	**TW-24A**	Water	10/26/22 13:35	10/26/22 21:30
30533104008	**DUP-1**	Water	10/26/22 00:00	10/26/22 21:30

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SAMPLE ANALYTE COUNT

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30533104001	**TW-20R**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	MEH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30533104002	**TW-21**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	MEH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30533104003	**TW-22**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	MEH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30533104004	**TW-22A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	MEH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30533104005	**TW-22B**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	MEH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30533104006	**TW-24**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	MEH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA

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Greensburg, PA 15601
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SAMPLE ANALYTE COUNT

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30533104007	**TW-24A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	MEH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30533104008	**DUP-1**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	MEH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Date: November 23, 2022

TW-20R (Lab ID: 30533104001)

- Sample pH for 8011 is 6

TW-21 (Lab ID: 30533104002)

- Sample pH for 8011 is 5

TW-22 (Lab ID: 30533104003)

- Sample pH for 8011 is 6

TW-22A (Lab ID: 30533104004)

- Sample pH for 8011 is 5

TW-22B (Lab ID: 30533104005)

- Sample pH for 8011 is 6

TW-24 (Lab ID: 30533104006)

- Sample pH for 8011 is 5

TW-24A (Lab ID: 30533104007)

- Sample pH for 8011 is 6

DUP-1 (Lab ID: 30533104008)

- Sample pH for 8011 is 5

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Greensburg, PA 15601
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PROJECT NARRATIVE

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 23, 2022

General Information:
8 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 23, 2022

General Information:
8 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: November 23, 2022

General Information:
8 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: November 23, 2022

General Information:
8 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 23, 2022

General Information:
8 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 543420

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- BLANK (Lab ID: 2637692)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- DUP-1 (Lab ID: 30533104008)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- LCS (Lab ID: 2637693)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MS (Lab ID: 2637694)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MSD (Lab ID: 2637695)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-20R (Lab ID: 30533104001)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-21 (Lab ID: 30533104002)
  - 1,1,1,2-Tetrachloroethane (S)

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PROJECT NARRATIVE

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 23, 2022

QC Batch: 543420

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- 1,2-Dibromo-3-chloropropane
- 1,2-Dibromoethane (EDB)

- TW-22 (Lab ID: 30533104003)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-22A (Lab ID: 30533104004)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-22B (Lab ID: 30533104005)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-24 (Lab ID: 30533104006)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-24A (Lab ID: 30533104007)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: November 23, 2022

General Information:
8 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 544505

1c: Alkalinity TV: -1.00 mg/L
- TW-22A (Lab ID: 30533104004)
  - Alkalinity,Total (CaCO3 pH4.5)

2c: Alkalinity TV: -2.00 mg/L
- TW-21 (Lab ID: 30533104002)
  - Alkalinity,Total (CaCO3 pH4.5)

3c: Alkalinity TV: 0.00 mg/L
- BLANK (Lab ID: 2642809)
  - Alkalinity,Total (CaCO3 pH4.5)

4c: Alkalinity TV: 2.00 mg/L
- DUP-1 (Lab ID: 30533104008)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-22 (Lab ID: 30533104003)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-24 (Lab ID: 30533104006)
  - Alkalinity,Total (CaCO3 pH4.5)

5c: Alkalinity TV: 4.00 mg/L
- TW-20R (Lab ID: 30533104001)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Method: **SM 2540C-2011**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: November 23, 2022

General Information:
8 samples were analyzed for SM 2540C-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: November 23, 2022

General Information:
8 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 543437

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30533104005,30533249002

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2637750)
  - Ammonia, Distilled
- MSD (Lab ID: 2637751)
  - Ammonia, Distilled

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: November 23, 2022

General Information:
8 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 543106

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30532667003,30533104005

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2636159)
  - Chemical Oxygen Demand
- MSD (Lab ID: 2636160)
  - Chemical Oxygen Demand

Additional Comments:

Analyte Comments:

QC Batch: 543877

6c: pH was adjusted to <2 at bench

- BLANK (Lab ID: 2639279)
  - Chemical Oxygen Demand
- LCS (Lab ID: 2639280)
  - Chemical Oxygen Demand

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PROJECT NARRATIVE

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: November 23, 2022

General Information:
8 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Method: **SM 4500NO3-F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: November 23, 2022

General Information:
8 samples were analyzed for SM 4500NO3-F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 543218

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- MS (Lab ID: 2636596)
  - Nitrogen, NO2 plus NO3
- MSD (Lab ID: 2636597)
  - Nitrogen, NO2 plus NO3
- TW-22B (Lab ID: 30533104005)
  - Nitrogen, NO2 plus NO3

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PROJECT NARRATIVE

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: November 23, 2022

General Information:
8 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 544206

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30532438001,30533104004

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MSD (Lab ID: 2641130)
  - Sulfate

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2646969)
  - Sulfate

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: November 23, 2022

General Information:
8 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Sample: TW-20R **Lab ID: 30533104001** Collected: 10/26/22 09:10 Received: 10/26/22 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**14.7**	mg/L	0.50	0.083	1	10/28/22 11:56	10/31/22 18:33	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	10/28/22 11:56	10/31/22 18:33	7439-89-6	
Magnesium	**4.3**	mg/L	0.50	0.047	1	10/28/22 11:56	10/31/22 18:33	7439-95-4	
Manganese	**0.041**	mg/L	0.0050	0.0027	1	10/28/22 11:56	10/31/22 18:33	7439-96-5	
Potassium	**3.3**	mg/L	0.50	0.26	1	10/28/22 11:56	10/31/22 18:33	7440-09-7	
Sodium	**10.9**	mg/L	0.50	0.34	1	10/28/22 11:56	10/31/22 18:33	7440-23-5	
Total Hardness	**54.4**	mg/L	3.3	0.27	1	10/28/22 11:56	10/31/22 18:33		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**15.8**	mg/L	0.50	0.083	1	10/28/22 13:32	10/31/22 18:18	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	10/28/22 13:32	10/31/22 18:18	7439-89-6	
Magnesium, Dissolved	**4.8**	mg/L	0.50	0.047	1	10/28/22 13:32	10/31/22 18:18	7439-95-4	
Manganese, Dissolved	**0.044**	mg/L	0.0050	0.0027	1	10/28/22 13:32	10/31/22 18:18	7439-96-5	
Potassium, Dissolved	**3.4**	mg/L	0.50	0.26	1	10/28/22 13:32	10/31/22 18:18	7440-09-7	
Sodium, Dissolved	**11.1**	mg/L	0.50	0.34	1	10/28/22 13:32	10/31/22 18:18	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/31/22 11:31	10/31/22 15:50	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	10/31/22 11:31	10/31/22 15:50	7440-38-2	
Barium	**0.040**	mg/L	0.0025	0.00098	1	10/31/22 11:31	10/31/22 15:50	7440-39-3	
Beryllium	**0.00030J**	mg/L	0.00050	0.00010	1	10/31/22 11:31	10/31/22 15:50	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	10/31/22 11:31	10/31/22 15:50	7440-43-9	
Chromium	**0.0017J**	mg/L	0.0025	0.00050	1	10/31/22 11:31	10/31/22 15:50	7440-47-3	
Cobalt	**0.0056**	mg/L	0.0025	0.00081	1	10/31/22 11:31	10/31/22 15:50	7440-48-4	
Copper	**0.0085**	mg/L	0.0025	0.00064	1	10/31/22 11:31	10/31/22 15:50	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/31/22 11:31	10/31/22 15:50	7439-92-1	
Nickel	**0.0034**	mg/L	0.0025	0.00065	1	10/31/22 11:31	10/31/22 15:50	7440-02-0	
Selenium	**0.0022J**	mg/L	0.0025	0.00084	1	10/31/22 11:31	10/31/22 15:50	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/31/22 11:31	10/31/22 15:50	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/31/22 11:31	10/31/22 15:50	7440-28-0	
Vanadium	**0.0031**	mg/L	0.0025	0.0012	1	10/31/22 11:31	10/31/22 15:50	7440-62-2	
Zinc	**0.0041J**	mg/L	0.0050	0.0040	1	10/31/22 11:31	10/31/22 15:50	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/21/22 09:44	11/21/22 16:59	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	10/31/22 07:30	10/31/22 16:46	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	10/31/22 07:30	10/31/22 16:46	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	108	%.	60-140		1	10/31/22 07:30	10/31/22 16:46	630-20-6	CH

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Sample: TW-20R **Lab ID: 30533104001** Collected: 10/26/22 09:10 Received: 10/26/22 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**4.0J**	mg/L	10.0	1.0	1		11/03/22 15:44		5c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**123**	mg/L	10.0	10.0	1		10/28/22 15:12		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	10/31/22 09:11	10/31/22 13:42		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**19.8J**	mg/L	25.0	4.7	1	10/28/22 09:46	10/28/22 15:03		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**12.1**	mg/L	3.0	0.67	1		10/31/22 14:42	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.91**	mg/L	0.10	0.053	1		10/28/22 17:35	14797-55-8	
Nitrogen, NO2 plus NO3	**0.91**	mg/L	0.10	0.053	1		10/28/22 17:35		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**56.2**	mg/L	10.0	4.7	1		11/07/22 18:26	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/27/22 11:22	14797-65-0	

Sample: TW-21 **Lab ID: 30533104002** Collected: 10/26/22 09:55 Received: 10/26/22 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**7.8**	mg/L	0.50	0.083	1	10/28/22 11:56	10/31/22 18:35	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	10/28/22 11:56	10/31/22 18:35	7439-89-6	
Magnesium	**2.8**	mg/L	0.50	0.047	1	10/28/22 11:56	10/31/22 18:35	7439-95-4	
Manganese	**0.13**	mg/L	0.0050	0.0027	1	10/28/22 11:56	10/31/22 18:35	7439-96-5	
Potassium	**2.0**	mg/L	0.50	0.26	1	10/28/22 11:56	10/31/22 18:35	7440-09-7	

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ANALYTICAL RESULTS

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Sample: TW-21 **Lab ID: 30533104002** Collected: 10/26/22 09:55 Received: 10/26/22 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**22.0**	mg/L	0.50	0.34	1	10/28/22 11:56	10/31/22 18:35	7440-23-5	
Total Hardness	**30.7**	mg/L	3.3	0.27	1	10/28/22 11:56	10/31/22 18:35		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**8.2**	mg/L	0.50	0.083	1	10/28/22 13:32	10/31/22 18:20	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	10/28/22 13:32	10/31/22 18:20	7439-89-6	
Magnesium, Dissolved	**3.0**	mg/L	0.50	0.047	1	10/28/22 13:32	10/31/22 18:20	7439-95-4	
Manganese, Dissolved	**0.13**	mg/L	0.0050	0.0027	1	10/28/22 13:32	10/31/22 18:20	7439-96-5	
Potassium, Dissolved	**2.0**	mg/L	0.50	0.26	1	10/28/22 13:32	10/31/22 18:20	7440-09-7	
Sodium, Dissolved	**22.1**	mg/L	0.50	0.34	1	10/28/22 13:32	10/31/22 18:20	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/31/22 11:31	10/31/22 15:53	7440-36-0	
Arsenic	**0.00048J**	mg/L	0.0025	0.00044	1	10/31/22 11:31	10/31/22 15:53	7440-38-2	
Barium	**0.086**	mg/L	0.0025	0.00098	1	10/31/22 11:31	10/31/22 15:53	7440-39-3	
Beryllium	**0.00051**	mg/L	0.00050	0.00010	1	10/31/22 11:31	10/31/22 15:53	7440-41-7	
Cadmium	**0.00027J**	mg/L	0.00050	0.00013	1	10/31/22 11:31	10/31/22 15:53	7440-43-9	
Chromium	**0.0021J**	mg/L	0.0025	0.00050	1	10/31/22 11:31	10/31/22 15:53	7440-47-3	
Cobalt	**0.011**	mg/L	0.0025	0.00081	1	10/31/22 11:31	10/31/22 15:53	7440-48-4	
Copper	**0.0021J**	mg/L	0.0025	0.00064	1	10/31/22 11:31	10/31/22 15:53	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/31/22 11:31	10/31/22 15:53	7439-92-1	
Nickel	**0.0053**	mg/L	0.0025	0.00065	1	10/31/22 11:31	10/31/22 15:53	7440-02-0	
Selenium	**0.0032**	mg/L	0.0025	0.00084	1	10/31/22 11:31	10/31/22 15:53	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/31/22 11:31	10/31/22 15:53	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/31/22 11:31	10/31/22 15:53	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/31/22 11:31	10/31/22 15:53	7440-62-2	
Zinc	**0.031**	mg/L	0.0050	0.0040	1	10/31/22 11:31	10/31/22 15:53	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/21/22 09:44	11/21/22 17:01	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	10/31/22 07:30	10/31/22 16:59	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	10/31/22 07:30	10/31/22 16:59	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	119	%.	60-140		1	10/31/22 07:30	10/31/22 16:59	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		11/03/22 15:46		2c

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ANALYTICAL RESULTS

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Sample: TW-21 **Lab ID: 30533104002** Collected: 10/26/22 09:55 Received: 10/26/22 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**116**	mg/L	10.0	10.0	1		10/28/22 15:12		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	10/31/22 09:11	10/31/22 13:44		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**10.7J**	mg/L	25.0	4.7	1	10/28/22 09:46	10/28/22 15:03		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**33.4**	mg/L	3.0	0.67	1		10/31/22 14:43	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**2.4**	mg/L	0.10	0.053	1		10/28/22 17:36	14797-55-8	
Nitrogen, NO2 plus NO3	**2.4**	mg/L	0.10	0.053	1		10/28/22 17:36		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**29.5**	mg/L	10.0	4.7	1		11/07/22 18:27	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/27/22 11:24	14797-65-0	

Sample: TW-22 **Lab ID: 30533104003** Collected: 10/26/22 11:20 Received: 10/26/22 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**2.3**	mg/L	0.50	0.083	1	10/28/22 11:56	10/31/22 18:37	7440-70-2	
Iron	**0.092**	mg/L	0.050	0.035	1	10/28/22 11:56	10/31/22 18:37	7439-89-6	
Magnesium	**2.0**	mg/L	0.50	0.047	1	10/28/22 11:56	10/31/22 18:37	7439-95-4	
Manganese	**0.034**	mg/L	0.0050	0.0027	1	10/28/22 11:56	10/31/22 18:37	7439-96-5	
Potassium	**1.2**	mg/L	0.50	0.26	1	10/28/22 11:56	10/31/22 18:37	7440-09-7	
Sodium	**12.4**	mg/L	0.50	0.34	1	10/28/22 11:56	10/31/22 18:37	7440-23-5	
Total Hardness	**14.0**	mg/L	3.3	0.27	1	10/28/22 11:56	10/31/22 18:37		N3

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ANALYTICAL RESULTS

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Sample: TW-22 **Lab ID: 30533104003** Collected: 10/26/22 11:20 Received: 10/26/22 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**2.4**	mg/L	0.50	0.083	1	10/28/22 13:32	10/31/22 18:22	7440-70-2	
Iron, Dissolved	**0.039J**	mg/L	0.050	0.035	1	10/28/22 13:32	10/31/22 18:22	7439-89-6	
Magnesium, Dissolved	**2.0**	mg/L	0.50	0.047	1	10/28/22 13:32	10/31/22 18:22	7439-95-4	
Manganese, Dissolved	**0.035**	mg/L	0.0050	0.0027	1	10/28/22 13:32	10/31/22 18:22	7439-96-5	
Potassium, Dissolved	**1.1**	mg/L	0.50	0.26	1	10/28/22 13:32	10/31/22 18:22	7440-09-7	
Sodium, Dissolved	**11.9**	mg/L	0.50	0.34	1	10/28/22 13:32	10/31/22 18:22	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/31/22 11:31	10/31/22 15:56	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	10/31/22 11:31	10/31/22 15:56	7440-38-2	
Barium	**0.047**	mg/L	0.0025	0.00098	1	10/31/22 11:31	10/31/22 15:56	7440-39-3	
Beryllium	**0.00029J**	mg/L	0.00050	0.00010	1	10/31/22 11:31	10/31/22 15:56	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	10/31/22 11:31	10/31/22 15:56	7440-43-9	
Chromium	**0.011**	mg/L	0.0025	0.00050	1	10/31/22 11:31	10/31/22 15:56	7440-47-3	
Cobalt	**0.012**	mg/L	0.0025	0.00081	1	10/31/22 11:31	10/31/22 15:56	7440-48-4	
Copper	**0.013**	mg/L	0.0025	0.00064	1	10/31/22 11:31	10/31/22 15:56	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/31/22 11:31	10/31/22 15:56	7439-92-1	
Nickel	**0.023**	mg/L	0.0025	0.00065	1	10/31/22 11:31	10/31/22 15:56	7440-02-0	
Selenium	**0.00096J**	mg/L	0.0025	0.00084	1	10/31/22 11:31	10/31/22 15:56	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/31/22 11:31	10/31/22 15:56	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/31/22 11:31	10/31/22 15:56	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/31/22 11:31	10/31/22 15:56	7440-62-2	
Zinc	**0.016**	mg/L	0.0050	0.0040	1	10/31/22 11:31	10/31/22 15:56	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/21/22 09:44	11/21/22 17:04	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	10/31/22 07:30	10/31/22 17:11	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/31/22 07:30	10/31/22 17:11	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	119	%.	60-140		1	10/31/22 07:30	10/31/22 17:11	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		11/03/22 15:48		4c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**41.0**	mg/L	10.0	10.0	1		10/31/22 19:32		

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ANALYTICAL RESULTS

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Sample: TW-22 **Lab ID: 30533104003** Collected: 10/26/22 11:20 Received: 10/26/22 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	10/31/22 09:11	10/31/22 13:46		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**10.7J**	mg/L	25.0	4.7	1	10/28/22 09:46	10/28/22 15:03		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**22.6**	mg/L	3.0	0.67	1		10/31/22 14:46	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.1**	mg/L	0.10	0.053	1		10/28/22 17:40	14797-55-8	
Nitrogen, NO2 plus NO3	**1.1**	mg/L	0.10	0.053	1		10/28/22 17:40		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/07/22 18:29	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/27/22 11:24	14797-65-0	

Sample: TW-22A **Lab ID: 30533104004** Collected: 10/26/22 11:55 Received: 10/26/22 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**6.5**	mg/L	0.50	0.083	1	10/28/22 11:56	10/31/22 18:43	7440-70-2	
Iron	**0.062**	mg/L	0.050	0.035	1	10/28/22 11:56	10/31/22 18:43	7439-89-6	
Magnesium	**6.0**	mg/L	0.50	0.047	1	10/28/22 11:56	10/31/22 18:43	7439-95-4	
Manganese	**0.16**	mg/L	0.0050	0.0027	1	10/28/22 11:56	10/31/22 18:43	7439-96-5	
Potassium	**2.1**	mg/L	0.50	0.26	1	10/28/22 11:56	10/31/22 18:43	7440-09-7	
Sodium	**48.1**	mg/L	0.50	0.34	1	10/28/22 11:56	10/31/22 18:43	7440-23-5	
Total Hardness	**40.9**	mg/L	3.3	0.27	1	10/28/22 11:56	10/31/22 18:43		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**6.7**	mg/L	0.50	0.083	1	11/04/22 12:44	11/08/22 16:47	7440-70-2	
Iron, Dissolved	**0.040J**	mg/L	0.050	0.035	1	11/04/22 12:44	11/08/22 16:47	7439-89-6	
Magnesium, Dissolved	**6.3**	mg/L	0.50	0.047	1	11/04/22 12:44	11/08/22 16:47	7439-95-4	

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ANALYTICAL RESULTS

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Sample: TW-22A **Lab ID: 30533104004** Collected: 10/26/22 11:55 Received: 10/26/22 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Manganese, Dissolved	**0.15**	mg/L	0.0050	0.0027	1	11/04/22 12:44	11/08/22 16:47	7439-96-5	
Potassium, Dissolved	**2.1**	mg/L	0.50	0.26	1	11/04/22 12:44	11/08/22 16:47	7440-09-7	
Sodium, Dissolved	**47.4**	mg/L	0.50	0.34	1	11/04/22 12:44	11/08/22 16:47	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/31/22 11:31	10/31/22 15:59	7440-36-0	
Arsenic	**0.00046J**	mg/L	0.0025	0.00044	1	10/31/22 11:31	10/31/22 15:59	7440-38-2	
Barium	**0.18**	mg/L	0.0025	0.00098	1	10/31/22 11:31	10/31/22 15:59	7440-39-3	
Beryllium	**0.00035J**	mg/L	0.00050	0.00010	1	10/31/22 11:31	10/31/22 15:59	7440-41-7	
Cadmium	**0.00029J**	mg/L	0.00050	0.00013	1	10/31/22 11:31	10/31/22 15:59	7440-43-9	
Chromium	**0.0020J**	mg/L	0.0025	0.00050	1	10/31/22 11:31	10/31/22 15:59	7440-47-3	
Cobalt	**0.020**	mg/L	0.0025	0.00081	1	10/31/22 11:31	10/31/22 15:59	7440-48-4	
Copper	**0.0072**	mg/L	0.0025	0.00064	1	10/31/22 11:31	10/31/22 15:59	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/31/22 11:31	10/31/22 15:59	7439-92-1	
Nickel	**0.012**	mg/L	0.0025	0.00065	1	10/31/22 11:31	10/31/22 15:59	7440-02-0	
Selenium	**0.0039**	mg/L	0.0025	0.00084	1	10/31/22 11:31	10/31/22 15:59	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/31/22 11:31	10/31/22 15:59	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/31/22 11:31	10/31/22 15:59	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/31/22 11:31	10/31/22 15:59	7440-62-2	
Zinc	**0.038**	mg/L	0.0050	0.0040	1	10/31/22 11:31	10/31/22 15:59	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/21/22 09:44	11/21/22 17:06	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	10/31/22 07:30	10/31/22 17:24	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	10/31/22 07:30	10/31/22 17:24	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	110	%.	60-140		1	10/31/22 07:30	10/31/22 17:24	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		11/03/22 15:50		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**163**	mg/L	10.0	10.0	1		10/31/22 19:32		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	10/31/22 09:11	10/31/22 13:48		

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ANALYTICAL RESULTS

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Sample: TW-22A **Lab ID: 30533104004** Collected: 10/26/22 11:55 Received: 10/26/22 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**17.5J**	mg/L	25.0	4.7	1	10/28/22 09:46	10/28/22 15:03		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**87.5**	mg/L	3.0	0.67	1		10/31/22 14:47	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**2.1**	mg/L	0.10	0.053	1		10/28/22 17:42	14797-55-8	
Nitrogen, NO2 plus NO3	**2.1**	mg/L	0.10	0.053	1		10/28/22 17:42		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**17.6**	mg/L	10.0	4.7	1		11/07/22 18:29	14808-79-8	MH
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/27/22 11:25	14797-65-0	

Sample: TW-22B **Lab ID: 30533104005** Collected: 10/26/22 10:40 Received: 10/26/22 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**19.4**	mg/L	0.50	0.083	1	10/28/22 11:56	10/31/22 18:45	7440-70-2	
Iron	**2.7**	mg/L	0.050	0.035	1	10/28/22 11:56	10/31/22 18:45	7439-89-6	
Magnesium	**4.1**	mg/L	0.50	0.047	1	10/28/22 11:56	10/31/22 18:45	7439-95-4	
Manganese	**0.021**	mg/L	0.0050	0.0027	1	10/28/22 11:56	10/31/22 18:45	7439-96-5	
Potassium	**4.2**	mg/L	0.50	0.26	1	10/28/22 11:56	10/31/22 18:45	7440-09-7	
Sodium	**6.8**	mg/L	0.50	0.34	1	10/28/22 11:56	10/31/22 18:45	7440-23-5	
Total Hardness	**65.5**	mg/L	3.3	0.27	1	10/28/22 11:56	10/31/22 18:45		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**20.7**	mg/L	0.50	0.083	1	11/04/22 12:44	11/08/22 16:49	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	11/04/22 12:44	11/08/22 16:49	7439-89-6	
Magnesium, Dissolved	**4.5**	mg/L	0.50	0.047	1	11/04/22 12:44	11/08/22 16:49	7439-95-4	
Manganese, Dissolved	**0.031**	mg/L	0.0050	0.0027	1	11/04/22 12:44	11/08/22 16:49	7439-96-5	
Potassium, Dissolved	**4.5**	mg/L	0.50	0.26	1	11/04/22 12:44	11/08/22 16:49	7440-09-7	
Sodium, Dissolved	**7.6**	mg/L	0.50	0.34	1	11/04/22 12:44	11/08/22 16:49	7440-23-5	

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ANALYTICAL RESULTS

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Sample: TW-22B **Lab ID: 30533104005** Collected: 10/26/22 10:40 Received: 10/26/22 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/31/22 11:31	10/31/22 16:02	7440-36-0	
Arsenic	**0.0019J**	mg/L	0.0025	0.00044	1	10/31/22 11:31	10/31/22 16:02	7440-38-2	
Barium	**0.046**	mg/L	0.0025	0.00098	1	10/31/22 11:31	10/31/22 16:02	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	10/31/22 11:31	10/31/22 16:02	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	10/31/22 11:31	10/31/22 16:02	7440-43-9	
Chromium	**0.021**	mg/L	0.0025	0.00050	1	10/31/22 11:31	10/31/22 16:02	7440-47-3	
Cobalt	**0.020**	mg/L	0.0025	0.00081	1	10/31/22 11:31	10/31/22 16:02	7440-48-4	
Copper	**0.010**	mg/L	0.0025	0.00064	1	10/31/22 11:31	10/31/22 16:02	7440-50-8	
Lead	**0.00040J**	mg/L	0.00050	0.00025	1	10/31/22 11:31	10/31/22 16:02	7439-92-1	
Nickel	**0.0095**	mg/L	0.0025	0.00065	1	10/31/22 11:31	10/31/22 16:02	7440-02-0	
Selenium	**0.0015J**	mg/L	0.0025	0.00084	1	10/31/22 11:31	10/31/22 16:02	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/31/22 11:31	10/31/22 16:02	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/31/22 11:31	10/31/22 16:02	7440-28-0	
Vanadium	**0.0040**	mg/L	0.0025	0.0012	1	10/31/22 11:31	10/31/22 16:02	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0040	1	10/31/22 11:31	10/31/22 16:02	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/21/22 09:44	11/21/22 17:08	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	10/31/22 07:30	10/31/22 17:37	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/31/22 07:30	10/31/22 17:37	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	112	%.	60-140		1	10/31/22 07:30	10/31/22 17:37	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**38.0**	mg/L	10.0	1.0	1		11/03/22 15:52		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**92.0**	mg/L	10.0	10.0	1		10/31/22 19:32		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	10/31/22 09:11	10/31/22 13:54		ML
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**17.5J**	mg/L	25.0	4.7	1	10/28/22 09:46	10/28/22 15:04		MH

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ANALYTICAL RESULTS

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Sample: TW-22B **Lab ID: 30533104005** Collected: 10/26/22 10:40 Received: 10/26/22 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**10.9**	mg/L	3.0	0.67	1		10/31/22 14:48	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**3.3**	mg/L	0.50	0.27	5		10/28/22 17:43	14797-55-8	
Nitrogen, NO2 plus NO3	**3.3**	mg/L	0.50	0.27	5		10/28/22 17:43		D3
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**19.5**	mg/L	10.0	4.7	1		11/07/22 18:36	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.0088J**	mg/L	0.010	0.0055	1		10/27/22 11:25	14797-65-0	

Sample: TW-24 **Lab ID: 30533104006** Collected: 10/26/22 13:00 Received: 10/26/22 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**4.6**	mg/L	0.50	0.083	1	10/28/22 11:56	10/31/22 18:47	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	10/28/22 11:56	10/31/22 18:47	7439-89-6	
Magnesium	**4.2**	mg/L	0.50	0.047	1	10/28/22 11:56	10/31/22 18:47	7439-95-4	
Manganese	**0.058**	mg/L	0.0050	0.0027	1	10/28/22 11:56	10/31/22 18:47	7439-96-5	
Potassium	**1.5**	mg/L	0.50	0.26	1	10/28/22 11:56	10/31/22 18:47	7440-09-7	
Sodium	**13.3**	mg/L	0.50	0.34	1	10/28/22 11:56	10/31/22 18:47	7440-23-5	
Total Hardness	**28.7**	mg/L	3.3	0.27	1	10/28/22 11:56	10/31/22 18:47		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**4.5**	mg/L	0.50	0.083	1	11/04/22 12:44	11/08/22 16:51	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	11/04/22 12:44	11/08/22 16:51	7439-89-6	
Magnesium, Dissolved	**4.3**	mg/L	0.50	0.047	1	11/04/22 12:44	11/08/22 16:51	7439-95-4	
Manganese, Dissolved	**0.056**	mg/L	0.0050	0.0027	1	11/04/22 12:44	11/08/22 16:51	7439-96-5	
Potassium, Dissolved	**1.6**	mg/L	0.50	0.26	1	11/04/22 12:44	11/08/22 16:51	7440-09-7	
Sodium, Dissolved	**13.3**	mg/L	0.50	0.34	1	11/04/22 12:44	11/08/22 16:51	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00054**	mg/L	0.00050	0.00030	1	10/31/22 11:31	11/01/22 11:00	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	10/31/22 11:31	11/01/22 11:00	7440-38-2	
Barium	**0.088**	mg/L	0.0025	0.00098	1	10/31/22 11:31	11/01/22 11:00	7440-39-3	

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ANALYTICAL RESULTS

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Sample: TW-24 **Lab ID: 30533104006** Collected: 10/26/22 13:00 Received: 10/26/22 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Beryllium	**0.00016J**	mg/L	0.00050	0.00010	1	10/31/22 11:31	11/01/22 11:00	7440-41-7	
Cadmium	**0.00020J**	mg/L	0.00050	0.00013	1	10/31/22 11:31	11/01/22 11:00	7440-43-9	
Chromium	**0.00066J**	mg/L	0.0025	0.00050	1	10/31/22 11:31	11/01/22 11:00	7440-47-3	
Cobalt	**0.011**	mg/L	0.0025	0.00081	1	10/31/22 11:31	11/01/22 11:00	7440-48-4	
Copper	**0.0052**	mg/L	0.0025	0.00064	1	10/31/22 11:31	11/01/22 11:00	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/31/22 11:31	11/01/22 11:00	7439-92-1	
Nickel	**0.011**	mg/L	0.0025	0.00065	1	10/31/22 11:31	11/01/22 11:00	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/31/22 11:31	11/01/22 11:00	7782-49-2	
Silver	**0.0030**	mg/L	0.0025	0.00053	1	10/31/22 11:31	11/01/22 11:00	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/31/22 11:31	11/01/22 11:00	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/31/22 11:31	11/01/22 11:00	7440-62-2	
Zinc	**0.013**	mg/L	0.0050	0.0040	1	10/31/22 11:31	11/01/22 11:00	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.0016**	mg/L	0.00020	0.00020	1	11/21/22 09:44	11/21/22 17:11	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	10/31/22 07:30	10/31/22 18:15	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	10/31/22 07:30	10/31/22 18:15	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	117	%.	60-140		1	10/31/22 07:30	10/31/22 18:15	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		11/03/22 15:55		4c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**71.0**	mg/L	10.0	10.0	1		10/31/22 19:32		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	10/31/22 09:11	10/31/22 14:00		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**8.4J**	mg/L	25.0	4.7	1	10/28/22 09:46	10/28/22 15:04		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**26.4**	mg/L	3.0	0.67	1		10/31/22 14:49	16887-00-6	

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ANALYTICAL RESULTS

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Sample: TW-24 **Lab ID: 30533104006** Collected: 10/26/22 13:00 Received: 10/26/22 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.0**	mg/L	0.10	0.053	1		10/28/22 17:45	14797-55-8	
Nitrogen, NO2 plus NO3	**1.0**	mg/L	0.10	0.053	1		10/28/22 17:45		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.4**	mg/L	10.0	4.7	1		11/07/22 18:36	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/27/22 11:26	14797-65-0	

Sample: TW-24A **Lab ID: 30533104007** Collected: 10/26/22 13:35 Received: 10/26/22 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**21.1**	mg/L	0.50	0.083	1	10/28/22 11:56	10/31/22 18:49	7440-70-2	
Iron	**0.056**	mg/L	0.050	0.035	1	10/28/22 11:56	10/31/22 18:49	7439-89-6	
Magnesium	**3.3**	mg/L	0.50	0.047	1	10/28/22 11:56	10/31/22 18:49	7439-95-4	
Manganese	**0.086**	mg/L	0.0050	0.0027	1	10/28/22 11:56	10/31/22 18:49	7439-96-5	
Potassium	**3.1**	mg/L	0.50	0.26	1	10/28/22 11:56	10/31/22 18:49	7440-09-7	
Sodium	**3.7**	mg/L	0.50	0.34	1	10/28/22 11:56	10/31/22 18:49	7440-23-5	
Total Hardness	**66.4**	mg/L	3.3	0.27	1	10/28/22 11:56	10/31/22 18:49		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**23.3**	mg/L	0.50	0.083	1	11/04/22 12:44	11/08/22 16:53	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	11/04/22 12:44	11/08/22 16:53	7439-89-6	
Magnesium, Dissolved	**3.7**	mg/L	0.50	0.047	1	11/04/22 12:44	11/08/22 16:53	7439-95-4	
Manganese, Dissolved	**0.089**	mg/L	0.0050	0.0027	1	11/04/22 12:44	11/08/22 16:53	7439-96-5	
Potassium, Dissolved	**3.3**	mg/L	0.50	0.26	1	11/04/22 12:44	11/08/22 16:53	7440-09-7	
Sodium, Dissolved	**3.9**	mg/L	0.50	0.34	1	11/04/22 12:44	11/08/22 16:53	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00033J**	mg/L	0.00050	0.00030	1	10/31/22 11:31	11/01/22 11:03	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	10/31/22 11:31	11/01/22 11:03	7440-38-2	
Barium	**0.047**	mg/L	0.0025	0.00098	1	10/31/22 11:31	11/01/22 11:03	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	10/31/22 11:31	11/01/22 11:03	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	10/31/22 11:31	11/01/22 11:03	7440-43-9	
Chromium	**0.0028**	mg/L	0.0025	0.00050	1	10/31/22 11:31	11/01/22 11:03	7440-47-3	
Cobalt	**0.0025J**	mg/L	0.0025	0.00081	1	10/31/22 11:31	11/01/22 11:03	7440-48-4	

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ANALYTICAL RESULTS

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Sample: TW-24A **Lab ID: 30533104007** Collected: 10/26/22 13:35 Received: 10/26/22 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Copper	**0.0030**	mg/L	0.0025	0.00064	1	10/31/22 11:31	11/01/22 11:03	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/31/22 11:31	11/01/22 11:03	7439-92-1	
Nickel	**0.0026**	mg/L	0.0025	0.00065	1	10/31/22 11:31	11/01/22 11:03	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/31/22 11:31	11/01/22 11:03	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/31/22 11:31	11/01/22 11:03	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/31/22 11:31	11/01/22 11:03	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/31/22 11:31	11/01/22 11:03	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0040	1	10/31/22 11:31	11/01/22 11:03	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/21/22 09:44	11/21/22 17:13	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	10/31/22 07:30	10/31/22 18:28	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	10/31/22 07:30	10/31/22 18:28	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	119	%.	60-140		1	10/31/22 07:30	10/31/22 18:28	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**52.0**	mg/L	10.0	1.0	1		11/03/22 15:58		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**91.0**	mg/L	10.0	10.0	1		10/31/22 19:32		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	10/31/22 09:11	10/31/22 14:02		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**19.8J**	mg/L	25.0	4.7	1	11/01/22 14:00	11/01/22 15:36		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**6.2**	mg/L	3.0	0.67	1		10/31/22 14:49	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.2**	mg/L	0.10	0.053	1		10/28/22 17:46	14797-55-8	
Nitrogen, NO2 plus NO3	**1.2**	mg/L	0.10	0.053	1		10/28/22 17:46		

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ANALYTICAL RESULTS

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Sample: TW-24A **Lab ID: 30533104007** Collected: 10/26/22 13:35 Received: 10/26/22 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**17.1**	mg/L	10.0	4.7	1		11/07/22 18:38	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/27/22 11:26	14797-65-0	

Sample: DUP-1 **Lab ID: 30533104008** Collected: 10/26/22 00:00 Received: 10/26/22 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**4.4**	mg/L	0.50	0.083	1	10/28/22 11:56	10/31/22 18:51	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	10/28/22 11:56	10/31/22 18:51	7439-89-6	
Magnesium	**4.0**	mg/L	0.50	0.047	1	10/28/22 11:56	10/31/22 18:51	7439-95-4	
Manganese	**0.054**	mg/L	0.0050	0.0027	1	10/28/22 11:56	10/31/22 18:51	7439-96-5	
Potassium	**1.4**	mg/L	0.50	0.26	1	10/28/22 11:56	10/31/22 18:51	7440-09-7	
Sodium	**12.6**	mg/L	0.50	0.34	1	10/28/22 11:56	10/31/22 18:51	7440-23-5	
Total Hardness	**27.2**	mg/L	3.3	0.27	1	10/28/22 11:56	10/31/22 18:51		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**4.8**	mg/L	0.50	0.083	1	11/04/22 12:44	11/08/22 16:55	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	11/04/22 12:44	11/08/22 16:55	7439-89-6	
Magnesium, Dissolved	**4.4**	mg/L	0.50	0.047	1	11/04/22 12:44	11/08/22 16:55	7439-95-4	
Manganese, Dissolved	**0.060**	mg/L	0.0050	0.0027	1	11/04/22 12:44	11/08/22 16:55	7439-96-5	
Potassium, Dissolved	**1.6**	mg/L	0.50	0.26	1	11/04/22 12:44	11/08/22 16:55	7440-09-7	
Sodium, Dissolved	**13.6**	mg/L	0.50	0.34	1	11/04/22 12:44	11/08/22 16:55	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/31/22 11:31	11/01/22 11:06	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	10/31/22 11:31	11/01/22 11:06	7440-38-2	
Barium	**0.086**	mg/L	0.0025	0.00098	1	10/31/22 11:31	11/01/22 11:06	7440-39-3	
Beryllium	**0.00014J**	mg/L	0.00050	0.00010	1	10/31/22 11:31	11/01/22 11:06	7440-41-7	
Cadmium	**0.00022J**	mg/L	0.00050	0.00013	1	10/31/22 11:31	11/01/22 11:06	7440-43-9	
Chromium	**0.00064J**	mg/L	0.0025	0.00050	1	10/31/22 11:31	11/01/22 11:06	7440-47-3	
Cobalt	**0.012**	mg/L	0.0025	0.00081	1	10/31/22 11:31	11/01/22 11:06	7440-48-4	
Copper	**0.0060**	mg/L	0.0025	0.00064	1	10/31/22 11:31	11/01/22 11:06	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/31/22 11:31	11/01/22 11:06	7439-92-1	
Nickel	**0.012**	mg/L	0.0025	0.00065	1	10/31/22 11:31	11/01/22 11:06	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/31/22 11:31	11/01/22 11:06	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/31/22 11:31	11/01/22 11:06	7440-22-4	

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ANALYTICAL RESULTS

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Sample: DUP-1 **Lab ID: 30533104008** Collected: 10/26/22 00:00 Received: 10/26/22 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/31/22 11:31	11/01/22 11:06	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/31/22 11:31	11/01/22 11:06	7440-62-2	
Zinc	**0.013**	mg/L	0.0050	0.0040	1	10/31/22 11:31	11/01/22 11:06	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00099**	mg/L	0.00020	0.00020	1	11/21/22 09:44	11/21/22 17:15	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	10/31/22 07:30	10/31/22 18:40	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	10/31/22 07:30	10/31/22 18:40	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	112	%.	60-140		1	10/31/22 07:30	10/31/22 18:40	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		11/03/22 16:00		4c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**62.0**	mg/L	10.0	10.0	1		10/31/22 20:25		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	10/31/22 09:11	10/31/22 14:03		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**10.7J**	mg/L	25.0	4.7	1	11/01/22 14:00	11/01/22 15:37		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**26.4**	mg/L	3.0	0.67	1		10/31/22 14:50	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.1**	mg/L	0.10	0.053	1		10/28/22 17:47	14797-55-8	
Nitrogen, NO2 plus NO3	**1.1**	mg/L	0.10	0.053	1		10/28/22 17:47		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.4**	mg/L	10.0	4.7	1		11/07/22 18:39	14808-79-8	

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ANALYTICAL RESULTS

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Sample: DUP-1 **Lab ID: 30533104008** Collected: 10/26/22 00:00 Received: 10/26/22 21:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/27/22 11:27	14797-65-0	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

QC Batch: 543166
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30533104001, 30533104002, 30533104003, 30533104004, 30533104005, 30533104006, 30533104007, 30533104008

METHOD BLANK: 2636355
Matrix: Water
Associated Lab Samples: 30533104001, 30533104002, 30533104003, 30533104004, 30533104005, 30533104006, 30533104007, 30533104008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	10/31/22 18:01	
Iron	mg/L	0.050 U	0.050	0.035	10/31/22 18:01	
Magnesium	mg/L	0.50 U	0.50	0.047	10/31/22 18:01	
Manganese	mg/L	0.0050 U	0.0050	0.0027	10/31/22 18:01	
Potassium	mg/L	0.50 U	0.50	0.26	10/31/22 18:01	
Sodium	mg/L	0.50 U	0.50	0.34	10/31/22 18:01	

LABORATORY CONTROL SAMPLE: 2636356

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	40.3	101	80-120	
Iron	mg/L	2	2.2	110	80-120	
Magnesium	mg/L	20	19.9	100	80-120	
Manganese	mg/L	2	2.1	104	80-120	
Potassium	mg/L	20	20.8	104	80-120	
Sodium	mg/L	20	20.7	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2636465 2636466

Parameter	Units	30528874003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	108000 ug/L	40	40	145	148	90	98	80-120	2	20	
Iron	mg/L	1.2	2	2	3.3	3.4	108	110	80-120	1	20	
Magnesium	mg/L	17900 ug/L	20	20	37.4	38.0	97	100	80-120	2	20	
Manganese	mg/L	0.15	2	2	2.2	2.2	102	104	80-120	2	20	
Potassium	mg/L	1640 ug/L	20	20	23.1	23.6	107	110	80-120	2	20	
Sodium	mg/L	9810 ug/L	20	20	30.6	31.4	104	108	80-120	2	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

QC Batch: 543232
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30533104001, 30533104002, 30533104003

METHOD BLANK: 2636664 Matrix: Water
Associated Lab Samples: 30533104001, 30533104002, 30533104003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	10/31/22 17:23	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	10/31/22 17:23	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	10/31/22 17:23	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	10/31/22 17:23	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	10/31/22 17:23	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	10/31/22 17:23	

LABORATORY CONTROL SAMPLE: 2636665

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	41.1	103	80-120	
Iron, Dissolved	mg/L	2	2.1	104	80-120	
Magnesium, Dissolved	mg/L	20	20.5	103	80-120	
Manganese, Dissolved	mg/L	2	2.1	103	80-120	
Potassium, Dissolved	mg/L	20	19.7	99	80-120	
Sodium, Dissolved	mg/L	20	19.9	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2636693 2636694

Parameter	Units	30532667001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	12.0	40	40	54.9	55.2	107	108	80-120	1	20	
Iron, Dissolved	mg/L	0.20	2	2	2.3	2.4	107	109	80-120	2	20	
Magnesium, Dissolved	mg/L	9.6	20	20	31.5	31.8	109	111	80-120	1	20	
Manganese, Dissolved	mg/L	1.3	2	2	3.5	3.5	110	110	80-120	0	20	
Potassium, Dissolved	mg/L	5.9	20	20	27.1	27.2	106	107	80-120	0	20	
Sodium, Dissolved	mg/L	18.4	20	20	40.5	40.6	111	111	80-120	0	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

QC Batch: 544824
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30533104004, 30533104005, 30533104006, 30533104007, 30533104008

METHOD BLANK: 2644748 Matrix: Water
Associated Lab Samples: 30533104004, 30533104005, 30533104006, 30533104007, 30533104008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	11/08/22 16:23	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	11/08/22 16:23	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	11/08/22 16:23	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	11/08/22 16:23	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	11/08/22 16:23	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	11/08/22 16:23	

LABORATORY CONTROL SAMPLE: 2644749

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	41.1	103	80-120	
Iron, Dissolved	mg/L	2	2.1	103	80-120	
Magnesium, Dissolved	mg/L	20	20.5	102	80-120	
Manganese, Dissolved	mg/L	2	2.0	102	80-120	
Potassium, Dissolved	mg/L	20	20.7	104	80-120	
Sodium, Dissolved	mg/L	20	20.8	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2644765 2644766

Parameter	Units	30531863001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	54.2	40	40	96.5	93.8	106	99	80-120	3	20	
Iron, Dissolved	mg/L	ND	2	2	2.1	2.1	106	106	80-120	0	20	
Magnesium, Dissolved	mg/L	13.9	20	20	34.8	34.6	104	103	80-120	1	20	
Manganese, Dissolved	mg/L	0.016	2	2	2.1	2.1	102	102	80-120	0	20	
Potassium, Dissolved	mg/L	2.3	20	20	23.8	23.8	108	108	80-120	0	20	
Sodium, Dissolved	mg/L	7.6	20	20	29.0	29.0	107	107	80-120	0	20	

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(724)850-5600

QUALITY CONTROL DATA

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

QC Batch: 543483
QC Batch Method: EPA 3020A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30533104001, 30533104002, 30533104003, 30533104004, 30533104005, 30533104006, 30533104007, 30533104008

METHOD BLANK: 2637872
Matrix: Water
Associated Lab Samples: 30533104001, 30533104002, 30533104003, 30533104004, 30533104005, 30533104006, 30533104007, 30533104008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00030	10/31/22 15:09	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	10/31/22 15:09	
Barium	mg/L	0.0025 U	0.0025	0.00098	10/31/22 15:09	
Beryllium	mg/L	0.00050 U	0.00050	0.00010	10/31/22 15:09	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	10/31/22 15:09	
Chromium	mg/L	0.0025 U	0.0025	0.00050	10/31/22 15:09	
Cobalt	mg/L	0.0025 U	0.0025	0.00081	10/31/22 15:09	
Copper	mg/L	0.0025 U	0.0025	0.00064	10/31/22 15:09	
Lead	mg/L	0.00050 U	0.00050	0.00025	10/31/22 15:09	
Nickel	mg/L	0.0025 U	0.0025	0.00065	10/31/22 15:09	
Selenium	mg/L	0.0025 U	0.0025	0.00084	10/31/22 15:09	
Silver	mg/L	0.0025 U	0.0025	0.00053	10/31/22 15:09	
Thallium	mg/L	0.00050 U	0.00050	0.000081	10/31/22 15:09	
Vanadium	mg/L	0.0025 U	0.0025	0.0012	10/31/22 15:09	
Zinc	mg/L	0.0050 U	0.0050	0.0040	10/31/22 15:09	

LABORATORY CONTROL SAMPLE: 2637873

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.021	105	80-120	
Arsenic	mg/L	0.1	0.10	100	80-120	
Barium	mg/L	0.1	0.10	100	80-120	
Beryllium	mg/L	0.02	0.018	91	80-120	
Cadmium	mg/L	0.02	0.019	97	80-120	
Chromium	mg/L	0.1	0.10	103	80-120	
Cobalt	mg/L	0.1	0.10	103	80-120	
Copper	mg/L	0.1	0.10	104	80-120	
Lead	mg/L	0.02	0.020	101	80-120	
Nickel	mg/L	0.1	0.10	103	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	
Silver	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.02	0.020	100	80-120	
Vanadium	mg/L	0.1	0.10	103	80-120	
Zinc	mg/L	0.2	0.20	100	80-120	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2637943 2637944

Parameter	Units	30532415001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.02	0.02	0.022	0.022	110	109	75-125	1	20	
Arsenic	mg/L	5.0 ug/L	0.1	0.1	0.11	0.11	105	105	75-125	0	20	
Barium	mg/L	92.1 ug/L	0.1	0.1	0.20	0.20	110	105	75-125	2	20	
Beryllium	mg/L	ND	0.02	0.02	0.019	0.019	96	95	75-125	1	20	
Cadmium	mg/L	ND	0.02	0.02	0.020	0.020	101	101	75-125	0	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.11	109	109	75-125	0	20	
Cobalt	mg/L	ND	0.1	0.1	0.11	0.11	109	108	75-125	1	20	
Copper	mg/L	40.1 ug/L	0.1	0.1	0.15	0.15	108	107	75-125	1	20	
Lead	mg/L	ND	0.02	0.02	0.021	0.021	107	107	75-125	0	20	
Nickel	mg/L	ND	0.1	0.1	0.11	0.11	107	107	75-125	0	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.098	102	98	75-125	4	20	
Silver	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	0	20	
Thallium	mg/L	ND	0.02	0.02	0.021	0.021	107	106	75-125	1	20	
Vanadium	mg/L	5.5 ug/L	0.1	0.1	0.12	0.11	110	109	75-125	1	20	
Zinc	mg/L	28.9 ug/L	0.2	0.2	0.24	0.24	104	104	75-125	0	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

QC Batch: 548459
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30533104001, 30533104002, 30533104003, 30533104004, 30533104005, 30533104006, 30533104007, 30533104008

METHOD BLANK: 2664673
Matrix: Water
Associated Lab Samples: 30533104001, 30533104002, 30533104003, 30533104004, 30533104005, 30533104006, 30533104007, 30533104008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	11/21/22 16:53	

LABORATORY CONTROL SAMPLE: 2664674

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.0093	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2664675 2664676

Parameter	Units	30537449009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	<0.20 ug/L	0.01	0.01	0.011	0.010	106	104	80-120	2	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

QC Batch: 543420
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30533104001, 30533104002, 30533104003, 30533104004, 30533104005, 30533104006, 30533104007, 30533104008

METHOD BLANK: 2637692
Matrix: Water
Associated Lab Samples: 30533104001, 30533104002, 30533104003, 30533104004, 30533104005, 30533104006, 30533104007, 30533104008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	10/31/22 13:35	CH
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	10/31/22 13:35	CH
1,1,1,2-Tetrachloroethane (S)	%.	99	60-140		10/31/22 13:35	CH

LABORATORY CONTROL SAMPLE: 2637693

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.23	90	85-115	CH
1,2-Dibromoethane (EDB)	ug/L	0.25	0.23	91	85-115	CH
1,1,1,2-Tetrachloroethane (S)	%.			102	60-140	CH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2637694 2637695

Parameter	Units	30533169001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	ND	0.4	0.4	0.34	0.35	85	86	60-140	2	25	CH
1,2-Dibromoethane (EDB)	ug/L	ND	0.4	0.4	0.32	0.33	80	82	60-140	4	25	CH
1,1,1,2-Tetrachloroethane (S)	%.						86	90	60-140			CH

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QUALITY CONTROL DATA

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

QC Batch: 544505
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30533104001, 30533104002, 30533104003, 30533104004, 30533104005, 30533104006, 30533104007, 30533104008

METHOD BLANK: 2642809
Matrix: Water
Associated Lab Samples: 30533104001, 30533104002, 30533104003, 30533104004, 30533104005, 30533104006, 30533104007, 30533104008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	11/03/22 14:04	3c

LABORATORY CONTROL SAMPLE: 2642810

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	21.0	105	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2642811 2642812

Parameter	Units	30533219006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	ND	50	50	54.0	54.0	96	96	85-115	0	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

QC Batch: 543092
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30533104001, 30533104002

METHOD BLANK: 2636106 Matrix: Water
Associated Lab Samples: 30533104001, 30533104002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	10/28/22 15:12	

LABORATORY CONTROL SAMPLE: 2636107

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	976	98	85-115	

SAMPLE DUPLICATE: 2636108

Parameter	Units	30533104001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	123	126	2	5	

SAMPLE DUPLICATE: 2636109

Parameter	Units	30533104002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	116	119	3	5	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

QC Batch: 543418
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30533104003, 30533104004, 30533104005, 30533104006, 30533104007

METHOD BLANK: 2637686
Matrix: Water
Associated Lab Samples: 30533104003, 30533104004, 30533104005, 30533104006, 30533104007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	10/31/22 19:32	

LABORATORY CONTROL SAMPLE: 2637687

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	960	96	85-115	

SAMPLE DUPLICATE: 2637688

Parameter	Units	30532810001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	929	918	1	5	

SAMPLE DUPLICATE: 2637689

Parameter	Units	30533104006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	71.0	69.0	3	5	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

QC Batch: 543421
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30533104008

METHOD BLANK: 2637696 Matrix: Water
Associated Lab Samples: 30533104008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	10/31/22 20:25	

LABORATORY CONTROL SAMPLE: 2637697

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	954	95	85-115	

SAMPLE DUPLICATE: 2637698

Parameter	Units	30533104008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	62.0	65.0	5	5	

SAMPLE DUPLICATE: 2637699

Parameter	Units	30533686004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	568	577	2	5	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

QC Batch: 543437 | Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 | Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30533104001, 30533104002, 30533104003, 30533104004, 30533104005, 30533104006, 30533104007, 30533104008

METHOD BLANK: 2637746 | Matrix: Water
Associated Lab Samples: 30533104001, 30533104002, 30533104003, 30533104004, 30533104005, 30533104006, 30533104007, 30533104008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	10/31/22 13:23	

LABORATORY CONTROL SAMPLE: 2637747

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	3.9	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2637748 2637749

Parameter	Units	30533249002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	ND	4	4	3.9	3.9	97	96	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2637750 2637751

Parameter	Units	30533104005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	3.4	3.4	85	84	90-110	1	20	ML

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QUALITY CONTROL DATA

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

QC Batch: 543106
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30533104001, 30533104002, 30533104003, 30533104004, 30533104005, 30533104006

METHOD BLANK: 2636155
Matrix: Water
Associated Lab Samples: 30533104001, 30533104002, 30533104003, 30533104004, 30533104005, 30533104006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	10/28/22 14:56	

LABORATORY CONTROL SAMPLE: 2636156

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	321	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2636157 2636158

Parameter	Units	30532667003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	10.7J	150	150	175	173	110	108	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2636159 2636160

Parameter	Units	30533104005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	17.5J	150	150	186	184	113	111	90-110	1	10	MH

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QUALITY CONTROL DATA

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

QC Batch: 543877
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30533104007, 30533104008

METHOD BLANK: 2639273 Matrix: Water
Associated Lab Samples: 30533104007, 30533104008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/01/22 15:32	

METHOD BLANK: 2639279 Matrix: Water
Associated Lab Samples: 30533104007, 30533104008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/01/22 15:33	6c

LABORATORY CONTROL SAMPLE: 2639274

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	323	108	90-110	

LABORATORY CONTROL SAMPLE: 2639280

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	321	107	90-110	6c

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2639275 2639276

Parameter	Units	30527807003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	186	150	150	346	337	106	100	90-110	3	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2639277 2639278

Parameter	Units	30533368001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	120	150	150	284	282	110	108	90-110	1	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

QC Batch: 543574 | Analysis Method: SM 4500-Cl-E-2011
QC Batch Method: SM 4500-Cl-E-2011 | Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30533104001, 30533104002, 30533104003, 30533104004, 30533104005, 30533104006, 30533104007, 30533104008

METHOD BLANK: 2638140 | Matrix: Water
Associated Lab Samples: 30533104001, 30533104002, 30533104003, 30533104004, 30533104005, 30533104006, 30533104007, 30533104008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	10/31/22 14:32	

LABORATORY CONTROL SAMPLE: 2638141

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.4	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2638142 2638143

Parameter	Units	30532667003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	7.6	20	20	30.3	30.3	113	113	85-115	0	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

QC Batch: 543218
QC Batch Method: SM 4500NO3-F-2011
Analysis Method: SM 4500NO3-F-2011
Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30533104001, 30533104002, 30533104003, 30533104004, 30533104005, 30533104006, 30533104007, 30533104008

METHOD BLANK: 2636594
Matrix: Water
Associated Lab Samples: 30533104001, 30533104002, 30533104003, 30533104004, 30533104005, 30533104006, 30533104007, 30533104008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	10/28/22 17:18	

LABORATORY CONTROL SAMPLE: 2636595

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	3.7	93	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2636596 2636597

Parameter	Units	30533353001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	ND	25	25	26.5	26.4	106	105	85-115	0	20	D3

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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(724)850-5600

QUALITY CONTROL DATA

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

QC Batch: 544206 | Analysis Method: EPA 9038
QC Batch Method: EPA 9038 | Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30533104001, 30533104002, 30533104003, 30533104004, 30533104005, 30533104006, 30533104007, 30533104008

METHOD BLANK: 2641125 | Matrix: Water
Associated Lab Samples: 30533104001, 30533104002, 30533104003, 30533104004, 30533104005, 30533104006, 30533104007, 30533104008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	11/07/22 18:10	

LABORATORY CONTROL SAMPLE: 2641126

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	31.7	106	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2641129 2641130

Parameter	Units	30533104004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	17.6	20	20	38.8	41.7	106	120	85-115	7	20	MH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2646969 2646970

Parameter	Units	30532438001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	26700	20000	20000	42800	47500	81	104	85-115	10	20	ML

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QUALITY CONTROL DATA

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

QC Batch: 542868
QC Batch Method: SM 4500NO2-B-2011
Analysis Method: SM 4500NO2-B-2011
Analysis Description: SM4500-NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30533104001, 30533104002, 30533104003, 30533104004, 30533104005, 30533104006, 30533104007, 30533104008

METHOD BLANK: 2634926
Matrix: Water
Associated Lab Samples: 30533104001, 30533104002, 30533104003, 30533104004, 30533104005, 30533104006, 30533104007, 30533104008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	10/27/22 11:21	

LABORATORY CONTROL SAMPLE: 2634927

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.099	99	90-110	

MATRIX SPIKE SAMPLE: 2634929

Parameter	Units	30533104001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.010 U	0.1	0.10	102	85-115	

SAMPLE DUPLICATE: 2634928

Parameter	Units	30533104001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010 U		20	

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QUALIFIERS

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30533104001
[1] Sample pH for 8011 is 6

Sample: 30533104002
[1] Sample pH for 8011 is 5

Sample: 30533104003
[1] Sample pH for 8011 is 6

Sample: 30533104004
[1] Sample pH for 8011 is 5

Sample: 30533104005
[1] Sample pH for 8011 is 6

Sample: 30533104006
[1] Sample pH for 8011 is 5

Sample: 30533104007
[1] Sample pH for 8011 is 6

Sample: 30533104008
[1] Sample pH for 8011 is 5

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QUALIFIERS

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

ANALYTE QUALIFIERS

1c	Alkalinity TV: -1.00 mg/L
2c	Alkalinity TV: -2.00 mg/L
3c	Alkalinity TV: 0.00 mg/L
4c	Alkalinity TV: 2.00 mg/L
5c	Alkalinity TV: 4.00 mg/L
6c	pH was adjusted to <2 at bench
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30533104001	**TW-20R**	EPA 3010A	543166	EPA 6010D	543691
30533104002	**TW-21**	EPA 3010A	543166	EPA 6010D	543691
30533104003	**TW-22**	EPA 3010A	543166	EPA 6010D	543691
30533104004	**TW-22A**	EPA 3010A	543166	EPA 6010D	543691
30533104005	**TW-22B**	EPA 3010A	543166	EPA 6010D	543691
30533104006	**TW-24**	EPA 3010A	543166	EPA 6010D	543691
30533104007	**TW-24A**	EPA 3010A	543166	EPA 6010D	543691
30533104008	**DUP-1**	EPA 3010A	543166	EPA 6010D	543691
30533104001	**TW-20R**	EPA 3010A	543232	EPA 6010D	543615
30533104002	**TW-21**	EPA 3010A	543232	EPA 6010D	543615
30533104003	**TW-22**	EPA 3010A	543232	EPA 6010D	543615
30533104004	**TW-22A**	EPA 3010A	544824	EPA 6010D	545624
30533104005	**TW-22B**	EPA 3010A	544824	EPA 6010D	545624
30533104006	**TW-24**	EPA 3010A	544824	EPA 6010D	545624
30533104007	**TW-24A**	EPA 3010A	544824	EPA 6010D	545624
30533104008	**DUP-1**	EPA 3010A	544824	EPA 6010D	545624
30533104001	**TW-20R**	EPA 3020A	543483	EPA 6020B	543650
30533104002	**TW-21**	EPA 3020A	543483	EPA 6020B	543650
30533104003	**TW-22**	EPA 3020A	543483	EPA 6020B	543650
30533104004	**TW-22A**	EPA 3020A	543483	EPA 6020B	543650
30533104005	**TW-22B**	EPA 3020A	543483	EPA 6020B	543650
30533104006	**TW-24**	EPA 3020A	543483	EPA 6020B	543650
30533104007	**TW-24A**	EPA 3020A	543483	EPA 6020B	543650
30533104008	**DUP-1**	EPA 3020A	543483	EPA 6020B	543650
30533104001	**TW-20R**	EPA 7470A	548459	EPA 7470A	548611
30533104002	**TW-21**	EPA 7470A	548459	EPA 7470A	548611
30533104003	**TW-22**	EPA 7470A	548459	EPA 7470A	548611
30533104004	**TW-22A**	EPA 7470A	548459	EPA 7470A	548611
30533104005	**TW-22B**	EPA 7470A	548459	EPA 7470A	548611
30533104006	**TW-24**	EPA 7470A	548459	EPA 7470A	548611
30533104007	**TW-24A**	EPA 7470A	548459	EPA 7470A	548611
30533104008	**DUP-1**	EPA 7470A	548459	EPA 7470A	548611
30533104001	**TW-20R**	EPA 8011	543420	EPA 8011	543553
30533104002	**TW-21**	EPA 8011	543420	EPA 8011	543553
30533104003	**TW-22**	EPA 8011	543420	EPA 8011	543553
30533104004	**TW-22A**	EPA 8011	543420	EPA 8011	543553
30533104005	**TW-22B**	EPA 8011	543420	EPA 8011	543553
30533104006	**TW-24**	EPA 8011	543420	EPA 8011	543553
30533104007	**TW-24A**	EPA 8011	543420	EPA 8011	543553
30533104008	**DUP-1**	EPA 8011	543420	EPA 8011	543553
30533104001	**TW-20R**	SM 2320B-2011	544505		
30533104002	**TW-21**	SM 2320B-2011	544505		
30533104003	**TW-22**	SM 2320B-2011	544505		
30533104004	**TW-22A**	SM 2320B-2011	544505		
30533104005	**TW-22B**	SM 2320B-2011	544505		
30533104006	**TW-24**	SM 2320B-2011	544505		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30533104007	**TW-24A**	SM 2320B-2011	544505		
30533104008	**DUP-1**	SM 2320B-2011	544505		
30533104001	**TW-20R**	SM 2540C-2011	543092		
30533104002	**TW-21**	SM 2540C-2011	543092		
30533104003	**TW-22**	SM 2540C-2011	543418		
30533104004	**TW-22A**	SM 2540C-2011	543418		
30533104005	**TW-22B**	SM 2540C-2011	543418		
30533104006	**TW-24**	SM 2540C-2011	543418		
30533104007	**TW-24A**	SM 2540C-2011	543418		
30533104008	**DUP-1**	SM 2540C-2011	543421		
30533104001	**TW-20R**	EPA 350.1	543437	EPA 350.1	543485
30533104002	**TW-21**	EPA 350.1	543437	EPA 350.1	543485
30533104003	**TW-22**	EPA 350.1	543437	EPA 350.1	543485
30533104004	**TW-22A**	EPA 350.1	543437	EPA 350.1	543485
30533104005	**TW-22B**	EPA 350.1	543437	EPA 350.1	543485
30533104006	**TW-24**	EPA 350.1	543437	EPA 350.1	543485
30533104007	**TW-24A**	EPA 350.1	543437	EPA 350.1	543485
30533104008	**DUP-1**	EPA 350.1	543437	EPA 350.1	543485
30533104001	**TW-20R**	EPA 410.4	543106	EPA 410.4	543173
30533104002	**TW-21**	EPA 410.4	543106	EPA 410.4	543173
30533104003	**TW-22**	EPA 410.4	543106	EPA 410.4	543173
30533104004	**TW-22A**	EPA 410.4	543106	EPA 410.4	543173
30533104005	**TW-22B**	EPA 410.4	543106	EPA 410.4	543173
30533104006	**TW-24**	EPA 410.4	543106	EPA 410.4	543173
30533104007	**TW-24A**	EPA 410.4	543877	EPA 410.4	543927
30533104008	**DUP-1**	EPA 410.4	543877	EPA 410.4	543927
30533104001	**TW-20R**	SM 4500-Cl-E-2011	543574		
30533104002	**TW-21**	SM 4500-Cl-E-2011	543574		
30533104003	**TW-22**	SM 4500-Cl-E-2011	543574		
30533104004	**TW-22A**	SM 4500-Cl-E-2011	543574		
30533104005	**TW-22B**	SM 4500-Cl-E-2011	543574		
30533104006	**TW-24**	SM 4500-Cl-E-2011	543574		
30533104007	**TW-24A**	SM 4500-Cl-E-2011	543574		
30533104008	**DUP-1**	SM 4500-Cl-E-2011	543574		
30533104001	**TW-20R**	SM 4500NO3-F-2011	543218		
30533104002	**TW-21**	SM 4500NO3-F-2011	543218		
30533104003	**TW-22**	SM 4500NO3-F-2011	543218		
30533104004	**TW-22A**	SM 4500NO3-F-2011	543218		
30533104005	**TW-22B**	SM 4500NO3-F-2011	543218		
30533104006	**TW-24**	SM 4500NO3-F-2011	543218		
30533104007	**TW-24A**	SM 4500NO3-F-2011	543218		
30533104008	**DUP-1**	SM 4500NO3-F-2011	543218		
30533104001	**TW-20R**	EPA 9038	544206		
30533104002	**TW-21**	EPA 9038	544206		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-Fall 2022-Revised Report
Pace Project No.: 30533104

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30533104003	**TW-22**	EPA 9038	544206		
30533104004	**TW-22A**	EPA 9038	544206		
30533104005	**TW-22B**	EPA 9038	544206		
30533104006	**TW-24**	EPA 9038	544206		
30533104007	**TW-24A**	EPA 9038	544206		
30533104008	**DUP-1**	EPA 9038	544206		
30533104001	**TW-20R**	SM 4500NO2-B-2011	542868		
30533104002	**TW-21**	SM 4500NO2-B-2011	542868		
30533104003	**TW-22**	SM 4500NO2-B-2011	542868		
30533104004	**TW-22A**	SM 4500NO2-B-2011	542868		
30533104005	**TW-22B**	SM 4500NO2-B-2011	542868		
30533104006	**TW-24**	SM 4500NO2-B-2011	542868		
30533104007	**TW-24A**	SM 4500NO2-B-2011	542868		
30533104008	**DUP-1**	SM 4500NO2-B-2011	542868		

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WO#: 30533104

30533104

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - FALL 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals (1)	Total + Diss Metals (2)	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO4, COD		Method 8011 - DBCP + EDB			
1	TW-20R	8	10-26-22	910	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓			
2	TW-21	↓	↓	955	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
3	TW-22	↓	↓	1120	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
4	TW-22A	↓	↓	1155	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
5	TW-22B	↓	↓	1040	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
6	TW-24	↓	↓	1300	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
7	TW-24A	↓	↓	1335	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
8	Dup-1	↓	↓	—	↓		QA	↓	↓	↓	↓	↓	↓	↓		↓			
9																			
10																			
11																			
12																			

	Signature	Date	Time
Relinquished by	SA Brown	10.24.22	1420
Received by	TB/PACE	10.24.22	1420
Relinquished by	TB/PACE	10-26-22	1723
Received by	S Breagle	10/26/22	18:00
Relinquished by	S Breagle	10/26/22	21:30
Received by	[illegible]	10-26-22	2130

Comments

(1) 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn
(2) 7470 - Hg / (2) 6010 - Ca, Fe, Mg, Mn, K, Na
PACE-WV-METALS / PACE-G-BULK-WET CHEM + 8011
LEVEL 2 REPORT
SEE ATTACHED LIST OF METHODS / LABS / PARAMETERS

Cooler Temp on Arrival _____ Deg. C

Rev. Aug. 2018

WO#: 30533104

PM: DAP Due Date: 11/10/22

CLIENT: ENV MONITOR

Millersville Landfill, Anne Arundel Cou		
	Pace, Beaver, WV	
	Method 6020 - ICPMS	
Parameter	RL	MDL
	(mg/l)	
TOTAL METALS - mg/l		
Antimony	0.0005	
Arsenic	0.0025	0.0002473
Barium	0.0025	
Beryllium	0.0005	
Cadmium	0.0005	
Chromium	0.0025	
Cobalt	0.0025	
Copper	0.0025	
Lead	0.0005	
Nickel	0.0025	
Selenium	0.0025	
Silver	0.0025	
Thallium	0.0005	
Vanadium	0.0025	
Zinc	0.005	
	Pace, Beaver, WV	
TOTAL MERCURY - mg/l	Method 7470A	
Mercury	0.0005	0.00025
	Pace, Beaver, WV	
TOTAL AND DISSOLVED METALS - mg/l	Method 6010 - ICP	
Calcium	0.5	0.028
Iron	0.05	0.0076
Magnesium	0.5	0.047
Manganese	0.005	0.00043
Potassium	0.5	0.19
Sodium	0.5	0.148
	Pace - Greensburg, PA	
VOLATILE ORGANICS - ug/l	Method 8011 - ug/l	
DBCP	0.041	
EDB	0.041	
GENERAL CHEMISTRY - mg/l	Pace - Greensburg, PA	
Alkalinity - SM 2320B	10	1
Ammonia - EPA 350.1	0.1	0.0445
COD - EPA 410.4	25	4.6532
Chloride - EPA 300.0	3	0.06683
Hardness - 2340B		
Nitrate - EPA 300.0	0.1	0.0238
Sulfate - EPA 300.0	10	4.6702
Total dissolved solids - SM2540C	10	10

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-GBUR-0088 v02_Sample Condition Upon Receipt-Pittsburgh Effective Date: 10/03/2022

WO#: 30533104
PM: DAP **Due Date: 11/10/22**
CLIENT: ENV MONITOR

Client Name: EMA

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking Number:

Examined By
Labeled By
Temped By

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

Thermometer Used: 16 **Type of Ice:** Wet Blue None

Cooler Temperature: Observed Temp 2.1 °C Correction Factor: .2 °C Final Temp: 2.3 °C
Temp should be above freezing to 6°C

Comments:	Yes	No	NA	pH paper Lot# 1009221	D.P.D. Residual Chlorine Lot #
Chain of Custody Present	✓			1.	
Chain of Custody Filled Out:	✓			2.	
-Were client corrections present on COC		✓			
Chain of Custody Relinquished	✓			3.	
Sampler Name & Signature on COC:		✓		4.	
Sample Labels match COC: -Includes date/time/ID Matrix: WA	✓			5.	
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):	✓			7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used:	✓			10.	
-Pace Containers Used	✓				
Containers Intact:	✓			11.	
Orthophosphate field filtered:			✓	12.	
Hex Cr Aqueous samples field filtered:			✓	13.	
Organic Samples checked for dechlorination			✓	14:	
Filtered volume received for dissolved tests:			✓	15:	
All containers checked for preservation: exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix	✓			16.	
All containers meet method preservation requirements:	✓			Initial when completed / Lot# of added Preservative	Date/Time of Preservation
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:	None	✓		18.	
Trip Blank Custody Seals Present		✓			
Rad Samples Screened <0.5 mrem/hr.	✓			Initial when completed	Date: 10-27-22 / Survey Meter SN 1563

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Qualtrax ID: 55680

WO# : 30533104

30533104

LIMS30 Internal Shipping Manifest

COOLER 21

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	21	Cooler temp (rcvd) °C	-.1
Packaged on Ice (Y/N)	Yes	Correction Factor	.0
Shipping Method	Courier	Cooler temp (corr) °C	-.1
Tracking #	N/A	IR GUN ID	23
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[illegible]	GBUR	10-27-22	1900
Received	[illegible]	BEAV	10-28-22	432
Relinquished				
Received				
Relinquished				
Received				

10

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	10/27/2022	30533213001 WGKU3/3	WGKU	30533213001	30533213
MF	10/27/2022	30533220001 WGFU1/2	WGFU	30533220001	30533220
MF	10/27/2022	30533218001 WGFU1/2	WGFU	30533218001	30533218
MF	10/27/2022	30533256003 WGFU2/2	WGFU	30533256003	30533256
MF	10/27/2022	30533256001 WGFU2/2	WGFU	30533256001	30533256
MF	10/27/2022	30533256002 WGFU2/2	WGFU	30533256002	30533256
MF	10/27/2022	30533303004 WGFU1/1	WGFU	30533303004	30533303
MF	10/27/2022	30533303001 WGFU1/1	WGFU	30533303001	30533303
MF	10/27/2022	30533303005 WGFU1/1	WGFU	30533303005	30533303
MF	10/27/2022	30533303003 WGFU1/1	WGFU	30533303003	30533303
MF	10/27/2022	30533303002 WGFU1/1	WGFU	30533303002	30533303
MF	10/27/2022	30532278001 BP3N1/1	BP3N	30532278001	30532278
MF	10/27/2022	30532280001 BP2N1/1	BP2N	30532280001	30532280
MF	10/27/2022	30533299001 BP3N1/1	BP3N	30533299001	30533299
MF	10/27/2022	30533299002 BP3N1/1	BP3N	30533299002	30533299
MF	10/27/2022	30533296003 BP3N1/1	BP3N	30533296003	30533296
MF	10/27/2022	30533296001 BP3N1/1	BP3N	30533296001	30533296
MF	10/27/2022	30533104004 BP3N1/3	BP3N	30533104004	30533104
MF	10/27/2022	30533104005 BP3N3/3	BP3N	30533104005	30533104
MF	10/27/2022	30533104003 BP3N3/3	BP3N	30533104003	30533104
MF	10/27/2022	30533104002 BP3N2/3	BP3N	30533104002	30533104
MF	10/27/2022	30533104003 BP3N2/3	BP3N	30533104003	30533104
MF	10/27/2022	30533104005 BP3N2/3	BP3N	30533104005	30533104
MF	10/27/2022	30533104007 BP3N3/3	BP3N	30533104007	30533104
MF	10/27/2022	30533104007 BP3N2/3	BP3N	30533104007	30533104
MF	10/27/2022	30533104005 BP3N1/3	BP3N	30533104005	30533104
MF	10/27/2022	30533104006 BP3N3/3	BP3N	30533104006	30533104
MF	10/27/2022	30533104001 BP3N3/3	BP3N	30533104001	30533104
MF	10/27/2022	30533104001 BP3N2/3	BP3N	30533104001	30533104
MF	10/27/2022	30533104006 BP3N2/3	BP3N	30533104006	30533104
MF	10/27/2022	30533104006 BP3N1/3	BP3N	30533104006	30533104
MF	10/27/2022	30533104004 BP3N3/3	BP3N	30533104004	30533104
MF	10/27/2022	30533104001 BP3N1/3	BP3N	30533104001	30533104

LIMS30 Internal Shipping Manifest

COOLER 21	Shipping Laboratory Location Code		Receiving Laboratory Location Code	
	GBUR		BEAV	
	Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
	Shipping information		Received information	
	Cooler ID	21	Cooler temp (rcvd) °C	-.1
	Packaged on Ice (Y/N)	Yes	Correction Factor	.0
	Shipping Method	Courier	Cooler temp (corr) °C	-.1
	Tracking #	N/A	IR GUN ID	23
	PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[illegible]	GBUR	10-27-22	1900
Received	[illegible]	BEAV	10-28-22	437
Relinquished				
Received				
Relinquished				
Received				

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	10/27/2022	30533104002 BP3N1/3	BP3N	30533104002	30533104
MF	10/27/2022	30533104007 BP3N1/3	BP3N	30533104007	30533104
MF	10/27/2022	30533104004 BP3N2/3	BP3N	30533104004	30533104
MF	10/27/2022	30533104008 BP3N3/3	BP3N	30533104008	30533104
MF	10/27/2022	30533104008 BP3N2/3	BP3N	30533104008	30533104
MF	10/27/2022	30533104008 BP3N1/3	BP3N	30533104008	30533104
MF	10/27/2022	30533104003 BP3N1/3	BP3N	30533104003	30533104
MF	10/27/2022	30533104002 BP3N3/3	BP3N	30533104002	30533104

10

WO#: 30533104

PM: DAP **Due Date: 11/10/22**

CLIENT: ENV MONITOR

LIMS73 Lab Sample Condition Upon Receipt (West Vir

Pace Analytical

Client Name: _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☑ Other: 3rd Party

Tracking #: _____

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 23 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** -.1 °C Correction Factor: .0 °C Final Temp: -.1 °C

Comments:

pH paper Lot#	Date and Initials of person examining contents:
2016722	CDW 10.28.22

	Yes	No	N/A	
Chain of Custody Present:				1.
Chain of Custody Filled Out:				2.
Chain of Custody Relinquished:				3.
Sampler Name & Signature on COC:				4.
Sample Labels match COC:				5.
-Includes date/time/ID Matrix: WT				Lab Labeled by: NA Checked by: NA
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered:			✓	13.
-pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓	
Filtered volume received for Dissolved tests:	✓			14.
All containers have been checked for preservation:	✓			15.
exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix				
All containers meet method preservation requirements:	✓			Initial when completed: CDW Date: 10.28.22
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present:			✓	17.
Trip Blank Custody Seals Present:			✓	
				Initial when completed: CDW Date: 10-28-22

Manifest

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

***PM review** is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

November 10, 2022

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-Fall-2022
Pace Project No.: 30533468

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on October 27, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

David A. Pichette
david.pichette@pacelabs.com
(724)850-5617
Project Manager

Enclosures

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: MLF-Fall-2022
Pace Project No.: 30533468

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver

225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: MLF-Fall-2022
Pace Project No.: 30533468

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30533468001	**TW-23R**	Water	10/27/22 10:30	10/27/22 22:30
30533468002	**TW-25**	Water	10/26/22 15:10	10/27/22 22:30
30533468003	**TW-25A**	Water	10/26/22 15:50	10/27/22 22:30
30533468004	**DUP-2**	Water	10/26/22 00:00	10/27/22 22:30

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SAMPLE ANALYTE COUNT

Project: MLF-Fall-2022
Pace Project No.: 30533468

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30533468001	**TW-23R**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	JLM	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30533468002	**TW-25**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	JLM	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30533468003	**TW-25A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	JLM	2	PASI-PA

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF-Fall-2022
Pace Project No.: 30533468

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30533468004	**DUP-2**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	JLM	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-Fall-2022
Pace Project No.: 30533468

Date: November 10, 2022

TW-23R (Lab ID: 30533468001)

- Sample pH for 8011 is 6

TW-25 (Lab ID: 30533468002)

- Sample pH for 8011 is 6

TW-25A (Lab ID: 30533468003)

- Sample pH for 8011 is 5

DUP-2 (Lab ID: 30533468004)

- Sample pH for 8011 is 6

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PROJECT NARRATIVE

Project: MLF-Fall-2022
Pace Project No.: 30533468

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 10, 2022

General Information:
4 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 543647

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30531671004

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2638718)
  - Iron

Additional Comments:

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-Fall-2022
Pace Project No.: 30533468

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 10, 2022

General Information:
4 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-Fall-2022
Pace Project No.: 30533468

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: November 10, 2022

General Information:
4 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-Fall-2022
Pace Project No.: 30533468

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: November 10, 2022

General Information:
4 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-Fall-2022
Pace Project No.: 30533468

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 10, 2022

General Information:
4 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-Fall-2022
Pace Project No.: 30533468

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: November 10, 2022

General Information:
4 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 544506

1c: Alkalinity TV: 0.00 mg/L
- BLANK (Lab ID: 2642814)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-23R (Lab ID: 30533468001)
  - Alkalinity,Total (CaCO3 pH4.5)

2c: Alkalinity TV: 2.00 mg/L
- DUP-2 (Lab ID: 30533468004)
  - Alkalinity,Total (CaCO3 pH4.5)

3c: Alkalinity TV: 3.00 mg/L
- TW-25 (Lab ID: 30533468002)
  - Alkalinity,Total (CaCO3 pH4.5)

4c: Alkalinity TV: 6.00 mg/L
- TW-25A (Lab ID: 30533468003)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-Fall-2022
Pace Project No.: 30533468

Method: **SM 2540C-2011**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: November 10, 2022

General Information:
4 samples were analyzed for SM 2540C-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 544017

5c: Sample volume was reduced so the sample could be within an acceptable range

- DUP (Lab ID: 2640275)
  - Total Dissolved Solids

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PROJECT NARRATIVE

Project: MLF-Fall-2022
Pace Project No.: 30533468

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: November 10, 2022

General Information:
4 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall-2022
Pace Project No.: 30533468

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: November 10, 2022

General Information:
4 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 543878

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30533470003,30533601003

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2639283)
  - Chemical Oxygen Demand

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall-2022
Pace Project No.: 30533468

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: November 10, 2022

General Information:
4 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall-2022
Pace Project No.: 30533468

Method: **SM 4500NO3-F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: November 10, 2022

General Information:
4 samples were analyzed for SM 4500NO3-F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall-2022
Pace Project No.: 30533468

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: November 10, 2022

General Information:
4 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 544206

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30532438001,30533104004

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MSD (Lab ID: 2641130)
  - Sulfate

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2646969)
  - Sulfate

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall-2022
Pace Project No.: 30533468

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: November 10, 2022

General Information:
4 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the EPA method holding time.
- DUP-2 (Lab ID: 30533468004)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-Fall-2022
Pace Project No.: 30533468

Sample: TW-23R **Lab ID: 30533468001** Collected: 10/27/22 10:30 Received: 10/27/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**3.1**	mg/L	0.50	0.083	1	11/01/22 07:10	11/01/22 15:54	7440-70-2	
Iron	**0.092**	mg/L	0.050	0.035	1	11/01/22 07:10	11/01/22 15:54	7439-89-6	
Magnesium	**1.1**	mg/L	0.50	0.047	1	11/01/22 07:10	11/01/22 15:54	7439-95-4	
Manganese	**0.014**	mg/L	0.0050	0.0027	1	11/01/22 07:10	11/01/22 15:54	7439-96-5	
Potassium	**1.1**	mg/L	0.50	0.26	1	11/01/22 07:10	11/01/22 15:54	7440-09-7	
Sodium	**4.8**	mg/L	0.50	0.34	1	11/01/22 07:10	11/01/22 15:54	7440-23-5	
Total Hardness	**12.3**	mg/L	3.3	0.27	1	11/01/22 07:10	11/01/22 15:54		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**3.0**	mg/L	0.50	0.083	1	11/04/22 12:44	11/08/22 17:05	7440-70-2	
Iron, Dissolved	**0.050J**	mg/L	0.050	0.035	1	11/04/22 12:44	11/08/22 17:05	7439-89-6	
Magnesium, Dissolved	**1.1**	mg/L	0.50	0.047	1	11/04/22 12:44	11/08/22 17:05	7439-95-4	
Manganese, Dissolved	**0.012**	mg/L	0.0050	0.0027	1	11/04/22 12:44	11/08/22 17:05	7439-96-5	
Potassium, Dissolved	**1.1**	mg/L	0.50	0.26	1	11/04/22 12:44	11/08/22 17:05	7440-09-7	
Sodium, Dissolved	**4.8**	mg/L	0.50	0.34	1	11/04/22 12:44	11/08/22 17:05	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/31/22 11:31	11/01/22 11:09	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	10/31/22 11:31	11/01/22 11:09	7440-38-2	
Barium	**0.015**	mg/L	0.0025	0.00098	1	10/31/22 11:31	11/01/22 11:09	7440-39-3	
Beryllium	**0.00011J**	mg/L	0.00050	0.00010	1	10/31/22 11:31	11/01/22 11:09	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	10/31/22 11:31	11/01/22 11:09	7440-43-9	
Chromium	**0.012**	mg/L	0.0025	0.00050	1	10/31/22 11:31	11/01/22 11:09	7440-47-3	
Cobalt	**0.0043**	mg/L	0.0025	0.00081	1	10/31/22 11:31	11/01/22 11:09	7440-48-4	
Copper	**0.011**	mg/L	0.0025	0.00064	1	10/31/22 11:31	11/01/22 11:09	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/31/22 11:31	11/01/22 11:09	7439-92-1	
Nickel	**0.022**	mg/L	0.0025	0.00065	1	10/31/22 11:31	11/01/22 11:09	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/31/22 11:31	11/01/22 11:09	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/31/22 11:31	11/01/22 11:09	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/31/22 11:31	11/01/22 11:09	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/31/22 11:31	11/01/22 11:09	7440-62-2	
Zinc	**0.0073**	mg/L	0.0050	0.0040	1	10/31/22 11:31	11/01/22 11:09	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/02/22 11:44	11/02/22 17:52	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/02/22 07:15	11/02/22 15:45	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/02/22 07:15	11/02/22 15:45	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	94	%.	60-140		1	11/02/22 07:15	11/02/22 15:45	630-20-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-Fall-2022
Pace Project No.: 30533468

Sample: TW-23R **Lab ID: 30533468001** Collected: 10/27/22 10:30 Received: 10/27/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		11/03/22 20:14		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**34.0**	mg/L	10.0	10.0	1		11/01/22 16:54		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/04/22 10:24	11/08/22 08:01		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.1J**	mg/L	25.0	4.7	1	11/01/22 14:00	11/01/22 16:17		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**8.0**	mg/L	3.0	0.67	1		10/31/22 14:51	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**1.9**	mg/L	0.10	0.053	1		11/03/22 12:43	14797-55-8	
Nitrogen, NO2 plus NO3	**1.9**	mg/L	0.10	0.053	1		11/03/22 12:43		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/07/22 18:41	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/28/22 11:17	14797-65-0	

Sample: TW-25 **Lab ID: 30533468002** Collected: 10/26/22 15:10 Received: 10/27/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**1.8**	mg/L	0.50	0.083	1	11/01/22 07:10	11/01/22 15:56	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	11/01/22 07:10	11/01/22 15:56	7439-89-6	
Magnesium	**0.97**	mg/L	0.50	0.047	1	11/01/22 07:10	11/01/22 15:56	7439-95-4	
Manganese	**0.018**	mg/L	0.0050	0.0027	1	11/01/22 07:10	11/01/22 15:56	7439-96-5	
Potassium	**0.65**	mg/L	0.50	0.26	1	11/01/22 07:10	11/01/22 15:56	7440-09-7	

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ANALYTICAL RESULTS

Project: MLF-Fall-2022
Pace Project No.: 30533468

Sample: TW-25 **Lab ID: 30533468002** Collected: 10/26/22 15:10 Received: 10/27/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**3.0**	mg/L	0.50	0.34	1	11/01/22 07:10	11/01/22 15:56	7440-23-5	
Total Hardness	**8.4**	mg/L	3.3	0.27	1	11/01/22 07:10	11/01/22 15:56		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**1.7**	mg/L	0.50	0.083	1	11/04/22 12:44	11/08/22 17:07	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	11/04/22 12:44	11/08/22 17:07	7439-89-6	
Magnesium, Dissolved	**1.0**	mg/L	0.50	0.047	1	11/04/22 12:44	11/08/22 17:07	7439-95-4	
Manganese, Dissolved	**0.018**	mg/L	0.0050	0.0027	1	11/04/22 12:44	11/08/22 17:07	7439-96-5	
Potassium, Dissolved	**0.74**	mg/L	0.50	0.26	1	11/04/22 12:44	11/08/22 17:07	7440-09-7	
Sodium, Dissolved	**3.1**	mg/L	0.50	0.34	1	11/04/22 12:44	11/08/22 17:07	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/31/22 11:31	11/01/22 11:12	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	10/31/22 11:31	11/01/22 11:12	7440-38-2	
Barium	**0.022**	mg/L	0.0025	0.00098	1	10/31/22 11:31	11/01/22 11:12	7440-39-3	
Beryllium	**0.00010J**	mg/L	0.00050	0.00010	1	10/31/22 11:31	11/01/22 11:12	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	10/31/22 11:31	11/01/22 11:12	7440-43-9	
Chromium	**0.0015J**	mg/L	0.0025	0.00050	1	10/31/22 11:31	11/01/22 11:12	7440-47-3	
Cobalt	**0.0039**	mg/L	0.0025	0.00081	1	10/31/22 11:31	11/01/22 11:12	7440-48-4	
Copper	**0.0032**	mg/L	0.0025	0.00064	1	10/31/22 11:31	11/01/22 11:12	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/31/22 11:31	11/01/22 11:12	7439-92-1	
Nickel	**0.0034**	mg/L	0.0025	0.00065	1	10/31/22 11:31	11/01/22 11:12	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/31/22 11:31	11/01/22 11:12	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/31/22 11:31	11/01/22 11:12	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/31/22 11:31	11/01/22 11:12	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/31/22 11:31	11/01/22 11:12	7440-62-2	
Zinc	**0.0060**	mg/L	0.0050	0.0040	1	10/31/22 11:31	11/01/22 11:12	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/02/22 11:44	11/02/22 17:59	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/02/22 07:15	11/02/22 16:23	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/02/22 07:15	11/02/22 16:23	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	97	%.	60-140		1	11/02/22 07:15	11/02/22 16:23	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**3.0J**	mg/L	10.0	1.0	1		11/03/22 19:58		3c

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ANALYTICAL RESULTS

Project: MLF-Fall-2022
Pace Project No.: 30533468

Sample: TW-25 **Lab ID: 30533468002** Collected: 10/26/22 15:10 Received: 10/27/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**39.0**	mg/L	10.0	10.0	1		11/01/22 16:54		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/04/22 10:24	11/08/22 08:07		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/01/22 14:00	11/01/22 16:17		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**7.4**	mg/L	3.0	0.67	1		10/31/22 14:52	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.28**	mg/L	0.10	0.053	1		11/03/22 12:45	14797-55-8	
Nitrogen, NO2 plus NO3	**0.28**	mg/L	0.10	0.053	1		11/03/22 12:45		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/07/22 18:41	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/28/22 11:20	14797-65-0	

Sample: TW-25A **Lab ID: 30533468003** Collected: 10/26/22 15:50 Received: 10/27/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**5.5**	mg/L	0.50	0.083	1	11/01/22 07:10	11/01/22 15:58	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	11/01/22 07:10	11/01/22 15:58	7439-89-6	
Magnesium	**2.2**	mg/L	0.50	0.047	1	11/01/22 07:10	11/01/22 15:58	7439-95-4	
Manganese	**0.051**	mg/L	0.0050	0.0027	1	11/01/22 07:10	11/01/22 15:58	7439-96-5	
Potassium	**1.1**	mg/L	0.50	0.26	1	11/01/22 07:10	11/01/22 15:58	7440-09-7	
Sodium	**4.3**	mg/L	0.50	0.34	1	11/01/22 07:10	11/01/22 15:58	7440-23-5	
Total Hardness	**23.0**	mg/L	3.3	0.27	1	11/01/22 07:10	11/01/22 15:58		N3

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ANALYTICAL RESULTS

Project: MLF-Fall-2022
Pace Project No.: 30533468

Sample: TW-25A **Lab ID: 30533468003** Collected: 10/26/22 15:50 Received: 10/27/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**5.2**	mg/L	0.50	0.083	1	11/04/22 12:44	11/08/22 17:09	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	11/04/22 12:44	11/08/22 17:09	7439-89-6	
Magnesium, Dissolved	**2.2**	mg/L	0.50	0.047	1	11/04/22 12:44	11/08/22 17:09	7439-95-4	
Manganese, Dissolved	**0.049**	mg/L	0.0050	0.0027	1	11/04/22 12:44	11/08/22 17:09	7439-96-5	
Potassium, Dissolved	**1.2**	mg/L	0.50	0.26	1	11/04/22 12:44	11/08/22 17:09	7440-09-7	
Sodium, Dissolved	**4.4**	mg/L	0.50	0.34	1	11/04/22 12:44	11/08/22 17:09	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/31/22 11:31	11/01/22 11:15	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	10/31/22 11:31	11/01/22 11:15	7440-38-2	
Barium	**0.075**	mg/L	0.0025	0.00098	1	10/31/22 11:31	11/01/22 11:15	7440-39-3	
Beryllium	**0.00094**	mg/L	0.00050	0.00010	1	10/31/22 11:31	11/01/22 11:15	7440-41-7	
Cadmium	**0.00022J**	mg/L	0.00050	0.00013	1	10/31/22 11:31	11/01/22 11:15	7440-43-9	
Chromium	**0.0011J**	mg/L	0.0025	0.00050	1	10/31/22 11:31	11/01/22 11:15	7440-47-3	
Cobalt	**0.0093**	mg/L	0.0025	0.00081	1	10/31/22 11:31	11/01/22 11:15	7440-48-4	
Copper	**0.061**	mg/L	0.0025	0.00064	1	10/31/22 11:31	11/01/22 11:15	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/31/22 11:31	11/01/22 11:15	7439-92-1	
Nickel	**0.0091**	mg/L	0.0025	0.00065	1	10/31/22 11:31	11/01/22 11:15	7440-02-0	
Selenium	**0.0010J**	mg/L	0.0025	0.00084	1	10/31/22 11:31	11/01/22 11:15	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/31/22 11:31	11/01/22 11:15	7440-22-4	
Thallium	**0.00014J**	mg/L	0.00050	0.000081	1	10/31/22 11:31	11/01/22 11:15	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/31/22 11:31	11/01/22 11:15	7440-62-2	
Zinc	**0.016**	mg/L	0.0050	0.0040	1	10/31/22 11:31	11/01/22 11:15	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/02/22 11:44	11/02/22 18:01	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/02/22 07:15	11/02/22 16:35	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/02/22 07:15	11/02/22 16:35	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	87	%.	60-140		1	11/02/22 07:15	11/02/22 16:35	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**6.0J**	mg/L	10.0	1.0	1		11/03/22 20:09		4c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**50.0**	mg/L	10.0	10.0	1		11/02/22 16:43		

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ANALYTICAL RESULTS

Project: MLF-Fall-2022
Pace Project No.: 30533468

Sample: TW-25A **Lab ID: 30533468003** Collected: 10/26/22 15:50 Received: 10/27/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/04/22 10:24	11/08/22 08:09		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**8.4J**	mg/L	25.0	4.7	1	11/01/22 14:00	11/01/22 16:18		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**11.7**	mg/L	3.0	0.67	1		10/31/22 14:53	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.77**	mg/L	0.10	0.053	1		11/03/22 12:46	14797-55-8	
Nitrogen, NO2 plus NO3	**0.89**	mg/L	0.10	0.053	1		11/03/22 12:46		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/07/22 18:43	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.12**	mg/L	0.010	0.0055	1		10/28/22 11:20	14797-65-0	

Sample: DUP-2 **Lab ID: 30533468004** Collected: 10/26/22 00:00 Received: 10/27/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**1.7**	mg/L	0.50	0.083	1	11/01/22 07:10	11/01/22 16:00	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	11/01/22 07:10	11/01/22 16:00	7439-89-6	
Magnesium	**1.0**	mg/L	0.50	0.047	1	11/01/22 07:10	11/01/22 16:00	7439-95-4	
Manganese	**0.019**	mg/L	0.0050	0.0027	1	11/01/22 07:10	11/01/22 16:00	7439-96-5	
Potassium	**0.65**	mg/L	0.50	0.26	1	11/01/22 07:10	11/01/22 16:00	7440-09-7	
Sodium	**3.0**	mg/L	0.50	0.34	1	11/01/22 07:10	11/01/22 16:00	7440-23-5	
Total Hardness	**8.5**	mg/L	3.3	0.27	1	11/01/22 07:10	11/01/22 16:00		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**1.9**	mg/L	0.50	0.083	1	11/04/22 12:44	11/08/22 17:11	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	11/04/22 12:44	11/08/22 17:11	7439-89-6	
Magnesium, Dissolved	**0.98**	mg/L	0.50	0.047	1	11/04/22 12:44	11/08/22 17:11	7439-95-4	

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ANALYTICAL RESULTS

Project: MLF-Fall-2022
Pace Project No.: 30533468

Sample: DUP-2 **Lab ID: 30533468004** Collected: 10/26/22 00:00 Received: 10/27/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Manganese, Dissolved	**0.018**	mg/L	0.0050	0.0027	1	11/04/22 12:44	11/08/22 17:11	7439-96-5	
Potassium, Dissolved	**0.73**	mg/L	0.50	0.26	1	11/04/22 12:44	11/08/22 17:11	7440-09-7	
Sodium, Dissolved	**3.0**	mg/L	0.50	0.34	1	11/04/22 12:44	11/08/22 17:11	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	10/31/22 11:31	11/01/22 11:17	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	10/31/22 11:31	11/01/22 11:17	7440-38-2	
Barium	**0.023**	mg/L	0.0025	0.00098	1	10/31/22 11:31	11/01/22 11:17	7440-39-3	
Beryllium	**0.00013J**	mg/L	0.00050	0.00010	1	10/31/22 11:31	11/01/22 11:17	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	10/31/22 11:31	11/01/22 11:17	7440-43-9	
Chromium	**0.0014J**	mg/L	0.0025	0.00050	1	10/31/22 11:31	11/01/22 11:17	7440-47-3	
Cobalt	**0.0042**	mg/L	0.0025	0.00081	1	10/31/22 11:31	11/01/22 11:17	7440-48-4	
Copper	**0.0081**	mg/L	0.0025	0.00064	1	10/31/22 11:31	11/01/22 11:17	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	10/31/22 11:31	11/01/22 11:17	7439-92-1	
Nickel	**0.0035**	mg/L	0.0025	0.00065	1	10/31/22 11:31	11/01/22 11:17	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	10/31/22 11:31	11/01/22 11:17	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	10/31/22 11:31	11/01/22 11:17	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	10/31/22 11:31	11/01/22 11:17	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	10/31/22 11:31	11/01/22 11:17	7440-62-2	
Zinc	**0.0067**	mg/L	0.0050	0.0040	1	10/31/22 11:31	11/01/22 11:17	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
	Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/02/22 11:44	11/02/22 18:04	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	11/02/22 07:15	11/02/22 16:48	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	11/02/22 07:15	11/02/22 16:48	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	95	%.	60-140		1	11/02/22 07:15	11/02/22 16:48	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011								
	Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		11/03/22 20:12		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011								
	Pace Analytical Services - Greensburg								
Total Dissolved Solids	**22.0**	mg/L	10.0	10.0	1		11/02/22 16:43		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1								
	Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/04/22 10:24	11/08/22 08:11		

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ANALYTICAL RESULTS

Project: MLF-Fall-2022
Pace Project No.: 30533468

Sample: DUP-2 **Lab ID: 30533468004** Collected: 10/26/22 00:00 Received: 10/27/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/01/22 14:00	11/01/22 16:18		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**7.4**	mg/L	3.0	0.67	1		10/31/22 14:54	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.27**	mg/L	0.10	0.053	1		11/03/22 12:47	14797-55-8	
Nitrogen, NO2 plus NO3	**0.27**	mg/L	0.10	0.053	1		11/03/22 12:47		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/07/22 18:43	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		10/28/22 11:20	14797-65-0	H1

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QUALITY CONTROL DATA

Project: MLF-Fall-2022
Pace Project No.: 30533468

QC Batch: 543647
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30533468001, 30533468002, 30533468003, 30533468004

METHOD BLANK: 2638337 Matrix: Water
Associated Lab Samples: 30533468001, 30533468002, 30533468003, 30533468004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	11/01/22 15:03	
Iron	mg/L	0.050 U	0.050	0.035	11/01/22 15:03	
Magnesium	mg/L	0.50 U	0.50	0.047	11/01/22 15:03	
Manganese	mg/L	0.0050 U	0.0050	0.0027	11/01/22 15:03	
Potassium	mg/L	0.50 U	0.50	0.26	11/01/22 15:03	
Sodium	mg/L	0.50 U	0.50	0.34	11/01/22 15:03	

LABORATORY CONTROL SAMPLE: 2638338

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	42.9	107	80-120	
Iron	mg/L	2	2.3	113	80-120	
Magnesium	mg/L	20	21.4	107	80-120	
Manganese	mg/L	2	2.2	108	80-120	
Potassium	mg/L	20	20.4	102	80-120	
Sodium	mg/L	20	20.4	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2638718 2638719

Parameter	Units	30531671004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	55000 ug/L	40	40	102	95.4	119	101	80-120	7	20	
Iron	mg/L	945 ug/L	2	2	3.4	3.2	121	111	80-120	6	20	M1
Magnesium	mg/L	21300 ug/L	20	20	45.4	42.2	120	105	80-120	7	20	
Manganese	mg/L	53.7 ug/L	2	2	2.3	2.2	112	106	80-120	6	20	
Potassium	mg/L	6280 ug/L	20	20	30.2	28.2	119	110	80-120	7	20	
Sodium	mg/L	161000 ug/L	20	20	190	175	148	72	80-120	8	20	P6

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: MLF-Fall-2022
Pace Project No.: 30533468

QC Batch: 544824
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30533468001, 30533468002, 30533468003, 30533468004

METHOD BLANK: 2644748 Matrix: Water
Associated Lab Samples: 30533468001, 30533468002, 30533468003, 30533468004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	11/08/22 16:23	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	11/08/22 16:23	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	11/08/22 16:23	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	11/08/22 16:23	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	11/08/22 16:23	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	11/08/22 16:23	

LABORATORY CONTROL SAMPLE: 2644749

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	41.1	103	80-120	
Iron, Dissolved	mg/L	2	2.1	103	80-120	
Magnesium, Dissolved	mg/L	20	20.5	102	80-120	
Manganese, Dissolved	mg/L	2	2.0	102	80-120	
Potassium, Dissolved	mg/L	20	20.7	104	80-120	
Sodium, Dissolved	mg/L	20	20.8	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2644765 2644766

Parameter	Units	30531863001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	54.2	40	40	96.5	93.8	106	99	80-120	3	20	
Iron, Dissolved	mg/L	ND	2	2	2.1	2.1	106	106	80-120	0	20	
Magnesium, Dissolved	mg/L	13.9	20	20	34.8	34.6	104	103	80-120	1	20	
Manganese, Dissolved	mg/L	0.016	2	2	2.1	2.1	102	102	80-120	0	20	
Potassium, Dissolved	mg/L	2.3	20	20	23.8	23.8	108	108	80-120	0	20	
Sodium, Dissolved	mg/L	7.6	20	20	29.0	29.0	107	107	80-120	0	20	

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QUALITY CONTROL DATA

Project: MLF-Fall-2022
Pace Project No.: 30533468

QC Batch: 543483
QC Batch Method: EPA 3020A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30533468001, 30533468002, 30533468003, 30533468004

METHOD BLANK: 2637872 Matrix: Water
Associated Lab Samples: 30533468001, 30533468002, 30533468003, 30533468004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00030	10/31/22 15:09	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	10/31/22 15:09	
Barium	mg/L	0.0025 U	0.0025	0.00098	10/31/22 15:09	
Beryllium	mg/L	0.00050 U	0.00050	0.00010	10/31/22 15:09	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	10/31/22 15:09	
Chromium	mg/L	0.0025 U	0.0025	0.00050	10/31/22 15:09	
Cobalt	mg/L	0.0025 U	0.0025	0.00081	10/31/22 15:09	
Copper	mg/L	0.0025 U	0.0025	0.00064	10/31/22 15:09	
Lead	mg/L	0.00050 U	0.00050	0.00025	10/31/22 15:09	
Nickel	mg/L	0.0025 U	0.0025	0.00065	10/31/22 15:09	
Selenium	mg/L	0.0025 U	0.0025	0.00084	10/31/22 15:09	
Silver	mg/L	0.0025 U	0.0025	0.00053	10/31/22 15:09	
Thallium	mg/L	0.00050 U	0.00050	0.000081	10/31/22 15:09	
Vanadium	mg/L	0.0025 U	0.0025	0.0012	10/31/22 15:09	
Zinc	mg/L	0.0050 U	0.0050	0.0040	10/31/22 15:09	

LABORATORY CONTROL SAMPLE: 2637873

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.021	105	80-120	
Arsenic	mg/L	0.1	0.10	100	80-120	
Barium	mg/L	0.1	0.10	100	80-120	
Beryllium	mg/L	0.02	0.018	91	80-120	
Cadmium	mg/L	0.02	0.019	97	80-120	
Chromium	mg/L	0.1	0.10	103	80-120	
Cobalt	mg/L	0.1	0.10	103	80-120	
Copper	mg/L	0.1	0.10	104	80-120	
Lead	mg/L	0.02	0.020	101	80-120	
Nickel	mg/L	0.1	0.10	103	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	
Silver	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.02	0.020	100	80-120	
Vanadium	mg/L	0.1	0.10	103	80-120	
Zinc	mg/L	0.2	0.20	100	80-120	

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QUALITY CONTROL DATA

Project: MLF-Fall-2022
Pace Project No.: 30533468

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2637943 2637944

Parameter	Units	30532415001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.02	0.02	0.022	0.022	110	109	75-125	1	20	
Arsenic	mg/L	5.0 ug/L	0.1	0.1	0.11	0.11	105	105	75-125	0	20	
Barium	mg/L	92.1 ug/L	0.1	0.1	0.20	0.20	110	105	75-125	2	20	
Beryllium	mg/L	ND	0.02	0.02	0.019	0.019	96	95	75-125	1	20	
Cadmium	mg/L	ND	0.02	0.02	0.020	0.020	101	101	75-125	0	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.11	109	109	75-125	0	20	
Cobalt	mg/L	ND	0.1	0.1	0.11	0.11	109	108	75-125	1	20	
Copper	mg/L	40.1 ug/L	0.1	0.1	0.15	0.15	108	107	75-125	1	20	
Lead	mg/L	ND	0.02	0.02	0.021	0.021	107	107	75-125	0	20	
Nickel	mg/L	ND	0.1	0.1	0.11	0.11	107	107	75-125	0	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.098	102	98	75-125	4	20	
Silver	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	0	20	
Thallium	mg/L	ND	0.02	0.02	0.021	0.021	107	106	75-125	1	20	
Vanadium	mg/L	5.5 ug/L	0.1	0.1	0.12	0.11	110	109	75-125	1	20	
Zinc	mg/L	28.9 ug/L	0.2	0.2	0.24	0.24	104	104	75-125	0	20	

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QUALITY CONTROL DATA

Project: MLF-Fall-2022
Pace Project No.: 30533468

QC Batch: 544083
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30533468001, 30533468002, 30533468003, 30533468004

METHOD BLANK: 2640499 Matrix: Water
Associated Lab Samples: 30533468001, 30533468002, 30533468003, 30533468004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	11/02/22 17:38	

LABORATORY CONTROL SAMPLE: 2640500

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.0098	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2640511 2640512

Parameter	Units	30533978005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.01	0.01	0.010	0.010	104	103	80-120	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-Fall-2022
Pace Project No.: 30533468

QC Batch: 544015
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30533468001, 30533468002, 30533468003, 30533468004

METHOD BLANK: 2640268 Matrix: Water
Associated Lab Samples: 30533468001, 30533468002, 30533468003, 30533468004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	11/02/22 15:19	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	11/02/22 15:19	
1,1,1,2-Tetrachloroethane (S)	%.	111	60-140		11/02/22 15:19	

LABORATORY CONTROL SAMPLE: 2640269

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.24	96	85-115	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.22	86	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			109	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2640270 2640271

Parameter	Units	30533468001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.4	0.41	0.36	0.37	91	90	60-140	2	25	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.4	0.41	0.33	0.33	82	81	60-140	1	25	
1,1,1,2-Tetrachloroethane (S)	%.						101	97	60-140			

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QUALITY CONTROL DATA

Project: MLF-Fall-2022
Pace Project No.: 30533468

QC Batch: 544506
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30533468001, 30533468002, 30533468003, 30533468004

METHOD BLANK: 2642814 Matrix: Water
Associated Lab Samples: 30533468001, 30533468002, 30533468003, 30533468004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	11/03/22 19:52	1c

LABORATORY CONTROL SAMPLE: 2642815

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2642816 2642817

Parameter	Units	30533468002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	3.0J	50	50	46.0	48.0	86	90	85-115	4	20	

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QUALITY CONTROL DATA

Project: MLF-Fall-2022
Pace Project No.: 30533468

QC Batch: 543743
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30533468001, 30533468002

METHOD BLANK: 2638759
Matrix: Water
Associated Lab Samples: 30533468001, 30533468002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	11/01/22 16:54	

LABORATORY CONTROL SAMPLE: 2638760

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	996	100	85-115	

SAMPLE DUPLICATE: 2638761

Parameter	Units	30533468002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	39.0	38.0	3	5	

SAMPLE DUPLICATE: 2638762

Parameter	Units	30533244001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	731	740	1	5	

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QUALITY CONTROL DATA

Project: MLF-Fall-2022
Pace Project No.: 30533468

QC Batch: 544017
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30533468003, 30533468004

METHOD BLANK: 2640272
Matrix: Water
Associated Lab Samples: 30533468003, 30533468004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	11/02/22 16:43	

LABORATORY CONTROL SAMPLE: 2640273

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	977	98	85-115	

SAMPLE DUPLICATE: 2640274

Parameter	Units	30533468004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	22.0	23.0	4	5	

SAMPLE DUPLICATE: 2640275

Parameter	Units	30533543002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	2830	2900	2	5	5c

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QUALITY CONTROL DATA

Project: MLF-Fall-2022
Pace Project No.: 30533468

QC Batch: 544652
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30533468001, 30533468002, 30533468003, 30533468004

METHOD BLANK: 2644047 Matrix: Water
Associated Lab Samples: 30533468001, 30533468002, 30533468003, 30533468004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	11/08/22 07:34	

METHOD BLANK: 2644048 Matrix: Water
Associated Lab Samples: 30533468001, 30533468002, 30533468003, 30533468004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	11/08/22 07:38	

LABORATORY CONTROL SAMPLE: 2644049

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.0	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2644050 2644051

Parameter	Units	30533542001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	ND	4	4	3.8	3.8	95	95	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2644052 2644053

Parameter	Units	30533782002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	3.7	3.7	94	93	90-110	1	20	

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QUALITY CONTROL DATA

Project: MLF-Fall-2022
Pace Project No.: 30533468

QC Batch: 543878
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30533468001, 30533468002, 30533468003, 30533468004

METHOD BLANK: 2639281
Matrix: Water
Associated Lab Samples: 30533468001, 30533468002, 30533468003, 30533468004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/01/22 16:12	

LABORATORY CONTROL SAMPLE: 2639282

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	323	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2639283 2639284

Parameter	Units	30533470003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	40.3	150	150	207	205	111	110	90-110	1	10	MH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2639285 2639286

Parameter	Units	30533601003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	31.2	150	150	184	186	102	103	90-110	1	10	

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QUALITY CONTROL DATA

Project: MLF-Fall-2022
Pace Project No.: 30533468

QC Batch: 543574
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30533468001, 30533468002, 30533468003, 30533468004

METHOD BLANK: 2638140 Matrix: Water
Associated Lab Samples: 30533468001, 30533468002, 30533468003, 30533468004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	10/31/22 14:32	

LABORATORY CONTROL SAMPLE: 2638141

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.4	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2638142 2638143

Parameter	Units	30532667003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	7.6	20	20	30.3	30.3	113	113	85-115	0	20	

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QUALITY CONTROL DATA

Project: MLF-Fall-2022
Pace Project No.: 30533468

QC Batch: 544136
QC Batch Method: SM 4500NO3-F-2011
Analysis Method: SM 4500NO3-F-2011
Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30533468001, 30533468002, 30533468003, 30533468004

METHOD BLANK: 2640738 Matrix: Water
Associated Lab Samples: 30533468001, 30533468002, 30533468003, 30533468004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	11/03/22 12:14	

METHOD BLANK: 2640740 Matrix: Water
Associated Lab Samples: 30533468001, 30533468002, 30533468003, 30533468004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	11/03/22 12:17	

LABORATORY CONTROL SAMPLE: 2640739

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	4.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2640741 2640742

Parameter	Units	30533327001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	10.5	10	10	19.3	19.2	89	88	85-115	0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: MLF-Fall-2022
Pace Project No.: 30533468

QC Batch: 544206
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30533468001, 30533468002, 30533468003, 30533468004

METHOD BLANK: 2641125 Matrix: Water
Associated Lab Samples: 30533468001, 30533468002, 30533468003, 30533468004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	11/07/22 18:10	

LABORATORY CONTROL SAMPLE: 2641126

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	31.7	106	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2641129 2641130

Parameter	Units	30533104004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	17.6	20	20	38.8	41.7	106	120	85-115	7	20	MH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2646969 2646970

Parameter	Units	30532438001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	26700	20000	20000	42800	47500	81	104	85-115	10	20	ML

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: MLF-Fall-2022
Pace Project No.: 30533468

QC Batch: 543169
QC Batch Method: SM 4500NO2-B-2011
Analysis Method: SM 4500NO2-B-2011
Analysis Description: SM4500-NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30533468001, 30533468002, 30533468003, 30533468004

METHOD BLANK: 2636402 Matrix: Water
Associated Lab Samples: 30533468001, 30533468002, 30533468003, 30533468004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	10/28/22 11:07	

LABORATORY CONTROL SAMPLE: 2636403

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.10	100	90-110	

MATRIX SPIKE SAMPLE: 2636405

Parameter	Units	30533468001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.010 U	0.1	0.098	98	85-115	

SAMPLE DUPLICATE: 2636404

Parameter	Units	30533468001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010 U		20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: MLF-Fall-2022
Pace Project No.: 30533468

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30533468001

[1] Sample pH for 8011 is 6

Sample: 30533468002

[1] Sample pH for 8011 is 6

Sample: 30533468003

[1] Sample pH for 8011 is 5

Sample: 30533468004

[1] Sample pH for 8011 is 6

ANALYTE QUALIFIERS

1c	Alkalinity TV: 0.00 mg/L
2c	Alkalinity TV: 2.00 mg/L
3c	Alkalinity TV: 3.00 mg/L
4c	Alkalinity TV: 6.00 mg/L
5c	Sample volume was reduced so the sample could be within an acceptable range
H1	Analysis conducted outside the EPA method holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: MLF-Fall-2022
Pace Project No.: 30533468

ANALYTE QUALIFIERS

MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-Fall-2022
Pace Project No.: 30533468

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30533468001	**TW-23R**	EPA 3010A	543647	EPA 6010D	543864
30533468002	**TW-25**	EPA 3010A	543647	EPA 6010D	543864
30533468003	**TW-25A**	EPA 3010A	543647	EPA 6010D	543864
30533468004	**DUP-2**	EPA 3010A	543647	EPA 6010D	543864
30533468001	**TW-23R**	EPA 3010A	544824	EPA 6010D	545624
30533468002	**TW-25**	EPA 3010A	544824	EPA 6010D	545624
30533468003	**TW-25A**	EPA 3010A	544824	EPA 6010D	545624
30533468004	**DUP-2**	EPA 3010A	544824	EPA 6010D	545624
30533468001	**TW-23R**	EPA 3020A	543483	EPA 6020B	543650
30533468002	**TW-25**	EPA 3020A	543483	EPA 6020B	543650
30533468003	**TW-25A**	EPA 3020A	543483	EPA 6020B	543650
30533468004	**DUP-2**	EPA 3020A	543483	EPA 6020B	543650
30533468001	**TW-23R**	EPA 7470A	544083	EPA 7470A	544438
30533468002	**TW-25**	EPA 7470A	544083	EPA 7470A	544438
30533468003	**TW-25A**	EPA 7470A	544083	EPA 7470A	544438
30533468004	**DUP-2**	EPA 7470A	544083	EPA 7470A	544438
30533468001	**TW-23R**	EPA 8011	544015	EPA 8011	544169
30533468002	**TW-25**	EPA 8011	544015	EPA 8011	544169
30533468003	**TW-25A**	EPA 8011	544015	EPA 8011	544169
30533468004	**DUP-2**	EPA 8011	544015	EPA 8011	544169
30533468001	**TW-23R**	SM 2320B-2011	544506		
30533468002	**TW-25**	SM 2320B-2011	544506		
30533468003	**TW-25A**	SM 2320B-2011	544506		
30533468004	**DUP-2**	SM 2320B-2011	544506		
30533468001	**TW-23R**	SM 2540C-2011	543743		
30533468002	**TW-25**	SM 2540C-2011	543743		
30533468003	**TW-25A**	SM 2540C-2011	544017		
30533468004	**DUP-2**	SM 2540C-2011	544017		
30533468001	**TW-23R**	EPA 350.1	544652	EPA 350.1	544760
30533468002	**TW-25**	EPA 350.1	544652	EPA 350.1	544760
30533468003	**TW-25A**	EPA 350.1	544652	EPA 350.1	544760
30533468004	**DUP-2**	EPA 350.1	544652	EPA 350.1	544760
30533468001	**TW-23R**	EPA 410.4	543878	EPA 410.4	543928
30533468002	**TW-25**	EPA 410.4	543878	EPA 410.4	543928
30533468003	**TW-25A**	EPA 410.4	543878	EPA 410.4	543928
30533468004	**DUP-2**	EPA 410.4	543878	EPA 410.4	543928
30533468001	**TW-23R**	SM 4500-Cl-E-2011	543574		
30533468002	**TW-25**	SM 4500-Cl-E-2011	543574		
30533468003	**TW-25A**	SM 4500-Cl-E-2011	543574		
30533468004	**DUP-2**	SM 4500-Cl-E-2011	543574		
30533468001	**TW-23R**	SM 4500NO3-F-2011	544136		
30533468002	**TW-25**	SM 4500NO3-F-2011	544136		
30533468003	**TW-25A**	SM 4500NO3-F-2011	544136		

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-Fall-2022
Pace Project No.: 30533468

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30533468004	**DUP-2**	SM 4500NO3-F-2011	544136		
30533468001	**TW-23R**	EPA 9038	544206		
30533468002	**TW-25**	EPA 9038	544206		
30533468003	**TW-25A**	EPA 9038	544206		
30533468004	**DUP-2**	EPA 9038	544206		
30533468001	**TW-23R**	SM 4500NO2-B-2011	543169		
30533468002	**TW-25**	SM 4500NO2-B-2011	543169		
30533468003	**TW-25A**	SM 4500NO2-B-2011	543169		
30533468004	**DUP-2**	SM 4500NO2-B-2011	543169		

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF-FALL 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals (1)	Total + Diss. Metals (2)	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO_4, COD		Method 8011 - DBCP + EDB			
1	TW-23R	8	10-27-22	1030	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓			
2	TW-25	↓	10-24-22	1510	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
3	TW-25A	↓	↓	1550	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
4	DUP-2	↓	↓	—	↓		QA	↓	↓	↓	↓	↓	↓	↓		↓			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

cal
ok
03
cal

WO#: 30533468
30533468

	Signature	Date	Time
Relinquished by	SA Brown	10.21.22	
Received by	TB/PACE	10.21.22	1356
Relinquished by	TB/PACE	10/21/22	1630
Received by	S Brough	10/27/22	17:55
Relinquished by	S Brough	10/27/22	
Received by	[illegible]	10-27-22	2030

Comments

(1) 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn
(1) 7470 - Hg
(2) 6010 - Ca, Fe, Mg, Mn, K, Na
PACE-WV - METALS / PACE-G-BURG - WET CHEM + 8011
LEVEL 2 REPORT
SEE ATTACHED LIST OF METHODS / PARAMETERS / LABS

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-GBUR-0088 v02_Sample Condition Upon Receipt-Pittsburgh Effective Date: 10/03/2022	WO# : 30533468 PM: DAP Due Date: 11/11/22 CLIENT: ENV MONITOR

Client Name: EMA

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking Number:

Examined By: BL
Labeled By: M
Temped By: BL

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

Thermometer Used: 18 **Type of Ice:** Wet Blue None

Cooler Temperature: Observed Temp 3.9 °C Correction Factor: 0 °C Final Temp: 3.9 °C
Temp should be above freezing to 6°C

Comments:	Yes	No	NA	pH paper Lot# 4paw31	D.P.D. Residual Chlorine Lot #
Chain of Custody Present	✓			1.	
Chain of Custody Filled Out:	✓			2.	
-Were client corrections present on COC		✓			
Chain of Custody Relinquished	✓			3.	
Sampler Name & Signature on COC:		✓		4.	
Sample Labels match COC: -Includes date/time/ID Matrix:	✓			5.	
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):	✓			7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used:	✓			10.	
-Pace Containers Used	✓				
Containers Intact:	✓			11.	
Orthophosphate field filtered:			✓	12.	
Hex Cr Aqueous samples field filtered:			✓	13.	
Organic Samples checked for dechlorination			✓	14:	
Filtered volume received for dissolved tests:			✓	15:	
All containers checked for preservation: exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix	✓			16.	
All containers meet method preservation requirements:	✓			Initial when completed M Lot# of added Preservative	Date/Time of Preservation
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:		✓		18.	
Trip Blank Custody Seals Present			✓		
Rad Samples Screened <0.5 mrem/hr.	✓			Initial when completed M	Date: 10/28/22 Survey Meter SN: 1553

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Millersville Landfill, Anne Arundel County, MD		
	Pace, Beaver, WV	
	Method 6020 - ICPMS	
Parameter	RL	MDL
	(mg/l)	
TOTAL METALS - mg/l		
Antimony	0.0005	
Arsenic	0.0025	0.0002473
Barium	0.0025	
Beryllium	0.0005	
Cadmium	0.0005	
Chromium	0.0025	
Cobalt	0.0025	
Copper	0.0025	
Lead	0.0005	
Nickel	0.0025	
Selenium	0.0025	
Silver	0.0025	
Thallium	0.0005	
Vanadium	0.0025	
Zinc	0.005	
	Pace, Beaver, WV	
TOTAL MERCURY - mg/l	Method 7470A	
Mercury	0.0005	0.00025
	Pace, Beaver, WV	
TOTAL AND DISSOLVED METALS - mg/l	Method 6010 - ICP	
Calcium	0.5	0.028
Iron	0.05	0.0076
Magnesium	0.5	0.047
Manganese	0.005	0.00043
Potassium	0.5	0.19
Sodium	0.5	0.148
	Pace - Greensburg, PA	
VOLATILE ORGANICS - ug/l	Method 8011 - ug/l	
DBCP	0.041	
EDB	0.041	
GENERAL CHEMISTRY - mg/l	Pace - Greensburg, PA	
Alkalinity - SM 2320B	10	1
Ammonia - EPA 350.1	0.1	0.0445
COD - EPA 410.4	25	4.6532
Chloride - EPA 300.0	3	0.06683
Hardness - 2340B		
Nitrate - EPA 300.0	0.1	0.0238
Sulfate - EPA 300.0	10	4.6702
Total dissolved solids - SM2540C	10	10

WO#:30533468
PM: DAP Due Date: 11/11/22
CLIENT: ENV MONITOR

WO# : 30533468

30533468

LIMS30 Internal Shipping Manifest

COOLER 23

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		**BEAV**	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		**Received information**	
Cooler ID	23	Cooler temp (rcvd) °C	.9
Packaged on Ice (Y/N)	Yes	Correction Factor	0
Shipping Method	Courier	Cooler temp (corr) °C	.9
Tracking #	N/A	IR GUN ID	23
PWS* Drinking water?	No	Received on ice?	Yes

* If sample is from a PWS, the PWSID can be found in LIMS30

(6)

	Signature	Location	Date	Time
Relinquished	[signature]	GBUR	10-28-22	1945
Received	[signature]	BEAV	10-29-22	430
Relinquished				
Received				
Relinquished				
Received				

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	10/28/2022	30533468003 BP3N1/3	BP3N	30533468003	30533468
MF	10/28/2022	30533468001 BP3N1/3	BP3N	30533468001	30533468
MF	10/28/2022	30533468002 BP3N1/3	BP3N	30533468002	30533468
MF	10/28/2022	30533468003 BP3N2/3	BP3N	30533468003	30533468
MF	10/28/2022	30533468002 BP3N3/3	BP3N	30533468002	30533468
MF	10/28/2022	30533468001 BP3N2/3	BP3N	30533468001	30533468
MF	10/28/2022	30533468004 BP3N2/3	BP3N	30533468004	30533468
MF	10/28/2022	30533468004 BP3N1/3	BP3N	30533468004	30533468
MF	10/28/2022	30533468002 BP3N2/3	BP3N	30533468002	30533468
MF	10/28/2022	30533468004 BP3N3/3	BP3N	30533468004	30533468
MF	10/28/2022	30533468001 BP3N3/3	BP3N	30533468001	30533468
MF	10/28/2022	30533468003 BP3N3/3	BP3N	30533468003	30533468
MF	10/28/2022	30533601001 BP3N1/1	BP3N	30533601001	30533601
MF	10/28/2022	30533470007 BP3N1/1	BP3N	30533470007	30533470
MF	10/28/2022	30533601003 BP3N1/1	BP3N	30533601003	30533601
MF	10/28/2022	30533601002 BP3N1/1	BP3N	30533601002	30533601
MF	10/28/2022	30533574001 BP3N1/1	BP3N	30533574001	30533574
MF	10/28/2022	30533574001 BP3U1/1	BP3U	30533574001	30533574
MF	10/28/2022	30533509001 BP3U1/1	BP3U	30533509001	30533509
MF	10/28/2022	30533509001 BP3N1/1	BP3N	30533509001	30533509
MF	10/28/2022	30533507001 BP3U1/1	BP3U	30533507001	30533507
MF	10/28/2022	30533507001 BP3N1/1	BP3N	30533507001	30533507

WO# : 30533468

PM: DAP **Due Date: 11/11/22**

CLIENT: ENV MONITOR

LIMS73 Lab Sample Condition Upon Receipt (West Vir

Pace Analytical

Client Name: _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☑ Other 3rd Party

Tracking #: _____

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 23 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** 1.9 °C Correction Factor: 2.0 °C Final Temp: 1.9 °C

Comments:

pH paper Lot#	Date and Initials of person examining contents:
206722	CDW 10-31-22

	Yes	No	N/A	
Chain of Custody Present:				1.
Chain of Custody Filled Out:				2. Manifest
Chain of Custody Relinquished:				3.
Sampler Name & Signature on COC:				4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT				5. Lab Labeled by: NA Checked by: NA
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered:			✓	13.
-pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓	
Filtered volume received for Dissolved tests:	✓			14.
All containers have been checked for preservation:	✓			15.
exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix				
All containers meet method preservation requirements:	✓			Initial when completed: CDW Date: 10-31-22
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present:			✓	17.
Trip Blank Custody Seals Present:			✓	
				Initial when completed: CDW Date: 10-31-22

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

***PM review** is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

November 17, 2022

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-Fall 2022
Pace Project No.: 30534444

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on November 01, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

David A. Pichette
david.pichette@pacelabs.com
(724)850-5617
Project Manager

Enclosures

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(724)850-5600

CERTIFICATIONS

Project: MLF-Fall 2022
Pace Project No.: 30534444

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver
225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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SAMPLE SUMMARY

Project: MLF-Fall 2022
Pace Project No.: 30534444

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30534444001	**SW-1**	Water	11/01/22 12:40	11/01/22 22:30
30534444002	**SW-2**	Water	11/01/22 13:15	11/01/22 22:30
30534444003	**SW-3**	Water	11/01/22 13:00	11/01/22 22:30

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SAMPLE ANALYTE COUNT

Project: MLF-Fall 2022
Pace Project No.: 30534444

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30534444001	**SW-1**	EPA 6010D	MFC	7	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30534444002	**SW-2**	EPA 6010D	MFC	7	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30534444003	**SW-3**	EPA 6010D	MFC	7	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30534444

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

General Information:
3 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30534444

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

General Information:
3 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 544775

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30531863001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2644670)
  - Thallium
- MSD (Lab ID: 2644671)
  - Thallium

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30534444

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

General Information:
3 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30534444

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

General Information:
3 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 545203

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30534665001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2646600)
  - Alkalinity,Total (CaCO3 pH4.5)
- MSD (Lab ID: 2646601)
  - Alkalinity,Total (CaCO3 pH4.5)

Additional Comments:

Analyte Comments:

QC Batch: 545203

1c: Alkalinity TV: 0.00 mg/L

- BLANK (Lab ID: 2646598)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30534444

Method: **SM 2540C-2011**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

General Information:
3 samples were analyzed for SM 2540C-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30534444

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

General Information:
3 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30534444

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

General Information:
3 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30534444

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

General Information:
3 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30534444

Method: **SM 4500NO3-F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

General Information:
3 samples were analyzed for SM 4500NO3-F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30534444

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

General Information:
3 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30534444

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

General Information:
3 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30534444

Sample: SW-1 **Lab ID: 30534444001** Collected: 11/01/22 12:40 Received: 11/01/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**13.8**	mg/L	0.50	0.083	1	11/04/22 13:56	11/08/22 18:00	7440-70-2	
Iron	**0.048J**	mg/L	0.050	0.035	1	11/04/22 13:56	11/08/22 18:00	7439-89-6	
Magnesium	**3.3**	mg/L	0.50	0.047	1	11/04/22 13:56	11/08/22 18:00	7439-95-4	
Manganese	**0.010**	mg/L	0.0050	0.0027	1	11/04/22 13:56	11/08/22 18:00	7439-96-5	
Potassium	**2.5**	mg/L	0.50	0.26	1	11/04/22 13:56	11/08/22 18:00	7440-09-7	
Sodium	**42.6**	mg/L	0.50	0.34	1	11/04/22 13:56	11/08/22 18:00	7440-23-5	
Total Hardness	**47.9**	mg/L	3.3	0.27	1	11/04/22 13:56	11/08/22 18:00		N3
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/04/22 11:28	11/04/22 15:45	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/04/22 11:28	11/04/22 15:45	7440-38-2	
Barium	**0.042**	mg/L	0.0025	0.00098	1	11/04/22 11:28	11/04/22 15:45	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	11/04/22 11:28	11/04/22 15:45	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/04/22 11:28	11/04/22 15:45	7440-43-9	
Chromium	**0.00060J**	mg/L	0.0025	0.00050	1	11/04/22 11:28	11/04/22 15:45	7440-47-3	
Cobalt	**0.0025 U**	mg/L	0.0025	0.00081	1	11/04/22 11:28	11/04/22 15:45	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.00064	1	11/04/22 11:28	11/04/22 15:45	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/04/22 11:28	11/04/22 15:45	7439-92-1	
Nickel	**0.0014J**	mg/L	0.0025	0.00065	1	11/04/22 11:28	11/04/22 15:45	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/04/22 11:28	11/04/22 15:45	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/04/22 11:28	11/04/22 15:45	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/04/22 11:28	11/04/22 15:45	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/04/22 11:28	11/04/22 15:45	7440-62-2	
Zinc	**0.0060**	mg/L	0.0050	0.0040	1	11/04/22 11:28	11/04/22 15:45	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/09/22 15:32	11/10/22 11:45	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**22.0**	mg/L	10.0	1.0	1		11/08/22 13:49		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**154**	mg/L	10.0	10.0	1		11/04/22 18:28		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/04/22 10:24	11/08/22 10:09		

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30534444

Sample: SW-1 **Lab ID: 30534444001** Collected: 11/01/22 12:40 Received: 11/01/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
	Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**10.7J**	mg/L	25.0	4.7	1	11/04/22 09:19	11/04/22 12:48		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
	Pace Analytical Services - Greensburg								
Chloride	**71.4**	mg/L	3.0	0.67	1		11/04/22 17:06	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011								
	Pace Analytical Services - Greensburg								
Nitrate as N	**1.9**	mg/L	0.10	0.053	1		11/07/22 16:27	14797-55-8	
Nitrogen, NO2 plus NO3	**1.9**	mg/L	0.10	0.053	1		11/07/22 16:27		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**12.8**	mg/L	10.0	4.7	1		11/16/22 20:35	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011								
	Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		11/02/22 13:35	14797-65-0	

Sample: SW-2 **Lab ID: 30534444002** Collected: 11/01/22 13:15 Received: 11/01/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Calcium	**28.0**	mg/L	0.50	0.083	1	11/04/22 13:56	11/08/22 18:02	7440-70-2	
Iron	**0.83**	mg/L	0.050	0.035	1	11/04/22 13:56	11/08/22 18:02	7439-89-6	
Magnesium	**6.2**	mg/L	0.50	0.047	1	11/04/22 13:56	11/08/22 18:02	7439-95-4	
Manganese	**0.067**	mg/L	0.0050	0.0027	1	11/04/22 13:56	11/08/22 18:02	7439-96-5	
Potassium	**7.4**	mg/L	0.50	0.26	1	11/04/22 13:56	11/08/22 18:02	7440-09-7	
Sodium	**18.9**	mg/L	0.50	0.34	1	11/04/22 13:56	11/08/22 18:02	7440-23-5	
Total Hardness	**95.5**	mg/L	3.3	0.27	1	11/04/22 13:56	11/08/22 18:02		N3
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A								
	Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/04/22 11:28	11/04/22 15:48	7440-36-0	
Arsenic	**0.00094J**	mg/L	0.0025	0.00044	1	11/04/22 11:28	11/04/22 15:48	7440-38-2	
Barium	**0.033**	mg/L	0.0025	0.00098	1	11/04/22 11:28	11/04/22 15:48	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	11/04/22 11:28	11/04/22 15:48	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/04/22 11:28	11/04/22 15:48	7440-43-9	
Chromium	**0.00097J**	mg/L	0.0025	0.00050	1	11/04/22 11:28	11/04/22 15:48	7440-47-3	
Cobalt	**0.0025 U**	mg/L	0.0025	0.00081	1	11/04/22 11:28	11/04/22 15:48	7440-48-4	
Copper	**0.00096J**	mg/L	0.0025	0.00064	1	11/04/22 11:28	11/04/22 15:48	7440-50-8	

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30534444

Sample: SW-2 **Lab ID: 30534444002** Collected: 11/01/22 13:15 Received: 11/01/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/04/22 11:28	11/04/22 15:48	7439-92-1	
Nickel	**0.0015J**	mg/L	0.0025	0.00065	1	11/04/22 11:28	11/04/22 15:48	7440-02-0	
Selenium	**0.00086J**	mg/L	0.0025	0.00084	1	11/04/22 11:28	11/04/22 15:48	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/04/22 11:28	11/04/22 15:48	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/04/22 11:28	11/04/22 15:48	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/04/22 11:28	11/04/22 15:48	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0040	1	11/04/22 11:28	11/04/22 15:48	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/09/22 15:32	11/10/22 11:57	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**74.0**	mg/L	10.0	1.0	1		11/08/22 13:52		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**131**	mg/L	10.0	10.0	1		11/04/22 19:38		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/04/22 10:24	11/08/22 10:11		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**26.7**	mg/L	25.0	4.7	1	11/04/22 09:19	11/04/22 12:48		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**35.9**	mg/L	3.0	0.67	1		11/04/22 17:10	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.065J**	mg/L	0.10	0.053	1		11/07/22 16:29	14797-55-8	
Nitrogen, NO2 plus NO3	**0.065J**	mg/L	0.10	0.053	1		11/07/22 16:29		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**19.0**	mg/L	10.0	4.7	1		11/16/22 20:39	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		11/02/22 13:37	14797-65-0	

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30534444

Sample: SW-3 **Lab ID: 30534444003** Collected: 11/01/22 13:00 Received: 11/01/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**30.2**	mg/L	0.50	0.083	1	11/04/22 13:56	11/08/22 18:04	7440-70-2	
Iron	**0.88**	mg/L	0.050	0.035	1	11/04/22 13:56	11/08/22 18:04	7439-89-6	
Magnesium	**6.5**	mg/L	0.50	0.047	1	11/04/22 13:56	11/08/22 18:04	7439-95-4	
Manganese	**0.24**	mg/L	0.0050	0.0027	1	11/04/22 13:56	11/08/22 18:04	7439-96-5	
Potassium	**4.9**	mg/L	0.50	0.26	1	11/04/22 13:56	11/08/22 18:04	7440-09-7	
Sodium	**37.2**	mg/L	0.50	0.34	1	11/04/22 13:56	11/08/22 18:04	7440-23-5	
Total Hardness	**102**	mg/L	3.3	0.27	1	11/04/22 13:56	11/08/22 18:04		N3
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/04/22 11:28	11/04/22 15:51	7440-36-0	
Arsenic	**0.0010J**	mg/L	0.0025	0.00044	1	11/04/22 11:28	11/04/22 15:51	7440-38-2	
Barium	**0.050**	mg/L	0.0025	0.00098	1	11/04/22 11:28	11/04/22 15:51	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	11/04/22 11:28	11/04/22 15:51	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/04/22 11:28	11/04/22 15:51	7440-43-9	
Chromium	**0.0018J**	mg/L	0.0025	0.00050	1	11/04/22 11:28	11/04/22 15:51	7440-47-3	
Cobalt	**0.0038**	mg/L	0.0025	0.00081	1	11/04/22 11:28	11/04/22 15:51	7440-48-4	
Copper	**0.0024J**	mg/L	0.0025	0.00064	1	11/04/22 11:28	11/04/22 15:51	7440-50-8	
Lead	**0.00089**	mg/L	0.00050	0.00025	1	11/04/22 11:28	11/04/22 15:51	7439-92-1	
Nickel	**0.0041**	mg/L	0.0025	0.00065	1	11/04/22 11:28	11/04/22 15:51	7440-02-0	
Selenium	**0.0010J**	mg/L	0.0025	0.00084	1	11/04/22 11:28	11/04/22 15:51	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/04/22 11:28	11/04/22 15:51	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/04/22 11:28	11/04/22 15:51	7440-28-0	
Vanadium	**0.0037**	mg/L	0.0025	0.0012	1	11/04/22 11:28	11/04/22 15:51	7440-62-2	
Zinc	**0.014**	mg/L	0.0050	0.0040	1	11/04/22 11:28	11/04/22 15:51	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/09/22 15:32	11/10/22 12:00	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**56.0**	mg/L	10.0	1.0	1		11/08/22 13:55		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**223**	mg/L	10.0	10.0	1		11/04/22 19:38		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/04/22 10:24	11/08/22 10:13		

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30534444

Sample: SW-3 **Lab ID: 30534444003** Collected: 11/01/22 13:00 Received: 11/01/22 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**47.2**	mg/L	25.0	4.7	1	11/04/22 09:19	11/04/22 12:49		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**63.4**	mg/L	3.0	0.67	1		11/04/22 17:11	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		11/07/22 16:30	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		11/07/22 16:30		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**43.6**	mg/L	10.0	4.7	1		11/16/22 20:40	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		11/02/22 13:37	14797-65-0	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534444

QC Batch: 544851
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30534444001, 30534444002, 30534444003

METHOD BLANK: 2644825 Matrix: Water
Associated Lab Samples: 30534444001, 30534444002, 30534444003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	11/08/22 17:27	
Iron	mg/L	0.050 U	0.050	0.035	11/08/22 17:27	
Magnesium	mg/L	0.50 U	0.50	0.047	11/08/22 17:27	
Manganese	mg/L	0.0050 U	0.0050	0.0027	11/08/22 17:27	
Potassium	mg/L	0.50 U	0.50	0.26	11/08/22 17:27	
Sodium	mg/L	0.50 U	0.50	0.34	11/08/22 17:27	

LABORATORY CONTROL SAMPLE: 2644826

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	43.5	109	80-120	
Iron	mg/L	2	2.2	108	80-120	
Magnesium	mg/L	20	21.3	106	80-120	
Manganese	mg/L	2	2.1	105	80-120	
Potassium	mg/L	20	21.5	107	80-120	
Sodium	mg/L	20	21.5	108	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2644877 2644878

Parameter	Units	30532667002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	0.99	40	40	44.4	44.3	109	108	80-120	0	20	
Iron	mg/L	0.050 U	2	2	2.2	2.2	108	108	80-120	1	20	
Magnesium	mg/L	0.40J	20	20	21.7	21.5	106	106	80-120	1	20	
Manganese	mg/L	0.0048J	2	2	2.1	2.1	105	105	80-120	0	20	
Potassium	mg/L	0.55	20	20	22.1	22.0	108	107	80-120	0	20	
Sodium	mg/L	1.5	20	20	23.0	22.9	108	107	80-120	0	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534444

QC Batch: 544775
QC Batch Method: EPA 3020A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30534444001, 30534444002, 30534444003

METHOD BLANK: 2644606 Matrix: Water
Associated Lab Samples: 30534444001, 30534444002, 30534444003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00030	11/04/22 15:07	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	11/04/22 15:07	
Barium	mg/L	0.0025 U	0.0025	0.00098	11/04/22 15:07	
Beryllium	mg/L	0.00050 U	0.00050	0.00010	11/04/22 15:07	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	11/04/22 15:07	
Chromium	mg/L	0.0025 U	0.0025	0.00050	11/04/22 15:07	
Cobalt	mg/L	0.0025 U	0.0025	0.00081	11/04/22 15:07	
Copper	mg/L	0.0025 U	0.0025	0.00064	11/04/22 15:07	
Lead	mg/L	0.00050 U	0.00050	0.00025	11/04/22 15:07	
Nickel	mg/L	0.0025 U	0.0025	0.00065	11/04/22 15:07	
Selenium	mg/L	0.0025 U	0.0025	0.00084	11/04/22 15:07	
Silver	mg/L	0.0025 U	0.0025	0.00053	11/04/22 15:07	
Thallium	mg/L	0.00050 U	0.00050	0.000081	11/04/22 15:07	
Vanadium	mg/L	0.0025 U	0.0025	0.0012	11/04/22 15:07	
Zinc	mg/L	0.0050 U	0.0050	0.0040	11/04/22 15:07	

LABORATORY CONTROL SAMPLE: 2644607

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.022	109	80-120	
Arsenic	mg/L	0.1	0.10	101	80-120	
Barium	mg/L	0.1	0.10	102	80-120	
Beryllium	mg/L	0.02	0.018	92	80-120	
Cadmium	mg/L	0.02	0.020	99	80-120	
Chromium	mg/L	0.1	0.11	105	80-120	
Cobalt	mg/L	0.1	0.11	106	80-120	
Copper	mg/L	0.1	0.11	106	80-120	
Lead	mg/L	0.02	0.020	102	80-120	
Nickel	mg/L	0.1	0.11	106	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	
Silver	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.02	0.020	102	80-120	
Vanadium	mg/L	0.1	0.10	105	80-120	
Zinc	mg/L	0.2	0.20	102	80-120	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534444

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2644670 2644671

Parameter	Units	30531863001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.02	0.02	0.022	0.023	112	113	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	105	102	75-125	2	20	
Barium	mg/L	0.033	0.1	0.1	0.13	0.14	101	103	75-125	1	20	
Beryllium	mg/L	ND	0.02	0.02	0.019	0.019	93	95	75-125	3	20	
Cadmium	mg/L	ND	0.02	0.02	0.020	0.020	101	101	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.11	107	107	75-125	0	20	
Cobalt	mg/L	ND	0.1	0.1	0.11	0.11	106	108	75-125	1	20	
Copper	mg/L	ND	0.1	0.1	0.11	0.11	105	106	75-125	1	20	
Lead	mg/L	ND	0.02	0.02	0.021	0.021	105	105	75-125	1	20	
Nickel	mg/L	0.0027	0.1	0.1	0.11	0.11	106	106	75-125	0	20	
Selenium	mg/L	0.0010J	0.1	0.1	0.10	0.097	99	96	75-125	3	20	
Silver	mg/L	ND	0.1	0.1	0.10	0.10	102	103	75-125	0	20	
Thallium	mg/L	ND	0.02	0.02	0.014	0.014	71	71	75-125	1	20	M1
Vanadium	mg/L	ND	0.1	0.1	0.11	0.11	108	108	75-125	0	20	
Zinc	mg/L	ND	0.2	0.2	0.21	0.21	103	104	75-125	0	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534444

QC Batch: 545853
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30534444001, 30534444002, 30534444003

METHOD BLANK: 2650057 Matrix: Water
Associated Lab Samples: 30534444001, 30534444002, 30534444003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	11/10/22 11:38	

LABORATORY CONTROL SAMPLE: 2650058

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.0086	86	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2650059 2650060

Parameter	Units	30534444001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00020 U	0.01	0.01	0.0092	0.0091	92	91	80-120	0	20	

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(724)850-5600

QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534444

QC Batch: 545203
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30534444001, 30534444002, 30534444003

METHOD BLANK: 2646598 Matrix: Water
Associated Lab Samples: 30534444001, 30534444002, 30534444003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	11/08/22 13:06	1c

LABORATORY CONTROL SAMPLE: 2646599

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	21.0	105	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2646600 2646601

Parameter	Units	30534665001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	218	50	50	246	244	56	52	85-115	1	20	ML

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534444

QC Batch: 544666
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30534444001

METHOD BLANK: 2644106
Matrix: Water
Associated Lab Samples: 30534444001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	11/04/22 18:28	

LABORATORY CONTROL SAMPLE: 2644107

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	989	99	85-115	

SAMPLE DUPLICATE: 2644109

Parameter	Units	30534444001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	154	149	3	5	

SAMPLE DUPLICATE: 2644110

Parameter	Units	30534546008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	26.0	25.0	4	5	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534444

QC Batch: 544669
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30534444002, 30534444003

METHOD BLANK: 2644113
Matrix: Water
Associated Lab Samples: 30534444002, 30534444003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	11/04/22 19:38	

LABORATORY CONTROL SAMPLE: 2644114

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	957	96	85-115	

SAMPLE DUPLICATE: 2644115

Parameter	Units	30534444002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	131	125	5	5	

SAMPLE DUPLICATE: 2644116

Parameter	Units	30534938004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	204	214	5	5	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534444

QC Batch: 544654
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30534444001, 30534444002, 30534444003

METHOD BLANK: 2644060 Matrix: Water
Associated Lab Samples: 30534444001, 30534444002, 30534444003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	11/08/22 09:31	

LABORATORY CONTROL SAMPLE: 2644061

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	3.9	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2644062 2644063

Parameter	Units	30534503002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.15	4	4	3.9	4.0	95	96	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2644064 2644065

Parameter	Units	30534679001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	ND	4	4	3.9	3.9	98	98	90-110	0	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534444

QC Batch: 544686
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30534444001, 30534444002, 30534444003

METHOD BLANK: 2644201 Matrix: Water
Associated Lab Samples: 30534444001, 30534444002, 30534444003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/04/22 12:43	

METHOD BLANK: 2644203 Matrix: Water
Associated Lab Samples: 30534444001, 30534444002, 30534444003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/04/22 12:44	

LABORATORY CONTROL SAMPLE: 2644202

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	328	109	90-110	

LABORATORY CONTROL SAMPLE: 2644204

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	328	109	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2644205 2644206

Parameter	Units	30535237001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	ND	150	150	161	164	102	103	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2644207 2644208

Parameter	Units	30534618002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	113	150	150	275	278	108	110	90-110	1	10	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534444

QC Batch: 544856
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30534444001

METHOD BLANK: 2644845 Matrix: Water
Associated Lab Samples: 30534444001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	11/04/22 16:43	

METHOD BLANK: 2645188 Matrix: Water
Associated Lab Samples: 30534444001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	11/04/22 16:44	

LABORATORY CONTROL SAMPLE: 2644846

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.7	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2644847 2644848

Parameter	Units	30534739001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	4.6	20	20	26.2	25.9	108	107	85-115	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534444

QC Batch: 544857
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30534444002, 30534444003

METHOD BLANK: 2644852 Matrix: Water
Associated Lab Samples: 30534444002, 30534444003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	11/04/22 17:08	

LABORATORY CONTROL SAMPLE: 2644853

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.9	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2645359 2645360

Parameter	Units	30534444003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	63.4	20	20	81.5	82.3	90	95	85-115	1	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534444

QC Batch: 545208
QC Batch Method: SM 4500NO3-F-2011
Analysis Method: SM 4500NO3-F-2011
Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30534444001, 30534444002, 30534444003

METHOD BLANK: 2646611 Matrix: Water
Associated Lab Samples: 30534444001, 30534444002, 30534444003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	11/07/22 15:57	

LABORATORY CONTROL SAMPLE: 2646612

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	3.9	98	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2646613 2646614

Parameter	Units	30534952002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	12.0	5	5	17.1	17.1	102	101	85-115	0	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534444

QC Batch: 545541
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30534444001, 30534444002, 30534444003

METHOD BLANK: 2648396 Matrix: Water
Associated Lab Samples: 30534444001, 30534444002, 30534444003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	11/16/22 20:32	

LABORATORY CONTROL SAMPLE: 2648397

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	29.8	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2648398 2648399

Parameter	Units	30534444001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	12.8	20	20	35.5	34.4	113	108	85-115	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2648400 2648401

Parameter	Units	30535063001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	31900	20000	20000	53400	54400	108	112	85-115	2	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534444

QC Batch: 544168
QC Batch Method: SM 4500NO2-B-2011
Analysis Method: SM 4500NO2-B-2011
Analysis Description: SM4500-NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30534444001, 30534444002, 30534444003

METHOD BLANK: 2640877 Matrix: Water
Associated Lab Samples: 30534444001, 30534444002, 30534444003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	11/02/22 13:31	

LABORATORY CONTROL SAMPLE: 2640878

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.10	104	90-110	

MATRIX SPIKE SAMPLE: 2640880

Parameter	Units	30534455001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	ND	0.1	0.10	102	85-115	

SAMPLE DUPLICATE: 2640879

Parameter	Units	30534455001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	ND	0.010 U		20	

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QUALIFIERS

Project: MLF-Fall 2022
Pace Project No.: 30534444

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

1c	Alkalinity TV: 0.00 mg/L
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-Fall 2022
Pace Project No.: 30534444

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30534444001	**SW-1**	EPA 3010A	544851	EPA 6010D	545626
30534444002	**SW-2**	EPA 3010A	544851	EPA 6010D	545626
30534444003	**SW-3**	EPA 3010A	544851	EPA 6010D	545626
30534444001	**SW-1**	EPA 3020A	544775	EPA 6020B	544886
30534444002	**SW-2**	EPA 3020A	544775	EPA 6020B	544886
30534444003	**SW-3**	EPA 3020A	544775	EPA 6020B	544886
30534444001	**SW-1**	EPA 7470A	545853	EPA 7470A	545969
30534444002	**SW-2**	EPA 7470A	545853	EPA 7470A	545969
30534444003	**SW-3**	EPA 7470A	545853	EPA 7470A	545969
30534444001	**SW-1**	SM 2320B-2011	545203		
30534444002	**SW-2**	SM 2320B-2011	545203		
30534444003	**SW-3**	SM 2320B-2011	545203		
30534444001	**SW-1**	SM 2540C-2011	544666		
30534444002	**SW-2**	SM 2540C-2011	544669		
30534444003	**SW-3**	SM 2540C-2011	544669		
30534444001	**SW-1**	EPA 350.1	544654	EPA 350.1	544762
30534444002	**SW-2**	EPA 350.1	544654	EPA 350.1	544762
30534444003	**SW-3**	EPA 350.1	544654	EPA 350.1	544762
30534444001	**SW-1**	EPA 410.4	544686	EPA 410.4	544739
30534444002	**SW-2**	EPA 410.4	544686	EPA 410.4	544739
30534444003	**SW-3**	EPA 410.4	544686	EPA 410.4	544739
30534444001	**SW-1**	SM 4500-Cl-E-2011	544856		
30534444002	**SW-2**	SM 4500-Cl-E-2011	544857		
30534444003	**SW-3**	SM 4500-Cl-E-2011	544857		
30534444001	**SW-1**	SM 4500NO3-F-2011	545208		
30534444002	**SW-2**	SM 4500NO3-F-2011	545208		
30534444003	**SW-3**	SM 4500NO3-F-2011	545208		
30534444001	**SW-1**	EPA 9038	545541		
30534444002	**SW-2**	EPA 9038	545541		
30534444003	**SW-3**	EPA 9038	545541		
30534444001	**SW-1**	SM 4500NO2-B-2011	544168		
30534444002	**SW-2**	SM 4500NO2-B-2011	544168		
30534444003	**SW-3**	SM 4500NO2-B-2011	544168		

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SW

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF-FALL 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	TOTAL METALS ①	ALKALINITY	TDS	HARDNESS, Cl	AMMONIA	NITRATE	SO4, COD					
1	SW-1	4	11.1.22	1240	✓		SW	✓	✓	✓	✓	✓	✓	✓					
2	SW-2	↓	↓	1315	✓		↓	↓	↓	↓	↓	↓	↓	↓					
3	SW-3	↓	↓	1300	✓		↓	↓	↓	↓	↓	↓	↓	↓					
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

cd
ooh
03

WO#: 30534444
30534444

	Signature	Date	Time	Comments
Relinquished by	[signature]	11.1.22	1410	①6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, ZN
Received by	TB/PACE	11-1-22	1410	①6010 - Ca, Fe, Mg, Mn, K, Na
Relinquished by	TB PACE	11/1/22	1650	①7470 - Hg
Received by	RDS PACE	11-1-22	1745	PACE - WV - METALS / PACE - G - BURG - WET CHEM + BOU
Relinquished by	RDS PACE	11-1-22	2230	
Received by	[signature]	11-1-22	2230	LEVEL 2 REPORT

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-GBUR-0088 v02_Sample Conditi... Pittsburgh
	Effective Date: 10/03/2022

WO#: 30534444
PM: DAP Due Date: 11/16/22
CLIENT: ENV MONITOR

Client Name: EMA

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking Number:

Examined By	BR
Labeled By	BR
Temped By	BR

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

Thermometer Used: 18 **Type of Ice:** ☑ Wet Blue None

Cooler Temperature: Observed Temp 2.9 °C Correction Factor: 0 °C Final Temp: 2.9 °C
Temp should be above freezing to 6°C

Comments:	Yes	No	NA	pH paper Lot# 1002221	D.P.D. Residual Chlorine Lot # -
Chain of Custody Present	✓			1.	
Chain of Custody Filled Out:	✓			2.	
-Were client corrections present on COC		✓			
Chain of Custody Relinquished	✓			3.	
Sampler Name & Signature on COC:		✓		4.	
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.	
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):	✓			7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used:	✓			10.	
-Pace Containers Used	✓				
Containers Intact:	✓			11.	
Orthophosphate field filtered:			✓	12.	
Hex Cr Aqueous samples field filtered:			✓	13.	
Organic Samples checked for dechlorination			✓	14:	
Filtered volume received for dissolved tests:			✓	15:	
All containers checked for preservation: exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix	✓			16.	
All containers meet method preservation requirements:	✓			Initial when completed BR / Lot# of added Preservative	Date/Time of Preservation
Headspace in VOA Vials (>6mm):			✓	17.	
Trip Blank Present:			✓	18.	
Trip Blank Custody Seals Present			✓		
Rad Samples Screened <0.5 mrem/hr.	✓			Initial when completed BR	Date: 11-2-22 / Survey Meter SN: 1563

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

WO# : 30534444

30534444

LIMS30 Internal Shipping Manifest

COOLER 22

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	22	Cooler temp (rcvd) °C	2.8
Packaged on Ice (Y/N)	Yes	Correction Factor	0
Shipping Method	Courier	Cooler temp (corr) °C	2.8
Tracking #	N/A	IR GUN ID	23
PWS* Drinking water?	No	Received on ice?	yes

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[signature]	GBUR	11-2-22	1640
Received	[signature]	BEAV	11-3-22	510
Relinquished				
Received				
Relinquished				
Received				

11

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	11/2/2022	30534467002 BP3N4/4	BP3N	30534467002	30534467
MF	11/2/2022	30534467002 BP3N1/4	BP3N	30534467002	30534467
MF	11/2/2022	30534467002 BP3N2/4	BP3N	30534467002	30534467
MF	11/2/2022	30534467002 BP3N3/4	BP3N	30534467002	30534467
MF	11/2/2022	30534597002 BP3N1/1	BP3N	30534597002	30534597
MF	11/2/2022	30534597001 BP3N1/1	BP3N	30534597001	30534597
MF	11/2/2022	30534459002 BP3N1/1	BP3N	30534459002	30534459
MF	11/2/2022	30534459003 BP3U1/1	BP3U	30534459003	30534459
MF	11/2/2022	30534769001 BP3N1/1	BP3N	30534769001	30534769
MF	11/2/2022	30534768001 BP3N1/1	BP3N	30534768001	30534768
MF	11/2/2022	30534444003 BP3N2/3	BP3N	30534444003	30534444
MF	11/2/2022	30534444001 BP3N2/3	BP3N	30534444001	30534444
MF	11/2/2022	30534444003 BP3N1/3	BP3N	30534444003	30534444
MF	11/2/2022	30534444001 BP3N1/3	BP3N	30534444001	30534444
MF	11/2/2022	30534444002 BP3N2/3	BP3N	30534444002	30534444
MF	11/2/2022	30534444002 BP3N1/3	BP3N	30534444002	30534444
MF	11/2/2022	30534448001 BP3N1/1	BP3N	30534448001	30534448
MF	11/2/2022	30534500001 BP3N1/1	BP3N	30534500001	30534500
MF	11/2/2022	30534500001 BP3U1/1	BP3U	30534500001	30534500
MF	11/2/2022	30534502001 BP3U1/1	BP3U	30534502001	30534502
MF	11/2/2022	30534502001 BP3N1/1	BP3N	30534502001	30534502
MF	11/2/2022	30534496001 BP3N1/1	BP3N	30534496001	30534496
MF	11/2/2022	30534496001 BP3U1/1	BP3U	30534496001	30534496
MF	11/2/2022	30534206001 BP3U1/1	BP3U	30534206001	30534206
MF	11/2/2022	30532944001 BP3U3/3	BP3U	30532944001	30532944

WO#: 30534444

PM: DAP Due Date: 11/16/22
CLIENT: ENV MONITOR

LIMS73 Lab Sample Condition Upon Receipt (West Virg

Pace Analytical

Client Name: _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☒ Other: 3rdpty

Tracking #: _____

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☒ no Seals intact: ☐ yes ☒ no

Thermometer Used 23 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** 2.8 °C Correction Factor: Ø °C Final Temp: 2.8 °C

Comments:

pH paper Lot#	Date and Initials of person examining contents:
206722	11-3-22

	Yes	No	N/A	
Chain of Custody Present:				1.
Chain of Custody Filled Out:				2.
Chain of Custody Relinquished:				3.
Sampler Name & Signature on COC:				4.
Sample Labels match COC: -Includes date/time/ID				5. Matrix: Lab Labeled by: Checked by:
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered:			✓	13.
-pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓	
Filtered volume received for Dissolved tests:			Ø	14. if applicable
All containers have been checked for preservation:	✓			15.
exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix				
All containers meet method preservation requirements:	✓			Initial when completed: @ Date: 11-3-22
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present:			✓	17.
Trip Blank Custody Seals Present:			✓	
				Initial when completed: @ Date: 11-3-22

Non Test

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

***PM review** is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

November 17, 2022

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-Fall 2022
Pace Project No.: 30534938

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on November 02, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

David A. Pichette
david.pichette@pacelabs.com
(724)850-5617
Project Manager

Enclosures

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Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: MLF-Fall 2022
Pace Project No.: 30534938

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver
225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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Greensburg, PA 15601
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SAMPLE SUMMARY

Project: MLF-Fall 2022
Pace Project No.: 30534938

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30534938001	**TW-2**	Water	11/01/22 15:55	11/02/22 22:15
30534938002	**TW-2A**	Water	11/01/22 15:20	11/02/22 22:15
30534938003	**TW-3**	Water	11/01/22 16:40	11/02/22 22:15
30534938004	**TW-3A**	Water	11/01/22 17:15	11/02/22 22:15
30534938005	**TW-4**	Water	11/02/22 11:10	11/02/22 22:15
30534938006	**TW-4B**	Water	11/02/22 11:45	11/02/22 22:15
30534938007	**TW-27**	Water	11/02/22 12:30	11/02/22 22:15

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SAMPLE ANALYTE COUNT

Project: MLF-Fall 2022
Pace Project No.: 30534938

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30534938001	**TW-2**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30534938002	**TW-2A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30534938003	**TW-3**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-Fall 2022
Pace Project No.: 30534938

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30534938004	**TW-3A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30534938005	**TW-4**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30534938006	**TW-4B**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-Fall 2022
Pace Project No.: 30534938

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30534938007	**TW-27**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AJR	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30534938

Date: November 17, 2022

TW-2 (Lab ID: 30534938001)

- Sample pH for 8011 is 7

TW-2A (Lab ID: 30534938002)

- Sample pH for 8011 is 7

TW-3 (Lab ID: 30534938003)

- Sample pH for 8011 is 7

TW-3A (Lab ID: 30534938004)

- Sample pH for 8011 is 7

TW-4 (Lab ID: 30534938005)

- Sample pH for 8011 is 7

TW-4B (Lab ID: 30534938006)

- Sample pH for 8011 is 7

TW-27 (Lab ID: 30534938007)

- Sample pH for 8011 is 7

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30534938

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

General Information:
7 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30534938

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

General Information:
7 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30534938

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

General Information:
7 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 545328

B: Analyte was detected in the associated method blank.
- BLANK for HBN 545328 [BMPR/687 (Lab ID: 2647482)
  - Antimony

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 544775

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30531863001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 2644670)
  - Thallium
- MSD (Lab ID: 2644671)
  - Thallium

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30534938

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

QC Batch: 545328

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30535386004

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2647503)
  - Lead
  - Thallium
- MSD (Lab ID: 2647504)
  - Lead
  - Thallium

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30534938

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

General Information:
7 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 546040

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30534938007

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MSD (Lab ID: 2651519)
  - Mercury

R1: RPD value was outside control limits.
- MSD (Lab ID: 2651519)
  - Mercury

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30534938

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

General Information:
7 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30534938

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

General Information:
7 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 545203

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30534665001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2646600)
  - Alkalinity,Total (CaCO3 pH4.5)
- MSD (Lab ID: 2646601)
  - Alkalinity,Total (CaCO3 pH4.5)

Additional Comments:

Analyte Comments:

QC Batch: 545203

1c: Alkalinity TV: 0.00 mg/L

- BLANK (Lab ID: 2646598)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-27 (Lab ID: 30534938007)
  - Alkalinity,Total (CaCO3 pH4.5)

2c: Alkalinity TV: 2.00 mg/L

- TW-4B (Lab ID: 30534938006)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30534938

Method: **SM 2540C-2011**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

General Information:
7 samples were analyzed for SM 2540C-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30534938

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

General Information:
7 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 544655

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30534645001,30534985004

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2644068)
  - Ammonia, Distilled

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30534938

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

General Information:
7 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 545379

3c: pH was adjusted to <2 at bench

- BLANK (Lab ID: 2647671)
  - Chemical Oxygen Demand
- LCS (Lab ID: 2647672)
  - Chemical Oxygen Demand

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30534938

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

General Information:
7 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30534938

Method: **SM 4500NO3-F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

General Information:
7 samples were analyzed for SM 4500NO3-F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 545209

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30534605002

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2646617)
  - Nitrogen, NO2 plus NO3
- MSD (Lab ID: 2646618)
  - Nitrogen, NO2 plus NO3

QC Batch: 545210

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30534938005

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2646621)
  - Nitrogen, NO2 plus NO3
- MSD (Lab ID: 2646622)
  - Nitrogen, NO2 plus NO3

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30534938

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

General Information:
7 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30534938

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

General Information:
7 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30534938

Sample: TW-2 **Lab ID: 30534938001** Collected: 11/01/22 15:55 Received: 11/02/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.33J**	mg/L	0.50	0.083	1	11/04/22 13:56	11/08/22 18:18	7440-70-2	
Iron	**13.3**	mg/L	0.050	0.035	1	11/04/22 13:56	11/08/22 18:18	7439-89-6	
Magnesium	**0.48J**	mg/L	0.50	0.047	1	11/04/22 13:56	11/08/22 18:18	7439-95-4	
Manganese	**0.18**	mg/L	0.0050	0.0027	1	11/04/22 13:56	11/08/22 18:18	7439-96-5	
Potassium	**0.63**	mg/L	0.50	0.26	1	11/04/22 13:56	11/08/22 18:18	7440-09-7	
Sodium	**1.7**	mg/L	0.50	0.34	1	11/04/22 13:56	11/08/22 18:18	7440-23-5	
Total Hardness	**2.8J**	mg/L	3.3	0.27	1	11/04/22 13:56	11/08/22 18:18		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.32J**	mg/L	0.50	0.083	1	11/07/22 09:49	11/08/22 23:49	7440-70-2	
Iron, Dissolved	**13.2**	mg/L	0.050	0.035	1	11/07/22 09:49	11/08/22 23:49	7439-89-6	
Magnesium, Dissolved	**0.48J**	mg/L	0.50	0.047	1	11/07/22 09:49	11/08/22 23:49	7439-95-4	
Manganese, Dissolved	**0.18**	mg/L	0.0050	0.0027	1	11/07/22 09:49	11/08/22 23:49	7439-96-5	
Potassium, Dissolved	**0.65**	mg/L	0.50	0.26	1	11/07/22 09:49	11/08/22 23:49	7440-09-7	
Sodium, Dissolved	**1.6**	mg/L	0.50	0.34	1	11/07/22 09:49	11/08/22 23:49	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/04/22 11:28	11/04/22 16:58	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/04/22 11:28	11/04/22 16:58	7440-38-2	
Barium	**0.0083**	mg/L	0.0025	0.00098	1	11/04/22 11:28	11/04/22 16:58	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	11/04/22 11:28	11/04/22 16:58	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/04/22 11:28	11/04/22 16:58	7440-43-9	
Chromium	**0.0011J**	mg/L	0.0025	0.00050	1	11/04/22 11:28	11/04/22 16:58	7440-47-3	
Cobalt	**0.0025 U**	mg/L	0.0025	0.00081	1	11/04/22 11:28	11/04/22 16:58	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.00064	1	11/04/22 11:28	11/04/22 16:58	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/04/22 11:28	11/04/22 16:58	7439-92-1	
Nickel	**0.0010J**	mg/L	0.0025	0.00065	1	11/04/22 11:28	11/04/22 16:58	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/04/22 11:28	11/04/22 16:58	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/04/22 11:28	11/04/22 16:58	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/04/22 11:28	11/04/22 16:58	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/04/22 11:28	11/04/22 16:58	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0040	1	11/04/22 11:28	11/04/22 16:58	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/09/22 15:32	11/10/22 12:35	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/07/22 07:30	11/07/22 21:42	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	11/07/22 07:30	11/07/22 21:42	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	115	%.	60-140		1	11/07/22 07:30	11/07/22 21:42	630-20-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30534938

Sample: TW-2 **Lab ID: 30534938001** Collected: 11/01/22 15:55 Received: 11/02/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**24.0**	mg/L	10.0	1.0	1		11/08/22 13:58		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**15.0**	mg/L	10.0	10.0	1		11/04/22 19:38		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/04/22 10:24	11/08/22 11:15		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.1J**	mg/L	25.0	4.7	1	11/08/22 12:47	11/08/22 16:01		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**3.3**	mg/L	3.0	0.67	1		11/04/22 17:15	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.056J**	mg/L	0.10	0.053	1		11/07/22 17:06	14797-55-8	
Nitrogen, NO2 plus NO3	**0.056J**	mg/L	0.10	0.053	1		11/07/22 17:06		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/16/22 20:42	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		11/03/22 12:04	14797-65-0	

Sample: TW-2A **Lab ID: 30534938002** Collected: 11/01/22 15:20 Received: 11/02/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**5.7**	mg/L	0.50	0.083	1	11/04/22 13:56	11/08/22 18:20	7440-70-2	
Iron	**34.6**	mg/L	0.050	0.035	1	11/04/22 13:56	11/08/22 18:20	7439-89-6	
Magnesium	**3.1**	mg/L	0.50	0.047	1	11/04/22 13:56	11/08/22 18:20	7439-95-4	
Manganese	**0.23**	mg/L	0.0050	0.0027	1	11/04/22 13:56	11/08/22 18:20	7439-96-5	
Potassium	**1.2**	mg/L	0.50	0.26	1	11/04/22 13:56	11/08/22 18:20	7440-09-7	

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30534938

Sample: TW-2A **Lab ID: 30534938002** Collected: 11/01/22 15:20 Received: 11/02/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**16.5**	mg/L	0.50	0.34	1	11/04/22 13:56	11/08/22 18:20	7440-23-5	
Total Hardness	**27.1**	mg/L	3.3	0.27	1	11/04/22 13:56	11/08/22 18:20		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**5.8**	mg/L	0.50	0.083	1	11/07/22 09:49	11/08/22 23:51	7440-70-2	
Iron, Dissolved	**32.4**	mg/L	0.050	0.035	1	11/07/22 09:49	11/08/22 23:51	7439-89-6	
Magnesium, Dissolved	**3.1**	mg/L	0.50	0.047	1	11/07/22 09:49	11/08/22 23:51	7439-95-4	
Manganese, Dissolved	**0.22**	mg/L	0.0050	0.0027	1	11/07/22 09:49	11/08/22 23:51	7439-96-5	
Potassium, Dissolved	**1.2**	mg/L	0.50	0.26	1	11/07/22 09:49	11/08/22 23:51	7440-09-7	
Sodium, Dissolved	**16.9**	mg/L	0.50	0.34	1	11/07/22 09:49	11/08/22 23:51	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.0010 U**	mg/L	0.0010	0.00059	2	11/04/22 11:28	11/04/22 17:13	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.00088	2	11/04/22 11:28	11/04/22 17:13	7440-38-2	
Barium	**0.068**	mg/L	0.0050	0.0020	2	11/04/22 11:28	11/04/22 17:13	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00020	2	11/04/22 11:28	11/04/22 17:13	7440-41-7	
Cadmium	**0.0010 U**	mg/L	0.0010	0.00027	2	11/04/22 11:28	11/04/22 17:13	7440-43-9	
Chromium	**0.0023J**	mg/L	0.0050	0.0010	2	11/04/22 11:28	11/04/22 17:13	7440-47-3	
Cobalt	**0.0019J**	mg/L	0.0050	0.0016	2	11/04/22 11:28	11/04/22 17:13	7440-48-4	
Copper	**0.0027J**	mg/L	0.0050	0.0013	2	11/04/22 11:28	11/04/22 17:13	7440-50-8	
Lead	**0.0010 U**	mg/L	0.0010	0.00050	2	11/04/22 11:28	11/04/22 17:13	7439-92-1	
Nickel	**0.0035J**	mg/L	0.0050	0.0013	2	11/04/22 11:28	11/04/22 17:13	7440-02-0	
Selenium	**0.0050 U**	mg/L	0.0050	0.0017	2	11/04/22 11:28	11/04/22 17:13	7782-49-2	
Silver	**0.0050 U**	mg/L	0.0050	0.0011	2	11/04/22 11:28	11/04/22 17:13	7440-22-4	
Thallium	**0.0010 U**	mg/L	0.0010	0.00016	2	11/04/22 11:28	11/04/22 17:13	7440-28-0	
Vanadium	**0.0050 U**	mg/L	0.0050	0.0024	2	11/04/22 11:28	11/04/22 17:13	7440-62-2	
Zinc	**0.010 U**	mg/L	0.010	0.0080	2	11/04/22 11:28	11/04/22 17:13	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/09/22 15:32	11/10/22 12:38	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	11/07/22 07:30	11/07/22 21:55	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	11/07/22 07:30	11/07/22 21:55	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	114	%.	60-140		1	11/07/22 07:30	11/07/22 21:55	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**32.0**	mg/L	10.0	1.0	1		11/08/22 14:02		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30534938

Sample: TW-2A **Lab ID: 30534938002** Collected: 11/01/22 15:20 Received: 11/02/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**82.0**	mg/L	10.0	10.0	1		11/04/22 19:38		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/09/22 08:49	11/09/22 12:20		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**10.7J**	mg/L	25.0	4.7	1	11/08/22 12:47	11/08/22 16:01		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**40.2**	mg/L	3.0	0.67	1		11/04/22 17:16	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.13J**	mg/L	0.20	0.11	2		11/07/22 17:07	14797-55-8	
Nitrogen, NO2 plus NO3	**0.14J**	mg/L	0.20	0.11	2		11/07/22 17:07		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/16/22 20:42	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.011**	mg/L	0.010	0.0055	1		11/03/22 12:05	14797-65-0	

Sample: TW-3 **Lab ID: 30534938003** Collected: 11/01/22 16:40 Received: 11/02/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**1.3**	mg/L	0.50	0.083	1	11/04/22 13:56	11/08/22 18:22	7440-70-2	
Iron	**12.9**	mg/L	0.050	0.035	1	11/04/22 13:56	11/08/22 18:22	7439-89-6	
Magnesium	**0.66**	mg/L	0.50	0.047	1	11/04/22 13:56	11/08/22 18:22	7439-95-4	
Manganese	**0.16**	mg/L	0.0050	0.0027	1	11/04/22 13:56	11/08/22 18:22	7439-96-5	
Potassium	**0.58**	mg/L	0.50	0.26	1	11/04/22 13:56	11/08/22 18:22	7440-09-7	
Sodium	**3.2**	mg/L	0.50	0.34	1	11/04/22 13:56	11/08/22 18:22	7440-23-5	
Total Hardness	**6.0**	mg/L	3.3	0.27	1	11/04/22 13:56	11/08/22 18:22		N3

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30534938

Sample: TW-3 **Lab ID: 30534938003** Collected: 11/01/22 16:40 Received: 11/02/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**1.3**	mg/L	0.50	0.083	1	11/07/22 09:49	11/08/22 23:53	7440-70-2	
Iron, Dissolved	**9.4**	mg/L	0.050	0.035	1	11/07/22 09:49	11/08/22 23:53	7439-89-6	
Magnesium, Dissolved	**0.68**	mg/L	0.50	0.047	1	11/07/22 09:49	11/08/22 23:53	7439-95-4	
Manganese, Dissolved	**0.18**	mg/L	0.0050	0.0027	1	11/07/22 09:49	11/08/22 23:53	7439-96-5	
Potassium, Dissolved	**0.60**	mg/L	0.50	0.26	1	11/07/22 09:49	11/08/22 23:53	7440-09-7	
Sodium, Dissolved	**3.3**	mg/L	0.50	0.34	1	11/07/22 09:49	11/08/22 23:53	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.0010 U**	mg/L	0.0010	0.00059	2	11/04/22 11:28	11/04/22 17:16	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.00088	2	11/04/22 11:28	11/04/22 17:16	7440-38-2	
Barium	**0.0084**	mg/L	0.0050	0.0020	2	11/04/22 11:28	11/04/22 17:16	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00020	2	11/04/22 11:28	11/04/22 17:16	7440-41-7	
Cadmium	**0.0010 U**	mg/L	0.0010	0.00027	2	11/04/22 11:28	11/04/22 17:16	7440-43-9	
Chromium	**0.011**	mg/L	0.0050	0.0010	2	11/04/22 11:28	11/04/22 17:16	7440-47-3	
Cobalt	**0.0019J**	mg/L	0.0050	0.0016	2	11/04/22 11:28	11/04/22 17:16	7440-48-4	
Copper	**0.0045J**	mg/L	0.0050	0.0013	2	11/04/22 11:28	11/04/22 17:16	7440-50-8	
Lead	**0.0010 U**	mg/L	0.0010	0.00050	2	11/04/22 11:28	11/04/22 17:16	7439-92-1	
Nickel	**0.049**	mg/L	0.0050	0.0013	2	11/04/22 11:28	11/04/22 17:16	7440-02-0	
Selenium	**0.0050 U**	mg/L	0.0050	0.0017	2	11/04/22 11:28	11/04/22 17:16	7782-49-2	
Silver	**0.0050 U**	mg/L	0.0050	0.0011	2	11/04/22 11:28	11/04/22 17:16	7440-22-4	
Thallium	**0.0010 U**	mg/L	0.0010	0.00016	2	11/04/22 11:28	11/04/22 17:16	7440-28-0	
Vanadium	**0.0050 U**	mg/L	0.0050	0.0024	2	11/04/22 11:28	11/04/22 17:16	7440-62-2	
Zinc	**0.010 U**	mg/L	0.010	0.0080	2	11/04/22 11:28	11/04/22 17:16	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/09/22 15:32	11/10/22 12:40	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/07/22 07:30	11/07/22 22:07	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/07/22 07:30	11/07/22 22:07	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	117	%.	60-140		1	11/07/22 07:30	11/07/22 22:07	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**14.0**	mg/L	10.0	1.0	1		11/08/22 14:06		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		11/04/22 19:38		

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30534938

Sample: TW-3 **Lab ID: 30534938003** Collected: 11/01/22 16:40 Received: 11/02/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/09/22 08:49	11/09/22 12:22		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.1J**	mg/L	25.0	4.7	1	11/08/22 12:47	11/08/22 16:02		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**6.0**	mg/L	3.0	0.67	1		11/04/22 17:17	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.065J**	mg/L	0.10	0.053	1		11/07/22 17:09	14797-55-8	
Nitrogen, NO2 plus NO3	**0.067J**	mg/L	0.10	0.053	1		11/07/22 17:09		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/16/22 20:44	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		11/03/22 12:07	14797-65-0	

Sample: TW-3A **Lab ID: 30534938004** Collected: 11/01/22 17:15 Received: 11/02/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**3.0**	mg/L	0.50	0.083	1	11/04/22 13:56	11/08/22 18:24	7440-70-2	
Iron	**76.3**	mg/L	0.050	0.035	1	11/04/22 13:56	11/08/22 18:24	7439-89-6	
Magnesium	**1.1**	mg/L	0.50	0.047	1	11/04/22 13:56	11/08/22 18:24	7439-95-4	
Manganese	**0.66**	mg/L	0.0050	0.0027	1	11/04/22 13:56	11/08/22 18:24	7439-96-5	
Potassium	**1.1**	mg/L	0.50	0.26	1	11/04/22 13:56	11/08/22 18:24	7440-09-7	
Sodium	**58.7**	mg/L	0.50	0.34	1	11/04/22 13:56	11/08/22 18:24	7440-23-5	
Total Hardness	**12.2**	mg/L	3.3	0.27	1	11/04/22 13:56	11/08/22 18:24		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**3.1**	mg/L	0.50	0.083	1	11/07/22 09:49	11/08/22 23:55	7440-70-2	
Iron, Dissolved	**77.0**	mg/L	0.050	0.035	1	11/07/22 09:49	11/08/22 23:55	7439-89-6	
Magnesium, Dissolved	**1.2**	mg/L	0.50	0.047	1	11/07/22 09:49	11/08/22 23:55	7439-95-4	

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30534938

Sample: TW-3A **Lab ID: 30534938004** Collected: 11/01/22 17:15 Received: 11/02/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Manganese, Dissolved	**0.67**	mg/L	0.0050	0.0027	1	11/07/22 09:49	11/08/22 23:55	7439-96-5	
Potassium, Dissolved	**1.2**	mg/L	0.50	0.26	1	11/07/22 09:49	11/08/22 23:55	7440-09-7	
Sodium, Dissolved	**61.7**	mg/L	0.50	0.34	1	11/07/22 09:49	11/08/22 23:55	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00033J**	mg/L	0.00050	0.00030	1	11/08/22 03:09	11/08/22 11:30	7440-36-0	B
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/08/22 03:09	11/08/22 11:30	7440-38-2	
Barium	**0.028**	mg/L	0.0025	0.00098	1	11/08/22 03:09	11/08/22 11:30	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	11/08/22 03:09	11/08/22 11:30	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/08/22 03:09	11/08/22 11:30	7440-43-9	
Chromium	**0.00089J**	mg/L	0.0025	0.00050	1	11/08/22 03:09	11/08/22 11:30	7440-47-3	
Cobalt	**0.0025 U**	mg/L	0.0025	0.00081	1	11/08/22 03:09	11/08/22 11:30	7440-48-4	
Copper	**0.00074J**	mg/L	0.0025	0.00064	1	11/08/22 03:09	11/08/22 11:30	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/08/22 03:09	11/08/22 11:30	7439-92-1	
Nickel	**0.00090J**	mg/L	0.0025	0.00065	1	11/08/22 03:09	11/08/22 11:30	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/08/22 03:09	11/08/22 11:30	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/08/22 03:09	11/08/22 11:30	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/08/22 03:09	11/08/22 11:30	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/08/22 03:09	11/08/22 11:30	7440-62-2	
Zinc	**0.0042J**	mg/L	0.0050	0.0040	1	11/08/22 03:09	11/08/22 11:30	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/09/22 15:32	11/10/22 12:42	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/07/22 07:30	11/07/22 22:20	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/07/22 07:30	11/07/22 22:20	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	115	%.	60-140		1	11/07/22 07:30	11/07/22 22:20	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**22.0**	mg/L	10.0	1.0	1		11/08/22 14:09		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**204**	mg/L	10.0	10.0	1		11/04/22 19:38		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/04/22 10:24	11/08/22 11:17		

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30534938

Sample: TW-3A **Lab ID: 30534938004** Collected: 11/01/22 17:15 Received: 11/02/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**19.8J**	mg/L	25.0	4.7	1	11/08/22 12:47	11/08/22 16:02		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**171**	mg/L	6.0	1.3	2		11/04/22 17:18	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.090J**	mg/L	0.10	0.053	1		11/07/22 17:10	14797-55-8	
Nitrogen, NO2 plus NO3	**0.098J**	mg/L	0.10	0.053	1		11/07/22 17:10		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/16/22 20:47	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.0079J**	mg/L	0.010	0.0055	1		11/03/22 12:07	14797-65-0	

Sample: TW-4 **Lab ID: 30534938005** Collected: 11/02/22 11:10 Received: 11/02/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**2.6**	mg/L	0.50	0.083	1	11/08/22 11:12	11/08/22 15:46	7440-70-2	
Iron	**36.0**	mg/L	0.050	0.035	1	11/08/22 11:12	11/08/22 15:46	7439-89-6	
Magnesium	**1.4**	mg/L	0.50	0.047	1	11/08/22 11:12	11/08/22 15:46	7439-95-4	
Manganese	**0.19**	mg/L	0.0050	0.0027	1	11/08/22 11:12	11/08/22 15:46	7439-96-5	
Potassium	**0.91**	mg/L	0.50	0.26	1	11/08/22 11:12	11/08/22 15:46	7440-09-7	
Sodium	**4.7**	mg/L	0.50	0.34	1	11/08/22 11:12	11/08/22 15:46	7440-23-5	
Total Hardness	**12.3**	mg/L	3.3	0.27	1	11/08/22 11:12	11/08/22 15:46		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**2.8**	mg/L	0.50	0.083	1	11/07/22 09:49	11/08/22 23:57	7440-70-2	
Iron, Dissolved	**28.0**	mg/L	0.050	0.035	1	11/07/22 09:49	11/08/22 23:57	7439-89-6	
Magnesium, Dissolved	**1.4**	mg/L	0.50	0.047	1	11/07/22 09:49	11/08/22 23:57	7439-95-4	
Manganese, Dissolved	**0.19**	mg/L	0.0050	0.0027	1	11/07/22 09:49	11/08/22 23:57	7439-96-5	
Potassium, Dissolved	**0.89**	mg/L	0.50	0.26	1	11/07/22 09:49	11/08/22 23:57	7440-09-7	
Sodium, Dissolved	**4.8**	mg/L	0.50	0.34	1	11/07/22 09:49	11/08/22 23:57	7440-23-5	

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30534938

Sample: TW-4 **Lab ID: 30534938005** Collected: 11/02/22 11:10 Received: 11/02/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00031J**	mg/L	0.00050	0.00030	1	11/08/22 03:09	11/08/22 11:32	7440-36-0	B
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/08/22 03:09	11/08/22 11:32	7440-38-2	
Barium	**0.029**	mg/L	0.0025	0.00098	1	11/08/22 03:09	11/08/22 11:32	7440-39-3	
Beryllium	**0.00015J**	mg/L	0.00050	0.00010	1	11/08/22 03:09	11/08/22 11:32	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/08/22 03:09	11/08/22 11:32	7440-43-9	
Chromium	**0.00078J**	mg/L	0.0025	0.00050	1	11/08/22 03:09	11/08/22 11:32	7440-47-3	
Cobalt	**0.0022J**	mg/L	0.0025	0.00081	1	11/08/22 03:09	11/08/22 11:32	7440-48-4	
Copper	**0.0028**	mg/L	0.0025	0.00064	1	11/08/22 03:09	11/08/22 11:32	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/08/22 03:09	11/08/22 11:32	7439-92-1	
Nickel	**0.0020J**	mg/L	0.0025	0.00065	1	11/08/22 03:09	11/08/22 11:32	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/08/22 03:09	11/08/22 11:32	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/08/22 03:09	11/08/22 11:32	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/08/22 03:09	11/08/22 11:32	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/08/22 03:09	11/08/22 11:32	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0040	1	11/08/22 03:09	11/08/22 11:32	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/10/22 11:41	11/11/22 11:29	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/07/22 07:30	11/07/22 22:33	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/07/22 07:30	11/07/22 22:33	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	113	%.	60-140		1	11/07/22 07:30	11/07/22 22:33	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**32.0**	mg/L	10.0	1.0	1		11/08/22 14:12		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**48.0**	mg/L	10.0	10.0	1		11/04/22 18:28		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/04/22 10:24	11/08/22 11:19		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**22.1J**	mg/L	25.0	4.7	1	11/08/22 12:47	11/08/22 16:03		

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30534938

Sample: TW-4 **Lab ID: 30534938005** Collected: 11/02/22 11:10 Received: 11/02/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**13.4**	mg/L	3.0	0.67	1		11/04/22 17:19	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.088J**	mg/L	0.10	0.053	1		11/07/22 17:17	14797-55-8	
Nitrogen, NO2 plus NO3	**0.096J**	mg/L	0.10	0.053	1		11/07/22 17:17		ML
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/16/22 20:49	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.0075J**	mg/L	0.010	0.0055	1		11/03/22 12:08	14797-65-0	

Sample: TW-4B **Lab ID: 30534938006** Collected: 11/02/22 11:45 Received: 11/02/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**3.2**	mg/L	0.50	0.083	1	11/08/22 11:12	11/08/22 15:52	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	11/08/22 11:12	11/08/22 15:52	7439-89-6	
Magnesium	**3.1**	mg/L	0.50	0.047	1	11/08/22 11:12	11/08/22 15:52	7439-95-4	
Manganese	**0.11**	mg/L	0.0050	0.0027	1	11/08/22 11:12	11/08/22 15:52	7439-96-5	
Potassium	**1.2**	mg/L	0.50	0.26	1	11/08/22 11:12	11/08/22 15:52	7440-09-7	
Sodium	**4.1**	mg/L	0.50	0.34	1	11/08/22 11:12	11/08/22 15:52	7440-23-5	
Total Hardness	**20.7**	mg/L	3.3	0.27	1	11/08/22 11:12	11/08/22 15:52		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**3.4**	mg/L	0.50	0.083	1	11/07/22 09:49	11/08/22 23:59	7440-70-2	
Iron, Dissolved	**0.064**	mg/L	0.050	0.035	1	11/07/22 09:49	11/08/22 23:59	7439-89-6	
Magnesium, Dissolved	**3.2**	mg/L	0.50	0.047	1	11/07/22 09:49	11/08/22 23:59	7439-95-4	
Manganese, Dissolved	**0.11**	mg/L	0.0050	0.0027	1	11/07/22 09:49	11/08/22 23:59	7439-96-5	
Potassium, Dissolved	**1.2**	mg/L	0.50	0.26	1	11/07/22 09:49	11/08/22 23:59	7440-09-7	
Sodium, Dissolved	**4.4**	mg/L	0.50	0.34	1	11/07/22 09:49	11/08/22 23:59	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/08/22 03:09	11/08/22 11:35	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/08/22 03:09	11/08/22 11:35	7440-38-2	
Barium	**0.077**	mg/L	0.0025	0.00098	1	11/08/22 03:09	11/08/22 11:35	7440-39-3	

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30534938

Sample: TW-4B **Lab ID: 30534938006** Collected: 11/02/22 11:45 Received: 11/02/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Beryllium	**0.00022J**	mg/L	0.00050	0.00010	1	11/08/22 03:09	11/08/22 11:35	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/08/22 03:09	11/08/22 11:35	7440-43-9	
Chromium	**0.0027**	mg/L	0.0025	0.00050	1	11/08/22 03:09	11/08/22 11:35	7440-47-3	
Cobalt	**0.0080**	mg/L	0.0025	0.00081	1	11/08/22 03:09	11/08/22 11:35	7440-48-4	
Copper	**0.0032**	mg/L	0.0025	0.00064	1	11/08/22 03:09	11/08/22 11:35	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/08/22 03:09	11/08/22 11:35	7439-92-1	
Nickel	**0.0052**	mg/L	0.0025	0.00065	1	11/08/22 03:09	11/08/22 11:35	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/08/22 03:09	11/08/22 11:35	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/08/22 03:09	11/08/22 11:35	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/08/22 03:09	11/08/22 11:35	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/08/22 03:09	11/08/22 11:35	7440-62-2	
Zinc	**0.013**	mg/L	0.0050	0.0040	1	11/08/22 03:09	11/08/22 11:35	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/10/22 11:41	11/11/22 11:32	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/07/22 07:30	11/07/22 22:46	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/07/22 07:30	11/07/22 22:46	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	109	%.	60-140		1	11/07/22 07:30	11/07/22 22:46	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		11/08/22 14:26		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**48.0**	mg/L	10.0	10.0	1		11/07/22 16:55		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/04/22 10:24	11/08/22 11:21		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**13.0J**	mg/L	25.0	4.7	1	11/08/22 12:47	11/08/22 16:03		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**9.3**	mg/L	3.0	0.67	1		11/04/22 17:20	16887-00-6	

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30534938

Sample: TW-4B **Lab ID: 30534938006** Collected: 11/02/22 11:45 Received: 11/02/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.28**	mg/L	0.10	0.053	1		11/07/22 17:21	14797-55-8	
Nitrogen, NO2 plus NO3	**0.28**	mg/L	0.10	0.053	1		11/07/22 17:21		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**12.4**	mg/L	10.0	4.7	1		11/16/22 20:49	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		11/03/22 12:08	14797-65-0	

Sample: TW-27 **Lab ID: 30534938007** Collected: 11/02/22 12:30 Received: 11/02/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.88**	mg/L	0.50	0.083	1	11/08/22 11:12	11/08/22 15:54	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	11/08/22 11:12	11/08/22 15:54	7439-89-6	
Magnesium	**0.40J**	mg/L	0.50	0.047	1	11/08/22 11:12	11/08/22 15:54	7439-95-4	
Manganese	**0.0060**	mg/L	0.0050	0.0027	1	11/08/22 11:12	11/08/22 15:54	7439-96-5	
Potassium	**0.51**	mg/L	0.50	0.26	1	11/08/22 11:12	11/08/22 15:54	7440-09-7	
Sodium	**2.4**	mg/L	0.50	0.34	1	11/08/22 11:12	11/08/22 15:54	7440-23-5	
Total Hardness	**3.9**	mg/L	3.3	0.27	1	11/08/22 11:12	11/08/22 15:54		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.85**	mg/L	0.50	0.083	1	11/07/22 09:49	11/09/22 00:01	7440-70-2	
Iron, Dissolved	**0.14**	mg/L	0.050	0.035	1	11/07/22 09:49	11/09/22 00:01	7439-89-6	
Magnesium, Dissolved	**0.40J**	mg/L	0.50	0.047	1	11/07/22 09:49	11/09/22 00:01	7439-95-4	
Manganese, Dissolved	**0.0056**	mg/L	0.0050	0.0027	1	11/07/22 09:49	11/09/22 00:01	7439-96-5	
Potassium, Dissolved	**0.49J**	mg/L	0.50	0.26	1	11/07/22 09:49	11/09/22 00:01	7440-09-7	
Sodium, Dissolved	**2.4**	mg/L	0.50	0.34	1	11/07/22 09:49	11/09/22 00:01	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/08/22 03:09	11/08/22 11:38	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/08/22 03:09	11/08/22 11:38	7440-38-2	
Barium	**0.0079**	mg/L	0.0025	0.00098	1	11/08/22 03:09	11/08/22 11:38	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	11/08/22 03:09	11/08/22 11:38	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/08/22 03:09	11/08/22 11:38	7440-43-9	
Chromium	**0.0028**	mg/L	0.0025	0.00050	1	11/08/22 03:09	11/08/22 11:38	7440-47-3	
Cobalt	**0.0010J**	mg/L	0.0025	0.00081	1	11/08/22 03:09	11/08/22 11:38	7440-48-4	

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30534938

Sample: TW-27 **Lab ID: 30534938007** Collected: 11/02/22 12:30 Received: 11/02/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Copper	**0.0058**	mg/L	0.0025	0.00064	1	11/08/22 03:09	11/08/22 11:38	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/08/22 03:09	11/08/22 11:38	7439-92-1	
Nickel	**0.0062**	mg/L	0.0025	0.00065	1	11/08/22 03:09	11/08/22 11:38	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/08/22 03:09	11/08/22 11:38	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/08/22 03:09	11/08/22 11:38	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/08/22 03:09	11/08/22 11:38	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/08/22 03:09	11/08/22 11:38	7440-62-2	
Zinc	**0.0071**	mg/L	0.0050	0.0040	1	11/08/22 03:09	11/08/22 11:38	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/10/22 11:41	11/11/22 11:34	7439-97-6	M1,R1
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/07/22 07:30	11/07/22 22:58	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/07/22 07:30	11/07/22 22:58	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	113	%.	60-140		1	11/07/22 07:30	11/07/22 22:58	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		11/08/22 14:29		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		11/07/22 16:55		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/04/22 10:24	11/08/22 11:31		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**8.4J**	mg/L	25.0	4.7	1	11/08/22 12:47	11/08/22 16:03		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**10**	mg/L	3.0	0.67	1		11/04/22 17:22	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.055J**	mg/L	0.10	0.053	1		11/07/22 17:22	14797-55-8	
Nitrogen, NO2 plus NO3	**0.055J**	mg/L	0.10	0.053	1		11/07/22 17:22		

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30534938

Sample: TW-27 **Lab ID: 30534938007** Collected: 11/02/22 12:30 Received: 11/02/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/16/22 20:51	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		11/03/22 12:09	14797-65-0	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534938

QC Batch: 544851
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30534938001, 30534938002, 30534938003, 30534938004

METHOD BLANK: 2644825 Matrix: Water
Associated Lab Samples: 30534938001, 30534938002, 30534938003, 30534938004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	11/08/22 17:27	
Iron	mg/L	0.050 U	0.050	0.035	11/08/22 17:27	
Magnesium	mg/L	0.50 U	0.50	0.047	11/08/22 17:27	
Manganese	mg/L	0.0050 U	0.0050	0.0027	11/08/22 17:27	
Potassium	mg/L	0.50 U	0.50	0.26	11/08/22 17:27	
Sodium	mg/L	0.50 U	0.50	0.34	11/08/22 17:27	

LABORATORY CONTROL SAMPLE: 2644826

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	43.5	109	80-120	
Iron	mg/L	2	2.2	108	80-120	
Magnesium	mg/L	20	21.3	106	80-120	
Manganese	mg/L	2	2.1	105	80-120	
Potassium	mg/L	20	21.5	107	80-120	
Sodium	mg/L	20	21.5	108	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2644877 2644878

Parameter	Units	30532667002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	0.99	40	40	44.4	44.3	109	108	80-120	0	20	
Iron	mg/L	0.050 U	2	2	2.2	2.2	108	108	80-120	1	20	
Magnesium	mg/L	0.40J	20	20	21.7	21.5	106	106	80-120	1	20	
Manganese	mg/L	0.0048J	2	2	2.1	2.1	105	105	80-120	0	20	
Potassium	mg/L	0.55	20	20	22.1	22.0	108	107	80-120	0	20	
Sodium	mg/L	1.5	20	20	23.0	22.9	108	107	80-120	0	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534938

QC Batch: 545397
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30534938005, 30534938006, 30534938007

METHOD BLANK: 2647718 Matrix: Water
Associated Lab Samples: 30534938005, 30534938006, 30534938007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	11/08/22 15:28	
Iron	mg/L	0.050 U	0.050	0.035	11/08/22 15:28	
Magnesium	mg/L	0.50 U	0.50	0.047	11/08/22 15:28	
Manganese	mg/L	0.0050 U	0.0050	0.0027	11/08/22 15:28	
Potassium	mg/L	0.50 U	0.50	0.26	11/08/22 15:28	
Sodium	mg/L	0.50 U	0.50	0.34	11/08/22 15:28	

LABORATORY CONTROL SAMPLE: 2647719

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	42.8	107	80-120	
Iron	mg/L	2	2.2	109	80-120	
Magnesium	mg/L	20	21.5	107	80-120	
Manganese	mg/L	2	2.1	106	80-120	
Potassium	mg/L	20	21.3	106	80-120	
Sodium	mg/L	20	21.3	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2647823 2647824

Parameter	Units	30535655009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	ND	40	40	41.3	43.2	103	108	80-120	5	20	
Iron	mg/L	ND	2	2	2.2	2.2	109	108	80-120	1	20	
Magnesium	mg/L	ND	20	20	21.5	21.3	108	106	80-120	1	20	
Manganese	mg/L	ND	2	2	2.1	2.1	106	105	80-120	1	20	
Potassium	mg/L	ND	20	20	21.3	21.1	106	105	80-120	1	20	
Sodium	mg/L	ND	20	20	21.2	21.0	106	105	80-120	1	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534938

QC Batch: 545073
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30534938001, 30534938002, 30534938003, 30534938004, 30534938005, 30534938006, 30534938007

METHOD BLANK: 2646281 Matrix: Water
Associated Lab Samples: 30534938001, 30534938002, 30534938003, 30534938004, 30534938005, 30534938006, 30534938007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	11/08/22 23:18	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	11/08/22 23:18	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	11/08/22 23:18	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	11/08/22 23:18	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	11/08/22 23:18	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	11/08/22 23:18	

LABORATORY CONTROL SAMPLE: 2646282

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	44.8	112	80-120	
Iron, Dissolved	mg/L	2	2.2	111	80-120	
Magnesium, Dissolved	mg/L	20	22.0	110	80-120	
Manganese, Dissolved	mg/L	2	2.1	107	80-120	
Potassium, Dissolved	mg/L	20	22.7	114	80-120	
Sodium, Dissolved	mg/L	20	22.8	114	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2646354 2646355

Parameter	Units	30534455001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	19000 ug/L	40	40	63.8	61.1	112	105	80-120	4	20	
Iron, Dissolved	mg/L	ND	2	2	2.2	2.1	107	105	80-120	2	20	
Magnesium, Dissolved	mg/L	18300 ug/L	20	20	40.6	40.4	111	110	80-120	1	20	
Manganese, Dissolved	mg/L	1040 ug/L	2	2	3.2	3.1	106	104	80-120	1	20	
Potassium, Dissolved	mg/L	4090 ug/L	20	20	27.2	27.0	116	115	80-120	1	20	
Sodium, Dissolved	mg/L	32700 ug/L	20	20	55.9	55.8	116	115	80-120	0	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534938

QC Batch: 544775
QC Batch Method: EPA 3020A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30534938001, 30534938002, 30534938003

METHOD BLANK: 2644606
Matrix: Water
Associated Lab Samples: 30534938001, 30534938002, 30534938003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00030	11/04/22 15:07	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	11/04/22 15:07	
Barium	mg/L	0.0025 U	0.0025	0.00098	11/04/22 15:07	
Beryllium	mg/L	0.00050 U	0.00050	0.00010	11/04/22 15:07	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	11/04/22 15:07	
Chromium	mg/L	0.0025 U	0.0025	0.00050	11/04/22 15:07	
Cobalt	mg/L	0.0025 U	0.0025	0.00081	11/04/22 15:07	
Copper	mg/L	0.0025 U	0.0025	0.00064	11/04/22 15:07	
Lead	mg/L	0.00050 U	0.00050	0.00025	11/04/22 15:07	
Nickel	mg/L	0.0025 U	0.0025	0.00065	11/04/22 15:07	
Selenium	mg/L	0.0025 U	0.0025	0.00084	11/04/22 15:07	
Silver	mg/L	0.0025 U	0.0025	0.00053	11/04/22 15:07	
Thallium	mg/L	0.00050 U	0.00050	0.000081	11/04/22 15:07	
Vanadium	mg/L	0.0025 U	0.0025	0.0012	11/04/22 15:07	
Zinc	mg/L	0.0050 U	0.0050	0.0040	11/04/22 15:07	

LABORATORY CONTROL SAMPLE: 2644607

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.022	109	80-120	
Arsenic	mg/L	0.1	0.10	101	80-120	
Barium	mg/L	0.1	0.10	102	80-120	
Beryllium	mg/L	0.02	0.018	92	80-120	
Cadmium	mg/L	0.02	0.020	99	80-120	
Chromium	mg/L	0.1	0.11	105	80-120	
Cobalt	mg/L	0.1	0.11	106	80-120	
Copper	mg/L	0.1	0.11	106	80-120	
Lead	mg/L	0.02	0.020	102	80-120	
Nickel	mg/L	0.1	0.11	106	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	
Silver	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.02	0.020	102	80-120	
Vanadium	mg/L	0.1	0.10	105	80-120	
Zinc	mg/L	0.2	0.20	102	80-120	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534938

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2644670 2644671

Parameter	Units	30531863001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.02	0.02	0.022	0.023	112	113	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	105	102	75-125	2	20	
Barium	mg/L	0.033	0.1	0.1	0.13	0.14	101	103	75-125	1	20	
Beryllium	mg/L	ND	0.02	0.02	0.019	0.019	93	95	75-125	3	20	
Cadmium	mg/L	ND	0.02	0.02	0.020	0.020	101	101	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.11	107	107	75-125	0	20	
Cobalt	mg/L	ND	0.1	0.1	0.11	0.11	106	108	75-125	1	20	
Copper	mg/L	ND	0.1	0.1	0.11	0.11	105	106	75-125	1	20	
Lead	mg/L	ND	0.02	0.02	0.021	0.021	105	105	75-125	1	20	
Nickel	mg/L	0.0027	0.1	0.1	0.11	0.11	106	106	75-125	0	20	
Selenium	mg/L	0.0010J	0.1	0.1	0.10	0.097	99	96	75-125	3	20	
Silver	mg/L	ND	0.1	0.1	0.10	0.10	102	103	75-125	0	20	
Thallium	mg/L	ND	0.02	0.02	0.014	0.014	71	71	75-125	1	20	M1
Vanadium	mg/L	ND	0.1	0.1	0.11	0.11	108	108	75-125	0	20	
Zinc	mg/L	ND	0.2	0.2	0.21	0.21	103	104	75-125	0	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534938

QC Batch: 545328
QC Batch Method: EPA 3020A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30534938004, 30534938005, 30534938006, 30534938007

METHOD BLANK: 2647482
Matrix: Water
Associated Lab Samples: 30534938004, 30534938005, 30534938006, 30534938007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00041J	0.00050	0.00030	11/08/22 11:18	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	11/08/22 11:18	
Barium	mg/L	0.0025 U	0.0025	0.00098	11/08/22 11:18	
Beryllium	mg/L	0.00050 U	0.00050	0.00010	11/08/22 11:18	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	11/08/22 11:18	
Chromium	mg/L	0.0025 U	0.0025	0.00050	11/08/22 11:18	
Cobalt	mg/L	0.0025 U	0.0025	0.00081	11/08/22 11:18	
Copper	mg/L	0.0025 U	0.0025	0.00064	11/08/22 11:18	
Lead	mg/L	0.00050 U	0.00050	0.00025	11/08/22 11:18	
Nickel	mg/L	0.0025 U	0.0025	0.00065	11/08/22 11:18	
Selenium	mg/L	0.0025 U	0.0025	0.00084	11/08/22 11:18	
Silver	mg/L	0.0025 U	0.0025	0.00053	11/08/22 11:18	
Thallium	mg/L	0.00050 U	0.00050	0.000081	11/08/22 11:18	
Vanadium	mg/L	0.0025 U	0.0025	0.0012	11/08/22 11:18	
Zinc	mg/L	0.0050 U	0.0050	0.0040	11/08/22 11:18	

LABORATORY CONTROL SAMPLE: 2647483

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.022	111	80-120	
Arsenic	mg/L	0.1	0.10	104	80-120	
Barium	mg/L	0.1	0.10	101	80-120	
Beryllium	mg/L	0.02	0.021	105	80-120	
Cadmium	mg/L	0.02	0.020	100	80-120	
Chromium	mg/L	0.1	0.11	106	80-120	
Cobalt	mg/L	0.1	0.11	106	80-120	
Copper	mg/L	0.1	0.11	107	80-120	
Lead	mg/L	0.02	0.021	104	80-120	
Nickel	mg/L	0.1	0.11	107	80-120	
Selenium	mg/L	0.1	0.10	105	80-120	
Silver	mg/L	0.1	0.10	104	80-120	
Thallium	mg/L	0.02	0.021	104	80-120	
Vanadium	mg/L	0.1	0.11	106	80-120	
Zinc	mg/L	0.2	0.21	104	80-120	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534938

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2647503 2647504

Parameter	Units	30535386004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00050 U	0.02	0.02	0.021	0.022	106	109	75-125	3	20	
Arsenic	mg/L	0.0025 U	0.1	0.1	0.10	0.10	102	102	75-125	0	20	
Barium	mg/L	0.036	0.1	0.1	0.13	0.13	94	95	75-125	1	20	
Beryllium	mg/L	0.00020J	0.02	0.02	0.022	0.021	107	104	75-125	2	20	
Cadmium	mg/L	0.00050 U	0.02	0.02	0.020	0.020	98	99	75-125	1	20	
Chromium	mg/L	0.013	0.1	0.1	0.11	0.11	95	94	75-125	1	20	
Cobalt	mg/L	0.0019J	0.1	0.1	0.11	0.11	106	105	75-125	1	20	
Copper	mg/L	0.0018J	0.1	0.1	0.11	0.11	106	105	75-125	1	20	
Lead	mg/L	0.041	0.02	0.02	0.021	0.021	-104	-102	75-125	1	20	M1
Nickel	mg/L	0.0034	0.1	0.1	0.11	0.11	106	105	75-125	1	20	
Selenium	mg/L	0.0025 U	0.1	0.1	0.10	0.10	102	101	75-125	1	20	
Silver	mg/L	0.0025 U	0.1	0.1	0.10	0.10	102	102	75-125	0	20	
Thallium	mg/L	0.00050 U	0.02	0.02	0.013	0.013	67	65	75-125	3	20	M1
Vanadium	mg/L	0.0025 U	0.1	0.1	0.11	0.10	105	105	75-125	0	20	
Zinc	mg/L	0.0054	0.2	0.2	0.21	0.21	102	104	75-125	2	20	

SAMPLE DUPLICATE: 2647510

Parameter	Units	30528062002 Result	Dup Result	RPD	Max RPD	Qualifiers
Antimony	mg/L	0.00086	0.00070	20	20	
Arsenic	mg/L	0.0059	0.0052	13	20	
Barium	mg/L	0.21	0.21	2	20	
Beryllium	mg/L	0.00035J	0.00027J		20	
Cadmium	mg/L	0.00041J	0.00042J		20	
Chromium	mg/L	0.00099J	0.0011J		20	
Cobalt	mg/L	0.027	0.027	1	20	
Copper	mg/L	0.0017J	0.0017J		20	
Lead	mg/L	0.00051	0.00046J		20	
Nickel	mg/L	0.0059	0.0058	2	20	
Selenium	mg/L	0.0025J	0.0024J		20	
Silver	mg/L	0.0025 U	0.0025 U		20	
Thallium	mg/L	0.000082J	0.00050 U		20	
Vanadium	mg/L	0.011	0.011	3	20	
Zinc	mg/L	0.0050 U	0.0050 U		20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534938

QC Batch: 545853
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30534938001, 30534938002, 30534938003, 30534938004

METHOD BLANK: 2650057 Matrix: Water
Associated Lab Samples: 30534938001, 30534938002, 30534938003, 30534938004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	11/10/22 11:38	

LABORATORY CONTROL SAMPLE: 2650058

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.0086	86	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2650059 2650060

Parameter	Units	30534444001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00020 U	0.01	0.01	0.0092	0.0091	92	91	80-120	0	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534938

QC Batch: 546040
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30534938005, 30534938006, 30534938007

METHOD BLANK: 2651516 Matrix: Water
Associated Lab Samples: 30534938005, 30534938006, 30534938007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	11/11/22 11:21	

LABORATORY CONTROL SAMPLE: 2651517

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.02	0.018	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2651518 2651519

Parameter	Units	30534938007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00020 U	0.02	0.02	0.019	0.015	96	76	80-120	23	20	M1,R1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534938

QC Batch: 545027
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30534938001, 30534938002, 30534938003, 30534938004, 30534938005, 30534938006, 30534938007

METHOD BLANK: 2646150 Matrix: Water
Associated Lab Samples: 30534938001, 30534938002, 30534938003, 30534938004, 30534938005, 30534938006, 30534938007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	11/07/22 19:35	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	11/07/22 19:35	
1,1,1,2-Tetrachloroethane (S)	%.	106	60-140		11/07/22 19:35	

LABORATORY CONTROL SAMPLE: 2646151

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.25	101	85-115	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.22	88	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			109	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2646152 2646153

Parameter	Units	30534695001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.33	0.41	0.41	0.67	0.69	82	88	60-140	3	25	
1,2-Dibromoethane (EDB)	ug/L	ND	0.41	0.41	0.31	0.35	74	83	60-140	11	25	
1,1,1,2-Tetrachloroethane (S)	%.						83	88	60-140			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534938

QC Batch: 545203
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30534938001, 30534938002, 30534938003, 30534938004, 30534938005, 30534938006, 30534938007

METHOD BLANK: 2646598 Matrix: Water
Associated Lab Samples: 30534938001, 30534938002, 30534938003, 30534938004, 30534938005, 30534938006, 30534938007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	11/08/22 13:06	1c

LABORATORY CONTROL SAMPLE: 2646599

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	21.0	105	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2646600 2646601

Parameter	Units	30534665001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	218	50	50	246	244	56	52	85-115	1	20	ML

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534938

QC Batch: 544666
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30534938005

METHOD BLANK: 2644106
Matrix: Water
Associated Lab Samples: 30534938005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	11/04/22 18:28	

LABORATORY CONTROL SAMPLE: 2644107

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	989	99	85-115	

SAMPLE DUPLICATE: 2644109

Parameter	Units	30534444001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	154	149	3	5	

SAMPLE DUPLICATE: 2644110

Parameter	Units	30534546008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	26.0	25.0	4	5	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534938

QC Batch: 544669
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30534938001, 30534938002, 30534938003, 30534938004

METHOD BLANK: 2644113 Matrix: Water
Associated Lab Samples: 30534938001, 30534938002, 30534938003, 30534938004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	11/04/22 19:38	

LABORATORY CONTROL SAMPLE: 2644114

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	957	96	85-115	

SAMPLE DUPLICATE: 2644115

Parameter	Units	30534444002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	131	125	5	5	

SAMPLE DUPLICATE: 2644116

Parameter	Units	30534938004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	204	214	5	5	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534938

QC Batch: 545029
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30534938006, 30534938007

METHOD BLANK: 2646154
Matrix: Water
Associated Lab Samples: 30534938006, 30534938007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	11/07/22 16:55	

LABORATORY CONTROL SAMPLE: 2646155

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	987	99	85-115	

SAMPLE DUPLICATE: 2646156

Parameter	Units	30534637001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	671	666	1	5	

SAMPLE DUPLICATE: 2646157

Parameter	Units	30535153001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	301	309	3	5	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534938

QC Batch: 544655
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30534938001, 30534938004, 30534938005, 30534938006

METHOD BLANK: 2644066 Matrix: Water
Associated Lab Samples: 30534938001, 30534938004, 30534938005, 30534938006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	11/08/22 10:29	

LABORATORY CONTROL SAMPLE: 2644067

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	3.9	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2644068 2644069

Parameter	Units	30534645001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	3.2	4	4	6.8	7.0	89	94	90-110	3	20	ML

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2644070 2644071

Parameter	Units	30534985004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.42	4	4	4.2	4.2	96	96	90-110	0	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534938

QC Batch: 544656
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30534938007

METHOD BLANK: 2644072 Matrix: Water
Associated Lab Samples: 30534938007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	11/08/22 11:27	

LABORATORY CONTROL SAMPLE: 2644073

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	3.9	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2644074 2644075

Parameter	Units	30534938007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	3.9	3.9	96	97	90-110	0	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534938

QC Batch: 545570
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30534938002, 30534938003

METHOD BLANK: 2648870
Matrix: Water
Associated Lab Samples: 30534938002, 30534938003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	11/09/22 11:43	

LABORATORY CONTROL SAMPLE: 2648871

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2648872 2648873

Parameter	Units	30535087001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.15	4	4	4.1	4.1	99	99	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2648874 2648875

Parameter	Units	30535233001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	ND	4	4	4.0	3.9	100	97	90-110	3	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534938

QC Batch: 545379
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30534938001, 30534938002, 30534938003, 30534938004, 30534938005, 30534938006, 30534938007

METHOD BLANK: 2647669 Matrix: Water
Associated Lab Samples: 30534938001, 30534938002, 30534938003, 30534938004, 30534938005, 30534938006, 30534938007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/08/22 15:58	

METHOD BLANK: 2647671 Matrix: Water
Associated Lab Samples: 30534938001, 30534938002, 30534938003, 30534938004, 30534938005, 30534938006, 30534938007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/08/22 15:58	3c

LABORATORY CONTROL SAMPLE: 2647670

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	323	108	90-110	

LABORATORY CONTROL SAMPLE: 2647672

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	326	109	90-110	3c

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2647673 2647674

Parameter	Units	30535111001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	5450	1500	1500	6860	6840	94	93	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2647675 2647676

Parameter	Units	30534938007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	8.4J	150	150	173	168	110	106	90-110	3	10	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534938

QC Batch: 544857
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30534938001, 30534938002, 30534938003, 30534938004, 30534938005, 30534938006, 30534938007

METHOD BLANK: 2644852 Matrix: Water
Associated Lab Samples: 30534938001, 30534938002, 30534938003, 30534938004, 30534938005, 30534938006, 30534938007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	11/04/22 17:08	

LABORATORY CONTROL SAMPLE: 2644853

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.9	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2645359 2645360

Parameter	Units	30534444003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	63.4	20	20	81.5	82.3	90	95	85-115	1	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534938

QC Batch: 545209
QC Batch Method: SM 4500NO3-F-2011
Analysis Method: SM 4500NO3-F-2011
Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30534938001, 30534938002, 30534938003, 30534938004

METHOD BLANK: 2646615 Matrix: Water
Associated Lab Samples: 30534938001, 30534938002, 30534938003, 30534938004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	11/07/22 16:35	

LABORATORY CONTROL SAMPLE: 2646616

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	3.9	98	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2646617 2646618

Parameter	Units	30534605002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	17.4	5	5	29.5	27.9	242	209	85-115	6	20	MH

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534938

QC Batch: 545210
QC Batch Method: SM 4500NO3-F-2011
Analysis Method: SM 4500NO3-F-2011
Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30534938005, 30534938006, 30534938007

METHOD BLANK: 2646619 Matrix: Water
Associated Lab Samples: 30534938005, 30534938006, 30534938007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	11/07/22 17:14	

LABORATORY CONTROL SAMPLE: 2646620

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	3.9	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2646621 2646622

Parameter	Units	30534938005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.096J	5	5	4.0	4.1	79	79	85-115	0	20	ML

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534938

QC Batch: 545541
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30534938001, 30534938002, 30534938003, 30534938004, 30534938005, 30534938006, 30534938007

METHOD BLANK: 2648396
Matrix: Water
Associated Lab Samples: 30534938001, 30534938002, 30534938003, 30534938004, 30534938005, 30534938006, 30534938007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	11/16/22 20:32	

LABORATORY CONTROL SAMPLE: 2648397

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	29.8	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2648398 2648399

Parameter	Units	30534444001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	12.8	20	20	35.5	34.4	113	108	85-115	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2648400 2648401

Parameter	Units	30535063001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	31900	20000	20000	53400	54400	108	112	85-115	2	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30534938

QC Batch: 544463 | Analysis Method: SM 4500NO2-B-2011
QC Batch Method: SM 4500NO2-B-2011 | Analysis Description: SM4500-NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30534938001, 30534938002, 30534938003, 30534938004, 30534938005, 30534938006, 30534938007

METHOD BLANK: 2642623 Matrix: Water
Associated Lab Samples: 30534938001, 30534938002, 30534938003, 30534938004, 30534938005, 30534938006, 30534938007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	11/03/22 12:00	

LABORATORY CONTROL SAMPLE: 2642624

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.10	102	90-110	

MATRIX SPIKE SAMPLE: 2642626

Parameter	Units	30534935001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	ND	0.1	0.096	96	85-115	

SAMPLE DUPLICATE: 2642625

Parameter	Units	30534935001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	ND	0.010 U		20	

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QUALIFIERS

Project: MLF-Fall 2022
Pace Project No.: 30534938

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30534938001
[1] Sample pH for 8011 is 7

Sample: 30534938002
[1] Sample pH for 8011 is 7

Sample: 30534938003
[1] Sample pH for 8011 is 7

Sample: 30534938004
[1] Sample pH for 8011 is 7

Sample: 30534938005
[1] Sample pH for 8011 is 7

Sample: 30534938006
[1] Sample pH for 8011 is 7

Sample: 30534938007
[1] Sample pH for 8011 is 7

ANALYTE QUALIFIERS

1c Alkalinity TV: 0.00 mg/L

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QUALIFIERS

Project: MLF-Fall 2022
Pace Project No.: 30534938

ANALYTE QUALIFIERS

2c	Alkalinity TV: 2.00 mg/L
3c	pH was adjusted to <2 at bench
B	Analyte was detected in the associated method blank.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-Fall 2022
Pace Project No.: 30534938

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30534938001	**TW-2**	EPA 3010A	544851	EPA 6010D	545626
30534938002	**TW-2A**	EPA 3010A	544851	EPA 6010D	545626
30534938003	**TW-3**	EPA 3010A	544851	EPA 6010D	545626
30534938004	**TW-3A**	EPA 3010A	544851	EPA 6010D	545626
30534938005	**TW-4**	EPA 3010A	545397	EPA 6010D	545623
30534938006	**TW-4B**	EPA 3010A	545397	EPA 6010D	545623
30534938007	**TW-27**	EPA 3010A	545397	EPA 6010D	545623
30534938001	**TW-2**	EPA 3010A	545073	EPA 6010D	545635
30534938002	**TW-2A**	EPA 3010A	545073	EPA 6010D	545635
30534938003	**TW-3**	EPA 3010A	545073	EPA 6010D	545635
30534938004	**TW-3A**	EPA 3010A	545073	EPA 6010D	545635
30534938005	**TW-4**	EPA 3010A	545073	EPA 6010D	545635
30534938006	**TW-4B**	EPA 3010A	545073	EPA 6010D	545635
30534938007	**TW-27**	EPA 3010A	545073	EPA 6010D	545635
30534938001	**TW-2**	EPA 3020A	544775	EPA 6020B	544886
30534938002	**TW-2A**	EPA 3020A	544775	EPA 6020B	544886
30534938003	**TW-3**	EPA 3020A	544775	EPA 6020B	544886
30534938004	**TW-3A**	EPA 3020A	545328	EPA 6020B	545419
30534938005	**TW-4**	EPA 3020A	545328	EPA 6020B	545419
30534938006	**TW-4B**	EPA 3020A	545328	EPA 6020B	545419
30534938007	**TW-27**	EPA 3020A	545328	EPA 6020B	545419
30534938001	**TW-2**	EPA 7470A	545853	EPA 7470A	545969
30534938002	**TW-2A**	EPA 7470A	545853	EPA 7470A	545969
30534938003	**TW-3**	EPA 7470A	545853	EPA 7470A	545969
30534938004	**TW-3A**	EPA 7470A	545853	EPA 7470A	545969
30534938005	**TW-4**	EPA 7470A	546040	EPA 7470A	546256
30534938006	**TW-4B**	EPA 7470A	546040	EPA 7470A	546256
30534938007	**TW-27**	EPA 7470A	546040	EPA 7470A	546256
30534938001	**TW-2**	EPA 8011	545027	EPA 8011	545164
30534938002	**TW-2A**	EPA 8011	545027	EPA 8011	545164
30534938003	**TW-3**	EPA 8011	545027	EPA 8011	545164
30534938004	**TW-3A**	EPA 8011	545027	EPA 8011	545164
30534938005	**TW-4**	EPA 8011	545027	EPA 8011	545164
30534938006	**TW-4B**	EPA 8011	545027	EPA 8011	545164
30534938007	**TW-27**	EPA 8011	545027	EPA 8011	545164
30534938001	**TW-2**	SM 2320B-2011	545203		
30534938002	**TW-2A**	SM 2320B-2011	545203		
30534938003	**TW-3**	SM 2320B-2011	545203		
30534938004	**TW-3A**	SM 2320B-2011	545203		
30534938005	**TW-4**	SM 2320B-2011	545203		
30534938006	**TW-4B**	SM 2320B-2011	545203		
30534938007	**TW-27**	SM 2320B-2011	545203		
30534938001	**TW-2**	SM 2540C-2011	544669		
30534938002	**TW-2A**	SM 2540C-2011	544669		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-Fall 2022
Pace Project No.: 30534938

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30534938003	**TW-3**	SM 2540C-2011	544669		
30534938004	**TW-3A**	SM 2540C-2011	544669		
30534938005	**TW-4**	SM 2540C-2011	544666		
30534938006	**TW-4B**	SM 2540C-2011	545029		
30534938007	**TW-27**	SM 2540C-2011	545029		
30534938001	**TW-2**	EPA 350.1	544655	EPA 350.1	544764
30534938002	**TW-2A**	EPA 350.1	545570	EPA 350.1	545620
30534938003	**TW-3**	EPA 350.1	545570	EPA 350.1	545620
30534938004	**TW-3A**	EPA 350.1	544655	EPA 350.1	544764
30534938005	**TW-4**	EPA 350.1	544655	EPA 350.1	544764
30534938006	**TW-4B**	EPA 350.1	544655	EPA 350.1	544764
30534938007	**TW-27**	EPA 350.1	544656	EPA 350.1	544765
30534938001	**TW-2**	EPA 410.4	545379	EPA 410.4	545497
30534938002	**TW-2A**	EPA 410.4	545379	EPA 410.4	545497
30534938003	**TW-3**	EPA 410.4	545379	EPA 410.4	545497
30534938004	**TW-3A**	EPA 410.4	545379	EPA 410.4	545497
30534938005	**TW-4**	EPA 410.4	545379	EPA 410.4	545497
30534938006	**TW-4B**	EPA 410.4	545379	EPA 410.4	545497
30534938007	**TW-27**	EPA 410.4	545379	EPA 410.4	545497
30534938001	**TW-2**	SM 4500-Cl-E-2011	544857		
30534938002	**TW-2A**	SM 4500-Cl-E-2011	544857		
30534938003	**TW-3**	SM 4500-Cl-E-2011	544857		
30534938004	**TW-3A**	SM 4500-Cl-E-2011	544857		
30534938005	**TW-4**	SM 4500-Cl-E-2011	544857		
30534938006	**TW-4B**	SM 4500-Cl-E-2011	544857		
30534938007	**TW-27**	SM 4500-Cl-E-2011	544857		
30534938001	**TW-2**	SM 4500NO3-F-2011	545209		
30534938002	**TW-2A**	SM 4500NO3-F-2011	545209		
30534938003	**TW-3**	SM 4500NO3-F-2011	545209		
30534938004	**TW-3A**	SM 4500NO3-F-2011	545209		
30534938005	**TW-4**	SM 4500NO3-F-2011	545210		
30534938006	**TW-4B**	SM 4500NO3-F-2011	545210		
30534938007	**TW-27**	SM 4500NO3-F-2011	545210		
30534938001	**TW-2**	EPA 9038	545541		
30534938002	**TW-2A**	EPA 9038	545541		
30534938003	**TW-3**	EPA 9038	545541		
30534938004	**TW-3A**	EPA 9038	545541		
30534938005	**TW-4**	EPA 9038	545541		
30534938006	**TW-4B**	EPA 9038	545541		
30534938007	**TW-27**	EPA 9038	545541		
30534938001	**TW-2**	SM 4500NO2-B-2011	544463		
30534938002	**TW-2A**	SM 4500NO2-B-2011	544463		
30534938003	**TW-3**	SM 4500NO2-B-2011	544463		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-Fall 2022
Pace Project No.: 30534938

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30534938004	**TW-3A**	SM 4500NO2-B-2011	544463		
30534938005	**TW-4**	SM 4500NO2-B-2011	544463		
30534938006	**TW-4B**	SM 4500NO2-B-2011	544463		
30534938007	**TW-27**	SM 4500NO2-B-2011	544463		

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

WO#: 30534938

30534938

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF-FALL 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals ①	Total + Diss. Metals ②	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO4, COD		Method 8011 - DBCP + EDB			
1	TW-2	8	11.1.22	1555	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓			
2	TW-2A	↓	↓	1520	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
3	TW-3	↓	↓	1640	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
4	TW-3A	↓	↓	1715	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
5	TW-4	↓	11.2.22	1110	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
6	TW-4B	↓	↓	1145	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
7	TW-27	↓	↓	1230	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
8																			
9																			
10																			
11																			
12																			

	Signature	Date	Time	Comments
Relinquished by	SA Brown	11.2.22		① 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn
Received by	TB/PACE	11.2.22	1351	① 7470 - Hg
Relinquished by	TB/PACE	11.2.22	1609	② 6010 - Ca, Fe, Mg, MN, K, Na
Received by	RDS PACE	11.2.22	1815	PACE-WV-METALS / PACE-G-BURL-WET CHEM +
Relinquished by	RDS PACE	11.2.22	2215	LEVEL 2 REPORT 8011
Received by	[illegible]	11.3.22	0215	SEE ATTACHED LIST OF METHODS / PARAMETERS /

Cooler Temp on Arrival: _____ Deg. C LAB Rev. Aug. 2018

Millersville Landfill, Anne Arundel County, MD		
	Pace, Beaver, WV	
	Method 6020 - ICPMS	
Parameter	RL	MDL
	(mg/l)	
TOTAL METALS - mg/l		
Antimony	0.0005	
Arsenic	0.0025	0.0002473
Barium	0.0025	
Beryllium	0.0005	
Cadmium	0.0005	
Chromium	0.0025	
Cobalt	0.0025	
Copper	0.0025	
Lead	0.0005	
Nickel	0.0025	
Selenium	0.0025	
Silver	0.0025	
Thallium	0.0005	
Vanadium	0.0025	
Zinc	0.005	
	Pace, Beaver, WV	
TOTAL MERCURY - mg/l	Method 7470A	
Mercury	0.0005	0.00025
	Pace, Beaver, WV	
TOTAL AND DISSOLVED METALS - mg/l	Method 6010 - ICP	
Calcium	0.5	0.028
Iron	0.05	0.0076
Magnesium	0.5	0.047
Manganese	0.005	0.00043
Potassium	0.5	0.19
Sodium	0.5	0.148
	Pace - Greensburg, PA	
VOLATILE ORGANICS - ug/l	Method 8011 - ug/l	
DBCP	0.041	
EDB	0.041	
GENERAL CHEMISTRY - mg/l	Pace - Greensburg, PA	
Alkalinity - SM 2320B	10	1
Ammonia - EPA 350.1	0.1	0.0445
COD - EPA 410.4	25	4.6532
Chloride - EPA 300.0	3	0.06683
Hardness - 2340B		
Nitrate - EPA 300.0	0.1	0.0238
Sulfate - EPA 300.0	10	4.6702
Total dissolved solids - SM2540C	10	10

WO#: 30534938
PM: DAP Due Date: 11/17/22
CLIENT: ENV MONITOR

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-GBUR-0088 v02_Sample Condition Upon Receipt-Pittsburgh
	Effective Date: 10/03/2022

WO#: 30534938
PM: DAP Due Date: 11/17/22
CLIENT: ENV MONITOR

Client Name: EMA

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking Number:

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

Thermometer Used: 16 **Type of Ice:** Wet Blue None

Cooler Temperature: Observed Temp 3.2 °C Correction Factor: +0.2 °C Final Temp: 3.4 °C
Temp should be above freezing to 6°C

Examined By	
Labeled By	
Temped By	

Comments:	Yes	No	NA	pH paper Lot# 1070221	D.P.D. Residual Chlorine Lot #
Chain of Custody Present	✓			1.	
Chain of Custody Filled Out:	✓			2.	
-Were client corrections present on COC		✓			
Chain of Custody Relinquished	✓			3.	
Sampler Name & Signature on COC:		✓		4.	
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.	
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):	✓			7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used:	✓			10.	
-Pace Containers Used	✓				
Containers Intact:	✓			11.	
Orthophosphate field filtered:			✓	12.	
Hex Cr Aqueous samples field filtered:			✓	13.	
Organic Samples checked for dechlorination			✓	14:	
Filtered volume received for dissolved tests:			✓	15:	
All containers checked for preservation: exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix	✓			16.	
All containers meet method preservation requirements:	✓			Initial when completed:	Date/Time of Preservation:
				Lot# of added Preservative:	
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:		✓		18.	
Trip Blank Custody Seals Present			✓		
Rad Samples Screened <0.5 mrem/hr.	✓			Initial when completed:	Date: 11-3-22 / Survey Meter SN: 1563

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Qualtrax ID: 55680

WO# : 30534938

30534938

LIMS30 Internal Shipping Manifest

COOLER 22

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	22	Cooler temp (rcvd) °C	1.2
Packaged on Ice (Y/N)	Yes	Correction Factor	0
Shipping Method	Courier	Cooler temp (corr) °C	1.2
Tracking #	N/A	IR GUN ID	23
PWS* Drinking water?	No	Received on ice?	YES

* If sample is from a PWS, the PWSID can be found in LIMS30

11

	Signature	Location	Date	Time
Relinquished	[illegible]	GBUR	11-3-22	1920
Received	[illegible]	BEAV	11-4-22	430
Relinquished				
Received				
Relinquished				
Received				

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	11/3/2022	30534938001 BP3N2/3	BP3N	30534938001	30534938
MF	11/3/2022	30534938001 BP3N3/3	BP3N	30534938001	30534938
MF	11/3/2022	30534938006 BP3N2/3	BP3N	30534938006	30534938
MF	11/3/2022	30534938006 BP3N3/3	BP3N	30534938006	30534938
MF	11/3/2022	30534938003 BP3N3/3	BP3N	30534938003	30534938
MF	11/3/2022	30534938001 BP3N1/3	BP3N	30534938001	30534938
MF	11/3/2022	30534938004 BP3N1/3	BP3N	30534938004	30534938
MF	11/3/2022	30534938002 BP3N2/3	BP3N	30534938002	30534938
MF	11/3/2022	30534938003 BP3N2/3	BP3N	30534938003	30534938
MF	11/3/2022	30534938002 BP3N3/3	BP3N	30534938002	30534938
MF	11/3/2022	30534938004 BP3N3/3	BP3N	30534938004	30534938
MF	11/3/2022	30534938003 BP3N1/3	BP3N	30534938003	30534938
MF	11/3/2022	30534935002 BP3N1/1	BP3N	30534935002	30534935
MF	11/3/2022	30534935004 BP3N1/1	BP3N	30534935004	30534935
MF	11/3/2022	30534935003 BP3N1/1	BP3N	30534935003	30534935
MF	11/3/2022	30534935001 BP3N1/1	BP3N	30534935001	30534935
MF	11/3/2022	30535062001 BP3N4/4	BP3N	30535062001	30535062
MF	11/3/2022	30535062001 BP3N3/4	BP3N	30535062001	30535062
MF	11/3/2022	30535062001 BP3N2/4	BP3N	30535062001	30535062
MF	11/3/2022	30535062001 BP3N1/4	BP3N	30535062001	30535062
MF	11/3/2022	30535071001 BP3N1/4	BP3N	30535071001	30535071
MF	11/3/2022	30535071001 BP3N2/4	BP3N	30535071001	30535071
MF	11/3/2022	30535071001 BP3N3/4	BP3N	30535071001	30535071
MF	11/3/2022	30535071001 BP3N4/4	BP3N	30535071001	30535071
MF	11/3/2022	30535015002 BP3N1/1	BP3N	30535015002	30535015
MF	11/3/2022	30535015010 BP3N1/1	BP3N	30535015010	30535015
MF	11/3/2022	30535015001 BP3N1/1	BP3N	30535015001	30535015
MF	11/3/2022	30535015005 BP3N1/1	BP3N	30535015005	30535015
MF	11/3/2022	30535015009 BP3N1/1	BP3N	30535015009	30535015
MF	11/3/2022	30535015006 BP3N1/1	BP3N	30535015006	30535015
MF	11/3/2022	30535015008 BP3N1/1	BP3N	30535015008	30535015
MF	11/3/2022	30535015007 BP3N1/1	BP3N	30535015007	30535015
MF	11/3/2022	30535015004 BP3N1/1	BP3N	30535015004	30535015

LIMS30 Internal Shipping Manifest

COOLER 22

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	22	Cooler temp (rcvd) °C	1.2
Packaged on Ice (Y/N)	Yes	Correction Factor	0
Shipping Method	Courier	Cooler temp (corr) °C	1.2
Tracking #	N/A	IR GUN ID	23
PWS* Drinking water?	No	Received on ice?	yes

11

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[signature]	GBUR	11-3-22	1920
Received	[signature]	BEAV	11-4-22	430
Relinquished				
Received				
Relinquished				
Received				

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	11/3/2022	30535015003 BP3N1/1	BP3N	30535015003	30535015
MF	11/3/2022	30535153001 BP3N1/1	BP3N	30535153001	30535153
MF	11/3/2022	30535172001 BP3N1/1	BP3N	30535172001	30535172
MF	11/3/2022	30534998007 BP3N1/1	BP3N	30534998007	30534998
MF	11/3/2022	30535002001 BP3U1/1	BP3U	30535002001	30535002
MF	11/3/2022	30535146007 BP3N1/1	BP3N	30535146007	30535146
MF	11/3/2022	30535005001 BP3N1/1	BP3N	30535005001	30535005
MF	11/3/2022	30535005001 BP3U1/1	BP3U	30535005001	30535005

WO#: 30534938
PM: DAP **Due Date: 11/17/22**
CLIENT: ENV MONITOR

LIMS73 Lab Sample Condition Upon Receipt (West V

Pace Analytical

Client Name: _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☑ Other: 3rd Party

Tracking #: _____

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 23 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** 1.2 °C Correction Factor: .0 °C Final Temp: 1.2 °C

Comments:

pH paper Lot#	Date and Initials of person examining contents
206722	CDW 11-4-22

	Yes	No	N/A	
Chain of Custody Present:				1.
Chain of Custody Filled Out:				2. Manifest
Chain of Custody Relinquished:				3.
Sampler Name & Signature on COC:				4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT				5. Lab Labeled by: NA Checked by: NA
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered: -pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓ ✓	13.
Filtered volume received for Dissolved tests:	✓			14.
All containers have been checked for preservation: exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix	✓			15.
All containers meet method preservation requirements:	✓			Initial when completed CDW Date: 11-4-22
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present:			✓	17.
Trip Blank Custody Seals Present:			✓	Initial when completed CDW Date: 11-4-22

Client Notification/ Resolution:
Person Contacted: _____ Date/Time: _____ Contacted By: _____
Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

***PM review** is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

LIMS30 Internal Shipping Manifest

COOLER 21

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	21	Cooler temp (rcvd) °C	.8
Packaged on Ice (Y/N)	Yes	Correction Factor	.0
Shipping Method	Courier	Cooler temp (corr) °C	.8
Tracking #	N/A	IR GUN ID	23
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

13

	Signature	Location	Date	Time
Relinquished	[illegible]	GBUR	11-3-22	1835
Received	[illegible]	BEAV	11-4-22	430
Relinquished				
Received				
Relinquished				
Received				

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	11/3/2022	30535091001 BG1U3/4	BG1U	30535091001	30535091
MF	11/3/2022	30535105001 BG1U1/1	BG1U	30535105001	30535105
MF	11/3/2022	30535044001 ZPLC1/2	ZPLC	30535044001	30535044
MF	11/3/2022	30535186001 WGFU1/1	WGFU	30535186001	30535186
MF	11/3/2022	30535190001 WGFU1/1	WGFU	30535190001	30535190
MF	11/3/2022	30535091003 JGFU1/2	JGFU	30535091003	30535091
MF	11/3/2022	30535091002 JGFU1/2	JGFU	30535091002	30535091
MF	11/3/2022	30534949001 WGFU1/1	WGFU	30534949001	30534949
MF	11/3/2022	30534950001 WGFU1/1	WGFU	30534950001	30534950
MF	11/3/2022	30534938005 BP3N1/3	BP3N	30534938005	30534938
MF	11/3/2022	30534938007 BP3N3/3	BP3N	30534938007	30534938
MF	11/3/2022	30534938007 BP3N2/3	BP3N	30534938007	30534938
MF	11/3/2022	30534938007 BP3N1/3	BP3N	30534938007	30534938
MF	11/3/2022	30534938002 BP3N1/3	BP3N	30534938002	30534938
MF	11/3/2022	30534938005 BP3N2/3	BP3N	30534938005	30534938
MF	11/3/2022	30534938005 BP3N3/3	BP3N	30534938005	30534938
MF	11/3/2022	30534938006 BP3N1/3	BP3N	30534938006	30534938
MF	11/3/2022	30534938004 BP3N2/3	BP3N	30534938004	30534938
MF	11/3/2022	30535164002 BP2N1/1	BP2N	30535164002	30535164
MF	11/3/2022	30535169005 CG3H1/1	CG3H	30535169005	30535169
MF	11/3/2022	30535169006 CG3H1/1	CG3H	30535169006	30535169
MF	11/3/2022	30535169001 CG3H1/1	CG3H	30535169001	30535169
MF	11/3/2022	30535169002 CG3H1/1	CG3H	30535169002	30535169
MF	11/3/2022	30535169003 GN1/1	GN1/	30535169003	30535169
MF	11/3/2022	30535169004 GN1/1	GN1/	30535169004	30535169
MF	11/3/2022	30535011001 BP3U1/1	BP3U	30535011001	30535011
MF	11/3/2022	30535011001 BP3N1/1	BP3N	30535011001	30535011
MF	11/3/2022	30535002001 BP3N1/1	BP3N	30535002001	30535002
MF	11/3/2022	30535007001 BP3U1/1	BP3U	30535007001	30535007
MF	11/3/2022	30535007001 BP3N1/1	BP3N	30535007001	30535007

LIMS73 Lab Sample Condition Upon Receipt (West Virginia)

Pace Analytical

Client Name: _____

Put label here prior to scanning

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☑ Other 3rd Party

Tracking #: _____

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 23 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** .8 °C Correction Factor: .0 °C Final Temp: .8 °C

Comments:

pH paper Lot#	Date and Initials of person examining contents
206722	CDW 11-4-22

	Yes	No	N/A	
Chain of Custody Present:				1.
Chain of Custody Filled Out:				2.
Chain of Custody Relinquished:				3. Manifest
Sampler Name & Signature on COC:				4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT				5. Lab Labeled by: NA Checked by: NA
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered: -pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓ ✓	13.
Filtered volume received for Dissolved tests:	✓			14.
All containers have been checked for preservation: exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix	✓			15.
All containers meet method preservation requirements:	✓			Initial when completed: CDW Date: 11-4-22
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present:			✓	17.
Trip Blank Custody Seals Present:			✓	
				Initial when completed: CDW Date: 11-4-22

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

November 21, 2022

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-Fall 2022
Pace Project No.: 30535386

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on November 03, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

David A. Pichette
david.pichette@pacelabs.com
(724)850-5617
Project Manager

Enclosures

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Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: MLF-Fall 2022
Pace Project No.: 30535386

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Florida: Cert E871149 SEKS WET
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver
225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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SAMPLE SUMMARY

Project: MLF-Fall 2022
Pace Project No.: 30535386

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30535386001	**TW-1**	Water	11/02/22 14:30	11/03/22 22:15
30535386002	**TW-14**	Water	11/03/22 12:10	11/03/22 22:15
30535386003	**TW-28**	Water	11/03/22 10:30	11/03/22 22:15
30535386004	**TW-29**	Water	11/03/22 11:15	11/03/22 22:15
30535386005	**TW-30**	Water	11/02/22 15:10	11/03/22 22:15
30535386006	**Field Blank**	Water	11/03/22 12:30	11/03/22 22:15

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SAMPLE ANALYTE COUNT

Project: MLF-Fall 2022
Pace Project No.: 30535386

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30535386001	**TW-1**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30535386002	**TW-14**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30535386003	**TW-28**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF-Fall 2022
Pace Project No.: 30535386

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30535386004	**TW-29**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30535386005	**TW-30**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30535386006	**Field Blank**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH	1	PASI-BV
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2011	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	JLM	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-Fall 2022
Pace Project No.: 30535386

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500NO3-F-2011	AJR	2	PASI-PA
		EPA 9038	JRM	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30535386

Date: November 21, 2022

TW-1 (Lab ID: 30535386001)

- Sample pH for 8011 is 7

TW-14 (Lab ID: 30535386002)

- Sample pH for 8011 is 6

TW-28 (Lab ID: 30535386003)

- Sample pH for 8011 is 6

TW-29 (Lab ID: 30535386004)

- Sample pH for 8011 is 6

TW-30 (Lab ID: 30535386005)

- Sample pH for 8011 is 6

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30535386

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2022

General Information:
6 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 545566

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30535424002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2648839)
  - Potassium
- MSD (Lab ID: 2648840)
  - Magnesium
  - Potassium
  - Sodium

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30535386

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2022

General Information:
6 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30535386

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2022

General Information:
6 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 545328

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30535386004

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2647503)
  - Lead
  - Thallium
- MSD (Lab ID: 2647504)
  - Lead
  - Thallium

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30535386

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2022

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30535386

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2022

General Information:
6 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 546040

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30534938007

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MSD (Lab ID: 2651519)
  - Mercury

R1: RPD value was outside control limits.
- MSD (Lab ID: 2651519)
  - Mercury

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30535386

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2022

General Information:
5 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30535386

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2022

General Information:
6 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 545203

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30534665001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2646600)
  - Alkalinity,Total (CaCO3 pH4.5)
- MSD (Lab ID: 2646601)
  - Alkalinity,Total (CaCO3 pH4.5)

Additional Comments:

Analyte Comments:

QC Batch: 545203

1c: Alkalinity TV: 0.00 mg/L
- BLANK (Lab ID: 2646598)
  - Alkalinity,Total (CaCO3 pH4.5)

2c: Alkalinity TV: 1.00 mg/L
- Field Blank (Lab ID: 30535386006)
  - Alkalinity,Total (CaCO3 pH4.5)

3c: Alkalinity TV: 2.00 mg/L
- TW-14 (Lab ID: 30535386002)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-28 (Lab ID: 30535386003)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-29 (Lab ID: 30535386004)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-30 (Lab ID: 30535386005)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30535386

Method: **SM 2540C-2011**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2022

General Information:
6 samples were analyzed for SM 2540C-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30535386

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2022

General Information:
6 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30535386

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2022

General Information:
6 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 545970

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30535786001,30536168001

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2651479)
  - Chemical Oxygen Demand
- MSD (Lab ID: 2651480)
  - Chemical Oxygen Demand

Additional Comments:

Analyte Comments:

QC Batch: 545970

4c: pH was adjusted to <2 at bench

- BLANK (Lab ID: 2651167)
  - Chemical Oxygen Demand
- LCS (Lab ID: 2651168)
  - Chemical Oxygen Demand

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30535386

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2022

General Information:
6 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30535386

Method: **SM 4500NO3-F-2011**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2022

General Information:
6 samples were analyzed for SM 4500NO3-F-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 545210

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30534938005

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2646621)
  - Nitrogen, NO2 plus NO3
- MSD (Lab ID: 2646622)
  - Nitrogen, NO2 plus NO3

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30535386

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2022

General Information:
6 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-Fall 2022
Pace Project No.: 30535386

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2022

General Information:
6 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30535386

Sample: TW-1 **Lab ID: 30535386001** Collected: 11/02/22 14:30 Received: 11/03/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**16.7**	mg/L	0.50	0.083	1	11/09/22 06:37	11/10/22 18:49	7440-70-2	
Iron	**39.0**	mg/L	0.050	0.035	1	11/09/22 06:37	11/10/22 18:49	7439-89-6	
Magnesium	**1.5**	mg/L	0.50	0.047	1	11/09/22 06:37	11/10/22 18:49	7439-95-4	
Manganese	**0.17**	mg/L	0.0050	0.0027	1	11/09/22 06:37	11/10/22 18:49	7439-96-5	
Potassium	**0.72**	mg/L	0.50	0.26	1	11/09/22 06:37	11/10/22 18:49	7440-09-7	
Sodium	**3.1**	mg/L	0.50	0.34	1	11/09/22 06:37	11/10/22 18:49	7440-23-5	
Total Hardness	**47.9**	mg/L	3.3	0.27	1	11/09/22 06:37	11/10/22 18:49		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**18.9**	mg/L	0.50	0.083	1	11/08/22 06:52	11/08/22 22:10	7440-70-2	
Iron, Dissolved	**28.7**	mg/L	0.050	0.035	1	11/08/22 06:52	11/08/22 22:10	7439-89-6	
Magnesium, Dissolved	**1.6**	mg/L	0.50	0.047	1	11/08/22 06:52	11/08/22 22:10	7439-95-4	
Manganese, Dissolved	**0.18**	mg/L	0.0050	0.0027	1	11/08/22 06:52	11/08/22 22:10	7439-96-5	
Potassium, Dissolved	**0.80**	mg/L	0.50	0.26	1	11/08/22 06:52	11/08/22 22:10	7440-09-7	
Sodium, Dissolved	**3.6**	mg/L	0.50	0.34	1	11/08/22 06:52	11/08/22 22:10	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/08/22 03:09	11/08/22 11:41	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/08/22 03:09	11/08/22 11:41	7440-38-2	
Barium	**0.017**	mg/L	0.0025	0.00098	1	11/08/22 03:09	11/08/22 11:41	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	11/08/22 03:09	11/08/22 11:41	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/08/22 03:09	11/08/22 11:41	7440-43-9	
Chromium	**0.0018J**	mg/L	0.0025	0.00050	1	11/08/22 03:09	11/08/22 11:41	7440-47-3	
Cobalt	**0.0025 U**	mg/L	0.0025	0.00081	1	11/08/22 03:09	11/08/22 11:41	7440-48-4	
Copper	**0.00090J**	mg/L	0.0025	0.00064	1	11/08/22 03:09	11/08/22 11:41	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/08/22 03:09	11/08/22 11:41	7439-92-1	
Nickel	**0.0017J**	mg/L	0.0025	0.00065	1	11/08/22 03:09	11/08/22 11:41	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/08/22 03:09	11/08/22 11:41	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/08/22 03:09	11/08/22 11:41	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/08/22 03:09	11/08/22 11:41	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/08/22 03:09	11/08/22 11:41	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0040	1	11/08/22 03:09	11/08/22 11:41	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/10/22 11:41	11/11/22 11:42	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/08/22 06:50	11/08/22 18:56	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/08/22 06:50	11/08/22 18:56	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	111	%.	60-140		1	11/08/22 06:50	11/08/22 18:56	630-20-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30535386

Sample: TW-1 **Lab ID: 30535386001** Collected: 11/02/22 14:30 Received: 11/03/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**46.0**	mg/L	10.0	1.0	1		11/08/22 14:34		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**47.0**	mg/L	10.0	10.0	1		11/07/22 16:55		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/09/22 08:49	11/09/22 13:16		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.1J**	mg/L	25.0	4.7	1	11/09/22 09:25	11/09/22 14:38		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**7.0**	mg/L	3.0	0.67	1		11/09/22 11:05	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.076J**	mg/L	0.10	0.053	1		11/07/22 17:42	14797-55-8	
Nitrogen, NO2 plus NO3	**0.080J**	mg/L	0.10	0.053	1		11/07/22 17:42		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/16/22 20:56	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		11/04/22 10:14	14797-65-0	

Sample: TW-14 **Lab ID: 30535386002** Collected: 11/03/22 12:10 Received: 11/03/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**1.3**	mg/L	0.50	0.083	1	11/09/22 06:37	11/10/22 18:51	7440-70-2	
Iron	**45.6**	mg/L	0.050	0.035	1	11/09/22 06:37	11/10/22 18:51	7439-89-6	
Magnesium	**1.1**	mg/L	0.50	0.047	1	11/09/22 06:37	11/10/22 18:51	7439-95-4	
Manganese	**0.14**	mg/L	0.0050	0.0027	1	11/09/22 06:37	11/10/22 18:51	7439-96-5	
Potassium	**0.72**	mg/L	0.50	0.26	1	11/09/22 06:37	11/10/22 18:51	7440-09-7	

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30535386

Sample: TW-14 **Lab ID: 30535386002** Collected: 11/03/22 12:10 Received: 11/03/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**3.5**	mg/L	0.50	0.34	1	11/09/22 06:37	11/10/22 18:51	7440-23-5	
Total Hardness	**7.9**	mg/L	3.3	0.27	1	11/09/22 06:37	11/10/22 18:51		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**1.5**	mg/L	0.50	0.083	1	11/08/22 06:52	11/08/22 22:16	7440-70-2	
Iron, Dissolved	**10.5**	mg/L	0.050	0.035	1	11/08/22 06:52	11/08/22 22:16	7439-89-6	
Magnesium, Dissolved	**1.3**	mg/L	0.50	0.047	1	11/08/22 06:52	11/08/22 22:16	7439-95-4	
Manganese, Dissolved	**0.14**	mg/L	0.0050	0.0027	1	11/08/22 06:52	11/08/22 22:16	7439-96-5	
Potassium, Dissolved	**0.80**	mg/L	0.50	0.26	1	11/08/22 06:52	11/08/22 22:16	7440-09-7	
Sodium, Dissolved	**4.2**	mg/L	0.50	0.34	1	11/08/22 06:52	11/08/22 22:16	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/08/22 03:09	11/08/22 11:44	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/08/22 03:09	11/08/22 11:44	7440-38-2	
Barium	**0.035**	mg/L	0.0025	0.00098	1	11/08/22 03:09	11/08/22 11:44	7440-39-3	
Beryllium	**0.00079**	mg/L	0.00050	0.00010	1	11/08/22 03:09	11/08/22 11:44	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/08/22 03:09	11/08/22 11:44	7440-43-9	
Chromium	**0.0026**	mg/L	0.0025	0.00050	1	11/08/22 03:09	11/08/22 11:44	7440-47-3	
Cobalt	**0.0094**	mg/L	0.0025	0.00081	1	11/08/22 03:09	11/08/22 11:44	7440-48-4	
Copper	**0.031**	mg/L	0.0025	0.00064	1	11/08/22 03:09	11/08/22 11:44	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/08/22 03:09	11/08/22 11:44	7439-92-1	
Nickel	**0.013**	mg/L	0.0025	0.00065	1	11/08/22 03:09	11/08/22 11:44	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/08/22 03:09	11/08/22 11:44	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/08/22 03:09	11/08/22 11:44	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/08/22 03:09	11/08/22 11:44	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/08/22 03:09	11/08/22 11:44	7440-62-2	
Zinc	**0.0074**	mg/L	0.0050	0.0040	1	11/08/22 03:09	11/08/22 11:44	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/10/22 11:41	11/11/22 11:44	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/08/22 06:50	11/08/22 19:09	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/08/22 06:50	11/08/22 19:09	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	107	%.	60-140		1	11/08/22 06:50	11/08/22 19:09	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		11/08/22 14:41		3c

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30535386

Sample: TW-14 **Lab ID: 30535386002** Collected: 11/03/22 12:10 Received: 11/03/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**29.0**	mg/L	10.0	10.0	1		11/07/22 16:55		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/09/22 08:49	11/09/22 13:22		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.1J**	mg/L	25.0	4.7	1	11/09/22 09:25	11/09/22 14:38		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**10.9**	mg/L	3.0	0.67	1		11/09/22 11:06	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.075J**	mg/L	0.10	0.053	1		11/07/22 17:43	14797-55-8	
Nitrogen, NO2 plus NO3	**0.12**	mg/L	0.10	0.053	1		11/07/22 17:43		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/16/22 20:57	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.043**	mg/L	0.010	0.0055	1		11/04/22 10:14	14797-65-0	

Sample: TW-28 **Lab ID: 30535386003** Collected: 11/03/22 10:30 Received: 11/03/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**5.8**	mg/L	0.50	0.083	1	11/09/22 06:37	11/10/22 18:53	7440-70-2	
Iron	**0.72**	mg/L	0.050	0.035	1	11/09/22 06:37	11/10/22 18:53	7439-89-6	
Magnesium	**2.9**	mg/L	0.50	0.047	1	11/09/22 06:37	11/10/22 18:53	7439-95-4	
Manganese	**0.030**	mg/L	0.0050	0.0027	1	11/09/22 06:37	11/10/22 18:53	7439-96-5	
Potassium	**1.1**	mg/L	0.50	0.26	1	11/09/22 06:37	11/10/22 18:53	7440-09-7	
Sodium	**20.9**	mg/L	0.50	0.34	1	11/09/22 06:37	11/10/22 18:53	7440-23-5	
Total Hardness	**26.3**	mg/L	3.3	0.27	1	11/09/22 06:37	11/10/22 18:53		N3

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30535386

Sample: TW-28 **Lab ID: 30535386003** Collected: 11/03/22 10:30 Received: 11/03/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**6.5**	mg/L	0.50	0.083	1	11/08/22 06:52	11/08/22 22:18	7440-70-2	
Iron, Dissolved	**0.14**	mg/L	0.050	0.035	1	11/08/22 06:52	11/08/22 22:18	7439-89-6	
Magnesium, Dissolved	**3.1**	mg/L	0.50	0.047	1	11/08/22 06:52	11/08/22 22:18	7439-95-4	
Manganese, Dissolved	**0.030**	mg/L	0.0050	0.0027	1	11/08/22 06:52	11/08/22 22:18	7439-96-5	
Potassium, Dissolved	**1.2**	mg/L	0.50	0.26	1	11/08/22 06:52	11/08/22 22:18	7440-09-7	
Sodium, Dissolved	**23.7**	mg/L	0.50	0.34	1	11/08/22 06:52	11/08/22 22:18	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.0010 U**	mg/L	0.0010	0.00059	2	11/08/22 03:09	11/08/22 12:20	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.00088	2	11/08/22 03:09	11/08/22 12:20	7440-38-2	
Barium	**0.067**	mg/L	0.0050	0.0020	2	11/08/22 03:09	11/08/22 12:20	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00020	2	11/08/22 03:09	11/08/22 12:20	7440-41-7	
Cadmium	**0.0010 U**	mg/L	0.0010	0.00027	2	11/08/22 03:09	11/08/22 12:20	7440-43-9	
Chromium	**0.010**	mg/L	0.0050	0.0010	2	11/08/22 03:09	11/08/22 12:20	7440-47-3	
Cobalt	**0.022**	mg/L	0.0050	0.0016	2	11/08/22 03:09	11/08/22 12:20	7440-48-4	
Copper	**0.0025J**	mg/L	0.0050	0.0013	2	11/08/22 03:09	11/08/22 12:20	7440-50-8	
Lead	**0.0010 U**	mg/L	0.0010	0.00050	2	11/08/22 03:09	11/08/22 12:20	7439-92-1	
Nickel	**0.018**	mg/L	0.0050	0.0013	2	11/08/22 03:09	11/08/22 12:20	7440-02-0	
Selenium	**0.0050 U**	mg/L	0.0050	0.0017	2	11/08/22 03:09	11/08/22 12:20	7782-49-2	
Silver	**0.0050 U**	mg/L	0.0050	0.0011	2	11/08/22 03:09	11/08/22 12:20	7440-22-4	
Thallium	**0.0010 U**	mg/L	0.0010	0.00016	2	11/08/22 03:09	11/08/22 12:20	7440-28-0	
Vanadium	**0.0050 U**	mg/L	0.0050	0.0024	2	11/08/22 03:09	11/08/22 12:20	7440-62-2	
Zinc	**0.014**	mg/L	0.010	0.0080	2	11/08/22 03:09	11/08/22 12:20	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/10/22 11:41	11/11/22 11:51	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/08/22 06:50	11/08/22 19:22	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	11/08/22 06:50	11/08/22 19:22	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	115	%.	60-140		1	11/08/22 06:50	11/08/22 19:22	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		11/08/22 14:44		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**116**	mg/L	10.0	10.0	1		11/09/22 16:46		

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30535386

Sample: TW-28 **Lab ID: 30535386003** Collected: 11/03/22 10:30 Received: 11/03/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/09/22 08:49	11/09/22 13:24		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/09/22 09:25	11/09/22 14:38		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**50.3**	mg/L	3.0	0.67	1		11/09/22 11:07	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.080J**	mg/L	0.10	0.053	1		11/07/22 17:44	14797-55-8	
Nitrogen, NO2 plus NO3	**0.083J**	mg/L	0.10	0.053	1		11/07/22 17:44		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/16/22 20:59	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		11/04/22 10:15	14797-65-0	

Sample: TW-29 **Lab ID: 30535386004** Collected: 11/03/22 11:15 Received: 11/03/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**2.1**	mg/L	0.50	0.083	1	11/09/22 06:37	11/10/22 18:55	7440-70-2	
Iron	**0.037J**	mg/L	0.050	0.035	1	11/09/22 06:37	11/10/22 18:55	7439-89-6	
Magnesium	**1.2**	mg/L	0.50	0.047	1	11/09/22 06:37	11/10/22 18:55	7439-95-4	
Manganese	**0.0097**	mg/L	0.0050	0.0027	1	11/09/22 06:37	11/10/22 18:55	7439-96-5	
Potassium	**0.79**	mg/L	0.50	0.26	1	11/09/22 06:37	11/10/22 18:55	7440-09-7	
Sodium	**4.5**	mg/L	0.50	0.34	1	11/09/22 06:37	11/10/22 18:55	7440-23-5	
Total Hardness	**10.1**	mg/L	3.3	0.27	1	11/09/22 06:37	11/10/22 18:55		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**2.3**	mg/L	0.50	0.083	1	11/08/22 06:52	11/08/22 22:20	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	11/08/22 06:52	11/08/22 22:20	7439-89-6	
Magnesium, Dissolved	**1.2**	mg/L	0.50	0.047	1	11/08/22 06:52	11/08/22 22:20	7439-95-4	

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30535386

Sample: TW-29 **Lab ID: 30535386004** Collected: 11/03/22 11:15 Received: 11/03/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Manganese, Dissolved	**0.0096**	mg/L	0.0050	0.0027	1	11/08/22 06:52	11/08/22 22:20	7439-96-5	
Potassium, Dissolved	**0.83**	mg/L	0.50	0.26	1	11/08/22 06:52	11/08/22 22:20	7440-09-7	
Sodium, Dissolved	**5.0**	mg/L	0.50	0.34	1	11/08/22 06:52	11/08/22 22:20	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/08/22 03:09	11/08/22 11:56	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/08/22 03:09	11/08/22 11:56	7440-38-2	
Barium	**0.036**	mg/L	0.0025	0.00098	1	11/08/22 03:09	11/08/22 11:56	7440-39-3	
Beryllium	**0.00020J**	mg/L	0.00050	0.00010	1	11/08/22 03:09	11/08/22 11:56	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/08/22 03:09	11/08/22 11:56	7440-43-9	
Chromium	**0.013**	mg/L	0.0025	0.00050	1	11/08/22 03:09	11/08/22 11:56	7440-47-3	
Cobalt	**0.0019J**	mg/L	0.0025	0.00081	1	11/08/22 03:09	11/08/22 11:56	7440-48-4	
Copper	**0.0018J**	mg/L	0.0025	0.00064	1	11/08/22 03:09	11/08/22 11:56	7440-50-8	
Lead	**0.041**	mg/L	0.00050	0.00025	1	11/08/22 03:09	11/08/22 11:56	7439-92-1	M1
Nickel	**0.0034**	mg/L	0.0025	0.00065	1	11/08/22 03:09	11/08/22 11:56	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/08/22 03:09	11/08/22 11:56	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/08/22 03:09	11/08/22 11:56	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/08/22 03:09	11/08/22 11:56	7440-28-0	M1
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/08/22 03:09	11/08/22 11:56	7440-62-2	
Zinc	**0.0054**	mg/L	0.0050	0.0040	1	11/08/22 03:09	11/08/22 11:56	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/10/22 11:41	11/11/22 11:53	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/08/22 06:50	11/08/22 19:34	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	11/08/22 06:50	11/08/22 19:34	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	109	%.	60-140		1	11/08/22 06:50	11/08/22 19:34	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		11/08/22 14:48		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**39.0**	mg/L	10.0	10.0	1		11/09/22 16:46		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/09/22 08:49	11/09/22 13:26		

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30535386

Sample: TW-29 **Lab ID: 30535386004** Collected: 11/03/22 11:15 Received: 11/03/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/09/22 09:25	11/09/22 14:38		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**11.3**	mg/L	3.0	0.67	1		11/09/22 11:10	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.61**	mg/L	0.10	0.053	1		11/07/22 17:46	14797-55-8	
Nitrogen, NO2 plus NO3	**0.61**	mg/L	0.10	0.053	1		11/07/22 17:46		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/16/22 21:01	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		11/04/22 10:16	14797-65-0	

Sample: TW-30 **Lab ID: 30535386005** Collected: 11/02/22 15:10 Received: 11/03/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**4.8**	mg/L	0.50	0.083	1	11/09/22 06:37	11/10/22 18:57	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	11/09/22 06:37	11/10/22 18:57	7439-89-6	
Magnesium	**1.9**	mg/L	0.50	0.047	1	11/09/22 06:37	11/10/22 18:57	7439-95-4	
Manganese	**0.012**	mg/L	0.0050	0.0027	1	11/09/22 06:37	11/10/22 18:57	7439-96-5	
Potassium	**1.5**	mg/L	0.50	0.26	1	11/09/22 06:37	11/10/22 18:57	7440-09-7	
Sodium	**11.3**	mg/L	0.50	0.34	1	11/09/22 06:37	11/10/22 18:57	7440-23-5	
Total Hardness	**19.9**	mg/L	3.3	0.27	1	11/09/22 06:37	11/10/22 18:57		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**5.3**	mg/L	0.50	0.083	1	11/08/22 06:52	11/08/22 22:22	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	11/08/22 06:52	11/08/22 22:22	7439-89-6	
Magnesium, Dissolved	**2.0**	mg/L	0.50	0.047	1	11/08/22 06:52	11/08/22 22:22	7439-95-4	
Manganese, Dissolved	**0.012**	mg/L	0.0050	0.0027	1	11/08/22 06:52	11/08/22 22:22	7439-96-5	
Potassium, Dissolved	**1.7**	mg/L	0.50	0.26	1	11/08/22 06:52	11/08/22 22:22	7440-09-7	
Sodium, Dissolved	**12.9**	mg/L	0.50	0.34	1	11/08/22 06:52	11/08/22 22:22	7440-23-5	

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30535386

Sample: TW-30 **Lab ID: 30535386005** Collected: 11/02/22 15:10 Received: 11/03/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/08/22 03:09	11/08/22 12:11	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/08/22 03:09	11/08/22 12:11	7440-38-2	
Barium	**0.035**	mg/L	0.0025	0.00098	1	11/08/22 03:09	11/08/22 12:11	7440-39-3	
Beryllium	**0.00012J**	mg/L	0.00050	0.00010	1	11/08/22 03:09	11/08/22 12:11	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/08/22 03:09	11/08/22 12:11	7440-43-9	
Chromium	**0.0020J**	mg/L	0.0025	0.00050	1	11/08/22 03:09	11/08/22 12:11	7440-47-3	
Cobalt	**0.0025J**	mg/L	0.0025	0.00081	1	11/08/22 03:09	11/08/22 12:11	7440-48-4	
Copper	**0.0019J**	mg/L	0.0025	0.00064	1	11/08/22 03:09	11/08/22 12:11	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/08/22 03:09	11/08/22 12:11	7439-92-1	
Nickel	**0.0047**	mg/L	0.0025	0.00065	1	11/08/22 03:09	11/08/22 12:11	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/08/22 03:09	11/08/22 12:11	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/08/22 03:09	11/08/22 12:11	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/08/22 03:09	11/08/22 12:11	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/08/22 03:09	11/08/22 12:11	7440-62-2	
Zinc	**0.0054**	mg/L	0.0050	0.0040	1	11/08/22 03:09	11/08/22 12:11	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/10/22 11:41	11/11/22 11:56	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/08/22 06:50	11/08/22 20:12	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/08/22 06:50	11/08/22 20:12	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	113	%.	60-140		1	11/08/22 06:50	11/08/22 20:12	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		11/08/22 14:38		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**50.0**	mg/L	10.0	10.0	1		11/07/22 16:55		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/09/22 08:49	11/09/22 13:28		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/09/22 09:25	11/09/22 14:39		

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30535386

Sample: TW-30 **Lab ID: 30535386005** Collected: 11/02/22 15:10 Received: 11/03/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**26.4**	mg/L	3.0	0.67	1		11/09/22 11:11	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**2.1**	mg/L	0.10	0.053	1		11/07/22 17:47	14797-55-8	
Nitrogen, NO2 plus NO3	**2.1**	mg/L	0.10	0.053	1		11/07/22 17:47		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/16/22 21:03	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		11/04/22 10:16	14797-65-0	

Sample: Field Blank **Lab ID: 30535386006** Collected: 11/03/22 12:30 Received: 11/03/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.50 U**	mg/L	0.50	0.083	1	11/09/22 06:37	11/10/22 18:59	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	11/09/22 06:37	11/10/22 18:59	7439-89-6	
Magnesium	**0.50 U**	mg/L	0.50	0.047	1	11/09/22 06:37	11/10/22 18:59	7439-95-4	
Manganese	**0.0050 U**	mg/L	0.0050	0.0027	1	11/09/22 06:37	11/10/22 18:59	7439-96-5	
Potassium	**0.50 U**	mg/L	0.50	0.26	1	11/09/22 06:37	11/10/22 18:59	7440-09-7	
Sodium	**0.50 U**	mg/L	0.50	0.34	1	11/09/22 06:37	11/10/22 18:59	7440-23-5	
Total Hardness	**3.3 U**	mg/L	3.3	0.27	1	11/09/22 06:37	11/10/22 18:59		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.50 U**	mg/L	0.50	0.083	1	11/08/22 06:52	11/08/22 22:24	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	11/08/22 06:52	11/08/22 22:24	7439-89-6	
Magnesium, Dissolved	**0.50 U**	mg/L	0.50	0.047	1	11/08/22 06:52	11/08/22 22:24	7439-95-4	
Manganese, Dissolved	**0.0050 U**	mg/L	0.0050	0.0027	1	11/08/22 06:52	11/08/22 22:24	7439-96-5	
Potassium, Dissolved	**0.50 U**	mg/L	0.50	0.26	1	11/08/22 06:52	11/08/22 22:24	7440-09-7	
Sodium, Dissolved	**0.50 U**	mg/L	0.50	0.34	1	11/08/22 06:52	11/08/22 22:24	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/08/22 03:09	11/08/22 12:14	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/08/22 03:09	11/08/22 12:14	7440-38-2	
Barium	**0.0025 U**	mg/L	0.0025	0.00098	1	11/08/22 03:09	11/08/22 12:14	7440-39-3	

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30535386

Sample: Field Blank **Lab ID: 30535386006** Collected: 11/03/22 12:30 Received: 11/03/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	11/08/22 03:09	11/08/22 12:14	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/08/22 03:09	11/08/22 12:14	7440-43-9	
Chromium	**0.00051J**	mg/L	0.0025	0.00050	1	11/08/22 03:09	11/08/22 12:14	7440-47-3	
Cobalt	**0.0025 U**	mg/L	0.0025	0.00081	1	11/08/22 03:09	11/08/22 12:14	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.00064	1	11/08/22 03:09	11/08/22 12:14	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/08/22 03:09	11/08/22 12:14	7439-92-1	
Nickel	**0.0025 U**	mg/L	0.0025	0.00065	1	11/08/22 03:09	11/08/22 12:14	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/08/22 03:09	11/08/22 12:14	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/08/22 03:09	11/08/22 12:14	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/08/22 03:09	11/08/22 12:14	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/08/22 03:09	11/08/22 12:14	7440-62-2	
Zinc	**0.0044J**	mg/L	0.0050	0.0040	1	11/08/22 03:09	11/08/22 12:14	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/10/22 11:41	11/11/22 11:58	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**1.0J**	mg/L	10.0	1.0	1		11/08/22 14:51		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		11/09/22 16:46		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/09/22 08:49	11/09/22 13:30		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/10/22 10:15	11/10/22 13:08		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**3.0 U**	mg/L	3.0	0.67	1		11/09/22 11:12	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2011 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		11/07/22 17:48	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		11/07/22 17:48		

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ANALYTICAL RESULTS

Project: MLF-Fall 2022
Pace Project No.: 30535386

Sample: Field Blank **Lab ID: 30535386006** Collected: 11/03/22 12:30 Received: 11/03/22 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/16/22 21:04	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		11/04/22 10:17	14797-65-0	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30535386

QC Batch: 545566
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30535386001, 30535386002, 30535386003, 30535386004, 30535386005, 30535386006

METHOD BLANK: 2648829 Matrix: Water
Associated Lab Samples: 30535386001, 30535386002, 30535386003, 30535386004, 30535386005, 30535386006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	11/09/22 21:31	
Iron	mg/L	0.050 U	0.050	0.035	11/09/22 21:31	
Magnesium	mg/L	0.50 U	0.50	0.047	11/09/22 21:31	
Manganese	mg/L	0.0050 U	0.0050	0.0027	11/09/22 21:31	
Potassium	mg/L	0.50 U	0.50	0.26	11/09/22 21:31	
Sodium	mg/L	0.50 U	0.50	0.34	11/09/22 21:31	

LABORATORY CONTROL SAMPLE: 2648830

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	43.5	109	80-120	
Iron	mg/L	2	2.3	115	80-120	
Magnesium	mg/L	20	22.4	112	80-120	
Manganese	mg/L	2	2.2	112	80-120	
Potassium	mg/L	20	22.6	113	80-120	
Sodium	mg/L	20	22.8	114	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2648839 2648840

Parameter	Units	30535424002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	171000 ug/L	40	40	208	217	94	114	80-120	4	20	
Iron	mg/L	1.1	2	2	3.2	3.3	110	114	80-120	2	20	
Magnesium	mg/L	55900 ug/L	20	20	77.8	80.4	109	122	80-120	3	20	M1
Manganese	mg/L	0.13	2	2	2.3	2.4	109	112	80-120	3	20	
Potassium	mg/L	3420 ug/L	20	20	27.7	28.3	121	125	80-120	2	20	M1
Sodium	mg/L	34200 ug/L	20	20	57.6	58.6	117	122	80-120	2	20	M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30535386

QC Batch: 545327
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30535386001, 30535386002, 30535386003, 30535386004, 30535386005, 30535386006

METHOD BLANK: 2647476 Matrix: Water
Associated Lab Samples: 30535386001, 30535386002, 30535386003, 30535386004, 30535386005, 30535386006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	11/08/22 21:26	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	11/08/22 21:26	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	11/08/22 21:26	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	11/08/22 21:26	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	11/08/22 21:26	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	11/08/22 21:26	

LABORATORY CONTROL SAMPLE: 2647478

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	43.7	109	80-120	
Iron, Dissolved	mg/L	2	2.2	109	80-120	
Magnesium, Dissolved	mg/L	20	21.5	107	80-120	
Manganese, Dissolved	mg/L	2	2.1	105	80-120	
Potassium, Dissolved	mg/L	20	22.3	111	80-120	
Sodium, Dissolved	mg/L	20	22.3	112	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2647479 2647480

Parameter	Units	30535434001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	73800 ug/L	40	40	117	118	109	110	80-120	0	20	
Iron, Dissolved	mg/L	ND	2	2	2.2	2.2	111	111	80-120	0	20	
Magnesium, Dissolved	mg/L	11600 ug/L	20	20	33.0	33.3	107	109	80-120	1	20	
Manganese, Dissolved	mg/L	1340 ug/L	2	2	3.4	3.4	102	102	80-120	0	20	
Potassium, Dissolved	mg/L	2460 ug/L	20	20	25.4	25.6	115	116	80-120	1	20	
Sodium, Dissolved	mg/L	8190 ug/L	20	20	30.6	30.8	112	113	80-120	1	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30535386

QC Batch: 545328
QC Batch Method: EPA 3020A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30535386001, 30535386002, 30535386003, 30535386004, 30535386005, 30535386006

METHOD BLANK: 2647482
Matrix: Water
Associated Lab Samples: 30535386001, 30535386002, 30535386003, 30535386004, 30535386005, 30535386006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00041J	0.00050	0.00030	11/08/22 11:18	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	11/08/22 11:18	
Barium	mg/L	0.0025 U	0.0025	0.00098	11/08/22 11:18	
Beryllium	mg/L	0.00050 U	0.00050	0.00010	11/08/22 11:18	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	11/08/22 11:18	
Chromium	mg/L	0.0025 U	0.0025	0.00050	11/08/22 11:18	
Cobalt	mg/L	0.0025 U	0.0025	0.00081	11/08/22 11:18	
Copper	mg/L	0.0025 U	0.0025	0.00064	11/08/22 11:18	
Lead	mg/L	0.00050 U	0.00050	0.00025	11/08/22 11:18	
Nickel	mg/L	0.0025 U	0.0025	0.00065	11/08/22 11:18	
Selenium	mg/L	0.0025 U	0.0025	0.00084	11/08/22 11:18	
Silver	mg/L	0.0025 U	0.0025	0.00053	11/08/22 11:18	
Thallium	mg/L	0.00050 U	0.00050	0.000081	11/08/22 11:18	
Vanadium	mg/L	0.0025 U	0.0025	0.0012	11/08/22 11:18	
Zinc	mg/L	0.0050 U	0.0050	0.0040	11/08/22 11:18	

LABORATORY CONTROL SAMPLE: 2647483

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.022	111	80-120	
Arsenic	mg/L	0.1	0.10	104	80-120	
Barium	mg/L	0.1	0.10	101	80-120	
Beryllium	mg/L	0.02	0.021	105	80-120	
Cadmium	mg/L	0.02	0.020	100	80-120	
Chromium	mg/L	0.1	0.11	106	80-120	
Cobalt	mg/L	0.1	0.11	106	80-120	
Copper	mg/L	0.1	0.11	107	80-120	
Lead	mg/L	0.02	0.021	104	80-120	
Nickel	mg/L	0.1	0.11	107	80-120	
Selenium	mg/L	0.1	0.10	105	80-120	
Silver	mg/L	0.1	0.10	104	80-120	
Thallium	mg/L	0.02	0.021	104	80-120	
Vanadium	mg/L	0.1	0.11	106	80-120	
Zinc	mg/L	0.2	0.21	104	80-120	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30535386

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2647503 2647504

Parameter	Units	30535386004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00050 U	0.02	0.02	0.021	0.022	106	109	75-125	3	20	
Arsenic	mg/L	0.0025 U	0.1	0.1	0.10	0.10	102	102	75-125	0	20	
Barium	mg/L	0.036	0.1	0.1	0.13	0.13	94	95	75-125	1	20	
Beryllium	mg/L	0.00020J	0.02	0.02	0.022	0.021	107	104	75-125	2	20	
Cadmium	mg/L	0.00050 U	0.02	0.02	0.020	0.020	98	99	75-125	1	20	
Chromium	mg/L	0.013	0.1	0.1	0.11	0.11	95	94	75-125	1	20	
Cobalt	mg/L	0.0019J	0.1	0.1	0.11	0.11	106	105	75-125	1	20	
Copper	mg/L	0.0018J	0.1	0.1	0.11	0.11	106	105	75-125	1	20	
Lead	mg/L	0.041	0.02	0.02	0.021	0.021	-104	-102	75-125	1	20	M1
Nickel	mg/L	0.0034	0.1	0.1	0.11	0.11	106	105	75-125	1	20	
Selenium	mg/L	0.0025 U	0.1	0.1	0.10	0.10	102	101	75-125	1	20	
Silver	mg/L	0.0025 U	0.1	0.1	0.10	0.10	102	102	75-125	0	20	
Thallium	mg/L	0.00050 U	0.02	0.02	0.013	0.013	67	65	75-125	3	20	M1
Vanadium	mg/L	0.0025 U	0.1	0.1	0.11	0.10	105	105	75-125	0	20	
Zinc	mg/L	0.0054	0.2	0.2	0.21	0.21	102	104	75-125	2	20	

SAMPLE DUPLICATE: 2647510

Parameter	Units	30528062002 Result	Dup Result	RPD	Max RPD	Qualifiers
Antimony	mg/L	0.00086	0.00070	20	20	
Arsenic	mg/L	0.0059	0.0052	13	20	
Barium	mg/L	0.21	0.21	2	20	
Beryllium	mg/L	0.00035J	0.00027J		20	
Cadmium	mg/L	0.00041J	0.00042J		20	
Chromium	mg/L	0.00099J	0.0011J		20	
Cobalt	mg/L	0.027	0.027	1	20	
Copper	mg/L	0.0017J	0.0017J		20	
Lead	mg/L	0.00051	0.00046J		20	
Nickel	mg/L	0.0059	0.0058	2	20	
Selenium	mg/L	0.0025J	0.0024J		20	
Silver	mg/L	0.0025 U	0.0025 U		20	
Thallium	mg/L	0.000082J	0.00050 U		20	
Vanadium	mg/L	0.011	0.011	3	20	
Zinc	mg/L	0.0050 U	0.0050 U		20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30535386

QC Batch: 546040
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30535386001, 30535386002, 30535386003, 30535386004, 30535386005, 30535386006

METHOD BLANK: 2651516 Matrix: Water
Associated Lab Samples: 30535386001, 30535386002, 30535386003, 30535386004, 30535386005, 30535386006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	11/11/22 11:21	

LABORATORY CONTROL SAMPLE: 2651517

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.02	0.018	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2651518 2651519

Parameter	Units	30534938007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00020 U	0.02	0.02	0.019	0.015	96	76	80-120	23	20	M1,R1

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30535386

QC Batch: 545332
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30535386001, 30535386002, 30535386003, 30535386004, 30535386005

METHOD BLANK: 2647519 Matrix: Water
Associated Lab Samples: 30535386001, 30535386002, 30535386003, 30535386004, 30535386005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	11/08/22 15:34	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	11/08/22 15:34	
1,1,1,2-Tetrachloroethane (S)	%.	100	60-140		11/08/22 15:34	

LABORATORY CONTROL SAMPLE: 2647520

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.25	98	85-115	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.22	87	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			101	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2647523 2647524

Parameter	Units	30535624002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	ND	0.41	0.41	0.40	0.40	96	97	60-140	0	25	
1,2-Dibromoethane (EDB)	ug/L	ND	0.41	0.41	0.36	0.36	87	87	60-140	1	25	
1,1,1,2-Tetrachloroethane (S)	%.						102	105	60-140			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30535386

QC Batch: 545203
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30535386001, 30535386002, 30535386003, 30535386004, 30535386005, 30535386006

METHOD BLANK: 2646598
Matrix: Water
Associated Lab Samples: 30535386001, 30535386002, 30535386003, 30535386004, 30535386005, 30535386006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	11/08/22 13:06	1c

LABORATORY CONTROL SAMPLE: 2646599

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	21.0	105	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2646600 2646601

Parameter	Units	30534665001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	218	50	50	246	244	56	52	85-115	1	20	ML

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30535386

QC Batch: 545029
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30535386001, 30535386002, 30535386005

METHOD BLANK: 2646154 Matrix: Water
Associated Lab Samples: 30535386001, 30535386002, 30535386005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	11/07/22 16:55	

LABORATORY CONTROL SAMPLE: 2646155

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	987	99	85-115	

SAMPLE DUPLICATE: 2646156

Parameter	Units	30534637001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	671	666	1	5	

SAMPLE DUPLICATE: 2646157

Parameter	Units	30535153001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	301	309	3	5	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30535386

QC Batch: 545585
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30535386003, 30535386004, 30535386006

METHOD BLANK: 2648948 Matrix: Water
Associated Lab Samples: 30535386003, 30535386004, 30535386006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	11/09/22 16:46	

LABORATORY CONTROL SAMPLE: 2648949

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	959	96	85-115	

SAMPLE DUPLICATE: 2648950

Parameter	Units	30535386003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	116	118	2	5	

SAMPLE DUPLICATE: 2648951

Parameter	Units	30536077002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	528	520	2	5	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30535386

QC Batch: 545571
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30535386001, 30535386002, 30535386003, 30535386004, 30535386005, 30535386006

METHOD BLANK: 2648877 Matrix: Water
Associated Lab Samples: 30535386001, 30535386002, 30535386003, 30535386004, 30535386005, 30535386006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	11/09/22 12:41	

LABORATORY CONTROL SAMPLE: 2648878

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.0	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2648879 2648880

Parameter	Units	30535205001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	1.2	4	4	5.1	5.1	97	98	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2648881 2648882

Parameter	Units	30535386001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.0	4.1	101	102	90-110	0	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30535386

QC Batch: 545604
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30535386001, 30535386002, 30535386003, 30535386004, 30535386005

METHOD BLANK: 2649010 Matrix: Water
Associated Lab Samples: 30535386001, 30535386002, 30535386003, 30535386004, 30535386005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/09/22 14:32	

METHOD BLANK: 2649012 Matrix: Water
Associated Lab Samples: 30535386001, 30535386002, 30535386003, 30535386004, 30535386005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/09/22 14:32	

METHOD BLANK: 2649014 Matrix: Water
Associated Lab Samples: 30535386001, 30535386002, 30535386003, 30535386004, 30535386005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/09/22 14:33	

LABORATORY CONTROL SAMPLE: 2649011

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	319	106	90-110	

LABORATORY CONTROL SAMPLE: 2649013

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	323	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2649017 2649018

Parameter	Units	30535386004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	25.0 U	150	150	159	161	106	108	90-110	1	10	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30535386

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2649124 2649125

Parameter	Units	30536278003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	122	150	150	257	259	90	91	90-110	1	10	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30535386

QC Batch: 545970
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30535386006

METHOD BLANK: 2651165 Matrix: Water
Associated Lab Samples: 30535386006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/10/22 13:07	

METHOD BLANK: 2651167 Matrix: Water
Associated Lab Samples: 30535386006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/10/22 13:07	4c

LABORATORY CONTROL SAMPLE: 2651166

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	323	108	90-110	

LABORATORY CONTROL SAMPLE: 2651168

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	328	109	90-110	4c

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2651171 2651172

Parameter	Units	30536168001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	230	150	150	385	389	103	106	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2651479 2651480

Parameter	Units	30535786001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	ND	150	150	177	175	118	117	90-110	1	10	MH

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REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30535386

QC Batch: 545664
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30535386001, 30535386002, 30535386003, 30535386004, 30535386005, 30535386006

METHOD BLANK: 2649236 Matrix: Water
Associated Lab Samples: 30535386001, 30535386002, 30535386003, 30535386004, 30535386005, 30535386006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	11/09/22 10:56	

LABORATORY CONTROL SAMPLE: 2649237

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.1	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2649238 2649239

Parameter	Units	30536278001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	49.0	20	20	69.1	68.4	101	97	85-115	1	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30535386

QC Batch: 545210
QC Batch Method: SM 4500NO3-F-2011
Analysis Method: SM 4500NO3-F-2011
Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30535386001, 30535386002, 30535386003, 30535386004, 30535386005, 30535386006

METHOD BLANK: 2646619 Matrix: Water
Associated Lab Samples: 30535386001, 30535386002, 30535386003, 30535386004, 30535386005, 30535386006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	11/07/22 17:14	

LABORATORY CONTROL SAMPLE: 2646620

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	3.9	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2646621 2646622

Parameter	Units	30534938005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.096J	5	5	4.0	4.1	79	79	85-115	0	20	ML

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30535386

QC Batch: 545541 | Analysis Method: EPA 9038
QC Batch Method: EPA 9038 | Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30535386001, 30535386002, 30535386003, 30535386004, 30535386005, 30535386006

METHOD BLANK: 2648396 | Matrix: Water
Associated Lab Samples: 30535386001, 30535386002, 30535386003, 30535386004, 30535386005, 30535386006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	11/16/22 20:32	

LABORATORY CONTROL SAMPLE: 2648397

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	29.8	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2648398 2648399

Parameter	Units	30534444001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	12.8	20	20	35.5	34.4	113	108	85-115	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2648400 2648401

Parameter	Units	30535063001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	31900	20000	20000	53400	54400	108	112	85-115	2	20	

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QUALITY CONTROL DATA

Project: MLF-Fall 2022
Pace Project No.: 30535386

QC Batch: 544732 | Analysis Method: SM 4500NO2-B-2011
QC Batch Method: SM 4500NO2-B-2011 | Analysis Description: SM4500-NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30535386001, 30535386002, 30535386003, 30535386004, 30535386005, 30535386006

METHOD BLANK: 2644399 | Matrix: Water
Associated Lab Samples: 30535386001, 30535386002, 30535386003, 30535386004, 30535386005, 30535386006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	11/04/22 10:10	

LABORATORY CONTROL SAMPLE: 2644400

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.10	101	90-110	

MATRIX SPIKE SAMPLE: 2644402

Parameter	Units	30535379001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	ND	0.1	0.098	98	85-115	

SAMPLE DUPLICATE: 2644401

Parameter	Units	30535379001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	ND	0.010 U		20	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: MLF-Fall 2022
Pace Project No.: 30535386

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30535386001

[1] Sample pH for 8011 is 7

Sample: 30535386002

[1] Sample pH for 8011 is 6

Sample: 30535386003

[1] Sample pH for 8011 is 6

Sample: 30535386004

[1] Sample pH for 8011 is 6

Sample: 30535386005

[1] Sample pH for 8011 is 6

ANALYTE QUALIFIERS

1c	Alkalinity TV: 0.00 mg/L
2c	Alkalinity TV: 1.00 mg/L
3c	Alkalinity TV: 2.00 mg/L
4c	pH was adjusted to <2 at bench
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALIFIERS

Project: MLF-Fall 2022
Pace Project No.: 30535386

ANALYTE QUALIFIERS

MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-Fall 2022
Pace Project No.: 30535386

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30535386001	**TW-1**	EPA 3010A	545566	EPA 6010D	545899
30535386002	**TW-14**	EPA 3010A	545566	EPA 6010D	545899
30535386003	**TW-28**	EPA 3010A	545566	EPA 6010D	545899
30535386004	**TW-29**	EPA 3010A	545566	EPA 6010D	545899
30535386005	**TW-30**	EPA 3010A	545566	EPA 6010D	545899
30535386006	**Field Blank**	EPA 3010A	545566	EPA 6010D	545899
30535386001	**TW-1**	EPA 3010A	545327	EPA 6010D	545631
30535386002	**TW-14**	EPA 3010A	545327	EPA 6010D	545631
30535386003	**TW-28**	EPA 3010A	545327	EPA 6010D	545631
30535386004	**TW-29**	EPA 3010A	545327	EPA 6010D	545631
30535386005	**TW-30**	EPA 3010A	545327	EPA 6010D	545631
30535386006	**Field Blank**	EPA 3010A	545327	EPA 6010D	545631
30535386001	**TW-1**	EPA 3020A	545328	EPA 6020B	545419
30535386002	**TW-14**	EPA 3020A	545328	EPA 6020B	545419
30535386003	**TW-28**	EPA 3020A	545328	EPA 6020B	545419
30535386004	**TW-29**	EPA 3020A	545328	EPA 6020B	545419
30535386005	**TW-30**	EPA 3020A	545328	EPA 6020B	545419
30535386006	**Field Blank**	EPA 3020A	545328	EPA 6020B	545419
30535386001	**TW-1**	EPA 7470A	546040	EPA 7470A	546256
30535386002	**TW-14**	EPA 7470A	546040	EPA 7470A	546256
30535386003	**TW-28**	EPA 7470A	546040	EPA 7470A	546256
30535386004	**TW-29**	EPA 7470A	546040	EPA 7470A	546256
30535386005	**TW-30**	EPA 7470A	546040	EPA 7470A	546256
30535386006	**Field Blank**	EPA 7470A	546040	EPA 7470A	546256
30535386001	**TW-1**	EPA 8011	545332	EPA 8011	545424
30535386002	**TW-14**	EPA 8011	545332	EPA 8011	545424
30535386003	**TW-28**	EPA 8011	545332	EPA 8011	545424
30535386004	**TW-29**	EPA 8011	545332	EPA 8011	545424
30535386005	**TW-30**	EPA 8011	545332	EPA 8011	545424
30535386001	**TW-1**	SM 2320B-2011	545203		
30535386002	**TW-14**	SM 2320B-2011	545203		
30535386003	**TW-28**	SM 2320B-2011	545203		
30535386004	**TW-29**	SM 2320B-2011	545203		
30535386005	**TW-30**	SM 2320B-2011	545203		
30535386006	**Field Blank**	SM 2320B-2011	545203		
30535386001	**TW-1**	SM 2540C-2011	545029		
30535386002	**TW-14**	SM 2540C-2011	545029		
30535386003	**TW-28**	SM 2540C-2011	545585		
30535386004	**TW-29**	SM 2540C-2011	545585		
30535386005	**TW-30**	SM 2540C-2011	545029		
30535386006	**Field Blank**	SM 2540C-2011	545585		
30535386001	**TW-1**	EPA 350.1	545571	EPA 350.1	545621
30535386002	**TW-14**	EPA 350.1	545571	EPA 350.1	545621
30535386003	**TW-28**	EPA 350.1	545571	EPA 350.1	545621

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-Fall 2022
Pace Project No.: 30535386

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30535386004	**TW-29**	EPA 350.1	545571	EPA 350.1	545621
30535386005	**TW-30**	EPA 350.1	545571	EPA 350.1	545621
30535386006	**Field Blank**	EPA 350.1	545571	EPA 350.1	545621
30535386001	**TW-1**	EPA 410.4	545604	EPA 410.4	545648
30535386002	**TW-14**	EPA 410.4	545604	EPA 410.4	545648
30535386003	**TW-28**	EPA 410.4	545604	EPA 410.4	545648
30535386004	**TW-29**	EPA 410.4	545604	EPA 410.4	545648
30535386005	**TW-30**	EPA 410.4	545604	EPA 410.4	545648
30535386006	**Field Blank**	EPA 410.4	545970	EPA 410.4	546036
30535386001	**TW-1**	SM 4500-Cl-E-2011	545664		
30535386002	**TW-14**	SM 4500-Cl-E-2011	545664		
30535386003	**TW-28**	SM 4500-Cl-E-2011	545664		
30535386004	**TW-29**	SM 4500-Cl-E-2011	545664		
30535386005	**TW-30**	SM 4500-Cl-E-2011	545664		
30535386006	**Field Blank**	SM 4500-Cl-E-2011	545664		
30535386001	**TW-1**	SM 4500NO3-F-2011	545210		
30535386002	**TW-14**	SM 4500NO3-F-2011	545210		
30535386003	**TW-28**	SM 4500NO3-F-2011	545210		
30535386004	**TW-29**	SM 4500NO3-F-2011	545210		
30535386005	**TW-30**	SM 4500NO3-F-2011	545210		
30535386006	**Field Blank**	SM 4500NO3-F-2011	545210		
30535386001	**TW-1**	EPA 9038	545541		
30535386002	**TW-14**	EPA 9038	545541		
30535386003	**TW-28**	EPA 9038	545541		
30535386004	**TW-29**	EPA 9038	545541		
30535386005	**TW-30**	EPA 9038	545541		
30535386006	**Field Blank**	EPA 9038	545541		
30535386001	**TW-1**	SM 4500NO2-B-2011	544732		
30535386002	**TW-14**	SM 4500NO2-B-2011	544732		
30535386003	**TW-28**	SM 4500NO2-B-2011	544732		
30535386004	**TW-29**	SM 4500NO2-B-2011	544732		
30535386005	**TW-30**	SM 4500NO2-B-2011	544732		
30535386006	**Field Blank**	SM 4500NO2-B-2011	544732		

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF- FALL 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals (1)	Total + Diss. Metals (2)	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO4, COD		Method 8011 - DBCP + EDB			
1	TW-1	8	11-2-22	1430	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓			
2	TW-14	↓	11-3-22	1210	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
3	TW-28	↓	11-3-22	1030	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
4	TW-29	↓	11-3-22	1115	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
5	TW-30	↓	11-2-22	1510	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
6	FIELD BLANK	5	11-3-22	1230	↓		QA	↓	↓	↓	↓	↓	↓	↓		↓			
7																			
8																			
9																			
10																			
11																			
12																			

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WO#: 30535386

30535386

	Signature	Date	Time	Comments
Relinquished by	DA Brown	11-3-22		(1) 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn
Received by	TD/PACE	11-3-22	1745	(1) 7470 - Hg
Relinquished by	TB/PACE	11-3/22	1627	(2) 6010 - Ca, Fe, Mg, Mn, K, Na
Received by	RDS PACE	11-3-22	1700	PACE - WV - METALS / PACE - G-BURG - WET CHEM + 8011
Relinquished by	RDS PACE	11-3-22	2215	LEVEL 2 REPORT
Received by	[illegible]	11-3-22	2215	SEE ATTACHED LIST OF METHODS / PARAMETERS / LABS

Cooler Temp on Arrival: _____ Deg. C

WO#: 30535386

PM: DAP Due Date: 11/18/22

CLIENT: ENV MONITOR

Millersville Landfill, Anne Arundel County, MD		
	Pace, Beaver, WV	
	Method 6020 - ICPMS	
Parameter	RL	MDL
	(mg/l)	
TOTAL METALS - mg/l		
Antimony	0.0005	
Arsenic	0.0025	0.0002473
Barium	0.0025	
Beryllium	0.0005	
Cadmium	0.0005	
Chromium	0.0025	
Cobalt	0.0025	
Copper	0.0025	
Lead	0.0005	
Nickel	0.0025	
Selenium	0.0025	
Silver	0.0025	
Thallium	0.0005	
Vanadium	0.0025	
Zinc	0.005	
	Pace, Beaver, WV	
TOTAL MERCURY - mg/l	Method 7470A	
Mercury	0.0005	0.00025
	Pace, Beaver, WV	
TOTAL AND DISSOLVED METALS - mg/l	Method 6010 - ICP	
Calcium	0.5	0.028
Iron	0.05	0.0076
Magnesium	0.5	0.047
Manganese	0.005	0.00043
Potassium	0.5	0.19
Sodium	0.5	0.148
	Pace - Greensburg, PA	
VOLATILE ORGANICS - ug/l	Method 8011 - ug/l	
DBCP	0.041	
EDB	0.041	
GENERAL CHEMISTRY - mg/l	Pace - Greensburg, PA	
Alkalinity - SM 2320B	10	1
Ammonia - EPA 350.1	0.1	0.0445
COD - EPA 410.4	25	4.6532
Chloride - EPA 300.0	3	0.06683
Hardness - 2340B		
Nitrate - EPA 300.0	0.1	0.0238
Sulfate - EPA 300.0	10	4.6702
Total dissolved solids - SM2540C	10	10

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-GBUR-0088 v02_Sample Condition Upon Receipt-Pittsburgh Effective Date: 10/03/2022	WO#: 30535386 PM: DAP Due Date: 11/18/22 CLIENT: ENV MONITOR

Client Name: EMA

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking Number:

Examined By	pr
Labeled By	pr
Temped By	pr

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

Thermometer Used: 18 **Type of Ice:** (Wet) Blue None

Cooler Temperature: Observed Temp 3.2 °C Correction Factor: 0 °C Final Temp: 3.2 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	NA	pH paper Lot# 1cp3031	D.P.D. Residual Chlorine Lot #
Chain of Custody Present	✓			1.	
Chain of Custody Filled Out:	✓			2.	
-Were client corrections present on COC		✓			
Chain of Custody Relinquished	✓			3.	
Sampler Name & Signature on COC:		✓		4.	
Sample Labels match COC:	✓			5.	
-Includes date/time/ID					
Matrix:	WA				
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):	✓			7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used:	✓			10.	
-Pace Containers Used	✓				
Containers Intact:	✓			11.	
Orthophosphate field filtered:			✓	12.	
Hex Cr Aqueous samples field filtered:			✓	13.	
Organic Samples checked for dechlorination			✓	14:	
Filtered volume received for dissolved tests:			✓	15:	
All containers checked for preservation: exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix	✓			16.	
All containers meet method preservation requirements:	✓			Initial when completed pr Lot# of added Preservative	Date/Time of Preservation
Headspace in VOA Vials (>6mm):		✓		17.	
Trip Blank Present:		✓		18.	
Trip Blank Custody Seals Present		✓			
Rad Samples Screened <0.5 mrem/hr.	✓			Initial when completed pr	Date: 1-4-22 / Survey Meter SN: 1563

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Qualtrax ID: 55680

WO# : 30535386

30535386

LIMS30 Internal Shipping Manifest

COOLER 24

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	24	Cooler temp (rcvd) °C	-.3
Packaged on Ice (Y/N)	Yes	Correction Factor	.0
Shipping Method	Courier	Cooler temp (corr) °C	-.3
Tracking #	N/A	IR GUN ID	23
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished		GBUR		2100
Received	[illegible]	BEAV	11-5-22	414
Relinquished				
Received				
Relinquished				
Received				

8

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	11/4/2022	30535386006 BP3N1/3	BP3N	30535386006	30535386
MF	11/4/2022	30535386006 BP3N2/3	BP3N	30535386006	30535386
MF	11/4/2022	30535386006 BP3N3/3	BP3N	30535386006	30535386
MF	11/4/2022	30535386005 BP3N1/3	BP3N	30535386005	30535386
MF	11/4/2022	30535386005 BP3N2/3	BP3N	30535386005	30535386
MF	11/4/2022	30535386005 BP3N3/3	BP3N	30535386005	30535386
MF	11/4/2022	30535386004 BP3N3/3	BP3N	30535386004	30535386
MF	11/4/2022	30535386004 BP3N2/3	BP3N	30535386004	30535386
MF	11/4/2022	30535386003 BP3N3/3	BP3N	30535386003	30535386
MF	11/4/2022	30535386003 BP3N2/3	BP3N	30535386003	30535386
MF	11/4/2022	30535386004 BP3N1/3	BP3N	30535386004	30535386
MF	11/4/2022	30535386003 BP3N1/3	BP3N	30535386003	30535386
MF	11/4/2022	30535386002 BP3N2/3	BP3N	30535386002	30535386
MF	11/4/2022	30535386002 BP3N1/3	BP3N	30535386002	30535386
MF	11/4/2022	30535386002 BP3N3/3	BP3N	30535386002	30535386
MF	11/4/2022	30535386001 BP3N2/3	BP3N	30535386001	30535386
MF	11/4/2022	30535429002 BP3N1/2	BP3N	30535429002	30535429
MF	11/4/2022	30535429001 BP3N2/2	BP3N	30535429001	30535429
MF	11/4/2022	30535429002 BP3N2/2	BP3N	30535429002	30535429
MF	11/4/2022	30535429001 BP3N1/2	BP3N	30535429001	30535429
MF	11/4/2022	30535429003 BP3N1/2	BP3N	30535429003	30535429
MF	11/4/2022	30535429004 BP3N1/1	BP3N	30535429004	30535429
MF	11/4/2022	30535423004 BP3N1/2	BP3N	30535423004	30535423
MF	11/4/2022	30535429003 BP3N2/2	BP3N	30535429003	30535429
MF	11/4/2022	30535422007 BP3N1/2	BP3N	30535422007	30535422
MF	11/4/2022	30535422008 BP3N2/2	BP3N	30535422008	30535422
MF	11/4/2022	30535422006 BP3N2/2	BP3N	30535422006	30535422
MF	11/4/2022	30535422006 BP3N1/2	BP3N	30535422006	30535422
MF	11/4/2022	30535422007 BP3N2/2	BP3N	30535422007	30535422
MF	11/4/2022	30535422001 BP3U1/1	BP3U	30535422001	30535422
MF	11/4/2022	30535422004 BP3N2/2	BP3N	30535422004	30535422
MF	11/4/2022	30535422004 BP3N1/2	BP3N	30535422004	30535422
MF	11/4/2022	30535422001 BP3N2/2	BP3N	30535422001	30535422

LIMS30 Internal Shipping Manifest

COOLER 24

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	24	Cooler temp (rcvd) °C	-.3
Packaged on ice (Y/N)	Yes	Correction Factor	.0
Shipping Method	Courier	Cooler temp (corr) °C	-.3
Tracking #	N/A	IR GUN ID	23
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[illegible]	GBUR	11-4-22	2100
Received	[illegible]	BEAV	11-5-22	414
Relinquished				
Received				
Relinquished				
Received				

8

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	11/4/2022	30535422008 BP3N1/2	BP3N	30535422008	30535422
MF	11/4/2022	30535426001 BP3N1/1	BP3N	30535426001	30535426
MF	11/4/2022	30535426002 BP3N1/1	BP3N	30535426002	30535426
MF	11/4/2022	30535425001 BP3N2/2	BP3N	30535425001	30535425
MF	11/4/2022	30535425001 BP3N1/2	BP3N	30535425001	30535425
MF	11/4/2022	30535379002 BP3N1/1	BP3N	30535379002	30535379
MF	11/4/2022	30535381001 BP3N1/1	BP3N	30535381001	30535381
MF	11/4/2022	30535423004 BP3N2/2	BP3N	30535423004	30535423

WO#: 30535386

PM: DAP Due Date: 11/18/22
CLIENT: ENV MONITOR

LIMS73 Lab Sample Condition Upon Receipt (West Vir

Pace Analytical

Client Name: _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☑ Other: 3rd Party

Tracking #: _____

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 23 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** -.3 °C Correction Factor: .0 °C Final Temp: -.3 °C

Comments:

pH paper Lot#	Date and Initials of person examining contents:
206722	CDW 11-7-22

	Yes	No	N/A	
Chain of Custody Present:				1.
Chain of Custody Filled Out:				2. Manifest
Chain of Custody Relinquished:				3.
Sampler Name & Signature on COC:				4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT				5. Lab Labeled by: NA Checked by: NA
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered:			✓	13.
-pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓	
Filtered volume received for Dissolved tests:				14.
All containers have been checked for preservation: exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix	✓			15.
All containers meet method preservation requirements:	✓			Initial when completed CDW Date: 11-7-22
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present:			✓	17.
Trip Blank Custody Seals Present:			✓	
				Initial when completed: CDW Date: 11-7-22

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

***PM review** is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

LIMS30 Internal Shipping Manifest

COOLER 23

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	23	Cooler temp (rcvd) °C	-1.4
Packaged on Ice (Y/N)	Yes	Correction Factor	.0
Shipping Method	Courier	Cooler temp (corr) °C	-1.4
Tracking #	N/A	IR GUN ID	TM10
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished		GBUR	11-4-22	2020
Received		BEAV	11-5-22	414
Relinquished				
Received				
Relinquished				
Received				

12

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	11/4/2022	30535478001 BP3N1/4	BP3N	30535478001	30535478
MF	11/4/2022	30535478001 BP3N2/4	BP3N	30535478001	30535478
MF	11/4/2022	30535478001 BP3N3/4	BP3N	30535478001	30535478
MF	11/4/2022	30535478001 BP3N4/4	BP3N	30535478001	30535478
MF	11/4/2022	30535477001 BP3N3/4	BP3N	30535477001	30535477
MF	11/4/2022	30535477001 BP3N4/4	BP3N	30535477001	30535477
MF	11/4/2022	30535379001 BP3N1/1	BP3N	30535379001	30535379
MF	11/4/2022	30535379003 BP3N1/1	BP3N	30535379003	30535379
MF	11/4/2022	30535386001 BP3N1/3	BP3N	30535386001	30535386
MF	11/4/2022	30535386001 BP3N3/3	BP3N	30535386001	30535386
MF	11/4/2022	30535563004 BP2N1/1	BP2N	30535563004	30535563
MF	11/4/2022	30535563003 BP2N1/1	BP2N	30535563003	30535563
MF	11/4/2022	30535563001 BP2N1/1	BP2N	30535563001	30535563
MF	11/4/2022	30535563002 BP2N1/1	BP2N	30535563002	30535563
MF	11/4/2022	30535477001 BP3N2/4	BP3N	30535477001	30535477
MF	11/4/2022	30535477001 BP3N1/4	BP3N	30535477001	30535477
MF	11/4/2022	30535563005 BP2N1/1	BP2N	30535563005	30535563
MF	11/4/2022	30534943001 BP3N1/1	BP3N	30534943001	30534943
MF	11/4/2022	30535578004 BP3N1/1	BP3N	30535578004	30535578
MF	11/4/2022	30535578005 BP3N1/1	BP3N	30535578005	30535578
MF	11/4/2022	30535578006 BP3N1/1	BP3N	30535578006	30535578
MF	11/4/2022	30535578002 BP3N1/1	BP3N	30535578002	30535578
MF	11/4/2022	30535578003 BP3N1/1	BP3N	30535578003	30535578
MF	11/4/2022	30535578001 BP3N1/1	BP3N	30535578001	30535578
MF	11/4/2022	30535659001 BP3N1/1	BP3N	30535659001	30535659
MF	11/4/2022	30535659002 BP3N1/1	BP3N	30535659002	30535659
MF	11/4/2022	30535659003 BP3N1/1	BP3N	30535659003	30535659
MF	11/4/2022	30535563007 BP2N1/1	BP2N	30535563007	30535563
MF	11/4/2022	30535563006 BP2N1/1	BP2N	30535563006	30535563
MF	11/4/2022	30535574004 BP3N1/1	BP3N	30535574004	30535574
MF	11/4/2022	30535574002 BP3N1/1	BP3N	30535574002	30535574
MF	11/4/2022	30535602001 BP3N1/1	BP3N	30535602001	30535602
MF	11/4/2022	30535602002 BP3N1/1	BP3N	30535602002	30535602

LIMS30 Internal Shipping Manifest

COOLER 23

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	23	Cooler temp (rcvd) °C	-1.4
Packaged on Ice (Y/N)	Yes	Correction Factor	.0
Shipping Method	Courier	Cooler temp (corr) °C	-1.4
Tracking #	N/A	IR GUN ID	TM10
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[signature]	GBUR	11-4-22	2020
Received	[signature]	BEAV	11-5-22	414
Relinquished				
Received				
Relinquished				
Received				

(12)

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	11/4/2022	30535613001 BP3N1/1	BP3N	30535613001	30535613
MF	11/4/2022	30535613001 BP3U1/1	BP3U	30535613001	30535613

LIMS73 Lab Sample Condition Upon Receipt (West Virginia)

Pace Analytical

Client Name: _____

Put label here prior to scanning

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☑ Other: 3rd Party

Tracking #: _____

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used BVTM10 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** -1.4 °C Correction Factor: .0 °C Final Temp: -1.4 °C

Comments:

pH paper Lot#	Date and Initials of person examining contents:
206722	CDW 11-7-22

	Yes	No	N/A	
Chain of Custody Present:				1.
Chain of Custody Filled Out:				2. Manifest
Chain of Custody Relinquished:				3.
Sampler Name & Signature on COC:				4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT				5. Lab Labeled by: NA Checked by: NA
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered: -pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓ ✓	13.
Filtered volume received for Dissolved tests:				14.
All containers have been checked for preservation: exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix	✓			15.
All containers meet method preservation requirements:	✓			Initial when completed: CDW Date: 11-7-22
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present: Trip Blank Custody Seals Present:			✓ ✓	17.
				Initial when completed: CDW Date: 11-7-22

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

***PM review** is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

November 17, 2022

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-FALL 2022
Pace Project No.: 30536604

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on November 08, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

David A. Pichette
david.pichette@pacelabs.com
(724)850-5617
Project Manager

Enclosures

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: MLF-FALL 2022
Pace Project No.: 30536604

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver

225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: MLF-FALL 2022
Pace Project No.: 30536604

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30536604001	**MW-P4**	Water	11/08/22 10:10	11/08/22 22:25
30536604002	**MW-P9**	Water	11/07/22 12:20	11/08/22 22:25
30536604003	**MW-P106**	Water	11/08/22 12:20	11/08/22 22:25
30536604004	**MW-P417**	Water	11/07/22 16:20	11/08/22 22:25
30536604005	**MW-P440**	Water	11/07/22 15:20	11/08/22 22:25
30536604006	**RW-P109**	Water	11/07/22 10:40	11/08/22 22:25
30536604007	**RW-P165**	Water	11/08/22 10:50	11/08/22 22:25
30536604008	**RW-P171-1**	Water	11/08/22 11:40	11/08/22 22:25
30536604009	**RW-P264**	Water	11/07/22 11:30	11/08/22 22:25
30536604010	**RW-P440**	Water	11/07/22 14:10	11/08/22 22:25
30536604011	**RW-P441**	Water	11/07/22 13:30	11/08/22 22:25
30536604012	**RW-P584**	Water	11/07/22 09:50	11/08/22 22:25

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF-FALL 2022
Pace Project No.: 30536604

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30536604001	**MW-P4**	EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30536604002	**MW-P9**	EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30536604003	**MW-P106**	EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30536604004	**MW-P417**	EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30536604005	**MW-P440**	EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30536604006	**RW-P109**	EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30536604007	**RW-P165**	EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30536604008	**RW-P171-1**	EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30536604009	**RW-P264**	EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30536604010	**RW-P440**	EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30536604011	**RW-P441**	EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30536604012	**RW-P584**	EPA 7470A	JLH	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-FALL 2022
Pace Project No.: 30536604

Date: November 17, 2022

MW-P4 (Lab ID: 30536604001)

- Sample pH for 8011 is 7

MW-P9 (Lab ID: 30536604002)

- Sample pH for 8011 is 5

MW-P106 (Lab ID: 30536604003)

- Sample pH for 8011 is 5

MW-P417 (Lab ID: 30536604004)

- Sample pH for 8011 is 5

MW-P440 (Lab ID: 30536604005)

- Sample pH for 8011 is 6

RW-P109 (Lab ID: 30536604006)

- Sample pH for 8011 is 6

RW-P165 (Lab ID: 30536604007)

- Sample pH for 8011 is 6

RW-P171-1 (Lab ID: 30536604008)

- Sample pH for 8011 is 6

RW-P264 (Lab ID: 30536604009)

- Sample pH for 8011 is 6

RW-P440 (Lab ID: 30536604010)

- Sample pH for 8011 is 6

RW-P441 (Lab ID: 30536604011)

- Sample pH for 8011 is 6

RW-P584 (Lab ID: 30536604012)

- Sample pH for 8011 is 5

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PROJECT NARRATIVE

Project: MLF-FALL 2022
Pace Project No.: 30536604

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

General Information:
12 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2022
Pace Project No.: 30536604

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

General Information:
12 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H2: Extraction or preparation conducted outside EPA method holding time.
- MW-P106 (Lab ID: 30536604003)
- MW-P417 (Lab ID: 30536604004)
- MW-P440 (Lab ID: 30536604005)
- MW-P9 (Lab ID: 30536604002)
- RW-P109 (Lab ID: 30536604006)
- RW-P165 (Lab ID: 30536604007)
- RW-P171-1 (Lab ID: 30536604008)
- RW-P264 (Lab ID: 30536604009)
- RW-P440 (Lab ID: 30536604010)
- RW-P441 (Lab ID: 30536604011)
- RW-P584 (Lab ID: 30536604012)

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 546628

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
- BLANK (Lab ID: 2655116)
  - 1,1,1,2-Tetrachloroethane (S)
- LCS (Lab ID: 2655117)
  - 1,1,1,2-Tetrachloroethane (S)
- MS (Lab ID: 2655118)
  - 1,1,1,2-Tetrachloroethane (S)
- MSD (Lab ID: 2655119)
  - 1,1,1,2-Tetrachloroethane (S)
- MW-P106 (Lab ID: 30536604003)
  - 1,1,1,2-Tetrachloroethane (S)
- MW-P4 (Lab ID: 30536604001)
  - 1,1,1,2-Tetrachloroethane (S)
- MW-P417 (Lab ID: 30536604004)
  - 1,1,1,2-Tetrachloroethane (S)

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PROJECT NARRATIVE

Project: MLF-FALL 2022
Pace Project No.: 30536604

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

QC Batch: 546628

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- MW-P440 (Lab ID: 30536604005)
  - 1,1,1,2-Tetrachloroethane (S)
- MW-P9 (Lab ID: 30536604002)
  - 1,1,1,2-Tetrachloroethane (S)
- RW-P109 (Lab ID: 30536604006)
  - 1,1,1,2-Tetrachloroethane (S)
- RW-P165 (Lab ID: 30536604007)
  - 1,1,1,2-Tetrachloroethane (S)
- RW-P171-1 (Lab ID: 30536604008)
  - 1,1,1,2-Tetrachloroethane (S)
- RW-P264 (Lab ID: 30536604009)
  - 1,1,1,2-Tetrachloroethane (S)
- RW-P440 (Lab ID: 30536604010)
  - 1,1,1,2-Tetrachloroethane (S)
- RW-P441 (Lab ID: 30536604011)
  - 1,1,1,2-Tetrachloroethane (S)
- RW-P584 (Lab ID: 30536604012)
  - 1,1,1,2-Tetrachloroethane (S)

QC Batch: 547272

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- BLANK (Lab ID: 2657991)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- LCS (Lab ID: 2657992)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- MW-P106 (Lab ID: 30536604003)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- MW-P417 (Lab ID: 30536604004)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- MW-P440 (Lab ID: 30536604005)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- MW-P9 (Lab ID: 30536604002)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- RW-P109 (Lab ID: 30536604006)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- RW-P165 (Lab ID: 30536604007)
  - 1,1,1,2-Tetrachloroethane (S)

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PROJECT NARRATIVE

Project: MLF-FALL 2022
Pace Project No.: 30536604

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

QC Batch: 547272

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- 1,2-Dibromo-3-chloropropane
- RW-P171-1 (Lab ID: 30536604008)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- RW-P264 (Lab ID: 30536604009)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- RW-P440 (Lab ID: 30536604010)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- RW-P441 (Lab ID: 30536604011)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- RW-P584 (Lab ID: 30536604012)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 546628

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

- LCS (Lab ID: 2655117)
  - 1,2-Dibromoethane (EDB)

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 547272

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2022
Pace Project No.: 30536604

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 17, 2022

Analyte Comments:

QC Batch: 546628

P2: Re-extraction or re-analysis could not be performed due to insufficient sample amount.

- MW-P4 (Lab ID: 30536604001)
  - 1,2-Dibromoethane (EDB)

- MW-P4 (Lab ID: 30536604001)
  - 1,2-Dibromo-3-chloropropane

QC Batch: 547272

1c: A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

- MW-P106 (Lab ID: 30536604003)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MW-P417 (Lab ID: 30536604004)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MW-P440 (Lab ID: 30536604005)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MW-P9 (Lab ID: 30536604002)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- RW-P109 (Lab ID: 30536604006)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- RW-P165 (Lab ID: 30536604007)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- RW-P171-1 (Lab ID: 30536604008)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- RW-P264 (Lab ID: 30536604009)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- RW-P440 (Lab ID: 30536604010)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- RW-P441 (Lab ID: 30536604011)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- RW-P584 (Lab ID: 30536604012)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-FALL 2022
Pace Project No.: 30536604

Sample: MW-P4 **Lab ID: 30536604001** Collected: 11/08/22 10:10 Received: 11/08/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/15/22 12:26	11/16/22 13:46	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/14/22 06:45	11/14/22 17:24	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/14/22 06:45	11/14/22 17:24	106-93-4	L2,P2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	99	%.	60-140		1	11/14/22 06:45	11/14/22 17:24	630-20-6	CH

Sample: MW-P9 **Lab ID: 30536604002** Collected: 11/07/22 12:20 Received: 11/08/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/15/22 12:26	11/16/22 13:48	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/14/22 06:45	11/14/22 18:02	96-12-8	
1,2-Dibromo-3-chloropropane	**0.042 U**	ug/L	0.042	0.022	1	11/16/22 06:54	11/16/22 17:20	96-12-8	1c,CH, H2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/14/22 06:45	11/14/22 18:02	106-93-4	L2
1,2-Dibromoethane (EDB)	**0.042 U**	ug/L	0.042	0.032	1	11/16/22 06:54	11/16/22 17:20	106-93-4	1c,H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	96	%.	60-140		1	11/14/22 06:45	11/14/22 18:02	630-20-6	CH
1,1,1,2-Tetrachloroethane (S)	116	%.	60-140		1	11/16/22 06:54	11/16/22 17:20	630-20-6	CH

Sample: MW-P106 **Lab ID: 30536604003** Collected: 11/08/22 12:20 Received: 11/08/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/15/22 12:26	11/16/22 13:51	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/14/22 06:45	11/14/22 18:15	96-12-8	
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/16/22 06:54	11/16/22 17:33	96-12-8	1c,CH, H2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	11/14/22 06:45	11/14/22 18:15	106-93-4	L2

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ANALYTICAL RESULTS

Project: MLF-FALL 2022
Pace Project No.: 30536604

Sample: MW-P106 **Lab ID: 30536604003** Collected: 11/08/22 12:20 Received: 11/08/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/16/22 06:54	11/16/22 17:33	106-93-4	1c,H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	112	%.	60-140		1	11/16/22 06:54	11/16/22 17:33	630-20-6	CH
1,1,1,2-Tetrachloroethane (S)	90	%.	60-140		1	11/14/22 06:45	11/14/22 18:15	630-20-6	CH

Sample: MW-P417 **Lab ID: 30536604004** Collected: 11/07/22 16:20 Received: 11/08/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
	Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/15/22 12:26	11/16/22 13:53	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/14/22 06:45	11/14/22 18:27	96-12-8	
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/16/22 06:54	11/16/22 17:45	96-12-8	1c,CH, H2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/14/22 06:45	11/14/22 18:27	106-93-4	L2
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/16/22 06:54	11/16/22 17:45	106-93-4	1c,H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	111	%.	60-140		1	11/16/22 06:54	11/16/22 17:45	630-20-6	CH
1,1,1,2-Tetrachloroethane (S)	99	%.	60-140		1	11/14/22 06:45	11/14/22 18:27	630-20-6	CH

Sample: MW-P440 **Lab ID: 30536604005** Collected: 11/07/22 15:20 Received: 11/08/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
	Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/15/22 12:26	11/16/22 13:55	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/14/22 06:45	11/14/22 18:40	96-12-8	
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/16/22 06:54	11/16/22 17:58	96-12-8	1c,CH, H2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	11/14/22 06:45	11/14/22 18:40	106-93-4	L2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	11/16/22 06:54	11/16/22 17:58	106-93-4	1c,H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	117	%.	60-140		1	11/16/22 06:54	11/16/22 17:58	630-20-6	CH
1,1,1,2-Tetrachloroethane (S)	104	%.	60-140		1	11/14/22 06:45	11/14/22 18:40	630-20-6	CH

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ANALYTICAL RESULTS

Project: MLF-FALL 2022
Pace Project No.: 30536604

Sample: RW-P109 **Lab ID: 30536604006** Collected: 11/07/22 10:40 Received: 11/08/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/15/22 12:26	11/16/22 14:02	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/14/22 06:45	11/14/22 18:53	96-12-8	
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/16/22 06:54	11/16/22 18:11	96-12-8	1c,CH, H2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	11/14/22 06:45	11/14/22 18:53	106-93-4	L2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	11/16/22 06:54	11/16/22 18:11	106-93-4	1c,H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	112	%.	60-140		1	11/14/22 06:45	11/14/22 18:53	630-20-6	CH
1,1,1,2-Tetrachloroethane (S)	105	%.	60-140		1	11/16/22 06:54	11/16/22 18:11	630-20-6	CH

Sample: RW-P165 **Lab ID: 30536604007** Collected: 11/08/22 10:50 Received: 11/08/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/15/22 12:26	11/16/22 14:05	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/14/22 06:45	11/14/22 19:05	96-12-8	
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/16/22 06:54	11/16/22 18:24	96-12-8	1c,CH, H2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/14/22 06:45	11/14/22 19:05	106-93-4	L2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/16/22 06:54	11/16/22 18:24	106-93-4	1c,H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	115	%.	60-140		1	11/16/22 06:54	11/16/22 18:24	630-20-6	CH
1,1,1,2-Tetrachloroethane (S)	101	%.	60-140		1	11/14/22 06:45	11/14/22 19:05	630-20-6	CH

Sample: RW-P171-1 **Lab ID: 30536604008** Collected: 11/08/22 11:40 Received: 11/08/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/15/22 12:26	11/16/22 14:07	7439-97-6	

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ANALYTICAL RESULTS

Project: MLF-FALL 2022
Pace Project No.: 30536604

Sample: RW-P171-1 **Lab ID: 30536604008** Collected: 11/08/22 11:40 Received: 11/08/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/14/22 06:45	11/14/22 19:18	96-12-8	
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/16/22 06:54	11/16/22 18:36	96-12-8	1c,CH, H2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/14/22 06:45	11/14/22 19:18	106-93-4	L2
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/16/22 06:54	11/16/22 18:36	106-93-4	1c,H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	118	%.	60-140		1	11/16/22 06:54	11/16/22 18:36	630-20-6	CH
1,1,1,2-Tetrachloroethane (S)	105	%.	60-140		1	11/14/22 06:45	11/14/22 19:18	630-20-6	CH

Sample: RW-P264 **Lab ID: 30536604009** Collected: 11/07/22 11:30 Received: 11/08/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/15/22 12:26	11/16/22 14:09	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/14/22 06:45	11/14/22 19:30	96-12-8	
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/16/22 06:54	11/16/22 18:49	96-12-8	1c,CH, H2
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/14/22 06:45	11/14/22 19:30	106-93-4	L2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/16/22 06:54	11/16/22 18:49	106-93-4	1c,H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	101	%.	60-140		1	11/14/22 06:45	11/14/22 19:30	630-20-6	CH
1,1,1,2-Tetrachloroethane (S)	112	%.	60-140		1	11/16/22 06:54	11/16/22 18:49	630-20-6	CH

Sample: RW-P440 **Lab ID: 30536604010** Collected: 11/07/22 14:10 Received: 11/08/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/15/22 12:26	11/16/22 14:12	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/14/22 06:45	11/14/22 19:43	96-12-8	
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/16/22 06:54	11/16/22 19:02	96-12-8	1c,CH, H2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/14/22 06:45	11/14/22 19:43	106-93-4	L2

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ANALYTICAL RESULTS

Project: MLF-FALL 2022
Pace Project No.: 30536604

Sample: RW-P440 **Lab ID: 30536604010** Collected: 11/07/22 14:10 Received: 11/08/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/16/22 06:54	11/16/22 19:02	106-93-4	1c,H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	110	%.	60-140		1	11/16/22 06:54	11/16/22 19:02	630-20-6	CH
1,1,1,2-Tetrachloroethane (S)	104	%.	60-140		1	11/14/22 06:45	11/14/22 19:43	630-20-6	CH

Sample: RW-P441 **Lab ID: 30536604011** Collected: 11/07/22 13:30 Received: 11/08/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
	Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/15/22 12:26	11/16/22 14:14	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/14/22 06:45	11/14/22 19:55	96-12-8	
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/16/22 06:54	11/16/22 19:15	96-12-8	1c,CH, H2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/14/22 06:45	11/14/22 19:55	106-93-4	L2
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/16/22 06:54	11/16/22 19:15	106-93-4	1c,H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	103	%.	60-140		1	11/14/22 06:45	11/14/22 19:55	630-20-6	CH
1,1,1,2-Tetrachloroethane (S)	115	%.	60-140		1	11/16/22 06:54	11/16/22 19:15	630-20-6	CH

Sample: RW-P584 **Lab ID: 30536604012** Collected: 11/07/22 09:50 Received: 11/08/22 22:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
	Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/15/22 12:26	11/16/22 14:16	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/14/22 06:45	11/14/22 20:08	96-12-8	
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/16/22 06:54	11/16/22 19:27	96-12-8	1c,CH, H2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/14/22 06:45	11/14/22 20:08	106-93-4	L2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/16/22 06:54	11/16/22 19:27	106-93-4	1c,H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	115	%.	60-140		1	11/16/22 06:54	11/16/22 19:27	630-20-6	CH
1,1,1,2-Tetrachloroethane (S)	105	%.	60-140		1	11/14/22 06:45	11/14/22 20:08	630-20-6	CH

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QUALITY CONTROL DATA

Project: MLF-FALL 2022
Pace Project No.: 30536604

QC Batch: 547153
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30536604001, 30536604002, 30536604003, 30536604004, 30536604005, 30536604006, 30536604007, 30536604008, 30536604009, 30536604010, 30536604011, 30536604012

METHOD BLANK: 2657223
Matrix: Water
Associated Lab Samples: 30536604001, 30536604002, 30536604003, 30536604004, 30536604005, 30536604006, 30536604007, 30536604008, 30536604009, 30536604010, 30536604011, 30536604012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	11/16/22 13:37	

LABORATORY CONTROL SAMPLE: 2657224

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.010	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2657226 2657227

Parameter	Units	30537449001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	<0.20 ug/L	0.01	0.01	0.011	0.0099	106	99	80-120	7	20	

SAMPLE DUPLICATE: 2657225

Parameter	Units	92632492011 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	ND	0.0010 U		20	H1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-FALL 2022
Pace Project No.: 30536604

QC Batch: 546628
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30536604001, 30536604002, 30536604003, 30536604004, 30536604005, 30536604006, 30536604007, 30536604008, 30536604009, 30536604010, 30536604011, 30536604012

METHOD BLANK: 2655116
Matrix: Water
Associated Lab Samples: 30536604001, 30536604002, 30536604003, 30536604004, 30536604005, 30536604006, 30536604007, 30536604008, 30536604009, 30536604010, 30536604011, 30536604012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	11/14/22 16:59	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	11/14/22 16:59	
1,1,1,2-Tetrachloroethane (S)	%.	97	60-140		11/14/22 16:59	CH

LABORATORY CONTROL SAMPLE: 2655117

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.22	88	85-115	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.20	81	85-115	L2
1,1,1,2-Tetrachloroethane (S)	%.			95	60-140	CH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2655118 2655119

Parameter	Units	30536604001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.041 U	0.4	0.41	0.40	0.34	100	85	60-140	15	25	
1,2-Dibromoethane (EDB)	ug/L	0.041 U	0.4	0.41	0.36	0.31	88	77	60-140	13	25	
1,1,1,2-Tetrachloroethane (S)	%.						102	90	60-140			CH

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-FALL 2022
Pace Project No.: 30536604

QC Batch: 547272
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30536604002, 30536604003, 30536604004, 30536604005, 30536604006, 30536604007, 30536604008, 30536604009, 30536604010, 30536604011, 30536604012

METHOD BLANK: 2657991
Matrix: Water
Associated Lab Samples: 30536604002, 30536604003, 30536604004, 30536604005, 30536604006, 30536604007, 30536604008, 30536604009, 30536604010, 30536604011, 30536604012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	11/16/22 16:54	CH
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	11/16/22 16:54	
1,1,1,2-Tetrachloroethane (S)	%.	107	60-140		11/16/22 16:54	CH

LABORATORY CONTROL SAMPLE: 2657992

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.26	103	85-115	CH
1,2-Dibromoethane (EDB)	ug/L	0.25	0.23	93	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			110	60-140	CH

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QUALIFIERS

Project: MLF-FALL 2022
Pace Project No.: 30536604

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30536604001
[1] Sample pH for 8011 is 7

Sample: 30536604002
[1] Sample pH for 8011 is 5

Sample: 30536604003
[1] Sample pH for 8011 is 5

Sample: 30536604004
[1] Sample pH for 8011 is 5

Sample: 30536604005
[1] Sample pH for 8011 is 6

Sample: 30536604006
[1] Sample pH for 8011 is 6

Sample: 30536604007
[1] Sample pH for 8011 is 6

Sample: 30536604008
[1] Sample pH for 8011 is 6

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QUALIFIERS

Project: MLF-FALL 2022
Pace Project No.: 30536604

SAMPLE QUALIFIERS

Sample: 30536604009
[1] Sample pH for 8011 is 6
Sample: 30536604010
[1] Sample pH for 8011 is 6
Sample: 30536604011
[1] Sample pH for 8011 is 6
Sample: 30536604012
[1] Sample pH for 8011 is 5

BATCH QUALIFIERS

Batch: 547272
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1c	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
H1	Analysis conducted outside the EPA method holding time.
H2	Extraction or preparation conducted outside EPA method holding time.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
P2	Re-extraction or re-analysis could not be performed due to insufficient sample amount.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-FALL 2022
Pace Project No.: 30536604

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30536604001	**MW-P4**	EPA 7470A	547153	EPA 7470A	547388
30536604002	**MW-P9**	EPA 7470A	547153	EPA 7470A	547388
30536604003	**MW-P106**	EPA 7470A	547153	EPA 7470A	547388
30536604004	**MW-P417**	EPA 7470A	547153	EPA 7470A	547388
30536604005	**MW-P440**	EPA 7470A	547153	EPA 7470A	547388
30536604006	**RW-P109**	EPA 7470A	547153	EPA 7470A	547388
30536604007	**RW-P165**	EPA 7470A	547153	EPA 7470A	547388
30536604008	**RW-P171-1**	EPA 7470A	547153	EPA 7470A	547388
30536604009	**RW-P264**	EPA 7470A	547153	EPA 7470A	547388
30536604010	**RW-P440**	EPA 7470A	547153	EPA 7470A	547388
30536604011	**RW-P441**	EPA 7470A	547153	EPA 7470A	547388
30536604012	**RW-P584**	EPA 7470A	547153	EPA 7470A	547388
30536604001	**MW-P4**	EPA 8011	546628	EPA 8011	546704
30536604002	**MW-P9**	EPA 8011	546628	EPA 8011	546704
30536604002	**MW-P9**	EPA 8011	547272	EPA 8011	547361
30536604003	**MW-P106**	EPA 8011	546628	EPA 8011	546704
30536604003	**MW-P106**	EPA 8011	547272	EPA 8011	547361
30536604004	**MW-P417**	EPA 8011	546628	EPA 8011	546704
30536604004	**MW-P417**	EPA 8011	547272	EPA 8011	547361
30536604005	**MW-P440**	EPA 8011	546628	EPA 8011	546704
30536604005	**MW-P440**	EPA 8011	547272	EPA 8011	547361
30536604006	**RW-P109**	EPA 8011	546628	EPA 8011	546704
30536604006	**RW-P109**	EPA 8011	547272	EPA 8011	547361
30536604007	**RW-P165**	EPA 8011	546628	EPA 8011	546704
30536604007	**RW-P165**	EPA 8011	547272	EPA 8011	547361
30536604008	**RW-P171-1**	EPA 8011	546628	EPA 8011	546704
30536604008	**RW-P171-1**	EPA 8011	547272	EPA 8011	547361
30536604009	**RW-P264**	EPA 8011	546628	EPA 8011	546704
30536604009	**RW-P264**	EPA 8011	547272	EPA 8011	547361
30536604010	**RW-P440**	EPA 8011	546628	EPA 8011	546704
30536604010	**RW-P440**	EPA 8011	547272	EPA 8011	547361
30536604011	**RW-P441**	EPA 8011	546628	EPA 8011	546704
30536604011	**RW-P441**	EPA 8011	547272	EPA 8011	547361
30536604012	**RW-P584**	EPA 8011	546628	EPA 8011	546704
30536604012	**RW-P584**	EPA 8011	547272	EPA 8011	547361

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - FALL 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

WO#: 30536604

30536604

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Mercury	Method Boil (DBCP + EDB)										
1	MW-4	4	11-8-22	1010	✓		GW	✓	✓										001
2	MW-P9		11-7-22	1220															002
3	MW-P106		11-8-22	1220															003
4	MW-P417		11-7-22	1620															004
5	MW-P440			1520															005
6	RW-P109			1040															006
7	RW-P165		11-8-22	1050															007
8	RW-P171-1		11-8-22	1140															008
9	RW-P264		11-7-22	1130															009
10	RW-P440			1410															010
11	RW-P441			1330															011
12	RW-P584			950															012

	Signature	Date	Time	Comments
Relinquished by	DA Brown	11-8-22	1300	
Received by	TB/PACE	11-8-22	1300	PACE-WV- Hg-7470
Relinquished by	TB/PACE	11-8-22	1508	PACE-C-BURL- METHOD 8011
Received by	RDS PACE	11-8-22	1730	
Relinquished by	RDS PACE	11-8-22	2225	LEVEL 2 REPORT
Received by	[illegible]	11/8/22	2225	

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-GBUR-0088 v02_Sample Condition Upon Receipt-Pittsburgh
	Effective Date: 10/03/2022

Client Name: EMA **Project #:**

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking Number:

Examined By	JS
Labeled By	JS
Temped By	JS

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

Thermometer Used: 18 **Type of Ice:** (Wet) Blue None

Cooler Temperature: Observed Temp 3.1 °C Correction Factor: 0 °C Final Temp: 3.1 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	NA	pH paper Lot# 1002221 / D.P.D. Residual Chlorine Lot # N/A
Chain of Custody Present	✓			1.
Chain of Custody Filled Out:	✓			2.
-Were client corrections present on COC		✓		
Chain of Custody Relinquished	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC:	✓			5.
-Includes date/time/ID				
Matrix:	WT			
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous samples field filtered:			✓	13.
Organic Samples checked for dechlorination			✓	14:
Filtered volume received for dissolved tests:		✓	✓	15:
All containers checked for preservation: exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix	✓			16.
All containers meet method preservation requirements:	✓			Initial when completed JS / Date/Time of Preservation / Lot# of added Preservative
Headspace in VOA Vials (>6mm):		✓	✓	17. JS 11/9/22
Trip Blank Present:		✓		18.
Trip Blank Custody Seals Present			✓	
Rad Samples Screened <0.5 mrem/hr.			✓	Initial when completed JS / Date: / Su SN

Comments:

WO#: 30536604

PM: DAP Due Date: 11/23/22

CLIENT: ENV MONITOR

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.

PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Qualtrax ID: 55680

30536604

VAB Mft.

EXCEL ~~EDPE~~ EMA AAM

ECD - 11-23-22

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - FALL 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater **SO** = Soil **DW** = Drinking Water **QC** = Quality Control
SW = Surface Water **LE** = Leachate **Other** _____

	Sample Designation P4	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	TOTAL MERCURY		METHOD 8011 (DBCP + EDB)									
1	MW-P4	4	11.8.22	1010	✓		GW	✓		✓									
2	MW-P9		11-7-22	1220															
3	MW-P106		11-8-22	1220															
4	MW-P417		11-7-22	1620															
5	MW-P440			1520															
6	RW-P109			1040															
7	RW-P165		11-8-22	1050															
8	RW-P171-1		11-8-22	1140															
9	RW-P264		11-7-22	1130															
10	RW-P440			1410															
11	RW-P441			1330															
12	RW-P584			950															

	Signature	Date	Time	Comments
Relinquished by	DA Brown	11.8.22	1300	
Received by	TW PACE	11.8.22	1300	PACE-WV-Hg-7470
Relinquished by				PACE-G-BUR-METHOD 8011
Received by				
Relinquished by				LEVEL 2 REPORT
Received by				

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

30536604 — MW-4 = MW-P4

WO# : 30536604

30536604

LIMS30 Internal Shipping Manifest

COOLER 23

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	23	Cooler temp (rcvd) °C	.2
Packaged on Ice (Y/N)	Yes	Correction Factor	.0
Shipping Method	Courier	Cooler temp (corr) °C	.2
Tracking #	N/A	IR GUN ID	23
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished		GBUR	11-9-22	2010
Received		BEAV	11-10-22	420
Relinquished				
Received				
Relinquished				
Received				

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	11/9/2022	30536330003 BP3N2/2	BP3N	30536330003	30536330
MF	11/9/2022	30536330004 BP3N1/2	BP3N	30536330004	30536330
MF	11/9/2022	30536330004 BP3N2/2	BP3N	30536330004	30536330
MF	11/9/2022	30536330005 BP3N2/2	BP3N	30536330005	30536330
MF	11/9/2022	30536330002 BP3N2/2	BP3N	30536330002	30536330
MF	11/9/2022	30536330003 BP3N1/2	BP3N	30536330003	30536330
MF	11/9/2022	30536330001 BP3N2/2	BP3N	30536330001	30536330
MF	11/9/2022	30536330005 BP3N1/2	BP3N	30536330005	30536330
MF	11/9/2022	30536330006 BP3N1/2	BP3N	30536330006	30536330
MF	11/9/2022	30536330006 BP3N2/2	BP3N	30536330006	30536330
MF	11/9/2022	30536330001 BP3N1/2	BP3N	30536330001	30536330
MF	11/9/2022	30536330002 BP3N1/2	BP3N	30536330002	30536330
MF	11/9/2022	30536604001 BP3N1/1	BP3N	30536604001	30536604
MF	11/9/2022	30536604007 BP3N1/1	BP3N	30536604007	30536604
MF	11/9/2022	30536604008 BP3N1/1	BP3N	30536604008	30536604
MF	11/9/2022	30536604011 BP3N1/1	BP3N	30536604011	30536604
MF	11/9/2022	30536604009 BP3N1/1	BP3N	30536604009	30536604
MF	11/9/2022	30536604006 BP3N1/1	BP3N	30536604006	30536604
MF	11/9/2022	30536604002 BP3N1/1	BP3N	30536604002	30536604
MF	11/9/2022	30536604005 BP3N1/1	BP3N	30536604005	30536604
MF	11/9/2022	30536604004 BP3N1/1	BP3N	30536604004	30536604
MF	11/9/2022	30536604010 BP3N1/1	BP3N	30536604010	30536604
MF	11/9/2022	30536604003 BP3N1/1	BP3N	30536604003	30536604
MF	11/9/2022	30536604012 BP3N1/1	BP3N	30536604012	30536604
MF	11/9/2022	30536324001 BP3N2/2	BP3N	30536324001	30536324
MF	11/9/2022	30536324001 BP3N1/2	BP3N	30536324001	30536324
MF	11/9/2022	30536593002 BP3N1/1	BP3N	30536593002	30536593
MF	11/9/2022	30536593001 BP3N1/1	BP3N	30536593001	30536593
MF	11/9/2022	30536329003 BP3N1/1	BP3N	30536329003	30536329
MF	11/9/2022	30536329004 BP3N1/1	BP3N	30536329004	30536329
MF	11/9/2022	30536317005 BP3N1/1	BP3N	30536317005	30536317
MF	11/9/2022	30536317003 BP3N1/1	BP3N	30536317003	30536317
MF	11/9/2022	30536317001 BP3N2/2	BP3N	30536317001	30536317

13

LIMS30 Internal Shipping Manifest

COOLER 23

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	23	Cooler temp (rcvd) °C	1.2
Packaged on Ice (Y/N)	Yes	Correction Factor	-.0
Shipping Method	Courier	Cooler temp (corr) °C	.2
Tracking #	N/A	IR GUN ID	23
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[signature]	GBUR	11-9-22	2010
Received	[signature]	BEAV	11-10-22	420
Relinquished				
Received				
Relinquished				
Received				

13

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	11/9/2022	30536317001 BP3N1/2	BP3N	30536317001	30536317
MF	11/9/2022	30536317002 BP3N1/1	BP3N	30536317002	30536317
MF	11/9/2022	30536317004 BP3N1/1	BP3N	30536317004	30536317
MF	11/9/2022	30536316001 BP3N1/1	BP3N	30536316001	30536316
MF	11/9/2022	30536321001 BP3N1/1	BP3N	30536321001	30536321
MF	11/9/2022	30536532001 BP3N1/1	BP3N	30536532001	30536532
MF	11/9/2022	30536447001 BP3N1/1	BP3N	30536447001	30536447
MF	11/9/2022	30536519001 BP3N1/1	BP3N	30536519001	30536519
MF	11/9/2022	30536462002 BP3N1/1	BP3N	30536462002	30536462
MF	11/9/2022	30536519001 BP3U1/1	BP3U	30536519001	30536519
MF	11/9/2022	30536450006 BP2N1/1	BP2N	30536450006	30536450

WO#: 30536604
PM: DAP **Due Date: 11/23/22**
CLIENT: ENV MONITOR

LIMS73 Lab Sample Condition Upon Receipt (West Virg

Pace Analytical

Client Name: _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☑ Other: 3rd Party

Tracking #: _____

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 23 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** 1.2 °C Correction Factor: .0 °C Final Temp: .2 °C

Comments:

pH paper Lot#	Date and Initials of person examining contents:
225320	DW 11-10-22

	Yes	No	N/A	
Chain of Custody Present:				1.
Chain of Custody Filled Out:				2.
Chain of Custody Relinquished:				3. Manifest
Sampler Name & Signature on COC:				4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT				5. Lab Labeled by: NA Checked by: NA
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered:			✓	13.
-pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓	
Filtered volume received for Dissolved tests:			✓	14.
All containers have been checked for preservation: exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix	✓			15.
All containers meet method preservation requirements:	✓			Initial when completed: DW Date: 11-10-22
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present:			✓	17.
Trip Blank Custody Seals Present:			✓	
				Initial when completed: DW Date: 11-10-22

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

***PM review** is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

December 08, 2022

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: RESAMPLING-TW-29
Pace Project No.: 30542724

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on December 01, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

David A. Pichette
david.pichette@pacelabs.com
(724)850-5617
Project Manager

Enclosures

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: RESAMPLING-TW-29
Pace Project No.: 30542724

Pace Analytical Services Beaver
225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: RESAMPLING-TW-29
Pace Project No.: 30542724

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30542724001	**TW-29**	Water	12/01/22 13:30	12/01/22 22:00

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(724)850-5600

SAMPLE ANALYTE COUNT

Project: RESAMPLING-TW-29
Pace Project No.: 30542724

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30542724001	**TW-29**	EPA 6020B	WES	1	PASI-BV

PASI-BV = Pace Analytical Services - Beaver

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: RESAMPLING-TW-29
Pace Project No.: 30542724

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: December 08, 2022

General Information:
1 sample was analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: RESAMPLING-TW-29
Pace Project No.: 30542724

Sample: TW-29 **Lab ID: 30542724001** Collected: 12/01/22 13:30 Received: 12/01/22 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3020A Pace Analytical Services - Beaver								
Lead	**0.50 U**	ug/L	0.50	0.25	1	12/08/22 05:13	12/08/22 10:50	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: RESAMPLING-TW-29
Pace Project No.: 30542724

QC Batch: 552244
QC Batch Method: EPA 3020A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30542724001

METHOD BLANK: 2682538 Matrix: Water
Associated Lab Samples: 30542724001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Lead	ug/L	0.50 U	0.50	0.25	12/08/22 11:28	

LABORATORY CONTROL SAMPLE: 2682539

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	ug/L	20	21.0	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2682540 2682541

Parameter	Units	30542724001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lead	ug/L	0.50 U	20	20	21.4	21.3	107	106	75-125	0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: RESAMPLING-TW-29
Pace Project No.: 30542724

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: RESAMPLING-TW-29
Pace Project No.: 30542724

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30542724001	**TW-29**	EPA 3020A	552244	EPA 6020B	552370

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LF	Lab	PACE
Project	RESAMPLING ST - TW-29	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Analytical Parameters: TOTAL Pb											
1	TW-29	1	12.1.22	1330	✓		GW	✓											
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

001

WO#: 30542724
30542724

	Signature	Date	Time	Comments
Relinquished by	DABrown	12.1.22	1400	
Received by	TB/PACE	12.1.22	1400	
Relinquished by	TB/PACE	12-1-22	1640	
Received by	RDS PACE	12-1-22	1800	
Relinquished by	RDS PACE	12-1-22	2200	
Received by	[illegible]	12-1-22	2200	

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-GBUR-0088 v02_Sample Condition Upon Receipt-Pittsburgh
	Effective Date: 10/03/2022

Client Name: EMA **Project #:** 30542724

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking Number:

Examined By	
Labeled By	
Temped By	

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

Thermometer Used: 18 **Type of Ice:** Wet Blue None

Cooler Temperature: Observed Temp 2.8 °C Correction Factor: 0 °C Final Temp: 2.8 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	NA	pH paper Lot# 10D2211	D.P.D. Residual Chlorine Lot # -
Chain of Custody Present	✓			1.	
Chain of Custody Filled Out:	✓			2.	
-Were client corrections present on COC		✓			
Chain of Custody Relinquished	✓			3.	
Sampler Name & Signature on COC:		✓		4.	
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.	
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):		✓		7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used:	✓			10.	
-Pace Containers Used	✓				
Containers Intact:	✓			11.	
Orthophosphate field filtered:			✓	12.	
Hex Cr Aqueous samples field filtered:			✓	13.	
Organic Samples checked for dechlorination			✓	14:	
Filtered volume received for dissolved tests:			✓	15:	
All containers checked for preservation: exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix	✓			16.	
All containers meet method preservation requirements:	✓			Initial when completed BR / Lot# of added Preservative	Date/Time of Preservation
Headspace in VOA Vials (>6mm):			✓	17.	
Trip Blank Present:			✓	18.	
Trip Blank Custody Seals Present			✓		
Rad Samples Screened <0.5 mrem/hr.	✓			Initial when completed	Date: 12-2-22 / Survey Meter SN: 1503

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Qualtrax ID: 55680

WO# : 30542724

30542724

LIMS30 Internal Shipping Manifest

COOLER 22

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	22	Cooler temp (rcvd) °C	1.3
Packaged on Ice (Y/N)	Yes	Correction Factor	1.0
Shipping Method	Courier	Cooler temp (corr) °C	1.3
Tracking #	N/A	IR GUN ID	23
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished		GBUR	12-2-22	2245
Received		BEAV	12-3-22	722
Relinquished				
Received				
Relinquished				
Received				

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	12/2/2022	30542800004 BP3N2/2	BP3N	30542800004	30542800
MF	12/2/2022	30542800005 BP3N1/2	BP3N	30542800005	30542800
MF	12/2/2022	30542800002 BP3N1/2	BP3N	30542800002	30542800
MF	12/2/2022	30542800001 BP3N1/2	BP3N	30542800001	30542800
MF	12/2/2022	30542800003 BP3N1/2	BP3N	30542800003	30542800
MF	12/2/2022	30542792001 BP3N2/2	BP3N	30542792001	30542792
MF	12/2/2022	30542794003 BP3N1/1	BP3N	30542794003	30542794
MF	12/2/2022	30542800004 BP3N1/2	BP3N	30542800004	30542800
MF	12/2/2022	30542800005 BP3N2/2	BP3N	30542800005	30542800
MF	12/2/2022	30542792002 BP3N1/1	BP3N	30542792002	30542792
MF	12/2/2022	30542800003 BP3N2/2	BP3N	30542800003	30542800
MF	12/2/2022	30542822001 BP3N1/1	BP3N	30542822001	30542822
MF	12/2/2022	30542792001 BP3N1/2	BP3N	30542792001	30542792
MF	12/2/2022	30542800001 BP3N2/2	BP3N	30542800001	30542800
MF	12/2/2022	30542795001 BP3N1/2	BP3N	30542795001	30542795
MF	12/2/2022	30542792004 BP3N1/1	BP3N	30542792004	30542792
MF	12/2/2022	30542792003 BP3N1/1	BP3N	30542792003	30542792
MF	12/2/2022	30542795001 BP3N2/2	BP3N	30542795001	30542795
MF	12/2/2022	30542822002 BP3N1/1	BP3N	30542822002	30542822
MF	12/2/2022	30542720001 BP3N1/2	BP3N	30542720001	30542720
MF	12/2/2022	30542718002 BP3N1/2	BP3N	30542718002	30542718
MF	12/2/2022	30542724001 BP3N1/1	BP3N	30542724001	30542724
MF	12/2/2022	30542718002 BP3N2/2	BP3N	30542718002	30542718
MF	12/2/2022	30542715001 BP3N2/2	BP3N	30542715001	30542715
MF	12/2/2022	30542718001 BP3N2/2	BP3N	30542718001	30542718
MF	12/2/2022	30542718001 BP3N1/2	BP3N	30542718001	30542718
MF	12/2/2022	50332357001 WGFU1/1	WGFU	50332357001	50332357
MF	12/2/2022	30542803005 WGFU1/1	WGFU	30542803005	30542803
MF	12/2/2022	30542924001 WGFU3/3	WGFU	30542924001	30542924
MF	12/2/2022	30542913003 WGFU1/2	WGFU	30542913003	30542913
MF	12/2/2022	30542430008 WGFU2/2	WGFU	30542430008	30542430
MF	12/2/2022	30542967002 WGFU1/1	WGFU	30542967002	30542967

15

WO#: 30542724
PM: DAP **Due Date: 12/16/22**
CLIENT: ENV MONITOR

LIMS73 Lab Sample Condition Upon Receipt (West Virginia

Pace Analytical

Client Name: _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☑ Other: 3rd Party

Tracking #: _____

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 23 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** 1.3 °C Correction Factor: 0 °C Final Temp: 1.3 °C

Comments:

pH paper Lot#	Date and Initials of person examining contents:
225320	CDW 12-5-22

	Yes	No	N/A	
Chain of Custody Present:				1.
Chain of Custody Filled Out:				2. Manifest
Chain of Custody Relinquished:				3.
Sampler Name & Signature on COC:				4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT				5. Lab Labeled by: NA Checked by: NA
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered: -pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓ ✓	13.
Filtered volume received for Dissolved tests:			✓	14.
All containers have been checked for preservation: exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix	✓			15.
All containers meet method preservation requirements:	✓			Initial when completed: CDW Date: 12-5-22
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present: Trip Blank Custody Seals Present:			✓ ✓	17.
				Initial when completed: CDW Date: 12-5-22

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

***PM review** is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

16 November 2022

Steve Brown
Environmental Monitoring and Assessment
207 East Sixth Street
Lititz, PA 17543
RE: MILLERSVILLE LANDFILL

Enclosed are the results of analyses for samples received by the laboratory on 11/08/22 13:10.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Rabecka Koons
Quality Assurance Officer

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-P4		2110817-01	Nonpotable Water	11/08/22 10:10	11/08/22 13:10
MW-P106		2110817-02	Nonpotable Water	11/08/22 12:20	11/08/22 13:10
MW-P9		2110817-03	Nonpotable Water	11/07/22 12:20	11/08/22 13:10
MW-P417		2110817-04	Nonpotable Water	11/07/22 16:20	11/08/22 13:10
MW-P440		2110817-05	Nonpotable Water	11/07/22 15:20	11/08/22 13:10
RW-P109		2110817-06	Nonpotable Water	11/07/22 10:40	11/08/22 13:10
RW-P165		2110817-07	Nonpotable Water	11/08/22 10:50	11/08/22 13:10
RW-P171-1		2110817-08	Nonpotable Water	11/08/22 11:40	11/08/22 13:10
RW-P264		2110817-09	Nonpotable Water	11/07/22 11:30	11/08/22 13:10
RW-P440		2110817-10	Nonpotable Water	11/07/22 14:10	11/08/22 13:10
RW-P441		2110817-11	Nonpotable Water	11/07/22 12:30	11/08/22 13:10
RW-P584		2110817-12	Nonpotable Water	11/07/22 09:50	11/08/22 13:10
TRIP BLANK		2110817-13	Nonpotable Water	11/08/22 00:00	11/08/22 13:10

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Rabecka Koons, Quality Assurance Officer

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

MW-P4

2110817-01 (Nonpotable Water)
Sample Date: 11/08/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 13:23	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 13:23	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 13:23	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 13:23	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 13:23	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 13:23	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 13:23	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 13:23	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL

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Rabecka Koons, Quality Assurance Officer

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

MW-P4

2110817-01 (Nonpotable Water)
Sample Date: 11/08/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 13:23	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 13:23	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 13:23	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 13:23	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 13:23	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 13:23	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:23	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*104 %*	*11/10/22*		*11/10/22 13:23*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*11/10/22*		*11/10/22 13:23*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*	*11/10/22*		*11/10/22 13:23*		

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Rabecka Koons, Quality Assurance Officer

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

MW-P106

2110817-02 (Nonpotable Water)
Sample Date: 11/08/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 13:48	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 13:48	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 13:48	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 13:48	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 13:48	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 13:48	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 13:48	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 13:48	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
Dichlorodifluoromethane	**1.6**		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
1,1-Dichloroethane	**2.9**		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
cis-1,2-Dichloroethene	**1.3**		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
Dichlorofluoromethane	**1.8**		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 13:48	LL

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Rabecka Koons, Quality Assurance Officer

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

MW-P106

2110817-02 (Nonpotable Water)
Sample Date: 11/08/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 13:48	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 13:48	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
Tetrachloroethene	**1.0**	J	ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
Trichloroethene	**0.7**	J	ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 13:48	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 13:48	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 13:48	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 13:48	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*104 %*		*11/10/22*		*11/10/22 13:48*	
Surrogate: Toluene-d8			*75-120*	*98 %*		*11/10/22*		*11/10/22 13:48*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*		*11/10/22*		*11/10/22 13:48*	

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

MW-P9

2110817-03 (Nonpotable Water)
Sample Date: 11/07/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 14:12	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 14:12	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 14:12	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 14:12	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 14:12	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 14:12	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 14:12	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 14:12	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
Dichlorodifluoromethane	**1.5**		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
1,1-Dichloroethane	**1.0**	J	ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
Dichlorofluoromethane	**0.7**	J	ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 14:12	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

MW-P9

2110817-03 (Nonpotable Water)
Sample Date: 11/07/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 14:12	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 14:12	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
Tetrachloroethene	**1.0**	J	ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 14:12	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 14:12	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 14:12	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:12	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*108 %*	*11/10/22*	*11/10/22 14:12*
Surrogate: Toluene-d8	*75-120*	*99 %*	*11/10/22*	*11/10/22 14:12*
Surrogate: 4-Bromofluorobenzene	*75-120*	*98 %*	*11/10/22*	*11/10/22 14:12*

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

MW-P417

2110817-04 (Nonpotable Water)
Sample Date: 11/07/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 14:36	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 14:36	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 14:36	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 14:36	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 14:36	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 14:36	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 14:36	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 14:36	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
Dichlorodifluoromethane	**0.6**	J	ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

MW-P417

2110817-04 (Nonpotable Water)
Sample Date: 11/07/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 14:36	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 14:36	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 14:36	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 14:36	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 14:36	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 14:36	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 14:36	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*103 %*	*11/10/22*		*11/10/22 14:36*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*11/10/22*		*11/10/22 14:36*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*	*11/10/22*		*11/10/22 14:36*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

MW-P440

2110817-05 (Nonpotable Water)
Sample Date: 11/07/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 15:01	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 15:01	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 15:01	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 15:01	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 15:01	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 15:01	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 15:01	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 15:01	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

MW-P440

2110817-05 (Nonpotable Water)
Sample Date: 11/07/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 15:01	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 15:01	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 15:01	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 15:01	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 15:01	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 15:01	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:01	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*104 %*		*11/10/22*	*11/10/22 15:01*		
Surrogate: Toluene-d8			*75-120*	*99 %*		*11/10/22*	*11/10/22 15:01*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*		*11/10/22*	*11/10/22 15:01*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

RW-P109

2110817-06 (Nonpotable Water)
Sample Date: 11/07/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 15:25	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 15:25	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 15:25	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 15:25	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 15:25	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 15:25	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 15:25	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 15:25	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
Dichlorodifluoromethane	**2.0**		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
1,1-Dichloroethane	**0.9**	J	ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
Dichlorofluoromethane	**0.7**	J	ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 15:25	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

RW-P109

2110817-06 (Nonpotable Water)
Sample Date: 11/07/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 15:25	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 15:25	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
Tetrachloroethene	**0.8**	J	ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
Trichloroethene	**1.1**		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 15:25	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 15:25	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 15:25	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:25	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*105 %*		*11/10/22*		*11/10/22 15:25*	
Surrogate: Toluene-d8			*75-120*	*99 %*		*11/10/22*		*11/10/22 15:25*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*		*11/10/22*		*11/10/22 15:25*	

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

RW-P165

2110817-07 (Nonpotable Water)
Sample Date: 11/08/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 15:50	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 15:50	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 15:50	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 15:50	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 15:50	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 15:50	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 15:50	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 15:50	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
Dichlorodifluoromethane	**5.4**		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
1,1-Dichloroethane	**3.0**		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
cis-1,2-Dichloroethene	**1.0**		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
Dichlorofluoromethane	**4.0**		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 15:50	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

RW-P165

2110817-07 (Nonpotable Water)
Sample Date: 11/08/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 15:50	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 15:50	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
Tetrachloroethene	**2.5**		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
Trichloroethene	**0.6**	J	ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
Trichlorofluoromethane (Freon 11)	**0.5**	J	ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 15:50	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 15:50	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 15:50	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 15:50	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*105 %*		*11/10/22*		*11/10/22 15:50*	
Surrogate: Toluene-d8			*75-120*	*99 %*		*11/10/22*		*11/10/22 15:50*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*		*11/10/22*		*11/10/22 15:50*	

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

RW-P171-1

2110817-08 (Nonpotable Water)
Sample Date: 11/08/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 16:14	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 16:14	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 16:14	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 16:14	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 16:14	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 16:14	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 16:14	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 16:14	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

RW-P171-1

2110817-08 (Nonpotable Water)
Sample Date: 11/08/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 16:14	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 16:14	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 16:14	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 16:14	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 16:14	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 16:14	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:14	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*104 %*	*11/10/22*		*11/10/22 16:14*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*11/10/22*		*11/10/22 16:14*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*	*11/10/22*		*11/10/22 16:14*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

RW-P264

2110817-09 (Nonpotable Water)
Sample Date: 11/07/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 16:39	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 16:39	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 16:39	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 16:39	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 16:39	LL
Chloroform	**0.8**	J	ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 16:39	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 16:39	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 16:39	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
Dichlorodifluoromethane	**6.0**		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
1,1-Dichloroethane	**3.3**		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
Dichlorofluoromethane	**4.1**		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 16:39	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

RW-P264

2110817-09 (Nonpotable Water)
Sample Date: 11/07/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 16:39	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 16:39	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
Tetrachloroethene	**2.0**		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
Trichloroethene	**0.7**	J	ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 16:39	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 16:39	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 16:39	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 16:39	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*105 %*		*11/10/22*		*11/10/22 16:39*	
Surrogate: Toluene-d8			*75-120*	*99 %*		*11/10/22*		*11/10/22 16:39*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*		*11/10/22*		*11/10/22 16:39*	

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

RW-P440

2110817-10 (Nonpotable Water)
Sample Date: 11/07/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 17:04	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 17:04	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 17:04	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 17:04	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 17:04	LL
Chloroform	**1.7**		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 17:04	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 17:04	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 17:04	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
Dichlorodifluoromethane	**1.0**		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
1,1-Dichloroethane	**1.2**		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
cis-1,2-Dichloroethene	**0.5**	J	ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
Dichlorofluoromethane	**0.7**	J	ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 17:04	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

RW-P440

2110817-10 (Nonpotable Water)
Sample Date: 11/07/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 17:04	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 17:04	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
Trichloroethene	**0.6**	J	ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 17:04	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 17:04	LL
Vinyl chloride	**1.9**		ug/L	1.0	1.0	1	11/10/22	11/10/22 17:04	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:04	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*106 %*		*11/10/22*		*11/10/22 17:04*	
Surrogate: Toluene-d8			*75-120*	*99 %*		*11/10/22*		*11/10/22 17:04*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*97 %*		*11/10/22*		*11/10/22 17:04*	

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

RW-P441

2110817-11 (Nonpotable Water)
Sample Date: 11/07/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 17:28	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 17:28	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 17:28	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 17:28	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 17:28	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 17:28	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 17:28	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 17:28	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
Dichlorodifluoromethane	**1.8**		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
1,1-Dichloroethane	**0.8**	J	ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

RW-P441

2110817-11 (Nonpotable Water)
Sample Date: 11/07/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 17:28	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 17:28	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 17:28	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
Tetrachloroethene	**0.7**	J	ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 17:28	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 17:28	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 17:28	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:28	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*105 %*		*11/10/22*	*11/10/22 17:28*		
Surrogate: Toluene-d8			*75-120*	*99 %*		*11/10/22*	*11/10/22 17:28*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*		*11/10/22*	*11/10/22 17:28*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

RW-P584

2110817-12 (Nonpotable Water)
Sample Date: 11/07/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 17:52	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 17:52	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 17:52	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 17:52	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 17:52	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 17:52	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 17:52	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 17:52	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
Dichlorodifluoromethane	**3.7**		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
1,1-Dichloroethane	**2.8**		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
cis-1,2-Dichloroethene	**0.9**	J	ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
Dichlorofluoromethane	**2.0**		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 17:52	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

RW-P584

2110817-12 (Nonpotable Water)
Sample Date: 11/07/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 17:52	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 17:52	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
Tetrachloroethene	**1.9**		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
Trichloroethene	**1.0**	J	ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 17:52	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 17:52	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 17:52	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 17:52	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*106 %*		*11/10/22*		*11/10/22 17:52*	
Surrogate: Toluene-d8			*75-120*	*99 %*		*11/10/22*		*11/10/22 17:52*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*		*11/10/22*		*11/10/22 17:52*	

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

TRIP BLANK

2110817-13 (Nonpotable Water)
Sample Date: 11/08/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 12:59	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 12:59	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 12:59	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 12:59	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 12:59	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 12:59	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 12:59	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 12:59	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

TRIP BLANK

2110817-13 (Nonpotable Water)
Sample Date: 11/08/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 12:59	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/22	11/10/22 12:59	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 12:59	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 12:59	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 12:59	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/22	11/10/22 12:59	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/22	11/10/22 12:59	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*106 %*	*11/10/22*		*11/10/22 12:59*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*11/10/22*		*11/10/22 12:59*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*101 %*	*11/10/22*		*11/10/22 12:59*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B211205 - GCMS-WATER-VOLATILES										
Blank (B211205-BLK1)					Prepared & Analyzed: 11/10/22					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B211205 - GCMS-WATER-VOLATILES										
Blank (B211205-BLK1)					Prepared & Analyzed: 11/10/22					
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*51.68*			ug/L	*50.00*		*103*	*70-130*		
Surrogate: Toluene-d8	*50.08*			ug/L	*50.00*		*100*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.60*			ug/L	*50.00*		*99*	*75-120*		

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Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B211205 - GCMS-WATER-VOLATILES										
LCS (B211205-BS1)					Prepared & Analyzed: 11/10/22					
Acetone	9.6		5.0	ug/L	10.00		96	55-150		
Acrylonitrile	4.9	J	5.0	ug/L	5.000		98	50-150		
Benzene	5.6		1.0	ug/L	5.000		111	70-130		
Bromochloromethane	5.8		1.0	ug/L	5.000		115	70-130		
Bromodichloromethane	5.1		1.0	ug/L	5.000		101	70-130		
Bromoform	4.6		1.0	ug/L	5.000		91	70-130		
Bromomethane	4.7		1.0	ug/L	5.000		94	25-150		
2-Butanone (MEK)	9.1		5.0	ug/L	10.00		91	60-140		
Carbon disulfide	6.0		1.0	ug/L	5.000		120	70-130		
Carbon tetrachloride	5.2		1.0	ug/L	5.000		104	70-130		
Chlorobenzene	5.4		1.0	ug/L	5.000		108	70-130		
Chloroethane	4.7		1.0	ug/L	5.000		95	60-150		
Chloroform	5.3		1.0	ug/L	5.000		106	70-130		
Chloromethane	4.9		1.0	ug/L	5.000		97	60-150		
Dibromochloromethane	5.1		1.0	ug/L	5.000		102	70-130		
1,2-Dibromo-3-chloropropane	5.8		1.0	ug/L	5.000		116	70-130		
1,2-Dibromoethane (EDB)	5.4		1.0	ug/L	5.000		108	70-130		
Dibromomethane	5.3		1.0	ug/L	5.000		106	70-130		
1,2-Dichlorobenzene	5.9		1.0	ug/L	5.000		118	70-130		
1,4-Dichlorobenzene	5.9		1.0	ug/L	5.000		119	70-130		
1,1-Dichloroethane	5.2		1.0	ug/L	5.000		104	70-130		
1,2-Dichloroethane	5.0		1.0	ug/L	5.000		100	70-130		
1,1-Dichloroethene	5.5		1.0	ug/L	5.000		111	70-130		
cis-1,2-Dichloroethene	5.1		1.0	ug/L	5.000		102	70-130		
trans-1,2-Dichloroethene	5.4		1.0	ug/L	5.000		108	70-130		
1,2-Dichloropropane	5.1		1.0	ug/L	5.000		102	70-130		
1,3-Dichloropropane	5.2		1.0	ug/L	5.000		103	70-130		
2,2-Dichloropropane	5.2		1.0	ug/L	5.000		104	70-130		
1,1-Dichloropropene	5.1		1.0	ug/L	5.000		103	70-130		
cis-1,3-Dichloropropene	4.9		1.0	ug/L	5.000		98	70-130		
trans-1,3-Dichloropropene	5.0		1.0	ug/L	5.000		99	70-130		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B211205 - GCMS-WATER-VOLATILES										
LCS (B211205-BS1)					Prepared & Analyzed: 11/10/22					
Ethylbenzene	5.8		1.0	ug/L	5.000		116	70-130		
2-Hexanone	9.6		5.0	ug/L	10.00		96	70-130		
Methyl tert-butyl ether (MTBE)	4.9		1.0	ug/L	5.000		98	70-130		
4-Methyl-2-pentanone	9.5		5.0	ug/L	10.00		95	70-130		
Methylene chloride	5.8		1.0	ug/L	5.000		117	50-200		
Methyl methacrylate	4.9	J	5.0	ug/L	5.000		98	50-150		
Styrene	5.3		1.0	ug/L	5.000		106	70-130		
1,1,1,2-Tetrachloroethane	5.2		1.0	ug/L	5.000		105	70-130		
1,1,2,2-Tetrachloroethane	5.6		1.0	ug/L	5.000		112	70-130		
Tetrachloroethene	5.2		1.0	ug/L	5.000		104	70-130		
Toluene	5.4		1.0	ug/L	5.000		107	70-130		
1,1,1-Trichloroethane	5.3		1.0	ug/L	5.000		107	70-130		
1,1,2-Trichloroethane	5.2		1.0	ug/L	5.000		105	70-130		
Trichloroethene	5.2		1.0	ug/L	5.000		104	70-130		
Trichlorofluoromethane (Freon 11)	5.3		1.0	ug/L	5.000		105	70-130		
1,2,3-Trichloropropane	5.1		1.0	ug/L	5.000		102	70-130		
Vinyl acetate	3.4		1.0	ug/L	5.000		68	70-130		
Vinyl chloride	5.0		1.0	ug/L	5.000		99	70-130		
o-Xylene	5.5		1.0	ug/L	5.000		111	70-130		
m- & p-Xylenes	11.1		1.0	ug/L	10.00		111	70-130		
Surrogate: 1,2-Dichloroethane-d4	*50.34*			ug/L	*50.00*		*101*	*70-130*		
Surrogate: Toluene-d8	*49.93*			ug/L	*50.00*		*100*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*50.76*			ug/L	*50.00*		*102*	*75-120*		
Duplicate (B211205-DUP1)			**Source: 2110817-01**		Prepared & Analyzed: 11/10/22					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B211205 - GCMS-WATER-VOLATILES										
Duplicate (B211205-DUP1)			**Source: 2110817-01**		Prepared & Analyzed: 11/10/22					
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	0.5	J	1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	ND		1.0	ug/L		ND				20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B211205 - GCMS-WATER-VOLATILES										
Duplicate (B211205-DUP1)		**Source: 2110817-01**		Prepared & Analyzed: 11/10/22						
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	ND		1.0	ug/L		ND				20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	ND		1.0	ug/L		ND				20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*52.60*			ug/L	*50.00*		*105*	*70-130*		
Surrogate: Toluene-d8	*49.53*			ug/L	*50.00*		*99*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.82*			ug/L	*50.00*		*98*	*75-120*		
Matrix Spike (B211205-MS1)		**Source: 2110817-02**		Prepared & Analyzed: 11/10/22						
Acetone	10.5		5.0	ug/L	10.00	ND	105	60-120		
Acrylonitrile	10.4		5.0	ug/L	10.00	ND	104	0-200		
Benzene	11.4		1.0	ug/L	10.00	ND	114	60-120		
Bromochloromethane	10.7		1.0	ug/L	10.00	ND	107	60-120		
Bromodichloromethane	10.5		1.0	ug/L	10.00	ND	105	60-120		
Bromoform	10.3		1.0	ug/L	10.00	ND	103	60-120		
Bromomethane	6.2		1.0	ug/L	10.00	ND	62	60-120		
2-Butanone (MEK)	9.3		5.0	ug/L	10.00	ND	93	60-120		

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B211205 - GCMS-WATER-VOLATILES										
Matrix Spike (B211205-MS1)			**Source: 2110817-02**		Prepared & Analyzed: 11/10/22					
Carbon disulfide	12.0		1.0	ug/L	10.00	ND	120	60-120		
Carbon tetrachloride	10.9		1.0	ug/L	10.00	ND	109	60-120		
Chlorobenzene	11.2		1.0	ug/L	10.00	ND	112	60-120		
Chloroethane	11.1		1.0	ug/L	10.00	ND	111	60-120		
Chloroform	10.7		1.0	ug/L	10.00	ND	107	60-120		
Chloromethane	10.7		1.0	ug/L	10.00	ND	107	60-120		
Dibromochloromethane	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,2-Dibromo-3-chloropropane	10.0		1.0	ug/L	10.00	ND	100	60-120		
1,2-Dibromoethane (EDB)	10.8		1.0	ug/L	10.00	ND	108	60-120		
Dibromomethane	10.3		1.0	ug/L	10.00	ND	103	60-120		
1,2-Dichlorobenzene	11.1		1.0	ug/L	10.00	ND	111	60-120		
1,4-Dichlorobenzene	10.9		1.0	ug/L	10.00	ND	109	60-120		
1,1-Dichloroethane	13.5		1.0	ug/L	10.00	2.9	106	60-120		
1,2-Dichloroethane	10.1		1.0	ug/L	10.00	ND	101	60-120		
1,1-Dichloroethene	11.6		1.0	ug/L	10.00	ND	116	60-120		
cis-1,2-Dichloroethene	11.8		1.0	ug/L	10.00	1.3	105	60-120		
trans-1,2-Dichloroethene	10.9		1.0	ug/L	10.00	ND	109	60-120		
1,2-Dichloropropane	10.6		1.0	ug/L	10.00	ND	106	60-120		
1,3-Dichloropropane	10.6		1.0	ug/L	10.00	ND	106	60-120		
2,2-Dichloropropane	9.2		1.0	ug/L	10.00	ND	92	60-120		
1,1-Dichloropropene	10.8		1.0	ug/L	10.00	ND	108	60-120		
cis-1,3-Dichloropropene	10.2		1.0	ug/L	10.00	ND	102	60-120		
trans-1,3-Dichloropropene	9.8		1.0	ug/L	10.00	ND	98	60-120		
Ethylbenzene	11.6		1.0	ug/L	10.00	ND	116	60-120		
2-Hexanone	9.6		5.0	ug/L	10.00	ND	96	60-120		
Methyl tert-butyl ether (MTBE)	9.2		1.0	ug/L	10.00	ND	92	60-120		
4-Methyl-2-pentanone	9.0		5.0	ug/L	10.00	ND	90	60-120		
Methylene chloride	10.4		1.0	ug/L	10.00	ND	104	60-120		
Methyl methacrylate	8.5		5.0	ug/L	10.00	ND	85	60-120		
Styrene	9.6		1.0	ug/L	10.00	ND	96	60-120		
1,1,1,2-Tetrachloroethane	10.8		1.0	ug/L	10.00	ND	108	60-120		

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Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B211205 - GCMS-WATER-VOLATILES										
Matrix Spike (B211205-MS1)			**Source: 2110817-02**		Prepared & Analyzed: 11/10/22					
1,1,2,2-Tetrachloroethane	11.0		1.0	ug/L	10.00	ND	110	60-120		
Tetrachloroethene	12.4		1.0	ug/L	10.00	1.0	114	60-120		
Toluene	11.3		1.0	ug/L	10.00	ND	113	60-120		
1,1,1-Trichloroethane	10.8		1.0	ug/L	10.00	ND	108	60-120		
1,1,2-Trichloroethane	10.9		1.0	ug/L	10.00	ND	109	60-120		
Trichloroethene	12.0		1.0	ug/L	10.00	0.7	113	60-120		
Trichlorofluoromethane (Freon 11)	12.0		1.0	ug/L	10.00	ND	120	60-120		
1,2,3-Trichloropropane	9.7		1.0	ug/L	10.00	ND	97	60-120		
Vinyl acetate	7.4		1.0	ug/L	10.00	ND	74	60-120		
Vinyl chloride	11.3		1.0	ug/L	10.00	ND	113	60-120		
o-Xylene	11.0		1.0	ug/L	10.00	ND	110	60-120		
m- & p-Xylenes	23.4		1.0	ug/L	20.00	ND	117	60-120		
Surrogate: 1,2-Dichloroethane-d4	*50.01*			ug/L	*50.00*		*100*	*70-130*		
Surrogate: Toluene-d8	*50.18*			ug/L	*50.00*		*100*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*50.65*			ug/L	*50.00*		*101*	*75-120*		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/16/22 14:30

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

1 of 2 ~~1 of 4~~

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MSS
Project	MVL - FALL 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260 (1)											
1	MW - P4	3	11.8.22	1010	✓		GW	✓											2110817-01 A
2	MW - P106		11.8.22	1220														-	02
3	MW - P9		11.7.22	1220														-	03
4	MW - P417		11.7.22	1620														-	04
5	MW - P440			1520														-	05
6	RW - P109			1040														-	06
7	RW - P165		11.8.22	1050														-	07
8	RW - P171-1		11.8.22	1140														-	08
9	RW - P264		11.7.22	1130														-	09
10	RW - P440			1410														-	10
11	RW - P441			1230														-	11
12	RW - P584			950														-	12

	Signature	Date	Time	Comments
Relinquished by	[signature]	11.8.22	1310	(1) APPENDIX I LIST of 47 VOCs, MTBE, DCDFM +
Received by	[signature]	11.8.22	1310	DCFM
Relinquished by				
Received by				STANDARD REPORT
Relinquished by				
Received by				

Cooler Temp on Arrival: 4.9 Deg. C

Rev. Aug. 2018

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MSS
Project	MLF - FALL 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260 (1)											
1	TRIP BLANK	3	11.8.22	—	✓		QA	✓											
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

2110817-13 A

	Signature	Date	Time	Comments
Relinquished by	[signature]	11.8.22	1310	(1) APPENDIX I LIST OF 47 VOCs, MTBE,
Received by	[signature]	11.8.22	1510	DCDFM + DCFM
Relinquished by				
Received by				STANDARD REPORT
Relinquished by				
Received by				

Cooler Temp on Arrival: 4.9 Deg. C

Rev. Aug. 2018

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

09 November 2022

Steve Brown
Environmental Monitoring and Assessment
207 East Sixth Street
Lititz, PA 17543
RE: MILLERSVILLE LANDFILL

Enclosed are the results of analyses for samples received by the laboratory on 11/03/22 14:30.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TRIP BLANK		2110333-01	Nonpotable Water	11/03/22 00:00	11/03/22 14:30
FIELD BLANK		2110333-02	Nonpotable Water	11/03/22 12:30	11/03/22 14:30
TW-1		2110333-03	Nonpotable Water	11/02/22 14:30	11/03/22 14:30
TW-2		2110333-04	Nonpotable Water	11/01/22 15:55	11/03/22 14:30
TW-2A		2110333-05	Nonpotable Water	11/01/22 15:20	11/03/22 14:30
TW-3		2110333-06	Nonpotable Water	11/01/22 16:40	11/03/22 14:30
TW-3A		2110333-07	Nonpotable Water	11/01/22 17:15	11/03/22 14:30
TW-4		2110333-08	Nonpotable Water	11/02/22 11:10	11/03/22 14:30
TW-4B		2110333-09	Nonpotable Water	11/02/22 11:45	11/03/22 14:30
TW-14		2110333-10	Nonpotable Water	11/03/22 12:10	11/03/22 14:30
TW-27		2110333-11	Nonpotable Water	11/02/22 12:30	11/03/22 14:30
TW-28		2110333-12	Nonpotable Water	11/03/22 10:30	11/03/22 14:30
TW-29		2110333-13	Nonpotable Water	11/03/22 11:15	11/03/22 14:30
TW-30		2110333-14	Nonpotable Water	11/02/22 15:10	11/03/22 14:30
SW-1		2110333-15	Nonpotable Water	11/01/22 12:40	11/03/22 14:30
SW-2		2110333-16	Nonpotable Water	11/01/22 13:15	11/03/22 14:30
SW-3		2110333-17	Nonpotable Water	11/01/22 13:00	11/03/22 14:30

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

Maryland spectral Services

Analytical Chemistry Services

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Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

TRIP BLANK

2110333-01 (Nonpotable Water)
Sample Date: 11/03/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 11:42	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 11:42	LL
Benzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 11:42	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 11:42	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 11:42	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 11:42	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 11:42	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 11:42	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL

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Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

TRIP BLANK

2110333-01 (Nonpotable Water)
Sample Date: 11/03/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 11:42	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 11:42	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 11:42	LL
Styrene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
Toluene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 11:42	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 11:42	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 11:42	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 11:42	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*105 %*	*11/08/22*		*11/08/22 11:42*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*11/08/22*		*11/08/22 11:42*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*101 %*	*11/08/22*		*11/08/22 11:42*		

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Will Brewington, President

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Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

FIELD BLANK

2110333-02 (Nonpotable Water)
Sample Date: 11/03/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 12:06	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 12:06	LL
Benzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 12:06	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 12:06	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 12:06	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 12:06	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 12:06	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 12:06	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL

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Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

FIELD BLANK

2110333-02 (Nonpotable Water)
Sample Date: 11/03/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 12:06	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 12:06	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 12:06	LL
Styrene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
Toluene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 12:06	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 12:06	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 12:06	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:06	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*105 %*	*11/08/22*		*11/08/22 12:06*		
Surrogate: Toluene-d8			*75-120*	*96 %*	*11/08/22*		*11/08/22 12:06*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*101 %*	*11/08/22*		*11/08/22 12:06*		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

TW-1

2110333-03 (Nonpotable Water)
Sample Date: 11/02/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 12:31	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 12:31	LL
Benzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 12:31	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 12:31	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 12:31	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 12:31	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 12:31	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 12:31	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
Dichlorodifluoromethane	**8.0**		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
1,1-Dichloroethane	**1.9**		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
cis-1,2-Dichloroethene	**0.5**	J	ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
Dichlorofluoromethane	**2.8**		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 12:31	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

TW-1

2110333-03 (Nonpotable Water)
Sample Date: 11/02/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
Methyl tert-butyl ether (MTBE)	**0.5**	J	ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 12:31	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 12:31	LL
Styrene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
Toluene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
Trichloroethene	**0.9**	J	ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 12:31	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 12:31	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 12:31	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:31	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*103 %*	*11/08/22*	*11/08/22 12:31*
Surrogate: Toluene-d8	*75-120*	*96 %*	*11/08/22*	*11/08/22 12:31*
Surrogate: 4-Bromofluorobenzene	*75-120*	*101 %*	*11/08/22*	*11/08/22 12:31*

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

TW-2

2110333-04 (Nonpotable Water)
Sample Date: 11/01/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 12:55	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 12:55	LL
Benzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 12:55	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 12:55	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 12:55	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 12:55	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 12:55	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 12:55	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

TW-2

2110333-04 (Nonpotable Water)
Sample Date: 11/01/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 12:55	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 12:55	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 12:55	LL
Styrene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
Toluene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 12:55	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 12:55	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 12:55	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 12:55	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*103 %*	*11/08/22*		*11/08/22 12:55*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*11/08/22*		*11/08/22 12:55*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*	*11/08/22*		*11/08/22 12:55*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

TW-2A

2110333-05 (Nonpotable Water)
Sample Date: 11/01/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 13:20	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 13:20	LL
Benzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 13:20	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 13:20	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 13:20	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 13:20	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 13:20	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 13:20	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
Dichlorodifluoromethane	**0.9**	J	ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
Dichlorofluoromethane	**0.8**	J	ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

TW-2A

2110333-05 (Nonpotable Water)
Sample Date: 11/01/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 13:20	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 13:20	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 13:20	LL
Styrene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
Toluene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 13:20	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 13:20	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 13:20	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:20	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*104 %*	*11/08/22*		*11/08/22 13:20*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*11/08/22*		*11/08/22 13:20*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*101 %*	*11/08/22*		*11/08/22 13:20*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

TW-3

2110333-06 (Nonpotable Water)
Sample Date: 11/01/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 13:44	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 13:44	LL
Benzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 13:44	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 13:44	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 13:44	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 13:44	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 13:44	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 13:44	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

TW-3

2110333-06 (Nonpotable Water)
Sample Date: 11/01/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 13:44	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 13:44	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 13:44	LL
Styrene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
Toluene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 13:44	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 13:44	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 13:44	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 13:44	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*103 %*	*11/08/22*		*11/08/22 13:44*		
Surrogate: Toluene-d8			*75-120*	*96 %*	*11/08/22*		*11/08/22 13:44*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*11/08/22*		*11/08/22 13:44*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

TW-3A

2110333-07 (Nonpotable Water)
Sample Date: 11/01/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 14:09	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 14:09	LL
Benzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 14:09	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 14:09	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 14:09	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 14:09	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 14:09	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 14:09	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

TW-3A

2110333-07 (Nonpotable Water)
Sample Date: 11/01/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 14:09	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 14:09	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 14:09	LL
Styrene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
Toluene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 14:09	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 14:09	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 14:09	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:09	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*104 %*	*11/08/22*		*11/08/22 14:09*		
Surrogate: Toluene-d8			*75-120*	*96 %*	*11/08/22*		*11/08/22 14:09*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*	*11/08/22*		*11/08/22 14:09*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

TW-4

2110333-08 (Nonpotable Water)
Sample Date: 11/02/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 14:34	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 14:34	LL
Benzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 14:34	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 14:34	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 14:34	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 14:34	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 14:34	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 14:34	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
Dichlorodifluoromethane	**2.1**		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
1,1-Dichloroethane	**2.8**		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
cis-1,2-Dichloroethene	**0.6**	J	ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
Dichlorofluoromethane	**4.5**		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 14:34	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

TW-4

2110333-08 (Nonpotable Water)
Sample Date: 11/02/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 14:34	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 14:34	LL
Styrene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
Toluene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 14:34	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 14:34	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 14:34	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:34	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*108 %*			*11/08/22*	*11/08/22 14:34*	
Surrogate: Toluene-d8			*75-120*	*96 %*			*11/08/22*	*11/08/22 14:34*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*			*11/08/22*	*11/08/22 14:34*	

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

TW-4B

2110333-09 (Nonpotable Water)
Sample Date: 11/02/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 14:59	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 14:59	LL
Benzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 14:59	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 14:59	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 14:59	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 14:59	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 14:59	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 14:59	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

TW-4B

2110333-09 (Nonpotable Water)
Sample Date: 11/02/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 14:59	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 14:59	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 14:59	LL
Styrene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
Toluene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 14:59	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 14:59	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 14:59	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 14:59	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*105 %*	*11/08/22*		*11/08/22 14:59*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*11/08/22*		*11/08/22 14:59*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*101 %*	*11/08/22*		*11/08/22 14:59*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

TW-14

2110333-10 (Nonpotable Water)
Sample Date: 11/03/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 15:23	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 15:23	LL
Benzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 15:23	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 15:23	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 15:23	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 15:23	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 15:23	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 15:23	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
Dichlorodifluoromethane	**6.2**		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
1,1-Dichloroethane	**3.5**		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
cis-1,2-Dichloroethene	**1.3**		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
Dichlorofluoromethane	**4.1**		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 15:23	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

TW-14

2110333-10 (Nonpotable Water)
Sample Date: 11/03/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 15:23	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 15:23	LL
Styrene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
Tetrachloroethene	**4.2**		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
Toluene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
Trichloroethene	**1.4**		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 15:23	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 15:23	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 15:23	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:23	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*103 %*			*11/08/22*	*11/08/22 15:23*	
Surrogate: Toluene-d8			*75-120*	*97 %*			*11/08/22*	*11/08/22 15:23*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*			*11/08/22*	*11/08/22 15:23*	

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

TW-27

2110333-11 (Nonpotable Water)
Sample Date: 11/02/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 15:48	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 15:48	LL
Benzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 15:48	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 15:48	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 15:48	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 15:48	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 15:48	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 15:48	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

TW-27

2110333-11 (Nonpotable Water)
Sample Date: 11/02/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 15:48	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 15:48	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 15:48	LL
Styrene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
Toluene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 15:48	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 15:48	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 15:48	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 15:48	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*105 %*	*11/08/22*		*11/08/22 15:48*		
Surrogate: Toluene-d8			*75-120*	*96 %*	*11/08/22*		*11/08/22 15:48*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*101 %*	*11/08/22*		*11/08/22 15:48*		

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Will Brewington, President

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Baltimore MD 21227
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

TW-28

2110333-12 (Nonpotable Water)
Sample Date: 11/03/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 16:13	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 16:13	LL
Benzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 16:13	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 16:13	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 16:13	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 16:13	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 16:13	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 16:13	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
Dichlorodifluoromethane	**5.0**		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
1,1-Dichloroethane	**1.7**		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
Dichlorofluoromethane	**4.1**		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 16:13	LL

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Baltimore MD 21227
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

TW-28

2110333-12 (Nonpotable Water)
Sample Date: 11/03/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 16:13	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 16:13	LL
Styrene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
Tetrachloroethene	**1.1**		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
Toluene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
Trichlorofluoromethane (Freon 11)	**1.3**		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 16:13	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 16:13	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 16:13	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:13	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*105 %*			*11/08/22*	*11/08/22 16:13*	
Surrogate: Toluene-d8			*75-120*	*95 %*			*11/08/22*	*11/08/22 16:13*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*			*11/08/22*	*11/08/22 16:13*	

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

TW-29

2110333-13 (Nonpotable Water)
Sample Date: 11/03/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 16:37	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 16:37	LL
Benzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 16:37	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 16:37	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 16:37	LL
Chloroform	**0.5**	J	ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 16:37	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 16:37	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 16:37	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
Dichlorodifluoromethane	**3.1**		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
1,1-Dichloroethane	**0.9**	J	ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
cis-1,2-Dichloroethene	**0.6**	J	ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
Dichlorofluoromethane	**1.1**		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 16:37	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

TW-29

2110333-13 (Nonpotable Water)
Sample Date: 11/03/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 16:37	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 16:37	LL
Styrene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
Tetrachloroethene	**1.2**		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
Toluene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 16:37	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 16:37	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 16:37	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 16:37	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*104 %*	*11/08/22*	*11/08/22 16:37*
Surrogate: Toluene-d8	*75-120*	*96 %*	*11/08/22*	*11/08/22 16:37*
Surrogate: 4-Bromofluorobenzene	*75-120*	*99 %*	*11/08/22*	*11/08/22 16:37*

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Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

TW-30

2110333-14 (Nonpotable Water)
Sample Date: 11/02/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 17:02	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 17:02	LL
Benzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 17:02	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 17:02	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 17:02	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 17:02	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 17:02	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 17:02	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

TW-30

2110333-14 (Nonpotable Water)
Sample Date: 11/02/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 17:02	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 17:02	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 17:02	LL
Styrene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
Toluene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 17:02	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 17:02	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 17:02	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:02	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*104 %*	*11/08/22*		*11/08/22 17:02*		
Surrogate: Toluene-d8			*75-120*	*96 %*	*11/08/22*		*11/08/22 17:02*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*	*11/08/22*		*11/08/22 17:02*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

SW-1

2110333-15 (Nonpotable Water)
Sample Date: 11/01/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 17:26	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 17:26	LL
Benzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 17:26	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 17:26	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 17:26	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 17:26	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 17:26	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 17:26	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

SW-1

2110333-15 (Nonpotable Water)
Sample Date: 11/01/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 17:26	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 17:26	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 17:26	LL
Styrene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
Toluene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 17:26	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 17:26	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 17:26	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:26	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*105 %*	*11/08/22*		*11/08/22 17:26*		
Surrogate: Toluene-d8			*75-120*	*96 %*	*11/08/22*		*11/08/22 17:26*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*11/08/22*		*11/08/22 17:26*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

SW-2

2110333-16 (Nonpotable Water)
Sample Date: 11/01/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 17:50	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 17:50	LL
Benzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 17:50	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 17:50	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 17:50	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 17:50	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 17:50	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 17:50	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

SW-2

2110333-16 (Nonpotable Water)
Sample Date: 11/01/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 17:50	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 17:50	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 17:50	LL
Styrene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
Toluene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 17:50	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 17:50	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 17:50	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 17:50	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*105 %*	*11/08/22*		*11/08/22 17:50*		
Surrogate: Toluene-d8			*75-120*	*96 %*	*11/08/22*		*11/08/22 17:50*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*11/08/22*		*11/08/22 17:50*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

SW-3

2110333-17 (Nonpotable Water)
Sample Date: 11/01/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	**7.7**		ug/L	5.0	5.0	1	11/08/22	11/08/22 18:15	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 18:15	LL
Benzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 18:15	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 18:15	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 18:15	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 18:15	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 18:15	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 18:15	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

SW-3

2110333-17 (Nonpotable Water)
Sample Date: 11/01/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 18:15	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/08/22	11/08/22 18:15	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 18:15	LL
Styrene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
Toluene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 18:15	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 18:15	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/08/22	11/08/22 18:15	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/08/22	11/08/22 18:15	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*106 %*	*11/08/22*		*11/08/22 18:15*		
Surrogate: Toluene-d8			*75-120*	*96 %*	*11/08/22*		*11/08/22 18:15*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*	*11/08/22*		*11/08/22 18:15*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B211156 - GCMS-WATER-VOLATILES										
Blank (B211156-BLK1)					Prepared & Analyzed: 11/08/22					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						

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Project Manager: Steve Brown

Reported:
11/09/22 16:40

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B211156 - GCMS-WATER-VOLATILES										
Blank (B211156-BLK1)					Prepared & Analyzed: 11/08/22					
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*51.59*			ug/L	*50.00*		*103*	*70-130*		
Surrogate: Toluene-d8	*48.04*			ug/L	*50.00*		*96*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.60*			ug/L	*50.00*		*99*	*75-120*		

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Project Manager: Steve Brown

Reported:
11/09/22 16:40

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B211156 - GCMS-WATER-VOLATILES										
LCS (B211156-BS1)					Prepared & Analyzed: 11/08/22					
Acetone	9.5		5.0	ug/L	10.00		95	55-150		
Acrylonitrile	5.5		5.0	ug/L	5.000		110	50-150		
Benzene	6.0		1.0	ug/L	5.000		120	70-130		
Bromochloromethane	6.1		1.0	ug/L	5.000		121	70-130		
Bromodichloromethane	5.6		1.0	ug/L	5.000		112	70-130		
Bromoform	5.0		1.0	ug/L	5.000		101	70-130		
Bromomethane	3.1		1.0	ug/L	5.000		62	25-150		
2-Butanone (MEK)	9.9		5.0	ug/L	10.00		99	60-140		
Carbon disulfide	6.4		1.0	ug/L	5.000		127	70-130		
Carbon tetrachloride	5.6		1.0	ug/L	5.000		112	70-130		
Chlorobenzene	5.6		1.0	ug/L	5.000		112	70-130		
Chloroethane	5.3		1.0	ug/L	5.000		106	60-150		
Chloroform	5.4		1.0	ug/L	5.000		109	70-130		
Chloromethane	5.1		1.0	ug/L	5.000		102	60-150		
Dibromochloromethane	5.4		1.0	ug/L	5.000		107	70-130		
1,2-Dibromo-3-chloropropane	5.7		1.0	ug/L	5.000		113	70-130		
1,2-Dibromoethane (EDB)	5.5		1.0	ug/L	5.000		109	70-130		
Dibromomethane	5.6		1.0	ug/L	5.000		112	70-130		
1,2-Dichlorobenzene	5.6		1.0	ug/L	5.000		113	70-130		
1,4-Dichlorobenzene	6.1		1.0	ug/L	5.000		122	70-130		
1,1-Dichloroethane	5.7		1.0	ug/L	5.000		113	70-130		
1,2-Dichloroethane	5.6		1.0	ug/L	5.000		112	70-130		
1,1-Dichloroethene	5.8		1.0	ug/L	5.000		116	70-130		
cis-1,2-Dichloroethene	5.7		1.0	ug/L	5.000		115	70-130		
trans-1,2-Dichloroethene	5.9		1.0	ug/L	5.000		117	70-130		
1,2-Dichloropropane	5.3		1.0	ug/L	5.000		106	70-130		
1,3-Dichloropropane	5.5		1.0	ug/L	5.000		110	70-130		
2,2-Dichloropropane	5.5		1.0	ug/L	5.000		111	70-130		
1,1-Dichloropropene	5.5		1.0	ug/L	5.000		109	70-130		
cis-1,3-Dichloropropene	5.4		1.0	ug/L	5.000		109	70-130		
trans-1,3-Dichloropropene	5.0		1.0	ug/L	5.000		101	70-130		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B211156 - GCMS-WATER-VOLATILES										
LCS (B211156-BS1)					Prepared & Analyzed: 11/08/22					
Ethylbenzene	5.8		1.0	ug/L	5.000		116	70-130		
2-Hexanone	10.2		5.0	ug/L	10.00		102	70-130		
Methyl tert-butyl ether (MTBE)	5.5		1.0	ug/L	5.000		109	70-130		
4-Methyl-2-pentanone	9.9		5.0	ug/L	10.00		99	70-130		
Methylene chloride	6.7		1.0	ug/L	5.000		134	50-200		
Methyl methacrylate	4.9	J	5.0	ug/L	5.000		98	50-150		
Styrene	5.4		1.0	ug/L	5.000		107	70-130		
1,1,1,2-Tetrachloroethane	5.4		1.0	ug/L	5.000		108	70-130		
1,1,2,2-Tetrachloroethane	5.6		1.0	ug/L	5.000		112	70-130		
Tetrachloroethene	5.1		1.0	ug/L	5.000		102	70-130		
Toluene	5.4		1.0	ug/L	5.000		108	70-130		
1,1,1-Trichloroethane	5.7		1.0	ug/L	5.000		113	70-130		
1,1,2-Trichloroethane	5.6		1.0	ug/L	5.000		111	70-130		
Trichloroethene	5.5		1.0	ug/L	5.000		110	70-130		
Trichlorofluoromethane (Freon 11)	5.6		1.0	ug/L	5.000		112	70-130		
1,2,3-Trichloropropane	5.2		1.0	ug/L	5.000		103	70-130		
Vinyl acetate	3.6		1.0	ug/L	5.000		72	70-130		
Vinyl chloride	5.3		1.0	ug/L	5.000		105	70-130		
o-Xylene	5.4		1.0	ug/L	5.000		108	70-130		
m- & p-Xylenes	11.4		1.0	ug/L	10.00		114	70-130		
Surrogate: 1,2-Dichloroethane-d4	*49.86*			ug/L	*50.00*		*100*	*70-130*		
Surrogate: Toluene-d8	*48.32*			ug/L	*50.00*		*97*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*50.84*			ug/L	*50.00*		*102*	*75-120*		
Duplicate (B211156-DUP1)			**Source: 2110333-03**		Prepared & Analyzed: 11/08/22					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B211156 - GCMS-WATER-VOLATILES										
Duplicate (B211156-DUP1)		**Source: 2110333-03**		Prepared & Analyzed: 11/08/22						
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	1.9		1.0	ug/L		1.9			2	20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	0.5	J	1.0	ug/L		0.5			0	20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B211156 - GCMS-WATER-VOLATILES										
Duplicate (B211156-DUP1)		**Source: 2110333-03**		Prepared & Analyzed: 11/08/22						
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	0.9	J	1.0	ug/L		0.5			52	20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	ND		1.0	ug/L		ND				20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	0.9	J	1.0	ug/L		0.9			7	20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*52.21*			ug/L	*50.00*		*104*	*70-130*		
Surrogate: Toluene-d8	*48.27*			ug/L	*50.00*		*97*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.79*			ug/L	*50.00*		*100*	*75-120*		
Matrix Spike (B211156-MS1)		**Source: 2110333-08**		Prepared & Analyzed: 11/08/22						
Acetone	11.1		5.0	ug/L	10.00	ND	111	60-120		
Acrylonitrile	10.9		5.0	ug/L	10.00	ND	109	0-200		
Benzene	11.8		1.0	ug/L	10.00	ND	118	60-120		
Bromochloromethane	11.3		1.0	ug/L	10.00	ND	113	60-120		
Bromodichloromethane	10.8		1.0	ug/L	10.00	ND	108	60-120		
Bromoform	10.0		1.0	ug/L	10.00	ND	100	60-120		
Bromomethane	7.5		1.0	ug/L	10.00	ND	75	60-120		
2-Butanone (MEK)	10.0		5.0	ug/L	10.00	ND	100	60-120		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B211156 - GCMS-WATER-VOLATILES										
Matrix Spike (B211156-MS1)		**Source: 2110333-08**		Prepared & Analyzed: 11/08/22						
Carbon disulfide	12.5		1.0	ug/L	10.00	ND	125	60-120		
Carbon tetrachloride	11.4		1.0	ug/L	10.00	ND	114	60-120		
Chlorobenzene	11.4		1.0	ug/L	10.00	ND	114	60-120		
Chloroethane	11.5		1.0	ug/L	10.00	ND	115	60-120		
Chloroform	11.3		1.0	ug/L	10.00	ND	113	60-120		
Chloromethane	11.2		1.0	ug/L	10.00	ND	112	60-120		
Dibromochloromethane	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,2-Dibromo-3-chloropropane	10.1		1.0	ug/L	10.00	ND	101	60-120		
1,2-Dibromoethane (EDB)	10.7		1.0	ug/L	10.00	ND	107	60-120		
Dibromomethane	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,2-Dichlorobenzene	10.6		1.0	ug/L	10.00	ND	106	60-120		
1,4-Dichlorobenzene	10.8		1.0	ug/L	10.00	ND	108	60-120		
1,1-Dichloroethane	13.8		1.0	ug/L	10.00	2.8	110	60-120		
1,2-Dichloroethane	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,1-Dichloroethene	11.6		1.0	ug/L	10.00	ND	116	60-120		
cis-1,2-Dichloroethene	11.2		1.0	ug/L	10.00	0.6	106	60-120		
trans-1,2-Dichloroethene	11.6		1.0	ug/L	10.00	ND	116	60-120		
1,2-Dichloropropane	11.0		1.0	ug/L	10.00	ND	110	60-120		
1,3-Dichloropropane	10.6		1.0	ug/L	10.00	ND	106	60-120		
2,2-Dichloropropane	10.2		1.0	ug/L	10.00	ND	102	60-120		
1,1-Dichloropropene	11.6		1.0	ug/L	10.00	ND	116	60-120		
cis-1,3-Dichloropropene	10.1		1.0	ug/L	10.00	ND	101	60-120		
trans-1,3-Dichloropropene	9.7		1.0	ug/L	10.00	ND	97	60-120		
Ethylbenzene	11.6		1.0	ug/L	10.00	ND	116	60-120		
2-Hexanone	8.7		5.0	ug/L	10.00	ND	87	60-120		
Methyl tert-butyl ether (MTBE)	10.1		1.0	ug/L	10.00	ND	101	60-120		
4-Methyl-2-pentanone	9.0		5.0	ug/L	10.00	ND	90	60-120		
Methylene chloride	11.1		1.0	ug/L	10.00	0.5	106	60-120		
Methyl methacrylate	9.0		5.0	ug/L	10.00	ND	90	60-120		
Styrene	10.5		1.0	ug/L	10.00	ND	105	60-120		
1,1,1,2-Tetrachloroethane	10.6		1.0	ug/L	10.00	ND	106	60-120		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B211156 - GCMS-WATER-VOLATILES										
Matrix Spike (B211156-MS1)			**Source: 2110333-08**		Prepared & Analyzed: 11/08/22					
1,1,2,2-Tetrachloroethane	10.8		1.0	ug/L	10.00	ND	108	60-120		
Tetrachloroethene	11.5		1.0	ug/L	10.00	ND	115	60-120		
Toluene	11.3		1.0	ug/L	10.00	ND	113	60-120		
1,1,1-Trichloroethane	11.9		1.0	ug/L	10.00	ND	119	60-120		
1,1,2-Trichloroethane	10.6		1.0	ug/L	10.00	ND	106	60-120		
Trichloroethene	11.6		1.0	ug/L	10.00	ND	116	60-120		
Trichlorofluoromethane (Freon 11)	13.1		1.0	ug/L	10.00	ND	131	60-120		
1,2,3-Trichloropropane	9.5		1.0	ug/L	10.00	ND	95	60-120		
Vinyl acetate	8.8		1.0	ug/L	10.00	ND	88	60-120		
Vinyl chloride	11.8		1.0	ug/L	10.00	ND	118	60-120		
o-Xylene	10.9		1.0	ug/L	10.00	ND	109	60-120		
m- & p-Xylenes	23.4		1.0	ug/L	20.00	ND	117	60-120		
Surrogate: 1,2-Dichloroethane-d4	*48.69*			ug/L	*50.00*		*97*	*70-130*		
Surrogate: Toluene-d8	*48.63*			ug/L	*50.00*		*97*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*50.04*			ug/L	*50.00*		*100*	*75-120*		

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
11/09/22 16:40

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	Millersville Landfill	Lab	MSS
Project	MLF- Fall 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - Method 8260 (1)											
1	TRIP BLANK	2	11.3.22	—	✓		QA	✓							2110333-01 A				
2	FIELD BLANK	2	11.3.22	1230			QA											-	02
3	TW-1		11.2.22	1430			GW											-	03
4	TW-2		11.1.22	1555														-	04
5	TW-2A		11.1.22	1520														-	05
6	TW-3		11.1.22	1640														-	06
7	TW-3A		11.1.22	1715														-	07
8	TW-4		11.2.22	1110														-	08
9	TW-4B		11.2.22	1145														-	09
10	TW-14		11.3.22	1210														-	10
11	TW-27		11.2.22	1230														-	11
12	TW-28		11.3.22	1030														-	12

	Signature	Date	Time	Comments
Relinquished by	[signature]	11.3.22	1430	(1) APPENDIX I LIST of 47 VOCs, MTBE, DCDFM
Received by	[signature]	11.3.22	1430	+ DCFM
Relinquished by				
Received by				
Relinquished by				
Received by				

Cooler Temp on Arrival: 5.3 Deg. C

Rev. Aug. 2018

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MSS
Project	MLF - FALL 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260 (1)											
1	TW-29	3	11.3.22	1115	✓		GW	✓											
2	TW-30	↓	11.2.22	1510	↓		↓	↓										–	14
3	SW-1	↓	11.1.22	1240	↓		SW	↓										–	15
4	SW-2	↓	↓	1315	↓		↓	↓										–	16
5	SW-3	↓	↓	1300	↓		↓	↓										–	17
6																			
7																			
8																			
9																			
10																			
11																			
12																			

2110333-13 A

	Signature	Date	Time	Comments
Relinquished by	[signature]	11.3.22	1430	(1) APPENDIX I LIST of 47 VOCs, MTBE, DCDFM +
Received by	[signature]	11.3.22	1430	DCFM
Relinquished by				
Received by				STANDARD REPORT
Relinquished by				
Received by				

Cooler Temp on Arrival: 5.3 Deg. C

Rev. Aug. 2018

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

31 October 2022

Steve Brown
Environmental Monitoring and Assessment
207 East Sixth Street
Lititz, PA 17543
RE: MILLERSVILLE LANDFILL

Enclosed are the results of analyses for samples received by the laboratory on 10/20/22 16:15.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TRIP BLANK		2102045-01	Nonpotable Water	10/20/22 00:00	10/20/22 16:15
TW-5		2102045-02	Nonpotable Water	10/18/22 12:40	10/20/22 16:15
TW-5A		2102045-03	Nonpotable Water	10/18/22 12:05	10/20/22 16:15
TW-5B		2102045-04	Nonpotable Water	10/18/22 11:30	10/20/22 16:15
TW-6		2102045-05	Nonpotable Water	10/18/22 14:10	10/20/22 16:15
TW-6B		2102045-06	Nonpotable Water	10/18/22 13:30	10/20/22 16:15
TW-7		2102045-07	Nonpotable Water	10/19/22 12:15	10/20/22 16:15
TW-7A		2102045-08	Nonpotable Water	10/19/22 11:40	10/20/22 16:15
TW-8		2102045-09	Nonpotable Water	10/19/22 13:00	10/20/22 16:15
TW-8A		2102045-10	Nonpotable Water	10/19/22 13:35	10/20/22 16:15
TW-9		2102045-11	Nonpotable Water	10/20/22 09:40	10/20/22 16:15
TW-9B		2102045-12	Nonpotable Water	10/19/22 14:20	10/20/22 16:15
TW-9C		2102045-13	Nonpotable Water	10/19/22 15:45	10/20/22 16:15
TW-10A		2102045-14	Nonpotable Water	10/20/22 10:30	10/20/22 16:15
TW-14A		2102045-15	Nonpotable Water	10/20/22 12:05	10/20/22 16:15
TW-14B		2102045-16	Nonpotable Water	10/20/22 11:30	10/20/22 16:15
TW-15		2102045-17	Nonpotable Water	10/20/22 13:30	10/20/22 16:15
TW-15B		2102045-18	Nonpotable Water	10/20/22 14:05	10/20/22 16:15

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Will Brewington, President

Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TRIP BLANK

2102045-01 (Nonpotable Water)
Sample Date: 10/20/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 11:40	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 11:40	LL
Benzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 11:40	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 11:40	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 11:40	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 11:40	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 11:40	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 11:40	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL

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Will Brewington, President

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410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TRIP BLANK

2102045-01 (Nonpotable Water)
Sample Date: 10/20/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 11:40	LL
Iodomethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 11:40	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 11:40	LL
Styrene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
Toluene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 11:40	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 11:40	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 11:40	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 11:40	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*106 %*		*10/26/22*		*10/26/22 11:40*	
Surrogate: Toluene-d8			*75-120*	*98 %*		*10/26/22*		*10/26/22 11:40*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*		*10/26/22*		*10/26/22 11:40*	

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Will Brewington, President

Maryland spectral Services

Analytical Chemistry Services

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Baltimore MD 21227
410-247-7600
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-5

2102045-02 (Nonpotable Water)
Sample Date: 10/18/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 12:05	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 12:05	LL
Benzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 12:05	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 12:05	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 12:05	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 12:05	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 12:05	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 12:05	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
Dichlorodifluoromethane	**2.8**		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
1,1-Dichloroethane	**2.2**		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
cis-1,2-Dichloroethene	**1.0**		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
Dichlorofluoromethane	**3.1**		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 12:05	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-5

2102045-02 (Nonpotable Water)
Sample Date: 10/18/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 12:05	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 12:05	LL
Styrene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
Toluene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 12:05	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 12:05	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 12:05	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:05	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*107 %*			*10/26/22*	*10/26/22 12:05*	
Surrogate: Toluene-d8			*75-120*	*97 %*			*10/26/22*	*10/26/22 12:05*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*			*10/26/22*	*10/26/22 12:05*	

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Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-5A

2102045-03 (Nonpotable Water)
Sample Date: 10/18/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 12:30	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 12:30	LL
Benzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 12:30	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 12:30	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 12:30	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 12:30	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 12:30	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 12:30	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
1,1-Dichloroethane	**0.9**	J	ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
Dichlorofluoromethane	**0.7**	J	ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-5A

2102045-03 (Nonpotable Water)
Sample Date: 10/18/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 12:30	LL
Iodomethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 12:30	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 12:30	LL
Styrene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
Toluene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 12:30	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 12:30	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 12:30	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:30	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*106 %*		*10/26/22*	*10/26/22 12:30*		
Surrogate: Toluene-d8			*75-120*	*98 %*		*10/26/22*	*10/26/22 12:30*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*		*10/26/22*	*10/26/22 12:30*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-5B

2102045-04 (Nonpotable Water)
Sample Date: 10/18/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 12:55	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 12:55	LL
Benzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 12:55	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 12:55	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 12:55	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 12:55	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 12:55	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 12:55	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-5B

2102045-04 (Nonpotable Water)
Sample Date: 10/18/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 12:55	LL
Iodomethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 12:55	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 12:55	LL
Styrene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
Toluene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 12:55	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 12:55	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 12:55	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 12:55	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*107 %*	*10/26/22*		*10/26/22 12:55*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*10/26/22*		*10/26/22 12:55*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*102 %*	*10/26/22*		*10/26/22 12:55*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-6

2102045-05 (Nonpotable Water)
Sample Date: 10/18/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 13:20	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 13:20	LL
Benzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 13:20	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 13:20	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 13:20	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 13:20	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 13:20	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 13:20	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
Dichlorodifluoromethane	**5.1**		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
1,1-Dichloroethane	**8.7**		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
cis-1,2-Dichloroethene	**5.2**		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
Dichlorofluoromethane	**5.4**		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 13:20	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-6

2102045-05 (Nonpotable Water)
Sample Date: 10/18/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 13:20	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 13:20	LL
Styrene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
Tetrachloroethene	**2.2**		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
Toluene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
Trichloroethene	**1.5**		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 13:20	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 13:20	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 13:20	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:20	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*107 %*		*10/26/22*		*10/26/22 13:20*	
Surrogate: Toluene-d8			*75-120*	*99 %*		*10/26/22*		*10/26/22 13:20*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*103 %*		*10/26/22*		*10/26/22 13:20*	

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-6B

2102045-06 (Nonpotable Water)
Sample Date: 10/18/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 13:45	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 13:45	LL
Benzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 13:45	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 13:45	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 13:45	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 13:45	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 13:45	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 13:45	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-6B

2102045-06 (Nonpotable Water)
Sample Date: 10/18/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 13:45	LL
Iodomethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 13:45	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 13:45	LL
Styrene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
Toluene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 13:45	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 13:45	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 13:45	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 13:45	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*106 %*		*10/26/22*	*10/26/22 13:45*		
Surrogate: Toluene-d8			*75-120*	*99 %*		*10/26/22*	*10/26/22 13:45*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*101 %*		*10/26/22*	*10/26/22 13:45*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-7

2102045-07 (Nonpotable Water)
Sample Date: 10/19/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 14:10	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 14:10	LL
Benzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 14:10	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 14:10	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 14:10	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 14:10	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 14:10	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 14:10	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-7

2102045-07 (Nonpotable Water)
Sample Date: 10/19/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 14:10	LL
Iodomethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 14:10	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 14:10	LL
Styrene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
Toluene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 14:10	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 14:10	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 14:10	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:10	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*106 %*		*10/26/22*	*10/26/22 14:10*		
Surrogate: Toluene-d8			*75-120*	*100 %*		*10/26/22*	*10/26/22 14:10*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*		*10/26/22*	*10/26/22 14:10*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-7A

2102045-08 (Nonpotable Water)
Sample Date: 10/19/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 14:35	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 14:35	LL
Benzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 14:35	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 14:35	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 14:35	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 14:35	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 14:35	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 14:35	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-7A

2102045-08 (Nonpotable Water)
Sample Date: 10/19/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 14:35	LL
Iodomethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 14:35	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 14:35	LL
Styrene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
Toluene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 14:35	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 14:35	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 14:35	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:35	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*106 %*	*10/26/22*		*10/26/22 14:35*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*10/26/22*		*10/26/22 14:35*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*	*10/26/22*		*10/26/22 14:35*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-8

2102045-09 (Nonpotable Water)
Sample Date: 10/19/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 14:59	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 14:59	LL
Benzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 14:59	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 14:59	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 14:59	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 14:59	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 14:59	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 14:59	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-8

2102045-09 (Nonpotable Water)
Sample Date: 10/19/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 14:59	LL
Iodomethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 14:59	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 14:59	LL
Styrene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
Toluene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 14:59	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 14:59	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 14:59	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 14:59	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*107 %*		*10/26/22*	*10/26/22 14:59*		
Surrogate: Toluene-d8			*75-120*	*99 %*		*10/26/22*	*10/26/22 14:59*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*101 %*		*10/26/22*	*10/26/22 14:59*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-8A

2102045-10 (Nonpotable Water)
Sample Date: 10/19/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 15:24	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 15:24	LL
Benzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 15:24	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 15:24	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 15:24	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 15:24	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 15:24	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 15:24	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-8A

2102045-10 (Nonpotable Water)
Sample Date: 10/19/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 15:24	LL
Iodomethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 15:24	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 15:24	LL
Styrene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
Toluene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 15:24	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 15:24	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 15:24	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:24	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*106 %*		*10/26/22*	*10/26/22 15:24*		
Surrogate: Toluene-d8			*75-120*	*99 %*		*10/26/22*	*10/26/22 15:24*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*		*10/26/22*	*10/26/22 15:24*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-9

2102045-11 (Nonpotable Water)
Sample Date: 10/20/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 15:49	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 15:49	LL
Benzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 15:49	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 15:49	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 15:49	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 15:49	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 15:49	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 15:49	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL

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Will Brewington, President

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Baltimore MD 21227
410-247-7600
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-9

2102045-11 (Nonpotable Water)
Sample Date: 10/20/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 15:49	LL
Iodomethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/26/22	10/26/22 15:49	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 15:49	LL
Styrene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
Toluene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 15:49	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 15:49	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/26/22	10/26/22 15:49	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/26/22	10/26/22 15:49	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*106 %*		*10/26/22*	*10/26/22 15:49*		
Surrogate: Toluene-d8			*75-120*	*99 %*		*10/26/22*	*10/26/22 15:49*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*		*10/26/22*	*10/26/22 15:49*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-9B

2102045-12 (Nonpotable Water)
Sample Date: 10/19/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 16:53	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 16:53	LL
Benzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 16:53	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 16:53	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 16:53	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 16:53	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 16:53	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 16:53	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-9B

2102045-12 (Nonpotable Water)
Sample Date: 10/19/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 16:53	LL
Iodomethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
Methyl tert-butyl ether (MTBE)	**0.6**	J	ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 16:53	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 16:53	LL
Styrene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
Toluene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 16:53	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 16:53	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 16:53	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 16:53	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*107 %*	*10/27/22*		*10/27/22 16:53*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*10/27/22*		*10/27/22 16:53*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*	*10/27/22*		*10/27/22 16:53*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-9C

2102045-13 (Nonpotable Water)
Sample Date: 10/19/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 17:18	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 17:18	LL
Benzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 17:18	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 17:18	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 17:18	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 17:18	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 17:18	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 17:18	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-9C

2102045-13 (Nonpotable Water)
Sample Date: 10/19/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 17:18	LL
Iodomethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 17:18	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 17:18	LL
Styrene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
Toluene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 17:18	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 17:18	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 17:18	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:18	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*107 %*		*10/27/22*	*10/27/22 17:18*		
Surrogate: Toluene-d8			*75-120*	*98 %*		*10/27/22*	*10/27/22 17:18*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*		*10/27/22*	*10/27/22 17:18*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-10A

2102045-14 (Nonpotable Water)
Sample Date: 10/20/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 17:42	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 17:42	LL
Benzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 17:42	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 17:42	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 17:42	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 17:42	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 17:42	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 17:42	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-10A

2102045-14 (Nonpotable Water)
Sample Date: 10/20/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 17:42	LL
Iodomethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 17:42	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 17:42	LL
Styrene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
Toluene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 17:42	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 17:42	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 17:42	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 17:42	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*106 %*		*10/27/22*	*10/27/22 17:42*		
Surrogate: Toluene-d8			*75-120*	*99 %*		*10/27/22*	*10/27/22 17:42*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*		*10/27/22*	*10/27/22 17:42*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-14A

2102045-15 (Nonpotable Water)
Sample Date: 10/20/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 18:06	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 18:06	LL
Benzene	**1.5**		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 18:06	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 18:06	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 18:06	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 18:06	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 18:06	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 18:06	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
Dichlorodifluoromethane	**3.5**		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
1,1-Dichloroethane	**6.3**		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
cis-1,2-Dichloroethene	**1.8**		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
Dichlorofluoromethane	**5.4**		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 18:06	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-14A

2102045-15 (Nonpotable Water)
Sample Date: 10/20/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
Methyl tert-butyl ether (MTBE)	**0.7**	J	ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 18:06	LL
Methylene chloride	**1.1**		ug/L	1.0	1.0	1	10/27/22	10/27/22 18:06	LL
Styrene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
Tetrachloroethene	**1.3**		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
Toluene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
Trichloroethene	**1.1**		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 18:06	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 18:06	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 18:06	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:06	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*109 %*	*10/27/22*	*10/27/22 18:06*
Surrogate: Toluene-d8	*75-120*	*98 %*	*10/27/22*	*10/27/22 18:06*
Surrogate: 4-Bromofluorobenzene	*75-120*	*101 %*	*10/27/22*	*10/27/22 18:06*

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-14B

2102045-16 (Nonpotable Water)
Sample Date: 10/20/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 18:31	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 18:31	LL
Benzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 18:31	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 18:31	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 18:31	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 18:31	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 18:31	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 18:31	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-14B

2102045-16 (Nonpotable Water)
Sample Date: 10/20/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 18:31	LL
Iodomethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 18:31	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 18:31	LL
Styrene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
Toluene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 18:31	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 18:31	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 18:31	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:31	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*108 %*		*10/27/22*	*10/27/22 18:31*		
Surrogate: Toluene-d8			*75-120*	*99 %*		*10/27/22*	*10/27/22 18:31*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*		*10/27/22*	*10/27/22 18:31*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-15

2102045-17 (Nonpotable Water)
Sample Date: 10/20/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 18:55	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 18:55	LL
Benzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 18:55	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 18:55	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 18:55	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 18:55	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 18:55	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 18:55	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
Dichlorodifluoromethane	**0.8**	J	ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-15

2102045-17 (Nonpotable Water)
Sample Date: 10/20/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 18:55	LL
Iodomethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 18:55	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 18:55	LL
Styrene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
Toluene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 18:55	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 18:55	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 18:55	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 18:55	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*107 %*		*10/27/22*	*10/27/22 18:55*		
Surrogate: Toluene-d8			*75-120*	*99 %*		*10/27/22*	*10/27/22 18:55*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*		*10/27/22*	*10/27/22 18:55*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-15B

2102045-18 (Nonpotable Water)
Sample Date: 10/20/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 19:20	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 19:20	LL
Benzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 19:20	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 19:20	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 19:20	LL
Chloroform	**1.1**		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 19:20	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 19:20	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 19:20	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
Dichlorodifluoromethane	**1.4**		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
1,1-Dichloroethane	**0.6**	J	ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 19:20	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

TW-15B

2102045-18 (Nonpotable Water)
Sample Date: 10/20/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/27/22	10/27/22 19:20	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 19:20	LL
Styrene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
Tetrachloroethene	**0.9**	J	ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
Toluene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 19:20	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 19:20	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/27/22	10/27/22 19:20	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/27/22	10/27/22 19:20	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*110 %*	*10/27/22*	*10/27/22 19:20*
Surrogate: Toluene-d8	*75-120*	*99 %*	*10/27/22*	*10/27/22 19:20*
Surrogate: 4-Bromofluorobenzene	*75-120*	*101 %*	*10/27/22*	*10/27/22 19:20*

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210481 - GCMS-WATER-VOLATILES										
Blank (B210481-BLK1)					Prepared & Analyzed: 10/26/22					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210481 - GCMS-WATER-VOLATILES										
Blank (B210481-BLK1)					Prepared & Analyzed: 10/26/22					
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*52.70*			ug/L	*50.00*		*105*	*70-130*		
Surrogate: Toluene-d8	*49.11*			ug/L	*50.00*		*98*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*51.27*			ug/L	*50.00*		*103*	*75-120*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210481 - GCMS-WATER-VOLATILES										
LCS (B210481-BS1)					Prepared & Analyzed: 10/26/22					
Acetone	9.8		5.0	ug/L	10.00		98	50-150		
Acrylonitrile	5.6		5.0	ug/L	5.000		111	50-150		
Benzene	5.9		1.0	ug/L	5.000		119	50-150		
Bromochloromethane	5.6		1.0	ug/L	5.000		111	50-150		
Bromodichloromethane	5.4		1.0	ug/L	5.000		107	50-150		
Bromoform	5.1		1.0	ug/L	5.000		102	50-150		
Bromomethane	6.3		1.0	ug/L	5.000		126	50-150		
2-Butanone (MEK)	10.4		5.0	ug/L	10.00		104	50-150		
Carbon disulfide	6.2		1.0	ug/L	5.000		124	50-150		
Carbon tetrachloride	5.6		1.0	ug/L	5.000		112	50-150		
Chlorobenzene	5.8		1.0	ug/L	5.000		117	50-150		
Chloroethane	5.2		1.0	ug/L	5.000		103	50-150		
Chloroform	5.7		1.0	ug/L	5.000		113	50-150		
Chloromethane	5.5		1.0	ug/L	5.000		110	50-150		
Dibromochloromethane	5.3		1.0	ug/L	5.000		106	50-150		
1,2-Dibromo-3-chloropropane	6.2		1.0	ug/L	5.000		123	50-150		
1,2-Dibromoethane (EDB)	5.5		1.0	ug/L	5.000		109	50-150		
Dibromomethane	5.4		1.0	ug/L	5.000		108	50-150		
1,2-Dichlorobenzene	6.0		1.0	ug/L	5.000		120	50-150		
1,4-Dichlorobenzene	6.2		1.0	ug/L	5.000		124	50-150		
1,1-Dichloroethane	5.7		1.0	ug/L	5.000		114	50-150		
1,2-Dichloroethane	5.7		1.0	ug/L	5.000		113	50-150		
1,1-Dichloroethene	5.8		1.0	ug/L	5.000		116	50-150		
cis-1,2-Dichloroethene	5.6		1.0	ug/L	5.000		112	50-150		
trans-1,2-Dichloroethene	5.7		1.0	ug/L	5.000		115	50-150		
1,2-Dichloropropane	5.4		1.0	ug/L	5.000		108	50-150		
1,3-Dichloropropane	5.3		1.0	ug/L	5.000		106	50-150		
2,2-Dichloropropane	5.7		1.0	ug/L	5.000		114	50-150		
1,1-Dichloropropene	5.5		1.0	ug/L	5.000		111	50-150		
cis-1,3-Dichloropropene	5.6		1.0	ug/L	5.000		112	50-150		
trans-1,3-Dichloropropene	5.6		1.0	ug/L	5.000		112	50-150		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210481 - GCMS-WATER-VOLATILES										
LCS (B210481-BS1)					Prepared & Analyzed: 10/26/22					
Ethylbenzene	6.2		1.0	ug/L	5.000		123	50-150		
2-Hexanone	10.5		5.0	ug/L	10.00		105	50-150		
Methyl tert-butyl ether (MTBE)	5.5		1.0	ug/L	5.000		110	50-150		
4-Methyl-2-pentanone	10.0		5.0	ug/L	10.00		100	50-150		
Methylene chloride	7.2		1.0	ug/L	5.000		144	0-200		
Methyl methacrylate	5.1		5.0	ug/L	5.000		102	50-150		
Styrene	5.9		1.0	ug/L	5.000		117	50-150		
1,1,1,2-Tetrachloroethane	5.5		1.0	ug/L	5.000		110	50-150		
1,1,2,2-Tetrachloroethane	6.0		1.0	ug/L	5.000		119	50-150		
Tetrachloroethene	5.5		1.0	ug/L	5.000		110	50-150		
Toluene	5.6		1.0	ug/L	5.000		113	50-150		
1,1,1-Trichloroethane	5.7		1.0	ug/L	5.000		114	50-150		
1,1,2-Trichloroethane	5.4		1.0	ug/L	5.000		108	50-150		
Trichloroethene	5.4		1.0	ug/L	5.000		108	50-150		
Trichlorofluoromethane (Freon 11)	5.7		1.0	ug/L	5.000		114	50-150		
1,2,3-Trichloropropane	5.3		1.0	ug/L	5.000		107	50-150		
Vinyl acetate	3.7		1.0	ug/L	5.000		74	50-150		
Vinyl chloride	5.5		1.0	ug/L	5.000		109	50-150		
o-Xylene	5.8		1.0	ug/L	5.000		116	50-150		
m- & p-Xylenes	12.2		1.0	ug/L	10.00		122	50-150		
Surrogate: 1,2-Dichloroethane-d4	*51.08*			ug/L	*50.00*		*102*	*70-130*		
Surrogate: Toluene-d8	*49.64*			ug/L	*50.00*		*99*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*51.00*			ug/L	*50.00*		*102*	*75-120*		
Duplicate (B210481-DUP1)		**Source: 2102045-03**			Prepared & Analyzed: 10/26/22					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20

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Project Manager: Steve Brown

Reported:
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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210481 - GCMS-WATER-VOLATILES										
Duplicate (B210481-DUP1)			**Source: 2102045-03**		Prepared & Analyzed: 10/26/22					
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	0.9	J	1.0	ug/L		0.9			7	20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210481 - GCMS-WATER-VOLATILES										
Duplicate (B210481-DUP1)		**Source: 2102045-03**		Prepared & Analyzed: 10/26/22						
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	ND		1.0	ug/L		ND				20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	ND		1.0	ug/L		ND				20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*53.68*			ug/L	*50.00*		*107*	*70-130*		
Surrogate: Toluene-d8	*49.50*			ug/L	*50.00*		*99*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.96*			ug/L	*50.00*		*100*	*75-120*		
Matrix Spike (B210481-MS1)		**Source: 2102045-05**		Prepared & Analyzed: 10/26/22						
Acetone	11.5		5.0	ug/L	10.00	1.6	99	60-120		
Acrylonitrile	11.4		5.0	ug/L	10.00	ND	114	0-200		
Benzene	12.2		1.0	ug/L	10.00	ND	122	60-120		
Bromochloromethane	11.3		1.0	ug/L	10.00	ND	113	60-120		
Bromodichloromethane	11.3		1.0	ug/L	10.00	ND	113	60-120		
Bromoform	10.6		1.0	ug/L	10.00	ND	106	60-120		
Bromomethane	9.7		1.0	ug/L	10.00	ND	97	60-120		
2-Butanone (MEK)	10.0		5.0	ug/L	10.00	ND	100	60-120		

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210481 - GCMS-WATER-VOLATILES										
Matrix Spike (B210481-MS1)		**Source: 2102045-05**		Prepared & Analyzed: 10/26/22						
Carbon disulfide	12.5		1.0	ug/L	10.00	ND	125	60-120		
Carbon tetrachloride	12.1		1.0	ug/L	10.00	ND	121	60-120		
Chlorobenzene	12.0		1.0	ug/L	10.00	ND	120	60-120		
Chloroethane	11.3		1.0	ug/L	10.00	ND	113	60-120		
Chloroform	11.4		1.0	ug/L	10.00	ND	114	60-120		
Chloromethane	12.3		1.0	ug/L	10.00	ND	123	60-120		
Dibromochloromethane	11.3		1.0	ug/L	10.00	ND	113	60-120		
1,2-Dibromo-3-chloropropane	10.3		1.0	ug/L	10.00	ND	103	60-120		
1,2-Dibromoethane (EDB)	11.4		1.0	ug/L	10.00	ND	114	60-120		
Dibromomethane	10.9		1.0	ug/L	10.00	ND	109	60-120		
1,2-Dichlorobenzene	11.4		1.0	ug/L	10.00	ND	114	60-120		
1,4-Dichlorobenzene	11.7		1.0	ug/L	10.00	ND	117	60-120		
1,1-Dichloroethane	19.7		1.0	ug/L	10.00	8.7	110	60-120		
1,2-Dichloroethane	11.2		1.0	ug/L	10.00	ND	112	60-120		
1,1-Dichloroethene	12.2		1.0	ug/L	10.00	ND	122	60-120		
cis-1,2-Dichloroethene	16.4		1.0	ug/L	10.00	5.2	111	60-120		
trans-1,2-Dichloroethene	12.1		1.0	ug/L	10.00	ND	121	60-120		
1,2-Dichloropropane	11.5		1.0	ug/L	10.00	ND	115	60-120		
1,3-Dichloropropane	11.0		1.0	ug/L	10.00	ND	110	60-120		
2,2-Dichloropropane	10.1		1.0	ug/L	10.00	ND	101	60-120		
1,1-Dichloropropene	11.7		1.0	ug/L	10.00	ND	117	60-120		
cis-1,3-Dichloropropene	10.6		1.0	ug/L	10.00	ND	106	60-120		
trans-1,3-Dichloropropene	10.3		1.0	ug/L	10.00	ND	103	60-120		
Ethylbenzene	12.6		1.0	ug/L	10.00	ND	126	60-120		
2-Hexanone	9.4		5.0	ug/L	10.00	ND	94	60-120		
Methyl tert-butyl ether (MTBE)	10.5		1.0	ug/L	10.00	ND	105	60-120		
4-Methyl-2-pentanone	9.8		5.0	ug/L	10.00	ND	98	60-120		
Methylene chloride	11.8		1.0	ug/L	10.00	0.9	109	60-120		
Methyl methacrylate	10.2		5.0	ug/L	10.00	ND	102	60-120		
Styrene	11.8		1.0	ug/L	10.00	ND	118	60-120		
1,1,1,2-Tetrachloroethane	11.4		1.0	ug/L	10.00	ND	114	60-120		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210481 - GCMS-WATER-VOLATILES										
Matrix Spike (B210481-MS1)			**Source: 2102045-05**		Prepared & Analyzed: 10/26/22					
1,1,2,2-Tetrachloroethane	11.6		1.0	ug/L	10.00	ND	116	60-120		
Tetrachloroethene	13.9		1.0	ug/L	10.00	2.2	117	60-120		
Toluene	11.9		1.0	ug/L	10.00	ND	119	60-120		
1,1,1-Trichloroethane	12.2		1.0	ug/L	10.00	ND	122	60-120		
1,1,2-Trichloroethane	11.3		1.0	ug/L	10.00	ND	113	60-120		
Trichloroethene	12.7		1.0	ug/L	10.00	1.5	113	60-120		
Trichlorofluoromethane (Freon 11)	13.5		1.0	ug/L	10.00	ND	135	60-120		
1,2,3-Trichloropropane	10.6		1.0	ug/L	10.00	ND	106	60-120		
Vinyl acetate	8.8		1.0	ug/L	10.00	ND	88	60-120		
Vinyl chloride	12.3		1.0	ug/L	10.00	ND	123	60-120		
o-Xylene	11.9		1.0	ug/L	10.00	ND	119	60-120		
m- & p-Xylenes	25.0		1.0	ug/L	20.00	ND	125	60-120		
Surrogate: 1,2-Dichloroethane-d4	*50.41*			ug/L	*50.00*		*101*	*70-130*		
Surrogate: Toluene-d8	*49.78*			ug/L	*50.00*		*100*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*50.47*			ug/L	*50.00*		*101*	*75-120*		
Batch B210503 - GCMS-WATER-VOLATILES										
Blank (B210503-BLK1)					Prepared & Analyzed: 10/27/22					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						

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Project Manager: Steve Brown

Reported:
10/31/22 11:21

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210503 - GCMS-WATER-VOLATILES										
Blank (B210503-BLK1)					Prepared & Analyzed: 10/27/22					
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210503 - GCMS-WATER-VOLATILES										
Blank (B210503-BLK1)					Prepared & Analyzed: 10/27/22					
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*52.62*			ug/L	*50.00*		*105*	*70-130*		
Surrogate: Toluene-d8	*49.16*			ug/L	*50.00*		*98*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*50.11*			ug/L	*50.00*		*100*	*75-120*		
LCS (B210503-BS1)					Prepared & Analyzed: 10/27/22					
Acetone	10.0		5.0	ug/L	10.00		100	50-150		
Acrylonitrile	5.4		5.0	ug/L	5.000		109	50-150		
Benzene	5.7		1.0	ug/L	5.000		114	50-150		
Bromochloromethane	5.7		1.0	ug/L	5.000		113	50-150		
Bromodichloromethane	5.5		1.0	ug/L	5.000		111	50-150		
Bromoform	4.9		1.0	ug/L	5.000		98	50-150		
Bromomethane	5.2		1.0	ug/L	5.000		104	50-150		
2-Butanone (MEK)	10.3		5.0	ug/L	10.00		103	50-150		
Carbon disulfide	6.4		1.0	ug/L	5.000		127	50-150		
Carbon tetrachloride	5.6		1.0	ug/L	5.000		112	50-150		
Chlorobenzene	5.8		1.0	ug/L	5.000		115	50-150		
Chloroethane	5.4		1.0	ug/L	5.000		108	50-150		
Chloroform	5.8		1.0	ug/L	5.000		115	50-150		
Chloromethane	5.7		1.0	ug/L	5.000		114	50-150		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210503 - GCMS-WATER-VOLATILES										
LCS (B210503-BS1)					Prepared & Analyzed: 10/27/22					
Dibromochloromethane	5.3		1.0	ug/L	5.000		105	50-150		
1,2-Dibromo-3-chloropropane	5.7		1.0	ug/L	5.000		114	50-150		
1,2-Dibromoethane (EDB)	5.5		1.0	ug/L	5.000		110	50-150		
Dibromomethane	5.4		1.0	ug/L	5.000		108	50-150		
1,2-Dichlorobenzene	6.1		1.0	ug/L	5.000		121	50-150		
1,4-Dichlorobenzene	6.3		1.0	ug/L	5.000		126	50-150		
1,1-Dichloroethane	5.6		1.0	ug/L	5.000		112	50-150		
1,2-Dichloroethane	5.4		1.0	ug/L	5.000		109	50-150		
1,1-Dichloroethene	5.8		1.0	ug/L	5.000		115	50-150		
cis-1,2-Dichloroethene	5.6		1.0	ug/L	5.000		112	50-150		
trans-1,2-Dichloroethene	5.7		1.0	ug/L	5.000		114	50-150		
1,2-Dichloropropane	5.2		1.0	ug/L	5.000		104	50-150		
1,3-Dichloropropane	5.5		1.0	ug/L	5.000		110	50-150		
2,2-Dichloropropane	5.4		1.0	ug/L	5.000		109	50-150		
1,1-Dichloropropene	5.6		1.0	ug/L	5.000		113	50-150		
cis-1,3-Dichloropropene	5.5		1.0	ug/L	5.000		110	50-150		
trans-1,3-Dichloropropene	5.3		1.0	ug/L	5.000		106	50-150		
Ethylbenzene	6.0		1.0	ug/L	5.000		120	50-150		
2-Hexanone	10.3		5.0	ug/L	10.00		103	50-150		
Methyl tert-butyl ether (MTBE)	5.1		1.0	ug/L	5.000		102	50-150		
4-Methyl-2-pentanone	10.2		5.0	ug/L	10.00		102	50-150		
Methylene chloride	6.3		1.0	ug/L	5.000		126	0-200		
Methyl methacrylate	4.7	J	5.0	ug/L	5.000		95	50-150		
Styrene	5.7		1.0	ug/L	5.000		113	50-150		
1,1,1,2-Tetrachloroethane	5.4		1.0	ug/L	5.000		108	50-150		
1,1,2,2-Tetrachloroethane	5.8		1.0	ug/L	5.000		115	50-150		
Tetrachloroethene	5.6		1.0	ug/L	5.000		111	50-150		
Toluene	5.6		1.0	ug/L	5.000		111	50-150		
1,1,1-Trichloroethane	5.8		1.0	ug/L	5.000		115	50-150		
1,1,2-Trichloroethane	5.5		1.0	ug/L	5.000		110	50-150		
Trichloroethene	5.4		1.0	ug/L	5.000		108	50-150		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210503 - GCMS-WATER-VOLATILES										
LCS (B210503-BS1)					Prepared & Analyzed: 10/27/22					
Trichlorofluoromethane (Freon 11)	5.8		1.0	ug/L	5.000		115	50-150		
1,2,3-Trichloropropane	5.4		1.0	ug/L	5.000		109	50-150		
Vinyl acetate	3.4		1.0	ug/L	5.000		69	50-150		
Vinyl chloride	5.4		1.0	ug/L	5.000		109	50-150		
o-Xylene	5.7		1.0	ug/L	5.000		113	50-150		
m- & p-Xylenes	11.9		1.0	ug/L	10.00		119	50-150		
Surrogate: 1,2-Dichloroethane-d4	*51.74*			ug/L	*50.00*		*103*	*70-130*		
Surrogate: Toluene-d8	*49.58*			ug/L	*50.00*		*99*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*51.33*			ug/L	*50.00*		*103*	*75-120*		
Duplicate (B210503-DUP1)		**Source: 2102045-12**			Prepared & Analyzed: 10/27/22					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210503 - GCMS-WATER-VOLATILES										
Duplicate (B210503-DUP1)		**Source: 2102045-12**		Prepared & Analyzed: 10/27/22						
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	ND		1.0	ug/L		ND				20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	0.6	J	1.0	ug/L		0.6			3	20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	ND		1.0	ug/L		ND				20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	ND		1.0	ug/L		ND				20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210503 - GCMS-WATER-VOLATILES										
Duplicate (B210503-DUP1)		**Source: 2102045-12**		Prepared & Analyzed: 10/27/22						
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*53.54*			ug/L	*50.00*		*107*	*70-130*		
Surrogate: Toluene-d8	*49.53*			ug/L	*50.00*		*99*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.68*			ug/L	*50.00*		*99*	*75-120*		
Matrix Spike (B210503-MS1)		**Source: 2102504-02**		Prepared & Analyzed: 10/27/22						
Acetone	12.6		5.0	ug/L	10.00	1.4	112	60-120		
Acrylonitrile	11.1		5.0	ug/L	10.00	ND	111	0-200		
Benzene	11.6		1.0	ug/L	10.00	ND	116	60-120		
Bromochloromethane	10.8		1.0	ug/L	10.00	ND	108	60-120		
Bromodichloromethane	10.9		1.0	ug/L	10.00	ND	109	60-120		
Bromoform	9.9		1.0	ug/L	10.00	ND	99	60-120		
Bromomethane	2.6		1.0	ug/L	10.00	ND	26	60-120		
2-Butanone (MEK)	9.9		5.0	ug/L	10.00	ND	99	60-120		
Carbon disulfide	11.8		1.0	ug/L	10.00	ND	118	60-120		
Carbon tetrachloride	11.2		1.0	ug/L	10.00	ND	112	60-120		
Chlorobenzene	11.3		1.0	ug/L	10.00	ND	113	60-120		
Chloroethane	10.9		1.0	ug/L	10.00	ND	109	60-120		
Chloroform	10.9		1.0	ug/L	10.00	ND	109	60-120		
Chloromethane	10.2		1.0	ug/L	10.00	ND	102	60-120		
Dibromochloromethane	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,2-Dibromo-3-chloropropane	10.0		1.0	ug/L	10.00	ND	100	60-120		
1,2-Dibromoethane (EDB)	10.8		1.0	ug/L	10.00	ND	108	60-120		
Dibromomethane	10.5		1.0	ug/L	10.00	ND	105	60-120		
1,2-Dichlorobenzene	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,4-Dichlorobenzene	10.6		1.0	ug/L	10.00	ND	106	60-120		
1,1-Dichloroethane	11.2		1.0	ug/L	10.00	ND	112	60-120		
1,2-Dichloroethane	10.6		1.0	ug/L	10.00	ND	106	60-120		

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Project: MILLERSVILLE LANDFILL

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Project Manager: Steve Brown

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210503 - GCMS-WATER-VOLATILES										
Matrix Spike (B210503-MS1)		**Source: 2102504-02**		Prepared & Analyzed: 10/27/22						
1,1-Dichloroethene	11.3		1.0	ug/L	10.00	ND	113	60-120		
cis-1,2-Dichloroethene	10.6		1.0	ug/L	10.00	ND	106	60-120		
trans-1,2-Dichloroethene	11.2		1.0	ug/L	10.00	ND	112	60-120		
1,2-Dichloropropane	10.5		1.0	ug/L	10.00	ND	105	60-120		
1,3-Dichloropropane	10.6		1.0	ug/L	10.00	ND	106	60-120		
2,2-Dichloropropane	9.2		1.0	ug/L	10.00	ND	92	60-120		
1,1-Dichloropropene	11.1		1.0	ug/L	10.00	ND	111	60-120		
cis-1,3-Dichloropropene	10.0		1.0	ug/L	10.00	ND	100	60-120		
trans-1,3-Dichloropropene	9.6		1.0	ug/L	10.00	ND	96	60-120		
Ethylbenzene	11.8		1.0	ug/L	10.00	ND	118	60-120		
2-Hexanone	10.3		5.0	ug/L	10.00	ND	103	60-120		
Methyl tert-butyl ether (MTBE)	10.1		1.0	ug/L	10.00	ND	101	60-120		
4-Methyl-2-pentanone	10.4		5.0	ug/L	10.00	ND	104	60-120		
Methylene chloride	10.4		1.0	ug/L	10.00	ND	104	60-120		
Methyl methacrylate	9.5		5.0	ug/L	10.00	ND	95	60-120		
Styrene	10.9		1.0	ug/L	10.00	ND	109	60-120		
1,1,1,2-Tetrachloroethane	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,1,2,2-Tetrachloroethane	11.2		1.0	ug/L	10.00	ND	112	60-120		
Tetrachloroethene	11.2		1.0	ug/L	10.00	ND	112	60-120		
Toluene	11.2		1.0	ug/L	10.00	ND	112	60-120		
1,1,1-Trichloroethane	11.4		1.0	ug/L	10.00	ND	114	60-120		
1,1,2-Trichloroethane	10.8		1.0	ug/L	10.00	ND	108	60-120		
Trichloroethene	10.9		1.0	ug/L	10.00	ND	109	60-120		
Trichlorofluoromethane (Freon 11)	12.3		1.0	ug/L	10.00	ND	123	60-120		
1,2,3-Trichloropropane	10.4		1.0	ug/L	10.00	ND	104	60-120		
Vinyl acetate	8.2		1.0	ug/L	10.00	ND	82	60-120		
Vinyl chloride	11.4		1.0	ug/L	10.00	ND	114	60-120		
o-Xylene	11.1		1.0	ug/L	10.00	ND	111	60-120		
m- & p-Xylenes	23.6		1.0	ug/L	20.00	ND	118	60-120		
Surrogate: 1,2-Dichloroethane-d4	*50.71*			ug/L	*50.00*		*101*	*70-130*		
Surrogate: Toluene-d8	*49.64*			ug/L	*50.00*		*99*	*75-120*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2022
Project Manager: Steve Brown

Reported:
10/31/22 11:21

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210503 - GCMS-WATER-VOLATILES										
Matrix Spike (B210503-MS1)		**Source: 2102504-02**		Prepared & Analyzed: 10/27/22						
Surrogate: 4-Bromofluorobenzene	*50.59*			ug/L	*50.00*		*101*	*75-120*		

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Project: MILLERSVILLE LANDFILL

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Project Manager: Steve Brown

Reported:
10/31/22 11:21

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MSS
Project	MLF-FALL 2022	Turnaround Time	☑ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - MSS 8260										
1	TRIP BLANK		10-20-22	—	✓		GW	✓				2102095	-01					
2	TW-5		10-18-22	1240									-02					
3	TW-5A			1205									-03					
4	TW-5B			1130									-04					
5	TW-6			1410									-05					
6	TW-6B			1330									-06					
7	TW-7		10-19-22	1215									-07					
8	TW-7A			1140									-08					
9	TW-8			1300									-09					
10	TW-8A			1335									-10					
11	TW-9		10-20-22	940									-11					
12	TW-9B		10-19-22	1420									-12					

	Signature	Date	Time	Comments
Relinquished by	D A Brown	10.20.22	1615	① APPENDIX I LIST OF 47 VOCs, MTBE
Received by	Chris Potter	10.20.22	1615	DCPM, DCPM
Relinquished by				
Received by				
Relinquished by				STANDARD REPORT
Received by				

Cooler Temp on Arrival: 6.0 Deg. C

Rev. Aug. 2018

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	Millersville Landfill	Lab	MSS
Project	MLF - Fall 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Analytical Parameters: VOCs - Method 8260											
1	TW-9C	3	10.19.22	1345	✓		GW	✓			2102045-	13							
2	TW-10A	↓	10.20.22	1030	↓		↓	↓			↓	-14							
3	TW-14A	↓	↓	1205	↓		↓	↓			↓	-15							
4	TW-14B	↓	↓	1130	↓		↓	↓			↓	-16							
5	TW-15	↓	↓	1330	↓		↓	↓			↓	-17							
6	TW-15B	↓	↓	1405	↓		↓	↓			↓	-18							
7																			
8																			
9																			
10																			
11																			
12																			

	Signature	Date	Time	Comments
Relinquished by	[signature]	10.20.22	1615	① Appendix I list of 47 VOCs, MTBE
Received by	Clara Petric	10.20.22	1615	DCDFM & DCEM
Relinquished by				
Received by				
Relinquished by				
Received by				

Cooler Temp on Arrival: 6.0 Deg. C

Rev. Aug. 2018

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

04 November 2022

Steve Brown
Environmental Monitoring and Assessment
207 East Sixth Street
Lititz, PA 17543
RE: MILLERSVILLE LANDFILL

Enclosed are the results of analyses for samples received by the laboratory on 10/27/22 13:00.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Rabecka Koons
Quality Assurance Officer

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TRIP BLANK		2102729-01	Nonpotable Water	10/27/22 00:00	10/27/22 13:00
TW-16		2102729-02	Nonpotable Water	10/25/22 12:15	10/27/22 13:00
TW-16A		2102729-03	Nonpotable Water	10/25/22 11:40	10/27/22 13:00
TW-17		2102729-04	Nonpotable Water	10/25/22 13:00	10/27/22 13:00
TW-17A		2102729-05	Nonpotable Water	10/25/22 13:35	10/27/22 13:00
TW-19		2102729-06	Nonpotable Water	10/25/22 14:15	10/27/22 13:00
TW-20R		2102729-07	Nonpotable Water	10/26/22 09:10	10/27/22 13:00
TW-21		2102729-08	Nonpotable Water	10/26/22 09:55	10/27/22 13:00
TW-22		2102729-09	Nonpotable Water	10/26/22 11:20	10/27/22 13:00
TW-22A		2102729-10	Nonpotable Water	10/26/22 11:55	10/27/22 13:00
TW-22B		2102729-11	Nonpotable Water	10/26/22 10:40	10/27/22 13:00
TW-23R		2102729-12	Nonpotable Water	10/27/22 10:30	10/27/22 13:00
TW-24		2102729-13	Nonpotable Water	10/26/22 13:00	10/27/22 13:00
TW-24A		2102729-14	Nonpotable Water	10/26/22 13:35	10/27/22 13:00
TW-25		2102729-15	Nonpotable Water	10/26/22 15:10	10/27/22 13:00
TW-25A		2102729-16	Nonpotable Water	10/26/22 15:50	10/27/22 13:00
DUP-1		2102729-17	Nonpotable Water	10/26/22 00:00	10/27/22 13:00
DUP-2		2102729-18	Nonpotable Water	10/26/22 00:00	10/27/22 13:00

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

Maryland spectral Services

Analytical Chemistry Services

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Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TRIP BLANK

2102729-01 (Nonpotable Water)
Sample Date: 10/27/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 11:44	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 11:44	LL
Benzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 11:44	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 11:44	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 11:44	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 11:44	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 11:44	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 11:44	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL

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Rabecka Koons, Quality Assurance Officer

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Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TRIP BLANK

2102729-01 (Nonpotable Water)
Sample Date: 10/27/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 11:44	LL
Iodomethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 11:44	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 11:44	LL
Styrene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
Toluene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 11:44	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 11:44	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 11:44	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 11:44	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*107 %*		*10/28/22*	*10/28/22 11:44*		
Surrogate: Toluene-d8			*75-120*	*98 %*		*10/28/22*	*10/28/22 11:44*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*101 %*		*10/28/22*	*10/28/22 11:44*		

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Rabecka Koons, Quality Assurance Officer

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410-247-7600
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-16

2102729-02 (Nonpotable Water)
Sample Date: 10/25/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 12:09	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 12:09	LL
Benzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 12:09	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 12:09	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 12:09	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 12:09	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 12:09	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 12:09	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-16

2102729-02 (Nonpotable Water)
Sample Date: 10/25/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 12:09	LL
Iodomethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 12:09	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 12:09	LL
Styrene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
Toluene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 12:09	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 12:09	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 12:09	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:09	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*106 %*		*10/28/22*	*10/28/22 12:09*		
Surrogate: Toluene-d8			*75-120*	*99 %*		*10/28/22*	*10/28/22 12:09*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*		*10/28/22*	*10/28/22 12:09*		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

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Baltimore MD 21227
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-16A

2102729-03 (Nonpotable Water)
Sample Date: 10/25/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 12:33	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 12:33	LL
Benzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 12:33	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 12:33	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 12:33	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 12:33	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 12:33	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 12:33	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-16A

2102729-03 (Nonpotable Water)
Sample Date: 10/25/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 12:33	LL
Iodomethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 12:33	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 12:33	LL
Styrene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
Toluene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 12:33	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 12:33	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 12:33	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:33	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*107 %*	*10/28/22*		*10/28/22 12:33*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*10/28/22*		*10/28/22 12:33*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*101 %*	*10/28/22*		*10/28/22 12:33*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-17

2102729-04 (Nonpotable Water)
Sample Date: 10/25/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 12:58	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 12:58	LL
Benzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 12:58	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 12:58	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 12:58	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 12:58	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 12:58	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 12:58	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-17

2102729-04 (Nonpotable Water)
Sample Date: 10/25/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 12:58	LL
Iodomethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 12:58	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 12:58	LL
Styrene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
Toluene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 12:58	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 12:58	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 12:58	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 12:58	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*108 %*		*10/28/22*	*10/28/22 12:58*		
Surrogate: Toluene-d8			*75-120*	*99 %*		*10/28/22*	*10/28/22 12:58*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*		*10/28/22*	*10/28/22 12:58*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-17A

2102729-05 (Nonpotable Water)
Sample Date: 10/25/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 13:22	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 13:22	LL
Benzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 13:22	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 13:22	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 13:22	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 13:22	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 13:22	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 13:22	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-17A

2102729-05 (Nonpotable Water)
Sample Date: 10/25/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 13:22	LL
Iodomethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 13:22	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 13:22	LL
Styrene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
Toluene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 13:22	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 13:22	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 13:22	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:22	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*108 %*		*10/28/22*	*10/28/22 13:22*		
Surrogate: Toluene-d8			*75-120*	*98 %*		*10/28/22*	*10/28/22 13:22*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*101 %*		*10/28/22*	*10/28/22 13:22*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-19

2102729-06 (Nonpotable Water)
Sample Date: 10/25/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 13:47	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 13:47	LL
Benzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 13:47	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 13:47	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 13:47	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 13:47	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 13:47	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 13:47	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
1,1-Dichloroethane	**0.8**	J	ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-19

2102729-06 (Nonpotable Water)
Sample Date: 10/25/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 13:47	LL
Iodomethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 13:47	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 13:47	LL
Styrene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
Toluene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 13:47	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 13:47	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 13:47	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 13:47	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*107 %*	*10/28/22*		*10/28/22 13:47*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*10/28/22*		*10/28/22 13:47*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*	*10/28/22*		*10/28/22 13:47*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-20R

2102729-07 (Nonpotable Water)
Sample Date: 10/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 14:11	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 14:11	LL
Benzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 14:11	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 14:11	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 14:11	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 14:11	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 14:11	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 14:11	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-20R

2102729-07 (Nonpotable Water)
Sample Date: 10/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 14:11	LL
Iodomethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 14:11	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 14:11	LL
Styrene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
Toluene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 14:11	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 14:11	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 14:11	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:11	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*108 %*	*10/28/22*		*10/28/22 14:11*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*10/28/22*		*10/28/22 14:11*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*	*10/28/22*		*10/28/22 14:11*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-21

2102729-08 (Nonpotable Water)
Sample Date: 10/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 14:36	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 14:36	LL
Benzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 14:36	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 14:36	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 14:36	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 14:36	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 14:36	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 14:36	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-21

2102729-08 (Nonpotable Water)
Sample Date: 10/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 14:36	LL
Iodomethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/28/22	10/28/22 14:36	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 14:36	LL
Styrene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
Toluene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 14:36	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 14:36	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/28/22	10/28/22 14:36	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/28/22	10/28/22 14:36	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*108 %*	*10/28/22*		*10/28/22 14:36*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*10/28/22*		*10/28/22 14:36*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*	*10/28/22*		*10/28/22 14:36*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-22

2102729-09 (Nonpotable Water)
Sample Date: 10/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 12:58	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 12:58	LL
Benzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 12:58	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 12:58	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 12:58	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 12:58	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 12:58	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 12:58	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL

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Baltimore MD 21227
410-247-7600
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-22

2102729-09 (Nonpotable Water)
Sample Date: 10/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 12:58	LL
Iodomethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 12:58	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 12:58	LL
Styrene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
Toluene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 12:58	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 12:58	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 12:58	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 12:58	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*105 %*	*10/31/22*		*10/31/22 12:58*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*10/31/22*		*10/31/22 12:58*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*	*10/31/22*		*10/31/22 12:58*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-22A

2102729-10 (Nonpotable Water)
Sample Date: 10/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 13:23	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 13:23	LL
Benzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 13:23	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 13:23	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 13:23	LL
Chloroform	**0.5**	J	ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 13:23	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 13:23	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 13:23	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-22A

2102729-10 (Nonpotable Water)
Sample Date: 10/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 13:23	LL
Iodomethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 13:23	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 13:23	LL
Styrene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
Toluene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 13:23	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 13:23	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 13:23	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:23	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*105 %*	*10/31/22*		*10/31/22 13:23*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*10/31/22*		*10/31/22 13:23*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*101 %*	*10/31/22*		*10/31/22 13:23*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-22B

2102729-11 (Nonpotable Water)
Sample Date: 10/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 13:47	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 13:47	LL
Benzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 13:47	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 13:47	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 13:47	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 13:47	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 13:47	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 13:47	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-22B

2102729-11 (Nonpotable Water)
Sample Date: 10/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 13:47	LL
Iodomethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 13:47	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 13:47	LL
Styrene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
Toluene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 13:47	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 13:47	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 13:47	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 13:47	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*106 %*	*10/31/22*		*10/31/22 13:47*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*10/31/22*		*10/31/22 13:47*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*101 %*	*10/31/22*		*10/31/22 13:47*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-23R

2102729-12 (Nonpotable Water)
Sample Date: 10/27/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 14:12	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 14:12	LL
Benzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 14:12	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 14:12	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 14:12	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 14:12	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 14:12	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 14:12	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-23R

2102729-12 (Nonpotable Water)
Sample Date: 10/27/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 14:12	LL
Iodomethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 14:12	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 14:12	LL
Styrene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
Toluene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 14:12	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 14:12	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 14:12	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:12	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*106 %*	*10/31/22*		*10/31/22 14:12*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*10/31/22*		*10/31/22 14:12*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*	*10/31/22*		*10/31/22 14:12*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-24

2102729-13 (Nonpotable Water)
Sample Date: 10/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 14:37	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 14:37	LL
Benzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 14:37	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 14:37	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 14:37	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 14:37	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 14:37	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 14:37	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
Dichlorodifluoromethane	**2.3**		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
1,1-Dichloroethane	**2.4**		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
Dichlorofluoromethane	**1.3**		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 14:37	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-24

2102729-13 (Nonpotable Water)
Sample Date: 10/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 14:37	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 14:37	LL
Styrene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
Tetrachloroethene	**0.7**	J	ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
Toluene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 14:37	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 14:37	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 14:37	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 14:37	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*107 %*	*10/31/22*	*10/31/22 14:37*
Surrogate: Toluene-d8	*75-120*	*98 %*	*10/31/22*	*10/31/22 14:37*
Surrogate: 4-Bromofluorobenzene	*75-120*	*100 %*	*10/31/22*	*10/31/22 14:37*

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Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-24A

2102729-14 (Nonpotable Water)
Sample Date: 10/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 15:02	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 15:02	LL
Benzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 15:02	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 15:02	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 15:02	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 15:02	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 15:02	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 15:02	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-24A

2102729-14 (Nonpotable Water)
Sample Date: 10/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 15:02	LL
Iodomethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 15:02	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 15:02	LL
Styrene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
Toluene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 15:02	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 15:02	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 15:02	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:02	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*106 %*	*10/31/22*		*10/31/22 15:02*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*10/31/22*		*10/31/22 15:02*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*	*10/31/22*		*10/31/22 15:02*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-25

2102729-15 (Nonpotable Water)
Sample Date: 10/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 15:26	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 15:26	LL
Benzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 15:26	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 15:26	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 15:26	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 15:26	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 15:26	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 15:26	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
Dichlorodifluoromethane	**5.7**		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
1,1-Dichloroethane	**2.1**		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
cis-1,2-Dichloroethene	**0.9**	J	ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
Dichlorofluoromethane	**3.0**		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 15:26	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-25

2102729-15 (Nonpotable Water)
Sample Date: 10/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 15:26	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 15:26	LL
Styrene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
Tetrachloroethene	**1.4**		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
Toluene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
Trichlorofluoromethane (Freon 11)	**0.6**	J	ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 15:26	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 15:26	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 15:26	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:26	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*105 %*	*10/31/22*	*10/31/22 15:26*
Surrogate: Toluene-d8	*75-120*	*99 %*	*10/31/22*	*10/31/22 15:26*
Surrogate: 4-Bromofluorobenzene	*75-120*	*100 %*	*10/31/22*	*10/31/22 15:26*

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Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-25A

2102729-16 (Nonpotable Water)
Sample Date: 10/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 15:51	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 15:51	LL
Benzene	**2.3**		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 15:51	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 15:51	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 15:51	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 15:51	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 15:51	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 15:51	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
1,4-Dichlorobenzene	**1.5**		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
Dichlorodifluoromethane	**10.4**		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
1,1-Dichloroethane	**27.3**		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
1,2-Dichloroethane	**1.7**		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
1,1-Dichloroethene	**0.8**	J	ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
cis-1,2-Dichloroethene	**5.3**		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
Dichlorofluoromethane	**25.2**		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
1,2-Dichloropropane	**1.1**		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 15:51	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

TW-25A

2102729-16 (Nonpotable Water)
Sample Date: 10/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
Methyl tert-butyl ether (MTBE)	**4.2**		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 15:51	LL
Methylene chloride	**23.4**	L	ug/L	1.0	1.0	1	10/31/22	10/31/22 15:51	LL
Styrene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
Tetrachloroethene	**3.3**		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
Toluene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
Trichloroethene	**4.5**		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
Trichlorofluoromethane (Freon 11)	**1.8**		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 15:51	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 15:51	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 15:51	LL
o-Xylene	**0.9**	J	ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 15:51	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*106 %*	*10/31/22*	*10/31/22 15:51*
Surrogate: Toluene-d8	*75-120*	*99 %*	*10/31/22*	*10/31/22 15:51*
Surrogate: 4-Bromofluorobenzene	*75-120*	*100 %*	*10/31/22*	*10/31/22 15:51*

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

DUP-1

2102729-17 (Nonpotable Water)
Sample Date: 10/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 16:15	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 16:15	LL
Benzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 16:15	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 16:15	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 16:15	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 16:15	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 16:15	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 16:15	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
Dichlorodifluoromethane	**2.5**		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
1,1-Dichloroethane	**2.4**		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
Dichlorofluoromethane	**1.3**		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 16:15	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

DUP-1

2102729-17 (Nonpotable Water)
Sample Date: 10/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 16:15	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 16:15	LL
Styrene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
Tetrachloroethene	**0.7**	J	ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
Toluene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 16:15	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 16:15	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 16:15	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:15	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*105 %*	*10/31/22*	*10/31/22 16:15*
Surrogate: Toluene-d8	*75-120*	*97 %*	*10/31/22*	*10/31/22 16:15*
Surrogate: 4-Bromofluorobenzene	*75-120*	*99 %*	*10/31/22*	*10/31/22 16:15*

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

DUP-2

2102729-18 (Nonpotable Water)
Sample Date: 10/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 16:39	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 16:39	LL
Benzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
Bromoform	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
Bromomethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 16:39	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 16:39	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
Chloroethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 16:39	LL
Chloroform	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
Chloromethane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 16:39	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 16:39	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 16:39	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
Dichlorodifluoromethane	**5.8**		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
1,1-Dichloroethane	**2.0**		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
cis-1,2-Dichloroethene	**0.9**	J	ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
Dichlorofluoromethane	**3.1**		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 16:39	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

DUP-2

2102729-18 (Nonpotable Water)
Sample Date: 10/26/22

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	10/31/22	10/31/22 16:39	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 16:39	LL
Styrene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
Tetrachloroethene	**1.6**		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
Toluene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
Trichlorofluoromethane (Freon 11)	**0.5**	J	ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 16:39	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 16:39	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	10/31/22	10/31/22 16:39	LL
o-Xylene	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	10/31/22	10/31/22 16:39	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*105 %*		*10/31/22*		*10/31/22 16:39*	
Surrogate: Toluene-d8			*75-120*	*99 %*		*10/31/22*		*10/31/22 16:39*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*		*10/31/22*		*10/31/22 16:39*	

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Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210534 - GCMS-WATER-VOLATILES										
Blank (B210534-BLK1)					Prepared & Analyzed: 10/28/22					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						

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Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210534 - GCMS-WATER-VOLATILES										
Blank (B210534-BLK1)					Prepared & Analyzed: 10/28/22					
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*52.87*			ug/L	*50.00*		*106*	*70-130*		
Surrogate: Toluene-d8	*49.72*			ug/L	*50.00*		*99*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*50.51*			ug/L	*50.00*		*101*	*75-120*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210534 - GCMS-WATER-VOLATILES										
LCS (B210534-BS1)					Prepared & Analyzed: 10/28/22					
Acetone	9.3		5.0	ug/L	10.00		93	50-150		
Acrylonitrile	5.2		5.0	ug/L	5.000		104	50-150		
Benzene	5.8		1.0	ug/L	5.000		115	50-150		
Bromochloromethane	5.4		1.0	ug/L	5.000		109	50-150		
Bromodichloromethane	5.4		1.0	ug/L	5.000		107	50-150		
Bromoform	5.1		1.0	ug/L	5.000		102	50-150		
Bromomethane	2.3		1.0	ug/L	5.000		46	50-150		
2-Butanone (MEK)	10.4		5.0	ug/L	10.00		104	50-150		
Carbon disulfide	6.3		1.0	ug/L	5.000		125	50-150		
Carbon tetrachloride	5.6		1.0	ug/L	5.000		113	50-150		
Chlorobenzene	5.7		1.0	ug/L	5.000		114	50-150		
Chloroethane	5.3		1.0	ug/L	5.000		107	50-150		
Chloroform	5.3		1.0	ug/L	5.000		107	50-150		
Chloromethane	5.0		1.0	ug/L	5.000		100	50-150		
Dibromochloromethane	5.4		1.0	ug/L	5.000		108	50-150		
1,2-Dibromo-3-chloropropane	5.4		1.0	ug/L	5.000		108	50-150		
1,2-Dibromoethane (EDB)	5.5		1.0	ug/L	5.000		111	50-150		
Dibromomethane	5.6		1.0	ug/L	5.000		112	50-150		
1,2-Dichlorobenzene	5.7		1.0	ug/L	5.000		114	50-150		
1,4-Dichlorobenzene	6.2		1.0	ug/L	5.000		123	50-150		
1,1-Dichloroethane	5.7		1.0	ug/L	5.000		114	50-150		
1,2-Dichloroethane	5.6		1.0	ug/L	5.000		111	50-150		
1,1-Dichloroethene	5.8		1.0	ug/L	5.000		116	50-150		
cis-1,2-Dichloroethene	5.4		1.0	ug/L	5.000		107	50-150		
trans-1,2-Dichloroethene	5.5		1.0	ug/L	5.000		110	50-150		
1,2-Dichloropropane	5.3		1.0	ug/L	5.000		106	50-150		
1,3-Dichloropropane	5.6		1.0	ug/L	5.000		112	50-150		
2,2-Dichloropropane	5.5		1.0	ug/L	5.000		110	50-150		
1,1-Dichloropropene	5.5		1.0	ug/L	5.000		110	50-150		
cis-1,3-Dichloropropene	5.2		1.0	ug/L	5.000		103	50-150		
trans-1,3-Dichloropropene	5.2		1.0	ug/L	5.000		103	50-150		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210534 - GCMS-WATER-VOLATILES										
LCS (B210534-BS1)					Prepared & Analyzed: 10/28/22					
Ethylbenzene	5.9		1.0	ug/L	5.000		118	50-150		
2-Hexanone	10.7		5.0	ug/L	10.00		107	50-150		
Methyl tert-butyl ether (MTBE)	5.2		1.0	ug/L	5.000		104	50-150		
4-Methyl-2-pentanone	10.3		5.0	ug/L	10.00		103	50-150		
Methylene chloride	6.3		1.0	ug/L	5.000		125	0-200		
Methyl methacrylate	4.8	J	5.0	ug/L	5.000		97	50-150		
Styrene	5.4		1.0	ug/L	5.000		108	50-150		
1,1,1,2-Tetrachloroethane	5.4		1.0	ug/L	5.000		107	50-150		
1,1,2,2-Tetrachloroethane	5.9		1.0	ug/L	5.000		119	50-150		
Tetrachloroethene	5.2		1.0	ug/L	5.000		104	50-150		
Toluene	5.5		1.0	ug/L	5.000		111	50-150		
1,1,1-Trichloroethane	5.5		1.0	ug/L	5.000		109	50-150		
1,1,2-Trichloroethane	5.4		1.0	ug/L	5.000		108	50-150		
Trichloroethene	5.4		1.0	ug/L	5.000		107	50-150		
Trichlorofluoromethane (Freon 11)	5.6		1.0	ug/L	5.000		112	50-150		
1,2,3-Trichloropropane	5.4		1.0	ug/L	5.000		107	50-150		
Vinyl acetate	3.7		1.0	ug/L	5.000		73	50-150		
Vinyl chloride	5.3		1.0	ug/L	5.000		106	50-150		
o-Xylene	5.4		1.0	ug/L	5.000		108	50-150		
m- & p-Xylenes	11.5		1.0	ug/L	10.00		115	50-150		
Surrogate: 1,2-Dichloroethane-d4	*52.26*			ug/L	*50.00*		*105*	*70-130*		
Surrogate: Toluene-d8	*49.88*			ug/L	*50.00*		*100*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*50.98*			ug/L	*50.00*		*102*	*75-120*		
Duplicate (B210534-DUP1)			**Source: 2102505-02**		Prepared & Analyzed: 10/28/22					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210534 - GCMS-WATER-VOLATILES										
Duplicate (B210534-DUP1)			**Source: 2102505-02**		Prepared & Analyzed: 10/28/22					
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	ND		1.0	ug/L		ND				20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20

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Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210534 - GCMS-WATER-VOLATILES										
Duplicate (B210534-DUP1)		**Source: 2102505-02**		Prepared & Analyzed: 10/28/22						
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	ND		1.0	ug/L		ND				20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	ND		1.0	ug/L		ND				20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*53.86*			ug/L	*50.00*		*108*	*70-130*		
Surrogate: Toluene-d8	*49.46*			ug/L	*50.00*		*99*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*50.21*			ug/L	*50.00*		*100*	*75-120*		
Matrix Spike (B210534-MS1)		**Source: 2102729-02**		Prepared & Analyzed: 10/28/22						
Acetone	11.3		5.0	ug/L	10.00	ND	113	60-120		
Acrylonitrile	11.0		5.0	ug/L	10.00	ND	110	0-200		
Benzene	11.7		1.0	ug/L	10.00	ND	117	60-120		
Bromochloromethane	10.8		1.0	ug/L	10.00	ND	108	60-120		
Bromodichloromethane	10.7		1.0	ug/L	10.00	ND	107	60-120		
Bromoform	10.3		1.0	ug/L	10.00	ND	103	60-120		
Bromomethane	1.9		1.0	ug/L	10.00	ND	19	60-120		
2-Butanone (MEK)	10.0		5.0	ug/L	10.00	ND	100	60-120		

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Project Manager: Steve Brown

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210534 - GCMS-WATER-VOLATILES										
Matrix Spike (B210534-MS1)		**Source: 2102729-02**		Prepared & Analyzed: 10/28/22						
Carbon disulfide	12.1		1.0	ug/L	10.00	ND	121	60-120		
Carbon tetrachloride	11.5		1.0	ug/L	10.00	ND	115	60-120		
Chlorobenzene	11.2		1.0	ug/L	10.00	ND	112	60-120		
Chloroethane	11.5		1.0	ug/L	10.00	ND	115	60-120		
Chloroform	11.0		1.0	ug/L	10.00	ND	110	60-120		
Chloromethane	10.6		1.0	ug/L	10.00	ND	106	60-120		
Dibromochloromethane	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,2-Dibromo-3-chloropropane	10.0		1.0	ug/L	10.00	ND	100	60-120		
1,2-Dibromoethane (EDB)	10.7		1.0	ug/L	10.00	ND	107	60-120		
Dibromomethane	10.5		1.0	ug/L	10.00	ND	105	60-120		
1,2-Dichlorobenzene	11.0		1.0	ug/L	10.00	ND	110	60-120		
1,4-Dichlorobenzene	10.9		1.0	ug/L	10.00	ND	109	60-120		
1,1-Dichloroethane	11.2		1.0	ug/L	10.00	ND	112	60-120		
1,2-Dichloroethane	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,1-Dichloroethene	11.7		1.0	ug/L	10.00	ND	117	60-120		
cis-1,2-Dichloroethene	10.4		1.0	ug/L	10.00	ND	104	60-120		
trans-1,2-Dichloroethene	11.5		1.0	ug/L	10.00	ND	115	60-120		
1,2-Dichloropropane	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,3-Dichloropropane	10.4		1.0	ug/L	10.00	ND	104	60-120		
2,2-Dichloropropane	10.2		1.0	ug/L	10.00	ND	102	60-120		
1,1-Dichloropropene	11.2		1.0	ug/L	10.00	ND	112	60-120		
cis-1,3-Dichloropropene	10.1		1.0	ug/L	10.00	ND	101	60-120		
trans-1,3-Dichloropropene	9.8		1.0	ug/L	10.00	ND	98	60-120		
Ethylbenzene	11.8		1.0	ug/L	10.00	ND	118	60-120		
2-Hexanone	9.2		5.0	ug/L	10.00	ND	92	60-120		
Methyl tert-butyl ether (MTBE)	9.8		1.0	ug/L	10.00	ND	98	60-120		
4-Methyl-2-pentanone	9.5		5.0	ug/L	10.00	ND	95	60-120		
Methylene chloride	10.9		1.0	ug/L	10.00	ND	109	60-120		
Methyl methacrylate	9.4		5.0	ug/L	10.00	ND	94	60-120		
Styrene	10.9		1.0	ug/L	10.00	ND	109	60-120		
1,1,1,2-Tetrachloroethane	10.8		1.0	ug/L	10.00	ND	108	60-120		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210534 - GCMS-WATER-VOLATILES										
Matrix Spike (B210534-MS1)		**Source: 2102729-02**		Prepared & Analyzed: 10/28/22						
1,1,2,2-Tetrachloroethane	11.2		1.0	ug/L	10.00	ND	112	60-120		
Tetrachloroethene	11.2		1.0	ug/L	10.00	ND	112	60-120		
Toluene	11.3		1.0	ug/L	10.00	ND	113	60-120		
1,1,1-Trichloroethane	11.4		1.0	ug/L	10.00	ND	114	60-120		
1,1,2-Trichloroethane	10.6		1.0	ug/L	10.00	ND	106	60-120		
Trichloroethene	11.2		1.0	ug/L	10.00	ND	112	60-120		
Trichlorofluoromethane (Freon 11)	12.5		1.0	ug/L	10.00	ND	125	60-120		
1,2,3-Trichloropropane	9.9		1.0	ug/L	10.00	ND	99	60-120		
Vinyl acetate	9.0		1.0	ug/L	10.00	ND	90	60-120		
Vinyl chloride	11.6		1.0	ug/L	10.00	ND	116	60-120		
o-Xylene	10.9		1.0	ug/L	10.00	ND	109	60-120		
m- & p-Xylenes	23.3		1.0	ug/L	20.00	ND	116	60-120		
Surrogate: 1,2-Dichloroethane-d4	*50.98*			ug/L	*50.00*		*102*	*70-130*		
Surrogate: Toluene-d8	*49.43*			ug/L	*50.00*		*99*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*50.27*			ug/L	*50.00*		*101*	*75-120*		
Batch B210557 - GCMS-WATER-VOLATILES										
Blank (B210557-BLK1)				Prepared & Analyzed: 10/31/22						
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						

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Project Manager: Steve Brown

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210557 - GCMS-WATER-VOLATILES										
Blank (B210557-BLK1)					Prepared & Analyzed: 10/31/22					
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						

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Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210557 - GCMS-WATER-VOLATILES										
Blank (B210557-BLK1)					Prepared & Analyzed: 10/31/22					
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*52.22*			ug/L	*50.00*		*104*	*70-130*		
Surrogate: Toluene-d8	*48.82*			ug/L	*50.00*		*98*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.88*			ug/L	*50.00*		*100*	*75-120*		
LCS (B210557-BS1)					Prepared & Analyzed: 10/31/22					
Acetone	9.3		5.0	ug/L	10.00		93	50-150		
Acrylonitrile	5.3		5.0	ug/L	5.000		105	50-150		
Benzene	5.8		1.0	ug/L	5.000		116	50-150		
Bromochloromethane	5.6		1.0	ug/L	5.000		111	50-150		
Bromodichloromethane	5.4		1.0	ug/L	5.000		109	50-150		
Bromoform	4.8		1.0	ug/L	5.000		96	50-150		
Bromomethane	3.1		1.0	ug/L	5.000		61	50-150		
2-Butanone (MEK)	9.0		5.0	ug/L	10.00		90	50-150		
Carbon disulfide	6.2		1.0	ug/L	5.000		124	50-150		
Carbon tetrachloride	5.3		1.0	ug/L	5.000		105	50-150		
Chlorobenzene	5.6		1.0	ug/L	5.000		113	50-150		
Chloroethane	5.6		1.0	ug/L	5.000		112	50-150		
Chloroform	5.5		1.0	ug/L	5.000		109	50-150		
Chloromethane	5.0		1.0	ug/L	5.000		100	50-150		

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210557 - GCMS-WATER-VOLATILES										
LCS (B210557-BS1)					Prepared & Analyzed: 10/31/22					
Dibromochloromethane	5.4		1.0	ug/L	5.000		108	50-150		
1,2-Dibromo-3-chloropropane	6.0		1.0	ug/L	5.000		119	50-150		
1,2-Dibromoethane (EDB)	5.5		1.0	ug/L	5.000		109	50-150		
Dibromomethane	5.4		1.0	ug/L	5.000		108	50-150		
1,2-Dichlorobenzene	5.7		1.0	ug/L	5.000		114	50-150		
1,4-Dichlorobenzene	6.1		1.0	ug/L	5.000		121	50-150		
1,1-Dichloroethane	5.4		1.0	ug/L	5.000		108	50-150		
1,2-Dichloroethane	5.6		1.0	ug/L	5.000		112	50-150		
1,1-Dichloroethene	5.4		1.0	ug/L	5.000		108	50-150		
cis-1,2-Dichloroethene	5.3		1.0	ug/L	5.000		107	50-150		
trans-1,2-Dichloroethene	5.6		1.0	ug/L	5.000		111	50-150		
1,2-Dichloropropane	5.3		1.0	ug/L	5.000		105	50-150		
1,3-Dichloropropane	5.6		1.0	ug/L	5.000		112	50-150		
2,2-Dichloropropane	5.5		1.0	ug/L	5.000		110	50-150		
1,1-Dichloropropene	5.6		1.0	ug/L	5.000		111	50-150		
cis-1,3-Dichloropropene	5.4		1.0	ug/L	5.000		108	50-150		
trans-1,3-Dichloropropene	5.1		1.0	ug/L	5.000		102	50-150		
Ethylbenzene	5.9		1.0	ug/L	5.000		117	50-150		
2-Hexanone	10.4		5.0	ug/L	10.00		104	50-150		
Methyl tert-butyl ether (MTBE)	5.4		1.0	ug/L	5.000		107	50-150		
4-Methyl-2-pentanone	10.0		5.0	ug/L	10.00		100	50-150		
Methylene chloride	6.6		1.0	ug/L	5.000		132	0-200		
Methyl methacrylate	4.8	J	5.0	ug/L	5.000		96	50-150		
Styrene	5.4		1.0	ug/L	5.000		108	50-150		
1,1,1,2-Tetrachloroethane	5.4		1.0	ug/L	5.000		108	50-150		
1,1,2,2-Tetrachloroethane	5.7		1.0	ug/L	5.000		115	50-150		
Tetrachloroethene	5.4		1.0	ug/L	5.000		107	50-150		
Toluene	5.5		1.0	ug/L	5.000		111	50-150		
1,1,1-Trichloroethane	5.5		1.0	ug/L	5.000		110	50-150		
1,1,2-Trichloroethane	5.5		1.0	ug/L	5.000		110	50-150		
Trichloroethene	5.3		1.0	ug/L	5.000		106	50-150		

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410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

Reported:
11/04/22 13:19

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210557 - GCMS-WATER-VOLATILES										
LCS (B210557-BS1)					Prepared & Analyzed: 10/31/22					
Trichlorofluoromethane (Freon 11)	5.6		1.0	ug/L	5.000		112	50-150		
1,2,3-Trichloropropane	5.3		1.0	ug/L	5.000		106	50-150		
Vinyl acetate	3.7		1.0	ug/L	5.000		73	50-150		
Vinyl chloride	5.1		1.0	ug/L	5.000		103	50-150		
o-Xylene	5.7		1.0	ug/L	5.000		114	50-150		
m- & p-Xylenes	11.6		1.0	ug/L	10.00		116	50-150		
Surrogate: 1,2-Dichloroethane-d4	*50.77*			ug/L	*50.00*		*102*	*70-130*		
Surrogate: Toluene-d8	*49.38*			ug/L	*50.00*		*99*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*51.24*			ug/L	*50.00*		*102*	*75-120*		
Duplicate (B210557-DUP1)			**Source: 2102729-09**		Prepared & Analyzed: 10/31/22					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20

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Rabecka Koons, Quality Assurance Officer

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210557 - GCMS-WATER-VOLATILES										
Duplicate (B210557-DUP1)			**Source: 2102729-09**		Prepared & Analyzed: 10/31/22					
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	ND		1.0	ug/L		ND				20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	ND		1.0	ug/L		ND				20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	ND		1.0	ug/L		ND				20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20

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Rabecka Koons, Quality Assurance Officer

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

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Project Manager: Steve Brown

Reported:
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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210557 - GCMS-WATER-VOLATILES										
Duplicate (B210557-DUP1)		**Source: 2102729-09**		Prepared & Analyzed: 10/31/22						
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*53.53*			ug/L	*50.00*		*107*	*70-130*		
Surrogate: Toluene-d8	*48.97*			ug/L	*50.00*		*98*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.94*			ug/L	*50.00*		*100*	*75-120*		
Matrix Spike (B210557-MS1)		**Source: 2102729-12**		Prepared & Analyzed: 10/31/22						
Acetone	10.6		5.0	ug/L	10.00	ND	106	60-120		
Acrylonitrile	11.3		5.0	ug/L	10.00	ND	113	0-200		
Benzene	11.7		1.0	ug/L	10.00	ND	117	60-120		
Bromochloromethane	11.3		1.0	ug/L	10.00	ND	113	60-120		
Bromodichloromethane	11.1		1.0	ug/L	10.00	ND	111	60-120		
Bromoform	10.1		1.0	ug/L	10.00	ND	101	60-120		
Bromomethane	6.6		1.0	ug/L	10.00	ND	66	60-120		
2-Butanone (MEK)	9.0		5.0	ug/L	10.00	ND	90	60-120		
Carbon disulfide	11.8		1.0	ug/L	10.00	ND	118	60-120		
Carbon tetrachloride	11.6		1.0	ug/L	10.00	ND	116	60-120		
Chlorobenzene	11.5		1.0	ug/L	10.00	ND	115	60-120		
Chloroethane	11.2		1.0	ug/L	10.00	ND	112	60-120		
Chloroform	11.4		1.0	ug/L	10.00	ND	114	60-120		
Chloromethane	10.5		1.0	ug/L	10.00	ND	105	60-120		
Dibromochloromethane	10.9		1.0	ug/L	10.00	ND	109	60-120		
1,2-Dibromo-3-chloropropane	10.2		1.0	ug/L	10.00	ND	102	60-120		
1,2-Dibromoethane (EDB)	10.8		1.0	ug/L	10.00	ND	108	60-120		
Dibromomethane	10.5		1.0	ug/L	10.00	ND	105	60-120		
1,2-Dichlorobenzene	10.8		1.0	ug/L	10.00	ND	108	60-120		
1,4-Dichlorobenzene	10.9		1.0	ug/L	10.00	ND	109	60-120		
1,1-Dichloroethane	11.0		1.0	ug/L	10.00	ND	110	60-120		
1,2-Dichloroethane	10.9		1.0	ug/L	10.00	ND	109	60-120		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF - FALL 2022
Project Manager: Steve Brown

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210557 - GCMS-WATER-VOLATILES										
Matrix Spike (B210557-MS1)		**Source: 2102729-12**		Prepared & Analyzed: 10/31/22						
1,1-Dichloroethene	11.5		1.0	ug/L	10.00	ND	115	60-120		
cis-1,2-Dichloroethene	10.8		1.0	ug/L	10.00	ND	108	60-120		
trans-1,2-Dichloroethene	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,2-Dichloropropane	10.4		1.0	ug/L	10.00	ND	104	60-120		
1,3-Dichloropropane	10.8		1.0	ug/L	10.00	ND	108	60-120		
2,2-Dichloropropane	10.5		1.0	ug/L	10.00	ND	105	60-120		
1,1-Dichloropropene	11.3		1.0	ug/L	10.00	ND	113	60-120		
cis-1,3-Dichloropropene	10.4		1.0	ug/L	10.00	ND	104	60-120		
trans-1,3-Dichloropropene	10.0		1.0	ug/L	10.00	ND	100	60-120		
Ethylbenzene	12.0		1.0	ug/L	10.00	ND	120	60-120		
2-Hexanone	9.6		5.0	ug/L	10.00	ND	96	60-120		
Methyl tert-butyl ether (MTBE)	10.4		1.0	ug/L	10.00	ND	104	60-120		
4-Methyl-2-pentanone	9.5		5.0	ug/L	10.00	ND	95	60-120		
Methylene chloride	10.8		1.0	ug/L	10.00	ND	108	60-120		
Methyl methacrylate	9.0		5.0	ug/L	10.00	ND	90	60-120		
Styrene	11.0		1.0	ug/L	10.00	ND	110	60-120		
1,1,1,2-Tetrachloroethane	11.0		1.0	ug/L	10.00	ND	110	60-120		
1,1,2,2-Tetrachloroethane	11.3		1.0	ug/L	10.00	ND	113	60-120		
Tetrachloroethene	11.3		1.0	ug/L	10.00	ND	113	60-120		
Toluene	11.4		1.0	ug/L	10.00	ND	114	60-120		
1,1,1-Trichloroethane	11.5		1.0	ug/L	10.00	ND	115	60-120		
1,1,2-Trichloroethane	10.8		1.0	ug/L	10.00	ND	108	60-120		
Trichloroethene	11.2		1.0	ug/L	10.00	ND	112	60-120		
Trichlorofluoromethane (Freon 11)	12.6		1.0	ug/L	10.00	ND	126	60-120		
1,2,3-Trichloropropane	10.0		1.0	ug/L	10.00	ND	100	60-120		
Vinyl acetate	8.9		1.0	ug/L	10.00	ND	89	60-120		
Vinyl chloride	11.6		1.0	ug/L	10.00	ND	116	60-120		
o-Xylene	11.2		1.0	ug/L	10.00	ND	112	60-120		
m- & p-Xylenes	24.1		1.0	ug/L	20.00	ND	121	60-120		
Surrogate: 1,2-Dichloroethane-d4	*49.44*			ug/L	*50.00*		*99*	*70-130*		
Surrogate: Toluene-d8	*49.34*			ug/L	*50.00*		*99*	*75-120*		

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Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210557 - GCMS-WATER-VOLATILES										
Matrix Spike (B210557-MS1)		**Source: 2102729-12**			Prepared & Analyzed: 10/31/22					
Surrogate: 4-Bromofluorobenzene	*50.84*			ug/L	*50.00*		*102*	*75-120*		

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11/04/22 13:19

Notes and Definitions

L	Analyte is a possible laboratory contaminant
J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

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Rabecka Koons, Quality Assurance Officer

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MSS
Project	MLF - FALL 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260 (1)											
1	TRIP BLANK	2	10.27.22	—	✓		QA	✓								210	272	9-01	
2	TW-16	3	10.25.22	1215			GW												-02
3	TW-16A			1140															-03
4	TW-17			1300															-04
5	TW-17A			1335															-05
6	TW-19			1415															-06
7	TW-20R		10.26.22	910															-07
8	TW-21			955															-08
9	TW-22			1120															-09
10	TW-22A			1155															-10
11	TW-22B			1040															-11
12	TW-23R		10.27.22	1030															-12

	Signature	Date	Time	Comments
Relinquished by	[signature]	10.27.22		(1) APPENDIX I LIST of 47 VOCs, MTBE,
Received by	[signature]	10.27.22	13:00	DCDFM + DCFM
Relinquished by				
Received by				
Relinquished by				
Received by				

Cooler Temp on Arrival: 3.4 Deg. C

Rev. Aug. 2018

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MSS
Project	MLF- FALL 2022	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	① VOCs - METHOD 8260											
1	TW-24	3	10.26.22	1300	✓		GW	✓									21D2729	-~~13~~ 13	RH 10/27/22
2	TW-24A	↓	↓	1335	↓		↓	↓										-14	
3	TW-25			1510														-15	
4	TW-25A		↓	1550			↓											-16	
5	Dup-1		10.26.22	—			QA											-17	
6	Dup-2	↓	10.26.22	—	↓		QA	↓										-18	
7																			
8																			
9																			
10																			
11																			
12																			

	Signature	Date	Time	Comments
Relinquished by	[signature]	10.27.22		① APPENDIX I LIST of 47 VOCS, MTBE,
Received by	[signature]	10.27.22	13:00	DCDFM + DCFM
Relinquished by				
Received by				STANDARD REPORT
Relinquished by				
Received by				

Cooler Temp on Arrival: 3.4 Deg. C

Rev. Aug. 2018

Appendix C.5
Spring 2023

Bureau of Waste Management Services
389 Burns Crossing Road
Severn, Maryland 21144
Phone (410) 222-6108

July 31, 2023

Mr. Andrew Grenzer, Chief
Solid Waste Operations Division
Land and Materials Administration
Maryland Department of the Environment
1800 Washington Blvd., Suite 605
Baltimore, MD 21230-1720

RE: Semi-Annual Groundwater and Surface Water Reports, January 1 – June 30, 2023, Millersville Landfill and Resource Recovery Facility and Sudley Closed Landfill

Dear Mr. Grenzer:

Enclosed are the Semi-Annual Groundwater and Surface Water Data Evaluation Reports for the Millersville Landfill and Resource Recovery Facility and the Sudley Landfill. The analytical results (raw data reports) for the monitoring events are also enclosed. The text, tables, and appendices are included as hard copies. The appendix containing the raw analytical data results is included electronically on the accompanying CDs.

Should you have any questions regarding the information covered in this document, please contact me or Mark Morris on (410) 222-6108.

Sincerely,

Stephen J. Krajcsik

Stephen J. Krajcsik
Solid Waste Operations Administrator

Enclosure

bcc: Bill Dehn, AACo. Health Department (Mail Stop 3101), w/enclosures
Rhody Holthaus, w/enclosures
Michael Porath, w/enclosures
Mark Morris, w/enclosures
Lauren Parker and Doug Schott, ARM Group (cover letter only)
File# OR-O-MLF-551E w/enclosures; OR-O-MCC/MLF-506 (cover letter only) for Millersville
File# OR-O-SLF-651C w/enclosures; OR-O-SCC/SLF-606 (cover letter only) for Sudley

ANNE ARUNDEL COUNTY

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY

GROUNDWATER MONITORING REPORT
1st SEMI-ANNUAL 2023

ARM Project 22011183

Prepared for:

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS
WASTE MANAGEMENT SERVICES
389 Burns Crossing Road
Severn, Maryland 21144

Prepared by:

ARM Group LLC
9175 Guilford Road
Suite 310
Columbia, MD 21046

July 2023

ANNE ARUNDEL COUNTY

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY

GROUNDWATER MONITORING REPORT
1st SEMI-ANNUAL 2023

ARM Project 22011183

Prepared for:

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS
WASTE MANAGEMENT SERVICES
389 Burns Crossing Road
Severn, Maryland 21144

Prepared by:

ARM Group LLC
9175 Guilford Road
Suite 310
Columbia, MD 21046

July 2023

Lauren Parker, G.I.T.
Project Geologist I

Stewart Kabis, P.G.
Project Geologist II/Q.A. Reviewer

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(following text)

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(following text)

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(following text)

Appendix A Historical Data Tables

Appendix B Historical MCL Exceedance Time-Series Plots

Appendix C Groundwater Elevations

Appendix D Data Validation

Appendix E Laboratory Analytical Reports

EXECUTIVE SUMMARY

The Maryland Department of Environment (MDE) has developed groundwater and surface water monitoring requirements to detect pollutant releases from landfills that could have adverse impacts on public health and the environment. To fulfill these requirements, landfills must be monitored to address three issues: (i) whether a release of chemicals from the landfill has occurred; (ii) whether conditions potentially adverse to public health and the environment were created as a result of a release; and (iii) whether the results of a statistical evaluation of groundwater data require that additional sampling and/or corrective measures be implemented. This executive summary presents the findings of the 1st semi-annual 2023 (Spring 2023) groundwater sampling event, performed at the Millersville Landfill and Resource Recovery Facility (MLFRRF) located in Anne Arundel County. The findings are summarized with respect to these three issues.

The sampling results are evaluated for compliance with regulatory standards, including: (i) U.S. Environmental Protection Agency (USEPA) maximum contaminant levels (MCLs) and secondary maximum contaminant levels (SMCLs); (ii) Maryland health-based standards; and (iii) groundwater protection standards (GWPS) established for the site. MCLs and groundwater protection standards are established based on health concerns, whereas SMCLs are based on aesthetic concerns, such as taste, color, and odor.

The groundwater and surface water monitoring strategy for the MLFRRF was first identified in the Environmental Monitoring Plan (EMP), prepared for the Anne Arundel County Department of Public Works (the County) by Stearns & Wheeler [June 1995, Revised June 1996]. An updated EMP for MLFRRF prepared by ERM, dated November 5, 2002, was conditionally approved by MDE with their June 7, 2004 letter, contingent upon the County adding methyl tertiary butyl ether (MTBE) analysis to the monitoring program. The EMP was updated by ERM and approved by MDE in a letter dated March 25, 2010. The EMP defines two separate portions of the MLFRRF. Closed portions (Cells 1 East, 2, and 4) that stopped receiving waste prior to October 9, 1991, are subject to the requirements of the Code of Maryland (COMAR). The closed portions (Cells 5, 6, and 7) that stopped receiving waste prior to October 9, 1993, are subject to the provisions of 40 CFR Part 258 related to final cover requirements only. The recently-closed Cell 8 and currently active Cell 9 are subject to 40 CFR Part 258. However, for the purposes of monitoring, the closed portion (Cells 5, 6, and 7) are included in the monitoring and analysis requirements pursuant to 40 CFR Part 258 along with Cell 8 and Cell 9. Each of these portions of the MLFRRF are monitored by a comprehensive monitoring network, on-site regulated monitoring wells (Subtitle D), on-site regulated monitoring wells (COMAR), on-site non-regulated monitoring wells, off-site non-regulated monitoring wells, and other off-site monitoring locations. The monitoring networks were defined according to strategies that comply with the applicable regulatory requirements.

At the request of MDE, additional monitoring was performed for a select list of parameters from the Appendix II list in 40 CFR Part 258 for the on-site Subtitle D regulated monitoring wells.

OVERVIEW OF FINDINGS

Overall, the sampling event did not reveal substantial changes in groundwater quality and the results for inorganic parameters are consistent with historical results. Given the data for the MLFRRF, the site-specific hydrogeology, and the corrective actions implemented by the County, the potential for adverse effects to human health and the environment continues to be minimal.

Of all samples collected for the Spring 2023 sampling event, there were two MCL exceedances, shown on **Table 3.** Neither of the two MCL exceedances was a first time exceedance. The two MCL exceedances are discussed below in **Section 3.3.1**.

The groundwater elevations and flow directions observed in the Zone 3 aquifer during this sampling event are generally consistent with historical data and seasonal variations.

The following summarizes the results of the Spring 2023 groundwater sampling event.

On-Site Regulated Monitoring Wells (Subtitle D)

All of the Appendix I VOC detections above the reporting limit (RL) are listed in **Table 4.** The Appendix II VOC detections are listed in **Table 5**. The concentration of methylene chloride in TW-25A exceeded its applicable MCL, as is typical.

In general, concentrations of Appendix I and Appendix II VOCs in the on-site Subtitle D regulated wells are consistent with historical concentrations. All VOC results for Subtitle D wells are discussed below in **Section 3.3.2**.

While iron and manganese continue to exceed SMCLs and pH is below the SMCL range in several wells, concentrations are generally consistent with historical levels.

On-site Regulated Monitoring Wells (COMAR)

Detections of Appendix I VOCs above the RL in COMAR wells are typically listed in **Table 6**; however, there were no Appendix I VOCs detected above RL in these wells during the Spring 2023 event**.** The Appendix II VOC detections above the RL are listed in **Table 7.** There were no GWPS or MCL exceedances for VOCs. The concentrations measured for Appendix I and Appendix II VOCs in the on-site COMAR-regulated wells are generally consistent with historical records.

While iron and manganese continue to exceed SMCLs and pH is below the SMCL range in several wells, concentrations are generally consistent with historical levels.

On-site Non-regulated Monitoring Wells

Appendix I VOC detections above the RL are listed in **Table 8.** Appendix II VOC detections above the RL are listed in **Table 9**. There were no GWPS or MCL exceedances for VOCs. The concentrations measured for Appendix I and Appendix II VOCs in the on-site non-regulated wells are generally consistent with historical records.

While iron and manganese continue to exceed SMCLs and pH is below the SMCL range in several wells, concentrations are generally consistent with historical levels. The concentration of arsenic in TW-11A exceeded its applicable MCL, as is typical.

Off-site Non-regulated Monitoring Wells

Appendix I VOC detections above the RL are listed in **Table 10.** Appendix II VOC detections above the RL are listed in **Table 11.** There were no MCL or GWPS exceedances. Appendix I and Appendix II VOC concentrations in these wells are generally consistent with historical concentrations. Mercury concentrations in the off-site non-regulated monitoring wells are generally consistent with the historical record.

Off-site Residential Zone 4 Water Supply Wells

As shown on **Table 12** and **Table 13**, there were no Zone 4 residential water supply wells sampled during the Spring 2023 event.

Surface Water Sampling Locations

Appendix I VOC detections above the RL are typically listed in **Table 14,** but there were no detections above the RL at surface water locations during this sampling event**.** Appendix II VOC detections above the RL are typically listed in **Table 15**, but there were no detections above the RL at surface water locations during this sampling event.

Concentrations of inorganic parameters were generally consistent with the historical record for surface water sampling locations.

Statistical Evaluation

The results of the statistical evaluation of the Spring 2023 groundwater data are generally consistent with historical results. The findings indicate that downgradient samples show constituent concentrations that are statistically significant increases (SSIs) above background levels for several VOCs and inorganic parameters. There were three new SSIs for parameters detected above the RL during the Spring 2023 sampling event that were not identified during the Fall 2022 event: o-xylene in TW-25A, alkalinity in TW-14A, and pH in TW-06. Concentrations of most parameters that

exhibited SSIs have generally been consistent with their historical data set; that is, no trend is apparent in the concentrations.

1 INTRODUCTION

1.1 BACKGROUND

In accordance with the requirements of the Solid Waste Management Regulations provided in Title 40 of the Code of Federal Regulations, Part 258 (40 CFR Part 258) and the Maryland Department of the Environment (MDE), the Anne Arundel County Department of Public Works (County) monitors groundwater and surface water at the Millersville Landfill and Resource Recovery Facility (MLFRRF), located in Anne Arundel County, Maryland. The monitoring requirements are provided in the Environmental Monitoring Plan (EMP), prepared by Stearns & Wheeler [June 1995, Revised June 1996]. An updated EMP for MLFRRF prepared by ERM, dated November 5, 2002, was conditionally approved by MDE with their June 7, 2004 letter, contingent upon the County adding methyl tertiary butyl ether (MTBE) analysis to the monitoring program. The EMP was revised by ERM and approved by MDE in a letter dated March 25, 2010. The primary objectives of the compliance monitoring program for the MLFRRF are: (i) to determine if leachate from the landfill affects groundwater quality; (ii) to evaluate whether or not conditions that are potentially adverse to public health and the environment have been caused in groundwater or surface water by the operation of the landfill; and (iii) to determine whether the results of a statistical evaluation of the sampling data indicate that the County needs to perform additional groundwater sampling or implement corrective measures.

This semi-annual report summarizes the findings of the evaluation performed on the data obtained during the Spring 2023 groundwater sampling event. The sampling performed during this event was conducted to fulfill the monitoring requirements of 40 CFR Part 258 and the approved EMP. This report also provides an overview of groundwater quality based on current and historical data.

The sampling data were evaluated through: (i) data validation; (ii) an evaluation of the ion balances of the samples that were collected, and an evaluation of the relative percent differences (RPDs) between sampling locations and corresponding duplicates (**Appendix D**); (iii) a statistical comparison of laboratory data between designated upgradient and downgradient groundwater on-site Subtitle D regulated monitoring wells; (iv) a comparison of laboratory results for each groundwater monitoring well with historical groundwater quality information; and (v) a comparison of laboratory results for each groundwater monitoring well with United States Environmental Protection Agency (USEPA) and MDE regulatory criteria, as well as with site-specific groundwater protection standards (GWPS).

There are three sets of rules that govern how the MLFRRF monitoring data are evaluated: 40 CFR Part 258 regulations apply to those portions of the MLFRRF that continued to receive waste after October 9th, 1993; 40 CFR Part 258 regulations related to final cover requirements apply to those portions of the MLFRRF that stopped receiving waste prior to October 9, 1993; and State Code of Maryland (COMAR) regulations apply to those closed portions of the MLFRRF that stopped

receiving waste before October 9, 1991. Closed disposal Cells 1 East, 2, and 4 are monitored in compliance with COMAR standards. The closed Cells 5, 6, and 7 that stopped receiving waste prior to October 9, 1993, are subject to the provisions of 40 CFR Part 258 related to final cover requirements only. Recently-closed Cell 8 and currently active Cell 9 are subject to 40 CFR Part 258. However, for the purposes of monitoring, the closed Cells 5, 6, and 7 are included in the monitoring and analysis requirements pursuant to 40 CFR Part 258 along with Cell 8 and Cell 9.

Table 1 provides a summary of the groundwater monitoring network for the MLFRRF. As shown in **Table 1**, the wells are designated according to whether they are used to monitor the older (Cells 1 East, 2, and 4) or newer (combined Cells 5, 6, and 7, Cell 8, and Cell 9) portions of the MLFRRF. The groundwater and surface water monitoring network for the MLFRRF is illustrated in **Figure C-1** in **Appendix C**. In general, the older and newer portions are separated by the Baltimore Gas Electric right-of-way.

In accordance with the EMP and in conformance with applicable regulations, 22 of the 50 on-site monitoring wells at the MLFRRF are classified as on-site regulated monitoring wells (Subtitle D). Eleven are located along the Eastern Boundary, two are near Cell 8, two are near the facility entrance serving as background wells, and seven are near Cell 9. Additionally, another 15 of the 50 on-site monitoring wells are classified as on-site regulated monitoring wells (COMAR). These monitoring wells are governed by COMAR for the closed portion of the MLFRRF. One monitoring well, TW-26R, is regulated by the facility's refuse disposal permit and is not covered by this semi-annual report. The remaining 13 on-site monitoring wells are classified as non-regulated. In conjunction with the regulated wells, numerous off-site monitoring locations have been established by the County to take proactive measures that comply with 40 CFR Part 258 groundwater monitoring requirements.

The regulated monitoring wells (Subtitle D) consist of the wells at the site that provide information on the quality of groundwater passing the relevant point of compliance and that are downgradient of combined Cells 5, 6, and 7, Cell 8 and Cell 9. **Table 1** summarizes the sampling locations used to monitor these cells. The on-site monitoring wells are designated as "TW". Wells designated as "MW" are off-site monitoring wells installed by the County to monitor off-site chemical concentrations in the groundwater. Wells designated as "RW" are also off-site monitoring wells and were converted from drinking water supply wells to monitoring wells by the County. Off-site residential water supply wells drilled into either the Zone 3 or Zone 4 aquifer are designated by the County parcel number with the prefix "P". Off-site residential water supply wells which have been drilled into the Zone 4 aquifer by the County have the suffix "Z4". Zone 4 residential wells are sampled biennially, with the exception of well P-417-Z4. This well is sampled annually in the spring as a conservative measure because there is no sentry monitoring point between the landfill and Parcel 417. **Table 2** lists the residential water supply wells. The residential water supply wells were not sampled during the Spring 2023 sampling event.

Regulated monitoring well (Subtitle D) TW-20 was abandoned on April 8, 2010, by a licensed well driller in accordance with COMAR 26.04.04.11. The well was placed to monitor groundwater downgradient of Cell 8 but was placed where a stormwater management pond was designated for Cell 9. Zone 3 monitoring well TW-20R was installed February 3-5, 2010, adjacent to Cell 8 as a replacement for abandoned monitoring well TW-20 per the approved EMP.

In addition to TW-20R, two non-regulated on-site Zone 4 monitoring wells were installed prior to the Spring 2010 sampling event. The installation of non-regulated on-site Zone 4 monitoring wells TW-14B and TW-6B were completed per the approved EMP on January 21, 2010 and February 2, 2010, respectively.

In accordance with the EMP, four on-site Zone 3 monitoring wells, TW-27, TW-28, TW-29, and TW-30, were installed prior to the Spring 2013 sampling event for incorporation into the regulatory monitoring well network for Cell 9. Additionally, existing monitoring wells TW-01, TW-02A, and TW-03, located south of Cell 9, are now considered part of the regulatory monitoring well network. Two years of background monitoring were completed prior to Cell 9 becoming operational in January 2017.

During the Fall 2020, construction activity for Cell 9 of the landfill involved significant earthwork in the immediate vicinity of TW-28, including raising the ground surface by 10-12 feet. As a result, new sections of well pipe were added to the top of TW-28 in order to vertically extend the well.

1.2 GROUNDWATER SAMPLING AND LABORATORY ANALYSIS

1.2.1 Groundwater Sampling

The County contracted with Environmental Monitoring and Assessment, LLC (EMA) of Lititz, Pennsylvania, to conduct the semi-annual groundwater sampling at the MLFRRF for the Spring 2023 sampling event. The sampling event included the collection of samples from 22 regulated on-site monitoring wells (Subtitle D), 15 regulated on-site monitoring wells (COMAR), 13 on-site non-regulated monitoring wells, and 12 off-site monitoring wells. The sampling locations are listed in **Table 1.**

Prior to collecting the groundwater samples, the depth to the water table was measured at each well. Once the water table measurement was recorded, the monitoring wells were purged and sampled in accordance with 40 CFR Part 258, MDE requirements, and the EMP. As the monitoring wells were purged, measurements of groundwater dissolved oxygen, pH, conductivity, temperature, oxidation-reduction potential, turbidity, and appearance were recorded.

1.2.2 Groundwater Sample Analysis

The groundwater analytical program for the MLFRRF includes the analysis of samples for parameters used to monitor both the existing and closed portion of the MLFRRF. For the purpose of uniformity and ease of implementation, the samples that are collected from the wells used to monitor the closed portion of the MLFRRF are analyzed in accordance with the detection monitoring requirements (defined by 40 CFR Part 258) for the existing portion of the MLFRRF, as specified in the EMP. In accordance with these detection monitoring requirements, the samples are analyzed for the parameters listed in Appendix I of 40 CFR Part 258 (Appendix I parameters). The Appendix I parameters include inorganic constituents (metals) and organic constituents (volatile organic compounds or VOCs).

In addition to these analytical requirements, the samples collected at the site are also analyzed for parameters historically monitored at the site. These parameters include dichlorodifluoromethane and dichlorofluoromethane, which are listed in Appendix II of 40 CFR Part 258 (Appendix II parameters), methyl tertiary butyl ether (MTBE), and general chemistry parameters such as chloride and total dissolved solids that can sometimes be indicators of landfill leachate (indicator parameters).

In accordance with this analytical program described above, the groundwater samples were analyzed for VOCs, total and dissolved metals, and general chemistry indicator parameters. The methods used to analyze the samples included USEPA Methods 8260 and 8011 for VOCs; USEPA Methods 6010D, 6020B, and 7470A for metals; and 40 CFR Part 136 methods for the indicator parameters. The full laboratory analytical results and data packages are presented as **Appendix E.**

1.3 SURFACE WATER SAMPLING AND LABORATORY ANALYSIS

1.3.1 Surface Water Sampling

During the Spring 2023 sampling event, three surface water samples, SW-1, SW-2, and SW-3 were collected by EMA from Wells Branch, which flows west to east across the site (see **Figure C-1**). The surface water samples were collected from the stream locations that are representative of upgradient and downgradient conditions. Sample location SW-1 is an upgradient location between Cell 8 and the leachate pretreatment plant, approximately 200 feet downgradient of monitoring well TW-10A. Sample location SW-2 is a downgradient location near the TW-4 well cluster. Surface water collected at this location is representative of surface water conditions prior to discharging off-site. Sample location SW-3 is a mid-stream location that is downgradient of Stormwater Pond 8-1 and is located between combined Cells 5-7, Cell 8, and Cell 9. This location is approximately equal distance from sample locations SW-1 and SW-2.

1.3.2 Surface Water Sample Analysis

The surface water samples were analyzed for VOCs, total metals, and indicator parameters. The methods used to analyze the samples included USEPA Method 8260 for VOCs; USEPA Methods 6010D, 6020B, and 7470A for metals; and 40 CFR Part 136 methods for the indicator parameters.

1.4 QUALITY ASSURANCE/QUALITY CONTROL SAMPLING AND ANALYSIS

1.4.1 Quality Assurance/Quality Control Sampling (QA/QC)

Field and laboratory QA/QC protocols were employed during the sampling event to ensure that QA/QC criteria were met. The field QA/QC protocols included the collection and analysis of two blind duplicate samples from wells TW-24 and TW-25A. In addition, one field blank and three trip blanks were prepared and analyzed. The laboratory QA/QC protocols included the analysis of method blanks and matrix spike (MS) and matrix spike duplicate (MSD) samples for GC/MS runs. These protocols help identify possible sources of VOC contamination that may cause elevated or false positive parameter levels to be reported.

1.4.2 Quality Assurance/Quality Control Sample Analysis

To ensure that the field QC criteria were met, blind duplicate samples were analyzed for all parameters for which the groundwater samples were analyzed. These parameters include VOCs by USEPA Method 8260 and 8011; total and dissolved metals by USEPA Methods 6010D, 6020B, and 7470A; and the indicator parameters by 40 CFR Part 136 methods. The field blank was also analyzed for all parameters for which the Subtitle D regulated monitoring wells were analyzed. These parameters include VOCs by USEPA Method 8260; total and dissolved metals by USEPA Methods 6010D, 6020B, and 7470A; and indicator parameters by 40 CFR Part 136 methods. The trip blanks were analyzed for VOCs according to USEPA Method 8260 and 8011.

To ensure that the laboratory QA criteria were met, project-specific MS and MSD samples were analyzed at the rate of one MS/MSD sample for every 20 field samples, as specified in the EMP. The MS and MSD samples were used by the laboratory to evaluate possible matrix effects that could have interfered with the analytical method, and to estimate the method precision. The analysis of laboratory method blanks was performed to identify possible sources of contamination that may have caused elevated or false positive parameter levels to be reported.

1.5 DATA ANALYSIS METHODOLOGY

The analysis of the data obtained during this sampling event included: validation of the laboratory data, determination of USEPA National Primary Drinking Water Standards (MCLs) exceedances,

statistical evaluation of upgradient versus downgradient parameter concentrations, identification of GWPS exceedances, and assessment of groundwater elevations.

The laboratory sample data and QA/QC data were validated to verify proper analytical procedures and checks were performed by the analytical laboratory. The laboratory data validation is discussed further in **Appendix D** of this report. The laboratory analytical data packages are presented as **Appendix E** of this report.

The data were evaluated to determine whether or not concentrations exceeded MCLs and National Secondary Drinking Water Standards (SMCLs), state health-based standards, and site-specific GWPS. The GWPS for the site were established in 1997. This evaluation is included in **Section 3** of this report.

The data analysis included a statistical evaluation of the detection monitoring data obtained from the on-site regulated monitoring wells (Subtitle D). This evaluation was used to determine if there is a statistically significant change in groundwater quality for the portions of the site subject to 40 CFR Part 258.54 that may be attributed to the MLFRRF. The historical concentrations of the parameters detected in the groundwater samples from each on-site regulated monitoring well (Subtitle D) were compared to the historical background data using statistical methods described in the EMP and 40 CFR Part 258.53(g). The statistical analysis is discussed further in **Section 4** of this report.

2 SUMMARY OF SAMPLING EVENT

2.1 OVERVIEW

The County contracted with EMA to conduct the Spring 2023 sampling event at the MLFRRF. VOC sample analysis was performed by Maryland Spectral Services of Baltimore, Maryland, and inorganic sample analysis was performed by Pace Analytical Service (Pace), of Greensburg, Pennsylvania and Beaver, West Virginia. Four samples were analyzed for nitrate and total dissolved solids at Fairway Laboratories, Inc. of Altoona, Pennsylvania due to a laboratory error.

The groundwater monitoring wells were purged and sampled in accordance with the EMP and 40 CFR Part 258. **Figure C-1** shows the locations of the sampling points and the corresponding sampling classifications. Quality control blanks and blind duplicates were obtained, as discussed in **Section 1.4.1** of this report. The groundwater samples were submitted to the laboratory for analyses of total and specific dissolved metals, Appendix I VOCs, and inorganic indicators of leachate (chloride, ammonia, nitrite and nitrate-nitrogen, chemical oxygen demand, total alkalinity, sulfate, dissolved solids, and hardness).

2.2 DATA ANALYSIS

The methods used to collect and analyze the groundwater, surface water and QA/QC samples for this sampling event were evaluated to determine compliance with the EMP for the site and 40 CFR Part 258. The following procedures were followed to evaluate the compliance of the field sampling activities and the laboratory methods:

- Review of the appropriateness of the analytical methods;
- Review of the appropriateness of sample bottle types, preservatives, and holding times for each analytical method;
- Review of reports and analytical data for trip blanks, field blanks, duplicate samples, and laboratory method blanks to identify possible evidence of contamination;
- Review of Chain-of-Custody documentation for accuracy and completeness; and
- Review of field methods described in the field sampling reports.

The field and laboratory results were also evaluated to determine the validity of the data. The following procedures were followed to assess the validity of the data:

- Calculation of charge balance errors on the samples collected in the field;

- Review of MS and MSD samples to evaluate possible matrix effects that may interfere with the analytical method;

- Review of MS, MSD, and blind duplicate samples to calculate the relative percent difference (RPD) of duplicate samples in obtaining an estimate of laboratory method precision;

- Review of laboratory reports on instrument tuning, instrument calibration, and recoveries of spiked samples for each analytical method; and

- Comparison of the analytical data and groundwater elevations to historical values at each sampling location.

The results obtained from this evaluation satisfy the project QA/QC objectives. The results of the evaluation of the analytical data are provided in **Appendix D.** The full laboratory analytical data packages are presented as **Appendix E** of this report.

A comparison of the analytical data to MCLs, SMCLs, State standards, and established GWPS, as well as to historical data, is discussed in **Section 3.**

3 SUMMARY OF ANALYTICAL RESULTS

3.1 INTRODUCTION

Groundwater elevations were measured by the County on a monthly basis and are included in this report in **Appendix C**. The field and laboratory analytical results were evaluated by comparing the current data to historical data. The laboratory results were also evaluated for compliance with regulatory standards. In assessing the laboratory data, each parameter was evaluated for compliance with: (i) MCLs and SMCLs; (ii) Maryland health-based standards; and (iii) GWPS established for the site. MCLs and GWPS are established based on health concerns, whereas SMCLs are based on aesthetic concerns, such as taste, color, and odor. A statistical evaluation of the laboratory results is presented in **Section 4**.

3.2 GROUNDWATER ELEVATION DATA

The monthly water table measurements recorded during June 2023 are provided in **Appendix C.** The groundwater elevations are generally consistent with historical data.

Potentiometric surface contours for groundwater levels measured in wells screened within the Zone 3 aquifer during Spring 2023 are illustrated on **Figure C-1** in **Appendix C**. As shown on the drawing, the general direction of groundwater flow in the Zone 3 aquifer at the MLFRRF is toward the northeast. Groundwater flow direction is consistent with historical data.

3.3 ANALYTICAL RESULTS

The results of the comparison of the analytical data to regulatory standards and to historical trends are discussed below for the volatile organic and inorganic data. In assessing the data, each parameter was evaluated for compliance with the MCLs and SMCLs, with Maryland health-based standards, and with GWPS established for the site.

The current analytical data and the historical analytical data are included in tables in **Appendix A.** The tables present the concentrations over time for organic and inorganic parameters. They provide a simple means of evaluating trends in the concentrations. The “J” qualifier associated with a concentration indicates the compound was detected at a trace concentration below the laboratory RL but above the MDL and as such is an estimated value. The “U” qualifier associated with a concentration indicates the compound was not detected. The “B” qualifier indicates possible laboratory contamination due to the compound being detected in the method or field blank sample analysis. An “L” qualifier indicates possible laboratory contaminant. An “M1” qualifier indicates that the matrix spike recovery analysis performed by the lab exceeded quality control limits, but the result was accepted based on laboratory control sample (LCS) recovery.

3.3.1 **MCL Exceedances**

Table 3 lists the MCL exceedances at the site for this sampling event. As shown in **Table 3**, there were two parameters that exceeded their applicable MCLs. Time-series plots for parameter concentrations with historic MCL exceedances for on-site monitoring wells have been constructed to identify potential trends in concentrations over time. These plots are included in **Appendix B**. Both of the MCL exceedances were consistent with the historical record. There were no first-time MCL exceedances during the Spring 2023 sampling event.

3.3.2 **On-site Regulated Monitoring Wells (Subtitle D)**

Appendix I Volatile Organic Compounds

As shown on **Table 4**, 11 different VOCs were detected above the RL across 11 different monitoring locations. The concentration of methylene chloride in TW-25A exceeded its applicable MCL, as it has done over the past several years.

All detections of VOCs above the RL were generally consistent with the historical record. No Appendix I VOCs were detected above the RL in the following Subtitle D wells during the Spring 2023 sampling event: TW-02A, TW-03, TW-04B, TW-05A, TW-10A, TW-19, TW-20R, TW-23, TW-24A, TW-27, and TW-30.

Appendix II Volatile Organic Compounds and MTBE

As shown in **Table 5**, detections above the RL of dichlorodifluoromethane, dichlorofluoromethane, and MTBE were noted for 11 different locations. There were no GWPS or Maryland State Action Level exceedances. In general, concentrations of these parameters are consistent with concentrations measured over the past 10 years.

No Appendix II VOCs were detected above the reporting limit in the following Subtitle D wells during the Spring 2023 sampling event: TW-02A, TW-03, TW-04B, TW-05A, TW-10A, TW-19, TW-20R, TW-23, TW-24A, TW-27, and TW-30.

Inorganics

Mercury was detected at concentrations above the RL only in Subtitle D wells TW-04B and TW-24. The concentrations of mercury in TW-04B and TW-24 were below the applicable MCL.

Iron (total and dissolved), manganese (total and dissolved), and turbidity were detected in many of the regulated monitoring wells (Subtitle D) at concentrations that exceeded the applicable SMCLs. Iron and manganese are typical naturally occurring metals found in groundwater and are not necessarily indicative of contamination from the landfill. Measurements of pH were below the SMCL range for most on-site Subtitle D regulated monitoring wells. Low pH is also typical

of groundwater and is believed to be a natural property of groundwater at the MLFRRF. Furthermore, pH concentrations in the downgradient monitoring wells are consistent with those measured in upgradient background groundwater.

Concentrations of inorganic parameters measured during the Spring 2023 sampling event—including those of iron, manganese, and pH—were generally consistent with the historical record.

3.3.3 **On-site Regulated Monitoring Wells (COMAR)**

Appendix I Volatile Organic Compounds

As shown on **Table 6,** there were no Appendix I VOCs detected above the RL across all COMAR regulated wells during the Spring 2023 sampling event. As such, there were no MCL or GWPS exceedances.

Appendix II Volatile Organic Compounds and MTBE

As shown in **Table 7**, there was only one detection above the RL of an Appendix II VOC in a COMAR regulated on-site monitoring well, dichlorodifluoromethane in TW-15B. The concentration of the detection was below GWPS or Maryland State Action Levels. The concentration was consistent with the historical record. There were no Appendix II VOCs detected above the RL in COMAR regulated wells TW-07, TW-07A, TW-08, TW-08A, TW-09B, TW-09C, TW-15, TW-16, TW-17, TW-17A, TW-21, TW-22, TW-22A, and TW-22B.

Inorganics

Mercury was not detected at a concentration above the RL in any COMAR regulated wells during the Spring 2023 sampling event. Iron (total and dissolved), manganese (total and dissolved), and turbidity were detected in several of the COMAR regulated monitoring wells at concentrations that exceeded their applicable SMCLs. Iron and manganese are typical naturally occurring metals found in groundwater and are not necessarily indicative of contamination from the landfill. Measurements of pH were below the SMCL range for all on-site COMAR regulated monitoring wells. Low pH is also typical of groundwater and is believed to be a natural property of groundwater at the MLFRRF. Furthermore, pH concentrations measured in the downgradient wells are comparable to upgradient background concentrations.

Concentrations of inorganic parameters measured in COMAR regulated monitoring wells during the Spring 2023 sampling event—including those of iron, manganese, and pH—were consistent with the historical record.

3.3.4 **On-site Non-regulated Monitoring Wells**

Appendix I Volatile Organic Compounds

As shown on **Table 8**, there were four Appendix I VOCs detected above the RL across two on-site non-regulated monitoring wells during the Spring 2023 sampling event. These detections are consistent with the historical record. There were no GWPS or Maryland State Action Level exceedances. There were no Appendix I VOCs detected above the RL in the following on-site non-regulated wells: TW-02, TW-03A, TW-05B, TW-06A, TW-06B, TW-09, TW-11A, TW-14B, TW-16A, TW-18, and TW-21A.

Appendix II Volatile Organic Compounds and MTBE

As shown on **Table 9**, detections of dichlorodifluoromethane and dichlorofluoromethane above the RL were observed in two on-site non-regulated monitoring wells during the Spring 2023 sampling event. There were no GWPS or Maryland State Action Level exceedances. The concentrations were consistent with the historical record. There were no Appendix II VOCs detected above the RL in on-site non-regulated wells TW-02, TW-03A, TW-05B, TW-06A, TW-06B, TW-09, TW-11A, TW-14B, TW-16A, TW-18, and TW-21A.

Inorganics

Mercury was not detected above the RL in any on-site non-regulated monitoring wells. Iron (total and dissolved), manganese (total and dissolved), and turbidity were detected in a few of the on-site non-regulated monitoring wells at concentrations that exceeded their applicable SMCLs. Iron and manganese are typical naturally-occurring metals found in groundwater and are not necessarily indicative of contamination from the landfill. Measurements of pH were below the SMCL range for most on-site non-regulated monitoring wells. Low pH is also typical of groundwater and is believed to be a natural property of groundwater at the MLFRRF. Furthermore, pH concentrations measured in the downgradient wells are comparable to upgradient background concentrations.

Concentrations of inorganic parameters measured in on-site non-regulated monitoring wells during the Spring 2023 sampling event—including those of iron, manganese, and pH—are generally consistent with the historical record.

3.3.5 **Off-site Non-regulated Monitoring Wells**

Appendix I Volatile Organic Compounds

As shown on **Table 10**, five different Appendix I VOCs were detected above the RL across six different off-site non-regulated monitoring well locations. There were no MCL or GWPS exceedances. In general, VOC concentrations detected above the RL in these wells are consistent

with historical concentrations. There were no Appendix I VOCs detected above the RL in wells MW-P4, MW-P9, MW-P417, MW-P440, RW-P171-1, and RW-P441.

Appendix II Volatile Organic Compounds and MTBE

As shown in **Table 11**, detections of dichlorodifluoromethane and dichlorofluoromethane above the RL were observed at six off-site non-regulated monitoring wells. There were no GWPS or Maryland State Action Level exceedances. The detected concentrations of dichlorodifluoromethane and dichlorofluoromethane are generally consistent with the historical record. There were no Appendix II VOCs detected above the RL in wells MW-P4, MW-P417, MW-P440, MW-P9, RW-P440, and RW-P171-1.

Inorganics

All off-site monitoring wells were analyzed for mercury. There were two concentrations of mercury detected above the RL in off-site non-regulated monitoring wells during the Spring 2023 sampling event, in wells MW-P106 and RW-P584. The concentrations of mercury in both of these wells were below the applicable MCL. The detected concentrations are consistent with the historical record.

3.3.6 **Off-site Residential Zone 4 Water Supply Wells**

As shown on **Table 12** and **Table 13**, there were no off-site residential Zone 4 water supply wells sampled during the Spring 2023 sampling event.

3.3.7 **Surface Water Sampling Locations**

Appendix I and Appendix II Volatile Organic Compounds

As shown on **Table 14** and **Table 15**, there were no Appendix I or Appendix II VOCs detected above the RL at any surface water monitoring locations during the Spring 2023 sampling event.

Inorganics

There were no MCL exceedances of inorganic parameters at the surface water sampling locations. SMCL exceedances were observed for iron and turbidity at SW-2 and SW-3. Concentrations of all detected inorganic parameters at surface water locations were consistent with historical values.

4 STATISTICAL EVALUATION

4.1 INTRODUCTION

In accordance with the EMP and 40 CFR Part 258.53, groundwater sampling and analysis requirements, the groundwater parameters at the MLFRRF have been statistically analyzed. Listed below are the objective of the analysis, the procedures used, and the summary of results. The detailed results of the statistical analysis are included after the text.

4.2 OBJECTIVE

According to the Code of Federal Regulations (40 CFR Part 258), groundwater monitoring data must be statistically analyzed to determine if parameter levels are exceeding background groundwater quality levels at each downgradient well. This goal is met by statistically analyzing the groundwater data that have been collected on the site since 1993. The analyses will determine if the land use may be contributing to groundwater contamination.

4.3 PROCEDURE

Samples have been collected since 1993 and tested for the constituents specified in the EMP. The concentrations observed in the downgradient wells are compared to the concentrations observed in the upgradient wells. If the downgradient samples show significantly higher concentrations than the upgradient samples statistically, it indicates that land use practices are likely affecting the groundwater quality.

The groundwater data were analyzed using the Mann-Whitney Test (Wilcoxon Rank Sum Test) to determine whether the downgradient data differed from the upgradient data with statistical significance. The Mann-Whitney analysis is nonparametric, that is, it assumes no underlying distribution (like the normal distribution) and compares two groups of data and determines whether both groups come from the same population with a certain confidence.

Individual statistical tests have a certain amount of uncertainty associated with them. When multiple tests are combined (from different wells and different constituents), that uncertainty is compounded. An overall network-wide Type I error rate of 5% is required by 40 CFR Part 258.53(h)(2); however, an error rate no less than 1% shall be applied to any single test. A 5% Type I error rate means 5% of the recognized exceedances are in reality not actually elevated above background levels; that is, they represent false positives.

Statistical analyses are performed for all parameters detected over the RL during the Spring 2023 sampling event at downgradient wells. Using the Bonferroni adjustment to account for multiple

statistical comparisons, a Type I error rate of much less than 1% per analysis would result, so a Type I error rate of 1% was used as the minimum allowable under 40 CFR Part 258.52(h)(2).

For each sampling event, an average concentration from the upgradient wells was calculated. The collection of average concentrations for all sampling events was then compared to the concentrations for all sampling events at each of the downgradient wells. For each downgradient well, the upgradient and downgradient concentrations are combined and ranked (the lowest concentration is assigned a rank of 1). Tied concentrations are ranked equally by averaging the ranks that would be assigned to the tied group if they were not tied.

The sum of the ranks, the number of upgradient observations, and the number of downgradient observations are used to calculate the Mann-Whitney Test Statistic (U). The calculated U for each well/parameter pair is compared to a critical U value which is published in tables in statistical texts. Critical U values are based on the number of samples in the upgradient group and at each downgradient well. Therefore, the critical U values vary from parameter-to-parameter and from well-to-well. If the calculated U is greater than the critical U, there is no exceedance at 99% confidence (a 1% Type I error rate for each analysis). Likewise, if the calculated U is less than the critical U, there is an exceedance.

Because the upgradient (background) condition is compared to each downgradient well separately, each well/parameter combination is tested. The results of all of the tests are included following the report text. There may be exceedances in some downgradient wells for a particular parameter, but not in other downgradient wells.

4.4 SUMMARY OF RESULTS

The results of the statistical analysis are shown on **Table 16.** The findings indicated that downgradient samples show constituent concentrations that are statistically significant increases (SSIs) above background levels in all 20 of the downgradient on-site regulated wells.

There were three new SSI identified for which the parameter was detected above the RL during this sampling event that were not identified during the previous sampling event. These new SSIs consist of o-xylene in TW-25A, alkalinity in TW-14A, and pH in TW-06. The Spring 2023 sampling event is the first event since Fall 2017 that o-xylene has been detected at a concentration above the RL in TW-25A. Furthermore, the SSI was triggered because o-xylene has never been detected in either of the background wells over their entire historical records. Alkalinity has frequently been detected in TW-14A at concentrations greater than background well concentrations since 2017. The measurement of pH in TW-06 has been detected at levels greater than background well concentrations since 2018 and the concentration has been relatively stable during that time. Furthermore, the pH values in TW-06 are more neutral than those of the

background wells, so the SSI for pH in TW-06 does not indication degradation in groundwater quality.

All other SSIs identified during the Spring 2023 event are generally consistent with historical exceedances. Concentrations of most parameters that exhibited SSIs have generally been consistent with their historical data set; that is, no trend is apparent in the concentrations.

5 RECOMMENDATIONS

The results of the Spring 2023 groundwater sampling event indicate that overall, groundwater conditions are generally consistent with historical data for the MLFRRF. Many monitoring wells continue to show VOC concentrations lower than historical data. While the data and statistical evaluations indicate that a release of landfill constituents to groundwater may have occurred, the site-specific hydrogeology and the corrective measures already implemented by the County have limited the potential for any adverse effects on human health and the environment. It is recommended that regular groundwater monitoring be continued in accordance with the EMP.

TABLES

Table 1 - MLFRRF SAMPLING LOCATIONS						
Sampling Locations Used to Monitor Cells 5, 6, 7, 8, and 9				**Sampling Locations Used to Monitor Cells 1 east, 2, and 4**		
On Site Regulated Monitoring Wells (Subtitle D)	Off-Site Non-Regulated Monitoring Wells	On-Site Non-Regulated Monitoring Wells	Surface Water Sampling Locations	On-Site Regulated Monitoring Wells (COMAR)	On-Site Non-Regulated Monitoring Wells	Surface Water Sampling Locations
TW-01	MW-P4	TW-02	SW-1	TW-07	TW-09	SW-1
TW-02A	MW-P9	TW-03A	SW-2	TW-07A	TW-16A	SW-2
TW-03	MW-P106	TW-05B	SW-3	TW-08		SW-3
TW-04	MW-P417	TW-06A*		TW-08A		
TW-04B	MW-P440	TW-06B		TW-09B		
TW-05	RW-P109	TW-11A*		TW-09C		
TW-05A	RW-P165	TW-12*		TW-15		
TW-06	RW-P171-1	TW-13*		TW-15B		
TW-10A	RW-P264	TW-14B		TW-16		
TW-14	RW-P440	TW-18*		TW-17		
TW-14A	RW-P441	TW-21A*		TW-17A		
TW-19	RW-P584			TW-21		
TW-20R				TW-22		
TW-23				TW-22A		
TW-24				TW-22B		
TW-24A						
TW-25						
TW-25A						
TW-27						
TW-28						
TW-29						
TW-30						

*Note: As specified in the EMP, the wells with an * are sampled annually only during the spring events.*

Table 2 - RESIDENTIAL SUPPLY WELL SAMPLING LOCATIONS			
Sampling Location	Aquifer	Sampling Location	Aquifer
P-109-Z4	Zone 4	P-417-Z4	Zone 4
P-145-Z4	Zone 4	P-261-Z4	Zone 4
P-160-Z4	Zone 4	P-264-Z4	Zone 4
P-161-Z4	Zone 4	P-277-Z4	Zone 4
P-162-Z4	Zone 4	P-323-Z4	Zone 4
P-164-Z4	Zone 4	P-359-Z4	Zone 4
P-165-Z4	Zone 4	P-383-Z4	Zone 4
P-166-Z4	Zone 4	P-412-Z4	Zone 4
P-168-Z4	Zone 4	P-440-Z4	Zone 4
P-169-Z4	Zone 4	P-441-Z4R	Zone 4
P-257-Z4	Zone 4	P-478-Z4	Zone 4

Residential Wells were not sampled during the Spring 2023 sampling event.

Table 3 - Current MCL Exceedances						
Well Group	Location	Parameter	Result	Qualifier	MCL	Units
On-Site Non-Regulated	**TW-11A**	Arsenic	0.016		0.01	mg/L
Subtitle D	**TW-25A**	Methylene Chloride	25.7	L	5	µg/L

Notes:

- *L flag - Analyte is a possible laboratory contaminant.*

Table 4 - APPENDIX I VOC DETECTIONS IN REGULATED WELLS (SUBTITLE D)					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
TW-01	1,1-Dichloroethane	1.5		1370	µg/L
TW-04	1,1-Dichloroethane	2.7		1370	µg/L
TW-05	1,1-Dichloroethane	1.7		1370	µg/L
TW-06	1,1-Dichloroethane	6.7		1370	µg/L
	cis-1,2-Dichloroethene	3.9		70	µg/L
	Tetrachloroethene	1.6		5	µg/L
	Trichloroethene	1.2		5	µg/L
TW-14	1,1-Dichloroethane	2.6		1370	µg/L
	cis-1,2-Dichloroethene	1		70	µg/L
	Tetrachloroethene	4.3		5	µg/L
TW-14A	1,1-Dichloroethane	5.9		1370	µg/L
	Benzene	1.7		5	µg/L
	cis-1,2-Dichloroethene	1.9		70	µg/L
	Tetrachloroethene	1.4		5	µg/L
	Trichloroethene	1.3		5	µg/L
TW-24	1,1-Dichloroethane	2.2		1370	µg/L
TW-25	1,1-Dichloroethane	2.1		1370	µg/L
	Tetrachloroethene	1.4		5	µg/L
TW-25A	1,1-Dichloroethane	27.4		1370	µg/L
	1,2-Dichloroethane	1.6		5	µg/L
	1,2-Dichloropropane	1.3		5	µg/L
	1,4-Dichlorobenzene	1.9		75	µg/L
	Benzene	2.8		5	µg/L
	cis-1,2-Dichloroethene	5.4		70	µg/L
	Methylene Chloride	**25.7**	**L**	**5**	**µg/L**
	o-Xylene	1.1		10000	µg/L
	Tetrachloroethene	3.4		5	µg/L
	Trichloroethene	5		5	µg/L
	Trichlorofluoromethane	1.8		1920	µg/L
TW-28	1,1-Dichloroethane	1.4		1370	µg/L
	Tetrachloroethene	1		5	µg/L
	Trichlorofluoromethane	1.1		1920	µg/L
TW-29	Tetrachloroethene	1.1		5	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*
- *L flag - Analyte is a possible laboratory contaminant.*

Table 5 - APPENDIX II VOC DETECTIONS IN REGULATED WELLS (SUBTITLE D)					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
TW-01	Dichlorodifluoromethane	5.4		1000	µg/L
	Dichlorofluoromethane	2.6		550	µg/L
TW-04	Dichlorodifluoromethane	1.5		1000	µg/L
	Dichlorofluoromethane	3.1		550	µg/L
TW-05	Dichlorodifluoromethane	1.6		1000	µg/L
	Dichlorofluoromethane	2.4		550	µg/L
TW-06	Dichlorodifluoromethane	3.2		1000	µg/L
	Dichlorofluoromethane	4.1		550	µg/L
TW-14	Dichlorodifluoromethane	4		1000	µg/L
	Dichlorofluoromethane	3.1		550	µg/L
TW-14A	Dichlorodifluoromethane	1.9		1000	µg/L
	Dichlorofluoromethane	4.7		550	µg/L
TW-24	Dichlorodifluoromethane	1.4		1000	µg/L
	Dichlorofluoromethane	1.1		550	µg/L
TW-25	Dichlorodifluoromethane	4.2		1000	µg/L
	Dichlorofluoromethane	2.9		550	µg/L
TW-25A	Dichlorodifluoromethane	9.6		1000	µg/L
	Dichlorofluoromethane	25.5		550	µg/L
	Methyl-tert-butyl ether	4.7		20	µg/L
TW-28	Dichlorodifluoromethane	3		1000	µg/L
	Dichlorofluoromethane	3.4		550	µg/L
TW-29	Dichlorodifluoromethane	2.1		1000	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 6 - APPENDIX I VOC DETECTIONS IN REGULATED WELLS (COMAR)					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
No Appendix I VOCs detected above the Reporting Limit.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 7 - APPENDIX II VOC DETECTIONS IN REGULATED WELLS (COMAR)					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
TW-15B	Dichlorodifluoromethane	1.2		1000	µg/L

• *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 8 - APPENDIX I VOC DETECTIONS IN ON-SITE NON-REGULATED WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
TW-12	Trichloroethene	1.4		5	µg/L
TW-13	1,1-Dichloroethane	3.6		1370	µg/L
	cis-1,2-Dichloroethene	3.2		70	µg/L
	Tetrachloroethene	3.4		5	µg/L
	Trichloroethene	4.7		5	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 9 - APPENDIX II VOC DETECTIONS IN ON-SITE NON-REGULATED WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
TW-12	Dichlorodifluoromethane	1.2		1000	µg/L
TW-13	Dichlorodifluoromethane	4.6		1000	µg/L
	Dichlorofluoromethane	2.3		550	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 10 - APPENDIX I VOC DETECTIONS IN OFF-SITE NON-REGULATED WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
MW-P106	1,1-Dichloroethane	2.9		1370	µg/L
	cis-1,2-Dichloroethene	1.8		70	µg/L
	Tetrachloroethene	1		5	µg/L
RW-P109	Trichloroethene	1		5	µg/L
RW-P165	1,1-Dichloroethane	3		1370	µg/L
	Tetrachloroethene	2.5		5	µg/L
RW-P264	1,1-Dichloroethane	3.9		1370	µg/L
	Tetrachloroethene	3		5	µg/L
RW-P440	Chloroform	1.2		80	µg/L
RW-P584	1,1-Dichloroethane	2.1		1370	µg/L
	Tetrachloroethene	1.9		5	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 11 - APPENDIX II VOC DETECTIONS IN OFF-SITE NON-REGULATED WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
MW-P106	Dichlorodifluoromethane	1.3		1000	µg/L
	Dichlorofluoromethane	1.7		550	µg/L
RW-P109	Dichlorodifluoromethane	1.4		1000	µg/L
RW-P165	Dichlorodifluoromethane	4		1000	µg/L
	Dichlorofluoromethane	4.1		550	µg/L
RW-P264	Dichlorodifluoromethane	5.7		1000	µg/L
	Dichlorofluoromethane	4		550	µg/L
RW-P441	Dichlorodifluoromethane	1		1000	µg/L
RW-P584	Dichlorodifluoromethane	2.3		1000	µg/L
	Dichlorofluoromethane	1.3		550	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 12 - APPENDIX I VOC DETECTIONS IN RESIDENTIAL SUPPLY WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
Residential Wells not sampled during the Spring 2023 Sampling Event.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 13 - APPENDIX II VOC DETECTIONS IN RESIDENTIAL SUPPLY WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
Residential Wells not sampled during the Spring 2023 Sampling Event.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 14 - APPENDIX I VOC DETECTIONS AT SURFACE WATER LOCATIONS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
No Appendix I VOCs detected above the Reporting Limit.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 15 - APPENDIX II VOC DETECTIONS AT SURFACE WATER LOCATIONS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
No Appendix II VOCs detected above the Reporting Limit.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 16 - STATISTICAL EXCEEDANCES OF BACKGROUND CONCENTRATIONS																				
		Regulated Wells (Subtitle D)																		
	Parameter	TW-01	TW-02A	TW-03	TW-04	TW-04B	TW-05	TW-05A	TW-06	TW-14	TW-14A	TW-19	TW-20R	TW-24	TW-24A	TW-25	TW-25A	TW-27	TW-28	TW-29	TW-30
Volatile Organic Compounds (VOCs)	1,1-Dichloroethane	X			X		X	*	X	X	X	‡		X	‡	X	X		X	*	
	1,2-Dichloroethane													‡	‡		X				
	1,2-Dichloropropane								‡		‡			‡			X				
	1,4-Dichlorobenzene								‡		‡			‡	‡		X				
	Benzene								‡		X			‡	‡		X				
	cis-1,2-Dichloroethene	‡			*		X	‡	X	X	X	‡		‡	‡	*	X			‡	
	Dichlorodifluoromethane	X	*		X		X	‡	X	X	X	‡		X	‡	X	X		X	X	
	Dichlorofluoromethane	X	*		X		X	*	X	X	X	‡		X	‡	X	X		X	*	
	Methylene Chloride								‡		‡			‡	‡		X				
	Methyl tert-butyl ether										*						X				
	o-Xylene								**‡**		**‡**				**‡**		**X**				
	Tetrachloroethene	‡			‡			‡	X	X	X	‡		*	‡	X	X		X	X	
	Trichloroethene	*			‡			‡	X	*	X	‡		‡	‡	‡	X		‡	‡	
	Trichlorofluoromethane	‡	‡						‡	‡	‡			‡		‡	X		X	‡	
Inorganics	Barium, total														X						
	Beryllium, total												*				X				
	Calcium, total	X										X	X		X						X
	Chromium, total																	X	X		
	Cobalt, total												X		*				X		
	Copper, total			*						X	X	*	X		*		X	*			
	Iron, total	X	X	X	X		X	X	X	X	X				X						
	Magnesium, total											X	X		X						
	Manganese, total	X	X	X					X	X	X		X		X						
	Mercury, total							‡	‡	‡	‡		‡	X	‡		‡				
	Nickel, total												X								
	Potassium, total											X	X		X						
	Sodium, total												X								
	Vanadium, total											‡	X			‡		‡			
General Chemistry	Alkalinity	X		X	X				X	X	**X**	X			X		*				
	Ammonia								‡		X				‡						
	Chemical Oxygen Demand												X		*						
	Chloride											X	X								
	Nitrate																				X
	Nitrite	‡	‡	‡	‡		‡	X	‡	‡	‡						X				
	pH	X	X	X	X		X	X	**X**	X	X	X									
	Specific Conductivity											X	X		X						
	Sulfate					X						X	X		X						
	Total Dissolved Solids											X	X		X						
	Total Hardness	X										X	X		X						
	Turbidity	X	X	X	X	X	X	X		X	X					X					

An X indicates an SSI over background. A ‡ indicates an SSI was identified during this event, but the parameter was not detected during this event. An asterisk (*) indicates an SSI was identified during this event, but the parameter was detected below the reporting limit or was flagged with a B qualifier during this event. A bold character indicates an SSI that was not identified during the previous event.

APPENDIX A
Historical Data Tables

HISTORICAL TABLES –
Subtitle D Wells

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-01***											
Nov-1993	36	36	ND	ND	2.6	0.2	ND	5.71	76.8	3.7	76	29.9
Apr-1994	34	34	0.1	42.3	2.5	ND	ND	6.15	62.5	3.9	57	23.37
Apr-1995	22.7	22.7	ND	ND	2.4	ND	ND	6.6	56.5	3.6	31	18.2
Apr-1997	ND	26	ND	ND	1.5	0.09	ND	NA	NA	ND	59	33
Apr-1998	25	25	0.27	ND	2.56	ND	ND	7.29	53.1	2.36	44	35
Apr-1999	21	21	0.13	ND	3.11	0.07	ND	7	61.6	1.84	63	26
Apr-2000	23	23	ND	ND	2.4	0.101	ND	7.07	52	3.92	32	25
Apr-2001	20	NA	ND	ND	2.57	ND	ND	NA	NA	67.1	30	21.5
Mar-2002	16	16	ND	ND	2.36	ND	ND	6.2	55.4	ND	43	22.3
Mar-2003	18	18	ND	ND	17.7	ND	ND	6.3	56.5	ND	34	20.7
Apr-2004	21	21	ND	ND	2.84	ND	ND	6.3	54.5	ND	49	24.6
Apr-2005	29	29	ND	ND	2.74	0.08	ND	6.5	66.3	2.38	120	33.5
Mar-2006	28	28	ND	ND	3.44	0.13	ND	6.4	64.1	2	69	30.5
Mar-2007	24	24	0.61	ND	4.15	0.18	ND	6.3	56.8	1.64	53	27.2
Mar-2008	24	24	ND	ND	4.32	0.2	ND	6.1	62.7	1.75	42	26.7
Mar-2009	23	23	ND	ND	4.4	0.16	ND	5.7	61.6	ND	56	23.9
Mar-2010	65	65	ND	ND	4.22	ND	ND	7.26	170	4.34	62	70.4
Apr-2011	21	21	ND	ND	4.49	0.16	ND	5.6	56.9	1.1	57	23.5
Mar-2012	18	18	ND	ND	4.81	0.17	ND	4.8	56.4	ND	62	20
Sep-2012	19.7	19.7	ND	ND	4.84	0.175	ND	6.2	54.6	ND	66	23.4
Mar-2013	20.4	20.4	0.123 J	ND	5.36	0.2	ND	6.4	58.2	1.14	31	21.4
Oct-2013	21.3	21.3	ND	ND	5.51	0.2	ND	6.1	62.7	1.5	41	25
Mar-2014	22.7	22.7	ND	ND	5.27	0.157	ND	6.1	58.7	0.915 J	50	23.1
Oct-2014	33	33	ND	ND	5.71	0.198	ND	5.9	55.6	ND	49	24.1
Apr-2015	21.6	21.6	ND	ND	5.71	0.206	ND	5.1	60.7	ND	51	26.8
Nov-2015	25.6	25.6	ND	ND	5.77	0.223	ND	6.4	105.4	ND	44	26.9
May-2016	21.7	21.7	ND	ND	6.02	0.227	ND	6.4	79.9	ND	40	27.8
Oct-2016	23.6	23.6	ND	ND	6.46	NA	NA	6.2	110.6	2.07	48	27.8
May-2017	20.1	20.1	ND	ND	6.17	0.231	ND	6.1	100.7	0.71 J	35	23.6
Oct-2017	27	27	ND	5 J	6.37	0.224	ND	6.3	113.3	ND	36	22.4
May-2018	30	30	ND	5.7 J	6.1	0.17	0.007 J	5.6	111.8	ND	55	25.7
Nov-2018	40	40	ND	ND	6.6	ND	0.018	6.77	149.5	ND	46	47.6
May-2019	52	NA	ND	ND	7.3	ND	ND	6.39	114.8	ND	68	50.3
Oct-2019	48 H1	NA	ND	ND	5.7	0.056 JB	0.028	6.22	153.3	48.2	82	49.3
May-2020	50	NA	ND	9.1 J	6.6	ND	0.0087 JMH	5.9	148.9	ND	51	53.7
Oct-2020	40	NA	ND	4.8 J	6.2	ND	ND	5.85	147.7	ND	132	49.9

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-01***											
Apr-2021	42	*NA*	*ND*	*6.1 J*	7.1	*0.048 J*	*ND*	7.17	193.3	*ND*	53	49.6
Oct-2021	50	*NA*	*ND*	*ND*	6.5	*ND*	*ND*	7.09	227.4	*ND*	45	51.3
May-2022	44 ML	*NA*	*ND*	*ND*	5.9	*0.099 J*	*0.0066 J*	6.7	205.1	*ND*	48	48.9 N3
Oct-2022	46	*NA*	*ND*	*6.1 J*	7	*0.076 J*	*ND*	6.64	215.4	*ND*	47	47.9 N3
May-2023	48	*NA*	*ND*	36.5	7.4	*ND*	*ND*	6.79	204.6	*ND*	62	43.7 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-01***													
Nov-1993	*NA*	*ND*	*ND*	*NA*	*ND*	11.3	*NA*	*ND*	*NA*	*ND*	0.08	0.12	*ND*	0.42	*NA*
Apr-1994	*NA*	*ND*	*ND*	*NA*	*ND*	9.3	*NA*	*ND*	*NA*	*ND*	0.64	*ND*	*ND*	*ND*	*NA*
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	6.6	*NA*	*ND*	*ND*	0.02	0.65	*ND*	*ND*	0.41	*NA*
Apr-1997	0.006	*ND*	0.016	*ND*	*ND*	13	9	*ND*	*ND*	*ND*	1.1	0.43	0.003	0.6	0.63
Apr-1998	*ND*	*ND*	0.041	*ND*	*ND*	12.5	9.96	0.052	*ND*	0.01	14.2	0.259	*ND*	1.04	0.456
Apr-1999	*ND*	*ND*	*ND*	*ND*	*ND*	9.67	9.79	*ND*	*ND*	*ND*	1.49	0.197	*ND*	0.564	0.491
Apr-2000	*ND*	*ND*	*ND*	*ND*	*ND*	9.04	7.45	0.018	*ND*	0.035	3.35	0.183	*ND*	0.601	0.442
Apr-2001	*ND*	*ND*	0.014	*ND*	*ND*	7.62	*NA*	*ND*	*ND*	*ND*	4.21	*NA*	*ND*	0.61	*NA*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	8	8.82	*ND*	*ND*	*ND*	3.62	0.64	*ND*	0.577	0.548
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	7.43	7.85	*ND*	*ND*	*ND*	0.716	*ND*	*ND*	0.504	0.466
Apr-2004	*ND*	0.002	0.014	*ND*	*ND*	8.52	11.1	*ND*	*ND*	*ND*	2.75	0.378	0.002	0.839	0.578
Apr-2005	*ND*	0.004	0.017	*ND*	*ND*	11.8	10.2	0.029	*ND*	0.011	7.16	0.279	0.006	1.01	0.504
Mar-2006	*ND*	0.003	0.015	*ND*	*ND*	10.8	9.72	*ND*	*ND*	*ND*	3.86	0.077	0.003	0.827	0.507
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	9.95	8.75	*ND*	*ND*	*ND*	0.916	0.346	*ND*	0.574	0.51
Mar-2008	*ND*	0.003	0.012	*ND*	*ND*	9.61	8.12	*ND*	*ND*	*ND*	12.8	0.358	*ND*	0.655	0.559
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	8.67	7.75	*ND*	*ND*	*ND*	3.36	0.541	*ND*	0.554	0.521
Mar-2010	*ND*	0.006	0.019	*ND*	*ND*	26.4	24.8	0.033	*ND*	0.017	44.1	1.58	0.01	1.09	0.65
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	8.29	8.23	*ND*	*ND*	*ND*	2.43	1.64	*ND*	0.688	0.678
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	6.77	6.84	*ND*	*ND*	*ND*	1.56	1.2	*ND*	0.753	0.749
Sep-2012	*ND*	*ND*	0.0101	*0.000181 J*	*ND*	8.15	7.91	*0.0025 J*	*0.000625 J*	*ND*	2.48	2.29	*0.000533 J*	0.749	0.707
Mar-2013	*ND*	*ND*	*0.0098 J*	*ND*	*ND*	7.39	7.3	*0.0026 J*	*0.000621 J*	*0.000478 J*	1.6	1.39	*ND*	0.724	0.753

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-01***													
Oct-2013	ND	ND	0.0113	ND	ND	8.7	8.9	0.0017 J	0.000632 J	ND	1.68	1.68	ND	0.794	0.824
Mar-2014	ND	ND	0.0103	ND	ND	8.09	9.7	0.0064 J	0.00061 J	0.000338 J	2.32	2.51	ND	0.712	0.86
Oct-2014	0.000689 J	ND	0.0116	ND	ND	8.35	8.86	0.0014 J	0.000654 J	ND	2.43	2.76	ND	0.796	0.826
Apr-2015	0.000671 J	ND	0.0128	ND	ND	9.14	9.46	0.0046 J	0.000818 J	0.000868 J	4.77	3.89	ND	0.962	0.952
Nov-2015	ND	ND	0.0121	ND	ND	9.24	8.94	0.0024 J	0.000698 J	ND	3.97	3.58	ND	0.928	0.927
May-2016	ND	ND	0.0126	ND	ND	9.47	9.13	0.0019 J	0.00072 J	0.00068 J	3.53	3.37	ND	1.01	0.989
Oct-2016	ND	ND	0.0121	ND	ND	9.44	9.71	0.00087 J	0.00071 J	ND	3.95	3.67	ND	1.03	1.02
May-2017	ND	ND	0.012	ND	ND	7.74	7.2	0.00096 J,B	0.0011	0.00054 J,B	4.07	3.43	ND	1.03	0.999
Oct-2017	ND	ND	0.0155	ND	ND	7.45	6.97	0.0017 J	0.00087 J	ND	8.05	7.72	ND	0.919	0.961
May-2018	0.000048 J	ND	0.016	0.000027 J	ND	8.7	8.6	0.0027 J	0.00072	0.00089 JB	11.5	10.5	ND	0.97 J	0.98 J
Nov-2018	ND	ND	0.012	ND	ND	16.7	15.7	0.002 J	0.00018 J	0.00043 J	31.8	25.7	0.000039 J	1.4	1.3
May-2019	ND	ND	0.011	ND	ND	17.9	17.7	ND	0.00058	ND	22.9	18	ND	1.4	1.4
Oct-2019	0.00012 JB	ND	0.013	ND	0.00018 JB	17.5	17	0.0043 J	0.0013	0.0043	31.9	18.4	0.00012 JB	1.4	1.3
May-2020	0.00016 J	ND	0.015	ND	ND	19	18.3	0.0087	0.00072	0.0032	39	20.9	0.00021 J	1.5	1.4
Oct-2020	0.00044 J	ND	0.013	ND	ND	17.5	16.5	0.0082 JB	0.0006 J	ND	25.6	23.5	ND	1.5	1.4
Apr-2021	ND	ND	0.014	ND	ND	17.4	18.1	0.0048 J	0.00089 J	ND	28	22.8	ND	1.5	1.6
Oct-2021	0.000089 JB	ND	0.015	ND	ND	18	17.4	0.0056	0.0016 J	0.00094 J	35.6	26.4 M1	0.00004 J	1.6	1.5
May-2022	ND	ND	0.016	ND	ND	17.1	17.5	0.004	0.00093 J	0.0008 J	37.3	29	ND	1.5	1.7
Oct-2022	ND	ND	0.017	ND	ND	16.7	18.9	0.0018 J	ND	0.0009 J	39	28.7	ND	1.5	1.6
May-2023	ND	0.00069 J	0.015	ND	ND	15.1	14.7	0.0059	0.00085 J	0.0051	32.1	28.7	ND	1.4	1.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-01*												
Nov-1993	0.05	NA	ND	NA	0.49	NA	ND	NA	1.3	NA	NA	NA	ND
Apr-1994	0.019	NA	ND	NA	0.55	NA	ND	NA	1.7	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.65	NA	ND	ND	0.94	NA	ND	ND	0.06
Apr-1997	0.06	0.043	ND	ND	2.5	2.2	ND	ND	1.2	1.4	0.002	ND	0.028
Apr-1998	0.226	0.02	NA	0.019	2.16	0.95	ND	ND	1.22	1.16	ND	0.023	0.1
Apr-1999	0.028	0.019	NA	ND	ND	0.722	ND	ND	1.24	1.22	ND	ND	0.027
Apr-2000	0.037	0.017	NA	0.015	1.47	0.759	ND	ND	2.06	1.19	ND	ND	0.321
Apr-2001	0.059	NA	NA	ND	1.39	NA	ND	ND	2.65	NA	ND	ND	0.131
Mar-2002	0.037	0.028	NA	ND	1.24	ND	ND	ND	1.82	1.27	ND	ND	0.05
Mar-2003	0.022	0.019	NA	ND	ND	0.706	ND	ND	1.29	1.33	ND	ND	0.023
Apr-2004	0.069	0.026	ND	ND	0.534	ND	ND	ND	1.72	1.34	ND	ND	0.038
Apr-2005	0.163	0.019	ND	0.018	1.07	0.66	ND	ND	1.78	1.4	ND	0.014	0.112
Mar-2006	ND	ND	ND	ND	0.828	ND	ND	ND	1.59	1.14	ND	ND	0.014
Mar-2007	0.018	0.015	ND	ND	ND	ND	ND	ND	1.43	1.36	ND	ND	0.033
Mar-2008	0.031	0.013	ND	ND	0.809	0.663	ND	ND	2.11	1.61	ND	ND	0.038
Mar-2009	0.019	0.014	ND	ND	ND	ND	ND	ND	1.62	1.84	ND	ND	0.024
Mar-2010	0.134	0.078	ND	0.031	0.809	0.596	ND	ND	1.25	1.38	ND	0.019	0.033
Apr-2011	0.038	0.037	ND	ND	0.608	0.621	ND	ND	1.75	1.8	ND	ND	ND
Mar-2012	0.028	0.027	ND	ND	0.573	0.537	ND	ND	1.89	1.84	ND	ND	ND
Sep-2012	0.0426	0.0427	ND	0.0018 J	0.553	0.531	ND	ND	2.02	1.98	0.0014 J	ND	ND
Mar-2013	0.0247	0.0248	0.000109 J	0.0033 J	0.554	0.543	ND	ND	1.83	1.84	0.000233 J	ND	0.0116
Oct-2013	0.0387	0.0397	ND	0.0022	0.563	0.579	ND	ND	2.12	2.22	0.000271 J	0.0014 J	0.0111

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-01***												
Mar-2014	0.0351	0.0331	ND	0.0029 J	0.518	0.645	ND	ND	1.77	2.12	0.000265 J	0.006 J	0.0043 J
Oct-2014	0.0314	0.0384	ND	0.0025 J	0.599	0.618	0.0012 J	ND	2.16	2.25	ND	ND	ND
Apr-2015	0.0436	0.0494	ND	0.0045 J	0.674	0.669	ND	ND	2.37	2.37	ND	ND	ND
Nov-2015	0.0469	0.0454	ND	0.0039 J	0.647	0.63	ND	ND	2.55	2.54	ND	ND	0.0033 J
May-2016	0.0394	0.0391	ND	0.0026 J	0.676	0.643	ND	ND	2.49	2.41	ND	ND	ND
Oct-2016	0.0558	0.056	ND	0.0016 J	0.647	0.68	ND	ND	2.49	2.51	ND	ND	ND
May-2017	0.0382	0.0419	ND	0.0043	0.62	0.629	ND	ND	2.52	2.4	ND	0.00023 J	ND
Oct-2017	0.0676	0.0715	ND	0.0024 JB	0.628	0.663	ND	ND	2.63	2.68	ND	ND	ND
May-2018	0.079	0.079	ND	0.0024	ND	ND	0.00028 JB	ND	2.8 J	2.9 J	ND	0.0028	0.003 JB
Nov-2018	0.18	0.17	ND	0.0011	ND	ND	ND	ND	3 J	2.9 J	ND	ND	0.0033 J
May-2019	0.18	0.17	ND	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	0.16	0.15	ND	0.0038	ND	ND	ND	ND	2.8 J	3.3 J	ND	0.0009 J	0.01 B
May-2020	0.17	0.15	ND	0.0064	ND	ND	ND	ND	2.9 J	2.9 J	ND	0.0018	0.0061
Oct-2020	0.18	0.16	ND	ND	ND	ND	0.0017 J	ND	3.2 J	2.6 J	ND	0.0024 JB	ND
Apr-2021	0.16	0.17	0.00005 J	0.0058 J	0.73	0.74	ND	ND	2.8	3	ND	ND	ND
Oct-2021	0.18	0.17	ND	0.0077	0.71	0.71	ND	ND	3.2	3.2	ND	ND	ND
May-2022	0.18	0.19	ND	0.0053	0.69	0.8	ND	ND	3	3.2	ND	ND	ND
Oct-2022	0.17	0.18	ND	0.0017 J	0.72	0.8	ND	ND	3.1	3.6	ND	ND	ND
May-2023	0.2	0.19	ND	0.0058	0.8	0.64	ND	ND	5.1	3	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-01*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.63 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-01*																
Mar-2013	ND	ND	ND	ND	0.73 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.63 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.81 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.1	0.22 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	0.2 J	ND	ND	1.2	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	0.2 J	ND	ND	1.5	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	0.2 J	ND	ND	1.4	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	0.1 J	ND	ND	1.5	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8 JB	ND
Nov-2018	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1.3 M1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.75	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-01***															
Nov-1993	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	3.7
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	0.7 J
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	1.7
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2	1.1
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.5	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	14.1	2.3
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.45 J	ND	ND	ND	ND	ND	4.38	1.68

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-01***															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.56 J	ND	ND	ND	ND	ND	8.81	2.83
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.49 J	ND	ND	ND	ND	ND	7.27	2.41
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.56 J	ND	ND	ND	ND	ND	8.99	2.7
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.55 J	ND	ND	ND	ND	ND	7.38	3.83
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.53 J	ND	ND	ND	ND	ND	6.99	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J,B	ND	ND	ND	ND	ND	15.6 J	3.4
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	6.5	3.7
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	0.1 J	ND	ND	ND	8.4	4.5
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J,B	ND	0.1 J	ND	ND	ND	7.7	4.3
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	0.2 J	ND	ND	ND	8.4	5.1
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.5	4.7
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.9 CL	3.7 N3
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5 CL	3.6 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.2	2.5
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.9	2.5
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.2	2.8
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.167 J	ND	0.349 J	ND	ND	ND	5.48	2.94 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	13.3	3.5
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.2	2.4
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	8	2.8
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	2.6

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-01***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	1	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-01***															
Sep-2012	ND	ND	ND	ND	ND	ND	ND	2.96	ND	ND	ND	ND	0.28 J	0.71 J	ND	ND	ND
Mar-2013	ND	ND	ND	0.15 J	ND	ND	ND	3.44	ND	ND	ND	ND	0.41 J	1 J	ND	ND	ND
Oct-2013	ND	ND	ND	0.21 J	ND	ND	ND	2.81	ND	ND	ND	ND	0.38 J	0.97 J	ND	ND	ND
Mar-2014	ND	ND	ND	0.17 J	ND	ND	ND	3.73	ND	ND	ND	ND	0.46 J	1	ND	ND	ND
Oct-2014	ND	ND	ND	0.21 J	ND	ND	ND	4.14	ND	ND	ND	ND	0.5 J	0.73 J	ND	ND	ND
Apr-2015	ND	ND	ND	0.18 J	ND	ND	ND	3.57 J	ND	ND	ND	ND	0.43 J	0.95 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	ND	0.5 J	0.9 J	ND	ND	ND
May-2016	ND	ND	ND	0.1 J	0.2 J	ND	ND	4.3	ND	ND	ND	ND	0.5 J	0.8 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	0.2 J	ND	ND	4.4	ND	ND	ND	ND	0.4 J	0.9 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	4.7	ND	ND	ND	ND	0.5 J	0.4 J	ND	ND	ND
Oct-2017	ND	ND	ND	0.1 J	0.2 J	ND	ND	3.7	ND	ND	ND	ND	0.4 J	0.7 J	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	1.2 B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Apr-2021	ND	ND	ND	0.431 J	0.653 JB	ND	ND	0.507 J	ND	ND	ND	ND	0.632 J	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Oct-2022	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA
May-2023	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-02A***											
Nov-1993	ND	ND	ND	ND	3.8	ND	ND	4.93	22.5	ND	90	3.52
Apr-1994	ND	ND	ND	23.4	3.6	ND	ND	4.94	22.2	ND	17	0.9
Apr-1995	10.3	10.3	ND	ND	5.5	0.2	0.3	5.6	30.9	2.2	38	4.7
Apr-1997	ND	2	ND	ND	7	0.08	ND	NA	NA	ND	28	6
Apr-1998	ND	ND	0.27	ND	8.76	0.22	ND	6.33	36.8	ND	21	5.8
Apr-1999	ND	ND	0.16	ND	6.58	ND	ND	5.04	35.5	ND	35	5.7
Apr-2000	2	2	ND	ND	6.4	ND	ND	5.28	29	ND	36	5.7
Apr-2001	ND	NA	ND	ND	5.43	1.65	ND	NA	NA	ND	11	6.47
Mar-2002	2.4	2.4	ND	ND	7	ND	ND	5.4	42.9	ND	30	6.94
Mar-2003	2.7	2.7	ND	ND	14.6	ND	ND	5.3	41.7	ND	25	6.69
Apr-2004	2.8	2.8	ND	ND	7.95	0.08	ND	5.3	40.5	1.31	40	9.39
Apr-2005	3.1	3.1	ND	ND	7.57	ND	ND	5.1	20.9	1.26	56	8.76
Mar-2006	7.8	7.8	ND	ND	9.04	0.1	ND	5.3	48.5	1.26	57	8.76
Mar-2007	3.8	3.8	ND	ND	9.84	0.11	ND	5.1	45.7	1.89	37	8.57
Mar-2008	5.3	5.3	ND	ND	9.58	0.09	ND	4.9	57.9	2.52	41	8.56
Mar-2009	4.9	4.9	ND	ND	9.98	0.07	ND	4.5	51.1	1.25	45	9.24
Apr-2010	3.7	3.7	ND	ND	10.1	0.08	ND	4.6	48.4	2.66	31	9.5
Apr-2011	5.2	5.2	ND	ND	10.4	0.08	ND	4.6	46.4	2.34	29	9.74
Mar-2012	4	4	ND	ND	11.6	ND	ND	4.5	51.2	2.34	12	11.2
Sep-2012	4.4	4.4	ND	ND	12.8	ND	ND	5.4	53.4	2.85	69	11.8
Mar-2013	6	6	0.106 J	ND	13.9	0.0653	ND	6.1	62.1	3	20	12.4
Oct-2013	5.72	5.72	ND	ND	14	0.0613	ND	5.7	62.3	3.15	31	13.6
Mar-2014	5.6	5.6	ND	ND	14.9	0.0668	ND	5.3	62.5	3.19	36	13.1
Oct-2014	4.4	4.4	ND	10	17.1	0.094	ND	5	68.2	2.88	64	15.6
Apr-2015	5.56	5.56	ND	5 J	17.3	0.061	ND	4.5	67.5	3.26	54	16.5
Nov-2015	4.4	4.4	ND	ND	19.1	0.0607	ND	5.9	136.2	2.63	55	18.4
May-2016	2.8	2.8	0.129 J	21	22.3	ND	ND	5.8	112.3	1.91	90	19.2
Oct-2016	3.4	3.4	ND	21	16.9	NA	NA	5.5	105.1	3.01	71	14.8
May-2017	4.48	4.48	ND	7 J	15.3	0.0687	ND	5.4	101.7	2.09	50	14.9
Oct-2017	30.9	30.9	ND	13	14.7	0.0511	ND	5.8	129.4	0.67 J	38	15.8
May-2018	16	16	ND	7.9 J	16.2	ND	ND	5	96	ND	26	15.1
Nov-2018	22	22	ND	7.9 J	19.5	ND	0.015	6.54	136.9	ND	55	18.6
May-2019	46	NA	ND	ND	21.8	ND	ND	6.43	123.6	ND	58	19.2
Oct-2019	16 H1	NA	ND	ND	22.6	0.083 J	0.0093 J	5.99	168.1	ND	90	19.6
May-2020	20	NA	ND	9.1 J	25.8	ND	0.074	5.93	168.3	ND	74	23.5
Oct-2020	20	NA	ND	7 J	27.2	ND	ND	6.52	172.1	ND	113	23.2
Apr-2021	20	NA	ND	6.1 J	35.6	0.075 J	ND	7.02	239.3	ND	92	23.8

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-02A***											
Oct-2021	22	*NA*	*ND*	*12.6 J*	32.2	*NA*	*ND*	7.02	273.5	*ND*	82	25.9
Dec-2021	*NA*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
May-2022	16	*NA*	*ND*	*ND*	31.5	*ND*	0.051	6.76	252	*ND*	73	24.9 N3
Oct-2022	32	*NA*	*ND*	*10.7 J*	40.2	*0.13 J*	0.011	6.84	271.3	*ND*	82	27.1 N3
May-2023	30	*NA*	*ND*	36.5	43.8	*ND*	*ND*	6.85	282.8	*ND*	118	26 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-02A***													
Nov-1993	NA	ND	ND	NA	ND	0.7	NA	ND	NA	ND	4.4	0.69	ND	0.43	NA
Apr-1994	NA	ND	ND	NA	ND	0.3	NA	ND	NA	ND	1.8	0.059	ND	0.35	NA
Apr-1995	ND	ND	ND	ND	ND	0.88	NA	ND	ND	ND	3.2	0.31	ND	0.6	NA
Apr-1997	ND	ND	0.02	ND	ND	1.3	1.3	ND	ND	ND	0.5	ND	0.002	0.54	0.54
Apr-1998	ND	ND	0.016	ND	ND	1.23	1.18	ND	ND	ND	1.58	0.101	ND	0.651	0.626
Apr-1999	ND	ND	0.015	ND	ND	1.21	1.27	ND	ND	ND	1.13	0.121	ND	0.646	0.667
Apr-2000	ND	ND	0.014	ND	ND	1.21	1.19	ND	ND	ND	3.54	0.08	ND	0.65	0.626
Apr-2001	ND	ND	0.016	ND	ND	1.45	NA	ND	ND	ND	3.08	NA	ND	0.695	NA
Mar-2002	ND	ND	0.019	ND	ND	1.47	1.53	ND	ND	ND	8.67	1.81	ND	0.795	0.798
Mar-2003	ND	ND	0.018	ND	ND	1.44	1.53	ND	ND	ND	6.22	0.282	ND	0.754	0.804
Apr-2004	ND	ND	0.023	ND	ND	2.06	1.82	ND	ND	ND	1.91	0.124	ND	1.03	0.943
Apr-2005	ND	ND	0.021	ND	ND	1.9	1.94	ND	ND	ND	4.1	0.2	ND	0.973	0.983
Mar-2006	ND	0.003	0.025	ND	ND	2.02	1.52	ND	ND	0.022	11.4	3.53	0.005	0.902	0.783
Mar-2007	ND	ND	0.025	ND	ND	1.93	1.9	ND	ND	ND	1.49	1.03	ND	0.911	0.876
Mar-2008	ND	ND	0.021	ND	ND	1.86	1.95	ND	ND	ND	2	1.62	ND	0.952	0.995
Mar-2009	ND	ND	0.025	ND	ND	2.11	2.32	ND	ND	ND	20.1	2.18	ND	0.964	0.967
Apr-2010	ND	ND	0.025	ND	ND	2.13	1.97	ND	ND	ND	25.9	2.03	ND	1.02	0.925
Apr-2011	ND	ND	0.027	ND	ND	2.12	2.15	ND	ND	0.02	41.9	1.51	ND	1.08	1.1
Mar-2012	ND	ND	0.027	ND	ND	2.36	2.3	ND	ND	ND	4.29	0.7	ND	1.3	1.26
Sep-2012	ND	ND	0.0298	0.000292 J	ND	2.58	2.49	0.0026 J	0.0027 J	0.0136	16.7	1.5	0.0016 J	1.31	1.31
Mar-2013	ND	ND	0.0316	0.000205 J	ND	2.78	2.7	0.0019 J	0.0026 J	0.0078 J	6.93	2.41	0.000514 J	1.33	1.24

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-02A***													
Oct-2013	ND	ND	0.0347	ND	ND	2.96	2.94	0.0018 J	0.0026	0.0067	3.49	2	0.000652 J	1.5	1.52
Mar-2014	0.000337 J	0.00014 J	0.028	0.00015 J	ND	2.8	2.85	0.0014 J	0.0025 J	0.0059 J	4.47	1.46	0.000364 J	1.49	1.5
Oct-2014	0.000589 J	0.000473 J	0.04	0.000176 J	0.000095 J	3.51	3.51	0.0023 J	0.0042 J	0.0087 J	9.19	2.4	0.000763 J	1.65	1.72
Apr-2015	0.000574 J	ND	0.0405	ND	ND	3.64	3.65	0.0017 J	0.0039 J	0.007 J	5.1	2	ND	1.8	1.8
Nov-2015	0.000674 J	0.000571 J	0.0442	0.000294 J	0.000111 J	3.97	3.8	0.0035 J	0.0047 J	0.0157	14.4	2.05	0.0012 J	2.07	1.93
May-2016	ND	ND	0.0709	ND	ND	4.72	4.64	0.0022 J	0.0014	0.0059	10.8	5.19	0.00095 J	1.8	1.84
Oct-2016	0.00068 J	0.0025 J	0.0372	0.00012 J	0.0002 J	3.09	3.25	0.0103 J+	0.0063	0.0368 J+	9.84	3.1	0.0016 J	1.73 J+	1.72
May-2017	ND	0.0012 J	0.0357	ND	ND	3.17	3.17	0.0037 J	0.0047	0.0181	14	9.1	0.0012 J	1.68	1.7
Oct-2017	ND	ND	0.0357	ND	ND	3.55	3	0.003 J	0.0036	0.012	21.1	16.6	0.002	1.69	1.57
May-2018	0.00045	0.0013	0.035	0.00011 J	0.00015 J	3.3	3.2	0.0046 JB	0.0054	0.02	12.1	5.6	0.0014	1.6	1.6
Nov-2018	ND	ND	0.045	0.000024 J	0.000029 J	4	3.9	0.004 J	0.00095	0.0028	28	27.4	0.00046 J	2.1	2
May-2019	ND	ND	0.05	ND	ND	4.1	4	ND	0.00093	0.004	30.4	28.5	ND	2.2	2.1
Oct-2019	0.00018 JB	ND	0.05	0.000052 J	0.00042 JB	4.2	4.1	0.0061 J	0.0017	0.0055	28.8	27.1	0.00018 JB	2.2	2.2
May-2020	0.00014 J	ND	0.055	0.000063 J	0.0001 J	5	4.6	0.0054 J	0.0014	0.0055	33.6	29.7	ND	2.7	2.5
Oct-2020	0.00056 J	ND	0.063	ND	ND	4.9	4.6	0.011 JB	0.0018 J	ND	32.3	29.5	ND	2.7	2.5
Apr-2021	ND	ND	0.063	0.0002 J	ND	5	5.1	0.0018 J	0.0012 J	0.0049 J	31.6	31.1	ND	2.8	2.9
Oct-2021	0.000074 JB	ND	0.065	ND	ND	5.4	5.3	0.0025 J	0.0018 J	0.0027	35	33.7	ND	3	3
May-2022	ND	0.0014 JB	0.064	ND	ND	5.2	5.5	0.0019 J	0.0016 J	0.0024 J	32.7	34.6	ND	2.9	3.1
Oct-2022	ND	ND	0.068	ND	ND	5.7	5.8	0.0023 J	0.0019 J	0.0027 J	34.6	32.4	ND	3.1	3.1
May-2023	ND	ND	0.071	ND	ND	5.4	5.4	0.0016 J	0.0019 J	0.0025	33	31.3	ND	3	3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-02A*												
Nov-1993	0.06	NA	ND	NA	0.44	NA	ND	NA	1.5	NA	NA	NA	ND
Apr-1994	0.07	NA	ND	NA	ND	NA	ND	NA	2.4	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.59	NA	ND	ND	1.7	NA	ND	ND	0.07
Apr-1997	0.01	0.013	ND	ND	1.7	1.6	ND	ND	2.1	2.6	ND	ND	ND
Apr-1998	0.01	0.024	NA	ND	1.06	1.53	ND	ND	2.28	2.31	ND	ND	0.034
Apr-1999	ND	ND	NA	ND	ND	ND	ND	ND	2.46	2.52	ND	ND	ND
Apr-2000	0.011	0.01	NA	ND	ND	0.83	ND	ND	2.46	2.41	ND	ND	ND
Apr-2001	0.011	NA	NA	ND	0.981	NA	ND	ND	3.65	NA	ND	ND	0.01
Mar-2002	0.019	0.025	NA	ND	ND	0.975	ND	ND	2.5	2.34	ND	ND	0.016
Mar-2003	0.018	0.011	NA	ND	1.48	ND	ND	ND	2.49	2.53	ND	ND	ND
Apr-2004	0.016	0.012	ND	ND	1.76	0.597	ND	ND	3.87	3.29	ND	ND	0.014
Apr-2005	0.02	0.015	ND	ND	0.81	0.77	ND	ND	3.58	3.91	ND	ND	ND
Mar-2006	ND	ND	ND	0.018	0.889	0.523	ND	ND	3.88	3.26	ND	ND	0.013
Mar-2007	0.016	0.016	ND	ND	ND	ND	ND	ND	3.57	3.44	ND	ND	0.019
Mar-2008	0.016	0.02	ND	ND	0.702	0.783	ND	ND	3.52	3.8	ND	ND	0.016
Mar-2009	0.019	0.024	ND	ND	0.596	0.636	ND	ND	3.79	3.93	ND	ND	0.03
Apr-2010	0.024	0.021	ND	ND	0.708	0.653	ND	ND	3.94	3.86	ND	ND	0.027
Apr-2011	0.025	0.023	ND	ND	0.716	0.694	ND	ND	4.34	4.33	ND	ND	0.036
Mar-2012	0.025	0.018	ND	ND	0.687	0.622	ND	ND	5.08	4.9	ND	ND	0.027
Sep-2012	0.0259	0.0243	ND	0.0042 J	0.717	0.68	0.000797 J	ND	5.33	5.26	0.000232 J	ND	0.0305
Mar-2013	0.0322	0.0295	0.000113 J	0.004 J	0.761	0.724	0.000652 J	ND	5.44	5.24	ND	ND	0.0434
Oct-2013	0.0299	0.0301	ND	0.0041	0.78	0.755	0.000848 J	ND	5.88	6.06	ND	0.0014 J	0.0452

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-02A***												
Mar-2014	0.0246	0.0247	ND	0.0042 J	0.77	0.792	ND	ND	5.7	5.82	ND	ND	0.0394
Oct-2014	0.0372	0.0346	0.000034 J	0.0065 J	0.866	0.876	0.0019 J	ND	6.43	6.55	ND	ND	0.0465
Apr-2015	0.0353	0.0334	ND	0.0058 J	0.917	0.923	0.0014 J	ND	6.77	6.88	ND	ND	0.0404
Nov-2015	0.048	0.0369	ND	0.008 J	0.988	0.931	0.0013 J	ND	7.94	7.9	ND	0.000203 J	0.045
May-2016	0.246	0.26	ND	0.0101	1.01	1.1	ND	ND	7.41	6.97	ND	ND	0.0868
Oct-2016	0.107 R	0.0689	ND	0.037 J+	0.944	0.887	0.00071 J-	ND	6.71 J+	6.72	ND	0.0013	0.076
May-2017	0.122	0.0983	ND	0.0205	0.946	0.931	ND	ND	6.8	6.41	ND	0.0003 J	0.0455
Oct-2017	0.169	0.152	ND	0.0184	0.92	0.857	ND	ND	6.33	6.08	ND	ND	0.0516
May-2018	0.12	0.074	ND	0.027	ND	ND	0.00065 J	ND	6.8	6.3	ND	0.002	0.032
Nov-2018	0.18	0.18	ND	0.0038	0.93 J	ND	0.00009 J	ND	7.6	7.8	ND	ND	0.0044 J
May-2019	0.22	0.2	ND	0.0025	ND	ND	ND	ND	8.1	7.4	ND	ND	ND
Oct-2019	0.19	0.18	ND	0.0052	1.1 J	1.1 J	ND	ND	8.4	8.7	ND	0.0021 D6	0.012 B
May-2020	0.21	0.2	ND	0.0042	ND	1.1 J	ND	ND	10.1	9.4	ND	0.0023	0.0065
Oct-2020	0.23	0.2	ND	0.0042	ND	ND	ND	ND	11.4	9.6	ND	0.0029 JB	ND
Apr-2021	0.21	0.22	ND	0.0028 J	1	1.1	ND	ND	12.4	13.1	ND	ND	ND
Oct-2021	0.23	0.23	ND	0.0035	1.1	1.1	ND	ND	14.4	14.4	ND	ND	0.0027 J
May-2022	0.23	0.24	ND	0.0035	1.1	1.1	ND	ND	14.5	16	ND	ND	ND
Oct-2022	0.23	0.22	ND	0.0035 J	1.2	1.2	ND	ND	16.5	16.9	ND	ND	ND
May-2023	0.24	0.23	ND	0.0032	1.1	1.1	ND	ND	16.4	16.5	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-02A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-02A*																
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7 J	200	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.8 B	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-02A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-02A***															
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.42 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*0.66 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*0.2 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.344 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*0.6 J*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*0.8 J*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*1 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-02A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.2 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-02A***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-03***											
Nov-1993	7	7	ND	ND	3.7	ND	ND	3.47	24.8	2.6	106	3.21
Apr-1994	5	5	ND	161	2.8	ND	ND	5.36	29.2	ND	25	2.12
Apr-1995	9.3	9.3	ND	ND	2.8	ND	ND	6.6	26.3	2	9	4
Apr-1997	ND	5	ND	ND	3.5	0.09	ND	NA	NA	ND	57	25
Apr-1998	2	2	0.95	ND	3.1	ND	ND	7.06	32	ND	23	4.7
Apr-1999	4	4	0.16	ND	3.94	ND	ND	5.41	38.6	ND	31	5.1
Apr-2000	3	3	ND	ND	3.67	0.16	ND	5.68	45	ND	25	5.7
Apr-2001	3.5	NA	0.28	ND	3.11	ND	ND	NA	NA	ND	ND	5.86
Mar-2002	2	2	ND	ND	4.01	ND	ND	5.6	62.7	ND	40	6.05
Mar-2003	3.4	3.4	ND	ND	13.7	ND	ND	5.6	31.8	ND	12	5.14
Apr-2004	6.5	6.5	ND	ND	4.53	ND	ND	5.6	26.9	ND	28	6.35
Apr-2005	4	4	ND	ND	4.92	0.08	ND	6.1	43.5	1.65	49	5.25
Mar-2006	6.4	6.4	ND	ND	5.27	0.12	ND	5.6	36.7	ND	13	4.72
Mar-2007	3.7	3.7	ND	ND	5.47	ND	ND	5.6	42.7	ND	39	6.21
Mar-2008	5.4	5.4	ND	ND	5.45	0.11	ND	5.2	33.1	ND	17	4.81
Mar-2009	14	14	ND	ND	6.19	0.06	ND	5.3	34.8	14.3	18	5.01
Apr-2010	11.1	11.1	ND	ND	6.96	ND	ND	4.8	34.2	ND	40	7.3
Apr-2011	6.2	6.2	ND	ND	6.95	0.08	ND	4.6	33.2	ND	39	6.57
Mar-2012	7.6	7.6	ND	ND	6.59	0.1	ND	4.4	34.9	ND	14	7.58
Sep-2012	7.64	7.64	ND	ND	6.11	ND	ND	5.4	34.4	ND	43	6.36
Mar-2013	15.3	15.3	0.236 J	ND	7.05	0.0585	ND	6	38.2	0.415 J	24	6.96
Oct-2013	14.2	14.2	ND	ND	7.85	0.0937	ND	5.3	39.4	ND	29	7.08
Mar-2014	13.6	13.6	ND	6 J	6.84	ND	ND	5.3	36	ND	ND	6.49
Oct-2014	35.2	35.2	ND	8 J	7.49	ND	ND	5	38.5	ND	ND	7.66
Apr-2015	4.72	4.72	ND	ND	8.49	0.16	ND	4.5	30.3	ND	ND	7.56
Nov-2015	3.52	3.52	ND	ND	8.33	0.127	ND	5.6	66.5	ND	34	7.43
May-2016	4.6	4.6	ND	6 J	5.74 B	ND	ND	5.5	44.6	ND	96	5.7
Oct-2016	4.6	4.6	ND	11	6.14	NA	NA	5.5	49.3	0.678 J	41	5.5
May-2017	3.52	3.52	ND	18	5.38	ND	ND	5.3	46.2	ND	ND	5.1
Oct-2017	14	14	ND	7 J	5.54	ND	ND	5.5	54.1	ND	16 J	5.5
May-2018	14	14	ND	12.2 J	5.5	ND	0.015	5.1	52	ND	ND	5.7
Nov-2018	6 JB	ND	ND	ND	5.4	0.041 J	0.0084 J	5.2	26.1	ND	10	5.2
May-2019	ND	NA	ND	ND	5.3	ND	ND	4.87	22.3	ND	17	5
Oct-2019	4 JH1	NA	ND	ND	4.7	0.11	ND	5.01	28.9	ND	25	4.6
May-2020	ND	NA	ND	ND	5.3	ND	0.02	5.51	39.6	ND	12	5.6
Oct-2020	4 J	NA	ND	ND	4.9	0.049 JB	ND	5.69	45.7	ND	37	5.5
Apr-2021	2 J3c	NA	ND	ND	4.6	0.059 J	ND	6.22	50.9	ND	13	5

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-03***											
Oct-2021	*6 J2c*	*NA*	*ND*	*ND*	4.1	*0.07 J*	*ND*	6.34	83.5	*ND*	*ND*	5.34
May-2022	10	*NA*	*ND*	*ND*	4.3	*0.071 J*	*ND*	6.38	79.1	*ND*	*ND*	5.1 N3
Oct-2022	14	*NA*	*ND*	*6.1 J*	6	*0.065 J*	*ND*	6.43	83.3	*ND*	*ND*	6 N3
May-2023	12	*NA*	*ND*	34.2	5.3	*ND*	*ND*	6.43	83.9	*ND*	29	5.3 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-03***													
Nov-1993	NA	ND	ND	NA	ND	0.61	NA	ND	NA	ND	4.2	1.9	ND	0.41	NA
Apr-1994	NA	ND	ND	NA	ND	0.79	NA	ND	NA	ND	ND	0.66	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	0.94	NA	ND	ND	ND	1.6	1.6	ND	0.41	NA
Apr-1997	ND	ND	0.019	ND	ND	1.8	0.8	ND	ND	ND	4.5	1.6	0.003	0.63	ND
Apr-1998	ND	ND	0.016	ND	ND	1.04	1.01	ND	ND	ND	1.28	0.593	ND	0.517	0.455
Apr-1999	ND	ND	ND	ND	ND	1.14	0.977	ND	ND	ND	6.94	1.18	ND	0.555	0.444
Apr-2000	ND	ND	ND	ND	ND	1.36	1.06	ND	ND	ND	13.6	1.09	ND	0.56	0.497
Apr-2001	ND	ND	0.016	ND	ND	1.36	NA	0.012	ND	ND	34.5	NA	0.009	0.597	NA
Mar-2002	ND	ND	0.013	ND	ND	1.46	1.17	ND	ND	ND	53.8	0.367	0.007	0.586	0.543
Mar-2003	ND	ND	ND	ND	ND	1.16	1.21	ND	ND	0.012	7.65	1.54	0.005	0.545	0.558
Apr-2004	ND	ND	0.015	ND	ND	1.47	1.25	ND	ND	0.012	141	7.86	0.009	0.654	0.596
Apr-2005	ND	ND	0.02	ND	ND	1.56	1.31	ND	ND	ND	92.8	1.3	0.013	0.627	0.589
Mar-2006	ND	ND	ND	ND	ND	1.13	0.987	ND	ND	0.011	20.5	1.04	0.006	0.458	0.442
Mar-2007	ND	ND	0.017	ND	ND	1.48	1.3	ND	ND	ND	19.1	7.55	0.007	0.609	0.524
Mar-2008	ND	0.002	ND	ND	ND	1.11	1.15	ND	ND	ND	9.41	0.532	ND	0.496	0.509
Mar-2009	ND	ND	ND	ND	ND	1.2	1.23	ND	ND	0.1	7.56	5.53	ND	0.487	0.504
Apr-2010	ND	ND	ND	ND	ND	1.92	1.75	ND	ND	0.01	10.4	7.4	ND	0.618	0.585
Apr-2011	ND	ND	ND	ND	ND	1.55	1.55	ND	ND	0.041	15.3	8.29	ND	0.655	0.65
Mar-2012	ND	ND	0.01	ND	ND	1.66	1.61	ND	ND	ND	11.4	3.66	ND	0.832	0.807
Sep-2012	ND	0.003	0.0074 J	ND	ND	1.45	1.39	0.0189	0.0026 J	0.0368	23.1	12.2	ND	0.666	0.632
Mar-2013	0.000835 J	0.0036	0.0104	ND	0.000273 J	1.62	1.58	0.0296	0.0056 J	0.0555	26.9	7.99	0.000874 J	0.709	0.678

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-03***													
Oct-2013	*ND*	*ND*	0.0127	*ND*	*0.000247 J*	1.61	1.46	0.0053	0.0024	0.0154	8.54	7.41	*0.000425 J*	0.742	0.693
Mar-2014	*0.000669 J*	0.0023	*0.0075 J*	*ND*	*0.000144 J*	1.75	1.64	0.019	*0.0032 J*	0.0282	26.8	16	*0.000588 J*	0.516	0.609
Oct-2014	0.0023	0.005	0.0112	*ND*	*0.000642 J*	1.81	1.6	0.0266	*0.0057 J*	0.0498	37.3	14.1	0.002	0.766	0.72
Apr-2015	0.002	0.0031	0.013	*ND*	*0.000276 J*	1.75	1.6	0.0133	*0.004 J*	0.0253	19.2	1.14	*0.0014 J*	0.775	0.718
Nov-2015	0.0036	**0.021 R,C**	0.0143	*0.000084 J*	*0.000979 J*	1.72	1.56	**0.133 R,C**	0.0252	0.245	75.4	2.2	0.0031	0.76	0.698
Dec-2015	*NA*	0.0052	*NA*	*NA*	*NA*	*NA*	*NA*	0.0261	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
May-2016	*ND*	*0.0022 J*	0.0076	*ND*	*0.00022 J*	1.32	1.23	0.0133	0.003	0.04	15.7	14.6	0.0036	0.59	0.599
Oct-2016	*0.00093 J*	*0.0033 J*	0.0075	*ND*	*0.00022 J*	1.22	1.2	*0.0245 J+*	0.0058	*0.0495 J+*	32.8	15.8	*0.0013 J*	*0.588 J+*	0.598
May-2017	*ND*	0.0045	0.0075	*ND*	*0.00036 J*	1.11	1.17	0.0304	0.0058	0.0716	23.9	13.6	0.002	0.575	0.55
Oct-2017	*ND*	*0.0034 J*	0.0091	*ND*	*0.00019 J*	1.31	1.07	0.0196	0.0048	0.0499	35.6	10.8	0.0024	0.535	0.507
May-2018	0.001	0.0052	0.0071	*0.000029 J*	*0.00032 J*	1.3	1.2	0.03	0.0071	0.065	26.8	11.9	0.002	*0.59 J*	*0.55 J*
Nov-2018	*ND*	*ND*	0.0096	*0.000053 J*	*0.00013 J*	1.1	1.1	*0.0037 J*	0.001	0.0034	20.6	0.84	*0.00056 J*	*0.59 J*	*0.54 J*
May-2019	*ND*	*ND*	0.011	*ND*	*ND*	1.1	1.1	*ND*	0.0011	0.0021	22.6	0.5	*ND*	*ND*	*ND*
Oct-2019	*0.0003 JB*	*ND*	0.03	*0.00045 J*	*0.0012 J*	1.1	1.1	*0.017 J*	*0.002 J*	0.015	195	1.7	*0.0027 J*	0.46	*0.54 J*
May-2020	0.00056	0.0011	0.0099	*ND*	*0.00013 J*	1.2	1.2	0.022	0.0042	0.0088	19.2	5.1	0.0019	0.61	*0.6 J*
Oct-2020	*0.00044 J*	*ND*	*0.0098 J*	*ND*	*ND*	1.2	1.1	*0.017 JB*	0.0038	*ND*	7.4	5.5	*ND*	0.63	*0.54 J*
Apr-2021	*ND*	*ND*	*0.008 J*	*ND*	*ND*	1.1	1.1	0.006	*0.0013 J*	*ND*	9.4	5.3	*ND*	0.54	0.54
Oct-2021	*0.000055 JB*	*ND*	0.0076	*ND*	*ND*	1.2	1.1	*0.0018 J*	*0.00072 J*	*0.00061 J*	10.6	7	*ND*	0.58	0.56
May-2022	*ND*	*0.0015 JB*	0.0078	*ND*	*ND*	1.1	1.2	0.0045	*0.0016 J*	*0.0014 J*	7.9	7.5	*ND*	0.56	0.61
Oct-2022	*ND*	*ND*	0.0084	*ND*	*ND*	1.3	1.3	0.011	*0.0019 J*	*0.0045 J*	12.9	9.4	*ND*	0.66	0.68
May-2023	*ND*	*ND*	0.008	*ND*	*ND*	1.2	1.1	0.0042	*0.002 J*	*0.0013 J*	9.9	8.3	*ND*	0.58	0.53

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-03*												
Nov-1993	0.12	NA	ND	NA	0.58	NA	ND	NA	1.5	NA	NA	NA	ND
Apr-1994	ND	NA	ND	NA	ND	NA	ND	NA	1.1	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.52	NA	ND	ND	1.4	NA	ND	ND	0.02
Apr-1997	0.066	0.026	ND	ND	2	2	ND	ND	1.8	1.7	ND	ND	0.066
Apr-1998	0.031	0.031	NA	ND	1.2	0.97	ND	ND	1.56	1.59	ND	ND	0.011
Apr-1999	0.043	0.023	NA	ND	1.49	0.644	ND	ND	2.03	1.56	ND	ND	ND
Apr-2000	0.023	0.03	NA	ND	0.653	ND	ND	ND	2.55	1.61	0.002	ND	0.011
Apr-2001	0.015	NA	NA	ND	1.51	NA	ND	ND	2.89	NA	ND	0.011	0.015
Mar-2002	0.015	0.015	NA	ND	0.806	1.14	ND	ND	2.48	1.76	ND	ND	0.026
Mar-2003	0.012	0.039	NA	ND	1.73	ND	ND	ND	1.92	1.96	ND	ND	0.026
Apr-2004	0.138	0.15	ND	ND	0.898	ND	ND	ND	2.6	2.23	ND	ND	0.028
Apr-2005	0.046	0.029	ND	ND	0.86	0.64	ND	ND	2.42	2.21	ND	ND	0.018
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	1.85	1.83	ND	ND	ND
Mar-2007	0.077	0.082	ND	ND	ND	ND	ND	ND	2.25	2	ND	ND	0.018
Mar-2008	0.033	0.012	ND	ND	0.575	0.598	ND	ND	2.17	2.22	ND	ND	ND
Mar-2009	0.097	0.088	ND	ND	ND	ND	ND	ND	2.41	2.72	ND	ND	ND
Apr-2010	0.146	0.116	ND	ND	0.638	0.623	ND	ND	2.83	2.79	ND	ND	ND
Apr-2011	0.156	0.162	ND	0.029	0.606	0.625	ND	ND	2.9	2.92	ND	ND	0.01
Mar-2012	0.12	0.1	ND	ND	0.735	0.708	ND	ND	3.68	3.55	ND	ND	ND
Sep-2012	0.249	0.217	ND	0.0133	0.796	0.764	ND	ND	3.52	3.48	ND	ND	0.0035 J
Mar-2013	0.152	0.101	0.000134 J	0.0242	0.812	0.748	ND	0.000022 J	3.48	3.28	ND	ND	0.019
Oct-2013	0.102	0.0916	ND	0.0073	0.646	0.592	ND	ND	3.52	3.41	0.000098 J	0.001 J	0.0166

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-03***												
Mar-2014	0.206	0.192	ND	0.0131	0.726	0.682	ND	0.000041 J	2.64	3.27	0.000185 J	0.0042 J	0.01
Oct-2014	0.38	0.247	0.00003 J	0.0253	0.864	0.816	ND	0.000086 J	3.85	3.83	ND	ND	0.0121
Apr-2015	0.0779	0.0368	ND	0.0164	0.765	0.736	0.000801 J	0.000033 J	3.95	4.01	ND	ND	0.0092 J
Nov-2015	0.278	0.0454	ND	0.111	0.804	0.714	0.000367 J	0.000192 J	4.19	4.09	0.000278 J	ND	0.0273
May-2016	0.24	0.234	ND	0.0191	0.874	0.828	ND	ND	3.33	3.09	ND	ND	0.0309
Oct-2016	0.272 R	0.217	ND	0.0249 J+	0.727	0.715	ND	ND	2.75 J+	2.77	ND	0.00032 J	0.0173 J
May-2017	0.242	0.217	ND	0.0324	0.766	0.729	ND	ND	2.73	2.68	ND	0.0003 J	0.0154 J
Oct-2017	0.269	0.186	ND	0.0217	0.628	0.603	ND	ND	2.57	2.39	ND	0.00025 J	0.0403
May-2018	0.27	0.21	ND	0.034	ND	ND	0.00027 J	ND	2.8 J	2.4 J	ND	0.0026	0.025
Nov-2018	0.018	0.019	ND	0.0045	ND	ND	ND	ND	2.2 J	2.3 J	ND	ND	0.0058
May-2019	0.02	0.016	ND	0.004	ND	ND	ND	ND	ND	ND	ND	ND	0.0057
Oct-2019	0.15	0.054	ND	0.012	ND	ND	ND	ND	2 J	2.4 J	ND	ND	0.065
May-2020	0.1	0.078	ND	0.028	ND	ND	ND	ND	2.3 J	2.3 J	ND	0.0013	0.0068
Oct-2020	0.093	0.08	ND	0.015	ND	ND	ND	ND	2.5 J	1.9 J	ND	0.0043 JB	ND
Apr-2021	0.11	0.12	ND	0.011	0.5	0.52	ND	ND	2.6	2.7	ND	ND	ND
Oct-2021	0.14	0.13	ND	0.0039	0.51	0.5	ND	ND	2.5	2.5	ND	ND	ND
May-2022	0.13	0.13	ND	0.01	0.5 J	0.46 J	ND	ND	2.4	2.9	ND	ND	ND
Oct-2022	0.16	0.18	ND	0.049	0.58	0.6	ND	ND	3.2	3.3	ND	ND	ND
May-2023	0.16	0.16	ND	0.0077	0.54	0.43 J	ND	ND	2.8	2.5	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-03*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.5	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.8	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.23	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.06 J	ND	ND	4.68 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-03*																
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.63 J,B*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.84 J*	*ND*	*ND*	7.02	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.19 J*	*ND*	*ND*	5.12	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.41 J*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.1	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.3 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.1	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.1	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.4	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-03*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-03***															
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.172 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-03***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-03*															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-04***											
Nov-1993	6	6	0.5	ND	21.6	ND	ND	5.25	21.8	4.2	34	5.14
Apr-1994	6	6	ND	ND	2.2	ND	ND	5.3	21	ND	18	4.39
Apr-1995	8.2	8.2	ND	ND	2.3	ND	ND	6.1	20.7	1.9	ND	4.2
Apr-1997	ND	4	ND	ND	2	0.09	ND	NA	NA	ND	50	11
Oct-1997	4	4	0.5	ND	1.51	0.28	ND	8.07	21.5	ND	ND	16
Apr-1998	3	3	ND	ND	2.03	ND	ND	6.81	19.53	ND	ND	5
Apr-1999	ND	ND	0.24	ND	2.61	ND	ND	5.26	22.5	ND	32	5.7
Oct-1999	ND	ND	0.08	ND	2.88	ND	ND	5.6	20.1	ND	18	5.3
Apr-2000	4	4	ND	ND	3.25	ND	ND	5.7	17	ND	23	5.9
Oct-2000	6.4	NA	ND	ND	1.96	ND	ND	5.6	17.05	ND	19	5.63
Apr-2001	5.5	NA	ND	ND	1.96	ND	ND	NA	NA	ND	ND	7
Sep-2001	4.9	4.9	ND	ND	5.92	ND	ND	5.6	21	ND	22	6.2
Mar-2002	3.2	3.2	ND	ND	1.71	ND	ND	4.5	16	ND	20	5.03
Sep-2002	5.8	5.8	ND	ND	1.99	ND	ND	5.5	20.1	ND	22	6.44
Mar-2003	5.4	5.4	ND	ND	12	ND	ND	5.3	21.6	ND	12	5.53
Oct-2003	5.2	5.2	ND	ND	7.09	ND	ND	4.1	21.6	ND	48	7.6
Apr-2004	4.2	4.2	ND	ND	2.28	0.1	ND	5.5	16.6	ND	21	9.54
Oct-2004	5.4	5.4	ND	ND	2.39	0.12	ND	5.6	16.6	ND	13	9.5
Apr-2005	4.9	4.9	ND	ND	2.45	0.1	ND	5.3	15.4	1.58	35	5.33
Oct-2005	6.4	6.4	ND	ND	2.42	0.11	ND	4.6	13.7	ND	27	5.76
Mar-2006	7.5	7.5	ND	ND	2.27	ND	ND	5.3	17.6	ND	ND	4.15
Sep-2006	6.1	6.1	ND	ND	2.6	0.12	ND	5.5	17.9	ND	15	5.94
Mar-2007	6.2	6.2	ND	ND	2.72	ND	ND	5.7	20	ND	27	5.01
Sep-2007	4.9	4.9	0.39	ND	8.92	ND	ND	5.5	18.3	ND	29	4.52
Mar-2008	6.5	6.5	ND	ND	2.62	0.1	ND	5.5	18.8	ND	ND	4.66
Sep-2008	6.5	6.5	0.2	ND	2.77	0.06	ND	5.5	18.1	ND	19	5.6
Mar-2009	6	6	ND	ND	2.71	0.08	ND	5.2	23.2	ND	22	4.7
Oct-2009	5.9	5.9	ND	ND	2.58	0.09	ND	5	18	ND	37	5.25
Mar-2010	6	6	ND	ND	2.64	ND	ND	5.48	27	ND	32	5.19
Oct-2010	5.5	5.5	ND	ND	3.16	0.06	ND	5	18.8	ND	ND	4.93
Apr-2011	7	7	ND	ND	2.92	0.09	ND	5.3	15.7	ND	13	4.72
Sep-2011	7.5	7.5	ND	ND	7.53	0.38	ND	5.5	20.6	ND	36	5.78
Mar-2012	5.3	5.3	ND	ND	3.12	0.08	ND	4.8	18.9	ND	ND	5.87
Sep-2012	6.12	6.12	ND	ND	3.38	0.11	ND	4.3	21.4	ND	53	6.25
Mar-2013	5.84	5.84	0.055 J	ND	3.76	0.0899	ND	5.6	21.2	0.359 J	25	6.49
Oct-2013	6.2	6.2	ND	ND	3.87	0.0901	ND	5.9	24.7	ND	ND	6.18
Mar-2014	6.24	6.24	ND	ND	4.1	0.0804	ND	5.6	24.8	ND	38	7.94

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-04***											
Oct-2014	ND	ND	ND	5 J	4.42	0.119	ND	5.2	24.4	ND	ND	6.5
Apr-2015	4.68	4.68	ND	ND	4.59	0.091	ND	4.4	23.7	ND	ND	5.68
Nov-2015	5.4	5.4	ND	ND	4.6	0.111	ND	5.7	45.6	ND	25	7.79
May-2016	4.64	4.64	ND	ND	4.99	0.103	ND	5.7	33.9	ND	46	7.6
Oct-2016	3.76	3.76	ND	ND	5.4	NA	NA	5.6	43.5	0.708 J	44	7.2
May-2017	4.28	4.28	ND	ND	6.43	0.137	ND	5.5	53.6	ND	27	6.5
Oct-2017	6.36	6.36	ND	6 J+	7.26	0.114	ND	6.1	59	ND	16 J	7.4
May-2018	10	10	ND	18.6 J	8.2	0.1	ND	5.9	54.3	ND	ND	8.4
Nov-2018	18	18	ND	ND	8.2	ND	0.0075 J	6.2	79.3	ND	77	8.6
May-2019	24	NA	ND	ND	9.1	ND	ND	5.9	62.7	ND	38	9.2
Oct-2019	10 H1	NA	ND	ND	7.1	0.084 J	0.017	5.84	87.3	ND	47	13
May-2020	26	NA	ND	6.9 J	9.9	ND	ND	5.64	94.7	ND	40	17.7
Oct-2020	26	NA	ND	ND	7.8	ND	0.0072 J	5.66	108	ND	68	27
Apr-2021	10	NA	0.064 J	ND	9.4	0.073 J	ND	6.53	131.1	ND	55 D6	16.7
Oct-2021	30	NA	ND	8.3 J	8.2	0.063 J	ND	6.69	170.9	ND	41	24.8
May-2022	28 ML	NA	ND	ND	8.7	0.15	0.0073 J	6.27	154.3	ND	64	16.5 N3
Oct-2022	32	NA	ND	22.1 J	13.4	0.088 J	0.0075 J	6.48	163.3	ND	48	12.3 N3
May-2023	36	NA	ND	45.6	15.3	0.1	ND	6.47	170.1	ND	72	12.7 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-04*													
Nov-1993	NA	ND	ND	NA	ND	1.4	NA	ND	NA	ND	1.1	0.13	ND	0.4	NA
Apr-1994	NA	ND	ND	NA	ND	1.7	NA	ND	NA	ND	0.072	ND	ND	0.45	NA
Apr-1995	ND	ND	ND	ND	ND	1.1	NA	ND	ND	ND	0.49	ND	ND	0.36	NA
Oct-1996	ND	ND	0.008	ND	ND	1.6	1.6	ND	ND	ND	0.82	0.22	ND	ND	ND
Apr-1997	ND	ND	0.021	ND	ND	2.5	0.86	ND	ND	ND	0.82	0.25	ND	0.55	ND
Oct-1997	ND	ND	ND	ND	ND	1.39	1.29	ND	ND	ND	20.7	0.786	ND	0.349	0.33
Apr-1998	ND	ND	0.01	ND	ND	1.37	1.29	ND	ND	ND	25.9	0.456	ND	0.374	0.366
Apr-1999	ND	ND	0.011	ND	ND	1.58	1.43	ND	ND	ND	19.3	0.422	ND	0.418	0.398
Oct-1999	ND	ND	ND	ND	ND	1.46	1.33	ND	ND	ND	15	0.465	ND	0.421	0.38
Apr-2000	ND	ND	ND	ND	ND	1.64	1.65	ND	ND	ND	5.3	0.212	ND	0.445	0.429
Oct-2000	ND	ND	ND	ND	ND	1.57	1.56	ND	ND	0.004	12	0.477	ND	0.415	0.416
Apr-2001	ND	ND	0.012	ND	ND	2	NA	ND	ND	ND	34.9	NA	ND	0.485	NA
Sep-2001	ND	ND	ND	ND	ND	1.65	1.58	ND	ND	ND	10.9	0.145	ND	0.5	0.422
Mar-2002	ND	ND	0.011	ND	ND	1.35	1.37	ND	ND	ND	29.7	0.607	ND	0.403	0.422
Sep-2002	ND	ND	0.011	ND	ND	1.82	1.35	ND	ND	ND	59.6	0.703	ND	0.462	0.414
Mar-2003	ND	ND	ND	ND	ND	1.49	1.41	ND	ND	ND	7.57	0.379	ND	0.441	0.412
Oct-2003	ND	ND	0.013	ND	ND	2.09	1.36	ND	ND	0.011	55.9	0.527	ND	0.579	0.402
Apr-2004	0.004	0.003	0.014	0.003	ND	1.89	1.04	ND	ND	ND	30.5	0.142	0.004	1.17	0.4
Oct-2004	ND	ND	0.01	ND	ND	2.86	1.45	ND	ND	0.014	36.3	0.288	ND	0.571	0.426
Apr-2005	ND	ND	0.013	ND	ND	1.41	1.38	ND	ND	ND	81.5	0.537	ND	0.437	0.424
Oct-2005	ND	ND	0.01	ND	ND	1.58	1.23	ND	ND	ND	39.4	0.379	ND	0.449	0.414

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-04***													
Mar-2006	ND	ND	ND	ND	ND	1.08	0.996	ND	ND	ND	43.7	0.372	ND	0.352	0.338
Sep-2006	ND	ND	ND	ND	ND	1.61	1.36	ND	ND	ND	38.2	0.206	ND	0.467	0.431
Mar-2007	ND	ND	0.014	ND	ND	1.33	1.22	ND	ND	ND	41.8	0.151	ND	0.41	0.376
Sep-2007	ND	ND	ND	ND	ND	1.14	1.11	ND	ND	ND	17.1	0.705	ND	0.406	0.372
Mar-2008	ND	ND	0.011	ND	ND	1.17	1.14	ND	ND	ND	40.9	0.576	ND	0.423	0.416
Sep-2008	ND	ND	ND	ND	ND	1.41	1.19	ND	ND	ND	23.6	0.24	ND	0.501	0.454
Mar-2009	ND	ND	ND	ND	ND	1.25	1.31	ND	ND	ND	26.9	0.4	ND	0.383	0.41
Oct-2009	ND	ND	ND	ND	ND	1.32	1.27	ND	ND	ND	10	0.243	ND	0.474	0.467
Mar-2010	ND	ND	ND	ND	ND	1.37	1.27	ND	ND	ND	2.48	0.155	ND	0.429	0.407
Oct-2010	ND	ND	ND	ND	ND	1.17	1.13	ND	ND	ND	11.3	0.91	ND	0.488	0.458
Apr-2011	ND	ND	0.012	ND	ND	1.11	1.1	ND	ND	ND	57.8	0.317	ND	0.473	0.462
Sep-2011	ND	ND	0.015	ND	ND	1.44	1.48	ND	ND	ND	90.5	0.469	ND	0.53	0.47
Mar-2012	ND	ND	0.01	ND	ND	1.36	1.33	ND	ND	ND	8.58	0.191	ND	0.599	0.576
Sep-2012	ND	ND	0.014	0.000181 J	ND	1.62	1.5	ND	0.00098 J	0.0044 J	68.2	0.274	0.000594 J	0.536	0.551
Mar-2013	ND	ND	0.0133	0.000126 J	ND	1.66	1.49	0.0021 J	0.0012 J	0.0025 J	20.2	0.251	ND	0.57	0.534
Oct-2013	ND	ND	0.0128	ND	ND	1.56	1.58	ND	0.000945 J	0.0018 J	9.53	0.335	ND	0.555	0.585
Mar-2014	ND	ND	0.0123	ND	ND	2.34	2.3	0.0049 J	0.000947 J	0.0026 J	17.5	0.389	ND	0.509	0.652
Oct-2014	0.000253 J	ND	0.0139	ND	ND	1.58	1.66	0.00074 J	0.001 J	0.0027 J	17.7	0.275	ND	0.621	0.62
Apr-2015	0.0012 J	ND	0.0148	ND	ND	1.27	1.31	0.000412 J	0.0012 J	0.0028 J	13.6	0.382	ND	0.611	0.631
Nov-2015	ND	ND	0.0144	ND	ND	1.94	1.82	0.000332 J	0.0012 J	0.002 J	5.46	0.512	0.000478 J	0.717	0.67
May-2016	ND	ND	0.0162	0.00019 J	ND	1.83	1.91	0.00071 J	0.0013	0.0032 J	25.4	0.285	0.00015 J	0.741	0.734
Oct-2016	ND	ND	0.0166	ND	ND	1.62	1.64	0.00071 J	0.0013	0.0021 J	1.62	0.824	0.00011 J	0.763	0.784
May-2017	ND	ND	0.0185	0.00019 J	ND	1.37	1.58	0.00083 JB	0.0016	0.0038 J	14.4	1.64	0.00018 J	0.745	0.751
Oct-2017	ND	ND	0.0183	0.00015 J	ND	1.62	1.62	ND	0.0016	0.0035 J	11.2	2.68	0.00019 J	0.811	0.844

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-04***													
May-2018	*0.00013 J*	*ND*	0.023	*0.00021 J*	*0.000078 J*	1.8	1.7	*0.0022 J*	0.0018	0.014	14.1	2.4	*0.00023 J*	*0.94 J*	*0.91 J*
Nov-2018	*ND*	*ND*	0.023	*0.00018 J*	*0.000032 J*	1.9	1.9	*0.0024 J*	0.0015	0.0041	44	17.7 M1	*0.000076 J*	*0.96 J*	*0.99 J*
May-2019	*ND*	*ND*	0.023	*ND*	*ND*	2.1	2.2	*ND*	0.0015	0.0028	23.4	14.1	*ND*	*ND*	1
Oct-2019	*ND*	*ND*	0.038	*0.00086 J*	*0.00076 J*	3.6	3.5	*0.0036 J*	0.0026	0.017	152	11.6	*0.00037 J*	1	1
May-2020	*0.00032 J*	*ND*	0.025	*0.00015 J*	*0.00016 J*	5.2	5.4	*0.003 J*	0.0026	0.0063	27.5	17.5	*ND*	1.2	1.2
Oct-2020	*0.00072 J*	*ND*	0.028	*ND*	*ND*	8.8	8.4	*0.01 J*	*0.0018 J*	*ND*	22.4 M1	19.5	*ND*	1.2	1.2
Apr-2021	*ND*	*ND*	0.028	*ND*	*ND*	4.6	4.5	*0.0009 J*	*0.0013 J*	*ND*	30.4	21.8	*ND*	1.2	1.2
Oct-2021	*0.000053 JB*	*ND*	0.027	*ND*	*ND*	7.5	7.2	*ND*	*0.0013 J*	*0.0014 J*	29.8	21.5	*ND*	1.5	1.4
May-2022	*ND*	*ND*	0.03	*ND*	*ND*	4.3	3.9	*0.0011 J*	*0.002 J*	*0.0017 J*	28.3	22.7	*ND*	1.4	1.3
Oct-2022	*0.00031 JB*	*ND*	0.029	*0.00015 J*	*ND*	2.6	2.8	*0.00078 J*	*0.0022 J*	0.0028	36	28	*ND*	1.4	1.4
May-2023	*0.0003 J*	*ND*	0.034	*0.00025 J*	*ND*	2.7	2.6	*0.00099 J*	*0.0023 J*	0.005	46.1	28.6	*ND*	1.4	1.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-04*												
Nov-1993	0.07	NA	ND	NA	0.36	NA	ND	NA	1.1	NA	NA	NA	ND
Apr-1994	0.012	NA	ND	NA	ND	NA	ND	NA	1.9	NA	NA	NA	0.014
Apr-1995	0.01	NA	ND	ND	0.46	NA	ND	ND	1	NA	ND	ND	0.02
Oct-1996	0.019	0.016	NA	ND	ND	ND	ND	ND	2.1	2.5	ND	ND	ND
Apr-1997	0.025	ND	ND	ND	2	1.8	ND	ND	1.3	1.2	ND	ND	0.044
Oct-1997	0.011	0.015	ND	ND	ND	0.552	ND	ND	1.08	1.02	ND	ND	0.01
Apr-1998	ND	0.033	ND	ND	ND	ND	ND	ND	1.09	1.18	ND	ND	ND
Apr-1999	0.01	0.015	NA	ND	0.875	ND	ND	ND	1.18	1.12	ND	ND	ND
Oct-1999	0.01	0.015	NA	ND	ND	ND	ND	ND	1.1	1.01	ND	ND	ND
Apr-2000	0.011	0.012	NA	ND	0.547	ND	ND	ND	1.12	1.04	ND	ND	ND
Oct-2000	0.012	0.015	NA	ND	0.514	ND	ND	ND	1.05	1.16	ND	ND	ND
Apr-2001	ND	NA	NA	ND	1.11	NA	ND	ND	2.15	NA	ND	ND	ND
Sep-2001	ND	ND	NA	ND	ND	0.641	ND	ND	1.18	1.1	ND	ND	ND
Mar-2002	0.015	0.017	NA	ND	1.03	0.901	ND	ND	1.16	1.15	ND	ND	ND
Sep-2002	ND	0.017	NA	ND	0.843	0.821	ND	ND	1.43	1.11	ND	ND	ND
Mar-2003	0.013	0.012	NA	ND	0.646	ND	ND	ND	1.18	1.13	ND	ND	ND
Oct-2003	ND	0.017	NA	ND	1.18	1.53	ND	ND	2.74	1.13	ND	0.044	ND
Apr-2004	ND	ND	ND	ND	1.48	ND	ND	ND	2.17	1.13	**0.003**	ND	0.021
Oct-2004	ND	0.011	ND	ND	ND	ND	ND	ND	1.56	0.833	ND	ND	0.073
Apr-2005	0.017	0.014	ND	ND	ND	ND	ND	ND	1.21	1.15	ND	ND	ND
Oct-2005	0.016	0.011	ND	ND	0.58	ND	ND	ND	1.97	1.06	ND	ND	0.012
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	0.919	0.81	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-04*												
Sep-2006	0.01	ND	ND	ND	0.514	ND	ND	ND	1.27	0.989	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	1.09	0.925	ND	ND	ND
Sep-2007	0.022	0.019	ND	ND	ND	ND	ND	ND	1.1	1.05	ND	ND	0.015
Mar-2008	0.019	0.014	ND	ND	ND	ND	ND	ND	1.18	1.13	ND	ND	ND
Sep-2008	0.01	ND	ND	ND	ND	ND	ND	ND	1.13	1.02	ND	ND	0.021
Mar-2009	ND	ND	**0.0072 R,C**	ND	ND	ND	ND	ND	1.14	1.17	ND	ND	0.011
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Jul-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.14	1.14	ND	ND	ND
Mar-2010	ND	ND	ND	ND	0.562	0.512	ND	ND	1.07	1.04	ND	ND	ND
Oct-2010	0.028	0.021	ND	ND	ND	ND	ND	ND	1.22	1.17	ND	ND	ND
Apr-2011	0.015	0.012	ND	ND	ND	ND	ND	ND	1.32	1.26	ND	ND	ND
Sep-2011	0.021	0.012	ND	ND	ND	ND	ND	ND	1.34	1.31	ND	ND	0.012
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	1.34	1.34	ND	ND	ND
Sep-2012	0.0153	0.011	ND	0.0019 J	0.45 J	0.54	ND	ND	1.38	1.39	ND	ND	0.006 J
Mar-2013	0.0122	0.0103	0.00018 J	0.0029 J	0.524	0.467 J	ND	ND	1.56	1.45	0.000555 J	ND	0.0128
Oct-2013	0.0132	0.0121	ND	0.0017 J	0.427	0.44	ND	ND	1.46	1.57	ND	0.000803 J	0.0114
Mar-2014	0.0108	0.0101	ND	0.0019 J	0.558	0.539	ND	ND	1.27	1.61	ND	0.0048 J	0.0098 J
Oct-2014	0.0144	0.012	0.000022 J	0.0018 J	0.518	0.529	0.0013 J	ND	1.69	1.71	ND	ND	ND
Apr-2015	0.0165	0.0146	ND	0.0017 J	0.545	0.548	0.000983 J	ND	1.83	1.88	ND	ND	0.0098 J
Nov-2015	0.0184	0.0167	ND	0.0017 J	0.557	0.516	ND	ND	2.03	1.92	0.000116 J	ND	0.0095 J
May-2016	0.0186	0.0122	ND	0.002 J	0.57	0.562	ND	ND	1.95	1.93	ND	ND	ND
Oct-2016	0.0193	0.0195	ND	0.002 J	0.546	0.582	ND	ND	2	2.1	ND	ND	ND
May-2017	0.0472	0.0279	0.00023	0.0021 J	0.575	0.588	ND	ND	2.25	2.24	ND	ND	0.0036 JB

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-04***												
Oct-2017	0.0403	0.0357	*0.00015 J*	*0.002 JB*	0.626	0.625	*ND*	*ND*	2.5	2.64	*ND*	*ND*	*ND*
May-2018	0.032	0.029	*0.00015 J*	0.0027	*ND*	*ND*	*0.00013 J*	*ND*	*2.9 J*	*2.7 J*	*0.000076 J*	*ND*	0.0065
Nov-2018	0.15	0.15	0.00032	0.0036	*ND*	*ND*	*0.0002 J*	*ND*	*3.5 J*	*3 J*	*ND*	*ND*	0.0057
May-2019	0.18	0.16	*ND*	0.0026	7.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	0.17	0.11	0.0006	0.0042	*ND*	*ND*	*ND*	*ND*	*2.6 J*	*3 J*	*ND*	*ND*	0.025
May-2020	0.1	0.16	*ND*	0.0032	*ND*	*ND*	*ND*	*ND*	*3.1 J*	*3.2 J*	*ND*	0.003	0.01
Oct-2020	0.15	0.12	*ND*	0.0042	*ND*	*ND*	*0.0017 J*	*ND*	*1.8 J*	*2.5 J*	*ND*	*0.0025 J*	*ND*
Apr-2021	0.16	0.16	*ND*	*ND*	0.76	0.77	*ND*	*ND*	3.7	3.4	*ND*	*ND*	*ND*
Oct-2021	0.16	0.16	*ND*	*0.0013 J*	0.8	0.77	*ND*	*ND*	3.6	3.6	*ND*	*ND*	*ND*
May-2022	0.16	0.16	*ND*	*0.0025 J*	0.83	0.8	*ND*	*ND*	4.3	3.9	*ND*	*ND*	*ND*
Oct-2022	0.19	0.19	*ND*	*0.002 J*	0.91	0.89	*ND*	*ND*	4.7	4.8	*ND*	*ND*	*ND*
May-2023	0.19	0.18	*ND*	0.0027	0.97 B	0.81	*ND*	*ND*	5.2	4.9	*ND*	*ND*	*0.0045 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.5	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04*																
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*0.21 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*0.24 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*0.25 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04*																
May-2017	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9 J	ND
Nov-2018	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	2.35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.48 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.62 J	0.4 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.18 J	ND	ND	ND	ND	ND	0.71 J	0.47 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.18 J	ND	ND	ND	ND	ND	0.81 J	0.33 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	0.64 J	0.45 J
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8 J	0.9 J
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	0.8 J	1.3
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.1 J	ND	ND	ND	1.3	2.3

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	1.2	3
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	1.5	4.1
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	4.7
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.3 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1 CL	4 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	2.9
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	3
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2	3.1
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*1.36 J*	*4.77 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	2.6	4.4
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	3.5
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	2.1	4.5
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	1.5	3.1

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-04B***											
Nov-1993	ND	ND	ND	30	3.1	ND	ND	4.82	25.8	4.2	42	3.93
Apr-1994	4.27	ND	ND	21.1	2.7	ND	ND	5.2	28.6	3.6	17	3.93
Apr-1995	ND	ND	ND	ND	3	ND	ND	5.4	27.5	8	16	5.6
Apr-1997	ND	5	ND	ND	2.5	0.03	ND	NA	NA	ND	54	5.7
Oct-1997	ND	ND	0.6	ND	1.54	ND	ND	8.34	51.6	2.5	18	ND
Apr-1998	ND	ND	0.34	ND	2.67	ND	ND	6.57	29.4	7.4	16	9.3
Apr-1999	ND	ND	0.13	ND	3.66	ND	ND	4.87	29.3	4.79	39	7.8
Oct-1999	ND	ND	0.07	ND	2.52	ND	ND	5.13	29.4	5.33	29	8.4
Apr-2000	1	1	ND	ND	2.8	ND	ND	5.47	25	4.27	42	9
Oct-2000	1	NA	ND	ND	3.58	ND	ND	5.06	34.2	11.7	364	7.72
Apr-2001	1.3	NA	ND	ND	2.33	ND	ND	NA	NA	8.7	37	8.47
Sep-2001	ND	ND	ND	ND	11.7	1.25	ND	4.9	48	11.4	33	10.5
Mar-2002	1	1	ND	ND	3.75	ND	ND	4.6	30	5.04	35	9.56
Sep-2002	1.4	1.4	ND	ND	3.03	ND	ND	5	41.1	7.73	83	10.8
Mar-2003	1.9	1.9	ND	ND	12.5	ND	ND	4.8	38.2	14.2	33	9.6
Oct-2003	2.1	2.1	ND	ND	2.72	ND	ND	3.8	39.9	7.67	55	10.5
Apr-2004	1.7	1.7	ND	ND	2.23	ND	ND	5.1	35.6	11.1	31	11.8
Oct-2004	1.9	1.9	ND	ND	3.14	ND	ND	4.9	37.6	8.58	28	10.1
Apr-2005	1.6	1.6	ND	ND	2.43	ND	ND	4.8	33	9.86	70	11.6
Oct-2005	2.7	2.7	0.22	ND	2.3	ND	ND	4.1	29.7	8.56	46	8.69
Mar-2006	3	3	ND	ND	2.16	0.08	ND	5	32.3	9.06	15	7.49
Sep-2006	2.8	2.8	ND	ND	2.6	ND	ND	4.8	33.5	8.32	34	9.31
Mar-2007	2.8	2.8	ND	ND	3.02	0.08	ND	5.1	35.1	8.73	41	8.47
Sep-2007	2.6	2.6	0.36	ND	2.57	ND	ND	5.5	35.9	7.63	45	9.1
Mar-2008	3	3	ND	ND	2.77	0.08	ND	5	36	9.24	29	9.43
Sep-2008	3.2	3.2	ND	43	2.86	ND	ND	5.1	33.6	9.75	37	10.2
Mar-2009	3.1	3.1	ND	ND	2.71	ND	ND	4.5	35.4	7.43	47	9.18
Oct-2009	3	3	ND	ND	2.73	ND	ND	4.5	31.7	10.3	60	10.4
Apr-2010	3.3	3.3	ND	ND	2.59	ND	ND	4.2	37.7	11.5	54	9.5
Oct-2010	2.6	2.6	ND	ND	3.08	ND	ND	4.4	34.9	8.6	29	11.1
Apr-2011	3.5	3.5	ND	ND	2.62	ND	ND	4.5	36.2	8.96	42	10.3
Sep-2011	3.6	3.6	ND	ND	3.02	ND	ND	4.7	36.6	7.53	19	10.7
Mar-2012	2.7	2.7	ND	ND	2.55	ND	ND	4.4	35.8	10	ND	11.1
Sep-2012	2.88	2.88	ND	ND	3.14	0.0613	ND	3.8	36.4	9.39	34	10.9
Mar-2013	3.4	3.4	ND	ND	3.44	0.0421 J	ND	5.1	39.1	9.35	28	11.4
Oct-2013	3.48	3.48	ND	ND	3.56	0.0428 J	ND	5.2	40.3	9.26	ND	11.1
Mar-2014	3	3	ND	ND	3.05	ND	ND	5	37.2	11.2	ND	10.9

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-04B***										
Oct-2014	*ND*	*ND*	*ND*	*5 J*	3.14	*ND*	*ND*	4.6	35.9	8.82	*ND*	11.2
Apr-2015	3.76	3.76	*ND*	*ND*	2.84	*ND*	*ND*	4.7	35.1	11.2	32	11.7
Nov-2015	2.64	2.64	*ND*	*ND*	2.72	*ND*	*ND*	5.1	60.9	10.8	27	11.7
May-2016	*ND*	*ND*	*ND*	*ND*	2.82	*ND*	*ND*	4.9	47.4	9.84	*19 J*	11.2
Oct-2016	*ND*	*ND*	*ND*	*ND*	3.03	*NA*	*NA*	5.1	53.1	9.28	41	10.9
May-2017	2.6	2.6	*ND*	*ND*	3.83	0.181	*ND*	4.9	66.7	8.3	*24 J*	12.4
Oct-2017	*ND*	*ND*	*ND*	*ND*	3.67	0.159	*ND*	5.1	65.4	9.23	35	12.3
May-2018	*4 J*	*ND*	*ND*	*ND*	3.3	0.16	*ND*	5.8	52.4	*7 J*	*ND*	11.6
Nov-2018	*6 JB*	*ND*	*ND*	*ND*	*2.8 J*	*0.076 J*	*ND*	4.63	40.9	*9.7 J*	93	11.6
May-2019	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	4.53	32.5	11.3	23	10.9
Oct-2019	*1 JH1*	*NA*	*ND*	*ND*	*2.7 J*	0.19	*ND*	4.32	46.2	*8.7 J*	231	11.9
May-2020	*ND*	*NA*	*ND*	*ND*	5.8	0.16	*ND*	4.41	55.9	*9.1 J*	46	16.2
Oct-2020	*ND*	*NA*	*ND*	*ND*	4.2	0.15	*ND*	4.41	50.3	10.4	27	14.9
Apr-2021	*ND*	*NA*	*ND*	*ND*	*2.3 J*	0.11	*ND*	4.82	47.3	*9.6 J*	34	11.3
Oct-2021	*ND*	*NA*	*ND*	*ND*	4.3	0.23	*ND*	4.79	88.6	*8.1 J*	14	16.4
May-2022	*2 J2c*	*NA*	*ND*	*ND*	5.7	0.28	*ND*	4.54	95.7	10.2	43	19.9 N3
Oct-2022	*2 J2c*	*NA*	*ND*	*13 J*	9.3	0.28	*ND*	4.62	105.2	12.4	48	20.7 N3
May-2023	30	*NA*	*ND*	36.5	6.3	0.32	*ND*	4.71	91.7	10.6	39	19.6 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-04B*													
Nov-1993	NA	ND	ND	NA	ND	0.37	NA	0.007	NA	ND	2.2	0.04	ND	0.73	NA
Apr-1994	NA	ND	ND	NA	ND	1.1	NA	ND	NA	ND	ND	ND	ND	0.37	NA
Apr-1995	ND	ND	ND	ND	ND	0.66	NA	ND	ND	ND	ND	ND	ND	0.95	NA
Oct-1996	ND	ND	0.026	ND	ND	1.4	1.5	ND	ND	ND	ND	ND	0.002	1.4	1.4
Apr-1997	ND	ND	0.042	ND	ND	2.7	1.6	ND	ND	ND	0.26	ND	ND	1.9	1.1
Oct-1997	ND	ND	0.022	ND	ND	0.982	0.948	ND	ND	ND	0.418	ND	ND	0.961	0.918
Apr-1998	ND	ND	0.03	ND	ND	1.72	1.59	ND	ND	ND	1.16	ND	ND	1.22	1.11
Apr-1999	ND	ND	0.039	ND	ND	1.2	1.18	ND	ND	ND	2.96	ND	ND	1.17	1.01
Oct-1999	ND	ND	0.022	ND	ND	1.27	0.964	ND	ND	ND	0.678	ND	ND	1.01	0.832
Apr-2000	ND	ND	0.023	ND	ND	1.54	1.22	ND	ND	ND	0.503	ND	ND	1.26	1.16
Oct-2000	ND	ND	0.022	ND	ND	1.26	1.27	ND	ND	ND	0.286	ND	ND	1.11	1.09
Apr-2001	ND	ND	0.024	ND	ND	1.48	NA	ND	ND	ND	0.556	NA	ND	1.16	NA
Sep-2001	ND	ND	0.027	ND	ND	1.83	1.38	ND	ND	ND	0.623	ND	ND	1.45	1.26
Mar-2002	ND	ND	0.026	ND	ND	1.67	1.53	ND	ND	ND	0.352	ND	ND	1.31	1.34
Sep-2002	ND	ND	0.035	ND	ND	1.95	1.44	ND	ND	0.013	4.57	ND	ND	1.45	1.33
Mar-2003	ND	ND	0.029	ND	ND	1.45	1.33	ND	ND	ND	0.257	ND	ND	1.46	1.28
Oct-2003	ND	ND	0.029	ND	ND	1.81	1.4	ND	ND	ND	0.68	ND	ND	1.46	1.36
Apr-2004	ND	ND	0.032	ND	ND	1.85	1.59	ND	ND	ND	0.599	ND	ND	1.74	1.67
Oct-2004	ND	ND	0.031	ND	ND	1.51	1.51	ND	ND	ND	0.609	ND	ND	1.53	1.52
Apr-2005	ND	ND	0.033	ND	ND	1.98	1.54	ND	ND	ND	0.998	ND	ND	1.62	1.58
Oct-2005	ND	ND	0.024	ND	ND	1.45	1.17	ND	ND	ND	0.491	ND	ND	1.32	1.23

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-04B***													
Mar-2006	ND	ND	0.019	ND	ND	1.19	1.07	ND	ND	ND	0.295	ND	ND	1.1	1.16
Sep-2006	ND	ND	0.023	ND	ND	1.57	1.39	ND	ND	ND	0.375	ND	ND	1.31	1.3
Mar-2007	ND	ND	0.031	ND	ND	1.36	1.28	ND	ND	ND	0.299	ND	ND	1.23	1.16
Sep-2007	ND	ND	0.027	ND	ND	1.4	1.4	ND	ND	ND	0.312	ND	ND	1.36	1.33
Mar-2008	ND	0.002	0.028	ND	ND	1.55	1.37	ND	ND	ND	0.63	ND	ND	1.35	1.24
Sep-2008	ND	ND	0.035	ND	ND	1.6	1.3	0.012	ND	ND	4.91	ND	ND	1.5	1.38
Mar-2009	ND	ND	0.029	ND	ND	1.58	1.5	ND	ND	ND	0.627	ND	ND	1.27	1.31
Oct-2009	ND	ND	0.031	ND	ND	1.79	1.44	ND	ND	ND	1.82	0.051	ND	1.44	1.46
Apr-2010	ND	ND	0.026	ND	ND	1.72	1.6	ND	ND	ND	0.816	ND	ND	1.27	1.52
Oct-2010	ND	ND	0.036	ND	ND	1.7	1.65	ND	ND	ND	0.659	ND	ND	1.67	1.64
Apr-2011	ND	ND	0.031	ND	ND	1.52	1.39	ND	ND	ND	0.543	ND	ND	1.59	1.41
Sep-2011	ND	ND	0.033	ND	ND	1.6	1.55	ND	ND	ND	ND	ND	ND	1.63	1.6
Mar-2012	ND	ND	0.032	ND	ND	1.55	1.57	ND	ND	ND	0.053	ND	ND	1.76	1.77
Sep-2012	ND	ND	0.0355	0.000114 J	ND	1.73	1.6	0.0018 J	0.0041 J	0.0015 J	0.108	0.0208 J	ND	1.61	1.57
Mar-2013	ND	ND	0.0368	0.000116 J	ND	1.81	1.8	0.002 J	0.004 J	0.0015 J	0.0309 J	0.0064 J	ND	1.66	1.66
Oct-2013	ND	ND	0.0404	ND	0.000097 J	1.77	1.69	0.0018 J	0.0042	0.0025	ND	ND	ND	1.62	1.64
Mar-2014	ND	ND	0.0319	ND	ND	2.2	2.06	0.0063 J	0.0035 J	0.0025 J	0.076	0.0586	ND	1.32	1.58
Oct-2014	0.000469 J	ND	0.0403	ND	0.000087 J	1.76	1.83	0.0025 J	0.0042 J	0.0021 J	0.0811	0.0111 J	ND	1.66	1.68
Apr-2015	0.0011 J	ND	0.0397	0.000169 J	0.000106 J	1.82	1.79	0.0016 J	0.0042 J	0.0019 J	0.0405 J	0.0639	ND	1.74	1.68
Nov-2015	ND	ND	0.0399	0.000126 J	0.000113 J	1.82	1.77	0.000929 J	0.0044 J	0.0017 J	0.0292 J	ND	0.000337 J	1.74	1.74
May-2016	ND	ND	0.0385	0.00013 J	ND	1.7	1.72	0.0019 J	0.004	0.0014 J	0.04 J	ND	ND	1.69	1.73
Oct-2016	ND	ND	0.0464	0.00015 J	ND	1.68	1.65	0.0022 J	0.0053	0.0019 J	0.035 J	ND	ND	1.63	1.65
May-2017	ND	ND	0.0528	0.00015 J	ND	2.08	1.83	0.0016 J	0.0055	0.002 J	ND	ND	ND	1.75	1.84
Oct-2017	ND	ND	0.0521	0.00013 J	0.00019 J	2.04	1.98	0.0015 J	0.0056	0.0021 J	0.0858 J	ND	ND	1.75	1.87

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-04B***													
May-2018	*ND*	*ND*	0.044	*0.00016 J*	*0.00012 J*	1.8	1.8	*0.0027 J*	0.0039	0.0064	*0.016 J*	*ND*	*0.000021 JB*	1.7	1.7
Nov-2018	*ND*	*ND*	0.036	*0.00013 J*	*0.000092 J*	1.8	1.8	*0.0034 J*	0.0031	*0.0013 J*	*0.017 J*	*ND*	*0.00021 J*	1.7	1.7
May-2019	*ND*	*ND*	0.034	*ND*	*ND*	1.8	1.8	*ND*	0.0036	*ND*	*ND*	*ND*	*ND*	1.6	1.6
Oct-2019	*0.00011 JB*	*ND*	0.038	*0.00015 J*	*0.00034 JB*	1.8	1.7	*0.0034 J*	0.0041	0.0022	*0.037 J*	*0.014 J*	*0.000079 JB*	1.8	1.8
May-2020	*0.000093 J*	*ND*	0.054	*0.00018 J*	*0.00025 J*	2.4	2.4	*0.0045 J*	0.0058	0.0031	*0.024 J*	*0.013 J*	*ND*	2.5	2.5
Oct-2020	*0.00049 J*	*ND*	0.055	*ND*	*ND*	2.4	2.2	*0.012 J*	0.006	*ND*	*0.024 J*	*0.013 J*	*ND*	2.2	2.1
Apr-2021	*ND*	*ND*	0.036	*ND*	*ND*	1.8	1.8	*0.0021 J*	*0.0037 J*	*ND*	*ND*	*ND*	*ND*	1.7	1.6
Oct-2021	*0.000071 JB*	*ND*	0.059	*0.00023 J*	*ND*	2.4	2.4	0.0027	0.0062	*0.002 J*	*0.029 J*	*0.013 J*	*ND*	2.5	2.4
May-2022	*ND*	*ND*	0.076	*0.00024 J*	*ND*	2.9	2.7	*0.0024 J*	0.0088	0.0025	*ND*	*ND*	*ND*	3.1	2.9
Oct-2022	*ND*	*ND*	0.077	*0.00022 J*	*ND*	3.2	3.4	0.0027	0.008	0.0032	*ND*	0.064	*ND*	3.1	3.2
May-2023	*0.00047 J*	*ND*	0.069	*0.00026 J*	*ND*	3.1	2.8	0.0026	0.0073	0.0028	*0.038 J*	*ND*	*ND*	2.9	2.5

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-04B*												
Nov-1993	0.07	NA	ND	NA	1.2	NA	ND	NA	1.6	NA	NA	NA	0.02
Apr-1994	0.008	NA	ND	NA	1.2	NA	ND	NA	2.6	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	1	NA	ND	ND	1.4	NA	ND	ND	0.02
Oct-1996	0.016	0.014	NA	ND	ND	ND	ND	ND	2.5	3.1	ND	ND	0.043
Apr-1997	0.019	0.01	ND	ND	2.9	2.5	ND	ND	1.6	1.7	ND	ND	0.045
Oct-1997	0.012	0.012	ND	ND	0.711	0.907	ND	ND	1.52	1.49	ND	ND	0.018
Apr-1998	0.017	0.014	ND	ND	1.59	0.81	ND	ND	1.57	2.88	ND	ND	ND
Apr-1999	0.027	0.013	NA	ND	1.6	1.27	ND	ND	1.63	1.47	ND	0.014	ND
Oct-1999	0.018	0.011	NA	ND	1.65	1.05	ND	ND	1.84	1.31	ND	ND	ND
Apr-2000	0.017	0.014	NA	ND	1.44	1.17	ND	ND	2.42	1.52	ND	ND	ND
Oct-2000	0.018	0.015	NA	ND	0.911	0.926	ND	ND	1.8	1.86	ND	ND	ND
Apr-2001	0.025	NA	NA	ND	1.77	NA	ND	ND	2.62	NA	ND	ND	ND
Sep-2001	0.027	0.016	NA	0.013	1.02	0.835	ND	ND	2.29	1.49	ND	ND	0.012
Mar-2002	0.021	0.019	NA	ND	0.839	0.869	ND	ND	2.03	1.56	ND	ND	0.013
Sep-2002	0.048	0.019	NA	ND	1.62	1.01	ND	ND	2.09	1.72	ND	ND	ND
Mar-2003	0.022	0.017	NA	ND	1.79	ND	ND	ND	1.74	1.73	ND	ND	ND
Oct-2003	0.023	0.018	NA	ND	1.81	1.88	ND	ND	2.25	1.54	ND	ND	ND
Apr-2004	0.025	0.023	ND	ND	1.41	1.48	ND	ND	1.81	1.43	ND	ND	0.038
Oct-2004	0.022	0.022	ND	ND	1.07	0.963	ND	ND	1.46	1.4	ND	ND	ND
Apr-2005	0.028	0.022	ND	ND	1.23	1.05	ND	ND	1.9	1.52	ND	ND	0.04
Oct-2005	0.018	0.015	ND	ND	0.937	0.81	ND	ND	1.96	1.15	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.574	0.567	ND	ND	0.949	0.942	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-04B***												
Sep-2006	0.019	0.018	*ND*	*ND*	0.985	0.957	*ND*	*ND*	1.031	1.12	*ND*	*ND*	*ND*
Mar-2007	0.018	0.016	*ND*	*ND*	0.676	0.589	*ND*	*ND*	1.29	1.21	*ND*	*ND*	*ND*
Sep-2007	0.022	0.021	*ND*	*ND*	0.894	0.796	*ND*	*ND*	1.39	1.35	*ND*	*ND*	*ND*
Mar-2008	0.023	0.02	*ND*	*ND*	1.01	0.862	*ND*	*ND*	1.64	1.42	*ND*	*ND*	*ND*
Sep-2008	0.057	0.023	*ND*	*ND*	1.1	0.806	*ND*	*ND*	1.41	1.29	*ND*	*ND*	0.024
Mar-2009	0.027	0.024	*ND*	*ND*	0.856	0.823	*ND*	*ND*	1.51	1.47	*ND*	*ND*	0.011
Oct-2009	0.051	0.026	*ND*	*ND*	0.835	0.757	*ND*	*ND*	1.45	1.7	*ND*	*ND*	0.03
Apr-2010	0.021	0.019	*ND*	*ND*	1.18	1.33	*ND*	*ND*	1.91	1.52	*ND*	*ND*	0.022
Oct-2010	0.033	0.029	*ND*	*ND*	1.11	0.936	*ND*	*ND*	1.46	1.43	*ND*	*ND*	*ND*
Apr-2011	0.025	0.021	*ND*	*ND*	1.16	1.07	*ND*	*ND*	1.58	1.58	*ND*	*ND*	*ND*
Sep-2011	0.03	0.029	*ND*	*ND*	0.867	0.955	*ND*	*ND*	1.65	1.65	*ND*	*ND*	*ND*
Mar-2012	0.025	0.025	*ND*	*ND*	0.93	0.913	*ND*	*ND*	1.49	1.5	*ND*	*ND*	*ND*
Sep-2012	0.0364	0.0344	*ND*	*0.0035 J*	0.959	0.884	*ND*	*ND*	1.69	1.69	*ND*	*ND*	*0.007 J*
Mar-2013	0.0368	0.0358	*0.000061 J*	*0.0035 J*	0.938	0.971	*ND*	*ND*	1.82	1.86	*ND*	*ND*	0.0131
Oct-2013	0.0419	0.041	*ND*	0.0036	0.881	0.862	*ND*	*ND*	1.94	1.96	*ND*	*0.0012 J*	0.0168
Mar-2014	0.0319	0.0323	*ND*	*0.0028 J*	1.16	1.12	*ND*	*ND*	1.36	1.89	*ND*	*0.0037 J*	*0.006 J*
Oct-2014	0.0461	0.0462	*ND*	*0.004 J*	0.991	0.984	*ND*	*ND*	1.8	1.82	*ND*	*ND*	*0.0086 J*
Apr-2015	0.0426	0.0405	*ND*	*0.0036 J*	1.08	1.02	*0.0011 J*	*ND*	1.83	1.73	*0.00079 J*	*ND*	0.0117
Nov-2015	0.0465	0.0458	*ND*	*0.0033 J*	0.907	0.891	*ND*	*ND*	1.73	1.74	*0.000083 J*	*ND*	0.0107
May-2016	0.0428	0.0456	*ND*	*0.0035 J*	0.943	0.954	*ND*	*ND*	1.64	1.74	*ND*	*ND*	*ND*
Oct-2016	0.0638	0.0613	*ND*	0.0044	0.935	0.949	*ND*	*ND*	1.7	1.76	*ND*	*ND*	*0.0059 J*
May-2017	0.0649	0.0629	*ND*	*0.0035 J*	0.9	0.936	*ND*	*ND*	1.81	1.92	*ND*	*ND*	*0.0068 JB*
Oct-2017	0.0662	0.0713	*0.00012 J*	*0.0039 JB*	0.913	0.999	*ND*	*ND*	1.78	1.89	*ND*	*ND*	*0.0057 J*
May-2018	0.057	0.045	**0.0025**	0.003	*0.95 J*	*0.98 J*	*0.00057 J*	*ND*	*1.7 J*	*1.7 J*	*0.00025 J*	*ND*	0.029

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-04B***												
Nov-2018	0.036	0.036	*ND*	0.0034	*1.2 J*	*ND*	*0.00024 J*	*ND*	*2 JB*	*1.6 J*	*ND*	*ND*	0.0063
May-2019	0.049	0.032	*ND*	0.0039	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0029	0.0051
Oct-2019	0.043	0.041	*ND*	0.0034	*ND*	*ND*	*ND*	*ND*	*ND*	*1.9 J*	*ND*	*ND*	0.013 B
May-2020	0.063	0.061	0.0002 B	0.0049	*ND*	*1.1 J*	*ND*	*ND*	*2.4 J*	*2.3 J*	*ND*	0.0031	0.012
Oct-2020	0.064	0.058	*ND*	0.006	*ND*	*ND*	*ND*	*ND*	*ND*	*1.7 J*	*ND*	*0.0024 J*	*ND*
Apr-2021	0.039	0.04	*ND*	*0.0037 J*	1.1	1.1	*ND*	*ND*	1.7	1.7	*ND*	*ND*	*0.0043 J*
Oct-2021	0.083	0.08	*0.00017 J*	0.0046	0.98	0.96	*ND*	*ND*	2.5	2.5	*ND*	*ND*	0.0073
May-2022	0.094	0.093	0.00082 M1	0.0063	1.1	1.1	*ND*	*ND*	3.3	3.1	*ND*	*ND*	0.0098
Oct-2022	0.11	0.11	*ND*	0.0052	1.2	1.2	*ND*	*ND*	4.1	4.4	*ND*	*ND*	0.013
May-2023	0.1	0.089	0.00086	0.0055	1.3 B	0.99	*ND*	*ND*	3.1 B	2.8	*ND*	*ND*	0.0099

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04B*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.9	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04B*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04B*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.9 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04B***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04B***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04B***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-04B*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04B***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05***											
Nov-1993	ND	ND	0.1	ND	2.2	ND	ND	5.24	18	ND	ND	2.86
Apr-1994	ND	ND	0.1	ND	2.4	ND	ND	5.03	18.2	ND	44	0.92
Aug-1994	7.5	7.5	ND	ND	2.2	0.3	ND	5.7	17.8	ND	ND	2.92
Sep-1994	ND	ND	ND	ND	2.5	0.2	ND	5.3	16.2	2.8	12	3.4
Nov-1994	ND	ND	ND	ND	2.2	ND	ND	5	16.5	1.9	40	3.3
Apr-1995	ND	ND	ND	43.7	2.2	ND	ND	5.3	17.2	ND	16	2.6
Apr-1997	ND	3	ND	ND	1.5	0.08	ND	NA	NA	ND	42	3.8
Oct-1997	ND	ND	0.53	ND	1.83	0.138	ND	5.56	18.62	ND	ND	7.5
Apr-1998	2	2	0.27	ND	1.91	0.15	ND	6.93	18.02	0.68	ND	3.2
Apr-1999	ND	ND	0.28	ND	2.69	ND	ND	5.43	18.79	ND	32	3.1
Oct-1999	ND	ND	0.08	ND	3.2	0.159	ND	5.38	18.07	ND	23	3.5
Apr-2000	4	4	ND	ND	1.86	ND	ND	6.76	14	ND	ND	4.2
Oct-2000	3.7	NA	ND	ND	2.43	0.8	ND	5.43	19.68	1.72	22	3.31
Apr-2001	2.8	NA	ND	ND	1.58	ND	ND	NA	NA	ND	13	3.97
Mar-2002	ND	ND	ND	ND	4.46	0.337	ND	5.5	19	1.58	33	3.8
Sep-2002	3	3	ND	ND	2.31	ND	ND	5.6	20.7	ND	33	4.36
Mar-2003	3.3	3.3	ND	ND	2.79	ND	ND	5.6	23.4	ND	20	3.23
Oct-2003	3.4	3.4	ND	11	2.24	0.122	ND	4.5	21	ND	51	4.28
Apr-2004	3.6	3.6	ND	ND	2.83	0.12	ND	5.5	19.9	ND	16	4.79
Oct-2004	3.4	3.4	ND	ND	2.83	0.1	ND	5.6	20	ND	13	6.17
Apr-2005	ND	ND	ND	ND	1.56	0.11	ND	4.6	15.7	4.59	46	1.79
Oct-2005	4.8	4.8	ND	ND	2.79	0.1	ND	5.5	15.3	ND	22	3.81
Mar-2006	4.6	4.6	ND	10	2.43	0.12	ND	4.8	17.7	ND	17	2.81
Sep-2006	4	4	ND	ND	2.29	0.11	ND	5.2	15.4	ND	20	3.49
Mar-2007	3.8	3.8	ND	ND	2.42	0.12	ND	5.2	15.8	ND	ND	2.65
Sep-2007	3.8	3.8	0.38	ND	2.16	ND	ND	5.3	18.6	ND	10	2.98
Mar-2008	5.1	5.1	ND	ND	2.57	0.1	ND	5.2	16.6	ND	20	2.7
Sep-2008	4.4	4.4	0.27	ND	2.33	0.07	ND	5.3	15.3	ND	33	3
Mar-2009	5.2	5.2	ND	ND	2.25	ND	ND	5	19	ND	20	3.31
Oct-2009	5.1	5.1	ND	ND	2.67	0.11	ND	5.4	19.5	ND	26	4.41
Apr-2010	4.2	4.2	ND	ND	2.77	0.1	ND	4.7	19.1	ND	31	3
Oct-2010	4.7	4.7	ND	ND	3.32	ND	ND	4.7	19.4	ND	10	3.77
Apr-2011	6	6	ND	ND	3.13	0.1	ND	5	17.6	ND	36	3.7
Sep-2011	5.8	5.8	0.23	ND	2.54	0.08	ND	4.8	17.2	ND	17	3.31
Mar-2012	4.7	4.7	ND	ND	2.81	0.07	ND	4.7	17.2	ND	ND	3.83
Sep-2012	4.88	4.88	ND	ND	2.76	0.1	ND	4.3	18.1	ND	ND	3.83
Mar-2013	6.4	6.4	0.061 J	ND	2.82	0.0898	ND	5.7	17.5	0.268 J	ND	3.84

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05***											
Oct-2013	6.68	6.68	ND	ND	2.72	0.0764	ND	5.4	17.8	ND	ND	3.63
Mar-2014	5.76	5.76	ND	6 J	3.21	0.068	ND	5.6	18.8	ND	30	4.53
Oct-2014	2.2	2.2	ND	13	3.74	0.102	ND	5.1	22.7	ND	ND	4.45
Apr-2015	9.8	9.8	ND	ND	3.83	0.0738	ND	4.2	24.9	ND	ND	4.39
Nov-2015	4.64	4.64	ND	ND	3.84	0.0896	ND	5.9	35.9	ND	18 J	4.41
May-2016	4.48	4.48	ND	10	3.73	0.0895	ND	5.7	31	ND	16 J	4.3
Oct-2016	3.88	3.88	ND	ND	3.33	NA	NA	5.6	31.6	0.593 J	23 J	4
May-2017	5.32	5.32	ND	ND	3.7	0.103	ND	5.8	43.5	ND	12 J	4.4
Oct-2017	10.1	10.1	ND	ND	3.83	0.0896	ND	5.9	48.9	ND	34	5
May-2018	16	16	ND	5.7 J	4.8	0.093 J	ND	5.9	50.2	ND	ND	6.4
Nov-2018	24 ML	24	ND	ND	6.8	ND	0.0079 J	6.46	105.2	ND	36	14.7
May-2019	36	NA	ND	ND	10.2	ND	0.012	6.36	99.3	ND	77	15.6
Oct-2019	2.5 JH1	NA	ND	ND	7.3	0.11	0.0071 J	6.27	85	ND	56	9.1
May-2020	22	NA	ND	ND	7.5	ND	ND	5.69	91.9	ND	33	12.3
Oct-2020	24	NA	ND	7 J	6.7	0.048 J	ND	5.76	86.8	ND	47	11.3
Apr-2021	20	NA	ND	ND	6.2	0.074 J	ND	6.38	105.1	ND	ND	10
Oct-2021	36	NA	ND	6.1 J	7.2	ND	ND	6.59	156.7	ND	30	14
May-2022	26	NA	ND	ND	7.7	ND	ND	6.88	208.8	ND	42 H1	13.4 N3
Oct-2022	38	NA	ND	8.4 J	10.1	ND	0.0067 J	6.52	149.1	ND	97	12.5 N3
May-2023	52	NA	ND	ND	7.5	ND	ND	6.58	143.2	ND	49	11.5 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-05*													
Nov-1993	NA	ND	ND	NA	ND	0.6	NA	ND	NA	ND	14.6	9.6	ND	0.33	NA
Apr-1994	NA	ND	ND	NA	ND	0.31	NA	ND	NA	ND	1.5	0.16	ND	1.1	NA
Aug-1994	NA	ND	ND	NA	ND	0.74	NA	ND	NA	ND	10.2	0.73	**0.016**	0.26	NA
Sep-1994	NA	ND	ND	NA	ND	0.85	NA	ND	NA	ND	0.84	0.17	ND	0.3	NA
Nov-1994	NA	ND	ND	NA	ND	0.75	NA	ND	NA	0.02	2.7	0.18	0.009	0.35	NA
Apr-1995	ND	ND	0.9	ND	ND	0.53	NA	ND	ND	ND	2.8	0.2	0.005	0.32	NA
Oct-1996	ND	ND	0.019	ND	ND	0.73	0.72	ND	ND	ND	14	1.5	ND	ND	ND
Apr-1997	ND	ND	0.01	ND	ND	0.83	0.8	ND	ND	ND	2.6	0.22	0.005	ND	ND
Oct-1997	ND	ND	0.01	ND	0.004	0.642	1.5	ND	ND	ND	6.76	2.38	ND	0.293	0.456
Apr-1998	ND	ND	ND	ND	ND	0.798	0.794	ND	ND	ND	27.9	0.544	ND	0.291	0.287
Apr-1999	ND	ND	0.01	ND	ND	0.762	0.728	ND	ND	ND	46.2	0.622	ND	0.296	0.278
Oct-1999	ND	ND	0.011	ND	ND	1.06	0.711	ND	ND	ND	29	0.62	ND	0.338	0.262
Apr-2000	ND	ND	0.012	ND	ND	1.07	0.658	ND	ND	ND	37.3	0.475	ND	0.368	0.271
Oct-2000	ND	ND	ND	ND	ND	0.793	0.747	ND	ND	ND	41.1	0.618	ND	0.322	0.3
Apr-2001	ND	ND	0.011	ND	ND	1.02	NA	ND	ND	ND	28.1	NA	0.006	0.346	NA
Mar-2002	ND	ND	ND	ND	ND	0.973	0.79	0.014	ND	0.039	50.1	0.789	0.011	0.333	0.317
Sep-2002	ND	ND	0.011	ND	ND	1.16	0.722	ND	ND	0.022	31.9	0.816	0.007	0.356	0.309
Mar-2003	ND	ND	ND	ND	ND	0.767	0.723	ND	ND	0.017	5.11	0.967	0.01	0.321	0.297
Oct-2003	ND	ND	0.01	ND	ND	1.11	0.757	ND	ND	ND	22.3	0.901	0.007	0.367	0.317
Apr-2004	ND	ND	0.013	ND	ND	1.21	0.761	ND	ND	0.012	31.7	0.889	0.006	0.43	0.326
Oct-2004	ND	ND	0.01	ND	ND	1.76	0.797	ND	ND	ND	24.2	0.924	0.006	0.431	0.338

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05***													
Apr-2005	ND	ND	ND	ND	ND	0.454	0.491	ND	ND	ND	ND	ND	ND	0.16	0.174
Oct-2005	ND	ND	0.01	ND	ND	1.03	0.719	ND	ND	0.022	45.5	0.602	0.009	0.312	0.292
Mar-2006	ND	ND	ND	ND	ND	0.695	0.504	ND	ND	0.01	105	0.819	0.011	0.26	0.208
Sep-2006	ND	ND	0.01	ND	ND	0.908	0.612	ND	ND	0.013	68.8	0.899	0.011	0.296	0.266
Mar-2007	ND	ND	0.012	ND	ND	0.642	0.554	ND	ND	ND	34.1	0.622	0.009	0.256	0.226
Sep-2007	ND	ND	ND	ND	ND	0.739	0.64	ND	ND	ND	21.1	0.7	0.006	0.275	0.236
Mar-2008	ND	ND	ND	ND	ND	0.631	0.631	ND	ND	ND	11.5	0.735	0.004	0.271	0.275
Sep-2008	ND	ND	0.007	ND	ND	0.699	0.509	ND	ND	ND	22.4	0.601	0.004	0.314	0.278
Mar-2009	ND	ND	0.011	ND	ND	0.787	0.697	ND	ND	ND	81.6	0.914	0.012	0.326	0.288
Oct-2009	ND	ND	ND	ND	ND	1.15	0.839	ND	ND	ND	26.3	2.54	0.003	0.374	0.344
Apr-2010	ND	ND	ND	ND	ND	0.671	0.584	ND	ND	ND	34.9	0.762	0.004	0.304	0.292
Oct-2010	ND	ND	ND	ND	ND	0.859	0.811	ND	ND	ND	51.6	1.05	0.008	0.396	0.374
Apr-2011	ND	ND	ND	ND	ND	0.889	0.803	ND	ND	ND	13.9	1.2	0.005	0.36	0.334
Sep-2011	ND	ND	ND	ND	ND	0.82	0.82	ND	ND	ND	15.2	1.72	0.005	0.306	0.327
Mar-2012	ND	ND	ND	ND	ND	0.829	0.824	ND	ND	ND	11.4	1.36	0.005	0.428	0.415
Sep-2012	ND	ND	0.0083 J	ND	ND	0.971	0.958	ND	0.000838 J	0.0011 J	2.43	1.42	0.0036	0.341	0.311
Mar-2013	ND	ND	0.0087 J	ND	ND	1	0.961	0.0018 J	0.000789 J	0.002 J	6.24	1.95	0.003	0.326	0.283
Oct-2013	ND	ND	0.0091	ND	ND	0.904	0.885	0.0011 J	0.000728 J	0.000891 J	1.58	1.48	0.0044	0.334	0.333
Mar-2014	ND	ND	0.0081 J	ND	ND	1.33	1.31	0.0064 J	0.000768 J	0.0011 J	5.65	1.83	0.0047	0.294	0.372
Oct-2014	0.000461 J	ND	0.0104	ND	ND	1.12	1.13	0.000704 J	0.000804 J	0.000686 J	4.25	2.54	0.0029	0.401	0.406
Apr-2015	0.0011 J	ND	0.0113	ND	ND	1.06	1.13	0.0014 J	0.000967 J	0.0018 J	11.2	2.16	0.0044	0.425	0.442
Nov-2015	ND	ND	0.0109	ND	ND	1.05	1.02	0.000637 J	0.000944 J	ND	2.53	1.76	0.002	0.432	0.425
May-2016	ND	ND	0.0108	ND	ND	1.02	1.1	0.00084 J	0.00086 J	0.00054 J	2.93	2.42	0.0022	0.43	0.442
Oct-2016	ND	ND	0.0118	ND	ND	0.922	0.91	0.0014 J	0.00088 J	0.0012 J	5.81	2.24	0.0028	0.407	0.409

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05***													
May-2017	*ND*	*ND*	0.011	*ND*	*ND*	1.1	1.13	*0.002 J*	*0.00093 J*	*ND*	2.76	2.59	*0.0018 J*	0.398	0.427
Oct-2017	*ND*	*ND*	0.0123	*ND*	*ND*	1.26	1.22	*ND*	*0.00087 J*	*ND*	4.82	4.01	*0.0014 J*	0.452	0.44
May-2018	*ND*	*ND*	0.015	*0.000077 J*	*0.000046 J*	1.6	1.5	*0.0025 J*	0.0011	0.0056	7.7	5.3	0.0012	*0.55 J*	*0.52 J*
Nov-2018	*ND*	*ND*	0.025	*0.00015 J*	*ND*	4.4	4.2	*0.0059 J*	0.00098	0.0026	49.7 M1	22.3 M1	*0.0009 J*	*0.92 J*	*0.92 J*
May-2019	*ND*	*ND*	0.027	*ND*	*ND*	4.6	4.6	*ND*	0.0013	0.0028	34.5 M1	25.8 M1	*ND*	1	1
Oct-2019	*0.000056 J*	*ND*	0.021	*0.000073 J*	*0.00018 J*	2.4	2.5	*0.0042 J*	0.0014	*0.0014 J*	23	13.5	*0.00086 J*	0.73	*0.7 J*
May-2020	*ND*	*ND*	0.024	*ND*	*ND*	3.6	3.6	**0.01 D6**	*0.0015 J*	0.012	29 ML	19.7	*ND*	0.82	0.85
Oct-2020	*0.00048 J*	*ND*	0.021	*ND*	*ND*	3.2	3.3	*0.011 J*	*0.0013 J*	*ND*	19.3	18.2	*ND*	0.79	*0.81 J*
Apr-2021	*ND*	*ND*	0.018	*ND*	*ND*	2.7	2.8	*0.0013 J*	*0.00054 J*	*ND*	18.7	17.9	*ND*	0.78	0.76
Oct-2021	*0.00006 JB*	*ND*	0.023	*ND*	*ND*	3.8	3.6	*0.0015 J*	*0.00088 J*	*0.00045 J*	27.4	25.2	*0.00015 J*	1.1	1
May-2022	*ND*	*ND*	0.028 M1	*ND*	*ND*	3.5	3.4	*0.0022 JR1M1*	*0.0011 JR1M1*	*0.00066 JR1M1*	29.4 M1	27.3 M1	*ND*	1.1	1.1
Oct-2022	*ND*	*ND*	0.026	*ND*	*ND*	3.3	3.7	*0.0017 J*	*0.00084 J*	*ND*	26.6	27.7	*ND*	1	1.1
May-2023	*ND*	*ND*	0.023	*ND*	*ND*	3.3	3.3	0.0031	*0.00082 J*	*0.00074 J*	27.9	27.2	*ND*	1	1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-05*												
Nov-1993	0.06	NA	ND	NA	0.37	NA	ND	NA	1.2	NA	NA	NA	ND
Apr-1994	0.18	NA	ND	NA	ND	NA	ND	NA	1.6	NA	NA	NA	ND
Aug-1994	0.02	NA	ND	NA	0.48	NA	ND	NA	0.88	NA	NA	NA	ND
Sep-1994	0.01	NA	ND	NA	0.38	NA	ND	NA	1.1	NA	NA	NA	0.03
Nov-1994	0.03	NA	ND	NA	0.53	NA	ND	NA	1.1	NA	NA	NA	0.01
Apr-1995	ND	NA	ND	ND	0.53	NA	ND	0.01	0.96	NA	ND	ND	0.02
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	1.2	1.3	ND	ND	0.026
Apr-1997	0.011	0.01	ND	ND	ND	ND	ND	ND	1.6	1.4	ND	ND	0.024
Oct-1997	0.026	0.03	0.0005	ND	ND	ND	ND	ND	1.35	1.35	ND	ND	0.016
Apr-1998	0.015	0.016	ND	ND	ND	ND	ND	ND	1.11	1.11	ND	ND	ND
Apr-1999	0.01	0.017	NA	ND	ND	ND	ND	ND	1.09	1.02	ND	ND	ND
Oct-1999	0.014	0.016	NA	ND	0.879	0.631	ND	ND	1.38	0.952	ND	ND	ND
Apr-2000	0.019	0.014	NA	ND	ND	ND	ND	ND	3.38	1.03	ND	ND	0.018
Oct-2000	ND	0.018	NA	ND	0.455	0.217	ND	ND	1.06	1.06	ND	ND	ND
Apr-2001	0.015	NA	NA	ND	1.16	NA	ND	ND	2.31	NA	ND	ND	ND
Mar-2002	0.015	0.018	NA	0.012	0.651	0.751	ND	ND	1.78	1.17	ND	ND	0.016
Sep-2002	0.016	0.019	NA	ND	1.43	ND	ND	ND	1.7	1.12	ND	ND	ND
Mar-2003	0.02	0.018	NA	ND	0.792	ND	ND	ND	1.18	1.16	ND	ND	ND
Oct-2003	0.014	0.018	NA	ND	0.663	0.638	ND	ND	1.52	1.16	ND	ND	ND
Apr-2004	0.015	0.019	ND	ND	0.753	ND	ND	ND	1.74	1.24	ND	ND	0.044
Oct-2004	0.02	0.018	ND	ND	1.15	ND	ND	ND	1.83	0.991	ND	ND	0.055
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	0.949	0.955	ND	ND	0.019

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05***												
Oct-2005	0.02	0.013	ND	ND	ND	ND	ND	ND	1.76	1.08	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	0.973	0.827	ND	ND	ND
Sep-2006	0.021	0.016	ND	ND	0.508	ND	ND	ND	1.14	0.883	ND	ND	ND
Mar-2007	0.019	0.012	ND	ND	ND	ND	ND	ND	0.981	0.81	ND	ND	ND
Sep-2007	0.023	0.015	ND	ND	ND	ND	ND	ND	0.967	0.953	ND	ND	ND
Mar-2008	0.017	0.014	ND	ND	ND	ND	ND	ND	0.963	0.976	ND	ND	ND
Sep-2008	0.017	0.013	ND	ND	ND	ND	ND	ND	0.964	0.899	ND	ND	0.016
Mar-2009	0.026	0.015	ND	ND	ND	ND	ND	ND	1.14	1.08	ND	ND	0.016
Oct-2009	0.04	0.036	ND	ND	ND	ND	ND	ND	1.24	1.17	ND	ND	0.027
Apr-2010	0.023	0.013	ND	ND	ND	ND	ND	ND	1.24	1.22	ND	ND	ND
Oct-2010	0.03	0.018	ND	ND	ND	ND	ND	ND	1.27	1.22	ND	ND	ND
Apr-2011	0.025	0.02	ND	ND	ND	ND	ND	ND	1.32	1.37	ND	ND	0.01
Sep-2011	0.03	0.027	ND	ND	ND	ND	ND	ND	1.27	1.28	ND	ND	ND
Mar-2012	0.024	0.022	ND	ND	ND	ND	ND	ND	1.29	1.26	ND	ND	0.011
Sep-2012	0.0343	0.0323	ND	0.0016 J	0.458 J	0.551	ND	ND	1.21	1.14	ND	ND	0.0043 J
Mar-2013	0.0306	0.0327	0.000055 J	0.0015 J	0.505	0.459 J	ND	ND	1.25	1.12	ND	ND	0.0624
Oct-2013	0.0274	0.0285	ND	0.0019 J	0.427	0.427	ND	ND	1.19	1.22	ND	0.0011 J	0.0121
Mar-2014	0.0224	0.0243	ND	0.0015 J	0.529	0.515	ND	ND	1.01	1.32	ND	0.0026 J	0.0041 J
Oct-2014	0.0369	0.0387	ND	0.0016 J	0.518	0.53	0.001 J	ND	1.53	1.56	ND	ND	0.0053 J
Apr-2015	0.0303	0.0323	ND	0.0019 J	0.506	0.542	ND	ND	1.57	1.66	ND	ND	0.0069 J
Nov-2015	0.0303	0.0265	ND	0.0015 J	0.508	0.487 J	ND	ND	1.75	1.74	0.000064 J	ND	0.0027 J
May-2016	0.0294	0.0324	ND	0.0016 J	0.528	0.512	ND	ND	1.58	1.6	ND	ND	0.0078 J
Oct-2016	0.0278	0.0271	ND	0.0024 J	0.5	0.489	ND	ND	1.48	1.52	ND	ND	ND
May-2017	0.0298	0.0294	ND	0.0021 J	0.495	0.495	ND	ND	1.45	1.55	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05***												
Oct-2017	0.0416	0.0396	*ND*	*0.0013 J*	0.516	0.538	*ND*	*ND*	1.63	1.65	*ND*	*ND*	*ND*
May-2018	0.049	0.04	*ND*	0.0022	*ND*	*ND*	*ND*	*ND*	*1.9 J*	*1.8 J*	*0.000077 J*	*ND*	*0.0047 J*
Nov-2018	0.18	0.17	*ND*	0.0049	*ND*	*1 J*	*ND*	*ND*	*2.8 J*	*2.7 J*	*ND*	*ND*	0.0065
May-2019	0.17	0.16	*ND*	0.0032	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0075
Oct-2019	0.085	0.085	*ND*	0.003	*ND*	*ND*	*ND*	*ND*	*2.8 J*	*2.8 J*	*ND*	0.0056	0.015
May-2020	0.11	0.11	*ND*	*0.009 J*	1	0.89	*ND*	*ND*	3	3.1	*ND*	*ND*	*ND*
Oct-2020	0.14	0.12	*ND*	0.0037	*ND*	*ND*	*0.0017 J*	*ND*	*2.4 J*	*2.2 J*	*ND*	*0.0031 J*	*ND*
Apr-2021	0.12	0.12	*0.00005 J*	*0.0021 J*	0.72	0.75	*ND*	*ND*	2.5	2.5	*ND*	*ND*	*ND*
Oct-2021	0.16	0.16	*ND*	*0.0023 J*	0.94	0.92	*ND*	*ND*	3.4	3.3	*ND*	*ND*	*ND*
May-2022	0.17	0.16	0.00033 M1	0.0036 M1	0.99	0.93	*ND*	*ND*	3.5	3.4	*ND*	*ND*	*ND*
Oct-2022	0.16	0.17	*ND*	*0.0023 J*	0.8	0.95	*ND*	*ND*	3.5	3.9	*ND*	*ND*	*0.005 J*
May-2023	0.18	0.18	*ND*	0.003	0.87	0.86	*ND*	*ND*	3.6	3.5	*ND*	*ND*	0.0064

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.8	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4 J	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05*																
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6 J	ND
Nov-2018	ND	ND	ND	ND	1.4 L2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2 JBIH	ND
May-2019	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.58	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-05*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05***															
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.46 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.39 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.51 J*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05***															
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.5 J	0.6 J
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.5 J	0.5 J
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.5 J	0.7 J
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.6 J	0.9 J
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	1.9
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	3.1 CLN3
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	4.9 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	2.3
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	2.3
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	2.5	2.5
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.113 J	ND	0.544 J	ND	ND	ND	1.25 J	4.18 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	4	4.1
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	3.4	3.7
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	2.8	3.1
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	1.6	2.4

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	1.2	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05***															
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.5 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.483 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05A***											
Nov-1993	6	6	ND	ND	2.5	ND	ND	5.43	18.1	ND	26	1.98
Apr-1994	ND	ND	0.1	ND	2.4	ND	ND	5	19.3	ND	48	0.75
Apr-1995	5	5	0.2	ND	2.9	ND	ND	5.4	21.8	2.3	ND	2.4
Apr-1997	ND	2	ND	ND	3	0.09	ND	NA	NA	ND	ND	7.8
Oct-1997	4	4	0.28	ND	ND	ND	ND	5.93	19.8	ND	ND	5
Apr-1998	ND	ND	ND	ND	2.24	ND	ND	6	62.1	ND	ND	3.1
Apr-1999	ND	ND	0.19	ND	4.41	ND	ND	5.32	19.8	ND	23	2.9
Oct-1999	20	20	0.08	ND	3.24	ND	ND	5.16	19.5	ND	18	3.1
Apr-2000	1	1	ND	ND	3.12	ND	ND	5.61	17	ND	19	3
Oct-2000	2.7	NA	ND	ND	5.19	ND	ND	5.26	21.8	5.48	25	3.12
Apr-2001	1.9	NA	ND	ND	3.51	0.498	ND	NA	NA	ND	ND	3.23
Sep-2001	1.9	1.9	ND	ND	4.28	ND	ND	5.49	25	ND	27	3.27
Mar-2002	ND	ND	ND	ND	3.28	ND	ND	5.5	22	ND	36	2.99
Sep-2002	3	3	ND	ND	2.96	ND	ND	5.5	24.5	ND	38	4.99
Mar-2003	4.2	4.2	ND	ND	3.59	ND	ND	5.3	25.1	ND	25	3.06
Oct-2003	3.6	3.6	ND	ND	3.23	0.093	ND	4.8	28.5	ND	62	10.3
Apr-2004	3.8	3.8	ND	ND	3.46	0.07	ND	5.5	23.5	ND	20	4.72
Oct-2004	3.6	3.6	ND	ND	36	0.74	ND	5.2	22.8	4.56	36	3.8
Apr-2005	3.6	3.6	ND	ND	3.27	0.08	ND	5.3	22.4	ND	62	4.39
Oct-2005	3.7	3.7	ND	ND	3.95	0.09	ND	5.3	18	ND	33	4.04
Mar-2006	4.7	4.7	ND	ND	3.83	0.11	ND	4.6	24.2	ND	36	3.64
Sep-2006	4.4	4.4	ND	ND	3.88	0.1	ND	5.2	24.1	ND	31	3.44
Mar-2007	4.7	4.7	0.38	ND	4.05	0.14	ND	5.4	25.5	ND	27	3.21
Sep-2007	3.4	3.4	0.35	ND	3.86	0.16	ND	5.3	26.6	ND	94	3.53
Mar-2008	4	4	ND	ND	4.03	0.15	ND	5.7	28.1	ND	18	3.4
Sep-2008	4	4	ND	14	4.22	0.1	ND	5.3	27.1	ND	23	3.7
Mar-2009	13	13	ND	ND	4.14	0.11	ND	4.5	26.6	ND	31	3.51
Oct-2009	3.9	3.9	ND	ND	4.08	0.13	ND	4.7	24	ND	44	4.3
Apr-2010	4.5	4.5	ND	ND	3.61	0.13	ND	5.2	25.8	ND	25	3
Oct-2010	3.2	3.2	ND	ND	4.2	0.09	ND	4.5	25.6	ND	ND	3.45
Apr-2011	4.4	4.4	ND	ND	3.88	0.11	ND	4.7	25.6	ND	30	3.65
Sep-2011	4.8	4.8	ND	ND	4.25	0.1	ND	5.5	20.1	ND	25	3.67
Mar-2012	3.8	3.8	ND	ND	4.14	0.12	ND	4.5	22.3	ND	ND	3.77
Sep-2012	3.32	3.32	ND	ND	4.24	0.142	ND	4.2	23.3	ND	27	3.74
Mar-2013	4.68	4.68	0.096 J	ND	4.58	0.127	ND	5.3	26	0.562 J	25	4.07
Oct-2013	5.12	5.12	ND	ND	4.66	0.119	ND	5.8	28.8	0.581 J	ND	4.29
Mar-2014	4.88	4.88	ND	ND	4.77	0.103	ND	5.3	26.6	0.869 J	ND	5.22

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05A***											
Oct-2014	ND	ND	ND	10	4.92	0.148	ND	4.6	27.3	ND	ND	5.18
Apr-2015	4.84	4.84	ND	ND	5.04	0.171	ND	4.2	27.2	0.515 J	ND	5.43
Nov-2015	3.48	3.48	ND	ND	5.05	0.236	ND	5.4	53.6	ND	12 J	5.52
May-2016	4.44	4.44	ND	ND	4.92	0.263	ND	5.6	36.6	ND	27	5.1
Oct-2016	2.8	2.8	ND	ND	5.3	NA	NA	5.2	43	1.42	31	5.5
May-2017	2.64	2.64	ND	7 J	5.1	0.314	ND	5.3	50.2	1.08	22 J	6.2
Oct-2017	5.76	5.76	ND	ND	5.13	0.354	ND	5.6	53.7	0.753 J	34	5.8
May-2018	22	22	ND	ND	4.3	0.32	0.0063 J	6.1	61.4	ND	10	6.1
Nov-2018	22	22	ND	5.7 J	5.4	ND	0.013	6.58	149.6	ND	32	6.3
May-2019	14	NA	ND	ND	4.9	ND	0.033	6.69	98.8	ND	45	7.8
Oct-2019	2.5 JH1	NA	ND	10.4 JMH	4.6	0.079 J	0.016	6.19	153.5	ND	65	7.1
May-2020	6 J	NA	ND	9.1 J	4.9	ND	0.0071 J	5.83	157.7	ND	18	6.2
Oct-2020	8 J	NA	ND	9.3 J	5	ND	0.014	5.8	142.4	ND	44	7.5
Apr-2021	14	NA	ND	8.3 J	5.7	0.077 J	ND	7.02	187.8	ND	ND	7.35
Oct-2021	24	NA	ND	10.5 J	5.5	ND	ND	6.92	212.5	ND	ND	7.95
May-2022	14	NA	ND	7.9 J	4.8	ND	0.017	6.47	153.3	ND	14 H1	7.7 N3
Oct-2022	20	NA	ND	15.2 J	9.3	ND	0.024	6.59	181.9	ND	39	6.9 N3
May-2023	32	NA	ND	20.5 J	4.7	0.055 J	0.013	6.62	169.3	ND	56	8.9 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05A***													
Nov-1993	NA	ND	ND	NA	ND	0.38	NA	ND	NA	ND	1.5	1	ND	0.25	NA
Apr-1994	NA	ND	ND	NA	ND	0.24	NA	ND	NA	ND	1.7	0.84	ND	4.3	NA
Apr-1995	ND	ND	0.6	ND	ND	0.5	NA	ND	ND	ND	3	1.3	ND	0.29	NA
Oct-1996	ND	ND	0.021	ND	ND	0.73	0.93	ND	ND	ND	8.2	3.7	ND	ND	ND
Apr-1997	ND	ND	0.016	ND	ND	1.6	0.84	ND	ND	ND	2.4	2.1	0.002	ND	ND
Oct-1997	ND	ND	0.011	ND	0.004	1.01	0.743	ND	ND	ND	19.9	0.371	ND	0.343	0.257
Apr-1998	ND	ND	0.012	ND	ND	0.696	0.751	ND	ND	ND	4.85	1.28	ND	0.331	0.306
Apr-1999	ND	ND	0.011	ND	ND	0.629	0.615	ND	ND	ND	1.93	0.436	ND	0.328	0.303
Oct-1999	ND	ND	0.011	ND	ND	0.666	0.601	ND	ND	ND	2.21	0.506	ND	0.338	0.295
Apr-2000	ND	ND	ND	ND	ND	0.657	0.647	ND	ND	ND	1.49	0.663	ND	0.332	0.311
Oct-2000	ND	ND	ND	ND	ND	0.678	0.653	ND	ND	ND	2.22	0.79	ND	0.347	0.329
Apr-2001	ND	ND	ND	ND	ND	0.698	NA	ND	ND	ND	1.15	NA	ND	0.361	NA
Sep-2001	ND	ND	ND	ND	ND	0.714	0.654	ND	ND	ND	5.08	1.46	ND	0.361	0.326
Mar-2002	ND	ND	0.012	ND	ND	0.638	0.684	ND	ND	ND	2.39	0.628	ND	0.338	0.343
Sep-2002	ND	ND	0.011	ND	ND	1.36	0.63	ND	ND	ND	11.3	1.35	ND	0.385	0.32
Mar-2003	ND	ND	ND	ND	ND	0.681	0.641	ND	ND	ND	1.36	0.966	ND	0.33	0.315
Oct-2003	ND	ND	0.013	ND	ND	1.06	0.668	ND	ND	ND	4.65	1.01	ND	0.419	0.357
Apr-2004	ND	ND	0.012	ND	ND	1.13	0.736	ND	ND	ND	2.63	0.712	ND	0.46	0.379
Oct-2004	ND	ND	0.013	ND	ND	0.788	0.708	ND	ND	ND	4.33	1.61	ND	0.443	0.398
Apr-2005	ND	ND	0.016	ND	ND	1.03	0.57	ND	ND	ND	4.97	0.373	0.003	0.444	0.294
Oct-2005	ND	ND	0.011	ND	ND	0.93	0.718	ND	ND	ND	1.82	0.515	ND	0.418	0.384

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05A***													
Mar-2006	ND	ND	ND	ND	ND	0.917	0.544	ND	ND	ND	1.9	0.34	ND	0.329	0.324
Sep-2006	ND	ND	0.011	ND	ND	0.723	0.741	ND	ND	ND	1.26	1.45	ND	0.395	0.402
Mar-2007	ND	ND	0.015	ND	ND	0.701	0.684	ND	ND	ND	1.11	0.338	ND	0.355	0.34
Sep-2007	ND	ND	0.011	ND	ND	0.741	0.72	ND	ND	ND	1.46	0.548	ND	0.408	0.408
Mar-2008	ND	ND	0.011	ND	ND	0.708	0.728	ND	ND	ND	1.27	1.51	ND	0.396	0.395
Sep-2008	ND	ND	0.012	ND	ND	0.721	0.585	ND	ND	ND	2.18	1.19	ND	0.453	0.416
Mar-2009	ND	ND	0.01	ND	ND	0.815	0.87	ND	ND	ND	6.91	6.48	ND	0.356	0.394
Oct-2009	ND	ND	0.011	ND	ND	0.974	0.648	ND	ND	ND	3.48	0.517	ND	0.455	0.416
Apr-2010	ND	ND	0.011	ND	ND	0.614	0.578	ND	ND	ND	3.23	0.768	ND	0.353	0.342
Oct-2010	ND	ND	0.011	ND	ND	0.698	0.698	ND	ND	ND	2.54	0.739	ND	0.416	0.431
Apr-2011	ND	ND	0.013	ND	ND	0.776	0.685	ND	ND	ND	8.66	1.94	ND	0.416	0.367
Sep-2011	ND	ND	0.013	ND	ND	0.788	0.792	ND	ND	ND	4.34	0.979	0.002	0.412	0.424
Mar-2012	ND	ND	0.012	ND	ND	0.703	0.695	ND	ND	ND	1.65	0.712	ND	0.488	0.488
Sep-2012	ND	ND	0.0124	0.000105 J	ND	0.779	0.703	0.0016 J	0.0013 J	0.0021 J	1.67	0.756	0.000612 J	0.436	0.425
Mar-2013	ND	ND	0.0131	0.000106 J	ND	0.889	0.969	0.0062 J	0.0017 J	0.0035 J	1.29	0.617	ND	0.449	0.457
Oct-2013	ND	ND	0.0156	ND	ND	0.864	0.886	0.0018 J	0.0015 J	0.0019 J	1.54	1.24	0.000467 J	0.517	0.554
Mar-2014	ND	ND	0.0151	ND	ND	1.33	1.37	0.0072 J	0.0016 J	0.0018 J	2.12	1.18	0.000372 J	0.46	0.587
Oct-2014	0.000634 J	ND	0.0181	ND	ND	1.07	1.03	0.000965 J	0.0019 J	0.0021 J	1.76	0.824	ND	0.609	0.588
Apr-2015	0.0011 J	ND	0.0192	ND	0.000076 J	1.08	1.02	0.0011 J	0.002 J	0.0022 J	3.18	0.994	ND	0.663	0.616
Nov-2015	ND	ND	0.019	0.000121 J	ND	1.09	1.06	0.000455 J	0.002 J	0.0019 J	1.73	0.715	0.000719 J	0.681	0.671
May-2016	ND	ND	0.0191	0.00012 J	ND	0.929	1.05	ND	0.002	0.0019 J	1.71	1.02	0.00031 J	0.674	0.669
Oct-2016	ND	ND	0.02	0.00012 J	ND	1.1	0.969	ND	0.0022	0.0017 J	1.13	0.861	0.00032 J	0.657	0.708
May-2017	ND	ND	0.0212	0.00012 J	ND	1.28	1.1	0.0017 J	0.0022	0.0017 J	1.07	0.809	0.00026 J	0.721	0.69
Oct-2017	ND	ND	0.02	0.00012 J	ND	1.1	1.03	ND	0.0018	0.0017 J	2.31	1.8	0.00024 J	0.743	0.721

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05A***													
May-2018	*0.000044 J*	*ND*	0.018	*0.00011 J*	*0.000033 J*	1.3	1.3	*0.0028 J*	0.0016	0.0065	16.5	8.8	*0.00034 J*	*0.69 J*	*0.67 J*
Nov-2018	*ND*	*0.00028 J*	0.014	*0.00002 J*	*0.00018 J*	1.4	1.4	*0.0026 J*	*0.0004 J*	*0.0016 J*	41.1	41.8 M1	*0.000085 J*	*0.67 J*	*0.67 J*
May-2019	*ND*	*ND*	0.015	*ND*	*ND*	1.8	1.9	*ND*	*ND*	**0.0033 D6**	31.7	32.1	*ND*	*ND*	*ND*
Oct-2019	*0.000052 J*	*ND*	0.016	*ND*	*0.00015 J*	1.6	1.6	*0.0027 J*	*0.00036 J*	*ND*	42.9	40.6	*0.000057 J*	0.73	*0.67 J*
May-2020	*ND*	*ND*	0.018	*ND*	*0.00035 J*	1.4	1.5	*ND*	*ND*	*0.0024 J*	53.6	43.7	*ND*	0.68	0.76
Oct-2020	*0.00046 J*	*ND*	0.018	*ND*	*ND*	1.8	1.7	*0.0087 J*	*0.0007 J*	*ND*	50.6	45.8	*ND*	0.72	*0.71 J*
Apr-2021	*ND*	*ND*	0.018	*0.00018 J*	*ND*	1.7	1.7	*ND*	*ND*	*ND*	47.6	45.9	*ND*	0.78	0.76
Oct-2021	*0.000063 JB*	*ND*	0.018	*ND*	*ND*	1.8	1.8	*ND*	*0.00056 J*	*0.00052 J*	53.4	48.4	*ND*	0.82	0.8
May-2022	*ND*	*ND*	0.018	*ND*	*ND*	1.7	1.8	*ND*	*0.00065 J*	*ND*	56.8	55.1	*ND*	0.81	0.81
Oct-2022	*ND*	*ND*	0.016	*ND*	*ND*	1.6	1.6	*0.00066 J*	*ND*	*ND*	47	44.9	*ND*	0.71	0.73
May-2023	*ND*	*0.00081 J*	0.021	*ND*	*ND*	2	2	*0.00092 J*	*0.00095 J*	*0.0009 J*	67.3	60.7	*ND*	0.92	0.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-05A*												
Nov-1993	0.05	NA	ND	NA	0.34	NA	ND	NA	1.2	NA	NA	NA	ND
Apr-1994	0.36	NA	ND	NA	0.7	NA	ND	NA	1.9	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.65	NA	ND	ND	1.1	NA	ND	ND	0.03
Oct-1996	0.031	0.026	NA	ND	ND	ND	ND	ND	1.8	1.7	ND	ND	0.021
Apr-1997	0.034	0.023	ND	ND	2	2.1	ND	ND	1.9	1.7	ND	ND	0.075
Oct-1997	0.014	0.016	ND	0.012	ND	1.14	ND	ND	1.23	1.1	ND	ND	0.032
Apr-1998	0.023	0.023	ND	ND	0.927	ND	ND	ND	1.45	1.46	ND	ND	ND
Apr-1999	0.014	0.012	NA	ND	0.575	0.847	ND	ND	1.48	1.39	ND	ND	ND
Oct-1999	0.014	0.011	NA	ND	ND	0.601	ND	ND	1.46	1.29	ND	ND	ND
Apr-2000	0.015	0.014	NA	ND	ND	ND	ND	ND	1.58	1.53	ND	ND	ND
Oct-2000	0.016	0.016	NA	ND	0.409	0.71	ND	ND	1.56	1.55	ND	ND	0.01
Apr-2001	0.015	NA	NA	ND	1.4	NA	ND	ND	1.69	NA	ND	ND	ND
Sep-2001	0.043	0.028	NA	ND	0.682	0.896	ND	ND	1.65	1.63	ND	ND	ND
Mar-2002	0.015	0.014	NA	ND	1.75	1.72	ND	ND	1.72	1.69	ND	ND	ND
Sep-2002	0.046	0.022	NA	ND	0.951	0.789	ND	ND	1.98	1.71	ND	ND	ND
Mar-2003	0.018	0.016	NA	ND	2.85	ND	ND	ND	1.86	1.79	ND	ND	ND
Oct-2003	0.023	0.02	NA	0.658	1.86	1.21	ND	ND	2.72	1.83	ND	ND	0.012
Apr-2004	0.019	0.021	ND	ND	2.08	1.12	ND	ND	2.43	1.94	ND	ND	0.091
Oct-2004	0.039	0.04	ND	ND	1.25	0.517	ND	ND	1.98	1.6	ND	ND	ND
Apr-2005	0.023	0.014	ND	ND	1.46	1.52	ND	ND	2.32	1.76	ND	ND	0.021
Oct-2005	0.017	0.015	ND	ND	0.699	0.664	ND	ND	2.27	1.62	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.789	0.718	ND	ND	1.69	1.66	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05A***												
Sep-2006	0.014	0.025	0.0003	ND	1.15	1.11	ND	ND	1.85	1.82	ND	ND	ND
Mar-2007	0.014	0.012	0.0003	ND	0.703	0.641	ND	ND	1.75	1.67	ND	ND	ND
Sep-2007	0.017	0.016	0.0003	ND	0.641	0.604	ND	ND	1.83	1.82	ND	ND	0.012
Mar-2008	0.016	0.019	0.0003	ND	0.757	0.734	ND	ND	1.94	1.99	ND	ND	ND
Sep-2008	0.018	0.018	0.0003	ND	0.691	0.67	ND	ND	1.86	1.82	ND	ND	0.014
Mar-2009	0.037	0.043	ND	ND	0.659	0.719	ND	ND	1.91	2.04	ND	ND	ND
Oct-2009	0.017	0.014	ND	ND	0.692	0.701	ND	ND	2.02	2	ND	ND	0.022
Apr-2010	0.017	0.014	ND	ND	0.9	0.794	ND	ND	1.92	1.86	ND	ND	ND
Oct-2010	0.014	0.014	ND	ND	0.611	0.574	ND	ND	1.91	1.87	ND	ND	ND
Apr-2011	0.04	0.028	ND	0.033	0.841	0.798	ND	ND	2.1	2.11	ND	ND	ND
Sep-2011	0.019	0.015	ND	ND	0.858	0.826	ND	ND	2.32	2.27	ND	ND	ND
Mar-2012	0.015	0.015	ND	ND	0.602	0.658	ND	ND	2.1	2.13	ND	ND	ND
Sep-2012	0.0173	0.0155	0.000106 J	0.0025 J	0.601	0.639	ND	ND	2.04	2.12	ND	ND	0.0037 J
Mar-2013	0.0171	0.0164	0.000226	0.008 J	0.713	0.745	ND	ND	2.01	2.11	ND	ND	0.011
Oct-2013	0.0197	0.0213	0.000268	0.003	0.65	0.688	ND	ND	2.21	2.37	ND	0.0013 J	0.0214
Mar-2014	0.0185	0.0184	0.000251	0.0027 J	0.904	0.916	ND	ND	1.88	2.44	ND	0.0043 J	0.0054 J
Oct-2014	0.0219	0.0206	0.000253	0.01 J	0.934	0.895	0.0014 J	ND	2.47	2.37	ND	ND	0.0079 J
Apr-2015	0.0235	0.0216	0.000245	0.0039 J	0.971	0.86	0.000772 J	ND	2.75	2.52	ND	ND	0.008 J
Nov-2015	0.0224	0.0218	0.000413	0.003 J	0.788	0.756	ND	ND	2.71	2.69	0.000065 J	ND	0.0034 J
May-2016	0.0233	0.0216	0.0003	0.003 J	0.807	0.8	ND	ND	2.47	2.48	ND	ND	ND
Oct-2016	0.0213	0.0242	0.00032	0.0039 J	0.77	0.83	ND	ND	2.35	2.59	ND	ND	ND
May-2017	0.022	0.0235	0.00046	0.0043	0.784	0.818	ND	ND	2.43	2.5	ND	ND	0.0038 JB
Oct-2017	0.0275	0.0278	0.00054	0.0024 J	0.823	0.8	ND	ND	2.57	2.56	ND	ND	ND
May-2018	0.093	0.075	0.00088	0.0037	0.91 J	ND	0.00036 J	ND	2.4 J	2.2 J	ND	ND	0.005 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05A***												
Nov-2018	0.22	0.23	*ND*	0.002	*ND*	*0.96 J*	*ND*	*ND*	*2.4 J*	*2.5 J*	*ND*	*ND*	*0.0036 J*
May-2019	0.31 M1	0.3	*ND*	0.0013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0054 D6
Oct-2019	0.32	0.31	*ND*	0.0013	*ND*	*ND*	*0.00039 J*	*ND*	*2.7 J*	*2.4 J*	*ND*	0.0049	0.012
May-2020	0.24	0.24	*ND*	*ND*	0.78	0.73	*ND*	*ND*	2.2	2.6	*ND*	*ND*	*ND*
Oct-2020	0.25	0.22	*ND*	0.0028	*ND*	*ND*	*ND*	*ND*	*1.2 J*	*1.9 J*	*ND*	*0.0026 J*	*ND*
Apr-2021	0.24	0.23	*0.00006 J*	*ND*	0.67	0.69	*ND*	*ND*	2.6	2.4	*ND*	*ND*	*ND*
Oct-2021	0.32	0.31	*ND*	*0.00094 J*	0.69	0.67	*ND*	*ND*	2.5	2.6	*ND*	*ND*	*ND*
May-2022	0.25	0.24	*ND*	*0.0012 J*	0.71	0.67	*ND*	*ND*	2.5	2.5	*ND*	*ND*	*ND*
Oct-2022	0.19	0.2	*ND*	0.0051	0.61	0.7	*ND*	*ND*	2.4	2.6	*ND*	*ND*	*ND*
May-2023	0.24	0.23	*ND*	*0.0024 J*	0.83	0.81	*ND*	*ND*	3	2.9	*ND*	*ND*	*0.0042 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	42	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05A*																
Mar-2006	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*0.87 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	1.18	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	1.12	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	1.13	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	1.47	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	1.28	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05A*																
May-2017	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 J	ND
Nov-2018	ND	ND	ND	ND	1.1 L2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*0.5 J*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05A***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	0.9 J
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	1.4
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	2.1
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	2.2
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	1.1
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.94 J
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.52 J	1.41
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.21 J	ND	ND	ND	ND	ND	0.87 J	2.38
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	0.73 J	1.31
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	0.25 J	ND	ND	ND	0.62 J	2.1
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.16 J	ND	0.22 J	ND	ND	ND	0.58 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4 J	2.2
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	0.6 J	2.3
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.2 J	ND	ND	ND	0.7 J	2.7

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*0.7 J*	2.7
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*0.8 J*	2.8
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	3
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3 CLN3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.128 J*	*ND*	*ND*	*ND*	*ND*	*1.58 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	1.2	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05A***															
Oct-2005	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1.7 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*0.14 J*	*ND*	*ND*	*ND*	*0.23 J*	*ND*	*ND*	*ND*	*ND*	*0.22 J*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*0.13 J*	*ND*	*ND*	*ND*	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.1 J*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05A***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.132 J*	*0.83 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-06***											
Nov-1993	6	6	0.2	ND	12.6	0.2	ND	5.44	49.9	2.6	60	8.1
Apr-1994	ND	ND	ND	ND	11.9	ND	ND	4.82	50.3	ND	45	5.34
Aug-1994	ND	ND	ND	ND	11.7	0.4	0.4	4.5	49.5	3.2	57	7.9
Sep-1994	ND	ND	ND	ND	12.2	0.3	ND	5.1	52.8	2.8	35	8.7
Nov-1994	ND	ND	ND	ND	13.2	0.2	ND	5.2	53.6	2.6	33	12
Apr-1995	8.2	8.2	ND	ND	14.1	ND	ND	5.4	62.8	2.2	9	10
Apr-1997	ND	16	ND	ND	11	0.06	ND	NA	NA	ND	52	12
Apr-1997	ND	8	ND	ND	9.5	0.06	ND	NA	NA	ND	36	6.1
Oct-1997	14	14	0.21	ND	10.9	ND	ND	6.65	75.3	ND	32	17
Apr-1998	17	17	ND	ND	8.13	ND	ND	6.32	64.9	ND	27	7.7
Apr-1999	11	11	0.31	ND	8.56	ND	ND	5.71	75.1	ND	65	12
Oct-1999	16	16	0.13	ND	7.73	0.172	ND	5.39	72.8	ND	52	8.4
Apr-2000	14	14	ND	ND	16.5	ND	ND	5.63	65	ND	31	11
Oct-2000	14	NA	ND	ND	14.9	ND	ND	5.39	78.4	3.52	55	12.8
Apr-2001	11	NA	ND	ND	12.2	ND	ND	NA	NA	ND	43	14.3
Sep-2001	8.7	8.7	ND	ND	16.5	ND	ND	5.04	89	ND	65	15.7
Mar-2002	17	17	ND	ND	24.6	ND	ND	6	143	ND	74	19.9
Sep-2002	14	14	ND	ND	19.3	ND	ND	5.9	141.3	ND	73	19.6
Mar-2003	13	13	ND	ND	16.4	ND	ND	5.4	112.1	ND	46	15.2
Oct-2003	11	11	ND	ND	18.1	0.122	ND	4.1	118.9	ND	101	18.7
Apr-2004	21	21	ND	ND	17.6	0.08	ND	5.6	102.9	ND	96	18.6
Oct-2004	7.2	7.2	ND	ND	13.4	0.11	ND	5.7	79.4	ND	60	13.8
Apr-2005	6.9	6.9	ND	ND	11.6	0.1	ND	5.2	63.8	1.44	69	12.5
Oct-2005	13	13	ND	ND	15.2	0.1	ND	4.8	82.1	2.83	67	12.9
Mar-2006	9.2	9.2	ND	ND	14.7	0.13	ND	4.8	92.4	4.02	49	13.7
Sep-2006	14	14	ND	ND	12.2	0.16	ND	5.6	91.7	1.55	74	12
Mar-2007	20	20	ND	ND	12.9	0.14	ND	6	97.8	1.59	52	11.5
Sep-2007	7.2	7.2	0.4	ND	12.9	0.15	ND	4.9	66.8	2.67	103	11.9
Mar-2008	7.8	7.8	0.35	ND	16.1	ND	ND	5	69.6	ND	55	11.5
Sep-2008	9.1	9.1	0.32	ND	14.2	0.28	ND	4.7	67.9	ND	60	11.8
Mar-2009	7.5	7.5	ND	ND	14.3	0.32	ND	4.9	71.9	1.1	49	10.2
Oct-2009	9	9	ND	ND	15.5	0.26	ND	4.6	69.5	1.64	53	12.1
Mar-2010	9.8	9.8	ND	ND	17.1	0.22	ND	5	93	2.53	37	11.8
Oct-2010	9.6	9.6	ND	ND	14.2	0.28	ND	4.5	69.8	2.47	38	13.7
Apr-2011	9.1	9.1	ND	ND	15.8	0.35	0.02	4.6	69.2	2.57	50	13.5
Sep-2011	5.5	5.5	ND	ND	14	0.41	ND	4.8	70.3	2.14	61	13.2
Mar-2012	6.4	6.4	ND	ND	14.8	0.42	ND	4.6	60.3	2.8	46	13.4

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-06***											
Sep-2012	7.72	7.72	ND	ND	14.6	0.389	ND	3.8	72.6	2.83	59	13.9
Mar-2013	10.6	10.6	0.258	ND	15.7	0.297	ND	5.1	85.7	4.27	44	14.7
Oct-2013	8.96	8.96	0.212	ND	15	0.418	ND	5.7	76.3	3.92	46	14
Mar-2014	9.2	9.2	0.197 J	ND	15.8	0.362	ND	5.3	74.6	4.95	54	16.9
Oct-2014	ND	ND	0.23	14	15.4	0.4	ND	4.8	73.2	3.96	39	16.5
Apr-2015	8.36	8.36	0.231	ND	15.6	0.427	ND	4.1	74.7	4.56	47	15.6
Nov-2015	7.8	7.8	0.216	ND	15.2	0.412	ND	5.5	131.2	2.08	50	18.5
May-2016	17.7	17.7	0.186 J	ND	16.3	0.195	0.0897	5.6	97.2	6.32	68	16.9
Oct-2016	5.56	5.56	ND	ND	14.7	NA	NA	5.6	101.1	4.1	44	16.4
May-2017	6.2	6.2	0.182 J	ND	14.5	0.419	ND	5.1	117.2	4.67	49	16.7
Oct-2017	7.36	7.36	0.196 J	13	14.2	0.453	ND	5.2	124.3	3.7	60	16.1
May-2018	14	14	0.21	ND	13.7	0.077 J	ND	5.84	147	6.6 J	ND	16.9
Nov-2018	70	70	0.29	ND	17.1	ND	0.024	5.88	183.2	5.8 J	70	19.2
May-2019	72	NA	0.35	ND	19.4	ND	0.024	5.96	155.6	ND	127	18.1
Oct-2019	25 H1	NA	0.26	8.2 J	12.9	0.067 J	0.044	5.8	194.2	ND	111	18.4
May-2020	30	NA	0.46	6.9 J	11.5	ND	0.054	5.66	164.7	ND	84	15
Oct-2020	40	NA	0.17	11.6 J	10.9	ND	0.055	5.67	156.1	4.9	105	17.8
Apr-2021	8 J6c	NA	0.16	ND	12.4	1.2	0.0063 J	5.27	120.5	10	66	21.2
Oct-2021	6 J2c	NA	ND	6.1 JMH	12.8	0.086 J	0.049 H1	5.6	168.7	17.7 MH	102	30.2
May-2022	26	NA	ND	10.1 J	11.4	ND	ND	5.45	161.9	10.3	69 H1	25.7 N3
Oct-2022	46	NA	ND	24.4 J	17.1	0.066 J	0.0069 J	5.7	182.4	8.1 J	65	23.8 N3
May-2023	30	NA	ND	9.1 J	13.5	0.12	ND	5.81	177.4	8.4 J	77	24.5 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-06*													
Nov-1993	NA	ND	ND	NA	ND	1.1	NA	ND	NA	ND	8	2.7	ND	1.3	NA
Apr-1994	NA	ND	0.012	NA	ND	1.1	NA	ND	NA	ND	0.37	2.7	ND	0.63	NA
Aug-1994	NA	ND	ND	NA	ND	1.2	NA	ND	NA	ND	1.2	0.7	ND	1.2	NA
Sep-1994	NA	ND	ND	NA	ND	1	NA	ND	NA	ND	0.53	0.1	ND	1.5	NA
Nov-1994	NA	ND	ND	NA	ND	2	NA	ND	NA	0.04	6.8	0.69	ND	1.7	NA
Apr-1995	ND	ND	ND	ND	ND	1.7	NA	ND	ND	ND	3.4	3.4	ND	1.4	NA
Oct-1996	ND	ND	0.076	ND	ND	1.9	1.8	ND	ND	ND	11	10	ND	1.8	1.8
Apr-1997	ND	ND	0.058	ND	ND	1.6	1.5	ND	ND	ND	7.2	5.8	0.004	1.4	1.4
Apr-1997	ND	ND	0.054	ND	ND	1.5	1.5	ND	ND	ND	5.1	3.2	ND	1.1	1.2
Oct-1997	ND	ND	0.053	ND	ND	1.24	1.26	ND	ND	ND	13	11.9	ND	1.22	1.23
Apr-1998	ND	ND	0.049	ND	ND	1.2	1.21	ND	ND	ND	17.6	9.85	ND	1.15	1.17
Apr-1999	ND	ND	0.075	ND	ND	1.8	1.61	ND	ND	0.016	10.5	8.17	ND	1.69	1.54
Oct-1999	ND	ND	0.06	ND	ND	1.65	1.47	ND	ND	ND	9.57	8.57	ND	1.52	1.38
Apr-2000	ND	ND	0.061	ND	ND	1.71	1.62	ND	ND	ND	9.73	9.18	ND	1.68	1.58
Oct-2000	ND	ND	0.069	ND	ND	1.95	1.95	ND	ND	ND	10.7	8.59	ND	1.93	1.95
Apr-2001	ND	ND	0.076	ND	ND	2.12	NA	ND	0.012	0.022	11.5	NA	0.002	2.19	NA
Sep-2001	ND	ND	0.086	ND	ND	2.26	2.18	ND	0.011	0.014	6.46	6.78	0.004	2.45	2.34
Mar-2002	ND	ND	0.099	ND	ND	2.71	2.67	ND	0.023	0.048	19.6	12.4	0.005	3.19	3.15
Sep-2002	ND	ND	0.091	ND	ND	2.82	2.27	ND	0.011	0.028	17.3	14.5	0.004	3.04	2.85
Mar-2003	ND	ND	0.072	ND	ND	2.01	1.89	ND	0.011	0.018	11.5	8.47	0.006	2.48	2.31
Oct-2003	ND	ND	0.084	ND	ND	2.33	2.28	ND	0.012	0.02	10.3	9.31	0.004	3.13	3.1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06***													
Apr-2004	ND	ND	ND	ND	ND	2.23	2.06	ND	0.016	0.037	19.7	16.6	0.003	3.17	2.98
Oct-2004	ND	ND	0.055	ND	ND	1.65	1.69	ND	ND	0.017	8.42	7.62	0.004	2.35	2.44
Apr-2005	ND	ND	0.047	ND	ND	1.63	1.62	ND	ND	0.01	5.5	4.89	0.007	2.05	2.02
Oct-2005	ND	ND	0.046	ND	0.004	1.74	1.74	ND	ND	0.043	9.53	7.71	0.004	2.07	2.08
Mar-2006	ND	ND	0.043	ND	ND	2.29	1.55	0.017	0.03	0.062	12.5	6.7	0.005	1.93	1.93
Sep-2006	0.002	ND	0.037	ND	ND	1.74	1.56	0.044	0.024	0.146	24.4	14.7	0.007	1.87	1.83
Mar-2007	ND	ND	0.039	ND	ND	1.6	1.62	ND	ND	ND	14.1	14.6	ND	1.83	1.84
Sep-2007	ND	0.002	0.035	ND	ND	2.12	2.17	ND	ND	ND	2.61	2.61	ND	1.61	1.65
Mar-2008	ND	0.003	0.034	ND	ND	1.94	1.78	ND	ND	0.01	2.78	2.9	0.006	1.61	1.62
Sep-2008	ND	ND	0.036	ND	ND	1.96	1.99	ND	ND	ND	2.53	2.53	0.003	1.67	1.76
Mar-2009	ND	ND	0.029	ND	ND	1.88	1.92	ND	ND	ND	1.75	2.1	0.003	1.35	1.44
Oct-2009	ND	ND	0.036	ND	ND	1.91	1.81	ND	ND	ND	2.77	2.59	ND	1.78	1.63
Mar-2010	ND	ND	0.043	ND	ND	1.89	1.83	ND	ND	ND	3.26	3.01	ND	1.72	1.68
Oct-2010	ND	ND	0.044	ND	ND	2.19	2.12	ND	ND	ND	2.77	2.58	ND	2	1.95
Apr-2011	ND	ND	0.044	ND	ND	2.09	2.02	ND	ND	ND	2.69	2.44	ND	2.01	1.92
Sep-2011	ND	ND	0.04	ND	ND	2.3	2.33	ND	ND	ND	1.28	1.41	0.002	1.82	1.98
Mar-2012	ND	ND	0.04	ND	ND	2.13	2.09	ND	ND	ND	1.92	1.93	ND	1.97	2.02
Sep-2012	ND	ND	0.0404	0.00056 J	0.00049 J	2.3	2.39	0.0022 J	0.0071 J	0.0047 J	2.37	2.61	0.0018 J	1.99	2.14
Mar-2013	ND	ND	0.0425	0.000544 J	0.000483 J	2.49	2.46	0.0041 J	0.0078 J	0.0035 J	3.1	3.07	0.0013 J	2.07	2
Oct-2013	0.000242 J	ND	0.0454	0.000534 J	0.000554 J	2.57	2.52	0.0096 J	0.0091 J	0.0029 J	2.3	2.28	0.0024	1.85	1.8
Mar-2014	ND	ND	0.0427	0.000407 J	0.000494 J	3.47	3.31	0.0086 J	0.01	0.0027 J	2.38	2.92	0.0013 J	2	2.53
Oct-2014	0.000382 J	0.000409 J	0.0535	0.000408 J	0.000392 J	2.57	2.57	0.0017 J	0.0105	0.0029 J	2.46	2.35	0.00099 J	2.46	2.41
Apr-2015	0.000488 J	0.000426 J	0.0502	0.000489 J	0.000465 J	2.59	2.63	0.0019 J	0.0114	0.0027 J	2.17	2.08	0.00085 J	2.21	2.22
Nov-2015	ND	0.000534 J	0.0582	0.000527 J	0.000548 J	2.96	2.86	0.0024 J	0.014	0.0032 J	4.66	4.32	0.001 J	2.7	2.58

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06***													
May-2016	*ND*	*ND*	0.0532	*0.00033 J*	*0.00032 J*	2.76	2.67	*0.0036 J*	0.0122	*0.0024 J*	1.97	1.95	*0.00098 J*	2.43	2.41
Oct-2016	*ND*	*ND*	0.054	*0.00036 J*	*0.00029 J*	2.73	2.82	*0.0017 J*	0.0131	*0.0028 J*	2.01	2.07	*0.00074 J*	2.32	2.18
May-2017	*ND*	*0.001 J*	0.0609	*0.00038 J*	*0.0006 J*	2.61	2.76	*0.0025 J*	0.0131	*0.0027 J*	2.55	2.41	*0.00081 J*	2.48	2.44
Oct-2017	*ND*	*ND*	0.0581	*0.00043 J*	*0.00054 J*	2.8	2.72	*0.0024 J*	0.0117	*0.0027 J*	2.39	2.38	*0.0011 J*	2.21	2.23
May-2018	*0.000091 J*	*ND*	0.069	0.00039	*0.00048 J*	2.9	2.6	*0.0041 J*	0.006	*0.0015 JB*	2.5	2.4	*0.00075 J*	2.3	2.2
Nov-2018	*ND*	*ND*	0.095	*0.00014 J*	*0.00027 J*	3.2	3.1	*0.0039 J*	0.0092	0.0037	39.2	36.7	*0.000026 J*	2.7	2.7
May-2019	*ND*	*ND*	0.091	*ND*	*ND*	3	3.5	*ND*	0.0087	0.0036	40.3	41.2	*ND*	2.6	2.6
Oct-2019	*0.000069 J*	*ND*	0.09	*0.00013 J*	*0.00021 J*	3.2	3	*0.0044 J*	0.0075	*ND*	42.1	39.7	*0.000085 J*	2.6	2.4
May-2020	*ND*	*ND*	0.096	*ND*	*0.00056 J*	2.3	2.3	*0.0027 J*	0.0073	0.007	38.1	36	*ND*	2.2	2.3
Oct-2020	*0.00034 J*	*ND*	0.087	*0.00032 J*	*ND*	3	2.7	*0.0035 J*	0.0079	*ND*	36.5	34	*ND*	2.5	2.4
Apr-2021	*ND*	*ND*	0.11	*0.00026 J*	*0.0017 J*	3.4	3.5	*0.0033 J*	0.022	0.02	6.2	6	*ND*	3.1	3.4
Oct-2021	*ND*	*ND*	0.15	*0.00021 J*	*0.00015 J*	4.8	4.9	0.0031	0.024	0.0077	14.6	15.4	*0.000055 J*	4.4	4.6
May-2022	*ND*	*ND*	0.14	*0.00023 J*	*0.0004 J*	4	4.1	0.0035	0.023	0.0074	15.7	15.1	*ND*	3.8	3.7
Oct-2022	*ND*	*ND*	0.13	*0.0002 J*	*ND*	4.1	4.4	*0.0024 J*	0.018	*ND*	21.3	23	*ND*	3.3	3.7
May-2023	*ND*	*ND*	0.12	*0.00017 J*	*0.0002 J*	4.2	4.5	0.0042	0.018	0.0081	24.3	23.4	*0.00035 J*	3.4	3.3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-06*												
Nov-1993	0.08	NA	ND	NA	1.4	NA	ND	NA	2.7	NA	NA	NA	ND
Apr-1994	0.023	NA	ND	NA	0.93	NA	ND	NA	2.8	NA	NA	NA	ND
Aug-1994	0.03	NA	ND	NA	2.3	NA	ND	NA	2.2	NA	NA	NA	0.02
Sep-1994	0.03	NA	ND	NA	1.4	NA	ND	NA	2.6	NA	NA	NA	0.04
Nov-1994	0.15	NA	ND	NA	1.5	NA	ND	NA	2.7	NA	NA	NA	0.03
Apr-1995	0.03	NA	ND	ND	1.8	NA	ND	ND	2.7	NA	ND	ND	0.02
Oct-1996	0.074	0.073	NA	ND	ND	ND	ND	ND	3.7	3.8	ND	ND	0.037
Apr-1997	0.089	0.084	**0.005**	ND	1.5	1.2	ND	ND	3.5	3.2	ND	ND	0.024
Apr-1997	0.05	0.052	0.0016	ND	2.7	2.4	ND	ND	4.2	3	ND	ND	0.036
Oct-1997	0.067	0.068	0.0012	ND	1.73	1.32	ND	ND	2.6	2.61	ND	ND	0.014
Apr-1998	0.06	0.062	0.0015	ND	0.683	1.08	ND	ND	2.36	2.38	ND	ND	0.01
Apr-1999	0.06	0.051	NA	ND	0.856	ND	ND	ND	3.31	3.06	ND	ND	0.016
Oct-1999	0.056	0.053	NA	ND	1.79	1.14	ND	ND	3	2.78	ND	ND	ND
Apr-2000	0.053	0.051	NA	ND	1.04	1.02	ND	ND	3.3	3.14	ND	ND	ND
Oct-2000	0.048	0.047	NA	ND	1.38	1.06	ND	ND	3.57	3.58	ND	ND	ND
Apr-2001	0.06	NA	NA	ND	1.98	NA	ND	ND	4.1	NA	ND	ND	0.018
Sep-2001	0.049	0.046	NA	0.022	1.58	0.692	ND	ND	4.51	4.27	ND	ND	0.016
Mar-2002	0.078	0.073	NA	0.044	2.11	1.13	ND	ND	5.59	5.41	ND	ND	0.041
Sep-2002	0.083	0.071	NA	0.018	1.23	1.11	ND	ND	5.04	4.6	ND	ND	0.021
Mar-2003	0.054	0.054	NA	0.013	2.4	0.954	ND	ND	4.29	4.11	ND	ND	0.012
Oct-2003	0.068	0.066	NA	0.013	2.55	2.47	ND	ND	5.16	4.96	ND	ND	0.014
Apr-2004	0.11	0.099	0.0009	0.037	2.23	1.49	ND	ND	5.43	5.17	ND	ND	0.02

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-06*												
Oct-2004	0.054	0.054	0.0006	ND	1.88	1.65	ND	ND	4.47	4.37	ND	ND	ND
Apr-2005	0.052	0.051	0.0003	ND	1.17	1.12	ND	ND	4.35	4.32	ND	ND	ND
Oct-2005	0.069	0.062	0.0003	0.027	1.23	1.24	ND	ND	4.81	4.73	ND	ND	ND
Mar-2006	0.03	0.015	0.00097	0.123	0.952	0.955	ND	ND	4.83	4.79	ND	ND	0.052
Sep-2006	0.11	0.092	**0.0025**	0.084	1.29	1.29	ND	ND	5.14	4.91	ND	ND	0.043
Mar-2007	0.08	0.083	ND	ND	1.24	1.3	ND	ND	4.89	4.91	ND	ND	ND
Sep-2007	0.036	0.038	ND	ND	1.02	0.953	ND	ND	5.04	5.16	ND	ND	0.011
Mar-2008	0.037	0.036	ND	ND	0.997	1.28	ND	ND	5.14	5.16	ND	ND	ND
Sep-2008	0.038	0.044	ND	0.005	1.07	1.08	ND	ND	5.39	6.11	ND	ND	ND
Mar-2009	0.032	0.037	ND	ND	1.13	1.19	ND	ND	5.46	5.93	ND	ND	ND
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	0.046	0.042	ND	ND	1.07	0.965	ND	ND	6.95	6.27	ND	ND	ND
Mar-2010	0.05	0.049	ND	ND	1.28	1.17	ND	ND	6.45	6.09	ND	ND	ND
Oct-2010	0.054	0.052	ND	ND	1.38	1.27	ND	ND	6.22	6.03	ND	ND	ND
Apr-2011	0.062	0.057	ND	ND	1.39	1.32	ND	ND	6.49	5.99	ND	ND	ND
Sep-2011	0.052	0.056	ND	ND	1.25	1.34	ND	ND	5.43	5.57	ND	ND	ND
Mar-2012	0.062	0.065	ND	ND	1.33	1.3	ND	ND	5.77	5.79	ND	ND	ND
Sep-2012	0.0717	0.0771	ND	0.0073 J	1.35	1.43	ND	ND	5.96	6.31	ND	ND	0.0075 J
Mar-2013	0.0785	0.0727	0.000119 J	0.0082 J	1.33	1.33	ND	ND	6.68	6.44	ND	ND	0.0171
Oct-2013	0.0901	0.0902	ND	0.0072 J	1.16	1.15	ND	ND	5.22	5.06	0.000745 J	0.0088 J	0.0158
Mar-2014	0.0864	0.0903	ND	0.0081 J	1.61	1.56	ND	ND	5.28	6.77	ND	0.0067 J	0.0085 J
Oct-2014	0.107	0.104	ND	0.0083 J	1.4	1.39	0.0016 J	ND	6	5.95	ND	ND	0.0107
Apr-2015	0.0949	0.0914	0.000032 J	0.0098 J	1.31	1.33	0.0012 J	ND	5.83	5.88	ND	ND	0.0119
Nov-2015	0.132	0.125	ND	0.0107	1.51	1.45	0.0017 J	ND	6.82	6.51	ND	ND	0.013

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-06***												
May-2016	0.0965	0.0994	*ND*	0.0108	1.45	1.39	*ND*	*ND*	6.23	6.1	*ND*	*ND*	*0.0087 J*
Oct-2016	0.0951	0.0881	*ND*	0.0089	1.44	1.4	*ND*	*ND*	5.9	5.6	*ND*	*ND*	*0.0087 J*
May-2017	0.103	0.103	*ND*	0.0101	1.48	1.55	*ND*	*ND*	6.08	5.73	*ND*	*ND*	*0.01 J*
Oct-2017	0.0965	0.0976	*ND*	0.0104	1.39	1.47	*ND*	*ND*	5.55	5.59	*ND*	*ND*	*0.0108 J*
May-2018	0.098	0.089	*ND*	0.0049	*0.97 J*	*0.94 J*	*0.00022 JB*	*ND*	6.4	5.9	*ND*	0.0047	0.0059 B
Nov-2018	0.27	0.26	*ND*	0.0047	*1.3 J*	*2 J*	*0.0004 J*	*ND*	7.2	8.1	*ND*	*ND*	0.0068
May-2019	0.33	0.32	*ND*	0.0049	*ND*	*ND*	*ND*	*ND*	6.9	7.1	*ND*	0.0029	0.0083
Oct-2019	0.31	0.31	*ND*	0.0039	*ND*	*1.6 J*	*0.00047 J*	*ND*	6.8	5.9	*ND*	0.005	0.011
May-2020	0.29	0.29	*ND*	*0.0047 J*	1.7	1.5	*ND*	*ND*	6.1	5.9	*ND*	*ND*	0.012
Oct-2020	0.3	0.29	*ND*	0.0043	*1.5 J*	*1.4 J*	*ND*	*ND*	5.6	5.1	*0.00084 J*	*0.00079 J*	*ND*
Apr-2021	0.22	0.23	0.0002	0.015	1.7	1.6	*ND*	*ND*	6	6.2	*ND*	*ND*	0.049
Oct-2021	0.31	0.32	0.00051	0.013	1.7	1.7	*0.0011 J*	*ND*	5.6	5.7	*0.000025 J*	*ND*	0.024
May-2022	0.31	0.3	0.00024	0.013	1.7	1.7	*ND*	*ND*	5.5	5.5	*ND*	*ND*	0.022
Oct-2022	0.31	0.33	*ND*	0.009	1.5	1.7	*0.0009 J*	*ND*	6.5	7.2	*ND*	*ND*	0.014
May-2023	0.33	0.32	*ND*	0.0086	1.7	1.7	*ND*	*ND*	7.2	7	*ND*	*ND*	0.018

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06*																
Nov-1993	ND	1.6	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	1.8	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	ND
Aug-1994	ND	1.5	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	2.1	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	2.9	ND	ND	2.4	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	9.2	ND	ND	8.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	1	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	1	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	1.2	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	0.9 J	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	0.9 J	NA	NA	5.3	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	4.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	0.7 J	NA	NA	5.2	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	1.5	ND	ND	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	1.1	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	1.2	ND	ND	14	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Mar-2002	ND	1.4	ND	ND	18	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Sep-2002	ND	2.3	ND	ND	23	1.2	ND	ND	ND	ND	ND	1	1.5	ND	ND	ND	ND	ND
Mar-2003	ND	1	ND	ND	13	0.5 J	ND	ND	ND	ND	ND	0.6 J	0.8 J	ND	ND	ND	ND	ND
Oct-2003	ND	1.2	ND	ND	20	0.8 J	ND	ND	ND	ND	ND	1	1.3	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06*																
Apr-2004	ND	0.9 J	ND	ND	16	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	7.2	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	8.5	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	5.8	0.6 J	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Sep-2006	ND	1.7	ND	ND	7.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	7.5	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2007	ND	0.6 J	ND	ND	11.2	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	5.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	8	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	6.9	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	7.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	8.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	8.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	4.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	6.54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	9.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	6.98	0.31 J	ND	ND	ND	ND	ND	0.25 J	0.36 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	6.42	0.21 J	ND	ND	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	7.14	ND	ND	ND	ND	ND	ND	ND	0.28 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06*																
Apr-2015	ND	ND	ND	ND	5.67	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	5.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	4.8	0.1 J	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	5.7	0.2 J	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	4.8	0.1 J	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	5.6	0.2 J	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	8.5 L2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4 JBIH	ND
May-2019	ND	ND	ND	ND	6.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	4.74	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	9.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	7.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	8.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	6.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-06*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	3.2
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	5.2
Aug-1994	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	7	4.8
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	4.9
Nov-1994	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.4	6
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	49	22
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	22	4
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	ND	2	ND	ND	ND	13	9
Oct-1997	ND	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	1.1	ND	ND	ND	10	12
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	20	5.6
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	0.7 J	ND	NA	3.8	NA	NA	NA	6	9.3
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND	ND	ND	4.3	6.3
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	0.8 J	ND	NA	2.9	NA	ND	NA	5.1	7.4
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	6	ND	ND	ND	38	15
Apr-2001	0.6 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	5.7	ND	ND	ND	22	14
Sep-2001	0.8 J	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	6.9	ND	ND	ND	24	18
Mar-2002	0.6 J	ND	ND	ND	ND	2.4	ND	ND	1.5	ND	0.8 J	5.8	ND	ND	ND	16	21
Sep-2002	1.3	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	9.6	ND	ND	ND	74	52
Mar-2003	0.6 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	7	ND	ND	ND	33	22
Oct-2003	1.3	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	12	ND	ND	ND	41	36

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-06***															
Apr-2004	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	9.8	*ND*	*ND*	*ND*	40	28
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	4.9	*ND*	*ND*	*ND*	24	23
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	15	14
Oct-2005	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	5.1	*ND*	*ND*	*ND*	13.6	15.9
Mar-2006	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	12.1	26.3
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.5	*ND*	*ND*	*ND*	17.8	21.9
Mar-2007	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	11.7	14.9
Sep-2007	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	4.5	*ND*	*ND*	*ND*	16.3	11.2
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	12.1	15.7
Sep-2008	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	14.5	13
Mar-2009	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	10.8	10.1
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	9.4	11.9
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*11.8 J*	13.5
Oct-2010	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	11.7	9.3
Apr-2011	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	14.4	11.9
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7	*ND*	*ND*	*ND*	15	6.6
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7	*ND*	*ND*	*ND*	11.5	6.4
Sep-2012	*0.42 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.81	*ND*	*ND*	*ND*	5.56	7.44
Mar-2013	*0.58 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.44 J*	*ND*	*ND*	7.25	*ND*	*ND*	*ND*	8.15	12.6
Oct-2013	*0.29 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.59 J*	*0.22 J*	*ND*	4.34	*ND*	*ND*	*ND*	8.76	13.6
Mar-2014	*0.28 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	3.85	*ND*	*ND*	*ND*	9.56	9.22
Oct-2014	*0.28 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.23 J*	*ND*	4.45	*ND*	*ND*	*ND*	7.33	9.85

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-06***															
Apr-2015	*0.25 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	3.26	*ND*	*ND*	*ND*	6	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.1	*ND*	*ND*	*ND*	*12.6 J*	6.3
May-2016	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	3.3	*ND*	*ND*	*ND*	4.7	5.5
Oct-2016	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	2.9	*ND*	*ND*	*ND*	6.3	7.7
May-2017	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J,B*	*ND*	3	*ND*	*ND*	*ND*	5.1	5.7
Oct-2017	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	3.9	*ND*	*ND*	*ND*	6.8	8
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.2	*ND*	*ND*	*ND*	6.5	4.5
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.3	*ND*	*ND*	*ND*	11.5	9.2 CLN3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	6.9	8.3 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	7.5	4.6
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	3.4	2.3
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	4.3	2.1
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.19	*ND*	*ND*	*ND*	*1.48 J*	*3.62 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	9.8	6.8
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.2	*ND*	*ND*	*ND*	7	5.3
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.2	*ND*	*ND*	*ND*	5.1	5.4
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.9	*ND*	*ND*	*ND*	3.2	4.1

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-06***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*NA*
Aug-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	2.8	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*0.5 J*	3	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	**7.4**	*ND*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	3	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	4	*ND*	*ND*	*ND*	*ND*	1	3	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*0.7 J*	2.3	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*0.9 J*	1.9	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	2	*ND*	*NA*	3.7	*ND*	*ND*	*NA*	*NA*	1.5	1.4	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	1.7	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*0.9 J*	1.2	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	1.3	*ND*	*NA*	2.9	*ND*	*ND*	*NA*	*NA*	*1 J*	1.4	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	3.2	*ND*	*ND*	**5.8**	*ND*	*ND*	*ND*	*ND*	2.1	2.6	*ND*	1.1	*NA*
Apr-2001	*ND*	*ND*	*0.5 J*	*NA*	3.3	*0.5 J*	*ND*	**5.2**	*ND*	*ND*	*ND*	*ND*	1.9	2.1	*ND*	1.1	*NA*
Sep-2001	*ND*	*ND*	*0.7 J*	*NA*	**7.3**	*0.8 J*	*ND*	**8.1**	*ND*	*ND*	*ND*	*ND*	2.8	2.5	*ND*	1.3	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	**6.9**	*ND*	*ND*	4.2	*ND*	*ND*	*ND*	*ND*	1.8	2.1	*ND*	1	*NA*
Sep-2002	*ND*	*ND*	1.5	*NA*	**24**	3.5	*ND*	**18**	*ND*	*ND*	*ND*	*ND*	**5.1**	6.9	*ND*	**2.5**	*NA*
Mar-2003	*ND*	*ND*	*0.6 J*	*NA*	**9.9**	*0.7 J*	*ND*	**9.9**	*ND*	*ND*	*ND*	*ND*	3	2.5	*ND*	1.2	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-06*															
Oct-2003	ND	ND	1.1	NA	**17**	1.2	ND	**15**	ND	ND	ND	ND	4.5	3.6	ND	**2.7**	NA
Apr-2004	ND	ND	0.6 J	NA	0.6 J	0.6 J	ND	**12**	ND	ND	ND	ND	3.5	2.5	ND	1.9	NA
Oct-2004	ND	ND	ND	NA	4.9	ND	ND	**5.7**	ND	ND	ND	ND	2.1	2.5	ND	1	NA
Apr-2005	ND	ND	ND	ND	2.9	ND	ND	**5.5**	ND	ND	ND	ND	1.7	1.1	ND	0.7 J	NA
Oct-2005	ND	ND	ND	ND	2.2	ND	ND	**6.9**	ND	ND	ND	ND	2.3	1.1	ND	1	NA
Mar-2006	ND	ND	ND	ND	2.6	1	ND	**6.4**	ND	ND	ND	ND	2.1	1.5	ND	1.1	NA
Sep-2006	ND	ND	ND	ND	1.7	ND	ND	**7.9**	ND	ND	ND	ND	2.9	0.7 J	ND	ND	NA
Mar-2007	ND	ND	ND	ND	4.1 R	ND	ND	**5.6**	ND	ND	ND	ND	2.2	1.3	ND	ND	NA
Sep-2007	ND	ND	0.5 J	ND	4.7	ND	ND	**6.9**	ND	ND	ND	ND	3.1	2	ND	1.1	NA
Mar-2008	ND	ND	ND	ND	2	ND	ND	**5.4**	ND	ND	ND	ND	2.3	1.4	ND	ND	NA
Sep-2008	ND	ND	ND	ND	3.9	ND	ND	**5.7**	ND	ND	ND	ND	2.3	1.2	ND	0.7 J	NA
Mar-2009	ND	ND	ND	ND	4.5	ND	ND	5	ND	ND	ND	ND	2	0.8 J	ND	0.5 J	NA
Oct-2009	ND	ND	ND	ND	**5.5**	ND	ND	4.8	ND	ND	ND	ND	2.1	0.8 J	ND	ND	NA
Mar-2010	ND	ND	ND	ND	**6.2**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	4.3	ND	ND	4.7	ND	ND	ND	ND	ND	0.7 J	ND	ND	NA
Apr-2011	ND	ND	ND	ND	**6.6**	ND	ND	**5.6**	ND	ND	ND	ND	2.2	ND	ND	0.6 J	NA
Sep-2011	ND	ND	ND	ND	2.1	ND	ND	3.7	ND	ND	ND	ND	1.5	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	2	ND	ND	4.3	ND	ND	ND	ND	1.6	0.5 J	ND	0.9 J	NA
Sep-2012	ND	ND	ND	ND	3.52	ND	ND	**5.6**	ND	ND	ND	ND	2.5	0.63 J	ND	0.48 J	ND
Mar-2013	ND	0.58 J,B	ND	ND	4.91	ND	ND	**6.59**	ND	ND	ND	ND	3.32	ND	ND	0.93 J	ND
Oct-2013	ND	ND	ND	ND	2.79	0.19 J	ND	4.43	ND	ND	ND	ND	2.73	1.25	ND	0.41 J	ND
Mar-2014	ND	ND	ND	ND	2.49	ND	ND	**5.1**	ND	ND	ND	ND	2.43	1.04	ND	0.35 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-06***															
Oct-2014	ND	ND	ND	ND	2.61	ND	ND	4.99	ND	ND	ND	ND	2.43	0.76 J	ND	0.24 J	ND
Apr-2015	ND	ND	ND	ND	2.5	ND	ND	3.81	ND	ND	ND	ND	1.96	0.66 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.7	ND	ND	3.9	ND	ND	ND	ND	2.1	0.7 J	ND	ND	ND
May-2016	ND	ND	ND	ND	2.2	ND	ND	3.5	ND	ND	ND	ND	1.9	ND	ND	0.2 J	ND
Oct-2016	ND	ND	ND	ND	2.6	ND	ND	3.8	ND	ND	ND	ND	1.8	0.8 J	ND	0.3 J	ND
May-2017	ND	ND	ND	ND	1.7	ND	ND	3.9	ND	ND	ND	ND	1.7	0.3 J	ND	0.2 J	ND
Oct-2017	ND	ND	ND	ND	1.8	ND	ND	4.2	ND	ND	ND	ND	2	0.8 J	ND	0.2 J	ND
May-2018	ND	ND	ND	ND	2.4 B	ND	ND	1.7	ND	ND	ND	ND	1.4	0.61 J	ND	ND	NA
Nov-2018	ND	ND	ND	ND	3.6	ND	ND	3	ND	ND	ND	ND	1.9	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	2.5	ND	ND	1.9	ND	ND	ND	ND	1.3	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	2.4	ND	ND	1.5	ND	ND	ND	ND	1.2	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.722 J	ND	ND	1.43	ND	ND	ND	ND	1.07	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	1.4	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	1.3	ND	ND	ND	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	1.5	ND	ND	ND	NA
May-2023	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	1.2	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-10A***											
Nov-1993	11	11	0.3	ND	18.8	2.6	ND	5.54	108	4.2	18	16.7
Apr-1994	7	7	0.2	ND	19.9	2.8	ND	5.26	112	3.1	91	21.05
Apr-1995	ND	ND	ND	ND	21.1	3.3	ND	5.1	120	5.1	44	18.8
Apr-1997	ND	10	ND	ND	27	2.5	ND	NA	NA	12	79	24
Oct-1997	5	5	0.21	ND	20.6	3.11	ND	7.8	149.8	3.17	51	22
Apr-1998	4	4	ND	ND	19.8	2.41	ND	5.26	162.2	5.6	62	27
Apr-1999	1	1	0.19	ND	18.2	2.34	ND	5.15	142.8	4	81	25
Oct-1999	6	6	0.11	ND	19.2	2.95	ND	5.68	148.1	5.86	98	25
Apr-2000	4	ND	ND	ND	26.2	3.28	ND	5.62	115	5.79	86	24
Oct-2000	6.6	NA	ND	ND	26.2	2.76	ND	5.63	141.8	4.79	93	28.9
Apr-2001	4.1	NA	ND	ND	25	2.9	ND	NA	NA	15.3	85	28.1
Sep-2001	5.7	5.7	ND	ND	24.1	3.18	ND	5.35	131	10.2	91	26.1
Mar-2002	4.6	4.6	ND	ND	41.7	3.23	ND	5.2	159.5	8.1	99	27.5
Sep-2002	4.2	4.2	ND	ND	32.1	2.73	ND	5.2	157.3	6.23	80	25.4
Mar-2003	4.4	4.4	ND	ND	29.2	2.27	ND	5.2	164.5	10.7	101	25
Oct-2003	5.1	5.1	ND	ND	26.9	2.62	ND	5.2	169.1	5.07	73	24.4
Apr-2004	5.9	5.9	ND	ND	24.2	2.61	ND	5.1	141.6	5.56	134	25.8
Oct-2004	5.9	5.9	ND	ND	22.5	2.47	ND	5.2	142	6.46	79	15.4
Apr-2005	6.1	6.1	ND	ND	22.3	2.41	ND	5.1	136.2	7.48	94	25.9
Oct-2005	6.1	6.1	0.21	ND	31.2	1.92	ND	4.7	126.6	8.34	112	21.1
Mar-2006	5.7	5.7	ND	ND	29.7	1.99	ND	5.3	136.2	8.1	79	20.8
Sep-2006	5.5	5.5	ND	ND	29.7	1.8	ND	5.1	129.4	8.63	105	21.5
Mar-2007	5.9	5.9	ND	ND	31.2	2.35	ND	5	123.9	6.69	72	20.8
Sep-2007	6.1	6.1	ND	ND	28.4	2	ND	5.2	113.2	10.7	90	21.6
Mar-2008	5.7	5.7	ND	ND	31	1.6	ND	5.2	128.2	9	107	21.3
Sep-2008	6.5	6.5	ND	ND	32.1	1.76	ND	4.8	116.7	6.1	112	21.6
Mar-2009	7	7	ND	ND	35.8	1.53	ND	4.9	138.9	5.17	101	22.5
Oct-2009	5.7	5.7	ND	ND	39.8	1.44	ND	4.9	138.7	5.45	95	24.3
Apr-2010	5.4	5.4	ND	ND	45.1	1.41	ND	4.5	139.1	6.43	73	24.6
Oct-2010	6	6	ND	ND	46	1.46	ND	4.8	143	5.77	117	26.7
Apr-2011	4.5	4.5	ND	ND	48	1.38	ND	4.7	154.6	5.68	117	26
Sep-2011	4.7	4.7	0.25	ND	47.6	1.51	ND	5.3	162.7	5.5	120	25.8
Mar-2012	4.6	4.6	ND	ND	45.7	1.48	ND	4.2	160.8	6.59	94	25.3
Sep-2012	4.96	4.96	ND	ND	48.5	1.48	ND	4.1	175.1	8.12	121	26.7
Mar-2013	4.64	4.64	ND	ND	42.2	1.7	ND	4.3	155.9	6.58	102	25.2
Oct-2013	4.8	4.8	ND	ND	43.2	1.65	ND	4.1	158	7.02	94	24.8
Mar-2014	3.84	3.84	ND	ND	48.8	1.49	ND	5.2	155.3	8.62	114	22.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-10A***										
Oct-2014	*ND*	*ND*	*ND*	*ND*	45.7	1.81	*ND*	4.8	148.1	6.76	102	25.5
Apr-2015	4.64	4.64	*ND*	*ND*	44.3	1.93	*ND*	4.6	175.1	8.7	104	25.9
Nov-2015	3.76	3.76	*ND*	*ND*	44.6	1.99	*ND*	5.1	199	8.64	109	28.6
May-2016	2.88	2.88	*ND*	*ND*	44.1	1.83	*ND*	5.2	259	9.58	113	28.3
Oct-2016	2.84	2.84	*ND*	*ND*	42.3	*NA*	*NA*	5.3	254	7.49	115	25.8
May-2017	2.64	2.64	*ND*	*ND*	43	1.93	*ND*	5	275	8.4	102	25.3
Oct-2017	2.04	2.04	*ND*	*ND*	44.5	1.98	*ND*	5.5	247	8.93	103	25.6
May-2018	*2 JB*	*ND*	*ND*	*5.8 J*	45.9	0.33	*ND*	4.8	253	*9 J*	112	27.4
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	42.6	1.9	*ND*	4.72	178.6	*9.3 J*	98	26.3
May-2019	*ND*	*NA*	*ND*	*ND*	44.3	2	*ND*	4.57	152.2	*ND*	90	26.5
Oct-2019	*ND*	*NA*	*ND*	*8.2 J*	44.9	2	*ND*	4.51	203.9	12.1	85	28.3
May-2020	*1 J*	*NA*	*ND*	*ND*	43.5	2.4	*ND*	4.43	189.7	10.8	118	28.2
Oct-2020	*ND*	*NA*	*ND*	*ND*	41.5	2.3	*ND*	4.34	177.9	10.7	95	29.8
Apr-2021	*2 J5c*	*NA*	*ND*	*ND*	45	2.2	*ND*	4.7	213	*8.6 J*	106	28
Oct-2021	*ND*	*NA*	*ND*	*ND*	43.3	2.2	*ND*	4.84	251.8	*9.3 J*	93	28.9
May-2022	*2 J*	*NA*	*ND*	*ND*	39.2	2	*ND*	4.67	225.6	*8.1 J*	85	28.9 N3
Oct-2022	*ND*	*NA*	*ND*	*8.4 J*	47.9	2.1	*ND*	4.74	228.7	11	100	28.5 N3
May-2023	*ND*	*NA*	*ND*	*ND*	45.9	2.2	*ND*	4.78	228	10.1	102	27.2 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-10A***													
Nov-1993	NA	ND	ND	NA	ND	3.4	NA	0.006	NA	ND	0.18	0.28	ND	2	NA
Apr-1994	NA	ND	ND	NA	ND	3.6	NA	ND	NA	ND	0.63	0.09	ND	2.93	NA
Apr-1995	ND	ND	0.6	ND	ND	2.9	NA	ND	0.02	ND	0.3	0.06	ND	2.8	NA
Oct-1996	ND	ND	0.066	ND	ND	5.9	5.6	ND	ND	ND	ND	ND	ND	2.8	2.9
Apr-1997	ND	ND	0.065	ND	ND	7	6	ND	ND	ND	ND	ND	0.002	3	2.6
Oct-1997	ND	ND	0.056	ND	ND	4.98	4.82	ND	ND	ND	0.226	ND	ND	3.08	3.03
Apr-1998	ND	ND	0.057	ND	ND	5.45	4.88	ND	ND	ND	0.248	ND	ND	3.25	3.18
Apr-1999	ND	ND	0.061	ND	ND	4.86	4.81	ND	ND	ND	0.099	ND	ND	3.04	2.92
Oct-1999	ND	ND	0.074	ND	ND	5.75	5.02	ND	ND	ND	0.164	ND	ND	3.14	2.84
Apr-2000	ND	ND	0.068	ND	ND	4.57	4.34	ND	ND	ND	ND	ND	ND	3.14	2.96
Oct-2000	ND	ND	0.075	ND	ND	6.1	5.79	ND	0.011	ND	0.389	ND	ND	3.31	3.11
Apr-2001	ND	ND	0.077	ND	ND	5.39	NA	ND	0.012	ND	0.184	NA	ND	3.57	NA
Sep-2001	ND	ND	0.074	ND	ND	5.23	5.11	ND	ND	ND	0.159	ND	ND	3.17	3.12
Mar-2002	ND	ND	0.073	ND	ND	5.76	5.44	ND	ND	ND	0.068	ND	ND	3.18	3.13
Sep-2002	ND	ND	0.075	ND	ND	5.09	4.53	ND	ND	0.016	0.073	ND	ND	3.1	3.04
Mar-2003	ND	ND	0.081	ND	ND	4.64	4.35	ND	ND	ND	ND	ND	ND	3.27	3.07
Oct-2003	ND	ND	0.078	ND	ND	4.47	4.05	ND	ND	0.012	0.074	ND	ND	3.2	3.12
Apr-2004	ND	0.002	0.081	ND	ND	4.79	4.68	ND	0.012	ND	0.125	ND	ND	3.38	3.25
Oct-2004	ND	ND	0.085	ND	ND	4.7	4.55	ND	0.01	ND	ND	ND	ND	3.46	3.34
Apr-2005	ND	0.002	0.084	ND	ND	4.98	5.09	ND	ND	ND	0.14	ND	ND	3.26	3.28
Oct-2005	ND	ND	0.066	ND	ND	4.44	3.96	ND	ND	ND	0.18	ND	ND	2.44	2.26

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-10A***													
Mar-2006	ND	ND	0.061	ND	ND	4.23	4.14	ND	ND	ND	ND	ND	ND	2.49	2.5
Sep-2006	ND	ND	0.057	ND	ND	4.68	4.8	ND	ND	ND	ND	ND	ND	2.38	2.58
Mar-2007	ND	ND	0.06	ND	ND	4.6	4.73	ND	ND	ND	ND	ND	ND	2.27	2.44
Sep-2007	ND	ND	0.061	ND	ND	4.86	4.71	ND	ND	ND	ND	ND	ND	2.31	2.32
Mar-2008	ND	0.002	0.063	ND	ND	4.73	4.47	ND	ND	ND	ND	ND	ND	2.31	2.19
Sep-2008	ND	ND	0.06	ND	ND	4.73	4.43	ND	ND	ND	ND	ND	ND	2.37	2.22
Mar-2009	ND	ND	0.061	ND	ND	5.15	4.92	ND	ND	ND	ND	ND	ND	2.32	2.25
Oct-2009	ND	ND	0.072	ND	ND	5.24	5.03	ND	ND	ND	0.065	ND	ND	2.72	2.62
Apr-2010	ND	ND	0.076	ND	ND	5.33	5.13	ND	ND	ND	ND	ND	ND	2.75	2.67
Oct-2010	ND	ND	0.072	ND	ND	5.56	5.48	ND	0.011	ND	ND	ND	ND	3.11	3.03
Apr-2011	ND	ND	0.087	ND	ND	5.41	4.57	ND	0.01	ND	0.059	ND	ND	3.3	2.66
Sep-2011	ND	ND	0.083	ND	ND	5.36	5.33	ND	ND	ND	0.053	ND	ND	3.01	2.99
Mar-2012	ND	ND	0.081	ND	ND	4.97	5.1	ND	ND	ND	ND	ND	ND	3.14	3.24
Sep-2012	ND	ND	0.0803	0.000438 J	ND	5.04	4.89	0.0019 J	0.01	0.0034 J	0.0379 J	0.051	ND	3.43	3.26
Mar-2013	ND	ND	0.0846	0.000432 J	ND	4.96	4.78	0.0033 J	0.0101	0.0042 J	0.0142 J	0.0094 J	ND	3.11	2.94
Oct-2013	ND	ND	0.0847	0.000355 J	0.000148 J	4.66	4.35	0.0037 J	0.0105	0.0046 J	ND	ND	ND	3.19	2.88
Mar-2014	0.00033 J	ND	0.0719	0.000412 J	0.000127 J	4.6	4.43	0.0025 J	0.0097 J	0.0024 J	0.0374 J	0.01 J	ND	2.71	2.69
Oct-2014	0.000857 J	ND	0.0862	0.000448 J	0.00013 J	4.96	5.08	0.000907 J	0.0106	0.0047 J	ND	ND	ND	3.19	3.27
Apr-2015	0.000433 J	ND	0.0874	0.000393 J	0.000126 J	4.99	4.9	0.0015 J	0.0116	0.0044 J	0.0426 J	0.0169 J	ND	3.26	3.21
Nov-2015	0.000357 J	ND	0.093	0.000553 J	0.000155 J	5.87	5.7	0.0011 J	0.0118	0.0038 J	ND	0.0514	0.000188 J	3.39	3.34
May-2016	ND	ND	0.0921	0.00041 J	0.00022 J	5.45	4.52	0.0016 J	0.0118	0.0035 J	ND	ND	ND	3.56	3.17
Oct-2016	ND	ND	0.095	0.00038 J	ND	5.06	5.21 J+	0.0029 J	0.0135	0.0032 J	0.0705 J	ND	0.00013 J	3.2	3.47 J+
May-2017	ND	ND	0.0907	0.00042 J	ND	4.7	5.32	0.0035 J	0.0239	0.004 J	0.102 J	ND	0.0003 J	3.28	3.31
Oct-2017	ND	ND	0.0849	0.00046 J	0.0002 J	5.27	5.07	ND	0.0117	0.0036 J	ND	ND	ND	3.02	3.15

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-10A***													
May-2018	*ND*	*ND*	*0.0891 J*	*ND*	*0.0002 J*	5.4	5.2	*0.0054 J*	*0.0126 J*	*ND*	0.03	*ND*	*ND*	3.4	3.3
Nov-2018	*ND*	*ND*	0.085	0.00062	*0.00019 J*	5.3	5.2	*0.0064 J*	0.011	0.0047	0.085	0.07	*0.000068 J*	3.2	3.1
May-2019	*ND*	*ND*	0.081	0.00055	*ND*	5.4	5.5	*ND*	0.01	0.004	*ND*	0.037	*ND*	3.2	3.3
Oct-2019	*0.00012 J*	*0.00021 J*	0.089	0.00052	*0.0003 J*	5.8	5.5	0.0078	0.01	0.0047	*0.05 J*	0.049	*0.000069 J*	3.4	3.3
May-2020	*ND*	*ND*	0.087	0.00052	*0.00016 J*	5.7	5.6	*0.005 J*	0.012	0.0045	*0.028 J*	*0.02 J*	*ND*	3.4	3.3
Oct-2020	*ND*	*ND*	0.087	*0.0006 J*	*ND*	5.9	5.4	*0.0034 J*	0.012	*0.0074 J*	*0.038 J*	0.027	*ND*	3.6	3.2
Apr-2021	*ND*	*ND*	0.093	*0.00055 J*	*ND*	5.6	5.7	*0.003 J*	0.012	*0.0049 J*	*ND*	*ND*	*ND*	3.4	3.6
Oct-2021	*ND*	*ND*	0.095	0.00061	*ND*	5.6	6.1	0.0032	0.015	0.0057	*0.048 J*	*0.033 J*	*0.000037 J*	3.6	3.8
May-2022	*ND*	*ND*	0.094	0.00052	*ND*	5.6	5.6	0.0042	0.014	0.0054	0.097	0.082	*ND*	3.6	3.5
Oct-2022	*ND*	*ND*	0.09	0.00058	*ND*	5.6	6.2	0.0029	0.013	0.0044	0.093	0.087	*ND*	3.5	3.8
May-2023	*ND*	*ND*	0.09	0.00059	*ND*	5.4	5.9	0.0026	0.015	0.005	0.09	0.077	*ND*	3.3	3.6

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-10A*												
Nov-1993	0.05	NA	ND	NA	2.7	NA	ND	NA	9.5	NA	NA	NA	0.02
Apr-1994	0.04	NA	ND	NA	2.39	NA	ND	NA	10.8	NA	NA	NA	0.07
Apr-1995	0.02	NA	ND	ND	2	NA	ND	ND	10.8	NA	ND	0.2	0.06
Oct-1996	0.028	0.026	NA	ND	ND	ND	ND	ND	13	13	ND	ND	0.53
Apr-1997	0.035	0.026	ND	ND	3.4	3.5	ND	ND	16	14	ND	ND	0.048
Oct-1997	0.041	0.03	0.0004	ND	2.43	1.52	ND	ND	12.7	12.7	ND	ND	0.021
Apr-1998	0.038	0.032	ND	ND	2.52	2.3	ND	ND	12.5	12.3	ND	ND	0.016
Apr-1999	0.035	0.03	NA	ND	2.29	2.18	ND	ND	12.6	12.2	ND	ND	0.013
Oct-1999	0.046	0.031	NA	0.02	2.61	2.37	ND	ND	14.1	12.7	ND	ND	0.013
Apr-2000	0.037	0.033	NA	ND	1.16	1.68	ND	ND	13.6	12.9	ND	ND	0.01
Oct-2000	0.06	0.035	NA	ND	2.44	2.27	ND	ND	14.8	14.1	ND	ND	0.013
Apr-2001	0.05	NA	NA	ND	2.48	NA	ND	ND	15.4	NA	ND	ND	0.015
Sep-2001	0.044	0.034	NA	0.011	2.17	2.11	ND	ND	14.7	14.2	ND	ND	0.014
Mar-2002	0.04	0.036	NA	0.012	3.27	2.47	ND	ND	17.8	17	ND	ND	0.02
Sep-2002	0.045	0.039	NA	0.012	3.36	2.92	ND	ND	16.4	16	ND	ND	0.016
Mar-2003	0.045	0.04	NA	ND	1.99	2.32	ND	ND	16.9	15.6	ND	ND	0.011
Oct-2003	0.049	0.047	NA	ND	4.57	2.88	ND	ND	15.8	15	ND	ND	0.011
Apr-2004	0.062	0.047	ND	ND	2.71	2.53	ND	ND	14.2	14.5	ND	ND	ND
Oct-2004	0.057	0.054	ND	ND	2.54	2.47	ND	ND	14.4	13.6	ND	ND	ND
Apr-2005	0.05	0.046	ND	ND	2.19	2.17	ND	ND	14.6	15.5	ND	ND	ND
Oct-2005	0.037	0.028	ND	ND	2.26	2.04	ND	ND	15.9	14.2	ND	ND	0.012
Mar-2006	ND	ND	ND	ND	2.14	2.17	ND	ND	16.8	15.9	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-10A***												
Sep-2006	0.027	0.034	*ND*	*ND*	2.3	2.33	*ND*	*ND*	16.5	14.9	*ND*	*ND*	*ND*
Mar-2007	0.024	0.029	*ND*	*ND*	2.18	2.15	*ND*	*ND*	16.8	15.6	*ND*	*ND*	0.011
Sep-2007	0.025	0.027	*ND*	*ND*	2.07	1.89	*ND*	*ND*	17.1	15.7	*ND*	*ND*	0.011
Mar-2008	0.025	0.024	*ND*	*ND*	2.19	2.04	*ND*	*ND*	18.6	16.6	*ND*	*ND*	0.011
Sep-2008	0.025	0.024	*ND*	*ND*	2.04	1.93	*ND*	*ND*	16.5	15.5	*ND*	*ND*	0.01
Mar-2009	0.026	0.025	*ND*	*ND*	2.14	2.09	*ND*	*ND*	17.4	17	*ND*	0.012	*ND*
Oct-2009	0.03	0.029	*ND*	*ND*	2.13	2.04	*ND*	*ND*	19.7	19.1	*ND*	*ND*	0.014
Apr-2010	0.032	0.029	*ND*	0.011	2.48	2.33	*ND*	*ND*	21.5	20.5	*ND*	*ND*	0.014
Oct-2010	0.038	0.037	*ND*	0.014	2.46	2.36	*ND*	*ND*	22.3	21.9	*ND*	*ND*	0.018
Apr-2011	0.042	0.04	*ND*	0.014	2.41	2.06	*ND*	*ND*	22.3	19	*ND*	*ND*	0.014
Sep-2011	0.041	0.039	*ND*	0.012	2.48	2.41	*ND*	*ND*	22.3	22	*ND*	*ND*	0.015
Mar-2012	0.041	0.043	*ND*	*ND*	2.34	2.41	*ND*	*ND*	22.3	22.9	*ND*	*ND*	0.015
Sep-2012	0.0422	0.0415	*0.000024 J*	0.0117	2.58	2.43	*ND*	*ND*	25.8	24.9	*0.0011 J*	*ND*	0.0128
Mar-2013	0.0507	0.0489	*0.000052 J*	0.0113	2.25	2.2	*0.000642 J*	*ND*	20.8	19.5	*ND*	*ND*	0.0218
Oct-2013	0.0521	0.0442	*ND*	0.0115	2.46	2.25	*0.000744 J*	*ND*	22.5	21.6	*0.000099 J*	*0.0016 J*	0.0246
Mar-2014	0.0489	0.0513	*ND*	*0.0108 J*	2.18	2.13	*ND*	*ND*	20.2	18.9	*ND*	*ND*	0.0163
Oct-2014	0.053	0.0518	*0.000023 J*	0.0111	2.37	2.48	*0.0018 J*	*ND*	22.9	24.1	*0.0017 J*	*ND*	0.018
Apr-2015	0.0569	0.0564	*0.000043 J*	0.0121	2.38	2.33	*0.0017 J*	*ND*	23.7	23.4	*ND*	*ND*	0.0197
Nov-2015	0.0577	0.0559	*ND*	0.0124	2.63	2.56	*0.001 J*	*ND*	26.3	25.6	*0.000146 J*	*ND*	0.0165
May-2016	0.0622	0.0596	*ND*	0.0119	2.62	2.45	*0.00079 J*	*ND*	26.9	23.9	*ND*	*ND*	*0.016 J,B*
Oct-2016	*0.0707 J+*	*0.0636 J+*	*ND*	0.0139	2.53	2.62	0.0008	*ND*	22.2	23.6	*ND*	*ND*	*0.015 J*
May-2017	0.135	0.0595	*ND*	0.0133	2.38	2.42	*0.00073 J*	*ND*	22.5	23.2	*ND*	*ND*	*0.0157 J*
Oct-2017	0.0555	0.0538	*ND*	0.0122 B	2.15	2.27	*0.00051 J*	*ND*	21.1	22.8	*ND*	*ND*	*0.0173 J*
May-2018	0.063	0.0558	*ND*	*0.022 J*	*2.5 J*	*2 J*	*ND*	*ND*	26.9	25.7	*ND*	*ND*	0.0227

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-10A***												
Nov-2018	0.053	0.05	*ND*	0.015	*2.3 J*	*2.2 J*	*0.00074 J*	*ND*	23	22.8	*ND*	*ND*	0.021
May-2019	0.058	0.055	*ND*	0.012	*ND*	*ND*	*ND*	*ND*	22.5	21.5	*ND*	0.0033	0.018
Oct-2019	0.073	0.06	*ND*	0.013	*2.2 J*	*ND*	*0.00055 J*	*ND*	24.5	24.7	*ND*	*ND*	0.024
May-2020	0.06	0.056	*ND*	0.013	*2.6 J*	*1.8 J*	*0.00082 J*	*ND*	25	22.3	*ND*	*ND*	0.02
Oct-2020	0.058	0.055	*ND*	0.013	*ND*	*2.1 J*	*ND*	*ND*	23.6	21.9	*ND*	*0.001 J*	*0.025 J*
Apr-2021	0.059	0.061	*0.00006 J*	0.015	2.3	2.3	*ND*	*ND*	23.3	24.6	*ND*	*ND*	0.021
Oct-2021	0.06	0.064	*ND*	0.016	2.1	2.1	*0.0012 J*	*ND*	22.9	24.1	*0.000039 J*	*ND*	0.022
May-2022	0.064	0.061	*ND*	0.016	2.3	2.3	*0.0012 J*	*ND*	23.9	23.6	*ND*	*ND*	0.021
Oct-2022	0.062	0.064	*ND*	0.016	2.2	2.5	*ND*	*ND*	24.3	26.4	*ND*	*ND*	0.024
May-2023	0.061	0.064	*ND*	0.015	2.2	2.4	*0.0015 J*	*ND*	23.8	26.9	*ND*	*ND*	0.023

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-10A***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	28	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-10A*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-10A*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.9 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.9 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-10A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-10A***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	0.63 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.32 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.27 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.21 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.22 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-10A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.163 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-10A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-10A***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.14 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-10A***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.3 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-14***											
Nov-1993	7	7	ND	ND	2.3	ND	ND	5.2	20.2	ND	10	1.41
Apr-1994	ND	ND	ND	ND	2	ND	ND	4.99	16.5	ND	38	ND
Aug-1994	9.5	9.5	ND	ND	2.2	0.3	ND	4.9	25.2	2.6	ND	1.69
Sep-1994	10	10	ND	ND	2.3	0.2	ND	5.9	25.6	2.4	18	1.6
Nov-1994	ND	ND	ND	ND	2.2	ND	ND	5.4	18.4	ND	ND	1.5
Apr-1995	ND	ND	0.3	ND	2.1	ND	ND	5.3	20.3	ND	22	1.4
Apr-1997	ND	5	ND	ND	3	0.06	ND	NA	NA	ND	32	5.8
Oct-1997	3	3	0.23	ND	1	ND	ND	7.68	21.1	ND	ND	11
Apr-1998	2	2	0.52	ND	1.92	0.12	ND	6.51	20.1	ND	16	1.7
Apr-1999	9	9	0.28	ND	3.77	ND	ND	6.11	35.1	ND	38	2.6
Oct-1999	4	4	0.21	ND	2.56	ND	ND	5.62	28.2	ND	29	2
Apr-2000	13	13	ND	ND	4.29	ND	ND	7.28	28	ND	20	3.7
Oct-2000	4	NA	ND	11	3.01	ND	ND	6.16	45.9	5.5	26	2.77
Apr-2001	2	NA	ND	ND	2.4	ND	ND	NA	NA	ND	28	3.43
Sep-2001	32	32	1.1	109	3.88	ND	ND	6.09	43	ND	45	2.52
Mar-2002	ND	ND	ND	ND	3.44	ND	ND	6	42	ND	ND	3.81
Sep-2002	2.8	2.8	ND	60	2.99	ND	ND	5.9	40.2	1.15	24	3.82
Mar-2003	3.5	3.5	ND	ND	31.9	ND	ND	5.8	34.2	7.67	22	2.43
Oct-2003	3.1	3	ND	ND	2.48	ND	ND	5.6	35.2	ND	15	2.86
Apr-2004	2.8	2.8	ND	ND	2.58	ND	ND	5.7	26.6	ND	37	3.02
Oct-2004	2.8	2.8	ND	ND	2.38	ND	ND	5.9	28.2	ND	31	3.22
Apr-2005	2.7	2.7	ND	ND	2.62	ND	ND	5.6	24.6	ND	33	2.1
Oct-2005	3.2	3.2	0.23	ND	3.47	0.08	ND	4.7	16.8	ND	40	3.14
Mar-2006	4.2	4.2	ND	ND	3.49	0.1	ND	6.7	19.8	ND	30	2.18
Sep-2006	4.4	4.4	ND	ND	3.79	ND	ND	5.2	23.7	ND	ND	2.66
Mar-2007	9.7	9.7	0.6	ND	3.47	1.9	ND	5.6	32.1	ND	ND	2.55
Sep-2007	8.5	8.5	0.29	ND	10.3	ND	ND	6.3	38.9	ND	40	2.47
Mar-2008	8.9	8.9	ND	ND	4.4	ND	ND	5.9	46.2	ND	18	1.36
Sep-2008	3.2	3.2	ND	19	5.01	ND	ND	5.6	37.5	ND	15	2.9
Mar-2009	21	21	ND	ND	5.18	ND	ND	5.8	56.9	ND	15	3.76
Oct-2009	13	13	ND	ND	5.95	ND	ND	5.5	50.9	ND	39	5.29
Apr-2010	18.9	18.9	ND	ND	6.5	ND	ND	5.1	57.6	ND	46	27.2
Oct-2010	19	19	ND	ND	7.52	ND	ND	4.9	46.4	ND	59	5.99
Apr-2011	6.7	6.7	ND	ND	6.4	ND	ND	4.6	34.7	ND	25	4.7
Sep-2011	8.9	8.9	ND	ND	6.57	ND	ND	5.8	47.8	ND	43	5.24
Mar-2012	7.7	7.7	ND	ND	5.75	ND	ND	4.7	33.8	ND	ND	6.78
Sep-2012	7.76	7.76	ND	ND	5.16	0.115	ND	4.5	31.8	ND	19	3.53

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-14***											
Mar-2013	9.68	9.68	*ND*	*ND*	5.46	0.107	*ND*	4.1	37.1	*0.385 J*	16	3.62
Oct-2013	9.6	9.6	*ND*	*ND*	5.5	0.101	*ND*	4.2	40.5	*ND*	*ND*	3.04
Mar-2014	10.7	10.7	*ND*	*ND*	5.75	0.113	*ND*	5.8	35.9	*ND*	32	3.23
Oct-2014	5.5	5.5	*ND*	*ND*	6.06	0.136	*ND*	5.3	38.3	*ND*	*ND*	3.86
Apr-2015	7.52	7.52	*ND*	*ND*	5.98	0.105	*ND*	5.2	48.2	*ND*	30	4.07
Nov-2015	6.68	6.68	*ND*	*ND*	5.88	0.129	*ND*	5.8	55.3	*ND*	*19 J*	4.08
May-2016	7.24	7.24	*ND*	*ND*	6.39	0.12	*ND*	6	67.4	*ND*	*21 J*	4.1
Oct-2016	7.68	7.68	*ND*	*5 J*	6.46	*NA*	*NA*	5.9	73.2	*ND*	31	4
May-2017	7.28	7.28	*ND*	*ND*	7.17	0.131	*ND*	5	68.5	*ND*	*24 J*	4.2
Oct-2017	14	14	*ND*	*ND*	7.41	0.118	*ND*	6.1	92.5	*ND*	*21 J*	4.5
May-2018	34	34	*ND*	*ND*	8.6	0.1	*ND*	6.2	96.8	*ND*	*ND*	6.8
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	9.8	*ND*	0.02	5.96	100.7	*ND*	16	6.7
May-2019	*ND*	*NA*	*ND*	*ND*	10.1	*ND*	0.016 H1	5.89	71.3	*ND*	24	6.2
Oct-2019	*2.5 JH1*	*NA*	*ND*	*10.4 J*	6.9	*0.053 J*	0.053 H1	6.09	81.5	*ND*	*ND*	5.7
May-2020	12	*NA*	*ND*	*ND*	8.1	*ND*	*0.0067 J*	5.3	71.1	*ND*	48	7.3
Oct-2020	*ND*	*NA*	*ND*	*ND*	8.4	*ND*	0.019 H1	5.26	74.7	*ND*	*ND*	7.1
Apr-2021	*1 J4c*	*NA*	*ND*	*ND*	8.8	*0.074 J*	*ND*	5.59	67.7	*ND*	30	6.9
Oct-2021	*8 J6c*	*NA*	*ND*	*6.1 JMH*	7.7	*ND*	*ND*	5.75	93.5	*ND*	*ND*	7.26
May-2022	*2 J2c*	*NA*	*ND*	*ND*	7.3	*ND*	0.024 MH	5.67	106	*ND*	14	8.4 N3
Oct-2022	*2 JB3c*	*NA*	*ND*	*6.1 J*	10.9	*0.075 J*	0.043	5.73	105.7	*ND*	29	7.9 N3
May-2023	13	*NA*	*ND*	*ND*	10.2	0.12	*ND*	5.81	104.5	*ND*	40	9.8 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-14*													
Nov-1993	NA	ND	ND	NA	ND	0.2	NA	ND	NA	ND	8.8	2.7	ND	0.22	NA
Apr-1994	NA	ND	ND	NA	ND	ND	NA	ND	NA	ND	1.6	1	ND	ND	NA
Aug-1994	NA	ND	ND	NA	ND	0.33	NA	ND	NA	ND	5	3.9	ND	0.21	NA
Sep-1994	NA	ND	ND	NA	ND	0.22	NA	ND	NA	ND	6.2	4.9	ND	0.25	NA
Nov-1994	NA	ND	ND	NA	ND	0.25	NA	ND	NA	0.04	2.5	2.7	ND	0.2	NA
Apr-1995	ND	ND	0.7	ND	ND	0.2	NA	ND	ND	ND	2.4	1.3	ND	0.23	NA
Oct-1996	ND	ND	0.011	ND	ND	0.43	0.33	ND	ND	ND	5	0.48	ND	ND	ND
Apr-1997	ND	ND	0.014	ND	ND	0.32	0.48	ND	ND	ND	3.6	2.8	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	0.274	0.289	ND	ND	ND	10.2	3.66	ND	0.211	0.216
Apr-1998	ND	ND	ND	ND	ND	0.298	0.391	ND	ND	ND	16.2	2.8	ND	0.237	0.237
Apr-1999	ND	ND	0.012	ND	ND	0.447	0.436	ND	ND	ND	19.1	7.85	ND	0.364	0.345
Oct-1999	ND	ND	0.013	ND	ND	0.498	0.438	ND	ND	ND	12.7	9.24	ND	0.383	0.34
Apr-2000	ND	ND	0.013	ND	ND	0.747	0.442	ND	ND	0.008	15.1	8.34	ND	0.437	0.351
Oct-2000	ND	ND	0.018	ND	ND	0.5	0.458	ND	ND	ND	122	12.3	ND	0.369	0.35
Apr-2001	ND	ND	0.018	ND	ND	0.704	NA	ND	ND	ND	87	NA	0.003	0.405	NA
Sep-2001	ND	ND	0.106	ND	ND	1.01	0.5	0.02	ND	0.121	1140	10.3	**0.046**	0.543	0.371
Mar-2002	ND	ND	0.022	ND	ND	0.816	0.478	0.014	ND	0.015	118	9.94	0.007	0.431	0.368
Sep-2002	ND	ND	0.024	ND	ND	0.867	0.415	ND	ND	0.044	43.9	8.96	0.005	0.404	0.341
Mar-2003	ND	ND	0.017	ND	ND	0.427	0.429	ND	ND	0.017	48.7	3.58	0.004	0.331	0.311
Oct-2003	ND	ND	0.024	ND	ND	0.648	0.316	ND	ND	0.043	195	6.42	0.004	0.302	0.24
Apr-2004	ND	ND	0.014	ND	ND	0.603	0.311	ND	ND	ND	80.4	7.38	0.002	0.37	0.236

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14***													
Oct-2004	ND	ND	0.014	ND	ND	0.788	0.286	ND	ND	0.043	59.3	6.44	0.002	0.303	0.232
Apr-2005	ND	ND	0.012	ND	ND	0.36	0.363	ND	ND	ND	14.3	5.68	ND	0.287	0.267
Oct-2005	ND	ND	0.011	ND	ND	0.659	0.47	ND	ND	0.014	3.11	0.264	ND	0.363	0.321
Mar-2006	ND	ND	ND	ND	ND	0.269	0.231	ND	ND	ND	5.84	0.262	ND	0.367	0.357
Sep-2006	ND	ND	ND	ND	ND	0.454	0.448	ND	ND	ND	1.96	1.22	ND	0.371	0.369
Mar-2007	ND	ND	0.01	ND	ND	0.459	0.421	ND	ND	ND	21.9	6.27	ND	0.341	0.331
Sep-2007	ND	0.002	ND	ND	ND	0.421	0.394	ND	ND	ND	14.3	11.3	ND	0.346	0.33
Mar-2008	ND	ND	0.016	ND	ND	0.547	0.49	ND	ND	0.013	45.6	7.07	ND	0.435	0.382
Sep-2008	ND	ND	0.016	0.002	ND	0.495	0.292	0.012	ND	0.029	70.7	10.4	ND	0.393	0.306
Mar-2009	ND	ND	0.012	ND	ND	0.72	0.612	ND	ND	0.013	27.7	16.4	ND	0.477	0.494
Oct-2009	ND	ND	0.017	ND	ND	0.957	0.624	0.043	ND	0.066	39	10.2	ND	0.705	0.585
Apr-2010	ND	ND	0.018	ND	ND	0.974	0.76	ND	ND	ND	22	19.8	ND	0.707	0.568
Oct-2010	ND	0.003	0.016	ND	ND	0.985	0.927	0.02	ND	0.039	39.9	28.2	ND	0.857	0.82
Apr-2011	ND	ND	0.018	ND	ND	0.787	0.779	ND	ND	ND	23.3	18.5	ND	0.666	0.655
Sep-2011	ND	0.005	0.02	ND	ND	0.851	0.903	0.047	0.012	0.09	54.1	22.1	ND	0.741	0.728
Mar-2012	ND	ND	0.017	ND	ND	1.09	0.917	0.015	ND	0.032	29.6	20.4	ND	0.987	0.86
Sep-2012	ND	ND	0.0156	0.00008 J	ND	0.608	0.614	0.0021 J	0.0024 J	0.0028 J	5	4.43	ND	0.488	0.511
Mar-2013	ND	ND	0.0158	0.000123 J	ND	0.691	0.695	0.0026 J	0.0026 J	0.0038 J	13.7	5	ND	0.46	0.457
Oct-2013	ND	ND	0.0143	ND	ND	0.544	0.533	0.0024 J	0.0023 J	0.0016 J	5.94	6	ND	0.409	0.431
Mar-2014	0.000447 J	ND	0.0139	ND	ND	0.572	0.583	0.0021 J	0.0025 J	0.0065 J	16.8	5.61	ND	0.438	0.435
Oct-2014	0.000554 J	ND	0.0185	0.000226 J	0.000111 J	0.716	0.679	0.000749 J	0.003 J	0.0047 J	19.3	6.29	ND	0.504	0.493
Apr-2015	0.0011 J	ND	0.0186	ND	0.000104 J	0.726	0.767	0.0031 J	0.0034 J	0.0041 J	21.3	8.53	ND	0.547	0.586
Nov-2015	ND	0.004	0.0216	0.000682 J	0.000281 J	0.783	0.782	0.0016 J	0.0037 J	0.0171	69.1	7.37	0.00054 J	0.516	0.506
May-2016	ND	ND	0.0169	0.00011 J	ND	0.709	0.715	0.0012 J	0.003	0.0024 J	10.9	7.06	ND	0.564	0.512

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14***													
Oct-2016	*ND*	*ND*	0.0199	*0.00032 J*	*ND*	0.701	*0.727 J+*	*0.0013 J*	0.0036	0.0084	40.9	10.1	*0.00015 J*	0.544	*0.55 J+*
May-2017	*ND*	*ND*	0.0221	*0.00012 J*	*ND*	0.731	0.807	*0.00073 J*	0.0038	*0.0018 J*	8.84	9.11	*ND*	0.576	0.594
Oct-2017	*ND*	*ND*	0.0207	*0.00012 J*	*ND*	0.713	0.948	*ND*	0.0054	*0.0015 J*	10.4	11.4	*ND*	0.664	0.698
May-2018	*ND*	*ND*	0.026	*0.000097 J*	*0.000043 J*	1.2	1.1	*0.0018 J*	0.0077	0.006	21.4	18.3	*0.000044 JB*	*0.95 J*	*0.89 J*
Nov-2018	*ND*	*ND*	0.025	*0.000065 J*	*0.000045 J*	1.1	1.1	*0.002 J*	0.0075	0.0022	22.4	20	*0.00012 J*	*0.93 J*	*0.94 J*
May-2019	*ND*	*ND*	0.024	*ND*	*ND*	1.1	1.1	*ND*	0.0079	*ND*	21.2	16.6	*ND*	*ND*	*ND*
Oct-2019	0.00059	0.0034	0.053	0.0021	*0.00033 J*	1.1	1.1	0.016	0.011	0.065	251	15.7	*0.00051 J*	0.74	*0.84 J*
May-2020	*ND*	*ND*	0.027	*0.000072 J*	*ND*	1.3	1.2	*0.0041 J*	0.0061	*0.0015 J*	12.2	11.4	*ND*	1	*0.95 J*
Oct-2020	*ND*	*ND*	0.026	*ND*	*ND*	1.2	1.3	*0.006 J*	0.0052	*ND*	23	13.4	*ND*	0.99	1
Apr-2021	*ND*	*ND*	0.026	*0.00018 J*	*ND*	1.2	1.3	*0.0017 J*	0.0062	0.0052	20.4	7.9	*ND*	0.96	1.1
Oct-2021	*0.000063 JB*	*ND*	0.028	*0.00016 J*	*ND*	1.2	1.3	*0.0022 J*	0.0084	0.0033	26.6	8.5	*ND*	1	1.1
May-2022	*ND*	*ND*	0.037	0.0006	*ND*	1.3	1.3	0.015	0.011	0.022	60.3	12.1	*ND*	1.2	1.2
Oct-2022	*ND*	*ND*	0.035	0.00079	*ND*	1.3	1.5	0.0026	0.0094	0.031	45.6	10.5	*ND*	1.1	1.3
May-2023	0.00052	*0.0022 J*	0.035	*0.00032 J*	*ND*	1.7	1.5	0.018	0.0089	0.027	38.9	12.6	*ND*	1.4	1.3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-14*												
Nov-1993	0.09	NA	ND	NA	0.29	NA	ND	NA	1.2	NA	NA	NA	ND
Apr-1994	0.029	NA	ND	NA	ND	NA	ND	NA	1.4	NA	NA	NA	ND
Aug-1994	0.06	NA	ND	NA	0.39	NA	ND	NA	0.94	NA	NA	NA	0.01
Sep-1994	0.08	NA	ND	NA	0.26	NA	ND	NA	1.1	NA	NA	NA	0.04
Nov-1994	0.07	NA	ND	NA	0.22	NA	ND	NA	0.91	NA	NA	NA	0.01
Apr-1995	0.02	NA	ND	ND	0.42	NA	ND	0.01	0.92	NA	ND	ND	0.03
Oct-1996	0.034	0.038	NA	ND	ND	ND	ND	ND	1.7	1.6	ND	ND	0.087
Apr-1997	0.062	0.055	**0.0045**	ND	1.8	ND	ND	ND	1.1	1.7	ND	ND	ND
Oct-1997	0.063	0.065	ND	ND	0.711	0.711	ND	ND	1.12	1.16	ND	ND	ND
Apr-1998	0.043	0.043	ND	ND	ND	0.566	ND	ND	1.16	1.16	ND	ND	ND
Apr-1999	0.091	0.091	NA	ND	ND	0.711	ND	ND	1.45	1.43	ND	ND	ND
Oct-1999	0.091	0.087	NA	ND	ND	0.594	ND	ND	1.53	1.37	ND	ND	ND
Apr-2000	0.078	0.071	NA	ND	ND	ND	ND	ND	3.04	1.63	ND	ND	0.011
Oct-2000	0.071	0.096	NA	ND	0.607	0.517	ND	ND	1.53	1.52	ND	ND	ND
Apr-2001	0.075	NA	NA	ND	0.514	NA	ND	ND	3.27	NA	ND	ND	ND
Sep-2001	ND	0.087	NA	0.016	ND	ND	ND	ND	2.94	1.57	ND	ND	0.183
Mar-2002	0.058	0.084	NA	ND	2.48	1.35	ND	ND	2.66	1.51	ND	ND	ND
Sep-2002	0.075	0.077	NA	ND	1.15	ND	ND	ND	1.8	1.44	ND	ND	0.012
Mar-2003	0.042	0.05	NA	ND	1.19	ND	ND	ND	1.57	1.48	ND	ND	0.019
Oct-2003	0.022	0.069	NA	ND	1.47	1.21	ND	ND	2.28	1.29	ND	ND	ND
Apr-2004	0.063	0.074	0.0002	ND	0.63	ND	ND	ND	1.95	1.26	ND	ND	0.03
Oct-2004	0.071	0.071	0.0004	ND	0.875	ND	ND	ND	1.86	1.33	ND	ND	0.016

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14***												
Apr-2005	0.067	0.064	*ND*	*ND*	0.59	0.51	*ND*	*ND*	1.31	1.27	*ND*	*ND*	*ND*
Oct-2005	0.045	0.041	*ND*	*ND*	0.63	0.558	*ND*	*ND*	2.06	1.43	*ND*	*ND*	*ND*
Mar-2006	0.047	0.04	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.57	1.57	*ND*	*ND*	*ND*
Sep-2006	0.054	0.053	*ND*	*ND*	*ND*	0.502	*ND*	*ND*	1.88	1.9	*ND*	*ND*	*ND*
Mar-2007	0.065	0.059	0.0002	*ND*	*ND*	*ND*	*ND*	*ND*	1.81	1.72	*ND*	*ND*	*ND*
Sep-2007	0.091	0.087	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.96	1.82	*ND*	*ND*	*ND*
Mar-2008	0.074	0.067	0.0004	*ND*	0.586	*ND*	*ND*	*ND*	2.29	2.05	*ND*	*ND*	0.014
Sep-2008	0.082	0.068	0.0005	*ND*	*ND*	*ND*	*ND*	*ND*	2.45	2.04	*ND*	*ND*	0.011
Mar-2009	0.137	0.136	*ND*	0.011	0.527	0.555	*ND*	*ND*	2.41	2.65	*ND*	*ND*	0.019
Oct-2009	0.247	0.079	0.0002	0.063	*ND*	*ND*	*ND*	*ND*	3.11	2.63	*ND*	*ND*	0.032
Apr-2010	0.28	0.152	*ND*	*ND*	0.648	0.541	*ND*	*ND*	3.26	3.08	*ND*	*ND*	0.013
Oct-2010	0.244	0.218	*ND*	0.029	0.515	0.524	*ND*	*ND*	3.55	3.45	*ND*	*ND*	0.011
Apr-2011	0.171	0.166	*ND*	0.012	*ND*	*ND*	*ND*	*ND*	2.91	2.9	*ND*	*ND*	*ND*
Sep-2011	0.227	0.17	*ND*	0.057	0.515	0.533	*ND*	*ND*	2.99	2.89	*ND*	*ND*	0.02
Mar-2012	0.203	0.188	*ND*	0.017	0.707	0.575	*ND*	*ND*	3.97	3.39	*ND*	*ND*	0.011
Sep-2012	0.049	0.0501	*ND*	*0.0023 J*	*0.491 J*	0.501	*ND*	*ND*	2.45	2.47	*0.000477 J*	*ND*	*ND*
Mar-2013	0.0575	0.0526	*0.000145 J*	*0.0027 J*	*0.491 J*	*0.48 J*	*ND*	*ND*	2.3	2.3	*ND*	*ND*	0.0101
Oct-2013	0.056	0.0606	*ND*	*0.0021 J*	*0.427 J*	*0.452 J*	*ND*	*ND*	2.02	2.17	*0.000108 J*	*ND*	0.0105
Mar-2014	0.0556	0.0557	*ND*	*0.0031 J*	*0.456 J*	*0.458 J*	*ND*	*ND*	2.17	2.18	*ND*	*ND*	*0.0027 J*
Oct-2014	0.062	0.0581	*0.000081 J*	*0.0028 J*	0.506	*0.499 J*	*0.000906 J*	*ND*	2.58	2.55	*0.000972 J*	*ND*	*0.0091 J*
Apr-2015	0.0748	0.0748	*ND*	*0.0037 J*	0.546	0.584	*0.000938 J*	*ND*	2.67	2.84	*ND*	*ND*	*0.0067 J*
Nov-2015	0.0735	0.0661	*0.000137 J*	*0.004 J*	0.567	0.56	0.004	*ND*	2.57	2.55	**0.0025 R,C**	*ND*	0.0101
Dec-2015	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*0.000588 J*	*NA*	*NA*
May-2016	0.0651	0.0658	*ND*	*0.0028 J*	0.584	0.509	*ND*	*ND*	2.64	2.37	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14***												
Oct-2016	*0.0756 J+*	*0.0811 J+*	*ND*	*0.0034 J*	0.579	0.557	*ND*	*ND*	2.57	2.6	*ND*	*ND*	*0.0062 J*
May-2017	0.0645	0.0693	*ND*	*0.0028 J*	0.561	0.596	*ND*	*ND*	2.59	2.64	*ND*	*ND*	*ND*
Oct-2017	0.0768	0.0811	*ND*	*0.0036 J*	0.58	0.616	*ND*	*ND*	3.06	3.16	*ND*	*ND*	*ND*
May-2018	0.13	0.12	*ND*	0.0066	*ND*	*ND*	*0.00038 J*	*ND*	*4 J*	*3.6 J*	*ND*	*ND*	0.006
Nov-2018	0.17	0.16	*ND*	0.0071	*ND*	*ND*	*0.00016 J*	*ND*	*4.3 J*	*4.4 J*	*ND*	*ND*	0.011
May-2019	0.2	0.24 M1	*ND*	0.0068	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0056
Oct-2019	0.22	0.17	*0.00017 J*	0.019	*1.3 J*	*ND*	*ND*	*ND*	*3.3 J*	*3.5 J*	*ND*	0.0057	0.03
May-2020	0.098	0.092	*ND*	0.0053	*ND*	*ND*	*ND*	*ND*	*4 J*	*2.8 J*	*ND*	*ND*	*0.0045 J*
Oct-2020	0.16	0.15	*ND*	0.0084	*ND*	*ND*	*ND*	*ND*	*3.7 J*	*3.3 J*	*ND*	0.0065	*ND*
Apr-2021	0.14	0.15	*0.00007 J*	*0.0069 J*	0.71	0.68	*ND*	*ND*	3.5	3.3	*ND*	*ND*	*0.0035 J*
Oct-2021	0.16	0.163	*ND*	0.0086	0.64	0.68	*ND*	*ND*	3.2	3.5	*ND*	*ND*	*0.0034 J*
May-2022	0.18	0.18	*ND*	0.023	0.77	0.71	*ND*	*ND*	3.8	3.7	*ND*	*ND*	0.0062
Oct-2022	0.14	0.14	*ND*	0.013	0.72	0.8	*ND*	*ND*	3.5	4.2	*ND*	*ND*	0.0074 B
May-2023	0.17	0.16	*ND*	0.02	0.98	0.82	*ND*	*ND*	4.4	4.1	*ND*	*ND*	0.0085

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7 J	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	2.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14*																
Nov-2015	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	3.1	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	3.5	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	3.8	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4 JB	ND
Nov-2018	ND	ND	ND	ND	4.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 JBIH	ND
May-2019	ND	ND	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	3.48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Aug-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	1.6	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*0.6 J*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14***															
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	0.6 J
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	1.2
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	1.4
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	1.1
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	1.6
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	2
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	1.9
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.69	2
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.34 J	ND	ND	ND	ND	ND	4.61	3.3
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.36 J	ND	ND	ND	ND	ND	6.33	4.38
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND	ND	6.94	4.58
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.27	4.48
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.8	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14***															
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12.9 J	5.1
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	6.4	6.3
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	0.1 J	ND	ND	ND	6.6	7.6
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J,B	ND	0.2 J	ND	ND	ND	6.3	7.4
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	0.2 J	ND	ND	ND	6	6.8
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11.4	7.5
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.8	9.4 N3
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3 CL	6.5 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.1	4.5
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.6	3.8
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	7.8	4.3
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.29 J	ND	0.912 J	ND	ND	ND	4.73 J	6.33
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	6.5	4.4
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	7.3	4.1
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	6.2	4.1
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	4	3.1

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14***															
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	1.52	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.56	ND	ND	ND	ND	0.37 J	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	1.86	ND	ND	ND	ND	0.5 J	0.47 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	2.87	ND	ND	ND	ND	0.6 J	0.51 J	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	0.54 J	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.64	*ND*	*ND*	*ND*	*ND*	*0.54 J*	*0.42 J*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.5	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	4.1	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.5 J*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.9	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*0.6 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	4.8	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.5 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	4.4	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.9	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.494 J*	*ND*	*ND*	4.19	*ND*	*ND*	*ND*	*ND*	*0.91 J*	*0.35 J*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.2	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.2	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.3	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-14A***											
Nov-1993	ND	ND	0.2	ND	3.1	ND	ND	5.07	15.8	2.3	ND	1.31
Apr-1994	ND	ND	0.1	ND	2.5	ND	ND	4.84	17.8	ND	12	ND
Apr-1995	10.3	10.3	ND	ND	3.3	ND	ND	5.3	28.5	2.4	18	2.1
Apr-1997	ND	4	ND	ND	3	0.03	ND	NA	NA	ND	40	4.8
Oct-1997	ND	ND	0.27	ND	2.16	ND	ND	7.1	18.21	ND	ND	ND
Apr-1998	ND	ND	0.22	ND	2.6	0.1	ND	6.78	126.4	0.69	15	3.2
Apr-1999	ND	ND	0.29	ND	4.77	ND	ND	5.74	29.6	ND	46	2.9
Oct-1999	12	12	0.14	ND	4.26	ND	ND	4.85	26.2	ND	36	2.9
Apr-2000	3	3	ND	ND	6.79	ND	ND	6.99	52	ND	24	4.7
Oct-2000	2.5	NA	ND	ND	4.66	ND	ND	6.08	28.8	15	16	4.46
Apr-2001	2.8	NA	ND	ND	4.67	ND	ND	NA	NA	ND	29	3.92
Sep-2001	3.4	3.4	ND	ND	5.92	ND	ND	5.59	35	ND	26	3.58
Mar-2002	2	2	ND	ND	7.48	ND	ND	5.8	37	ND	14	4.37
Sep-2002	4	4	ND	ND	6.88	ND	ND	6.3	42.9	ND	27	3.38
Mar-2003	6.5	6.5	ND	ND	60.7	ND	ND	6.5	54.4	7.43	59	3.79
Oct-2003	4.6	4.6	ND	ND	4.89	ND	ND	5.7	38.3	ND	34	4.24
Apr-2004	2.1	2.1	ND	11	4.01	ND	ND	6.2	22.8	ND	32	2.71
Oct-2004	1.9	1.9	ND	ND	5.22	ND	ND	4.8	30.1	ND	47	4.51
Apr-2005	2.6	2.6	ND	ND	5.11	ND	ND	4.8	26.1	ND	37	4
Oct-2005	4.2	4.2	0.21	ND	6.87	ND	ND	4.4	33.1	ND	48	4.36
Mar-2006	6.7	6.7	ND	ND	6.89	ND	ND	6.8	40.7	1.15	34	2.69
Sep-2006	6.4	6.4	ND	ND	7.87	ND	ND	5	45	ND	31	4.51
Mar-2007	4.7	4.7	ND	ND	6.58	ND	ND	5.5	47.2	ND	ND	3.4
Sep-2007	3.8	3.8	0.31	ND	89.5	ND	ND	5.8	43.5	29.9	24	4.47
Mar-2008	16	16	ND	ND	13.9	ND	ND	5.2	62.4	1.93	37	4.15
Sep-2008	13	13	ND	27	9.82	ND	ND	5.1	55.7	ND	39	4.9
Mar-2009	12	12	ND	ND	9.92	ND	ND	5	74.6	ND	31	4.64
Oct-2009	9.9	9.9	ND	ND	10.1	ND	ND	5.1	66.7	ND	19	5.84
Mar-2010	11	11	ND	10.1	8.05	ND	ND	5.31	71	0.97	ND	3.26
Oct-2010	9.3	9.3	ND	ND	8.46	ND	ND	4.2	46.8	ND	32	3.83
Apr-2011	13	13	ND	ND	9.4	ND	0.02	5	51.9	ND	40	4.1
Sep-2011	15	15	0.22	ND	8.85	ND	ND	5.3	56.7	ND	47	7.08
Mar-2012	5.9	5.9	0.26	ND	9.58	0.06	ND	4.4	44.7	ND	18	4.53
Sep-2012	11.2	11.2	ND	ND	10.7	ND	ND	4.1	58.1	ND	46	3.24
Mar-2013	10.6	10.6	ND	ND	11.8	0.0417 J	ND	3.9	65.1	0.595 J	38	5.14
Oct-2013	20.5	20.5	ND	ND	12.7	0.0382 J	ND	4.4	115.8	ND	47	4.31
Mar-2014	15	15	ND	23	13.7	0.0274 J	ND	5.3	65	ND	54	4.82

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-14A***											
Oct-2014	2.2	2.2	*ND*	*ND*	10.7	0.0948	*ND*	4.9	51	*ND*	*ND*	4
Apr-2015	4.44	4.44	*ND*	*8 J*	11.1	0.0572	*ND*	4.4	51.9	*ND*	44	4.34
Nov-2015	*ND*	*ND*	*ND*	13	9.08	*ND*	*ND*	5.3	71.1	3.34	45	5.31
May-2016	3.72	3.72	*ND*	*5 J*	10.3	*ND*	*ND*	5.5	105.6	5.35	60	10.6
Oct-2016	1.92	1.92	*ND*	*6 J*	14.8	*NA*	*NA*	5.8	130.3	8.02	66	7.1
May-2017	7.2	7.2	*0.154 J*	10	15.6	*ND*	*ND*	5.2	157.9	11.7	66	18.4
Oct-2017	16.5	16.5	0.228	*8 J+*	17	*ND*	*ND*	5.5	165.2	15.5	135	22.6
May-2018	56	56	0.35	*16.5 J*	18.8	*0.064 J*	*ND*	5.75	207.6	*ND*	104	39.1
Nov-2018	74	74	0.2	*16.5 J*	14.1	*ND*	*0.007 J*	6.07	257.7	*ND*	149	28.4
May-2019	12 H1	*NA*	*ND*	*ND*	4.5	*ND*	*ND*	6.04	57.2	*ND*	31	*ND*
Oct-2019	*ND*	*NA*	*ND*	*ND*	4	*0.039 J*	0.034	5.99	59.4	*ND*	28	2.1
May-2020	30	*NA*	*0.074 J*	*6.9 J*	10.6	*ND*	0.02	5.58	235.7	*ND*	109	21.5
Oct-2020	*2 J*	*NA*	*ND*	*4.8 J*	9.5	*ND*	0.068 H1	5.62	134.9	1.2	10	8.5
Apr-2021	*ND*	*NA*	*ND*	*ND*	4.9	*0.058 J*	*ND*	6.49	97	*ND*	16	*1.8 J*
Oct-2021	*ND*	*NA*	*ND*	*ND*	6	*ND*	*ND*	6.47	109.8	*ND*	*ND*	3.82
May-2022	50	*NA*	0.26	*ND*	11.1	*ND*	0.024	6.08	274.2	*ND*	96	20.5 N3
Oct-2022	36	*NA*	0.14	*17.5 J*	12.6	*0.079 J*	*ND*	6.03	222.8	*ND*	72	17.4 N3
May-2023	34	*NA*	0.36	45.6	15.5	*ND*	*NA*	6.37	300.3	*9.4 J*	28	26.9 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14A***													
Nov-1993	NA	ND	ND	NA	ND	0.03	NA	0.007	NA	ND	6.9	0.34	ND	0.3	NA
Apr-1994	NA	ND	ND	NA	ND	ND	NA	ND	NA	ND	0.89	0.29	ND	ND	NA
Apr-1995	ND	ND	1	ND	ND	0.3	NA	ND	ND	ND	5.7	2.3	ND	0.32	NA
Oct-1996	ND	ND	0.014	ND	ND	0.81	0.53	ND	ND	ND	3.3	3.7	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	0.64	0.66	ND	ND	ND	2.7	0.71	ND	ND	ND
Oct-1997	ND	ND	0.031	ND	ND	0.514	0.403	ND	ND	ND	4.32	0.628	ND	0.354	0.217
Apr-1998	ND	ND	0.044	ND	ND	0.497	0.424	0.012	ND	0.016	9.35	1.6	ND	0.48	0.263
Apr-1999	ND	ND	0.023	ND	ND	0.485	0.52	ND	ND	0.011	6.6	4.72	ND	0.405	0.359
Oct-1999	ND	ND	0.025	ND	ND	0.652	0.62	ND	ND	0.01	3.6	2.31	ND	0.52	0.472
Apr-2000	ND	ND	0.019	ND	ND	0.951	0.619	ND	ND	0.012	4.08	1.94	ND	0.564	0.449
Oct-2000	ND	ND	0.02	ND	ND	0.935	0.543	ND	ND	0.013	4.02	3.19	ND	0.516	0.4
Apr-2001	ND	ND	0.019	ND	ND	0.743	NA	ND	ND	ND	4.46	NA	ND	0.502	NA
Sep-2001	ND	ND	0.017	ND	ND	0.696	0.519	ND	ND	0.01	3.47	2.12	ND	0.446	0.397
Mar-2002	ND	ND	0.018	ND	ND	0.883	0.574	ND	ND	0.012	4.28	3.52	ND	0.527	0.465
Sep-2002	ND	ND	0.019	ND	ND	0.569	0.594	ND	ND	ND	5.86	5.07	ND	0.477	0.479
Mar-2003	ND	ND	0.018	ND	ND	0.655	0.608	ND	ND	ND	3.65	3.01	ND	0.523	0.501
Oct-2003	ND	ND	0.021	ND	ND	0.867	0.546	ND	ND	0.014	7.09	3.56	ND	0.504	0.452
Apr-2004	ND	ND	0.021	ND	ND	0.552	0.542	ND	ND	0.012	4.52	1.08	ND	0.322	0.268
Oct-2004	ND	ND	0.02	ND	ND	1.09	0.662	ND	ND	0.018	5.17	0.752	ND	0.434	0.359
Apr-2005	ND	ND	0.016	ND	ND	1.04	0.703	ND	ND	0.019	5.87	2.26	ND	0.347	0.282
Oct-2005	ND	ND	0.02	ND	ND	1.04	0.799	ND	ND	0.014	5.53	1.6	ND	0.427	0.389

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14A***													
Mar-2006	ND	ND	0.016	ND	ND	0.429	0.333	ND	ND	ND	5.67	2.51	ND	0.394	0.393
Sep-2006	ND	ND	0.021	ND	ND	0.886	0.689	ND	ND	0.014	6.2	4.04	ND	0.559	0.535
Mar-2007	ND	ND	0.017	ND	ND	0.746	0.728	ND	ND	0.013	2.78	1.63	ND	0.374	0.368
Sep-2007	ND	0.002	0.015	ND	ND	1.18	0.586	0.034	ND	0.017	10.7	4.72	0.002	0.37	0.292
Mar-2008	ND	ND	0.029	ND	ND	0.701	0.648	ND	ND	ND	10	8.37	ND	0.583	0.524
Sep-2008	ND	ND	0.033	ND	ND	0.835	0.565	ND	ND	0.013	12.6	7.3	0.002	0.685	0.58
Mar-2009	ND	ND	0.032	ND	ND	0.84	0.691	ND	ND	0.024	17	9.93	ND	0.616	0.599
Oct-2009	ND	ND	0.035	ND	ND	1.14	0.711	ND	ND	0.017	15.5	10.5	ND	0.727	0.68
Mar-2010	ND	ND	0.029	ND	ND	0.572	0.568	ND	ND	0.012	11.6	12.1	ND	0.445	0.43
Oct-2010	ND	ND	0.02	ND	ND	0.681	0.655	ND	ND	0.016	5.71	5.21	ND	0.518	0.519
Apr-2011	ND	ND	0.029	ND	ND	0.722	0.691	ND	ND	0.013	6.77	5.66	ND	0.559	0.549
Sep-2011	ND	ND	0.03	ND	ND	1.59	0.82	ND	ND	0.023	9.09	7.51	ND	0.756	0.583
Mar-2012	ND	ND	0.026	ND	ND	0.726	0.729	ND	ND	0.011	3.33	4.84	ND	0.661	0.668
Sep-2012	ND	ND	0.0188	0.000445 J	ND	0.543	0.53	0.0021 J	0.0051 J	0.0068 J	5.3	4.6	ND	0.457	0.438
Mar-2013	ND	ND	0.0358	0.000832 J	ND	0.906	0.92	0.0029 J	0.0086 J	0.0114	6.88	6.75	ND	0.699	0.666
Oct-2013	ND	ND	0.0292	0.000643 J	0.000239 J	0.702	0.599	0.0092 J	0.0079 J	0.0138	27.5	24	ND	0.621	0.568
Mar-2014	0.000526 J	ND	0.0293	0.000653 J	0.000211 J	0.771	0.758	0.0021 J	0.0083 J	0.0143	7.53	7.79	ND	0.703	0.68
Oct-2014	0.000546 J	ND	0.0281	0.000749 J	0.000238 J	0.713	0.708	0.000747 J	0.0068 J	0.0183	5.65	5.31	ND	0.539	0.541
Apr-2015	0.001 J	0.0019 J	0.0358	0.000875 J	0.000381 J	0.752	0.754	0.0137	0.0179	0.0435	6.62	4.29	ND	0.597	0.589
Nov-2015	0.0012 J	0.0023	0.0333	0.0013 J	0.000551 J	0.918	0.944	0.0254	0.0155	0.0883	13.9	3.29	0.000848 J	0.734	0.733
May-2016	ND	0.0015 J	0.0638	0.00082 J	0.00052 J	1.66	1.63	0.0107	0.0202	0.0387	9.96	6.77	0.00051 J	1.56	1.64
Oct-2016	0.00075 J	0.0022 J	0.0399	0.00064 J	0.00039 J	1.16	1.88	0.0148 J+	0.0167	0.0511 J+	12.7	5.76	0.00087 J	1.02 J+	1.85
May-2017	0.0011 J	0.0065	0.107	0.00091 J	0.00047 J	2.73	2.64	0.0456	0.0505	0.106	14	7.92	0.0003 J	2.82	2.71
Oct-2017	0.00051 J	0.0016 J	0.119	0.00086 J	0.00086 J	3.48	3.51	0.0079	0.0358	0.0291	9.45	8.96	ND	3.37	3.58

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14A***													
May-2018	*0.00039 J*	0.0012	0.2	0.00093	0.0019	6	5.8	*0.0065 J*	0.042	0.045	27.4	24.7	*0.00026 J*	5.9	5.7
Nov-2018	*0.000045 J*	*0.00073 J*	0.16	0.00057	*0.00054 J*	4.3	4.6	*0.0052 J*	0.02	0.012	52.1	50.1	*0.00016 J*	4.3	4.5
May-2019	*ND*	*ND*	0.019	0.00036	0.0022	*ND*	*ND*	0.012	0.0027	0.026	14.2	12.9	*ND*	*ND*	*ND*
Oct-2019	*0.00015 J*	*0.0003 J*	0.014	*0.00029 J*	*0.00043 J*	0.46	*0.43 J*	0.0085	0.0017	0.0094	13.2	10.4	*0.00011 J*	0.22	*0.23 J*
May-2020	*0.000095 J*	0.0014	0.086	*0.00025 J*	*0.00035 J*	3.3	3.2	0.011	0.012	0.0071	50.8	46.7	*ND*	3.2	3.1
Oct-2020	*ND*	*ND*	0.042	*ND*	*ND*	1.4	1.4	*0.0024 J*	0.0035	*ND*	32.3	26.3	*ND*	1.2	1.3
Apr-2021	*ND*	*0.0028 J*	0.016	*0.00043 J*	*ND*	*0.4 J*	*0.38 J*	0.0051	*0.0009 J*	0.0098	23.3	17.3	*ND*	*0.19 J*	0.22
Oct-2021	*0.00012 JB*	*0.0013 J*	0.02	*0.00037 J*	*ND*	0.73	0.84	0.0039	0.0032	0.0079	21.8	13.3	*0.00012 J*	*0.48 J*	0.56
May-2022	*ND*	*0.0014 J*	0.093	*0.00032 J*	*0.00023 J*	3.1	3	0.003	0.013	0.0026	53.5	49.6	*ND*	3.1	3
Oct-2022	*ND*	*0.0019 J*	0.078	*0.0002 J*	*ND*	2.7	3.2	*0.0023 J*	0.0037	0.0027	55.2	59	*ND*	2.6	2.9
May-2023	*ND*	*0.001 J*	0.13	*0.00029 J*	*0.0007 J*	4.2	4.4	0.0064	0.013	0.019	55.6	52.1	*ND*	4	4.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-14A*												
Nov-1993	0.07	NA	ND	NA	1.1	NA	ND	NA	1.4	NA	NA	NA	ND
Apr-1994	0.036	NA	ND	NA	ND	NA	ND	NA	1.9	NA	NA	NA	ND
Apr-1995	0.02	NA	ND	ND	0.61	NA	ND	0.01	1.6	NA	ND	ND	0.03
Oct-1996	0.053	0.05	NA	ND	ND	ND	ND	ND	2.3	2.3	ND	ND	0.18
Apr-1997	0.084	0.029	ND	ND	ND	ND	ND	ND	2.3	2.1	ND	ND	0.021
Oct-1997	0.025	0.026	ND	ND	1.57	ND	ND	ND	1.67	1.61	ND	0.01	0.02
Apr-1998	0.03	0.033	0.0005	ND	1.68	ND	ND	ND	2.03	1.93	ND	0.013	0.012
Apr-1999	0.043	0.043	NA	ND	1.16	0.659	ND	ND	2.36	2.32	ND	ND	0.01
Oct-1999	0.02	0.024	NA	ND	ND	0.541	ND	ND	2.57	2.42	ND	ND	ND
Apr-2000	0.029	0.024	NA	ND	ND	ND	ND	ND	4.08	2.53	ND	ND	0.015
Oct-2000	0.023	0.03	NA	ND	0.572	0.95	ND	ND	3.57	2.53	ND	ND	0.015
Apr-2001	0.03	NA	NA	ND	ND	NA	ND	ND	3.58	NA	ND	ND	0.015
Sep-2001	0.019	0.019	NA	0.012	0.722	ND	ND	ND	3.97	2.61	ND	ND	0.01
Mar-2002	0.039	0.037	NA	ND	1.32	0.388	ND	ND	4.13	2.98	ND	ND	0.012
Sep-2002	0.054	0.056	NA	ND	0.696	ND	ND	ND	3.26	3.27	ND	ND	ND
Mar-2003	0.073	0.067	NA	0.012	1.2	ND	ND	ND	3.54	3.37	ND	ND	ND
Oct-2003	0.083	0.075	NA	0.014	0.986	0.533	ND	ND	3.85	2.98	ND	ND	0.011
Apr-2004	0.025	0.023	0.0008	ND	1.21	1.28	ND	ND	3.3	2.31	ND	ND	ND
Oct-2004	0.037	0.031	0.0006	ND	1.17	ND	ND	ND	3.45	2.92	ND	ND	0.018
Apr-2005	0.046	0.045	0.0003	ND	0.95	0.69	ND	ND	3.47	2.95	ND	ND	0.026
Oct-2005	0.032	0.034	0.0006	ND	0.823	0.675	ND	ND	3.86	3	ND	ND	0.01
Mar-2006	ND	ND	0.0004	ND	ND	ND	ND	ND	3.94	3.3	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14A***												
Sep-2006	0.027	0.023	0.0002	0.013	0.692	0.6	ND	ND	3.99	3.87	ND	ND	0.015
Mar-2007	0.014	0.013	0.0004	ND	0.57	0.529	ND	ND	3.17	3.17	ND	ND	ND
Sep-2007	0.059	0.043	0.0004	0.022	0.518	ND	ND	ND	3.22	3.19	ND	ND	0.034
Mar-2008	0.052	0.047	ND	ND	0.802	0.577	ND	ND	4.14	3.88	ND	ND	0.012
Sep-2008	0.05	0.043	ND	ND	0.798	0.503	ND	ND	4.26	3.9	ND	ND	0.025
Mar-2009	0.054	0.056	ND	0.014	0.839	0.668	ND	ND	4.4	4.45	ND	ND	0.027
Oct-2009	0.061	0.06	ND	0.014	0.777	0.526	ND	ND	4.72	4.81	ND	ND	0.041
Mar-2010	0.069	0.067	ND	ND	0.715	0.622	ND	ND	3.71	4.15	ND	ND	ND
Oct-2010	0.047	0.044	ND	0.011	0.526	0.525	ND	ND	4.61	4.58	ND	ND	0.019
Apr-2011	0.037	0.033	ND	ND	ND	ND	ND	ND	4.13	3.96	ND	ND	0.014
Sep-2011	0.042	0.249	ND	0.023	1.36	0.832	ND	ND	4.96	4.7	ND	ND	0.026
Mar-2012	0.028	0.035	ND	ND	0.536	0.525	ND	ND	4.44	4.61	ND	ND	0.012
Sep-2012	0.0341	0.0312	ND	0.0056 J	0.573	0.556	ND	ND	7.85	7.89	0.000238 J	ND	0.0055 J
Mar-2013	0.0391	0.0391	0.000072 J	0.0102 J	0.66	0.645	ND	ND	6.06	6.03	ND	ND	0.0219
Oct-2013	0.121	0.111	0.000061 J	0.0084 J	0.634	0.56	ND	ND	7	6.52	0.000189 J	0.0021 J	0.0168
Mar-2014	0.0448	0.0469	ND	0.0084 J	0.606	0.582	ND	ND	6.34	6.27	ND	ND	0.0132
Oct-2014	0.032	0.0313	0.000073 J	0.0072 J	0.601	0.597	0.000986 J	ND	5.62	5.55	0.000758 J	ND	0.013
Apr-2015	0.0648	0.0478	0.000064 J	0.0724	0.794	0.732	ND	ND	5.24	5.45	ND	0.000833 J	0.0203
Nov-2015	0.125	0.104	0.000039 J	0.0332	0.996	0.908	0.000688 J	ND	4.76	4.85	ND	0.0011 J	0.0265
May-2016	0.0836	0.0492	0.00011 J	0.0365	1.11	1.14	0.00051 J	ND	5.37	5.13	0.00018 J	0.00067 J	0.0443
Oct-2016	0.0642 R	0.0627	0.000056 J	0.0329 J+	0.833	1.25	ND	ND	3.45 J+	6.37	0.00017 J	0.0032	0.0322
May-2017	0.133	0.0909	ND	0.109	1.57	1.51	0.00067 J	ND	7.75	7.42	0.00025 J	0.00046 J	0.0535
Oct-2017	0.106	0.0998	ND	0.0436	1.61	1.67	0.00057 J	ND	7.65	8.26	0.0002 J	ND	0.0431
May-2018	0.17	0.078	ND	0.046	2.2 J	1.6 J	0.00079 J	ND	10.1	10.1	0.00031	0.0031 B	0.0528

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14A***												
Nov-2018	0.27	0.25	*ND*	0.023	*1.7 J*	*1.8 J*	*0.00024 J*	*ND*	7.5	7.9	*0.00008 J*	*ND*	0.029
May-2019	0.13	0.12	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.00031	*ND*	0.022
Oct-2019	0.23	0.21	*ND*	0.0055	*ND*	*ND*	*ND*	*ND*	*2.9 J*	*3 J*	*ND*	0.0062	0.012
May-2020	0.28	0.26	*0.00016 J*	0.015	*1.5 J*	*1.1 J*	*ND*	*ND*	7.3	6.1	*ND*	0.0047	0.017
Oct-2020	0.17	0.16	*ND*	0.0058	*ND*	*ND*	*ND*	*ND*	*4.2 J*	*3.9 J*	*ND*	*0.0014 J*	*ND*
Apr-2021	0.2	0.19	*0.00008 J*	*0.0062 J*	0.54	*0.47 J*	*ND*	*ND*	3	2.8	*ND*	*ND*	*0.0062 J*
Oct-2021	0.29	0.29	*ND*	0.006	0.61	0.7	*ND*	*ND*	3.8	4.3	*0.000068 J*	*ND*	0.0077
May-2022	0.32	0.3	*ND*	0.013	1.3	1.2	*ND*	*ND*	8.2	7.9	*ND*	*ND*	0.019
Oct-2022	0.28	0.32	*ND*	0.0052	1.2	1.4	*ND*	*ND*	7.3	8.2	*ND*	*ND*	0.01
May-2023	0.56	0.55	*ND*	0.015	1.5	1.5	*ND*	*ND*	7.6	7.9	*ND*	*ND*	0.052

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-14A***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	0.8 J	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	0.8 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	0.7 J	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	1.2	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	0.5 J	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14A*																
Mar-2006	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2007	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	6.2	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	10	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	9.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	7.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	4.72	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	9.59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	9.97	0.32 J	ND	ND	ND	ND	ND	0.39 J	0.37 J	ND	ND	ND	1.09 J,B	ND
Mar-2014	ND	ND	ND	ND	8.29	0.24 J	ND	ND	ND	ND	ND	0.28 J	0.43 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	3.77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	3.82	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	0.1 J	0.2 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14A*																
Oct-2016	ND	ND	ND	ND	5.1	0.1 J	ND	ND	ND	ND	ND	0.2 J	0.2 J	1.4 J	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	8.5	0.2 J	ND	ND	ND	ND	0.1 J	0.3 J	0.4 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	7.8	0.2 J	ND	ND	ND	ND	0.1 J	0.3 J	0.4 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	6.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.1 JB	ND
Nov-2018	ND	ND	ND	ND	10.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	6.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	2.9
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	4.1
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	7.1	4
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.3	7.2
Apr-2000	ND	NA	NA	ND	NA	2.4	NA	ND	ND	ND	NA	ND	NA	ND	NA	1.4	4
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	6
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	8.3
Sep-2001	ND	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.7	5.1
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	3.4
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	6.2
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	3.5
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.8	5.6
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.2	3.5
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	8.3
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.3	7.2
Oct-2005	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	13.2	10.5

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14A***															
Mar-2006	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	22.8	11.9
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	22.6	13.3
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	9.8	9.9
May-2007	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	7.5	10.8
Sep-2007	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	12.5	5.2
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	22.5	16.9
Sep-2008	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	14.2	19.4
Mar-2009	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	16.5	20.8
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	14.7	19.9
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*10.9 J*	11.4
Oct-2010	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	8.5	7.8
Apr-2011	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	10.6	10.5
Sep-2011	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	17.8	11.7
Mar-2012	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	7.6	6.7
Sep-2012	*0.76 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.86 J*	*ND*	*ND*	*ND*	3.17	4.82
Mar-2013	1.39	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.84	*ND*	*ND*	*ND*	6.7	12
Oct-2013	2.01	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.98	*ND*	*ND*	*ND*	5.13	12.4
Mar-2014	1.68	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.95	*ND*	*ND*	*ND*	5.67	10
Oct-2014	*0.92 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.01	*ND*	*ND*	*ND*	1.88	4.45
Apr-2015	*0.88 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.89 J*	*ND*	*ND*	*ND*	1.95	4.21
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*2.7 J*	2.9
May-2016	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	1.3	3.5

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14A***															
Oct-2016	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	2	6.3
May-2017	2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	3.7	10
Oct-2017	2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	2.5	*ND*	*ND*	*ND*	3.7	11
May-2018	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	4.5	6.5
Nov-2018	2.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	6.3	14.9 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	2.4	3.7
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	1.1	1.6
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*
May-2022	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	4.6	5.2
Oct-2022	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	3.5	5.4
May-2023	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	1.9	4.7

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	2.5	NA	ND	NA
Oct-1999	ND	ND	ND	NA	3.3	ND	ND	1.7	ND	ND	ND	ND	1.1	4.4	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	1	ND	ND	NA
Oct-2000	ND	ND	ND	NA	2.8	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	NA
Apr-2001	ND	ND	ND	NA	4	ND	ND	1.1	ND	ND	ND	ND	0.7 J	3.5	ND	ND	NA
Sep-2001	ND	ND	ND	NA	2.9	ND	ND	0.5 J	ND	ND	ND	ND	ND	1.7	ND	ND	NA
Mar-2002	ND	ND	ND	NA	3.9	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	NA
Sep-2002	ND	ND	ND	NA	**6.4**	ND	ND	0.6 J	ND	ND	ND	ND	0.5 J	1.1	ND	ND	NA
Mar-2003	ND	ND	ND	NA	**5.3**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	2.7	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	NA
Apr-2004	ND	ND	ND	NA	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	4.9	ND	ND	0.7 J	ND	ND	ND	ND	ND	2.3	ND	ND	NA
Apr-2005	ND	ND	ND	ND	**5.9**	ND	ND	0.9 J	ND	ND	ND	ND	0.6 J	1.5	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14A***															
Oct-2005	ND	ND	0.7 J	ND	**9.5**	0.5 J	ND	1.7	ND	ND	ND	ND	1.3	2.3	ND	0.7 J	NA
Mar-2006	ND	ND	0.9 J	ND	**11.6**	0.6 J	ND	1.9	ND	ND	ND	ND	1.6	3.1	ND	0.5 J	NA
Sep-2006	ND	ND	ND	ND	**7.6**	ND	ND	2.1	ND	ND	ND	ND	1.6	1.7	ND	ND	NA
Mar-2007	ND	ND	0.5 J	ND	**6.5 R**	ND	ND	1.3	ND	ND	ND	ND	0.9 J	1.5	ND	ND	NA
May-2007	ND	ND	0.6 J	1.7	5	ND	ND	1.5	ND	ND	ND	ND	0.9 J	1.3	ND	0.7 J	NA
Sep-2007	ND	ND	0.6 J	0.6 J	**7.7**	ND	ND	1.4	ND	ND	ND	ND	1.1	2	ND	ND	NA
Mar-2008	ND	ND	0.9 J	ND	**8.9**	0.7 J	ND	2.3	ND	ND	ND	ND	2	3.6	ND	ND	NA
Sep-2008	ND	ND	0.7 J	ND	**12**	0.7 J	ND	2.4	ND	ND	ND	ND	1.8	6.5	ND	1.5	NA
Mar-2009	ND	ND	1.1	ND	**16.3**	1.1	ND	2.6	ND	ND	ND	ND	2.5 J	0.5 J	ND	0.8 J	NA
Oct-2009	ND	ND	0.7 J	ND	**14.2**	0.8 J	ND	2.6	ND	ND	ND	ND	2.3	2.1	ND	0.6 J	NA
Mar-2010	ND	ND	ND	ND	**8.4**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	**6.5**	ND	ND	1.3	ND	ND	ND	ND	ND	0.9 J	ND	ND	NA
Apr-2011	ND	ND	ND	ND	**8.1**	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	0.7 J	ND	**7.4**	0.5 J	ND	2	ND	ND	ND	ND	1.4	1.3	ND	ND	NA
Mar-2012	ND	ND	ND	ND	3.9	ND	ND	1.3	ND	ND	ND	ND	0.9 J	0.6 J	ND	0.7 J	NA
Sep-2012	ND	ND	0.81 J	0.28 J	3.95	0.36 J	ND	1.48	ND	ND	ND	ND	1.05	0.48 J	ND	ND	1.17
Mar-2013	0.5 J	ND	1 J	0.37 J	**8.69**	0.68 J	ND	2.09	ND	ND	ND	ND	1.77	ND	ND	0.34 J	1.68
Oct-2013	ND	ND	0.7 J	ND	**5.94**	0.53 J	ND	2.02	ND	ND	ND	ND	1.67	0.7 J	ND	ND	1.23
Mar-2014	ND	ND	1.08	0.53 J	**6.26**	0.41 J	ND	2.75	ND	ND	ND	ND	1.89	0.74 J	ND	0.34 J	1.49
Oct-2014	ND	ND	0.52 J	0.29 J	2.35	ND	ND	1.34	ND	ND	ND	ND	0.83 J	ND	ND	ND	0.52 J
Apr-2015	ND	ND	0.59 J	0.28 J	2.66	ND	ND	1.32	ND	ND	ND	ND	0.93 J	ND	ND	ND	0.59 J
Nov-2015	ND	ND	ND	ND	2	ND	ND	0.7 J	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14A***															
May-2016	ND	ND	0.3 J	0.2 J	2	ND	ND	1.1	ND	ND	ND	ND	0.7 J	0.1 J	ND	0.1 J	0.3 J
Oct-2016	ND	ND	0.4 J	0.3 J	3.1	ND	ND	1.5	ND	ND	ND	ND	1	0.4 J	ND	0.3 J	0.4 J
May-2017	ND	ND	0.7 J	0.7 J	4.9	0.2 J	ND	2.5	ND	ND	ND	ND	1.8	0.2 J	ND	0.4 J	0.9 J
Oct-2017	ND	ND	0.5 J	0.6 J	4.4	0.1 J	ND	2.5	ND	ND	ND	ND	1.7	ND	ND	0.5 J	0.6 J
May-2018	ND	ND	ND	ND	2.3 B	ND	ND	1.5	ND	ND	ND	ND	1.3	ND	ND	ND	NA
Nov-2018	ND	ND	ND	1.1	2.9 CH	ND	ND	1.9	ND	ND	ND	ND	2.1	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.46 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	0.6 J	1.5 L	ND	ND	1.3	ND	ND	ND	ND	1.1	ND	ND	ND	NA
Oct-2022	ND	ND	ND	0.7 J	1.1	ND	ND	1.3	ND	ND	ND	ND	1.1	ND	ND	ND	NA
May-2023	ND	ND	ND	0.7 J	ND	ND	ND	1.4	ND	ND	ND	ND	1.3	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-19***											
Nov-1993	ND	ND	0.1	ND	7.6	0.9	ND	4.68	74.7	12.4	50	13
Apr-1994	ND	ND	0.2	ND	17.3	2.7	ND	4.5	201	45.6	181	52.2
Apr-1995	ND	ND	0.2	ND	19.5	2.2	ND	4.7	176	40.2	112	38.6
Apr-1997	ND	3	ND	ND	12	0.46	ND	NA	NA	32	80	21
Apr-1998	ND	ND	1.1	ND	14.6	0.196	ND	6.19	156.4	16.2	96	51
Apr-1999	ND	ND	0.13	ND	13.5	0.68	ND	4.49	204	52.8	110	63
Apr-2000	12	12	ND	ND	29.6	1.48	ND	5.64	252	71.8	196	102
Apr-2001	16	NA	ND	ND	26.4	ND	ND	NA	NA	45.1	119	86
Mar-2002	6.8	6.8	ND	40	11	0.29	ND	5.4	87.6	15.7	88	34.3
Mar-2003	22	22	ND	ND	25.8	0.75	ND	6	206	35.8	143	65.3
Apr-2004	13	13	ND	ND	22.4	ND	ND	5.3	160.1	19.3	90	47.2
Apr-2005	11	11	ND	ND	26.8	0.45	ND	5.3	154.9	30	108	56.1
Mar-2006	9.8	9.8	ND	ND	21.4	0.72	ND	5.3	142.8	27.3	112	40.8
Mar-2007	13	13	0.46	ND	25.5	0.78	ND	5.4	158.3	41.9	142	56.5
Mar-2008	13	13	ND	ND	22.8	0.91	ND	5.5	145.3	27.8	114	49
Mar-2009	14	14	ND	ND	18.2	0.34	ND	4.9	118.3	15.7	86	32.5
Mar-2010	45	45	ND	ND	56.9	0.42	ND	5.84	390	51.8	183	96.2
Oct-2010	28	28	ND	ND	31.8	0.64	ND	5.3	189.9	34.9	154	72
Apr-2011	43	43	ND	ND	38.5	0.67	ND	5.6	312	46.5	207	89.2
Sep-2011	39	39	ND	ND	54	0.52	ND	6	321	45.6	229	99.1
Mar-2012	33	33	ND	ND	43.2	0.46	ND	5.3	354	44.4	164	78.1
Sep-2012	40.6	40.6	ND	ND	29.8	0.733	ND	5.5	199.6	37.3	156	76.4
Mar-2013	32.6	32.6	ND	ND	32.8	0.829	ND	5.8	201	36	145	68.3
Oct-2013	19.5	19.5	ND	ND	21.1	0.462	ND	4.8	138.9	22.3	105	44.3
Mar-2014	51.4	51.4	ND	30	62.1	1.07	ND	6.2	429	58.5	253	106
Oct-2014	35.2	35.2	ND	6 J	73	0.581	ND	5.9	404	29.1	220	83.4
Apr-2015	89.2	89.2	ND	8 J	80.4	0.763	ND	5.9	532	44.7	299	116
Nov-2015	37.6	37.6	ND	6 J	44.9	0.573	ND	6	329	25.8	152	73.5
May-2016	51.2	51.2	ND	12	41.4	0.701	ND	6.3	410	30.8	178	77.7
Oct-2016	50.4	50.4	ND	ND	34.1	NA	NA	6.4	340	30	170	74.4
May-2017	74.5	74.5	ND	ND	49.1	0.847	ND	6.3	510	40.4	225	104
Oct-2017	55.8	55.8	ND	9 J	35.4	0.699	ND	6.1	426	29.5	172	88.5
May-2018	28	28	ND	ND	22.8	0.082 J	ND	5.4	174.5	16.6	149	52
Nov-2018	66	66	ND	ND	30.5	0.84	ND	5.94	283	41.4	163	96.5
May-2019	22 H1	NA	0.19	ND	27.7	1.4	ND	5.27	159.3	31.9	129	60.7
Oct-2019	7.5 J	NA	ND	ND	22.7	1	0.0086 J	5.03	165.3	23.9	290	44.7
May-2020	12	NA	ND	9.1 J	8.7	2.3	ND	5.26	205.8	40.3	123	84.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-19***										
Oct-2020	40	*NA*	*ND*	*9.3 J*	12.3	1.8	*0.0099 J*	5.38	190.4	33.2	126	79.6
Apr-2021	60	*NA*	*ND*	*12.6 J*	14.4	0.78	*ND*	5.9	246.4	31.9	139	80.6
Oct-2021	36	*NA*	*ND*	*8.3 J*	13.5	0.8	*ND*	5.7	218.9	19.5	82	56.4
May-2022	58	*NA*	*ND*	*ND*	17.9	0.99	*ND*	5.79	266.7	22.2	136	79.8 N3
Oct-2022	38	*NA*	*ND*	*6.1 J*	18.4	0.93	*ND*	5.64	219.1	22.7	106	63.8 N3
May-2023	64	*NA*	*ND*	29.6	14.1	1.5	*ND*	6.05	258.7	25.1	124	97.4 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-19***													
Nov-1993	NA	ND	ND	NA	ND	1.6	NA	ND	NA	ND	1.9	0.07	ND	2.2	NA
Apr-1994	NA	ND	0.19	NA	ND	12	NA	ND	NA	0.02	ND	ND	ND	5.4	NA
Apr-1995	ND	ND	1.3	ND	ND	8.2	NA	ND	ND	ND	0.29	ND	ND	4.4	NA
Apr-1997	ND	ND	0.068	ND	ND	9.7	9.8	ND	ND	ND	1.9	0.33	ND	2.9	2.9
Apr-1998	ND	ND	0.103	ND	ND	13.8	13.5	0.01	0.012	0.021	3.35	ND	ND	3.96	3.84
Apr-1999	ND	ND	0.1	ND	0.004	17.9	17.1	ND	0.01	0.022	3.36	ND	ND	4.52	4.29
Apr-2000	ND	ND	0.076	ND	ND	31.8	29.3	0.012	ND	0.033	10	ND	ND	5.51	5.02
Apr-2001	ND	ND	0.081	ND	ND	25.7	NA	0.05	ND	0.086	40.5	NA	0.005	5.23	NA
Mar-2002	ND	ND	0.043	ND	ND	9.42	8.88	0.02	ND	0.045	14.6	ND	ND	2.63	2.49
Mar-2003	ND	ND	0.051	ND	ND	20.1	19.4	ND	ND	ND	0.799	ND	ND	3.68	3.52
Apr-2004	ND	0.003	0.068	ND	ND	12.1	11.6	ND	ND	0.018	4.63	ND	0.002	4.1	3.88
Apr-2005	ND	ND	0.09	ND	ND	14.3	14	ND	ND	0.02	2.98	ND	ND	4.96	4.86
Mar-2006	ND	ND	0.067	ND	ND	10.1	10.5	ND	ND	ND	2.41	ND	ND	3.79	3.91
Mar-2007	ND	0.007	0.072	ND	ND	15.5	15.6	ND	ND	0.019	7.26	ND	ND	4.33	4.32
Mar-2008	ND	ND	0.058	ND	ND	13.5	12.5	ND	ND	ND	ND	ND	ND	3.71	3.34
Mar-2009	ND	ND	0.035	ND	ND	9.17	9.05	ND	ND	0.014	0.104	ND	ND	2.34	2.31
Mar-2010	ND	ND	0.073	ND	ND	28.2	26.7	ND	ND	ND	0.101	ND	ND	6.26	6.02
Oct-2010	ND	ND	0.067	ND	ND	19.9	18.3	ND	ND	0.006	ND	ND	ND	5.42	5.28
Apr-2011	ND	ND	0.075	ND	ND	26	25	ND	ND	ND	0.189	ND	ND	5.91	5.69
Sep-2011	ND	ND	0.078	ND	ND	29.1	28.7	ND	ND	ND	ND	ND	ND	6.42	6.3
Mar-2012	ND	ND	0.069	ND	ND	22.2	21.6	ND	ND	ND	ND	ND	ND	5.52	5.41

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-19***													
Sep-2012	ND	ND	0.0644	0.000086 J	ND	21.3	20.9	0.002 J	0.0022 J	0.0051 J	0.0256 J	0.0777	ND	5.64	5.69
Mar-2013	ND	ND	0.0634	ND	ND	19.9	18.1	0.0014 J	0.0025 J	0.0055 J	0.0275 J	0.0053 J	0.0016 J	4.51	4.06
Oct-2013	ND	ND	0.0482	0.000147 J	ND	12.7	12.4	0.0082 J	0.0063 J	0.0122	ND	ND	ND	3.05	3.04
Mar-2014	0.000279 J	ND	0.0654	ND	ND	31.6	32.2	0.0011 J	0.0012 J	0.0037 J	0.0845	0.0447 J	ND	6.47	6.6
Oct-2014	0.000873 J	ND	0.0629	ND	ND	24.5	24.3	0.000605 J	0.0025 J	0.0056 J	0.0105 J	0.0212 J	ND	5.4	5.29
Apr-2015	0.000587 J	ND	0.0642	ND	ND	35.4	35.9	0.000881 J	0.000674 J	0.0023 J	0.0386 J	0.0145 J	ND	6.73	6.77
Nov-2015	ND	ND	0.0547	ND	0.000073 J	21.6	20.8	0.000527 J	0.0026 J	0.0058 J	ND	ND	ND	4.78	4.76
May-2016	ND	ND	0.0483	ND	ND	22.9	24.1	0.00078 J	0.0019	0.0039 J	ND	ND	ND	4.96	5.09
Oct-2016	ND	ND	0.0469	ND	ND	22.1	21.9	0.00074 J	0.0024	0.0066	ND	ND	0.00011 J	4.66	4.85 J+
May-2017	ND	ND	0.0502	ND	ND	31.1	33.3	0.0011 J	0.0024	0.0046	0.0414 J	ND	ND	6.52	6.15
Oct-2017	ND	ND	0.0456	0.00011 J	ND	27.2	24.8	ND	0.0046	0.0098	0.0378 J	ND	0.00075 J	4.97	4.86
May-2018	0.000062 J	ND	0.047	0.00024 J	0.00019 J	14.6	13.4	0.0008 J	0.0103	0.017	0.11	ND	0.00013 JB	3.8	3.4
Nov-2018	ND	ND	0.042	0.000022 J	0.000051 J	29.8	30.6	0.0029 J	0.0013	0.0033	0.034	ND	0.000086 J	5.4	5.5
May-2019	ND	ND	0.071	ND	ND	15.9	16.7	ND	0.0013	0.0021	ND	ND	ND	5.1	5.2
Oct-2019	0.00011 J	ND	0.051	0.000072 J	0.00018 J	11.3	10.7	0.0048 J	0.0023	0.004	0.007 J	ND	ND	4	3.8
May-2020	0.000075 J	ND	0.061	ND	ND	22.9	22.9	0.0049 J	0.00049 J	0.0026	ND	ND	ND	6.7	6.6
Oct-2020	ND	ND	0.038	ND	ND	21.8	21.4	0.0025 J	0.00056 J	ND	ND	ND	ND	6.1	5.9
Apr-2021	ND	ND	0.062	ND	ND	22.7	24	0.00088 J	0.00079 J	ND	ND	ND	ND	5.8	6.2
Oct-2021	0.000065 JB	ND	0.05	ND	ND	15.2	16.5	ND	0.0033	0.0059	ND	ND	ND	4.5	4.9
May-2022	ND	ND	0.059	ND	ND	22.7	24.5	0.00073 J	0.00073 J	0.0018 J	ND	ND	ND	5.6	6.1
Oct-2022	ND	ND	0.051	ND	ND	17.8	18.8	0.0016 J	0.0044	0.0049	ND	ND	ND	4.7	5
May-2023	ND	ND	0.046	ND	ND	28.4	27.8	0.0024 J	0.00083 J	0.0021 J	ND	ND	ND	6.4	6.2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-19*												
Nov-1993	0.12	NA	ND	NA	1.1	NA	ND	NA	2.3	NA	NA	NA	0.01
Apr-1994	0.05	NA	ND	NA	2.1	NA	ND	NA	7.4	NA	NA	NA	0.037
Apr-1995	0.12	NA	ND	1.1	2.8	NA	ND	ND	5.5	NA	ND	ND	0.04
Apr-1997	0.082	0.087	**0.003**	ND	3.5	3.4	ND	ND	4.9	5.6	ND	ND	0.025
Apr-1998	0.095	0.115	NA	ND	4.38	3.11	ND	ND	6.97	6.97	ND	0.012	0.024
Apr-1999	0.091	0.084	NA	ND	3.93	3.1	ND	ND	6.12	5.85	ND	ND	0.015
Apr-2000	0.065	0.049	NA	ND	6.11	5.89	ND	ND	15.5	13	ND	0.029	0.02
Apr-2001	0.083	NA	NA	ND	6.53	NA	ND	ND	12.2	NA	ND	0.141	0.035
Mar-2002	0.039	0.026	NA	ND	3.14	3.05	ND	ND	6.41	5.25	ND	0.055	0.016
Mar-2003	0.018	0.011	NA	ND	6.64	6.93	ND	ND	11	10.5	ND	ND	ND
Apr-2004	0.05	0.04	ND	ND	4.03	3.83	ND	ND	11	10.3	ND	0.014	0.068
Apr-2005	0.048	0.044	ND	ND	3.85	3.62	ND	ND	11.9	11.6	ND	ND	0.029
Mar-2006	0.021	0.017	ND	ND	2.49	2.49	ND	ND	8.93	8.97	ND	ND	ND
Mar-2007	0.035	0.025	ND	ND	4.15	4.11	ND	ND	11.1	11.2	ND	0.02	0.01
Mar-2008	0.018	0.016	ND	ND	3.76	3.47	ND	ND	10.2	9.4	ND	ND	ND
Mar-2009	0.01	ND	ND	ND	2.33	2.28	ND	ND	7.65	7.48	ND	ND	ND
Mar-2010	ND	ND	ND	ND	6.71	6.35	ND	ND	26.8	27.9	ND	ND	ND
Oct-2010	0.017	0.014	ND	ND	4.55	4.32	ND	ND	17.6	17.4	ND	ND	ND
Apr-2011	0.01	ND	ND	ND	5.85	5.61	ND	ND	22.8	21.9	ND	ND	ND
Sep-2011	ND	ND	ND	ND	6.14	6	ND	ND	24.6	24.2	ND	ND	ND
Mar-2012	0.011	0.011	ND	ND	5.36	5.21	ND	ND	23.1	22.2	ND	ND	0.014
Sep-2012	0.0091 J	0.01 J	0.000032 J	0.0049 J	4.53	4.62	ND	ND	21.5	20.7	0.00054 J	ND	0.0026 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-19***												
Mar-2013	0.01 J	0.0088 J	0.000031 J	0.0044 J	4.85	4.33	ND	ND	18.9	17	ND	ND	0.0145
Oct-2013	0.0146	0.0141	ND	0.0059 J	2.87	2.79	ND	ND	10.6	10.8	ND	0.0033 J	0.0127
Mar-2014	0.0054 J	0.0051 J	ND	0.0024 J	7.14	7.25	ND	ND	32.4	33.1	ND	ND	0.0028 J
Oct-2014	0.0097 J	0.0096 J	0.000023 J	0.004 J	5.08	4.97	0.0016 J	ND	31.9	31.5	ND	ND	0.007 J
Apr-2015	0.0046 J	0.0036 J	ND	0.002 J	9.82	9.94	0.000992 J	ND	55.7	56.4	ND	ND	ND
Nov-2015	0.0086 J	0.0083 J	ND	0.0042 J	5.31	5.22	0.001 J	ND	27.5	26.9	ND	0.000161 J	0.0035 J
May-2016	0.0071	0.0057	ND	0.0031 J	6.27	6.31	ND	ND	26.2	26.6	ND	0.00034 J	ND
Oct-2016	0.0044	0.0061 B	ND	0.0039 J	5.75	5.86	ND	ND	20.4	21.2	ND	0.00035 J	ND
May-2017	0.0049	0.0042	ND	0.0037 J	9.06	9.41	ND	ND	30.2	30	ND	0.00037 J	ND
Oct-2017	0.0067	0.0054	ND	0.0049	6.24	6.29	ND	ND	19.6	18.4	ND	0.00031 J	ND
May-2018	0.021	0.019	0.00018 JB	0.011	3.5 J	2.9 J	0.00032 J	ND	13.7	11.7	ND	0.0037	0.0091 B
Nov-2018	0.004	0.0026	ND	0.0028	7.1	7.3	0.00017 J	ND	19.5	20.2	ND	0.0022	0.0047 J
May-2019	0.039	0.037	ND	0.0059	ND	ND	ND	ND	15.6	15.5	ND	0.0035 B	0.0072
Oct-2019	0.016	0.015	ND	0.0045	3.7 J	3.5 J	0.00051 J	ND	14.7	12.1	ND	0.0088	0.0075
May-2020	0.0057	0.005	ND	0.0023	6.5	6.8	ND	ND	9.1	9.2	ND	0.01	0.0034 J
Oct-2020	0.0045	0.0042	ND	ND	5.7	5.8	ND	ND	9.1	8.4	ND	0.0012 J	ND
Apr-2021	0.0067	0.0062	ND	0.0024 J	6.1	6.6	ND	ND	10.3	11.1	ND	ND	0.0025 J
Oct-2021	0.0071	0.0075	ND	0.0041	4.2	4.6	ND	ND	8.9	9.8	0.000028 J	0.00035 J	0.0027 J
May-2022	0.0037 J	0.0038 J	ND	0.0024 J	6.4	6.4	ND	ND	13	13.2	ND	0.00054 JB	ND
Oct-2022	0.007	0.0077	ND	0.0058	4.9	4.8	ND	ND	11.6	11.4	ND	ND	ND
May-2023	ND	ND	ND	0.0022 J	6.6	6.4	0.0013 JB	ND	11.9	11.6	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-19***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	6.5	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2002	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2002	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	7.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-19*																
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.93 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.81 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	7.73	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	2.73	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-19*																
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-19***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.2	10
Jul-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	1.2
Jul-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	1.9
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	13	15
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5	8.3
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-19***															
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.97 J
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.96 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	3.39	ND	ND	ND	2.84	9.26
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.89 J	ND	ND	ND	0.75 J	3.18
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	2.3 J	3.5
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	0.5 J	ND	ND	ND	0.8 J	2.9
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.6 J	ND	ND	ND	0.7 J	3.4
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	0.3 J
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.8 J	ND	ND	ND	0.9 J	3.2
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	4.4	7
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.755 J	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	1.5

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-19*															
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-19***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	4.8	ND	ND	ND	ND	1.9	ND	ND	ND	NA
Jul-2002	ND	ND	ND	NA	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Jul-2002	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	**6.4**	ND	ND	ND	ND	2.7	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.2 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	3.3	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-19***															
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	0.95 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	0.46 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	3.48	ND	ND	ND	ND	1.06	0.47 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	1.73	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	0.3 J	0.2 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.6 B	ND	ND	3.1	ND	ND	ND	ND	1.1	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	1.2 BCH	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.611 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-19***															
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-20R***											
Apr-2010	3.2	3.2	*ND*	*ND*	105	0.81	*ND*	4.3	604	211	352	143
Oct-2010	*ND*	*ND*	*ND*	*ND*	102	0.87	*ND*	4.1	556	153	349	128
Apr-2011	*ND*	*ND*	*ND*	13	119	0.86	*ND*	4	573	115	386	123
Sep-2011	*ND*	*ND*	*ND*	*ND*	94.8	0.79	*ND*	4.3	520	115	363	124
Mar-2012	*ND*	*ND*	*ND*	10	121	0.86	*ND*	3.6	660	204	391	138
Sep-2012	*ND*	*ND*	*ND*	10.3	107	0.794	*ND*	3.9	511	177	365	135
Mar-2013	*ND*	*ND*	*ND*	14.6	108	0.902	*ND*	4.1	633	124	358	104
Oct-2013	*ND*	*ND*	*ND*	15.7	106	0.874	*ND*	3.6	658	161	401	109
Mar-2014	*ND*	*ND*	*ND*	22	104	0.902	*ND*	4.5	578	179	371	105
Oct-2014	*ND*	*ND*	*ND*	*9 J*	96.9	0.831	*ND*	4.3	633	209	326	119
Apr-2015	0.96	0.96	*ND*	*5 J*	91.1	1.04	*ND*	3.9	548	180	346	112
Nov-2015	*ND*	*ND*	*ND*	*9 J*	96.4	0.979	*ND*	4.4	650	214	343	87
May-2016	*ND*	*ND*	*ND*	14	82.6	1.25	*ND*	4.5	767	163	341	114
Oct-2016	*ND*	*ND*	*ND*	11	75.4	*NA*	*NA*	4.3	670	186	376	114
May-2017	*ND*	*ND*	*ND*	*ND*	81.9	1.27	*ND*	4.2	714	189	341	114
Oct-2017	*ND*	*ND*	*0.078 J*	*6 J*	75.7	1.82	*ND*	4.4	785	204	330	94.3
May-2018	*ND*	*ND*	*ND*	*18.7 J*	65.4	0.58	0.013	4	603	133	311	110
Nov-2018	*ND*	*ND*	*ND*	*14.3 J*	59.4	1.8	*ND*	4.15	473.8	144	272	110
May-2019	16 H1	*NA*	*ND*	*ND*	44	1.2	*ND*	5.13	355	139	284	139
Oct-2019	*2.5 J*	*NA*	*ND*	*14.8 J*	48.1	1.5	*ND*	4.56	472.6	126	276	115
May-2020	*ND*	*NA*	*ND*	*13.5 J*	32.2	1.1	*ND*	4.83	320.4	84.4	197	106
Oct-2020	*4 J*	*NA*	*ND*	*11.6 J*	20.3	0.98	*ND*	5.05	246.8	79.6	158	67.2
Apr-2021	44	*NA*	*ND*	*14.8 J*	12.9	0.98	*ND*	5.7	270.8	53.8	157 D6	85.8
Oct-2021	30	*NA*	*ND*	*8.3 J*	11	0.93	*ND*	5.54	277.7	60.5 ML	139	80.7
May-2022	36	*NA*	*ND*	*5.6 J*	8.7	0.89	*ND*	5.46	238	54.1	135	77.4 N3
Oct-2022	*4 J5c*	*NA*	*ND*	*19.8 J*	12.1	0.91	*ND*	4.9	230.1	56.2	123	54.4 N3
May-2023	14	*NA*	*ND*	36.5	12.6	0.92	*ND*	5.09	218.1	50.4	114	68.7 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-20R*													
Apr-2010	ND	ND	0.04	ND	ND	37.3	36.5	ND	0.017	0.018	0.076	ND	ND	12.1	11.8
Oct-2010	ND	ND	0.032	0.002	ND	29.9	29	ND	0.025	0.027	0.062	ND	ND	13	12.8
Apr-2011	ND	ND	0.036	0.002	ND	30.1	29.7	ND	0.02	0.022	0.357	0.031	ND	11.6	11.3
Sep-2011	ND	ND	0.041	ND	ND	27	25.2	ND	0.027	0.035	0.436	ND	ND	13.7	13.1
Mar-2012	ND	ND	0.035	0.003	ND	33.4	32.3	ND	0.019	0.025	0.122	ND	ND	13.2	12.7
Sep-2012	ND	ND	0.0383	0.0027	0.000685 J	31.6	31.7	0.0064 J	0.0225	0.0301	0.155	0.0323 J	ND	13.7	13.2
Mar-2013	ND	ND	0.0307	0.0017 J	0.000583 J	25.1	29.2	ND	0.0197 J	0.0259	0.0963	0.0261 J	0.0014 J	10.1	11.9
Oct-2013	ND	0.000794 J	0.0358	0.0019 J	0.0012 J	28	29.3	0.0085 J	0.0188 J	0.0266	ND	ND	0.000426 J	9.6	10.4
Mar-2014	0.00044 J	ND	0.0478 J	ND	ND	25.7	26	0.0094 J	0.0159 J	0.0249 J	2.02	0.0426 J	ND	10	10.3
Oct-2014	0.0013 J	0.0043 J	0.0574	0.0025 J	0.000866 J	28.9	28.9	0.0117 J	0.0229 J	0.0263 J	1.87	ND	0.003	11.4	11.6
Apr-2015	0.000541 J	0.0018 J	0.0334	0.0014 J	0.000605 J	27.3	26.8	ND	0.0173 J	0.0209	0.0507 J	ND	ND	10.7	10.6
Nov-2015	ND	0.0041	0.0364	0.0019 J	0.00099 J	20.6	20.7	0.0011 J	0.0158	0.0314	0.0486 J	0.0265 J	ND	8.67	8.66
May-2016	ND	0.0012 J	0.0342	0.0019	0.00046 J	28.1	28.6	0.0022 J	0.0229	0.0257	ND	ND	ND	10.6	10.7
Oct-2016	ND	0.0028 J	0.0216	0.0021	0.00052 J	26	28.2	0.0022 J	0.0276	0.0282	ND	0.0395 J	0.00013 J	11.8	13
May-2017	ND	0.0024 J	0.0342	0.0023	0.00062 J	23.4	24.5	0.0032 J	0.0323	0.0294	0.263	ND	0.00035 J	13.6	13.2
Oct-2017	ND	0.0013 J	0.0293	0.0018	0.00057 J	19.7	20.3	0.0044	0.0304	0.0263	0.147 J	0.0387 J	0.00021 J	11	11.4
May-2018	0.000035 J	ND	0.027	0.0021	0.0019	25.7	22.1	0.0036 JB	0.0223	0.018	0.24	0.022	0.00045 J	11.1	9.8
Nov-2018	0.000054 J	ND	0.024	0.00092	0.00084 J	31.1	31.5	0.0068 J	0.0072 J	0.025 J	0.07	0.018 J	0.00049 J	7.9	8
May-2019	ND	ND	0.025	0.00071	ND	40.2	41.1	ND	ND	ND	ND	ND	ND	9.5	9.6
Oct-2019	0.00011 J	ND	0.022	0.001	0.00082 J	32.1	31.2	0.0064 J	0.008	0.013	0.021 J	0.014 J	ND	8.4	8.2
May-2020	0.000086 J	ND	0.026	0.00043	0.00027 J	31.1	30.5	0.0064 J	0.0034	ND	0.055 J	0.015 J	ND	6.8	6.7

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-20R***													
Oct-2020	*ND*	*ND*	0.018	*0.00035 J*	*ND*	18.9	18.5	*0.0043 J*	*0.0021 J*	*ND*	0.13	*ND*	*ND*	4.9	4.6
Apr-2021	*ND*	*ND*	0.035	*0.00022 J*	*ND*	25.4	27.2	*0.0015 J*	*0.0017 J*	*0.0033 J*	*ND*	*ND*	*ND*	5.4	5.8
Oct-2021	*ND*	*ND*	0.031 M1	*0.0003 J*	*ND*	22.9 M1	21.2	*0.002 J*	0.0042	0.0037 M1	*0.041 JM1*	*0.025 JB*	*0.000049 JR1M1*	5.7 M1	5.3
May-2022	*ND*	*ND*	0.039 M1	*0.00021 J*	*ND*	22.1	24	*0.0014 J*	0.0033	0.0033	*ND*	*ND*	*ND*	5.4	5.9
Oct-2022	*ND*	*ND*	0.04	*0.0003 J*	*ND*	14.7	15.8	*0.0017 J*	0.0056	0.0085	*ND*	*ND*	*ND*	4.3	4.8
May-2023	*ND*	*ND*	0.037	*0.00021 J*	*0.00014 J*	19.2	18.9	0.0044	0.0031	0.006	0.26	*ND*	*ND*	5	4.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-20R*												
Apr-2010	0.298	0.292	ND	0.013	3.77	3.74	ND	ND	35.4	34.9	ND	ND	0.019
Oct-2010	0.269	0.263	ND	0.019	3.4	3.36	ND	ND	37.7	37.1	ND	ND	0.024
Apr-2011	0.238	0.232	ND	0.015	3.53	3.43	ND	ND	44.6	44	ND	ND	0.019
Sep-2011	0.291	0.278	0.0002	0.028	3.84	3.18	ND	ND	41.7	39.2	ND	ND	0.037
Mar-2012	0.239	0.233	0.0003	0.014	3.87	3.77	ND	ND	50.1	48.7	ND	ND	0.019
Sep-2012	0.227	0.228	0.000349	0.0195	3.67	3.67	0.0026	ND	56.1	55.3	0.000296 J	ND	0.022
Mar-2013	0.229	0.261	0.000199 J	0.015	2.56 J	3.06 J	0.002 J	ND	42	49.6	ND	ND	0.0264
Oct-2013	0.239	0.265	ND	0.0124	3.47 J	3.16 J	0.0023	0.000025 J	53.5	57	ND	0.0135 J	0.0252
Mar-2014	0.198	0.195	ND	0.0128 J	3.48 J	3.14	ND	ND	48.6	48.9	ND	0.0147 J	0.0738 J
Oct-2014	0.233	0.234	0.000118 J	0.0194 J	3.62 J	3.18 J	0.0184 J	0.000032 J	48.5	50.4	ND	0.0141 J	ND
Apr-2015	0.186	0.192	0.000095 J	0.0128	3.09	3.08	0.0118	ND	41.8	41.5	ND	ND	0.0245
Nov-2015	0.167	0.166	0.000325	0.0154	2.51	2.52	0.0267	ND	36.8	37.5	ND	0.0018 J	0.0235
May-2016	0.18	0.175	0.00024	0.0136	3.46	3.37	0.0011 J	ND	44.3	44.2	ND	0.0022	0.0195 J
Oct-2016	0.19	0.215	0.00016 J	0.0177	3.09	3.51	0.00058 J	ND	39	45.3	ND	0.0025	0.0254 J
May-2017	0.246	0.248	0.00039	0.0208	3.14	3.08	0.00063 J	ND	47	45.3	ND	0.0059	0.0309
Oct-2017	0.205	0.206	0.000077 J	0.0179	2.99	2.96	0.00057 J	ND	50.7 J-	50.4	ND	0.0044	0.0227 J
May-2018	0.19	0.22	0.00015 J	0.011 B	2.5 J	2.6 J	0.0033	ND	55.1	45.8	ND	0.0032 J	0.0016 JB
Nov-2018	0.11	0.13	ND	0.0052 J	4 J	4 J	ND	ND	40.3	41.5	ND	0.0014 J	ND
May-2019	0.055	0.057	ND	ND	ND	ND	ND	ND	26.8	27	ND	ND	ND
Oct-2019	0.063	0.022	ND	0.0055	4.3 J	4.3 J	0.0021	ND	36.4	34.5	ND	0.01	0.01
May-2020	0.028	0.03	ND	0.0032	3.7 J	3.7 J	ND	ND	23.6	23.4	ND	0.0054	ND
Oct-2020	0.055	0.03	ND	ND	2.9 J	3 J	ND	ND	22.7	20.3	ND	0.0028 J	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-20R***												
Apr-2021	0.02	0.02	*ND*	*0.0017 J*	3.1	3.4	*ND*	*ND*	12.5	13.6	*ND*	*0.004 J*	*ND*
Oct-2021	0.033 M1	0.031	*ND*	0.0028 M1	3.5 M1	3.3	*0.0015 J*	*ND*	14.6 M1	14.4	*0.000032 J*	0.0031	*0.0022 JR1M1*
May-2022	0.028	0.039	*ND*	0.0027 M1	3.3	3.3	*0.0012 J*	*ND*	10.7	10.9	*ND*	0.0043	*ND*
Oct-2022	0.041	0.044	*ND*	0.0034	3.3	3.4	*0.0022 J*	*ND*	10.9	11.1	*ND*	0.0031	*0.0041 J*
May-2023	0.031	0.03	*ND*	0.0036	3.6	3.5	0.0027 B	*ND*	11.9	11.6	*ND*	0.0049	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-20R*																
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-20R*																
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-20R*															
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-20R***															
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-20R***															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.56 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*0.31 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-20R***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.516 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-23***											
Apr-1995	10.3	10.3	ND	34.7	3.4	0.6	ND	5.8	40.6	5.3	34	8.5
Apr-1997	ND	2	ND	ND	4	0.42	ND	NA	NA	ND	57	12
Oct-1997	2	2	ND	ND	3.52	0.695	ND	8.92	34.2	ND	ND	ND
Apr-1998	ND	ND	0.21	ND	2.44	0.36	ND	6.73	20.3	ND	12	4.6
Apr-1999	ND	ND	0.25	ND	13.9	0.24	ND	5.36	68.4	ND	33	4.7
Oct-1999	ND	ND	0.16	ND	3.42	0.38	ND	5.6	23.2	0.93	33	4.5
Apr-2000	10	10	ND	ND	2.75	0.32	ND	6.02	20	ND	29	7.3
Oct-2000	9.5	NA	ND	14	3.06	0.31	ND	6.06	23.4	ND	27	5.76
Apr-2001	2.2	NA	ND	ND	2.57	0.44	ND	NA	NA	ND	31	4.8
Sep-2001	1.6	1.6	ND	ND	3.87	1.4	ND	5.22	19	ND	25	4.81
Mar-2002	ND	ND	ND	27	4.35	0.522	ND	5.2	15.6	ND	36	5
Sep-2002	2	2	ND	ND	3.9	0.56	ND	5.2	26.2	ND	ND	5
Mar-2003	4.4	4.4	ND	ND	16	ND	ND	5.4	35.5	ND	42	6.69
Oct-2003	4.2	4.2	ND	11	3.33	0.384	ND	4.5	27.8	ND	ND	7.79
Apr-2004	7.8	7.8	ND	10	14.9	0.435	ND	5.6	75.3	ND	96	6.26
Oct-2004	3.7	3.7	ND	14	3.68	0.48	ND	5.2	24.7	ND	31	8.08
Apr-2005	4.1	4.1	ND	ND	8.81	0.48	ND	5.4	40.4	ND	ND	5.1
Oct-2005	3.8	3.8	ND	ND	3.51	0.4	ND	5.1	19.6	ND	34	5.22
Mar-2006	4.7	4.7	ND	ND	8.69	0.41	ND	5.3	42.1	ND	19	2.45
Sep-2006	3.5	3.5	ND	43	3.52	0.39	ND	5.2	26.1	ND	30	5.88
Mar-2007	6.1	6.1	ND	ND	32.6	0.45	ND	5.4	99.8	ND	52	3.24
Sep-2007	3	3	ND	ND	8.75	0.94	ND	5.1	21.2	ND	37	4.27
Mar-2008	2.9	2.9	ND	15	13	1.39	ND	5	26	4.86	18	5.05
Sep-2008	3.9	3.9	ND	11	3.44	0.42	ND	4.7	19.1	ND	22	5.1
Mar-2009	4.6	4.6	ND	37	4.22	0.45	ND	4.8	27.3	ND	26	3.81
Oct-2009	3.7	3.7	ND	13	3.88	0.58	ND	4.7	24.4	ND	30	9.1
Apr-2010	7	7	ND	ND	6.3	0.67	ND	4.9	40	ND	27	3.9
Oct-2010	4.4	4.4	ND	ND	3.81	0.57	ND	4.6	21.6	1.31	39	6.87
Apr-2011	10	10	ND	22	15.9	0.76	ND	5.6	73.2	ND	89	5.9
Sep-2011	14	14	ND	ND	1.98	0.36	ND	6	31.4	ND	34	15.4
Mar-2012	14	14	ND	ND	10	0.6	ND	5.3	58	ND	37	10.7
Sep-2012	10.4	10.4	ND	ND	3.42	0.562	ND	5	30.4	ND	43	12.6
Mar-2013	20.7	20.7	ND	11.7	38.1	0.717	ND	6.1	148.4	0.922 J	99	15.5
Oct-2013	17	17	0.101 J	50.6	1.89	0.277	ND	6	29.8	1.45	ND	16.8
Mar-2014	7.56	7.56	ND	ND	3.88	0.596	ND	6.1	33.7	0.498 J	ND	9.85
Oct-2014	ND	ND	ND	ND	7.73	1.2	ND	5.1	44.6	2	50	8.03
Apr-2015	6.52	6.52	ND	ND	7.01	1.34	ND	4.4	42.5	0.879 J	60	10.8

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-23***										
Nov-2015	4.28	4.28	*ND*	*ND*	6.66	1.35	*ND*	5.5	68.1	*ND*	112	17.6
May-2016	2.68	2.68	*ND*	*8 J*	6.53	*ND*	*ND*	5.3	56.2	*ND*	27	8.2
Oct-2016	3.68	3.68	*ND*	*ND*	6.72	*NA*	*NA*	5.2	57.5	*0.895 J*	35	8.7
May-2017	*ND*	*ND*	*ND*	*ND*	7.43	1.41	*ND*	5.2	60.9	*0.749 J*	*15 J*	8.3
Oct-2017	3.56	3.56	*ND*	*ND*	7.17	1.55	*ND*	5	72	*0.567 J*	*20 J*	8.8
May-2018	*4 J*	*ND*	*ND*	*ND*	6.7	1.5	*ND*	5.8	51.1	*ND*	31	9.5
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	6.3	1.4	*ND*	4.79	47.4	*ND*	11	9.5
May-2019	*ND*	*NA*	*ND*	*ND*	6.3	1.2	*ND*	4.84	33	*ND*	16	8.6
Oct-2019	*ND*	*NA*	*ND*	*ND*	5.3	1.5	*ND*	4.56	4.14	*ND*	18	9.7
May-2020	*ND*	*NA*	*ND*	*ND*	6.7	1.4	*ND*	5.23	55.1	*ND*	*ND*	9.6
Oct-2020	*ND*	*NA*	*ND*	*ND*	6.5	1.5	*ND*	5.01	44.3	*ND*	39	10
Apr-2021	*ND*	*NA*	*ND*	*ND*	6.9	1.6	*ND*	4.95	51.4	*ND*	23	10.1
Oct-2021	*ND*	*NA*	*0.061 J*	*ND*	6.5	1.4	*ND*	4.97	87.2	*ND*	20	10.9
May-2022	*2 J2c*	*NA*	*ND*	*ND*	6.6	1.8	*ND*	4.87	75.2	*ND*	12	11.3 N3
Oct-2022	*ND*	*NA*	*ND*	*6.1 J*	8	1.9	*ND*	4.96	74.2	*ND*	34	12.3 N3
May-2023	10	*NA*	*ND*	29.6	8.1	2	*ND*	4.94	75.2	*ND*	40	11.5 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-23***													
Apr-1995	ND	ND	ND	ND	ND	2.2	NA	ND	ND	ND	0.57	0.05	ND	0.72	NA
Oct-1996	ND	ND	0.019	ND	ND	1.4	1.5	0.026	ND	ND	0.91	0.5	ND	ND	ND
Apr-1997	ND	ND	0.024	ND	ND	2.6	1.3	ND	ND	ND	0.26	ND	0.005	0.76	ND
Oct-1997	ND	ND	ND	ND	ND	1.08	1.06	ND	ND	ND	0.092	ND	ND	0.387	0.377
Apr-1998	ND	ND	ND	ND	ND	1.15	1.15	ND	ND	ND	0.13	ND	ND	0.421	0.396
Apr-1999	ND	ND	ND	ND	ND	1.25	1.32	ND	ND	ND	0.164	ND	ND	0.394	0.385
Oct-1999	ND	ND	ND	ND	ND	1.24	1.15	ND	ND	ND	0.113	ND	ND	0.406	0.352
Apr-2000	ND	ND	ND	ND	ND	1.42	1.26	ND	ND	0.017	0.795	ND	ND	0.91	0.389
Oct-2000	ND	ND	ND	ND	ND	1.48	1.46	ND	ND	ND	0.285	ND	ND	0.499	0.428
Apr-2001	ND	ND	ND	ND	ND	1.17	NA	ND	ND	ND	0.199	NA	ND	0.447	NA
Sep-2001	ND	ND	ND	ND	ND	1.19	1.29	ND	ND	ND	0.4	0.128	ND	0.448	0.436
Mar-2002	ND	ND	ND	ND	ND	1.27	1.11	ND	ND	ND	0.156	ND	ND	0.443	0.403
Sep-2002	ND	ND	ND	ND	ND	1.26	1.19	ND	ND	ND	0.565	ND	ND	0.482	0.4
Mar-2003	ND	ND	ND	ND	ND	1.81	1.28	ND	ND	ND	0.173	ND	ND	0.53	0.391
Oct-2003	ND	ND	0.011	ND	ND	2.04	1.56	ND	ND	ND	1.59	ND	0.003	0.656	0.434
Apr-2004	ND	ND	0.033	ND	ND	1.29	0.335	0.034	ND	0.024	13.6	ND	0.01	0.737	0.166
Oct-2004	ND	ND	0.011	ND	ND	2.22	1.22	0.011	ND	0.015	3.11	0.122	0.005	0.617	0.375
Apr-2005	ND	ND	ND	ND	ND	1.29	0.986	ND	ND	0.011	0.829	ND	ND	0.464	0.374
Oct-2005	ND	ND	ND	ND	ND	1.33	1.04	ND	ND	ND	0.527	ND	ND	0.46	0.372
Mar-2006	ND	ND	ND	ND	ND	0.683	0.497	ND	ND	ND	0.523	ND	ND	0.18	0.14
Sep-2006	ND	ND	ND	ND	ND	1.42	1.12	0.021	ND	ND	0.758	ND	0.004	0.565	0.383

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-23***													
Mar-2007	ND	ND	ND	ND	ND	0.708	0.573	0.014	ND	ND	2.05	ND	0.004	0.356	0.211
Sep-2007	ND	ND	ND	ND	ND	1.03	0.921	ND	ND	ND	0.628	ND	ND	0.414	0.358
Mar-2008	ND	ND	ND	ND	ND	1.19	0.977	0.046	ND	0.026	1.35	ND	0.006	0.505	0.349
Sep-2008	ND	ND	ND	ND	ND	1.25	1.08	ND	ND	ND	0.427	ND	ND	0.484	0.396
Mar-2009	ND	ND	ND	ND	ND	0.931	0.826	ND	ND	ND	0.243	ND	ND	0.363	0.299
Oct-2009	ND	ND	0.015	ND	ND	1.83	1.12	0.021	ND	0.014	2.17	0.19	0.011	1.1	0.382
Apr-2010	ND	ND	ND	ND	ND	1.33	1.52	ND	ND	ND	3.62	0.182	ND	0.395	0.247
Oct-2010	ND	ND	ND	ND	ND	1.89	1.8	ND	ND	ND	0.508	ND	ND	0.523	0.437
Apr-2011	ND	ND	0.02	ND	ND	1.24	0.396	0.014	ND	ND	4.31	0.121	0.007	0.689	0.135
Sep-2011	ND	ND	0.012	ND	ND	4.88	3.75	ND	ND	0.011	0.959	ND	0.002	0.771	0.469
Mar-2012	ND	ND	0.012	ND	ND	3.02	2.25	ND	ND	ND	2	0.088	0.003	0.764	0.411
Sep-2012	ND	ND	0.0158	ND	ND	3.9	3.58	0.0072 J	0.000829 J	0.003 J	1.07	0.163	0.0018 J	0.706	0.568
Mar-2013	ND	ND	0.0101	ND	ND	4.83	4.79	0.0107	0.000515 J	0.0043 J	1.31	0.365	0.0035	0.829	0.624
Oct-2013	0.001 J	0.0011 J	0.0255	0.000179 J	0.000162 J	4.9	4.8	0.0189	0.000838 J	0.0101	5.28	0.112	0.0083	1.11	0.552
Mar-2014	0.00041 J	0.001 J	0.0144	0.000128 J	ND	2.9	2.76	0.0058 J	0.0022 J	0.0049 J	3.69	0.161	0.0016 J	0.631	0.535
Oct-2014	0.000466 J	ND	0.0207	ND	ND	1.88	1.84	0.0012 J	0.0035 J	0.0023 J	0.0652	0.012 J	ND	0.811	0.775
Apr-2015	0.000661 J	0.000492 J	0.0376	0.000279 J	0.000075 J	2.33	1.49	0.0056 J	0.0027 J	0.0041 J	2.26	0.0177 J	0.0022	1.21	0.505
Nov-2015	ND	0.00087 J	0.0601	0.000503 J	0.000116 J	3.56	1.5	0.0071 J	0.0032 J	0.0077 J	5.46	0.031 J	0.0049	2.11	0.539
May-2016	ND	ND	0.0135	0.000088 J	ND	2	1.98	0.0013 J	0.0022	0.0024 J	0.0559 J	ND	ND	0.77	0.721
Oct-2016	ND	ND	0.0137	ND	ND	2.22	2.11	0.00082 J	0.0022	0.0021 J	ND	ND	ND	0.775	0.795
May-2017	ND	ND	0.0143	ND	ND	2.02	2.14	0.00095 J	0.0023	0.0026 J	ND	ND	ND	0.787	0.857
Oct-2017	ND	ND	0.0134	0.000084 J	ND	2.17	2.3	ND	0.0025	0.004	ND	ND	ND	0.824	0.893
May-2018	0.000055 J	ND	0.015	0.0001 J	0.000053 J	2.3	2.2	0.0072	0.005	0.0079	0.078	0.023	0.00004 J	0.91 J	0.85 J
Nov-2018	ND	ND	0.011	0.000097 J	0.000061 J	2.4	2.4	0.0047 J	0.0028	0.0052	0.13	0.022	0.00011 JB	0.86 J	0.88 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-23***													
May-2019	*ND*	*ND*	0.01	*ND*	*ND*	2.2	2.2	0.016	0.0068	0.0092	0.26	0.19	*ND*	*ND*	*ND*
Oct-2019	*0.00011 J*	*ND*	0.01	*0.00011 J*	*0.00026 J*	2.4	2.4	*0.0069 J*	0.0032	0.014	*0.059 J*	0.023	*0.000074 J*	0.88	*0.87 J*
May-2020	*0.00007 J*	*ND*	0.012	*0.000059 J*	*ND*	2.4	2.3	0.046	0.0055	0.015	0.39	0.16	*ND*	0.86	*0.85 J*
Oct-2020	*0.00032 J*	*ND*	0.015	*ND*	*ND*	2.5	2.5	*0.017 J*	0.0042	*ND*	0.12	0.055	*ND*	0.91	*0.91 J*
Apr-2021	*ND*	*ND*	0.014	*ND*	*ND*	2.5	2.4	0.006	*0.0036 J*	0.0096	0.076	*0.062 J*	*ND*	0.93	0.97
Oct-2021	*0.000089 J*	*ND*	0.016	*ND*	*ND*	2.7	2.7	0.0081	0.0041	0.0073	0.067	*0.047 J*	*0.000042 J*	1	1
May-2022	*ND*	*0.0017 JB*	0.015	*ND*	*ND*	2.8	2.9	0.015	0.004	0.011	0.16	0.095	*ND*	1.1	1.1
Oct-2022	*ND*	*ND*	0.015	*0.00011 J*	*ND*	3.1	3	0.012	0.0043	0.011	0.092	*0.05 J*	*ND*	1.1	1.1
May-2023	*ND*	*ND*	0.016	*ND*	*ND*	2.8	2.8	0.0096	0.0043	0.009	0.083	*0.046 J*	*ND*	1.1	1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-23*												
Apr-1995	0.03	NA	ND	ND	1.2	NA	ND	0.02	3.1	NA	ND	ND	0.07
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	1.7	1.8	ND	ND	0.099
Apr-1997	0.011	ND	ND	ND	2.1	2.3	ND	ND	1.2	1.9	ND	ND	0.073
Oct-1997	ND	ND	ND	ND	0.907	1.32	ND	ND	1.33	1.38	ND	ND	0.015
Apr-1998	ND	ND	ND	0.016	ND	ND	ND	ND	1.61	1.4	ND	ND	0.013
Apr-1999	ND	ND	NA	ND	ND	1.12	ND	ND	8.54	8.47	ND	ND	0.027
Oct-1999	ND	0.01	NA	ND	0.759	ND	ND	ND	1.51	1.37	ND	ND	0.016
Apr-2000	ND	ND	NA	ND	ND	ND	ND	ND	2.26	2.21	ND	ND	0.044
Oct-2000	ND	ND	NA	ND	0.712	0.577	ND	ND	1.42	1.37	ND	ND	0.023
Apr-2001	ND	NA	NA	ND	1.66	NA	ND	ND	1.53	NA	ND	ND	0.016
Sep-2001	ND	ND	NA	ND	0.9	1.09	ND	ND	1.72	1.67	ND	ND	0.019
Mar-2002	ND	ND	NA	ND	0.948	0.868	ND	ND	2.74	1.78	ND	ND	0.02
Sep-2002	ND	ND	NA	ND	0.833	ND	ND	ND	1.68	1.65	ND	ND	0.022
Mar-2003	ND	ND	NA	ND	1.42	0.569	ND	ND	3.83	3.32	ND	ND	0.035
Oct-2003	ND	0.012	NA	0.012	ND	ND	ND	ND	2.35	1.61	ND	ND	0.122
Apr-2004	0.01	ND	ND	0.017	1.35	0.73	ND	ND	15.1	16	ND	0.034	0.081
Oct-2004	ND	ND	ND	ND	1.55	0.598	ND	ND	2.9	2.08	ND	ND	0.064
Apr-2005	ND	ND	ND	ND	0.83	0.69	ND	ND	6.96	6.52	ND	ND	0.082
Oct-2005	ND	ND	ND	ND	0.686	0.545	ND	ND	2.05	1.3	ND	ND	0.039
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	6.12	7.09	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.75	0.694	ND	ND	1.7	1.43	ND	ND	0.039
Mar-2007	ND	ND	ND	ND	0.74	0.512	ND	ND	21.4	21.3	ND	ND	0.037

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-23***												
Sep-2007	ND	ND	ND	ND	0.873	0.671	ND	ND	1.82	1.79	ND	ND	0.016
Mar-2008	ND	ND	ND	ND	0.915	0.793	ND	ND	1.84	1.58	ND	ND	0.058
Sep-2008	ND	ND	ND	ND	0.706	0.652	ND	ND	1.49	1.4	ND	ND	0.026
Mar-2009	ND	ND	ND	ND	0.775	0.721	ND	ND	2.38	2.36	ND	ND	0.023
Oct-2009	0.016	ND	ND	ND	0.722	ND	ND	ND	1.67	1.51	ND	ND	0.12
Apr-2010	ND	ND	ND	ND	0.752	0.579	ND	ND	5.28	5.44	ND	ND	0.036
Oct-2010	ND	ND	ND	ND	0.735	0.653	ND	ND	2.03	1.97	ND	ND	0.041
Apr-2011	0.011	ND	ND	ND	0.801	ND	ND	ND	13.3	12.4	ND	0.013	0.066
Sep-2011	0.013	ND	ND	0.013	0.985	0.574	ND	ND	2.52	2.06	ND	ND	0.042
Mar-2012	0.014	ND	ND	ND	0.68	ND	ND	ND	10.5	10.5	ND	ND	0.057
Sep-2012	0.0157	0.0131	ND	0.0032 J	1	0.679	ND	ND	1.84	1.85	ND	ND	0.0594
Mar-2013	0.024	0.0208	0.000095 J	0.0051 J	1.57	1.58	ND	0.000036 J	26	26.8	ND	ND	0.111
Oct-2013	0.0286	0.0171	ND	0.0058 J	0.933	0.397 J	ND	ND	1.32	1.55	0.000312 J	0.0149	0.134
Mar-2014	0.026	0.0181	ND	0.0101 J	0.856	0.752	ND	0.000044 J	1.57	1.65	ND	0.0063 J	0.0335
Oct-2014	0.0115	0.0125	ND	0.0051 J	0.936	0.923	ND	ND	5	5.16	ND	ND	0.0084 J
Apr-2015	0.0492	0.029	ND	0.0055 J	1.25	1.02	ND	ND	6.82	6.98	ND	0.0034 J	0.014
Nov-2015	0.0908	0.0381	ND	0.0062 J	1.65	0.943	0.0014 J	ND	7.18	7.04	ND	0.0088 J	0.0284
May-2016	0.0427	0.0402	ND	0.0036 J	0.987	1	ND	ND	4.26	4.26	ND	ND	0.0144 J
Oct-2016	0.0339	0.0342	ND	0.0038 J	0.988	1.02	ND	ND	3.95	4.07	ND	ND	0.0099 J
May-2017	0.0212	0.0215	ND	0.0037 J	0.923	1.02	ND	ND	3.98	4.11	ND	ND	0.0089 J
Oct-2017	0.0189	0.0193	ND	0.0035 J	0.971	1.06	ND	ND	4.17 J-	4.32	ND	ND	0.0101 J
May-2018	0.019	0.017	ND	0.0092	1.1 J	ND	0.0006 JB	ND	4.2 J	4.2 J	ND	0.0035	0.011
Nov-2018	0.02	0.017	ND	0.0069	1.2 J	1.6 J	0.00012 J	ND	2.4 J	4 JB	ND	0.0026	0.011
May-2019	0.024	0.021	ND	0.022	ND	ND	ND	ND	ND	ND	ND	0.0034	0.012

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-23***												
Oct-2019	0.019	0.016	*ND*	0.0094	*1.1 J*	*1.1 J*	*ND*	*ND*	*3.2 J*	*3.2 J*	*ND*	*ND*	0.022
May-2020	0.032	0.028	*ND*	0.055	*ND*	*1.4 J*	*ND*	*ND*	*3.3 J*	*3.1 J*	*ND*	0.012	0.0097
Oct-2020	0.019	0.016	*ND*	0.026	*ND*	*ND*	*ND*	*ND*	*2.5 J*	*2.9 J*	*ND*	*0.0025 J*	*ND*
Apr-2021	0.014	0.012	*0.00006 J*	0.014	1.1	0.96	*ND*	*ND*	3.9	3.4	*ND*	*ND*	*0.0068 J*
Oct-2021	0.012	0.012	*ND*	0.016	1	1.1	*ND*	*ND*	4.4	4.6	*ND*	*ND*	0.0059
May-2022	0.014	0.014	*ND*	0.03	1	1.1	*ND*	*ND*	4.3	4.8	*ND*	*ND*	0.0055
Oct-2022	0.014	0.012	*ND*	0.022	1.1	1.1	*ND*	*ND*	4.8	4.8	*ND*	*ND*	0.0073
May-2023	0.012	0.011	*ND*	0.019	1.1 B	1	*ND*	*ND*	4.3	4.4	*ND*	*ND*	0.0072

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-23***																
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-23*																
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1 J	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-23*																
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-23***															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-23***															
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.44 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-23***															
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.189 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-23***															
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Feb-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-23***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*0.66 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*0.26 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-23***															
May-2017	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.292 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-24***											
Apr-1995	47.4	31	ND	30.1	9.4	ND	ND	8.8	125	7	77	17.9
Apr-1997	ND	2	ND	ND	7	0.17	ND	NA	NA	0.1	51	12
Oct-1997	3	3	0.26	ND	7.44	ND	ND	5.58	40.5	ND	16	ND
Apr-1998	ND	ND	0.23	ND	5.44	0.14	ND	5.65	47.7	ND	10	7.4
Apr-1999	ND	ND	0.46	ND	24.7	0.125	ND	5.03	39.3	ND	37	6
Oct-1999	ND	ND	0.08	ND	6.98	0.299	ND	5.39	36.8	ND	32	7.2
Apr-2000	5	5	0.61	ND	7.27	0.227	ND	5.84	33	ND	28	10
Oct-2000	7.9	NA	ND	ND	5.45	ND	ND	5.18	29.1	5	28	6.34
Apr-2001	4.1	NA	0.26	ND	6.18	ND	ND	NA	NA	ND	25	8.5
Sep-2001	2	2	ND	ND	9.87	1.38	ND	4.81	42	38.6	38	6.77
Mar-2002	3.6	3.6	ND	ND	9.49	ND	ND	5.1	49	ND	37	7.42
Sep-2002	4	4	ND	ND	9.42	ND	ND	6.1	46.1	ND	24	8.25
Mar-2003	3.6	3.6	ND	ND	7.39	0.256	ND	5.1	45	ND	50	8.22
Oct-2003	4.2	4.2	ND	ND	7.42	0.24	ND	4.6	51.7	ND	17	9.13
Apr-2004	4.2	4.2	ND	ND	8.28	0.174	ND	4.7	51.2	ND	45	13.1
Oct-2004	4.2	4.2	ND	ND	9.13	0.223	ND	4.85	47.8	ND	42	9.83
Apr-2005	18	18	ND	ND	10.2	0.25	ND	5.5	66.4	ND	65	13.6
Oct-2005	5	5	ND	ND	6.25	0.28	ND	4.4	38.4	ND	38	6.16
Mar-2006	4.9	4.9	ND	ND	7.6	0.28	ND	5.6	60.3	1.16	42	5.83
Sep-2006	4.3	4.3	ND	ND	6.63	0.25	ND	4.9	43	1.07	37	6.71
Mar-2007	4.7	4.7	ND	ND	8.12	0.2	ND	4.7	45.9	ND	ND	7.64
Sep-2007	5.3	5.3	ND	ND	8.37	0.14	ND	5.6	41.8	ND	57	7.71
Mar-2008	16	16	ND	ND	21.1	1.01	ND	4.8	44.6	6.71	37	11.9
Sep-2008	6.3	6.3	ND	ND	9.79	0.09	ND	4.8	45.9	1.15	34	8.4
Mar-2009	5.8	5.8	ND	ND	15.8	0.07	ND	4.7	73.6	1.67	43	13.4
Oct-2009	7	7	ND	ND	12.5	0.08	ND	4.7	60.3	2.3	64	11.7
Mar-2010	7.5	7.5	0.44	11.8	13.9	0.07	ND	4.82	75	4.01	62	12
Oct-2010	6	6	ND	ND	12.2	ND	ND	4.6	59.2	4.05	37	11.6
Apr-2011	7.1	7.1	ND	ND	11.4	0.07	ND	4.5	62.6	3.6	66	10.4
Sep-2011	7.1	7.1	ND	ND	11.7	0.08	ND	4.7	57.6	3.44	52	12
Mar-2012	6.8	6.8	ND	ND	12	0.09	ND	4.1	61.4	3.98	46	12.3
Sep-2012	6	6	ND	ND	11.9	0.125	ND	3.6	59.3	3.23	46	12.1
Mar-2013	5.84	5.84	ND	ND	12.1	0.135	ND	4.9	60.9	3.23	51	9.7
Oct-2013	6.76	6.76	ND	ND	13	0.109	ND	5.7	62.3	3.7	46	13.5
Mar-2014	6.52	6.52	ND	ND	13.5	0.138	ND	5	66.7	3.68	460	13.4
Oct-2014	ND	ND	ND	ND	13.3	0.137	ND	4.9	67.8	4.81	34	14.7
Apr-2015	7.44	7.44	ND	ND	14.7	0.0722	ND	3.9	66	4.46	48	15.2

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-24***											
Nov-2015	4.52	4.52	*ND*	*6 J*	14.7	0.0738	*ND*	5	94.1	5.42	55	14.9
May-2016	4.4	4.4	*ND*	*ND*	13.7	0.0732	*ND*	5	89.7	4.15	47	14.7
Oct-2016	5.48	5.48	*ND*	*ND*	14.9	*NA*	*NA*	4.9	97.2	4.7	51	14.2
May-2017	3.56	3.56	*ND*	*ND*	14.7	0.334	*ND*	4.9	105.5	5.01	*21 J*	15.5
Oct-2017	2	2	*0.144 J*	*ND*	15.2	0.408	*ND*	5.1	110.4	3.28	53	16.2
May-2018	*4 J*	*ND*	*ND*	*7.9 J*	14.5	0.41	*ND*	5.3	97.5	*5.5 J*	43	17.4
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	16.5	0.73	*ND*	4.58	86.7	*7.1 J*	47	19.4
May-2019	*ND*	*NA*	*ND*	*ND*	19.8	0.61	*ND*	4.56	78.3	*ND*	61	21.2
Oct-2019	*4 J*	*NA*	*ND*	*ND*	18.2	0.63	*ND*	4.21	102.8	*8.4 J*	104	23.9
May-2020	*ND*	*NA*	*ND*	*ND*	16.1	0.25	*ND*	4.29	89.6	*9.2 J*	30	19.2
Oct-2020	*2 J*	*NA*	*ND*	*ND*	15.8	0.28	*ND*	4.47	82.2	8.2	38	19.8
Apr-2021	*ND*	*NA*	*ND*	*ND*	24.4	1.1	*ND*	4.61	129.3	*ND*	72	22.2
Oct-2021	12	*NA*	*ND*	*ND*	22.1	1	*ND*	4.8	165	*5.2 J*	55	22.6
May-2022	*2 J3c*	*NA*	*ND*	*ND*	20.2	1	*ND*	4.6	155.1	*8.4 J*	74	25.7 N3
Oct-2022	*2 J4c*	*NA*	*ND*	*8.4 J*	26.4	1	*ND*	4.65	161.2	10.4	71	28.7 N3
May-2023	*4 J4cB*	*NA*	*ND*	*6.9 JB*	27.6	1.2	*ND*	4.66	180.3	11.5	90	33.1 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24***													
Apr-1995	ND	ND	ND	ND	ND	43.2	NA	0.01	ND	ND	1.7	0.07	ND	2.4	NA
Oct-1996	ND	ND	0.026	ND	ND	1.9	1.6	ND	ND	ND	0.22	ND	ND	0.87	0.71
Apr-1997	ND	ND	0.018	ND	ND	1.4	1.8	ND	ND	ND	ND	ND	ND	0.85	1.1
Oct-1997	ND	ND	0.019	ND	ND	1.36	1.39	ND	ND	ND	0.201	ND	ND	0.886	0.897
Apr-1998	ND	ND	0.021	ND	ND	1.44	1.41	ND	ND	ND	0.198	ND	ND	0.918	0.908
Apr-1999	ND	ND	0.015	ND	ND	1.16	1.19	ND	ND	ND	ND	ND	ND	0.747	0.759
Oct-1999	ND	ND	0.018	ND	ND	1.28	1.2	ND	ND	ND	0.085	0.058	ND	0.836	0.776
Apr-2000	ND	ND	0.018	ND	ND	2.77	1.23	0.021	ND	ND	3.87	0.571	ND	0.828	0.694
Oct-2000	ND	ND	0.014	ND	ND	1.23	1.23	ND	ND	ND	0.053	ND	ND	0.792	0.81
Apr-2001	ND	ND	0.017	ND	ND	2.03	NA	ND	ND	ND	1.27	NA	ND	0.842	NA
Sep-2001	ND	ND	0.016	ND	ND	1.29	1.41	ND	ND	ND	0.175	0.111	ND	0.863	0.9
Mar-2002	ND	ND	0.02	ND	ND	1.44	1.44	ND	ND	ND	0.132	0.121	ND	0.929	0.919
Sep-2002	ND	ND	0.022	ND	ND	1.68	1.58	ND	ND	ND	0.251	0.189	ND	0.987	0.97
Mar-2003	ND	ND	0.02	ND	ND	1.73	1.41	ND	ND	ND	0.185	0.083	ND	0.945	0.943
Oct-2003	ND	ND	0.022	ND	ND	1.87	1.47	ND	ND	ND	0.161	0.089	ND	1.08	1.01
Apr-2004	ND	ND	0.027	ND	ND	3.01	1.85	ND	ND	ND	1.65	0.177	ND	1.36	1.25
Oct-2004	ND	ND	0.025	ND	ND	1.85	1.84	ND	ND	ND	0.379	0.275	ND	1.27	1.26
Apr-2005	ND	ND	0.024	ND	ND	3.6	1.85	ND	ND	ND	4.47	1.07	ND	1.12	0.975
Oct-2005	ND	ND	0.017	ND	ND	1.15	1.11	ND	ND	ND	0.199	0.112	ND	0.801	0.773
Mar-2006	ND	ND	0.015	ND	ND	1.08	0.969	ND	ND	ND	ND	ND	ND	0.765	0.723
Sep-2006	ND	ND	0.017	ND	ND	1.24	1.23	ND	ND	ND	0.077	0.051	ND	0.876	0.921

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24***													
Mar-2007	ND	ND	0.022	ND	ND	1.33	1.36	ND	ND	0.118 J	ND	ND	ND	1.05	1.06
Sep-2007	ND	ND	0.02	ND	ND	1.42	1.29	ND	ND	ND	0.066	0.052	ND	1.01	0.956
Mar-2008	ND	0.002	0.024	ND	ND	2.9	1.93	ND	ND	ND	3.09	1.41	ND	1.13	0.988
Sep-2008	ND	ND	0.022	ND	ND	1.43	1.37	ND	ND	ND	0.128	0.096	ND	1.17	1.13
Mar-2009	ND	ND	0.036	ND	ND	2.39	2.32	ND	ND	ND	0.103	0.074	ND	1.8	1.76
Oct-2009	ND	ND	0.033	ND	ND	2.1	1.93	ND	ND	ND	0.189	0.137	ND	1.56	1.45
Mar-2010	ND	ND	0.04	ND	ND	2.08	1.85	ND	ND	ND	0.079	ND	ND	1.66	1.47
Oct-2010	ND	ND	0.027	ND	ND	1.99	1.98	ND	ND	ND	ND	ND	ND	1.62	1.63
Apr-2011	ND	ND	0.033	ND	ND	1.78	1.74	ND	ND	ND	0.064	ND	ND	1.45	1.42
Sep-2011	ND	ND	0.034	ND	ND	2.07	2.03	ND	ND	ND	ND	ND	ND	1.66	1.61
Mar-2012	ND	ND	0.039	ND	ND	1.95	1.86	ND	ND	ND	ND	ND	ND	1.8	1.73
Sep-2012	ND	ND	0.0356	0.000072 J	ND	2.02	2.16	ND	0.0038 J	0.0027 J	0.0281 J	0.0308 J	ND	1.71	1.79
Mar-2013	ND	ND	0.0295	ND	ND	1.69	2.07	ND	0.0031 J	0.002 J	0.0085 J	0.007 J	0.0013 J	1.33	1.65
Oct-2013	ND	ND	0.0423	ND	ND	2.28	2.19	0.0025 J	0.0045 J	0.0021 J	ND	ND	ND	1.9	1.79
Mar-2014	ND	ND	0.0438	ND	0.000104 J	2.35	2.36	0.0012 J	0.0039 J	0.0021 J	0.041 J	0.0637	ND	1.84	1.82
Oct-2014	0.000819 J	ND	0.0449	ND	0.000131 J	2.43	2.4	ND	0.0047 J	0.0033 J	0.0107 J	0.0112 J	ND	2.1	2.07
Apr-2015	0.000837 J	ND	0.0467	ND	0.000153 J	2.5	2.56	ND	0.0049 J	0.0027 J	0.371	0.101	ND	2.19	2.21
Nov-2015	ND	ND	0.0444	ND	0.000201 J	2.45	2.52	ND	0.0049 J	0.0022 J	ND	ND	ND	2.13	2.2
May-2016	ND	ND	0.0444	0.000079 J	ND	2.34	2.37	ND	0.0052	0.002 J	ND	ND	ND	2.15	2.17
Oct-2016	ND	ND	0.0422	ND	ND	2.44	2.37	ND	0.0051	0.0022 J	ND	ND	ND	1.98	2.16
May-2017	ND	ND	0.0461	ND	ND	2.42	2.49	0.00069 J	0.0054	0.0022 J	ND	ND	ND	2.29	2.39
Oct-2017	ND	ND	0.0494	0.000072 J	ND	2.64	2.59	ND	0.0058	0.0024 J	ND	ND	ND	2.34	2.34
May-2018	0.000084 J	ND	0.053	0.000074 J	0.00015 J	2.8	2.6	0.0025 J	0.0056	0.003 B	ND	ND	0.000018 J	2.5	2.3
Nov-2018	ND	ND	0.06	0.000089 J	0.00017 J	3.1	3	0.0024 J	0.0062	0.0038	ND	ND	0.00014 JB	2.8	2.9

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24***													
May-2019	*ND*	*ND*	0.068	*ND*	*ND*	3.4	3.6	*ND*	0.0075	0.0031	*ND*	*ND*	*ND*	3.1	3.3
Oct-2019	*0.00011 J*	*ND*	0.072	*0.00012 J*	*0.00044 J*	3.8	3.7	*0.0034 J*	0.0082	0.0067	*ND*	*ND*	*0.000058 J*	3.5	3.4
May-2020	*0.000059 J*	*ND*	0.059	*ND*	*ND*	3.4	3.1	*0.0054 J*	0.0069	0.0027	*ND*	*ND*	*ND*	3.2	3
Oct-2020	*ND*	*ND*	0.045	*ND*	*ND*	3.2	3.1	*0.0034 J*	0.0054	*ND*	*ND*	*ND*	*ND*	2.9	2.9
Apr-2021	*ND*	*ND*	0.074	*ND*	*ND*	3.5	3.5	*ND*	0.0086	*0.0049 J*	*ND*	*ND*	*ND*	3.3	3.4
Oct-2021	*ND*	*ND*	0.071	*ND*	*ND*	3.6	3.7	*ND*	0.009	0.0038	*ND*	*ND*	*ND*	3.3	3.4
May-2022	*ND*	*ND*	0.075	*ND*	*ND*	4	4.1	*0.00084 J*	0.0097	0.004	*ND*	*ND*	*ND*	3.8	3.8
Oct-2022	0.00054	*ND*	0.088	*0.00016 J*	*0.0002 J*	4.6	4.5	*0.00066 J*	0.011	0.0052	*ND*	*ND*	*ND*	4.2	4.3
May-2023	*ND*	*ND*	0.1	*0.00014 J*	*0.00026 J*	5.1	5.1	*0.00078 J*	0.013	0.0049	*ND*	*ND*	*ND*	4.9	4.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-24*												
Apr-1995	0.1	NA	ND	ND	4.6	NA	ND	ND	2.8	NA	ND	ND	0.07
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	2.6	2.7	ND	ND	0.023
Apr-1997	ND	0.011	**0.0023**	ND	ND	1.3	ND	ND	2.5	2.6	ND	ND	ND
Oct-1997	ND	ND	0.0007	ND	1.47	1.28	ND	ND	2.09	2.09	ND	ND	0.013
Apr-1998	0.01	0.011	0.0006	ND	1.13	ND	ND	ND	2.19	2.18	ND	ND	0.011
Apr-1999	ND	ND	NA	ND	ND	1.44	ND	ND	1.94	1.9	ND	ND	ND
Oct-1999	ND	ND	NA	ND	1.03	1.26	ND	ND	2.14	1.97	ND	ND	ND
Apr-2000	0.032	0.011	NA	ND	0.764	ND	ND	ND	2.49	2.14	ND	ND	ND
Oct-2000	ND	ND	NA	ND	0.887	0.986	ND	ND	2.27	2.33	ND	ND	ND
Apr-2001	0.017	NA	NA	ND	1.51	NA	ND	ND	2.57	NA	ND	ND	ND
Sep-2001	0.011	0.01	NA	ND	0.638	2.07	ND	ND	2.97	2.99	ND	ND	ND
Mar-2002	0.011	0.011	NA	ND	1.65	1.54	ND	ND	3.09	2.93	ND	ND	ND
Sep-2002	0.012	0.011	NA	ND	1.06	1.12	ND	ND	3.57	3.34	ND	ND	ND
Mar-2003	0.011	0.01	NA	ND	2.14	1.47	ND	ND	3.11	3.07	ND	ND	ND
Oct-2003	0.012	ND	NA	ND	0.645	0.609	ND	ND	4.39	3.25	ND	ND	0.015
Apr-2004	0.026	0.015	0.0012	ND	2.08	1.14	ND	ND	3.57	3.42	ND	ND	ND
Oct-2004	0.016	0.015	0.0007	ND	1.48	1.3	ND	ND	3.6	3.55	ND	ND	ND
Apr-2005	0.036	0.016	0.0002	ND	1.17	1.08	ND	ND	3.72	3.35	ND	ND	ND
Oct-2005	ND	ND	0.0002	ND	0.827	0.771	ND	ND	2.84	2.96	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.774	0.75	ND	ND	3.4	3.19	ND	ND	ND
Sep-2006	ND	ND	0.0002	ND	0.908	1.02	ND	ND	3.02	3.22	ND	ND	ND
Mar-2007	ND	ND	0.0012	0.057 J	1.02	1.04	ND	ND	3.14	3.36	ND	ND	0.102 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-24*												
Sep-2007	ND	ND	0.0016	ND	1.09	1.03	ND	ND	3.73	3.74	ND	ND	ND
Mar-2008	0.027	0.017	0.0008	ND	1.2	1.12	ND	ND	3.85	3.24	ND	ND	ND
Sep-2008	0.012	0.012	0.0003	ND	0.999	0.976	ND	ND	3.75	3.75	ND	ND	ND
Mar-2009	0.02	0.019	0.0008	ND	1.47	1.42	ND	ND	5.32	5.22	ND	ND	ND
Oct-2009	0.018	0.016	0.0002	ND	1.15	1.04	ND	ND	4.82	4.62	ND	ND	ND
Mar-2010	0.018	0.016	ND	ND	1.44	1.31	ND	ND	5.88	6.35	ND	ND	ND
Oct-2010	0.018	0.019	ND	ND	1.3	1.3	ND	ND	7.13	7.13	ND	ND	ND
Apr-2011	0.016	0.016	0.0002	ND	1.03	0.997	ND	ND	6.32	6.2	ND	ND	ND
Sep-2011	0.018	0.018	ND	ND	1.25	1.22	ND	ND	6.48	6.42	ND	ND	ND
Mar-2012	0.02	0.019	ND	ND	1.25	1.2	ND	ND	6	5.87	ND	ND	ND
Sep-2012	0.0197	0.0208	ND	0.0044 J	1.14	1.23	ND	ND	5.64	5.82	ND	ND	0.0074 J
Mar-2013	0.0165	0.0195	0.000081 J	0.0035 J	0.848	1.07	ND	ND	4.31	5.26	ND	ND	0.0123
Oct-2013	0.0225	0.0215	ND	0.0049 J	1.15	1.09	ND	ND	6.2	5.73	0.0004 J	0.000639 J	0.0189
Mar-2014	0.0238	0.0219	ND	0.0049 J	1.15	1.15	ND	ND	5.94	5.79	0.000109 J	0.000843 J	0.0051 J
Oct-2014	0.0236	0.0234	0.000564	0.0054 J	1.31	1.29	ND	ND	7.18	7.14	ND	ND	0.0085 J
Apr-2015	0.025	0.0252	0.000477	0.0055 J	1.24	1.27	ND	ND	7.05	7.19	ND	ND	0.0112
Nov-2015	0.0252	0.0259	0.000072 J	0.0056 J	1.26	1.31	ND	ND	7.23	7.46	ND	ND	0.0126
May-2016	0.0243	0.024	0.00015 J	0.005	1.24	1.22	ND	ND	7.02	7.03	ND	ND	0.0076 J
Oct-2016	0.0232	0.0284	0.00036	0.0059	1.15	1.25	ND	ND	6.59	7.01	ND	ND	0.0064 J
May-2017	0.0264	0.0264	0.00046	0.0061	1.18	1.24	ND	ND	6.51	6.79	ND	ND	0.008 J
Oct-2017	0.0278	0.0283	0.00089	0.0051	1.27	1.33	ND	ND	6.67 J-	6.66	ND	ND	0.0078 J
May-2018	0.026	0.027	0.00076	0.0066	ND	ND	0.0012 JB	ND	7.9	7.3	ND	0.0044	0.01
Nov-2018	0.038	0.032	0.00057	0.0071	1.4 J	1.9 J	0.00019 J	ND	6.5	8.1 B	ND	0.003	0.011
May-2019	0.041	0.041	**0.0023**	0.0084	ND	ND	ND	ND	7.9	8.2	ND	0.0042 B	0.011

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-24***												
Oct-2019	0.041	0.04	0.0019 M1	0.0083	*1.5 J*	*1.5 J*	*ND*	*ND*	8.8	8.7	*ND*	*ND*	0.02
May-2020	0.038	0.35	0.00039	0.0074	*ND*	*ND*	*0.00036 J*	*ND*	7.7	7.4	*ND*	0.011	0.0082
Oct-2020	0.038	0.037	0.00042	0.0056	*ND*	*1.1 J*	*ND*	*ND*	7.3	6.7	*ND*	*0.00082 J*	*ND*
Apr-2021	0.044	0.045	0.00057	0.01	1.3	1.2	*ND*	*ND*	10.1	9.9	*ND*	*ND*	0.01
Oct-2021	0.045	0.046	0.00054	0.0089	1.3	1.3	*ND*	*ND*	12	12.7	*0.000027 J*	*ND*	0.01
May-2022	0.049	0.049	0.00053	0.01	1.3	1.3	*ND*	*ND*	12.2	12	*ND*	*ND*	0.012
Oct-2022	0.058	0.056	0.0016	0.011	1.5	1.6	*ND*	0.003	13.3	13.3	*ND*	*ND*	0.013
May-2023	0.065	0.067	0.00069	0.014	1.4	1.4	*ND*	*ND*	13.7	13.8	*ND*	*ND*	0.016

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24*																
Oct-1996	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	0.6 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	1.5	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7 J	ND
Apr-2004	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24*																
Mar-2007	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	5.8	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Jun-2009	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.8	ND
Mar-2010	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	6.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	6.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	4.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	5.59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	6.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	7.35	ND	ND	ND	ND	ND	ND	0.27 J	0.55 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	6.96	ND	ND	ND	ND	ND	ND	0.27 J	0.47 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	6.14	ND	ND	ND	ND	ND	ND	0.25 J	0.44 J	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	7.87	ND	ND	ND	ND	ND	ND	0.29 J	0.32 J	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	6.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	6.7	0.1 J	ND	ND	ND	ND	0.1 J	0.3 J	0.3 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	7	0.1 J	ND	ND	ND	ND	0.1 J	0.2 J	0.3 J	1.4 J	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	0.1 J	0.2 J	0.3 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24*																
Oct-2017	*ND*	*ND*	*ND*	*ND*	4.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.3 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	3.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	5.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	5.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	2.07	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.126 J*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	2.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24***															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	9.5	4.4
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	9	1
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	5	6.5
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	5	2.4
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	0.9 J	NA	NA	NA	ND	0.8 J
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	1.3	1
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	1.9	NA	ND	NA	2	2
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	7.1	1.6
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	4.8	2
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	5.8	2.4
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	5.7	2.3
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	9.7	5.3
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	4.8	2.8
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	12	7.4
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3	ND	ND	ND	15	7.8
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	6.2	6.4
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2	ND	ND	ND	6.6	7.4
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	6	2.1
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	7.6	2.4
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	7.6	1.6

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24***															
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	7.2	2.5
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	15.2	2.3
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	7.2	2.9
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	10.7	7.4
Mar-2009	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	ND	ND	ND	17.6	10.4
Jun-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	17.4	8
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	9.7	6.1
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4 J	12.2
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND	ND	ND	24.1	10
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	ND	ND	ND	ND	10
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	24	12.3
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	20.1	11.3
Sep-2012	0.27 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.39	ND	ND	ND	10.4	6.77
Mar-2013	0.28 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	12.4	9.38
Oct-2013	0.49 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.41 J,B	4.95	ND	ND	ND	11.8	10.7
Mar-2014	0.47 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	ND	ND	ND	14.9 J	10.1
Oct-2014	0.37 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.59 J,B	3.92	ND	ND	ND	9.73	7.49
Apr-2015	0.61 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.68	ND	ND	ND	9.67	9.41
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.4	ND	ND	ND	20.3 J	8.2
May-2016	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	3.5	ND	ND	ND	9.4	9.3
Oct-2016	0.3 J	ND	ND	ND	ND	ND	ND	ND	0.1 J	0.2 J	0.8 J	2.3	ND	ND	ND	9.2	9.9
May-2017	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J,B	ND	1.7	ND	ND	ND	5.8	5.6

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24***															
Oct-2017	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	1.5	*ND*	*ND*	*ND*	5.1	4.9
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	9.2	4.7
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*0.86 JN3*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2 CL	2.2 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.7	2.1
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	7.3	4.5
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	9	4.7
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.282 J*	*ND*	*ND*	*ND*	*1.54 J*	*1.49 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*1 J*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.5	*0.9 J*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	1.3
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	1.1

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24***															
Oct-1996	ND	ND	NA	NA	ND	NA	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	2.5	ND	ND	ND	ND	0.9 J	0.7 J	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	1.9	ND	ND	ND	ND	0.8 J	0.7 J	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	0.7 J	ND	ND	NA	NA	ND	0.5 J	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	0.6 J	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	1.6	ND	ND	NA	NA	0.6 J	0.9 J	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	2.1	ND	ND	ND	ND	0.6 J	0.6 J	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	2.8	ND	ND	ND	ND	0.7 J	0.7 J	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	2.7	ND	ND	ND	ND	0.6 J	0.6 J	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	4.4	ND	ND	ND	ND	1.2	1.2	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	2.8	ND	ND	ND	ND	0.6 J	0.6 J	ND	ND	NA
Oct-2003	ND	ND	ND	NA	1.1	ND	ND	4.6	ND	ND	ND	ND	1.6	1.1	ND	ND	NA
Apr-2004	ND	ND	ND	NA	2.3	ND	ND	5	ND	ND	ND	ND	1.8	1.1	ND	0.9 J	NA
Oct-2004	ND	ND	ND	NA	1.6	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	0.6 J	ND	ND	4.2	ND	ND	ND	ND	1.5	1.1	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	3.4	ND	ND	ND	ND	0.8 J	0.7 J	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	ND	0.8 J	0.9 J	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-24*															
Sep-2006	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	3.6	ND	ND	ND	ND	1.2	0.9 J	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	3.7	ND	ND	ND	ND	1.5	1.9	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	1.1	1.1	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	5	ND	ND	ND	ND	3.1	5.1	ND	1.1	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	**9.2 C**	ND	ND	ND	ND	**8.4 C**	ND	ND	ND	NA
Jun-2009	ND	ND	ND	ND	ND	ND	ND	**8**	ND	ND	ND	ND	**5.9**	1.1	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	**6**	ND	ND	ND	ND	4.1	1 J	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	**11.7**	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	**11**	ND	ND	ND	ND	ND	1.5	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	**11.8**	ND	ND	ND	ND	**7.2**	1.3	ND	1.4	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	**11.8**	ND	ND	ND	ND	**7.8**	1.4	ND	ND	NA
Mar-2012	ND	ND	ND	ND	0.5 J	ND	ND	**11**	ND	ND	ND	ND	**7.1**	1.3	ND	0.8 J	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	**8.9**	ND	ND	ND	ND	**5.44**	1.04	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	**7.14**	ND	ND	ND	ND	**5.73**	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.16 J	ND	ND	ND	**8.91**	ND	ND	ND	ND	**8.32**	1.08	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	**7.46**	ND	ND	ND	ND	**7.33**	0.88 J	ND	ND	ND
Oct-2014	ND	ND	ND	0.13 J	ND	ND	ND	**6.5**	ND	ND	ND	ND	**5.75**	0.76 J	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	**6.29**	ND	ND	ND	ND	**6.48**	0.69 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	**5.1**	ND	ND	ND	ND	**5.2**	0.6 J	ND	ND	ND
May-2016	ND	ND	ND	0.1 J	0.3 J	ND	ND	4.6	ND	ND	ND	ND	4.2	0.6 J	ND	0.2 J	ND
Oct-2016	ND	ND	ND	0.1 J	0.3 J	ND	ND	3.6	ND	ND	ND	ND	3.1	0.6 J	ND	0.2 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24***															
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	1.9	*0.1 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	1.7	*0.3 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2 B	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	2.2	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*0.98 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.106 J*	*ND*	*ND*	*ND*	*0.434 J*	*ND*	*ND*	*ND*	*ND*	*0.326 J*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-24A***											
Apr-1995	33	33	ND	94.6	5	ND	ND	5.4	472	137	278	19.3
Apr-1997	ND	4	ND	ND	16	ND	ND	NA	NA	16	79	21
Oct-1997	ND	ND	0.51	ND	18	ND	ND	5.1	125.9	9.64	70	26
Apr-1998	ND	ND	0.3	ND	11.1	0.19	ND	4.71	119.6	21.7	55	24
Apr-1999	ND	ND	1.3	ND	12	ND	ND	4.29	264	47.6	170	68
Oct-1999	ND	ND	0.43	ND	19.6	ND	ND	4.67	174	43.3	120	46
Apr-2000	ND	ND	0.92	ND	16.4	ND	ND	4.55	143	55.3	82	35
Oct-2000	ND	NA	0.75	15	13.1	ND	ND	4.27	154	43.4	102	30.6
Apr-2001	ND	NA	0.9	13	11	ND	ND	NA	NA	40	96	32
Sep-2001	ND	ND	0.48	ND	13.8	ND	ND	4.06	159	35.5	91	23.5
Mar-2002	ND	ND	0.64	ND	14.6	ND	ND	4.5	180	44.4	116	26.1
Sep-2002	ND	ND	0.69	ND	11.1	ND	ND	4.4	155.6	43.6	101	25.7
Mar-2003	ND	ND	0.78	ND	17.9	ND	ND	4.3	163.9	43.5	100	30
Oct-2003	ND	ND	0.31	12	12.2	0.086	ND	4.3	133.3	26.3	45	20.8
Apr-2004	1.2	1.2	0.41	14	11.8	ND	ND	4.4	106.5	29.6	96	18.2
Oct-2004	2	2	0.34	19	10.4	ND	ND	4.56	96.9	25.9	110	18.6
Apr-2005	4.3	4.3	0.55	17	8.3	ND	ND	4.7	107.4	36.4	90	26.3
Oct-2005	9.5	9.5	0.48	ND	9.29	ND	ND	4.4	108.9	32.9	76	25.4
Mar-2006	13	13	ND	ND	8.34	ND	ND	4.8	124.6	38.8	92	31.9
Sep-2006	4.8	4.8	0.46	ND	8.04	ND	ND	4.7	104.9	31.9	78	29.1
Mar-2007	7.6	7.6	ND	ND	8.51	ND	ND	4.7	92.7	25.8	71	26.2
Sep-2007	8.6	8.6	0.21	13	7.69	ND	ND	5.5	102.1	24.3	95	31.2
Mar-2008	23	23	0.56	16	11.4	ND	ND	5.2	117	35.2	78	38.7
Sep-2008	26	26	0.63	ND	7.48	ND	ND	5.3	109.6	23.2	97	40.6
Mar-2009	35	35	0.88	ND	6.32	ND	ND	5	133.6	27.1	82	45.9
Oct-2009	31	31	0.64	ND	6.74	ND	ND	5	119.3	23.4	86	42.2
Mar-2010	28	28	0.6	11.4	6.85	ND	ND	5.4	144	21.4	82	38.8
Oct-2010	31	31	0.46	ND	6.6	ND	ND	4.9	102.6	18.7	76	40.5
Apr-2011	28	28	0.72	ND	5.81	ND	ND	5	113.1	20.2	95	35.3
Sep-2011	18	18	0.26	ND	6.49	0.08	ND	5.1	92.1	15.3	75	29.7
Mar-2012	14	14	0.42	ND	5.81	0.27	ND	4.5	88.7	18.1	55	27.6
Sep-2012	14.7	14.7	0.29	ND	5.31	0.251	ND	4	108.9	32.9	84	47.1
Mar-2013	12	12	ND	ND	5.39	0.993	ND	5.2	98.8	26.1	74	36
Oct-2013	17	17	0.187 J	12	5.7	0.88	ND	5.7	103.4	27.5	80	45.1
Mar-2014	28	28	ND	6 J	5.32	0.992	ND	5.6	118.5	24.7	57	54.2
Oct-2014	37.4	37.4	ND	5 J	5.17	1.29	ND	5.7	115	18.2	78	58.2
Apr-2015	43.2	43.2	ND	ND	4.84	1.32	ND	5	121.9	18.5	80	72.7

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-24A***											
Nov-2015	33.2	33.2	*0.108 J*	*9 J*	5.49	1.41	*ND*	5.8	143	16.7	89	57.5
May-2016	43	43	*ND*	*6 J*	4.61	1.31	*ND*	6	168.5	16.2	84	62.2
Oct-2016	44.8	44.8	*ND*	*ND*	4.63	*NA*	*NA*	5.9	183.7	14	141	62.6
May-2017	50.2	50.2	*ND*	*5 J*	4.55	1.22	*ND*	5.9	214	15.3	75	63.2
Oct-2017	46.2	46.2	*0.125 J*	*ND*	4.83	1.35	*ND*	6.1	196	14.3	93	60.3
May-2018	42	42	*ND*	*ND*	6	1.5	*ND*	5.2	141.5	13.1	30	63
Nov-2018	26	26	*ND*	*7.9 J*	10	0.95	*ND*	5.43	116.4	10.7	72	46.4
May-2019	22 H1	*NA*	*ND*	*ND*	11.5	1.3	*ND*	5.34	96.9	14.7	91	42
Oct-2019	20	*NA*	*ND*	*6 J*	9	1	0.018	4.85	118.3	16.3	25	40.1
May-2020	36	*NA*	*ND*	*ND*	6.8	1.5	*ND*	5.12	132	15.2	66	56.3
Oct-2020	36	*NA*	*ND*	*ND*	7	1.6	*ND*	5.23	132.1	17.6	71	63.7
Apr-2021	40	*NA*	*ND*	*12.6 J*	6.4	1.9	*ND*	5.79	163	12.3	91	61.8
Oct-2021	*4 J4c*	*NA*	*0.059 J*	*8.3 J*	4.7	1.6	*ND*	5.83	203.2	17.9	84	69.7
May-2022	62	*NA*	*ND*	*ND*	4	1.5	0.016	5.72	189.2	19.1	110	85.7 N3
Oct-2022	52	*NA*	*ND*	*19.8 J*	6.2	1.2	*ND*	5.74	168.5	17.1	91	66.4 N3
May-2023	42	*NA*	*ND*	*6.9 JB*	5.3	1.3	*ND*	5.76	165.1	13	83	63.1 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24A***													
Apr-1995	ND	ND	ND	ND	ND	4.6	NA	**0.156**	ND	ND	1.7	1.4	ND	1.9	NA
Oct-1996	ND	ND	0.14	ND	ND	3.3	3.2	ND	ND	ND	ND	ND	ND	2.4	2.3
Apr-1997	ND	ND	0.13	ND	ND	3.7	3.5	ND	ND	0.033	1.5	0.38	ND	2.6	2.4
Oct-1997	ND	ND	0.128	ND	ND	3.14	3.21	ND	0.012	0.019	4.55	4.5	ND	2.61	2.6
Apr-1998	ND	ND	0.144	ND	ND	4.11	4.09	ND	0.019	0.013	2.07	2.08	ND	3.45	3.42
Apr-1999	ND	ND	0.222	ND	ND	12.5	11.6	ND	0.079	0.017	3.29	3.04	ND	8.85	8.24
Oct-1999	ND	ND	0.139	ND	0.004	12.7	11.8	ND	0.066	0.032	1.83	1.71	ND	6.61	6.15
Apr-2000	ND	ND	0.114	ND	ND	8.15	7.71	ND	0.033	0.027	1.25	1.22	ND	3.61	3.42
Oct-2000	ND	ND	0.105	0.003	ND	7.02	6.68	ND	0.025	0.1	3.7	3.61	ND	3.16	3.04
Apr-2001	ND	ND	0.086	**0.005**	ND	7.41	NA	ND	0.024	0.111	4.67	NA	ND	3.26	NA
Sep-2001	ND	ND	0.075	ND	ND	5.4	6.14	ND	0.021	0.065	4.79	5.02	ND	2.44	2.61
Mar-2002	ND	ND	0.063	ND	ND	6.07	6.01	ND	0.02	0.069	5.4	5.53	ND	2.66	2.7
Sep-2002	ND	ND	0.061	ND	ND	5.94	5.94	ND	0.019	0.071	5.24	5.19	ND	2.64	2.64
Mar-2003	ND	ND	0.067	ND	ND	6.92	7.04	ND	0.019	0.052	5.66	5.67	ND	3.09	3.09
Oct-2003	ND	ND	0.079	ND	ND	4.5	3.99	ND	0.014	0.045	5.75	5.55	ND	2.33	2.23
Apr-2004	ND	ND	0.079	ND	ND	3.6	3.29	ND	0.015	0.045	8.23	7.57	ND	2.23	2.06
Oct-2004	ND	ND	0.088	ND	ND	3.56	3.5	ND	0.013	0.032	8.94	8.7	ND	2.36	2.31
Apr-2005	ND	ND	0.082	ND	ND	6.09	5.65	ND	0.013	0.072	7.77	7.8	ND	2.69	2.5
Oct-2005	ND	ND	0.075	ND	ND	5.94	5.6	ND	0.014	0.061	8.83	8.31	ND	2.56	2.42
Mar-2006	ND	ND	0.064	ND	ND	8	7.68	ND	ND	0.03	6.43	6.12	ND	2.89	2.78
Sep-2006	ND	ND	0.051	ND	ND	7.39	6.99	ND	ND	0.04	5.16	4.92	ND	2.58	2.46

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24A***													
Mar-2007	ND	ND	0.046	ND	ND	6.97	6.76	ND	ND	0.051	4.1	3.98	ND	2.13	2.08
Sep-2007	ND	ND	0.053	ND	ND	8.51	7.65	ND	ND	0.031	4.5	4.23	ND	2.44	2.27
Mar-2008	ND	ND	0.04	ND	ND	10.8	10.3	ND	ND	0.012	4.73	4.57	ND	2.83	2.74
Sep-2008	ND	ND	0.035	ND	ND	11.3	10.7	ND	ND	0.023	4.65	4.41	ND	3	2.84
Mar-2009	ND	ND	0.038	ND	ND	13	13.6	ND	ND	0.018	5.66	5.47	ND	3.26	3.2
Oct-2009	ND	ND	0.042	ND	ND	12.1	11.4	ND	ND	0.033	5.54	4.9	ND	2.91	2.68
Mar-2010	ND	ND	0.053	ND	ND	10.9	10.2	ND	ND	ND	4.81	4.91	ND	2.82	2.69
Oct-2010	ND	ND	0.053	ND	ND	11.4	11.3	ND	ND	ND	5.71	5.89	ND	2.91	2.9
Apr-2011	ND	ND	0.051	ND	ND	10.4	10.1	ND	ND	ND	6.16	5.92	ND	2.27	2.21
Sep-2011	ND	ND	0.057	ND	ND	8.4	8.51	ND	ND	ND	4.29	4.25	ND	2.11	2.1
Mar-2012	ND	ND	0.048	ND	ND	7.73	7.53	ND	ND	ND	4	3.8	ND	2.01	2
Sep-2012	ND	ND	0.0636	0.00011 J	ND	13.3	13.1	ND	0.0047 J	0.0081 J	0.498	0.509	ND	3.37	3.26
Mar-2013	ND	ND	0.0452	ND	0.000734 J	10.2	10.5	0.0023 J	0.0054 J	0.0141	0.546	0.531	0.0015 J	2.56	2.54
Oct-2013	ND	ND	0.0562	ND	0.000263 J	12.5	12.3	0.0034 J	0.0049 J	0.0172	ND	ND	ND	3.38	3.35
Mar-2014	ND	ND	0.048	ND	0.000148 J	15.7	15.6	0.0013 J	0.0023 J	0.0049 J	0.0821	0.0516	ND	3.65	3.67
Oct-2014	ND	ND	0.0448	ND	0.000135 J	17.2	17.5	ND	0.0016 J	0.0069 J	0.0096 J	0.008 J	ND	3.7	3.74
Apr-2015	0.000526 J	ND	0.0497	ND	ND	21.7	21.3	0.000514 J	0.0015 J	0.011	0.0228 J	0.0095 J	ND	4.5	4.4
Nov-2015	ND	ND	0.0481	ND	0.000106 J	17.2	16.7	0.000487 J	0.0021 J	0.0168	0.0671	ND	ND	3.52	3.45
May-2016	ND	ND	0.0506	ND	ND	18.3	18.6	0.00085 J	0.0018	0.0151	ND	ND	ND	3.99	3.95
Oct-2016	ND	ND	0.0425	ND	ND	18.9	18.3	0.00098 J	0.0015	0.0097	ND	ND	ND	3.74	3.78
May-2017	ND	ND	0.0383	ND	ND	19.1	19.9	0.00099 J	0.00092 J	0.0053	ND	ND	ND	3.77	4.06
Oct-2017	ND	ND	0.0364	ND	ND	18.6	20.8	ND	0.0015	0.0033 J	ND	ND	ND	3.34	3.6
May-2018	0.000079 J	ND	0.047	ND	0.000085 J	19.5	17.4	0.0035 J	0.002	0.0037 B	0.014 J	ND	ND	3.4	3.13
Nov-2018	ND	ND	0.042	ND	0.000096 J	14.4	14.3	0.0037 J	0.0024	0.0032	0.023	0.076	0.00008 JB	2.5	2.7

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24A***													
May-2019	*ND*	*ND*	0.065	*ND*	*ND*	12.7	13.4	0.0088	0.0061	0.0062	*ND*	*ND*	*ND*	2.5	2.6
Oct-2019	*0.00012 J*	*ND*	0.064	*0.0002 J*	*0.00047 J*	12	11.9	*0.0067 J*	0.0061	0.0086	*0.077 J*	*0.017 J*	*0.000096 J*	2.5	2.4
May-2020	*0.000074 J*	*ND*	0.059	*0.00011 J*	*ND*	16.4	16.6	*0.0064 J*	0.006	0.004	*0.02 J*	*ND*	*ND*	3.7	3.7
Oct-2020	*ND*	*ND*	0.073	*ND*	*ND*	18.9	18.2	*0.011 J*	0.0072	*ND*	0.16	*0.016 J*	*ND*	4	3.8
Apr-2021	*ND*	*ND*	0.064	*ND*	*ND*	19.2	19.3	*0.0027 J*	*0.0034 J*	*ND*	*0.067 J*	*ND*	*ND*	3.4	3.4
Oct-2021	*0.000073 J*	*ND*	0.068	*0.00018 J*	*ND*	21.5	21.5	0.0034	0.005	0.0044	0.066	*0.012 J*	*0.000033 J*	3.9	3.9
May-2022	*ND*	*ND*	0.062	*ND*	*ND*	26.2	26.9	0.0037	0.0041	0.004	0.051	*ND*	*ND*	4.9	5
Oct-2022	*0.00033 J*	*ND*	0.047	*ND*	*ND*	21.1	23.3	0.0028	*0.0025 J*	0.003	0.056	*ND*	*ND*	3.3	3.7
May-2023	*ND*	*ND*	0.041	*ND*	*ND*	20	21.3	0.0037	*0.0023 J*	*0.002 J*	0.079	*ND*	*ND*	3.2	3.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-24A***												
Apr-1995	0.13	NA	ND	ND	135	NA	ND	0.02	18.1	NA	ND	ND	0.08
Oct-1996	0.1	0.096	NA	ND	ND	ND	ND	ND	3.4	5.1	ND	ND	0.074
Apr-1997	0.11	0.1	0.0005	ND	2	2	ND	ND	5.7	5.3	ND	ND	0.057
Oct-1997	0.13	0.131	ND	0.013	1.72	2.39	ND	ND	6.64	6.66	ND	ND	0.032
Apr-1998	0.14	0.156	0.0002	0.03	1.23	2.17	ND	ND	3.95	3.96	ND	ND	0.037
Apr-1999	0.804	0.746	NA	0.064	2.99	3.55	ND	ND	6.23	5.86	ND	ND	0.088
Oct-1999	0.862	0.805	NA	0.04	2.84	2.98	ND	ND	5.07	4.66	ND	ND	0.097
Apr-2000	0.442	0.424	NA	ND	2.65	1.56	ND	ND	4.89	4.64	ND	ND	0.061
Oct-2000	0.348	0.334	NA	ND	2.06	2.35	ND	ND	5.08	5.03	ND	ND	0.043
Apr-2001	0.357	NA	NA	0.013	2.61	NA	ND	ND	4.85	NA	ND	ND	0.038
Sep-2001	0.251	0.261	NA	0.02	1.65	2.26	ND	ND	4.65	4.61	ND	ND	0.028
Mar-2002	0.26	0.267	NA	ND	3.09	1.51	ND	ND	5.2	4.49	ND	ND	0.028
Sep-2002	0.252	0.25	NA	ND	2.85	2.46	ND	ND	4.53	4.51	ND	ND	0.023
Mar-2003	0.289	0.292	NA	ND	2.21	2.01	ND	ND	4.18	4.17	ND	ND	0.026
Oct-2003	0.211	0.202	NA	ND	1.18	1.42	ND	ND	5.56	4.31	ND	ND	0.047
Apr-2004	0.188	0.174	ND	ND	3.21	1.86	ND	ND	4.71	4.33	ND	ND	0.019
Oct-2004	0.179	0.173	0.0002	ND	2.61	1.55	ND	ND	4.64	4.36	ND	ND	0.017
Apr-2005	0.215	0.199	ND	ND	2.12	2.03	ND	ND	3.79	3.69	ND	ND	0.016
Oct-2005	0.21	0.2	0.0002	ND	2.23	2.02	ND	ND	3.62	3.38	ND	ND	0.016
Mar-2006	0.217	0.207	ND	ND	2.03	1.96	ND	ND	3.3	3.16	ND	ND	ND
Sep-2006	0.179	0.17	ND	ND	2.01	1.89	ND	ND	3.29	3.07	ND	ND	ND
Mar-2007	0.147	0.143	0.0003	ND	1.89	1.89	ND	ND	3.32	3.21	ND	ND	0.014

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-24A***												
Sep-2007	0.166	0.153	0.0006	ND	2.05	1.81	ND	ND	3.16	3.05	ND	ND	ND
Mar-2008	0.185	0.178	0.0007	ND	2.21	2.14	ND	ND	2.48	2.39	ND	ND	ND
Sep-2008	0.189	0.179	**0.0041 C**	ND	1.97	1.87	ND	ND	2.87	2.71	ND	ND	0.01
Dec-2008	NA	NA	**0.0031**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mar-2009	0.212	0.209	**0.0034**	ND	2.21	2.14	ND	ND	2.78	2.7	ND	ND	0.012
Oct-2009	0.194	0.181	**0.0144**	ND	2.16	1.97	ND	ND	2.71	2.65	ND	ND	ND
Mar-2010	0.196	0.189	0.0011	ND	2.36	2.13	ND	ND	2.8	3.1	ND	ND	ND
Oct-2010	0.187	0.183	0.0002	ND	2.76	2.68	ND	ND	2.83	2.8	ND	ND	0.012
Apr-2011	0.153	0.147	0.0008	ND	2	1.96	ND	ND	2.76	2.67	ND	ND	ND
Sep-2011	0.155	0.157	0.0004	ND	2.3	2.29	ND	ND	3.28	3.29	ND	ND	ND
Mar-2012	0.131	0.13	0.0004	ND	2.4	2.35	ND	ND	3.19	3.14	ND	ND	ND
Sep-2012	0.192	0.19	0.000044 J	0.0043 J	2.65	2.63	ND	ND	2.9	2.82	ND	ND	0.0042 J
Mar-2013	0.15	0.155	0.000091 J	0.0044 J	2.25	2.28	ND	0.000025 J	2.3	2.35	0.00035 J	ND	0.0163
Oct-2013	0.155	0.152	ND	0.0034 J	2.26	2.19	ND	ND	2.94	2.88	0.000199 J	0.000806 J	0.0133
Mar-2014	0.155	0.158	ND	0.002 J	2.26	2.22	ND	ND	2.38	2.39	0.000203 J	0.000563 J	ND
Oct-2014	0.151	0.154	0.000071 J	0.00099 J	2.61	2.64	ND	ND	2.53	2.55	ND	ND	ND
Apr-2015	0.172	0.169	0.000063 J	0.0011 J	2.95	2.93	ND	ND	2.75	2.69	ND	ND	0.0051 J
Nov-2015	0.17	0.162	0.000063 J	0.0014 J	2.77	2.74	0.000746 J	ND	2.85	2.84	ND	ND	0.0038 J
May-2016	0.16	0.153	0.000065 J	ND	2.73	2.78	ND	ND	2.51	2.47	ND	ND	ND
Oct-2016	0.142	0.148	0.00014 J	0.0012 J	2.71	2.82	ND	ND	2.34	2.34	ND	ND	ND
May-2017	0.128	0.134	0.00022	0.00099 J	2.84	3.06	ND	ND	2.32	2.37	ND	ND	ND
Oct-2017	0.117	0.126	ND	ND	3.05	3.33	ND	ND	2.55 J-	2.6	ND	ND	ND
May-2018	0.11	0.1	0.00026	0.0024	2.6 J	2.51 J	0.00076 JB	ND	3.6 J	3.34 J	ND	0.0037	0.0035 JB
Nov-2018	0.091	0.094	ND	0.0038	3.2 J	3.7 J	0.00033 J	ND	2.6 J	4.3 JB	0.000092 J	0.003	0.004 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-24A***												
May-2019	0.13	0.13	0.0008	0.0068	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0036 B	0.0089
Oct-2019	0.13	0.14	**0.0023**	0.0051	*3.8 J*	*3.7 J*	*0.00035 J*	*ND*	*4.1 J*	*4 J*	*ND*	*ND*	0.019
May-2020	0.16	0.1	0.00022	0.0033	*3 J*	*2.9 J*	*0.00056 J*	*ND*	*2.9 J*	*2.8 J*	*ND*	0.0098	*0.0045 J*
Oct-2020	0.14	0.13	**0.0026**	0.007	*3.4 J*	*3 J*	*ND*	*ND*	*3.9 J*	*3.2 J*	*ND*	*0.0014 J*	*ND*
Apr-2021	0.11	0.1	0.001	*0.0028 J*	3	3.1	*ND*	*ND*	3.2	3.3	*ND*	*ND*	*0.0034 J*
Oct-2021	0.13	0.12	0.00025	0.0036	3.4	3.4	*ND*	*ND*	3.5	3.6	*0.000078 J*	*ND*	0.0058
May-2022	0.12	0.12	0.00034	0.004	3.3	3.2	*ND*	*ND*	3	3.1	*ND*	*ND*	*0.005 J*
Oct-2022	0.086	0.089	*ND*	0.0026	3.1	3.3	*ND*	*ND*	3.7	3.9	*ND*	*ND*	*ND*
May-2023	0.084	0.083	*ND*	0.003	2.8	2.9	*ND*	*ND*	3.4	3.6	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-24A***																
Oct-1996	ND	3.3	ND	ND	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	1	ND	ND	28	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	3	ND
Oct-1997	ND	1.8	ND	ND	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	1.2 J	ND	ND	35	ND	ND	ND	ND	ND	1.7	0.8 J	1.3 J	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	22	ND	NA	NA	NA	NA	1	ND	1.7	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	12	ND	ND	ND	ND	ND	0.6 J	ND	0.9 J	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	5.3	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	4.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24A*																
Mar-2007	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.45	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.93 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.56 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.58 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	0.33 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24A*																
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.3 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-24A*															
Oct-1996	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	39
Apr-1997	3	ND	ND	ND	ND	ND	ND	ND	13	ND	ND	2	ND	ND	ND	17	15
Oct-1997	2.6	ND	ND	ND	ND	ND	ND	ND	8.1	ND	ND	2.8	ND	ND	ND	6.7	47
Apr-1998	2.9	ND	ND	ND	ND	1.7	ND	ND	8.8	ND	ND	5.4	ND	ND	ND	15	35
Apr-1999	1.9	NA	NA	NA	NA	ND	NA	ND	4.3	ND	NA	3.4	NA	NA	NA	4	18
Oct-1999	1.1	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	1.8	ND	ND	ND	4	12
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	1	ND	NA	0.7 J	NA	ND	NA	2.5	5.4
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	5.1
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	5.5	5
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	2.1
Mar-2002	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	7.5	3
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	0.7 J	ND	ND	ND	8.6	4.1
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	0.6 J	ND	ND	ND	5.9	3.2
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	8.3	2.1
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	0.9 J	ND	ND	ND	12	3.1
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	0.6 J	ND	ND	ND	8.9	3.5
Apr-2005	0.5 J	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	1.1	ND	ND	ND	8.4	4.7
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	0.9 J	ND	ND	ND	8.3	3.1
Mar-2006	0.7 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.2	ND	ND	ND	8	5.2
Sep-2006	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	9.5	3.5

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24A***															
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	1.5
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.6	1.2
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	3
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	0.9 J
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.9 J
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.29 J	ND	ND	ND	0.6 J	1.17
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.47 J	0.86 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43 J	0.5 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.36 J	0.43 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.41 J,B	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	0.2 J	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J,B	ND	ND	ND	ND	ND	0.2 J	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	0.2 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24A***															
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.444 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24A***															
Oct-1996	ND	ND	NA	NA	**24**	NA	ND	3.2	ND	ND	ND	ND	3.7	ND	ND	ND	2.4
Apr-1997	ND	ND	NA	NA	**38**	NA	ND	4	ND	ND	ND	ND	5	ND	ND	**7**	4
Oct-1997	ND	ND	3.4	NA	**44**	3.5	ND	**8.3**	ND	ND	ND	ND	**7.5**	ND	ND	**4.8**	NA
Apr-1998	ND	ND	2.6	NA	**46**	4.3	ND	**8.8**	ND	ND	ND	ND	**6.2**	1.1 J	ND	**4.9**	NA
Apr-1999	ND	NA	0.7 J	NA	**15**	1	NA	3.1	ND	ND	NA	NA	3.2	ND	NA	**2.8**	NA
Oct-1999	ND	ND	ND	NA	**9.3**	ND	ND	2.3	ND	ND	ND	ND	1.7	0.5 J	ND	1.4	NA
Apr-2000	ND	NA	ND	NA	4.1	ND	NA	1.2	ND	ND	NA	NA	0.7 J	ND	ND	0.7 J	NA
Oct-2000	ND	ND	ND	NA	3.3	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	1.1	NA
Apr-2001	ND	ND	ND	NA	4.9	ND	ND	1.1	ND	ND	ND	ND	0.7 J	ND	ND	0.7 J	NA
Sep-2001	ND	ND	ND	NA	1.8	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	0.6 J	NA
Mar-2002	ND	ND	ND	NA	2.7	ND	ND	0.8 J	0.6 J	ND	ND	ND	ND	ND	ND	1.1	NA
Sep-2002	ND	ND	ND	NA	2.8	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	**2.4**	NA
Mar-2003	ND	ND	ND	NA	2.2	ND	ND	2.4	ND	ND	ND	ND	0.7 J	ND	ND	**2.2**	NA
Oct-2003	ND	ND	ND	NA	1.1	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	**2.8**	NA
Apr-2004	ND	ND	ND	NA	1.9	0.6 J	ND	3.6	ND	ND	ND	ND	1.4	ND	ND	**5.1**	NA
Oct-2004	ND	ND	ND	NA	1.1	ND	ND	3.2	ND	ND	ND	ND	1.3	ND	ND	**7.7**	NA
Apr-2005	ND	ND	ND	ND	2.2	ND	ND	4.4	ND	ND	ND	ND	1.6	ND	ND	**8.1**	NA
Oct-2005	ND	ND	ND	ND	3.2	ND	ND	4.5	ND	ND	ND	ND	1.5	ND	ND	**5.4**	NA
Mar-2006	ND	ND	ND	ND	**6.3**	ND	ND	**5.7**	ND	ND	ND	ND	2	ND	ND	**4.7**	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24A***															
Sep-2006	ND	ND	ND	ND	5	ND	ND	3.1	ND	ND	ND	ND	1.2	ND	ND	**3.7**	NA
Mar-2007	ND	ND	ND	ND	2.1 R	ND	ND	1.5	ND	ND	ND	ND	0.7 J	ND	ND	1.3	NA
Sep-2007	ND	ND	ND	ND	2.3	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	1.4	NA
Mar-2008	ND	ND	ND	ND	0.7 J	ND	ND	2.6	ND	ND	ND	ND	0.9 J	ND	ND	1.1	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	1.5	NA
Mar-2009	ND	ND	ND	ND	1.9	ND	ND	0.9 J	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	1.79	ND	ND	0.69 J	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.81 J	ND	ND	0.26 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.69 J	ND	ND	0.22 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24A***															
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-25***											
Apr-1995	13.4	13.4	ND	ND	2.6	0.4	ND	5.8	37.3	2.5	15	11.6
Apr-1997	ND	40	ND	ND	2	0.06	ND	NA	NA	ND	51	1.9
Oct-1997	1	1	0.47	ND	1.7	ND	ND	6.83	13.71	ND	14	ND
Apr-1998	ND	ND	0.27	ND	1.86	0.1	ND	5.87	23.9	0.76	29	5.6
Apr-1999	ND	ND	0.35	ND	1.86	ND	ND	5.29	16.52	ND	ND	7
Oct-1999	ND	ND	0.11	ND	2.33	ND	ND	5.24	16.1	ND	29	5.6
Apr-2000	2	2	ND	ND	2.03	0.147	ND	5.17	12	ND	17	4.9
Oct-2000	3	NA	ND	ND	1.76	ND	ND	5.34	12.9	ND	47	4.89
Apr-2001	2.2	NA	0.2	ND	1.6	ND	ND	NA	NA	ND	28	4.4
Sep-2001	2.6	2.6	ND	ND	3.74	ND	ND	5.03	17	ND	51	4.67
Mar-2002	5.8	5.8	ND	28	3.08	ND	ND	5.1	15	ND	38	4.39
Sep-2002	2.8	2.8	ND	ND	2.15	ND	ND	5	17.3	ND	115	5.12
Mar-2003	2.8	2.8	ND	ND	2.67	0.099	ND	5.1	16.8	ND	36	4.47
Oct-2003	2.4	2.4	ND	ND	7.17	ND	ND	4.8	16.5	ND	ND	4.87
Apr-2004	2.5	2.5	ND	ND	2.18	ND	ND	4.9	13.7	ND	46	3.2
Oct-2004	2.4	2.4	ND	11	2.29	0.13	ND	4.8	14.1	ND	20	2.66
Apr-2005	2.5	2.5	ND	ND	2.36	0.13	ND	5	12.5	2.02	23	4.2
Oct-2005	3.6	3.6	0.21	ND	2.34	0.12	ND	4.7	13.9	ND	21	4.21
Mar-2006	3.6	3.6	ND	ND	2.38	0.14	ND	5	16.4	1.04	52	3.21
Sep-2006	3.4	3.4	ND	ND	2.5	0.13	ND	5	14.2	ND	48	2.9
Mar-2007	3.5	3.5	ND	ND	2.63	0.15	ND	4.9	12	ND	36	2.87
Sep-2007	3.3	3.3	ND	ND	7.59	ND	ND	6.5	13.7	ND	69	4.77
Mar-2008	3.5	3.5	ND	29	14.9	ND	ND	4.9	13.9	ND	15	3.23
Sep-2008	3.5	3.5	ND	25	3.03	0.09	ND	5.4	15.3	ND	22	4.2
Mar-2009	3.6	3.6	ND	ND	2.72	0.11	ND	4.5	15.5	ND	19	2.88
Oct-2009	3.4	3.4	ND	ND	2.71	0.13	ND	4.5	15	ND	62	3.51
Apr-2010	3.3	3.3	ND	11	2.75	0.15	ND	4.6	14.6	ND	ND	4.1
Oct-2010	3	3	ND	ND	3.31	0.12	ND	4.3	14.9	ND	24	4.16
Apr-2011	5.2	5.2	ND	ND	2.93	0.15	ND	4.7	16.5	ND	16	4.6
Sep-2011	3.5	3.5	0.22	ND	3.06	0.13	ND	4.7	16.6	ND	35	3.61
Mar-2012	3.4	3.4	ND	ND	3.26	0.13	ND	3.5	43.2	ND	19	2.85
Sep-2012	ND	ND	ND	12.2	3.39	0.15	ND	4.3	17.2	ND	16	3.57
Mar-2013	3.56	3.56	ND	ND	3.5	0.137	ND	5.1	18.1	0.482 J	14	3.65
Oct-2013	3.64	3.64	ND	ND	3.58	0.156	ND	5.8	17	0.487 J	ND	3.75
Mar-2014	3.44	3.44	ND	ND	3.75	0.154	ND	5.2	20.3	ND	ND	4.32
Oct-2014	ND	ND	ND	ND	3.96	0.126	ND	5	22.9	0.324 J	ND	4.29
Apr-2015	3.8	3.8	ND	ND	4.06	0.177	ND	4.2	20	ND	ND	4.64

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-25***											
Nov-2015	*ND*	*ND*	*ND*	*ND*	4.2	0.189	*ND*	5.2	27.7	*ND*	29	4.73
May-2016	*ND*	*ND*	*ND*	*5 J*	4.27	0.2	*ND*	5.2	28.4	*ND*	*ND*	4.3
Oct-2016	*ND*	*ND*	*ND*	*ND*	4.46	*NA*	*NA*	5.4	31.8	*0.627 J*	26	4.7
May-2017	2.4	2.4	*ND*	*ND*	4.73	0.21	*ND*	4.9	34.6	*ND*	*9 J*	4.9
Oct-2017	2	2	*ND*	*ND*	4.88	0.229	*ND*	5	40	*ND*	*21 J*	5.2
May-2018	*2 J*	*ND*	*0.052 J*	*ND*	4.9	0.22	*ND*	5.1	46.3	*ND*	*ND*	5.7
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	5.6	0.22	*ND*	4.64	29.5	*ND*	73	6.2
May-2019	*ND*	*NA*	*ND*	*ND*	6.2	0.18	*ND*	4.56	23.4	*ND*	*ND*	5.7
Oct-2019	*ND*	*NA*	*ND*	*ND*	4.8	0.23	*ND*	4.34	29.5	*ND*	14	5.8
May-2020	*ND*	*NA*	*ND*	*ND*	6.3	0.22	*ND*	4.28	33.7	*ND*	26	6.5
Oct-2020	*ND*	*NA*	*ND*	*ND*	6.2	0.23	*ND*	4.44	31.4	*ND*	11	6.9
Apr-2021	*ND*	*NA*	*ND*	*6.1 J*	7.3	0.26	*ND*	4.81	40.7	*ND*	14	7.3
Oct-2021	*ND*	*NA*	*ND*	*ND*	6.2	0.28	*ND*	4.95	72	*ND*	*ND*	7.9
May-2022	*ND*	*NA*	*ND*	*ND*	5.1	0.23	*ND*	4.74	54.9	*ND*	19	7.2 N3
Oct-2022	*3 J3c*	*NA*	*ND*	*ND*	7.4	0.28	*ND*	4.83	58.4	*ND*	39	8.4 N3
May-2023	*2 J2cB*	*NA*	*ND*	*ND*	7.3	0.3	*ND*	4.75	65.9	*ND*	22	8.3 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25***													
Apr-1995	ND	ND	ND	ND	ND	3.6	NA	ND	ND	ND	0.46	0.33	ND	0.63	NA
Oct-1996	ND	ND	0.03	ND	ND	1.6	2.2	0.041	ND	ND	5.5	0.52	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	0.7	0.69	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	0.034	ND	ND	0.921	0.827	ND	ND	ND	3.92	0.075	ND	0.487	0.309
Apr-1998	ND	ND	0.055	ND	ND	1.18	1.07	0.019	ND	ND	8.41	ND	ND	0.649	0.334
Apr-1999	ND	ND	0.04	ND	ND	1.63	0.995	0.019	ND	0.013	7.21	ND	ND	0.706	0.32
Oct-1999	ND	ND	0.023	ND	ND	1.21	0.802	0.012	ND	0.011	4.98	ND	ND	0.505	0.303
Apr-2000	ND	ND	0.018	ND	ND	1.18	0.708	ND	ND	ND	3.2	ND	ND	0.481	0.288
Oct-2000	ND	ND	0.012	ND	ND	1.25	0.778	ND	ND	0.012	1.39	ND	ND	0.432	0.312
Apr-2001	ND	ND	0.012	ND	ND	1.13	NA	ND	ND	0.011	0.753	NA	ND	0.381	NA
Sep-2001	ND	ND	0.02	ND	ND	1.04	0.703	0.011	ND	ND	4.31	ND	0.003	0.504	0.293
Mar-2002	ND	ND	0.016	ND	ND	1.04	0.78	ND	ND	ND	2.44	ND	0.002	0.436	0.308
Sep-2002	ND	ND	0.02	ND	ND	1.28	0.724	ND	ND	ND	3.66	0.073	0.003	0.468	0.294
Mar-2003	ND	ND	0.012	ND	ND	1.14	0.609	ND	ND	ND	0.374	ND	ND	0.397	0.303
Oct-2003	ND	ND	0.022	ND	ND	1.1	0.607	0.012	ND	ND	5.65	ND	0.004	0.518	0.299
Apr-2004	ND	ND	0.011	ND	ND	0.704	0.608	ND	ND	ND	0.408	ND	ND	0.351	0.298
Oct-2004	ND	ND	ND	ND	ND	0.543	0.531	ND	ND	ND	0.231	ND	ND	0.319	0.31
Apr-2005	ND	ND	0.018	ND	ND	0.963	0.614	ND	ND	ND	3.85	ND	ND	0.446	0.302
Oct-2005	ND	ND	0.021	ND	ND	0.94	0.602	0.012	ND	0.011	4.8	ND	0.003	0.452	0.273
Mar-2006	ND	ND	0.022	ND	ND	0.668	0.373	ND	ND	ND	6.83	ND	0.005	0.374	0.179
Sep-2006	ND	ND	ND	ND	ND	0.633	0.505	ND	ND	ND	0.496	ND	ND	0.321	0.292

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25***													
Mar-2007	ND	ND	0.012	ND	ND	0.586	0.543	ND	ND	ND	1.17	ND	ND	0.343	0.296
Sep-2007	ND	0.004	0.012	ND	ND	1.16	0.531	ND	ND	ND	1.08	ND	ND	0.455	0.302
Mar-2008	ND	ND	0.014	ND	ND	0.726	0.615	ND	ND	ND	2.29	ND	ND	0.344	0.291
Sep-2008	ND	ND	0.021	0.002 R	ND	0.814	0.49	0.018	ND	ND	5.7	ND	0.003	0.536	0.337
Mar-2009	ND	ND	ND	ND	ND	0.629	0.538	ND	ND	ND	0.268	ND	ND	0.318	0.326
Oct-2009	ND	ND	0.016	ND	ND	0.712	0.561	ND	ND	ND	2.95	ND	ND	0.419	0.319
Apr-2010	ND	ND	0.02	ND	ND	0.806	0.527	0.014	ND	ND	7.96	ND	0.003	0.521	0.306
Oct-2010	ND	0.003	0.017	ND	ND	0.757	0.676	0.014	ND	ND	5.19	ND	0.003	0.551	0.385
Apr-2011	ND	ND	0.011	ND	ND	1.25	0.907	ND	ND	ND	0.355	ND	ND	0.357	0.294
Sep-2011	ND	ND	ND	ND	ND	0.781	0.797	ND	ND	ND	ND	ND	ND	0.402	0.426
Mar-2012	ND	ND	0.011	ND	ND	0.485	0.477	ND	ND	ND	ND	ND	ND	0.399	0.385
Sep-2012	ND	ND	0.0103	ND	ND	0.736	0.698	ND	0.0015 J	0.0018 J	0.0253 J	0.0118 J	ND	0.421	0.411
Mar-2013	ND	ND	0.0103	ND	ND	0.829	0.792	0.0034 J	0.0015 J	0.0022 J	0.0107 J	0.0049 J	0.0017 J	0.384	0.367
Oct-2013	ND	ND	0.0119	ND	ND	0.777	0.857	0.0012 J	0.0016 J	0.0016 J	ND	ND	ND	0.439	0.453
Mar-2014	ND	ND	0.011	ND	ND	1.02	0.921	0.0013 J	0.0012 J	0.0016 J	0.0546	0.041 J	ND	0.431	0.388
Oct-2014	0.001 J	ND	0.0136	ND	ND	0.932	0.924	0.000551 J	0.0019 J	0.0017 J	ND	0.0119 J	ND	0.482	0.488
Apr-2015	0.000883 J	ND	0.0135	ND	ND	0.986	0.959	0.000597 J	0.0019 J	0.0018 J	ND	ND	ND	0.53	0.528
Nov-2015	ND	ND	0.0127	ND	0.000095 J	1.06	0.908	0.000538 J	0.0018 J	0.0015 J	ND	ND	ND	0.506	0.521
May-2016	ND	ND	0.0168	0.000072 J	ND	0.86	0.85	0.0013 J	0.0021	0.0016 J	ND	ND	ND	0.53	0.553
Oct-2016	ND	ND	0.0131	ND	ND	0.985	0.841	0.00085 J	0.002	0.0021 J	ND	ND	ND	0.533	0.567
May-2017	ND	ND	0.0159	ND	ND	0.946	1.02	0.0014 J	0.002	0.0018 J	ND	ND	ND	0.606	0.609
Oct-2017	ND	ND	0.0159	0.000081 J	ND	1.01	1.12	ND	0.0023	0.0018 J	ND	ND	ND	0.648	0.674
May-2018	0.000052 J	ND	0.017	0.000075 J	0.000042 J	1.2	1.07	0.0027 J	0.0022	0.0052 B	ND	ND	0.000068 J	0.67 J	0.644 J
Nov-2018	ND	ND	0.016	0.000086 J	0.000056 J	1.3	1.2	0.0027 JB	0.0022	0.0065	ND	ND	0.00019 JB	0.72 J	0.7 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25***													
May-2019	*ND*	*ND*	0.017	*ND*	*ND*	1.2	1.2	*ND*	0.0046	0.0068	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*0.00011 J*	*ND*	0.017	*0.000096 J*	*0.00027 J*	1.2	1.2	*0.0045 J*	0.0029	0.0058	*0.0085 J*	*ND*	*0.0001 J*	0.68	*0.67 J*
May-2020	*0.000052 J*	*ND*	0.018	*ND*	*ND*	1.4	1.3	*0.0054 J*	0.0028	0.0056	*ND*	*0.0098 J*	*ND*	0.76	*0.72 J*
Oct-2020	*ND*	*ND*	0.015	*ND*	*ND*	1.4	1.4	*0.0056 J*	0.0038	*ND*	*0.016 J*	*ND*	*ND*	0.8	*0.74 J*
Apr-2021	*ND*	*ND*	0.024	*ND*	*ND*	1.5	1.6	*0.0025 J*	0.0051	*ND*	*ND*	*ND*	*ND*	0.85	0.93
Oct-2021	*0.00007 J*	*ND*	0.023	*ND*	*ND*	1.7	1.8	0.0044	0.0074	0.0085	*0.025 JB*	*0.02 J*	*0.00011 J*	0.88	0.91
May-2022	*ND*	*ND*	0.022	*ND*	*ND*	1.5	1.4	*0.0024 J*	0.0051	0.0034	*ND*	*ND*	*ND*	0.86	0.84
Oct-2022	*ND*	*ND*	0.022	*0.0001 J*	*ND*	1.8	1.7	*0.0015 J*	0.0039	0.0032	*ND*	*ND*	*ND*	0.97	1
May-2023	*ND*	*ND*	0.026	*0.00012 J*	*ND*	1.7	1.8	*0.0019 J*	0.0045	0.0049	*ND*	*ND*	*ND*	0.98	1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-25*												
Apr-1995	0.03	NA	ND	ND	0.1	NA	ND	0.01	1.5	NA	ND	ND	0.1
Oct-1996	0.017	0.023	NA	ND	ND	ND	ND	ND	2	1.7	ND	ND	0.32
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	1.8	1.6	ND	ND	0.035
Oct-1997	0.014	ND	ND	ND	1.08	0.735	ND	ND	1.16	1.09	ND	0.016	0.01
Apr-1998	0.019	0.012	ND	ND	2.34	ND	ND	ND	1.21	1.11	ND	0.03	0.013
Apr-1999	0.017	0.01	NA	0.013	1.25	ND	ND	ND	1.49	1.09	ND	0.022	0.032
Oct-1999	0.015	0.01	NA	ND	1.38	0.661	ND	ND	1.52	1.05	ND	0.019	0.013
Apr-2000	0.012	ND	NA	ND	0.957	ND	ND	ND	2.46	1.02	ND	0.012	0.011
Oct-2000	0.013	ND	NA	ND	0.642	ND	ND	ND	1.73	1.14	ND	ND	0.011
Apr-2001	ND	NA	NA	ND	1.23	NA	ND	ND	1.92	NA	ND	ND	0.017
Sep-2001	0.012	ND	NA	ND	0.652	ND	ND	ND	2.5	1.1	ND	0.016	ND
Mar-2002	0.01	ND	NA	ND	1.14	0.988	ND	ND	2.27	1.23	ND	0.01	ND
Sep-2002	0.014	ND	NA	ND	0.738	ND	ND	ND	1.44	1.16	ND	0.017	ND
Mar-2003	ND	ND	NA	ND	0.517	ND	ND	ND	1.6	1.14	ND	ND	ND
Oct-2003	0.011	ND	NA	ND	ND	ND	ND	ND	2.43	1.09	ND	0.022	0.014
Apr-2004	ND	ND	ND	ND	1.22	ND	ND	ND	1.23	1.17	ND	ND	ND
Oct-2004	ND	ND	ND	ND	1.07	ND	ND	ND	1.03	0.936	ND	ND	ND
Apr-2005	0.011	ND	ND	ND	0.83	0.43	ND	ND	2	1.09	ND	0.016	0.011
Oct-2005	0.013	ND	ND	ND	0.757	ND	ND	ND	1.94	0.997	ND	0.02	0.012
Mar-2006	ND	ND	ND	ND	0.699	ND	ND	ND	1.19	0.939	ND	0.015	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	1.44	1.08	ND	ND	ND
Mar-2007	ND	ND	ND	ND	0.559	ND	ND	ND	1.17	1.13	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-25***												
Sep-2007	ND	ND	ND	0.014	0.547	ND	ND	ND	1.41	1.12	ND	ND	0.028
Mar-2008	ND	ND	0.0004	ND	0.798	0.536	ND	ND	1.29	1.05	ND	ND	ND
Sep-2008	0.013	ND	ND	ND	0.754	ND	ND	ND	1.25	1.11	ND	ND	0.022
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.17	1.17	ND	ND	0.016
Oct-2009	ND	ND	ND	ND	0.665	ND	ND	ND	1.33	1.06	ND	0.012	0.012
Apr-2010	0.013	ND	ND	ND	0.896	ND	ND	ND	1.53	1.25	ND	0.023	0.013
Oct-2010	0.016	ND	ND	ND	0.995	ND	ND	ND	1.44	1.4	ND	0.023	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.46	1.45	ND	ND	0.014
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.58	1.58	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	1.44	1.41	ND	ND	ND
Sep-2012	0.0085 J	0.008 J	ND	0.0016 J	0.41 J	0.387 J	ND	ND	1.48	1.48	ND	ND	0.005 J
Mar-2013	0.0083 J	0.0081 J	0.000044 J	0.0019 J	0.412 J	0.392 J	ND	0.000026 J	1.42	1.36	ND	ND	0.0153
Oct-2013	0.0089 J	0.0089 J	ND	0.0017 J	0.399 J	0.398 J	ND	ND	1.56	1.61	0.0001525 J	0.000873 J	0.013
Mar-2014	0.0084 J	0.0082 J	ND	0.0018 J	0.452 J	0.412 J	ND	ND	1.53	1.4	ND	ND	ND
Oct-2014	0.0102	0.0103	ND	0.002 J	0.535	0.536	0.0021	ND	1.92	1.92	ND	ND	0.0069 J
Apr-2015	0.0106	0.0104	ND	0.0024 J	0.503	0.496 J	ND	ND	1.94	1.93	ND	ND	0.0096 J
Nov-2015	0.0102	0.0106	ND	0.0021 J	0.51	0.523	ND	ND	1.88	1.93	ND	ND	0.0064 J
May-2016	0.0091	0.0111	ND	0.003 J	0.483	0.483	ND	ND	1.83	1.85	ND	ND	ND
Oct-2016	0.01	0.0131	ND	0.0026 J	0.478	0.499	ND	ND	1.76	1.89	ND	ND	ND
May-2017	0.0118	0.0119	ND	0.0026 J	0.528	0.529	ND	ND	1.94	1.9	ND	ND	0.0036 JB
Oct-2017	0.0117	0.0126	ND	0.0016 J	0.543	0.607	ND	ND	1.99 J-	2.13	ND	ND	0.0058 J
May-2018	0.011	0.01	ND	0.0027	ND	ND	0.00028 JB	ND	2.5 J	2.24 J	ND	0.0034	0.0053 B
Nov-2018	0.013	0.012	ND	0.0028	ND	1.3 J	0.00013 JB	ND	0.95 J	2.7 JB	ND	0.0034 B	0.0077
May-2019	0.014	0.013	ND	0.0037	ND	ND	ND	ND	ND	ND	ND	0.0039 B	0.0072

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-25***												
Oct-2019	0.014	0.012	*ND*	0.0031	*ND*	*ND*	*ND*	*ND*	*2.2 J*	*2.1 J*	*ND*	*ND*	0.015
May-2020	0.014	0.013	*ND*	0.0027	*ND*	*ND*	*ND*	*ND*	*2.3 J*	*2.2 J*	*ND*	0.0084	0.0051
Oct-2020	0.015	0.015	*ND*	0.0045	*ND*	*ND*	*ND*	*ND*	*2.4 J*	*2.1 J*	*ND*	*0.001 J*	*ND*
Apr-2021	0.017	0.017	*ND*	*0.0036 J*	0.64	0.68	*ND*	*ND*	2.6	3.1	*ND*	*ND*	*0.0051 J*
Oct-2021	0.017	0.018	*ND*	0.0051	0.59	0.605	*ND*	*0.00027 J*	2.8	2.8	*ND*	*ND*	0.0061
May-2022	0.017	0.017	*ND*	0.0039	0.58	0.63	*ND*	*ND*	2.6	2.6	*ND*	*ND*	0.0057
Oct-2022	0.018	0.018	*ND*	0.0034	0.65	0.74	*ND*	*ND*	3	3.1	*ND*	*ND*	0.006
May-2023	0.018	0.019	*ND*	0.004	0.58	0.59	*ND*	*ND*	2.9	3	*ND*	*ND*	0.0071

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25*																
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25*																
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	1 R	1 R	1 R	1 R	7.4 R	1 R	1 R	**1 R**	**1 R**	1 R	0.7 R	1 R	1 R	5 R	5 R	5 R	5 R	5 R
Dec-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*0.42 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*0.45 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*0.42 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*0.66 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25*																
Oct-2017	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.7 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*0.94 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	2.07	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25***															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25***															
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	0.9 R	1 R	1 R	1 R	1 R	11.4 R
Dec-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.6 J
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.7 J
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.05	0.46 J
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.11	0.62 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	1.25	0.84 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.19 J	ND	ND	ND	ND	ND	1.83 J	0.77 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	0.5 J,B	ND	ND	ND	ND	1.67	0.83 J
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	1.11
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8 J	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	2.7	1.9
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	3	2.4
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J,B	ND	ND	ND	ND	ND	2.7	2

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25***															
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	3	2.2
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.5	2.5
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	**3 D6**	2.2 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3 CL	2.2 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	1.4
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.8	1.7
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	5.8	2.5
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.235 J*	*ND*	*0.674 J*	*ND*	*ND*	*ND*	*3.6 J*	*3.7 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	5	2.9
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	6.4	2.4
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	5.7	3
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	4.2	2.9

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25***															
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25***															
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	1 R	1 R	1 R	1.5 R	**9 R**	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1.1 R	1 R	1 R	1 R	*NA*
Dec-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.27 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.31 J*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.27 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.36 J*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.34 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.34 J*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.39 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.4 J*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.5 J*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.4 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.4 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.41	*ND*	*ND*	*ND*	*ND*	*0.343 J*	*0.446 J*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-25A***											
Apr-1995	52.5	52.5	ND	59.7	2.7	ND	ND	8.9	100	3.2	70	99.7
Apr-1997	ND	36	ND	ND	3	0.06	ND	NA	NA	ND	82	33
Oct-1997	21	21	ND	ND	2.33	ND	ND	8.38	50.7	ND	ND	18
Apr-1998	37	37	ND	ND	2.64	0.22	ND	6.65	110.9	2.25	50	41
Apr-1999	25	25	0.8	ND	2.64	ND	ND	5.89	91.2	1.44	35	32
Oct-1999	32	32	0.07	ND	4.37	ND	ND	5.72	44.9	2.75	35	18
Apr-2000	16	16	ND	ND	3	ND	ND	6.32	43	2.16	45	19
Oct-2000	16	NA	ND	ND	2.03	ND	ND	5.77	42.4	4.37	33	21.7
Apr-2001	20	NA	ND	ND	2.85	ND	ND	NA	NA	1.57	33	23
Sep-2001	5.9	5.9	0.32	ND	5.01	ND	ND	5.71	43	7.52	28	15
Mar-2002	8	8	ND	ND	3.88	ND	ND	5.5	36	2.16	13	12
Sep-2002	5.2	5.2	ND	ND	3.55	ND	ND	5.4	34	3.13	20	8.49
Mar-2003	22	22	ND	ND	14.4	ND	ND	5.8	59.9	5.65	30	22.6
Oct-2003	14	14	ND	ND	4.24	0.118	ND	5.2	56.1	1.43	11	98.6
Apr-2004	12	12	ND	ND	4.85	ND	ND	5.5	48.6	1.34	50	17.5
Oct-2004	15	15	ND	ND	5.7	ND	ND	3.2	50.8	1.43	41	19.6
Apr-2005	18	18	ND	ND	5.64	ND	ND	5.2	49.8	3.51	ND	22.6
Oct-2005	11	11	0.22	ND	5.94	ND	ND	4.7	42.8	2.62	43	13.5
Mar-2006	11	11	ND	ND	6.33	ND	ND	5.3	51.5	2.99	26	13
Sep-2006	7.1	7.1	ND	ND	6.05	ND	ND	4.9	37.7	2.83	42	10.7
Mar-2007	6.9	6.9	ND	ND	5.9	ND	ND	4.9	37.5	2.17	42	9.64
Sep-2007	11	11	0.23	ND	5.45	ND	ND	6.2	42.6	1.87	38	14.1
Mar-2008	17	17	ND	11	17.5	ND	ND	6.2	52.7	5.13	53	18.2
Sep-2008	7.5	7.5	0.27	ND	5.59	ND	ND	5.7	33.5	2.25	30	9.2
Mar-2009	6	6	ND	ND	5.78	ND	ND	5.1	35.8	1.52	ND	8.57
Oct-2009	5.2	5.2	ND	ND	5.98	ND	ND	4.9	31.8	1.6	34	7.53
Mar-2010	8.8	8.8	ND	ND	6.41	ND	ND	4.59	45	2.01	14	9.74
Oct-2010	1.8	1.8	ND	ND	6.58	ND	ND	3.6	37.8	2.54	22	7.13
Apr-2011	3	3	ND	ND	6.57	ND	0.04	4.1	41.5	1.8	42	6.4
Sep-2011	4.7	4.7	0.22	ND	7.04	ND	0.03	4.3	40.7	1.56	44	8.48
Mar-2012	4.3	4.3	ND	ND	7.23	0.06	0.04	3.6	41	1.98	24	8.01
Sep-2012	4.2	4.2	ND	ND	7.96	0.104	ND	3.5	42.8	2.47	28	8.53
Mar-2013	3.8	3.8	ND	ND	8.59	0.103	0.0377 J	4.5	48.8	1.79	31	8.47
Oct-2013	3.64	3.64	ND	ND	8.62	0.127	0.134	5.3	46.9	2.29	ND	9.02
Mar-2014	3.52	3.52	ND	ND	8.88	0.131	ND	4.6	48.2	2.66	26	8.9
Oct-2014	ND	ND	ND	ND	9.57	0.106	ND	4.5	46	3.2	25	9.8
Apr-2015	3.72	3.72	ND	ND	8.62	0.116	ND	3.6	46	1.75	ND	8.86

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-25A***											
Nov-2015	*ND*	*ND*	*ND*	*5 J*	9.48	0.125	0.0657	4.7	60.8	1.9	*22 J*	9.15
May-2016	*ND*	*ND*	*ND*	*ND*	8.67	0.132	0.0891	4.5	61.3	3.23	*13 J*	8.7
Oct-2016	*ND*	*ND*	*ND*	*ND*	9.05	*NA*	*NA*	4.6	69.9	2.81	42	9.7
May-2017	*ND*	*ND*	*ND*	13	9.61	0.235	0.106	4.5	76.2	3.52	*13 J*	9.8
Oct-2017	*ND*	*ND*	*ND*	*ND*	8.92	0.244	0.0755	4.6	84.6	2.31	33	11.3
May-2018	*ND*	*ND*	*ND*	*5.8 J*	8.4	0.24	0.023	4.8	67.3	*ND*	23	11.2
Nov-2018	18	18	*ND*	*ND*	10.1	0.16	0.04	5.03	87.7	*6.2 J*	90	30.8
May-2019	*ND*	*NA*	*ND*	*ND*	10.4	0.23	0.066	4.67	53.8	*ND*	48	18.3
Oct-2019	*6 J*	*NA*	*ND*	*6 J*	62.8	0.58	0.093	4.33	70.1	*ND*	44	17.2
May-2020	*4 J*	*NA*	*ND*	*ND*	11.2	0.77	0.11	4.32	76.5	*5 J*	46	19.4
Oct-2020	*2 J*	*NA*	*ND*	*ND*	10.5	0.76	0.096	4.62	74.3	4	35	21.4
Apr-2021	20	*NA*	*ND*	*ND*	10.7	0.71	0.12	5.29	113.9	*ND*	55	36.5
Oct-2021	12	*NA*	*ND*	*ND*	9.4	0.82	0.1	4.98	116.8	*ND*	22	22.1
May-2022	*ND*	*NA*	*ND*	*ND*	8.5	0.73	0.086	4.63	97.5	*ND*	33	19.1 N3
Oct-2022	*6 J4c*	*NA*	*ND*	*8.4 J*	11.7	0.77	0.12	4.78	101.7	*ND*	50	23 N3
May-2023	*3 J3cB*	*NA*	*ND*	*18.3 JB*	9.7	0.73	0.066	4.68	105.6	*ND*	39	18 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25A***													
Apr-1995	ND	ND	ND	ND	ND	38.8	NA	ND	ND	ND	0.82	0.05	ND	0.68	NA
Oct-1996	ND	ND	0.041	ND	ND	8	7.7	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	0.048	ND	ND	12	NA	ND	ND	ND	ND	NA	ND	ND	ND
Oct-1997	ND	ND	0.028	ND	ND	7.09	6.38	ND	ND	ND	0.108	ND	ND	0.491	0.47
Apr-1998	ND	ND	0.06	ND	ND	15	15.7	ND	ND	ND	ND	ND	ND	0.743	0.732
Apr-1999	ND	ND	0.048	ND	ND	11.6	11.1	ND	ND	ND	0.104	ND	ND	0.629	0.567
Oct-1999	ND	ND	0.028	ND	ND	1.23	1.09	ND	ND	0.017	0.057	ND	ND	0.643	0.589
Apr-2000	ND	ND	0.043	ND	ND	6.43	5.88	ND	ND	ND	ND	ND	ND	0.729	0.691
Oct-2000	ND	ND	0.029	ND	ND	7.46	7.78	ND	ND	0.02	0.065	ND	ND	0.758	0.614
Apr-2001	ND	ND	0.044	ND	ND	7.78	NA	ND	ND	0.012	ND	NA	ND	0.812	NA
Sep-2001	ND	ND	0.029	ND	ND	4.89	4.23	ND	ND	0.014	0.067	ND	ND	0.679	0.585
Mar-2002	ND	ND	0.031	ND	ND	3.67	3.47	ND	ND	0.019	0.051	ND	ND	0.702	0.678
Sep-2002	ND	ND	0.034	ND	ND	2.2	2.05	ND	ND	0.013	0.097	ND	ND	0.728	0.715
Mar-2003	ND	ND	0.051	ND	ND	7.8	5.8	ND	ND	0.012	0.08	ND	ND	0.753	0.708
Oct-2003	ND	ND	0.213	ND	0.005	32.3	5.95	ND	0.02	0.094	0.252	ND	ND	4.37	0.762
Apr-2004	ND	ND	0.047	ND	ND	5.54	4.82	ND	ND	0.02	ND	ND	ND	0.901	0.887
Oct-2004	ND	ND	0.053	ND	ND	6.17	5.84	ND	ND	0.021	ND	ND	ND	1.03	1.03
Apr-2005	ND	ND	0.055	ND	ND	7.35	6.71	ND	ND	0.017	ND	ND	ND	1.04	0.995
Oct-2005	ND	ND	0.052	ND	ND	3.81	3.58	ND	ND	0.024	ND	ND	ND	0.97	0.913
Mar-2006	ND	ND	0.047	ND	ND	3.85	3.77	ND	ND	0.013	ND	ND	ND	0.812	0.778
Sep-2006	ND	ND	0.049	ND	ND	2.7	2.69	ND	ND	0.021	ND	ND	ND	0.964	0.915

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25A***													
Mar-2007	ND	ND	0.046	ND	ND	2.35	2.36	ND	ND	0.023	ND	ND	ND	0.916	0.878
Sep-2007	ND	ND	0.045	ND	ND	4.12	3.41	ND	ND	0.022	ND	ND	ND	0.932	0.873
Mar-2008	ND	ND	0.048	ND	ND	5.75	5	ND	ND	0.02	ND	ND	ND	0.922	0.87
Sep-2008	ND	ND	0.047	0.002	ND	2.03	2.02	ND	ND	0.023	ND	ND	0.003	1.01	0.977
Mar-2009	ND	ND	0.05	ND	ND	1.65	1.34	ND	ND	0.025	ND	ND	ND	1.08	0.968
Oct-2009	ND	ND	0.048	ND	ND	1.35	1.24	ND	ND	0.025	0.052	ND	ND	1.01	0.997
Mar-2010	ND	ND	0.054	ND	ND	2.25	2.4	ND	ND	0.021	0.069	ND	ND	1	0.981
Oct-2010	ND	ND	0.049	ND	ND	0.845	0.803	ND	ND	0.024	ND	ND	ND	1.22	1.2
Apr-2011	ND	ND	0.058	ND	ND	0.744	0.756	ND	ND	0.016	ND	ND	ND	1.09	1.16
Sep-2011	ND	ND	0.056	ND	ND	1.3	1.32	ND	ND	0.022	ND	ND	ND	1.27	1.28
Mar-2012	ND	ND	0.062	ND	ND	1.08	1.19	ND	ND	0.024	ND	ND	ND	1.29	1.26
Sep-2012	ND	ND	0.0669	0.0011 J	ND	0.993	1.18	ND	0.007 J	0.0276	0.0538	0.0413 J	ND	1.47	1.41
Mar-2013	ND	ND	0.0556	0.000842 J	0.000248 J	1.33	1.46	0.0017 J	0.0065 J	0.0231	0.0754	0.0186 J	0.0015 J	1.25	1.3
Oct-2013	ND	ND	0.0704	ND	0.000199 J	1.19	1.16	0.004 J	0.0075 J	0.0262	ND	ND	ND	1.47	1.43
Mar-2014	ND	ND	0.0629	0.000979 J	0.000205 J	1.32	1.4	0.0013 J	0.0056 J	0.0243	0.0595	0.0542	ND	1.36	1.43
Oct-2014	0.000772 J	ND	0.078	0.0011 J	0.000284 J	1.47	1.47	0.000361 J	0.0075 J	0.0309	0.0403 J	0.0371 J	0.0011 J	1.49	1.49
Apr-2015	0.00058 J	ND	0.0698	0.0011 J	0.000246 J	1.12	1.13	0.000575 J	0.0071 J	0.0328	0.239	0.0264 J	ND	1.47	1.5
Nov-2015	ND	ND	0.0647	0.0011 J	0.000276 J	1.18	1.21	0.000316 J	0.0071 J	0.0265	0.0234 J	ND	ND	1.5	1.57
May-2016	ND	ND	0.0645	0.001 J	0.0002 J	1.05	1.24	ND	0.0067	0.0232	ND	ND	ND	1.49	1.48
Oct-2016	ND	ND	0.0683	0.001	ND	1.27	1.28	ND	0.0075	0.0248	ND	ND	ND	1.58	1.68
May-2017	ND	ND	0.0625	0.00092 J	0.00022 J	1.15	1.1	ND	0.0073	0.0225	ND	ND	ND	1.67	1.71
Oct-2017	ND	ND	0.0661	0.00097 J	0.00026 J	1.73	1.66	ND	0.0078	0.0258	0.0551 J	ND	0.00028 J	1.71	1.77
May-2018	0.000062 J	ND	0.072	0.00099	0.00027 J	1.3	1.21	0.002 J	0.0065	0.02	0.012 J	ND	0.000018 J	1.9	1.76
Nov-2018	ND	ND	0.063	0.00074	0.00023 J	9.9	9.9	0.0019 JB	0.0056	0.046	0.017 J	ND	0.000088 JB	1.5	1.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25A***													
May-2019	*ND*	*ND*	0.066	0.001	*ND*	4.7	4.8	*ND*	0.0059	0.035	*ND*	*ND*	*ND*	1.6	1.6
Oct-2019	*0.0002 J*	*0.00016 J*	0.066	0.0012	*0.00049 J*	4	3.8	*0.0029 J*	0.0059	0.039	*0.015 J*	*0.013 J*	*0.000086 J*	1.8	1.7
May-2020	*0.000059 J*	*ND*	0.067	0.00086	*0.00014 J*	4.8	4.6	*0.0049 J*	0.0076	0.048	*0.017 J*	*0.016 J*	*ND*	1.8	1.8
Oct-2020	*ND*	*ND*	0.058	*0.00068 J*	*ND*	5.5	5.2	*0.0035 J*	0.0063	0.03	*ND*	*ND*	*ND*	1.9	1.8
Apr-2021	*ND*	*ND*	0.073	*0.00061 J*	*ND*	11.8	11.8	*0.00036 J*	0.0073	0.026	*ND*	*ND*	*ND*	1.7	1.9
Oct-2021	*0.000079 J*	*ND*	0.076	0.0012	*0.0001 J*	5.6	5.7	*0.0011 J*	0.0085	0.055	0.076	*0.011 J*	*0.000082 J*	2	2
May-2022	*ND*	*ND*	0.082	0.0011	*0.00017 J*	4.2	3.9	*0.001 J*	0.011	0.056	*0.045 J*	*0.038 J*	*ND*	2.1	2.1
Oct-2022	*ND*	*ND*	0.075	0.00094	*0.00022 J*	5.5	5.2	*0.0011 J*	0.0093	0.061	*ND*	*ND*	*ND*	2.2	2.2
May-2023	*ND*	*ND*	0.078	0.00091	*0.0002 J*	3.6	3.5	*0.0012 J*	0.0094	0.04	*0.044 J*	*ND*	*ND*	2.2	2.3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-25A*												
Apr-1995	0.01	NA	ND	ND	2.8	NA	ND	0.02	2.1	NA	ND	ND	0.05
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	1.6	1.8	ND	ND	0.04
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	2	2	ND	ND	0.03
Oct-1997	ND	ND	ND	ND	0.821	ND	ND	ND	1.37	1.35	ND	ND	0.013
Apr-1998	ND	ND	ND	0.015	0.799	0.749	ND	ND	1.48	1.46	ND	ND	0.024
Apr-1999	ND	ND	NA	ND	ND	ND	ND	ND	1.5	1.39	ND	ND	ND
Oct-1999	ND	ND	NA	ND	1.04	ND	ND	ND	1.37	1.29	ND	ND	0.01
Apr-2000	ND	ND	NA	ND	1.02	0.621	ND	ND	1.47	1.34	ND	ND	ND
Oct-2000	ND	ND	NA	ND	0.759	0.625	ND	ND	2.35	1.47	ND	ND	0.011
Apr-2001	NA	NA	NA	ND	1.23	NA	ND	ND	1.6	NA	ND	ND	ND
Sep-2001	ND	ND	NA	ND	0.504	0.935	ND	ND	1.55	1.42	ND	ND	ND
Mar-2002	ND	ND	NA	ND	1.61	0.754	ND	ND	1.65	1.5	ND	ND	ND
Sep-2002	ND	ND	NA	ND	0.682	ND	ND	ND	1.6	1.57	ND	ND	ND
Mar-2003	ND	ND	NA	ND	0.768	ND	ND	ND	1.65	1.62	ND	ND	ND
Oct-2003	0.039	ND	NA	0.032	ND	ND	ND	ND	13.7	1.84	ND	ND	0.074
Apr-2004	0.011	0.011	**0.0036**	ND	0.833	0.931	ND	ND	2.19	2.1	ND	ND	ND
Oct-2004	0.012	0.011	0.002	ND	1.62	1.11	ND	ND	2.39	2.12	ND	ND	0.012
Apr-2005	0.011	ND	ND	ND	0.75	0.68	ND	ND	2.23	2.11	ND	ND	ND
Oct-2005	0.011	0.01	**0.0037**	ND	0.521	ND	ND	ND	2.25	2.11	ND	ND	0.012
Mar-2006	ND	ND	**0.0033**	ND	ND	ND	ND	ND	2.19	2.12	ND	ND	ND
Sep-2006	0.011	0.01	**0.0042**	ND	0.657	0.666	ND	ND	2.3	2.17	ND	ND	ND
Mar-2007	ND	ND	**0.0065**	ND	0.671	0.646	ND	ND	2.26	2.19	ND	ND	0.011

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-25A***												
Sep-2007	0.01	*ND*	**0.0089**	*ND*	0.632	0.545	*ND*	*ND*	2.1	2.07	*ND*	*ND*	0.01
Mar-2008	0.012	0.011	**0.0065**	*ND*	0.815	0.778	*ND*	*ND*	2.06	1.94	*ND*	*ND*	*ND*
Sep-2008	0.013	0.013	**0.0036**	*ND*	0.617	0.62	*ND*	*ND*	2.12	2.05	*ND*	*ND*	0.015
Mar-2009	0.014	0.012	**0.0021**	*ND*	0.652	0.646	*ND*	*ND*	2.29	2.4	*ND*	*ND*	*ND*
Oct-2009	0.013	0.013	**0.0024**	*ND*	0.516	*ND*	*ND*	*ND*	1.96	2.1	*ND*	*ND*	*ND*
Mar-2010	0.013	0.013	0.0019	*ND*	0.742	0.695	*ND*	*ND*	2.07	2.36	*ND*	*ND*	0.011
Oct-2010	0.017	0.017	0.0012	*ND*	0.71	0.689	*ND*	*ND*	2.53	2.5	*ND*	*ND*	*ND*
Apr-2011	0.016	0.016	0.0011	*ND*	0.513	*ND*	*ND*	*ND*	2.26	2.24	*ND*	*ND*	*ND*
Sep-2011	0.018	0.018	0.0011	*ND*	0.848	0.872	*ND*	*ND*	2.69	2.69	*ND*	*ND*	*ND*
Mar-2012	0.019	0.019	0.0011	*ND*	0.719	0.726	*ND*	*ND*	2.57	2.56	*ND*	*ND*	*ND*
Sep-2012	0.0236	0.0231	0.00087	*0.0067 J*	0.835	0.793	*ND*	*ND*	2.88	2.94	*0.000481 J*	*ND*	0.0105
Mar-2013	0.0224	0.0223	0.000742	*0.0065 J*	0.748	0.754	*ND*	*0.000028 J*	2.52	2.58	*ND*	*ND*	0.0192
Oct-2013	0.0257	0.0241	0.000652	*0.007 J*	0.833	0.776	*0.00058 J*	*ND*	3.02	2.95	*0.000124 J*	*0.00095 J*	0.02
Mar-2014	0.024	0.0269	0.000517	*0.006 J*	0.851	0.897	*0.000457 J*	*ND*	2.72	2.86	*0.000144 J*	*0.000758 J*	*0.0056 J*
Oct-2014	0.0284	0.0285	0.000379	*0.0075 J*	0.996	0.991	*0.0019 J*	*0.003 J*	3.37	3.37	*ND*	*ND*	0.0112
Apr-2015	0.0277	0.0283	0.000377	*0.0071 J*	0.937	0.934	*ND*	*ND*	3.29	3.22	*ND*	*ND*	0.0107
Nov-2015	0.0284	0.0298	0.000269	*0.007 J*	1.02	1.06	*0.000731 J*	*ND*	3.34	3.48	*ND*	*ND*	*0.0083 J*
May-2016	0.0294	0.0284	0.00023	0.0064	0.969	0.966	*ND*	*ND*	3.1	3.09	*ND*	*ND*	*0.0094 J*
Oct-2016	0.0319	0.0365	*0.00015 J*	0.0071	1.02	1.09	*ND*	*ND*	3.15	3.32	*ND*	*ND*	*0.007 J*
May-2017	0.0343	0.0346	*0.00016 J*	0.0065	1.02	1.04	*ND*	*ND*	3.2	3.13	*ND*	*ND*	*0.0085 J*
Oct-2017	0.0335	0.0408	*0.000059 J*	0.0056	1.06	1.13	*ND*	*ND*	*3.2 J-*	3.36	*0.00013 J*	*ND*	*0.0105 J*
May-2018	0.032	0.031	*0.00018 J*	0.0061	*ND*	*ND*	*0.00094 JB*	*ND*	*3.9 J*	*3.54 J*	*0.00008 J*	0.0036	0.0082 B
Nov-2018	0.028	0.028	0.00027	0.0061	*1.1 J*	*1.4 J*	*0.00066 J*	*ND*	*1.7 J*	*3.7 JB*	*0.000078 J*	0.0029 B	0.0091
May-2019	0.034	0.034	*ND*	0.0062	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0041 B	0.0086

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-25A***												
Oct-2019	0.032	0.036	*ND*	0.0053	*1.2 J*	*1.2 J*	*0.00053 J*	*ND*	*4.1 J*	*4 J*	*ND*	*ND*	0.064
May-2020	0.041	0.04	*ND*	0.0077	*ND*	*1.1 J*	*0.00064 J*	*ND*	*4.4 J*	*3.9 J*	*ND*	0.01	0.011
Oct-2020	0.043	0.042	*ND*	0.0059	*ND*	*ND*	*ND*	*ND*	*4.1 J*	*3.7 J*	*ND*	*0.00092 J*	*ND*
Apr-2021	0.041	0.042	*0.00011 J*	*0.0078 J*	1	1	*ND*	*ND*	3.9	4	*ND*	*ND*	*0.0093 J*
Oct-2021	0.046	0.045	*0.00009 J*	0.008	1.1	0.977	*ND*	*ND*	4.2	4.1	*0.00014 J*	*ND*	0.012
May-2022	0.047	0.048	*ND*	0.01	1	1.1	*ND*	*ND*	4.1	4	*0.00017 J*	*ND*	0.014
Oct-2022	0.051	0.049	*ND*	0.0091	1.1	1.2	*0.001 J*	*ND*	4.3	4.4	*0.00014 J*	*ND*	0.016
May-2023	0.05	0.051	*ND*	0.0092	0.99	1	*ND*	*ND*	3.9	4.1	*0.0001 J*	*ND*	0.014

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-25A***																
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	0.5 J	NA	NA	0.7 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	1	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	0.7 J	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	0.7 J	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	0.9 J	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	0.5 J	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	0.7 J	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	0.9 J	ND	ND	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	0.8 J	ND	ND	4.4	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	1	ND	ND	5.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	0.9 J	ND	ND	6.4	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	0.7 J	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	1.2	ND	ND	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25A*																
Mar-2007	ND	1.1	ND	ND	13.1	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	2	ND	ND	20	0.7 J	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	0.6 J	ND	ND	6.8	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Sep-2008	1 R	1 R	1 R	1 R	1 R	1 R	1 R	**1 R**	**1 R**	1 R	1 R	1 R	1 R	5 R	5 R	5 R	5 R	5 R
Dec-2008	ND	ND	ND	ND	12.5	ND	ND	ND	ND	ND	1.1	ND	0.6 J	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	7.4	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	9.6	ND	ND	ND	ND	ND	0.9 J	ND	0.6 J	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	21.3	ND	ND	ND	ND	ND	ND	ND	0.97 J	ND	ND	ND	ND	ND
Oct-2010	ND	1.4	ND	ND	27.5	ND	ND	ND	ND	ND	1.4	0.8 J	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	14.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	34.1	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	24.8	1.1	ND	ND	ND	ND	2.4	1	1.6	ND	ND	ND	ND	ND
Sep-2012	ND	1.16	ND	ND	35	0.95 J	ND	ND	ND	ND	2.01	1.16	1.69	ND	ND	ND	ND	ND
Mar-2013	ND	1.14	ND	ND	42.1	1.28	ND	ND	ND	ND	2.9	1.12	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	41.9	1.14	ND	ND	ND	ND	2.5	1.34	2.17	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	39.7	1.2	ND	ND	ND	ND	2.47	1.1	2.13	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	40.1	1.16	ND	ND	ND	ND	2.35	1.36	2.17	ND	ND	ND	ND	ND
Apr-2015	ND	0.94 J	ND	ND	37.3	1.17	ND	ND	ND	ND	2.28	1.26	1.7	ND	ND	ND	ND	ND
Nov-2015	ND	1 J	ND	ND	35.1	1.4	ND	ND	ND	ND	2.3	1.3	1.9	ND	ND	ND	ND	ND
May-2016	ND	0.8 J	ND	ND	27	1.2	ND	ND	ND	ND	2	1.2	1.8	ND	ND	ND	ND	ND
Oct-2016	ND	0.8 J	ND	ND	32	1	ND	ND	ND	ND	2.4	1.2	1.9	ND	ND	ND	ND	ND
May-2017	ND	0.6 J	ND	ND	33	1 J	ND	ND	ND	ND	2.2	1	1.7	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25A*																
Oct-2017	ND	0.6 J	ND	ND	28	1.2	ND	ND	ND	ND	2	1.2	1.7	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	37.4	1.3	ND	ND	ND	ND	2.4	1.4	2.2	ND	ND	ND	2.5 JB	ND
Nov-2018	ND	0.59 J	ND	ND	30.3	1 J	ND	ND	ND	ND	1.8	1.1	1.3	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	19.5	ND	ND	ND	ND	ND	1.2	ND	1.4	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	23.3	ND	ND	ND	ND	ND	1.4	ND	1.3	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	18.4	ND	ND	ND	ND	ND	1.4	ND	1.4	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	24.2	0.7 J	ND	ND	ND	ND	1.5	1	ND	ND	ND	ND	ND	ND
Apr-2021	ND	0.295 J	ND	ND	28	0.718 J	ND	ND	ND	ND	1.95	1.02	1.01	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	30.6	0.8 J	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	25.5	0.7 J	ND	ND	ND	ND	1.6	1.1	1.5	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	27.3	0.8 J	ND	ND	ND	ND	1.7	1.1	1.5	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	27.4	0.8 J	ND	ND	ND	ND	1.6	1.3	1.9	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25A***															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	1.4
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	2.6
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	1.4	2.8
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.2	5.7
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.4	5.3
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	4.3
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	5.5
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	9.8
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19	5.4
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	28	12
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	61	11
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	24	14
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	36	18
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	32.3	22.2
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21.9	16.9
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	22.1	21.9

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25A***															
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	0.8 J	ND	ND	ND	16.1	31.7
Sep-2007	0.5 J	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	1	ND	ND	ND	24.2	23.6
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	1	15.4
Sep-2008	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1.8 R	3 R
Dec-2008	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	1	16.2
Mar-2009	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	7.5
Oct-2009	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	12.8	2.5
Mar-2010	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	30.5 J	46.9
Oct-2010	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	ND	ND	ND	33.5	47.9
Apr-2011	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7	ND	ND	ND	43.7	42.7
Sep-2011	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	28.8	57.6
Mar-2012	3	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	ND	ND	ND	25.6	59.1
Sep-2012	3.57	ND	ND	ND	ND	ND	ND	ND	0.83 J	ND	ND	5.6	ND	ND	ND	15.2	42
Mar-2013	3.82	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.5	ND	ND	ND	19.6	60.8
Oct-2013	4.24	0.24 J	ND	ND	ND	ND	ND	ND	0.94 J	0.23 J	ND	6.43	ND	ND	ND	16.7	61.4
Mar-2014	3.79	ND	ND	ND	ND	ND	ND	ND	0.8 J	0.24 J	ND	5.87	ND	ND	ND	22 J	62.3
Oct-2014	3.98	ND	ND	ND	ND	ND	ND	ND	0.53 J	0.24 J	ND	6.16	ND	ND	ND	19.3	57.7
Apr-2015	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.79	ND	ND	ND	16.9	51.4
Nov-2015	3.4	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	6.4	ND	ND	ND	32.3 J	48.4
May-2016	3.3	ND	ND	ND	ND	ND	ND	ND	0.5 J	0.2 J	ND	6.1	ND	ND	ND	17	41
Oct-2016	3.3	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.3 J	ND	5.5	ND	ND	ND	16	53
May-2017	3	ND	ND	ND	ND	ND	ND	ND	0.4 J	0.2 J,B	ND	5.5	ND	ND	ND	13	47

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25A***															
Oct-2017	3.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*0.2 J*	*ND*	5.9	*ND*	*ND*	*ND*	13	48
May-2018	3.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.2	*ND*	*ND*	*ND*	26.9	52.3
Nov-2018	2.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.1	*ND*	*ND*	*ND*	11.7	44.3 N3
May-2019	1.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	8.5 CL	32 N3
Oct-2019	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.9	*ND*	*ND*	*ND*	12.2	20.4
May-2020	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	7.6	15.5
Oct-2020	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.1	*ND*	*ND*	*ND*	12.9	21.4
Apr-2021	1.88	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.233 J*	*0.187 J*	*ND*	4.75	*ND*	*ND*	*ND*	6.82	35.8
Oct-2021	2.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.1	*ND*	*ND*	*ND*	9.1	26
May-2022	2.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5	*ND*	*ND*	*ND*	12.9	22.7
Oct-2022	2.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.3	*ND*	*ND*	*ND*	10.4	25.2
May-2023	2.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.4	*ND*	*ND*	*ND*	9.6	25.5

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25A***															
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	1.4	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	1.6	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	NA
Apr-2000	ND	NA	ND	NA	1.6	ND	NA	ND	ND	ND	NA	NA	ND	0.7 J	ND	ND	NA
Oct-2000	ND	ND	ND	NA	2	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	NA
Apr-2001	ND	ND	ND	NA	1.4	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	NA
Sep-2001	ND	ND	ND	NA	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	NA
Mar-2002	ND	ND	ND	NA	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	NA
Sep-2002	ND	ND	ND	NA	1.2	ND	ND	ND	ND	ND	ND	ND	0.7 J	1.8	ND	ND	NA
Mar-2003	ND	ND	ND	NA	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	NA
Oct-2003	ND	ND	ND	NA	1.1	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	NA
Apr-2004	ND	ND	ND	NA	1	ND	ND	0.6 J	ND	ND	ND	ND	0.8 J	2.3	ND	ND	NA
Oct-2004	ND	ND	ND	NA	2.4	ND	ND	ND	ND	ND	ND	ND	ND	3.1	ND	ND	NA
Apr-2005	ND	ND	ND	ND	2.3	ND	ND	0.9 J	ND	ND	ND	ND	1.2	2.7	ND	ND	NA
Oct-2005	ND	ND	ND	ND	3.3	ND	ND	1.6	ND	ND	ND	ND	1.4	2.5	ND	ND	NA
Mar-2006	ND	ND	ND	ND	2.5	ND	ND	1.4	ND	ND	ND	ND	1.1	1.8	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-25A*															
Sep-2006	ND	ND	ND	ND	**5.4**	ND	ND	1.4	ND	ND	ND	ND	1.7	3.9	ND	ND	NA
Mar-2007	ND	ND	ND	1	6.1 J	ND	ND	1.9	ND	ND	ND	ND	2.6	3	ND	ND	NA
Sep-2007	ND	ND	ND	1.5	**12.1**	ND	ND	2.1	ND	ND	ND	ND	3.6	3.9	ND	ND	NA
Mar-2008	ND	ND	ND	1.6	**9**	ND	ND	1.1	ND	ND	ND	ND	1.8	ND	ND	0.6 J	NA
Sep-2008	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	NA
Dec-2008	ND	ND	0.6 J	2.2	**14.1**	ND	ND	0.9 J	0.5 J	ND	ND	ND	2	ND	ND	ND	NA
Mar-2009	ND	ND	ND	2.4	**11.4**	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA
Oct-2009	ND	ND	0.7 J	ND	**12.1**	0.6 J	ND	0.8 J	ND	ND	ND	ND	1.8	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	**20.7**	ND	ND	ND	ND	ND	ND	ND	ND	3.6	ND	ND	NA
Oct-2010	ND	ND	1.1	3.4	**25.9**	1.2	ND	3.5	ND	ND	ND	ND	ND	3.6	ND	1.2	NA
Apr-2011	ND	ND	1.1	2.8	**22.9**	1.2	ND	3.7	ND	ND	ND	ND	**5.4 C**	3	ND	**5.5 R,C**	NA
May-2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**5.5**	NA	NA	1	NA
Sep-2011	ND	ND	1.1	5.3	**30.9**	1.2	ND	4.7	ND	ND	ND	ND	**6.8**	4	ND	1.4	NA
Mar-2012	ND	ND	1.2	4.8	**34.3**	1.4	ND	4.5	ND	ND	ND	ND	**6.5**	3.6	ND	**4.3 R,C**	NA
May-2012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5	NA
Sep-2012	ND	ND	1.9	5.97	**36.1**	1.88	ND	**5.06 C**	ND	ND	ND	ND	**6.71**	3.53	ND	1.36	3.78
Nov-2012	NA	NA	NA	NA	NA	NA	NA	**5.44**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mar-2013	ND	ND	1.73	6.33	**44**	1.94	ND	**5.14**	ND	ND	ND	ND	**7.31**	ND	ND	1.55	3.67
Oct-2013	ND	ND	2.07	6.05	**43**	2.28	ND	**6.05**	ND	0.18 J	ND	ND	**7.97**	3.34	ND	1.66	4.35
Mar-2014	ND	ND	1.9	6.01	**40.8**	2.26	ND	**5.68**	ND	ND	ND	ND	**7.69**	3.2	ND	1.52	4.16
Oct-2014	ND	ND	0.94 J	5.65	**41.7**	2.17	ND	**6.1**	ND	ND	ND	ND	**8.14**	3.64	ND	1.45	3.11
Apr-2015	0.28 J	ND	ND	5.65	**41.1**	1.94	ND	**5.08**	ND	ND	ND	ND	**7.43**	3.61	ND	1.42	1.94

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25A***															
Nov-2015	*ND*	*ND*	*ND*	5.5	**40.8**	1.8	*ND*	4.9	*ND*	*ND*	*ND*	*ND*	**7.5**	3.3	*ND*	2	1.8
May-2016	*ND*	*ND*	*0.1 J*	4.6	**33**	1.7	*ND*	5	*ND*	*0.1 J*	*ND*	*ND*	**7.1**	3.7	*ND*	1.3	1.8
Oct-2016	*ND*	*ND*	*ND*	4	**35**	1.2	*ND*	4.3	*ND*	*0.2 J*	*ND*	*ND*	**6.4**	4	*ND*	1.5	1.2
May-2017	*ND*	*ND*	*ND*	4.6	**37**	1.6	*ND*	4.3	*ND*	*0.1 J*	*ND*	*ND*	**6**	1.5	*ND*	1.2	1.6
Oct-2017	*ND*	*ND*	*ND*	4.6	**32**	1.6	*ND*	4.5	*ND*	*0.1 J*	*ND*	*ND*	**6.4**	3.4	*ND*	1.3	1.6
May-2018	*ND*	*ND*	*ND*	5.2	**42.1**	2.1	*ND*	**5.6**	*ND*	*ND*	*ND*	*ND*	**8.9**	4.4	*ND*	1.7	*NA*
Nov-2018	*ND*	*ND*	*ND*	4.4	**26.3**	1	*ND*	2.6 CL	*ND*	*ND*	*ND*	*ND*	**5.7**	3.4	*ND*	*0.98 J*	*NA*
May-2019	*ND*	*ND*	*ND*	2.8	**16.7**	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	3.8	2.2	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	2.9	**18.8**	*ND*	*ND*	3.1	*ND*	*ND*	*ND*	*ND*	4	1.6	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	2.2	**15.2**	*ND*	*ND*	2.7	*ND*	*ND*	*ND*	*ND*	2.9	1.2	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	3.1	**16.4**	*0.6 J*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	3.2	1.7	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	3.98	**19.5**	*0.526 J*	*ND*	2.62	*ND*	*ND*	*ND*	*ND*	3.84	*2.1 J*	*ND*	*0.693 J*	*NA*
Oct-2021	*ND*	*ND*	*ND*	4.1	**23.6**	*0.7 J*	*ND*	3	*ND*	*ND*	*ND*	*ND*	4.1	1.9	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	3.9	**22.4 L**	*0.8 J*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	4.7	1.8	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	4.2	**23.4 L**	*0.9 J*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	4.5	1.8	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	4.7	**25.7 L**	1.1	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	5	1.8	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-27***											
Mar-2013	4.24	4.24	*0.0847 J*	*ND*	3.16	0.0583	*ND*	6.2	17.5	*0.63 J*	*ND*	3.43
Oct-2013	4.36	4.36	*ND*	*ND*	3.03	0.0804	*ND*	5.8	18.4	*0.615 J*	32	3.37
Mar-2014	4.28	4.28	*ND*	*ND*	2.96	0.0592	*ND*	5.5	20.1	*ND*	*ND*	3.56
Oct-2014	24.2	24.2	*ND*	*ND*	3.09	0.0724	*ND*	5.8	18.2	*ND*	*ND*	3.72
Apr-2015	4.48	4.48	*ND*	*5 J*	2.92	0.0554	*ND*	3.9	18.6	*ND*	31	3.57
Nov-2015	*ND*	*ND*	*ND*	*ND*	3.16	0.053	*ND*	5.4	23.2	*ND*	32	4.25
May-2016	3.6	3.6	*ND*	*ND*	3.93	0.0614	*ND*	5.3	22.9	*ND*	*20 J*	3.6
Oct-2016	*ND*	*ND*	*ND*	*ND*	3.72	*NA*	*NA*	5.2	26.9	*0.701 J*	*23 J*	3.3
May-2017	*ND*	*ND*	*ND*	*ND*	3.1	0.0707	*ND*	5.1	37.8	*ND*	*ND*	3.6
Oct-2017	*ND*	*ND*	*ND*	*ND*	3.63	0.0788	*ND*	5.3	31.3	*ND*	*21 J*	3.5
May-2018	*6 J*	*ND*	*ND*	*ND*	3.3	*0.063 J*	*ND*	6.5	225	*ND*	15	*3.4 J*
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	4.7	*0.076 J*	*ND*	4.7	24	*ND*	80	*3.7 J*
May-2019	*ND*	*NA*	*ND*	*ND*	4.7	*ND*	*ND*	4.45	19.7	*ND*	*ND*	*ND*
Oct-2019	*2.5 J*	*NA*	*ND*	*ND*	4	*0.095 J*	*ND*	4.5	25.3	*ND*	24	3.5
May-2020	*ND*	*NA*	*ND*	*ND*	4.7	*0.056 J*	*ND*	4.5	22	*ND*	25	3.5
Oct-2020	*ND*	*NA*	*ND*	*ND*	4.4	*0.068 J*	*ND*	4.69	22.1	*ND*	20	3.8
Apr-2021	20	*NA*	*ND*	*ND*	4.3	*0.089 J*	*ND*	6.08	25.1	*ND*	*ND*	3.7
Oct-2021	20	*NA*	*ND*	*ND*	3.8	*0.055 J*	*ND*	5.48	21.1	*ND*	*ND*	3.5
May-2022	*2 J2c*	*NA*	*ND*	*ND*	3.8	*ND*	*ND*	6.2	92.4	*ND*	*ND*	3.5 N3
Oct-2022	*ND*	*NA*	*ND*	*8.4 J*	10	*0.055 J*	*ND*	5.25	84.8	*ND*	*ND*	3.9 N3
May-2023	*1 J2c*	*NA*	*ND*	29.6	5.1	*0.06 J*	*ND*	5.09	52	*ND*	17	4.2 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-27***													
Mar-2013	ND	ND	0.006 J	ND	ND	0.877	0.928	0.0074 J	0.000939 J	0.0023 J	0.0538	0.0056	ND	0.302	0.311
Oct-2013	ND	ND	0.006 J	ND	ND	0.835	0.803	0.0034 J	0.00098 J	0.0019 J	0.0606	ND	0.000286 J	0.313	0.307
Mar-2014	0.0017 J	0.000343 J	0.007 J	ND	ND	0.869	0.872	0.0039 J	0.000823 J	0.0025 J	0.287	0.0077 J	ND	0.337	0.328
Oct-2014	0.0012 J	0.000421 J	0.0173	ND	ND	0.915	0.82	0.0062 J	0.000869 J	0.0024 J	0.737	ND	0.0012 J	0.348	0.273
Apr-2015	0.000396 J	ND	0.0065 J	ND	ND	0.899	0.887	0.0015 J	0.000804 J	0.0019 J	0.0623	ND	ND	0.323	0.326
Nov-2015	ND	ND	0.0065 J	ND	0.00008 J	1.13	0.872	0.0014 J	0.000764 J	0.0023 J	0.0973	ND	ND	0.346	0.337
May-2016	ND	ND	0.0065	ND	ND	0.875	0.926	0.0024 J	0.00078 J	0.0023 J	0.385	ND	ND	0.34	0.34
Oct-2016	ND	ND	0.0073	ND	ND	0.77	0.8	0.00062 J	0.0008 J	0.0022 J	ND	ND	ND	0.332	0.35
May-2017	ND	ND	0.0064	ND	ND	0.902	0.721	0.0015 J	0.00084 J	0.0025 J	0.0661 J	ND	ND	0.338	0.327
Oct-2017	ND	ND	0.006	ND	ND	0.8	0.764	0.00092 J	0.00075 J	0.0023 J	ND	ND	ND	0.358	0.305
May-2018	0.000039 J	ND	0.0065	ND	0.000025 J	0.8 J	0.76 J	0.0027 J	0.00077	0.0048 B	ND	ND	ND	0.34 J	0.32 J
Nov-2018	ND	ND	0.0064	0.000027 J	0.000046 J	0.88 J	0.86 J	0.0033 J	0.00082	0.0068	0.026	ND	0.00018 J	0.37 J	0.34 J
May-2019	ND	ND	0.0069	ND	ND	ND	ND	ND	0.00091	0.0074	ND	ND	ND	ND	ND
Oct-2019	0.00011 J	ND	0.0067	ND	0.00025 J	0.8	0.79 J	0.0055 J	0.00093	0.021	0.035 J	0.0088 J	0.000054 J	0.36	0.34 J
May-2020	0.000078 J	ND	0.0064	ND	0.0001 J	0.8	0.82 J	0.0068 J	0.00097	0.022	0.039 J	0.014 J	ND	0.36	0.36 J
Oct-2020	0.00052 J	ND	0.028	ND	ND	0.92	0.78 J	0.054	0.0084	ND	4.2	0.06	ND	0.38	0.36 J
Apr-2021	ND	ND	0.011	ND	ND	0.85 J	0.72 J	0.013	0.0018 J	0.02	0.76	ND	ND	0.38	0.33
Oct-2021	ND	ND	0.0074	ND	ND	0.81	0.84	0.0022 J	0.0011 J	0.0146	0.54	0.014 J	0.00011 J	0.36 J	0.37 J
May-2022	ND	0.0015 JB	0.0077	ND	ND	0.79	0.9	0.0018 J	0.00091 J	0.0071	0.036 J	ND	ND	0.37 J	0.4 J
Oct-2022	ND	ND	0.0079	ND	ND	0.88	0.85	0.0028	0.001 J	0.0058	ND	0.14	ND	0.4 J	0.4 J
May-2023	ND	ND	0.0077	ND	ND	0.95	0.9	0.0031	0.0012 J	0.0024 J	0.04 J	ND	ND	0.44 J	0.41 J

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-27*												
Mar-2013	0.0078 J	0.0079 J	0.000098 J	0.0045 J	0.437 J	0.45	ND	ND	1.41	1.46	ND	ND	0.0177
Oct-2013	0.0079 J	0.0073 J	ND	0.0031 J	0.377 J	0.344 J	ND	ND	1.45	1.43	ND	0.000916 J	0.0184
Mar-2014	0.0078 J	0.0071 J	ND	0.0028 J	0.491 J	0.441 J	ND	ND	1.53	1.63	0.000579 J	0.0011 J	0.0086 J
Oct-2014	0.0111	0.0087 J	ND	0.0035 J	0.58	0.372 J	ND	ND	1.62	1.65	ND	0.003 J	0.0089 J
Apr-2015	0.0078 J	0.0078 J	ND	0.0018 J	0.377 J	0.389 J	ND	ND	1.51	1.6	ND	ND	0.0094 J
Nov-2015	0.0074 J	0.007 J	ND	0.0017 J	0.444 J	0.422 J	ND	ND	1.64	1.64	ND	0.000256 J	0.0086 J
May-2016	0.007	0.0067	ND	0.0022 J	0.383 J	0.363 J	ND	ND	1.49	1.48	ND	0.00039 J	0.008 J
Oct-2016	0.0067	0.006	ND	0.0013 J	0.427	0.415	ND	ND	1.71	1.76	ND	ND	0.0037 J
May-2017	0.0073	0.0054	ND	0.005	0.418	0.38 J	ND	ND	1.52	1.36	ND	0.00024 J	0.0049 JB
Oct-2017	0.0062	0.0056	ND	0.0016 J	0.444	0.416	ND	ND	1.82	1.86	ND	ND	0.0051 J
May-2018	0.0053	0.0049	ND	0.0024	ND	ND	0.00045 JB	ND	1.7 J	1.9 J	ND	0.0041	0.0061 B
Nov-2018	0.0073	0.0054	ND	0.0028	ND	ND	0.00013 J	ND	2.5 JB	2.2 J	ND	0.0028	0.0069
May-2019	0.0062	0.0051	ND	0.0028	ND	ND	ND	ND	ND	ND	ND	0.0038	0.0053
Oct-2019	0.0051	0.0046	ND	0.0033	ND	ND	ND	ND	2.2 J	2 J	ND	0.0008 J	0.014
May-2020	0.005	0.0045	ND	0.0044	ND	ND	ND	ND	2.1 J	2.1 J	ND	0.003	0.0077
Oct-2020	0.024	0.012	ND	0.045	ND	ND	ND	ND	ND	ND	ND	0.0065	ND
Apr-2021	0.0077	0.0058	ND	0.013	0.53	0.41 J	ND	ND	2.4	2.3	ND	0.0012 J	0.0033 J
Oct-2021	0.0067	0.0074	ND	0.0042	0.51	0.446 J	ND	ND	2.2	2.2	ND	0.00036 J	0.0028 J
May-2022	0.0052	0.0057	ND	0.0026	0.44 J	0.37 J	ND	ND	2.2	2.5	ND	0.00066 JB	ND
Oct-2022	0.006	0.0056	ND	0.0062	0.51	0.49 J	ND	ND	2.4	2.4	ND	ND	0.0071
May-2023	0.0066	0.0059	ND	0.0039	0.56 B	0.43 J	ND	ND	2.5 B	2.4	ND	ND	0.031

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-27*																
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-27*																
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-27***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.18 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.206 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-27*															
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-27***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-27***															
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-28***											
Mar-2013	4.52	4.52	*0.0847 J*	*ND*	4.04	0.0805	*ND*	6.2	20	*0.533 J*	*ND*	4.82
Oct-2013	4.4	4.4	*ND*	*ND*	3.95	0.112	*ND*	5.6	21.4	*0.517 J*	46	4.9
Mar-2014	4.32	4.32	*ND*	*ND*	4.19	0.0818	*ND*	5.4	23.5	*ND*	*ND*	5.44
Oct-2014	*ND*	*ND*	*0.106 J*	*ND*	4.85	0.0941	*ND*	4.7	28.3	*ND*	36	5.31
Apr-2015	4.64	4.64	*ND*	*ND*	5.29	0.0508	*ND*	4.1	25.7	*ND*	*ND*	6
Nov-2015	3.72	3.72	*ND*	*ND*	6.06	0.0781	*ND*	5.2	47.9	*ND*	*12 J*	6.59
May-2016	2.24	2.24	*ND*	*ND*	6.46	0.0791	*ND*	5.2	39	*ND*	27	6.4
Oct-2016	*ND*	*ND*	*ND*	*ND*	7.83	*NA*	*NA*	5.3	47.6	*0.717 J*	31	6.8
May-2017	2.68	2.68	*ND*	*5 J*	9.52	0.16	*ND*	5	58.6	*0.545 J*	*22 J*	7.7
Oct-2017	*ND*	*ND*	*ND*	*ND*	12.3	0.101	*ND*	5	79.6	*0.542 J*	29	9.6
May-2018	*2 JB*	*ND*	*0.066 J*	*ND*	14.6	*0.086 J*	*ND*	5.4	79.2	*ND*	37	10.7
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	19.5	*0.079 J*	*ND*	4.68	70.1	*ND*	83	13.2
May-2019	*ND*	*NA*	*ND*	*ND*	28.6	*ND*	*ND*	4.28	78.8	*ND*	67	16.8
Oct-2019	*2.5 J*	*NA*	*ND*	*ND*	40.6	*0.098 J*	*ND*	4.29	139.3	*ND*	85	22.3
May-2020	*ND*	*NA*	*ND*	*ND*	45.1	*0.087 J*	*ND*	4.44	141.9	*ND*	94	20.3
Oct-2020	*ND*	*NA*	*ND*	*6.1 J*	43.5	*0.058 J*	*ND*	5.03	170.4	*ND*	90	23.8
Apr-2021	*1 J3c*	*NA*	*ND*	*ND*	54.5	*0.076 J*	*ND*	4.63	204.2	*ND*	80	25
Oct-2021	*1 J2c*	*NA*	*ND*	*ND*	51.6	*0.075 J*	*ND*	4.82	235.9	*ND*	86	25.4
May-2022	*1 J2c*	*NA*	*ND*	*ND*	48.5	*0.061 J*	*ND*	4.66	213.3	*ND*	100	26.7 N3
Oct-2022	*2 JB3c*	*NA*	*ND*	*ND*	50.3	*0.08 J*	*ND*	4.73	204.2	*ND*	116	26.3 N3
May-2023	*ND*	*NA*	*ND*	34.2	56.4	*0.077 J*	*ND*	4.85	221.8	*ND*	114	31 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-28***													
Mar-2013	ND	ND	0.0103	ND	ND	1.16	1.27	0.0017 J	0.0025 J	0.0013 J	0.0052 J	0.0051 J	ND	0.466	0.522
Oct-2013	ND	ND	0.0118	ND	ND	1.16	1.14	0.0013 J	0.0027 J	0.000921 J	ND	ND	ND	0.487	0.485
Mar-2014	0.000945 J	ND	0.0116	ND	ND	1.26	1.23	0.000968 J	0.0028 J	0.0013 J	0.0131 J	0.0044 J	ND	0.56	0.549
Oct-2014	0.000718 J	ND	0.0125	ND	ND	1.28	1.29	0.0021 J	0.0027 J	0.000985 J	0.0179 J	ND	ND	0.515	0.499
Apr-2015	0.000611 J	ND	0.0142	ND	ND	1.41	1.42	0.0027 J	0.0028 J	0.0013 J	0.0482 J	ND	ND	0.602	0.611
Nov-2015	ND	0.000252 J	0.0154	ND	ND	1.51	1.51	0.000811 J	0.0029 J	0.0011 J	ND	ND	0.000474 J	0.683	0.695
May-2016	ND	ND	0.0181	0.000071 J	ND	1.4	1.59	0.002 J	0.0026	0.0011 J	ND	ND	ND	0.695	0.716
Oct-2016	ND	ND	0.0175	ND	ND	1.54	1.54	0.003 J	0.0029	0.0013 J	0.0662 J	ND	ND	0.726	0.756
May-2017	ND	ND	0.0172	ND	ND	1.71	1.7	0.0018 J	0.003	0.0013 J	ND	ND	ND	0.829	0.832
Oct-2017	ND	ND	0.0216	0.000092 J	ND	2.19	1.9	0.0014 J	0.003	0.001 J	ND	ND	ND	1.01	0.986
May-2018	0.000045 J	ND	0.028	0.0001 J	0.000029 J	2.4	2.4	0.0039 J	0.003	0.0025 B	0.044	ND	ND	1.1	1.1
Nov-2018	ND	ND	0.029	0.00012 J	0.000039 J	3	2.9	0.0098	0.0028	0.0015 J	0.072	0.029	0.00014 J	1.4	1.4
May-2019	ND	ND	0.041	ND	ND	3.8	3.9	0.0087	0.0038	0.0025	ND	0.021	ND	1.8	1.8
Oct-2019	0.000099 J	ND	0.052	0.00021 J	0.00026 J	5.1	5	0.011	0.0045	0.0057	0.098 J	0.048	0.000073 J	2.3	2.3
May-2020	0.000088 J	ND	0.05	0.00018 J	ND	4.6	3.2	0.0071	0.0045	0.0026	0.062 J	ND	ND	2.2	3
Oct-2020	ND	ND	0.068	0.00029 J	ND	5.3	5.1	0.081	0.013	0.0062	2.2	0.29	ND	2.6	2.5
Apr-2021	ND	ND	0.064	0.00018 J	ND	5.6	5.8	0.0085	0.006	ND	0.11	0.06 J	ND	2.7	2.8
Oct-2021	0.000063 J	ND	0.066	0.0002 J	ND	5.6	6.2	0.0043	0.0059	0.0018 J	0.2	0.036 J	0.000051 J	2.8	3
May-2022	ND	ND	0.07	0.00016 J	ND	5.8	5.9	0.0063	0.0076	0.002 J	0.18	0.067	ND	2.9	3.1
Oct-2022	ND	ND	0.067	ND	ND	5.8	6.5	0.01	0.022	0.0025 J	0.72	0.14	ND	2.9	3.1
May-2023	ND	ND	0.077	0.0002 J	ND	6.7	6.4	0.025	0.019	0.0043	0.67	0.09	ND	3.4	3.2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-28***												
Mar-2013	0.0077 J	0.0086 J	0.000105 J	0.0014 J	0.39 J	0.412 J	ND	ND	1.47	1.7	ND	ND	0.0154
Oct-2013	0.0074 J	0.0071 J	ND	0.0019 J	0.36 J	0.349 J	ND	ND	1.7	1.71	ND	0.001 J	0.0136
Mar-2014	0.0072 J	0.0072 J	ND	0.0018 J	0.477 J	0.469 J	ND	ND	1.86	1.81	ND	ND	0.0087 J
Oct-2014	0.0072 J	0.0069 J	ND	0.0028 J	0.431 J	0.43 J	ND	ND	1.98	1.97	ND	ND	0.0093 J
Apr-2015	0.013	0.0077 J	ND	0.0032 J	0.452 J	0.464 J	ND	ND	2.19	2.24	ND	ND	0.0079 J
Nov-2015	0.0085 J	0.0087 J	ND	0.0023 J	0.497 J	0.497 J	ND	ND	2.6	2.69	0.000168 J	ND	0.0065 J
May-2016	0.0087	0.0089	ND	0.0027 J	0.465	0.454	ND	ND	2.62	2.69	ND	ND	0.0075 J
Oct-2016	0.0091	0.0083	ND	0.0036 J	0.504	0.533	ND	ND	3.2	3.24	ND	ND	ND
May-2017	0.0098	0.0092	ND	0.0033 J	0.537	0.577	ND	ND	3.8	3.62	ND	ND	0.0045 JB
Oct-2017	0.0096	0.0107	ND	0.003 J	0.613	0.641	ND	ND	4.85	4.65	ND	ND	0.0049 J
May-2018	0.012	0.011	ND	0.0047	ND	ND	0.00018 JB	ND	5.9	6.2	ND	0.0036	0.007 B
Nov-2018	0.015	0.014	ND	0.0087	0.84 J	ND	0.00012 J	ND	8	7.5	ND	0.0024	0.0081
May-2019	0.02	0.019	ND	0.0079	ND	ND	ND	ND	9.5	9.2	ND	0.0056	0.0092
Oct-2019	0.03	0.024	ND	0.011	ND	1.1 J	ND	ND	16.7	16.2	ND	ND	0.017
May-2020	0.026	0.023	ND	0.0084	ND	1.2 J	ND	ND	15.3	7.3	ND	0.0029	0.011
Oct-2020	0.037	0.032	ND	0.072	1.5	1.1	ND	ND	20	19.1	ND	0.007	0.02
Apr-2021	0.027	0.028	0.00006 J	0.015	1.1	1.1	ND	ND	23.2	24.2	ND	ND	0.009 J
Oct-2021	0.026	0.028	ND	0.0097	1.1	1.12	ND	ND	24.4	26.2	ND	ND	0.0082
May-2022	0.028	0.029	ND	0.013	1	1.2	ND	ND	22.7	23.7	ND	ND	0.0085
Oct-2022	0.03	0.03	ND	0.018	1.1	1.2	ND	ND	20.9	23.7	ND	ND	0.014
May-2023	0.036	0.034	ND	0.027	1.3 B	1.1	ND	0.00082 J	23.4	22.9	ND	0.0018 J	0.024

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-28***																
Mar-2013	ND	ND	ND	ND	1.08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	2.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	0.1 J	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	0.1 J	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	0.1 J	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2 JB	ND
Nov-2018	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.63	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-28*																
May-2023	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-28***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.42 J*	*ND*	*ND*	*ND*	*ND*	*ND*	8.46	6.37
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.41 J*	*ND*	*ND*	*ND*	*ND*	*ND*	5.9	6.23
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*9.82 J*	7.38
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.39 J*	*ND*	*ND*	*ND*	*ND*	*ND*	6.82	7.55
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.37 J*	*ND*	*ND*	*ND*	*ND*	*ND*	8.14	8.59
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*18.1 J*	9
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	4.2	4.5
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	4.5	4.7
May-2017	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	3.8	4.6
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	4	4.8
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	8.3	5.1
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4 CL	4.4 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7 CL	4.6 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.3	3.6
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.3	3.4
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	2.3
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.22 J*	*ND*	*0.213 J*	*ND*	*ND*	*ND*	*3.49 J*	5.5
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.1	4.4
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.7	3.5
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5	4.1

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-28*															
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3	3.4

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-28***															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.3	0.16 J	ND	ND	ND	0.29 J	3.88	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	1.58	ND	ND	ND	ND	0.33 J	3.32	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.56	ND	ND	ND	ND	0.34 J	4.15	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	0.33 J	3.09	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	2.04	ND	ND	ND	ND	0.43 J	3.43	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	0.5 J	3.9	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	0.2 J	1.8	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	0.8 J	0.1 J	ND	ND	ND	0.2 J	1.9	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	0.2 J	1.8	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	0.2 J	1.6	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	2.3	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	1.4	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	0.6 J	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.481 JB	ND	ND	0.849 J	0.563 J	ND	ND	ND	0.227 J	1.31 J	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	1.7	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	1.3	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-28***															
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-29***											
Mar-2013	3.68	3.68	*0.0847 J*	*ND*	7.45	0.345	*ND*	6.1	39.4	1.38	19	7.56
Oct-2013	3.84	3.84	*ND*	*ND*	7.1	0.338	*ND*	5.8	39.2	*0.95 J*	44	8.02
Mar-2014	3.64	3.64	*0.108 J*	*ND*	7.5	0.378	*ND*	5.1	40	*0.635 J*	*ND*	8.99
Oct-2014	*ND*	*ND*	*ND*	*ND*	7.85	0.352	*ND*	4.5	37.1	*ND*	32	8.22
Apr-2015	4.76	4.76	*ND*	*ND*	7.91	0.401	*ND*	4.9	39.6	*ND*	27	8.83
Nov-2015	*ND*	*ND*	*ND*	*ND*	8.47	0.453	*ND*	5.1	66.3	*ND*	28	10
May-2016	*ND*	*ND*	*ND*	*ND*	9.01	0.442	*ND*	5	57.4	*0.644 J*	29	9
Oct-2016	*ND*	*ND*	*ND*	*ND*	8.1	*NA*	*NA*	4.9	57.9	*0.951 J*	28	7.9
May-2017	*ND*	*ND*	*ND*	*ND*	8.33	0.438	*ND*	4.9	59.4	*0.855 J*	25	8.3
Oct-2017	*ND*	*ND*	*ND*	*ND*	9.03	0.498	*ND*	5.3	69.4	*0.69 J*	26	8.6
May-2018	*2 JB*	*ND*	*ND*	*ND*	8.6	0.49	*ND*	5.7	59.2	*ND*	27	9.1
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	9.8	0.51	*ND*	4.64	43.1	*ND*	33	10.1
May-2019	*ND*	*NA*	*ND*	*ND*	9.4	0.54	*ND*	4.44	38.1	*ND*	81	9.3
Oct-2019	*ND*	*NA*	*ND*	161 ML	10.1	0.58	*ND*	4.35	48.8	*ND*	44	9.2
May-2020	*ND*	*NA*	*ND*	*ND*	10.5	0.57	*ND*	4.4	49.7	*ND*	30	9.8
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	9.4	0.55	*ND*	4.83	48.3	*ND*	39	9.9
Apr-2021	*1 J3c*	*NA*	*ND*	*ND*	10.7	0.58	*ND*	4.73	62.4	*ND*	21	9.5
Oct-2021	*ND*	*NA*	*ND*	*ND*	9.1	0.66	*ND*	4.84	89.8	*ND*	*ND*	10.4
May-2022	*ND*	*NA*	*ND*	*ND*	9.8	0.6	*ND*	4.64	80.8	*ND*	14	10.2 N3
Oct-2022	*2 JB3c*	*NA*	*ND*	*ND*	11.3	0.61	*ND*	4.74	79.4	*ND*	39	10.1 N3
May-2023	*ND*	*NA*	*ND*	27.4	11.5	0.63	*ND*	4.8	84.7	*ND*	43	10.4 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-29***													
Mar-2013	ND	ND	0.0168	0.000171 J	ND	1.73	2.1	0.0039 J	0.0172	0.004 J	0.0493 J	0.0085 J	ND	0.786	0.903
Oct-2013	ND	ND	0.0214	ND	ND	1.77	1.86	0.0018 J	0.0117	0.0024 J	ND	ND	ND	0.874	0.936
Mar-2014	0.000625 J	0.00023 J	0.0219	ND	ND	1.96	1.99	0.0044 J	0.0078 J	0.0026 J	0.11	0.0084 J	ND	0.992	0.996
Oct-2014	0.000547 J	ND	0.0225	ND	ND	1.86	1.88	0.000879 J	0.0057 J	0.0018 J	0.0223 J	ND	ND	0.867	0.869
Apr-2015	0.000537 J	ND	0.0258	0.000165 J	ND	1.96	1.98	0.000867 J	0.0047 J	0.0019 J	0.0169 J	ND	ND	0.955	0.983
Nov-2015	ND	ND	0.0276	0.000158 J	ND	2.14	1.96	0.00074 J	0.0051 J	0.0022 J	0.0248 J	0.0151 J	0.000367 J	1.13	1.07
May-2016	ND	ND	0.0237	0.00014 J	ND	1.99	1.87	0.0015 J	0.0035	0.0018 J	ND	ND	0.00025 J	0.985	0.93
Oct-2016	ND	ND	0.0209	0.00013 J	ND	1.66	1.71	0.00068 J	0.0032	0.0015 J	ND	ND	ND	0.919	0.971
May-2017	ND	ND	0.0228	0.00013 J	ND	1.7	1.74	0.0017 J	0.0024	0.0017 J	0.0474 J	ND	0.000095 J	0.975	0.988
Oct-2017	ND	ND	0.0241	0.00016 J	ND	1.68	1.84	ND	0.0024	0.0016 J	ND	ND	ND	1.07	1.04
May-2018	0.000048 J	ND	0.028	0.00014 J	0.000033 J	2	1.9	0.0022 J	0.0018	0.0024 B	ND	ND	0.000018 J	1	1
Nov-2018	ND	ND	0.028	0.00017 J	0.000042 J	2.1	2.1	0.0057 J	0.0019	0.0071	0.041	0.019 J	0.00009 J	1.2	1.1
May-2019	ND	ND	0.027	ND	ND	2	2	ND	0.0018	0.0045	ND	ND	ND	1	1.1
Oct-2019	0.00009 J	ND	0.026	0.00016 J	0.00022 J	2	2	0.0047 J	0.0018	0.009	0.013 J	0.0068 J	0.000065 J	1	1.1
May-2020	0.000068 J	ND	0.027	0.00014 J	ND	2.1	1.4	0.0047 J	0.0018	0.0072	0.015 J	ND	ND	1.1	0.75 J
Oct-2020	ND	ND	0.028	ND	ND	2.1	2	0.012 J	0.0019 J	0.0076 J	0.02 J	0.0063 J	ND	1.2	1.1
Apr-2021	ND	ND	0.029	ND	ND	2	2	0.002 J	0.0015 J	ND	ND	ND	ND	1.1	1.1
Oct-2021	ND	ND	0.031	0.00019 J	ND	2.2	2.3	0.002 J	0.002 J	0.0016 J	0.015 J	ND	0.000033 J	1.2	1.2
May-2022	ND	ND	0.03	ND	ND	2.1	2.3	0.0026	0.0019 J	0.0019 J	ND	ND	ND	1.2	1.3
Oct-2022	ND	ND	0.036	0.0002 J	ND	2.1	2.3	0.013	0.0019 J	0.0018 J	0.037 J	ND	ND	1.2	1.2
May-2023	ND	ND	0.031	0.00014 J	ND	2.2	2.2	0.004	0.0021 J	0.0022 J	ND	ND	ND	1.2	1.2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-29*												
Mar-2013	0.0086 J	0.0094 J	0.000099 J	0.0165	0.594	0.681	ND	ND	2.65	3.01	ND	ND	0.0155
Oct-2013	0.0075 J	0.0078 J	ND	0.0081 J	0.569	0.588	ND	ND	2.93	3.13	ND	ND	0.0127
Mar-2014	0.0073 J	0.0072 J	ND	0.0079 J	0.775	0.729	ND	ND	3.09	3.18	ND	ND	0.006 J
Oct-2014	0.0072 J	0.0072 J	ND	0.0041 J	0.672	0.653	0.00076 J	ND	3.14	3.14	ND	ND	ND
Apr-2015	0.0078 J	0.008 J	ND	0.0037 J	0.683	0.703	ND	ND	3.63	3.73	ND	ND	0.0072 J
Nov-2015	0.0085 J	0.0082 J	ND	0.0041 J	0.744	0.686	ND	ND	3.98	3.76	ND	ND	0.0111
May-2016	0.0075	0.0067	ND	0.0032 J	0.688	0.655	ND	ND	3.29	3.28	ND	ND	ND
Oct-2016	0.0069	0.0068	ND	0.0027 J	0.655	0.688	ND	ND	3.23	3.34	ND	ND	ND
May-2017	0.0074	0.0069	ND	0.0032 J	0.731	0.711	ND	ND	3.38	3.18	ND	0.00044 J	ND
Oct-2017	0.0068	0.0074	ND	0.0025 J	0.716	0.741	ND	ND	3.79	3.68	ND	ND	ND
May-2018	0.0071	0.007	ND	0.0031	ND	ND	0.00037 JB	ND	3.7 J	3.9 J	ND	0.0033	0.0044 JB
Nov-2018	0.0097	0.009	ND	0.0054	ND	ND	0.00022 J	ND	4.2 J	4.2 J	ND	0.0024	0.0049 J
May-2019	0.0085	0.008	ND	0.0034	ND	ND	ND	ND	ND	ND	ND	0.0054	ND
Oct-2019	0.008	0.0079	ND	0.003	ND	ND	ND	ND	3.8 J	3.9 J	ND	ND	0.011
May-2020	0.0092	0.0079	ND	0.0036	1.1 J	ND	ND	ND	3.2 J	2.2 J	ND	0.0032	0.0053
Oct-2020	0.0089	0.0085	ND	0.0038	ND	ND	ND	ND	4.2 J	3.7 J	ND	0.0039 J	ND
Apr-2021	0.0089	0.0087	0.00007 J	0.0042 J	0.8	0.75	ND	ND	4.2	4.3	ND	ND	ND
Oct-2021	0.0095	0.0089	ND	0.0031	0.79	0.743	ND	ND	4.5	4.5	ND	ND	0.002 J
May-2022	0.0098	0.011	ND	0.0032	0.76	0.84	ND	ND	4.4	4.8	ND	ND	ND
Oct-2022	0.0097	0.0096	ND	0.0034	0.79	0.83	ND	ND	4.5	5	ND	ND	0.0054 B
May-2023	0.01	0.0095	ND	0.0041	0.79	0.77	ND	ND	4.6	4.4	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-29*																
Mar-2013	ND	ND	ND	ND	1.48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.96	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.68	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.51	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.6	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	0.1 J	ND	ND	1.7	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	0.1 J	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8 J	ND
Nov-2018	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-29*																
May-2023	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-29***															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.88 J	ND	0.45 J	ND	ND	ND	9.31	4.23
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.99 J	ND	0.66 J	ND	ND	ND	6.72	4.54
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.97 J	0.45 J,B	0.54 J	ND	ND	ND	9.34 J	4.81
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.86 J	ND	0.51 J	ND	ND	ND	6.19	3.62
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.72 J	ND	0.53 J	ND	ND	ND	5.59	3.13
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J,B	ND	0.9 J	ND	ND	ND	12.1 J	3.4
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	0.8 J	ND	ND	ND	5.6	3.7
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	0.7 J	ND	ND	ND	6.4	3.9
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	0.9 J	ND	ND	ND	5.3	3.7
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	0.9 J	ND	ND	ND	5	3.5
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	9.1	3.2
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.54 J	ND	0.71 J	ND	ND	ND	4.3 CL	2.3 N3
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3 CL	2.4 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	1.9
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	1.4
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	0.7 J	ND	ND	ND	5.1	1.6
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.571 J	ND	0.751 J	ND	ND	ND	3.23 J	2.34 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	0.7 J	ND	ND	ND	3.9	1.5
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	1
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	0.6 J	ND	ND	ND	3.1	1.1

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-29*															
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.1	*1 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-29***															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	3.78	0.36 J	ND	ND	ND	0.5 J	0.92 J	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	4.65	ND	ND	ND	ND	0.6 J	0.79 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	4.04	ND	ND	ND	ND	0.57 J	0.94 J	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	3.8	ND	ND	ND	ND	0.51 J	0.48 J	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	3.29	ND	ND	ND	ND	0.44 J	0.45 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND
May-2016	ND	ND	ND	0.1 J	ND	ND	ND	3.1	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	0.5 J	0.6 J	ND	ND	ND
May-2017	ND	ND	ND	0.1 J	ND	ND	ND	2.9	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
Oct-2017	ND	ND	ND	0.2 J	ND	ND	ND	2.5	ND	ND	ND	ND	0.4 J	0.4 J	ND	ND	ND
May-2018	ND	ND	ND	ND	1.2	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	0.75 J	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	**1.9 D6**	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	0.274 J	0.46 JB	ND	ND	1.36	ND	ND	ND	ND	0.326 J	0.277 J	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-29***															
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-30***											
Mar-2013	13.4	13.4	*0.107 J*	*ND*	20.6	1.75	*ND*	6.2	108.6	4.07	71	25.2
Oct-2013	12.5	12.5	*ND*	*ND*	21	1.71	*ND*	6.6	99.2	1.24	72	25.2
Mar-2014	8.92	8.92	*ND*	*ND*	21.8	1.8	*ND*	5.8	94.7	*0.863 J*	58	24.2
Oct-2014	3.3	3.3	*ND*	*ND*	21.3	1.82	*ND*	5.5	83	*ND*	70	21.4
Apr-2015	6.52	6.52	*ND*	*ND*	21.5	1.88	*ND*	4.6	84.5	*ND*	68	20.9
Nov-2015	2.84	2.84	*ND*	*ND*	20.9	1.93	*ND*	5.4	129.7	*ND*	45	18.4
May-2016	2.72	2.72	*ND*	*ND*	22.8	1.86	*ND*	5	114.9	*ND*	77	18.9
Oct-2016	*ND*	*ND*	*ND*	*ND*	22.9	*NA*	*NA*	5.3	126.3	1.03	88	17.4
May-2017	*ND*	*ND*	*ND*	*6 J*	23.5	1.84	*ND*	5.1	133.9	*0.765 J*	50	17.3
Oct-2017	*ND*	*ND*	*ND*	*7 J*	23.1	2.02	*ND*	5.3	146.2	*0.73 J*	73	17.5
May-2018	*2 JB*	*ND*	*ND*	*ND*	21.5	2	*ND*	5	131.8	28.6	*ND*	18
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	23.5	2.1	*ND*	4.78	98.3	*ND*	69	18.8
May-2019	*ND*	*NA*	*ND*	*ND*	23.2	2.2	*ND*	4.77	75.9	*ND*	55	18.3
Oct-2019	*2 JH1*	*NA*	*ND*	*ND*	22.7	2.1	*ND*	4.76	100.1	*ND*	72	19.7
May-2020	*2 J*	*NA*	*ND*	*ND*	25.6	2.2	0.01	4.42	99.5	*ND*	73	19.6
Oct-2020	*ND*	*NA*	*ND*	*ND*	23.6	1.9	*ND*	4.77	102.4	*ND*	86	18.3
Apr-2021	*4 J4c*	*NA*	*ND*	*ND*	26	2.2	*ND*	4.84	121.2	*ND*	56	19.3
Oct-2021	*2 J3c*	*NA*	*0.047 J*	*ND*	22.1	2.3	*ND*	4.97	151.4	*ND*	56	18.9
May-2022	*2 J3c*	*NA*	*ND*	*ND*	22.8	2.1	*ND*	4.82	138.6	*ND*	61	20 N3
Oct-2022	*2 J3c*	*NA*	*ND*	*ND*	26.4	2.1	*ND*	4.89	140.8	*ND*	50	19.9 N3
May-2023	*2 J2c*	*NA*	*ND*	25.1	27.3	2.2	*ND*	4.94	140	*ND*	80	19.5 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-30***													
Mar-2013	ND	ND	0.026	ND	ND	7.64	7.6	0.007 J	0.0023 J	0.0013 J	0.29	0.0067 J	ND	1.48	1.48
Oct-2013	ND	ND	0.0302	ND	ND	7.39	7.55	0.0022 J	0.0019 J	0.000525 J	0.0226 J	ND	ND	1.63	1.69
Mar-2014	0.000575 J	0.000086 J	0.0279	ND	ND	7	7.06	0.0013 J	0.0017 J	0.0013 J	0.0734	0.0057 J	ND	1.64	1.63
Oct-2014	0.0004 J	ND	0.0289	ND	ND	5.96	5.94	0.0011 J	0.0018 J	0.000821 J	0.0747	ND	ND	1.57	1.4
Apr-2015	0.000927 J	ND	0.031	ND	ND	5.79	5.78	0.000877 J	0.0019 J	0.0015 J	0.0312 J	0.0135 J	ND	1.57	1.57
Nov-2015	ND	ND	0.0284	0.000066 J	0.000064 J	4.82	4.68	0.000609 J	0.0017 J	0.0016 J	0.0353 J	ND	0.00038 J	1.55	1.53
May-2016	ND	ND	0.0307	0.00012 J	ND	4.89	4.64	0.0015 J	0.002	0.002 J	ND	ND	ND	1.61	1.58
Oct-2016	ND	ND	0.0274	ND	ND	4.41	4.47	0.0017 J	0.002	0.0014 J	ND	ND	ND	1.55	1.54
May-2017	ND	ND	0.0317	0.00011 J	ND	4.28	4.33	0.00079 J	0.002	0.002 J	ND	ND	ND	1.61	1.6
Oct-2017	ND	ND	0.0263	0.00011 J	ND	4.27	4.48	ND	0.0018	0.0014 J	ND	ND	ND	1.66	1.58
May-2018	0.000036 JB	ND	0.032	0.0001 J	0.000058 J	4.5	4.5	0.0027 JB	0.0019	0.0026 B	0.013 J	ND	ND	1.6	1.7
Nov-2018	ND	ND	0.032	0.00012 J	0.000064 J	4.6	4.6	0.0032 J	0.002	0.0018 J	0.016 J	ND	0.000033 J	1.8	1.7
May-2019	ND	ND	0.032	ND	ND	4.5	4.5	ND	0.0021	0.0033	ND	ND	ND	1.7	1.7
Oct-2019	0.000094 JB	ND	0.031	0.000099 J	0.00028 JB	4.9	4.5	0.0042 J	0.0021	0.0039	0.021 J	0.018 J	0.000075 JB	1.8	1.7
May-2020	0.000061 J	ND	0.033	0.0001 J	ND	4.8	4.8	0.0047 J	0.0022	0.014	0.024 J	0.011 J	ND	1.8	1.8
Oct-2020	ND	ND	0.033	ND	ND	4.5	4.5	0.0073 JB	0.0025 J	ND	0.0093 J	ND	ND	1.7	1.8
Apr-2021	ND	ND	0.034	ND	ND	4.7	4.3	0.00081 J	0.0023 J	0.0053	ND	ND	ND	1.9	1.7
Oct-2021	ND	ND	0.036	ND	ND	4.6	4.7	0.0019 J	0.0025 J	0.0015 J	0.012 J	ND	ND	1.8	1.8
May-2022	ND	ND	0.036	ND	ND	4.8	5.4	0.0018 J	0.0023 J	0.0015 J	ND	ND	ND	1.9	2.1
Oct-2022	ND	ND	0.035	0.00012 J	ND	4.8	5.3	0.002 J	0.0025 J	0.0019 J	ND	ND	ND	1.9	2
May-2023	ND	ND	0.037	0.0001 J	ND	4.8	5	0.0015 J	0.0026	0.0015 J	ND	ND	ND	1.9	1.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-30*												
Mar-2013	0.0145	0.0146	0.000097 J	0.0055 J	1.45	1.35	ND	ND	12.1	12.3	0.000257 J	ND	0.019
Oct-2013	0.0106	0.0108	ND	0.0032 J	1.18	1.2	ND	ND	10.4	10.6	ND	ND	0.0156
Mar-2014	0.0087 J	0.0085 J	ND	0.0031 J	1.39	1.4	ND	ND	10.3	10.4	0.000698 J	ND	0.0077 J
Oct-2014	0.0086 J	0.0083 J	ND	0.003 J	1.38	1.37	ND	ND	10.2	10.1	ND	ND	0.0073 J
Apr-2015	0.009 J	0.0092 J	ND	0.0031 J	1.35	1.35	ND	ND	10.8	10.8	ND	ND	0.0106
Nov-2015	0.0086 J	0.0088 J	ND	0.0029 J	1.32	1.31	ND	ND	10.6	10.5	ND	ND	0.0071 J
May-2016	0.0097	0.0096	ND	0.0035 J	1.26	1.25	ND	ND	10.8	10.5	ND	ND	ND
Oct-2016	0.0114	0.0087	ND	0.0042	1.35	1.34	ND	ND	10.5	10.7	ND	ND	0.0049 J
May-2017	0.0096	0.0092	ND	0.0032 J	1.37	1.36	ND	ND	10.5	10.4	ND	ND	0.0051 JB
Oct-2017	0.0089	0.0095	ND	0.0032 J	1.34	1.38	ND	ND	10.9	10.4	ND	ND	ND
May-2018	0.009	0.0093	ND	0.004	1.4 J	0.88 J	ND	ND	10.2	10.7	0.00023 J	0.0032 B	0.0061
Nov-2018	0.01	0.0099	ND	0.0043	1.5 J	1 J	0.00016 J	ND	9.9	10.7	ND	0.0025	0.0062
May-2019	0.01	0.01	ND	0.006	ND	ND	ND	ND	9.6	9	ND	0.0051	0.0057
Oct-2019	0.011	0.01	ND	0.005	1.6 J	1.6 J	ND	ND	10.9	10.5	ND	ND	0.011 B
May-2020	0.012	0.01	ND	0.0054	1.6 J	1.4 J	ND	ND	9.8	10.6	ND	0.0033	0.007
Oct-2020	0.01	0.01	ND	0.004	1.4 J	1.3 J	ND	ND	10.2	10.3	ND	0.0032 JB	ND
Apr-2021	0.011	0.01	ND	0.0041 J	1.5	1.4	ND	ND	12.4	11.8	ND	ND	0.0042 J
Oct-2021	0.011	0.011	ND	0.0043	1.5	1.41	ND	ND	11.8	11.5	ND	ND	0.0036 J
May-2022	0.012	0.013	ND	0.0042	1.4	1.6	ND	ND	11.1	12	ND	ND	ND
Oct-2022	0.012	0.012	ND	0.0047	1.5	1.7	ND	ND	11.3	12.9	ND	ND	0.0054
May-2023	0.012	0.011	ND	0.0046	1.5	1.6	ND	ND	11	11.3	ND	ND	0.0047 J

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-30*																
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-30*																
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-30***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.34 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*0.39 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.181 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-30*															
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-30***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*0.89 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-30***															
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

HISTORICAL TABLES –
COMAR Wells

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-07***											
Nov-1993	10	10	0.1	ND	2.9	0.3	ND	5.75	31.5	ND	ND	3.38
Apr-1994	10	10	0.1	ND	3	0.3	ND	5.61	22.3	3	20	3.4
Apr-1995	ND	ND	ND	ND	2.7	0.3	ND	5.2	21.6	2.1	33	2.3
Apr-1997	ND	8	ND	ND	2.5	0.17	ND	NA	NA	ND	80	9.6
Oct-1997	2	2	0.23	ND	ND	ND	ND	6.17	39.7	ND	40	6.5
Apr-1998	ND	ND	0.21	ND	2.17	0.38	ND	6.37	41.9	0.65	12	3.1
Apr-1999	ND	ND	0.74	ND	3.88	0.34	ND	5.32	25.7	ND	28	3.7
Oct-1999	ND	ND	0.08	ND	3.12	0.433	ND	5.12	23.1	ND	47	3.1
Apr-2000	2	2	ND	ND	2.3	0.4	ND	5.85	20	ND	19	4.2
Oct-2000	3	NA	ND	ND	2.61	ND	ND	5.41	27.5	ND	ND	3.45
Apr-2001	3.3	NA	ND	ND	1.49	ND	ND	NA	NA	ND	22	3.49
Sep-2001	6	6	ND	ND	4.04	1.3	ND	5.17	24	ND	25	4.7
Mar-2002	4	4	ND	ND	1.49	0.282	ND	5.6	28.1	ND	21	3.79
Sep-2002	5	5	ND	ND	3.19	ND	ND	5.6	28.3	ND	32	5.2
Mar-2003	5	5	ND	ND	3.37	ND	ND	5.5	31.2	ND	21	5.64
Oct-2003	4.3	4.3	ND	ND	2.69	0.289	ND	5.3	25.7	ND	42	4.97
Apr-2004	3.2	3.2	ND	ND	2.69	0.27	ND	5.5	22.3	ND	41	3.71
Oct-2004	8.1	8.1	ND	ND	2.94	0.32	ND	5.7	22.4	ND	19	11
Apr-2005	3.6	3.6	ND	ND	2.63	0.32	ND	5.7	22.4	ND	36	4.3
Oct-2005	11	11	ND	ND	3.06	0.3	ND	4.8	34.5	ND	34	10
Mar-2006	7.1	7.1	ND	ND	2.84	0.32	ND	5.1	28.9	0.58	22	5.45
Sep-2006	4.3	4.3	ND	ND	2.9	0.41	ND	5.5	25.5	ND	27	3.85
Mar-2007	5.1	5.1	ND	ND	3.03	0.38	ND	5.2	23.3	ND	ND	3.98
Sep-2007	6.3	6.3	ND	ND	7.78	ND	ND	5.2	25.6	ND	21	5.54
Mar-2008	6.3	6.3	ND	ND	7.05	ND	ND	5.4	27.1	ND	31	5.67
Sep-2008	7.3	7.3	ND	ND	3.16	ND	ND	5.2	24.2	ND	31	4.4
Mar-2009	20	20	ND	ND	2.44	0.11	ND	5.6	31.9	ND	11	13.9
Oct-2009	35	35	ND	ND	2.29	0.08	ND	5.1	26	ND	49	24.9
Apr-2010	22.5	22.5	ND	ND	3.07	0.08	ND	4.8	21.7	ND	39	18.2
Oct-2010	30	30	ND	ND	2.91	ND	ND	4.5	25.4	ND	27	27.6
Apr-2011	24	24	ND	ND	2.82	0.1	ND	4.3	26.6	ND	34	27.4
Sep-2011	26	26	ND	ND	2.58	ND	ND	5.7	24.9	ND	28	18.8
Mar-2012	32	32	ND	ND	2.51	ND	ND	4.7	24.8	ND	42	22.4
Sep-2012	7.04	7.04	ND	ND	2.93	0.285	ND	4.1	24.4	ND	20	4.27
Mar-2013	11.4	11.4	0.159 J	79.5	3.17	0.245	ND	4.8	38.7	0.983 J	42	7.08
Oct-2013	7.2	7.2	ND	ND	3.38	0.278	ND	6.2	29.8	0.521 J	ND	4.86
Mar-2014	8.8	8.8	ND	ND	3.88	0.193	ND	5.9	30.5	ND	32	4.85

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-07***											
Oct-2014	*ND*	*ND*	*ND*	*5 J*	4.4	0.261	*ND*	5.3	27.1	*ND*	*ND*	4.89
Apr-2015	7.56	7.56	*ND*	*ND*	3.93	0.33	*ND*	4.5	31.5	*ND*	*ND*	5.34
Nov-2015	5.56	5.56	*ND*	10	5.09	0.342	*ND*	5.9	55.3	*ND*	*20 J*	5.1
May-2016	8.16	8.16	*ND*	*ND*	6.53	*ND*	*ND*	5.9	68.3	*ND*	28	7.2
Oct-2016	5.6	5.6	*ND*	*ND*	6.47	*NA*	*NA*	5.7	61.3	*0.538 J*	30	7.2
May-2017	17.3	17.3	*ND*	*ND*	4.48	0.0902	*ND*	5.9	84.5	*0.515 J*	30	19.1
Oct-2017	8.2	8.2	*0.0707 J*	*ND*	11.2	0.378	*ND*	6.1	89.2	*ND*	35	9.3
May-2018	10 B	10	*ND*	*ND*	14	*ND*	0.029	5.8	95.4	*ND*	53	10.7
Nov-2018	10 B	10	*ND*	*ND*	14.4	*ND*	0.1	6.09	92.5	*ND*	*ND*	10.1
May-2019	*ND*	*NA*	*ND*	*ND*	11.2	*ND*	0.16	5.72	59	*ND*	18	11.4
Oct-2019	*2.5 JH1*	*NA*	*ND*	*6 J*	10.5	0.25	0.032 H1	5.86	78.4	*ND*	68	11.4
May-2020	24	*NA*	*ND*	*6.9 J*	11.1	*ND*	0.012	5.57	111.6	*ND*	57	14.2
Oct-2020	28	*NA*	*ND*	*4.8 J*	11.2	0.16	*0.0094 J*	5.61	99.7	*ND*	65	18
Apr-2021	20	*NA*	*ND*	*ND*	12.3	0.17	*ND*	6.19	123	*ND*	*ND*	17.2
Oct-2021	20	*NA*	*ND*	*ND*	9.3	0.13	*ND*	6.22	112.7	*ND*	51	17.1
May-2022	24	*NA*	*ND*	*ND*	8.7	*0.063 J*	0.017	6.2	130.2	*ND*	38	21.2 N3
Oct-2022	24	*NA*	*ND*	*6.1 J*	12.4	0.12	*ND*	6.14	126.2	*ND*	41	18.8 N3
May-2023	24	*NA*	*ND*	*ND*	12.2	0.17	0.015	6.02	120.2	*ND*	48	17.9 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-07*													
Nov-1993	NA	ND	ND	NA	ND	0.94	NA	ND	NA	ND	25.5	0.82	ND	0.25	NA
Apr-1994	NA	ND	ND	NA	ND	0.9	NA	ND	NA	ND	1.79	0.26	ND	0.28	NA
Apr-1995	ND	ND	0.7	ND	ND	0.54	NA	ND	ND	ND	5.3	0.41	ND	0.24	NA
Oct-1996	ND	ND	0.011	ND	ND	0.7	0.7	ND	ND	ND	0.55	0.22	ND	ND	0.17
Apr-1997	ND	ND	0.034	ND	ND	3	1.4	ND	ND	ND	4.3	2.1	ND	0.56	ND
Oct-1997	ND	ND	0.014	ND	ND	0.842	0.83	ND	ND	ND	23.9	0.846	ND	0.239	0.234
Apr-1998	ND	ND	0.014	ND	ND	0.841	0.821	ND	ND	ND	23.1	0.767	ND	0.249	0.246
Apr-1999	ND	ND	0.014	ND	ND	1.03	1.01	ND	ND	ND	22	0.77	ND	0.268	0.26
Oct-1999	ND	ND	0.017	ND	ND	1.35	0.995	ND	ND	ND	45	0.831	ND	0.323	0.251
Apr-2000	ND	ND	0.015	ND	ND	1.11	0.823	ND	ND	0.011	33.1	0.885	ND	0.357	0.262
Oct-2000	ND	ND	0.014	ND	ND	0.911	0.869	ND	ND	ND	24.3	0.718	ND	0.284	0.286
Apr-2001	ND	ND	0.014	ND	ND	0.916	NA	ND	ND	ND	20.7	NA	ND	0.292	NA
Sep-2001	ND	ND	0.027	ND	ND	1.38	0.964	ND	ND	ND	97.5	0.65	0.003	0.305	0.276
Mar-2002	ND	ND	0.015	ND	ND	1.11	1.04	ND	ND	ND	22.5	1.11	ND	0.249	0.26
Sep-2002	ND	ND	0.021	ND	ND	1.6	1.11	ND	ND	ND	59.5	1.35	0.002	0.296	0.244
Mar-2003	ND	ND	0.019	ND	ND	1.81	0.994	ND	ND	ND	23.3	0.984	0.002	0.275	0.242
Oct-2003	ND	ND	0.018	ND	ND	1.47	1.08	ND	ND	0.012	10.8	0.173	0.003	0.314	0.267
Apr-2004	ND	ND	0.014	ND	ND	1.01	0.894	ND	ND	ND	8.44	0.651	ND	0.286	0.266
Oct-2004	ND	ND	0.051	ND	ND	3.81	0.928	ND	ND	ND	152	0.561	0.011	0.349	0.267
Apr-2005	ND	ND	0.022	ND	ND	1.29	1.04	ND	ND	ND	30.6	1.14	0.004	0.271	0.258
Oct-2005	ND	ND	0.013	ND	ND	3.47	3.53	ND	ND	ND	1.25	0.248	ND	0.333	0.306

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-07***													
Mar-2006	ND	ND	0.01	ND	ND	1.86	1.86	ND	ND	ND	0.886	0.886	ND	0.2	0.2
Sep-2006	ND	ND	0.012	ND	ND	1.13	1.37	ND	ND	ND	6.85	0.43	ND	0.249	0.257
Mar-2007	ND	ND	0.016	ND	ND	1.16	1.37	ND	ND	ND	12.6	0.521	ND	0.261	0.252
Sep-2007	ND	0.003	0.013	ND	ND	1.79	1.71	ND	ND	ND	0.933	0.662	ND	0.261	0.258
Mar-2008	ND	ND	0.015	ND	ND	1.85	1.78	ND	ND	ND	9.16	0.848	ND	0.255	0.23
Sep-2008	ND	ND	0.013	ND	ND	1.35	1.25	ND	ND	ND	4.05	0.759	ND	0.251	0.247
Mar-2009	ND	ND	0.012	ND	ND	5.02	4.37	ND	ND	ND	8.26	4.53	ND	0.33	0.298
Oct-2009	ND	ND	0.018	ND	ND	9.1	1.41	ND	ND	ND	14.3	1.06	ND	0.532	0.259
Apr-2010	ND	ND	0.024	ND	ND	6.56	5.83	ND	ND	ND	10.4	7.39	ND	0.444	0.396
Oct-2010	ND	0.002	0.018	ND	ND	9.96	9.5	ND	ND	0.018	11.4	9.55	ND	0.644	0.573
Apr-2011	ND	ND	0.016	ND	ND	6.14	5.15	ND	ND	ND	8.2	6.96	ND	0.516	0.4
Sep-2011	ND	ND	0.017	ND	ND	6.66	5.28	ND	ND	ND	10.3	8.49	ND	0.526	0.424
Mar-2012	ND	ND	0.019	ND	ND	7.91	8.26	ND	ND	ND	7.03	6.67	ND	0.634	0.652
Sep-2012	ND	ND	0.0161	0.000286 J	ND	1.24	1.39	ND	0.0018 J	0.0045 J	16.6	1.6	0.000551 J	0.285	0.29
Mar-2013	ND	ND	0.243	**0.0092 R,C**	0.0025 J	2.41	2.33	0.0533	0.0095 J	0.146	1940	2.71	0.0067	0.259	0.338
Jun-2013	NA	NA	NA	0.00015 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2013	0.000272 J	ND	0.0273	0.000789 J	0.000091 J	1.53	1.31	0.0069 J	0.0022 J	0.0085 J	103	1.37	0.000725 J	0.253	0.228
Mar-2014	0.000677 J	ND	0.0137	0.000208 J	ND	1.49	1.22	0.0013 J	0.0015 J	0.000861 J	3.46	1.62	ND	0.273	0.275
Oct-2014	0.00029 J	ND	0.0199	0.000316 J	ND	1.36	1.55	0.000384 J	0.0019 J	0.0035 J	8.18	1.76	ND	0.364	0.34
Apr-2015	0.000734 J	ND	0.0175	0.000333 J	ND	1.59	1.52	0.000813 J	0.0017 J	0.0026 J	5.64	1.98	ND	0.33	0.326
Nov-2015	0.000416 J	ND	0.0193	0.000401 J	0.000074 J	1.37	1.3	0.000686 J	0.0026 J	0.0039 J	3.67	1.07	0.000705 J	0.406	0.405
May-2016	ND	ND	0.0228	0.00034 J	ND	2.07	2	0.0011 J	0.0026	0.0038 J	6.63	2.68	0.00032 J	0.499	0.449
Oct-2016	ND	ND	0.0228	0.00039 J	ND	2.14	2.17 J+	0.0012 J	0.0022	0.004 J	9.41	2.92 J+	0.00052 J	0.44	0.44 J+
May-2017	ND	ND	0.0384	0.00043 J	ND	6.49	6.38	0.0151	0.0018	0.0216	30.2	10.3	0.00051 J	0.692	0.608

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-07***													
Oct-2017	*ND*	*ND*	0.0387	*0.00049 J*	*ND*	2.56	3.06	0.0334	0.0048	0.0255	10.3	5.47	*0.00033 J*	0.704	0.695
May-2018	*ND*	*ND*	*0.0439 J*	*0.00063 J*	*ND*	2.8	2.7	*0.0021 J*	*0.0023 J*	*ND*	25.8	5.1	*ND*	*0.89 J*	*0.93 J*
Nov-2018	*ND*	*ND*	0.051	0.001	*0.0001 J*	2.6	2.5	*0.0024 J*	0.0033	0.0082	70.1	6	*0.00038 J*	*0.91 J*	*0.98 J*
May-2019	*ND*	*ND*	0.046	0.00044	*ND*	3.3	3.3	*ND*	0.0029	0.0068	82.2	7.7	*ND*	*ND*	*ND*
Oct-2019	*0.00033 J*	*0.0005 J*	0.042	0.00074	*0.00038 J*	3.3	3.3	0.0072	0.0039	0.0077	42.7	5.4	*0.00058 J*	0.79	*0.78 J*
May-2020	*ND*	*ND*	0.046	*0.00038 J*	*0.00046 J*	4.2	4.5	0.014	*0.0026 J*	0.0088	32.9	17.4	*ND*	0.91	1
Oct-2020	*ND*	*ND*	0.038	*ND*	*ND*	5.6	5.5	*0.0021 J*	0.0025	*ND*	11.6	11.4	*ND*	0.98	*0.96 J*
Apr-2021	*ND*	*ND*	0.043	*0.00018 J*	*ND*	5.2	4.9	*0.0015 J*	*0.0023 J*	*0.0033 J*	16.1	12.3	*ND*	1	0.94
Oct-2021	*0.000051 J*	*ND*	0.042	*0.00035 J*	*ND*	5.4	5.7	*0.0019 J*	0.0036	0.0032	12.4	8.7	*0.000035 J*	0.88	0.91
May-2022	*ND*	*ND*	0.052	*0.00043 J*	*ND*	6.8	6.9	0.0056	0.0032	0.0077	17.6	12.3	*ND*	1.1	1.1
Oct-2022	*ND*	*ND*	0.049	*0.0004 J*	*ND*	6.1	6.3	*0.0013 J*	0.0044	0.003	29.3	10.4	*ND*	0.87	1.1
May-2023	*0.00032 J*	*0.00086 J*	0.057	0.0008	*ND*	5.1	5.2	0.012	0.0067	0.0068	49.4	7.3	*0.00043 J*	1.3	1.3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-07*												
Nov-1993	0.06	NA	ND	NA	1.2	NA	ND	NA	1.5	NA	NA	NA	0.05
Apr-1994	0.03	NA	ND	NA	1.46	NA	ND	NA	1.69	NA	NA	NA	0.05
Apr-1995	ND	NA	ND	ND	1.3	NA	ND	ND	1.3	NA	ND	ND	0.03
Oct-1996	0.015	0.011	NA	ND	ND	ND	ND	ND	2.2	2.4	ND	ND	0.035
Apr-1997	0.099	0.048	ND	ND	4.4	3	ND	ND	2.3	2.3	ND	ND	0.082
Oct-1997	0.024	0.024	NA	0.011	1.3	0.83	ND	ND	1.36	1.37	ND	ND	ND
Apr-1998	0.025	0.04	NA	ND	1.15	1.06	ND	ND	1.56	1.58	ND	ND	0.03
Apr-1999	0.027	0.029	NA	ND	1.82	1.09	ND	ND	1.65	1.61	ND	ND	ND
Oct-1999	0.029	0.026	NA	ND	0.847	1.17	ND	ND	2.14	1.51	ND	ND	0.011
Apr-2000	0.019	0.025	NA	ND	1.2	1.22	ND	ND	2.42	1.56	ND	ND	0.031
Oct-2000	0.022	0.02	NA	ND	1.64	1.23	ND	ND	1.69	1.65	ND	ND	ND
Apr-2001	0.022	NA	NA	ND	1.09	NA	ND	ND	1.61	NA	ND	ND	ND
Sep-2001	0.016	0.02	NA	ND	1.1	1.19	ND	ND	1.59	1.57	ND	ND	ND
Mar-2002	0.03	0.027	NA	ND	1.51	1.66	ND	ND	1.63	1.6	ND	ND	ND
Sep-2002	0.024	0.031	NA	ND	1.74	1.77	ND	ND	2.06	1.47	ND	ND	ND
Mar-2003	0.029	0.021	NA	ND	1.99	0.928	ND	ND	1.54	1.46	ND	ND	ND
Oct-2003	0.014	0.013	NA	ND	2.58	1.25	ND	ND	2.16	1.54	ND	ND	ND
Apr-2004	0.019	0.017	ND	1.58	1.89	1.09	ND	ND	1.58	1.48	ND	ND	ND
Oct-2004	0.082	0.018	ND	ND	1.35	1.13	ND	ND	1.97	1.23	ND	ND	0.023
Apr-2005	0.046	0.022	ND	ND	0.92	0.9	ND	ND	1.6	1.58	ND	ND	ND
Oct-2005	0.032	0.033	ND	ND	0.731	0.761	ND	ND	1.34	1.3	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.662	0.662	ND	ND	1.18	1.18	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-07***												
Sep-2006	0.014	0.015	ND	ND	0.953	1.01	ND	ND	1.31	1.34	ND	ND	ND
Mar-2007	0.014	0.015	ND	ND	0.945	1	ND	ND	1.36	1.37	ND	ND	0.011
Sep-2007	0.02	0.02	ND	ND	0.97	0.977	ND	ND	1.31	1.32	ND	ND	0.018
Mar-2008	0.025	0.022	ND	ND	1.17	1.01	ND	ND	1.47	1.27	ND	ND	ND
Sep-2008	0.023	0.021	ND	ND	1.04	1	ND	ND	1.29	1.25	ND	ND	0.014
Mar-2009	0.125	0.1	ND	ND	1.98	1.76	ND	ND	1.69	1.64	ND	ND	ND
Oct-2009	0.177	0.024	ND	0.012	3.98	0.878	ND	ND	2.62	1.23	ND	ND	ND
Apr-2010	0.321	0.247	ND	ND	2.21	2.08	ND	ND	1.77	1.75	ND	ND	ND
Oct-2010	0.142	0.155	ND	0.019	3.26	3.13	ND	ND	2.19	1.96	ND	ND	ND
Apr-2011	0.119	0.125	ND	ND	3.54	2.78	ND	ND	2.09	1.8	ND	ND	ND
Sep-2011	0.146	0.138	ND	ND	3.59	2.62	ND	ND	2.43	1.92	ND	ND	ND
Mar-2012	0.109	0.092	ND	ND	4.12	4.26	ND	ND	2.51	2.63	ND	ND	ND
Sep-2012	0.0289	0.0286	0.000023 J	0.0032 J	0.949	1.03	ND	ND	1.31	1.35	ND	ND	0.0044 J
Mar-2013	0.32	0.0668	0.00014 J	0.04 J	1.09	1.38	ND	0.000269 J	1.16	1.66	ND	ND	0.109
Oct-2013	0.0542	0.0314	0.000077 J	0.0043 J	0.955	0.85	ND	0.0022 J	1.27	1.15	0.00018 J	0.006 J	0.0175 J
Mar-2014	0.0393	0.0307	ND	0.0027 J	1.28	1.2	ND	0.000154 J	1.79	1.82	ND	ND	0.0071 J
Oct-2014	0.0309	0.0354	0.000025 J	0.0032 J	1.38	1.42	ND	ND	1.95	1.88	ND	ND	0.0118
Apr-2015	0.0384	0.0367	0.000029 J	0.003 J	1.3	1.28	0.000802 J	0.000065 J	1.99	1.98	ND	ND	0.0068 J
Nov-2015	0.0277	0.0259	ND	0.0047 J	1.22	1.21	ND	ND	2.44	2.46	0.000251 J	ND	0.0073 J
May-2016	0.0571	0.0497	ND	0.0049	1.54	1.23	ND	0.00012 J	3.33	3.09	ND	ND	ND
Oct-2016	0.0502 J+	0.0477 J+	ND	0.0051	1.43	1.43	ND	0.00025 J	3.18	3.13	ND	ND	0.0046 J
May-2017	0.184	0.171	ND	0.0518	2.44	2.42	ND	0.0117	2.59	2.41	ND	ND	0.0181 J
Oct-2017	0.0857	0.0849	ND	0.0889	1.72	1.77	ND	0.0312	5.21	5.09	ND	ND	0.0289 J
May-2018	0.0801	0.0711	ND	0.0139 J	2.2 J	1.7 J	ND	ND	7 B	6.7	ND	ND	0.009 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-07***												
Nov-2018	0.09	0.083	*ND*	0.0069	*1.6 J*	*2.5 J*	*0.00011 J*	*ND*	6.8	7.8	*ND*	*ND*	0.014
May-2019	0.12	0.14 M1	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	6.6	5.5	*ND*	*ND*	0.01
Oct-2019	0.099	0.096	*ND*	0.0086	*1.8 J*	*ND*	*0.00043 J*	*0.00046 J*	5.8	6.1	*0.00015 J*	0.0073	0.023
May-2020	0.15	0.16	*ND*	0.028	1.7	1.6	*ND*	0.0077	5.8	6	*ND*	*ND*	*0.01 J*
Oct-2020	0.11	0.11	*ND*	0.0061	*1.6 J*	*1.6 J*	*ND*	*ND*	6	5.8	*ND*	*0.00083 J*	*ND*
Apr-2021	0.14	0.12	*0.00005 J*	*0.0059 J*	1.8	1.7	*ND*	*ND*	6.5	6.2	*ND*	*ND*	*0.0037 J*
Oct-2021	0.12	0.12	*ND*	0.0072	1.7	1.6	*ND*	*ND*	4.7	4.9	*ND*	*ND*	0.0058
May-2022	0.17	0.17	*ND*	0.0078	2.1	2.2	*ND*	*ND*	5	5.2	*ND*	*ND*	0.0054
Oct-2022	0.15	0.16	*ND*	0.0062	2.1	2	*ND*	*ND*	5.9	6	*ND*	*ND*	0.0072
May-2023	0.15	0.14	*ND*	0.019	1.9	1.9	*ND*	*0.0012 J*	6.8	6.8	*ND*	*ND*	0.012

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.7 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.5 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-07*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-07***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.37 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-07***															
May-2017	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-07*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-07*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	4.3 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-07***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.583 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-07A***											
Nov-1993	ND	ND	ND	ND	3.3	ND	ND	4.43	51	7.4	ND	5.54
Apr-1994	5	5	0.1	ND	3	ND	ND	5.11	34.7	5.1	27	3.18
Apr-1995	ND	ND	ND	ND	3.8	ND	ND	4.7	46.1	9.1	45	8.8
Apr-1997	ND	ND	ND	ND	4	0.04	ND	NA	NA	12	58	23
Oct-1997	2	2	0.24	ND	2.73	ND	ND	5.66	46.6	13.7	33	12
Apr-1998	ND	ND	0.21	ND	4.39	ND	ND	6.07	40.7	9.48	16	11
Apr-1999	ND	ND	0.2	ND	4.49	ND	ND	4.47	47.3	6.03	43	12
Oct-1999	ND	ND	0.08	ND	5.12	0.128	ND	4.45	53.6	9.36	40	14
Apr-2000	2	2	ND	ND	3.34	ND	ND	5.01	37	7.01	38	10
Oct-2000	3	NA	ND	ND	3.37	ND	ND	4.74	41.9	6.71	38	10.6
Apr-2001	1.4	NA	ND	ND	3.54	ND	ND	NA	NA	5.02	45	10.1
Sep-2001	ND	ND	0.33	ND	6.41	1.19	ND	4.1	46	12.8	35	9.4
Mar-2002	2.2	2.2	ND	ND	3.85	ND	ND	4.9	44.3	7.58	31	9.01
Sep-2002	1.8	1.8	ND	ND	3.2	ND	ND	4.8	44.1	8.01	26	9.24
Mar-2003	2.3	2.3	ND	ND	3.57	ND	ND	4.8	47.2	6.71	27	9.41
Oct-2003	2	2	ND	ND	2.73	0.135	ND	5.4	54.5	8.97	64	11.8
Apr-2004	2.1	2.1	ND	ND	3.21	0.11	ND	4.9	44.2	11.2	54	14
Oct-2004	2.4	2.4	ND	14	3.49	0.15	ND	4.6	46	9.99	35	13.5
Apr-2005	1.9	1.9	ND	10	3.24	0.17	ND	4.6	46	11.2	54	12.5
Oct-2005	3.3	3.3	ND	ND	3.78	0.3	ND	4.3	41.4	13.3	45	11.7
Mar-2006	3.5	3.5	ND	ND	3.57	0.3	ND	4.3	51.8	11.4	36	11.3
Sep-2006	3	3	ND	ND	3.6	0.3	ND	4.6	40.8	9.94	32	11.4
Mar-2007	2.6	2.6	ND	ND	3.67	0.21	ND	4.8	44.3	9.24	16	9.95
Sep-2007	2.4	2.4	0.21	ND	7.81	ND	ND	4.7	42.4	10.9	43	11.1
Mar-2008	3	3	0.24	ND	8.04	ND	ND	4.7	43.9	8.72	29	10.4
Sep-2008	2.6	2.6	ND	ND	3.48	ND	ND	4.8	38	6.93	61	9.7
Mar-2009	2.5	2.5	ND	ND	3.2	0.15	ND	4.3	40.5	8.29	35	9.12
Oct-2009	2.4	2.4	ND	ND	3.2	0.16	ND	4.3	40.6	11.8	38	10.4
Apr-2010	2.6	2.6	ND	ND	3.5	0.31	ND	4	41	10.6	12	12
Oct-2010	1.6	1.6	ND	ND	3.76	0.52	ND	4.1	41.3	8.51	30	13.3
Apr-2011	14	14	ND	ND	3.3	0.2	ND	4.4	40.6	7.49	65	26
Sep-2011	2	2	0.23	ND	3.45	0.38	ND	4.7	41.8	8.03	48	11.6
Mar-2012	2.1	2.1	ND	ND	3.7	0.58	ND	3.8	44.2	10.3	18	12.8
Sep-2012	2.04	2.04	ND	ND	3.69	0.58	ND	3.8	41.6	11.1	60	12.4
Mar-2013	2.56	2.56	0.07 J	ND	4.28	0.458	ND	4.1	48	12.1	24	12.3
Oct-2013	2.64	2.64	ND	ND	5	0.3	ND	5.6	46.4	9.52	ND	11.5
Mar-2014	2.28	2.28	ND	ND	5.67	0.234	ND	4.8	43.6	9.91	47	9.82

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-07A***											
Oct-2014	*ND*	*ND*	*ND*	*6 J*	4.67	0.428	*ND*	4.3	42.5	9.81	37	12
Apr-2015	2.84	2.84	*ND*	*ND*	5.25	0.336	*ND*	3.8	48.2	8.7	*ND*	11.8
Nov-2015	2.64	2.64	*ND*	11	4.8	0.397	*ND*	4.8	59.7	11.2	*16 J*	13.3
May-2016	*ND*	*ND*	*ND*	*ND*	6.04	*ND*	*ND*	4.8	80.1	10.9	28	13.3
Oct-2016	*ND*	*ND*	*ND*	*7 J*	7.07	*NA*	*NA*	5	79.7	9.27	28	12.1
May-2017	*ND*	*ND*	*ND*	*ND*	7.33	0.348	*ND*	4.7	823	8.89	36	13
Oct-2017	*ND*	*ND*	*ND*	*ND*	8.52	0.369	*ND*	4.8	87	9.63	30	12.7
May-2018	*2 JB*	*ND*	*ND*	*ND*	8.2	*0.06 J*	*ND*	4.6	81.6	*8.6 J*	42	13.3
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	3.9	0.33	*ND*	4.39	47.4	*9.9 J*	*ND*	12.9
May-2019	*ND*	*NA*	*ND*	*ND*	3.6	0.24	*ND*	4.46	39.5	*ND*	15	13.2
Oct-2019	*2.5 JH1*	*NA*	*ND*	*ND*	3.5	0.29	*ND*	4.3	48.1	*6.8 J*	24	11.7
May-2020	*ND*	*NA*	*ND*	*ND*	4.5	0.31	*ND*	4.32	48.1	*9.9 J*	21	11.7
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	4.3	0.31	*ND*	4.26	48	9.9	46	12.1
Apr-2021	*ND*	*NA*	*ND*	*ND*	3.4	0.24	*ND*	4.51	54.2	*8.5 J*	*ND*	11.9
Oct-2021	*ND*	*NA*	*ND*	*ND*	3.1	0.23	*ND*	4.66	67.2	*8.3 J*	36	12.5
May-2022	*2 J3c*	*NA*	*ND*	*ND*	3.4	0.23	*ND*	4.49	72.1	*7.5 J*	31	13.5 N3
Oct-2022	*ND*	*NA*	*ND*	*8.4 J*	5.3	0.26	*ND*	4.42	74.2	10.5	36	13.1 N3
May-2023	*ND*	*NA*	*ND*	*ND*	6	0.31	*ND*	4.62	82.1	*8 J*	29	15.2 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-07A*													
Nov-1993	NA	ND	ND	NA	ND	0.46	NA	0.009	NA	ND	3.7	0.09	ND	1.2	NA
Apr-1994	NA	ND	ND	NA	ND	1.24	NA	ND	NA	ND	0.34	0.1	ND	1.09	NA
Apr-1995	ND	ND	0.8	ND	ND	1.2	NA	ND	ND	ND	0.16	0.09	ND	1.4	NA
Oct-1996	ND	ND	0.048	ND	ND	2	2	ND	ND	ND	ND	ND	ND	1.7	1.7
Apr-1997	ND	ND	0.055	ND	ND	2.4	2.6	ND	ND	ND	ND	ND	0.003	1.7	1.9
Oct-1997	ND	ND	0.057	ND	ND	2.49	2.44	ND	ND	ND	ND	ND	ND	1.7	1.71
Apr-1998	ND	ND	0.046	ND	ND	1.88	1.92	ND	ND	ND	ND	ND	ND	1.46	1.48
Apr-1999	ND	ND	0.053	ND	ND	2.14	1.92	ND	ND	ND	ND	ND	ND	1.72	1.55
Oct-1999	ND	ND	0.05	ND	ND	1.8	1.61	ND	ND	ND	ND	ND	ND	1.54	1.38
Apr-2000	ND	ND	0.044	ND	ND	1.7	1.68	ND	ND	ND	ND	ND	ND	1.44	1.42
Oct-2000	ND	ND	0.043	ND	ND	1.88	1.86	ND	ND	ND	ND	ND	ND	1.45	1.46
Apr-2001	ND	ND	0.044	ND	ND	1.63	NA	ND	ND	ND	ND	NA	ND	1.47	NA
Sep-2001	ND	ND	0.037	ND	ND	1.46	1.36	ND	ND	ND	0.037	ND	ND	1.39	1.26
Mar-2002	ND	ND	0.037	ND	ND	1.57	1.36	ND	ND	0.011	ND	ND	ND	1.23	1.2
Sep-2002	ND	ND	0.043	ND	ND	1.43	1.47	ND	ND	ND	0.055	ND	ND	1.38	1.36
Mar-2003	ND	ND	0.041	ND	ND	1.56	1.42	ND	ND	ND	ND	ND	ND	1.34	1.25
Oct-2003	ND	ND	0.05	ND	ND	2.06	2.02	ND	ND	ND	ND	ND	ND	1.61	1.54
Apr-2004	ND	ND	0.056	ND	ND	2.81	2.58	ND	ND	ND	0.121	ND	ND	1.7	1.62
Oct-2004	ND	ND	0.056	ND	ND	2.75	2.64	ND	ND	ND	ND	ND	ND	1.61	1.57
Apr-2005	ND	ND	0.054	ND	ND	2.49	2.24	ND	ND	ND	ND	ND	ND	1.52	1.39
Oct-2005	ND	ND	0.048	ND	ND	2.36	2.27	ND	ND	ND	ND	ND	ND	1.42	1.34

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-07A***													
Mar-2006	ND	ND	0.047	ND	ND	2.14	2.02	ND	ND	ND	ND	ND	ND	1.45	1.39
Sep-2006	ND	ND	0.045	ND	ND	2.12	2.11	ND	ND	ND	ND	ND	ND	1.48	1.45
Mar-2007	ND	ND	0.044	ND	ND	1.78	1.77	ND	ND	ND	ND	ND	ND	1.34	1.31
Sep-2007	ND	ND	0.048	ND	ND	2.15	2.16	ND	ND	ND	ND	ND	ND	1.39	1.4
Mar-2008	ND	ND	0.046	ND	ND	1.62	1.56	ND	ND	ND	ND	ND	ND	1.55	1.47
Sep-2008	ND	ND	0.04	ND	ND	1.41	1.35	ND	ND	ND	0.062	ND	ND	1.5	1.49
Mar-2009	ND	ND	0.037	ND	ND	1.31	1.3	ND	ND	ND	ND	ND	ND	1.42	1.38
Oct-2009	ND	ND	0.04	ND	ND	1.36	1.33	ND	ND	ND	0.069	ND	ND	1.71	1.67
Apr-2010	ND	ND	0.052	ND	ND	2.22	2.14	ND	ND	ND	ND	ND	ND	1.59	1.5
Oct-2010	ND	ND	0.054	ND	ND	2.66	2.58	ND	ND	ND	0.067	ND	ND	1.62	1.59
Apr-2011	ND	ND	0.046	ND	ND	7.67	4.47	ND	ND	ND	0.283	ND	ND	1.65	1.58
Sep-2011	ND	ND	0.049	ND	ND	2.26	2.22	ND	ND	ND	ND	ND	ND	1.44	1.44
Mar-2012	ND	ND	0.055	ND	ND	2.46	2.55	ND	ND	ND	0.15	ND	ND	1.62	1.66
Sep-2012	ND	ND	0.0542	0.000101 J	ND	2.49	2.47	ND	0.0037 J	0.0038 J	0.023 J	0.0225 J	ND	1.5	1.49
Mar-2013	ND	ND	0.0477	0.000121 J	ND	2.27	2.42	0.0012 J	0.003 J	0.003 J	0.0153 J	ND	ND	1.6	1.71
Oct-2013	ND	ND	0.0501	0.00013 J	0.000118 J	2.32	2.13	0.0072 J	0.0031 J	0.0028 J	0.0514	0.0672	ND	1.39	1.15
Mar-2014	0.000707 J	ND	0.039	0.000209 J	ND	1.85	1.97	0.0019 J	0.0026 J	0.0012 J	0.0071 J	0.0049 J	ND	1.26	1.35
Oct-2014	0.000751 J	ND	0.0542	ND	0.000186 J	2.4	2.49	0.0014 J	0.0036 J	0.0036 J	0.0178 J	ND	ND	1.47	1.52
Apr-2015	0.000315 J	ND	0.0521	ND	0.000144 J	2.29	2.43	0.0014 J	0.0036 J	0.0037 J	0.014 J	0.0178 J	ND	1.47	1.53
Nov-2015	0.000487 J	ND	0.056	0.000112 J	0.000199 J	2.85	2.85	0.000928 J	0.0041 J	0.0041 J	0.0983	0.04 J	0.000348 J	1.5	1.51
May-2016	ND	ND	0.0543	0.00014 J	0.0002 J	2.63	2.17	0.0016 J	0.0036	0.0036 J	ND	ND	ND	1.64	1.51
Oct-2016	ND	ND	0.0553	0.00012 J	ND	2.28	2.54 J+	0.0021 J	0.0032	0.0032 J	ND	ND	ND	1.57	1.77 J+
May-2017	ND	ND	0.0512	0.00013 J	ND	2.28	2.47	0.0015 J	0.003	0.0034 J	ND	ND	ND	1.77	1.83
Oct-2017	ND	ND	0.0491	0.000096 J	0.00015 J	2.28	2.26	ND	0.0032	0.0031 J	ND	ND	ND	1.71	1.68

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-07A***													
May-2018	*ND*	*ND*	*0.0524 J*	*ND*	*ND*	2.5	2.5	*0.0018 J*	*0.0029 J*	*0.0026 J*	*0.012 J*	*ND*	*ND*	1.7	1.7
Nov-2018	*ND*	*ND*	0.052	*0.00018 J*	*0.00021 J*	2.8	2.6	*0.0038 J*	0.0038	0.004	*0.016 J*	*ND*	*0.000016 J*	1.5	1.5
May-2019	*ND*	*ND*	0.055	*ND*	*ND*	2.8	2.6	*ND*	0.0041	0.0053	*ND*	*ND*	*ND*	1.5	1.4
Oct-2019	*0.00019 J*	*0.00047 J*	0.052	*0.00018 J*	*0.00041 J*	2.6	2.6	*0.0065 J*	0.0039	0.0051	*0.015 J*	*0.0096 J*	*0.00009 J*	1.3	1.3
May-2020	*ND*	*ND*	0.058	*ND*	*ND*	2.5	2.5	*0.0036 J*	*0.004 J*	0.0056	*ND*	*ND*	*ND*	1.3	1.4
Oct-2020	*ND*	*ND*	0.049	*ND*	*ND*	2.5	2.5	*0.0031 J*	0.0041	*ND*	*0.014 J*	*0.018 J*	*ND*	1.4	1.4
Apr-2021	*ND*	*ND*	0.053	*ND*	*0.00041 J*	2.5	2.4	*0.0024 J*	*0.0045 J*	*0.0045 J*	*ND*	*ND*	*ND*	1.4	1.3
Oct-2021	*ND*	*ND*	0.054	*0.00017 J*	*0.000082 J*	2.6	2.7	*0.0025 J*	0.005	0.0044	*0.012 J*	*ND*	*ND*	1.4	1.4
May-2022	*ND*	*ND*	0.055	*0.00018 J*	*0.00017 J*	2.7	2.6	0.0051	0.005	0.0054	0.069	*ND*	*ND*	1.6	1.5
Oct-2022	*ND*	*ND*	0.06	*0.00019 J*	*ND*	2.7	2.9	*0.0016 J*	0.005	0.0049	*ND*	*ND*	*ND*	1.5	1.6
May-2023	*ND*	*ND*	0.062	*0.00019 J*	*ND*	3.1	3	0.0027	0.0055	0.005	*ND*	*ND*	*0.00029 J*	1.8	1.8

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-07A*												
Nov-1993	ND	NA	ND	NA	1.6	NA	ND	NA	1.5	NA	NA	NA	0.01
Apr-1994	0.02	NA	ND	NA	1.26	NA	ND	NA	1.67	NA	NA	NA	0.03
Apr-1995	ND	NA	ND	ND	1.4	NA	ND	ND	1.3	NA	ND	ND	0.02
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	2.3	2.6	ND	ND	0.13
Apr-1997	0.015	0.014	0.0011	ND	1.1	2.5	ND	ND	2	1.5	ND	ND	ND
Oct-1997	0.017	0.017	NA	ND	0.733	0.589	ND	ND	1.51	1.47	ND	ND	0.01
Apr-1998	0.012	0.012	NA	0.011	0.918	0.928	ND	ND	1.52	1.51	ND	ND	ND
Apr-1999	0.013	0.013	NA	ND	1.51	0.878	ND	ND	1.86	1.68	ND	ND	ND
Oct-1999	0.011	0.012	NA	ND	0.597	0.869	ND	ND	1.88	1.63	ND	ND	ND
Apr-2000	0.011	0.011	NA	0.014	1.74	1.21	ND	ND	1.77	1.75	ND	ND	ND
Oct-2000	0.01	0.011	NA	ND	1.26	1.07	ND	ND	1.89	1.81	ND	ND	ND
Apr-2001	0.011	NA	NA	ND	1.1	NA	ND	ND	1.76	NA	ND	ND	ND
Sep-2001	0.011	0.01	NA	ND	1.32	0.875	ND	ND	1.72	1.53	ND	ND	ND
Mar-2002	0.011	ND	NA	ND	2.68	1.5	ND	ND	2.48	1.51	ND	ND	ND
Sep-2002	0.01	0.011	NA	ND	1.05	1.04	ND	ND	1.63	1.6	ND	ND	ND
Mar-2003	ND	ND	NA	ND	0.707	0.588	ND	ND	1.47	1.44	ND	ND	ND
Oct-2003	0.011	0.015	NA	ND	1.52	1.53	ND	ND	1.52	1.45	ND	ND	ND
Apr-2004	0.021	0.021	0.0005	ND	1.26	1.23	ND	ND	1.61	1.51	ND	ND	ND
Oct-2004	0.022	0.021	0.0007	ND	1.01	0.89	ND	ND	1.57	1.27	ND	ND	ND
Apr-2005	0.019	0.016	0.0006	ND	0.82	0.71	ND	ND	1.67	1.55	ND	ND	ND
Oct-2005	0.017	0.016	0.0008	ND	0.83	0.912	ND	ND	1.41	1.38	ND	ND	ND
Mar-2006	ND	ND	0.00093	ND	0.801	0.779	ND	ND	1.28	1.18	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-07A*												
Sep-2006	0.014	0.015	0.0009	ND	1.19	1.2	ND	ND	1.39	1.35	ND	ND	ND
Mar-2007	0.011	0.011	0.0004	ND	1.05	1.03	ND	ND	1.36	1.34	ND	ND	0.03
Sep-2007	0.017	0.017	0.0007	ND	0.989	0.951	ND	ND	1.37	1.37	ND	ND	0.011
Mar-2008	0.016	0.015	0.0004	ND	1.11	0.958	ND	ND	1.49	1.3	ND	ND	ND
Sep-2008	0.016	0.016	ND	ND	0.92	0.941	ND	ND	1.31	1.28	ND	ND	ND
Mar-2009	0.016	0.015	ND	ND	1.05	1.04	ND	ND	1.32	1.3	ND	ND	ND
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	0.019	0.018	ND	ND	0.834	0.801	ND	ND	1.33	1.3	ND	ND	ND
Apr-2010	0.017	0.016	ND	ND	0.85	0.792	ND	ND	1.57	1.53	ND	ND	ND
Oct-2010	0.021	0.021	0.0002	ND	0.784	0.75	ND	ND	1.43	1.45	ND	ND	ND
Apr-2011	0.022	0.02	ND	ND	1.69	1.6	ND	ND	1.97	1.87	ND	ND	0.016
Sep-2011	0.02	0.02	ND	ND	0.84	0.785	ND	ND	1.66	1.63	ND	ND	ND
Mar-2012	0.024	0.024	ND	ND	0.74	0.727	ND	ND	1.57	1.57	ND	ND	ND
Sep-2012	0.0227	0.0228	0.000199 J	0.0037 J	0.8	0.795	ND	ND	1.41	1.44	ND	ND	0.006 J
Mar-2013	0.0217	0.0225	0.000197 J	0.0028 J	0.892	0.95	0.000665 J	ND	1.8	1.93	ND	ND	0.0139
Oct-2013	0.0226	0.0217	ND	0.0029 J	0.775	0.695	0.000413 J	ND	1.79	1.49	0.000154 J	0.0062 J	0.0146
Mar-2014	0.02	0.0214	ND	0.0031 J	0.894	0.94	ND	ND	2.27	2.4	ND	ND	0.0077 J
Oct-2014	0.0229	0.0241	0.000077 J	0.0041 J	0.833	0.839	0.0013 J	ND	1.81	1.83	ND	ND	0.0069 J
Apr-2015	0.0241	0.0252	0.000047 J	0.004 J	0.898	0.906	0.0014 J	ND	2.26	2.29	ND	ND	0.0113
Nov-2015	0.0261	0.0264	ND	0.004 J	0.824	0.811	0.00099 J	ND	2.11	2.04	0.000247 J	ND	0.0124
May-2016	0.0267	0.0243	ND	0.004	0.936	0.772	ND	ND	3.03	2.75	ND	ND	ND
Oct-2016	0.0258 J+	0.0285 J+	ND	0.0044	0.935	0.979	0.00057	ND	3.56	3.63	ND	ND	0.0052 J
May-2017	0.0272	0.0289	ND	0.0034 J	0.981	1	0.00054 J	ND	3.5	3.38	ND	ND	0.0051 J
Oct-2017	0.0265	0.0286	ND	0.0031 J	0.932	0.919	0.00057 J	ND	4.1	4.17	ND	ND	0.0041 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-07A***												
May-2018	0.0284	0.0273	*0.00012 JB*	*0.0102 J*	*1.2 J*	*ND*	*ND*	*ND*	5.1 B	*4.5 J*	*0.0061 J*	*ND*	*0.0061 J*
Nov-2018	0.026	0.028	*ND*	0.005	*ND*	*1.1 J*	*0.00058 J*	*ND*	*1.8 J*	*2.6 JB*	*ND*	*0.00005 J*	0.0095
May-2019	0.025	0.025	*ND*	0.006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.01
Oct-2019	0.028	0.028	*ND*	0.0057	*ND*	*ND*	*0.00079 J*	*ND*	*1.8 J*	*2 J*	*ND*	0.0074 D6	0.017
May-2020	0.025	0.026	*ND*	*0.0064 J*	0.82	0.71	*ND*	*ND*	1.9	2.2	*ND*	*ND*	*0.0094 J*
Oct-2020	0.026	0.027	*ND*	0.0052	*ND*	*ND*	*ND*	*ND*	*2.3 J*	*2.1 J*	*ND*	*0.00068 J*	*ND*
Apr-2021	0.029	0.027	*0.00006 J*	*0.0055 J*	0.65	0.65	*ND*	*ND*	1.7	1.5	*ND*	*ND*	*0.008 J*
Oct-2021	0.029	0.029	*ND*	0.0057	0.64	0.6	*0.00089 J*	*ND*	1.6 B	1.7	*0.000049 J*	*ND*	0.0099
May-2022	0.035	0.032	*ND*	0.007	0.8	0.77	*ND*	*ND*	1.9	1.8	*ND*	*ND*	0.0096
Oct-2022	0.032	0.033	*ND*	0.0055	0.77	0.81	*ND*	*ND*	2.2	2.3	*ND*	*ND*	0.012
May-2023	0.034	0.034	*ND*	0.0063	0.96	0.92	*ND*	*ND*	2.7	2.7	*ND*	*ND*	0.012

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Oct-1996	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	3.9	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	4.6	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07A*																
Mar-2006	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.32 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.82 J	ND	ND	1.63 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07A*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.8 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.7 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-07A*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	4.7
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	14
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	2.2
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	1 J	NA	NA	NA	1.5	5.9
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	1.1	5.5
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	1.3	NA	ND	NA	1.3	6.6
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	4.8	6.7
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	2.7	5.8
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	1.7	4.3
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.7 J
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	3
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	1.7
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	1.9
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	2.5
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.4	4.5
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	1.8
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.1	2.5

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-07A***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	1.9
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	0.6 J
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	0.9 J
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	1.3
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.68 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	ND	ND	ND	ND	0.77 J	0.37 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	ND	ND	ND	ND	0.41 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.24 J	ND	ND	ND	ND	ND	0.42 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.34 J	ND	ND	ND	ND	ND	0.6 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	0.34 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J,B	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	0.4 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	0.3 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-07A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.13 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.481 J*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-07A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	**6.6**	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	**5.1**	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	3.6	*ND*	*ND*	*NA*	*NA*	1.1	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.5	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	4.7	*ND*	*ND*	*NA*	*NA*	1.5	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.9	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*0.6 J*	*ND*	*ND*	2.9	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	2.5	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	2.2	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-07A***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	2.4	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.8 R	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	0.38 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	0.22 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-07A***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.507 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-08***										
Nov-1993	8	8	ND	33.8	6.2	0.4	ND	6.34	49	5.4	ND	6.55
Apr-1994	9	9	0.1	ND	6.5	0.4	ND	5.57	20.4	5.4	28	48.2
Apr-1995	5	5	ND	ND	7.1	0.5	ND	5.3	49.6	5.7	26	7.8
Apr-1997	ND	2	ND	ND	6	0.35	ND	NA	NA	5.7	42	7.6
Oct-1997	4	4	0.44	ND	5.05	0.195	ND	5.55	83.2	4.4	34	11
Apr-1998	4	4	0.2	ND	4.82	0.3	ND	6.14	45.7	3.58	31	9.5
Apr-1999	4	4	0.17	ND	10.1	ND	ND	5.05	45.6	5.74	64	12
Oct-1999	5	5	0.1	ND	5.83	0.334	ND	5.25	47.1	5.12	36	11
Apr-2000	7	7	ND	ND	3.92	0.39	ND	5.99	39	5.81	33	11
Oct-2000	7	NA	ND	ND	4.11	ND	ND	5.83	51.8	6.75	17	11.6
Apr-2001	5.2	NA	ND	ND	4.59	ND	ND	NA	NA	6.13	35	12.1
Sep-2001	5.3	5.3	ND	ND	5.67	ND	ND	5.16	52	11	37	11.9
Mar-2002	6.9	6.9	ND	ND	6.38	0.317	ND	5.3	46.3	6.43	35	13
Sep-2002	5.2	5.2	ND	ND	4.5	0.49	ND	5.4	46.8	8.3	36	11.2
Mar-2003	7.5	7.5	ND	ND	46.9	0.881	ND	5.3	55.2	46	ND	12.1
Oct-2003	6.1	6.1	ND	ND	4.33	0.168	ND	5.5	54.3	5.5	59	13.5
Apr-2004	7.8	7.8	ND	ND	4.12	0.17	ND	5.4	45	5.7	56	13
Oct-2004	6.6	6.6	ND	10	4.44	0.23	ND	5.5	45.8	5.08	37	16.9
Apr-2005	5.9	5.9	ND	ND	4.42	0.3	ND	5.1	40.6	4.95	66	12.1
Oct-2005	8.3	8.3	ND	ND	4.98	0.29	ND	4.9	38.3	4.73	40	10.2
Mar-2006	7	7	ND	ND	4.89	0.2	ND	4.7	41	5.72	40	10
Sep-2006	6.8	6.8	ND	ND	4.87	0.34	ND	5.2	42.6	4.57	27	10.8
Mar-2007	7.3	7.3	ND	ND	4.74	0.22	ND	5.2	46.7	5.12	18	10.7
Sep-2007	6.6	6.6	ND	ND	9.98	ND	ND	5.9	48.3	8.74	38	10.9
Mar-2008	9.5	9.5	ND	ND	9.91	0.79	ND	5.2	43.9	4.42	36	11.2
Sep-2008	11	11	ND	ND	5.84	0.32	ND	5.1	45.3	4.54	39	10.8
Mar-2009	12	12	ND	ND	6.71	0.35	ND	4.8	47.1	3.21	41	10.8
Oct-2009	8.2	8.2	ND	ND	5.79	0.21	ND	4.8	47.1	4.48	37	13
Apr-2010	10	10	ND	ND	6.69	0.29	ND	4.3	56.9	4.16	ND	13.1
Oct-2010	14	14	ND	ND	8.15	0.43	ND	4.2	50.3	3.63	35	14.8
Apr-2011	7.2	7.2	ND	ND	9.96	0.53	ND	5	61.9	7.95	63	16.7
Sep-2011	6.3	6.3	ND	ND	10.4	0.6	ND	5.1	64.9	7.82	58	17.6
Mar-2012	6.8	6.8	ND	ND	16	0.93	ND	4.6	82.4	10.5	52	20.2
Sep-2012	11.7	11.7	ND	ND	16.6	0.931	ND	4.9	83.9	11.3	64	21.4
Mar-2013	11.8	11.8	0.128 J	ND	16.6	1.05	ND	4.5	100.2	10.9	58	22.2
Oct-2013	9.24	9.24	ND	ND	19.6	1.29	ND	6.1	105.1	10.8	59	21.3
Mar-2014	10.4	10.4	ND	ND	17.9	1.24	ND	5.7	105	12.5	85	21.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-08***											
Oct-2014	37.4	37.4	*0.141 J*	14	17.3	0.07	*ND*	5.7	107.9	1.82	56	30.8
Apr-2015	22.9	22.9	0.33	12	16.6	*ND*	*ND*	4.7	115.1	*ND*	28	21.2
Nov-2015	11.4	11.4	*ND*	10	24.7	1.13	*ND*	5.7	174.3	6.94	72	27.3
May-2016	8.92	8.92	1.17	*ND*	22.3	*ND*	*ND*	5.7	205	*ND*	66	12
Oct-2016	11.2	11.2	1.09	13	22.4	*NA*	*NA*	5.7	228	*0.93 J*	69	14.1
May-2017	15.8	15.8	0.852	24	21.3	*ND*	*ND*	5.5	233	*0.612 J*	52	18.3
Oct-2017	16	16	0.699	16	25.7	*ND*	*ND*	5.9	275	*ND*	58	16.8
May-2018	30	30	0.34	27.2	34.8	*ND*	0.035	5.4	243	*ND*	49	24.6
Nov-2018	46	46	0.12	*ND*	44.6	*0.038 J*	0.028	6.21	257.7	*ND*	88	34
May-2019	50	*NA*	*ND*	*ND*	50.5	0.13	0.03	6.14	224.3	*ND*	146	37.4
Oct-2019	20 H1	*NA*	*0.08 J*	*14.8 J*	47.2	0.18	0.028	6.15	282.5	*ND*	97	34.8
May-2020	36	*NA*	0.2	*11.3 J*	43.5	*ND*	0.023	5.64	257.4	*ND*	137	31.5
Oct-2020	110	*NA*	0.14	*11.6 J*	43.5	*0.084 J*	0.021	5.9	249.7	3.8	147	32.8
Apr-2021	14	*NA*	0.18	*10.5 J*	47.3	0.22	*ND*	6.37	325.7	*ND*	93	35.7
Oct-2021	36	*NA*	0.17	*10.5 J*	50.7	*0.075 J*	0.014	6.57	357.8	*ND*	130	34.4
May-2022	30	*NA*	0.14	*5.6 J*	45.9	0.1	0.032	6.32	322.5	*ND*	121	35.9 N3
Oct-2022	38	*NA*	*0.099 J*	*8.4 J*	52.7	*0.086 J*	0.049	6.34	317.4	*ND*	128	29.6 N3
May-2023	38	*NA*	0.25	*ND*	51.2	0.16	0.037	6.33	323	*ND*	125	30.4 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-08*													
Nov-1993	NA	ND	ND	NA	ND	0.81	NA	ND	NA	ND	14.2	2.2	ND	1.1	NA
Apr-1994	NA	ND	ND	NA	ND	1.17	NA	ND	NA	ND	3.23	2.24	ND	1.49	NA
Apr-1995	ND	ND	0.7	ND	ND	0.82	NA	ND	0.03	ND	2.2	2	ND	1.4	NA
Oct-1996	ND	ND	0.053	ND	ND	1.7	1.6	ND	ND	ND	3.7	1.8	ND	1.2	1.2
Apr-1997	ND	ND	0.059	ND	ND	2.1	1.8	ND	ND	ND	0.89	0.63	ND	1.5	1.2
Oct-1997	ND	ND	0.047	ND	ND	1.68	1.73	ND	ND	ND	3.91	1.3	ND	1.39	1.4
Apr-1998	ND	ND	0.049	ND	ND	1.62	1.68	ND	ND	0.014	19	1.33	ND	1.32	1.38
Apr-1999	ND	ND	0.052	ND	ND	1.97	1.93	ND	ND	ND	6.45	4.05	ND	1.64	1.59
Oct-1999	ND	ND	0.059	ND	ND	1.87	1.7	ND	ND	ND	9.14	1.44	ND	1.56	1.42
Apr-2000	ND	ND	0.055	ND	ND	1.89	1.84	ND	ND	ND	4.64	1.94	ND	1.56	1.49
Oct-2000	ND	ND	0.057	ND	ND	1.99	2.01	ND	ND	ND	6.68	2.52	ND	1.62	1.63
Apr-2001	ND	ND	0.066	ND	ND	2.02	NA	ND	ND	ND	11.3	NA	ND	1.7	NA
Sep-2001	ND	ND	0.065	ND	ND	1.98	1.89	ND	ND	ND	4.89	3.36	ND	1.7	1.6
Mar-2002	ND	ND	0.065	ND	ND	2.3	1.93	ND	ND	0.016	10.5	2.21	ND	1.77	1.7
Sep-2002	ND	ND	0.066	ND	ND	1.83	1.88	ND	ND	0.013	13.4	2.13	ND	1.61	1.67
Mar-2003	ND	ND	0.067	ND	ND	2.02	1.96	ND	ND	ND	3.26	2.24	ND	1.72	1.63
Oct-2003	ND	ND	0.07	ND	ND	2.39	2.06	ND	ND	0.011	7.7	2.2	ND	1.84	1.79
Apr-2004	ND	ND	0.068	ND	ND	2.16	2.11	ND	ND	ND	3.16	1.75	ND	1.84	1.83
Oct-2004	ND	ND	0.073	ND	ND	3.5	2.13	ND	ND	0.015	13.1	2.67	ND	1.98	1.84
Apr-2005	ND	ND	0.076	ND	ND	2.11	1.95	ND	ND	ND	13.2	1.82	ND	1.67	1.55
Oct-2005	ND	ND	0.064	ND	ND	1.8	1.7	ND	ND	ND	4.74	1.86	ND	1.38	1.31

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-08***													
Mar-2006	ND	ND	0.054	ND	ND	1.91	1.6	ND	ND	ND	11.7	2.29	ND	1.28	1.31
Sep-2006	ND	ND	0.059	ND	ND	1.97	1.89	ND	ND	0.021	19.1	1.92	ND	1.43	1.45
Mar-2007	ND	ND	0.064	ND	ND	1.91	1.87	ND	ND	ND	4.12	2.64	ND	1.45	1.45
Sep-2007	ND	0.003	0.068	ND	ND	1.91	1.86	ND	ND	ND	10.2	2.06	ND	1.49	1.44
Mar-2008	ND	ND	0.074	ND	ND	1.93	1.82	ND	ND	ND	3.68	1.89	ND	1.54	1.42
Sep-2008	ND	ND	0.068	ND	ND	1.9	1.79	ND	ND	ND	5.49	2.41	ND	1.48	1.47
Mar-2009	ND	ND	0.073	ND	ND	2	1.84	ND	ND	ND	4.88	2.66	ND	1.41	1.38
Oct-2009	ND	ND	0.08	ND	ND	2.19	2.06	ND	ND	ND	11.7	4.86	ND	1.84	1.72
Apr-2010	ND	ND	0.089	ND	ND	2.49	2.31	ND	ND	ND	9.78	5.06	ND	1.68	1.65
Oct-2010	ND	ND	0.102	ND	ND	2.58	2.47	ND	ND	ND	7.8	5.13	ND	2.04	1.94
Apr-2011	ND	ND	0.108	ND	ND	2.89	2.69	ND	0.015	0.023	19.6	2.12	ND	2.3	2.1
Sep-2011	ND	ND	0.106	ND	ND	3.01	2.91	0.013	0.016	0.028	26.1	2.12	ND	2.44	2.34
Mar-2012	ND	0.005	0.132	ND	ND	3.41	3.57	0.076	0.041	0.168	132	2	ND	2.83	3.08
Sep-2012	ND	ND	0.116	0.000371 J	0.000301 J	3.67	3.81	0.0031 J	0.0146	0.007 J	5.82	4.27	ND	2.98	3.1
Mar-2013	ND	ND	0.144	0.00032 J	ND	3.93	3.93	0.0023 J	0.01	0.0067 J	8.35	7.68	ND	3.01	3.03
Oct-2013	ND	ND	0.155	0.00045 J	0.000277 J	4.02	4.06	0.0108	0.0128	0.0094 J	11.5	6.37	ND	2.73	2.59
Mar-2014	0.000428 J	0.000546 J	0.135	ND	0.000305 J	3.91	3.9	0.0049 J	0.0141	0.0165	15.1	8.32	ND	2.87	2.8
Oct-2014	0.000647 J	0.0013 J	0.147	ND	0.000338 J	5.49	5.45	0.0056 J	0.0111	0.0102	48.1	27.9	0.0012 J	4.16	4.14
Apr-2015	0.000966 J	0.0016 J	0.0912	0.000178 J	0.000209 J	3.74	3.87	0.0031 J	0.0064 J	0.0176	48.9	19.2	0.0011 J	2.87	3.08
Nov-2015	0.000355 J	0.000813 J	0.175	0.000355 J	0.000252 J	5.16	5.3	0.0016 J	0.0123	0.0089 J	15	10.6	0.000386 J	3.51	3.65
May-2016	ND	0.00064 J	0.0467	ND	ND	2.18	2.12	0.0024 J	0.0018	0.0028 J,B	3.81	0.392	0.00056 J	1.59	1.67
Oct-2016	0.00058 J	0.004	0.0573	ND	ND	2.57	2.44	0.0035 J+	0.0035	0.0125 J+	23.5	2.98	0.00084 J	1.85 J+	1.85
May-2017	ND	0.0023 J	0.0693	ND	ND	3.8	3.41	0.0036 J	0.0049	0.0098	17.9	10.2	0.0008 J	2.13	2.27
Oct-2017	ND	0.001 J	0.0619	ND	0.00032 J	3.23	3.22	0.0028 J	0.0039	0.0027 J	13.6	9.96	0.0005 J	2.11	2.17

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-08***													
May-2018	0.00068	0.0028	0.1	*0.00012 J*	*0.00044 J*	4.9	4.8	*0.0044 JB*	0.0059	0.012	27.7	23	0.0014	3	3
Nov-2018	*0.000056 J*	*0.00011 J*	0.19	*0.00022 J*	*0.00012 J*	6.3	6.2	*0.0029 J*	0.0047	0.0068	33.2	31.4	*0.00004 J*	4.4	4.6
May-2019	*ND*	*ND*	0.23	0.00038	*ND*	7	6.6	*ND*	0.0068	0.0087	35.6	31.2	*ND*	4.9	4.6
Oct-2019	*0.00021 J*	*0.00042 J*	0.22	*0.00023 J*	*0.00026 J*	6.6	6.7	*0.0054 J*	0.0053	0.0041	36.1	35.3	*0.000081 J*	4.4	4.5
May-2020	*ND*	*ND*	0.22	*0.00032 J*	*0.00037 J*	5.9	6.1	*0.0021 J*	*0.0048 J*	0.0098	40.5	36.4	*ND*	4.1	4.5
Oct-2020	*ND*	*ND*	0.19	*0.00028 J*	*ND*	6.3	6.2	*0.0033 J*	0.0047	*0.0072 J*	36.1	32	*ND*	4.2	4.2
Apr-2021	*ND*	*ND*	0.2	*0.00024 J*	*ND*	6.7	6.4	*ND*	0.0056	*0.0049 J*	36	30.1	*ND*	4.6	4.3
Oct-2021	*ND*	*ND*	0.2	*0.00024 J*	*ND*	6.5	7	*ND*	0.0056	0.0045	33.5	31.9	*ND*	4.4	4.7
May-2022	*ND*	*ND*	0.2	*0.00029 J*	*ND*	6.7	6.5	*0.00098 J*	0.0051	0.0043	39.1	33	*ND*	4.6	4.4
Oct-2022	*ND*	*ND*	0.18	*0.00029 J*	*ND*	5.4	6.6	*0.00089 J*	0.0048	0.0046	33.9	31	*ND*	3.9	4.3
May-2023	*ND*	*0.00054 J*	0.17	*0.00021 J*	*ND*	6	6.5	*0.0013 J*	0.0052	0.0055	34.6	30.7	*ND*	3.7	4.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-08*												
Nov-1993	0.08	NA	ND	NA	0.73	NA	ND	NA	2.5	NA	NA	NA	ND
Apr-1994	0.1	NA	ND	NA	0.9	NA	ND	NA	3.28	NA	NA	NA	0.06
Apr-1995	ND	NA	ND	ND	1.1	NA	ND	ND	2.7	NA	ND	ND	0.03
Oct-1996	0.075	0.068	NA	ND	ND	ND	ND	ND	3.2	3.3	ND	ND	0.082
Apr-1997	0.054	0.053	ND	ND	2.4	ND	ND	ND	2.5	2.9	ND	ND	0.037
Oct-1997	0.087	0.087	NA	ND	ND	0.748	ND	ND	2.65	2.77	ND	ND	0.014
Apr-1998	0.101	0.081	NA	0.013	ND	0.719	ND	ND	2.68	2.44	ND	ND	0.017
Apr-1999	0.148	0.143	NA	ND	0.763	0.544	ND	ND	2.21	2.13	ND	ND	ND
Oct-1999	0.099	0.092	NA	0.013	0.564	0.714	ND	ND	2.85	2.53	ND	ND	0.011
Apr-2000	0.138	0.132	NA	ND	1.53	1.13	ND	ND	2.69	2.63	ND	ND	ND
Oct-2000	0.136	0.133	NA	ND	0.887	1.05	ND	ND	2.67	2.6	ND	ND	ND
Apr-2001	0.148	NA	NA	ND	0.545	NA	ND	ND	2.67	NA	ND	ND	ND
Sep-2001	0.133	0.143	NA	0.01	0.639	0.947	ND	ND	2.66	2.62	ND	ND	ND
Mar-2002	0.119	0.116	NA	ND	1.64	ND	ND	ND	3.74	2.66	ND	ND	0.012
Sep-2002	0.113	0.109	NA	ND	1.81	1.43	ND	ND	2.34	2.35	ND	ND	ND
Mar-2003	0.128	0.119	NA	ND	1.2	1.28	ND	ND	2.5	2.36	ND	ND	ND
Oct-2003	0.134	0.131	NA	ND	1.95	2	ND	ND	2.82	2.22	ND	ND	0.01
Apr-2004	0.13	0.12	ND	ND	0.636	ND	ND	ND	2.36	2.25	ND	ND	ND
Oct-2004	0.142	0.138	ND	ND	0.94	0.81	ND	ND	3.22	2.32	ND	ND	0.073
Apr-2005	0.127	0.116	ND	ND	0.7	0.62	ND	ND	2.83	2.7	ND	ND	0.01
Oct-2005	0.111	0.104	ND	ND	0.833	0.717	ND	ND	2.4	2.27	ND	ND	ND
Mar-2006	0.104	0.088	ND	ND	ND	ND	ND	ND	2.05	2.11	ND	ND	0.019

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-08***												
Sep-2006	0.127	0.117	ND	0.011	0.84	0.839	ND	ND	2.48	2.34	ND	ND	0.017
Mar-2007	0.137	0.13	ND	ND	0.782	0.785	ND	ND	2.33	2.33	ND	ND	0.011
Sep-2007	0.144	0.121	ND	ND	0.744	0.683	ND	ND	2.67	2.76	ND	ND	0.015
Mar-2008	0.123	0.111	ND	ND	0.781	0.703	ND	ND	2.84	2.5	ND	ND	0.01
Sep-2008	0.125	0.121	ND	ND	0.758	0.734	ND	ND	2.71	2.6	ND	ND	0.034
Mar-2009	0.127	0.12	ND	ND	0.943	0.853	ND	ND	3.17	3.11	ND	ND	0.021
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	0.21	0.181	ND	ND	0.632	0.642	ND	ND	2.74	2.76	ND	ND	0.016
Apr-2010	0.163	0.162	ND	ND	0.765	0.747	ND	ND	3.29	3.17	ND	ND	0.019
Oct-2010	0.178	0.169	ND	ND	0.789	0.77	ND	ND	3.66	3.66	ND	ND	0.015
Apr-2011	0.143	0.123	ND	0.016	0.742	0.691	ND	ND	4.44	4.34	ND	ND	0.052
Sep-2011	0.15	0.132	ND	0.019	0.86	0.777	ND	ND	4.63	4.51	ND	ND	0.051
Mar-2012	0.24	0.152	0.0003	0.088	0.824	0.855	ND	ND	7.75	8.15	ND	ND	0.141
Sep-2012	0.173	0.178	0.000044 J	0.0146	0.875	0.931	0.000466 J	ND	7.63	7.82	ND	ND	0.0343
Mar-2013	0.193	0.191	0.000079 J	0.0108 J	0.933	0.919	ND	ND	7.9	7.86	ND	ND	0.0408
Oct-2013	0.195	0.189	ND	0.0112	0.812	0.798	ND	ND	7.68	7.21	0.000106 J	0.0082 J	0.0383
Mar-2014	0.202	0.213	ND	0.0139	0.952	0.962	ND	ND	7.38	7.52	ND	ND	0.0488
Oct-2014	0.715	0.58	0.000082 J	0.0217	1.18	1.22	0.000855 J	ND	10.9	11.2	ND	ND	0.0362
Apr-2015	0.396	0.348	0.000074 J	0.0146	1.19	1.21	ND	0.000058 J	10.7	10.7	ND	ND	0.0262
Nov-2015	0.306	0.31	ND	0.0111	1.14	1.2	0.000756 J	ND	12.1	12.6	0.000181 J	ND	0.0366
May-2016	0.152	0.102	ND	0.0066	1.13	1.09	ND	ND	11.7	11.9	ND	ND	0.0162 J
Oct-2016	0.231 R	0.152	ND	0.008 J+	1.17	1.14	ND	ND	11.9 J+	11	ND	ND	0.0131 J
May-2017	0.363	0.337	ND	0.0112	1.17	1.16	ND	ND	12.7	12.7	ND	ND	0.0177 J
Oct-2017	0.305	0.289	ND	0.0075	1.15	1.17	ND	ND	13.1	12.9	ND	ND	0.0175 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-08***												
May-2018	0.58	0.52	*ND*	0.011	*ND*	*0.86 J*	*0.00045 J*	*ND*	17.1	16.1	*ND*	0.002	0.03
Nov-2018	0.53	0.52	*ND*	0.0049	*1.1 J*	*1.6 J*	*0.0002 J*	*ND*	22.2	23.8	*ND*	*ND*	0.015
May-2019	0.61	0.62	*ND*	0.005	*ND*	*ND*	*ND*	*ND*	24.4	23.9	*ND*	*ND*	0.02
Oct-2019	0.64	0.63	*ND*	0.0044	*1.5 J*	*ND*	*ND*	*ND*	25	26.4	*ND*	0.0088	0.019
May-2020	0.59	0.62	*ND*	*0.0068 J*	1.5	1.4	*ND*	*ND*	22.6	22.1	*ND*	*ND*	0.016
Oct-2020	0.62	0.57	*ND*	0.0045	*1.3 J*	*1.3 J*	*ND*	*ND*	21.6	21.6	*ND*	*0.00092 J*	*0.014 J*
Apr-2021	0.72	0.66	*0.00006 J*	*0.0042 J*	1.4	1.4	*ND*	*ND*	25.9	24.3	*ND*	*ND*	0.014
Oct-2021	0.66	0.71	*ND*	0.0038	1.3	1.3	*ND*	*ND*	25.7	27.5	*ND*	*ND*	0.013
May-2022	0.72	0.67	*ND*	0.0053	1.5	1.4	*ND*	*ND*	25.3	24.3	*ND*	*ND*	0.011
Oct-2022	0.61	0.64	*ND*	0.0042	1.4	1.5	*ND*	*ND*	26.8	28.9	*ND*	*ND*	0.013
May-2023	0.59	0.62	*ND*	0.0046	1.3	1.4	*ND*	*ND*	24.9	27.9	*ND*	*ND*	0.013

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	23	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08*																
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.59 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.8 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.94 J*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.7 J*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.2 J*	*ND*	*ND*	5.2	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.5 B	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.8 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-08*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-08***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	0.58 J	ND	ND	ND	ND	0.64 J,B	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	0.45 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-08***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-08***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-08*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-08***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.551 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-08A***											
Nov-1993	ND	ND	ND	ND	3.5	ND	ND	4.61	51.3	11.8	18	10.4
Apr-1994	10	10	0.1	67.6	3.5	ND	ND	4.74	50.5	12.1	34	13.46
Apr-1995	ND	ND	ND	ND	4.2	ND	ND	4.4	54.9	13.1	ND	10.2
Apr-1997	ND	2	ND	ND	4.5	0.07	ND	NA	NA	13	96	29
Oct-1997	ND	ND	0.24	ND	2.76	ND	ND	5.62	50.7	11.7	45	15
Apr-1998	ND	ND	ND	ND	3.8	ND	ND	5.38	47.9	11.9	26	14
Apr-1999	ND	ND	0.19	ND	3.8	ND	ND	4.16	54.1	9.69	67	15
Oct-1999	ND	ND	0.2	ND	3.98	ND	ND	4.82	78.5	11	38	15
Apr-2000	ND	ND	ND	ND	2.42	ND	ND	5.39	44	11	45	13
Oct-2000	2.8	NA	ND	ND	4.56	ND	ND	5.29	59.2	14.6	45	14.5
Apr-2001	ND	NA	ND	ND	3.62	ND	ND	NA	NA	12.1	20	15.1
Sep-2001	ND	ND	ND	ND	4.78	ND	ND	4.32	60	17.1	41	15.4
Mar-2002	ND	ND	ND	ND	4.39	ND	ND	4.7	57	17.8	58	16.3
Sep-2002	ND	ND	ND	ND	4	ND	ND	4.8	56.5	17.9	27	16.2
Mar-2003	ND	ND	ND	ND	39.5	ND	ND	4.7	64.8	128	23	14.9
Oct-2003	ND	ND	ND	ND	3.93	0.086	ND	4.7	79.2	18.3	72	18.8
Apr-2004	ND	ND	ND	ND	3.32	ND	ND	4.8	53.9	16.6	66	19.4
Oct-2004	1.1	1.1	ND	ND	2.78	ND	ND	4.7	42.5	11.6	41	17
Apr-2005	ND	ND	ND	ND	3.92	0.1	ND	4.6	42.6	16.3	81	17.4
Oct-2005	1.7	1.7	ND	ND	3.74	0.09	ND	4.6	41.9	15.8	51	13.3
Mar-2006	1.8	1.8	ND	ND	5.66	0.16	ND	4.1	54.8	18.8	40	14.9
Sep-2006	1.7	1.7	ND	ND	4.79	0.23	ND	4.5	53.5	16.7	49	16.6
Mar-2007	1.1	1.1	0.3	ND	17.6	2.22	ND	4.6	93.6	15.8	47	26.8
Sep-2007	ND	ND	0.23	ND	10	ND	ND	4.8	63.1	19	51	16.3
Mar-2008	ND	ND	ND	ND	24.2	3.29	ND	4.4	77.1	19	73	22.8
Sep-2008	1.5	1.5	ND	12	8.63	0.83	ND	4.4	77.3	21.4	54	18.2
Mar-2009	1.1	1.1	ND	ND	11.8	0.57	ND	4.2	77	18	60	18.1
Oct-2009	1	1	ND	ND	27.5	1.14	ND	4.1	119.2	18.4	87	25.3
Apr-2010	1.2	1.2	ND	ND	34.6	1.18	ND	3.9	129.1	19.7	58	27.6
Oct-2010	ND	ND	ND	ND	56.8	2.15	ND	4	121.8	19.1	166	37.4
Apr-2011	1.4	1.4	ND	ND	23	2	ND	4.3	130	20.8	109	21
Sep-2011	ND	ND	0.21	ND	45.6	4.16	ND	4.5	179.2	20.4	142	37.1
Mar-2012	ND	ND	ND	ND	43.7	2.89	ND	3.5	183.8	27.1	101	36.4
Sep-2012	ND	ND	ND	ND	18.9	0.982	ND	3.9	95.4	23.3	62	21.7
Mar-2013	1.16	1.16	0.167 J	ND	42.1	2.72	ND	3.7	177.1	25	108	33.7
Oct-2013	1.16 J	1.16 J	ND	ND	62	4.01	ND	5.3	352	25.1	176	36.6
Mar-2014	ND	ND	ND	6 J	66.7	3.38	ND	4.5	308	30.3	173	31.1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-08A***										
Oct-2014	*ND*	*ND*	*ND*	*6 J*	63	3.52	*ND*	4.3	353	30.7	152	35.7
Apr-2015	1.92	1.92	*ND*	*7 J*	33.8	2.36	*ND*	3.9	157.2	24.7	90	26.6
Nov-2015	*ND*	*ND*	*ND*	*5 J*	55.6	3.65	*ND*	4.6	292	24.6	132	38.8
May-2016	*ND*	*ND*	*ND*	*ND*	57.3	2.11	*ND*	4.6	383	27	160	32.8
Oct-2016	*ND*	*ND*	*ND*	*ND*	83.9	*NA*	*NA*	4.5	416	20.9	177	44.7
May-2017	*ND*	*ND*	*ND*	*5 J*	109	4.81	*ND*	4.4	590	33.1	237	47.1
Oct-2017	*ND*	*ND*	*0.103 J*	*5 J+*	181	5.05	*ND*	4.7	625	27.9	271	47.6
May-2018	*4 JB*	*ND*	0.12	*5.8 J*	94	1.5	*ND*	4.2	494	25.4	190	44.5
Nov-2018	*1 JB*	*ND*	*ND*	*ND*	76.1	5.3	*ND*	4.3	342.1	24.4	157	42.8
May-2019	*ND*	*NA*	*ND*	*ND*	30.6	0.58	*ND*	4.25	116.4	14.9	73	31.1
Oct-2019	*2.5 JH1*	*NA*	*ND*	*6 J*	15.5	0.62	*ND*	4.31	97	10.9	33	19.5
May-2020	*ND*	*NA*	*ND*	*6.9 J*	63	1.5	*ND*	4.24	261.7	18.4	143	28.7
Oct-2020	240	*NA*	*ND*	*ND*	58.8	3.1	*ND*	4.36	246.4	19.4	160	39.1
Apr-2021	*ND*	*NA*	*ND*	*ND*	46.1	2.7	*ND*	4.34	271.6	26.3	132	35.9
Oct-2021	*ND*	*NA*	*ND*	*ND*	30.2	0.85	*ND*	4.54	200	12.9	71	26
May-2022	*ND*	*NA*	*ND*	*ND*	25.6	1.4	*ND*	4.44	182.4	12.5	84	25 N3
Oct-2022	*ND*	*NA*	*ND*	*8.4 J*	88.9	4.6	*ND*	4.42	419.2	19.5	193	45.8 N3
May-2023	*ND*	*NA*	*ND*	*ND*	111	5	*ND*	4.38	472.4	22.8	250	44.5 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-08A*													
Nov-1993	NA	ND	ND	NA	ND	1.7	NA	0.005	NA	ND	0.99	0.06	ND	1.5	NA
Apr-1994	NA	ND	ND	NA	ND	2.8	NA	ND	NA	ND	1.15	0.15	ND	1.57	NA
Apr-1995	ND	ND	ND	ND	0.005	1.3	NA	ND	0.02	ND	0.84	0.06	0.006	1.7	NA
Oct-1996	ND	ND	0.055	ND	ND	2.3	2.6	ND	ND	ND	0.31	ND	ND	1.5	1.4
Apr-1997	ND	ND	0.074	ND	ND	5.4	4	ND	ND	ND	ND	ND	0.006	2	1.7
Oct-1997	ND	ND	0.06	ND	ND	3.15	3.19	ND	ND	0.015	1.31	ND	ND	1.72	1.67
Apr-1998	ND	ND	0.066	ND	ND	2.61	2.56	0.011	ND	0.017	4.87	ND	ND	1.93	1.76
Apr-1999	ND	ND	0.063	ND	ND	2.79	2.65	ND	ND	0.01	1.47	ND	ND	1.95	1.8
Oct-1999	ND	ND	0.06	ND	ND	2.84	2.5	ND	ND	0.011	0.894	ND	ND	1.96	1.77
Apr-2000	ND	ND	0.056	ND	ND	2.57	2.43	ND	ND	ND	ND	ND	ND	1.7	1.6
Oct-2000	ND	ND	0.049	ND	ND	2.79	2.6	ND	ND	0.018	2.39	ND	ND	1.84	1.74
Apr-2001	ND	ND	0.055	ND	ND	2.91	NA	ND	ND	ND	0.562	NA	ND	1.89	NA
Sep-2001	ND	ND	0.054	ND	ND	2.85	2.54	ND	ND	ND	0.924	ND	ND	2.01	1.97
Mar-2002	ND	ND	0.053	ND	ND	3.06	2.68	ND	ND	0.011	0.434	ND	ND	2.11	1.96
Sep-2002	ND	ND	0.057	ND	ND	3.18	2.53	ND	ND	0.015	2.22	ND	ND	1.99	1.86
Mar-2003	ND	ND	0.054	ND	ND	2.58	2.49	ND	ND	ND	0.094	ND	ND	2.05	1.94
Oct-2003	ND	ND	0.066	ND	ND	3.53	3.12	ND	ND	0.012	0.305	ND	ND	2.42	2.28
Apr-2004	ND	0.002	0.067	ND	ND	3.59	3.04	ND	ND	0.015	2.43	ND	ND	2.54	2.26
Oct-2004	ND	ND	0.055	ND	ND	3.77	2.53	ND	ND	ND	0.797	0.365	ND	1.83	1.67
Apr-2005	ND	ND	0.067	ND	ND	3.69	3.14	ND	ND	0.014	1.01	ND	ND	1.99	1.87
Oct-2005	ND	ND	0.054	ND	ND	2.69	2.34	ND	ND	0.011	0.57	ND	ND	1.59	1.48

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-08A***													
Mar-2006	ND	ND	0.058	ND	ND	2.91	2.89	ND	ND	ND	1.43	ND	ND	1.86	1.95
Sep-2006	ND	ND	0.063	ND	ND	3.29	3.27	ND	ND	ND	0.834	ND	ND	2.03	2.04
Mar-2007	ND	ND	0.106	ND	ND	5.05	4.62	ND	0.011	ND	0.384	ND	ND	3.46	2.92
Sep-2007	ND	0.002	0.068	ND	ND	3.18	3.24	ND	ND	0.011	1.89	ND	ND	2.04	2.07
Mar-2008	ND	ND	0.095	ND	ND	4.15	4.18	ND	ND	0.01	1.05	ND	ND	3.02	3.03
Sep-2008	ND	0.003	0.071	ND	ND	3.3	3.22	ND	ND	ND	1.33	ND	ND	2.41	2.37
Mar-2009	ND	ND	0.071	ND	ND	3.36	3.3	ND	ND	0.011	0.553	ND	ND	2.35	2.32
Oct-2009	ND	ND	0.097	ND	ND	4.58	4.51	ND	ND	ND	2.32	0.053	ND	3.38	3.58
Apr-2010	ND	ND	0.117	ND	ND	5.07	4.86	ND	0.01	0.013	2.89	ND	ND	3.62	3.53
Oct-2010	ND	ND	0.142	ND	ND	6.65	6.27	ND	0.013	ND	1.17	ND	ND	5.05	4.78
Apr-2011	ND	ND	0.112	ND	ND	5.25	5.16	ND	ND	0.01	1.71	ND	ND	4	3.85
Sep-2011	ND	ND	0.15	ND	ND	6.9	6.93	ND	0.012	0.015	0.292	ND	ND	4.84	4.87
Mar-2012	ND	ND	0.145	ND	ND	6.61	6.6	ND	0.011	0.015	0.319	ND	ND	4.84	4.85
Sep-2012	ND	ND	0.0894	0.00034 J	0.000282 J	3.9	3.86	0.0013 J	0.0071 J	0.0144	0.0248 J	0.0324 J	ND	2.91	2.84
Mar-2013	ND	ND	0.127	0.000413 J	0.0003 J	6.11	5.96	0.0091 J	0.0099 J	0.0132	0.0782	0.0589	ND	4.48	4.44
Oct-2013	ND	ND	0.16	0.000546 J	0.000533 J	7.32	7.19	0.0176	0.0113	0.0125	0.133	0.0672	ND	4.45	4.03
Mar-2014	0.000446 J	ND	0.124	0.000413 J	0.000432 J	6.16	6.15	0.0028 J	0.0092 J	0.01	0.0305 J	0.0142 J	ND	3.83	3.82
Oct-2014	0.000379 J	0.000519 J	0.15	0.000413 J	0.000427 J	6.79	6.68	0.0026 J	0.0099 J	0.013	0.0319 J	0.0146 J	ND	4.55	4.47
Apr-2015	0.000529 J	0.000397 J	0.096	0.000215 J	0.000305 J	4.91	5.3	0.003 J	0.0078 J	0.0086 J	0.0457 J	0.018 J	ND	3.48	3.76
Nov-2015	0.000371 J	0.000482 J	0.145	0.000405 J	0.000439 J	7.77	7.73	0.002 J	0.0111	0.0124	0.0202 J	0.0164 J	0.000371 J	4.72	4.75
May-2016	ND	ND	0.117	0.0003 J	0.0003 J	6.21	5.79	0.0019 J	0.0102	0.009	ND	ND	ND	4.2	4
Oct-2016	ND	0.0017 J	0.167	0.00044 J	0.00055 J	8.84	8.77 J+	0.0044	0.0135	0.0146	0.058 J	ND	ND	5.5	5.77 J+
May-2017	ND	0.0012 J	0.159	0.00039 J	0.00045 J	9.1	8.72	0.0084	0.0147	0.0156	0.379	ND	0.00026 J	5.93	5.98
Oct-2017	ND	ND	0.166	0.00033 J	0.00059 J	9.29	8.97	0.0021 J	0.0151	0.0119	ND	ND	ND	5.92	6.25

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-08A***													
May-2018	*ND*	*ND*	*0.157 J*	*ND*	*0.00052 J*	8.7	8.8	*0.0026 J*	*0.0129 J*	*0.0106 J*	0.024	*0.011 J*	*ND*	5.5	5.6
Nov-2018	*ND*	*ND*	0.13	0.00041	*0.00058 J*	8.3	8.1	0.0076	0.011	0.009	0.052	0.032	*0.000046 J*	5.3	5.5
May-2019	*ND*	*ND*	0.099	0.00032	*ND*	6.1	5.7	0.0081	0.0076	0.015	*ND*	*ND*	*ND*	3.8	3.6
Oct-2019	*0.00016 J*	*ND*	0.074	*0.00027 J*	*0.00041 J*	3.7	3.8	0.0094	0.0064	0.012	*0.034 J*	*0.015 J*	*0.00007 J*	2.5	2.5
May-2020	*ND*	*ND*	0.11	*0.00031 J*	*0.00051 J*	5.6	5.9	0.0079	0.0089	0.0091	0.086	*ND*	*ND*	3.6	3.9
Oct-2020	*ND*	*ND*	0.13	*0.0003 J*	*ND*	7.4	7.3	*0.0066 J*	0.011	*0.0099 J*	*0.059 J*	0.029	*ND*	5	4.9
Apr-2021	*ND*	*ND*	0.14	*0.00028 J*	*0.00067 J*	6.8	6.6	*0.0036 J*	0.011	0.0096	*ND*	*ND*	*ND*	4.6	4.2
Oct-2021	*ND*	*ND*	0.12	*0.00042 J*	*0.00018 J*	4.6	5.1	0.0039	0.01	0.019	*0.024 J*	*0.024 J*	*ND*	3.5	3.8
May-2022	*ND*	*ND*	0.086	*0.00024 J*	*0.00014 J*	4.7	4.9	0.0048	0.0074	0.007	0.094	0.27	*ND*	3.2	3.4
Oct-2022	*ND*	*ND*	0.17	*0.00042 J*	*0.00046 J*	9	9.1	0.0052	0.015	0.011	0.07	*0.045 J*	*ND*	5.6	5.8
May-2023	*ND*	*ND*	0.19	*0.00049 J*	0.00058	8.6	9.4	0.014	0.015	0.015	0.12	*0.043 J*	*ND*	5.6	6

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-08A*												
Nov-1993	0.1	NA	ND	NA	0.87	NA	ND	NA	2.1	NA	NA	NA	ND
Apr-1994	0.07	NA	ND	NA	0.78	NA	ND	NA	1.51	NA	NA	NA	0.03
Apr-1995	0.03	NA	ND	ND	0.89	NA	ND	ND	1.5	NA	ND	ND	0.06
Oct-1996	0.054	0.056	NA	ND	ND	ND	ND	ND	2.2	2	ND	ND	0.034
Apr-1997	0.081	0.064	0.0009	ND	2.3	1.6	ND	ND	2.1	2.6	ND	ND	0.032
Oct-1997	0.066	0.063	NA	ND	ND	ND	ND	ND	1.47	1.54	ND	ND	0.021
Apr-1998	0.055	0.055	NA	0.016	2.17	ND	ND	ND	1.73	1.63	ND	0.015	0.031
Apr-1999	0.069	0.068	NA	ND	1.43	1.06	ND	ND	2.02	1.75	ND	ND	0.018
Oct-1999	0.062	0.06	NA	ND	0.97	1.05	ND	ND	2.16	1.72	ND	ND	0.021
Apr-2000	0.068	0.064	NA	ND	ND	ND	ND	ND	1.82	1.7	ND	ND	0.014
Oct-2000	0.056	0.06	NA	ND	1.18	1.24	ND	ND	4.19	2.8	ND	ND	0.016
Apr-2001	0.068	NA	NA	ND	1.32	NA	ND	ND	3.02	NA	ND	ND	0.016
Sep-2001	0.058	0.055	NA	0.018	1.06	0.662	ND	ND	2.62	1.81	ND	ND	0.019
Mar-2002	0.066	0.066	NA	ND	1.43	1.7	ND	ND	2.51	1.61	ND	ND	0.015
Sep-2002	0.072	0.062	NA	ND	1.21	ND	ND	ND	2.14	1.75	ND	ND	0.015
Mar-2003	0.055	0.054	NA	ND	1.52	ND	ND	ND	1.89	1.8	ND	ND	0.01
Oct-2003	0.086	0.081	NA	ND	1.64	1.56	ND	ND	3.23	2.72	ND	ND	0.019
Apr-2004	0.082	0.078	ND	ND	1.81	0.922	ND	ND	2.26	1.77	ND	ND	0.044
Oct-2004	0.091	0.083	ND	ND	0.817	ND	ND	ND	1.78	1.25	ND	ND	0.063
Apr-2005	0.1	0.093	ND	ND	0.72	0.62	ND	ND	2.26	1.86	ND	ND	0.046
Oct-2005	0.066	0.058	ND	ND	0.979	0.922	ND	ND	2.38	1.47	ND	ND	0.015
Mar-2006	0.041	0.038	ND	ND	0.672	0.637	ND	ND	1.75	1.7	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-08A***												
Sep-2006	0.091	0.091	ND	ND	0.991	0.975	ND	ND	2.13	2.09	ND	ND	0.021
Mar-2007	0.134	0.124	ND	ND	1.26	1.13	ND	ND	8.06	6.5	ND	ND	0.032
Sep-2007	0.091	0.091	ND	ND	0.922	0.759	ND	ND	2.61	2.71	ND	ND	0.024
Mar-2008	0.105	0.106	ND	ND	1.13	1.02	ND	ND	7.26	6.57	ND	ND	0.023
Sep-2008	0.088	0.09	ND	ND	1	0.896	ND	ND	3.38	3.57	ND	ND	0.035
Mar-2009	0.084	0.085	ND	ND	1.13	1.02	ND	ND	4.71	4.77	ND	ND	0.022
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	0.105	0.11	ND	ND	1.12	1	ND	ND	11.2	12.1	ND	ND	0.049
Apr-2010	0.119	0.116	ND	ND	1.3	1.08	ND	ND	16.3	15.4	ND	ND	0.036
Oct-2010	0.16	0.153	ND	ND	1.54	1.29	ND	ND	29.3	27.7	ND	ND	0.032
Apr-2011	0.131	0.118	ND	ND	1.16	0.97	ND	ND	13.3	13	ND	ND	0.024
Sep-2011	0.182	0.183	ND	ND	1.5	1.4	ND	ND	22.8	22.8	ND	ND	0.036
Mar-2012	0.181	0.18	ND	0.012	1.38	1.34	ND	ND	22.9	23	ND	ND	0.033
Sep-2012	0.1	0.0963	0.000033 J	0.006 J	1.06	1.07	0.000578 J	ND	9.79	9.35	ND	ND	0.0168
Mar-2013	0.161	0.155	0.000077 J	0.0119	1.3	1.32	0.000678 J	ND	23	22.6	ND	ND	0.0394
Oct-2013	0.186	0.184	ND	0.0086 J	1.3	1.25	ND	ND	33.2	33	0.000098 J	ND	0.0371
Mar-2014	0.173	0.174	ND	0.0072 J	1.27	1.25	ND	ND	28.8	28.8	ND	ND	0.0272
Oct-2014	0.166	0.163	ND	0.0088 J	1.51	1.49	0.0038	ND	33	31.9	ND	ND	0.0289
Apr-2015	0.129	0.139	0.000032 J	0.0068 J	1.19	1.28	0.0021	ND	18.5	19.8	ND	ND	0.0201
Nov-2015	0.194	0.197	ND	0.0088 J	1.53	1.52	0.0036	ND	34.3	34.2	0.000192 J	ND	0.0356
May-2016	0.185	0.177	ND	0.0071	1.4	1.44	ND	ND	38.9	36.8	ND	ND	0.024 J,B
Oct-2016	0.252 J+	0.254 J+	ND	0.0117	1.75	1.84	ND	ND	45.8	46.6	ND	ND	0.0382
May-2017	0.259	0.265	ND	0.0135	1.9	1.84	0.00058 J	ND	65	64.1	ND	0.0011	0.0329
Oct-2017	0.275	0.273	ND	0.0099	1.74	1.88	ND	ND	65.9	72.2	ND	ND	0.0335

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-08A***												
May-2018	0.248	0.25	*ND*	*0.0163 J*	*2 J*	*1.7 J*	*ND*	*ND*	53.3	54.3	*0.0038 J*	*ND*	0.0395
Nov-2018	0.19	0.26	*ND*	0.0098	*1.6 J*	*2.5 J*	*0.00077 J*	*ND*	46.2	46.7	*ND*	0.0014	0.029
May-2019	0.077	0.081	*ND*	0.0098	*ND*	*ND*	*ND*	*ND*	15	14.5	*ND*	*ND*	0.014
Oct-2019	0.083	0.082	*ND*	0.008	*1.4 J*	*ND*	*0.0005 J*	*ND*	7.2	7.8	*ND*	0.0081	0.023
May-2020	0.15	0.16	*ND*	0.011	1.7	1.6	*ND*	*ND*	37.1	36.2	*ND*	*ND*	0.026
Oct-2020	0.17	0.17	*ND*	0.0095	*1.8 J*	*1.7 J*	*ND*	*ND*	30.8	30.5	*ND*	*0.00091 J*	0.033
Apr-2021	0.18	0.17	*0.00005 J*	*0.009 J*	1.7	1.7	*ND*	*ND*	29.7	27.2	*ND*	*ND*	0.03
Oct-2021	0.068	0.076	*ND*	0.01	1.5	1.6	*0.0015 J*	*ND*	15	16.5	*0.000026 J*	*ND*	0.015
May-2022	0.13	0.14	*ND*	0.0074	1.4	1.4	*ND*	*ND*	17.6	18.4	*ND*	*ND*	0.02
Oct-2022	0.23	0.22	*ND*	0.012	2.1	2	*0.0022 J*	*ND*	56.4	55.8	*ND*	*ND*	0.038
May-2023	0.22	0.23	*ND*	0.019	1.9	2.1	*0.0019 J*	*ND*	57.8	64.6	*ND*	*ND*	0.041

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-08A***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	33	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5 J	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08A*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08A*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.7 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-08A*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.1	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	63	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	1
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	2.3	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	25	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.3	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.4	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-08A***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.23	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.63	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.16 J	ND	ND	ND	ND	ND	1.83	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.21	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.38 J,B	ND	ND	ND	ND	1.45	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.19 J	ND	ND	ND	ND	ND	1.13	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	0.56 J	ND	ND	ND	ND	ND	ND	0.64 J	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.9 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-08A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.518 J*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-08A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-08A*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	0.7 J,B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.16 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	0.13 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-08A***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.4 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.538 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-09B***											
Nov-1993	ND	ND	ND	26.8	17.3	2	ND	4.61	78.9	2.8	ND	7.38
Apr-1994	ND	ND	ND	74.5	1.4	2	ND	4.88	81.2	2.5	41	10.47
Apr-1995	ND	ND	ND	ND	17.9	2.2	ND	4.6	87.2	2.4	37	2.7
Apr-1997	ND	13	ND	24	13	1.7	ND	NA	NA	ND	74	11
Oct-1997	ND	ND	0.6	ND	22.5	2.48	ND	5.62	95.1	ND	85	11
Apr-1998	ND	ND	0.21	ND	20.1	2	ND	5.91	86.2	ND	67	13
Apr-1999	ND	ND	0.24	ND	22.4	2.07	ND	4.52	89.2	ND	74	20
Oct-1999	ND	ND	0.14	ND	17.7	1.97	ND	4.99	94.2	0.883	390	17
Apr-2000	ND	3	ND	ND	19.3	1.9	ND	5.62	73	ND	71	14
Oct-2000	ND	NA	ND	32	21.9	2.52	ND	4.86	91.2	ND	92	15.1
Apr-2001	ND	NA	ND	ND	18.9	1.96	ND	NA	NA	ND	62	13.4
Sep-2001	ND	ND	ND	ND	18.7	2.59	ND	6.78	103	ND	166	12
Mar-2002	ND	ND	ND	45	20.9	2.32	ND	4.9	97.3	ND	356	16.6
Sep-2002	1	1	ND	11	23.3	2.11	ND	4.9	139.3	ND	124	15.4
Mar-2003	1.3	1.3	ND	ND	23.1	2.18	ND	4.9	114.3	ND	114	14.5
Oct-2003	1.9	1.9	ND	ND	22.6	2.25	ND	5.1	115.1	1.06	114	15.6
Apr-2004	1.6	1.6	ND	ND	21	1.98	ND	4.8	94.9	1.38	116	15.1
Oct-2004	1.6	1.6	ND	ND	21	2.01	ND	4.9	90.5	ND	72	12.9
Apr-2005	ND	ND	ND	39	22.7	2.1	ND	4.8	91.3	2.12	212	18.3
Oct-2005	2	2	ND	54	24	2.15	ND	5	92.5	1.65	155	18.1
Mar-2006	3	3	ND	ND	21.8	2.2	ND	6	95.1	2.01	96	11
Sep-2006	2	2	ND	ND	19.7	2.31	ND	4.8	88.4	1.66	152	16.3
Mar-2007	3.3	3.3	ND	ND	19.3	2.36	ND	5.4	90	1.58	71	14.1
Sep-2007	2.1	2.1	ND	ND	21.8	2.77	ND	5	89.6	ND	101	12.4
Mar-2008	2.1	2.1	ND	ND	25.1	3.26	ND	4.9	87.1	1.19	155	12.4
Sep-2008	3.1	3.1	ND	34	20.4	2.55	ND	4.7	81.6	2.03	109	12.5
Mar-2009	2.6	2.6	ND	ND	19.6	2.56	ND	4.7	87.5	2.01	42	11.3
Oct-2009	2.4	2.4	ND	23	20.1	2.34	ND	4.6	80.8	1.35	173	15.1
Apr-2010	2.9	2.9	ND	35	19.7	2.26	ND	4.3	80.1	1.97	200	16.7
Oct-2010	3	3	ND	ND	17.8	2.06	ND	4.3	76.2	2.3	72	11.4
Apr-2011	10	10	ND	ND	17.2	1.72	ND	4.5	79.7	2.65	73	18.3
Sep-2011	3.4	3.4	ND	ND	20.6	2.36	ND	5	68.1	ND	60	12.1
Mar-2012	3.2	3.2	ND	ND	14.7	1.54	ND	4	79.5	10.6	24	17.4
Sep-2012	3.4	3.4	ND	ND	19.7	2.23	ND	3.7	84.1	1.79	66	12.1
Mar-2013	3.56	3.56	ND	ND	19.3	2.39	ND	4.1	87.8	1.6	44	11.9
Oct-2013	3.8	3.8	ND	ND	19.7	2.43	ND	3.6	89.8	1.51	54	12
Mar-2014	3.44	3.44	ND	6 J	20.3	2.4	ND	5	81.3	1.56	75	14.4

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-09B***										
Oct-2014	*ND*	*ND*	*ND*	*ND*	21.3	2.39	*ND*	4.8	85.7	2.11	72	13.7
Apr-2015	3.76	3.76	*ND*	*ND*	21.1	2.53	*ND*	4.4	89.8	*0.855 J*	42	13.6
Nov-2015	*ND*	*ND*	*ND*	*ND*	20.8	2.37	*ND*	5.1	134.8	3	33	14.2
May-2016	3.16	3.16	*ND*	*ND*	19.7	2.23	*ND*	5.1	145.9	3.53	62	14.7
Oct-2016	3.72	3.72	*ND*	*ND*	21.3	*NA*	*NA*	5.1	140.5	2.91	82	14.5
May-2017	2.24	2.24	*ND*	*7 J*	22.3	2.69	*ND*	5.1	143.8	2.85	76	21
Oct-2017	*ND*	*ND*	*ND*	*ND*	22	2.96	*ND*	5.1	139.9	2.84	52	14.7
May-2018	*3 JB*	*ND*	*ND*	*ND*	23	0.52	*ND*	4.8	143.8	*ND*	62	17.2
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	21.4	2.5	*ND*	4.85	106.3	*ND*	57	16.2
May-2019	*ND*	*NA*	*ND*	*ND*	22.6	2.4	*ND*	4.75	86	*ND*	53	17.5
Oct-2019	*ND*	*NA*	*ND*	*6 J*	18.7	2.3	*ND*	4.66	103.2	*5.3 J*	67	16.4
May-2020	*6 J*	*NA*	*ND*	*ND*	20.2	2.2	*ND*	5.36	107.7	*5.2 J*	64	18.3
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	20.5	2.1	*ND*	5.24	110.2	6.4	86	22.5
Apr-2021	*2 J3c*	*NA*	*ND*	*6.1 J*	23.7	2.5	*ND*	6.43	136.2	*ND*	62	23.3
Oct-2021	12	*NA*	0.12	*ND*	20.9	2.4	*ND*	5.53	161.5	*ND*	63	22.7
May-2022	*8 J4c*	*NA*	*ND*	*ND*	17.4	2.1	*ND*	5.2	156.1	*5.6 J*	49	26.7 N3
Oct-2022	*4 J3c*	*NA*	*ND*	*ND*	26.8	2.8	*ND*	5.04	153.6	*7.1 J*	126	23 N3
May-2023	*2 J2c*	*NA*	*ND*	*ND*	21.5	2.2	*0.0076 J*	5.26	138.6	*5.9 J*	72	18.7 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-09B*													
Nov-1993	NA	0.005	ND	NA	ND	0.15	NA	0.018	NA	ND	4.6	0.13	ND	1.7	NA
Apr-1994	NA	ND	ND	NA	ND	1.72	NA	ND	NA	ND	0.27	ND	ND	1.5	NA
Apr-1995	ND	ND	0.7	ND	ND	1	NA	ND	ND	ND	0.25	ND	ND	1.5	NA
Oct-1996	ND	ND	0.09	0.001	ND	2.5	2.3	ND	0.021	ND	3.3	0.46	ND	1.7	1.6
Apr-1997	ND	ND	0.05	ND	ND	5.4	6.9	ND	ND	ND	ND	ND	0.003	1.5	1.6
Oct-1997	ND	ND	0.063	ND	ND	2.21	2.08	ND	0.01	ND	1.58	ND	ND	1.92	1.69
Apr-1998	ND	ND	0.057	ND	ND	2.21	2.12	ND	ND	ND	1.1	ND	ND	1.74	1.56
Apr-1999	ND	ND	0.182	ND	ND	3	2.07	0.047	0.02	0.052	9.09	ND	ND	2.97	1.52
Oct-1999	ND	ND	0.087	ND	ND	2.73	1.93	0.028	0.017	0.056	5.02	ND	ND	1.91	1.38
Apr-2000	ND	ND	0.055	ND	ND	2.54	1.92	ND	0.012	0.022	1.6	0.219	ND	1.77	1.52
Oct-2000	ND	ND	0.067	ND	ND	2.77	2.22	0.014	0.015	0.028	2.54	ND	ND	1.98	1.67
Apr-2001	ND	ND	0.046	ND	ND	2.49	NA	ND	0.012	ND	0.856	NA	ND	1.75	NA
Sep-2001	ND	ND	0.097	ND	ND	2.92	2.21	0.031	0.015	0.053	7.62	ND	0.013	2.19	1.65
Mar-2002	ND	ND	0.079	ND	ND	3.01	2.23	0.023	0.017	0.043	4.51	0.059	0.009	2.2	1.71
Sep-2002	ND	ND	0.073	ND	ND	2.9	2.14	0.015	0.012	0.038	3.78	ND	0.007	1.98	1.63
Mar-2003	ND	0.002	0.051	ND	ND	2.63	2.3	ND	0.017	0.039	0.907	0.118	0.003	1.92	1.67
Oct-2003	ND	0.004	0.074	ND	ND	2.85	2.19	0.015	0.012	0.066	3.45	ND	0.008	2.07	1.7
Apr-2004	ND	0.004	0.069	ND	ND	2.74	2.03	0.014	0.01	0.024	3.02	ND	0.006	2.01	1.65
Oct-2004	ND	ND	0.042	ND	ND	2.31	1.86	ND	ND	ND	0.71	ND	ND	1.73	1.62
Apr-2005	ND	0.009	0.123	0.002	ND	3.35	2.22	0.047	0.02	0.085	9.19	ND	**0.018**	2.41	1.78
Oct-2005	ND	**0.014**	0.149	ND	0.004	3.09	1.86	0.064	0.025	0.116	11.5	ND	**0.028**	2.52	1.49

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09B***													
Mar-2006	ND	ND	0.031	ND	ND	2.07	1.93	ND	ND	ND	0.277	ND	ND	1.42	1.49
Sep-2006	ND	ND	0.081	ND	ND	3.1	2.21	0.039	0.019	0.079	7.79	ND	**0.016**	2.05	1.55
Mar-2007	ND	0.003	0.058	ND	ND	2.66	2.48	ND	0.012	0.021	1.4	ND	0.003	1.81	1.59
Sep-2007	ND	ND	0.046	ND	ND	2.26	2.2	ND	ND	ND	0.88	ND	0.003	1.65	1.56
Mar-2008	ND	0.004	0.062	ND	ND	2.27	2.1	0.013	0.011	0.023	2.38	ND	0.006	1.64	1.5
Sep-2008	ND	0.003	0.063	ND	ND	2.17	1.92	0.018	0.014	0.02	2.31	ND	0.005	1.71	1.48
Mar-2009	ND	ND	0.046	ND	ND	2.09	1.88	ND	ND	0.017	1.51	ND	0.003	1.48	1.35
Oct-2009	ND	0.005	0.09	ND	ND	2.82	1.93	0.031	0.016	0.061	4.87	0.052	0.011	1.96	1.52
Apr-2010	ND	0.006	0.094	ND	ND	3.34	2.45	0.039	0.017	0.066	11	ND	0.014	2.05	1.38
Oct-2010	ND	ND	0.037	ND	ND	1.94	1.97	ND	ND	ND	0.516	ND	ND	1.59	1.59
Apr-2011	ND	ND	0.034	ND	ND	4.56	4.07	ND	0.022	ND	4.41	ND	ND	1.67	1.53
Sep-2011	ND	ND	0.04	ND	ND	2.12	2.05	ND	ND	ND	0.211	ND	ND	1.65	1.61
Mar-2012	ND	ND	0.066	ND	ND	2.82	2.86	ND	ND	ND	ND	ND	ND	2.51	2.54
Sep-2012	ND	ND	0.0335	0.000191 J	ND	2.09	2.03	ND	0.0068 J	0.0015 J	0.0749	0.0223 J	ND	1.66	1.67
Mar-2013	ND	ND	0.0379	0.000152 J	ND	2.13	2.19	0.0029 J	0.0069 J	0.0016 J	0.0186 J	0.0078 J	ND	1.61	1.62
Oct-2013	ND	ND	0.0414	0.000199 J	ND	2.39	2.43	0.0095 J	0.0074 J	0.0012 J	0.101	0.0559	0.000275 J	1.47	1.42
Mar-2014	0.000599 J	ND	0.0436	0.000386 J	ND	2.67	2.23	0.0046 J	0.0069 J	0.00041 J	0.194	0.003 J	ND	1.87	1.58
Oct-2014	0.000623 J	ND	0.0454	0.00016 J	0.000098 J	2.39	2.4	0.0025 J	0.0074 J	0.0017 J	0.0974	ND	ND	1.89	1.89
Apr-2015	0.000723 J	ND	0.0449	0.00016 J	0.000093 J	2.42	2.49	0.002 J	0.0079 J	0.0022 J	0.137	ND	0.00099 J	1.83	1.9
Nov-2015	0.000329 J	ND	0.041	0.000183 J	0.0001 J	2.56	2.52	0.000845 J	0.0068 J	0.0023 J	0.054	ND	0.000315 J	1.89	1.95
May-2016	ND	ND	0.0411	0.00021 J	ND	2.43	2.18	0.0014 J	0.0065	0.003 J	0.265	ND	ND	2.11	1.89
Oct-2016	ND	ND	0.0474	0.00017 J	ND	2.5	2.55 J+	0.0021 J	0.0066	0.0022 J	0.128 J	ND	0.00017 J	2	2.23 J+
May-2017	ND	ND	0.0508	0.0002 J	ND	2.83	2.32	0.0024 J	0.0085	0.0068	0.177 J	ND	0.00054 J	3.39	2.14
Oct-2017	ND	ND	0.0464	0.00014 J	ND	2.47	2.45	ND	0.0075	0.0017 J	ND	ND	ND	2.07	2.14

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09B***													
May-2018	*ND*	*ND*	*0.0507 J*	*ND*	*ND*	2.9	2.9	*ND*	*0.0078 J*	*ND*	*0.017 J*	*ND*	*ND*	2.4	2.4
Nov-2018	*ND*	*ND*	0.043	*0.00014 JM1*	*0.000091 J*	2.9	2.8	*0.0041 J*	0.0057	0.0029	*0.014 J*	*ND*	*0.000081 J*	2.2	2.2
May-2019	*ND*	*ND*	0.048	*ND*	*ND*	2.8	2.6	*ND*	0.0058	0.0035	*ND*	*ND*	*ND*	2.6	2.4
Oct-2019	*0.00014 J*	*0.00044 J*	0.05	*0.00012 J*	*0.0002 J*	2.5	2.5	*0.0056 J*	0.0056	0.0022	*0.017 J*	*ND*	*ND*	2.5	2.5
May-2020	*0.000061 J*	*ND*	0.047	*0.000093 J*	*ND*	3.1	3	*0.0041 J*	0.0046	0.0023	*0.017 J*	*0.013 J*	*ND*	2.5	2.4
Oct-2020	*ND*	*ND*	0.045	*ND*	*ND*	4.6	4.3	*0.0031 J*	0.0045	*ND*	*0.021 J*	*0.01 J*	*ND*	2.7	2.5
Apr-2021	*ND*	*ND*	0.052	*ND*	*ND*	4.9	4.8	*0.0014 J*	*0.0046 J*	*ND*	*0.053 J*	*ND*	*ND*	2.7	2.8
Oct-2021	*ND*	*ND*	0.051	*ND*	*ND*	4.3	4.6	0.0034	0.0051	*0.002 J*	*0.031 J*	*0.013 J*	*0.000034 J*	2.9	3.1
May-2022	*ND*	*ND*	0.048	*ND*	*ND*	5.6	5	0.0031	0.0048	0.0026	*ND*	*ND*	*ND*	3.1	2.5
Oct-2022	*ND*	*ND*	0.056	*0.00011 J*	*ND*	4.2	3.8	*0.0018 J*	0.0078	*0.0019 J*	0.083	*ND*	*ND*	3	2.8
May-2023	*ND*	*ND*	0.049	*0.00011 J*	*ND*	3.7	4.1	0.0038	0.0079	0.0028	0.18	*ND*	*ND*	2.3	2.6

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-09B*												
Nov-1993	0.05	NA	ND	NA	4.7	NA	ND	NA	8	NA	NA	NA	0.04
Apr-1994	0.03	NA	ND	NA	1.2	NA	ND	NA	8.28	NA	NA	NA	0.08
Apr-1995	ND	NA	ND	ND	1.7	NA	ND	ND	7.2	NA	ND	ND	0.03
Oct-1996	0.019	0.017	NA	ND	ND	ND	ND	ND	8.9	9.1	ND	0.026	0.16
Apr-1997	0.019	0.017	ND	ND	2.3	4.4	ND	ND	8.4	9.2	ND	ND	0.031
Oct-1997	0.02	0.018	NA	0.018	1.49	ND	ND	ND	11.1	10.9	ND	0.012	0.025
Apr-1998	0.019	0.017	NA	0.018	2.09	1.85	ND	ND	10.2	10.2	ND	ND	0.026
Apr-1999	0.03	0.018	NA	0.025	8.15	1.24	ND	ND	11.8	10.5	ND	0.079	0.056
Oct-1999	0.02	0.017	NA	0.035	2.97	1.29	ND	ND	10.3	9.04	ND	0.055	0.06
Apr-2000	0.02	0.017	NA	0.018	1.88	1.31	ND	ND	10.9	9.63	ND	0.017	0.033
Oct-2000	0.021	0.017	NA	0.025	2.6	1.53	ND	ND	12.6	11.1	ND	0.025	0.036
Apr-2001	0.02	NA	NA	0.012	1.92	NA	ND	ND	12.3	NA	ND	ND	0.015
Sep-2001	0.026	0.018	NA	0.036	3.42	1.42	ND	ND	13.2	11.7	ND	0.061	0.038
Mar-2002	0.025	0.02	NA	0.019	3.42	2.01	ND	ND	14.3	12.2	ND	0.047	0.038
Sep-2002	0.025	0.018	NA	0.015	2.03	1.56	ND	ND	13.2	12.3	ND	0.034	0.028
Mar-2003	0.021	0.018	NA	0.019	2.98	1.45	ND	ND	13.4	12.5	ND	0.025	0.027
Oct-2003	0.028	0.02	NA	0.016	3.2	2.95	ND	ND	14.1	12.9	ND	0.036	0.047
Apr-2004	0.026	0.02	ND	0.016	3.46	2.34	ND	ND	13.3	12.8	ND	0.028	0.108
Oct-2004	0.021	0.02	ND	ND	2.49	ND	ND	ND	13.6	13.1	ND	ND	0.02
Apr-2005	0.03	0.019	ND	0.033	3.31	1.33	ND	ND	15.2	15.1	ND	0.086	0.1
Oct-2005	0.031	0.016	ND	0.034	4.29	1.35	ND	ND	14.3	11.9	ND	0.12	0.069
Mar-2006	ND	ND	ND	ND	1.25	1.15	ND	ND	11	11.8	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09B***												
Sep-2006	0.027	0.017	0.0002	0.024	2.93	1.41	ND	ND	11.4	10.9	ND	0.07	0.046
Mar-2007	0.02	0.016	ND	0.014	2.3	1.48	ND	ND	10.5	10.7	ND	0.019	0.02
Sep-2007	0.02	0.019	ND	0.012	1.66	1.23	ND	ND	11.5	11.6	ND	ND	0.017
Mar-2008	0.021	0.017	ND	0.015	2.29	1.26	ND	ND	11.9	11.4	ND	0.019	0.023
Sep-2008	0.022	0.017	ND	0.019	2.63	1.24	ND	ND	10.2	10.1	ND	0.016	0.049
Mar-2009	0.019	0.016	ND	ND	2.08	1.36	ND	ND	10.6	10.3	ND	ND	0.018
Oct-2009	0.031	0.017	ND	0.023	2.9	1.16	ND	ND	10.7	11	ND	0.058	0.062
Apr-2010	0.029	0.014	ND	0.023	3.54	1.37	ND	ND	11	10.9	ND	0.08	0.043
Oct-2010	0.024	0.02	ND	ND	1.91	1.49	ND	ND	11.1	11.3	ND	ND	0.015
Apr-2011	0.239	0.012	ND	0.011	1.56	1.42	ND	ND	10.6	10.2	ND	ND	0.022
Sep-2011	0.019	0.018	ND	ND	1.71	1.52	ND	ND	11.7	11.3	ND	ND	0.01
Mar-2012	0.045	0.045	ND	ND	1.5	1.51	ND	ND	8.98	9.28	ND	ND	ND
Sep-2012	0.0202	0.02	ND	0.0083 J	1.47	1.37	ND	ND	11.6	11.5	ND	ND	0.0074 J
Mar-2013	0.0199	0.0206	0.000063 J	0.0091 J	1.33	1.36	ND	ND	11	10.9	ND	ND	0.0167
Oct-2013	0.0238	0.0241	ND	0.0081 J	1.24	1.21	ND	ND	9.63	9.33	0.000127 J	0.0052 J	0.0169
Mar-2014	0.0211	0.0218	ND	0.0091 J	1.85	1.44	ND	ND	12.7	10.6	ND	0.000972 J	0.0119
Oct-2014	0.0233	0.0232	0.000034 J	0.0099 J	1.65	1.6	0.00081 J	ND	12.6	12.6	ND	ND	0.0117
Apr-2015	0.0251	0.0248	ND	0.0097 J	1.66	1.61	0.0014 J	ND	12.9	13.2	0.000871 J	ND	0.0152
Nov-2015	0.0223	0.0226	ND	0.0087 J	1.68	1.71	0.000537 J	ND	12.5	12.7	0.00018 J	ND	0.0133
May-2016	0.0235	0.0224	ND	0.0081	1.84	1.65	ND	ND	14.9	12.3	ND	ND	0.0088 J,B
Oct-2016	0.0236 J+	0.0256 J+	ND	0.0099	1.83	1.79	ND	ND	13.1	14.1	ND	0.00068 J	0.0122 J
May-2017	0.0309	0.0254	ND	0.0127	2.25	1.69	ND	ND	50.3	13.2	ND	0.00067 J	0.0208 J
Oct-2017	0.0261	0.0267	ND	0.0084	1.56	1.63	ND	ND	12.9	13.3	ND	ND	0.0092 J
May-2018	0.0293	0.0279	ND	0.0178 J	1.9 J	1.4 J	ND	ND	14.8	14	ND	ND	0.0124 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09B***												
Nov-2018	0.022	0.02	*ND*	0.0093	*1.9 J*	*1.7 J*	*0.0004 J*	*ND*	13.4	13.4	*ND*	0.002	0.011 D6
May-2019	0.026	0.024	*ND*	0.008	*ND*	*ND*	*ND*	*ND*	13.3	12.8	*ND*	*ND*	0.0086
Oct-2019	0.029	0.03	*ND*	0.0073	*1.9 J*	*ND*	*0.00065 J*	*ND*	12.5	13	*ND*	0.0087	0.015
May-2020	0.021	0.02	*ND*	0.0098	*2.2 J*	*1.3 J*	*0.00043 J*	*ND*	15.2	11.8	*ND*	0.0044	0.01
Oct-2020	0.023	0.022	*ND*	0.0084	*ND*	*1.5 J*	*ND*	*ND*	13	12.9	*ND*	*0.0012 J*	*0.015 J*
Apr-2021	0.026	0.029	*ND*	*0.0084 J*	1.7	1.8	*ND*	*ND*	14.5	15.1	*ND*	*0.00073 J*	*0.0078 J*
Oct-2021	0.026	0.028	*ND*	0.0098	1.6	1.6	*0.0011 J*	*ND*	13.1	14	*0.000034 J*	*ND*	0.0097
May-2022	0.031	0.027	*ND*	0.012	1.7	1.5	*ND*	*ND*	15.4	13	*ND*	*ND*	0.017
Oct-2022	0.038	0.036	*ND*	0.012	1.9	1.8	*ND*	*ND*	16.6	16.6	*ND*	*ND*	0.014
May-2023	0.03	0.033	*ND*	0.014	1.5	1.7	*ND*	*ND*	13.4	15.8	*ND*	*0.0013 J*	0.018

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09B*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	6	5	4	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	17	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09B*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09B*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.6 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-09B*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	2.1	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	0.6 J	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.1	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.3	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09B***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.49 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	0.39 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.32 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.4 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.3 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09B***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	5.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-09B*															
Oct-2005	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	0.5 J	0.5 J	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.44 J	ND	ND	ND	0.18 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	0.34 J	ND	ND	ND	0.21 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	0.38 J	ND	ND	ND	0.19 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	0.29 J	ND	ND	ND	0.19 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	0.3 J	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09B***															
Oct-2016	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.455 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-09C***											
Nov-1993	9	9	ND	ND	13.3	1.6	ND	5.05	78.9	3.5	38	14.7
Apr-1994	57	31	0.2	ND	14.1	1.5	ND	8.94	143	3.3	71	91.14
Apr-1995	19.6	19.6	ND	17.6	17.6	2.1	ND	5.6	114	3	68	28
Apr-1997	ND	1	ND	ND	18	2.1	ND	NA	NA	ND	68	8
Oct-1997	6	6	0.42	ND	17.2	1.74	ND	5.8	94.5	1.1	59	17
Apr-1998	15	15	0.23	ND	15	1.45	ND	6.66	86.2	1.26	63	25
Apr-1999	ND	ND	0.17	ND	18.2	1.52	ND	5.07	87.3	2.12	88	17
Oct-1999	5	5	0.1	ND	15.6	1.73	ND	5.37	111.2	2.12	110	21
Apr-2000	3	4	ND	ND	17.1	1.8	ND	5.73	79	4.23	83	20
Oct-2000	10.2	NA	ND	ND	17	1.94	ND	5.49	98	5.69	91	26.1
Apr-2001	3.1	NA	ND	ND	15.2	1.36	ND	NA	NA	6.39	68	18.7
Sep-2001	5.1	5.1	ND	ND	16.9	2.63	ND	6.91	100	10.5	90	20.5
Mar-2002	2.8	2.8	ND	ND	17	2.16	ND	5.2	88.3	4.78	95	17.5
Sep-2002	2.8	2.8	ND	ND	17.3	1.85	ND	5.1	99.2	6.62	197	17.8
Mar-2003	5.7	5.7	ND	ND	20.8	1.82	ND	5.4	111.5	11.2	94	18.9
Oct-2003	29	29	ND	ND	17.9	1.98	ND	5.9	113.3	4.71	105	42.5
Apr-2004	7.2	7.2	ND	ND	18.4	1.91	ND	5.4	95.1	2.6	112	18.9
Oct-2004	9.6	9.6	ND	ND	17.9	1.83	ND	5.3	86.8	2.45	74	26.9
Apr-2005	23	23	ND	ND	17.1	1.84	ND	5	92.8	2.97	120	30.5
Oct-2005	5.4	5.4	ND	ND	19.3	1.96	ND	5.4	82.8	4.26	78	14.6
Mar-2006	4.8	4.8	ND	ND	15.5	1.6	ND	5.2	97.9	8.46	72	16.3
Sep-2006	3.8	3.8	ND	ND	16.5	1.83	ND	4.9	92.6	8.75	91	17.6
Mar-2007	4	4	ND	ND	17.2	1.97	ND	5.2	94.1	7.75	73	17.6
Sep-2007	3.2	3.2	ND	ND	18.4	2.35	ND	5.1	85	10.8	80	16.2
Mar-2008	3.5	3.5	ND	ND	19.9	2.49	ND	5.2	84.3	9.06	88	15.3
Sep-2008	4.2	4.2	ND	ND	15.2	1.76	ND	4.9	82.5	9.79	67	15.1
Mar-2009	3.5	3.5	ND	ND	14.4	1.87	ND	4.8	83.5	10	35	14.2
Oct-2009	3.4	3.4	ND	ND	15	1.66	ND	4.9	79.7	9.35	86	16.2
Apr-2010	6.1	6.1	ND	ND	17.5	2.2	ND	4.6	81.1	5.77	62	18.9
Oct-2010	3	3	ND	ND	15.9	2.11	ND	4.2	608	5.13	131	14.5
Apr-2011	33	33	ND	ND	16.1	1.88	0.03	4.5	81.2	5.33	110	38
Sep-2011	2.7	2.7	0.29	ND	16.7	1.77	ND	4.9	72.6	6.5	59	15.4
Mar-2012	3.1	3.1	ND	ND	19.5	2.25	ND	15.4	80.7	ND	76	12
Sep-2012	3.04	3.04	ND	ND	14.3	1.46	ND	4.1	86.3	12.8	72	18
Mar-2013	2.84	2.84	ND	ND	16.7	1.54	ND	3.9	97.1	11.9	65	16.4
Oct-2013	3.32	3.32	ND	ND	16.2	1.6	ND	3.6	94.3	12.5	65	18.1
Mar-2014	2.68	2.68	ND	ND	16.6	1.55	ND	5	91.3	13.5	63	17.1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-09C***										
Oct-2014	ND	ND	ND	11	17	1.57	ND	4.7	90.7	12.4	62	20.6
Apr-2015	2.84	2.84	ND	ND	18.1	2.11	ND	4.2	95.2	11.2	50	19.3
Nov-2015	ND	ND	ND	8 J	19.6	2.29	ND	5	129.4	10.2	58	18.7
May-2016	ND	ND	ND	ND	18.1	2.15	ND	5	151	9.71	66	18.4
Oct-2016	ND	ND	ND	ND	19.3	NA	NA	4.9	149.5	8.32	64	17.5
May-2017	ND	ND	ND	7 J	18.7	2.23	ND	4.9	147.7	10.4	64	24.3
Oct-2017	ND	ND	ND	7 J+	16.7	2.14	ND	4.9	138.3	11.9	50	20
May-2018	4 JB	ND	0.088 J	ND	17.4	0.39	ND	4.6	139.4	12.7	68	22.1
Nov-2018	4 JB	ND	ND	ND	22.5	2.8	ND	4.69	125.1	12	31	23.6
May-2019	20	NA	ND	ND	19.9	2.6	ND	5.6	112.6	11.7	84	39.4
Oct-2019	ND	NA	ND	8.2 J	16.7	2.3	ND	4.77	121.8	15.4	60	25.3
May-2020	ND	NA	ND	ND	19.4	2.6	ND	4.56	123	13.1	89	25.5
Oct-2020	ND	NA	ND	ND	20	2.7	ND	4.53	124.4	13.4	93	27.5
Apr-2021	22	NA	ND	6.1 J	23.3	2.9	ND	4.88	155.3	12.9	80	27.4
Oct-2021	6 J2c	NA	ND	ND	25.5	3.5	ND	4.85	201.4	10.1	67	26.3
May-2022	4 J3c	NA	ND	ND	22.6	3.1	ND	4.62	190.7	9.6 J	61	27.7 N3
Oct-2022	ND	NA	ND	6.1 J	24.1	2.5	ND	4.72	166.4	15.6	66	25.4 N3
May-2023	ND	NA	ND	ND	18.6	2.4	ND	4.77	157	14.6	65	24.3 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-09C*													
Nov-1993	NA	ND	ND	NA	ND	2.6	NA	0.015	NA	ND	6.4	0.14	ND	2	NA
Apr-1994	NA	ND	ND	NA	ND	33.5	NA	ND	NA	ND	0.25	1.59	ND	1.82	NA
Apr-1995	ND	ND	ND	ND	ND	7.9	NA	ND	ND	ND	ND	ND	ND	2	NA
Oct-1996	ND	ND	0.065	ND	ND	10	6.4	ND	ND	ND	ND	ND	ND	1.7	1.8
Apr-1997	ND	ND	0.042	ND	ND	2.3	2.2	ND	ND	ND	0.22	ND	0.002	1.5	1.5
Oct-1997	ND	ND	0.049	ND	ND	4.65	3.92	ND	0.013	ND	0.49	ND	ND	1.59	1.48
Apr-1998	ND	ND	0.053	ND	ND	7.37	6.97	ND	ND	ND	0.338	ND	ND	1.6	1.48
Apr-1999	ND	ND	0.06	ND	ND	3.68	3	ND	0.016	0.016	0.881	ND	ND	1.99	1.59
Oct-1999	ND	ND	0.061	ND	ND	3.2	2.57	ND	0.013	0.015	0.387	ND	ND	2.24	2.19
Apr-2000	ND	ND	0.072	ND	ND	3.92	3.13	ND	0.015	0.017	1.27	0.11	ND	2.37	2.11
Oct-2000	ND	ND	0.071	ND	ND	6.62	5.77	ND	0.012	0.013	0.777	ND	ND	2.32	2.08
Apr-2001	ND	ND	0.067	ND	ND	3.39	NA	ND	0.012	ND	0.154	NA	ND	2.5	NA
Sep-2001	ND	ND	0.071	ND	ND	4.36	3.13	ND	0.011	0.012	0.366	ND	ND	2.33	2.19
Mar-2002	ND	ND	0.063	ND	ND	3.27	2.67	ND	0.01	ND	0.54	ND	ND	2.26	2.16
Sep-2002	ND	ND	0.072	ND	ND	3.47	2.66	ND	ND	0.017	1.42	0.329	0.002	2.23	2.1
Mar-2003	ND	ND	0.061	ND	ND	4.11	3.51	ND	0.013	ND	0.059	ND	ND	2.09	2.14
Oct-2003	ND	ND	0.07	ND	ND	13.5	8.39	ND	ND	0.012	0.43	ND	ND	2.13	2.09
Apr-2004	ND	0.002	0.059	ND	ND	4.28	3.25	ND	ND	ND	0.312	ND	ND	1.98	1.86
Oct-2004	ND	ND	0.054	ND	ND	7.84	3.16	ND	0.016	0.016	0.676	ND	0.002	1.76	1.61
Apr-2005	ND	0.005	0.091	ND	ND	8.6	3.38	0.023	0.035	0.049	5.71	ND	0.011	2.18	1.56
Oct-2005	ND	ND	0.047	ND	ND	3.15	2.53	ND	0.011	0.012	0.965	ND	0.002	1.65	1.55

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09C***													
Mar-2006	ND	ND	0.053	ND	ND	3.13	3.08	ND	0.011	ND	0.608	ND	ND	2.06	2.12
Sep-2006	ND	ND	0.059	ND	ND	3.21	2.94	ND	0.011	ND	0.373	ND	ND	2.32	2.31
Mar-2007	ND	0.003	0.076	ND	ND	3.32	2.92	ND	0.016	0.014	1.44	ND	0.002	2.25	2.13
Sep-2007	ND	ND	0.066	ND	ND	2.87	2.71	ND	0.011	ND	0.377	ND	ND	2.2	2.18
Mar-2008	ND	0.002	0.066	ND	ND	2.74	2.6	ND	0.01	ND	0.477	ND	ND	2.05	2.1
Sep-2008	ND	0.002	0.06	ND	ND	2.68	2.46	ND	ND	ND	0.492	ND	ND	2.04	2.12
Mar-2009	ND	ND	0.062	ND	ND	2.53	2.35	ND	ND	0.015	1.53	ND	ND	1.91	1.87
Oct-2009	ND	ND	0.063	ND	ND	3.08	2.62	ND	0.012	0.013	1.35	ND	ND	2.06	2.22
Apr-2010	ND	ND	0.069	ND	ND	4	3.41	ND	0.014	0.012	2.1	ND	ND	2.15	1.91
Oct-2010	ND	ND	0.056	ND	ND	2.49	2.42	ND	ND	ND	0.207	ND	ND	2.01	1.91
Apr-2011	ND	ND	0.061	ND	ND	11.3	8.91	ND	0.019	0.014	0.202	ND	ND	2.38	1.85
Sep-2011	ND	ND	0.064	ND	ND	2.56	2.56	ND	ND	ND	0.177	ND	ND	2.18	2.15
Mar-2012	ND	ND	0.036	ND	ND	1.93	1.93	ND	ND	ND	ND	ND	ND	1.75	1.75
Sep-2012	ND	ND	0.0637	0.000327 J	ND	2.89	2.96	0.0023 J	0.0081 J	0.0042 J	0.227	0.0343 J	ND	2.62	2.65
Mar-2013	ND	ND	0.0686	0.00029 J	ND	2.6	3.15	0.0023 J	0.0071 J	0.0027 J	0.0286 J	0.0103 J	ND	2.41	2.82
Oct-2013	ND	ND	0.0751	0.000345 J	0.00013 J	2.72	2.76	0.0028 J	0.008 J	0.0031 J	ND	ND	ND	2.75	2.73
Mar-2014	0.000518 J	ND	0.0717	0.000333 J	0.000115 J	2.95	3.05	0.0025 J	0.008 J	0.0015 J	0.241	0.0045 J	ND	2.37	2.44
Oct-2014	0.001 J	ND	0.0893	0.000437 J	0.000143 J	3.42	3.31	0.0011 J	0.0086 J	0.0042 J	0.102	ND	ND	2.94	2.86
Apr-2015	0.000486 J	ND	0.0873	0.000482 J	0.000129 J	3.26	3.17	0.0016 J	0.0089 J	0.0034 J	0.0461 J	0.009 J	ND	2.72	2.67
Nov-2015	0.000371 J	0.000239 J	0.0776	0.00042 J	0.000141 J	3.3	3.29	0.0013 J	0.0082 J	0.0042 J	0.17	ND	0.000519 J	2.53	2.55
May-2016	ND	ND	0.0732	0.00041 J	ND	3.11	2.77	0.0013 J	0.0081	0.0034 J	0.036 J	ND	ND	2.59	2.32
Oct-2016	ND	ND	0.0711	0.00041 J	ND	3.03	2.97 J+	0.0017 J	0.0084	0.0036 J	0.0493 J	ND	ND	2.4	2.55 J+
May-2017	ND	ND	0.085	0.00039 J	ND	3.62	3.25	0.0017 J	0.01	0.0079	0.159 J	ND	0.00054 J	3.7	2.73
Oct-2017	ND	ND	0.0807	0.00033 J	ND	3.46	3.31	ND	0.0096	0.0031 J	ND	ND	ND	2.76	2.93

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09C***													
May-2018	*ND*	*ND*	*0.0871 J*	*ND*	*0.00014 J*	3.8	3.7	*0.0022 J*	*0.0097 J*	*0.0032 J*	*0.02 J*	*ND*	*ND*	3.1	3
Nov-2018	*ND*	*ND*	0.086	0.0004	*0.00017 J*	4.2	4.1	*0.0064 J*	0.0086	0.0043	0.026	*0.014 J*	*0.000046 J*	3.2	3.2
May-2019	*ND*	*ND*	0.075	*ND*	*ND*	10.3	9.4	*ND*	0.0071	0.0031	*ND*	*ND*	*ND*	3.3	3.1
Oct-2019	*0.00013 J*	*ND*	0.083	*0.00029 J*	*0.00028 J*	4.5	4.7	0.0074	0.0082	0.0033	*0.018 J*	*0.011 J*	*ND*	3.4	3.4
May-2020	*0.000054 J*	*ND*	0.089	*0.0003 J*	*0.00017 J*	4.2	4.2	0.0094	0.011	0.0037	*0.06 J*	*0.019 J*	*ND*	3.7	3.6
Oct-2020	*0.00026 J*	*ND*	0.11	*0.00038 J*	*0.0007 J*	4.5	4.3	0.099	0.0098	0.57	*0.028 J*	*0.014 J*	*0.0014 J*	4	3.7
Apr-2021	*ND*	*0.0029 J*	0.1	*0.00028 J*	*0.00035 J*	4.8	5	*0.0035 J*	0.011	*0.0044 J*	*ND*	*ND*	*ND*	3.7	3.9
Oct-2021	*ND*	*ND*	0.1	*0.00032 J*	*ND*	4.3	4.6	0.0037	0.013	0.0033	*0.016 J*	*0.01 J*	*ND*	3.8	4
May-2022	*ND*	*ND*	0.12	*0.00039 J*	*0.00017 J*	4.6	4.4	0.0059	0.015	0.0044	*0.036 J*	*ND*	*ND*	3.9	3.8
Oct-2022	*ND*	*ND*	0.097	*0.00032 J*	*ND*	4.3	4.9	0.0033	0.012	0.0038	*ND*	*ND*	*ND*	3.5	4
May-2023	*ND*	*ND*	0.1	*0.00024 J*	*ND*	4.2	4.6	0.0035	0.012	0.0041	0.051	*ND*	*ND*	3.4	3.7

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-09C*												
Nov-1993	0.06	NA	ND	NA	4.3	NA	ND	NA	6.5	NA	NA	NA	0.04
Apr-1994	0.03	NA	ND	NA	3.26	NA	ND	NA	8.87	NA	NA	NA	0.05
Apr-1995	0.01	NA	ND	ND	7.8	NA	ND	ND	7.3	NA	ND	ND	0.02
Oct-1996	0.024	0.023	NA	ND	ND	ND	ND	ND	8	8.1	ND	ND	0.096
Apr-1997	0.018	0.015	ND	ND	2.6	2.3	ND	ND	9.5	10	ND	ND	0.043
Oct-1997	0.023	0.02	NA	0.016	1.74	0.969	ND	ND	9.14	8.95	ND	ND	0.02
Apr-1998	0.019	0.015	NA	ND	1.99	1.61	ND	ND	9.25	8.96	ND	ND	0.017
Apr-1999	0.029	0.02	NA	ND	3.16	1.65	ND	ND	10	9.15	ND	ND	0.028
Oct-1999	0.032	0.031	NA	0.025	1.91	1.78	ND	ND	9.38	8.42	ND	ND	0.033
Apr-2000	0.039	0.035	NA	0.017	1.39	0.689	ND	ND	10.6	9.28	ND	ND	0.032
Oct-2000	0.041	0.032	NA	ND	1.94	1.58	ND	ND	11.5	9.91	ND	ND	0.024
Apr-2001	0.045	NA	NA	ND	1.86	NA	ND	ND	10.7	NA	ND	ND	0.012
Sep-2001	0.042	0.036	NA	0.02	1.79	1.44	ND	ND	11.5	9.26	ND	ND	0.023
Mar-2002	0.039	0.036	NA	ND	1.98	1.34	ND	ND	10.4	9.3	ND	ND	0.019
Sep-2002	0.041	0.034	NA	ND	2.08	1.79	ND	ND	9.83	9.67	ND	ND	0.021
Mar-2003	0.032	0.034	NA	0.012	2.47	1.03	ND	ND	10.1	9.64	ND	ND	0.017
Oct-2003	0.036	0.029	NA	ND	2.86	1.49	ND	ND	12.7	11.9	ND	ND	0.018
Apr-2004	0.032	0.03	ND	ND	2.5	1.95	ND	ND	12.2	12.4	ND	ND	0.01
Oct-2004	0.027	0.022	ND	0.045	3.34	2.15	ND	ND	12.9	11.5	ND	ND	0.086
Apr-2005	0.045	0.018	ND	0.044	3.36	1.23	ND	ND	13.5	11.9	ND	0.035	0.096
Oct-2005	0.023	0.019	ND	0.013	1.79	1.45	ND	ND	11.1	9.58	ND	ND	0.022
Mar-2006	ND	ND	ND	0.012	1.69	1.42	ND	ND	8.26	8.69	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09C***												
Sep-2006	0.047	0.044	ND	ND	1.83	1.69	ND	ND	9.88	9.84	ND	ND	0.017
Mar-2007	0.045	0.042	ND	0.016	2.37	1.51	ND	ND	10.3	9.87	ND	0.012	0.029
Sep-2007	0.046	0.047	ND	ND	1.61	1.41	ND	ND	9.72	9.14	ND	ND	0.018
Mar-2008	0.043	0.044	ND	ND	1.64	1.43	ND	ND	9.61	8.98	ND	ND	0.022
Sep-2008	0.041	0.043	ND	0.012	1.54	1.43	ND	ND	7.7	7.86	ND	ND	0.038
Mar-2009	0.04	0.039	ND	ND	2.02	1.57	ND	ND	8	7.76	ND	ND	0.02
Oct-2009	0.044	0.043	ND	0.017	1.6	1.42	ND	ND	8.01	8.5	ND	ND	0.055
Apr-2010	0.039	0.031	ND	0.016	1.9	1.47	ND	ND	10.5	10	ND	ND	0.03
Oct-2010	0.038	0.035	ND	ND	1.68	1.51	ND	ND	10.1	10.3	ND	ND	0.014
Apr-2011	0.076	0.032	ND	0.014	1.62	1.46	ND	ND	10.2	9.47	ND	ND	0.033
Sep-2011	0.041	0.04	ND	ND	1.77	1.66	ND	ND	9.56	9.44	ND	ND	ND
Mar-2012	0.018	0.019	ND	ND	1.35	1.34	ND	ND	11.8	11.8	ND	ND	ND
Sep-2012	0.0536	0.0546	0.000045 J	0.0081 J	1.6	1.65	ND	ND	8.42	8.5	ND	ND	0.0075 J
Mar-2013	0.0558	0.0621	0.000083 J	0.0074 J	1.38	1.68	0.000739 J	ND	8.32	9.93	ND	ND	0.0144
Oct-2013	0.0658	0.066	ND	0.0076 J	1.6	1.62	0.000585 J	ND	9.71	9.88	0.00019 J	0.0016 J	0.018
Mar-2014	0.0707	0.0719	ND	0.0074 J	1.59	1.57	ND	ND	8.71	8.98	ND	0.000889 J	0.0108
Oct-2014	0.0739	0.0722	ND	0.0079 J	1.76	1.72	0.0016 J	ND	10.2	10.2	ND	ND	0.0176
Apr-2015	0.0757	0.0749	0.000028 J	0.0085 J	1.66	1.61	0.0013 J	ND	10.8	10.6	ND	ND	0.0286
Nov-2015	0.0616	0.0611	ND	0.0079 J	1.75	1.71	0.0012 J	ND	11.5	11.9	0.000156 J	0.000737 J	0.018
May-2016	0.0629	0.0571	ND	0.0084	1.81	1.76	ND	ND	13.3	11.2	ND	ND	0.0099 J,B
Oct-2016	0.0504 J+	0.0559 J+	ND	0.0096	1.81	1.86	ND	ND	12.2	12.7	ND	0.0002 J	0.0108 J
May-2017	0.0644	0.064	ND	0.0112	2.21	1.73	0.00046 J	ND	43	11	ND	0.0005 J	0.0211 J
Oct-2017	0.0721	0.0727	ND	0.0093	1.74	1.82	ND	ND	9.91	10.3	ND	ND	0.0104 J
May-2018	0.0804	0.0772	ND	0.0163 J	2 J	1.4 J	ND	ND	11.2	10.4	ND	ND	0.0128 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09C***												
Nov-2018	0.067	0.065	*ND*	0.011	*1.8 J*	*2.4 J*	*0.00065 J*	*ND*	13.5	14.4	*ND*	0.0021	0.012
May-2019	0.055	0.058	*ND*	0.01	*ND*	*ND*	*ND*	*ND*	12.2	11.9	*ND*	0.01	0.0097
Oct-2019	0.068	0.065	*ND*	0.0095	*2 J*	*ND*	*0.00086 J*	*ND*	11.2	12.1	*ND*	0.0044	0.015
May-2020	0.074	0.069	*ND*	0.013	*2.5 J*	*1.6 J*	*0.00086 J*	*ND*	13.7	11.3	*ND*	*ND*	0.012
Oct-2020	0.6	0.068	*ND*	0.1	*ND*	*2 J*	*ND*	*ND*	11.6	11.9	*ND*	*ND*	0.93
Apr-2021	0.078	0.08	*ND*	0.012	2.1	2.2	*ND*	*ND*	13.8	14.7	*ND*	*ND*	*0.009 J*
Oct-2021	0.079	0.084	*ND*	0.014	1.8	1.9	*ND*	*ND*	15.1	16	*0.00004 J*	*ND*	0.013
May-2022	0.091	0.086	*ND*	0.017	2.1	2	*0.0016 J*	*ND*	16.1	15.6	*ND*	*ND*	0.02
Oct-2022	0.089	0.097	*ND*	0.012	2	2.2	*0.00097 J*	*ND*	14	15.2	*ND*	*ND*	0.019
May-2023	0.1	0.1	*ND*	0.012	1.8	2	*0.0013 J*	*ND*	11.5	13.1	*ND*	*ND*	0.02

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09C*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	1	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09C*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09C*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.1 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-09C*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.1	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.6	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.4	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	2.9	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	2	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.5	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.6	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.9	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.5	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.2	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.2	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.6	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09C***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.77 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.44 J	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	0.61 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.21 J	ND	ND	ND	ND	ND	0.34 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	0.34 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.16 J	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	0.3 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	0.2 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09C***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.324 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09C***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-09C*															
Oct-2005	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	4.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	1.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	0.89 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.78 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	0.55 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	0.69 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	0.37 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	0.48 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	0.4 J	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09C***															
Oct-2016	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.51 J*	*0.561 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-15***											
Nov-1993	7	7	0.2	ND	3	ND	ND	5.12	24.4	ND	34	2.43
Apr-1994	ND	ND	0.1	ND	3.1	ND	ND	4.89	20.5	1.8	ND	0.33
Aug-1994	ND	ND	ND	ND	2.9	0.3	ND	4.7	21.8	2.6	ND	2.51
Sep-1994	ND	ND	ND	ND	3.2	0.3	ND	5.4	21.8	3.9	46	2.4
Nov-1994	ND	ND	ND	ND	3.1	0.2	ND	5.1	21.6	1.8	27	2.6
Apr-1995	ND	ND	ND	ND	2.9	0.4	ND	5.1	19.3	2.9	7	2.3
Apr-1997	ND	ND	ND	ND	2	0.15	ND	NA	NA	ND	26	1.8
Oct-1997	ND	ND	0.26	ND	2.75	ND	ND	5.68	22.8	7.77	18	ND
Apr-1998	ND	ND	0.24	ND	1.71	0.133	ND	7.32	20	ND	ND	2.6
Apr-1999	ND	ND	0.14	ND	3.45	ND	ND	4.94	19.59	ND	13	2.9
Oct-1999	ND	ND	0.07	ND	3.03	ND	ND	4.85	24.3	ND	29	2.9
Apr-2000	2	2	ND	ND	3.31	ND	ND	5.29	17	ND	ND	3.3
Oct-2000	24	NA	ND	13	2.48	ND	ND	5.17	20.6	ND	41	3.59
Apr-2001	2.2	NA	ND	ND	2.51	ND	ND	NA	NA	ND	26	3.2
Sep-2001	2.2	2.2	ND	ND	11.7	ND	ND	5.07	22	ND	29	3.61
Mar-2002	2	2	ND	ND	2.72	ND	ND	5.3	173.6	ND	42	3.38
Sep-2002	2.8	2.8	ND	ND	3.05	ND	ND	5.2	19.4	ND	16	2.87
Mar-2003	2.5	2.5	ND	ND	31.7	ND	ND	5.1	24.3	8.11	58	2.94
Oct-2003	4	4	ND	ND	3	0.124	ND	5.3	25.7	ND	30	4.33
Apr-2004	2.7	2.7	ND	ND	2.71	0.148	ND	5.1	20.2	ND	28	3.59
Oct-2004	2.7	2.7	ND	ND	2.69	0.113	ND	5.3	17.2	ND	25	4.2
Apr-2005	2.5	2.5	ND	ND	2.86	0.16	ND	5	16.7	ND	32	3
Oct-2005	4.4	4.4	0.21	ND	3.08	0.14	ND	4.4	17.8	ND	37	3.33
Mar-2006	4.2	4.2	ND	ND	2.85	0.16	ND	7.2	21	1.05	83	1.85
Sep-2006	3.4	3.4	ND	ND	2.97	0.16	ND	5	20.7	ND	22	2.8
Mar-2007	4.4	4.4	0.62	ND	3.07	0.16	ND	4.9	18.6	ND	ND	2.82
Sep-2007	4.2	4.2	0.33	ND	9.64	ND	ND	5.6	21.2	ND	33	2.96
Mar-2008	6.7	6.7	0.47	ND	8.02	0.48	ND	4.9	24.8	1.69	56	3.33
Sep-2008	4.4	4.4	ND	ND	3.11	ND	ND	4.9	20.2	ND	22	2.9
Mar-2009	5.2	5.2	ND	ND	3.11	0.11	ND	4.5	21.9	ND	ND	3.16
Oct-2009	5.2	5.2	ND	ND	2.85	0.1	ND	4.6	20.1	ND	37	3.31
Mar-2010	5.5	5.5	ND	ND	2.85	0.1	ND	5.54	42	ND	28	2.81
Oct-2010	4.8	4.8	ND	ND	3.4	0.07	ND	4.8	19.4	ND	18	3.11
Apr-2011	4	4	ND	ND	2.98	0.14	ND	4.8	19.5	ND	49	2.9
Sep-2011	3.9	3.9	0.24	ND	2.97	0.13	ND	4.8	31.9	ND	14	3.32
Mar-2012	3.4	3.4	ND	ND	3.05	0.16	ND	4.8	21.9	ND	ND	3.27
Sep-2012	3.48	3.48	ND	ND	3.07	0.157	ND	3.9	19.6	ND	ND	3.16

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-15***											
Mar-2013	4.36	4.36	*ND*	*ND*	3.38	0.193	*ND*	3.8	16.8	*0.601 J*	23	2.59
Oct-2013	3.8	3.8	*ND*	*ND*	3.25	0.165	*ND*	3.1	18.9	*ND*	*ND*	2.92
Mar-2014	3.64	3.64	*ND*	22	3.3	0.174	*ND*	5.4	23.8	*ND*	*ND*	2.74
Oct-2014	*ND*	*ND*	*ND*	*7 J*	3.59	0.158	*ND*	4.9	19.6	*ND*	*ND*	3.32
Apr-2015	4.64	4.64	*ND*	*ND*	3.25	0.168	*ND*	4.2	21.5	*ND*	*ND*	3.24
Nov-2015	3.48	3.48	*ND*	*ND*	3.48	0.169	*ND*	5.3	27.6	*ND*	*ND*	3.68
May-2016	*ND*	*ND*	*ND*	*ND*	3.37	0.197	*ND*	5.3	33.8	*ND*	*15 J*	3.3
Oct-2016	*ND*	*ND*	*ND*	*ND*	3.27	*NA*	*NA*	5.7	30.3	*0.742 J*	32	3.2
May-2017	2.68	2.68	*ND*	*ND*	3.18	0.192	*ND*	5.2	81.3	*0.512 J*	*ND*	3.2
Oct-2017	3.88	3.88	*ND*	*7 J*	3.23	0.209	*ND*	5.5	36.8	*ND*	*15 J*	3
May-2018	*8 J*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	4.3	97.4	*ND*	39	*3.6 J*
Nov-2018	24	24	*0.052 J*	*ND*	3.4	*0.038 J*	*ND*	6.01	65.5	*ND*	39	*3.7 J*
May-2019	40	*NA*	*ND*	*ND*	3.4	*ND*	*ND*	6.14	72.3	*ND*	20	*ND*
Oct-2019	*2.5 JH1*	*NA*	*ND*	*14.8 J*	3.1	0.13	0.011	5.83	67.3	*ND*	34	3.8
May-2020	12	*NA*	*ND*	*ND*	3.4	*ND*	*ND*	5.98	74.1	*ND*	*ND*	4.1
Oct-2020	*ND*	*NA*	*ND*	*ND*	3.4	*ND*	0.07	6.07	66.2	*ND*	21	3.9
Apr-2021	*ND*	*NA*	*ND*	*10.5 J*	3.5	0.14	*ND*	6.32	106.8	*ND*	25	3.8
Oct-2021	14	*NA*	*ND*	*ND*	3.5	*ND*	*ND*	6.49	126.3	*ND*	*ND*	3.85
May-2022	10	*NA*	*ND*	*ND*	3.4 ML	0.15	0.016	6.32	114.2	*ND*	39	4.3 N3
Oct-2022	26	*NA*	*ND*	*8.4 J*	4.6	0.11	*ND*	6.35	116.1	*ND*	33	3.9 N3
May-2023	24	*NA*	*ND*	*ND*	4.1	0.13	*0.009 J*	6.22	96.2	*ND*	30	4.6 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15***													
Nov-1993	NA	ND	ND	NA	ND	0.38	NA	ND	NA	ND	67	3	ND	0.36	NA
Apr-1994	NA	ND	ND	NA	ND	0.38	NA	ND	NA	ND	1.5	1	ND	0.25	NA
Aug-1994	NA	ND	ND	NA	ND	0.46	NA	ND	NA	ND	7.1	0.31	ND	0.33	NA
Sep-1994	NA	ND	ND	NA	ND	0.34	NA	ND	NA	ND	6.5	1.7	ND	0.37	NA
Nov-1994	NA	ND	ND	NA	ND	0.45	NA	ND	NA	0.02	4.8	1.6	ND	0.35	NA
Apr-1995	ND	ND	0.7	ND	ND	0.36	NA	ND	ND	ND	8.1	ND	ND	0.35	NA
Oct-1996	ND	ND	0.015	ND	ND	0.55	0.62	ND	ND	ND	26	0.94	0.002	ND	ND
Apr-1997	ND	ND	ND	ND	ND	0.6	0.69	ND	ND	ND	0.6	0.45	ND	ND	ND
Oct-1997	ND	ND	0.011	ND	ND	0.495	0.587	ND	ND	ND	5.37	0.273	ND	0.328	0.322
Apr-1998	ND	ND	0.01	ND	ND	0.5	0.491	ND	ND	ND	26.2	0.201	ND	0.331	0.326
Apr-1999	ND	ND	0.011	ND	ND	0.551	0.543	ND	ND	ND	7.77	0.245	ND	0.372	0.355
Oct-1999	ND	ND	ND	ND	ND	0.508	0.471	ND	ND	ND	12.1	0.396	ND	0.345	0.318
Apr-2000	ND	ND	ND	ND	ND	0.716	0.452	ND	ND	ND	9.48	0.476	ND	0.378	0.304
Oct-2000	ND	ND	ND	ND	ND	0.728	0.667	ND	ND	ND	23.5	16.8	ND	0.43	0.425
Apr-2001	ND	ND	0.012	ND	ND	0.602	NA	ND	ND	ND	7.97	NA	ND	0.401	NA
Sep-2001	ND	ND	0.012	ND	ND	0.738	0.569	ND	ND	ND	24	0.88	ND	0.431	0.386
Mar-2002	ND	ND	0.012	ND	ND	0.713	0.552	ND	ND	ND	15.3	1.81	ND	0.388	0.376
Sep-2002	ND	ND	0.011	ND	ND	0.544	0.513	ND	ND	ND	12.2	0.425	ND	0.366	0.351
Mar-2003	ND	ND	0.012	ND	ND	0.565	0.528	ND	ND	ND	7.18	0.178	ND	0.373	0.349
Oct-2003	ND	ND	0.013	ND	ND	0.956	0.603	ND	ND	0.012	21.5	1.12	ND	0.47	0.408
Apr-2004	ND	ND	ND	ND	ND	0.754	0.548	ND	ND	ND	11.4	0.306	ND	0.415	0.359

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15***													
Oct-2004	*ND*	*ND*	0.013	*ND*	*ND*	0.978	0.536	*ND*	*ND*	*ND*	50.2	0.81	*ND*	0.426	0.366
Apr-2005	*ND*	*ND*	0.012	*ND*	*ND*	0.574	0.566	*ND*	*ND*	*ND*	13.1	0.214	*ND*	0.384	0.371
Oct-2005	*ND*	*ND*	0.012	*ND*	*ND*	0.758	0.559	*ND*	*ND*	*ND*	18.4	0.378	*ND*	0.35	0.324
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	0.271	0.26	*ND*	*ND*	*ND*	10.8	0.27	*ND*	0.285	0.302
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	0.542	0.532	*ND*	*ND*	*ND*	6.1	0.274	*ND*	0.353	0.351
Mar-2007	*ND*	*ND*	0.011	*ND*	*ND*	0.543	0.512	*ND*	*ND*	*ND*	14.6	1.12	*ND*	0.354	0.345
Sep-2007	*ND*	*ND*	0.011	*ND*	*ND*	0.563	0.527	*ND*	*ND*	*ND*	19.1	0.483	*ND*	0.379	0.364
Mar-2008	*ND*	*ND*	0.015	*ND*	*ND*	0.649	0.626	*ND*	*ND*	*ND*	28.5	3.92	*ND*	0.416	0.393
Sep-2008	*ND*	*ND*	0.011	*ND*	*ND*	0.507	0.466	*ND*	*ND*	*ND*	16.8	0.914	*ND*	0.386	0.389
Mar-2009	*ND*	*ND*	0.013	*ND*	*ND*	0.655	0.562	*ND*	*ND*	*ND*	44	2.06	*ND*	0.37	0.352
Oct-2009	*ND*	*ND*	0.012	*ND*	*ND*	0.605	0.558	*ND*	*ND*	*ND*	29.2	12	*ND*	0.436	0.385
Mar-2010	*ND*	*ND*	0.013	*ND*	*ND*	0.541	0.504	*ND*	*ND*	0.011	28	4.21	*ND*	0.354	0.335
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	0.581	0.526	*ND*	*ND*	*ND*	5.14	1.88	*ND*	0.404	0.391
Apr-2011	*ND*	*ND*	0.012	*ND*	*ND*	0.543	0.528	*ND*	*ND*	*ND*	8.19	0.312	*ND*	0.362	0.369
Sep-2011	*ND*	*ND*	0.012	*ND*	*ND*	0.693	0.692	*ND*	*ND*	*ND*	20.6	0.252	*ND*	0.387	0.383
Mar-2012	*ND*	*ND*	0.011	*ND*	*ND*	0.574	0.567	*ND*	*ND*	*ND*	7.42	0.296	*ND*	0.448	0.434
Sep-2012	*ND*	*ND*	0.0117	*0.000263 J*	*ND*	0.636	0.606	*ND*	*0.0042 J*	*0.0053 J*	10.3	0.217	*ND*	0.381	0.372
Mar-2013	*ND*	*ND*	0.0114	*0.000278 J*	*ND*	0.537	0.614	*ND*	*0.004 J*	*0.0076 J*	27.6	0.115	*0.0014 J*	0.303	0.335
Oct-2013	*ND*	*ND*	0.0115	*0.000213 J*	*ND*	0.573	0.508	*0.0025 J*	*0.0044 J*	*0.0033 J*	0.449	0.118	*ND*	0.362	0.345
Mar-2014	*0.000418 J*	*ND*	0.0109	*ND*	*ND*	0.534	0.538	*0.0017 J*	*0.0044 J*	*0.0074 J*	28.4	0.123	*ND*	0.341	0.343
Oct-2014	*0.00056 J*	*ND*	0.0125	*0.000239 J*	*ND*	0.672	0.69	*0.000523 J*	*0.0043 J*	*0.0044 J*	6.7	0.216	*ND*	0.399	0.412
Apr-2015	*0.000993 J*	*ND*	0.0126	*0.000209 J*	*0.000102 J*	0.638	0.648	*0.001 J*	*0.0047 J*	*0.0044 J*	11.6	0.175	*ND*	0.4	0.412
Nov-2015	*ND*	*ND*	0.0132	*0.000321 J*	*0.000099 J*	0.781	0.752	*0.00054 J*	*0.0044 J*	0.0124	26.7	0.234	*0.000304 J*	0.421	0.446
May-2016	*ND*	*ND*	0.0114	*0.00021 J*	*ND*	0.613	0.6	*0.001 J*	0.0042	0.0045	15.5	*0.151 J*	*ND*	0.424	0.381

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15***													
Oct-2016	*ND*	*ND*	0.0129	*0.00022 J*	*ND*	0.644	0.573	*0.0011 J*	0.0041	0.0044	10.6	*0.19 J+*	*ND*	0.378	0.409
May-2017	*ND*	*ND*	0.0124	*0.00019 J*	*ND*	0.58	0.711	*0.0006 J*	0.0044	*0.0032 J*	1.08	0.892	*ND*	0.415	0.428
Oct-2017	*ND*	*ND*	0.0116	*0.00018 J*	*ND*	0.527	0.648	*ND*	0.0042	*0.003 J*	1.43	1.08	*ND*	0.414	0.426
May-2018	*0.000047 J*	*ND*	0.013	*0.0002 J*	*0.000068 J*	*0.73 J*	*0.68 J*	*0.00059 J*	0.0039	0.0056	1.8	1.6	*0.000031 JB*	*0.44 J*	*0.43 J*
Nov-2018	*ND*	*ND*	0.012	*0.000097 J*	*0.000034 J*	*0.71 J*	*0.74 J*	*0.0018 J*	0.0028	0.0022	15.3	13.6	*0.000079 J*	*0.46 J*	*0.46 J*
May-2019	*ND*	*ND*	0.014	*ND*	*ND*	*ND*	*ND*	*ND*	0.0037	*ND*	22	21	*ND*	*ND*	*ND*
Oct-2019	*0.00012 J*	*ND*	0.014	*0.0002 J*	*0.00015 J*	0.75	*0.78 J*	0.0074	0.0031	0.0028	24.1	13.8	*0.000074 J*	0.48	*0.49 J*
May-2020	*0.00022 J*	*0.00032 J*	0.017	0.00034	*0.00011 J*	0.78	*0.78 J*	*0.0046 J*	0.0032	0.0066	52.2	16.9	*ND*	0.51	*0.52 J*
Oct-2020	*0.00046 J*	*ND*	0.019	*0.00062 J*	*ND*	0.76	*0.72 J*	*0.0048 J*	0.0044	0.012	60.9	9.5	*ND*	0.49	*0.47 J*
Apr-2021	*ND*	*ND*	0.016	*ND*	*ND*	*0.73 J*	*0.72 J*	*0.00041 J*	*0.0029 J*	*ND*	25	24.9	*ND*	0.48	0.5
Oct-2021	*0.000049 JB*	*ND*	0.015	*ND*	*ND*	0.75	0.79	*0.0017 J*	0.0027	*0.001 J*	22.9	20.6	*ND*	*0.48 J*	0.51
May-2022	*ND*	*ND*	0.015	*ND*	*ND*	0.83	0.87	*0.0015 J*	0.0029	*0.0023 J*	31.7	21.3	*ND*	0.54	0.57
Oct-2022	*ND*	*ND*	0.014	*ND*	*ND*	0.75	0.87	*0.0012 J*	0.0025	*0.0019 J*	42.4	23.8	*ND*	*0.49 J*	0.55
May-2023	*ND*	*ND*	0.016	*0.0001 J*	*ND*	0.89	0.83	*0.0019 J*	0.0037	*0.0022 J*	20.9	17	*ND*	0.57	0.55

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-15*												
Nov-1993	0.08	NA	ND	NA	0.58	NA	ND	NA	1.6	NA	NA	NA	ND
Apr-1994	0.05	NA	ND	NA	0.34	NA	ND	NA	1.2	NA	NA	NA	ND
Aug-1994	0.01	NA	ND	NA	0.49	NA	ND	NA	1.1	NA	NA	NA	ND
Sep-1994	0.02	NA	ND	NA	0.4	NA	ND	NA	1.3	NA	NA	NA	0.03
Nov-1994	0.04	NA	ND	NA	0.47	NA	ND	NA	1.2	NA	NA	NA	0.02
Apr-1995	0.04	NA	ND	ND	0.06	NA	ND	ND	1.2	NA	ND	ND	0.02
Oct-1996	0.02	0.01	NA	ND	ND	ND	ND	ND	1.9	1.8	ND	ND	0.049
Apr-1997	0.011	ND	ND	ND	ND	2	ND	ND	1.9	1.4	ND	ND	ND
Oct-1997	ND	0.011	NA	ND	0.922	ND	ND	ND	1.29	1.36	ND	ND	ND
Apr-1998	ND	0.011	NA	ND	1.64	ND	ND	ND	1.4	1.33	ND	ND	0.03
Apr-1999	ND	ND	NA	ND	0.972	0.732	ND	ND	1.52	1.45	ND	ND	ND
Oct-1999	ND	ND	NA	ND	ND	0.831	ND	ND	1.43	1.32	ND	ND	ND
Apr-2000	0.012	0.01	NA	ND	ND	ND	ND	ND	2.95	1.33	ND	ND	ND
Oct-2000	0.184	0.176	NA	ND	0.782	0.661	ND	ND	1.69	1.69	ND	ND	ND
Apr-2001	0.014	NA	NA	ND	1.08	NA	ND	ND	1.62	NA	ND	ND	ND
Sep-2001	0.01	0.013	NA	ND	0.816	0.478	ND	ND	2.38	1.5	ND	ND	ND
Mar-2002	0.022	0.024	NA	ND	1.95	1.06	ND	ND	2.33	1.47	ND	ND	ND
Sep-2002	ND	ND	NA	ND	0.583	0.568	ND	ND	1.48	1.44	ND	ND	ND
Mar-2003	ND	ND	NA	ND	1.16	1.1	ND	ND	1.5	1.4	ND	ND	ND
Oct-2003	0.016	0.015	NA	ND	2.54	1	ND	ND	2.4	1.52	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.67	1	ND	ND	1.33	1.43	ND	ND	ND
Oct-2004	ND	0.014	0.0002	ND	1.26	0.739	ND	ND	2	1.52	ND	ND	0.014

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-15***												
Apr-2005	ND	ND	ND	ND	0.74	0.74	ND	ND	1.46	1.43	ND	ND	ND
Oct-2005	0.01	ND	ND	ND	0.712	0.665	ND	ND	1.85	1.23	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	1.14	1.11	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.633	0.694	ND	ND	1.29	1.27	ND	ND	ND
Mar-2007	0.016	0.013	ND	ND	0.621	0.563	ND	ND	1.3	1.24	ND	ND	ND
Sep-2007	ND	ND	ND	ND	0.574	ND	ND	ND	1.48	1.38	ND	ND	ND
Mar-2008	0.031	0.041	ND	ND	0.809	0.745	ND	ND	1.59	1.43	ND	ND	ND
Sep-2008	ND	ND	ND	ND	0.567	0.557	ND	ND	1.32	1.3	ND	ND	0.023
Mar-2009	0.018	0.019	ND	ND	0.665	0.684	ND	ND	1.48	1.36	ND	ND	0.047
Oct-2009	0.152	0.135	ND	ND	0.576	0.573	ND	ND	1.47	1.57	ND	ND	ND
Mar-2010	0.086	0.052	0.0002	0.018	0.806	0.714	ND	ND	1.21	1.47	ND	ND	ND
Oct-2010	0.017	0.023	ND	ND	0.592	0.542	ND	ND	1.42	1.38	ND	ND	0.014
Apr-2011	0.01	ND	ND	ND	ND	ND	ND	ND	1.33	1.28	ND	ND	ND
Sep-2011	0.013	ND	ND	ND	0.753	0.735	ND	ND	1.64	1.58	ND	ND	0.012
Mar-2012	ND	ND	ND	ND	0.65	0.63	ND	ND	1.45	1.39	ND	ND	ND
Sep-2012	0.01 J	0.0077 J	ND	0.0062 J	0.692	0.666	ND	ND	1.43	1.37	ND	ND	0.0068 J
Mar-2013	0.0122	0.0069 J	0.000141 J	0.0059 J	0.546	0.605	ND	ND	1.18	1.27	ND	ND	0.0155
Oct-2013	0.0074 J	0.0068 J	ND	0.0065 J	0.686	0.644	ND	ND	1.36	1.31	0.000103 J	0.0011 J	0.014
Mar-2014	0.0137	0.007 J	ND	0.0066 J	0.646	0.666	ND	ND	1.35	1.39	ND	ND	0.0084 J
Oct-2014	0.0095 J	0.008 J	0.000027 J	0.0061 J	0.711	0.721	ND	ND	1.65	1.69	ND	ND	0.009 J
Apr-2015	0.0101	0.0079 J	ND	0.0067 J	0.764	0.774	0.001 J	ND	1.59	1.63	ND	ND	0.0125
Nov-2015	0.0151	0.009 J	ND	0.0065 J	0.739	0.779	ND	ND	1.61	1.67	0.000123 J	ND	0.0148
May-2016	0.0109	0.0071	ND	0.0067	0.901	0.764	ND	ND	1.57	1.38	ND	ND	0.0075 J,B
Oct-2016	0.0101	0.0083 J+	ND	0.0061	0.688	0.757	ND	ND	1.44	1.57	ND	ND	0.009 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-15***												
May-2017	0.0119	0.0149	*ND*	0.006	0.794	0.801	*ND*	*ND*	1.48	1.5	*ND*	*ND*	*0.006 J*
Oct-2017	0.0175	0.0191	*ND*	0.006	0.81	0.815	*ND*	*ND*	1.53	1.57	*ND*	*ND*	*0.006 J*
May-2018	0.022	0.023	*ND*	0.007	*0.94 J*	*ND*	*0.00012 J*	*0.0008 J*	*1.8 J*	*1.5 J*	*ND*	0.0025	0.012
Nov-2018	0.16	0.16	*ND*	0.005	*ND*	*ND*	*0.00014 J*	*ND*	*1.5 J*	*1.6 J*	*ND*	*ND*	0.012
May-2019	0.17	0.16	*ND*	0.0052	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.011
Oct-2019	0.19	0.16	*ND*	0.0057	*ND*	*ND*	*ND*	*ND*	*ND*	*2 J*	*ND*	0.006	0.011
May-2020	0.25	0.22	*ND*	0.0053	*ND*	*ND*	*ND*	*ND*	*1.7 J*	*1.8 J*	0.00059	0.0034	0.0099
Oct-2020	0.18	0.15	*ND*	0.0074	*ND*	*ND*	*ND*	*ND*	*1.8 J*	*ND*	*ND*	*0.00064 J*	*0.013 J*
Apr-2021	0.17	0.18	*ND*	*0.0027 J*	0.79	0.88	*ND*	*ND*	2	2	*ND*	*0.00061 J*	*ND*
Oct-2021	0.22	0.234	*ND*	0.005	0.75	0.81	*ND*	*ND*	1.7	1.9	*ND*	*ND*	*0.0019 J*
May-2022	0.25	0.25	*ND*	0.0047	0.94	0.83	*ND*	*ND*	2.1	2	*ND*	*ND*	*ND*
Oct-2022	0.24	0.27	*ND*	0.0042	0.76	0.92	*ND*	*ND*	2	2.2	*ND*	*ND*	0.005
May-2023	0.2	0.2	*ND*	0.006	1	0.89	*ND*	*ND*	2.3	2.1	*ND*	*ND*	*0.0044 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.7	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.7	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	5.1	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	7.2	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	37	ND
Apr-2005	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7	ND
Mar-2006	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.48 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.51 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.51 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	0.67 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*0.74 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.368 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-15*															
Nov-1993	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	1.5	NA	1.2	NA	ND	ND	ND	NA	ND	NA	0.7 J	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	0.7 J
Sep-2001	ND	ND	ND	0.9 J	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.5 J
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15***															
Oct-2004	ND	ND	ND	1.5	ND	1.4	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	0.8 J	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	1.3
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	1
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.9 J
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	1.1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	0.8 J
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	1.4
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	1.9
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	1.1
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	1.2
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	0.9 J
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.68 J	0.44 J
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.77 J	0.58 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	0.73 J	0.59 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.85 J	0.57 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.73 J	0.76 J
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.69 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15***															
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43 J	0.78 J
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.6 J	0.6 J
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.6 J	0.6 J
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.8 J	0.6 J
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.6 J	0.6 J
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	1.3 N3
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	2.1 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.463 J	0.419 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15***															
Nov-1993	*ND*	*ND*	3.7	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Aug-1994	*0.5 J*	*ND*	3.1	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*0.8 J*	*NA*	*ND*	*0.9 J*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15***															
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1.7 R	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	2	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.74 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.52 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.68 J*	*ND*	*ND*	*ND*	*ND*	*0.22 J*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.84 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.61 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.611 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-15B***											
Nov-1993	ND	ND	0.3	75.6	5.3	ND	ND	4.53	39.5	6.6	46	5.78
Apr-1994	ND	ND	ND	ND	5.1	ND	ND	4.8	30.3	1.6	7	0.8
Aug-1994	ND	ND	0.1	ND	6.3	0.3	ND	4.5	42.7	5.8	40	5.9
Sep-1994	ND	ND	ND	ND	5.5	0.3	ND	4.9	32.6	5.1	36	4.4
Nov-1994	ND	ND	ND	ND	6.1	ND	ND	4.6	43.3	6.6	12	5.6
Apr-1995	ND	ND	0.2	ND	6.2	ND	ND	4.7	37.3	4.4	5	4.8
Apr-1997	ND	5	ND	ND	5	0.06	ND	NA	NA	6.7	51	7.7
Oct-1997	ND	ND	0.92	ND	4.17	ND	ND	5.48	50.3	7.77	37	7.5
Apr-1998	ND	ND	ND	ND	4.2	ND	ND	6.72	51.3	1.35	29	5.7
Apr-1999	ND	ND	0.17	ND	7.53	ND	ND	4.38	40.2	1.18	41	6.8
Oct-1999	ND	ND	0.14	ND	5.43	ND	ND	4.32	44.8	5.53	33	6.1
Apr-2000	2	2	ND	ND	8.41	ND	ND	5.55	38	ND	35	7.9
Oct-2000	30	NA	ND	ND	8.09	ND	ND	4.69	40.5	4.93	36	7.36
Apr-2001	2.6	NA	ND	ND	9.2	ND	ND	NA	NA	ND	39	9.4
Sep-2001	2.2	2.2	ND	ND	16	ND	ND	4.89	71	7.37	53	13.1
Mar-2002	ND	ND	ND	ND	20.6	ND	ND	4.9	72.8	1.15	35	13.9
Sep-2002	3.2	3.2	ND	ND	16	ND	ND	5.5	64.1	1.57	57	12
Mar-2003	5.4	5.4	ND	ND	161	ND	ND	5.8	74.9	14.5	73	12.3
Oct-2003	2.9	2.9	ND	ND	10.4	ND	ND	5.4	54.8	1.98	14	9.25
Apr-2004	3.3	3.3	ND	ND	7.79	ND	ND	4.6	46.3	1.97	37	6.99
Oct-2004	2	2	ND	ND	7.13	ND	ND	4.8	46.1	5	47	7.2
Apr-2005	4.1	4.1	ND	ND	9.37	ND	ND	4.4	50.1	5.11	59	9.2
Oct-2005	3.7	3.7	ND	ND	8.61	ND	ND	4.2	41.9	2.79	48	6.13
Mar-2006	5.2	5.2	ND	ND	12.3	ND	ND	7.1	51.7	4.13	47	8.93
Sep-2006	4.4	4.4	ND	ND	10.2	ND	ND	7.1	51.7	4.11	26	8.95
Mar-2007	4.5	4.5	ND	ND	9.49	ND	ND	4.3	49.6	3.44	14	8.09
Sep-2007	1.3	1.3	0.31	ND	9.97	ND	ND	5.3	45.8	8.48	41	6.17
Mar-2008	3.9	3.9	0.47	ND	11.7	ND	ND	4.2	51.2	14.4	20	8.23
Sep-2008	3.8	3.8	ND	ND	8.06	ND	ND	4.3	52.7	8.14	40	8.1
Mar-2009	4.6	4.6	ND	ND	10	ND	ND	4.2	57.5	8.04	ND	7.71
Oct-2009	2.8	2.8	ND	ND	11.2	ND	ND	4.3	60.7	4.44	35	9.12
Mar-2010	2.8	2.8	ND	ND	14.8	ND	ND	4.42	83	5.87	53	9.44
Oct-2010	1.6	1.6	ND	ND	9.94	ND	ND	4.2	58.9	8.79	30	9.04
Apr-2011	3.2	3.2	ND	ND	7.25	0.18	0.08	4	51.3	5.24	31	8
Sep-2011	3.1	3.1	ND	ND	11.9	ND	ND	4.1	58.7	4.46	46	8.71
Mar-2012	1.9	1.9	ND	ND	13.5	ND	ND	3.5	71.4	7.38	38	8.96
Sep-2012	1.4	1.4	ND	ND	10.7	ND	ND	3.2	57.5	5.83	42	8.62

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-15B***											
Mar-2013	3.8	3.8	*ND*	*ND*	8.6	0.731	*0.0348 J*	3.1	46.3	3	37	7.63
Oct-2013	3.56	3.56	*ND*	*ND*	14.8	0.072	*ND*	3	66.4	3.33	*ND*	10.9
Mar-2014	3.6	3.6	*ND*	21	13	0.119	*ND*	4.8	77.2	3.59	46	9.57
Oct-2014	*ND*	*ND*	*ND*	*ND*	9.14	*ND*	*ND*	4.3	47.3	6.05	*ND*	7.47
Apr-2015	1	1	*ND*	*ND*	13.3	0.0959	*ND*	3.5	65.7	7.62	37	8.89
Nov-2015	*ND*	*ND*	*ND*	*8 J*	15.5	*ND*	*ND*	4.6	90.5	7.22	26	10.4
May-2016	*ND*	*ND*	*ND*	*ND*	14	0.107	*ND*	4.6	105	7.39	44	9.9
Oct-2016	*ND*	*ND*	*ND*	*ND*	16.8	*NA*	*NA*	4.6	109.3	4.72	48	10.7
May-2017	*ND*	*ND*	*ND*	*ND*	14.9	0.157	*ND*	4.5	111.2	5.24	38	11.2
Oct-2017	*ND*	*ND*	*0.0868 J*	*ND*	15.8	0.0769	*ND*	4.7	118.5	6.26	46	13.4
May-2018	*1 J*	*ND*	*0.086 J*	*ND*	15.7	*ND*	*ND*	5	33.9	*5.1 J*	60	13.6
Nov-2018	*2 JB*	*ND*	*0.071 J*	*7.9 J*	15.5	*0.083 J*	*ND*	4.31	76.9	*ND*	44	10.4
May-2019	*ND*	*NA*	*ND*	*ND*	17.2	*ND*	*ND*	4.21	62.6	*ND*	20	9
Oct-2019	*ND*	*NA*	*ND*	*6 J*	12.8	0.2	*0.0074 J*	4.11	74.2	*5.5 J*	42	8.9
May-2020	*ND*	*NA*	*ND*	*6.9 J*	30.5	0.56	*ND*	3.97	126	*ND*	48	20.8
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	23.7	0.25	*0.0065 J*	3.99	107.1	5.4	66	16.7
Apr-2021	*ND*	*NA*	*ND*	*6.1 J*	14.7	0.34	*ND*	4.36	90	*ND*	19	9.9
Oct-2021	*ND*	*NA*	*ND*	*ND*	18.7	0.27	*ND*	4.35	137.7	*ND*	29	12.2
May-2022	*ND*	*NA*	*ND*	*5.6 J*	47.9	0.56	*ND*	4.02	252.8	*ND*	113	27.9 N3
Oct-2022	*ND*	*NA*	*ND*	*13 J*	58.1	0.68	*ND*	4.15	248.7	*7.7 J*	109	27.5 N3
May-2023	*ND*	*NA*	*0.097 J*	*22.8 J*	60.8	0.93	*ND*	4.2	263.1	*5.6 J*	109	35.5 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15B***													
Nov-1993	NA	ND	ND	NA	ND	0.5	NA	ND	NA	ND	1.3	0.08	ND	1.1	NA
Apr-1994	NA	ND	ND	NA	ND	0.6	NA	ND	NA	ND	ND	ND	ND	ND	NA
Aug-1994	NA	ND	ND	NA	ND	0.75	NA	ND	NA	ND	ND	ND	ND	0.97	NA
Sep-1994	NA	ND	ND	NA	ND	0.51	NA	ND	NA	ND	ND	ND	ND	0.75	NA
Nov-1994	NA	ND	ND	NA	ND	0.61	NA	ND	NA	0.03	ND	ND	ND	1	NA
Apr-1995	ND	ND	0.8	ND	ND	0.36	NA	ND	ND	ND	0.23	ND	ND	0.95	NA
Oct-1996	ND	ND	0.13	0.002	ND	1.2	1.2	ND	ND	ND	ND	ND	ND	0.87	0.87
Apr-1997	ND	ND	0.086	0.002	ND	1.4	1	ND	ND	ND	ND	ND	ND	0.96	0.75
Oct-1997	ND	ND	0.157	0.004	ND	1.19	1.21	ND	0.013	0.015	ND	ND	ND	1.26	1.26
Apr-1998	ND	ND	0.031	ND	ND	1.09	1.09	ND	ND	ND	0.124	0.226	ND	0.72	0.831
Apr-1999	ND	ND	0.032	ND	ND	1.22	1.2	ND	ND	0.018	0.303	0.3	ND	0.913	0.891
Oct-1999	ND	ND	0.028	ND	ND	0.906	0.902	ND	ND	0.012	0.445	0.263	ND	0.849	0.817
Apr-2000	ND	ND	0.027	ND	ND	1.77	1.57	ND	ND	0.012	0.054	0.053	ND	0.835	0.906
Oct-2000	ND	ND	0.052	ND	ND	1.13	1.12	ND	ND	0.123	0.083	0.077	ND	1.1	1.06
Apr-2001	ND	ND	0.038	ND	ND	1.64	NA	ND	0.01	ND	0.234	NA	ND	1.28	NA
Sep-2001	ND	ND	0.051	ND	ND	2.16	1.96	ND	0.013	0.011	0.556	0.326	ND	1.86	1.76
Mar-2002	ND	ND	0.052	ND	ND	2.3	2.21	ND	0.019	0.013	0.48	0.469	ND	1.99	1.91
Sep-2002	ND	ND	0.045	ND	ND	2.01	1.97	ND	0.015	ND	0.505	0.447	ND	1.69	1.69
Mar-2003	ND	ND	0.046	ND	ND	2.19	2.18	ND	0.015	0.01	0.24	0.245	ND	1.65	1.72
Oct-2003	ND	ND	0.038	ND	ND	1.69	1.41	ND	0.011	0.011	0.242	0.171	ND	1.22	1.21
Apr-2004	ND	ND	0.041	ND	ND	1.15	1.12	ND	ND	0.013	0.088	0.075	ND	1	1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15B***													
Oct-2004	ND	ND	0.061	ND	ND	1.13	1.06	ND	0.01	ND	0.089	ND	ND	1.06	1.05
Apr-2005	ND	ND	0.056	ND	ND	1.54	1.48	ND	0.011	ND	0.126	0.108	ND	1.3	1.26
Oct-2005	ND	ND	0.034	ND	ND	1.01	0.974	ND	ND	ND	0.098	0.095	ND	0.874	0.819
Mar-2006	ND	ND	0.037	ND	ND	1.34	1.22	ND	0.01	ND	ND	ND	ND	1.35	1.29
Sep-2006	ND	ND	0.034	ND	ND	1.44	1.39	ND	0.013	ND	0.214	0.214	ND	1.3	1.29
Mar-2007	ND	ND	0.042	ND	ND	1.31	1.27	ND	0.012	0.012	0.174	0.17	ND	1.17	1.17
Sep-2007	ND	ND	0.035	ND	ND	0.839	0.801	0.012	ND	ND	0.561	0.498	ND	0.991	0.967
Mar-2008	ND	ND	0.034	ND	ND	1.2	1.1	ND	0.011	ND	0.943	0.85	ND	1.27	1.16
Sep-2008	ND	ND	0.037	ND	ND	1.18	1.04	ND	0.01	ND	1.49	1.36	ND	1.26	1.22
Mar-2009	ND	ND	0.032	ND	ND	1.19	1.17	ND	ND	0.013	1.52	1.58	ND	1.15	1.24
Oct-2009	ND	ND	0.037	ND	ND	1.23	1.2	ND	0.01	ND	1.87	1.74	ND	1.47	1.43
Mar-2010	ND	ND	0.059	ND	ND	1.34	1.3	ND	0.012	0.019	1.82	1.54	ND	1.48	1.43
Oct-2010	ND	ND	0.069	0.002	ND	1.23	1.16	ND	0.011	0.012	1.44	1.38	ND	1.45	1.36
Apr-2011	ND	ND	0.05	ND	ND	1.16	1.15	ND	0.011	ND	1.16	1.17	ND	1.24	1.26
Sep-2011	ND	ND	0.057	ND	ND	1.33	1.35	ND	0.012	ND	1.58	1.54	ND	1.31	1.35
Mar-2012	ND	ND	0.08	0.003	ND	1.13	1.16	ND	0.012	0.011	1.22	1.22	ND	1.49	1.5
Sep-2012	ND	ND	0.0504	0.0018 J	ND	1.21	1.19	0.0012 J	0.0122	0.0087 J	1.29	1.3	ND	1.36	1.38
Mar-2013	ND	ND	0.039	0.000838 J	ND	1.11	1.21	ND	0.0114	0.0078 J	0.125	0.126	0.0013 J	1.18	1.24
Oct-2013	ND	ND	0.0564	0.000901 J	0.000222 J	1.35	1.3	0.0115	0.0157	0.0089 J	0.104	0.0962	ND	1.83	1.76
Mar-2014	0.000563 J	ND	0.0422	ND	0.000177 J	1.27	1.32	0.0013 J	0.0143	0.0103	0.116	0.108	ND	1.55	1.59
Oct-2014	0.000751 J	ND	0.0443	0.000845 J	0.000166 J	1.07	1.04	0.000391 J	0.0109	0.0084 J	0.55	0.551	ND	1.17	1.16
Apr-2015	0.0011 J	ND	0.0609	0.0013 J	0.000297 J	1.25	1.25	0.000321 J	0.0144	0.0095 J	1.13	1.16	ND	1.4	1.45
Nov-2015	0.000315 J	ND	0.0639	0.0018 J	0.000282 J	1.48	1.46	0.000671 J	0.0158	0.0109	1.35	1.34	0.000298 J	1.63	1.63
May-2016	ND	ND	0.0709	0.0017	0.00024 J	1.41	1.24	ND	0.0165	0.0093	1.21	1.18	ND	1.56	1.51

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15B***													
Oct-2016	*ND*	*ND*	0.0517	*0.00095 J*	*0.00025 J*	1.47	1.37	*0.00062 J*	0.0178	0.0082	0.731	*0.738 J+*	*ND*	1.71	1.76
May-2017	*ND*	*ND*	0.0556	*0.00068 J*	*0.00026 J*	1.38	1.67	*0.0017 J*	0.0181	0.0075	*0.116 J*	*0.103 J*	*ND*	1.89	1.87
Oct-2017	*ND*	*ND*	0.0613	*0.00069 J*	*0.00025 J*	1.69	1.67	*ND*	0.0187	0.0075	*ND*	*ND*	*ND*	2.22	2.2
May-2018	*0.00011 J*	*ND*	0.06	0.00065	*0.00029 J*	1.9	1.8	*0.00051 J*	0.0136	0.0068	*0.013 J*	*ND*	*0.00014 JB*	2.1	2
Nov-2018	*ND*	*ND*	0.052	0.00073	*0.00022 J*	1.3	1.4	*0.0018 J*	0.013	0.0049	0.022	*0.018 J*	*0.000077 J*	1.7	1.8
May-2019	*ND*	*ND*	0.045	0.00088	*ND*	1.3	1.4	*ND*	0.011	0.0056	*ND*	0.042	*ND*	1.4	1.4
Oct-2019	*0.0001 J*	*ND*	0.046	0.00091	*0.00032 J*	1.3	1.3	*0.0049 J*	0.01	0.007	*0.02 J*	*0.011 J*	*0.000095 J*	1.4	1.3
May-2020	*0.000085 J*	*ND*	0.078	0.0011	*0.00037 J*	2.8	2.7	*0.0055 J*	0.024	0.011	*0.015 J*	0.063	*ND*	3.4	3.2
Oct-2020	*ND*	*ND*	0.087	*0.0011 JM1*	*ND*	2.2	2.1	*0.0034 JM1*	0.021	*0.0095 J*	*0.017 JB*	*0.02 J*	*ND*	2.7	2.6
Apr-2021	*ND*	*ND*	0.054	*0.00056 J*	*ND*	1.2	1.3	*0.00054 J*	0.013	0.0052	*ND*	*ND*	*ND*	1.7	1.7
Oct-2021	*0.000053 JB*	*ND*	0.075	0.0013	*0.00007 J*	1.5	1.6	*0.0015 J*	0.017	0.011	*0.011 J*	*0.016 J*	*0.000046 J*	2	2.1
May-2022	*ND*	*ND*	0.15	0.0015	0.00057	3.8	4	0.0026	0.038	0.014	*ND*	*ND*	0.0019	4.5	4.7
Oct-2022	*ND*	*ND*	0.16	0.002	0.00053	4	4.6	*0.0014 J*	0.033	0.012	*ND*	0.055	*ND*	4.3	4.9
May-2023	*ND*	*ND*	0.2	0.0017	0.00063	5	4.7	*0.0015 J*	0.051	0.014	*ND*	0.054	*ND*	5.6	5.3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-15B*												
Nov-1993	0.18	NA	ND	NA	0.82	NA	ND	NA	2.1	NA	NA	NA	0.03
Apr-1994	0.06	NA	ND	NA	0.85	NA	ND	NA	2.9	NA	NA	NA	0.01
Aug-1994	0.1	NA	ND	NA	0.98	NA	ND	NA	2.3	NA	NA	NA	0.06
Sep-1994	0.11	NA	ND	NA	0.67	NA	ND	NA	2.2	NA	NA	NA	0.05
Nov-1994	0.14	NA	ND	NA	0.72	NA	ND	NA	2.1	NA	NA	NA	0.05
Apr-1995	ND	NA	ND	ND	1	NA	ND	ND	2	NA	ND	ND	0.05
Oct-1996	0.25	0.23	NA	ND	ND	ND	ND	ND	2.5	2.4	ND	ND	0.082
Apr-1997	0.095	0.079	ND	ND	ND	ND	ND	ND	3.1	2.3	ND	ND	0.05
Oct-1997	0.271	0.272	NA	0.011	ND	ND	ND	ND	1.96	1.9	ND	ND	0.079
Apr-1998	0.013	0.033	NA	0.013	0.811	1.07	ND	ND	2.54	2.55	ND	ND	0.023
Apr-1999	0.015	0.018	NA	ND	1.07	1.59	ND	ND	3.18	2.92	ND	ND	0.016
Oct-1999	ND	0.01	NA	ND	ND	0.839	ND	ND	3.1	2.89	ND	ND	0.019
Apr-2000	ND	ND	NA	ND	0.814	0.739	ND	ND	3.15	3.18	ND	ND	0.012
Oct-2000	0.041	0.039	NA	ND	1.37	1.26	ND	ND	3.58	3.38	ND	ND	0.027
Apr-2001	0.012	NA	NA	ND	1.18	NA	ND	ND	4.07	NA	ND	ND	0.021
Sep-2001	0.021	0.018	NA	0.025	1.4	1.14	ND	ND	7.22	5.84	ND	ND	0.028
Mar-2002	0.02	0.019	NA	0.023	1.69	1.17	ND	ND	7.55	7.17	ND	ND	0.034
Sep-2002	0.017	0.017	NA	0.02	1.23	1.12	ND	ND	7.03	6.93	ND	ND	0.025
Mar-2003	0.018	0.018	NA	0.018	1.27	1.41	ND	ND	7.33	7.02	ND	ND	0.026
Oct-2003	0.018	0.015	NA	ND	2.98	1.34	ND	ND	6.29	5.35	ND	ND	0.024
Apr-2004	0.034	0.044	ND	ND	1.57	1.55	ND	ND	4.37	4.11	ND	ND	0.019
Oct-2004	0.095	0.108	0.0003	ND	1.5	1.43	ND	ND	3.97	3.44	ND	ND	0.033

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-15B***												
Apr-2005	0.054	0.074	ND	ND	1.21	1.16	ND	ND	4.38	4.11	ND	ND	0.027
Oct-2005	0.02	0.031	ND	ND	0.945	0.886	ND	ND	3.35	3.04	ND	ND	0.017
Mar-2006	ND	ND	ND	0.014	0.917	0.9	ND	ND	5	4.67	ND	ND	ND
Sep-2006	0.018	0.019	ND	0.015	1.04	1.03	ND	ND	4.26	4.19	ND	ND	0.018
Mar-2007	0.025	0.029	ND	0.014	0.933	0.866	ND	ND	3.9	3.78	ND	ND	0.025
Sep-2007	0.035	0.034	ND	ND	0.564	0.521	ND	ND	2.6	2.52	ND	ND	0.022
Mar-2008	0.024	0.022	0.0004	ND	0.877	0.808	ND	ND	3	2.74	ND	ND	0.023
Sep-2008	0.03	0.029	ND	0.013	0.678	0.678	ND	ND	3.02	2.95	ND	ND	0.031
Mar-2009	0.017	0.018	0.0008	ND	0.799	0.807	ND	ND	3.36	3.59	ND	ND	0.029
Oct-2009	0.035	0.032	ND	0.011	0.618	0.641	ND	ND	4.09	3.99	ND	ND	0.026
Mar-2010	0.052	0.049	ND	0.014	0.912	0.839	ND	ND	4.64	4.99	ND	ND	0.033
Oct-2010	0.128	0.126	ND	0.017	0.628	0.549	ND	ND	4.3	4.05	ND	ND	0.049
Apr-2011	0.049	0.049	ND	0.011	0.552	0.536	ND	ND	3.05	3.09	ND	ND	0.028
Sep-2011	0.051	0.05	ND	0.012	0.82	0.796	ND	ND	4.91	4.99	ND	ND	0.033
Mar-2012	0.07	0.071	ND	0.013	0.728	0.707	ND	ND	5.61	5.52	ND	ND	0.037
Sep-2012	0.0504	0.0502	ND	0.0129	0.757	0.733	ND	ND	4.49	4.55	ND	ND	0.032
Mar-2013	0.0289	0.0296	0.000082 J	0.012	0.649	0.672	ND	ND	2.93	3.15	ND	ND	0.0331
Oct-2013	0.0302	0.0294	ND	0.0167	0.862	0.828	ND	ND	5.82	5.49	0.000162 J	0.004 J	0.0442
Mar-2014	0.0259	0.0257	ND	0.0144	0.765	0.789	ND	ND	4.44	4.48	ND	ND	0.0281
Oct-2014	0.0562	0.0563	0.00004 J	0.012	0.663	0.649	0.0012 J	ND	3.91	3.89	ND	ND	0.0331
Apr-2015	0.0585	0.0623	ND	0.0141	0.788	0.811	0.0013 J	ND	4.81	4.97	ND	ND	0.0382
Nov-2015	0.0561	0.0561	0.00007 J	0.0146	0.84	0.82	0.000647 J	ND	5.71	5.55	0.000173 J	ND	0.0375
May-2016	0.0698	0.0652	ND	0.0134	0.893	0.892	ND	ND	5.76	5.46	ND	ND	0.0361
Oct-2016	0.0398	0.0409 J+	0.000073 J	0.0156	0.898	1.01	ND	ND	6.46	6.52	ND	ND	0.0299 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-15B***												
May-2017	0.0311	0.033	*0.00012 J*	0.0155	0.989	1.03	*ND*	*ND*	6.21	6.24	*ND*	*ND*	*0.0286 J*
Oct-2017	0.0336	0.0361	*ND*	0.0161	1.05	1.1	*ND*	*ND*	6.86	6.73	*ND*	*ND*	*0.0288 J*
May-2018	0.028	0.026	*0.00017 JB*	0.014	*1.2 J*	*ND*	*0.0005 J*	*ND*	7.5	6.6	*0.000073 J*	0.0032	0.024
Nov-2018	0.028	0.025	*0.00016 J*	0.011	*1 J*	*1 J*	*0.00021 J*	*ND*	6.5	6.8	*ND*	*ND*	0.02
May-2019	0.027	0.028	*ND*	0.0087	*ND*	*ND*	*ND*	*ND*	7.1	6.8	*ND*	*ND*	0.039
Oct-2019	0.04	0.036	0.00046	0.012	*ND*	*ND*	*0.00039 J*	*ND*	5.8	6	*ND*	0.0061	0.024
May-2020	0.053	0.049	0.00045	0.022	*1.4 J*	*1.4 J*	*0.00041 J*	*ND*	11.6	11.2	*ND*	0.004	0.035
Oct-2020	0.052	0.043	0.0003	0.019	*ND*	*1.1 J*	*ND*	*ND*	10	9	*ND*	*0.00052 JM1*	0.04 M1
Apr-2021	0.026	0.029	0.00086	0.012	1.1	1.1	*ND*	*ND*	7.3	7.6	*ND*	*ND*	0.016
Oct-2021	0.055	0.0579	0.00022	0.016	1	1.1	*ND*	*ND*	8.1	8.4	*0.000078 J*	*ND*	0.029
May-2022	0.076	0.078	*ND*	0.038	1.4	1.4	*ND*	*ND*	22.8	22.7	*0.00011 J*	*ND*	0.069
Oct-2022	0.073	0.083	*ND*	0.031	1.4	1.6	*0.0022 J*	*ND*	21.4	23.7	*0.000099 J*	*ND*	0.069
May-2023	0.089	0.087	*ND*	0.049	1.8	1.7	*0.00088 J*	*ND*	24.9	23.3	*0.0001 J*	*ND*	0.1

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-15B***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	3.3	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	1.8	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	6.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	9.2	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	9.9	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	6.7	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	6.3	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	5.3	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15B*																
Oct-2004	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	7	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2007	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	5.7	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	3.4	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	2.71	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.92	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	4.79	ND	ND	ND	ND	ND	ND	0.72 J	0.81 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	2.87	ND	ND	ND	ND	ND	ND	0.34 J	0.52 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15B*																
Apr-2015	ND	ND	ND	ND	1.71	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.23	ND	ND	ND	ND	ND	ND	0.26 J	0.31 J	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	0.2 J	0.3 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4 JB	ND
Nov-2018	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9 JBIH	ND
May-2019	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.23	ND	ND	ND	ND	ND	ND	ND	0.131 J	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.7
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	2.4
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	0.6 J	ND	ND	ND	ND	ND	3.2	4.2
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	3.4
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	4.8	16
Apr-1998	0.8 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	4.1	4.8
Apr-1999	0.8 J	NA	NA	NA	NA	ND	NA	ND	0.8 J	ND	NA	ND	NA	NA	NA	2.7	4.3
Oct-1999	2.3	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	1.5	ND	ND	ND	2	6.3
Apr-2000	0.5 J	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	1.2	1.9
Oct-2000	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	4
Apr-2001	2	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	4.6	6.5
Sep-2001	3.2	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	1.1	ND	ND	ND	6.9	8.3
Mar-2002	4.3	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	1.5	ND	ND	ND	8.9	9
Sep-2002	2.8	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	1.2	ND	ND	ND	11	8.9
Mar-2003	2.7	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.3	ND	ND	ND	8.4	6.7
Oct-2003	2	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	0.6 J	0.8 J	ND	ND	ND	2.8	5.2
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3	2.7

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15B***															
Oct-2004	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	0.7 J	ND	ND	ND	4.7	3.3
Apr-2005	2.4	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.5	ND	ND	ND	7.9	7.1
Oct-2005	0.6 J	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	2.9
Mar-2006	3.3	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.7	ND	ND	ND	8.4	7
Sep-2006	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	8.4	6.2
Mar-2007	2.5	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	1.8	ND	ND	ND	5.9	6.3
May-2007	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	5.8	6.1
Sep-2007	2.8	ND	ND	ND	ND	ND	ND	ND	0.7 J	1.2	ND	1.8	ND	ND	ND	5.8	2.2
Mar-2008	2.2	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	5.2	7
Sep-2008	3.7	ND	ND	ND	ND	ND	ND	ND	1.5	1	ND	2.5	ND	ND	ND	6.6	6.9
Mar-2009	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND	ND	3.2	3.5
Oct-2009	3	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	2.1	ND	ND	ND	6.1	6.2
Mar-2010	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	1.5	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	1.1	ND	ND	ND	4.6	2.6
Apr-2011	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	1.9	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	1.5	ND	ND	ND	9.5	3.5
Mar-2012	1.9	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	1.7	ND	ND	ND	7.4	3.7
Sep-2012	1.45	ND	ND	ND	ND	ND	ND	ND	ND	0.81 J	ND	1.16	ND	ND	ND	3.04	2.08
Mar-2013	1.04	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	0.74 J	ND	ND	ND	3.04	2.01
Oct-2013	2.39	ND	ND	ND	ND	ND	ND	ND	0.51 J	0.33 J	ND	1.89	ND	ND	ND	3.83	3.94
Mar-2014	1.34	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	1.02	ND	ND	ND	4.14	2.7
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	1.87	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15B***															
Apr-2015	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.38 J*	*ND*	*0.55 J*	*ND*	*ND*	*ND*	2.42	*ND*
Nov-2015	*0.82 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.47 B	*ND*	*0.61 J*	*ND*	*ND*	*ND*	1.48	1.87
May-2016	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.6 J*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	2.2	1.6
Oct-2016	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.5 J*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	2.8	2.4
May-2017	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	2.5	1.8
Oct-2017	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	2.5	1.6
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5	1.6
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.1	1.9 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.9	1.9 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.8	*0.7 J*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.123 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.76 J*	*0.881 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	2.1	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	**6**	ND	ND	3	ND	ND	ND	ND	1.1	0.6 J	ND	1.3	NA
Apr-1998	ND	ND	0.5 J	NA	**7.6**	ND	ND	2.3	ND	ND	ND	ND	1	ND	ND	1.1	NA
Apr-1999	ND	NA	0.6 J	NA	**8.5**	ND	NA	2	ND	ND	NA	NA	0.9 J	ND	NA	1	NA
Oct-1999	ND	ND	0.6 J	NA	**22**	1	ND	4.1	ND	ND	ND	ND	2.1	ND	ND	1.5	NA
Apr-2000	ND	NA	ND	NA	2.6	ND	NA	1.2	ND	ND	NA	NA	0.7 J	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	**6.3**	ND	ND	3.1	ND	ND	ND	ND	1.4	ND	ND	1.1	NA
Apr-2001	ND	ND	1.2	NA	**5.6**	0.6 J	ND	4.9	ND	ND	ND	ND	2.4	ND	ND	1.7	NA
Sep-2001	ND	ND	0.9 J	NA	**12**	1.3	ND	**8.9**	ND	ND	ND	ND	3.9	0.6 J	ND	**3.3**	NA
Mar-2002	ND	ND	1.1	NA	**18**	2	ND	**9.1**	ND	ND	ND	ND	4.2	0.6 J	ND	**3.8**	NA
Sep-2002	ND	ND	ND	NA	**12**	2.2	ND	**7.2**	ND	ND	ND	ND	3	0.7 J	ND	**3.4**	NA
Mar-2003	ND	ND	ND	NA	**12**	0.8 J	ND	**6.3**	ND	ND	ND	ND	2.8	ND	ND	**2.4**	NA
Oct-2003	ND	ND	1.6	NA	**8.5**	2	ND	3.8	ND	ND	ND	ND	1.9	ND	ND	1.1	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-15B*															
Apr-2004	ND	ND	ND	NA	2.6	ND	ND	2.5	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	3.6	ND	ND	2.8	ND	ND	ND	ND	1.1	ND	ND	0.8 J	NA
Apr-2005	ND	ND	ND	ND	**12**	0.6 J	ND	4.9	ND	ND	ND	ND	2.4	ND	ND	**2.6**	NA
Oct-2005	ND	ND	ND	ND	2.2	ND	ND	3	ND	ND	ND	ND	1	ND	ND	0.9 J	NA
Mar-2006	ND	ND	ND	ND	**15**	0.8 J	ND	**6.8**	ND	ND	ND	ND	2.8	0.5 J	ND	**3.3**	NA
Sep-2006	ND	ND	ND	ND	**18.7**	0.6 J	ND	**5.8**	ND	ND	ND	ND	2.4	ND	ND	**3.9**	NA
Mar-2007	ND	ND	ND	ND	**13.3 R**	0.7 J	ND	**5.3**	ND	ND	ND	ND	2.4	ND	ND	**2.3**	NA
May-2007	ND	ND	ND	ND	**11.4**	0.7 J	ND	**5.7**	ND	ND	ND	ND	2.2	ND	ND	**2.3**	NA
Sep-2007	ND	ND	ND	ND	**12.1**	1.1	ND	4.3	ND	ND	ND	ND	2.2	ND	ND	1.9	NA
Mar-2008	ND	ND	ND	ND	**15.4**	1.3	ND	**6.6**	ND	ND	ND	ND	3.1	0.5 J	ND	ND	NA
Sep-2008	ND	ND	ND	ND	**17.6**	3.7	ND	**7.8**	ND	ND	ND	ND	3.4	4.5	ND	**3.7**	NA
Mar-2009	ND	ND	ND	ND	**14.6**	1.3	ND	**5.6**	ND	ND	ND	ND	2.8	ND	ND	**2.9**	NA
Oct-2009	ND	ND	ND	ND	**12.7**	1.1	ND	**5.3**	ND	ND	ND	ND	2.5	ND	ND	**3.2**	NA
Mar-2010	ND	ND	ND	ND	**12.5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**3**	NA
Oct-2010	ND	ND	ND	ND	**5.3**	0.8 J	ND	3.3	ND	ND	ND	ND	ND	ND	ND	1.5	NA
Apr-2011	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	NA
Sep-2011	ND	ND	ND	ND	**5.3**	0.8 J	ND	3.9	ND	ND	ND	ND	1.5	ND	ND	**2.1**	NA
Mar-2012	ND	ND	ND	ND	**5.2**	1 J	ND	4.3	ND	ND	ND	ND	1.9	ND	ND	2	NA
Sep-2012	ND	ND	ND	ND	3.86	ND	ND	3.35	ND	ND	ND	ND	1.39	ND	ND	1.08	ND
Mar-2013	ND	ND	ND	ND	2.65	0.43 J	ND	1.57	ND	ND	ND	ND	0.8 J	ND	ND	0.66 J	ND
Oct-2013	ND	ND	0.48 J	ND	**5.49**	1.52	ND	3.65	ND	ND	ND	ND	2.01	ND	ND	1.75	2
Mar-2014	ND	ND	ND	ND	3.24	0.8 J	ND	3.53	ND	ND	ND	ND	1.34	ND	ND	1.05	0.8 J

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15B***															
Oct-2014	ND	ND	ND	ND	ND	ND	ND	1.01	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.97	0.33 J	ND	1.76	ND	ND	ND	ND	0.71 J	ND	ND	0.55 J	ND
Nov-2015	ND	ND	ND	ND	1.68	0.46 J	ND	2.25	ND	ND	ND	ND	0.88 J	ND	ND	0.46 J	0.46 J
May-2016	ND	ND	ND	ND	1.6	0.2 J	ND	1.8	ND	ND	ND	ND	0.7 J	ND	ND	0.5 J	0.2 J
Oct-2016	ND	ND	ND	ND	1.6	0.2 J	ND	2	ND	ND	ND	ND	0.7 J	0.1 J	ND	0.6 J	0.2 J
May-2017	ND	ND	ND	ND	1.4	0.1 J	ND	1.9	ND	ND	ND	ND	0.6 J	ND	ND	0.5 J	0.1 J
Oct-2017	ND	ND	ND	ND	1.1	0.2 J	ND	1.8	ND	ND	ND	ND	0.6 J	ND	ND	0.4 J	0.2 J
May-2018	ND	ND	ND	ND	1.9 B	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	1.6 CH	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	1	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.641 JB	ND	ND	1.02	ND	ND	ND	ND	0.254 J	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2023	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-16***											
Nov-1993	ND	ND	0.2	31.5	18.3	0.4	0.3	3.7	20.4	74.6	60	37.9
Apr-1994	ND	ND	0.1	ND	14.9	ND	ND	3.6	311	64.9	128	32.56
Aug-1994	ND	ND	0.2	ND	13.6	0.3	ND	3.4	252	59.1	163	25.6
Sep-1994	ND	ND	ND	ND	11.2	0.3	ND	3.7	233	53.5	93	22.5
Nov-1994	ND	ND	0.2	ND	19.5	ND	ND	3.6	326	87.3	148	27.5
Apr-1995	ND	ND	ND	ND	16.6	0.3	ND	3.6	298	74.9	ND	27.7
Apr-1997	ND	ND	ND	ND	18	0.05	ND	NA	NA	78	172	52
Oct-1997	ND	ND	0.49	ND	14.5	ND	ND	5.62	285	60.4	128	47
Apr-1998	ND	ND	ND	ND	14.2	0.114	ND	5.79	229	68.3	120	36
Apr-1999	ND	ND	0.25	ND	14.7	ND	ND	3.4	287	67.1	150	42
Oct-1999	ND	ND	0.12	ND	18	ND	ND	3.52	284	75.1	141	42
Apr-2000	ND	ND	ND	ND	22.2	ND	ND	3.6	315	96.7	211	66
Oct-2000	ND	NA	ND	ND	14.9	ND	ND	3.64	326	80	162	56.7
Apr-2001	ND	NA	ND	ND	16	ND	ND	NA	NA	74	148	54
Sep-2001	ND	ND	0.24	ND	16.4	1.28	ND	3.47	330	72.7	146	46.4
Mar-2002	ND	ND	ND	ND	16	ND	ND	3.8	308	75.7	155	54.1
Sep-2002	ND	ND	ND	ND	20.2	ND	ND	3.8	364	97.7	176	58.9
Mar-2003	ND	ND	ND	ND	25.8	ND	ND	3.7	413	90.4	215	71.6
Oct-2003	ND	ND	ND	ND	12.8	0.146	ND	4.2	295	69.1	97	41.3
Apr-2004	ND	ND	ND	ND	15.8	ND	ND	3.7	395	91.5	149	53.2
Oct-2004	ND	ND	ND	ND	11.2	0.111	ND	3.7	246	63.2	112	38.7
Apr-2005	ND	ND	ND	ND	13.1	0.13	ND	3.7	295	58.4	133	36.6
Oct-2005	ND	ND	0.21	ND	6.61	0.13	ND	3.4	116.1	26.4	84	20.8
Mar-2006	5.1	5.1	ND	ND	6.63	0.16	ND	5.1	83.1	25.4	61	18.1
Sep-2006	4.1	4.1	ND	ND	6.41	0.16	ND	5.1	83.1	22.8	68	20
Mar-2007	2.8	2.8	ND	ND	9.81	0.14	ND	4.7	114.8	43.4	109	30.4
Sep-2007	3.1	3.1	0.3	ND	12.5	ND	ND	5.9	86.2	24.1	57	21.1
Mar-2008	5.2	5.2	ND	ND	5.76	0.16	ND	5.2	72.8	15.6	55	15.4
Sep-2008	4.7	4.7	ND	ND	6.5	0.13	ND	4.8	65.4	20.7	69	19.8
Mar-2009	5.5	5.5	ND	ND	6.25	0.12	ND	4.4	89.3	19.1	65	17.4
Oct-2009	5	5	ND	ND	5.77	0.11	ND	4.6	66	16.6	54	19.9
Apr-2010	5	5	ND	ND	7.36	0.1	ND	4.1	734	25.8	102	22.8
Oct-2010	2.8	2.8	ND	ND	8.61	0.08	ND	4.6	90.7	30.1	77	25.5
Apr-2011	5.5	5.5	ND	ND	6	0.13	ND	4.7	88.4	15.1	61	16.9
Sep-2011	6.1	6.1	0.27	ND	5.61	0.13	ND	4.8	57.6	11.9	40	15
Mar-2012	5.3	5.3	ND	ND	8.01	0.11	ND	4.5	111.4	25	106	27.1
Sep-2012	6.08	6.08	ND	ND	5.34	0.115	ND	4.6	68.9	11.1	55	14.7

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-16***											
Mar-2013	6.72	6.72	*ND*	*ND*	7.78	0.122	*ND*	3.9	78.7	22.4	78	20.6
Oct-2013	6.92	6.92	*ND*	*ND*	5.55	0.122	*ND*	3.9	69.6	12.2	36	17.4
Mar-2014	7.68	7.68	*ND*	21	5.95	0.114	*ND*	5.6	73.3	14.3	44	17.6
Oct-2014	2.2	2.2	*ND*	*6 J*	6.01	0.134	*ND*	5.1	57.4	13.4	29	16.9
Apr-2015	4.64	4.64	*ND*	*ND*	9.61	0.0957	*ND*	4.1	115.7	36.5	76	31.4
Nov-2015	3.48	3.48	*ND*	*ND*	9.77	0.0997	*ND*	5.2	124.9	35	77	31.9
May-2016	4.44	4.44	*ND*	*ND*	7.85	0.104	*ND*	5.3	157.7	23.8	59	23.8
Oct-2016	4.56	4.56	*ND*	*ND*	6.98	*NA*	*NA*	5.6	98.3	16.9	78	18.5
May-2017	4.52	4.52	*ND*	*ND*	6.67	0.126	*ND*	5.2	102.4	15.5	38	20.3
Oct-2017	4.64	4.64	*ND*	*ND*	7	0.127	*ND*	5.5	119.3	18.8	68	21.4
May-2018	*4 J*	*ND*	*ND*	*ND*	10.4	*ND*	*0.0062 J*	4.8	248	40.2	114	37.4
Nov-2018	*ND*	*ND*	*ND*	*5.7 J*	23.4	*0.044 J*	*ND*	4.05	275.7	87.6	193	67.2
May-2019	*ND*	*NA*	*ND*	*ND*	24.8	*ND*	*ND*	4.1	227.9	84.4	153	66.7
Oct-2019	*ND*	*NA*	*ND*	*8.2 J*	23.4	*0.045 J*	*ND*	4.07	326.3	158	224	74.5
May-2020	*ND*	*NA*	*ND*	*9.1 J*	24	*ND*	*ND*	3.82	294.7	92.5	182	75.5
Oct-2020	*ND*	*NA*	*ND*	*9.3 J*	22.2	*0.055 J*	*ND*	3.94	283.7	95.2	182	72.4
Apr-2021	*ND*	*NA*	*ND*	*6.1 J*	25.7	*0.026 J*	*ND*	3.99	348.7	81.5 MH	190	72.2
Oct-2021	*ND*	*NA*	*ND*	*6.1 J*	23.6	*ND*	*ND*	4.05	396.7	99.1	195	71.5
May-2022	*ND*	*NA*	*ND*	*ND*	21.6	*ND*	*ND*	3.96	363.4	129	219	77.3 N3
Oct-2022	*ND*	*NA*	*ND*	*8.4 J*	25	*ND*	*ND*	4.12	353.1	105	204	70.7 N3
May-2023	*ND*	*NA*	*ND*	*ND*	24.7	*ND*	*ND*	4.11	348.3	102	204	80 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-16*													
Nov-1993	NA	ND	ND	NA	ND	4.8	NA	0.008	NA	ND	1.2	1.3	ND	6.3	NA
Apr-1994	NA	ND	ND	NA	ND	2.98	NA	ND	NA	ND	0.46	0.14	ND	6.1	NA
Aug-1994	NA	ND	ND	NA	ND	3	NA	ND	NA	ND	0.21	0.04	ND	4.4	NA
Sep-1994	NA	ND	ND	NA	ND	2.1	NA	ND	NA	ND	0.86	0.08	ND	4.2	NA
Nov-1994	NA	ND	ND	NA	ND	3.1	NA	ND	NA	ND	ND	1	ND	4.8	NA
Apr-1995	ND	ND	0.8	ND	ND	2.2	NA	ND	ND	ND	0.11	0.03	ND	5.4	NA
Oct-1996	ND	ND	0.013	ND	ND	4.1	4.2	ND	ND	ND	0.23	0.21	ND	4	4.2
Apr-1997	ND	ND	0.013	ND	ND	7	6.7	ND	0.18	ND	8.3	7.4	ND	6.9	6.6
Oct-1997	ND	ND	0.012	ND	ND	6.43	5.58	ND	0.163	ND	9.98	7.88	ND	6.56	5.64
Apr-1998	ND	ND	0.01	ND	ND	5.54	5.49	ND	0.13	ND	8.98	2.65	ND	5.5	5.42
Apr-1999	ND	ND	0.014	ND	ND	6.45	6.64	ND	0.143	ND	1.99	0.075	ND	6.2	6.29
Oct-1999	ND	ND	0.01	ND	ND	5.53	5	ND	0.125	ND	0.589	0.077	ND	5.55	5.01
Apr-2000	ND	ND	0.017	ND	ND	9.8	9.27	ND	0.236	ND	0.881	0.078	ND	10	9.46
Oct-2000	ND	ND	0.014	ND	ND	8.67	8.03	ND	0.2	ND	1.02	0.125	ND	8.51	7.91
Apr-2001	ND	ND	0.016	ND	ND	8.09	NA	ND	0.187	ND	2.89	NA	ND	8.12	NA
Sep-2001	ND	ND	0.013	ND	ND	7.02	6.93	ND	0.163	ND	1.6	0.051	ND	7.03	7.06
Mar-2002	ND	ND	0.016	ND	ND	8.37	8.21	ND	0.183	0.01	0.337	0.076	ND	8.05	8.09
Sep-2002	ND	ND	0.021	ND	ND	9.1	8.56	ND	0.199	ND	5.45	0.1	ND	8.79	8.64
Mar-2003	ND	ND	0.023	ND	ND	10.8	10.6	ND	0.256	ND	0.816	0.126	ND	10.8	10.6
Oct-2003	ND	ND	0.015	ND	ND	6.46	6.24	ND	0.142	ND	6.58	0.185	0.003	6.12	6.16
Apr-2004	ND	0.002	0.017	ND	ND	8.41	8.92	ND	0.182	ND	1.29	0.081	ND	7.82	8.29

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-16***													
Oct-2004	*ND*	*ND*	0.014	*ND*	*ND*	6.13	5.54	*ND*	0.14	*ND*	1.48	0.267	*ND*	5.69	5.18
Apr-2005	*ND*	*ND*	0.014	*ND*	*ND*	5.83	5.59	*ND*	0.134	*ND*	1.53	0.203	*ND*	5.36	5.11
Oct-2005	*ND*	*ND*	0.016	*ND*	*ND*	4.03	3.17	0.022	0.08	*ND*	10.7	0.421	0.003	2.61	1.99
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	3.87	4.26	*ND*	0.045	*ND*	0.706	*ND*	*ND*	2.04	2.43
Sep-2006	*ND*	*ND*	0.011	*ND*	*ND*	4.91	4.79	*ND*	0.044	*ND*	0.6	*ND*	*ND*	1.86	2.59
Mar-2007	*ND*	*ND*	0.016	*ND*	*ND*	6.47	5.73	*ND*	0.078	*ND*	2.12	0.066	*ND*	3.46	3.16
Sep-2007	*ND*	*ND*	0.012	*ND*	*ND*	4.49	4.16	*ND*	0.053	*ND*	0.535	0.066	*ND*	2.4	2.08
Mar-2008	*ND*	*ND*	0.014	*ND*	*ND*	3.88	3.75	*ND*	0.028	*ND*	0.721	*ND*	*ND*	1.39	1.52
Sep-2008	*ND*	*ND*	0.015	*ND*	*ND*	4.28	4.02	*ND*	0.048	*ND*	1.09	*ND*	*ND*	2.21	1.89
Mar-2009	*ND*	*ND*	0.013	*ND*	*ND*	4.18	4.09	*ND*	0.037	*ND*	0.806	0.101	*ND*	1.71	1.8
Oct-2009	*ND*	*ND*	0.015	*ND*	*ND*	4.49	4.18	*ND*	0.045	*ND*	1.23	0.232	*ND*	2.12	2.13
Apr-2010	*ND*	*ND*	0.015	*ND*	*ND*	5.49	5.41	*ND*	0.046	*ND*	1.86	0.184	*ND*	2.22	2.34
Oct-2010	*ND*	*ND*	0.01	*ND*	*ND*	5.59	5.83	*ND*	0.058	*ND*	0.998	0.853	*ND*	2.8	2.93
Apr-2011	*ND*	*ND*	0.017	*ND*	*ND*	4.16	3.84	*ND*	0.031	*ND*	1.96	0.487	*ND*	1.57	1.28
Sep-2011	*ND*	*ND*	0.019	*ND*	*ND*	3.93	3.47	*ND*	0.023	*ND*	2.41	0.192	*ND*	1.27	1.03
Mar-2012	*ND*	*ND*	0.019	*ND*	*ND*	5.79	5.15	*ND*	0.061	*ND*	1.99	0.475	*ND*	3.07	2.41
Sep-2012	*ND*	*ND*	0.0168	*0.000142 J*	*ND*	3.82	3.97	*0.0066 J*	0.0228	*0.0012 J*	1.94	0.593	*0.000893 J*	1.26	1.21
Mar-2013	*ND*	*ND*	0.0183	*0.000163 J*	*ND*	4.91	4.69	*0.0075 J*	0.0469	*0.0021 J*	1.97	0.542	*0.002 J*	2.03	1.83
Oct-2013	*ND*	*ND*	0.0174	*0.000136 J*	*ND*	4	3.89	*0.0047 J*	0.0341	*ND*	1.38	1.2	*0.000314 J*	1.81	1.77
Mar-2014	*0.000507 J*	*0.0001 J*	0.0158	*ND*	*ND*	4.23	3.97	*0.0034 J*	0.0311	*0.0027 J*	1.1	0.765	*ND*	1.71	1.5
Oct-2014	*0.000763 J*	*0.000465 J*	0.0185	*0.000205 J*	*ND*	4.29	4.34	*0.0032 J*	0.0265	*0.000607 J*	1.52	0.604	*ND*	1.51	1.53
Apr-2015	*0.000937 J*	*ND*	0.0205	*0.000285 J*	*ND*	6.36	6.7	*0.0021 J*	0.0749	*0.000363 J*	1.21	0.91	*ND*	3.77	3.91
Nov-2015	*0.000322 J*	*ND*	0.0214	*0.000315 J*	*ND*	6.8	6.75	*0.0024 J*	0.0721	*0.00064 J*	0.889	0.43	*0.000521 J*	3.61	3.38
May-2016	*ND*	*ND*	0.0201	*0.00025 J*	*ND*	5.29	5.21	0.0045	0.0439	*0.0007 J*	1.27	0.546	*0.00032 J*	2.58	2.42

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-16***													
Oct-2016	*ND*	*ND*	0.0207	*0.00022 J*	*ND*	4.29	4.92	0.0077	0.0309	*0.00059 J*	2.1	*1.07 J+*	*0.00025 J*	1.89	2.19
May-2017	*ND*	*ND*	0.0195	*0.0002 J*	*ND*	4.6	5.47	*0.003 J*	0.0319	*ND*	0.769	0.473	*ND*	2.13	2.01
Oct-2017	*ND*	*ND*	0.0184	*0.00025 J*	*ND*	4.79	4.7	0.0179	0.0343	*ND*	0.767	0.519	*ND*	2.29	2.3
May-2018	*0.000091 J*	*ND*	0.019	0.00033	*0.00007 J*	7.2	6.6	*0.0026 J*	0.0685	*0.0013 J*	1.3	0.14	*0.00021 J*	4.7	4.2
Nov-2018	*ND*	*ND*	0.022	*0.00058 J*	*0.000038 J*	11.5	11.4	0.024	0.18	*0.001 J*	1.3	0.81	*0.000064 J*	9.4	9.3
May-2019	*ND*	*ND*	0.028	0.00035	*ND*	11.9	11.9	0.0073	0.19	*ND*	3.7	0.9	*ND*	9	9
Oct-2019	*0.0001 J*	*ND*	0.028	0.00046	*0.00013 J*	13	12.2	*0.0053 J*	0.21	*ND*	2.7	1	*ND*	10.2	9.3
May-2020	*0.000091 J*	*ND*	0.027	0.00057	*ND*	13.1	12.4	0.0075	0.2	0.0025	3.6	0.67	*ND*	10.4	9.8
Oct-2020	*ND*	*ND*	0.028	*0.00078 J*	*ND*	12.3	11.7	*0.011 J*	0.22	*ND*	2.3	0.68	*ND*	10.1	9.5
Apr-2021	*ND*	*ND*	0.028	*0.0009 J*	*ND*	12.3	12.1	*0.0034 J*	0.21	*ND*	4.3	1.2	*ND*	10.1	10
Oct-2021	*0.000057 JB*	*ND*	0.027	0.00058	*ND*	12.2	13.1	0.0049	0.24	*ND*	3	0.95	*0.000031 J*	10	10.8
May-2022	*ND*	*ND*	0.028	0.00073	*ND*	12.8	13.5	0.0062	0.24	*ND*	6.3	0.89	*ND*	11	11.5
Oct-2022	*ND*	*ND*	0.025	0.00078	*ND*	12.2	12	0.0046	0.23	*ND*	0.46	0.2	*ND*	9.7	9.6
May-2023	*ND*	*ND*	0.028	0.00091	*ND*	13.5	12.3	0.007	0.26	*ND*	1.6	0.24	*ND*	11.3	10.2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-16*												
Nov-1993	1.4	NA	ND	NA	6.7	NA	ND	NA	21.8	NA	NA	NA	0.42
Apr-1994	0.8	NA	ND	NA	4.22	NA	ND	NA	11.37	NA	NA	NA	0.28
Aug-1994	0.68	NA	ND	NA	4.7	NA	ND	NA	8.8	NA	NA	NA	0.26
Sep-1994	0.66	NA	ND	NA	3.6	NA	ND	NA	8.7	NA	NA	NA	0.24
Nov-1994	0.97	NA	ND	NA	5.5	NA	ND	NA	10.7	NA	NA	NA	0.24
Apr-1995	0.08	NA	ND	0.06	4.9	NA	ND	0.01	9.5	NA	ND	ND	0.28
Oct-1996	0.56	0.57	NA	0.085	ND	ND	ND	ND	8.7	8.5	ND	ND	0.2
Apr-1997	1.2	1.1	ND	0.31	5.3	5.1	ND	ND	14	14	ND	ND	0.29
Oct-1997	1.04	0.91	NA	0.157	4.16	3.04	ND	ND	13.3	11.4	ND	ND	0.267
Apr-1998	0.804	0.811	NA	0.125	5.25	5.07	ND	ND	10.7	10.6	ND	ND	0.337
Apr-1999	0.858	0.871	NA	0.142	4.23	4.05	ND	ND	11.8	12.1	ND	ND	0.286
Oct-1999	0.751	0.677	NA	0.116	4.88	3.62	ND	ND	10.4	9.32	ND	ND	0.242
Apr-2000	1.42	1.34	NA	0.222	5.86	6.21	ND	ND	20.2	19.2	ND	ND	0.454
Oct-2000	1.2	1.11	NA	0.188	6	5.56	ND	ND	16.4	15.1	ND	ND	0.403
Apr-2001	1.12	NA	NA	0.183	6.01	NA	ND	ND	15.6	NA	ND	ND	0.365
Sep-2001	0.962	0.963	NA	0.161	5.66	5.25	ND	ND	14.6	13.3	ND	ND	0.313
Mar-2002	1.09	1.1	NA	0.173	7.03	6.6	ND	ND	16.4	15.4	ND	ND	0.34
Sep-2002	1.19	1.17	NA	0.198	5.89	6.09	ND	ND	18.1	17.9	ND	ND	0.382
Mar-2003	1.52	1.49	NA	0.251	6.94	7.24	ND	ND	21.5	20.9	ND	ND	0.491
Oct-2003	0.84	0.841	NA	0.143	5.97	5.21	ND	ND	12.5	11.8	ND	ND	0.314
Apr-2004	1.09	1.16	ND	0.188	6.55	5.88	ND	ND	15	16.3	ND	ND	0.322
Oct-2004	0.823	0.756	ND	0.141	5.11	4.74	ND	ND	11	9.79	ND	ND	0.241

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-16***												
Apr-2005	0.785	0.749	*ND*	0.132	4.43	4.01	*ND*	*ND*	10.1	9.66	*ND*	*ND*	0.225
Oct-2005	0.466	0.338	*ND*	0.072	2.51	1.93	*ND*	*ND*	5.64	3.89	*ND*	*ND*	0.132
Mar-2006	0.26	0.308	*ND*	0.053	1.84	2.04	*ND*	*ND*	4.3	4.88	*ND*	*ND*	0.058
Sep-2006	0.241	0.358	*ND*	0.048	1.92	2.4	*ND*	*ND*	4.15	5.25	*ND*	*ND*	0.123
Mar-2007	0.458	0.419	*ND*	0.082	2.97	2.71	*ND*	*ND*	6.86	6.32	*ND*	*ND*	0.154
Sep-2007	0.316	0.267	*ND*	0.054	2.02	1.7	*ND*	*ND*	5.22	4.59	*ND*	*ND*	0.1
Mar-2008	0.158	0.174	*ND*	0.034	1.64	1.6	*ND*	*ND*	3.19	3.47	*ND*	*ND*	0.067
Sep-2008	0.259	0.22	*ND*	0.057	1.82	1.63	*ND*	*ND*	4.49	3.98	*ND*	*ND*	0.091
Mar-2009	0.204	0.222	*ND*	0.043	1.77	1.74	*ND*	*ND*	3.97	4.18	*ND*	*ND*	0.075
Oct-2009	0.25	0.254	*ND*	0.052	1.79	1.63	*ND*	*ND*	4.5	4.42	*ND*	*ND*	0.088
Apr-2010	0.258	0.279	*ND*	0.053	2	1.99	*ND*	*ND*	4.88	5.04	*ND*	*ND*	0.09
Oct-2010	0.326	0.343	*ND*	0.061	2.15	2.2	*ND*	*ND*	5.88	6.18	*ND*	*ND*	0.092
Apr-2011	0.174	0.135	*ND*	0.039	1.49	1.16	*ND*	*ND*	3.55	3.06	*ND*	*ND*	0.06
Sep-2011	0.118	0.096	*ND*	0.038	1.69	1.04	*ND*	*ND*	3.13	2.87	*ND*	*ND*	0.055
Mar-2012	0.367	0.275	*ND*	0.068	2.46	1.94	*ND*	*ND*	6.41	5.25	*ND*	*ND*	0.104
Sep-2012	0.121	0.12	*ND*	0.0333	1.34	1.27	*ND*	*ND*	3.06	3.02	*0.0015 J*	*ND*	0.0492
Mar-2013	0.272	0.224	*0.000048 J*	0.0554	1.73	1.52	*ND*	*ND*	4.33	3.89	*ND*	*ND*	0.0989
Oct-2013	0.177	0.174	*ND*	0.0424	1.72	1.54	*ND*	*ND*	3.97	3.86	*0.000104 J*	*0.0028 J*	0.0741
Mar-2014	0.181	0.154	*ND*	0.0407	1.55	1.33	*ND*	*ND*	3.59	3.27	*ND*	*0.000622 J*	0.0629
Oct-2014	0.152	0.155	*ND*	0.0353	1.59	1.47	*ND*	*ND*	3.62	3.78	*ND*	*0.0013 J*	0.063
Apr-2015	0.435	0.458	*ND*	0.0863	2.79	2.84	*0.000895 J*	*ND*	7.45	7.8	*ND*	*ND*	0.139
Nov-2015	0.407	0.378	*ND*	0.0833	2.72	2.51	*ND*	*ND*	7.24	6.83	*0.00011 J*	*0.000842 J*	0.133
May-2016	0.258	0.257	*ND*	0.0549	2.19	1.92	*ND*	*ND*	5.36	4.96	*ND*	0.0012	0.0855
Oct-2016	0.191	0.223	*ND*	0.0439	1.62	1.86	*ND*	*ND*	4.42	4.9	*ND*	0.0011	0.0652

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-16***												
May-2017	0.176	0.169	*ND*	0.048	1.72	1.75	*ND*	*ND*	4.39	4.28	*ND*	*0.00034 J*	0.0754
Oct-2017	0.19	0.196	*ND*	0.0503	1.84	1.87	*ND*	*ND*	4.63	4.67	*ND*	*0.00037 J*	0.0795
May-2018	0.34	0.33	*ND*	0.099	*3.3 J*	*2.6 J*	*0.000095 J*	*ND*	9.4	7.8	*ND*	0.0036	0.17
Nov-2018	1.2	0.93	*ND*	0.21	6	6	*0.00012 J*	*ND*	18.5	18.6	*ND*	0.0056	0.34
May-2019	1.3	1.2	*ND*	0.21	5.9	5.4	*ND*	*ND*	17.6	17.2	*ND*	*ND*	0.34
Oct-2019	1.5	1.3	*ND*	0.22	6	5.9	*ND*	*ND*	19.3	18.6	*ND*	0.0068	0.34
May-2020	1.3	1.3	*ND*	0.21	6.4	6.4	*ND*	*ND*	19.6	18.8	*ND*	*ND*	0.35
Oct-2020	1.3	1.2	*ND*	0.23	6.1	6	*ND*	*ND*	19.6	18.1	*ND*	*0.00092 J*	0.37
Apr-2021	1.4	1.4	*ND*	0.24	6.3	6.2	*0.0055 J*	*ND*	19.6	19.5	*ND*	*ND*	0.35
Oct-2021	1.4	1.54	*ND*	0.24	6.2	6.9	*ND*	*ND*	19.6	21.5	*0.000044 J*	*ND*	0.36
May-2022	1.5	1.5	*ND*	0.25	6.7	6.5	*ND*	*ND*	20.8	20.6	*ND*	*ND*	0.39
Oct-2022	1.3	1.3	*ND*	0.24	6.6	5.9	*ND*	*ND*	20.2	18.4	*ND*	*ND*	0.36
May-2023	1.4	1.3	*ND*	0.29	7.3	6.7	*ND*	*ND*	22	19.9	*ND*	*ND*	0.43

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	33	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.3 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.4 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-16***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-16***															
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-16***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16***															
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.1 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-17***											
Nov-1993	62	62	0.2	24.8	6.7	ND	ND	5.94	172	15.4	45	63.1
Apr-1994	64	64	0.1	62.3	6.1	ND	ND	5.96	183	18.9	103	58.75
Apr-1995	58.7	58.7	ND	74.7	7.1	ND	ND	6	186	22.5	88	43.9
Apr-1997	ND	20	ND	ND	5	0.04	ND	NA	NA	14	88	15
Oct-1997	35	35	0.24	ND	4.39	ND	ND	6.48	170.5	14.3	107	46
Apr-1998	32	32	0.26	ND	4.22	ND	ND	7.6	164.7	19	64	39
Apr-1999	28	28	0.82	16	5.33	ND	ND	5.61	143.1	19.5	110	48
Oct-1999	38	38	0.08	ND	7.13	ND	ND	5.68	132	17.1	140	32
Apr-2000	31	31	ND	ND	3.42	ND	ND	6.01	74	29	117	48
Oct-2000	23	NA	0.22	56	6.06	ND	ND	5.88	137.9	27.3	87	37.8
Apr-2001	29	NA	ND	10	6	ND	ND	NA	NA	28.4	108	45
Sep-2001	26	26	ND	ND	8.69	ND	ND	5.74	165	34.4	105	36.7
Mar-2002	25	25	ND	38	4.51	ND	ND	5.8	68.5	27.1	122	37
Sep-2002	17	17	ND	ND	5.88	ND	ND	5.7	167.5	43.5	108	36.2
Mar-2003	22	22	ND	ND	15.2	ND	ND	5.8	157.9	33.9	110	42
Oct-2003	27	27	ND	ND	5.19	ND	ND	5.6	164.7	34.6	106	46.2
Apr-2004	31	31	ND	27	5.06	ND	ND	5.6	151.5	28.1	106	51.8
Oct-2004	45	45	ND	ND	5.21	0.08	ND	5.6	164.6	30.7	123	51.7
Apr-2005	33	33	ND	ND	5.68	ND	ND	5.7	127.4	26.3	113	41.8
Oct-2005	29	29	ND	ND	1.03	ND	ND	5.5	296	2.32	92	35.2
Mar-2006	27	27	ND	ND	5.6	ND	ND	7.7	104.8	21.9	105	26.3
Sep-2006	13	13	ND	ND	5.22	ND	ND	7.7	104.8	20.3	210	33.3
Mar-2007	8.2	8.2	0.6	ND	5.44	ND	ND	5.5	107.9	20	58	17.6
Sep-2007	6.1	6.1	ND	82	9.89	ND	ND	6.1	104.6	20.5	87	14
Mar-2008	13	13	0.25	ND	10.1	ND	ND	5.3	107.2	33.7	39	17.2
Sep-2008	13	13	ND	36	9.93	ND	ND	5.3	101.1	15	67	18
Mar-2009	10	10	ND	ND	5.52	ND	ND	5	113.4	31.4	85	19.4
Oct-2009	7	7	ND	ND	5.35	ND	ND	5.1	97.3	23.2	62	12.7
Apr-2010	6.2	6.2	ND	ND	5.67	ND	ND	4.8	119.7	25.7	133	13.6
Oct-2010	14	14	ND	ND	5.7	ND	ND	5.2	89.3	24.9	73	24.3
Apr-2011	106	106	ND	ND	5.38	ND	ND	5.1	103.4	22.5	70	16.7
Sep-2011	9.2	9.2	ND	ND	5.65	ND	ND	5.1	95.5	20.7	59	14.7
Mar-2012	15	15	ND	ND	5.53	ND	ND	5	111.4	26.6	72	27.4
Sep-2012	8.44	8.44	ND	ND	5.83	ND	ND	4.5	100.4	24.1	95	16.6
Mar-2013	8.72	8.72	ND	10.2	5.86	ND	ND	5.3	113	23	83	11.2
Oct-2013	14	14	ND	10.3	5.78	ND	ND	4.1	110.6	28.6	77	24.3
Mar-2014	6.8	6.8	ND	19	5.56	ND	ND	5.5	108.5	27.1	58	13.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-17***											
Oct-2014	2.2	2.2	*ND*	33	5.75	*ND*	*ND*	5.3	100.3	26.5	108	22.3
Apr-2015	13.2	13.2	*ND*	13	5.52	*ND*	*ND*	4.5	102.1	28.7	71	21.1
Nov-2015	5.56	5.56	*ND*	*ND*	5.95	0.0536	*ND*	5.5	122.9	25.5	53	14.9
May-2016	12.6	12.6	0.274	*7 J*	5.87	0.0852	*ND*	5.6	182.9	28.9	81	24.1
Oct-2016	18.3	18.3	*0.185 J*	45	5.86	*NA*	*NA*	5.5	190.5	34.1	140	29.6
May-2017	2.6	2.6	*ND*	*ND*	5.56	0.076	*ND*	5.2	162.4	30.6	64	17
Oct-2017	*ND*	*ND*	*0.0838 J*	*ND*	5.58	*ND*	*ND*	5.1	160.4	34.5	96	17.3
May-2018	*ND*	*ND*	*ND*	*ND*	5.9	*ND*	0.024	4.4	191.5	62.5	139	38.2
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	5.9	*0.038 J*	*ND*	4.63	169.6	63.6	95	39.3
May-2019	*ND*	*NA*	*ND*	*ND*	4.8	*ND*	*ND*	5.06	128.2	50.6	82	34.2
Oct-2019	*ND*	*NA*	*ND*	*ND*	5.4	*0.047 J*	*ND*	5.05	164	52.5	108	30
May-2020	*1 J*	*NA*	*ND*	*ND*	5.7	*ND*	*ND*	4.69	143.9	45.2	68	26.9
Oct-2020	*8 J*	*NA*	*ND*	*ND*	5.4	*ND*	*0.0064 J*	4.79	143.4	43.3	75	25.4
Apr-2021	*2 J3c*	*NA*	*ND*	38.6	5.7	*0.025 J*	*ND*	5.29	166.1	36.9	87	25.9
Oct-2021	*6 J5c*	*NA*	*ND*	*ND*	5	*ND*	*ND*	5.45	190.6	36.8	65	20.9
May-2022	10	*NA*	*ND*	*ND*	4.7	*ND*	*ND*	4.97	160.2	40.6	73	22.9 N3
Oct-2022	*6 J4c*	*NA*	*ND*	*10.7 J*	7.6	*ND*	*ND*	4.99	155.9	34.9	73	23.5 N3
May-2023	*1 J2c*	*NA*	*ND*	*ND*	5.3	*ND*	0.013	4.94	142.6	32.8	66	19.4 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17***													
Nov-1993	*NA*	*ND*	*ND*	*NA*	*ND*	22.5	*NA*	0.012	*NA*	*ND*	10	6.7	*ND*	1.7	*NA*
Apr-1994	*NA*	*ND*	*ND*	*NA*	*ND*	20.4	*NA*	*ND*	*NA*	*ND*	8.53	3.14	*ND*	1.89	*NA*
Apr-1995	*ND*	*ND*	1	*ND*	*ND*	14.6	*NA*	*ND*	*ND*	*ND*	7.6	7.6	*ND*	1.8	*NA*
Oct-1996	*ND*	*ND*	0.035	*ND*	*ND*	8.8	8.4	*ND*	*ND*	*ND*	6	8	*ND*	1.4	1.3
Apr-1997	*ND*	*ND*	0.016	*ND*	*ND*	8.4	8.7	*ND*	*ND*	*ND*	4.2	2.1	0.003	1.1	1.1
Oct-1997	*ND*	*ND*	0.053	*ND*	*ND*	12.2	10.9	0.014	0.019	0.053	14.3	7.52	*ND*	1.9	1.55
Apr-1998	*ND*	*ND*	0.116	*ND*	*ND*	11.5	2.12	0.031	0.018	0.033	23.9	4.46	*ND*	2.45	0.453
Apr-1999	*ND*	*ND*	0.179	*ND*	*ND*	13.7	10.1	0.054	0.026	0.042	38.5	7.9	*ND*	3.41	1.65
Oct-1999	*ND*	*ND*	0.025	*ND*	*ND*	6.94	6.54	*ND*	*ND*	0.011	6.29	1.08	*ND*	1.51	1.38
Apr-2000	*ND*	*ND*	0.034	*ND*	*ND*	15.9	15	*ND*	0.012	0.012	11.6	4.76	*ND*	2.04	1.89
Oct-2000	*ND*	*ND*	0.031	*ND*	*ND*	12	9.46	*ND*	0.011	0.018	17.2	6.64	*ND*	1.91	1.6
Apr-2001	*ND*	*ND*	0.084	*ND*	*ND*	14	*NA*	0.02	0.019	0.02	35.7	*NA*	0.004	2.32	*NA*
Sep-2001	*ND*	*ND*	0.04	*ND*	*ND*	11.5	10.4	0.011	0.011	0.012	24.1	6.29	0.003	1.91	1.61
Mar-2002	*ND*	*ND*	0.037	*ND*	*ND*	11.4	10.1	0.01	0.018	0.011	16.2	5.94	*ND*	2.08	1.85
Sep-2002	*ND*	*ND*	0.044	*ND*	*ND*	11.2	10.6	*ND*	0.027	0.014	22.6	15	0.003	1.98	1.8
Mar-2003	*ND*	*ND*	0.045	*ND*	*ND*	13.5	11.8	*ND*	0.05	0.01	47.7	3.79	0.002	2.02	1.85
Oct-2003	*ND*	0.005	0.05	*ND*	*ND*	14.9	12	0.016	0.04	0.025	24.7	4.81	0.006	2.15	1.69
Apr-2004	*ND*	**0.011**	0.088	*ND*	*ND*	16.8	14.2	0.041	0.056	0.045	45.1	3.94	0.01	2.37	1.9
Oct-2004	*ND*	0.003	0.041	*ND*	*ND*	17.2	15.7	0.012	0.037	0.017	16.3	3.7	0.004	2.11	1.94
Apr-2005	*ND*	0.002	0.04	*ND*	*ND*	13.6	12.8	0.012	0.03	0.02	12.4	4.46	0.002	1.9	1.74
Oct-2005	*ND*	*ND*	0.019	*ND*	*ND*	11.6	10.7	*ND*	0.011	*ND*	0.798	1.86	*ND*	1.54	1.49

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17***													
Mar-2006	*ND*	*ND*	0.016	*ND*	*ND*	8.36	8.68	*ND*	0.01	*ND*	2.02	3.39	*ND*	1.3	1.37
Sep-2006	*ND*	*ND*	0.042	*ND*	*ND*	10.8	9.11	*ND*	0.019	0.016	9.22	4.96	0.003	1.54	1.43
Mar-2007	*ND*	0.005	0.043	*ND*	*ND*	4.73	6.14	0.04	0.033	0.029	18.5	4.58	0.007	1.4	1.37
Sep-2007	*ND*	0.009	0.045	*ND*	*ND*	3.5	3.39	0.045	0.034	0.031	21.4	5.09	0.008	1.28	1.11
Mar-2008	*ND*	0.003	0.026	*ND*	*ND*	4.7	4.37	0.013	0.012	*ND*	8.65	3.43	0.002	1.33	1.28
Sep-2008	*ND*	0.003	0.03	*ND*	*ND*	4.66	4.35	0.013	0.01	*ND*	8.02	3.63	*ND*	1.56	1.41
Mar-2009	*ND*	0.005	0.051	*ND*	*ND*	5.16	3.43	0.049	0.038	0.029	38.5	4.56	0.008	1.57	1.25
Oct-2009	*ND*	0.003	0.03	*ND*	*ND*	3.16	3.27	0.023	0.014	0.016	17.6	4.26	0.003	1.16	1.21
Apr-2010	*ND*	0.006	0.034	*ND*	*ND*	3.26	2.33	0.023	0.022	0.018	20	5.97	0.005	1.33	1.07
Oct-2010	*ND*	0.003	0.031	*ND*	*ND*	6.87	6.32	0.02	0.02	0.012	12.3	3.91	0.003	1.73	1.54
Apr-2011	*ND*	*ND*	0.019	*ND*	*ND*	4.46	4.49	*ND*	*ND*	*ND*	3.83	4.49	*ND*	1.36	1.39
Sep-2011	*ND*	0.002	0.034	*ND*	*ND*	3.55	2.45	0.016	*ND*	0.014	11.5	5.9	0.003	1.42	1.16
Mar-2012	*ND*	0.002	0.038	*ND*	*ND*	7.74	5.95	0.014	*ND*	0.017	11.1	4.72	0.003	1.96	1.61
Sep-2012	*ND*	0.0036	0.035	*0.000401 J*	*ND*	4.15	4.04	0.0266	0.0172	0.0152	26.3	4.65	0.0042	1.52	1.47
Mar-2013	*ND*	*ND*	0.0298	*0.000333 J*	*ND*	2.73	3.13	0.0217	0.0158	0.0148	30.9	4.77	0.0052	1.07	1.19
Oct-2013	*ND*	*0.0018 J*	0.0414	*0.000309 J*	*0.000155 J*	6.69	5.28	*0.0154 J*	*0.0081 J*	*0.0089 J*	16	4.38	0.0025	1.84	1.65
Jan-2014	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	0.0252	*NA*	*NA*	*NA*	*NA*	0.0059	*NA*	*NA*
Mar-2014	*0.000701 J*	*0.0015 J*	0.0326	*0.000238 J*	*ND*	3.06	3.26	*0.0074 J*	*0.0048 J*	*0.0005 J*	8.91	4.5	*0.0018 J*	1.45	1.46
Oct-2014	*0.0012 J*	*0.0261 J*	0.166	*ND*	*0.000168 J*	5.24	4.81	*0.112 J*	*0.0474 J*	*0.0591 J*	78.3	4.4	**0.0239**	2.25	1.57
Apr-2015	*0.0013 J*	**0.013**	0.133	*0.000895 J*	*0.000127 J*	5.13	5.14	0.075	*0.0326 J*	*0.0353 J*	55.6	4.01	**0.0181**	2	1.63
Nov-2015	*0.00073 J*	0.0042	0.0658	*0.000416 J*	*0.000064 J*	3.51	4.08	0.022	0.0111	0.0124	16.4	5.09	0.0061	1.5	1.56
May-2016	*ND*	0.0099	0.064	*0.00059 J*	*ND*	6.17	5.41	0.0461	0.0247	0.0239	39.9	8.98	0.0082	2.11	1.83
Oct-2016	*ND*	*0.0024 J*	0.0367	*0.00028 J*	*ND*	8.2	7.35	0.0168	0.0074	0.0063	11.9	7.49	0.0021	2.23	2.19
May-2017	*ND*	*0.001 J*	0.0263	*0.00015 J*	*ND*	4.03	4.4	0.0067	0.0041	*0.0026 J*	8.35	4.65	*0.00079 J*	1.67	1.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17***													
Oct-2017	*ND*	*0.0016 J*	0.0297	*0.00017 J*	*ND*	4.22	3.55	0.0068	0.0057	*0.0022 J*	14.2	4.78	*0.00065 J*	1.65	1.64
May-2018	*0.00011 J*	*0.00026 J*	0.053	0.00086	*0.00049 J*	10.1	9.9	0.025	0.0433	0.0023	9.6	0.96	*0.00024 J*	3.1	3.1
Nov-2018	*ND*	*0.0007 J*	0.032	0.00044	*0.00025 J*	11.5	11.3	0.038	0.021	0.0029	7	0.79	*0.0006 J*	2.6	2.6
May-2019	*ND*	*ND*	0.026	*ND*	*ND*	9.8	9.9	0.049	0.029	*ND*	9.2	6.1	*ND*	2.4	2.4
Oct-2019	*0.00011 J*	*0.0005 J*	0.025	*0.000094 J*	*0.0002 J*	8.3	7.7	0.024	0.041	*ND*	8	6.3	*0.00014 J*	2.2	2
May-2020	*0.000083 J*	*0.0005 J*	0.024	*0.00014 J*	*ND*	7.2	7	0.063	0.036	0.003	13.5	3.6	*0.00024 J*	2.2	2.1
Oct-2020	*ND*	*ND*	0.021	*ND*	*ND*	6.8	6.8	*0.03 J*	0.022	*ND*	9.8	3.7	*ND*	2	2
Apr-2021	*ND*	*ND*	0.023	*ND*	*ND*	7	7	0.0088	0.019	*ND*	10	7.3	*ND*	2.1	2
Oct-2021	*0.000051 JB*	*ND*	0.022	*ND*	*ND*	5.6	6	0.0044	0.023	*0.00036 J*	8.2	7.3	*0.000042 J*	1.7	1.9
May-2022	*ND*	*0.00058 J*	0.023	*ND*	*ND*	6	6.3	0.022	0.019	*0.0014 J*	10	2.5	*ND*	2	2.2
Oct-2022	*ND*	*0.0008 J*	0.023	*ND*	*ND*	6	6.1	0.016	0.013	*ND*	20.6	3.3	*ND*	2	2.1
May-2023	*ND*	*0.0006 J*	0.022	*0.00014 J*	*ND*	4.7	4.5	0.012	0.0069	*0.0012 J*	19.7	1.4	*ND*	1.8	1.7

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-17*												
Nov-1993	0.27	NA	ND	NA	2	NA	ND	NA	11	NA	NA	NA	0.01
Apr-1994	0.31	NA	ND	NA	1.69	NA	ND	NA	12.97	NA	NA	NA	0.06
Apr-1995	0.28	NA	ND	ND	2.1	NA	ND	ND	8.4	NA	ND	ND	0.03
Oct-1996	0.21	0.19	NA	ND	ND	ND	ND	ND	9	8.4	ND	ND	0.27
Apr-1997	0.18	0.19	ND	ND	1.8	1.8	ND	ND	7.2	7.3	ND	ND	0.025
Oct-1997	0.259	0.244	NA	0.064	3.88	0.695	ND	ND	10.2	9.61	ND	0.018	0.08
Apr-1998	0.262	0.048	NA	0.1	6.8	1.61	ND	ND	10.6	1.99	ND	0.051	0.076
Apr-1999	0.348	0.243	NA	0.03	8.91	ND	ND	ND	13.1	10.6	ND	0.088	0.106
Oct-1999	0.214	0.204	NA	ND	1.78	1.28	ND	ND	10.8	10.2	ND	ND	0.032
Apr-2000	0.231	0.225	NA	ND	1.89	1.25	ND	ND	12.8	11.2	ND	ND	0.037
Oct-2000	0.237	0.21	NA	0.018	2.16	1.5	ND	ND	13.1	10.8	ND	0.011	0.041
Apr-2001	0.25	NA	NA	0.015	4.25	NA	ND	ND	12.5	NA	ND	0.037	0.059
Sep-2001	0.212	0.199	NA	0.022	2.82	1.91	ND	ND	13.4	10.4	ND	0.015	0.048
Mar-2002	0.255	0.236	NA	0.018	2.87	1.53	ND	ND	12	11.1	ND	0.014	0.046
Sep-2002	0.249	0.234	NA	0.029	2.39	2.13	ND	ND	12.4	11.6	ND	0.018	0.064
Mar-2003	0.236	0.233	NA	0.046	2.32	1.33	ND	ND	12.4	11.5	ND	ND	0.084
Oct-2003	0.22	0.209	NA	0.041	2.74	1.76	ND	ND	12.9	10.8	ND	0.03	0.08
Apr-2004	0.234	0.211	ND	0.055	4.63	2.15	ND	ND	12.6	11.9	ND	0.065	0.226
Oct-2004	0.244	0.232	ND	0.025	2.76	1.76	ND	ND	12.7	12	ND	0.017	0.079
Apr-2005	0.263	0.253	ND	0.03	2.66	1.68	ND	ND	11.9	11.5	ND	0.02	0.061
Oct-2005	0.216	0.216	ND	0.017	1.58	1.43	ND	ND	9.66	8.61	ND	ND	0.04
Mar-2006	0.174	0.194	ND	0.015	1.34	1.29	ND	ND	9.53	9.45	ND	ND	0.015

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-17***												
Sep-2006	0.244	0.221	ND	0.027	1.92	1.49	ND	ND	9.55	9.87	ND	0.01	0.096
Mar-2007	0.218	0.205	ND	0.04	2.2	1.36	ND	ND	9.08	9.56	ND	0.033	0.085
Sep-2007	0.183	0.172	ND	0.039	1.96	1.1	ND	ND	8.21	8.9	ND	0.038	0.088
Mar-2008	0.196	0.183	ND	0.019	1.69	1.36	ND	ND	9.11	9.26	ND	ND	0.052
Sep-2008	0.202	0.186	ND	0.017	1.84	1.32	ND	ND	9.74	9.32	ND	ND	0.043
Mar-2009	0.201	0.175	ND	0.045	2.36	1.38	ND	ND	9.67	9.75	ND	0.036	0.1
Oct-2009	0.157	0.176	ND	0.018	1.56	1.13	ND	ND	8.17	8.59	ND	0.019	0.05
Apr-2010	0.174	0.155	ND	0.022	2.05	1.18	ND	ND	8.91	8.64	ND	0.033	0.064
Oct-2010	0.224	0.204	ND	0.026	2.2	1.44	ND	ND	11.7	11.6	ND	0.013	0.052
Apr-2011	0.171	0.17	ND	0.016	1.26	1.24	ND	ND	10.4	10.3	ND	ND	0.032
Sep-2011	0.181	0.166	ND	0.017	2.44	1.28	ND	ND	9.96	9.42	ND	0.011	0.044
Mar-2012	0.276	0.252	0.0002	0.024	2.87	1.52	ND	ND	12.2	11.1	ND	0.012	0.065
Sep-2012	0.196	0.184	ND	0.0238	1.9	1.44	ND	ND	10.4	10.8	0.000409 J	0.0179	0.0513
Mar-2013	0.153	0.174	0.000142 J	0.0182	1.37	1.15	ND	0.000022 J	7.37	8.92	ND	0.0191	0.0512
Oct-2013	0.227	0.192	ND	0.015	2.27 J	1.52	ND	0.000018 J	10.8	11.4	0.000198 J	0.0205 J	0.0491
Mar-2014	0.157	0.17	ND	0.0106 J	1.8	1.37	ND	ND	9.13	10.1	0.000637 J	0.0083 J	0.0257
Oct-2014	0.203	0.17	0.000121 J	0.0665 J	5.72 J	1.61	ND	0.000089 J	9.92 J	11.6	ND	0.0981 J	0.104
Apr-2015	0.187	0.182	ND	0.0425 J	4.91	1.57	ND	0.00008 J	10.2	11.8	ND	0.0674	0.0674
Nov-2015	0.158	0.184	ND	0.0161	2.82	1.56	0.000942 J	ND	8.92	11.2	0.000327 J	0.0234	0.0383
May-2016	0.2	0.188	ND	0.0294	3.22	1.8	ND	ND	12.3	12	0.00017 J	0.0438	0.0732
Oct-2016	0.265	0.262	ND	0.019	2.11	1.94	ND	ND	13.7	13.8	ND	0.0106	0.0647
May-2017	0.2	0.191	ND	0.0091	1.67	1.62	ND	ND	11.3	11.2	ND	0.0044	0.039
Oct-2017	0.213	0.203	ND	0.0104	1.58	1.56	ND	ND	11	11	ND	0.0033	0.0382
May-2018	0.33	0.34	ND	0.062	2.1 J	1.7 J	0.00046 J	ND	15.1	13.8	0.000071 J	0.0041	0.15

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-17***												
Nov-2018	0.22	0.23	*ND*	0.048	*2.1 J*	*2 J*	*0.00019 J*	*ND*	13.8	13.9	*ND*	0.0055	0.089
May-2019	0.5	0.47	*ND*	0.04	*ND*	*ND*	*ND*	*ND*	13.5	13.4	*ND*	*ND*	0.077
Oct-2019	0.7	0.63	*ND*	0.034	*1.4 J*	*ND*	*ND*	*ND*	13.4	13.1	*ND*	0.0073	0.066
May-2020	0.57	0.58	*ND*	0.026	*1.8 J*	*1.8 J*	*ND*	*ND*	13.4	13.1	*ND*	*ND*	0.048
Oct-2020	0.42	0.4	*ND*	0.02	*ND*	*1.7 J*	*ND*	*ND*	13.4	12.9	*ND*	*0.0015 J*	0.041
Apr-2021	0.43	0.42	*ND*	0.016	1.8	1.7	*0.0056 J*	*ND*	13.6	13.4	*ND*	*0.00068 J*	0.034
Oct-2021	0.45	0.482	*ND*	0.016	1.6	1.7	*ND*	*ND*	12.2	13.5	*0.000029 J*	*ND*	0.035
May-2022	0.41	0.43	*ND*	0.016	1.8	1.8	*ND*	*ND*	13.3	13.9	*ND*	*0.0011 JB*	0.035
Oct-2022	0.35	0.34	*ND*	0.015	1.9	1.7	*ND*	*ND*	14.3	13.5	*ND*	*ND*	0.03
May-2023	0.23	0.23	*ND*	0.01	2.1	1.8	*ND*	*ND*	13.4	12.6	*ND*	*0.0012 J*	0.027

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	35	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.96 J	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 J	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 J	ND	11	22 J+	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.4 J*	7.9	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.4 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.6 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.5 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-17A***											
Nov-1993	ND	ND	ND	21.3	2.6	0.3	ND	4.76	19.2	2.5	ND	2.47
Apr-1994	5	5	0.2	ND	2.4	0.3	ND	5	19	ND	20	3.79
Apr-1995	ND	ND	0.4	ND	2.7	0.3	ND	4.8	19.1	2.3	18	2
Apr-1997	ND	2	ND	ND	1.5	0.29	ND	NA	NA	ND	66	4.1
Oct-1997	2	2	0.33	30	2.6	0.294	ND	5.99	19.7	ND	22	ND
Apr-1998	3	ND	ND	ND	1.79	0.301	ND	7.35	18.75	ND	ND	3
Apr-1999	ND	ND	0.45	ND	2.04	0.18	ND	4.95	48.5	ND	20	3.2
Oct-1999	ND	ND	0.07	ND	2.76	0.563	ND	4.69	20.8	1.35	19	3.1
Apr-2000	ND	ND	ND	ND	1.62	0.26	ND	6.88	103	0.87	24	3.2
Oct-2000	1	NA	ND	ND	2.03	ND	ND	6.08	29.8	ND	33	3.31
Apr-2001	1.3	NA	ND	ND	2.23	0.292	ND	NA	NA	ND	25	3.3
Sep-2001	ND	ND	ND	ND	3.42	1.27	ND	5.04	19	ND	21	3.16
Mar-2002	ND	ND	ND	ND	3.6	0.426	ND	5.1	14.2	0.821	21	3.08
Sep-2002	1.8	1.8	ND	ND	2.62	0.3	ND	5	20.8	ND	16	2.97
Mar-2003	1.6	1.6	ND	ND	1.34	ND	ND	5.2	16.2	ND	36	3.15
Oct-2003	1.5	1.5	ND	ND	4.03	0.214	ND	4.8	20.9	ND	19	4.09
Apr-2004	1.7	1.7	ND	ND	2.44	0.189	ND	4.8	17.9	ND	21	3.39
Oct-2004	1.5	1.5	ND	ND	2.45	0.266	ND	4.8	15.7	ND	30	3.05
Apr-2005	1.8	1.8	ND	ND	2.63	0.3	ND	4.8	15.5	1.45	38	3.2
Oct-2005	2.7	2.7	ND	ND	2.68	0.27	ND	4.1	15.9	1.21	35	3.07
Mar-2006	2.8	2.8	ND	ND	2.51	0.29	ND	4.9	17.5	1.51	24	2.14
Sep-2006	2.7	2.7	ND	ND	2.54	0.3	ND	4.9	17.5	1.2	20	2.92
Mar-2007	2.8	2.8	ND	ND	2.73	0.29	ND	4.7	15.2	ND	ND	2.89
Sep-2007	2.4	2.4	ND	ND	2.5	0.3	ND	6.4	16.6	ND	17	2.7
Mar-2008	2.2	2.2	ND	ND	7.48	ND	ND	4.8	14.8	2.92	11	2.8
Sep-2008	2.9	2.9	0.22	ND	2.61	0.26	ND	4.5	14.6	ND	23	3
Mar-2009	2.6	2.6	ND	ND	2.69	0.3	ND	4.3	16.7	2.38	ND	2.97
Oct-2009	2.6	2.6	ND	ND	2.59	0.24	ND	4.5	15.5	ND	14	2.66
Apr-2010	2.5	2.5	ND	ND	2.98	0.22	ND	3.7	16.4	ND	54	3.1
Oct-2010	2.3	2.3	ND	ND	2.97	0.2	ND	4.8	12.2	ND	16	3.24
Apr-2011	2.6	2.6	ND	ND	2.55	0.26	ND	4.4	16.2	ND	16	2.8
Sep-2011	2.8	2.8	ND	ND	2.59	0.26	ND	4.6	16.2	ND	ND	3.57
Mar-2012	2.6	2.6	ND	ND	2.77	0.26	ND	4.5	21.3	ND	ND	2.68
Sep-2012	2.28	2.28	ND	ND	2.81	0.246	ND	3.9	16.3	ND	36	3.26
Mar-2013	3.08	3.08	0.0641	ND	2.94	0.253	ND	5	16.1	0.742 J	16	3.25
Oct-2013	2.76	2.76	ND	ND	2.89	0.246	ND	3.1	15.8	0.63 J	ND	3.12
Mar-2014	2.72	2.72	ND	18	2.89	0.251	ND	5.2	16.6	0.725 J	ND	3.08

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-17A***										
Oct-2014	ND	ND	ND	ND	3.23	0.197	ND	4.7	16	ND	ND	3.14
Apr-2015	3.72	3.72	ND	ND	2.93	0.214	ND	3.8	16.6	ND	ND	3.26
Nov-2015	ND	ND	ND	7 J	2.99	0.223	ND	5.2	56.1	ND	23 J	3.73
May-2016	ND	ND	ND	ND	2.97	0.233	ND	5.3	26.6	ND	12 J	3.4
Oct-2016	ND	ND	ND	6 J	2.87	NA	NA	5.3	24.2	0.922 J	23 J	3
May-2017	ND	ND	ND	ND	2.75	0.255	ND	4.9	26.9	ND	ND	3.1
Oct-2017	ND	ND	0.0677 J	ND	2.84	0.221	ND	4.9	30.4	ND	15 J	3.1
May-2018	2 J	ND	ND	ND	3.1	ND	ND	4.4	24.4	ND	60	3.2 J
Nov-2018	2 JB	ND	ND	ND	3	0.18	ND	4.64	19.4	ND	ND	3.2 J
May-2019	ND	NA	ND	ND	ND	0.17	ND	4.63	15.4	ND	ND	ND
Oct-2019	2.5 JH1	NA	ND	ND	2.6 J	0.2	ND	4.53	20.6	ND	38	3.5
May-2020	ND	NA	ND	ND	2.7 J	0.19	ND	4.4	20.7	ND	ND	3.5
Oct-2020	ND	NA	ND	ND	2.8 J	0.21	ND	4.48	19.4	ND	ND	3.4
Apr-2021	ND	NA	ND	ND	2.9 J	0.17	ND	4.86	22.4	ND	ND	3.4
Oct-2021	4 J4c	NA	ND	ND	2.4 J	0.25	ND	5.01	51.9	ND	ND	3.28 J
May-2022	4 J4c	NA	ND	ND	2.4 J	0.21	ND	4.8	48.5	ND	10	3.5 N3
Oct-2022	3 J3c	NA	ND	10.7 J	3.4	0.22	ND	4.83	40	ND	15	3.6 N3
May-2023	ND	NA	ND	ND	2.6 J	0.23	ND	4.89	45.9	ND	ND	3.8 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17A***													
Nov-1993	NA	ND	ND	NA	ND	0.46	NA	ND	NA	ND	0.37	0.08	ND	0.32	NA
Apr-1994	NA	ND	ND	NA	ND	0.76	NA	ND	NA	ND	0.24	0.93	ND	0.46	NA
Apr-1995	ND	ND	0.8	ND	ND	0.27	NA	ND	ND	ND	0.03	ND	ND	0.33	NA
Oct-1996	ND	ND	0.013	ND	ND	0.65	0.61	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	**0.007**	ND	0.025	ND	ND	1.4	0.55	ND	ND	ND	ND	ND	ND	0.66	ND
Oct-1997	ND	ND	0.011	ND	ND	0.646	0.542	ND	ND	ND	0.115	ND	ND	0.338	0.279
Apr-1998	ND	ND	0.01	ND	ND	0.648	0.608	ND	ND	ND	0.097	ND	ND	0.341	0.315
Apr-1999	ND	ND	0.01	ND	ND	0.686	0.638	ND	ND	ND	0.196	ND	ND	0.369	0.34
Oct-1999	ND	ND	0.01	ND	ND	0.668	0.619	ND	ND	ND	ND	ND	ND	0.36	0.335
Apr-2000	ND	ND	ND	ND	ND	0.699	0.628	ND	ND	ND	0.361	ND	ND	0.346	0.317
Oct-2000	ND	ND	ND	ND	ND	0.722	0.682	ND	ND	ND	ND	ND	ND	0.366	0.347
Apr-2001	ND	ND	ND	ND	ND	0.699	NA	ND	ND	ND	ND	NA	ND	0.366	NA
Sep-2001	ND	ND	ND	ND	ND	0.675	0.677	ND	ND	ND	0.092	ND	ND	0.358	0.347
Mar-2002	ND	ND	0.011	ND	ND	0.661	0.662	ND	ND	ND	ND	ND	ND	0.348	0.349
Sep-2002	ND	ND	0.011	ND	ND	0.631	0.619	ND	ND	ND	0.067	ND	ND	0.341	0.337
Mar-2003	ND	ND	ND	ND	ND	0.657	0.621	ND	ND	ND	ND	ND	ND	0.368	0.341
Oct-2003	ND	ND	0.011	ND	ND	0.979	0.622	ND	ND	ND	0.086	ND	ND	0.401	0.349
Apr-2004	ND	ND	ND	ND	ND	0.723	0.711	ND	ND	ND	0.166	ND	ND	0.385	0.369
Oct-2004	ND	ND	ND	ND	ND	0.649	0.643	ND	ND	ND	ND	ND	ND	0.347	0.354
Apr-2005	ND	ND	0.011	ND	ND	0.674	0.664	ND	ND	ND	ND	ND	ND	0.367	0.36
Oct-2005	ND	ND	0.011	ND	ND	0.676	0.645	ND	ND	ND	ND	ND	ND	0.334	0.319

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17A***													
Mar-2006	ND	ND	ND	ND	ND	0.373	0.356	ND	ND	ND	ND	ND	ND	0.293	0.291
Sep-2006	ND	ND	ND	ND	ND	0.619	0.614	ND	ND	ND	ND	ND	ND	0.333	0.327
Mar-2007	ND	ND	ND	ND	ND	0.617	0.599	ND	ND	ND	ND	ND	ND	0.327	0.323
Sep-2007	ND	ND	ND	ND	ND	0.568	0.55	ND	ND	ND	ND	ND	ND	0.312	0.308
Mar-2008	ND	ND	0.01	ND	ND	0.603	0.606	ND	ND	ND	ND	ND	ND	0.313	0.316
Sep-2008	ND	ND	0.011	ND	ND	0.629	0.62	ND	ND	ND	ND	ND	ND	0.35	0.334
Mar-2009	ND	ND	ND	ND	ND	0.663	0.594	ND	ND	ND	ND	ND	ND	0.317	0.306
Oct-2009	ND	ND	ND	ND	ND	0.566	0.564	ND	ND	ND	ND	ND	ND	0.303	0.325
Apr-2010	ND	ND	ND	ND	ND	0.695	0.49	ND	ND	ND	ND	ND	ND	0.341	0.298
Oct-2010	ND	ND	ND	ND	ND	0.681	0.61	ND	ND	ND	ND	0.11	ND	0.373	0.349
Apr-2011	ND	ND	0.01	ND	ND	0.619	0.578	ND	ND	ND	ND	ND	ND	0.326	0.323
Sep-2011	ND	ND	ND	ND	ND	0.756	0.745	ND	ND	ND	ND	ND	ND	0.408	0.364
Mar-2012	ND	ND	0.011	ND	0.004	0.476	0.456	ND	0.016	0.029	ND	ND	ND	0.363	0.327
Sep-2012	ND	ND	0.0106	0.00024 J	ND	0.714	0.707	0.0012 J	0.0033 J	0.0019 J	0.0251 J	0.0327 J	ND	0.358	0.354
Mar-2013	ND	ND	0.0105	0.000213 J	ND	0.77	0.725	0.0017 J	0.0034 J	0.0018 J	0.0127 J	0.0068 J	0.0016 J	0.323	0.294
Oct-2013	ND	ND	0.0106	ND	ND	0.755	0.729	0.0024 J	0.0029 J	0.0017 J	ND	ND	ND	0.3	0.317
Mar-2014	0.000468 J	ND	0.0096 J	0.000304 J	ND	0.642	0.537	0.0012 J	0.0028 J	0.0025 J	0.0127 J	0.0046 J	ND	0.358	0.286
Oct-2014	0.000907 J	ND	0.0105	0.000251 J	ND	0.689	0.703	0.000956 J	0.0031 J	0.0017 J	0.0108 J	ND	ND	0.345	0.351
Apr-2015	0.000929 J	ND	0.0108	0.000254 J	ND	0.705	0.702	0.000605 J	0.0033 J	0.0017 J	0.011 J	0.0739	ND	0.365	0.357
Nov-2015	0.000479 J	ND	0.0113	0.000303 J	ND	0.854	0.817	0.000597 J	0.0033 J	0.0017 J	ND	0.0179 J	ND	0.389	0.389
May-2016	ND	ND	0.0108	0.00027 J	ND	0.725	0.626	0.0011 J	0.0029	0.0016 J	ND	ND	ND	0.381	0.347
Oct-2016	ND	ND	0.0097	0.00026 J	ND	0.653	0.688	ND	0.0028	0.0015 J	ND	ND	ND	0.335	0.356
May-2017	ND	ND	0.0108	0.00027 J	ND	0.666	0.649	0.0017 J	0.0031	0.0016 J	ND	ND	ND	0.354	0.35
Oct-2017	ND	ND	0.0095	0.00024 J	ND	0.673	0.699	0.0013 J	0.003	0.0016 J	ND	ND	ND	0.339	0.327

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17A***													
May-2018	*0.00004 J*	*ND*	0.011	*0.00027 J*	*0.000032 J*	*0.71 J*	*0.74 J*	*0.0025 J*	0.0035	*0.002 J*	0.028	*0.011 J*	*0.000043 JB*	*0.35 J*	*0.38 J*
Nov-2018	*ND*	*ND*	0.011	0.0003	*0.000034 J*	*0.7 J*	*0.7 J*	0.015	0.0065	0.0024	0.13	0.11	*0.000027 J*	*0.36 J*	*0.36 J*
May-2019	*ND*	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	0.017	0.0068	0.0022	0.13	0.094	*ND*	*ND*	*ND*
Oct-2019	*0.00011 J*	*ND*	0.01	*0.00027 J*	*0.00014 J*	0.76	*0.72 J*	*0.0062 J*	0.0032	*0.0019 J*	*0.03 J*	0.022	*ND*	0.39	*0.37 J*
May-2020	*0.000053 J*	*ND*	0.01	*0.00022 J*	*ND*	0.75	*0.72 J*	0.01	0.0043	0.0036	*0.055 J*	0.035	*ND*	0.39	*0.38 JB*
Oct-2020	*ND*	*ND*	*0.0087 J*	*ND*	*ND*	0.75	*0.72 J*	*0.0058 J*	0.0033	*ND*	*0.07 JB*	0.022	*ND*	0.37	*0.38 J*
Apr-2021	*ND*	*ND*	0.012	*0.00028 J*	*ND*	*0.75 J*	*0.72 J*	*0.0033 J*	*0.0035 J*	*0.0032 J*	*ND*	*ND*	*ND*	0.38	0.4
Oct-2021	*ND*	*ND*	0.011	*0.00021 J*	*ND*	0.71	0.77	0.0058	0.0049	*0.0022 J*	0.061	*0.031 J*	*ND*	*0.37 J*	*0.39 J*
May-2022	*ND*	*ND*	0.011	*0.00024 J*	*ND*	0.75	0.83	0.0043	0.0044	*0.0022 J*	*0.04 J*	*ND*	*ND*	*0.4 J*	*0.43 J*
Oct-2022	*ND*	*ND*	0.012	*0.00023 J*	*ND*	0.78	0.79	0.0064	0.0052	*0.0013 J*	0.06	*0.036 J*	*ND*	*0.41 J*	*0.39 J*
May-2023	*ND*	*ND*	0.012	*0.00028 J*	*ND*	0.83	0.78	0.004	0.0042	*0.0023 J*	*0.044 J*	*ND*	*ND*	*0.43 J*	*0.42 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-17A*												
Nov-1993	ND	NA	ND	NA	0.49	NA	ND	NA	1.2	NA	NA	NA	ND
Apr-1994	0.01	NA	ND	NA	0.57	NA	ND	NA	1.39	NA	NA	NA	0.19
Apr-1995	ND	NA	ND	ND	0.59	NA	ND	ND	0.96	NA	ND	ND	0.02
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	1.8	1.7	ND	ND	0.054
Apr-1997	0.011	ND	ND	0.044	1.9	1.4	ND	ND	1.2	1.6	ND	ND	0.065
Oct-1997	ND	ND	NA	ND	ND	ND	ND	ND	0.99	0.658	ND	ND	0.012
Apr-1998	ND	0.023	NA	ND	0.889	0.711	ND	ND	1.13	1.17	ND	ND	ND
Apr-1999	ND	ND	NA	ND	ND	ND	ND	ND	1.22	1.1	ND	ND	ND
Oct-1999	ND	ND	NA	ND	ND	ND	ND	ND	1.21	1.13	ND	ND	ND
Apr-2000	ND	ND	NA	ND	ND	ND	ND	ND	1.11	1.07	ND	ND	0.011
Oct-2000	ND	ND	NA	ND	0.771	0.842	ND	ND	1.35	1.15	ND	ND	ND
Apr-2001	ND	NA	NA	ND	1.05	NA	ND	ND	1.19	NA	ND	ND	ND
Sep-2001	ND	ND	NA	ND	ND	ND	ND	ND	1.16	1.14	ND	ND	ND
Mar-2002	ND	ND	NA	ND	ND	ND	ND	ND	1.2	1.15	ND	ND	ND
Sep-2002	ND	ND	NA	ND	0.837	ND	ND	ND	1.17	1.15	ND	ND	ND
Mar-2003	ND	ND	NA	ND	ND	ND	ND	ND	1.16	1.1	ND	ND	ND
Oct-2003	ND	ND	NA	ND	1.3	ND	ND	ND	2.06	1.12	ND	ND	0.012
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	1.18	1.22	ND	ND	ND
Oct-2004	ND	ND	ND	ND	0.83	ND	ND	ND	1.28	1.24	ND	ND	ND
Apr-2005	ND	ND	ND	ND	0.65	0.59	ND	ND	1.18	1.14	ND	ND	ND
Oct-2005	ND	ND	ND	ND	0.602	0.607	ND	ND	1.09	1.03	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	0.859	0.818	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-17A***												
Sep-2006	ND	ND	ND	ND	0.526	0.514	ND	ND	1.03	1.03	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	1.01	0.996	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	0.355	ND	ND	1.08	1.01	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.53	0.549	ND	ND	1.07	1.07	ND	ND	ND
Sep-2008	ND	ND	ND	ND	0.525	ND	ND	ND	1.13	1.08	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.07	1.04	ND	ND	0.018
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	0.995	0.944	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.2	1.04	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.2	1.08	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.03	1.01	ND	ND	ND
Sep-2011	ND	ND	ND	ND	0.517	ND	ND	ND	1.3	1.27	ND	ND	ND
Mar-2012	0.016	ND	ND	0.024	0.521	ND	ND	ND	1.18	1.12	ND	0.03	0.011
Sep-2012	0.0064 J	0.006 J	ND	0.0052 J	0.481 J	0.474 J	ND	ND	1.16	1.15	0.000259 J	ND	0.0074 J
Mar-2013	0.0065 J	0.0057 J	0.000048 J	0.0053 J	0.421 J	0.394 J	ND	ND	1.05	0.984	ND	ND	0.0197
Oct-2013	0.0057 J	0.0058 J	ND	0.0052 J	0.427 J	0.454 J	ND	ND	1.05	1.13	ND	ND	0.0169
Mar-2014	0.0056 J	0.0047 J	ND	0.0046 J	0.494 J	0.512	ND	ND	1.05	1.1	0.000376 J	ND	0.0071 J
Oct-2014	0.0059 J	0.0061 J	ND	0.0051 J	0.468 J	0.474 J	ND	ND	1.26	1.29	0.0012 J	ND	0.0088 J
Apr-2015	0.0063 J	0.0065 J	ND	0.0052 J	0.507	0.492 J	0.000917 J	ND	1.29	1.28	ND	ND	0.0093 J
Nov-2015	0.0065 J	0.0068 J	ND	0.0052 J	0.526	0.527	ND	ND	1.34	1.39	0.000182 J	ND	0.0081 J
May-2016	0.0058	0.0057	ND	0.0049	0.504	0.465	ND	ND	1.26	1.13	ND	ND	0.0083 J,B
Oct-2016	0.0056	0.0062 J+	ND	0.0048	0.439	0.507	ND	ND	1.13	1.22	ND	ND	0.0063 J
May-2017	0.0059	0.006	ND	0.0054	0.486	0.49	ND	ND	1.1	1.12	ND	ND	0.0066 J
Oct-2017	0.0062	0.0053	ND	0.0057	0.444	0.464	ND	ND	1.05	1.09	ND	ND	0.0059 J
May-2018	0.0064	0.0056	ND	0.0086	ND	ND	ND	ND	1.5 J	1.2 J	ND	0.0039	0.0077 B

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-17A***												
Nov-2018	0.0083	0.0069	*ND*	0.025	*ND*	*ND*	*0.00012 J*	*ND*	*1.1 J*	*1.2 J*	*ND*	0.0023	0.0098
May-2019	0.013	0.0073	*ND*	0.027	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.014
Oct-2019	0.0073	0.0065	*ND*	0.0074	*ND*	*ND*	*ND*	*ND*	*ND*	*1.4 J*	*ND*	0.0073	0.012
May-2020	0.009	0.0063	*ND*	0.013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0099	0.0073
Oct-2020	0.0068	0.0062	*ND*	0.008	*ND*	*ND*	*ND*	*ND*	*1.3 J*	*ND*	*ND*	*0.00063 J*	*ND*
Apr-2021	0.0068	0.006	*ND*	*0.0081 J*	*0.49 J*	0.5	*ND*	*ND*	1.2	1.2	*ND*	*ND*	*0.0058 J*
Oct-2021	0.0068	0.0069	*ND*	0.013	*0.44 J*	*0.46 J*	*ND*	*ND*	1.2	1.4 B	*ND*	*ND*	0.0061
May-2022	0.0073	0.0072	*ND*	0.01	0.56	*0.48 J*	*ND*	*ND*	1.3	1.3	*ND*	*ND*	0.0076
Oct-2022	0.0073	0.0072	*ND*	0.014	0.55	*0.42 J*	*ND*	*ND*	1.4	1.3	*ND*	*ND*	0.007
May-2023	0.0074	0.0074	*ND*	0.0096	0.63	0.56	*ND*	*ND*	1.4	1.4	*ND*	*ND*	0.0089

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	22	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17A*																
Feb-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17A*																
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.2 J*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.5 B	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17A***															
Feb-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17A***															
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-17A*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	NA
Feb-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-17A*															
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.5 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1 BCH	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-21***											
Nov-1993	ND	ND	0.2	ND	14.9	0.8	0.2	4.76	116.2	19.6	34	12.8
Apr-1994	ND	ND	0.2	ND	14.5	1	ND	4.47	126	21.9	50	17.15
Apr-1995	ND	ND	ND	ND	17.4	0.9	ND	4.4	125	23.9	44	14.5
Apr-1997	ND	ND	ND	22	15	0.62	ND	NA	NA	22	71	11
Oct-1997	ND	ND	0.2	ND	15	0.382	ND	5.58	117.4	24.5	80	20
Apr-1998	ND	ND	ND	ND	14.8	0.52	ND	4.61	124.2	19.8	69	31
Apr-1999	ND	ND	0.19	ND	17.9	0.392	ND	4.03	125.6	23.3	83	22
Oct-1999	ND	ND	0.06	ND	14.4	0.374	ND	4.5	152.3	19.5	79	19
Apr-2000	ND	ND	ND	ND	19.3	0.95	ND	5.01	113	32.8	82	21
Oct-2000	ND	NA	ND	ND	12.1	0.37	ND	6.12	136.3	23.2	83	21.3
Apr-2001	ND	NA	ND	ND	15.4	0.785	ND	NA	NA	27.4	84	23
Sep-2001	ND	ND	ND	ND	16.8	1.83	ND	4.45	150	28.5	87	23.9
Mar-2002	ND	ND	ND	ND	19.1	0.896	ND	4.5	155	28.4	89	24.4
Sep-2002	ND	ND	ND	ND	20	1.04	ND	4.5	152.3	31.1	73	21.1
Mar-2003	ND	ND	ND	ND	22.8	1.01	ND	4.4	153.8	29.4	103	23.7
Oct-2003	ND	ND	ND	ND	12.8	1.69	ND	4.3	128.3	20.8	78	20.2
Apr-2004	ND	ND	ND	ND	16.1	0.575	ND	4.3	120.1	28.4	77	22.9
Oct-2004	ND	ND	ND	ND	11.3	0.504	ND	3.7	107.7	25.9	71	19
Apr-2005	ND	ND	ND	11	16.8	0.74	ND	4.4	108.9	24.1	85	21.2
Oct-2005	ND	ND	ND	ND	13.4	0.48	ND	3.9	103.8	32.5	74	17.3
Mar-2006	ND	ND	ND	ND	16	0.53	ND	4.5	125.8	36.2	71	19.4
Sep-2006	ND	ND	ND	ND	16	0.46	ND	4.3	119.1	28.6	75	20.1
Mar-2007	ND	ND	0.46	ND	16.5	0.51	ND	4.2	111.2	30.5	83	19.4
Sep-2007	ND	ND	ND	ND	16.4	0.96	ND	4.5	103.7	30.4	94	17.4
Mar-2008	ND	ND	0.47	ND	23.1	ND	ND	4.1	118.5	33.3	91	20.7
Sep-2008	ND	ND	ND	ND	21.8	0.74	ND	4.3	121.5	34.9	88	19
Mar-2009	ND	ND	ND	ND	23.7	0.89	ND	4	132.3	33.8	97	20.8
Oct-2009	ND	ND	ND	ND	29.7	0.83	ND	4.1	133	32.4	115	19.5
Apr-2010	ND	ND	ND	ND	30.5	1	ND	3.6	142.7	33	58	20.8
Oct-2010	ND	ND	ND	ND	21.4	0.88	ND	3.6	114.2	26.4	77	20.2
Apr-2011	2.9	2.9	ND	ND	23.9	0.75	ND	3.9	144.2	21	89	19.5
Sep-2011	ND	ND	0.26	ND	26.3	1.05	ND	4.5	126.1	27.2	95	20.7
Mar-2012	ND	ND	ND	ND	22	0.68	ND	3.6	125.4	30	100	20.3
Sep-2012	ND	ND	ND	ND	19.2	0.654	ND	4.2	115.1	29.6	97	20.1
Mar-2013	0.52 J	0.52 J	ND	ND	29.9	0.931	ND	4.3	147.6	26.8	102	18.5
Oct-2013	0.4	0.4	ND	ND	22.1	0.731	ND	3.2	103.7	26.6	86	19.6
Mar-2014	ND	ND	ND	10	24.4	0.754	ND	4.5	146.1	33.8	92	20.8

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-21***										
Oct-2014	*ND*	*ND*	*ND*	*ND*	17.2	0.523	*ND*	4.3	113.2	28.7	50	19.2
Apr-2015	0.96	0.96	*ND*	*ND*	23.7	0.887	*ND*	3.9	123.8	29.6	78	22.5
Nov-2015	*ND*	*ND*	*ND*	*8 J*	19.1	0.769	*ND*	4.5	156.8	27.4	62	22.8
May-2016	*ND*	*ND*	*ND*	*6 J*	22	1	*ND*	4.5	216	30.8	78	22.5
Oct-2016	*ND*	*ND*	*ND*	*ND*	21.7	*NA*	*NA*	4.5	181.9	24.2	93	21.1
May-2017	*ND*	*ND*	*ND*	*5 J*	24	1.27	*ND*	4.4	227	27	98	22
Oct-2017	*ND*	*ND*	*ND*	*7 J*	26.9	1.63	*ND*	4.5	262	30.4	89	23.8
May-2018	*ND*	*ND*	*ND*	*7.9 J*	32	0.46	*ND*	4.2	246	26.9	80	28.9
Nov-2018	*ND*	*ND*	*ND*	*ND*	32	2.2	*ND*	4.26	170.1	24.9	98	27.4
May-2019	*ND*	*NA*	*ND*	*ND*	22.8	1.6	*ND*	3.96	116.5	23.7	96	25.3
Oct-2019	*ND*	*NA*	*ND*	*6 J*	17.5	1.4	*ND*	4.06	138.7	24.3	73	22.8
May-2020	*ND*	*NA*	*ND*	*ND*	28.2	1.9	*ND*	4.1	158.5	26.6	74	27
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	28.1	2	*ND*	4.13	163.4	29.2	81	26.3
Apr-2021	*ND*	*NA*	*ND*	*ND*	23	1.9	*ND*	4.33	184.6	26.7	78	25.6
Oct-2021	*ND*	*NA*	*ND*	*6.1 J*	17.1	1.5	*ND*	4.44	196.8	26	84	23
May-2022	*1 J2c*	*NA*	*ND*	*ND*	22.6	2.1	*ND*	4.19	217.1	31	118	29.6 N3
Oct-2022	*ND*	*NA*	*ND*	*10.7 J*	33.4	2.4	*ND*	4.28	232.3	29.5	116	30.7 N3
May-2023	*ND*	*NA*	*ND*	34.2	37.9	2.4	*ND*	4.34	247.3	30.3	108	37.1 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-21***													
Nov-1993	NA	ND	ND	NA	ND	2	NA	ND	NA	ND	0.03	0.12	ND	1.9	NA
Apr-1994	NA	ND	ND	NA	ND	2.91	NA	ND	NA	ND	0.24	ND	ND	2.4	NA
Apr-1995	ND	ND	0.6	ND	ND	2	NA	ND	ND	ND	0.35	0.05	ND	2.3	NA
Oct-1996	ND	ND	0.12	ND	ND	4.5	4.9	ND	ND	ND	ND	ND	ND	2	2
Apr-1997	0.006	ND	0.11	ND	ND	4	4.1	ND	ND	ND	ND	ND	ND	1.8	2.1
Oct-1997	ND	ND	0.114	ND	ND	3.99	4.02	ND	0.014	ND	ND	ND	ND	2.07	2.09
Apr-1998	ND	ND	0.194	ND	ND	6.7	4.7	ND	0.019	ND	0.246	ND	ND	3.43	2.38
Apr-1999	ND	ND	0.13	ND	ND	4.66	4.35	ND	0.012	ND	0.179	ND	ND	2.39	2.24
Oct-1999	ND	ND	0.127	ND	ND	4.3	3.98	ND	0.014	0.031	0.068	ND	ND	2.25	2.08
Apr-2000	ND	ND	0.115	ND	ND	4.75	4.55	ND	0.012	ND	ND	ND	ND	2.3	2.2
Oct-2000	ND	ND	0.106	ND	ND	4.9	4.83	ND	0.012	ND	0.101	ND	ND	2.21	2.18
Apr-2001	ND	ND	0.115	ND	ND	5.22	NA	ND	0.014	ND	0.166	NA	ND	2.39	NA
Sep-2001	ND	ND	0.121	ND	ND	5.4	5.39	ND	0.012	ND	0.079	ND	ND	2.52	2.45
Mar-2002	ND	ND	0.11	ND	ND	5.71	5.39	ND	0.013	ND	0.078	ND	ND	2.47	2.43
Sep-2002	ND	ND	0.119	ND	ND	4.72	4.76	ND	0.01	ND	0.091	ND	ND	2.26	2.27
Mar-2003	ND	ND	0.123	ND	ND	5.42	5.3	ND	0.012	ND	ND	ND	ND	2.49	2.41
Oct-2003	ND	ND	0.105	ND	ND	4.72	4.45	ND	ND	ND	0.065	ND	ND	2.04	2
Apr-2004	ND	ND	0.105	ND	ND	5.53	5.53	ND	ND	ND	0.123	ND	ND	2.21	2.19
Oct-2004	ND	ND	0.102	ND	ND	4.2	4.19	ND	0.011	ND	0.128	ND	ND	2.06	2.05
Apr-2005	ND	ND	0.112	ND	ND	4.84	4.6	ND	ND	ND	0.122	ND	ND	2.21	2.17
Oct-2005	ND	0.002	0.099	ND	ND	4.04	3.74	ND	ND	ND	2.38	ND	ND	1.74	1.66

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-21***													
Mar-2006	ND	ND	0.103	ND	ND	4.46	4.36	ND	ND	ND	ND	ND	ND	2.01	1.94
Sep-2006	ND	ND	0.097	ND	ND	4.77	4.76	ND	0.011	ND	ND	ND	ND	1.98	1.99
Mar-2007	ND	ND	0.092	ND	ND	4.68	4.76	ND	0.012	ND	ND	ND	ND	1.86	1.87
Sep-2007	ND	0.002	0.084	ND	ND	4.13	4.07	ND	ND	ND	ND	ND	ND	1.72	1.71
Mar-2008	ND	ND	0.101	ND	ND	4.85	4.35	ND	0.012	ND	0.074	ND	ND	2.09	1.84
Sep-2008	ND	ND	0.086	ND	ND	4.38	4.37	ND	0.011	ND	0.067	ND	ND	1.97	1.96
Mar-2009	ND	ND	0.096	ND	ND	4.95	4.8	ND	ND	ND	0.078	ND	ND	2.05	2.01
Oct-2009	ND	ND	0.089	ND	ND	4.65	4.9	ND	ND	ND	0.898	ND	ND	1.91	2.01
Apr-2010	ND	ND	0.087	ND	ND	5.06	4.92	ND	0.01	ND	0.11	ND	ND	1.99	1.98
Oct-2010	ND	ND	0.086	ND	ND	4.73	4.72	ND	0.013	ND	1.28	ND	ND	2.03	2
Apr-2011	ND	ND	0.09	ND	ND	4.79	4.7	ND	ND	ND	0.165	ND	ND	1.83	1.82
Sep-2011	ND	ND	0.092	ND	ND	4.9	4.86	ND	ND	ND	ND	ND	ND	2.07	2.02
Mar-2012	ND	ND	0.088	ND	ND	4.69	4.62	ND	ND	ND	ND	ND	ND	2.08	2.05
Sep-2012	ND	ND	0.0898	0.000585 J	0.000276 J	4.72	4.71	0.0024 J	0.0096 J	0.0024 J	0.0469 J	0.0228 J	ND	2.03	1.98
Mar-2013	ND	ND	0.0813	0.000462 J	0.000305 J	4.47	5.23	0.0017 J	0.009 J	0.0025 J	0.0121 J	0.007 J	0.0013 J	1.78	2.01
Oct-2013	ND	ND	0.0899	0.000545 J	0.000395 J	4.8	4.87	0.0048 J	0.0098 J	0.0024 J	ND	ND	ND	1.85	1.94
Mar-2014	0.000344 J	0.00009 J	0.0884	0.000622 J	0.000346 J	4.93	4.93	0.0011 J	0.0089 J	0.0024 J	0.009 J	0.0072 J	ND	2.06	2.11
Oct-2014	0.000961 J	0.000473 J	0.0834	0.000457 J	0.000301 J	4.62	4.63	0.0016 J	0.0089 J	0.0023 J	0.0101 J	0.0082 J	ND	1.86	1.86
Apr-2015	0.000744 J	ND	0.0981	0.000598 J	0.000275 J	5.42	5.47	0.000653 J	0.0102	0.0025 J	ND	0.0108 J	ND	2.19	2.25
Nov-2015	0.000487 J	0.000599 J	0.0931	0.000635 J	0.000341 J	5.65	5.69	0.000609 J	0.0091 J	0.0024 J	ND	ND	ND	2.12	2.14
May-2016	ND	0.00086 J	0.0875	0.00053 J	0.00037 J	5.47	5.38	0.00086 J	0.0103	0.0025 J	ND	ND	ND	2.15	2.18
Oct-2016	ND	0.0016 J	0.0821	0.00049 J	0.00031 J	5.02	4.84	0.00085 J	0.01	0.0028 J	ND	ND	ND	2.08	2.04
May-2017	ND	0.0013 J	0.0866	0.0005 J	0.00024 J	5.27	5.76	0.0015 J	0.0088	0.0026 J	ND	ND	ND	2.14	2.26
Oct-2017	ND	0.00099 J	0.087	0.00053 J	0.00031 J	5.68	6.29	0.0014 J	0.0103	0.0026 J	ND	ND	ND	2.34	2.53

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-21***													
May-2018	*0.000059 J*	*ND*	0.076	0.00053	*0.00053 J*	7.2	6.8	*0.0019 JB*	0.0092	*0.00069 J*	*ND*	*ND*	*0.00011 JB*	2.7	2.5
Nov-2018	*ND*	*ND*	0.071	0.00054	*0.00042 J*	6.8	6.8	*0.0054 J*	0.0076	0.0024	0.04	*0.016 J*	*0.000092 J*	2.5	2.5
May-2019	*ND*	*ND*	0.068	0.00046	*ND*	6.3	6.1	*ND*	0.004	*ND*	*ND*	*ND*	*ND*	2.4	2.2
Oct-2019	*0.00011 J*	*ND*	0.074	0.00043	*0.00048 J*	5.6	5.4	*0.0058 J*	0.0084	0.0024	*0.014 J*	*0.0098 J*	*0.000069 J*	2.1	2
May-2020	*0.000068 J*	*ND*	0.084	0.00053	*0.00038 J*	6.6	6.4	*0.0052 J*	0.0093	*ND*	*0.015 J*	*0.012 J*	*ND*	2.6	2.5
Oct-2020	*ND*	*ND*	0.068	*0.00041 J*	*ND*	6.5	6.3	*0.0049 J*	0.0077	*ND*	*ND*	*ND*	*ND*	2.5	2.4
Apr-2021	*ND*	*ND*	0.077	*0.00054 J*	*ND*	6.4	6.5	*0.0011 J*	0.0083	*0.0035 J*	*ND*	*ND*	*ND*	2.3	2.4
Oct-2021	*0.0001 J*	*0.00032 J*	0.077	*0.00044 J*	*0.000081 J*	5.8	6.1	*0.0012 J*	0.0086	*0.0023 J*	*ND*	*0.021 JB*	*0.000055 J*	2.1	2.2
May-2022	*ND*	*ND*	0.089	0.00051	*0.00023 J*	7.3	7.9	*0.0018 J*	0.01	0.0028	*ND*	*ND*	*ND*	2.8	3
Oct-2022	*ND*	*0.00048 J*	0.086	0.00051	*0.00027 J*	7.8	8.2	*0.0021 J*	0.011	*0.0021 J*	*ND*	*ND*	*ND*	2.8	3
May-2023	*ND*	*0.0006 J*	0.092	0.00054	*0.00024 J*	9.2	9.1	0.0034	0.013	0.0033	*0.037 J*	*ND*	*ND*	3.4	3.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-21***												
Nov-1993	0.17	NA	ND	NA	2	NA	ND	NA	3	NA	NA	NA	0.04
Apr-1994	0.17	NA	ND	NA	2.59	NA	ND	NA	11.2	NA	NA	NA	0.09
Apr-1995	0.16	NA	ND	ND	2.2	NA	ND	ND	9.3	NA	ND	ND	0.08
Oct-1996	0.12	0.13	NA	ND	ND	ND	ND	ND	9.8	9.9	ND	ND	0.18
Apr-1997	0.13	0.13	ND	ND	3.7	3.1	ND	ND	8	9.1	0.002	ND	0.23
Oct-1997	0.149	0.151	NA	0.013	1.81	2.46	ND	ND	8.32	8.35	ND	ND	0.051
Apr-1998	0.22	0.153	NA	0.011	3.52	2.33	ND	ND	16	10.9	ND	ND	0.084
Apr-1999	0.158	0.149	NA	ND	1.58	2.01	ND	ND	11.5	10.8	ND	ND	0.05
Oct-1999	0.155	0.146	NA	0.018	2.71	2.75	ND	ND	10.8	9.99	ND	ND	0.062
Apr-2000	0.133	0.128	NA	ND	1.91	2.1	ND	ND	10.9	10.4	ND	ND	0.041
Oct-2000	0.134	0.131	NA	ND	2.3	1.94	ND	ND	10	9.79	ND	ND	0.039
Apr-2001	0.147	NA	NA	ND	3.52	NA	ND	ND	11.3	NA	ND	ND	0.044
Sep-2001	0.145	0.146	NA	ND	3.01	2.66	ND	ND	13.1	12.1	ND	ND	0.044
Mar-2002	0.137	0.139	NA	ND	3.65	3.48	ND	ND	14.2	13.1	ND	ND	0.047
Sep-2002	0.139	0.141	NA	ND	2.12	2.07	ND	ND	12.8	12.7	ND	ND	0.044
Mar-2003	0.147	0.145	NA	ND	2.47	2.14	ND	ND	13.4	12.7	ND	ND	0.045
Oct-2003	0.16	0.164	NA	ND	2.24	2.76	ND	ND	8.91	8.29	ND	ND	0.045
Apr-2004	0.154	0.152	ND	ND	2.12	2.14	ND	ND	10.3	10.7	ND	ND	0.043
Oct-2004	0.188	0.187	ND	ND	1.88	1.87	ND	ND	7.81	7.63	ND	ND	0.048
Apr-2005	0.175	0.176	ND	ND	2.21	1.86	ND	ND	10.5	9.96	ND	ND	0.053
Oct-2005	0.148	0.142	ND	ND	1.83	1.59	ND	ND	8.39	7.29	ND	0.013	0.044
Mar-2006	0.141	0.138	ND	ND	1.64	1.58	ND	ND	9.97	9.69	ND	ND	0.02

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-21***												
Sep-2006	0.154	0.156	ND	ND	1.79	1.82	ND	ND	9.83	9.95	ND	ND	0.039
Mar-2007	0.139	0.139	ND	ND	1.68	1.69	ND	ND	9.37	9.39	ND	ND	0.043
Sep-2007	0.137	0.137	ND	ND	1.42	1.33	ND	ND	8.11	8.01	ND	ND	0.05
Mar-2008	0.154	0.136	ND	ND	1.95	1.66	ND	ND	11.6	10.3	ND	ND	0.047
Sep-2008	0.137	0.136	ND	ND	1.63	1.6	ND	ND	11.7	11.6	ND	ND	0.038
Mar-2009	0.146	0.144	ND	ND	1.81	1.72	ND	ND	13.7	13.3	ND	ND	0.043
Oct-2009	0.135	0.141	ND	ND	1.56	1.5	ND	ND	14.6	14.9	ND	ND	ND
Apr-2010	0.132	0.131	ND	ND	1.71	1.66	ND	ND	17	16.8	ND	ND	0.038
Oct-2010	0.143	0.142	ND	ND	1.63	1.61	ND	ND	13	13.1	ND	ND	0.047
Apr-2011	0.127	0.124	ND	ND	1.35	1.29	ND	ND	14.2	14	ND	ND	0.049
Sep-2011	0.137	0.136	ND	ND	1.73	1.73	ND	ND	15.9	16	ND	ND	0.037
Mar-2012	0.13	0.128	ND	ND	1.6	1.57	ND	ND	13.3	13.3	ND	ND	0.036
Sep-2012	0.125	0.126	0.000024 J	0.0057 J	1.57	1.6	0.000692 J	ND	13.8	13.5	ND	ND	0.0393
Mar-2013	0.12	0.138	0.000061 J	0.0049 J	1.46	1.65	0.000602 J	ND	14.8	16.3	ND	ND	0.0415
Oct-2013	0.127	0.128	ND	0.0052 J	1.57	1.59	0.000675 J	ND	12.3	12.9	ND	0.002 J	0.0484
Mar-2014	0.111	0.113	ND	0.0043 J	1.66	1.69	ND	ND	13.1	13.4	ND	ND	0.033
Oct-2014	0.112	0.112	0.000023 J	0.0056 J	1.59	1.58	0.0028	ND	9.32	9.39	ND	ND	0.035
Apr-2015	0.133	0.135	ND	0.0051 J	1.71	1.77	0.0029	ND	12.9	13.2	ND	ND	0.0376
Nov-2015	0.124	0.127	ND	0.0048 J	1.73	1.74	0.0039	ND	11.1	11.2	0.000151 J	ND	0.0369
May-2016	0.123	0.125	ND	0.0048	1.75	1.75	ND	ND	13.4	14	ND	ND	0.04
Oct-2016	0.118	0.124	ND	0.0054	1.67	1.7	ND	ND	12.6	12.9	ND	ND	0.0371
May-2017	0.116	0.118	ND	0.0049	1.76	1.86	ND	ND	14.5	14.6	ND	ND	0.0347
Oct-2017	0.117	0.123	ND	0.005	1.9	2.07	ND	ND	13.3 J-	16.9	ND	ND	0.0361
May-2018	0.1	0.1	ND	0.00071 B	1.5 J	1.6 J	0.0013 J	ND	21.6	19.5	ND	0.0023	0.0066

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-21***												
Nov-2018	0.094	0.095	*ND*	0.0062	*2.1 J*	*2.1 J*	*0.00064 J*	*ND*	19.6	19.9	*ND*	0.002	0.026
May-2019	0.098	0.095	*ND*	0.0031	*ND*	*ND*	*ND*	*ND*	14.8	14.1	*ND*	*ND*	0.013
Oct-2019	0.11	0.1	*ND*	0.0054	*2.2 J*	*2 J*	*0.00062 J*	*ND*	14.2	12.6	*ND*	0.0075	0.036
May-2020	0.13	0.12	*ND*	0.0052	*2 J*	*2.1 J*	*ND*	*ND*	18	18	*ND*	0.0098	0.032
Oct-2020	0.13	0.11	*ND*	0.0039	*ND*	*1.9 J*	*ND*	*ND*	18.8	17.3	*ND*	0.016	0.025
Apr-2021	0.1	0.1	*ND*	*0.0036 J*	1.9	1.9	*ND*	*ND*	15.6	15.8	*ND*	*0.0008 J*	0.024
Oct-2021	0.1	0.11	*ND*	0.0044	1.7	1.8	*0.0016 J*	*ND*	13.5	14.4	*ND*	*ND*	0.028
May-2022	0.13	0.13	*ND*	0.0053	2	2	*0.0012 J*	*ND*	19.4	19.9	*ND*	*ND*	0.033
Oct-2022	0.13	0.13	*ND*	0.0053	2	2	0.0032	*ND*	22	22.1	*ND*	*ND*	0.031
May-2023	0.13	0.13	*ND*	0.0064	2.2	2.3	0.0031	*ND*	24	23.9	*ND*	*ND*	0.03

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-21*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	25	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-21*																
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.3 J*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-21*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.5 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-21***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.5	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*0.6 J*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-21***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.44 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.37 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.39 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*0.49 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.36 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-21***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.416 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-21***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	1.4	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	0.7 J	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-21***															
Oct-2005	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*0.29 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.29 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-21***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.1 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.4 BCH	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-22***											
Nov-1993	5	5	0.2	ND	7.1	0.8	ND	5.44	40.4	2.6	ND	5.18
Apr-1994	ND	ND	0.1	ND	4.6	0.8	ND	5.28	172	ND	22	63.1
Apr-1995	ND	ND	ND	4	4	0.7	ND	4.6	29.3	2.6	15	2.9
Apr-1997	ND	ND	ND	ND	5	0.79	ND	NA	NA	ND	78	6.2
Oct-1997	ND	ND	0.2	ND	4.85	0.733	ND	5.98	51.3	ND	30	5
Apr-1998	ND	ND	ND	ND	5.12	0.93	ND	6.28	28.3	0.7	28	5.1
Apr-1999	ND	ND	0.5	ND	3.51	0.591	ND	4.62	29.6	ND	14	4.6
Oct-1999	ND	ND	0.09	ND	4.81	0.987	ND	4.86	39.5	ND	32	4.5
Apr-2000	ND	ND	ND	ND	2.96	ND	ND	5.11	29	ND	30	4.2
Oct-2000	ND	NA	ND	ND	5.77	1.08	ND	5.3	24.1	ND	32	6.57
Apr-2001	1.2	NA	ND	ND	5.47	0.561	ND	NA	NA	ND	35	6.5
Sep-2001	ND	ND	ND	ND	7.55	1.84	ND	4.93	28	ND	32	6.77
Mar-2002	2.1	2.1	ND	13	6.11	1.15	ND	4.9	36.5	ND	54	6.65
Sep-2002	ND	ND	ND	ND	6.2	0.93	ND	4.9	35.3	ND	62	6.75
Mar-2003	ND	ND	ND	ND	15.6	1.07	ND	4.8	38.1	ND	48	5.84
Oct-2003	ND	ND	ND	ND	5.15	0.783	ND	5	44.3	ND	17	6.29
Apr-2004	ND	ND	ND	ND	4.93	0.709	ND	4.6	31.5	1.54	31	4.98
Oct-2004	ND	ND	ND	ND	4.68	0.71	ND	4.9	32.6	ND	23	4.81
Apr-2005	ND	ND	ND	ND	5.01	0.76	ND	4.6	29.4	3.61	45	5.7
Oct-2005	1.7	1.7	ND	ND	5.4	0.78	ND	4.6	28.7	1.77	43	4.51
Mar-2006	1.9	1.9	ND	ND	5.16	0.77	ND	5.1	33.3	3.93	18	3.88
Sep-2006	1.7	1.7	ND	ND	5.05	0.75	ND	5.1	33.3	1.78	21	5.56
Mar-2007	1.7	1.7	ND	ND	5.32	0.81	ND	4.8	32.3	1.33	ND	5.04
Sep-2007	1.6	1.6	ND	ND	5.14	0.81	ND	6.1	32.7	1.28	47	4.9
Mar-2008	1.4	1.4	ND	ND	16.6	1.72	ND	4.4	33.5	4.72	13	4.84
Sep-2008	1.6	1.6	0.25	ND	5.79	0.86	ND	4.5	35.6	ND	23	5.3
Mar-2009	1.9	1.9	ND	ND	5.91	0.85	ND	4.5	36.7	1.58	31	5.11
Oct-2009	2	2	ND	ND	5.94	0.76	ND	4.1	34.8	1.38	14	5.39
Apr-2010	1.8	1.8	ND	ND	6.68	0.81	ND	3.7	38.4	2.68	70	5
Oct-2010	1.8	1.8	ND	ND	7.32	0.82	ND	4.2	38.7	1.61	23	6.5
Apr-2011	1.8	1.8	ND	ND	7.03	0.81	ND	4.3	41	1.66	42	5.8
Sep-2011	1.6	1.6	ND	ND	7.71	0.86	ND	4.5	39	1.24	23	6.37
Mar-2012	1.6	1.6	ND	ND	8.18	0.86	ND	3.9	42.8	2.3	53	6.54
Sep-2012	1.32	1.32	ND	ND	8.79	0.849	ND	4.1	43.1	3.6	29	6.8
Mar-2013	1.92	1.92	ND	ND	9.97	1.03	ND	4.7	49.4	1.19	31	7.32
Oct-2013	1.96 J	1.96 J	0.134 J	ND	9.55	0.986	ND	5.8	48.3	1.19	37	7.05
Mar-2014	1.88	1.88	ND	ND	10.2	0.904	ND	4.9	54.1	2.71	29	7.67

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-22***											
Oct-2014	*ND*	*ND*	*ND*	*ND*	12.3	0.952	*ND*	4.8	54.5	2.86	29	8.6
Apr-2015	1.92	1.92	*ND*	*ND*	14.3	1.21	*ND*	3.7	61.4	2.75	32	10.3
Nov-2015	*ND*	*ND*	*ND*	*6 J*	14.6	1.19	*ND*	4.8	98.9	3.48	37	10.4
May-2016	*ND*	*ND*	*ND*	*ND*	13.9	1.14	*ND*	4.9	102.6	2.63	36	9.2
Oct-2016	*ND*	*ND*	*ND*	*ND*	14.2	*NA*	*NA*	4.7	95.7	1.88	41	8.4
May-2017	*ND*	*ND*	*ND*	*ND*	14.9	1.11	*ND*	4.6	98.6	2.56	29	8.9
Oct-2017	2.8	2.8	*ND*	*7 J*	16.2	1.2	*ND*	4.7	116.5	4.97	50	11.8
May-2018	16 B	16	*ND*	*10.1 J*	15.2	0.48	*ND*	4.6	94.6	29.8	79	54.2
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	14.7	0.97	*ND*	4.56	70.6	*5.6 J*	*ND*	9.1
May-2019	*ND*	*NA*	*ND*	*ND*	21.6	1.2	*ND*	4.47	74.7	*ND*	57	12.7
Oct-2019	*ND*	*NA*	*ND*	*6 J*	22.4	1.3	*ND*	4.16	113.4	*ND*	53	14.9
May-2020	*ND*	*NA*	*ND*	*ND*	22	1.2	*ND*	4.11	98.1	*ND*	48	13
Oct-2020	*ND*	*NA*	*ND*	*ND*	21.1	1	*ND*	4.36	91.7	2.8	38	11.9
Apr-2021	*ND*	*NA*	*0.072 J*	*ND*	21.5	1.1	*ND*	4.59	103.4	*ND*	35	12.1
Oct-2021	*2 J3c*	*NA*	*ND*	*ND*	21.6	1.2	*ND*	4.67	154.6	*ND*	45	14
May-2022	*ND*	*NA*	*ND*	*ND*	18.4	1.1	*ND*	4.34	129.7	*ND*	65	14.5 N3
Oct-2022	*2 J4c*	*NA*	*ND*	*10.7 J*	22.6	1.1	*ND*	4.55	123.2	*ND*	41	14 N3
May-2023	*2 J3c*	*NA*	*ND*	31.9	24	1	*ND*	4.63	131.3	*ND*	53	13.9 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22***													
Nov-1993	NA	ND	ND	NA	ND	0.82	NA	0.009	NA	ND	3.8	0.29	ND	0.76	NA
Apr-1994	NA	ND	ND	NA	ND	1.64	NA	ND	NA	ND	0.16	0.12	ND	0.68	NA
Apr-1995	ND	ND	0.9	ND	ND	0.41	NA	ND	ND	ND	ND	ND	ND	0.45	NA
Oct-1996	ND	ND	0.011	ND	ND	0.79	0.83	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	0.041	ND	ND	2.2	0.72	ND	0.023	ND	0.43	ND	ND	0.79	ND
Oct-1997	ND	ND	0.013	ND	ND	0.877	0.806	ND	ND	ND	0.656	ND	ND	0.49	0.465
Apr-1998	ND	ND	0.029	ND	ND	1.01	0.956	ND	ND	ND	1.7	ND	ND	0.613	0.506
Apr-1999	ND	ND	0.015	ND	ND	0.947	0.807	ND	ND	ND	0.482	ND	ND	0.546	0.502
Oct-1999	ND	ND	0.013	ND	ND	0.907	0.833	ND	ND	ND	ND	ND	ND	0.541	0.502
Apr-2000	ND	ND	0.011	ND	ND	0.81	0.773	ND	ND	ND	ND	ND	ND	0.529	0.495
Oct-2000	ND	ND	0.013	ND	ND	1.54	1.09	ND	ND	0.011	0.268	ND	ND	0.662	0.594
Apr-2001	ND	ND	0.02	ND	ND	1.46	NA	ND	ND	ND	2.25	NA	ND	0.686	NA
Sep-2001	ND	ND	0.014	ND	ND	1.42	1.11	ND	ND	ND	0.575	ND	ND	0.782	0.607
Mar-2002	ND	ND	0.016	ND	ND	1.49	1.09	ND	ND	ND	0.624	ND	ND	0.71	0.629
Sep-2002	ND	ND	0.016	ND	ND	1.59	1.08	ND	ND	ND	0.408	ND	ND	0.675	0.598
Mar-2003	ND	ND	0.015	ND	ND	1.21	1.1	ND	ND	ND	ND	ND	ND	0.686	0.636
Oct-2003	ND	ND	0.02	ND	ND	1.42	0.984	ND	ND	ND	1.14	ND	ND	0.668	0.612
Apr-2004	ND	ND	0.013	ND	ND	0.95	0.958	ND	ND	ND	ND	ND	ND	0.633	0.606
Oct-2004	ND	ND	0.013	ND	ND	0.878	0.886	ND	ND	ND	0.067	ND	ND	0.636	0.62
Apr-2005	ND	ND	0.018	ND	ND	1.22	0.874	ND	ND	ND	1.47	ND	ND	0.645	0.594
Oct-2005	ND	ND	0.013	ND	ND	0.911	0.862	ND	ND	ND	ND	ND	ND	0.544	0.534

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22***													
Mar-2006	ND	ND	0.01	ND	ND	0.736	0.66	ND	ND	ND	ND	ND	ND	0.496	0.486
Sep-2006	ND	ND	0.013	ND	ND	1.2	0.88	ND	ND	ND	ND	ND	ND	0.622	0.658
Mar-2007	ND	ND	0.015	ND	ND	0.931	0.874	ND	ND	ND	ND	ND	ND	0.661	0.64
Sep-2007	ND	ND	0.014	ND	ND	0.863	0.825	ND	ND	ND	ND	ND	ND	0.668	0.648
Mar-2008	ND	ND	0.015	ND	ND	0.936	0.846	ND	ND	ND	ND	ND	ND	0.608	0.617
Sep-2008	ND	ND	0.016	ND	ND	0.934	0.926	ND	ND	ND	ND	ND	ND	0.722	0.704
Mar-2009	ND	ND	0.014	ND	ND	0.913	0.893	ND	ND	ND	ND	ND	ND	0.688	0.666
Oct-2009	ND	ND	0.016	ND	ND	0.938	0.916	ND	ND	ND	ND	ND	ND	0.741	0.726
Apr-2010	ND	ND	0.014	ND	ND	0.878	0.881	ND	ND	ND	ND	ND	ND	0.684	0.688
Oct-2010	ND	ND	0.014	ND	ND	1.15	1.12	ND	ND	ND	ND	ND	ND	0.881	0.878
Apr-2011	ND	ND	0.018	ND	ND	1.04	1.01	ND	ND	ND	ND	ND	ND	0.768	0.754
Sep-2011	ND	ND	0.018	ND	ND	1.24	1.25	ND	ND	ND	ND	ND	ND	0.794	0.788
Mar-2012	ND	ND	0.019	ND	ND	1.12	1.13	ND	ND	ND	ND	ND	ND	0.908	0.902
Sep-2012	ND	ND	0.0187	0.000215 J	ND	1.23	1.26	ND	0.008 J	0.0037 J	0.0364 J	0.0396 J	ND	0.906	0.997
Mar-2013	ND	ND	0.0202	0.000232 J	ND	1.41	1.32	0.003 J	0.0088 J	0.0071 J	0.0383 J	0.0062 J	0.0016 J	0.923	0.759
Oct-2013	ND	ND	0.0223	0.000213 J	ND	1.4	1.46	0.0016 J	0.0087 J	0.004 J	ND	ND	ND	0.863	0.943
Mar-2014	ND	ND	0.0235	0.00026 J	0.000094 J	1.52	1.7	0.0027 J	0.0073 J	0.0054 J	0.073	0.0562	ND	0.94	1.08
Oct-2014	0.000768 J	ND	0.0281	0.000346 J	0.000097 J	1.55	1.62	0.0013 J	0.01	0.0051 J	0.0143 J	ND	ND	1.15	1.18
Apr-2015	0.000774 J	ND	0.0332	0.00028 J	0.00012 J	1.86	1.79	0.0012 J	0.0109	0.0058 J	0.0177 J	0.0262 J	ND	1.37	1.34
Nov-2015	0.000428 J	ND	0.0325	0.00035 J	0.000131 J	1.86	2.04	0.000665 J	0.0104	0.005 J	ND	ND	0.000458 J	1.41	1.38
May-2016	ND	ND	0.0304	0.0003 J	ND	1.56	1.78	ND	0.011	0.0051	ND	ND	ND	1.28	1.3
Oct-2016	ND	ND	0.0291	0.00026 J	ND	1.5	1.49	0.00075 J	0.0101	0.0052	ND	ND	ND	1.13	1.18
May-2017	ND	ND	0.0285	0.00025 J	ND	1.46	1.64	0.00087 J	0.0087	0.0044	ND	ND	ND	1.27	1.35
Oct-2017	ND	ND	0.0267	0.00026 J	0.00024 J	2.4	2.05	0.0013 J	0.0094	0.0191	0.539	0.0811 J	0.0044	1.41	1.37

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22***													
May-2018	*0.0001 J*	*ND*	0.036	*ND*	*0.0001 J*	15.9	1.6	*0.0066 JB*	0.0029	0.0043	0.24	*0.015 J*	*0.000079 JB*	3.5	1.4
Nov-2018	*ND*	*ND*	0.03	*0.00028 J*	*0.00011 J*	1.5	1.7	0.022	0.007	0.0037	0.13	0.079	*0.0001 J*	1.3	1.4
May-2019	*ND*	*ND*	0.04	0.00038	*ND*	2.1	2.1	0.017	0.0098	0.0051	*ND*	0.054	*ND*	1.8	1.8
Oct-2019	*0.00019 J*	*ND*	0.049	0.00037	*0.00063 J*	2.3	2.3	0.0094	0.0094	0.011	*0.046 J*	0.032	*0.00017 J*	2.2	2.1
May-2020	*0.000058 J*	*ND*	0.041	*0.00028 J*	*ND*	2.1	2.1	0.021	0.011	0.0066	0.11	0.042	*ND*	1.9	1.8
Oct-2020	*ND*	*ND*	0.032	*0.00027 J*	*ND*	2.1	2	*0.031 J*	0.01	*0.0098 J*	0.19	0.099	*ND*	1.6	1.6
Apr-2021	*ND*	*ND*	0.043	*0.00038 J*	*ND*	2	2	0.015	0.01	0.014	0.088	*0.05 J*	*ND*	1.7	1.7
Oct-2021	*0.000076 J*	*ND*	0.052	*0.00035 J*	*ND*	2.2	2.3	0.01	0.012	0.014	0.096	0.054 B	*ND*	2	2
May-2022	*ND*	*ND*	0.051	*0.00032 J*	*ND*	2.3	2.4	0.0043	0.013	0.011	*ND*	*ND*	*ND*	2.1	2.1
Oct-2022	*ND*	*ND*	0.047	*0.00029 J*	*ND*	2.3	2.4	0.011	0.012	0.013	0.092	*0.039 J*	*ND*	2	2
May-2023	*ND*	*ND*	0.045	*0.00032 J*	*ND*	2.3	2.2	0.013	0.013	0.044	0.15	*0.04 J*	*ND*	2	1.8

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-22*												
Nov-1993	ND	NA	ND	NA	1.6	NA	ND	NA	3.3	NA	NA	NA	0.01
Apr-1994	0.02	NA	ND	NA	0.85	NA	ND	NA	2.6	NA	NA	NA	0.04
Apr-1995	ND	NA	ND	ND	1	NA	ND	ND	1.8	NA	ND	ND	0.01
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	3.2	3.3	ND	ND	0.068
Apr-1997	0.012	ND	0.0014	ND	2.4	1.6	ND	ND	2.7	2.6	ND	ND	0.084
Oct-1997	ND	ND	NA	ND	0.802	0.886	ND	ND	2	1.98	ND	ND	0.014
Apr-1998	ND	0.018	NA	ND	2	0.939	ND	ND	2.23	2.25	ND	ND	0.014
Apr-1999	ND	ND	NA	ND	0.588	0.71	ND	ND	2.19	2.09	ND	ND	0.015
Oct-1999	ND	ND	NA	0.012	0.947	1.66	ND	ND	2.41	2.16	ND	ND	0.011
Apr-2000	ND	ND	NA	ND	0.605	ND	ND	ND	2.4	2.28	ND	ND	0.01
Oct-2000	ND	ND	NA	ND	1.2	0.734	ND	ND	3.23	2.67	ND	ND	0.019
Apr-2001	ND	NA	NA	ND	1.81	NA	ND	ND	3.35	NA	ND	ND	0.017
Sep-2001	ND	ND	NA	0.014	1.1	0.794	ND	ND	3.83	2.64	ND	ND	0.023
Mar-2002	ND	ND	NA	ND	0.932	0.822	ND	ND	4.13	2.84	ND	ND	0.017
Sep-2002	0.01	ND	NA	0.011	0.434	1.02	ND	ND	3.12	2.76	ND	ND	0.019
Mar-2003	ND	ND	NA	ND	0.908	0.713	ND	ND	3.04	2.88	ND	ND	0.013
Oct-2003	ND	ND	NA	0.014	0.771	ND	ND	ND	3.63	2.68	ND	ND	0.023
Apr-2004	ND	ND	ND	ND	1.4	1.28	ND	ND	2.5	2.47	ND	ND	ND
Oct-2004	ND	ND	ND	ND	1.23	0.7	ND	ND	2.41	2.24	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.26	1.03	ND	ND	3.27	2.38	ND	ND	0.015
Oct-2005	ND	ND	ND	0.011	0.933	0.89	ND	ND	2.43	2.25	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.644	0.584	ND	ND	2.54	2.36	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22***												
Sep-2006	ND	ND	ND	ND	0.893	0.959	ND	ND	2.31	2.4	ND	ND	0.042
Mar-2007	ND	ND	ND	ND	0.874	0.852	ND	ND	2.43	2.39	ND	ND	0.019
Sep-2007	ND	ND	ND	ND	0.778	0.729	ND	ND	2.57	2.44	ND	ND	ND
Mar-2008	ND	ND	ND	ND	1.06	1.02	ND	ND	2.57	2.21	ND	ND	ND
Sep-2008	ND	ND	ND	ND	0.847	0.819	ND	ND	2.66	2.53	ND	ND	ND
Mar-2009	ND	ND	ND	ND	0.951	0.933	ND	ND	2.73	2.68	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.705	0.627	ND	ND	2.69	2.52	ND	ND	ND
Apr-2010	ND	ND	ND	ND	0.79	0.783	ND	ND	3.02	2.96	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.907	0.926	ND	ND	3.43	3.64	ND	ND	0.012
Apr-2011	ND	ND	ND	ND	0.673	0.645	ND	ND	3.27	3.17	ND	ND	0.012
Sep-2011	ND	ND	ND	ND	0.909	0.928	ND	ND	3.9	3.84	ND	ND	0.011
Mar-2012	ND	ND	ND	ND	0.876	0.851	ND	ND	3.96	3.86	ND	ND	0.01
Sep-2012	0.0318	0.0101	0.000022 J	0.0099 J	0.877	0.879	ND	ND	3.96	4.02	ND	ND	0.009 J
Mar-2013	0.0101	0.0089 J	0.00003 J	0.0123	0.9	0.878	ND	0.000033 J	4.54	4.54	0.00046 J	ND	0.0264
Oct-2013	0.01 J	0.0111	ND	0.0109 J	0.881	0.908	ND	ND	4.39	4.49	ND	0.0014 J	0.0199
Mar-2014	0.0111	0.0117	ND	0.0136	0.923	0.966	ND	0.000054 J	4.34	4.81	0.000268 J	0.000699 J	0.0103
Oct-2014	0.0131	0.0136	ND	0.0138	1.03	1.02	ND	ND	6.03	5.97	ND	ND	0.0169
Apr-2015	0.0156	0.0153	ND	0.015	1.13	1.09	ND	ND	7.58	7.28	ND	ND	0.0202
Nov-2015	0.0153	0.015	ND	0.0137	1.19	1.17	0.000479 J	ND	7.46	7.24	0.000174 J	ND	0.0177
May-2016	0.0146	0.0158	ND	0.0145	1.07	1.15	ND	ND	7.28	7	ND	ND	0.0164 J
Oct-2016	0.0122	0.0146	ND	0.0133	1.03	1.06	ND	ND	6.75	6.99	ND	ND	0.0143 J
May-2017	0.0152	0.0157	ND	0.0121	1.06	1.09	ND	ND	7.54	7.91	ND	ND	0.0122 J
Oct-2017	0.0211	0.0231	0.000051 J	0.0229	1.09	1.09	ND	ND	9.27	9.11	ND	ND	0.134
May-2018	0.041	0.017	ND	0.0056	3.4 J	ND	0.0014 J	ND	11.9	8	ND	0.0021	0.0043 JB

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22***												
Nov-2018	0.018	0.017	*ND*	0.023	*0.99 J*	*1.2 J*	*0.00028 J*	*ND*	7.5	7.7	*ND*	0.0029	0.012
May-2019	0.024	0.024	*ND*	0.022	*ND*	*ND*	*ND*	*ND*	10.5	10	*ND*	*ND*	0.014
Oct-2019	0.026	0.029	*ND*	0.016	*1.7 J*	*1.5 J*	*0.00062 J*	*ND*	13.4	12.1	*ND*	0.0029	0.03
May-2020	0.028	0.027	*ND*	0.024	*ND*	*1.3 J*	*0.00062 JM1*	*ND*	11.6	10.1	*ND*	0.013 D6M1	0.015
Oct-2020	0.024	0.025	*ND*	0.031	*ND*	*1.1 J*	*ND*	*ND*	10.7	9.4	*ND*	*0.0023 J*	*0.015 J*
Apr-2021	0.027	0.025	*ND*	0.024	1.2	1.1	*ND*	*ND*	11.3	11	*ND*	*ND*	0.013
Oct-2021	0.035	0.036	*ND*	0.022	1.2	1.2	*ND*	*ND*	12.8	13	*0.000053 J*	*ND*	0.015
May-2022	0.034	0.034	*ND*	0.018	1.2	1.1	*ND*	*ND*	12.6	12.4	*ND*	*ND*	0.016
Oct-2022	0.034	0.035	*ND*	0.023	1.2	1.1	*0.00096 J*	*ND*	12.4	11.9	*ND*	*ND*	0.016
May-2023	0.033	0.031	*ND*	0.024	1.3 B	1.1	*0.001 J*	*ND*	12.2	11.2	*ND*	*ND*	0.016

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-22***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5 J	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.9 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.3 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.25 J*	*0.37 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.6 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.401 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.23 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-22A***											
Nov-1993	50	50	0.2	ND	30	ND	ND	5.25	217	9.3	90	15.9
Apr-1994	69	69	2.2	20.2	61.7	ND	ND	5.62	341	7.5	182	30.36
Apr-1995	99.9	99.9	1.4	ND	44.4	ND	ND	5.5	379	16.6	ND	28.6
Apr-1997	ND	10	ND	ND	6	0.14	ND	NA	NA	5.6	113	15
Oct-1997	47	47	0.59	ND	7.36	0.228	ND	6.37	96.9	7.1	80	26
Apr-1998	92	92	1.2	15	16.8	ND	ND	6.24	75.2	7.17	150	28
Apr-1999	67	67	1.5	ND	15.2	ND	ND	5.14	57.1	4.99	96	17
Oct-1999	57	57	1.2	ND	21.3	ND	ND	5.89	92.7	8.3	140	21
Apr-2000	21	21	1.7	ND	32.3	ND	ND	6.31	131	10.4	102	17
Oct-2000	23	NA	2.8	16	31.8	ND	ND	6.07	98	10.1	108	17
Apr-2001	14	NA	1.9	ND	14.6	ND	ND	NA	NA	2.59	91	14
Sep-2001	11	11	4.8	14	83.3	1.21	ND	5.27	209	29.4	205	28.8
Mar-2002	12	12	2.6	ND	50.6	0.264	ND	5	58.7	25.2	137	21.4
Sep-2002	7	7	2	ND	42.4	0.76	ND	5	48.1	22.6	112	16.6
Mar-2003	2.5	2.5	ND	ND	14	ND	ND	4.9	52.1	12.7	52	14.1
Oct-2003	2.2	2.2	0.55	15	4.38	0.49	ND	5.4	66.4	8.49	17	15.3
Apr-2004	5.3	5.3	0.43	19	28.3	ND	ND	6	71.2	8.39	84	18.1
Oct-2004	4.8	4.8	0.55	ND	21.9	0.11	ND	4.3	67.4	10.4	72	14.1
Apr-2005	2.2	2.2	ND	ND	10.1	0.55	ND	4.6	78.8	11.6	55	13.6
Oct-2005	2.6	2.6	ND	ND	6	0.67	ND	4.9	46.6	10.4	55	12.2
Mar-2006	3	3	ND	ND	5.48	0.65	ND	5.1	48.1	11.4	31	11.2
Sep-2006	3	3	ND	ND	4.61	0.35	ND	4.7	44.5	8.85	31	11.7
Mar-2007	3.1	3.1	ND	ND	4.54	0.35	ND	4.5	38.9	8.38	19	10.8
Sep-2007	2.8	2.8	ND	ND	4.22	0.28	ND	6.1	40.5	7.67	55	10.8
Mar-2008	3.2	3.2	ND	ND	16.2	1.12	ND	4.5	43.5	16	22	10.5
Sep-2008	3.2	3.2	ND	ND	4.75	0.21	ND	4.6	41.9	10.7	25	11.2
Mar-2009	3.4	3.4	ND	ND	5.57	0.35	ND	4.4	46	7.32	36	11.5
Oct-2009	3.4	3.4	ND	ND	10.4	0.8	ND	4.3	61.1	7.43	43	14
Apr-2010	2.8	2.8	ND	ND	19.5	1.33	ND	3.9	86.7	8.81	113	16.9
Oct-2010	2.7	2.7	ND	ND	29.8	1.66	ND	4.6	113.5	7.86	84	21.2
Apr-2011	2.4	2.4	ND	ND	32.5	1.48	ND	4.3	129.1	8.18	94	18.9
Sep-2011	2.6	2.6	ND	ND	30.6	1.31	ND	4.4	115.3	10.1	83	21
Mar-2012	2.6	2.6	ND	ND	16.6	0.73	ND	3.6	80.8	10.5	84	18.4
Sep-2012	2.12	2.12	ND	ND	18.8	0.747	ND	4.1	79.8	11.1	62	18.9
Mar-2013	2.96	2.96	ND	ND	31.2	1.1	ND	4.7	121	8.15	77	18.5
Oct-2013	2.8	2.8	ND	ND	27.3	0.953	ND	6	110.7	9.18	67	19.5
Mar-2014	2.68	2.68	ND	ND	31.1	1.08	ND	4.9	129.8	9.94	91	22.3

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-22A***										
Oct-2014	*ND*	*ND*	*ND*	*ND*	44.4	1.37	*ND*	4.8	146.5	11.9	88	25
Apr-2015	2.84	2.84	*ND*	*ND*	49.8	1.68	*ND*	3.9	157.1	12.7	106	27.9
Nov-2015	*ND*	*ND*	*ND*	*6 J*	45.2	1.55	*ND*	4.9	205	13.1	96	26.2
May-2016	*ND*	*ND*	*ND*	*ND*	32.5	1.16	*ND*	4.8	203	12.6	74	21.9
Oct-2016	*ND*	*ND*	*ND*	*ND*	40.4	*NA*	*NA*	4.6	221	9.36	97	22.8
May-2017	*ND*	*ND*	*ND*	10	40.5	1.17	*ND*	4.7	240	10.8	76	24.4
Oct-2017	*ND*	*ND*	*ND*	*ND*	45.4	1.36	*ND*	4.8	264	11.1	96	27
May-2018	*2 JB*	*ND*	*ND*	*ND*	42.6	0.24	*ND*	4.4	228	10.4	78	27.1
Nov-2018	*1 JB*	*ND*	*ND*	*5.7 J*	57.2	1.6	*ND*	4.44	232.1	*9.3 J*	99	27.4
May-2019	*ND*	*NA*	*ND*	*ND*	56.8	1.7	*ND*	4.48	213.4	*ND*	135	32.7
Oct-2019	*ND*	*NA*	*ND*	*6 J*	61.4	1.9	*ND*	4.16	260.8	12.9	142	32.2
May-2020	*ND*	*NA*	*ND*	*6.9 J*	95.5	2.3	*ND*	4.03	350	12.6	182	33.8
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	94.5	2.4	*ND*	4.19	350.2	19	178	39.7
Apr-2021	*ND*	*NA*	*ND*	*8.3 J*	82.2	1.8	*ND*	4.42	339.7	15.7	160	34.8
Oct-2021	*ND*	*NA*	*ND*	*6.1 J*	65.4	1.4	*ND*	4.53	341.6	11.9	142	30.1
May-2022	*ND*	*NA*	*ND*	*ND*	71.1	1.7	*ND*	4.25	343.5	13.4	171	34.6 N3
Oct-2022	*ND*	*NA*	*ND*	*17.5 J*	87.5	2.1	*ND*	4.42	377.3	17.6 MH	163	40.9 N3
May-2023	*2 J3c*	*NA*	*ND*	36.5	74	1.9	*ND*	4.81	333.6	21.8	162	45.2 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-22A*													
Nov-1993	NA	ND	ND	NA	ND	3.4	NA	ND	NA	ND	18.4	18.3	ND	1.8	NA
Apr-1994	NA	ND	ND	NA	ND	5.89	NA	ND	NA	ND	27.7	22.7	ND	3.8	NA
Apr-1995	ND	ND	0.6	ND	ND	5.2	NA	ND	ND	ND	50.1	47	ND	3.8	NA
Oct-1996	ND	**0.12**	0.054	ND	ND	8.1	8.6	ND	ND	ND	40	37	ND	3.6	3.7
Apr-1997	ND	ND	0.055	ND	ND	3.4	2.4	ND	ND	ND	16	11	ND	2	1.5
Oct-1997	ND	**0.065**	0.043	ND	ND	2.76	2.44	ND	ND	ND	20	15	ND	1.69	1.61
Apr-1998	ND	ND	0.058	ND	ND	6.16	6.1	ND	ND	ND	57	56	ND	3.06	3.05
Apr-1999	ND	ND	0.04	ND	ND	3.66	3.55	ND	ND	ND	38.5	36.7	ND	1.82	1.78
Oct-1999	ND	ND	0.033	ND	ND	2.82	2.44	ND	ND	ND	0.597	0.083	ND	1.5	1.36
Apr-2000	ND	ND	0.042	ND	ND	3.55	3.3	ND	ND	ND	0.894	0.472	ND	1.95	1.81
Oct-2000	ND	ND	0.041	ND	ND	3.65	3.68	ND	ND	ND	4.38	4.02	ND	1.92	1.92
Apr-2001	ND	ND	0.039	ND	ND	2.83	NA	ND	ND	ND	1.01	NA	ND	1.77	NA
Sep-2001	ND	ND	0.069	ND	ND	5.81	6.18	ND	ND	ND	8.81	1.55	ND	3.47	3.64
Mar-2002	ND	ND	0.054	ND	ND	4.35	2.24	ND	ND	ND	3.46	ND	ND	2.55	1.83
Sep-2002	ND	ND	0.056	ND	ND	3.09	2.14	ND	ND	ND	1.44	ND	ND	2.15	1.78
Mar-2003	ND	ND	0.073	ND	ND	2.23	2.1	ND	ND	ND	1.58	ND	ND	2.08	1.97
Oct-2003	ND	ND	0.07	ND	ND	2.78	3.28	ND	ND	ND	1.13	1.71	ND	2.04	1.95
Apr-2004	ND	ND	0.066	ND	ND	3.66	3.05	ND	ND	ND	1.61	2.01	ND	2.18	1.95
Oct-2004	ND	ND	0.062	ND	ND	2.76	2.55	ND	ND	ND	1.6	0.842	ND	1.75	1.72
Apr-2005	ND	ND	0.073	ND	ND	2.26	2.12	ND	ND	ND	0.366	0.118	ND	1.93	1.88
Oct-2005	ND	ND	0.066	ND	ND	2.04	1.77	ND	ND	ND	0.222	ND	ND	1.72	1.63

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22A***													
Mar-2006	ND	ND	0.065	ND	ND	1.69	1.66	ND	ND	ND	ND	ND	ND	1.7	1.68
Sep-2006	ND	ND	0.062	ND	ND	1.85	1.87	ND	ND	ND	0.113	ND	ND	1.71	1.72
Mar-2007	ND	ND	0.059	ND	ND	1.68	1.66	ND	ND	ND	ND	ND	ND	1.61	1.6
Sep-2007	ND	0.002	0.058	ND	ND	1.62	1.57	ND	ND	ND	0.14	ND	ND	1.63	1.58
Mar-2008	ND	ND	0.061	ND	ND	1.65	1.56	ND	ND	ND	0.232	ND	ND	1.55	1.46
Sep-2008	ND	ND	0.061	ND	ND	1.65	1.58	ND	ND	ND	ND	ND	ND	1.72	1.62
Mar-2009	ND	ND	0.064	ND	ND	1.77	1.7	ND	ND	ND	ND	ND	ND	1.73	1.67
Oct-2009	ND	ND	0.81	ND	ND	2.18	2.11	ND	ND	ND	ND	ND	ND	2.08	2.02
Apr-2010	ND	ND	0.095	ND	ND	2.8	2.67	ND	ND	ND	0.051	ND	ND	2.41	2.33
Oct-2010	ND	ND	0.116	ND	ND	3.45	3.25	ND	ND	ND	ND	ND	ND	3.06	2.93
Apr-2011	ND	ND	0.125	ND	ND	3.13	3.09	ND	ND	ND	0.171	ND	ND	2.7	2.67
Sep-2011	ND	ND	0.131	ND	ND	3.59	3.54	ND	ND	ND	0.083	ND	ND	2.93	2.91
Mar-2012	ND	ND	0.118	ND	ND	3.12	3.05	ND	ND	ND	0.22	0.132	ND	2.57	2.5
Sep-2012	ND	ND	0.115	0.00023 J	0.000299 J	3.24	3.24	0.002 J	0.0069 J	0.0031 J	0.0642	0.0258 J	ND	2.62	2.52
Mar-2013	ND	ND	0.113	0.000199 J	0.00036 J	3.22	3.78	0.0041 J	0.0073 J	0.004 J	0.0516	0.0259 J	0.0014 J	2.54	3.03
Oct-2013	ND	ND	0.132	0.00029 J	0.000255 J	3.38	3.34	0.0099 J	0.008 J	0.0036 J	0.0763	0.0189 J	ND	2.69	2.8
Mar-2014	ND	ND	0.148	0.00036 J	0.00034 J	3.8	3.81	0.0017 J	0.0073 J	0.0043 J	0.0757	0.0336 J	ND	3.1	3.16
Oct-2014	0.000489 J	ND	0.155	0.000342 J	0.000317 J	4.03	4.11	0.000798 J	0.0094 J	0.0044 J	0.04 J	ND	ND	3.63	3.67
Apr-2015	0.000647 J	ND	0.171	0.000472 J	0.000416 J	4.42	4.28	0.0013 J	0.01	0.0061 J	0.0228 J	0.0465 J	ND	4.09	4.04
Nov-2015	0.000376 J	0.000221 J	0.17	0.000477 J	0.000345 J	4.75	5.01	0.0052 J	0.01	0.006 J	0.331	0.0372 J	0.000558 J	3.48	3.57
May-2016	ND	ND	0.136	0.00044 J	0.0003 J	3.67	3.91	0.0015 J	0.0087	0.0056	ND	ND	ND	3.1	3.17
Oct-2016	ND	ND	0.144	0.00041 J	0.00032 J	3.65	4.08	0.0011 J	0.0098	0.0056	0.038 J	ND	ND	3.32	3.49
May-2017	ND	ND	0.14	0.00038 J	0.00029 J	3.65	3.45	0.0012 J	0.009	0.0052	ND	ND	ND	3.71	3.59
Oct-2017	ND	ND	0.148	0.00035 J	0.0003 J	3.97	4.13	0.0027 J	0.0105	0.0049	0.372	ND	0.00016 J	4.15	4.28

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22A***													
May-2018	*0.00005 J*	*ND*	0.13	0.00045	*0.00036 J*	3.9	3.7	*0.0013 JB*	0.0084	0.0055	*ND*	*ND*	*0.000069 JB*	4.2	4
Nov-2018	*ND*	*ND*	0.15	0.00066	*0.00043 J*	4.2	4.2	*0.0058 J*	0.0094	0.0065	0.22	0.07	*0.000079 J*	4.1	4.2
May-2019	*ND*	*ND*	0.18	0.00067	*ND*	5.5	5.2	0.0071	0.0078	0.0048	0.16	0.095	*ND*	4.6	4.2
Oct-2019	*0.00014 J*	*ND*	0.17	0.00069	*0.00084 J*	5.4	5.2	*0.0065 J*	0.012	0.012	0.1	0.084	*0.00012 J*	4.5	4.3
May-2020	*0.000075 J*	*ND*	0.18	0.00071	*0.00055 J*	5.9	5.7	0.0091	0.013	*0.0095 J*	0.32	0.078	*ND*	4.6	4.4
Oct-2020	*ND*	*ND*	0.15	*0.00052 J*	*ND*	6.7	6.2	*0.0062 J*	0.013	*0.0077 J*	0.12	0.077	*ND*	5.6	5.2
Apr-2021	*ND*	*ND*	0.17	*0.00067 J*	*0.00034 J*	5.9	5.7	0.0067	0.017	0.011	0.19	0.11	*ND*	4.9	4.7
Oct-2021	*0.000077 J*	*0.00027 J*	0.15	0.00054	*0.0002 J*	5	5	*0.0022 J*	0.025	0.0072	0.089	0.075 B	*ND*	4.3	4.3
May-2022	*ND*	*ND*	0.17	0.00068	*0.00035 J*	5.9	5.9	*0.0022 J*	0.022	0.0098	0.057	*0.046 J*	*ND*	4.8	4.7
Oct-2022	*ND*	*0.00046 J*	0.18	*0.00035 J*	*0.00029 J*	6.5	6.7	*0.002 J*	0.02	0.0072	0.062	*0.04 J*	*ND*	6	6.3
May-2023	*ND*	*0.00058 J*	0.18	*0.00044 J*	*0.00035 J*	6.5	6.3	0.0069	0.024	0.0073	0.32	0.066	*ND*	7	6.6

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22A***												
Nov-1993	0.08	NA	ND	NA	3.3	NA	ND	NA	35.8	NA	NA	NA	ND
Apr-1994	0.15	NA	ND	NA	3.69	NA	ND	NA	50.2	NA	NA	NA	0.06
Apr-1995	0.11	NA	ND	ND	3.7	NA	ND	ND	19.4	NA	ND	ND	0.02
Oct-1996	0.085	0.09	NA	ND	ND	ND	ND	ND	23	24	ND	ND	0.035
Apr-1997	0.053	0.037	ND	ND	3	2.1	ND	ND	4.2	4.1	ND	ND	0.16
Oct-1997	0.04	0.04	NA	ND	0.955	0.623	ND	ND	3.31	2.89	ND	ND	ND
Apr-1998	0.075	0.095	NA	ND	2.15	2.62	ND	ND	9.73	9.68	ND	ND	ND
Apr-1999	0.04	0.039	NA	ND	1.94	1.84	ND	ND	10.7	10.4	ND	ND	ND
Oct-1999	0.043	0.039	NA	ND	2.17	2.61	ND	ND	11.1	8.85	ND	ND	ND
Apr-2000	0.062	0.058	NA	ND	2.67	2.18	ND	ND	24.7	22.7	ND	ND	ND
Oct-2000	0.077	0.083	NA	ND	4.34	4.61	ND	ND	23	23.5	ND	ND	ND
Apr-2001	0.066	NA	NA	ND	4	NA	ND	ND	17.8	NA	ND	ND	ND
Sep-2001	0.159	0.172	NA	ND	6.76	7.11	ND	ND	70.2	68.7	ND	ND	ND
Mar-2002	0.103	0.061	NA	ND	4.88	1.97	ND	ND	30.2	7.09	ND	ND	ND
Sep-2002	0.079	0.061	NA	ND	2.91	2.05	ND	ND	20.4	6.92	ND	ND	ND
Mar-2003	0.065	0.062	NA	ND	1.46	0.736	ND	ND	2.74	2.41	ND	ND	ND
Oct-2003	0.07	0.084	NA	ND	0.914	2.92	ND	ND	6.56	16.5	ND	ND	0.021
Apr-2004	0.081	0.079	ND	ND	3.84	2.04	ND	ND	18.1	14.8	ND	ND	ND
Oct-2004	0.052	0.051	ND	ND	1.66	1.55	ND	ND	16.7	13.9	ND	ND	ND
Apr-2005	0.059	0.057	ND	ND	1.09	1.04	ND	ND	5.98	4.73	ND	ND	0.012
Oct-2005	0.052	0.049	ND	ND	1.01	0.935	ND	ND	3.18	2.44	ND	ND	0.012
Mar-2006	0.04	0.039	ND	ND	0.526	0.548	ND	ND	2.51	2.47	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22A***												
Sep-2006	0.054	0.056	ND	ND	0.808	0.82	ND	ND	2.14	2.1	ND	ND	ND
Mar-2007	0.044	0.043	ND	0.012	0.809	0.804	ND	ND	2.06	2.02	ND	ND	0.018
Sep-2007	0.044	0.043	ND	ND	0.743	0.604	ND	ND	2	1.94	ND	ND	0.01
Mar-2008	0.042	0.04	ND	ND	1	0.935	ND	ND	1.84	1.73	ND	ND	0.011
Sep-2008	0.044	0.041	ND	ND	0.843	0.804	ND	ND	2.08	1.96	ND	ND	0.01
Mar-2009	0.046	0.044	ND	ND	0.947	0.908	ND	ND	2.49	2.37	ND	ND	0.011
Oct-2009	0.055	0.053	ND	ND	0.736	0.703	ND	ND	4.58	4.31	ND	ND	0.012
Apr-2010	0.066	0.064	ND	ND	1	0.973	ND	ND	9.49	9.43	ND	ND	0.019
Oct-2010	0.1	0.094	ND	ND	1.1	1.12	ND	ND	16	16	ND	ND	0.029
Apr-2011	0.096	0.094	ND	ND	0.87	0.878	ND	ND	16.9	16.6	ND	ND	0.029
Sep-2011	0.119	0.117	ND	ND	1.07	1.13	ND	ND	16	15.7	ND	ND	0.034
Mar-2012	0.107	0.103	0.0002	0.026	1.02	1.01	ND	ND	7.66	7.5	ND	ND	0.029
Sep-2012	0.106	0.104	0.00005 J	0.0078 J	1.01	1.01	0.000507 J	ND	8.23	8.19	ND	ND	0.0338
Mar-2013	0.1	0.117	0.00009 J	0.0103 J	0.997	1.13	ND	0.000027 J	12.3	14.5	ND	ND	0.0439
Oct-2013	0.101	0.102	ND	0.012	1.19	1.16	0.000502 J	ND	12.4	12.9	ND	0.0024 J	0.0388
Mar-2014	0.117	0.11	ND	0.0083 J	1.26	1.28	0.000771 J	ND	13.4	13.6	0.000178 J	0.000816 J	0.0331
Oct-2014	0.116	0.117	0.000127 J	0.0092 J	1.42	1.43	0.0016 J	ND	20.2	20.5	ND	ND	0.0393
Apr-2015	0.126	0.124	0.000219	0.0107 J	1.36	1.36	0.0021	ND	26.2	25.7	ND	ND	0.0529
Nov-2015	0.129	0.131	0.000393	0.014	1.42	1.46	0.0021	ND	22.8	23.2	0.000133 J	ND	0.0427
May-2016	0.117	0.117	0.0001 J	0.009	1.24	1.3	ND	ND	15.6	15.8	ND	ND	0.0467
Oct-2016	0.115	0.127	0.000051 J	0.0095	1.28	1.34	0.00044 J	ND	18	19.2	ND	ND	0.0445
May-2017	0.114	0.109	ND	0.0082	1.52	1.43	0.00048 J	ND	21.5	20.3	ND	ND	0.0379
Oct-2017	0.117	0.119	ND	0.009	1.62	1.66	0.00057 J	ND	18.6 J-	22.9	ND	0.00038 J	0.0376
May-2018	0.078	0.078	0.00014 J	0.0069	0.97 J	1 J	0.00078 J	ND	23.4	21.8	ND	0.0022	0.016

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22A***												
Nov-2018	0.12	0.12	0.00054	0.011	*1.4 J*	*1.7 J*	*0.00071 J*	*ND*	27.5	28.3	*ND*	0.003	0.034
May-2019	0.13	0.15	0.00062	0.0095	*ND*	*ND*	*ND*	*ND*	33.9	31.1	*ND*	0.0017	0.03
Oct-2019	0.14	0.11	0.00046	0.012	*2 J*	*2 J*	*0.00097 J*	*ND*	34.3	32.6	*ND*	0.0025	0.056
May-2020	0.15	0.15	0.00056	0.014	*ND*	*1.9 J*	*0.0019 JM1*	*ND*	47.6	40.7	*ND*	0.0099	0.047
Oct-2020	0.18	0.15	*0.00013 J*	0.012	*ND*	*1.8 J*	*ND*	*ND*	52.6	45.6	*ND*	*0.0012 J*	0.037
Apr-2021	0.14	0.13	*0.00018 J*	0.017	1.8	1.7	*ND*	*ND*	41	40.8	*ND*	*ND*	0.038
Oct-2021	0.12	0.12	0.00027	0.012	1.6	1.6	0.0025	*ND*	37.6	38.9	*0.00003 J*	*ND*	0.037
May-2022	0.14	0.13	0.00034 M1	0.014	1.7	1.7	*0.002 J*	*ND*	40.3	38.8	*ND*	*ND*	0.044
Oct-2022	0.16	0.15	*ND*	0.012	2.1	2.1	0.0039	*ND*	48.1	47.4	*ND*	*ND*	0.038
May-2023	0.14	0.13	*ND*	0.016	2.1 B	1.9	0.0039	*ND*	38.7	37.9	*ND*	*ND*	0.032

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-22A***																
Nov-1993	ND	ND	ND	ND	39	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	33	ND
Apr-1994	ND	ND	ND	ND	21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	54	ND
Oct-1996	ND	ND	ND	ND	86	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	57	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	34	ND	ND	ND	ND	ND	ND	0.7 J	0.9 J	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	27	ND	ND	ND	ND	ND	ND	0.5 J	0.6 J	2.3 J	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	31	ND	NA	NA	NA	NA	ND	0.7 J	0.6 J	ND	NA	NA	7.6	NA
Oct-1999	ND	ND	ND	ND	19	ND	ND	ND	ND	0.6 J	ND	0.6 J	1.1	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	8.3	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	12	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	6.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	6.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	6.4	ND
Apr-2005	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22A*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22A*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.6 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-22A*															
Nov-1993	**9.6**	ND	ND	ND	ND	1.2	ND	ND	4.4	ND	ND	15	ND	ND	ND	8	33
Apr-1994	3.9	ND	ND	ND	ND	ND	ND	ND	1.9 J	ND	ND	6.8	ND	ND	ND	3.5	18
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	ND	ND	ND	9	51
Apr-1997	**17**	ND	ND	ND	2	ND	ND	ND	4	ND	2	ND	15	ND	ND	54	28
Oct-1997	**8.3**	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	7.5	ND	ND	ND	6.1	42
Apr-1998	**6.4**	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	6.6	ND	ND	ND	5.4	16
Apr-1999	4.4	NA	NA	NA	NA	ND	NA	ND	1 J	ND	NA	5.8	NA	NA	NA	1.7	17
Oct-1999	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	ND	ND	ND	1.4	8.9
Apr-2000	1.4	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	1.5	NA	ND	NA	0.9 J	4
Oct-2000	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.1	5.7
Apr-2001	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	5.1	4.9
Sep-2001	0.8 J	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	1.1	ND	ND	ND	1.6	2.5
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	1
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	1
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.3
Oct-2004	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	3.9	6.7
Apr-2005	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	2.7	3.5
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22A***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.9 J
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.37 J	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	0.52 J,B	ND	ND	ND	ND	0.4 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.36 J	0.4 J,B	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	0.2 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	0.2 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*0.2 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.252 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22A***															
Nov-1993	ND	ND	5.2	ND	ND	ND	ND	**9**	ND	ND	ND	ND	**7.5**	ND	ND	**2.2**	NA
Apr-1994	ND	ND	1.3 J	ND	ND	ND	ND	3.2	ND	ND	ND	ND	5	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	**11**	ND	1.5	ND	ND	**11**	ND	ND	**3.8**	ND
Apr-1997	ND	ND	NA	NA	1	NA	ND	**8**	ND	ND	1	ND	**11**	ND	ND	**7**	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	3.7	ND	0.9 J	ND	ND	**7.9**	ND	ND	2	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	4.5	ND	0.7 J	ND	ND	**6.7**	ND	ND	1.9	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	3.8	ND	0.6 J	NA	NA	**6**	ND	NA	1.2	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	3	ND	ND	ND	ND	3.7	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	2.8	ND	ND	NA	NA	2.3	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	4.6	ND	ND	ND	ND	4.2	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	4.3	ND	ND	ND	ND	1.8	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	3.5	ND	ND	ND	ND	2.4	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	1.4	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	0.7 J	ND	ND	3.4	ND	ND	ND	ND	2.1	ND	ND	0.8 J	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22A***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*0.45 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.21 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*0.14 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22A***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-22B***											
Nov-1993	69	69	1.5	ND	20	ND	ND	5.31	227	9.6	142	15.2
Apr-1994	367	367	19.6	109.6	524	ND	ND	6.06	2.1	5.6	948	125.86
Apr-1995	216	216	10.8	27.1	133	ND	ND	5.8	823	8.9	376	35.6
Apr-1997	ND	26	ND	ND	4.5	0.02	ND	NA	NA	9.1	141	16
Oct-1997	95	95	0.87	ND	5.06	ND	ND	6.07	208	7.36	114	42
Apr-1998	102	102	6.7	14	28.6	ND	ND	5.96	319	7.08	160	30
Apr-1999	80	80	5.1	20	81.4	0.61	ND	6.32	545	30	560	36
Oct-1999	52	58	0.88	ND	4.35	ND	ND	5.18	152.1	9.13	91	13
Apr-2000	65	65	5.2	ND	1.05	ND	ND	6.27	253	12.7	131	29
Oct-2000	33	NA	4.4	15	47.4	ND	ND	5.34	425	15	148	25.9
Apr-2001	25	NA	11	55	239	ND	ND	NA	NA	75.4	631	78
Sep-2001	39	39	8.4	24	77.1	ND	ND	5.86	657	45.3	247	31.8
Mar-2002	38	38	6.3	16	30.4	ND	ND	5.9	419	24.6	242	30
Sep-2002	8.2	8.2	2.3	13	54.4	ND	ND	5.9	310	22	146	12.3
Mar-2003	11	11	1.1	ND	36.2	ND	ND	5.7	253	13.5	111	13.2
Oct-2003	2	2	ND	13	30	1.15	ND	4.8	168.3	12.2	63	16.5
Apr-2004	7.8	7.8	ND	16	22.3	2.81	ND	4.8	120.8	7.45	97	31.7
Oct-2004	21	21	ND	ND	8.79	2.27	ND	5.1	69.6	6.68	76	27.1
Apr-2005	4	4	ND	ND	5.31	0.48	ND	5	65.8	7.66	50	10.3
Oct-2005	2.7	2.7	ND	ND	3.91	3.04	ND	4.8	47.8	3.43	47	12.1
Mar-2006	4.5	4.5	ND	ND	4.14	0.42	ND	5.2	36.4	6.42	28	4.87
Sep-2006	4.8	4.8	0.54	ND	12.8	1.21	ND	4.6	71.7	9.5	74	10.6
Mar-2007	8.7	8.7	0.97	ND	20.1	0.21	ND	3.1	674	18.6	69	15.4
Sep-2007	1.7	1.7	ND	ND	4.76	6.67	ND	6	80.1	2.82	87	20.4
Mar-2008	5.3	5.3	0.52	ND	28.3	2.82	ND	4.6	102	22.9	63	17.5
Sep-2008	4.1	4.1	0.72	13	18.4	1.61	ND	4.7	108.1	20.1	79	17
Mar-2009	5.3	5.3	0.99	ND	16.4	0.12	ND	4.7	133.7	34.9	95	17
Oct-2009	4.3	4.3	0.41	10	17.9	0.21	ND	4.6	112.9	27.5	87	14.9
Apr-2010	1.6	1.6	ND	ND	9.26	6.17	ND	4.1	98.2	10.9	113	22.8
Oct-2010	2.8	2.8	0.22	ND	6.07	6.15	ND	5.3	84.1	5.63	71	25
Apr-2011	3.5	3.5	ND	ND	9.27	2.43	ND	4.4	97.8	17.3	77	23.3
Sep-2011	2.2	2.2	ND	ND	14.4	2.09	ND	4.4	95.3	20.2	74	23.4
Mar-2012	1.4	1.4	ND	ND	8.89	5.28	ND	3.5	93.6	10.3	80	22.9
Sep-2012	1.24	1.24	ND	ND	8.83	4.42	ND	4.1	88.9	15.9	80	22.8
Mar-2013	2.96	2.96	ND	ND	12.6	1.43	ND	4.8	115.4	28	84	26.5
Oct-2013	3.2	3.2	ND	13.1	13	0.803	ND	5.3	104.6	25.2	69	21.9
Mar-2014	3.8	3.8	ND	8 J	18.5	1.17	ND	5	123.9	25.6	76	23.8

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-22B***											
Oct-2014	ND	ND	ND	ND	9.18	4.44	ND	4.5	96.3	16.2	58	22.2
Apr-2015	2.8	2.8	ND	ND	8.54	1.66	ND	4	103	33.8	63	28.6
Nov-2015	ND	ND	ND	6 J	7.57	3.95	ND	4.2	110	18.9	58	25.7
May-2016	ND	ND	ND	ND	8.05	2.18	ND	4.9	166.3	25.6	67	22.3
Oct-2016	ND	ND	ND	ND	7.44	NA	NA	4.9	144.3	26.2	80	26
May-2017	10	10	ND	13	7.53	1.39	ND	5.4	174.5	29.3	61	40.5
Oct-2017	14	14	ND	ND	13.7	2.63	ND	5.7	194.1	27.1	97	48.6
May-2018	1 JB	ND	ND	10.1 J	15.8	0.19	ND	4.9	87.1	ND	ND	10
Nov-2018	28	28	ND	14.3 J	7.9	1.8	ND	5.47	163.7	33.8	88	57.7
May-2019	ND	NA	ND	ND	10	3.5	ND	4.78	118.9	33.2	103	50.1
Oct-2019	ND	NA	ND	6 J	5.2	3.6	ND	4.71	100.1	14.6	54	28.7
May-2020	4 J	NA	ND	6.9 J	8.9	2.4	ND	4.54	123.2	23.9	63	32.6
Oct-2020	4 J	NA	ND	7 J	21.7	4.4	ND	4.87	165.7	18	93	49.5
Apr-2021	ND	NA	ND	8.3 J	9.3	5.1	ND	4.88	3.26	15.4	64	34.3
Oct-2021	22	NA	ND	8.3 J	6.1	2.4	ND	5.39	143.6	21.3	67	36.8
May-2022	28	NA	0.062 J	ND	4.9	2.5	ND	5.42	174.1	21.4	90	52.4 N3
Oct-2022	38	NA	ND	17.5 JMH	10.9	3.3	0.0088 J	5.65	191	19.5	92	65.5 N3
May-2023	ND	NA	ND	38.7	11.1	2.3	ND	5.74	196.9	19.4	108	58 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22B***													
Nov-1993	NA	**0.018**	ND	NA	0.001	2.3	NA	ND	NA	ND	31.8	28.2	ND	2.3	NA
Apr-1994	NA	**0.014**	ND	NA	ND	20.7	NA	ND	NA	ND	125	126	ND	18	NA
Apr-1995	ND	ND	ND	ND	ND	5.7	NA	ND	ND	0.03	69.6	60.7	ND	5.2	NA
Oct-1996	ND	ND	0.032	ND	ND	3.5	3.2	ND	ND	ND	23	20	ND	1.9	1.7
Apr-1997	ND	ND	0.051	ND	ND	3.9	2.9	ND	0.021	ND	27	20	ND	2	1.7
Oct-1997	ND	ND	0.049	ND	ND	6.18	6.26	ND	ND	ND	43.1	43.6	ND	3.23	3.27
Apr-1998	ND	ND	0.056	ND	ND	6.96	6.64	ND	ND	ND	45.3	45.5	ND	3.05	3.05
Apr-1999	ND	ND	0.073	ND	ND	7.26	6.71	ND	ND	ND	70	67.2	ND	4.25	4.04
Oct-1999	ND	ND	0.073	ND	ND	8.7	8.09	ND	ND	ND	66.7	41.7	ND	4.27	3.92
Apr-2000	ND	ND	0.04	ND	ND	8.02	6.3	ND	ND	ND	34.9	29.9	ND	2.17	1.98
Oct-2000	ND	ND	0.049	ND	ND	5.84	5.26	ND	ND	ND	58.1	55.2	ND	2.75	2.65
Apr-2001	ND	ND	0.128	ND	ND	18.4	NA	ND	ND	ND	88.2	NA	ND	7.73	NA
Sep-2001	ND	ND	0.062	ND	ND	6.28	6.29	ND	ND	ND	52.2	52.1	ND	3.89	3.94
Mar-2002	ND	ND	0.054	ND	ND	6.76	6.05	ND	ND	ND	44.9	43.2	ND	3.18	3.21
Sep-2002	ND	ND	0.031	ND	ND	2.73	3.56	ND	ND	ND	25.8	23.4	ND	1.34	1.3
Mar-2003	ND	ND	0.021	ND	ND	3.84	6.09	ND	ND	ND	4.82	1.51	ND	0.867	0.812
Oct-2003	ND	ND	0.038	ND	ND	3.57	3.12	ND	ND	ND	0.742	ND	ND	1.83	1.72
Apr-2004	ND	ND	0.059	ND	ND	9.48	3.68	ND	ND	ND	0.233	ND	ND	1.95	1.87
Oct-2004	ND	ND	0.049	ND	ND	8.19	5.74	ND	ND	ND	0.343	ND	ND	1.6	1.5
Apr-2005	ND	ND	0.031	ND	ND	2.42	2.37	ND	ND	ND	0.99	0.05	ND	1.04	0.989
Oct-2005	ND	ND	0.041	ND	ND	2.71	2.31	0.03	ND	0.013	1.23	0.073	ND	1.29	1.19

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22B***													
Mar-2006	ND	ND	0.017	ND	ND	1.09	1.04	ND	ND	ND	0.34	ND	ND	0.519	0.487
Sep-2006	ND	ND	0.031	ND	ND	2.63	2.79	ND	ND	ND	0.27	0.219	ND	0.987	1.06
Mar-2007	ND	0.002	0.042	ND	ND	3.97	3.58	0.011	ND	ND	1.91	1.09	ND	1.33	1.28
Sep-2007	ND	0.003	0.063	ND	ND	4.49	4.06	0.017	0.011	0.012	1.38	0.054	ND	2.24	2.12
Mar-2008	ND	ND	0.055	ND	ND	4.12	3.83	ND	ND	0.013	0.161	ND	ND	1.74	1.63
Sep-2008	ND	0.002	0.058	ND	ND	3.68	3.45	0.014	ND	ND	1.92	1.04	ND	1.89	1.8
Mar-2009	ND	0.002	0.048	ND	ND	4.19	3.88	0.019	ND	ND	5.94	2.84	ND	1.57	1.49
Oct-2009	ND	ND	0.041	ND	ND	3.45	3.34	ND	ND	ND	3.17	2.83	ND	1.53	1.48
Apr-2010	ND	ND	0.062	ND	ND	5.13	4.97	0.017	ND	ND	1.46	0.063	ND	2.44	2.39
Oct-2010	ND	ND	0.068	ND	ND	5.83	5.81	0.01	0.011	0.025	0.615	ND	ND	2.52	2.53
Apr-2011	ND	ND	0.078	ND	ND	5.5	5.39	0.021	0.011	0.029	1.5	ND	ND	2.33	2.3
Sep-2011	ND	ND	0.082	ND	ND	5.14	5.04	0.025	0.013	0.042	2.64	ND	ND	2.57	2.53
Mar-2012	ND	ND	0.077	ND	ND	4.95	4.82	ND	0.011	0.043	0.909	ND	ND	2.55	2.46
Sep-2012	ND	ND	0.0823	0.000583 J	0.000553 J	5.05	4.81	0.0218	0.0129	0.0585	2.34	0.0587	0.000532 J	2.48	2.68
Mar-2013	ND	ND	0.0858	0.000419 J	0.000611 J	6.08	6.07	0.0213	0.016	0.0655	1.7	0.0317 J	0.0018 J	2.76	2.76
Oct-2013	ND	0.000692 J	0.0652	0.000203 J	0.000316 J	5.35	5.48	0.0081 J	0.0131	0.0273	0.323	ND	0.000304 J	2.07	2.11
Mar-2014	ND	ND	0.0552	0.000163 J	0.000285 J	5.99	6.09	0.012	0.0171	0.0324	1.59	0.103	ND	2.15	2.13
Oct-2014	0.00035 J	0.0011 J	0.0743	0.000259 J	0.000421 J	5.15	5.41	0.0149	0.0092 J	0.0221	1.75	0.0281 J	0.000845 J	2.28	2.34
Apr-2015	0.000643 J	0.000575 J	0.0723	0.000279 J	0.000368 J	7.01	6.97	0.0121	0.0102	0.0245	0.887	0.129	ND	2.68	2.62
Nov-2015	0.000394 J	0.0012 J	0.0753	0.000384 J	0.000372 J	6.29	6.92	0.0098 J	0.009 J	0.024	1.37	0.0313 J	0.001 J	2.44	2.6
May-2016	ND	ND	0.0561	0.00032 J	0.00038 J	5.43	5.63	0.0037 J	0.0088	0.0241	0.3	0.0419 J	ND	2.12	2.16
Oct-2016	ND	0.00094 J	0.0501	0.00018 J	0.00022 J	6.58	6.7	0.0039 J	0.0062	0.0102	0.654	0.0793 J	0.00017 J	2.32	2.46
May-2017	ND	0.0009 J	0.0418	ND	ND	11.2	10.4	0.0089	0.0036	0.0066	0.887	ND	0.00026 J	3.04	3.01
Oct-2017	ND	ND	0.0407	ND	ND	13.9	15.7	0.0024 J	0.0086	0.0045	0.0558 J	1.7	ND	3.35	3.75

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22B***													
May-2018	*0.000038 J*	*ND*	0.036	*0.00026 J*	*0.00011 J*	1.6	14.5	*0.0049 JB*	0.009	0.0042	0.044	*ND*	*0.000037 JB*	1.5	3.2
Nov-2018	*0.000032 J*	*0.0002 J*	0.037	*ND*	*0.0001 J*	16.8	16.6	0.042	0.004	0.0048	0.67	0.076	*0.00012 J*	3.8	3.8
May-2019	*ND*	*ND*	0.051	*ND*	*ND*	13.6	12.8	0.014	0.0044	0.0088	0.28	0.04	*ND*	3.9	3.6
Oct-2019	0.00054	*0.00042 J*	0.044	*0.00017 J*	*0.00053 J*	7.5	7	0.013	0.0053	0.016	0.38	0.026	*0.00039 J*	2.4	2.3
May-2020	*0.000094 J*	*ND*	0.042	*0.000095 J*	*0.0001 J*	8.7	7.8	0.016	0.014	0.0074	0.46	0.026	*ND*	2.6	2.4
Oct-2020	*ND*	*ND*	0.038	*ND*	*ND*	13.8	12.7	*0.022 J*	0.0094	*ND*	0.73	0.05	*ND*	3.6	3.4
Apr-2021	*ND*	*ND*	0.044	*0.00022 J*	*ND*	9.7	9.8	0.011	0.0084	0.018	0.42	*ND*	*ND*	2.5	2.6
Oct-2021	*0.000091 J*	*ND*	0.044	*ND*	*ND*	10	9.5	0.006	0.0089	0.0053	0.14	*0.04 JB*	*0.000033 J*	2.9	2.9
May-2022	*ND*	*0.00049 J*	0.042	*ND*	*ND*	14.8	14.9	0.012	0.01	0.0058	0.54	0.079	*ND*	3.7	3.7
Oct-2022	*ND*	*0.0019 J*	0.046	*ND*	*ND*	19.4	20.7	0.021	0.02	0.01	2.7	*ND*	*0.0004 J*	4.1	4.5
May-2023	*ND*	*0.00089 J*	0.039	*ND*	*ND*	17	16.7	0.017	0.021	0.0033	0.71	*0.036 J*	*ND*	3.8	3.6

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-22B*												
Nov-1993	0.13	NA	ND	NA	2.5	NA	ND	NA	18.2	NA	NA	NA	ND
Apr-1994	0.66	NA	ND	NA	17.95	NA	ND	NA	375	NA	NA	NA	0.03
Apr-1995	0.27	NA	ND	ND	10.1	NA	ND	ND	75.2	NA	ND	ND	0.04
Oct-1996	0.077	0.068	NA	ND	ND	ND	ND	ND	5.1	5	ND	ND	0.19
Apr-1997	0.064	0.047	**0.0031**	ND	3.2	2.5	ND	ND	3.1	3.2	ND	ND	0.027
Oct-1997	0.065	0.064	NA	ND	2.49	2.42	ND	ND	2.76	2.84	ND	ND	ND
Apr-1998	0.147	0.145	NA	ND	7.13	6.77	ND	ND	20.2	19.9	ND	ND	ND
Apr-1999	0.231	0.218	NA	ND	6.9	6.16	ND	ND	48.2	46	ND	ND	ND
Oct-1999	0.29	0.267	NA	ND	11.9	11.2	ND	ND	52.8	49.1	ND	ND	ND
Apr-2000	0.144	0.132	NA	ND	6.73	6.12	ND	ND	17.9	16.2	ND	ND	0.015
Oct-2000	0.208	0.202	NA	ND	5.69	5.34	ND	ND	30.9	30.1	ND	ND	ND
Apr-2001	0.481	NA	NA	ND	12.5	NA	ND	ND	199	NA	ND	ND	0.029
Sep-2001	0.202	0.206	NA	ND	9.37	8.75	ND	ND	58.1	54.3	ND	ND	ND
Mar-2002	0.178	0.181	NA	ND	8.72	9.26	ND	ND	39.6	39.6	ND	ND	ND
Sep-2002	0.098	0.094	NA	ND	3.93	5.05	ND	ND	30.9	30.8	ND	ND	ND
Mar-2003	0.072	0.067	NA	ND	4.66	3.82	ND	ND	26.9	24.9	ND	ND	0.013
Oct-2003	0.12	0.123	NA	ND	2.92	3.27	ND	ND	20.9	18.9	ND	ND	0.022
Apr-2004	0.129	0.126	ND	ND	3.66	2.91	ND	ND	16.2	15.9	ND	ND	0.019
Oct-2004	0.115	0.109	ND	ND	2.69	2.43	ND	ND	6.47	5.89	ND	ND	0.013
Apr-2005	0.072	0.065	ND	ND	1.9	1.77	ND	ND	3.32	3.52	ND	ND	ND
Oct-2005	0.06	0.054	ND	0.029	1.62	1.33	ND	ND	3.34	2.43	ND	ND	0.014
Mar-2006	0.012	0.01	ND	ND	0.981	0.85	ND	ND	2.34	2.23	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22B***												
Sep-2006	0.051	0.055	ND	ND	1.56	1.75	ND	ND	8.01	8.42	ND	ND	ND
Mar-2007	0.075	0.071	ND	0.016	2.84	2.7	ND	ND	13.9	13.4	ND	ND	0.015
Sep-2007	0.085	0.079	ND	0.021	2.16	1.95	ND	ND	3.58	3.55	ND	ND	0.016
Mar-2008	0.067	0.067	ND	ND	2.29	2.09	ND	ND	8.64	8.12	ND	ND	0.015
Sep-2008	0.081	0.078	ND	0.016	2.48	2.43	ND	ND	11.5	11.1	ND	ND	0.018
Mar-2009	0.105	0.102	ND	ND	3.41	3.39	ND	ND	12.9	12.8	ND	ND	0.012
Oct-2009	0.112	0.108	ND	ND	3.32	3.24	ND	ND	12.3	11.7	ND	ND	ND
Apr-2010	0.137	0.134	ND	0.017	3.16	3.05	ND	ND	6.23	6.02	ND	ND	0.014
Oct-2010	0.088	0.087	ND	0.014	2.04	2.16	ND	ND	4.27	4.55	ND	ND	0.016
Apr-2011	0.106	0.104	ND	0.018	2.26	2.16	ND	ND	6.75	6.67	ND	ND	0.013
Sep-2011	0.12	0.117	ND	0.02	2.76	2.54	ND	ND	10.4	10.3	ND	ND	0.015
Mar-2012	0.093	0.09	0.0002	0.014	2.34	2.24	ND	ND	6.23	5.9	ND	ND	0.013
Sep-2012	0.0894	0.0852	0.000076 J	0.0185	2.32	2.19	0.000538 J	ND	6.34	6.97	ND	ND	0.0138
Mar-2013	0.131	0.133	0.000096 J	0.0176	3.12	3.08	ND	0.000087 J	8.97	9.08	ND	ND	0.0275
Oct-2013	0.132	0.136	ND	0.0086 J	3.71	3.69	ND	0.000069 J	9.02	9.25	0.000169 J	0.0026 J	0.0152
Mar-2014	0.127	0.128	ND	0.0095 J	3.88	3.93	ND	0.00019 J	10.6	10.8	0.000166 J	0.0012 J	0.0048 J
Oct-2014	0.0756	0.0787	0.000077 J	0.0141	2.6	2.55	0.000825 J	ND	6.02	6.25	ND	0.003 J	0.0125
Apr-2015	0.113	0.112	0.000027 J	0.0153	3.81	3.79	0.000966 J	ND	8.21	8.08	ND	0.0012 J	0.0194
Nov-2015	0.0686	0.0749	ND	0.0111	2.87	2.92	0.0012 J	ND	5.56	5.95	0.00017 J	0.0039 J	0.0099 J
May-2016	0.0743	0.0756	0.000053 J	0.0089	3.1	2.97	ND	ND	6.96	6.43	ND	0.00071 J	0.0095 J
Oct-2016	0.0725	0.0807	ND	0.007	3.41	3.73	ND	ND	6.19	6.52	ND	0.00093 J	0.0054 J
May-2017	0.0811	0.0733	ND	0.005	4.28	4.09	0.00052 J	ND	6.01	5.56	ND	0.0014	0.0047 JB
Oct-2017	0.0631	0.0706	ND	0.0084	4.09	4.76	0.00052 J	ND	7.57 J-	8.44	ND	ND	0.0045 J
May-2018	0.019	0.042	ND	0.015	0.93 J	3.5 J	0.00088 J	ND	8.6	10.9	ND	0.0022	0.013

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22B***												
Nov-2018	0.037	0.034	*ND*	0.028	*4 J*	*4 J*	*0.00091 J*	*ND*	7.4	7.6	*ND*	0.0034	*0.0049 J*
May-2019	0.029	0.033	*ND*	0.0093	*ND*	*ND*	*ND*	*ND*	8	7.7	*ND*	0.0043	*ND*
Oct-2019	0.026	0.028	*ND*	0.0096	*2.5 J*	*2.2 J*	*0.00069 J*	*0.00045 J*	*4.8 J*	*4 J*	0.00051	0.0023	0.016
May-2020	0.046	0.044	*ND*	0.0097	*2.8 J*	*3.2 J*	*0.00062 J*	*ND*	7.5	6.4	*ND*	0.01	*0.0038 J*
Oct-2020	0.037	0.037	*ND*	0.013	*3.7 J*	*3.3 J*	*ND*	*ND*	12.8	11.5	*ND*	*0.0017 J*	*ND*
Apr-2021	0.021	0.022	*ND*	*0.0097 J*	2.2	2.2	*ND*	*ND*	6.8	7.6	*ND*	*0.00063 J*	*0.0037 J*
Oct-2021	0.037	0.042	*0.00003 J*	0.0064	3.2	3	*ND*	*ND*	7.6	9.3	*0.000089 J*	*ND*	*0.0022 J*
May-2022	0.026	0.026	*ND*	0.012	3.5	3.4	*ND*	*ND*	6.4	6.6	*0.00011 J*	*0.0013 J*	*ND*
Oct-2022	0.021	0.031	*ND*	0.0095	4.2	4.5	*0.0015 J*	*ND*	6.8	7.6	*ND*	0.004	*ND*
May-2023	0.014	0.014	*ND*	0.01	4.1	4	*0.0011 J*	*ND*	8.7	8.8	*ND*	*0.0013 J*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-22B***																
Nov-1993	ND	ND	ND	ND	75	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	72	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	47	ND
Oct-1996	ND	ND	ND	ND	97	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND
Apr-1997	ND	ND	9	ND	66	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	39	ND	ND	ND	ND	ND	ND	ND	1.1 J	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	80	ND	ND	ND	ND	ND	ND	1.8 J	1.9 J	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	24	ND	NA	NA	NA	NA	ND	ND	1	ND	NA	NA	7.3	NA
Oct-1999	ND	ND	ND	ND	21	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	6.7	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	20	ND	ND	ND	ND	ND	ND	0.7 J	1.7	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	16	ND	ND	ND	ND	ND	ND	0.5 J	0.8 J	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	15	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	7.1	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	8.4	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22B*																
Feb-2006	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2006	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	ND	NA	0.8 J	NA	NA	NA	ND	NA
Dec-2006	NA	ND	NA	NA	3.1	NA	NA	NA	NA	NA	ND	NA	ND	NA	NA	NA	ND	NA
Mar-2007	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.62 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.86 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	0.42 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.11 J	ND
Apr-2015	ND	ND	ND	ND	0.34 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22B*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.9 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.152 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-22B*															
Nov-1993	**19**	ND	ND	ND	ND	ND	ND	ND	7.7	ND	ND	28	ND	ND	ND	9.9	70
Apr-1994	**43**	ND	ND	ND	ND	ND	ND	ND	10	ND	ND	18	ND	ND	ND	5.9	47
Oct-1996	**49**	ND	ND	ND	ND	ND	ND	ND	3.4	ND	ND	18	ND	ND	ND	8	58
Apr-1997	**21**	ND	ND	ND	ND	ND	ND	ND	5	ND	ND	13	ND	ND	ND	39	33
Oct-1997	**12**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10	ND	ND	ND	4.9	56
Apr-1998	**45**	ND	ND	ND	ND	ND	ND	ND	4.1	ND	ND	16	ND	ND	ND	10	35
Apr-1999	**9.2**	NA	NA	NA	NA	ND	NA	0.5 J	ND	ND	NA	5	NA	NA	NA	3.3	17
Oct-1999	**5.5**	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	4.8	ND	ND	ND	2.6	15
Apr-2000	1.8	NA	NA	ND	NA	ND	NA	ND	0.5 J	ND	NA	1.2	NA	ND	NA	1.5	4.6
Oct-2000	4.2	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	2.4	ND	ND	ND	7	9.2
Apr-2001	**15**	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	2.7	ND	ND	ND	2.3	8
Sep-2001	**7.2**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	2.5	5.8
Mar-2002	**7.3**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	3.6	5.8
Sep-2002	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	1.5	2.7
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.6 J
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	1.6	2.1
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	1.1	1.4
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.6 J
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22B***															
Feb-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.2
Dec-2006	ND	NA	NA	ND	NA	NA	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND
Dec-2006	ND	NA	NA	ND	NA	NA	NA	ND	NA	ND	NA	ND	NA	ND	NA	1.3	1.4
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.9 J
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.9 J
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.6 J
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.32 J	0.27 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22B***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.129 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22B***															
Nov-1993	ND	ND	7.2	ND	**6.3**	ND	ND	**18**	ND	ND	ND	ND	**16**	ND	ND	**4.2**	NA
Apr-1994	13	ND	ND	ND	3.4	ND	ND	4.5	ND	ND	ND	ND	**6.6**	ND	ND	**3**	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	**16**	ND	1.7	ND	ND	**12**	ND	ND	**4**	2.1
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	2	ND	ND	ND	9	ND	**6**	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	**7.8**	ND	ND	ND	ND	**7.7**	ND	ND	1.9 J	NA
Apr-1998	ND	ND	1.5	NA	ND	ND	ND	**6.7**	ND	1.9 J	ND	ND	**7.3**	ND	ND	**2.9**	NA
Apr-1999	0.6 J	NA	ND	NA	ND	ND	NA	1.3	ND	0.8 J	NA	NA	1.6	ND	NA	1.6	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	1.3	ND	0.7 J	ND	ND	1.9	ND	ND	1.4	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	1.4	ND	ND	NA	NA	1	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	1.2	ND	ND	ND	ND	2.4	ND	ND	1.1	NA
Apr-2001	1.1	ND	0.5 J	NA	ND	ND	ND	0.5 J	ND	0.5 J	ND	ND	2.3	ND	ND	0.8 J	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	0.5 J	ND	ND	ND	ND	1.9	ND	ND	0.6 J	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	0.8 J	ND	ND	ND	ND	1.7	ND	ND	0.7 J	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	1.1	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22B***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	34.7	ND	ND	ND	ND	ND	ND	ND	NA
Feb-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Dec-2006	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Dec-2006	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	0.6 J	ND	NA	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22B***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.9 BCH	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.438 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

HISTORICAL TABLES –
On-site Non-regulated Wells

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-02***											
Nov-1993	ND	ND	ND	ND	2.5	ND	ND	4.9	14.8	ND	18	1.36
Apr-1994	13	13	ND	ND	2.2	0.9	ND	4.68	16.9	ND	19	ND
Apr-1995	ND	ND	ND	ND	2.3	ND	ND	4.9	17.2	1.9	12	1.3
Apr-1997	ND	2	ND	24	2	0.02	ND	NA	NA	ND	82	4
Apr-1998	5	5	0.24	ND	1.69	ND	ND	6.56	51.6	ND	ND	1.8
Apr-1999	ND	ND	0.14	ND	2.64	ND	ND	4.99	17.57	ND	18	1.8
Apr-2001	ND	NA	ND	ND	33.5	ND	ND	NA	NA	ND	ND	2.3
Mar-2002	ND	ND	ND	16	3.79	ND	ND	6.1	34.8	1.62	22	1.91
Mar-2003	1.9	1.9	ND	ND	12.8	ND	ND	5.3	16	ND	42	1.36
Apr-2004	2	2	ND	ND	2.1	ND	ND	5.5	13.3	ND	ND	2.19
Apr-2005	2.2	2.2	ND	ND	2.18	ND	ND	5.9	22.9	ND	45	3.12
Mar-2006	4.3	4.3	ND	ND	2.45	ND	ND	5.3	14.4	ND	29	2.01
Mar-2007	3.4	3.4	ND	ND	2.83	ND	ND	5	12.9	ND	26	1.69
Mar-2008	2.8	2.8	ND	ND	2.63	ND	ND	4.6	16	ND	14	2.6
Mar-2009	3.5	3.5	ND	ND	2.65	ND	ND	4.8	15.2	ND	29	2.4
Apr-2010	4.3	4.3	ND	ND	2.28	ND	ND	4.5	14.5	ND	18	1.6
Apr-2011	4.2	4.2	ND	ND	2.4	ND	ND	4.8	12.4	ND	ND	2.25
Mar-2012	3.3	3.3	ND	ND	2.46	ND	ND	4.1	12.1	ND	ND	2.38
Sep-2012	3.52	3.52	ND	ND	2.73	ND	ND	5.4	14.6	ND	35	2.73
Mar-2013	3.76	3.76	0.0847 J	ND	2.95	0.0243 J	ND	6	15.7	0.72 J	ND	2.84
Oct-2013	4.84	4.84	ND	ND	2.9	0.0353 J	ND	5.8	15.4	0.577 J	ND	2.28
Mar-2014	4.68	4.68	ND	ND	3.04	ND	ND	5.8	21.3	0.56 J	ND	2.33
Oct-2014	ND	ND	ND	ND	3.15	ND	ND	5	17.4	ND	ND	2.32
Apr-2015	7.8	7.8	ND	5 J	2.76	ND	ND	5	25.1	ND	ND	2.26
Nov-2015	2.76	2.76	ND	ND	2.54	ND	ND	5.8	28.6	ND	29	2.54
May-2016	4.8	4.8	ND	198	3.03 B	ND	ND	5.3	24.3	ND	93	3.5
Oct-2016	3.36	3.36	ND	8 J	3.2	NA	NA	5.4	27.1	1.03	37	3
May-2017	4.64	4.64	ND	ND	3.38	ND	ND	5.3	28.9	0.703 J	14 J	3.7
Oct-2017	22.6	22.6	ND	13	2.97	ND	ND	5.6	31.7	ND	30	3.2
May-2018	6 JB	ND	ND	5.8 J	3.7	0.063 J	ND	4.9	39.1	ND	ND	4.7
Nov-2018	18	18	0.099 J	ND	3.9	0.093 J	ND	6.05	42.6	ND	14	4.9
May-2019	ND	NA	ND	ND	ND	0.22	ND	5.72	26.5	ND	63	ND
Oct-2019	10 H1	NA	ND	ND	3.6	0.18	ND	5.79	51.7	ND	40	4.1
May-2020	14	NA	ND	6.9 J	4.6	ND	0.01	5.8	62.2	ND	11	4.1
Oct-2020	12	NA	ND	7 J	3.3	ND	ND	5.92	50.8	ND	46	3.3
Apr-2021	12	NA	ND	ND	3.5	0.065 J	ND	6.41	60.8	ND	16	2.8 J
Oct-2021	8 J3c	NA	ND	ND	2.8 J	ND	ND	6.21	75.4	ND	ND	3.17 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-02***										
May-2022	12	*NA*	*ND*	*ND*	*2.7 J*	*ND*	*ND*	6.23	71.1	*ND*	*ND*	*2.2 JN3*
Oct-2022	24	*NA*	*ND*	*6.1 J*	3.3	*0.056 J*	*ND*	6.36	79.8	*ND*	15	*2.8 JN3*
May-2023	15	*NA*	*ND*	34.2	3.3	*ND*	*ND*	6.44	89.2	*ND*	30	*3 JN3*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-02***													
Nov-1993	NA	ND	ND	NA	ND	0.15	NA	ND	NA	ND	0.55	0.25	ND	0.24	NA
Apr-1994	NA	ND	ND	NA	ND	ND	NA	ND	NA	ND	0.11	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	0.14	NA	ND	ND	ND	0.62	1.8	ND	0.24	NA
Apr-1997	ND	ND	0.015	ND	ND	0.7	0.54	ND	ND	ND	0.26	0.24	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	0.296	0.317	ND	ND	ND	5.76	2.06	ND	0.266	0.266
Apr-1999	ND	ND	ND	ND	ND	0.263	0.285	ND	ND	ND	9.7	0.976	ND	0.268	0.276
Apr-2001	ND	ND	0.011	ND	ND	0.407	NA	0.019	ND	0.055	11.2	NA	0.002	0.311	NA
Mar-2002	ND	ND	0.011	ND	ND	0.455	0.17	ND	ND	0.015	20.2	1.69	ND	0.309	0.266
Mar-2003	ND	ND	ND	ND	ND	0.175	0.15	ND	ND	ND	0.609	0.421	ND	0.225	0.19
Apr-2004	ND	ND	ND	ND	ND	0.402	0.158	ND	ND	ND	3.89	0.572	ND	0.289	0.195
Apr-2005	ND	ND	0.011	ND	ND	0.695	0.247	ND	ND	ND	5.82	0.502	0.002	0.335	0.278
Mar-2006	ND	0.002	0.012	ND	ND	0.259	0.14	0.01	ND	0.013	18.5	ND	0.003	0.332	0.269
Mar-2007	ND	ND	0.013	ND	ND	0.165	0.158	ND	ND	0.02	3.08	0.175	ND	0.311	0.293
Mar-2008	ND	0.004	0.011	ND	ND	0.377	0.224	ND	ND	ND	2.93	0.165	ND	0.403	0.31
Mar-2009	ND	ND	ND	ND	ND	0.367	0.256	ND	ND	ND	4.14	0.325	ND	0.36	0.273
Apr-2010	ND	ND	ND	ND	ND	0.12	ND	ND	ND	ND	23.9	0.187	ND	0.32	0.213
Apr-2011	ND	ND	ND	ND	ND	0.257	0.227	ND	ND	ND	19.9	0.145	ND	0.391	0.264
Mar-2012	ND	ND	ND	ND	ND	0.226	0.223	ND	ND	ND	14.3	0.236	ND	0.441	0.411
Sep-2012	ND	ND	0.009 J	ND	ND	0.35	0.33	0.0016 J	0.000481 J	0.0028 J	5.6	0.278	0.000853 J	0.45	0.453
Mar-2013	ND	ND	0.0093 J	ND	ND	0.418	0.281	0.0017 J	0.000427 J	0.0031 J	5.84	0.18	ND	0.436	0.314
Oct-2013	ND	ND	0.0093	ND	ND	0.265	0.27	ND	0.000352 J	ND	1.11	0.371	ND	0.393	0.412

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-02***													
Mar-2014	0.000324 J	ND	0.0081 J	ND	ND	0.222	0.188	0.000473 J	0.000339 J	0.000538 J	1.18	0.422	ND	0.431	0.347
Oct-2014	0.000908 J	0.000509 J	0.0099 J	ND	ND	0.287	0.257	0.0024 J	0.000575 J	0.0077 J	11.2	0.255	ND	0.39	0.321
Apr-2015	0.000544 J	ND	0.0105	ND	ND	0.275	0.247	0.0022 J	0.000408 J	0.0024 J	8.26	0.743	ND	0.382	0.337
Nov-2015	0.000654 J	0.000454 J	0.0108	ND	ND	0.321	0.35	0.0048 J	0.000604 J	0.0047 J	11.9	0.395	0.000883 J	0.423	0.34
May-2016	0.0004 J	0.0017 J	0.0114	ND	ND	0.588	0.584	0.0046	0.003	0.0203	11.6	3.49	0.00099 J	0.49	0.498
Oct-2016	0.00058 J	0.0023 J	0.0095	ND	ND	0.382 J	0.368 J	0.008 J+	0.0029	0.035 J+	19.7	1.73	0.00036 J	0.498 J+	0.475
May-2017	ND	0.002 J	0.0088	ND	ND	0.546	0.42	0.0105	0.0025	0.0459	15	10.4	0.0006 J	0.568	0.555
Oct-2017	0.00059 J	0.0035 J	0.007	ND	ND	0.433	0.418	0.0161	0.0035	0.0677	19.8	12.2	0.00068 J	0.504	0.466
May-2018	0.00011 J	ND	0.014	0.000038 J	0.00005 J	0.51 J	0.52 J	0.0016 JB	0.00054	0.003	1.2	1.2	0.000091 JB	0.83 J	0.85 J
Nov-2018	ND	ND	0.011	ND	ND	0.52 J	0.49 J	0.0041 J	0.00049 J	0.00078 J	8.8	7.8	0.00016 J	0.87 J	0.82 J
May-2019	ND	ND	0.011	ND	ND	ND	ND	ND	0.00052	ND	4.4	3.9	ND	ND	ND
Oct-2019	0.000089 JB	ND	0.012	ND	0.00018 JB	0.41	0.41 J	0.0029 J	0.00056	0.0035	9.7	8.3	0.00014 JB	0.75	0.77 J
May-2020	0.000067 J	ND	0.01	ND	ND	0.51	0.51 J	0.0032 J	0.00064	0.002 J	16.2	13.9	ND	0.7	0.69 J
Oct-2020	0.00039 J	ND	0.011	ND	ND	0.36	0.31 J	0.01 JB	0.00064 J	ND	12.2	9.9	ND	0.59	0.53 J
Apr-2021	ND	ND	0.0085 J	ND	ND	0.26 J	0.27 J	0.0017 J	0.00062 J	ND	11.2	10.2	ND	0.53	0.53
Oct-2021	0.000084 JB	ND	0.0089	ND	ND	0.32 J	0.37 J	0.0027	0.00051 J	ND	8.2	7.3	ND	0.58	0.57
May-2022	ND	0.0014 JB	0.0085	ND	ND	0.29 J	0.43 J	0.0025 J	0.00049 J	ND	7.8	10.2	ND	0.35 J	0.48 J
Oct-2022	ND	ND	0.0083	ND	ND	0.33 J	0.32 J	0.0011 J	ND	ND	13.3	13.2	ND	0.48 J	0.48 J
May-2023	ND	ND	0.0082	ND	ND	0.36 J	0.39 J	0.00076 J	ND	ND	12.4	10.6	ND	0.52	0.5 J

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-02*												
Nov-1993	0.06	NA	ND	NA	0.62	NA	ND	NA	1.3	NA	NA	NA	ND
Apr-1994	0.007	NA	ND	NA	0.8	NA	ND	NA	1.6	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.73	NA	ND	ND	1.2	NA	ND	ND	0.01
Apr-1997	ND	0.012	ND	ND	2.1	1.8	ND	ND	1.1	1.9	ND	ND	0.039
Apr-1998	0.066	0.083	NA	ND	1.2	0.689	ND	ND	1.21	1.27	ND	ND	0.012
Apr-1999	0.036	0.037	NA	ND	ND	ND	ND	ND	1.19	1.21	ND	ND	ND
Apr-2001	0.039	NA	NA	0.026	1.57	NA	ND	ND	2.73	NA	ND	ND	0.031
Mar-2002	0.059	0.036	NA	ND	0.702	0.507	ND	ND	1.8	1.22	ND	ND	0.026
Mar-2003	0.015	0.017	NA	ND	1.09	ND	ND	ND	1.28	1.27	ND	ND	0.106
Apr-2004	0.044	0.024	ND	ND	0.983	ND	ND	ND	1.74	1.19	ND	ND	0.042
Apr-2005	0.028	0.013	ND	ND	0.8	0.72	ND	ND	1.52	1.29	ND	ND	0.064
Mar-2006	ND	ND	ND	ND	0.687	0.509	ND	ND	1.42	0.923	ND	ND	ND
Mar-2007	0.016	ND	ND	ND	ND	ND	ND	ND	1.13	1.06	ND	ND	0.019
Mar-2008	0.015	0.011	ND	ND	0.808	0.673	ND	ND	1.38	1.23	ND	ND	0.025
Mar-2009	0.017	ND	ND	ND	0.552	0.599	ND	ND	1.41	1.61	ND	ND	0.019
Apr-2010	0.021	ND	ND	ND	0.706	0.627	ND	ND	1.23	1.29	ND	ND	0.02
Apr-2011	0.018	ND	ND	ND	0.706	0.653	ND	ND	1.33	1.38	ND	ND	0.019
Mar-2012	0.018	ND	ND	ND	0.564	0.581	ND	ND	1.26	1.26	ND	ND	0.017
Sep-2012	0.0103	0.0076 J	ND	0.0016 J	0.656	0.635	ND	ND	1.33	1.3	0.000582 J	ND	0.0142
Mar-2013	0.0082 J	0.0054 J	0.000085 J	0.0014 J	0.66	0.591	ND	ND	1.33	1.25	ND	ND	0.0303
Oct-2013	0.0158	0.0143	ND	0.0014 J	0.616	0.619	ND	ND	1.38	1.44	0.000112 J	0.000996 J	0.0216
Mar-2014	0.0154	0.0099 J	ND	0.00098 J	0.652	0.703	ND	ND	1.38	1.46	ND	ND	0.0151

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-02***												
Oct-2014	0.0176	0.0112	*0.00005 J*	*0.0028 J*	0.691	0.717	*0.0013 J*	*ND*	1.41	1.48	*ND*	*ND*	0.0234
Apr-2015	0.0283	0.0204	*ND*	*0.0017 J*	0.76	0.721	*0.00072 J*	*ND*	1.42	1.46	*ND*	*0.000969 J*	0.0236
Nov-2015	0.0355	0.0112	*ND*	*0.004 J*	0.792	0.736	*0.000487 J*	*ND*	1.5	1.72	*ND*	*0.0011 J*	0.0201
May-2016	0.0867	0.0433	*ND*	0.0273	0.827	0.766	*ND*	*ND*	1.5	1.41	*ND*	0.001	0.13
Oct-2016	0.0331 R	0.0178	*ND*	*0.031 J+*	0.745	0.73	*ND*	*ND*	*1.63 J+*	1.59	*ND*	*0.00022 J*	*0.0191 J*
May-2017	0.109	0.0891	*ND*	0.029	0.755	0.763	*ND*	*ND*	1.38	1.63	*ND*	*ND*	*0.0162 J*
Oct-2017	0.14	0.117	*ND*	0.0432	0.739	0.685	*ND*	*ND*	1.32	1.27	*ND*	*ND*	*0.0241 J*
May-2018	0.016	0.017	*ND*	0.0023	*ND*	*ND*	*0.00046 J*	*ND*	*1.8 J*	*1.7 JB*	*ND*	0.0021	0.013
Nov-2018	0.15	0.18	*ND*	0.0043	*1.2 J*	*ND*	*0.00014 J*	*ND*	*1.8 J*	*1.8 J*	*ND*	*ND*	*0.0033 J*
May-2019	0.093	0.083	*ND*	0.0047	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	0.15	0.14	*ND*	0.0027	*ND*	*1.1 J*	*ND*	*ND*	*1.8 J*	*2.2 J*	*ND*	*ND*	0.0091 B
May-2020	0.19	0.19	*ND*	0.0031	*ND*	*ND*	*ND*	*ND*	*2.2 J*	*2.2 J*	*ND*	*0.00027 J*	*0.0047 J*
Oct-2020	0.17	0.15	*ND*	0.0032	*ND*	*ND*	*ND*	*ND*	*2.2 J*	*1.7 J*	*ND*	*0.0029 JB*	*ND*
Apr-2021	0.15	0.15	*ND*	*0.0019 J*	0.63	0.63	*ND*	*ND*	2.1	2	*ND*	*ND*	*ND*
Oct-2021	0.12	0.11	*ND*	*0.0023 J*	0.66	0.65	*ND*	*ND*	2	2	*0.000024 J*	*ND*	*ND*
May-2022	0.13	0.16	*ND*	*0.0021 J*	*0.45 J*	0.6	*ND*	*ND*	1.3	1.9	*ND*	*ND*	*ND*
Oct-2022	0.18	0.18	*ND*	*0.001 J*	0.63	0.65	*ND*	*ND*	1.7	1.6	*ND*	*ND*	*ND*
May-2023	0.17	0.15	*ND*	*0.00093 J*	0.6	*0.5 J*	*ND*	*ND*	1.9	1.4	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-02*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.21 J	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.99 J,B	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-02*																
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.24 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.6 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.7 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-02***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.76 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.68 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-02***															
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.89 J*	*0.41 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.35 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.28 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.164 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-02***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-02***															
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	1 B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-03A***											
Nov-1993	ND	ND	0.5	ND	21.6	ND	ND	5.15	88.3	4.2	64	2.75
Apr-1994	ND	18	0.1	31.9	5.5	ND	ND	5.12	28.7	1.1	22	ND
Apr-1995	5.2	5.2	ND	ND	13.8	ND	ND	6	49.3	3.5	ND	2.8
Apr-1997	ND	5	ND	ND	38	0.07	ND	NA	NA	ND	91	12
Apr-1998	4	4	0.22	ND	14	0.15	ND	6.85	52.7	ND	43	2.5
Apr-1999	ND	ND	0.16	ND	8.58	0.13	ND	4.97	44.1	ND	44	3
Apr-2000	1	1	0.76	ND	190	0.28	ND	5.1	298	4.99	379	37
Apr-2001	ND	NA	ND	ND	22.8	ND	ND	NA	NA	4.16	42	6.97
Mar-2002	1.2	1.2	0.34	ND	219	ND	ND	5	711	9.53	353	31.8
Mar-2003	ND	ND	ND	ND	189	ND	ND	4.9	970	13.2	191	40.7
Apr-2004	3	3	ND	ND	32.7	0.07	ND	5.7	120.2	2.07	67	8.7
Apr-2005	2.3	2.3	ND	16	35.6	0.08	ND	5.1	114.5	3.25	88	5.45
Mar-2006	3.8	3.8	ND	ND	17.2	0.1	ND	5.1	74.3	3.54	ND	3.72
Mar-2007	1.1	1.1	ND	ND	233	0.17	ND	5.1	845	8.42	373	34.3
Mar-2008	4.8	4.8	ND	ND	12.8	0.09	ND	5.2	64.7	2.96	29	3.84
Mar-2009	17	17	0.23	ND	20.1	ND	ND	5.1	90.7	3.22	53	4.42
Apr-2010	11.4	11.4	ND	ND	45.5	ND	ND	4.8	188.5	1.11	91	10.3
Apr-2011	8.3	8.3	ND	ND	19.6	ND	ND	4.7	60	1.58	55	3.69
Mar-2012	8.3	8.3	ND	ND	42	ND	ND	4.8	134.7	2.09	78	9.69
Sep-2012	11.1	11.1	ND	ND	30.3	ND	ND	5.9	111.2	3.08	93	6.68
Mar-2013	4.72	4.72	0.0887 J	ND	7.13	0.0421 J	ND	5.7	38.9	2.13	ND	3.36
Oct-2013	17.1	17.1	ND	10.1	45.6	0.0428 J	ND	5.5	159.8	6.59	96	8.13
Mar-2014	6.32	6.32	ND	ND	56.8	0.0633	ND	5.4	166.3	10.5	115	9.28
Oct-2014	26.4	26.4	ND	9 J	51.8	0.0908	ND	5.5	176.8	4.91	104	8.6
Apr-2015	4.68	4.68	0.155 J	ND	6.83	0.0594	ND	4	41.9	3.66	25	3.93
Nov-2015	ND	ND	ND	5 J	62.5	ND	ND	5.7	328	2.14	112	11.5
May-2016	ND	ND	ND	6 J	168	0.0605	ND	5.1	491	2.36	254	19.6
Oct-2016	1.88	1.88	ND	17	155	NA	NA	6.1	524	1.92	254	16.9
May-2017	ND	ND	ND	ND	105	0.103	ND	5.1	487	5.61	185	15.6
Oct-2017	3.72	3.72	ND	ND	207	0.0842	ND	6	663	8.01	257	20.8
May-2018	8 JB	ND	ND	7.9 J	119	ND	ND	NA	NA	9 J	184	18.2
Nov-2018	8 JB	ND	ND	12.2 J	101	ND	0.046	6.7	386.2	ND	161	15.6
May-2019	14	NA	0.31 ML	ND	61.7	ND	0.019	6.14	229.1	ND	121	6.5
Oct-2019	4 JH1	NA	ND	8.2 J	45.8	0.064 J	0.012	6.1	260.6	ND	100	5.4
May-2020	2 J	NA	ND	11.3 J	39.6	ND	0.027	5.97	197.3	ND	61	4.4
Oct-2020	2 J	NA	ND	9.3 J	48.6	ND	ND	5.98	228.1	ND	113	4.6
Apr-2021	2 J3c	NA	ND	10.5 J	54.6	0.068 J	ND	7	328.6	ND	102	3.8

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-03A***											
Oct-2021	*ND*	*NA*	*ND*	*10.5 J*	40.6	*ND*	*ND*	6.88	309.9	*ND*	64	4.02
May-2022	*8 J3c*	*NA*	*ND*	*12.4 J*	48.3	0.15	*0.008 J*	6.87	322.3	*ND*	82	4.5 N3
Oct-2022	22	*NA*	*ND*	*19.8 J*	171	*0.09 J*	*0.0079 J*	6.77	590.4	*ND*	204	12.2 N3
May-2023	14	*NA*	*ND*	52.4	172	*ND*	*ND*	6.64	749	*ND*	314	21.4 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-03A***													
Nov-1993	NA	ND	ND	NA	ND	0.36	NA	ND	NA	ND	3.7	2.4	ND	0.45	NA
Apr-1994	NA	ND	ND	NA	ND	ND	NA	ND	NA	ND	0.32	0.08	ND	7.3	NA
Apr-1995	ND	ND	ND	ND	ND	0.45	NA	ND	ND	ND	0.6	0.56	ND	0.4	NA
Apr-1997	ND	ND	0.057	ND	ND	1.8	1.3	ND	ND	ND	4.5	2.8	ND	1.4	1.2
Apr-1998	ND	ND	0.016	ND	ND	0.46	0.465	ND	ND	ND	7.02	3.87	ND	0.34	0.339
Apr-1999	ND	ND	0.014	ND	ND	0.587	0.591	ND	ND	ND	4.69	1.27	ND	0.361	0.334
Apr-2000	ND	ND	0.195	ND	ND	8.12	7.98	ND	ND	ND	4.54	3	ND	3.96	3.89
Apr-2001	ND	ND	0.039	ND	ND	1.47	NA	ND	ND	ND	8.19	NA	ND	0.802	NA
Mar-2002	ND	ND	0.183	ND	ND	7.3	7.51	ND	ND	ND	3.22	1.4	ND	3.3	3.33
Mar-2003	ND	ND	0.31	ND	ND	8.68	8.46	ND	ND	ND	2.32	1.61	ND	4.61	4.43
Apr-2004	ND	ND	0.038	ND	ND	1.83	1.62	ND	ND	ND	3.39	1.07	ND	1.01	0.924
Apr-2005	ND	ND	0.036	ND	ND	1.02	1.02	ND	ND	ND	5.4	2.96	ND	0.704	0.685
Mar-2006	ND	ND	0.014	ND	ND	0.898	0.683	ND	ND	ND	6.28	0.653	ND	0.36	0.343
Mar-2007	ND	ND	0.176	ND	ND	9.17	8.74	ND	ND	ND	3.13	1.55	ND	2.78	2.62
Mar-2008	ND	ND	0.017	ND	ND	0.878	0.84	ND	ND	ND	2.98	1.72	ND	0.399	0.377
Mar-2009	ND	ND	0.018	ND	ND	1.04	0.964	ND	ND	ND	14.6	7.91	ND	0.443	0.419
Apr-2010	ND	ND	0.031	ND	ND	0.654	1.77	ND	ND	ND	13.7	9.24	ND	1.02	0.971
Apr-2011	ND	ND	0.015	ND	ND	0.812	0.751	ND	ND	ND	15.9	14	ND	0.402	0.377
Mar-2012	ND	ND	0.033	ND	ND	2.13	1.97	ND	ND	ND	11.1	2.3	ND	1.06	0.98
Sep-2012	ND	ND	0.0218	0.000066 J	ND	1.6	1.49	0.0018 J	0.0012 J	0.0019 J	7.83	3.83	ND	0.651	0.6
Mar-2013	ND	ND	0.0133	0.000107 J	ND	0.784	0.638	0.0015 J	0.0011 J	0.0014 J	3.34	1.27	ND	0.34	0.278

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-03A***													
Oct-2013	ND	ND	0.0286	ND	ND	1.95	1.91	0.000793 J	0.0025	0.0014 J	16.3	17.6	0.000568 J	0.791	0.747
Mar-2014	ND	0.001 J	0.0289	ND	0.000177 J	2.63	2.43	0.0051 J	0.0021 J	0.0041 J	14.9	2.44	0.0024	0.658	0.799
Oct-2014	0.000393 J	0.0013 J	0.0271	ND	0.00013 J	2.02	1.97	0.000888 J	0.0014 J	0.0033 J	27.7	14.9	0.0011 J	0.865	0.848
Apr-2015	0.0016 J	0.000766 J	0.0135	ND	0.000106 J	0.858	0.839	0.000666 J	0.0013 J	0.0033 J	5.19	1.13	ND	0.434	0.393
Nov-2015	0.000548 J	0.000437 J	0.0321	ND	0.000323 J	2.79	2.71	0.000539 J	0.0015 J	0.0027 J	28.6	24.5	0.00049 J	1.1	1.06
May-2016	ND	0.00058 J	0.0897	0.00024 J,B	0.00024 J	4.38	4.07	0.00088 J	0.0043	0.0015 J,B	3.55	2.24	0.0011 J	2.1	2.09
Oct-2016	ND	0.0021 J	0.0614	ND	ND	4.02	4.19	0.0027 J+	0.0034	0.0093 J+	55.5	34.8	0.0022	1.68 J+	1.68
May-2017	ND	0.00098 J	0.0824	0.00016 J	ND	3.66	3.71	0.0013 J	0.0061	0.0046	7.74	2.93	0.00075 J	1.57	1.63
Oct-2017	ND	ND	0.0982	0.00014 J	ND	5.44	5.13	0.0046	0.0025	0.00065 J	3.11	2.21	0.00021 J	1.75	1.89
May-2018	0.000066 J	ND	0.079	0.00012 J	0.000094 J	4.5	4.4	0.0026 JB	0.0018	0.0017 J	2.7	2.8	0.00018 J	1.7	1.6
Nov-2018	ND	0.00017 J	0.056	ND	0.000022 J	3.5	3.4	0.0026 J	0.00044 J	0.0019 J	52	48.2	0.00013 J	1.6	1.5
May-2019	ND	ND	0.025	ND	ND	1.4	1.6	ND	ND	ND	54.2	53.4	ND	ND	ND
Oct-2019	0.00011 JB	ND	0.014	ND	0.00025 JB	1.2	1.2	0.002 JB	0.0002 J	0.0016 J	52	47.4	0.000067 JB	0.58	0.59 J
May-2020	0.00025 J	ND	0.011	ND	ND	1	1	0.0027 J	0.0002 J	0.0014 J	29.5	27.6	ND	0.44	0.44 J
Oct-2020	0.00042 J	ND	0.011	ND	ND	1.1	0.97 J	0.0078 JB	ND	ND	36.8	33	ND	0.46	0.4 J
Apr-2021	ND	ND	0.014	ND	ND	0.84 J	0.88 J	0.00071 J	ND	ND	64	62.9	ND	0.42	0.42
Oct-2021	0.00007 JB	ND	0.011	ND	ND	0.94	0.87	0.00094 J	0.00017 J	ND	59.3	52.9	ND	0.41 J	0.38 J
May-2022	ND	0.0023 JB	0.012	ND	ND	1	1.1	0.00097 J	0.00045 J	0.001 J	56.3	59	ND	0.45 J	0.48 J
Oct-2022	0.00033 JB	ND	0.028	ND	ND	3	3.1	0.00089 J	ND	0.00074 J	76.3	77	ND	1.1	1.2
May-2023	ND	0.0012 J	0.054	ND	ND	5.4	5.5	0.0017 J	ND	0.004 J	74.3	62.5 P6	0.00054 J	2	2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-03A*												
Nov-1993	0.12	NA	ND	NA	1.1	NA	ND	NA	26.1	NA	NA	NA	0.02
Apr-1994	0.038	NA	ND	NA	0.79	NA	ND	NA	4.1	NA	NA	NA	0.009
Apr-1995	0.02	NA	ND	ND	0.99	NA	ND	ND	5.7	NA	ND	ND	0.03
Apr-1997	0.13	0.095	ND	ND	2.8	2.8	ND	ND	26	26	ND	ND	ND
Apr-1998	0.099	0.099	NA	ND	0.643	1.57	ND	ND	6.95	7.43	ND	ND	0.01
Apr-1999	0.064	0.063	NA	ND	ND	1.09	ND	ND	4.03	4.01	ND	ND	ND
Apr-2000	0.195	0.201	NA	ND	2	2.15	ND	ND	114	112	ND	ND	0.01
Apr-2001	0.92	NA	NA	ND	1.35	NA	ND	ND	19.2	NA	ND	ND	ND
Mar-2002	0.134	0.131	NA	ND	2.72	2.54	ND	ND	108	103	ND	ND	0.015
Mar-2003	0.192	0.184	NA	ND	2.02	1.02	ND	ND	161	154	ND	ND	0.015
Apr-2004	0.061	0.057	ND	ND	1.31	ND	ND	ND	20.8	19.7	ND	ND	0.011
Apr-2005	0.09	0.084	ND	ND	1.19	1.19	ND	ND	21	20.2	ND	ND	ND
Mar-2006	0.01	ND	ND	ND	0.552	0.565	ND	ND	9.06	8.7	ND	ND	ND
Mar-2007	0.103	0.099	ND	ND	1.27	1.18	ND	ND	100	107	ND	ND	0.032
Mar-2008	0.046	0.037	ND	ND	0.776	0.728	ND	ND	8.12	7.66	ND	ND	ND
Mar-2009	0.125	0.104	ND	0.015	0.649	0.69	ND	ND	10.9	11.4	ND	ND	0.012
Apr-2010	0.736	0.233	ND	ND	1.35	1.16	ND	ND	26.4	37.7	ND	ND	ND
Apr-2011	0.184	0.157	ND	ND	0.895	0.887	ND	ND	12.6	12.4	ND	ND	0.013
Mar-2012	0.178	0.076	ND	ND	1.06	0.933	ND	ND	26.7	25.3	ND	ND	ND
Sep-2012	0.0886	0.0681	ND	0.0027 J	0.789	0.738	ND	ND	20	18.9	ND	ND	0.0048 J
Mar-2013	0.0367	0.0268	0.000069 J	0.0071 J	0.674	0.541	ND	ND	4.59	3.96	ND	ND	0.0143
Oct-2013	0.162	0.164	ND	0.0124	0.886	0.806	ND	ND	31.9	34.2	ND	0.0011 J	0.0143

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-03A***												
Mar-2014	0.0648	0.0499	ND	0.0078 J	1.07	0.939	ND	ND	38.7	38.3	ND	0.0122	0.0105
Oct-2014	0.24	0.193	ND	0.0045 J	1.17	1.14	0.0018 J	ND	32.8	32.5	ND	ND	0.0107
Apr-2015	0.0551	0.0339	ND	0.007 J	0.763	0.771	ND	ND	5.44	5.33	ND	ND	0.0076 J
Nov-2015	0.359	0.312	ND	0.0048 J	1.06	1.07	ND	ND	35.6	35.5	ND	ND	0.0084 J
May-2016	0.124	0.103	ND	0.0109	1.52	1.36	ND	ND	71.1	67.1	ND	0.00041 J	0.0163 J
Oct-2016	0.382 R	0.304	ND	0.0199 J+	1.22	1.23	ND	ND	68.1	62.4	ND	0.00053 J	0.0124 J
May-2017	0.111	0.0807	ND	0.0373	1.21	1.23	ND	ND	57.9	58.4	ND	ND	0.0075 J
Oct-2017	0.102	0.093	ND	0.0057 B	1.26	1.38	ND	ND	72.9	82	ND	ND	ND
May-2018	0.079	0.081	ND	0.0034	ND	0.95 J	0.00098 J	ND	81.7	74.2	0.00018 J	0.002	0.0073
Nov-2018	0.76	0.75	ND	0.0025	ND	ND	0.00012 J	ND	47.2	47.9	ND	ND	0.0032 J
May-2019	0.64	0.61	ND	0.00082	ND	ND	ND	ND	21	22.2	ND	ND	ND
Oct-2019	0.49	0.48	ND	0.00068	ND	ND	ND	ND	19.4	19.6	ND	ND	0.0088 B
May-2020	0.36	0.34	ND	0.0012	ND	ND	ND	ND	19.5	19.6	ND	ND	0.0044 J
Oct-2020	0.39	0.35	ND	ND	ND	ND	ND	ND	23	19	ND	0.0039 JB	ND
Apr-2021	0.45	0.46	ND	ND	0.54	0.57	ND	ND	16	16.8	ND	ND	ND
Oct-2021	0.51	0.47	ND	0.00071 J	0.57	0.53	ND	ND	15.4	14.7	ND	ND	ND
May-2022	0.53	0.55	ND	0.0025 J	0.68	0.65	ND	ND	21.6	24	ND	ND	ND
Oct-2022	0.66	0.67	ND	0.0009 J	1.1	1.2	ND	ND	58.7	61.7	ND	ND	0.0042 J
May-2023	0.75	0.68	ND	0.011	1.4	1.5	ND	ND	77.8	79.1 P6	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-03A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	18	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	5.8	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.14 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-03A*																
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.03 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.26 J*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.4 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-03A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*0.6 J*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.55 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.51 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-03A***															
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.76 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.68 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.36 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.48 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.22 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-03A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-03A***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.278 J*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05B***											
Nov-1993	ND	ND	0.1	ND	1.6	0.2	ND	3.73	44.6	3.8	32	1.54
Apr-1994	ND	ND	ND	ND	1.3	ND	ND	4.95	24.4	2.7	ND	ND
Aug-1994	ND	ND	ND	ND	1.6	0.4	ND	4.9	20.4	4.3	ND	2.61
Sep-1994	ND	ND	ND	ND	1.6	0.3	ND	4.8	19.3	4.8	10	2.8
Nov-1994	ND	ND	ND	ND	1.5	0.2	ND	4.5	19.5	4.3	42	1.7
Apr-1995	ND	ND	ND	ND	1.4	ND	ND	4.7	18.7	4.2	ND	1.3
Apr-1997	ND	ND	ND	ND	ND	0.15	ND	NA	NA	ND	35	3.8
Oct-1997	ND	ND	0.2	ND	1.06	ND	ND	5.58	19.8	1.86	21	ND
Apr-1998	3	3	0.22	ND	1.42	ND	ND	5.71	17.86	3.05	15	3.4
Apr-1999	ND	ND	0.27	ND	2.2	ND	ND	4.52	19.24	1.52	32	1.7
Oct-1999	ND	ND	0.06	ND	1.69	ND	ND	4.79	18.92	1.83	32	1.8
Apr-2000	ND	ND	ND	ND	2.52	0.15	ND	4.99	15	1.13	23	1.8
Oct-2000	ND	NA	ND	ND	1.54	ND	ND	4.57	15.62	5.31	14	2.71
Apr-2001	ND	NA	ND	ND	1.2	ND	ND	NA	NA	ND	10	1.92
Sep-2001	ND	ND	ND	ND	2.62	ND	ND	4.61	20	7.5	26	1.99
Mar-2002	ND	ND	ND	ND	1.34	ND	ND	4.7	18	1.9	ND	1.55
Sep-2002	ND	ND	ND	ND	1.34	ND	ND	4.4	19.8	3.95	27	2.95
Mar-2003	ND	ND	ND	ND	2.17	ND	ND	4.8	18.2	2.69	17	2.53
Oct-2003	ND	ND	ND	ND	1.51	0.142	ND	3.8	19.4	2.74	49	10.5
Apr-2004	ND	ND	ND	ND	1.7	0.12	ND	5	15.2	3.17	ND	3.01
Oct-2004	ND	ND	ND	15	1.61	0.11	ND	4.5	19.9	2.56	31	1.77
Apr-2005	3.2	3.2	ND	ND	2.53	0.09	ND	5.2	18.4	ND	44	3.32
Oct-2005	1.1	1.1	ND	ND	1.83	0.12	ND	4.7	14.7	4.29	33	1.76
Mar-2006	1.4	1.4	ND	ND	1.68	0.13	ND	4	16.1	4.73	ND	0.971
Sep-2006	1.2	1.2	ND	ND	1.78	0.12	ND	4.6	16.2	4.13	18	1.42
Mar-2007	1.8	1.8	ND	ND	1.91	0.14	ND	4.8	15.4	3.74	12	1.61
Sep-2007	ND	ND	0.31	ND	1.68	0.13	ND	4.2	14.6	3.39	28	1.33
Mar-2008	ND	ND	ND	10	1.9	0.12	ND	4.4	15.6	4.55	28	1.51
Sep-2008	1.8	1.8	ND	ND	1.74	0.06	ND	4.7	15	5.72	21	1.7
Mar-2009	1.2	1.2	ND	ND	1.65	0.1	ND	4.7	16.8	6.58	16	1.96
Oct-2009	1.4	1.4	ND	ND	1.58	0.14	ND	3.9	15.5	2.74	19	1.47
Apr-2010	1.5	1.5	ND	ND	1.53	0.12	ND	4.6	17.2	2.94	22	1.2
Oct-2010	ND	ND	ND	ND	1.95	0.08	ND	3.8	15.6	2.67	ND	1.62
Apr-2011	1.1	1.1	ND	ND	1.84	0.13	ND	4.1	16.8	2.11	27	1.54
Sep-2011	1.3	1.3	0.21	ND	1.62	0.1	ND	4.5	15.8	2.25	32	1.44
Mar-2012	1.2	1.2	ND	ND	1.82	0.1	ND	3.8	15.8	3.4	ND	1.72
Sep-2012	1	1	ND	ND	1.84	0.12	ND	3.8	16.4	1.9	22	1.59

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05B***											
Mar-2013	1.6	1.6	*ND*	*ND*	2.02	0.117	*ND*	4.8	16.6	2.39	12	1.75
Oct-2013	1.72	1.72	*ND*	*ND*	1.88	0.12	*ND*	4.8	16.4	2.52	*ND*	2.23
Mar-2014	1.4	1.4	*ND*	*ND*	1.87	0.115	*ND*	5.1	16.2	2.72	*ND*	1.59
Oct-2014	*ND*	*ND*	*ND*	*9 J*	2.1	0.129	*ND*	4.1	16.1	2.36	*ND*	1.61
Apr-2015	1.92	1.92	*ND*	*ND*	1.94	0.122	*ND*	4.4	15.3	2.86	*ND*	1.89
Nov-2015	*ND*	*ND*	*ND*	*ND*	1.93	0.144	*ND*	4.9	27.7	2.94	*ND*	1.52
May-2016	2.76	2.76	*ND*	*ND*	2.13 B	0.158	*ND*	4.7	26	3.66	57	3
Oct-2016	1.04	1.04	*ND*	*ND*	1.99	*NA*	*NA*	4.8	28.4	4.36	28	2.8
May-2017	2.6	2.6	*ND*	35	2.29	0.211	*ND*	4.5	32.1	4.68	*22 J*	3.5
Oct-2017	*ND*	*ND*	*ND*	*ND*	1.91	0.182	*ND*	4.9	33.5	2.97	*ND*	1.5
May-2018	*1 JB*	*ND*	*ND*	*7.9 J*	*2 J*	*ND*	*ND*	4.5	26.8	*ND*	*ND*	*1.8 J*
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	*1.8 J*	0.17	*ND*	4.27	18.5	*ND*	*ND*	*1.6 J*
May-2019	*ND*	*NA*	*ND*	*ND*	*ND*	0.18	*ND*	4.23	14.5	*ND*	27	*ND*
Oct-2019	*ND*	*NA*	*ND*	*ND*	*1.5 J*	0.19	*ND*	4.34	19.5	*ND*	20	1.2
May-2020	*ND*	*NA*	*ND*	*ND*	*1.7 J*	0.17	*ND*	4.4	18.9	*ND*	19	*1.8 J*
Oct-2020	*ND*	*NA*	*ND*	*ND*	*1.6 J*	0.18	*ND*	4.26	17.6	*ND*	11	1.6
Apr-2021	14	*NA*	*ND*	*ND*	*1.8 J*	0.2	*ND*	4.96	22.7	*ND*	*ND*	3.45
Oct-2021	*ND*	*NA*	*ND*	*ND*	*1.5 J*	0.22	*ND*	4.95	51.6	*ND*	*ND*	*1.78 J*
May-2022	*ND*	*NA*	*ND*	*ND*	*1.8 J*	0.18	*ND*	4.52	42.2	*ND*	*ND*	*2 JN3*
Oct-2022	*ND*	*NA*	*ND*	*ND*	*2.2 J*	0.2	*ND*	4.28	39.4	*ND*	*ND*	*1.6 JN3*
May-2023	*ND*	*NA*	*ND*	*ND*	*1.6 J*	0.22	*ND*	4.67	39.4	*ND*	*ND*	*2.2 JN3*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-05B*													
Nov-1993	NA	ND	ND	NA	ND	0.32	NA	ND	NA	ND	0.03	ND	ND	0.18	NA
Apr-1994	NA	ND	ND	NA	ND	0.011	NA	ND	NA	ND	67	3	ND	0.036	NA
Aug-1994	NA	ND	ND	NA	ND	0.78	NA	ND	NA	ND	ND	ND	ND	0.16	NA
Sep-1994	NA	ND	ND	NA	ND	0.82	NA	ND	NA	ND	0.11	0.04	**0.038**	0.19	NA
Nov-1994	NA	ND	ND	NA	ND	0.4	NA	ND	NA	0.03	ND	ND	ND	0.17	NA
Apr-1995	ND	ND	0.8	ND	ND	0.24	NA	ND	ND	ND	3.2	ND	ND	0.18	NA
Oct-1996	ND	ND	0.006	ND	ND	0.58	0.49	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	0.72	0.48	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	0.572	0.507	ND	ND	0.013	0.652	ND	ND	0.208	0.166
Apr-1998	ND	ND	ND	ND	ND	1.01	3.15	ND	ND	ND	0.378	0.019	ND	0.213	0.545
Apr-1999	ND	ND	ND	ND	ND	0.441	0.495	ND	ND	ND	ND	ND	ND	0.169	0.163
Oct-1999	ND	ND	ND	ND	ND	0.48	0.497	ND	ND	ND	0.11	ND	ND	0.176	0.168
Apr-2000	ND	ND	ND	ND	ND	0.451	0.457	ND	ND	ND	ND	ND	ND	0.169	0.157
Oct-2000	ND	ND	ND	ND	ND	0.716	0.417	ND	ND	0.015	0.104	ND	ND	0.224	0.16
Apr-2001	ND	ND	ND	ND	ND	0.471	NA	ND	ND	ND	0.075	NA	ND	0.18	NA
Sep-2001	ND	ND	ND	ND	ND	0.476	0.432	ND	ND	0.023	58.1	0.079	**0.02**	0.193	0.157
Mar-2002	ND	ND	ND	ND	ND	0.363	0.442	ND	ND	ND	0.144	ND	ND	0.157	0.168
Sep-2002	ND	ND	ND	ND	ND	0.829	0.368	ND	ND	0.014	0.136	ND	ND	0.214	0.159
Mar-2003	ND	ND	ND	ND	ND	0.699	0.673	ND	ND	ND	ND	ND	ND	0.192	0.178
Oct-2003	ND	ND	ND	ND	ND	0.807	0.504	ND	ND	0.028	0.194	ND	0.01	0.204	0.168
Apr-2004	ND	ND	ND	ND	ND	0.808	0.591	ND	ND	0.012	0.103	ND	ND	0.239	0.177

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05B***													
Oct-2004	ND	ND	ND	ND	ND	0.429	0.423	ND	ND	ND	0.094	ND	ND	0.169	0.157
Apr-2005	ND	ND	0.011	ND	ND	0.78	0.816	ND	ND	ND	30.5	0.897	0.007	0.333	0.342
Oct-2005	ND	ND	ND	ND	ND	0.431	0.428	ND	ND	ND	0.286	ND	ND	0.166	0.167
Mar-2006	ND	ND	ND	ND	ND	0.233	0.226	ND	ND	ND	ND	ND	ND	0.095	0.099
Sep-2006	ND	ND	ND	ND	ND	0.332	0.338	ND	ND	ND	0.158	ND	ND	0.144	0.138
Mar-2007	ND	ND	ND	ND	ND	0.417	0.409	ND	ND	ND	0.058	ND	ND	0.138	0.165
Sep-2007	ND	0.002	ND	ND	ND	0.319	0.327	ND	ND	ND	ND	ND	ND	0.13	0.126
Mar-2008	ND	0.003	ND	ND	ND	0.363	0.391	ND	ND	ND	0.082	ND	ND	0.147	0.153
Sep-2008	ND	ND	ND	ND	ND	0.42	0.263	ND	ND	ND	0.176	ND	ND	0.163	0.152
Mar-2009	ND	ND	ND	ND	ND	0.497	0.31	ND	ND	ND	0.175	ND	ND	0.175	0.125
Oct-2009	ND	ND	ND	ND	ND	0.323	0.35	ND	ND	ND	0.157	ND	ND	0.16	0.161
Apr-2010	ND	ND	ND	ND	ND	0.296	0.212	ND	ND	ND	0.165	ND	ND	0.113	0.094
Oct-2010	ND	ND	ND	ND	ND	0.392	0.289	ND	ND	ND	0.213	ND	ND	0.156	0.1
Apr-2011	ND	ND	ND	ND	ND	0.362	0.302	ND	ND	ND	0.101	ND	ND	1.55	0.123
Sep-2011	ND	ND	ND	ND	ND	0.356	0.381	ND	ND	ND	0.148	ND	ND	0.133	0.165
Mar-2012	ND	ND	ND	ND	ND	0.323	0.337	ND	ND	ND	0.062	ND	ND	0.222	0.216
Sep-2012	ND	ND	0.0043 J	0.000281 J	ND	0.381	0.372	ND	0.0035 J	0.0077 J	0.0666	0.0131 J	0.000497 J	0.154	0.16
Mar-2013	ND	ND	0.0059 J	0.000283 J	ND	0.468	0.464	0.0049 J	0.0034 J	0.0107	0.947	0.0082 J	0.0014 J	0.141	0.115
Oct-2013	0.000873 J	ND	0.0049 J	0.000283 J	ND	0.684	0.602	0.0084 J	0.0035 J	0.0072 J	0.253	0.0668	0.000971 J	0.126	0.11
Mar-2014	0.000335 J	ND	0.0036 J	0.000313 J	ND	0.371	0.336	0.000381 J	0.0031 J	0.0064 J	0.0871 J	0.0073 J	0.000355 J	0.161	0.142
Oct-2014	0.000609 J	ND	0.0077 J	0.00036 J	ND	0.374	0.308	0.0029 J	0.0033 J	0.008 J	0.828	0.0991	0.0011 J	0.165	0.101
Apr-2015	0.0013 J	ND	0.0047 J	0.00023 J	0.000094 J	0.479	0.324	0.000635 J	0.0035 J	0.0075 J	0.157	0.0084 J	ND	0.169	0.105
Nov-2015	0.000506 J	ND	0.0042 J	0.000288 J	ND	0.357	0.221	0.00062 J	0.0037 J	0.0093 J	0.0924	ND	0.000591 J	0.153	0.0846
May-2016	0.00052 J	ND	0.0051	0.00026 J,B	ND	0.857	0.608	0.0011 J	0.0031	0.0058	0.557	ND	0.0025	0.201	0.185 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05B***													
Oct-2016	*0.00069 J*	*ND*	0.0059	*0.00025 J*	*0.00074 J*	0.767	0.658	*0.0014 J+*	0.0033	*0.0044 J+*	0.734	*ND*	0.0027	*0.216 J+*	*0.191 J*
May-2017	*0.00076 J*	*ND*	0.0055	*0.00023 J*	*ND*	0.976	0.705	*0.0011 J*	0.0031	0.0043	0.423	*ND*	0.0027	0.264	0.209
Oct-2017	*ND*	*ND*	0.0045	*0.00023 J*	*ND*	*0.366 J*	*0.37 J*	*0.0015 J*	0.0035	*0.0031 J*	*ND*	*ND*	*ND*	*0.15 J*	*0.164 J*
May-2018	*0.000066 J*	*ND*	0.0044	*0.00022 J*	*0.000056 J*	*0.38 J*	*0.36 J*	*0.0047 J*	0.0033	0.0034 B	*0.017 J*	*ND*	*0.000041 J*	*0.22 J*	*0.17 J*
Nov-2018	*ND*	*0.000041 J*	0.0039	*0.00024 J*	*0.000062 J*	*0.47 J*	1.6	0.011	0.0034	**0.0037 D6**	0.086	0.026	*0.00014 J*	*0.11 J*	*0.19 J*
May-2019	*ND*	*ND*	0.0042	*ND*	*ND*	*ND*	*ND*	0.011	0.0041	0.004	*ND*	0.033	*ND*	*ND*	*ND*
Oct-2019	*0.000052 J*	*ND*	0.0041	*0.00022 J*	*0.0002 J*	0.31	*0.75 J*	0.017	0.0052	0.0086	0.11	0.058	*0.00011 J*	*0.11 J*	*0.17 J*
May-2020	*ND*	*ND*	*0.0049 J*	*0.00028 J*	*ND*	*0.49 J*	*0.68 J*	0.0073	*0.0034 J*	0.0085	0.072	*ND*	*ND*	*0.15 J*	*0.17 J*
Oct-2020	*0.0005 J*	*ND*	*0.0045 J*	*ND*	*ND*	0.48	*0.65 J*	*0.013 J*	0.0042	*ND*	*0.061 J*	0.03	*ND*	*0.11 J*	*0.18 J*
Apr-2021	*ND*	*ND*	*0.0043 J*	*0.00023 J*	*ND*	1	1.1	*0.0049 J*	*0.0034 J*	0.0059	*0.053 J*	*ND*	*ND*	0.23	0.23
Oct-2021	*0.000053 JB*	*ND*	0.0044	*0.00024 J*	*ND*	*0.44 J*	0.509	0.013	0.0048	0.011	0.14	0.0576	*0.000061 J*	*0.16 J*	*0.186 J*
May-2022	*ND*	*ND*	0.0056	*0.00033 J*	*ND*	*0.49 J*	0.61	0.011	0.0051	0.016	0.07	0.064	*ND*	*0.19 J*	*0.2 J*
Oct-2022	*ND*	*ND*	0.0044	*0.00024 J*	*ND*	*0.39 J*	*0.43 J*	0.01	0.0044	0.012	0.1	0.062	*ND*	*0.15 J*	*0.18 J*
May-2023	*ND*	*ND*	0.0044	*0.00026 J*	*ND*	0.56	0.61	0.0078	0.0043	0.0067	0.071	0.056	*ND*	*0.2 J*	*0.21 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-05B*												
Nov-1993	0.05	NA	ND	NA	0.47	NA	ND	NA	1.1	NA	NA	NA	0.01
Apr-1994	0.08	NA	ND	NA	0.58	NA	ND	NA	1.6	NA	NA	NA	ND
Aug-1994	0.01	NA	ND	NA	0.58	NA	ND	NA	0.76	NA	NA	NA	0.05
Sep-1994	0.01	NA	ND	NA	0.37	NA	ND	NA	0.85	NA	NA	NA	1.1
Nov-1994	ND	NA	ND	NA	0.3	NA	ND	NA	0.75	NA	NA	NA	0.02
Apr-1995	ND	NA	ND	ND	0.53	NA	ND	0.01	0.82	NA	ND	ND	0.04
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	2.2	1.7	ND	ND	0.13
Apr-1997	ND	ND	0.0018	ND	1.1	1.8	ND	ND	1.9	1	ND	ND	0.039
Oct-1997	ND	ND	NA	0.015	ND	ND	ND	ND	0.971	0.907	ND	ND	0.049
Apr-1998	ND	0.012	NA	0.022	1.16	ND	ND	ND	0.898	1.11	ND	ND	0.107
Apr-1999	ND	ND	NA	ND	ND	1.05	ND	ND	0.93	0.926	ND	ND	0.024
Oct-1999	ND	ND	NA	ND	ND	ND	ND	ND	0.95	0.91	ND	ND	0.027
Apr-2000	ND	ND	NA	ND	ND	ND	ND	ND	0.96	0.974	ND	ND	0.019
Oct-2000	ND	ND	NA	ND	0.712	0.457	ND	ND	1.74	0.939	ND	ND	0.023
Apr-2001	ND	NA	NA	ND	1.28	NA	ND	ND	0.993	NA	ND	ND	0.018
Sep-2001	0.125	ND	NA	ND	0.573	0.733	ND	ND	0.963	0.909	ND	ND	2.11
Mar-2002	ND	ND	NA	ND	0.773	ND	ND	ND	0.936	0.975	ND	ND	0.022
Sep-2002	ND	ND	NA	ND	1.26	ND	ND	ND	1.58	0.873	ND	ND	0.023
Mar-2003	ND	ND	NA	ND	ND	ND	ND	ND	0.92	0.941	ND	ND	0.033
Oct-2003	ND	ND	NA	ND	1.93	1.06	ND	ND	1.54	0.922	ND	ND	0.025
Apr-2004	ND	ND	ND	ND	0.668	ND	ND	ND	1.37	0.976	ND	ND	0.058
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	0.914	0.604	ND	ND	0.024

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05B***												
Apr-2005	0.018	0.016	ND	ND	ND	0.54	ND	ND	1.36	1.35	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	0.845	0.812	ND	ND	0.013
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	0.63	0.588	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.52	0.51	ND	ND	0.783	0.777	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	0.764	0.695	ND	ND	0.02
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	0.804	0.778	ND	ND	0.015
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	0.834	0.829	ND	ND	0.01
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	0.831	0.753	ND	ND	0.057
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.12	0.887	ND	ND	0.02
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	0.81	0.791	ND	ND	0.015
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	0.847	0.841	ND	ND	0.021
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	0.857	0.87	ND	ND	0.018
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	0.907	0.899	ND	ND	0.02
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	0.983	0.947	ND	ND	0.013
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	0.9	0.901	ND	ND	0.013
Sep-2012	0.0039 J	0.0036 J	ND	0.0055 J	0.39 J	0.321 J	ND	ND	0.948	0.903	ND	ND	0.0168
Mar-2013	0.0044 J	0.0027 J	0.000072 J	0.0068 J	0.48 J	0.435 J	ND	ND	0.909	1.02	ND	ND	0.0321
Oct-2013	0.0043 J	0.0035 J	ND	0.005 J	0.347 J	0.302 J	ND	ND	0.753	0.744	0.000122 J	0.0084 J	0.0276
Mar-2014	0.0032 J	0.003 J	ND	0.0052 J	0.396 J	0.401 J	ND	ND	0.903	0.932	ND	ND	0.02
Oct-2014	0.0046 J	0.0027 J	ND	0.0064 J	0.551	0.443 J	0.0012 J	ND	0.984	1.1	ND	0.0018 J	0.0197
Apr-2015	0.0039 J	0.0021 J	ND	0.0059 J	0.47 J	0.453 J	ND	ND	1.05	1.09	ND	ND	0.023
Nov-2015	0.004 J	0.002 J	ND	0.0062 J	0.414 J	0.42 J	ND	ND	1.09	1.15	ND	ND	0.0205
May-2016	0.0064	0.0043 B	ND	0.0062	0.464	0.451	ND	ND	2.4	1.98	ND	0.0003 J	0.809
Oct-2016	0.0079 R	0.0042	ND	0.0057 J+	0.515	0.52	ND	ND	2.49 J+	2.44	ND	0.00037 J	0.55

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05B***												
May-2017	0.008	*0.004 J*	*ND*	0.0055	0.488	0.477	*ND*	*ND*	4	3.23	*ND*	*0.00028 J*	0.835
Oct-2017	0.0042	*0.0035 J*	*ND*	0.0074	0.427	*0.395 J*	*ND*	*ND*	1.01	1.04	*ND*	*ND*	*0.0091 J*
May-2018	0.0036 B	0.0031	*ND*	0.008	*ND*	*ND*	*0.00048 JB*	*ND*	*1.5 J*	*1.2 J*	*ND*	*ND*	0.0088 B
Nov-2018	0.0037	0.0041	*ND*	0.015	*ND*	*ND*	*0.00013 J*	*ND*	*1.2 J*	*1.2 J*	*0.000076 J*	*0.00045 J*	0.0086 D6
May-2019	0.0048	0.0057	*ND*	0.013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0026	0.023
Oct-2019	0.006	0.0064	*ND*	0.018	*ND*	*ND*	*0.00054 J*	*0.00049 J*	*ND*	*ND*	*ND*	0.005	0.034
May-2020	*0.0041 J*	*0.0045 JB*	*ND*	0.011	*0.5 J*	*0.45 J*	*ND*	*ND*	1.2	1.3	*ND*	*ND*	0.017
Oct-2020	0.0049	0.0034	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.0035 J*	*ND*
Apr-2021	*0.0045 J*	*0.0042 J*	*0.00005 J*	*0.0092 J*	*0.47 J*	*0.49 J*	*ND*	*ND*	1.1	*0.98 J*	*ND*	*ND*	0.051
Oct-2021	0.0053	0.0062	*ND*	0.018	*0.4 J*	*0.424 J*	*ND*	*0.0003 J*	1.1	1.29 B	*0.000079 J*	*ND*	0.012
May-2022	*0.0048 J*	0.0065	*ND*	0.015	*0.44 J*	0.52	*ND*	*ND*	1.3	1.5	*0.00011 J*	*ND*	0.025
Oct-2022	0.0054	0.0075	*ND*	0.014	*0.39 J*	*0.47 J*	*ND*	*ND*	1.3	1.4	*ND*	*ND*	0.01
May-2023	0.005	0.0087	*ND*	0.012	0.52	0.53	*ND*	*ND*	1.4	1.4	*ND*	*ND*	0.016

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05B*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05B*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05B*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.8 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.5	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05B***															
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.18 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05B***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05B***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Aug-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-05B*															
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.1 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05B***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.705 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-06A***											
Nov-1993	18	18	0.5	288	17.2	0.6	ND	5.42	381	136	246	144
Apr-1994	46	46	0.3	31	12.4	ND	ND	5.62	302	71.6	187	98.05
Apr-1995	55.6	55.6	ND	40.6	14.2	ND	ND	6.5	349	66.5	203	129
Apr-1997	ND	70	ND	27	6	ND	ND	NA	NA	30	166	98
Apr-1998	101	101	0.34	28	3.76	0.141	ND	6.93	230	28.7	170	118
Apr-1999	77	77	0.75	24	5.94	ND	ND	6.29	366	67.8	130	143
Apr-2000	96	96	ND	27	5.99	ND	ND	8.36	219	46	181	133
Apr-2001	98	NA	ND	24	2.58	ND	ND	NA	NA	18.8	186	140
Mar-2002	109	109	ND	28	1.77	1.55	ND	7.9	391	80.5	276	194
Mar-2003	82	82	ND	19	5.12	ND	ND	7	243	27.3	146	110
Apr-2004	94	94	ND	14	2.4	ND	ND	7.1	207	30.7	215	132
Apr-2005	88	88	ND	28	2.4	ND	ND	6.8	241	34.6	175	128
Mar-2006	62	62	ND	10	3.07	0.22	ND	5.7	258	50.4	170	115
Mar-2007	72	72	0.5	21	11.3	ND	ND	6.4	187.6	34.8	135	111
Mar-2008	91	91	ND	ND	7.34	ND	ND	7	192.8	29.3	190	54.2
Mar-2009	136	136	ND	ND	3.82	0.7	ND	6.9	315	47.5	237	177
Apr-2010	107	107	ND	18	4.68	ND	ND	6.3	207	27.5	220	142
Apr-2011	99	99	ND	16	4.6	ND	ND	6.2	201	22.3	159	119
Mar-2012	64	64	0.27	13	4.08	ND	ND	5.9	174.9	35.5	149	95.7
Mar-2013	57.9	57.9	ND	18.3	3.87	0.304	ND	6.5	178.3	46.3	150	110
Mar-2014	55.3	55.3	ND	ND	2.91	0.882	ND	6.2	179.9	49.8	148	122
Apr-2015	82.4	82.4	ND	9 J	4.07	0.531	ND	5.8	211	40.9	200	122
May-2016	70.5	70.5	ND	6 J	3.99	0.526	ND	7	276	43	159	126
May-2017	68.5	68.5	ND	17	6.15	0.734	0.0762	6.4	352	42.1	168	112
May-2018	82	82	ND	33.7	7	0.1	ND	NA	NA	42	78	136
May-2019	112	NA	ND	ND	3.8	0.1	ND	6.62	195.2	34.7	179	139
May-2020	100	NA	ND	13.5 J	3.1	1.1	ND	5.94	219.2	36	151	130
Apr-2021	120	NA	ND	12.6 J	2.7 J	0.1	ND	7.12	294.2	30.1 ML	170	141
May-2022	102	NA	ND	5.6 J	3 J	0.6	ND	7.04	309	33.2	166 H1	146 N3
May-2023	114	NA	ND	11.4 J	2.8 J	0.44	ND	6.64	308.1	30.4	170	157 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06A***													
Nov-1993	NA	ND	ND	NA	ND	46	NA	ND	NA	ND	47.3	0.08	ND	7.3	NA
Apr-1994	NA	ND	0.019	NA	ND	33	NA	ND	NA	ND	13	8.9	ND	3.8	NA
Apr-1995	ND	ND	ND	ND	ND	43	NA	ND	ND	ND	15.1	ND	ND	5.3	NA
Apr-1997	ND	ND	0.02	ND	ND	29	32	ND	ND	ND	6.2	6.2	ND	3.6	3.9
Apr-1998	ND	ND	0.02	ND	ND	39.7	40	ND	ND	ND	3.05	0.84	ND	4.63	4.65
Apr-1999	ND	ND	0.02	ND	ND	47.5	48.9	ND	ND	ND	13	0.07	ND	5.99	6.18
Apr-2000	ND	ND	0.019	ND	ND	44.8	43.5	ND	ND	ND	5.16	0.908	ND	5.13	4.98
Apr-2001	ND	ND	0.017	ND	ND	47.2	NA	ND	ND	ND	2.56	NA	ND	5.34	NA
Mar-2002	ND	ND	0.034	ND	ND	64.7	67.3	ND	ND	ND	1.02	ND	ND	7.98	8.32
Mar-2003	ND	ND	0.017	ND	ND	37.1	35.6	ND	ND	ND	3.59	0.217	ND	4.23	3.98
Apr-2004	ND	ND	0.03	ND	ND	45.3	43.3	ND	ND	ND	5.38	0.766	ND	4.73	4.46
Apr-2005	ND	ND	0.027	ND	ND	43.8	40.2	ND	ND	ND	9.29	1.68	ND	4.6	4.2
Mar-2006	ND	ND	0.038	ND	ND	38.7	37.8	ND	ND	ND	2.26	ND	ND	4.44	4.32
Mar-2007	ND	ND	0.038	ND	ND	37.9	34.1	ND	ND	0.01	62.1	3.6	ND	3.95	3.44
Mar-2008	ND	ND	0.021	ND	ND	36.7	37.9	ND	ND	ND	15	0.105	ND	4.06	4.2
Mar-2009	ND	ND	0.025	ND	ND	60.4	57.3	ND	ND	0.013	0.865	ND	ND	6.36	6.03
Apr-2010	ND	ND	0.027	ND	ND	49	44.6	ND	ND	ND	5.95	2.17	ND	4.81	4.36
Apr-2011	ND	ND	0.024	ND	ND	40.5	39.3	ND	ND	0.014	2.14	0.952	ND	4.49	4.21
Mar-2012	ND	ND	0.029	ND	ND	32.4	31.6	ND	ND	0.011	1.28	0.362	ND	3.59	3.43
Mar-2013	ND	ND	0.0466	0.000079 J	ND	36.9	33.3	0.0036 J	0.0026 J	0.128	26.8	0.393	0.0013 J	4.29	3.71
Mar-2014	ND	ND	0.0305	ND	ND	43	41.1	0.0044 J	0.0021 J	0.0092 J	1.8	0.0827	ND	3.45	4.27

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06A***													
Apr-2015	*0.000223 J*	*ND*	0.0298	*ND*	*ND*	41.4	42.9	*0.000762 J*	*0.000611 J*	*0.0055 J*	2.11	0.244	*ND*	4.63	4.84
May-2016	*0.00042 J*	*0.00073 J*	0.0483	*0.00015 J*	*ND*	42.8	41.8	0.0111	0.0051	0.0826	67.2	*0.0234 J*	*0.0018 J*	4.68	4.57
May-2017	*ND*	*ND*	0.0346	*ND*	*ND*	37.4	38.9	*0.0019 J*	0.0026	0.0079	3.38	*0.059 J*	*0.00021 J*	4.46	4.67
May-2018	0.0012	*ND*	0.06	0.00075	*0.00079 J*	46.3	38.1	0.01	0.0015	0.022	110	0.099	0.013	4.9	4.2
May-2019	*ND*	*ND*	0.026	*ND*	*ND*	47.2	46.4	*ND*	0.003	*ND*	0.66	0.02	*ND*	5	5
May-2020	*ND*	*ND*	0.032	*ND*	*ND*	44.5	43.6	*0.0047 J*	*0.0047 J*	*0.0045 J*	3.8	*ND*	*ND*	4.6	4.8
Apr-2021	*ND*	*ND*	0.027	*ND*	*ND*	48.2 ML	48.4 MH	*0.0015 J*	*0.0015 J*	*ND*	0.67	*ND*	*ND*	5.1	5
May-2022	*ND*	*ND*	0.03	*ND*	*ND*	49.4	48.3	*0.0009 J*	*0.00073 J*	*0.00093 J*	0.26	*ND*	*ND*	5.5	5.4
May-2023	*ND*	*ND*	0.032	*ND*	*ND*	52.9	51.5	*0.0012 J*	*0.0009 J*	*0.0017 J*	0.46	*ND*	*ND*	5.9	5.8

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-06A*												
Nov-1993	0.78	NA	ND	NA	7.4	NA	ND	NA	9.3	NA	NA	NA	0.16
Apr-1994	0.27	NA	ND	NA	5.2	NA	ND	NA	5.3	NA	NA	NA	ND
Apr-1995	0.23	NA	ND	ND	5.6	NA	ND	ND	2.8	NA	ND	ND	0.04
Apr-1997	0.1	0.1	ND	ND	4.4	5	ND	ND	2.3	2.6	ND	ND	ND
Apr-1998	0.04	0.035	NA	ND	4.93	4.13	ND	ND	1.89	1.94	ND	ND	0.016
Apr-1999	0.087	0.079	NA	ND	4.97	4.93	ND	ND	2.29	2.36	ND	ND	ND
Apr-2000	0.063	0.059	NA	ND	4.27	3.89	ND	ND	1.9	1.82	ND	ND	ND
Apr-2001	0.014	NA	NA	ND	4.5	NA	ND	ND	1.63	NA	ND	ND	ND
Mar-2002	0.011	ND	NA	ND	5.16	5.13	ND	ND	1.35	1.4	ND	ND	0.015
Mar-2003	ND	ND	NA	ND	3.44	3.78	ND	ND	1.62	1.6	ND	ND	0.011
Apr-2004	0.087	0.067	ND	ND	4.24	3.99	ND	ND	1.38	1.37	ND	ND	ND
Apr-2005	0.077	0.059	ND	ND	3.67	3.18	ND	ND	1.54	1.3	ND	ND	0.026
Mar-2006	0.026	0.018	ND	ND	3.6	3.49	ND	ND	1.22	1.17	ND	ND	ND
Mar-2007	0.165	0.103	ND	ND	4.09	3.78	ND	ND	1.4	1.28	ND	ND	0.02
Mar-2008	0.065	0.023	ND	ND	3.69	3.71	ND	ND	1.82	1.41	ND	ND	0.01
Mar-2009	ND	ND	ND	ND	4.84	4.57	ND	ND	1.49	1.38	ND	ND	ND
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apr-2010	0.073	0.079	ND	ND	4.82	4.43	ND	ND	1.83	1.77	ND	ND	ND
Apr-2011	0.037	0.031	ND	ND	4.41	4.25	ND	ND	2.43	2.39	ND	ND	ND
Mar-2012	0.069	0.06	ND	ND	4.08	4.03	ND	ND	1.99	1.95	ND	ND	ND
Mar-2013	0.184	0.1	0.000113 J	0.0056 J	3.92	3.61	0.000429 J	0.000023 J	2.19	2.06	ND	ND	0.0211
Mar-2014	0.0308	0.029	ND	0.0017 J	4.3	4.05	ND	0.000079 J	1.53	1.95	ND	0.0041 J	0.0074 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-06A***												
Apr-2015	0.0163	0.0131	*ND*	*0.0014 J*	4.12	4.3	*0.00088 J*	*ND*	2.33	2.44	*ND*	*ND*	*0.0059 J*
May-2016	0.216	0.039	*ND*	0.0108	4.01	3.86	*ND*	*0.00016 J*	1.95	1.97	*ND*	0.0032	*0.0237 J*
May-2017	0.0408	0.034	*ND*	*0.0017 J*	4.78	4.89	*ND*	*ND*	2.55	2.49	*ND*	*0.00041 J*	*0.0036 J*
May-2018	0.24	0.0081	*ND*	0.005	*3.9 J*	*3.5 J*	*0.00018 JB*	*ND*	*2.8 J*	*2.4 J*	*ND*	0.012	0.017
May-2019	0.006	0.017	*ND*	0.0014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.002	*ND*
May-2020	0.013	0.0077 B	*ND*	*0.0038 J*	5.4	4.7	*ND*	*ND*	2.3	2.7	*ND*	*ND*	*ND*
Apr-2021	*0.005 J*	*ND*	*ND*	*ND*	5	5	*ND*	*ND*	2.3	2.4	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*0.00092 J*	5.2	5.1	*ND*	*ND*	2.2	2.3	*ND*	*ND*	*ND*
May-2023	*ND*	*0.0028 J*	*ND*	*0.0013 J*	5.1	5	*ND*	*ND*	2.2	2.3	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06A*																
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-06A*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-06A***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-06A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	2.6 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2013	*ND*	*0.53 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-06A***															
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-06B***											
Apr-2010	1.3	1.3	ND	ND	2.76	0.33	ND	3.8	22.1	3.09	26	1.9
Oct-2010	1.2	1.2	ND	ND	2.81	0.32	ND	3.6	22.4	3.58	10	2.24
Apr-2011	ND	ND	ND	ND	2.82	0.35	ND	4	24.1	1.7	17	2
Sep-2011	ND	ND	0.21	ND	2.69	0.34	ND	4.5	23.5	2.22	28	2.4
Mar-2012	ND	ND	ND	ND	3.17	0.35	ND	3.8	20.8	3.55	14	2.51
Sep-2012	ND	ND	ND	ND	2.95	0.335	ND	3.1	23.6	3.24	20	2.23
Mar-2013	0.92 J	0.92 J	ND	ND	3.22	0.341	ND	3.9	25.7	1.98	15	2.52
Oct-2013	1.56	1.56	ND	ND	3.09	0.324	ND	5.4	24.9	2.33	ND	2.77
Mar-2014	ND	ND	ND	ND	3.32	0.291	ND	4.6	24.1	2.84	ND	2.02
Oct-2014	ND	ND	ND	11	3.31	0.314	ND	4.4	23	2.8	ND	2.26
Apr-2015	0.96	0.96	ND	ND	3.16	0.357	ND	4.2	23.3	3.1	ND	2.28
Nov-2015	ND	ND	ND	ND	3.06	0.352	ND	4.8	37.5	1.95	20 J	2.2
May-2016	ND	ND	ND	ND	3.19	ND	ND	4.6	40.8	3.11	15 J	2.3
Oct-2016	ND	ND	ND	ND	3.36	NA	NA	4.8	36.1	2.17	31	2.1
May-2017	2.64	2.64	ND	ND	2.99	0.336	ND	4.5	43.8	2.15	13 J,B	3
Oct-2017	ND	ND	0.0676 J	ND	3.3	0.399	ND	4.4	44.2	2.88	25	2.3
May-2018	1 JB	ND	ND	5.8 J	2.7 J	0.073 J	ND	4.4	34.7	ND	ND	2.3 J
Nov-2018	1 JB	ND	ND	ND	2.9 J	0.31	ND	4.1	24.8	ND	ND	2.2 J
May-2019	ND	NA	ND	ND	ND	0.35	ND	3.86	20.3	ND	21	ND
Oct-2019	ND	NA	ND	ND	2.6 J	0.35	ND	4.14	24.6	ND	10	2.2
May-2020	ND	NA	ND	ND	2.9 J	0.33	ND	4.17	24.6	ND	ND	2.2 J
Oct-2020	ND	NA	ND	ND	3.2	0.35	ND	5.01	24.4	1.2	35	2.3
Apr-2021	ND	NA	ND	ND	3.1	0.34	ND	4.51	29.1	ND	17	2.3 J
Oct-2021	ND	NA	ND	ND	3 J	0.35	ND	4.57	38.5	ND	ND	2.5 J
May-2022	ND	NA	ND	ND	2.9 J	0.32	ND	4.45	49.4	ND	ND	2.3 JN3
Oct-2022	ND	NA	ND	6.1 J	3.7 J	0.34	ND	4.44	44.7	ND	ND	2.5 JN3
May-2023	ND	NA	ND	ND	2.8 J	0.39	ND	4.58	47.3	ND	ND	2.9 JN3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06B***													
Apr-2010	ND	ND	ND	ND	ND	0.431	0.353	ND	ND	ND	ND	ND	ND	0.188	0.157
Oct-2010	ND	ND	ND	ND	ND	0.521	0.514	ND	ND	ND	0.052	ND	ND	0.229	0.226
Apr-2011	ND	ND	ND	ND	ND	0.446	0.484	ND	ND	ND	ND	ND	ND	0.216	0.236
Sep-2011	ND	ND	ND	ND	ND	0.578	0.606	ND	ND	ND	ND	ND	ND	0.233	0.233
Mar-2012	ND	ND	ND	ND	ND	0.507	0.501	ND	ND	ND	ND	ND	ND	0.301	0.299
Sep-2012	ND	ND	0.0065 J	0.000303 J	ND	0.522	0.602	0.0011 J	0.005 J	0.0032 J	0.0367 J	0.0319 J	ND	0.225	0.245
Mar-2013	ND	ND	0.0069 J	0.000275 J	ND	0.613	0.481	0.0016 J	0.0052 J	0.0028 J	0.011 J	0.0147 J	ND	0.241	0.195
Oct-2013	ND	ND	0.0066 J	0.000312 J	ND	0.801	0.791	0.0124 J	0.0049 J	0.0022 J	0.0756	0.0724	0.000335 J	0.186	0.215
Mar-2014	0.0025	ND	0.0056 J	0.000252 J	ND	0.481	0.501	0.0015 J	0.0044 J	0.0015 J	ND	ND	ND	0.199	0.207
Oct-2014	0.0012 J	ND	0.0067 J	0.000301 J	0.000074 J	0.526	0.553	0.000384 J	0.0048 J	0.003 J	ND	ND	ND	0.231	0.244
Apr-2015	0.000346 J	ND	0.0066 J	0.000287 J	0.000071 J	0.523	0.551	0.000417 J	0.0049 J	0.0029 J	0.143	0.0882	ND	0.237	0.241
Nov-2015	ND	ND	0.0062 J	0.000327 J	0.000108 J	0.504	0.567	0.000703 J	0.0049 J	0.0028 J	ND	ND	0.000426 J	0.229	0.238
May-2016	ND	ND	0.0068	0.00029 J	ND	0.522	0.455	0.00096 J	0.0048	0.0025 J	ND	ND	ND	0.249	0.227
Oct-2016	ND	ND	0.0069	0.00028 J	ND	0.439	0.451	0.00095 J	0.0053	0.0028 J	ND	ND	0.00011 J	0.236	0.244
May-2017	ND	0.00077 J	0.0053 B	0.00027 J	ND	0.738	0.78	0.00084 J,B	0.0053	0.0051	0.134 J	ND	0.001 J	0.283	0.256
Oct-2017	ND	ND	0.0067	0.0003 J	ND	0.512	0.509	ND	0.0051	0.0027 J	ND	ND	0.00012 J	0.24	0.247
May-2018	0.000054 J	ND	0.0068	0.00025 J	0.000078 J	0.51 J	0.49 J	0.0022 J	0.0048	0.0034 B	0.028	ND	0.00012 J	0.24 J	0.25 J
Nov-2018	ND	ND	0.0062	0.00028 J	0.00011 J	0.5 J	0.85 J	0.0018 J	0.0049	0.0087	ND	0.014 J	0.00039 J	0.24 J	0.24 J
May-2019	ND	ND	0.0063	ND	ND	ND	ND	ND	0.005	0.011	ND	ND	ND	ND	ND
Oct-2019	0.000055 J	ND	0.0065	0.00027 J	0.00022 J	0.52	0.5 J	0.0046 J	0.0054	0.0098	0.016 J	0.015 J	0.00017 J	0.23	0.23 J
May-2020	ND	ND	0.0067 J	0.00029 J	ND	0.5 J	0.5 J	0.004 J	0.0045 J	0.02	ND	ND	ND	0.22	0.23

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06B***													
Oct-2020	*ND*	*ND*	*0.0064 J*	*0.00031 J*	*ND*	0.52	*0.5 J*	*0.0039 J*	0.0066	0.016	*0.023 J*	0.03 D6	*ND*	0.24	*0.24 J*
Apr-2021	*ND*	*ND*	*0.007 J*	*0.00039 J*	*ND*	*0.52 J*	*0.54 J*	*0.0033 J*	0.0055	0.018	*ND*	*ND*	*ND*	0.24	0.24
Oct-2021	*ND*	*ND*	0.0064	*0.00023 J*	*ND*	0.56	0.58	0.0026	0.0058	0.015	*0.013 J*	*0.014 J*	*0.00014 J*	*0.27 J*	*0.28 J*
May-2022	*ND*	*ND*	0.0071	*0.00025 J*	*ND*	*0.49 J*	0.54	*0.0024 J*	0.0065	0.019	*ND*	*ND*	*ND*	*0.27 J*	*0.28 J*
Oct-2022	*ND*	*ND*	0.0077	*0.0003 J*	*ND*	0.57	0.62	0.0036	0.0063	0.017	*ND*	*ND*	*ND*	*0.26 J*	*0.32 J*
May-2023	*ND*	*ND*	0.0072	*0.00029 J*	*ND*	0.64	0.64	*0.0017 J*	0.0063	0.013	*ND*	*ND*	0.00063	*0.31 J*	*0.32 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-06B*												
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.27	1.23	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.17	1.15	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.28	1.25	ND	ND	ND
Sep-2011	ND	ND	ND	ND	0.534	ND	ND	ND	1.4	1.42	ND	ND	ND
Mar-2012	ND	ND	ND	ND	0.533	0.514	ND	ND	1.36	1.3	ND	ND	ND
Sep-2012	0.006 J	0.0065 J	ND	0.0076 J	0.465 J	0.493 J	ND	ND	1.32	1.32	ND	ND	0.0088 J
Mar-2013	0.0061 J	0.0047 J	0.000106 J	0.0075 J	0.53	0.521	ND	ND	1.53	1.57	ND	ND	0.018
Oct-2013	0.0064 J	0.0072 J	ND	0.0069 J	0.405 J	0.407 J	ND	ND	1.04	1.12	0.000409 J	0.004 J	0.0202
Mar-2014	0.0056	0.0058	ND	0.0069 J	0.556	0.545	ND	ND	1.68	1.64	0.000593 J	ND	0.0104
Oct-2014	0.0057 J	0.0061 J	ND	0.0077 J	0.529	0.516	0.0015 J	ND	1.45	1.41	ND	ND	0.0104
Apr-2015	0.0061 J	0.0064 J	ND	0.0076 J	0.523	0.502	0.000966 J	ND	1.47	1.49	ND	ND	0.0133
Nov-2015	0.0057 J	0.0061 J	ND	0.0082 J	0.517	0.496 J	0.000419 J	ND	1.55	1.53	0.000183 J	ND	0.01
May-2016	0.01	0.0053	ND	0.008	0.651	0.439	ND	ND	1.53	1.35	ND	ND	0.0091 J,B
Oct-2016	0.0055	0.006	ND	0.0086	0.529	0.535	ND	ND	1.49	1.55	ND	ND	0.0073 J
May-2017	0.0072	0.0068	ND	0.0095	0.564	0.599	ND	ND	2.54	2.45	ND	ND	0.0156 JB
Oct-2017	0.0063	0.0057	ND	0.0079	0.516	0.539	ND	ND	1.54	1.56	ND	ND	0.0076 J
May-2018	0.0058	0.0051	ND	0.0088	ND	ND	0.00044 JB	ND	1.8 J	1.6 J	ND	0.003	0.0092 B
Nov-2018	0.0091	0.0099	ND	0.0072	ND	ND	0.00019 J	ND	1.5 J	1.5 J	0.000069 J	0.0019	0.011
May-2019	0.0061	0.0058	ND	0.0096	ND	ND	ND	ND	ND	ND	ND	0.0049	0.01
Oct-2019	0.011	0.0078	ND	0.0099	ND	ND	0.00041 J	ND	1.5 J	ND	ND	0.0056	0.018
May-2020	0.0058	0.0061 B	ND	0.012	0.56	0.49 J	ND	ND	1.4	1.6	ND	ND	0.0094 J
Oct-2020	0.0095	0.0088	ND	0.0093	ND	ND	ND	ND	ND	ND	ND	0.00081 J	0.011 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-06B***												
Apr-2021	0.0067	0.0061	*ND*	*0.0094 J*	0.52	0.53	*ND*	*ND*	1.5	1.8	*ND*	*ND*	*0.0078 J*
Oct-2021	0.0059	0.0065	*ND*	0.0094	0.52	*0.47 J*	*ND*	*ND*	1.6 B	1.7	*0.000062 J*	*ND*	0.0089
May-2022	0.0078	0.0075	*ND*	0.0099	0.52	0.53	*ND*	*ND*	1.6	1.6	*ND*	*ND*	0.0092
Oct-2022	0.0074	0.0076	*ND*	0.01	*0.45 J*	0.52	*0.00089 J*	*ND*	1.6	1.9	*ND*	*ND*	0.011
May-2023	0.0075	0.0076	*ND*	0.01	0.59	0.59	*0.0009 J*	*ND*	1.8	1.8	*ND*	*ND*	0.0099

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06B*																
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06B*																
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-06B*															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-06B***															
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-06B***															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-06B***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-09***											
Nov-1993	ND	ND	ND	22.8	2.1	ND	ND	4.73	36.8	11.9	44	2.72
Apr-1994	10	10	ND	ND	1.6	ND	ND	6.8	39.4	8.6	43	2.3
Apr-1995	ND	ND	ND	ND	1.8	ND	ND	4.5	38.8	11.3	19	1.8
Apr-1997	ND	2	ND	ND	1.5	0.02	ND	NA	NA	7.3	88	7.7
Apr-1998	7	7	0.21	ND	1.35	ND	ND	6.41	79.7	7.32	40	2.6
Apr-1999	ND	ND	0.15	ND	2.09	ND	ND	5.56	49.3	7.28	39	2.8
Apr-2000	ND	ND	ND	ND	ND	ND	ND	6.24	38	9.45	36	2.4
Apr-2001	ND	NA	ND	ND	1.12	ND	ND	NA	NA	10.2	33	2.59
Mar-2002	7.1	7.1	ND	ND	2.12	ND	ND	5.9	44.5	11.6	54	3.28
Mar-2003	ND	ND	ND	ND	14.8	0.961	ND	5.5	52.3	14.9	49	2.47
Apr-2004	ND	ND	ND	ND	1.47	ND	ND	5.8	43.7	11.4	58	2.5
Apr-2005	5.3	5.3	ND	ND	1.42	ND	ND	5.5	39.8	7.73	68	4.6
Mar-2006	ND	ND	ND	ND	1.58	ND	ND	5.7	41.8	16.2	23	1.84
Mar-2007	9.2	9.2	ND	ND	1.76	ND	ND	5.9	41.1	7.1	ND	2.25
Mar-2008	1.3	1.3	ND	ND	5.71	ND	ND	5.7	39.5	20.2	29	2.28
Mar-2009	1.2	1.2	ND	ND	1.47	ND	ND	5.8	40.7	18.2	19	2.56
Oct-2009	2.5	2.5	ND	ND	1.41	ND	ND	5.4	40.8	8.11	49	1.04
Apr-2010	1.8	1.8	ND	ND	1.35	ND	ND	5	39.1	11.7	ND	1.7
Oct-2010	11	11	ND	ND	1.76	ND	ND	5	38	7.69	40	2.47
Apr-2011	8.4	8.4	ND	ND	1.64	ND	ND	5.3	37.8	6.64	42	2.2
Sep-2011	4.7	4.7	ND	ND	1.42	ND	ND	5.8	39.2	6.7	29	2.26
Mar-2012	5.2	5.2	ND	ND	1.61	ND	ND	5	37.2	7.33	17	2.55
Sep-2012	6.16	6.16	ND	ND	1.6	ND	ND	4.9	37.9	6.8	28	2.33
Mar-2013	11.5	11.5	0.0707	ND	1.8	ND	ND	4.8	41.1	7.24	ND	2.53
Oct-2013	8.52	8.52	ND	ND	1.66	ND	ND	6.7	39.8	6.81	ND	2.68
Mar-2014	14.4	14.4	ND	ND	1.72	ND	ND	6	39.1	7.15	ND	2.21
Oct-2014	22	ND	ND	10	1.84	ND	ND	5.8	37.4	6.72	29	2.25
Apr-2015	9.4	9.4	ND	8 J	1.77	ND	ND	5	38.9	6.21	ND	2.33
Nov-2015	4	4	ND	ND	1.64	ND	ND	6.2	69.6	6.03	21 J	2.36
May-2016	4.64	4.64	ND	13	1.67 B	ND	ND	6	60.8	0.832 J	85	6.1
Oct-2016	ND	ND	ND	16	1.65	NA	NA	6.1	65.6	4.4	33	3.7
May-2017	5.32	5.32	ND	14	1.64	ND	ND	6.4	88.9	4.49	17 J	8
Oct-2017	27.3	27.3	ND	15	1.57	ND	ND	6.5	119.4	1.66	29	2.4
May-2018	4 J	ND	ND	18.7 J	3.2	ND	ND	5.7	59.2	ND	10	2.9 J
Nov-2018	18	18	ND	7.9 J	1.4 J	ND	ND	6.33	76.6	ND	12	2.1 J
May-2019	22	NA	ND	ND	ND	ND	0.017	5.87	62	ND	22	ND
Oct-2019	2.5 JH1	NA	ND	8.2 J	1.3 J	0.34 J	0.014	6.15	81.9	ND	13	2.1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-09***											
May-2020	12	*NA*	*ND*	*6.9 J*	*1.5 J*	*ND*	*ND*	5.76	75.2	*ND*	41	2.2
Oct-2020	*4 J*	*NA*	*ND*	*7 J*	*1.6 J*	*ND*	*ND*	5.32	74.2	1.4	59	2
Apr-2021	*8 J4c*	*NA*	*ND*	*17 J*	*1.6 J*	*0.14 J*	*ND*	6.77	94.5	*ND*	17	*2 J*
Oct-2021	20	*NA*	*ND*	*6.1 J*	*1.4 J*	*ND*	*ND*	6.85	125.2	*ND*	29	*2.1 J*
May-2022	20	*NA*	*ND*	*ND*	*1.5 JML*	*ND*	*ND*	6.7	117.5	*ND*	*ND*	*2 JN3*
Oct-2022	*6 J4c*	*NA*	*ND*	*10.7 J*	*1.8 J*	*0.065 J*	*ND*	6.55	107.5	*ND*	28	*2 JN3*
May-2023	*6 J3c*	*NA*	*ND*	*ND*	*2.6 J*	*0.058 J*	*0.0084 J*	6.54	107.3	*ND*	20	*1.9 JN3*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-09*													
Nov-1993	NA	ND	ND	NA	ND	0.58	NA	ND	NA	ND	8.2	4	ND	0.31	NA
Apr-1994	NA	ND	0.56	NA	ND	0.51	NA	ND	NA	ND	3	9.22	ND	0.25	NA
Apr-1995	ND	ND	0.7	0.003	ND	0.19	NA	ND	ND	ND	3.4	2.7	ND	0.32	NA
Apr-1997	ND	ND	0.023	0.002	ND	0.68	0.79	ND	ND	ND	14	12	ND	ND	ND
Apr-1998	ND	ND	0.016	ND	ND	0.516	0.571	ND	ND	ND	8.83	7.96	ND	0.3	0.293
Apr-1999	ND	ND	0.016	ND	ND	0.615	0.637	ND	ND	ND	3.24	2.74	ND	0.295	0.27
Apr-2000	ND	ND	0.014	0.003	ND	0.522	0.506	ND	ND	ND	2.37	2.35	ND	0.271	0.257
Apr-2001	ND	ND	0.013	ND	ND	0.555	NA	ND	ND	ND	3.14	NA	ND	0.292	NA
Mar-2002	ND	ND	0.015	0.002	ND	0.774	1.41	ND	ND	ND	10.3	8.16	ND	0.327	0.38
Mar-2003	ND	ND	0.015	ND	ND	0.537	0.511	ND	ND	ND	3.16	2.67	ND	0.274	0.259
Apr-2004	ND	0.002	0.013	0.004	ND	0.55	0.542	ND	ND	ND	4.38	2.8	ND	0.276	0.272
Apr-2005	ND	ND	0.015	ND	ND	1.34	0.685	ND	ND	ND	9.81	8.11	ND	0.316	0.398
Mar-2006	ND	ND	0.012	ND	ND	0.385	0.358	ND	ND	ND	3.01	1.96	ND	0.214	0.183
Mar-2007	ND	ND	0.013	ND	ND	0.488	0.508	ND	ND	ND	11.7	9.23	ND	0.249	0.26
Mar-2008	ND	ND	0.013	0.003	ND	0.501	0.501	ND	ND	ND	4.74	4.29	ND	0.251	0.233
Mar-2009	ND	ND	0.012	ND	ND	0.617	0.434	ND	ND	ND	5.2	3.49	ND	0.248	0.215
Oct-2009	ND	ND	0.013	ND	ND	ND	ND	ND	ND	ND	9.66	8.16	ND	2.53	0.243
Apr-2010	ND	ND	0.012	ND	ND	0.351	0.374	ND	ND	ND	3.29	2.28	ND	0.203	0.205
Oct-2010	ND	ND	ND	ND	ND	0.538	0.495	ND	ND	ND	9.58	7.81	ND	0.274	0.264
Apr-2011	ND	ND	0.014	ND	ND	0.464	0.5	ND	ND	ND	9.56	8.44	ND	0.252	0.286
Sep-2011	ND	ND	0.014	0.002	ND	0.491	0.483	ND	ND	ND	10.4	7.33	ND	0.25	0.237

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09***													
Mar-2012	ND	ND	0.014	0.002	ND	0.47	0.467	ND	ND	ND	9.88	8.15	ND	0.336	0.323
Sep-2012	ND	ND	0.0141	0.0017 J	ND	0.52	0.472	ND	0.0058 J	0.000562 J	9.77	8.43	0.000735 J	0.25	0.251
Mar-2013	ND	ND	0.0132	0.002	ND	0.569	0.565	0.0018 J	0.0067 J	ND	11.4	8.56	ND	0.269	0.255
Oct-2013	ND	ND	0.0149	0.0021	ND	0.695	0.681	0.0068 J	0.0062 J	ND	10	8.6	0.000338 J	0.229	0.207
Mar-2014	0.000232 J	0.00068 J	0.0122	0.0021	0.000096 J	0.456	0.455	0.000821 J	0.0061 J	0.000268 J	10.9	8.75	0.000593 J	0.261	0.261
Oct-2014	0.000345 J	0.000869 J	0.0146	0.0021	ND	0.507	0.556	0.00094 J	0.0059 J	0.0011 J	10.8	9.4	ND	0.24	0.249
Apr-2015	0.000374 J	0.000603 J	0.0146	0.0018 J	0.000074 J	0.512	0.571	0.000714 J	0.0058 J	0.000342 J	11.5	10.7	ND	0.256	0.259
Nov-2015	0.00038 J	0.000334 J	0.0139	0.0016 J	ND	0.515	0.544	0.000373 J	0.0042 J	0.000839 J	11.6	11.9	ND	0.261	0.263
May-2016	ND	0.0007 J	0.0147	0.0019	0.00033 J	1.24	1.23	0.0012 J	0.0066	0.00068 J,B	27.6	14.3	0.0011 J	0.734	0.724
Oct-2016	ND	0.0069	0.0174	0.0027	0.00031 J	0.989	0.616	0.0031 J+	0.0156	0.0064 J+	38.3	14.2	0.002 J	0.291 J+	0.253
May-2017	ND	0.0031 J	0.0145	0.0022	0.00024 J	0.866	0.62	0.003 J	0.0085	0.0076	29.1	16.6	0.0053	1.42	0.268
Oct-2017	ND	0.001 J	0.0163	0.0022	ND	0.531	0.421	0.0014 J	0.0031	ND	33.6	22.5	0.00054 J	0.256	0.234
May-2018	0.00053	0.0043	0.013	0.0019	0.00016 J	0.79 J	0.63 J	0.0034 JB	0.0081	0.0061	41.5	24.4	0.0017	0.23 J	0.26 J
Nov-2018	ND	0.00045 J	0.012	0.0016	0.000048 J	0.47 J	0.47 J	0.0046 J	0.0024	0.0009 J	24.2	22.7	0.00012 JM1	0.23 J	0.24 J
May-2019	ND	ND	0.012	0.0012	ND	ND	ND	ND	0.0016	ND	27.2	24.8	ND	ND	ND
Oct-2019	0.00014 J	0.00065 J	0.013	0.0015	0.00018 J	0.47	0.49 J	0.0068 J	0.0015	ND	25.6	24.9	0.000099 J	0.23	0.23 J
May-2020	0.00023 J	0.00092 J	0.012	0.0015	0.00014 J	0.49	0.46 JB	0.0058 J	0.014	ND	38.8	23.9	ND	0.25	0.22 JB
Oct-2020	ND	ND	0.012	0.0014 J	ND	0.45	0.43 J	0.0033 J	0.0017 J	ND	24.9	23.6	ND	0.22	0.22 J
Apr-2021	ND	ND	0.013	0.0011	ND	0.43 J	0.38 J	0.00092 J	0.0014 J	ND	25.2	24.8	ND	0.23	0.21
Oct-2021	0.000047 J	0.00089 J	0.012	0.0014	ND	0.46 J	0.47 J	0.0015 J	0.0015 J	0.00062 J	25.7	26	ND	0.23 J	0.24 J
May-2022	ND	0.00099 J	0.012	0.0011	ND	0.41 J	0.53	0.001 J	0.0011 J	ND	27.5	26	ND	0.24 J	0.24 J
Oct-2022	ND	0.00087 J	0.012	0.0012	ND	0.45 J	0.49 J	0.00093 J	0.0012 J	0.0015 J	27.4	29.3 M1	ND	0.23 J	0.23 J
May-2023	ND	0.0012 J	0.012	0.0014	ND	0.4 J	0.45 J	0.0014 J	0.0016 J	ND	25.2	25.8	ND	0.21 J	0.23 J

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-09*												
Nov-1993	0.07	NA	ND	NA	0.59	NA	ND	NA	0.95	NA	NA	NA	ND
Apr-1994	0.01	NA	ND	NA	0.29	NA	ND	NA	0.74	NA	NA	NA	ND
Apr-1995	0.09	NA	ND	ND	0.75	NA	ND	ND	0.98	NA	ND	ND	0.04
Apr-1997	0.073	0.064	ND	ND	1.9	1.4	ND	ND	1	1.3	ND	ND	0.034
Apr-1998	0.049	0.048	NA	ND	0.847	0.796	ND	ND	0.833	0.825	ND	ND	0.042
Apr-1999	0.02	0.019	NA	ND	0.677	0.81	ND	ND	0.995	0.831	ND	ND	0.041
Apr-2000	0.02	0.019	NA	0.016	ND	ND	ND	ND	0.788	0.746	ND	ND	0.039
Apr-2001	0.019	NA	NA	0.014	ND	NA	ND	ND	0.905	NA	ND	ND	0.03
Mar-2002	0.055	0.051	NA	0.012	1.16	0.947	ND	ND	1.81	0.891	ND	ND	0.055
Mar-2003	0.017	0.016	NA	0.015	ND	ND	ND	ND	0.888	0.861	ND	ND	0.04
Apr-2004	0.019	0.019	ND	0.022	1.33	1.08	ND	ND	0.889	0.87	ND	ND	0.081
Apr-2005	0.056	0.051	ND	0.018	0.52	ND	ND	ND	1.33	0.984	ND	ND	0.305
Mar-2006	ND	ND	ND	0.019	ND	ND	ND	ND	0.613	0.547	ND	ND	0.043
Mar-2007	0.061	0.056	ND	0.015	0.582	0.576	ND	ND	0.748	0.738	ND	ND	0.059
Mar-2008	0.025	0.025	ND	0.017	0.561	ND	ND	ND	0.792	0.677	ND	ND	0.026
Mar-2009	0.027	0.022	ND	0.016	0.819	0.618	ND	ND	1.2	0.803	ND	ND	0.039
Oct-2009	0.057	0.058	ND	0.015	ND	ND	ND	ND	0.749	0.672	ND	ND	0.031
Apr-2010	0.017	0.014	ND	0.013	ND	ND	ND	ND	0.806	0.758	ND	ND	0.025
Oct-2010	0.054	0.05	ND	0.018	ND	ND	ND	ND	0.784	0.72	ND	ND	0.032
Apr-2011	0.058	0.056	ND	0.01	ND	ND	ND	ND	0.766	0.792	ND	ND	0.026
Sep-2011	0.052	0.046	ND	0.016	0.53	ND	ND	ND	0.91	0.873	ND	ND	0.03
Mar-2012	0.054	0.053	ND	0.016	ND	ND	ND	ND	0.855	0.846	ND	ND	0.034

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09***												
Sep-2012	0.0572	0.0538	ND	0.0137	0.504	0.446 J	ND	ND	0.836	0.827	ND	ND	0.0362
Mar-2013	0.0543	0.0505	0.00009 J	0.0157	0.51	0.49 J	ND	ND	0.932	0.945	ND	ND	0.0424
Oct-2013	0.0597	0.0587	ND	0.0132	0.436 J	0.406 J	ND	ND	0.726	0.672	0.000144 J	0.0056 J	0.0406
Mar-2014	0.0552	0.0545	ND	0.0159	0.516	0.511	ND	ND	0.826	0.836	ND	0.0011 J	0.0372
Oct-2014	0.0531	0.055	ND	0.0153	0.528	0.522	0.000836 J	ND	0.9	0.938	ND	0.0013 J	0.0363
Apr-2015	0.0626	0.0655	0.000032 J	0.0137	0.558	0.54	ND	ND	0.899	0.917	ND	0.0013 J	0.0355
Nov-2015	0.0713	0.0691	ND	0.0102	0.568	0.569	ND	ND	1.11	1.01	ND	0.000282 J	0.0408
May-2016	0.398	0.358	ND	0.0285	0.887	0.845	ND	ND	1.3	1.2	ND	0.0014	0.0547
Oct-2016	0.226 R	0.116	ND	0.045 J+	0.739	0.6	ND	ND	1.05 J+	0.919	ND	0.0021	0.0587
May-2017	0.145	0.104	ND	0.0294	0.955	0.59	ND	ND	33.9	0.915	ND	0.002	0.0505
Oct-2017	0.144	0.132	ND	0.0162	0.526	0.516	ND	ND	0.84	0.84	ND	0.0013	0.0255 J
May-2018	0.22	0.15	ND	0.023	ND	ND	0.00042 J	ND	1.3 J	1 JB	ND	0.0029	0.028
Nov-2018	0.12	0.12	ND	0.0072	ND	ND	0.0001 JM1	ND	0.84 J	0.88 J	ND	0.0017	0.013 D6
May-2019	0.14	0.14	ND	0.004	ND	ND	ND	ND	ND	ND	ND	ND	0.0068
Oct-2019	0.13	0.13	ND	0.0054	ND	ND	ND	ND	ND	ND	ND	0.0096	0.018
May-2020	0.14	0.14	ND	0.036	1.3 J	ND	ND	ND	4.4 J	ND	0.00043	0.0059	0.02
Oct-2020	0.13	0.13	ND	0.0042	ND	ND	ND	ND	ND	ND	ND	0.0018 J	0.012 J
Apr-2021	0.13	0.13	ND	0.0031 J	0.5	0.51	ND	ND	0.85 J	0.99 J	ND	0.0011 J	ND
Oct-2021	0.14	0.14	ND	0.0037	0.48 J	0.44 J	ND	ND	0.85 B	0.93	ND	0.00092 J	0.0071
May-2022	0.15	0.14	ND	0.0026	0.49 J	0.49 J	ND	ND	0.86	0.87	ND	ND	0.0057
Oct-2022	0.14	0.16	ND	0.0031	0.56	0.59	ND	ND	1	1.1	ND	ND	0.0065
May-2023	0.14	0.15	ND	0.0035	0.43 J	0.46 J	ND	ND	0.83	0.91	ND	0.0014 J	0.0079

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	22	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09*																
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.6 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09*																
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-09*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09***															
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-09*															
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.5 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-09*															
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.578 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09***															
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-11A***											
Nov-1993	118	118	0.5	46.3	1	*ND*	*ND*	4.95	32.8	5	192	27
Apr-1994	153	153	0.4	35.8	13.2	*ND*	*ND*	5.77	358	11.8	102	35.43
Apr-1995	134	134	0.3	28.5	7.4	*ND*	*ND*	5.9	295	13.9	101	17.5
Apr-1997	*ND*	27	*ND*	39	19	0.05	*ND*	*NA*	*NA*	6	17600	28
Apr-1998	120	120	2.9	53	43	0.15	*ND*	6.81	737	1.93	160	39
Apr-1999	95	95	2.9	81	39.7	*ND*	*ND*	6.74	749	*ND*	246	50
Apr-2000	57	57	3.6	*ND*	63.9	*ND*	*ND*	6.76	450	5.03	156	43
Apr-2001	22	*NA*	2	24	24.8	*ND*	*ND*	*NA*	*NA*	18.6	82	34.3
Mar-2002	20	20	1.8	25	22.6	*ND*	*ND*	6.1	352	27.3	111	31.3
Mar-2003	12	12	8.8	10	25	*ND*	*ND*	6.6	393	29	109	29.4
Apr-2004	6.4	6.4	0.89	20	13.7	*ND*	*ND*	6.5	284	22	93	20
Apr-2005	4.6	4.6	0.65	13	16.6	*ND*	*ND*	6.2	264	27.4	105	18.8
Mar-2006	29	29	0.98	*ND*	19.5	0.1	*ND*	6	207	24.2	91	19.1
Mar-2007	15	15	0.71	*ND*	18.9	0.83	*ND*	6.2	181.6	22.4	79	17.5
Mar-2008	50	50	0.54	16	17.2	0.11	*ND*	6.1	175.6	26.3	87	16.5
Mar-2009	21	21	0.79	*ND*	38.4	0.08	*ND*	5.7	340	21.2	113	17.6
Apr-2010	8.9	8.9	1	*ND*	65.5	0.09	*ND*	5.6	406	27.7	125	23.8
Apr-2011	16	16	0.54	*ND*	40.7	0.14	*ND*	5.8	210	22.5	183	20.3
Mar-2012	17	17	0.53	*ND*	40.5	0.16	*ND*	5.2	312	31.7	132	22.9
Mar-2013	25.4	25.4	0.357	12.1	34.5	0.128	*ND*	4.9	305	27	113	20.8
Mar-2014	48.6	48.6	0.465	*ND*	28.2	0.0816	*ND*	6.1	152.6	26.5	112	17.4
Apr-2015	20.8	20.8	0.332	*9 J*	21.4	0.474	*ND*	5.6	168.3	25	106	19.6
May-2016	15	15	0.39	*ND*	24.5	0.544	*ND*	6	275	24.1	119	24.5
May-2017	15.8	15.8	0.255	*ND*	19.7	0.877	*ND*	5.9	279	24.3	99	22.6
May-2018	40	40	0.3	*7.9 J*	20.3	*0.074 J*	*ND*	5.9	266	22.5	118	24.3
May-2019	50	*NA*	0.36	*ND*	18.6	*ND*	*ND*	5.87	167.3	23.6	113	19.2
May-2020	28	*NA*	*0.071 J*	*13.5 J*	18	*ND*	*ND*	5.39	234	23.4	145	23.5
Apr-2021	*ND*	*NA*	0.21	*17 J*	30.2	0.1	*ND*	6.03	295.9	25.5	139	26.5
May-2022	34	*NA*	0.12	*5.6 J*	14.3	*0.06 J*	*ND*	5.98	256.4	20.6	88	16.1 N3
May-2023	22	*NA*	*0.098 J*	*ND*	19	*0.078 J*	*ND*	5.95	219.9	23.3	79	18.6 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-11A*													
Nov-1993	*NA*	**0.025**	*ND*	*NA*	*ND*	3.7	*NA*	*ND*	*NA*	*ND*	154	139	*ND*	4.3	*NA*
Apr-1994	*NA*	*ND*	*ND*	*NA*	*ND*	4.13	*NA*	*ND*	*NA*	*ND*	176	122	*ND*	6.1	*NA*
Apr-1995	*ND*	**0.02**	0.6	*ND*	*ND*	1.9	*NA*	*ND*	*ND*	*ND*	126	88.2	*ND*	3.1	*NA*
Apr-1997	0.006	**0.23**	0.038	*ND*	*ND*	3.7	4	*ND*	*ND*	*ND*	110	12	0.003	2.8	2.8
Apr-1998	*ND*	*ND*	0.055	*ND*	*ND*	7.19	7.21	*ND*	*ND*	*ND*	200	192	*ND*	5.08	5.07
Apr-1999	*ND*	*ND*	0.052	*ND*	*ND*	9.53	9.53	*ND*	*ND*	*ND*	191	192	*ND*	6.4	6.41
Apr-2000	*ND*	*ND*	0.046	*ND*	*ND*	8.94	8.44	*ND*	*ND*	*ND*	124	118	*ND*	4.99	4.72
Apr-2001	*ND*	*ND*	0.039	*ND*	*ND*	7.53	*NA*	*ND*	*ND*	*ND*	96	*NA*	*ND*	3.75	*NA*
Mar-2002	*ND*	*ND*	0.044	*ND*	*ND*	6.41	6.19	*ND*	*ND*	*ND*	107	104	*ND*	3.71	3.65
Mar-2003	*ND*	**0.027**	0.057	*ND*	*ND*	6.02	5.62	*ND*	*ND*	*ND*	77.6	73.3	*ND*	3.5	3.27
Apr-2004	*ND*	**0.029**	0.032	*ND*	*ND*	4.56	4.36	*ND*	*ND*	*ND*	57	54.8	*ND*	2.09	2.02
Apr-2005	*ND*	**0.064**	0.042	*ND*	*ND*	3.93	3.84	*ND*	*ND*	*ND*	67.7	56.2	*ND*	2.38	2.34
Mar-2006	*ND*	**0.037**	0.043	*ND*	*ND*	3.88	3.53	*ND*	*ND*	*ND*	58	46.4	*ND*	2.28	2.16
Mar-2007	*ND*	**0.026**	0.049	*ND*	*ND*	3.58	3.6	*ND*	*ND*	*ND*	40.9	41.1	*ND*	2.08	2.09
Mar-2008	*ND*	**0.018**	0.064	*ND*	*ND*	3.02	3.01	*ND*	*ND*	*ND*	34.1	36.8	*ND*	2.17	2.07
Mar-2009	*ND*	**0.018**	0.048	*ND*	*ND*	3.65	3.63	*ND*	*ND*	*ND*	41	40.3	*ND*	2.05	2.04
Apr-2010	*ND*	**0.019**	0.068	*ND*	*ND*	5.26	5.11	*ND*	*ND*	*ND*	45.9	41	*ND*	2.61	2.66
Apr-2011	*ND*	**0.019**	0.077	*ND*	*ND*	4.22	4.1	*ND*	*ND*	*ND*	30.7	30.3	*ND*	2.37	2.32
Mar-2012	*ND*	**0.017**	0.075	*ND*	*ND*	4.61	4.61	*ND*	*ND*	*ND*	34.3	34.6	*ND*	2.77	2.78
Mar-2013	*ND*	**0.0202**	0.071	*0.000191 J*	*0.000291 J*	4.37	4.54	*0.0013 J*	*0.0046 J*	*0.0026 J*	32.2	30.7	*ND*	2.39	2.54
Mar-2014	*0.000209 J*	**0.0192**	0.0483	*0.000393 J*	*0.000149 J*	3.89	3.97	*0.0014 J*	*0.003 J*	*0.00897 J*	31.1	28.8	*ND*	1.87	2.07

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-11A***													
Apr-2015	*0.000273 J*	**0.0185**	0.0688	*0.000274 J*	*0.000278 J*	4.21	4.19	*0.000745 J*	*0.0052 J*	*0.0035 J*	26.7	25.2	*ND*	2.2	2.24
May-2016	*ND*	**0.0204**	0.0757	*0.00021 J*	*ND*	5.17	4.72	*0.0013 J*	0.0061	0.005	31	29.7	*ND*	2.81	2.61
May-2017	*ND*	**0.0198**	0.0678	*0.00022 J*	*0.00028 J*	4.65	4.94	*0.00099 J*	0.0065	0.0052	29.1	28.8	*ND*	2.67	2.49
May-2018	*ND*	**0.0174**	*0.0754 J*	*ND*	*ND*	5.2	5.2	*ND*	*0.0068 J*	*ND*	25	24.5	*ND*	2.7	2.7
May-2019	*ND*	**0.024**	0.041	*ND*	*ND*	4.6	4.7	*ND*	0.0014	*ND*	37.3	37.3	*ND*	1.9	2
May-2020	*0.000057 J*	**0.024**	0.048	*ND*	*ND*	5.5	5.4	*0.0047 J*	0.0016	*ND*	47	43.2	*ND*	2.4	2.3
Apr-2021	*ND*	**0.022**	0.072	*ND*	*ND*	6.2	6.2	*0.00037 J*	0.0081	*ND*	42.9	43.2	*ND*	2.7	2.7
May-2022	*ND*	**0.025**	0.061	*ND*	*ND*	3.6	3.9	*0.00098 J*	0.0074	*ND*	29.3	30.8	*ND*	1.7	1.9
May-2023	*ND*	**0.016**	0.072	*0.00014 J*	*ND*	4.2	4.9	*0.00088 J*	0.017	*0.0012 J*	16.3	15.9	*ND*	2	2.3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-11A*												
Nov-1993	0.36	NA	ND	NA	1.2	NA	ND	NA	9	NA	NA	NA	ND
Apr-1994	0.4	NA	ND	NA	1.41	NA	ND	NA	8.4	NA	NA	NA	0.06
Apr-1995	0.23	NA	ND	ND	1.3	NA	ND	0.01	5.4	NA	ND	ND	0.02
Apr-1997	0.22	0.23	ND	ND	2.7	2	ND	ND	8.7	10	ND	ND	0.023
Apr-1998	0.312	0.331	NA	ND	2.27	1.46	ND	ND	22.9	23	ND	ND	ND
Apr-1999	0.348	0.354	NA	ND	2.81	3.5	ND	ND	25.1	25.2	ND	ND	ND
Apr-2000	0.228	0.218	NA	ND	2.44	2.36	ND	ND	25.4	23.9	ND	ND	ND
Apr-2001	0.247	NA	NA	ND	2.45	NA	ND	ND	16.4	NA	ND	ND	ND
Mar-2002	0.385	0.373	NA	ND	3.13	2.12	ND	ND	15.4	15.2	ND	ND	ND
Mar-2003	0.4	0.387	NA	ND	2.21	2.7	ND	ND	14.2	13.1	ND	ND	ND
Apr-2004	0.332	0.331	ND	ND	2.07	1.95	ND	ND	10.1	9.94	ND	ND	ND
Apr-2005	0.384	0.383	ND	ND	1.82	1.62	ND	ND	12.2	12.3	ND	ND	ND
Mar-2006	0.38	0.373	ND	ND	2.07	1.94	ND	ND	11.9	11.3	ND	ND	ND
Mar-2007	0.41	0.418	ND	ND	2.52	2.59	ND	ND	11.4	11.5	ND	ND	ND
Mar-2008	0.428	0.422	ND	ND	2.43	2.22	ND	ND	11.9	10.8	ND	ND	ND
Mar-2009	0.523	0.51	ND	ND	2.36	2.4	ND	ND	15.3	15.1	ND	ND	ND
Apr-2010	0.606	0.599	ND	ND	2.61	2.59	ND	ND	33.7	32.4	ND	ND	ND
Apr-2011	0.542	0.507	ND	ND	2	1.96	ND	ND	23.2	22.7	ND	ND	0.012
Mar-2012	0.683	0.68	0.0004	ND	2.54	2.5	ND	ND	24.3	24.3	ND	ND	0.014
Mar-2013	0.561	0.593	0.00011 J	0.0035 J	2.13	2.16	ND	ND	19.1	19.3	ND	ND	0.017
Mar-2014	0.467	0.486	ND	0.0021 J	1.91	1.94	ND	ND	14.6	16	ND	ND	0.0088 J
Apr-2015	0.51	0.505	0.00006 J	0.0034 J	1.75	1.76	0.0012 J	ND	14.1	13.8	ND	ND	0.0375

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-11A***												
May-2016	0.594	0.572	*ND*	*0.0034 J*	2.13	2.05	*ND*	*ND*	18.1	16.8	*ND*	*ND*	*0.0098 J,B*
May-2017	0.508	0.497	*ND*	*0.0036 J*	1.98	2	*ND*	*ND*	13	12.8	*ND*	*0.00021 J*	*0.0097 J*
May-2018	0.484	0.476	*ND*	*0.0093 J*	*2.1 J*	*1.6 J*	*ND*	*ND*	14.1	13.2	*ND*	*ND*	*0.0141 J*
May-2019	0.4	0.4	*ND*	0.0017	*ND*	*ND*	*ND*	*ND*	13.2	13.1	*ND*	*ND*	*ND*
May-2020	0.53	0.53	*ND*	0.0011	*2.8 J*	*2.3 J*	*ND*	*ND*	11.9	10.3	*ND*	0.0042	*ND*
Apr-2021	0.57	0.58	*ND*	*ND*	2	2.1	*ND*	*ND*	17.1	17.5	*ND*	*0.0011 J*	*ND*
May-2022	0.39	0.42	*ND*	0.0032	2	2.2	*0.00098 J*	*ND*	10.9	11.7	*ND*	*ND*	*ND*
May-2023	0.41	0.45	*ND*	0.0058	2.1	2.6	*ND*	*ND*	11.2	13.3	*ND*	*ND*	0.0071

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-11A***																
Nov-1993	ND	ND	ND	ND	55	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	40	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19	ND
Apr-1997	ND	ND	ND	ND	38	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	56	ND	ND	ND	ND	ND	ND	ND	ND	16	ND	ND	19	ND
Apr-1999	NA	ND	NA	NA	52	ND	NA	NA	NA	NA	ND	ND	ND	34	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	27	ND	NA	NA	NA	NA	ND	0.6 J	0.6 J	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	15	ND	ND	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	13	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-11A*																
Apr-2015	*ND*	*ND*	*ND*	*ND*	*0.82 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.2 JB*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.976 J*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*0.449 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-11A*															
Nov-1993	3.4	ND	ND	ND	ND	ND	ND	ND	6.5	ND	ND	5.8	ND	ND	ND	39	94
Apr-1994	2.6	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	4.5	ND	ND	ND	30	70
Apr-1997	4	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	16	ND	ND	ND	10	56
Apr-1998	**6.9**	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	25	ND	ND	ND	15	65
Apr-1999	**5.2**	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	3.7	NA	NA	NA	6.3	62
Apr-2000	3.3	NA	NA	ND	NA	ND	NA	ND	0.7 J	ND	NA	ND	NA	ND	NA	2.4	32
Apr-2001	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.1	18
Mar-2002	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.2	16
Mar-2003	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	6
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	7.2
Apr-2005	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	2.4	6.5
Mar-2006	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	5.9
Mar-2007	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	5.4
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	4.6
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	2.6
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	3.5
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	2.2
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND	ND	0.65 J	1.77
Mar-2014	0.17 J	ND	ND	ND	ND	ND	ND	ND	ND	0.16 J	ND	ND	ND	ND	ND	0.71 J	1.15

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-11A***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*0.3 J*	*0.8 J*
May-2017	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*0.6 J*	1.6
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	1.9
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3 N3
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	1.4
Apr-2021	*0.137 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.741 J*	*ND*	*ND*	*ND*	*0.506 J*	*1.22 J*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.9 J*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-11A***															
Nov-1993	6.8	*ND*	14	*ND*	*ND*	4.8	*ND*	**10**	25	*ND*	*ND*	*ND*	**6.1**	*ND*	*ND*	*ND*	*NA*
Apr-1994	4	*ND*	7.9	*ND*	*ND*	3.1	*ND*	**16**	9.2	*ND*	*ND*	*ND*	4.7	*ND*	*ND*	*ND*	*NA*
Apr-1997	4	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	2	5	*ND*	*ND*	*ND*	3	*ND*	*ND*	2	5
Apr-1998	5.9	*ND*	7.9	*NA*	2.6	2.3	*ND*	*ND*	28	*ND*	*ND*	*ND*	2.6	*ND*	*ND*	*ND*	*NA*
Apr-1999	3.5	*NA*	5.2	*NA*	*ND*	*1.6 J*	*NA*	*ND*	23	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	1	*NA*
Apr-2000	2.4	*NA*	2.3	*NA*	*ND*	1	*NA*	*ND*	5.7	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	1.1	*ND*	1	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*0.8 J*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*0.7 J*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.83 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-11A***															
Mar-2014	*ND*	*ND*	*ND*	*0.14 J*	*ND*	*ND*	*ND*	*0.28 J*	*ND*	*ND*	*ND*	*ND*	*0.28 J*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.24 J*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.717 J*	*ND*	*ND*	*ND*	*ND*	*0.551 J*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-12***											
Nov-1993	ND	ND	0.3	ND	3.2	0.3	ND	4.98	22.9	2.5	38	3.28
Apr-1994	5	5	0.1	ND	3.3	ND	ND	5.1	27.4	ND	8	1.07
Apr-1995	17.5	17.5	0.3	ND	4	0.2	ND	5.5	439	2	ND	3.8
Apr-1997	ND	3	ND	ND	3.5	0.13	ND	NA	NA	ND	86	6.2
Apr-1998	13	13	0.28	ND	3.72	0.18	ND	5.87	46.7	35.5	32	5.9
Apr-1999	ND	ND	0.17	ND	6.05	0.15	ND	5.62	69.8	ND	32	8.1
Apr-2000	4	4	ND	ND	6.34	0.22	ND	5.42	47	ND	21	9.1
Apr-2001	5.5	NA	ND	ND	7.7	ND	ND	NA	NA	ND	43	10.6
Mar-2002	5	5	ND	ND	9.07	ND	ND	5.4	72.7	1.42	47	12.1
Mar-2003	7.6	7.6	ND	ND	19.6	ND	ND	5.6	116.1	8.65	43	14
Apr-2004	22.1	22.1	ND	13	14.3	ND	ND	5.8	121.3	ND	133	12.7
Apr-2005	8.4	8.4	ND	ND	14.1	0.21	ND	5.3	88	1.39	68	12.4
Mar-2006	11	11	ND	ND	12.4	0.34	ND	5.8	103.8	3.66	40	11.6
Mar-2007	11	11	ND	ND	13.1	0.2	ND	5.6	91.8	3.43	41	13.9
Mar-2008	14	14	ND	ND	16.2	ND	ND	5.6	96.3	3.66	66	11.8
Mar-2009	34	34	ND	ND	10.6	0.1	ND	5.2	96.9	2.18	48	11.4
Mar-2010	14	14	ND	ND	12.6	0.26	ND	5.25	86	5.1	54	12.3
Apr-2011	15	15	ND	ND	8.27	0.28	0.03	5.2	74.6	2.39	61	9.1
Mar-2012	19	19	ND	ND	9.15	0.34	ND	4.9	78.3	3.7	35	11.7
Mar-2013	20.9	20.9	ND	ND	8.75	0.407	ND	4.6	81.9	4.8	49	13.5
Mar-2014	24	24	ND	ND	8.95	0.331	ND	6	79.1	4.41	54	12.5
Apr-2015	17	17	ND	ND	8.94	0.344	ND	5.1	79.4	4.05	42	11.6
May-2016	15.9	15.9	ND	ND	8.62	0.398	ND	6	120.6	2.68	48	12.6
May-2017	13.8	13.8	ND	ND	8.12	0.386	ND	5.9	124.7	4.68	24 J	12.1
May-2018	34	34	0.21	ND	7.8	ND	ND	5.8	119.4	ND	53	12.7
May-2019	20	NA	ND	ND	8.4	ND	ND	6.27	135.6	ND	51	15.7
May-2020	14	NA	ND	ND	7	ND	0.02	5.93	151.1	ND	61	15.8
Apr-2021	26	NA	ND	10.5 J	7.4	0.1	ND	6.84	178	ND	29	14.8
May-2022	28	NA	ND	ND	5.8	ND	0.027	6.64	192.1	ND	33	15.5 N3
May-2023	28 ML	NA	ND	6.9 J	7.6	ND	NA	6.74	173.9	ND	ND	12.4 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-12***													
Nov-1993	*NA*	*ND*	*ND*	*NA*	*ND*	0.52	*NA*	*ND*	*NA*	*ND*	17.2	0.41	*ND*	0.48	*NA*
Apr-1994	*NA*	*ND*	*ND*	*NA*	*ND*	0.37	*NA*	*ND*	*NA*	*ND*	3.9	0.38	*ND*	*ND*	*NA*
Apr-1995	*ND*	*ND*	0.6	*ND*	*ND*	0.6	*NA*	*ND*	*ND*	*ND*	19.8	9.3	*ND*	0.55	*NA*
Apr-1997	*ND*	*ND*	0.034	*ND*	*ND*	1.6	0.93	*ND*	*ND*	*ND*	9.1	2.6	0.006	1	*ND*
Apr-1998	*ND*	*ND*	0.023	*ND*	*ND*	1.16	1.18	*ND*	*ND*	*ND*	34.9	11.7	*ND*	0.728	0.724
Apr-1999	*ND*	*ND*	0.032	*ND*	*ND*	1.49	1.36	*ND*	*ND*	0.021	84.2	1.39	*ND*	1.07	0.973
Apr-2000	*ND*	*ND*	0.025	*ND*	*ND*	1.75	1.4	*ND*	*ND*	0.01	38.2	1.06	*ND*	1.16	1.05
Apr-2001	*ND*	*ND*	0.035	*ND*	*ND*	1.98	*NA*	*ND*	*ND*	*ND*	50.2	*NA*	0.012	1.38	*NA*
Mar-2002	*ND*	*ND*	0.039	*ND*	*ND*	2.24	1.91	*ND*	*ND*	0.013	60.7	2.3	0.015	1.57	1.44
Mar-2003	*ND*	*ND*	0.049	*ND*	*ND*	2.46	2.24	*ND*	*ND*	0.013	11.9	2.53	0.015	1.9	1.74
Apr-2004	*ND*	*ND*	0.04	*ND*	*ND*	2.3	2.22	*ND*	*ND*	*ND*	39.8	13.3	0.008	1.69	1.65
Apr-2005	*ND*	*ND*	0.039	*ND*	*ND*	2.43	2.07	*ND*	*ND*	0.01	58.9	6.39	**0.023**	1.53	1.51
Mar-2006	*ND*	*ND*	0.035	*ND*	*ND*	2.23	1.92	*ND*	*ND*	0.013	112	4.16	**0.043**	1.48	1.48
Mar-2007	*ND*	*ND*	0.04	*ND*	*ND*	2.61	2.45	*ND*	*ND*	0.018	80.1	12.9	**0.034**	1.78	1.68
Mar-2008	*ND*	*ND*	0.039	*ND*	*ND*	2.14	1.95	*ND*	*ND*	0.017	87.7	4.93	**0.042**	1.58	1.48
Mar-2009	*ND*	*ND*	0.031	*ND*	*ND*	2.21	2.26	*ND*	*ND*	*ND*	41.9	19.1	0.003	1.42	1.43
Mar-2010	*ND*	*ND*	0.041	*ND*	*ND*	2.25	2.16	*ND*	*ND*	*ND*	7.94	5.22	0.002	1.62	1.57
Apr-2011	*ND*	*ND*	0.029	*ND*	*ND*	1.66	1.61	*ND*	*ND*	*ND*	14.8	7.72	0.004	1.21	1.15
Mar-2012	*ND*	*ND*	0.034	*ND*	*ND*	2.03	2	*ND*	*ND*	*ND*	12.7	10.2	0.002	1.6	1.58
Mar-2013	*ND*	*ND*	0.0378	*0.0001 J*	*ND*	2.52	2.31	*0.0021 J*	*0.0032 J*	*0.0019 J*	9.7	8.06	0.0038	1.74	1.59
Mar-2014	*0.0019 J*	*0.000176 J*	0.0325	*ND*	*ND*	2.28	2.15	*0.0023 J*	*0.0029 J*	*0.0038 J*	11.2	9.3	*0.0013 J*	1.64	1.55

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-12***													
Apr-2015	*0.000157 J*	*ND*	0.0373	*ND*	*ND*	2.1	2.29	*0.003 J*	*0.0036 J*	*0.0031 J*	13.8	11.4	0.0042	1.55	1.59
May-2016	*ND*	*ND*	0.0358	*0.00014 J*	*ND*	2.27	1.9	*0.0011 J*	0.0027	*0.0015 J*	12.2	11.6	*0.00063 J*	1.69	1.54
May-2017	*ND*	*ND*	0.0385	*0.00012 J*	*ND*	2.08	2.31	*0.0014 J*	0.0033	*0.0019 J*	8.38	8.25	*0.0018 J*	1.67	1.57
May-2018	*0.0032 J*	*ND*	*0.0353 J*	*ND*	*ND*	2.4	2.3	*0.0026 J*	*0.0021 J*	*ND*	14.1	13.8	*0.0013 J*	1.6	1.6
May-2019	*ND*	*ND*	0.04	*ND*	*ND*	3.4	3.3	*ND*	0.00058	*ND*	43.5	42.2	*ND*	1.8	1.8
May-2020	*ND*	*ND*	0.039	*ND*	*ND*	3.3	3.4	*0.0039 J*	*0.00043 J*	*ND*	39.3	38.5	*ND*	1.8	1.8
Apr-2021	*ND*	*0.0027 J*	0.041	*ND*	*ND*	3.1	3.2	*0.00094 J*	*ND*	*ND*	36.4	37.8	*ND*	1.7	1.8
May-2022	*ND*	*ND*	0.042	*ND*	*ND*	3.2	3.2	*0.00085 J*	*0.0004 J*	*ND*	40.3	40	*ND*	1.9	1.9
May-2023	*ND*	*ND*	0.036	*ND*	*ND*	2.6	2.7	*0.0011 J*	*ND*	*0.00079 J*	31.6	31.5	*ND*	1.5	1.5

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-12***												
Nov-1993	0.06	*NA*	*ND*	*NA*	0.59	*NA*	*ND*	*NA*	1.8	*NA*	*NA*	*NA*	*ND*
Apr-1994	0.01	*NA*	*ND*	*NA*	0.62	*NA*	*ND*	*NA*	2.1	*NA*	*NA*	*NA*	0.018
Apr-1995	0.02	*NA*	*ND*	*ND*	0.62	*NA*	*ND*	*ND*	1.5	*NA*	*ND*	*ND*	0.02
Apr-1997	0.05	0.026	*ND*	*ND*	2.1	2.1	*ND*	*ND*	2.2	2.6	*ND*	*ND*	0.085
Apr-1998	0.063	0.071	*NA*	*ND*	1	*ND*	*ND*	*ND*	1.99	2.01	*ND*	*ND*	0.017
Apr-1999	*ND*	0.019	*NA*	0.069	0.733	*ND*	*ND*	*ND*	2.67	2.5	*ND*	*ND*	0.012
Apr-2000	0.019	0.022	*NA*	*ND*	1.14	*ND*	*ND*	*ND*	4.27	2.8	*ND*	*ND*	0.021
Apr-2001	0.021	*NA*	*NA*	*ND*	1.33	*NA*	*ND*	*ND*	4.38	*NA*	*ND*	*ND*	0.042
Mar-2002	0.017	0.03	*NA*	*ND*	1.98	1.94	*ND*	*ND*	5.18	4.46	*ND*	*ND*	0.037
Mar-2003	0.038	0.034	*NA*	*ND*	2.31	1.6	*ND*	*ND*	6.13	5.69	*ND*	*ND*	0.018
Apr-2004	0.068	0.072	0.0002	*ND*	1.81	0.973	*ND*	*ND*	7.03	7.01	*ND*	*ND*	*ND*
Apr-2005	0.054	0.058	0.0007	*ND*	0.93	0.85	*ND*	*ND*	8.28	8.83	*ND*	*ND*	0.045
Mar-2006	0.015	*ND*	0.0015	*ND*	0.947	0.85	*ND*	*ND*	5.51	5.4	*ND*	*ND*	0.038
Mar-2007	0.106	0.077	0.0011	*ND*	1.28	1.12	*ND*	*ND*	5.46	5.12	*ND*	*ND*	0.038
Mar-2008	0.06	0.043	0.0013	*ND*	1.13	0.976	*ND*	*ND*	6.52	5.45	*ND*	*ND*	0.013
Mar-2009	0.138	0.139	*ND*	*ND*	1.16	1.16	*ND*	*ND*	4.83	4.96	*ND*	*ND*	*ND*
Mar-2010	0.051	0.045	0.0002	*ND*	1.16	1.07	*ND*	*ND*	4.88	4.5	*ND*	*ND*	0.012
Apr-2011	0.066	0.057	0.0002	*ND*	0.723	0.654	*ND*	*ND*	4.57	4.34	*ND*	*ND*	*ND*
Mar-2012	0.076	0.078	0.0003	*ND*	0.994	1	*ND*	*ND*	4.84	4.89	*ND*	*ND*	*ND*
Mar-2013	0.081	0.0818	*0.000172 J*	*0.0037 J*	1.02	1.05	*ND*	*ND*	4	4.58	*ND*	*ND*	0.0122
Mar-2014	0.0906	0.0834	0.000249	*0.0034 J*	0.982	0.978	*ND*	*ND*	4.09	4.14	*ND*	*0.000446 J*	*0.0047 J*
Apr-2015	0.0792	0.095	*0.000183 J*	*0.0043 J*	1.11	1.04	*0.000857 J*	*ND*	4.54	4.66	*ND*	*0.0014 J*	*0.0088 J*

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-12***												
May-2016	0.0924	0.096	*ND*	*0.0033 J*	1.28	1	*ND*	*ND*	4.9	4.4	*ND*	*ND*	*ND*
May-2017	0.0757	0.0783	*0.000058 J*	*0.0037 J*	1.13	1.05	*ND*	*ND*	4.36	4.18	*ND*	*0.00024 J*	*0.0042 J*
May-2018	0.114	0.112	*0.00013 JB*	*0.0109 J*	*1.2 J*	*ND*	*ND*	*ND*	*4.9 JB*	*4.3 J*	*0.004 J*	*ND*	*0.0056 J*
May-2019	0.26	0.26	*ND*	0.0014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	0.27	0.25	*0.00011 J*	0.0012	*1.4 J*	*ND*	*ND*	*ND*	5.7	*4.5 J*	*ND*	0.0038	*ND*
Apr-2021	0.22	0.23	*ND*	*ND*	1.2	1.3	*ND*	*ND*	5.3	5.6	*ND*	*0.00069 J*	*ND*
May-2022	0.26	0.27	*ND*	*0.001 J*	1.2	1.2	*ND*	*ND*	5.3	5.3	*ND*	*ND*	*ND*
May-2023	0.21	0.21	*ND*	*0.0012 J*	1.1	1.1	*ND*	*ND*	4.6	4.9	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-12*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	ND
Apr-1997	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	0.6 J	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Apr-1999	NA	ND	NA	NA	10	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	10	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	0.7 J	ND	ND	15	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND
Mar-2002	ND	0.5 J	ND	ND	15	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	11	ND
Mar-2003	ND	ND	ND	ND	13	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Apr-2004	ND	0.6 J	ND	ND	23	ND	ND	ND	ND	ND	ND	1.1	0.6 J	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	8.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	5.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	4.39	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	4.36	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-12*																
Apr-2015	*ND*	*ND*	*ND*	*ND*	2.84	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	2.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.7 JB*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	1.74	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-12***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	2.7
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.6	ND
Apr-1997	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	94	8
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	2.5	ND	ND	ND	11	14
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	23	NA	NA	NA	8.6	18
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	26	NA	ND	NA	5.8	17
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	42	ND	ND	ND	12	24
Mar-2002	ND	ND	ND	ND	ND	1	ND	ND	0.6 J	ND	ND	26	ND	ND	ND	11	22
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	35	ND	ND	ND	19	18
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	59	ND	ND	ND	49	36
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	ND	ND	ND	30	14
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.9	ND	ND	ND	18	6.3
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.1	ND	ND	ND	20.7	10.2
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12.9	6.2
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.7	ND	ND	ND	10.3	4.5
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.3 J	7.5
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	ND	4.4
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	15.2	4.7
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.44	ND	ND	ND	6.27	3.38
Mar-2014	0.24 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.47	ND	ND	ND	6.73	3.46

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-12***															
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.84 J	ND	ND	ND	4.62	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	3.9	2.1
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	4	2.3
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.1	2.1
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	4.7 CL	3.3 N3
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	1
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.776 J	ND	ND	ND	1.78 J	1.32 J
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	2.7	1.1
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	1.2	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-12***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	**40**	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*NA*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	**18**	*ND*	*ND*	*ND*	*ND*	**6**	2	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	2.2	*NA*	1.4	2.9	*ND*	**13**	*ND*	*ND*	*ND*	*ND*	**15**	*0.9 J*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	**19**	*ND*	*ND*	*NA*	*NA*	**51**	*1.3 J*	*NA*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*1.4 J*	*ND*	*NA*	**19**	*ND*	*ND*	*NA*	*NA*	**40**	*1.4 J*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	1.2	*ND*	*ND*	**25**	*ND*	*ND*	*ND*	*ND*	**31**	2.1	*ND*	*ND*	*NA*
Mar-2002	*0.6 J*	*ND*	3.1	*NA*	1.1	4.3	*ND*	**7.9**	*ND*	*ND*	*ND*	*ND*	**15**	*0.9 J*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*0.9 J*	*ND*	*ND*	4.9	*ND*	*ND*	*ND*	*ND*	**12**	*ND*	*ND*	*0.6 J*	*NA*
Apr-2004	*ND*	*ND*	*0.6 J*	*NA*	1.5	*0.5 J*	*ND*	**36**	*ND*	*ND*	*ND*	*ND*	**61**	1.8	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	**11**	*ND*	*ND*	*ND*	*ND*	**13**	1.3	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	**5.7**	*ND*	*ND*	*ND*	*ND*	4.7	*0.8 J*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1.9 R	*ND*	*ND*	**9.4**	*ND*	*ND*	*ND*	*ND*	**11.2**	*0.6 J*	*ND*	*0.9 J*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	**5.6**	*ND*	*ND*	*ND*	*ND*	4	*0.6 J*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	*NA*
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.8	*ND*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	1.2	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.8	*ND*	*ND*	*ND*	*ND*	2.5	*ND*	*ND*	*1 J*	*NA*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.97	*ND*	*ND*	*ND*	*ND*	2.23	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-12***															
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.2	*ND*	*ND*	*ND*	*ND*	1.65	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.65	*ND*	*ND*	*ND*	*ND*	*0.96 J*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	1.2	*0.1 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.257 J*	*0.508 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.59	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-13***											
Nov-1993	7	7	0.2	ND	3	ND	ND	5.31	24.4	2.6	54	3.2
Apr-1994	9	9	ND	ND	2.5	ND	ND	5.19	19.6	ND	ND	3.15
Apr-1995	12.4	12.4	0.2	46.2	3.2	ND	ND	5.7	34.7	2.8	13	3
Apr-1997	ND	4	ND	ND	5	0.08	ND	NA	NA	ND	92	12
Apr-1998	5	5	0.26	ND	5.36	ND	ND	6.04	35.1	0.84	29	6.9
Apr-1999	ND	ND	0.14	ND	5.34	ND	ND	5.46	37.7	ND	38	4.3
Apr-2000	12	12	ND	ND	4.46	0.17	ND	5.29	28	ND	ND	3.9
Apr-2001	ND	NA	ND	30	1.22	ND	ND	NA	NA	ND	33	4.87
Mar-2002	2.8	2.8	ND	19	5.04	ND	ND	5.4	36.4	ND	33	6.77
Mar-2003	2.7	2.7	ND	ND	15.1	ND	ND	5.4	39.7	7.67	23	5.55
Apr-2004	2.5	2.5	ND	14	4.36	0.19	ND	5.8	40.6	ND	59	5.72
Apr-2005	ND	ND	ND	ND	5.03	0.25	ND	5.6	38.7	ND	42	5.8
Mar-2006	11	11	ND	ND	7.24	0.18	ND	5.9	62.7	1.18	41	5.01
Mar-2007	3.6	3.6	ND	ND	8.07	0.18	ND	5.9	75.6	1.26	11	5.81
Mar-2008	22	22	ND	ND	13.9	ND	ND	5.9	88.8	ND	58	6.79
Mar-2009	14	14	ND	ND	9.62	0.08	ND	5.5	92	1.55	37	11.5
Mar-2010	3.8	3.8	ND	18.2	10.3	0.22	ND	5.46	69	1.49	33	6.17
Apr-2011	5	5	ND	ND	9.76	0.23	0.03	5.4	70	ND	62	6.7
Mar-2012	3.7	3.7	ND	ND	11.1	0.23	ND	5	64.5	ND	14	7.57
Mar-2013	5.08	5.08	ND	ND	11.8	0.224	ND	4.3	72.7	1.18	24	8.5
Mar-2014	23	23	ND	8 J	11.9	0.259	ND	5.9	77.2	0.873 J	43	7.21
Apr-2015	16.7	16.7	ND	ND	12.1	0.236	ND	5	82.5	ND	58	9.23
May-2016	15.4	15.4	ND	ND	12.6	0.176	ND	6.2	135.4	ND	57	11.2
May-2017	8.96	8.96	ND	ND	12.5	0.297	ND	5.8	126.5	1.37	41	9.2
May-2018	22	22	ND	5.7 J	15.8	0.2	0.0056 J	5.7	137.7	ND	59	15.3
May-2019	22	NA	ND	ND	13.2	ND	ND	5.94	105	ND	28	11.9
May-2020	10	NA	ND	ND	15.4	0.11	0.0097 J	5.35	101.9	ND	68	15.1
Apr-2021	ND	NA	ND	6.1 J	14.3	0.18	ND	5.9	123.6	ND	43	14.3
May-2022	26	NA	ND	ND	14.1	0.18	0.0069 J	5.62	149.6	ND	27	18.3 N3
May-2023	2 J3c	NA	ND	34.2	20.5	ND	NA	5.65	135.1	ND	52	17.3 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-13***													
Nov-1993	*NA*	*ND*	*ND*	*NA*	*ND*	0.44	*NA*	*ND*	*NA*	*ND*	105	2.4	*ND*	0.51	*NA*
Apr-1994	*NA*	*ND*	*ND*	*NA*	*ND*	0.62	*NA*	*ND*	*NA*	*ND*	1.75	0.87	*ND*	0.39	*NA*
Apr-1995	*ND*	*ND*	0.7	*ND*	*ND*	0.43	*NA*	0.032	*ND*	*ND*	22.8	0.88	*ND*	0.48	*NA*
Apr-1997	*ND*	*ND*	0.038	*ND*	*ND*	2	1.5	*ND*	*ND*	*ND*	4.9	2.7	*ND*	1.1	0.83
Apr-1998	*ND*	*ND*	0.027	*ND*	*ND*	1.28	1.27	*ND*	*ND*	0.034	51	5.28	*ND*	0.89	0.871
Apr-1999	*ND*	*ND*	0.016	*ND*	*ND*	0.832	0.882	*ND*	*ND*	0.018	24.7	3.02	*ND*	0.546	0.538
Apr-2000	*ND*	*ND*	0.02	0.002	*ND*	0.868	0.498	0.042	*ND*	0.179	214	0.978	*ND*	0.42	0.328
Apr-2001	0.004	*ND*	0.023	*ND*	*ND*	1.04	*NA*	**0.211**	0.082	0.614	141	*NA*	0.003	0.555	*NA*
Mar-2002	0.005	*ND*	0.027	0.002	*ND*	1.46	1.03	**0.199**	0.06	0.668	154	3.85	0.003	0.759	0.66
Mar-2003	*ND*	*ND*	0.019	*ND*	*ND*	1.09	0.988	0.035	0.022	0.265	48.6	1.35	*ND*	0.688	0.626
Apr-2004	*ND*	0.007	0.015	*ND*	*ND*	1.4	0.862	0.06	0.017	0.182	52.1	6.71	*ND*	0.541	0.44
Apr-2005	0.004	0.01	0.019	*ND*	*ND*	1.62	0.672	**0.12**	0.028	0.386	80.9	5.02	0.003	0.433	0.36
Mar-2006	0.003	0.006	0.016	*ND*	*ND*	1.08	0.98	0.067	0.022	0.257	70.3	11.9	*ND*	0.559	0.56
Mar-2007	*ND*	0.003	0.023	*ND*	*ND*	1.3	1.11	0.067	*ND*	0.235	79.7	13.7	0.002	0.622	0.536
Mar-2008	*ND*	0.004	0.025	*ND*	*ND*	1.52	1.43	0.017	*ND*	0.064	26	17.7	*ND*	0.727	0.669
Mar-2009	*ND*	0.003	0.029	*ND*	*ND*	2.55	2.19	0.042	0.016	0.137	62.7	5.04	*ND*	1.24	1.05
Mar-2010	0.003	0.01	0.022	*ND*	*ND*	1.38	1.32	0.07	0.013	0.209	15	6.83	*ND*	0.66	0.638
Apr-2011	0.002	0.006	0.02	*ND*	*ND*	1.48	1.45	0.053	*ND*	0.166	22.6	8.96	*ND*	0.74	0.716
Mar-2012	*ND*	0.002	0.022	*ND*	*ND*	1.54	1.5	0.019	*ND*	0.064	29.1	10.1	*ND*	0.904	0.875
Mar-2013	*ND*	*0.0014 J*	0.0265	*0.000359 J*	*ND*	1.82	1.74	0.0203	*0.0066 J*	0.071	33.6	10.8	*ND*	0.96	0.863
Mar-2014	0.0021	0.0052	0.0211	*ND*	*0.000196 J*	1.56	1.56	0.0535	0.0124	0.172	35	13.6	*0.000968 J*	0.803	0.805

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-13***													
Apr-2015	*0.000337 J*	*0.001 J*	0.0266	*0.000171 J*	*ND*	2.03	2.08	*0.0085 J*	*0.0041 J*	0.0269	22.7	18	*ND*	1.01	1.04
May-2016	*ND*	*ND*	0.0275	*0.000096 J*	*ND*	2.43	2.24	*0.003 J*	0.0033	0.0073	19.6	16.3	*ND*	1.25	1.17
May-2017	*ND*	*0.0016 J*	0.0273	*0.00031 J*	*0.00021 J*	1.87	1.86	0.0097	0.0053	0.037	23.3	13.4	*0.00032 J*	1.11	1.02
May-2018	*0.000064 J*	*ND*	0.035	*0.00014 J*	*0.000053 J*	3.3	3.2	*0.0024 J*	0.0048	0.0044 B	13	11.6	*0.000031 J*	1.7	1.7
May-2019	*ND*	*ND*	0.023	*ND*	*ND*	2.8	2.8	*ND*	0.0056	0.013	23.3 M1	21.3	*ND*	1.2	1.2
May-2020	*ND*	*ND*	0.033	*0.00013 J*	*0.00014 J*	3.2	3.1	*0.0048 J*	0.006	0.0027	9.2	7.6	*ND*	1.8	1.7
Apr-2021	*ND*	*ND*	0.046	*ND*	*ND*	3.1	3.1	*0.0012 J*	*0.0043 J*	*ND*	15.9	12.5	*ND*	1.6	1.6
May-2022	*ND*	*ND*	0.051	*0.00021 J*	*ND*	3.6	3.1	*0.0015 J*	0.0091	0.0028	14	10.4	*ND*	2.3	1.9
May-2023	*ND*	*ND*	0.042	*0.00022 J*	*ND*	3.6	3.6	*0.0024 J*	0.0073	0.008	16.8	7.2	*ND*	2	2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-13*												
Nov-1993	0.19	NA	ND	NA	0.64	NA	ND	NA	1.5	NA	NA	NA	0.01
Apr-1994	0.05	NA	ND	NA	0.97	NA	ND	NA	1.49	NA	NA	NA	0.04
Apr-1995	0.2	NA	ND	ND	0.73	NA	ND	ND	1.3	NA	ND	ND	0.03
Apr-1997	0.11	0.07	0.0014	ND	2.4	1.8	ND	ND	2.4	2.7	ND	ND	ND
Apr-1998	0.053	0.074	NA	ND	1.37	0.735	ND	ND	2.44	2.47	ND	ND	0.041
Apr-1999	0.044	0.049	NA	ND	ND	1.02	ND	ND	2.36	2.23	ND	ND	0.056
Apr-2000	ND	0.045	NA	0.013	0.705	ND	ND	ND	5	2.03	ND	ND	0.051
Apr-2001	0.252	NA	NA	0.265	1.07	NA	ND	ND	3.28	NA	ND	ND	0.101
Mar-2002	0.166	0.047	NA	0.224	1.94	0.48	ND	ND	3.81	2.53	ND	ND	0.09
Mar-2003	0.078	0.054	NA	0.098	0.655	0.83	ND	ND	2.5	2.45	ND	ND	0.05
Apr-2004	0.121	0.076	0.0012	0.072	1.47	1.31	ND	ND	2.96	2.47	ND	ND	0.076
Apr-2005	0.149	0.052	**0.0047**	0.133	0.66	0.54	ND	ND	3.33	2.89	ND	ND	0.162
Mar-2006	0.11	0.045	**0.0032**	0.073	0.528	0.556	ND	ND	3.13	3.05	ND	ND	0.018
Mar-2007	0.125	0.075	**0.0051**	0.046	0.846	0.761	ND	ND	3.87	3.6	ND	ND	0.019
Mar-2008	0.113	0.085	0.0005	0.029	0.904	0.817	ND	ND	4.94	4.23	ND	ND	ND
Mar-2009	0.118	0.074	0.0004	0.05	1.18	1.03	ND	ND	4.48	3.8	ND	ND	0.066
Mar-2010	0.155	0.088	0.0004	0.096	1.03	0.96	ND	ND	4.25	4.01	ND	ND	0.022
Apr-2011	0.112	0.06	0.0004	0.046	0.714	0.658	ND	ND	4.36	4.17	ND	ND	0.018
Mar-2012	0.096	0.084	0.0004	0.023	0.866	0.924	ND	ND	4.9	5.08	ND	ND	0.012
Mar-2013	0.111	0.0863	0.000377	0.0233	0.852	0.785	ND	ND	5.07	4.57	ND	ND	0.0159
Mar-2014	0.127	0.0813	0.000762	0.0559	0.849	0.84	ND	0.00007 J	5.07	5.1	ND	ND	0.0164
Apr-2015	0.0996	0.0988	0.000078 J	0.0097 J	0.94	0.989	ND	ND	5.73	5.98	ND	ND	0.011

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-13***												
May-2016	0.102	0.107	*ND*	0.0052	1.11	0.978	*ND*	*ND*	6.28	5.79	*ND*	*ND*	*ND*
May-2017	0.0982	0.089	0.00036	0.0152	0.963	0.947	*ND*	*ND*	5.82	5.78	*ND*	*ND*	*0.0074 J*
May-2018	0.088	0.086	*ND*	0.0064	*1.2 J*	*ND*	*0.00054 JB*	*ND*	7.5	7.8	*ND*	0.0029	0.007 B
May-2019	0.18	0.16	*ND*	0.0055	*ND*	*ND*	*ND*	*ND*	5.4	5.2	*ND*	*ND*	0.013
May-2020	0.076	0.072	*0.00016 J*	0.0075	*1.2 J*	*ND*	*0.00036 J*	*ND*	8.1	6.6	*ND*	*0.00053 J*	0.0077
Apr-2021	0.11	0.11	*ND*	*0.0055 J*	1	1.1	*ND*	*ND*	7.2	7.5	*0.0044 J*	*ND*	*0.0031 J*
Jun-2021	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*NA*
May-2022	0.11	0.096	*ND*	0.01	1.2	1.1	*ND*	*ND*	9.2	8.2	*ND*	*ND*	0.0096
May-2023	0.11	0.099	*ND*	0.011	1.2	1.2	*ND*	*ND*	9.1	9.1	*ND*	*ND*	0.013

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-13*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	43	ND
Apr-1997	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	1.1	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	4.39	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-13*																
Mar-2014	*ND*	*ND*	*ND*	*ND*	4.71	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.34 J*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	4.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	4.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	4.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.9 JB*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	4.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	3.99	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	3.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-13***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	10	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	1.2
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	1.4	1.4
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	1.5
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	1.1
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	1
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	7.2	3.1
Mar-2006	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	4.6	ND	ND	ND	8.4	4.7
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	5.4	2.8
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.5	ND	ND	ND	10.5	7.9
May-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND	ND	ND	10.5	2.9
Mar-2009	ND	ND	ND	ND	ND	2.2 B	ND	ND	ND	ND	ND	1.3	ND	ND	ND	5.4	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.6 J	4.5
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	11.9	4.3
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	11.1	3.5
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.95	ND	ND	ND	6.21	3.63

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-13***															
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.04	ND	ND	ND	8.47	4.03
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.37	ND	ND	ND	5.96	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	5.6	4.3
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	ND	ND	ND	5.9	4.1
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.2	ND	ND	ND	11.4	5.2
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.1	ND	ND	ND	8.2	6.4 N3
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2	ND	ND	ND	5.1	2.2
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.82	ND	ND	ND	4.95 J	4.41 J
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7	ND	ND	ND	8.5	2.7
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2	ND	ND	ND	4.6	2.3

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-13***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	2.1	ND	ND	NA	NA	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	ND	2.9	0.5 J	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	4.1	ND	ND	ND	ND	**5.3**	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	3.6	ND	ND	ND	ND	3.7	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	**7 C**	ND	ND	ND	ND	**10.4**	0.5 J	ND	ND	NA
May-2008	ND	ND	ND	ND	ND	ND	ND	**6.3**	ND	ND	ND	ND	5	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	4.1	ND	ND	ND	ND	2.1	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	3.7	ND	ND	ND	ND	2.5	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	ND	2.3	ND	ND	0.5 J	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-13***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.37	*ND*	*ND*	*ND*	*ND*	2.45	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.53	*ND*	*ND*	*ND*	*ND*	3.3	*0.34 J*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.34	*ND*	*ND*	*ND*	*ND*	4.15	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.9	*ND*	*ND*	*ND*	*ND*	**5.1**	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.8	*ND*	*ND*	*ND*	*ND*	4.6	*0.1 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	**6**	*ND*	*ND*	*ND*	*ND*	**9.6**	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	**8.4**	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.6	*ND*	*ND*	*ND*	*ND*	4.7	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.872 JB*	*ND*	*ND*	2.72	*ND*	*ND*	*ND*	*ND*	**5.59**	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	*ND*	**5.3**	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	4.7	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-14B***											
Apr-2010	ND	ND	ND	ND	1.71	0.17	ND	4	27.7	6.92	11	2.8
Oct-2010	ND	ND	ND	ND	1.82	0.18	ND	3.5	21.6	4.72	11	2.62
Apr-2011	ND	ND	ND	ND	1.61	0.2	ND	4	21	3.35	18	1.9
Sep-2011	ND	ND	ND	ND	1.56	0.2	ND	4.4	20.5	4.28	22	2.41
Mar-2012	ND	ND	ND	ND	1.74	0.21	ND	3.5	20.7	5.11	ND	2.36
Sep-2012	ND	ND	ND	ND	1.69	0.193	ND	3.4	21	5.08	ND	1.96
Mar-2013	0.92 J	0.92 J	ND	ND	1.88	0.202	ND	3.1	20.8	3.24	15	2.11
Oct-2013	1.72 J	1.72 J	ND	ND	1.8	0.196	ND	2.9	20.1	3.64	ND	2.16
Mar-2014	0.72	0.72	ND	24	1.75	0.208	ND	5.4	27.3	3.75	ND	1.85
Oct-2014	ND	ND	ND	ND	1.9	0.212	ND	4.1	20.7	4.02	ND	2.2
Apr-2015	5.64	5.64	ND	ND	1.92	0.234	ND	3.9	21.4	4.35	36	4.51
Nov-2015	1.92	1.92	ND	ND	1.78	0.221	ND	4.8	33.2	4.39	21 J	2.79
May-2016	ND	ND	ND	5 J	1.89 B	0.187	ND	4.7	28.3	3.78	73	2.9
Oct-2016	1.8	1.8	ND	5 J	1.77	NA	NA	4.6	34.4	3.98	133	2.6
May-2017	2.56	2.56	ND	12	1.72	0.227	ND	4.5	34.7	3.56	13 J	3.1
Oct-2017	ND	ND	ND	ND	1.71	0.243	ND	4.7	35.7	4.29	11 J	2.1
May-2018	ND	ND	ND	ND	1.5 J	0.24	ND	6.1	29.3	ND	ND	2.3 J
Nov-2018	ND	ND	ND	ND	1.5 J	0.25	ND	4.28	22.3	ND	ND	2.3 J
May-2019	ND	NA	ND	ND	ND	0.25	ND	4.31	17.8	ND	16	ND
Oct-2019	ND	NA	ND	ND	1.4 J	0.29	ND	3.6	23.9	ND	ND	2.3
May-2020	ND	NA	ND	ND	1.5 J	0.28	ND	4.02	22.8	ND	20	2.4
Oct-2020	ND	NA	ND	ND	1.9 J	0.27	ND	3.98	22.3	2.2	ND	2.3
Apr-2021	ND	NA	ND	ND	1.7 J	0.32	ND	4.43	26.4	ND	26	2.2 J
Oct-2021	ND	NA	ND	ND	1.3 J	0.34	ND	4.56	52.8	ND	ND	2.24 J
May-2022	ND	NA	ND	ND	1.6 J	0.32	ND	4.27	47.2	ND	ND	2.5 JN3
Oct-2022	ND	NA	ND	ND	2 J	0.35	ND	4.49	42.4	5.9 J	14	2.5 JN3
May-2023	ND	NA	ND	41	1.7 J	ND	NA	4.49	42.3	ND	ND	2.3 JN3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14B***													
Apr-2010	ND	ND	ND	ND	ND	0.674	0.553	ND	0.022	0.01	ND	ND	ND	0.271	0.225
Oct-2010	ND	ND	ND	ND	ND	0.62	0.551	ND	0.015	ND	ND	ND	ND	0.26	0.235
Apr-2011	ND	ND	ND	ND	ND	0.445	0.466	ND	0.011	ND	ND	ND	ND	0.205	0.23
Sep-2011	ND	ND	ND	ND	ND	0.608	0.61	ND	ND	ND	ND	ND	ND	0.216	0.262
Mar-2012	ND	ND	ND	ND	ND	0.462	0.445	ND	ND	ND	0.064	ND	ND	0.295	0.283
Sep-2012	ND	ND	0.0054 J	0.000317 J	ND	0.44	0.591	0.0023 J	0.0082 J	0.0051 J	0.0352 J	0.0702	ND	0.21	0.245
Mar-2013	ND	ND	0.0055 J	0.000399 J	ND	0.518	0.516	0.0022 J	0.008 J	0.0047 J	0.0052 J	0.0174 J	ND	0.199	0.202
Oct-2013	ND	ND	0.0053 J	0.000313 J	0.000151 J	0.586	0.483	0.0072 J	0.0071 J	0.0036 J	0.0542	ND	ND	0.169	0.225
Mar-2014	0.000742 J	ND	0.0047 J	ND	0.00012 J	0.428	0.342	0.0018 J	0.0071 J	0.0063 J	ND	ND	ND	0.19	0.133
Oct-2014	0.00092 J	0.000584 J	0.0055 J	0.000383 J	0.000144 J	0.531	0.523	0.000633 J	0.0071 J	0.0048 J	0.0109 J	0.0173 J	ND	0.213	0.224
Apr-2015	0.0026	0.000676 J	0.0083 J	0.000399 J	0.000295 J	1.27	0.831	0.000584 J	0.0089 J	0.0422	0.317	0.0251 J	0.0037	0.323	0.227
Nov-2015	0.000636 J	0.000194 J	0.0067 J	0.000425 J	0.000178 J	0.688	0.907	0.000423 J	0.0079 J	0.008 J	0.18	ND	0.000607 J	0.26	0.282
May-2016	ND	ND	0.007	0.00034 J,B	0.00021 J	0.762	0.654	ND	0.0071	0.0062	0.114 J	0.0412 J	0.0015 J	0.25	0.248
Oct-2016	ND	0.00075 J	0.0066	0.00036 J	ND	0.62	0.606	0.00086 J+	0.0069	0.0068 J+	0.176 J	ND	0.0016 J	0.26 J+	0.241
May-2017	0.0015 J	0.00076 J	0.006	0.00035 J	ND	0.766	0.732	0.00074 J	0.0068	0.007	0.107 J	ND	0.0012 J	0.279	0.25
Oct-2017	ND	ND	0.0052	0.00026 J	0.00021 J	0.48	0.465	0.0011 J	0.0058	0.0034 J	ND	ND	ND	0.209	0.221
May-2018	ND	ND	0.0055	0.00032	0.00017 J	0.5 J	0.48 J	0.0029 J	0.0052	0.0069	0.02 J	ND	0.000047 JB	0.24 J	0.23 J
Nov-2018	ND	ND	0.0056	0.00031	0.00016 J	0.52 J	0.5 J	0.0064 J	0.0049	0.005	0.035	0.02 J	0.00011 J	0.23 J	0.23 J
May-2019	ND	ND	0.0058	ND	ND	ND	ND	0.009	0.0052	0.0063	ND	0.026	ND	ND	ND
Oct-2019	0.0001 J	ND	0.0058	0.00029 J	0.00026 J	0.52	0.5 J	0.007 J	0.0051	0.0087	0.025 J	0.019 J	0.000056 J	0.25	0.2 J
May-2020	ND	ND	0.0055	0.00026 J	0.00013 J	0.53	0.49 JB	0.0065 J	0.0054	0.0047	0.02 J	0.016 J	ND	0.25	0.22 JB

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14B***													
Oct-2020	*ND*	*ND*	*0.0061 J*	*0.00029 J*	*ND*	0.5	*0.48 J*	*0.0063 J*	0.0057	0.013	*0.034 JB*	*0.019 J*	*ND*	0.25	*0.24 J*
Apr-2021	*ND*	*ND*	*0.0091 J*	*0.00026 J*	*ND*	*0.49 J*	*0.48 J*	*0.0029 J*	0.0055	*0.005 J*	*ND*	*ND*	*ND*	0.23	0.24
Oct-2021	*ND*	*ND*	0.006	*0.00032 J*	*ND*	*0.5 J*	0.53	0.0038	0.0058	0.0091	*0.021 J*	*0.014 J*	*0.000046 J*	*0.24 J*	*0.25 J*
May-2022	*ND*	*ND*	0.0064	*0.0003 J*	*ND*	0.51	*0.49 J*	0.0035	0.0064	0.0088	*ND*	*ND*	*ND*	*0.29 J*	*0.26 J*
Oct-2022	*ND*	*ND*	0.006	*0.00027 J*	*ND*	0.55	0.55	*0.0024 J*	0.0057	0.0079	*ND*	*ND*	*ND*	*0.28 J*	*0.27 J*
May-2023	*ND*	*ND*	0.0056	*0.00022 J*	*ND*	0.57	0.5	0.0032	0.0052	0.0081	*0.042 J*	*ND*	*ND*	*0.22 J*	*0.24 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-14B*												
Apr-2010	0.013	0.012	ND	0.028	ND	ND	ND	ND	0.89	0.777	ND	ND	0.071
Oct-2010	ND	ND	ND	0.019	ND	ND	ND	ND	0.835	0.817	ND	ND	0.037
Apr-2011	ND	ND	ND	0.015	ND	ND	ND	ND	0.758	0.741	ND	ND	0.025
Sep-2011	ND	ND	ND	0.015	0.51	ND	ND	ND	1.07	1.03	ND	ND	0.021
Mar-2012	ND	ND	ND	0.012	ND	ND	ND	ND	0.907	0.862	ND	ND	0.016
Sep-2012	0.0072 J	0.0086 J	ND	0.0128	0.387 J	0.419 J	ND	ND	0.861	0.908	ND	ND	0.0148
Mar-2013	0.0068 J	0.007 J	0.00006 J	0.0115	0.385 J	0.345 J	ND	ND	0.799	0.755	ND	ND	0.025
Oct-2013	0.0065 J	0.0073 J	ND	0.0089 J	0.351 J	0.412 J	ND	0.000036 J	0.653	0.851	0.000443 J	0.002 J	0.0563
Mar-2014	0.0064 J	0.0039 J	ND	0.0111	0.382 J	0.41 J	ND	ND	0.859	1.03	ND	ND	0.0151
Oct-2014	0.007 J	0.0073 J	ND	0.0108 J	0.423 J	0.409 J	0.0012 J	ND	0.958	0.942	0.00071 J	ND	0.0206
Apr-2015	0.0118	0.0068 J	ND	0.0135	0.59	0.58	ND	ND	3.48	3.31	ND	ND	0.0647
Nov-2015	0.0088 J	0.0097 J	ND	0.0125	0.524	0.618	ND	ND	1.75	2.98	ND	ND	0.0276
May-2016	0.0093	0.0093 B	ND	0.0117	0.496	0.516	ND	ND	1.63	1.37	ND	ND	0.0262 J
Oct-2016	0.0082 R	0.0069	ND	0.0112 J+	0.508	0.519	ND	ND	2.09 J+	1.82	ND	ND	0.045
May-2017	0.0094	0.0088	ND	0.0107	0.528	0.477	ND	ND	1.96	1.47	ND	ND	0.0591
Oct-2017	0.0061	0.0059	ND	0.0093	0.401	0.455	ND	ND	0.859	0.876	ND	ND	0.0104 J
May-2018	0.0059	0.0053	ND	0.0091	ND	ND	0.00012 J	ND	0.84 J	0.81 J	ND	ND	0.013
Nov-2018	0.015	0.0061	ND	0.012	ND	ND	0.00022 J	ND	0.81 J	0.91 J	ND	ND	0.014
May-2019	0.0073	0.0084	ND	0.013	ND	ND	ND	ND	ND	ND	ND	0.0024	0.013
Oct-2019	0.0078	0.0068	ND	0.011	ND	ND	ND	ND	ND	ND	ND	0.0068	0.016
May-2020	0.0077	0.0071	ND	0.01	ND	ND	ND	ND	ND	ND	ND	ND	0.011
Oct-2020	0.0079	0.0071	ND	0.012	ND	ND	ND	ND	ND	ND	ND	0.0014 J	0.013 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14B***												
Apr-2021	0.0074	0.0073	*ND*	0.01	*0.42 J*	*0.41 J*	*ND*	*ND*	*0.86 J*	1.1	*ND*	*ND*	0.01
Oct-2021	0.0075	0.008	*ND*	0.011	*0.38 J*	*0.4 J*	*ND*	*ND*	0.89	1 B	*0.000068 J*	*ND*	0.015
May-2022	0.0097	0.0086	*ND*	0.012	*0.49 J*	*0.44 J*	*ND*	*ND*	1.1	0.95	*ND*	*ND*	0.012
Oct-2022	0.0084	0.0087	*ND*	0.01	*0.49 J*	0.5	*ND*	*ND*	1.2	1.2	*ND*	*ND*	0.012
May-2023	0.0072	0.0076	*ND*	0.01	*0.35 J*	*0.45 J*	*ND*	*ND*	1	0.99	*ND*	*ND*	0.01

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-14B***																
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14B*																
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-14B*															
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14B***															
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14B***															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14B***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-16A***											
Oct-2009	2.9	2.9	ND	ND	2.93	0.2	ND	4.6	18.3	0.81	16	3.39
Apr-2010	2.9	2.9	ND	ND	3.33	0.2	ND	4.1	18.4	ND	44	3.1
Oct-2010	2.5	2.5	ND	ND	3.27	0.16	ND	4.6	18.2	ND	14	3.86
Apr-2011	2.9	2.9	ND	ND	3.06	0.2	ND	4.6	17	ND	12	3.5
Sep-2011	3.1	3.1	ND	ND	3.05	0.19	ND	4.6	17.5	ND	13	4
Mar-2012	3	3	ND	ND	3.13	0.2	ND	4.2	23.3	ND	39	3.9
Sep-2012	2.64	2.64	ND	ND	3.27	0.174	ND	3.8	18.3	ND	49	3.67
Mar-2013	3.32	3.32	ND	ND	3.44	0.19	ND	3.7	417.6	0.868 J	19	3.74
Oct-2013	3.72	3.72	ND	ND	3.38	0.169	ND	3.4	18.9	0.747 J	28	3.62
Mar-2014	3.08	3.08	ND	17	3.27	0.178	ND	5.4	20.5	0.581 J	ND	3.41
Oct-2014	ND	ND	ND	8 J	3.44	0.186	ND	5.1	17.9	0.224 J	ND	3.86
Apr-2015	3.76	3.76	ND	ND	3.3	0.173	ND	4.3	20.9	ND	ND	3.88
Nov-2015	2.56	2.56	ND	6 J	3.4	0.19	ND	5.1	44.9	1.08	ND	3.99
May-2016	2.56	2.56	ND	ND	3.37	0.187	ND	5.2	30.7	ND	14 J	4
Oct-2016	ND	ND	ND	ND	3.2	NA	NA	5.1	32.7	1.06	31	3.4
May-2017	ND	ND	ND	ND	3.07	0.19	ND	5	28.6	0.899 J	ND	3.3
Oct-2017	ND	ND	0.0787 J	ND	3.05	0.203	ND	5.2	34.5	0.501 J	33	3.8
May-2018	2 J	ND	0.056 J	ND	3.1	ND	ND	4.8	33.9	ND	45	4 J
Nov-2018	2 JB	ND	ND	ND	2.9 J	0.18	ND	4.66	20.4	ND	17	59.7
May-2019	ND	NA	ND	ND	ND	0.19	ND	4.7	14.9	ND	ND	ND
Oct-2019	ND	NA	ND	ND	2.6 J	0.19	ND	4.59	20.8	ND	21	3.9
May-2020	ND	NA	ND	ND	2.8 J	0.15	ND	4.38	19.2	ND	ND	4.1
Oct-2020	ND	NA	ND	ND	2.9 J	0.17	ND	4.45	20	ND	ND	4
Apr-2021	ND	NA	ND	ND	3 J	0.18	ND	4.91	25.6	ND	12	4
Oct-2021	2 J3c	NA	ND	ND	2.4 J	0.18	ND	5.02	52.4	ND	ND	3.79
May-2022	2 J3c	NA	ND	ND	2.4 J	0.17	ND	4.81	44.9	ND	16	3.9 N3
Oct-2022	3 J3c	NA	ND	8.4 J	3.3	0.17	ND	4.83	45.2	ND	ND	4.1 N3
May-2023	2 J3c	NA	ND	ND	2.6 J	0.17	ND	4.93	43.9	ND	15	4.3 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-16A***													
Oct-2009	ND	ND	ND	ND	ND	0.828	0.795	ND	ND	ND	ND	ND	ND	0.32	0.329
Apr-2010	ND	ND	ND	ND	ND	0.746	0.735	ND	ND	ND	0.152	ND	ND	0.299	0.296
Oct-2010	ND	ND	ND	ND	ND	0.92	0.864	ND	ND	ND	ND	ND	ND	0.378	0.359
Apr-2011	ND	ND	ND	ND	ND	0.833	0.811	ND	ND	ND	ND	ND	ND	0.348	0.329
Sep-2011	ND	ND	ND	ND	ND	0.973	0.98	ND	ND	ND	ND	ND	ND	0.381	0.382
Mar-2012	ND	ND	ND	ND	ND	0.86	0.85	ND	ND	ND	ND	ND	ND	0.424	0.409
Sep-2012	ND	ND	0.0064 J	0.000091 J	ND	0.889	0.905	ND	0.0034 J	0.0012 J	0.024 J	0.0281 J	ND	0.351	0.356
Mar-2013	ND	ND	0.0066 J	0.000067 J	ND	0.981	0.898	0.0021 J	0.0038 J	0.000806 J	0.0113 J	0.0061 J	0.0014 J	0.313	0.291
Oct-2013	ND	ND	0.0067 J	ND	ND	0.991	0.878	0.0088 J	0.0037 J	0.000741 J	0.062	ND	ND	0.279	0.35
Mar-2014	0.00052 J	ND	0.0057 J	ND	ND	0.845	0.875	0.0018 J	0.0034 J	0.0022 J	ND	ND	ND	0.315	0.319
Oct-2014	0.000784 J	ND	0.0069 J	ND	ND	0.966	0.975	0.000635 J	0.003 J	0.000772 J	ND	ND	ND	0.351	0.348
Apr-2015	0.0011 J	0.000376 J	0.007 J	ND	ND	0.945	0.93	0.00071 J	0.0038 J	0.001 J	ND	0.0106 J	ND	0.369	0.363
Nov-2015	0.000344 J	ND	0.0065 J	0.000083 J	0.000101 J	0.999	1.01	0.000304 J	0.0031 J	0.0012 J	0.0175 J	ND	0.000283 J	0.362	0.371
May-2016	ND	ND	0.0067	ND	ND	0.982	0.825	0.00082 J	0.0032	0.00098 J	ND	ND	ND	0.37	0.34
Oct-2016	ND	ND	0.0068	ND	ND	0.816	0.904	ND	0.003	0.00098 J	ND	ND	ND	0.339	0.366
May-2017	ND	ND	0.0074	ND	ND	0.749	0.796	0.001 J	0.003	0.00088 J	ND	ND	ND	0.35	0.344
Oct-2017	ND	ND	0.0055	0.000077 J	ND	0.944	0.901	0.00091 J	0.0041	0.0018 J	ND	ND	ND	0.352	0.344
May-2018	0.000063 J	ND	0.0067	0.0001 J	0.000079 J	0.97 J	0.96 J	0.00085 J	0.0053	0.0017 J	0.011 J	ND	0.000068 JB	0.38 J	0.37 J
Nov-2018	ND	ND	0.0058	0.000055 J	0.000072 J	13.4	1.1	0.0087	0.026	0.0061	0.31	0.04	0.00026 J	6.4	0.46 J
May-2019	ND	ND	0.0058	ND	ND	ND	1.4	0.0099	0.029	0.0024	ND	0.04	ND	ND	ND
Oct-2019	0.000096 J	ND	0.0059	0.000078 J	0.00016 J	0.96	0.93 J	0.012	0.032	0.0031	0.068 J	0.041	ND	0.37	0.37 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-16A***													
May-2020	*0.000058 J*	*ND*	0.006	*ND*	*ND*	1	*0.97 J*	0.014	0.045	0.0032	*0.095 J*	0.054	*ND*	0.38	*0.37 JB*
Oct-2020	*ND*	*ND*	*0.0065 J*	*ND*	*ND*	0.97	*0.93 J*	*0.0094 J*	0.034	*ND*	*0.057 JB*	0.042	*ND*	0.37	*0.36 J*
Apr-2021	*ND*	*ND*	*0.0071 J*	*0.00021 J*	*ND*	*0.98 J*	*0.93 J*	0.0061	0.028	*0.0045 J*	*0.051 J*	*ND*	*ND*	0.38	0.37
Oct-2021	*ND*	*ND*	0.0065	*ND*	*ND*	0.94	1	0.0025	0.017	*0.002 J*	*0.024 J*	*0.017 J*	*ND*	*0.35 J*	*0.38 J*
May-2022	*ND*	*ND*	0.0067	*ND*	*ND*	0.95	1	*0.0014 J*	0.024	*0.0022 J*	*ND*	*0.036 J*	*ND*	*0.37 J*	*0.4 J*
Oct-2022	*ND*	*ND*	0.0062	*ND*	*ND*	0.99	1.1	0.0034	0.013	*0.0016 J*	*ND*	*ND*	*ND*	*0.4 J*	*0.39 J*
May-2023	*ND*	*ND*	0.0063	*ND*	*ND*	1.1	1	0.0031	0.015	0.0027	*0.035 J*	*ND*	*ND*	*0.4 J*	*0.38 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-16A*												
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.1	1.04	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.17	1.16	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.52	ND	ND	ND	1.28	1.21	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.21	1.16	ND	ND	ND
Sep-2011	ND	ND	ND	ND	0.525	0.536	ND	ND	1.48	1.45	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	1.3	1.27	ND	ND	ND
Sep-2012	0.0042 J	0.0043 J	ND	0.0046 J	0.472 J	0.464 J	ND	ND	1.28	1.33	0.000679 J	ND	0.0065 J
Mar-2013	0.0045 J	0.0042 J	0.000054 J	0.0048 J	0.424 J	0.376 J	ND	ND	1.19	1.12	ND	ND	0.0163
Oct-2013	0.0047 J	0.0045 J	ND	0.0038 J	0.409 J	0.489 J	ND	ND	1.01	1.32	0.001 J	0.0022 J	0.0123
Mar-2014	0.0036 J	0.0037 J	ND	0.0046 J	0.45 J	0.423 J	ND	ND	1.26	1.23	ND	ND	0.0064 J
Oct-2014	0.0039 J	0.0041 J	0.000024 J	0.0052 J	0.502	0.489 J	0.000965 J	ND	1.47	1.41	ND	ND	0.0095 J
Apr-2015	0.0045 J	0.0045 J	ND	0.005 J	0.529	0.516	0.0013 J	0.000034 J	1.51	1.48	0.000888 J	ND	0.0118
Nov-2015	0.004 J	0.0041 J	ND	0.0046 J	0.508	0.521	ND	ND	1.39	1.43	0.000103 J	ND	0.0044 J
May-2016	0.0046	0.0041	ND	0.0046	0.529	0.492	ND	ND	1.43	1.26	ND	ND	0.0076 J,B
Oct-2016	0.003 J	0.0038 J+	ND	0.0043	0.446	0.49	ND	ND	1.29	1.36	ND	ND	0.006 J
May-2017	0.0042	0.0032 J	ND	0.0051	0.484	0.485	ND	ND	1.21	1.23	ND	ND	0.0055 J
Oct-2017	0.0046	0.004	ND	0.0044	0.482	0.506	ND	ND	1.25	1.29	ND	ND	0.006 J
May-2018	0.0048	0.0034	ND	0.0062	ND	ND	ND	ND	1.6 J	1.2 J	ND	0.0039	0.0084 B
Nov-2018	0.0098	0.015	ND	0.009	2.3 J	ND	0.0002 J	ND	22.4	1.4 J	ND	ND	0.021
May-2019	0.025	0.064	ND	0.01	ND	ND	ND	ND	ND	ND	ND	ND	0.015
Oct-2019	0.0074	0.0091	ND	0.01	ND	ND	ND	ND	ND	1.4 J	ND	0.0072	0.011
May-2020	0.0093	0.0074	ND	0.011	ND	ND	ND	ND	ND	ND	ND	0.0081	0.0075

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-16A***												
Oct-2020	0.0071	0.0067	*ND*	0.01	*ND*	*ND*	*ND*	*ND*	*1.3 J*	*ND*	*ND*	*0.00089 J*	*ND*
Apr-2021	0.0066	0.0058	*ND*	*0.0095 J*	0.51	*0.5 J*	*0.0058 J*	*ND*	1.3	1.1	*ND*	*ND*	*0.005 J*
Oct-2021	*0.0045 J*	*0.0048 J*	*ND*	0.0068	*0.44 J*	*0.49 J*	*ND*	*ND*	1.2	1.4 B	*0.000053 J*	*ND*	0.0051
May-2022	0.0054	0.0057	*ND*	0.0083	0.56	*0.47 J*	*ND*	*ND*	1.2	1.3	*ND*	*ND*	0.006
Oct-2022	*0.0048 J*	0.0052	*ND*	0.0066	0.55	*0.47 J*	*ND*	*ND*	1.5	1.4	*ND*	*ND*	0.0078
May-2023	*0.005 J*	*0.0049 J*	*ND*	0.0072	0.64	0.55	*ND*	*ND*	1.4	1.4	*ND*	*ND*	0.0057

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16A*																
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16A*																
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-16A*															
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-16A***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.123 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16A***															
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16A***															
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-18***											
Nov-1993	*ND*	*ND*	0.2	*ND*	16	*ND*	*ND*	4	184.1	48.4	112	26.5
Apr-1994	*ND*	*ND*	0.1	*ND*	14.8	*ND*	*ND*	4.44	189	51.8	108	37.42
Apr-1995	*ND*	*ND*	0.3	22.6	14.2	*ND*	*ND*	4.3	183	55.5	96	25.9
Apr-1997	*ND*	11	*ND*	*ND*	14	*ND*	*ND*	*NA*	*NA*	37	108	18.3
Apr-1998	*ND*	*ND*	1.1	*ND*	10.9	8.44	*ND*	5	199.8	23.9	93	42
Apr-1999	*ND*	*ND*	0.65	*ND*	14.3	5.01	*ND*	4.28	175.7	29.6	102	42
Apr-2000	*ND*	*ND*	2.4	*ND*	10.9	**38.6**	*ND*	4.05	353	9.27	205	83
Apr-2001	*ND*	*NA*	1.3	*ND*	9.89	**28.8**	*ND*	*NA*	*NA*	20.6	147	78
Mar-2002	*ND*	*ND*	*ND*	*ND*	8.8	3.78	*ND*	3.9	135	23.3	74	35.6
Mar-2003	*ND*	*ND*	0.8	13	16.8	**11.5**	*ND*	4	222	31.9	145	52.7
Apr-2004	*ND*	*ND*	0.38	*ND*	6.95	6.47	*ND*	4.2	166.4	42.4	102	44.6
Apr-2005	*ND*	*ND*	*ND*	*ND*	10.5	5.93	*ND*	4.4	136.3	29.4	72	43
Mar-2006	*ND*	*ND*	*ND*	*ND*	9.69	7.16	*ND*	4.5	162.9	42.9	118	43.3
Mar-2007	*ND*	*ND*	*ND*	*ND*	5.17	**12.6**	*ND*	4.2	168	45.6	128	52.1
Mar-2008	*ND*	*ND*	*ND*	*ND*	5.89	**14.9**	*ND*	4	183.3	38.3	143	54.5
Mar-2009	*ND*	*ND*	*ND*	*ND*	6.59	9.29	*ND*	3.8	166.2	47.9	114	42
Mar-2010	*ND*	*ND*	*ND*	10.8	7.05	7.06	*ND*	4.16	178	35.6	104	36.3
Apr-2011	*ND*	*ND*	*ND*	*ND*	5.12	5.67	*ND*	3.9	134	31.3	114	35.2
Mar-2012	*ND*	*ND*	*ND*	*ND*	8.46	4.25	*ND*	3.6	115.3	38.1	67	34
Mar-2013	*ND*	*ND*	*ND*	*ND*	7.18	2.97	*ND*	4.4	116.4	31.2	89	28.9
Mar-2014	*ND*	*ND*	*ND*	17	7.46	2.06	*ND*	4.5	110.7	32.5	56	27.5
Apr-2015	*ND*	*ND*	*ND*	*ND*	6.9	2.05	*ND*	3.7	101	33.5	68	27.8
May-2016	*ND*	*ND*	*ND*	*ND*	9.36	1.7	*ND*	4.5	186.9	37.3	66	31.6
May-2017	*ND*	*ND*	*ND*	*ND*	9.75	1.23	*ND*	4.5	157	27.5	51	29.4
May-2018	*ND*	*ND*	0.12	*5.8 J*	6.3	0.46	*ND*	4.3	147.2	34.2	126	32.6
May-2019	*ND*	*NA*	*ND*	*ND*	8.6	1.5	*ND*	4.33	89.7	27.5	79	30.7
May-2020	*ND*	*NA*	*ND*	*ND*	5.5	1.8	*ND*	3.94	114.9	33.2	60	33.3
Apr-2021	*ND*	*NA*	*ND*	*12.6 J*	7.2	1.4	*ND*	4.25	122	27.1	55	22.5
May-2022	*1 J2c*	*NA*	*ND*	*ND*	4.2	1.6	*ND*	4.2	147.1	26.3	66	28.4 N3
May-2023	*ND*	*NA*	*ND*	*ND*	4.4	1.5	*ND*	4.33	134.4	27.8	47	28 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-18***													
Nov-1993	*NA*	*ND*	*ND*	*NA*	*ND*	3.7	*NA*	*ND*	*NA*	*ND*	4.2	3.7	*ND*	4.2	*NA*
Apr-1994	*NA*	*ND*	*ND*	*NA*	*ND*	4.1	*NA*	*ND*	*NA*	*ND*	3.9	4.34	*ND*	6.6	*NA*
Apr-1995	*ND*	*ND*	1	*ND*	*ND*	3.1	*NA*	*ND*	0.06	*ND*	9.4	9.2	*ND*	4.4	*NA*
Apr-1997	*ND*	*ND*	0.07	*ND*	**0.012**	4.6	4.9	*ND*	0.14	*ND*	12	9.7	*ND*	3.2	3.4
Apr-1998	*ND*	*ND*	0.145	*ND*	*ND*	7.7	7.78	*ND*	0.223	0.013	1.43	1.36	*ND*	5.65	5.67
Apr-1999	*ND*	*ND*	0.111	*ND*	*ND*	7.87	7.3	*ND*	0.153	0.01	0.261	*ND*	*ND*	5.51	5.04
Apr-2000	*ND*	*ND*	0.531	0.003	0.004	16.7	15.3	*ND*	0.657	0.019	0.211	0.071	*ND*	10	9.24
Apr-2001	*ND*	*ND*	0.388	0.004	0.005	16.4	*NA*	*ND*	0.488	0.018	0.135	*NA*	*ND*	9.03	*NA*
Mar-2002	*ND*	*ND*	0.085	*ND*	*ND*	6.6	6.61	*ND*	0.121	*ND*	0.262	0.138	*ND*	4.64	4.61
Mar-2003	*ND*	*ND*	0.225	*ND*	*ND*	11.7	10.8	*ND*	0.365	*ND*	0.333	*ND*	*ND*	5.74	5.32
Apr-2004	*ND*	*ND*	0.105	*ND*	*ND*	10.1	10.2	*ND*	0.256	*ND*	0.302	*ND*	*ND*	4.73	4.78
Apr-2005	*ND*	*ND*	0.111	*ND*	*ND*	9.29	9	*ND*	0.17	*ND*	*ND*	*ND*	*ND*	4.81	4.66
Mar-2006	*ND*	*ND*	0.091	*ND*	*ND*	9.75	9.47	*ND*	0.177	*ND*	*ND*	*ND*	*ND*	4.62	4.5
Mar-2007	*ND*	*ND*	0.112	*ND*	*ND*	13.1	12.5	*ND*	0.253	*ND*	0.08	*ND*	*ND*	4.72	4.54
Mar-2008	*ND*	*ND*	0.1	*ND*	*ND*	13.4	13.4	*ND*	0.25	*ND*	*ND*	*ND*	*ND*	5.1	5.03
Mar-2009	*ND*	*ND*	0.074	*ND*	*ND*	10.1	9.97	*ND*	0.201	0.01	0.05	*ND*	*ND*	4.08	4.02
Mar-2010	*ND*	*ND*	0.102	*ND*	*ND*	7.95	7.66	*ND*	0.163	*ND*	0.061	*ND*	*ND*	3.98	3.91
Apr-2011	*ND*	*ND*	0.093	*ND*	*ND*	8.38	8.21	*ND*	0.163	*ND*	0.077	*ND*	*ND*	3.46	3.41
Mar-2012	*ND*	*ND*	0.101	*ND*	*ND*	7.32	7.12	*ND*	0.151	*ND*	*ND*	*ND*	*ND*	3.82	3.73
Mar-2013	*ND*	*ND*	0.0717	*0.000707 J*	*0.0015 J*	6.76	6.92	*0.0047 J*	0.139	*0.0056 J*	*0.0466 J*	*0.0183 J*	*0.0015 J*	2.93	2.88
Mar-2014	*0.000269 J*	*ND*	0.0749	*0.000812 J*	*0.000947 J*	5.41	5.44	*0.0013 J*	0.0955	*0.0043 J*	*0.0209 J*	*0.0092 J*	*ND*	3.4	3.4

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-18***													
Apr-2015	*0.00061 J*	*ND*	0.0783	*0.00072 J*	*0.0011 J*	5.91	6.1	*0.001 J*	0.107	*0.0043 J*	*0.0148 J*	*ND*	*ND*	3.16	3.26
May-2016	*ND*	*ND*	0.0806	*0.00064 J*	0.001	6.58	6.03	*0.0022 J*	0.106	0.0041	*0.0541 J*	*ND*	*0.00018 J*	3.7	3.54
May-2017	*ND*	*ND*	0.0911	*0.00043 J*	*0.00067 J*	5.14	5.56	*0.0034 J*	0.0662	*0.0031 J*	*0.0381 J*	*ND*	*ND*	4.02	3.75
May-2018	*0.000049 J*	*ND*	0.053	0.00072	0.0014	7.9	7.8	*0.0014 J*	0.106	0.0041	*0.019 J*	*0.014 J*	*0.000087 JB*	3.1	3
May-2019	*ND*	*ND*	0.077	0.00076	0.0013	6.6	6.3	0.0082	0.066	0.0024	*ND*	0.033	*ND*	3.4	3.2
May-2020	*0.000087 J*	*ND*	0.055	0.00064	0.0012	8.2	7.9	0.022	0.1	0.0046	0.11	0.076	*ND*	3.1	3
Apr-2021	*ND*	*ND*	0.073	*0.00057 J*	*0.00087 J*	4.9	5.6	0.005	0.085	*0.0032 J*	*0.068 J*	*ND*	*ND*	2.5	2.9
May-2022	*ND*	*ND*	0.058	0.00064	0.00092	6.7	7.2	0.0036	0.11	0.0049	*ND*	0.062	0.00097	2.8	2.9
May-2023	*ND*	*ND*	0.064	0.00055	0.00086	6.6	6.4	0.005	0.1	0.0051	0.15	*ND*	*ND*	2.8	2.7

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-18*												
Nov-1993	1.8	NA	ND	NA	2.4	NA	ND	NA	4.9	NA	NA	NA	0.48
Apr-1994	2.25	NA	ND	NA	2.31	NA	ND	NA	3.87	NA	NA	NA	0.06
Apr-1995	2.1	NA	ND	0.17	2.9	NA	ND	ND	3	NA	ND	ND	0.58
Apr-1997	1.6	1.8	ND	0.1	3.7	3.6	ND	ND	4.3	5	ND	ND	0.18
Apr-1998	3.02	3.06	NA	0.137	3.06	3.67	ND	ND	4.3	4.31	ND	ND	0.332
Apr-1999	1.81	1.67	NA	0.094	3.46	3.33	ND	ND	5.5	4.98	ND	ND	0.229
Apr-2000	10.3	9.41	NA	0.38	5	4.8	ND	ND	2.67	2.48	ND	ND	0.933
Apr-2001	7.14	NA	NA	0.294	5.85	NA	ND	ND	2.85	NA	ND	ND	0.74
Mar-2002	1.49	1.46	NA	0.073	2.81	2.47	ND	ND	3.7	3.7	ND	ND	0.175
Mar-2003	4.21	3.88	NA	0.244	4.6	3.46	ND	ND	2.51	2.32	ND	ND	0.638
Apr-2004	2.32	2.32	ND	0.179	3.72	3.8	ND	ND	2.85	2.88	ND	ND	0.465
Apr-2005	1.52	1.48	ND	0.116	3.23	3.17	ND	ND	3.75	3.61	ND	ND	0.307
Mar-2006	1.46	1.41	ND	0.132	2.81	2.76	ND	ND	3.74	3.64	ND	ND	0.368
Mar-2007	1.58	1.52	ND	0.201	3.18	2.98	ND	ND	2.62	2.55	ND	ND	0.611
Mar-2008	1.71	1.7	ND	0.2	3.23	3.26	ND	ND	2.67	2.69	ND	ND	0.611
Mar-2009	1.29	1.27	ND	0.157	2.63	2.6	ND	ND	3.01	2.98	ND	ND	0.47
Mar-2010	1.18	1.17	ND	0.134	2.42	2.25	ND	ND	2.73	3.03	ND	ND	0.35
Apr-2011	0.895	0.868	ND	0.133	1.96	1.92	ND	ND	2.58	2.6	ND	ND	0.418
Mar-2012	0.898	0.88	ND	0.122	2.1	2.08	ND	ND	3.32	3.33	ND	ND	0.354
Mar-2013	0.738	0.721	0.000065 J	0.111	1.64	1.62	0.000574 J	ND	2.65	2.64	ND	ND	0.37
Mar-2014	0.607	0.616	ND	0.0714	1.93	1.95	ND	ND	3.57	3.61	0.000548 J	ND	0.226
Apr-2015	0.648	0.65	ND	0.088	1.81	1.88	0.0017 J	ND	3.15	3.28	ND	ND	0.273

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-18***												
May-2016	0.673	0.634	*ND*	0.084	2.19	2.26	*ND*	*ND*	4.44	4.22	*ND*	*ND*	0.267
May-2017	0.61	0.603	*ND*	0.0484	2.32	2.43	*ND*	*ND*	4.77	4.94	*ND*	*ND*	0.0967
May-2018	0.46	0.46	*0.00013 JB*	0.092	*1.8 J*	*1.6 J*	*0.00086 J*	*ND*	*3.5 J*	*3.1 J*	*ND*	0.0033	0.32
May-2019	0.5	0.51	*ND*	0.057	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.16
May-2020	0.49	0.46	*ND*	0.11	*1.6 J*	*1.5 J*	*0.00068 J*	*ND*	*3 J*	*2.9 J*	*ND*	0.0098	0.32
Apr-2021	0.37	0.41	*ND*	0.074	1.3	1.5	*ND*	*ND*	3.2	3.7	*ND*	*ND*	0.21
May-2022	0.37	0.38	*ND*	0.1	1.4	1.3	*ND*	*ND*	3.1	3	*ND*	*ND*	0.31
May-2023	0.35	0.35	*ND*	0.092	1.5	1.4	*0.00096 J*	*ND*	2.7	2.7	*ND*	*ND*	0.29

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-18*																
Nov-1993	ND	ND	ND	ND	103	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	204	ND	ND	ND	ND	ND	ND	**6.1**	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	84	ND	ND	ND	ND	ND	3	**7**	4	30	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	21	ND	ND	ND	ND	ND	ND	1.7 J	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	2.3	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	0.9 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	35	ND	ND	ND	ND	ND	0.5 J	1.7	2.1	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	15	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-18*																
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.9 JB*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-18*															
Nov-1993	**11**	ND	ND	ND	ND	ND	ND	ND	23	ND	ND	ND	ND	ND	ND	23	190
Apr-1994	**23**	ND	ND	ND	ND	ND	ND	ND	29	ND	ND	10	ND	ND	ND	16	306
Apr-1997	**10**	ND	1	ND	ND	ND	ND	ND	9	9	ND	**250**	ND	ND	ND	6	75
Apr-1998	2.3 J	ND	ND	ND	ND	ND	ND	ND	2 J	ND	ND	65	ND	ND	ND	5.8	18
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	4.7	NA	NA	NA	1	2.6
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	1.2	NA	ND	NA	0.5 J	0.9 J
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	0.7 J	3
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	1.9	ND	ND	ND	2.2	3.8
Mar-2003	2.3	ND	ND	ND	ND	ND	ND	ND	4.6	ND	ND	5.9	ND	ND	ND	6.2	21
Apr-2004	0.9 J	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	2.8	ND	ND	ND	6.1	9.7
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	0.8 J	ND	ND	ND	4.7	4
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	1.5
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-18***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-18***															
Nov-1993	ND	ND	ND	ND	**77**	ND	ND	**124**	ND	ND	ND	ND	**52**	ND	ND	ND	NA
Apr-1994	ND	ND	28	ND	**114**	34	ND	**200**	ND	ND	ND	ND	**104**	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	**10**	NA	ND	**18**	ND	2	ND	ND	**16**	1	ND	**4**	3
Apr-1998	ND	ND	1.6 J	NA	3.3	ND	ND	**5.9**	ND	ND	ND	ND	4.5	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	1.3	ND	NA	2.7	ND	ND	NA	NA	1	ND	NA	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	0.8 J	ND	ND	NA	NA	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	4.6	ND	ND	**17**	ND	ND	ND	ND	3.6	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	4.3	ND	ND	**18**	ND	ND	ND	ND	3.8	ND	ND	ND	NA
Mar-2003	ND	ND	3.1	NA	**39**	3.3	ND	**142**	ND	1.9	ND	ND	**33**	ND	ND	**3.2**	NA
Apr-2004	ND	ND	1.6	NA	**16**	0.9 J	ND	**63**	ND	ND	ND	ND	**14**	ND	ND	1.5	NA
Apr-2005	ND	ND	ND	ND	4.1	ND	ND	**21**	ND	ND	ND	ND	3.9	ND	ND	0.7 J	NA
Mar-2006	ND	ND	ND	ND	0.9 J	ND	ND	**7.5**	ND	ND	ND	ND	1.1	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.2 R	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2013	ND	ND	ND	ND	ND	ND	ND	0.52 J	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-18***															
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.86 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.1 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.513 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-21A***											
Nov-1993	ND	ND	0.2	ND	19.5	1.3	ND	4.41	144.7	22	36	12.7
Apr-1994	ND	ND	0.1	21.1	16.1	1.1	ND	4.43	135	23.1	71	15.64
Apr-1995	ND	ND	ND	ND	19	0.8	ND	4.3	140	26	83	13.8
Apr-1997	ND	ND	ND	ND	15	0.26	ND	NA	NA	20	ND	8
Apr-1998	ND	ND	0.26	ND	7.43	0.25	ND	5.17	80.1	14.2	36	12
Apr-1999	ND	ND	0.27	ND	22.3	0.364	ND	4.1	150.4	24.9	89	19
Apr-2000	ND	ND	ND	ND	18.5	0.97	ND	4.66	116	28.9	84	21
Apr-2001	ND	NA	ND	ND	14.4	0.818	ND	NA	NA	27.3	86	23
Mar-2002	ND	ND	ND	ND	27.2	1.49	ND	4.5	160.7	46.3	105	24.7
Mar-2003	ND	ND	ND	ND	23.3	1.22	ND	4.4	158.9	30.7	120	29.4
Apr-2004	ND	ND	ND	ND	12.1	0.462	ND	4.2	108.3	28.6	60	20.3
Apr-2005	ND	ND	ND	ND	23.8	0.44	ND	4.4	124.5	24.5	110	22
Mar-2006	ND	ND	ND	ND	15.8	0.58	ND	4.9	141.6	50.1	86	28.9
Mar-2007	ND	ND	ND	ND	19.6	0.67	ND	4.2	127.6	36	90	25.4
Mar-2008	ND	ND	0.51	ND	23.4	ND	ND	4.1	137.7	50.8	105	27.2
Mar-2009	ND	ND	ND	ND	21.5	1.13	ND	4	148.5	43.3	106	28.5
Apr-2010	2.5	2.5	ND	ND	24.2	1.58	ND	3.9	129.4	32.6	72	24.3
Apr-2011	2.5	2.5	ND	ND	31.7	1.4	ND	4	213	25.5	111	25.6
Mar-2012	ND	ND	ND	ND	19.2	0.99	ND	3.4	124.2	34	111	23.4
Mar-2013	0.68 J	0.68 J	ND	ND	61.6	2.47	ND	4.3	358	38.3	169	36.2
Mar-2014	0.72	0.72	ND	7 J	30.9	1.53	ND	4.5	175.4	42.6	118	32.6
Apr-2015	3.76	3.76	ND	ND	30.6	1.43	ND	3.9	144.4	31.5	99	35.2
May-2016	ND	ND	ND	ND	32.2	1.11	ND	4.6	264	32.7	105	28.8
May-2017	ND	ND	ND	7 J	31.7	1.59	ND	4.9	288	44.7	113	42.3
May-2018	10 B	10	0.049 J	22.9 J	38.7	0.7	ND	5	307	35.3	131	65.6
May-2019	ND	NA	ND	ND	20	0.99	ND	4.32	90.5	17.9	80	21.8
May-2020	36	NA	ND	9.1 J	18.5	1.5	ND	5.28	192	18.7	103	70
Apr-2021	ND	NA	ND	6.1 J	32	1.6	ND	4.64	186.2	22.1	87	25.2
May-2022	4 J4c	NA	ND	ND	17.3	2.4	ND	4.72	208.7	33.3	111	39.6 N3
May-2023	ND	NA	ND	38.7	51.3	2.3	ND	4.8	297	36.3	148	65.7 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-21A***													
Nov-1993	*NA*	*ND*	*ND*	*NA*	*ND*	2.3	*NA*	*ND*	*NA*	*ND*	*ND*	0.18	*ND*	1.7	*NA*
Apr-1994	*NA*	*ND*	*ND*	*NA*	*ND*	2.67	*NA*	*ND*	*NA*	*ND*	0.31	*ND*	*ND*	2.18	*NA*
Apr-1995	*ND*	*ND*	0.6	*ND*	*ND*	2.4	*NA*	*ND*	0.02	*ND*	0.14	0.05	*ND*	1.9	*NA*
Apr-1997	*ND*	*ND*	0.093	*ND*	*ND*	3.2	3.6	*ND*	*ND*	*ND*	*ND*	*ND*	0.003	1.5	1.6
Apr-1998	*ND*	*ND*	0.094	*ND*	*ND*	2.61	2.63	*ND*	*ND*	*ND*	0.105	*ND*	*ND*	1.45	1.45
Apr-1999	*ND*	*ND*	0.101	*ND*	*ND*	4.6	4.49	*ND*	0.012	*ND*	*ND*	*ND*	*ND*	1.81	1.77
Apr-2000	*ND*	*ND*	0.108	*ND*	*ND*	5.13	4.95	*ND*	0.01	*ND*	0.241	*ND*	*ND*	1.96	1.83
Apr-2001	*ND*	*ND*	0.099	*ND*	*ND*	5.77	*NA*	*ND*	0.01	*ND*	*ND*	*NA*	**0.024**	2	*NA*
Mar-2002	*ND*	*ND*	0.088	*ND*	*ND*	6.51	6.5	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	2.04	2.07
Mar-2003	*ND*	*ND*	0.107	*ND*	*ND*	7.43	6.84	*ND*	0.01	*ND*	*ND*	*ND*	*ND*	2.61	2.39
Apr-2004	*ND*	0.003	0.106	*ND*	*ND*	4.59	4.49	*ND*	0.013	*ND*	0.059	*ND*	*ND*	2.14	2.1
Apr-2005	*ND*	*ND*	0.109	*ND*	*ND*	5.52	5.22	*ND*	*ND*	0.01	0.078	*ND*	*ND*	1.99	1.92
Mar-2006	*ND*	*ND*	0.091	*ND*	*ND*	7.84	8.03	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.33	2.95
Mar-2007	*ND*	*ND*	0.085	*ND*	*ND*	6.88	6.75	*ND*	0.016	*ND*	*ND*	*ND*	*ND*	1.98	1.96
Mar-2008	*ND*	*ND*	0.077	*ND*	*ND*	7.08	6.59	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	2.31	2.1
Mar-2009	*ND*	*ND*	0.076	*ND*	*ND*	7.27	7.06	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.49	2.42
Apr-2010	*ND*	*ND*	0.068	*ND*	*ND*	6.72	6.58	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.81	1.78
Apr-2011	*ND*	*ND*	0.076	*ND*	*ND*	6.92	6.79	*ND*	0.01	*ND*	0.214	*ND*	*ND*	2.01	1.98
Mar-2012	*ND*	*ND*	0.07	*ND*	*ND*	6.02	5.67	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.03	1.94
Mar-2013	*ND*	*ND*	0.072	*0.000599 J*	*0.000306 J*	9.49	8.74	*0.0045 J*	*0.0092 J*	*0.0035 J*	0.0928	0.0519	*0.0016 J*	3.04	2.77
Mar-2014	*ND*	*ND*	0.0633	*0.000432 J*	*0.000365 J*	8.48	7.39	*0.0017 J*	*0.0077 J*	*0.0027 J*	*0.0422 J*	*ND*	*ND*	2.78	2.58

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-21A***													
Apr-2015	*0.000855 J*	*0.000423 J*	0.0835	*0.000523 J*	*0.000222 J*	9.43	9.38	*0.0013 J*	*0.0093 J*	*0.0026 J*	*0.0271 J*	*0.0111 J*	*ND*	2.84	2.84
May-2016	*ND*	*0.00072 J*	0.0712	*0.00045 J*	*ND*	7.74	7.61	*0.00094 J*	0.0083	*0.0022 J*	*ND*	*ND*	*ND*	2.3	2.37
May-2017	*ND*	*0.0021 J*	0.0701	*0.00048 J*	*ND*	10.9	11.1	*0.0023 J*	0.0067	*0.0017 J*	*ND*	*ND*	*ND*	3.65	3.56
May-2018	*0.000094 J*	*ND*	0.067	*0.00021 J*	*0.00032 J*	18.4	17	*0.0017 JB*	0.0069	*0.00082 J*	0.027	*ND*	*0.00014 J*	4.8	4.5
May-2019	*ND*	*ND*	0.053	*ND*	*ND*	5.9	5.8	*ND*	0.0032	*ND*	*ND*	*ND*	*ND*	1.7	1.7
May-2020	0.00066	*0.00078 J*	0.051	*0.0002 J*	*0.00018 J*	23.1	22.5	0.0073	0.0039	*ND*	*0.066 J*	0.027	*ND*	3	2.9
Apr-2021	*ND*	*ND*	0.073	*0.00037 J*	*ND*	6.8	7	*0.0024 J*	0.0056	*0.003 J*	*ND*	*ND*	*ND*	2	2
May-2022	*ND*	*ND*	0.068	*0.00041 J*	*ND*	10.9	11.8	0.0034	0.0088	*0.0015 J*	*0.042 J*	*ND*	*ND*	3	3.2
May-2023	*ND*	*0.0007 J*	0.068	*0.00045 J*	*0.00029 J*	18	16.7	0.0034	0.0069	*0.0017 J*	0.071	*ND*	*ND*	5	4.6

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-21A***												
Nov-1993	0.16	*NA*	*ND*	*NA*	2	*NA*	*ND*	*NA*	12.4	*NA*	*NA*	*NA*	0.05
Apr-1994	0.17	*NA*	*ND*	*NA*	2.26	*NA*	*ND*	*NA*	12.8	*NA*	*NA*	*NA*	0.19
Apr-1995	0.12	*NA*	*ND*	*ND*	1.9	*NA*	*ND*	*ND*	10.2	*NA*	*ND*	*ND*	0.08
Apr-1997	0.14	0.15	*ND*	*ND*	2.8	2.7	*ND*	*ND*	7.4	8.7	*ND*	*ND*	0.061
Apr-1998	0.22	0.223	*NA*	*ND*	1.03	1.55	*ND*	*ND*	4.83	4.83	*ND*	*ND*	0.052
Apr-1999	0.124	0.123	*NA*	*ND*	2.19	1.48	*ND*	*ND*	12.4	12.2	*ND*	*ND*	0.052
Apr-2000	0.132	0.125	*NA*	*ND*	1.39	1.17	*ND*	*ND*	12.3	11.5	*ND*	*ND*	0.05
Apr-2001	0.125	*NA*	*NA*	*ND*	2.83	*NA*	*ND*	*ND*	12.2	*NA*	*ND*	*ND*	0.052
Mar-2002	0.103	0.107	*NA*	*ND*	3.01	2.71	*ND*	*ND*	13.1	12.9	*ND*	*ND*	0.051
Mar-2003	0.126	0.116	*NA*	*ND*	2.51	2.12	*ND*	*ND*	14.4	13	*ND*	*ND*	0.04
Apr-2004	0.179	0.179	*ND*	*ND*	2.85	2.13	*ND*	*ND*	8.72	8.41	*ND*	*ND*	0.044
Apr-2005	0.143	0.14	*ND*	*ND*	2.2	1.76	*ND*	*ND*	14.7	14.2	*ND*	*ND*	0.053
Mar-2006	0.08	0.101	*ND*	*ND*	1.86	2.34	*ND*	*ND*	10.8	11.1	*ND*	*ND*	0.016
Mar-2007	0.18	0.179	*ND*	*ND*	1.65	1.65	*ND*	*ND*	11.9	11.7	*ND*	*ND*	0.058
Mar-2008	0.108	0.099	*ND*	*ND*	2.02	1.75	*ND*	*ND*	11.4	10.5	*ND*	*ND*	0.032
Mar-2009	0.106	0.104	*ND*	*ND*	1.98	1.93	*ND*	*ND*	11.9	11.6	*ND*	*ND*	0.027
Apr-2010	0.118	0.115	*ND*	*ND*	1.63	1.57	*ND*	*ND*	14.5	14.1	*ND*	*ND*	0.031
Apr-2011	0.103	0.101	*ND*	*ND*	1.84	1.76	*ND*	*ND*	19	18.5	*ND*	*ND*	0.038
Mar-2012	0.106	0.1	*ND*	*ND*	1.7	1.63	*ND*	*ND*	12.7	12.2	*ND*	*ND*	0.027
Mar-2013	0.104	0.0972	*0.000082 J*	*0.0055 J*	2.46	2.27	*0.000622 J*	*0.000037 J*	31.2	31	*0.0015 J*	*ND*	0.0342
Mar-2014	0.0923	0.0908	*ND*	*0.0039 J*	2.35	2.02	*0.00063 J*	*ND*	19.7	19	*0.000454 J*	*0.001 J*	0.0192
Apr-2015	0.0966	0.0958	*ND*	*0.0042 J*	2.29	2.26	0.0036	*ND*	17	16.8	*ND*	*ND*	0.0296

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-21A***												
May-2016	0.073	0.0746	*ND*	*0.0031 J*	1.86	1.94	*ND*	*ND*	19.3	20.1	*ND*	*ND*	*0.027 J*
May-2017	0.0752	0.0775	*ND*	0.0041	2.7	2.6	*ND*	*ND*	22.2	21.3	*ND*	*ND*	*0.0214 J*
May-2018	0.08	0.097	*ND*	0.001 B	*2.4 J*	*2.6 J*	*0.00071 J*	*ND*	26.7	24.2	*ND*	0.0025	0.0052 B
May-2019	0.048	0.054	*ND*	0.0031	*ND*	*ND*	*ND*	*ND*	13.1	12.5	*ND*	*ND*	0.012
May-2020	0.039	0.036	*ND*	0.004	*2.4 J*	*2.5 J*	*ND*	*ND*	13.5	13.3	*ND*	0.006	0.04
Apr-2021	0.069	0.067	*ND*	*0.0037 J*	1.8	1.8	*0.0059 J*	*ND*	21.9	22	*ND*	*ND*	0.019
May-2022	0.062	0.064	*ND*	0.0047	2.3	2.3	*0.0017 J*	*ND*	15.8	16.4	*ND*	*ND*	0.021
May-2023	0.071	0.064	*ND*	0.0044	2.9	2.7	0.0042 B	*ND*	26.8	24.5	*ND*	*ND*	0.017

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-21A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	3	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-21A*																
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.3 JB*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-21A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	2
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	1.2
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	0.7 J	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	0.5 J	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.69 J	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.54 J	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-21A***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.15	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.255 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-21A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	**6.1**	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	1.4	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	1.2	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*0.8 J*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-21A***															
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.1 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

HISTORICAL TABLES –
Off-site Non-regulated Wells

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID: MW-P4	
Nov-2005	*ND*
Mar-2009	*ND*
Oct-2009	*ND*
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000031 J*
Mar-2013	*0.000056 J*
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*ND*
Apr-2015	*ND*
Nov-2015	*ND*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.000058 J*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00005 J*
Oct-2021	*ND*
May-2022	*ND*
Oct-2022	*ND*
May-2023	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P4*																
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P4*																
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.8 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P4***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.27 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.28 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.26 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.36 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P4***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.23 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.404 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P4***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P4***															
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical Total Mercury (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***MW-P9***
Jun-1994	*ND*
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	0.0013
Apr-1997	*ND*
Apr-2004	*ND*
Oct-2004	*ND*
Mar-2009	0.0012
Oct-2009	*ND*
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	0.0002
Sep-2012	0.00024
Mar-2013	0.000223
Oct-2013	0.000384
Mar-2014	0.000259
Oct-2014	0.00022
Apr-2015	*0.000126 J*
Nov-2015	*0.000117 J*
May-2016	*0.00013 J*
Oct-2016	*0.00016 J*
May-2017	0.00033
Oct-2017	*0.00013 J*
May-2018	0.00041 B
Nov-2018	0.00038
May-2019	0.00024
Oct-2019	*0.0002 J*

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***MW-P9***
May-2020	0.00026
Oct-2020	*ND*
Apr-2021	0.00022
Oct-2021	*0.00014 J*
May-2022	*ND*
Oct-2022	*ND*
May-2023	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Millersville Landfill and Resource Recovery Facility

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***MW-P9***																
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	35	91	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	139	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	1 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	1 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P9*																
Oct-2004	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	*0.6 J*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	*0.8 J*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.45	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.53	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.36	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P9*																
Nov-2015	ND	ND	ND	ND	1.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	0.818 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P9***															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	1 J	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND
Sep-1994	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	3
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	2.2
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	1.4
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	0.7 J	2.2
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	1.8
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	0.6 J	1.8
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	2.5
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	2
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	2.1
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	2.2
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	3.5
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	2
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	3
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	3.2

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P9***															
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	3
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	2.6
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	2
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	3.1
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	2.3
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	2.1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	1.3
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	1.8
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	2.4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	2
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	2.1
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	2.3
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	2.8
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	2	ND	ND	ND	6.3	3.2
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.9	0.8 J
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	0.38 J	ND	ND	ND	1.14	1.56
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31 J	ND	0.32 J	ND	ND	ND	1.8	1.62
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.29 J	0.37 J,B	0.34 J	ND	ND	ND	2.09	1.86
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	0.25 J	ND	ND	ND	2.3	1.65
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	0.24 J	ND	ND	ND	2.09	1.73
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.22 J	ND	0.25 J	ND	ND	ND	2	1.26

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P9***															
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.47	1.47
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.2 J	ND	ND	ND	1.9	1.8
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.2 J	ND	ND	ND	1.5	1.5
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.2 J	ND	ND	ND	1.5	1.3
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.2 J	ND	ND	ND	1.7	1.6
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	1.6
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	1.4 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.9 J
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.806 J	0.982 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	0.9 J
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	0.6 J
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	0.7 J
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.5 J

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P9***															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	0.5 J	ND	0.6 J	ND	ND	0.6 J	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	0.8 J	ND	2.1	ND	ND	1	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	1	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	1.5	ND	NA	0.6 J	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	1.5	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	1.5	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	1.6	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	1.4	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	1.1	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	0.8 J	ND	ND	1.4	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P9***															
Apr-2004	ND	ND	ND	NA	0.9 J	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	1.1	ND	ND	1.7	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	0.9 J	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	0.9 J	ND	ND	1.8	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	0.5 J	ND	ND	1.3	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	1	ND	ND	2.7	ND	ND	ND	ND	1.8	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	0.86 J	ND	ND	2.44	ND	ND	ND	ND	0.68 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.66 J	ND	ND	1.75	ND	ND	ND	ND	0.59 J	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.71 J	ND	ND	1.62	ND	ND	ND	ND	0.62 J	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	0.61 J	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	2.06	ND	ND	ND	ND	0.58 J	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P9***															
Apr-2015	ND	ND	ND	ND	ND	ND	ND	1.51	ND	ND	ND	ND	0.46 J	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	1.43	ND	ND	ND	ND	0.51 J	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	0.4 J	ND	ND	1.6	ND	ND	ND	ND	0.5 J	0.2 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	0.3 J	ND	ND	1.3	ND	ND	ND	ND	0.4 J	0.1 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	0.5 J	0.2 J	ND	ND	ND
May-2018	ND	ND	ND	ND	1.3	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	ND	ND	ND	1.13	ND	ND	ND	ND	0.284 J	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2023	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical Total Mercury (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	*MW-P106*
Sep-1994	*ND*
Oct-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	**0.0027**
Apr-1997	0.0009
Apr-2004	0.001
Oct-2004	0.0005
Apr-2005	0.0005
Mar-2009	0.0003
Oct-2009	0.0002
Mar-2010	*ND*
Oct-2010	0.0004
Apr-2011	0.0002
Sep-2011	0.0004
Mar-2012	0.0002
Sep-2012	0.00029
Mar-2013	*0.000178 J*
Oct-2013	*0.000097 J*
Mar-2014	*0.000064 J*
Oct-2014	*0.000109 J*
Apr-2015	*0.000152 J*
Nov-2015	0.00043
May-2016	0.00024
Oct-2016	*0.00012 J*
May-2017	*0.00015 J*
Oct-2017	*0.00011 J*
May-2018	*0.00018 JB*
Nov-2018	*0.00016 J*
May-2019	*ND*
Oct-2019	*ND*

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	*MW-P106*
May-2020	0.00071
Oct-2020	0.0004
Apr-2021	0.00021
Oct-2021	*0.00011 J*
May-2022	*ND*
Oct-2022	*ND*
May-2023	0.00026

MCLs and Results are in mg/L unless indicated otherwise

Millersville Landfill and Resource Recovery Facility

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***MW-P106***																
Oct-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	0.7 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	1.5	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	1.7	NA	NA	6.5	0.5 J	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	1.4	ND	ND	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	1.3	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	0.5 J	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	0.6 J	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	0.6 J	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	0.7 J	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	0.6 J	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P106*																
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.78	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	0.23 J	ND	ND	7.16	ND	ND	ND	ND	ND	ND	ND	0.44 J	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	11.1	0.34 J	ND	ND	ND	ND	ND	0.34 J	0.56 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	9	0.27 J	ND	ND	ND	ND	ND	ND	0.54 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	0.58 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	3.43	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	0.1 J	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P106*																
Oct-2016	*ND*	*0.1 J*	*ND*	*ND*	5.1	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	4.5	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*0.1 J*	*ND*	*ND*	5	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.7 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	2.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	1.64	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	2.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	2.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	2.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*MW-P106*															
Oct-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	0.6 J	NA	NA	NA	2.5	1.2
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	5.7	ND	ND	ND	11	10
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	1 J	ND	NA	6.5	NA	ND	NA	10	11
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.9	ND	ND	ND	34	9.6
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	3.3	ND	ND	ND	16	6.9
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	6.3	1.8
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.7	1.4
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.7	1.8
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	14	3.3
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	6.3	3.1
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	8.6	2.1
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	0.9 J
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P106***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	6.4	4.7
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	7	8.1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	2.4	3.3
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	3.4	4.7
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	5.3
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.4	7.2
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.9	5
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	2.1
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.58 J	ND	ND	ND	1.81	1.93
Mar-2013	0.34 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.01	ND	ND	ND	6.99	8.26
Oct-2013	0.66 J	ND	ND	ND	ND	ND	ND	ND	0.7 J	0.28 J	ND	4.75	ND	ND	ND	8.57	13.1
Mar-2014	0.41 J	ND	ND	ND	ND	ND	ND	ND	0.36 J	ND	ND	3.44	ND	ND	ND	8.47	11.6
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.21 J	ND	ND	ND	0.51 J	0.76 J
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.16	ND	ND	ND	3.11	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.68 J	ND	ND	ND	1.17	2.59
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	3.8	4.7

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P106***															
Oct-2016	0.1 J	ND	ND	ND	ND	ND	ND	ND	0.2 J	0.1 J	ND	1.6	ND	ND	ND	5.5	6.6
May-2017	0.1 J	ND	ND	ND	ND	ND	ND	ND	0.1 J	0.1 J	ND	1.5	ND	ND	ND	4.4	5.4
Oct-2017	0.1 J	ND	ND	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	1.6	ND	ND	ND	6.4	6.3
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	6.4	3.8
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	1.3
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	3.3	2.3
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.588 J	ND	ND	ND	1.35 J	1.71 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	2.3	2
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	1.2	1.2
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	1.6	1.8
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	1.3	1.7

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P106***															
Oct-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	1 J	ND	ND	NA	NA	ND	0.8 J	NA	ND	NA
Oct-1999	ND	ND	ND	NA	1.1	ND	ND	**5.4**	ND	ND	ND	ND	2	2.8	ND	ND	NA
Apr-2000	ND	NA	ND	NA	1.9	ND	NA	**5.3**	ND	ND	NA	NA	2	2.9	ND	0.7 J	NA
Oct-2000	ND	ND	ND	NA	1.5	ND	ND	3.4	ND	ND	ND	ND	1.2	2.6	ND	ND	NA
Apr-2001	ND	ND	ND	NA	1.3	ND	ND	3	ND	ND	ND	ND	1	1.9	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	1.1	ND	ND	ND	ND	ND	0.9 J	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	1	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	1	ND	ND	NA
Mar-2003	ND	ND	ND	NA	0.9 J	ND	ND	1.5	ND	ND	ND	ND	ND	1.2	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	0.9 J	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	0.7 J	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P106***															
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	0.6 J	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.9 R	ND	ND	3.9	ND	ND	ND	ND	1.3	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	1.5	ND	ND	1.8	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	1	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	ND	1.5	1 J	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	1.1	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	0.51 J	ND	ND	1.11	ND	ND	ND	ND	0.93 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	2.45	ND	ND	3.21	ND	ND	ND	ND	2.58	ND	ND	ND	ND
Oct-2013	ND	ND	0.42 J	ND	**5.11**	0.24 J	ND	3.68	ND	ND	ND	ND	2.56	1.07	ND	0.42 J	0.66 J
Mar-2014	ND	ND	0.31 J	ND	3.21	ND	ND	4.64	ND	ND	ND	ND	2.81	0.92 J	ND	ND	0.31 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	0.78 J	ND	ND	1.81	ND	ND	ND	ND	1.36	0.51 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	1.11	ND	ND	ND	ND	0.91 J	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P106***															
May-2016	ND	ND	ND	ND	0.7 J	ND	ND	2.1	ND	ND	ND	ND	1.5	0.6 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	1.5	ND	ND	2.2	ND	ND	ND	ND	1.5	0.7 J	ND	0.1 J	ND
May-2017	ND	ND	ND	ND	1.1	ND	ND	1.8 J+	ND	ND	ND	ND	1.2	0.5 J	ND	0.1 J	ND
Oct-2017	ND	ND	ND	ND	1.1	ND	ND	2.1	ND	ND	ND	ND	1.5	0.8 J	ND	0.1 J	ND
May-2018	ND	ND	ND	ND	1.5	ND	ND	1.4	ND	ND	ND	ND	1.5	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.608 JB	ND	ND	0.622 J	ND	ND	ND	ND	0.515 J	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
May-2023	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***MW-P417***
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	*ND*
Apr-1997	0.0012
Apr-2004	*ND*
Oct-2004	*ND*
Mar-2009	*ND*
Oct-2009	*ND*
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000035 J*
Mar-2013	*0.000077 J*
Oct-2013	*0.000173 J*
Mar-2014	*0.000171 J*
Oct-2014	*0.000136 J*
Apr-2015	*0.00014 J*
Nov-2015	0.000344
May-2016	0.00026
Oct-2016	0.00054
May-2017	0.00055
Oct-2017	0.00081
May-2018	0.0018
Nov-2018	0.001
May-2019	0.0011
Oct-2019	0.00021
May-2020	*0.00018 J*
Oct-2020	0.00035
Apr-2021	0.00023
Oct-2021	*0.00006 J*
May-2022	*ND*
Oct-2022	*ND*
May-2023	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P417*																
Aug-1994	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	31	4.9 J	ND
Sep-1994	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	75	109	ND
Nov-1994	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	43	203 E	ND
Apr-1995	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	66	ND
Oct-1996	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	0.5 J	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	5.2	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	8.3	ND	NA	NA	NA	NA	ND	ND	0.5 J	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	4.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P417*																
Apr-2005	ND	ND	ND	ND	6.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	7.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	9.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	7.2	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
May-2007	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	7.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	5.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	5.86	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	7.47	ND	ND	ND	ND	ND	ND	ND	0.53 J	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	5.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	4.08	ND	ND	ND	ND	ND	ND	ND	0.29 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	4.15	ND	ND	ND	ND	ND	ND	ND	0.28 J	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	3.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P417*																
Nov-2015	ND	ND	ND	ND	3.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.6 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	0.309 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P417***															
Aug-1994	*0.6 J*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	18	*ND*	*ND*	*ND*	*ND*	*ND*	2.9	3.2
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	3.3	2.9
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	3.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.4	2.7
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	2
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.1	3
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	6	5
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.7	8.9
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	9.8	7.1
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	1.1	*ND*	*NA*	1.4	*NA*	*NA*	*NA*	5.9	10
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	1	*ND*	*ND*	*ND*	2.9	8.6
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	1.5	*ND*	*NA*	1.6	*NA*	*ND*	*NA*	2.9	13
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	16	16
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	1	*ND*	*ND*	*ND*	6.9	7
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	1	*ND*	*ND*	*ND*	8.9	5.2
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	6.5	3.8
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	7.1	4.6
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	8.7	4.3
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.2	6
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	9.1	6.7
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	11	7.2

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P417***															
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	1.7	ND	ND	ND	12	12
Oct-2005	ND	0.9 J	ND	ND	ND	ND	ND	ND	3	ND	ND	1.7	ND	ND	ND	7.4	8.4
Mar-2006	0.7 J	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	1.6	ND	ND	ND	8.9	19.7
Sep-2006	0.8 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.9	ND	ND	ND	11.2	12
Mar-2007	0.7 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.8	ND	ND	ND	7.5	9.6
May-2007	0.9 J	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	2	ND	ND	ND	9.7	12
Sep-2007	0.8 J	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	1.9	ND	ND	ND	10.5	7
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	10.8	8.4
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	1.4	ND	ND	ND	12.9	8.6
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.1	5.9
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	11.7	7.5
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.8 J	6.4
Oct-2010	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	21.7	7.2
Apr-2011	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND	ND	ND	17.5	8.4
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5	ND	ND	ND	15.5	9.9
Mar-2012	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	18.7	7.6
Sep-2012	0.64 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.75	ND	ND	ND	7.99	6.5
Mar-2013	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.15	ND	ND	ND	9.09	9.12
Oct-2013	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.84	ND	ND	ND	6.28	6.28
Mar-2014	0.32 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.89	ND	ND	ND	5.88	5.01
Oct-2014	0.31 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.94	ND	ND	ND	3.11	4.78
Apr-2015	0.23 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	3.5	3.08

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P417***															
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.27	ND	ND	ND	1.72	2.86
May-2016	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	2.2	2.7
Oct-2016	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	2.1	2.2
May-2017	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	1.8	2.2
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	1.3	1.2
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	1.2
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	1.4
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.229 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.6 J
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	0.5 J
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P417***															
Aug-1994	ND	ND	1.1	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	1	NA	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND
Oct-1997	ND	ND	ND	NA	1.5	ND	ND	1.2	ND	ND	ND	ND	0.6 J	0.8 J	ND	ND	NA
Apr-1998	ND	ND	ND	NA	2.9	ND	ND	1.6	ND	ND	ND	ND	0.9 J	1.2	ND	ND	NA
Apr-1999	ND	NA	ND	NA	3.4	ND	NA	2.6	ND	ND	NA	NA	1.3	0.9 J	NA	ND	NA
Oct-1999	ND	ND	ND	NA	2.7	ND	ND	3.3	ND	ND	ND	ND	1.2	0.6 J	ND	ND	NA
Apr-2000	ND	NA	ND	NA	**5.3**	ND	NA	3.9	ND	ND	NA	NA	1.7	0.8 J	ND	0.5 J	NA
Oct-2000	ND	ND	ND	NA	**9.6**	ND	ND	4.6	ND	ND	ND	ND	2	1.5	ND	1.2	NA
Apr-2001	ND	ND	ND	NA	3.9	ND	ND	2.7	ND	ND	ND	ND	1	0.8 J	ND	ND	NA
Sep-2001	ND	ND	ND	NA	2.6	ND	ND	2.3	ND	ND	ND	ND	0.9 J	0.8 J	ND	ND	NA
Mar-2002	ND	ND	ND	NA	1.8	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	1.5	ND	ND	1.5	ND	ND	ND	ND	0.6 J	0.6 J	ND	ND	NA
Mar-2003	ND	ND	ND	NA	4.1	ND	ND	1.3	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	3.7	ND	ND	1.5	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	2.6	ND	3.2	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*MW-P417*															
Oct-2004	ND	ND	ND	NA	2.9	ND	ND	4	ND	ND	ND	ND	1.4	0.7 J	ND	ND	NA
Apr-2005	ND	ND	ND	ND	4.7	ND	ND	**6.7**	ND	ND	ND	ND	2.3	1.1	ND	0.9 J	NA
Oct-2005	ND	ND	ND	ND	**6.2**	ND	ND	**10.3**	ND	ND	ND	ND	3.1	0.7 J	ND	1.5	NA
Mar-2006	ND	ND	ND	ND	**9.7**	1.2	ND	**14**	ND	ND	ND	ND	4.1	0.9 J	ND	**2.7**	NA
Sep-2006	ND	ND	ND	ND	**10.9**	ND	ND	**15.3**	ND	ND	ND	ND	5	ND	ND	**3.2**	NA
Mar-2007	ND	ND	ND	ND	**7.1 R**	ND	ND	**10.8**	ND	ND	ND	ND	3.6	ND	ND	**3**	NA
May-2007	ND	ND	ND	0.9 J	**6.5**	ND	ND	**11.3**	ND	ND	ND	ND	3.2	0.7 J	ND	**3.6**	NA
Sep-2007	ND	ND	ND	ND	**9.2**	ND	ND	**8.6**	ND	ND	ND	ND	3.5	0.8 J	ND	**2.8**	NA
Mar-2008	ND	ND	ND	ND	4.1	ND	ND	**7.6**	ND	ND	ND	ND	2.3	1 J	ND	1.7	NA
Sep-2008	ND	ND	ND	ND	**6**	ND	ND	**5.1**	ND	ND	ND	ND	2	1.1	ND	1.5	NA
Mar-2009	ND	ND	ND	ND	4.4	ND	ND	5	ND	ND	ND	ND	1.7	0.7 J	ND	ND	NA
Oct-2009	ND	ND	ND	ND	4	ND	ND	4	ND	ND	ND	ND	1.9	0.9 J	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	3.3	ND	ND	4.9	ND	ND	ND	ND	ND	0.6 J	ND	0.7 J	NA
Apr-2011	ND	ND	ND	ND	3	ND	ND	**5.6**	ND	ND	ND	ND	**6.4 C**	ND	ND	0.6 J	NA
May-2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**8.5**	NA	NA	NA	NA
Sep-2011	ND	ND	ND	ND	4.1	ND	ND	3.5	ND	ND	ND	ND	**5.9**	ND	ND	0.8 J	NA
Mar-2012	ND	ND	ND	ND	2.6	ND	ND	3.9	ND	ND	ND	ND	4.9	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	2.27	ND	ND	**6.84**	ND	ND	ND	ND	**7.36**	0.63 J	ND	0.3 J	ND
Mar-2013	ND	ND	ND	ND	1.95	0.26 J	ND	**7.97**	ND	ND	ND	ND	**9.29**	ND	ND	0.34 J	ND
Oct-2013	ND	ND	ND	0.17 J	2.64	ND	ND	3.17	ND	ND	ND	ND	4.37	0.42 J	ND	0.36 J	ND
Mar-2014	ND	ND	ND	0.16 J	2.02	ND	ND	3.17	ND	ND	ND	ND	3.31	0.26 J	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P417***															
Oct-2014	ND	ND	ND	0.13 J	2.03	ND	ND	3.24	ND	ND	ND	ND	3.37	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.74	ND	ND	2.04	ND	ND	ND	ND	2.35	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	1.4	ND	ND	1.49	ND	ND	ND	ND	1.78	ND	ND	ND	ND
May-2016	ND	ND	ND	0.1 J	1.5	ND	ND	1.4	ND	ND	ND	ND	1.4	0.1 J	ND	0.1 J	ND
Oct-2016	ND	ND	ND	ND	0.9 J	ND	ND	1.2	ND	ND	ND	ND	1.3	0.1 J	ND	ND	ND
May-2017	ND	ND	ND	ND	1	ND	ND	1.1 J+	ND	ND	ND	ND	1.1	ND	ND	0.1 J	ND
Oct-2017	ND	ND	ND	ND	0.7 J	ND	ND	0.5 J	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***MW-P440***
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	*ND*
Apr-1997	*ND*
Apr-2004	*ND*
Oct-2004	*ND*
Mar-2009	*ND*
Oct-2009	*ND*
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000092 J*
Mar-2013	*0.000085 J*
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*ND*
Apr-2015	*ND*
Nov-2015	*ND*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.000065 J*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00006 J*
Oct-2021	*ND*
May-2022	*ND*
Oct-2022	*ND*
May-2023	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P440*																
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	36	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	0.7 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P440*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.43 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.32 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P440*																
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.1 J	ND
Nov-2018	ND	ND	ND	ND	1.1 L2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P440***															
Aug-1994	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*0.8 J*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*0.7 J*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	1.2
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	1.3	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	3.8	7
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	20	9.4
Feb-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.7	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	13	10
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	4.1	4.5
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.9	5.3
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	5.9	3.7
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	2.4	1.8
Mar-2003	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	9	5.9
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.7	*0.6 J*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P440***															
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	3.2	0.9 J
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	5	1.6
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3	0.9 J
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.7	1.3
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	4.1	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	0.7 J
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	0.8 J
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	0.5 J
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.6	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.79 J	ND	ND	ND	ND	ND	1.21	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	0.54 J	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	ND	ND	ND	ND	1.62	0.56 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND	ND	1.48	0.29 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.91 J	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.71 J	ND	0.44 J	ND	ND	ND	2.3	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P440***															
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J,B	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	0.1 J	ND	ND	ND	0.4 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	0.3 J	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	0.3 J	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	0.5 J	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.96 JN3
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.383 J	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P440***															
Aug-1994	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	3.9	*ND*	*ND*	*NA*	*NA*	*0.6 J*	*0.9 J*	*ND*	**2.8**	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.7	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	**4.4**	*NA*
Feb-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	**6.4**	*ND*	*ND*	*ND*	*ND*	1.4	1.1	*ND*	**3.6**	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*0.5 J*	*ND*	1.1	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*0.6 J*	*ND*	1.6	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*0.9 J*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.4	*ND*	*ND*	*ND*	*ND*	1.3	*0.6 J*	*ND*	**2.4**	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P440***															
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.42 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.37 J*	*ND*	*ND*	*ND*	*ND*	*0.21 J*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.31 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P440***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.77 J*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*0.37 J*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.96 J*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P109***
Apr-2004	0.0003
Oct-2004	0.0006
Mar-2009	0.0003
Oct-2009	0.0005
Mar-2010	0.0003
Oct-2010	*ND*
Apr-2011	0.0005
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000086 J*
Mar-2013	*0.000088 J*
Oct-2013	*0.000084 J*
Mar-2014	*0.000066 J*
Oct-2014	*0.000101 J*
Apr-2015	*0.000071 J*
Nov-2015	*0.000081 J*
May-2016	*0.000051 J*
Oct-2016	*ND*
May-2017	*0.00013 J*
Oct-2017	*ND*
May-2018	0.00021 B
Nov-2018	*0.00013 J*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00007 J*
Oct-2021	*ND*
May-2022	*ND*
Oct-2022	*ND*
May-2023	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P109*																
Jan-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P109*																
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	2.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.91	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	0.1 J	0.1 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9 J	ND
Nov-2018	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P109*																
Apr-2021	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P109*															
Jan-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.5 J
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	0.6 J
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	1.1
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	0.9 J
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.1	2.2
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	3.7
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	6.3	4.5
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	5.6	3.7
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	3.2	4.1
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	7.8	4
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	3.8	2.9
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	5.8	2.1
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P109***															
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	1.8
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	0.7 J
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	0.5 J	ND	ND	ND	2.87	1.85
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	0.56 J	ND	ND	ND	2.89	2.11
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	0.83 J	ND	ND	ND	3.54	2.55
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.28 J	ND	0.8 J	ND	ND	ND	3.84	2.52
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.32 J	ND	0.9 J	ND	ND	ND	2.95	2.61
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	0.84 J	ND	ND	ND	2.86	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.28	ND	ND	ND	1.8	2.21
May-2016	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	1.6	ND	ND	ND	3	2.9
Oct-2016	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	1.9	ND	ND	ND	3.4	3.2
May-2017	0.2 J	ND	ND	ND	ND	ND	ND	ND	0.1 J	0.3 J	ND	1.7	ND	ND	ND	3.2	3.5
Oct-2017	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	2	ND	ND	ND	3.3	3.3
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	5.5	2.7
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5 CL	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	1.3 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	0.7 J

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P109***															
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.302 J*	*ND*	*ND*	*ND*	*1.27 J*	*1.01 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.5	*0.9 J*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.6	*0.7 J*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2	*0.7 J*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*0.6 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P109***															
Jan-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Feb-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	0.8 J	2.1	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	0.5 J	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P109***															
Oct-2009	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	2.09	ND	ND	ND	ND	1.42	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.86	ND	ND	ND	ND	1.56	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	1.45	ND	ND	ND	ND	1.73	0.36 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	2.16	0.29 J	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	2.05	ND	ND	ND	ND	2.57	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	1.41	ND	ND	ND	ND	2.46	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	1.41	ND	ND	ND	ND	2.99	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	3.7	0.3 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	4.2	0.3 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	1.7 J+	ND	ND	ND	ND	4	0.3 J	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	4	0.3 J	ND	ND	ND
May-2018	ND	ND	ND	ND	1.3	ND	ND	1.2	ND	ND	ND	ND	3.2	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P109***															
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.823 J*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P165***
Oct-2009	*ND*
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000047 J*
Mar-2013	*0.000073 J*
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*0.000033 J*
Apr-2015	*ND*
Nov-2015	*0.00003 J*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.0001 J*
Oct-2017	*0.000064 J*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00007 J*
Oct-2021	*ND*
May-2022	*ND*
Oct-2022	*ND*
May-2023	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P165*																
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.46	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.76	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3 J	ND
Nov-2018	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P165*																
Oct-2019	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	3.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P165*															
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.7 J
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	0.9 J
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.57	1.34
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	ND	ND	ND	ND	2.17	1.97
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	2.48	2.33
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	3.11	2.41
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.29 J	ND	ND	ND	ND	ND	2.5	2.7
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.23 J	ND	ND	ND	2.72	2.47
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.64	2.81
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	2.9	3.3
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	3.4	3.6
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	0.3 J
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	0.3 J	ND	ND	ND	4.8	4.2
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8	5
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8 CL	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	4.1 N3

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P165***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.4	3.2
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.3	2.9
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	6.4	3.8
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.292 J*	*ND*	*0.728 J*	*ND*	*ND*	*ND*	*3.94 J*	5.51
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	6.3	5
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	7	3.7
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	5.4	4
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	4	4.1

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P165***															
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	0.46 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.16 J	ND	ND	ND	0.42 J	ND	ND	ND	ND	0.22 J	0.43 J	ND	ND	ND
Mar-2014	ND	ND	ND	0.17 J	ND	ND	ND	0.61 J	ND	ND	ND	ND	0.24 J	0.4 J	ND	ND	ND
Oct-2014	ND	ND	ND	0.21 J	ND	ND	ND	0.78 J	ND	ND	ND	ND	0.32 J	0.38 J	ND	ND	ND
Apr-2015	ND	ND	ND	0.17 J	ND	ND	ND	0.75 J	ND	ND	ND	ND	0.28 J	0.36 J	ND	ND	ND
Nov-2015	ND	ND	ND	0.26 J	ND	ND	ND	0.66 J	ND	ND	ND	ND	0.29 J	0.36 J	ND	ND	ND
May-2016	ND	ND	ND	0.2 J	ND	ND	ND	0.8 J	ND	ND	ND	ND	0.3 J	0.4 J	ND	ND	ND
Oct-2016	ND	ND	ND	0.2 J	ND	ND	ND	1 J	ND	ND	ND	ND	0.4 J	0.5 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	0.2 J	ND	ND	ND	1.1	ND	ND	ND	ND	0.4 J	0.6 J	ND	ND	ND
May-2018	ND	ND	ND	ND	1.3	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P165***															
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.202 J*	*ND*	*ND*	*ND*	2.39	*ND*	*ND*	*ND*	*ND*	*0.719 J*	*0.429 J*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.6 J*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.5	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.5 J*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.5	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P171-1***
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000071 J*
Mar-2013	*0.000076 J*
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*0.000025 J*
Apr-2015	*ND*
Nov-2015	*ND*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.00015 J*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00005 J*
Oct-2021	*ND*
May-2022	*ND*
Oct-2022	*ND*
May-2023	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P171-1*																
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P171-1*																
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P171-1***															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.54 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.47 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.48 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.51 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P171-1***															
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.405 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P171-1***															
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P171-1***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P264***
Apr-2004	0.0003
Oct-2004	0.0003
Mar-2009	*ND*
Oct-2009	*ND*
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000109 J*
Mar-2013	*0.000094 J*
Oct-2013	*0.000065 J*
Mar-2014	*0.000056 J*
Oct-2014	*0.000083 J*
Apr-2015	*ND*
Nov-2015	*0.000059 J*
May-2016	*0.000068 J*
Oct-2016	*0.000059 J*
May-2017	0.00021
Oct-2017	*0.00013 J*
May-2018	*0.00019 JB*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00007 J*
Oct-2021	*ND*
May-2022	*ND*
Oct-2022	*ND*
May-2023	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P264*																
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.91 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.55	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P264*																
Mar-2014	ND	ND	ND	ND	1.61	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	1.85	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 J	ND
Nov-2018	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	3.02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P264*															
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	0.7 J
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	0.8 J
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.8 J
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	1.1
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	1.1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	0.7
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	1.1
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	3.8
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	1
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.3
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	1.3
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	0.6 J
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.76	1.57
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	ND	ND	ND	ND	2.33	2.28
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	0.22 J	ND	ND	ND	2.69	2.79

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P264***															
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	0.22 J	ND	ND	ND	3.3	3.41
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.24 J	ND	0.22 J	ND	ND	ND	2.27	3.23
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.24 J	ND	0.22 J	ND	ND	ND	2.64	2.76
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.61	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	2.6	3.4
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	3	3.8
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	0.3 J	0.2 J	ND	ND	ND	3	4.2
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	3.2	4.3
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.3	5
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 CL	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	4.9 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	3.6
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	2.5
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	6	3.5
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.464 J	ND	0.343 J	ND	ND	ND	4.29 J	5.38
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	6.4	4.6
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	7.1	3.6
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	6	4.1
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	0.6 J	ND	ND	ND	5.7	4

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P264***															
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.61 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.44 J*	*ND*	*ND*	*ND*	*ND*	*0.28 J*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P264***															
Oct-2013	ND	ND	ND	ND	ND	ND	ND	0.55 J	ND	ND	ND	ND	0.35 J	0.37 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	0.74 J	ND	ND	ND	ND	0.39 J	0.43 J	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	0.91 J	ND	ND	ND	ND	0.47 J	0.36 J	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	0.65 J	ND	ND	ND	ND	0.37 J	0.31 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	0.74 J	ND	ND	ND	ND	0.36 J	0.28 J	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	0.4 J	0.4 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	1 J+	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
May-2018	ND	ND	ND	ND	1.2	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	NA
Apr-2021	ND	ND	ND	0.164 J	0.543 JB	ND	ND	2.27	ND	ND	ND	ND	0.789 J	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	0.7 J	0.6 J	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
May-2023	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical Total Mercury (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	*RW-P440*
Jun-1994	*ND*
Jun-1994	*ND*
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	0.001
Apr-1997	*ND*
Apr-2004	0.001
Oct-2004	0.0005
Mar-2009	*ND*
Oct-2009	*ND*
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000056 J*
Mar-2013	0.000101
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*0.000051 J*
Apr-2015	*ND*
Nov-2015	*0.000036 J*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.00012 J*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	*RW-P440*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00006 J*
Oct-2021	*ND*
May-2022	*ND*
Oct-2022	*ND*
May-2023	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Millersville Landfill and Resource Recovery Facility

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P440*																
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	ND
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	0.7 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jan-2001	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2 J	ND
Apr-2001	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P440*																
Mar-2003	ND	ND	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	*1.6 J*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	*0.7 J*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	*0.98 J*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P440*																
Mar-2014	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	1.56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	0.512 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P440*															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	1.2	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	1 J	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	1.3	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	1.5	NA	ND	NA	NA	NA	1.1	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	1.3	0.7 J
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	1	NA	ND	NA	ND	NA	1.9	2.4
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	12	7.5
Jan-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.67 J	ND	ND	ND	ND	14	9
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.3	0.5 J	ND	ND	ND	ND	ND	10	7.7
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	7.4	7
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.1	0.7 J	ND	ND	ND	ND	ND	9.5	6.4
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	1	1.6	ND	ND	ND	ND	ND	8.6	6.2
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	0.7 J	ND	ND	ND	ND	ND	8.7	5.3

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P440***															
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	0.6 J	ND	ND	ND	ND	ND	7.3	5.2
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	5.5	4.4
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	8.1	4.8
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	4.3	3.4
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	4.1	2.8
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	2.6	1.6
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	4.5	4.8
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	6.3	2.7
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	4.5 J	3 J
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	5.3	1.7
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	3.4	2.2
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	6.3	4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	2.6
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	4.8	3.8
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	6.7	1.9
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	6.1	3
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND	ND	ND	ND	ND	ND	2.9
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.88 J	ND	ND	ND	ND	ND	2.14	1.1
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.95 J	ND	0.45 J	ND	ND	ND	3.92	2.15
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.22	ND	0.36 J	ND	ND	ND	3.25	1.54

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P440***															
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.85 J	ND	0.31 J	ND	ND	ND	4.18 J	1.92
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.91 J	ND	0.34 J	ND	ND	ND	2.39	1.52
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.86 J	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.89 J,B	ND	0.78 J	ND	ND	ND	1.42	1.57
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	0.5 J	ND	ND	ND	1.4	0.9 J
Oct-2016	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	0.9 J	ND	ND	ND	2.3	1.6
May-2017	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	0.9 J	ND	ND	ND	2.2	1.7
Oct-2017	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	0.8 J	ND	ND	ND	2	1.4
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	1.2	ND	ND	ND	3.6	1.6
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.2 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	0.7 J	ND	ND	ND	2	0.8 J
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.09 J	ND	0.134 J	ND	ND	ND	0.433 J	0.398 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 JB	ND	ND	ND	ND	ND	1.4	0.6 J
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	1.6	0.6 J
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	0.5 J	ND	ND	ND	1	0.7 J
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	0.6 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P440***															
Jun-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jun-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Aug-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	1.2	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	**2.3**	*NA*
Jan-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	*ND*	1.1	*0.78 J*	*ND*	**3.2**	*NA*
Feb-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.2	*ND*	*ND*	*ND*	*ND*	1	*0.7 J*	*ND*	**2.6**	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.4	*ND*	*ND*	*ND*	*ND*	1	*0.7 J*	*ND*	**2.3**	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.8	*ND*	*ND*	*ND*	*ND*	1	*0.8 J*	*ND*	**2.2**	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*0.6 J*	*ND*	1.7	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*RW-P440*															
Sep-2002	ND	ND	ND	NA	ND	ND	ND	2.9	ND	ND	ND	ND	0.9 J	ND	ND	1.5	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	3.1	ND	ND	ND	ND	0.9 J	0.5 J	ND	1.4	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	2.2	ND	ND	ND	ND	0.7 J	ND	ND	1	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	1.3	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	0.7 J	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	0.6 J	ND	ND	0.9 J	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	2.2 J	ND	ND	ND	ND	0.7 J	ND	ND	0.8 J	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.5 J	ND	ND	1.1	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	0.5 J	ND	ND	2.4	ND	ND	ND	ND	0.6 J	ND	ND	1.6	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	0.6 J	ND	ND	**2.1**	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	1.8	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	1.1	ND	ND	1.3	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	0.7 J	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	1.13	ND	ND	ND	ND	0.6 J	ND	ND	0.51 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.28	ND	ND	ND	ND	0.93 J	ND	ND	0.55 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P440***															
Oct-2013	ND	ND	ND	ND	ND	ND	ND	0.92 J	ND	ND	ND	ND	0.73 J	0.24 J	ND	0.54 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.23	ND	ND	ND	ND	0.55 J	0.23 J	ND	0.32 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	1.17	ND	ND	ND	ND	0.65 J	ND	ND	0.46 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	1.05	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.6 J	ND	ND	0.1 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	1.2	ND	ND	0.2 J	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	1.3	0.1 J	ND	0.3 J	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	1	ND	ND	0.2 J	ND
May-2018	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	1.9	NA
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.272 J	ND	ND	0.867 J	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	1.1	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	1.9	NA
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical Total Mercury (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	*RW-P441*
Jun-1994	*ND*
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	0.0017
Apr-1997	0.0008
Apr-2004	0.0018
Oct-2004	0.0007
Mar-2009	0.0003
Oct-2009	0.0003
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	0.0005
Sep-2011	0.0002
Mar-2012	0.0006
Sep-2012	0.00086
Mar-2013	0.0013
Oct-2013	*0.000198 J*
Mar-2014	*ND*
Oct-2014	*0.00006 J*
Apr-2015	*0.000081 J*
Nov-2015	0.000206
May-2016	*ND*
Oct-2016	*0.000071 J*
May-2017	0.00032
Oct-2017	*0.000061 J*
May-2018	0.00042 B
Nov-2018	0.00022
May-2019	*ND*
Oct-2019	*ND*

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	*RW-P441*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00014 J*
Oct-2021	*ND*
May-2022	*ND*
Oct-2022	*ND*
May-2023	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Millersville Landfill and Resource Recovery Facility

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P441*																
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	0.9 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P441*																
Oct-2004	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	1.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.44	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.58	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	2.14	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	2.12	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	2.01	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.74	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P441*																
Nov-2015	ND	ND	ND	ND	2.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	0.332 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P441*															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	1	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	0.6 J	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	0.7 J	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	4.1	1.5
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	2	1
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	1.4	1.8
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	1.6	0.9 J
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	0.5 J	NA	ND	NA	NA	NA	0.9 J	1
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	1.7
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	2.7	3.1
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	2.9
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	1.9
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.7	2.8
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.4	2.2
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.6	3.2
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	3.1
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	7.3	5.5
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.1	3.2

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P441***															
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.1	3.6
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.7	1.7
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	4.6	2
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	5.6	4.4
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.5	1.9
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*5.6 J*	*3.3 J*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.6	1.6
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.6	1.8
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	8.7	3
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.3	1.8
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.6	3
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.1	2.2
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	10.6	1.6
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.5	1.9
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	11.3	1.7
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.4	1.8
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.06	1.02
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.34 J*	*ND*	*ND*	*ND*	*ND*	*ND*	3.54	1.31
Oct-2013	*0.28 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.27 J*	*ND*	*ND*	*ND*	4.49	1.8
Mar-2014	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.17 J*	*ND*	*0.33 J*	*ND*	*ND*	*ND*	*5.54 J*	1.91
Oct-2014	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	3.67	1.8
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*0.34 J*	*ND*	*ND*	*ND*	3.41	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P441***															
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	2.18	1.32
May-2016	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.4 J	ND	ND	ND	2.7	1.3
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.5 J	ND	ND	ND	3.5	1.5
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.4 J	ND	ND	ND	2.9	1.3
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	0.5 J	ND	ND	ND	3.7	1.5
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	1.4
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6 CL	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	1.1 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.412 J	0.223 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	0.5 J
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P441***															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	1.3	ND	ND	NA	NA	ND	0.7 J	ND	0.5 J	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	0.5 J	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	1	ND	ND	1.5	ND	ND	ND	ND	0.5 J	0.5 J	ND	0.5 J	NA
Mar-2002	ND	ND	ND	NA	0.7 J	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	1.3	ND	ND	1.9	ND	ND	ND	ND	0.6 J	ND	ND	1.1	NA
Mar-2003	ND	ND	ND	NA	1.3	ND	ND	2.1	ND	ND	ND	ND	0.7 J	ND	ND	1.2	NA
Oct-2003	ND	ND	ND	NA	2.4	ND	ND	3.3	ND	ND	ND	ND	1.1	ND	ND	1.9	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P441***															
Apr-2004	ND	ND	ND	NA	1.4	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	1.1	ND	ND	2.2	ND	ND	ND	ND	0.7 J	ND	ND	0.9 J	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	1.5	0.8 J	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.3 R	ND	ND	2.3 J	ND	ND	ND	ND	0.7 J	ND	ND	1.2 J	NA
Sep-2007	ND	ND	ND	ND	1.3	ND	ND	2	ND	ND	ND	ND	0.6 J	ND	ND	0.9 J	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	0.9 J	ND	ND	2.5	ND	ND	ND	ND	0.5 J	ND	ND	1.3	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	1.3	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	0.6 J	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.5 J	ND	ND	0.6 J	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	1.69	ND	ND	ND	ND	0.54 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.07	ND	ND	ND	ND	0.36 J	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	0.5 J	0.26 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	0.6 J	0.35 J	ND	0.33 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	2.22	ND	ND	ND	ND	0.91 J	ND	ND	0.28 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P441***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.32	*ND*	*ND*	*ND*	*ND*	*0.63 J*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.34	*ND*	*ND*	*ND*	*ND*	*0.69 J*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.2 J*	*ND*	*0.1 J*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.1 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P584***
Apr-1995	*ND*
Oct-1996	0.0013
Apr-1997	0.0017
Apr-2004	*ND*
Oct-2004	*ND*
Mar-2009	*ND*
Oct-2009	*ND*
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000119 J*
Mar-2013	0.000103
Oct-2013	*0.000073 J*
Mar-2014	*ND*
Oct-2014	*0.000041 J*
Apr-2015	*ND*
Nov-2015	*0.000043 J*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*ND*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	0.00028
Oct-2021	*0.00005 J*
May-2022	0.00045
Oct-2022	*ND*
May-2023	0.00028

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P584*																
Apr-1995	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	0.6 J	NA	NA	3.2	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	0.7 J	NA	NA	4	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	9.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jan-2001	ND	0.76 J	ND	ND	9.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	0.9 J	ND	ND	13	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND
Apr-2001	ND	1	ND	ND	16	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2001	ND	0.7 J	ND	ND	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	0.7 J	ND	ND	15	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2002	ND	0.6 J	ND	ND	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	ND
Mar-2003	ND	ND	ND	ND	9.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	7.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	5.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P584*																
Oct-2005	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	4.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	5.49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	6.76	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	6.59	0.24 J	ND	ND	ND	ND	ND	ND	0.38 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	5.01	ND	ND	ND	ND	ND	ND	ND	0.32 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	4.26	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	3.91	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	4.74	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	4.2	0.1 J	ND	ND	ND	ND	ND	0.1 J	0.2 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P584*																
Oct-2016	ND	ND	ND	ND	3.4	ND	ND	ND	ND	ND	0.1 J+	0.1 J	0.2 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	3.7	ND	ND	ND	ND	ND	ND	0.1 J	0.2 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	3.4	ND	ND	ND	ND	ND	ND	0.1 J	0.2 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2 J	ND
Nov-2018	ND	ND	ND	ND	1.7 L2M0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	2.64	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P584*															
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	2.1
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	4
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	4.7
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	2.3
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	0.9 J	NA	NA	NA	1.3	6.7
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	1.6	4.4
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	0.8 J	ND	NA	0.8 J	NA	ND	NA	4.5	11
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	1.7	ND	ND	ND	22	20
Jan-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	1.7	ND	ND	ND	ND	21
Feb-2001	0.7 J	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND	2.2	ND	ND	ND	18	23
Apr-2001	1	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	2.6	ND	ND	ND	12	25
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	1.9	ND	ND	ND	8.8	16
Mar-2002	0.9 J	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	3.1	ND	ND	ND	12	20
Sep-2002	0.7 J	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	2.7	ND	ND	ND	13	18
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	2.1	ND	ND	ND	7.9	12
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	1.2	ND	ND	ND	12	11
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	15	9.2
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	14	8.4
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	15	9

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P584***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	12.4	5.5
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	9	5.8
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	13.2	5.3
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 J	ND	ND	ND	10 J	6.8 J
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	1.4	ND	ND	ND	11.8	3.9
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	9.4	5.2
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	9.9	5.4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	9.4	5.5
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	11.6	6.5
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.9 J	6.3
Oct-2010	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	18.7	7.2
Apr-2011	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.1	ND	ND	ND	20.7	9.4
Sep-2011	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5	ND	ND	ND	25.4	9.1
Mar-2012	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND	ND	ND	22.7	9.3
Sep-2012	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.59	ND	ND	ND	8.55	5.98
Mar-2013	0.55 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.11	ND	ND	ND	10.7	8.85
Oct-2013	0.58 J	ND	ND	ND	ND	ND	ND	ND	0.34 J	ND	ND	4.36	ND	ND	ND	10.4	8.15
Mar-2014	0.37 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.16	ND	ND	ND	10.6	8.31
Oct-2014	0.34 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.55	ND	ND	ND	7.23	6.15
Apr-2015	0.32 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.36	ND	ND	ND	6.98	4.91
Nov-2015	0.31 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.74	ND	ND	ND	3.83	5.33
May-2016	0.3 J	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	3	ND	ND	ND	6.4	5.7

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P584***															
Oct-2016	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	4.9	4.6
May-2017	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	2.3	*ND*	*ND*	*ND*	5.6	4.6
Oct-2017	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	2.1	*ND*	*ND*	*ND*	5.1	4.4
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	9	4.5
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3 CL	2.1 N3M1
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	5	3.8 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	5.7	2.5
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	4.8	2.2
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	6.2	2.6
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.886 J*	*ND*	*ND*	*ND*	*2.74 J*	*2.5 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	4.4	2.3
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	3.1	1.1
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	3.7	2
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	2.3	1.3

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P584***															
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	1.1	*ND*	*NA*	2	*ND*	*ND*	*NA*	*NA*	*0.8 J*	1.3	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	1.8	*ND*	*NA*	4.4	*ND*	*ND*	*NA*	*NA*	1.2	1.4	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	**8.3**	*ND*	*ND*	**10**	*ND*	*ND*	*ND*	*ND*	3.1	2.1	*ND*	*ND*	*NA*
Jan-2001	*ND*	*ND*	*ND*	*NA*	**9.8**	*ND*	*ND*	**6.3**	*ND*	*ND*	*ND*	*ND*	2.5	1.6	*ND*	*0.73 J*	*NA*
Feb-2001	*0.6 J*	*ND*	*0.9 J*	*NA*	**14**	*1 J*	*ND*	**15**	*ND*	*ND*	*ND*	*ND*	4.7	1.8	*ND*	1.4	*NA*
Apr-2001	*ND*	*ND*	1.2	*NA*	**19**	1.4	*ND*	**18**	*ND*	*ND*	*ND*	*ND*	**5.8**	1.6	*ND*	1.5	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	**12**	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	2.2	1.2	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*0.8 J*	*NA*	**16**	*0.9 J*	*ND*	**15**	*ND*	*ND*	*ND*	*ND*	4.9	1.3	*ND*	1.7	*NA*
Sep-2002	*ND*	*ND*	*0.5 J*	*NA*	**11**	*ND*	*ND*	**11**	*ND*	*ND*	*ND*	*ND*	3.5	1.2	*ND*	1.2	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	**7**	*ND*	*ND*	4.7	*ND*	*ND*	*ND*	*ND*	2.5	1	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	**7.1**	*ND*	*ND*	4.8	*ND*	*ND*	*ND*	*ND*	1.7	1	*ND*	*0.6 J*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	4.8	*ND*	*ND*	4.9	*ND*	*ND*	*ND*	*ND*	1.8	1.1	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	4.4	*ND*	*ND*	2.8	*ND*	*ND*	*ND*	*ND*	1.4	1.4	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*RW-P584*															
Apr-2005	ND	ND	ND	ND	3.9	ND	ND	4.6	ND	ND	ND	ND	1.7	1.5	ND	ND	NA
Oct-2005	ND	ND	ND	ND	1.6	ND	ND	3.9	ND	ND	ND	ND	1.8	1	ND	0.6 J	NA
Mar-2006	ND	ND	ND	ND	1.8	ND	ND	**5.4**	ND	ND	ND	ND	2.1	1.1	ND	ND	NA
Sep-2006	ND	ND	ND	ND	0.6 J	ND	ND	4.9	ND	ND	ND	ND	2.4	1.9	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.6 R	ND	ND	6.8 J	ND	ND	ND	ND	3 J	ND	ND	0.7 J	NA
Sep-2007	ND	ND	ND	ND	2.5	ND	ND	**8.6**	0.5 J	ND	ND	ND	2.9	1.2	ND	1.5	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	**9.5**	ND	ND	ND	ND	2.5	0.9 J	ND	1.8	NA
Sep-2008	ND	ND	ND	ND	1.8	ND	ND	**7.7**	ND	ND	ND	ND	2.6	1.1	ND	1.7	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	**7.6**	ND	ND	ND	ND	2.7	0.9 J	ND	ND	NA
Oct-2009	ND	ND	ND	ND	1.6	ND	ND	**7.2**	ND	ND	ND	ND	3.7	0.9 J	ND	1.3	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	NA
Oct-2010	ND	ND	ND	ND	2.5	ND	ND	**5.5**	ND	ND	ND	ND	ND	ND	ND	0.9 J	NA
Apr-2011	ND	ND	ND	ND	2.5	ND	ND	**5.4**	ND	ND	ND	ND	**5.6**	ND	ND	0.8 J	NA
Sep-2011	ND	ND	ND	ND	2.3	ND	ND	**5.1**	ND	ND	ND	ND	**6.6**	ND	ND	0.7 J	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	**5.1**	ND	ND	ND	ND	**7.2**	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	1.33	ND	ND	**6.13**	ND	ND	ND	ND	**7.44**	0.85 J	ND	0.29 J	ND
Mar-2013	ND	ND	ND	ND	1.02	ND	ND	**6.48**	ND	ND	ND	ND	**8.3**	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.84 J	ND	ND	**5.5**	ND	ND	ND	ND	**7.22**	0.88 J	ND	0.32 J	ND
Mar-2014	ND	ND	ND	ND	0.58 J	ND	ND	**6.17**	ND	ND	ND	ND	**5.89**	0.74 J	ND	0.23 J	ND
Oct-2014	ND	ND	ND	0.13 J	ND	ND	ND	**6.23**	ND	ND	ND	ND	4.83	0.6 J	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	ND	3.56	0.53 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	ND	3.54	0.42 J	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P584***															
May-2016	ND	ND	ND	0.1 J	0.4 J	ND	ND	4.5	ND	ND	ND	ND	3.9	0.5 J	ND	0.2 J	ND
Oct-2016	ND	ND	ND	0.1 J	0.3 J	ND	ND	3.3	ND	ND	ND	ND	2.8	0.4 J	ND	0.1 J	ND
May-2017	ND	ND	ND	ND	0.3 J	ND	ND	3.6	ND	ND	ND	ND	3	0.2 J	ND	0.1 J	ND
Oct-2017	ND	ND	ND	ND	0.3 J	ND	ND	3.4	ND	ND	ND	ND	2.6	0.4 J	ND	0.1 J	ND
May-2018	ND	ND	ND	ND	1.7	ND	ND	2.7	ND	ND	ND	ND	2.6	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	1.3 M1	ND	ND	ND	ND	0.99 JM1	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND	ND	ND	1.8	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	1.5	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	ND	1.8	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	1.3	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	ND	ND	ND	2.34	ND	ND	ND	ND	1.23	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	1 J	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	1 J	ND	ND	ND	NA
May-2023	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

HISTORICAL TABLES –
Surface Water Monitoring Locations

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-1***											
Nov-1993	17	17	0.2	30.9	21.7	8.3	ND	NA	192	15.8	146	58
Apr-1994	42	42	0.1	ND	25.3	3.6	ND	5.9	233	28.8	135	71.77
Apr-1995	12.4	12.4	ND	ND	18	3.1	ND	6	157	17.2	95	36.2
Apr-1997	ND	84	ND	ND	32	0.63	ND	NA	NA	37	229	120
Oct-1997	10	10	0.64	ND	8.4	0.255	ND	6.76	146	ND	80	33
Apr-1998	ND	ND	0.2	ND	2	ND	ND	6.4	242	4.71	22	1.8
Apr-1999	21	21	0.16	ND	125	0.901	ND	5.92	573	27.6	340	111
Oct-1999	30	30	0.1	32	13.6	2.34	ND	5.92	150.3	23.6	99	49
Oct-2000	13	NA	ND	10	67.6	2.21	ND	6.32	302	27.2	184	50.5
Apr-2001	7.5	NA	ND	ND	90.3	1.9	ND	NA	NA	15.3	206	60
Sep-2001	6	6	0.35	ND	63.4	3.51	ND	5.8	176	21.9	156	44.2
Mar-2002	8.5	8.5	ND	26	32.7	ND	ND	5.8	302	21.1	254	46.4
Sep-2002	15	15	ND	ND	55	2.09	ND	5.9	355	14.1	165	46.1
Mar-2003	18	18	ND	ND	93.9	2.02	ND	5.8	469	19.6	244	73.6
Oct-2003	22	22	ND	16	168	1.7	ND	6	691	20.8	378	101
Apr-2004	26	26	ND	ND	130	1.28	ND	6.6	619	18.9	350	73.4
Oct-2004	45	45	ND	19	37.6	1.03	ND	6.8	256	15.5	147	69.8
Apr-2005	23	23	ND	10	102	1.85	ND	6.2	399	15.6	274	65.8
Mar-2006	11	11	ND	ND	109	1.94	ND	5.7	421	17.4	224	51.9
Mar-2007	21	21	ND	ND	133	2.11	ND	6.2	606	18.3	298	59.4
Mar-2008	11	11	ND	12	126	2.23	ND	6	586	16.6	280	55.3
Mar-2009	12	12	ND	ND	118	1.16	ND	5.7	489	13.6	257	42.5
Apr-2010	27	27	ND	ND	115	1.5	ND	7.6	523	27.8	279	64.3
Oct-2010	43	43	0.27	11	42.4	0.55	ND	7	271	16.9	151	51
Apr-2011	24	24	ND	17	167	1.73	ND	7.2	532	16.2	311	57.4
Sep-2011	27	27	0.22	ND	15.1	0.57	ND	7.2	89.8	3.49	75	33.5
Mar-2012	21	21	ND	16	95.9	1.48	ND	6.1	417	18.1	213	50.9
Sep-2012	12.8	12.8	ND	ND	90.3	1.79	ND	5.6	412	13.2	191	41
Mar-2013	14.8	14.8	ND	ND	82.2	1.81	ND	7.1	386	15.1	188	43.1
Oct-2013	14.5	14.5	ND	ND	99.2	1.52	ND	6.7	459	15.4	238	44.5
Mar-2014	25.7	25.7	ND	18	489	1.62	ND	6.1	1139	19	710	60.5
Oct-2014	37.4	37.4	ND	14	187	1.58	ND	6.3	514	16	307	61.9
Apr-2015	21.9	21.9	ND	13	157	1.59	ND	6.5	501	17.1	263	61.3
Nov-2015	23.8	23.8	ND	ND	158	1.36	ND	6.5	482	15.4	285	63.3
May-2016	25.3	25.3	ND	19	109	1.32	ND	6.9	558	14.8	250	51.9
Oct-2016	13.2	13.2	ND	8 J	108	NA	NA	6.9	540	14.1	242	42.4
May-2017	11.7	11.7	ND	9 J	136	1.78	ND	6.8	650	13.3	286	50.4

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-1***											
Oct-2017	14.9	14.9	*ND*	*6 J*	106	2.12	*ND*	6.5	521	13.2	223	42
May-2018	20	20	*ND*	*20.8 J*	109	0.33	*ND*	6.9	474	15.2	187	53.5
Nov-2018	30	30	*ND*	*7.9 J*	120	1.3	*ND*	6.37	610	17.9	270	63.7
May-2019	60	*NA*	*ND*	28.4	35.8	0.2	*ND*	7.2	393	10.3	157	73.3
Oct-2019	16	*NA*	*ND*	*19.3 J*	143	1.3	*ND*	6.92	631	21.8	296	60.5
May-2020	12	12	*ND*	31.4	63.6	1.9	*ND*	6.8	406	11.6	185	48.3
Oct-2020	26	*NA*	*ND*	*ND*	61.7	1.9	*ND*	6.21	375	14.7	146	43.6
Apr-2021	40	*NA*	*ND*	*6.1 J*	69.3	1.6	*ND*	6.61	321	16.4	152	59.8
Oct-2021	*8 J5c*	*NA*	*ND*	*12.6 J*	74.7	2	*ND*	7.02	436	12	177	46.1
May-2022	20	*NA*	*ND*	*ND*	65.9	2	*ND*	6.96	362	13.5	173	46.8 N3
Oct-2022	22	*NA*	*ND*	*10.7 J*	71.4	1.9	*ND*	6.3	643	12.8	154	47.9 N3
May-2023	20	*NA*	*ND*	*6.9 JB*	71	2	*ND*	6.21	643	13.8	179	48.1 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-1***													
Nov-1993	NA	ND	ND	NA	0.002	14	NA	ND	NA	ND	1.2	NA	**0.034**	5.6	NA
Apr-1994	NA	ND	ND	NA	ND	20	NA	ND	NA	ND	0.42	NA	**0.034**	5.3	NA
Apr-1995	ND	ND	0.5	ND	ND	9.4	NA	ND	ND	ND	0.31	NA	ND	3.1	NA
Oct-1996	ND	ND	0.1	ND	ND	66	58	ND	ND	ND	6.5	1.1	ND	12	11
Apr-1997	ND	ND	0.038	ND	ND	36	35	ND	ND	ND	0.74	0.52	ND	8.8	8.4
Oct-1997	ND	ND	0.041	ND	ND	8.89	NA	ND	ND	ND	0.292	NA	ND	2.77	NA
Apr-1998	ND	ND	0.044	ND	ND	23.7	NA	ND	ND	ND	1.04	NA	ND	6.21	NA
Apr-1999	ND	ND	0.086	ND	ND	31.3	NA	ND	ND	ND	0.345	NA	ND	7.97	NA
Oct-1999	ND	ND	0.067	ND	ND	11.9	NA	ND	ND	ND	0.337	NA	ND	3.67	NA
Oct-2000	ND	ND	0.043	ND	ND	14.2	NA	ND	ND	ND	0.366	NA	ND	3.65	NA
Apr-2001	ND	ND	0.084	ND	ND	16.1	NA	ND	ND	ND	0.546	NA	ND	4.78	NA
Sep-2001	ND	ND	0.056	ND	ND	10.1	NA	ND	ND	ND	1.82	NA	0.003	4.59	NA
Mar-2002	ND	ND	0.044	ND	ND	12.8	NA	ND	ND	ND	0.573	NA	ND	3.51	NA
Sep-2002	ND	ND	0.052	ND	ND	13.2	NA	ND	ND	ND	0.171	NA	ND	3.19	NA
Mar-2003	ND	ND	0.094	ND	ND	19.9	NA	ND	ND	ND	0.258	NA	ND	5.8	NA
Oct-2003	ND	ND	0.126	ND	ND	28.1	NA	ND	ND	ND	0.594	NA	ND	7.54	NA
Apr-2004	ND	ND	0.072	ND	ND	21	NA	ND	ND	ND	0.701	NA	ND	5.11	NA
Oct-2004	ND	ND	0.032	ND	ND	20.1	NA	ND	ND	ND	1.23	NA	0.003	4.73	NA
Apr-2005	ND	0.004	0.058	ND	ND	18.6	NA	ND	ND	ND	1.12	NA	ND	4.69	NA
Mar-2006	ND	ND	0.056	ND	ND	14.4	NA	ND	ND	ND	0.471	NA	ND	3.84	NA
Mar-2007	ND	ND	0.055	ND	ND	17.7	NA	ND	ND	ND	0.116	NA	ND	3.68	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-1***													
Mar-2008	ND	0.002	0.071	ND	ND	15.4	NA	ND	ND	ND	0.208	NA	ND	4.07	NA
Mar-2009	ND	ND	0.055	ND	ND	11.7	NA	ND	ND	ND	0.496	NA	ND	3.22	NA
Apr-2010	ND	ND	0.049	ND	ND	18.7	NA	ND	ND	ND	ND	NA	ND	4.27	NA
Oct-2010	ND	ND	0.02	ND	ND	15	NA	ND	ND	ND	0.339	NA	ND	3.5	NA
Apr-2011	ND	ND	0.054	ND	ND	16.8	NA	ND	ND	ND	0.657	NA	ND	3.77	NA
Sep-2011	ND	ND	0.014	ND	ND	10.4	NA	ND	ND	ND	0.519	NA	ND	1.82	NA
Mar-2012	ND	ND	0.044	ND	ND	14.2	NA	ND	ND	ND	ND	NA	ND	3.74	NA
Sep-2012	ND	ND	0.0428	0.000066 J	ND	11.3	NA	ND	0.000981 J	ND	0.0847	NA	ND	3.1	NA
Mar-2013	ND	ND	0.0436	ND	ND	11.8	NA	0.0022 J	0.0011 J	0.00083 J	0.0408 J	NA	0.0012 J	3.31	NA
Oct-2013	0.000594 J	ND	0.0516	ND	ND	13.1	NA	0.0065 J	0.0012 J	0.00074 J	0.142	NA	0.000333 J	2.86	NA
Mar-2014	0.000455 J	0.000116 J	0.0655	ND	ND	18.1	NA	0.0009 J	0.001 J	0.0012 J	0.185	NA	0.000482 J	3.73	NA
Oct-2014	0.000432 J	0.000397 J	0.0661	ND	ND	17.5	NA	0.000625 J	0.0008 J	0.000969 J	0.169	NA	ND	4.41	NA
Apr-2015	0.000634 J	0.000521 J	0.0611	ND	ND	17.3	NA	0.0013 J	0.0017 J	0.0013 J	0.496	NA	0.0012 J	4.4	NA
Nov-2015	0.000471 J	0.000477 J	0.0549	ND	ND	18.7	NA	0.0012 J	0.0013 J	0.000996 J	0.682	NA	0.000705 J	4.02	NA
May-2016	ND	0.00074 J	0.0542	ND	ND	14.5	NA	0.00081 J	0.00063 J	0.0014 J	0.19 J	NA	0.00055 J	3.81	NA
Oct-2016	ND	ND	0.0552	ND	ND	11.5	NA	0.00074 J	0.0021	0.00078 J	0.34	NA	0.001 J	3.31	NA
May-2017	ND	ND	0.0641	ND	ND	13.8	NA	0.0018 J	0.002	0.0012 J,B	0.248	NA	0.00094 J	3.88	NA
Oct-2017	ND	ND	0.0482	ND	ND	11.8	NA	ND	0.00081 J	ND	ND	NA	ND	3.02	NA
May-2018	0.0001 J	ND	0.057	0.000038 J	0.000065 J	15.1	NA	0.0052 J	0.001	0.003 B	0.42	NA	0.00071 J	3.8	NA
Nov-2018	0.00033 J	0.000072 J	0.04	0.000047 J	0.000054 J	18.3	NA	0.0035 J	0.0016	0.0033	0.91	NA	0.0013	4.4	NA
May-2019	ND	ND	0.021	ND	ND	24.6	NA	ND	0.00069	0.0024	2.5	NA	0.0018	2.9	NA
Oct-2019	0.00016 J	0.00018 J	0.056	0.000096 J	0.00032 J	16.9	NA	0.004 J	0.0016	0.0039	0.92	NA	0.0018	4.4	NA
May-2020	0.00036 J	0.00034 J	0.044	0.00011 J	0.00012 J	13.4	NA	0.0079	0.0022	**0.0026 D6**	0.84	NA	0.0021	3.6	NA
Oct-2020	ND	ND	0.037	ND	ND	12.4	NA	0.0095 J	0.00053 J	ND	0.037 J	NA	ND	3.1	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-1***													
Apr-2021	*ND*	*ND*	0.038	*ND*	*ND*	17.7	*NA*	*0.00043 J*	*ND*	*ND*	0.2	*NA*	*ND*	3.8	*NA*
Oct-2021	*0.000076 J*	*ND*	0.042	*ND*	*ND*	13.1	*NA*	*ND*	*0.00037 J*	*0.00042 J*	0.076	*NA*	*0.00012 J*	3.2	*NA*
May-2022	*ND*	*ND*	0.047	*ND*	*ND*	13.4	*NA*	*0.00054 J*	*0.00054 J*	*ND*	*0.046 J*	*NA*	*ND*	3.3	*NA*
Oct-2022	*ND*	*ND*	0.042	*ND*	*ND*	13.8	*NA*	*0.0006 J*	*ND*	*ND*	*0.048 J*	*NA*	*ND*	3.3	*NA*
May-2023	*ND*	*ND*	0.042	*ND*	*ND*	13.6	*NA*	*0.00065 J*	*ND*	*0.00069 J*	*0.038 J*	*NA*	*ND*	3.4	*NA*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*SW-1*												
Nov-1993	0.2	NA	ND	NA	4.1	NA	ND	NA	16.9	NA	NA	NA	0.02
Apr-1994	0.064	NA	ND	NA	2.7	NA	ND	NA	11	NA	NA	NA	0.022
Apr-1995	0.05	NA	ND	ND	1.7	NA	ND	ND	7.1	NA	ND	ND	0.04
Oct-1996	0.57	0.076	NA	ND	ND	ND	ND	ND	7.7	8.7	ND	ND	0.43
Apr-1997	0.14	0.13	ND	ND	4.2	4	ND	ND	19	18	ND	ND	0.047
Oct-1997	0.049	NA	NA	ND	1.98	NA	ND	ND	13.6	NA	ND	ND	ND
Apr-1998	0.041	NA	ND	3.09	ND	NA	ND	17.5	ND	NA	ND	0.025	NA
Apr-1999	0.07	NA	NA	ND	3.91	NA	ND	ND	67.9	NA	ND	ND	0.01
Oct-1999	0.076	NA	NA	ND	2.93	NA	ND	ND	44.8	NA	ND	ND	ND
Oct-2000	0.036	NA	NA	ND	3.15	NA	ND	ND	40.6	NA	ND	ND	ND
Apr-2001	0.1	NA	NA	ND	2.48	NA	ND	ND	46.3	NA	ND	ND	ND
Sep-2001	0.052	NA	NA	0.023	3.79	NA	ND	ND	37.4	NA	ND	ND	0.015
Mar-2002	0.025	NA	NA	ND	2.64	NA	ND	ND	66.9	NA	ND	ND	0.012
Sep-2002	0.059	NA	NA	ND	2.4	NA	ND	ND	35.1	NA	ND	ND	0.012
Mar-2003	0.116	NA	NA	ND	2.77	NA	ND	ND	62.9	NA	ND	ND	ND
Oct-2003	0.182	NA	NA	ND	2.28	NA	ND	ND	91.7	NA	ND	ND	0.021
Apr-2004	0.116	NA	ND	ND	2.42	NA	ND	ND	103	NA	ND	ND	0.035
Oct-2004	0.042	NA	ND	ND	3.49	NA	ND	ND	28.5	NA	ND	ND	0.048
Apr-2005	0.063	NA	ND	ND	3.17	NA	ND	ND	66.4	NA	ND	ND	0.011
Mar-2006	0.026	NA	ND	ND	2.28	NA	ND	ND	52.1	NA	ND	ND	0.048
Mar-2007	0.039	NA	ND	ND	2.78	NA	ND	ND	73	NA	ND	ND	ND
Mar-2008	0.051	NA	ND	ND	2.96	NA	ND	ND	79.3	NA	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-1***												
Mar-2009	0.06	NA	0.0002	ND	2.26	NA	ND	ND	63	NA	ND	ND	0.01
Apr-2010	0.038	NA	ND	ND	2.52	NA	ND	ND	62	NA	ND	ND	ND
Oct-2010	0.014	NA	ND	ND	2.74	NA	ND	ND	29.2	NA	ND	ND	ND
Apr-2011	0.049	NA	ND	ND	2.46	NA	ND	ND	76.7	NA	ND	ND	ND
Sep-2011	0.015	NA	ND	ND	1.16	NA	ND	ND	10.1	NA	ND	ND	ND
Mar-2012	0.038	NA	ND	ND	2.41	NA	ND	ND	55.8	NA	ND	ND	ND
Sep-2012	0.0339	NA	ND	0.0014 J	2.43	NA	0.000504 J	ND	51.5	NA	ND	ND	0.0053 J
Mar-2013	0.0335	NA	0.000055 J	0.0015 J	2.4	NA	0.000445 J	0.00002 J	41.3	NA	ND	ND	0.0172
Oct-2013	0.0329	NA	ND	0.0017 J	2.19	NA	ND	0.000026 J	58.8	NA	0.000724 J	ND	0.0162
Mar-2014	0.0326	NA	ND	0.0016 J	2.34	NA	0.0011 J	ND	216	NA	ND	0.000342 J	0.0106
Oct-2014	0.0244	NA	0.00004 J	0.0033 J	2.62	NA	0.0014 J	ND	82.5	NA	ND	ND	0.0073 J
Apr-2015	0.0572	NA	ND	0.0034 J	2.76	NA	0.0013 J	ND	76.8	NA	ND	0.0011 J	0.0153
Nov-2015	0.0414	NA	ND	0.0027 J	2.95	NA	0.0012 J	ND	74.5	NA	0.000195 J	0.00091 J	0.0067 J
May-2016	0.0216	NA	ND	0.0021 J	2.66	NA	0.0006 J	ND	64.3	NA	ND	0.00049 J	0.0123 J
Oct-2016	0.0512	NA	ND	0.0025 J	2.34	NA	0.0006 J	ND	66.7	NA	ND	0.00064 J	0.0079 J
May-2017	0.0382	NA	ND	0.0019 J,B	2.47	NA	0.00068 J	ND	76	NA	ND	0.00047 J	0.0144 JB
Oct-2017	0.0203	NA	ND	0.0013 JB	2.31	NA	0.00059 J	ND	59.6	NA	ND	ND	0.0062 J
May-2018	0.043	NA	ND	0.0034	2.2 J	NA	0.0013 JB	ND	73.2	NA	ND	ND	0.0092 B
Nov-2018	0.057	NA	ND	0.0035	1.9 J	NA	0.00075 J	ND	80.2	NA	0.000095 J	0.0041	0.01
May-2019	0.063	NA	ND	0.0035	ND	NA	ND	ND	24.1	NA	ND	0.0059	0.019
Oct-2019	0.05	NA	ND	0.0037	2.6 J	NA	0.0013 J	ND	96.3	NA	ND	ND	0.015
May-2020	0.056	NA	ND	0.0054	2.3 J	NA	0.001 J	ND	38.6	NA	ND	0.0012 D6	0.011 D6
Oct-2020	0.011	NA	ND	ND	2.3 J	NA	ND	ND	39.7	NA	ND	0.0027 J	ND
Apr-2021	0.013	NA	ND	ND	2.3	NA	ND	ND	43.4	NA	ND	ND	0.0066 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-1***												
Oct-2021	0.009	*NA*	*ND*	*0.0012 J*	2.2	*NA*	*ND*	*ND*	48.4	*NA*	*ND*	*0.00028 J*	*0.0035 J*
May-2022	0.012	*NA*	*ND*	*0.0014 J*	2.3	*NA*	*ND*	*ND*	42.6	*NA*	*ND*	*ND*	0.0055
Oct-2022	0.01	*NA*	*ND*	*0.0014 J*	2.5	*NA*	*ND*	*ND*	42.6	*NA*	*ND*	*ND*	0.006
May-2023	0.012	*NA*	*ND*	*0.0014 J*	2.2	*NA*	*0.00092 JB*	*ND*	48.5	*NA*	*ND*	*ND*	0.0071

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***SW-1***																
Nov-1993	NA	ND	ND	ND	ND	ND	NA	NA	NA	NA	ND	ND	NA	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	23	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.5	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-1*																
Jun-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.46 J*	*ND*	*ND*	*4.84 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.09 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.25 J,B*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***SW-1***																
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.4 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-1***															
Nov-1993	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA	NA	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-1***															
Jun-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-1***															
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-1***															
Nov-1993	ND	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-1***															
May-2005	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jun-2005	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	1.7	2.1 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-1***															
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-2***											
Nov-1993	28	28	ND	39.3	18.4	1.3	ND	5.8	306	80	200	104
Apr-1994	30	30	0.2	22.7	8.6	0.5	ND	6.15	164	26.1	107	61.88
Apr-1995	23.7	23.7	ND	ND	13.7	0.7	ND	6.5	140	23.7	70	47
Apr-1997	ND	24	ND	ND	11	0.21	ND	NA	NA	32	192	54
Apr-1997	ND	17	ND	ND	14	0.22	ND	NA	NA	27	164	21
Oct-1997	23	23	0.39	ND	25.8	2.54	ND	6.83	92.2	15.1	17	36
Apr-1998	13	13	0.33	11	6.7	0.2	ND	6.29	164.7	18.4	72	37
Apr-1999	31	31	0.29	14	20.4	0.503	ND	5.99	296	46.6	480	89
Oct-1999	4	4	0.2	ND	4.95	ND	ND	5.62	62.2	13.8	40	15
Oct-2000	30	NA	ND	16	18.1	ND	ND	6.69	130.4	10.5	90	50.3
Apr-2001	36	NA	ND	17	14.9	ND	ND	NA	NA	15.5	151	77.2
Sep-2001	45	45	0.25	22	16.2	ND	ND	7.2	202	22.2	121	70.5
Mar-2002	46	46	ND	28	13.7	ND	ND	7.1	388	116	256	104
Sep-2002	80	80	ND	21	10.3	ND	ND	7.4	327	49.2	206	140
Mar-2003	45	45	ND	25	19	0.254	ND	7.1	212	23.6	133	71.6
Oct-2003	39	39	ND	23	29.4	0.358	ND	6.7	233	10.3	174	59.6
Apr-2004	110	110	ND	46	30	1.63	ND	7.7	372	31	248	143
Oct-2004	35	35	ND	26	23.1	0.53	ND	6.95	160.2	15.7	121	60.4
Apr-2005	42	42	ND	21	13.9	0.36	ND	6.5	131.7	14.2	185	61.9
Mar-2006	30	30	ND	ND	31.7	0.42	ND	6.9	192.3	24.6	146	58.6
Mar-2007	49	49	ND	19	54.6	0.44	ND	6.9	401	20.1	165	72.8
Mar-2008	43	43	ND	26	60.8	0.29	ND	7.1	392	25.3	199	74.3
Mar-2009	28	28	ND	ND	45.5	0.26	ND	6	320	19.3	160	51
Apr-2010	32	32	ND	23	42.9	0.39	ND	7	188.5	16.9	132	50.6
Oct-2010	59	59	ND	26	45.7	0.15	ND	7.6	309	26.2	214	96.1
Apr-2011	37	37	ND	20	53.7	0.47	ND	6.8	210	19.8	160	59.4
Sep-2011	89	89	ND	43	26	0.44	0.03	7.2	279	21.3	208	109
Mar-2012	23	23	ND	ND	56.6	0.43	0.02	6.1	202	12.9	140	45.7
Sep-2012	32.8	32.8	ND	81.1	24.5	0.212	ND	5.7	146.9	11.4	116	50.3
Mar-2013	31.9	31.9	ND	19.5	43.9	0.229	ND	6.9	310	19.7	162	52.6
Oct-2013	48.6	48.6	ND	42.8	11.4	0.293	ND	7.2	174.5	29.7	161	74.3
Mar-2014	33.2	33.2	ND	37	73.9	0.246	ND	6.5	354	22.7	204	62.1
Oct-2014	44	44	ND	23	45.2	0.0948	ND	6.9	177.5	11.7	131	49.9
Apr-2015	108	108	0.195 J	53	81.9	0.987	ND	6.4	528	25.1	338	137
Nov-2015	60	60	ND	33	37.5	0.362	ND	7.4	310	27.7	250	95.2
May-2016	53.8	53.8	ND	21	56.4	0.104	ND	6.2	354	12.8	194	77.4
Oct-2016	112	112	ND	97	32.6	NA	NA	7.1	565	55	356	154

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-2***											
May-2017	51.8	51.8	*ND*	20	37.4	0.504	*ND*	6.9	368	15	151	74
Oct-2017	63.2	63.2	*ND*	30	4.97	*ND*	*ND*	6.9	238	9.23	102	71.5
May-2018	60	60	0.16	42.3	33.2	*ND*	0.021	6	234	13.7	68	81.7
Nov-2018	88	88	*0.052 J*	*20.8 J*	24.2	0.21	*0.0069 J*	7.99	328	17.1	147	104
May-2019	78	*NA*	*ND*	*ND*	53.6	0.38	0.013	7.49	374	15.8	206	93.8
Oct-2019	122	*NA*	*ND*	*12.6 J*	8.9	0.29	*ND*	7.24	872	*5.1 J*	122	134
May-2020	68	68	*ND*	55.9	46.9	0.46	*0.0057 J*	7.25	530	10.9	199	84.5
Oct-2020	92	*NA*	*ND*	29.6	15.1	0.21	*ND*	6.93	327	16.1	146	121
Apr-2021	80	*NA*	*ND*	*14.8 J*	41	0.44	*ND*	8.19	304	16.6	150	97.8
Oct-2021	20	*NA*	*ND*	*17 J*	27.8	0.61	*ND*	6.55	365	10.5	164	113
May-2022	72	*NA*	*ND*	26	38.8	*0.095 J*	*ND*	7.11	362	12.8	172	99.3 N3
Oct-2022	74	*NA*	*ND*	26.7	35.9	*0.065 J*	*ND*	6.82	362	19	131	95.5 N3
May-2023	64	*NA*	*ND*	36.5	24.9	*0.096 J*	*ND*	7.41	325	11.8	139	88.3 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-2***													
Nov-1993	NA	ND	ND	NA	ND	32.3	NA	ND	NA	ND	0.2	NA	ND	5.8	NA
Apr-1994	NA	ND	0.008	NA	ND	20	NA	ND	NA	ND	0.37	NA	ND	2.9	NA
Apr-1995	ND	ND	ND	ND	ND	14.7	NA	ND	ND	ND	0.6	NA	0.006	2.5	NA
Oct-1996	ND	ND	0.028	ND	ND	15	14	ND	ND	ND	1.1	1.1	ND	3.1	2.8
Apr-1997	ND	ND	0.029	ND	ND	15	16	ND	ND	ND	0.71	0.7	ND	3.2	3.5
Apr-1997	ND	ND	0.035	ND	ND	11	12	ND	ND	ND	0.79	0.56	ND	3	3.1
Oct-1997	ND	ND	0.031	ND	ND	9.35	NA	ND	ND	ND	1.46	NA	ND	2.19	NA
Apr-1998	ND	ND	0.03	ND	ND	10.4	NA	ND	ND	ND	1.01	NA	ND	2.63	NA
Apr-1999	ND	ND	0.066	ND	ND	25.4	NA	0.03	0.013	0.015	12.5	NA	ND	6.09	NA
Oct-1999	ND	ND	0.045	ND	ND	22.5	NA	ND	ND	ND	1.03	NA	ND	5.03	NA
Oct-2000	ND	ND	0.036	ND	ND	14.4	NA	ND	ND	ND	0.311	NA	ND	3.48	NA
Apr-2001	ND	ND	0.03	ND	ND	22.7	NA	ND	ND	ND	0.326	NA	ND	4.98	NA
Sep-2001	ND	ND	0.031	ND	ND	21.1	NA	ND	ND	ND	0.502	NA	ND	4.35	NA
Mar-2002	ND	ND	0.039	ND	ND	31	NA	ND	ND	ND	0.68	NA	ND	6.53	NA
Sep-2002	ND	ND	0.025	ND	ND	43.8	NA	ND	ND	ND	0.286	NA	ND	7.55	NA
Mar-2003	ND	ND	0.026	ND	ND	21.9	NA	ND	ND	0.01	0.257	NA	ND	4.11	NA
Oct-2003	ND	ND	0.04	ND	ND	17.2	NA	ND	ND	ND	0.8	NA	ND	4.06	NA
Apr-2004	ND	0.002	0.034	ND	ND	44.5	NA	ND	ND	0.012	0.378	NA	0.003	7.88	NA
Oct-2004	ND	ND	0.041	ND	ND	17.5	NA	ND	ND	ND	0.271	NA	ND	4.06	NA
Apr-2005	ND	0.003	0.03	ND	ND	18.9	NA	ND	ND	ND	1.69	NA	0.003	3.57	NA
Mar-2006	ND	ND	0.038	ND	ND	16.2	NA	ND	ND	ND	0.071	NA	ND	4.41	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-2***													
Mar-2007	ND	ND	0.029	ND	ND	23.7	NA	ND	ND	ND	0.478	NA	ND	4.1	NA
Mar-2008	ND	0.003	0.032	ND	ND	22	NA	ND	ND	ND	0.399	NA	ND	4.7	NA
Mar-2009	ND	ND	0.028	ND	ND	14.5	NA	ND	ND	ND	0.391	NA	ND	3.59	NA
Apr-2010	ND	ND	0.039	ND	ND	14.8	NA	ND	ND	ND	0.329	NA	ND	3.31	NA
Oct-2010	ND	ND	0.038	ND	ND	29	NA	ND	ND	ND	0.311	NA	ND	6.09	NA
Apr-2011	ND	ND	0.041	ND	ND	17.5	NA	ND	ND	ND	0.436	NA	ND	3.82	NA
Sep-2011	ND	0.003	0.035	ND	ND	33.8	NA	ND	ND	ND	1.18	NA	ND	5.94	NA
Mar-2012	ND	ND	0.046	ND	ND	12.5	NA	ND	ND	ND	0.727	NA	ND	3.51	NA
Sep-2012	ND	0.0013 J	0.0369	0.00007 J	ND	14.3	NA	ND	0.0016 J	0.0013 J	1.13	NA	ND	3.55	NA
Mar-2013	ND	ND	0.0303	ND	ND	15.1	NA	0.0027 J	0.0017 J	0.0018 J	0.671	NA	0.0014 J	3.62	NA
Oct-2013	0.000546 J	ND	0.033	ND	0.000306 J	23.5	NA	0.0066 J	0.0013 J	0.0045 J	1.03	NA	0.004	3.79	NA
Mar-2014	0.000427 J	0.000355 J	0.0333	ND	ND	18.2	NA	0.0014 J	0.0017 J	0.002 J	0.43	NA	ND	4.04	NA
Oct-2014	0.00048 J	0.000872 J	0.0412	ND	ND	13.6	NA	0.001 J	0.000988 J	0.000866 J	0.549	NA	ND	3.88	NA
Apr-2015	0.000938 J	0.0022	0.039	ND	0.000074 J	42.4	NA	0.002 J	0.0015 J	0.0053 J	0.66	NA	0.0012 J	7.44	NA
Nov-2015	0.000754 J	0.0036	0.0675	0.000225 J	0.000081 J	30.1	NA	0.0201	0.0017 J	0.0051 J	6.97	NA	0.0079	4.86	NA
May-2016	ND	0.0011 J	0.0403	ND	ND	22.7	NA	0.0015 J	0.0014	0.00071 J	1.93	NA	0.00028 J	5.06	NA
Oct-2016	0.00066 J	0.0036 J	0.0535	ND	ND	41.8	NA	0.0021 J	0.0009 J	0.0042	1.14	NA	0.00083 J	12.1	NA
May-2017	ND	0.0013 J	0.0195	ND	ND	22.5	NA	0.0017 J	0.00081 J	0.0016 J	1.44	NA	0.00055 J	4.3	NA
Oct-2017	ND	0.0017 J	0.0128	ND	ND	21.6	NA	0.0012 J	0.00043 J	0.0012 J	0.619	NA	0.00046 J	4.28	NA
May-2018	0.0003 J	0.00094 JB	0.02	ND	0.000022 J	24.4	NA	0.0042 J	0.0012	0.0038 B	1.3	NA	0.00042 J	5.1	NA
Nov-2018	0.00015 J	0.00032 J	0.026	0.00003 J	ND	32	NA	0.0025 J	0.00058	0.0027	0.93	NA	0.00032 J	5.8	NA
May-2019	ND	ND	0.035	ND	ND	28.2	NA	ND	0.0011	ND	1.2	NA	ND	5.7	NA
Oct-2019	0.00014 J	0.00036 J	0.033	ND	0.00019 J	38.1	NA	0.0018 J	0.0004 J	0.0062	0.84	NA	0.0002 J	9.4	NA
May-2020	0.00013 J	ND	0.033	ND	ND	24.8	NA	0.0043 J	0.00092	0.0017 J	0.9	NA	ND	5.5	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-2***													
Oct-2020	*0.00031 J*	*ND*	0.032	*ND*	*ND*	37.5	*NA*	*0.0092 J*	*0.00061 J*	*ND*	0.84	*NA*	*ND*	6.6	*NA*
Apr-2021	*ND*	*ND*	0.035	*ND*	*ND*	29.2	*NA*	*0.0011 J*	*0.00087 J*	*ND*	1.1	*NA*	*ND*	6	*NA*
Oct-2021	*0.00012 J*	*0.00067 J*	0.039	*ND*	*ND*	32.1	*NA*	*ND*	*0.00032 J*	*0.00031 J*	0.43	*NA*	*0.000066 J*	7.9	*NA*
May-2022	*ND*	*0.0013 J*	0.03	*ND*	*ND*	29.7	*NA*	*0.0014 J*	*0.00074 J*	*0.0015 J*	1.5	*NA*	0.00056	6.1	*NA*
Oct-2022	*ND*	*0.00094 J*	0.033	*ND*	*ND*	28	*NA*	*0.00097 J*	*ND*	*0.00096 J*	0.83	*NA*	*ND*	6.2	*NA*
May-2023	*ND*	*0.0011 J*	0.025	*ND*	*ND*	26	*NA*	*0.0013 J*	*0.00091 J*	*0.0017 J*	1.3	*NA*	*0.00034 J*	5.7	*NA*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-2***												
Nov-1993	0.1	NA	ND	NA	6.2	NA	ND	NA	6.7	NA	NA	NA	ND
Apr-1994	0.061	NA	ND	NA	3.3	NA	ND	NA	4.8	NA	NA	NA	0.014
Apr-1995	0.02	NA	ND	ND	3.6	NA	ND	ND	4.7	NA	ND	ND	0.03
Oct-1996	0.062	0.047	NA	ND	ND	ND	ND	ND	4.9	4.7	ND	ND	0.04
Apr-1997	0.062	0.065	ND	ND	3.1	3.6	ND	ND	5.7	6.3	ND	ND	0.037
Apr-1997	0.059	0.065	ND	ND	3.4	3.5	ND	ND	6.1	7.2	ND	ND	ND
Oct-1997	0.105	NA	NA	ND	2.16	NA	ND	ND	1.65	NA	ND	ND	0.017
Apr-1998	0.069	NA	ND	2.16	ND	NA	ND	3.59	ND	NA	ND	0.05	NA
Apr-1999	0.141	NA	NA	0.047	5.54	NA	ND	ND	11.7	NA	ND	0.046	0.11
Oct-1999	0.138	NA	NA	0.016	11.3	NA	ND	ND	8.72	NA	ND	ND	0.011
Oct-2000	0.057	NA	NA	ND	3.63	NA	ND	ND	8.6	NA	ND	ND	ND
Apr-2001	0.071	NA	NA	0.011	4.57	NA	ND	ND	17.6	NA	ND	ND	0.015
Sep-2001	0.059	NA	NA	ND	4.39	NA	ND	ND	11.1	NA	ND	ND	0.012
Mar-2002	0.054	NA	NA	ND	5.48	NA	ND	ND	37.7	NA	ND	ND	0.012
Sep-2002	0.023	NA	NA	0.022	6.52	NA	ND	ND	5.22	NA	ND	ND	0.032
Mar-2003	0.063	NA	NA	0.014	5.32	NA	ND	ND	14	NA	ND	ND	0.023
Oct-2003	0.052	NA	NA	ND	4.41	NA	ND	ND	17	NA	ND	ND	0.012
Apr-2004	0.029	NA	ND	ND	14	NA	ND	ND	25.6	NA	ND	ND	0.023
Oct-2004	0.028	NA	ND	ND	7.12	NA	ND	ND	14.8	NA	ND	ND	ND
Apr-2005	0.048	NA	ND	ND	3.92	NA	ND	ND	10.2	NA	ND	ND	0.039
Mar-2006	ND	NA	ND	ND	2.75	NA	ND	ND	17	NA	ND	ND	ND
Mar-2007	0.039	NA	ND	ND	3.53	NA	ND	ND	27.7	NA	ND	ND	0.014

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-2***												
Mar-2008	0.048	NA	ND	ND	3.57	NA	ND	ND	34.8	NA	ND	ND	ND
Mar-2009	0.052	NA	ND	ND	2.57	NA	ND	ND	21.4	NA	ND	ND	ND
Apr-2010	0.03	NA	ND	ND	3.25	NA	ND	ND	23.2	NA	ND	ND	0.011
Oct-2010	0.026	NA	ND	ND	6.05	NA	ND	ND	25.2	NA	ND	ND	ND
Apr-2011	0.044	NA	ND	ND	2.7	NA	ND	ND	26.1	NA	ND	ND	ND
Sep-2011	0.037	NA	ND	ND	9.74	NA	ND	ND	16.3	NA	ND	ND	ND
Mar-2012	0.043	NA	ND	ND	3.2	NA	ND	ND	29.9	NA	ND	ND	ND
Sep-2012	0.06	NA	ND	0.0027 J	5.93	NA	0.000415 J	ND	14.2	NA	ND	ND	0.0057 J
Mar-2013	0.0394	NA	0.000056 J	0.0039 J	3.39	NA	ND	ND	22.6	NA	ND	ND	0.0193
Oct-2013	0.0259	NA	ND	0.0071 J	8.3	NA	ND	0.000018 J	6.88	NA	ND	0.0079 J	0.0186
Mar-2014	0.0396	NA	ND	0.0036 J	3.26	NA	ND	ND	38.9	NA	ND	0.0021 J	0.0106
Oct-2014	0.0312	NA	0.000022 J	0.0019 J	4.19	NA	ND	ND	23.2	NA	ND	0.0011 J	0.0051 J
Apr-2015	0.0453	NA	ND	0.0067 J	12.1	NA	ND	ND	58.6	NA	ND	0.0043 J	0.0131
Nov-2015	0.0381	NA	ND	0.0051 J	6.95	NA	0.0013 J	ND	19.4	NA	0.000222 J	0.0234	0.0103
May-2016	0.058	NA	ND	0.0018 J	2.7	NA	ND	ND	30.6	NA	ND	0.0011	0.0129 J
Oct-2016	0.0327	NA	ND	0.0061	23.1	NA	ND	ND	19.4	NA	ND	0.0033	0.0059 J
May-2017	0.0309	NA	ND	0.0019 J,B	3.42	NA	ND	ND	21.6	NA	ND	0.0018	0.0072 JB
Oct-2017	0.0125	NA	ND	0.0012 JB	4.86	NA	ND	ND	3.68	NA	ND	0.0021	ND
May-2018	0.062	NA	ND	0.005	3.9 J	NA	0.0011 JB	ND	19.7	NA	ND	0.00034 J	0.007 B
Nov-2018	0.026	NA	ND	0.0039	4 J	NA	0.00019 J	ND	14.8	NA	ND	0.0048	0.0052
May-2019	0.067	NA	ND	0.0021	ND	NA	ND	ND	29.4	NA	ND	0.0045	0.0051
Oct-2019	0.026	NA	ND	0.00074	2.4 J	NA	ND	ND	5.9	NA	ND	0.0032	0.011
May-2020	0.042	NA	ND	0.0016	2.8 J	NA	ND	ND	25.5	NA	ND	0.0027	0.0029 J
Oct-2020	0.019	NA	ND	0.0029	4.8 J	NA	ND	ND	9.9	NA	ND	0.0051	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-2***												
Apr-2021	0.032	*NA*	*ND*	*0.0016 J*	4	*NA*	*ND*	*ND*	24.6	*NA*	*ND*	*0.0021 J*	*0.0043 J*
Oct-2021	0.017	*NA*	*ND*	*0.00075 J*	4.9	*NA*	*ND*	*ND*	17.8	*NA*	*ND*	*0.00056 J*	*ND*
May-2022	0.031	*NA*	*ND*	*0.0018 J*	6.3	*NA*	*ND*	*ND*	28.1	*NA*	*ND*	*0.0024 J*	*ND*
Oct-2022	0.067	*NA*	*ND*	*0.0015 J*	7.4	*NA*	*0.00086 J*	*ND*	18.9	*NA*	*ND*	*ND*	*ND*
May-2023	0.043	*NA*	*ND*	0.0056	4	*NA*	*ND*	*ND*	16.8	*NA*	*ND*	*0.0021 J*	0.0067

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***SW-2***																
Nov-1993	NA	ND	ND	ND	ND	ND	NA	NA	NA	NA	ND	ND	NA	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5 J	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2002	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jan-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-2*																
Apr-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.93 J*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.72 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.67 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.47 J*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.36 J,B*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-2*																
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.5	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*SW-2*															
Nov-1993	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA	NA	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jan-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-2***															
Apr-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-2***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-2***															
Nov-1993	*ND*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jul-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jun-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Dec-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jan-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-2***															
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.1 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 R	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-2***															
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-3***											
Apr-1995	10.3	10.3	*ND*	*ND*	14.4	0.8	*ND*	6.2	157	18.5	66	19.2
Apr-1997	*ND*	15	*ND*	*ND*	22	0.35	*ND*	*NA*	*NA*	13	109	35
Oct-1997	12	12	0.44	17	4.53	*ND*	*ND*	6.7	121	15.4	41	28
Apr-1998	43	43	0.25	26	3.22	*ND*	*ND*	7.23	212	36.3	140	88
Apr-1999	20	20	0.14	*ND*	103	0.416	*ND*	6.18	369	13.6	260	51
Oct-2000	23	*NA*	*ND*	27	39.4	*ND*	*ND*	7.2	170.6	21	105	42.5
Apr-2001	15	*NA*	*ND*	12	18.9	0.395	*ND*	*NA*	*NA*	6.13	131	40
Sep-2001	28	28	0.26	33	35.3	1.38	*ND*	7.1	318	13.3	123	48
Mar-2002	88	88	*ND*	29	187	3.74	*ND*	7.1	444	61.7	353	210
Sep-2002	14	14	*ND*	*ND*	29.8	*ND*	*ND*	6.4	231	14.6	111	44.1
Mar-2003	13	13	*ND*	14	49.1	0.239	*ND*	5.8	209	14.1	118	34.7
Oct-2003	26	26	*ND*	21	47.4	0.398	*ND*	6.3	268	9	131	51.5
Apr-2004	15	15	*ND*	11	53.7	0.49	*ND*	7.1	252	11.3	130	40.1
Oct-2004	20	20	*ND*	18	45.4	0.61	*ND*	7	179.6	8.04	128	45
Apr-2005	13	13	*ND*	12	45.4	0.48	*ND*	6.5	176	11.5	150	39.1
Mar-2006	13	13	*ND*	*ND*	59.5	0.65	*ND*	6.7	209	12.1	148	38.2
Mar-2007	14	14	0.51	11	131	0.56	*ND*	5.9	544	13.3	220	45.9
Mar-2008	15	15	0.38	12	104	0.35	*ND*	6.5	445	12.6	210	40.2
Mar-2009	13	13	*ND*	*ND*	85.8	0.26	*ND*	6.1	387	9.7	206	39.7
Apr-2010	21	21	*ND*	17	62.4	0.44	*ND*	7.4	359	14.8	157	39.6
Oct-2010	116	116	*ND*	45	22.7	0.26	*ND*	7.4	375	56.3	294	174
Apr-2011	104	104	*ND*	38	6.96	*ND*	*ND*	8.1	301	46.7	244	65.5
Sep-2011	130	130	*ND*	57	18.4	0.51	0.05	7.3	311	27.5	277	139
Mar-2012	20	20	*ND*	*ND*	90.2	0.45	0.03	6.3	400	13.8	206	48.1
Sep-2012	131	131	*ND*	32.9	17.7	0.304	*ND*	6.4	440	27.6	258	167
Mar-2013	94.2	94.2	*ND*	93.1	1.78	*ND*	*ND*	8.4	323	45.1	196	126
Oct-2013	55.2	55.2	*0.113 J*	46.7	4.53	0.522	*ND*	7.4	151.7	23.1	172	77
Mar-2014	15	15	*ND*	25	162	0.415	*ND*	6.2	543	22.2	274	48.3
Oct-2014	30.8	30.8	*ND*	21	88.6	0.123	*ND*	6.9	356	14	201	59.3
Apr-2015	24.6	24.6	*ND*	12	107	0.332	*ND*	6.1	404	17	250	56.5
Nov-2015	46.3	46.3	*ND*	18	108	0.299	*ND*	7.4	510	15.6	275	98
May-2016	50.6	50.6	*ND*	15	100	0.323	*ND*	6.8	515	18.7	258	87.4
Oct-2016	81.3	81.3	*ND*	47	7.37	*NA*	*NA*	7.1	332	25.8	213	107
May-2017	43.8	43.8	*ND*	14	80.8	0.357	0.132	7	547	23.5	218	82.1
Oct-2017	30.2	30.2	*ND*	13	12.2	0.063	*ND*	6.5	167.7	14.1	74	41.8
May-2018	30	30	*0.045 J*	27.2	49.1	*ND*	*ND*	5.3	275	25.6	68	62.4
Nov-2018	114	114	*ND*	31.5	3	*0.063 J*	*ND*	8.58	313	19.8	63	124

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-3***											
May-2019	70	*NA*	*ND*	*ND*	71.3	*ND*	*ND*	7.06	433	18.4	228	93.1
Oct-2019	100	*NA*	*ND*	30.3	53.5	0.11	0.014	7.35	439	17.2	226	131
May-2020	98	98	*ND*	29.1	4.9	1.2	**0.017 D6D8**	7.61	354	17.4	181	120
Oct-2020	140	*NA*	*ND*	36.4	*1.8 J*	0.1	*ND*	7.96	380	20.6	146	138
Apr-2021	100	*NA*	*ND*	27.8	4.1	0.42	*0.0095 J*	9.55	232	12	119	111
Oct-2021	110	*NA*	*ND*	*ND*	77.1 ML	0.87	*ND*	7.07	562	*9.8 J*	241	107
May-2022	116	*NA*	0.17	28.3	4	0.53	*0.0078 J*	7.1	352	15.9	159	138 N3
Oct-2022	56	*NA*	*ND*	47.2	63.4	*ND*	*ND*	6.34	438	43.6	223	102 N3
May-2023	80	*NA*	*ND*	47.8	19.7	0.11	*0.0056 J*	6.79	376	11.9	153	105 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*SW-3*													
Apr-1995	ND	ND	ND	ND	ND	4.4	NA	ND	ND	ND	0.44	NA	ND	2	NA
Oct-1996	ND	ND	0.037	ND	ND	9.5	8.8	ND	ND	ND	0.7	0.42	ND	2.8	2.8
Apr-1997	ND	ND	0.049	ND	ND	9.1	7.9	ND	ND	ND	1.6	0.34	0.008	2.8	2.5
Oct-1997	ND	ND	0.04	ND	ND	7.1	NA	ND	ND	ND	0.784	NA	ND	2.63	NA
Apr-1998	ND	ND	0.017	ND	ND	27	NA	ND	0.041	ND	1.2	NA	ND	4.94	NA
Apr-1999	ND	ND	0.052	ND	ND	14.3	NA	ND	ND	ND	1.64	NA	ND	3.68	NA
Oct-1999	ND	ND	0.059	ND	ND	11.9	NA	ND	ND	ND	1.18	NA	ND	3.71	NA
Oct-2000	ND	ND	0.038	ND	ND	11.3	NA	ND	ND	ND	0.687	NA	ND	3.49	NA
Apr-2001	ND	ND	0.044	ND	ND	10.4	NA	ND	ND	ND	0.287	NA	ND	3.41	NA
Sep-2001	ND	ND	0.044	ND	ND	13.1	NA	ND	ND	ND	0.495	NA	ND	3.7	NA
Mar-2002	ND	ND	0.043	ND	ND	63.2	NA	ND	ND	ND	0.974	NA	ND	12.7	NA
Sep-2002	ND	ND	0.046	ND	ND	11.8	NA	ND	ND	ND	0.141	NA	ND	3.58	NA
Mar-2003	ND	ND	0.038	ND	ND	9.34	NA	ND	ND	ND	0.171	NA	ND	2.78	NA
Oct-2003	ND	ND	0.049	ND	ND	13.9	NA	ND	ND	ND	1.5	NA	ND	4.04	NA
Apr-2004	ND	ND	0.047	ND	ND	10.5	NA	ND	ND	ND	0.536	NA	ND	3.35	NA
Oct-2004	ND	ND	0.045	ND	ND	11.7	NA	ND	ND	ND	0.28	NA	ND	3.8	NA
Apr-2005	ND	0.003	0.043	ND	ND	10.2	NA	ND	ND	ND	0.411	NA	ND	3.3	NA
Mar-2006	ND	ND	0.051	ND	ND	9.61	NA	ND	ND	ND	0.145	NA	ND	3.46	NA
Mar-2007	ND	ND	0.056	ND	ND	13.2	NA	ND	ND	ND	0.139	NA	ND	3.62	NA
Mar-2008	ND	ND	0.046	ND	ND	10.5	NA	ND	ND	ND	0.161	NA	ND	3.39	NA
Mar-2009	ND	ND	0.045	ND	ND	10.3	NA	ND	ND	ND	0.124	NA	ND	3.4	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-3***													
Apr-2010	ND	ND	0.044	ND	ND	10.8	NA	ND	ND	ND	0.39	NA	ND	3.05	NA
Oct-2010	ND	ND	0.023	ND	ND	55.6	NA	ND	ND	ND	0.251	NA	ND	8.88	NA
Apr-2011	ND	ND	ND	ND	ND	43.2	NA	ND	ND	ND	0.695	NA	ND	6.06	NA
Sep-2011	ND	0.003	0.026	ND	ND	44	NA	ND	ND	ND	0.298	NA	ND	7.07	NA
Mar-2012	ND	ND	0.061	ND	ND	12.5	NA	ND	ND	ND	0.639	NA	ND	4.11	NA
Sep-2012	ND	ND	0.0583 J	ND	ND	53.8	NA	0.0111 J	0.011 J	0.009 J	2.96	NA	ND	8.01	NA
Mar-2013	ND	0.0012 J	0.293	0.000214 J	ND	40.5	NA	0.0029 J	0.0112	0.0044 J	0.811	NA	0.0022	5.97	NA
Oct-2013	0.000514 J	ND	0.0183	ND	ND	25.6	NA	0.0053 J	0.0024 J	0.0056 J	0.67	NA	0.000659 J	3.17	NA
Mar-2014	0.000334 J	ND	0.0506	ND	ND	12.4	NA	0.000922 J	0.0029 J	0.000955 J	0.116	NA	ND	4.23	NA
Oct-2014	0.000416 J	0.000399 J	0.0703	ND	ND	15.5	NA	0.000492 J	0.0042 J	0.000492 J	0.469	NA	ND	5.02	NA
Apr-2015	0.000671 J	0.0004 J	0.0576	ND	ND	15.2	NA	0.000947 J	0.0028 J	0.0014 J	0.557	NA	0.000675 J	4.48	NA
Nov-2015	0.000352 J	0.000599 J	0.0701	ND	ND	28.8	NA	0.000715 J	0.0065 J	0.000868 J	0.758	NA	0.000331 J	6.3	NA
May-2016	ND	0.0006 J	0.059	ND	ND	25	NA	ND	0.0006 J	0.0005 J	0.255	NA	0.00017 J	6.09	NA
Oct-2016	ND	0.0012 J	0.0232	ND	ND	35.3	NA	0.00086 J	0.0012	0.0052	0.395	NA	0.00022 J	4.56	NA
May-2017	ND	ND	0.0512	ND	ND	23.2	NA	0.0012 J,B	0.0061	ND	0.773	NA	0.00012 J	5.88	NA
Oct-2017	ND	ND	0.0392	ND	ND	11	NA	ND	0.0044	ND	1.14	NA	0.00027 J	3.46	NA
May-2018	0.00011 J	ND	0.045	ND	ND	16.8	NA	0.0029 J	0.0017	0.0018 JB	0.39	NA	0.000067 J	4.9	NA
Nov-2018	0.00036 J	ND	0.02	0.00011 J	0.000033 J	41.4	NA	0.0025 J	0.0011	0.0048	0.35	NA	0.00035 J	5	NA
May-2019	ND	ND	0.027	ND	ND	28.1	NA	ND	0.0018	0.0021	0.38	NA	ND	5.6	NA
Oct-2019	0.00018 J	0.00054 J	0.063	ND	0.00023 J	39.9	NA	0.0023 J	0.0021	0.0051	0.85	NA	0.00082 J	7.6	NA
May-2020	0.00017 J	0.00019 J	0.028	ND	ND	35.4	NA	0.0042 J	0.00057	0.0039	0.2	NA	ND	7.7	NA
Oct-2020	0.00026 J	ND	0.033	ND	ND	42.9	NA	0.0092 J	0.00046 J	ND	0.26	NA	ND	7.6	NA
Apr-2021	ND	ND	0.023	0.00018 J	ND	31.7	NA	0.00079 J	ND	0.0027 J	0.33	NA	ND	7.7	NA
Oct-2021	0.00009 J	ND	0.053	ND	ND	32.4	NA	ND	0.0013 J	ND	0.47	NA	0.00006 J	6.3	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-3***													
May-2022	*ND*	*0.00069 J*	0.026	*ND*	*ND*	41.5	*NA*	*0.00067 J*	*0.00086 J*	0.0044	0.26	*NA*	*0.00049 J*	8.3	*NA*
Oct-2022	*ND*	*0.001 J*	0.05	*ND*	*ND*	30.2	*NA*	*0.0018 J*	0.0038	*0.0024 J*	0.88	*NA*	0.00089	6.5	*NA*
May-2023	*ND*	*0.0011 J*	0.025	*ND*	*ND*	31.2	*NA*	*0.0019 J*	*0.0015 J*	0.0045	0.76	*NA*	0.00077	6.5	*NA*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*SW-3*												
Apr-1995	0.1	NA	ND	ND	1.2	NA	ND	ND	4.6	NA	ND	ND	0.04
Oct-1996	0.045	0.027	NA	ND	ND	ND	ND	ND	7.8	8	ND	ND	0.23
Apr-1997	0.047	ND	ND	ND	2.3	2.3	ND	ND	11	11	ND	ND	0.028
Oct-1997	0.038	NA	NA	ND	1.85	NA	ND	ND	10.4	NA	ND	ND	ND
Apr-1998	0.295	NA	**0.102**	3.58	ND	NA	ND	2.21	ND	NA	ND	0.248	NA
Apr-1999	0.028	NA	NA	ND	4.72	NA	ND	ND	49.2	NA	ND	ND	0.014
Oct-1999	0.083	NA	NA	0.013	3.49	NA	ND	ND	15.2	NA	ND	ND	ND
Oct-2000	0.026	NA	NA	ND	2.76	NA	ND	ND	19.9	NA	ND	ND	ND
Apr-2001	0.022	NA	NA	ND	2.5	NA	ND	ND	24.9	NA	ND	ND	ND
Sep-2001	0.03	NA	NA	ND	2.7	NA	ND	ND	21.5	NA	ND	ND	ND
Mar-2002	0.128	NA	NA	0.028	10.8	NA	ND	ND	7.24	NA	ND	ND	0.045
Sep-2002	0.011	NA	NA	ND	3.09	NA	ND	ND	19.4	NA	ND	ND	ND
Mar-2003	ND	NA	NA	ND	2.84	NA	ND	ND	31.3	NA	ND	ND	0.013
Oct-2003	0.075	NA	NA	ND	2.35	NA	ND	ND	26.4	NA	ND	ND	0.014
Apr-2004	0.025	NA	ND	ND	2.26	NA	ND	ND	33.2	NA	ND	ND	0.016
Oct-2004	0.011	NA	ND	ND	3.49	NA	ND	ND	27.4	NA	ND	ND	ND
Apr-2005	0.028	NA	ND	ND	2.15	NA	ND	ND	28.9	NA	ND	ND	ND
Mar-2006	ND	NA	ND	ND	1.94	NA	ND	ND	29.4	NA	ND	ND	ND
Mar-2007	0.018	NA	ND	ND	2.15	NA	ND	ND	67.7	NA	ND	ND	ND
Mar-2008	0.012	NA	ND	ND	2.18	NA	ND	ND	54.1	NA	ND	ND	ND
Mar-2009	ND	NA	ND	ND	2.21	NA	ND	ND	46.4	NA	ND	ND	ND
Apr-2010	0.022	NA	ND	ND	2.32	NA	ND	ND	31	NA	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-3***												
Oct-2010	0.021	NA	ND	ND	13.1	NA	ND	ND	14	NA	ND	ND	ND
Apr-2011	0.125	NA	ND	0.026	3.67	NA	ND	ND	4.63	NA	ND	ND	0.023
Sep-2011	0.029	NA	ND	ND	13.4	NA	ND	ND	13.8	NA	ND	0.01	ND
Mar-2012	0.042	NA	ND	ND	3.44	NA	ND	ND	48.2	NA	ND	ND	ND
Sep-2012	0.237	NA	ND	0.0209 J	18.5	NA	ND	ND	13.2	NA	ND	ND	0.0519 J
Mar-2013	0.0573	NA	0.000088 J	0.0265	3.23	NA	ND	0.000031 J	2.2	NA	ND	0.0043 J	0.0718
Oct-2013	0.0343	NA	ND	0.0114	6.69	NA	ND	0.000019 J	2.15	NA	ND	0.00094 J	0.0261
Mar-2014	0.115	NA	ND	0.0015 J	2.81	NA	ND	ND	74.8	NA	ND	ND	0.0064 J
Oct-2014	0.219	NA	ND	0.0022 J	4.18	NA	0.000787 J	ND	44.4	NA	ND	ND	0.0051 J
Apr-2015	0.136	NA	ND	0.0022 J	3.19	NA	ND	ND	61.8	NA	ND	0.0011 J	0.0093 J
Nov-2015	0.333	NA	ND	0.0024 J	4.25	NA	0.000606 J	ND	61.7	NA	0.000161 J	0.000718 J	0.0035 J
May-2016	0.0913	NA	ND	0.0015 J	3.04	NA	ND	ND	55.5	NA	ND	0.00025 J	0.0152 J
Oct-2016	0.0153	NA	ND	0.0162	9.17	NA	ND	ND	4.53	NA	ND	0.002	0.0073 J
May-2017	0.532	NA	ND	0.0011 J,B	2.76	NA	ND	ND	42.5	NA	ND	ND	ND
Oct-2017	0.45	NA	ND	ND	2.67	NA	ND	ND	8.68	NA	ND	0.00042 J	ND
May-2018	0.35	NA	ND	0.0019	2.1 J	NA	0.00066 JB	ND	27.6	NA	ND	0.0048	0.0035 JB
Nov-2018	0.015	NA	ND	0.014	2.9 J	NA	0.00014 J	ND	1.6 J	NA	ND	0.0047	0.013
May-2019	0.08	NA	ND	0.0044	ND	NA	ND	ND	40.1	NA	ND	0.0068	0.0067
Oct-2019	0.37	NA	ND	0.003	5.8	NA	0.00055 J	ND	31.4	NA	ND	0.0046	0.013
May-2020	0.015	NA	ND	0.0022	5.5	NA	ND	ND	5.1	NA	ND	0.0014	0.003 J
Oct-2020	0.01	NA	ND	0.0043	5.5	NA	ND	ND	2.6 J	NA	ND	0.0056	ND
Apr-2021	0.0095	NA	ND	0.0018 J	4.4	NA	ND	ND	4.2	NA	ND	0.0021 J	0.0033 J
Oct-2021	0.4	NA	ND	ND	4	NA	ND	ND	45.8	NA	ND	ND	ND
May-2022	0.019	NA	ND	0.0026	4.1	NA	ND	ND	5.6	NA	ND	0.0018 J	0.0053

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-3***												
Oct-2022	0.24	*NA*	*ND*	0.0041	4.9	*NA*	*0.001 J*	*ND*	37.2	*NA*	*ND*	0.0037	0.014
May-2023	0.03	*NA*	*ND*	0.0047	4.1	*NA*	*ND*	*ND*	13.8	*NA*	*ND*	0.0042	0.0068

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-3*																
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7 J	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-3*																
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.15 J*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.65 J*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.47 J*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.14 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.25 J,B*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.3 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.4	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.6 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.1 JBIH*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-3*																
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.7	ND
May-2023	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*SW-3*															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-3***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-3***															
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-3***															
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jul-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jun-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Dec-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

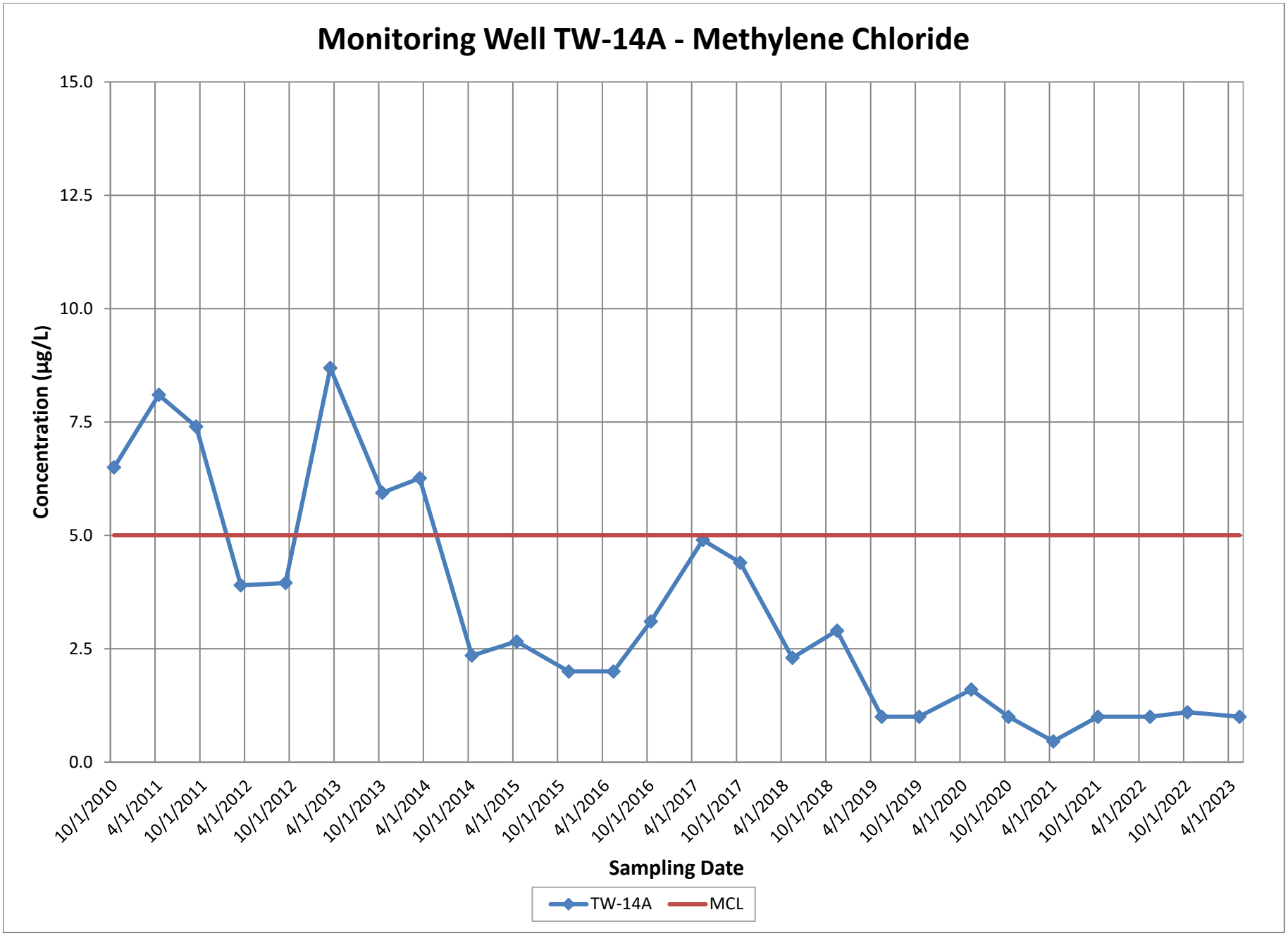
Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-3***															
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.5 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 R	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

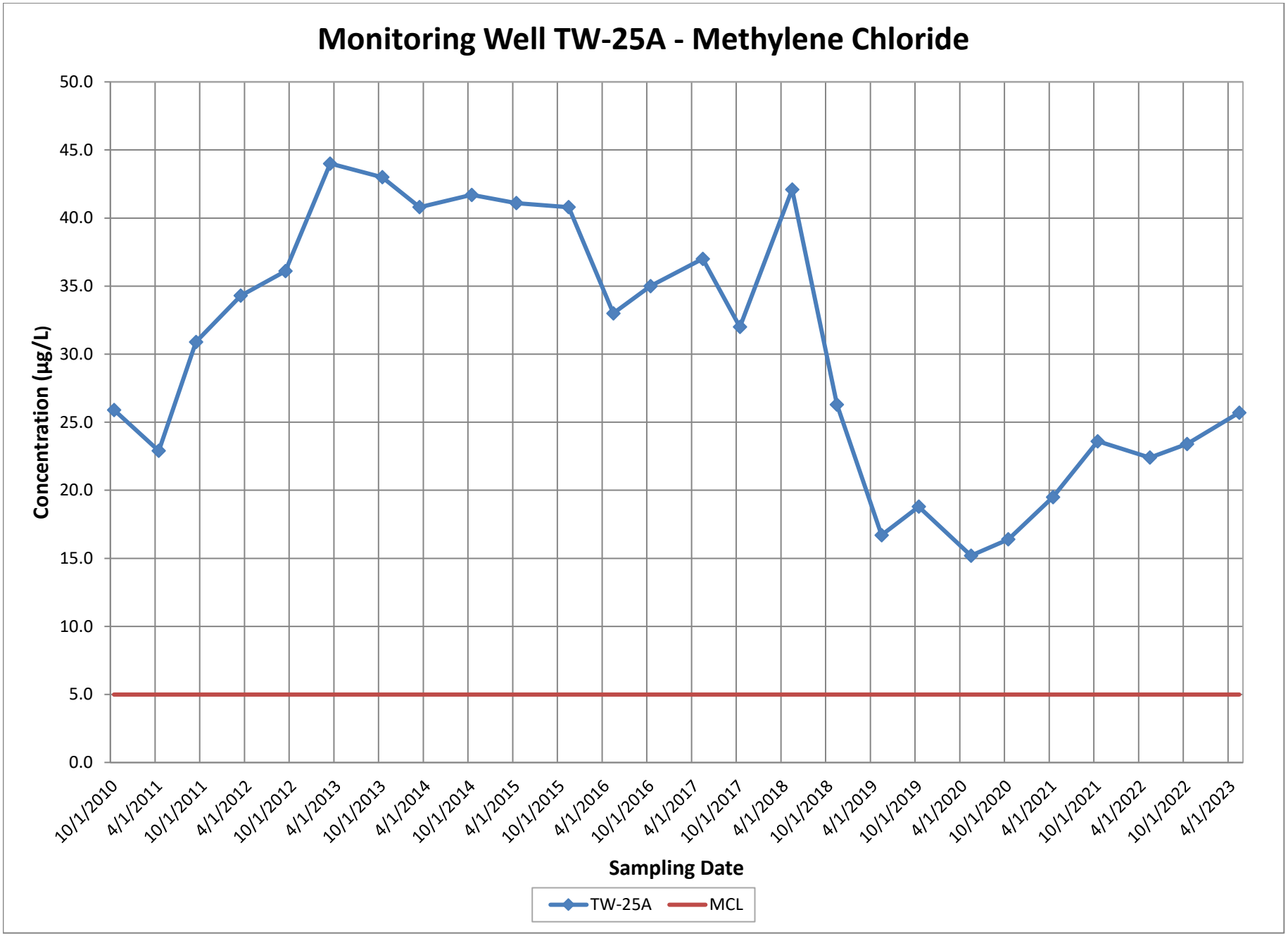
MCLs and Results are in ug/L unless indicated otherwise

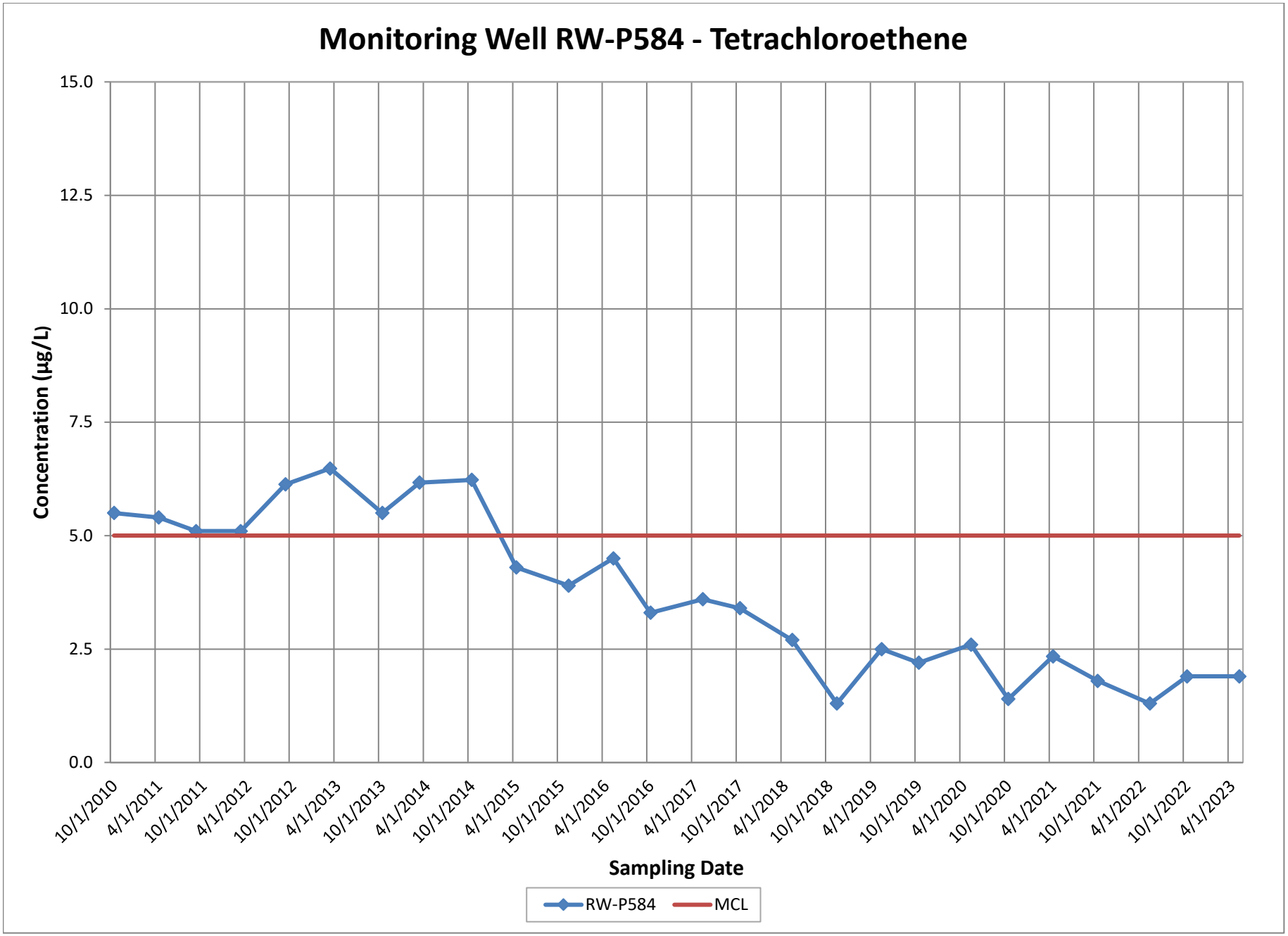
Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-3***															
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

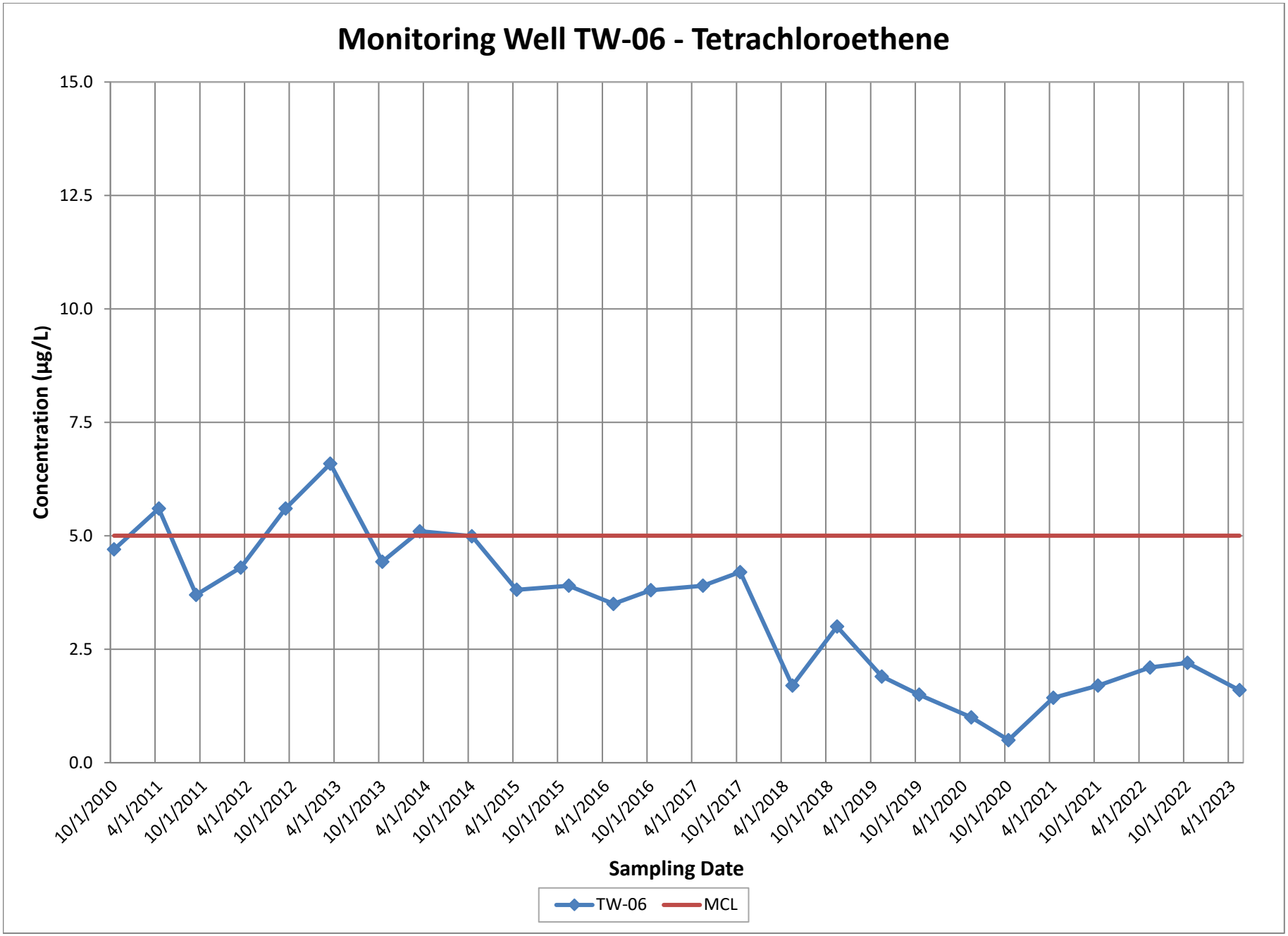
MCLs and Results are in ug/L unless indicated otherwise

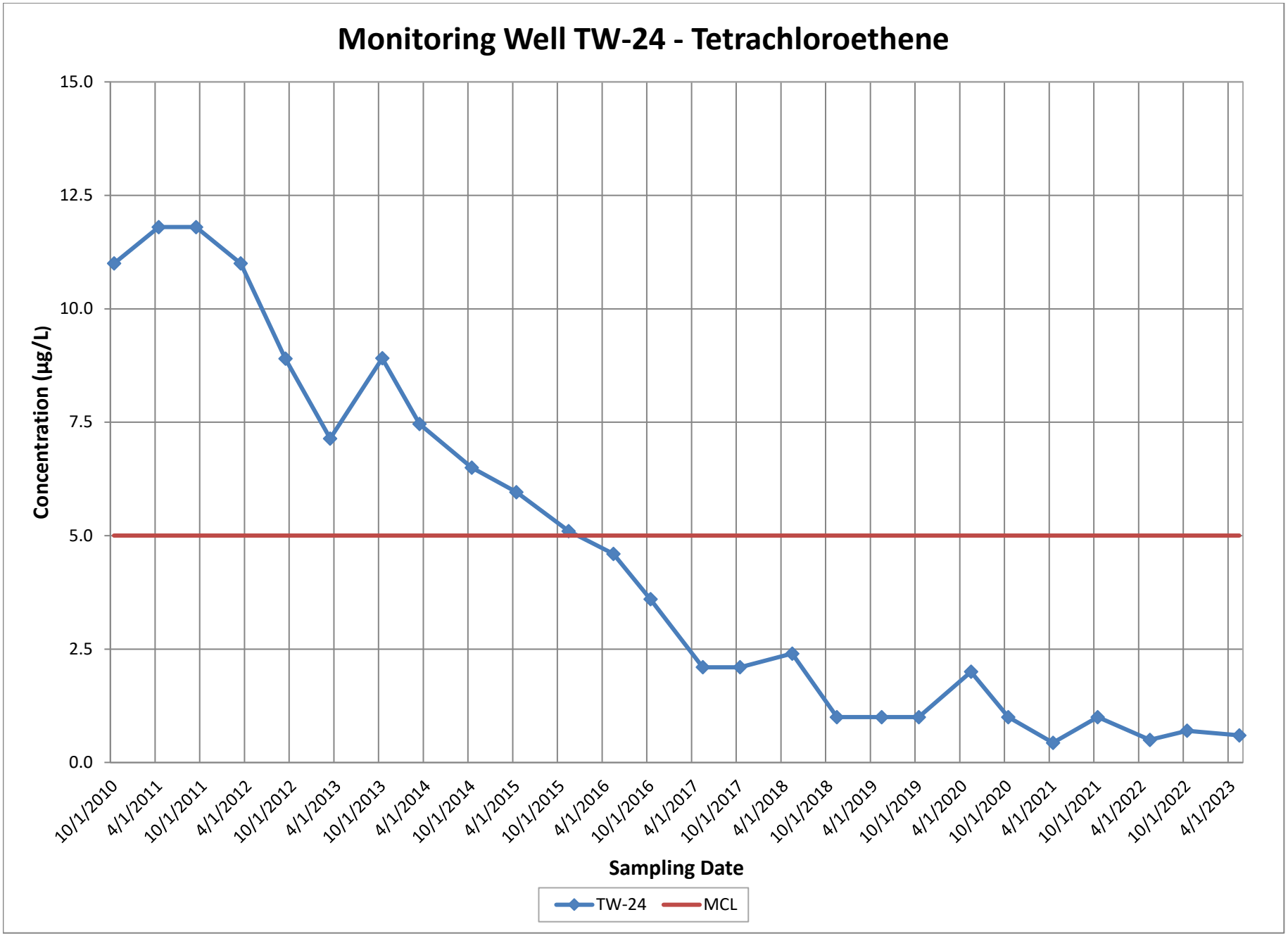
APPENDIX B
Historical MCL Exceedance
Time-Series Plots

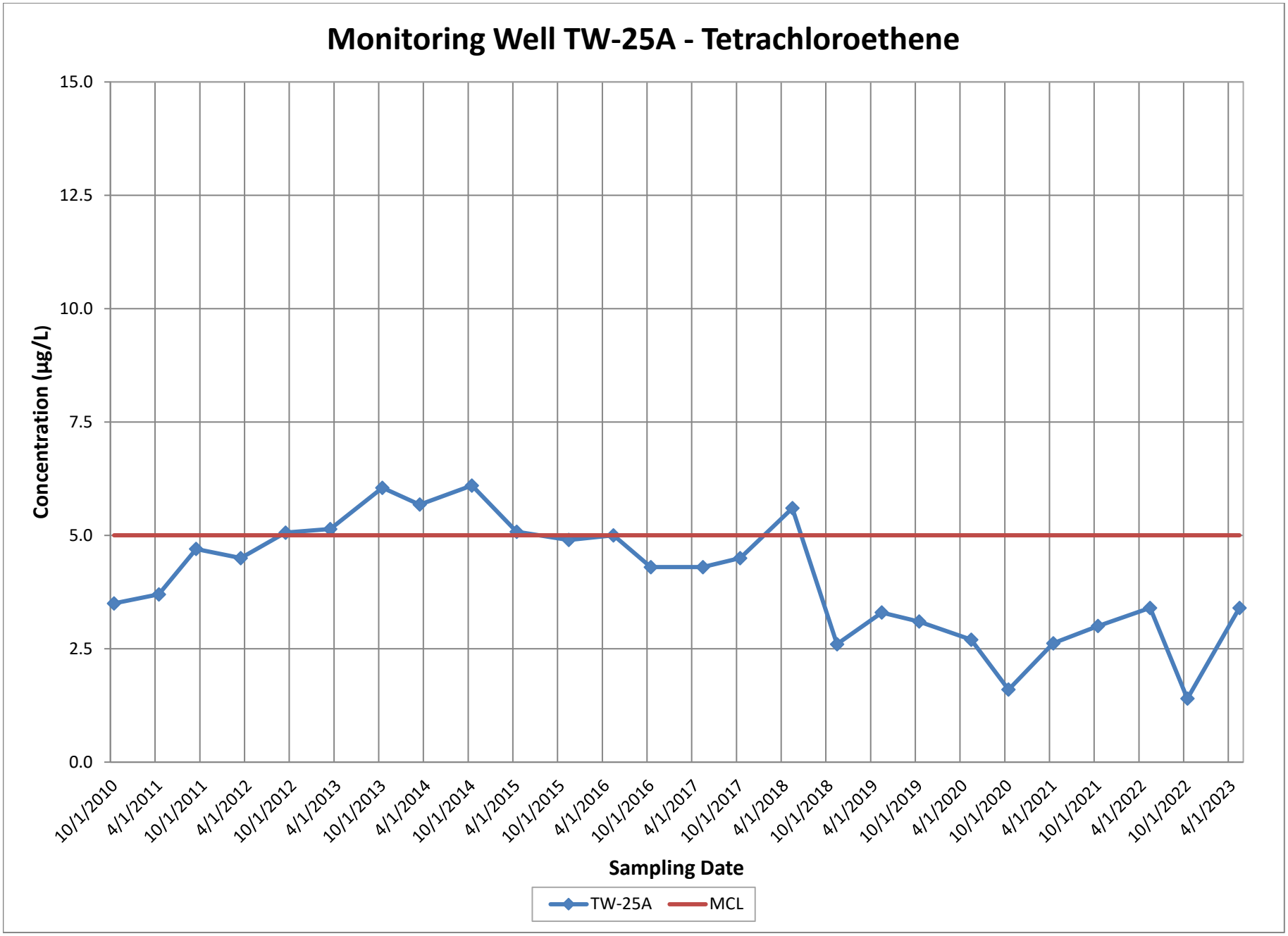

Monitoring Well TW-14A - Methylene Chloride
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
4/1/2023
Sampling Date
TW-14A
MCL

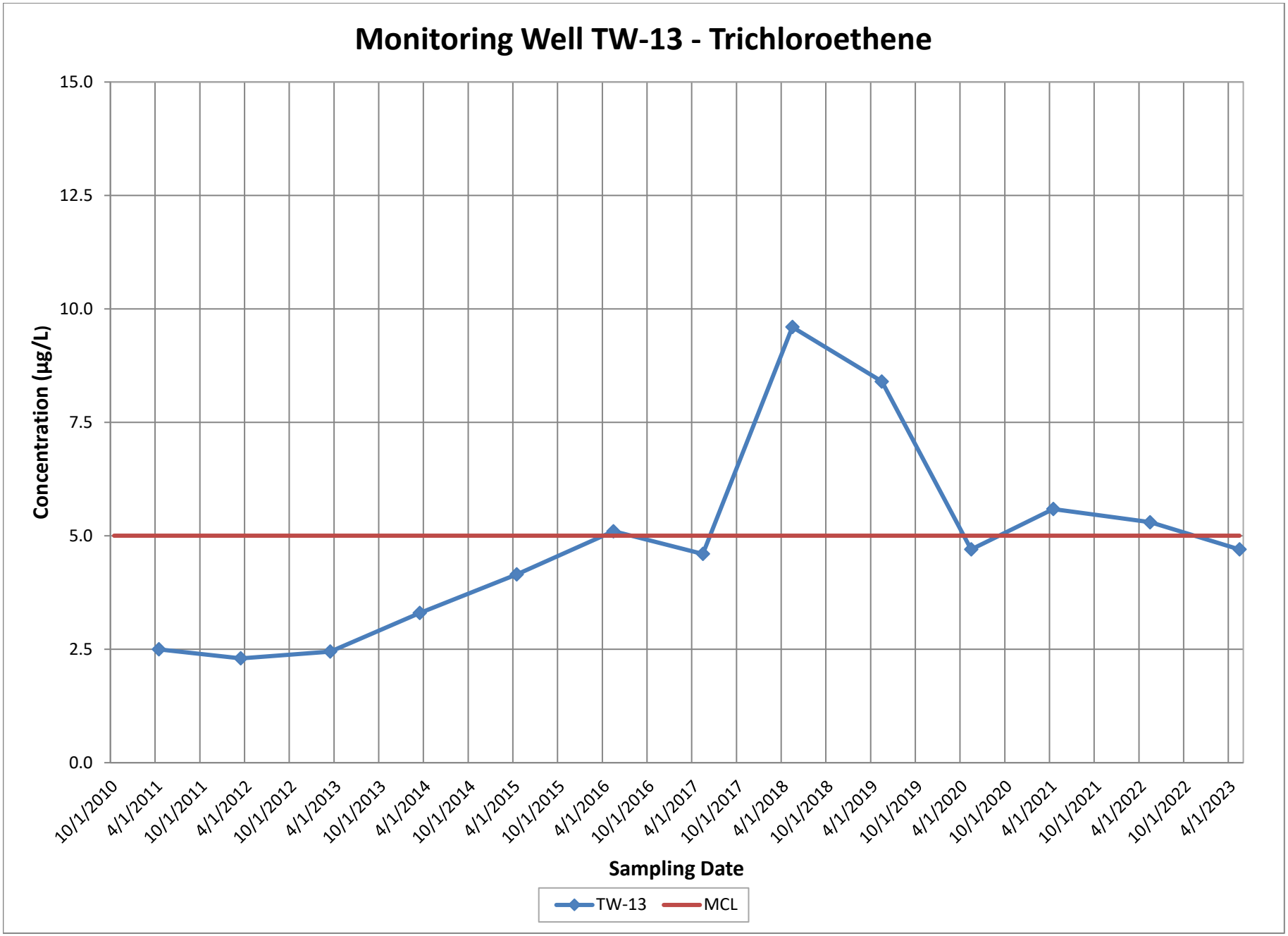

Monitoring Well TW-25A - Methylene Chloride
Concentration (µg/L)
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
4/1/2023
Sampling Date
TW-25A
MCL

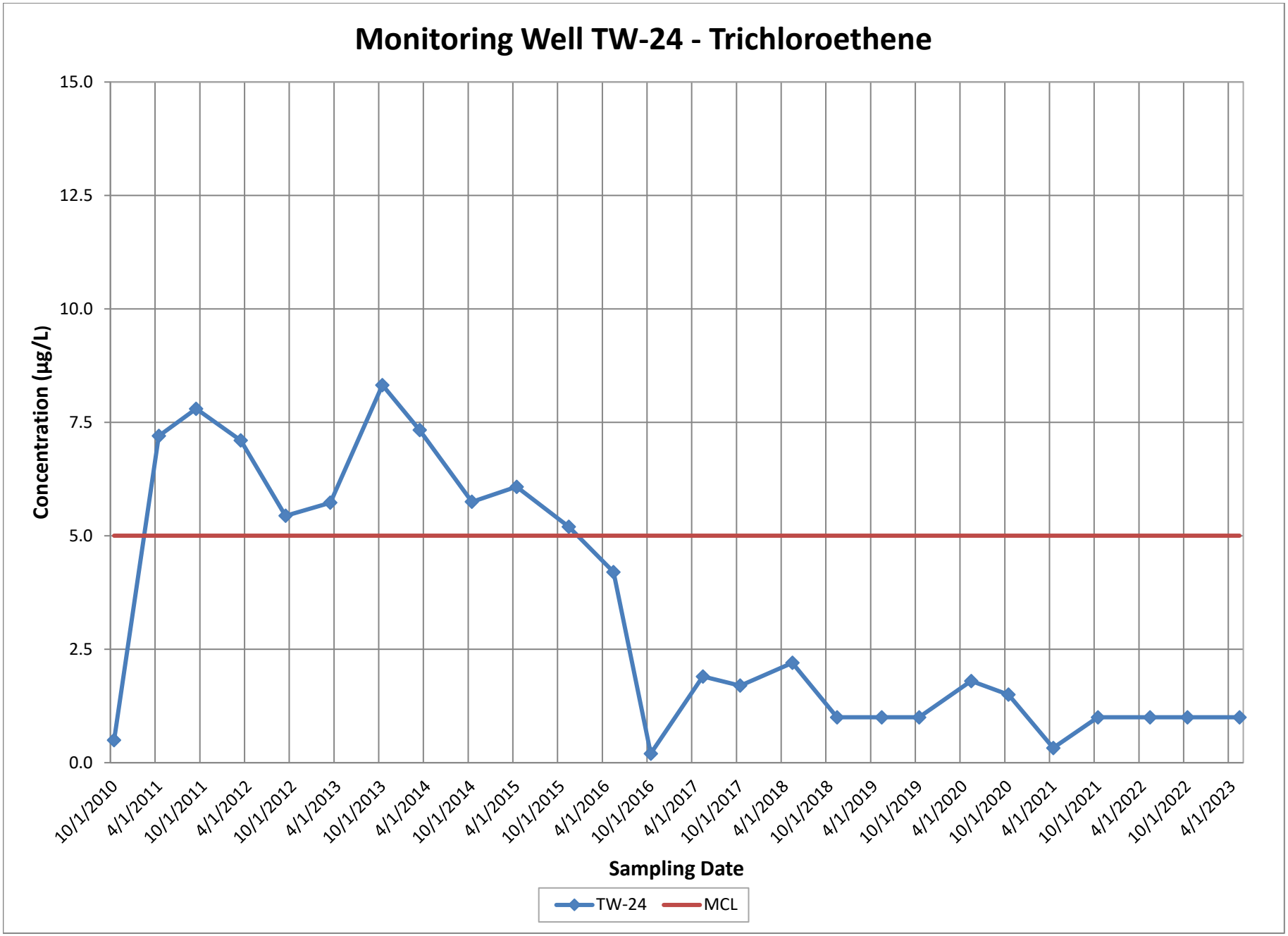

Monitoring Well RW-P584 - Tetrachloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
4/1/2023
Sampling Date
RW-P584
MCL

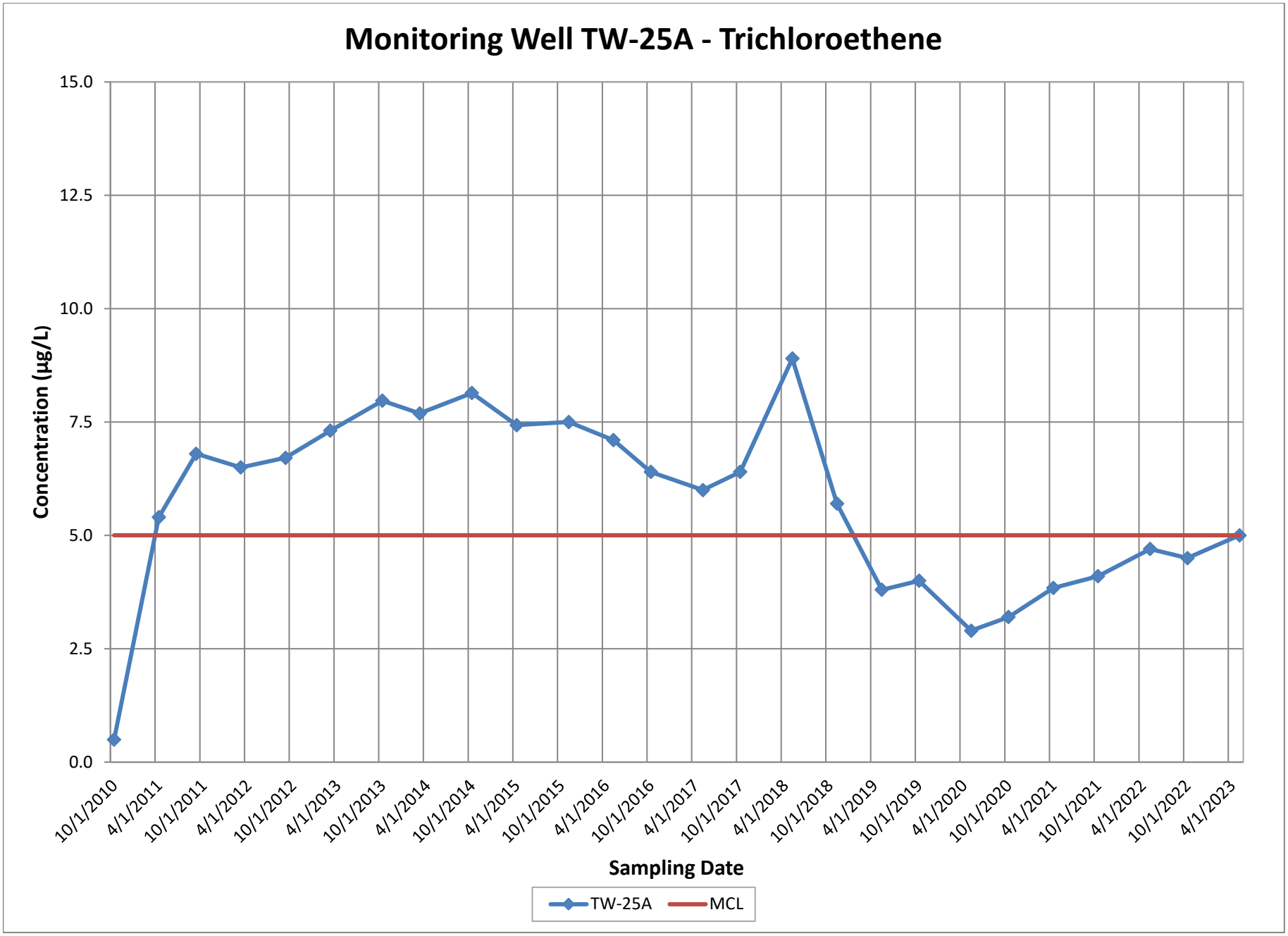

Monitoring Well TW-06 - Tetrachloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
4/1/2023
Sampling Date
TW-06
MCL

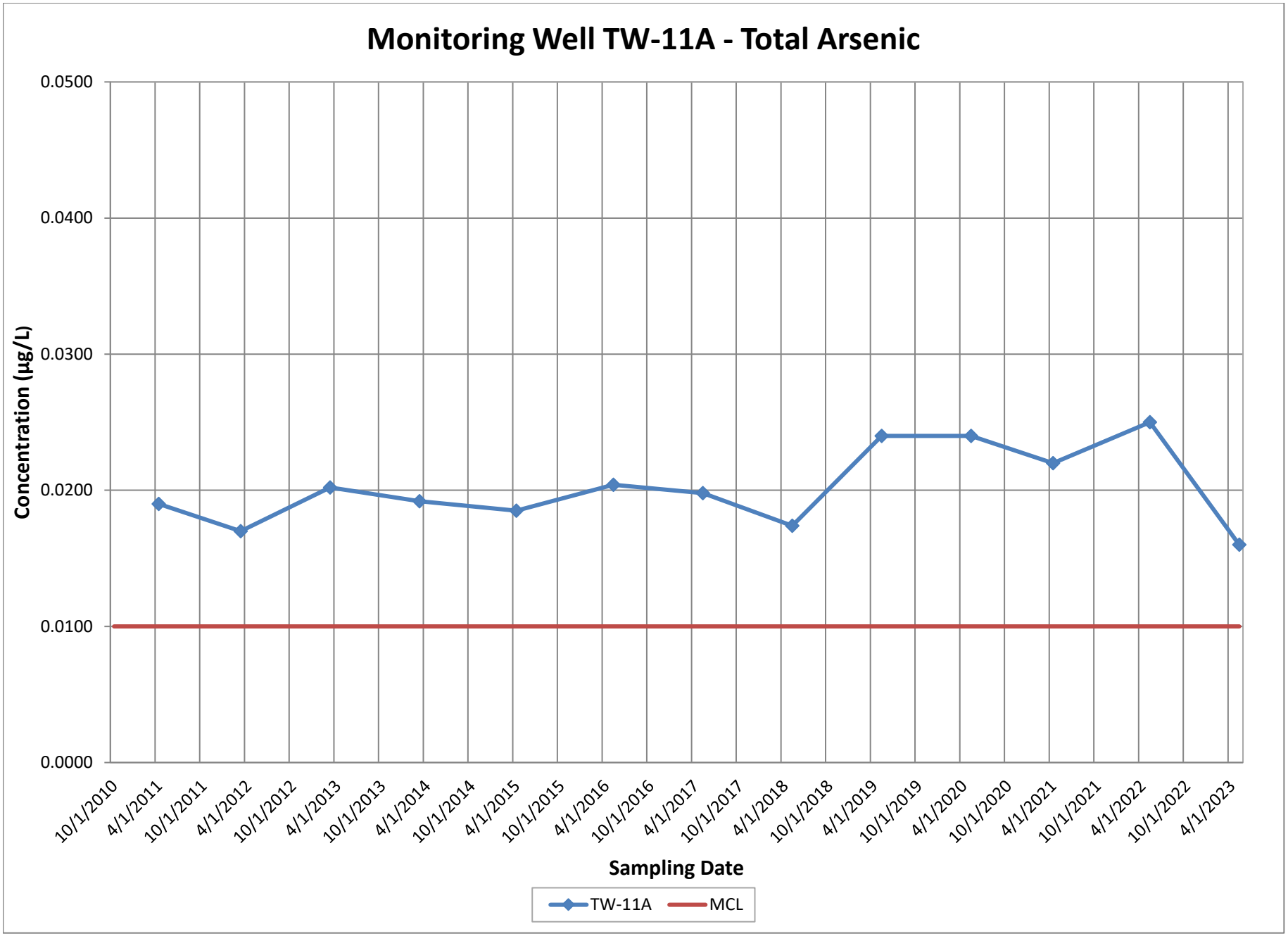

Monitoring Well TW-24 - Tetrachloroethene
15.0
12.5
10.0
7.5
5.0
2.5
0.0
Concentration (µg/L)
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
4/1/2023
Sampling Date
TW-24
MCL

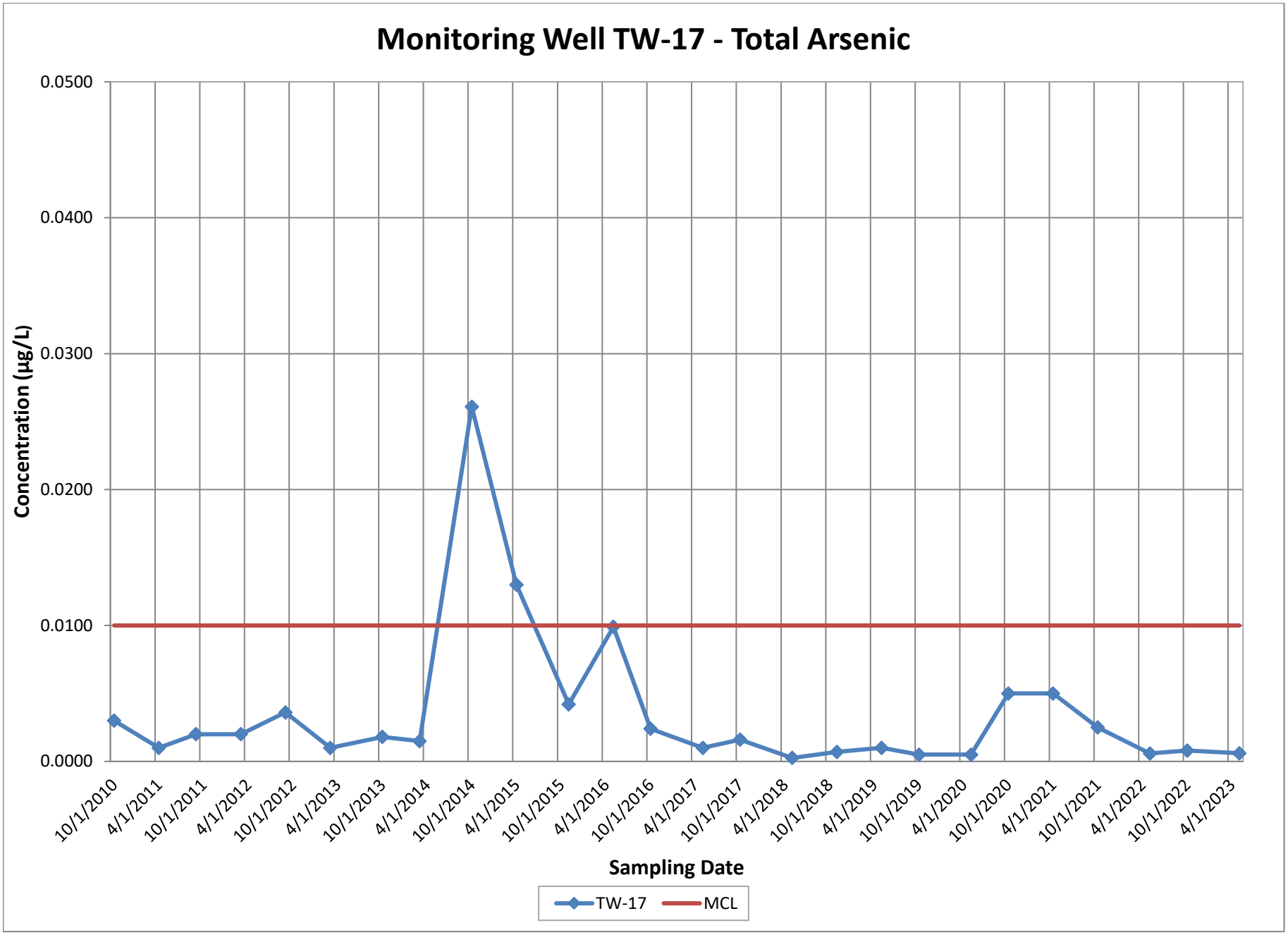

Monitoring Well TW-25A - Tetrachloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
4/1/2023
Sampling Date
TW-25A
MCL

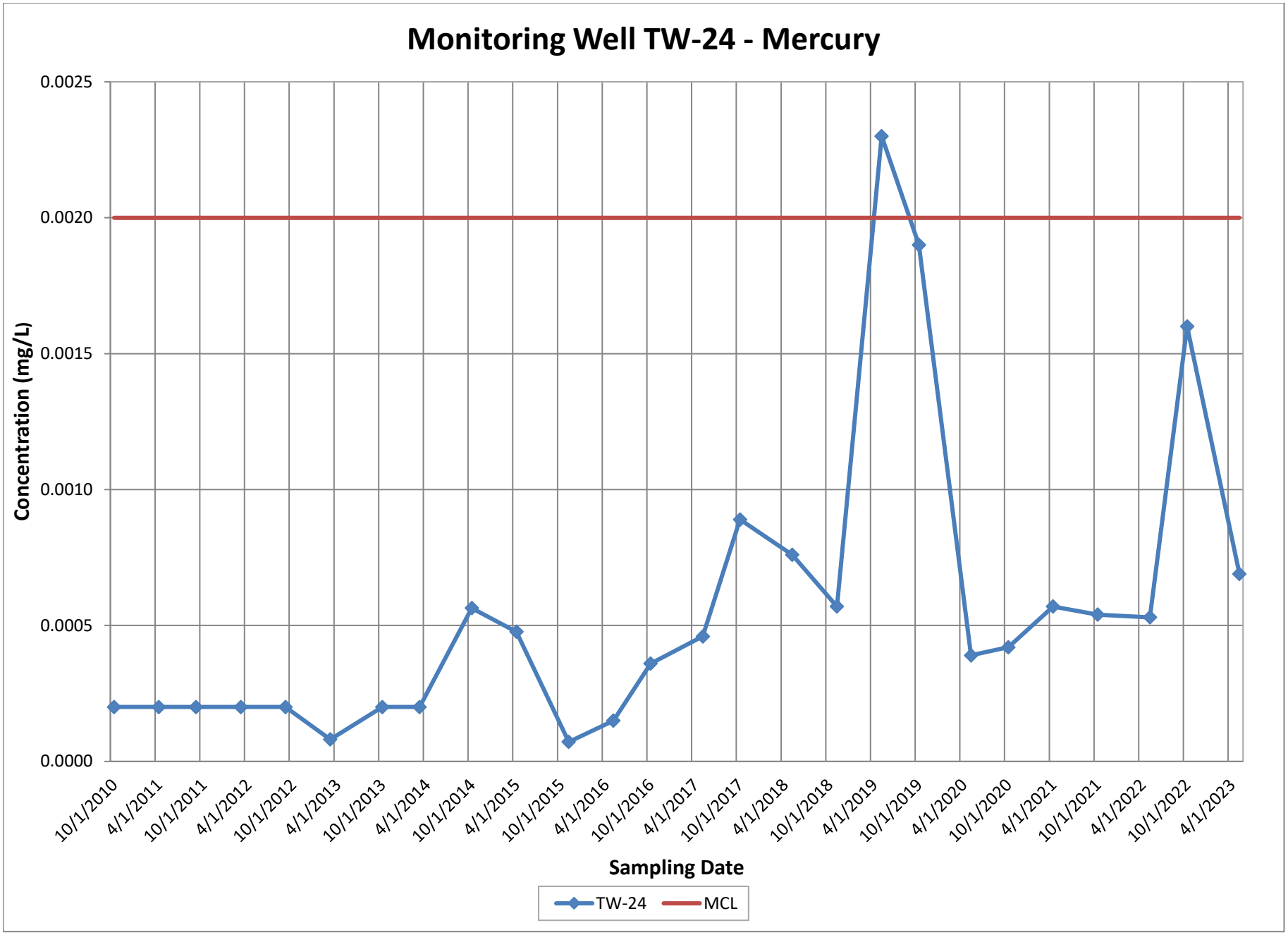

Monitoring Well TW-13 - Trichloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
4/1/2023
Sampling Date
TW-13
MCL

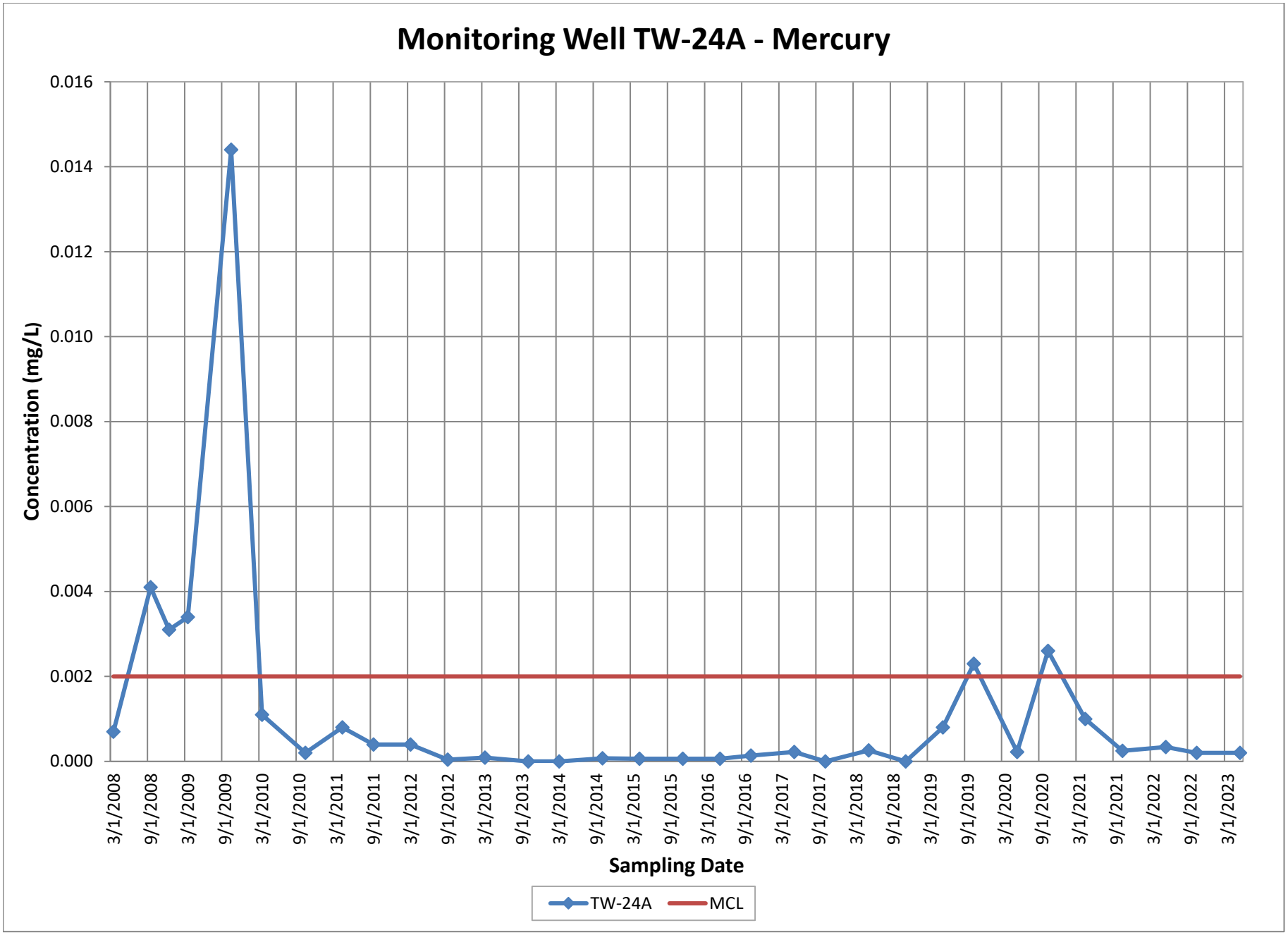

Monitoring Well TW-24 - Trichloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
4/1/2023
Sampling Date
TW-24
MCL

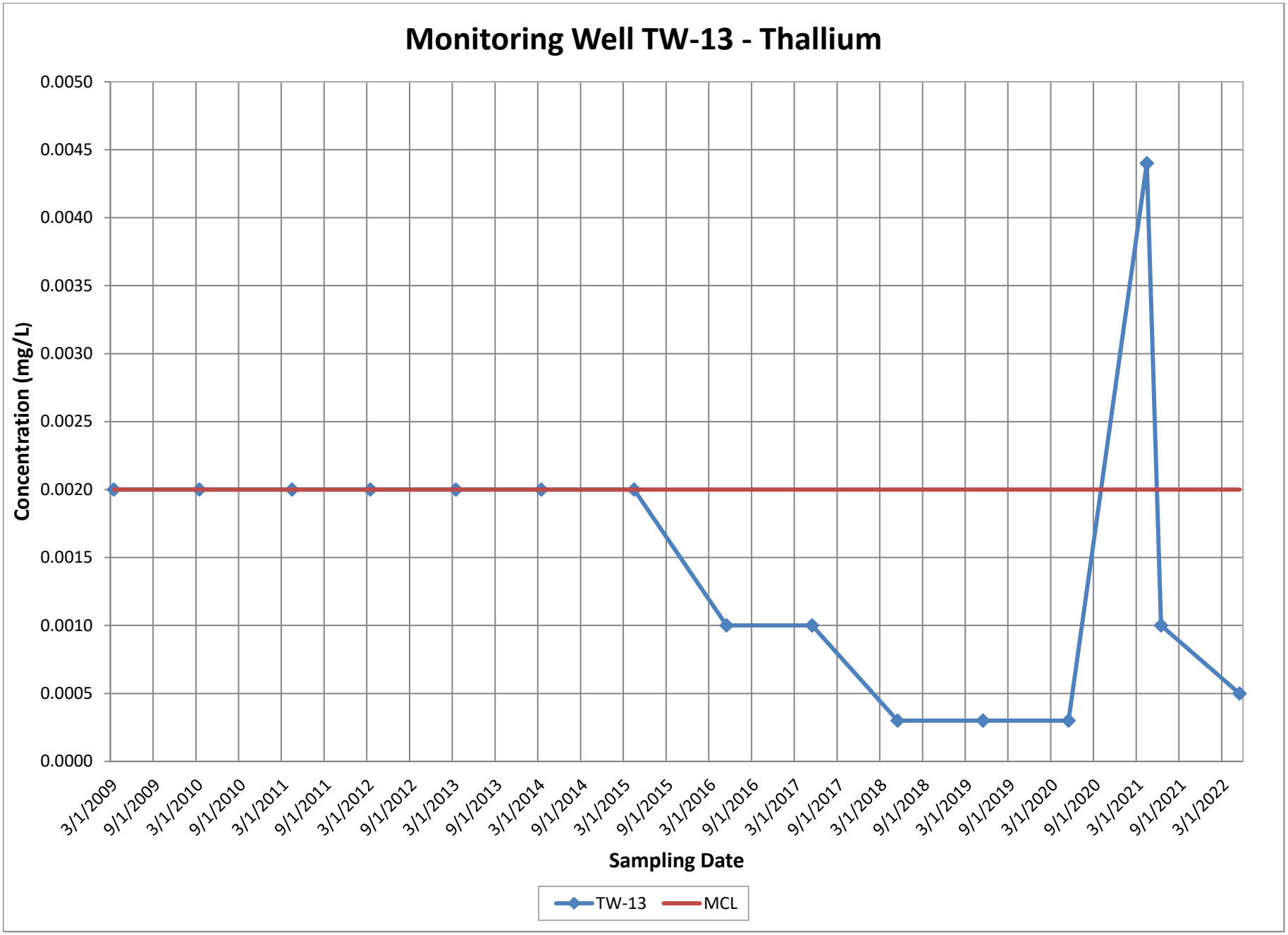

Monitoring Well TW-25A - Trichloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
4/1/2023
Sampling Date
TW-25A
MCL

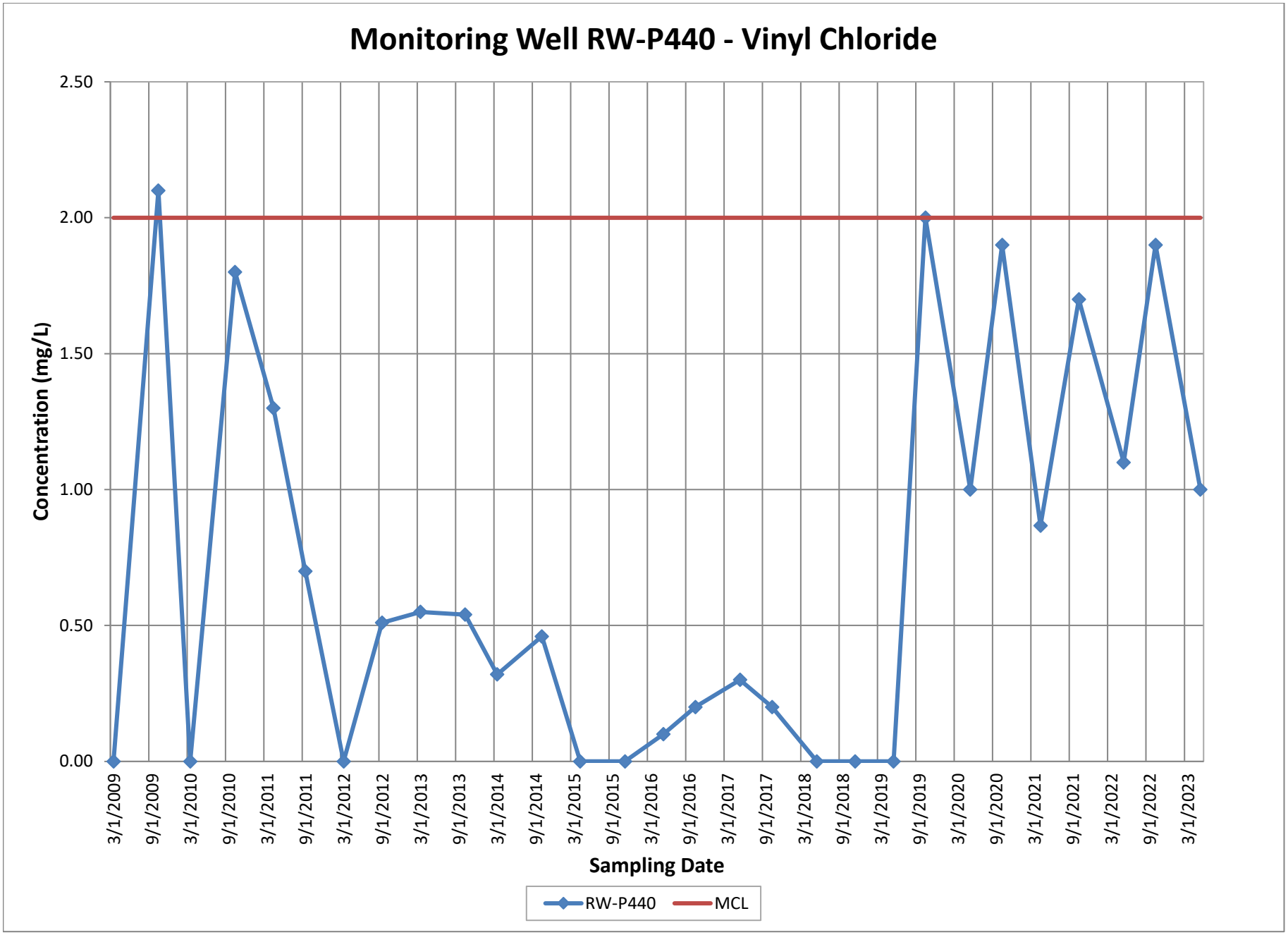

Monitoring Well TW-11A - Total Arsenic
Concentration (µg/L)
0.0500
0.0400
0.0300
0.0200
0.0100
0.0000
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
4/1/2023
Sampling Date
TW-11A
MCL


Monitoring Well TW-17 - Total Arsenic
Concentration (µg/L)
0.0500
0.0400
0.0300
0.0200
0.0100
0.0000
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
4/1/2023
Sampling Date
TW-17
MCL

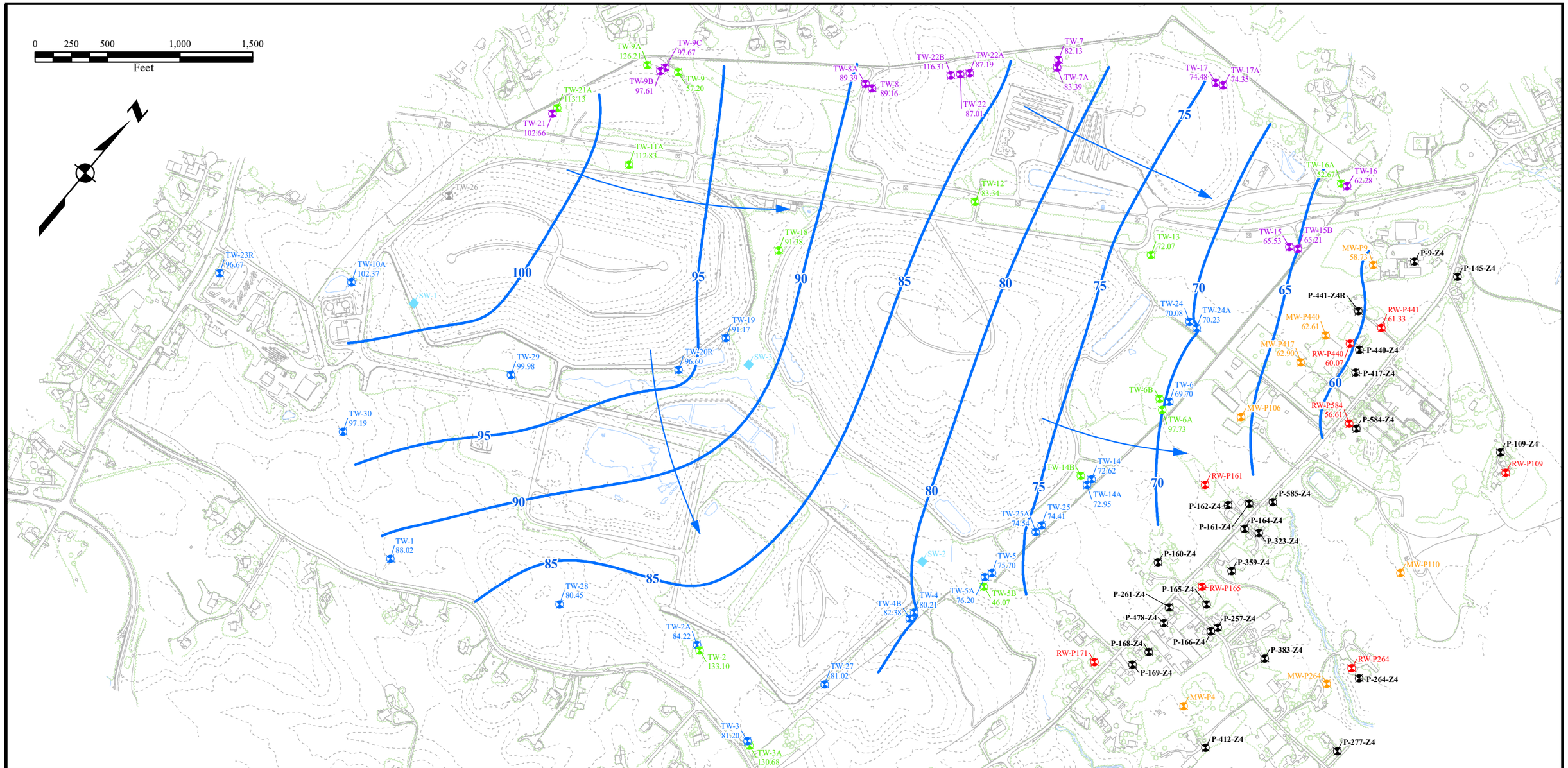

Monitoring Well TW-24 - Mercury
Concentration (mg/L)
0.0025
0.0020
0.0015
0.0010
0.0005
0.0000
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
4/1/2023
Sampling Date
TW-24
MCL


Monitoring Well TW-24A - Mercury
Concentration (mg/L)
0.016
0.014
0.012
0.010
0.008
0.006
0.004
0.002
0.000
3/1/2008
9/1/2008
3/1/2009
9/1/2009
3/1/2010
9/1/2010
3/1/2011
9/1/2011
3/1/2012
9/1/2012
3/1/2013
9/1/2013
3/1/2014
9/1/2014
3/1/2015
9/1/2015
3/1/2016
9/1/2016
3/1/2017
9/1/2017
3/1/2018
9/1/2018
3/1/2019
9/1/2019
3/1/2020
9/1/2020
3/1/2021
9/1/2021
3/1/2022
9/1/2022
3/1/2023
Sampling Date
TW-24A
MCL


Monitoring Well TW-13 - Thallium
Concentration (mg/L)
0.0050
0.0045
0.0040
0.0035
0.0030
0.0025
0.0020
0.0015
0.0010
0.0005
0.0000
3/1/2009
9/1/2009
3/1/2010
9/1/2010
3/1/2011
9/1/2011
3/1/2012
9/1/2012
3/1/2013
9/1/2013
3/1/2014
9/1/2014
3/1/2015
9/1/2015
3/1/2016
9/1/2016
3/1/2017
9/1/2017
3/1/2018
9/1/2018
3/1/2019
9/1/2019
3/1/2020
9/1/2020
3/1/2021
9/1/2021
3/1/2022
Sampling Date
TW-13
MCL


Monitoring Well RW-P440 - Vinyl Chloride
Concentration (mg/L)
2.50
2.00
1.50
1.00
0.50
0.00
3/1/2009
9/1/2009
3/1/2010
9/1/2010
3/1/2011
9/1/2011
3/1/2012
9/1/2012
3/1/2013
9/1/2013
3/1/2014
9/1/2014
3/1/2015
9/1/2015
3/1/2016
9/1/2016
3/1/2017
9/1/2017
3/1/2018
9/1/2018
3/1/2019
9/1/2019
3/1/2020
9/1/2020
3/1/2021
9/1/2021
3/1/2022
9/1/2022
3/1/2023
Sampling Date
RW-P440
MCL

APPENDIX C
Groundwater Elevations



LEGEND

TW-1 88.02	WELL NAME, GROUNDWATER ELEVATION (FT AMSL)
TW-30	ONSITE REGULATED MONITORING WELL (SUBTITLE D)
SW-1	SURFACE WATER SAMPLE LOCATION
TW-26	ONSITE REGULATED MONITORING WELL (RPD)
TW-06	ONSITE REGULATED MONITORING WELL (COMAR)
TW-02	ONSITE NON-REGULATED MONITORING WELL
MW-417	OFFSITE NON-REGULATED MONITORING WELL
RW-P165	OFFSITE RESIDENTIAL WATER SUPPLY WELL
P-277-Z4	OFFSITE RESIDENTIAL ZONE 4 WELL
90	GROUNDWATER ELEVATION CONTOUR (FT AMSL)
→	GROUNDWATER FLOW DIRECTION

GROUNDWATER ELEVATIONS MEASURED MAY 2023

CONTOURS DEVELOPED BASED ON ZONE 3 WELL GROUND-WATER ELEVATIONS

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ARM Group LLC
Engineers and Scientists

GROUNDWATER CONTOUR MAP
MILLERSVILLE LANDFILL
ANNE ARUNDEL COUNTY, MD

July 2023

22011183

Figure
C-1

C:\Users\LParker\Desktop\Millersville GIS\MLF GW Contour Map - LP.mxd

APPENDIX C - MILLERSVILLE LANDFILL GROUNDWATER LEVEL MEASUREMENTS (May 2023)

WELL ID	DATE	MEASURING POINT ELEV. (FEET)	DEPTH TO WATER (FEET)	ELEV. (FEET)
MW-MB		236.81	---	NA
MW-P106		107.62	---	NA
MW-P417	5/5	112.75	49.85	62.90
MW-P440	5/5	115.25	52.64	62.61
MW-P9	5/5	112.32	53.59	58.73
N	5/31	195.48	106.24	89.24
P-564	5/31	176.31	100.76	75.55
RW-P440	5/5	117.11	57.04	60.07
RW-P441	5/31	117.58	56.25	61.33
RW-P584	5/5	118.56	61.95	56.61
TW1	5/11	193.42	105.40	88.02
TW10A	5/3	194.52	92.15	102.37
TW10B	5/31	195.96	95.36	100.60
TW11A	5/3	138.52	25.69	112.83
TW12	5/3	141.99	58.65	83.34
TW13	5/4	117.71	45.64	72.07
TW14	5/4	123.07	50.45	72.62
TW14A	5/4	123.26	50.31	72.95
TW15	5/4	116.98	51.45	65.53
TW15B	5/4	116.30	51.09	65.21
TW16	5/4	115.07	52.79	62.28
TW16A	5/4	115.44	62.77	52.67
TW17	5/31	131.99	57.51	74.48
TW17A	5/31	131.55	57.20	74.35
TW18	5/4	128.09	36.71	91.38
TW19	5/9	116.19	25.02	91.17
TW2	5/11	197.71	64.61	133.10
TW20R	5/9	129.97	33.37	96.60
TW21	5/9	158.75	56.09	102.66
TW21A	5/9	158.83	45.70	113.13
TW22	5/9	189.15	102.14	87.01
TW22A	5/10	188.24	101.05	87.19
TW22B	5/9	189.58	73.27	116.31
TW23R	5/10	236.64	139.97	96.67
TW24	5/31	109.19	39.11	70.08
TW24A	5/31	108.69	38.46	70.23
TW25	5/31	117.42	43.01	74.41
TW25A	5/31	117.05	42.51	74.54
TW27	5/10	182.90	101.88	81.02
TW28	5/10	211.73	131.28	80.45

APPENDIX C - MILLERSVILLE LANDFILL GROUNDWATER LEVEL MEASUREMENTS (May 2023)

WELL ID	DATE	MEASURING POINT ELEV. (FEET)	DEPTH TO WATER (FEET)	ELEV. (FEET)
TW29	5/11	143.89	43.91	99.98
TW2A	5/11	197.92	113.70	84.22
TW3	5/11	180.75	99.55	81.20
TW30	5/11	221.00	123.81	97.19
TW31	5/31	186.47	101.76	84.71
TW32	5/31	190.09	74.17	115.92
TW3A	5/11	181.45	50.77	130.68
TW4	5/10	112.56	32.35	80.21
TW4B	5/10	113.60	31.22	82.38
TW5	5/31	104.77	29.07	75.70
TW5A	5/31	105.31	29.11	76.20
TW5B	5/31	103.98	57.91	46.07
TW6	5/31	107.41	37.71	69.70
TW6A	5/31	106.29	8.56	97.73
TW7	5/31	126.85	44.72	82.13
TW7A	5/31	127.56	44.17	83.39
TW8	5/3	139.49	50.33	89.16
TW8A	5/3	139.67	50.28	89.39
TW9	5/3	131.24	74.04	57.20
TW9A	5/31	134.68	8.47	126.21
TW9B	5/3	133.81	36.20	97.61
TW9C	5/3	133.95	36.28	97.67
W	5/31	203.57	115.10	88.47

Note: MW-MB and MW-106 were unable to be accessed for measurement in May 2023

APPENDIX D
Data Validation

APPENDIX D
LABORATORY DATA VALIDATION

1.1 INTRODUCTION

This document presents the summary of data validation performed on the laboratory analytical data associated with the 1st semi-annual 2023 groundwater monitoring event at the Millersville Landfill and Resource Recovery Facility (MLFRRF) in Anne Arundel County, Maryland. Groundwater samples were collected pursuant to the Annotated Code of Maryland (COMAR) Title 26, Chapter 4; the Code of Federal Regulations (CFR) Title 40, Chapter Part 258; and the MLFRRF Environmental Monitoring Plan (EMP).

Groundwater and surface water sampling for the 1st semi-annual 2023 event was performed on April 26-27, May 3-5, and May 9-12, 2023. Environmental Monitoring and Assessment (EMA), LLC of Lititz, Pennsylvania conducted the sampling. Laboratory analysis for volatile organic compounds (VOCs) was performed by Maryland Spectral Services (MSS) of Baltimore, Maryland and for laboratory analysis for inorganic compounds was performed by Pace Analytical Service (Pace) of Greensburg, Pennsylvania.

Quality Assurance/Quality Control (QA/QC) protocols employed during this event included the analysis of matrix spike (MS) and matrix spike duplicate (MSD) samples, laboratory control samples (LCS), laboratory method blanks, and laboratory preparation blanks. These protocols also included the analysis of two blind duplicate samples obtained from TW-24 (DUP-1) and TW-25A (DUP-2). In addition, the QA/QC protocols included the preparation of four trip blanks and one field blank.

Samples were analyzed for VOCs, total and dissolved metals, and general chemistry parameters.

1.2 SAMPLE PACKAGE COMPLETENESS AND DELIVERABLES

Chains of custody were present in the data packages for all samples, along with statements from the laboratory attesting to the validity of the data. All requested analyses were accounted for in the data report. Sample receipt forms were present for all samples.

1.3 VOLATILE ORGANIC COMPOUND ANALYSES

1.3.1 General Information

<u>Groundwater Sampling Locations (62):</u>

TW-01, TW-02, TW-02A, TW-03, TW-03A, TW-04, TW-04B, TW-05, TW-05A, TW-05B, TW-06, TW-06A, TW-06B, TW-07, TW-07A, TW-08, TW-08A, TW-09, TW-09B, TW-09C, TW-10A, TW-11A, TW-12, TW-13, TW-14, TW-14A, TW-14B, TW-15, TW-15B, TW-16,

TW-16A, TW-17, TW-17A, TW-18, TW-19, TW-20R, TW-21, TW-21A, TW-22, TW-22A, TW-22B, TW-23R, TW-24, TW-24A, TW-25, TW-25A, TW-27, TW-28, TW-29, TW-30, MW-P4, MW-P9, MW-P106, MW-P417, MW-P440, RW-P109, RW-P165, RW-P171-1, RW-P264, RW-P440, RW-P441, and RW-P584.

Surface Water Sampling Locations (3):

SW-1, SW-2, and SW-3.

QA/QC Samples:

Field blank, all trip blanks, laboratory control samples, laboratory method blanks, and laboratory MS/MSDs.

1.3.2 **Analytical Method**

The samples were analyzed for VOCs following the United States Environmental Protection Agency (USEPA) Methods 8260B and 8011. The target analyte list was that established as Appendix I by 40 CFR Part 258, "Constituents for Detection Monitoring" and Appendix II (40 CFR Part 258) parameters – dichlorodifluoromethane and dichlorofluoromethane, and methyl tertiary-butyl ether (MTBE).

Field and Trip Blanks

One field blank and three trip blanks were prepared and analyzed for this sampling event. There were no VOC parameters detected in any of the three trip blanks or in the field blank. Therefore, no concentrations were flagged with "B" qualifiers.

Blind Duplicate Samples

The blind duplicate samples were collected from wells TW-24 (DUP-1) and TW-25A (DUP-2). Analyses were performed to calculate the RPD of duplicate samples in obtaining an estimate of laboratory method precision. Table D-1 summarizes the RPD of constituents detected above the RL. The agreement between the detected VOCs in the duplicate and corresponding sample was within QC standards.

Quality Control Sample Review

Quality Control samples for each laboratory report were reviewed to verify proper documentation of any analysis issues. Notable observations from the quality control samples are summarized below.

- Surrogates: For all projects, all surrogates were within quality control limits.
- Method Blanks: For all projects, there were no analytes detected in method blanks.

- Holding Time: All VOC samples in all projects were prepared and analyzed within the method required holding times, except for the analysis of 1,2-dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (EDB) using method 8011 in project 30584816. Concentrations for all impacted results were below detection limits. Proper qualification was added for the associated sample results.
- Continuing Calibration: For all projects, all criteria were within method requirements, with the exception of the analysis of DBCP and EDB in projects 30582429 and 30581969. The results were flagged with a "CH" qualifier if the continuing calibration for the compound was outside of laboratory acceptance limits. The results might be biased high.
- Laboratory Control Spike: For all projects, recoveries in the laboratory control samples were within quality control limits, with a few exceptions. For the following projects, recoveries in some of the laboratory control samples were outside quality control limits: 3042721 and 3050514. Proper qualification was added where appropriate.
- Matrix Spikes: For all projects, recoveries in matrix spikes and matrix spike duplicates were within quality control limits, with a few exceptions. The following projects had matrix spike or matrix spike duplicate recoveries that were outside control limits: 3051226, 3042721, and 3050514. No additional qualification was necessary. Proper qualification was added where appropriate.
- Laboratory Duplicate: For all projects, the precision between the sample and laboratory sample duplicate was within control limits.

1.4 INORGANIC ANALYSIS

1.4.1 General Information

Groundwater Sampling Locations (62):

TW-01, TW-02, TW-02A, TW-03, TW-03A, TW-04, TW-04B, TW-05, TW-05A, TW-05B, TW-06, TW-06A, TW-06B, TW-07, TW-07A, TW-08, TW-08A, TW-09, TW-09B, TW-09C, TW-10A, TW-11A, TW-12, TW-13, TW-14, TW-14A, TW-14B, TW-15, TW-15B, TW-16, TW-16A, TW-17, TW-17A, TW-18, TW-19, TW-20R, TW-21, TW-21A, TW-22, TW-22A, TW-22B, TW-23R, TW-24, TW-24A, TW-25, TW-25A, TW-27, TW-28, TW-29, TW-30, MW-P106, MW-P4, MW-P417, MW-P440, MW-P9, RW-P109, RW-P165, RW-P171-1, RW-P264, RW-P440, RW-P441, and RW-P584.

Surface Water Sampling Locations (3):

SW-1, SW-2, and SW-3.

QA/QC Samples:

Field Blank, laboratory control samples, laboratory method blanks, laboratory duplicates, and laboratory MS/MSDs.

1.4.2 **Analytical Methods**

On-site samples were analyzed for antimony, arsenic, barium, beryllium, cadmium, calcium (total and dissolved), chromium, cobalt, copper, iron (total and dissolved), lead, magnesium (total and dissolved), manganese (total and dissolved), mercury, nickel, potassium (total and dissolved), selenium, silver, sodium (total and dissolved), thallium, vanadium, and zinc using the Inductively Coupled Plasma Optical Emission Spectrometry/Mass Spectrometer (ICP/MS) (USEPA Method 6010D and 6020B). Mercury was analyzed using the Cold Vapor Atomic Absorption Spectrometry method (CVAA) (USEPA Method 7470A).

Additionally, samples were analyzed for chloride (Standard Method [SM]4500CIE), nitrate and nitrite (SM4500NO3-F and SM4500NO2-B), ammonia (USEPA Method 350.1), chemical oxygen demand (USEPA Method 410.4), hardness (SM2340B), alkalinity (SM2320B), sulfate (USEPA Method 9038), total dissolved solids (SM2540C), and turbidity (SM2130B).

Off-site samples (MW and RW) were analyzed for mercury (total) only. All QC data were compared with quality control criteria for drinking water analysis in the USEPA Analytical Procedures for Determination of Metals under 40 CFR Part 136.

Field Blank

One field blank was prepared and analyzed for this sampling event as part of work order 3042721. There were “J” flagged detections for alkalinity and chemical oxygen demand in the field blank in work order 3042721. Comparable concentrations of alkalinity were flagged with a “B” qualifier in four samples (DUP-2, TW-24, TW-25, and TW-25A) and comparable concentrations of chemical oxygen demand were flagged with a “B” qualifier in four samples (SW-1, TW-24, TW-24A, and TW-25).

Blind Duplicate Samples

Table D1 summarizes the RPD of the detected inorganic constituents in duplicate samples. RPD’s were generally within control limits. The highest RPD was 26.4% for concentrations of total dissolved solids in TW-24 and DUP-1. The RPD for the remaining analytes was 12% or less.

Charge-Balance Error

The charge-balance error of samples collected in the field can be used to evaluate whether all ionic species that exist in the groundwater sample have been identified. Table D2 provides a summary of the calculated charge-balance errors. Fourteen out of 53 samples had a charge-

balance error greater than the 20%. Charge-balance errors greater than 20% may indicate that ions are present in the groundwater sample that were not used in the calculations.

Project Narrative Review

Project narratives for each data package were reviewed to verify proper documentation of any analysis issues. Notable observations from the project narratives are summarized below.

- Holding Time: All samples in all projects were prepared and analyzed within the method required holding times.
- Initial Calibration: For all projects, all criteria were within method requirements.
- Continuing Calibration: For all projects, all criteria were within method requirements.
- Internal Standards: For all projects, all internal standards were within quality control limits.
- Method Blanks: The following projects had at least one analyte detected above the reporting limit in the associated method blank: 30585905, 30581969, and 30586485. The results were flagged with a "B" qualifier if an analyte was detected above the reporting limit in a method blank.
- Laboratory Control Spike: For all projects, all analytes in the lab control spike were recovered within the quality control limits.
- Matrix Spikes: For the following projects, the RPD value for at least one analyte in a matrix spike or matrix spike duplicate was outside the quality control limits: 30587048, 30582429, 30584816, 30585905, 30581969, 30586485, 30584251. The associated batch was either accepted based on LCS recovery or proper qualification was added for the associated sample results.
- Laboratory Duplicate: For all projects, the precision between the sample and laboratory sample duplicate was within control limits.

TABLE D1 MLFRRF LABORATORY DATA VALIDATION - SPRING 2023 Duplicate Comparison - Detected Parameters										
Parameter	**Unit**	**TW-24 Result**		**Dup 1 Result**		**Relative Percent Difference**	**TW-25A Result**		**Dup 2 Result**		**Relative Percent Difference**
1,1-Dichloroethane	µg/L	2.2		2.2		0.0%	27.4		27		1.5%
1,2-Dichloroethane	µg/L	1	U	1	U	NA	1.6		1.6		0.0%
1,2-Dichloropropane	µg/L	1	U	1	U	NA	1.3		1.2		8.0%
1,4-Dichlorobenzene	µg/L	1	U	1	U	NA	1.9		1.8		5.4%
Benzene	µg/L	1	U	1	U	NA	2.8		2.8		0.0%
cis-1,2-Dichloroethene	µg/L	1	U	1	U	NA	5.4		5.1		5.7%
Dichlorodifluoromethane	µg/L	1.4		1.4		0.0%	9.6		9.5		1.0%
Dichlorofluoromethane	µg/L	1.1		1.1		0.0%	25.5		25.6		0.4%
Methylene chloride	µg/L	1	U	1	U	NA	25.7	L	25.7	L	0.0%
Methyl-tert-butyl ether	µg/L	1	U	1	U	NA	4.7		4.8		2.1%
Tetrachloroethene	µg/L	0.6	J	0.6	J	NA	3.4		3.4		0.0%
Trichloroethene	µg/L	1	U	1	U	NA	5		5.3		5.8%
Trichlorofluoromethane	µg/L	1	U	1	U	NA	1.8		1.6		11.8%
Barium	mg/L	0.1		0.1		0.0%	0.078		0.078		0.0%
Beryllium	mg/L	0.00014	J	0.00014	J	NA	0.00091		0.00095		4.3%
Calcium	mg/L	5.1		5.1		0.0%	3.6		3.7		2.7%
Calcium, Dissolved	mg/L	5.1		5.1		0.0%	3.6		3.7		2.7%
Chloride	mg/L	27.6		27.2		1.5%	9.7		9.8		1.0%
Cobalt	mg/L	0.013		0.013		0.0%	0.0094		0.0095		1.1%
Copper	mg/L	0.0049		0.0048		2.1%	0.04		0.04		0.0%
Magnesium	mg/L	4.9		4.9		0.0%	2.2		2.3		4.4%
Magnesium, Dissolved	mg/L	4.9		4.9		0.0%	2.3		2.3		0.0%
Manganese	mg/L	0.065		0.065		0.0%	0.05		0.051		2.0%
Manganese, Dissolved	mg/L	0.067		0.066		1.5%	0.051		0.051		0.0%
Mercury	mg/L	0.00069		0.00071		2.9%	0.0002	U	0.0002	U	NA
Nickel	mg/L	0.014		0.013		7.4%	0.0092		0.0093		1.1%
Nitrate as N	mg/L	1.2		1.2		0.0%	0.73		0.73		0.0%
Nitrite as N	mg/L	0.066		0.066		0.0%	0.01	U	0.01	U	NA
Nitrogen, NO2 plus NO3	mg/L	1.2		1.2		0.0%	0.8		0.8		0.0%
Potassium	mg/L	1.4		1.4		0.0%	0.99		1		1.0%
Potassium, Dissolved	mg/L	1.4		1.4		0.0%	1		1		0.0%
Sodium	mg/L	13.7		13.5		1.5%	3.9		4		2.5%
Sodium, Dissolved	mg/L	13.8		13.8		0.0%	4.1		4.1		0.0%
Sulfate	mg/L	11.5		10.8		6.3%	10	U	4.8	J	NA
Total Dissolved Solids	mg/L	90		69		26.4%	39		44		12.0%
Total Hardness	mg/L	33.1	N3	32.6	N3	1.5%	18	N3	18.5	N3	2.7%
Zinc	mg/L	0.016		0.015		6.5%	0.014		0.015		6.9%

TABLE D2
MLFRRF DATA EVALUATION - SPRING 2023
Cation/Anion Balance Worksheet

	ION	M.W. (g/mol)	*Subtite D Regulated Wells* Concentration (mg/L)														
			TW-01	TW-02A	TW-03	TW-04	TW-04B	TW-05	TW-05A	TW-06	TW-10A	TW-14	TW-14A	TW-19	TW-20R	TW-23R	TW-24
CATIONS	Ca^{2+}	40.08	14.7	5.4	1.1	2.6	2.8	3.3	2	4.5	5.9	1.5	4.4	27.8	18.9	2.8	5.1
	Mg^{2+}	24.31	1.4	3	0.53	1.4	2.5	1	0.9	3.3	3.6	1	4.1	6.2	4.9	1	4.9
	K^{+}	39.10	0.64	1.1	0.43	0.81	0.99	0.86	0.81	1.7	2.4	0.82	1.5	6.4	3.5	1	1.4
	Na^{+}	22.99	3	16.5	2.5	4.9	2.8	3.5	2.9	7	26.9	4.1	7.9	11.6	11.6	4.4	13.8
Cations (meq/L)			1.00	1.26	0.22	0.48	0.49	0.42	0.32	0.84	1.82	0.38	0.94	2.57	1.94	0.44	1.29
ANIONS	HCO_3^-	61.01	29.3	18.3	7.3	22.0	18.3	31.7	19.5	18.3	0	7.9	20.74	39.0	8.5	6.1	2.4
	Cl^-	35.45	7.4	43.8	5.3	15.3	6.3	7.5	4.7	13.5	45.9	10.2	15.5	14.1	12.6	8.1	27.6
	NO_3^-	62.00	0	0	0	0.44	1.4	0	0.24	0.53	9.7	0.53	0	6.6	4.1	8.9	5.3
	SO_4^{2-}	96.06	0	0	0	0	10.6	0	0	8.4	10.1	0	9.4	25.1	50.4	0	11.5
Anions (meq/L)			0.69	1.54	0.27	0.80	0.72	0.73	0.46	0.86	1.66	0.43	0.97	1.67	1.61	0.47	1.14
CBE (%)			*18.2*	*9.8*	*10.5*	***25.0***	*18.8*	***26.9***	*17.5*	*1.2*	*4.6*	*5.6*	*1.8*	***21.2***	*9.3*	*3.6*	*6.2*

	ION	M.W. (g/mol)	*Subtite D Regulated Wells* Concentration (mg/L)							*Surface Water*		
			TW-24A	TW-25	TW-25A	TW-27	TW-28	TW-29	TW-30	SW-1	SW-2	SW-3
CATIONS	Ca^{2+}	40.08	21.3	1.8	3.5	0.90	6.4	2.2	5	13.6	26	31.2
	Mg^{2+}	24.31	3.4	1	2.3	0.41	3.2	1.2	1.9	3.4	5.7	6.5
	K^{+}	39.10	2.9	0.59	1	0.43	1.1	0.77	1.6	2.2	4	4.1
	Na^{+}	22.99	3.6	3	4.1	2.4	22.9	4.4	11.3	48.5	16.8	13.8
Cations (meq/L)			1.57	0.32	0.57	0.19	1.61	0.42	0.94	3.12	2.60	2.80
ANIONS	HCO_3^-	61.01	25.6	1.22	2	0.6	0	0	1.2	13.42	45.1	34.2
	Cl^-	35.45	5.3	7.3	9.7	5.1	56.4	11.5	27.3	71	24.9	19.7
	NO_3^-	62.00	5.8	1.3	3.2	0	0.34	2.8	9.7	8.9	0.43	0.5
	SO_4^{2-}	96.06	13	0	0	0	0	0	0	13.8	11.8	11.9
Anions (meq/L)			0.93	0.25	0.36	0.16	1.60	0.37	0.95	2.65	1.69	1.37
CBE (%)			***25.5***	*12.4*	***23.0***	*10.2*	*0.3*	*6.4*	*0.5*	*8.2*	***21.1***	***34.2***

TABLE D2
MLFRRF DATA EVALUATION - SPRING 2023
Cation/Anion Balance Worksheet

	ION	M.W. (g/mol)	*COMAR Regulated Wells* Concentration (mg/L)														
			TW-07	TW-07A	TW-08	TW-08A	TW-09B	TW-09C	TW-15	TW-15B	TW-16	TW-17	TW-17A	TW-21	TW-22	TW-22A	TW-22B
CATIONS	Ca^{2+}	40.08	5.2	3	6.5	9.4	4.1	4.6	0.83	4.7	12.3	4.5	0.78	9.1	2.2	6.3	16.7
	Mg^{2+}	24.31	1.3	1.8	4.1	6	2.6	3.7	0.6	5.3	10.2	1.7	0.4	3.4	1.8	6.6	3.6
	K^{+}	39.10	1.9	0.92	1.4	2.1	1.7	2	0.89	1.7	6.7	1.8	0.6	2.3	1.1	1.9	4
	Na^{+}	22.99	6.8	2.7	27.9	64.6	15.8	13.1	2.1	23.3	19.9	12.6	1.4	23.9	11.2	37.9	8.8
Cations (meq/L)			**0.71**	**0.44**	**1.91**	**3.83**	**1.15**	**1.15**	**0.20**	**1.73**	**2.49**	**0.96**	**0.15**	**1.83**	**0.77**	**2.55**	**1.61**
ANIONS	HCO_3^-	61.01	14.6	0	23.2	0	1.2	0	15	0	0	0.6	0	0	1.22	1.22	0
	Cl^-	35.45	12.2	6	51.2	111	21.5	18.6	4.1	60.8	24.7	5.3	2.6	37.9	24	74	11.1
	NO_3^-	62.00	0.75	1.4	0.71	22.2	9.7	10.6	0.58	4.1	0	0	0.97	10.6	4.4	8.4	10.2
	SO_4^{2-}	96.06	0	8	0	22.8	5.9	14.6	0	5.6	102	32.8	0	30.3	0	21.8	19.4
Anions (meq/L)			**0.60**	**0.36**	**1.84**	**3.96**	**0.91**	**1.00**	**0.36**	**1.90**	**2.82**	**0.84**	**0.09**	**1.87**	**0.77**	**2.70**	**0.88**
CBE (%)			*8.8*	*10.1*	*2.0*	*1.8*	*11.8*	*7.2*	***29.0***	*4.7*	*6.2*	*6.4*	***25.1***	*1.1*	*0.3*	*2.7*	***29.4***

	ION	M.W. (g/mol)	*On-site Non-Regulated Wells* Concentration (mg/L)												
			TW-02	TW-03A	TW-05B	TW-06A	TW-06B	TW-09	TW-11A	TW-12	TW-13	TW-14B	TW-16A	TW-18	TW-21A
CATIONS	Ca^{2+}	40.08	0.39	5.5	0.61	51.5	0.64	0.45	4.9	2.7	3.6	0.5	1	6.4	16.7
	Mg^{2+}	24.31	0.50	2.00	0.21	6	0.32	0.23	2.3	1.5	2	0.24	0.38	2.7	4.6
	K^{+}	39.10	0.5	1.5	0.5	5	0.59	0.46	2.6	1.1	1.2	0.45	0.55	1.4	2.7
	Na^{+}	22.99	1.4	79.1	1.4	2.3	1.8	0.91	13.3	4.9	9.1	0.99	1.4	2.7	24.5
Cations (meq/L)			**0.13**	**3.92**	**0.12**	**3.27**	**0.15**	**0.09**	**1.08**	**0.50**	**0.77**	**0.10**	**0.16**	**0.69**	**2.35**
ANIONS	HCO_3^-	61.01	9.2	8.5	0	69.5	0	3.7	13.4	17.1	1.2	0	1.2	0	0
	Cl^-	35.45	3.3	172	1.6	2.8	2.8	2.6	19	7.6	20.5	1.7	2.6	4.4	51.3
	NO_3^-	62.00	0	0	0.97	1.9	1.7	0.26	0.35	0	0	0	1.02	6.6	10.2
	SO_4^{2-}	96.06	0	0	0	30.4	0	0	23.3	0	0	0	0	27.8	36.3
Anions (meq/L)			**0.24**	**4.99**	**0.06**	**1.88**	**0.11**	**0.14**	**1.25**	**0.49**	**0.60**	**0.05**	**0.11**	**0.81**	**2.37**
CBE (%)			***28.8***	*12.1*	***33.5***	***27.0***	*17.3*	*19.4*	*7.2*	*0.5*	*12.6*	***34.9***	*17.4*	*7.7*	*0.4*

APPENDIX E
Laboratory Analytical Data Packages

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

May 05, 2023

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-SPRING 2023
Pace Project No.: 30581969

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on April 26, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alaina Deitch

Alaina R. Deitch
alaina.deitch@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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Pace Analytical Services, LLC
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Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Florida: Cert E871149 SEKS WET
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver

225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30581969001	**TW-24**	Water	04/26/23 14:10	04/26/23 22:10
30581969002	**TW-24A**	Water	04/26/23 14:45	04/26/23 22:10
30581969003	**TW-25**	Water	04/26/23 13:30	04/26/23 22:10
30581969004	**TW-25A**	Water	04/26/23 12:50	04/26/23 22:10
30581969005	**DUP-1**	Water	04/26/23 00:01	04/26/23 22:10
30581969006	**DUP-2**	Water	04/26/23 00:01	04/26/23 22:10
30581969007	**Field Blank**	Water	04/26/23 12:00	04/26/23 22:10
30581969008	**SW-1**	Water	04/26/23 10:00	04/26/23 22:10
30581969009	**SW-2**	Water	04/26/23 11:30	04/26/23 22:10
30581969010	**SW-3**	Water	04/26/23 11:00	04/26/23 22:10

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Greensburg, PA 15601
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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30581969001	**TW-24**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	JLM	1	PASI-PA
30581969002	**TW-24A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	JLM	1	PASI-PA
30581969003	**TW-25**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	JLM	1	PASI-PA
30581969004	**TW-25A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	JLM	1	PASI-PA
30581969005	**DUP-1**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	JLM	1	PASI-PA
30581969006	**DUP-2**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	JLM	1	PASI-PA
30581969007	**Field Blank**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	JLM	1	PASI-PA
30581969008	**SW-1**	EPA 6010D	MFC	7	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	JLM	1	PASI-PA
30581969009	**SW-2**	EPA 6010D	MFC	7	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500NO2-B-2011	JLM	1	PASI-PA
30581969010	**SW-3**	EPA 6010D	MFC	7	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		SM 2320B-2011	AJR	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	JLM	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Date: May 05, 2023

TW-24 (Lab ID: 30581969001)

- Sample pH for 8011 is 5

TW-24A (Lab ID: 30581969002)

- Sample pH for 8011 is 6

TW-25 (Lab ID: 30581969003)

- Sample pH for 8011 is 5

TW-25A (Lab ID: 30581969004)

- Sample pH for 8011 is 5

DUP-1 (Lab ID: 30581969005)

- Sample pH for 8011 is 5

DUP-2 (Lab ID: 30581969006)

- Sample pH for 8011 is 5

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: May 05, 2023

General Information:
10 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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1638 Roseytown Road - Suites 2,3,4
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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: May 05, 2023

General Information:
7 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: May 05, 2023

General Information:
10 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 584701

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30581969001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2839528)
  - Thallium
- MSD (Lab ID: 2839529)
  - Thallium

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: May 05, 2023

General Information:
10 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: May 05, 2023

General Information:
6 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 584692

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- BLANK (Lab ID: 2839505)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- DUP-1 (Lab ID: 30581969005)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- DUP-2 (Lab ID: 30581969006)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- LCS (Lab ID: 2839506)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MS (Lab ID: 2839507)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MSD (Lab ID: 2839508)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-24 (Lab ID: 30581969001)
  - 1,1,1,2-Tetrachloroethane (S)

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: May 05, 2023

QC Batch: 584692

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- 1,2-Dibromo-3-chloropropane
- 1,2-Dibromoethane (EDB)

- TW-24A (Lab ID: 30581969002)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-25 (Lab ID: 30581969003)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-25A (Lab ID: 30581969004)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: May 05, 2023

General Information:
10 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 584791

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30582011001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2839913)
  - Alkalinity,Total (CaCO3 pH4.5)
- MSD (Lab ID: 2839914)
  - Alkalinity,Total (CaCO3 pH4.5)

Additional Comments:

Analyte Comments:

QC Batch: 584791

1c: Alkalinity TV: 0.00 mg/L
- DUP-1 (Lab ID: 30581969005)
  - Alkalinity,Total (CaCO3 pH4.5)

2c: Alkalinity TV: 2.00 mg/L
- Field Blank (Lab ID: 30581969007)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-25 (Lab ID: 30581969003)
  - Alkalinity,Total (CaCO3 pH4.5)

3c: Alkalinity TV: 3.00 mg/L
- DUP-2 (Lab ID: 30581969006)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-25A (Lab ID: 30581969004)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: May 05, 2023

Analyte Comments:

QC Batch: 584791

4c: Alkalinity TV: 4.00 mg/L

- TW-24 (Lab ID: 30581969001)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: May 05, 2023

General Information:
10 samples were analyzed for SM 2540C-2015 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: May 05, 2023

General Information:
10 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: May 05, 2023

General Information:
10 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 586058

5c: pH adjusted to <2 in lab at bench prior to analysis

- BLANK (Lab ID: 2847024)
  - Chemical Oxygen Demand
- LCS (Lab ID: 2847025)
  - Chemical Oxygen Demand

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: May 05, 2023

General Information:
10 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Method: **SM 4500NO3-F-2016**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: May 05, 2023

General Information:
10 samples were analyzed for SM 4500NO3-F-2016 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: May 05, 2023

General Information:
10 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 584368

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30581969001,30582130001

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2837866)
  - Sulfate
- MSD (Lab ID: 2837867)
  - Sulfate

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: May 05, 2023

General Information:
10 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Sample: TW-24 **Lab ID: 30581969001** Collected: 04/26/23 14:10 Received: 04/26/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**5.1**	mg/L	0.50	0.083	1	04/28/23 11:39	05/01/23 15:34	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	04/28/23 11:39	05/01/23 15:34	7439-89-6	
Magnesium	**4.9**	mg/L	0.50	0.047	1	04/28/23 11:39	05/01/23 15:34	7439-95-4	
Manganese	**0.065**	mg/L	0.0050	0.0027	1	04/28/23 11:39	05/01/23 15:34	7439-96-5	
Potassium	**1.4**	mg/L	0.50	0.26	1	04/28/23 11:39	05/01/23 15:34	7440-09-7	
Sodium	**13.7**	mg/L	0.50	0.34	1	04/28/23 11:39	05/01/23 15:34	7440-23-5	
Total Hardness	**33.1**	mg/L	3.3	0.27	1	04/28/23 11:39	05/01/23 15:34		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**5.1**	mg/L	0.50	0.083	1	04/28/23 11:50	05/01/23 15:01	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	04/28/23 11:50	05/01/23 15:01	7439-89-6	
Magnesium, Dissolved	**4.9**	mg/L	0.50	0.047	1	04/28/23 11:50	05/01/23 15:01	7439-95-4	
Manganese, Dissolved	**0.067**	mg/L	0.0050	0.0027	1	04/28/23 11:50	05/01/23 15:01	7439-96-5	
Potassium, Dissolved	**1.4**	mg/L	0.50	0.26	1	04/28/23 11:50	05/01/23 15:01	7440-09-7	
Sodium, Dissolved	**13.8**	mg/L	0.50	0.34	1	04/28/23 11:50	05/01/23 15:01	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/01/23 09:00	05/01/23 14:06	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/01/23 09:00	05/01/23 14:06	7440-38-2	
Barium	**0.10**	mg/L	0.0025	0.00098	1	05/01/23 09:00	05/01/23 14:06	7440-39-3	
Beryllium	**0.00014J**	mg/L	0.00050	0.00010	1	05/01/23 09:00	05/01/23 14:06	7440-41-7	
Cadmium	**0.00026J**	mg/L	0.00050	0.00013	1	05/01/23 09:00	05/01/23 14:06	7440-43-9	
Chromium	**0.00078J**	mg/L	0.0025	0.00050	1	05/01/23 09:00	05/01/23 14:06	7440-47-3	
Cobalt	**0.013**	mg/L	0.0025	0.00081	1	05/01/23 09:00	05/01/23 14:06	7440-48-4	
Copper	**0.0049**	mg/L	0.0025	0.00064	1	05/01/23 09:00	05/01/23 14:06	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/01/23 09:00	05/01/23 14:06	7439-92-1	
Nickel	**0.014**	mg/L	0.0025	0.00065	1	05/01/23 09:00	05/01/23 14:06	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/01/23 09:00	05/01/23 14:06	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/01/23 09:00	05/01/23 14:06	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/01/23 09:00	05/01/23 14:06	7440-28-0	M1
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/01/23 09:00	05/01/23 14:06	7440-62-2	
Zinc	**0.016**	mg/L	0.0050	0.0040	1	05/01/23 09:00	05/01/23 14:06	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00069**	mg/L	0.00020	0.00020	1	05/01/23 11:40	05/01/23 16:59	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/01/23 08:04	05/02/23 12:29	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/01/23 08:04	05/02/23 12:29	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	110	%.	60-140		1	05/01/23 08:04	05/02/23 12:29	630-20-6	CH

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Sample: TW-24 **Lab ID: 30581969001** Collected: 04/26/23 14:10 Received: 04/26/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**4.0J**	mg/L	10.0	1.0	1		05/01/23 15:30		4c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**90.0**	mg/L	10.0	10.0	1		05/01/23 15:52		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/02/23 07:28	05/02/23 10:27		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.9J**	mg/L	25.0	4.7	1	05/04/23 13:25	05/04/23 16:24		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**27.6**	mg/L	3.0	0.67	1		05/01/23 10:50	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**1.2**	mg/L	0.10	0.053	1		05/02/23 12:16	14797-55-8	
Nitrogen, NO2 plus NO3	**1.2**	mg/L	0.10	0.053	1		05/02/23 12:16		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**11.5**	mg/L	10.0	4.7	1		04/28/23 11:37	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/27/23 10:59	14797-65-0	

Sample: TW-24A **Lab ID: 30581969002** Collected: 04/26/23 14:45 Received: 04/26/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**20.0**	mg/L	0.50	0.083	1	04/28/23 11:39	05/01/23 15:48	7440-70-2	
Iron	**0.079**	mg/L	0.050	0.035	1	04/28/23 11:39	05/01/23 15:48	7439-89-6	
Magnesium	**3.2**	mg/L	0.50	0.047	1	04/28/23 11:39	05/01/23 15:48	7439-95-4	
Manganese	**0.084**	mg/L	0.0050	0.0027	1	04/28/23 11:39	05/01/23 15:48	7439-96-5	
Potassium	**2.8**	mg/L	0.50	0.26	1	04/28/23 11:39	05/01/23 15:48	7440-09-7	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Sample: TW-24A **Lab ID: 30581969002** Collected: 04/26/23 14:45 Received: 04/26/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**3.4**	mg/L	0.50	0.34	1	04/28/23 11:39	05/01/23 15:48	7440-23-5	
Total Hardness	**63.1**	mg/L	3.3	0.27	1	04/28/23 11:39	05/01/23 15:48		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**21.3**	mg/L	0.50	0.083	1	04/28/23 11:50	05/01/23 15:03	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	04/28/23 11:50	05/01/23 15:03	7439-89-6	
Magnesium, Dissolved	**3.4**	mg/L	0.50	0.047	1	04/28/23 11:50	05/01/23 15:03	7439-95-4	
Manganese, Dissolved	**0.083**	mg/L	0.0050	0.0027	1	04/28/23 11:50	05/01/23 15:03	7439-96-5	
Potassium, Dissolved	**2.9**	mg/L	0.50	0.26	1	04/28/23 11:50	05/01/23 15:03	7440-09-7	
Sodium, Dissolved	**3.6**	mg/L	0.50	0.34	1	04/28/23 11:50	05/01/23 15:03	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/01/23 09:00	05/01/23 14:27	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/01/23 09:00	05/01/23 14:27	7440-38-2	
Barium	**0.041**	mg/L	0.0025	0.00098	1	05/01/23 09:00	05/01/23 14:27	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	05/01/23 09:00	05/01/23 14:27	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/01/23 09:00	05/01/23 14:27	7440-43-9	
Chromium	**0.0037**	mg/L	0.0025	0.00050	1	05/01/23 09:00	05/01/23 14:27	7440-47-3	
Cobalt	**0.0023J**	mg/L	0.0025	0.00081	1	05/01/23 09:00	05/01/23 14:27	7440-48-4	
Copper	**0.0020J**	mg/L	0.0025	0.00064	1	05/01/23 09:00	05/01/23 14:27	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/01/23 09:00	05/01/23 14:27	7439-92-1	
Nickel	**0.0030**	mg/L	0.0025	0.00065	1	05/01/23 09:00	05/01/23 14:27	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/01/23 09:00	05/01/23 14:27	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/01/23 09:00	05/01/23 14:27	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/01/23 09:00	05/01/23 14:27	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/01/23 09:00	05/01/23 14:27	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0040	1	05/01/23 09:00	05/01/23 14:27	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/01/23 11:40	05/01/23 17:06	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/01/23 08:04	05/02/23 12:42	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/01/23 08:04	05/02/23 12:42	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	106	%.	60-140		1	05/01/23 08:04	05/02/23 12:42	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**42.0**	mg/L	10.0	1.0	1		05/01/23 15:33		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Sample: TW-24A **Lab ID: 30581969002** Collected: 04/26/23 14:45 Received: 04/26/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**83.0**	mg/L	10.0	10.0	1		05/01/23 15:52		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/02/23 07:28	05/02/23 10:39		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.9J**	mg/L	25.0	4.7	1	05/04/23 13:25	05/04/23 16:25		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**5.3**	mg/L	3.0	0.67	1		05/01/23 10:51	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**1.3**	mg/L	0.10	0.053	1		05/02/23 12:20	14797-55-8	
Nitrogen, NO2 plus NO3	**1.3**	mg/L	0.10	0.053	1		05/02/23 12:20		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**13.0**	mg/L	10.0	4.7	1		04/28/23 11:41	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/27/23 10:59	14797-65-0	

Sample: TW-25 **Lab ID: 30581969003** Collected: 04/26/23 13:30 Received: 04/26/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**1.7**	mg/L	0.50	0.083	1	04/28/23 11:39	05/01/23 15:50	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	04/28/23 11:39	05/01/23 15:50	7439-89-6	
Magnesium	**0.98**	mg/L	0.50	0.047	1	04/28/23 11:39	05/01/23 15:50	7439-95-4	
Manganese	**0.018**	mg/L	0.0050	0.0027	1	04/28/23 11:39	05/01/23 15:50	7439-96-5	
Potassium	**0.58**	mg/L	0.50	0.26	1	04/28/23 11:39	05/01/23 15:50	7440-09-7	
Sodium	**2.9**	mg/L	0.50	0.34	1	04/28/23 11:39	05/01/23 15:50	7440-23-5	
Total Hardness	**8.3**	mg/L	3.3	0.27	1	04/28/23 11:39	05/01/23 15:50		N3

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Sample: TW-25 **Lab ID: 30581969003** Collected: 04/26/23 13:30 Received: 04/26/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**1.8**	mg/L	0.50	0.083	1	04/28/23 11:50	05/01/23 15:05	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	04/28/23 11:50	05/01/23 15:05	7439-89-6	
Magnesium, Dissolved	**1.0**	mg/L	0.50	0.047	1	04/28/23 11:50	05/01/23 15:05	7439-95-4	
Manganese, Dissolved	**0.019**	mg/L	0.0050	0.0027	1	04/28/23 11:50	05/01/23 15:05	7439-96-5	
Potassium, Dissolved	**0.59**	mg/L	0.50	0.26	1	04/28/23 11:50	05/01/23 15:05	7440-09-7	
Sodium, Dissolved	**3.0**	mg/L	0.50	0.34	1	04/28/23 11:50	05/01/23 15:05	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/01/23 09:00	05/01/23 14:30	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/01/23 09:00	05/01/23 14:30	7440-38-2	
Barium	**0.026**	mg/L	0.0025	0.00098	1	05/01/23 09:00	05/01/23 14:30	7440-39-3	
Beryllium	**0.00012J**	mg/L	0.00050	0.00010	1	05/01/23 09:00	05/01/23 14:30	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/01/23 09:00	05/01/23 14:30	7440-43-9	
Chromium	**0.0019J**	mg/L	0.0025	0.00050	1	05/01/23 09:00	05/01/23 14:30	7440-47-3	
Cobalt	**0.0045**	mg/L	0.0025	0.00081	1	05/01/23 09:00	05/01/23 14:30	7440-48-4	
Copper	**0.0049**	mg/L	0.0025	0.00064	1	05/01/23 09:00	05/01/23 14:30	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/01/23 09:00	05/01/23 14:30	7439-92-1	
Nickel	**0.0040**	mg/L	0.0025	0.00065	1	05/01/23 09:00	05/01/23 14:30	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/01/23 09:00	05/01/23 14:30	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/01/23 09:00	05/01/23 14:30	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/01/23 09:00	05/01/23 14:30	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/01/23 09:00	05/01/23 14:30	7440-62-2	
Zinc	**0.0071**	mg/L	0.0050	0.0040	1	05/01/23 09:00	05/01/23 14:30	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/01/23 11:40	05/01/23 17:09	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/01/23 08:04	05/02/23 12:55	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/01/23 08:04	05/02/23 12:55	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	116	%.	60-140		1	05/01/23 08:04	05/02/23 12:55	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		05/01/23 15:35		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**22.0**	mg/L	10.0	10.0	1		05/01/23 15:52		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Sample: TW-25 **Lab ID: 30581969003** Collected: 04/26/23 13:30 Received: 04/26/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/02/23 07:28	05/02/23 10:44		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/04/23 13:25	05/04/23 16:25		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**7.3**	mg/L	3.0	0.67	1		05/01/23 10:52	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.30**	mg/L	0.10	0.053	1		05/02/23 12:21	14797-55-8	
Nitrogen, NO2 plus NO3	**0.30**	mg/L	0.10	0.053	1		05/02/23 12:21		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/28/23 11:42	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/27/23 10:58	14797-65-0	

Sample: TW-25A **Lab ID: 30581969004** Collected: 04/26/23 12:50 Received: 04/26/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**3.6**	mg/L	0.50	0.083	1	04/28/23 11:39	05/01/23 15:52	7440-70-2	
Iron	**0.044J**	mg/L	0.050	0.035	1	04/28/23 11:39	05/01/23 15:52	7439-89-6	
Magnesium	**2.2**	mg/L	0.50	0.047	1	04/28/23 11:39	05/01/23 15:52	7439-95-4	
Manganese	**0.050**	mg/L	0.0050	0.0027	1	04/28/23 11:39	05/01/23 15:52	7439-96-5	
Potassium	**0.99**	mg/L	0.50	0.26	1	04/28/23 11:39	05/01/23 15:52	7440-09-7	
Sodium	**3.9**	mg/L	0.50	0.34	1	04/28/23 11:39	05/01/23 15:52	7440-23-5	
Total Hardness	**18.0**	mg/L	3.3	0.27	1	04/28/23 11:39	05/01/23 15:52		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**3.5**	mg/L	0.50	0.083	1	04/28/23 11:50	05/01/23 15:07	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	04/28/23 11:50	05/01/23 15:07	7439-89-6	
Magnesium, Dissolved	**2.3**	mg/L	0.50	0.047	1	04/28/23 11:50	05/01/23 15:07	7439-95-4	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Sample: TW-25A **Lab ID: 30581969004** Collected: 04/26/23 12:50 Received: 04/26/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Manganese, Dissolved	**0.051**	mg/L	0.0050	0.0027	1	04/28/23 11:50	05/01/23 15:07	7439-96-5	
Potassium, Dissolved	**1.0**	mg/L	0.50	0.26	1	04/28/23 11:50	05/01/23 15:07	7440-09-7	
Sodium, Dissolved	**4.1**	mg/L	0.50	0.34	1	04/28/23 11:50	05/01/23 15:07	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/01/23 09:00	05/01/23 14:33	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/01/23 09:00	05/01/23 14:33	7440-38-2	
Barium	**0.078**	mg/L	0.0025	0.00098	1	05/01/23 09:00	05/01/23 14:33	7440-39-3	
Beryllium	**0.00091**	mg/L	0.00050	0.00010	1	05/01/23 09:00	05/01/23 14:33	7440-41-7	
Cadmium	**0.00020J**	mg/L	0.00050	0.00013	1	05/01/23 09:00	05/01/23 14:33	7440-43-9	
Chromium	**0.0012J**	mg/L	0.0025	0.00050	1	05/01/23 09:00	05/01/23 14:33	7440-47-3	
Cobalt	**0.0094**	mg/L	0.0025	0.00081	1	05/01/23 09:00	05/01/23 14:33	7440-48-4	
Copper	**0.040**	mg/L	0.0025	0.00064	1	05/01/23 09:00	05/01/23 14:33	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/01/23 09:00	05/01/23 14:33	7439-92-1	
Nickel	**0.0092**	mg/L	0.0025	0.00065	1	05/01/23 09:00	05/01/23 14:33	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/01/23 09:00	05/01/23 14:33	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/01/23 09:00	05/01/23 14:33	7440-22-4	
Thallium	**0.00010J**	mg/L	0.00050	0.000081	1	05/01/23 09:00	05/01/23 14:33	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/01/23 09:00	05/01/23 14:33	7440-62-2	
Zinc	**0.014**	mg/L	0.0050	0.0040	1	05/01/23 09:00	05/01/23 14:33	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/01/23 11:40	05/01/23 17:11	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/01/23 08:04	05/02/23 13:07	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/01/23 08:04	05/02/23 13:07	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	111	%.	60-140		1	05/01/23 08:04	05/02/23 13:07	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**3.0J**	mg/L	10.0	1.0	1		05/01/23 15:37		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**39.0**	mg/L	10.0	10.0	1		05/01/23 15:52		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/02/23 07:28	05/02/23 10:46		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Sample: TW-25A **Lab ID: 30581969004** Collected: 04/26/23 12:50 Received: 04/26/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**18.3J**	mg/L	25.0	4.7	1	05/04/23 13:25	05/04/23 16:25		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**9.7**	mg/L	3.0	0.67	1		05/01/23 10:53	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.73**	mg/L	0.10	0.053	1		05/02/23 12:22	14797-55-8	
Nitrogen, NO2 plus NO3	**0.80**	mg/L	0.10	0.053	1		05/02/23 12:22		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/28/23 11:44	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.066**	mg/L	0.010	0.0055	1		04/27/23 10:57	14797-65-0	

Sample: DUP-1 **Lab ID: 30581969005** Collected: 04/26/23 00:01 Received: 04/26/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**5.1**	mg/L	0.50	0.083	1	04/28/23 11:39	05/01/23 15:54	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	04/28/23 11:39	05/01/23 15:54	7439-89-6	
Magnesium	**4.9**	mg/L	0.50	0.047	1	04/28/23 11:39	05/01/23 15:54	7439-95-4	
Manganese	**0.065**	mg/L	0.0050	0.0027	1	04/28/23 11:39	05/01/23 15:54	7439-96-5	
Potassium	**1.4**	mg/L	0.50	0.26	1	04/28/23 11:39	05/01/23 15:54	7440-09-7	
Sodium	**13.5**	mg/L	0.50	0.34	1	04/28/23 11:39	05/01/23 15:54	7440-23-5	
Total Hardness	**32.6**	mg/L	3.3	0.27	1	04/28/23 11:39	05/01/23 15:54		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**5.1**	mg/L	0.50	0.083	1	04/28/23 11:50	05/01/23 15:09	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	04/28/23 11:50	05/01/23 15:09	7439-89-6	
Magnesium, Dissolved	**4.9**	mg/L	0.50	0.047	1	04/28/23 11:50	05/01/23 15:09	7439-95-4	
Manganese, Dissolved	**0.066**	mg/L	0.0050	0.0027	1	04/28/23 11:50	05/01/23 15:09	7439-96-5	
Potassium, Dissolved	**1.4**	mg/L	0.50	0.26	1	04/28/23 11:50	05/01/23 15:09	7440-09-7	
Sodium, Dissolved	**13.8**	mg/L	0.50	0.34	1	04/28/23 11:50	05/01/23 15:09	7440-23-5	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Sample: DUP-1 **Lab ID: 30581969005** Collected: 04/26/23 00:01 Received: 04/26/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/01/23 09:00	05/01/23 14:37	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/01/23 09:00	05/01/23 14:37	7440-38-2	
Barium	**0.10**	mg/L	0.0025	0.00098	1	05/01/23 09:00	05/01/23 14:37	7440-39-3	
Beryllium	**0.00014J**	mg/L	0.00050	0.00010	1	05/01/23 09:00	05/01/23 14:37	7440-41-7	
Cadmium	**0.00022J**	mg/L	0.00050	0.00013	1	05/01/23 09:00	05/01/23 14:37	7440-43-9	
Chromium	**0.00076J**	mg/L	0.0025	0.00050	1	05/01/23 09:00	05/01/23 14:37	7440-47-3	
Cobalt	**0.013**	mg/L	0.0025	0.00081	1	05/01/23 09:00	05/01/23 14:37	7440-48-4	
Copper	**0.0048**	mg/L	0.0025	0.00064	1	05/01/23 09:00	05/01/23 14:37	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/01/23 09:00	05/01/23 14:37	7439-92-1	
Nickel	**0.013**	mg/L	0.0025	0.00065	1	05/01/23 09:00	05/01/23 14:37	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/01/23 09:00	05/01/23 14:37	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/01/23 09:00	05/01/23 14:37	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/01/23 09:00	05/01/23 14:37	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/01/23 09:00	05/01/23 14:37	7440-62-2	
Zinc	**0.015**	mg/L	0.0050	0.0040	1	05/01/23 09:00	05/01/23 14:37	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00071**	mg/L	0.00020	0.00020	1	05/01/23 11:40	05/01/23 17:14	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/01/23 08:04	05/02/23 13:20	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/01/23 08:04	05/02/23 13:20	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	111	%.	60-140		1	05/01/23 08:04	05/02/23 13:20	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/01/23 15:40		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**69.0**	mg/L	10.0	10.0	1		05/01/23 15:52		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/02/23 07:28	05/02/23 10:48		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/04/23 13:25	05/04/23 16:25		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Sample: DUP-1 **Lab ID: 30581969005** Collected: 04/26/23 00:01 Received: 04/26/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**27.2**	mg/L	3.0	0.67	1		05/01/23 10:55	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**1.2**	mg/L	0.10	0.053	1		05/02/23 12:24	14797-55-8	
Nitrogen, NO2 plus NO3	**1.2**	mg/L	0.10	0.053	1		05/02/23 12:24		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.8**	mg/L	10.0	4.7	1		04/28/23 11:44	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/27/23 10:52	14797-65-0	

Sample: DUP-2 **Lab ID: 30581969006** Collected: 04/26/23 00:01 Received: 04/26/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**3.7**	mg/L	0.50	0.083	1	04/28/23 11:39	05/01/23 15:56	7440-70-2	
Iron	**0.036J**	mg/L	0.050	0.035	1	04/28/23 11:39	05/01/23 15:56	7439-89-6	
Magnesium	**2.3**	mg/L	0.50	0.047	1	04/28/23 11:39	05/01/23 15:56	7439-95-4	
Manganese	**0.051**	mg/L	0.0050	0.0027	1	04/28/23 11:39	05/01/23 15:56	7439-96-5	
Potassium	**1.0**	mg/L	0.50	0.26	1	04/28/23 11:39	05/01/23 15:56	7440-09-7	
Sodium	**4.0**	mg/L	0.50	0.34	1	04/28/23 11:39	05/01/23 15:56	7440-23-5	
Total Hardness	**18.5**	mg/L	3.3	0.27	1	04/28/23 11:39	05/01/23 15:56		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**3.5**	mg/L	0.50	0.083	1	04/28/23 11:50	05/01/23 15:11	7440-70-2	
Iron, Dissolved	**0.035J**	mg/L	0.050	0.035	1	04/28/23 11:50	05/01/23 15:11	7439-89-6	
Magnesium, Dissolved	**2.3**	mg/L	0.50	0.047	1	04/28/23 11:50	05/01/23 15:11	7439-95-4	
Manganese, Dissolved	**0.051**	mg/L	0.0050	0.0027	1	04/28/23 11:50	05/01/23 15:11	7439-96-5	
Potassium, Dissolved	**1.0**	mg/L	0.50	0.26	1	04/28/23 11:50	05/01/23 15:11	7440-09-7	
Sodium, Dissolved	**4.1**	mg/L	0.50	0.34	1	04/28/23 11:50	05/01/23 15:11	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/01/23 09:00	05/01/23 14:40	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/01/23 09:00	05/01/23 14:40	7440-38-2	
Barium	**0.078**	mg/L	0.0025	0.00098	1	05/01/23 09:00	05/01/23 14:40	7440-39-3	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Sample: DUP-2 **Lab ID: 30581969006** Collected: 04/26/23 00:01 Received: 04/26/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Beryllium	**0.00095**	mg/L	0.00050	0.00010	1	05/01/23 09:00	05/01/23 14:40	7440-41-7	
Cadmium	**0.00019J**	mg/L	0.00050	0.00013	1	05/01/23 09:00	05/01/23 14:40	7440-43-9	
Chromium	**0.0012J**	mg/L	0.0025	0.00050	1	05/01/23 09:00	05/01/23 14:40	7440-47-3	
Cobalt	**0.0095**	mg/L	0.0025	0.00081	1	05/01/23 09:00	05/01/23 14:40	7440-48-4	
Copper	**0.040**	mg/L	0.0025	0.00064	1	05/01/23 09:00	05/01/23 14:40	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/01/23 09:00	05/01/23 14:40	7439-92-1	
Nickel	**0.0093**	mg/L	0.0025	0.00065	1	05/01/23 09:00	05/01/23 14:40	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/01/23 09:00	05/01/23 14:40	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/01/23 09:00	05/01/23 14:40	7440-22-4	
Thallium	**0.00010J**	mg/L	0.00050	0.000081	1	05/01/23 09:00	05/01/23 14:40	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/01/23 09:00	05/01/23 14:40	7440-62-2	
Zinc	**0.015**	mg/L	0.0050	0.0040	1	05/01/23 09:00	05/01/23 14:40	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/01/23 11:40	05/01/23 17:16	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/01/23 08:04	05/02/23 13:33	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/01/23 08:04	05/02/23 13:33	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	109	%.	60-140		1	05/01/23 08:04	05/02/23 13:33	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**3.0J**	mg/L	10.0	1.0	1		05/01/23 15:42		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**44.0**	mg/L	10.0	10.0	1		05/01/23 15:52		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/02/23 07:28	05/02/23 10:50		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/04/23 13:25	05/04/23 16:25		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**9.8**	mg/L	3.0	0.67	1		05/01/23 10:56	16887-00-6	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Sample: DUP-2 **Lab ID: 30581969006** Collected: 04/26/23 00:01 Received: 04/26/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.73**	mg/L	0.10	0.053	1		05/02/23 12:25	14797-55-8	
Nitrogen, NO2 plus NO3	**0.80**	mg/L	0.10	0.053	1		05/02/23 12:25		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**4.8J**	mg/L	10.0	4.7	1		04/28/23 11:46	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.066**	mg/L	0.010	0.0055	1		04/27/23 10:55	14797-65-0	

Sample: Field Blank **Lab ID: 30581969007** Collected: 04/26/23 12:00 Received: 04/26/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.50 U**	mg/L	0.50	0.083	1	04/28/23 11:39	05/01/23 15:58	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	04/28/23 11:39	05/01/23 15:58	7439-89-6	
Magnesium	**0.50 U**	mg/L	0.50	0.047	1	04/28/23 11:39	05/01/23 15:58	7439-95-4	
Manganese	**0.0050 U**	mg/L	0.0050	0.0027	1	04/28/23 11:39	05/01/23 15:58	7439-96-5	
Potassium	**0.50 U**	mg/L	0.50	0.26	1	04/28/23 11:39	05/01/23 15:58	7440-09-7	
Sodium	**0.50 U**	mg/L	0.50	0.34	1	04/28/23 11:39	05/01/23 15:58	7440-23-5	
Total Hardness	**3.3 U**	mg/L	3.3	0.27	1	04/28/23 11:39	05/01/23 15:58		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.50 U**	mg/L	0.50	0.083	1	04/28/23 11:50	05/01/23 15:13	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	04/28/23 11:50	05/01/23 15:13	7439-89-6	
Magnesium, Dissolved	**0.50 U**	mg/L	0.50	0.047	1	04/28/23 11:50	05/01/23 15:13	7439-95-4	
Manganese, Dissolved	**0.0050 U**	mg/L	0.0050	0.0027	1	04/28/23 11:50	05/01/23 15:13	7439-96-5	
Potassium, Dissolved	**0.50 U**	mg/L	0.50	0.26	1	04/28/23 11:50	05/01/23 15:13	7440-09-7	
Sodium, Dissolved	**0.50 U**	mg/L	0.50	0.34	1	04/28/23 11:50	05/01/23 15:13	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/01/23 09:00	05/01/23 14:43	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/01/23 09:00	05/01/23 14:43	7440-38-2	
Barium	**0.0025 U**	mg/L	0.0025	0.00098	1	05/01/23 09:00	05/01/23 14:43	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	05/01/23 09:00	05/01/23 14:43	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/01/23 09:00	05/01/23 14:43	7440-43-9	
Chromium	**0.0025 U**	mg/L	0.0025	0.00050	1	05/01/23 09:00	05/01/23 14:43	7440-47-3	
Cobalt	**0.0025 U**	mg/L	0.0025	0.00081	1	05/01/23 09:00	05/01/23 14:43	7440-48-4	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Sample: Field Blank **Lab ID: 30581969007** Collected: 04/26/23 12:00 Received: 04/26/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Copper	**0.0025 U**	mg/L	0.0025	0.00064	1	05/01/23 09:00	05/01/23 14:43	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/01/23 09:00	05/01/23 14:43	7439-92-1	
Nickel	**0.0025 U**	mg/L	0.0025	0.00065	1	05/01/23 09:00	05/01/23 14:43	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/01/23 09:00	05/01/23 14:43	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/01/23 09:00	05/01/23 14:43	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/01/23 09:00	05/01/23 14:43	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/01/23 09:00	05/01/23 14:43	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0040	1	05/01/23 09:00	05/01/23 14:43	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/01/23 11:40	05/01/23 17:18	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		05/01/23 15:46		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		05/01/23 15:52		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/02/23 07:28	05/02/23 10:52		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**13.7J**	mg/L	25.0	4.7	1	05/04/23 13:25	05/04/23 16:26		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**3.0 U**	mg/L	3.0	0.67	1		05/01/23 10:57	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		05/02/23 12:27	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		05/02/23 12:27		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/28/23 11:49	14808-79-8	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Sample: Field Blank **Lab ID: 30581969007** Collected: 04/26/23 12:00 Received: 04/26/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/27/23 10:57	14797-65-0	

Sample: SW-1 **Lab ID: 30581969008** Collected: 04/26/23 10:00 Received: 04/26/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**13.6**	mg/L	0.50	0.083	1	04/28/23 11:39	05/01/23 16:00	7440-70-2	
Iron	**0.038J**	mg/L	0.050	0.035	1	04/28/23 11:39	05/01/23 16:00	7439-89-6	
Magnesium	**3.4**	mg/L	0.50	0.047	1	04/28/23 11:39	05/01/23 16:00	7439-95-4	
Manganese	**0.012**	mg/L	0.0050	0.0027	1	04/28/23 11:39	05/01/23 16:00	7439-96-5	
Potassium	**2.2**	mg/L	0.50	0.26	1	04/28/23 11:39	05/01/23 16:00	7440-09-7	
Sodium	**48.5**	mg/L	0.50	0.34	1	04/28/23 11:39	05/01/23 16:00	7440-23-5	
Total Hardness	**48.1**	mg/L	3.3	0.27	1	04/28/23 11:39	05/01/23 16:00		N3
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/01/23 09:00	05/01/23 14:46	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/01/23 09:00	05/01/23 14:46	7440-38-2	
Barium	**0.042**	mg/L	0.0025	0.00098	1	05/01/23 09:00	05/01/23 14:46	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	05/01/23 09:00	05/01/23 14:46	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/01/23 09:00	05/01/23 14:46	7440-43-9	
Chromium	**0.00065J**	mg/L	0.0025	0.00050	1	05/01/23 09:00	05/01/23 14:46	7440-47-3	
Cobalt	**0.0025 U**	mg/L	0.0025	0.00081	1	05/01/23 09:00	05/01/23 14:46	7440-48-4	
Copper	**0.00069J**	mg/L	0.0025	0.00064	1	05/01/23 09:00	05/01/23 14:46	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/01/23 09:00	05/01/23 14:46	7439-92-1	
Nickel	**0.0014J**	mg/L	0.0025	0.00065	1	05/01/23 09:00	05/01/23 14:46	7440-02-0	
Selenium	**0.00092J**	mg/L	0.0025	0.00084	1	05/01/23 09:00	05/01/23 14:46	7782-49-2	B
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/01/23 09:00	05/01/23 14:46	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/01/23 09:00	05/01/23 14:46	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/01/23 09:00	05/01/23 14:46	7440-62-2	
Zinc	**0.0071**	mg/L	0.0050	0.0040	1	05/01/23 09:00	05/01/23 14:46	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/01/23 11:40	05/01/23 17:21	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**20.0**	mg/L	10.0	1.0	1		05/01/23 15:48		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Sample: SW-1 **Lab ID: 30581969008** Collected: 04/26/23 10:00 Received: 04/26/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**179**	mg/L	10.0	10.0	1		05/01/23 15:52		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/02/23 07:28	05/02/23 10:54		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.9J**	mg/L	25.0	4.7	1	05/04/23 13:25	05/04/23 16:26		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**71.0**	mg/L	3.0	0.67	1		05/01/23 10:58	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**2.0**	mg/L	0.10	0.053	1		05/02/23 12:28	14797-55-8	
Nitrogen, NO2 plus NO3	**2.0**	mg/L	0.10	0.053	1		05/02/23 12:28		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**13.8**	mg/L	10.0	4.7	1		04/28/23 11:51	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/27/23 10:55	14797-65-0	

Sample: SW-2 **Lab ID: 30581969009** Collected: 04/26/23 11:30 Received: 04/26/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**26.0**	mg/L	0.50	0.083	1	04/28/23 11:39	05/01/23 16:02	7440-70-2	
Iron	**1.3**	mg/L	0.050	0.035	1	04/28/23 11:39	05/01/23 16:02	7439-89-6	
Magnesium	**5.7**	mg/L	0.50	0.047	1	04/28/23 11:39	05/01/23 16:02	7439-95-4	
Manganese	**0.043**	mg/L	0.0050	0.0027	1	04/28/23 11:39	05/01/23 16:02	7439-96-5	
Potassium	**4.0**	mg/L	0.50	0.26	1	04/28/23 11:39	05/01/23 16:02	7440-09-7	
Sodium	**16.8**	mg/L	0.50	0.34	1	04/28/23 11:39	05/01/23 16:02	7440-23-5	
Total Hardness	**88.3**	mg/L	3.3	0.27	1	04/28/23 11:39	05/01/23 16:02		N3

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Sample: SW-2 **Lab ID: 30581969009** Collected: 04/26/23 11:30 Received: 04/26/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/01/23 09:00	05/01/23 14:50	7440-36-0	
Arsenic	**0.0011J**	mg/L	0.0025	0.00044	1	05/01/23 09:00	05/01/23 14:50	7440-38-2	
Barium	**0.025**	mg/L	0.0025	0.00098	1	05/01/23 09:00	05/01/23 14:50	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	05/01/23 09:00	05/01/23 14:50	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/01/23 09:00	05/01/23 14:50	7440-43-9	
Chromium	**0.0013J**	mg/L	0.0025	0.00050	1	05/01/23 09:00	05/01/23 14:50	7440-47-3	
Cobalt	**0.00091J**	mg/L	0.0025	0.00081	1	05/01/23 09:00	05/01/23 14:50	7440-48-4	
Copper	**0.0017J**	mg/L	0.0025	0.00064	1	05/01/23 09:00	05/01/23 14:50	7440-50-8	
Lead	**0.00034J**	mg/L	0.00050	0.00025	1	05/01/23 09:00	05/01/23 14:50	7439-92-1	
Nickel	**0.0056**	mg/L	0.0025	0.00065	1	05/01/23 09:00	05/01/23 14:50	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/01/23 09:00	05/01/23 14:50	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/01/23 09:00	05/01/23 14:50	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/01/23 09:00	05/01/23 14:50	7440-28-0	
Vanadium	**0.0021J**	mg/L	0.0025	0.0012	1	05/01/23 09:00	05/01/23 14:50	7440-62-2	
Zinc	**0.0067**	mg/L	0.0050	0.0040	1	05/01/23 09:00	05/01/23 14:50	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/01/23 11:40	05/01/23 17:28	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**64.0**	mg/L	10.0	1.0	1		05/01/23 15:50		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**139**	mg/L	10.0	10.0	1		05/01/23 15:52		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/02/23 07:28	05/02/23 10:56		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**36.5**	mg/L	25.0	4.7	1	05/04/23 13:25	05/04/23 16:26		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**24.9**	mg/L	3.0	0.67	1		05/01/23 10:59	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.096J**	mg/L	0.10	0.053	1		05/02/23 12:32	14797-55-8	
Nitrogen, NO2 plus NO3	**0.098J**	mg/L	0.10	0.053	1		05/02/23 12:32		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Sample: SW-2 **Lab ID: 30581969009** Collected: 04/26/23 11:30 Received: 04/26/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**11.8**	mg/L	10.0	4.7	1		04/28/23 11:51	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/27/23 10:56	14797-65-0	

Sample: SW-3 **Lab ID: 30581969010** Collected: 04/26/23 11:00 Received: 04/26/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**31.2**	mg/L	0.50	0.083	1	04/28/23 11:39	05/01/23 16:08	7440-70-2	
Iron	**0.76**	mg/L	0.050	0.035	1	04/28/23 11:39	05/01/23 16:08	7439-89-6	
Magnesium	**6.5**	mg/L	0.50	0.047	1	04/28/23 11:39	05/01/23 16:08	7439-95-4	
Manganese	**0.030**	mg/L	0.0050	0.0027	1	04/28/23 11:39	05/01/23 16:08	7439-96-5	
Potassium	**4.1**	mg/L	0.50	0.26	1	04/28/23 11:39	05/01/23 16:08	7440-09-7	
Sodium	**13.8**	mg/L	0.50	0.34	1	04/28/23 11:39	05/01/23 16:08	7440-23-5	
Total Hardness	**105**	mg/L	3.3	0.27	1	04/28/23 11:39	05/01/23 16:08		N3
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/01/23 09:00	05/01/23 14:53	7440-36-0	
Arsenic	**0.0011J**	mg/L	0.0025	0.00044	1	05/01/23 09:00	05/01/23 14:53	7440-38-2	
Barium	**0.025**	mg/L	0.0025	0.00098	1	05/01/23 09:00	05/01/23 14:53	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	05/01/23 09:00	05/01/23 14:53	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/01/23 09:00	05/01/23 14:53	7440-43-9	
Chromium	**0.0019J**	mg/L	0.0025	0.00050	1	05/01/23 09:00	05/01/23 14:53	7440-47-3	
Cobalt	**0.0015J**	mg/L	0.0025	0.00081	1	05/01/23 09:00	05/01/23 14:53	7440-48-4	
Copper	**0.0045**	mg/L	0.0025	0.00064	1	05/01/23 09:00	05/01/23 14:53	7440-50-8	
Lead	**0.00077**	mg/L	0.00050	0.00025	1	05/01/23 09:00	05/01/23 14:53	7439-92-1	
Nickel	**0.0047**	mg/L	0.0025	0.00065	1	05/01/23 09:00	05/01/23 14:53	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/01/23 09:00	05/01/23 14:53	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/01/23 09:00	05/01/23 14:53	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/01/23 09:00	05/01/23 14:53	7440-28-0	
Vanadium	**0.0042**	mg/L	0.0025	0.0012	1	05/01/23 09:00	05/01/23 14:53	7440-62-2	
Zinc	**0.0068**	mg/L	0.0050	0.0040	1	05/01/23 09:00	05/01/23 14:53	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/01/23 11:40	05/01/23 17:30	7439-97-6	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Sample: SW-3 **Lab ID: 30581969010** Collected: 04/26/23 11:00 Received: 04/26/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**80.0**	mg/L	10.0	1.0	1		05/01/23 15:52		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**153**	mg/L	10.0	10.0	1		05/01/23 15:52		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/02/23 07:28	05/02/23 10:58		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**47.8**	mg/L	25.0	4.7	1	05/05/23 11:51	05/05/23 14:53		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**19.7**	mg/L	3.0	0.67	1		05/01/23 11:00	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.11**	mg/L	0.10	0.053	1		05/02/23 12:36	14797-55-8	
Nitrogen, NO2 plus NO3	**0.11**	mg/L	0.10	0.053	1		05/02/23 12:36		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**11.9**	mg/L	10.0	4.7	1		04/28/23 11:53	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.0056J**	mg/L	0.010	0.0055	1		04/27/23 10:56	14797-65-0	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30581969

QC Batch: 584420
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30581969001, 30581969002, 30581969003, 30581969004, 30581969005, 30581969006, 30581969007, 30581969008, 30581969009, 30581969010

METHOD BLANK: 2837910 Matrix: Water
Associated Lab Samples: 30581969001, 30581969002, 30581969003, 30581969004, 30581969005, 30581969006, 30581969007, 30581969008, 30581969009, 30581969010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	05/01/23 15:28	
Iron	mg/L	0.050 U	0.050	0.035	05/01/23 15:28	
Magnesium	mg/L	0.50 U	0.50	0.047	05/01/23 15:28	
Manganese	mg/L	0.0050 U	0.0050	0.0027	05/01/23 15:28	
Potassium	mg/L	0.50 U	0.50	0.26	05/01/23 15:28	
Sodium	mg/L	0.50 U	0.50	0.34	05/01/23 15:28	

LABORATORY CONTROL SAMPLE: 2837911

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	41.8	104	80-120	
Iron	mg/L	2	2.2	110	80-120	
Magnesium	mg/L	20	21.5	108	80-120	
Manganese	mg/L	2	2.1	107	80-120	
Potassium	mg/L	20	21.4	107	80-120	
Sodium	mg/L	20	20.9	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2837957 2837958

Parameter	Units	30581969001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	5.1	40	40	47.1	47.2	105	105	80-120	0	20	
Iron	mg/L	0.050 U	2	2	2.2	2.2	110	110	80-120	0	20	
Magnesium	mg/L	4.9	20	20	26.6	26.5	109	108	80-120	0	20	
Manganese	mg/L	0.065	2	2	2.2	2.2	107	108	80-120	0	20	
Potassium	mg/L	1.4	20	20	23.4	23.5	110	110	80-120	0	20	
Sodium	mg/L	13.7	20	20	35.5	35.5	109	109	80-120	0	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30581969

QC Batch: 584416
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30581969001, 30581969002, 30581969003, 30581969004, 30581969005, 30581969006, 30581969007

METHOD BLANK: 2837902 Matrix: Water
Associated Lab Samples: 30581969001, 30581969002, 30581969003, 30581969004, 30581969005, 30581969006, 30581969007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	05/01/23 14:25	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	05/01/23 14:25	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	05/01/23 14:25	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	05/01/23 14:25	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	05/01/23 14:25	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	05/01/23 14:25	

LABORATORY CONTROL SAMPLE: 2837903

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	41.7	104	80-120	
Iron, Dissolved	mg/L	2	2.2	110	80-120	
Magnesium, Dissolved	mg/L	20	21.4	107	80-120	
Manganese, Dissolved	mg/L	2	2.1	107	80-120	
Potassium, Dissolved	mg/L	20	21.1	106	80-120	
Sodium, Dissolved	mg/L	20	21.0	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2837904 2837905

Parameter	Units	30578499006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	85800 ug/L	40	40	129	127	108	104	80-120	1	20	
Iron, Dissolved	mg/L	0.050 U	2	2	2.2	2.2	110	109	80-120	0	20	
Magnesium, Dissolved	mg/L	25600 ug/L	20	20	48.1	47.6	113	110	80-120	1	20	
Manganese, Dissolved	mg/L	0.19	2	2	2.3	2.3	107	106	80-120	1	20	
Potassium, Dissolved	mg/L	2280 ug/L	20	20	25.1	24.9	114	113	80-120	1	20	
Sodium, Dissolved	mg/L	29700 ug/L	20	20	52.7	52.0	115	112	80-120	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30581969

QC Batch: 584701
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30581969001, 30581969002, 30581969003, 30581969004, 30581969005, 30581969006, 30581969007, 30581969008, 30581969009, 30581969010

METHOD BLANK: 2839526
Matrix: Water
Associated Lab Samples: 30581969001, 30581969002, 30581969003, 30581969004, 30581969005, 30581969006, 30581969007, 30581969008, 30581969009, 30581969010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00044J	0.00050	0.00030	05/01/23 14:00	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	05/01/23 14:00	
Barium	mg/L	0.0025 U	0.0025	0.00098	05/01/23 14:00	
Beryllium	mg/L	0.00050 U	0.00050	0.00010	05/01/23 14:00	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	05/01/23 14:00	
Chromium	mg/L	0.0025 U	0.0025	0.00050	05/01/23 14:00	
Cobalt	mg/L	0.0025 U	0.0025	0.00081	05/01/23 14:00	
Copper	mg/L	0.0025 U	0.0025	0.00064	05/01/23 14:00	
Lead	mg/L	0.00050 U	0.00050	0.00025	05/01/23 14:00	
Nickel	mg/L	0.0025 U	0.0025	0.00065	05/01/23 14:00	
Selenium	mg/L	0.0025 U	0.0025	0.00084	05/01/23 14:00	
Silver	mg/L	0.0025 U	0.0025	0.00053	05/01/23 14:00	
Thallium	mg/L	0.00050 U	0.00050	0.000081	05/01/23 14:00	
Vanadium	mg/L	0.0025 U	0.0025	0.0012	05/01/23 14:00	
Zinc	mg/L	0.0050 U	0.0050	0.0040	05/01/23 14:00	

LABORATORY CONTROL SAMPLE: 2839527

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.021	107	80-120	
Arsenic	mg/L	0.1	0.10	104	80-120	
Barium	mg/L	0.1	0.10	104	80-120	
Beryllium	mg/L	0.02	0.021	103	80-120	
Cadmium	mg/L	0.02	0.020	100	80-120	
Chromium	mg/L	0.1	0.11	106	80-120	
Cobalt	mg/L	0.1	0.11	106	80-120	
Copper	mg/L	0.1	0.11	106	80-120	
Lead	mg/L	0.02	0.020	102	80-120	
Nickel	mg/L	0.1	0.11	105	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	
Silver	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.02	0.020	101	80-120	
Vanadium	mg/L	0.1	0.10	105	80-120	
Zinc	mg/L	0.2	0.21	104	80-120	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30581969

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2839528 2839529

Parameter	Units	30581969001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00050 U	0.02	0.02	0.021	0.021	106	105	75-125	1	20	
Arsenic	mg/L	0.0025 U	0.1	0.1	0.10	0.10	102	104	75-125	1	20	
Barium	mg/L	0.10	0.1	0.1	0.20	0.20	99	101	75-125	1	20	
Beryllium	mg/L	0.00014J	0.02	0.02	0.020	0.021	102	102	75-125	1	20	
Cadmium	mg/L	0.00026J	0.02	0.02	0.020	0.020	99	100	75-125	1	20	
Chromium	mg/L	0.00078J	0.1	0.1	0.11	0.11	107	105	75-125	1	20	
Cobalt	mg/L	0.013	0.1	0.1	0.12	0.12	107	105	75-125	1	20	
Copper	mg/L	0.0049	0.1	0.1	0.11	0.11	108	106	75-125	2	20	
Lead	mg/L	0.00050 U	0.02	0.02	0.020	0.020	102	102	75-125	0	20	
Nickel	mg/L	0.014	0.1	0.1	0.12	0.12	106	106	75-125	0	20	
Selenium	mg/L	0.0025 U	0.1	0.1	0.098	0.099	98	98	75-125	1	20	
Silver	mg/L	0.0025 U	0.1	0.1	0.10	0.10	100	100	75-125	1	20	
Thallium	mg/L	0.00050 U	0.02	0.02	0.013	0.013	66	66	75-125	1	20	M1
Vanadium	mg/L	0.0025 U	0.1	0.1	0.11	0.11	107	105	75-125	1	20	
Zinc	mg/L	0.016	0.2	0.2	0.22	0.22	102	103	75-125	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30581969

QC Batch: 584792
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30581969001, 30581969002, 30581969003, 30581969004, 30581969005, 30581969006, 30581969007, 30581969008, 30581969009, 30581969010

METHOD BLANK: 2839916
Matrix: Water
Associated Lab Samples: 30581969001, 30581969002, 30581969003, 30581969004, 30581969005, 30581969006, 30581969007, 30581969008, 30581969009, 30581969010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	05/01/23 16:50	

LABORATORY CONTROL SAMPLE: 2839917

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.011	108	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2839918 2839919

Parameter	Units	30581969001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00069	0.01	0.01	0.011	0.011	101	100	80-120	0	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30581969

QC Batch: 584692
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30581969001, 30581969002, 30581969003, 30581969004, 30581969005, 30581969006

METHOD BLANK: 2839505 Matrix: Water
Associated Lab Samples: 30581969001, 30581969002, 30581969003, 30581969004, 30581969005, 30581969006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	05/02/23 11:13	CH
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	05/02/23 11:13	CH
1,1,1,2-Tetrachloroethane (S)	%.	107	60-140		05/02/23 11:13	CH

LABORATORY CONTROL SAMPLE: 2839506

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.28	111	85-115	CH
1,2-Dibromoethane (EDB)	ug/L	0.25	0.25	101	85-115	CH
1,1,1,2-Tetrachloroethane (S)	%.			112	60-140	CH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2839507 2839508

Parameter	Units	30581697001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	ND	0.4	0.4	0.44	0.44	110	108	60-140	1	25	CH
1,2-Dibromoethane (EDB)	ug/L	ND	0.4	0.4	0.40	0.40	100	100	60-140	0	25	CH
1,1,1,2-Tetrachloroethane (S)	%.						102	106	60-140			CH

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30581969

QC Batch: 584791
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30581969001, 30581969002, 30581969003, 30581969004, 30581969005, 30581969006, 30581969007, 30581969008, 30581969009, 30581969010

METHOD BLANK: 2839911
Matrix: Water
Associated Lab Samples: 30581969001, 30581969002, 30581969003, 30581969004, 30581969005, 30581969006, 30581969007, 30581969008, 30581969009, 30581969010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	05/01/23 14:24	

LABORATORY CONTROL SAMPLE: 2839912

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	21.0	105	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2839913 2839914

Parameter	Units	30582011001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	134	50	50	172	172	76	76	85-115	0	20	ML

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30581969

QC Batch: 584682
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30581969001, 30581969002, 30581969003, 30581969004, 30581969005, 30581969006, 30581969007, 30581969008, 30581969009, 30581969010

METHOD BLANK: 2839463 Matrix: Water
Associated Lab Samples: 30581969001, 30581969002, 30581969003, 30581969004, 30581969005, 30581969006, 30581969007, 30581969008, 30581969009, 30581969010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	05/01/23 15:52	

LABORATORY CONTROL SAMPLE: 2839464

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	978	98	85-115	

SAMPLE DUPLICATE: 2839465

Parameter	Units	30581969001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	90.0	87.0	3	5	

SAMPLE DUPLICATE: 2839466

Parameter	Units	30581969009 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	139	135	3	5	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30581969

QC Batch: 584636
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30581969001

METHOD BLANK: 2839230 Matrix: Water
Associated Lab Samples: 30581969001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	05/02/23 09:35	

LABORATORY CONTROL SAMPLE: 2839231

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2839232 2839233

Parameter	Units	30581629002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	ND	4	4	4.1	4.1	102	102	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2839234 2839235

Parameter	Units	30581845002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	7.9	4	4	11.7	11.7	95	94	90-110	0	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30581969

QC Batch: 584637
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30581969002, 30581969003, 30581969004, 30581969005, 30581969006, 30581969007, 30581969008, 30581969009, 30581969010

METHOD BLANK: 2839236 Matrix: Water
Associated Lab Samples: 30581969002, 30581969003, 30581969004, 30581969005, 30581969006, 30581969007, 30581969008, 30581969009, 30581969010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	05/02/23 10:33	

METHOD BLANK: 2839237 Matrix: Water
Associated Lab Samples: 30581969002, 30581969003, 30581969004, 30581969005, 30581969006, 30581969007, 30581969008, 30581969009, 30581969010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	05/02/23 13:47	

LABORATORY CONTROL SAMPLE: 2839238

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2839239 2839240

Parameter	Units	30581969002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	3.9	3.9	98	99	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2839241 2839242

Parameter	Units	30582429002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.0	4.0	101	101	90-110	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30581969

QC Batch: 585751
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30581969001, 30581969002, 30581969003, 30581969004, 30581969005, 30581969006, 30581969007, 30581969008, 30581969009

METHOD BLANK: 2845136 Matrix: Water
Associated Lab Samples: 30581969001, 30581969002, 30581969003, 30581969004, 30581969005, 30581969006, 30581969007, 30581969008, 30581969009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	05/04/23 16:20	

METHOD BLANK: 2845138 Matrix: Water
Associated Lab Samples: 30581969001, 30581969002, 30581969003, 30581969004, 30581969005, 30581969006, 30581969007, 30581969008, 30581969009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	05/04/23 16:21	

LABORATORY CONTROL SAMPLE: 2845137

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	303	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2845142 2845143

Parameter	Units	30581969008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	6.9J	150	150	162	162	103	103	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2845329 2845330

Parameter	Units	30583519003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	54.7	150	150	203	203	99	99	90-110	0	10	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30581969

QC Batch: 586058
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30581969010

METHOD BLANK: 2847022 Matrix: Water
Associated Lab Samples: 30581969010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	05/05/23 14:52	

METHOD BLANK: 2847024 Matrix: Water
Associated Lab Samples: 30581969010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	05/05/23 14:52	5c

LABORATORY CONTROL SAMPLE: 2847023

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	296	99	90-110	

LABORATORY CONTROL SAMPLE: 2847025

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	310	103	90-110	5c

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2847026 2847027

Parameter	Units	30581969010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	47.8	150	150	193	191	97	96	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2847028 2847029

Parameter	Units	30584144001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	ND	150	150	157	155	105	103	90-110	1	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30581969

QC Batch: 584642
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30581969001, 30581969002, 30581969003, 30581969004, 30581969005, 30581969006, 30581969007, 30581969008, 30581969009, 30581969010

METHOD BLANK: 2839255
Matrix: Water
Associated Lab Samples: 30581969001, 30581969002, 30581969003, 30581969004, 30581969005, 30581969006, 30581969007, 30581969008, 30581969009, 30581969010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/01/23 10:41	

LABORATORY CONTROL SAMPLE: 2839256

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	19.1	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2839257 2839258

Parameter	Units	30581779001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	31.6	20	20	50.5	49.6	94	90	85-115	2	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30581969

QC Batch: 584816 | Analysis Method: SM 4500NO3-F-2016
QC Batch Method: SM 4500NO3-F-2016 | Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30581969001, 30581969002, 30581969003, 30581969004, 30581969005, 30581969006, 30581969007, 30581969008, 30581969009, 30581969010

METHOD BLANK: 2839971 | Matrix: Water
Associated Lab Samples: 30581969001, 30581969002, 30581969003, 30581969004, 30581969005, 30581969006, 30581969007, 30581969008, 30581969009, 30581969010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	05/02/23 12:10	

LABORATORY CONTROL SAMPLE: 2839972

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	3.9	97	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2839973 2839974

Parameter	Units	30581969001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	1.2	5	5	6.4	6.4	106	104	85-115	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2841258 2841259

Parameter	Units	30581969009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.098J	5	5	5.4	5.3	106	104	85-115	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30581969

QC Batch: 584368
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30581969001, 30581969002, 30581969003, 30581969004, 30581969005, 30581969006, 30581969007, 30581969008, 30581969009, 30581969010

METHOD BLANK: 2837756
Matrix: Water
Associated Lab Samples: 30581969001, 30581969002, 30581969003, 30581969004, 30581969005, 30581969006, 30581969007, 30581969008, 30581969009, 30581969010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	04/28/23 11:34	

LABORATORY CONTROL SAMPLE: 2837757

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	30.1	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2837758 2837759

Parameter	Units	30581969001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	11.5	20	20	33.8	33.2	112	109	85-115	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2837866 2837867

Parameter	Units	30582130001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	28300	20000	20000	56800	56500	143	141	85-115	1	20	MH

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30581969

QC Batch: 584039
QC Batch Method: SM 4500NO2-B-2011
Analysis Method: SM 4500NO2-B-2011
Analysis Description: SM4500-NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30581969001, 30581969002, 30581969003, 30581969004, 30581969005, 30581969006, 30581969007, 30581969008, 30581969009, 30581969010

METHOD BLANK: 2836153
Matrix: Water
Associated Lab Samples: 30581969001, 30581969002, 30581969003, 30581969004, 30581969005, 30581969006, 30581969007, 30581969008, 30581969009, 30581969010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	04/27/23 10:48	

LABORATORY CONTROL SAMPLE: 2836154

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.10	100	90-110	

MATRIX SPIKE SAMPLE: 2836209

Parameter	Units	30581969005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.010 U	0.1	0.10	101	85-115	

SAMPLE DUPLICATE: 2836210

Parameter	Units	30581969005 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010 U		20	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: MLF-SPRING 2023
Pace Project No.: 30581969

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30581969001
[1] Sample pH for 8011 is 5

Sample: 30581969002
[1] Sample pH for 8011 is 6

Sample: 30581969003
[1] Sample pH for 8011 is 5

Sample: 30581969004
[1] Sample pH for 8011 is 5

Sample: 30581969005
[1] Sample pH for 8011 is 5

Sample: 30581969006
[1] Sample pH for 8011 is 5

ANALYTE QUALIFIERS

1c Alkalinity TV: 0.00 mg/L
2c Alkalinity TV: 2.00 mg/L
3c Alkalinity TV: 3.00 mg/L

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QUALIFIERS

Project: MLF-SPRING 2023
Pace Project No.: 30581969

ANALYTE QUALIFIERS

4c	Alkalinity TV: 4.00 mg/L
5c	pH adjusted to <2 in lab at bench prior to analysis
B	Analyte was detected in the associated method blank.
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30581969001	**TW-24**	EPA 3010A	584420	EPA 6010D	584885
30581969002	**TW-24A**	EPA 3010A	584420	EPA 6010D	584885
30581969003	**TW-25**	EPA 3010A	584420	EPA 6010D	584885
30581969004	**TW-25A**	EPA 3010A	584420	EPA 6010D	584885
30581969005	**DUP-1**	EPA 3010A	584420	EPA 6010D	584885
30581969006	**DUP-2**	EPA 3010A	584420	EPA 6010D	584885
30581969007	**Field Blank**	EPA 3010A	584420	EPA 6010D	584885
30581969008	**SW-1**	EPA 3010A	584420	EPA 6010D	584885
30581969009	**SW-2**	EPA 3010A	584420	EPA 6010D	584885
30581969010	**SW-3**	EPA 3010A	584420	EPA 6010D	584885
30581969001	**TW-24**	EPA 3010A	584416	EPA 6010D	584884
30581969002	**TW-24A**	EPA 3010A	584416	EPA 6010D	584884
30581969003	**TW-25**	EPA 3010A	584416	EPA 6010D	584884
30581969004	**TW-25A**	EPA 3010A	584416	EPA 6010D	584884
30581969005	**DUP-1**	EPA 3010A	584416	EPA 6010D	584884
30581969006	**DUP-2**	EPA 3010A	584416	EPA 6010D	584884
30581969007	**Field Blank**	EPA 3010A	584416	EPA 6010D	584884
30581969001	**TW-24**	EPA 3010A	584701	EPA 6020B	584849
30581969002	**TW-24A**	EPA 3010A	584701	EPA 6020B	584849
30581969003	**TW-25**	EPA 3010A	584701	EPA 6020B	584849
30581969004	**TW-25A**	EPA 3010A	584701	EPA 6020B	584849
30581969005	**DUP-1**	EPA 3010A	584701	EPA 6020B	584849
30581969006	**DUP-2**	EPA 3010A	584701	EPA 6020B	584849
30581969007	**Field Blank**	EPA 3010A	584701	EPA 6020B	584849
30581969008	**SW-1**	EPA 3010A	584701	EPA 6020B	584849
30581969009	**SW-2**	EPA 3010A	584701	EPA 6020B	584849
30581969010	**SW-3**	EPA 3010A	584701	EPA 6020B	584849
30581969001	**TW-24**	EPA 7470A	584792	EPA 7470A	584903
30581969002	**TW-24A**	EPA 7470A	584792	EPA 7470A	584903
30581969003	**TW-25**	EPA 7470A	584792	EPA 7470A	584903
30581969004	**TW-25A**	EPA 7470A	584792	EPA 7470A	584903
30581969005	**DUP-1**	EPA 7470A	584792	EPA 7470A	584903
30581969006	**DUP-2**	EPA 7470A	584792	EPA 7470A	584903
30581969007	**Field Blank**	EPA 7470A	584792	EPA 7470A	584903
30581969008	**SW-1**	EPA 7470A	584792	EPA 7470A	584903
30581969009	**SW-2**	EPA 7470A	584792	EPA 7470A	584903
30581969010	**SW-3**	EPA 7470A	584792	EPA 7470A	584903
30581969001	**TW-24**	EPA 8011	584692	EPA 8011	584733
30581969002	**TW-24A**	EPA 8011	584692	EPA 8011	584733
30581969003	**TW-25**	EPA 8011	584692	EPA 8011	584733
30581969004	**TW-25A**	EPA 8011	584692	EPA 8011	584733
30581969005	**DUP-1**	EPA 8011	584692	EPA 8011	584733
30581969006	**DUP-2**	EPA 8011	584692	EPA 8011	584733
30581969001	**TW-24**	SM 2320B-2011	584791		
30581969002	**TW-24A**	SM 2320B-2011	584791		
30581969003	**TW-25**	SM 2320B-2011	584791		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30581969004	**TW-25A**	SM 2320B-2011	584791		
30581969005	**DUP-1**	SM 2320B-2011	584791		
30581969006	**DUP-2**	SM 2320B-2011	584791		
30581969007	**Field Blank**	SM 2320B-2011	584791		
30581969008	**SW-1**	SM 2320B-2011	584791		
30581969009	**SW-2**	SM 2320B-2011	584791		
30581969010	**SW-3**	SM 2320B-2011	584791		
30581969001	**TW-24**	SM 2540C-2015	584682		
30581969002	**TW-24A**	SM 2540C-2015	584682		
30581969003	**TW-25**	SM 2540C-2015	584682		
30581969004	**TW-25A**	SM 2540C-2015	584682		
30581969005	**DUP-1**	SM 2540C-2015	584682		
30581969006	**DUP-2**	SM 2540C-2015	584682		
30581969007	**Field Blank**	SM 2540C-2015	584682		
30581969008	**SW-1**	SM 2540C-2015	584682		
30581969009	**SW-2**	SM 2540C-2015	584682		
30581969010	**SW-3**	SM 2540C-2015	584682		
30581969001	**TW-24**	EPA 350.1	584636	EPA 350.1	584983
30581969002	**TW-24A**	EPA 350.1	584637	EPA 350.1	584985
30581969003	**TW-25**	EPA 350.1	584637	EPA 350.1	584985
30581969004	**TW-25A**	EPA 350.1	584637	EPA 350.1	584985
30581969005	**DUP-1**	EPA 350.1	584637	EPA 350.1	584985
30581969006	**DUP-2**	EPA 350.1	584637	EPA 350.1	584985
30581969007	**Field Blank**	EPA 350.1	584637	EPA 350.1	584985
30581969008	**SW-1**	EPA 350.1	584637	EPA 350.1	584985
30581969009	**SW-2**	EPA 350.1	584637	EPA 350.1	584985
30581969010	**SW-3**	EPA 350.1	584637	EPA 350.1	584985
30581969001	**TW-24**	EPA 410.4	585751	EPA 410.4	585863
30581969002	**TW-24A**	EPA 410.4	585751	EPA 410.4	585863
30581969003	**TW-25**	EPA 410.4	585751	EPA 410.4	585863
30581969004	**TW-25A**	EPA 410.4	585751	EPA 410.4	585863
30581969005	**DUP-1**	EPA 410.4	585751	EPA 410.4	585863
30581969006	**DUP-2**	EPA 410.4	585751	EPA 410.4	585863
30581969007	**Field Blank**	EPA 410.4	585751	EPA 410.4	585863
30581969008	**SW-1**	EPA 410.4	585751	EPA 410.4	585863
30581969009	**SW-2**	EPA 410.4	585751	EPA 410.4	585863
30581969010	**SW-3**	EPA 410.4	586058	EPA 410.4	586123
30581969001	**TW-24**	SM 4500-Cl-E-2011	584642		
30581969002	**TW-24A**	SM 4500-Cl-E-2011	584642		
30581969003	**TW-25**	SM 4500-Cl-E-2011	584642		
30581969004	**TW-25A**	SM 4500-Cl-E-2011	584642		
30581969005	**DUP-1**	SM 4500-Cl-E-2011	584642		
30581969006	**DUP-2**	SM 4500-Cl-E-2011	584642		
30581969007	**Field Blank**	SM 4500-Cl-E-2011	584642		
30581969008	**SW-1**	SM 4500-Cl-E-2011	584642		
30581969009	**SW-2**	SM 4500-Cl-E-2011	584642		

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2023
Pace Project No.: 30581969

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30581969010	**SW-3**	SM 4500-Cl-E-2011	584642		
30581969001	**TW-24**	SM 4500NO3-F-2016	584816		
30581969002	**TW-24A**	SM 4500NO3-F-2016	584816		
30581969003	**TW-25**	SM 4500NO3-F-2016	584816		
30581969004	**TW-25A**	SM 4500NO3-F-2016	584816		
30581969005	**DUP-1**	SM 4500NO3-F-2016	584816		
30581969006	**DUP-2**	SM 4500NO3-F-2016	584816		
30581969007	**Field Blank**	SM 4500NO3-F-2016	584816		
30581969008	**SW-1**	SM 4500NO3-F-2016	584816		
30581969009	**SW-2**	SM 4500NO3-F-2016	584816		
30581969010	**SW-3**	SM 4500NO3-F-2016	584816		
30581969001	**TW-24**	EPA 9038	584368		
30581969002	**TW-24A**	EPA 9038	584368		
30581969003	**TW-25**	EPA 9038	584368		
30581969004	**TW-25A**	EPA 9038	584368		
30581969005	**DUP-1**	EPA 9038	584368		
30581969006	**DUP-2**	EPA 9038	584368		
30581969007	**Field Blank**	EPA 9038	584368		
30581969008	**SW-1**	EPA 9038	584368		
30581969009	**SW-2**	EPA 9038	584368		
30581969010	**SW-3**	EPA 9038	584368		
30581969001	**TW-24**	SM 4500NO2-B-2011	584039		
30581969002	**TW-24A**	SM 4500NO2-B-2011	584039		
30581969003	**TW-25**	SM 4500NO2-B-2011	584039		
30581969004	**TW-25A**	SM 4500NO2-B-2011	584039		
30581969005	**DUP-1**	SM 4500NO2-B-2011	584039		
30581969006	**DUP-2**	SM 4500NO2-B-2011	584039		
30581969007	**Field Blank**	SM 4500NO2-B-2011	584039		
30581969008	**SW-1**	SM 4500NO2-B-2011	584039		
30581969009	**SW-2**	SM 4500NO2-B-2011	584039		
30581969010	**SW-3**	SM 4500NO2-B-2011	584039		

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WO#: 30581969

30581969

1 of 2

EMA E ... D ASSESSMENT, LLC

207 East Sixth Stree ... sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF-SPRING 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

		Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals ①	Total + Diss. Metals ②	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO4, COD		Method 8011 - DBCP+EDB			
001	1	TW-24	7	4-26-23	1410	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓			
002	2	TW-24A	↓	↓	1445	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
003	3	TW-25	↓	↓	1330	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
004	4	TW-25A	↓	↓	1250	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
005	5	Dup-1	↓	↓	—	↓		QA	↓	↓	↓	↓	↓	↓	↓		↓			
006	6	Dup-2	↓	↓	—	↓		QA	↓	↓	↓	↓	↓	↓	↓		↓			
007	7	FIELD BLANK	4	↓	1200	↓		QA	↓	↓	↓	↓	↓	↓	↓					
	8																			
	9																			
	10																			
	11																			
	12																			

	Signature	Date	Time	Comments
Relinquished by	DA Brown	4-26-23	1500	① 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn
Received by	TB/Pace	4-26-23	1500	① 7470 - Hg
Relinquished by	TB/Pace	4-26-23	1750	② 6010 - Ca, Fe, Mg, Mn, K, Na
Received by	RDS PACE	4-26-23	1810	PACE - WU - METALS
Relinquished by	RDS PACE	4-26-23	2210	PACE - G - BURL - WET CHEM + 8011
Received by	PACE	4/26/23	2210	LEVEL 2 REPORT

Cooler Temp on Arrival: 1.6 12.6 Deg. C

Rev. Aug. 2018

2 of 2 SW

WO#: 30581969

PM: ARG Due Date: 05/11/23
CLIENT: ENV MONITOR

EMA ENVIRONMENTAL ASSESSMENT, LLC

207 East Sixth Street
sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - SPRING 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

		Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	TOTAL METALS ①	ALKALINITY	TDS	HARDNESS, Cl	AMMONIA	NITRATE	SO4, COD				
008	1	SW-1	3	4-26-23	1000	✓		SW	✓	✓	✓	✓	✓	✓	✓				
009	2	SW-2	3	↓	1130	✓		↓	↓	↓	↓	↓	↓	↓	↓				
010	3	SW-3	3	↓	1100	✓		↓	↓	↓	↓	↓	↓	↓	↓				
	4																		
	5																		
	6																		
	7																		
	8																		
	9																		
	10																		
	11																		
	12																		

	Signature	Date	Time	Comments
Relinquished by	A Brown	4-26-23	1500	① 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn
Received by	~~TB/Pace~~ TB/Pace	4-26-23	1500	① 6010 - Ca, Fe, Mg, Mn, K, Na
Relinquished by	TB/Pace	4-26-23	1750	① 7470 - Hg
Received by	RDS PACE	4-26-23	1810	PACE - WV - METALS
Relinquished by	RDS PACE	4-26-23	2210	PACE - G - BULK - WET CHEM + BOIL
Received by	Thomas Kunst PACE	4/26/23	2210	LEVEL 2 REPORT

Cooler Temp on Arrival: ~~1.6~~ 1.6 Deg. C

RL 4/26/23

Rev. Aug. 2018

DC#_Title: ENV-FRM-GBUR-0088 v04_Sample Condition Upon Receipt-Pittsburgh

Effective Date: 02/03/2023

WO#: 30581969

PM: ARG Due Date: 05/11/23

CLIENT: ENV MONITOR

Client Name: EMA

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking Number:

Examined By	BL
Labeled By	BL
Temped By	BL

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

Thermometer Used: 17 **Type of Ice:** (Wet) Blue None

Cooler Temperature: Observed Temp 1.2 12.2 °C Correction Factor: +0.4 °C Final Temp: 1.6 12.6 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	NA	pH paper Lot# 10D3121 / D.P.D. Residual Chlorine Lot #
Chain of Custody Present	✓			1.
Chain of Custody Filled Out:	✓			2.
-Were client corrections present on COC		✓		No corrections
Chain of Custody Relinquished	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC:	✓			5.
-Includes date/time/ID				
Matrix:		WT		Samples 005, 006, + 007 have QA as the Matrix
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):	✓			7. Nitrite
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous samples field filtered:			✓	13.
Organic Samples checked for dechlorination			✓	14:
Filtered volume received for dissolved tests:			✓	15: Not specified
All containers checked for preservation:	✓			16.
exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix				
All containers meet method preservation requirements:	✓			Initial when completed BL / Date/Time of Preservation / Lot# of added Preservative
8260C/D: Headspace in VOA Vials (> 6mm)			✓	17.
624.1: Headspace in VOA Vials (0mm)			✓	18.
Trip Blank Present:		✓		Trip blank custody seal present? YES or (NO)
Rad Samples Screened <0.5 mrem/hr.	✓			Initial when completed BL / Date: 4/26/23 / Survey Meter SN: 1563

Comments: No headspace - 8011

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Qualtrax ID: 55680

LIMS30 Internal Shipping Manifest

COOLER 24

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	24	Cooler temp (rcvd) °C	.9
Packaged on Ice (Y/N)	Yes	Correction Factor	.0
Shipping Method	Courier	Cooler temp (corr) °C	.9
Tracking #	N/A	IR GUN ID	9
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

10

	Signature	Location	Date	Time
Relinquished	[signature]	GBUR	4-27-23	2035
Received	[signature]	BEAV	4-28-23	541
Relinquished				
Received				
Relinquished				
Received				

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	4/27/2023	30581927003 BP3N1/1	BP3N	30581927003	30581927
MF	4/27/2023	30581927001 BP3N1/1	BP3N	30581927001	30581927
MF	4/27/2023	30581969003 BP3N2/2	BP3N	30581969003	30581969
MF	4/27/2023	30581969004 BP3N1/2	BP3N	30581969004	30581969
MF	4/27/2023	30581969006 BP3N1/2	BP3N	30581969006	30581969
MF	4/27/2023	30581969006 BP3N2/2	BP3N	30581969006	30581969
MF	4/27/2023	30581969005 BP3N2/2	BP3N	30581969005	30581969
MF	4/27/2023	30581969005 BP3N1/2	BP3N	30581969005	30581969
MF	4/27/2023	30581969002 BP3N1/2	BP3N	30581969002	30581969
MF	4/27/2023	30581969001 BP3N2/2	BP3N	30581969001	30581969
MF	4/27/2023	30581969002 BP3N2/2	BP3N	30581969002	30581969
MF	4/27/2023	30581969007 BP3N2/2	BP3N	30581969007	30581969
MF	4/27/2023	30581969007 BP3N1/2	BP3N	30581969007	30581969
MF	4/27/2023	30581969003 BP3N1/2	BP3N	30581969003	30581969
MF	4/27/2023	30581969004 BP3N2/2	BP3N	30581969004	30581969
MF	4/27/2023	30581969010 BP3N1/1	BP3N	30581969010	30581969
MF	4/27/2023	30581969008 BP3N1/1	BP3N	30581969008	30581969
MF	4/27/2023	30581969001 BP3N1/2	BP3N	30581969001	30581969
MF	4/27/2023	30581969009 BP3N1/1	BP3N	30581969009	30581969
MF	4/27/2023	30581959002 BP3N1/1	BP3N	30581959002	30581959
MF	4/27/2023	30581959001 BP3N1/1	BP3N	30581959001	30581959
MF	4/27/2023	30581959003 BP3N1/1	BP3N	30581959003	30581959
MF	4/27/2023	30581959004 BP3N1/1	BP3N	30581959004	30581959
MF	4/27/2023	30582240001 BP2N1/1	BP2N	30582240001	30582240
MF	4/27/2023	30581934001 BP3N1/1	BP3N	30581934001	30581934
MF	4/27/2023	30582245001 BP3N1/1	BP3N	30582245001	30582245
MF	4/27/2023	30582231001 BP3N1/1	BP3N	30582231001	30582231
MF	4/27/2023	30582228001 BP3N1/1	BP3N	30582228001	30582228
MF	4/27/2023	30582238001 BP3C1/1	BP3C	30582238001	30582238
MF	4/27/2023	30582380002 BP3N1/1	BP3N	30582380002	30582380
MF	4/27/2023	30582380001 BP3N1/1	BP3N	30582380001	30582380
MF	4/27/2023	30582380004 BP3N1/1	BP3N	30582380004	30582380
MF	4/27/2023	30582380003 BP3N1/1	BP3N	30582380003	30582380

DC#_Title: ENV-FRM-BEAV-0058 v03_Pace WV Sample Condition Upon Receipt (SCUR)
Effective Date: 2/8/2023

LIMS30 Lab Sample Condition Upon Receipt (West Virginia)

Put label here prior to scanning

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☑ 3rd Party Courier ☐ Pace ☐ Other _____

Tracking #: _____

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 9 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** .9 °C Correction Factor: .0 °C Final Temp: .9 °C

Thermal Preservation Requirement Met Yes ☑ No ☐

pH paper Lot#	Date and Initials of person examining contents
206722	CDW 4-28-23

	Yes	No	N/A	
Chain of Custody Present:				1.
Chain of Custody Filled Out:				2.
Chain of Custody Relinquished:				3. Manifest
Sampler Name & Signature on COC:				4.
Sample Labels match COC: -Includes date/time/ID Matrix:_____				5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered:			✓	13.
-pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓	
Filtered volume received for Dissolved tests:	✓			14.
All containers have been checked for chemical preservation: exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix	✓			15.
All containers meet method/chemical preservation requirements:	✓			Initial when completed CDW Date: 4-28-23
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present:			✓	17.
				Initial when completed: CDW Date: 4-28-23

Comments: _____

*PM review is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

July 03, 2023

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-SPRING 2023
Pace Project No.: 30582429

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on April 27, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

(Greensburg, PA) - Revision 1 - This report replaces the May, 29, 2023 report. This project was revised on June, 06, 2023 To recheck hardness results.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alaina Deitch

Alaina R. Deitch
alaina.deitch@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572023-03
New Hampshire/TNI Certification #: 297622
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad

Pace Analytical Services Beaver

225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30582429001	**TW-5**	Water	04/27/23 09:55	04/27/23 22:10
30582429002	**TW-5A**	Water	04/27/23 09:20	04/27/23 22:10
30582429003	**TW-5B**	Water	04/27/23 08:45	04/27/23 22:10
30582429004	**TW-6**	Water	04/27/23 12:10	04/27/23 22:10
30582429005	**TW-6A**	Water	04/27/23 11:30	04/27/23 22:10
30582429006	**TW-6B**	Water	04/27/23 10:50	04/27/23 22:10
30582429007	**TW-7**	Water	04/27/23 13:40	04/27/23 22:10
30582429008	**TW-7A**	Water	04/27/23 13:00	04/27/23 22:10

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30582429001	**TW-5**	EPA 6010D	MFC	1	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30582429002	**TW-5A**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30582429003	**TW-5B**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30582429004	**TW-6**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30582429005	**TW-6A**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30582429006	**TW-6B**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30582429007	**TW-7**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30582429008	**TW-7A**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Date: July 03, 2023

(Greensburg, PA) - Revision 1 - This report replaces the June, 06, 2023 report. This project was revised on July 10, 2023 To recheck hardness results in samples -002 through -008.

TW-5 (Lab ID: 30582429001)

- Sample pH for 8011 is 7

TW-5A (Lab ID: 30582429002)

- Sample pH for 8011 is 7

TW-5B (Lab ID: 30582429003)

- Sample pH for 8011 is 7

TW-6 (Lab ID: 30582429004)

- Sample pH for 8011 is 6

TW-6A (Lab ID: 30582429005)

- Sample pH for 8011 is 7

TW-6B (Lab ID: 30582429006)

- Sample pH for 8011 is 7

TW-7 (Lab ID: 30582429007)

- Sample pH for 8011 is 7

TW-7A (Lab ID: 30582429008)

- Sample pH for 8011 is 6

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: July 03, 2023

General Information:
8 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: July 03, 2023

General Information:
8 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: July 03, 2023

General Information:
8 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 584927

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30582429001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2840546)
  - Thallium
- MSD (Lab ID: 2840547)
  - Thallium

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: July 03, 2023

General Information:
8 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: July 03, 2023

General Information:
8 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 584971

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- BLANK (Lab ID: 2841039)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- LCS (Lab ID: 2841040)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MS (Lab ID: 2841041)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MSD (Lab ID: 2841042)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-5 (Lab ID: 30582429001)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-5A (Lab ID: 30582429002)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-5B (Lab ID: 30582429003)
  - 1,1,1,2-Tetrachloroethane (S)

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: July 03, 2023

QC Batch: 584971

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- 1,2-Dibromo-3-chloropropane
- 1,2-Dibromoethane (EDB)

- TW-6 (Lab ID: 30582429004)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-6A (Lab ID: 30582429005)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-6B (Lab ID: 30582429006)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-7 (Lab ID: 30582429007)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-7A (Lab ID: 30582429008)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: July 03, 2023

General Information:
8 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 586484

1c: Alkalinity TV: 0.00 mg/L

- TW-5B (Lab ID: 30582429003)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-6B (Lab ID: 30582429006)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-7A (Lab ID: 30582429008)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: July 03, 2023

General Information:
8 samples were analyzed for SM 2540C-2015 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: July 03, 2023

General Information:
8 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: July 03, 2023

General Information:
8 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 586770

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30582429001,30582643001

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2850575)
  - Chemical Oxygen Demand
- MSD (Lab ID: 2850576)
  - Chemical Oxygen Demand

Additional Comments:

Analyte Comments:

QC Batch: 586770

2c: pH adjusted to <2 in lab at bench prior to analysis

- BLANK (Lab ID: 2850572)
  - Chemical Oxygen Demand
- LCS (Lab ID: 2850573)
  - Chemical Oxygen Demand

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: July 03, 2023

General Information:
8 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Method: **SM 4500NO3-F-2016**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: July 03, 2023

General Information:
8 samples were analyzed for SM 4500NO3-F-2016 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: July 03, 2023

General Information:
8 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 584411

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30582429001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2837886)
  - Sulfate
- MSD (Lab ID: 2837887)
  - Sulfate

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: July 03, 2023

General Information:
8 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Sample: TW-5 **Lab ID: 30582429001** Collected: 04/27/23 09:55 Received: 04/27/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Total Hardness	**11.9**	mg/L	3.3	0.27	1	05/30/23 12:30	05/31/23 19:47		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**3.3**	mg/L	0.50	0.083	1	05/10/23 12:45	05/11/23 17:05	7440-70-2	
Iron, Dissolved	**27.2**	mg/L	0.050	0.035	1	05/10/23 12:45	05/11/23 17:05	7439-89-6	
Magnesium, Dissolved	**1.0**	mg/L	0.50	0.047	1	05/10/23 12:45	05/11/23 17:05	7439-95-4	
Manganese, Dissolved	**0.18**	mg/L	0.0050	0.0027	1	05/10/23 12:45	05/11/23 17:05	7439-96-5	
Potassium, Dissolved	**0.86**	mg/L	0.50	0.26	1	05/10/23 12:45	05/11/23 17:05	7440-09-7	
Sodium, Dissolved	**3.5**	mg/L	0.50	0.34	1	05/10/23 12:45	05/11/23 17:05	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/01/23 17:00	05/02/23 10:27	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/01/23 17:00	05/02/23 10:27	7440-38-2	
Barium	**0.023**	mg/L	0.0025	0.00098	1	05/01/23 17:00	05/02/23 10:27	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	05/01/23 17:00	05/02/23 10:27	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/01/23 17:00	05/02/23 10:27	7440-43-9	
Chromium	**0.0031**	mg/L	0.0025	0.00050	1	05/01/23 17:00	05/02/23 10:27	7440-47-3	
Cobalt	**0.00082J**	mg/L	0.0025	0.00081	1	05/01/23 17:00	05/02/23 10:27	7440-48-4	
Copper	**0.00074J**	mg/L	0.0025	0.00064	1	05/01/23 17:00	05/02/23 10:27	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/01/23 17:00	05/02/23 10:27	7439-92-1	
Nickel	**0.0030**	mg/L	0.0025	0.00065	1	05/01/23 17:00	05/02/23 10:27	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/01/23 17:00	05/02/23 10:27	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/01/23 17:00	05/02/23 10:27	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/01/23 17:00	05/02/23 10:27	7440-28-0	M1
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/01/23 17:00	05/02/23 10:27	7440-62-2	
Zinc	**0.0064**	mg/L	0.0050	0.0040	1	05/01/23 17:00	05/02/23 10:27	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/01/23 11:40	05/01/23 17:40	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/02/23 07:12	05/02/23 14:36	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/02/23 07:12	05/02/23 14:36	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	114	%.	60-140		1	05/02/23 07:12	05/02/23 14:36	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**52.0**	mg/L	10.0	1.0	1		05/08/23 11:14		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Sample: TW-5 **Lab ID: 30582429001** Collected: 04/27/23 09:55 Received: 04/27/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**49.0**	mg/L	10.0	10.0	1		05/03/23 18:30		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/02/23 07:28	05/02/23 11:00		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/09/23 09:53	05/09/23 13:06		MH
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**7.5**	mg/L	3.0	0.67	1		05/01/23 11:02	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		05/02/23 12:42	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		05/02/23 12:42		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/28/23 12:12	14808-79-8	ML
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/28/23 11:10	14797-65-0	

Sample: TW-5A **Lab ID: 30582429002** Collected: 04/27/23 09:20 Received: 04/27/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**2.0**	mg/L	0.50	0.083	1	05/10/23 12:45	05/11/23 16:16	7440-70-2	
Iron	**67.3**	mg/L	0.050	0.035	1	05/10/23 12:45	05/11/23 16:16	7439-89-6	
Magnesium	**0.92**	mg/L	0.50	0.047	1	05/10/23 12:45	05/11/23 16:16	7439-95-4	
Manganese	**0.24**	mg/L	0.0050	0.0027	1	05/10/23 12:45	05/11/23 16:16	7439-96-5	
Potassium	**0.83**	mg/L	0.50	0.26	1	05/10/23 12:45	05/11/23 16:16	7440-09-7	
Sodium	**3.0**	mg/L	0.50	0.34	1	05/10/23 12:45	05/11/23 16:16	7440-23-5	
Total Hardness	**8.9**	mg/L	3.3	0.27	1	05/10/23 12:45	05/11/23 16:16		N3

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Sample: TW-5A **Lab ID: 30582429002** Collected: 04/27/23 09:20 Received: 04/27/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**2.0**	mg/L	0.50	0.083	1	05/10/23 12:45	05/11/23 17:07	7440-70-2	
Iron, Dissolved	**60.7**	mg/L	0.050	0.035	1	05/10/23 12:45	05/11/23 17:07	7439-89-6	
Magnesium, Dissolved	**0.90**	mg/L	0.50	0.047	1	05/10/23 12:45	05/11/23 17:07	7439-95-4	
Manganese, Dissolved	**0.23**	mg/L	0.0050	0.0027	1	05/10/23 12:45	05/11/23 17:07	7439-96-5	
Potassium, Dissolved	**0.81**	mg/L	0.50	0.26	1	05/10/23 12:45	05/11/23 17:07	7440-09-7	
Sodium, Dissolved	**2.9**	mg/L	0.50	0.34	1	05/10/23 12:45	05/11/23 17:07	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/01/23 17:00	05/02/23 10:42	7440-36-0	
Arsenic	**0.00081J**	mg/L	0.0025	0.00044	1	05/01/23 17:00	05/02/23 10:42	7440-38-2	
Barium	**0.021**	mg/L	0.0025	0.00098	1	05/01/23 17:00	05/02/23 10:42	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	05/01/23 17:00	05/02/23 10:42	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/01/23 17:00	05/02/23 10:42	7440-43-9	
Chromium	**0.00092J**	mg/L	0.0025	0.00050	1	05/01/23 17:00	05/02/23 10:42	7440-47-3	
Cobalt	**0.00095J**	mg/L	0.0025	0.00081	1	05/01/23 17:00	05/02/23 10:42	7440-48-4	
Copper	**0.00090J**	mg/L	0.0025	0.00064	1	05/01/23 17:00	05/02/23 10:42	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/01/23 17:00	05/02/23 10:42	7439-92-1	
Nickel	**0.0024J**	mg/L	0.0025	0.00065	1	05/01/23 17:00	05/02/23 10:42	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/01/23 17:00	05/02/23 10:42	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/01/23 17:00	05/02/23 10:42	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/01/23 17:00	05/02/23 10:42	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/01/23 17:00	05/02/23 10:42	7440-62-2	
Zinc	**0.0042J**	mg/L	0.0050	0.0040	1	05/01/23 17:00	05/02/23 10:42	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/01/23 11:40	05/01/23 17:42	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/02/23 07:12	05/02/23 15:14	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/02/23 07:12	05/02/23 15:14	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	113	%.	60-140		1	05/02/23 07:12	05/02/23 15:14	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**32.0**	mg/L	10.0	1.0	1		05/08/23 11:22		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**56.0**	mg/L	10.0	10.0	1		05/03/23 18:30		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Sample: TW-5A **Lab ID: 30582429002** Collected: 04/27/23 09:20 Received: 04/27/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/02/23 07:28	05/02/23 11:06		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**20.5J**	mg/L	25.0	4.7	1	05/09/23 09:53	05/09/23 13:06		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**4.7**	mg/L	3.0	0.67	1		05/01/23 11:03	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.055J**	mg/L	0.10	0.053	1		05/02/23 12:43	14797-55-8	
Nitrogen, NO2 plus NO3	**0.068J**	mg/L	0.10	0.053	1		05/02/23 12:43		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/28/23 12:18	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.013**	mg/L	0.010	0.0055	1		04/28/23 11:12	14797-65-0	

Sample: TW-5B **Lab ID: 30582429003** Collected: 04/27/23 08:45 Received: 04/27/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.56**	mg/L	0.50	0.083	1	05/10/23 12:45	05/11/23 16:18	7440-70-2	
Iron	**0.071**	mg/L	0.050	0.035	1	05/10/23 12:45	05/11/23 16:18	7439-89-6	
Magnesium	**0.20J**	mg/L	0.50	0.047	1	05/10/23 12:45	05/11/23 16:18	7439-95-4	
Manganese	**0.0050**	mg/L	0.0050	0.0027	1	05/10/23 12:45	05/11/23 16:18	7439-96-5	
Potassium	**0.52**	mg/L	0.50	0.26	1	05/10/23 12:45	05/11/23 16:18	7440-09-7	
Sodium	**1.4**	mg/L	0.50	0.34	1	05/10/23 12:45	05/11/23 16:18	7440-23-5	
Total Hardness	**2.2J**	mg/L	3.3	0.27	1	05/10/23 12:45	05/11/23 16:18		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.61**	mg/L	0.50	0.083	1	05/10/23 12:45	05/11/23 17:09	7440-70-2	
Iron, Dissolved	**0.056**	mg/L	0.050	0.035	1	05/10/23 12:45	05/11/23 17:09	7439-89-6	
Magnesium, Dissolved	**0.21J**	mg/L	0.50	0.047	1	05/10/23 12:45	05/11/23 17:09	7439-95-4	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Sample: TW-5B **Lab ID: 30582429003** Collected: 04/27/23 08:45 Received: 04/27/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Manganese, Dissolved	**0.0087**	mg/L	0.0050	0.0027	1	05/10/23 12:45	05/11/23 17:09	7439-96-5	
Potassium, Dissolved	**0.53**	mg/L	0.50	0.26	1	05/10/23 12:45	05/11/23 17:09	7440-09-7	
Sodium, Dissolved	**1.4**	mg/L	0.50	0.34	1	05/10/23 12:45	05/11/23 17:09	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/01/23 17:00	05/02/23 10:45	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/01/23 17:00	05/02/23 10:45	7440-38-2	
Barium	**0.0044**	mg/L	0.0025	0.00098	1	05/01/23 17:00	05/02/23 10:45	7440-39-3	
Beryllium	**0.00026J**	mg/L	0.00050	0.00010	1	05/01/23 17:00	05/02/23 10:45	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/01/23 17:00	05/02/23 10:45	7440-43-9	
Chromium	**0.0078**	mg/L	0.0025	0.00050	1	05/01/23 17:00	05/02/23 10:45	7440-47-3	
Cobalt	**0.0043**	mg/L	0.0025	0.00081	1	05/01/23 17:00	05/02/23 10:45	7440-48-4	
Copper	**0.0067**	mg/L	0.0025	0.00064	1	05/01/23 17:00	05/02/23 10:45	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/01/23 17:00	05/02/23 10:45	7439-92-1	
Nickel	**0.012**	mg/L	0.0025	0.00065	1	05/01/23 17:00	05/02/23 10:45	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/01/23 17:00	05/02/23 10:45	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/01/23 17:00	05/02/23 10:45	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/01/23 17:00	05/02/23 10:45	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/01/23 17:00	05/02/23 10:45	7440-62-2	
Zinc	**0.016**	mg/L	0.0050	0.0040	1	05/01/23 17:00	05/02/23 10:45	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/01/23 11:40	05/01/23 17:45	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/02/23 07:12	05/02/23 15:27	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/02/23 07:12	05/02/23 15:27	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	100	%.	60-140		1	05/02/23 07:12	05/02/23 15:27	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/08/23 11:26		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		05/03/23 18:30		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/02/23 07:28	05/02/23 11:12		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Sample: TW-5B **Lab ID: 30582429003** Collected: 04/27/23 08:45 Received: 04/27/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/09/23 09:53	05/09/23 13:06		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**1.6J**	mg/L	3.0	0.67	1		05/01/23 11:09	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.22**	mg/L	0.10	0.053	1		05/02/23 12:44	14797-55-8	
Nitrogen, NO2 plus NO3	**0.22**	mg/L	0.10	0.053	1		05/02/23 12:44		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/28/23 12:20	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/28/23 11:12	14797-65-0	

Sample: TW-6 **Lab ID: 30582429004** Collected: 04/27/23 12:10 Received: 04/27/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**4.2**	mg/L	0.50	0.083	1	05/10/23 12:45	05/11/23 16:20	7440-70-2	
Iron	**24.3**	mg/L	0.050	0.035	1	05/10/23 12:45	05/11/23 16:20	7439-89-6	
Magnesium	**3.4**	mg/L	0.50	0.047	1	05/10/23 12:45	05/11/23 16:20	7439-95-4	
Manganese	**0.33**	mg/L	0.0050	0.0027	1	05/10/23 12:45	05/11/23 16:20	7439-96-5	
Potassium	**1.7**	mg/L	0.50	0.26	1	05/10/23 12:45	05/11/23 16:20	7440-09-7	
Sodium	**7.2**	mg/L	0.50	0.34	1	05/10/23 12:45	05/11/23 16:20	7440-23-5	
Total Hardness	**24.5**	mg/L	3.3	0.27	1	05/10/23 12:45	05/11/23 16:20		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**4.5**	mg/L	0.50	0.083	1	05/10/23 12:45	05/11/23 17:11	7440-70-2	
Iron, Dissolved	**23.4**	mg/L	0.050	0.035	1	05/10/23 12:45	05/11/23 17:11	7439-89-6	
Magnesium, Dissolved	**3.3**	mg/L	0.50	0.047	1	05/10/23 12:45	05/11/23 17:11	7439-95-4	
Manganese, Dissolved	**0.32**	mg/L	0.0050	0.0027	1	05/10/23 12:45	05/11/23 17:11	7439-96-5	
Potassium, Dissolved	**1.7**	mg/L	0.50	0.26	1	05/10/23 12:45	05/11/23 17:11	7440-09-7	
Sodium, Dissolved	**7.0**	mg/L	0.50	0.34	1	05/10/23 12:45	05/11/23 17:11	7440-23-5	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Sample: TW-6 **Lab ID: 30582429004** Collected: 04/27/23 12:10 Received: 04/27/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/01/23 17:00	05/02/23 10:48	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/01/23 17:00	05/02/23 10:48	7440-38-2	
Barium	**0.12**	mg/L	0.0025	0.00098	1	05/01/23 17:00	05/02/23 10:48	7440-39-3	
Beryllium	**0.00017J**	mg/L	0.00050	0.00010	1	05/01/23 17:00	05/02/23 10:48	7440-41-7	
Cadmium	**0.00020J**	mg/L	0.00050	0.00013	1	05/01/23 17:00	05/02/23 10:48	7440-43-9	
Chromium	**0.0042**	mg/L	0.0025	0.00050	1	05/01/23 17:00	05/02/23 10:48	7440-47-3	
Cobalt	**0.018**	mg/L	0.0025	0.00081	1	05/01/23 17:00	05/02/23 10:48	7440-48-4	
Copper	**0.0081**	mg/L	0.0025	0.00064	1	05/01/23 17:00	05/02/23 10:48	7440-50-8	
Lead	**0.00035J**	mg/L	0.00050	0.00025	1	05/01/23 17:00	05/02/23 10:48	7439-92-1	
Nickel	**0.0086**	mg/L	0.0025	0.00065	1	05/01/23 17:00	05/02/23 10:48	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/01/23 17:00	05/02/23 10:48	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/01/23 17:00	05/02/23 10:48	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/01/23 17:00	05/02/23 10:48	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/01/23 17:00	05/02/23 10:48	7440-62-2	
Zinc	**0.018**	mg/L	0.0050	0.0040	1	05/01/23 17:00	05/02/23 10:48	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/01/23 11:40	05/01/23 17:47	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/02/23 07:12	05/02/23 15:39	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/02/23 07:12	05/02/23 15:39	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	103	%.	60-140		1	05/02/23 07:12	05/02/23 15:39	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**30.0**	mg/L	10.0	1.0	1		05/08/23 11:29		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**77.0**	mg/L	10.0	10.0	1		05/03/23 18:30		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/02/23 07:28	05/02/23 11:13		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**9.1J**	mg/L	25.0	4.7	1	05/09/23 09:53	05/09/23 13:07		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Sample: TW-6 **Lab ID: 30582429004** Collected: 04/27/23 12:10 Received: 04/27/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**13.5**	mg/L	3.0	0.67	1		05/01/23 11:11	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.12**	mg/L	0.10	0.053	1		05/02/23 12:46	14797-55-8	
Nitrogen, NO2 plus NO3	**0.13**	mg/L	0.10	0.053	1		05/02/23 12:46		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**8.4J**	mg/L	10.0	4.7	1		04/28/23 12:20	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/28/23 11:12	14797-65-0	

Sample: TW-6A **Lab ID: 30582429005** Collected: 04/27/23 11:30 Received: 04/27/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**52.9**	mg/L	0.50	0.083	1	05/10/23 12:45	05/11/23 16:22	7440-70-2	
Iron	**0.46**	mg/L	0.050	0.035	1	05/10/23 12:45	05/11/23 16:22	7439-89-6	
Magnesium	**5.9**	mg/L	0.50	0.047	1	05/10/23 12:45	05/11/23 16:22	7439-95-4	
Manganese	**0.0050 U**	mg/L	0.0050	0.0027	1	05/10/23 12:45	05/11/23 16:22	7439-96-5	
Potassium	**5.1**	mg/L	0.50	0.26	1	05/10/23 12:45	05/11/23 16:22	7440-09-7	
Sodium	**2.2**	mg/L	0.50	0.34	1	05/10/23 12:45	05/11/23 16:22	7440-23-5	
Total Hardness	**157**	mg/L	3.3	0.27	1	05/10/23 12:45	05/11/23 16:22		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**51.5**	mg/L	0.50	0.083	1	05/10/23 12:45	05/11/23 17:13	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/10/23 12:45	05/11/23 17:13	7439-89-6	
Magnesium, Dissolved	**5.8**	mg/L	0.50	0.047	1	05/10/23 12:45	05/11/23 17:13	7439-95-4	
Manganese, Dissolved	**0.0028J**	mg/L	0.0050	0.0027	1	05/10/23 12:45	05/11/23 17:13	7439-96-5	
Potassium, Dissolved	**5.0**	mg/L	0.50	0.26	1	05/10/23 12:45	05/11/23 17:13	7440-09-7	
Sodium, Dissolved	**2.3**	mg/L	0.50	0.34	1	05/10/23 12:45	05/11/23 17:13	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/01/23 17:00	05/02/23 10:57	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/01/23 17:00	05/02/23 10:57	7440-38-2	
Barium	**0.032**	mg/L	0.0025	0.00098	1	05/01/23 17:00	05/02/23 10:57	7440-39-3	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Sample: TW-6A **Lab ID: 30582429005** Collected: 04/27/23 11:30 Received: 04/27/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	05/01/23 17:00	05/02/23 10:57	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/01/23 17:00	05/02/23 10:57	7440-43-9	
Chromium	**0.0012J**	mg/L	0.0025	0.00050	1	05/01/23 17:00	05/02/23 10:57	7440-47-3	
Cobalt	**0.00090J**	mg/L	0.0025	0.00081	1	05/01/23 17:00	05/02/23 10:57	7440-48-4	
Copper	**0.0017J**	mg/L	0.0025	0.00064	1	05/01/23 17:00	05/02/23 10:57	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/01/23 17:00	05/02/23 10:57	7439-92-1	
Nickel	**0.0013J**	mg/L	0.0025	0.00065	1	05/01/23 17:00	05/02/23 10:57	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/01/23 17:00	05/02/23 10:57	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/01/23 17:00	05/02/23 10:57	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/01/23 17:00	05/02/23 10:57	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/01/23 17:00	05/02/23 10:57	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0040	1	05/01/23 17:00	05/02/23 10:57	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/01/23 11:40	05/01/23 17:49	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/02/23 07:12	05/02/23 15:52	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/02/23 07:12	05/02/23 15:52	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	116	%.	60-140		1	05/02/23 07:12	05/02/23 15:52	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**114**	mg/L	10.0	1.0	1		05/08/23 11:33		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**170**	mg/L	10.0	10.0	1		05/03/23 18:30		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/02/23 07:28	05/02/23 11:15		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**11.4J**	mg/L	25.0	4.7	1	05/09/23 09:53	05/09/23 13:07		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**2.8J**	mg/L	3.0	0.67	1		05/01/23 11:12	16887-00-6	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Sample: TW-6A **Lab ID: 30582429005** Collected: 04/27/23 11:30 Received: 04/27/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.44**	mg/L	0.10	0.053	1		05/02/23 12:47	14797-55-8	
Nitrogen, NO2 plus NO3	**0.44**	mg/L	0.10	0.053	1		05/02/23 12:47		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**30.4**	mg/L	10.0	4.7	1		04/28/23 12:22	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/28/23 11:13	14797-65-0	

Sample: TW-6B **Lab ID: 30582429006** Collected: 04/27/23 10:50 Received: 04/27/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.64**	mg/L	0.50	0.083	1	05/10/23 12:45	05/11/23 16:28	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	05/10/23 12:45	05/11/23 16:28	7439-89-6	
Magnesium	**0.31J**	mg/L	0.50	0.047	1	05/10/23 12:45	05/11/23 16:28	7439-95-4	
Manganese	**0.0075**	mg/L	0.0050	0.0027	1	05/10/23 12:45	05/11/23 16:28	7439-96-5	
Potassium	**0.59**	mg/L	0.50	0.26	1	05/10/23 12:45	05/11/23 16:28	7440-09-7	
Sodium	**1.8**	mg/L	0.50	0.34	1	05/10/23 12:45	05/11/23 16:28	7440-23-5	
Total Hardness	**2.9J**	mg/L	3.3	0.27	1	05/10/23 12:45	05/11/23 16:28		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.64**	mg/L	0.50	0.083	1	05/10/23 12:45	05/11/23 17:15	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/10/23 12:45	05/11/23 17:15	7439-89-6	
Magnesium, Dissolved	**0.32J**	mg/L	0.50	0.047	1	05/10/23 12:45	05/11/23 17:15	7439-95-4	
Manganese, Dissolved	**0.0076**	mg/L	0.0050	0.0027	1	05/10/23 12:45	05/11/23 17:15	7439-96-5	
Potassium, Dissolved	**0.59**	mg/L	0.50	0.26	1	05/10/23 12:45	05/11/23 17:15	7440-09-7	
Sodium, Dissolved	**1.8**	mg/L	0.50	0.34	1	05/10/23 12:45	05/11/23 17:15	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/01/23 17:00	05/02/23 11:00	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/01/23 17:00	05/02/23 11:00	7440-38-2	
Barium	**0.0072**	mg/L	0.0025	0.00098	1	05/01/23 17:00	05/02/23 11:00	7440-39-3	
Beryllium	**0.00029J**	mg/L	0.00050	0.00010	1	05/01/23 17:00	05/02/23 11:00	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/01/23 17:00	05/02/23 11:00	7440-43-9	
Chromium	**0.0017J**	mg/L	0.0025	0.00050	1	05/01/23 17:00	05/02/23 11:00	7440-47-3	
Cobalt	**0.0063**	mg/L	0.0025	0.00081	1	05/01/23 17:00	05/02/23 11:00	7440-48-4	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Sample: TW-6B **Lab ID: 30582429006** Collected: 04/27/23 10:50 Received: 04/27/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Copper	**0.013**	mg/L	0.0025	0.00064	1	05/01/23 17:00	05/02/23 11:00	7440-50-8	
Lead	**0.00063**	mg/L	0.00050	0.00025	1	05/01/23 17:00	05/02/23 11:00	7439-92-1	
Nickel	**0.010**	mg/L	0.0025	0.00065	1	05/01/23 17:00	05/02/23 11:00	7440-02-0	
Selenium	**0.00090J**	mg/L	0.0025	0.00084	1	05/01/23 17:00	05/02/23 11:00	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/01/23 17:00	05/02/23 11:00	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/01/23 17:00	05/02/23 11:00	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/01/23 17:00	05/02/23 11:00	7440-62-2	
Zinc	**0.0099**	mg/L	0.0050	0.0040	1	05/01/23 17:00	05/02/23 11:00	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/01/23 11:40	05/01/23 17:56	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/02/23 07:12	05/02/23 16:05	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/02/23 07:12	05/02/23 16:05	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	121	%.	60-140		1	05/02/23 07:12	05/02/23 16:05	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/08/23 11:41		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		05/03/23 18:30		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/02/23 07:28	05/02/23 11:17		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/09/23 09:53	05/09/23 13:07		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**2.8J**	mg/L	3.0	0.67	1		05/01/23 11:13	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.39**	mg/L	0.10	0.053	1		05/02/23 12:55	14797-55-8	
Nitrogen, NO2 plus NO3	**0.39**	mg/L	0.10	0.053	1		05/02/23 12:55		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Sample: TW-6B **Lab ID: 30582429006** Collected: 04/27/23 10:50 Received: 04/27/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/28/23 12:22	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/28/23 11:13	14797-65-0	

Sample: TW-7 **Lab ID: 30582429007** Collected: 04/27/23 13:40 Received: 04/27/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**5.1**	mg/L	0.50	0.083	1	05/10/23 12:45	05/11/23 16:30	7440-70-2	
Iron	**49.4**	mg/L	0.050	0.035	1	05/10/23 12:45	05/11/23 16:30	7439-89-6	
Magnesium	**1.3**	mg/L	0.50	0.047	1	05/10/23 12:45	05/11/23 16:30	7439-95-4	
Manganese	**0.15**	mg/L	0.0050	0.0027	1	05/10/23 12:45	05/11/23 16:30	7439-96-5	
Potassium	**1.9**	mg/L	0.50	0.26	1	05/10/23 12:45	05/11/23 16:30	7440-09-7	
Sodium	**6.8**	mg/L	0.50	0.34	1	05/10/23 12:45	05/11/23 16:30	7440-23-5	
Total Hardness	**17.9**	mg/L	3.3	0.27	1	05/10/23 12:45	05/11/23 16:30		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**5.2**	mg/L	0.50	0.083	1	05/10/23 12:45	05/11/23 17:21	7440-70-2	
Iron, Dissolved	**7.3**	mg/L	0.050	0.035	1	05/10/23 12:45	05/11/23 17:21	7439-89-6	
Magnesium, Dissolved	**1.3**	mg/L	0.50	0.047	1	05/10/23 12:45	05/11/23 17:21	7439-95-4	
Manganese, Dissolved	**0.14**	mg/L	0.0050	0.0027	1	05/10/23 12:45	05/11/23 17:21	7439-96-5	
Potassium, Dissolved	**1.9**	mg/L	0.50	0.26	1	05/10/23 12:45	05/11/23 17:21	7440-09-7	
Sodium, Dissolved	**6.8**	mg/L	0.50	0.34	1	05/10/23 12:45	05/11/23 17:21	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00032J**	mg/L	0.00050	0.00030	1	05/01/23 17:00	05/02/23 11:03	7440-36-0	
Arsenic	**0.00086J**	mg/L	0.0025	0.00044	1	05/01/23 17:00	05/02/23 11:03	7440-38-2	
Barium	**0.057**	mg/L	0.0025	0.00098	1	05/01/23 17:00	05/02/23 11:03	7440-39-3	
Beryllium	**0.00080**	mg/L	0.00050	0.00010	1	05/01/23 17:00	05/02/23 11:03	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/01/23 17:00	05/02/23 11:03	7440-43-9	
Chromium	**0.012**	mg/L	0.0025	0.00050	1	05/01/23 17:00	05/02/23 11:03	7440-47-3	
Cobalt	**0.0067**	mg/L	0.0025	0.00081	1	05/01/23 17:00	05/02/23 11:03	7440-48-4	
Copper	**0.0068**	mg/L	0.0025	0.00064	1	05/01/23 17:00	05/02/23 11:03	7440-50-8	
Lead	**0.00043J**	mg/L	0.00050	0.00025	1	05/01/23 17:00	05/02/23 11:03	7439-92-1	
Nickel	**0.019**	mg/L	0.0025	0.00065	1	05/01/23 17:00	05/02/23 11:03	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/01/23 17:00	05/02/23 11:03	7782-49-2	
Silver	**0.0012J**	mg/L	0.0025	0.00053	1	05/01/23 17:00	05/02/23 11:03	7440-22-4	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Sample: TW-7 **Lab ID: 30582429007** Collected: 04/27/23 13:40 Received: 04/27/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/01/23 17:00	05/02/23 11:03	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/01/23 17:00	05/02/23 11:03	7440-62-2	
Zinc	**0.012**	mg/L	0.0050	0.0040	1	05/01/23 17:00	05/02/23 11:03	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/01/23 11:40	05/01/23 17:59	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/02/23 07:12	05/02/23 16:17	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/02/23 07:12	05/02/23 16:17	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	118	%.	60-140		1	05/02/23 07:12	05/02/23 16:17	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**24.0**	mg/L	10.0	1.0	1		05/08/23 11:45		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**48.0**	mg/L	10.0	10.0	1		05/04/23 16:05		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/02/23 07:28	05/02/23 11:19		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/09/23 09:53	05/09/23 13:07		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**12.2**	mg/L	3.0	0.67	1		05/01/23 11:14	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.17**	mg/L	0.10	0.053	1		05/02/23 13:00	14797-55-8	
Nitrogen, NO2 plus NO3	**0.19**	mg/L	0.10	0.053	1		05/02/23 13:00		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		04/28/23 12:24	14808-79-8	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Sample: TW-7 **Lab ID: 30582429007** Collected: 04/27/23 13:40 Received: 04/27/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.015**	mg/L	0.010	0.0055	1		04/28/23 11:14	14797-65-0	

Sample: TW-7A **Lab ID: 30582429008** Collected: 04/27/23 13:00 Received: 04/27/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**3.1**	mg/L	0.50	0.083	1	05/10/23 12:45	05/11/23 16:32	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	05/10/23 12:45	05/11/23 16:32	7439-89-6	
Magnesium	**1.8**	mg/L	0.50	0.047	1	05/10/23 12:45	05/11/23 16:32	7439-95-4	
Manganese	**0.034**	mg/L	0.0050	0.0027	1	05/10/23 12:45	05/11/23 16:32	7439-96-5	
Potassium	**0.96**	mg/L	0.50	0.26	1	05/10/23 12:45	05/11/23 16:32	7440-09-7	
Sodium	**2.7**	mg/L	0.50	0.34	1	05/10/23 12:45	05/11/23 16:32	7440-23-5	
Total Hardness	**15.2**	mg/L	3.3	0.27	1	05/10/23 12:45	05/11/23 16:32		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**3.0**	mg/L	0.50	0.083	1	05/10/23 12:45	05/11/23 17:23	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/10/23 12:45	05/11/23 17:23	7439-89-6	
Magnesium, Dissolved	**1.8**	mg/L	0.50	0.047	1	05/10/23 12:45	05/11/23 17:23	7439-95-4	
Manganese, Dissolved	**0.034**	mg/L	0.0050	0.0027	1	05/10/23 12:45	05/11/23 17:23	7439-96-5	
Potassium, Dissolved	**0.92**	mg/L	0.50	0.26	1	05/10/23 12:45	05/11/23 17:23	7440-09-7	
Sodium, Dissolved	**2.7**	mg/L	0.50	0.34	1	05/10/23 12:45	05/11/23 17:23	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/01/23 17:00	05/02/23 11:06	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/01/23 17:00	05/02/23 11:06	7440-38-2	
Barium	**0.062**	mg/L	0.0025	0.00098	1	05/01/23 17:00	05/02/23 11:06	7440-39-3	
Beryllium	**0.00019J**	mg/L	0.00050	0.00010	1	05/01/23 17:00	05/02/23 11:06	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/01/23 17:00	05/02/23 11:06	7440-43-9	
Chromium	**0.0027**	mg/L	0.0025	0.00050	1	05/01/23 17:00	05/02/23 11:06	7440-47-3	
Cobalt	**0.0055**	mg/L	0.0025	0.00081	1	05/01/23 17:00	05/02/23 11:06	7440-48-4	
Copper	**0.0050**	mg/L	0.0025	0.00064	1	05/01/23 17:00	05/02/23 11:06	7440-50-8	
Lead	**0.00029J**	mg/L	0.00050	0.00025	1	05/01/23 17:00	05/02/23 11:06	7439-92-1	
Nickel	**0.0063**	mg/L	0.0025	0.00065	1	05/01/23 17:00	05/02/23 11:06	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/01/23 17:00	05/02/23 11:06	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/01/23 17:00	05/02/23 11:06	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/01/23 17:00	05/02/23 11:06	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/01/23 17:00	05/02/23 11:06	7440-62-2	
Zinc	**0.012**	mg/L	0.0050	0.0040	1	05/01/23 17:00	05/02/23 11:06	7440-66-6	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30582429

Sample: TW-7A **Lab ID: 30582429008** Collected: 04/27/23 13:00 Received: 04/27/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/03/23 12:07	05/04/23 16:14	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	05/02/23 07:12	05/02/23 16:30	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	05/02/23 07:12	05/02/23 16:30	106-93-4	CH
Surrogates									
1,1,1,2-Tetrachloroethane (S)	114	%.	60-140		1	05/02/23 07:12	05/02/23 16:30	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/08/23 11:47		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**29.0**	mg/L	10.0	10.0	1		05/04/23 16:05		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/02/23 07:28	05/02/23 11:21		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/09/23 09:53	05/09/23 13:08		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**6.0**	mg/L	3.0	0.67	1		05/01/23 11:15	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.31**	mg/L	0.10	0.053	1		05/02/23 13:01	14797-55-8	
Nitrogen, NO2 plus NO3	**0.31**	mg/L	0.10	0.053	1		05/02/23 13:01		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**8.0J**	mg/L	10.0	4.7	1		04/28/23 12:25	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		04/28/23 11:15	14797-65-0	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30582429

QC Batch: 587192
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30582429002, 30582429003, 30582429004, 30582429005, 30582429006, 30582429007, 30582429008

METHOD BLANK: 2852439 Matrix: Water
Associated Lab Samples: 30582429002, 30582429003, 30582429004, 30582429005, 30582429006, 30582429007, 30582429008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	05/11/23 16:10	
Iron	mg/L	0.050 U	0.050	0.035	05/11/23 16:10	
Magnesium	mg/L	0.50 U	0.50	0.047	05/11/23 16:10	
Manganese	mg/L	0.0050 U	0.0050	0.0027	05/11/23 16:10	
Potassium	mg/L	0.50 U	0.50	0.26	05/11/23 16:10	
Sodium	mg/L	0.50 U	0.50	0.34	05/11/23 16:10	

LABORATORY CONTROL SAMPLE: 2852440

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	44.1	110	80-120	
Iron	mg/L	2	2.3	115	80-120	
Magnesium	mg/L	20	23.1	116	80-120	
Manganese	mg/L	2	2.3	114	80-120	
Potassium	mg/L	20	21.1	105	80-120	
Sodium	mg/L	20	22.7	113	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2852441 2852442

Parameter	Units	30585905001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	28.4	40	40	69.4	69.9	102	104	80-120	1	20	
Iron	mg/L	0.050 U	2	2	2.2	2.2	109	111	80-120	1	20	
Magnesium	mg/L	6.4	20	20	28.4	28.8	110	112	80-120	1	20	
Manganese	mg/L	0.0050 U	2	2	2.2	2.2	109	110	80-120	1	20	
Potassium	mg/L	6.6	20	20	27.1	27.3	102	103	80-120	1	20	
Sodium	mg/L	11.9	20	20	33.7	34.0	109	111	80-120	1	20	

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30582429

QC Batch: 587202
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30582429001, 30582429002, 30582429003, 30582429004, 30582429005, 30582429006, 30582429007, 30582429008

METHOD BLANK: 2852472 Matrix: Water
Associated Lab Samples: 30582429001, 30582429002, 30582429003, 30582429004, 30582429005, 30582429006, 30582429007, 30582429008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	05/11/23 17:01	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	05/11/23 17:01	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	05/11/23 17:01	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	05/11/23 17:01	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	05/11/23 17:01	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	05/11/23 17:01	

LABORATORY CONTROL SAMPLE: 2852473

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	42.5	106	80-120	
Iron, Dissolved	mg/L	2	2.2	111	80-120	
Magnesium, Dissolved	mg/L	20	22.1	110	80-120	
Manganese, Dissolved	mg/L	2	2.2	110	80-120	
Potassium, Dissolved	mg/L	20	20.5	102	80-120	
Sodium, Dissolved	mg/L	20	21.7	109	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2852474 2852475

Parameter	Units	30585905001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	27.8	40	40	69.5	70.4	104	106	80-120	1	20	
Iron, Dissolved	mg/L	0.050 U	2	2	2.2	2.2	110	111	80-120	1	20	
Magnesium, Dissolved	mg/L	6.2	20	20	28.6	28.8	112	113	80-120	1	20	
Manganese, Dissolved	mg/L	0.0050 U	2	2	2.2	2.2	110	111	80-120	1	20	
Potassium, Dissolved	mg/L	6.4	20	20	27.2	27.6	104	106	80-120	1	20	
Sodium, Dissolved	mg/L	11.6	20	20	34.0	34.2	112	113	80-120	0	20	

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QUALITY CONTROL DATA

Project:	MLF-SPRING 2023
Pace Project No.:	30582429

QC Batch:	584927	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3010A	Analysis Description:	BVR 6020B MET ICPMS
		Laboratory:	Pace Analytical Services - Beaver

Associated Lab Samples:

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QUALITY CONTROL DATA

Project:	MLF-SPRING 2023
Pace Project No.:	30582429

QC Batch:	584792	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	BVR 7470 Mercury
		Laboratory:	Pace Analytical Services - Beaver

Associated Lab Samples:

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QUALITY CONTROL DATA

Project:	MLF-SPRING 2023
Pace Project No.:	30582429

QC Batch:	585430	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	BVR 7470 Mercury
		Laboratory:	Pace Analytical Services - Beaver

Associated Lab Samples:

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QUALITY CONTROL DATA

Project:	MLF-SPRING 2023
Pace Project No.:	30582429

QC Batch:	584971	Analysis Method:	EPA 8011
QC Batch Method:	EPA 8011	Analysis Description:	GCS 8011 EDB DBCP
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples:

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QUALITY CONTROL DATA

Project:	MLF-SPRING 2023
Pace Project No.:	30582429

QC Batch:	586484	Analysis Method:	SM 2320B-2011
QC Batch Method:	SM 2320B-2011	Analysis Description:	2320B Alkalinity
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples:

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QUALITY CONTROL DATA

Project:	MLF-SPRING 2023
Pace Project No.:	30582429

QC Batch:	585313	Analysis Method:	SM 2540C-2015
QC Batch Method:	SM 2540C-2015	Analysis Description:	2540C Total Dissolved Solids
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples:

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30582429

QC Batch:	585667	Analysis Method:	SM 2540C-2015
QC Batch Method:	SM 2540C-2015	Analysis Description:	2540C Total Dissolved Solids
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples:

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30582429

QC Batch:	584637	Analysis Method:	EPA 350.1
QC Batch Method:	EPA 350.1	Analysis Description:	350.1 Ammonia, Distilled
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples:

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QUALITY CONTROL DATA

Project:	MLF-SPRING 2023
Pace Project No.:	30582429

QC Batch:	586770	Analysis Method:	EPA 410.4
QC Batch Method:	EPA 410.4	Analysis Description:	410.4 COD
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples:

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QUALITY CONTROL DATA

Project:	MLF-SPRING 2023
Pace Project No.:	30582429

QC Batch:	584642	Analysis Method:	SM 4500-Cl-E-2011
QC Batch Method:	SM 4500-Cl-E-2011	Analysis Description:	4500 Chloride
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples:

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QUALITY CONTROL DATA

Project:	MLF-SPRING 2023
Pace Project No.:	30582429

QC Batch:	584643	Analysis Method:	SM 4500-Cl-E-2011
QC Batch Method:	SM 4500-Cl-E-2011	Analysis Description:	4500 Chloride
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples:

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30582429

QC Batch:	584816	Analysis Method:	SM 4500NO3-F-2016
QC Batch Method:	SM 4500NO3-F-2016	Analysis Description:	SM4500NO3-F, Nitrate, Preserved
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples:

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30582429

QC Batch:	584819	Analysis Method:	SM 4500NO3-F-2016
QC Batch Method:	SM 4500NO3-F-2016	Analysis Description:	SM4500NO3-F, Nitrate, Preserved
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples:

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30582429

QC Batch:	584411	Analysis Method:	EPA 9038
QC Batch Method:	EPA 9038	Analysis Description:	9038 Sulfate, Turbidimetric
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples:

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QUALITY CONTROL DATA

Project:	MLF-SPRING 2023
Pace Project No.:	30582429

QC Batch:	584364	Analysis Method:	SM 4500NO2-B-2011
QC Batch Method:	SM 4500NO2-B-2011	Analysis Description:	SM4500-NO2-B, Nitrite, unpres
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples:

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QUALIFIERS

Project: MLF-SPRING 2023
Pace Project No.: 30582429

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

WORKORDER QUALIFIERS

WO: 30582429

[2] (Greensburg, PA) - Revision 1 - This report replaces the June, 06, 2023 report. This project was revised on July 10, 2023 To recheck hardness results in samples -002 through -008.

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WO#: 30582429

30582429

EMA El ASSESSMENT, LLC

207 East Sixth Street sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF- SPRING 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals ①	Total + Diss. Metals ②	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO4, COD		Method 8011 - DBCP + EDB				
1	TW-5	7	4.27.23	955	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓				001
2	TW-5A	↓	↓	920	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓				002
3	TW-5B			845																003
4	TW-6			1210																004
5	TW-6A			1130																005
6	TW-6B			1050																006
7	TW-7			1340																007
8	TW-7A			1300																008
9																				
10																				
11																				
12																				

	Signature	Date	Time	Comments
Relinquished by	DABrown TB/Pace	4.27.23	1430	① 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn
Received by		4-27-23	1430	① 7470 - Hg
Relinquished by	TB/Pace	4-27-23	1705	② 6010 - Ca, Fe, Mg, Mn, K, Na
Received by	RDS PACE	4/27/23	1745	PACE - WV - METALS
Relinquished by	RDS PACE	4/27/23	2210	PACE - G-BURG - WET CHEM + 8011
Received by	PACE	4/27/23	2210	LEVEL 2 REPORT

Cooler Temp on Arrival: 3.8 / 4.3 Deg. C

Rev. Aug. 2018

DC#_Title: ENV-FRM-GBUR-0088 v04_Sample Condition Upon Receipt-Pittsburgh

Effective Date: 02/03/2023

WO#: 30582429

PM: ARG Due Date: 05/12/23

CLIENT: ENV MONITOR

Client Name: EMA

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking Number:

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

Thermometer Used: 16 **Type of Ice:** (Wet) Blue None

Cooler Temperature: Observed Temp 3.8 / 4.3 °C Correction Factor: 0 °C Final Temp: 3.8 / 4.3 °C

Temp should be above freezing to 6°C

Examined By	BL
Labeled By	BL
Temped By	BL

Comments:	Yes	No	NA	pH paper Lot# 1003121 / D.P.D. Residual Chlorine Lot # —
Chain of Custody Present	✓			1.
Chain of Custody Filled Out:	✓			2.
-Were client corrections present on COC		✓		No corrections
Chain of Custody Relinquished	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC:	✓			5.
-Includes date/time/ID	yes			
Matrix:	WT			
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):	✓			7. Nitrite
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous samples field filtered:			✓	13.
Organic Samples checked for dechlorination			✓	14:
Filtered volume received for dissolved tests:			✓	15: Not specified
All containers checked for preservation: exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix	✓			16.
All containers meet method preservation requirements:	✓			Initial when completed BL / Date/Time of Preservation / Lot# of added Preservative
8260C/D: Headspace in VOA Vials (> 6mm)			✓	17.
624.1: Headspace in VOA Vials (0mm)			✓	18.
Trip Blank Present:		✓		Trip blank custody seal present? YES or (NO)
Rad Samples Screened <0.5 mrem/hr.	✓			Initial when completed BL / Date: 4/28/23 / Survey Meter SN: 1563

Comments: 8011: Samples 001 & 006 have 1/3 VG9Ts with headspace

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

LIMS30 Internal Shipping Manifest

COOLER 22

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	22	Cooler temp (rcvd) °C	.4
Packaged on Ice (Y/N)	Yes	Correction Factor	.0
Shipping Method	Courier	Cooler temp (corr) °C	.4
Tracking #	N/A	IR GUN ID	2
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[signature]	GBUR	4-28-23	2140
Received	[signature]	BEAV	4-29-23	[illegible]
Relinquished				
Received				
Relinquished				
Received				

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	4/28/2023	30582422001 BP2N1/1	BP2N	30582422001	30582422
MF	4/28/2023	30582422001 BP3C1/1	BP3C	30582422001	30582422
MF	4/28/2023	30582422001 GN1/1	GN1/	30582422001	30582422
MF	4/28/2023	30582506001 BG1U2/5	BG1U	30582506001	30582506
MF	4/28/2023	30582656001 AG1H1/1	AG1H	30582656001	30582656
MF	4/28/2023	30582533001 WGFU2/2	WGFU	30582533001	30582533
MF	4/28/2023	30582532002 WGFU2/2	WGFU	30582532002	30582532
MF	4/28/2023	30582532001 WGFU2/2	WGFU	30582532001	30582532
MF	4/28/2023	30582511001 CG3H1/1	CG3H	30582511001	30582511
MF	4/28/2023	30582511003 CG3H1/1	CG3H	30582511003	30582511
MF	4/28/2023	30582721001 BP3N1/1	BP3N	30582721001	30582721
MF	4/28/2023	30582721004 BP3N1/1	BP3N	30582721004	30582721
MF	4/28/2023	30582721003 BP3N1/1	BP3N	30582721003	30582721
MF	4/28/2023	30582721002 BP3N1/1	BP3N	30582721002	30582721
MF	4/28/2023	30582511002 BP3N1/1	BP3N	30582511002	30582511
MF	4/28/2023	30582511002 BP3N2/2	BP3N	30582511002	30582511
MF	4/28/2023	30582606001 BP3N1/1	BP3N	30582606001	30582606
MF	4/28/2023	30582606002 BP3N1/1	BP3N	30582606002	30582606
MF	4/28/2023	30582672002 BP3N1/1	BP3N	30582672002	30582672
MF	4/28/2023	30582672001 BP3N1/1	BP3N	30582672001	30582672
MF	4/28/2023	30582429008 BP3N2/2	BP3N	30582429008	30582429
MF	4/28/2023	30582429007 BP3N2/2	BP3N	30582429007	30582429
MF	4/28/2023	30582429006 BP3N2/2	BP3N	30582429006	30582429
MF	4/28/2023	30582429006 BP3N1/2	BP3N	30582429006	30582429
MF	4/28/2023	30582429004 BP3N1/2	BP3N	30582429004	30582429
MF	4/28/2023	30582429004 BP3N2/2	BP3N	30582429004	30582429
MF	4/28/2023	30582429005 BP3N1/2	BP3N	30582429005	30582429
MF	4/28/2023	30582429005 BP3N2/2	BP3N	30582429005	30582429
MF	4/28/2023	30582429002 BP3N1/2	BP3N	30582429002	30582429
MF	4/28/2023	30582429002 BP3N2/2	BP3N	30582429002	30582429
MF	4/28/2023	30582429001 BP3N2/2	BP3N	30582429001	30582429
MF	4/28/2023	30582429001 BP3N1/2	BP3N	30582429001	30582429
MF	4/28/2023	30582429007 BP3N1/2	BP3N	30582429007	30582429

LIMS30 Internal Shipping Manifest

COOLER 22

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	22	Cooler temp (rcvd) °C	.4
Packaged on Ice (Y/N)	Yes	Correction Factor	.0
Shipping Method	Courier	Cooler temp (corr) °C	.4
Tracking #	N/A	IR GUN ID	9
PWS* Drinking water?	No	Received on ice?	Y

10

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[signature]	GBUR	4-28-23	2140
Received	[signature]	BEAV	4-29-23	512
Relinquished				
Received				
Relinquished				
Received				

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	4/28/2023	30582429008 BP3N1/2	BP3N	30582429008	30582429
MF	4/28/2023	30582429003 BP3N1/2	BP3N	30582429003	30582429
MF	4/28/2023	30582429003 BP3N2/2	BP3N	30582429003	30582429

DC#_Title: ENV-FRM-BEAV-0058 v03_Pace WV Sample Condition Upon Receipt (SCUR)
Effective Date: 2/8/2023

LIMS30 Lab Sample Condition Upon Receipt (West Virginia)

Put label here prior to scanning

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☑ 3rd Party Courier ☐ Pace ☐ Other _____

Tracking #: _____

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 9 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** 4 °C Correction Factor: 0 °C Final Temp: 4 °C

Thermal Preservation Requirement Met Yes ☑ No ☐

pH paper Lot#	Date and Initials of person examining contents:
206722	CDW 5-1-23

	Yes	No	N/A	
Chain of Custody Present:				1.
Chain of Custody Filled Out:				2. Manifest
Chain of Custody Relinquished:				3.
Sampler Name & Signature on COC:				4.
Sample Labels match COC: -Includes date/time/ID Matrix: _____				5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered:			✓	13.
-pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓	
Filtered volume received for Dissolved tests:	✓			14.
All containers have been checked for chemical preservation: exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix	✓			15.
All containers meet method/chemical preservation requirements:	✓			Initial when completed: CDW Date: 5-1-23
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present:			✓	17.
				Initial when completed: CDW Date: 5-1-23

Comments: _____

***PM review** is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

May 18, 2023

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-SPRING 2023
Pace Project No.: 30584251

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on May 03, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alaina Deitch

Alaina R. Deitch
alaina.deitch@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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CERTIFICATIONS

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver

225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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SAMPLE SUMMARY

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30584251001	**TW-8**	Water	05/03/23 10:30	05/03/23 22:30
30584251002	**TW-8A**	Water	05/03/23 11:05	05/03/23 22:30
30584251003	**TW-9**	Water	05/03/23 13:15	05/03/23 22:30
30584251004	**TW-9B**	Water	05/03/23 11:50	05/03/23 22:30
30584251005	**TW-9C**	Water	05/03/23 12:30	05/03/23 22:30
30584251006	**TW-10A**	Water	05/03/23 14:00	05/03/23 22:30
30584251007	**TW-11A**	Water	05/03/23 14:40	05/03/23 22:30

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30584251001	**TW-8**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30584251002	**TW-8A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30584251003	**TW-9**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30584251004	**TW-9B**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30584251005	**TW-9C**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30584251006	**TW-10A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30584251007	**TW-11A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Date: May 18, 2023

TW-8 (Lab ID: 30584251001)

- Sample pH for 8011 is 7

TW-8A (Lab ID: 30584251002)

- Sample pH for 8011 is 6

TW-9 (Lab ID: 30584251003)

- Sample pH for 8011 is 7

TW-9B (Lab ID: 30584251004)

- Sample pH for 8011 is 6

TW-9C (Lab ID: 30584251005)

- Sample pH for 8011 is 6

TW-10A (Lab ID: 30584251006)

- Sample pH for 8011 is 6

TW-11A (Lab ID: 30584251007)

- Sample pH for 8011 is 6

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: May 18, 2023

General Information:
7 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: May 18, 2023

General Information:
7 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: May 18, 2023

General Information:
7 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 586888

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30584251002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2851009)
  - Thallium
- MSD (Lab ID: 2851010)
  - Thallium

Additional Comments:

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Greensburg, PA 15601
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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: May 18, 2023

General Information:
7 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 586473

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30584251001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2849095)
  - Mercury
- MSD (Lab ID: 2849096)
  - Mercury

Additional Comments:

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: May 18, 2023

General Information:
7 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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(724)850-5600

PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: May 18, 2023

General Information:
7 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 586484

1c: Alkalinity TV: 0.00 mg/L
- TW-10A (Lab ID: 30584251006)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-8A (Lab ID: 30584251002)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-9C (Lab ID: 30584251005)
  - Alkalinity,Total (CaCO3 pH4.5)

2c: Alkalinity TV: 2.00 mg/L
- TW-9B (Lab ID: 30584251004)
  - Alkalinity,Total (CaCO3 pH4.5)

3c: Alkalinity TV: 6.00 mg/L
- TW-9 (Lab ID: 30584251003)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: May 18, 2023

General Information:
7 samples were analyzed for SM 2540C-2015 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: May 18, 2023

General Information:
7 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: May 18, 2023

General Information:
7 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 588327

4c: pH adjusted to <2 in lab at bench prior to analysis

- BLANK (Lab ID: 2858767)
  - Chemical Oxygen Demand
- LCS (Lab ID: 2858768)
  - Chemical Oxygen Demand

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: May 18, 2023

General Information:
7 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 585901

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30583491001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2845853)
  - Chloride

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Method: **SM 4500NO3-F-2016**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: May 18, 2023

General Information:
7 samples were analyzed for SM 4500NO3-F-2016 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: May 18, 2023

General Information:
7 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 585858

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30584023001

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MSD (Lab ID: 2845638)
  - Sulfate

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: May 18, 2023

General Information:
7 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Sample: TW-8 **Lab ID: 30584251001** Collected: 05/03/23 10:30 Received: 05/03/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**6.0**	mg/L	0.50	0.083	1	05/08/23 07:22	05/08/23 15:40	7440-70-2	
Iron	**34.6**	mg/L	0.050	0.035	1	05/08/23 07:22	05/08/23 15:40	7439-89-6	
Magnesium	**3.7**	mg/L	0.50	0.047	1	05/08/23 07:22	05/08/23 15:40	7439-95-4	
Manganese	**0.59**	mg/L	0.0050	0.0027	1	05/08/23 07:22	05/08/23 15:40	7439-96-5	
Potassium	**1.3**	mg/L	0.50	0.26	1	05/08/23 07:22	05/08/23 15:40	7440-09-7	
Sodium	**24.9**	mg/L	0.50	0.34	1	05/08/23 07:22	05/08/23 15:40	7440-23-5	
Total Hardness	**30.4**	mg/L	3.3	0.27	1	05/08/23 07:22	05/08/23 15:40		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**6.5**	mg/L	0.50	0.083	1	05/09/23 11:08	05/09/23 18:03	7440-70-2	
Iron, Dissolved	**30.7**	mg/L	0.050	0.035	1	05/09/23 11:08	05/09/23 18:03	7439-89-6	
Magnesium, Dissolved	**4.1**	mg/L	0.50	0.047	1	05/09/23 11:08	05/09/23 18:03	7439-95-4	
Manganese, Dissolved	**0.62**	mg/L	0.0050	0.0027	1	05/09/23 11:08	05/09/23 18:03	7439-96-5	
Potassium, Dissolved	**1.4**	mg/L	0.50	0.26	1	05/09/23 11:08	05/09/23 18:03	7440-09-7	
Sodium, Dissolved	**27.9**	mg/L	0.50	0.34	1	05/09/23 11:08	05/09/23 18:03	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/09/23 13:42	05/10/23 10:24	7440-36-0	
Arsenic	**0.00054J**	mg/L	0.0025	0.00044	1	05/09/23 13:42	05/10/23 10:24	7440-38-2	
Barium	**0.17**	mg/L	0.0025	0.00098	1	05/09/23 13:42	05/10/23 10:24	7440-39-3	
Beryllium	**0.00021J**	mg/L	0.00050	0.00010	1	05/09/23 13:42	05/10/23 10:24	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/09/23 13:42	05/10/23 10:24	7440-43-9	
Chromium	**0.0013J**	mg/L	0.0025	0.00050	1	05/09/23 13:42	05/10/23 10:24	7440-47-3	
Cobalt	**0.0052**	mg/L	0.0025	0.00081	1	05/09/23 13:42	05/10/23 10:24	7440-48-4	
Copper	**0.0055**	mg/L	0.0025	0.00064	1	05/09/23 13:42	05/10/23 10:24	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/09/23 13:42	05/10/23 10:24	7439-92-1	
Nickel	**0.0046**	mg/L	0.0025	0.00065	1	05/09/23 13:42	05/10/23 10:24	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/09/23 13:42	05/10/23 10:24	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/09/23 13:42	05/10/23 10:24	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/09/23 13:42	05/10/23 10:24	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/09/23 13:42	05/10/23 10:24	7440-62-2	
Zinc	**0.013**	mg/L	0.0050	0.0040	1	05/09/23 13:42	05/10/23 10:24	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/08/23 10:07	05/08/23 15:52	7439-97-6	M1
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/05/23 07:20	05/05/23 12:27	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/05/23 07:20	05/05/23 12:27	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	86	%.	60-140		1	05/05/23 07:20	05/05/23 12:27	630-20-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Sample: TW-8 **Lab ID: 30584251001** Collected: 05/03/23 10:30 Received: 05/03/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**38.0**	mg/L	10.0	1.0	1		05/08/23 12:15		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**125**	mg/L	10.0	10.0	1		05/09/23 16:00		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.25**	mg/L	0.10	0.090	1	05/09/23 07:46	05/09/23 12:13		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/16/23 10:19	05/16/23 15:02		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**51.2**	mg/L	3.0	0.67	1		05/08/23 10:23	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.16**	mg/L	0.10	0.053	1		05/05/23 09:56	14797-55-8	
Nitrogen, NO2 plus NO3	**0.20**	mg/L	0.10	0.053	1		05/05/23 09:56		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/04/23 15:05	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.037**	mg/L	0.010	0.0055	1		05/04/23 10:42	14797-65-0	

Sample: TW-8A **Lab ID: 30584251002** Collected: 05/03/23 11:05 Received: 05/03/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**8.6**	mg/L	0.50	0.083	1	05/08/23 07:22	05/08/23 15:42	7440-70-2	
Iron	**0.12**	mg/L	0.050	0.035	1	05/08/23 07:22	05/08/23 15:42	7439-89-6	
Magnesium	**5.6**	mg/L	0.50	0.047	1	05/08/23 07:22	05/08/23 15:42	7439-95-4	
Manganese	**0.22**	mg/L	0.0050	0.0027	1	05/08/23 07:22	05/08/23 15:42	7439-96-5	
Potassium	**1.9**	mg/L	0.50	0.26	1	05/08/23 07:22	05/08/23 15:42	7440-09-7	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Sample: TW-8A **Lab ID: 30584251002** Collected: 05/03/23 11:05 Received: 05/03/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**57.8**	mg/L	0.50	0.34	1	05/08/23 07:22	05/08/23 15:42	7440-23-5	
Total Hardness	**44.5**	mg/L	3.3	0.27	1	05/08/23 07:22	05/08/23 15:42		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**9.4**	mg/L	0.50	0.083	1	05/09/23 11:08	05/09/23 18:05	7440-70-2	
Iron, Dissolved	**0.043J**	mg/L	0.050	0.035	1	05/09/23 11:08	05/09/23 18:05	7439-89-6	
Magnesium, Dissolved	**6.0**	mg/L	0.50	0.047	1	05/09/23 11:08	05/09/23 18:05	7439-95-4	
Manganese, Dissolved	**0.23**	mg/L	0.0050	0.0027	1	05/09/23 11:08	05/09/23 18:05	7439-96-5	
Potassium, Dissolved	**2.1**	mg/L	0.50	0.26	1	05/09/23 11:08	05/09/23 18:05	7440-09-7	
Sodium, Dissolved	**64.6**	mg/L	0.50	0.34	1	05/09/23 11:08	05/09/23 18:05	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/09/23 13:42	05/10/23 10:27	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/09/23 13:42	05/10/23 10:27	7440-38-2	
Barium	**0.19**	mg/L	0.0025	0.00098	1	05/09/23 13:42	05/10/23 10:27	7440-39-3	
Beryllium	**0.00049J**	mg/L	0.00050	0.00010	1	05/09/23 13:42	05/10/23 10:27	7440-41-7	
Cadmium	**0.00058**	mg/L	0.00050	0.00013	1	05/09/23 13:42	05/10/23 10:27	7440-43-9	
Chromium	**0.014**	mg/L	0.0025	0.00050	1	05/09/23 13:42	05/10/23 10:27	7440-47-3	
Cobalt	**0.015**	mg/L	0.0025	0.00081	1	05/09/23 13:42	05/10/23 10:27	7440-48-4	
Copper	**0.015**	mg/L	0.0025	0.00064	1	05/09/23 13:42	05/10/23 10:27	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/09/23 13:42	05/10/23 10:27	7439-92-1	
Nickel	**0.019**	mg/L	0.0025	0.00065	1	05/09/23 13:42	05/10/23 10:27	7440-02-0	
Selenium	**0.0019J**	mg/L	0.0025	0.00084	1	05/09/23 13:42	05/10/23 10:27	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/09/23 13:42	05/10/23 10:27	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/09/23 13:42	05/10/23 10:27	7440-28-0	M1
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/09/23 13:42	05/10/23 10:27	7440-62-2	
Zinc	**0.041**	mg/L	0.0050	0.0040	1	05/09/23 13:42	05/10/23 10:27	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/08/23 10:07	05/08/23 16:00	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	05/05/23 07:20	05/05/23 13:05	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	05/05/23 07:20	05/05/23 13:05	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	83	%.	60-140		1	05/05/23 07:20	05/05/23 13:05	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/08/23 12:17		1c

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Sample: TW-8A **Lab ID: 30584251002** Collected: 05/03/23 11:05 Received: 05/03/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**250**	mg/L	10.0	10.0	1		05/09/23 16:00		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/09/23 07:46	05/09/23 12:18		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/16/23 10:19	05/16/23 15:02		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**111**	mg/L	6.0	1.3	2		05/08/23 12:25	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**5.0**	mg/L	0.10	0.053	1		05/05/23 09:57	14797-55-8	
Nitrogen, NO2 plus NO3	**5.0**	mg/L	0.10	0.053	1		05/05/23 09:57		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**22.8**	mg/L	10.0	4.7	1		05/04/23 15:05	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/04/23 10:44	14797-65-0	

Sample: TW-9 **Lab ID: 30584251003** Collected: 05/03/23 13:15 Received: 05/03/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.40J**	mg/L	0.50	0.083	1	05/08/23 07:22	05/08/23 15:44	7440-70-2	
Iron	**25.2**	mg/L	0.050	0.035	1	05/08/23 07:22	05/08/23 15:44	7439-89-6	
Magnesium	**0.21J**	mg/L	0.50	0.047	1	05/08/23 07:22	05/08/23 15:44	7439-95-4	
Manganese	**0.14**	mg/L	0.0050	0.0027	1	05/08/23 07:22	05/08/23 15:44	7439-96-5	
Potassium	**0.43J**	mg/L	0.50	0.26	1	05/08/23 07:22	05/08/23 15:44	7440-09-7	
Sodium	**0.83**	mg/L	0.50	0.34	1	05/08/23 07:22	05/08/23 15:44	7440-23-5	
Total Hardness	**1.9J**	mg/L	3.3	0.27	1	05/08/23 07:22	05/08/23 15:44		N3

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Sample: TW-9 **Lab ID: 30584251003** Collected: 05/03/23 13:15 Received: 05/03/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.45J**	mg/L	0.50	0.083	1	05/09/23 11:08	05/09/23 18:07	7440-70-2	
Iron, Dissolved	**25.8**	mg/L	0.050	0.035	1	05/09/23 11:08	05/09/23 18:07	7439-89-6	
Magnesium, Dissolved	**0.23J**	mg/L	0.50	0.047	1	05/09/23 11:08	05/09/23 18:07	7439-95-4	
Manganese, Dissolved	**0.15**	mg/L	0.0050	0.0027	1	05/09/23 11:08	05/09/23 18:07	7439-96-5	
Potassium, Dissolved	**0.46J**	mg/L	0.50	0.26	1	05/09/23 11:08	05/09/23 18:07	7440-09-7	
Sodium, Dissolved	**0.91**	mg/L	0.50	0.34	1	05/09/23 11:08	05/09/23 18:07	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/09/23 13:42	05/10/23 10:42	7440-36-0	
Arsenic	**0.0012J**	mg/L	0.0025	0.00044	1	05/09/23 13:42	05/10/23 10:42	7440-38-2	
Barium	**0.012**	mg/L	0.0025	0.00098	1	05/09/23 13:42	05/10/23 10:42	7440-39-3	
Beryllium	**0.0014**	mg/L	0.00050	0.00010	1	05/09/23 13:42	05/10/23 10:42	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/09/23 13:42	05/10/23 10:42	7440-43-9	
Chromium	**0.0014J**	mg/L	0.0025	0.00050	1	05/09/23 13:42	05/10/23 10:42	7440-47-3	
Cobalt	**0.0016J**	mg/L	0.0025	0.00081	1	05/09/23 13:42	05/10/23 10:42	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.00064	1	05/09/23 13:42	05/10/23 10:42	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/09/23 13:42	05/10/23 10:42	7439-92-1	
Nickel	**0.0035**	mg/L	0.0025	0.00065	1	05/09/23 13:42	05/10/23 10:42	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/09/23 13:42	05/10/23 10:42	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/09/23 13:42	05/10/23 10:42	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/09/23 13:42	05/10/23 10:42	7440-28-0	
Vanadium	**0.0014J**	mg/L	0.0025	0.0012	1	05/09/23 13:42	05/10/23 10:42	7440-62-2	
Zinc	**0.0079**	mg/L	0.0050	0.0040	1	05/09/23 13:42	05/10/23 10:42	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/08/23 10:07	05/08/23 16:02	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	05/05/23 07:20	05/05/23 13:17	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	05/05/23 07:20	05/05/23 13:17	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	99	%.	60-140		1	05/05/23 07:20	05/05/23 13:17	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**6.0J**	mg/L	10.0	1.0	1		05/08/23 12:19		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**20.0**	mg/L	10.0	10.0	1		05/09/23 16:00		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Sample: TW-9 **Lab ID: 30584251003** Collected: 05/03/23 13:15 Received: 05/03/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/09/23 07:46	05/09/23 12:20		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/16/23 10:19	05/16/23 15:02		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**2.6J**	mg/L	3.0	0.67	1		05/08/23 10:27	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.058J**	mg/L	0.10	0.053	1		05/05/23 09:59	14797-55-8	
Nitrogen, NO2 plus NO3	**0.066J**	mg/L	0.10	0.053	1		05/05/23 09:59		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/04/23 15:07	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.0084J**	mg/L	0.010	0.0055	1		05/04/23 10:45	14797-65-0	

Sample: TW-9B **Lab ID: 30584251004** Collected: 05/03/23 11:50 Received: 05/03/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**3.7**	mg/L	0.50	0.083	1	05/08/23 07:22	05/08/23 15:46	7440-70-2	
Iron	**0.18**	mg/L	0.050	0.035	1	05/08/23 07:22	05/08/23 15:46	7439-89-6	
Magnesium	**2.3**	mg/L	0.50	0.047	1	05/08/23 07:22	05/08/23 15:46	7439-95-4	
Manganese	**0.030**	mg/L	0.0050	0.0027	1	05/08/23 07:22	05/08/23 15:46	7439-96-5	
Potassium	**1.5**	mg/L	0.50	0.26	1	05/08/23 07:22	05/08/23 15:46	7440-09-7	
Sodium	**13.4**	mg/L	0.50	0.34	1	05/08/23 07:22	05/08/23 15:46	7440-23-5	
Total Hardness	**18.7**	mg/L	3.3	0.27	1	05/08/23 07:22	05/08/23 15:46		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**4.1**	mg/L	0.50	0.083	1	05/09/23 11:08	05/09/23 18:09	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/09/23 11:08	05/09/23 18:09	7439-89-6	
Magnesium, Dissolved	**2.6**	mg/L	0.50	0.047	1	05/09/23 11:08	05/09/23 18:09	7439-95-4	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Sample: TW-9B **Lab ID: 30584251004** Collected: 05/03/23 11:50 Received: 05/03/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Manganese, Dissolved	**0.033**	mg/L	0.0050	0.0027	1	05/09/23 11:08	05/09/23 18:09	7439-96-5	
Potassium, Dissolved	**1.7**	mg/L	0.50	0.26	1	05/09/23 11:08	05/09/23 18:09	7440-09-7	
Sodium, Dissolved	**15.8**	mg/L	0.50	0.34	1	05/09/23 11:08	05/09/23 18:09	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/09/23 13:42	05/10/23 10:45	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/09/23 13:42	05/10/23 10:45	7440-38-2	
Barium	**0.049**	mg/L	0.0025	0.00098	1	05/09/23 13:42	05/10/23 10:45	7440-39-3	
Beryllium	**0.00011J**	mg/L	0.00050	0.00010	1	05/09/23 13:42	05/10/23 10:45	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/09/23 13:42	05/10/23 10:45	7440-43-9	
Chromium	**0.0038**	mg/L	0.0025	0.00050	1	05/09/23 13:42	05/10/23 10:45	7440-47-3	
Cobalt	**0.0079**	mg/L	0.0025	0.00081	1	05/09/23 13:42	05/10/23 10:45	7440-48-4	
Copper	**0.0028**	mg/L	0.0025	0.00064	1	05/09/23 13:42	05/10/23 10:45	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/09/23 13:42	05/10/23 10:45	7439-92-1	
Nickel	**0.014**	mg/L	0.0025	0.00065	1	05/09/23 13:42	05/10/23 10:45	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/09/23 13:42	05/10/23 10:45	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/09/23 13:42	05/10/23 10:45	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/09/23 13:42	05/10/23 10:45	7440-28-0	
Vanadium	**0.0013J**	mg/L	0.0025	0.0012	1	05/09/23 13:42	05/10/23 10:45	7440-62-2	
Zinc	**0.018**	mg/L	0.0050	0.0040	1	05/09/23 13:42	05/10/23 10:45	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/08/23 10:07	05/08/23 16:04	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	05/05/23 07:20	05/05/23 13:30	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	05/05/23 07:20	05/05/23 13:30	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	86	%.	60-140		1	05/05/23 07:20	05/05/23 13:30	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		05/08/23 12:22		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**72.0**	mg/L	10.0	10.0	1		05/09/23 16:00		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/09/23 07:46	05/09/23 12:22		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Sample: TW-9B **Lab ID: 30584251004** Collected: 05/03/23 11:50 Received: 05/03/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/16/23 10:19	05/16/23 15:03		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**21.5**	mg/L	3.0	0.67	1		05/08/23 10:27	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**2.2**	mg/L	0.10	0.053	1		05/05/23 10:00	14797-55-8	
Nitrogen, NO2 plus NO3	**2.2**	mg/L	0.10	0.053	1		05/05/23 10:00		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**5.9J**	mg/L	10.0	4.7	1		05/04/23 15:08	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.0076J**	mg/L	0.010	0.0055	1		05/04/23 10:44	14797-65-0	

Sample: TW-9C **Lab ID: 30584251005** Collected: 05/03/23 12:30 Received: 05/03/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**4.2**	mg/L	0.50	0.083	1	05/08/23 07:22	05/08/23 15:48	7440-70-2	
Iron	**0.051**	mg/L	0.050	0.035	1	05/08/23 07:22	05/08/23 15:48	7439-89-6	
Magnesium	**3.4**	mg/L	0.50	0.047	1	05/08/23 07:22	05/08/23 15:48	7439-95-4	
Manganese	**0.10**	mg/L	0.0050	0.0027	1	05/08/23 07:22	05/08/23 15:48	7439-96-5	
Potassium	**1.8**	mg/L	0.50	0.26	1	05/08/23 07:22	05/08/23 15:48	7440-09-7	
Sodium	**11.5**	mg/L	0.50	0.34	1	05/08/23 07:22	05/08/23 15:48	7440-23-5	
Total Hardness	**24.3**	mg/L	3.3	0.27	1	05/08/23 07:22	05/08/23 15:48		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**4.6**	mg/L	0.50	0.083	1	05/09/23 11:08	05/09/23 18:11	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/09/23 11:08	05/09/23 18:11	7439-89-6	
Magnesium, Dissolved	**3.7**	mg/L	0.50	0.047	1	05/09/23 11:08	05/09/23 18:11	7439-95-4	
Manganese, Dissolved	**0.10**	mg/L	0.0050	0.0027	1	05/09/23 11:08	05/09/23 18:11	7439-96-5	
Potassium, Dissolved	**2.0**	mg/L	0.50	0.26	1	05/09/23 11:08	05/09/23 18:11	7440-09-7	
Sodium, Dissolved	**13.1**	mg/L	0.50	0.34	1	05/09/23 11:08	05/09/23 18:11	7440-23-5	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Sample: TW-9C **Lab ID: 30584251005** Collected: 05/03/23 12:30 Received: 05/03/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/09/23 13:42	05/10/23 10:55	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/09/23 13:42	05/10/23 10:55	7440-38-2	
Barium	**0.10**	mg/L	0.0025	0.00098	1	05/09/23 13:42	05/10/23 10:55	7440-39-3	
Beryllium	**0.00024J**	mg/L	0.00050	0.00010	1	05/09/23 13:42	05/10/23 10:55	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/09/23 13:42	05/10/23 10:55	7440-43-9	
Chromium	**0.0035**	mg/L	0.0025	0.00050	1	05/09/23 13:42	05/10/23 10:55	7440-47-3	
Cobalt	**0.012**	mg/L	0.0025	0.00081	1	05/09/23 13:42	05/10/23 10:55	7440-48-4	
Copper	**0.0041**	mg/L	0.0025	0.00064	1	05/09/23 13:42	05/10/23 10:55	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/09/23 13:42	05/10/23 10:55	7439-92-1	
Nickel	**0.012**	mg/L	0.0025	0.00065	1	05/09/23 13:42	05/10/23 10:55	7440-02-0	
Selenium	**0.0013J**	mg/L	0.0025	0.00084	1	05/09/23 13:42	05/10/23 10:55	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/09/23 13:42	05/10/23 10:55	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/09/23 13:42	05/10/23 10:55	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/09/23 13:42	05/10/23 10:55	7440-62-2	
Zinc	**0.020**	mg/L	0.0050	0.0040	1	05/09/23 13:42	05/10/23 10:55	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/08/23 10:07	05/08/23 16:11	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	05/05/23 07:20	05/05/23 13:43	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	05/05/23 07:20	05/05/23 13:43	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	90	%.	60-140		1	05/05/23 07:20	05/05/23 13:43	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/08/23 12:30		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**65.0**	mg/L	10.0	10.0	1		05/09/23 16:00		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/09/23 07:46	05/09/23 12:24		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/16/23 10:19	05/16/23 15:03		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Sample: TW-9C **Lab ID: 30584251005** Collected: 05/03/23 12:30 Received: 05/03/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**18.6**	mg/L	3.0	0.67	1		05/08/23 10:28	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**2.4**	mg/L	0.10	0.053	1		05/05/23 10:02	14797-55-8	
Nitrogen, NO2 plus NO3	**2.4**	mg/L	0.10	0.053	1		05/05/23 10:02		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**14.6**	mg/L	10.0	4.7	1		05/04/23 15:10	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/04/23 10:45	14797-65-0	

Sample: TW-10A **Lab ID: 30584251006** Collected: 05/03/23 14:00 Received: 05/03/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**5.4**	mg/L	0.50	0.083	1	05/08/23 07:22	05/08/23 15:50	7440-70-2	
Iron	**0.090**	mg/L	0.050	0.035	1	05/08/23 07:22	05/08/23 15:50	7439-89-6	
Magnesium	**3.3**	mg/L	0.50	0.047	1	05/08/23 07:22	05/08/23 15:50	7439-95-4	
Manganese	**0.061**	mg/L	0.0050	0.0027	1	05/08/23 07:22	05/08/23 15:50	7439-96-5	
Potassium	**2.2**	mg/L	0.50	0.26	1	05/08/23 07:22	05/08/23 15:50	7440-09-7	
Sodium	**23.8**	mg/L	0.50	0.34	1	05/08/23 07:22	05/08/23 15:50	7440-23-5	
Total Hardness	**27.2**	mg/L	3.3	0.27	1	05/08/23 07:22	05/08/23 15:50		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**5.9**	mg/L	0.50	0.083	1	05/09/23 11:08	05/09/23 18:13	7440-70-2	
Iron, Dissolved	**0.077**	mg/L	0.050	0.035	1	05/09/23 11:08	05/09/23 18:13	7439-89-6	
Magnesium, Dissolved	**3.6**	mg/L	0.50	0.047	1	05/09/23 11:08	05/09/23 18:13	7439-95-4	
Manganese, Dissolved	**0.064**	mg/L	0.0050	0.0027	1	05/09/23 11:08	05/09/23 18:13	7439-96-5	
Potassium, Dissolved	**2.4**	mg/L	0.50	0.26	1	05/09/23 11:08	05/09/23 18:13	7440-09-7	
Sodium, Dissolved	**26.9**	mg/L	0.50	0.34	1	05/09/23 11:08	05/09/23 18:13	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/09/23 13:42	05/10/23 10:58	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/09/23 13:42	05/10/23 10:58	7440-38-2	
Barium	**0.090**	mg/L	0.0025	0.00098	1	05/09/23 13:42	05/10/23 10:58	7440-39-3	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Sample: TW-10A **Lab ID: 30584251006** Collected: 05/03/23 14:00 Received: 05/03/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Beryllium	**0.00059**	mg/L	0.00050	0.00010	1	05/09/23 13:42	05/10/23 10:58	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/09/23 13:42	05/10/23 10:58	7440-43-9	
Chromium	**0.0026**	mg/L	0.0025	0.00050	1	05/09/23 13:42	05/10/23 10:58	7440-47-3	
Cobalt	**0.015**	mg/L	0.0025	0.00081	1	05/09/23 13:42	05/10/23 10:58	7440-48-4	
Copper	**0.0050**	mg/L	0.0025	0.00064	1	05/09/23 13:42	05/10/23 10:58	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/09/23 13:42	05/10/23 10:58	7439-92-1	
Nickel	**0.015**	mg/L	0.0025	0.00065	1	05/09/23 13:42	05/10/23 10:58	7440-02-0	
Selenium	**0.0015J**	mg/L	0.0025	0.00084	1	05/09/23 13:42	05/10/23 10:58	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/09/23 13:42	05/10/23 10:58	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/09/23 13:42	05/10/23 10:58	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/09/23 13:42	05/10/23 10:58	7440-62-2	
Zinc	**0.023**	mg/L	0.0050	0.0040	1	05/09/23 13:42	05/10/23 10:58	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/08/23 10:07	05/08/23 16:14	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	05/05/23 07:20	05/05/23 13:55	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	05/05/23 07:20	05/05/23 13:55	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	84	%.	60-140		1	05/05/23 07:20	05/05/23 13:55	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/08/23 12:31		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**102**	mg/L	10.0	10.0	1		05/09/23 16:00		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/09/23 07:46	05/09/23 12:26		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/16/23 10:19	05/16/23 15:03		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**45.9**	mg/L	3.0	0.67	1		05/08/23 10:29	16887-00-6	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Sample: TW-10A **Lab ID: 30584251006** Collected: 05/03/23 14:00 Received: 05/03/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**2.2**	mg/L	0.10	0.053	1		05/05/23 10:03	14797-55-8	
Nitrogen, NO2 plus NO3	**2.2**	mg/L	0.10	0.053	1		05/05/23 10:03		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.1**	mg/L	10.0	4.7	1		05/04/23 15:10	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/04/23 10:46	14797-65-0	

Sample: TW-11A **Lab ID: 30584251007** Collected: 05/03/23 14:40 Received: 05/03/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**4.2**	mg/L	0.50	0.083	1	05/08/23 07:22	05/08/23 15:52	7440-70-2	
Iron	**16.3**	mg/L	0.050	0.035	1	05/08/23 07:22	05/08/23 15:52	7439-89-6	
Magnesium	**2.0**	mg/L	0.50	0.047	1	05/08/23 07:22	05/08/23 15:52	7439-95-4	
Manganese	**0.41**	mg/L	0.0050	0.0027	1	05/08/23 07:22	05/08/23 15:52	7439-96-5	
Potassium	**2.1**	mg/L	0.50	0.26	1	05/08/23 07:22	05/08/23 15:52	7440-09-7	
Sodium	**11.2**	mg/L	0.50	0.34	1	05/08/23 07:22	05/08/23 15:52	7440-23-5	
Total Hardness	**18.6**	mg/L	3.3	0.27	1	05/08/23 07:22	05/08/23 15:52		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**4.9**	mg/L	0.50	0.083	1	05/09/23 11:08	05/09/23 18:15	7440-70-2	
Iron, Dissolved	**15.9**	mg/L	0.050	0.035	1	05/09/23 11:08	05/09/23 18:15	7439-89-6	
Magnesium, Dissolved	**2.3**	mg/L	0.50	0.047	1	05/09/23 11:08	05/09/23 18:15	7439-95-4	
Manganese, Dissolved	**0.45**	mg/L	0.0050	0.0027	1	05/09/23 11:08	05/09/23 18:15	7439-96-5	
Potassium, Dissolved	**2.6**	mg/L	0.50	0.26	1	05/09/23 11:08	05/09/23 18:15	7440-09-7	
Sodium, Dissolved	**13.3**	mg/L	0.50	0.34	1	05/09/23 11:08	05/09/23 18:15	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/09/23 13:42	05/10/23 11:01	7440-36-0	
Arsenic	**0.016**	mg/L	0.0025	0.00044	1	05/09/23 13:42	05/10/23 11:01	7440-38-2	
Barium	**0.072**	mg/L	0.0025	0.00098	1	05/09/23 13:42	05/10/23 11:01	7440-39-3	
Beryllium	**0.00014J**	mg/L	0.00050	0.00010	1	05/09/23 13:42	05/10/23 11:01	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/09/23 13:42	05/10/23 11:01	7440-43-9	
Chromium	**0.00088J**	mg/L	0.0025	0.00050	1	05/09/23 13:42	05/10/23 11:01	7440-47-3	
Cobalt	**0.017**	mg/L	0.0025	0.00081	1	05/09/23 13:42	05/10/23 11:01	7440-48-4	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Sample: TW-11A **Lab ID: 30584251007** Collected: 05/03/23 14:40 Received: 05/03/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Copper	**0.0012J**	mg/L	0.0025	0.00064	1	05/09/23 13:42	05/10/23 11:01	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/09/23 13:42	05/10/23 11:01	7439-92-1	
Nickel	**0.0058**	mg/L	0.0025	0.00065	1	05/09/23 13:42	05/10/23 11:01	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/09/23 13:42	05/10/23 11:01	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/09/23 13:42	05/10/23 11:01	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/09/23 13:42	05/10/23 11:01	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/09/23 13:42	05/10/23 11:01	7440-62-2	
Zinc	**0.0071**	mg/L	0.0050	0.0040	1	05/09/23 13:42	05/10/23 11:01	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/08/23 10:07	05/08/23 16:16	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	05/05/23 07:20	05/05/23 14:08	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	05/05/23 07:20	05/05/23 14:08	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	93	%.	60-140		1	05/05/23 07:20	05/05/23 14:08	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**22.0**	mg/L	10.0	1.0	1		05/08/23 12:31		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**79.0**	mg/L	10.0	10.0	1		05/09/23 16:00		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.098J**	mg/L	0.10	0.090	1	05/09/23 07:46	05/09/23 12:28		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/16/23 10:19	05/16/23 15:03		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**19.0**	mg/L	3.0	0.67	1		05/08/23 10:30	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.078J**	mg/L	0.10	0.053	1		05/05/23 10:04	14797-55-8	
Nitrogen, NO2 plus NO3	**0.079J**	mg/L	0.10	0.053	1		05/05/23 10:04		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Sample: TW-11A **Lab ID: 30584251007** Collected: 05/03/23 14:40 Received: 05/03/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**23.3**	mg/L	10.0	4.7	1		05/04/23 15:12	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/04/23 10:46	14797-65-0	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584251

QC Batch: 586393
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

METHOD BLANK: 2848803 Matrix: Water
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	05/08/23 15:16	
Iron	mg/L	0.050 U	0.050	0.035	05/08/23 15:16	
Magnesium	mg/L	0.50 U	0.50	0.047	05/08/23 15:16	
Manganese	mg/L	0.0050 U	0.0050	0.0027	05/08/23 15:16	
Potassium	mg/L	0.50 U	0.50	0.26	05/08/23 15:16	
Sodium	mg/L	0.50 U	0.50	0.34	05/08/23 15:16	

LABORATORY CONTROL SAMPLE: 2848804

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	38.3	96	80-120	
Iron	mg/L	2	2.1	104	80-120	
Magnesium	mg/L	20	19.5	97	80-120	
Manganese	mg/L	2	2.0	102	80-120	
Potassium	mg/L	20	19.7	99	80-120	
Sodium	mg/L	20	19.4	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2848893 2848894

Parameter	Units	30584281002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	22500 ug/L	40	40	65.6	60.1	108	94	80-120	9	20	
Iron	mg/L	ND	2	2	2.2	2.1	111	101	80-120	9	20	
Magnesium	mg/L	7580 ug/L	20	20	29.6	27.2	110	98	80-120	9	20	
Manganese	mg/L	11.3 ug/L	2	2	2.2	2.0	109	100	80-120	8	20	
Potassium	mg/L	4170 ug/L	20	20	26.4	24.2	111	100	80-120	9	20	
Sodium	mg/L	6210 ug/L	20	20	28.0	25.7	109	98	80-120	8	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584251

QC Batch: 586768
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

METHOD BLANK: 2850563 Matrix: Water
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	05/09/23 17:27	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	05/09/23 17:27	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	05/09/23 17:27	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	05/09/23 17:27	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	05/09/23 17:27	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	05/09/23 17:27	

LABORATORY CONTROL SAMPLE: 2850564

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	42.2	105	80-120	
Iron, Dissolved	mg/L	2	2.2	110	80-120	
Magnesium, Dissolved	mg/L	20	21.4	107	80-120	
Manganese, Dissolved	mg/L	2	2.2	109	80-120	
Potassium, Dissolved	mg/L	20	22.1	111	80-120	
Sodium, Dissolved	mg/L	20	22.0	110	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2850565 2850566

Parameter	Units	30583503001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	96900 ug/L	40	40	138	140	102	108	80-120	2	20	
Iron, Dissolved	mg/L	0.050 U	2	2	2.2	2.2	109	111	80-120	2	20	
Magnesium, Dissolved	mg/L	19500 ug/L	20	20	40.8	41.6	106	111	80-120	2	20	
Manganese, Dissolved	mg/L	0.011	2	2	2.1	2.2	107	109	80-120	2	20	
Potassium, Dissolved	mg/L	1740 ug/L	20	20	24.5	25.0	114	116	80-120	2	20	
Sodium, Dissolved	mg/L	9170 ug/L	20	20	31.4	32.0	111	114	80-120	2	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584251

QC Batch: 586888
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

METHOD BLANK: 2851007
Matrix: Water
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00030	05/10/23 10:18	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	05/10/23 10:18	
Barium	mg/L	0.0025 U	0.0025	0.00098	05/10/23 10:18	
Beryllium	mg/L	0.00050 U	0.00050	0.00010	05/10/23 10:18	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	05/10/23 10:18	
Chromium	mg/L	0.0025 U	0.0025	0.00050	05/10/23 10:18	
Cobalt	mg/L	0.0025 U	0.0025	0.00081	05/10/23 10:18	
Copper	mg/L	0.0025 U	0.0025	0.00064	05/10/23 10:18	
Lead	mg/L	0.00050 U	0.00050	0.00025	05/10/23 10:18	
Nickel	mg/L	0.0025 U	0.0025	0.00065	05/10/23 10:18	
Selenium	mg/L	0.0025 U	0.0025	0.00084	05/10/23 10:18	
Silver	mg/L	0.0025 U	0.0025	0.00053	05/10/23 10:18	
Thallium	mg/L	0.00050 U	0.00050	0.000081	05/10/23 10:18	
Vanadium	mg/L	0.0025 U	0.0025	0.0012	05/10/23 10:18	
Zinc	mg/L	0.0050 U	0.0050	0.0040	05/10/23 10:18	

LABORATORY CONTROL SAMPLE: 2851008

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.021	105	80-120	
Arsenic	mg/L	0.1	0.10	104	80-120	
Barium	mg/L	0.1	0.10	101	80-120	
Beryllium	mg/L	0.02	0.020	98	80-120	
Cadmium	mg/L	0.02	0.020	99	80-120	
Chromium	mg/L	0.1	0.11	110	80-120	
Cobalt	mg/L	0.1	0.11	111	80-120	
Copper	mg/L	0.1	0.11	112	80-120	
Lead	mg/L	0.02	0.020	102	80-120	
Nickel	mg/L	0.1	0.11	110	80-120	
Selenium	mg/L	0.1	0.10	100	80-120	
Silver	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.02	0.020	101	80-120	
Vanadium	mg/L	0.1	0.11	108	80-120	
Zinc	mg/L	0.2	0.21	107	80-120	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584251

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2851009 2851010

Parameter	Units	30584251002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00050 U	0.02	0.02	0.022	0.021	108	106	75-125	2	20	
Arsenic	mg/L	0.0025 U	0.1	0.1	0.092	0.091	92	91	75-125	1	20	
Barium	mg/L	0.19	0.1	0.1	0.29	0.28	101	97	75-125	2	20	
Beryllium	mg/L	0.00049J	0.02	0.02	0.021	0.021	103	104	75-125	1	20	
Cadmium	mg/L	0.00058	0.02	0.02	0.021	0.020	101	99	75-125	2	20	
Chromium	mg/L	0.014	0.1	0.1	0.12	0.12	110	110	75-125	0	20	
Cobalt	mg/L	0.015	0.1	0.1	0.13	0.13	111	111	75-125	0	20	
Copper	mg/L	0.015	0.1	0.1	0.13	0.13	111	111	75-125	0	20	
Lead	mg/L	0.00050 U	0.02	0.02	0.021	0.021	104	104	75-125	0	20	
Nickel	mg/L	0.019	0.1	0.1	0.13	0.13	110	111	75-125	0	20	
Selenium	mg/L	0.0019J	0.1	0.1	0.087	0.086	85	84	75-125	2	20	
Silver	mg/L	0.0025 U	0.1	0.1	0.10	0.10	101	100	75-125	1	20	
Thallium	mg/L	0.00050 U	0.02	0.02	0.013	0.013	64	66	75-125	4	20	M1
Vanadium	mg/L	0.0025 U	0.1	0.1	0.11	0.11	109	110	75-125	1	20	
Zinc	mg/L	0.041	0.2	0.2	0.26	0.26	108	107	75-125	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584251

QC Batch: 586473
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

METHOD BLANK: 2849093 Matrix: Water
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	05/08/23 15:43	

LABORATORY CONTROL SAMPLE: 2849094

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.011	108	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2849095 2849096

Parameter	Units	30584251001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00020 U	0.01	0.01	0.013	0.014	128	135	80-120	5	20	M1

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584251

QC Batch: 586019
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

METHOD BLANK: 2846894 Matrix: Water
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	05/05/23 12:01	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	05/05/23 12:01	
1,1,1,2-Tetrachloroethane (S)	%.	91	60-140		05/05/23 12:01	

LABORATORY CONTROL SAMPLE: 2846895

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.24	95	85-115	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.22	87	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			90	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2846896 2846897

Parameter	Units	30584251001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.041 U	0.4	0.4	0.34	0.35	85	86	60-140	2	25	
1,2-Dibromoethane (EDB)	ug/L	0.041 U	0.4	0.4	0.34	0.34	85	84	60-140	0	25	
1,1,1,2-Tetrachloroethane (S)	%.						85	83	60-140			

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584251

QC Batch: 586484
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

METHOD BLANK: 2849126
Matrix: Water
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	05/08/23 10:24	

LABORATORY CONTROL SAMPLE: 2849127

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	22.0	110	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2849128 2849129

Parameter	Units	30582231001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	188	50	50	244	245	112	114	85-115	0	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584251

QC Batch: 586717 | Analysis Method: SM 2540C-2015
QC Batch Method: SM 2540C-2015 | Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

METHOD BLANK: 2850447 | Matrix: Water
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	05/09/23 16:00	

LABORATORY CONTROL SAMPLE: 2850448

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	982	98	85-115	

SAMPLE DUPLICATE: 2850449

Parameter	Units	30584185004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	431	450	4	5	

SAMPLE DUPLICATE: 2850450

Parameter	Units	30584816002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	30.0	29.0	3	5	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584251

QC Batch: 586399
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

METHOD BLANK: 2848837 Matrix: Water
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	05/09/23 11:28	

LABORATORY CONTROL SAMPLE: 2848838

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.2	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2848839 2848840

Parameter	Units	30583749002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	2.0	4	4	6.1	6.2	103	106	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2848841 2848842

Parameter	Units	30584251001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.25	4	4	4.6	4.6	109	109	90-110	0	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584251

QC Batch: 588327
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

METHOD BLANK: 2858761 Matrix: Water
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	05/16/23 14:59	

METHOD BLANK: 2858767 Matrix: Water
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	05/16/23 14:59	4c

LABORATORY CONTROL SAMPLE: 2858762

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	296	99	90-110	

LABORATORY CONTROL SAMPLE: 2858768

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	305	102	90-110	4c

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2858763 2858764

Parameter	Units	30583891001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	ND	150	150	171	171	103	103	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2858765 2858766

Parameter	Units	30584251007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	25.0 U	150	150	153	159	102	106	90-110	4	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584251

QC Batch: 585901
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

METHOD BLANK: 2845850 Matrix: Water
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/08/23 10:11	

METHOD BLANK: 2845851 Matrix: Water
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/08/23 10:13	

METHOD BLANK: 2846945 Matrix: Water
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/08/23 10:13	

LABORATORY CONTROL SAMPLE: 2845852

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	19.4	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2845853 2845854

Parameter	Units	30583491001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	102	20	20	118	120	78	89	85-115	2	20	ML

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584251

QC Batch: 585898
QC Batch Method: SM 4500NO3-F-2016
Analysis Method: SM 4500NO3-F-2016
Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

METHOD BLANK: 2845842 Matrix: Water
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	05/05/23 09:46	

LABORATORY CONTROL SAMPLE: 2845843

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	3.9	97	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2845844 2845845

Parameter	Units	30583952001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.11	5	5	5.4	5.4	106	105	85-115	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584251

QC Batch: 585858
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

METHOD BLANK: 2845635 Matrix: Water
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	05/04/23 14:58	

LABORATORY CONTROL SAMPLE: 2845636

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	29.8	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2845637 2845638

Parameter	Units	30584023001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	34600	20000	20000	56200	57800	108	116	85-115	3	20	MH

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584251

QC Batch: 585688
QC Batch Method: SM 4500NO2-B-2011
Analysis Method: SM 4500NO2-B-2011
Analysis Description: SM4500-NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

METHOD BLANK: 2844873 Matrix: Water
Associated Lab Samples: 30584251001, 30584251002, 30584251003, 30584251004, 30584251005, 30584251006, 30584251007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	05/04/23 10:41	

LABORATORY CONTROL SAMPLE: 2844874

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.10	103	90-110	

MATRIX SPIKE SAMPLE: 2844876

Parameter	Units	30584251001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.037	0.1	0.15	110	85-115	

SAMPLE DUPLICATE: 2844875

Parameter	Units	30584251001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	0.037	0.035	4	20	

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QUALIFIERS

Project: MLF-SPRING 2023
Pace Project No.: 30584251

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30584251001
[1] Sample pH for 8011 is 7

Sample: 30584251002
[1] Sample pH for 8011 is 6

Sample: 30584251003
[1] Sample pH for 8011 is 7

Sample: 30584251004
[1] Sample pH for 8011 is 6

Sample: 30584251005
[1] Sample pH for 8011 is 6

Sample: 30584251006
[1] Sample pH for 8011 is 6

Sample: 30584251007
[1] Sample pH for 8011 is 6

ANALYTE QUALIFIERS

1c Alkalinity TV: 0.00 mg/L

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QUALIFIERS

Project: MLF-SPRING 2023
Pace Project No.: 30584251

ANALYTE QUALIFIERS

2c	Alkalinity TV: 2.00 mg/L
3c	Alkalinity TV: 6.00 mg/L
4c	pH adjusted to <2 in lab at bench prior to analysis
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30584251001	**TW-8**	EPA 3010A	586393	EPA 6010D	586554
30584251002	**TW-8A**	EPA 3010A	586393	EPA 6010D	586554
30584251003	**TW-9**	EPA 3010A	586393	EPA 6010D	586554
30584251004	**TW-9B**	EPA 3010A	586393	EPA 6010D	586554
30584251005	**TW-9C**	EPA 3010A	586393	EPA 6010D	586554
30584251006	**TW-10A**	EPA 3010A	586393	EPA 6010D	586554
30584251007	**TW-11A**	EPA 3010A	586393	EPA 6010D	586554
30584251001	**TW-8**	EPA 3010A	586768	EPA 6010D	586958
30584251002	**TW-8A**	EPA 3010A	586768	EPA 6010D	586958
30584251003	**TW-9**	EPA 3010A	586768	EPA 6010D	586958
30584251004	**TW-9B**	EPA 3010A	586768	EPA 6010D	586958
30584251005	**TW-9C**	EPA 3010A	586768	EPA 6010D	586958
30584251006	**TW-10A**	EPA 3010A	586768	EPA 6010D	586958
30584251007	**TW-11A**	EPA 3010A	586768	EPA 6010D	586958
30584251001	**TW-8**	EPA 3010A	586888	EPA 6020B	587106
30584251002	**TW-8A**	EPA 3010A	586888	EPA 6020B	587106
30584251003	**TW-9**	EPA 3010A	586888	EPA 6020B	587106
30584251004	**TW-9B**	EPA 3010A	586888	EPA 6020B	587106
30584251005	**TW-9C**	EPA 3010A	586888	EPA 6020B	587106
30584251006	**TW-10A**	EPA 3010A	586888	EPA 6020B	587106
30584251007	**TW-11A**	EPA 3010A	586888	EPA 6020B	587106
30584251001	**TW-8**	EPA 7470A	586473	EPA 7470A	586601
30584251002	**TW-8A**	EPA 7470A	586473	EPA 7470A	586601
30584251003	**TW-9**	EPA 7470A	586473	EPA 7470A	586601
30584251004	**TW-9B**	EPA 7470A	586473	EPA 7470A	586601
30584251005	**TW-9C**	EPA 7470A	586473	EPA 7470A	586601
30584251006	**TW-10A**	EPA 7470A	586473	EPA 7470A	586601
30584251007	**TW-11A**	EPA 7470A	586473	EPA 7470A	586601
30584251001	**TW-8**	EPA 8011	586019	EPA 8011	586067
30584251002	**TW-8A**	EPA 8011	586019	EPA 8011	586067
30584251003	**TW-9**	EPA 8011	586019	EPA 8011	586067
30584251004	**TW-9B**	EPA 8011	586019	EPA 8011	586067
30584251005	**TW-9C**	EPA 8011	586019	EPA 8011	586067
30584251006	**TW-10A**	EPA 8011	586019	EPA 8011	586067
30584251007	**TW-11A**	EPA 8011	586019	EPA 8011	586067
30584251001	**TW-8**	SM 2320B-2011	586484		
30584251002	**TW-8A**	SM 2320B-2011	586484		
30584251003	**TW-9**	SM 2320B-2011	586484		
30584251004	**TW-9B**	SM 2320B-2011	586484		
30584251005	**TW-9C**	SM 2320B-2011	586484		
30584251006	**TW-10A**	SM 2320B-2011	586484		
30584251007	**TW-11A**	SM 2320B-2011	586484		
30584251001	**TW-8**	SM 2540C-2015	586717		
30584251002	**TW-8A**	SM 2540C-2015	586717		
30584251003	**TW-9**	SM 2540C-2015	586717		
30584251004	**TW-9B**	SM 2540C-2015	586717		

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(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2023
Pace Project No.: 30584251

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30584251005	**TW-9C**	SM 2540C-2015	586717		
30584251006	**TW-10A**	SM 2540C-2015	586717		
30584251007	**TW-11A**	SM 2540C-2015	586717		
30584251001	**TW-8**	EPA 350.1	586399	EPA 350.1	586733
30584251002	**TW-8A**	EPA 350.1	586399	EPA 350.1	586733
30584251003	**TW-9**	EPA 350.1	586399	EPA 350.1	586733
30584251004	**TW-9B**	EPA 350.1	586399	EPA 350.1	586733
30584251005	**TW-9C**	EPA 350.1	586399	EPA 350.1	586733
30584251006	**TW-10A**	EPA 350.1	586399	EPA 350.1	586733
30584251007	**TW-11A**	EPA 350.1	586399	EPA 350.1	586733
30584251001	**TW-8**	EPA 410.4	588327	EPA 410.4	588376
30584251002	**TW-8A**	EPA 410.4	588327	EPA 410.4	588376
30584251003	**TW-9**	EPA 410.4	588327	EPA 410.4	588376
30584251004	**TW-9B**	EPA 410.4	588327	EPA 410.4	588376
30584251005	**TW-9C**	EPA 410.4	588327	EPA 410.4	588376
30584251006	**TW-10A**	EPA 410.4	588327	EPA 410.4	588376
30584251007	**TW-11A**	EPA 410.4	588327	EPA 410.4	588376
30584251001	**TW-8**	SM 4500-Cl-E-2011	585901		
30584251002	**TW-8A**	SM 4500-Cl-E-2011	585901		
30584251003	**TW-9**	SM 4500-Cl-E-2011	585901		
30584251004	**TW-9B**	SM 4500-Cl-E-2011	585901		
30584251005	**TW-9C**	SM 4500-Cl-E-2011	585901		
30584251006	**TW-10A**	SM 4500-Cl-E-2011	585901		
30584251007	**TW-11A**	SM 4500-Cl-E-2011	585901		
30584251001	**TW-8**	SM 4500NO3-F-2016	585898		
30584251002	**TW-8A**	SM 4500NO3-F-2016	585898		
30584251003	**TW-9**	SM 4500NO3-F-2016	585898		
30584251004	**TW-9B**	SM 4500NO3-F-2016	585898		
30584251005	**TW-9C**	SM 4500NO3-F-2016	585898		
30584251006	**TW-10A**	SM 4500NO3-F-2016	585898		
30584251007	**TW-11A**	SM 4500NO3-F-2016	585898		
30584251001	**TW-8**	EPA 9038	585858		
30584251002	**TW-8A**	EPA 9038	585858		
30584251003	**TW-9**	EPA 9038	585858		
30584251004	**TW-9B**	EPA 9038	585858		
30584251005	**TW-9C**	EPA 9038	585858		
30584251006	**TW-10A**	EPA 9038	585858		
30584251007	**TW-11A**	EPA 9038	585858		
30584251001	**TW-8**	SM 4500NO2-B-2011	585688		
30584251002	**TW-8A**	SM 4500NO2-B-2011	585688		
30584251003	**TW-9**	SM 4500NO2-B-2011	585688		
30584251004	**TW-9B**	SM 4500NO2-B-2011	585688		
30584251005	**TW-9C**	SM 4500NO2-B-2011	585688		
30584251006	**TW-10A**	SM 4500NO2-B-2011	585688		
30584251007	**TW-11A**	SM 4500NO2-B-2011	585688		

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WO#: 30584251

30584251

EMA

207 East Sixth Stre

D ASSESSMENT, LLC

sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - SPRING 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals ①	Total + Diss. Metals ②	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO4, COD	Method 8011 - DBCP + EDB			
001 1	TW-8	7	5-3-23	1030	✓		GW	✓	✓	✓	✓	✓	✓	✓	✓			
002 2	TW-8A	↓	↓	1105	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓			
003 3	TW-9			1315														
004 4	TW-9B			1150														
005 5	TW-9C			1230														
006 6	TW-10A			1400														
007 7	TW-11A	↓	↓	1440	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓			
8																		
9																		
10																		
11																		
12																		

	Signature	Date	Time	Comments
Relinquished by	AABrown	5-3-23	1500	① 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn
Received by	TB/Pace	5-3-23	1500	① 7470 - Hg
Relinquished by	TB/Pace	5-3-23	1726	② 6010 - Ca, Fe, Mg, Mn, K, Na
Received by	KDS PACE	5-3-23	1945	PACE - WV - METALS
Relinquished by	KDS PACE	5-3-23	2230	PACE - G-BUAL - WET CHEM + 8011
Received by	[illegible] PACE	5/3/23	2230	LEVEL 2 REPORT

Cooler Temp on Arrival: 2.1, 3.2 Deg. C

Rev. Aug. 2018

Pace Analytical Services	DC#_Title: ENV-FRM-GBUR-0088 v04_Sample Condition Upon Receipt-Pittsburgh Effective Date: 02/03/2023	**WO#: 30584251** PM: ARG Due Date: 05/18/23 CLIENT: ENV MONITOR

Client Name: EMA

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking Number:

Examined By	BL
Labeled By	BL
Temped By	BL

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

Thermometer Used: 16 **Type of Ice:** (Wet) Blue None

Cooler Temperature: Observed Temp 2.1 °C Correction Factor: 0 °C Final Temp: 2.1 °C
3.2 3.2

Temp should be above freezing to 6°C

Comments:	Yes	No	NA	pH paper Lot# 10D3121 / D.P.D. Residual Chlorine Lot #
Chain of Custody Present	✓			1.
Chain of Custody Filled Out:	✓			2.
-Were client corrections present on COC		✓		No corrections
Chain of Custody Relinquished	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC:	✓			5.
-Includes date/time/ID	yes			
Matrix:	WT			
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):	✓			7. Nitrite
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous samples field filtered:			✓	13.
Organic Samples checked for dechlorination			✓	14:
Filtered volume received for dissolved tests:			✓	15:
All containers checked for preservation:	✓			16.
exceptions: (VOA) coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix				
All containers meet method preservation requirements:	✓			Initial when completed BL / Date/Time of Preservation / Lot# of added Preservative
8260C/D: Headspace in VOA Vials (> 6mm)			✓	17.
624.1: Headspace in VOA Vials (0mm)			✓	18.
Trip Blank Present:		✓		Trip blank custody seal present? YES or (NO)
Rad Samples Screened <0.5 mrem/hr.	✓			Initial when completed BL / Date: 5/14/23 / Survey Meter SN: 1563

Comments: 8011 no headspace

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

LIMS30 Internal Shipping Manifest

COOLER 31

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	31	Cooler temp (rcvd) °C	1.2
Packaged on Ice (Y/N)	Yes	Correction Factor	.0
Shipping Method	Courier	Cooler temp (corr) °C	1.2
Tracking #	N/A	IR GUN ID	23
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[signature]	GBUR	5-4-23	2380
Received	[signature]	BEAV	5-5-23	515
Relinquished				
Received				
Relinquished				
Received				

10

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	5/4/2023	30584567002 BP2N1/1	BP2N	30584567002	30584567
MF	5/4/2023	30584288002 BP1U1/1	BP1U	30584288002	30584288
MF	5/4/2023	30584288001 BP1U1/1	BP1U	30584288001	30584288
MF	5/4/2023	30584288003 BP1U1/1	BP1U	30584288003	30584288
MF	5/4/2023	30584287002 BP1U1/1	BP1U	30584287002	30584287
MF	5/4/2023	30584287001 BP2U1/1	BP2U	30584287001	30584287
MF	5/4/2023	30584289002 BP1U1/1	BP1U	30584289002	30584289
MF	5/4/2023	30584289001 BP3U1/1	BP3U	30584289001	30584289
MF	5/4/2023	30584281002 BP3N1/1	BP3N	30584281002	30584281
MF	5/4/2023	30584281003 BP3N1/1	BP3N	30584281003	30584281
MF	5/4/2023	30584559001 BP3N1/1	BP3N	30584559001	30584559
MF	5/4/2023	30584559004 BP3N1/1	BP3N	30584559004	30584559
MF	5/4/2023	30584309003 BP3N1/1	BP3N	30584309003	30584309
MF	5/4/2023	30584309002 BP3N1/1	BP3N	30584309002	30584309
MF	5/4/2023	30584309001 BP3N1/1	BP3N	30584309001	30584309
MF	5/4/2023	30584612001 BP3N1/1	BP3N	30584612001	30584612
MF	5/4/2023	30584612002 BP3N1/1	BP3N	30584612002	30584612
MF	5/4/2023	30584251004 BP3N2/2	BP3N	30584251004	30584251
MF	5/4/2023	30584251005 BP3N2/2	BP3N	30584251005	30584251
MF	5/4/2023	30584251004 BP3N1/2	BP3N	30584251004	30584251
MF	5/4/2023	30584251005 BP3N1/2	BP3N	30584251005	30584251
MF	5/4/2023	30584251007 BP3N2/2	BP3N	30584251007	30584251
MF	5/4/2023	30584251007 BP3N1/2	BP3N	30584251007	30584251
MF	5/4/2023	30584251003 BP3N1/2	BP3N	30584251003	30584251
MF	5/4/2023	30584251006 BP3N1/2	BP3N	30584251006	30584251
MF	5/4/2023	30584251003 BP3N2/2	BP3N	30584251003	30584251
MF	5/4/2023	30584251006 BP3N2/2	BP3N	30584251006	30584251
MF	5/4/2023	30584251001 BP3N2/2	BP3N	30584251001	30584251
MF	5/4/2023	30584251001 BP3N1/2	BP3N	30584251001	30584251
MF	5/4/2023	30584251002 BP3N1/2	BP3N	30584251002	30584251
MF	5/4/2023	30584251002 BP3N2/2	BP3N	30584251002	30584251
MF	5/4/2023	30584570003 GN1/1	GN1/	30584570003	30584570
MF	5/4/2023	30584570004 GN1/1	GN1/	30584570004	30584570

LIMS30 Internal Shipping Manifest

COOLER 31

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	31	Cooler temp (rcvd) °C	1.2
Packaged on Ice (Y/N)	Yes	Correction Factor	.0
Shipping Method	Courier	Cooler temp (corr) °C	1.2
Tracking #	N/A	IR GUN ID	23
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[illegible]	GBUR	5-4-23	2320
Received	[illegible]	BEAV	5-5-23	515
Relinquished				
Received				
Relinquished				
Received				

10

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	5/4/2023	30584570006 BP3N1/1	BP3N	30584570006	30584570
MF	5/4/2023	30584570005 BP3N1/1	BP3N	30584570005	30584570
MF	5/4/2023	30584570002 BP3N1/1	BP3N	30584570002	30584570
MF	5/4/2023	30584570001 BP3N1/1	BP3N	30584570001	30584570

DC#_Title: ENV-FRM-BEAV-0058 v03_Pace WV Sample Condition Upon Receipt (SCUR)
Effective Date: 2/8/2023

LIMS30 Lab Sample Condition Upon Receipt (West Virginia)

Put label here prior to scanning

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☑ 3rd Party Courier ☐ Pace ☐ Other _____

Tracking #: _____

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 23 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** 1.2 °C Correction Factor: .0 °C Final Temp: 1.2 °C

Thermal Preservation Requirement Met Yes ☑ No ☐

pH paper Lot#	Date and Initials of person examining contents
206722	CDW 5-5-23

	Yes	No	N/A	
Chain of Custody Present:				1.
Chain of Custody Filled Out:				2.
Chain of Custody Relinquished:				3.
Sampler Name & Signature on COC:				4.
Sample Labels match COC: -Includes date/time/ID Matrix:				5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered:			✓	13.
-pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓	
Filtered volume received for Dissolved tests:				14.
All containers have been checked for chemical preservation: exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix	✓			15.
All containers meet method/chemical preservation requirements:	✓			Initial when completed: CDW Date: 5-5-23
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present:			✓	17.
				Initial when completed: CDW Date: 5-5-23

Manifest

Comments: _____

*PM review is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

May 22, 2023

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-SPRING 2023
Pace Project No.: 30584816

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory between May 04, 2023 and May 12, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses were subcontracted outside of the Pace Network. The test report from the external subcontractor is attached to this report in its entirety.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alaina Deitch

Alaina R. Deitch
alaina.deitch@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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CERTIFICATIONS

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Florida: Cert E871149 SEKS WET
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver
225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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SAMPLE SUMMARY

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30584816001	**TW-14**	Water	05/04/23 10:35	05/04/23 22:30
30584816002	**TW-15**	Water	05/04/23 11:20	05/04/23 22:30
30584816003	**TW-15B**	Water	05/04/23 12:00	05/04/23 22:30
30584816004	**TW-16**	Water	05/04/23 13:20	05/04/23 22:30
30584816005	**TW-16A**	Water	05/04/23 12:45	05/04/23 22:30
30584816006	**TW-17**	Water	05/04/23 14:00	05/04/23 22:30
30584816007	**TW-17A**	Water	05/04/23 14:35	05/04/23 22:30
30584816008	**TW-18**	Water	05/04/23 15:15	05/04/23 22:30
30584816009	**TW-12**	Water	05/03/23 15:30	05/12/23 15:00
30584816010	**TW-13**	Water	05/04/23 08:30	05/12/23 15:00
30584816011	**TW-14A**	Water	05/04/23 10:00	05/12/23 15:00
30584816012	**TW-14B**	Water	05/04/23 09:20	05/12/23 15:00

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30584816001	**TW-14**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30584816002	**TW-15**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30584816003	**TW-15B**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30584816004	**TW-16**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30584816005	**TW-16A**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30584816006	**TW-17**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30584816007	**TW-17A**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30584816008	**TW-18**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30584816009	**TW-12**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30584816010	**TW-13**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30584816011	**TW-14A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30584816012	**TW-14B**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Date: May 22, 2023

TW-14 (Lab ID: 30584816001)
- Sample pH for 8011 is 6

TW-15 (Lab ID: 30584816002)
- Sample pH for 8011 is 6

TW-15B (Lab ID: 30584816003)
- Sample pH for 8011 is 5

TW-16 (Lab ID: 30584816004)
- Sample pH for 8011 is 6

TW-16A (Lab ID: 30584816005)
- Sample pH for 8011 is 6

TW-17 (Lab ID: 30584816006)
- Sample pH for 8011 is 5

TW-17A (Lab ID: 30584816007)
- Sample pH for 8011 is 6

TW-18 (Lab ID: 30584816008)
- Sample pH for 8011 is 6

TW-12 (Lab ID: 30584816009)
- Sample pH for 8011 is 6

TW-13 (Lab ID: 30584816010)
- Sample pH for 8011 is 6

TW-14A (Lab ID: 30584816011)
- Sample pH for 8011 is 6

TW-14B (Lab ID: 30584816012)
- Sample pH for 8011 is 6

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
12 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 589138

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30587259002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2862797)
  - Iron
  - Sodium
- MSD (Lab ID: 2862798)
  - Iron
  - Sodium

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
12 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
12 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 586888

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30584251002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2851009)
  - Thallium
- MSD (Lab ID: 2851010)
  - Thallium

QC Batch: 588356

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30585905003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2858908)

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

QC Batch: 588356

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30585905003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- Thallium

- MSD (Lab ID: 2858909)
  - Thallium

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
12 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 586473

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30584251001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2849095)
  - Mercury
- MSD (Lab ID: 2849096)
  - Mercury

QC Batch: 586801

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30584816008

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2850709)

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

QC Batch: 586801

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30584816008

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- Mercury
- MSD (Lab ID: 2850710)
  - Mercury

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
12 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H3: Sample was received or analysis requested beyond the recognized method holding time.
- TW-12 (Lab ID: 30584816009)
- TW-13 (Lab ID: 30584816010)
- TW-14A (Lab ID: 30584816011)
- TW-14B (Lab ID: 30584816012)

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
12 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 588735

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30584816009

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2860886)
  - Alkalinity,Total (CaCO3 pH4.5)
- MSD (Lab ID: 2860887)
  - Alkalinity,Total (CaCO3 pH4.5)

Additional Comments:

Analyte Comments:

QC Batch: 588735

1c: Alkalinity TV: 0.00 mg/L

- TW-14B (Lab ID: 30584816012)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-15B (Lab ID: 30584816003)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-16 (Lab ID: 30584816004)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-17A (Lab ID: 30584816007)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-18 (Lab ID: 30584816008)
  - Alkalinity,Total (CaCO3 pH4.5)

2c: Alkalinity TV: 1.00 mg/L

- TW-17 (Lab ID: 30584816006)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

Analyte Comments:

QC Batch: 588735

3c: Alkalinity TV: 2.00 mg/L

- TW-13 (Lab ID: 30584816010)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-16A (Lab ID: 30584816005)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
8 samples were analyzed for SM 2540C-2015 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
12 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
12 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 589025

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30584816009,30585317001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2862232)
  - Chemical Oxygen Demand
- MSD (Lab ID: 2862233)
  - Chemical Oxygen Demand

Additional Comments:

Analyte Comments:

QC Batch: 589025

4c: pH adjusted to <2 in lab at bench prior to analysis

- BLANK (Lab ID: 2862230)
  - Chemical Oxygen Demand
- LCS (Lab ID: 2862231)
  - Chemical Oxygen Demand

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
12 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Method: **SM 4500NO3-F-2016**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
8 samples were analyzed for SM 4500NO3-F-2016 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
12 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 586203

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30584816001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2847741)
  - Sulfate

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
8 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Sample: TW-14 **Lab ID: 30584816001** Collected: 05/04/23 10:35 Received: 05/04/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**1.7**	mg/L	0.50	0.083	1	05/08/23 16:45	05/09/23 17:18	7440-70-2	
Iron	**38.9**	mg/L	0.050	0.035	1	05/08/23 16:45	05/09/23 17:18	7439-89-6	
Magnesium	**1.4**	mg/L	0.50	0.047	1	05/08/23 16:45	05/09/23 17:18	7439-95-4	
Manganese	**0.17**	mg/L	0.0050	0.0027	1	05/08/23 16:45	05/09/23 17:18	7439-96-5	
Potassium	**0.98**	mg/L	0.50	0.26	1	05/08/23 16:45	05/09/23 17:18	7440-09-7	
Sodium	**4.4**	mg/L	0.50	0.34	1	05/08/23 16:45	05/09/23 17:18	7440-23-5	
Total Hardness	**9.8**	mg/L	3.3	0.27	1	05/08/23 16:45	05/09/23 17:18		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**1.5**	mg/L	0.50	0.083	1	05/09/23 11:40	05/10/23 18:21	7440-70-2	
Iron, Dissolved	**12.6**	mg/L	0.050	0.035	1	05/09/23 11:40	05/10/23 18:21	7439-89-6	
Magnesium, Dissolved	**1.3**	mg/L	0.50	0.047	1	05/09/23 11:40	05/10/23 18:21	7439-95-4	
Manganese, Dissolved	**0.16**	mg/L	0.0050	0.0027	1	05/09/23 11:40	05/10/23 18:21	7439-96-5	
Potassium, Dissolved	**0.82**	mg/L	0.50	0.26	1	05/09/23 11:40	05/10/23 18:21	7440-09-7	
Sodium, Dissolved	**4.1**	mg/L	0.50	0.34	1	05/09/23 11:40	05/10/23 18:21	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00052**	mg/L	0.00050	0.00030	1	05/09/23 13:42	05/10/23 11:10	7440-36-0	
Arsenic	**0.0022J**	mg/L	0.0025	0.00044	1	05/09/23 13:42	05/10/23 11:10	7440-38-2	
Barium	**0.035**	mg/L	0.0025	0.00098	1	05/09/23 13:42	05/10/23 11:10	7440-39-3	
Beryllium	**0.00032J**	mg/L	0.00050	0.00010	1	05/09/23 13:42	05/10/23 11:10	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/09/23 13:42	05/10/23 11:10	7440-43-9	
Chromium	**0.018**	mg/L	0.0025	0.00050	1	05/09/23 13:42	05/10/23 11:10	7440-47-3	
Cobalt	**0.0089**	mg/L	0.0025	0.00081	1	05/09/23 13:42	05/10/23 11:10	7440-48-4	
Copper	**0.027**	mg/L	0.0025	0.00064	1	05/09/23 13:42	05/10/23 11:10	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/09/23 13:42	05/10/23 11:10	7439-92-1	
Nickel	**0.020**	mg/L	0.0025	0.00065	1	05/09/23 13:42	05/10/23 11:10	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/09/23 13:42	05/10/23 11:10	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/09/23 13:42	05/10/23 11:10	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/09/23 13:42	05/10/23 11:10	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/09/23 13:42	05/10/23 11:10	7440-62-2	
Zinc	**0.0085**	mg/L	0.0050	0.0040	1	05/09/23 13:42	05/10/23 11:10	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/08/23 10:07	05/08/23 16:47	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/08/23 07:24	05/08/23 11:58	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/08/23 07:24	05/08/23 11:58	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	97	%.	60-140		1	05/08/23 07:24	05/08/23 11:58	630-20-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Sample: TW-14 **Lab ID: 30584816001** Collected: 05/04/23 10:35 Received: 05/04/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**13.0**	mg/L	10.0	1.0	1		05/17/23 15:17		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**40.0**	mg/L	10.0	10.0	1		05/09/23 16:00		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/09/23 07:46	05/09/23 13:22		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/18/23 10:54	05/18/23 16:37		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**10.2**	mg/L	3.0	0.67	1		05/08/23 12:00	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.12**	mg/L	0.10	0.053	1		05/09/23 11:05	14797-55-8	
Nitrogen, NO2 plus NO3	**0.12**	mg/L	0.10	0.053	1		05/09/23 11:05		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/05/23 10:57	14808-79-8	ML
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/05/23 10:18	14797-65-0	

Sample: TW-15 **Lab ID: 30584816002** Collected: 05/04/23 11:20 Received: 05/04/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.89**	mg/L	0.50	0.083	1	05/08/23 16:45	05/09/23 17:24	7440-70-2	
Iron	**20.9**	mg/L	0.050	0.035	1	05/08/23 16:45	05/09/23 17:24	7439-89-6	
Magnesium	**0.57**	mg/L	0.50	0.047	1	05/08/23 16:45	05/09/23 17:24	7439-95-4	
Manganese	**0.20**	mg/L	0.0050	0.0027	1	05/08/23 16:45	05/09/23 17:24	7439-96-5	
Potassium	**1.0**	mg/L	0.50	0.26	1	05/08/23 16:45	05/09/23 17:24	7440-09-7	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Sample: TW-15 **Lab ID: 30584816002** Collected: 05/04/23 11:20 Received: 05/04/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**2.3**	mg/L	0.50	0.34	1	05/08/23 16:45	05/09/23 17:24	7440-23-5	
Total Hardness	**4.6**	mg/L	3.3	0.27	1	05/08/23 16:45	05/09/23 17:24		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.83**	mg/L	0.50	0.083	1	05/09/23 11:40	05/10/23 18:23	7440-70-2	
Iron, Dissolved	**17.0**	mg/L	0.050	0.035	1	05/09/23 11:40	05/10/23 18:23	7439-89-6	
Magnesium, Dissolved	**0.55**	mg/L	0.50	0.047	1	05/09/23 11:40	05/10/23 18:23	7439-95-4	
Manganese, Dissolved	**0.20**	mg/L	0.0050	0.0027	1	05/09/23 11:40	05/10/23 18:23	7439-96-5	
Potassium, Dissolved	**0.89**	mg/L	0.50	0.26	1	05/09/23 11:40	05/10/23 18:23	7440-09-7	
Sodium, Dissolved	**2.1**	mg/L	0.50	0.34	1	05/09/23 11:40	05/10/23 18:23	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/09/23 08:27	05/09/23 13:27	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/09/23 08:27	05/09/23 13:27	7440-38-2	
Barium	**0.016**	mg/L	0.0025	0.00098	1	05/09/23 08:27	05/09/23 13:27	7440-39-3	
Beryllium	**0.00010J**	mg/L	0.00050	0.00010	1	05/09/23 08:27	05/09/23 13:27	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/09/23 08:27	05/09/23 13:27	7440-43-9	
Chromium	**0.0019J**	mg/L	0.0025	0.00050	1	05/09/23 08:27	05/09/23 13:27	7440-47-3	
Cobalt	**0.0037**	mg/L	0.0025	0.00081	1	05/09/23 08:27	05/09/23 13:27	7440-48-4	
Copper	**0.0022J**	mg/L	0.0025	0.00064	1	05/09/23 08:27	05/09/23 13:27	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/09/23 08:27	05/09/23 13:27	7439-92-1	
Nickel	**0.0060**	mg/L	0.0025	0.00065	1	05/09/23 08:27	05/09/23 13:27	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/09/23 08:27	05/09/23 13:27	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/09/23 08:27	05/09/23 13:27	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/09/23 08:27	05/09/23 13:27	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/09/23 08:27	05/09/23 13:27	7440-62-2	
Zinc	**0.0044J**	mg/L	0.0050	0.0040	1	05/09/23 08:27	05/09/23 13:27	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/09/23 10:26	05/09/23 15:15	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	05/08/23 07:24	05/08/23 12:36	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	05/08/23 07:24	05/08/23 12:36	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	90	%.	60-140		1	05/08/23 07:24	05/08/23 12:36	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**24.0**	mg/L	10.0	1.0	1		05/17/23 15:19		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Sample: TW-15 **Lab ID: 30584816002** Collected: 05/04/23 11:20 Received: 05/04/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**30.0**	mg/L	10.0	10.0	1		05/09/23 16:00		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/09/23 07:46	05/09/23 13:24		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/18/23 10:54	05/18/23 16:37		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**4.1**	mg/L	3.0	0.67	1		05/08/23 12:01	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.13**	mg/L	0.10	0.053	1		05/09/23 11:07	14797-55-8	
Nitrogen, NO2 plus NO3	**0.14**	mg/L	0.10	0.053	1		05/09/23 11:07		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/05/23 11:00	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.0090J**	mg/L	0.010	0.0055	1		05/05/23 10:19	14797-65-0	

Sample: TW-15B **Lab ID: 30584816003** Collected: 05/04/23 12:00 Received: 05/04/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**5.0**	mg/L	0.50	0.083	1	05/08/23 16:45	05/09/23 17:26	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	05/08/23 16:45	05/09/23 17:26	7439-89-6	
Magnesium	**5.6**	mg/L	0.50	0.047	1	05/08/23 16:45	05/09/23 17:26	7439-95-4	
Manganese	**0.089**	mg/L	0.0050	0.0027	1	05/08/23 16:45	05/09/23 17:26	7439-96-5	
Potassium	**1.8**	mg/L	0.50	0.26	1	05/08/23 16:45	05/09/23 17:26	7440-09-7	
Sodium	**24.9**	mg/L	0.50	0.34	1	05/08/23 16:45	05/09/23 17:26	7440-23-5	
Total Hardness	**35.5**	mg/L	3.3	0.27	1	05/08/23 16:45	05/09/23 17:26		N3

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Sample: TW-15B **Lab ID: 30584816003** Collected: 05/04/23 12:00 Received: 05/04/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**4.7**	mg/L	0.50	0.083	1	05/09/23 11:40	05/10/23 18:25	7440-70-2	
Iron, Dissolved	**0.054**	mg/L	0.050	0.035	1	05/09/23 11:40	05/10/23 18:25	7439-89-6	
Magnesium, Dissolved	**5.3**	mg/L	0.50	0.047	1	05/09/23 11:40	05/10/23 18:25	7439-95-4	
Manganese, Dissolved	**0.087**	mg/L	0.0050	0.0027	1	05/09/23 11:40	05/10/23 18:25	7439-96-5	
Potassium, Dissolved	**1.7**	mg/L	0.50	0.26	1	05/09/23 11:40	05/10/23 18:25	7440-09-7	
Sodium, Dissolved	**23.3**	mg/L	0.50	0.34	1	05/09/23 11:40	05/10/23 18:25	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/09/23 08:27	05/09/23 13:34	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/09/23 08:27	05/09/23 13:34	7440-38-2	
Barium	**0.20**	mg/L	0.0025	0.00098	1	05/09/23 08:27	05/09/23 13:34	7440-39-3	
Beryllium	**0.0017**	mg/L	0.00050	0.00010	1	05/09/23 08:27	05/09/23 13:34	7440-41-7	
Cadmium	**0.00063**	mg/L	0.00050	0.00013	1	05/09/23 08:27	05/09/23 13:34	7440-43-9	
Chromium	**0.0015J**	mg/L	0.0025	0.00050	1	05/09/23 08:27	05/09/23 13:34	7440-47-3	
Cobalt	**0.051**	mg/L	0.0025	0.00081	1	05/09/23 08:27	05/09/23 13:34	7440-48-4	
Copper	**0.014**	mg/L	0.0025	0.00064	1	05/09/23 08:27	05/09/23 13:34	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/09/23 08:27	05/09/23 13:34	7439-92-1	
Nickel	**0.049**	mg/L	0.0025	0.00065	1	05/09/23 08:27	05/09/23 13:34	7440-02-0	
Selenium	**0.00088J**	mg/L	0.0025	0.00084	1	05/09/23 08:27	05/09/23 13:34	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/09/23 08:27	05/09/23 13:34	7440-22-4	
Thallium	**0.00010J**	mg/L	0.00050	0.000081	1	05/09/23 08:27	05/09/23 13:34	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/09/23 08:27	05/09/23 13:34	7440-62-2	
Zinc	**0.10**	mg/L	0.0050	0.0040	1	05/09/23 08:27	05/09/23 13:34	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/09/23 10:26	05/09/23 15:17	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/08/23 07:24	05/08/23 12:48	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/08/23 07:24	05/08/23 12:48	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	85	%.	60-140		1	05/08/23 07:24	05/08/23 12:48	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/17/23 15:21		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**109**	mg/L	10.0	10.0	1		05/09/23 16:00		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Sample: TW-15B **Lab ID: 30584816003** Collected: 05/04/23 12:00 Received: 05/04/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.097J**	mg/L	0.10	0.090	1	05/09/23 07:46	05/09/23 13:26		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**22.8J**	mg/L	25.0	4.7	1	05/18/23 10:54	05/18/23 16:38		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**60.8**	mg/L	3.0	0.67	1		05/08/23 12:02	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.93**	mg/L	0.10	0.053	1		05/09/23 11:08	14797-55-8	
Nitrogen, NO2 plus NO3	**0.93**	mg/L	0.10	0.053	1		05/09/23 11:08		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**5.6J**	mg/L	10.0	4.7	1		05/05/23 11:02	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/05/23 10:21	14797-65-0	

Sample: TW-16 **Lab ID: 30584816004** Collected: 05/04/23 13:20 Received: 05/04/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**13.5**	mg/L	0.50	0.083	1	05/08/23 16:45	05/09/23 17:36	7440-70-2	
Iron	**1.6**	mg/L	0.050	0.035	1	05/08/23 16:45	05/09/23 17:36	7439-89-6	
Magnesium	**11.3**	mg/L	0.50	0.047	1	05/08/23 16:45	05/09/23 17:36	7439-95-4	
Manganese	**1.4**	mg/L	0.0050	0.0027	1	05/08/23 16:45	05/09/23 17:36	7439-96-5	
Potassium	**7.3**	mg/L	0.50	0.26	1	05/08/23 16:45	05/09/23 17:36	7440-09-7	
Sodium	**22.0**	mg/L	0.50	0.34	1	05/08/23 16:45	05/09/23 17:36	7440-23-5	
Total Hardness	**80.0**	mg/L	3.3	0.27	1	05/08/23 16:45	05/09/23 17:36		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**12.3**	mg/L	0.50	0.083	1	05/09/23 11:40	05/10/23 18:27	7440-70-2	
Iron, Dissolved	**0.24**	mg/L	0.050	0.035	1	05/09/23 11:40	05/10/23 18:27	7439-89-6	
Magnesium, Dissolved	**10.2**	mg/L	0.50	0.047	1	05/09/23 11:40	05/10/23 18:27	7439-95-4	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Sample: TW-16 **Lab ID: 30584816004** Collected: 05/04/23 13:20 Received: 05/04/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Manganese, Dissolved	**1.3**	mg/L	0.0050	0.0027	1	05/09/23 11:40	05/10/23 18:27	7439-96-5	
Potassium, Dissolved	**6.7**	mg/L	0.50	0.26	1	05/09/23 11:40	05/10/23 18:27	7440-09-7	
Sodium, Dissolved	**19.9**	mg/L	0.50	0.34	1	05/09/23 11:40	05/10/23 18:27	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/09/23 08:27	05/09/23 13:37	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/09/23 08:27	05/09/23 13:37	7440-38-2	
Barium	**0.028**	mg/L	0.0025	0.00098	1	05/09/23 08:27	05/09/23 13:37	7440-39-3	
Beryllium	**0.00091**	mg/L	0.00050	0.00010	1	05/09/23 08:27	05/09/23 13:37	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/09/23 08:27	05/09/23 13:37	7440-43-9	
Chromium	**0.0070**	mg/L	0.0025	0.00050	1	05/09/23 08:27	05/09/23 13:37	7440-47-3	
Cobalt	**0.26**	mg/L	0.0025	0.00081	1	05/09/23 08:27	05/09/23 13:37	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.00064	1	05/09/23 08:27	05/09/23 13:37	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/09/23 08:27	05/09/23 13:37	7439-92-1	
Nickel	**0.29**	mg/L	0.0025	0.00065	1	05/09/23 08:27	05/09/23 13:37	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/09/23 08:27	05/09/23 13:37	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/09/23 08:27	05/09/23 13:37	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/09/23 08:27	05/09/23 13:37	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/09/23 08:27	05/09/23 13:37	7440-62-2	
Zinc	**0.43**	mg/L	0.0050	0.0040	1	05/09/23 08:27	05/09/23 13:37	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/09/23 10:26	05/09/23 15:20	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/08/23 07:24	05/08/23 13:01	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/08/23 07:24	05/08/23 13:01	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	92	%.	60-140		1	05/08/23 07:24	05/08/23 13:01	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/17/23 15:23		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**204**	mg/L	10.0	10.0	1		05/09/23 16:00		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/09/23 07:46	05/09/23 13:28		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Sample: TW-16 **Lab ID: 30584816004** Collected: 05/04/23 13:20 Received: 05/04/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/18/23 10:54	05/18/23 16:38		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**24.7**	mg/L	3.0	0.67	1		05/08/23 12:02	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		05/09/23 11:09	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		05/09/23 11:09		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**102**	mg/L	20.0	9.3	2		05/05/23 11:21	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/05/23 10:21	14797-65-0	

Sample: TW-16A **Lab ID: 30584816005** Collected: 05/04/23 12:45 Received: 05/04/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**1.1**	mg/L	0.50	0.083	1	05/08/23 16:45	05/09/23 17:38	7440-70-2	
Iron	**0.035J**	mg/L	0.050	0.035	1	05/08/23 16:45	05/09/23 17:38	7439-89-6	
Magnesium	**0.40J**	mg/L	0.50	0.047	1	05/08/23 16:45	05/09/23 17:38	7439-95-4	
Manganese	**0.0050J**	mg/L	0.0050	0.0027	1	05/08/23 16:45	05/09/23 17:38	7439-96-5	
Potassium	**0.64**	mg/L	0.50	0.26	1	05/08/23 16:45	05/09/23 17:38	7440-09-7	
Sodium	**1.4**	mg/L	0.50	0.34	1	05/08/23 16:45	05/09/23 17:38	7440-23-5	
Total Hardness	**4.3**	mg/L	3.3	0.27	1	05/08/23 16:45	05/09/23 17:38		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**1.0**	mg/L	0.50	0.083	1	05/09/23 11:40	05/10/23 18:29	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/09/23 11:40	05/10/23 18:29	7439-89-6	
Magnesium, Dissolved	**0.38J**	mg/L	0.50	0.047	1	05/09/23 11:40	05/10/23 18:29	7439-95-4	
Manganese, Dissolved	**0.0049J**	mg/L	0.0050	0.0027	1	05/09/23 11:40	05/10/23 18:29	7439-96-5	
Potassium, Dissolved	**0.55**	mg/L	0.50	0.26	1	05/09/23 11:40	05/10/23 18:29	7440-09-7	
Sodium, Dissolved	**1.4**	mg/L	0.50	0.34	1	05/09/23 11:40	05/10/23 18:29	7440-23-5	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Sample: TW-16A **Lab ID: 30584816005** Collected: 05/04/23 12:45 Received: 05/04/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/09/23 08:27	05/09/23 13:40	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/09/23 08:27	05/09/23 13:40	7440-38-2	
Barium	**0.0063**	mg/L	0.0025	0.00098	1	05/09/23 08:27	05/09/23 13:40	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	05/09/23 08:27	05/09/23 13:40	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/09/23 08:27	05/09/23 13:40	7440-43-9	
Chromium	**0.0031**	mg/L	0.0025	0.00050	1	05/09/23 08:27	05/09/23 13:40	7440-47-3	
Cobalt	**0.015**	mg/L	0.0025	0.00081	1	05/09/23 08:27	05/09/23 13:40	7440-48-4	
Copper	**0.0027**	mg/L	0.0025	0.00064	1	05/09/23 08:27	05/09/23 13:40	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/09/23 08:27	05/09/23 13:40	7439-92-1	
Nickel	**0.0072**	mg/L	0.0025	0.00065	1	05/09/23 08:27	05/09/23 13:40	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/09/23 08:27	05/09/23 13:40	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/09/23 08:27	05/09/23 13:40	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/09/23 08:27	05/09/23 13:40	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/09/23 08:27	05/09/23 13:40	7440-62-2	
Zinc	**0.0057**	mg/L	0.0050	0.0040	1	05/09/23 08:27	05/09/23 13:40	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/09/23 10:26	05/09/23 15:22	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/08/23 07:24	05/08/23 13:14	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/08/23 07:24	05/08/23 13:14	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	96	%.	60-140		1	05/08/23 07:24	05/08/23 13:14	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		05/17/23 15:29		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**15.0**	mg/L	10.0	10.0	1		05/10/23 17:01		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/09/23 07:46	05/09/23 14:31		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/18/23 10:54	05/18/23 16:38		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Sample: TW-16A **Lab ID: 30584816005** Collected: 05/04/23 12:45 Received: 05/04/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**2.6J**	mg/L	3.0	0.67	1		05/08/23 12:03	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.17**	mg/L	0.10	0.053	1		05/09/23 11:14	14797-55-8	
Nitrogen, NO2 plus NO3	**0.17**	mg/L	0.10	0.053	1		05/09/23 11:14		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/05/23 11:04	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/05/23 10:21	14797-65-0	

Sample: TW-17 **Lab ID: 30584816006** Collected: 05/04/23 14:00 Received: 05/04/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**4.7**	mg/L	0.50	0.083	1	05/08/23 16:45	05/09/23 17:40	7440-70-2	
Iron	**19.7**	mg/L	0.050	0.035	1	05/08/23 16:45	05/09/23 17:40	7439-89-6	
Magnesium	**1.8**	mg/L	0.50	0.047	1	05/08/23 16:45	05/09/23 17:40	7439-95-4	
Manganese	**0.23**	mg/L	0.0050	0.0027	1	05/08/23 16:45	05/09/23 17:40	7439-96-5	
Potassium	**2.1**	mg/L	0.50	0.26	1	05/08/23 16:45	05/09/23 17:40	7440-09-7	
Sodium	**13.4**	mg/L	0.50	0.34	1	05/08/23 16:45	05/09/23 17:40	7440-23-5	
Total Hardness	**19.4**	mg/L	3.3	0.27	1	05/08/23 16:45	05/09/23 17:40		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**4.5**	mg/L	0.50	0.083	1	05/09/23 11:40	05/10/23 18:31	7440-70-2	
Iron, Dissolved	**1.4**	mg/L	0.050	0.035	1	05/09/23 11:40	05/10/23 18:31	7439-89-6	
Magnesium, Dissolved	**1.7**	mg/L	0.50	0.047	1	05/09/23 11:40	05/10/23 18:31	7439-95-4	
Manganese, Dissolved	**0.23**	mg/L	0.0050	0.0027	1	05/09/23 11:40	05/10/23 18:31	7439-96-5	
Potassium, Dissolved	**1.8**	mg/L	0.50	0.26	1	05/09/23 11:40	05/10/23 18:31	7440-09-7	
Sodium, Dissolved	**12.6**	mg/L	0.50	0.34	1	05/09/23 11:40	05/10/23 18:31	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/09/23 08:27	05/09/23 13:43	7440-36-0	
Arsenic	**0.00060J**	mg/L	0.0025	0.00044	1	05/09/23 08:27	05/09/23 13:43	7440-38-2	
Barium	**0.022**	mg/L	0.0025	0.00098	1	05/09/23 08:27	05/09/23 13:43	7440-39-3	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Sample: TW-17 **Lab ID: 30584816006** Collected: 05/04/23 14:00 Received: 05/04/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Beryllium	**0.00014J**	mg/L	0.00050	0.00010	1	05/09/23 08:27	05/09/23 13:43	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/09/23 08:27	05/09/23 13:43	7440-43-9	
Chromium	**0.012**	mg/L	0.0025	0.00050	1	05/09/23 08:27	05/09/23 13:43	7440-47-3	
Cobalt	**0.0069**	mg/L	0.0025	0.00081	1	05/09/23 08:27	05/09/23 13:43	7440-48-4	
Copper	**0.0012J**	mg/L	0.0025	0.00064	1	05/09/23 08:27	05/09/23 13:43	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/09/23 08:27	05/09/23 13:43	7439-92-1	
Nickel	**0.010**	mg/L	0.0025	0.00065	1	05/09/23 08:27	05/09/23 13:43	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/09/23 08:27	05/09/23 13:43	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/09/23 08:27	05/09/23 13:43	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/09/23 08:27	05/09/23 13:43	7440-28-0	
Vanadium	**0.0012J**	mg/L	0.0025	0.0012	1	05/09/23 08:27	05/09/23 13:43	7440-62-2	
Zinc	**0.027**	mg/L	0.0050	0.0040	1	05/09/23 08:27	05/09/23 13:43	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/09/23 10:26	05/09/23 15:25	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	05/08/23 07:24	05/08/23 13:26	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	05/08/23 07:24	05/08/23 13:26	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	99	%.	60-140		1	05/08/23 07:24	05/08/23 13:26	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**1.0J**	mg/L	10.0	1.0	1		05/17/23 15:31		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**66.0**	mg/L	10.0	10.0	1		05/10/23 17:01		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/09/23 07:46	05/09/23 14:37		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/18/23 10:54	05/18/23 16:38		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**5.3**	mg/L	3.0	0.67	1		05/08/23 12:04	16887-00-6	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Sample: TW-17 **Lab ID: 30584816006** Collected: 05/04/23 14:00 Received: 05/04/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		05/09/23 11:15	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		05/09/23 11:15		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**32.8**	mg/L	10.0	4.7	1		05/05/23 11:04	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.013**	mg/L	0.010	0.0055	1		05/05/23 10:22	14797-65-0	

Sample: TW-17A **Lab ID: 30584816007** Collected: 05/04/23 14:35 Received: 05/04/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.83**	mg/L	0.50	0.083	1	05/08/23 16:45	05/09/23 17:42	7440-70-2	
Iron	**0.044J**	mg/L	0.050	0.035	1	05/08/23 16:45	05/09/23 17:42	7439-89-6	
Magnesium	**0.43J**	mg/L	0.50	0.047	1	05/08/23 16:45	05/09/23 17:42	7439-95-4	
Manganese	**0.0074**	mg/L	0.0050	0.0027	1	05/08/23 16:45	05/09/23 17:42	7439-96-5	
Potassium	**0.63**	mg/L	0.50	0.26	1	05/08/23 16:45	05/09/23 17:42	7440-09-7	
Sodium	**1.4**	mg/L	0.50	0.34	1	05/08/23 16:45	05/09/23 17:42	7440-23-5	
Total Hardness	**3.8**	mg/L	3.3	0.27	1	05/08/23 16:45	05/09/23 17:42		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.78**	mg/L	0.50	0.083	1	05/09/23 11:40	05/10/23 18:33	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/09/23 11:40	05/10/23 18:33	7439-89-6	
Magnesium, Dissolved	**0.42J**	mg/L	0.50	0.047	1	05/09/23 11:40	05/10/23 18:33	7439-95-4	
Manganese, Dissolved	**0.0074**	mg/L	0.0050	0.0027	1	05/09/23 11:40	05/10/23 18:33	7439-96-5	
Potassium, Dissolved	**0.56**	mg/L	0.50	0.26	1	05/09/23 11:40	05/10/23 18:33	7440-09-7	
Sodium, Dissolved	**1.4**	mg/L	0.50	0.34	1	05/09/23 11:40	05/10/23 18:33	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/09/23 08:27	05/09/23 14:08	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/09/23 08:27	05/09/23 14:08	7440-38-2	
Barium	**0.012**	mg/L	0.0025	0.00098	1	05/09/23 08:27	05/09/23 14:08	7440-39-3	
Beryllium	**0.00028J**	mg/L	0.00050	0.00010	1	05/09/23 08:27	05/09/23 14:08	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/09/23 08:27	05/09/23 14:08	7440-43-9	
Chromium	**0.0040**	mg/L	0.0025	0.00050	1	05/09/23 08:27	05/09/23 14:08	7440-47-3	
Cobalt	**0.0042**	mg/L	0.0025	0.00081	1	05/09/23 08:27	05/09/23 14:08	7440-48-4	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Sample: TW-17A **Lab ID: 30584816007** Collected: 05/04/23 14:35 Received: 05/04/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Copper	**0.0023J**	mg/L	0.0025	0.00064	1	05/09/23 08:27	05/09/23 14:08	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/09/23 08:27	05/09/23 14:08	7439-92-1	
Nickel	**0.0096**	mg/L	0.0025	0.00065	1	05/09/23 08:27	05/09/23 14:08	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/09/23 08:27	05/09/23 14:08	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/09/23 08:27	05/09/23 14:08	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/09/23 08:27	05/09/23 14:08	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/09/23 08:27	05/09/23 14:08	7440-62-2	
Zinc	**0.0089**	mg/L	0.0050	0.0040	1	05/09/23 08:27	05/09/23 14:08	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/09/23 10:26	05/09/23 15:32	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	05/08/23 07:24	05/08/23 13:39	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	05/08/23 07:24	05/08/23 13:39	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	94	%.	60-140		1	05/08/23 07:24	05/08/23 13:39	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/17/23 15:33		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		05/10/23 17:01		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/09/23 07:46	05/09/23 14:39		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/18/23 10:54	05/18/23 16:39		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**2.6J**	mg/L	3.0	0.67	1		05/08/23 12:05	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.23**	mg/L	0.10	0.053	1		05/09/23 11:16	14797-55-8	
Nitrogen, NO2 plus NO3	**0.23**	mg/L	0.10	0.053	1		05/09/23 11:16		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Sample: TW-17A **Lab ID: 30584816007** Collected: 05/04/23 14:35 Received: 05/04/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/05/23 11:07	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/05/23 10:22	14797-65-0	

Sample: TW-18 **Lab ID: 30584816008** Collected: 05/04/23 15:15 Received: 05/04/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**6.6**	mg/L	0.50	0.083	1	05/08/23 16:45	05/09/23 17:48	7440-70-2	
Iron	**0.15**	mg/L	0.050	0.035	1	05/08/23 16:45	05/09/23 17:48	7439-89-6	
Magnesium	**2.8**	mg/L	0.50	0.047	1	05/08/23 16:45	05/09/23 17:48	7439-95-4	
Manganese	**0.35**	mg/L	0.0050	0.0027	1	05/08/23 16:45	05/09/23 17:48	7439-96-5	
Potassium	**1.5**	mg/L	0.50	0.26	1	05/08/23 16:45	05/09/23 17:48	7440-09-7	
Sodium	**2.7**	mg/L	0.50	0.34	1	05/08/23 16:45	05/09/23 17:48	7440-23-5	
Total Hardness	**28.0**	mg/L	3.3	0.27	1	05/08/23 16:45	05/09/23 17:48		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**6.4**	mg/L	0.50	0.083	1	05/09/23 11:40	05/10/23 18:35	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/09/23 11:40	05/10/23 18:35	7439-89-6	
Magnesium, Dissolved	**2.7**	mg/L	0.50	0.047	1	05/09/23 11:40	05/10/23 18:35	7439-95-4	
Manganese, Dissolved	**0.35**	mg/L	0.0050	0.0027	1	05/09/23 11:40	05/10/23 18:35	7439-96-5	
Potassium, Dissolved	**1.4**	mg/L	0.50	0.26	1	05/09/23 11:40	05/10/23 18:35	7440-09-7	
Sodium, Dissolved	**2.7**	mg/L	0.50	0.34	1	05/09/23 11:40	05/10/23 18:35	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/09/23 08:27	05/09/23 14:11	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/09/23 08:27	05/09/23 14:11	7440-38-2	
Barium	**0.064**	mg/L	0.0025	0.00098	1	05/09/23 08:27	05/09/23 14:11	7440-39-3	
Beryllium	**0.00055**	mg/L	0.00050	0.00010	1	05/09/23 08:27	05/09/23 14:11	7440-41-7	
Cadmium	**0.00086**	mg/L	0.00050	0.00013	1	05/09/23 08:27	05/09/23 14:11	7440-43-9	
Chromium	**0.0050**	mg/L	0.0025	0.00050	1	05/09/23 08:27	05/09/23 14:11	7440-47-3	
Cobalt	**0.10**	mg/L	0.0025	0.00081	1	05/09/23 08:27	05/09/23 14:11	7440-48-4	
Copper	**0.0051**	mg/L	0.0025	0.00064	1	05/09/23 08:27	05/09/23 14:11	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/09/23 08:27	05/09/23 14:11	7439-92-1	
Nickel	**0.092**	mg/L	0.0025	0.00065	1	05/09/23 08:27	05/09/23 14:11	7440-02-0	
Selenium	**0.00096J**	mg/L	0.0025	0.00084	1	05/09/23 08:27	05/09/23 14:11	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/09/23 08:27	05/09/23 14:11	7440-22-4	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Sample: TW-18 **Lab ID: 30584816008** Collected: 05/04/23 15:15 Received: 05/04/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/09/23 08:27	05/09/23 14:11	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/09/23 08:27	05/09/23 14:11	7440-62-2	
Zinc	**0.29**	mg/L	0.0050	0.0040	1	05/09/23 08:27	05/09/23 14:11	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/09/23 10:26	05/09/23 15:34	7439-97-6	M1
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/08/23 07:24	05/08/23 13:52	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/08/23 07:24	05/08/23 13:52	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	89	%.	60-140		1	05/08/23 07:24	05/08/23 13:52	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/17/23 15:34		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**47.0**	mg/L	10.0	10.0	1		05/10/23 17:01		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/09/23 07:46	05/09/23 14:41		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	05/18/23 10:54	05/18/23 16:39		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**4.4**	mg/L	3.0	0.67	1		05/08/23 12:09	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**1.5**	mg/L	0.10	0.053	1		05/09/23 11:18	14797-55-8	
Nitrogen, NO2 plus NO3	**1.5**	mg/L	0.10	0.053	1		05/09/23 11:18		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**27.8**	mg/L	10.0	4.7	1		05/05/23 11:07	14808-79-8	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Sample: TW-18 **Lab ID: 30584816008** Collected: 05/04/23 15:15 Received: 05/04/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/05/23 10:22	14797-65-0	

Sample: TW-12 **Lab ID: 30584816009** Collected: 05/03/23 15:30 Received: 05/12/23 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**2.6**	mg/L	0.50	0.083	1	05/18/23 15:23	05/19/23 15:57	7440-70-2	
Iron	**31.6**	mg/L	0.050	0.035	1	05/18/23 15:23	05/19/23 15:57	7439-89-6	
Magnesium	**1.5**	mg/L	0.50	0.047	1	05/18/23 15:23	05/19/23 15:57	7439-95-4	
Manganese	**0.21**	mg/L	0.0050	0.0027	1	05/18/23 15:23	05/19/23 15:57	7439-96-5	
Potassium	**1.1**	mg/L	0.50	0.26	1	05/18/23 15:23	05/19/23 15:57	7440-09-7	
Sodium	**4.6**	mg/L	0.50	0.34	1	05/18/23 15:23	05/19/23 15:57	7440-23-5	
Total Hardness	**12.4**	mg/L	3.3	0.27	1	05/18/23 15:23	05/19/23 15:57		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**2.7**	mg/L	0.50	0.083	1	05/16/23 12:00	05/17/23 15:44	7440-70-2	
Iron, Dissolved	**31.5**	mg/L	0.050	0.035	1	05/16/23 12:00	05/17/23 15:44	7439-89-6	
Magnesium, Dissolved	**1.5**	mg/L	0.50	0.047	1	05/16/23 12:00	05/17/23 15:44	7439-95-4	
Manganese, Dissolved	**0.21**	mg/L	0.0050	0.0027	1	05/16/23 12:00	05/17/23 15:44	7439-96-5	
Potassium, Dissolved	**1.1**	mg/L	0.50	0.26	1	05/16/23 12:00	05/17/23 15:44	7440-09-7	
Sodium, Dissolved	**4.9**	mg/L	0.50	0.34	1	05/16/23 12:00	05/17/23 15:44	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/16/23 11:40	05/16/23 15:31	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/16/23 11:40	05/16/23 15:31	7440-38-2	
Barium	**0.036**	mg/L	0.0025	0.00098	1	05/16/23 11:40	05/16/23 15:31	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	05/16/23 11:40	05/16/23 15:31	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/16/23 11:40	05/16/23 15:31	7440-43-9	
Chromium	**0.0011J**	mg/L	0.0025	0.00050	1	05/16/23 11:40	05/16/23 15:31	7440-47-3	
Cobalt	**0.0025 U**	mg/L	0.0025	0.00081	1	05/16/23 11:40	05/16/23 15:31	7440-48-4	
Copper	**0.00079J**	mg/L	0.0025	0.00064	1	05/16/23 11:40	05/16/23 15:31	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/16/23 11:40	05/16/23 15:31	7439-92-1	
Nickel	**0.0012J**	mg/L	0.0025	0.00065	1	05/16/23 11:40	05/16/23 15:31	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/16/23 11:40	05/16/23 15:31	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/16/23 11:40	05/16/23 15:31	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/16/23 11:40	05/16/23 15:31	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/16/23 11:40	05/16/23 15:31	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0040	1	05/16/23 11:40	05/16/23 15:31	7440-66-6	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Sample: TW-12 **Lab ID: 30584816009** Collected: 05/03/23 15:30 Received: 05/12/23 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/18/23 10:20	05/18/23 15:23	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/17/23 07:45	05/17/23 13:31	96-12-8	H3
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/17/23 07:45	05/17/23 13:31	106-93-4	H3
Surrogates									
1,1,1,2-Tetrachloroethane (S)	96	%.	60-140		1	05/17/23 07:45	05/17/23 13:31	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**28.0**	mg/L	10.0	1.0	1		05/17/23 15:09		ML
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/18/23 09:34	05/18/23 13:34		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.9J**	mg/L	25.0	4.7	1	05/18/23 10:54	05/18/23 16:39		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**7.6**	mg/L	3.0	0.67	1		05/19/23 10:04	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/16/23 13:16	14808-79-8	

Sample: TW-13 **Lab ID: 30584816010** Collected: 05/04/23 08:30 Received: 05/12/23 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**3.6**	mg/L	0.50	0.083	1	05/18/23 15:23	05/19/23 15:59	7440-70-2	
Iron	**16.8**	mg/L	0.050	0.035	1	05/18/23 15:23	05/19/23 15:59	7439-89-6	
Magnesium	**2.0**	mg/L	0.50	0.047	1	05/18/23 15:23	05/19/23 15:59	7439-95-4	
Manganese	**0.11**	mg/L	0.0050	0.0027	1	05/18/23 15:23	05/19/23 15:59	7439-96-5	
Potassium	**1.2**	mg/L	0.50	0.26	1	05/18/23 15:23	05/19/23 15:59	7440-09-7	
Sodium	**9.1**	mg/L	0.50	0.34	1	05/18/23 15:23	05/19/23 15:59	7440-23-5	
Total Hardness	**17.3**	mg/L	3.3	0.27	1	05/18/23 15:23	05/19/23 15:59		N3

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Sample: TW-13 **Lab ID: 30584816010** Collected: 05/04/23 08:30 Received: 05/12/23 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**3.6**	mg/L	0.50	0.083	1	05/16/23 12:00	05/17/23 15:46	7440-70-2	
Iron, Dissolved	**7.2**	mg/L	0.050	0.035	1	05/16/23 12:00	05/17/23 15:46	7439-89-6	
Magnesium, Dissolved	**2.0**	mg/L	0.50	0.047	1	05/16/23 12:00	05/17/23 15:46	7439-95-4	
Manganese, Dissolved	**0.099**	mg/L	0.0050	0.0027	1	05/16/23 12:00	05/17/23 15:46	7439-96-5	
Potassium, Dissolved	**1.2**	mg/L	0.50	0.26	1	05/16/23 12:00	05/17/23 15:46	7440-09-7	
Sodium, Dissolved	**9.1**	mg/L	0.50	0.34	1	05/16/23 12:00	05/17/23 15:46	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/16/23 11:40	05/16/23 15:34	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/16/23 11:40	05/16/23 15:34	7440-38-2	
Barium	**0.042**	mg/L	0.0025	0.00098	1	05/16/23 11:40	05/16/23 15:34	7440-39-3	
Beryllium	**0.00022J**	mg/L	0.00050	0.00010	1	05/16/23 11:40	05/16/23 15:34	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/16/23 11:40	05/16/23 15:34	7440-43-9	
Chromium	**0.0024J**	mg/L	0.0025	0.00050	1	05/16/23 11:40	05/16/23 15:34	7440-47-3	
Cobalt	**0.0073**	mg/L	0.0025	0.00081	1	05/16/23 11:40	05/16/23 15:34	7440-48-4	
Copper	**0.0080**	mg/L	0.0025	0.00064	1	05/16/23 11:40	05/16/23 15:34	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/16/23 11:40	05/16/23 15:34	7439-92-1	
Nickel	**0.011**	mg/L	0.0025	0.00065	1	05/16/23 11:40	05/16/23 15:34	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/16/23 11:40	05/16/23 15:34	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/16/23 11:40	05/16/23 15:34	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/16/23 11:40	05/16/23 15:34	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/16/23 11:40	05/16/23 15:34	7440-62-2	
Zinc	**0.013**	mg/L	0.0050	0.0040	1	05/16/23 11:40	05/16/23 15:34	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/18/23 10:20	05/18/23 15:25	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.042 U**	ug/L	0.042	0.022	1	05/17/23 07:45	05/17/23 13:44	96-12-8	H3
1,2-Dibromoethane (EDB)	**0.042 U**	ug/L	0.042	0.032	1	05/17/23 07:45	05/17/23 13:44	106-93-4	H3
Surrogates									
1,1,1,2-Tetrachloroethane (S)	100	%.	60-140		1	05/17/23 07:45	05/17/23 13:44	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		05/17/23 15:37		3c
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/18/23 09:34	05/18/23 13:40		

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Sample: TW-13 **Lab ID: 30584816010** Collected: 05/04/23 08:30 Received: 05/12/23 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
	Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**34.2**	mg/L	25.0	4.7	1	05/22/23 10:55	05/22/23 16:07		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
	Pace Analytical Services - Greensburg								
Chloride	**20.5**	mg/L	3.0	0.67	1		05/19/23 10:06	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/16/23 13:21	14808-79-8	

Sample: TW-14A **Lab ID: 30584816011** Collected: 05/04/23 10:00 Received: 05/12/23 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Calcium	**4.2**	mg/L	0.50	0.083	1	05/18/23 15:23	05/19/23 16:01	7440-70-2	
Iron	**55.6**	mg/L	0.050	0.035	1	05/18/23 15:23	05/19/23 16:01	7439-89-6	
Magnesium	**4.0**	mg/L	0.50	0.047	1	05/18/23 15:23	05/19/23 16:01	7439-95-4	
Manganese	**0.56**	mg/L	0.0050	0.0027	1	05/18/23 15:23	05/19/23 16:01	7439-96-5	
Potassium	**1.5**	mg/L	0.50	0.26	1	05/18/23 15:23	05/19/23 16:01	7440-09-7	
Sodium	**7.6**	mg/L	0.50	0.34	1	05/18/23 15:23	05/19/23 16:01	7440-23-5	
Total Hardness	**26.9**	mg/L	3.3	0.27	1	05/18/23 15:23	05/19/23 16:01		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Calcium, Dissolved	**4.4**	mg/L	0.50	0.083	1	05/16/23 12:00	05/17/23 15:48	7440-70-2	
Iron, Dissolved	**52.1**	mg/L	0.050	0.035	1	05/16/23 12:00	05/17/23 15:48	7439-89-6	
Magnesium, Dissolved	**4.1**	mg/L	0.50	0.047	1	05/16/23 12:00	05/17/23 15:48	7439-95-4	
Manganese, Dissolved	**0.55**	mg/L	0.0050	0.0027	1	05/16/23 12:00	05/17/23 15:48	7439-96-5	
Potassium, Dissolved	**1.5**	mg/L	0.50	0.26	1	05/16/23 12:00	05/17/23 15:48	7440-09-7	
Sodium, Dissolved	**7.9**	mg/L	0.50	0.34	1	05/16/23 12:00	05/17/23 15:48	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Antimony	**0.0010 U**	mg/L	0.0010	0.00059	2	05/16/23 11:40	05/16/23 15:21	7440-36-0	
Arsenic	**0.0010J**	mg/L	0.0050	0.00088	2	05/16/23 11:40	05/16/23 15:21	7440-38-2	
Barium	**0.13**	mg/L	0.0050	0.0020	2	05/16/23 11:40	05/16/23 15:21	7440-39-3	
Beryllium	**0.00029J**	mg/L	0.0010	0.00020	2	05/16/23 11:40	05/16/23 15:21	7440-41-7	
Cadmium	**0.00070J**	mg/L	0.0010	0.00027	2	05/16/23 11:40	05/16/23 15:21	7440-43-9	
Chromium	**0.0064**	mg/L	0.0050	0.0010	2	05/16/23 11:40	05/16/23 15:21	7440-47-3	
Cobalt	**0.013**	mg/L	0.0050	0.0016	2	05/16/23 11:40	05/16/23 15:21	7440-48-4	
Copper	**0.019**	mg/L	0.0050	0.0013	2	05/16/23 11:40	05/16/23 15:21	7440-50-8	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Sample: TW-14A **Lab ID: 30584816011** Collected: 05/04/23 10:00 Received: 05/12/23 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Lead	**0.0010 U**	mg/L	0.0010	0.00050	2	05/16/23 11:40	05/16/23 15:21	7439-92-1	
Nickel	**0.015**	mg/L	0.0050	0.0013	2	05/16/23 11:40	05/16/23 15:21	7440-02-0	
Selenium	**0.0050 U**	mg/L	0.0050	0.0017	2	05/16/23 11:40	05/16/23 15:21	7782-49-2	
Silver	**0.0050 U**	mg/L	0.0050	0.0011	2	05/16/23 11:40	05/16/23 15:21	7440-22-4	
Thallium	**0.0010 U**	mg/L	0.0010	0.00016	2	05/16/23 11:40	05/16/23 15:21	7440-28-0	
Vanadium	**0.0050 U**	mg/L	0.0050	0.0024	2	05/16/23 11:40	05/16/23 15:21	7440-62-2	
Zinc	**0.052**	mg/L	0.010	0.0080	2	05/16/23 11:40	05/16/23 15:21	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/18/23 10:20	05/18/23 15:28	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/17/23 07:45	05/17/23 13:56	96-12-8	H3
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/17/23 07:45	05/17/23 13:56	106-93-4	H3
Surrogates									
1,1,1,2-Tetrachloroethane (S)	94	%.	60-140		1	05/17/23 07:45	05/17/23 13:56	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**34.0**	mg/L	10.0	1.0	1		05/17/23 15:38		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.36**	mg/L	0.10	0.090	1	05/18/23 09:34	05/18/23 13:41		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**45.6**	mg/L	25.0	4.7	1	05/22/23 10:55	05/22/23 16:07		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**15.5**	mg/L	3.0	0.67	1		05/19/23 10:07	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**9.4J**	mg/L	10.0	4.7	1		05/16/23 13:21	14808-79-8	

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Sample: TW-14B **Lab ID: 30584816012** Collected: 05/04/23 09:20 Received: 05/12/23 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.57**	mg/L	0.50	0.083	1	05/18/23 15:23	05/19/23 16:03	7440-70-2	
Iron	**0.042J**	mg/L	0.050	0.035	1	05/18/23 15:23	05/19/23 16:03	7439-89-6	
Magnesium	**0.22J**	mg/L	0.50	0.047	1	05/18/23 15:23	05/19/23 16:03	7439-95-4	
Manganese	**0.0072**	mg/L	0.0050	0.0027	1	05/18/23 15:23	05/19/23 16:03	7439-96-5	
Potassium	**0.35J**	mg/L	0.50	0.26	1	05/18/23 15:23	05/19/23 16:03	7440-09-7	
Sodium	**1.0**	mg/L	0.50	0.34	1	05/18/23 15:23	05/19/23 16:03	7440-23-5	
Total Hardness	**2.3J**	mg/L	3.3	0.27	1	05/18/23 15:23	05/19/23 16:03		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.50**	mg/L	0.50	0.083	1	05/16/23 12:00	05/17/23 15:50	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/16/23 12:00	05/17/23 15:50	7439-89-6	
Magnesium, Dissolved	**0.24J**	mg/L	0.50	0.047	1	05/16/23 12:00	05/17/23 15:50	7439-95-4	
Manganese, Dissolved	**0.0076**	mg/L	0.0050	0.0027	1	05/16/23 12:00	05/17/23 15:50	7439-96-5	
Potassium, Dissolved	**0.45J**	mg/L	0.50	0.26	1	05/16/23 12:00	05/17/23 15:50	7440-09-7	
Sodium, Dissolved	**0.99**	mg/L	0.50	0.34	1	05/16/23 12:00	05/17/23 15:50	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/16/23 11:40	05/16/23 15:37	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/16/23 11:40	05/16/23 15:37	7440-38-2	
Barium	**0.0056**	mg/L	0.0025	0.00098	1	05/16/23 11:40	05/16/23 15:37	7440-39-3	
Beryllium	**0.00022J**	mg/L	0.00050	0.00010	1	05/16/23 11:40	05/16/23 15:37	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/16/23 11:40	05/16/23 15:37	7440-43-9	
Chromium	**0.0032**	mg/L	0.0025	0.00050	1	05/16/23 11:40	05/16/23 15:37	7440-47-3	
Cobalt	**0.0052**	mg/L	0.0025	0.00081	1	05/16/23 11:40	05/16/23 15:37	7440-48-4	
Copper	**0.0081**	mg/L	0.0025	0.00064	1	05/16/23 11:40	05/16/23 15:37	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/16/23 11:40	05/16/23 15:37	7439-92-1	
Nickel	**0.010**	mg/L	0.0025	0.00065	1	05/16/23 11:40	05/16/23 15:37	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/16/23 11:40	05/16/23 15:37	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/16/23 11:40	05/16/23 15:37	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/16/23 11:40	05/16/23 15:37	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/16/23 11:40	05/16/23 15:37	7440-62-2	
Zinc	**0.010**	mg/L	0.0050	0.0040	1	05/16/23 11:40	05/16/23 15:37	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/18/23 10:20	05/18/23 15:30	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	05/17/23 07:45	05/17/23 14:09	96-12-8	H3
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	05/17/23 07:45	05/17/23 14:09	106-93-4	H3
Surrogates									
1,1,1,2-Tetrachloroethane (S)	99	%.	60-140		1	05/17/23 07:45	05/17/23 14:09	630-20-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Sample: TW-14B **Lab ID: 30584816012** Collected: 05/04/23 09:20 Received: 05/12/23 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/17/23 15:40		1c
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/18/23 09:34	05/18/23 13:43		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**41.0**	mg/L	25.0	4.7	1	05/22/23 10:55	05/22/23 16:07		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**1.7J**	mg/L	3.0	0.67	1		05/19/23 10:08	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/16/23 13:23	14808-79-8	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

QC Batch: 586611
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30584816001, 30584816002, 30584816003, 30584816004, 30584816005, 30584816006, 30584816007, 30584816008

METHOD BLANK: 2849749 Matrix: Water
Associated Lab Samples: 30584816001, 30584816002, 30584816003, 30584816004, 30584816005, 30584816006, 30584816007, 30584816008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	05/09/23 17:12	
Iron	mg/L	0.050 U	0.050	0.035	05/09/23 17:12	
Magnesium	mg/L	0.50 U	0.50	0.047	05/09/23 17:12	
Manganese	mg/L	0.0050 U	0.0050	0.0027	05/09/23 17:12	
Potassium	mg/L	0.50 U	0.50	0.26	05/09/23 17:12	
Sodium	mg/L	0.50 U	0.50	0.34	05/09/23 17:12	

LABORATORY CONTROL SAMPLE: 2849750

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	43.3	108	80-120	
Iron	mg/L	2	2.3	116	80-120	
Magnesium	mg/L	20	21.9	110	80-120	
Manganese	mg/L	2	2.2	109	80-120	
Potassium	mg/L	20	22.1	110	80-120	
Sodium	mg/L	20	22.0	110	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2849843 2849844

Parameter	Units	30584816003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	5.0	40	40	48.3	48.2	108	108	80-120	0	20	
Iron	mg/L	0.050 U	2	2	2.3	2.3	113	113	80-120	0	20	
Magnesium	mg/L	5.6	20	20	27.6	27.4	110	109	80-120	1	20	
Manganese	mg/L	0.089	2	2	2.2	2.2	108	108	80-120	0	20	
Potassium	mg/L	1.8	20	20	24.4	24.3	113	113	80-120	0	20	
Sodium	mg/L	24.9	20	20	47.3	47.2	112	111	80-120	0	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

QC Batch: 589138
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30584816009, 30584816010, 30584816011, 30584816012

METHOD BLANK: 2862795 Matrix: Water
Associated Lab Samples: 30584816009, 30584816010, 30584816011, 30584816012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	05/19/23 15:48	
Iron	mg/L	0.050 U	0.050	0.035	05/19/23 15:48	
Magnesium	mg/L	0.50 U	0.50	0.047	05/19/23 15:48	
Manganese	mg/L	0.0050 U	0.0050	0.0027	05/19/23 15:48	
Potassium	mg/L	0.50 U	0.50	0.26	05/19/23 15:48	
Sodium	mg/L	0.50 U	0.50	0.34	05/19/23 15:48	

LABORATORY CONTROL SAMPLE: 2862796

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	38.8	97	80-120	
Iron	mg/L	2	2.1	103	80-120	
Magnesium	mg/L	20	19.5	98	80-120	
Manganese	mg/L	2	2.0	100	80-120	
Potassium	mg/L	20	19.3	96	80-120	
Sodium	mg/L	20	18.9	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2862797 2862798

Parameter	Units	30587259002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	5110 ug/L	40	40	46.0	46.5	102	103	80-120	1	20	
Iron	mg/L	2610 ug/L	2	2	2.1	2.2	-24	-23	80-120	1	20	M1
Magnesium	mg/L	1150 ug/L	20	20	22.7	22.9	108	109	80-120	1	20	
Manganese	mg/L	360 ug/L	2	2	2.1	2.1	85	86	80-120	1	20	
Potassium	mg/L	4170 ug/L	20	20	22.0	22.2	89	90	80-120	1	20	
Sodium	mg/L	533 ug/L	20	20	31.9	32.1	157	158	80-120	1	20	M1

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

QC Batch: 586842
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30584816001, 30584816002, 30584816003, 30584816004, 30584816005, 30584816006, 30584816007, 30584816008

METHOD BLANK: 2850822 Matrix: Water
Associated Lab Samples: 30584816001, 30584816002, 30584816003, 30584816004, 30584816005, 30584816006, 30584816007, 30584816008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	05/10/23 17:55	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	05/10/23 17:55	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	05/10/23 17:55	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	05/10/23 17:55	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	05/10/23 17:55	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	05/10/23 17:55	

LABORATORY CONTROL SAMPLE: 2850823

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	41.3	103	80-120	
Iron, Dissolved	mg/L	2	2.2	110	80-120	
Magnesium, Dissolved	mg/L	20	20.9	105	80-120	
Manganese, Dissolved	mg/L	2	2.2	109	80-120	
Potassium, Dissolved	mg/L	20	21.2	106	80-120	
Sodium, Dissolved	mg/L	20	20.9	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2850824 2850825

Parameter	Units	30584912004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	83500 ug/L	40	40	117	123	84	98	80-120	4	20	
Iron, Dissolved	mg/L	0.050 U	2	2	2.1	2.2	105	109	80-120	4	20	
Magnesium, Dissolved	mg/L	6720 ug/L	20	20	26.1	27.2	97	103	80-120	4	20	
Manganese, Dissolved	mg/L	0.0070	2	2	2.1	2.1	103	107	80-120	4	20	
Potassium, Dissolved	mg/L	1090 ug/L	20	20	21.9	22.8	104	109	80-120	4	20	
Sodium, Dissolved	mg/L	13800 ug/L	20	20	32.8	34.2	95	102	80-120	4	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

QC Batch: 588357
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30584816009, 30584816010, 30584816011, 30584816012

METHOD BLANK: 2858914 Matrix: Water
Associated Lab Samples: 30584816009, 30584816010, 30584816011, 30584816012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	05/17/23 15:22	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	05/17/23 15:22	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	05/17/23 15:22	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	05/17/23 15:22	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	05/17/23 15:22	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	05/17/23 15:22	

LABORATORY CONTROL SAMPLE: 2858915

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	40.4	101	80-120	
Iron, Dissolved	mg/L	2	2.0	101	80-120	
Magnesium, Dissolved	mg/L	20	20.1	101	80-120	
Manganese, Dissolved	mg/L	2	2.0	99	80-120	
Potassium, Dissolved	mg/L	20	19.9	99	80-120	
Sodium, Dissolved	mg/L	20	19.5	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2858916 2858917

Parameter	Units	30587048005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	5.5	40	40	48.0	45.8	106	101	80-120	5	20	
Iron, Dissolved	mg/L	62.5	2	2	68.6	65.4	307	145	80-120	5	20	P6
Magnesium, Dissolved	mg/L	2.0	20	20	23.2	22.1	106	101	80-120	5	20	
Manganese, Dissolved	mg/L	0.68	2	2	2.8	2.7	106	100	80-120	5	20	
Potassium, Dissolved	mg/L	1.5	20	20	23.4	22.3	110	104	80-120	5	20	
Sodium, Dissolved	mg/L	79.1	20	20	104	99.3	125	101	80-120	5	20	P6

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

QC Batch: 586697
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30584816002, 30584816003, 30584816004, 30584816005, 30584816006, 30584816007, 30584816008

METHOD BLANK: 2850306
Matrix: Water
Associated Lab Samples: 30584816002, 30584816003, 30584816004, 30584816005, 30584816006, 30584816007, 30584816008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00030	05/09/23 12:50	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	05/09/23 12:50	
Barium	mg/L	0.0025 U	0.0025	0.00098	05/09/23 12:50	
Beryllium	mg/L	0.00050 U	0.00050	0.00010	05/09/23 12:50	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	05/09/23 12:50	
Chromium	mg/L	0.0025 U	0.0025	0.00050	05/09/23 12:50	
Cobalt	mg/L	0.0025 U	0.0025	0.00081	05/09/23 12:50	
Copper	mg/L	0.0025 U	0.0025	0.00064	05/09/23 12:50	
Lead	mg/L	0.00050 U	0.00050	0.00025	05/09/23 12:50	
Nickel	mg/L	0.0025 U	0.0025	0.00065	05/09/23 12:50	
Selenium	mg/L	0.0025 U	0.0025	0.00084	05/09/23 12:50	
Silver	mg/L	0.0025 U	0.0025	0.00053	05/09/23 12:50	
Thallium	mg/L	0.00050 U	0.00050	0.000081	05/09/23 12:50	
Vanadium	mg/L	0.0025 U	0.0025	0.0012	05/09/23 12:50	
Zinc	mg/L	0.0050 U	0.0050	0.0040	05/09/23 12:50	

LABORATORY CONTROL SAMPLE: 2850307

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.022	109	80-120	
Arsenic	mg/L	0.1	0.11	107	80-120	
Barium	mg/L	0.1	0.11	105	80-120	
Beryllium	mg/L	0.02	0.020	102	80-120	
Cadmium	mg/L	0.02	0.020	102	80-120	
Chromium	mg/L	0.1	0.11	112	80-120	
Cobalt	mg/L	0.1	0.11	112	80-120	
Copper	mg/L	0.1	0.11	114	80-120	
Lead	mg/L	0.02	0.021	105	80-120	
Nickel	mg/L	0.1	0.11	110	80-120	
Selenium	mg/L	0.1	0.10	103	80-120	
Silver	mg/L	0.1	0.10	105	80-120	
Thallium	mg/L	0.02	0.021	105	80-120	
Vanadium	mg/L	0.1	0.11	111	80-120	
Zinc	mg/L	0.2	0.22	108	80-120	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2850308 2850309

Parameter	Units	30584584002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.02	0.02	0.022	0.023	111	114	75-125	3	20	
Arsenic	mg/L	ND	0.1	0.1	0.11	0.11	107	112	75-125	4	20	
Barium	mg/L	84.8 ug/L	0.1	0.1	0.19	0.20	106	112	75-125	3	20	
Beryllium	mg/L	ND	0.02	0.02	0.021	0.021	104	107	75-125	3	20	
Cadmium	mg/L	ND	0.02	0.02	0.020	0.021	102	105	75-125	2	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.11	110	113	75-125	3	20	
Cobalt	mg/L	ND	0.1	0.1	0.11	0.11	108	111	75-125	2	20	
Copper	mg/L	ND	0.1	0.1	0.11	0.11	107	111	75-125	3	20	
Lead	mg/L	ND	0.02	0.02	0.021	0.022	106	109	75-125	3	20	
Nickel	mg/L	3.4 ug/L	0.1	0.1	0.11	0.11	109	111	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.11	102	106	75-125	3	20	
Silver	mg/L	ND	0.1	0.1	0.10	0.11	103	107	75-125	3	20	
Thallium	mg/L	ND	0.02	0.02	0.021	0.022	105	110	75-125	5	20	
Vanadium	mg/L	ND	0.1	0.1	0.11	0.12	111	115	75-125	3	20	
Zinc	mg/L	ND	0.2	0.2	0.22	0.22	107	109	75-125	2	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

QC Batch: 586888
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30584816001

METHOD BLANK: 2851007
Matrix: Water
Associated Lab Samples: 30584816001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00030	05/10/23 10:18	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	05/10/23 10:18	
Barium	mg/L	0.0025 U	0.0025	0.00098	05/10/23 10:18	
Beryllium	mg/L	0.00050 U	0.00050	0.00010	05/10/23 10:18	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	05/10/23 10:18	
Chromium	mg/L	0.0025 U	0.0025	0.00050	05/10/23 10:18	
Cobalt	mg/L	0.0025 U	0.0025	0.00081	05/10/23 10:18	
Copper	mg/L	0.0025 U	0.0025	0.00064	05/10/23 10:18	
Lead	mg/L	0.00050 U	0.00050	0.00025	05/10/23 10:18	
Nickel	mg/L	0.0025 U	0.0025	0.00065	05/10/23 10:18	
Selenium	mg/L	0.0025 U	0.0025	0.00084	05/10/23 10:18	
Silver	mg/L	0.0025 U	0.0025	0.00053	05/10/23 10:18	
Thallium	mg/L	0.00050 U	0.00050	0.000081	05/10/23 10:18	
Vanadium	mg/L	0.0025 U	0.0025	0.0012	05/10/23 10:18	
Zinc	mg/L	0.0050 U	0.0050	0.0040	05/10/23 10:18	

LABORATORY CONTROL SAMPLE: 2851008

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.021	105	80-120	
Arsenic	mg/L	0.1	0.10	104	80-120	
Barium	mg/L	0.1	0.10	101	80-120	
Beryllium	mg/L	0.02	0.020	98	80-120	
Cadmium	mg/L	0.02	0.020	99	80-120	
Chromium	mg/L	0.1	0.11	110	80-120	
Cobalt	mg/L	0.1	0.11	111	80-120	
Copper	mg/L	0.1	0.11	112	80-120	
Lead	mg/L	0.02	0.020	102	80-120	
Nickel	mg/L	0.1	0.11	110	80-120	
Selenium	mg/L	0.1	0.10	100	80-120	
Silver	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.02	0.020	101	80-120	
Vanadium	mg/L	0.1	0.11	108	80-120	
Zinc	mg/L	0.2	0.21	107	80-120	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2851009 2851010

Parameter	Units	30584251002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00050 U	0.02	0.02	0.022	0.021	108	106	75-125	2	20	
Arsenic	mg/L	0.0025 U	0.1	0.1	0.092	0.091	92	91	75-125	1	20	
Barium	mg/L	0.19	0.1	0.1	0.29	0.28	101	97	75-125	2	20	
Beryllium	mg/L	0.00049J	0.02	0.02	0.021	0.021	103	104	75-125	1	20	
Cadmium	mg/L	0.00058	0.02	0.02	0.021	0.020	101	99	75-125	2	20	
Chromium	mg/L	0.014	0.1	0.1	0.12	0.12	110	110	75-125	0	20	
Cobalt	mg/L	0.015	0.1	0.1	0.13	0.13	111	111	75-125	0	20	
Copper	mg/L	0.015	0.1	0.1	0.13	0.13	111	111	75-125	0	20	
Lead	mg/L	0.00050 U	0.02	0.02	0.021	0.021	104	104	75-125	0	20	
Nickel	mg/L	0.019	0.1	0.1	0.13	0.13	110	111	75-125	0	20	
Selenium	mg/L	0.0019J	0.1	0.1	0.087	0.086	85	84	75-125	2	20	
Silver	mg/L	0.0025 U	0.1	0.1	0.10	0.10	101	100	75-125	1	20	
Thallium	mg/L	0.00050 U	0.02	0.02	0.013	0.013	64	66	75-125	4	20	M1
Vanadium	mg/L	0.0025 U	0.1	0.1	0.11	0.11	109	110	75-125	1	20	
Zinc	mg/L	0.041	0.2	0.2	0.26	0.26	108	107	75-125	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

QC Batch: 588356
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30584816009, 30584816010, 30584816011, 30584816012

METHOD BLANK: 2858906 Matrix: Water
Associated Lab Samples: 30584816009, 30584816010, 30584816011, 30584816012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00030	05/16/23 14:29	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	05/16/23 14:29	
Barium	mg/L	0.0025 U	0.0025	0.00098	05/16/23 14:29	
Beryllium	mg/L	0.00050 U	0.00050	0.00010	05/16/23 14:29	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	05/16/23 14:29	
Chromium	mg/L	0.0025 U	0.0025	0.00050	05/16/23 14:29	
Cobalt	mg/L	0.0025 U	0.0025	0.00081	05/16/23 14:29	
Copper	mg/L	0.0025 U	0.0025	0.00064	05/16/23 14:29	
Lead	mg/L	0.00050 U	0.00050	0.00025	05/16/23 14:29	
Nickel	mg/L	0.0025 U	0.0025	0.00065	05/16/23 14:29	
Selenium	mg/L	0.0025 U	0.0025	0.00084	05/16/23 14:29	
Silver	mg/L	0.0025 U	0.0025	0.00053	05/16/23 14:29	
Thallium	mg/L	0.00050 U	0.00050	0.000081	05/16/23 14:29	
Vanadium	mg/L	0.0025 U	0.0025	0.0012	05/16/23 14:29	
Zinc	mg/L	0.0050 U	0.0050	0.0040	05/16/23 14:29	

LABORATORY CONTROL SAMPLE: 2858907

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.021	107	80-120	
Arsenic	mg/L	0.1	0.11	106	80-120	
Barium	mg/L	0.1	0.10	103	80-120	
Beryllium	mg/L	0.02	0.020	99	80-120	
Cadmium	mg/L	0.02	0.020	101	80-120	
Chromium	mg/L	0.1	0.11	109	80-120	
Cobalt	mg/L	0.1	0.11	109	80-120	
Copper	mg/L	0.1	0.11	109	80-120	
Lead	mg/L	0.02	0.021	104	80-120	
Nickel	mg/L	0.1	0.11	111	80-120	
Selenium	mg/L	0.1	0.10	103	80-120	
Silver	mg/L	0.1	0.11	105	80-120	
Thallium	mg/L	0.02	0.021	104	80-120	
Vanadium	mg/L	0.1	0.11	109	80-120	
Zinc	mg/L	0.2	0.21	106	80-120	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2858908 2858909

Parameter	Units	30585905003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00050 U	0.02	0.02	0.022	0.022	109	108	75-125	1	20	
Arsenic	mg/L	0.00060J	0.1	0.1	0.089	0.089	88	89	75-125	1	20	
Barium	mg/L	0.092	0.1	0.1	0.19	0.19	101	102	75-125	0	20	
Beryllium	mg/L	0.00054	0.02	0.02	0.021	0.020	102	99	75-125	3	20	
Cadmium	mg/L	0.00024J	0.02	0.02	0.021	0.021	102	102	75-125	1	20	
Chromium	mg/L	0.0034	0.1	0.1	0.11	0.11	107	109	75-125	2	20	
Cobalt	mg/L	0.013	0.1	0.1	0.12	0.12	107	110	75-125	2	20	
Copper	mg/L	0.0033	0.1	0.1	0.11	0.11	108	110	75-125	2	20	
Lead	mg/L	0.00050 U	0.02	0.02	0.021	0.021	105	105	75-125	0	20	
Nickel	mg/L	0.0064	0.1	0.1	0.11	0.12	108	110	75-125	1	20	
Selenium	mg/L	0.0031	0.1	0.1	0.086	0.087	83	84	75-125	1	20	
Silver	mg/L	0.0025 U	0.1	0.1	0.10	0.10	104	104	75-125	0	20	
Thallium	mg/L	0.00050 U	0.02	0.02	0.014	0.014	71	71	75-125	0	20	M1
Vanadium	mg/L	0.0025 U	0.1	0.1	0.11	0.11	108	110	75-125	1	20	
Zinc	mg/L	0.030	0.2	0.2	0.24	0.24	104	105	75-125	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

QC Batch: 586473
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30584816001

METHOD BLANK: 2849093 Matrix: Water
Associated Lab Samples: 30584816001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	05/08/23 15:43	

LABORATORY CONTROL SAMPLE: 2849094

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.011	108	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2849095 2849096

Parameter	Units	30584251001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00020 U	0.01	0.01	0.013	0.014	128	135	80-120	5	20	M1

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

QC Batch: 586801
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30584816002, 30584816003, 30584816004, 30584816005, 30584816006, 30584816007, 30584816008

METHOD BLANK: 2850668 Matrix: Water
Associated Lab Samples: 30584816002, 30584816003, 30584816004, 30584816005, 30584816006, 30584816007, 30584816008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	05/09/23 15:08	

LABORATORY CONTROL SAMPLE: 2850669

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.010	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2850709 2850710

Parameter	Units	30584816008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00020 U	0.01	0.01	0.016	0.015	155	151	80-120	3	20	M1

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

QC Batch: 589041
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30584816009, 30584816010, 30584816011, 30584816012

METHOD BLANK: 2862340 Matrix: Water
Associated Lab Samples: 30584816009, 30584816010, 30584816011, 30584816012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	05/18/23 14:57	

LABORATORY CONTROL SAMPLE: 2862341

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.0099	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2862342 2862343

Parameter	Units	30587834001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.01	0.01	0.011	0.011	106	113	80-120	7	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

QC Batch: 586412
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30584816001, 30584816002, 30584816003, 30584816004, 30584816005, 30584816006, 30584816007, 30584816008

METHOD BLANK: 2848901
Matrix: Water
Associated Lab Samples: 30584816001, 30584816002, 30584816003, 30584816004, 30584816005, 30584816006, 30584816007, 30584816008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	05/08/23 11:32	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	05/08/23 11:32	
1,1,1,2-Tetrachloroethane (S)	%.	95	60-140		05/08/23 11:32	

LABORATORY CONTROL SAMPLE: 2848902

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.22	88	85-115	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.22	88	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			93	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2848903 2848904

Parameter	Units	30584816001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.041 U	0.41	0.41	0.38	0.38	93	94	60-140	1	25	
1,2-Dibromoethane (EDB)	ug/L	0.041 U	0.41	0.41	0.37	0.37	90	91	60-140	2	25	
1,1,1,2-Tetrachloroethane (S)	%.						89	90	60-140			

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

QC Batch: 588615
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30584816009, 30584816010, 30584816011, 30584816012

METHOD BLANK: 2860430 Matrix: Water
Associated Lab Samples: 30584816009, 30584816010, 30584816011, 30584816012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	05/17/23 11:36	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	05/17/23 11:36	
1,1,1,2-Tetrachloroethane (S)	%.	96	60-140		05/17/23 11:36	

LABORATORY CONTROL SAMPLE: 2860431

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.22	87	85-115	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.23	93	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			92	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2860432 2860433

Parameter	Units	30587330001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.041 U	0.4	0.41	0.32	0.34	81	84	60-140	5	25	
1,2-Dibromoethane (EDB)	ug/L	0.041 U	0.4	0.41	0.35	0.37	88	91	60-140	6	25	
1,1,1,2-Tetrachloroethane (S)	%.						84	87	60-140			

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

QC Batch: 588735
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30584816001, 30584816002, 30584816003, 30584816004, 30584816005, 30584816006, 30584816007, 30584816008, 30584816009, 30584816010, 30584816011, 30584816012

METHOD BLANK: 2860884
Matrix: Water
Associated Lab Samples: 30584816001, 30584816002, 30584816003, 30584816004, 30584816005, 30584816006, 30584816007, 30584816008, 30584816009, 30584816010, 30584816011, 30584816012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	1.0J	10.0	1.0	05/17/23 15:05	

LABORATORY CONTROL SAMPLE: 2860885

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2860886 2860887

Parameter	Units	30584816009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	28.0	50	50	68.0	66.0	80	76	85-115	3	20	ML

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

QC Batch: 586717
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30584816001, 30584816002, 30584816003, 30584816004

METHOD BLANK: 2850447 Matrix: Water
Associated Lab Samples: 30584816001, 30584816002, 30584816003, 30584816004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	05/09/23 16:00	

LABORATORY CONTROL SAMPLE: 2850448

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	982	98	85-115	

SAMPLE DUPLICATE: 2850449

Parameter	Units	30584185004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	431	450	4	5	

SAMPLE DUPLICATE: 2850450

Parameter	Units	30584816002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	30.0	29.0	3	5	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

QC Batch: 587050
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30584816005, 30584816006, 30584816007, 30584816008

METHOD BLANK: 2851821 Matrix: Water
Associated Lab Samples: 30584816005, 30584816006, 30584816007, 30584816008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	05/10/23 17:01	

LABORATORY CONTROL SAMPLE: 2851822

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	955	96	85-115	

SAMPLE DUPLICATE: 2851823

Parameter	Units	30584816005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	15.0	15.0	0	5	

SAMPLE DUPLICATE: 2851824

Parameter	Units	30585343004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	117	112	4	5	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

QC Batch: 586400
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30584816001, 30584816002, 30584816003, 30584816004

METHOD BLANK: 2848843 Matrix: Water
Associated Lab Samples: 30584816001, 30584816002, 30584816003, 30584816004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	05/09/23 12:36	

LABORATORY CONTROL SAMPLE: 2848844

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.2	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2848845 2848846

Parameter	Units	30584469001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	2.2	4	4	6.3	6.3	102	101	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2848847 2848848

Parameter	Units	30584548001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.48	4	4	4.7	4.9	106	110	90-110	4	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

QC Batch: 586401
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30584816005, 30584816006, 30584816007, 30584816008

METHOD BLANK: 2848849 Matrix: Water
Associated Lab Samples: 30584816005, 30584816006, 30584816007, 30584816008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	05/09/23 14:27	

LABORATORY CONTROL SAMPLE: 2848850

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.2	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2848851 2848852

Parameter	Units	30584816005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.2	4.3	106	107	90-110	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

QC Batch: 588607
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30584816009, 30584816010, 30584816011, 30584816012

METHOD BLANK: 2860391 Matrix: Water
Associated Lab Samples: 30584816009, 30584816010, 30584816011, 30584816012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	05/18/23 13:01	

METHOD BLANK: 2860392 Matrix: Water
Associated Lab Samples: 30584816009, 30584816010, 30584816011, 30584816012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	05/18/23 13:05	

LABORATORY CONTROL SAMPLE: 2860393

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.2	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2860394 2860395

Parameter	Units	30587048001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.2	4.2	104	104	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2860396 2860397

Parameter	Units	30584816009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.2	4.2	104	105	90-110	0	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

QC Batch: 589025
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30584816001, 30584816002, 30584816003, 30584816004, 30584816005, 30584816006, 30584816007, 30584816008, 30584816009

METHOD BLANK: 2862228 Matrix: Water
Associated Lab Samples: 30584816001, 30584816002, 30584816003, 30584816004, 30584816005, 30584816006, 30584816007, 30584816008, 30584816009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	05/18/23 16:35	

METHOD BLANK: 2862230 Matrix: Water
Associated Lab Samples: 30584816001, 30584816002, 30584816003, 30584816004, 30584816005, 30584816006, 30584816007, 30584816008, 30584816009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	05/18/23 16:35	4c

LABORATORY CONTROL SAMPLE: 2862229

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	307	102	90-110	

LABORATORY CONTROL SAMPLE: 2862231

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	300	100	90-110	4c

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2862232 2862233

Parameter	Units	30585317001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	4800	1500	1500	6030	6050	82	83	90-110	0	10	ML

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2862234 2862235

Parameter	Units	30584816009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	6.9J	150	150	171	164	109	105	90-110	4	10	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

QC Batch: 589652
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30584816010, 30584816011, 30584816012

METHOD BLANK: 2865684 Matrix: Water
Associated Lab Samples: 30584816010, 30584816011, 30584816012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	05/22/23 16:01	

LABORATORY CONTROL SAMPLE: 2865685

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	319	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2865686 2865687

Parameter	Units	30585905001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	29.6	150	150	189	191	106	108	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2865688 2865689

Parameter	Units	30584816011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	45.6	150	150	203	200	105	103	90-110	1	10	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

QC Batch: 586406
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30584816001, 30584816002, 30584816003, 30584816004, 30584816005, 30584816006, 30584816007

METHOD BLANK: 2848873 Matrix: Water
Associated Lab Samples: 30584816001, 30584816002, 30584816003, 30584816004, 30584816005, 30584816006, 30584816007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/08/23 10:33	

LABORATORY CONTROL SAMPLE: 2848874

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	19.2	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2848875 2848876

Parameter	Units	30584631001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	ND	20	20	20.0	19.8	93	92	85-115	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

QC Batch: 586407
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30584816008

METHOD BLANK: 2848877 Matrix: Water
Associated Lab Samples: 30584816008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/08/23 12:08	

LABORATORY CONTROL SAMPLE: 2848878

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	18.4	92	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2848879 2848880

Parameter	Units	30584816008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	4.4	20	20	24.3	24.3	100	100	85-115	0	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

QC Batch: 589230
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30584816009, 30584816010, 30584816011, 30584816012

METHOD BLANK: 2863679 Matrix: Water
Associated Lab Samples: 30584816009, 30584816010, 30584816011, 30584816012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/19/23 10:02	

LABORATORY CONTROL SAMPLE: 2863680

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.6	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2863681 2863682

Parameter	Units	30584816009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	7.6	20	20	28.5	28.9	104	106	85-115	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

QC Batch: 586410
QC Batch Method: SM 4500NO3-F-2016
Analysis Method: SM 4500NO3-F-2016
Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30584816001, 30584816002, 30584816003, 30584816004, 30584816005, 30584816006, 30584816007, 30584816008

METHOD BLANK: 2848889
Matrix: Water
Associated Lab Samples: 30584816001, 30584816002, 30584816003, 30584816004, 30584816005, 30584816006, 30584816007, 30584816008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	05/09/23 10:52	

LABORATORY CONTROL SAMPLE: 2848890

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	3.9	98	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2848891 2848892

Parameter	Units	30584744001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	4.7	5	5	10.3	10.3	111	111	85-115	0	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

QC Batch: 586203
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30584816001, 30584816002, 30584816003, 30584816004, 30584816005, 30584816006, 30584816007, 30584816008

METHOD BLANK: 2847739
Matrix: Water
Associated Lab Samples: 30584816001, 30584816002, 30584816003, 30584816004, 30584816005, 30584816006, 30584816007, 30584816008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	05/05/23 10:55	

LABORATORY CONTROL SAMPLE: 2847740

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	30.9	103	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2847741 2847742

Parameter	Units	30584816001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.0 U	20	20	18.5	21.4	78	92	85-115	14	20	ML

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

QC Batch: 588368
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30584816009, 30584816010, 30584816011, 30584816012

METHOD BLANK: 2858967 Matrix: Water
Associated Lab Samples: 30584816009, 30584816010, 30584816011, 30584816012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	05/16/23 13:14	

LABORATORY CONTROL SAMPLE: 2858968

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	30.4	101	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2858969 2858970

Parameter	Units	30584816009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.0 U	20	20	21.5	20.7	98	94	85-115	4	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING 2023
Pace Project No.: 30584816

QC Batch: 586055
QC Batch Method: SM 4500NO2-B-2011
Analysis Method: SM 4500NO2-B-2011
Analysis Description: SM4500-NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30584816001, 30584816002, 30584816003, 30584816004, 30584816005, 30584816006, 30584816007, 30584816008

METHOD BLANK: 2847014 Matrix: Water
Associated Lab Samples: 30584816001, 30584816002, 30584816003, 30584816004, 30584816005, 30584816006, 30584816007, 30584816008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	05/05/23 10:17	

LABORATORY CONTROL SAMPLE: 2847015

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.10	103	90-110	

MATRIX SPIKE SAMPLE: 2847017

Parameter	Units	30584816001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.010 U	0.1	0.12	112	85-115	

SAMPLE DUPLICATE: 2847016

Parameter	Units	30584816001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010 U		20	

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QUALIFIERS

Project: MLF-SPRING 2023
Pace Project No.: 30584816

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30584816001
[1] Sample pH for 8011 is 6

Sample: 30584816002
[1] Sample pH for 8011 is 6

Sample: 30584816003
[1] Sample pH for 8011 is 5

Sample: 30584816004
[1] Sample pH for 8011 is 6

Sample: 30584816005
[1] Sample pH for 8011 is 6

Sample: 30584816006
[1] Sample pH for 8011 is 5

Sample: 30584816007
[1] Sample pH for 8011 is 6

Sample: 30584816008
[1] Sample pH for 8011 is 6

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QUALIFIERS

Project: MLF-SPRING 2023
Pace Project No.: 30584816

SAMPLE QUALIFIERS

Sample: 30584816009
[1] Sample pH for 8011 is 6
Sample: 30584816010
[1] Sample pH for 8011 is 6
Sample: 30584816011
[1] Sample pH for 8011 is 6
Sample: 30584816012
[1] Sample pH for 8011 is 6

ANALYTE QUALIFIERS

1c	Alkalinity TV: 0.00 mg/L
2c	Alkalinity TV: 1.00 mg/L
3c	Alkalinity TV: 2.00 mg/L
4c	pH adjusted to <2 in lab at bench prior to analysis
H3	Sample was received or analysis requested beyond the recognized method holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30584816001	**TW-14**	EPA 3010A	586611	EPA 6010D	586913
30584816002	**TW-15**	EPA 3010A	586611	EPA 6010D	586913
30584816003	**TW-15B**	EPA 3010A	586611	EPA 6010D	586913
30584816004	**TW-16**	EPA 3010A	586611	EPA 6010D	586913
30584816005	**TW-16A**	EPA 3010A	586611	EPA 6010D	586913
30584816006	**TW-17**	EPA 3010A	586611	EPA 6010D	586913
30584816007	**TW-17A**	EPA 3010A	586611	EPA 6010D	586913
30584816008	**TW-18**	EPA 3010A	586611	EPA 6010D	586913
30584816009	**TW-12**	EPA 3010A	589138	EPA 6010D	589382
30584816010	**TW-13**	EPA 3010A	589138	EPA 6010D	589382
30584816011	**TW-14A**	EPA 3010A	589138	EPA 6010D	589382
30584816012	**TW-14B**	EPA 3010A	589138	EPA 6010D	589382
30584816001	**TW-14**	EPA 3010A	586842	EPA 6010D	587313
30584816002	**TW-15**	EPA 3010A	586842	EPA 6010D	587313
30584816003	**TW-15B**	EPA 3010A	586842	EPA 6010D	587313
30584816004	**TW-16**	EPA 3010A	586842	EPA 6010D	587313
30584816005	**TW-16A**	EPA 3010A	586842	EPA 6010D	587313
30584816006	**TW-17**	EPA 3010A	586842	EPA 6010D	587313
30584816007	**TW-17A**	EPA 3010A	586842	EPA 6010D	587313
30584816008	**TW-18**	EPA 3010A	586842	EPA 6010D	587313
30584816009	**TW-12**	EPA 3010A	588357	EPA 6010D	588773
30584816010	**TW-13**	EPA 3010A	588357	EPA 6010D	588773
30584816011	**TW-14A**	EPA 3010A	588357	EPA 6010D	588773
30584816012	**TW-14B**	EPA 3010A	588357	EPA 6010D	588773
30584816001	**TW-14**	EPA 3010A	586888	EPA 6020B	587106
30584816002	**TW-15**	EPA 3010A	586697	EPA 6020B	586843
30584816003	**TW-15B**	EPA 3010A	586697	EPA 6020B	586843
30584816004	**TW-16**	EPA 3010A	586697	EPA 6020B	586843
30584816005	**TW-16A**	EPA 3010A	586697	EPA 6020B	586843
30584816006	**TW-17**	EPA 3010A	586697	EPA 6020B	586843
30584816007	**TW-17A**	EPA 3010A	586697	EPA 6020B	586843
30584816008	**TW-18**	EPA 3010A	586697	EPA 6020B	586843
30584816009	**TW-12**	EPA 3010A	588356	EPA 6020B	588472
30584816010	**TW-13**	EPA 3010A	588356	EPA 6020B	588472
30584816011	**TW-14A**	EPA 3010A	588356	EPA 6020B	588472
30584816012	**TW-14B**	EPA 3010A	588356	EPA 6020B	588472
30584816001	**TW-14**	EPA 7470A	586473	EPA 7470A	586601
30584816002	**TW-15**	EPA 7470A	586801	EPA 7470A	586942
30584816003	**TW-15B**	EPA 7470A	586801	EPA 7470A	586942
30584816004	**TW-16**	EPA 7470A	586801	EPA 7470A	586942
30584816005	**TW-16A**	EPA 7470A	586801	EPA 7470A	586942
30584816006	**TW-17**	EPA 7470A	586801	EPA 7470A	586942
30584816007	**TW-17A**	EPA 7470A	586801	EPA 7470A	586942
30584816008	**TW-18**	EPA 7470A	586801	EPA 7470A	586942

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30584816009	**TW-12**	EPA 7470A	589041	EPA 7470A	589153
30584816010	**TW-13**	EPA 7470A	589041	EPA 7470A	589153
30584816011	**TW-14A**	EPA 7470A	589041	EPA 7470A	589153
30584816012	**TW-14B**	EPA 7470A	589041	EPA 7470A	589153
30584816001	**TW-14**	EPA 8011	586412	EPA 8011	586476
30584816002	**TW-15**	EPA 8011	586412	EPA 8011	586476
30584816003	**TW-15B**	EPA 8011	586412	EPA 8011	586476
30584816004	**TW-16**	EPA 8011	586412	EPA 8011	586476
30584816005	**TW-16A**	EPA 8011	586412	EPA 8011	586476
30584816006	**TW-17**	EPA 8011	586412	EPA 8011	586476
30584816007	**TW-17A**	EPA 8011	586412	EPA 8011	586476
30584816008	**TW-18**	EPA 8011	586412	EPA 8011	586476
30584816009	**TW-12**	EPA 8011	588615	EPA 8011	588674
30584816010	**TW-13**	EPA 8011	588615	EPA 8011	588674
30584816011	**TW-14A**	EPA 8011	588615	EPA 8011	588674
30584816012	**TW-14B**	EPA 8011	588615	EPA 8011	588674
30584816001	**TW-14**	SM 2320B-2011	588735		
30584816002	**TW-15**	SM 2320B-2011	588735		
30584816003	**TW-15B**	SM 2320B-2011	588735		
30584816004	**TW-16**	SM 2320B-2011	588735		
30584816005	**TW-16A**	SM 2320B-2011	588735		
30584816006	**TW-17**	SM 2320B-2011	588735		
30584816007	**TW-17A**	SM 2320B-2011	588735		
30584816008	**TW-18**	SM 2320B-2011	588735		
30584816009	**TW-12**	SM 2320B-2011	588735		
30584816010	**TW-13**	SM 2320B-2011	588735		
30584816011	**TW-14A**	SM 2320B-2011	588735		
30584816012	**TW-14B**	SM 2320B-2011	588735		
30584816001	**TW-14**	SM 2540C-2015	586717		
30584816002	**TW-15**	SM 2540C-2015	586717		
30584816003	**TW-15B**	SM 2540C-2015	586717		
30584816004	**TW-16**	SM 2540C-2015	586717		
30584816005	**TW-16A**	SM 2540C-2015	587050		
30584816006	**TW-17**	SM 2540C-2015	587050		
30584816007	**TW-17A**	SM 2540C-2015	587050		
30584816008	**TW-18**	SM 2540C-2015	587050		
30584816001	**TW-14**	EPA 350.1	586400	EPA 350.1	586735
30584816002	**TW-15**	EPA 350.1	586400	EPA 350.1	586735
30584816003	**TW-15B**	EPA 350.1	586400	EPA 350.1	586735
30584816004	**TW-16**	EPA 350.1	586400	EPA 350.1	586735
30584816005	**TW-16A**	EPA 350.1	586401	EPA 350.1	586736
30584816006	**TW-17**	EPA 350.1	586401	EPA 350.1	586736
30584816007	**TW-17A**	EPA 350.1	586401	EPA 350.1	586736
30584816008	**TW-18**	EPA 350.1	586401	EPA 350.1	586736
30584816009	**TW-12**	EPA 350.1	588607	EPA 350.1	589032

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30584816010	**TW-13**	EPA 350.1	588607	EPA 350.1	589032
30584816011	**TW-14A**	EPA 350.1	588607	EPA 350.1	589032
30584816012	**TW-14B**	EPA 350.1	588607	EPA 350.1	589032
30584816001	**TW-14**	EPA 410.4	589025	EPA 410.4	589095
30584816002	**TW-15**	EPA 410.4	589025	EPA 410.4	589095
30584816003	**TW-15B**	EPA 410.4	589025	EPA 410.4	589095
30584816004	**TW-16**	EPA 410.4	589025	EPA 410.4	589095
30584816005	**TW-16A**	EPA 410.4	589025	EPA 410.4	589095
30584816006	**TW-17**	EPA 410.4	589025	EPA 410.4	589095
30584816007	**TW-17A**	EPA 410.4	589025	EPA 410.4	589095
30584816008	**TW-18**	EPA 410.4	589025	EPA 410.4	589095
30584816009	**TW-12**	EPA 410.4	589025	EPA 410.4	589095
30584816010	**TW-13**	EPA 410.4	589652	EPA 410.4	589745
30584816011	**TW-14A**	EPA 410.4	589652	EPA 410.4	589745
30584816012	**TW-14B**	EPA 410.4	589652	EPA 410.4	589745
30584816001	**TW-14**	SM 4500-Cl-E-2011	586406		
30584816002	**TW-15**	SM 4500-Cl-E-2011	586406		
30584816003	**TW-15B**	SM 4500-Cl-E-2011	586406		
30584816004	**TW-16**	SM 4500-Cl-E-2011	586406		
30584816005	**TW-16A**	SM 4500-Cl-E-2011	586406		
30584816006	**TW-17**	SM 4500-Cl-E-2011	586406		
30584816007	**TW-17A**	SM 4500-Cl-E-2011	586406		
30584816008	**TW-18**	SM 4500-Cl-E-2011	586407		
30584816009	**TW-12**	SM 4500-Cl-E-2011	589230		
30584816010	**TW-13**	SM 4500-Cl-E-2011	589230		
30584816011	**TW-14A**	SM 4500-Cl-E-2011	589230		
30584816012	**TW-14B**	SM 4500-Cl-E-2011	589230		
30584816001	**TW-14**	SM 4500NO3-F-2016	586410		
30584816002	**TW-15**	SM 4500NO3-F-2016	586410		
30584816003	**TW-15B**	SM 4500NO3-F-2016	586410		
30584816004	**TW-16**	SM 4500NO3-F-2016	586410		
30584816005	**TW-16A**	SM 4500NO3-F-2016	586410		
30584816006	**TW-17**	SM 4500NO3-F-2016	586410		
30584816007	**TW-17A**	SM 4500NO3-F-2016	586410		
30584816008	**TW-18**	SM 4500NO3-F-2016	586410		
30584816001	**TW-14**	EPA 9038	586203		
30584816002	**TW-15**	EPA 9038	586203		
30584816003	**TW-15B**	EPA 9038	586203		
30584816004	**TW-16**	EPA 9038	586203		
30584816005	**TW-16A**	EPA 9038	586203		
30584816006	**TW-17**	EPA 9038	586203		
30584816007	**TW-17A**	EPA 9038	586203		
30584816008	**TW-18**	EPA 9038	586203		
30584816009	**TW-12**	EPA 9038	588368		
30584816010	**TW-13**	EPA 9038	588368		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING 2023
Pace Project No.: 30584816

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30584816011	**TW-14A**	EPA 9038	588368		
30584816012	**TW-14B**	EPA 9038	588368		
30584816001	**TW-14**	SM 4500NO2-B-2011	586055		
30584816002	**TW-15**	SM 4500NO2-B-2011	586055		
30584816003	**TW-15B**	SM 4500NO2-B-2011	586055		
30584816004	**TW-16**	SM 4500NO2-B-2011	586055		
30584816005	**TW-16A**	SM 4500NO2-B-2011	586055		
30584816006	**TW-17**	SM 4500NO2-B-2011	586055		
30584816007	**TW-17A**	SM 4500NO2-B-2011	586055		
30584816008	**TW-18**	SM 4500NO2-B-2011	586055		

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WO#: 30584816

EMA

207 East Sixth S

30584816

ND ASSESSMENT, LLC
50 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF-SPRING 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals ①	Total + Diss. Metals ②	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO4, COD	Method 8011-DBCP+EDB				
1	TW-12	7	5.3.23	1530	✓		GW	✓	✓	✓	✓	✓	✓	✓	✓				
2	TW-13	↓	5.4.23	830	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓				
3	TW-14	↓	↓	635	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓				
4	TW-14A	↓	↓	1000	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓				
5	TW-14B	↓	↓	920	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓				
6	TW-15	↓	↓	1120	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓				
7	TW-15B	↓	↓	1200	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓				
8	TW-16	↓	↓	1320	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓				
9	TW-16A	↓	↓	1245	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓				
10	TW-17	↓	↓	1400	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓				
11	TW-17A	↓	↓	1435	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓				
12	TW-18	↓	↓	1515	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓				

001
002
003
004
005
006
007
008

	Signature	Date	Time	Comments
Relinquished by	DA Brown	5.4.23	1520	① 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn
Received by	TB/Pace	5.4.23	1520	① 7470 - Hg
Relinquished by	TB/Pace	5.4.23	1830	② 6010 - Ca, Fe, Mg, Mn, K, Na
Received by	RDS PACE	5.4.23	1845	PACE - WV - METALS
Relinquished by	RDS PACE	5.4.23	2230	PACE - G. BURL - WET CHEM + 8011
Received by	[illegible] PACE	5/4/23	2230	LEVEL 2 REPORT

Cooler Temp on Arrival: 3.3, 4.1 Deg. C

Rev. Aug. 2018

DC#_Title: ENV-FRM-GBUR-0088 v04_Sample Condition Upon Receipt-Pittsburgh

Effective Date: 02/03/2023

WO#: 30584816

PM: ARG Due Date: 05/19/23

CLIENT: ENV MONITOR

Client Name: CMA

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking Number:

Examined By	BL
Labeled By	BL
Temped By	BL

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

Thermometer Used: 18 **Type of Ice:** (Wet) Blue None

Cooler Temperature: Observed Temp 3.9 / 3.1 °C Correction Factor: +0.2 °C Final Temp: 4.1 / 3.3 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	NA	pH paper Lot# 1093121 / D.P.D. Residual Chlorine Lot #
Chain of Custody Present	✓			1.
Chain of Custody Filled Out:	✓			2.
-Were client corrections present on COC	✓			Sample 008 time
Chain of Custody Relinquished	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC:	✓			5.
-Includes date/time/ID	NO			Sample 005: 2 VGAIs have 1645, not 1245
Matrix:	WT			
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):	✓			7. Nitrite
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous samples field filtered:			✓	13.
Organic Samples checked for dechlorination			✓	14:
Filtered volume received for dissolved tests:			✓	15: Not specified
All containers checked for preservation:	✓			16.
exceptions: (VOA) coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix				
All containers meet method preservation requirements:	✓			Initial when completed BL / Date/Time of Preservation / Lot# of added Preservative
8260C/D: Headspace in VOA Vials (> 6mm)			✓	17.
624.1: Headspace in VOA Vials (0mm)			✓	18.
Trip Blank Present:		✓		Trip blank custody seal present? YES or (NO)
Rad Samples Screened <0.5 mrem/hr.	✓			Initial when completed BL / Date: 5/5/23 / Survey Meter SN: 7563

Comments: 8011 - sample 001 has 1VGAT with head space
X Samples "TW-12", "TW-13", "TW-14A", and "TW-14B" not received. Instructed to log due to nitrite holdtime

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Qualtrax ID: 55680

LIMS30 Internal Shipping Manifest

COOLER 27

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	27	Cooler temp (rcvd) °C	6
Packaged on Ice (Y/N)	Yes	Correction Factor	.0
Shipping Method	Courier	Cooler temp (corr) °C	.6
Tracking #	N/A	IR GUN ID	9
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[illegible]	GBUR	5-5-23	2020
Received	[illegible]	BEAV	5-5-23	505
Relinquished				
Received				
Relinquished				
Received				

2

Logger	Scan Date	Column	Type	LIMS Lab ID	LIMS Work Order
MF	5/5/2023	30584795005 BP3N1/2	BP3N	30584795005	30584795
MF	5/5/2023	30584795004 BP3N1/2	BP3N	30584795004	30584795
MF	5/5/2023	30584795004 BP3N2/2	BP3N	30584795004	30584795
MF	5/5/2023	30584795008 BP3N2/2	BP3N	30584795008	30584795
MF	5/5/2023	30584795008 BP3N1/2	BP3N	30584795008	30584795
MF	5/5/2023	30584795007 BP3N2/2	BP3N	30584795007	30584795
MF	5/5/2023	30584795007 BP3N1/2	BP3N	30584795007	30584795
MF	5/5/2023	30584795001 BP3N1/2	BP3N	30584795001	30584795
MF	5/5/2023	30584795003 BP3N2/2	BP3N	30584795003	30584795
MF	5/5/2023	30584795003 BP3N1/2	BP3N	30584795003	30584795
MF	5/5/2023	30584795001 BP3N2/2	BP3N	30584795001	30584795
MF	5/5/2023	30584795002 BP3N2/2	BP3N	30584795002	30584795
MF	5/5/2023	30584795005 BP3N2/2	BP3N	30584795005	30584795
MF	5/5/2023	30584795002 BP3N1/2	BP3N	30584795002	30584795
MF	5/5/2023	30584795006 BP3N1/2	BP3N	30584795006	30584795
MF	5/5/2023	30584795006 BP3N2/2	BP3N	30584795006	30584795
MF	5/5/2023	30584816001 BP3N1/2	BP3N	30584816001	30584816
MF	5/5/2023	30584816002 BP3N2/2	BP3N	30584816002	30584816
MF	5/5/2023	30584816002 BP3N1/2	BP3N	30584816002	30584816
MF	5/5/2023	30584816003 BP3N2/2	BP3N	30584816003	30584816
MF	5/5/2023	30584816003 BP3N1/2	BP3N	30584816003	30584816
MF	5/5/2023	30584816001 BP3N2/2	BP3N	30584816001	30584816
MF	5/5/2023	30584816005 BP3N1/2	BP3N	30584816005	30584816
MF	5/5/2023	30584816007 BP3N2/2	BP3N	30584816007	30584816
MF	5/5/2023	30584816007 BP3N1/2	BP3N	30584816007	30584816
MF	5/5/2023	30584816008 BP3N1/2	BP3N	30584816008	30584816
MF	5/5/2023	30584816008 BP3N2/2	BP3N	30584816008	30584816
MF	5/5/2023	30584816006 BP3N2/2	BP3N	30584816006	30584816
MF	5/5/2023	30584816005 BP3N2/2	BP3N	30584816005	30584816
MF	5/5/2023	30584816004 BP3N1/2	BP3N	30584816004	30584816
MF	5/5/2023	30584816006 BP3N1/2	BP3N	30584816006	30584816
MF	5/5/2023	30584816004 BP3N2/2	BP3N	30584816004	30584816

DC#_Title: ENV-FRM-BEAV-0058 v03_Pace WV Sample Condition Upon Receipt (SCUR)
Effective Date: 2/8/2023

LIMS30 Lab Sample Condition Upon Receipt (West Virginia)

Put label here prior to scanning

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☑ 3rd Party Courier ☐ Pace ☐ Other _____

Tracking #: _____

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 9 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** 1.6 °C Correction Factor: 1.0 °C Final Temp: 1.6 °C

Thermal Preservation Requirement Met Yes ☑ No ☐

pH paper Lot#	Date and Initials of person examining contents
206722	CDW 5-8-23

	Yes	No	N/A	
Chain of Custody Present:				1.
Chain of Custody Filled Out:				2.
Chain of Custody Relinquished:				3.
Sampler Name & Signature on COC:				4.
Sample Labels match COC: -Includes date/time/ID Matrix:_____				5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered:			✓	13.
-pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓	
Filtered volume received for Dissolved tests:	✓			14.
All containers have been checked for chemical preservation: exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix	✓			15.
All containers meet method/chemical preservation requirements:	✓			Initial when completed: CDW Date: 5-8-23
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present:			✓	17.
				Initial when completed: CDW Date: 5-8-23

Manifest

Comments: _____

*PM review is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

LIMS30 Internal Shipping Manifest

COOLER 21

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	21	Cooler temp (rcvd) °C	.1
Packaged on Ice (Y/N)	Yes	Correction Factor	.0
Shipping Method	Courier	Cooler temp (corr) °C	.1
Tracking #	N/A	IR GUN ID	TM14
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[signature]	GBUR	5-15-23	2045
Received	[signature]	BEAV	5-16-23	522
Relinquished				
Received				
Relinquished				
Received				

11

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	5/15/2023	30587330005 BP3N1/1	BP3N	30587330005	30587330
MF	5/15/2023	30587330004 BP3N1/1	BP3N	30587330004	30587330
MF	5/15/2023	30587330001 BP3N1/1	BP3N	30587330001	30587330
MF	5/15/2023	30587330003 BP3N1/1	BP3N	30587330003	30587330
MF	5/15/2023	30587330002 BP3N1/1	BP3N	30587330002	30587330
MF	5/15/2023	30587359001 CG3H1/1	CG3H	30587359001	30587359
MF	5/15/2023	30587359002 CG3H1/1	CG3H	30587359002	30587359
MF	5/15/2023	30587359003 CG3H1/1	CG3H	30587359003	30587359
MF	5/15/2023	30587390001 BP3N1/1	BP3N	30587390001	30587390
MF	5/15/2023	30587393001 BP3U1/1	BP3U	30587393001	30587393
MF	5/15/2023	30587391001 BP3C1/1	BP3C	30587391001	30587391
MF	5/15/2023	30587391001 GN1/1	GN1/	30587391001	30587391
MF	5/15/2023	30587181003 BP3N1/1	BP3N	30587181003	30587181
MF	5/15/2023	30587181006 BP3N1/1	BP3N	30587181006	30587181
MF	5/15/2023	30587181007 BP3N3/3	BP3N	30587181007	30587181
MF	5/15/2023	30587181002 BP3N1/1	BP3N	30587181002	30587181
MF	5/15/2023	30587181007 BP3N2/3	BP3N	30587181007	30587181
MF	5/15/2023	30587181009 BP3N1/1	BP3N	30587181009	30587181
MF	5/15/2023	30587181007 BP3N1/3	BP3N	30587181007	30587181
MF	5/15/2023	30587181008 BP3N1/1	BP3N	30587181008	30587181
MF	5/15/2023	30587181004 BP3N1/1	BP3N	30587181004	30587181
MF	5/15/2023	30587181001 BP3N1/1	BP3N	30587181001	30587181
MF	5/15/2023	30587181005 BP3N1/1	BP3N	30587181005	30587181
MF	5/15/2023	30582968002 BP2U1/2	BP2U	30582968002	30582968
MF	5/15/2023	30582968001 BP2U1/2	BP2U	30582968001	30582968
MF	5/15/2023	30587050002 BP2U2/2	BP2U	30587050002	30587050
MF	5/15/2023	30587442003 BP3N1/1	BP3N	30587442003	30587442
MF	5/15/2023	30584816012 BP3N1/1	BP3N	30584816012	30584816
MF	5/15/2023	30584816011 BP3N1/1	BP3N	30584816011	30584816
MF	5/15/2023	30584816010 BP3N1/1	BP3N	30584816010	30584816
MF	5/15/2023	30584816011 BP2N1/1	BP2N	30584816011	30584816
MF	5/15/2023	30584816012 BP2N1/1	BP2N	30584816012	30584816
MF	5/15/2023	30584816010 BP2N1/1	BP2N	30584816010	30584816

LIMS30 Internal Shipping Manifest

COOLER 21	Shipping Laboratory Location Code		Receiving Laboratory Location Code	
	GBUR		BEAV	
	Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
	Shipping information		Received information	
	Cooler ID	21	Cooler temp (rcvd) °C	
	Packaged on Ice (Y/N)	Yes	Correction Factor	
	Shipping Method	Courier	Cooler temp (corr) °C	
	Tracking #	N/A	IR GUN ID	
	PWS* Drinking water?	No	Received on ice?	

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[illegible]	GBUR	5-15-23	2045
Received	[illegible]	BEAV	5-16-23	522
Relinquished				
Received				
Relinquished				
Received				

11

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	5/15/2023	30584816009 BP3N1/1	BP3N	30584816009	30584816
MF	5/15/2023	30584816009 BP2N1/1	BP2N	30584816009	30584816
MF	5/15/2023	30587393001 BP3N1/1	BP3N	30587393001	30587393
MF	5/15/2023	30587394001 BP3N1/1	BP3N	30587394001	30587394

LIMS30 Lab Sample Condition Upon Receipt (West Virginia)

Put label here prior to scanning

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☑ 3rd Party Courier ☐ Pace ☐ Other _____

Tracking #: _____

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used TM14 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** .1 °C Correction Factor: .0 °C Final Temp: .1 °C

Thermal Preservation Requirement Met Yes ☑ No ☐

pH paper Lot#	Date and Initials of person examining contents:
206722	CDW 5-16-23

	Yes	No	N/A	
Chain of Custody Present:				1.
Chain of Custody Filled Out:				2. Manifest
Chain of Custody Relinquished:				3.
Sampler Name & Signature on COC:				4.
Sample Labels match COC: -Includes date/time/ID Matrix: _____				5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered:			✓	13.
-pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓	
Filtered volume received for Dissolved tests:			✓	14.
All containers have been checked for chemical preservation:	✓			15.
exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix				
All containers meet method/chemical preservation requirements:	✓			Initial when completed: CDW Date: 5-16-23
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present:			✓	17.
				Initial when completed: CDW Date: 5-16-23

Comments: _____

***PM review** is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

2019 Ninth Avenue
Altoona, PA 16602
(814) 946-4306

NELAP: PA 07-062, VA 460212

State Certifications: MD 275, WV 364

FAIRWAY LABORATORIES

www.fairwaylaboratories.com

Pace Analytical Services Inc. Greensburg, PA		Project:	General
1638 Roseytown Rd., Suites 2, 3, 4		Project Number:	30584816
Greensburg, PA 15601		Collector:	Client
Project Manager:	Alaina Deitch	Number of Containers:	28

Reported:
05/18/23 15:45

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Sample Type	Date Sampled	Date Received
TW-12	AXE1949-01	Water	Grab	05/03/23 15:30	05/05/23 19:00
TW-13	AXE1949-02	Water	Grab	05/04/23 08:30	05/05/23 19:00
TW-14A	AXE1949-03	Water	Grab	05/04/23 10:00	05/05/23 19:00
TW-14B	AXE1949-04	Water	Grab	05/04/23 09:20	05/05/23 19:00

Fairway Laboratories, Inc.

Reviewed and Submitted by:

Ron Bollman

Project Manager

Fairway Labs in Altoona, PA is a NELAP (National Environmental Laboratory Accreditation Program) accredited lab, and as such, certifies that all applicable test results meet the requirements of NELAP, unless otherwise stated on the analytical report.

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FAIRWAY LABORATORIES

www.fairwaylaboratories.com

Pace Analytical Services Inc. Greensburg, PA
1638 Roseytown Rd., Suites 2, 3, 4
Greensburg, PA 15601

Project Manager: Alaina Deitch

Project: General
Project Number: 30584816
Collector: Client
Number of Containers: 28

Reported:
05/18/23 15:45

Client Sample ID: **TW-12**

Date/Time Sampled: 05/03/23 15:30

Laboratory Sample ID: **AXE1949-01 (Water/Grab)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Conventional Chemistry Parameters by SM/EPA Methods								
Nitrate as N	<2.000		2.000	mg/l	05/05/23 20:45	EPA 300.0/2.1	bdw	B1
Total Dissolved Solids	<20.0		20.0	mg/l	05/10/23 15:48	SM 2540C-15	ark	

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Pace Analytical Services Inc. Greensburg, PA
1638 Roseytown Rd., Suites 2, 3, 4
Greensburg, PA 15601

Project Manager: Alaina Deitch

Project: General
Project Number: 30584816
Collector: Client
Number of Containers: 28

Reported:
05/18/23 15:45

Client Sample ID: **TW-13**

Date/Time Sampled: 05/04/23 08:30

Laboratory Sample ID: **AXE1949-02 (Water/Grab)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Conventional Chemistry Parameters by SM/EPA Methods								
Nitrate as N	<2.000		2.000	mg/l	05/05/23 21:00	EPA 300.0/2.1	bdw	
Total Dissolved Solids	52.0		20.0	mg/l	05/10/23 15:48	SM 2540C-15	ark	

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FAIRWAY LABORATORIES

www.fairwaylaboratories.com

Pace Analytical Services Inc. Greensburg, PA
1638 Roseytown Rd., Suites 2, 3, 4
Greensburg, PA 15601

Project Manager: Alaina Deitch

Project: General
Project Number: 30584816
Collector: Client
Number of Containers: 28

Reported:
05/18/23 15:45

Client Sample ID: TW-14A

Date/Time Sampled: 05/04/23 10:00

Laboratory Sample ID: AXE1949-03 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Conventional Chemistry Parameters by SM/EPA Methods								
Nitrate as N	<2.000		2.000	mg/l	05/05/23 23:08	EPA 300.0/2.1	bdw	
Total Dissolved Solids	28.0		20.0	mg/l	05/10/23 15:48	SM 2540C-15	ark	

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Pace Analytical Services Inc. Greensburg, PA
1638 Roseytown Rd., Suites 2, 3, 4
Greensburg, PA 15601

Project Manager: Alaina Deitch

Project: General
Project Number: 30584816
Collector: Client
Number of Containers: 28

Reported: 05/18/23 15:45

Client Sample ID: **TW-14B** **Date/Time Sampled:** 05/04/23 09:20

Laboratory Sample ID: **AXE1949-04 (Water/Grab)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Conventional Chemistry Parameters by SM/EPA Methods								
Nitrate as N	<2.000		2.000	mg/l	05/05/23 21:14	EPA 300.0/2.1	bdw	
Total Dissolved Solids	<20.0		20.0	mg/l	05/10/23 15:48	SM 2540C-15	ark	

Fairway Labs in Altoona, PA is a NELAP (National Environmental Laboratory Accreditation Program) accredited lab, and as such, certifies that all applicable test results meet the requirements of NELAP, unless otherwise stated on the analytical report.

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Pace Analytical Services Inc. Greensburg, PA		Project:	General
1638 Roseytown Rd., Suites 2, 3, 4		Project Number:	30584816
Greensburg, PA 15601		Collector:	Client
Project Manager:	Alaina Deitch	Number of Containers:	28

Reported:
05/18/23 15:45

Notes

B1 This sample was received outside the EPA holding time.

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Pace Analytical Services Inc. Greensburg, PA		Project:	General
1638 Roseytown Rd., Suites 2, 3, 4		Project Number:	30584816
Greensburg, PA 15601		Collector:	Client
Project Manager:	Alaina Deitch	Number of Containers:	28

Reported:
05/18/23 15:45

Definitions:

If surrogate values are not within the indicated range, then the results are considered to be estimated.

Reporting limits are adjusted accordingly when samples are analyzed at a dilution due to the matrix.

+ MBAS, calculated as LAS, mol wt 348

If the solid sample weight for VOC analysis does not fall within the 3.5-6.5 gram range, the results are considered estimated values.

Unless otherwise noted, all results for solids are reported on a dry weight basis.

Samples collected by Fairway Laboratories' personnel are done so in accordance with Standard Operating Procedures established by Fairway Laboratories.

The following analyses are to be performed immediately upon sampling: pH, sulfite, chlorine residual, dissolved oxygen, filtration for ortho phosphorus, and ferrous iron. The date and time reported reflect the time the samples were analyzed at the laboratory; and should be considered as analyzed outside the EPA holding time.

^ The following analytes are to be filtered immediately upon sampling: Hexavalent Chromium. Filtration through a 0.45 micron filter within 15 minutes of sampling is required for compliance with the Clean Water Act (CWA) for reporting of hexavalent chromium to prevent interconversion of chromium species.

* **Analysis location indicator:**
DU: Indicates analysis performed by Fairway Laboratories, Inc., 40 Hoover Ave., DuBois, PA 15801. PA DEP Chapter 252 certification: PA 33-00258.
ER: Indicates analysis performed by Fairway Laboratories, Inc., 1920 East 38th Street, Erie, PA 16510. NELAP certification: PA 25-05907.
WY: Indicates analysis performed by Fairway Laboratories, Inc., 1851 Golden Mile Rd., Wysox, PA 18854. NELAP certification: PA 08-05622 and NY 12127.

< Represents "less than" - indicates that the result was less than the RL, or the MDL if indicated for the parameter.

MDL Method Detection Limit - is the lowest or minimum level that provides 99% confidence level that the analyte is detected. Any reported result values that are less than the RL are considered estimated values. If Radiological results are reported, the MDC - Minimum Detectable Concentration is shown in the MDL column.

RL Reporting Limit - is the lowest or minimum level at which the analyte can be quantified.

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Definitions Continued:

[CALC]	Indicates a calculated result. Calculations use results from other analyses performed under accredited methods.
ND	Non Detect. The noted analyte was not detected in the sample.

(-) Method Revision Indicator - West Virginia Samples

EPA 8270D - : Indicates that samples collected in West Virginia are analyzed by Method SW 8270E.
EPA 8260B - : Indicates that samples collected in West Virginia are analyzed by Method SW 8260D.
EPA 8015D - : Indicates that samples collected in West Virginia are analyzed by Method SW 8015C.
EPA 1010 - : Indicates that samples collected in West Virginia are analyzed by Method SW 1010B.
EPA 6010B - : Indicates that samples collected in West Virginia are analyzed by Method SW 6010D.

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FAIRWAY LABORATORIES

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Pace Analytical Services Inc. Greensburg, PA	Project: General	
1638 Roseytown Rd., Suites 2, 3, 4	Project Number: 30584816	
Greensburg, PA 15601	Collector: Client	**Reported:**
Project Manager: Alaina Deitch	Number of Containers: 28	05/18/23 15:45

Terms & Conditions

Services provided by Fairway Laboratories Inc. are limited to the terms and conditions stated herein, unless otherwise agreed to in a formal contract.

CHAIN OF CUSTODY Fairway Laboratories Inc. ("Fairway," "us" or "we") will initiate a chain-of-custody/request for analysis upon sample receipt unless the client includes a completed form with the received sample(s). Upon request, Fairway will provide chain-of-custody forms for use.

CONFIDENTIALITY Fairway maintains confidentiality in all of our client interactions. The client's consent will be required before releasing information about the services provided.

CONTRACTS All contracts are subject to review and approval by Fairway's legal council. Each contract must be signed by a corporate officer.

PAYMENT/BILLING Unless otherwise set forth in a signed contract or purchase order, terms of payment are "NET 30 Days." The time allowed for payment shall begin based on the invoice date. A 1.5% per month service charge may be added to all unpaid balances beyond the initial 30 days. In its sole discretion, Fairway reserves the right to request payment before services and hold sample results for payment of due balances. We will not bill a third party without prior agreement among all parties acknowledging and accepting responsibility for payment.

SAMPLE COLLECTION AND SUBMISSION Clients not requesting collection services from Fairway are responsible for proper collection, preservation, packaging, and delivery of samples to the laboratory in accordance with current law and commercial practice. Fairway shall have no responsibility for sample integrity prior to the receipt of the sample(s) and/or for any inaccuracy in test or analyses results as a result of the failure of the client or any third party to maintain the integrity of samples prior to delivery to Fairway. All samples submitted must be accompanied by a completed chain of custody or similar document clearly noting the requested analyses, dates/time sampled, client contact information, and trail of custody. Samples received at the laboratory after business hours are verified on the next business day. Discrepancies are documented on the Receiving Document.

SUBCONTRACTING Some analyses may require subcontracting to another laboratory. Unless the client indicates otherwise, this decision will be made by Fairway. Subcontracted work will be identified on the final report in accordance with NELAC requirements.

RETURN OF RESULTS Fairway routinely provides faxed or verbal results within 10 working days of receipt of sample(s) and a hard copy of the data results is routinely received via US Postal Service within 15 working days. At the request of the client, Fairway may offer expedited return of sample results. Surcharges may apply to rush requests. All rush requests must be pre-approved by Fairway. We reserve the right to charge an archive retrieval fee for results older than one (1) year from the date of the request. All records will be maintained by Fairway for 5 years, after which, they will be destroyed.

SAMPLE DISPOSAL Fairway will maintain samples for four (4) weeks after the sample receipt date. Fairway will dispose of samples which are not and/or do not contain hazardous wastes (as such term is defined by applicable federal or state law), unless prior arrangements have been made for long-term storage. Fairway reserves the right to charge a disposal fee for the proper disposal of samples found or suspected to contain hazardous waste. A return shipping charge will be invoiced for samples returned to the client at their request.

HAZARD COMMUNICATION The client has the responsibility to inform the laboratory of any hazardous characteristics known or suspected about the sample, and to provide information on hazard prevention and personal protection as necessary or otherwise required by applicable law.

WARRANTY AND LIMITATION OF LIABILITY For services rendered, Fairway warrants that it will apply its best scientific knowledge and judgment and to employ its best level of effort consistent with professional standards within the environmental testing industry in performing the analytical services requested by its clients. We disclaim any other warranties, expressed or implied by law. Fairway does not accept any legal responsibility for the purposes for which client uses the test results.

LITIGATION All costs associated with compliance to any subpoena for documents, for testimony in a court of law, or for any other purpose relating to work performed by Fairway Laboratories, Inc. shall be invoiced by Fairway and paid by client. These costs shall include, but are not limited to, hourly charges for the persons involved, travel, mileage, and accommodations and for any and all other expenses associated with said litigation.

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WO#: 30584816

New Project

AXE1949

EMA

30584816

207 East Sixth S

ND ASSESSMENT, LLC
50 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF-SPRING 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

		Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals ①	Total + Diss. Metals ②	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO4, COD		Method 8011-DBCP+EDB				
1	G	TW-12	7	5-3-23	1530	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓				
2	O	TW-13		5-4-23	830																001
3	O	TW-14			1035																
4	O	TW-14A			1000																
5	O	TW-14B			920																
6	O	TW-15			1120																002
7	O	TW-15B			1200																003
8	O	TW-16			1320																004
9	O	TW-16A			1245																005
10	O	TW-17			1400																006
11	O	TW-17A			1435																007
12	O	TW-18			1515																008

	Signature	Date	Time	Comments
Relinquished by	DA Brown	5-4-23	1520	① 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn
Received by	TB/Pace	5-4-23	1520	① 7470 - Hg
Relinquished by	TB/Pace	5-4-23	1830	② 6010 - Ca, Fe, Mg, Mn, K, Na
Received by	RDS PACE	5-4-23	1845	PACE - WV - METALS
Relinquished by	RDS PACE	5-4-23	2230	PACE - G-BURL - WET CHEM + 8011
Received by	[illegible] PACE	5/4/23	2230	LEVEL 2 REPORT

Cooler Temp on Arrival: 3.3, 4.1 Deg. C

Rev. Aug. 2018

312 5-5-23 1450

311 5-5-23 1000

Rg3

Chain of Custody Receiving Document

Page 2 of 9

Receiver: IC

Date/Time of this check: 5/9/23 1200 Client: EMA Lab # AXE 1949

Received on ICE? ✓ ☐ * Sample Temperature when delivered to the Lab: 0.0 °C Acceptable? ✓ ☐ * or In cool down process? ☐ *

(Not applicable for WV compliance)

Custody Seals? NO Intact? NO

Morning Temperature Verification <6°C (if applicable): ✓ 2611

COC/Labels on bottles agree? ✓ ☐ * Correct containers for all the analysis requested? ✓ ☐ * Matrix: Water

COC #	Number and Type of BOTTLES										Comments
	Poly Non-Pres. 1L	Poly H2SO4 500ml <2	Poly HNO3 250ml <2	Amber H2SO4	Amber Non-Pres.	Poly NaOH	VOCS (Head space?) N	Other ☐ *	Properly Preserved ☐ *	Bacti	☐ * Internal notification completed for deviations
12	1	1	2				3HCl		✓		
13	↓	↓	↓				↓		↓		
14A	↓	↓	↓				↓		↓		
14B	1	1	2				3HCl		↓		

* DEVIATION PRESENT:	CLIENT CALLED:	CLIENT RESPONSE:
☹ No Ice ( )	YES ( )	Proceed with analysis; qualify data ( )
☹ Not at Proper Temperature ( )	By Whom:	Will Resample ( )
☹ Wrong Container ( )		Provided Information ( )
☹ Missing Information: ( )	_____ Date: _____	No Response; Proceed and qualified ( )
		Client Contact: _____ Date: _____

* Comments: _____

Analytical Services Request
Purchase Order

Subcontractor Project No.:
P.O. No: ASR- 30584816

Pace Analytical Services, Inc.
1638 Roseytown Road
Suites 2,3, & 4
Greensburg, PA 15601
Phone: (724) 850-5600
FAX: (724) 850-5601

Request Date: 5/16/23 Analysis Due Date: 5/25/23
Shipped By: Courier

Certification Required: PA

Page 1 of 1

Pace Project No.: 30584816
Report/Invoice to: alaina.deitch@pacelabs.com
Email to PGHSubcon@pacelabs.com

	Pace Sample ID:	Matrix:	Collection Date:	Time:	Analysis Requested:	Analytical Method:	Preservative Type:	Price
1	30584816-009	WT	5/3/2023	15:30	TDS, Nitrate (Nitrite)		unpres	$ 20.00
2	30584816-010	WT	5/4/2023	8:30	TDS, Nitrate (Nitrite)			$ 20.00
3	30584816-011	WT	5/4/2023	10:00	TDS, Nitrate (Nitrite)			$ 20.00
4	30584816-012	WT	5/4/2023	9:40	TDS, Nitrate (Nitrite)			$ 20.00
5								$ -
6								$ -
7								$ -
8								$ -
9								$ -
10								$ -
11								$ -
12								$ -

Special Requirements: ****Please supply a method blank and LCS QC information on the final report****

Subcontract Lab: Fairway Laboratories - Altoona
Address: 100 Marshall Drive
Warrendale, PA 15086
Contact: Sample Receiving
Phone: 724-772-0610
Proposal No.:

Unit Price Total: $ 80.00
Analytical Subtotal: $ 80.00
Subtotal this Page: $ 80.00
Total: $ 80.00

Instructions:
Please fill in your Project Number on both the Purchase Order and the Chain of Custody, sign Acceptance of Terms, and complete the Chain of Custody information. Please return one copy of the Chain of Custody to Pace Analytical Services, Inc. with the Final Report. Thank you. **Email to PGHSubcon@pacelabs.com**

PLEASE REFERENCE THE ABOVE P.O. NUMBER ON ALL CORRESPONDENCE

Chain of Custody

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road
Suites 2,3, & 4
Greensburg, PA 15601
Phone: (724) 850-5600
FAX: (724) 850-5601

Sample Condition upon Receipt: (Please record the following information)		
Temp in C		
Received on Ice	Yes	No
Sealed Cooler	Yes	No
Samples Intact	Yes	No

Subcontractor Project No.:
P.O. No: ASR- 30584816

Request Date: 5/16/23 Analysis Due Date: 5/25/2023
Shipped By: Courier

Certification Required: PA

Pace Project No.: 30584816
Report/Invoice to: alaina.deitch@pacelabs.com

Page 1 of 1

	Pace Sample ID:	Matrix:	Collection Date:	Time:	Analysis Requested:	Analytical Method:	Preservative Type:
1	30584816-009	WT	5/3/23	15:30	TDS, Nitrate (Nitrite)		unpres
2	30584816-010	WT	5/4/23	8:30	TDS, Nitrate (Nitrite)		
3	30584816-011	WT	5/4/23	10:00	TDS, Nitrate (Nitrite)		
4	30584816-012	WT	5/4/23	9:40	TDS, Nitrate (Nitrite)		
5							
6							
7							
8							
9							
10							
11							
12							

Special Requirements: ****Please supply a method blank and LCS QC information on the final report****

Subcontract Lab: Fairway Laboratories - Altoona
Address: 100 Marshall Drive
Warrendale, PA 15086
Phone: 724-772-0610

Analysis Authorized By: _____
Pace Agent Name Title

Acceptance of Terms By: _____
Subcontract Lab Agent Title

Relinquished By: _____
(Signature & Affiliation) (Date) (Time)

Received By: _____
(Signature & Affiliation) (Date) (Time)

Relinquished By: _____
(Signature & Affiliation) (Date) (Time)

Received By: _____
(Signature & Affiliation) (Date) (Time)

Comments:

In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.

WO#: 30584816

EMA

30584816

207 East Sixth S

ND ASSESSMENT, LLC
50 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF-SPRING 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals ①	Total + Diss. Metals ②	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO4, COD		Method 8011-DBCP+EDB				
1	TW-12	7	5.3.23	1530	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓				
2	TW-13		5.4.23	830																001
3	TW-14			1035																
4	TW-14A			1000																
5	TW-14B			920																
6	TW-15			1120																002
7	TW-15B			1200																003
8	TW-16			1320																004
9	TW-16A			1245																005
10	TW-17			1400																006
11	TW-17A			1435																007
12	TW-18			1515																008

	Signature	Date	Time	Comments
Relinquished by	DA Brown	5.4.23	1520	① 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn
Received by	TB/Pace	5.4.23	1520	① 7470 - Hg
Relinquished by	TB/Pace	5.4.23	1830	② 6010 - Ca, Fe, Mg, Mn, K, Na
Received by	RDS PACE	5.4.23	1845	PACE - WV - METALS
Relinquished by	RDS PACE	5.4.23	2230	PACE - G. BURL - WET CHEM + 8011
Received by	[illegible] PACE	5/4/23	2230	LEVEL 2 REPORT

Cooler Temp on Arrival: 3.3, 4.1 Deg. C

Rev. Aug. 2018

DC#_Title: ENV-FRM-GBUR-0088 v04_Sample Condition Upon Receipt-Pittsburgh

Effective Date: 02/03/2023

WO#: 30584816

PM: ARG Due Date: 05/19/23

CLIENT: ENV MONITOR

Client Name: EMA

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking Number:

Examined By: BL
Labeled By: BL
Temped By: BL

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No Seals Intact: ☐ Yes ☑ No

Thermometer Used: 18 Type of Ice: (Wet) Blue None

Cooler Temperature: Observed Temp 3.9 °C 3.1 Correction Factor: +0.2 °C Final Temp: 4.1 °C 3.3

Temp should be above freezing to 6°C

pH paper Lot# 103121 D.P.D. Residual Chlorine Lot #

Comments:	Yes	No	NA	
Chain of Custody Present	✓			1.
Chain of Custody Filled Out:	✓			2.
-Were client corrections present on COC	✓			Sample 008 time
Chain of Custody Relinquished	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC:	✓			5.
-Includes date/time/ID	NO			Sample 005: 2 VGATs have 1645, not 1245
Matrix:	WT			
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):	✓			7. Nitrite
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous samples field filtered:			✓	13.
Organic Samples checked for dechlorination			✓	14:
Filtered volume received for dissolved tests:			✓	15: Not specified
All containers checked for preservation:	✓			16.
exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix				
All containers meet method preservation requirements:	✓			Initial when completed: BL Date/Time of Preservation: Lot# of added Preservative:
8260C/D: Headspace in VOA Vials (> 6mm)			✓	17.
624.1: Headspace in VOA Vials (0mm)			✓	18.
Trip Blank Present:		✓		Trip blank custody seal present? YES or (NO)
Rad Samples Screened <0.5 mrem/hr.	✓			Initial when completed: BL Date: 5/15/23 Survey Meter SN: 1563

Comments: 8011 - sample 001 has 1VGAT with head space
X-Samples "TW-12", "TW-13", "TW-14A", and "TW-14B" not received. Instructed to log due to nitrite holdtime

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Page 1 of 1

Qualtrax ID: 55680

LIMS30 Internal Shipping Manifest

COOLER 27

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information.	
Cooler ID	27	Cooler temp (rcvd) °C	.6
Packaged on Ice (Y/N)	Yes	Correction Factor	.0
Shipping Method	Courier	Cooler temp (corr) °C	.6
Tracking #	N/A	IR GUN ID	9
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[illegible]	GBUR	5-5-23	2020
Received	[illegible]	BEAV	5-5-23	505
Relinquished				
Received				
Relinquished				
Received				

2

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	5/5/2023	30584795005 BP3N1/2	BP3N	30584795005	30584795
MF	5/5/2023	30584795004 BP3N1/2	BP3N	30584795004	30584795
MF	5/5/2023	30584795004 BP3N2/2	BP3N	30584795004	30584795
MF	5/5/2023	30584795008 BP3N2/2	BP3N	30584795008	30584795
MF	5/5/2023	30584795008 BP3N1/2	BP3N	30584795008	30584795
MF	5/5/2023	30584795007 BP3N2/2	BP3N	30584795007	30584795
MF	5/5/2023	30584795007 BP3N1/2	BP3N	30584795007	30584795
MF	5/5/2023	30584795001 BP3N1/2	BP3N	30584795001	30584795
MF	5/5/2023	30584795003 BP3N2/2	BP3N	30584795003	30584795
MF	5/5/2023	30584795003 BP3N1/2	BP3N	30584795003	30584795
MF	5/5/2023	30584795001 BP3N2/2	BP3N	30584795001	30584795
MF	5/5/2023	30584795002 BP3N2/2	BP3N	30584795002	30584795
MF	5/5/2023	30584795005 BP3N2/2	BP3N	30584795005	30584795
MF	5/5/2023	30584795002 BP3N1/2	BP3N	30584795002	30584795
MF	5/5/2023	30584795006 BP3N1/2	BP3N	30584795006	30584795
MF	5/5/2023	30584795006 BP3N2/2	BP3N	30584795006	30584795
MF	5/5/2023	30584816001 BP3N1/2	BP3N	30584816001	30584816
MF	5/5/2023	30584816002 BP3N2/2	BP3N	30584816002	30584816
MF	5/5/2023	30584816002 BP3N1/2	BP3N	30584816002	30584816
MF	5/5/2023	30584816003 BP3N2/2	BP3N	30584816003	30584816
MF	5/5/2023	30584816003 BP3N1/2	BP3N	30584816003	30584816
MF	5/5/2023	30584816001 BP3N2/2	BP3N	30584816001	30584816
MF	5/5/2023	30584816005 BP3N1/2	BP3N	30584816005	30584816
MF	5/5/2023	30584816007 BP3N2/2	BP3N	30584816007	30584816
MF	5/5/2023	30584816007 BP3N1/2	BP3N	30584816007	30584816
MF	5/5/2023	30584816008 BP3N1/2	BP3N	30584816008	30584816
MF	5/5/2023	30584816008 BP3N2/2	BP3N	30584816008	30584816
MF	5/5/2023	30584816006 BP3N2/2	BP3N	30584816006	30584816
MF	5/5/2023	30584816005 BP3N2/2	BP3N	30584816005	30584816
MF	5/5/2023	30584816004 BP3N1/2	BP3N	30584816004	30584816
MF	5/5/2023	30584816006 BP3N1/2	BP3N	30584816006	30584816
MF	5/5/2023	30584816004 BP3N2/2	BP3N	30584816004	30584816

LIMS30 Lab Sample Condition Upon Receipt (West Virginia)

Put label here prior to scanning

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☑ 3rd Party Courier ☐ Pace ☐ Other _____

Tracking #: _____

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 9 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** 1.6 °C Correction Factor: 1.0 °C Final Temp: 1.6 °C

Thermal Preservation Requirement Met Yes ☑ No ☐

pH paper Lot#	Date and Initials of person examining contents:
206722	CDW 5-8-23

	Yes	No	N/A	
Chain of Custody Present:				1.
Chain of Custody Filled Out:				2. Manifest
Chain of Custody Relinquished:				3.
Sampler Name & Signature on COC:				4.
Sample Labels match COC: -Includes date/time/ID Matrix:_____				5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered:			✓	13.
-pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓	
Filtered volume received for Dissolved tests:	✓			14.
All containers have been checked for chemical preservation: exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix	✓			15.
All containers meet method/chemical preservation requirements:	✓			Initial when completed: CDW Date: 5-8-23
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present:			✓	17.
				Initial when completed: CDW Date: 5-8-23

Comments: _____

*PM review is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

May 22, 2023

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-SPRING-2023
Pace Project No.: 30585905

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on May 09, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alaina Deitch

Alaina R. Deitch
alaina.deitch@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver

225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30585905001	**TW-19**	Water	05/09/23 12:20	05/09/23 22:00
30585905002	**TW-20R**	Water	05/09/23 11:40	05/09/23 22:00
30585905003	**TW-21**	Water	05/09/23 13:40	05/09/23 22:00
30585905004	**TW-21A**	Water	05/09/23 14:20	05/09/23 22:00
30585905005	**MW-P9**	Water	05/05/23 10:00	05/09/23 22:00
30585905006	**MW-P417**	Water	05/05/23 14:45	05/09/23 22:00
30585905007	**MW-P440**	Water	05/05/23 14:00	05/09/23 22:00
30585905008	**RW-P109**	Water	05/05/23 10:40	05/09/23 22:00
30585905009	**RW-P440**	Water	05/05/23 12:10	05/09/23 22:00
30585905010	**RW-P441**	Water	05/05/23 11:30	05/09/23 22:00
30585905011	**RW-P584**	Water	05/05/23 12:50	05/09/23 22:00

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30585905001	**TW-19**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30585905002	**TW-20R**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30585905003	**TW-21**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30585905004	**TW-21A**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30585905005	**MW-P9**	EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30585905006	**MW-P417**	EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30585905007	**MW-P440**	EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30585905008	**RW-P109**	EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30585905009	**RW-P440**	EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30585905010	**RW-P441**	EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30585905011	**RW-P584**	EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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(724)850-5600

PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Date: May 22, 2023

TW-19 (Lab ID: 30585905001)

- Sample pH for 8011 is 6

TW-20R (Lab ID: 30585905002)

- Sample pH for 8011 is 6

TW-21 (Lab ID: 30585905003)

- Sample pH for 8011 is 6

TW-21A (Lab ID: 30585905004)

- Sample pH for 8011 is 5

MW-P9 (Lab ID: 30585905005)

- Sample pH for 8011 is 5

MW-P417 (Lab ID: 30585905006)

- Sample pH for 8011 is 5

MW-P440 (Lab ID: 30585905007)

- Sample pH for 8011 is 5

RW-P109 (Lab ID: 30585905008)

- Sample pH for 8011 is 5

RW-P440 (Lab ID: 30585905009)

- Sample pH for 8011 is 5

RW-P441 (Lab ID: 30585905010)

- Sample pH for 8011 is 5

RW-P584 (Lab ID: 30585905011)

- Sample pH for 8011 is 5

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
4 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
4 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
4 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 587425

B: Analyte was detected in the associated method blank.
- BLANK for HBN 587425 [BMPR/106 (Lab ID: 2853954)
  - Selenium

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 587425

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30584612001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 2853956)
  - Thallium
- MSD (Lab ID: 2853957)
  - Thallium

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

QC Batch: 588356

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30585905003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2858908)
  - Thallium
- MSD (Lab ID: 2858909)
  - Thallium

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
11 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 587481

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30585905002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 2854160)
  - Mercury

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
11 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
4 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 589325

1c: Alkalinity TV: 0.00 mg/L

- TW-21 (Lab ID: 30585905003)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-21A (Lab ID: 30585905004)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
4 samples were analyzed for SM 2540C-2015 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
4 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 587381

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30585820002,30585905001

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2853795)
  - Ammonia, Distilled
- MS (Lab ID: 2853797)
  - Ammonia, Distilled
- MSD (Lab ID: 2853796)
  - Ammonia, Distilled
- MSD (Lab ID: 2853798)
  - Ammonia, Distilled

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
4 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
4 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Method: **SM 4500NO3-F-2016**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
4 samples were analyzed for SM 4500NO3-F-2016 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
4 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
4 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Sample: TW-19 **Lab ID: 30585905001** Collected: 05/09/23 12:20 Received: 05/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**28.4**	mg/L	0.50	0.083	1	05/10/23 12:45	05/11/23 16:34	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	05/10/23 12:45	05/11/23 16:34	7439-89-6	
Magnesium	**6.4**	mg/L	0.50	0.047	1	05/10/23 12:45	05/11/23 16:34	7439-95-4	
Manganese	**0.0050 U**	mg/L	0.0050	0.0027	1	05/10/23 12:45	05/11/23 16:34	7439-96-5	
Potassium	**6.6**	mg/L	0.50	0.26	1	05/10/23 12:45	05/11/23 16:34	7440-09-7	
Sodium	**11.9**	mg/L	0.50	0.34	1	05/10/23 12:45	05/11/23 16:34	7440-23-5	
Total Hardness	**97.4**	mg/L	3.3	0.27	1	05/10/23 12:45	05/11/23 16:34		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**27.8**	mg/L	0.50	0.083	1	05/10/23 12:45	05/11/23 17:25	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/10/23 12:45	05/11/23 17:25	7439-89-6	
Magnesium, Dissolved	**6.2**	mg/L	0.50	0.047	1	05/10/23 12:45	05/11/23 17:25	7439-95-4	
Manganese, Dissolved	**0.0050 U**	mg/L	0.0050	0.0027	1	05/10/23 12:45	05/11/23 17:25	7439-96-5	
Potassium, Dissolved	**6.4**	mg/L	0.50	0.26	1	05/10/23 12:45	05/11/23 17:25	7440-09-7	
Sodium, Dissolved	**11.6**	mg/L	0.50	0.34	1	05/10/23 12:45	05/11/23 17:25	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/11/23 09:00	05/12/23 11:39	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/11/23 09:00	05/12/23 11:39	7440-38-2	
Barium	**0.046**	mg/L	0.0025	0.00098	1	05/11/23 09:00	05/12/23 11:39	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	05/11/23 09:00	05/12/23 11:39	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/11/23 09:00	05/12/23 11:39	7440-43-9	
Chromium	**0.0024J**	mg/L	0.0025	0.00050	1	05/11/23 09:00	05/12/23 11:39	7440-47-3	
Cobalt	**0.00083J**	mg/L	0.0025	0.00081	1	05/11/23 09:00	05/12/23 11:39	7440-48-4	
Copper	**0.0021J**	mg/L	0.0025	0.00064	1	05/11/23 09:00	05/12/23 11:39	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/11/23 09:00	05/12/23 11:39	7439-92-1	
Nickel	**0.0022J**	mg/L	0.0025	0.00065	1	05/11/23 09:00	05/12/23 11:39	7440-02-0	
Selenium	**0.0013J**	mg/L	0.0025	0.00084	1	05/11/23 09:00	05/12/23 11:39	7782-49-2	B
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/11/23 09:00	05/12/23 11:39	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/11/23 09:00	05/12/23 11:39	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/11/23 09:00	05/12/23 11:39	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0040	1	05/11/23 09:00	05/12/23 11:39	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/11/23 09:15	05/11/23 14:54	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/12/23 07:55	05/12/23 12:08	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/12/23 07:55	05/12/23 12:08	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	90	%.	60-140		1	05/12/23 07:55	05/12/23 12:08	630-20-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Sample: TW-19 **Lab ID: 30585905001** Collected: 05/09/23 12:20 Received: 05/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**64.0**	mg/L	10.0	1.0	1		05/19/23 13:54		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**124**	mg/L	10.0	10.0	1		05/11/23 17:51		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/12/23 06:55	05/16/23 14:35		MH
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**29.6**	mg/L	25.0	4.7	1	05/22/23 10:55	05/22/23 16:01		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**14.1**	mg/L	3.0	0.67	1		05/16/23 11:55	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**1.5**	mg/L	0.10	0.053	1		05/12/23 10:55	14797-55-8	
Nitrogen, NO2 plus NO3	**1.5**	mg/L	0.10	0.053	1		05/12/23 10:55		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**25.1**	mg/L	10.0	4.7	1		05/11/23 10:26	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/10/23 14:15	14797-65-0	

Sample: TW-20R **Lab ID: 30585905002** Collected: 05/09/23 11:40 Received: 05/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**19.2**	mg/L	0.50	0.083	1	05/10/23 12:45	05/11/23 16:44	7440-70-2	
Iron	**0.26**	mg/L	0.050	0.035	1	05/10/23 12:45	05/11/23 16:44	7439-89-6	
Magnesium	**5.0**	mg/L	0.50	0.047	1	05/10/23 12:45	05/11/23 16:44	7439-95-4	
Manganese	**0.031**	mg/L	0.0050	0.0027	1	05/10/23 12:45	05/11/23 16:44	7439-96-5	
Potassium	**3.6**	mg/L	0.50	0.26	1	05/10/23 12:45	05/11/23 16:44	7440-09-7	

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Sample: TW-20R **Lab ID: 30585905002** Collected: 05/09/23 11:40 Received: 05/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**11.9**	mg/L	0.50	0.34	1	05/10/23 12:45	05/11/23 16:44	7440-23-5	
Total Hardness	**68.7**	mg/L	3.3	0.27	1	05/10/23 12:45	05/11/23 16:44		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**18.9**	mg/L	0.50	0.083	1	05/10/23 12:45	05/11/23 17:35	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/10/23 12:45	05/11/23 17:35	7439-89-6	
Magnesium, Dissolved	**4.9**	mg/L	0.50	0.047	1	05/10/23 12:45	05/11/23 17:35	7439-95-4	
Manganese, Dissolved	**0.030**	mg/L	0.0050	0.0027	1	05/10/23 12:45	05/11/23 17:35	7439-96-5	
Potassium, Dissolved	**3.5**	mg/L	0.50	0.26	1	05/10/23 12:45	05/11/23 17:35	7440-09-7	
Sodium, Dissolved	**11.6**	mg/L	0.50	0.34	1	05/10/23 12:45	05/11/23 17:35	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/11/23 09:00	05/12/23 11:48	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/11/23 09:00	05/12/23 11:48	7440-38-2	
Barium	**0.037**	mg/L	0.0025	0.00098	1	05/11/23 09:00	05/12/23 11:48	7440-39-3	
Beryllium	**0.00021J**	mg/L	0.00050	0.00010	1	05/11/23 09:00	05/12/23 11:48	7440-41-7	
Cadmium	**0.00014J**	mg/L	0.00050	0.00013	1	05/11/23 09:00	05/12/23 11:48	7440-43-9	
Chromium	**0.0044**	mg/L	0.0025	0.00050	1	05/11/23 09:00	05/12/23 11:48	7440-47-3	
Cobalt	**0.0031**	mg/L	0.0025	0.00081	1	05/11/23 09:00	05/12/23 11:48	7440-48-4	
Copper	**0.0060**	mg/L	0.0025	0.00064	1	05/11/23 09:00	05/12/23 11:48	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/11/23 09:00	05/12/23 11:48	7439-92-1	
Nickel	**0.0036**	mg/L	0.0025	0.00065	1	05/11/23 09:00	05/12/23 11:48	7440-02-0	
Selenium	**0.0027**	mg/L	0.0025	0.00084	1	05/11/23 09:00	05/12/23 11:48	7782-49-2	B
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/11/23 09:00	05/12/23 11:48	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/11/23 09:00	05/12/23 11:48	7440-28-0	
Vanadium	**0.0049**	mg/L	0.0025	0.0012	1	05/11/23 09:00	05/12/23 11:48	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0040	1	05/11/23 09:00	05/12/23 11:48	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/11/23 09:15	05/11/23 14:56	7439-97-6	M1
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/12/23 07:55	05/12/23 12:46	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/12/23 07:55	05/12/23 12:46	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	88	%.	60-140		1	05/12/23 07:55	05/12/23 12:46	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**14.0**	mg/L	10.0	1.0	1		05/19/23 13:57		

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Sample: TW-20R **Lab ID: 30585905002** Collected: 05/09/23 11:40 Received: 05/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**114**	mg/L	10.0	10.0	1		05/11/23 17:51		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/12/23 06:55	05/16/23 14:41		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**36.5**	mg/L	25.0	4.7	1	05/22/23 10:55	05/22/23 16:02		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**12.6**	mg/L	3.0	0.67	1		05/16/23 11:56	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.92**	mg/L	0.10	0.053	1		05/12/23 10:56	14797-55-8	
Nitrogen, NO2 plus NO3	**0.92**	mg/L	0.10	0.053	1		05/12/23 10:56		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**50.4**	mg/L	10.0	4.7	1		05/11/23 10:27	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/10/23 14:17	14797-65-0	

Sample: TW-21 **Lab ID: 30585905003** Collected: 05/09/23 13:40 Received: 05/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**9.2**	mg/L	0.50	0.083	1	05/10/23 12:45	05/11/23 16:46	7440-70-2	
Iron	**0.037J**	mg/L	0.050	0.035	1	05/10/23 12:45	05/11/23 16:46	7439-89-6	
Magnesium	**3.4**	mg/L	0.50	0.047	1	05/10/23 12:45	05/11/23 16:46	7439-95-4	
Manganese	**0.13**	mg/L	0.0050	0.0027	1	05/10/23 12:45	05/11/23 16:46	7439-96-5	
Potassium	**2.2**	mg/L	0.50	0.26	1	05/10/23 12:45	05/11/23 16:46	7440-09-7	
Sodium	**24.0**	mg/L	0.50	0.34	1	05/10/23 12:45	05/11/23 16:46	7440-23-5	
Total Hardness	**37.1**	mg/L	3.3	0.27	1	05/10/23 12:45	05/11/23 16:46		N3

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Sample: TW-21 **Lab ID: 30585905003** Collected: 05/09/23 13:40 Received: 05/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**9.1**	mg/L	0.50	0.083	1	05/10/23 12:45	05/11/23 17:37	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/10/23 12:45	05/11/23 17:37	7439-89-6	
Magnesium, Dissolved	**3.4**	mg/L	0.50	0.047	1	05/10/23 12:45	05/11/23 17:37	7439-95-4	
Manganese, Dissolved	**0.13**	mg/L	0.0050	0.0027	1	05/10/23 12:45	05/11/23 17:37	7439-96-5	
Potassium, Dissolved	**2.3**	mg/L	0.50	0.26	1	05/10/23 12:45	05/11/23 17:37	7440-09-7	
Sodium, Dissolved	**23.9**	mg/L	0.50	0.34	1	05/10/23 12:45	05/11/23 17:37	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/16/23 11:40	05/16/23 14:35	7440-36-0	
Arsenic	**0.00060J**	mg/L	0.0025	0.00044	1	05/16/23 11:40	05/16/23 14:35	7440-38-2	
Barium	**0.092**	mg/L	0.0025	0.00098	1	05/16/23 11:40	05/16/23 14:35	7440-39-3	
Beryllium	**0.00054**	mg/L	0.00050	0.00010	1	05/16/23 11:40	05/16/23 14:35	7440-41-7	
Cadmium	**0.00024J**	mg/L	0.00050	0.00013	1	05/16/23 11:40	05/16/23 14:35	7440-43-9	
Chromium	**0.0034**	mg/L	0.0025	0.00050	1	05/16/23 11:40	05/16/23 14:35	7440-47-3	
Cobalt	**0.013**	mg/L	0.0025	0.00081	1	05/16/23 11:40	05/16/23 14:35	7440-48-4	
Copper	**0.0033**	mg/L	0.0025	0.00064	1	05/16/23 11:40	05/16/23 14:35	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/16/23 11:40	05/16/23 14:35	7439-92-1	
Nickel	**0.0064**	mg/L	0.0025	0.00065	1	05/16/23 11:40	05/16/23 14:35	7440-02-0	
Selenium	**0.0031**	mg/L	0.0025	0.00084	1	05/16/23 11:40	05/16/23 14:35	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/16/23 11:40	05/16/23 14:35	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/16/23 11:40	05/16/23 14:35	7440-28-0	M1
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/16/23 11:40	05/16/23 14:35	7440-62-2	
Zinc	**0.030**	mg/L	0.0050	0.0040	1	05/16/23 11:40	05/16/23 14:35	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/11/23 09:15	05/11/23 15:03	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/12/23 07:55	05/12/23 12:59	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/12/23 07:55	05/12/23 12:59	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	86	%.	60-140		1	05/12/23 07:55	05/12/23 12:59	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/19/23 14:11		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**108**	mg/L	10.0	10.0	1		05/11/23 17:51		

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Sample: TW-21 **Lab ID: 30585905003** Collected: 05/09/23 13:40 Received: 05/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/12/23 06:55	05/16/23 14:43		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**34.2**	mg/L	25.0	4.7	1	05/22/23 10:55	05/22/23 16:02		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**37.9**	mg/L	3.0	0.67	1		05/16/23 11:57	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**2.4**	mg/L	0.10	0.053	1		05/12/23 10:57	14797-55-8	
Nitrogen, NO2 plus NO3	**2.4**	mg/L	0.10	0.053	1		05/12/23 10:57		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**30.3**	mg/L	10.0	4.7	1		05/11/23 10:29	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/10/23 14:17	14797-65-0	

Sample: TW-21A **Lab ID: 30585905004** Collected: 05/09/23 14:20 Received: 05/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**18.0**	mg/L	0.50	0.083	1	05/10/23 12:45	05/11/23 16:53	7440-70-2	
Iron	**0.071**	mg/L	0.050	0.035	1	05/10/23 12:45	05/11/23 16:53	7439-89-6	
Magnesium	**5.0**	mg/L	0.50	0.047	1	05/10/23 12:45	05/11/23 16:53	7439-95-4	
Manganese	**0.071**	mg/L	0.0050	0.0027	1	05/10/23 12:45	05/11/23 16:53	7439-96-5	
Potassium	**2.9**	mg/L	0.50	0.26	1	05/10/23 12:45	05/11/23 16:53	7440-09-7	
Sodium	**26.8**	mg/L	0.50	0.34	1	05/10/23 12:45	05/11/23 16:53	7440-23-5	
Total Hardness	**65.7**	mg/L	3.3	0.27	1	05/10/23 12:45	05/11/23 16:53		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**16.7**	mg/L	0.50	0.083	1	05/10/23 12:45	05/11/23 17:39	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/10/23 12:45	05/11/23 17:39	7439-89-6	
Magnesium, Dissolved	**4.6**	mg/L	0.50	0.047	1	05/10/23 12:45	05/11/23 17:39	7439-95-4	

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Sample: TW-21A **Lab ID: 30585905004** Collected: 05/09/23 14:20 Received: 05/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Manganese, Dissolved	**0.064**	mg/L	0.0050	0.0027	1	05/10/23 12:45	05/11/23 17:39	7439-96-5	
Potassium, Dissolved	**2.7**	mg/L	0.50	0.26	1	05/10/23 12:45	05/11/23 17:39	7440-09-7	
Sodium, Dissolved	**24.5**	mg/L	0.50	0.34	1	05/10/23 12:45	05/11/23 17:39	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/11/23 09:00	05/12/23 11:54	7440-36-0	
Arsenic	**0.00070J**	mg/L	0.0025	0.00044	1	05/11/23 09:00	05/12/23 11:54	7440-38-2	
Barium	**0.068**	mg/L	0.0025	0.00098	1	05/11/23 09:00	05/12/23 11:54	7440-39-3	
Beryllium	**0.00045J**	mg/L	0.00050	0.00010	1	05/11/23 09:00	05/12/23 11:54	7440-41-7	
Cadmium	**0.00029J**	mg/L	0.00050	0.00013	1	05/11/23 09:00	05/12/23 11:54	7440-43-9	
Chromium	**0.0034**	mg/L	0.0025	0.00050	1	05/11/23 09:00	05/12/23 11:54	7440-47-3	
Cobalt	**0.0069**	mg/L	0.0025	0.00081	1	05/11/23 09:00	05/12/23 11:54	7440-48-4	
Copper	**0.0017J**	mg/L	0.0025	0.00064	1	05/11/23 09:00	05/12/23 11:54	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/11/23 09:00	05/12/23 11:54	7439-92-1	
Nickel	**0.0044**	mg/L	0.0025	0.00065	1	05/11/23 09:00	05/12/23 11:54	7440-02-0	
Selenium	**0.0042**	mg/L	0.0025	0.00084	1	05/11/23 09:00	05/12/23 11:54	7782-49-2	B
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/11/23 09:00	05/12/23 11:54	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/11/23 09:00	05/12/23 11:54	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/11/23 09:00	05/12/23 11:54	7440-62-2	
Zinc	**0.017**	mg/L	0.0050	0.0040	1	05/11/23 09:00	05/12/23 11:54	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/11/23 09:15	05/11/23 15:05	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/12/23 07:55	05/12/23 13:11	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/12/23 07:55	05/12/23 13:11	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	88	%.	60-140		1	05/12/23 07:55	05/12/23 13:11	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/19/23 13:59		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**148**	mg/L	10.0	10.0	1		05/11/23 17:51		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/12/23 06:55	05/16/23 14:45		

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Sample: TW-21A **Lab ID: 30585905004** Collected: 05/09/23 14:20 Received: 05/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**38.7**	mg/L	25.0	4.7	1	05/22/23 10:55	05/22/23 16:03		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**51.3**	mg/L	3.0	0.67	1		05/16/23 11:58	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**2.3**	mg/L	0.10	0.053	1		05/12/23 10:59	14797-55-8	
Nitrogen, NO2 plus NO3	**2.3**	mg/L	0.10	0.053	1		05/12/23 10:59		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**36.3**	mg/L	10.0	4.7	1		05/11/23 10:29	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/10/23 14:18	14797-65-0	

Sample: MW-P9 **Lab ID: 30585905005** Collected: 05/05/23 10:00 Received: 05/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/11/23 09:15	05/11/23 15:08	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/12/23 07:55	05/12/23 13:24	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/12/23 07:55	05/12/23 13:24	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	91	%.	60-140		1	05/12/23 07:55	05/12/23 13:24	630-20-6	

Sample: MW-P417 **Lab ID: 30585905006** Collected: 05/05/23 14:45 Received: 05/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/11/23 09:15	05/11/23 15:10	7439-97-6	

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Sample: MW-P417 **Lab ID: 30585905006** Collected: 05/05/23 14:45 Received: 05/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	05/12/23 07:55	05/12/23 13:37	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	05/12/23 07:55	05/12/23 13:37	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	90	%.	60-140		1	05/12/23 07:55	05/12/23 13:37	630-20-6	

Sample: MW-P440 **Lab ID: 30585905007** Collected: 05/05/23 14:00 Received: 05/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/11/23 09:15	05/11/23 15:17	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	05/12/23 07:55	05/12/23 13:50	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	05/12/23 07:55	05/12/23 13:50	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	89	%.	60-140		1	05/12/23 07:55	05/12/23 13:50	630-20-6	

Sample: RW-P109 **Lab ID: 30585905008** Collected: 05/05/23 10:40 Received: 05/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/11/23 09:15	05/11/23 15:20	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/12/23 07:55	05/12/23 14:02	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/12/23 07:55	05/12/23 14:02	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	91	%.	60-140		1	05/12/23 07:55	05/12/23 14:02	630-20-6	

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Sample: RW-P440 **Lab ID: 30585905009** Collected: 05/05/23 12:10 Received: 05/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/11/23 09:15	05/11/23 15:22	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/12/23 07:55	05/12/23 14:15	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/12/23 07:55	05/12/23 14:15	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	87	%.	60-140		1	05/12/23 07:55	05/12/23 14:15	630-20-6	

Sample: RW-P441 **Lab ID: 30585905010** Collected: 05/05/23 11:30 Received: 05/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/11/23 09:15	05/11/23 15:25	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/12/23 07:55	05/12/23 14:28	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/12/23 07:55	05/12/23 14:28	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	91	%.	60-140		1	05/12/23 07:55	05/12/23 14:28	630-20-6	

Sample: RW-P584 **Lab ID: 30585905011** Collected: 05/05/23 12:50 Received: 05/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00028**	mg/L	0.00020	0.00020	1	05/11/23 09:15	05/11/23 15:27	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/12/23 07:55	05/12/23 14:40	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/12/23 07:55	05/12/23 14:40	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	90	%.	60-140		1	05/12/23 07:55	05/12/23 14:40	630-20-6	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30585905

QC Batch: 587192
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30585905001, 30585905002, 30585905003, 30585905004

METHOD BLANK: 2852439 Matrix: Water
Associated Lab Samples: 30585905001, 30585905002, 30585905003, 30585905004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	05/11/23 16:10	
Iron	mg/L	0.050 U	0.050	0.035	05/11/23 16:10	
Magnesium	mg/L	0.50 U	0.50	0.047	05/11/23 16:10	
Manganese	mg/L	0.0050 U	0.0050	0.0027	05/11/23 16:10	
Potassium	mg/L	0.50 U	0.50	0.26	05/11/23 16:10	
Sodium	mg/L	0.50 U	0.50	0.34	05/11/23 16:10	

LABORATORY CONTROL SAMPLE: 2852440

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	44.1	110	80-120	
Iron	mg/L	2	2.3	115	80-120	
Magnesium	mg/L	20	23.1	116	80-120	
Manganese	mg/L	2	2.3	114	80-120	
Potassium	mg/L	20	21.1	105	80-120	
Sodium	mg/L	20	22.7	113	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2852441 2852442

Parameter	Units	30585905001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	28.4	40	40	69.4	69.9	102	104	80-120	1	20	
Iron	mg/L	0.050 U	2	2	2.2	2.2	109	111	80-120	1	20	
Magnesium	mg/L	6.4	20	20	28.4	28.8	110	112	80-120	1	20	
Manganese	mg/L	0.0050 U	2	2	2.2	2.2	109	110	80-120	1	20	
Potassium	mg/L	6.6	20	20	27.1	27.3	102	103	80-120	1	20	
Sodium	mg/L	11.9	20	20	33.7	34.0	109	111	80-120	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30585905

QC Batch: 587202
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30585905001, 30585905002, 30585905003, 30585905004

METHOD BLANK: 2852472 Matrix: Water
Associated Lab Samples: 30585905001, 30585905002, 30585905003, 30585905004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	05/11/23 17:01	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	05/11/23 17:01	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	05/11/23 17:01	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	05/11/23 17:01	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	05/11/23 17:01	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	05/11/23 17:01	

LABORATORY CONTROL SAMPLE: 2852473

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	42.5	106	80-120	
Iron, Dissolved	mg/L	2	2.2	111	80-120	
Magnesium, Dissolved	mg/L	20	22.1	110	80-120	
Manganese, Dissolved	mg/L	2	2.2	110	80-120	
Potassium, Dissolved	mg/L	20	20.5	102	80-120	
Sodium, Dissolved	mg/L	20	21.7	109	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2852474 2852475

Parameter	Units	30585905001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	27.8	40	40	69.5	70.4	104	106	80-120	1	20	
Iron, Dissolved	mg/L	0.050 U	2	2	2.2	2.2	110	111	80-120	1	20	
Magnesium, Dissolved	mg/L	6.2	20	20	28.6	28.8	112	113	80-120	1	20	
Manganese, Dissolved	mg/L	0.0050 U	2	2	2.2	2.2	110	111	80-120	1	20	
Potassium, Dissolved	mg/L	6.4	20	20	27.2	27.6	104	106	80-120	1	20	
Sodium, Dissolved	mg/L	11.6	20	20	34.0	34.2	112	113	80-120	0	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30585905

QC Batch: 587425
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30585905001, 30585905002, 30585905004

METHOD BLANK: 2853954
Matrix: Water
Associated Lab Samples: 30585905001, 30585905002, 30585905004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00032J	0.00050	0.00030	05/12/23 11:15	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	05/12/23 11:15	
Barium	mg/L	0.0025 U	0.0025	0.00098	05/12/23 11:15	
Beryllium	mg/L	0.00050 U	0.00050	0.00010	05/12/23 11:15	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	05/12/23 11:15	
Chromium	mg/L	0.0025 U	0.0025	0.00050	05/12/23 11:15	
Cobalt	mg/L	0.0025 U	0.0025	0.00081	05/12/23 11:15	
Copper	mg/L	0.0025 U	0.0025	0.00064	05/12/23 11:15	
Lead	mg/L	0.00050 U	0.00050	0.00025	05/12/23 11:15	
Nickel	mg/L	0.0025 U	0.0025	0.00065	05/12/23 11:15	
Selenium	mg/L	0.0014J	0.0025	0.00084	05/12/23 11:15	
Silver	mg/L	0.0025 U	0.0025	0.00053	05/12/23 11:15	
Thallium	mg/L	0.00050 U	0.00050	0.000081	05/12/23 11:15	
Vanadium	mg/L	0.0025 U	0.0025	0.0012	05/12/23 11:15	
Zinc	mg/L	0.0050 U	0.0050	0.0040	05/12/23 11:15	

LABORATORY CONTROL SAMPLE: 2853955

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.021	105	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.10	100	80-120	
Beryllium	mg/L	0.02	0.021	105	80-120	
Cadmium	mg/L	0.02	0.020	98	80-120	
Chromium	mg/L	0.1	0.11	106	80-120	
Cobalt	mg/L	0.1	0.11	105	80-120	
Copper	mg/L	0.1	0.11	106	80-120	
Lead	mg/L	0.02	0.021	104	80-120	
Nickel	mg/L	0.1	0.10	104	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	
Silver	mg/L	0.1	0.11	107	80-120	
Thallium	mg/L	0.02	0.021	103	80-120	
Vanadium	mg/L	0.1	0.10	105	80-120	
Zinc	mg/L	0.2	0.20	100	80-120	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30585905

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2853956 2853957

Parameter	Units	30584612001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.02	0.02	0.021	0.021	104	103	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.098	0.097	97	97	75-125	0	20	
Barium	mg/L	94.8 ug/L	0.1	0.1	0.20	0.19	100	97	75-125	2	20	
Beryllium	mg/L	ND	0.02	0.02	0.023	0.024	114	119	75-125	4	20	
Cadmium	mg/L	ND	0.02	0.02	0.019	0.019	97	97	75-125	0	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20	
Copper	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	0	20	
Lead	mg/L	0.59 ug/L	0.02	0.02	0.021	0.021	103	104	75-125	1	20	
Nickel	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	0	20	
Selenium	mg/L	ND	0.1	0.1	0.094	0.095	93	94	75-125	1	20	
Silver	mg/L	ND	0.1	0.1	0.10	0.11	105	106	75-125	1	20	
Thallium	mg/L	ND	0.02	0.02	0.013	0.013	66	67	75-125	2	20	M1
Vanadium	mg/L	ND	0.1	0.1	0.10	0.10	102	103	75-125	0	20	
Zinc	mg/L	ND	0.2	0.2	0.20	0.20	97	97	75-125	0	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30585905

QC Batch: 588356
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30585905003

METHOD BLANK: 2858906
Matrix: Water
Associated Lab Samples: 30585905003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00030	05/16/23 14:29	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	05/16/23 14:29	
Barium	mg/L	0.0025 U	0.0025	0.00098	05/16/23 14:29	
Beryllium	mg/L	0.00050 U	0.00050	0.00010	05/16/23 14:29	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	05/16/23 14:29	
Chromium	mg/L	0.0025 U	0.0025	0.00050	05/16/23 14:29	
Cobalt	mg/L	0.0025 U	0.0025	0.00081	05/16/23 14:29	
Copper	mg/L	0.0025 U	0.0025	0.00064	05/16/23 14:29	
Lead	mg/L	0.00050 U	0.00050	0.00025	05/16/23 14:29	
Nickel	mg/L	0.0025 U	0.0025	0.00065	05/16/23 14:29	
Selenium	mg/L	0.0025 U	0.0025	0.00084	05/16/23 14:29	
Silver	mg/L	0.0025 U	0.0025	0.00053	05/16/23 14:29	
Thallium	mg/L	0.00050 U	0.00050	0.000081	05/16/23 14:29	
Vanadium	mg/L	0.0025 U	0.0025	0.0012	05/16/23 14:29	
Zinc	mg/L	0.0050 U	0.0050	0.0040	05/16/23 14:29	

LABORATORY CONTROL SAMPLE: 2858907

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.021	107	80-120	
Arsenic	mg/L	0.1	0.11	106	80-120	
Barium	mg/L	0.1	0.10	103	80-120	
Beryllium	mg/L	0.02	0.020	99	80-120	
Cadmium	mg/L	0.02	0.020	101	80-120	
Chromium	mg/L	0.1	0.11	109	80-120	
Cobalt	mg/L	0.1	0.11	109	80-120	
Copper	mg/L	0.1	0.11	109	80-120	
Lead	mg/L	0.02	0.021	104	80-120	
Nickel	mg/L	0.1	0.11	111	80-120	
Selenium	mg/L	0.1	0.10	103	80-120	
Silver	mg/L	0.1	0.11	105	80-120	
Thallium	mg/L	0.02	0.021	104	80-120	
Vanadium	mg/L	0.1	0.11	109	80-120	
Zinc	mg/L	0.2	0.21	106	80-120	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30585905

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2858908 2858909

Parameter	Units	30585905003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00050 U	0.02	0.02	0.022	0.022	109	108	75-125	1	20	
Arsenic	mg/L	0.00060J	0.1	0.1	0.089	0.089	88	89	75-125	1	20	
Barium	mg/L	0.092	0.1	0.1	0.19	0.19	101	102	75-125	0	20	
Beryllium	mg/L	0.00054	0.02	0.02	0.021	0.020	102	99	75-125	3	20	
Cadmium	mg/L	0.00024J	0.02	0.02	0.021	0.021	102	102	75-125	1	20	
Chromium	mg/L	0.0034	0.1	0.1	0.11	0.11	107	109	75-125	2	20	
Cobalt	mg/L	0.013	0.1	0.1	0.12	0.12	107	110	75-125	2	20	
Copper	mg/L	0.0033	0.1	0.1	0.11	0.11	108	110	75-125	2	20	
Lead	mg/L	0.00050 U	0.02	0.02	0.021	0.021	105	105	75-125	0	20	
Nickel	mg/L	0.0064	0.1	0.1	0.11	0.12	108	110	75-125	1	20	
Selenium	mg/L	0.0031	0.1	0.1	0.086	0.087	83	84	75-125	1	20	
Silver	mg/L	0.0025 U	0.1	0.1	0.10	0.10	104	104	75-125	0	20	
Thallium	mg/L	0.00050 U	0.02	0.02	0.014	0.014	71	71	75-125	0	20	M1
Vanadium	mg/L	0.0025 U	0.1	0.1	0.11	0.11	108	110	75-125	1	20	
Zinc	mg/L	0.030	0.2	0.2	0.24	0.24	104	105	75-125	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30585905

QC Batch: 587481
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30585905001, 30585905002, 30585905003, 30585905004, 30585905005, 30585905006, 30585905007, 30585905008, 30585905009, 30585905010, 30585905011

METHOD BLANK: 2854157
Matrix: Water
Associated Lab Samples: 30585905001, 30585905002, 30585905003, 30585905004, 30585905005, 30585905006, 30585905007, 30585905008, 30585905009, 30585905010, 30585905011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	05/11/23 14:49	

LABORATORY CONTROL SAMPLE: 2854158

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.010	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2854159 2854160

Parameter	Units	30585905002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00020 U	0.01	0.01	0.011	0.013	106	125	80-120	17	20	M1

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30585905

QC Batch: 587719
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30585905001, 30585905002, 30585905003, 30585905004, 30585905005, 30585905006, 30585905007, 30585905008, 30585905009, 30585905010, 30585905011

METHOD BLANK: 2855671
Matrix: Water
Associated Lab Samples: 30585905001, 30585905002, 30585905003, 30585905004, 30585905005, 30585905006, 30585905007, 30585905008, 30585905009, 30585905010, 30585905011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	05/12/23 11:43	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	05/12/23 11:43	
1,1,1,2-Tetrachloroethane (S)	%.	97	60-140		05/12/23 11:43	

LABORATORY CONTROL SAMPLE: 2855672

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.23	90	85-115	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.22	89	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			91	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2855673 2855674

Parameter	Units	30585905001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.041 U	0.4	0.41	0.36	0.36	91	89	60-140	1	25	
1,2-Dibromoethane (EDB)	ug/L	0.041 U	0.4	0.41	0.36	0.36	89	88	60-140	0	25	
1,1,1,2-Tetrachloroethane (S)	%.						86	86	60-140			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30585905

QC Batch: 589325
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30585905001, 30585905002, 30585905003, 30585905004

METHOD BLANK: 2863969 Matrix: Water
Associated Lab Samples: 30585905001, 30585905002, 30585905003, 30585905004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	05/19/23 13:32	

LABORATORY CONTROL SAMPLE: 2863970

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	22.0	110	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2863971 2863972

Parameter	Units	30588729001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	32.0	50	50	80.0	82.0	96	100	85-115	2	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30585905

QC Batch: 587394
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30585905001, 30585905002, 30585905003, 30585905004

METHOD BLANK: 2853853 Matrix: Water
Associated Lab Samples: 30585905001, 30585905002, 30585905003, 30585905004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	05/11/23 17:51	

LABORATORY CONTROL SAMPLE: 2853854

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	950	95	85-115	

SAMPLE DUPLICATE: 2853855

Parameter	Units	30585639001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	34.0	34.0	0	5	

SAMPLE DUPLICATE: 2853856

Parameter	Units	30585905002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	114	110	4	5	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30585905

QC Batch: 587381
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30585905001, 30585905002, 30585905003, 30585905004

METHOD BLANK: 2853791 Matrix: Water
Associated Lab Samples: 30585905001, 30585905002, 30585905003, 30585905004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	05/16/23 14:02	

LABORATORY CONTROL SAMPLE: 2853792

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.1	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2853795 2853796

Parameter	Units	30585905001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.9	4.9	122	122	90-110	0	20	MH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2853797 2853798

Parameter	Units	30585820002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	ND	4	4	4.6	4.5	115	112	90-110	3	20	MH

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30585905

QC Batch: 589652
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30585905001, 30585905002, 30585905003, 30585905004

METHOD BLANK: 2865684 Matrix: Water
Associated Lab Samples: 30585905001, 30585905002, 30585905003, 30585905004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	05/22/23 16:01	

LABORATORY CONTROL SAMPLE: 2865685

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	319	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2865686 2865687

Parameter	Units	30585905001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	29.6	150	150	189	191	106	108	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2865688 2865689

Parameter	Units	30584816011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	45.6	150	150	203	200	105	103	90-110	1	10	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30585905

QC Batch: 588008
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30585905001, 30585905002, 30585905003, 30585905004

METHOD BLANK: 2857303 Matrix: Water
Associated Lab Samples: 30585905001, 30585905002, 30585905003, 30585905004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/16/23 11:41	

LABORATORY CONTROL SAMPLE: 2857304

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.3	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2857305 2857306

Parameter	Units	30586400001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	ND	20	20	22.8	22.5	105	104	85-115	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30585905

QC Batch: 587383
QC Batch Method: SM 4500NO3-F-2016
Analysis Method: SM 4500NO3-F-2016
Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30585905001, 30585905002, 30585905003, 30585905004

METHOD BLANK: 2853803 Matrix: Water
Associated Lab Samples: 30585905001, 30585905002, 30585905003, 30585905004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	05/12/23 10:26	

LABORATORY CONTROL SAMPLE: 2853804

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	3.9	98	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2853805 2853806

Parameter	Units	30585302001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	ND	5	5	4.7	4.6	92	91	85-115	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30585905

QC Batch: 587420
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30585905001, 30585905002, 30585905003, 30585905004

METHOD BLANK: 2853942 Matrix: Water
Associated Lab Samples: 30585905001, 30585905002, 30585905003, 30585905004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	05/11/23 10:19	

LABORATORY CONTROL SAMPLE: 2853943

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	29.8	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2853944 2853945

Parameter	Units	30585773001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	29400	20000	20000	51100	50000	109	103	85-115	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2854181 2854182

Parameter	Units	30586485001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.0 U	20	20	18.5	19.2	85	89	85-115	4	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30585905

QC Batch: 587108
QC Batch Method: SM 4500NO2-B-2011
Analysis Method: SM 4500NO2-B-2011
Analysis Description: SM4500-NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30585905001, 30585905002, 30585905003, 30585905004

METHOD BLANK: 2852026 Matrix: Water
Associated Lab Samples: 30585905001, 30585905002, 30585905003, 30585905004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	05/10/23 14:14	

LABORATORY CONTROL SAMPLE: 2852027

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.10	101	90-110	

MATRIX SPIKE SAMPLE: 2852029

Parameter	Units	30585905001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.010 U	0.1	0.10	100	85-115	

SAMPLE DUPLICATE: 2852028

Parameter	Units	30585905001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010 U		20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: MLF-SPRING-2023
Pace Project No.: 30585905

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30585905001
[1] Sample pH for 8011 is 6

Sample: 30585905002
[1] Sample pH for 8011 is 6

Sample: 30585905003
[1] Sample pH for 8011 is 6

Sample: 30585905004
[1] Sample pH for 8011 is 5

Sample: 30585905005
[1] Sample pH for 8011 is 5

Sample: 30585905006
[1] Sample pH for 8011 is 5

Sample: 30585905007
[1] Sample pH for 8011 is 5

Sample: 30585905008
[1] Sample pH for 8011 is 5

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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: MLF-SPRING-2023
Pace Project No.: 30585905

SAMPLE QUALIFIERS

Sample: 30585905009
[1] Sample pH for 8011 is 5
Sample: 30585905010
[1] Sample pH for 8011 is 5
Sample: 30585905011
[1] Sample pH for 8011 is 5

ANALYTE QUALIFIERS

1c	Alkalinity TV: 0.00 mg/L
B	Analyte was detected in the associated method blank.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.

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(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30585905001	**TW-19**	EPA 3010A	587192	EPA 6010D	587500
30585905002	**TW-20R**	EPA 3010A	587192	EPA 6010D	587500
30585905003	**TW-21**	EPA 3010A	587192	EPA 6010D	587500
30585905004	**TW-21A**	EPA 3010A	587192	EPA 6010D	587500
30585905001	**TW-19**	EPA 3010A	587202	EPA 6010D	587597
30585905002	**TW-20R**	EPA 3010A	587202	EPA 6010D	587597
30585905003	**TW-21**	EPA 3010A	587202	EPA 6010D	587597
30585905004	**TW-21A**	EPA 3010A	587202	EPA 6010D	587597
30585905001	**TW-19**	EPA 3010A	587425	EPA 6020B	587584
30585905002	**TW-20R**	EPA 3010A	587425	EPA 6020B	587584
30585905003	**TW-21**	EPA 3010A	588356	EPA 6020B	588472
30585905004	**TW-21A**	EPA 3010A	587425	EPA 6020B	587584
30585905001	**TW-19**	EPA 7470A	587481	EPA 7470A	587587
30585905002	**TW-20R**	EPA 7470A	587481	EPA 7470A	587587
30585905003	**TW-21**	EPA 7470A	587481	EPA 7470A	587587
30585905004	**TW-21A**	EPA 7470A	587481	EPA 7470A	587587
30585905005	**MW-P9**	EPA 7470A	587481	EPA 7470A	587587
30585905006	**MW-P417**	EPA 7470A	587481	EPA 7470A	587587
30585905007	**MW-P440**	EPA 7470A	587481	EPA 7470A	587587
30585905008	**RW-P109**	EPA 7470A	587481	EPA 7470A	587587
30585905009	**RW-P440**	EPA 7470A	587481	EPA 7470A	587587
30585905010	**RW-P441**	EPA 7470A	587481	EPA 7470A	587587
30585905011	**RW-P584**	EPA 7470A	587481	EPA 7470A	587587
30585905001	**TW-19**	EPA 8011	587719	EPA 8011	587763
30585905002	**TW-20R**	EPA 8011	587719	EPA 8011	587763
30585905003	**TW-21**	EPA 8011	587719	EPA 8011	587763
30585905004	**TW-21A**	EPA 8011	587719	EPA 8011	587763
30585905005	**MW-P9**	EPA 8011	587719	EPA 8011	587763
30585905006	**MW-P417**	EPA 8011	587719	EPA 8011	587763
30585905007	**MW-P440**	EPA 8011	587719	EPA 8011	587763
30585905008	**RW-P109**	EPA 8011	587719	EPA 8011	587763
30585905009	**RW-P440**	EPA 8011	587719	EPA 8011	587763
30585905010	**RW-P441**	EPA 8011	587719	EPA 8011	587763
30585905011	**RW-P584**	EPA 8011	587719	EPA 8011	587763
30585905001	**TW-19**	SM 2320B-2011	589325		
30585905002	**TW-20R**	SM 2320B-2011	589325		
30585905003	**TW-21**	SM 2320B-2011	589325		
30585905004	**TW-21A**	SM 2320B-2011	589325		
30585905001	**TW-19**	SM 2540C-2015	587394		
30585905002	**TW-20R**	SM 2540C-2015	587394		
30585905003	**TW-21**	SM 2540C-2015	587394		
30585905004	**TW-21A**	SM 2540C-2015	587394		
30585905001	**TW-19**	EPA 350.1	587381	EPA 350.1	587701
30585905002	**TW-20R**	EPA 350.1	587381	EPA 350.1	587701

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING-2023
Pace Project No.: 30585905

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30585905003	**TW-21**	EPA 350.1	587381	EPA 350.1	587701
30585905004	**TW-21A**	EPA 350.1	587381	EPA 350.1	587701
30585905001	**TW-19**	EPA 410.4	589652	EPA 410.4	589745
30585905002	**TW-20R**	EPA 410.4	589652	EPA 410.4	589745
30585905003	**TW-21**	EPA 410.4	589652	EPA 410.4	589745
30585905004	**TW-21A**	EPA 410.4	589652	EPA 410.4	589745
30585905001	**TW-19**	SM 4500-Cl-E-2011	588008		
30585905002	**TW-20R**	SM 4500-Cl-E-2011	588008		
30585905003	**TW-21**	SM 4500-Cl-E-2011	588008		
30585905004	**TW-21A**	SM 4500-Cl-E-2011	588008		
30585905001	**TW-19**	SM 4500NO3-F-2016	587383		
30585905002	**TW-20R**	SM 4500NO3-F-2016	587383		
30585905003	**TW-21**	SM 4500NO3-F-2016	587383		
30585905004	**TW-21A**	SM 4500NO3-F-2016	587383		
30585905001	**TW-19**	EPA 9038	587420		
30585905002	**TW-20R**	EPA 9038	587420		
30585905003	**TW-21**	EPA 9038	587420		
30585905004	**TW-21A**	EPA 9038	587420		
30585905001	**TW-19**	SM 4500NO2-B-2011	587108		
30585905002	**TW-20R**	SM 4500NO2-B-2011	587108		
30585905003	**TW-21**	SM 4500NO2-B-2011	587108		
30585905004	**TW-21A**	SM 4500NO2-B-2011	587108		

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WO#: 30585905

EMA

207 East Sixth St

30585905

ND ASSESSMENT, LLC

50 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF-SPRING 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

		Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals (1)	Total + Diss. Metals (2)	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO_4, COD		Method 8011 - DBCP+EDB	Total Mercury		
001	1	TW-19	7	5-9-23	1220	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓			
002	2	TW-20R	↓	↓	1140	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
003	3	TW-21	↓	↓	1340	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
004	4	TW-21A	↓	↓	1420	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓			
005	5	MW-P9	4	5.5.23	1000	↓		↓									↓	✓		
006	6	MW-P417	↓	↓	1445	↓		↓									↓	✓		
007	7	MW-P440	↓	↓	1400	↓		↓									↓	✓		
008	8	RW-P109	↓	↓	1040	↓		↓									↓	✓		
009	9	RW-P440	↓	↓	1210	↓		↓									↓	✓		
010	10	RW-P441	↓	↓	1130	↓		↓									↓	✓		
011	11	RW-P584	↓	↓	1250	↓		↓									↓	✓		
	12																			

	Signature	Date	Time
Relinquished by	D A Brown TB/Pace	5-9-23	1515
Received by		5-9-23	1515
Relinquished by	TB/Pace		
Received by	KDS PACE	5-9-23	1835
Relinquished by	KDS PACE	5-9-23	2200
Received by	PACE	5/9/23	2200

Comments

(1) 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, ZN
(1) 7470 - Hg
(2) 6010 - Ca, Fe, Mg, MN, K, NA
PACE - WV - METALS
PACE - G-BURG - WET CHEM + 8011
LEVEL 2 REPORT

Cooler Temp on Arrival: 3.0 Deg. C

Rev. Aug. 2018

DC#_Title: ENV-FRM-GBUR-0088 v04_Sample Condition Upon Receipt
Pittsburgh

Effective Date: 02/03/2023

WO#: 30585905
PM: ARG Due Date: 05/24/23
CLIENT: ENV MONITOR

Client Name: EMA

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking Number:

Examined By: BL
Labeled By: BL
Temped By: BL

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No Seals Intact: ☐ Yes ☑ No

Thermometer Used: 17 Type of Ice: (Wet) Blue None

Cooler Temperature: Observed Temp 2.6 °C Correction Factor: +0.4 °C Final Temp: 3.0 °C

Temp should be above freezing to 6°C

pH paper Lot# 1003121 D.P.D. Residual Chlorine Lot #

Comments:	Yes	No	NA	
Chain of Custody Present	✓			1.
Chain of Custody Filled Out:	✓			2.
-Were client corrections present on COC		✓		No corrections
Chain of Custody Relinquished	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC:	✓			5.
-Includes date/time/ID	yes			
Matrix:	WT			
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):	✓			7. Nitrite
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous samples field filtered:			✓	13.
Organic Samples checked for dechlorination			✓	14:
Filtered volume received for dissolved tests:			✓	15:
All containers checked for preservation:	✓			16.
exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix				
All containers meet method preservation requirements:	✓			Initial when completed: BL Date/Time of Preservation: Lot# of added Preservative:
8260C/D: Headspace in VOA Vials (> 6mm)			✓	17.
624.1: Headspace in VOA Vials (0mm)			✓	18.
Trip Blank Present:		✓		Trip blank custody seal present? YES or (NO)
Rad Samples Screened <0.5 mrem/hr.	✓			Initial when completed: BL Date: 5/9/23 Survey Meter SN: 7563

Comments: Headspace in 1/3 VG9Ts for samples 004, 005, and 007.

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

LIMS30 Internal Shipping Manifest

COOLER 23

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	23	Cooler temp (rcvd) °C	.5
Packaged on Ice (Y/N)	Yes	Correction Factor	.0
Shipping Method	Courier	Cooler temp (corr) °C	.5
Tracking #	N/A	IR GUN ID	23
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[signature]	GBUR	5-9-23	2315
Received	[signature]	BEAV	5-10-23	441
Relinquished				
Received				
Relinquished				
Received				

2

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	5/9/2023	30585890003 BP3N1/1	BP3N	30585890003	30585890
MF	5/9/2023	30585890004 BP3N1/1	BP3N	30585890004	30585890
MF	5/9/2023	30585905009 BP3N1/1	BP3N	30585905009	30585905
MF	5/9/2023	30585905002 BP3N1/2	BP3N	30585905002	30585905
MF	5/9/2023	30585905004 BP3N2/2	BP3N	30585905004	30585905
MF	5/9/2023	30585905001 BP3N2/2	BP3N	30585905001	30585905
MF	5/9/2023	30585905003 BP3N1/2	BP3N	30585905003	30585905
MF	5/9/2023	30585905010 BP3N1/1	BP3N	30585905010	30585905
MF	5/9/2023	30585905011 BP3N1/1	BP3N	30585905011	30585905
MF	5/9/2023	30585905005 BP3N1/1	BP3N	30585905005	30585905
MF	5/9/2023	30585905006 BP3N1/1	BP3N	30585905006	30585905
MF	5/9/2023	30585905008 BP3N1/1	BP3N	30585905008	30585905
MF	5/9/2023	30585905007 BP3N1/1	BP3N	30585905007	30585905
MF	5/9/2023	30585905001 BP3N1/2	BP3N	30585905001	30585905
MF	5/9/2023	30585905003 BP3N2/2	BP3N	30585905003	30585905
MF	5/9/2023	30585905004 BP3N1/2	BP3N	30585905004	30585905
MF	5/9/2023	30585905002 BP3N2/2	BP3N	30585905002	30585905

DC#_Title: ENV-FRM-BEAV-0058 v03_Pace WV Sample Condition Upon Receipt (SCUR)
Effective Date: 2/8/2023

LIMS30 Lab Sample Condition Upon Receipt (West Virginia)

Put label here prior to scanning

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☑ 3rd Party Courier ☐ Pace ☐ Other _____

Tracking #: _____

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 23 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** .5 °C Correction Factor: .0 °C Final Temp: .5 °C

Thermal Preservation Requirement Met Yes ☑ No ☐

pH paper Lot#	Date and Initials of person examining contents:
206722	DW 5-10-23

	Yes	No	N/A	
Chain of Custody Present:				1.
Chain of Custody Filled Out:				2.
Chain of Custody Relinquished:				3.
Sampler Name & Signature on COC:				4.
Sample Labels match COC: -Includes date/time/ID Matrix:				5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered:			✓	13.
-pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓	
Filtered volume received for Dissolved tests:	✓			14.
All containers have been checked for chemical preservation: exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix	✓			15.
All containers meet method/chemical preservation requirements:	✓			Initial when completed: DW Date: 5-10-23
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present:			✓	17.
				Initial when completed: DW Date: 5-10-23

Manifest

Comments: _____

*PM review is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

May 22, 2023

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-SPRING-2023
Pace Project No.: 30586485

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on May 10, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alaina Deitch

Alaina R. Deitch
alaina.deitch@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Florida: Cert E871149 SEKS WET
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver

225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
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SAMPLE SUMMARY

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30586485001	**TW-4**	Water	05/10/23 11:15	05/10/23 22:40
30586485002	**TW-4B**	Water	05/10/23 10:40	05/10/23 22:40
30586485003	**TW-22**	Water	05/09/23 16:15	05/10/23 22:40
30586485004	**TW-22A**	Water	05/10/23 09:00	05/10/23 22:40
30586485005	**TW-22B**	Water	05/09/23 15:40	05/10/23 22:40
30586485006	**TW-23R**	Water	05/10/23 09:50	05/10/23 22:40
30586485007	**TW-27**	Water	05/10/23 11:50	05/10/23 22:40
30586485008	**TW-28**	Water	05/10/23 13:00	05/10/23 22:40

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30586485001	**TW-4**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30586485002	**TW-4B**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30586485003	**TW-22**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30586485004	**TW-22A**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30586485005	**TW-22B**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30586485006	**TW-23R**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30586485007	**TW-27**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA
30586485008	**TW-28**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	AK1	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	PAS	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Date: May 22, 2023

TW-4 (Lab ID: 30586485001)

- Sample pH for 8011 is 6

TW-4B (Lab ID: 30586485002)

- Sample pH for 8011 is 5

TW-22 (Lab ID: 30586485003)

- Sample pH for 8011 is 6

TW-22A (Lab ID: 30586485004)

- Sample pH for 8011 is 5

TW-22B (Lab ID: 30586485005)

- Sample pH for 8011 is 6

TW-23R (Lab ID: 30586485006)

- Sample pH for 8011 is 5

TW-27 (Lab ID: 30586485007)

- Sample pH for 8011 is 6

TW-28 (Lab ID: 30586485008)

- Sample pH for 8011 is 5

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
8 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 587785

B: Analyte was detected in the associated method blank.
- BLANK for HBN 587785 [BMPR/106 (Lab ID: 2855972)
  - Potassium
  - Sodium

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
8 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
8 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 587813

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30586485002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2856111)
  - Thallium
- MSD (Lab ID: 2856112)
  - Thallium

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
8 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 588123

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30587048006

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2857697)
  - Mercury
- MSD (Lab ID: 2857698)
  - Mercury

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
8 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
8 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 589325

1c: Alkalinity TV: 0.00 mg/L
- TW-22B (Lab ID: 30586485005)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-28 (Lab ID: 30586485008)
  - Alkalinity,Total (CaCO3 pH4.5)

2c: Alkalinity TV: 1.00 mg/L
- TW-27 (Lab ID: 30586485007)
  - Alkalinity,Total (CaCO3 pH4.5)

3c: Alkalinity TV: 2.00 mg/L
- TW-22 (Lab ID: 30586485003)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-22A (Lab ID: 30586485004)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
8 samples were analyzed for SM 2540C-2015 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
8 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
8 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
8 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Method: **SM 4500NO3-F-2016**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
8 samples were analyzed for SM 4500NO3-F-2016 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
8 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: May 22, 2023

General Information:
8 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 587417

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30586485001

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2853937)
  - Nitrite as N

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Sample: TW-4 **Lab ID: 30586485001** Collected: 05/10/23 11:15 Received: 05/10/23 22:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**2.7**	mg/L	0.50	0.083	1	05/12/23 11:45	05/15/23 19:11	7440-70-2	
Iron	**46.1**	mg/L	0.050	0.035	1	05/12/23 11:45	05/15/23 19:11	7439-89-6	
Magnesium	**1.4**	mg/L	0.50	0.047	1	05/12/23 11:45	05/15/23 19:11	7439-95-4	
Manganese	**0.19**	mg/L	0.0050	0.0027	1	05/12/23 11:45	05/15/23 19:11	7439-96-5	
Potassium	**0.97**	mg/L	0.50	0.26	1	05/12/23 11:45	05/15/23 19:11	7440-09-7	B
Sodium	**5.2**	mg/L	0.50	0.34	1	05/12/23 11:45	05/15/23 19:11	7440-23-5	
Total Hardness	**12.7**	mg/L	3.3	0.27	1	05/12/23 11:45	05/15/23 19:11		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**2.6**	mg/L	0.50	0.083	1	05/15/23 16:45	05/16/23 17:48	7440-70-2	
Iron, Dissolved	**28.6**	mg/L	0.050	0.035	1	05/15/23 16:45	05/16/23 17:48	7439-89-6	
Magnesium, Dissolved	**1.4**	mg/L	0.50	0.047	1	05/15/23 16:45	05/16/23 17:48	7439-95-4	
Manganese, Dissolved	**0.18**	mg/L	0.0050	0.0027	1	05/15/23 16:45	05/16/23 17:48	7439-96-5	
Potassium, Dissolved	**0.81**	mg/L	0.50	0.26	1	05/15/23 16:45	05/16/23 17:48	7440-09-7	
Sodium, Dissolved	**4.9**	mg/L	0.50	0.34	1	05/15/23 16:45	05/16/23 17:48	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00030J**	mg/L	0.00050	0.00030	1	05/12/23 12:15	05/16/23 11:52	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/12/23 12:15	05/16/23 11:52	7440-38-2	
Barium	**0.034**	mg/L	0.0025	0.00098	1	05/12/23 12:15	05/16/23 11:52	7440-39-3	
Beryllium	**0.00025J**	mg/L	0.00050	0.00010	1	05/12/23 12:15	05/16/23 11:52	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/12/23 12:15	05/16/23 11:52	7440-43-9	
Chromium	**0.00099J**	mg/L	0.0025	0.00050	1	05/12/23 12:15	05/16/23 11:52	7440-47-3	
Cobalt	**0.0023J**	mg/L	0.0025	0.00081	1	05/12/23 12:15	05/16/23 11:52	7440-48-4	
Copper	**0.0050**	mg/L	0.0025	0.00064	1	05/12/23 12:15	05/16/23 11:52	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/12/23 12:15	05/16/23 11:52	7439-92-1	
Nickel	**0.0027**	mg/L	0.0025	0.00065	1	05/12/23 12:15	05/16/23 11:52	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/12/23 12:15	05/16/23 11:52	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/12/23 12:15	05/16/23 11:52	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/12/23 12:15	05/16/23 11:52	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/12/23 12:15	05/16/23 11:52	7440-62-2	
Zinc	**0.0045J**	mg/L	0.0050	0.0040	1	05/12/23 12:15	05/16/23 11:52	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/15/23 13:03	05/16/23 12:37	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	05/16/23 07:31	05/16/23 12:53	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	05/16/23 07:31	05/16/23 12:53	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	89	%.	60-140		1	05/16/23 07:31	05/16/23 12:53	630-20-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Sample: TW-4 **Lab ID: 30586485001** Collected: 05/10/23 11:15 Received: 05/10/23 22:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**36.0**	mg/L	10.0	1.0	1		05/19/23 14:05		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**72.0**	mg/L	10.0	10.0	1		05/15/23 15:39		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/12/23 06:55	05/16/23 16:14		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**45.6**	mg/L	25.0	4.7	1	05/22/23 10:55	05/22/23 16:03		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**15.3**	mg/L	3.0	0.67	1		05/16/23 12:02	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10**	mg/L	0.10	0.053	1		05/12/23 13:27	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10**	mg/L	0.10	0.053	1		05/12/23 13:27		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/11/23 10:33	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/11/23 10:11	14797-65-0	MH

Sample: TW-4B **Lab ID: 30586485002** Collected: 05/10/23 10:40 Received: 05/10/23 22:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**3.1**	mg/L	0.50	0.083	1	05/12/23 11:45	05/15/23 19:13	7440-70-2	
Iron	**0.038J**	mg/L	0.050	0.035	1	05/12/23 11:45	05/15/23 19:13	7439-89-6	
Magnesium	**2.9**	mg/L	0.50	0.047	1	05/12/23 11:45	05/15/23 19:13	7439-95-4	
Manganese	**0.10**	mg/L	0.0050	0.0027	1	05/12/23 11:45	05/15/23 19:13	7439-96-5	
Potassium	**1.3**	mg/L	0.50	0.26	1	05/12/23 11:45	05/15/23 19:13	7440-09-7	B

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Sample: TW-4B **Lab ID: 30586485002** Collected: 05/10/23 10:40 Received: 05/10/23 22:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**3.1**	mg/L	0.50	0.34	1	05/12/23 11:45	05/15/23 19:13	7440-23-5	B
Total Hardness	**19.6**	mg/L	3.3	0.27	1	05/12/23 11:45	05/15/23 19:13		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**2.8**	mg/L	0.50	0.083	1	05/15/23 16:45	05/16/23 17:51	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/15/23 16:45	05/16/23 17:51	7439-89-6	
Magnesium, Dissolved	**2.5**	mg/L	0.50	0.047	1	05/15/23 16:45	05/16/23 17:51	7439-95-4	
Manganese, Dissolved	**0.089**	mg/L	0.0050	0.0027	1	05/15/23 16:45	05/16/23 17:51	7439-96-5	
Potassium, Dissolved	**0.99**	mg/L	0.50	0.26	1	05/15/23 16:45	05/16/23 17:51	7440-09-7	
Sodium, Dissolved	**2.8**	mg/L	0.50	0.34	1	05/15/23 16:45	05/16/23 17:51	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00047J**	mg/L	0.00050	0.00030	1	05/12/23 12:15	05/16/23 11:55	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/12/23 12:15	05/16/23 11:55	7440-38-2	
Barium	**0.069**	mg/L	0.0025	0.00098	1	05/12/23 12:15	05/16/23 11:55	7440-39-3	
Beryllium	**0.00026J**	mg/L	0.00050	0.00010	1	05/12/23 12:15	05/16/23 11:55	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/12/23 12:15	05/16/23 11:55	7440-43-9	
Chromium	**0.0026**	mg/L	0.0025	0.00050	1	05/12/23 12:15	05/16/23 11:55	7440-47-3	
Cobalt	**0.0073**	mg/L	0.0025	0.00081	1	05/12/23 12:15	05/16/23 11:55	7440-48-4	
Copper	**0.0028**	mg/L	0.0025	0.00064	1	05/12/23 12:15	05/16/23 11:55	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/12/23 12:15	05/16/23 11:55	7439-92-1	
Nickel	**0.0055**	mg/L	0.0025	0.00065	1	05/12/23 12:15	05/16/23 11:55	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/12/23 12:15	05/16/23 11:55	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/12/23 12:15	05/16/23 11:55	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/12/23 12:15	05/16/23 11:55	7440-28-0	M1
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/12/23 12:15	05/16/23 11:55	7440-62-2	
Zinc	**0.0099**	mg/L	0.0050	0.0040	1	05/12/23 12:15	05/16/23 11:55	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00086**	mg/L	0.00020	0.00020	1	05/15/23 13:03	05/16/23 12:39	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/16/23 07:31	05/16/23 13:31	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/16/23 07:31	05/16/23 13:31	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	86	%.	60-140		1	05/16/23 07:31	05/16/23 13:31	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**30.0**	mg/L	10.0	1.0	1		05/19/23 14:08		

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Sample: TW-4B **Lab ID: 30586485002** Collected: 05/10/23 10:40 Received: 05/10/23 22:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**39.0**	mg/L	10.0	10.0	1		05/15/23 15:39		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/12/23 06:55	05/16/23 16:16		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**36.5**	mg/L	25.0	4.7	1	05/22/23 10:55	05/22/23 16:03		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**6.3**	mg/L	3.0	0.67	1		05/16/23 12:03	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.32**	mg/L	0.10	0.053	1		05/12/23 13:31	14797-55-8	
Nitrogen, NO2 plus NO3	**0.32**	mg/L	0.10	0.053	1		05/12/23 13:31		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.6**	mg/L	10.0	4.7	1		05/11/23 10:36	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/11/23 10:13	14797-65-0	

Sample: TW-22 **Lab ID: 30586485003** Collected: 05/09/23 16:15 Received: 05/10/23 22:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**2.3**	mg/L	0.50	0.083	1	05/12/23 11:45	05/15/23 19:19	7440-70-2	
Iron	**0.15**	mg/L	0.050	0.035	1	05/12/23 11:45	05/15/23 19:19	7439-89-6	
Magnesium	**2.0**	mg/L	0.50	0.047	1	05/12/23 11:45	05/15/23 19:19	7439-95-4	
Manganese	**0.033**	mg/L	0.0050	0.0027	1	05/12/23 11:45	05/15/23 19:19	7439-96-5	
Potassium	**1.3**	mg/L	0.50	0.26	1	05/12/23 11:45	05/15/23 19:19	7440-09-7	B
Sodium	**12.2**	mg/L	0.50	0.34	1	05/12/23 11:45	05/15/23 19:19	7440-23-5	
Total Hardness	**13.9**	mg/L	3.3	0.27	1	05/12/23 11:45	05/15/23 19:19		N3

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Sample: TW-22 **Lab ID: 30586485003** Collected: 05/09/23 16:15 Received: 05/10/23 22:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**2.2**	mg/L	0.50	0.083	1	05/15/23 16:45	05/16/23 17:53	7440-70-2	
Iron, Dissolved	**0.040J**	mg/L	0.050	0.035	1	05/15/23 16:45	05/16/23 17:53	7439-89-6	
Magnesium, Dissolved	**1.8**	mg/L	0.50	0.047	1	05/15/23 16:45	05/16/23 17:53	7439-95-4	
Manganese, Dissolved	**0.031**	mg/L	0.0050	0.0027	1	05/15/23 16:45	05/16/23 17:53	7439-96-5	
Potassium, Dissolved	**1.1**	mg/L	0.50	0.26	1	05/15/23 16:45	05/16/23 17:53	7440-09-7	
Sodium, Dissolved	**11.2**	mg/L	0.50	0.34	1	05/15/23 16:45	05/16/23 17:53	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/12/23 12:15	05/16/23 12:10	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/12/23 12:15	05/16/23 12:10	7440-38-2	
Barium	**0.045**	mg/L	0.0025	0.00098	1	05/12/23 12:15	05/16/23 12:10	7440-39-3	
Beryllium	**0.00032J**	mg/L	0.00050	0.00010	1	05/12/23 12:15	05/16/23 12:10	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/12/23 12:15	05/16/23 12:10	7440-43-9	
Chromium	**0.013**	mg/L	0.0025	0.00050	1	05/12/23 12:15	05/16/23 12:10	7440-47-3	
Cobalt	**0.013**	mg/L	0.0025	0.00081	1	05/12/23 12:15	05/16/23 12:10	7440-48-4	
Copper	**0.044**	mg/L	0.0025	0.00064	1	05/12/23 12:15	05/16/23 12:10	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/12/23 12:15	05/16/23 12:10	7439-92-1	
Nickel	**0.024**	mg/L	0.0025	0.00065	1	05/12/23 12:15	05/16/23 12:10	7440-02-0	
Selenium	**0.0010J**	mg/L	0.0025	0.00084	1	05/12/23 12:15	05/16/23 12:10	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/12/23 12:15	05/16/23 12:10	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/12/23 12:15	05/16/23 12:10	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/12/23 12:15	05/16/23 12:10	7440-62-2	
Zinc	**0.016**	mg/L	0.0050	0.0040	1	05/12/23 12:15	05/16/23 12:10	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/15/23 13:03	05/16/23 12:42	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/16/23 07:31	05/16/23 13:44	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/16/23 07:31	05/16/23 13:44	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	88	%.	60-140		1	05/16/23 07:31	05/16/23 13:44	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		05/19/23 14:00		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**53.0**	mg/L	10.0	10.0	1		05/15/23 15:39		

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Sample: TW-22 **Lab ID: 30586485003** Collected: 05/09/23 16:15 Received: 05/10/23 22:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/12/23 06:55	05/16/23 16:18		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**31.9**	mg/L	25.0	4.7	1	05/22/23 10:55	05/22/23 16:03		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**24.0**	mg/L	3.0	0.67	1		05/16/23 12:07	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**1.0**	mg/L	0.10	0.053	1		05/12/23 13:32	14797-55-8	
Nitrogen, NO2 plus NO3	**1.0**	mg/L	0.10	0.053	1		05/12/23 13:32		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/11/23 10:38	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/11/23 10:13	14797-65-0	

Sample: TW-22A **Lab ID: 30586485004** Collected: 05/10/23 09:00 Received: 05/10/23 22:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**6.5**	mg/L	0.50	0.083	1	05/12/23 11:45	05/15/23 19:21	7440-70-2	
Iron	**0.32**	mg/L	0.050	0.035	1	05/12/23 11:45	05/15/23 19:21	7439-89-6	
Magnesium	**7.0**	mg/L	0.50	0.047	1	05/12/23 11:45	05/15/23 19:21	7439-95-4	
Manganese	**0.14**	mg/L	0.0050	0.0027	1	05/12/23 11:45	05/15/23 19:21	7439-96-5	
Potassium	**2.1**	mg/L	0.50	0.26	1	05/12/23 11:45	05/15/23 19:21	7440-09-7	B
Sodium	**38.7**	mg/L	0.50	0.34	1	05/12/23 11:45	05/15/23 19:21	7440-23-5	
Total Hardness	**45.2**	mg/L	3.3	0.27	1	05/12/23 11:45	05/15/23 19:21		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**6.3**	mg/L	0.50	0.083	1	05/15/23 16:45	05/16/23 17:55	7440-70-2	
Iron, Dissolved	**0.066**	mg/L	0.050	0.035	1	05/15/23 16:45	05/16/23 17:55	7439-89-6	
Magnesium, Dissolved	**6.6**	mg/L	0.50	0.047	1	05/15/23 16:45	05/16/23 17:55	7439-95-4	

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Sample: TW-22A **Lab ID: 30586485004** Collected: 05/10/23 09:00 Received: 05/10/23 22:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Manganese, Dissolved	**0.13**	mg/L	0.0050	0.0027	1	05/15/23 16:45	05/16/23 17:55	7439-96-5	
Potassium, Dissolved	**1.9**	mg/L	0.50	0.26	1	05/15/23 16:45	05/16/23 17:55	7440-09-7	
Sodium, Dissolved	**37.9**	mg/L	0.50	0.34	1	05/15/23 16:45	05/16/23 17:55	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/12/23 12:15	05/16/23 12:13	7440-36-0	
Arsenic	**0.00058J**	mg/L	0.0025	0.00044	1	05/12/23 12:15	05/16/23 12:13	7440-38-2	
Barium	**0.18**	mg/L	0.0025	0.00098	1	05/12/23 12:15	05/16/23 12:13	7440-39-3	
Beryllium	**0.00044J**	mg/L	0.00050	0.00010	1	05/12/23 12:15	05/16/23 12:13	7440-41-7	
Cadmium	**0.00035J**	mg/L	0.00050	0.00013	1	05/12/23 12:15	05/16/23 12:13	7440-43-9	
Chromium	**0.0069**	mg/L	0.0025	0.00050	1	05/12/23 12:15	05/16/23 12:13	7440-47-3	
Cobalt	**0.024**	mg/L	0.0025	0.00081	1	05/12/23 12:15	05/16/23 12:13	7440-48-4	
Copper	**0.0073**	mg/L	0.0025	0.00064	1	05/12/23 12:15	05/16/23 12:13	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/12/23 12:15	05/16/23 12:13	7439-92-1	
Nickel	**0.016**	mg/L	0.0025	0.00065	1	05/12/23 12:15	05/16/23 12:13	7440-02-0	
Selenium	**0.0039**	mg/L	0.0025	0.00084	1	05/12/23 12:15	05/16/23 12:13	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/12/23 12:15	05/16/23 12:13	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/12/23 12:15	05/16/23 12:13	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/12/23 12:15	05/16/23 12:13	7440-62-2	
Zinc	**0.032**	mg/L	0.0050	0.0040	1	05/12/23 12:15	05/16/23 12:13	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/15/23 13:03	05/16/23 12:44	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/16/23 07:31	05/16/23 13:57	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/16/23 07:31	05/16/23 13:57	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	87	%.	60-140		1	05/16/23 07:31	05/16/23 13:57	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		05/19/23 14:09		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**162**	mg/L	10.0	10.0	1		05/15/23 15:39		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/12/23 06:55	05/16/23 16:24		

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Sample: TW-22A **Lab ID: 30586485004** Collected: 05/10/23 09:00 Received: 05/10/23 22:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**36.5**	mg/L	25.0	4.7	1	05/22/23 10:55	05/22/23 16:03		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**74.0**	mg/L	3.0	0.67	1		05/16/23 12:10	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**1.9**	mg/L	0.10	0.053	1		05/12/23 13:33	14797-55-8	
Nitrogen, NO2 plus NO3	**1.9**	mg/L	0.10	0.053	1		05/12/23 13:33		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**21.8**	mg/L	10.0	4.7	1		05/11/23 10:39	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/11/23 10:14	14797-65-0	

Sample: TW-22B **Lab ID: 30586485005** Collected: 05/09/23 15:40 Received: 05/10/23 22:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**17.0**	mg/L	0.50	0.083	1	05/12/23 11:45	05/15/23 19:23	7440-70-2	
Iron	**0.71**	mg/L	0.050	0.035	1	05/12/23 11:45	05/15/23 19:23	7439-89-6	
Magnesium	**3.8**	mg/L	0.50	0.047	1	05/12/23 11:45	05/15/23 19:23	7439-95-4	
Manganese	**0.014**	mg/L	0.0050	0.0027	1	05/12/23 11:45	05/15/23 19:23	7439-96-5	
Potassium	**4.1**	mg/L	0.50	0.26	1	05/12/23 11:45	05/15/23 19:23	7440-09-7	
Sodium	**8.7**	mg/L	0.50	0.34	1	05/12/23 11:45	05/15/23 19:23	7440-23-5	
Total Hardness	**58.0**	mg/L	3.3	0.27	1	05/12/23 11:45	05/15/23 19:23		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**16.7**	mg/L	0.50	0.083	1	05/15/23 16:45	05/16/23 17:57	7440-70-2	
Iron, Dissolved	**0.036J**	mg/L	0.050	0.035	1	05/15/23 16:45	05/16/23 17:57	7439-89-6	
Magnesium, Dissolved	**3.6**	mg/L	0.50	0.047	1	05/15/23 16:45	05/16/23 17:57	7439-95-4	
Manganese, Dissolved	**0.014**	mg/L	0.0050	0.0027	1	05/15/23 16:45	05/16/23 17:57	7439-96-5	
Potassium, Dissolved	**4.0**	mg/L	0.50	0.26	1	05/15/23 16:45	05/16/23 17:57	7440-09-7	
Sodium, Dissolved	**8.8**	mg/L	0.50	0.34	1	05/15/23 16:45	05/16/23 17:57	7440-23-5	

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Sample: TW-22B **Lab ID: 30586485005** Collected: 05/09/23 15:40 Received: 05/10/23 22:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/12/23 12:15	05/16/23 12:22	7440-36-0	
Arsenic	**0.00089J**	mg/L	0.0025	0.00044	1	05/12/23 12:15	05/16/23 12:22	7440-38-2	
Barium	**0.039**	mg/L	0.0025	0.00098	1	05/12/23 12:15	05/16/23 12:22	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	05/12/23 12:15	05/16/23 12:22	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/12/23 12:15	05/16/23 12:22	7440-43-9	
Chromium	**0.017**	mg/L	0.0025	0.00050	1	05/12/23 12:15	05/16/23 12:22	7440-47-3	
Cobalt	**0.021**	mg/L	0.0025	0.00081	1	05/12/23 12:15	05/16/23 12:22	7440-48-4	
Copper	**0.0033**	mg/L	0.0025	0.00064	1	05/12/23 12:15	05/16/23 12:22	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/12/23 12:15	05/16/23 12:22	7439-92-1	
Nickel	**0.010**	mg/L	0.0025	0.00065	1	05/12/23 12:15	05/16/23 12:22	7440-02-0	
Selenium	**0.0011J**	mg/L	0.0025	0.00084	1	05/12/23 12:15	05/16/23 12:22	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/12/23 12:15	05/16/23 12:22	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/12/23 12:15	05/16/23 12:22	7440-28-0	
Vanadium	**0.0013J**	mg/L	0.0025	0.0012	1	05/12/23 12:15	05/16/23 12:22	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0040	1	05/12/23 12:15	05/16/23 12:22	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/15/23 13:03	05/16/23 12:46	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.039 U**	ug/L	0.039	0.021	1	05/16/23 07:31	05/16/23 14:10	96-12-8	
1,2-Dibromoethane (EDB)	**0.039 U**	ug/L	0.039	0.030	1	05/16/23 07:31	05/16/23 14:10	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	93	%.	60-140		1	05/16/23 07:31	05/16/23 14:10	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/19/23 14:03		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**108**	mg/L	10.0	10.0	1		05/15/23 15:39		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/12/23 06:55	05/16/23 16:26		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**38.7**	mg/L	25.0	4.7	1	05/22/23 10:55	05/22/23 16:04		

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Sample: TW-22B **Lab ID: 30586485005** Collected: 05/09/23 15:40 Received: 05/10/23 22:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**11.1**	mg/L	3.0	0.67	1		05/16/23 12:11	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**2.3**	mg/L	0.10	0.053	1		05/12/23 13:35	14797-55-8	
Nitrogen, NO2 plus NO3	**2.3**	mg/L	0.10	0.053	1		05/12/23 13:35		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**19.4**	mg/L	10.0	4.7	1		05/11/23 10:41	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/11/23 10:14	14797-65-0	

Sample: TW-23R **Lab ID: 30586485006** Collected: 05/10/23 09:50 Received: 05/10/23 22:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**2.8**	mg/L	0.50	0.083	1	05/12/23 11:45	05/15/23 19:25	7440-70-2	
Iron	**0.083**	mg/L	0.050	0.035	1	05/12/23 11:45	05/15/23 19:25	7439-89-6	
Magnesium	**1.1**	mg/L	0.50	0.047	1	05/12/23 11:45	05/15/23 19:25	7439-95-4	
Manganese	**0.012**	mg/L	0.0050	0.0027	1	05/12/23 11:45	05/15/23 19:25	7439-96-5	
Potassium	**1.1**	mg/L	0.50	0.26	1	05/12/23 11:45	05/15/23 19:25	7440-09-7	B
Sodium	**4.3**	mg/L	0.50	0.34	1	05/12/23 11:45	05/15/23 19:25	7440-23-5	
Total Hardness	**11.5**	mg/L	3.3	0.27	1	05/12/23 11:45	05/15/23 19:25		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**2.8**	mg/L	0.50	0.083	1	05/15/23 16:45	05/16/23 17:59	7440-70-2	
Iron, Dissolved	**0.046J**	mg/L	0.050	0.035	1	05/15/23 16:45	05/16/23 17:59	7439-89-6	
Magnesium, Dissolved	**1.0**	mg/L	0.50	0.047	1	05/15/23 16:45	05/16/23 17:59	7439-95-4	
Manganese, Dissolved	**0.011**	mg/L	0.0050	0.0027	1	05/15/23 16:45	05/16/23 17:59	7439-96-5	
Potassium, Dissolved	**1.0**	mg/L	0.50	0.26	1	05/15/23 16:45	05/16/23 17:59	7440-09-7	
Sodium, Dissolved	**4.4**	mg/L	0.50	0.34	1	05/15/23 16:45	05/16/23 17:59	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/12/23 12:15	05/16/23 12:25	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/12/23 12:15	05/16/23 12:25	7440-38-2	
Barium	**0.016**	mg/L	0.0025	0.00098	1	05/12/23 12:15	05/16/23 12:25	7440-39-3	

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Sample: TW-23R **Lab ID: 30586485006** Collected: 05/10/23 09:50 Received: 05/10/23 22:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	05/12/23 12:15	05/16/23 12:25	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/12/23 12:15	05/16/23 12:25	7440-43-9	
Chromium	**0.0096**	mg/L	0.0025	0.00050	1	05/12/23 12:15	05/16/23 12:25	7440-47-3	
Cobalt	**0.0043**	mg/L	0.0025	0.00081	1	05/12/23 12:15	05/16/23 12:25	7440-48-4	
Copper	**0.0090**	mg/L	0.0025	0.00064	1	05/12/23 12:15	05/16/23 12:25	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/12/23 12:15	05/16/23 12:25	7439-92-1	
Nickel	**0.019**	mg/L	0.0025	0.00065	1	05/12/23 12:15	05/16/23 12:25	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/12/23 12:15	05/16/23 12:25	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/12/23 12:15	05/16/23 12:25	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/12/23 12:15	05/16/23 12:25	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/12/23 12:15	05/16/23 12:25	7440-62-2	
Zinc	**0.0072**	mg/L	0.0050	0.0040	1	05/12/23 12:15	05/16/23 12:25	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/15/23 13:03	05/16/23 12:49	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/16/23 07:31	05/16/23 14:22	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/16/23 07:31	05/16/23 14:22	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	94	%.	60-140		1	05/16/23 07:31	05/16/23 14:22	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0**	mg/L	10.0	1.0	1		05/19/23 14:12		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**40.0**	mg/L	10.0	10.0	1		05/15/23 15:39		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/12/23 06:55	05/16/23 16:28		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**29.6**	mg/L	25.0	4.7	1	05/22/23 10:55	05/22/23 16:04		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**8.1**	mg/L	3.0	0.67	1		05/16/23 12:12	16887-00-6	

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Sample: TW-23R **Lab ID: 30586485006** Collected: 05/10/23 09:50 Received: 05/10/23 22:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**2.0**	mg/L	0.10	0.053	1		05/12/23 13:36	14797-55-8	
Nitrogen, NO2 plus NO3	**2.0**	mg/L	0.10	0.053	1		05/12/23 13:36		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/11/23 10:41	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/11/23 10:15	14797-65-0	

Sample: TW-27 **Lab ID: 30586485007** Collected: 05/10/23 11:50 Received: 05/10/23 22:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.95**	mg/L	0.50	0.083	1	05/12/23 11:45	05/15/23 19:27	7440-70-2	
Iron	**0.040J**	mg/L	0.050	0.035	1	05/12/23 11:45	05/15/23 19:27	7439-89-6	
Magnesium	**0.44J**	mg/L	0.50	0.047	1	05/12/23 11:45	05/15/23 19:27	7439-95-4	
Manganese	**0.0066**	mg/L	0.0050	0.0027	1	05/12/23 11:45	05/15/23 19:27	7439-96-5	
Potassium	**0.56**	mg/L	0.50	0.26	1	05/12/23 11:45	05/15/23 19:27	7440-09-7	B
Sodium	**2.5**	mg/L	0.50	0.34	1	05/12/23 11:45	05/15/23 19:27	7440-23-5	B
Total Hardness	**4.2**	mg/L	3.3	0.27	1	05/12/23 11:45	05/15/23 19:27		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.90**	mg/L	0.50	0.083	1	05/15/23 16:45	05/16/23 18:01	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/15/23 16:45	05/16/23 18:01	7439-89-6	
Magnesium, Dissolved	**0.41J**	mg/L	0.50	0.047	1	05/15/23 16:45	05/16/23 18:01	7439-95-4	
Manganese, Dissolved	**0.0059**	mg/L	0.0050	0.0027	1	05/15/23 16:45	05/16/23 18:01	7439-96-5	
Potassium, Dissolved	**0.43J**	mg/L	0.50	0.26	1	05/15/23 16:45	05/16/23 18:01	7440-09-7	
Sodium, Dissolved	**2.4**	mg/L	0.50	0.34	1	05/15/23 16:45	05/16/23 18:01	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/12/23 12:15	05/16/23 12:28	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/12/23 12:15	05/16/23 12:28	7440-38-2	
Barium	**0.0077**	mg/L	0.0025	0.00098	1	05/12/23 12:15	05/16/23 12:28	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	05/12/23 12:15	05/16/23 12:28	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/12/23 12:15	05/16/23 12:28	7440-43-9	
Chromium	**0.0031**	mg/L	0.0025	0.00050	1	05/12/23 12:15	05/16/23 12:28	7440-47-3	
Cobalt	**0.0012J**	mg/L	0.0025	0.00081	1	05/12/23 12:15	05/16/23 12:28	7440-48-4	

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Sample: TW-27 **Lab ID: 30586485007** Collected: 05/10/23 11:50 Received: 05/10/23 22:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Copper	**0.0024J**	mg/L	0.0025	0.00064	1	05/12/23 12:15	05/16/23 12:28	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/12/23 12:15	05/16/23 12:28	7439-92-1	
Nickel	**0.0039**	mg/L	0.0025	0.00065	1	05/12/23 12:15	05/16/23 12:28	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/12/23 12:15	05/16/23 12:28	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/12/23 12:15	05/16/23 12:28	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/12/23 12:15	05/16/23 12:28	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/12/23 12:15	05/16/23 12:28	7440-62-2	
Zinc	**0.031**	mg/L	0.0050	0.0040	1	05/12/23 12:15	05/16/23 12:28	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/15/23 13:03	05/16/23 12:51	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/16/23 07:31	05/16/23 14:35	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/16/23 07:31	05/16/23 14:35	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	96	%.	60-140		1	05/16/23 07:31	05/16/23 14:35	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**1.0J**	mg/L	10.0	1.0	1		05/19/23 14:14		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**17.0**	mg/L	10.0	10.0	1		05/15/23 15:39		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/12/23 06:55	05/16/23 16:34		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**29.6**	mg/L	25.0	4.7	1	05/22/23 10:55	05/22/23 16:04		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**5.1**	mg/L	3.0	0.67	1		05/16/23 12:13	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.060J**	mg/L	0.10	0.053	1		05/12/23 13:37	14797-55-8	
Nitrogen, NO2 plus NO3	**0.060J**	mg/L	0.10	0.053	1		05/12/23 13:37		

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Sample: TW-27 **Lab ID: 30586485007** Collected: 05/10/23 11:50 Received: 05/10/23 22:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/11/23 10:43	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/11/23 10:15	14797-65-0	

Sample: TW-28 **Lab ID: 30586485008** Collected: 05/10/23 13:00 Received: 05/10/23 22:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**6.7**	mg/L	0.50	0.083	1	05/12/23 11:45	05/15/23 19:29	7440-70-2	
Iron	**0.67**	mg/L	0.050	0.035	1	05/12/23 11:45	05/15/23 19:29	7439-89-6	
Magnesium	**3.4**	mg/L	0.50	0.047	1	05/12/23 11:45	05/15/23 19:29	7439-95-4	
Manganese	**0.036**	mg/L	0.0050	0.0027	1	05/12/23 11:45	05/15/23 19:29	7439-96-5	
Potassium	**1.3**	mg/L	0.50	0.26	1	05/12/23 11:45	05/15/23 19:29	7440-09-7	B
Sodium	**23.4**	mg/L	0.50	0.34	1	05/12/23 11:45	05/15/23 19:29	7440-23-5	
Total Hardness	**31.0**	mg/L	3.3	0.27	1	05/12/23 11:45	05/15/23 19:29		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**6.4**	mg/L	0.50	0.083	1	05/15/23 16:45	05/16/23 18:03	7440-70-2	
Iron, Dissolved	**0.090**	mg/L	0.050	0.035	1	05/15/23 16:45	05/16/23 18:03	7439-89-6	
Magnesium, Dissolved	**3.2**	mg/L	0.50	0.047	1	05/15/23 16:45	05/16/23 18:03	7439-95-4	
Manganese, Dissolved	**0.034**	mg/L	0.0050	0.0027	1	05/15/23 16:45	05/16/23 18:03	7439-96-5	
Potassium, Dissolved	**1.1**	mg/L	0.50	0.26	1	05/15/23 16:45	05/16/23 18:03	7440-09-7	
Sodium, Dissolved	**22.9**	mg/L	0.50	0.34	1	05/15/23 16:45	05/16/23 18:03	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/12/23 12:15	05/16/23 12:31	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/12/23 12:15	05/16/23 12:31	7440-38-2	
Barium	**0.077**	mg/L	0.0025	0.00098	1	05/12/23 12:15	05/16/23 12:31	7440-39-3	
Beryllium	**0.00020J**	mg/L	0.00050	0.00010	1	05/12/23 12:15	05/16/23 12:31	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/12/23 12:15	05/16/23 12:31	7440-43-9	
Chromium	**0.025**	mg/L	0.0025	0.00050	1	05/12/23 12:15	05/16/23 12:31	7440-47-3	
Cobalt	**0.019**	mg/L	0.0025	0.00081	1	05/12/23 12:15	05/16/23 12:31	7440-48-4	
Copper	**0.0043**	mg/L	0.0025	0.00064	1	05/12/23 12:15	05/16/23 12:31	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/12/23 12:15	05/16/23 12:31	7439-92-1	
Nickel	**0.027**	mg/L	0.0025	0.00065	1	05/12/23 12:15	05/16/23 12:31	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/12/23 12:15	05/16/23 12:31	7782-49-2	
Silver	**0.00082J**	mg/L	0.0025	0.00053	1	05/12/23 12:15	05/16/23 12:31	7440-22-4	

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Sample: TW-28 **Lab ID: 30586485008** Collected: 05/10/23 13:00 Received: 05/10/23 22:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/12/23 12:15	05/16/23 12:31	7440-28-0	
Vanadium	**0.0018J**	mg/L	0.0025	0.0012	1	05/12/23 12:15	05/16/23 12:31	7440-62-2	
Zinc	**0.024**	mg/L	0.0050	0.0040	1	05/12/23 12:15	05/16/23 12:31	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/15/23 13:03	05/16/23 12:58	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/16/23 07:31	05/16/23 14:48	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/16/23 07:31	05/16/23 14:48	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	96	%.	60-140		1	05/16/23 07:31	05/16/23 14:48	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/19/23 14:16		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**114**	mg/L	10.0	10.0	1		05/15/23 15:39		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/12/23 06:55	05/16/23 16:36		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**34.2**	mg/L	25.0	4.7	1	05/22/23 10:55	05/22/23 16:06		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**56.4**	mg/L	3.0	0.67	1		05/16/23 12:14	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.077J**	mg/L	0.10	0.053	1		05/12/23 13:39	14797-55-8	
Nitrogen, NO2 plus NO3	**0.081J**	mg/L	0.10	0.053	1		05/12/23 13:39		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/11/23 10:43	14808-79-8	

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Sample: TW-28 **Lab ID: 30586485008** Collected: 05/10/23 13:00 Received: 05/10/23 22:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/11/23 10:16	14797-65-0	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30586485

QC Batch: 587785
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30586485001, 30586485002, 30586485003, 30586485004, 30586485005, 30586485006, 30586485007, 30586485008

METHOD BLANK: 2855972
Matrix: Water
Associated Lab Samples: 30586485001, 30586485002, 30586485003, 30586485004, 30586485005, 30586485006, 30586485007, 30586485008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	05/15/23 18:47	
Iron	mg/L	0.050 U	0.050	0.035	05/15/23 18:47	
Magnesium	mg/L	0.50 U	0.50	0.047	05/15/23 18:47	
Manganese	mg/L	0.0050 U	0.0050	0.0027	05/15/23 18:47	
Potassium	mg/L	0.40J	0.50	0.26	05/15/23 18:47	
Sodium	mg/L	0.40J	0.50	0.34	05/15/23 18:47	

LABORATORY CONTROL SAMPLE: 2855973

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	41.1	103	80-120	
Iron	mg/L	2	2.2	109	80-120	
Magnesium	mg/L	20	21.4	107	80-120	
Manganese	mg/L	2	2.1	107	80-120	
Potassium	mg/L	20	21.0	105	80-120	
Sodium	mg/L	20	20.7	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2855974 2855975

Parameter	Units	30585805003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	113000 ug/L	40	40	149	148	90	89	80-120	0	20	
Iron	mg/L	1.1	2	2	3.2	3.3	106	107	80-120	1	20	
Magnesium	mg/L	14700 ug/L	20	20	35.5	35.4	104	104	80-120	0	20	
Manganese	mg/L	0.12	2	2	2.2	2.2	106	105	80-120	1	20	
Potassium	mg/L	1830 ug/L	20	20	23.6	23.5	109	108	80-120	1	20	
Sodium	mg/L	10200 ug/L	20	20	30.8	30.7	103	102	80-120	0	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30586485

QC Batch: 588238
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30586485001, 30586485002, 30586485003, 30586485004, 30586485005, 30586485006, 30586485007, 30586485008

METHOD BLANK: 2858202 Matrix: Water
Associated Lab Samples: 30586485001, 30586485002, 30586485003, 30586485004, 30586485005, 30586485006, 30586485007, 30586485008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	05/16/23 16:51	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	05/16/23 16:51	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	05/16/23 16:51	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	05/16/23 16:51	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	05/16/23 16:51	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	05/16/23 16:51	

LABORATORY CONTROL SAMPLE: 2858203

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	38.3	96	80-120	
Iron, Dissolved	mg/L	2	2.0	100	80-120	
Magnesium, Dissolved	mg/L	20	19.2	96	80-120	
Manganese, Dissolved	mg/L	2	2.0	100	80-120	
Potassium, Dissolved	mg/L	20	19.2	96	80-120	
Sodium, Dissolved	mg/L	20	19.2	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2858204 2858205

Parameter	Units	30582402001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	68500 ug/L	40	40	106	109	94	101	80-120	3	20	
Iron, Dissolved	mg/L	0.050 U	2	2	2.0	2.1	100	104	80-120	3	20	
Magnesium, Dissolved	mg/L	8220 ug/L	20	20	27.5	28.5	96	101	80-120	4	20	
Manganese, Dissolved	mg/L	0.0092	2	2	2.0	2.1	100	104	80-120	3	20	
Potassium, Dissolved	mg/L	1220 ug/L	20	20	21.2	21.7	100	103	80-120	2	20	
Sodium, Dissolved	mg/L	6650 ug/L	20	20	26.4	27.1	99	102	80-120	3	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30586485

QC Batch: 587813
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30586485001, 30586485002, 30586485003, 30586485004, 30586485005, 30586485006, 30586485007, 30586485008

METHOD BLANK: 2856109
Matrix: Water
Associated Lab Samples: 30586485001, 30586485002, 30586485003, 30586485004, 30586485005, 30586485006, 30586485007, 30586485008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00030	05/16/23 11:46	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	05/16/23 11:46	
Barium	mg/L	0.0025 U	0.0025	0.00098	05/16/23 11:46	
Beryllium	mg/L	0.00050 U	0.00050	0.00010	05/16/23 11:46	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	05/16/23 11:46	
Chromium	mg/L	0.0025 U	0.0025	0.00050	05/16/23 11:46	
Cobalt	mg/L	0.0025 U	0.0025	0.00081	05/16/23 11:46	
Copper	mg/L	0.0025 U	0.0025	0.00064	05/16/23 11:46	
Lead	mg/L	0.00050 U	0.00050	0.00025	05/16/23 11:46	
Nickel	mg/L	0.0025 U	0.0025	0.00065	05/16/23 11:46	
Selenium	mg/L	0.0025 U	0.0025	0.00084	05/16/23 11:46	
Silver	mg/L	0.0025 U	0.0025	0.00053	05/16/23 11:46	
Thallium	mg/L	0.00050 U	0.00050	0.000081	05/16/23 11:46	
Vanadium	mg/L	0.0025 U	0.0025	0.0012	05/16/23 11:46	
Zinc	mg/L	0.0050 U	0.0050	0.0040	05/16/23 11:46	

LABORATORY CONTROL SAMPLE: 2856110

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.022	110	80-120	
Arsenic	mg/L	0.1	0.11	106	80-120	
Barium	mg/L	0.1	0.10	104	80-120	
Beryllium	mg/L	0.02	0.021	104	80-120	
Cadmium	mg/L	0.02	0.020	102	80-120	
Chromium	mg/L	0.1	0.11	110	80-120	
Cobalt	mg/L	0.1	0.11	110	80-120	
Copper	mg/L	0.1	0.11	111	80-120	
Lead	mg/L	0.02	0.021	105	80-120	
Nickel	mg/L	0.1	0.11	110	80-120	
Selenium	mg/L	0.1	0.10	103	80-120	
Silver	mg/L	0.1	0.11	106	80-120	
Thallium	mg/L	0.02	0.021	105	80-120	
Vanadium	mg/L	0.1	0.11	109	80-120	
Zinc	mg/L	0.2	0.21	106	80-120	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30586485

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2856111 2856112

Parameter	Units	30586485002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00047J	0.02	0.02	0.022	0.022	107	108	75-125	1	20	
Arsenic	mg/L	0.0025 U	0.1	0.1	0.10	0.10	105	105	75-125	0	20	
Barium	mg/L	0.069	0.1	0.1	0.17	0.17	104	104	75-125	0	20	
Beryllium	mg/L	0.00026J	0.02	0.02	0.021	0.021	104	106	75-125	2	20	
Cadmium	mg/L	0.00050 U	0.02	0.02	0.020	0.021	102	103	75-125	1	20	
Chromium	mg/L	0.0026	0.1	0.1	0.11	0.11	110	110	75-125	0	20	
Cobalt	mg/L	0.0073	0.1	0.1	0.12	0.12	110	110	75-125	0	20	
Copper	mg/L	0.0028	0.1	0.1	0.11	0.11	110	109	75-125	1	20	
Lead	mg/L	0.00050 U	0.02	0.02	0.021	0.021	104	105	75-125	1	20	
Nickel	mg/L	0.0055	0.1	0.1	0.12	0.12	110	110	75-125	1	20	
Selenium	mg/L	0.0025 U	0.1	0.1	0.099	0.10	99	100	75-125	1	20	
Silver	mg/L	0.0025 U	0.1	0.1	0.10	0.10	104	104	75-125	0	20	
Thallium	mg/L	0.00050 U	0.02	0.02	0.013	0.014	66	68	75-125	2	20	M1
Vanadium	mg/L	0.0025 U	0.1	0.1	0.11	0.11	109	109	75-125	1	20	
Zinc	mg/L	0.0099	0.2	0.2	0.22	0.22	105	106	75-125	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30586485

QC Batch: 588123
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30586485001, 30586485002, 30586485003, 30586485004, 30586485005, 30586485006, 30586485007, 30586485008

METHOD BLANK: 2857695
Matrix: Water
Associated Lab Samples: 30586485001, 30586485002, 30586485003, 30586485004, 30586485005, 30586485006, 30586485007, 30586485008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	05/16/23 12:30	

LABORATORY CONTROL SAMPLE: 2857696

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.0092	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2857697 2857698

Parameter	Units	30587048006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.011	0.01	0.01	0.010	0.00020 U	-2	-105	80-120		20	M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30586485

QC Batch: 588286
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30586485001, 30586485002, 30586485003, 30586485004, 30586485005, 30586485006, 30586485007, 30586485008

METHOD BLANK: 2858640 Matrix: Water
Associated Lab Samples: 30586485001, 30586485002, 30586485003, 30586485004, 30586485005, 30586485006, 30586485007, 30586485008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	05/16/23 12:28	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	05/16/23 12:28	
1,1,1,2-Tetrachloroethane (S)	%.	87	60-140		05/16/23 12:28	

LABORATORY CONTROL SAMPLE: 2858641

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.22	87	85-115	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.23	90	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			91	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2858642 2858643

Parameter	Units	30586485001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.41	0.4	0.37	0.37	90	92	60-140	1	25	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.41	0.4	0.37	0.37	89	91	60-140	0	25	
1,1,1,2-Tetrachloroethane (S)	%.						88	91	60-140			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30586485

QC Batch: 589325
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30586485001, 30586485002, 30586485003, 30586485004, 30586485005, 30586485006, 30586485007, 30586485008

METHOD BLANK: 2863969
Matrix: Water
Associated Lab Samples: 30586485001, 30586485002, 30586485003, 30586485004, 30586485005, 30586485006, 30586485007, 30586485008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	05/19/23 13:32	

LABORATORY CONTROL SAMPLE: 2863970

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	22.0	110	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2863971 2863972

Parameter	Units	30588729001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	32.0	50	50	80.0	82.0	96	100	85-115	2	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30586485

QC Batch: 588056
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30586485001, 30586485002, 30586485003, 30586485004, 30586485005, 30586485006, 30586485007, 30586485008

METHOD BLANK: 2857442 Matrix: Water
Associated Lab Samples: 30586485001, 30586485002, 30586485003, 30586485004, 30586485005, 30586485006, 30586485007, 30586485008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	05/15/23 15:39	

LABORATORY CONTROL SAMPLE: 2857443

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	980	98	85-115	

SAMPLE DUPLICATE: 2857444

Parameter	Units	30585913001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	730	743	2	5	

SAMPLE DUPLICATE: 2857445

Parameter	Units	30586485007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	17.0	17.0	0	5	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30586485

QC Batch: 587694
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30586485001, 30586485002, 30586485003, 30586485004, 30586485005, 30586485006, 30586485007, 30586485008

METHOD BLANK: 2855621
Matrix: Water
Associated Lab Samples: 30586485001, 30586485002, 30586485003, 30586485004, 30586485005, 30586485006, 30586485007, 30586485008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	05/16/23 15:53	

LABORATORY CONTROL SAMPLE: 2855622

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.1	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2855623 2855624

Parameter	Units	30586230001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	ND	4	4	4.4	4.4	110	110	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2855625 2855626

Parameter	Units	30586485006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.2	4.2	105	106	90-110	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30586485

QC Batch: 589652
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30586485001, 30586485002, 30586485003, 30586485004, 30586485005, 30586485006, 30586485007, 30586485008

METHOD BLANK: 2865684 Matrix: Water
Associated Lab Samples: 30586485001, 30586485002, 30586485003, 30586485004, 30586485005, 30586485006, 30586485007, 30586485008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	05/22/23 16:01	

LABORATORY CONTROL SAMPLE: 2865685

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	319	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2865686 2865687

Parameter	Units	30585905001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	29.6	150	150	189	191	106	108	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2865688 2865689

Parameter	Units	30584816011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	45.6	150	150	203	200	105	103	90-110	1	10	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30586485

QC Batch: 588008
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30586485001, 30586485002

METHOD BLANK: 2857303
Matrix: Water
Associated Lab Samples: 30586485001, 30586485002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/16/23 11:41	

LABORATORY CONTROL SAMPLE: 2857304

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.3	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2857305 2857306

Parameter	Units	30586400001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	ND	20	20	22.8	22.5	105	104	85-115	1	20	

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REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30586485

QC Batch: 588009
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30586485003, 30586485004, 30586485005, 30586485006, 30586485007, 30586485008

METHOD BLANK: 2857307 Matrix: Water
Associated Lab Samples: 30586485003, 30586485004, 30586485005, 30586485006, 30586485007, 30586485008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/16/23 12:06	

LABORATORY CONTROL SAMPLE: 2857308

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.7	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2857309 2857310

Parameter	Units	30586485003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	24.0	20	20	43.6	44.0	98	100	85-115	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30586485

QC Batch: 587696 | Analysis Method: SM 4500NO3-F-2016
QC Batch Method: SM 4500NO3-F-2016 | Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30586485001, 30586485002, 30586485003, 30586485004, 30586485005, 30586485006, 30586485007, 30586485008

METHOD BLANK: 2855631 | Matrix: Water
Associated Lab Samples: 30586485001, 30586485002, 30586485003, 30586485004, 30586485005, 30586485006, 30586485007, 30586485008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	05/12/23 13:09	

LABORATORY CONTROL SAMPLE: 2855632

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	3.8	96	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2855633 2855634

Parameter	Units	30586299002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	5.5	5	5	10.7	10.6	104	103	85-115	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30586485

QC Batch: 587420
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30586485001, 30586485002, 30586485003, 30586485004, 30586485005, 30586485006, 30586485007, 30586485008

METHOD BLANK: 2853942
Matrix: Water
Associated Lab Samples: 30586485001, 30586485002, 30586485003, 30586485004, 30586485005, 30586485006, 30586485007, 30586485008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	05/11/23 10:19	

LABORATORY CONTROL SAMPLE: 2853943

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	29.8	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2853944 2853945

Parameter	Units	30585773001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	29400	20000	20000	51100	50000	109	103	85-115	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2854181 2854182

Parameter	Units	30586485001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.0 U	20	20	18.5	19.2	85	89	85-115	4	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30586485

QC Batch: 587417 | Analysis Method: SM 4500NO2-B-2011
QC Batch Method: SM 4500NO2-B-2011 | Analysis Description: SM4500-NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30586485001, 30586485002, 30586485003, 30586485004, 30586485005, 30586485006, 30586485007, 30586485008

METHOD BLANK: 2853934 | Matrix: Water
Associated Lab Samples: 30586485001, 30586485002, 30586485003, 30586485004, 30586485005, 30586485006, 30586485007, 30586485008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	05/11/23 10:10	

LABORATORY CONTROL SAMPLE: 2853935

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.10	100	90-110	

MATRIX SPIKE SAMPLE: 2853937

Parameter	Units	30586485001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.010 U	0.1	0.12	117	85-115	MH

SAMPLE DUPLICATE: 2853936

Parameter	Units	30586485001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010 U		20	

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QUALIFIERS

Project: MLF-SPRING-2023
Pace Project No.: 30586485

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30586485001
[1] Sample pH for 8011 is 6

Sample: 30586485002
[1] Sample pH for 8011 is 5

Sample: 30586485003
[1] Sample pH for 8011 is 6

Sample: 30586485004
[1] Sample pH for 8011 is 5

Sample: 30586485005
[1] Sample pH for 8011 is 6

Sample: 30586485006
[1] Sample pH for 8011 is 5

Sample: 30586485007
[1] Sample pH for 8011 is 6

Sample: 30586485008
[1] Sample pH for 8011 is 5

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QUALIFIERS

Project: MLF-SPRING-2023
Pace Project No.: 30586485

ANALYTE QUALIFIERS

1c	Alkalinity TV: 0.00 mg/L
2c	Alkalinity TV: 1.00 mg/L
3c	Alkalinity TV: 2.00 mg/L
B	Analyte was detected in the associated method blank.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30586485001	**TW-4**	EPA 3010A	587785	EPA 6010D	588202
30586485002	**TW-4B**	EPA 3010A	587785	EPA 6010D	588202
30586485003	**TW-22**	EPA 3010A	587785	EPA 6010D	588202
30586485004	**TW-22A**	EPA 3010A	587785	EPA 6010D	588202
30586485005	**TW-22B**	EPA 3010A	587785	EPA 6010D	588202
30586485006	**TW-23R**	EPA 3010A	587785	EPA 6010D	588202
30586485007	**TW-27**	EPA 3010A	587785	EPA 6010D	588202
30586485008	**TW-28**	EPA 3010A	587785	EPA 6010D	588202
30586485001	**TW-4**	EPA 3010A	588238	EPA 6010D	588468
30586485002	**TW-4B**	EPA 3010A	588238	EPA 6010D	588468
30586485003	**TW-22**	EPA 3010A	588238	EPA 6010D	588468
30586485004	**TW-22A**	EPA 3010A	588238	EPA 6010D	588468
30586485005	**TW-22B**	EPA 3010A	588238	EPA 6010D	588468
30586485006	**TW-23R**	EPA 3010A	588238	EPA 6010D	588468
30586485007	**TW-27**	EPA 3010A	588238	EPA 6010D	588468
30586485008	**TW-28**	EPA 3010A	588238	EPA 6010D	588468
30586485001	**TW-4**	EPA 3010A	587813	EPA 6020B	588377
30586485002	**TW-4B**	EPA 3010A	587813	EPA 6020B	588377
30586485003	**TW-22**	EPA 3010A	587813	EPA 6020B	588377
30586485004	**TW-22A**	EPA 3010A	587813	EPA 6020B	588377
30586485005	**TW-22B**	EPA 3010A	587813	EPA 6020B	588377
30586485006	**TW-23R**	EPA 3010A	587813	EPA 6020B	588377
30586485007	**TW-27**	EPA 3010A	587813	EPA 6020B	588377
30586485008	**TW-28**	EPA 3010A	587813	EPA 6020B	588377
30586485001	**TW-4**	EPA 7470A	588123	EPA 7470A	588409
30586485002	**TW-4B**	EPA 7470A	588123	EPA 7470A	588409
30586485003	**TW-22**	EPA 7470A	588123	EPA 7470A	588409
30586485004	**TW-22A**	EPA 7470A	588123	EPA 7470A	588409
30586485005	**TW-22B**	EPA 7470A	588123	EPA 7470A	588409
30586485006	**TW-23R**	EPA 7470A	588123	EPA 7470A	588409
30586485007	**TW-27**	EPA 7470A	588123	EPA 7470A	588409
30586485008	**TW-28**	EPA 7470A	588123	EPA 7470A	588409
30586485001	**TW-4**	EPA 8011	588286	EPA 8011	588380
30586485002	**TW-4B**	EPA 8011	588286	EPA 8011	588380
30586485003	**TW-22**	EPA 8011	588286	EPA 8011	588380
30586485004	**TW-22A**	EPA 8011	588286	EPA 8011	588380
30586485005	**TW-22B**	EPA 8011	588286	EPA 8011	588380
30586485006	**TW-23R**	EPA 8011	588286	EPA 8011	588380
30586485007	**TW-27**	EPA 8011	588286	EPA 8011	588380
30586485008	**TW-28**	EPA 8011	588286	EPA 8011	588380
30586485001	**TW-4**	SM 2320B-2011	589325		
30586485002	**TW-4B**	SM 2320B-2011	589325		
30586485003	**TW-22**	SM 2320B-2011	589325		
30586485004	**TW-22A**	SM 2320B-2011	589325		
30586485005	**TW-22B**	SM 2320B-2011	589325		
30586485006	**TW-23R**	SM 2320B-2011	589325		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30586485007	**TW-27**	SM 2320B-2011	589325		
30586485008	**TW-28**	SM 2320B-2011	589325		
30586485001	**TW-4**	SM 2540C-2015	588056		
30586485002	**TW-4B**	SM 2540C-2015	588056		
30586485003	**TW-22**	SM 2540C-2015	588056		
30586485004	**TW-22A**	SM 2540C-2015	588056		
30586485005	**TW-22B**	SM 2540C-2015	588056		
30586485006	**TW-23R**	SM 2540C-2015	588056		
30586485007	**TW-27**	SM 2540C-2015	588056		
30586485008	**TW-28**	SM 2540C-2015	588056		
30586485001	**TW-4**	EPA 350.1	587694	EPA 350.1	587703
30586485002	**TW-4B**	EPA 350.1	587694	EPA 350.1	587703
30586485003	**TW-22**	EPA 350.1	587694	EPA 350.1	587703
30586485004	**TW-22A**	EPA 350.1	587694	EPA 350.1	587703
30586485005	**TW-22B**	EPA 350.1	587694	EPA 350.1	587703
30586485006	**TW-23R**	EPA 350.1	587694	EPA 350.1	587703
30586485007	**TW-27**	EPA 350.1	587694	EPA 350.1	587703
30586485008	**TW-28**	EPA 350.1	587694	EPA 350.1	587703
30586485001	**TW-4**	EPA 410.4	589652	EPA 410.4	589745
30586485002	**TW-4B**	EPA 410.4	589652	EPA 410.4	589745
30586485003	**TW-22**	EPA 410.4	589652	EPA 410.4	589745
30586485004	**TW-22A**	EPA 410.4	589652	EPA 410.4	589745
30586485005	**TW-22B**	EPA 410.4	589652	EPA 410.4	589745
30586485006	**TW-23R**	EPA 410.4	589652	EPA 410.4	589745
30586485007	**TW-27**	EPA 410.4	589652	EPA 410.4	589745
30586485008	**TW-28**	EPA 410.4	589652	EPA 410.4	589745
30586485001	**TW-4**	SM 4500-Cl-E-2011	588008		
30586485002	**TW-4B**	SM 4500-Cl-E-2011	588008		
30586485003	**TW-22**	SM 4500-Cl-E-2011	588009		
30586485004	**TW-22A**	SM 4500-Cl-E-2011	588009		
30586485005	**TW-22B**	SM 4500-Cl-E-2011	588009		
30586485006	**TW-23R**	SM 4500-Cl-E-2011	588009		
30586485007	**TW-27**	SM 4500-Cl-E-2011	588009		
30586485008	**TW-28**	SM 4500-Cl-E-2011	588009		
30586485001	**TW-4**	SM 4500NO3-F-2016	587696		
30586485002	**TW-4B**	SM 4500NO3-F-2016	587696		
30586485003	**TW-22**	SM 4500NO3-F-2016	587696		
30586485004	**TW-22A**	SM 4500NO3-F-2016	587696		
30586485005	**TW-22B**	SM 4500NO3-F-2016	587696		
30586485006	**TW-23R**	SM 4500NO3-F-2016	587696		
30586485007	**TW-27**	SM 4500NO3-F-2016	587696		
30586485008	**TW-28**	SM 4500NO3-F-2016	587696		
30586485001	**TW-4**	EPA 9038	587420		
30586485002	**TW-4B**	EPA 9038	587420		
30586485003	**TW-22**	EPA 9038	587420		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING-2023
Pace Project No.: 30586485

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30586485004	**TW-22A**	EPA 9038	587420		
30586485005	**TW-22B**	EPA 9038	587420		
30586485006	**TW-23R**	EPA 9038	587420		
30586485007	**TW-27**	EPA 9038	587420		
30586485008	**TW-28**	EPA 9038	587420		
30586485001	**TW-4**	SM 4500NO2-B-2011	587417		
30586485002	**TW-4B**	SM 4500NO2-B-2011	587417		
30586485003	**TW-22**	SM 4500NO2-B-2011	587417		
30586485004	**TW-22A**	SM 4500NO2-B-2011	587417		
30586485005	**TW-22B**	SM 4500NO2-B-2011	587417		
30586485006	**TW-23R**	SM 4500NO2-B-2011	587417		
30586485007	**TW-27**	SM 4500NO2-B-2011	587417		
30586485008	**TW-28**	SM 4500NO2-B-2011	587417		

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WO#: 30586485

EMA

207 East Sixth St

30586485

ND ASSESSMENT, LLC

50 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF-SPRING 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater
SW = Surface Water
SO = Soil
LE = Leachate
DW = Drinking Water
Other _____
QC = Quality Control

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	TOTAL METALS ①	TOTAL + DISS. METALS ②	ALKALINITY, TDS	HARDNESS, Cl	AMMONIA	NITRATE	SO4, COD	METHOD 8011 - DBCP + EDB			
001	1 TW-4	7	5.10.23	1115	✓		GW	✓	✓	✓	✓	✓	✓	✓	✓			
002	2 TW-4B	↓	5.10.23	1040	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓			
003	3 TW-22	↓	5.9.23	1615	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓			
004	4 TW-22A	↓	5.10.23	900	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓			
005	5 TW-22B	↓	5.9.23	1540	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓			
006	6 TW-23R	↓	5.10.23	950	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓			
007	7 TW-27	↓	5.10.23	1150	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓			
008	8 TW-28	↓	5.10.23	1300	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓			
	9																	
	10																	
	11																	
	12																	

	Signature	Date	Time	Comments
Relinquished by	AABrown	5.10.23		① 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn
Received by	TB/Pace	5.10.23	1418	① 7470 - Hg
Relinquished by	TB/Pace	5-10-23	1900	② 6010 - Ca, Fe, Mg, Mn, K, Na
Received by	RDS PACE	51023	1910	PACE - WU - METALS
Relinquished by	RDS PACE	51023	2240	PACE - G-BULK - WET CHEM + 8011
Received by	[illegible] PACE	5/10/23	2240	LEVEL 2 REPORT

Cooler Temp on Arrival: 2.8, 2.9 Deg. C

Rev. Aug. 2018

DC#_Title: ENV-FRM-GBUR-0088 v04_Sample Condition Upon Receipt-Pittsburgh

Effective Date: 02/03/2023

WO#: 30586485

PM: ARG Due Date: 05/25/23

CLIENT: ENV MONITOR

Client Name: EMA

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking Number:

Examined By	BL
Labeled By	BL
Temped By	BL

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

Thermometer Used: 17 **Type of Ice:** (Wet) Blue None

Cooler Temperature: Observed Temp 2.4 / 2.5 °C Correction Factor: +0.4 °C Final Temp: 2.8 / 2.9 °C

Temp should be above freezing to 6°C

pH paper Lot# 103121 D.P.D. Residual Chlorine Lot #

Comments:	Yes	No	NA	
Chain of Custody Present	✓			1.
Chain of Custody Filled Out:	✓			2.
-Were client corrections present on COC		✓		No corrections
Chain of Custody Relinquished	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC:	✓			5.
-Includes date/time/ID	yes			
Matrix:	WT			
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):	✓			7. Nitrite (24 Hrs > on samples 003 & 005 Nitrites)
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous samples field filtered:			✓	13.
Organic Samples checked for dechlorination			✓	14:
Filtered volume received for dissolved tests:			✓	15:
All containers checked for preservation:	✓			16.
exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix				
All containers meet method preservation requirements:	✓			Initial when completed BL / Date/Time of Preservation / Lot# of added Preservative
8260C/D: Headspace in VOA Vials (> 6mm)			✓	17.
624.1: Headspace in VOA Vials (0mm)			✓	18.
Trip Blank Present:		✓		Trip blank custody seal present? YES or (NO)
Rad Samples Screened <0.5 mrem/hr.	✓			Initial when completed BL / Date: 5/11/23 / Survey Meter SN: 1563

Comments: 8011: Headspace in 1 of 3 VG9Ts for sample 004

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

LIMS30 Internal Shipping Manifest

COOLER 23

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	23	Cooler temp (rcvd) °C	-.7
Packaged on Ice (Y/N)	Yes	Correction Factor	.0
Shipping Method	Courier	Cooler temp (corr) °C	-.7
Tracking #	N/A	IR GUN ID	TM14
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

7

	Signature	Location	Date	Time
Relinquished	[signature]	GBUR	5-11-23	2100
Received	[signature]	BEAV	5-12-23	530
Relinquished				
Received				
Relinquished				
Received				

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	5/11/2023	30586963002 BP3N1/1	BP3N	30586963002	30586963
MF	5/11/2023	30586963001 BP3N1/1	BP3N	30586963001	30586963
MF	5/11/2023	30586563002 BP3N1/2	BP3N	30586563002	30586563
MF	5/11/2023	30586563002 BP3N2/2	BP3N	30586563002	30586563
MF	5/11/2023	30586616001 BP3N1/1	BP3N	30586616001	30586616
MF	5/11/2023	30586485006 BP3N1/2	BP3N	30586485006	30586485
MF	5/11/2023	30586485007 BP3N2/2	BP3N	30586485007	30586485
MF	5/11/2023	30586485005 BP3N2/2	BP3N	30586485005	30586485
MF	5/11/2023	30586485004 BP3N1/2	BP3N	30586485004	30586485
MF	5/11/2023	30586485003 BP3N1/2	BP3N	30586485003	30586485
MF	5/11/2023	30586485002 BP3N2/2	BP3N	30586485002	30586485
MF	5/11/2023	30586485002 BP3N1/2	BP3N	30586485002	30586485
MF	5/11/2023	30586485001 BP3N2/2	BP3N	30586485001	30586485
MF	5/11/2023	30586485008 BP3N1/2	BP3N	30586485008	30586485
MF	5/11/2023	30586485007 BP3N1/2	BP3N	30586485007	30586485
MF	5/11/2023	30586485006 BP3N2/2	BP3N	30586485006	30586485
MF	5/11/2023	30586485008 BP3N2/2	BP3N	30586485008	30586485
MF	5/11/2023	30586485005 BP3N1/2	BP3N	30586485005	30586485
MF	5/11/2023	30586485004 BP3N2/2	BP3N	30586485004	30586485
MF	5/11/2023	30586485001 BP3N1/2	BP3N	30586485001	30586485
MF	5/11/2023	30586485003 BP3N2/2	BP3N	30586485003	30586485
MF	5/11/2023	30586969001 BP3N1/1	BP3N	30586969001	30586969
MF	5/11/2023	30586971001 WGFU1/1	WGFU	30586971001	30586971
MF	5/11/2023	30586970001 WGFU1/1	WGFU	30586970001	30586970
MF	5/11/2023	30586972001 AG1H1/1	AG1H	30586972001	30586972
MF	5/11/2023	30586972001 BP3N1/1	BP3N	30586972001	30586972

DC#_Title: ENV-FRM-BEAV-0058 v03_Pace WV Sample Condition Upon Receipt (SCUR)
Effective Date: 2/8/2023

LIMS30 Lab Sample Condition Upon Receipt (West Virginia)

Put label here prior to scanning 5

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☑ 3rd Party Courier ☐ Pace ☐ Other _____

Tracking #: _____

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used TM14 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** -.7 °C Correction Factor: .0 °C Final Temp: -.7 °C

Thermal Preservation Requirement Met Yes ☑ No ☐

pH paper Lot#	Date and Initials of person examining contents
206722	CDW 5-12-23

	Yes	No	N/A	
Chain of Custody Present:				1.
Chain of Custody Filled Out:				2. Manifest
Chain of Custody Relinquished:				3.
Sampler Name & Signature on COC:				4.
Sample Labels match COC: -Includes date/time/ID Matrix:				5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered:			✓	13.
-pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓	
Filtered volume received for Dissolved tests:	✓			14.
All containers have been checked for chemical preservation: exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix	✓			15.
All containers meet method/chemical preservation requirements:	✓			Initial when completed: CDW Date: 5-12-23
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present:			✓	17.
				Initial when completed: CDW Date: 5-12-23

Comments: _____

*PM review is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

May 31, 2023

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-SPRING-2023
Pace Project No.: 30587048

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on May 11, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

(Greensburg, PA) - Revision X - This report replaces the May, 24, 2023 report. This project was revised on May, 31, 2023 To retest Mercury.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alaina Deitch

Alaina R. Deitch
alaina.deitch@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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Pace Analytical Services, LLC
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Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Florida: Cert E871149 SEKS WET
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver

225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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SAMPLE SUMMARY

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30587048001	**TW-1**	Water	05/11/23 09:50	05/11/23 22:30
30587048002	**TW-2**	Water	05/11/23 13:05	05/11/23 22:30
30587048003	**TW-2A**	Water	05/11/23 12:30	05/11/23 22:30
30587048004	**TW-3**	Water	05/11/23 14:30	05/11/23 22:30
30587048005	**TW-3A**	Water	05/11/23 13:50	05/11/23 22:30
30587048006	**TW-29**	Water	05/11/23 11:30	05/11/23 22:30
30587048007	**TW-30**	Water	05/11/23 10:40	05/11/23 22:30

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30587048001	**TW-1**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	JLM	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	JLM	1	PASI-PA
30587048002	**TW-2**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	JLM	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	JLM	1	PASI-PA
30587048003	**TW-2A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	JLM	2	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	JLM	1	PASI-PA
30587048004	**TW-3**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	JLM	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	JLM	1	PASI-PA
30587048005	**TW-3A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	JLM	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	JLM	1	PASI-PA
30587048006	**TW-29**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	JLM	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	JLM	1	PASI-PA
30587048007	**TW-30**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	JLM	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		SM 4500NO3-F-2016	JLM	2	PASI-PA
		EPA 9038	PAS	1	PASI-PA
		SM 4500NO2-B-2011	JLM	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Date: May 31, 2023

TW-1 (Lab ID: 30587048001)

- Sample pH for 8011 is 6

TW-2 (Lab ID: 30587048002)

- Sample pH for 8011 is 6

TW-2A (Lab ID: 30587048003)

- Sample pH for 8011 is 6

TW-3 (Lab ID: 30587048004)

- Sample pH for 8011 is 6

TW-3A (Lab ID: 30587048005)

- Sample pH for 8011 is 6

TW-29 (Lab ID: 30587048006)

- Sample pH for 8011 is 5

TW-30 (Lab ID: 30587048007)

- Sample pH for 8011 is 6

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: May 31, 2023

General Information:
7 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: May 31, 2023

General Information:
7 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: May 31, 2023

General Information:
7 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 588356

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30585905003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2858908)
  - Thallium
- MSD (Lab ID: 2858909)
  - Thallium

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: May 31, 2023

General Information:
7 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 588123

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30587048006

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2857697)
  - Mercury

QC Batch: 591281

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30591126001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2873347)
  - Mercury
- MSD (Lab ID: 2873348)

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: May 31, 2023

QC Batch: 591281

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30591126001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- Mercury

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: May 31, 2023

General Information:
7 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: May 31, 2023

General Information:
7 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 590117

1c: Alkalinity TV: 0.00 mg/L
- TW-29 (Lab ID: 30587048006)
  - Alkalinity,Total (CaCO3 pH4.5)

2c: Alkalinity TV: 2.00 mg/L
- TW-30 (Lab ID: 30587048007)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: May 31, 2023

General Information:
7 samples were analyzed for SM 2540C-2015 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: May 31, 2023

General Information:
7 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: May 31, 2023

General Information:
7 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: May 31, 2023

General Information:
7 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Method: **SM 4500NO3-F-2016**
Description: SM4500NO3-F, NO3-NO2
Client: Environmental Monitoring and Assessment LLC
Date: May 31, 2023

General Information:
7 samples were analyzed for SM 4500NO3-F-2016 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: May 31, 2023

General Information:
7 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 588184

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30587048001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MSD (Lab ID: 2857994)
  - Sulfate

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Method: **SM 4500NO2-B-2011**
Description: SM4500-NO2-B, Nitrite, unpres
Client: Environmental Monitoring and Assessment LLC
Date: May 31, 2023

General Information:
7 samples were analyzed for SM 4500NO2-B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Sample: TW-1 **Lab ID: 30587048001** Collected: 05/11/23 09:50 Received: 05/11/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**15.1**	mg/L	0.50	0.083	1	05/15/23 15:20	05/16/23 16:28	7440-70-2	
Iron	**32.1**	mg/L	0.050	0.035	1	05/15/23 15:20	05/16/23 16:28	7439-89-6	
Magnesium	**1.4**	mg/L	0.50	0.047	1	05/15/23 15:20	05/16/23 16:28	7439-95-4	
Manganese	**0.20**	mg/L	0.0050	0.0027	1	05/15/23 15:20	05/16/23 16:28	7439-96-5	
Potassium	**0.80**	mg/L	0.50	0.26	1	05/15/23 15:20	05/16/23 16:28	7440-09-7	
Sodium	**5.1**	mg/L	0.50	0.34	1	05/15/23 15:20	05/16/23 16:28	7440-23-5	
Total Hardness	**43.7**	mg/L	3.3	0.27	1	05/15/23 15:20	05/16/23 16:28		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**14.7**	mg/L	0.50	0.083	1	05/15/23 16:45	05/16/23 18:05	7440-70-2	
Iron, Dissolved	**28.7**	mg/L	0.050	0.035	1	05/15/23 16:45	05/16/23 18:05	7439-89-6	
Magnesium, Dissolved	**1.4**	mg/L	0.50	0.047	1	05/15/23 16:45	05/16/23 18:05	7439-95-4	
Manganese, Dissolved	**0.19**	mg/L	0.0050	0.0027	1	05/15/23 16:45	05/16/23 18:05	7439-96-5	
Potassium, Dissolved	**0.64**	mg/L	0.50	0.26	1	05/15/23 16:45	05/16/23 18:05	7440-09-7	
Sodium, Dissolved	**3.0**	mg/L	0.50	0.34	1	05/15/23 16:45	05/16/23 18:05	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/16/23 11:40	05/16/23 14:59	7440-36-0	
Arsenic	**0.00069J**	mg/L	0.0025	0.00044	1	05/16/23 11:40	05/16/23 14:59	7440-38-2	
Barium	**0.015**	mg/L	0.0025	0.00098	1	05/16/23 11:40	05/16/23 14:59	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	05/16/23 11:40	05/16/23 14:59	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/16/23 11:40	05/16/23 14:59	7440-43-9	
Chromium	**0.0059**	mg/L	0.0025	0.00050	1	05/16/23 11:40	05/16/23 14:59	7440-47-3	
Cobalt	**0.00085J**	mg/L	0.0025	0.00081	1	05/16/23 11:40	05/16/23 14:59	7440-48-4	
Copper	**0.0051**	mg/L	0.0025	0.00064	1	05/16/23 11:40	05/16/23 14:59	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/16/23 11:40	05/16/23 14:59	7439-92-1	
Nickel	**0.0058**	mg/L	0.0025	0.00065	1	05/16/23 11:40	05/16/23 14:59	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/16/23 11:40	05/16/23 14:59	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/16/23 11:40	05/16/23 14:59	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/16/23 11:40	05/16/23 14:59	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/16/23 11:40	05/16/23 14:59	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0040	1	05/16/23 11:40	05/16/23 14:59	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/15/23 13:03	05/16/23 13:08	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/16/23 07:31	05/16/23 15:00	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/16/23 07:31	05/16/23 15:00	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	97	%.	60-140		1	05/16/23 07:31	05/16/23 15:00	630-20-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Sample: TW-1 **Lab ID: 30587048001** Collected: 05/11/23 09:50 Received: 05/11/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**48.0**	mg/L	10.0	1.0	1		05/23/23 16:14		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**62.0**	mg/L	10.0	10.0	1		05/17/23 16:33		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/18/23 09:34	05/18/23 13:06		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**36.5**	mg/L	25.0	4.7	1	05/22/23 10:55	05/22/23 16:06		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**7.4**	mg/L	3.0	0.67	1		05/16/23 12:14	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		05/18/23 12:17	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		05/18/23 12:17		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/15/23 14:23	14808-79-8	ML
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/12/23 16:06	14797-65-0	

Sample: TW-2 **Lab ID: 30587048002** Collected: 05/11/23 13:05 Received: 05/11/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.36J**	mg/L	0.50	0.083	1	05/15/23 15:20	05/16/23 16:30	7440-70-2	
Iron	**12.4**	mg/L	0.050	0.035	1	05/15/23 15:20	05/16/23 16:30	7439-89-6	
Magnesium	**0.52**	mg/L	0.50	0.047	1	05/15/23 15:20	05/16/23 16:30	7439-95-4	
Manganese	**0.17**	mg/L	0.0050	0.0027	1	05/15/23 15:20	05/16/23 16:30	7439-96-5	
Potassium	**0.60**	mg/L	0.50	0.26	1	05/15/23 15:20	05/16/23 16:30	7440-09-7	

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Sample: TW-2 **Lab ID: 30587048002** Collected: 05/11/23 13:05 Received: 05/11/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**1.9**	mg/L	0.50	0.34	1	05/15/23 15:20	05/16/23 16:30	7440-23-5	
Total Hardness	**3.0J**	mg/L	3.3	0.27	1	05/15/23 15:20	05/16/23 16:30		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.39J**	mg/L	0.50	0.083	1	05/15/23 16:45	05/16/23 18:07	7440-70-2	
Iron, Dissolved	**10.6**	mg/L	0.050	0.035	1	05/15/23 16:45	05/16/23 18:07	7439-89-6	
Magnesium, Dissolved	**0.50J**	mg/L	0.50	0.047	1	05/15/23 16:45	05/16/23 18:07	7439-95-4	
Manganese, Dissolved	**0.15**	mg/L	0.0050	0.0027	1	05/15/23 16:45	05/16/23 18:07	7439-96-5	
Potassium, Dissolved	**0.50J**	mg/L	0.50	0.26	1	05/15/23 16:45	05/16/23 18:07	7440-09-7	
Sodium, Dissolved	**1.4**	mg/L	0.50	0.34	1	05/15/23 16:45	05/16/23 18:07	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/16/23 11:40	05/16/23 15:02	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/16/23 11:40	05/16/23 15:02	7440-38-2	
Barium	**0.0082**	mg/L	0.0025	0.00098	1	05/16/23 11:40	05/16/23 15:02	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	05/16/23 11:40	05/16/23 15:02	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/16/23 11:40	05/16/23 15:02	7440-43-9	
Chromium	**0.00076J**	mg/L	0.0025	0.00050	1	05/16/23 11:40	05/16/23 15:02	7440-47-3	
Cobalt	**0.0025 U**	mg/L	0.0025	0.00081	1	05/16/23 11:40	05/16/23 15:02	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.00064	1	05/16/23 11:40	05/16/23 15:02	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/16/23 11:40	05/16/23 15:02	7439-92-1	
Nickel	**0.00093J**	mg/L	0.0025	0.00065	1	05/16/23 11:40	05/16/23 15:02	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/16/23 11:40	05/16/23 15:02	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/16/23 11:40	05/16/23 15:02	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/16/23 11:40	05/16/23 15:02	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/16/23 11:40	05/16/23 15:02	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0040	1	05/16/23 11:40	05/16/23 15:02	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/15/23 13:03	05/16/23 13:10	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/16/23 07:31	05/16/23 15:13	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/16/23 07:31	05/16/23 15:13	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	96	%.	60-140		1	05/16/23 07:31	05/16/23 15:13	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**15.0**	mg/L	10.0	1.0	1		05/23/23 16:17		

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Sample: TW-2 **Lab ID: 30587048002** Collected: 05/11/23 13:05 Received: 05/11/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**30.0**	mg/L	10.0	10.0	1		05/17/23 16:33		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/18/23 09:34	05/18/23 13:12		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**34.2**	mg/L	25.0	4.7	1	05/22/23 10:55	05/22/23 16:06		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**3.3**	mg/L	3.0	0.67	1		05/16/23 12:15	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		05/18/23 12:18	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		05/18/23 12:18		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/15/23 14:28	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/12/23 16:08	14797-65-0	

Sample: TW-2A **Lab ID: 30587048003** Collected: 05/11/23 12:30 Received: 05/11/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**5.4**	mg/L	0.50	0.083	1	05/15/23 15:20	05/16/23 16:32	7440-70-2	
Iron	**33.0**	mg/L	0.050	0.035	1	05/15/23 15:20	05/16/23 16:32	7439-89-6	
Magnesium	**3.0**	mg/L	0.50	0.047	1	05/15/23 15:20	05/16/23 16:32	7439-95-4	
Manganese	**0.24**	mg/L	0.0050	0.0027	1	05/15/23 15:20	05/16/23 16:32	7439-96-5	
Potassium	**1.1**	mg/L	0.50	0.26	1	05/15/23 15:20	05/16/23 16:32	7440-09-7	
Sodium	**16.4**	mg/L	0.50	0.34	1	05/15/23 15:20	05/16/23 16:32	7440-23-5	
Total Hardness	**26.0**	mg/L	3.3	0.27	1	05/15/23 15:20	05/16/23 16:32		N3

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Sample: TW-2A **Lab ID: 30587048003** Collected: 05/11/23 12:30 Received: 05/11/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**5.4**	mg/L	0.50	0.083	1	05/15/23 16:45	05/16/23 18:13	7440-70-2	
Iron, Dissolved	**31.3**	mg/L	0.050	0.035	1	05/15/23 16:45	05/16/23 18:13	7439-89-6	
Magnesium, Dissolved	**3.0**	mg/L	0.50	0.047	1	05/15/23 16:45	05/16/23 18:13	7439-95-4	
Manganese, Dissolved	**0.23**	mg/L	0.0050	0.0027	1	05/15/23 16:45	05/16/23 18:13	7439-96-5	
Potassium, Dissolved	**1.1**	mg/L	0.50	0.26	1	05/15/23 16:45	05/16/23 18:13	7440-09-7	
Sodium, Dissolved	**16.5**	mg/L	0.50	0.34	1	05/15/23 16:45	05/16/23 18:13	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/16/23 11:40	05/16/23 15:06	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/16/23 11:40	05/16/23 15:06	7440-38-2	
Barium	**0.071**	mg/L	0.0025	0.00098	1	05/16/23 11:40	05/16/23 15:06	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	05/16/23 11:40	05/16/23 15:06	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/16/23 11:40	05/16/23 15:06	7440-43-9	
Chromium	**0.0016J**	mg/L	0.0025	0.00050	1	05/16/23 11:40	05/16/23 15:06	7440-47-3	
Cobalt	**0.0019J**	mg/L	0.0025	0.00081	1	05/16/23 11:40	05/16/23 15:06	7440-48-4	
Copper	**0.0025**	mg/L	0.0025	0.00064	1	05/16/23 11:40	05/16/23 15:06	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/16/23 11:40	05/16/23 15:06	7439-92-1	
Nickel	**0.0032**	mg/L	0.0025	0.00065	1	05/16/23 11:40	05/16/23 15:06	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/16/23 11:40	05/16/23 15:06	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/16/23 11:40	05/16/23 15:06	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/16/23 11:40	05/16/23 15:06	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/16/23 11:40	05/16/23 15:06	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0040	1	05/16/23 11:40	05/16/23 15:06	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/15/23 13:03	05/16/23 13:12	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.042 U**	ug/L	0.042	0.022	1	05/16/23 07:31	05/16/23 15:26	96-12-8	
1,2-Dibromoethane (EDB)	**0.042 U**	ug/L	0.042	0.032	1	05/16/23 07:31	05/16/23 15:26	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	99	%.	60-140		1	05/16/23 07:31	05/16/23 15:26	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**30.0**	mg/L	10.0	1.0	1		05/23/23 16:19		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**118**	mg/L	10.0	10.0	1		05/17/23 16:33		

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Sample: TW-2A **Lab ID: 30587048003** Collected: 05/11/23 12:30 Received: 05/11/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/18/23 09:34	05/18/23 13:14		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**36.5**	mg/L	25.0	4.7	1	05/22/23 10:55	05/22/23 16:06		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**43.8**	mg/L	3.0	0.67	1		05/16/23 12:16	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		05/18/23 12:19	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		05/18/23 12:19		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/15/23 14:28	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/12/23 16:08	14797-65-0	

Sample: TW-3 **Lab ID: 30587048004** Collected: 05/11/23 14:30 Received: 05/11/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**1.2**	mg/L	0.50	0.083	1	05/15/23 15:20	05/16/23 16:34	7440-70-2	
Iron	**9.9**	mg/L	0.050	0.035	1	05/15/23 15:20	05/16/23 16:34	7439-89-6	
Magnesium	**0.58**	mg/L	0.50	0.047	1	05/15/23 15:20	05/16/23 16:34	7439-95-4	
Manganese	**0.16**	mg/L	0.0050	0.0027	1	05/15/23 15:20	05/16/23 16:34	7439-96-5	
Potassium	**0.54**	mg/L	0.50	0.26	1	05/15/23 15:20	05/16/23 16:34	7440-09-7	
Sodium	**2.8**	mg/L	0.50	0.34	1	05/15/23 15:20	05/16/23 16:34	7440-23-5	
Total Hardness	**5.3**	mg/L	3.3	0.27	1	05/15/23 15:20	05/16/23 16:34		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**1.1**	mg/L	0.50	0.083	1	05/15/23 16:45	05/16/23 18:15	7440-70-2	
Iron, Dissolved	**8.3**	mg/L	0.050	0.035	1	05/15/23 16:45	05/16/23 18:15	7439-89-6	
Magnesium, Dissolved	**0.53**	mg/L	0.50	0.047	1	05/15/23 16:45	05/16/23 18:15	7439-95-4	

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Sample: TW-3 **Lab ID: 30587048004** Collected: 05/11/23 14:30 Received: 05/11/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Manganese, Dissolved	**0.16**	mg/L	0.0050	0.0027	1	05/15/23 16:45	05/16/23 18:15	7439-96-5	
Potassium, Dissolved	**0.43J**	mg/L	0.50	0.26	1	05/15/23 16:45	05/16/23 18:15	7440-09-7	
Sodium, Dissolved	**2.5**	mg/L	0.50	0.34	1	05/15/23 16:45	05/16/23 18:15	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/16/23 11:40	05/16/23 15:09	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/16/23 11:40	05/16/23 15:09	7440-38-2	
Barium	**0.0080**	mg/L	0.0025	0.00098	1	05/16/23 11:40	05/16/23 15:09	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	05/16/23 11:40	05/16/23 15:09	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/16/23 11:40	05/16/23 15:09	7440-43-9	
Chromium	**0.0042**	mg/L	0.0025	0.00050	1	05/16/23 11:40	05/16/23 15:09	7440-47-3	
Cobalt	**0.0020J**	mg/L	0.0025	0.00081	1	05/16/23 11:40	05/16/23 15:09	7440-48-4	
Copper	**0.0013J**	mg/L	0.0025	0.00064	1	05/16/23 11:40	05/16/23 15:09	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/16/23 11:40	05/16/23 15:09	7439-92-1	
Nickel	**0.0077**	mg/L	0.0025	0.00065	1	05/16/23 11:40	05/16/23 15:09	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/16/23 11:40	05/16/23 15:09	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/16/23 11:40	05/16/23 15:09	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/16/23 11:40	05/16/23 15:09	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/16/23 11:40	05/16/23 15:09	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0040	1	05/16/23 11:40	05/16/23 15:09	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/15/23 13:03	05/16/23 13:15	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	05/16/23 07:31	05/16/23 15:38	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	05/16/23 07:31	05/16/23 15:38	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	94	%.	60-140		1	05/16/23 07:31	05/16/23 15:38	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**12.0**	mg/L	10.0	1.0	1		05/23/23 16:20		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**29.0**	mg/L	10.0	10.0	1		05/17/23 16:33		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/18/23 09:34	05/18/23 13:16		

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Sample: TW-3 **Lab ID: 30587048004** Collected: 05/11/23 14:30 Received: 05/11/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**34.2**	mg/L	25.0	4.7	1	05/22/23 10:55	05/22/23 16:06		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**5.3**	mg/L	3.0	0.67	1		05/16/23 12:17	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		05/18/23 12:21	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		05/18/23 12:21		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/15/23 14:30	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/12/23 16:10	14797-65-0	

Sample: TW-3A **Lab ID: 30587048005** Collected: 05/11/23 13:50 Received: 05/11/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**5.4**	mg/L	0.50	0.083	1	05/15/23 15:20	05/16/23 16:36	7440-70-2	
Iron	**74.3**	mg/L	0.050	0.035	1	05/15/23 15:20	05/16/23 16:36	7439-89-6	
Magnesium	**2.0**	mg/L	0.50	0.047	1	05/15/23 15:20	05/16/23 16:36	7439-95-4	
Manganese	**0.75**	mg/L	0.0050	0.0027	1	05/15/23 15:20	05/16/23 16:36	7439-96-5	
Potassium	**1.4**	mg/L	0.50	0.26	1	05/15/23 15:20	05/16/23 16:36	7440-09-7	
Sodium	**77.8**	mg/L	0.50	0.34	1	05/15/23 15:20	05/16/23 16:36	7440-23-5	
Total Hardness	**21.4**	mg/L	3.3	0.27	1	05/15/23 15:20	05/16/23 16:36		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**5.5**	mg/L	0.50	0.083	1	05/16/23 12:00	05/17/23 15:26	7440-70-2	
Iron, Dissolved	**62.5**	mg/L	0.050	0.035	1	05/16/23 12:00	05/17/23 15:26	7439-89-6	P6
Magnesium, Dissolved	**2.0**	mg/L	0.50	0.047	1	05/16/23 12:00	05/17/23 15:26	7439-95-4	
Manganese, Dissolved	**0.68**	mg/L	0.0050	0.0027	1	05/16/23 12:00	05/17/23 15:26	7439-96-5	
Potassium, Dissolved	**1.5**	mg/L	0.50	0.26	1	05/16/23 12:00	05/17/23 15:26	7440-09-7	
Sodium, Dissolved	**79.1**	mg/L	0.50	0.34	1	05/16/23 12:00	05/17/23 15:26	7440-23-5	P6

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Sample: TW-3A **Lab ID: 30587048005** Collected: 05/11/23 13:50 Received: 05/11/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.0010 U**	mg/L	0.0010	0.00059	2	05/16/23 11:40	05/16/23 15:12	7440-36-0	
Arsenic	**0.0012J**	mg/L	0.0050	0.00088	2	05/16/23 11:40	05/16/23 15:12	7440-38-2	
Barium	**0.054**	mg/L	0.0050	0.0020	2	05/16/23 11:40	05/16/23 15:12	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00020	2	05/16/23 11:40	05/16/23 15:12	7440-41-7	
Cadmium	**0.0010 U**	mg/L	0.0010	0.00027	2	05/16/23 11:40	05/16/23 15:12	7440-43-9	
Chromium	**0.0017J**	mg/L	0.0050	0.0010	2	05/16/23 11:40	05/16/23 15:12	7440-47-3	
Cobalt	**0.0050 U**	mg/L	0.0050	0.0016	2	05/16/23 11:40	05/16/23 15:12	7440-48-4	
Copper	**0.0040J**	mg/L	0.0050	0.0013	2	05/16/23 11:40	05/16/23 15:12	7440-50-8	
Lead	**0.00054J**	mg/L	0.0010	0.00050	2	05/16/23 11:40	05/16/23 15:12	7439-92-1	
Nickel	**0.011**	mg/L	0.0050	0.0013	2	05/16/23 11:40	05/16/23 15:12	7440-02-0	
Selenium	**0.0050 U**	mg/L	0.0050	0.0017	2	05/16/23 11:40	05/16/23 15:12	7782-49-2	
Silver	**0.0050 U**	mg/L	0.0050	0.0011	2	05/16/23 11:40	05/16/23 15:12	7440-22-4	
Thallium	**0.0010 U**	mg/L	0.0010	0.00016	2	05/16/23 11:40	05/16/23 15:12	7440-28-0	
Vanadium	**0.0050 U**	mg/L	0.0050	0.0024	2	05/16/23 11:40	05/16/23 15:12	7440-62-2	
Zinc	**0.010 U**	mg/L	0.010	0.0080	2	05/16/23 11:40	05/16/23 15:12	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/15/23 13:03	05/16/23 13:17	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	05/16/23 07:31	05/16/23 15:51	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	05/16/23 07:31	05/16/23 15:51	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	97	%.	60-140		1	05/16/23 07:31	05/16/23 15:51	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**14.0**	mg/L	10.0	1.0	1		05/23/23 16:22		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**314**	mg/L	10.0	10.0	1		05/17/23 16:33		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/18/23 09:34	05/18/23 13:18		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**52.4**	mg/L	25.0	4.7	1	05/22/23 10:55	05/22/23 16:06		

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Sample: TW-3A **Lab ID: 30587048005** Collected: 05/11/23 13:50 Received: 05/11/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**172**	mg/L	15.0	3.3	5		05/16/23 13:03	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.10 U**	mg/L	0.10	0.053	1		05/18/23 12:22	14797-55-8	
Nitrogen, NO2 plus NO3	**0.10 U**	mg/L	0.10	0.053	1		05/18/23 12:22		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/15/23 14:30	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/12/23 16:09	14797-65-0	

Sample: TW-29 **Lab ID: 30587048006** Collected: 05/11/23 11:30 Received: 05/11/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**2.2**	mg/L	0.50	0.083	1	05/15/23 15:20	05/16/23 16:38	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	05/15/23 15:20	05/16/23 16:38	7439-89-6	
Magnesium	**1.2**	mg/L	0.50	0.047	1	05/15/23 15:20	05/16/23 16:38	7439-95-4	
Manganese	**0.010**	mg/L	0.0050	0.0027	1	05/15/23 15:20	05/16/23 16:38	7439-96-5	
Potassium	**0.79**	mg/L	0.50	0.26	1	05/15/23 15:20	05/16/23 16:38	7440-09-7	
Sodium	**4.6**	mg/L	0.50	0.34	1	05/15/23 15:20	05/16/23 16:38	7440-23-5	
Total Hardness	**10.4**	mg/L	3.3	0.27	1	05/15/23 15:20	05/16/23 16:38		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**2.2**	mg/L	0.50	0.083	1	05/16/23 12:00	05/17/23 15:40	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/16/23 12:00	05/17/23 15:40	7439-89-6	
Magnesium, Dissolved	**1.2**	mg/L	0.50	0.047	1	05/16/23 12:00	05/17/23 15:40	7439-95-4	
Manganese, Dissolved	**0.0095**	mg/L	0.0050	0.0027	1	05/16/23 12:00	05/17/23 15:40	7439-96-5	
Potassium, Dissolved	**0.77**	mg/L	0.50	0.26	1	05/16/23 12:00	05/17/23 15:40	7440-09-7	
Sodium, Dissolved	**4.4**	mg/L	0.50	0.34	1	05/16/23 12:00	05/17/23 15:40	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/16/23 11:40	05/16/23 15:15	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/16/23 11:40	05/16/23 15:15	7440-38-2	
Barium	**0.031**	mg/L	0.0025	0.00098	1	05/16/23 11:40	05/16/23 15:15	7440-39-3	

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Sample: TW-29 **Lab ID: 30587048006** Collected: 05/11/23 11:30 Received: 05/11/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Beryllium	**0.00014J**	mg/L	0.00050	0.00010	1	05/16/23 11:40	05/16/23 15:15	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/16/23 11:40	05/16/23 15:15	7440-43-9	
Chromium	**0.0040**	mg/L	0.0025	0.00050	1	05/16/23 11:40	05/16/23 15:15	7440-47-3	
Cobalt	**0.0021J**	mg/L	0.0025	0.00081	1	05/16/23 11:40	05/16/23 15:15	7440-48-4	
Copper	**0.0022J**	mg/L	0.0025	0.00064	1	05/16/23 11:40	05/16/23 15:15	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/16/23 11:40	05/16/23 15:15	7439-92-1	
Nickel	**0.0041**	mg/L	0.0025	0.00065	1	05/16/23 11:40	05/16/23 15:15	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/16/23 11:40	05/16/23 15:15	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/16/23 11:40	05/16/23 15:15	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/16/23 11:40	05/16/23 15:15	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/16/23 11:40	05/16/23 15:15	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0040	1	05/16/23 11:40	05/16/23 15:15	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/30/23 10:08	05/30/23 15:05	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	05/16/23 07:31	05/16/23 16:04	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/16/23 07:31	05/16/23 16:04	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	99	%.	60-140		1	05/16/23 07:31	05/16/23 16:04	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		05/23/23 16:25		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**43.0**	mg/L	10.0	10.0	1		05/17/23 16:33		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/18/23 09:34	05/18/23 13:20		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**27.4**	mg/L	25.0	4.7	1	05/22/23 10:55	05/22/23 16:09		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**11.5**	mg/L	3.0	0.67	1		05/16/23 12:21	16887-00-6	

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Sample: TW-29 **Lab ID: 30587048006** Collected: 05/11/23 11:30 Received: 05/11/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**0.63**	mg/L	0.10	0.053	1		05/18/23 12:23	14797-55-8	
Nitrogen, NO2 plus NO3	**0.66**	mg/L	0.10	0.053	1		05/18/23 12:23		
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/15/23 14:33	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/12/23 16:07	14797-65-0	

Sample: TW-30 **Lab ID: 30587048007** Collected: 05/11/23 10:40 Received: 05/11/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**4.8**	mg/L	0.50	0.083	1	05/15/23 15:20	05/16/23 16:40	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.035	1	05/15/23 15:20	05/16/23 16:40	7439-89-6	
Magnesium	**1.9**	mg/L	0.50	0.047	1	05/15/23 15:20	05/16/23 16:40	7439-95-4	
Manganese	**0.012**	mg/L	0.0050	0.0027	1	05/15/23 15:20	05/16/23 16:40	7439-96-5	
Potassium	**1.5**	mg/L	0.50	0.26	1	05/15/23 15:20	05/16/23 16:40	7440-09-7	
Sodium	**11.0**	mg/L	0.50	0.34	1	05/15/23 15:20	05/16/23 16:40	7440-23-5	
Total Hardness	**19.5**	mg/L	3.3	0.27	1	05/15/23 15:20	05/16/23 16:40		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**5.0**	mg/L	0.50	0.083	1	05/16/23 12:00	05/17/23 15:42	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.035	1	05/16/23 12:00	05/17/23 15:42	7439-89-6	
Magnesium, Dissolved	**1.9**	mg/L	0.50	0.047	1	05/16/23 12:00	05/17/23 15:42	7439-95-4	
Manganese, Dissolved	**0.011**	mg/L	0.0050	0.0027	1	05/16/23 12:00	05/17/23 15:42	7439-96-5	
Potassium, Dissolved	**1.6**	mg/L	0.50	0.26	1	05/16/23 12:00	05/17/23 15:42	7440-09-7	
Sodium, Dissolved	**11.3**	mg/L	0.50	0.34	1	05/16/23 12:00	05/17/23 15:42	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	05/16/23 11:40	05/16/23 15:18	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	05/16/23 11:40	05/16/23 15:18	7440-38-2	
Barium	**0.037**	mg/L	0.0025	0.00098	1	05/16/23 11:40	05/16/23 15:18	7440-39-3	
Beryllium	**0.00010J**	mg/L	0.00050	0.00010	1	05/16/23 11:40	05/16/23 15:18	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	05/16/23 11:40	05/16/23 15:18	7440-43-9	
Chromium	**0.0015J**	mg/L	0.0025	0.00050	1	05/16/23 11:40	05/16/23 15:18	7440-47-3	
Cobalt	**0.0026**	mg/L	0.0025	0.00081	1	05/16/23 11:40	05/16/23 15:18	7440-48-4	

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Sample: TW-30 **Lab ID: 30587048007** Collected: 05/11/23 10:40 Received: 05/11/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Copper	**0.0015J**	mg/L	0.0025	0.00064	1	05/16/23 11:40	05/16/23 15:18	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	05/16/23 11:40	05/16/23 15:18	7439-92-1	
Nickel	**0.0046**	mg/L	0.0025	0.00065	1	05/16/23 11:40	05/16/23 15:18	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	05/16/23 11:40	05/16/23 15:18	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	05/16/23 11:40	05/16/23 15:18	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	05/16/23 11:40	05/16/23 15:18	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	05/16/23 11:40	05/16/23 15:18	7440-62-2	
Zinc	**0.0047J**	mg/L	0.0050	0.0040	1	05/16/23 11:40	05/16/23 15:18	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/15/23 13:03	05/16/23 13:29	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/16/23 07:31	05/16/23 16:17	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/16/23 07:31	05/16/23 16:17	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	97	%.	60-140		1	05/16/23 07:31	05/16/23 16:17	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		05/23/23 16:27		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**80.0**	mg/L	10.0	10.0	1		05/17/23 16:33		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	05/18/23 09:34	05/18/23 13:22		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.1**	mg/L	25.0	4.7	1	05/22/23 10:55	05/22/23 16:09		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**27.3**	mg/L	3.0	0.67	1		05/16/23 12:21	16887-00-6	
SM4500NO3-F, NO3-NO2	Analytical Method: SM 4500NO3-F-2016 Pace Analytical Services - Greensburg								
Nitrate as N	**2.2**	mg/L	0.10	0.053	1		05/18/23 12:28	14797-55-8	
Nitrogen, NO2 plus NO3	**2.2**	mg/L	0.10	0.053	1		05/18/23 12:28		

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ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Sample: TW-30 **Lab ID: 30587048007** Collected: 05/11/23 10:40 Received: 05/11/23 22:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		05/15/23 14:33	14808-79-8	
SM4500-NO2-B, Nitrite, unpres	Analytical Method: SM 4500NO2-B-2011 Pace Analytical Services - Greensburg								
Nitrite as N	**0.010 U**	mg/L	0.010	0.0055	1		05/12/23 16:07	14797-65-0	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30587048

QC Batch: 588197
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30587048001, 30587048002, 30587048003, 30587048004, 30587048005, 30587048006, 30587048007

METHOD BLANK: 2858033 Matrix: Water
Associated Lab Samples: 30587048001, 30587048002, 30587048003, 30587048004, 30587048005, 30587048006, 30587048007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	05/16/23 15:56	
Iron	mg/L	0.050 U	0.050	0.035	05/16/23 15:56	
Magnesium	mg/L	0.50 U	0.50	0.047	05/16/23 15:56	
Manganese	mg/L	0.0050 U	0.0050	0.0027	05/16/23 15:56	
Potassium	mg/L	0.50 U	0.50	0.26	05/16/23 15:56	
Sodium	mg/L	0.50 U	0.50	0.34	05/16/23 15:56	

LABORATORY CONTROL SAMPLE: 2858034

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	38.5	96	80-120	
Iron	mg/L	2	2.1	104	80-120	
Magnesium	mg/L	20	19.5	98	80-120	
Manganese	mg/L	2	2.0	102	80-120	
Potassium	mg/L	20	19.3	97	80-120	
Sodium	mg/L	20	19.0	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2858035 2858036

Parameter	Units	30587048007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	4.8	40	40	43.6	44.9	97	100	80-120	3	20	
Iron	mg/L	0.050 U	2	2	2.2	2.2	107	110	80-120	3	20	
Magnesium	mg/L	1.9	20	20	21.6	22.3	99	102	80-120	3	20	
Manganese	mg/L	0.012	2	2	2.1	2.2	105	108	80-120	3	20	
Potassium	mg/L	1.5	20	20	21.5	22.0	100	102	80-120	2	20	
Sodium	mg/L	11.0	20	20	30.0	30.9	95	99	80-120	3	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30587048

QC Batch: 588238
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30587048001, 30587048002, 30587048003, 30587048004

METHOD BLANK: 2858202 Matrix: Water
Associated Lab Samples: 30587048001, 30587048002, 30587048003, 30587048004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	05/16/23 16:51	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	05/16/23 16:51	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	05/16/23 16:51	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	05/16/23 16:51	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	05/16/23 16:51	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	05/16/23 16:51	

LABORATORY CONTROL SAMPLE: 2858203

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	38.3	96	80-120	
Iron, Dissolved	mg/L	2	2.0	100	80-120	
Magnesium, Dissolved	mg/L	20	19.2	96	80-120	
Manganese, Dissolved	mg/L	2	2.0	100	80-120	
Potassium, Dissolved	mg/L	20	19.2	96	80-120	
Sodium, Dissolved	mg/L	20	19.2	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2858204 2858205

Parameter	Units	30582402001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	68500 ug/L	40	40	106	109	94	101	80-120	3	20	
Iron, Dissolved	mg/L	0.050 U	2	2	2.0	2.1	100	104	80-120	3	20	
Magnesium, Dissolved	mg/L	8220 ug/L	20	20	27.5	28.5	96	101	80-120	4	20	
Manganese, Dissolved	mg/L	0.0092	2	2	2.0	2.1	100	104	80-120	3	20	
Potassium, Dissolved	mg/L	1220 ug/L	20	20	21.2	21.7	100	103	80-120	2	20	
Sodium, Dissolved	mg/L	6650 ug/L	20	20	26.4	27.1	99	102	80-120	3	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30587048

QC Batch: 588357
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30587048005, 30587048006, 30587048007

METHOD BLANK: 2858914 Matrix: Water
Associated Lab Samples: 30587048005, 30587048006, 30587048007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	05/17/23 15:22	
Iron, Dissolved	mg/L	0.050 U	0.050	0.035	05/17/23 15:22	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	05/17/23 15:22	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	05/17/23 15:22	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	05/17/23 15:22	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	05/17/23 15:22	

LABORATORY CONTROL SAMPLE: 2858915

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	40.4	101	80-120	
Iron, Dissolved	mg/L	2	2.0	101	80-120	
Magnesium, Dissolved	mg/L	20	20.1	101	80-120	
Manganese, Dissolved	mg/L	2	2.0	99	80-120	
Potassium, Dissolved	mg/L	20	19.9	99	80-120	
Sodium, Dissolved	mg/L	20	19.5	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2858916 2858917

Parameter	Units	30587048005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	5.5	40	40	48.0	45.8	106	101	80-120	5	20	
Iron, Dissolved	mg/L	62.5	2	2	68.6	65.4	307	145	80-120	5	20	P6
Magnesium, Dissolved	mg/L	2.0	20	20	23.2	22.1	106	101	80-120	5	20	
Manganese, Dissolved	mg/L	0.68	2	2	2.8	2.7	106	100	80-120	5	20	
Potassium, Dissolved	mg/L	1.5	20	20	23.4	22.3	110	104	80-120	5	20	
Sodium, Dissolved	mg/L	79.1	20	20	104	99.3	125	101	80-120	5	20	P6

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30587048

QC Batch: 588356
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30587048001, 30587048002, 30587048003, 30587048004, 30587048005, 30587048006, 30587048007

METHOD BLANK: 2858906
Matrix: Water
Associated Lab Samples: 30587048001, 30587048002, 30587048003, 30587048004, 30587048005, 30587048006, 30587048007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00030	05/16/23 14:29	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	05/16/23 14:29	
Barium	mg/L	0.0025 U	0.0025	0.00098	05/16/23 14:29	
Beryllium	mg/L	0.00050 U	0.00050	0.00010	05/16/23 14:29	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	05/16/23 14:29	
Chromium	mg/L	0.0025 U	0.0025	0.00050	05/16/23 14:29	
Cobalt	mg/L	0.0025 U	0.0025	0.00081	05/16/23 14:29	
Copper	mg/L	0.0025 U	0.0025	0.00064	05/16/23 14:29	
Lead	mg/L	0.00050 U	0.00050	0.00025	05/16/23 14:29	
Nickel	mg/L	0.0025 U	0.0025	0.00065	05/16/23 14:29	
Selenium	mg/L	0.0025 U	0.0025	0.00084	05/16/23 14:29	
Silver	mg/L	0.0025 U	0.0025	0.00053	05/16/23 14:29	
Thallium	mg/L	0.00050 U	0.00050	0.000081	05/16/23 14:29	
Vanadium	mg/L	0.0025 U	0.0025	0.0012	05/16/23 14:29	
Zinc	mg/L	0.0050 U	0.0050	0.0040	05/16/23 14:29	

LABORATORY CONTROL SAMPLE: 2858907

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.021	107	80-120	
Arsenic	mg/L	0.1	0.11	106	80-120	
Barium	mg/L	0.1	0.10	103	80-120	
Beryllium	mg/L	0.02	0.020	99	80-120	
Cadmium	mg/L	0.02	0.020	101	80-120	
Chromium	mg/L	0.1	0.11	109	80-120	
Cobalt	mg/L	0.1	0.11	109	80-120	
Copper	mg/L	0.1	0.11	109	80-120	
Lead	mg/L	0.02	0.021	104	80-120	
Nickel	mg/L	0.1	0.11	111	80-120	
Selenium	mg/L	0.1	0.10	103	80-120	
Silver	mg/L	0.1	0.11	105	80-120	
Thallium	mg/L	0.02	0.021	104	80-120	
Vanadium	mg/L	0.1	0.11	109	80-120	
Zinc	mg/L	0.2	0.21	106	80-120	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30587048

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2858908 2858909

Parameter	Units	30585905003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00050 U	0.02	0.02	0.022	0.022	109	108	75-125	1	20	
Arsenic	mg/L	0.00060J	0.1	0.1	0.089	0.089	88	89	75-125	1	20	
Barium	mg/L	0.092	0.1	0.1	0.19	0.19	101	102	75-125	0	20	
Beryllium	mg/L	0.00054	0.02	0.02	0.021	0.020	102	99	75-125	3	20	
Cadmium	mg/L	0.00024J	0.02	0.02	0.021	0.021	102	102	75-125	1	20	
Chromium	mg/L	0.0034	0.1	0.1	0.11	0.11	107	109	75-125	2	20	
Cobalt	mg/L	0.013	0.1	0.1	0.12	0.12	107	110	75-125	2	20	
Copper	mg/L	0.0033	0.1	0.1	0.11	0.11	108	110	75-125	2	20	
Lead	mg/L	0.00050 U	0.02	0.02	0.021	0.021	105	105	75-125	0	20	
Nickel	mg/L	0.0064	0.1	0.1	0.11	0.12	108	110	75-125	1	20	
Selenium	mg/L	0.0031	0.1	0.1	0.086	0.087	83	84	75-125	1	20	
Silver	mg/L	0.0025 U	0.1	0.1	0.10	0.10	104	104	75-125	0	20	
Thallium	mg/L	0.00050 U	0.02	0.02	0.014	0.014	71	71	75-125	0	20	M1
Vanadium	mg/L	0.0025 U	0.1	0.1	0.11	0.11	108	110	75-125	1	20	
Zinc	mg/L	0.030	0.2	0.2	0.24	0.24	104	105	75-125	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30587048

QC Batch: 588123
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30587048001, 30587048002, 30587048003, 30587048004, 30587048005, 30587048007

METHOD BLANK: 2857695 Matrix: Water
Associated Lab Samples: 30587048001, 30587048002, 30587048003, 30587048004, 30587048005, 30587048006, 30587048007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	05/16/23 12:30	

LABORATORY CONTROL SAMPLE: 2857696

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.0092	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2857697 2857698

Parameter	Units	30587048006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00020 U	0.01	0.01	0.010	0.010	104	104	80-120	0	20	M1

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30587048

QC Batch: 591281
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30587048006

METHOD BLANK: 2873344 Matrix: Water
Associated Lab Samples: 30587048006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	05/30/23 15:01	

LABORATORY CONTROL SAMPLE: 2873345

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.011	108	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2873347 2873348

Parameter	Units	30591126001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	<0.20 ug/L	0.01	0.01	0.014	0.014	135	137	80-120	1	20	M1

SAMPLE DUPLICATE: 2873346

Parameter	Units	30587048006 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/L	0.00020 U	0.00020 U		20	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30587048

QC Batch: 588286
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30587048001, 30587048002, 30587048003, 30587048004, 30587048005, 30587048006, 30587048007

METHOD BLANK: 2858640 Matrix: Water
Associated Lab Samples: 30587048001, 30587048002, 30587048003, 30587048004, 30587048005, 30587048006, 30587048007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	05/16/23 12:28	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	05/16/23 12:28	
1,1,1,2-Tetrachloroethane (S)	%.	87	60-140		05/16/23 12:28	

LABORATORY CONTROL SAMPLE: 2858641

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.22	87	85-115	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.23	90	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			91	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2858642 2858643

Parameter	Units	30586485001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.41	0.4	0.37	0.37	90	92	60-140	1	25	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.41	0.4	0.37	0.37	89	91	60-140	0	25	
1,1,1,2-Tetrachloroethane (S)	%.						88	91	60-140			

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30587048

QC Batch: 590117
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30587048001, 30587048002, 30587048003, 30587048004, 30587048005, 30587048006, 30587048007

METHOD BLANK: 2867448
Matrix: Water
Associated Lab Samples: 30587048001, 30587048002, 30587048003, 30587048004, 30587048005, 30587048006, 30587048007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	05/23/23 14:34	

LABORATORY CONTROL SAMPLE: 2867449

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	22.0	110	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2867450 2867451

Parameter	Units	30587504001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	64.0	50	50	108	108	88	88	85-115	0	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30587048

QC Batch: 588616 | Analysis Method: SM 2540C-2015
QC Batch Method: SM 2540C-2015 | Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30587048001, 30587048002, 30587048003, 30587048004, 30587048005, 30587048006, 30587048007

METHOD BLANK: 2860434 | Matrix: Water
Associated Lab Samples: 30587048001, 30587048002, 30587048003, 30587048004, 30587048005, 30587048006, 30587048007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	05/17/23 16:33	

LABORATORY CONTROL SAMPLE: 2860435

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	989	99	85-115	

SAMPLE DUPLICATE: 2860436

Parameter	Units	30586765002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	702	700	0	5	

SAMPLE DUPLICATE: 2860437

Parameter	Units	30587535002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	134	128	5	5	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30587048

QC Batch: 588607 | Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 | Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30587048001, 30587048002, 30587048003, 30587048004, 30587048005, 30587048006, 30587048007

METHOD BLANK: 2860391 Matrix: Water
Associated Lab Samples: 30587048001, 30587048002, 30587048003, 30587048004, 30587048005, 30587048006, 30587048007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	05/18/23 13:01	

METHOD BLANK: 2860392 Matrix: Water
Associated Lab Samples: 30587048001, 30587048002, 30587048003, 30587048004, 30587048005, 30587048006, 30587048007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	05/18/23 13:05	

LABORATORY CONTROL SAMPLE: 2860393

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.2	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2860394 2860395

Parameter	Units	30587048001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.2	4.2	104	104	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2860396 2860397

Parameter	Units	30584816009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.2	4.2	104	105	90-110	0	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30587048

QC Batch: 589652
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30587048001, 30587048002, 30587048003, 30587048004, 30587048005

METHOD BLANK: 2865684 Matrix: Water
Associated Lab Samples: 30587048001, 30587048002, 30587048003, 30587048004, 30587048005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	05/22/23 16:01	

LABORATORY CONTROL SAMPLE: 2865685

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	319	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2865686 2865687

Parameter	Units	30585905001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	29.6	150	150	189	191	106	108	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2865688 2865689

Parameter	Units	30584816011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	45.6	150	150	203	200	105	103	90-110	1	10	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30587048

QC Batch: 589653
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30587048006, 30587048007

METHOD BLANK: 2865692 Matrix: Water
Associated Lab Samples: 30587048006, 30587048007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	05/22/23 16:08	

METHOD BLANK: 2865711 Matrix: Water
Associated Lab Samples: 30587048006, 30587048007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	05/22/23 16:08	

METHOD BLANK: 2865712 Matrix: Water
Associated Lab Samples: 30587048006, 30587048007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	05/22/23 16:08	

LABORATORY CONTROL SAMPLE: 2865693

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	328	109	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2865695 2865696

Parameter	Units	30587048006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	27.4	150	150	184	182	105	103	90-110	1	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30587048

QC Batch: 588009
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30587048001, 30587048002, 30587048003, 30587048004, 30587048005, 30587048006, 30587048007

METHOD BLANK: 2857307 Matrix: Water
Associated Lab Samples: 30587048001, 30587048002, 30587048003, 30587048004, 30587048005, 30587048006, 30587048007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	05/16/23 12:06	

LABORATORY CONTROL SAMPLE: 2857308

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.7	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2857309 2857310

Parameter	Units	30586485003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	24.0	20	20	43.6	44.0	98	100	85-115	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30587048

QC Batch: 588609 | Analysis Method: SM 4500NO3-F-2016
QC Batch Method: SM 4500NO3-F-2016 | Analysis Description: SM4500NO3-F, Nitrate, Preserved
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30587048001, 30587048002, 30587048003, 30587048004, 30587048005, 30587048006, 30587048007

METHOD BLANK: 2860402 Matrix: Water
Associated Lab Samples: 30587048001, 30587048002, 30587048003, 30587048004, 30587048005, 30587048006, 30587048007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	0.10 U	0.10	0.053	05/18/23 12:06	

LABORATORY CONTROL SAMPLE: 2860403

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	4	4.0	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2860404 2860405

Parameter	Units	30586769001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	4.6	5	5	9.9	10.0	106	108	85-115	1	20	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30587048

QC Batch: 588184
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30587048001, 30587048002, 30587048003, 30587048004, 30587048005, 30587048006, 30587048007

METHOD BLANK: 2857991
Matrix: Water
Associated Lab Samples: 30587048001, 30587048002, 30587048003, 30587048004, 30587048005, 30587048006, 30587048007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	05/15/23 14:21	

LABORATORY CONTROL SAMPLE: 2857992

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	29.4	98	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2857993 2857994

Parameter	Units	30587048001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.0 U	20	20	19.5	18.1	86	79	85-115	7	20	ML

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30587048

QC Batch: 587893 | Analysis Method: SM 4500NO2-B-2011
QC Batch Method: SM 4500NO2-B-2011 | Analysis Description: SM4500-NO2-B, Nitrite, unpres
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30587048001, 30587048002, 30587048003, 30587048004, 30587048005, 30587048006, 30587048007

METHOD BLANK: 2856368 | Matrix: Water
Associated Lab Samples: 30587048001, 30587048002, 30587048003, 30587048004, 30587048005, 30587048006, 30587048007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010	0.0055	05/12/23 16:04	

LABORATORY CONTROL SAMPLE: 2856369

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.1	0.097	97	90-110	

MATRIX SPIKE SAMPLE: 2856370

Parameter	Units	30587048001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.010 U	0.1	0.10	102	85-115	

SAMPLE DUPLICATE: 2856371

Parameter	Units	30587048001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrite as N	mg/L	0.010 U	0.010 U		20	

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QUALIFIERS

Project: MLF-SPRING-2023
Pace Project No.: 30587048

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30587048001
[1] Sample pH for 8011 is 6

Sample: 30587048002
[1] Sample pH for 8011 is 6

Sample: 30587048003
[1] Sample pH for 8011 is 6

Sample: 30587048004
[1] Sample pH for 8011 is 6

Sample: 30587048005
[1] Sample pH for 8011 is 6

Sample: 30587048006
[1] Sample pH for 8011 is 5

Sample: 30587048007
[1] Sample pH for 8011 is 6

ANALYTE QUALIFIERS

1c Alkalinity TV: 0.00 mg/L

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QUALIFIERS

Project: MLF-SPRING-2023
Pace Project No.: 30587048

ANALYTE QUALIFIERS

2c	Alkalinity TV: 2.00 mg/L
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30587048001	**TW-1**	EPA 3010A	588197	EPA 6010D	588501
30587048002	**TW-2**	EPA 3010A	588197	EPA 6010D	588501
30587048003	**TW-2A**	EPA 3010A	588197	EPA 6010D	588501
30587048004	**TW-3**	EPA 3010A	588197	EPA 6010D	588501
30587048005	**TW-3A**	EPA 3010A	588197	EPA 6010D	588501
30587048006	**TW-29**	EPA 3010A	588197	EPA 6010D	588501
30587048007	**TW-30**	EPA 3010A	588197	EPA 6010D	588501
30587048001	**TW-1**	EPA 3010A	588238	EPA 6010D	588468
30587048002	**TW-2**	EPA 3010A	588238	EPA 6010D	588468
30587048003	**TW-2A**	EPA 3010A	588238	EPA 6010D	588468
30587048004	**TW-3**	EPA 3010A	588238	EPA 6010D	588468
30587048005	**TW-3A**	EPA 3010A	588357	EPA 6010D	588773
30587048006	**TW-29**	EPA 3010A	588357	EPA 6010D	588773
30587048007	**TW-30**	EPA 3010A	588357	EPA 6010D	588773
30587048001	**TW-1**	EPA 3010A	588356	EPA 6020B	588472
30587048002	**TW-2**	EPA 3010A	588356	EPA 6020B	588472
30587048003	**TW-2A**	EPA 3010A	588356	EPA 6020B	588472
30587048004	**TW-3**	EPA 3010A	588356	EPA 6020B	588472
30587048005	**TW-3A**	EPA 3010A	588356	EPA 6020B	588472
30587048006	**TW-29**	EPA 3010A	588356	EPA 6020B	588472
30587048007	**TW-30**	EPA 3010A	588356	EPA 6020B	588472
30587048001	**TW-1**	EPA 7470A	588123	EPA 7470A	588409
30587048002	**TW-2**	EPA 7470A	588123	EPA 7470A	588409
30587048003	**TW-2A**	EPA 7470A	588123	EPA 7470A	588409
30587048004	**TW-3**	EPA 7470A	588123	EPA 7470A	588409
30587048005	**TW-3A**	EPA 7470A	588123	EPA 7470A	588409
30587048006	**TW-29**	EPA 7470A	591281	EPA 7470A	591405
30587048007	**TW-30**	EPA 7470A	588123	EPA 7470A	588409
30587048001	**TW-1**	EPA 8011	588286	EPA 8011	588380
30587048002	**TW-2**	EPA 8011	588286	EPA 8011	588380
30587048003	**TW-2A**	EPA 8011	588286	EPA 8011	588380
30587048004	**TW-3**	EPA 8011	588286	EPA 8011	588380
30587048005	**TW-3A**	EPA 8011	588286	EPA 8011	588380
30587048006	**TW-29**	EPA 8011	588286	EPA 8011	588380
30587048007	**TW-30**	EPA 8011	588286	EPA 8011	588380
30587048001	**TW-1**	SM 2320B-2011	590117		
30587048002	**TW-2**	SM 2320B-2011	590117		
30587048003	**TW-2A**	SM 2320B-2011	590117		
30587048004	**TW-3**	SM 2320B-2011	590117		
30587048005	**TW-3A**	SM 2320B-2011	590117		
30587048006	**TW-29**	SM 2320B-2011	590117		
30587048007	**TW-30**	SM 2320B-2011	590117		
30587048001	**TW-1**	SM 2540C-2015	588616		
30587048002	**TW-2**	SM 2540C-2015	588616		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30587048003	**TW-2A**	SM 2540C-2015	588616		
30587048004	**TW-3**	SM 2540C-2015	588616		
30587048005	**TW-3A**	SM 2540C-2015	588616		
30587048006	**TW-29**	SM 2540C-2015	588616		
30587048007	**TW-30**	SM 2540C-2015	588616		
30587048001	**TW-1**	EPA 350.1	588607	EPA 350.1	589032
30587048002	**TW-2**	EPA 350.1	588607	EPA 350.1	589032
30587048003	**TW-2A**	EPA 350.1	588607	EPA 350.1	589032
30587048004	**TW-3**	EPA 350.1	588607	EPA 350.1	589032
30587048005	**TW-3A**	EPA 350.1	588607	EPA 350.1	589032
30587048006	**TW-29**	EPA 350.1	588607	EPA 350.1	589032
30587048007	**TW-30**	EPA 350.1	588607	EPA 350.1	589032
30587048001	**TW-1**	EPA 410.4	589652	EPA 410.4	589745
30587048002	**TW-2**	EPA 410.4	589652	EPA 410.4	589745
30587048003	**TW-2A**	EPA 410.4	589652	EPA 410.4	589745
30587048004	**TW-3**	EPA 410.4	589652	EPA 410.4	589745
30587048005	**TW-3A**	EPA 410.4	589652	EPA 410.4	589745
30587048006	**TW-29**	EPA 410.4	589653	EPA 410.4	589746
30587048007	**TW-30**	EPA 410.4	589653	EPA 410.4	589746
30587048001	**TW-1**	SM 4500-Cl-E-2011	588009		
30587048002	**TW-2**	SM 4500-Cl-E-2011	588009		
30587048003	**TW-2A**	SM 4500-Cl-E-2011	588009		
30587048004	**TW-3**	SM 4500-Cl-E-2011	588009		
30587048005	**TW-3A**	SM 4500-Cl-E-2011	588009		
30587048006	**TW-29**	SM 4500-Cl-E-2011	588009		
30587048007	**TW-30**	SM 4500-Cl-E-2011	588009		
30587048001	**TW-1**	SM 4500NO3-F-2016	588609		
30587048002	**TW-2**	SM 4500NO3-F-2016	588609		
30587048003	**TW-2A**	SM 4500NO3-F-2016	588609		
30587048004	**TW-3**	SM 4500NO3-F-2016	588609		
30587048005	**TW-3A**	SM 4500NO3-F-2016	588609		
30587048006	**TW-29**	SM 4500NO3-F-2016	588609		
30587048007	**TW-30**	SM 4500NO3-F-2016	588609		
30587048001	**TW-1**	EPA 9038	588184		
30587048002	**TW-2**	EPA 9038	588184		
30587048003	**TW-2A**	EPA 9038	588184		
30587048004	**TW-3**	EPA 9038	588184		
30587048005	**TW-3A**	EPA 9038	588184		
30587048006	**TW-29**	EPA 9038	588184		
30587048007	**TW-30**	EPA 9038	588184		
30587048001	**TW-1**	SM 4500NO2-B-2011	587893		
30587048002	**TW-2**	SM 4500NO2-B-2011	587893		
30587048003	**TW-2A**	SM 4500NO2-B-2011	587893		
30587048004	**TW-3**	SM 4500NO2-B-2011	587893		
30587048005	**TW-3A**	SM 4500NO2-B-2011	587893		

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING-2023
Pace Project No.: 30587048

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30587048006	**TW-29**	SM 4500NO2-B-2011	587893		
30587048007	**TW-30**	SM 4500NO2-B-2011	587893		

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WO#: 30587048

EM

30587048

207 East S

NG AND ASSESSMENT, LLC

26-9260 • sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF-SPRING 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals (1)	Total + Diss. Metals (2)	Alkalinity, TDS	Hardness, Cl	Ammonia	Nitrate	SO_4, COD		Method 8011-DBCP + EDB		
001 1	TW-1	7	5-11-23	950	✓		GW	✓	✓	✓	✓	✓	✓	✓		✓		
002 2	TW-2	↓	↓	1305	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓		
003 3	TW-2A	↓	↓	1230	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓		
004 4	TW-3	↓	↓	1430	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓		
005 5	TW-3A	↓	↓	1350	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓		
006 6	TW-29	↓	↓	1130	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓		
007 7	TW-30	↓	↓	1040	↓		↓	↓	↓	↓	↓	↓	↓	↓		↓		
8																		
9																		
10																		
11																		
12																		

	Signature	Date	Time
Relinquished by	[signature]	5.11.23	1500
Received by	TB/Pace	5.11.23	1500
Relinquished by	[signature] PACE	5-11-23	1730
Received by	RDS PACE	5/11/23	2230
Relinquished by			
Received by	[signature] PACE	5/11/23	2230

Comments

(1) 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn
(1) 7470 - Hg
(2) 6010 - Ca, Fe, Mg, Mn, K, Na
PACE - WV - METALS
PACE - G - BULK - WETCHEM + 8011
LEVEL 2 REPORT

Cooler Temp on Arrival: 3.8, 3.5 Deg. C

Rev. Aug. 2018

	DC#_Title: ENV-FRM-GBUR-0088 v04_Sample Condition [illegible] Pittsburgh	WO#: 30587048
Pace ANALYTICAL SERVICES	Effective Date: 02/03/2023	PM: ARG Due Date: 05/26/23 CLIENT: ENV MONITOR

Client Name: EMA

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking Number:

Examined By	BL
Labeled By	BL
Temped By	BL

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

Thermometer Used: V7 **Type of Ice:** (Wet) Blue None

Cooler Temperature: Observed Temp 3.1 °C Correction Factor: +0.4 °C Final Temp: 3.5 °C

Temp should be above freezing to 6°C 3.4 3.8

Comments:	Yes	No	NA	pH paper Lot# 10D3121	D.P.D. Residual Chlorine Lot #
Chain of Custody Present	✓			1.	
Chain of Custody Filled Out:	✓			2.	
-Were client corrections present on COC		✓		No corrections	
Chain of Custody Relinquished	✓			3.	
Sampler Name & Signature on COC:		✓		4.	
Sample Labels match COC:	✓			5.	
-Includes date/time/ID	yes				
Matrix:	WT				
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):	✓			7. Nitrite	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used:	✓			10.	
-Pace Containers Used	✓				
Containers Intact:				11.	
Orthophosphate field filtered:			✓	12.	
Hex Cr Aqueous samples field filtered:			✓	13.	
Organic Samples checked for dechlorination			✓	14:	
Filtered volume received for dissolved tests:			✓	15:	
All containers checked for preservation:	✓			16.	
exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix					
All containers meet method preservation requirements:	✓			Initial when completed BL	Date/Time of Preservation
				Lot# of added Preservative	
8260C/D: Headspace in VOA Vials (> 6mm)			✓	17.	
624.1: Headspace in VOA Vials (0mm)			✓	18.	
Trip Blank Present:		✓		Trip blank custody seal present? YES or (NO)	
Rad Samples Screened <0.5 mrem/hr.	✓			Initial when completed BL	Date: 5/12/23 Survey Meter SN: 1563

Comments: 8011: Headspace in 1 of 3 VG9Ts for sample 003

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

LIMS30 Internal Shipping Manifest

COOLER 22

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	22	Cooler temp (rcvd) °C	.6
Packaged on Ice (Y/N)	Yes	Correction Factor	.0
Shipping Method	Courier	Cooler temp (corr) °C	.6
Tracking #	N/A	IR GUN ID	9
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[signature]	GBUR	5-11-23	2200
Received	[signature]	BEAV	5-13-23	507
Relinquished				
Received				
Relinquished				
Received				

13

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	5/12/2023	30587050001 BP3N1/1	BP3N	30587050001	30587050
MF	5/12/2023	30587050004 BP3N1/1	BP3N	30587050004	30587050
MF	5/12/2023	30587050001 BP2U1/1	BP2U	30587050001	30587050
MF	5/12/2023	30587050004 BP2U1/1	BP2U	30587050004	30587050
MF	5/12/2023	30587050003 BP2U1/1	BP2U	30587050003	30587050
MF	5/12/2023	30587324001 WGFU2/2	WGFU	30587324001	30587324 •
MF	5/12/2023	30587048003 BP3N2/2	BP3N	30587048003	30587048
MF	5/12/2023	30587048005 BP3N2/2	BP3N	30587048005	30587048
MF	5/12/2023	30587048003 BP3N1/2	BP3N	30587048003	30587048
MF	5/12/2023	30587048005 BP3N1/2	BP3N	30587048005	30587048
MF	5/12/2023	30587048006 BP3N2/2	BP3N	30587048006	30587048
MF	5/12/2023	30587048006 BP3N1/2	BP3N	30587048006	30587048
MF	5/12/2023	30587048007 BP3N2/2	BP3N	30587048007	30587048
MF	5/12/2023	30587048007 BP3N1/2	BP3N	30587048007	30587048
MF	5/12/2023	30587048004 BP3N1/2	BP3N	30587048004	30587048
MF	5/12/2023	30587048004 BP3N2/2	BP3N	30587048004	30587048
MF	5/12/2023	30587048001 BP3N1/2	BP3N	30587048001	30587048
MF	5/12/2023	30587048001 BP3N2/2	BP3N	30587048001	30587048
MF	5/12/2023	30587048002 BP3N1/2	BP3N	30587048002	30587048
MF	5/12/2023	30587048002 BP3N2/2	BP3N	30587048002	30587048
MF	5/12/2023	30585898001 BP1U1/1	BP1U	30585898001	30585898
MF	5/12/2023	30585754001 BG1U4/5	BG1U	30585754001	30585754
MF	5/12/2023	30585257001 BP2U1/1	BP2U	30585257001	30585257
MF	5/12/2023	30582808001 BP2U1/1	BP2U	30582808001	30582808
MF	5/12/2023	30587200001 BP3N1/1	BP3N	30587200001	30587200 ••
MF	5/12/2023	30587259003 BP3N1/1	BP3N	30587259003	30587259
MF	5/12/2023	30587259002 BP3N1/1	BP3N	30587259002	30587259
MF	5/12/2023	30585694001 WGFU1/1	WGFU	30585694001	30585694
MF	5/12/2023	30585694003 WGFU1/1	WGFU	30585694003	30585694
MF	5/12/2023	30585694002 WGFU1/1	WGFU	30585694002	30585694
MF	5/12/2023	30585694004 WGFU1/1	WGFU	30585694004	30585694
MF	5/12/2023	30585970001 BP3U1/1	BP3U	30585970001	30585970
MF	5/12/2023	30584559003 BP2U1/1	BP2U	30584559003	30584559

LIMS30 Internal Shipping Manifest

COOLER 22

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	22	Cooler temp (rcvd) °C	.6
Packaged on Ice (Y/N)	Yes	Correction Factor	.0
Shipping Method	Courier	Cooler temp (corr) °C	.6
Tracking #	N/A	IR GUN ID	9
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[signature]	GBUR	5-12-23	2200
Received	[signature]	BEAV	5-13-23	807
Relinquished				
Received				
Relinquished				
Received				

13

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	5/12/2023	30584101001 BG1U1/1	BG1U	30584101001	30584101

LIMS30 Lab Sample Condition Upon Receipt (West Virginia)

Put label here prior to scanning

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☑ 3rd Party Courier ☐ Pace ☐ Other _____

Tracking #: _____

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used 9 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** 16 °C Correction Factor: 0 °C Final Temp: 6 °C

Thermal Preservation Requirement Met Yes ☑ No ☐

pH paper Lot#	Date and Initials of person examining contents:
206722	DW 5-15-23

	Yes	No	N/A	
Chain of Custody Present:				1.
Chain of Custody Filled Out:				2.
Chain of Custody Relinquished:				3.
Sampler Name & Signature on COC:				4.
Sample Labels match COC: -Includes date/time/ID Matrix:_____				5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered:			✓	13.
-pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓	
Filtered volume received for Dissolved tests:	✓			14.
All containers have been checked for chemical preservation: exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix	✓			15.
All containers meet method/chemical preservation requirements:	✓			Initial when completed: DW Date: 5-15-23
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present:			✓	17.
				Initial when completed: DW Date: 5-15-23

Manifest

Comments: _____

***PM review** is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

May 19, 2023

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-SPRING-2023
Pace Project No.: 30587330

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on May 12, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alaina Deitch

Alaina R. Deitch
alaina.deitch@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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CERTIFICATIONS

Project: MLF-SPRING-2023
Pace Project No.: 30587330

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver

225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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SAMPLE SUMMARY

Project: MLF-SPRING-2023
Pace Project No.: 30587330

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30587330001	**MW-P4**	Water	05/12/23 10:00	05/12/23 22:15
30587330002	**MW-P106**	Water	05/12/23 12:15	05/12/23 22:15
30587330003	**RW-P165**	Water	05/12/23 10:50	05/12/23 22:15
30587330004	**RW-P171-1**	Water	05/12/23 11:35	05/12/23 22:15
30587330005	**RW-P264**	Water	05/12/23 09:20	05/12/23 22:15

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SAMPLE ANALYTE COUNT

Project: MLF-SPRING-2023
Pace Project No.: 30587330

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30587330001	**MW-P4**	EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30587330002	**MW-P106**	EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30587330003	**RW-P165**	EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30587330004	**RW-P171-1**	EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
30587330005	**RW-P264**	EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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Greensburg, PA 15601
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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30587330

Date: May 19, 2023

MW-P4 (Lab ID: 30587330001)

- Sample pH for 8011 is 5

MW-P106 (Lab ID: 30587330002)

- Sample pH for 8011 is 5

RW-P165 (Lab ID: 30587330003)

- Sample pH for 8011 is 5

RW-P171-1 (Lab ID: 30587330004)

- Sample pH for 8011 is 5

RW-P264 (Lab ID: 30587330005)

- Sample pH for 8011 is 5

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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30587330

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: May 19, 2023

General Information:
5 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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Greensburg, PA 15601
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PROJECT NARRATIVE

Project: MLF-SPRING-2023
Pace Project No.: 30587330

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: May 19, 2023

General Information:
5 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30587330

Sample: MW-P4 **Lab ID: 30587330001** Collected: 05/12/23 10:00 Received: 05/12/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/18/23 10:20	05/18/23 15:06	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/17/23 07:45	05/17/23 12:02	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/17/23 07:45	05/17/23 12:02	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	86	%.	60-140		1	05/17/23 07:45	05/17/23 12:02	630-20-6	

Sample: MW-P106 **Lab ID: 30587330002** Collected: 05/12/23 12:15 Received: 05/12/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00026**	mg/L	0.00020	0.00020	1	05/18/23 10:20	05/18/23 15:09	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	05/17/23 07:45	05/17/23 12:40	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	05/17/23 07:45	05/17/23 12:40	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	88	%.	60-140		1	05/17/23 07:45	05/17/23 12:40	630-20-6	

Sample: RW-P165 **Lab ID: 30587330003** Collected: 05/12/23 10:50 Received: 05/12/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/18/23 10:20	05/18/23 15:11	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	05/17/23 07:45	05/17/23 12:53	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	05/17/23 07:45	05/17/23 12:53	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	96	%.	60-140		1	05/17/23 07:45	05/17/23 12:53	630-20-6	

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Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: MLF-SPRING-2023
Pace Project No.: 30587330

Sample: RW-P171-1 **Lab ID: 30587330004** Collected: 05/12/23 11:35 Received: 05/12/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/18/23 10:20	05/18/23 15:14	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/17/23 07:45	05/17/23 13:06	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	05/17/23 07:45	05/17/23 13:06	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	97	%.	60-140		1	05/17/23 07:45	05/17/23 13:06	630-20-6	

Sample: RW-P264 **Lab ID: 30587330005** Collected: 05/12/23 09:20 Received: 05/12/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	05/18/23 10:20	05/18/23 15:21	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	05/17/23 07:45	05/17/23 13:18	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	05/17/23 07:45	05/17/23 13:18	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	93	%.	60-140		1	05/17/23 07:45	05/17/23 13:18	630-20-6	

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30587330

QC Batch: 589041
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30587330001, 30587330002, 30587330003, 30587330004, 30587330005

METHOD BLANK: 2862340 Matrix: Water
Associated Lab Samples: 30587330001, 30587330002, 30587330003, 30587330004, 30587330005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	05/18/23 14:57	

LABORATORY CONTROL SAMPLE: 2862341

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.0099	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2862342 2862343

Parameter	Units	30587834001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.01	0.01	0.011	0.011	106	113	80-120	7	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-SPRING-2023
Pace Project No.: 30587330

QC Batch: 588615
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30587330001, 30587330002, 30587330003, 30587330004, 30587330005

METHOD BLANK: 2860430 Matrix: Water
Associated Lab Samples: 30587330001, 30587330002, 30587330003, 30587330004, 30587330005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	05/17/23 11:36	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	05/17/23 11:36	
1,1,1,2-Tetrachloroethane (S)	%.	96	60-140		05/17/23 11:36	

LABORATORY CONTROL SAMPLE: 2860431

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.22	87	85-115	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.23	93	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			92	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2860432 2860433

Parameter	Units	30587330001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.041 U	0.4	0.41	0.32	0.34	81	84	60-140	5	25	
1,2-Dibromoethane (EDB)	ug/L	0.041 U	0.4	0.41	0.35	0.37	88	91	60-140	6	25	
1,1,1,2-Tetrachloroethane (S)	%.						84	87	60-140			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: MLF-SPRING-2023
Pace Project No.: 30587330

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30587330001

[1] Sample pH for 8011 is 5

Sample: 30587330002

[1] Sample pH for 8011 is 5

Sample: 30587330003

[1] Sample pH for 8011 is 5

Sample: 30587330004

[1] Sample pH for 8011 is 5

Sample: 30587330005

[1] Sample pH for 8011 is 5

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-SPRING-2023
Pace Project No.: 30587330

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30587330001	**MW-P4**	EPA 7470A	589041	EPA 7470A	589153
30587330002	**MW-P106**	EPA 7470A	589041	EPA 7470A	589153
30587330003	**RW-P165**	EPA 7470A	589041	EPA 7470A	589153
30587330004	**RW-P171-1**	EPA 7470A	589041	EPA 7470A	589153
30587330005	**RW-P264**	EPA 7470A	589041	EPA 7470A	589153
30587330001	**MW-P4**	EPA 8011	588615	EPA 8011	588674
30587330002	**MW-P106**	EPA 8011	588615	EPA 8011	588674
30587330003	**RW-P165**	EPA 8011	588615	EPA 8011	588674
30587330004	**RW-P171-1**	EPA 8011	588615	EPA 8011	588674
30587330005	**RW-P264**	EPA 8011	588615	EPA 8011	588674

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WO#: 30587330

30587330

EMA AND ASSESSMENT, LLC

207 East Sixth ... 260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF-SPRING 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	TOTAL MERCURY		METHOD 8011 - DBCP + EDB									
001 1	MW-P4	4	5.12.23	1060	✓		GW	✓		✓									
002 2	MW-P106	↓	↓	1215	↓		↓	↓		↓									
003 3	RW-P165			1050															
004 4	RW-P171-1			1135															
005 5	RW-P264	↓	↓	920	↓		↓	↓		↓									
6																			
7																			
8																			
9																			
10																			
11																			
12																			

	Signature	Date	Time	Comments
Relinquished by	DA Brown TB/Pace	5-12-23	1400	
Received by		5-12-23	1400	PACE-WV-Hg-7470
Relinquished by	TB/Pace	5-12-23	1830	PACE-G-BURG - METHOD 8011
Received by	RDS PACE	5/12/23	1835	
Relinquished by	RDS PACE	5/12/23	2215	LEVEL 2 REPORT
Received by	[illegible] PACE	5/12/23	2215	

Cooler Temp on Arrival: 4.3 Deg. C

Rev. Aug. 2018

	DC#_Title: ENV-FRM-GBUR-0088 v04_Sample Condition Upon Receipt-Pittsburgh
Pace ANALYTICAL SERVICES	Effective Date: 02/03/2023

WO#: 30587330

PM: ARG Due Date: 05/30/23

CLIENT: ENV MONITOR

Client Name: CMA

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking Number:

Examined By	BL
Labeled By	BL
Temped By	BL

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

Thermometer Used: 10 **Type of Ice:** (Wet) Blue None

Cooler Temperature: Observed Temp 4.1 °C Correction Factor: +0.2 °C Final Temp: 4.3 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	NA	pH paper Lot# 10D3121	D.P.D. Residual Chlorine Lot #
Chain of Custody Present	✓			1.	
Chain of Custody Filled Out:	✓			2.	
-Were client corrections present on COC		✓		No corrections	
Chain of Custody Relinquished	✓			3.	
Sampler Name & Signature on COC:		✓		4.	
Sample Labels match COC:	✓			5.	
-Includes date/time/ID		yes			
Matrix:		WT			
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):		✓		7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used:	✓			10.	
-Pace Containers Used	✓				
Containers Intact:	✓			11.	
Orthophosphate field filtered:			✓	12.	
Hex Cr Aqueous samples field filtered:			✓	13.	
Organic Samples checked for dechlorination			✓	14:	
Filtered volume received for dissolved tests:			✓	15:	
All containers checked for preservation:	✓			16.	
exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix					
All containers meet method preservation requirements:	✓			Initial when completed BL	Date/Time of Preservation
				Lot# of added Preservative	
8260C/D: Headspace in VOA Vials (> 6mm)			✓	17.	
624.1: Headspace in VOA Vials (0mm)			✓	18.	
Trip Blank Present:		✓		Trip blank custody seal present? YES or (NO)	
Rad Samples Screened <0.5 mrem/hr.	✓			Initial when completed BL	Date: 5/12/23 Survey Meter SN: 1563

Comments: 8011: No headspace

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

LIMS30 Internal Shipping Manifest

COOLER 21

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	21	Cooler temp (rcvd) °C	.1
Packaged on Ice (Y/N)	Yes	Correction Factor	.0
Shipping Method	Courier	Cooler temp (corr) °C	.1
Tracking #	N/A	IR GUN ID	TM14
PWS* Drinking water?	No	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[signature]	GBUR	5-15-23	2045
Received	[signature]	BEAV	5-16-23	522
Relinquished				
Received				
Relinquished				
Received				

11

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	5/15/2023	30587330005 BP3N1/1	BP3N	30587330005	30587330
MF	5/15/2023	30587330004 BP3N1/1	BP3N	30587330004	30587330
MF	5/15/2023	30587330001 BP3N1/1	BP3N	30587330001	30587330
MF	5/15/2023	30587330003 BP3N1/1	BP3N	30587330003	30587330
MF	5/15/2023	30587330002 BP3N1/1	BP3N	30587330002	30587330
MF	5/15/2023	30587359001 CG3H1/1	CG3H	30587359001	30587359
MF	5/15/2023	30587359002 CG3H1/1	CG3H	30587359002	30587359
MF	5/15/2023	30587359003 CG3H1/1	CG3H	30587359003	30587359
MF	5/15/2023	30587390001 BP3N1/1	BP3N	30587390001	30587390
MF	5/15/2023	30587393001 BP3U1/1	BP3U	30587393001	30587393
MF	5/15/2023	30587391001 BP3C1/1	BP3C	30587391001	30587391
MF	5/15/2023	30587391001 GN1/1	GN1/	30587391001	30587391
MF	5/15/2023	30587181003 BP3N1/1	BP3N	30587181003	30587181
MF	5/15/2023	30587181006 BP3N1/1	BP3N	30587181006	30587181
MF	5/15/2023	30587181007 BP3N3/3	BP3N	30587181007	30587181
MF	5/15/2023	30587181002 BP3N1/1	BP3N	30587181002	30587181
MF	5/15/2023	30587181007 BP3N2/3	BP3N	30587181007	30587181
MF	5/15/2023	30587181009 BP3N1/1	BP3N	30587181009	30587181
MF	5/15/2023	30587181007 BP3N1/3	BP3N	30587181007	30587181
MF	5/15/2023	30587181008 BP3N1/1	BP3N	30587181008	30587181
MF	5/15/2023	30587181004 BP3N1/1	BP3N	30587181004	30587181
MF	5/15/2023	30587181001 BP3N1/1	BP3N	30587181001	30587181
MF	5/15/2023	30587181005 BP3N1/1	BP3N	30587181005	30587181
MF	5/15/2023	30582968002 BP2U1/2	BP2U	30582968002	30582968
MF	5/15/2023	30582968001 BP2U1/2	BP2U	30582968001	30582968
MF	5/15/2023	30587050002 BP2U2/2	BP2U	30587050002	30587050
MF	5/15/2023	30587442003 BP3N1/1	BP3N	30587442003	30587442
MF	5/15/2023	30584816012 BP3N1/1	BP3N	30584816012	30584816
MF	5/15/2023	30584816011 BP3N1/1	BP3N	30584816011	30584816
MF	5/15/2023	30584816010 BP3N1/1	BP3N	30584816010	30584816
MF	5/15/2023	30584816011 BP2N1/1	BP2N	30584816011	30584816
MF	5/15/2023	30584816012 BP2N1/1	BP2N	30584816012	30584816
MF	5/15/2023	30584816010 BP2N1/1	BP2N	30584816010	30584816

LIMS30 Internal Shipping Manifest

COOLER 21	Shipping Laboratory Location Code		Receiving Laboratory Location Code	
	GBUR		BEAV	
	Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
	Shipping information		Received information	
	Cooler ID	21	Cooler temp (rcvd) °C	
	Packaged on Ice (Y/N)	Yes	Correction Factor	
	Shipping Method	Courier	Cooler temp (corr) °C	
	Tracking #	N/A	IR GUN ID	
	PWS* Drinking water?	No	Received on ice?	

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	[illegible]	GBUR	5-15-23	2045
Received	[illegible]	BEAV	5-16-23	522
Relinquished				
Received				
Relinquished				
Received				

11

Logger	Scan Date	Column1	Type	LIMS Lab ID	LIMS Work Order
MF	5/15/2023	30584816009 BP3N1/1	BP3N	30584816009	30584816
MF	5/15/2023	30584816009 BP2N1/1	BP2N	30584816009	30584816
MF	5/15/2023	30587393001 BP3N1/1	BP3N	30587393001	30587393
MF	5/15/2023	30587394001 BP3N1/1	BP3N	30587394001	30587394

LIMS30 Lab Sample Condition Upon Receipt (West Virginia)

Put label here prior to scanning

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☑ 3rd Party Courier ☐ Pace ☐ Other _____

Tracking #: _____

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used TM14 **Type of Ice:** (Wet) Blue None

Cooler Temperature **Observed Temp** .1 °C Correction Factor: .0 °C Final Temp: .1 °C

Thermal Preservation Requirement Met Yes ☑ No ☐

pH paper Lot#	Date and Initials of person examining contents
206722	CDW 5-16-23

	Yes	No	N/A	
Chain of Custody Present:				1.
Chain of Custody Filled Out:				2. Manifest
Chain of Custody Relinquished:				3.
Sampler Name & Signature on COC:				4.
Sample Labels match COC: -Includes date/time/ID Matrix: _____				5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous sample field filtered: -pH adjusted within 24 hours? (If yes, indicate acid lot #)			✓ ✓	13.
Filtered volume received for Dissolved tests:			✓	14.
All containers have been checked for chemical preservation: exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix	✓			15.
All containers meet method/chemical preservation requirements:	✓			Initial when completed CDW Date: 5-16-23
				Tests not preserved:
Headspace in VOA Vials:			✓	16.
Trip Blank Present:			✓	17.
				Initial when completed CDW Date: 5-16-23

Comments: _____

***PM review** is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

08 May 2023

Steve Brown
Environmental Monitoring and Assessment
207 East Sixth Street
Lititz, PA 17543
RE: MILLERSVILLE LANDFILL

Enclosed are the results of analyses for samples received by the laboratory on 04/27/23 15:00.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Rabecka Koons
Quality Assurance Officer

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TRIP BLANK		3042721-01	Nonpotable Water	04/27/23 00:00	04/27/23 15:00
FIELD BLANK		3042721-02	Nonpotable Water	04/26/23 12:00	04/27/23 15:00
TW-5		3042721-03	Nonpotable Water	04/27/23 09:55	04/27/23 15:00
TW-5A		3042721-04	Nonpotable Water	04/27/23 09:20	04/27/23 15:00
TW-5B		3042721-05	Nonpotable Water	04/27/23 08:45	04/27/23 15:00
TW-6		3042721-06	Nonpotable Water	04/27/23 12:10	04/27/23 15:00
TW-6A		3042721-07	Nonpotable Water	04/27/23 11:30	04/27/23 15:00
TW-6B		3042721-08	Nonpotable Water	04/27/23 10:50	04/27/23 15:00
TW-7		3042721-09	Nonpotable Water	04/27/23 13:40	04/27/23 15:00
TW-7A		3042721-10	Nonpotable Water	04/27/23 13:00	04/27/23 15:00
TW-24		3042721-11	Nonpotable Water	04/26/23 14:10	04/27/23 15:00
TW-24A		3042721-12	Nonpotable Water	04/26/23 14:45	04/27/23 15:00
TW-25		3042721-13	Nonpotable Water	04/26/23 13:30	04/27/23 15:00
TW-25A		3042721-14	Nonpotable Water	04/26/23 12:50	04/27/23 15:00
SW-1		3042721-15	Nonpotable Water	04/26/23 10:00	04/27/23 15:00
SW-2		3042721-16	Nonpotable Water	04/26/23 11:30	04/27/23 15:00
SW-3		3042721-17	Nonpotable Water	04/26/23 11:00	04/27/23 15:00
DUP-1		3042721-18	Nonpotable Water	04/26/23 00:00	04/27/23 15:00
DUP-2		3042721-19	Nonpotable Water	04/26/23 00:00	04/27/23 15:00

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

Maryland spectral Services

Analytical Chemistry Services

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410-247-7600
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

TRIP BLANK

3042721-01 (Nonpotable Water)
Sample Date: 04/27/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 14:04	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 14:04	LL
Benzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 14:04	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 14:04	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 14:04	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 14:04	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 14:04	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 14:04	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL

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Rabecka Koons, Quality Assurance Officer

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www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

TRIP BLANK

3042721-01 (Nonpotable Water)
Sample Date: 04/27/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 14:04	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 14:04	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 14:04	LL
Styrene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
Toluene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 14:04	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 14:04	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 14:04	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:04	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*96 %*	*05/02/23*		*05/02/23 14:04*		
Surrogate: Toluene-d8			*75-120*	*102 %*	*05/02/23*		*05/02/23 14:04*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*	*05/02/23*		*05/02/23 14:04*		

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Rabecka Koons, Quality Assurance Officer

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

FIELD BLANK

3042721-02 (Nonpotable Water)
Sample Date: 04/26/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 14:29	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 14:29	LL
Benzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 14:29	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 14:29	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 14:29	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 14:29	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 14:29	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 14:29	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL

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Rabecka Koons, Quality Assurance Officer

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

FIELD BLANK

3042721-02 (Nonpotable Water)
Sample Date: 04/26/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 14:29	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 14:29	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 14:29	LL
Styrene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
Toluene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 14:29	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 14:29	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 14:29	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:29	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*97 %*	*05/02/23*		*05/02/23 14:29*		
Surrogate: Toluene-d8			*75-120*	*103 %*	*05/02/23*		*05/02/23 14:29*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*	*05/02/23*		*05/02/23 14:29*		

Rabecka Koons

Rabecka Koons, Quality Assurance Officer

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

TW-5

3042721-03 (Nonpotable Water)
Sample Date: 04/27/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 14:54	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 14:54	LL
Benzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 14:54	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 14:54	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 14:54	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 14:54	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 14:54	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 14:54	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
Dichlorodifluoromethane	**1.6**		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
1,1-Dichloroethane	**1.7**		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
cis-1,2-Dichloroethene	**0.7**	J	ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
Dichlorofluoromethane	**2.4**		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 14:54	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

TW-5

3042721-03 (Nonpotable Water)
Sample Date: 04/27/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 14:54	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 14:54	LL
Styrene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
Toluene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 14:54	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 14:54	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 14:54	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 14:54	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*98 %*		*05/02/23*	*05/02/23 14:54*		
Surrogate: Toluene-d8			*75-120*	*103 %*		*05/02/23*	*05/02/23 14:54*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*95 %*		*05/02/23*	*05/02/23 14:54*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

TW-5A

3042721-04 (Nonpotable Water)
Sample Date: 04/27/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 15:19	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 15:19	LL
Benzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 15:19	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 15:19	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 15:19	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 15:19	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 15:19	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 15:19	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
1,1-Dichloroethane	**0.9**	J	ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
Dichlorofluoromethane	**0.7**	J	ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

TW-5A

3042721-04 (Nonpotable Water)
Sample Date: 04/27/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 15:19	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 15:19	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 15:19	LL
Styrene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
Toluene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 15:19	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 15:19	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 15:19	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:19	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*97 %*	*05/02/23*		*05/02/23 15:19*		
Surrogate: Toluene-d8			*75-120*	*103 %*	*05/02/23*		*05/02/23 15:19*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*97 %*	*05/02/23*		*05/02/23 15:19*		

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Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

TW-5B

3042721-05 (Nonpotable Water)
Sample Date: 04/27/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 15:44	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 15:44	LL
Benzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 15:44	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 15:44	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 15:44	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 15:44	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 15:44	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 15:44	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

TW-5B

3042721-05 (Nonpotable Water)
Sample Date: 04/27/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 15:44	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 15:44	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 15:44	LL
Styrene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
Toluene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 15:44	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 15:44	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 15:44	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 15:44	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*98 %*	*05/02/23*		*05/02/23 15:44*		
Surrogate: Toluene-d8			*75-120*	*102 %*	*05/02/23*		*05/02/23 15:44*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*	*05/02/23*		*05/02/23 15:44*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

TW-6

3042721-06 (Nonpotable Water)
Sample Date: 04/27/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 16:09	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 16:09	LL
Benzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 16:09	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 16:09	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 16:09	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 16:09	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 16:09	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 16:09	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
Dichlorodifluoromethane	**3.2**		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
1,1-Dichloroethane	**6.7**		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
cis-1,2-Dichloroethene	**3.9**		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
Dichlorofluoromethane	**4.1**		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 16:09	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

TW-6

3042721-06 (Nonpotable Water)
Sample Date: 04/27/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 16:09	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 16:09	LL
Styrene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
Tetrachloroethene	**1.6**		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
Toluene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
Trichloroethene	**1.2**		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 16:09	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 16:09	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 16:09	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:09	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*97 %*		*05/02/23*	*05/02/23 16:09*		
Surrogate: Toluene-d8			*75-120*	*102 %*		*05/02/23*	*05/02/23 16:09*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*		*05/02/23*	*05/02/23 16:09*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

TW-6A

3042721-07 (Nonpotable Water)
Sample Date: 04/27/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 16:34	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 16:34	LL
Benzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 16:34	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 16:34	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 16:34	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 16:34	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 16:34	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 16:34	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

TW-6A

3042721-07 (Nonpotable Water)
Sample Date: 04/27/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 16:34	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 16:34	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 16:34	LL
Styrene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
Toluene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 16:34	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 16:34	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 16:34	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:34	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*97 %*	*05/02/23*		*05/02/23 16:34*		
Surrogate: Toluene-d8			*75-120*	*103 %*	*05/02/23*		*05/02/23 16:34*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*	*05/02/23*		*05/02/23 16:34*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

TW-6B

3042721-08 (Nonpotable Water)
Sample Date: 04/27/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 16:59	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 16:59	LL
Benzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 16:59	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 16:59	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 16:59	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 16:59	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 16:59	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 16:59	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

TW-6B

3042721-08 (Nonpotable Water)
Sample Date: 04/27/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 16:59	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 16:59	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 16:59	LL
Styrene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
Toluene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 16:59	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 16:59	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 16:59	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 16:59	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*97 %*	*05/02/23*		*05/02/23 16:59*		
Surrogate: Toluene-d8			*75-120*	*102 %*	*05/02/23*		*05/02/23 16:59*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*	*05/02/23*		*05/02/23 16:59*		

Rabecka Koons

Rabecka Koons, Quality Assurance Officer

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

TW-7

3042721-09 (Nonpotable Water)
Sample Date: 04/27/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 17:24	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 17:24	LL
Benzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 17:24	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 17:24	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 17:24	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 17:24	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 17:24	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 17:24	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL

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Baltimore MD 21227
410-247-7600
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

TW-7

3042721-09 (Nonpotable Water)
Sample Date: 04/27/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 17:24	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 17:24	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 17:24	LL
Styrene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
Toluene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 17:24	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 17:24	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 17:24	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:24	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*97 %*	*05/02/23*		*05/02/23 17:24*		
Surrogate: Toluene-d8			*75-120*	*102 %*	*05/02/23*		*05/02/23 17:24*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*95 %*	*05/02/23*		*05/02/23 17:24*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

TW-7A

3042721-10 (Nonpotable Water)
Sample Date: 04/27/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 17:49	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 17:49	LL
Benzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 17:49	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 17:49	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 17:49	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 17:49	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 17:49	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 17:49	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL

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Baltimore MD 21227
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

TW-7A

3042721-10 (Nonpotable Water)
Sample Date: 04/27/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 17:49	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/02/23	05/02/23 17:49	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 17:49	LL
Styrene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
Toluene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 17:49	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 17:49	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/02/23	05/02/23 17:49	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/02/23	05/02/23 17:49	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*98 %*	*05/02/23*		*05/02/23 17:49*		
Surrogate: Toluene-d8			*75-120*	*103 %*	*05/02/23*		*05/02/23 17:49*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*	*05/02/23*		*05/02/23 17:49*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

TW-24

3042721-11 (Nonpotable Water)
Sample Date: 04/26/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 12:57	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 12:57	LL
Benzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 12:57	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 12:57	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 12:57	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 12:57	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 12:57	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 12:57	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
Dichlorodifluoromethane	**1.4**		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
1,1-Dichloroethane	**2.2**		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
Dichlorofluoromethane	**1.1**		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 12:57	LL

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Baltimore MD 21227
410-247-7600
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

TW-24

3042721-11 (Nonpotable Water)
Sample Date: 04/26/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 12:57	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 12:57	LL
Styrene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
Tetrachloroethene	**0.6**	J	ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
Toluene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 12:57	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 12:57	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 12:57	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 12:57	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*97 %*	*05/03/23*	*05/03/23 12:57*
Surrogate: Toluene-d8	*75-120*	*102 %*	*05/03/23*	*05/03/23 12:57*
Surrogate: 4-Bromofluorobenzene	*75-120*	*96 %*	*05/03/23*	*05/03/23 12:57*

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Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

TW-24A

3042721-12 (Nonpotable Water)
Sample Date: 04/26/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 13:23	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 13:23	LL
Benzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 13:23	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 13:23	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 13:23	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 13:23	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 13:23	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 13:23	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

TW-24A

3042721-12 (Nonpotable Water)
Sample Date: 04/26/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 13:23	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 13:23	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 13:23	LL
Styrene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
Toluene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 13:23	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 13:23	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 13:23	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:23	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*95 %*	*05/03/23*		*05/03/23 13:23*		
Surrogate: Toluene-d8			*75-120*	*103 %*	*05/03/23*		*05/03/23 13:23*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*	*05/03/23*		*05/03/23 13:23*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

TW-25

3042721-13 (Nonpotable Water)
Sample Date: 04/26/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 13:48	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 13:48	LL
Benzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 13:48	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 13:48	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 13:48	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 13:48	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 13:48	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 13:48	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
Dichlorodifluoromethane	**4.2**		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
1,1-Dichloroethane	**2.1**		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
cis-1,2-Dichloroethene	**0.9**	J	ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
Dichlorofluoromethane	**2.9**		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 13:48	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

TW-25

3042721-13 (Nonpotable Water)
Sample Date: 04/26/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 13:48	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 13:48	LL
Styrene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
Tetrachloroethene	**1.4**		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
Toluene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 13:48	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 13:48	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 13:48	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 13:48	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*95 %*	*05/03/23*	*05/03/23 13:48*
Surrogate: Toluene-d8	*75-120*	*102 %*	*05/03/23*	*05/03/23 13:48*
Surrogate: 4-Bromofluorobenzene	*75-120*	*96 %*	*05/03/23*	*05/03/23 13:48*

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Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

TW-25A

3042721-14 (Nonpotable Water)
Sample Date: 04/26/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 14:13	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 14:13	LL
Benzene	**2.8**		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 14:13	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 14:13	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 14:13	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 14:13	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 14:13	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 14:13	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
1,4-Dichlorobenzene	**1.9**		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
Dichlorodifluoromethane	**9.6**		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
1,1-Dichloroethane	**27.4**		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
1,2-Dichloroethane	**1.6**		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
1,1-Dichloroethene	**0.8**	J	ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
cis-1,2-Dichloroethene	**5.4**		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
Dichlorofluoromethane	**25.5**		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
1,2-Dichloropropane	**1.3**		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 14:13	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

TW-25A

3042721-14 (Nonpotable Water)
Sample Date: 04/26/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
Methyl tert-butyl ether (MTBE)	**4.7**		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 14:13	LL
Methylene chloride	**25.7**	L	ug/L	1.0	1.0	1	05/03/23	05/03/23 14:13	LL
Styrene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
Tetrachloroethene	**3.4**		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
Toluene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
Trichloroethene	**5.0**		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
Trichlorofluoromethane (Freon 11)	**1.8**		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 14:13	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 14:13	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 14:13	LL
o-Xylene	**1.1**		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:13	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*97 %*	*05/03/23*		*05/03/23 14:13*		
Surrogate: Toluene-d8			*75-120*	*102 %*	*05/03/23*		*05/03/23 14:13*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*	*05/03/23*		*05/03/23 14:13*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

SW-1

3042721-15 (Nonpotable Water)
Sample Date: 04/26/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 14:38	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 14:38	LL
Benzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 14:38	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 14:38	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 14:38	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 14:38	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 14:38	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 14:38	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

SW-1

3042721-15 (Nonpotable Water)
Sample Date: 04/26/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 14:38	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 14:38	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 14:38	LL
Styrene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
Toluene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 14:38	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 14:38	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 14:38	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 14:38	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*95 %*	*05/03/23*		*05/03/23 14:38*		
Surrogate: Toluene-d8			*75-120*	*103 %*	*05/03/23*		*05/03/23 14:38*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*97 %*	*05/03/23*		*05/03/23 14:38*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

SW-2

3042721-16 (Nonpotable Water)
Sample Date: 04/26/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 15:03	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 15:03	LL
Benzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 15:03	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 15:03	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 15:03	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 15:03	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 15:03	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 15:03	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

SW-2

3042721-16 (Nonpotable Water)
Sample Date: 04/26/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 15:03	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 15:03	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 15:03	LL
Styrene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
Toluene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 15:03	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 15:03	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 15:03	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:03	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*96 %*	*05/03/23*		*05/03/23 15:03*		
Surrogate: Toluene-d8			*75-120*	*103 %*	*05/03/23*		*05/03/23 15:03*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*	*05/03/23*		*05/03/23 15:03*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

SW-3

3042721-17 (Nonpotable Water)
Sample Date: 04/26/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 15:28	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 15:28	LL
Benzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 15:28	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 15:28	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 15:28	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 15:28	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 15:28	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 15:28	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

SW-3

3042721-17 (Nonpotable Water)
Sample Date: 04/26/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 15:28	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 15:28	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 15:28	LL
Styrene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
Toluene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 15:28	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 15:28	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 15:28	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:28	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*96 %*	*05/03/23*		*05/03/23 15:28*		
Surrogate: Toluene-d8			*75-120*	*103 %*	*05/03/23*		*05/03/23 15:28*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*95 %*	*05/03/23*		*05/03/23 15:28*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

DUP-1

3042721-18 (Nonpotable Water)
Sample Date: 04/26/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 15:53	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 15:53	LL
Benzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 15:53	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 15:53	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 15:53	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 15:53	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 15:53	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 15:53	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
Dichlorodifluoromethane	**1.4**		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
1,1-Dichloroethane	**2.2**		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
Dichlorofluoromethane	**1.1**		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 15:53	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

DUP-1

3042721-18 (Nonpotable Water)
Sample Date: 04/26/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 15:53	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 15:53	LL
Styrene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
Tetrachloroethene	**0.6**	J	ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
Toluene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 15:53	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 15:53	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 15:53	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 15:53	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*96 %*	*05/03/23*	*05/03/23 15:53*
Surrogate: Toluene-d8	*75-120*	*102 %*	*05/03/23*	*05/03/23 15:53*
Surrogate: 4-Bromofluorobenzene	*75-120*	*96 %*	*05/03/23*	*05/03/23 15:53*

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

DUP-2

3042721-19 (Nonpotable Water)
Sample Date: 04/26/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 16:18	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 16:18	LL
Benzene	**2.8**		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 16:18	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 16:18	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 16:18	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 16:18	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 16:18	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 16:18	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
1,4-Dichlorobenzene	**1.8**		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
Dichlorodifluoromethane	**9.5**		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
1,1-Dichloroethane	**27.0**		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
1,2-Dichloroethane	**1.6**		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
1,1-Dichloroethene	**0.8**	J	ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
cis-1,2-Dichloroethene	**5.1**		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
Dichlorofluoromethane	**25.6**		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
1,2-Dichloropropane	**1.2**		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 16:18	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

DUP-2

3042721-19 (Nonpotable Water)
Sample Date: 04/26/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
Methyl tert-butyl ether (MTBE)	**4.8**		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/03/23	05/03/23 16:18	LL
Methylene chloride	**25.7**	L	ug/L	1.0	1.0	1	05/03/23	05/03/23 16:18	LL
Styrene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
Tetrachloroethene	**3.4**		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
Toluene	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
Trichloroethene	**5.3**		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
Trichlorofluoromethane (Freon 11)	**1.6**		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 16:18	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/03/23	05/03/23 16:18	LL
Vinyl chloride	**1.0**		ug/L	1.0	1.0	1	05/03/23	05/03/23 16:18	LL
o-Xylene	**1.0**	J	ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/03/23	05/03/23 16:18	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*97 %*	*05/03/23*	*05/03/23 16:18*
Surrogate: Toluene-d8	*75-120*	*101 %*	*05/03/23*	*05/03/23 16:18*
Surrogate: 4-Bromofluorobenzene	*75-120*	*95 %*	*05/03/23*	*05/03/23 16:18*

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305045 - GCMS-WATER-VOLATILES										
Blank (B305045-BLK1)					Prepared & Analyzed: 05/02/23					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305045 - GCMS-WATER-VOLATILES										
Blank (B305045-BLK1)					Prepared & Analyzed: 05/02/23					
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*48.25*			ug/L	*50.00*		*97*	*80-120*		
Surrogate: Toluene-d8	*51.85*			ug/L	*50.00*		*104*	*88-110*		
Surrogate: 4-Bromofluorobenzene	*48.14*			ug/L	*50.00*		*96*	*86-115*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305045 - GCMS-WATER-VOLATILES										
LCS (B305045-BS1)					Prepared & Analyzed: 05/02/23					
Acetone	7.8		5.0	ug/L	10.00		78	55-150		
Acrylonitrile	4.9	J	5.0	ug/L	5.000		99	50-150		
Benzene	5.2		1.0	ug/L	5.000		104	70-130		
Bromochloromethane	5.3		1.0	ug/L	5.000		105	70-130		
Bromodichloromethane	4.9		1.0	ug/L	5.000		97	70-130		
Bromoform	4.6		1.0	ug/L	5.000		92	70-130		
Bromomethane	4.5		1.0	ug/L	5.000		89	50-150		
2-Butanone (MEK)	8.2		5.0	ug/L	10.00		82	60-140		
Carbon disulfide	5.4		1.0	ug/L	5.000		107	70-130		
Carbon tetrachloride	4.8		1.0	ug/L	5.000		95	70-130		
Chlorobenzene	5.4		1.0	ug/L	5.000		108	70-130		
Chloroethane	3.2		1.0	ug/L	5.000		63	60-150		
Chloroform	5.0		1.0	ug/L	5.000		99	70-130		
Chloromethane	5.2		1.0	ug/L	5.000		103	60-150		
Dibromochloromethane	4.9		1.0	ug/L	5.000		99	70-130		
1,2-Dibromo-3-chloropropane	5.1		1.0	ug/L	5.000		103	70-130		
1,2-Dibromoethane (EDB)	4.9		1.0	ug/L	5.000		98	70-130		
Dibromomethane	4.6		1.0	ug/L	5.000		91	70-130		
1,2-Dichlorobenzene	5.7		1.0	ug/L	5.000		113	70-130		
1,4-Dichlorobenzene	5.7		1.0	ug/L	5.000		113	70-130		
1,1-Dichloroethane	5.0		1.0	ug/L	5.000		100	70-130		
1,2-Dichloroethane	4.7		1.0	ug/L	5.000		94	70-130		
1,1-Dichloroethene	4.9		1.0	ug/L	5.000		97	70-130		
cis-1,2-Dichloroethene	4.8		1.0	ug/L	5.000		95	70-130		
trans-1,2-Dichloroethene	5.0		1.0	ug/L	5.000		100	70-130		
1,2-Dichloropropane	4.8		1.0	ug/L	5.000		97	70-130		
1,3-Dichloropropane	5.0		1.0	ug/L	5.000		100	70-130		
2,2-Dichloropropane	4.8		1.0	ug/L	5.000		95	70-130		
1,1-Dichloropropene	4.7		1.0	ug/L	5.000		93	70-130		
cis-1,3-Dichloropropene	4.7		1.0	ug/L	5.000		94	70-130		
trans-1,3-Dichloropropene	4.8		1.0	ug/L	5.000		96	70-130		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305045 - GCMS-WATER-VOLATILES										
LCS (B305045-BS1)					Prepared & Analyzed: 05/02/23					
Ethylbenzene	5.3		1.0	ug/L	5.000		106	70-130		
2-Hexanone	9.6		5.0	ug/L	10.00		96	70-130		
Methyl tert-butyl ether (MTBE)	4.8		1.0	ug/L	5.000		96	70-130		
4-Methyl-2-pentanone	9.7		5.0	ug/L	10.00		97	70-130		
Methylene chloride	5.4		1.0	ug/L	5.000		108	50-200		
Methyl methacrylate	4.8	J	5.0	ug/L	5.000		96	50-150		
Styrene	5.0		1.0	ug/L	5.000		99	70-130		
1,1,1,2-Tetrachloroethane	4.8		1.0	ug/L	5.000		95	70-130		
1,1,2,2-Tetrachloroethane	5.2		1.0	ug/L	5.000		103	70-130		
Tetrachloroethene	5.0		1.0	ug/L	5.000		100	70-130		
Toluene	5.3		1.0	ug/L	5.000		105	70-130		
1,1,1-Trichloroethane	4.6		1.0	ug/L	5.000		93	70-130		
1,1,2-Trichloroethane	5.0		1.0	ug/L	5.000		99	70-130		
Trichloroethene	5.0		1.0	ug/L	5.000		100	70-130		
Trichlorofluoromethane (Freon 11)	4.0		1.0	ug/L	5.000		81	70-130		
1,2,3-Trichloropropane	5.4		1.0	ug/L	5.000		107	70-130		
Vinyl acetate	3.7		1.0	ug/L	5.000		73	70-130		
Vinyl chloride	4.8		1.0	ug/L	5.000		96	70-130		
o-Xylene	4.9		1.0	ug/L	5.000		98	70-130		
m- & p-Xylenes	10.2		1.0	ug/L	10.00		102	70-130		
Surrogate: 1,2-Dichloroethane-d4	*48.61*			ug/L	*50.00*		*97*	*80-120*		
Surrogate: Toluene-d8	*52.13*			ug/L	*50.00*		*104*	*88-110*		
Surrogate: 4-Bromofluorobenzene	*48.05*			ug/L	*50.00*		*96*	*86-115*		
Duplicate (B305045-DUP1)			**Source: 3042721-05**		Prepared & Analyzed: 05/02/23					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20

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Project Manager: Steve Brown

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305045 - GCMS-WATER-VOLATILES										
Duplicate (B305045-DUP1)			**Source: 3042721-05**		Prepared & Analyzed: 05/02/23					
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	ND		1.0	ug/L		ND				20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20

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Project Manager: Steve Brown

Reported:
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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305045 - GCMS-WATER-VOLATILES										
Duplicate (B305045-DUP1)		**Source: 3042721-05**		Prepared & Analyzed: 05/02/23						
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	ND		1.0	ug/L		ND				20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	ND		1.0	ug/L		ND				20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*47.84*			ug/L	*50.00*		*96*	*80-120*		
Surrogate: Toluene-d8	*51.09*			ug/L	*50.00*		*102*	*88-110*		
Surrogate: 4-Bromofluorobenzene	*47.80*			ug/L	*50.00*		*96*	*86-115*		
Matrix Spike (B305045-MS1)		**Source: 3042721-09**		Prepared & Analyzed: 05/02/23						
Acetone	8.1		5.0	ug/L	10.00	ND	81	60-120		
Acrylonitrile	10.5		5.0	ug/L	10.00	ND	105	0-200		
Benzene	11.4		1.0	ug/L	10.00	ND	114	76-120		
Bromochloromethane	9.5		1.0	ug/L	10.00	ND	95	60-120		
Bromodichloromethane	10.4		1.0	ug/L	10.00	ND	104	60-120		
Bromoform	10.2		1.0	ug/L	10.00	ND	102	60-120		
Bromomethane	5.0		1.0	ug/L	10.00	ND	50	60-120		
2-Butanone (MEK)	11.7		5.0	ug/L	10.00	ND	117	60-120		

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Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305045 - GCMS-WATER-VOLATILES										
Matrix Spike (B305045-MS1)		**Source: 3042721-09**		Prepared & Analyzed: 05/02/23						
Carbon disulfide	10.5		1.0	ug/L	10.00	ND	105	60-120		
Carbon tetrachloride	10.2		1.0	ug/L	10.00	ND	102	60-120		
Chlorobenzene	11.1		1.0	ug/L	10.00	ND	111	75-120		
Chloroethane	10.1		1.0	ug/L	10.00	ND	101	60-120		
Chloroform	10.6		1.0	ug/L	10.00	ND	106	60-120		
Chloromethane	15.9		1.0	ug/L	10.00	ND	159	60-120		
Dibromochloromethane	10.0		1.0	ug/L	10.00	ND	100	60-120		
1,2-Dibromo-3-chloropropane	10.6		1.0	ug/L	10.00	ND	106	60-120		
1,2-Dibromoethane (EDB)	10.3		1.0	ug/L	10.00	ND	103	60-120		
Dibromomethane	9.5		1.0	ug/L	10.00	ND	95	60-120		
1,2-Dichlorobenzene	11.1		1.0	ug/L	10.00	ND	111	60-120		
1,4-Dichlorobenzene	10.9		1.0	ug/L	10.00	ND	109	60-120		
1,1-Dichloroethane	10.8		1.0	ug/L	10.00	ND	108	60-120		
1,2-Dichloroethane	10.0		1.0	ug/L	10.00	ND	100	60-120		
1,1-Dichloroethene	10.7		1.0	ug/L	10.00	ND	107	61-120		
cis-1,2-Dichloroethene	10.1		1.0	ug/L	10.00	ND	101	60-120		
trans-1,2-Dichloroethene	10.4		1.0	ug/L	10.00	ND	104	60-120		
1,2-Dichloropropane	10.9		1.0	ug/L	10.00	ND	109	60-120		
1,3-Dichloropropane	11.0		1.0	ug/L	10.00	ND	110	60-120		
2,2-Dichloropropane	9.5		1.0	ug/L	10.00	ND	95	60-120		
1,1-Dichloropropene	11.0		1.0	ug/L	10.00	ND	110	60-120		
cis-1,3-Dichloropropene	10.3		1.0	ug/L	10.00	ND	103	60-120		
trans-1,3-Dichloropropene	10.1		1.0	ug/L	10.00	ND	101	60-120		
Ethylbenzene	11.6		1.0	ug/L	10.00	ND	116	60-120		
2-Hexanone	11.9		5.0	ug/L	10.00	ND	119	60-120		
Methyl tert-butyl ether (MTBE)	10.3		1.0	ug/L	10.00	ND	103	60-120		
4-Methyl-2-pentanone	11.0		5.0	ug/L	10.00	ND	110	60-120		
Methylene chloride	10.5		1.0	ug/L	10.00	ND	105	60-120		
Methyl methacrylate	11.4		5.0	ug/L	10.00	ND	114	60-120		
Styrene	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,1,1,2-Tetrachloroethane	10.2		1.0	ug/L	10.00	ND	102	60-120		

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305045 - GCMS-WATER-VOLATILES										
Matrix Spike (B305045-MS1)			**Source: 3042721-09**		Prepared & Analyzed: 05/02/23					
1,1,2,2-Tetrachloroethane	10.9		1.0	ug/L	10.00	ND	109	60-120		
Tetrachloroethene	10.5		1.0	ug/L	10.00	ND	105	60-120		
Toluene	11.1		1.0	ug/L	10.00	ND	111	76-120		
1,1,1-Trichloroethane	10.1		1.0	ug/L	10.00	ND	101	60-120		
1,1,2-Trichloroethane	10.4		1.0	ug/L	10.00	ND	104	60-120		
Trichloroethene	11.0		1.0	ug/L	10.00	ND	110	71-120		
Trichlorofluoromethane (Freon 11)	10.2		1.0	ug/L	10.00	ND	102	60-120		
1,2,3-Trichloropropane	10.9		1.0	ug/L	10.00	ND	109	60-120		
Vinyl acetate	9.1		1.0	ug/L	10.00	ND	91	60-120		
Vinyl chloride	10.1		1.0	ug/L	10.00	ND	101	60-120		
o-Xylene	10.5		1.0	ug/L	10.00	ND	105	60-120		
m- & p-Xylenes	22.1		1.0	ug/L	20.00	ND	111	60-120		
Surrogate: 1,2-Dichloroethane-d4	*48.24*			ug/L	*50.00*		*96*	*80-120*		
Surrogate: Toluene-d8	*51.21*			ug/L	*50.00*		*102*	*88-110*		
Surrogate: 4-Bromofluorobenzene	*48.40*			ug/L	*50.00*		*97*	*86-115*		
Batch B305073 - GCMS-WATER-VOLATILES										
Blank (B305073-BLK1)					Prepared & Analyzed: 05/03/23					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305073 - GCMS-WATER-VOLATILES										
Blank (B305073-BLK1)					Prepared & Analyzed: 05/03/23					
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305073 - GCMS-WATER-VOLATILES										
Blank (B305073-BLK1)					Prepared & Analyzed: 05/03/23					
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*48.94*			ug/L	*50.00*		*98*	*70-130*		
Surrogate: Toluene-d8	*51.82*			ug/L	*50.00*		*104*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.50*			ug/L	*50.00*		*97*	*75-120*		
LCS (B305073-BS1)					Prepared & Analyzed: 05/03/23					
Acetone	7.7		5.0	ug/L	10.00		77	55-150		
Acrylonitrile	4.9	J	5.0	ug/L	5.000		98	50-150		
Benzene	5.2		1.0	ug/L	5.000		104	70-130		
Bromochloromethane	5.4		1.0	ug/L	5.000		108	70-130		
Bromodichloromethane	4.8		1.0	ug/L	5.000		96	70-130		
Bromoform	4.6		1.0	ug/L	5.000		92	70-130		
Bromomethane	4.1		1.0	ug/L	5.000		81	25-150		
2-Butanone (MEK)	8.8		5.0	ug/L	10.00		88	60-140		
Carbon disulfide	5.3		1.0	ug/L	5.000		106	70-130		
Carbon tetrachloride	4.8		1.0	ug/L	5.000		95	70-130		
Chlorobenzene	5.2		1.0	ug/L	5.000		103	70-130		
Chloroethane	3.1		1.0	ug/L	5.000		61	60-150		
Chloroform	4.9		1.0	ug/L	5.000		99	70-130		
Chloromethane	5.4		1.0	ug/L	5.000		108	60-150		

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305073 - GCMS-WATER-VOLATILES										
LCS (B305073-BS1)					Prepared & Analyzed: 05/03/23					
Dibromochloromethane	4.7		1.0	ug/L	5.000		95	70-130		
1,2-Dibromo-3-chloropropane	5.0		1.0	ug/L	5.000		100	70-130		
1,2-Dibromoethane (EDB)	4.8		1.0	ug/L	5.000		96	70-130		
Dibromomethane	4.7		1.0	ug/L	5.000		93	70-130		
1,2-Dichlorobenzene	5.4		1.0	ug/L	5.000		109	70-130		
1,4-Dichlorobenzene	5.4		1.0	ug/L	5.000		108	70-130		
1,1-Dichloroethane	5.2		1.0	ug/L	5.000		105	70-130		
1,2-Dichloroethane	4.7		1.0	ug/L	5.000		94	70-130		
1,1-Dichloroethene	4.8		1.0	ug/L	5.000		95	70-130		
cis-1,2-Dichloroethene	4.8		1.0	ug/L	5.000		95	70-130		
trans-1,2-Dichloroethene	5.0		1.0	ug/L	5.000		100	70-130		
1,2-Dichloropropane	4.9		1.0	ug/L	5.000		99	70-130		
1,3-Dichloropropane	5.0		1.0	ug/L	5.000		101	70-130		
2,2-Dichloropropane	4.7		1.0	ug/L	5.000		94	70-130		
1,1-Dichloropropene	4.6		1.0	ug/L	5.000		92	70-130		
cis-1,3-Dichloropropene	4.8		1.0	ug/L	5.000		96	70-130		
trans-1,3-Dichloropropene	4.8		1.0	ug/L	5.000		96	70-130		
Ethylbenzene	5.2		1.0	ug/L	5.000		103	70-130		
2-Hexanone	9.6		5.0	ug/L	10.00		96	70-130		
Methyl tert-butyl ether (MTBE)	4.8		1.0	ug/L	5.000		96	70-130		
4-Methyl-2-pentanone	9.8		5.0	ug/L	10.00		98	70-130		
Methylene chloride	5.6		1.0	ug/L	5.000		112	50-200		
Methyl methacrylate	4.7	J	5.0	ug/L	5.000		94	50-150		
Styrene	5.0		1.0	ug/L	5.000		99	70-130		
1,1,1,2-Tetrachloroethane	4.6		1.0	ug/L	5.000		92	70-130		
1,1,2,2-Tetrachloroethane	5.1		1.0	ug/L	5.000		102	70-130		
Tetrachloroethene	5.0		1.0	ug/L	5.000		99	70-130		
Toluene	5.1		1.0	ug/L	5.000		102	70-130		
1,1,1-Trichloroethane	4.8		1.0	ug/L	5.000		96	70-130		
1,1,2-Trichloroethane	5.2		1.0	ug/L	5.000		103	70-130		
Trichloroethene	4.9		1.0	ug/L	5.000		98	70-130		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/08/23 12:08

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305073 - GCMS-WATER-VOLATILES										
LCS (B305073-BS1)					Prepared & Analyzed: 05/03/23					
Trichlorofluoromethane (Freon 11)	3.8		1.0	ug/L	5.000		75	70-130		
1,2,3-Trichloropropane	5.2		1.0	ug/L	5.000		104	70-130		
Vinyl acetate	3.2		1.0	ug/L	5.000		64	70-130		
Vinyl chloride	4.6		1.0	ug/L	5.000		91	70-130		
o-Xylene	4.7		1.0	ug/L	5.000		95	70-130		
m- & p-Xylenes	10.1		1.0	ug/L	10.00		101	70-130		
Surrogate: 1,2-Dichloroethane-d4	*48.45*			ug/L	*50.00*		*97*	*70-130*		
Surrogate: Toluene-d8	*51.25*			ug/L	*50.00*		*103*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*47.21*			ug/L	*50.00*		*94*	*75-120*		
Duplicate (B305073-DUP1)		**Source: 3042721-12**			Prepared & Analyzed: 05/03/23					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305073 - GCMS-WATER-VOLATILES										
Duplicate (B305073-DUP1)			**Source: 3042721-12**		Prepared & Analyzed: 05/03/23					
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	ND		1.0	ug/L		ND				20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	ND		1.0	ug/L		ND				20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	ND		1.0	ug/L		ND				20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20

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Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305073 - GCMS-WATER-VOLATILES										
Duplicate (B305073-DUP1)		**Source: 3042721-12**		Prepared & Analyzed: 05/03/23						
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*48.75*			ug/L	*50.00*		*98*	*70-130*		
Surrogate: Toluene-d8	*51.07*			ug/L	*50.00*		*102*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*47.61*			ug/L	*50.00*		*95*	*75-120*		
Matrix Spike (B305073-MS1)		**Source: 3042721-15**		Prepared & Analyzed: 05/03/23						
Acetone	7.4		5.0	ug/L	10.00	ND	74	60-120		
Acrylonitrile	10.9		5.0	ug/L	10.00	ND	109	0-200		
Benzene	11.9		1.0	ug/L	10.00	ND	119	60-120		
Bromochloromethane	10.9		1.0	ug/L	10.00	ND	109	60-120		
Bromodichloromethane	10.5		1.0	ug/L	10.00	ND	105	60-120		
Bromoform	10.1		1.0	ug/L	10.00	ND	101	60-120		
Bromomethane	6.7		1.0	ug/L	10.00	ND	67	60-120		
2-Butanone (MEK)	10.9		5.0	ug/L	10.00	ND	109	60-120		
Carbon disulfide	10.5		1.0	ug/L	10.00	ND	105	60-120		
Carbon tetrachloride	10.8		1.0	ug/L	10.00	ND	108	60-120		
Chlorobenzene	11.5		1.0	ug/L	10.00	ND	115	60-120		
Chloroethane	10.2		1.0	ug/L	10.00	ND	102	60-120		
Chloroform	11.0		1.0	ug/L	10.00	ND	110	60-120		
Chloromethane	13.0		1.0	ug/L	10.00	ND	130	60-120		
Dibromochloromethane	10.4		1.0	ug/L	10.00	ND	104	60-120		
1,2-Dibromo-3-chloropropane	10.6		1.0	ug/L	10.00	ND	106	60-120		
1,2-Dibromoethane (EDB)	10.5		1.0	ug/L	10.00	ND	105	60-120		
Dibromomethane	10.0		1.0	ug/L	10.00	ND	100	60-120		
1,2-Dichlorobenzene	11.3		1.0	ug/L	10.00	ND	113	60-120		
1,4-Dichlorobenzene	11.4		1.0	ug/L	10.00	ND	114	60-120		
1,1-Dichloroethane	11.0		1.0	ug/L	10.00	ND	110	60-120		
1,2-Dichloroethane	10.3		1.0	ug/L	10.00	ND	103	60-120		

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Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305073 - GCMS-WATER-VOLATILES										
Matrix Spike (B305073-MS1)		**Source: 3042721-15**		Prepared & Analyzed: 05/03/23						
1,1-Dichloroethene	10.8		1.0	ug/L	10.00	ND	108	60-120		
cis-1,2-Dichloroethene	10.6		1.0	ug/L	10.00	ND	106	60-120		
trans-1,2-Dichloroethene	10.8		1.0	ug/L	10.00	ND	108	60-120		
1,2-Dichloropropane	11.2		1.0	ug/L	10.00	ND	112	60-120		
1,3-Dichloropropane	11.1		1.0	ug/L	10.00	ND	111	60-120		
2,2-Dichloropropane	10.0		1.0	ug/L	10.00	ND	100	60-120		
1,1-Dichloropropene	11.1		1.0	ug/L	10.00	ND	111	60-120		
cis-1,3-Dichloropropene	10.4		1.0	ug/L	10.00	ND	104	60-120		
trans-1,3-Dichloropropene	10.2		1.0	ug/L	10.00	ND	102	60-120		
Ethylbenzene	11.9		1.0	ug/L	10.00	ND	119	60-120		
2-Hexanone	10.8		5.0	ug/L	10.00	ND	108	60-120		
Methyl tert-butyl ether (MTBE)	10.5		1.0	ug/L	10.00	ND	105	60-120		
4-Methyl-2-pentanone	10.4		5.0	ug/L	10.00	ND	104	60-120		
Methylene chloride	10.4		1.0	ug/L	10.00	ND	104	60-120		
Methyl methacrylate	10.6		5.0	ug/L	10.00	ND	106	60-120		
Styrene	11.2		1.0	ug/L	10.00	ND	112	60-120		
1,1,1,2-Tetrachloroethane	10.5		1.0	ug/L	10.00	ND	105	60-120		
1,1,2,2-Tetrachloroethane	10.8		1.0	ug/L	10.00	ND	108	60-120		
Tetrachloroethene	11.1		1.0	ug/L	10.00	ND	111	60-120		
Toluene	11.7		1.0	ug/L	10.00	ND	117	60-120		
1,1,1-Trichloroethane	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,1,2-Trichloroethane	10.9		1.0	ug/L	10.00	ND	109	60-120		
Trichloroethene	11.1		1.0	ug/L	10.00	ND	111	60-120		
Trichlorofluoromethane (Freon 11)	10.5		1.0	ug/L	10.00	ND	105	60-120		
1,2,3-Trichloropropane	11.0		1.0	ug/L	10.00	ND	110	60-120		
Vinyl acetate	11.0		1.0	ug/L	10.00	ND	110	60-120		
Vinyl chloride	9.7		1.0	ug/L	10.00	ND	97	60-120		
o-Xylene	11.1		1.0	ug/L	10.00	ND	111	60-120		
m- & p-Xylenes	23.4		1.0	ug/L	20.00	ND	117	60-120		
Surrogate: 1,2-Dichloroethane-d4	*47.56*			ug/L	*50.00*		*95*	*70-130*		
Surrogate: Toluene-d8	*50.80*			ug/L	*50.00*		*102*	*75-120*		

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Project Manager: Steve Brown

Reported:
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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305073 - GCMS-WATER-VOLATILES										
Matrix Spike (B305073-MS1)		**Source: 3042721-15**			Prepared & Analyzed: 05/03/23					
Surrogate: 4-Bromofluorobenzene	*48.52*			ug/L	*50.00*		*97*	*75-120*		

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Project Number: MLF-SPRING 2023
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Notes and Definitions

L	Analyte is a possible laboratory contaminant
J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MSS
Project	MLF-SPRING 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260										
1	TRIP BLANK	2	4.27.23	—	✓		QA	✓										3042721-01 A
2	FIELD BLANK	2	4.26.23	1200			QA											-02
3	TW-5		4.27.23	955			GW											-03
4	TW-5A			920														-04
5	TW-5B			845														-05
6	TW-6			1210														-06
7	TW-6A			1130														-07
8	TW-6B			1050														-08
9	TW-7			1340														-09
10	TW-7A			1300														-10
11	TW-24		4.26.23	1410														-11
12	TW-24A		4.26.23	1445														-12

	Signature	Date	Time	Comments
Relinquished by	M A Brown	4.27.23	1500	① APPENDIX I LIST of 47 VOCs, MTBE, DCDFM
Received by	Rachel [illegible]	4.27.23	1500	DCFM
Relinquished by				
Received by				STANDARD REPORT
Relinquished by				
Received by				

Cooler Temp on Arrival: 4.6 Deg. C

Rev. Aug. 2018

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MSS
Project	MLF- SPRING 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260 ①											
1	TW-25	3	4.26.23	1330	✓		GW	✓							30412721		-	13
2	TW-25A	↓	↓	1250	↓		GW	↓									-	14
3	SW-1	↓	↓	1000	↓		SW	↓									-	15
4	SW-2	↓	↓	1130	↓		SW	↓									-	16
5	SW-3	↓	↓	1100	↓		SW	↓									-	17
6	Dup-1	↓	↓	—	↓		QA	↓									-	18
7	Dup-2	↓	↓	—	↓		QA	↓									-	19
8																		
9																		
10																		
11																		
12																		

	Signature	Date	Time	Comments
Relinquished by	[signature]	4.27.23	1500	① APPENDIX I LIST OF 47 VOCs, MTBE, DCDFM +
Received by	[signature]	4.27.23	1500	DCFM
Relinquished by				
Received by				STD. REPORT
Relinquished by				
Received by				

Cooler Temp on Arrival: 4.6 Deg. C

Rev. Aug. 2018

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

15 May 2023

Steve Brown
Environmental Monitoring and Assessment
207 East Sixth Street
Lititz, PA 17543
RE: MILLERSVILLE LANDFILL

Enclosed are the results of analyses for samples received by the laboratory on 05/05/23 16:30.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Rabecka Koons
Quality Assurance Officer

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TW-8		3050514-01	Nonpotable Water	05/03/23 10:30	05/05/23 16:30
TW-8A		3050514-02	Nonpotable Water	05/03/23 11:05	05/05/23 16:30
TW-9		3050514-03	Nonpotable Water	05/03/23 13:15	05/05/23 16:30
TW-9B		3050514-04	Nonpotable Water	05/03/23 11:50	05/05/23 16:30
TW-9C		3050514-05	Nonpotable Water	05/03/23 12:30	05/05/23 16:30
TW-10A		3050514-06	Nonpotable Water	05/03/23 14:00	05/05/23 16:30
TW-11A		3050514-07	Nonpotable Water	05/03/23 14:40	05/05/23 16:30
TW-12		3050514-08	Nonpotable Water	05/03/23 15:30	05/05/23 16:30
TW-13		3050514-09	Nonpotable Water	05/04/23 08:30	05/05/23 16:30
TW-14		3050514-10	Nonpotable Water	05/04/23 10:35	05/05/23 16:30
TW-14A		3050514-11	Nonpotable Water	05/04/23 10:00	05/05/23 16:30
TW-14B		3050514-12	Nonpotable Water	05/04/23 09:20	05/05/23 16:30
TW-15		3050514-13	Nonpotable Water	05/04/23 11:20	05/05/23 16:30
TW-15B		3050514-14	Nonpotable Water	05/04/23 12:00	05/05/23 16:30
TW-16		3050514-15	Nonpotable Water	05/04/23 13:20	05/05/23 16:30
TW-16A		3050514-16	Nonpotable Water	05/04/23 12:45	05/05/23 16:30
TW-17		3050514-17	Nonpotable Water	05/04/23 14:00	05/05/23 16:30
TW-17A		3050514-18	Nonpotable Water	05/04/23 14:35	05/05/23 16:30
TW-18		3050514-19	Nonpotable Water	05/04/23 15:15	05/05/23 16:30
TRIP BLANK		3050514-20	Nonpotable Water	05/04/23 00:00	05/05/23 16:30
MW-P9		3050514-21	Nonpotable Water	05/05/23 10:00	05/05/23 16:30
RW-P109		3050514-22	Nonpotable Water	05/05/23 10:40	05/05/23 16:30
RW-P441		3050514-23	Nonpotable Water	05/05/23 11:30	05/05/23 16:30
RW-P440		3050514-24	Nonpotable Water	05/05/23 12:10	05/05/23 16:30
RW-P584		3050514-25	Nonpotable Water	05/05/23 12:50	05/05/23 16:30

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-P440		3050514-26	Nonpotable Water	05/05/23 14:00	05/05/23 16:30
MW-P417		3050514-27	Nonpotable Water	05/05/23 14:45	05/05/23 16:30

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-8

3050514-01 (Nonpotable Water)
Sample Date: 05/03/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 13:16	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 13:16	LL
Benzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 13:16	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 13:16	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 13:16	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 13:16	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 13:16	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 13:16	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL

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Rabecka Koons, Quality Assurance Officer

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-8

3050514-01 (Nonpotable Water)
Sample Date: 05/03/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 13:16	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 13:16	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 13:16	LL
Styrene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
Toluene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 13:16	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 13:16	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 13:16	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:16	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*92 %*	*05/08/23*		*05/08/23 13:16*		
Surrogate: Toluene-d8			*75-120*	*100 %*	*05/08/23*		*05/08/23 13:16*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*93 %*	*05/08/23*		*05/08/23 13:16*		

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Rabecka Koons, Quality Assurance Officer

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Baltimore MD 21227
410-247-7600
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-8A

3050514-02 (Nonpotable Water)
Sample Date: 05/03/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 13:41	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 13:41	LL
Benzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 13:41	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 13:41	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 13:41	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 13:41	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 13:41	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 13:41	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL

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Rabecka Koons, Quality Assurance Officer

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-8A

3050514-02 (Nonpotable Water)
Sample Date: 05/03/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 13:41	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 13:41	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 13:41	LL
Styrene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
Toluene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 13:41	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 13:41	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 13:41	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 13:41	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*91 %*	*05/08/23*		*05/08/23 13:41*		
Surrogate: Toluene-d8			*75-120*	*100 %*	*05/08/23*		*05/08/23 13:41*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*94 %*	*05/08/23*		*05/08/23 13:41*		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-9

3050514-03 (Nonpotable Water)
Sample Date: 05/03/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 14:05	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 14:05	LL
Benzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 14:05	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 14:05	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 14:05	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 14:05	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 14:05	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 14:05	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL

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Baltimore MD 21227
410-247-7600
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-9

3050514-03 (Nonpotable Water)
Sample Date: 05/03/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 14:05	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 14:05	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 14:05	LL
Styrene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
Toluene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 14:05	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 14:05	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 14:05	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:05	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*94 %*	*05/08/23*		*05/08/23 14:05*		
Surrogate: Toluene-d8			*75-120*	*100 %*	*05/08/23*		*05/08/23 14:05*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*93 %*	*05/08/23*		*05/08/23 14:05*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-9B

3050514-04 (Nonpotable Water)
Sample Date: 05/03/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 14:30	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 14:30	LL
Benzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 14:30	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 14:30	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 14:30	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 14:30	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 14:30	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 14:30	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-9B

3050514-04 (Nonpotable Water)
Sample Date: 05/03/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 14:30	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 14:30	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 14:30	LL
Styrene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
Toluene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 14:30	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 14:30	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 14:30	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:30	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*93 %*	*05/08/23*		*05/08/23 14:30*		
Surrogate: Toluene-d8			*75-120*	*101 %*	*05/08/23*		*05/08/23 14:30*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*94 %*	*05/08/23*		*05/08/23 14:30*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-9C

3050514-05 (Nonpotable Water)
Sample Date: 05/03/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 14:55	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 14:55	LL
Benzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 14:55	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 14:55	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 14:55	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 14:55	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 14:55	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 14:55	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-9C

3050514-05 (Nonpotable Water)
Sample Date: 05/03/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 14:55	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 14:55	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 14:55	LL
Styrene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
Toluene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 14:55	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 14:55	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 14:55	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 14:55	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*91 %*	*05/08/23*		*05/08/23 14:55*		
Surrogate: Toluene-d8			*75-120*	*100 %*	*05/08/23*		*05/08/23 14:55*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*93 %*	*05/08/23*		*05/08/23 14:55*		

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Rabecka Koons, Quality Assurance Officer

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-10A

3050514-06 (Nonpotable Water)
Sample Date: 05/03/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 15:19	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 15:19	LL
Benzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 15:19	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 15:19	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 15:19	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 15:19	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 15:19	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 15:19	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-10A

3050514-06 (Nonpotable Water)
Sample Date: 05/03/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 15:19	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 15:19	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 15:19	LL
Styrene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
Toluene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 15:19	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 15:19	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 15:19	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:19	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*91 %*	*05/08/23*		*05/08/23 15:19*		
Surrogate: Toluene-d8			*75-120*	*101 %*	*05/08/23*		*05/08/23 15:19*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*94 %*	*05/08/23*		*05/08/23 15:19*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-11A

3050514-07 (Nonpotable Water)
Sample Date: 05/03/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 15:44	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 15:44	LL
Benzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 15:44	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 15:44	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 15:44	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 15:44	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 15:44	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 15:44	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
1,1-Dichloroethane	**0.5**	J	ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
Dichlorofluoromethane	**0.6**	J	ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-11A

3050514-07 (Nonpotable Water)
Sample Date: 05/03/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 15:44	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 15:44	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 15:44	LL
Styrene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
Toluene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 15:44	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 15:44	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 15:44	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 15:44	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*91 %*	*05/08/23*		*05/08/23 15:44*		
Surrogate: Toluene-d8			*75-120*	*102 %*	*05/08/23*		*05/08/23 15:44*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*	*05/08/23*		*05/08/23 15:44*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-12

3050514-08 (Nonpotable Water)
Sample Date: 05/03/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 16:09	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 16:09	LL
Benzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 16:09	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 16:09	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 16:09	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 16:09	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 16:09	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 16:09	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
Dichlorodifluoromethane	**1.2**		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
1,1-Dichloroethane	**0.8**	J	ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
cis-1,2-Dichloroethene	**0.7**	J	ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 16:09	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-12

3050514-08 (Nonpotable Water)
Sample Date: 05/03/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 16:09	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 16:09	LL
Styrene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
Toluene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
Trichloroethene	**1.4**		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 16:09	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 16:09	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 16:09	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:09	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*91 %*	*05/08/23*	*05/08/23 16:09*
Surrogate: Toluene-d8	*75-120*	*101 %*	*05/08/23*	*05/08/23 16:09*
Surrogate: 4-Bromofluorobenzene	*75-120*	*96 %*	*05/08/23*	*05/08/23 16:09*

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-13

3050514-09 (Nonpotable Water)
Sample Date: 05/04/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 16:33	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 16:33	LL
Benzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 16:33	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 16:33	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 16:33	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 16:33	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 16:33	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 16:33	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
Dichlorodifluoromethane	**4.6**		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
1,1-Dichloroethane	**3.6**		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
cis-1,2-Dichloroethene	**3.2**		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
Dichlorofluoromethane	**2.3**		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 16:33	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-13

3050514-09 (Nonpotable Water)
Sample Date: 05/04/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/08/23	05/08/23 16:33	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 16:33	LL
Styrene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
Tetrachloroethene	**3.4**		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
Toluene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
Trichloroethene	**4.7**		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 16:33	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 16:33	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/08/23	05/08/23 16:33	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/08/23	05/08/23 16:33	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*92 %*		*05/08/23*	*05/08/23 16:33*		
Surrogate: Toluene-d8			*75-120*	*101 %*		*05/08/23*	*05/08/23 16:33*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*95 %*		*05/08/23*	*05/08/23 16:33*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-14

3050514-10 (Nonpotable Water)
Sample Date: 05/04/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 12:25	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 12:25	LL
Benzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 12:25	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 12:25	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 12:25	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 12:25	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 12:25	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 12:25	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
Dichlorodifluoromethane	**4.0**		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
1,1-Dichloroethane	**2.6**		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
cis-1,2-Dichloroethene	**1.0**		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
Dichlorofluoromethane	**3.1**		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 12:25	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-14

3050514-10 (Nonpotable Water)
Sample Date: 05/04/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 12:25	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 12:25	LL
Styrene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
Tetrachloroethene	**4.3**		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
Toluene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
Trichloroethene	**0.7**	J	ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 12:25	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 12:25	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 12:25	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:25	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*91 %*	*05/09/23*	*05/09/23 12:25*
Surrogate: Toluene-d8	*75-120*	*101 %*	*05/09/23*	*05/09/23 12:25*
Surrogate: 4-Bromofluorobenzene	*75-120*	*94 %*	*05/09/23*	*05/09/23 12:25*

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-14A

3050514-11 (Nonpotable Water)
Sample Date: 05/04/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 12:49	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 12:49	LL
Benzene	**1.7**		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 12:49	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 12:49	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 12:49	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 12:49	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 12:49	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 12:49	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
Dichlorodifluoromethane	**1.9**		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
1,1-Dichloroethane	**5.9**		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
cis-1,2-Dichloroethene	**1.9**		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
Dichlorofluoromethane	**4.7**		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 12:49	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-14A

3050514-11 (Nonpotable Water)
Sample Date: 05/04/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
Methyl tert-butyl ether (MTBE)	**0.7**	J	ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 12:49	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 12:49	LL
Styrene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
Tetrachloroethene	**1.4**		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
Toluene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
Trichloroethene	**1.3**		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 12:49	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 12:49	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 12:49	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 12:49	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*87 %*	*05/09/23*	*05/09/23 12:49*
Surrogate: Toluene-d8	*75-120*	*100 %*	*05/09/23*	*05/09/23 12:49*
Surrogate: 4-Bromofluorobenzene	*75-120*	*94 %*	*05/09/23*	*05/09/23 12:49*

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Rabecka Koons, Quality Assurance Officer

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-14B

3050514-12 (Nonpotable Water)
Sample Date: 05/04/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 13:14	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 13:14	LL
Benzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 13:14	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 13:14	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 13:14	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 13:14	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 13:14	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 13:14	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-14B

3050514-12 (Nonpotable Water)
Sample Date: 05/04/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 13:14	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 13:14	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 13:14	LL
Styrene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
Toluene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 13:14	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 13:14	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 13:14	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:14	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*90 %*	*05/09/23*		*05/09/23 13:14*		
Surrogate: Toluene-d8			*75-120*	*100 %*	*05/09/23*		*05/09/23 13:14*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*92 %*	*05/09/23*		*05/09/23 13:14*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-15

3050514-13 (Nonpotable Water)
Sample Date: 05/04/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 13:38	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 13:38	LL
Benzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 13:38	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 13:38	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 13:38	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 13:38	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 13:38	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 13:38	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-15

3050514-13 (Nonpotable Water)
Sample Date: 05/04/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 13:38	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 13:38	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 13:38	LL
Styrene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
Toluene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 13:38	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 13:38	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 13:38	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 13:38	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*88 %*	*05/09/23*		*05/09/23 13:38*		
Surrogate: Toluene-d8			*75-120*	*100 %*	*05/09/23*		*05/09/23 13:38*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*93 %*	*05/09/23*		*05/09/23 13:38*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-15B

3050514-14 (Nonpotable Water)
Sample Date: 05/04/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 14:03	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 14:03	LL
Benzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 14:03	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 14:03	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 14:03	LL
Chloroform	**0.6**	J	ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 14:03	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 14:03	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 14:03	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
Dichlorodifluoromethane	**1.2**		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
1,1-Dichloroethane	**0.6**	J	ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 14:03	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-15B

3050514-14 (Nonpotable Water)
Sample Date: 05/04/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 14:03	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 14:03	LL
Styrene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
Tetrachloroethene	**0.8**	J	ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
Toluene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 14:03	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 14:03	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 14:03	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:03	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*89 %*	*05/09/23*	*05/09/23 14:03*
Surrogate: Toluene-d8	*75-120*	*100 %*	*05/09/23*	*05/09/23 14:03*
Surrogate: 4-Bromofluorobenzene	*75-120*	*94 %*	*05/09/23*	*05/09/23 14:03*

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-16

3050514-15 (Nonpotable Water)
Sample Date: 05/04/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 14:27	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 14:27	LL
Benzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 14:27	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 14:27	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 14:27	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 14:27	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 14:27	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 14:27	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-16

3050514-15 (Nonpotable Water)
Sample Date: 05/04/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 14:27	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 14:27	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 14:27	LL
Styrene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
Toluene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 14:27	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 14:27	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 14:27	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:27	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*88 %*	*05/09/23*		*05/09/23 14:27*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*05/09/23*		*05/09/23 14:27*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*92 %*	*05/09/23*		*05/09/23 14:27*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-16A

3050514-16 (Nonpotable Water)
Sample Date: 05/04/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 14:52	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 14:52	LL
Benzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 14:52	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 14:52	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 14:52	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 14:52	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 14:52	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 14:52	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-16A

3050514-16 (Nonpotable Water)
Sample Date: 05/04/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 14:52	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 14:52	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 14:52	LL
Styrene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
Toluene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 14:52	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 14:52	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 14:52	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 14:52	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*89 %*	*05/09/23*		*05/09/23 14:52*		
Surrogate: Toluene-d8			*75-120*	*100 %*	*05/09/23*		*05/09/23 14:52*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*93 %*	*05/09/23*		*05/09/23 14:52*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-17

3050514-17 (Nonpotable Water)
Sample Date: 05/04/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 15:16	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 15:16	LL
Benzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 15:16	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 15:16	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 15:16	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 15:16	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 15:16	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 15:16	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-17

3050514-17 (Nonpotable Water)
Sample Date: 05/04/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 15:16	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 15:16	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 15:16	LL
Styrene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
Toluene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 15:16	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 15:16	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 15:16	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:16	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*88 %*	*05/09/23*		*05/09/23 15:16*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*05/09/23*		*05/09/23 15:16*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*93 %*	*05/09/23*		*05/09/23 15:16*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-17A

3050514-18 (Nonpotable Water)
Sample Date: 05/04/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 15:41	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 15:41	LL
Benzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 15:41	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 15:41	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 15:41	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 15:41	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 15:41	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 15:41	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-17A

3050514-18 (Nonpotable Water)
Sample Date: 05/04/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 15:41	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 15:41	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 15:41	LL
Styrene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
Toluene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 15:41	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 15:41	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 15:41	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 15:41	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*88 %*	*05/09/23*		*05/09/23 15:41*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*05/09/23*		*05/09/23 15:41*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*92 %*	*05/09/23*		*05/09/23 15:41*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-18

3050514-19 (Nonpotable Water)
Sample Date: 05/04/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 16:05	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 16:05	LL
Benzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 16:05	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 16:05	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 16:05	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 16:05	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 16:05	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 16:05	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TW-18

3050514-19 (Nonpotable Water)
Sample Date: 05/04/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 16:05	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 16:05	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 16:05	LL
Styrene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
Toluene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 16:05	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 16:05	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 16:05	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:05	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*86 %*	*05/09/23*		*05/09/23 16:05*		
Surrogate: Toluene-d8			*75-120*	*100 %*	*05/09/23*		*05/09/23 16:05*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*92 %*	*05/09/23*		*05/09/23 16:05*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TRIP BLANK

3050514-20 (Nonpotable Water)
Sample Date: 05/04/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 16:29	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 16:29	LL
Benzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 16:29	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 16:29	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 16:29	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 16:29	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 16:29	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 16:29	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

TRIP BLANK

3050514-20 (Nonpotable Water)
Sample Date: 05/04/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 16:29	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 16:29	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 16:29	LL
Styrene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
Toluene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 16:29	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 16:29	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 16:29	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:29	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*89 %*	*05/09/23*		*05/09/23 16:29*		
Surrogate: Toluene-d8			*75-120*	*100 %*	*05/09/23*		*05/09/23 16:29*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*93 %*	*05/09/23*		*05/09/23 16:29*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

MW-P9

3050514-21 (Nonpotable Water)
Sample Date: 05/05/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 16:54	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 16:54	LL
Benzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 16:54	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 16:54	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 16:54	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 16:54	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 16:54	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 16:54	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
Dichlorodifluoromethane	**0.6**	J	ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
1,1-Dichloroethane	**0.6**	J	ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
Dichlorofluoromethane	**0.5**	J	ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 16:54	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

MW-P9

3050514-21 (Nonpotable Water)
Sample Date: 05/05/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 16:54	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 16:54	LL
Styrene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
Tetrachloroethene	**0.9**	J	ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
Toluene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 16:54	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 16:54	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 16:54	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 16:54	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*88 %*	*05/09/23*	*05/09/23 16:54*
Surrogate: Toluene-d8	*75-120*	*99 %*	*05/09/23*	*05/09/23 16:54*
Surrogate: 4-Bromofluorobenzene	*75-120*	*92 %*	*05/09/23*	*05/09/23 16:54*

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

RW-P109

3050514-22 (Nonpotable Water)
Sample Date: 05/05/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 17:18	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 17:18	LL
Benzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 17:18	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 17:18	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 17:18	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 17:18	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 17:18	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 17:18	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
Dichlorodifluoromethane	**1.4**		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
1,1-Dichloroethane	**0.9**	J	ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
Dichlorofluoromethane	**0.6**	J	ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 17:18	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

RW-P109

3050514-22 (Nonpotable Water)
Sample Date: 05/05/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 17:18	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 17:18	LL
Styrene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
Tetrachloroethene	**0.7**	J	ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
Toluene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
Trichloroethene	**1.0**		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 17:18	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 17:18	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 17:18	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:18	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*90 %*	*05/09/23*	*05/09/23 17:18*
Surrogate: Toluene-d8	*75-120*	*101 %*	*05/09/23*	*05/09/23 17:18*
Surrogate: 4-Bromofluorobenzene	*75-120*	*95 %*	*05/09/23*	*05/09/23 17:18*

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

RW-P441

3050514-23 (Nonpotable Water)
Sample Date: 05/05/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 17:43	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 17:43	LL
Benzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 17:43	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 17:43	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 17:43	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 17:43	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 17:43	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 17:43	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
Dichlorodifluoromethane	**1.0**		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
1,1-Dichloroethane	**0.5**	J	ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

RW-P441

3050514-23 (Nonpotable Water)
Sample Date: 05/05/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 17:43	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 17:43	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 17:43	LL
Styrene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
Toluene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 17:43	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 17:43	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 17:43	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 17:43	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*88 %*	*05/09/23*		*05/09/23 17:43*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*05/09/23*		*05/09/23 17:43*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*91 %*	*05/09/23*		*05/09/23 17:43*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

RW-P440

3050514-24 (Nonpotable Water)
Sample Date: 05/05/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 18:07	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 18:07	LL
Benzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 18:07	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 18:07	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 18:07	LL
Chloroform	**1.2**		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 18:07	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 18:07	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 18:07	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
Dichlorodifluoromethane	**0.6**	J	ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
1,1-Dichloroethane	**0.6**	J	ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 18:07	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

RW-P440

3050514-24 (Nonpotable Water)
Sample Date: 05/05/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/09/23	05/09/23 18:07	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 18:07	LL
Styrene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
Toluene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 18:07	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 18:07	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/09/23	05/09/23 18:07	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/09/23	05/09/23 18:07	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*88 %*			*05/09/23*	*05/09/23 18:07*	
Surrogate: Toluene-d8			*75-120*	*100 %*			*05/09/23*	*05/09/23 18:07*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*93 %*			*05/09/23*	*05/09/23 18:07*	

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

RW-P584

3050514-25 (Nonpotable Water)
Sample Date: 05/05/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/10/23	05/10/23 21:04	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/10/23	05/10/23 21:04	LL
Benzene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/10/23	05/10/23 21:04	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/10/23	05/10/23 21:04	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/10/23	05/10/23 21:04	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/10/23	05/10/23 21:04	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/10/23	05/10/23 21:04	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/10/23	05/10/23 21:04	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
Dichlorodifluoromethane	**2.3**		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
1,1-Dichloroethane	**2.1**		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
cis-1,2-Dichloroethene	**0.8**	J	ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
Dichlorofluoromethane	**1.3**		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/10/23	05/10/23 21:04	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

RW-P584

3050514-25 (Nonpotable Water)
Sample Date: 05/05/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/10/23	05/10/23 21:04	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/10/23	05/10/23 21:04	LL
Styrene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
Tetrachloroethene	**1.9**		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
Toluene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
Trichloroethene	**0.9**	J	ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/10/23	05/10/23 21:04	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/10/23	05/10/23 21:04	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/10/23	05/10/23 21:04	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 21:04	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*79 %*	*05/10/23*	*05/10/23 21:04*
Surrogate: Toluene-d8	*75-120*	*97 %*	*05/10/23*	*05/10/23 21:04*
Surrogate: 4-Bromofluorobenzene	*75-120*	*93 %*	*05/10/23*	*05/10/23 21:04*

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

MW-P440

3050514-26 (Nonpotable Water)
Sample Date: 05/05/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/10/23	05/10/23 14:07	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/10/23	05/10/23 14:07	LL
Benzene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/10/23	05/10/23 14:07	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/10/23	05/10/23 14:07	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/10/23	05/10/23 14:07	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/10/23	05/10/23 14:07	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/10/23	05/10/23 14:07	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/10/23	05/10/23 14:07	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL

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Rabecka Koons, Quality Assurance Officer

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410-247-7600
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

MW-P440

3050514-26 (Nonpotable Water)
Sample Date: 05/05/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/10/23	05/10/23 14:07	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/10/23	05/10/23 14:07	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/10/23	05/10/23 14:07	LL
Styrene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
Toluene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/10/23	05/10/23 14:07	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/10/23	05/10/23 14:07	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/10/23	05/10/23 14:07	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:07	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*85 %*	*05/10/23*		*05/10/23 14:07*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*05/10/23*		*05/10/23 14:07*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*92 %*	*05/10/23*		*05/10/23 14:07*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

MW-P417

3050514-27 (Nonpotable Water)
Sample Date: 05/05/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/10/23	05/10/23 14:31	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/10/23	05/10/23 14:31	LL
Benzene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/10/23	05/10/23 14:31	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/10/23	05/10/23 14:31	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/10/23	05/10/23 14:31	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/10/23	05/10/23 14:31	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/10/23	05/10/23 14:31	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/10/23	05/10/23 14:31	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

MW-P417

3050514-27 (Nonpotable Water)
Sample Date: 05/05/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/10/23	05/10/23 14:31	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/10/23	05/10/23 14:31	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/10/23	05/10/23 14:31	LL
Styrene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
Toluene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/10/23	05/10/23 14:31	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/10/23	05/10/23 14:31	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/10/23	05/10/23 14:31	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/10/23	05/10/23 14:31	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*86 %*	*05/10/23*		*05/10/23 14:31*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*05/10/23*		*05/10/23 14:31*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*93 %*	*05/10/23*		*05/10/23 14:31*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305166 - GCMS-WATER-VOLATILES										
Blank (B305166-BLK1)					Prepared & Analyzed: 05/08/23					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						

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Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305166 - GCMS-WATER-VOLATILES										
Blank (B305166-BLK1)					Prepared & Analyzed: 05/08/23					
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*45.43*			ug/L	*50.00*		*91*	*70-130*		
Surrogate: Toluene-d8	*50.86*			ug/L	*50.00*		*102*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*46.38*			ug/L	*50.00*		*93*	*75-120*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305166 - GCMS-WATER-VOLATILES										
LCS (B305166-BS1)					Prepared & Analyzed: 05/08/23					
Acetone	7.4		5.0	ug/L	10.00		74	55-150		
Acrylonitrile	4.5	J	5.0	ug/L	5.000		90	50-150		
Benzene	5.2		1.0	ug/L	5.000		104	70-130		
Bromochloromethane	5.5		1.0	ug/L	5.000		110	70-130		
Bromodichloromethane	4.8		1.0	ug/L	5.000		97	70-130		
Bromoform	4.8		1.0	ug/L	5.000		95	70-130		
Bromomethane	3.6		1.0	ug/L	5.000		72	25-150		
2-Butanone (MEK)	8.2		5.0	ug/L	10.00		82	60-140		
Carbon disulfide	5.3		1.0	ug/L	5.000		106	70-130		
Carbon tetrachloride	4.9		1.0	ug/L	5.000		97	70-130		
Chlorobenzene	5.4		1.0	ug/L	5.000		108	70-130		
Chloroethane	3.1		1.0	ug/L	5.000		62	60-150		
Chloroform	5.0		1.0	ug/L	5.000		99	70-130		
Chloromethane	5.2		1.0	ug/L	5.000		103	60-150		
Dibromochloromethane	4.9		1.0	ug/L	5.000		98	70-130		
1,2-Dibromo-3-chloropropane	5.5		1.0	ug/L	5.000		110	70-130		
1,2-Dibromoethane (EDB)	4.8		1.0	ug/L	5.000		96	70-130		
Dibromomethane	4.4		1.0	ug/L	5.000		89	70-130		
1,2-Dichlorobenzene	5.8		1.0	ug/L	5.000		116	70-130		
1,4-Dichlorobenzene	5.8		1.0	ug/L	5.000		115	70-130		
1,1-Dichloroethane	5.0		1.0	ug/L	5.000		101	70-130		
1,2-Dichloroethane	4.5		1.0	ug/L	5.000		90	70-130		
1,1-Dichloroethene	4.7		1.0	ug/L	5.000		94	70-130		
cis-1,2-Dichloroethene	4.8		1.0	ug/L	5.000		96	70-130		
trans-1,2-Dichloroethene	5.0		1.0	ug/L	5.000		99	70-130		
1,2-Dichloropropane	4.7		1.0	ug/L	5.000		94	70-130		
1,3-Dichloropropane	5.0		1.0	ug/L	5.000		100	70-130		
2,2-Dichloropropane	4.7		1.0	ug/L	5.000		93	70-130		
1,1-Dichloropropene	4.6		1.0	ug/L	5.000		93	70-130		
cis-1,3-Dichloropropene	4.6		1.0	ug/L	5.000		92	70-130		
trans-1,3-Dichloropropene	4.8		1.0	ug/L	5.000		95	70-130		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305166 - GCMS-WATER-VOLATILES										
LCS (B305166-BS1)					Prepared & Analyzed: 05/08/23					
Ethylbenzene	5.2		1.0	ug/L	5.000		104	70-130		
2-Hexanone	8.5		5.0	ug/L	10.00		85	70-130		
Methyl tert-butyl ether (MTBE)	4.5		1.0	ug/L	5.000		90	70-130		
4-Methyl-2-pentanone	8.1		5.0	ug/L	10.00		81	70-130		
Methylene chloride	5.3		1.0	ug/L	5.000		106	50-200		
Methyl methacrylate	4.1	J	5.0	ug/L	5.000		82	50-150		
Styrene	4.9		1.0	ug/L	5.000		99	70-130		
1,1,1,2-Tetrachloroethane	4.9		1.0	ug/L	5.000		97	70-130		
1,1,2,2-Tetrachloroethane	5.0		1.0	ug/L	5.000		100	70-130		
Tetrachloroethene	4.8		1.0	ug/L	5.000		96	70-130		
Toluene	5.1		1.0	ug/L	5.000		101	70-130		
1,1,1-Trichloroethane	4.6		1.0	ug/L	5.000		92	70-130		
1,1,2-Trichloroethane	5.2		1.0	ug/L	5.000		103	70-130		
Trichloroethene	5.0		1.0	ug/L	5.000		99	70-130		
Trichlorofluoromethane (Freon 11)	3.7		1.0	ug/L	5.000		74	70-130		
1,2,3-Trichloropropane	5.1		1.0	ug/L	5.000		102	70-130		
Vinyl acetate	3.2		1.0	ug/L	5.000		65	70-130		
Vinyl chloride	4.1		1.0	ug/L	5.000		81	70-130		
o-Xylene	4.7		1.0	ug/L	5.000		94	70-130		
m- & p-Xylenes	10.5		1.0	ug/L	10.00		105	70-130		
Surrogate: 1,2-Dichloroethane-d4	*45.52*			ug/L	*50.00*		*91*	*70-130*		
Surrogate: Toluene-d8	*51.63*			ug/L	*50.00*		*103*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*46.96*			ug/L	*50.00*		*94*	*75-120*		
Duplicate (B305166-DUP1)			**Source: 3050514-02**		Prepared & Analyzed: 05/08/23					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20

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Project Manager: Steve Brown

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305166 - GCMS-WATER-VOLATILES										
Duplicate (B305166-DUP1)			**Source: 3050514-02**		Prepared & Analyzed: 05/08/23					
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	ND		1.0	ug/L		ND				20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305166 - GCMS-WATER-VOLATILES										
Duplicate (B305166-DUP1)		**Source: 3050514-02**		Prepared & Analyzed: 05/08/23						
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	ND		1.0	ug/L		ND				20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	ND		1.0	ug/L		ND				20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*49.37*			ug/L	*50.00*		*99*	*70-130*		
Surrogate: Toluene-d8	*49.36*			ug/L	*50.00*		*99*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.29*			ug/L	*50.00*		*99*	*75-120*		
Matrix Spike (B305166-MS1)		**Source: 3050514-07**		Prepared & Analyzed: 05/08/23						
Acetone	7.6		5.0	ug/L	10.00	ND	76	60-120		
Acrylonitrile	9.3		5.0	ug/L	10.00	ND	93	0-200		
Benzene	10.6		1.0	ug/L	10.00	ND	106	60-120		
Bromochloromethane	9.7		1.0	ug/L	10.00	ND	97	60-120		
Bromodichloromethane	9.7		1.0	ug/L	10.00	ND	97	60-120		
Bromoform	9.5		1.0	ug/L	10.00	ND	95	60-120		
Bromomethane	4.0		1.0	ug/L	10.00	ND	40	60-120		
2-Butanone (MEK)	8.7		5.0	ug/L	10.00	ND	87	60-120		

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305166 - GCMS-WATER-VOLATILES										
Matrix Spike (B305166-MS1)			**Source: 3050514-07**		Prepared & Analyzed: 05/08/23					
Carbon disulfide	9.5		1.0	ug/L	10.00	ND	95	60-120		
Carbon tetrachloride	9.7		1.0	ug/L	10.00	ND	97	60-120		
Chlorobenzene	10.1		1.0	ug/L	10.00	ND	101	60-120		
Chloroethane	9.2		1.0	ug/L	10.00	ND	92	60-120		
Chloroform	9.4		1.0	ug/L	10.00	ND	94	60-120		
Chloromethane	13.6		1.0	ug/L	10.00	ND	136	60-120		
Dibromochloromethane	9.7		1.0	ug/L	10.00	ND	97	60-120		
1,2-Dibromo-3-chloropropane	9.0		1.0	ug/L	10.00	ND	90	60-120		
1,2-Dibromoethane (EDB)	9.3		1.0	ug/L	10.00	ND	93	60-120		
Dibromomethane	8.9		1.0	ug/L	10.00	ND	89	60-120		
1,2-Dichlorobenzene	10.3		1.0	ug/L	10.00	ND	103	60-120		
1,4-Dichlorobenzene	10.1		1.0	ug/L	10.00	ND	101	60-120		
1,1-Dichloroethane	10.2		1.0	ug/L	10.00	0.5	97	60-120		
1,2-Dichloroethane	8.7		1.0	ug/L	10.00	ND	87	60-120		
1,1-Dichloroethene	9.7		1.0	ug/L	10.00	ND	97	60-120		
cis-1,2-Dichloroethene	9.3		1.0	ug/L	10.00	ND	93	60-120		
trans-1,2-Dichloroethene	9.7		1.0	ug/L	10.00	ND	97	60-120		
1,2-Dichloropropane	10.0		1.0	ug/L	10.00	ND	100	60-120		
1,3-Dichloropropane	9.5		1.0	ug/L	10.00	ND	95	60-120		
2,2-Dichloropropane	8.7		1.0	ug/L	10.00	ND	87	60-120		
1,1-Dichloropropene	9.9		1.0	ug/L	10.00	ND	99	60-120		
cis-1,3-Dichloropropene	9.5		1.0	ug/L	10.00	ND	95	60-120		
trans-1,3-Dichloropropene	9.3		1.0	ug/L	10.00	ND	93	60-120		
Ethylbenzene	10.4		1.0	ug/L	10.00	ND	104	60-120		
2-Hexanone	9.3		5.0	ug/L	10.00	ND	93	60-120		
Methyl tert-butyl ether (MTBE)	9.2		1.0	ug/L	10.00	ND	92	60-120		
4-Methyl-2-pentanone	8.8		5.0	ug/L	10.00	ND	88	60-120		
Methylene chloride	9.8		1.0	ug/L	10.00	ND	98	60-120		
Methyl methacrylate	9.4		5.0	ug/L	10.00	ND	94	60-120		
Styrene	9.7		1.0	ug/L	10.00	ND	97	60-120		
1,1,1,2-Tetrachloroethane	9.6		1.0	ug/L	10.00	ND	96	60-120		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305166 - GCMS-WATER-VOLATILES										
Matrix Spike (B305166-MS1)			**Source: 3050514-07**		Prepared & Analyzed: 05/08/23					
1,1,2,2-Tetrachloroethane	9.5		1.0	ug/L	10.00	ND	95	60-120		
Tetrachloroethene	10.5		1.0	ug/L	10.00	ND	105	60-120		
Toluene	10.4		1.0	ug/L	10.00	ND	104	60-120		
1,1,1-Trichloroethane	9.3		1.0	ug/L	10.00	ND	93	60-120		
1,1,2-Trichloroethane	9.6		1.0	ug/L	10.00	ND	96	60-120		
Trichloroethene	10.3		1.0	ug/L	10.00	ND	103	60-120		
Trichlorofluoromethane (Freon 11)	9.3		1.0	ug/L	10.00	ND	93	60-120		
1,2,3-Trichloropropane	9.1		1.0	ug/L	10.00	ND	91	60-120		
Vinyl acetate	8.0		1.0	ug/L	10.00	ND	80	60-120		
Vinyl chloride	7.9		1.0	ug/L	10.00	ND	79	60-120		
o-Xylene	9.6		1.0	ug/L	10.00	ND	96	60-120		
m- & p-Xylenes	21.0		1.0	ug/L	20.00	ND	105	60-120		
Surrogate: 1,2-Dichloroethane-d4	*44.70*			ug/L	*50.00*		*89*	*70-130*		
Surrogate: Toluene-d8	*50.19*			ug/L	*50.00*		*100*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*47.40*			ug/L	*50.00*		*95*	*75-120*		
Batch B305201 - GCMS-WATER-VOLATILES										
Blank (B305201-BLK1)					Prepared & Analyzed: 05/09/23					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						

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Rabecka Koons, Quality Assurance Officer

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305201 - GCMS-WATER-VOLATILES										
Blank (B305201-BLK1)					Prepared & Analyzed: 05/09/23					
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305201 - GCMS-WATER-VOLATILES										
Blank (B305201-BLK1)					Prepared & Analyzed: 05/09/23					
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*44.19*			ug/L	*50.00*		*88*	*70-130*		
Surrogate: Toluene-d8	*50.29*			ug/L	*50.00*		*101*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*47.66*			ug/L	*50.00*		*95*	*75-120*		
LCS (B305201-BS1)					Prepared & Analyzed: 05/09/23					
Acetone	6.4		5.0	ug/L	10.00		64	55-150		
Acrylonitrile	4.6	J	5.0	ug/L	5.000		93	50-150		
Benzene	5.1		1.0	ug/L	5.000		102	70-130		
Bromochloromethane	5.7		1.0	ug/L	5.000		114	70-130		
Bromodichloromethane	5.0		1.0	ug/L	5.000		99	70-130		
Bromoform	4.6		1.0	ug/L	5.000		92	70-130		
Bromomethane	3.9		1.0	ug/L	5.000		79	25-150		
2-Butanone (MEK)	6.9		5.0	ug/L	10.00		69	60-140		
Carbon disulfide	5.2		1.0	ug/L	5.000		104	70-130		
Carbon tetrachloride	5.0		1.0	ug/L	5.000		99	70-130		
Chlorobenzene	5.3		1.0	ug/L	5.000		106	70-130		
Chloroethane	2.7		1.0	ug/L	5.000		55	60-150		
Chloroform	5.1		1.0	ug/L	5.000		102	70-130		
Chloromethane	5.0		1.0	ug/L	5.000		101	60-150		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305201 - GCMS-WATER-VOLATILES										
LCS (B305201-BS1)					Prepared & Analyzed: 05/09/23					
Dibromochloromethane	4.7		1.0	ug/L	5.000		93	70-130		
1,2-Dibromo-3-chloropropane	4.3		1.0	ug/L	5.000		86	70-130		
1,2-Dibromoethane (EDB)	4.8		1.0	ug/L	5.000		95	70-130		
Dibromomethane	4.8		1.0	ug/L	5.000		96	70-130		
1,2-Dichlorobenzene	5.2		1.0	ug/L	5.000		103	70-130		
1,4-Dichlorobenzene	5.3		1.0	ug/L	5.000		105	70-130		
1,1-Dichloroethane	4.9		1.0	ug/L	5.000		98	70-130		
1,2-Dichloroethane	4.6		1.0	ug/L	5.000		92	70-130		
1,1-Dichloroethene	5.0		1.0	ug/L	5.000		100	70-130		
cis-1,2-Dichloroethene	4.8		1.0	ug/L	5.000		97	70-130		
trans-1,2-Dichloroethene	5.1		1.0	ug/L	5.000		102	70-130		
1,2-Dichloropropane	4.9		1.0	ug/L	5.000		98	70-130		
1,3-Dichloropropane	4.7		1.0	ug/L	5.000		93	70-130		
2,2-Dichloropropane	4.9		1.0	ug/L	5.000		98	70-130		
1,1-Dichloropropene	4.6		1.0	ug/L	5.000		92	70-130		
cis-1,3-Dichloropropene	4.7		1.0	ug/L	5.000		93	70-130		
trans-1,3-Dichloropropene	4.6		1.0	ug/L	5.000		92	70-130		
Ethylbenzene	4.9		1.0	ug/L	5.000		98	70-130		
2-Hexanone	8.3		5.0	ug/L	10.00		83	70-130		
Methyl tert-butyl ether (MTBE)	4.7		1.0	ug/L	5.000		93	70-130		
4-Methyl-2-pentanone	7.7		5.0	ug/L	10.00		77	70-130		
Methylene chloride	5.7		1.0	ug/L	5.000		114	50-200		
Methyl methacrylate	3.9	J	5.0	ug/L	5.000		79	50-150		
Styrene	4.7		1.0	ug/L	5.000		94	70-130		
1,1,1,2-Tetrachloroethane	4.9		1.0	ug/L	5.000		98	70-130		
1,1,2,2-Tetrachloroethane	4.7		1.0	ug/L	5.000		93	70-130		
Tetrachloroethene	4.9		1.0	ug/L	5.000		99	70-130		
Toluene	5.0		1.0	ug/L	5.000		100	70-130		
1,1,1-Trichloroethane	4.6		1.0	ug/L	5.000		91	70-130		
1,1,2-Trichloroethane	4.9		1.0	ug/L	5.000		98	70-130		
Trichloroethene	5.1		1.0	ug/L	5.000		102	70-130		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305201 - GCMS-WATER-VOLATILES										
LCS (B305201-BS1)					Prepared & Analyzed: 05/09/23					
Trichlorofluoromethane (Freon 11)	3.7		1.0	ug/L	5.000		74	70-130		
1,2,3-Trichloropropane	4.5		1.0	ug/L	5.000		90	70-130		
Vinyl acetate	3.5		1.0	ug/L	5.000		70	70-130		
Vinyl chloride	3.8		1.0	ug/L	5.000		75	70-130		
o-Xylene	4.6		1.0	ug/L	5.000		91	70-130		
m- & p-Xylenes	9.9		1.0	ug/L	10.00		99	70-130		
Surrogate: 1,2-Dichloroethane-d4	*46.43*			ug/L	*50.00*		*93*	*70-130*		
Surrogate: Toluene-d8	*49.84*			ug/L	*50.00*		*100*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.69*			ug/L	*50.00*		*99*	*75-120*		
Duplicate (B305201-DUP1)		**Source: 3050514-12**			Prepared & Analyzed: 05/09/23					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20

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Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305201 - GCMS-WATER-VOLATILES										
Duplicate (B305201-DUP1)			**Source: 3050514-12**		Prepared & Analyzed: 05/09/23					
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	ND		1.0	ug/L		ND				20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	ND		1.0	ug/L		ND				20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	ND		1.0	ug/L		ND				20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305201 - GCMS-WATER-VOLATILES										
Duplicate (B305201-DUP1)		**Source: 3050514-12**		Prepared & Analyzed: 05/09/23						
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*42.68*			ug/L	*50.00*		*85*	*70-130*		
Surrogate: Toluene-d8	*49.39*			ug/L	*50.00*		*99*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*45.87*			ug/L	*50.00*		*92*	*75-120*		
Matrix Spike (B305201-MS1)		**Source: 3050514-17**		Prepared & Analyzed: 05/09/23						
Acetone	5.9		5.0	ug/L	10.00	ND	59	60-120		
Acrylonitrile	9.1		5.0	ug/L	10.00	ND	91	0-200		
Benzene	10.5		1.0	ug/L	10.00	ND	105	60-120		
Bromochloromethane	11.1		1.0	ug/L	10.00	ND	111	60-120		
Bromodichloromethane	9.9		1.0	ug/L	10.00	ND	99	60-120		
Bromoform	10.0		1.0	ug/L	10.00	ND	100	60-120		
Bromomethane	4.0		1.0	ug/L	10.00	ND	40	60-120		
2-Butanone (MEK)	8.0		5.0	ug/L	10.00	ND	80	60-120		
Carbon disulfide	10.0		1.0	ug/L	10.00	ND	100	60-120		
Carbon tetrachloride	10.7		1.0	ug/L	10.00	ND	107	60-120		
Chlorobenzene	10.9		1.0	ug/L	10.00	ND	109	60-120		
Chloroethane	8.8		1.0	ug/L	10.00	ND	88	60-120		
Chloroform	9.8		1.0	ug/L	10.00	ND	98	60-120		
Chloromethane	12.9		1.0	ug/L	10.00	ND	129	60-120		
Dibromochloromethane	10.0		1.0	ug/L	10.00	ND	100	60-120		
1,2-Dibromo-3-chloropropane	9.6		1.0	ug/L	10.00	ND	96	60-120		
1,2-Dibromoethane (EDB)	9.9		1.0	ug/L	10.00	ND	99	60-120		
Dibromomethane	8.8		1.0	ug/L	10.00	ND	88	60-120		
1,2-Dichlorobenzene	10.4		1.0	ug/L	10.00	ND	104	60-120		
1,4-Dichlorobenzene	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,1-Dichloroethane	9.4		1.0	ug/L	10.00	ND	94	60-120		
1,2-Dichloroethane	8.5		1.0	ug/L	10.00	ND	85	60-120		

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Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305201 - GCMS-WATER-VOLATILES										
Matrix Spike (B305201-MS1)		**Source: 3050514-17**		Prepared & Analyzed: 05/09/23						
1,1-Dichloroethene	10.0		1.0	ug/L	10.00	ND	100	60-120		
cis-1,2-Dichloroethene	9.6		1.0	ug/L	10.00	ND	96	60-120		
trans-1,2-Dichloroethene	10.2		1.0	ug/L	10.00	ND	102	60-120		
1,2-Dichloropropane	9.9		1.0	ug/L	10.00	ND	99	60-120		
1,3-Dichloropropane	9.8		1.0	ug/L	10.00	ND	98	60-120		
2,2-Dichloropropane	9.0		1.0	ug/L	10.00	ND	90	60-120		
1,1-Dichloropropene	9.9		1.0	ug/L	10.00	ND	99	60-120		
cis-1,3-Dichloropropene	9.4		1.0	ug/L	10.00	ND	94	60-120		
trans-1,3-Dichloropropene	9.3		1.0	ug/L	10.00	ND	93	60-120		
Ethylbenzene	11.0		1.0	ug/L	10.00	ND	110	60-120		
2-Hexanone	8.4		5.0	ug/L	10.00	ND	84	60-120		
Methyl tert-butyl ether (MTBE)	9.0		1.0	ug/L	10.00	ND	90	60-120		
4-Methyl-2-pentanone	7.9		5.0	ug/L	10.00	ND	79	60-120		
Methylene chloride	9.3		1.0	ug/L	10.00	ND	93	60-120		
Methyl methacrylate	8.5		5.0	ug/L	10.00	ND	85	60-120		
Styrene	10.6		1.0	ug/L	10.00	ND	106	60-120		
1,1,1,2-Tetrachloroethane	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,1,2,2-Tetrachloroethane	9.5		1.0	ug/L	10.00	ND	95	60-120		
Tetrachloroethene	11.6		1.0	ug/L	10.00	ND	116	60-120		
Toluene	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,1,1-Trichloroethane	9.8		1.0	ug/L	10.00	ND	98	60-120		
1,1,2-Trichloroethane	9.9		1.0	ug/L	10.00	ND	99	60-120		
Trichloroethene	10.5		1.0	ug/L	10.00	ND	105	60-120		
Trichlorofluoromethane (Freon 11)	9.7		1.0	ug/L	10.00	ND	97	60-120		
1,2,3-Trichloropropane	8.8		1.0	ug/L	10.00	ND	88	60-120		
Vinyl acetate	7.9		1.0	ug/L	10.00	ND	79	60-120		
Vinyl chloride	7.5		1.0	ug/L	10.00	ND	75	60-120		
o-Xylene	10.0		1.0	ug/L	10.00	ND	100	60-120		
m- & p-Xylenes	22.1		1.0	ug/L	20.00	ND	111	60-120		
Surrogate: 1,2-Dichloroethane-d4	*42.78*			ug/L	*50.00*		*86*	*70-130*		
Surrogate: Toluene-d8	*50.11*			ug/L	*50.00*		*100*	*75-120*		

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Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305201 - GCMS-WATER-VOLATILES										
Matrix Spike (B305201-MS1)		**Source: 3050514-17**			Prepared & Analyzed: 05/09/23					
Surrogate: 4-Bromofluorobenzene	*47.63*			ug/L	*50.00*		*95*	*75-120*		
Batch B305236 - GCMS-WATER-VOLATILES										
Blank (B305236-BLK1)					Prepared & Analyzed: 05/10/23					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305236 - GCMS-WATER-VOLATILES										
Blank (B305236-BLK1)					Prepared & Analyzed: 05/10/23					
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*42.79*			ug/L	*50.00*		*86*	*70-130*		

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Rabecka Koons, Quality Assurance Officer

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305236 - GCMS-WATER-VOLATILES										
Blank (B305236-BLK1)					Prepared & Analyzed: 05/10/23					
Surrogate: Toluene-d8	*48.16*			ug/L	*50.00*		*96*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*46.29*			ug/L	*50.00*		*93*	*75-120*		
LCS (B305236-BS1)					Prepared & Analyzed: 05/10/23					
Acetone	5.9		5.0	ug/L	10.00		59	55-150		
Acrylonitrile	4.4	J	5.0	ug/L	5.000		87	50-150		
Benzene	4.9		1.0	ug/L	5.000		97	70-130		
Bromochloromethane	5.5		1.0	ug/L	5.000		110	70-130		
Bromodichloromethane	4.5		1.0	ug/L	5.000		90	70-130		
Bromoform	4.8		1.0	ug/L	5.000		95	70-130		
Bromomethane	3.2		1.0	ug/L	5.000		64	25-150		
2-Butanone (MEK)	5.9		5.0	ug/L	10.00		59	60-140		
Carbon disulfide	4.7		1.0	ug/L	5.000		93	70-130		
Carbon tetrachloride	4.8		1.0	ug/L	5.000		97	70-130		
Chlorobenzene	5.2		1.0	ug/L	5.000		104	70-130		
Chloroethane	2.2		1.0	ug/L	5.000		44	60-150		
Chloroform	4.7		1.0	ug/L	5.000		94	70-130		
Chloromethane	3.7		1.0	ug/L	5.000		74	60-150		
Dibromochloromethane	4.7		1.0	ug/L	5.000		94	70-130		
1,2-Dibromo-3-chloropropane	5.2		1.0	ug/L	5.000		104	70-130		
1,2-Dibromoethane (EDB)	4.8		1.0	ug/L	5.000		96	70-130		
Dibromomethane	4.6		1.0	ug/L	5.000		92	70-130		
1,2-Dichlorobenzene	5.5		1.0	ug/L	5.000		110	70-130		
1,4-Dichlorobenzene	5.4		1.0	ug/L	5.000		108	70-130		
1,1-Dichloroethane	4.5		1.0	ug/L	5.000		89	70-130		
1,2-Dichloroethane	4.2		1.0	ug/L	5.000		83	70-130		
1,1-Dichloroethene	4.8		1.0	ug/L	5.000		95	70-130		
cis-1,2-Dichloroethene	4.6		1.0	ug/L	5.000		92	70-130		
trans-1,2-Dichloroethene	4.9		1.0	ug/L	5.000		99	70-130		
1,2-Dichloropropane	4.3		1.0	ug/L	5.000		85	70-130		
1,3-Dichloropropane	4.7		1.0	ug/L	5.000		93	70-130		
2,2-Dichloropropane	4.5		1.0	ug/L	5.000		91	70-130		

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Project Manager: Steve Brown

Reported:
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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305236 - GCMS-WATER-VOLATILES										
LCS (B305236-BS1)					Prepared & Analyzed: 05/10/23					
1,1-Dichloropropene	4.4		1.0	ug/L	5.000		88	70-130		
cis-1,3-Dichloropropene	4.7		1.0	ug/L	5.000		94	70-130		
trans-1,3-Dichloropropene	4.4		1.0	ug/L	5.000		89	70-130		
Ethylbenzene	5.0		1.0	ug/L	5.000		100	70-130		
2-Hexanone	7.1		5.0	ug/L	10.00		71	70-130		
Methyl tert-butyl ether (MTBE)	4.3		1.0	ug/L	5.000		86	70-130		
4-Methyl-2-pentanone	7.5		5.0	ug/L	10.00		75	70-130		
Methylene chloride	4.9		1.0	ug/L	5.000		99	50-200		
Methyl methacrylate	3.6	J	5.0	ug/L	5.000		72	50-150		
Styrene	4.9		1.0	ug/L	5.000		98	70-130		
1,1,1,2-Tetrachloroethane	4.8		1.0	ug/L	5.000		97	70-130		
1,1,2,2-Tetrachloroethane	4.4		1.0	ug/L	5.000		88	70-130		
Tetrachloroethene	5.2		1.0	ug/L	5.000		104	70-130		
Toluene	4.9		1.0	ug/L	5.000		98	70-130		
1,1,1-Trichloroethane	4.6		1.0	ug/L	5.000		91	70-130		
1,1,2-Trichloroethane	4.9		1.0	ug/L	5.000		97	70-130		
Trichloroethene	5.1		1.0	ug/L	5.000		102	70-130		
Trichlorofluoromethane (Freon 11)	3.3		1.0	ug/L	5.000		66	70-130		
1,2,3-Trichloropropane	4.6		1.0	ug/L	5.000		91	70-130		
Vinyl acetate	3.0		1.0	ug/L	5.000		60	70-130		
Vinyl chloride	3.1		1.0	ug/L	5.000		62	70-130		
o-Xylene	4.5		1.0	ug/L	5.000		90	70-130		
m- & p-Xylenes	10.0		1.0	ug/L	10.00		100	70-130		
Surrogate: 1,2-Dichloroethane-d4	*43.88*			ug/L	*50.00*		*88*	*70-130*		
Surrogate: Toluene-d8	*50.91*			ug/L	*50.00*		*102*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*45.25*			ug/L	*50.00*		*91*	*75-120*		
Duplicate (B305236-DUP1)			**Source: 3050514-25**		Prepared & Analyzed: 05/10/23					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305236 - GCMS-WATER-VOLATILES										
Duplicate (B305236-DUP1)		**Source: 3050514-25**		Prepared & Analyzed: 05/10/23						
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	2.1		1.0	ug/L		2.1			2	20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	0.8	J	1.0	ug/L		0.8			0	20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305236 - GCMS-WATER-VOLATILES										
Duplicate (B305236-DUP1)		**Source: 3050514-25**		Prepared & Analyzed: 05/10/23						
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	1.8		1.0	ug/L		1.9			3	20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	1.0	J	1.0	ug/L		0.9			13	20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*41.05*			ug/L	*50.00*		*82*	*70-130*		
Surrogate: Toluene-d8	*48.61*			ug/L	*50.00*		*97*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*45.76*			ug/L	*50.00*		*92*	*75-120*		
Matrix Spike (B305236-MS1)		**Source: 3050514-26**		Prepared & Analyzed: 05/10/23						
Acetone	6.0		5.0	ug/L	10.00	ND	60	60-120		
Acrylonitrile	9.1		5.0	ug/L	10.00	ND	91	0-200		
Benzene	10.5		1.0	ug/L	10.00	ND	105	60-120		
Bromochloromethane	9.5		1.0	ug/L	10.00	ND	95	60-120		
Bromodichloromethane	9.2		1.0	ug/L	10.00	ND	92	60-120		

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305236 - GCMS-WATER-VOLATILES										
Matrix Spike (B305236-MS1)		**Source: 3050514-26**		Prepared & Analyzed: 05/10/23						
Bromoform	10.5		1.0	ug/L	10.00	ND	105	60-120		
Bromomethane	4.3		1.0	ug/L	10.00	ND	43	60-120		
2-Butanone (MEK)	9.0		5.0	ug/L	10.00	ND	90	60-120		
Carbon disulfide	8.7		1.0	ug/L	10.00	ND	87	60-120		
Carbon tetrachloride	10.5		1.0	ug/L	10.00	ND	105	60-120		
Chlorobenzene	10.9		1.0	ug/L	10.00	ND	109	60-120		
Chloroethane	7.4		1.0	ug/L	10.00	ND	74	60-120		
Chloroform	9.6		1.0	ug/L	10.00	ND	96	60-120		
Chloromethane	10.5		1.0	ug/L	10.00	ND	105	60-120		
Dibromochloromethane	10.1		1.0	ug/L	10.00	ND	101	60-120		
1,2-Dibromo-3-chloropropane	9.7		1.0	ug/L	10.00	ND	97	60-120		
1,2-Dibromoethane (EDB)	9.6		1.0	ug/L	10.00	ND	96	60-120		
Dibromomethane	8.2		1.0	ug/L	10.00	ND	82	60-120		
1,2-Dichlorobenzene	10.2		1.0	ug/L	10.00	ND	102	60-120		
1,4-Dichlorobenzene	10.6		1.0	ug/L	10.00	ND	106	60-120		
1,1-Dichloroethane	8.8		1.0	ug/L	10.00	ND	88	60-120		
1,2-Dichloroethane	8.0		1.0	ug/L	10.00	ND	80	60-120		
1,1-Dichloroethene	9.3		1.0	ug/L	10.00	ND	93	60-120		
cis-1,2-Dichloroethene	9.4		1.0	ug/L	10.00	ND	94	60-120		
trans-1,2-Dichloroethene	9.6		1.0	ug/L	10.00	ND	96	60-120		
1,2-Dichloropropane	9.5		1.0	ug/L	10.00	ND	95	60-120		
1,3-Dichloropropane	9.6		1.0	ug/L	10.00	ND	96	60-120		
2,2-Dichloropropane	8.5		1.0	ug/L	10.00	ND	85	60-120		
1,1-Dichloropropene	10.0		1.0	ug/L	10.00	ND	100	60-120		
cis-1,3-Dichloropropene	9.5		1.0	ug/L	10.00	ND	95	60-120		
trans-1,3-Dichloropropene	9.6		1.0	ug/L	10.00	ND	96	60-120		
Ethylbenzene	10.7		1.0	ug/L	10.00	ND	107	60-120		
2-Hexanone	9.0		5.0	ug/L	10.00	ND	90	60-120		
Methyl tert-butyl ether (MTBE)	9.6		1.0	ug/L	10.00	ND	96	60-120		
4-Methyl-2-pentanone	8.3		5.0	ug/L	10.00	ND	83	60-120		
Methylene chloride	8.4		1.0	ug/L	10.00	ND	84	60-120		

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Project Number: MLF-SPRING 2023
Project Manager: Steve Brown

Reported:
05/15/23 13:28

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305236 - GCMS-WATER-VOLATILES										
Matrix Spike (B305236-MS1)			**Source: 3050514-26**		Prepared & Analyzed: 05/10/23					
Methyl methacrylate	9.1		5.0	ug/L	10.00	ND	91	60-120		
Styrene	10.5		1.0	ug/L	10.00	ND	105	60-120		
1,1,1,2-Tetrachloroethane	10.8		1.0	ug/L	10.00	ND	108	60-120		
1,1,2,2-Tetrachloroethane	9.4		1.0	ug/L	10.00	ND	94	60-120		
Tetrachloroethene	11.6		1.0	ug/L	10.00	ND	116	60-120		
Toluene	10.6		1.0	ug/L	10.00	ND	106	60-120		
1,1,1-Trichloroethane	9.9		1.0	ug/L	10.00	ND	99	60-120		
1,1,2-Trichloroethane	10.2		1.0	ug/L	10.00	ND	102	60-120		
Trichloroethene	11.2		1.0	ug/L	10.00	ND	112	60-120		
Trichlorofluoromethane (Freon 11)	9.6		1.0	ug/L	10.00	ND	96	60-120		
1,2,3-Trichloropropane	9.1		1.0	ug/L	10.00	ND	91	60-120		
Vinyl acetate	8.3		1.0	ug/L	10.00	ND	83	60-120		
Vinyl chloride	6.3		1.0	ug/L	10.00	ND	63	60-120		
o-Xylene	10.0		1.0	ug/L	10.00	ND	100	60-120		
m- & p-Xylenes	21.8		1.0	ug/L	20.00	ND	109	60-120		
Surrogate: 1,2-Dichloroethane-d4	*41.40*			ug/L	*50.00*		*83*	*70-130*		
Surrogate: Toluene-d8	*48.23*			ug/L	*50.00*		*96*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*47.18*			ug/L	*50.00*		*94*	*75-120*		

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Project Manager: Steve Brown

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Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MSS
Project	MLF-SPRING 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260 (1)										
1	TW-8	3	5-3-23	1030	✓		GW	✓								3050514-01 A		
2	TW-8A			1105												-	0	2
3	TW-9			1315												-	0	3
4	TW-9B			1150												-	0	4
5	TW-9C			1230												-	0	5
6	TW-10A			1400												-	0	6
7	TW-11A			1440												-	0	7
8	TW-12		↓	1530												-	0	8
9	TW-13		5-4-23	830												-	0	9
10	TW-14			1035												-	1	0
11	TW-14A			1000												-	1	1
12	TW-14B	↓	↓	920	↓		↓	↓								-	1	2

	Signature	Date	Time	Comments
Relinquished by	DA Brown	5.5.23	1630	(1) APPENDIX I LIST of 47 VOCs, MTBE, DCDFM,
Received by	[illegible]	5-5-23	1630	DCFM
Relinquished by				
Received by				STANDARD REPORT
Relinquished by				
Received by				

Cooler Temp on Arrival: 5.7 Deg. C

Rev. Aug. 2018

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MSS
Project	MLF-SPRING 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260 (1)										
1	TW-15	3	5-4-23	1120	✓		GW	✓								3050514-13 A		
2	TW-15B			1200												-	1	4
3	TW-16			1320												-	1	5
4	TW-16A			1245												-	1	6
5	TW-17			1400												-	1	7
6	TW-17A			1435												-	1	8
7	TW-18			1515												-	1	9
8	TRIP BLANK	2		—			QA									-	2	0
9	MW-09	3	5-5-23	1000	✓		GW									-	2	1
10	RW-P109			1040												-	2	2
11	RW-P441			1130												-	2	3
12	RW-P440			1210												-	2	4

	Signature	Date	Time	Comments
Relinquished by	[signature]	5.5.23	1630	(1) APPENDIX I LIST of 47 VOCs, MTBE,
Received by	[signature]	5.5.23	1630	DCDFM + DCFM
Relinquished by				
Received by				STANDARD REPORT
Relinquished by				
Received by				

Cooler Temp on Arrival: 5.7 Deg. C

Rev. Aug. 2018

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MSS
Project	MLF - SPRING 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260 (1)											
1	RW - P584	3	5.5.23	1250	✓		GW	✓									3050514-25 A		
2	MW - P440	↓	↓	1400	↓		↓	✓									-	2	6
3	MW - P417	↓	↓	1445	↓		↓	✓									-	2	7
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

	Signature	Date	Time	Comments
Relinquished by	DA Brown	5. 5.23	1630	(1) APPENDIX I LIST OF 47 VOCs, MTBE, DCDFM
Received by		5-5-23	1630	DCFM
Relinquished by				
Received by				STANDARD REPORT
Relinquished by				
Received by				

Cooler Temp on Arrival: 5.7 Deg. C

Rev. Aug. 2018

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

22 May 2023

Steve Brown
Environmental Monitoring and Assessment
207 East Sixth Street
Lititz, PA 17543
RE: MILLERSVILLE LANDFILL

Enclosed are the results of analyses for samples received by the laboratory on 05/12/23 13:00.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TW-1		3051226-01	Nonpotable Water	05/11/23 09:50	05/12/23 13:00
TW-2		3051226-02	Nonpotable Water	05/11/23 13:05	05/12/23 13:00
TW-2A		3051226-03	Nonpotable Water	05/11/23 12:30	05/12/23 13:00
TW-3		3051226-04	Nonpotable Water	05/11/23 14:30	05/12/23 13:00
TW-3A		3051226-05	Nonpotable Water	05/11/23 13:50	05/12/23 13:00
TW-4		3051226-06	Nonpotable Water	05/10/23 11:15	05/12/23 13:00
TW-4B		3051226-07	Nonpotable Water	05/10/23 10:40	05/12/23 13:00
TW-19		3051226-08	Nonpotable Water	05/09/23 12:20	05/12/23 13:00
TW-20R		3051226-09	Nonpotable Water	05/09/23 11:40	05/12/23 13:00
TW-21		3051226-10	Nonpotable Water	05/09/23 13:40	05/12/23 13:00
TW-21A		3051226-11	Nonpotable Water	05/09/23 14:20	05/12/23 13:00
TW-22		3051226-12	Nonpotable Water	05/09/23 16:15	05/12/23 13:00
TW-22A		3051226-13	Nonpotable Water	05/10/23 09:00	05/12/23 13:00
TW-22B		3051226-14	Nonpotable Water	05/09/23 15:40	05/12/23 13:00
TW-23R		3051226-15	Nonpotable Water	05/10/23 09:50	05/12/23 13:00
TW-27		3051226-16	Nonpotable Water	05/10/23 11:50	05/12/23 13:00
TW-28		3051226-17	Nonpotable Water	05/10/23 13:00	05/12/23 13:00
TW-29		3051226-18	Nonpotable Water	05/11/23 11:30	05/12/23 13:00
TW-30		3051226-19	Nonpotable Water	05/11/23 10:40	05/12/23 13:00
TRIP BLANK		3051226-20	Nonpotable Water	05/12/23 00:00	05/12/23 13:00
MW-P4		3051226-21	Nonpotable Water	05/12/23 10:00	05/12/23 13:00
MW-P106		3051226-22	Nonpotable Water	05/12/23 12:15	05/12/23 13:00
RW-P165		3051226-23	Nonpotable Water	05/12/23 10:50	05/12/23 13:00
RW-P171-1		3051226-24	Nonpotable Water	05/12/23 11:35	05/12/23 13:00
RW-P264		3051226-25	Nonpotable Water	05/12/23 09:20	05/12/23 13:00

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Will Brewington, President

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Baltimore MD 21227
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

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Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-1

3051226-01 (Nonpotable Water)
Sample Date: 05/11/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/16/23	05/16/23 20:35	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/16/23	05/16/23 20:35	LL
Benzene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/16/23	05/16/23 20:35	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/16/23	05/16/23 20:35	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/16/23	05/16/23 20:35	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/16/23	05/16/23 20:35	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/16/23	05/16/23 20:35	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/16/23	05/16/23 20:35	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
Dichlorodifluoromethane	**5.4**		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
1,1-Dichloroethane	**1.5**		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
Dichlorofluoromethane	**2.6**		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/16/23	05/16/23 20:35	LL

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Will Brewington, President

1500 Caton Center Dr Suite G
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-1

3051226-01 (Nonpotable Water)
Sample Date: 05/11/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
Methyl tert-butyl ether (MTBE)	**0.6**	J	ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/16/23	05/16/23 20:35	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/16/23	05/16/23 20:35	LL
Styrene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
Toluene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
Trichloroethene	**0.5**	J	ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/16/23	05/16/23 20:35	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/16/23	05/16/23 20:35	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/16/23	05/16/23 20:35	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 20:35	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*98 %*	*05/16/23*	*05/16/23 20:35*
Surrogate: Toluene-d8	*75-120*	*99 %*	*05/16/23*	*05/16/23 20:35*
Surrogate: 4-Bromofluorobenzene	*75-120*	*102 %*	*05/16/23*	*05/16/23 20:35*

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Will Brewington, President

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Baltimore MD 21227
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-2

3051226-02 (Nonpotable Water)
Sample Date: 05/11/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/16/23	05/16/23 21:00	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/16/23	05/16/23 21:00	LL
Benzene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/16/23	05/16/23 21:00	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/16/23	05/16/23 21:00	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/16/23	05/16/23 21:00	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/16/23	05/16/23 21:00	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/16/23	05/16/23 21:00	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/16/23	05/16/23 21:00	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-2

3051226-02 (Nonpotable Water)
Sample Date: 05/11/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/16/23	05/16/23 21:00	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/16/23	05/16/23 21:00	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/16/23	05/16/23 21:00	LL
Styrene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
Toluene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/16/23	05/16/23 21:00	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/16/23	05/16/23 21:00	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/16/23	05/16/23 21:00	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:00	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*101 %*	*05/16/23*		*05/16/23 21:00*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*05/16/23*		*05/16/23 21:00*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*	*05/16/23*		*05/16/23 21:00*		

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-2A

3051226-03 (Nonpotable Water)
Sample Date: 05/11/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/16/23	05/16/23 21:24	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/16/23	05/16/23 21:24	LL
Benzene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/16/23	05/16/23 21:24	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/16/23	05/16/23 21:24	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/16/23	05/16/23 21:24	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/16/23	05/16/23 21:24	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/16/23	05/16/23 21:24	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/16/23	05/16/23 21:24	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
Dichlorodifluoromethane	**0.8**	J	ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
Dichlorofluoromethane	**1.0**	J	ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-2A

3051226-03 (Nonpotable Water)
Sample Date: 05/11/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/16/23	05/16/23 21:24	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/16/23	05/16/23 21:24	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/16/23	05/16/23 21:24	LL
Styrene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
Toluene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/16/23	05/16/23 21:24	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/16/23	05/16/23 21:24	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/16/23	05/16/23 21:24	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/16/23	05/16/23 21:24	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*	*05/16/23*		*05/16/23 21:24*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*05/16/23*		*05/16/23 21:24*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*	*05/16/23*		*05/16/23 21:24*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-3

3051226-04 (Nonpotable Water)
Sample Date: 05/11/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 13:34	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 13:34	LL
Benzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 13:34	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 13:34	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 13:34	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 13:34	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 13:34	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 13:34	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-3

3051226-04 (Nonpotable Water)
Sample Date: 05/11/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 13:34	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 13:34	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 13:34	LL
Styrene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
Toluene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 13:34	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 13:34	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 13:34	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:34	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*97 %*	*05/17/23*		*05/17/23 13:34*		
Surrogate: Toluene-d8			*75-120*	*100 %*	*05/17/23*		*05/17/23 13:34*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*05/17/23*		*05/17/23 13:34*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-3A

3051226-05 (Nonpotable Water)
Sample Date: 05/11/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 13:59	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 13:59	LL
Benzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 13:59	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 13:59	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 13:59	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 13:59	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 13:59	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 13:59	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-3A

3051226-05 (Nonpotable Water)
Sample Date: 05/11/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 13:59	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 13:59	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 13:59	LL
Styrene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
Toluene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 13:59	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 13:59	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 13:59	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 13:59	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*98 %*	*05/17/23*		*05/17/23 13:59*		
Surrogate: Toluene-d8			*75-120*	*101 %*	*05/17/23*		*05/17/23 13:59*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*05/17/23*		*05/17/23 13:59*		

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-4

3051226-06 (Nonpotable Water)
Sample Date: 05/10/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 14:23	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 14:23	LL
Benzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 14:23	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 14:23	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 14:23	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 14:23	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 14:23	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 14:23	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
Dichlorodifluoromethane	**1.5**		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
1,1-Dichloroethane	**2.7**		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
cis-1,2-Dichloroethene	**0.6**	J	ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
Dichlorofluoromethane	**3.1**		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 14:23	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-4

3051226-06 (Nonpotable Water)
Sample Date: 05/10/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 14:23	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 14:23	LL
Styrene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
Toluene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 14:23	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 14:23	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 14:23	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:23	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*			*05/17/23*	*05/17/23 14:23*	
Surrogate: Toluene-d8			*75-120*	*100 %*			*05/17/23*	*05/17/23 14:23*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*			*05/17/23*	*05/17/23 14:23*	

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Maryland spectral Services

Analytical Chemistry Services

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-4B

3051226-07 (Nonpotable Water)
Sample Date: 05/10/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 14:48	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 14:48	LL
Benzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 14:48	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 14:48	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 14:48	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 14:48	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 14:48	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 14:48	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-4B

3051226-07 (Nonpotable Water)
Sample Date: 05/10/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 14:48	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 14:48	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 14:48	LL
Styrene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
Toluene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 14:48	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 14:48	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 14:48	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 14:48	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*98 %*	*05/17/23*		*05/17/23 14:48*		
Surrogate: Toluene-d8			*75-120*	*100 %*	*05/17/23*		*05/17/23 14:48*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*	*05/17/23*		*05/17/23 14:48*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-19

3051226-08 (Nonpotable Water)
Sample Date: 05/09/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 15:12	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 15:12	LL
Benzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 15:12	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 15:12	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 15:12	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 15:12	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 15:12	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 15:12	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-19

3051226-08 (Nonpotable Water)
Sample Date: 05/09/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 15:12	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 15:12	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 15:12	LL
Styrene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
Toluene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 15:12	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 15:12	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 15:12	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:12	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*	*05/17/23*		*05/17/23 15:12*		
Surrogate: Toluene-d8			*75-120*	*100 %*	*05/17/23*		*05/17/23 15:12*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*05/17/23*		*05/17/23 15:12*		

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Maryland spectral Services

Analytical Chemistry Services

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Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-20R

3051226-09 (Nonpotable Water)
Sample Date: 05/09/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 15:37	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 15:37	LL
Benzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 15:37	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 15:37	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 15:37	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 15:37	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 15:37	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 15:37	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-20R

3051226-09 (Nonpotable Water)
Sample Date: 05/09/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 15:37	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 15:37	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 15:37	LL
Styrene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
Toluene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 15:37	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 15:37	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 15:37	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 15:37	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*101 %*		*05/17/23*	*05/17/23 15:37*		
Surrogate: Toluene-d8			*75-120*	*99 %*		*05/17/23*	*05/17/23 15:37*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*		*05/17/23*	*05/17/23 15:37*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-21

3051226-10 (Nonpotable Water)
Sample Date: 05/09/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 16:01	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 16:01	LL
Benzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 16:01	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 16:01	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 16:01	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 16:01	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 16:01	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 16:01	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-21

3051226-10 (Nonpotable Water)
Sample Date: 05/09/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 16:01	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 16:01	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 16:01	LL
Styrene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
Toluene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 16:01	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 16:01	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 16:01	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:01	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*	*05/17/23*		*05/17/23 16:01*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*05/17/23*		*05/17/23 16:01*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*97 %*	*05/17/23*		*05/17/23 16:01*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-21A

3051226-11 (Nonpotable Water)
Sample Date: 05/09/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 16:25	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 16:25	LL
Benzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 16:25	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 16:25	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 16:25	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 16:25	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 16:25	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 16:25	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-21A

3051226-11 (Nonpotable Water)
Sample Date: 05/09/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 16:25	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 16:25	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 16:25	LL
Styrene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
Toluene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 16:25	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 16:25	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 16:25	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:25	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*	*05/17/23*		*05/17/23 16:25*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*05/17/23*		*05/17/23 16:25*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*101 %*	*05/17/23*		*05/17/23 16:25*		

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410-247-7600
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-22

3051226-12 (Nonpotable Water)
Sample Date: 05/09/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 16:50	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 16:50	LL
Benzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 16:50	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 16:50	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 16:50	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 16:50	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 16:50	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 16:50	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-22

3051226-12 (Nonpotable Water)
Sample Date: 05/09/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 16:50	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 16:50	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 16:50	LL
Styrene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
Toluene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 16:50	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 16:50	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 16:50	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 16:50	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*105 %*	*05/17/23*		*05/17/23 16:50*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*05/17/23*		*05/17/23 16:50*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*	*05/17/23*		*05/17/23 16:50*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-22A

3051226-13 (Nonpotable Water)
Sample Date: 05/10/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 17:14	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 17:14	LL
Benzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 17:14	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 17:14	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 17:14	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 17:14	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 17:14	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 17:14	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-22A

3051226-13 (Nonpotable Water)
Sample Date: 05/10/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 17:14	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 17:14	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 17:14	LL
Styrene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
Toluene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 17:14	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 17:14	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 17:14	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:14	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*102 %*	*05/17/23*		*05/17/23 17:14*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*05/17/23*		*05/17/23 17:14*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*	*05/17/23*		*05/17/23 17:14*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-22B

3051226-14 (Nonpotable Water)
Sample Date: 05/09/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 17:39	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 17:39	LL
Benzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 17:39	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 17:39	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 17:39	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 17:39	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 17:39	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 17:39	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-22B

3051226-14 (Nonpotable Water)
Sample Date: 05/09/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 17:39	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 17:39	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 17:39	LL
Styrene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
Toluene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 17:39	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 17:39	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 17:39	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 17:39	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*	*05/17/23*		*05/17/23 17:39*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*05/17/23*		*05/17/23 17:39*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*	*05/17/23*		*05/17/23 17:39*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-23R

3051226-15 (Nonpotable Water)
Sample Date: 05/10/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 18:03	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 18:03	LL
Benzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 18:03	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 18:03	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 18:03	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 18:03	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 18:03	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 18:03	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-23R

3051226-15 (Nonpotable Water)
Sample Date: 05/10/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 18:03	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 18:03	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 18:03	LL
Styrene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
Toluene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 18:03	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 18:03	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 18:03	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:03	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*	*05/17/23*		*05/17/23 18:03*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*05/17/23*		*05/17/23 18:03*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*05/17/23*		*05/17/23 18:03*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-27

3051226-16 (Nonpotable Water)
Sample Date: 05/10/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 18:28	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 18:28	LL
Benzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 18:28	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 18:28	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 18:28	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 18:28	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 18:28	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 18:28	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-27

3051226-16 (Nonpotable Water)
Sample Date: 05/10/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 18:28	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 18:28	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 18:28	LL
Styrene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
Toluene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 18:28	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 18:28	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 18:28	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:28	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*102 %*			*05/17/23*	*05/17/23 18:28*	
Surrogate: Toluene-d8			*75-120*	*99 %*			*05/17/23*	*05/17/23 18:28*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*			*05/17/23*	*05/17/23 18:28*	

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-28

3051226-17 (Nonpotable Water)
Sample Date: 05/10/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 18:52	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 18:52	LL
Benzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 18:52	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 18:52	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 18:52	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 18:52	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 18:52	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 18:52	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
Dichlorodifluoromethane	**3.0**		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
1,1-Dichloroethane	**1.4**		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
Dichlorofluoromethane	**3.4**		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 18:52	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-28

3051226-17 (Nonpotable Water)
Sample Date: 05/10/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 18:52	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 18:52	LL
Styrene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
Tetrachloroethene	**1.0**		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
Toluene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
Trichlorofluoromethane (Freon 11)	**1.1**		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 18:52	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 18:52	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 18:52	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 18:52	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*			*05/17/23*	*05/17/23 18:52*	
Surrogate: Toluene-d8			*75-120*	*100 %*			*05/17/23*	*05/17/23 18:52*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*101 %*			*05/17/23*	*05/17/23 18:52*	

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-29

3051226-18 (Nonpotable Water)
Sample Date: 05/11/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 19:17	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 19:17	LL
Benzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 19:17	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 19:17	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 19:17	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 19:17	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 19:17	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 19:17	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
Dichlorodifluoromethane	**2.1**		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
1,1-Dichloroethane	**0.8**	J	ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
Dichlorofluoromethane	**1.0**	J	ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 19:17	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-29

3051226-18 (Nonpotable Water)
Sample Date: 05/11/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 19:17	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 19:17	LL
Styrene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
Tetrachloroethene	**1.1**		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
Toluene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 19:17	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 19:17	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 19:17	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:17	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*102 %*	*05/17/23*	*05/17/23 19:17*
Surrogate: Toluene-d8	*75-120*	*100 %*	*05/17/23*	*05/17/23 19:17*
Surrogate: 4-Bromofluorobenzene	*75-120*	*101 %*	*05/17/23*	*05/17/23 19:17*

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-30

3051226-19 (Nonpotable Water)
Sample Date: 05/11/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 19:42	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 19:42	LL
Benzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 19:42	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 19:42	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 19:42	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 19:42	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 19:42	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 19:42	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TW-30

3051226-19 (Nonpotable Water)
Sample Date: 05/11/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 19:42	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 19:42	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 19:42	LL
Styrene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
Toluene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 19:42	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 19:42	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 19:42	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 19:42	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*	*05/17/23*		*05/17/23 19:42*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*05/17/23*		*05/17/23 19:42*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*101 %*	*05/17/23*		*05/17/23 19:42*		

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Maryland spectral Services

Analytical Chemistry Services

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TRIP BLANK

3051226-20 (Nonpotable Water)
Sample Date: 05/12/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 20:07	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 20:07	LL
Benzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 20:07	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 20:07	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 20:07	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 20:07	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 20:07	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 20:07	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

TRIP BLANK

3051226-20 (Nonpotable Water)
Sample Date: 05/12/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 20:07	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 20:07	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 20:07	LL
Styrene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
Toluene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 20:07	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 20:07	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 20:07	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:07	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*102 %*	*05/17/23*		*05/17/23 20:07*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*05/17/23*		*05/17/23 20:07*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*	*05/17/23*		*05/17/23 20:07*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

MW-P4

3051226-21 (Nonpotable Water)
Sample Date: 05/12/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 20:31	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 20:31	LL
Benzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 20:31	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 20:31	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 20:31	LL
Chloroform	**0.5**	J	ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 20:31	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 20:31	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 20:31	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

MW-P4

3051226-21 (Nonpotable Water)
Sample Date: 05/12/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 20:31	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 20:31	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 20:31	LL
Styrene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
Toluene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 20:31	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 20:31	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 20:31	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:31	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*101 %*	*05/17/23*		*05/17/23 20:31*		
Surrogate: Toluene-d8			*75-120*	*100 %*	*05/17/23*		*05/17/23 20:31*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*102 %*	*05/17/23*		*05/17/23 20:31*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

MW-P106

3051226-22 (Nonpotable Water)
Sample Date: 05/12/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 20:57	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 20:57	LL
Benzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 20:57	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 20:57	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 20:57	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 20:57	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 20:57	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 20:57	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
Dichlorodifluoromethane	**1.3**		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
1,1-Dichloroethane	**2.9**		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
cis-1,2-Dichloroethene	**1.8**		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
Dichlorofluoromethane	**1.7**		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 20:57	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

MW-P106

3051226-22 (Nonpotable Water)
Sample Date: 05/12/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 20:57	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 20:57	LL
Styrene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
Tetrachloroethene	**1.0**		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
Toluene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
Trichloroethene	**0.8**	J	ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 20:57	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 20:57	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 20:57	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 20:57	LL

Surrogate: 1,2-Dichloroethane-d4	*70-130*	*100 %*	*05/17/23*	*05/17/23 20:57*
Surrogate: Toluene-d8	*75-120*	*98 %*	*05/17/23*	*05/17/23 20:57*
Surrogate: 4-Bromofluorobenzene	*75-120*	*101 %*	*05/17/23*	*05/17/23 20:57*

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

RW-P165

3051226-23 (Nonpotable Water)
Sample Date: 05/12/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 21:22	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 21:22	LL
Benzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 21:22	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 21:22	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 21:22	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 21:22	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 21:22	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 21:22	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
Dichlorodifluoromethane	**4.0**		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
1,1-Dichloroethane	**3.0**		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
cis-1,2-Dichloroethene	**0.9**	J	ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
Dichlorofluoromethane	**4.1**		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 21:22	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

RW-P165

3051226-23 (Nonpotable Water)
Sample Date: 05/12/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/17/23	05/17/23 21:22	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 21:22	LL
Styrene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
Tetrachloroethene	**2.5**		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
Toluene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
Trichloroethene	**0.8**	J	ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 21:22	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 21:22	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/17/23	05/17/23 21:22	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/17/23	05/17/23 21:22	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*			*05/17/23*	*05/17/23 21:22*	
Surrogate: Toluene-d8			*75-120*	*98 %*			*05/17/23*	*05/17/23 21:22*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*			*05/17/23*	*05/17/23 21:22*	

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

RW-P171-1

3051226-24 (Nonpotable Water)
Sample Date: 05/12/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/18/23	05/18/23 13:06	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/18/23	05/18/23 13:06	LL
Benzene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/18/23	05/18/23 13:06	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/18/23	05/18/23 13:06	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/18/23	05/18/23 13:06	LL
Chloroform	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/18/23	05/18/23 13:06	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/18/23	05/18/23 13:06	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/18/23	05/18/23 13:06	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

RW-P171-1

3051226-24 (Nonpotable Water)
Sample Date: 05/12/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	05/18/23	05/18/23 13:06	LL
Iodomethane	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/18/23	05/18/23 13:06	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/18/23	05/18/23 13:06	LL
Styrene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
Toluene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/18/23	05/18/23 13:06	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/18/23	05/18/23 13:06	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/18/23	05/18/23 13:06	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:06	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*		*05/18/23*	*05/18/23 13:06*		
Surrogate: Toluene-d8			*75-120*	*105 %*		*05/18/23*	*05/18/23 13:06*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*105 %*		*05/18/23*	*05/18/23 13:06*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

RW-P264

3051226-25 (Nonpotable Water)
Sample Date: 05/12/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	05/18/23	05/18/23 13:30	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	05/18/23	05/18/23 13:30	LL
Benzene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
Bromoform	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
Bromomethane	ND		ug/L	1.0	1.0	1	05/18/23	05/18/23 13:30	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	05/18/23	05/18/23 13:30	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
Chloroethane	ND		ug/L	1.0	1.0	1	05/18/23	05/18/23 13:30	LL
Chloroform	**0.7**	J	ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
Chloromethane	ND		ug/L	1.0	1.0	1	05/18/23	05/18/23 13:30	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	05/18/23	05/18/23 13:30	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	05/18/23	05/18/23 13:30	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
Dichlorodifluoromethane	**5.7**		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
1,1-Dichloroethane	**3.9**		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
cis-1,2-Dichloroethene	**0.6**	J	ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
Dichlorofluoromethane	**4.0**		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	05/18/23	05/18/23 13:30	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

RW-P264

3051226-25 (Nonpotable Water)
Sample Date: 05/12/23

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	05/18/23	05/18/23 13:30	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	05/18/23	05/18/23 13:30	LL
Styrene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
Tetrachloroethene	**3.0**		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
Toluene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
Trichloroethene	**0.8**	J	ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	05/18/23	05/18/23 13:30	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	05/18/23	05/18/23 13:30	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	05/18/23	05/18/23 13:30	LL
o-Xylene	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	05/18/23	05/18/23 13:30	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*119 %*		*05/18/23*		*05/18/23 13:30*	
Surrogate: Toluene-d8			*75-120*	*97 %*		*05/18/23*		*05/18/23 13:30*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*106 %*		*05/18/23*		*05/18/23 13:30*	

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410-247-7600
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305351 - GCMS-WATER-VOLATILES										
Blank (B305351-BLK1)					Prepared & Analyzed: 05/16/23					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						

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Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305351 - GCMS-WATER-VOLATILES										
Blank (B305351-BLK1)					Prepared & Analyzed: 05/16/23					
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*50.62*			ug/L	*50.00*		*101*	*70-130*		
Surrogate: Toluene-d8	*49.38*			ug/L	*50.00*		*99*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*50.48*			ug/L	*50.00*		*101*	*75-120*		

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305351 - GCMS-WATER-VOLATILES										
LCS (B305351-BS1)					Prepared & Analyzed: 05/16/23					
Acetone	10.5		5.0	ug/L	10.00		105	55-150		
Acrylonitrile	5.3		5.0	ug/L	5.000		107	50-150		
Benzene	5.2		1.0	ug/L	5.000		104	70-130		
Bromochloromethane	5.6		1.0	ug/L	5.000		111	70-130		
Bromodichloromethane	5.2		1.0	ug/L	5.000		103	70-130		
Bromoform	5.2		1.0	ug/L	5.000		105	70-130		
Bromomethane	5.1		1.0	ug/L	5.000		102	25-150		
2-Butanone (MEK)	8.2		5.0	ug/L	10.00		82	60-140		
Carbon disulfide	5.1		1.0	ug/L	5.000		102	70-130		
Carbon tetrachloride	5.3		1.0	ug/L	5.000		105	70-130		
Chlorobenzene	5.5		1.0	ug/L	5.000		110	70-130		
Chloroethane	3.9		1.0	ug/L	5.000		78	60-150		
Chloroform	5.3		1.0	ug/L	5.000		106	70-130		
Chloromethane	4.7		1.0	ug/L	5.000		93	60-150		
Dibromochloromethane	5.2		1.0	ug/L	5.000		103	70-130		
1,2-Dibromo-3-chloropropane	5.7		1.0	ug/L	5.000		113	70-130		
1,2-Dibromoethane (EDB)	5.3		1.0	ug/L	5.000		106	70-130		
Dibromomethane	5.2		1.0	ug/L	5.000		103	70-130		
1,2-Dichlorobenzene	5.5		1.0	ug/L	5.000		110	70-130		
1,4-Dichlorobenzene	5.4		1.0	ug/L	5.000		107	70-130		
1,1-Dichloroethane	5.0		1.0	ug/L	5.000		100	70-130		
1,2-Dichloroethane	5.1		1.0	ug/L	5.000		101	70-130		
1,1-Dichloroethene	5.0		1.0	ug/L	5.000		99	70-130		
cis-1,2-Dichloroethene	5.3		1.0	ug/L	5.000		106	70-130		
trans-1,2-Dichloroethene	5.3		1.0	ug/L	5.000		106	70-130		
1,2-Dichloropropane	5.7		1.0	ug/L	5.000		114	70-130		
1,3-Dichloropropane	5.3		1.0	ug/L	5.000		106	70-130		
2,2-Dichloropropane	5.3		1.0	ug/L	5.000		106	70-130		
1,1-Dichloropropene	5.1		1.0	ug/L	5.000		101	70-130		
cis-1,3-Dichloropropene	5.2		1.0	ug/L	5.000		104	70-130		
trans-1,3-Dichloropropene	5.3		1.0	ug/L	5.000		106	70-130		

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305351 - GCMS-WATER-VOLATILES										
LCS (B305351-BS1)					Prepared & Analyzed: 05/16/23					
Ethylbenzene	5.4		1.0	ug/L	5.000		108	70-130		
2-Hexanone	9.4		5.0	ug/L	10.00		94	70-130		
Methyl tert-butyl ether (MTBE)	4.9		1.0	ug/L	5.000		97	70-130		
4-Methyl-2-pentanone	10.5		5.0	ug/L	10.00		105	70-130		
Methylene chloride	5.3		1.0	ug/L	5.000		106	50-200		
Methyl methacrylate	5.1		5.0	ug/L	5.000		103	50-150		
Styrene	5.2		1.0	ug/L	5.000		104	70-130		
1,1,1,2-Tetrachloroethane	5.1		1.0	ug/L	5.000		102	70-130		
1,1,2,2-Tetrachloroethane	5.2		1.0	ug/L	5.000		105	70-130		
Tetrachloroethene	5.0		1.0	ug/L	5.000		100	70-130		
Toluene	5.3		1.0	ug/L	5.000		106	70-130		
1,1,1-Trichloroethane	4.9		1.0	ug/L	5.000		98	70-130		
1,1,2-Trichloroethane	5.2		1.0	ug/L	5.000		104	70-130		
Trichloroethene	5.1		1.0	ug/L	5.000		101	70-130		
Trichlorofluoromethane (Freon 11)	4.3		1.0	ug/L	5.000		86	70-130		
1,2,3-Trichloropropane	5.6		1.0	ug/L	5.000		112	70-130		
Vinyl acetate	4.0		1.0	ug/L	5.000		81	70-130		
Vinyl chloride	4.9		1.0	ug/L	5.000		98	70-130		
o-Xylene	5.3		1.0	ug/L	5.000		106	70-130		
m- & p-Xylenes	10.6		1.0	ug/L	10.00		106	70-130		
Surrogate: 1,2-Dichloroethane-d4	*50.30*			ug/L	*50.00*		*101*	*70-130*		
Surrogate: Toluene-d8	*50.47*			ug/L	*50.00*		*101*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*50.36*			ug/L	*50.00*		*101*	*75-120*		
Duplicate (B305351-DUP1)		**Source: 3051226-02**			Prepared & Analyzed: 05/16/23					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20

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Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305351 - GCMS-WATER-VOLATILES										
Duplicate (B305351-DUP1)			**Source: 3051226-02**		Prepared & Analyzed: 05/16/23					
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	ND		1.0	ug/L		ND				20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305351 - GCMS-WATER-VOLATILES										
Duplicate (B305351-DUP1)		**Source: 3051226-02**		Prepared & Analyzed: 05/16/23						
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	ND		1.0	ug/L		ND				20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	ND		1.0	ug/L		ND				20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*50.87*			ug/L	*50.00*		*102*	*70-130*		
Surrogate: Toluene-d8	*49.28*			ug/L	*50.00*		*99*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*50.30*			ug/L	*50.00*		*101*	*75-120*		
Matrix Spike (B305351-MS1)		**Source: 3051226-03**		Prepared & Analyzed: 05/16/23						
Acetone	7.6		5.0	ug/L	10.00	ND	76	60-120		
Acrylonitrile	10.8		5.0	ug/L	10.00	ND	108	0-200		
Benzene	10.8		1.0	ug/L	10.00	ND	108	60-120		
Bromochloromethane	10.8		1.0	ug/L	10.00	ND	108	60-120		
Bromodichloromethane	10.6		1.0	ug/L	10.00	ND	106	60-120		
Bromoform	10.0		1.0	ug/L	10.00	ND	100	60-120		
Bromomethane	10.3		1.0	ug/L	10.00	ND	103	60-120		
2-Butanone (MEK)	9.3		5.0	ug/L	10.00	ND	93	60-120		

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Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305351 - GCMS-WATER-VOLATILES										
Matrix Spike (B305351-MS1)		**Source: 3051226-03**		Prepared & Analyzed: 05/16/23						
Carbon disulfide	10.8		1.0	ug/L	10.00	ND	108	60-120		
Carbon tetrachloride	11.0		1.0	ug/L	10.00	ND	110	60-120		
Chlorobenzene	10.9		1.0	ug/L	10.00	ND	109	60-120		
Chloroethane	18.5		1.0	ug/L	10.00	ND	185	60-120		
Chloroform	10.5		1.0	ug/L	10.00	ND	105	60-120		
Chloromethane	8.6		1.0	ug/L	10.00	ND	86	60-120		
Dibromochloromethane	10.4		1.0	ug/L	10.00	ND	104	60-120		
1,2-Dibromo-3-chloropropane	9.7		1.0	ug/L	10.00	ND	97	60-120		
1,2-Dibromoethane (EDB)	10.3		1.0	ug/L	10.00	ND	103	60-120		
Dibromomethane	10.4		1.0	ug/L	10.00	ND	104	60-120		
1,2-Dichlorobenzene	10.5		1.0	ug/L	10.00	ND	105	60-120		
1,4-Dichlorobenzene	10.6		1.0	ug/L	10.00	ND	106	60-120		
1,1-Dichloroethane	11.1		1.0	ug/L	10.00	ND	111	60-120		
1,2-Dichloroethane	10.9		1.0	ug/L	10.00	ND	109	60-120		
1,1-Dichloroethene	10.9		1.0	ug/L	10.00	ND	109	60-120		
cis-1,2-Dichloroethene	11.1		1.0	ug/L	10.00	ND	111	60-120		
trans-1,2-Dichloroethene	10.6		1.0	ug/L	10.00	ND	106	60-120		
1,2-Dichloropropane	11.2		1.0	ug/L	10.00	ND	112	60-120		
1,3-Dichloropropane	10.9		1.0	ug/L	10.00	ND	109	60-120		
2,2-Dichloropropane	10.0		1.0	ug/L	10.00	ND	100	60-120		
1,1-Dichloropropene	10.7		1.0	ug/L	10.00	ND	107	60-120		
cis-1,3-Dichloropropene	9.5		1.0	ug/L	10.00	ND	95	60-120		
trans-1,3-Dichloropropene	9.7		1.0	ug/L	10.00	ND	97	60-120		
Ethylbenzene	10.8		1.0	ug/L	10.00	ND	108	60-120		
2-Hexanone	8.8		5.0	ug/L	10.00	ND	88	60-120		
Methyl tert-butyl ether (MTBE)	10.1		1.0	ug/L	10.00	ND	101	60-120		
4-Methyl-2-pentanone	10.0		5.0	ug/L	10.00	ND	100	60-120		
Methylene chloride	10.6		1.0	ug/L	10.00	ND	106	60-120		
Methyl methacrylate	9.8		5.0	ug/L	10.00	ND	98	60-120		
Styrene	10.8		1.0	ug/L	10.00	ND	108	60-120		
1,1,1,2-Tetrachloroethane	10.4		1.0	ug/L	10.00	ND	104	60-120		

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Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305351 - GCMS-WATER-VOLATILES										
Matrix Spike (B305351-MS1)			**Source: 3051226-03**		Prepared & Analyzed: 05/16/23					
1,1,2,2-Tetrachloroethane	10.1		1.0	ug/L	10.00	ND	101	60-120		
Tetrachloroethene	10.9		1.0	ug/L	10.00	ND	109	60-120		
Toluene	11.0		1.0	ug/L	10.00	ND	110	60-120		
1,1,1-Trichloroethane	10.9		1.0	ug/L	10.00	ND	109	60-120		
1,1,2-Trichloroethane	10.9		1.0	ug/L	10.00	ND	109	60-120		
Trichloroethene	11.3		1.0	ug/L	10.00	ND	113	60-120		
Trichlorofluoromethane (Freon 11)	12.8		1.0	ug/L	10.00	ND	128	60-120		
1,2,3-Trichloropropane	10.3		1.0	ug/L	10.00	ND	103	60-120		
Vinyl acetate	9.6		1.0	ug/L	10.00	ND	96	60-120		
Vinyl chloride	10.9		1.0	ug/L	10.00	ND	109	60-120		
o-Xylene	10.8		1.0	ug/L	10.00	ND	108	60-120		
m- & p-Xylenes	21.8		1.0	ug/L	20.00	ND	109	60-120		
Surrogate: 1,2-Dichloroethane-d4	*49.62*			ug/L	*50.00*		*99*	*70-130*		
Surrogate: Toluene-d8	*49.63*			ug/L	*50.00*		*99*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*50.66*			ug/L	*50.00*		*101*	*75-120*		
Batch B305391 - GCMS-WATER-VOLATILES										
Blank (B305391-BLK1)					Prepared & Analyzed: 05/17/23					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305391 - GCMS-WATER-VOLATILES										
Blank (B305391-BLK1)					Prepared & Analyzed: 05/17/23					
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305391 - GCMS-WATER-VOLATILES										
Blank (B305391-BLK1)					Prepared & Analyzed: 05/17/23					
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*49.50*			ug/L	*50.00*		*99*	*70-130*		
Surrogate: Toluene-d8	*49.52*			ug/L	*50.00*		*99*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.84*			ug/L	*50.00*		*100*	*75-120*		
LCS (B305391-BS1)					Prepared & Analyzed: 05/17/23					
Acetone	7.1		5.0	ug/L	10.00		71	55-150		
Acrylonitrile	5.5		5.0	ug/L	5.000		109	50-150		
Benzene	5.2		1.0	ug/L	5.000		104	70-130		
Bromochloromethane	6.2		1.0	ug/L	5.000		124	70-130		
Bromodichloromethane	5.2		1.0	ug/L	5.000		103	70-130		
Bromoform	4.2		1.0	ug/L	5.000		84	70-130		
Bromomethane	6.9		1.0	ug/L	5.000		138	25-150		
2-Butanone (MEK)	8.0		5.0	ug/L	10.00		80	60-140		
Carbon disulfide	5.5		1.0	ug/L	5.000		110	70-130		
Carbon tetrachloride	5.6		1.0	ug/L	5.000		113	70-130		
Chlorobenzene	5.1		1.0	ug/L	5.000		101	70-130		
Chloroethane	5.5		1.0	ug/L	5.000		109	60-150		
Chloroform	5.5		1.0	ug/L	5.000		110	70-130		
Chloromethane	3.8		1.0	ug/L	5.000		76	60-150		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305391 - GCMS-WATER-VOLATILES										
LCS (B305391-BS1)					Prepared & Analyzed: 05/17/23					
Dibromochloromethane	4.6		1.0	ug/L	5.000		92	70-130		
1,2-Dibromo-3-chloropropane	3.8		1.0	ug/L	5.000		76	70-130		
1,2-Dibromoethane (EDB)	4.7		1.0	ug/L	5.000		93	70-130		
Dibromomethane	5.5		1.0	ug/L	5.000		109	70-130		
1,2-Dichlorobenzene	4.8		1.0	ug/L	5.000		96	70-130		
1,4-Dichlorobenzene	4.7		1.0	ug/L	5.000		93	70-130		
1,1-Dichloroethane	5.3		1.0	ug/L	5.000		106	70-130		
1,2-Dichloroethane	6.1		1.0	ug/L	5.000		122	70-130		
1,1-Dichloroethene	5.5		1.0	ug/L	5.000		109	70-130		
cis-1,2-Dichloroethene	5.5		1.0	ug/L	5.000		110	70-130		
trans-1,2-Dichloroethene	6.0		1.0	ug/L	5.000		120	70-130		
1,2-Dichloropropane	5.4		1.0	ug/L	5.000		108	70-130		
1,3-Dichloropropane	4.8		1.0	ug/L	5.000		95	70-130		
2,2-Dichloropropane	5.9		1.0	ug/L	5.000		117	70-130		
1,1-Dichloropropene	5.3		1.0	ug/L	5.000		107	70-130		
cis-1,3-Dichloropropene	4.5		1.0	ug/L	5.000		89	70-130		
trans-1,3-Dichloropropene	4.6		1.0	ug/L	5.000		92	70-130		
Ethylbenzene	5.0		1.0	ug/L	5.000		100	70-130		
2-Hexanone	7.7		5.0	ug/L	10.00		77	70-130		
Methyl tert-butyl ether (MTBE)	5.1		1.0	ug/L	5.000		101	70-130		
4-Methyl-2-pentanone	8.0		5.0	ug/L	10.00		80	70-130		
Methylene chloride	6.4		1.0	ug/L	5.000		128	50-200		
Methyl methacrylate	5.1		5.0	ug/L	5.000		103	50-150		
Styrene	4.6		1.0	ug/L	5.000		93	70-130		
1,1,1,2-Tetrachloroethane	4.7		1.0	ug/L	5.000		93	70-130		
1,1,2,2-Tetrachloroethane	4.7		1.0	ug/L	5.000		94	70-130		
Tetrachloroethene	4.9		1.0	ug/L	5.000		98	70-130		
Toluene	4.8		1.0	ug/L	5.000		95	70-130		
1,1,1-Trichloroethane	5.2		1.0	ug/L	5.000		104	70-130		
1,1,2-Trichloroethane	4.6		1.0	ug/L	5.000		92	70-130		
Trichloroethene	6.1		1.0	ug/L	5.000		121	70-130		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305391 - GCMS-WATER-VOLATILES										
LCS (B305391-BS1)					Prepared & Analyzed: 05/17/23					
Trichlorofluoromethane (Freon 11)	4.6		1.0	ug/L	5.000		92	70-130		
1,2,3-Trichloropropane	4.6		1.0	ug/L	5.000		92	70-130		
Vinyl acetate	4.5		1.0	ug/L	5.000		90	70-130		
Vinyl chloride	5.0		1.0	ug/L	5.000		101	70-130		
o-Xylene	4.7		1.0	ug/L	5.000		94	70-130		
m- & p-Xylenes	9.4		1.0	ug/L	10.00		94	70-130		
Surrogate: 1,2-Dichloroethane-d4	*52.51*			ug/L	*50.00*		*105*	*70-130*		
Surrogate: Toluene-d8	*42.51*			ug/L	*50.00*		*85*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.22*			ug/L	*50.00*		*98*	*75-120*		
Duplicate (B305391-DUP1)		**Source: 3051226-08**			Prepared & Analyzed: 05/17/23					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305391 - GCMS-WATER-VOLATILES										
Duplicate (B305391-DUP1)			**Source: 3051226-08**		Prepared & Analyzed: 05/17/23					
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	ND		1.0	ug/L		ND				20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	ND		1.0	ug/L		ND				20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	ND		1.0	ug/L		ND				20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305391 - GCMS-WATER-VOLATILES										
Duplicate (B305391-DUP1)		**Source: 3051226-08**		Prepared & Analyzed: 05/17/23						
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*48.88*			ug/L	*50.00*		*98*	*70-130*		
Surrogate: Toluene-d8	*49.16*			ug/L	*50.00*		*98*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*50.70*			ug/L	*50.00*		*101*	*75-120*		
Matrix Spike (B305391-MS1)		**Source: 3051226-18**		Prepared & Analyzed: 05/17/23						
Acetone	11.0		5.0	ug/L	10.00	ND	110	60-120		
Acrylonitrile	10.7		5.0	ug/L	10.00	ND	107	0-200		
Benzene	11.1		1.0	ug/L	10.00	ND	111	60-120		
Bromochloromethane	9.8		1.0	ug/L	10.00	ND	98	60-120		
Bromodichloromethane	10.0		1.0	ug/L	10.00	ND	100	60-120		
Bromoform	10.0		1.0	ug/L	10.00	ND	100	60-120		
Bromomethane	7.5		1.0	ug/L	10.00	ND	75	60-120		
2-Butanone (MEK)	10.7		5.0	ug/L	10.00	ND	107	60-120		
Carbon disulfide	10.4		1.0	ug/L	10.00	ND	104	60-120		
Carbon tetrachloride	11.0		1.0	ug/L	10.00	ND	110	60-120		
Chlorobenzene	10.9		1.0	ug/L	10.00	ND	109	60-120		
Chloroethane	15.8		1.0	ug/L	10.00	ND	158	60-120		
Chloroform	11.1		1.0	ug/L	10.00	ND	111	60-120		
Chloromethane	9.6		1.0	ug/L	10.00	ND	96	60-120		
Dibromochloromethane	10.1		1.0	ug/L	10.00	ND	101	60-120		
1,2-Dibromo-3-chloropropane	9.6		1.0	ug/L	10.00	ND	96	60-120		
1,2-Dibromoethane (EDB)	10.4		1.0	ug/L	10.00	ND	104	60-120		
Dibromomethane	10.9		1.0	ug/L	10.00	ND	109	60-120		
1,2-Dichlorobenzene	10.8		1.0	ug/L	10.00	ND	108	60-120		
1,4-Dichlorobenzene	10.5		1.0	ug/L	10.00	ND	105	60-120		
1,1-Dichloroethane	11.3		1.0	ug/L	10.00	0.8	106	60-120		
1,2-Dichloroethane	11.0		1.0	ug/L	10.00	ND	110	60-120		

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Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305391 - GCMS-WATER-VOLATILES										
Matrix Spike (B305391-MS1)		**Source: 3051226-18**		Prepared & Analyzed: 05/17/23						
1,1-Dichloroethene	10.6		1.0	ug/L	10.00	ND	106	60-120		
cis-1,2-Dichloroethene	10.8		1.0	ug/L	10.00	ND	108	60-120		
trans-1,2-Dichloroethene	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,2-Dichloropropane	11.1		1.0	ug/L	10.00	ND	111	60-120		
1,3-Dichloropropane	10.9		1.0	ug/L	10.00	ND	109	60-120		
2,2-Dichloropropane	9.6		1.0	ug/L	10.00	ND	96	60-120		
1,1-Dichloropropene	11.3		1.0	ug/L	10.00	ND	113	60-120		
cis-1,3-Dichloropropene	9.8		1.0	ug/L	10.00	ND	98	60-120		
trans-1,3-Dichloropropene	10.1		1.0	ug/L	10.00	ND	101	60-120		
Ethylbenzene	11.1		1.0	ug/L	10.00	ND	111	60-120		
2-Hexanone	11.0		5.0	ug/L	10.00	ND	110	60-120		
Methyl tert-butyl ether (MTBE)	10.9		1.0	ug/L	10.00	ND	109	60-120		
4-Methyl-2-pentanone	10.6		5.0	ug/L	10.00	ND	106	60-120		
Methylene chloride	10.6		1.0	ug/L	10.00	ND	106	60-120		
Methyl methacrylate	10.4		5.0	ug/L	10.00	ND	104	60-120		
Styrene	10.8		1.0	ug/L	10.00	ND	108	60-120		
1,1,1,2-Tetrachloroethane	10.5		1.0	ug/L	10.00	ND	105	60-120		
1,1,2,2-Tetrachloroethane	10.5		1.0	ug/L	10.00	ND	105	60-120		
Tetrachloroethene	11.9		1.0	ug/L	10.00	1.1	108	60-120		
Toluene	11.0		1.0	ug/L	10.00	ND	110	60-120		
1,1,1-Trichloroethane	11.0		1.0	ug/L	10.00	ND	110	60-120		
1,1,2-Trichloroethane	10.7		1.0	ug/L	10.00	ND	107	60-120		
Trichloroethene	11.3		1.0	ug/L	10.00	ND	113	60-120		
Trichlorofluoromethane (Freon 11)	12.6		1.0	ug/L	10.00	ND	126	60-120		
1,2,3-Trichloropropane	10.4		1.0	ug/L	10.00	ND	104	60-120		
Vinyl acetate	10.3		1.0	ug/L	10.00	ND	103	60-120		
Vinyl chloride	9.7		1.0	ug/L	10.00	ND	97	60-120		
o-Xylene	11.0		1.0	ug/L	10.00	ND	110	60-120		
m- & p-Xylenes	22.4		1.0	ug/L	20.00	ND	112	60-120		
Surrogate: 1,2-Dichloroethane-d4	*49.64*			ug/L	*50.00*		*99*	*70-130*		
Surrogate: Toluene-d8	*49.71*			ug/L	*50.00*		*99*	*75-120*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305391 - GCMS-WATER-VOLATILES										
Matrix Spike (B305391-MS1)		**Source: 3051226-18**			Prepared & Analyzed: 05/17/23					
Surrogate: 4-Bromofluorobenzene	*50.05*			ug/L	*50.00*		*100*	*75-120*		
Batch B305419 - GCMS-WATER-VOLATILES										
Blank (B305419-BLK1)					Prepared & Analyzed: 05/18/23					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305419 - GCMS-WATER-VOLATILES										
Blank (B305419-BLK1)					Prepared & Analyzed: 05/18/23					
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*49.94*			ug/L	*50.00*		*100*	*70-130*		

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Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305419 - GCMS-WATER-VOLATILES										
Blank (B305419-BLK1)					Prepared & Analyzed: 05/18/23					
Surrogate: Toluene-d8	*50.19*			ug/L	*50.00*		*100*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*50.27*			ug/L	*50.00*		*101*	*75-120*		
LCS (B305419-BS1)					Prepared & Analyzed: 05/18/23					
Acetone	7.7		5.0	ug/L	10.00		77	55-150		
Acrylonitrile	5.0		5.0	ug/L	5.000		100	50-150		
Benzene	5.2		1.0	ug/L	5.000		104	70-130		
Bromochloromethane	5.3		1.0	ug/L	5.000		106	70-130		
Bromodichloromethane	5.1		1.0	ug/L	5.000		102	70-130		
Bromoform	5.0		1.0	ug/L	5.000		99	70-130		
Bromomethane	5.9		1.0	ug/L	5.000		118	25-150		
2-Butanone (MEK)	7.7		5.0	ug/L	10.00		77	60-140		
Carbon disulfide	5.0		1.0	ug/L	5.000		101	70-130		
Carbon tetrachloride	5.0		1.0	ug/L	5.000		100	70-130		
Chlorobenzene	5.2		1.0	ug/L	5.000		104	70-130		
Chloroethane	4.5		1.0	ug/L	5.000		91	60-150		
Chloroform	5.1		1.0	ug/L	5.000		102	70-130		
Chloromethane	4.2		1.0	ug/L	5.000		85	60-150		
Dibromochloromethane	4.8		1.0	ug/L	5.000		96	70-130		
1,2-Dibromo-3-chloropropane	4.7		1.0	ug/L	5.000		94	70-130		
1,2-Dibromoethane (EDB)	4.7		1.0	ug/L	5.000		93	70-130		
Dibromomethane	4.9		1.0	ug/L	5.000		99	70-130		
1,2-Dichlorobenzene	5.3		1.0	ug/L	5.000		105	70-130		
1,4-Dichlorobenzene	5.2		1.0	ug/L	5.000		103	70-130		
1,1-Dichloroethane	4.9		1.0	ug/L	5.000		99	70-130		
1,2-Dichloroethane	5.1		1.0	ug/L	5.000		103	70-130		
1,1-Dichloroethene	5.0		1.0	ug/L	5.000		101	70-130		
cis-1,2-Dichloroethene	4.9		1.0	ug/L	5.000		98	70-130		
trans-1,2-Dichloroethene	5.0		1.0	ug/L	5.000		100	70-130		
1,2-Dichloropropane	5.2		1.0	ug/L	5.000		104	70-130		
1,3-Dichloropropane	5.0		1.0	ug/L	5.000		101	70-130		
2,2-Dichloropropane	5.4		1.0	ug/L	5.000		107	70-130		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305419 - GCMS-WATER-VOLATILES										
LCS (B305419-BS1)					Prepared & Analyzed: 05/18/23					
1,1-Dichloropropene	4.9		1.0	ug/L	5.000		98	70-130		
cis-1,3-Dichloropropene	4.9		1.0	ug/L	5.000		97	70-130		
trans-1,3-Dichloropropene	5.1		1.0	ug/L	5.000		101	70-130		
Ethylbenzene	5.3		1.0	ug/L	5.000		106	70-130		
2-Hexanone	10.5		5.0	ug/L	10.00		105	70-130		
Methyl tert-butyl ether (MTBE)	4.6		1.0	ug/L	5.000		93	70-130		
4-Methyl-2-pentanone	9.8		5.0	ug/L	10.00		98	70-130		
Methylene chloride	5.4		1.0	ug/L	5.000		108	50-200		
Methyl methacrylate	4.9	J	5.0	ug/L	5.000		97	50-150		
Styrene	4.9		1.0	ug/L	5.000		99	70-130		
1,1,1,2-Tetrachloroethane	4.6		1.0	ug/L	5.000		92	70-130		
1,1,2,2-Tetrachloroethane	4.9		1.0	ug/L	5.000		99	70-130		
Tetrachloroethene	4.9		1.0	ug/L	5.000		98	70-130		
Toluene	5.1		1.0	ug/L	5.000		101	70-130		
1,1,1-Trichloroethane	4.8		1.0	ug/L	5.000		96	70-130		
1,1,2-Trichloroethane	4.9		1.0	ug/L	5.000		98	70-130		
Trichloroethene	5.3		1.0	ug/L	5.000		105	70-130		
Trichlorofluoromethane (Freon 11)	4.1		1.0	ug/L	5.000		81	70-130		
1,2,3-Trichloropropane	5.2		1.0	ug/L	5.000		104	70-130		
Vinyl acetate	4.4		1.0	ug/L	5.000		88	70-130		
Vinyl chloride	4.8		1.0	ug/L	5.000		96	70-130		
o-Xylene	5.2		1.0	ug/L	5.000		104	70-130		
m- & p-Xylenes	10.3		1.0	ug/L	10.00		103	70-130		
Surrogate: 1,2-Dichloroethane-d4	*50.65*			ug/L	*50.00*		*101*	*70-130*		
Surrogate: Toluene-d8	*48.68*			ug/L	*50.00*		*97*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.96*			ug/L	*50.00*		*100*	*75-120*		
Duplicate (B305419-DUP1)		**Source: 3051226-24**			Prepared & Analyzed: 05/18/23					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305419 - GCMS-WATER-VOLATILES										
Duplicate (B305419-DUP1)			**Source: 3051226-24**		Prepared & Analyzed: 05/18/23					
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	ND		1.0	ug/L		ND				20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305419 - GCMS-WATER-VOLATILES										
Duplicate (B305419-DUP1)		**Source: 3051226-24**		Prepared & Analyzed: 05/18/23						
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	ND		1.0	ug/L		ND				20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	ND		1.0	ug/L		ND				20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*51.37*			ug/L	*50.00*		*103*	*70-130*		
Surrogate: Toluene-d8	*48.28*			ug/L	*50.00*		*97*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.94*			ug/L	*50.00*		*98*	*75-120*		
Matrix Spike (B305419-MS1)		**Source: 3051226-25**		Prepared & Analyzed: 05/18/23						
Acetone	7.7		5.0	ug/L	10.00	ND	77	60-120		
Acrylonitrile	11.3		5.0	ug/L	10.00	ND	113	0-200		
Benzene	11.3		1.0	ug/L	10.00	ND	113	60-120		
Bromochloromethane	12.4		1.0	ug/L	10.00	ND	124	60-120		
Bromodichloromethane	10.7		1.0	ug/L	10.00	ND	107	60-120		

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Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305419 - GCMS-WATER-VOLATILES										
Matrix Spike (B305419-MS1)		**Source: 3051226-25**		Prepared & Analyzed: 05/18/23						
Bromoform	10.1		1.0	ug/L	10.00	ND	101	60-120		
Bromomethane	6.4		1.0	ug/L	10.00	ND	64	60-120		
2-Butanone (MEK)	9.8		5.0	ug/L	10.00	ND	98	60-120		
Carbon disulfide	11.3		1.0	ug/L	10.00	ND	113	60-120		
Carbon tetrachloride	11.9		1.0	ug/L	10.00	ND	119	60-120		
Chlorobenzene	11.1		1.0	ug/L	10.00	ND	111	60-120		
Chloroethane	10.9		1.0	ug/L	10.00	ND	109	60-120		
Chloroform	12.3		1.0	ug/L	10.00	0.7	116	60-120		
Chloromethane	10.7		1.0	ug/L	10.00	ND	107	60-120		
Dibromochloromethane	11.0		1.0	ug/L	10.00	ND	110	60-120		
1,2-Dibromo-3-chloropropane	10.3		1.0	ug/L	10.00	ND	103	60-120		
1,2-Dibromoethane (EDB)	10.8		1.0	ug/L	10.00	ND	108	60-120		
Dibromomethane	11.4		1.0	ug/L	10.00	ND	114	60-120		
1,2-Dichlorobenzene	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,4-Dichlorobenzene	10.6		1.0	ug/L	10.00	ND	106	60-120		
1,1-Dichloroethane	14.4		1.0	ug/L	10.00	3.9	106	60-120		
1,2-Dichloroethane	11.8		1.0	ug/L	10.00	ND	118	60-120		
1,1-Dichloroethene	11.6		1.0	ug/L	10.00	ND	116	60-120		
cis-1,2-Dichloroethene	11.9		1.0	ug/L	10.00	0.6	113	60-120		
trans-1,2-Dichloroethene	11.6		1.0	ug/L	10.00	ND	116	60-120		
1,2-Dichloropropane	11.3		1.0	ug/L	10.00	ND	113	60-120		
1,3-Dichloropropane	11.2		1.0	ug/L	10.00	ND	112	60-120		
2,2-Dichloropropane	11.9		1.0	ug/L	10.00	ND	119	60-120		
1,1-Dichloropropene	11.4		1.0	ug/L	10.00	ND	114	60-120		
cis-1,3-Dichloropropene	10.9		1.0	ug/L	10.00	ND	109	60-120		
trans-1,3-Dichloropropene	10.7		1.0	ug/L	10.00	ND	107	60-120		
Ethylbenzene	11.9		1.0	ug/L	10.00	ND	119	60-120		
2-Hexanone	11.2		5.0	ug/L	10.00	ND	112	60-120		
Methyl tert-butyl ether (MTBE)	10.6		1.0	ug/L	10.00	ND	106	60-120		
4-Methyl-2-pentanone	10.0		5.0	ug/L	10.00	ND	100	60-120		
Methylene chloride	11.6		1.0	ug/L	10.00	ND	116	60-120		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B305419 - GCMS-WATER-VOLATILES										
Matrix Spike (B305419-MS1)		**Source: 3051226-25**		Prepared & Analyzed: 05/18/23						
Methyl methacrylate	10.9		5.0	ug/L	10.00	ND	109	60-120		
Styrene	11.3		1.0	ug/L	10.00	ND	113	60-120		
1,1,1,2-Tetrachloroethane	11.2		1.0	ug/L	10.00	ND	112	60-120		
1,1,2,2-Tetrachloroethane	10.6		1.0	ug/L	10.00	ND	106	60-120		
Tetrachloroethene	13.9		1.0	ug/L	10.00	3.0	109	60-120		
Toluene	11.6		1.0	ug/L	10.00	ND	116	60-120		
1,1,1-Trichloroethane	11.7		1.0	ug/L	10.00	ND	117	60-120		
1,1,2-Trichloroethane	10.7		1.0	ug/L	10.00	ND	107	60-120		
Trichloroethene	11.9		1.0	ug/L	10.00	0.8	112	60-120		
Trichlorofluoromethane (Freon 11)	10.4		1.0	ug/L	10.00	ND	104	60-120		
1,2,3-Trichloropropane	10.9		1.0	ug/L	10.00	ND	109	60-120		
Vinyl acetate	10.5		1.0	ug/L	10.00	ND	105	60-120		
Vinyl chloride	11.9		1.0	ug/L	10.00	ND	119	60-120		
o-Xylene	11.6		1.0	ug/L	10.00	ND	116	60-120		
m- & p-Xylenes	23.1		1.0	ug/L	20.00	ND	115	60-120		
Surrogate: 1,2-Dichloroethane-d4	*51.42*			ug/L	*50.00*		*103*	*70-130*		
Surrogate: Toluene-d8	*50.18*			ug/L	*50.00*		*100*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*51.19*			ug/L	*50.00*		*102*	*75-120*		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-SPRING-2023
Project Manager: Steve Brown

Reported:
05/22/23 15:32

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

1 of 3

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MSS
Project		Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260 (1)											
1	TW-1	3	5-11-23	950	✓		GW	✓											3051226-01 A
2	TW-2	↓	↓	1305	↓		↓	↓										-	02
3	TW-2A			1230														-	03
4	TW-3			1430														-	04
5	TW-3A		↓	1350														-	05
6	TW-4		5-10-23	1115														-	06
7	TW-4B		5-10-23	1040														-	07
8	TW-19		5-9-23	1220														-	08
9	TW-20R			1140														-	09
10	TW-21			1340														-	10
11	TW-21A		↓	1420														-	11
12	TW-22	↓	↓	1615	↓		↓	↓										-	12

	Signature	Date	Time	Comments
Relinquished by	S A Brown	5.12.23	1300	(1) APPENDIX I LIST of 47 VOCs, MTBE,
Received by	[illegible]	5.12.23	1300	DCDFM + BCFM
Relinquished by				
Received by				
Relinquished by				STANDARD REPORT
Received by				

Cooler Temp on Arrival: 5.0 Deg. C

Rev. Aug. 2018

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MSS
Project	MLF-SPRING 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

3051226-13 A

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260 ①										
1	TW-22A	3	5.10.23	900	✓		GW	✓										
2	TW-22B	↓	5.9.23	1540			↓	↓									-	14
3	TW-23R	↓	5.10.23	950			↓	↓									-	15
4	TW-27	↓	5.10.23	1150			↓	↓									-	16
5	TW-28	↓	5.10.23	1300			↓	↓									-	17
6	TW-29	↓	5.11.23	1130			↓	↓									-	18
7	TW-30	↓	5.11.23	1040			↓	↓									-	19
8	TRIP BLANK	2	5.12.23	—			QA	↓									-	20
9	MW-P4	3	↓	1000			GW	↓									-	21
10	MW-P106	↓	↓	1215			↓	↓									-	22
11	RW-P165	↓	↓	1050			↓	↓									-	23
12	RW-P171-1	↓	↓	1135			↓	↓									-	24

	Signature	Date	Time	Comments
Relinquished by	DABrown	5.12.23	1300	① APPENDIX I LIST OF 47 VOCs, MTBE, DCDFM +
Received by		5.12.23	1300	DCFM
Relinquished by				
Received by				STANDARD REPORT
Relinquished by				
Received by				

Cooler Temp on Arrival: 5.0 Deg. C

Rev. Aug. 2018

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	Millersville Landfill	Lab	MSS
Project	MLF-Spring 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - MSS Appx B260											
1	RW-P244	3	5.12.23	920	✓		GW	✓											
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Analytical Parameters

3051226-25 A

	Signature	Date	Time	Comments
Relinquished by	[signature]	5.12.23	1300	① Appendix I list of 47 VOCs MTBE, DCDFM + DCFM
Received by	[signature]			
Relinquished by				
Received by				
Relinquished by				
Received by				

Cooler Temp on Arrival: 5.0 Deg. C

Rev. Aug. 2018

Appendix C.6
Fall 2023

Bureau of Waste Management Services
389 Burns Crossing Road
Severn, Maryland 21144
410-222-6108
pwkraj00@aacounty.org
www.dpwandyou.com

January 31, 2024

Mr. Andrew Grenzer, Chief
Solid Waste Operations Division
Land and Materials Administration
Maryland Department of the Environment
1800 Washington Blvd., Suite 605
Baltimore, MD 21230-1720

RE: Semi-Annual Groundwater and Surface Water Reports, July 1 – December 31, 2023, Millersville Landfill and Resource Recovery Facility and Sudley Closed Landfill

Dear Mr. Grenzer:

Enclosed are the Semi-Annual Groundwater and Surface Water Data Evaluation Reports for the Millersville Landfill and Resource Recovery Facility and the Sudley Landfill. The analytical results (raw data reports) for the monitoring events are also enclosed. The text, tables, and appendices are included as hard copies. The appendix containing the raw analytical data results is included electronically on the accompanying CDs.

Should you have any questions regarding the information covered in this document, please contact me or Mark Morris on (410) 222-6108.

Sincerely,

Stephen J. Krajcsik
Solid Waste Operations Administrator

Enclosure

ANNE ARUNDEL COUNTY

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY

GROUNDWATER MONITORING REPORT
2nd SEMI-ANNUAL 2023

ARM Project 23011471

Prepared for:

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS
WASTE MANAGEMENT SERVICES
389 Burns Crossing Road
Severn, Maryland 21144

Prepared by:

ARM Group LLC
9175 Guilford Road
Suite 310
Columbia, MD 21046

January 2024

ANNE ARUNDEL COUNTY

MILLERSVILLE LANDFILL AND RESOURCE RECOVERY FACILITY

GROUNDWATER MONITORING REPORT
2nd SEMI-ANNUAL 2023

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January 2024

Lauren Parker, G.I.T.
Project Geologist I

Stewart Kabis, P.G.
Q.A. Reviewer

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Appendix D Data Validation

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EXECUTIVE SUMMARY

The Maryland Department of Environment (MDE) has developed groundwater and surface water monitoring requirements to detect pollutant releases from landfills that could have adverse impacts on public health and the environment. To fulfill these requirements, landfills must be monitored to address three issues: (i) whether a release of chemicals from the landfill has occurred; (ii) whether conditions potentially adverse to public health and the environment were created as a result of a release; and (iii) whether the results of a statistical evaluation of groundwater data require that additional sampling and/or corrective measures be implemented. This executive summary presents the findings of the 2nd semi-annual 2023 (Fall 2023) groundwater sampling event, performed at the Millersville Landfill and Resource Recovery Facility (MLFRRF) located in Anne Arundel County. The findings are summarized with respect to these three issues.

The sampling results are evaluated for compliance with regulatory standards, including: (i) U.S. Environmental Protection Agency (USEPA) maximum contaminant levels (MCLs) and secondary maximum contaminant levels (SMCLs); (ii) Maryland health-based standards; and (iii) groundwater protection standards (GWPS) established for the site. MCLs and groundwater protection standards are established based on health concerns, whereas SMCLs are based on aesthetic concerns, such as taste, color, and odor.

The groundwater and surface water monitoring strategy for the MLFRRF was first identified in the Environmental Monitoring Plan (EMP), prepared for the Anne Arundel County Department of Public Works (the County) by Stearns & Wheeler [June 1995, Revised June 1996]. An updated EMP for MLFRRF prepared by ERM, dated November 5, 2002, was conditionally approved by MDE with their June 7, 2004 letter, contingent upon the County adding methyl tertiary butyl ether (MTBE) analysis to the monitoring program. The EMP was updated by ERM and approved by MDE in a letter dated March 25, 2010. The EMP defines two separate portions of the MLFRRF. Closed portions (Cells 1 East, 2, and 4) that stopped receiving waste prior to October 9, 1991, are subject to the requirements of the Code of Maryland (COMAR). The closed portions (Cells 5, 6, and 7) that stopped receiving waste prior to October 9, 1993, are subject to the provisions of 40 CFR Part 258 related to final cover requirements only. The recently-closed Cell 8 and currently active Cell 9 are subject to 40 CFR Part 258. However, for the purposes of monitoring, the closed portion (Cells 5, 6, and 7) are included in the monitoring and analysis requirements pursuant to 40 CFR Part 258 along with Cell 8 and Cell 9. Each of these portions of the MLFRRF are monitored by a comprehensive monitoring network, on-site regulated monitoring wells (Subtitle D), on-site regulated monitoring wells (COMAR), on-site non-regulated monitoring wells, off-site non-regulated monitoring wells, and other off-site monitoring locations. The monitoring networks were defined according to strategies that comply with the applicable regulatory requirements.

At the request of MDE, additional monitoring was performed for a select list of parameters from the Appendix II list in 40 CFR Part 258 for the on-site Subtitle D regulated monitoring wells.

OVERVIEW OF FINDINGS

Overall, the sampling event did not reveal substantial changes in groundwater quality and the results for inorganic parameters are consistent with historical results. Given the data for the MLFRRF, the site-specific hydrogeology, and the corrective actions implemented by the County, the potential for adverse effects to human health and the environment continues to be minimal.

Of all samples collected for the Fall 2023 sampling event, there was one MCL exceedance, shown on **Table 3.** This was not a first-time exceedance. The MCL exceedance is discussed below in **Section 3.3.1**.

The groundwater elevations and flow directions observed in the Zone 3 aquifer during this sampling event are generally consistent with historical data and seasonal variations.

The following summarizes the results of the Fall 2023 groundwater sampling event.

On-Site Regulated Monitoring Wells (Subtitle D)

All of the Appendix I VOC detections above the reporting limit (RL) are listed in **Table 4.** The Appendix II VOC detections are listed in **Table 5**. The concentration of methylene chloride in TW-25A exceeded its applicable MCL, as is typical.

In general, concentrations of Appendix I and Appendix II VOCs in the on-site Subtitle D regulated wells are consistent with historical concentrations. All VOC results for Subtitle D wells are discussed below in **Section 3.3.2**.

While iron and manganese continue to exceed SMCLs and pH is below the SMCL range in several wells, concentrations are generally consistent with historical levels.

On-site Regulated Monitoring Wells (COMAR)

Detections of Appendix I VOCs above the RL in COMAR wells are typically listed in **Table 6**; however, there were no Appendix I VOCs detected above RL in these wells during the Fall 2023 event**.** The Appendix II VOC detections above the RL are listed in **Table 7.** There were no GWPS or MCL exceedances for VOCs. The concentrations measured for Appendix I and Appendix II VOCs in the on-site COMAR-regulated wells are generally consistent with historical records.

While iron and manganese continue to exceed SMCLs and pH is below the SMCL range in several wells, concentrations are generally consistent with historical levels.

On-site Non-regulated Monitoring Wells

Appendix I VOC detections above the RL are typically listed in **Table 8**; however, there were no Appendix I VOCs detected above RL in these wells during the Fall 2023 event**.** Appendix II VOC

detections above the RL are typically listed in **Table 9**; however, there were no Appendix II VOCs detected above RL in these wells during the Fall 2023 event.

While iron and manganese continue to exceed SMCLs and pH is below the SMCL range in several wells, concentrations are generally consistent with historical levels.

Off-site Non-regulated Monitoring Wells

Appendix I VOC detections above the RL are listed in **Table 10.** Appendix II VOC detections above the RL are listed in **Table 11.** There were no MCL or GWPS exceedances. Appendix I and Appendix II VOC concentrations in these wells are generally consistent with historical concentrations. Mercury concentrations in the off-site non-regulated monitoring wells are generally consistent with the historical record.

Off-site Residential Zone 4 Water Supply Wells

As shown on **Table 12** and **Table 13**, there were no Zone 4 residential water supply wells sampled during the Fall 2023 event.

Surface Water Sampling Locations

Appendix I VOC detections above the RL are listed in **Table 14.** Appendix II VOC detections above the RL are typically listed in **Table 15**, but there were no detections above the RL at surface water locations during this sampling event. There were no MCL or GWPS exceedances.

Concentrations of inorganic parameters were generally consistent with the historical record for surface water sampling locations, with the exception of arsenic (and a few other metals), which was detected in SW-2 and SW-3 at higher concentrations than previous sampling events.

Statistical Evaluation

The results of the statistical evaluation of the Fall 2023 groundwater data are generally consistent with historical results. The findings indicate that downgradient samples show constituent concentrations that are statistically significant increases (SSIs) above background levels for several VOCs and inorganic parameters. There were two new SSIs for parameters detected above the RL during the Fall 2023 sampling event that were not identified during the Spring 2023 event: cobalt in TW-06 and alkalinity in TW-02A. Concentrations of most parameters that exhibited SSIs have generally been consistent with their historical data set; that is, no trend is apparent in the concentrations.

1 INTRODUCTION

1.1 BACKGROUND

In accordance with the requirements of the Solid Waste Management Regulations provided in Title 40 of the Code of Federal Regulations, Part 258 (40 CFR Part 258) and the Maryland Department of the Environment (MDE), the Anne Arundel County Department of Public Works (County) monitors groundwater and surface water at the Millersville Landfill and Resource Recovery Facility (MLFRRF), located in Anne Arundel County, Maryland. The monitoring requirements are provided in the Environmental Monitoring Plan (EMP), prepared by Stearns & Wheeler [June 1995, Revised June 1996]. An updated EMP for MLFRRF prepared by ERM, dated November 5, 2002, was conditionally approved by MDE with their June 7, 2004 letter, contingent upon the County adding methyl tertiary butyl ether (MTBE) analysis to the monitoring program. The EMP was revised by ERM and approved by MDE in a letter dated March 25, 2010. The primary objectives of the compliance monitoring program for the MLFRRF are: (i) to determine if leachate from the landfill affects groundwater quality; (ii) to evaluate whether or not conditions that are potentially adverse to public health and the environment have been caused in groundwater or surface water by the operation of the landfill; and (iii) to determine whether the results of a statistical evaluation of the sampling data indicate that the County needs to perform additional groundwater sampling or implement corrective measures.

This semi-annual report summarizes the findings of the evaluation performed on the data obtained during the Fall 2023 groundwater sampling event. The sampling performed during this event was conducted to fulfill the monitoring requirements of 40 CFR Part 258 and the approved EMP. This report also provides an overview of groundwater quality based on current and historical data.

The sampling data were evaluated through: (i) data validation; (ii) an evaluation of the ion balances of the samples that were collected, and an evaluation of the relative percent differences (RPDs) between sampling locations and corresponding duplicates (**Appendix D**); (iii) a statistical comparison of laboratory data between designated upgradient and downgradient groundwater on-site Subtitle D regulated monitoring wells; (iv) a comparison of laboratory results for each groundwater monitoring well with historical groundwater quality information; and (v) a comparison of laboratory results for each groundwater monitoring well with United States Environmental Protection Agency (USEPA) and MDE regulatory criteria, as well as with site-specific groundwater protection standards (GWPS).

There are three sets of rules that govern how the MLFRRF monitoring data are evaluated: 40 CFR Part 258 regulations apply to those portions of the MLFRRF that continued to receive waste after October 9th, 1993; 40 CFR Part 258 regulations related to final cover requirements apply to those portions of the MLFRRF that stopped receiving waste prior to October 9, 1993; and State Code of Maryland (COMAR) regulations apply to those closed portions of the MLFRRF that stopped

receiving waste before October 9, 1991. Closed disposal Cells 1 East, 2, and 4 are monitored in compliance with COMAR standards. The closed Cells 5, 6, and 7 that stopped receiving waste prior to October 9, 1993, are subject to the provisions of 40 CFR Part 258 related to final cover requirements only. Recently-closed Cell 8 and currently active Cell 9 are subject to 40 CFR Part 258. However, for the purposes of monitoring, the closed Cells 5, 6, and 7 are included in the monitoring and analysis requirements pursuant to 40 CFR Part 258 along with Cell 8 and Cell 9.

Table 1 provides a summary of the groundwater monitoring network for the MLFRRF. As shown in **Table 1**, the wells are designated according to whether they are used to monitor the older (Cells 1 East, 2, and 4) or newer (combined Cells 5, 6, and 7, Cell 8, and Cell 9) portions of the MLFRRF. The groundwater and surface water monitoring network for the MLFRRF is illustrated in **Figure C-1** in **Appendix C**. In general, the older and newer portions are separated by the Baltimore Gas Electric right-of-way.

In accordance with the EMP and in conformance with applicable regulations, 22 of the 50 on-site monitoring wells at the MLFRRF are classified as on-site regulated monitoring wells (Subtitle D). Eleven are located along the Eastern Boundary, two are near Cell 8, two are near the facility entrance serving as background wells, and seven are near Cell 9. Additionally, another 15 of the 50 on-site monitoring wells are classified as on-site regulated monitoring wells (COMAR). These monitoring wells are governed by COMAR for the closed portion of the MLFRRF. One monitoring well, TW-26R, is regulated by the facility's refuse disposal permit and is not covered by this semi-annual report. The remaining 13 on-site monitoring wells are classified as non-regulated. In conjunction with the regulated wells, numerous off-site monitoring locations have been established by the County to take proactive measures that comply with 40 CFR Part 258 groundwater monitoring requirements.

The regulated monitoring wells (Subtitle D) consist of the wells at the site that provide information on the quality of groundwater passing the relevant point of compliance and that are downgradient of combined Cells 5, 6, and 7, Cell 8 and Cell 9. **Table 1** summarizes the sampling locations used to monitor these cells. The on-site monitoring wells are designated as "TW". Wells designated as "MW" are off-site monitoring wells installed by the County to monitor off-site chemical concentrations in the groundwater. Wells designated as "RW" are also off-site monitoring wells and were converted from drinking water supply wells to monitoring wells by the County. Off-site residential water supply wells drilled into either the Zone 3 or Zone 4 aquifer are designated by the County parcel number with the prefix "P". Off-site residential water supply wells which have been drilled into the Zone 4 aquifer by the County have the suffix "Z4". Zone 4 residential wells are sampled biennially, with the exception of well P-417-Z4. This well is sampled annually in the spring as a conservative measure because there is no sentry monitoring point between the landfill and Parcel 417. **Table 2** lists the residential water supply wells. The residential water supply wells were not sampled during the Fall 2023 sampling event.

Regulated monitoring well (Subtitle D) TW-20 was abandoned on April 8, 2010, by a licensed well driller in accordance with COMAR 26.04.04.11. The well was placed to monitor groundwater downgradient of Cell 8 but was placed where a stormwater management pond was designated for Cell 9. Zone 3 monitoring well TW-20R was installed February 3-5, 2010, adjacent to Cell 8 as a replacement for abandoned monitoring well TW-20 per the approved EMP.

In addition to TW-20R, two non-regulated on-site Zone 4 monitoring wells were installed prior to the Spring 2010 sampling event. The installation of non-regulated on-site Zone 4 monitoring wells TW-14B and TW-6B were completed per the approved EMP on January 21, 2010 and February 2, 2010, respectively.

In accordance with the EMP, four on-site Zone 3 monitoring wells, TW-27, TW-28, TW-29, and TW-30, were installed prior to the Spring 2013 sampling event for incorporation into the regulatory monitoring well network for Cell 9. Additionally, existing monitoring wells TW-01, TW-02A, and TW-03, located south of Cell 9, are now considered part of the regulatory monitoring well network. Two years of background monitoring were completed prior to Cell 9 becoming operational in January 2017.

During the Fall 2020, construction activity for Cell 9 of the landfill involved significant earthwork in the immediate vicinity of TW-28, including raising the ground surface by 10-12 feet. As a result, new sections of well pipe were added to the top of TW-28 in order to vertically extend the well.

1.2 GROUNDWATER SAMPLING AND LABORATORY ANALYSIS

1.2.1 Groundwater Sampling

The County contracted with Environmental Monitoring and Assessment, LLC (EMA) of Lititz, Pennsylvania, to conduct the semi-annual groundwater sampling at the MLFRRF for the Fall 2023 sampling event. The sampling event included the collection of samples from 22 regulated on-site monitoring wells (Subtitle D), 15 regulated on-site monitoring wells (COMAR), 7 on-site non-regulated monitoring wells, and 12 off-site monitoring wells. The sampling locations are listed in **Table 1.**

Prior to collecting the groundwater samples, the depth to the water table was measured at each well. Once the water table measurement was recorded, the monitoring wells were purged and sampled in accordance with 40 CFR Part 258, MDE requirements, and the EMP. As the monitoring wells were purged, measurements of groundwater dissolved oxygen, pH, conductivity, temperature, oxidation-reduction potential, turbidity, and appearance were recorded. Upon review of the field data, the turbidity value for sample TW-05A was invalidated due to the result being a

negative value. The field turbidity value for TW-05A was not included in the Fall 2023 data set for review or statistical analysis.

1.2.2 Groundwater Sample Analysis

The groundwater analytical program for the MLFRRF includes the analysis of samples for parameters used to monitor both the existing and closed portion of the MLFRRF. For the purpose of uniformity and ease of implementation, the samples that are collected from the wells used to monitor the closed portion of the MLFRRF are analyzed in accordance with the detection monitoring requirements (defined by 40 CFR Part 258) for the existing portion of the MLFRRF, as specified in the EMP. In accordance with these detection monitoring requirements, the samples are analyzed for the parameters listed in Appendix I of 40 CFR Part 258 (Appendix I parameters). The Appendix I parameters include inorganic constituents (metals) and organic constituents (volatile organic compounds or VOCs).

In addition to these analytical requirements, the samples collected at the site are also analyzed for parameters historically monitored at the site. These parameters include dichlorodifluoromethane and dichlorofluoromethane, which are listed in Appendix II of 40 CFR Part 258 (Appendix II parameters), methyl tertiary butyl ether (MTBE), and general chemistry parameters such as chloride and total dissolved solids that can sometimes be indicators of landfill leachate (indicator parameters).

In accordance with this analytical program described above, the groundwater samples were analyzed for VOCs, total and dissolved metals, and general chemistry indicator parameters. The methods used to analyze the samples included USEPA Methods 8260 and 8011 for VOCs; USEPA Methods 6010D, 6020B, and 7470A for metals; and 40 CFR Part 136 methods for the indicator parameters. The full laboratory analytical results and data packages are presented as **Appendix E.**

1.3 SURFACE WATER SAMPLING AND LABORATORY ANALYSIS

1.3.1 Surface Water Sampling

During the Fall 2023 sampling event, three surface water samples, SW-1, SW-2, and SW-3 were collected by EMA from Wells Branch, which flows west to east across the site (see **Figure C-1**). The surface water samples were collected from the stream locations that are representative of upgradient and downgradient conditions. Sample location SW-1 is an upgradient location between Cell 8 and the leachate pretreatment plant, approximately 200 feet downgradient of monitoring well TW-10A. Sample location SW-2 is a downgradient location near the TW-4 well cluster. Surface water collected at this location is representative of surface water conditions prior to discharging off-site. Sample location SW-3 is a mid-stream location that is downgradient

of Stormwater Pond 8-1 and is located between combined Cells 5-7, Cell 8, and Cell 9. This location is approximately equal distance from sample locations SW-1 and SW-2.

1.3.2 Surface Water Sample Analysis

The surface water samples were analyzed for VOCs, total metals, and indicator parameters. The methods used to analyze the samples included USEPA Method 8260 for VOCs; USEPA Methods 6010D, 6020B, and 7470A for metals; and 40 CFR Part 136 methods for the indicator parameters.

1.4 QUALITY ASSURANCE/QUALITY CONTROL SAMPLING AND ANALYSIS

1.4.1 Quality Assurance/Quality Control Sampling (QA/QC)

Field and laboratory QA/QC protocols were employed during the sampling event to ensure that QA/QC criteria were met. The field QA/QC protocols included the collection and analysis of two blind duplicate samples from wells TW-24 and TW-25A. In addition, one field blank and six trip blanks were prepared and analyzed. The laboratory QA/QC protocols included the analysis of method blanks and matrix spike (MS) and matrix spike duplicate (MSD) samples for GC/MS runs. These protocols help identify possible sources of VOC contamination that may cause elevated or false positive parameter levels to be reported.

1.4.2 Quality Assurance/Quality Control Sample Analysis

To ensure that the field QC criteria were met, blind duplicate samples were analyzed for all parameters for which the groundwater samples were analyzed. These parameters include VOCs by USEPA Method 8260 and 8011; total and dissolved metals by USEPA Methods 6010D, 6020B, and 7470A; and the indicator parameters by 40 CFR Part 136 methods. The field blank was also analyzed for all parameters for which the Subtitle D regulated monitoring wells were analyzed. These parameters include VOCs by USEPA Method 8260; total and dissolved metals by USEPA Methods 6010D, 6020B, and 7470A; and indicator parameters by 40 CFR Part 136 methods. The trip blanks were analyzed for VOCs according to USEPA Method 8260 and 8011.

To ensure that the laboratory QA criteria were met, project-specific MS and MSD samples were analyzed at the rate of one MS/MSD sample for every 20 field samples, as specified in the EMP. The MS and MSD samples were used by the laboratory to evaluate possible matrix effects that could have interfered with the analytical method, and to estimate the method precision. The analysis of laboratory method blanks was performed to identify possible sources of contamination that may have caused elevated or false positive parameter levels to be reported.

1.5 DATA ANALYSIS METHODOLOGY

The analysis of the data obtained during this sampling event included: validation of the laboratory data, determination of USEPA National Primary Drinking Water Standards (MCLs) exceedances, statistical evaluation of upgradient versus downgradient parameter concentrations, identification of GWPS exceedances, and assessment of groundwater elevations.

The laboratory sample data and QA/QC data were validated to verify proper analytical procedures and checks were performed by the analytical laboratory. The laboratory data validation is discussed further in **Appendix D** of this report. The laboratory analytical data packages are presented as **Appendix E** of this report.

The data were evaluated to determine whether or not concentrations exceeded MCLs and National Secondary Drinking Water Standards (SMCLs), state health-based standards, and site-specific GWPS. The GWPS for the site were established in 1997. This evaluation is included in **Section 3** of this report.

The data analysis included a statistical evaluation of the detection monitoring data obtained from the on-site regulated monitoring wells (Subtitle D). This evaluation was used to determine if there is a statistically significant change in groundwater quality for the portions of the site subject to 40 CFR Part 258.54 that may be attributed to the MLFRRF. The historical concentrations of the parameters detected in the groundwater samples from each on-site regulated monitoring well (Subtitle D) were compared to the historical background data using statistical methods described in the EMP and 40 CFR Part 258.53(g). The statistical analysis is discussed further in **Section 4** of this report.

2 SUMMARY OF SAMPLING EVENT

2.1 OVERVIEW

The County contracted with EMA to conduct the Fall 2023 sampling event at the MLFRRF. VOC sample analysis was performed by Maryland Spectral Services of Baltimore, Maryland, and inorganic sample analysis was performed by Pace Analytical Service (Pace), of Greensburg, Pennsylvania and Beaver, West Virginia.

The groundwater monitoring wells were purged and sampled in accordance with the EMP and 40 CFR Part 258. **Figure C-1** shows the locations of the sampling points and the corresponding sampling classifications. Quality control blanks and blind duplicates were obtained, as discussed in **Section 1.4.1** of this report. The groundwater samples were submitted to the laboratory for analyses of total and specific dissolved metals, Appendix I VOCs, and inorganic indicators of leachate (chloride, ammonia, nitrite and nitrate-nitrogen, chemical oxygen demand, total alkalinity, sulfate, dissolved solids, and hardness).

2.2 DATA ANALYSIS

The methods used to collect and analyze the groundwater, surface water and QA/QC samples for this sampling event were evaluated to determine compliance with the EMP for the site and 40 CFR Part 258. The following procedures were followed to evaluate the compliance of the field sampling activities and the laboratory methods:

- Review of the appropriateness of the analytical methods;
- Review of the appropriateness of sample bottle types, preservatives, and holding times for each analytical method;
- Review of reports and analytical data for trip blanks, field blanks, duplicate samples, and laboratory method blanks to identify possible evidence of contamination;
- Review of Chain-of-Custody documentation for accuracy and completeness; and
- Review of field methods described in the field sampling reports.

The field and laboratory results were also evaluated to determine the validity of the data. The following procedures were followed to assess the validity of the data:

- Calculation of charge balance errors on the samples collected in the field;

- Review of MS and MSD samples to evaluate possible matrix effects that may interfere with the analytical method;

- Review of MS, MSD, and blind duplicate samples to calculate the relative percent difference (RPD) of duplicate samples in obtaining an estimate of laboratory method precision;

- Review of laboratory reports on instrument tuning, instrument calibration, and recoveries of spiked samples for each analytical method; and

- Comparison of the analytical data and groundwater elevations to historical values at each sampling location.

The results obtained from this evaluation satisfy the project QA/QC objectives. The results of the evaluation of the analytical data are provided in **Appendix D.** The full laboratory analytical data packages are presented as **Appendix E** of this report.

A comparison of the analytical data to MCLs, SMCLs, State standards, and established GWPS, as well as to historical data, is discussed in **Section 3.**

3 SUMMARY OF ANALYTICAL RESULTS

3.1 INTRODUCTION

Groundwater elevations were measured by the County on a monthly basis and are included in this report in **Appendix C**. The field and laboratory analytical results were evaluated by comparing the current data to historical data. The laboratory results were also evaluated for compliance with regulatory standards. In assessing the laboratory data, each parameter was evaluated for compliance with: (i) MCLs and SMCLs; (ii) Maryland health-based standards; and (iii) GWPS established for the site. MCLs and GWPS are established based on health concerns, whereas SMCLs are based on aesthetic concerns, such as taste, color, and odor. A statistical evaluation of the laboratory results is presented in **Section 4**.

3.2 GROUNDWATER ELEVATION DATA

The monthly water table measurements recorded during November 2023 are provided in **Appendix C.** The groundwater elevations are generally consistent with historical data, with the exception of TW-25 which was reported as lower than expected.

Potentiometric surface contours for groundwater levels measured in wells screened within the Zone 3 aquifer during Fall 2023 are illustrated on **Figure C-1** in **Appendix C**. As shown on the drawing, the general direction of groundwater flow in the Zone 3 aquifer at the MLFRRF is toward the northeast. Groundwater flow direction is consistent with historical data.

3.3 ANALYTICAL RESULTS

The results of the comparison of the analytical data to regulatory standards and to historical trends are discussed below for the volatile organic and inorganic data. In assessing the data, each parameter was evaluated for compliance with the MCLs and SMCLs, with Maryland health-based standards, and with GWPS established for the site.

The current analytical data and the historical analytical data are included in tables in **Appendix A.** The tables present the concentrations over time for organic and inorganic parameters. They provide a simple means of evaluating trends in the concentrations. The “J” qualifier associated with a concentration indicates the compound was detected at a trace concentration below the laboratory RL but above the MDL and as such is an estimated value. The “U” qualifier associated with a concentration indicates the compound was not detected. The “B” qualifier indicates possible laboratory contamination due to the compound being detected in the method or field blank sample analysis. An “M1” qualifier indicates that the matrix spike recovery analysis performed

by the lab exceeded quality control limits, but the result was accepted based on laboratory control sample (LCS) recovery.

3.3.1 **MCL Exceedances**

Table 3 lists the MCL exceedances at the site for this sampling event. As shown in **Table 3**, there was one parameter concentration that exceeded its applicable MCL. The MCL exceedance was consistent with the historical record. There were no first-time MCL exceedances during the Fall 2023 sampling event. Time-series plots for parameter concentrations with historic MCL exceedances for on-site monitoring wells have been constructed to identify potential trends in concentrations over time. These plots are included in **Appendix B**.

3.3.2 **On-site Regulated Monitoring Wells (Subtitle D)**

Appendix I Volatile Organic Compounds

As shown on **Table 4**, 11 different VOCs were detected above the RL across ten different monitoring locations. The concentration of methylene chloride in TW-25A exceeded its applicable MCL, as it has done over the past several years.

All detections of VOCs above the RL were generally consistent with the historical record. No Appendix I VOCs were detected above the RL in the following Subtitle D wells during the Fall 2023 sampling event: TW-02A, TW-03, TW-04B, TW-05A, TW-10A, TW-19, TW-20R, TW-23, TW-24A, TW-27, TW-29, and TW-30.

Appendix II Volatile Organic Compounds and MTBE

As shown in **Table 5**, detections above the RL of dichlorodifluoromethane, dichlorofluoromethane, and MTBE were noted for 12 different locations. There were no GWPS or Maryland State Action Level exceedances. In general, concentrations of these parameters are consistent with concentrations measured over the past 10 years.

No Appendix II VOCs were detected above the reporting limit in the following Subtitle D wells during the Fall 2023 sampling event: TW-03, TW-04B, TW-05A, TW-10A, TW-19, TW-20R, TW-23, TW-24A, TW-27, and TW-30.

Inorganics

Mercury was detected at concentrations above the RL only in Subtitle D wells TW-04B, TW-06, and TW-24. The concentrations of mercury in TW-04B, TW-06, and TW-24 were below the applicable MCL.

Iron (total and dissolved), manganese (total and dissolved), and turbidity were detected in many of the regulated monitoring wells (Subtitle D) at concentrations that exceeded their applicable SMCLs. Iron and manganese are typical naturally occurring metals found in groundwater and are not necessarily indicative of contamination from the landfill. Measurements of pH were below the SMCL range for most on-site Subtitle D regulated monitoring wells. Low pH is also typical of groundwater and is believed to be a natural property of groundwater at the MLFRRF. Furthermore, pH concentrations in the downgradient monitoring wells are consistent with those measured in upgradient background groundwater.

Concentrations of inorganic parameters measured during the Fall 2023 sampling event—including those of iron, manganese, and pH—were generally consistent with the historical record.

3.3.3 **On-site Regulated Monitoring Wells (COMAR)**

Appendix I Volatile Organic Compounds

As shown on **Table 6,** there were no Appendix I VOCs detected above the RL across all COMAR regulated wells during the Fall 2023 sampling event. As such, there were no MCL or GWPS exceedances.

Appendix II Volatile Organic Compounds and MTBE

As shown in **Table 7**, there was only one detection above the RL of an Appendix II VOC in a COMAR regulated on-site monitoring well, dichlorodifluoromethane in TW-15B. The concentration of the detection was below GWPS or Maryland State Action Levels. The concentration was consistent with the historical record. There were no Appendix II VOCs detected above the RL in COMAR regulated wells TW-07, TW-07A, TW-08, TW-08A, TW-09B, TW-09C, TW-15, TW-16, TW-17, TW-17A, TW-21, TW-22, TW-22A, and TW-22B.

Inorganics

Mercury was detected at a concentration above the RL in two COMAR regulated wells during the Fall 2023 sampling event, TW-15B and TW-22A. The concentrations of mercury in both wells were below the applicable MCL. Iron (total and dissolved), manganese (total and dissolved), and turbidity were detected in several of the COMAR regulated monitoring wells at concentrations that exceeded their applicable SMCLs. Iron and manganese are typical naturally occurring metals found in groundwater and are not necessarily indicative of contamination from the landfill. Measurements of pH were below the SMCL range for all on-site COMAR regulated monitoring wells. Low pH is also typical of groundwater and is believed to be a natural property of groundwater at the MLFRRF. Furthermore, pH concentrations measured in the downgradient wells are comparable to upgradient background concentrations.

Concentrations of inorganic parameters measured in COMAR regulated monitoring wells during the Fall 2023 sampling event—including those of iron, manganese, and pH—were consistent with the historical record.

3.3.4 **On-site Non-regulated Monitoring Wells**

Appendix I Volatile Organic Compounds

As shown on **Table 8**, there were no Appendix I VOCs detected above the RL across all on-site non-regulated monitoring wells during the Fall 2023 sampling event. As such, there were no MCL or GWPS exceedances.

Appendix II Volatile Organic Compounds and MTBE

As shown on **Table 9**, there were no Appendix II VOCs detected above the RL across all on-site non-regulated monitoring wells during the Fall 2023 sampling event. As such, there were no GWPS or Maryland State Action Level exceedances.

Inorganics

Mercury was not detected above the RL in any on-site non-regulated monitoring wells. Iron (total and dissolved), manganese (total and dissolved), and turbidity were detected in a few of the on-site non-regulated monitoring wells at concentrations that exceeded their applicable SMCLs. Iron and manganese are typical naturally-occurring metals found in groundwater and are not necessarily indicative of contamination from the landfill. Measurements of pH were below the SMCL range for most on-site non-regulated monitoring wells. Low pH is also typical of groundwater and is believed to be a natural property of groundwater at the MLFRRF. Furthermore, pH concentrations measured in the downgradient wells are comparable to upgradient background concentrations.

Concentrations of inorganic parameters measured in on-site non-regulated monitoring wells during the Fall 2023 sampling event—including those of iron, manganese, and pH—are generally consistent with the historical record.

3.3.5 **Off-site Non-regulated Monitoring Wells**

Appendix I Volatile Organic Compounds

As shown on **Table 10**, five different Appendix I VOCs were detected above the RL across six different off-site non-regulated monitoring well locations. There were no MCL or GWPS exceedances. In general, VOC concentrations detected above the RL in these wells are consistent with historical concentrations. There were no Appendix I VOCs detected above the RL in wells MW-P4, MW-P9, MW-P417, MW-P440, RW-P171-1, and RW-P441.

Appendix II Volatile Organic Compounds and MTBE

As shown in **Table 11**, detections of dichlorodifluoromethane and dichlorofluoromethane above the RL were observed at seven off-site non-regulated monitoring wells. There were no detections of MTBE above the RL. There were no GWPS or Maryland State Action Level exceedances. The detected concentrations of dichlorodifluoromethane and dichlorofluoromethane are generally consistent with the historical record. There were no Appendix II VOCs detected above the RL in wells MW-P4, MW-P9, MW-P417, MW-P440, and RW-P171-1.

Inorganics

All off-site monitoring wells were analyzed for mercury. There was one concentration of mercury detected above the RL in off-site non-regulated monitoring wells during the Fall 2023 sampling event, in well MW-P106. The concentration of mercury in this well was below the applicable MCL. The detected concentration is consistent with the historical record.

3.3.6 **Off-site Residential Zone 4 Water Supply Wells**

As shown on **Table 12** and **Table 13**, there were no off-site residential Zone 4 water supply wells sampled during the Fall 2023 sampling event.

3.3.7 **Surface Water Sampling Locations**

Appendix I and Appendix II Volatile Organic Compounds

As shown on **Table 14**, there were detections above the RL for acetone in SW-1, SW-2, and SW-3. There is no standardized concentration limit for acetone in surface water and the concentrations are consistent with the historical record. Acetone is also typically considered a common laboratory contaminant. There were no other Appendix I VOCs detected above the RL at any surface water sampling locations.

As shown on **Table 15**, there were no Appendix II VOCs detected above the RL at any surface water monitoring locations during the Fall 2023 sampling event.

Inorganics

There were no MCL exceedances of inorganic parameters at the surface water sampling locations. SMCL exceedances were observed for iron, manganese, and turbidity at SW-2 and SW-3. Concentrations of most detected inorganic parameters at surface water locations were consistent with historical values. However, there were notable increases in the concentrations of arsenic, cobalt, iron and manganese at SW-2 and SW-3. There was also a notable increase in the concentration of lead at SW-3. These locations will be watched closely in future sampling events to see if the concentrations of metals remain elevated or return to historically typical levels.

4 STATISTICAL EVALUATION

4.1 INTRODUCTION

In accordance with the EMP and 40 CFR Part 258.53, groundwater sampling and analysis requirements, the groundwater parameters at the MLFRRF have been statistically analyzed. Listed below are the objective of the analysis, the procedures used, and the summary of results. The detailed results of the statistical analysis are included after the text.

4.2 OBJECTIVE

According to the Code of Federal Regulations (40 CFR Part 258), groundwater monitoring data must be statistically analyzed to determine if parameter levels are exceeding background groundwater quality levels at each downgradient well. This goal is met by statistically analyzing the groundwater data that have been collected on the site since 1993. The analyses will determine if the land use may be contributing to groundwater contamination.

4.3 PROCEDURE

Samples have been collected since 1993 and tested for the constituents specified in the EMP. The concentrations observed in the downgradient wells are compared to the concentrations observed in the upgradient wells. If the downgradient samples show significantly higher concentrations than the upgradient samples statistically, it indicates that land use practices are likely affecting the groundwater quality.

The groundwater data were analyzed using the Mann-Whitney Test (Wilcoxon Rank Sum Test) to determine whether the downgradient data differed from the upgradient data with statistical significance. The Mann-Whitney analysis is nonparametric, that is, it assumes no underlying distribution (like the normal distribution) and compares two groups of data and determines whether both groups come from the same population with a certain confidence.

Individual statistical tests have a certain amount of uncertainty associated with them. When multiple tests are combined (from different wells and different constituents), that uncertainty is compounded. An overall network-wide Type I error rate of 5% is required by 40 CFR Part 258.53(h)(2); however, an error rate no less than 1% shall be applied to any single test. A 5% Type I error rate means 5% of the recognized exceedances are in reality not actually elevated above background levels; that is, they represent false positives.

Statistical analyses are performed for all parameters detected over the RL during the Fall 2023 sampling event at downgradient wells. Using the Bonferroni adjustment to account for multiple

statistical comparisons, a Type I error rate of much less than 1% per analysis would result, so a Type I error rate of 1% was used as the minimum allowable under 40 CFR Part 258.52(h)(2).

For each sampling event, an average concentration from the upgradient wells was calculated. The collection of average concentrations for all sampling events was then compared to the concentrations for all sampling events at each of the downgradient wells. For each downgradient well, the upgradient and downgradient concentrations are combined and ranked (the lowest concentration is assigned a rank of 1). Tied concentrations are ranked equally by averaging the ranks that would be assigned to the tied group if they were not tied.

The sum of the ranks, the number of upgradient observations, and the number of downgradient observations are used to calculate the Mann-Whitney Test Statistic (U). The calculated U for each well/parameter pair is compared to a critical U value which is published in tables in statistical texts. Critical U values are based on the number of samples in the upgradient group and at each downgradient well. Therefore, the critical U values vary from parameter-to-parameter and from well-to-well. If the calculated U is greater than the critical U, there is no exceedance at 99% confidence (a 1% Type I error rate for each analysis). Likewise, if the calculated U is less than the critical U, there is an exceedance.

Because the upgradient (background) condition is compared to each downgradient well separately, each well/parameter combination is tested. The results of all of the tests are included following the report text. There may be exceedances in some downgradient wells for a particular parameter, but not in other downgradient wells.

4.4 SUMMARY OF RESULTS

The results of the statistical analysis are shown on **Table 16.** The findings indicated that downgradient samples show constituent concentrations that are statistically significant increases (SSIs) above background levels in all 20 of the downgradient on-site regulated wells.

There were two new SSIs identified during the Fall 2023 sampling event for which the parameter was detected above the RL that were not identified during the previous sampling event. These new SSIs consist of cobalt in TW-06 and alkalinity in TW-02A. Cobalt in TW-06 has been detected at higher concentrations than concentrations of cobalt in the two background wells, though cobalt concentrations in TW-06 have been decreasing the last four sampling events. Alkalinity has frequently been detected in TW-02A at concentrations greater than background well concentrations since the Fall 2017 sampling event. Prior to the Fall 2017 sampling event, alkalinity at TW-02A was measured to be less than 6 mg/L but has since been reported between 16 mg/L and 46 mg/L with no apparent trend.

All other SSIs identified during the Fall 2023 event are generally consistent with historical exceedances. Concentrations of most parameters that exhibited SSIs have generally been consistent with their historical data set; that is, no trend is apparent in the concentrations.

5 RECOMMENDATIONS

The results of the Fall 2023 groundwater sampling event indicate that overall, groundwater conditions are generally consistent with historical data for the MLFRRF. Many monitoring wells continue to show VOC concentrations lower than historical data. While the data and statistical evaluations indicate that a release of landfill constituents to groundwater may have occurred, the site-specific hydrogeology and the corrective measures already implemented by the County have limited the potential for any adverse effects on human health and the environment. It is recommended that regular groundwater monitoring be continued in accordance with the EMP.

TABLES

Table 1 - MLFRRF SAMPLING LOCATIONS						
Sampling Locations Used to Monitor Cells 5, 6, 7, 8, and 9				**Sampling Locations Used to Monitor Cells 1 east, 2, and 4**		
On Site Regulated Monitoring Wells (Subtitle D)	Off-Site Non-Regulated Monitoring Wells	On-Site Non-Regulated Monitoring Wells	Surface Water Sampling Locations	On-Site Regulated Monitoring Wells (COMAR)	On-Site Non-Regulated Monitoring Wells	Surface Water Sampling Locations
TW-01	MW-P4	TW-02	SW-1	TW-07	TW-09	SW-1
TW-02A	MW-P9	TW-03A	SW-2	TW-07A	TW-16A	SW-2
TW-03	MW-P106	TW-05B	SW-3	TW-08		SW-3
TW-04	MW-P417	TW-06A*		TW-08A		
TW-04B	MW-P440	TW-06B		TW-09B		
TW-05	RW-P109	TW-11A*		TW-09C		
TW-05A	RW-P165	TW-12*		TW-15		
TW-06	RW-P171-1	TW-13*		TW-15B		
TW-10A	RW-P264	TW-14B		TW-16		
TW-14	RW-P440	TW-18*		TW-17		
TW-14A	RW-P441	TW-21A*		TW-17A		
TW-19	RW-P584			TW-21		
TW-20R				TW-22		
TW-23				TW-22A		
TW-24				TW-22B		
TW-24A						
TW-25						
TW-25A						
TW-27						
TW-28						
TW-29						
TW-30						

*Note: As specified in the EMP, the wells with an * are sampled annually only during the spring events.*

Table 2 - RESIDENTIAL SUPPLY WELL SAMPLING LOCATIONS			
Sampling Location	Aquifer	Sampling Location	Aquifer
P-109-Z4	Zone 4	P-417-Z4	Zone 4
P-145-Z4	Zone 4	P-261-Z4	Zone 4
P-160-Z4	Zone 4	P-264-Z4	Zone 4
P-161-Z4	Zone 4	P-277-Z4	Zone 4
P-162-Z4	Zone 4	P-323-Z4	Zone 4
P-164-Z4	Zone 4	P-359-Z4	Zone 4
P-165-Z4	Zone 4	P-383-Z4	Zone 4
P-166-Z4	Zone 4	P-412-Z4	Zone 4
P-168-Z4	Zone 4	P-440-Z4	Zone 4
P-169-Z4	Zone 4	P-441-Z4R	Zone 4
P-257-Z4	Zone 4	P-478-Z4	Zone 4

Residential Wells were not sampled during the Fall 2023 sampling event.

Table 3 - Current MCL Exceedances						
Well Group	Location	Parameter	Result	Qualifier	MCL	Units
Subtitle D	**TW-25A**	Methylene Chloride	26.5		5	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 4 - APPENDIX I VOC DETECTIONS IN REGULATED WELLS (SUBTITLE D)					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
TW-01	1,1-Dichloroethane	1.6		1370	µg/L
TW-04	1,1-Dichloroethane	3		1370	µg/L
TW-05	1,1-Dichloroethane	2.2		1370	µg/L
TW-06	1,1-Dichloroethane	6.3		1370	µg/L
	cis-1,2-Dichloroethene	4.5		70	µg/L
	Tetrachloroethene	1.7		5	µg/L
	Trichloroethene	1.2		5	µg/L
TW-14	1,1-Dichloroethane	2.9		1370	µg/L
	cis-1,2-Dichloroethene	1.1		70	µg/L
	Tetrachloroethene	3.3		5	µg/L
TW-14A	1,1-Dichloroethane	5.2		1370	µg/L
	Benzene	1.2		5	µg/L
	cis-1,2-Dichloroethene	1.5		70	µg/L
	Tetrachloroethene	1.3		5	µg/L
	Trichloroethene	1.1		5	µg/L
TW-24	1,1-Dichloroethane	2.6		1370	µg/L
TW-25	1,1-Dichloroethane	2.1		1370	µg/L
	cis-1,2-Dichloroethene	1.1		70	µg/L
	Tetrachloroethene	1.5		5	µg/L
TW-25A	1,1-Dichloroethane	27.8		1370	µg/L
	1,2-Dichloroethane	1.8		5	µg/L
	1,2-Dichloropropane	1.1		5	µg/L
	1,4-Dichlorobenzene	1.7		75	µg/L
	Benzene	2.5		5	µg/L
	cis-1,2-Dichloroethene	5.2		70	µg/L
	Methylene Chloride	**26.5**		**5**	**µg/L**
	Tetrachloroethene	3.7		5	µg/L
	Trichloroethene	4.8		5	µg/L
	Trichlorofluoromethane	1.8		1920	µg/L
	Vinyl chloride	1.2		2	µg/L
TW-28	1,1-Dichloroethane	1.8		1370	µg/L
	Trichlorofluoromethane	1.1		1920	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 5 - APPENDIX II VOC DETECTIONS IN REGULATED WELLS (SUBTITLE D)					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
TW-01	Dichlorodifluoromethane	6.9		1000	µg/L
	Dichlorofluoromethane	2.3		550	µg/L
TW-02A	Dichlorodifluoromethane	1.2		1000	µg/L
	Dichlorofluoromethane	1.3		550	µg/L
TW-04	Dichlorodifluoromethane	1.9		1000	µg/L
	Dichlorofluoromethane	4.7		550	µg/L
TW-05	Dichlorodifluoromethane	2.1		1000	µg/L
	Dichlorofluoromethane	3.1		550	µg/L
TW-06	Dichlorodifluoromethane	4.8		1000	µg/L
	Dichlorofluoromethane	4.3		550	µg/L
TW-14	Dichlorodifluoromethane	4.8		1000	µg/L
	Dichlorofluoromethane	4.6		550	µg/L
TW-14A	Dichlorodifluoromethane	1.5		1000	µg/L
	Dichlorofluoromethane	3.7		550	µg/L
TW-24	Dichlorodifluoromethane	1.5		1000	µg/L
	Dichlorofluoromethane	1.2		550	µg/L
TW-25	Dichlorodifluoromethane	4.9		1000	µg/L
	Dichlorofluoromethane	3.2		550	µg/L
TW-25A	Dichlorodifluoromethane	12.3		1000	µg/L
	Dichlorofluoromethane	27.2		550	µg/L
	Methyl-tert-butyl ether	4		20	µg/L
TW-28	Dichlorodifluoromethane	4		1000	µg/L
	Dichlorofluoromethane	4.4		550	µg/L
TW-29	Dichlorodifluoromethane	2.5		1000	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 6 - APPENDIX I VOC DETECTIONS IN REGULATED WELLS (COMAR)					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
No Appendix I VOCs detected above the Reporting Limit.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 7 - APPENDIX II VOC DETECTIONS IN REGULATED WELLS (COMAR)					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
TW-15B	Dichlorodifluoromethane	1.2		1000	µg/L

• *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 8 - APPENDIX I VOC DETECTIONS IN ON-SITE NON-REGULATED WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
No Appendix I VOCs detected above the Reporting Limit.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 9 - APPENDIX II VOC DETECTIONS IN ON-SITE NON-REGULATED WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
No Appendix II VOCs detected above the Reporting Limit.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 10 - APPENDIX I VOC DETECTIONS IN OFF-SITE NON-REGULATED WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
MW-P106	1,1-Dichloroethane	2.6		1370	µg/L
	cis-1,2-Dichloroethene	1.4		70	µg/L
RW-P109	1,1-Dichloroethane	1.1		1370	µg/L
	Trichloroethene	1.1		5	µg/L
RW-P165	1,1-Dichloroethane	2.8		1370	µg/L
	Tetrachloroethene	1.9		5	µg/L
RW-P264	1,1-Dichloroethane	3.1		1370	µg/L
	Tetrachloroethene	2.4		5	µg/L
RW-P440	Chloroform	1.3		80	µg/L
RW-P584	1,1-Dichloroethane	3		1370	µg/L
	cis-1,2-Dichloroethene	1.2		70	µg/L
	Tetrachloroethene	1.7		5	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 11 - APPENDIX II VOC DETECTIONS IN OFF-SITE NON-REGULATED WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
MW-P106	Dichlorodifluoromethane	1		1000	µg/L
	Dichlorofluoromethane	1.5		550	µg/L
RW-P109	Dichlorodifluoromethane	1.8		1000	µg/L
RW-P165	Dichlorodifluoromethane	4.5		1000	µg/L
	Dichlorofluoromethane	3.8		550	µg/L
RW-P264	Dichlorodifluoromethane	5.4		1000	µg/L
	Dichlorofluoromethane	4		550	µg/L
RW-P440	Dichlorodifluoromethane	1.4		1000	µg/L
RW-P441	Dichlorodifluoromethane	2		1000	µg/L
RW-P584	Dichlorodifluoromethane	3.8		1000	µg/L
	Dichlorofluoromethane	2.2		550	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 12 - APPENDIX I VOC DETECTIONS IN RESIDENTIAL SUPPLY WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
Residential Wells not sampled during the Fall 2023 Sampling Event.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 13 - APPENDIX II VOC DETECTIONS IN RESIDENTIAL SUPPLY WELLS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
Residential Wells not sampled during the Fall 2023 Sampling Event.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 14 - APPENDIX I VOC DETECTIONS AT SURFACE WATER LOCATIONS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
SW-1	Acetone	5.3		--	µg/L
SW-2	Acetone	15.5		--	µg/L
SW-3	Acetone	10		--	µg/L

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 15 - APPENDIX II VOC DETECTIONS AT SURFACE WATER LOCATIONS					
Location	**Parameter**	**Result**	**Qualifier**	**MCL/GWPS**	**Units**
No Appendix II VOCs detected above the Reporting Limit.					

Notes:

- *J-flagged results are not included in the table, as they are non-quantified values detected below the reporting limit. All J-flagged results are reported in the historical tables found in Appendix A.*

Table 16 - STATISTICAL EXCEEDANCES OF BACKGROUND CONCENTRATIONS																				
		Regulated Wells (Subtitle D)																		
	Parameter	TW-01	TW-02A	TW-03	TW-04	TW-04B	TW-05	TW-05A	TW-06	TW-14	TW-14A	TW-19	TW-20R	TW-24	TW-24A	TW-25	TW-25A	TW-27	TW-28	TW-29	TW-30
Volatile Organic Compounds (VOCs)	1,1-Dichloroethane	X			X		X	*	X	X	X	‡		X	‡	X	X		X	*	
	1,2-Dichloroethane													‡	‡		X				
	1,2-Dichloropropane								‡		‡			‡			X				
	1,4-Dichlorobenzene								‡		‡			‡	‡		X				
	Benzene								‡		X			‡	‡		X				
	cis-1,2-Dichloroethene	‡			*		X	‡	X	X	X	‡		‡	‡	*	X			‡	
	Dichlorodifluoromethane	X	*		X		X	‡	X	X	X	‡		X	‡	X	X		X	X	
	Dichlorofluoromethane	X	*		X		X	*	X	X	X	‡		X	‡	X	X		X	*	
	Methylene Chloride								‡		‡			‡	‡		X				
	Methyl tert-butyl ether										*						X				
	Tetrachloroethene	‡			‡			‡	X	X	X	‡		*	‡	X	X		X	X	
	Trichloroethene	*			‡			‡	X	*	X	‡		‡	‡	‡	X		‡	‡	
	Trichlorofluoromethane	‡							‡	‡	‡			‡		‡	X		X	‡	
	Vinyl Chloride								‡		‡			‡	‡		X				
Inorganics	Barium, total														X						
	Beryllium, total												*				X			*	
	Calcium, total	X										X	X		X						X
	Chromium, total																	X	X		
	Cobalt, total								**X**				X		X				X		
	Copper, total			‡						X	‡	X	X		*		X	X			
	Iron, total	X	X	X	X		X	X	X	X	X				*						
	Magnesium, total											X	X		X						
	Manganese, total	X	X	X					X	X	X		X		X						
	Mercury, total							‡	X	‡	‡		‡	X	‡		‡				
	Nickel, total												X								
	Potassium, total											X	X		X						
	Sodium, total												X								
	Vanadium, total											‡	X			‡		‡			
General Chemistry	Alkalinity	X	**X**	X	X				X	*	X	X			X		*				
	Ammonia								‡		X				‡						
	Chloride											X	X								
	Nitrate																				X
	pH	X	X	X	X		X	X	X	X	X	X									
	Specific Conductivity											X	X		X						
	Sulfate					X						X	X		X						
	Total Dissolved Solids											X	X		X						
	Total Hardness	X										X	X		X						
	Turbidity	X	X	X	X	X	X	X		X	X					X					

An X indicates an SSI over background. A ‡ indicates an SSI was identified during this event, but the parameter was not detected during this event. An asterisk (*) indicates an SSI was identified during this event, but the parameter was detected below the reporting limit or was flagged with a B qualifier during this event. A bold character indicates an SSI that was not identified during the previous event.

APPENDIX A
Historical Data Tables

HISTORICAL TABLES –
Subtitle D Wells

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-01***											
Nov-1993	36	36	ND	ND	2.6	0.2	ND	5.71	76.8	3.7	76	29.9
Apr-1994	34	34	0.1	42.3	2.5	ND	ND	6.15	62.5	3.9	57	23.37
Apr-1995	22.7	22.7	ND	ND	2.4	ND	ND	6.6	56.5	3.6	31	18.2
Apr-1997	ND	26	ND	ND	1.5	0.09	ND	NA	NA	ND	59	33
Apr-1998	25	25	0.27	ND	2.56	ND	ND	7.29	53.1	2.36	44	35
Apr-1999	21	21	0.13	ND	3.11	0.07	ND	7	61.6	1.84	63	26
Apr-2000	23	23	ND	ND	2.4	0.101	ND	7.07	52	3.92	32	25
Apr-2001	20	NA	ND	ND	2.57	ND	ND	NA	NA	67.1	30	21.5
Mar-2002	16	16	ND	ND	2.36	ND	ND	6.2	55.4	ND	43	22.3
Mar-2003	18	18	ND	ND	17.7	ND	ND	6.3	56.5	ND	34	20.7
Apr-2004	21	21	ND	ND	2.84	ND	ND	6.3	54.5	ND	49	24.6
Apr-2005	29	29	ND	ND	2.74	0.08	ND	6.5	66.3	2.38	120	33.5
Mar-2006	28	28	ND	ND	3.44	0.13	ND	6.4	64.1	2	69	30.5
Mar-2007	24	24	0.61	ND	4.15	0.18	ND	6.3	56.8	1.64	53	27.2
Mar-2008	24	24	ND	ND	4.32	0.2	ND	6.1	62.7	1.75	42	26.7
Mar-2009	23	23	ND	ND	4.4	0.16	ND	5.7	61.6	ND	56	23.9
Mar-2010	65	65	ND	ND	4.22	ND	ND	7.26	170	4.34	62	70.4
Apr-2011	21	21	ND	ND	4.49	0.16	ND	5.6	56.9	1.1	57	23.5
Mar-2012	18	18	ND	ND	4.81	0.17	ND	4.8	56.4	ND	62	20
Sep-2012	19.7	19.7	ND	ND	4.84	0.175	ND	6.2	54.6	ND	66	23.4
Mar-2013	20.4	20.4	0.123 J	ND	5.36	0.2	ND	6.4	58.2	1.14	31	21.4
Oct-2013	21.3	21.3	ND	ND	5.51	0.2	ND	6.1	62.7	1.5	41	25
Mar-2014	22.7	22.7	ND	ND	5.27	0.157	ND	6.1	58.7	0.915 J	50	23.1
Oct-2014	33	33	ND	ND	5.71	0.198	ND	5.9	55.6	ND	49	24.1
Apr-2015	21.6	21.6	ND	ND	5.71	0.206	ND	5.1	60.7	ND	51	26.8
Nov-2015	25.6	25.6	ND	ND	5.77	0.223	ND	6.4	105.4	ND	44	26.9
May-2016	21.7	21.7	ND	ND	6.02	0.227	ND	6.4	79.9	ND	40	27.8
Oct-2016	23.6	23.6	ND	ND	6.46	NA	NA	6.2	110.6	2.07	48	27.8
May-2017	20.1	20.1	ND	ND	6.17	0.231	ND	6.1	100.7	0.71 J	35	23.6
Oct-2017	27	27	ND	5 J	6.37	0.224	ND	6.3	113.3	ND	36	22.4
May-2018	30	30	ND	5.7 J	6.1	0.17	0.007 J	5.6	111.8	ND	55	25.7
Nov-2018	40	40	ND	ND	6.6	ND	0.018	6.77	149.5	ND	46	47.6
May-2019	52	NA	ND	ND	7.3	ND	ND	6.39	114.8	ND	68	50.3
Oct-2019	48 H1	NA	ND	ND	5.7	0.056 JB	0.028	6.22	153.3	48.2	82	49.3
May-2020	50	NA	ND	9.1 J	6.6	ND	0.0087 JMH	5.9	148.9	ND	51	53.7
Oct-2020	40	NA	ND	4.8 J	6.2	ND	ND	5.85	147.7	ND	132	49.9

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-01***											
Apr-2021	42	*NA*	*ND*	*6.1 J*	7.1	*0.048 J*	*ND*	7.17	193.3	*ND*	53	49.6
Oct-2021	50	*NA*	*ND*	*ND*	6.5	*ND*	*ND*	7.09	227.4	*ND*	45	51.3
May-2022	44 ML	*NA*	*ND*	*ND*	5.9	*0.099 J*	*0.0066 J*	6.7	205.1	*ND*	48	48.9 N3
Oct-2022	46	*NA*	*ND*	*6.1 J*	7	*0.076 J*	*ND*	6.64	215.4	*ND*	47	47.9 N3
May-2023	48	*NA*	*ND*	36.5	7.4	*ND*	*ND*	6.79	204.6	*ND*	62	43.7 N3
Oct-2023	58	*NA*	*ND*	*9 JB*	7.7	*ND*	*NA*	6.7	214.2	*ND*	60	53.8 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-01***													
Nov-1993	*NA*	*ND*	*ND*	*NA*	*ND*	11.3	*NA*	*ND*	*NA*	*ND*	0.08	0.12	*ND*	0.42	*NA*
Apr-1994	*NA*	*ND*	*ND*	*NA*	*ND*	9.3	*NA*	*ND*	*NA*	*ND*	0.64	*ND*	*ND*	*ND*	*NA*
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	6.6	*NA*	*ND*	*ND*	0.02	0.65	*ND*	*ND*	0.41	*NA*
Apr-1997	0.006	*ND*	0.016	*ND*	*ND*	13	9	*ND*	*ND*	*ND*	1.1	0.43	0.003	0.6	0.63
Apr-1998	*ND*	*ND*	0.041	*ND*	*ND*	12.5	9.96	0.052	*ND*	0.01	14.2	0.259	*ND*	1.04	0.456
Apr-1999	*ND*	*ND*	*ND*	*ND*	*ND*	9.67	9.79	*ND*	*ND*	*ND*	1.49	0.197	*ND*	0.564	0.491
Apr-2000	*ND*	*ND*	*ND*	*ND*	*ND*	9.04	7.45	0.018	*ND*	0.035	3.35	0.183	*ND*	0.601	0.442
Apr-2001	*ND*	*ND*	0.014	*ND*	*ND*	7.62	*NA*	*ND*	*ND*	*ND*	4.21	*NA*	*ND*	0.61	*NA*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	8	8.82	*ND*	*ND*	*ND*	3.62	0.64	*ND*	0.577	0.548
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	7.43	7.85	*ND*	*ND*	*ND*	0.716	*ND*	*ND*	0.504	0.466
Apr-2004	*ND*	0.002	0.014	*ND*	*ND*	8.52	11.1	*ND*	*ND*	*ND*	2.75	0.378	0.002	0.839	0.578
Apr-2005	*ND*	0.004	0.017	*ND*	*ND*	11.8	10.2	0.029	*ND*	0.011	7.16	0.279	0.006	1.01	0.504
Mar-2006	*ND*	0.003	0.015	*ND*	*ND*	10.8	9.72	*ND*	*ND*	*ND*	3.86	0.077	0.003	0.827	0.507
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	9.95	8.75	*ND*	*ND*	*ND*	0.916	0.346	*ND*	0.574	0.51
Mar-2008	*ND*	0.003	0.012	*ND*	*ND*	9.61	8.12	*ND*	*ND*	*ND*	12.8	0.358	*ND*	0.655	0.559
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	8.67	7.75	*ND*	*ND*	*ND*	3.36	0.541	*ND*	0.554	0.521
Mar-2010	*ND*	0.006	0.019	*ND*	*ND*	26.4	24.8	0.033	*ND*	0.017	44.1	1.58	0.01	1.09	0.65
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	8.29	8.23	*ND*	*ND*	*ND*	2.43	1.64	*ND*	0.688	0.678
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	6.77	6.84	*ND*	*ND*	*ND*	1.56	1.2	*ND*	0.753	0.749
Sep-2012	*ND*	*ND*	0.0101	*0.000181 J*	*ND*	8.15	7.91	*0.0025 J*	*0.000625 J*	*ND*	2.48	2.29	*0.000533 J*	0.749	0.707
Mar-2013	*ND*	*ND*	*0.0098 J*	*ND*	*ND*	7.39	7.3	*0.0026 J*	*0.000621 J*	*0.000478 J*	1.6	1.39	*ND*	0.724	0.753

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-01***													
Oct-2013	ND	ND	0.0113	ND	ND	8.7	8.9	0.0017 J	0.000632 J	ND	1.68	1.68	ND	0.794	0.824
Mar-2014	ND	ND	0.0103	ND	ND	8.09	9.7	0.0064 J	0.00061 J	0.000338 J	2.32	2.51	ND	0.712	0.86
Oct-2014	0.000689 J	ND	0.0116	ND	ND	8.35	8.86	0.0014 J	0.000654 J	ND	2.43	2.76	ND	0.796	0.826
Apr-2015	0.000671 J	ND	0.0128	ND	ND	9.14	9.46	0.0046 J	0.000818 J	0.000868 J	4.77	3.89	ND	0.962	0.952
Nov-2015	ND	ND	0.0121	ND	ND	9.24	8.94	0.0024 J	0.000698 J	ND	3.97	3.58	ND	0.928	0.927
May-2016	ND	ND	0.0126	ND	ND	9.47	9.13	0.0019 J	0.00072 J	0.00068 J	3.53	3.37	ND	1.01	0.989
Oct-2016	ND	ND	0.0121	ND	ND	9.44	9.71	0.00087 J	0.00071 J	ND	3.95	3.67	ND	1.03	1.02
May-2017	ND	ND	0.012	ND	ND	7.74	7.2	0.00096 J,B	0.0011	0.00054 J,B	4.07	3.43	ND	1.03	0.999
Oct-2017	ND	ND	0.0155	ND	ND	7.45	6.97	0.0017 J	0.00087 J	ND	8.05	7.72	ND	0.919	0.961
May-2018	0.000048 J	ND	0.016	0.000027 J	ND	8.7	8.6	0.0027 J	0.00072	0.00089 JB	11.5	10.5	ND	0.97 J	0.98 J
Nov-2018	ND	ND	0.012	ND	ND	16.7	15.7	0.002 J	0.00018 J	0.00043 J	31.8	25.7	0.000039 J	1.4	1.3
May-2019	ND	ND	0.011	ND	ND	17.9	17.7	ND	0.00058	ND	22.9	18	ND	1.4	1.4
Oct-2019	0.00012 JB	ND	0.013	ND	0.00018 JB	17.5	17	0.0043 J	0.0013	0.0043	31.9	18.4	0.00012 JB	1.4	1.3
May-2020	0.00016 J	ND	0.015	ND	ND	19	18.3	0.0087	0.00072	0.0032	39	20.9	0.00021 J	1.5	1.4
Oct-2020	0.00044 J	ND	0.013	ND	ND	17.5	16.5	0.0082 JB	0.0006 J	ND	25.6	23.5	ND	1.5	1.4
Apr-2021	ND	ND	0.014	ND	ND	17.4	18.1	0.0048 J	0.00089 J	ND	28	22.8	ND	1.5	1.6
Oct-2021	0.000089 JB	ND	0.015	ND	ND	18	17.4	0.0056	0.0016 J	0.00094 J	35.6	26.4 M1	0.00004 J	1.6	1.5
May-2022	ND	ND	0.016	ND	ND	17.1	17.5	0.004	0.00093 J	0.0008 J	37.3	29	ND	1.5	1.7
Oct-2022	ND	ND	0.017	ND	ND	16.7	18.9	0.0018 J	ND	0.0009 J	39	28.7	ND	1.5	1.6
May-2023	ND	0.00069 J	0.015	ND	ND	15.1	14.7	0.0059	0.00085 J	0.0051	32.1	28.7	ND	1.4	1.4
Oct-2023	ND	ND	0.014	ND	ND	18.7	17.9	0.0044 B	ND	ND	30.8	28.6	ND	1.7	1.7

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-01*												
Nov-1993	0.05	NA	ND	NA	0.49	NA	ND	NA	1.3	NA	NA	NA	ND
Apr-1994	0.019	NA	ND	NA	0.55	NA	ND	NA	1.7	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.65	NA	ND	ND	0.94	NA	ND	ND	0.06
Apr-1997	0.06	0.043	ND	ND	2.5	2.2	ND	ND	1.2	1.4	0.002	ND	0.028
Apr-1998	0.226	0.02	NA	0.019	2.16	0.95	ND	ND	1.22	1.16	ND	0.023	0.1
Apr-1999	0.028	0.019	NA	ND	ND	0.722	ND	ND	1.24	1.22	ND	ND	0.027
Apr-2000	0.037	0.017	NA	0.015	1.47	0.759	ND	ND	2.06	1.19	ND	ND	0.321
Apr-2001	0.059	NA	NA	ND	1.39	NA	ND	ND	2.65	NA	ND	ND	0.131
Mar-2002	0.037	0.028	NA	ND	1.24	ND	ND	ND	1.82	1.27	ND	ND	0.05
Mar-2003	0.022	0.019	NA	ND	ND	0.706	ND	ND	1.29	1.33	ND	ND	0.023
Apr-2004	0.069	0.026	ND	ND	0.534	ND	ND	ND	1.72	1.34	ND	ND	0.038
Apr-2005	0.163	0.019	ND	0.018	1.07	0.66	ND	ND	1.78	1.4	ND	0.014	0.112
Mar-2006	ND	ND	ND	ND	0.828	ND	ND	ND	1.59	1.14	ND	ND	0.014
Mar-2007	0.018	0.015	ND	ND	ND	ND	ND	ND	1.43	1.36	ND	ND	0.033
Mar-2008	0.031	0.013	ND	ND	0.809	0.663	ND	ND	2.11	1.61	ND	ND	0.038
Mar-2009	0.019	0.014	ND	ND	ND	ND	ND	ND	1.62	1.84	ND	ND	0.024
Mar-2010	0.134	0.078	ND	0.031	0.809	0.596	ND	ND	1.25	1.38	ND	0.019	0.033
Apr-2011	0.038	0.037	ND	ND	0.608	0.621	ND	ND	1.75	1.8	ND	ND	ND
Mar-2012	0.028	0.027	ND	ND	0.573	0.537	ND	ND	1.89	1.84	ND	ND	ND
Sep-2012	0.0426	0.0427	ND	0.0018 J	0.553	0.531	ND	ND	2.02	1.98	0.0014 J	ND	ND
Mar-2013	0.0247	0.0248	0.000109 J	0.0033 J	0.554	0.543	ND	ND	1.83	1.84	0.000233 J	ND	0.0116
Oct-2013	0.0387	0.0397	ND	0.0022	0.563	0.579	ND	ND	2.12	2.22	0.000271 J	0.0014 J	0.0111

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-01***												
Mar-2014	0.0351	0.0331	ND	0.0029 J	0.518	0.645	ND	ND	1.77	2.12	0.000265 J	0.006 J	0.0043 J
Oct-2014	0.0314	0.0384	ND	0.0025 J	0.599	0.618	0.0012 J	ND	2.16	2.25	ND	ND	ND
Apr-2015	0.0436	0.0494	ND	0.0045 J	0.674	0.669	ND	ND	2.37	2.37	ND	ND	ND
Nov-2015	0.0469	0.0454	ND	0.0039 J	0.647	0.63	ND	ND	2.55	2.54	ND	ND	0.0033 J
May-2016	0.0394	0.0391	ND	0.0026 J	0.676	0.643	ND	ND	2.49	2.41	ND	ND	ND
Oct-2016	0.0558	0.056	ND	0.0016 J	0.647	0.68	ND	ND	2.49	2.51	ND	ND	ND
May-2017	0.0382	0.0419	ND	0.0043	0.62	0.629	ND	ND	2.52	2.4	ND	0.00023 J	ND
Oct-2017	0.0676	0.0715	ND	0.0024 JB	0.628	0.663	ND	ND	2.63	2.68	ND	ND	ND
May-2018	0.079	0.079	ND	0.0024	ND	ND	0.00028 JB	ND	2.8 J	2.9 J	ND	0.0028	0.003 JB
Nov-2018	0.18	0.17	ND	0.0011	ND	ND	ND	ND	3 J	2.9 J	ND	ND	0.0033 J
May-2019	0.18	0.17	ND	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	0.16	0.15	ND	0.0038	ND	ND	ND	ND	2.8 J	3.3 J	ND	0.0009 J	0.01 B
May-2020	0.17	0.15	ND	0.0064	ND	ND	ND	ND	2.9 J	2.9 J	ND	0.0018	0.0061
Oct-2020	0.18	0.16	ND	ND	ND	ND	0.0017 J	ND	3.2 J	2.6 J	ND	0.0024 JB	ND
Apr-2021	0.16	0.17	0.00005 J	0.0058 J	0.73	0.74	ND	ND	2.8	3	ND	ND	ND
Oct-2021	0.18	0.17	ND	0.0077	0.71	0.71	ND	ND	3.2	3.2	ND	ND	ND
May-2022	0.18	0.19	ND	0.0053	0.69	0.8	ND	ND	3	3.2	ND	ND	ND
Oct-2022	0.17	0.18	ND	0.0017 J	0.72	0.8	ND	ND	3.1	3.6	ND	ND	ND
May-2023	0.2	0.19	ND	0.0058	0.8	0.64	ND	ND	5.1	3	ND	ND	ND
Oct-2023	0.18	0.18	ND	0.002 JB	0.74	0.75	ND	ND	3.4	3.5	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-01*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.63 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-01*																
Mar-2013	ND	ND	ND	ND	0.73 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.63 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.81 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.1	0.22 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	0.2 J	ND	ND	1.2	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	0.2 J	ND	ND	1.5	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	0.2 J	ND	ND	1.4	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	0.1 J	ND	ND	1.5	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8 JB	ND
Nov-2018	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1.3 M1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.75	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2023	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-01***															
Nov-1993	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	3.7
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	0.7 J
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	1.7
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2	1.1
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.5	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	14.1	2.3
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.45 J	ND	ND	ND	ND	ND	4.38	1.68

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-01***															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.56 J	ND	ND	ND	ND	ND	8.81	2.83
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.49 J	ND	ND	ND	ND	ND	7.27	2.41
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.56 J	ND	ND	ND	ND	ND	8.99	2.7
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.55 J	ND	ND	ND	ND	ND	7.38	3.83
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.53 J	ND	ND	ND	ND	ND	6.99	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J,B	ND	ND	ND	ND	ND	15.6 J	3.4
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	6.5	3.7
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	0.1 J	ND	ND	ND	8.4	4.5
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J,B	ND	0.1 J	ND	ND	ND	7.7	4.3
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	0.2 J	ND	ND	ND	8.4	5.1
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.5	4.7
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.9 CL	3.7 N3
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5 CL	3.6 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.2	2.5
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.9	2.5
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.2	2.8
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.167 J	ND	0.349 J	ND	ND	ND	5.48	2.94 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	13.3	3.5
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.2	2.4
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	8	2.8
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	2.6
Oct-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.9	2.3

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-01***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	1	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-01***															
Sep-2012	ND	ND	ND	ND	ND	ND	ND	2.96	ND	ND	ND	ND	0.28 J	0.71 J	ND	ND	ND
Mar-2013	ND	ND	ND	0.15 J	ND	ND	ND	3.44	ND	ND	ND	ND	0.41 J	1 J	ND	ND	ND
Oct-2013	ND	ND	ND	0.21 J	ND	ND	ND	2.81	ND	ND	ND	ND	0.38 J	0.97 J	ND	ND	ND
Mar-2014	ND	ND	ND	0.17 J	ND	ND	ND	3.73	ND	ND	ND	ND	0.46 J	1	ND	ND	ND
Oct-2014	ND	ND	ND	0.21 J	ND	ND	ND	4.14	ND	ND	ND	ND	0.5 J	0.73 J	ND	ND	ND
Apr-2015	ND	ND	ND	0.18 J	ND	ND	ND	3.57 J	ND	ND	ND	ND	0.43 J	0.95 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	ND	0.5 J	0.9 J	ND	ND	ND
May-2016	ND	ND	ND	0.1 J	0.2 J	ND	ND	4.3	ND	ND	ND	ND	0.5 J	0.8 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	0.2 J	ND	ND	4.4	ND	ND	ND	ND	0.4 J	0.9 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	4.7	ND	ND	ND	ND	0.5 J	0.4 J	ND	ND	ND
Oct-2017	ND	ND	ND	0.1 J	0.2 J	ND	ND	3.7	ND	ND	ND	ND	0.4 J	0.7 J	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	1.2 B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Apr-2021	ND	ND	ND	0.431 J	0.653 JB	ND	ND	0.507 J	ND	ND	ND	ND	0.632 J	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Oct-2022	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA
May-2023	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-01*															
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-02A***											
Nov-1993	ND	ND	ND	ND	3.8	ND	ND	4.93	22.5	ND	90	3.52
Apr-1994	ND	ND	ND	23.4	3.6	ND	ND	4.94	22.2	ND	17	0.9
Apr-1995	10.3	10.3	ND	ND	5.5	0.2	0.3	5.6	30.9	2.2	38	4.7
Apr-1997	ND	2	ND	ND	7	0.08	ND	NA	NA	ND	28	6
Apr-1998	ND	ND	0.27	ND	8.76	0.22	ND	6.33	36.8	ND	21	5.8
Apr-1999	ND	ND	0.16	ND	6.58	ND	ND	5.04	35.5	ND	35	5.7
Apr-2000	2	2	ND	ND	6.4	ND	ND	5.28	29	ND	36	5.7
Apr-2001	ND	NA	ND	ND	5.43	1.65	ND	NA	NA	ND	11	6.47
Mar-2002	2.4	2.4	ND	ND	7	ND	ND	5.4	42.9	ND	30	6.94
Mar-2003	2.7	2.7	ND	ND	14.6	ND	ND	5.3	41.7	ND	25	6.69
Apr-2004	2.8	2.8	ND	ND	7.95	0.08	ND	5.3	40.5	1.31	40	9.39
Apr-2005	3.1	3.1	ND	ND	7.57	ND	ND	5.1	20.9	1.26	56	8.76
Mar-2006	7.8	7.8	ND	ND	9.04	0.1	ND	5.3	48.5	1.26	57	8.76
Mar-2007	3.8	3.8	ND	ND	9.84	0.11	ND	5.1	45.7	1.89	37	8.57
Mar-2008	5.3	5.3	ND	ND	9.58	0.09	ND	4.9	57.9	2.52	41	8.56
Mar-2009	4.9	4.9	ND	ND	9.98	0.07	ND	4.5	51.1	1.25	45	9.24
Apr-2010	3.7	3.7	ND	ND	10.1	0.08	ND	4.6	48.4	2.66	31	9.5
Apr-2011	5.2	5.2	ND	ND	10.4	0.08	ND	4.6	46.4	2.34	29	9.74
Mar-2012	4	4	ND	ND	11.6	ND	ND	4.5	51.2	2.34	12	11.2
Sep-2012	4.4	4.4	ND	ND	12.8	ND	ND	5.4	53.4	2.85	69	11.8
Mar-2013	6	6	0.106 J	ND	13.9	0.0653	ND	6.1	62.1	3	20	12.4
Oct-2013	5.72	5.72	ND	ND	14	0.0613	ND	5.7	62.3	3.15	31	13.6
Mar-2014	5.6	5.6	ND	ND	14.9	0.0668	ND	5.3	62.5	3.19	36	13.1
Oct-2014	4.4	4.4	ND	10	17.1	0.094	ND	5	68.2	2.88	64	15.6
Apr-2015	5.56	5.56	ND	5 J	17.3	0.061	ND	4.5	67.5	3.26	54	16.5
Nov-2015	4.4	4.4	ND	ND	19.1	0.0607	ND	5.9	136.2	2.63	55	18.4
May-2016	2.8	2.8	0.129 J	21	22.3	ND	ND	5.8	112.3	1.91	90	19.2
Oct-2016	3.4	3.4	ND	21	16.9	NA	NA	5.5	105.1	3.01	71	14.8
May-2017	4.48	4.48	ND	7 J	15.3	0.0687	ND	5.4	101.7	2.09	50	14.9
Oct-2017	30.9	30.9	ND	13	14.7	0.0511	ND	5.8	129.4	0.67 J	38	15.8
May-2018	16	16	ND	7.9 J	16.2	ND	ND	5	96	ND	26	15.1
Nov-2018	22	22	ND	7.9 J	19.5	ND	0.015	6.54	136.9	ND	55	18.6
May-2019	46	NA	ND	ND	21.8	ND	ND	6.43	123.6	ND	58	19.2
Oct-2019	16 H1	NA	ND	ND	22.6	0.083 J	0.0093 J	5.99	168.1	ND	90	19.6
May-2020	20	NA	ND	9.1 J	25.8	ND	0.074	5.93	168.3	ND	74	23.5
Oct-2020	20	NA	ND	7 J	27.2	ND	ND	6.52	172.1	ND	113	23.2
Apr-2021	20	NA	ND	6.1 J	35.6	0.075 J	ND	7.02	239.3	ND	92	23.8

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-02A***											
Oct-2021	22	*NA*	*ND*	*12.6 J*	32.2	*NA*	*ND*	7.02	273.5	*ND*	82	25.9
Dec-2021	*NA*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
May-2022	16	*NA*	*ND*	*ND*	31.5	*ND*	0.051	6.76	252	*ND*	73	24.9 N3
Oct-2022	32	*NA*	*ND*	*10.7 J*	40.2	*0.13 J*	0.011	6.84	271.3	*ND*	82	27.1 N3
May-2023	30	*NA*	*ND*	36.5	43.8	*ND*	*ND*	6.85	282.8	*ND*	118	26 N3
Oct-2023	32	*NA*	*ND*	*6.8 J*	43.2	*ND*	*NA*	6.74	280.8	*ND*	117	27.3 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-02A***													
Nov-1993	NA	ND	ND	NA	ND	0.7	NA	ND	NA	ND	4.4	0.69	ND	0.43	NA
Apr-1994	NA	ND	ND	NA	ND	0.3	NA	ND	NA	ND	1.8	0.059	ND	0.35	NA
Apr-1995	ND	ND	ND	ND	ND	0.88	NA	ND	ND	ND	3.2	0.31	ND	0.6	NA
Apr-1997	ND	ND	0.02	ND	ND	1.3	1.3	ND	ND	ND	0.5	ND	0.002	0.54	0.54
Apr-1998	ND	ND	0.016	ND	ND	1.23	1.18	ND	ND	ND	1.58	0.101	ND	0.651	0.626
Apr-1999	ND	ND	0.015	ND	ND	1.21	1.27	ND	ND	ND	1.13	0.121	ND	0.646	0.667
Apr-2000	ND	ND	0.014	ND	ND	1.21	1.19	ND	ND	ND	3.54	0.08	ND	0.65	0.626
Apr-2001	ND	ND	0.016	ND	ND	1.45	NA	ND	ND	ND	3.08	NA	ND	0.695	NA
Mar-2002	ND	ND	0.019	ND	ND	1.47	1.53	ND	ND	ND	8.67	1.81	ND	0.795	0.798
Mar-2003	ND	ND	0.018	ND	ND	1.44	1.53	ND	ND	ND	6.22	0.282	ND	0.754	0.804
Apr-2004	ND	ND	0.023	ND	ND	2.06	1.82	ND	ND	ND	1.91	0.124	ND	1.03	0.943
Apr-2005	ND	ND	0.021	ND	ND	1.9	1.94	ND	ND	ND	4.1	0.2	ND	0.973	0.983
Mar-2006	ND	0.003	0.025	ND	ND	2.02	1.52	ND	ND	0.022	11.4	3.53	0.005	0.902	0.783
Mar-2007	ND	ND	0.025	ND	ND	1.93	1.9	ND	ND	ND	1.49	1.03	ND	0.911	0.876
Mar-2008	ND	ND	0.021	ND	ND	1.86	1.95	ND	ND	ND	2	1.62	ND	0.952	0.995
Mar-2009	ND	ND	0.025	ND	ND	2.11	2.32	ND	ND	ND	20.1	2.18	ND	0.964	0.967
Apr-2010	ND	ND	0.025	ND	ND	2.13	1.97	ND	ND	ND	25.9	2.03	ND	1.02	0.925
Apr-2011	ND	ND	0.027	ND	ND	2.12	2.15	ND	ND	0.02	41.9	1.51	ND	1.08	1.1
Mar-2012	ND	ND	0.027	ND	ND	2.36	2.3	ND	ND	ND	4.29	0.7	ND	1.3	1.26
Sep-2012	ND	ND	0.0298	0.000292 J	ND	2.58	2.49	0.0026 J	0.0027 J	0.0136	16.7	1.5	0.0016 J	1.31	1.31
Mar-2013	ND	ND	0.0316	0.000205 J	ND	2.78	2.7	0.0019 J	0.0026 J	0.0078 J	6.93	2.41	0.000514 J	1.33	1.24

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-02A***													
Oct-2013	ND	ND	0.0347	ND	ND	2.96	2.94	0.0018 J	0.0026	0.0067	3.49	2	0.000652 J	1.5	1.52
Mar-2014	0.000337 J	0.00014 J	0.028	0.00015 J	ND	2.8	2.85	0.0014 J	0.0025 J	0.0059 J	4.47	1.46	0.000364 J	1.49	1.5
Oct-2014	0.000589 J	0.000473 J	0.04	0.000176 J	0.000095 J	3.51	3.51	0.0023 J	0.0042 J	0.0087 J	9.19	2.4	0.000763 J	1.65	1.72
Apr-2015	0.000574 J	ND	0.0405	ND	ND	3.64	3.65	0.0017 J	0.0039 J	0.007 J	5.1	2	ND	1.8	1.8
Nov-2015	0.000674 J	0.000571 J	0.0442	0.000294 J	0.000111 J	3.97	3.8	0.0035 J	0.0047 J	0.0157	14.4	2.05	0.0012 J	2.07	1.93
May-2016	ND	ND	0.0709	ND	ND	4.72	4.64	0.0022 J	0.0014	0.0059	10.8	5.19	0.00095 J	1.8	1.84
Oct-2016	0.00068 J	0.0025 J	0.0372	0.00012 J	0.0002 J	3.09	3.25	0.0103 J+	0.0063	0.0368 J+	9.84	3.1	0.0016 J	1.73 J+	1.72
May-2017	ND	0.0012 J	0.0357	ND	ND	3.17	3.17	0.0037 J	0.0047	0.0181	14	9.1	0.0012 J	1.68	1.7
Oct-2017	ND	ND	0.0357	ND	ND	3.55	3	0.003 J	0.0036	0.012	21.1	16.6	0.002	1.69	1.57
May-2018	0.00045	0.0013	0.035	0.00011 J	0.00015 J	3.3	3.2	0.0046 JB	0.0054	0.02	12.1	5.6	0.0014	1.6	1.6
Nov-2018	ND	ND	0.045	0.000024 J	0.000029 J	4	3.9	0.004 J	0.00095	0.0028	28	27.4	0.00046 J	2.1	2
May-2019	ND	ND	0.05	ND	ND	4.1	4	ND	0.00093	0.004	30.4	28.5	ND	2.2	2.1
Oct-2019	0.00018 JB	ND	0.05	0.000052 J	0.00042 JB	4.2	4.1	0.0061 J	0.0017	0.0055	28.8	27.1	0.00018 JB	2.2	2.2
May-2020	0.00014 J	ND	0.055	0.000063 J	0.0001 J	5	4.6	0.0054 J	0.0014	0.0055	33.6	29.7	ND	2.7	2.5
Oct-2020	0.00056 J	ND	0.063	ND	ND	4.9	4.6	0.011 JB	0.0018 J	ND	32.3	29.5	ND	2.7	2.5
Apr-2021	ND	ND	0.063	0.0002 J	ND	5	5.1	0.0018 J	0.0012 J	0.0049 J	31.6	31.1	ND	2.8	2.9
Oct-2021	0.000074 JB	ND	0.065	ND	ND	5.4	5.3	0.0025 J	0.0018 J	0.0027	35	33.7	ND	3	3
May-2022	ND	0.0014 JB	0.064	ND	ND	5.2	5.5	0.0019 J	0.0016 J	0.0024 J	32.7	34.6	ND	2.9	3.1
Oct-2022	ND	ND	0.068	ND	ND	5.7	5.8	0.0023 J	0.0019 J	0.0027 J	34.6	32.4	ND	3.1	3.1
May-2023	ND	ND	0.071	ND	ND	5.4	5.4	0.0016 J	0.0019 J	0.0025	33	31.3	ND	3	3
Oct-2023	ND	ND	0.073	ND	ND	5.8	6	0.0081	0.0058	0.0042 J	36.2	36	ND	3.1	3.3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-02A*												
Nov-1993	0.06	NA	ND	NA	0.44	NA	ND	NA	1.5	NA	NA	NA	ND
Apr-1994	0.07	NA	ND	NA	ND	NA	ND	NA	2.4	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.59	NA	ND	ND	1.7	NA	ND	ND	0.07
Apr-1997	0.01	0.013	ND	ND	1.7	1.6	ND	ND	2.1	2.6	ND	ND	ND
Apr-1998	0.01	0.024	NA	ND	1.06	1.53	ND	ND	2.28	2.31	ND	ND	0.034
Apr-1999	ND	ND	NA	ND	ND	ND	ND	ND	2.46	2.52	ND	ND	ND
Apr-2000	0.011	0.01	NA	ND	ND	0.83	ND	ND	2.46	2.41	ND	ND	ND
Apr-2001	0.011	NA	NA	ND	0.981	NA	ND	ND	3.65	NA	ND	ND	0.01
Mar-2002	0.019	0.025	NA	ND	ND	0.975	ND	ND	2.5	2.34	ND	ND	0.016
Mar-2003	0.018	0.011	NA	ND	1.48	ND	ND	ND	2.49	2.53	ND	ND	ND
Apr-2004	0.016	0.012	ND	ND	1.76	0.597	ND	ND	3.87	3.29	ND	ND	0.014
Apr-2005	0.02	0.015	ND	ND	0.81	0.77	ND	ND	3.58	3.91	ND	ND	ND
Mar-2006	ND	ND	ND	0.018	0.889	0.523	ND	ND	3.88	3.26	ND	ND	0.013
Mar-2007	0.016	0.016	ND	ND	ND	ND	ND	ND	3.57	3.44	ND	ND	0.019
Mar-2008	0.016	0.02	ND	ND	0.702	0.783	ND	ND	3.52	3.8	ND	ND	0.016
Mar-2009	0.019	0.024	ND	ND	0.596	0.636	ND	ND	3.79	3.93	ND	ND	0.03
Apr-2010	0.024	0.021	ND	ND	0.708	0.653	ND	ND	3.94	3.86	ND	ND	0.027
Apr-2011	0.025	0.023	ND	ND	0.716	0.694	ND	ND	4.34	4.33	ND	ND	0.036
Mar-2012	0.025	0.018	ND	ND	0.687	0.622	ND	ND	5.08	4.9	ND	ND	0.027
Sep-2012	0.0259	0.0243	ND	0.0042 J	0.717	0.68	0.000797 J	ND	5.33	5.26	0.000232 J	ND	0.0305
Mar-2013	0.0322	0.0295	0.000113 J	0.004 J	0.761	0.724	0.000652 J	ND	5.44	5.24	ND	ND	0.0434
Oct-2013	0.0299	0.0301	ND	0.0041	0.78	0.755	0.000848 J	ND	5.88	6.06	ND	0.0014 J	0.0452

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-02A***												
Mar-2014	0.0246	0.0247	ND	0.0042 J	0.77	0.792	ND	ND	5.7	5.82	ND	ND	0.0394
Oct-2014	0.0372	0.0346	0.000034 J	0.0065 J	0.866	0.876	0.0019 J	ND	6.43	6.55	ND	ND	0.0465
Apr-2015	0.0353	0.0334	ND	0.0058 J	0.917	0.923	0.0014 J	ND	6.77	6.88	ND	ND	0.0404
Nov-2015	0.048	0.0369	ND	0.008 J	0.988	0.931	0.0013 J	ND	7.94	7.9	ND	0.000203 J	0.045
May-2016	0.246	0.26	ND	0.0101	1.01	1.1	ND	ND	7.41	6.97	ND	ND	0.0868
Oct-2016	0.107 R	0.0689	ND	0.037 J+	0.944	0.887	0.00071 J-	ND	6.71 J+	6.72	ND	0.0013	0.076
May-2017	0.122	0.0983	ND	0.0205	0.946	0.931	ND	ND	6.8	6.41	ND	0.0003 J	0.0455
Oct-2017	0.169	0.152	ND	0.0184	0.92	0.857	ND	ND	6.33	6.08	ND	ND	0.0516
May-2018	0.12	0.074	ND	0.027	ND	ND	0.00065 J	ND	6.8	6.3	ND	0.002	0.032
Nov-2018	0.18	0.18	ND	0.0038	0.93 J	ND	0.00009 J	ND	7.6	7.8	ND	ND	0.0044 J
May-2019	0.22	0.2	ND	0.0025	ND	ND	ND	ND	8.1	7.4	ND	ND	ND
Oct-2019	0.19	0.18	ND	0.0052	1.1 J	1.1 J	ND	ND	8.4	8.7	ND	0.0021 D6	0.012 B
May-2020	0.21	0.2	ND	0.0042	ND	1.1 J	ND	ND	10.1	9.4	ND	0.0023	0.0065
Oct-2020	0.23	0.2	ND	0.0042	ND	ND	ND	ND	11.4	9.6	ND	0.0029 JB	ND
Apr-2021	0.21	0.22	ND	0.0028 J	1	1.1	ND	ND	12.4	13.1	ND	ND	ND
Oct-2021	0.23	0.23	ND	0.0035	1.1	1.1	ND	ND	14.4	14.4	ND	ND	0.0027 J
May-2022	0.23	0.24	ND	0.0035	1.1	1.1	ND	ND	14.5	16	ND	ND	ND
Oct-2022	0.23	0.22	ND	0.0035 J	1.2	1.2	ND	ND	16.5	16.9	ND	ND	ND
May-2023	0.24	0.23	ND	0.0032	1.1	1.1	ND	ND	16.4	16.5	ND	ND	ND
Oct-2023	0.26	0.27	ND	0.02	1.2	1.2	ND	ND	18.3	19	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-02A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-02A*																
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7 J	200	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.8 B	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-02A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-02A***															
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.42 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	0.66 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.4 J	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	0.2 J
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.344 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	0.6 J
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	0.8 J
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	1 J
Oct-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	1.3

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-02A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.2 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-02A***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-03***											
Nov-1993	7	7	ND	ND	3.7	ND	ND	3.47	24.8	2.6	106	3.21
Apr-1994	5	5	ND	161	2.8	ND	ND	5.36	29.2	ND	25	2.12
Apr-1995	9.3	9.3	ND	ND	2.8	ND	ND	6.6	26.3	2	9	4
Apr-1997	ND	5	ND	ND	3.5	0.09	ND	NA	NA	ND	57	25
Apr-1998	2	2	0.95	ND	3.1	ND	ND	7.06	32	ND	23	4.7
Apr-1999	4	4	0.16	ND	3.94	ND	ND	5.41	38.6	ND	31	5.1
Apr-2000	3	3	ND	ND	3.67	0.16	ND	5.68	45	ND	25	5.7
Apr-2001	3.5	NA	0.28	ND	3.11	ND	ND	NA	NA	ND	ND	5.86
Mar-2002	2	2	ND	ND	4.01	ND	ND	5.6	62.7	ND	40	6.05
Mar-2003	3.4	3.4	ND	ND	13.7	ND	ND	5.6	31.8	ND	12	5.14
Apr-2004	6.5	6.5	ND	ND	4.53	ND	ND	5.6	26.9	ND	28	6.35
Apr-2005	4	4	ND	ND	4.92	0.08	ND	6.1	43.5	1.65	49	5.25
Mar-2006	6.4	6.4	ND	ND	5.27	0.12	ND	5.6	36.7	ND	13	4.72
Mar-2007	3.7	3.7	ND	ND	5.47	ND	ND	5.6	42.7	ND	39	6.21
Mar-2008	5.4	5.4	ND	ND	5.45	0.11	ND	5.2	33.1	ND	17	4.81
Mar-2009	14	14	ND	ND	6.19	0.06	ND	5.3	34.8	14.3	18	5.01
Apr-2010	11.1	11.1	ND	ND	6.96	ND	ND	4.8	34.2	ND	40	7.3
Apr-2011	6.2	6.2	ND	ND	6.95	0.08	ND	4.6	33.2	ND	39	6.57
Mar-2012	7.6	7.6	ND	ND	6.59	0.1	ND	4.4	34.9	ND	14	7.58
Sep-2012	7.64	7.64	ND	ND	6.11	ND	ND	5.4	34.4	ND	43	6.36
Mar-2013	15.3	15.3	0.236 J	ND	7.05	0.0585	ND	6	38.2	0.415 J	24	6.96
Oct-2013	14.2	14.2	ND	ND	7.85	0.0937	ND	5.3	39.4	ND	29	7.08
Mar-2014	13.6	13.6	ND	6 J	6.84	ND	ND	5.3	36	ND	ND	6.49
Oct-2014	35.2	35.2	ND	8 J	7.49	ND	ND	5	38.5	ND	ND	7.66
Apr-2015	4.72	4.72	ND	ND	8.49	0.16	ND	4.5	30.3	ND	ND	7.56
Nov-2015	3.52	3.52	ND	ND	8.33	0.127	ND	5.6	66.5	ND	34	7.43
May-2016	4.6	4.6	ND	6 J	5.74 B	ND	ND	5.5	44.6	ND	96	5.7
Oct-2016	4.6	4.6	ND	11	6.14	NA	NA	5.5	49.3	0.678 J	41	5.5
May-2017	3.52	3.52	ND	18	5.38	ND	ND	5.3	46.2	ND	ND	5.1
Oct-2017	14	14	ND	7 J	5.54	ND	ND	5.5	54.1	ND	16 J	5.5
May-2018	14	14	ND	12.2 J	5.5	ND	0.015	5.1	52	ND	ND	5.7
Nov-2018	6 JB	ND	ND	ND	5.4	0.041 J	0.0084 J	5.2	26.1	ND	10	5.2
May-2019	ND	NA	ND	ND	5.3	ND	ND	4.87	22.3	ND	17	5
Oct-2019	4 JH1	NA	ND	ND	4.7	0.11	ND	5.01	28.9	ND	25	4.6
May-2020	ND	NA	ND	ND	5.3	ND	0.02	5.51	39.6	ND	12	5.6
Oct-2020	4 J	NA	ND	ND	4.9	0.049 JB	ND	5.69	45.7	ND	37	5.5
Apr-2021	2 J3c	NA	ND	ND	4.6	0.059 J	ND	6.22	50.9	ND	13	5

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-03***											
Oct-2021	*6 J2c*	*NA*	*ND*	*ND*	4.1	*0.07 J*	*ND*	6.34	83.5	*ND*	*ND*	5.34
May-2022	10	*NA*	*ND*	*ND*	4.3	*0.071 J*	*ND*	6.38	79.1	*ND*	*ND*	5.1 N3
Oct-2022	14	*NA*	*ND*	*6.1 J*	6	*0.065 J*	*ND*	6.43	83.3	*ND*	*ND*	6 N3
May-2023	12	*NA*	*ND*	34.2	5.3	*ND*	*ND*	6.43	83.9	*ND*	29	5.3 N3
Oct-2023	14	*NA*	*ND*	25	5.2	0.044	*NA*	6.46	74.1	*ND*	30	5.2 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-03***													
Nov-1993	NA	ND	ND	NA	ND	0.61	NA	ND	NA	ND	4.2	1.9	ND	0.41	NA
Apr-1994	NA	ND	ND	NA	ND	0.79	NA	ND	NA	ND	ND	0.66	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	0.94	NA	ND	ND	ND	1.6	1.6	ND	0.41	NA
Apr-1997	ND	ND	0.019	ND	ND	1.8	0.8	ND	ND	ND	4.5	1.6	0.003	0.63	ND
Apr-1998	ND	ND	0.016	ND	ND	1.04	1.01	ND	ND	ND	1.28	0.593	ND	0.517	0.455
Apr-1999	ND	ND	ND	ND	ND	1.14	0.977	ND	ND	ND	6.94	1.18	ND	0.555	0.444
Apr-2000	ND	ND	ND	ND	ND	1.36	1.06	ND	ND	ND	13.6	1.09	ND	0.56	0.497
Apr-2001	ND	ND	0.016	ND	ND	1.36	NA	0.012	ND	ND	34.5	NA	0.009	0.597	NA
Mar-2002	ND	ND	0.013	ND	ND	1.46	1.17	ND	ND	ND	53.8	0.367	0.007	0.586	0.543
Mar-2003	ND	ND	ND	ND	ND	1.16	1.21	ND	ND	0.012	7.65	1.54	0.005	0.545	0.558
Apr-2004	ND	ND	0.015	ND	ND	1.47	1.25	ND	ND	0.012	141	7.86	0.009	0.654	0.596
Apr-2005	ND	ND	0.02	ND	ND	1.56	1.31	ND	ND	ND	92.8	1.3	0.013	0.627	0.589
Mar-2006	ND	ND	ND	ND	ND	1.13	0.987	ND	ND	0.011	20.5	1.04	0.006	0.458	0.442
Mar-2007	ND	ND	0.017	ND	ND	1.48	1.3	ND	ND	ND	19.1	7.55	0.007	0.609	0.524
Mar-2008	ND	0.002	ND	ND	ND	1.11	1.15	ND	ND	ND	9.41	0.532	ND	0.496	0.509
Mar-2009	ND	ND	ND	ND	ND	1.2	1.23	ND	ND	0.1	7.56	5.53	ND	0.487	0.504
Apr-2010	ND	ND	ND	ND	ND	1.92	1.75	ND	ND	0.01	10.4	7.4	ND	0.618	0.585
Apr-2011	ND	ND	ND	ND	ND	1.55	1.55	ND	ND	0.041	15.3	8.29	ND	0.655	0.65
Mar-2012	ND	ND	0.01	ND	ND	1.66	1.61	ND	ND	ND	11.4	3.66	ND	0.832	0.807
Sep-2012	ND	0.003	0.0074 J	ND	ND	1.45	1.39	0.0189	0.0026 J	0.0368	23.1	12.2	ND	0.666	0.632
Mar-2013	0.000835 J	0.0036	0.0104	ND	0.000273 J	1.62	1.58	0.0296	0.0056 J	0.0555	26.9	7.99	0.000874 J	0.709	0.678

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-03***													
Oct-2013	*ND*	*ND*	0.0127	*ND*	*0.000247 J*	1.61	1.46	0.0053	0.0024	0.0154	8.54	7.41	*0.000425 J*	0.742	0.693
Mar-2014	*0.000669 J*	0.0023	*0.0075 J*	*ND*	*0.000144 J*	1.75	1.64	0.019	*0.0032 J*	0.0282	26.8	16	*0.000588 J*	0.516	0.609
Oct-2014	0.0023	0.005	0.0112	*ND*	*0.000642 J*	1.81	1.6	0.0266	*0.0057 J*	0.0498	37.3	14.1	0.002	0.766	0.72
Apr-2015	0.002	0.0031	0.013	*ND*	*0.000276 J*	1.75	1.6	0.0133	*0.004 J*	0.0253	19.2	1.14	*0.0014 J*	0.775	0.718
Nov-2015	0.0036	**0.021 R,C**	0.0143	*0.000084 J*	*0.000979 J*	1.72	1.56	**0.133 R,C**	0.0252	0.245	75.4	2.2	0.0031	0.76	0.698
Dec-2015	*NA*	0.0052	*NA*	*NA*	*NA*	*NA*	*NA*	0.0261	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
May-2016	*ND*	*0.0022 J*	0.0076	*ND*	*0.00022 J*	1.32	1.23	0.0133	0.003	0.04	15.7	14.6	0.0036	0.59	0.599
Oct-2016	*0.00093 J*	*0.0033 J*	0.0075	*ND*	*0.00022 J*	1.22	1.2	*0.0245 J+*	0.0058	*0.0495 J+*	32.8	15.8	*0.0013 J*	*0.588 J+*	0.598
May-2017	*ND*	0.0045	0.0075	*ND*	*0.00036 J*	1.11	1.17	0.0304	0.0058	0.0716	23.9	13.6	0.002	0.575	0.55
Oct-2017	*ND*	*0.0034 J*	0.0091	*ND*	*0.00019 J*	1.31	1.07	0.0196	0.0048	0.0499	35.6	10.8	0.0024	0.535	0.507
May-2018	0.001	0.0052	0.0071	*0.000029 J*	*0.00032 J*	1.3	1.2	0.03	0.0071	0.065	26.8	11.9	0.002	*0.59 J*	*0.55 J*
Nov-2018	*ND*	*ND*	0.0096	*0.000053 J*	*0.00013 J*	1.1	1.1	*0.0037 J*	0.001	0.0034	20.6	0.84	*0.00056 J*	*0.59 J*	*0.54 J*
May-2019	*ND*	*ND*	0.011	*ND*	*ND*	1.1	1.1	*ND*	0.0011	0.0021	22.6	0.5	*ND*	*ND*	*ND*
Oct-2019	*0.0003 JB*	*ND*	0.03	*0.00045 J*	*0.0012 J*	1.1	1.1	*0.017 J*	*0.002 J*	0.015	195	1.7	*0.0027 J*	0.46	*0.54 J*
May-2020	0.00056	0.0011	0.0099	*ND*	*0.00013 J*	1.2	1.2	0.022	0.0042	0.0088	19.2	5.1	0.0019	0.61	*0.6 J*
Oct-2020	*0.00044 J*	*ND*	*0.0098 J*	*ND*	*ND*	1.2	1.1	*0.017 JB*	0.0038	*ND*	7.4	5.5	*ND*	0.63	*0.54 J*
Apr-2021	*ND*	*ND*	*0.008 J*	*ND*	*ND*	1.1	1.1	0.006	*0.0013 J*	*ND*	9.4	5.3	*ND*	0.54	0.54
Oct-2021	*0.000055 JB*	*ND*	0.0076	*ND*	*ND*	1.2	1.1	*0.0018 J*	*0.00072 J*	*0.00061 J*	10.6	7	*ND*	0.58	0.56
May-2022	*ND*	*0.0015 JB*	0.0078	*ND*	*ND*	1.1	1.2	0.0045	*0.0016 J*	*0.0014 J*	7.9	7.5	*ND*	0.56	0.61
Oct-2022	*ND*	*ND*	0.0084	*ND*	*ND*	1.3	1.3	0.011	*0.0019 J*	*0.0045 J*	12.9	9.4	*ND*	0.66	0.68
May-2023	*ND*	*ND*	0.008	*ND*	*ND*	1.2	1.1	0.0042	*0.002 J*	*0.0013 J*	9.9	8.3	*ND*	0.58	0.53
Oct-2023	*ND*	*ND*	0.0077	*ND*	*ND*	1.2	1.1	0.0063	*0.0009 J*	*ND*	7.2	6.3	*ND*	0.56	0.58

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-03*												
Nov-1993	0.12	NA	ND	NA	0.58	NA	ND	NA	1.5	NA	NA	NA	ND
Apr-1994	ND	NA	ND	NA	ND	NA	ND	NA	1.1	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.52	NA	ND	ND	1.4	NA	ND	ND	0.02
Apr-1997	0.066	0.026	ND	ND	2	2	ND	ND	1.8	1.7	ND	ND	0.066
Apr-1998	0.031	0.031	NA	ND	1.2	0.97	ND	ND	1.56	1.59	ND	ND	0.011
Apr-1999	0.043	0.023	NA	ND	1.49	0.644	ND	ND	2.03	1.56	ND	ND	ND
Apr-2000	0.023	0.03	NA	ND	0.653	ND	ND	ND	2.55	1.61	0.002	ND	0.011
Apr-2001	0.015	NA	NA	ND	1.51	NA	ND	ND	2.89	NA	ND	0.011	0.015
Mar-2002	0.015	0.015	NA	ND	0.806	1.14	ND	ND	2.48	1.76	ND	ND	0.026
Mar-2003	0.012	0.039	NA	ND	1.73	ND	ND	ND	1.92	1.96	ND	ND	0.026
Apr-2004	0.138	0.15	ND	ND	0.898	ND	ND	ND	2.6	2.23	ND	ND	0.028
Apr-2005	0.046	0.029	ND	ND	0.86	0.64	ND	ND	2.42	2.21	ND	ND	0.018
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	1.85	1.83	ND	ND	ND
Mar-2007	0.077	0.082	ND	ND	ND	ND	ND	ND	2.25	2	ND	ND	0.018
Mar-2008	0.033	0.012	ND	ND	0.575	0.598	ND	ND	2.17	2.22	ND	ND	ND
Mar-2009	0.097	0.088	ND	ND	ND	ND	ND	ND	2.41	2.72	ND	ND	ND
Apr-2010	0.146	0.116	ND	ND	0.638	0.623	ND	ND	2.83	2.79	ND	ND	ND
Apr-2011	0.156	0.162	ND	0.029	0.606	0.625	ND	ND	2.9	2.92	ND	ND	0.01
Mar-2012	0.12	0.1	ND	ND	0.735	0.708	ND	ND	3.68	3.55	ND	ND	ND
Sep-2012	0.249	0.217	ND	0.0133	0.796	0.764	ND	ND	3.52	3.48	ND	ND	0.0035 J
Mar-2013	0.152	0.101	0.000134 J	0.0242	0.812	0.748	ND	0.000022 J	3.48	3.28	ND	ND	0.019
Oct-2013	0.102	0.0916	ND	0.0073	0.646	0.592	ND	ND	3.52	3.41	0.000098 J	0.001 J	0.0166

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-03***												
Mar-2014	0.206	0.192	ND	0.0131	0.726	0.682	ND	0.000041 J	2.64	3.27	0.000185 J	0.0042 J	0.01
Oct-2014	0.38	0.247	0.00003 J	0.0253	0.864	0.816	ND	0.000086 J	3.85	3.83	ND	ND	0.0121
Apr-2015	0.0779	0.0368	ND	0.0164	0.765	0.736	0.000801 J	0.000033 J	3.95	4.01	ND	ND	0.0092 J
Nov-2015	0.278	0.0454	ND	0.111	0.804	0.714	0.000367 J	0.000192 J	4.19	4.09	0.000278 J	ND	0.0273
May-2016	0.24	0.234	ND	0.0191	0.874	0.828	ND	ND	3.33	3.09	ND	ND	0.0309
Oct-2016	0.272 R	0.217	ND	0.0249 J+	0.727	0.715	ND	ND	2.75 J+	2.77	ND	0.00032 J	0.0173 J
May-2017	0.242	0.217	ND	0.0324	0.766	0.729	ND	ND	2.73	2.68	ND	0.0003 J	0.0154 J
Oct-2017	0.269	0.186	ND	0.0217	0.628	0.603	ND	ND	2.57	2.39	ND	0.00025 J	0.0403
May-2018	0.27	0.21	ND	0.034	ND	ND	0.00027 J	ND	2.8 J	2.4 J	ND	0.0026	0.025
Nov-2018	0.018	0.019	ND	0.0045	ND	ND	ND	ND	2.2 J	2.3 J	ND	ND	0.0058
May-2019	0.02	0.016	ND	0.004	ND	ND	ND	ND	ND	ND	ND	ND	0.0057
Oct-2019	0.15	0.054	ND	0.012	ND	ND	ND	ND	2 J	2.4 J	ND	ND	0.065
May-2020	0.1	0.078	ND	0.028	ND	ND	ND	ND	2.3 J	2.3 J	ND	0.0013	0.0068
Oct-2020	0.093	0.08	ND	0.015	ND	ND	ND	ND	2.5 J	1.9 J	ND	0.0043 JB	ND
Apr-2021	0.11	0.12	ND	0.011	0.5	0.52	ND	ND	2.6	2.7	ND	ND	ND
Oct-2021	0.14	0.13	ND	0.0039	0.51	0.5	ND	ND	2.5	2.5	ND	ND	ND
May-2022	0.13	0.13	ND	0.01	0.5 J	0.46 J	ND	ND	2.4	2.9	ND	ND	ND
Oct-2022	0.16	0.18	ND	0.049	0.58	0.6	ND	ND	3.2	3.3	ND	ND	ND
May-2023	0.16	0.16	ND	0.0077	0.54	0.43 J	ND	ND	2.8	2.5	ND	ND	ND
Oct-2023	0.1	0.11	ND	0.0097	0.47 J	0.5	ND	ND	2.6	2.5	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-03*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.5	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.8	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.23	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.06 J	ND	ND	4.68 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-03*																
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.63 J,B*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.84 J*	*ND*	*ND*	7.02	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.19 J*	*ND*	*ND*	5.12	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.41 J*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.1	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.3 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.1	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.1	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.4	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-03*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-03***															
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.172 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-03***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-03***															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-04***											
Nov-1993	6	6	0.5	ND	21.6	ND	ND	5.25	21.8	4.2	34	5.14
Apr-1994	6	6	ND	ND	2.2	ND	ND	5.3	21	ND	18	4.39
Apr-1995	8.2	8.2	ND	ND	2.3	ND	ND	6.1	20.7	1.9	ND	4.2
Apr-1997	ND	4	ND	ND	2	0.09	ND	NA	NA	ND	50	11
Oct-1997	4	4	0.5	ND	1.51	0.28	ND	8.07	21.5	ND	ND	16
Apr-1998	3	3	ND	ND	2.03	ND	ND	6.81	19.53	ND	ND	5
Apr-1999	ND	ND	0.24	ND	2.61	ND	ND	5.26	22.5	ND	32	5.7
Oct-1999	ND	ND	0.08	ND	2.88	ND	ND	5.6	20.1	ND	18	5.3
Apr-2000	4	4	ND	ND	3.25	ND	ND	5.7	17	ND	23	5.9
Oct-2000	6.4	NA	ND	ND	1.96	ND	ND	5.6	17.05	ND	19	5.63
Apr-2001	5.5	NA	ND	ND	1.96	ND	ND	NA	NA	ND	ND	7
Sep-2001	4.9	4.9	ND	ND	5.92	ND	ND	5.6	21	ND	22	6.2
Mar-2002	3.2	3.2	ND	ND	1.71	ND	ND	4.5	16	ND	20	5.03
Sep-2002	5.8	5.8	ND	ND	1.99	ND	ND	5.5	20.1	ND	22	6.44
Mar-2003	5.4	5.4	ND	ND	12	ND	ND	5.3	21.6	ND	12	5.53
Oct-2003	5.2	5.2	ND	ND	7.09	ND	ND	4.1	21.6	ND	48	7.6
Apr-2004	4.2	4.2	ND	ND	2.28	0.1	ND	5.5	16.6	ND	21	9.54
Oct-2004	5.4	5.4	ND	ND	2.39	0.12	ND	5.6	16.6	ND	13	9.5
Apr-2005	4.9	4.9	ND	ND	2.45	0.1	ND	5.3	15.4	1.58	35	5.33
Oct-2005	6.4	6.4	ND	ND	2.42	0.11	ND	4.6	13.7	ND	27	5.76
Mar-2006	7.5	7.5	ND	ND	2.27	ND	ND	5.3	17.6	ND	ND	4.15
Sep-2006	6.1	6.1	ND	ND	2.6	0.12	ND	5.5	17.9	ND	15	5.94
Mar-2007	6.2	6.2	ND	ND	2.72	ND	ND	5.7	20	ND	27	5.01
Sep-2007	4.9	4.9	0.39	ND	8.92	ND	ND	5.5	18.3	ND	29	4.52
Mar-2008	6.5	6.5	ND	ND	2.62	0.1	ND	5.5	18.8	ND	ND	4.66
Sep-2008	6.5	6.5	0.2	ND	2.77	0.06	ND	5.5	18.1	ND	19	5.6
Mar-2009	6	6	ND	ND	2.71	0.08	ND	5.2	23.2	ND	22	4.7
Oct-2009	5.9	5.9	ND	ND	2.58	0.09	ND	5	18	ND	37	5.25
Mar-2010	6	6	ND	ND	2.64	ND	ND	5.48	27	ND	32	5.19
Oct-2010	5.5	5.5	ND	ND	3.16	0.06	ND	5	18.8	ND	ND	4.93
Apr-2011	7	7	ND	ND	2.92	0.09	ND	5.3	15.7	ND	13	4.72
Sep-2011	7.5	7.5	ND	ND	7.53	0.38	ND	5.5	20.6	ND	36	5.78
Mar-2012	5.3	5.3	ND	ND	3.12	0.08	ND	4.8	18.9	ND	ND	5.87
Sep-2012	6.12	6.12	ND	ND	3.38	0.11	ND	4.3	21.4	ND	53	6.25
Mar-2013	5.84	5.84	0.055 J	ND	3.76	0.0899	ND	5.6	21.2	0.359 J	25	6.49
Oct-2013	6.2	6.2	ND	ND	3.87	0.0901	ND	5.9	24.7	ND	ND	6.18
Mar-2014	6.24	6.24	ND	ND	4.1	0.0804	ND	5.6	24.8	ND	38	7.94

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-04***											
Oct-2014	ND	ND	ND	5 J	4.42	0.119	ND	5.2	24.4	ND	ND	6.5
Apr-2015	4.68	4.68	ND	ND	4.59	0.091	ND	4.4	23.7	ND	ND	5.68
Nov-2015	5.4	5.4	ND	ND	4.6	0.111	ND	5.7	45.6	ND	25	7.79
May-2016	4.64	4.64	ND	ND	4.99	0.103	ND	5.7	33.9	ND	46	7.6
Oct-2016	3.76	3.76	ND	ND	5.4	NA	NA	5.6	43.5	0.708 J	44	7.2
May-2017	4.28	4.28	ND	ND	6.43	0.137	ND	5.5	53.6	ND	27	6.5
Oct-2017	6.36	6.36	ND	6 J+	7.26	0.114	ND	6.1	59	ND	16 J	7.4
May-2018	10	10	ND	18.6 J	8.2	0.1	ND	5.9	54.3	ND	ND	8.4
Nov-2018	18	18	ND	ND	8.2	ND	0.0075 J	6.2	79.3	ND	77	8.6
May-2019	24	NA	ND	ND	9.1	ND	ND	5.9	62.7	ND	38	9.2
Oct-2019	10 H1	NA	ND	ND	7.1	0.084 J	0.017	5.84	87.3	ND	47	13
May-2020	26	NA	ND	6.9 J	9.9	ND	ND	5.64	94.7	ND	40	17.7
Oct-2020	26	NA	ND	ND	7.8	ND	0.0072 J	5.66	108	ND	68	27
Apr-2021	10	NA	0.064 J	ND	9.4	0.073 J	ND	6.53	131.1	ND	55 D6	16.7
Oct-2021	30	NA	ND	8.3 J	8.2	0.063 J	ND	6.69	170.9	ND	41	24.8
May-2022	28 ML	NA	ND	ND	8.7	0.15	0.0073 J	6.27	154.3	ND	64	16.5 N3
Oct-2022	32	NA	ND	22.1 J	13.4	0.088 J	0.0075 J	6.48	163.3	ND	48	12.3 N3
May-2023	36	NA	ND	45.6	15.3	0.1	ND	6.47	170.1	ND	72	12.7 N3
Oct-2023	34	NA	ND	6.8 J	16.3	ND	NA	6.47	187.9	ND	74	13.4 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-04*													
Nov-1993	NA	ND	ND	NA	ND	1.4	NA	ND	NA	ND	1.1	0.13	ND	0.4	NA
Apr-1994	NA	ND	ND	NA	ND	1.7	NA	ND	NA	ND	0.072	ND	ND	0.45	NA
Apr-1995	ND	ND	ND	ND	ND	1.1	NA	ND	ND	ND	0.49	ND	ND	0.36	NA
Oct-1996	ND	ND	0.008	ND	ND	1.6	1.6	ND	ND	ND	0.82	0.22	ND	ND	ND
Apr-1997	ND	ND	0.021	ND	ND	2.5	0.86	ND	ND	ND	0.82	0.25	ND	0.55	ND
Oct-1997	ND	ND	ND	ND	ND	1.39	1.29	ND	ND	ND	20.7	0.786	ND	0.349	0.33
Apr-1998	ND	ND	0.01	ND	ND	1.37	1.29	ND	ND	ND	25.9	0.456	ND	0.374	0.366
Apr-1999	ND	ND	0.011	ND	ND	1.58	1.43	ND	ND	ND	19.3	0.422	ND	0.418	0.398
Oct-1999	ND	ND	ND	ND	ND	1.46	1.33	ND	ND	ND	15	0.465	ND	0.421	0.38
Apr-2000	ND	ND	ND	ND	ND	1.64	1.65	ND	ND	ND	5.3	0.212	ND	0.445	0.429
Oct-2000	ND	ND	ND	ND	ND	1.57	1.56	ND	ND	0.004	12	0.477	ND	0.415	0.416
Apr-2001	ND	ND	0.012	ND	ND	2	NA	ND	ND	ND	34.9	NA	ND	0.485	NA
Sep-2001	ND	ND	ND	ND	ND	1.65	1.58	ND	ND	ND	10.9	0.145	ND	0.5	0.422
Mar-2002	ND	ND	0.011	ND	ND	1.35	1.37	ND	ND	ND	29.7	0.607	ND	0.403	0.422
Sep-2002	ND	ND	0.011	ND	ND	1.82	1.35	ND	ND	ND	59.6	0.703	ND	0.462	0.414
Mar-2003	ND	ND	ND	ND	ND	1.49	1.41	ND	ND	ND	7.57	0.379	ND	0.441	0.412
Oct-2003	ND	ND	0.013	ND	ND	2.09	1.36	ND	ND	0.011	55.9	0.527	ND	0.579	0.402
Apr-2004	0.004	0.003	0.014	0.003	ND	1.89	1.04	ND	ND	ND	30.5	0.142	0.004	1.17	0.4
Oct-2004	ND	ND	0.01	ND	ND	2.86	1.45	ND	ND	0.014	36.3	0.288	ND	0.571	0.426
Apr-2005	ND	ND	0.013	ND	ND	1.41	1.38	ND	ND	ND	81.5	0.537	ND	0.437	0.424
Oct-2005	ND	ND	0.01	ND	ND	1.58	1.23	ND	ND	ND	39.4	0.379	ND	0.449	0.414

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-04***													
Mar-2006	ND	ND	ND	ND	ND	1.08	0.996	ND	ND	ND	43.7	0.372	ND	0.352	0.338
Sep-2006	ND	ND	ND	ND	ND	1.61	1.36	ND	ND	ND	38.2	0.206	ND	0.467	0.431
Mar-2007	ND	ND	0.014	ND	ND	1.33	1.22	ND	ND	ND	41.8	0.151	ND	0.41	0.376
Sep-2007	ND	ND	ND	ND	ND	1.14	1.11	ND	ND	ND	17.1	0.705	ND	0.406	0.372
Mar-2008	ND	ND	0.011	ND	ND	1.17	1.14	ND	ND	ND	40.9	0.576	ND	0.423	0.416
Sep-2008	ND	ND	ND	ND	ND	1.41	1.19	ND	ND	ND	23.6	0.24	ND	0.501	0.454
Mar-2009	ND	ND	ND	ND	ND	1.25	1.31	ND	ND	ND	26.9	0.4	ND	0.383	0.41
Oct-2009	ND	ND	ND	ND	ND	1.32	1.27	ND	ND	ND	10	0.243	ND	0.474	0.467
Mar-2010	ND	ND	ND	ND	ND	1.37	1.27	ND	ND	ND	2.48	0.155	ND	0.429	0.407
Oct-2010	ND	ND	ND	ND	ND	1.17	1.13	ND	ND	ND	11.3	0.91	ND	0.488	0.458
Apr-2011	ND	ND	0.012	ND	ND	1.11	1.1	ND	ND	ND	57.8	0.317	ND	0.473	0.462
Sep-2011	ND	ND	0.015	ND	ND	1.44	1.48	ND	ND	ND	90.5	0.469	ND	0.53	0.47
Mar-2012	ND	ND	0.01	ND	ND	1.36	1.33	ND	ND	ND	8.58	0.191	ND	0.599	0.576
Sep-2012	ND	ND	0.014	0.000181 J	ND	1.62	1.5	ND	0.00098 J	0.0044 J	68.2	0.274	0.000594 J	0.536	0.551
Mar-2013	ND	ND	0.0133	0.000126 J	ND	1.66	1.49	0.0021 J	0.0012 J	0.0025 J	20.2	0.251	ND	0.57	0.534
Oct-2013	ND	ND	0.0128	ND	ND	1.56	1.58	ND	0.000945 J	0.0018 J	9.53	0.335	ND	0.555	0.585
Mar-2014	ND	ND	0.0123	ND	ND	2.34	2.3	0.0049 J	0.000947 J	0.0026 J	17.5	0.389	ND	0.509	0.652
Oct-2014	0.000253 J	ND	0.0139	ND	ND	1.58	1.66	0.00074 J	0.001 J	0.0027 J	17.7	0.275	ND	0.621	0.62
Apr-2015	0.0012 J	ND	0.0148	ND	ND	1.27	1.31	0.000412 J	0.0012 J	0.0028 J	13.6	0.382	ND	0.611	0.631
Nov-2015	ND	ND	0.0144	ND	ND	1.94	1.82	0.000332 J	0.0012 J	0.002 J	5.46	0.512	0.000478 J	0.717	0.67
May-2016	ND	ND	0.0162	0.00019 J	ND	1.83	1.91	0.00071 J	0.0013	0.0032 J	25.4	0.285	0.00015 J	0.741	0.734
Oct-2016	ND	ND	0.0166	ND	ND	1.62	1.64	0.00071 J	0.0013	0.0021 J	1.62	0.824	0.00011 J	0.763	0.784
May-2017	ND	ND	0.0185	0.00019 J	ND	1.37	1.58	0.00083 JB	0.0016	0.0038 J	14.4	1.64	0.00018 J	0.745	0.751
Oct-2017	ND	ND	0.0183	0.00015 J	ND	1.62	1.62	ND	0.0016	0.0035 J	11.2	2.68	0.00019 J	0.811	0.844

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-04***													
May-2018	*0.00013 J*	*ND*	0.023	*0.00021 J*	*0.000078 J*	1.8	1.7	*0.0022 J*	0.0018	0.014	14.1	2.4	*0.00023 J*	*0.94 J*	*0.91 J*
Nov-2018	*ND*	*ND*	0.023	*0.00018 J*	*0.000032 J*	1.9	1.9	*0.0024 J*	0.0015	0.0041	44	17.7 M1	*0.000076 J*	*0.96 J*	*0.99 J*
May-2019	*ND*	*ND*	0.023	*ND*	*ND*	2.1	2.2	*ND*	0.0015	0.0028	23.4	14.1	*ND*	*ND*	1
Oct-2019	*ND*	*ND*	0.038	*0.00086 J*	*0.00076 J*	3.6	3.5	*0.0036 J*	0.0026	0.017	152	11.6	*0.00037 J*	1	1
May-2020	*0.00032 J*	*ND*	0.025	*0.00015 J*	*0.00016 J*	5.2	5.4	*0.003 J*	0.0026	0.0063	27.5	17.5	*ND*	1.2	1.2
Oct-2020	*0.00072 J*	*ND*	0.028	*ND*	*ND*	8.8	8.4	*0.01 J*	*0.0018 J*	*ND*	22.4 M1	19.5	*ND*	1.2	1.2
Apr-2021	*ND*	*ND*	0.028	*ND*	*ND*	4.6	4.5	*0.0009 J*	*0.0013 J*	*ND*	30.4	21.8	*ND*	1.2	1.2
Oct-2021	*0.000053 JB*	*ND*	0.027	*ND*	*ND*	7.5	7.2	*ND*	*0.0013 J*	*0.0014 J*	29.8	21.5	*ND*	1.5	1.4
May-2022	*ND*	*ND*	0.03	*ND*	*ND*	4.3	3.9	*0.0011 J*	*0.002 J*	*0.0017 J*	28.3	22.7	*ND*	1.4	1.3
Oct-2022	*0.00031 JB*	*ND*	0.029	*0.00015 J*	*ND*	2.6	2.8	*0.00078 J*	*0.0022 J*	0.0028	36	28	*ND*	1.4	1.4
May-2023	*0.0003 J*	*ND*	0.034	*0.00025 J*	*ND*	2.7	2.6	*0.00099 J*	*0.0023 J*	0.005	46.1	28.6	*ND*	1.4	1.4
Oct-2023	*ND*	*ND*	0.037	*0.00031 J*	*ND*	2.9	3	*ND*	*0.0024 J*	0.014	79.8	34.2	*ND*	1.5	1.5

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-04*												
Nov-1993	0.07	NA	ND	NA	0.36	NA	ND	NA	1.1	NA	NA	NA	ND
Apr-1994	0.012	NA	ND	NA	ND	NA	ND	NA	1.9	NA	NA	NA	0.014
Apr-1995	0.01	NA	ND	ND	0.46	NA	ND	ND	1	NA	ND	ND	0.02
Oct-1996	0.019	0.016	NA	ND	ND	ND	ND	ND	2.1	2.5	ND	ND	ND
Apr-1997	0.025	ND	ND	ND	2	1.8	ND	ND	1.3	1.2	ND	ND	0.044
Oct-1997	0.011	0.015	ND	ND	ND	0.552	ND	ND	1.08	1.02	ND	ND	0.01
Apr-1998	ND	0.033	ND	ND	ND	ND	ND	ND	1.09	1.18	ND	ND	ND
Apr-1999	0.01	0.015	NA	ND	0.875	ND	ND	ND	1.18	1.12	ND	ND	ND
Oct-1999	0.01	0.015	NA	ND	ND	ND	ND	ND	1.1	1.01	ND	ND	ND
Apr-2000	0.011	0.012	NA	ND	0.547	ND	ND	ND	1.12	1.04	ND	ND	ND
Oct-2000	0.012	0.015	NA	ND	0.514	ND	ND	ND	1.05	1.16	ND	ND	ND
Apr-2001	ND	NA	NA	ND	1.11	NA	ND	ND	2.15	NA	ND	ND	ND
Sep-2001	ND	ND	NA	ND	ND	0.641	ND	ND	1.18	1.1	ND	ND	ND
Mar-2002	0.015	0.017	NA	ND	1.03	0.901	ND	ND	1.16	1.15	ND	ND	ND
Sep-2002	ND	0.017	NA	ND	0.843	0.821	ND	ND	1.43	1.11	ND	ND	ND
Mar-2003	0.013	0.012	NA	ND	0.646	ND	ND	ND	1.18	1.13	ND	ND	ND
Oct-2003	ND	0.017	NA	ND	1.18	1.53	ND	ND	2.74	1.13	ND	0.044	ND
Apr-2004	ND	ND	ND	ND	1.48	ND	ND	ND	2.17	1.13	**0.003**	ND	0.021
Oct-2004	ND	0.011	ND	ND	ND	ND	ND	ND	1.56	0.833	ND	ND	0.073
Apr-2005	0.017	0.014	ND	ND	ND	ND	ND	ND	1.21	1.15	ND	ND	ND
Oct-2005	0.016	0.011	ND	ND	0.58	ND	ND	ND	1.97	1.06	ND	ND	0.012
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	0.919	0.81	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-04*												
Sep-2006	0.01	ND	ND	ND	0.514	ND	ND	ND	1.27	0.989	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	1.09	0.925	ND	ND	ND
Sep-2007	0.022	0.019	ND	ND	ND	ND	ND	ND	1.1	1.05	ND	ND	0.015
Mar-2008	0.019	0.014	ND	ND	ND	ND	ND	ND	1.18	1.13	ND	ND	ND
Sep-2008	0.01	ND	ND	ND	ND	ND	ND	ND	1.13	1.02	ND	ND	0.021
Mar-2009	ND	ND	**0.0072 R,C**	ND	ND	ND	ND	ND	1.14	1.17	ND	ND	0.011
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Jul-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.14	1.14	ND	ND	ND
Mar-2010	ND	ND	ND	ND	0.562	0.512	ND	ND	1.07	1.04	ND	ND	ND
Oct-2010	0.028	0.021	ND	ND	ND	ND	ND	ND	1.22	1.17	ND	ND	ND
Apr-2011	0.015	0.012	ND	ND	ND	ND	ND	ND	1.32	1.26	ND	ND	ND
Sep-2011	0.021	0.012	ND	ND	ND	ND	ND	ND	1.34	1.31	ND	ND	0.012
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	1.34	1.34	ND	ND	ND
Sep-2012	0.0153	0.011	ND	0.0019 J	0.45 J	0.54	ND	ND	1.38	1.39	ND	ND	0.006 J
Mar-2013	0.0122	0.0103	0.00018 J	0.0029 J	0.524	0.467 J	ND	ND	1.56	1.45	0.000555 J	ND	0.0128
Oct-2013	0.0132	0.0121	ND	0.0017 J	0.427	0.44	ND	ND	1.46	1.57	ND	0.000803 J	0.0114
Mar-2014	0.0108	0.0101	ND	0.0019 J	0.558	0.539	ND	ND	1.27	1.61	ND	0.0048 J	0.0098 J
Oct-2014	0.0144	0.012	0.000022 J	0.0018 J	0.518	0.529	0.0013 J	ND	1.69	1.71	ND	ND	ND
Apr-2015	0.0165	0.0146	ND	0.0017 J	0.545	0.548	0.000983 J	ND	1.83	1.88	ND	ND	0.0098 J
Nov-2015	0.0184	0.0167	ND	0.0017 J	0.557	0.516	ND	ND	2.03	1.92	0.000116 J	ND	0.0095 J
May-2016	0.0186	0.0122	ND	0.002 J	0.57	0.562	ND	ND	1.95	1.93	ND	ND	ND
Oct-2016	0.0193	0.0195	ND	0.002 J	0.546	0.582	ND	ND	2	2.1	ND	ND	ND
May-2017	0.0472	0.0279	0.00023	0.0021 J	0.575	0.588	ND	ND	2.25	2.24	ND	ND	0.0036 JB

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-04***												
Oct-2017	0.0403	0.0357	*0.00015 J*	*0.002 JB*	0.626	0.625	*ND*	*ND*	2.5	2.64	*ND*	*ND*	*ND*
May-2018	0.032	0.029	*0.00015 J*	0.0027	*ND*	*ND*	*0.00013 J*	*ND*	*2.9 J*	*2.7 J*	*0.000076 J*	*ND*	0.0065
Nov-2018	0.15	0.15	0.00032	0.0036	*ND*	*ND*	*0.0002 J*	*ND*	*3.5 J*	*3 J*	*ND*	*ND*	0.0057
May-2019	0.18	0.16	*ND*	0.0026	7.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	0.17	0.11	0.0006	0.0042	*ND*	*ND*	*ND*	*ND*	*2.6 J*	*3 J*	*ND*	*ND*	0.025
May-2020	0.1	0.16	*ND*	0.0032	*ND*	*ND*	*ND*	*ND*	*3.1 J*	*3.2 J*	*ND*	0.003	0.01
Oct-2020	0.15	0.12	*ND*	0.0042	*ND*	*ND*	*0.0017 J*	*ND*	*1.8 J*	*2.5 J*	*ND*	*0.0025 J*	*ND*
Apr-2021	0.16	0.16	*ND*	*ND*	0.76	0.77	*ND*	*ND*	3.7	3.4	*ND*	*ND*	*ND*
Oct-2021	0.16	0.16	*ND*	*0.0013 J*	0.8	0.77	*ND*	*ND*	3.6	3.6	*ND*	*ND*	*ND*
May-2022	0.16	0.16	*ND*	*0.0025 J*	0.83	0.8	*ND*	*ND*	4.3	3.9	*ND*	*ND*	*ND*
Oct-2022	0.19	0.19	*ND*	*0.002 J*	0.91	0.89	*ND*	*ND*	4.7	4.8	*ND*	*ND*	*ND*
May-2023	0.19	0.18	*ND*	0.0027	0.97 B	0.81	*ND*	*ND*	5.2	4.9	*ND*	*ND*	*0.0045 J*
Oct-2023	0.21	0.21	*ND*	*0.0025 J*	0.92	0.93	*ND*	*ND*	5.7	5.9	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.5	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04*																
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*0.21 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*0.24 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*0.25 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04*																
May-2017	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9 J	ND
Nov-2018	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	2.35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2023	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.48 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.62 J	0.4 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.18 J	ND	ND	ND	ND	ND	0.71 J	0.47 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.18 J	ND	ND	ND	ND	ND	0.81 J	0.33 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	0.64 J	0.45 J
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8 J	0.9 J
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	0.8 J	1.3
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.1 J	ND	ND	ND	1.3	2.3

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	1.2	3
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	1.5	4.1
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	4.7
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.3 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1 CL	4 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	2.9
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	3
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2	3.1
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*1.36 J*	*4.77 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	2.6	4.4
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	3.5
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	2.1	4.5
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	1.5	3.1
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	1.9	4.7

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-04B***											
Nov-1993	ND	ND	ND	30	3.1	ND	ND	4.82	25.8	4.2	42	3.93
Apr-1994	4.27	ND	ND	21.1	2.7	ND	ND	5.2	28.6	3.6	17	3.93
Apr-1995	ND	ND	ND	ND	3	ND	ND	5.4	27.5	8	16	5.6
Apr-1997	ND	5	ND	ND	2.5	0.03	ND	NA	NA	ND	54	5.7
Oct-1997	ND	ND	0.6	ND	1.54	ND	ND	8.34	51.6	2.5	18	ND
Apr-1998	ND	ND	0.34	ND	2.67	ND	ND	6.57	29.4	7.4	16	9.3
Apr-1999	ND	ND	0.13	ND	3.66	ND	ND	4.87	29.3	4.79	39	7.8
Oct-1999	ND	ND	0.07	ND	2.52	ND	ND	5.13	29.4	5.33	29	8.4
Apr-2000	1	1	ND	ND	2.8	ND	ND	5.47	25	4.27	42	9
Oct-2000	1	NA	ND	ND	3.58	ND	ND	5.06	34.2	11.7	364	7.72
Apr-2001	1.3	NA	ND	ND	2.33	ND	ND	NA	NA	8.7	37	8.47
Sep-2001	ND	ND	ND	ND	11.7	1.25	ND	4.9	48	11.4	33	10.5
Mar-2002	1	1	ND	ND	3.75	ND	ND	4.6	30	5.04	35	9.56
Sep-2002	1.4	1.4	ND	ND	3.03	ND	ND	5	41.1	7.73	83	10.8
Mar-2003	1.9	1.9	ND	ND	12.5	ND	ND	4.8	38.2	14.2	33	9.6
Oct-2003	2.1	2.1	ND	ND	2.72	ND	ND	3.8	39.9	7.67	55	10.5
Apr-2004	1.7	1.7	ND	ND	2.23	ND	ND	5.1	35.6	11.1	31	11.8
Oct-2004	1.9	1.9	ND	ND	3.14	ND	ND	4.9	37.6	8.58	28	10.1
Apr-2005	1.6	1.6	ND	ND	2.43	ND	ND	4.8	33	9.86	70	11.6
Oct-2005	2.7	2.7	0.22	ND	2.3	ND	ND	4.1	29.7	8.56	46	8.69
Mar-2006	3	3	ND	ND	2.16	0.08	ND	5	32.3	9.06	15	7.49
Sep-2006	2.8	2.8	ND	ND	2.6	ND	ND	4.8	33.5	8.32	34	9.31
Mar-2007	2.8	2.8	ND	ND	3.02	0.08	ND	5.1	35.1	8.73	41	8.47
Sep-2007	2.6	2.6	0.36	ND	2.57	ND	ND	5.5	35.9	7.63	45	9.1
Mar-2008	3	3	ND	ND	2.77	0.08	ND	5	36	9.24	29	9.43
Sep-2008	3.2	3.2	ND	43	2.86	ND	ND	5.1	33.6	9.75	37	10.2
Mar-2009	3.1	3.1	ND	ND	2.71	ND	ND	4.5	35.4	7.43	47	9.18
Oct-2009	3	3	ND	ND	2.73	ND	ND	4.5	31.7	10.3	60	10.4
Apr-2010	3.3	3.3	ND	ND	2.59	ND	ND	4.2	37.7	11.5	54	9.5
Oct-2010	2.6	2.6	ND	ND	3.08	ND	ND	4.4	34.9	8.6	29	11.1
Apr-2011	3.5	3.5	ND	ND	2.62	ND	ND	4.5	36.2	8.96	42	10.3
Sep-2011	3.6	3.6	ND	ND	3.02	ND	ND	4.7	36.6	7.53	19	10.7
Mar-2012	2.7	2.7	ND	ND	2.55	ND	ND	4.4	35.8	10	ND	11.1
Sep-2012	2.88	2.88	ND	ND	3.14	0.0613	ND	3.8	36.4	9.39	34	10.9
Mar-2013	3.4	3.4	ND	ND	3.44	0.0421 J	ND	5.1	39.1	9.35	28	11.4
Oct-2013	3.48	3.48	ND	ND	3.56	0.0428 J	ND	5.2	40.3	9.26	ND	11.1
Mar-2014	3	3	ND	ND	3.05	ND	ND	5	37.2	11.2	ND	10.9

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-04B***										
Oct-2014	*ND*	*ND*	*ND*	*5 J*	3.14	*ND*	*ND*	4.6	35.9	8.82	*ND*	11.2
Apr-2015	3.76	3.76	*ND*	*ND*	2.84	*ND*	*ND*	4.7	35.1	11.2	32	11.7
Nov-2015	2.64	2.64	*ND*	*ND*	2.72	*ND*	*ND*	5.1	60.9	10.8	27	11.7
May-2016	*ND*	*ND*	*ND*	*ND*	2.82	*ND*	*ND*	4.9	47.4	9.84	*19 J*	11.2
Oct-2016	*ND*	*ND*	*ND*	*ND*	3.03	*NA*	*NA*	5.1	53.1	9.28	41	10.9
May-2017	2.6	2.6	*ND*	*ND*	3.83	0.181	*ND*	4.9	66.7	8.3	*24 J*	12.4
Oct-2017	*ND*	*ND*	*ND*	*ND*	3.67	0.159	*ND*	5.1	65.4	9.23	35	12.3
May-2018	*4 J*	*ND*	*ND*	*ND*	3.3	0.16	*ND*	5.8	52.4	*7 J*	*ND*	11.6
Nov-2018	*6 JB*	*ND*	*ND*	*ND*	*2.8 J*	*0.076 J*	*ND*	4.63	40.9	*9.7 J*	93	11.6
May-2019	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	4.53	32.5	11.3	23	10.9
Oct-2019	*1 JH1*	*NA*	*ND*	*ND*	*2.7 J*	0.19	*ND*	4.32	46.2	*8.7 J*	231	11.9
May-2020	*ND*	*NA*	*ND*	*ND*	5.8	0.16	*ND*	4.41	55.9	*9.1 J*	46	16.2
Oct-2020	*ND*	*NA*	*ND*	*ND*	4.2	0.15	*ND*	4.41	50.3	10.4	27	14.9
Apr-2021	*ND*	*NA*	*ND*	*ND*	*2.3 J*	0.11	*ND*	4.82	47.3	*9.6 J*	34	11.3
Oct-2021	*ND*	*NA*	*ND*	*ND*	4.3	0.23	*ND*	4.79	88.6	*8.1 J*	14	16.4
May-2022	*2 J2c*	*NA*	*ND*	*ND*	5.7	0.28	*ND*	4.54	95.7	10.2	43	19.9 N3
Oct-2022	*2 J2c*	*NA*	*ND*	*13 J*	9.3	0.28	*ND*	4.62	105.2	12.4	48	20.7 N3
May-2023	30	*NA*	*ND*	36.5	6.3	0.32	*ND*	4.71	91.7	10.6	39	19.6 N3
Oct-2023	*2 J2c*	*NA*	*ND*	*ND*	5.8	0.277	*NA*	4.75	99.2	11.4	25	18.5 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-04B*													
Nov-1993	NA	ND	ND	NA	ND	0.37	NA	0.007	NA	ND	2.2	0.04	ND	0.73	NA
Apr-1994	NA	ND	ND	NA	ND	1.1	NA	ND	NA	ND	ND	ND	ND	0.37	NA
Apr-1995	ND	ND	ND	ND	ND	0.66	NA	ND	ND	ND	ND	ND	ND	0.95	NA
Oct-1996	ND	ND	0.026	ND	ND	1.4	1.5	ND	ND	ND	ND	ND	0.002	1.4	1.4
Apr-1997	ND	ND	0.042	ND	ND	2.7	1.6	ND	ND	ND	0.26	ND	ND	1.9	1.1
Oct-1997	ND	ND	0.022	ND	ND	0.982	0.948	ND	ND	ND	0.418	ND	ND	0.961	0.918
Apr-1998	ND	ND	0.03	ND	ND	1.72	1.59	ND	ND	ND	1.16	ND	ND	1.22	1.11
Apr-1999	ND	ND	0.039	ND	ND	1.2	1.18	ND	ND	ND	2.96	ND	ND	1.17	1.01
Oct-1999	ND	ND	0.022	ND	ND	1.27	0.964	ND	ND	ND	0.678	ND	ND	1.01	0.832
Apr-2000	ND	ND	0.023	ND	ND	1.54	1.22	ND	ND	ND	0.503	ND	ND	1.26	1.16
Oct-2000	ND	ND	0.022	ND	ND	1.26	1.27	ND	ND	ND	0.286	ND	ND	1.11	1.09
Apr-2001	ND	ND	0.024	ND	ND	1.48	NA	ND	ND	ND	0.556	NA	ND	1.16	NA
Sep-2001	ND	ND	0.027	ND	ND	1.83	1.38	ND	ND	ND	0.623	ND	ND	1.45	1.26
Mar-2002	ND	ND	0.026	ND	ND	1.67	1.53	ND	ND	ND	0.352	ND	ND	1.31	1.34
Sep-2002	ND	ND	0.035	ND	ND	1.95	1.44	ND	ND	0.013	4.57	ND	ND	1.45	1.33
Mar-2003	ND	ND	0.029	ND	ND	1.45	1.33	ND	ND	ND	0.257	ND	ND	1.46	1.28
Oct-2003	ND	ND	0.029	ND	ND	1.81	1.4	ND	ND	ND	0.68	ND	ND	1.46	1.36
Apr-2004	ND	ND	0.032	ND	ND	1.85	1.59	ND	ND	ND	0.599	ND	ND	1.74	1.67
Oct-2004	ND	ND	0.031	ND	ND	1.51	1.51	ND	ND	ND	0.609	ND	ND	1.53	1.52
Apr-2005	ND	ND	0.033	ND	ND	1.98	1.54	ND	ND	ND	0.998	ND	ND	1.62	1.58
Oct-2005	ND	ND	0.024	ND	ND	1.45	1.17	ND	ND	ND	0.491	ND	ND	1.32	1.23

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-04B***													
Mar-2006	ND	ND	0.019	ND	ND	1.19	1.07	ND	ND	ND	0.295	ND	ND	1.1	1.16
Sep-2006	ND	ND	0.023	ND	ND	1.57	1.39	ND	ND	ND	0.375	ND	ND	1.31	1.3
Mar-2007	ND	ND	0.031	ND	ND	1.36	1.28	ND	ND	ND	0.299	ND	ND	1.23	1.16
Sep-2007	ND	ND	0.027	ND	ND	1.4	1.4	ND	ND	ND	0.312	ND	ND	1.36	1.33
Mar-2008	ND	0.002	0.028	ND	ND	1.55	1.37	ND	ND	ND	0.63	ND	ND	1.35	1.24
Sep-2008	ND	ND	0.035	ND	ND	1.6	1.3	0.012	ND	ND	4.91	ND	ND	1.5	1.38
Mar-2009	ND	ND	0.029	ND	ND	1.58	1.5	ND	ND	ND	0.627	ND	ND	1.27	1.31
Oct-2009	ND	ND	0.031	ND	ND	1.79	1.44	ND	ND	ND	1.82	0.051	ND	1.44	1.46
Apr-2010	ND	ND	0.026	ND	ND	1.72	1.6	ND	ND	ND	0.816	ND	ND	1.27	1.52
Oct-2010	ND	ND	0.036	ND	ND	1.7	1.65	ND	ND	ND	0.659	ND	ND	1.67	1.64
Apr-2011	ND	ND	0.031	ND	ND	1.52	1.39	ND	ND	ND	0.543	ND	ND	1.59	1.41
Sep-2011	ND	ND	0.033	ND	ND	1.6	1.55	ND	ND	ND	ND	ND	ND	1.63	1.6
Mar-2012	ND	ND	0.032	ND	ND	1.55	1.57	ND	ND	ND	0.053	ND	ND	1.76	1.77
Sep-2012	ND	ND	0.0355	0.000114 J	ND	1.73	1.6	0.0018 J	0.0041 J	0.0015 J	0.108	0.0208 J	ND	1.61	1.57
Mar-2013	ND	ND	0.0368	0.000116 J	ND	1.81	1.8	0.002 J	0.004 J	0.0015 J	0.0309 J	0.0064 J	ND	1.66	1.66
Oct-2013	ND	ND	0.0404	ND	0.000097 J	1.77	1.69	0.0018 J	0.0042	0.0025	ND	ND	ND	1.62	1.64
Mar-2014	ND	ND	0.0319	ND	ND	2.2	2.06	0.0063 J	0.0035 J	0.0025 J	0.076	0.0586	ND	1.32	1.58
Oct-2014	0.000469 J	ND	0.0403	ND	0.000087 J	1.76	1.83	0.0025 J	0.0042 J	0.0021 J	0.0811	0.0111 J	ND	1.66	1.68
Apr-2015	0.0011 J	ND	0.0397	0.000169 J	0.000106 J	1.82	1.79	0.0016 J	0.0042 J	0.0019 J	0.0405 J	0.0639	ND	1.74	1.68
Nov-2015	ND	ND	0.0399	0.000126 J	0.000113 J	1.82	1.77	0.000929 J	0.0044 J	0.0017 J	0.0292 J	ND	0.000337 J	1.74	1.74
May-2016	ND	ND	0.0385	0.00013 J	ND	1.7	1.72	0.0019 J	0.004	0.0014 J	0.04 J	ND	ND	1.69	1.73
Oct-2016	ND	ND	0.0464	0.00015 J	ND	1.68	1.65	0.0022 J	0.0053	0.0019 J	0.035 J	ND	ND	1.63	1.65
May-2017	ND	ND	0.0528	0.00015 J	ND	2.08	1.83	0.0016 J	0.0055	0.002 J	ND	ND	ND	1.75	1.84
Oct-2017	ND	ND	0.0521	0.00013 J	0.00019 J	2.04	1.98	0.0015 J	0.0056	0.0021 J	0.0858 J	ND	ND	1.75	1.87

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-04B***													
May-2018	*ND*	*ND*	0.044	*0.00016 J*	*0.00012 J*	1.8	1.8	*0.0027 J*	0.0039	0.0064	*0.016 J*	*ND*	*0.000021 JB*	1.7	1.7
Nov-2018	*ND*	*ND*	0.036	*0.00013 J*	*0.000092 J*	1.8	1.8	*0.0034 J*	0.0031	*0.0013 J*	*0.017 J*	*ND*	*0.00021 J*	1.7	1.7
May-2019	*ND*	*ND*	0.034	*ND*	*ND*	1.8	1.8	*ND*	0.0036	*ND*	*ND*	*ND*	*ND*	1.6	1.6
Oct-2019	*0.00011 JB*	*ND*	0.038	*0.00015 J*	*0.00034 JB*	1.8	1.7	*0.0034 J*	0.0041	0.0022	*0.037 J*	*0.014 J*	*0.000079 JB*	1.8	1.8
May-2020	*0.000093 J*	*ND*	0.054	*0.00018 J*	*0.00025 J*	2.4	2.4	*0.0045 J*	0.0058	0.0031	*0.024 J*	*0.013 J*	*ND*	2.5	2.5
Oct-2020	*0.00049 J*	*ND*	0.055	*ND*	*ND*	2.4	2.2	*0.012 J*	0.006	*ND*	*0.024 J*	*0.013 J*	*ND*	2.2	2.1
Apr-2021	*ND*	*ND*	0.036	*ND*	*ND*	1.8	1.8	*0.0021 J*	*0.0037 J*	*ND*	*ND*	*ND*	*ND*	1.7	1.6
Oct-2021	*0.000071 JB*	*ND*	0.059	*0.00023 J*	*ND*	2.4	2.4	0.0027	0.0062	*0.002 J*	*0.029 J*	*0.013 J*	*ND*	2.5	2.4
May-2022	*ND*	*ND*	0.076	*0.00024 J*	*ND*	2.9	2.7	*0.0024 J*	0.0088	0.0025	*ND*	*ND*	*ND*	3.1	2.9
Oct-2022	*ND*	*ND*	0.077	*0.00022 J*	*ND*	3.2	3.4	0.0027	0.008	0.0032	*ND*	0.064	*ND*	3.1	3.2
May-2023	*0.00047 J*	*ND*	0.069	*0.00026 J*	*ND*	3.1	2.8	0.0026	0.0073	0.0028	*0.038 J*	*ND*	*ND*	2.9	2.5
Oct-2023	*ND*	*ND*	0.068	*0.00031 J*	*ND*	3.1	3.1	0.0026	0.0072	0.0034	0.082	*ND*	*ND*	2.6	2.6

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-04B*												
Nov-1993	0.07	NA	ND	NA	1.2	NA	ND	NA	1.6	NA	NA	NA	0.02
Apr-1994	0.008	NA	ND	NA	1.2	NA	ND	NA	2.6	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	1	NA	ND	ND	1.4	NA	ND	ND	0.02
Oct-1996	0.016	0.014	NA	ND	ND	ND	ND	ND	2.5	3.1	ND	ND	0.043
Apr-1997	0.019	0.01	ND	ND	2.9	2.5	ND	ND	1.6	1.7	ND	ND	0.045
Oct-1997	0.012	0.012	ND	ND	0.711	0.907	ND	ND	1.52	1.49	ND	ND	0.018
Apr-1998	0.017	0.014	ND	ND	1.59	0.81	ND	ND	1.57	2.88	ND	ND	ND
Apr-1999	0.027	0.013	NA	ND	1.6	1.27	ND	ND	1.63	1.47	ND	0.014	ND
Oct-1999	0.018	0.011	NA	ND	1.65	1.05	ND	ND	1.84	1.31	ND	ND	ND
Apr-2000	0.017	0.014	NA	ND	1.44	1.17	ND	ND	2.42	1.52	ND	ND	ND
Oct-2000	0.018	0.015	NA	ND	0.911	0.926	ND	ND	1.8	1.86	ND	ND	ND
Apr-2001	0.025	NA	NA	ND	1.77	NA	ND	ND	2.62	NA	ND	ND	ND
Sep-2001	0.027	0.016	NA	0.013	1.02	0.835	ND	ND	2.29	1.49	ND	ND	0.012
Mar-2002	0.021	0.019	NA	ND	0.839	0.869	ND	ND	2.03	1.56	ND	ND	0.013
Sep-2002	0.048	0.019	NA	ND	1.62	1.01	ND	ND	2.09	1.72	ND	ND	ND
Mar-2003	0.022	0.017	NA	ND	1.79	ND	ND	ND	1.74	1.73	ND	ND	ND
Oct-2003	0.023	0.018	NA	ND	1.81	1.88	ND	ND	2.25	1.54	ND	ND	ND
Apr-2004	0.025	0.023	ND	ND	1.41	1.48	ND	ND	1.81	1.43	ND	ND	0.038
Oct-2004	0.022	0.022	ND	ND	1.07	0.963	ND	ND	1.46	1.4	ND	ND	ND
Apr-2005	0.028	0.022	ND	ND	1.23	1.05	ND	ND	1.9	1.52	ND	ND	0.04
Oct-2005	0.018	0.015	ND	ND	0.937	0.81	ND	ND	1.96	1.15	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.574	0.567	ND	ND	0.949	0.942	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-04B***												
Sep-2006	0.019	0.018	*ND*	*ND*	0.985	0.957	*ND*	*ND*	1.031	1.12	*ND*	*ND*	*ND*
Mar-2007	0.018	0.016	*ND*	*ND*	0.676	0.589	*ND*	*ND*	1.29	1.21	*ND*	*ND*	*ND*
Sep-2007	0.022	0.021	*ND*	*ND*	0.894	0.796	*ND*	*ND*	1.39	1.35	*ND*	*ND*	*ND*
Mar-2008	0.023	0.02	*ND*	*ND*	1.01	0.862	*ND*	*ND*	1.64	1.42	*ND*	*ND*	*ND*
Sep-2008	0.057	0.023	*ND*	*ND*	1.1	0.806	*ND*	*ND*	1.41	1.29	*ND*	*ND*	0.024
Mar-2009	0.027	0.024	*ND*	*ND*	0.856	0.823	*ND*	*ND*	1.51	1.47	*ND*	*ND*	0.011
Oct-2009	0.051	0.026	*ND*	*ND*	0.835	0.757	*ND*	*ND*	1.45	1.7	*ND*	*ND*	0.03
Apr-2010	0.021	0.019	*ND*	*ND*	1.18	1.33	*ND*	*ND*	1.91	1.52	*ND*	*ND*	0.022
Oct-2010	0.033	0.029	*ND*	*ND*	1.11	0.936	*ND*	*ND*	1.46	1.43	*ND*	*ND*	*ND*
Apr-2011	0.025	0.021	*ND*	*ND*	1.16	1.07	*ND*	*ND*	1.58	1.58	*ND*	*ND*	*ND*
Sep-2011	0.03	0.029	*ND*	*ND*	0.867	0.955	*ND*	*ND*	1.65	1.65	*ND*	*ND*	*ND*
Mar-2012	0.025	0.025	*ND*	*ND*	0.93	0.913	*ND*	*ND*	1.49	1.5	*ND*	*ND*	*ND*
Sep-2012	0.0364	0.0344	*ND*	*0.0035 J*	0.959	0.884	*ND*	*ND*	1.69	1.69	*ND*	*ND*	*0.007 J*
Mar-2013	0.0368	0.0358	*0.000061 J*	*0.0035 J*	0.938	0.971	*ND*	*ND*	1.82	1.86	*ND*	*ND*	0.0131
Oct-2013	0.0419	0.041	*ND*	0.0036	0.881	0.862	*ND*	*ND*	1.94	1.96	*ND*	*0.0012 J*	0.0168
Mar-2014	0.0319	0.0323	*ND*	*0.0028 J*	1.16	1.12	*ND*	*ND*	1.36	1.89	*ND*	*0.0037 J*	*0.006 J*
Oct-2014	0.0461	0.0462	*ND*	*0.004 J*	0.991	0.984	*ND*	*ND*	1.8	1.82	*ND*	*ND*	*0.0086 J*
Apr-2015	0.0426	0.0405	*ND*	*0.0036 J*	1.08	1.02	*0.0011 J*	*ND*	1.83	1.73	*0.00079 J*	*ND*	0.0117
Nov-2015	0.0465	0.0458	*ND*	*0.0033 J*	0.907	0.891	*ND*	*ND*	1.73	1.74	*0.000083 J*	*ND*	0.0107
May-2016	0.0428	0.0456	*ND*	*0.0035 J*	0.943	0.954	*ND*	*ND*	1.64	1.74	*ND*	*ND*	*ND*
Oct-2016	0.0638	0.0613	*ND*	0.0044	0.935	0.949	*ND*	*ND*	1.7	1.76	*ND*	*ND*	*0.0059 J*
May-2017	0.0649	0.0629	*ND*	*0.0035 J*	0.9	0.936	*ND*	*ND*	1.81	1.92	*ND*	*ND*	*0.0068 JB*
Oct-2017	0.0662	0.0713	*0.00012 J*	*0.0039 JB*	0.913	0.999	*ND*	*ND*	1.78	1.89	*ND*	*ND*	*0.0057 J*
May-2018	0.057	0.045	**0.0025**	0.003	*0.95 J*	*0.98 J*	*0.00057 J*	*ND*	*1.7 J*	*1.7 J*	*0.00025 J*	*ND*	0.029

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-04B***												
Nov-2018	0.036	0.036	*ND*	0.0034	*1.2 J*	*ND*	*0.00024 J*	*ND*	*2 JB*	*1.6 J*	*ND*	*ND*	0.0063
May-2019	0.049	0.032	*ND*	0.0039	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0029	0.0051
Oct-2019	0.043	0.041	*ND*	0.0034	*ND*	*ND*	*ND*	*ND*	*ND*	*1.9 J*	*ND*	*ND*	0.013 B
May-2020	0.063	0.061	0.0002 B	0.0049	*ND*	*1.1 J*	*ND*	*ND*	*2.4 J*	*2.3 J*	*ND*	0.0031	0.012
Oct-2020	0.064	0.058	*ND*	0.006	*ND*	*ND*	*ND*	*ND*	*ND*	*1.7 J*	*ND*	*0.0024 J*	*ND*
Apr-2021	0.039	0.04	*ND*	*0.0037 J*	1.1	1.1	*ND*	*ND*	1.7	1.7	*ND*	*ND*	*0.0043 J*
Oct-2021	0.083	0.08	*0.00017 J*	0.0046	0.98	0.96	*ND*	*ND*	2.5	2.5	*ND*	*ND*	0.0073
May-2022	0.094	0.093	0.00082 M1	0.0063	1.1	1.1	*ND*	*ND*	3.3	3.1	*ND*	*ND*	0.0098
Oct-2022	0.11	0.11	*ND*	0.0052	1.2	1.2	*ND*	*ND*	4.1	4.4	*ND*	*ND*	0.013
May-2023	0.1	0.089	0.00086	0.0055	1.3 B	0.99	*ND*	*ND*	3.1 B	2.8	*ND*	*ND*	0.0099
Oct-2023	0.11	0.11	0.00034	0.0056	1.1	1.1	*ND*	*ND*	2.7	2.8	*ND*	*ND*	0.0098

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04B*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.9	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04B*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-04B*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.9 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04B***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-04B***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04B***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-04B*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-04B***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05***											
Nov-1993	ND	ND	0.1	ND	2.2	ND	ND	5.24	18	ND	ND	2.86
Apr-1994	ND	ND	0.1	ND	2.4	ND	ND	5.03	18.2	ND	44	0.92
Aug-1994	7.5	7.5	ND	ND	2.2	0.3	ND	5.7	17.8	ND	ND	2.92
Sep-1994	ND	ND	ND	ND	2.5	0.2	ND	5.3	16.2	2.8	12	3.4
Nov-1994	ND	ND	ND	ND	2.2	ND	ND	5	16.5	1.9	40	3.3
Apr-1995	ND	ND	ND	43.7	2.2	ND	ND	5.3	17.2	ND	16	2.6
Apr-1997	ND	3	ND	ND	1.5	0.08	ND	NA	NA	ND	42	3.8
Oct-1997	ND	ND	0.53	ND	1.83	0.138	ND	5.56	18.62	ND	ND	7.5
Apr-1998	2	2	0.27	ND	1.91	0.15	ND	6.93	18.02	0.68	ND	3.2
Apr-1999	ND	ND	0.28	ND	2.69	ND	ND	5.43	18.79	ND	32	3.1
Oct-1999	ND	ND	0.08	ND	3.2	0.159	ND	5.38	18.07	ND	23	3.5
Apr-2000	4	4	ND	ND	1.86	ND	ND	6.76	14	ND	ND	4.2
Oct-2000	3.7	NA	ND	ND	2.43	0.8	ND	5.43	19.68	1.72	22	3.31
Apr-2001	2.8	NA	ND	ND	1.58	ND	ND	NA	NA	ND	13	3.97
Mar-2002	ND	ND	ND	ND	4.46	0.337	ND	5.5	19	1.58	33	3.8
Sep-2002	3	3	ND	ND	2.31	ND	ND	5.6	20.7	ND	33	4.36
Mar-2003	3.3	3.3	ND	ND	2.79	ND	ND	5.6	23.4	ND	20	3.23
Oct-2003	3.4	3.4	ND	11	2.24	0.122	ND	4.5	21	ND	51	4.28
Apr-2004	3.6	3.6	ND	ND	2.83	0.12	ND	5.5	19.9	ND	16	4.79
Oct-2004	3.4	3.4	ND	ND	2.83	0.1	ND	5.6	20	ND	13	6.17
Apr-2005	ND	ND	ND	ND	1.56	0.11	ND	4.6	15.7	4.59	46	1.79
Oct-2005	4.8	4.8	ND	ND	2.79	0.1	ND	5.5	15.3	ND	22	3.81
Mar-2006	4.6	4.6	ND	10	2.43	0.12	ND	4.8	17.7	ND	17	2.81
Sep-2006	4	4	ND	ND	2.29	0.11	ND	5.2	15.4	ND	20	3.49
Mar-2007	3.8	3.8	ND	ND	2.42	0.12	ND	5.2	15.8	ND	ND	2.65
Sep-2007	3.8	3.8	0.38	ND	2.16	ND	ND	5.3	18.6	ND	10	2.98
Mar-2008	5.1	5.1	ND	ND	2.57	0.1	ND	5.2	16.6	ND	20	2.7
Sep-2008	4.4	4.4	0.27	ND	2.33	0.07	ND	5.3	15.3	ND	33	3
Mar-2009	5.2	5.2	ND	ND	2.25	ND	ND	5	19	ND	20	3.31
Oct-2009	5.1	5.1	ND	ND	2.67	0.11	ND	5.4	19.5	ND	26	4.41
Apr-2010	4.2	4.2	ND	ND	2.77	0.1	ND	4.7	19.1	ND	31	3
Oct-2010	4.7	4.7	ND	ND	3.32	ND	ND	4.7	19.4	ND	10	3.77
Apr-2011	6	6	ND	ND	3.13	0.1	ND	5	17.6	ND	36	3.7
Sep-2011	5.8	5.8	0.23	ND	2.54	0.08	ND	4.8	17.2	ND	17	3.31
Mar-2012	4.7	4.7	ND	ND	2.81	0.07	ND	4.7	17.2	ND	ND	3.83
Sep-2012	4.88	4.88	ND	ND	2.76	0.1	ND	4.3	18.1	ND	ND	3.83
Mar-2013	6.4	6.4	0.061 J	ND	2.82	0.0898	ND	5.7	17.5	0.268 J	ND	3.84

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05***											
Oct-2013	6.68	6.68	ND	ND	2.72	0.0764	ND	5.4	17.8	ND	ND	3.63
Mar-2014	5.76	5.76	ND	6 J	3.21	0.068	ND	5.6	18.8	ND	30	4.53
Oct-2014	2.2	2.2	ND	13	3.74	0.102	ND	5.1	22.7	ND	ND	4.45
Apr-2015	9.8	9.8	ND	ND	3.83	0.0738	ND	4.2	24.9	ND	ND	4.39
Nov-2015	4.64	4.64	ND	ND	3.84	0.0896	ND	5.9	35.9	ND	18 J	4.41
May-2016	4.48	4.48	ND	10	3.73	0.0895	ND	5.7	31	ND	16 J	4.3
Oct-2016	3.88	3.88	ND	ND	3.33	NA	NA	5.6	31.6	0.593 J	23 J	4
May-2017	5.32	5.32	ND	ND	3.7	0.103	ND	5.8	43.5	ND	12 J	4.4
Oct-2017	10.1	10.1	ND	ND	3.83	0.0896	ND	5.9	48.9	ND	34	5
May-2018	16	16	ND	5.7 J	4.8	0.093 J	ND	5.9	50.2	ND	ND	6.4
Nov-2018	24 ML	24	ND	ND	6.8	ND	0.0079 J	6.46	105.2	ND	36	14.7
May-2019	36	NA	ND	ND	10.2	ND	0.012	6.36	99.3	ND	77	15.6
Oct-2019	2.5 JH1	NA	ND	ND	7.3	0.11	0.0071 J	6.27	85	ND	56	9.1
May-2020	22	NA	ND	ND	7.5	ND	ND	5.69	91.9	ND	33	12.3
Oct-2020	24	NA	ND	7 J	6.7	0.048 J	ND	5.76	86.8	ND	47	11.3
Apr-2021	20	NA	ND	ND	6.2	0.074 J	ND	6.38	105.1	ND	ND	10
Oct-2021	36	NA	ND	6.1 J	7.2	ND	ND	6.59	156.7	ND	30	14
May-2022	26	NA	ND	ND	7.7	ND	ND	6.88	208.8	ND	42 H1	13.4 N3
Oct-2022	38	NA	ND	8.4 J	10.1	ND	0.0067 J	6.52	149.1	ND	97	12.5 N3
May-2023	52	NA	ND	ND	7.5	ND	ND	6.58	143.2	ND	49	11.5 N3
Oct-2023	34 ML	NA	ND	ND	11.2	ND	NA	6.6	136.9	ND	59	13 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-05*													
Nov-1993	NA	ND	ND	NA	ND	0.6	NA	ND	NA	ND	14.6	9.6	ND	0.33	NA
Apr-1994	NA	ND	ND	NA	ND	0.31	NA	ND	NA	ND	1.5	0.16	ND	1.1	NA
Aug-1994	NA	ND	ND	NA	ND	0.74	NA	ND	NA	ND	10.2	0.73	**0.016**	0.26	NA
Sep-1994	NA	ND	ND	NA	ND	0.85	NA	ND	NA	ND	0.84	0.17	ND	0.3	NA
Nov-1994	NA	ND	ND	NA	ND	0.75	NA	ND	NA	0.02	2.7	0.18	0.009	0.35	NA
Apr-1995	ND	ND	0.9	ND	ND	0.53	NA	ND	ND	ND	2.8	0.2	0.005	0.32	NA
Oct-1996	ND	ND	0.019	ND	ND	0.73	0.72	ND	ND	ND	14	1.5	ND	ND	ND
Apr-1997	ND	ND	0.01	ND	ND	0.83	0.8	ND	ND	ND	2.6	0.22	0.005	ND	ND
Oct-1997	ND	ND	0.01	ND	0.004	0.642	1.5	ND	ND	ND	6.76	2.38	ND	0.293	0.456
Apr-1998	ND	ND	ND	ND	ND	0.798	0.794	ND	ND	ND	27.9	0.544	ND	0.291	0.287
Apr-1999	ND	ND	0.01	ND	ND	0.762	0.728	ND	ND	ND	46.2	0.622	ND	0.296	0.278
Oct-1999	ND	ND	0.011	ND	ND	1.06	0.711	ND	ND	ND	29	0.62	ND	0.338	0.262
Apr-2000	ND	ND	0.012	ND	ND	1.07	0.658	ND	ND	ND	37.3	0.475	ND	0.368	0.271
Oct-2000	ND	ND	ND	ND	ND	0.793	0.747	ND	ND	ND	41.1	0.618	ND	0.322	0.3
Apr-2001	ND	ND	0.011	ND	ND	1.02	NA	ND	ND	ND	28.1	NA	0.006	0.346	NA
Mar-2002	ND	ND	ND	ND	ND	0.973	0.79	0.014	ND	0.039	50.1	0.789	0.011	0.333	0.317
Sep-2002	ND	ND	0.011	ND	ND	1.16	0.722	ND	ND	0.022	31.9	0.816	0.007	0.356	0.309
Mar-2003	ND	ND	ND	ND	ND	0.767	0.723	ND	ND	0.017	5.11	0.967	0.01	0.321	0.297
Oct-2003	ND	ND	0.01	ND	ND	1.11	0.757	ND	ND	ND	22.3	0.901	0.007	0.367	0.317
Apr-2004	ND	ND	0.013	ND	ND	1.21	0.761	ND	ND	0.012	31.7	0.889	0.006	0.43	0.326
Oct-2004	ND	ND	0.01	ND	ND	1.76	0.797	ND	ND	ND	24.2	0.924	0.006	0.431	0.338

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05***													
Apr-2005	ND	ND	ND	ND	ND	0.454	0.491	ND	ND	ND	ND	ND	ND	0.16	0.174
Oct-2005	ND	ND	0.01	ND	ND	1.03	0.719	ND	ND	0.022	45.5	0.602	0.009	0.312	0.292
Mar-2006	ND	ND	ND	ND	ND	0.695	0.504	ND	ND	0.01	105	0.819	0.011	0.26	0.208
Sep-2006	ND	ND	0.01	ND	ND	0.908	0.612	ND	ND	0.013	68.8	0.899	0.011	0.296	0.266
Mar-2007	ND	ND	0.012	ND	ND	0.642	0.554	ND	ND	ND	34.1	0.622	0.009	0.256	0.226
Sep-2007	ND	ND	ND	ND	ND	0.739	0.64	ND	ND	ND	21.1	0.7	0.006	0.275	0.236
Mar-2008	ND	ND	ND	ND	ND	0.631	0.631	ND	ND	ND	11.5	0.735	0.004	0.271	0.275
Sep-2008	ND	ND	0.007	ND	ND	0.699	0.509	ND	ND	ND	22.4	0.601	0.004	0.314	0.278
Mar-2009	ND	ND	0.011	ND	ND	0.787	0.697	ND	ND	ND	81.6	0.914	0.012	0.326	0.288
Oct-2009	ND	ND	ND	ND	ND	1.15	0.839	ND	ND	ND	26.3	2.54	0.003	0.374	0.344
Apr-2010	ND	ND	ND	ND	ND	0.671	0.584	ND	ND	ND	34.9	0.762	0.004	0.304	0.292
Oct-2010	ND	ND	ND	ND	ND	0.859	0.811	ND	ND	ND	51.6	1.05	0.008	0.396	0.374
Apr-2011	ND	ND	ND	ND	ND	0.889	0.803	ND	ND	ND	13.9	1.2	0.005	0.36	0.334
Sep-2011	ND	ND	ND	ND	ND	0.82	0.82	ND	ND	ND	15.2	1.72	0.005	0.306	0.327
Mar-2012	ND	ND	ND	ND	ND	0.829	0.824	ND	ND	ND	11.4	1.36	0.005	0.428	0.415
Sep-2012	ND	ND	0.0083 J	ND	ND	0.971	0.958	ND	0.000838 J	0.0011 J	2.43	1.42	0.0036	0.341	0.311
Mar-2013	ND	ND	0.0087 J	ND	ND	1	0.961	0.0018 J	0.000789 J	0.002 J	6.24	1.95	0.003	0.326	0.283
Oct-2013	ND	ND	0.0091	ND	ND	0.904	0.885	0.0011 J	0.000728 J	0.000891 J	1.58	1.48	0.0044	0.334	0.333
Mar-2014	ND	ND	0.0081 J	ND	ND	1.33	1.31	0.0064 J	0.000768 J	0.0011 J	5.65	1.83	0.0047	0.294	0.372
Oct-2014	0.000461 J	ND	0.0104	ND	ND	1.12	1.13	0.000704 J	0.000804 J	0.000686 J	4.25	2.54	0.0029	0.401	0.406
Apr-2015	0.0011 J	ND	0.0113	ND	ND	1.06	1.13	0.0014 J	0.000967 J	0.0018 J	11.2	2.16	0.0044	0.425	0.442
Nov-2015	ND	ND	0.0109	ND	ND	1.05	1.02	0.000637 J	0.000944 J	ND	2.53	1.76	0.002	0.432	0.425
May-2016	ND	ND	0.0108	ND	ND	1.02	1.1	0.00084 J	0.00086 J	0.00054 J	2.93	2.42	0.0022	0.43	0.442
Oct-2016	ND	ND	0.0118	ND	ND	0.922	0.91	0.0014 J	0.00088 J	0.0012 J	5.81	2.24	0.0028	0.407	0.409

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05***													
May-2017	*ND*	*ND*	0.011	*ND*	*ND*	1.1	1.13	*0.002 J*	*0.00093 J*	*ND*	2.76	2.59	*0.0018 J*	0.398	0.427
Oct-2017	*ND*	*ND*	0.0123	*ND*	*ND*	1.26	1.22	*ND*	*0.00087 J*	*ND*	4.82	4.01	*0.0014 J*	0.452	0.44
May-2018	*ND*	*ND*	0.015	*0.000077 J*	*0.000046 J*	1.6	1.5	*0.0025 J*	0.0011	0.0056	7.7	5.3	0.0012	*0.55 J*	*0.52 J*
Nov-2018	*ND*	*ND*	0.025	*0.00015 J*	*ND*	4.4	4.2	*0.0059 J*	0.00098	0.0026	49.7 M1	22.3 M1	*0.0009 J*	*0.92 J*	*0.92 J*
May-2019	*ND*	*ND*	0.027	*ND*	*ND*	4.6	4.6	*ND*	0.0013	0.0028	34.5 M1	25.8 M1	*ND*	1	1
Oct-2019	*0.000056 J*	*ND*	0.021	*0.000073 J*	*0.00018 J*	2.4	2.5	*0.0042 J*	0.0014	*0.0014 J*	23	13.5	*0.00086 J*	0.73	*0.7 J*
May-2020	*ND*	*ND*	0.024	*ND*	*ND*	3.6	3.6	**0.01 D6**	*0.0015 J*	0.012	29 ML	19.7	*ND*	0.82	0.85
Oct-2020	*0.00048 J*	*ND*	0.021	*ND*	*ND*	3.2	3.3	*0.011 J*	*0.0013 J*	*ND*	19.3	18.2	*ND*	0.79	*0.81 J*
Apr-2021	*ND*	*ND*	0.018	*ND*	*ND*	2.7	2.8	*0.0013 J*	*0.00054 J*	*ND*	18.7	17.9	*ND*	0.78	0.76
Oct-2021	*0.00006 JB*	*ND*	0.023	*ND*	*ND*	3.8	3.6	*0.0015 J*	*0.00088 J*	*0.00045 J*	27.4	25.2	*0.00015 J*	1.1	1
May-2022	*ND*	*ND*	0.028 M1	*ND*	*ND*	3.5	3.4	*0.0022 JR1M1*	*0.0011 JR1M1*	*0.00066 JR1M1*	29.4 M1	27.3 M1	*ND*	1.1	1.1
Oct-2022	*ND*	*ND*	0.026	*ND*	*ND*	3.3	3.7	*0.0017 J*	*0.00084 J*	*ND*	26.6	27.7	*ND*	1	1.1
May-2023	*ND*	*ND*	0.023	*ND*	*ND*	3.3	3.3	0.0031	*0.00082 J*	*0.00074 J*	27.9	27.2	*ND*	1	1
Oct-2023	*ND*	*ND*	0.026	*ND*	*ND*	3.4	3.5	*0.0031 J*	*ND*	*ND*	30	29.7	*ND*	1.1	1.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-05*												
Nov-1993	0.06	NA	ND	NA	0.37	NA	ND	NA	1.2	NA	NA	NA	ND
Apr-1994	0.18	NA	ND	NA	ND	NA	ND	NA	1.6	NA	NA	NA	ND
Aug-1994	0.02	NA	ND	NA	0.48	NA	ND	NA	0.88	NA	NA	NA	ND
Sep-1994	0.01	NA	ND	NA	0.38	NA	ND	NA	1.1	NA	NA	NA	0.03
Nov-1994	0.03	NA	ND	NA	0.53	NA	ND	NA	1.1	NA	NA	NA	0.01
Apr-1995	ND	NA	ND	ND	0.53	NA	ND	0.01	0.96	NA	ND	ND	0.02
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	1.2	1.3	ND	ND	0.026
Apr-1997	0.011	0.01	ND	ND	ND	ND	ND	ND	1.6	1.4	ND	ND	0.024
Oct-1997	0.026	0.03	0.0005	ND	ND	ND	ND	ND	1.35	1.35	ND	ND	0.016
Apr-1998	0.015	0.016	ND	ND	ND	ND	ND	ND	1.11	1.11	ND	ND	ND
Apr-1999	0.01	0.017	NA	ND	ND	ND	ND	ND	1.09	1.02	ND	ND	ND
Oct-1999	0.014	0.016	NA	ND	0.879	0.631	ND	ND	1.38	0.952	ND	ND	ND
Apr-2000	0.019	0.014	NA	ND	ND	ND	ND	ND	3.38	1.03	ND	ND	0.018
Oct-2000	ND	0.018	NA	ND	0.455	0.217	ND	ND	1.06	1.06	ND	ND	ND
Apr-2001	0.015	NA	NA	ND	1.16	NA	ND	ND	2.31	NA	ND	ND	ND
Mar-2002	0.015	0.018	NA	0.012	0.651	0.751	ND	ND	1.78	1.17	ND	ND	0.016
Sep-2002	0.016	0.019	NA	ND	1.43	ND	ND	ND	1.7	1.12	ND	ND	ND
Mar-2003	0.02	0.018	NA	ND	0.792	ND	ND	ND	1.18	1.16	ND	ND	ND
Oct-2003	0.014	0.018	NA	ND	0.663	0.638	ND	ND	1.52	1.16	ND	ND	ND
Apr-2004	0.015	0.019	ND	ND	0.753	ND	ND	ND	1.74	1.24	ND	ND	0.044
Oct-2004	0.02	0.018	ND	ND	1.15	ND	ND	ND	1.83	0.991	ND	ND	0.055
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	0.949	0.955	ND	ND	0.019

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05***												
Oct-2005	0.02	0.013	ND	ND	ND	ND	ND	ND	1.76	1.08	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	0.973	0.827	ND	ND	ND
Sep-2006	0.021	0.016	ND	ND	0.508	ND	ND	ND	1.14	0.883	ND	ND	ND
Mar-2007	0.019	0.012	ND	ND	ND	ND	ND	ND	0.981	0.81	ND	ND	ND
Sep-2007	0.023	0.015	ND	ND	ND	ND	ND	ND	0.967	0.953	ND	ND	ND
Mar-2008	0.017	0.014	ND	ND	ND	ND	ND	ND	0.963	0.976	ND	ND	ND
Sep-2008	0.017	0.013	ND	ND	ND	ND	ND	ND	0.964	0.899	ND	ND	0.016
Mar-2009	0.026	0.015	ND	ND	ND	ND	ND	ND	1.14	1.08	ND	ND	0.016
Oct-2009	0.04	0.036	ND	ND	ND	ND	ND	ND	1.24	1.17	ND	ND	0.027
Apr-2010	0.023	0.013	ND	ND	ND	ND	ND	ND	1.24	1.22	ND	ND	ND
Oct-2010	0.03	0.018	ND	ND	ND	ND	ND	ND	1.27	1.22	ND	ND	ND
Apr-2011	0.025	0.02	ND	ND	ND	ND	ND	ND	1.32	1.37	ND	ND	0.01
Sep-2011	0.03	0.027	ND	ND	ND	ND	ND	ND	1.27	1.28	ND	ND	ND
Mar-2012	0.024	0.022	ND	ND	ND	ND	ND	ND	1.29	1.26	ND	ND	0.011
Sep-2012	0.0343	0.0323	ND	0.0016 J	0.458 J	0.551	ND	ND	1.21	1.14	ND	ND	0.0043 J
Mar-2013	0.0306	0.0327	0.000055 J	0.0015 J	0.505	0.459 J	ND	ND	1.25	1.12	ND	ND	0.0624
Oct-2013	0.0274	0.0285	ND	0.0019 J	0.427	0.427	ND	ND	1.19	1.22	ND	0.0011 J	0.0121
Mar-2014	0.0224	0.0243	ND	0.0015 J	0.529	0.515	ND	ND	1.01	1.32	ND	0.0026 J	0.0041 J
Oct-2014	0.0369	0.0387	ND	0.0016 J	0.518	0.53	0.001 J	ND	1.53	1.56	ND	ND	0.0053 J
Apr-2015	0.0303	0.0323	ND	0.0019 J	0.506	0.542	ND	ND	1.57	1.66	ND	ND	0.0069 J
Nov-2015	0.0303	0.0265	ND	0.0015 J	0.508	0.487 J	ND	ND	1.75	1.74	0.000064 J	ND	0.0027 J
May-2016	0.0294	0.0324	ND	0.0016 J	0.528	0.512	ND	ND	1.58	1.6	ND	ND	0.0078 J
Oct-2016	0.0278	0.0271	ND	0.0024 J	0.5	0.489	ND	ND	1.48	1.52	ND	ND	ND
May-2017	0.0298	0.0294	ND	0.0021 J	0.495	0.495	ND	ND	1.45	1.55	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05***												
Oct-2017	0.0416	0.0396	*ND*	*0.0013 J*	0.516	0.538	*ND*	*ND*	1.63	1.65	*ND*	*ND*	*ND*
May-2018	0.049	0.04	*ND*	0.0022	*ND*	*ND*	*ND*	*ND*	*1.9 J*	*1.8 J*	*0.000077 J*	*ND*	*0.0047 J*
Nov-2018	0.18	0.17	*ND*	0.0049	*ND*	*1 J*	*ND*	*ND*	*2.8 J*	*2.7 J*	*ND*	*ND*	0.0065
May-2019	0.17	0.16	*ND*	0.0032	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0075
Oct-2019	0.085	0.085	*ND*	0.003	*ND*	*ND*	*ND*	*ND*	*2.8 J*	*2.8 J*	*ND*	0.0056	0.015
May-2020	0.11	0.11	*ND*	*0.009 J*	1	0.89	*ND*	*ND*	3	3.1	*ND*	*ND*	*ND*
Oct-2020	0.14	0.12	*ND*	0.0037	*ND*	*ND*	*0.0017 J*	*ND*	*2.4 J*	*2.2 J*	*ND*	*0.0031 J*	*ND*
Apr-2021	0.12	0.12	*0.00005 J*	*0.0021 J*	0.72	0.75	*ND*	*ND*	2.5	2.5	*ND*	*ND*	*ND*
Oct-2021	0.16	0.16	*ND*	*0.0023 J*	0.94	0.92	*ND*	*ND*	3.4	3.3	*ND*	*ND*	*ND*
May-2022	0.17	0.16	0.00033 M1	0.0036 M1	0.99	0.93	*ND*	*ND*	3.5	3.4	*ND*	*ND*	*ND*
Oct-2022	0.16	0.17	*ND*	*0.0023 J*	0.8	0.95	*ND*	*ND*	3.5	3.9	*ND*	*ND*	*0.005 J*
May-2023	0.18	0.18	*ND*	0.003	0.87	0.86	*ND*	*ND*	3.6	3.5	*ND*	*ND*	0.0064
Oct-2023	0.18	0.19	*ND*	*0.0032 J*	0.82	0.83	*ND*	*ND*	3.5	3.6	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.8	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4 J	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05*																
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6 J	ND
Nov-2018	ND	ND	ND	ND	1.4 L2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2 JBIH	ND
May-2019	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.58	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2023	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-05*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05***															
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.46 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.39 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.51 J*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05***															
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.5 J	0.6 J
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.5 J	0.5 J
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.5 J	0.7 J
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.6 J	0.9 J
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	1.9
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	3.1 CLN3
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	4.9 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	2.3
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	2.3
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	2.5	2.5
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.113 J	ND	0.544 J	ND	ND	ND	1.25 J	4.18 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	4	4.1
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	3.4	3.7
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	2.8	3.1
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	1.6	2.4
Oct-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	2.1	3.1

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	1.2	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05***															
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.5 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.483 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05A***											
Nov-1993	6	6	ND	ND	2.5	ND	ND	5.43	18.1	ND	26	1.98
Apr-1994	ND	ND	0.1	ND	2.4	ND	ND	5	19.3	ND	48	0.75
Apr-1995	5	5	0.2	ND	2.9	ND	ND	5.4	21.8	2.3	ND	2.4
Apr-1997	ND	2	ND	ND	3	0.09	ND	NA	NA	ND	ND	7.8
Oct-1997	4	4	0.28	ND	ND	ND	ND	5.93	19.8	ND	ND	5
Apr-1998	ND	ND	ND	ND	2.24	ND	ND	6	62.1	ND	ND	3.1
Apr-1999	ND	ND	0.19	ND	4.41	ND	ND	5.32	19.8	ND	23	2.9
Oct-1999	20	20	0.08	ND	3.24	ND	ND	5.16	19.5	ND	18	3.1
Apr-2000	1	1	ND	ND	3.12	ND	ND	5.61	17	ND	19	3
Oct-2000	2.7	NA	ND	ND	5.19	ND	ND	5.26	21.8	5.48	25	3.12
Apr-2001	1.9	NA	ND	ND	3.51	0.498	ND	NA	NA	ND	ND	3.23
Sep-2001	1.9	1.9	ND	ND	4.28	ND	ND	5.49	25	ND	27	3.27
Mar-2002	ND	ND	ND	ND	3.28	ND	ND	5.5	22	ND	36	2.99
Sep-2002	3	3	ND	ND	2.96	ND	ND	5.5	24.5	ND	38	4.99
Mar-2003	4.2	4.2	ND	ND	3.59	ND	ND	5.3	25.1	ND	25	3.06
Oct-2003	3.6	3.6	ND	ND	3.23	0.093	ND	4.8	28.5	ND	62	10.3
Apr-2004	3.8	3.8	ND	ND	3.46	0.07	ND	5.5	23.5	ND	20	4.72
Oct-2004	3.6	3.6	ND	ND	36	0.74	ND	5.2	22.8	4.56	36	3.8
Apr-2005	3.6	3.6	ND	ND	3.27	0.08	ND	5.3	22.4	ND	62	4.39
Oct-2005	3.7	3.7	ND	ND	3.95	0.09	ND	5.3	18	ND	33	4.04
Mar-2006	4.7	4.7	ND	ND	3.83	0.11	ND	4.6	24.2	ND	36	3.64
Sep-2006	4.4	4.4	ND	ND	3.88	0.1	ND	5.2	24.1	ND	31	3.44
Mar-2007	4.7	4.7	0.38	ND	4.05	0.14	ND	5.4	25.5	ND	27	3.21
Sep-2007	3.4	3.4	0.35	ND	3.86	0.16	ND	5.3	26.6	ND	94	3.53
Mar-2008	4	4	ND	ND	4.03	0.15	ND	5.7	28.1	ND	18	3.4
Sep-2008	4	4	ND	14	4.22	0.1	ND	5.3	27.1	ND	23	3.7
Mar-2009	13	13	ND	ND	4.14	0.11	ND	4.5	26.6	ND	31	3.51
Oct-2009	3.9	3.9	ND	ND	4.08	0.13	ND	4.7	24	ND	44	4.3
Apr-2010	4.5	4.5	ND	ND	3.61	0.13	ND	5.2	25.8	ND	25	3
Oct-2010	3.2	3.2	ND	ND	4.2	0.09	ND	4.5	25.6	ND	ND	3.45
Apr-2011	4.4	4.4	ND	ND	3.88	0.11	ND	4.7	25.6	ND	30	3.65
Sep-2011	4.8	4.8	ND	ND	4.25	0.1	ND	5.5	20.1	ND	25	3.67
Mar-2012	3.8	3.8	ND	ND	4.14	0.12	ND	4.5	22.3	ND	ND	3.77
Sep-2012	3.32	3.32	ND	ND	4.24	0.142	ND	4.2	23.3	ND	27	3.74
Mar-2013	4.68	4.68	0.096 J	ND	4.58	0.127	ND	5.3	26	0.562 J	25	4.07
Oct-2013	5.12	5.12	ND	ND	4.66	0.119	ND	5.8	28.8	0.581 J	ND	4.29
Mar-2014	4.88	4.88	ND	ND	4.77	0.103	ND	5.3	26.6	0.869 J	ND	5.22

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05A***											
Oct-2014	ND	ND	ND	10	4.92	0.148	ND	4.6	27.3	ND	ND	5.18
Apr-2015	4.84	4.84	ND	ND	5.04	0.171	ND	4.2	27.2	0.515 J	ND	5.43
Nov-2015	3.48	3.48	ND	ND	5.05	0.236	ND	5.4	53.6	ND	12 J	5.52
May-2016	4.44	4.44	ND	ND	4.92	0.263	ND	5.6	36.6	ND	27	5.1
Oct-2016	2.8	2.8	ND	ND	5.3	NA	NA	5.2	43	1.42	31	5.5
May-2017	2.64	2.64	ND	7 J	5.1	0.314	ND	5.3	50.2	1.08	22 J	6.2
Oct-2017	5.76	5.76	ND	ND	5.13	0.354	ND	5.6	53.7	0.753 J	34	5.8
May-2018	22	22	ND	ND	4.3	0.32	0.0063 J	6.1	61.4	ND	10	6.1
Nov-2018	22	22	ND	5.7 J	5.4	ND	0.013	6.58	149.6	ND	32	6.3
May-2019	14	NA	ND	ND	4.9	ND	0.033	6.69	98.8	ND	45	7.8
Oct-2019	2.5 JH1	NA	ND	10.4 JMH	4.6	0.079 J	0.016	6.19	153.5	ND	65	7.1
May-2020	6 J	NA	ND	9.1 J	4.9	ND	0.0071 J	5.83	157.7	ND	18	6.2
Oct-2020	8 J	NA	ND	9.3 J	5	ND	0.014	5.8	142.4	ND	44	7.5
Apr-2021	14	NA	ND	8.3 J	5.7	0.077 J	ND	7.02	187.8	ND	ND	7.35
Oct-2021	24	NA	ND	10.5 J	5.5	ND	ND	6.92	212.5	ND	ND	7.95
May-2022	14	NA	ND	7.9 J	4.8	ND	0.017	6.47	153.3	ND	14 H1	7.7 N3
Oct-2022	20	NA	ND	15.2 J	9.3	ND	0.024	6.59	181.9	ND	39	6.9 N3
May-2023	32	NA	ND	20.5 J	4.7	0.055 J	0.013	6.62	169.3	ND	56	8.9 N3
Oct-2023	24	NA	ND	9 J	5.6	ND	NA	6.73	205.5	ND	48	7.6 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05A***													
Nov-1993	NA	ND	ND	NA	ND	0.38	NA	ND	NA	ND	1.5	1	ND	0.25	NA
Apr-1994	NA	ND	ND	NA	ND	0.24	NA	ND	NA	ND	1.7	0.84	ND	4.3	NA
Apr-1995	ND	ND	0.6	ND	ND	0.5	NA	ND	ND	ND	3	1.3	ND	0.29	NA
Oct-1996	ND	ND	0.021	ND	ND	0.73	0.93	ND	ND	ND	8.2	3.7	ND	ND	ND
Apr-1997	ND	ND	0.016	ND	ND	1.6	0.84	ND	ND	ND	2.4	2.1	0.002	ND	ND
Oct-1997	ND	ND	0.011	ND	0.004	1.01	0.743	ND	ND	ND	19.9	0.371	ND	0.343	0.257
Apr-1998	ND	ND	0.012	ND	ND	0.696	0.751	ND	ND	ND	4.85	1.28	ND	0.331	0.306
Apr-1999	ND	ND	0.011	ND	ND	0.629	0.615	ND	ND	ND	1.93	0.436	ND	0.328	0.303
Oct-1999	ND	ND	0.011	ND	ND	0.666	0.601	ND	ND	ND	2.21	0.506	ND	0.338	0.295
Apr-2000	ND	ND	ND	ND	ND	0.657	0.647	ND	ND	ND	1.49	0.663	ND	0.332	0.311
Oct-2000	ND	ND	ND	ND	ND	0.678	0.653	ND	ND	ND	2.22	0.79	ND	0.347	0.329
Apr-2001	ND	ND	ND	ND	ND	0.698	NA	ND	ND	ND	1.15	NA	ND	0.361	NA
Sep-2001	ND	ND	ND	ND	ND	0.714	0.654	ND	ND	ND	5.08	1.46	ND	0.361	0.326
Mar-2002	ND	ND	0.012	ND	ND	0.638	0.684	ND	ND	ND	2.39	0.628	ND	0.338	0.343
Sep-2002	ND	ND	0.011	ND	ND	1.36	0.63	ND	ND	ND	11.3	1.35	ND	0.385	0.32
Mar-2003	ND	ND	ND	ND	ND	0.681	0.641	ND	ND	ND	1.36	0.966	ND	0.33	0.315
Oct-2003	ND	ND	0.013	ND	ND	1.06	0.668	ND	ND	ND	4.65	1.01	ND	0.419	0.357
Apr-2004	ND	ND	0.012	ND	ND	1.13	0.736	ND	ND	ND	2.63	0.712	ND	0.46	0.379
Oct-2004	ND	ND	0.013	ND	ND	0.788	0.708	ND	ND	ND	4.33	1.61	ND	0.443	0.398
Apr-2005	ND	ND	0.016	ND	ND	1.03	0.57	ND	ND	ND	4.97	0.373	0.003	0.444	0.294
Oct-2005	ND	ND	0.011	ND	ND	0.93	0.718	ND	ND	ND	1.82	0.515	ND	0.418	0.384

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05A***													
Mar-2006	ND	ND	ND	ND	ND	0.917	0.544	ND	ND	ND	1.9	0.34	ND	0.329	0.324
Sep-2006	ND	ND	0.011	ND	ND	0.723	0.741	ND	ND	ND	1.26	1.45	ND	0.395	0.402
Mar-2007	ND	ND	0.015	ND	ND	0.701	0.684	ND	ND	ND	1.11	0.338	ND	0.355	0.34
Sep-2007	ND	ND	0.011	ND	ND	0.741	0.72	ND	ND	ND	1.46	0.548	ND	0.408	0.408
Mar-2008	ND	ND	0.011	ND	ND	0.708	0.728	ND	ND	ND	1.27	1.51	ND	0.396	0.395
Sep-2008	ND	ND	0.012	ND	ND	0.721	0.585	ND	ND	ND	2.18	1.19	ND	0.453	0.416
Mar-2009	ND	ND	0.01	ND	ND	0.815	0.87	ND	ND	ND	6.91	6.48	ND	0.356	0.394
Oct-2009	ND	ND	0.011	ND	ND	0.974	0.648	ND	ND	ND	3.48	0.517	ND	0.455	0.416
Apr-2010	ND	ND	0.011	ND	ND	0.614	0.578	ND	ND	ND	3.23	0.768	ND	0.353	0.342
Oct-2010	ND	ND	0.011	ND	ND	0.698	0.698	ND	ND	ND	2.54	0.739	ND	0.416	0.431
Apr-2011	ND	ND	0.013	ND	ND	0.776	0.685	ND	ND	ND	8.66	1.94	ND	0.416	0.367
Sep-2011	ND	ND	0.013	ND	ND	0.788	0.792	ND	ND	ND	4.34	0.979	0.002	0.412	0.424
Mar-2012	ND	ND	0.012	ND	ND	0.703	0.695	ND	ND	ND	1.65	0.712	ND	0.488	0.488
Sep-2012	ND	ND	0.0124	0.000105 J	ND	0.779	0.703	0.0016 J	0.0013 J	0.0021 J	1.67	0.756	0.000612 J	0.436	0.425
Mar-2013	ND	ND	0.0131	0.000106 J	ND	0.889	0.969	0.0062 J	0.0017 J	0.0035 J	1.29	0.617	ND	0.449	0.457
Oct-2013	ND	ND	0.0156	ND	ND	0.864	0.886	0.0018 J	0.0015 J	0.0019 J	1.54	1.24	0.000467 J	0.517	0.554
Mar-2014	ND	ND	0.0151	ND	ND	1.33	1.37	0.0072 J	0.0016 J	0.0018 J	2.12	1.18	0.000372 J	0.46	0.587
Oct-2014	0.000634 J	ND	0.0181	ND	ND	1.07	1.03	0.000965 J	0.0019 J	0.0021 J	1.76	0.824	ND	0.609	0.588
Apr-2015	0.0011 J	ND	0.0192	ND	0.000076 J	1.08	1.02	0.0011 J	0.002 J	0.0022 J	3.18	0.994	ND	0.663	0.616
Nov-2015	ND	ND	0.019	0.000121 J	ND	1.09	1.06	0.000455 J	0.002 J	0.0019 J	1.73	0.715	0.000719 J	0.681	0.671
May-2016	ND	ND	0.0191	0.00012 J	ND	0.929	1.05	ND	0.002	0.0019 J	1.71	1.02	0.00031 J	0.674	0.669
Oct-2016	ND	ND	0.02	0.00012 J	ND	1.1	0.969	ND	0.0022	0.0017 J	1.13	0.861	0.00032 J	0.657	0.708
May-2017	ND	ND	0.0212	0.00012 J	ND	1.28	1.1	0.0017 J	0.0022	0.0017 J	1.07	0.809	0.00026 J	0.721	0.69
Oct-2017	ND	ND	0.02	0.00012 J	ND	1.1	1.03	ND	0.0018	0.0017 J	2.31	1.8	0.00024 J	0.743	0.721

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05A***													
May-2018	*0.000044 J*	*ND*	0.018	*0.00011 J*	*0.000033 J*	1.3	1.3	*0.0028 J*	0.0016	0.0065	16.5	8.8	*0.00034 J*	*0.69 J*	*0.67 J*
Nov-2018	*ND*	*0.00028 J*	0.014	*0.00002 J*	*0.00018 J*	1.4	1.4	*0.0026 J*	*0.0004 J*	*0.0016 J*	41.1	41.8 M1	*0.000085 J*	*0.67 J*	*0.67 J*
May-2019	*ND*	*ND*	0.015	*ND*	*ND*	1.8	1.9	*ND*	*ND*	**0.0033 D6**	31.7	32.1	*ND*	*ND*	*ND*
Oct-2019	*0.000052 J*	*ND*	0.016	*ND*	*0.00015 J*	1.6	1.6	*0.0027 J*	*0.00036 J*	*ND*	42.9	40.6	*0.000057 J*	0.73	*0.67 J*
May-2020	*ND*	*ND*	0.018	*ND*	*0.00035 J*	1.4	1.5	*ND*	*ND*	*0.0024 J*	53.6	43.7	*ND*	0.68	0.76
Oct-2020	*0.00046 J*	*ND*	0.018	*ND*	*ND*	1.8	1.7	*0.0087 J*	*0.0007 J*	*ND*	50.6	45.8	*ND*	0.72	*0.71 J*
Apr-2021	*ND*	*ND*	0.018	*0.00018 J*	*ND*	1.7	1.7	*ND*	*ND*	*ND*	47.6	45.9	*ND*	0.78	0.76
Oct-2021	*0.000063 JB*	*ND*	0.018	*ND*	*ND*	1.8	1.8	*ND*	*0.00056 J*	*0.00052 J*	53.4	48.4	*ND*	0.82	0.8
May-2022	*ND*	*ND*	0.018	*ND*	*ND*	1.7	1.8	*ND*	*0.00065 J*	*ND*	56.8	55.1	*ND*	0.81	0.81
Oct-2022	*ND*	*ND*	0.016	*ND*	*ND*	1.6	1.6	*0.00066 J*	*ND*	*ND*	47	44.9	*ND*	0.71	0.73
May-2023	*ND*	*0.00081 J*	0.021	*ND*	*ND*	2	2	*0.00092 J*	*0.00095 J*	*0.0009 J*	67.3	60.7	*ND*	0.92	0.9
Oct-2023	*ND*	*ND*	0.018	*ND*	*ND*	1.7	1.7	*0.0023 J*	*ND*	*ND*	51.5	57.5	*ND*	0.84	0.82

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-05A*												
Nov-1993	0.05	NA	ND	NA	0.34	NA	ND	NA	1.2	NA	NA	NA	ND
Apr-1994	0.36	NA	ND	NA	0.7	NA	ND	NA	1.9	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.65	NA	ND	ND	1.1	NA	ND	ND	0.03
Oct-1996	0.031	0.026	NA	ND	ND	ND	ND	ND	1.8	1.7	ND	ND	0.021
Apr-1997	0.034	0.023	ND	ND	2	2.1	ND	ND	1.9	1.7	ND	ND	0.075
Oct-1997	0.014	0.016	ND	0.012	ND	1.14	ND	ND	1.23	1.1	ND	ND	0.032
Apr-1998	0.023	0.023	ND	ND	0.927	ND	ND	ND	1.45	1.46	ND	ND	ND
Apr-1999	0.014	0.012	NA	ND	0.575	0.847	ND	ND	1.48	1.39	ND	ND	ND
Oct-1999	0.014	0.011	NA	ND	ND	0.601	ND	ND	1.46	1.29	ND	ND	ND
Apr-2000	0.015	0.014	NA	ND	ND	ND	ND	ND	1.58	1.53	ND	ND	ND
Oct-2000	0.016	0.016	NA	ND	0.409	0.71	ND	ND	1.56	1.55	ND	ND	0.01
Apr-2001	0.015	NA	NA	ND	1.4	NA	ND	ND	1.69	NA	ND	ND	ND
Sep-2001	0.043	0.028	NA	ND	0.682	0.896	ND	ND	1.65	1.63	ND	ND	ND
Mar-2002	0.015	0.014	NA	ND	1.75	1.72	ND	ND	1.72	1.69	ND	ND	ND
Sep-2002	0.046	0.022	NA	ND	0.951	0.789	ND	ND	1.98	1.71	ND	ND	ND
Mar-2003	0.018	0.016	NA	ND	2.85	ND	ND	ND	1.86	1.79	ND	ND	ND
Oct-2003	0.023	0.02	NA	0.658	1.86	1.21	ND	ND	2.72	1.83	ND	ND	0.012
Apr-2004	0.019	0.021	ND	ND	2.08	1.12	ND	ND	2.43	1.94	ND	ND	0.091
Oct-2004	0.039	0.04	ND	ND	1.25	0.517	ND	ND	1.98	1.6	ND	ND	ND
Apr-2005	0.023	0.014	ND	ND	1.46	1.52	ND	ND	2.32	1.76	ND	ND	0.021
Oct-2005	0.017	0.015	ND	ND	0.699	0.664	ND	ND	2.27	1.62	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.789	0.718	ND	ND	1.69	1.66	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05A***												
Sep-2006	0.014	0.025	0.0003	ND	1.15	1.11	ND	ND	1.85	1.82	ND	ND	ND
Mar-2007	0.014	0.012	0.0003	ND	0.703	0.641	ND	ND	1.75	1.67	ND	ND	ND
Sep-2007	0.017	0.016	0.0003	ND	0.641	0.604	ND	ND	1.83	1.82	ND	ND	0.012
Mar-2008	0.016	0.019	0.0003	ND	0.757	0.734	ND	ND	1.94	1.99	ND	ND	ND
Sep-2008	0.018	0.018	0.0003	ND	0.691	0.67	ND	ND	1.86	1.82	ND	ND	0.014
Mar-2009	0.037	0.043	ND	ND	0.659	0.719	ND	ND	1.91	2.04	ND	ND	ND
Oct-2009	0.017	0.014	ND	ND	0.692	0.701	ND	ND	2.02	2	ND	ND	0.022
Apr-2010	0.017	0.014	ND	ND	0.9	0.794	ND	ND	1.92	1.86	ND	ND	ND
Oct-2010	0.014	0.014	ND	ND	0.611	0.574	ND	ND	1.91	1.87	ND	ND	ND
Apr-2011	0.04	0.028	ND	0.033	0.841	0.798	ND	ND	2.1	2.11	ND	ND	ND
Sep-2011	0.019	0.015	ND	ND	0.858	0.826	ND	ND	2.32	2.27	ND	ND	ND
Mar-2012	0.015	0.015	ND	ND	0.602	0.658	ND	ND	2.1	2.13	ND	ND	ND
Sep-2012	0.0173	0.0155	0.000106 J	0.0025 J	0.601	0.639	ND	ND	2.04	2.12	ND	ND	0.0037 J
Mar-2013	0.0171	0.0164	0.000226	0.008 J	0.713	0.745	ND	ND	2.01	2.11	ND	ND	0.011
Oct-2013	0.0197	0.0213	0.000268	0.003	0.65	0.688	ND	ND	2.21	2.37	ND	0.0013 J	0.0214
Mar-2014	0.0185	0.0184	0.000251	0.0027 J	0.904	0.916	ND	ND	1.88	2.44	ND	0.0043 J	0.0054 J
Oct-2014	0.0219	0.0206	0.000253	0.01 J	0.934	0.895	0.0014 J	ND	2.47	2.37	ND	ND	0.0079 J
Apr-2015	0.0235	0.0216	0.000245	0.0039 J	0.971	0.86	0.000772 J	ND	2.75	2.52	ND	ND	0.008 J
Nov-2015	0.0224	0.0218	0.000413	0.003 J	0.788	0.756	ND	ND	2.71	2.69	0.000065 J	ND	0.0034 J
May-2016	0.0233	0.0216	0.0003	0.003 J	0.807	0.8	ND	ND	2.47	2.48	ND	ND	ND
Oct-2016	0.0213	0.0242	0.00032	0.0039 J	0.77	0.83	ND	ND	2.35	2.59	ND	ND	ND
May-2017	0.022	0.0235	0.00046	0.0043	0.784	0.818	ND	ND	2.43	2.5	ND	ND	0.0038 JB
Oct-2017	0.0275	0.0278	0.00054	0.0024 J	0.823	0.8	ND	ND	2.57	2.56	ND	ND	ND
May-2018	0.093	0.075	0.00088	0.0037	0.91 J	ND	0.00036 J	ND	2.4 J	2.2 J	ND	ND	0.005 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05A***												
Nov-2018	0.22	0.23	ND	0.002	ND	0.96 J	ND	ND	2.4 J	2.5 J	ND	ND	0.0036 J
May-2019	0.31 M1	0.3	ND	0.0013	ND	ND	ND	ND	ND	ND	ND	ND	0.0054 D6
Oct-2019	0.32	0.31	ND	0.0013	ND	ND	0.00039 J	ND	2.7 J	2.4 J	ND	0.0049	0.012
May-2020	0.24	0.24	ND	ND	0.78	0.73	ND	ND	2.2	2.6	ND	ND	ND
Oct-2020	0.25	0.22	ND	0.0028	ND	ND	ND	ND	1.2 J	1.9 J	ND	0.0026 J	ND
Apr-2021	0.24	0.23	0.00006 J	ND	0.67	0.69	ND	ND	2.6	2.4	ND	ND	ND
Oct-2021	0.32	0.31	ND	0.00094 J	0.69	0.67	ND	ND	2.5	2.6	ND	ND	ND
May-2022	0.25	0.24	ND	0.0012 J	0.71	0.67	ND	ND	2.5	2.5	ND	ND	ND
Oct-2022	0.19	0.2	ND	0.0051	0.61	0.7	ND	ND	2.4	2.6	ND	ND	ND
May-2023	0.24	0.23	ND	0.0024 J	0.83	0.81	ND	ND	3	2.9	ND	ND	0.0042 J
Oct-2023	0.22	0.24	ND	ND	0.73	0.74	ND	ND	2.5	2.6	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	42	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05A*																
Mar-2006	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*0.87 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	1.18	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	1.12	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	1.13	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	1.47	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	1.28	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05A*																
May-2017	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	2.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.2 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.1 L2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.9 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	1.15	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*0.5 J*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05A***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	0.9 J
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	1.4
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	2.1
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	2.2
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	1.1
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.94 J
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.52 J	1.41
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.21 J	ND	ND	ND	ND	ND	0.87 J	2.38
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	0.73 J	1.31
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	0.25 J	ND	ND	ND	0.62 J	2.1
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.16 J	ND	0.22 J	ND	ND	ND	0.58 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4 J	2.2
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	0.6 J	2.3
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.2 J	ND	ND	ND	0.7 J	2.7

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*0.7 J*	2.7
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*0.8 J*	2.8
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	3
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3 CLN3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.128 J*	*ND*	*ND*	*ND*	*ND*	*1.58 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	1.2	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05A***															
Oct-2005	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1.7 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*0.14 J*	*ND*	*ND*	*ND*	*0.23 J*	*ND*	*ND*	*ND*	*ND*	*0.22 J*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*0.13 J*	*ND*	*ND*	*ND*	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.1 J*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05A***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.132 J*	*0.83 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-06***											
Nov-1993	6	6	0.2	ND	12.6	0.2	ND	5.44	49.9	2.6	60	8.1
Apr-1994	ND	ND	ND	ND	11.9	ND	ND	4.82	50.3	ND	45	5.34
Aug-1994	ND	ND	ND	ND	11.7	0.4	0.4	4.5	49.5	3.2	57	7.9
Sep-1994	ND	ND	ND	ND	12.2	0.3	ND	5.1	52.8	2.8	35	8.7
Nov-1994	ND	ND	ND	ND	13.2	0.2	ND	5.2	53.6	2.6	33	12
Apr-1995	8.2	8.2	ND	ND	14.1	ND	ND	5.4	62.8	2.2	9	10
Apr-1997	ND	16	ND	ND	11	0.06	ND	NA	NA	ND	52	12
Apr-1997	ND	8	ND	ND	9.5	0.06	ND	NA	NA	ND	36	6.1
Oct-1997	14	14	0.21	ND	10.9	ND	ND	6.65	75.3	ND	32	17
Apr-1998	17	17	ND	ND	8.13	ND	ND	6.32	64.9	ND	27	7.7
Apr-1999	11	11	0.31	ND	8.56	ND	ND	5.71	75.1	ND	65	12
Oct-1999	16	16	0.13	ND	7.73	0.172	ND	5.39	72.8	ND	52	8.4
Apr-2000	14	14	ND	ND	16.5	ND	ND	5.63	65	ND	31	11
Oct-2000	14	NA	ND	ND	14.9	ND	ND	5.39	78.4	3.52	55	12.8
Apr-2001	11	NA	ND	ND	12.2	ND	ND	NA	NA	ND	43	14.3
Sep-2001	8.7	8.7	ND	ND	16.5	ND	ND	5.04	89	ND	65	15.7
Mar-2002	17	17	ND	ND	24.6	ND	ND	6	143	ND	74	19.9
Sep-2002	14	14	ND	ND	19.3	ND	ND	5.9	141.3	ND	73	19.6
Mar-2003	13	13	ND	ND	16.4	ND	ND	5.4	112.1	ND	46	15.2
Oct-2003	11	11	ND	ND	18.1	0.122	ND	4.1	118.9	ND	101	18.7
Apr-2004	21	21	ND	ND	17.6	0.08	ND	5.6	102.9	ND	96	18.6
Oct-2004	7.2	7.2	ND	ND	13.4	0.11	ND	5.7	79.4	ND	60	13.8
Apr-2005	6.9	6.9	ND	ND	11.6	0.1	ND	5.2	63.8	1.44	69	12.5
Oct-2005	13	13	ND	ND	15.2	0.1	ND	4.8	82.1	2.83	67	12.9
Mar-2006	9.2	9.2	ND	ND	14.7	0.13	ND	4.8	92.4	4.02	49	13.7
Sep-2006	14	14	ND	ND	12.2	0.16	ND	5.6	91.7	1.55	74	12
Mar-2007	20	20	ND	ND	12.9	0.14	ND	6	97.8	1.59	52	11.5
Sep-2007	7.2	7.2	0.4	ND	12.9	0.15	ND	4.9	66.8	2.67	103	11.9
Mar-2008	7.8	7.8	0.35	ND	16.1	ND	ND	5	69.6	ND	55	11.5
Sep-2008	9.1	9.1	0.32	ND	14.2	0.28	ND	4.7	67.9	ND	60	11.8
Mar-2009	7.5	7.5	ND	ND	14.3	0.32	ND	4.9	71.9	1.1	49	10.2
Oct-2009	9	9	ND	ND	15.5	0.26	ND	4.6	69.5	1.64	53	12.1
Mar-2010	9.8	9.8	ND	ND	17.1	0.22	ND	5	93	2.53	37	11.8
Oct-2010	9.6	9.6	ND	ND	14.2	0.28	ND	4.5	69.8	2.47	38	13.7
Apr-2011	9.1	9.1	ND	ND	15.8	0.35	0.02	4.6	69.2	2.57	50	13.5
Sep-2011	5.5	5.5	ND	ND	14	0.41	ND	4.8	70.3	2.14	61	13.2
Mar-2012	6.4	6.4	ND	ND	14.8	0.42	ND	4.6	60.3	2.8	46	13.4

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-06***											
Sep-2012	7.72	7.72	ND	ND	14.6	0.389	ND	3.8	72.6	2.83	59	13.9
Mar-2013	10.6	10.6	0.258	ND	15.7	0.297	ND	5.1	85.7	4.27	44	14.7
Oct-2013	8.96	8.96	0.212	ND	15	0.418	ND	5.7	76.3	3.92	46	14
Mar-2014	9.2	9.2	0.197 J	ND	15.8	0.362	ND	5.3	74.6	4.95	54	16.9
Oct-2014	ND	ND	0.23	14	15.4	0.4	ND	4.8	73.2	3.96	39	16.5
Apr-2015	8.36	8.36	0.231	ND	15.6	0.427	ND	4.1	74.7	4.56	47	15.6
Nov-2015	7.8	7.8	0.216	ND	15.2	0.412	ND	5.5	131.2	2.08	50	18.5
May-2016	17.7	17.7	0.186 J	ND	16.3	0.195	0.0897	5.6	97.2	6.32	68	16.9
Oct-2016	5.56	5.56	ND	ND	14.7	NA	NA	5.6	101.1	4.1	44	16.4
May-2017	6.2	6.2	0.182 J	ND	14.5	0.419	ND	5.1	117.2	4.67	49	16.7
Oct-2017	7.36	7.36	0.196 J	13	14.2	0.453	ND	5.2	124.3	3.7	60	16.1
May-2018	14	14	0.21	ND	13.7	0.077 J	ND	5.84	147	6.6 J	ND	16.9
Nov-2018	70	70	0.29	ND	17.1	ND	0.024	5.88	183.2	5.8 J	70	19.2
May-2019	72	NA	0.35	ND	19.4	ND	0.024	5.96	155.6	ND	127	18.1
Oct-2019	25 H1	NA	0.26	8.2 J	12.9	0.067 J	0.044	5.8	194.2	ND	111	18.4
May-2020	30	NA	0.46	6.9 J	11.5	ND	0.054	5.66	164.7	ND	84	15
Oct-2020	40	NA	0.17	11.6 J	10.9	ND	0.055	5.67	156.1	4.9	105	17.8
Apr-2021	8 J6c	NA	0.16	ND	12.4	1.2	0.0063 J	5.27	120.5	10	66	21.2
Oct-2021	6 J2c	NA	ND	6.1 JMH	12.8	0.086 J	0.049 H1	5.6	168.7	17.7 MH	102	30.2
May-2022	26	NA	ND	10.1 J	11.4	ND	ND	5.45	161.9	10.3	69 H1	25.7 N3
Oct-2022	46	NA	ND	24.4 J	17.1	0.066 J	0.0069 J	5.7	182.4	8.1 J	65	23.8 N3
May-2023	30	NA	ND	9.1 J	13.5	0.12	ND	5.81	177.4	8.4 J	77	24.5 N3
Oct-2023	38	NA	ND	ND	16.5	0.084	NA	5.72	171.6	10.6	103	22.1 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-06*													
Nov-1993	NA	ND	ND	NA	ND	1.1	NA	ND	NA	ND	8	2.7	ND	1.3	NA
Apr-1994	NA	ND	0.012	NA	ND	1.1	NA	ND	NA	ND	0.37	2.7	ND	0.63	NA
Aug-1994	NA	ND	ND	NA	ND	1.2	NA	ND	NA	ND	1.2	0.7	ND	1.2	NA
Sep-1994	NA	ND	ND	NA	ND	1	NA	ND	NA	ND	0.53	0.1	ND	1.5	NA
Nov-1994	NA	ND	ND	NA	ND	2	NA	ND	NA	0.04	6.8	0.69	ND	1.7	NA
Apr-1995	ND	ND	ND	ND	ND	1.7	NA	ND	ND	ND	3.4	3.4	ND	1.4	NA
Oct-1996	ND	ND	0.076	ND	ND	1.9	1.8	ND	ND	ND	11	10	ND	1.8	1.8
Apr-1997	ND	ND	0.058	ND	ND	1.6	1.5	ND	ND	ND	7.2	5.8	0.004	1.4	1.4
Apr-1997	ND	ND	0.054	ND	ND	1.5	1.5	ND	ND	ND	5.1	3.2	ND	1.1	1.2
Oct-1997	ND	ND	0.053	ND	ND	1.24	1.26	ND	ND	ND	13	11.9	ND	1.22	1.23
Apr-1998	ND	ND	0.049	ND	ND	1.2	1.21	ND	ND	ND	17.6	9.85	ND	1.15	1.17
Apr-1999	ND	ND	0.075	ND	ND	1.8	1.61	ND	ND	0.016	10.5	8.17	ND	1.69	1.54
Oct-1999	ND	ND	0.06	ND	ND	1.65	1.47	ND	ND	ND	9.57	8.57	ND	1.52	1.38
Apr-2000	ND	ND	0.061	ND	ND	1.71	1.62	ND	ND	ND	9.73	9.18	ND	1.68	1.58
Oct-2000	ND	ND	0.069	ND	ND	1.95	1.95	ND	ND	ND	10.7	8.59	ND	1.93	1.95
Apr-2001	ND	ND	0.076	ND	ND	2.12	NA	ND	0.012	0.022	11.5	NA	0.002	2.19	NA
Sep-2001	ND	ND	0.086	ND	ND	2.26	2.18	ND	0.011	0.014	6.46	6.78	0.004	2.45	2.34
Mar-2002	ND	ND	0.099	ND	ND	2.71	2.67	ND	0.023	0.048	19.6	12.4	0.005	3.19	3.15
Sep-2002	ND	ND	0.091	ND	ND	2.82	2.27	ND	0.011	0.028	17.3	14.5	0.004	3.04	2.85
Mar-2003	ND	ND	0.072	ND	ND	2.01	1.89	ND	0.011	0.018	11.5	8.47	0.006	2.48	2.31
Oct-2003	ND	ND	0.084	ND	ND	2.33	2.28	ND	0.012	0.02	10.3	9.31	0.004	3.13	3.1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06***													
Apr-2004	ND	ND	ND	ND	ND	2.23	2.06	ND	0.016	0.037	19.7	16.6	0.003	3.17	2.98
Oct-2004	ND	ND	0.055	ND	ND	1.65	1.69	ND	ND	0.017	8.42	7.62	0.004	2.35	2.44
Apr-2005	ND	ND	0.047	ND	ND	1.63	1.62	ND	ND	0.01	5.5	4.89	0.007	2.05	2.02
Oct-2005	ND	ND	0.046	ND	0.004	1.74	1.74	ND	ND	0.043	9.53	7.71	0.004	2.07	2.08
Mar-2006	ND	ND	0.043	ND	ND	2.29	1.55	0.017	0.03	0.062	12.5	6.7	0.005	1.93	1.93
Sep-2006	0.002	ND	0.037	ND	ND	1.74	1.56	0.044	0.024	0.146	24.4	14.7	0.007	1.87	1.83
Mar-2007	ND	ND	0.039	ND	ND	1.6	1.62	ND	ND	ND	14.1	14.6	ND	1.83	1.84
Sep-2007	ND	0.002	0.035	ND	ND	2.12	2.17	ND	ND	ND	2.61	2.61	ND	1.61	1.65
Mar-2008	ND	0.003	0.034	ND	ND	1.94	1.78	ND	ND	0.01	2.78	2.9	0.006	1.61	1.62
Sep-2008	ND	ND	0.036	ND	ND	1.96	1.99	ND	ND	ND	2.53	2.53	0.003	1.67	1.76
Mar-2009	ND	ND	0.029	ND	ND	1.88	1.92	ND	ND	ND	1.75	2.1	0.003	1.35	1.44
Oct-2009	ND	ND	0.036	ND	ND	1.91	1.81	ND	ND	ND	2.77	2.59	ND	1.78	1.63
Mar-2010	ND	ND	0.043	ND	ND	1.89	1.83	ND	ND	ND	3.26	3.01	ND	1.72	1.68
Oct-2010	ND	ND	0.044	ND	ND	2.19	2.12	ND	ND	ND	2.77	2.58	ND	2	1.95
Apr-2011	ND	ND	0.044	ND	ND	2.09	2.02	ND	ND	ND	2.69	2.44	ND	2.01	1.92
Sep-2011	ND	ND	0.04	ND	ND	2.3	2.33	ND	ND	ND	1.28	1.41	0.002	1.82	1.98
Mar-2012	ND	ND	0.04	ND	ND	2.13	2.09	ND	ND	ND	1.92	1.93	ND	1.97	2.02
Sep-2012	ND	ND	0.0404	0.00056 J	0.00049 J	2.3	2.39	0.0022 J	0.0071 J	0.0047 J	2.37	2.61	0.0018 J	1.99	2.14
Mar-2013	ND	ND	0.0425	0.000544 J	0.000483 J	2.49	2.46	0.0041 J	0.0078 J	0.0035 J	3.1	3.07	0.0013 J	2.07	2
Oct-2013	0.000242 J	ND	0.0454	0.000534 J	0.000554 J	2.57	2.52	0.0096 J	0.0091 J	0.0029 J	2.3	2.28	0.0024	1.85	1.8
Mar-2014	ND	ND	0.0427	0.000407 J	0.000494 J	3.47	3.31	0.0086 J	0.01	0.0027 J	2.38	2.92	0.0013 J	2	2.53
Oct-2014	0.000382 J	0.000409 J	0.0535	0.000408 J	0.000392 J	2.57	2.57	0.0017 J	0.0105	0.0029 J	2.46	2.35	0.00099 J	2.46	2.41
Apr-2015	0.000488 J	0.000426 J	0.0502	0.000489 J	0.000465 J	2.59	2.63	0.0019 J	0.0114	0.0027 J	2.17	2.08	0.00085 J	2.21	2.22
Nov-2015	ND	0.000534 J	0.0582	0.000527 J	0.000548 J	2.96	2.86	0.0024 J	0.014	0.0032 J	4.66	4.32	0.001 J	2.7	2.58

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06***													
May-2016	*ND*	*ND*	0.0532	*0.00033 J*	*0.00032 J*	2.76	2.67	*0.0036 J*	0.0122	*0.0024 J*	1.97	1.95	*0.00098 J*	2.43	2.41
Oct-2016	*ND*	*ND*	0.054	*0.00036 J*	*0.00029 J*	2.73	2.82	*0.0017 J*	0.0131	*0.0028 J*	2.01	2.07	*0.00074 J*	2.32	2.18
May-2017	*ND*	*0.001 J*	0.0609	*0.00038 J*	*0.0006 J*	2.61	2.76	*0.0025 J*	0.0131	*0.0027 J*	2.55	2.41	*0.00081 J*	2.48	2.44
Oct-2017	*ND*	*ND*	0.0581	*0.00043 J*	*0.00054 J*	2.8	2.72	*0.0024 J*	0.0117	*0.0027 J*	2.39	2.38	*0.0011 J*	2.21	2.23
May-2018	*0.000091 J*	*ND*	0.069	0.00039	*0.00048 J*	2.9	2.6	*0.0041 J*	0.006	*0.0015 JB*	2.5	2.4	*0.00075 J*	2.3	2.2
Nov-2018	*ND*	*ND*	0.095	*0.00014 J*	*0.00027 J*	3.2	3.1	*0.0039 J*	0.0092	0.0037	39.2	36.7	*0.000026 J*	2.7	2.7
May-2019	*ND*	*ND*	0.091	*ND*	*ND*	3	3.5	*ND*	0.0087	0.0036	40.3	41.2	*ND*	2.6	2.6
Oct-2019	*0.000069 J*	*ND*	0.09	*0.00013 J*	*0.00021 J*	3.2	3	*0.0044 J*	0.0075	*ND*	42.1	39.7	*0.000085 J*	2.6	2.4
May-2020	*ND*	*ND*	0.096	*ND*	*0.00056 J*	2.3	2.3	*0.0027 J*	0.0073	0.007	38.1	36	*ND*	2.2	2.3
Oct-2020	*0.00034 J*	*ND*	0.087	*0.00032 J*	*ND*	3	2.7	*0.0035 J*	0.0079	*ND*	36.5	34	*ND*	2.5	2.4
Apr-2021	*ND*	*ND*	0.11	*0.00026 J*	*0.0017 J*	3.4	3.5	*0.0033 J*	0.022	0.02	6.2	6	*ND*	3.1	3.4
Oct-2021	*ND*	*ND*	0.15	*0.00021 J*	*0.00015 J*	4.8	4.9	0.0031	0.024	0.0077	14.6	15.4	*0.000055 J*	4.4	4.6
May-2022	*ND*	*ND*	0.14	*0.00023 J*	*0.0004 J*	4	4.1	0.0035	0.023	0.0074	15.7	15.1	*ND*	3.8	3.7
Oct-2022	*ND*	*ND*	0.13	*0.0002 J*	*ND*	4.1	4.4	*0.0024 J*	0.018	*ND*	21.3	23	*ND*	3.3	3.7
May-2023	*ND*	*ND*	0.12	*0.00017 J*	*0.0002 J*	4.2	4.5	0.0042	0.018	0.0081	24.3	23.4	*0.00035 J*	3.4	3.3
Oct-2023	*ND*	*ND*	0.12	*0.00022 J*	*0.00041 J*	4.5	4.5	0.0046	0.017	0.0078	20.5	19.2	*ND*	2.7	2.7

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-06*												
Nov-1993	0.08	NA	ND	NA	1.4	NA	ND	NA	2.7	NA	NA	NA	ND
Apr-1994	0.023	NA	ND	NA	0.93	NA	ND	NA	2.8	NA	NA	NA	ND
Aug-1994	0.03	NA	ND	NA	2.3	NA	ND	NA	2.2	NA	NA	NA	0.02
Sep-1994	0.03	NA	ND	NA	1.4	NA	ND	NA	2.6	NA	NA	NA	0.04
Nov-1994	0.15	NA	ND	NA	1.5	NA	ND	NA	2.7	NA	NA	NA	0.03
Apr-1995	0.03	NA	ND	ND	1.8	NA	ND	ND	2.7	NA	ND	ND	0.02
Oct-1996	0.074	0.073	NA	ND	ND	ND	ND	ND	3.7	3.8	ND	ND	0.037
Apr-1997	0.089	0.084	**0.005**	ND	1.5	1.2	ND	ND	3.5	3.2	ND	ND	0.024
Apr-1997	0.05	0.052	0.0016	ND	2.7	2.4	ND	ND	4.2	3	ND	ND	0.036
Oct-1997	0.067	0.068	0.0012	ND	1.73	1.32	ND	ND	2.6	2.61	ND	ND	0.014
Apr-1998	0.06	0.062	0.0015	ND	0.683	1.08	ND	ND	2.36	2.38	ND	ND	0.01
Apr-1999	0.06	0.051	NA	ND	0.856	ND	ND	ND	3.31	3.06	ND	ND	0.016
Oct-1999	0.056	0.053	NA	ND	1.79	1.14	ND	ND	3	2.78	ND	ND	ND
Apr-2000	0.053	0.051	NA	ND	1.04	1.02	ND	ND	3.3	3.14	ND	ND	ND
Oct-2000	0.048	0.047	NA	ND	1.38	1.06	ND	ND	3.57	3.58	ND	ND	ND
Apr-2001	0.06	NA	NA	ND	1.98	NA	ND	ND	4.1	NA	ND	ND	0.018
Sep-2001	0.049	0.046	NA	0.022	1.58	0.692	ND	ND	4.51	4.27	ND	ND	0.016
Mar-2002	0.078	0.073	NA	0.044	2.11	1.13	ND	ND	5.59	5.41	ND	ND	0.041
Sep-2002	0.083	0.071	NA	0.018	1.23	1.11	ND	ND	5.04	4.6	ND	ND	0.021
Mar-2003	0.054	0.054	NA	0.013	2.4	0.954	ND	ND	4.29	4.11	ND	ND	0.012
Oct-2003	0.068	0.066	NA	0.013	2.55	2.47	ND	ND	5.16	4.96	ND	ND	0.014
Apr-2004	0.11	0.099	0.0009	0.037	2.23	1.49	ND	ND	5.43	5.17	ND	ND	0.02

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-06*												
Oct-2004	0.054	0.054	0.0006	ND	1.88	1.65	ND	ND	4.47	4.37	ND	ND	ND
Apr-2005	0.052	0.051	0.0003	ND	1.17	1.12	ND	ND	4.35	4.32	ND	ND	ND
Oct-2005	0.069	0.062	0.0003	0.027	1.23	1.24	ND	ND	4.81	4.73	ND	ND	ND
Mar-2006	0.03	0.015	0.00097	0.123	0.952	0.955	ND	ND	4.83	4.79	ND	ND	0.052
Sep-2006	0.11	0.092	**0.0025**	0.084	1.29	1.29	ND	ND	5.14	4.91	ND	ND	0.043
Mar-2007	0.08	0.083	ND	ND	1.24	1.3	ND	ND	4.89	4.91	ND	ND	ND
Sep-2007	0.036	0.038	ND	ND	1.02	0.953	ND	ND	5.04	5.16	ND	ND	0.011
Mar-2008	0.037	0.036	ND	ND	0.997	1.28	ND	ND	5.14	5.16	ND	ND	ND
Sep-2008	0.038	0.044	ND	0.005	1.07	1.08	ND	ND	5.39	6.11	ND	ND	ND
Mar-2009	0.032	0.037	ND	ND	1.13	1.19	ND	ND	5.46	5.93	ND	ND	ND
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	0.046	0.042	ND	ND	1.07	0.965	ND	ND	6.95	6.27	ND	ND	ND
Mar-2010	0.05	0.049	ND	ND	1.28	1.17	ND	ND	6.45	6.09	ND	ND	ND
Oct-2010	0.054	0.052	ND	ND	1.38	1.27	ND	ND	6.22	6.03	ND	ND	ND
Apr-2011	0.062	0.057	ND	ND	1.39	1.32	ND	ND	6.49	5.99	ND	ND	ND
Sep-2011	0.052	0.056	ND	ND	1.25	1.34	ND	ND	5.43	5.57	ND	ND	ND
Mar-2012	0.062	0.065	ND	ND	1.33	1.3	ND	ND	5.77	5.79	ND	ND	ND
Sep-2012	0.0717	0.0771	ND	0.0073 J	1.35	1.43	ND	ND	5.96	6.31	ND	ND	0.0075 J
Mar-2013	0.0785	0.0727	0.000119 J	0.0082 J	1.33	1.33	ND	ND	6.68	6.44	ND	ND	0.0171
Oct-2013	0.0901	0.0902	ND	0.0072 J	1.16	1.15	ND	ND	5.22	5.06	0.000745 J	0.0088 J	0.0158
Mar-2014	0.0864	0.0903	ND	0.0081 J	1.61	1.56	ND	ND	5.28	6.77	ND	0.0067 J	0.0085 J
Oct-2014	0.107	0.104	ND	0.0083 J	1.4	1.39	0.0016 J	ND	6	5.95	ND	ND	0.0107
Apr-2015	0.0949	0.0914	0.000032 J	0.0098 J	1.31	1.33	0.0012 J	ND	5.83	5.88	ND	ND	0.0119
Nov-2015	0.132	0.125	ND	0.0107	1.51	1.45	0.0017 J	ND	6.82	6.51	ND	ND	0.013

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-06***												
May-2016	0.0965	0.0994	*ND*	0.0108	1.45	1.39	*ND*	*ND*	6.23	6.1	*ND*	*ND*	*0.0087 J*
Oct-2016	0.0951	0.0881	*ND*	0.0089	1.44	1.4	*ND*	*ND*	5.9	5.6	*ND*	*ND*	*0.0087 J*
May-2017	0.103	0.103	*ND*	0.0101	1.48	1.55	*ND*	*ND*	6.08	5.73	*ND*	*ND*	*0.01 J*
Oct-2017	0.0965	0.0976	*ND*	0.0104	1.39	1.47	*ND*	*ND*	5.55	5.59	*ND*	*ND*	*0.0108 J*
May-2018	0.098	0.089	*ND*	0.0049	*0.97 J*	*0.94 J*	*0.00022 JB*	*ND*	6.4	5.9	*ND*	0.0047	0.0059 B
Nov-2018	0.27	0.26	*ND*	0.0047	*1.3 J*	*2 J*	*0.0004 J*	*ND*	7.2	8.1	*ND*	*ND*	0.0068
May-2019	0.33	0.32	*ND*	0.0049	*ND*	*ND*	*ND*	*ND*	6.9	7.1	*ND*	0.0029	0.0083
Oct-2019	0.31	0.31	*ND*	0.0039	*ND*	*1.6 J*	*0.00047 J*	*ND*	6.8	5.9	*ND*	0.005	0.011
May-2020	0.29	0.29	*ND*	*0.0047 J*	1.7	1.5	*ND*	*ND*	6.1	5.9	*ND*	*ND*	0.012
Oct-2020	0.3	0.29	*ND*	0.0043	*1.5 J*	*1.4 J*	*ND*	*ND*	5.6	5.1	*0.00084 J*	*0.00079 J*	*ND*
Apr-2021	0.22	0.23	0.0002	0.015	1.7	1.6	*ND*	*ND*	6	6.2	*ND*	*ND*	0.049
Oct-2021	0.31	0.32	0.00051	0.013	1.7	1.7	*0.0011 J*	*ND*	5.6	5.7	*0.000025 J*	*ND*	0.024
May-2022	0.31	0.3	0.00024	0.013	1.7	1.7	*ND*	*ND*	5.5	5.5	*ND*	*ND*	0.022
Oct-2022	0.31	0.33	*ND*	0.009	1.5	1.7	*0.0009 J*	*ND*	6.5	7.2	*ND*	*ND*	0.014
May-2023	0.33	0.32	*ND*	0.0086	1.7	1.7	*ND*	*ND*	7.2	7	*ND*	*ND*	0.018
Oct-2023	0.27	0.25	0.00036	0.0084	1.7	1.6	*ND*	*ND*	7	6.8	*ND*	*ND*	0.019

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06*																
Nov-1993	ND	1.6	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	1.8	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	ND
Aug-1994	ND	1.5	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	2.1	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	2.9	ND	ND	2.4	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	9.2	ND	ND	8.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	1	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	1	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	1.2	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	0.9 J	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	0.9 J	NA	NA	5.3	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	4.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	0.7 J	NA	NA	5.2	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	1.5	ND	ND	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	1.1	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	1.2	ND	ND	14	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Mar-2002	ND	1.4	ND	ND	18	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Sep-2002	ND	2.3	ND	ND	23	1.2	ND	ND	ND	ND	ND	1	1.5	ND	ND	ND	ND	ND
Mar-2003	ND	1	ND	ND	13	0.5 J	ND	ND	ND	ND	ND	0.6 J	0.8 J	ND	ND	ND	ND	ND
Oct-2003	ND	1.2	ND	ND	20	0.8 J	ND	ND	ND	ND	ND	1	1.3	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06*																
Apr-2004	ND	0.9 J	ND	ND	16	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	7.2	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	8.5	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	5.8	0.6 J	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Sep-2006	ND	1.7	ND	ND	7.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	7.5	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2007	ND	0.6 J	ND	ND	11.2	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	5.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	8	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	6.9	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	7.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	8.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	8.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	4.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	6.54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	9.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	6.98	0.31 J	ND	ND	ND	ND	ND	0.25 J	0.36 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	6.42	0.21 J	ND	ND	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	7.14	ND	ND	ND	ND	ND	ND	ND	0.28 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06*																
Apr-2015	ND	ND	ND	ND	5.67	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	5.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	4.8	0.1 J	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	5.7	0.2 J	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	4.8	0.1 J	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	5.6	0.2 J	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	8.5 L2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4 JBIH	ND
May-2019	ND	ND	ND	ND	6.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	4.74	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	9.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	7.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	8.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	6.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2023	ND	ND	ND	ND	6.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-06*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	3.2
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	5.2
Aug-1994	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	7	4.8
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	4.9
Nov-1994	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.4	6
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	49	22
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	22	4
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	ND	2	ND	ND	ND	13	9
Oct-1997	ND	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	1.1	ND	ND	ND	10	12
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	20	5.6
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	0.7 J	ND	NA	3.8	NA	NA	NA	6	9.3
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND	ND	ND	4.3	6.3
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	0.8 J	ND	NA	2.9	NA	ND	NA	5.1	7.4
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	6	ND	ND	ND	38	15
Apr-2001	0.6 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	5.7	ND	ND	ND	22	14
Sep-2001	0.8 J	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	6.9	ND	ND	ND	24	18
Mar-2002	0.6 J	ND	ND	ND	ND	2.4	ND	ND	1.5	ND	0.8 J	5.8	ND	ND	ND	16	21
Sep-2002	1.3	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	9.6	ND	ND	ND	74	52
Mar-2003	0.6 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	7	ND	ND	ND	33	22
Oct-2003	1.3	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	12	ND	ND	ND	41	36

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-06***															
Apr-2004	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	9.8	*ND*	*ND*	*ND*	40	28
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	4.9	*ND*	*ND*	*ND*	24	23
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	15	14
Oct-2005	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	5.1	*ND*	*ND*	*ND*	13.6	15.9
Mar-2006	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	12.1	26.3
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.5	*ND*	*ND*	*ND*	17.8	21.9
Mar-2007	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	11.7	14.9
Sep-2007	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	4.5	*ND*	*ND*	*ND*	16.3	11.2
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	12.1	15.7
Sep-2008	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	14.5	13
Mar-2009	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	10.8	10.1
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	9.4	11.9
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*11.8 J*	13.5
Oct-2010	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	11.7	9.3
Apr-2011	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	14.4	11.9
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7	*ND*	*ND*	*ND*	15	6.6
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7	*ND*	*ND*	*ND*	11.5	6.4
Sep-2012	*0.42 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.81	*ND*	*ND*	*ND*	5.56	7.44
Mar-2013	*0.58 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.44 J*	*ND*	*ND*	7.25	*ND*	*ND*	*ND*	8.15	12.6
Oct-2013	*0.29 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.59 J*	*0.22 J*	*ND*	4.34	*ND*	*ND*	*ND*	8.76	13.6
Mar-2014	*0.28 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	3.85	*ND*	*ND*	*ND*	9.56	9.22
Oct-2014	*0.28 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.23 J*	*ND*	4.45	*ND*	*ND*	*ND*	7.33	9.85

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-06***															
Apr-2015	*0.25 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	3.26	*ND*	*ND*	*ND*	6	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.1	*ND*	*ND*	*ND*	*12.6 J*	6.3
May-2016	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	3.3	*ND*	*ND*	*ND*	4.7	5.5
Oct-2016	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	2.9	*ND*	*ND*	*ND*	6.3	7.7
May-2017	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J,B*	*ND*	3	*ND*	*ND*	*ND*	5.1	5.7
Oct-2017	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	3.9	*ND*	*ND*	*ND*	6.8	8
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.2	*ND*	*ND*	*ND*	6.5	4.5
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.3	*ND*	*ND*	*ND*	11.5	9.2 CLN3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	6.9	8.3 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	7.5	4.6
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	3.4	2.3
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	4.3	2.1
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.19	*ND*	*ND*	*ND*	*1.48 J*	*3.62 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	9.8	6.8
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.2	*ND*	*ND*	*ND*	7	5.3
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.2	*ND*	*ND*	*ND*	5.1	5.4
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.9	*ND*	*ND*	*ND*	3.2	4.1
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.5	*ND*	*ND*	*ND*	4.8	4.3

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-06***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*NA*
Aug-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	2.8	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*0.5 J*	3	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	**7.4**	*ND*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	3	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	4	*ND*	*ND*	*ND*	*ND*	1	3	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*0.7 J*	2.3	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*0.9 J*	1.9	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	2	*ND*	*NA*	3.7	*ND*	*ND*	*NA*	*NA*	1.5	1.4	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	1.7	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*0.9 J*	1.2	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	1.3	*ND*	*NA*	2.9	*ND*	*ND*	*NA*	*NA*	*1 J*	1.4	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	3.2	*ND*	*ND*	**5.8**	*ND*	*ND*	*ND*	*ND*	2.1	2.6	*ND*	1.1	*NA*
Apr-2001	*ND*	*ND*	*0.5 J*	*NA*	3.3	*0.5 J*	*ND*	**5.2**	*ND*	*ND*	*ND*	*ND*	1.9	2.1	*ND*	1.1	*NA*
Sep-2001	*ND*	*ND*	*0.7 J*	*NA*	**7.3**	*0.8 J*	*ND*	**8.1**	*ND*	*ND*	*ND*	*ND*	2.8	2.5	*ND*	1.3	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	**6.9**	*ND*	*ND*	4.2	*ND*	*ND*	*ND*	*ND*	1.8	2.1	*ND*	1	*NA*
Sep-2002	*ND*	*ND*	1.5	*NA*	**24**	3.5	*ND*	**18**	*ND*	*ND*	*ND*	*ND*	**5.1**	6.9	*ND*	**2.5**	*NA*
Mar-2003	*ND*	*ND*	*0.6 J*	*NA*	**9.9**	*0.7 J*	*ND*	**9.9**	*ND*	*ND*	*ND*	*ND*	3	2.5	*ND*	1.2	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-06*															
Oct-2003	ND	ND	1.1	NA	**17**	1.2	ND	**15**	ND	ND	ND	ND	4.5	3.6	ND	**2.7**	NA
Apr-2004	ND	ND	0.6 J	NA	0.6 J	0.6 J	ND	**12**	ND	ND	ND	ND	3.5	2.5	ND	1.9	NA
Oct-2004	ND	ND	ND	NA	4.9	ND	ND	**5.7**	ND	ND	ND	ND	2.1	2.5	ND	1	NA
Apr-2005	ND	ND	ND	ND	2.9	ND	ND	**5.5**	ND	ND	ND	ND	1.7	1.1	ND	0.7 J	NA
Oct-2005	ND	ND	ND	ND	2.2	ND	ND	**6.9**	ND	ND	ND	ND	2.3	1.1	ND	1	NA
Mar-2006	ND	ND	ND	ND	2.6	1	ND	**6.4**	ND	ND	ND	ND	2.1	1.5	ND	1.1	NA
Sep-2006	ND	ND	ND	ND	1.7	ND	ND	**7.9**	ND	ND	ND	ND	2.9	0.7 J	ND	ND	NA
Mar-2007	ND	ND	ND	ND	4.1 R	ND	ND	**5.6**	ND	ND	ND	ND	2.2	1.3	ND	ND	NA
Sep-2007	ND	ND	0.5 J	ND	4.7	ND	ND	**6.9**	ND	ND	ND	ND	3.1	2	ND	1.1	NA
Mar-2008	ND	ND	ND	ND	2	ND	ND	**5.4**	ND	ND	ND	ND	2.3	1.4	ND	ND	NA
Sep-2008	ND	ND	ND	ND	3.9	ND	ND	**5.7**	ND	ND	ND	ND	2.3	1.2	ND	0.7 J	NA
Mar-2009	ND	ND	ND	ND	4.5	ND	ND	5	ND	ND	ND	ND	2	0.8 J	ND	0.5 J	NA
Oct-2009	ND	ND	ND	ND	**5.5**	ND	ND	4.8	ND	ND	ND	ND	2.1	0.8 J	ND	ND	NA
Mar-2010	ND	ND	ND	ND	**6.2**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	4.3	ND	ND	4.7	ND	ND	ND	ND	ND	0.7 J	ND	ND	NA
Apr-2011	ND	ND	ND	ND	**6.6**	ND	ND	**5.6**	ND	ND	ND	ND	2.2	ND	ND	0.6 J	NA
Sep-2011	ND	ND	ND	ND	2.1	ND	ND	3.7	ND	ND	ND	ND	1.5	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	2	ND	ND	4.3	ND	ND	ND	ND	1.6	0.5 J	ND	0.9 J	NA
Sep-2012	ND	ND	ND	ND	3.52	ND	ND	**5.6**	ND	ND	ND	ND	2.5	0.63 J	ND	0.48 J	ND
Mar-2013	ND	0.58 J,B	ND	ND	4.91	ND	ND	**6.59**	ND	ND	ND	ND	3.32	ND	ND	0.93 J	ND
Oct-2013	ND	ND	ND	ND	2.79	0.19 J	ND	4.43	ND	ND	ND	ND	2.73	1.25	ND	0.41 J	ND
Mar-2014	ND	ND	ND	ND	2.49	ND	ND	**5.1**	ND	ND	ND	ND	2.43	1.04	ND	0.35 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-06*															
Oct-2014	ND	ND	ND	ND	2.61	ND	ND	4.99	ND	ND	ND	ND	2.43	0.76 J	ND	0.24 J	ND
Apr-2015	ND	ND	ND	ND	2.5	ND	ND	3.81	ND	ND	ND	ND	1.96	0.66 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.7	ND	ND	3.9	ND	ND	ND	ND	2.1	0.7 J	ND	ND	ND
May-2016	ND	ND	ND	ND	2.2	ND	ND	3.5	ND	ND	ND	ND	1.9	ND	ND	0.2 J	ND
Oct-2016	ND	ND	ND	ND	2.6	ND	ND	3.8	ND	ND	ND	ND	1.8	0.8 J	ND	0.3 J	ND
May-2017	ND	ND	ND	ND	1.7	ND	ND	3.9	ND	ND	ND	ND	1.7	0.3 J	ND	0.2 J	ND
Oct-2017	ND	ND	ND	ND	1.8	ND	ND	4.2	ND	ND	ND	ND	2	0.8 J	ND	0.2 J	ND
May-2018	ND	ND	ND	ND	2.4 B	ND	ND	1.7	ND	ND	ND	ND	1.4	0.61 J	ND	ND	NA
Nov-2018	ND	ND	ND	ND	3.6	ND	ND	3	ND	ND	ND	ND	1.9	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	2.5	ND	ND	1.9	ND	ND	ND	ND	1.3	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	2.4	ND	ND	1.5	ND	ND	ND	ND	1.2	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.722 J	ND	ND	1.43	ND	ND	ND	ND	1.07	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	1.4	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	1.3	ND	ND	ND	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	1.5	ND	ND	ND	NA
May-2023	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	1.2	ND	ND	ND	NA
Oct-2023	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	1.2	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-10A***											
Nov-1993	11	11	0.3	ND	18.8	2.6	ND	5.54	108	4.2	18	16.7
Apr-1994	7	7	0.2	ND	19.9	2.8	ND	5.26	112	3.1	91	21.05
Apr-1995	ND	ND	ND	ND	21.1	3.3	ND	5.1	120	5.1	44	18.8
Apr-1997	ND	10	ND	ND	27	2.5	ND	NA	NA	12	79	24
Oct-1997	5	5	0.21	ND	20.6	3.11	ND	7.8	149.8	3.17	51	22
Apr-1998	4	4	ND	ND	19.8	2.41	ND	5.26	162.2	5.6	62	27
Apr-1999	1	1	0.19	ND	18.2	2.34	ND	5.15	142.8	4	81	25
Oct-1999	6	6	0.11	ND	19.2	2.95	ND	5.68	148.1	5.86	98	25
Apr-2000	4	ND	ND	ND	26.2	3.28	ND	5.62	115	5.79	86	24
Oct-2000	6.6	NA	ND	ND	26.2	2.76	ND	5.63	141.8	4.79	93	28.9
Apr-2001	4.1	NA	ND	ND	25	2.9	ND	NA	NA	15.3	85	28.1
Sep-2001	5.7	5.7	ND	ND	24.1	3.18	ND	5.35	131	10.2	91	26.1
Mar-2002	4.6	4.6	ND	ND	41.7	3.23	ND	5.2	159.5	8.1	99	27.5
Sep-2002	4.2	4.2	ND	ND	32.1	2.73	ND	5.2	157.3	6.23	80	25.4
Mar-2003	4.4	4.4	ND	ND	29.2	2.27	ND	5.2	164.5	10.7	101	25
Oct-2003	5.1	5.1	ND	ND	26.9	2.62	ND	5.2	169.1	5.07	73	24.4
Apr-2004	5.9	5.9	ND	ND	24.2	2.61	ND	5.1	141.6	5.56	134	25.8
Oct-2004	5.9	5.9	ND	ND	22.5	2.47	ND	5.2	142	6.46	79	15.4
Apr-2005	6.1	6.1	ND	ND	22.3	2.41	ND	5.1	136.2	7.48	94	25.9
Oct-2005	6.1	6.1	0.21	ND	31.2	1.92	ND	4.7	126.6	8.34	112	21.1
Mar-2006	5.7	5.7	ND	ND	29.7	1.99	ND	5.3	136.2	8.1	79	20.8
Sep-2006	5.5	5.5	ND	ND	29.7	1.8	ND	5.1	129.4	8.63	105	21.5
Mar-2007	5.9	5.9	ND	ND	31.2	2.35	ND	5	123.9	6.69	72	20.8
Sep-2007	6.1	6.1	ND	ND	28.4	2	ND	5.2	113.2	10.7	90	21.6
Mar-2008	5.7	5.7	ND	ND	31	1.6	ND	5.2	128.2	9	107	21.3
Sep-2008	6.5	6.5	ND	ND	32.1	1.76	ND	4.8	116.7	6.1	112	21.6
Mar-2009	7	7	ND	ND	35.8	1.53	ND	4.9	138.9	5.17	101	22.5
Oct-2009	5.7	5.7	ND	ND	39.8	1.44	ND	4.9	138.7	5.45	95	24.3
Apr-2010	5.4	5.4	ND	ND	45.1	1.41	ND	4.5	139.1	6.43	73	24.6
Oct-2010	6	6	ND	ND	46	1.46	ND	4.8	143	5.77	117	26.7
Apr-2011	4.5	4.5	ND	ND	48	1.38	ND	4.7	154.6	5.68	117	26
Sep-2011	4.7	4.7	0.25	ND	47.6	1.51	ND	5.3	162.7	5.5	120	25.8
Mar-2012	4.6	4.6	ND	ND	45.7	1.48	ND	4.2	160.8	6.59	94	25.3
Sep-2012	4.96	4.96	ND	ND	48.5	1.48	ND	4.1	175.1	8.12	121	26.7
Mar-2013	4.64	4.64	ND	ND	42.2	1.7	ND	4.3	155.9	6.58	102	25.2
Oct-2013	4.8	4.8	ND	ND	43.2	1.65	ND	4.1	158	7.02	94	24.8
Mar-2014	3.84	3.84	ND	ND	48.8	1.49	ND	5.2	155.3	8.62	114	22.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-10A***										
Oct-2014	*ND*	*ND*	*ND*	*ND*	45.7	1.81	*ND*	4.8	148.1	6.76	102	25.5
Apr-2015	4.64	4.64	*ND*	*ND*	44.3	1.93	*ND*	4.6	175.1	8.7	104	25.9
Nov-2015	3.76	3.76	*ND*	*ND*	44.6	1.99	*ND*	5.1	199	8.64	109	28.6
May-2016	2.88	2.88	*ND*	*ND*	44.1	1.83	*ND*	5.2	259	9.58	113	28.3
Oct-2016	2.84	2.84	*ND*	*ND*	42.3	*NA*	*NA*	5.3	254	7.49	115	25.8
May-2017	2.64	2.64	*ND*	*ND*	43	1.93	*ND*	5	275	8.4	102	25.3
Oct-2017	2.04	2.04	*ND*	*ND*	44.5	1.98	*ND*	5.5	247	8.93	103	25.6
May-2018	*2 JB*	*ND*	*ND*	*5.8 J*	45.9	0.33	*ND*	4.8	253	*9 J*	112	27.4
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	42.6	1.9	*ND*	4.72	178.6	*9.3 J*	98	26.3
May-2019	*ND*	*NA*	*ND*	*ND*	44.3	2	*ND*	4.57	152.2	*ND*	90	26.5
Oct-2019	*ND*	*NA*	*ND*	*8.2 J*	44.9	2	*ND*	4.51	203.9	12.1	85	28.3
May-2020	*1 J*	*NA*	*ND*	*ND*	43.5	2.4	*ND*	4.43	189.7	10.8	118	28.2
Oct-2020	*ND*	*NA*	*ND*	*ND*	41.5	2.3	*ND*	4.34	177.9	10.7	95	29.8
Apr-2021	*2 J5c*	*NA*	*ND*	*ND*	45	2.2	*ND*	4.7	213	*8.6 J*	106	28
Oct-2021	*ND*	*NA*	*ND*	*ND*	43.3	2.2	*ND*	4.84	251.8	*9.3 J*	93	28.9
May-2022	*2 J*	*NA*	*ND*	*ND*	39.2	2	*ND*	4.67	225.6	*8.1 J*	85	28.9 N3
Oct-2022	*ND*	*NA*	*ND*	*8.4 J*	47.9	2.1	*ND*	4.74	228.7	11	100	28.5 N3
May-2023	*ND*	*NA*	*ND*	*ND*	45.9	2.2	*ND*	4.78	228	10.1	102	27.2 N3
Oct-2023	*ND*	*NA*	*ND*	*ND*	49.6	2.17	*NA*	4.77	228.8	11.4	130	29.6 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-10A***													
Nov-1993	NA	ND	ND	NA	ND	3.4	NA	0.006	NA	ND	0.18	0.28	ND	2	NA
Apr-1994	NA	ND	ND	NA	ND	3.6	NA	ND	NA	ND	0.63	0.09	ND	2.93	NA
Apr-1995	ND	ND	0.6	ND	ND	2.9	NA	ND	0.02	ND	0.3	0.06	ND	2.8	NA
Oct-1996	ND	ND	0.066	ND	ND	5.9	5.6	ND	ND	ND	ND	ND	ND	2.8	2.9
Apr-1997	ND	ND	0.065	ND	ND	7	6	ND	ND	ND	ND	ND	0.002	3	2.6
Oct-1997	ND	ND	0.056	ND	ND	4.98	4.82	ND	ND	ND	0.226	ND	ND	3.08	3.03
Apr-1998	ND	ND	0.057	ND	ND	5.45	4.88	ND	ND	ND	0.248	ND	ND	3.25	3.18
Apr-1999	ND	ND	0.061	ND	ND	4.86	4.81	ND	ND	ND	0.099	ND	ND	3.04	2.92
Oct-1999	ND	ND	0.074	ND	ND	5.75	5.02	ND	ND	ND	0.164	ND	ND	3.14	2.84
Apr-2000	ND	ND	0.068	ND	ND	4.57	4.34	ND	ND	ND	ND	ND	ND	3.14	2.96
Oct-2000	ND	ND	0.075	ND	ND	6.1	5.79	ND	0.011	ND	0.389	ND	ND	3.31	3.11
Apr-2001	ND	ND	0.077	ND	ND	5.39	NA	ND	0.012	ND	0.184	NA	ND	3.57	NA
Sep-2001	ND	ND	0.074	ND	ND	5.23	5.11	ND	ND	ND	0.159	ND	ND	3.17	3.12
Mar-2002	ND	ND	0.073	ND	ND	5.76	5.44	ND	ND	ND	0.068	ND	ND	3.18	3.13
Sep-2002	ND	ND	0.075	ND	ND	5.09	4.53	ND	ND	0.016	0.073	ND	ND	3.1	3.04
Mar-2003	ND	ND	0.081	ND	ND	4.64	4.35	ND	ND	ND	ND	ND	ND	3.27	3.07
Oct-2003	ND	ND	0.078	ND	ND	4.47	4.05	ND	ND	0.012	0.074	ND	ND	3.2	3.12
Apr-2004	ND	0.002	0.081	ND	ND	4.79	4.68	ND	0.012	ND	0.125	ND	ND	3.38	3.25
Oct-2004	ND	ND	0.085	ND	ND	4.7	4.55	ND	0.01	ND	ND	ND	ND	3.46	3.34
Apr-2005	ND	0.002	0.084	ND	ND	4.98	5.09	ND	ND	ND	0.14	ND	ND	3.26	3.28
Oct-2005	ND	ND	0.066	ND	ND	4.44	3.96	ND	ND	ND	0.18	ND	ND	2.44	2.26

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-10A***													
Mar-2006	ND	ND	0.061	ND	ND	4.23	4.14	ND	ND	ND	ND	ND	ND	2.49	2.5
Sep-2006	ND	ND	0.057	ND	ND	4.68	4.8	ND	ND	ND	ND	ND	ND	2.38	2.58
Mar-2007	ND	ND	0.06	ND	ND	4.6	4.73	ND	ND	ND	ND	ND	ND	2.27	2.44
Sep-2007	ND	ND	0.061	ND	ND	4.86	4.71	ND	ND	ND	ND	ND	ND	2.31	2.32
Mar-2008	ND	0.002	0.063	ND	ND	4.73	4.47	ND	ND	ND	ND	ND	ND	2.31	2.19
Sep-2008	ND	ND	0.06	ND	ND	4.73	4.43	ND	ND	ND	ND	ND	ND	2.37	2.22
Mar-2009	ND	ND	0.061	ND	ND	5.15	4.92	ND	ND	ND	ND	ND	ND	2.32	2.25
Oct-2009	ND	ND	0.072	ND	ND	5.24	5.03	ND	ND	ND	0.065	ND	ND	2.72	2.62
Apr-2010	ND	ND	0.076	ND	ND	5.33	5.13	ND	ND	ND	ND	ND	ND	2.75	2.67
Oct-2010	ND	ND	0.072	ND	ND	5.56	5.48	ND	0.011	ND	ND	ND	ND	3.11	3.03
Apr-2011	ND	ND	0.087	ND	ND	5.41	4.57	ND	0.01	ND	0.059	ND	ND	3.3	2.66
Sep-2011	ND	ND	0.083	ND	ND	5.36	5.33	ND	ND	ND	0.053	ND	ND	3.01	2.99
Mar-2012	ND	ND	0.081	ND	ND	4.97	5.1	ND	ND	ND	ND	ND	ND	3.14	3.24
Sep-2012	ND	ND	0.0803	0.000438 J	ND	5.04	4.89	0.0019 J	0.01	0.0034 J	0.0379 J	0.051	ND	3.43	3.26
Mar-2013	ND	ND	0.0846	0.000432 J	ND	4.96	4.78	0.0033 J	0.0101	0.0042 J	0.0142 J	0.0094 J	ND	3.11	2.94
Oct-2013	ND	ND	0.0847	0.000355 J	0.000148 J	4.66	4.35	0.0037 J	0.0105	0.0046 J	ND	ND	ND	3.19	2.88
Mar-2014	0.00033 J	ND	0.0719	0.000412 J	0.000127 J	4.6	4.43	0.0025 J	0.0097 J	0.0024 J	0.0374 J	0.01 J	ND	2.71	2.69
Oct-2014	0.000857 J	ND	0.0862	0.000448 J	0.00013 J	4.96	5.08	0.000907 J	0.0106	0.0047 J	ND	ND	ND	3.19	3.27
Apr-2015	0.000433 J	ND	0.0874	0.000393 J	0.000126 J	4.99	4.9	0.0015 J	0.0116	0.0044 J	0.0426 J	0.0169 J	ND	3.26	3.21
Nov-2015	0.000357 J	ND	0.093	0.000553 J	0.000155 J	5.87	5.7	0.0011 J	0.0118	0.0038 J	ND	0.0514	0.000188 J	3.39	3.34
May-2016	ND	ND	0.0921	0.00041 J	0.00022 J	5.45	4.52	0.0016 J	0.0118	0.0035 J	ND	ND	ND	3.56	3.17
Oct-2016	ND	ND	0.095	0.00038 J	ND	5.06	5.21 J+	0.0029 J	0.0135	0.0032 J	0.0705 J	ND	0.00013 J	3.2	3.47 J+
May-2017	ND	ND	0.0907	0.00042 J	ND	4.7	5.32	0.0035 J	0.0239	0.004 J	0.102 J	ND	0.0003 J	3.28	3.31
Oct-2017	ND	ND	0.0849	0.00046 J	0.0002 J	5.27	5.07	ND	0.0117	0.0036 J	ND	ND	ND	3.02	3.15

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-10A***													
May-2018	*ND*	*ND*	*0.0891 J*	*ND*	*0.0002 J*	5.4	5.2	*0.0054 J*	*0.0126 J*	*ND*	0.03	*ND*	*ND*	3.4	3.3
Nov-2018	*ND*	*ND*	0.085	0.00062	*0.00019 J*	5.3	5.2	*0.0064 J*	0.011	0.0047	0.085	0.07	*0.000068 J*	3.2	3.1
May-2019	*ND*	*ND*	0.081	0.00055	*ND*	5.4	5.5	*ND*	0.01	0.004	*ND*	0.037	*ND*	3.2	3.3
Oct-2019	*0.00012 J*	*0.00021 J*	0.089	0.00052	*0.0003 J*	5.8	5.5	0.0078	0.01	0.0047	*0.05 J*	0.049	*0.000069 J*	3.4	3.3
May-2020	*ND*	*ND*	0.087	0.00052	*0.00016 J*	5.7	5.6	*0.005 J*	0.012	0.0045	*0.028 J*	*0.02 J*	*ND*	3.4	3.3
Oct-2020	*ND*	*ND*	0.087	*0.0006 J*	*ND*	5.9	5.4	*0.0034 J*	0.012	*0.0074 J*	*0.038 J*	0.027	*ND*	3.6	3.2
Apr-2021	*ND*	*ND*	0.093	*0.00055 J*	*ND*	5.6	5.7	*0.003 J*	0.012	*0.0049 J*	*ND*	*ND*	*ND*	3.4	3.6
Oct-2021	*ND*	*ND*	0.095	0.00061	*ND*	5.6	6.1	0.0032	0.015	0.0057	*0.048 J*	*0.033 J*	*0.000037 J*	3.6	3.8
May-2022	*ND*	*ND*	0.094	0.00052	*ND*	5.6	5.6	0.0042	0.014	0.0054	0.097	0.082	*ND*	3.6	3.5
Oct-2022	*ND*	*ND*	0.09	0.00058	*ND*	5.6	6.2	0.0029	0.013	0.0044	0.093	0.087	*ND*	3.5	3.8
May-2023	*ND*	*ND*	0.09	0.00059	*ND*	5.4	5.9	0.0026	0.015	0.005	0.09	0.077	*ND*	3.3	3.6
Oct-2023	*ND*	*ND*	0.092	0.00053	*ND*	6	5.7	*0.0018 J*	0.015	0.0059 B	*0.03 J*	*0.037 J*	*ND*	3.6	3.6

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-10A*												
Nov-1993	0.05	NA	ND	NA	2.7	NA	ND	NA	9.5	NA	NA	NA	0.02
Apr-1994	0.04	NA	ND	NA	2.39	NA	ND	NA	10.8	NA	NA	NA	0.07
Apr-1995	0.02	NA	ND	ND	2	NA	ND	ND	10.8	NA	ND	0.2	0.06
Oct-1996	0.028	0.026	NA	ND	ND	ND	ND	ND	13	13	ND	ND	0.53
Apr-1997	0.035	0.026	ND	ND	3.4	3.5	ND	ND	16	14	ND	ND	0.048
Oct-1997	0.041	0.03	0.0004	ND	2.43	1.52	ND	ND	12.7	12.7	ND	ND	0.021
Apr-1998	0.038	0.032	ND	ND	2.52	2.3	ND	ND	12.5	12.3	ND	ND	0.016
Apr-1999	0.035	0.03	NA	ND	2.29	2.18	ND	ND	12.6	12.2	ND	ND	0.013
Oct-1999	0.046	0.031	NA	0.02	2.61	2.37	ND	ND	14.1	12.7	ND	ND	0.013
Apr-2000	0.037	0.033	NA	ND	1.16	1.68	ND	ND	13.6	12.9	ND	ND	0.01
Oct-2000	0.06	0.035	NA	ND	2.44	2.27	ND	ND	14.8	14.1	ND	ND	0.013
Apr-2001	0.05	NA	NA	ND	2.48	NA	ND	ND	15.4	NA	ND	ND	0.015
Sep-2001	0.044	0.034	NA	0.011	2.17	2.11	ND	ND	14.7	14.2	ND	ND	0.014
Mar-2002	0.04	0.036	NA	0.012	3.27	2.47	ND	ND	17.8	17	ND	ND	0.02
Sep-2002	0.045	0.039	NA	0.012	3.36	2.92	ND	ND	16.4	16	ND	ND	0.016
Mar-2003	0.045	0.04	NA	ND	1.99	2.32	ND	ND	16.9	15.6	ND	ND	0.011
Oct-2003	0.049	0.047	NA	ND	4.57	2.88	ND	ND	15.8	15	ND	ND	0.011
Apr-2004	0.062	0.047	ND	ND	2.71	2.53	ND	ND	14.2	14.5	ND	ND	ND
Oct-2004	0.057	0.054	ND	ND	2.54	2.47	ND	ND	14.4	13.6	ND	ND	ND
Apr-2005	0.05	0.046	ND	ND	2.19	2.17	ND	ND	14.6	15.5	ND	ND	ND
Oct-2005	0.037	0.028	ND	ND	2.26	2.04	ND	ND	15.9	14.2	ND	ND	0.012
Mar-2006	ND	ND	ND	ND	2.14	2.17	ND	ND	16.8	15.9	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-10A***												
Sep-2006	0.027	0.034	*ND*	*ND*	2.3	2.33	*ND*	*ND*	16.5	14.9	*ND*	*ND*	*ND*
Mar-2007	0.024	0.029	*ND*	*ND*	2.18	2.15	*ND*	*ND*	16.8	15.6	*ND*	*ND*	0.011
Sep-2007	0.025	0.027	*ND*	*ND*	2.07	1.89	*ND*	*ND*	17.1	15.7	*ND*	*ND*	0.011
Mar-2008	0.025	0.024	*ND*	*ND*	2.19	2.04	*ND*	*ND*	18.6	16.6	*ND*	*ND*	0.011
Sep-2008	0.025	0.024	*ND*	*ND*	2.04	1.93	*ND*	*ND*	16.5	15.5	*ND*	*ND*	0.01
Mar-2009	0.026	0.025	*ND*	*ND*	2.14	2.09	*ND*	*ND*	17.4	17	*ND*	0.012	*ND*
Oct-2009	0.03	0.029	*ND*	*ND*	2.13	2.04	*ND*	*ND*	19.7	19.1	*ND*	*ND*	0.014
Apr-2010	0.032	0.029	*ND*	0.011	2.48	2.33	*ND*	*ND*	21.5	20.5	*ND*	*ND*	0.014
Oct-2010	0.038	0.037	*ND*	0.014	2.46	2.36	*ND*	*ND*	22.3	21.9	*ND*	*ND*	0.018
Apr-2011	0.042	0.04	*ND*	0.014	2.41	2.06	*ND*	*ND*	22.3	19	*ND*	*ND*	0.014
Sep-2011	0.041	0.039	*ND*	0.012	2.48	2.41	*ND*	*ND*	22.3	22	*ND*	*ND*	0.015
Mar-2012	0.041	0.043	*ND*	*ND*	2.34	2.41	*ND*	*ND*	22.3	22.9	*ND*	*ND*	0.015
Sep-2012	0.0422	0.0415	*0.000024 J*	0.0117	2.58	2.43	*ND*	*ND*	25.8	24.9	*0.0011 J*	*ND*	0.0128
Mar-2013	0.0507	0.0489	*0.000052 J*	0.0113	2.25	2.2	*0.000642 J*	*ND*	20.8	19.5	*ND*	*ND*	0.0218
Oct-2013	0.0521	0.0442	*ND*	0.0115	2.46	2.25	*0.000744 J*	*ND*	22.5	21.6	*0.000099 J*	*0.0016 J*	0.0246
Mar-2014	0.0489	0.0513	*ND*	*0.0108 J*	2.18	2.13	*ND*	*ND*	20.2	18.9	*ND*	*ND*	0.0163
Oct-2014	0.053	0.0518	*0.000023 J*	0.0111	2.37	2.48	*0.0018 J*	*ND*	22.9	24.1	*0.0017 J*	*ND*	0.018
Apr-2015	0.0569	0.0564	*0.000043 J*	0.0121	2.38	2.33	*0.0017 J*	*ND*	23.7	23.4	*ND*	*ND*	0.0197
Nov-2015	0.0577	0.0559	*ND*	0.0124	2.63	2.56	*0.001 J*	*ND*	26.3	25.6	*0.000146 J*	*ND*	0.0165
May-2016	0.0622	0.0596	*ND*	0.0119	2.62	2.45	*0.00079 J*	*ND*	26.9	23.9	*ND*	*ND*	*0.016 J,B*
Oct-2016	*0.0707 J+*	*0.0636 J+*	*ND*	0.0139	2.53	2.62	0.0008	*ND*	22.2	23.6	*ND*	*ND*	*0.015 J*
May-2017	0.135	0.0595	*ND*	0.0133	2.38	2.42	*0.00073 J*	*ND*	22.5	23.2	*ND*	*ND*	*0.0157 J*
Oct-2017	0.0555	0.0538	*ND*	0.0122 B	2.15	2.27	*0.00051 J*	*ND*	21.1	22.8	*ND*	*ND*	*0.0173 J*
May-2018	0.063	0.0558	*ND*	*0.022 J*	*2.5 J*	*2 J*	*ND*	*ND*	26.9	25.7	*ND*	*ND*	0.0227

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-10A***												
Nov-2018	0.053	0.05	*ND*	0.015	*2.3 J*	*2.2 J*	*0.00074 J*	*ND*	23	22.8	*ND*	*ND*	0.021
May-2019	0.058	0.055	*ND*	0.012	*ND*	*ND*	*ND*	*ND*	22.5	21.5	*ND*	0.0033	0.018
Oct-2019	0.073	0.06	*ND*	0.013	*2.2 J*	*ND*	*0.00055 J*	*ND*	24.5	24.7	*ND*	*ND*	0.024
May-2020	0.06	0.056	*ND*	0.013	*2.6 J*	*1.8 J*	*0.00082 J*	*ND*	25	22.3	*ND*	*ND*	0.02
Oct-2020	0.058	0.055	*ND*	0.013	*ND*	*2.1 J*	*ND*	*ND*	23.6	21.9	*ND*	*0.001 J*	*0.025 J*
Apr-2021	0.059	0.061	*0.00006 J*	0.015	2.3	2.3	*ND*	*ND*	23.3	24.6	*ND*	*ND*	0.021
Oct-2021	0.06	0.064	*ND*	0.016	2.1	2.1	*0.0012 J*	*ND*	22.9	24.1	*0.000039 J*	*ND*	0.022
May-2022	0.064	0.061	*ND*	0.016	2.3	2.3	*0.0012 J*	*ND*	23.9	23.6	*ND*	*ND*	0.021
Oct-2022	0.062	0.064	*ND*	0.016	2.2	2.5	*ND*	*ND*	24.3	26.4	*ND*	*ND*	0.024
May-2023	0.061	0.064	*ND*	0.015	2.2	2.4	*0.0015 J*	*ND*	23.8	26.9	*ND*	*ND*	0.023
Oct-2023	0.068	0.064	*ND*	0.014	2.3	2.4	*ND*	*ND*	26.3	25.9	*ND*	*ND*	0.023

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-10A***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	28	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-10A*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-10A*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.9 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.9 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-10A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-10A***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	0.63 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.32 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.27 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.21 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.22 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-10A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.163 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-10A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-10A***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.14 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-10A***															
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.3 B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-14***											
Nov-1993	7	7	ND	ND	2.3	ND	ND	5.2	20.2	ND	10	1.41
Apr-1994	ND	ND	ND	ND	2	ND	ND	4.99	16.5	ND	38	ND
Aug-1994	9.5	9.5	ND	ND	2.2	0.3	ND	4.9	25.2	2.6	ND	1.69
Sep-1994	10	10	ND	ND	2.3	0.2	ND	5.9	25.6	2.4	18	1.6
Nov-1994	ND	ND	ND	ND	2.2	ND	ND	5.4	18.4	ND	ND	1.5
Apr-1995	ND	ND	0.3	ND	2.1	ND	ND	5.3	20.3	ND	22	1.4
Apr-1997	ND	5	ND	ND	3	0.06	ND	NA	NA	ND	32	5.8
Oct-1997	3	3	0.23	ND	1	ND	ND	7.68	21.1	ND	ND	11
Apr-1998	2	2	0.52	ND	1.92	0.12	ND	6.51	20.1	ND	16	1.7
Apr-1999	9	9	0.28	ND	3.77	ND	ND	6.11	35.1	ND	38	2.6
Oct-1999	4	4	0.21	ND	2.56	ND	ND	5.62	28.2	ND	29	2
Apr-2000	13	13	ND	ND	4.29	ND	ND	7.28	28	ND	20	3.7
Oct-2000	4	NA	ND	11	3.01	ND	ND	6.16	45.9	5.5	26	2.77
Apr-2001	2	NA	ND	ND	2.4	ND	ND	NA	NA	ND	28	3.43
Sep-2001	32	32	1.1	109	3.88	ND	ND	6.09	43	ND	45	2.52
Mar-2002	ND	ND	ND	ND	3.44	ND	ND	6	42	ND	ND	3.81
Sep-2002	2.8	2.8	ND	60	2.99	ND	ND	5.9	40.2	1.15	24	3.82
Mar-2003	3.5	3.5	ND	ND	31.9	ND	ND	5.8	34.2	7.67	22	2.43
Oct-2003	3.1	3	ND	ND	2.48	ND	ND	5.6	35.2	ND	15	2.86
Apr-2004	2.8	2.8	ND	ND	2.58	ND	ND	5.7	26.6	ND	37	3.02
Oct-2004	2.8	2.8	ND	ND	2.38	ND	ND	5.9	28.2	ND	31	3.22
Apr-2005	2.7	2.7	ND	ND	2.62	ND	ND	5.6	24.6	ND	33	2.1
Oct-2005	3.2	3.2	0.23	ND	3.47	0.08	ND	4.7	16.8	ND	40	3.14
Mar-2006	4.2	4.2	ND	ND	3.49	0.1	ND	6.7	19.8	ND	30	2.18
Sep-2006	4.4	4.4	ND	ND	3.79	ND	ND	5.2	23.7	ND	ND	2.66
Mar-2007	9.7	9.7	0.6	ND	3.47	1.9	ND	5.6	32.1	ND	ND	2.55
Sep-2007	8.5	8.5	0.29	ND	10.3	ND	ND	6.3	38.9	ND	40	2.47
Mar-2008	8.9	8.9	ND	ND	4.4	ND	ND	5.9	46.2	ND	18	1.36
Sep-2008	3.2	3.2	ND	19	5.01	ND	ND	5.6	37.5	ND	15	2.9
Mar-2009	21	21	ND	ND	5.18	ND	ND	5.8	56.9	ND	15	3.76
Oct-2009	13	13	ND	ND	5.95	ND	ND	5.5	50.9	ND	39	5.29
Apr-2010	18.9	18.9	ND	ND	6.5	ND	ND	5.1	57.6	ND	46	27.2
Oct-2010	19	19	ND	ND	7.52	ND	ND	4.9	46.4	ND	59	5.99
Apr-2011	6.7	6.7	ND	ND	6.4	ND	ND	4.6	34.7	ND	25	4.7
Sep-2011	8.9	8.9	ND	ND	6.57	ND	ND	5.8	47.8	ND	43	5.24
Mar-2012	7.7	7.7	ND	ND	5.75	ND	ND	4.7	33.8	ND	ND	6.78
Sep-2012	7.76	7.76	ND	ND	5.16	0.115	ND	4.5	31.8	ND	19	3.53

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-14***											
Mar-2013	9.68	9.68	*ND*	*ND*	5.46	0.107	*ND*	4.1	37.1	*0.385 J*	16	3.62
Oct-2013	9.6	9.6	*ND*	*ND*	5.5	0.101	*ND*	4.2	40.5	*ND*	*ND*	3.04
Mar-2014	10.7	10.7	*ND*	*ND*	5.75	0.113	*ND*	5.8	35.9	*ND*	32	3.23
Oct-2014	5.5	5.5	*ND*	*ND*	6.06	0.136	*ND*	5.3	38.3	*ND*	*ND*	3.86
Apr-2015	7.52	7.52	*ND*	*ND*	5.98	0.105	*ND*	5.2	48.2	*ND*	30	4.07
Nov-2015	6.68	6.68	*ND*	*ND*	5.88	0.129	*ND*	5.8	55.3	*ND*	*19 J*	4.08
May-2016	7.24	7.24	*ND*	*ND*	6.39	0.12	*ND*	6	67.4	*ND*	*21 J*	4.1
Oct-2016	7.68	7.68	*ND*	*5 J*	6.46	*NA*	*NA*	5.9	73.2	*ND*	31	4
May-2017	7.28	7.28	*ND*	*ND*	7.17	0.131	*ND*	5	68.5	*ND*	*24 J*	4.2
Oct-2017	14	14	*ND*	*ND*	7.41	0.118	*ND*	6.1	92.5	*ND*	*21 J*	4.5
May-2018	34	34	*ND*	*ND*	8.6	0.1	*ND*	6.2	96.8	*ND*	*ND*	6.8
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	9.8	*ND*	0.02	5.96	100.7	*ND*	16	6.7
May-2019	*ND*	*NA*	*ND*	*ND*	10.1	*ND*	0.016 H1	5.89	71.3	*ND*	24	6.2
Oct-2019	*2.5 JH1*	*NA*	*ND*	*10.4 J*	6.9	*0.053 J*	0.053 H1	6.09	81.5	*ND*	*ND*	5.7
May-2020	12	*NA*	*ND*	*ND*	8.1	*ND*	*0.0067 J*	5.3	71.1	*ND*	48	7.3
Oct-2020	*ND*	*NA*	*ND*	*ND*	8.4	*ND*	0.019 H1	5.26	74.7	*ND*	*ND*	7.1
Apr-2021	*1 J4c*	*NA*	*ND*	*ND*	8.8	*0.074 J*	*ND*	5.59	67.7	*ND*	30	6.9
Oct-2021	*8 J6c*	*NA*	*ND*	*6.1 JMH*	7.7	*ND*	*ND*	5.75	93.5	*ND*	*ND*	7.26
May-2022	*2 J2c*	*NA*	*ND*	*ND*	7.3	*ND*	0.024 MH	5.67	106	*ND*	14	8.4 N3
Oct-2022	*2 JB3c*	*NA*	*ND*	*6.1 J*	10.9	*0.075 J*	0.043	5.73	105.7	*ND*	29	7.9 N3
May-2023	13	*NA*	*ND*	*ND*	10.2	0.12	*ND*	5.81	104.5	*ND*	40	9.8 N3
Oct-2023	*2 J2c*	*NA*	*ND*	*ND*	13.8	0.057	*NA*	5.78	110.5	*ND*	43	9.7 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-14*													
Nov-1993	NA	ND	ND	NA	ND	0.2	NA	ND	NA	ND	8.8	2.7	ND	0.22	NA
Apr-1994	NA	ND	ND	NA	ND	ND	NA	ND	NA	ND	1.6	1	ND	ND	NA
Aug-1994	NA	ND	ND	NA	ND	0.33	NA	ND	NA	ND	5	3.9	ND	0.21	NA
Sep-1994	NA	ND	ND	NA	ND	0.22	NA	ND	NA	ND	6.2	4.9	ND	0.25	NA
Nov-1994	NA	ND	ND	NA	ND	0.25	NA	ND	NA	0.04	2.5	2.7	ND	0.2	NA
Apr-1995	ND	ND	0.7	ND	ND	0.2	NA	ND	ND	ND	2.4	1.3	ND	0.23	NA
Oct-1996	ND	ND	0.011	ND	ND	0.43	0.33	ND	ND	ND	5	0.48	ND	ND	ND
Apr-1997	ND	ND	0.014	ND	ND	0.32	0.48	ND	ND	ND	3.6	2.8	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	0.274	0.289	ND	ND	ND	10.2	3.66	ND	0.211	0.216
Apr-1998	ND	ND	ND	ND	ND	0.298	0.391	ND	ND	ND	16.2	2.8	ND	0.237	0.237
Apr-1999	ND	ND	0.012	ND	ND	0.447	0.436	ND	ND	ND	19.1	7.85	ND	0.364	0.345
Oct-1999	ND	ND	0.013	ND	ND	0.498	0.438	ND	ND	ND	12.7	9.24	ND	0.383	0.34
Apr-2000	ND	ND	0.013	ND	ND	0.747	0.442	ND	ND	0.008	15.1	8.34	ND	0.437	0.351
Oct-2000	ND	ND	0.018	ND	ND	0.5	0.458	ND	ND	ND	122	12.3	ND	0.369	0.35
Apr-2001	ND	ND	0.018	ND	ND	0.704	NA	ND	ND	ND	87	NA	0.003	0.405	NA
Sep-2001	ND	ND	0.106	ND	ND	1.01	0.5	0.02	ND	0.121	1140	10.3	**0.046**	0.543	0.371
Mar-2002	ND	ND	0.022	ND	ND	0.816	0.478	0.014	ND	0.015	118	9.94	0.007	0.431	0.368
Sep-2002	ND	ND	0.024	ND	ND	0.867	0.415	ND	ND	0.044	43.9	8.96	0.005	0.404	0.341
Mar-2003	ND	ND	0.017	ND	ND	0.427	0.429	ND	ND	0.017	48.7	3.58	0.004	0.331	0.311
Oct-2003	ND	ND	0.024	ND	ND	0.648	0.316	ND	ND	0.043	195	6.42	0.004	0.302	0.24
Apr-2004	ND	ND	0.014	ND	ND	0.603	0.311	ND	ND	ND	80.4	7.38	0.002	0.37	0.236

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14***													
Oct-2004	ND	ND	0.014	ND	ND	0.788	0.286	ND	ND	0.043	59.3	6.44	0.002	0.303	0.232
Apr-2005	ND	ND	0.012	ND	ND	0.36	0.363	ND	ND	ND	14.3	5.68	ND	0.287	0.267
Oct-2005	ND	ND	0.011	ND	ND	0.659	0.47	ND	ND	0.014	3.11	0.264	ND	0.363	0.321
Mar-2006	ND	ND	ND	ND	ND	0.269	0.231	ND	ND	ND	5.84	0.262	ND	0.367	0.357
Sep-2006	ND	ND	ND	ND	ND	0.454	0.448	ND	ND	ND	1.96	1.22	ND	0.371	0.369
Mar-2007	ND	ND	0.01	ND	ND	0.459	0.421	ND	ND	ND	21.9	6.27	ND	0.341	0.331
Sep-2007	ND	0.002	ND	ND	ND	0.421	0.394	ND	ND	ND	14.3	11.3	ND	0.346	0.33
Mar-2008	ND	ND	0.016	ND	ND	0.547	0.49	ND	ND	0.013	45.6	7.07	ND	0.435	0.382
Sep-2008	ND	ND	0.016	0.002	ND	0.495	0.292	0.012	ND	0.029	70.7	10.4	ND	0.393	0.306
Mar-2009	ND	ND	0.012	ND	ND	0.72	0.612	ND	ND	0.013	27.7	16.4	ND	0.477	0.494
Oct-2009	ND	ND	0.017	ND	ND	0.957	0.624	0.043	ND	0.066	39	10.2	ND	0.705	0.585
Apr-2010	ND	ND	0.018	ND	ND	0.974	0.76	ND	ND	ND	22	19.8	ND	0.707	0.568
Oct-2010	ND	0.003	0.016	ND	ND	0.985	0.927	0.02	ND	0.039	39.9	28.2	ND	0.857	0.82
Apr-2011	ND	ND	0.018	ND	ND	0.787	0.779	ND	ND	ND	23.3	18.5	ND	0.666	0.655
Sep-2011	ND	0.005	0.02	ND	ND	0.851	0.903	0.047	0.012	0.09	54.1	22.1	ND	0.741	0.728
Mar-2012	ND	ND	0.017	ND	ND	1.09	0.917	0.015	ND	0.032	29.6	20.4	ND	0.987	0.86
Sep-2012	ND	ND	0.0156	0.00008 J	ND	0.608	0.614	0.0021 J	0.0024 J	0.0028 J	5	4.43	ND	0.488	0.511
Mar-2013	ND	ND	0.0158	0.000123 J	ND	0.691	0.695	0.0026 J	0.0026 J	0.0038 J	13.7	5	ND	0.46	0.457
Oct-2013	ND	ND	0.0143	ND	ND	0.544	0.533	0.0024 J	0.0023 J	0.0016 J	5.94	6	ND	0.409	0.431
Mar-2014	0.000447 J	ND	0.0139	ND	ND	0.572	0.583	0.0021 J	0.0025 J	0.0065 J	16.8	5.61	ND	0.438	0.435
Oct-2014	0.000554 J	ND	0.0185	0.000226 J	0.000111 J	0.716	0.679	0.000749 J	0.003 J	0.0047 J	19.3	6.29	ND	0.504	0.493
Apr-2015	0.0011 J	ND	0.0186	ND	0.000104 J	0.726	0.767	0.0031 J	0.0034 J	0.0041 J	21.3	8.53	ND	0.547	0.586
Nov-2015	ND	0.004	0.0216	0.000682 J	0.000281 J	0.783	0.782	0.0016 J	0.0037 J	0.0171	69.1	7.37	0.00054 J	0.516	0.506
May-2016	ND	ND	0.0169	0.00011 J	ND	0.709	0.715	0.0012 J	0.003	0.0024 J	10.9	7.06	ND	0.564	0.512

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14***													
Oct-2016	ND	ND	0.0199	0.00032 J	ND	0.701	0.727 J+	0.0013 J	0.0036	0.0084	40.9	10.1	0.00015 J	0.544	0.55 J+
May-2017	ND	ND	0.0221	0.00012 J	ND	0.731	0.807	0.00073 J	0.0038	0.0018 J	8.84	9.11	ND	0.576	0.594
Oct-2017	ND	ND	0.0207	0.00012 J	ND	0.713	0.948	ND	0.0054	0.0015 J	10.4	11.4	ND	0.664	0.698
May-2018	ND	ND	0.026	0.000097 J	0.000043 J	1.2	1.1	0.0018 J	0.0077	0.006	21.4	18.3	0.000044 JB	0.95 J	0.89 J
Nov-2018	ND	ND	0.025	0.000065 J	0.000045 J	1.1	1.1	0.002 J	0.0075	0.0022	22.4	20	0.00012 J	0.93 J	0.94 J
May-2019	ND	ND	0.024	ND	ND	1.1	1.1	ND	0.0079	ND	21.2	16.6	ND	ND	ND
Oct-2019	0.00059	0.0034	0.053	0.0021	0.00033 J	1.1	1.1	0.016	0.011	0.065	251	15.7	0.00051 J	0.74	0.84 J
May-2020	ND	ND	0.027	0.000072 J	ND	1.3	1.2	0.0041 J	0.0061	0.0015 J	12.2	11.4	ND	1	0.95 J
Oct-2020	ND	ND	0.026	ND	ND	1.2	1.3	0.006 J	0.0052	ND	23	13.4	ND	0.99	1
Apr-2021	ND	ND	0.026	0.00018 J	ND	1.2	1.3	0.0017 J	0.0062	0.0052	20.4	7.9	ND	0.96	1.1
Oct-2021	0.000063 JB	ND	0.028	0.00016 J	ND	1.2	1.3	0.0022 J	0.0084	0.0033	26.6	8.5	ND	1	1.1
May-2022	ND	ND	0.037	0.0006	ND	1.3	1.3	0.015	0.011	0.022	60.3	12.1	ND	1.2	1.2
Oct-2022	ND	ND	0.035	0.00079	ND	1.3	1.5	0.0026	0.0094	0.031	45.6	10.5	ND	1.1	1.3
May-2023	0.00052	0.0022 J	0.035	0.00032 J	ND	1.7	1.5	0.018	0.0089	0.027	38.9	12.6	ND	1.4	1.3
Oct-2023	ND	ND	0.036	ND	ND	1.7	1.7	0.0039 J	0.0079	0.0086	20.3	11.4	ND	1.4	1.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-14*												
Nov-1993	0.09	NA	ND	NA	0.29	NA	ND	NA	1.2	NA	NA	NA	ND
Apr-1994	0.029	NA	ND	NA	ND	NA	ND	NA	1.4	NA	NA	NA	ND
Aug-1994	0.06	NA	ND	NA	0.39	NA	ND	NA	0.94	NA	NA	NA	0.01
Sep-1994	0.08	NA	ND	NA	0.26	NA	ND	NA	1.1	NA	NA	NA	0.04
Nov-1994	0.07	NA	ND	NA	0.22	NA	ND	NA	0.91	NA	NA	NA	0.01
Apr-1995	0.02	NA	ND	ND	0.42	NA	ND	0.01	0.92	NA	ND	ND	0.03
Oct-1996	0.034	0.038	NA	ND	ND	ND	ND	ND	1.7	1.6	ND	ND	0.087
Apr-1997	0.062	0.055	**0.0045**	ND	1.8	ND	ND	ND	1.1	1.7	ND	ND	ND
Oct-1997	0.063	0.065	ND	ND	0.711	0.711	ND	ND	1.12	1.16	ND	ND	ND
Apr-1998	0.043	0.043	ND	ND	ND	0.566	ND	ND	1.16	1.16	ND	ND	ND
Apr-1999	0.091	0.091	NA	ND	ND	0.711	ND	ND	1.45	1.43	ND	ND	ND
Oct-1999	0.091	0.087	NA	ND	ND	0.594	ND	ND	1.53	1.37	ND	ND	ND
Apr-2000	0.078	0.071	NA	ND	ND	ND	ND	ND	3.04	1.63	ND	ND	0.011
Oct-2000	0.071	0.096	NA	ND	0.607	0.517	ND	ND	1.53	1.52	ND	ND	ND
Apr-2001	0.075	NA	NA	ND	0.514	NA	ND	ND	3.27	NA	ND	ND	ND
Sep-2001	ND	0.087	NA	0.016	ND	ND	ND	ND	2.94	1.57	ND	ND	0.183
Mar-2002	0.058	0.084	NA	ND	2.48	1.35	ND	ND	2.66	1.51	ND	ND	ND
Sep-2002	0.075	0.077	NA	ND	1.15	ND	ND	ND	1.8	1.44	ND	ND	0.012
Mar-2003	0.042	0.05	NA	ND	1.19	ND	ND	ND	1.57	1.48	ND	ND	0.019
Oct-2003	0.022	0.069	NA	ND	1.47	1.21	ND	ND	2.28	1.29	ND	ND	ND
Apr-2004	0.063	0.074	0.0002	ND	0.63	ND	ND	ND	1.95	1.26	ND	ND	0.03
Oct-2004	0.071	0.071	0.0004	ND	0.875	ND	ND	ND	1.86	1.33	ND	ND	0.016

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14***												
Apr-2005	0.067	0.064	*ND*	*ND*	0.59	0.51	*ND*	*ND*	1.31	1.27	*ND*	*ND*	*ND*
Oct-2005	0.045	0.041	*ND*	*ND*	0.63	0.558	*ND*	*ND*	2.06	1.43	*ND*	*ND*	*ND*
Mar-2006	0.047	0.04	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.57	1.57	*ND*	*ND*	*ND*
Sep-2006	0.054	0.053	*ND*	*ND*	*ND*	0.502	*ND*	*ND*	1.88	1.9	*ND*	*ND*	*ND*
Mar-2007	0.065	0.059	0.0002	*ND*	*ND*	*ND*	*ND*	*ND*	1.81	1.72	*ND*	*ND*	*ND*
Sep-2007	0.091	0.087	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.96	1.82	*ND*	*ND*	*ND*
Mar-2008	0.074	0.067	0.0004	*ND*	0.586	*ND*	*ND*	*ND*	2.29	2.05	*ND*	*ND*	0.014
Sep-2008	0.082	0.068	0.0005	*ND*	*ND*	*ND*	*ND*	*ND*	2.45	2.04	*ND*	*ND*	0.011
Mar-2009	0.137	0.136	*ND*	0.011	0.527	0.555	*ND*	*ND*	2.41	2.65	*ND*	*ND*	0.019
Oct-2009	0.247	0.079	0.0002	0.063	*ND*	*ND*	*ND*	*ND*	3.11	2.63	*ND*	*ND*	0.032
Apr-2010	0.28	0.152	*ND*	*ND*	0.648	0.541	*ND*	*ND*	3.26	3.08	*ND*	*ND*	0.013
Oct-2010	0.244	0.218	*ND*	0.029	0.515	0.524	*ND*	*ND*	3.55	3.45	*ND*	*ND*	0.011
Apr-2011	0.171	0.166	*ND*	0.012	*ND*	*ND*	*ND*	*ND*	2.91	2.9	*ND*	*ND*	*ND*
Sep-2011	0.227	0.17	*ND*	0.057	0.515	0.533	*ND*	*ND*	2.99	2.89	*ND*	*ND*	0.02
Mar-2012	0.203	0.188	*ND*	0.017	0.707	0.575	*ND*	*ND*	3.97	3.39	*ND*	*ND*	0.011
Sep-2012	0.049	0.0501	*ND*	*0.0023 J*	*0.491 J*	0.501	*ND*	*ND*	2.45	2.47	*0.000477 J*	*ND*	*ND*
Mar-2013	0.0575	0.0526	*0.000145 J*	*0.0027 J*	*0.491 J*	*0.48 J*	*ND*	*ND*	2.3	2.3	*ND*	*ND*	0.0101
Oct-2013	0.056	0.0606	*ND*	*0.0021 J*	*0.427 J*	*0.452 J*	*ND*	*ND*	2.02	2.17	*0.000108 J*	*ND*	0.0105
Mar-2014	0.0556	0.0557	*ND*	*0.0031 J*	*0.456 J*	*0.458 J*	*ND*	*ND*	2.17	2.18	*ND*	*ND*	*0.0027 J*
Oct-2014	0.062	0.0581	*0.000081 J*	*0.0028 J*	0.506	*0.499 J*	*0.000906 J*	*ND*	2.58	2.55	*0.000972 J*	*ND*	*0.0091 J*
Apr-2015	0.0748	0.0748	*ND*	*0.0037 J*	0.546	0.584	*0.000938 J*	*ND*	2.67	2.84	*ND*	*ND*	*0.0067 J*
Nov-2015	0.0735	0.0661	*0.000137 J*	*0.004 J*	0.567	0.56	0.004	*ND*	2.57	2.55	**0.0025 R,C**	*ND*	0.0101
Dec-2015	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*0.000588 J*	*NA*	*NA*
May-2016	0.0651	0.0658	*ND*	*0.0028 J*	0.584	0.509	*ND*	*ND*	2.64	2.37	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14***												
Oct-2016	*0.0756 J+*	*0.0811 J+*	*ND*	*0.0034 J*	0.579	0.557	*ND*	*ND*	2.57	2.6	*ND*	*ND*	*0.0062 J*
May-2017	0.0645	0.0693	*ND*	*0.0028 J*	0.561	0.596	*ND*	*ND*	2.59	2.64	*ND*	*ND*	*ND*
Oct-2017	0.0768	0.0811	*ND*	*0.0036 J*	0.58	0.616	*ND*	*ND*	3.06	3.16	*ND*	*ND*	*ND*
May-2018	0.13	0.12	*ND*	0.0066	*ND*	*ND*	*0.00038 J*	*ND*	*4 J*	*3.6 J*	*ND*	*ND*	0.006
Nov-2018	0.17	0.16	*ND*	0.0071	*ND*	*ND*	*0.00016 J*	*ND*	*4.3 J*	*4.4 J*	*ND*	*ND*	0.011
May-2019	0.2	0.24 M1	*ND*	0.0068	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0056
Oct-2019	0.22	0.17	*0.00017 J*	0.019	*1.3 J*	*ND*	*ND*	*ND*	*3.3 J*	*3.5 J*	*ND*	0.0057	0.03
May-2020	0.098	0.092	*ND*	0.0053	*ND*	*ND*	*ND*	*ND*	*4 J*	*2.8 J*	*ND*	*ND*	*0.0045 J*
Oct-2020	0.16	0.15	*ND*	0.0084	*ND*	*ND*	*ND*	*ND*	*3.7 J*	*3.3 J*	*ND*	0.0065	*ND*
Apr-2021	0.14	0.15	*0.00007 J*	*0.0069 J*	0.71	0.68	*ND*	*ND*	3.5	3.3	*ND*	*ND*	*0.0035 J*
Oct-2021	0.16	0.163	*ND*	0.0086	0.64	0.68	*ND*	*ND*	3.2	3.5	*ND*	*ND*	*0.0034 J*
May-2022	0.18	0.18	*ND*	0.023	0.77	0.71	*ND*	*ND*	3.8	3.7	*ND*	*ND*	0.0062
Oct-2022	0.14	0.14	*ND*	0.013	0.72	0.8	*ND*	*ND*	3.5	4.2	*ND*	*ND*	0.0074 B
May-2023	0.17	0.16	*ND*	0.02	0.98	0.82	*ND*	*ND*	4.4	4.1	*ND*	*ND*	0.0085
Oct-2023	0.18	0.18	*ND*	0.012	0.82	0.83	*ND*	*ND*	4.9	4.9	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7 J	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	2.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14*																
Nov-2015	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	3.1	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	3.5	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	3.8	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4 JB	ND
Nov-2018	ND	ND	ND	ND	4.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 JBIH	ND
May-2019	ND	ND	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	3.48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2023	ND	ND	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Aug-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	1.6	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*0.6 J*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14***															
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	0.6 J
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	1.2
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	1.4
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	1.1
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	1.6
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	2
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	1.9
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.69	2
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.34 J	ND	ND	ND	ND	ND	4.61	3.3
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.36 J	ND	ND	ND	ND	ND	6.33	4.38
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND	ND	6.94	4.58
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.27	4.48
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.8	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14***															
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12.9 J	5.1
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	6.4	6.3
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	0.1 J	ND	ND	ND	6.6	7.6
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J,B	ND	0.2 J	ND	ND	ND	6.3	7.4
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	0.2 J	ND	ND	ND	6	6.8
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11.4	7.5
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.8	9.4 N3
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3 CL	6.5 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.1	4.5
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.6	3.8
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	7.8	4.3
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.29 J	ND	0.912 J	ND	ND	ND	4.73 J	6.33
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	6.5	4.4
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	7.3	4.1
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	6.2	4.1
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	4	3.1
Oct-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	4.8	3.6

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14***															
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	1.52	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.56	ND	ND	ND	ND	0.37 J	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	1.86	ND	ND	ND	ND	0.5 J	0.47 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	2.87	ND	ND	ND	ND	0.6 J	0.51 J	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	0.54 J	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.64	*ND*	*ND*	*ND*	*ND*	*0.54 J*	*0.42 J*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.5	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	4.1	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.5 J*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.9	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*0.6 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	4.8	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.5 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	4.4	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.9	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.494 J*	*ND*	*ND*	4.19	*ND*	*ND*	*ND*	*ND*	*0.91 J*	*0.35 J*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.2	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.2	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.3	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-14A***											
Nov-1993	ND	ND	0.2	ND	3.1	ND	ND	5.07	15.8	2.3	ND	1.31
Apr-1994	ND	ND	0.1	ND	2.5	ND	ND	4.84	17.8	ND	12	ND
Apr-1995	10.3	10.3	ND	ND	3.3	ND	ND	5.3	28.5	2.4	18	2.1
Apr-1997	ND	4	ND	ND	3	0.03	ND	NA	NA	ND	40	4.8
Oct-1997	ND	ND	0.27	ND	2.16	ND	ND	7.1	18.21	ND	ND	ND
Apr-1998	ND	ND	0.22	ND	2.6	0.1	ND	6.78	126.4	0.69	15	3.2
Apr-1999	ND	ND	0.29	ND	4.77	ND	ND	5.74	29.6	ND	46	2.9
Oct-1999	12	12	0.14	ND	4.26	ND	ND	4.85	26.2	ND	36	2.9
Apr-2000	3	3	ND	ND	6.79	ND	ND	6.99	52	ND	24	4.7
Oct-2000	2.5	NA	ND	ND	4.66	ND	ND	6.08	28.8	15	16	4.46
Apr-2001	2.8	NA	ND	ND	4.67	ND	ND	NA	NA	ND	29	3.92
Sep-2001	3.4	3.4	ND	ND	5.92	ND	ND	5.59	35	ND	26	3.58
Mar-2002	2	2	ND	ND	7.48	ND	ND	5.8	37	ND	14	4.37
Sep-2002	4	4	ND	ND	6.88	ND	ND	6.3	42.9	ND	27	3.38
Mar-2003	6.5	6.5	ND	ND	60.7	ND	ND	6.5	54.4	7.43	59	3.79
Oct-2003	4.6	4.6	ND	ND	4.89	ND	ND	5.7	38.3	ND	34	4.24
Apr-2004	2.1	2.1	ND	11	4.01	ND	ND	6.2	22.8	ND	32	2.71
Oct-2004	1.9	1.9	ND	ND	5.22	ND	ND	4.8	30.1	ND	47	4.51
Apr-2005	2.6	2.6	ND	ND	5.11	ND	ND	4.8	26.1	ND	37	4
Oct-2005	4.2	4.2	0.21	ND	6.87	ND	ND	4.4	33.1	ND	48	4.36
Mar-2006	6.7	6.7	ND	ND	6.89	ND	ND	6.8	40.7	1.15	34	2.69
Sep-2006	6.4	6.4	ND	ND	7.87	ND	ND	5	45	ND	31	4.51
Mar-2007	4.7	4.7	ND	ND	6.58	ND	ND	5.5	47.2	ND	ND	3.4
Sep-2007	3.8	3.8	0.31	ND	89.5	ND	ND	5.8	43.5	29.9	24	4.47
Mar-2008	16	16	ND	ND	13.9	ND	ND	5.2	62.4	1.93	37	4.15
Sep-2008	13	13	ND	27	9.82	ND	ND	5.1	55.7	ND	39	4.9
Mar-2009	12	12	ND	ND	9.92	ND	ND	5	74.6	ND	31	4.64
Oct-2009	9.9	9.9	ND	ND	10.1	ND	ND	5.1	66.7	ND	19	5.84
Mar-2010	11	11	ND	10.1	8.05	ND	ND	5.31	71	0.97	ND	3.26
Oct-2010	9.3	9.3	ND	ND	8.46	ND	ND	4.2	46.8	ND	32	3.83
Apr-2011	13	13	ND	ND	9.4	ND	0.02	5	51.9	ND	40	4.1
Sep-2011	15	15	0.22	ND	8.85	ND	ND	5.3	56.7	ND	47	7.08
Mar-2012	5.9	5.9	0.26	ND	9.58	0.06	ND	4.4	44.7	ND	18	4.53
Sep-2012	11.2	11.2	ND	ND	10.7	ND	ND	4.1	58.1	ND	46	3.24
Mar-2013	10.6	10.6	ND	ND	11.8	0.0417 J	ND	3.9	65.1	0.595 J	38	5.14
Oct-2013	20.5	20.5	ND	ND	12.7	0.0382 J	ND	4.4	115.8	ND	47	4.31
Mar-2014	15	15	ND	23	13.7	0.0274 J	ND	5.3	65	ND	54	4.82

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-14A***											
Oct-2014	2.2	2.2	*ND*	*ND*	10.7	0.0948	*ND*	4.9	51	*ND*	*ND*	4
Apr-2015	4.44	4.44	*ND*	*8 J*	11.1	0.0572	*ND*	4.4	51.9	*ND*	44	4.34
Nov-2015	*ND*	*ND*	*ND*	13	9.08	*ND*	*ND*	5.3	71.1	3.34	45	5.31
May-2016	3.72	3.72	*ND*	*5 J*	10.3	*ND*	*ND*	5.5	105.6	5.35	60	10.6
Oct-2016	1.92	1.92	*ND*	*6 J*	14.8	*NA*	*NA*	5.8	130.3	8.02	66	7.1
May-2017	7.2	7.2	*0.154 J*	10	15.6	*ND*	*ND*	5.2	157.9	11.7	66	18.4
Oct-2017	16.5	16.5	0.228	*8 J+*	17	*ND*	*ND*	5.5	165.2	15.5	135	22.6
May-2018	56	56	0.35	*16.5 J*	18.8	*0.064 J*	*ND*	5.75	207.6	*ND*	104	39.1
Nov-2018	74	74	0.2	*16.5 J*	14.1	*ND*	*0.007 J*	6.07	257.7	*ND*	149	28.4
May-2019	12 H1	*NA*	*ND*	*ND*	4.5	*ND*	*ND*	6.04	57.2	*ND*	31	*ND*
Oct-2019	*ND*	*NA*	*ND*	*ND*	4	*0.039 J*	0.034	5.99	59.4	*ND*	28	2.1
May-2020	30	*NA*	*0.074 J*	*6.9 J*	10.6	*ND*	0.02	5.58	235.7	*ND*	109	21.5
Oct-2020	*2 J*	*NA*	*ND*	*4.8 J*	9.5	*ND*	0.068 H1	5.62	134.9	1.2	10	8.5
Apr-2021	*ND*	*NA*	*ND*	*ND*	4.9	*0.058 J*	*ND*	6.49	97	*ND*	16	*1.8 J*
Oct-2021	*ND*	*NA*	*ND*	*ND*	6	*ND*	*ND*	6.47	109.8	*ND*	*ND*	3.82
May-2022	50	*NA*	0.26	*ND*	11.1	*ND*	0.024	6.08	274.2	*ND*	96	20.5 N3
Oct-2022	36	*NA*	0.14	*17.5 J*	12.6	*0.079 J*	*ND*	6.03	222.8	*ND*	72	17.4 N3
May-2023	34	*NA*	0.36	45.6	15.5	*ND*	*NA*	6.37	300.3	*9.4 J*	28	26.9 N3
Oct-2023	32	*NA*	0.29	*13.6 J*	15.8	*ND*	*NA*	6.4	302.8	17.9	138	34.2 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14A***													
Nov-1993	NA	ND	ND	NA	ND	0.03	NA	0.007	NA	ND	6.9	0.34	ND	0.3	NA
Apr-1994	NA	ND	ND	NA	ND	ND	NA	ND	NA	ND	0.89	0.29	ND	ND	NA
Apr-1995	ND	ND	1	ND	ND	0.3	NA	ND	ND	ND	5.7	2.3	ND	0.32	NA
Oct-1996	ND	ND	0.014	ND	ND	0.81	0.53	ND	ND	ND	3.3	3.7	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	0.64	0.66	ND	ND	ND	2.7	0.71	ND	ND	ND
Oct-1997	ND	ND	0.031	ND	ND	0.514	0.403	ND	ND	ND	4.32	0.628	ND	0.354	0.217
Apr-1998	ND	ND	0.044	ND	ND	0.497	0.424	0.012	ND	0.016	9.35	1.6	ND	0.48	0.263
Apr-1999	ND	ND	0.023	ND	ND	0.485	0.52	ND	ND	0.011	6.6	4.72	ND	0.405	0.359
Oct-1999	ND	ND	0.025	ND	ND	0.652	0.62	ND	ND	0.01	3.6	2.31	ND	0.52	0.472
Apr-2000	ND	ND	0.019	ND	ND	0.951	0.619	ND	ND	0.012	4.08	1.94	ND	0.564	0.449
Oct-2000	ND	ND	0.02	ND	ND	0.935	0.543	ND	ND	0.013	4.02	3.19	ND	0.516	0.4
Apr-2001	ND	ND	0.019	ND	ND	0.743	NA	ND	ND	ND	4.46	NA	ND	0.502	NA
Sep-2001	ND	ND	0.017	ND	ND	0.696	0.519	ND	ND	0.01	3.47	2.12	ND	0.446	0.397
Mar-2002	ND	ND	0.018	ND	ND	0.883	0.574	ND	ND	0.012	4.28	3.52	ND	0.527	0.465
Sep-2002	ND	ND	0.019	ND	ND	0.569	0.594	ND	ND	ND	5.86	5.07	ND	0.477	0.479
Mar-2003	ND	ND	0.018	ND	ND	0.655	0.608	ND	ND	ND	3.65	3.01	ND	0.523	0.501
Oct-2003	ND	ND	0.021	ND	ND	0.867	0.546	ND	ND	0.014	7.09	3.56	ND	0.504	0.452
Apr-2004	ND	ND	0.021	ND	ND	0.552	0.542	ND	ND	0.012	4.52	1.08	ND	0.322	0.268
Oct-2004	ND	ND	0.02	ND	ND	1.09	0.662	ND	ND	0.018	5.17	0.752	ND	0.434	0.359
Apr-2005	ND	ND	0.016	ND	ND	1.04	0.703	ND	ND	0.019	5.87	2.26	ND	0.347	0.282
Oct-2005	ND	ND	0.02	ND	ND	1.04	0.799	ND	ND	0.014	5.53	1.6	ND	0.427	0.389

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14A***													
Mar-2006	ND	ND	0.016	ND	ND	0.429	0.333	ND	ND	ND	5.67	2.51	ND	0.394	0.393
Sep-2006	ND	ND	0.021	ND	ND	0.886	0.689	ND	ND	0.014	6.2	4.04	ND	0.559	0.535
Mar-2007	ND	ND	0.017	ND	ND	0.746	0.728	ND	ND	0.013	2.78	1.63	ND	0.374	0.368
Sep-2007	ND	0.002	0.015	ND	ND	1.18	0.586	0.034	ND	0.017	10.7	4.72	0.002	0.37	0.292
Mar-2008	ND	ND	0.029	ND	ND	0.701	0.648	ND	ND	ND	10	8.37	ND	0.583	0.524
Sep-2008	ND	ND	0.033	ND	ND	0.835	0.565	ND	ND	0.013	12.6	7.3	0.002	0.685	0.58
Mar-2009	ND	ND	0.032	ND	ND	0.84	0.691	ND	ND	0.024	17	9.93	ND	0.616	0.599
Oct-2009	ND	ND	0.035	ND	ND	1.14	0.711	ND	ND	0.017	15.5	10.5	ND	0.727	0.68
Mar-2010	ND	ND	0.029	ND	ND	0.572	0.568	ND	ND	0.012	11.6	12.1	ND	0.445	0.43
Oct-2010	ND	ND	0.02	ND	ND	0.681	0.655	ND	ND	0.016	5.71	5.21	ND	0.518	0.519
Apr-2011	ND	ND	0.029	ND	ND	0.722	0.691	ND	ND	0.013	6.77	5.66	ND	0.559	0.549
Sep-2011	ND	ND	0.03	ND	ND	1.59	0.82	ND	ND	0.023	9.09	7.51	ND	0.756	0.583
Mar-2012	ND	ND	0.026	ND	ND	0.726	0.729	ND	ND	0.011	3.33	4.84	ND	0.661	0.668
Sep-2012	ND	ND	0.0188	0.000445 J	ND	0.543	0.53	0.0021 J	0.0051 J	0.0068 J	5.3	4.6	ND	0.457	0.438
Mar-2013	ND	ND	0.0358	0.000832 J	ND	0.906	0.92	0.0029 J	0.0086 J	0.0114	6.88	6.75	ND	0.699	0.666
Oct-2013	ND	ND	0.0292	0.000643 J	0.000239 J	0.702	0.599	0.0092 J	0.0079 J	0.0138	27.5	24	ND	0.621	0.568
Mar-2014	0.000526 J	ND	0.0293	0.000653 J	0.000211 J	0.771	0.758	0.0021 J	0.0083 J	0.0143	7.53	7.79	ND	0.703	0.68
Oct-2014	0.000546 J	ND	0.0281	0.000749 J	0.000238 J	0.713	0.708	0.000747 J	0.0068 J	0.0183	5.65	5.31	ND	0.539	0.541
Apr-2015	0.001 J	0.0019 J	0.0358	0.000875 J	0.000381 J	0.752	0.754	0.0137	0.0179	0.0435	6.62	4.29	ND	0.597	0.589
Nov-2015	0.0012 J	0.0023	0.0333	0.0013 J	0.000551 J	0.918	0.944	0.0254	0.0155	0.0883	13.9	3.29	0.000848 J	0.734	0.733
May-2016	ND	0.0015 J	0.0638	0.00082 J	0.00052 J	1.66	1.63	0.0107	0.0202	0.0387	9.96	6.77	0.00051 J	1.56	1.64
Oct-2016	0.00075 J	0.0022 J	0.0399	0.00064 J	0.00039 J	1.16	1.88	0.0148 J+	0.0167	0.0511 J+	12.7	5.76	0.00087 J	1.02 J+	1.85
May-2017	0.0011 J	0.0065	0.107	0.00091 J	0.00047 J	2.73	2.64	0.0456	0.0505	0.106	14	7.92	0.0003 J	2.82	2.71
Oct-2017	0.00051 J	0.0016 J	0.119	0.00086 J	0.00086 J	3.48	3.51	0.0079	0.0358	0.0291	9.45	8.96	ND	3.37	3.58

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14A***													
May-2018	0.00039 J	0.0012	0.2	0.00093	0.0019	6	5.8	0.0065 J	0.042	0.045	27.4	24.7	0.00026 J	5.9	5.7
Nov-2018	0.000045 J	0.00073 J	0.16	0.00057	0.00054 J	4.3	4.6	0.0052 J	0.02	0.012	52.1	50.1	0.00016 J	4.3	4.5
May-2019	ND	ND	0.019	0.00036	0.0022	ND	ND	0.012	0.0027	0.026	14.2	12.9	ND	ND	ND
Oct-2019	0.00015 J	0.0003 J	0.014	0.00029 J	0.00043 J	0.46	0.43 J	0.0085	0.0017	0.0094	13.2	10.4	0.00011 J	0.22	0.23 J
May-2020	0.000095 J	0.0014	0.086	0.00025 J	0.00035 J	3.3	3.2	0.011	0.012	0.0071	50.8	46.7	ND	3.2	3.1
Oct-2020	ND	ND	0.042	ND	ND	1.4	1.4	0.0024 J	0.0035	ND	32.3	26.3	ND	1.2	1.3
Apr-2021	ND	0.0028 J	0.016	0.00043 J	ND	0.4 J	0.38 J	0.0051	0.0009 J	0.0098	23.3	17.3	ND	0.19 J	0.22
Oct-2021	0.00012 JB	0.0013 J	0.02	0.00037 J	ND	0.73	0.84	0.0039	0.0032	0.0079	21.8	13.3	0.00012 J	0.48 J	0.56
May-2022	ND	0.0014 J	0.093	0.00032 J	0.00023 J	3.1	3	0.003	0.013	0.0026	53.5	49.6	ND	3.1	3
Oct-2022	ND	0.0019 J	0.078	0.0002 J	ND	2.7	3.2	0.0023 J	0.0037	0.0027	55.2	59	ND	2.6	2.9
May-2023	ND	0.001 J	0.13	0.00029 J	0.0007 J	4.2	4.4	0.0064	0.013	0.019	55.6	52.1	ND	4	4.1
Oct-2023	ND	0.0014 J	0.16	0.00022 J	ND	5.3	5.7	0.0024 J	0.013	ND	51.9	60.4	ND	5.1	5.6

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-14A*												
Nov-1993	0.07	NA	ND	NA	1.1	NA	ND	NA	1.4	NA	NA	NA	ND
Apr-1994	0.036	NA	ND	NA	ND	NA	ND	NA	1.9	NA	NA	NA	ND
Apr-1995	0.02	NA	ND	ND	0.61	NA	ND	0.01	1.6	NA	ND	ND	0.03
Oct-1996	0.053	0.05	NA	ND	ND	ND	ND	ND	2.3	2.3	ND	ND	0.18
Apr-1997	0.084	0.029	ND	ND	ND	ND	ND	ND	2.3	2.1	ND	ND	0.021
Oct-1997	0.025	0.026	ND	ND	1.57	ND	ND	ND	1.67	1.61	ND	0.01	0.02
Apr-1998	0.03	0.033	0.0005	ND	1.68	ND	ND	ND	2.03	1.93	ND	0.013	0.012
Apr-1999	0.043	0.043	NA	ND	1.16	0.659	ND	ND	2.36	2.32	ND	ND	0.01
Oct-1999	0.02	0.024	NA	ND	ND	0.541	ND	ND	2.57	2.42	ND	ND	ND
Apr-2000	0.029	0.024	NA	ND	ND	ND	ND	ND	4.08	2.53	ND	ND	0.015
Oct-2000	0.023	0.03	NA	ND	0.572	0.95	ND	ND	3.57	2.53	ND	ND	0.015
Apr-2001	0.03	NA	NA	ND	ND	NA	ND	ND	3.58	NA	ND	ND	0.015
Sep-2001	0.019	0.019	NA	0.012	0.722	ND	ND	ND	3.97	2.61	ND	ND	0.01
Mar-2002	0.039	0.037	NA	ND	1.32	0.388	ND	ND	4.13	2.98	ND	ND	0.012
Sep-2002	0.054	0.056	NA	ND	0.696	ND	ND	ND	3.26	3.27	ND	ND	ND
Mar-2003	0.073	0.067	NA	0.012	1.2	ND	ND	ND	3.54	3.37	ND	ND	ND
Oct-2003	0.083	0.075	NA	0.014	0.986	0.533	ND	ND	3.85	2.98	ND	ND	0.011
Apr-2004	0.025	0.023	0.0008	ND	1.21	1.28	ND	ND	3.3	2.31	ND	ND	ND
Oct-2004	0.037	0.031	0.0006	ND	1.17	ND	ND	ND	3.45	2.92	ND	ND	0.018
Apr-2005	0.046	0.045	0.0003	ND	0.95	0.69	ND	ND	3.47	2.95	ND	ND	0.026
Oct-2005	0.032	0.034	0.0006	ND	0.823	0.675	ND	ND	3.86	3	ND	ND	0.01
Mar-2006	ND	ND	0.0004	ND	ND	ND	ND	ND	3.94	3.3	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14A***												
Sep-2006	0.027	0.023	0.0002	0.013	0.692	0.6	ND	ND	3.99	3.87	ND	ND	0.015
Mar-2007	0.014	0.013	0.0004	ND	0.57	0.529	ND	ND	3.17	3.17	ND	ND	ND
Sep-2007	0.059	0.043	0.0004	0.022	0.518	ND	ND	ND	3.22	3.19	ND	ND	0.034
Mar-2008	0.052	0.047	ND	ND	0.802	0.577	ND	ND	4.14	3.88	ND	ND	0.012
Sep-2008	0.05	0.043	ND	ND	0.798	0.503	ND	ND	4.26	3.9	ND	ND	0.025
Mar-2009	0.054	0.056	ND	0.014	0.839	0.668	ND	ND	4.4	4.45	ND	ND	0.027
Oct-2009	0.061	0.06	ND	0.014	0.777	0.526	ND	ND	4.72	4.81	ND	ND	0.041
Mar-2010	0.069	0.067	ND	ND	0.715	0.622	ND	ND	3.71	4.15	ND	ND	ND
Oct-2010	0.047	0.044	ND	0.011	0.526	0.525	ND	ND	4.61	4.58	ND	ND	0.019
Apr-2011	0.037	0.033	ND	ND	ND	ND	ND	ND	4.13	3.96	ND	ND	0.014
Sep-2011	0.042	0.249	ND	0.023	1.36	0.832	ND	ND	4.96	4.7	ND	ND	0.026
Mar-2012	0.028	0.035	ND	ND	0.536	0.525	ND	ND	4.44	4.61	ND	ND	0.012
Sep-2012	0.0341	0.0312	ND	0.0056 J	0.573	0.556	ND	ND	7.85	7.89	0.000238 J	ND	0.0055 J
Mar-2013	0.0391	0.0391	0.000072 J	0.0102 J	0.66	0.645	ND	ND	6.06	6.03	ND	ND	0.0219
Oct-2013	0.121	0.111	0.000061 J	0.0084 J	0.634	0.56	ND	ND	7	6.52	0.000189 J	0.0021 J	0.0168
Mar-2014	0.0448	0.0469	ND	0.0084 J	0.606	0.582	ND	ND	6.34	6.27	ND	ND	0.0132
Oct-2014	0.032	0.0313	0.000073 J	0.0072 J	0.601	0.597	0.000986 J	ND	5.62	5.55	0.000758 J	ND	0.013
Apr-2015	0.0648	0.0478	0.000064 J	0.0724	0.794	0.732	ND	ND	5.24	5.45	ND	0.000833 J	0.0203
Nov-2015	0.125	0.104	0.000039 J	0.0332	0.996	0.908	0.000688 J	ND	4.76	4.85	ND	0.0011 J	0.0265
May-2016	0.0836	0.0492	0.00011 J	0.0365	1.11	1.14	0.00051 J	ND	5.37	5.13	0.00018 J	0.00067 J	0.0443
Oct-2016	0.0642 R	0.0627	0.000056 J	0.0329 J+	0.833	1.25	ND	ND	3.45 J+	6.37	0.00017 J	0.0032	0.0322
May-2017	0.133	0.0909	ND	0.109	1.57	1.51	0.00067 J	ND	7.75	7.42	0.00025 J	0.00046 J	0.0535
Oct-2017	0.106	0.0998	ND	0.0436	1.61	1.67	0.00057 J	ND	7.65	8.26	0.0002 J	ND	0.0431
May-2018	0.17	0.078	ND	0.046	2.2 J	1.6 J	0.00079 J	ND	10.1	10.1	0.00031	0.0031 B	0.0528

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14A***												
Nov-2018	0.27	0.25	*ND*	0.023	*1.7 J*	*1.8 J*	*0.00024 J*	*ND*	7.5	7.9	*0.00008 J*	*ND*	0.029
May-2019	0.13	0.12	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.00031	*ND*	0.022
Oct-2019	0.23	0.21	*ND*	0.0055	*ND*	*ND*	*ND*	*ND*	*2.9 J*	*3 J*	*ND*	0.0062	0.012
May-2020	0.28	0.26	*0.00016 J*	0.015	*1.5 J*	*1.1 J*	*ND*	*ND*	7.3	6.1	*ND*	0.0047	0.017
Oct-2020	0.17	0.16	*ND*	0.0058	*ND*	*ND*	*ND*	*ND*	*4.2 J*	*3.9 J*	*ND*	*0.0014 J*	*ND*
Apr-2021	0.2	0.19	*0.00008 J*	*0.0062 J*	0.54	*0.47 J*	*ND*	*ND*	3	2.8	*ND*	*ND*	*0.0062 J*
Oct-2021	0.29	0.29	*ND*	0.006	0.61	0.7	*ND*	*ND*	3.8	4.3	*0.000068 J*	*ND*	0.0077
May-2022	0.32	0.3	*ND*	0.013	1.3	1.2	*ND*	*ND*	8.2	7.9	*ND*	*ND*	0.019
Oct-2022	0.28	0.32	*ND*	0.0052	1.2	1.4	*ND*	*ND*	7.3	8.2	*ND*	*ND*	0.01
May-2023	0.56	0.55	*ND*	0.015	1.5	1.5	*ND*	*ND*	7.6	7.9	*ND*	*ND*	0.052
Oct-2023	0.68	0.77	*ND*	0.015	1.6	1.7	*ND*	*ND*	8.1	8.7	*ND*	*ND*	0.015

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-14A***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	0.8 J	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	0.8 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	0.7 J	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	1.2	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	0.5 J	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14A*																
Mar-2006	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2007	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	6.2	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	10	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	9.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	7.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	4.72	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	9.59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	9.97	0.32 J	ND	ND	ND	ND	ND	0.39 J	0.37 J	ND	ND	ND	1.09 J,B	ND
Mar-2014	ND	ND	ND	ND	8.29	0.24 J	ND	ND	ND	ND	ND	0.28 J	0.43 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	3.77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	3.82	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	0.1 J	0.2 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14A*																
Oct-2016	ND	ND	ND	ND	5.1	0.1 J	ND	ND	ND	ND	ND	0.2 J	0.2 J	1.4 J	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	8.5	0.2 J	ND	ND	ND	ND	0.1 J	0.3 J	0.4 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	7.8	0.2 J	ND	ND	ND	ND	0.1 J	0.3 J	0.4 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	6.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.1 JB	ND
Nov-2018	ND	ND	ND	ND	10.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	6.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2023	ND	ND	ND	ND	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	2.9
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	4.1
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	7.1	4
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.3	7.2
Apr-2000	ND	NA	NA	ND	NA	2.4	NA	ND	ND	ND	NA	ND	NA	ND	NA	1.4	4
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	6
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	8.3
Sep-2001	ND	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.7	5.1
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	3.4
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	6.2
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	3.5
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.8	5.6
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.2	3.5
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	8.3
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.3	7.2
Oct-2005	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	13.2	10.5

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14A***															
Mar-2006	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	22.8	11.9
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	22.6	13.3
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	9.8	9.9
May-2007	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	7.5	10.8
Sep-2007	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	12.5	5.2
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	22.5	16.9
Sep-2008	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	14.2	19.4
Mar-2009	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	16.5	20.8
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	14.7	19.9
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*10.9 J*	11.4
Oct-2010	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	8.5	7.8
Apr-2011	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	10.6	10.5
Sep-2011	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	17.8	11.7
Mar-2012	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	7.6	6.7
Sep-2012	*0.76 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.86 J*	*ND*	*ND*	*ND*	3.17	4.82
Mar-2013	1.39	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.84	*ND*	*ND*	*ND*	6.7	12
Oct-2013	2.01	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.98	*ND*	*ND*	*ND*	5.13	12.4
Mar-2014	1.68	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.95	*ND*	*ND*	*ND*	5.67	10
Oct-2014	*0.92 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.01	*ND*	*ND*	*ND*	1.88	4.45
Apr-2015	*0.88 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.89 J*	*ND*	*ND*	*ND*	1.95	4.21
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*2.7 J*	2.9
May-2016	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	1.3	3.5

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14A***															
Oct-2016	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	2	6.3
May-2017	2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	3.7	10
Oct-2017	2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	2.5	*ND*	*ND*	*ND*	3.7	11
May-2018	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	4.5	6.5
Nov-2018	2.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	6.3	14.9 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	2.4	3.7
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	1.1	1.6
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*
May-2022	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	4.6	5.2
Oct-2022	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	3.5	5.4
May-2023	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	1.9	4.7
Oct-2023	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	1.5	3.7

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	2.5	NA	ND	NA
Oct-1999	ND	ND	ND	NA	3.3	ND	ND	1.7	ND	ND	ND	ND	1.1	4.4	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	1	ND	ND	NA
Oct-2000	ND	ND	ND	NA	2.8	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	NA
Apr-2001	ND	ND	ND	NA	4	ND	ND	1.1	ND	ND	ND	ND	0.7 J	3.5	ND	ND	NA
Sep-2001	ND	ND	ND	NA	2.9	ND	ND	0.5 J	ND	ND	ND	ND	ND	1.7	ND	ND	NA
Mar-2002	ND	ND	ND	NA	3.9	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	NA
Sep-2002	ND	ND	ND	NA	**6.4**	ND	ND	0.6 J	ND	ND	ND	ND	0.5 J	1.1	ND	ND	NA
Mar-2003	ND	ND	ND	NA	**5.3**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	2.7	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	NA
Apr-2004	ND	ND	ND	NA	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	4.9	ND	ND	0.7 J	ND	ND	ND	ND	ND	2.3	ND	ND	NA
Apr-2005	ND	ND	ND	ND	**5.9**	ND	ND	0.9 J	ND	ND	ND	ND	0.6 J	1.5	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14A***															
Oct-2005	ND	ND	0.7 J	ND	**9.5**	0.5 J	ND	1.7	ND	ND	ND	ND	1.3	2.3	ND	0.7 J	NA
Mar-2006	ND	ND	0.9 J	ND	**11.6**	0.6 J	ND	1.9	ND	ND	ND	ND	1.6	3.1	ND	0.5 J	NA
Sep-2006	ND	ND	ND	ND	**7.6**	ND	ND	2.1	ND	ND	ND	ND	1.6	1.7	ND	ND	NA
Mar-2007	ND	ND	0.5 J	ND	**6.5 R**	ND	ND	1.3	ND	ND	ND	ND	0.9 J	1.5	ND	ND	NA
May-2007	ND	ND	0.6 J	1.7	5	ND	ND	1.5	ND	ND	ND	ND	0.9 J	1.3	ND	0.7 J	NA
Sep-2007	ND	ND	0.6 J	0.6 J	**7.7**	ND	ND	1.4	ND	ND	ND	ND	1.1	2	ND	ND	NA
Mar-2008	ND	ND	0.9 J	ND	**8.9**	0.7 J	ND	2.3	ND	ND	ND	ND	2	3.6	ND	ND	NA
Sep-2008	ND	ND	0.7 J	ND	**12**	0.7 J	ND	2.4	ND	ND	ND	ND	1.8	6.5	ND	1.5	NA
Mar-2009	ND	ND	1.1	ND	**16.3**	1.1	ND	2.6	ND	ND	ND	ND	2.5 J	0.5 J	ND	0.8 J	NA
Oct-2009	ND	ND	0.7 J	ND	**14.2**	0.8 J	ND	2.6	ND	ND	ND	ND	2.3	2.1	ND	0.6 J	NA
Mar-2010	ND	ND	ND	ND	**8.4**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	**6.5**	ND	ND	1.3	ND	ND	ND	ND	ND	0.9 J	ND	ND	NA
Apr-2011	ND	ND	ND	ND	**8.1**	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	0.7 J	ND	**7.4**	0.5 J	ND	2	ND	ND	ND	ND	1.4	1.3	ND	ND	NA
Mar-2012	ND	ND	ND	ND	3.9	ND	ND	1.3	ND	ND	ND	ND	0.9 J	0.6 J	ND	0.7 J	NA
Sep-2012	ND	ND	0.81 J	0.28 J	3.95	0.36 J	ND	1.48	ND	ND	ND	ND	1.05	0.48 J	ND	ND	1.17
Mar-2013	0.5 J	ND	1 J	0.37 J	**8.69**	0.68 J	ND	2.09	ND	ND	ND	ND	1.77	ND	ND	0.34 J	1.68
Oct-2013	ND	ND	0.7 J	ND	**5.94**	0.53 J	ND	2.02	ND	ND	ND	ND	1.67	0.7 J	ND	ND	1.23
Mar-2014	ND	ND	1.08	0.53 J	**6.26**	0.41 J	ND	2.75	ND	ND	ND	ND	1.89	0.74 J	ND	0.34 J	1.49
Oct-2014	ND	ND	0.52 J	0.29 J	2.35	ND	ND	1.34	ND	ND	ND	ND	0.83 J	ND	ND	ND	0.52 J
Apr-2015	ND	ND	0.59 J	0.28 J	2.66	ND	ND	1.32	ND	ND	ND	ND	0.93 J	ND	ND	ND	0.59 J
Nov-2015	ND	ND	ND	ND	2	ND	ND	0.7 J	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14A***															
May-2016	ND	ND	0.3 J	0.2 J	2	ND	ND	1.1	ND	ND	ND	ND	0.7 J	0.1 J	ND	0.1 J	0.3 J
Oct-2016	ND	ND	0.4 J	0.3 J	3.1	ND	ND	1.5	ND	ND	ND	ND	1	0.4 J	ND	0.3 J	0.4 J
May-2017	ND	ND	0.7 J	0.7 J	4.9	0.2 J	ND	2.5	ND	ND	ND	ND	1.8	0.2 J	ND	0.4 J	0.9 J
Oct-2017	ND	ND	0.5 J	0.6 J	4.4	0.1 J	ND	2.5	ND	ND	ND	ND	1.7	ND	ND	0.5 J	0.6 J
May-2018	ND	ND	ND	ND	2.3 B	ND	ND	1.5	ND	ND	ND	ND	1.3	ND	ND	ND	NA
Nov-2018	ND	ND	ND	1.1	2.9 CH	ND	ND	1.9	ND	ND	ND	ND	2.1	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.46 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	0.6 J	1.5 L	ND	ND	1.3	ND	ND	ND	ND	1.1	ND	ND	ND	NA
Oct-2022	ND	ND	ND	0.7 J	1.1	ND	ND	1.3	ND	ND	ND	ND	1.1	ND	ND	ND	NA
May-2023	ND	ND	ND	0.7 J	ND	ND	ND	1.4	ND	ND	ND	ND	1.3	ND	ND	ND	NA
Oct-2023	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	1.1	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-19***											
Nov-1993	ND	ND	0.1	ND	7.6	0.9	ND	4.68	74.7	12.4	50	13
Apr-1994	ND	ND	0.2	ND	17.3	2.7	ND	4.5	201	45.6	181	52.2
Apr-1995	ND	ND	0.2	ND	19.5	2.2	ND	4.7	176	40.2	112	38.6
Apr-1997	ND	3	ND	ND	12	0.46	ND	NA	NA	32	80	21
Apr-1998	ND	ND	1.1	ND	14.6	0.196	ND	6.19	156.4	16.2	96	51
Apr-1999	ND	ND	0.13	ND	13.5	0.68	ND	4.49	204	52.8	110	63
Apr-2000	12	12	ND	ND	29.6	1.48	ND	5.64	252	71.8	196	102
Apr-2001	16	NA	ND	ND	26.4	ND	ND	NA	NA	45.1	119	86
Mar-2002	6.8	6.8	ND	40	11	0.29	ND	5.4	87.6	15.7	88	34.3
Mar-2003	22	22	ND	ND	25.8	0.75	ND	6	206	35.8	143	65.3
Apr-2004	13	13	ND	ND	22.4	ND	ND	5.3	160.1	19.3	90	47.2
Apr-2005	11	11	ND	ND	26.8	0.45	ND	5.3	154.9	30	108	56.1
Mar-2006	9.8	9.8	ND	ND	21.4	0.72	ND	5.3	142.8	27.3	112	40.8
Mar-2007	13	13	0.46	ND	25.5	0.78	ND	5.4	158.3	41.9	142	56.5
Mar-2008	13	13	ND	ND	22.8	0.91	ND	5.5	145.3	27.8	114	49
Mar-2009	14	14	ND	ND	18.2	0.34	ND	4.9	118.3	15.7	86	32.5
Mar-2010	45	45	ND	ND	56.9	0.42	ND	5.84	390	51.8	183	96.2
Oct-2010	28	28	ND	ND	31.8	0.64	ND	5.3	189.9	34.9	154	72
Apr-2011	43	43	ND	ND	38.5	0.67	ND	5.6	312	46.5	207	89.2
Sep-2011	39	39	ND	ND	54	0.52	ND	6	321	45.6	229	99.1
Mar-2012	33	33	ND	ND	43.2	0.46	ND	5.3	354	44.4	164	78.1
Sep-2012	40.6	40.6	ND	ND	29.8	0.733	ND	5.5	199.6	37.3	156	76.4
Mar-2013	32.6	32.6	ND	ND	32.8	0.829	ND	5.8	201	36	145	68.3
Oct-2013	19.5	19.5	ND	ND	21.1	0.462	ND	4.8	138.9	22.3	105	44.3
Mar-2014	51.4	51.4	ND	30	62.1	1.07	ND	6.2	429	58.5	253	106
Oct-2014	35.2	35.2	ND	6 J	73	0.581	ND	5.9	404	29.1	220	83.4
Apr-2015	89.2	89.2	ND	8 J	80.4	0.763	ND	5.9	532	44.7	299	116
Nov-2015	37.6	37.6	ND	6 J	44.9	0.573	ND	6	329	25.8	152	73.5
May-2016	51.2	51.2	ND	12	41.4	0.701	ND	6.3	410	30.8	178	77.7
Oct-2016	50.4	50.4	ND	ND	34.1	NA	NA	6.4	340	30	170	74.4
May-2017	74.5	74.5	ND	ND	49.1	0.847	ND	6.3	510	40.4	225	104
Oct-2017	55.8	55.8	ND	9 J	35.4	0.699	ND	6.1	426	29.5	172	88.5
May-2018	28	28	ND	ND	22.8	0.082 J	ND	5.4	174.5	16.6	149	52
Nov-2018	66	66	ND	ND	30.5	0.84	ND	5.94	283	41.4	163	96.5
May-2019	22 H1	NA	0.19	ND	27.7	1.4	ND	5.27	159.3	31.9	129	60.7
Oct-2019	7.5 J	NA	ND	ND	22.7	1	0.0086 J	5.03	165.3	23.9	290	44.7
May-2020	12	NA	ND	9.1 J	8.7	2.3	ND	5.26	205.8	40.3	123	84.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-19***										
Oct-2020	40	*NA*	*ND*	*9.3 J*	12.3	1.8	*0.0099 J*	5.38	190.4	33.2	126	79.6
Apr-2021	60	*NA*	*ND*	*12.6 J*	14.4	0.78	*ND*	5.9	246.4	31.9	139	80.6
Oct-2021	36	*NA*	*ND*	*8.3 J*	13.5	0.8	*ND*	5.7	218.9	19.5	82	56.4
May-2022	58	*NA*	*ND*	*ND*	17.9	0.99	*ND*	5.79	266.7	22.2	136	79.8 N3
Oct-2022	38	*NA*	*ND*	*6.1 J*	18.4	0.93	*ND*	5.64	219.1	22.7	106	63.8 N3
May-2023	64	*NA*	*ND*	29.6	14.1	1.5	*ND*	6.05	258.7	25.1	124	97.4 N3
Oct-2023	28	*NA*	*ND*	*6.8 J*	19.8	1.1 R-01	*NA*	5.72	223.9	24.9	122	67.4 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-19***													
Nov-1993	NA	ND	ND	NA	ND	1.6	NA	ND	NA	ND	1.9	0.07	ND	2.2	NA
Apr-1994	NA	ND	0.19	NA	ND	12	NA	ND	NA	0.02	ND	ND	ND	5.4	NA
Apr-1995	ND	ND	1.3	ND	ND	8.2	NA	ND	ND	ND	0.29	ND	ND	4.4	NA
Apr-1997	ND	ND	0.068	ND	ND	9.7	9.8	ND	ND	ND	1.9	0.33	ND	2.9	2.9
Apr-1998	ND	ND	0.103	ND	ND	13.8	13.5	0.01	0.012	0.021	3.35	ND	ND	3.96	3.84
Apr-1999	ND	ND	0.1	ND	0.004	17.9	17.1	ND	0.01	0.022	3.36	ND	ND	4.52	4.29
Apr-2000	ND	ND	0.076	ND	ND	31.8	29.3	0.012	ND	0.033	10	ND	ND	5.51	5.02
Apr-2001	ND	ND	0.081	ND	ND	25.7	NA	0.05	ND	0.086	40.5	NA	0.005	5.23	NA
Mar-2002	ND	ND	0.043	ND	ND	9.42	8.88	0.02	ND	0.045	14.6	ND	ND	2.63	2.49
Mar-2003	ND	ND	0.051	ND	ND	20.1	19.4	ND	ND	ND	0.799	ND	ND	3.68	3.52
Apr-2004	ND	0.003	0.068	ND	ND	12.1	11.6	ND	ND	0.018	4.63	ND	0.002	4.1	3.88
Apr-2005	ND	ND	0.09	ND	ND	14.3	14	ND	ND	0.02	2.98	ND	ND	4.96	4.86
Mar-2006	ND	ND	0.067	ND	ND	10.1	10.5	ND	ND	ND	2.41	ND	ND	3.79	3.91
Mar-2007	ND	0.007	0.072	ND	ND	15.5	15.6	ND	ND	0.019	7.26	ND	ND	4.33	4.32
Mar-2008	ND	ND	0.058	ND	ND	13.5	12.5	ND	ND	ND	ND	ND	ND	3.71	3.34
Mar-2009	ND	ND	0.035	ND	ND	9.17	9.05	ND	ND	0.014	0.104	ND	ND	2.34	2.31
Mar-2010	ND	ND	0.073	ND	ND	28.2	26.7	ND	ND	ND	0.101	ND	ND	6.26	6.02
Oct-2010	ND	ND	0.067	ND	ND	19.9	18.3	ND	ND	0.006	ND	ND	ND	5.42	5.28
Apr-2011	ND	ND	0.075	ND	ND	26	25	ND	ND	ND	0.189	ND	ND	5.91	5.69
Sep-2011	ND	ND	0.078	ND	ND	29.1	28.7	ND	ND	ND	ND	ND	ND	6.42	6.3
Mar-2012	ND	ND	0.069	ND	ND	22.2	21.6	ND	ND	ND	ND	ND	ND	5.52	5.41

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-19***													
Sep-2012	ND	ND	0.0644	0.000086 J	ND	21.3	20.9	0.002 J	0.0022 J	0.0051 J	0.0256 J	0.0777	ND	5.64	5.69
Mar-2013	ND	ND	0.0634	ND	ND	19.9	18.1	0.0014 J	0.0025 J	0.0055 J	0.0275 J	0.0053 J	0.0016 J	4.51	4.06
Oct-2013	ND	ND	0.0482	0.000147 J	ND	12.7	12.4	0.0082 J	0.0063 J	0.0122	ND	ND	ND	3.05	3.04
Mar-2014	0.000279 J	ND	0.0654	ND	ND	31.6	32.2	0.0011 J	0.0012 J	0.0037 J	0.0845	0.0447 J	ND	6.47	6.6
Oct-2014	0.000873 J	ND	0.0629	ND	ND	24.5	24.3	0.000605 J	0.0025 J	0.0056 J	0.0105 J	0.0212 J	ND	5.4	5.29
Apr-2015	0.000587 J	ND	0.0642	ND	ND	35.4	35.9	0.000881 J	0.000674 J	0.0023 J	0.0386 J	0.0145 J	ND	6.73	6.77
Nov-2015	ND	ND	0.0547	ND	0.000073 J	21.6	20.8	0.000527 J	0.0026 J	0.0058 J	ND	ND	ND	4.78	4.76
May-2016	ND	ND	0.0483	ND	ND	22.9	24.1	0.00078 J	0.0019	0.0039 J	ND	ND	ND	4.96	5.09
Oct-2016	ND	ND	0.0469	ND	ND	22.1	21.9	0.00074 J	0.0024	0.0066	ND	ND	0.00011 J	4.66	4.85 J+
May-2017	ND	ND	0.0502	ND	ND	31.1	33.3	0.0011 J	0.0024	0.0046	0.0414 J	ND	ND	6.52	6.15
Oct-2017	ND	ND	0.0456	0.00011 J	ND	27.2	24.8	ND	0.0046	0.0098	0.0378 J	ND	0.00075 J	4.97	4.86
May-2018	0.000062 J	ND	0.047	0.00024 J	0.00019 J	14.6	13.4	0.0008 J	0.0103	0.017	0.11	ND	0.00013 JB	3.8	3.4
Nov-2018	ND	ND	0.042	0.000022 J	0.000051 J	29.8	30.6	0.0029 J	0.0013	0.0033	0.034	ND	0.000086 J	5.4	5.5
May-2019	ND	ND	0.071	ND	ND	15.9	16.7	ND	0.0013	0.0021	ND	ND	ND	5.1	5.2
Oct-2019	0.00011 J	ND	0.051	0.000072 J	0.00018 J	11.3	10.7	0.0048 J	0.0023	0.004	0.007 J	ND	ND	4	3.8
May-2020	0.000075 J	ND	0.061	ND	ND	22.9	22.9	0.0049 J	0.00049 J	0.0026	ND	ND	ND	6.7	6.6
Oct-2020	ND	ND	0.038	ND	ND	21.8	21.4	0.0025 J	0.00056 J	ND	ND	ND	ND	6.1	5.9
Apr-2021	ND	ND	0.062	ND	ND	22.7	24	0.00088 J	0.00079 J	ND	ND	ND	ND	5.8	6.2
Oct-2021	0.000065 JB	ND	0.05	ND	ND	15.2	16.5	ND	0.0033	0.0059	ND	ND	ND	4.5	4.9
May-2022	ND	ND	0.059	ND	ND	22.7	24.5	0.00073 J	0.00073 J	0.0018 J	ND	ND	ND	5.6	6.1
Oct-2022	ND	ND	0.051	ND	ND	17.8	18.8	0.0016 J	0.0044	0.0049	ND	ND	ND	4.7	5
May-2023	ND	ND	0.046	ND	ND	28.4	27.8	0.0024 J	0.00083 J	0.0021 J	ND	ND	ND	6.4	6.2
Oct-2023	ND	ND	0.053	0.00017 J	ND	18.8	18.9	0.0024 J	0.012	0.012	0.014 JB	0.011 J	ND	5	4.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-19*												
Nov-1993	0.12	NA	ND	NA	1.1	NA	ND	NA	2.3	NA	NA	NA	0.01
Apr-1994	0.05	NA	ND	NA	2.1	NA	ND	NA	7.4	NA	NA	NA	0.037
Apr-1995	0.12	NA	ND	1.1	2.8	NA	ND	ND	5.5	NA	ND	ND	0.04
Apr-1997	0.082	0.087	**0.003**	ND	3.5	3.4	ND	ND	4.9	5.6	ND	ND	0.025
Apr-1998	0.095	0.115	NA	ND	4.38	3.11	ND	ND	6.97	6.97	ND	0.012	0.024
Apr-1999	0.091	0.084	NA	ND	3.93	3.1	ND	ND	6.12	5.85	ND	ND	0.015
Apr-2000	0.065	0.049	NA	ND	6.11	5.89	ND	ND	15.5	13	ND	0.029	0.02
Apr-2001	0.083	NA	NA	ND	6.53	NA	ND	ND	12.2	NA	ND	0.141	0.035
Mar-2002	0.039	0.026	NA	ND	3.14	3.05	ND	ND	6.41	5.25	ND	0.055	0.016
Mar-2003	0.018	0.011	NA	ND	6.64	6.93	ND	ND	11	10.5	ND	ND	ND
Apr-2004	0.05	0.04	ND	ND	4.03	3.83	ND	ND	11	10.3	ND	0.014	0.068
Apr-2005	0.048	0.044	ND	ND	3.85	3.62	ND	ND	11.9	11.6	ND	ND	0.029
Mar-2006	0.021	0.017	ND	ND	2.49	2.49	ND	ND	8.93	8.97	ND	ND	ND
Mar-2007	0.035	0.025	ND	ND	4.15	4.11	ND	ND	11.1	11.2	ND	0.02	0.01
Mar-2008	0.018	0.016	ND	ND	3.76	3.47	ND	ND	10.2	9.4	ND	ND	ND
Mar-2009	0.01	ND	ND	ND	2.33	2.28	ND	ND	7.65	7.48	ND	ND	ND
Mar-2010	ND	ND	ND	ND	6.71	6.35	ND	ND	26.8	27.9	ND	ND	ND
Oct-2010	0.017	0.014	ND	ND	4.55	4.32	ND	ND	17.6	17.4	ND	ND	ND
Apr-2011	0.01	ND	ND	ND	5.85	5.61	ND	ND	22.8	21.9	ND	ND	ND
Sep-2011	ND	ND	ND	ND	6.14	6	ND	ND	24.6	24.2	ND	ND	ND
Mar-2012	0.011	0.011	ND	ND	5.36	5.21	ND	ND	23.1	22.2	ND	ND	0.014
Sep-2012	0.0091 J	0.01 J	0.000032 J	0.0049 J	4.53	4.62	ND	ND	21.5	20.7	0.00054 J	ND	0.0026 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-19***												
Mar-2013	0.01 J	0.0088 J	0.000031 J	0.0044 J	4.85	4.33	ND	ND	18.9	17	ND	ND	0.0145
Oct-2013	0.0146	0.0141	ND	0.0059 J	2.87	2.79	ND	ND	10.6	10.8	ND	0.0033 J	0.0127
Mar-2014	0.0054 J	0.0051 J	ND	0.0024 J	7.14	7.25	ND	ND	32.4	33.1	ND	ND	0.0028 J
Oct-2014	0.0097 J	0.0096 J	0.000023 J	0.004 J	5.08	4.97	0.0016 J	ND	31.9	31.5	ND	ND	0.007 J
Apr-2015	0.0046 J	0.0036 J	ND	0.002 J	9.82	9.94	0.000992 J	ND	55.7	56.4	ND	ND	ND
Nov-2015	0.0086 J	0.0083 J	ND	0.0042 J	5.31	5.22	0.001 J	ND	27.5	26.9	ND	0.000161 J	0.0035 J
May-2016	0.0071	0.0057	ND	0.0031 J	6.27	6.31	ND	ND	26.2	26.6	ND	0.00034 J	ND
Oct-2016	0.0044	0.0061 B	ND	0.0039 J	5.75	5.86	ND	ND	20.4	21.2	ND	0.00035 J	ND
May-2017	0.0049	0.0042	ND	0.0037 J	9.06	9.41	ND	ND	30.2	30	ND	0.00037 J	ND
Oct-2017	0.0067	0.0054	ND	0.0049	6.24	6.29	ND	ND	19.6	18.4	ND	0.00031 J	ND
May-2018	0.021	0.019	0.00018 JB	0.011	3.5 J	2.9 J	0.00032 J	ND	13.7	11.7	ND	0.0037	0.0091 B
Nov-2018	0.004	0.0026	ND	0.0028	7.1	7.3	0.00017 J	ND	19.5	20.2	ND	0.0022	0.0047 J
May-2019	0.039	0.037	ND	0.0059	ND	ND	ND	ND	15.6	15.5	ND	0.0035 B	0.0072
Oct-2019	0.016	0.015	ND	0.0045	3.7 J	3.5 J	0.00051 J	ND	14.7	12.1	ND	0.0088	0.0075
May-2020	0.0057	0.005	ND	0.0023	6.5	6.8	ND	ND	9.1	9.2	ND	0.01	0.0034 J
Oct-2020	0.0045	0.0042	ND	ND	5.7	5.8	ND	ND	9.1	8.4	ND	0.0012 J	ND
Apr-2021	0.0067	0.0062	ND	0.0024 J	6.1	6.6	ND	ND	10.3	11.1	ND	ND	0.0025 J
Oct-2021	0.0071	0.0075	ND	0.0041	4.2	4.6	ND	ND	8.9	9.8	0.000028 J	0.00035 J	0.0027 J
May-2022	0.0037 J	0.0038 J	ND	0.0024 J	6.4	6.4	ND	ND	13	13.2	ND	0.00054 JB	ND
Oct-2022	0.007	0.0077	ND	0.0058	4.9	4.8	ND	ND	11.6	11.4	ND	ND	ND
May-2023	ND	ND	ND	0.0022 J	6.6	6.4	0.0013 JB	ND	11.9	11.6	ND	ND	ND
Oct-2023	0.013	0.013	ND	0.013	4.5	4.5	ND	ND	11.8	11.6	ND	ND	0.0066

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-19***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	6.5	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2002	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2002	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	7.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-19*																
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.93 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.81 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	7.73	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	2.73	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-19*																
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-19***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.2	10
Jul-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	1.2
Jul-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	1.9
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	13	15
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5	8.3
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-19***															
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.97 J
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.96 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	3.39	ND	ND	ND	2.84	9.26
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.89 J	ND	ND	ND	0.75 J	3.18
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	2.3 J	3.5
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	0.5 J	ND	ND	ND	0.8 J	2.9
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.6 J	ND	ND	ND	0.7 J	3.4
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	0.3 J
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.8 J	ND	ND	ND	0.9 J	3.2
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	4.4	7
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.755 J	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	1.5

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-19***															
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-19***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	4.8	ND	ND	ND	ND	1.9	ND	ND	ND	NA
Jul-2002	ND	ND	ND	NA	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Jul-2002	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	**6.4**	ND	ND	ND	ND	2.7	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.2 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	3.3	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-19***															
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	0.95 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	0.46 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	3.48	ND	ND	ND	ND	1.06	0.47 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	1.73	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	0.3 J	0.2 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.6 B	ND	ND	3.1	ND	ND	ND	ND	1.1	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	1.2 BCH	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.611 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-19***															
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-20R***											
Apr-2010	3.2	3.2	*ND*	*ND*	105	0.81	*ND*	4.3	604	211	352	143
Oct-2010	*ND*	*ND*	*ND*	*ND*	102	0.87	*ND*	4.1	556	153	349	128
Apr-2011	*ND*	*ND*	*ND*	13	119	0.86	*ND*	4	573	115	386	123
Sep-2011	*ND*	*ND*	*ND*	*ND*	94.8	0.79	*ND*	4.3	520	115	363	124
Mar-2012	*ND*	*ND*	*ND*	10	121	0.86	*ND*	3.6	660	204	391	138
Sep-2012	*ND*	*ND*	*ND*	10.3	107	0.794	*ND*	3.9	511	177	365	135
Mar-2013	*ND*	*ND*	*ND*	14.6	108	0.902	*ND*	4.1	633	124	358	104
Oct-2013	*ND*	*ND*	*ND*	15.7	106	0.874	*ND*	3.6	658	161	401	109
Mar-2014	*ND*	*ND*	*ND*	22	104	0.902	*ND*	4.5	578	179	371	105
Oct-2014	*ND*	*ND*	*ND*	*9 J*	96.9	0.831	*ND*	4.3	633	209	326	119
Apr-2015	0.96	0.96	*ND*	*5 J*	91.1	1.04	*ND*	3.9	548	180	346	112
Nov-2015	*ND*	*ND*	*ND*	*9 J*	96.4	0.979	*ND*	4.4	650	214	343	87
May-2016	*ND*	*ND*	*ND*	14	82.6	1.25	*ND*	4.5	767	163	341	114
Oct-2016	*ND*	*ND*	*ND*	11	75.4	*NA*	*NA*	4.3	670	186	376	114
May-2017	*ND*	*ND*	*ND*	*ND*	81.9	1.27	*ND*	4.2	714	189	341	114
Oct-2017	*ND*	*ND*	*0.078 J*	*6 J*	75.7	1.82	*ND*	4.4	785	204	330	94.3
May-2018	*ND*	*ND*	*ND*	*18.7 J*	65.4	0.58	0.013	4	603	133	311	110
Nov-2018	*ND*	*ND*	*ND*	*14.3 J*	59.4	1.8	*ND*	4.15	473.8	144	272	110
May-2019	16 H1	*NA*	*ND*	*ND*	44	1.2	*ND*	5.13	355	139	284	139
Oct-2019	*2.5 J*	*NA*	*ND*	*14.8 J*	48.1	1.5	*ND*	4.56	472.6	126	276	115
May-2020	*ND*	*NA*	*ND*	*13.5 J*	32.2	1.1	*ND*	4.83	320.4	84.4	197	106
Oct-2020	*4 J*	*NA*	*ND*	*11.6 J*	20.3	0.98	*ND*	5.05	246.8	79.6	158	67.2
Apr-2021	44	*NA*	*ND*	*14.8 J*	12.9	0.98	*ND*	5.7	270.8	53.8	157 D6	85.8
Oct-2021	30	*NA*	*ND*	*8.3 J*	11	0.93	*ND*	5.54	277.7	60.5 ML	139	80.7
May-2022	36	*NA*	*ND*	*5.6 J*	8.7	0.89	*ND*	5.46	238	54.1	135	77.4 N3
Oct-2022	*4 J5c*	*NA*	*ND*	*19.8 J*	12.1	0.91	*ND*	4.9	230.1	56.2	123	54.4 N3
May-2023	14	*NA*	*ND*	36.5	12.6	0.92	*ND*	5.09	218.1	50.4	114	68.7 N3
Oct-2023	*ND*	*NA*	*ND*	*13.6 J*	16.6	1.32	*NA*	4.61	219.5	55.2	118	51.5 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-20R*													
Apr-2010	ND	ND	0.04	ND	ND	37.3	36.5	ND	0.017	0.018	0.076	ND	ND	12.1	11.8
Oct-2010	ND	ND	0.032	0.002	ND	29.9	29	ND	0.025	0.027	0.062	ND	ND	13	12.8
Apr-2011	ND	ND	0.036	0.002	ND	30.1	29.7	ND	0.02	0.022	0.357	0.031	ND	11.6	11.3
Sep-2011	ND	ND	0.041	ND	ND	27	25.2	ND	0.027	0.035	0.436	ND	ND	13.7	13.1
Mar-2012	ND	ND	0.035	0.003	ND	33.4	32.3	ND	0.019	0.025	0.122	ND	ND	13.2	12.7
Sep-2012	ND	ND	0.0383	0.0027	0.000685 J	31.6	31.7	0.0064 J	0.0225	0.0301	0.155	0.0323 J	ND	13.7	13.2
Mar-2013	ND	ND	0.0307	0.0017 J	0.000583 J	25.1	29.2	ND	0.0197 J	0.0259	0.0963	0.0261 J	0.0014 J	10.1	11.9
Oct-2013	ND	0.000794 J	0.0358	0.0019 J	0.0012 J	28	29.3	0.0085 J	0.0188 J	0.0266	ND	ND	0.000426 J	9.6	10.4
Mar-2014	0.00044 J	ND	0.0478 J	ND	ND	25.7	26	0.0094 J	0.0159 J	0.0249 J	2.02	0.0426 J	ND	10	10.3
Oct-2014	0.0013 J	0.0043 J	0.0574	0.0025 J	0.000866 J	28.9	28.9	0.0117 J	0.0229 J	0.0263 J	1.87	ND	0.003	11.4	11.6
Apr-2015	0.000541 J	0.0018 J	0.0334	0.0014 J	0.000605 J	27.3	26.8	ND	0.0173 J	0.0209	0.0507 J	ND	ND	10.7	10.6
Nov-2015	ND	0.0041	0.0364	0.0019 J	0.00099 J	20.6	20.7	0.0011 J	0.0158	0.0314	0.0486 J	0.0265 J	ND	8.67	8.66
May-2016	ND	0.0012 J	0.0342	0.0019	0.00046 J	28.1	28.6	0.0022 J	0.0229	0.0257	ND	ND	ND	10.6	10.7
Oct-2016	ND	0.0028 J	0.0216	0.0021	0.00052 J	26	28.2	0.0022 J	0.0276	0.0282	ND	0.0395 J	0.00013 J	11.8	13
May-2017	ND	0.0024 J	0.0342	0.0023	0.00062 J	23.4	24.5	0.0032 J	0.0323	0.0294	0.263	ND	0.00035 J	13.6	13.2
Oct-2017	ND	0.0013 J	0.0293	0.0018	0.00057 J	19.7	20.3	0.0044	0.0304	0.0263	0.147 J	0.0387 J	0.00021 J	11	11.4
May-2018	0.000035 J	ND	0.027	0.0021	0.0019	25.7	22.1	0.0036 JB	0.0223	0.018	0.24	0.022	0.00045 J	11.1	9.8
Nov-2018	0.000054 J	ND	0.024	0.00092	0.00084 J	31.1	31.5	0.0068 J	0.0072 J	0.025 J	0.07	0.018 J	0.00049 J	7.9	8
May-2019	ND	ND	0.025	0.00071	ND	40.2	41.1	ND	ND	ND	ND	ND	ND	9.5	9.6
Oct-2019	0.00011 J	ND	0.022	0.001	0.00082 J	32.1	31.2	0.0064 J	0.008	0.013	0.021 J	0.014 J	ND	8.4	8.2
May-2020	0.000086 J	ND	0.026	0.00043	0.00027 J	31.1	30.5	0.0064 J	0.0034	ND	0.055 J	0.015 J	ND	6.8	6.7

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-20R***													
Oct-2020	*ND*	*ND*	0.018	*0.00035 J*	*ND*	18.9	18.5	*0.0043 J*	*0.0021 J*	*ND*	0.13	*ND*	*ND*	4.9	4.6
Apr-2021	*ND*	*ND*	0.035	*0.00022 J*	*ND*	25.4	27.2	*0.0015 J*	*0.0017 J*	*0.0033 J*	*ND*	*ND*	*ND*	5.4	5.8
Oct-2021	*ND*	*ND*	0.031 M1	*0.0003 J*	*ND*	22.9 M1	21.2	*0.002 J*	0.0042	0.0037 M1	*0.041 JM1*	*0.025 JB*	*0.000049 JR1M1*	5.7 M1	5.3
May-2022	*ND*	*ND*	0.039 M1	*0.00021 J*	*ND*	22.1	24	*0.0014 J*	0.0033	0.0033	*ND*	*ND*	*ND*	5.4	5.9
Oct-2022	*ND*	*ND*	0.04	*0.0003 J*	*ND*	14.7	15.8	*0.0017 J*	0.0056	0.0085	*ND*	*ND*	*ND*	4.3	4.8
May-2023	*ND*	*ND*	0.037	*0.00021 J*	*0.00014 J*	19.2	18.9	0.0044	0.0031	0.006	0.26	*ND*	*ND*	5	4.9
Oct-2023	*ND*	*ND*	0.044	*0.0004 J*	*ND*	14.5	14.5	0.0035	0.0028	0.015	0.16	*0.0095 J*	*ND*	3.7	3.8

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-20R*												
Apr-2010	0.298	0.292	ND	0.013	3.77	3.74	ND	ND	35.4	34.9	ND	ND	0.019
Oct-2010	0.269	0.263	ND	0.019	3.4	3.36	ND	ND	37.7	37.1	ND	ND	0.024
Apr-2011	0.238	0.232	ND	0.015	3.53	3.43	ND	ND	44.6	44	ND	ND	0.019
Sep-2011	0.291	0.278	0.0002	0.028	3.84	3.18	ND	ND	41.7	39.2	ND	ND	0.037
Mar-2012	0.239	0.233	0.0003	0.014	3.87	3.77	ND	ND	50.1	48.7	ND	ND	0.019
Sep-2012	0.227	0.228	0.000349	0.0195	3.67	3.67	0.0026	ND	56.1	55.3	0.000296 J	ND	0.022
Mar-2013	0.229	0.261	0.000199 J	0.015	2.56 J	3.06 J	0.002 J	ND	42	49.6	ND	ND	0.0264
Oct-2013	0.239	0.265	ND	0.0124	3.47 J	3.16 J	0.0023	0.000025 J	53.5	57	ND	0.0135 J	0.0252
Mar-2014	0.198	0.195	ND	0.0128 J	3.48 J	3.14	ND	ND	48.6	48.9	ND	0.0147 J	0.0738 J
Oct-2014	0.233	0.234	0.000118 J	0.0194 J	3.62 J	3.18 J	0.0184 J	0.000032 J	48.5	50.4	ND	0.0141 J	ND
Apr-2015	0.186	0.192	0.000095 J	0.0128	3.09	3.08	0.0118	ND	41.8	41.5	ND	ND	0.0245
Nov-2015	0.167	0.166	0.000325	0.0154	2.51	2.52	0.0267	ND	36.8	37.5	ND	0.0018 J	0.0235
May-2016	0.18	0.175	0.00024	0.0136	3.46	3.37	0.0011 J	ND	44.3	44.2	ND	0.0022	0.0195 J
Oct-2016	0.19	0.215	0.00016 J	0.0177	3.09	3.51	0.00058 J	ND	39	45.3	ND	0.0025	0.0254 J
May-2017	0.246	0.248	0.00039	0.0208	3.14	3.08	0.00063 J	ND	47	45.3	ND	0.0059	0.0309
Oct-2017	0.205	0.206	0.000077 J	0.0179	2.99	2.96	0.00057 J	ND	50.7 J-	50.4	ND	0.0044	0.0227 J
May-2018	0.19	0.22	0.00015 J	0.011 B	2.5 J	2.6 J	0.0033	ND	55.1	45.8	ND	0.0032 J	0.0016 JB
Nov-2018	0.11	0.13	ND	0.0052 J	4 J	4 J	ND	ND	40.3	41.5	ND	0.0014 J	ND
May-2019	0.055	0.057	ND	ND	ND	ND	ND	ND	26.8	27	ND	ND	ND
Oct-2019	0.063	0.022	ND	0.0055	4.3 J	4.3 J	0.0021	ND	36.4	34.5	ND	0.01	0.01
May-2020	0.028	0.03	ND	0.0032	3.7 J	3.7 J	ND	ND	23.6	23.4	ND	0.0054	ND
Oct-2020	0.055	0.03	ND	ND	2.9 J	3 J	ND	ND	22.7	20.3	ND	0.0028 J	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-20R***												
Apr-2021	0.02	0.02	*ND*	*0.0017 J*	3.1	3.4	*ND*	*ND*	12.5	13.6	*ND*	*0.004 J*	*ND*
Oct-2021	0.033 M1	0.031	*ND*	0.0028 M1	3.5 M1	3.3	*0.0015 J*	*ND*	14.6 M1	14.4	*0.000032 J*	0.0031	*0.0022 JR1M1*
May-2022	0.028	0.039	*ND*	0.0027 M1	3.3	3.3	*0.0012 J*	*ND*	10.7	10.9	*ND*	0.0043	*ND*
Oct-2022	0.041	0.044	*ND*	0.0034	3.3	3.4	*0.0022 J*	*ND*	10.9	11.1	*ND*	0.0031	*0.0041 J*
May-2023	0.031	0.03	*ND*	0.0036	3.6	3.5	0.0027 B	*ND*	11.9	11.6	*ND*	0.0049	*ND*
Oct-2023	0.037	0.037	*ND*	0.0031	3.4	3.5	*0.0015 J*	*ND*	14.2	14.5	*ND*	0.0039	0.0053

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-20R*																
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-20R*																
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-20R*															
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-20R***															
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-20R***															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.56 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*0.31 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-20R***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.516 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-23***											
Apr-1995	10.3	10.3	ND	34.7	3.4	0.6	ND	5.8	40.6	5.3	34	8.5
Apr-1997	ND	2	ND	ND	4	0.42	ND	NA	NA	ND	57	12
Oct-1997	2	2	ND	ND	3.52	0.695	ND	8.92	34.2	ND	ND	ND
Apr-1998	ND	ND	0.21	ND	2.44	0.36	ND	6.73	20.3	ND	12	4.6
Apr-1999	ND	ND	0.25	ND	13.9	0.24	ND	5.36	68.4	ND	33	4.7
Oct-1999	ND	ND	0.16	ND	3.42	0.38	ND	5.6	23.2	0.93	33	4.5
Apr-2000	10	10	ND	ND	2.75	0.32	ND	6.02	20	ND	29	7.3
Oct-2000	9.5	NA	ND	14	3.06	0.31	ND	6.06	23.4	ND	27	5.76
Apr-2001	2.2	NA	ND	ND	2.57	0.44	ND	NA	NA	ND	31	4.8
Sep-2001	1.6	1.6	ND	ND	3.87	1.4	ND	5.22	19	ND	25	4.81
Mar-2002	ND	ND	ND	27	4.35	0.522	ND	5.2	15.6	ND	36	5
Sep-2002	2	2	ND	ND	3.9	0.56	ND	5.2	26.2	ND	ND	5
Mar-2003	4.4	4.4	ND	ND	16	ND	ND	5.4	35.5	ND	42	6.69
Oct-2003	4.2	4.2	ND	11	3.33	0.384	ND	4.5	27.8	ND	ND	7.79
Apr-2004	7.8	7.8	ND	10	14.9	0.435	ND	5.6	75.3	ND	96	6.26
Oct-2004	3.7	3.7	ND	14	3.68	0.48	ND	5.2	24.7	ND	31	8.08
Apr-2005	4.1	4.1	ND	ND	8.81	0.48	ND	5.4	40.4	ND	ND	5.1
Oct-2005	3.8	3.8	ND	ND	3.51	0.4	ND	5.1	19.6	ND	34	5.22
Mar-2006	4.7	4.7	ND	ND	8.69	0.41	ND	5.3	42.1	ND	19	2.45
Sep-2006	3.5	3.5	ND	43	3.52	0.39	ND	5.2	26.1	ND	30	5.88
Mar-2007	6.1	6.1	ND	ND	32.6	0.45	ND	5.4	99.8	ND	52	3.24
Sep-2007	3	3	ND	ND	8.75	0.94	ND	5.1	21.2	ND	37	4.27
Mar-2008	2.9	2.9	ND	15	13	1.39	ND	5	26	4.86	18	5.05
Sep-2008	3.9	3.9	ND	11	3.44	0.42	ND	4.7	19.1	ND	22	5.1
Mar-2009	4.6	4.6	ND	37	4.22	0.45	ND	4.8	27.3	ND	26	3.81
Oct-2009	3.7	3.7	ND	13	3.88	0.58	ND	4.7	24.4	ND	30	9.1
Apr-2010	7	7	ND	ND	6.3	0.67	ND	4.9	40	ND	27	3.9
Oct-2010	4.4	4.4	ND	ND	3.81	0.57	ND	4.6	21.6	1.31	39	6.87
Apr-2011	10	10	ND	22	15.9	0.76	ND	5.6	73.2	ND	89	5.9
Sep-2011	14	14	ND	ND	1.98	0.36	ND	6	31.4	ND	34	15.4
Mar-2012	14	14	ND	ND	10	0.6	ND	5.3	58	ND	37	10.7
Sep-2012	10.4	10.4	ND	ND	3.42	0.562	ND	5	30.4	ND	43	12.6
Mar-2013	20.7	20.7	ND	11.7	38.1	0.717	ND	6.1	148.4	0.922 J	99	15.5
Oct-2013	17	17	0.101 J	50.6	1.89	0.277	ND	6	29.8	1.45	ND	16.8
Mar-2014	7.56	7.56	ND	ND	3.88	0.596	ND	6.1	33.7	0.498 J	ND	9.85
Oct-2014	ND	ND	ND	ND	7.73	1.2	ND	5.1	44.6	2	50	8.03
Apr-2015	6.52	6.52	ND	ND	7.01	1.34	ND	4.4	42.5	0.879 J	60	10.8

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-23***										
Nov-2015	4.28	4.28	*ND*	*ND*	6.66	1.35	*ND*	5.5	68.1	*ND*	112	17.6
May-2016	2.68	2.68	*ND*	*8 J*	6.53	*ND*	*ND*	5.3	56.2	*ND*	27	8.2
Oct-2016	3.68	3.68	*ND*	*ND*	6.72	*NA*	*NA*	5.2	57.5	*0.895 J*	35	8.7
May-2017	*ND*	*ND*	*ND*	*ND*	7.43	1.41	*ND*	5.2	60.9	*0.749 J*	*15 J*	8.3
Oct-2017	3.56	3.56	*ND*	*ND*	7.17	1.55	*ND*	5	72	*0.567 J*	*20 J*	8.8
May-2018	*4 J*	*ND*	*ND*	*ND*	6.7	1.5	*ND*	5.8	51.1	*ND*	31	9.5
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	6.3	1.4	*ND*	4.79	47.4	*ND*	11	9.5
May-2019	*ND*	*NA*	*ND*	*ND*	6.3	1.2	*ND*	4.84	33	*ND*	16	8.6
Oct-2019	*ND*	*NA*	*ND*	*ND*	5.3	1.5	*ND*	4.56	4.14	*ND*	18	9.7
May-2020	*ND*	*NA*	*ND*	*ND*	6.7	1.4	*ND*	5.23	55.1	*ND*	*ND*	9.6
Oct-2020	*ND*	*NA*	*ND*	*ND*	6.5	1.5	*ND*	5.01	44.3	*ND*	39	10
Apr-2021	*ND*	*NA*	*ND*	*ND*	6.9	1.6	*ND*	4.95	51.4	*ND*	23	10.1
Oct-2021	*ND*	*NA*	*0.061 J*	*ND*	6.5	1.4	*ND*	4.97	87.2	*ND*	20	10.9
May-2022	*2 J2c*	*NA*	*ND*	*ND*	6.6	1.8	*ND*	4.87	75.2	*ND*	12	11.3 N3
Oct-2022	*ND*	*NA*	*ND*	*6.1 J*	8	1.9	*ND*	4.96	74.2	*ND*	34	12.3 N3
May-2023	10	*NA*	*ND*	29.6	8.1	2	*ND*	4.94	75.2	*ND*	40	11.5 N3
Oct-2023	*2 J4c*	*NA*	*ND*	*6.8 J*	8	1.51 O-04R-01	*NA*	5.03	74.7	*ND*	42	11.4 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-23***													
Apr-1995	ND	ND	ND	ND	ND	2.2	NA	ND	ND	ND	0.57	0.05	ND	0.72	NA
Oct-1996	ND	ND	0.019	ND	ND	1.4	1.5	0.026	ND	ND	0.91	0.5	ND	ND	ND
Apr-1997	ND	ND	0.024	ND	ND	2.6	1.3	ND	ND	ND	0.26	ND	0.005	0.76	ND
Oct-1997	ND	ND	ND	ND	ND	1.08	1.06	ND	ND	ND	0.092	ND	ND	0.387	0.377
Apr-1998	ND	ND	ND	ND	ND	1.15	1.15	ND	ND	ND	0.13	ND	ND	0.421	0.396
Apr-1999	ND	ND	ND	ND	ND	1.25	1.32	ND	ND	ND	0.164	ND	ND	0.394	0.385
Oct-1999	ND	ND	ND	ND	ND	1.24	1.15	ND	ND	ND	0.113	ND	ND	0.406	0.352
Apr-2000	ND	ND	ND	ND	ND	1.42	1.26	ND	ND	0.017	0.795	ND	ND	0.91	0.389
Oct-2000	ND	ND	ND	ND	ND	1.48	1.46	ND	ND	ND	0.285	ND	ND	0.499	0.428
Apr-2001	ND	ND	ND	ND	ND	1.17	NA	ND	ND	ND	0.199	NA	ND	0.447	NA
Sep-2001	ND	ND	ND	ND	ND	1.19	1.29	ND	ND	ND	0.4	0.128	ND	0.448	0.436
Mar-2002	ND	ND	ND	ND	ND	1.27	1.11	ND	ND	ND	0.156	ND	ND	0.443	0.403
Sep-2002	ND	ND	ND	ND	ND	1.26	1.19	ND	ND	ND	0.565	ND	ND	0.482	0.4
Mar-2003	ND	ND	ND	ND	ND	1.81	1.28	ND	ND	ND	0.173	ND	ND	0.53	0.391
Oct-2003	ND	ND	0.011	ND	ND	2.04	1.56	ND	ND	ND	1.59	ND	0.003	0.656	0.434
Apr-2004	ND	ND	0.033	ND	ND	1.29	0.335	0.034	ND	0.024	13.6	ND	0.01	0.737	0.166
Oct-2004	ND	ND	0.011	ND	ND	2.22	1.22	0.011	ND	0.015	3.11	0.122	0.005	0.617	0.375
Apr-2005	ND	ND	ND	ND	ND	1.29	0.986	ND	ND	0.011	0.829	ND	ND	0.464	0.374
Oct-2005	ND	ND	ND	ND	ND	1.33	1.04	ND	ND	ND	0.527	ND	ND	0.46	0.372
Mar-2006	ND	ND	ND	ND	ND	0.683	0.497	ND	ND	ND	0.523	ND	ND	0.18	0.14
Sep-2006	ND	ND	ND	ND	ND	1.42	1.12	0.021	ND	ND	0.758	ND	0.004	0.565	0.383

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-23***													
Mar-2007	ND	ND	ND	ND	ND	0.708	0.573	0.014	ND	ND	2.05	ND	0.004	0.356	0.211
Sep-2007	ND	ND	ND	ND	ND	1.03	0.921	ND	ND	ND	0.628	ND	ND	0.414	0.358
Mar-2008	ND	ND	ND	ND	ND	1.19	0.977	0.046	ND	0.026	1.35	ND	0.006	0.505	0.349
Sep-2008	ND	ND	ND	ND	ND	1.25	1.08	ND	ND	ND	0.427	ND	ND	0.484	0.396
Mar-2009	ND	ND	ND	ND	ND	0.931	0.826	ND	ND	ND	0.243	ND	ND	0.363	0.299
Oct-2009	ND	ND	0.015	ND	ND	1.83	1.12	0.021	ND	0.014	2.17	0.19	0.011	1.1	0.382
Apr-2010	ND	ND	ND	ND	ND	1.33	1.52	ND	ND	ND	3.62	0.182	ND	0.395	0.247
Oct-2010	ND	ND	ND	ND	ND	1.89	1.8	ND	ND	ND	0.508	ND	ND	0.523	0.437
Apr-2011	ND	ND	0.02	ND	ND	1.24	0.396	0.014	ND	ND	4.31	0.121	0.007	0.689	0.135
Sep-2011	ND	ND	0.012	ND	ND	4.88	3.75	ND	ND	0.011	0.959	ND	0.002	0.771	0.469
Mar-2012	ND	ND	0.012	ND	ND	3.02	2.25	ND	ND	ND	2	0.088	0.003	0.764	0.411
Sep-2012	ND	ND	0.0158	ND	ND	3.9	3.58	0.0072 J	0.000829 J	0.003 J	1.07	0.163	0.0018 J	0.706	0.568
Mar-2013	ND	ND	0.0101	ND	ND	4.83	4.79	0.0107	0.000515 J	0.0043 J	1.31	0.365	0.0035	0.829	0.624
Oct-2013	0.001 J	0.0011 J	0.0255	0.000179 J	0.000162 J	4.9	4.8	0.0189	0.000838 J	0.0101	5.28	0.112	0.0083	1.11	0.552
Mar-2014	0.00041 J	0.001 J	0.0144	0.000128 J	ND	2.9	2.76	0.0058 J	0.0022 J	0.0049 J	3.69	0.161	0.0016 J	0.631	0.535
Oct-2014	0.000466 J	ND	0.0207	ND	ND	1.88	1.84	0.0012 J	0.0035 J	0.0023 J	0.0652	0.012 J	ND	0.811	0.775
Apr-2015	0.000661 J	0.000492 J	0.0376	0.000279 J	0.000075 J	2.33	1.49	0.0056 J	0.0027 J	0.0041 J	2.26	0.0177 J	0.0022	1.21	0.505
Nov-2015	ND	0.00087 J	0.0601	0.000503 J	0.000116 J	3.56	1.5	0.0071 J	0.0032 J	0.0077 J	5.46	0.031 J	0.0049	2.11	0.539
May-2016	ND	ND	0.0135	0.000088 J	ND	2	1.98	0.0013 J	0.0022	0.0024 J	0.0559 J	ND	ND	0.77	0.721
Oct-2016	ND	ND	0.0137	ND	ND	2.22	2.11	0.00082 J	0.0022	0.0021 J	ND	ND	ND	0.775	0.795
May-2017	ND	ND	0.0143	ND	ND	2.02	2.14	0.00095 J	0.0023	0.0026 J	ND	ND	ND	0.787	0.857
Oct-2017	ND	ND	0.0134	0.000084 J	ND	2.17	2.3	ND	0.0025	0.004	ND	ND	ND	0.824	0.893
May-2018	0.000055 J	ND	0.015	0.0001 J	0.000053 J	2.3	2.2	0.0072	0.005	0.0079	0.078	0.023	0.00004 J	0.91 J	0.85 J
Nov-2018	ND	ND	0.011	0.000097 J	0.000061 J	2.4	2.4	0.0047 J	0.0028	0.0052	0.13	0.022	0.00011 JB	0.86 J	0.88 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-23***													
May-2019	*ND*	*ND*	0.01	*ND*	*ND*	2.2	2.2	0.016	0.0068	0.0092	0.26	0.19	*ND*	*ND*	*ND*
Oct-2019	*0.00011 J*	*ND*	0.01	*0.00011 J*	*0.00026 J*	2.4	2.4	*0.0069 J*	0.0032	0.014	*0.059 J*	0.023	*0.000074 J*	0.88	*0.87 J*
May-2020	*0.00007 J*	*ND*	0.012	*0.000059 J*	*ND*	2.4	2.3	0.046	0.0055	0.015	0.39	0.16	*ND*	0.86	*0.85 J*
Oct-2020	*0.00032 J*	*ND*	0.015	*ND*	*ND*	2.5	2.5	*0.017 J*	0.0042	*ND*	0.12	0.055	*ND*	0.91	*0.91 J*
Apr-2021	*ND*	*ND*	0.014	*ND*	*ND*	2.5	2.4	0.006	*0.0036 J*	0.0096	0.076	*0.062 J*	*ND*	0.93	0.97
Oct-2021	*0.000089 J*	*ND*	0.016	*ND*	*ND*	2.7	2.7	0.0081	0.0041	0.0073	0.067	*0.047 J*	*0.000042 J*	1	1
May-2022	*ND*	*0.0017 JB*	0.015	*ND*	*ND*	2.8	2.9	0.015	0.004	0.011	0.16	0.095	*ND*	1.1	1.1
Oct-2022	*ND*	*ND*	0.015	*0.00011 J*	*ND*	3.1	3	0.012	0.0043	0.011	0.092	*0.05 J*	*ND*	1.1	1.1
May-2023	*ND*	*ND*	0.016	*ND*	*ND*	2.8	2.8	0.0096	0.0043	0.009	0.083	*0.046 J*	*ND*	1.1	1
Oct-2023	*ND*	*ND*	0.015	*ND*	*ND*	2.8	2.6	0.032	0.0062	0.073	0.41	0.39	*ND*	1.1	0.96

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-23*												
Apr-1995	0.03	NA	ND	ND	1.2	NA	ND	0.02	3.1	NA	ND	ND	0.07
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	1.7	1.8	ND	ND	0.099
Apr-1997	0.011	ND	ND	ND	2.1	2.3	ND	ND	1.2	1.9	ND	ND	0.073
Oct-1997	ND	ND	ND	ND	0.907	1.32	ND	ND	1.33	1.38	ND	ND	0.015
Apr-1998	ND	ND	ND	0.016	ND	ND	ND	ND	1.61	1.4	ND	ND	0.013
Apr-1999	ND	ND	NA	ND	ND	1.12	ND	ND	8.54	8.47	ND	ND	0.027
Oct-1999	ND	0.01	NA	ND	0.759	ND	ND	ND	1.51	1.37	ND	ND	0.016
Apr-2000	ND	ND	NA	ND	ND	ND	ND	ND	2.26	2.21	ND	ND	0.044
Oct-2000	ND	ND	NA	ND	0.712	0.577	ND	ND	1.42	1.37	ND	ND	0.023
Apr-2001	ND	NA	NA	ND	1.66	NA	ND	ND	1.53	NA	ND	ND	0.016
Sep-2001	ND	ND	NA	ND	0.9	1.09	ND	ND	1.72	1.67	ND	ND	0.019
Mar-2002	ND	ND	NA	ND	0.948	0.868	ND	ND	2.74	1.78	ND	ND	0.02
Sep-2002	ND	ND	NA	ND	0.833	ND	ND	ND	1.68	1.65	ND	ND	0.022
Mar-2003	ND	ND	NA	ND	1.42	0.569	ND	ND	3.83	3.32	ND	ND	0.035
Oct-2003	ND	0.012	NA	0.012	ND	ND	ND	ND	2.35	1.61	ND	ND	0.122
Apr-2004	0.01	ND	ND	0.017	1.35	0.73	ND	ND	15.1	16	ND	0.034	0.081
Oct-2004	ND	ND	ND	ND	1.55	0.598	ND	ND	2.9	2.08	ND	ND	0.064
Apr-2005	ND	ND	ND	ND	0.83	0.69	ND	ND	6.96	6.52	ND	ND	0.082
Oct-2005	ND	ND	ND	ND	0.686	0.545	ND	ND	2.05	1.3	ND	ND	0.039
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	6.12	7.09	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.75	0.694	ND	ND	1.7	1.43	ND	ND	0.039
Mar-2007	ND	ND	ND	ND	0.74	0.512	ND	ND	21.4	21.3	ND	ND	0.037

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-23***												
Sep-2007	ND	ND	ND	ND	0.873	0.671	ND	ND	1.82	1.79	ND	ND	0.016
Mar-2008	ND	ND	ND	ND	0.915	0.793	ND	ND	1.84	1.58	ND	ND	0.058
Sep-2008	ND	ND	ND	ND	0.706	0.652	ND	ND	1.49	1.4	ND	ND	0.026
Mar-2009	ND	ND	ND	ND	0.775	0.721	ND	ND	2.38	2.36	ND	ND	0.023
Oct-2009	0.016	ND	ND	ND	0.722	ND	ND	ND	1.67	1.51	ND	ND	0.12
Apr-2010	ND	ND	ND	ND	0.752	0.579	ND	ND	5.28	5.44	ND	ND	0.036
Oct-2010	ND	ND	ND	ND	0.735	0.653	ND	ND	2.03	1.97	ND	ND	0.041
Apr-2011	0.011	ND	ND	ND	0.801	ND	ND	ND	13.3	12.4	ND	0.013	0.066
Sep-2011	0.013	ND	ND	0.013	0.985	0.574	ND	ND	2.52	2.06	ND	ND	0.042
Mar-2012	0.014	ND	ND	ND	0.68	ND	ND	ND	10.5	10.5	ND	ND	0.057
Sep-2012	0.0157	0.0131	ND	0.0032 J	1	0.679	ND	ND	1.84	1.85	ND	ND	0.0594
Mar-2013	0.024	0.0208	0.000095 J	0.0051 J	1.57	1.58	ND	0.000036 J	26	26.8	ND	ND	0.111
Oct-2013	0.0286	0.0171	ND	0.0058 J	0.933	0.397 J	ND	ND	1.32	1.55	0.000312 J	0.0149	0.134
Mar-2014	0.026	0.0181	ND	0.0101 J	0.856	0.752	ND	0.000044 J	1.57	1.65	ND	0.0063 J	0.0335
Oct-2014	0.0115	0.0125	ND	0.0051 J	0.936	0.923	ND	ND	5	5.16	ND	ND	0.0084 J
Apr-2015	0.0492	0.029	ND	0.0055 J	1.25	1.02	ND	ND	6.82	6.98	ND	0.0034 J	0.014
Nov-2015	0.0908	0.0381	ND	0.0062 J	1.65	0.943	0.0014 J	ND	7.18	7.04	ND	0.0088 J	0.0284
May-2016	0.0427	0.0402	ND	0.0036 J	0.987	1	ND	ND	4.26	4.26	ND	ND	0.0144 J
Oct-2016	0.0339	0.0342	ND	0.0038 J	0.988	1.02	ND	ND	3.95	4.07	ND	ND	0.0099 J
May-2017	0.0212	0.0215	ND	0.0037 J	0.923	1.02	ND	ND	3.98	4.11	ND	ND	0.0089 J
Oct-2017	0.0189	0.0193	ND	0.0035 J	0.971	1.06	ND	ND	4.17 J-	4.32	ND	ND	0.0101 J
May-2018	0.019	0.017	ND	0.0092	1.1 J	ND	0.0006 JB	ND	4.2 J	4.2 J	ND	0.0035	0.011
Nov-2018	0.02	0.017	ND	0.0069	1.2 J	1.6 J	0.00012 J	ND	2.4 J	4 JB	ND	0.0026	0.011
May-2019	0.024	0.021	ND	0.022	ND	ND	ND	ND	ND	ND	ND	0.0034	0.012

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-23***												
Oct-2019	0.019	0.016	*ND*	0.0094	*1.1 J*	*1.1 J*	*ND*	*ND*	*3.2 J*	*3.2 J*	*ND*	*ND*	0.022
May-2020	0.032	0.028	*ND*	0.055	*ND*	*1.4 J*	*ND*	*ND*	*3.3 J*	*3.1 J*	*ND*	0.012	0.0097
Oct-2020	0.019	0.016	*ND*	0.026	*ND*	*ND*	*ND*	*ND*	*2.5 J*	*2.9 J*	*ND*	*0.0025 J*	*ND*
Apr-2021	0.014	0.012	*0.00006 J*	0.014	1.1	0.96	*ND*	*ND*	3.9	3.4	*ND*	*ND*	*0.0068 J*
Oct-2021	0.012	0.012	*ND*	0.016	1	1.1	*ND*	*ND*	4.4	4.6	*ND*	*ND*	0.0059
May-2022	0.014	0.014	*ND*	0.03	1	1.1	*ND*	*ND*	4.3	4.8	*ND*	*ND*	0.0055
Oct-2022	0.014	0.012	*ND*	0.022	1.1	1.1	*ND*	*ND*	4.8	4.8	*ND*	*ND*	0.0073
May-2023	0.012	0.011	*ND*	0.019	1.1 B	1	*ND*	*ND*	4.3	4.4	*ND*	*ND*	0.0072
Oct-2023	0.03	0.034	*ND*	0.075	1	0.98	*ND*	*ND*	4.1	3.9	*ND*	*ND*	0.016

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-23***																
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-23*																
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1 J	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-23*																
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-23***															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-23***															
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.44 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-23***															
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.189 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-23***															
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Feb-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-23***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*0.66 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*0.26 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-23***															
May-2017	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.292 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-24***											
Apr-1995	47.4	31	ND	30.1	9.4	ND	ND	8.8	125	7	77	17.9
Apr-1997	ND	2	ND	ND	7	0.17	ND	NA	NA	0.1	51	12
Oct-1997	3	3	0.26	ND	7.44	ND	ND	5.58	40.5	ND	16	ND
Apr-1998	ND	ND	0.23	ND	5.44	0.14	ND	5.65	47.7	ND	10	7.4
Apr-1999	ND	ND	0.46	ND	24.7	0.125	ND	5.03	39.3	ND	37	6
Oct-1999	ND	ND	0.08	ND	6.98	0.299	ND	5.39	36.8	ND	32	7.2
Apr-2000	5	5	0.61	ND	7.27	0.227	ND	5.84	33	ND	28	10
Oct-2000	7.9	NA	ND	ND	5.45	ND	ND	5.18	29.1	5	28	6.34
Apr-2001	4.1	NA	0.26	ND	6.18	ND	ND	NA	NA	ND	25	8.5
Sep-2001	2	2	ND	ND	9.87	1.38	ND	4.81	42	38.6	38	6.77
Mar-2002	3.6	3.6	ND	ND	9.49	ND	ND	5.1	49	ND	37	7.42
Sep-2002	4	4	ND	ND	9.42	ND	ND	6.1	46.1	ND	24	8.25
Mar-2003	3.6	3.6	ND	ND	7.39	0.256	ND	5.1	45	ND	50	8.22
Oct-2003	4.2	4.2	ND	ND	7.42	0.24	ND	4.6	51.7	ND	17	9.13
Apr-2004	4.2	4.2	ND	ND	8.28	0.174	ND	4.7	51.2	ND	45	13.1
Oct-2004	4.2	4.2	ND	ND	9.13	0.223	ND	4.85	47.8	ND	42	9.83
Apr-2005	18	18	ND	ND	10.2	0.25	ND	5.5	66.4	ND	65	13.6
Oct-2005	5	5	ND	ND	6.25	0.28	ND	4.4	38.4	ND	38	6.16
Mar-2006	4.9	4.9	ND	ND	7.6	0.28	ND	5.6	60.3	1.16	42	5.83
Sep-2006	4.3	4.3	ND	ND	6.63	0.25	ND	4.9	43	1.07	37	6.71
Mar-2007	4.7	4.7	ND	ND	8.12	0.2	ND	4.7	45.9	ND	ND	7.64
Sep-2007	5.3	5.3	ND	ND	8.37	0.14	ND	5.6	41.8	ND	57	7.71
Mar-2008	16	16	ND	ND	21.1	1.01	ND	4.8	44.6	6.71	37	11.9
Sep-2008	6.3	6.3	ND	ND	9.79	0.09	ND	4.8	45.9	1.15	34	8.4
Mar-2009	5.8	5.8	ND	ND	15.8	0.07	ND	4.7	73.6	1.67	43	13.4
Oct-2009	7	7	ND	ND	12.5	0.08	ND	4.7	60.3	2.3	64	11.7
Mar-2010	7.5	7.5	0.44	11.8	13.9	0.07	ND	4.82	75	4.01	62	12
Oct-2010	6	6	ND	ND	12.2	ND	ND	4.6	59.2	4.05	37	11.6
Apr-2011	7.1	7.1	ND	ND	11.4	0.07	ND	4.5	62.6	3.6	66	10.4
Sep-2011	7.1	7.1	ND	ND	11.7	0.08	ND	4.7	57.6	3.44	52	12
Mar-2012	6.8	6.8	ND	ND	12	0.09	ND	4.1	61.4	3.98	46	12.3
Sep-2012	6	6	ND	ND	11.9	0.125	ND	3.6	59.3	3.23	46	12.1
Mar-2013	5.84	5.84	ND	ND	12.1	0.135	ND	4.9	60.9	3.23	51	9.7
Oct-2013	6.76	6.76	ND	ND	13	0.109	ND	5.7	62.3	3.7	46	13.5
Mar-2014	6.52	6.52	ND	ND	13.5	0.138	ND	5	66.7	3.68	460	13.4
Oct-2014	ND	ND	ND	ND	13.3	0.137	ND	4.9	67.8	4.81	34	14.7
Apr-2015	7.44	7.44	ND	ND	14.7	0.0722	ND	3.9	66	4.46	48	15.2

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-24***											
Nov-2015	4.52	4.52	*ND*	*6 J*	14.7	0.0738	*ND*	5	94.1	5.42	55	14.9
May-2016	4.4	4.4	*ND*	*ND*	13.7	0.0732	*ND*	5	89.7	4.15	47	14.7
Oct-2016	5.48	5.48	*ND*	*ND*	14.9	*NA*	*NA*	4.9	97.2	4.7	51	14.2
May-2017	3.56	3.56	*ND*	*ND*	14.7	0.334	*ND*	4.9	105.5	5.01	*21 J*	15.5
Oct-2017	2	2	*0.144 J*	*ND*	15.2	0.408	*ND*	5.1	110.4	3.28	53	16.2
May-2018	*4 J*	*ND*	*ND*	*7.9 J*	14.5	0.41	*ND*	5.3	97.5	*5.5 J*	43	17.4
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	16.5	0.73	*ND*	4.58	86.7	*7.1 J*	47	19.4
May-2019	*ND*	*NA*	*ND*	*ND*	19.8	0.61	*ND*	4.56	78.3	*ND*	61	21.2
Oct-2019	*4 J*	*NA*	*ND*	*ND*	18.2	0.63	*ND*	4.21	102.8	*8.4 J*	104	23.9
May-2020	*ND*	*NA*	*ND*	*ND*	16.1	0.25	*ND*	4.29	89.6	*9.2 J*	30	19.2
Oct-2020	*2 J*	*NA*	*ND*	*ND*	15.8	0.28	*ND*	4.47	82.2	8.2	38	19.8
Apr-2021	*ND*	*NA*	*ND*	*ND*	24.4	1.1	*ND*	4.61	129.3	*ND*	72	22.2
Oct-2021	12	*NA*	*ND*	*ND*	22.1	1	*ND*	4.8	165	*5.2 J*	55	22.6
May-2022	*2 J3c*	*NA*	*ND*	*ND*	20.2	1	*ND*	4.6	155.1	*8.4 J*	74	25.7 N3
Oct-2022	*2 J4c*	*NA*	*ND*	*8.4 J*	26.4	1	*ND*	4.65	161.2	10.4	71	28.7 N3
May-2023	*4 J4cB*	*NA*	*ND*	*6.9 JB*	27.6	1.2	*ND*	4.66	180.3	11.5	90	33.1 N3
Oct-2023	*2 J2c*	*NA*	*ND*	*ND*	31.5	1.13	*NA*	4.72	185.9	11.8	88	29.7 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24***													
Apr-1995	ND	ND	ND	ND	ND	43.2	NA	0.01	ND	ND	1.7	0.07	ND	2.4	NA
Oct-1996	ND	ND	0.026	ND	ND	1.9	1.6	ND	ND	ND	0.22	ND	ND	0.87	0.71
Apr-1997	ND	ND	0.018	ND	ND	1.4	1.8	ND	ND	ND	ND	ND	ND	0.85	1.1
Oct-1997	ND	ND	0.019	ND	ND	1.36	1.39	ND	ND	ND	0.201	ND	ND	0.886	0.897
Apr-1998	ND	ND	0.021	ND	ND	1.44	1.41	ND	ND	ND	0.198	ND	ND	0.918	0.908
Apr-1999	ND	ND	0.015	ND	ND	1.16	1.19	ND	ND	ND	ND	ND	ND	0.747	0.759
Oct-1999	ND	ND	0.018	ND	ND	1.28	1.2	ND	ND	ND	0.085	0.058	ND	0.836	0.776
Apr-2000	ND	ND	0.018	ND	ND	2.77	1.23	0.021	ND	ND	3.87	0.571	ND	0.828	0.694
Oct-2000	ND	ND	0.014	ND	ND	1.23	1.23	ND	ND	ND	0.053	ND	ND	0.792	0.81
Apr-2001	ND	ND	0.017	ND	ND	2.03	NA	ND	ND	ND	1.27	NA	ND	0.842	NA
Sep-2001	ND	ND	0.016	ND	ND	1.29	1.41	ND	ND	ND	0.175	0.111	ND	0.863	0.9
Mar-2002	ND	ND	0.02	ND	ND	1.44	1.44	ND	ND	ND	0.132	0.121	ND	0.929	0.919
Sep-2002	ND	ND	0.022	ND	ND	1.68	1.58	ND	ND	ND	0.251	0.189	ND	0.987	0.97
Mar-2003	ND	ND	0.02	ND	ND	1.73	1.41	ND	ND	ND	0.185	0.083	ND	0.945	0.943
Oct-2003	ND	ND	0.022	ND	ND	1.87	1.47	ND	ND	ND	0.161	0.089	ND	1.08	1.01
Apr-2004	ND	ND	0.027	ND	ND	3.01	1.85	ND	ND	ND	1.65	0.177	ND	1.36	1.25
Oct-2004	ND	ND	0.025	ND	ND	1.85	1.84	ND	ND	ND	0.379	0.275	ND	1.27	1.26
Apr-2005	ND	ND	0.024	ND	ND	3.6	1.85	ND	ND	ND	4.47	1.07	ND	1.12	0.975
Oct-2005	ND	ND	0.017	ND	ND	1.15	1.11	ND	ND	ND	0.199	0.112	ND	0.801	0.773
Mar-2006	ND	ND	0.015	ND	ND	1.08	0.969	ND	ND	ND	ND	ND	ND	0.765	0.723
Sep-2006	ND	ND	0.017	ND	ND	1.24	1.23	ND	ND	ND	0.077	0.051	ND	0.876	0.921

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24***													
Mar-2007	ND	ND	0.022	ND	ND	1.33	1.36	ND	ND	0.118 J	ND	ND	ND	1.05	1.06
Sep-2007	ND	ND	0.02	ND	ND	1.42	1.29	ND	ND	ND	0.066	0.052	ND	1.01	0.956
Mar-2008	ND	0.002	0.024	ND	ND	2.9	1.93	ND	ND	ND	3.09	1.41	ND	1.13	0.988
Sep-2008	ND	ND	0.022	ND	ND	1.43	1.37	ND	ND	ND	0.128	0.096	ND	1.17	1.13
Mar-2009	ND	ND	0.036	ND	ND	2.39	2.32	ND	ND	ND	0.103	0.074	ND	1.8	1.76
Oct-2009	ND	ND	0.033	ND	ND	2.1	1.93	ND	ND	ND	0.189	0.137	ND	1.56	1.45
Mar-2010	ND	ND	0.04	ND	ND	2.08	1.85	ND	ND	ND	0.079	ND	ND	1.66	1.47
Oct-2010	ND	ND	0.027	ND	ND	1.99	1.98	ND	ND	ND	ND	ND	ND	1.62	1.63
Apr-2011	ND	ND	0.033	ND	ND	1.78	1.74	ND	ND	ND	0.064	ND	ND	1.45	1.42
Sep-2011	ND	ND	0.034	ND	ND	2.07	2.03	ND	ND	ND	ND	ND	ND	1.66	1.61
Mar-2012	ND	ND	0.039	ND	ND	1.95	1.86	ND	ND	ND	ND	ND	ND	1.8	1.73
Sep-2012	ND	ND	0.0356	0.000072 J	ND	2.02	2.16	ND	0.0038 J	0.0027 J	0.0281 J	0.0308 J	ND	1.71	1.79
Mar-2013	ND	ND	0.0295	ND	ND	1.69	2.07	ND	0.0031 J	0.002 J	0.0085 J	0.007 J	0.0013 J	1.33	1.65
Oct-2013	ND	ND	0.0423	ND	ND	2.28	2.19	0.0025 J	0.0045 J	0.0021 J	ND	ND	ND	1.9	1.79
Mar-2014	ND	ND	0.0438	ND	0.000104 J	2.35	2.36	0.0012 J	0.0039 J	0.0021 J	0.041 J	0.0637	ND	1.84	1.82
Oct-2014	0.000819 J	ND	0.0449	ND	0.000131 J	2.43	2.4	ND	0.0047 J	0.0033 J	0.0107 J	0.0112 J	ND	2.1	2.07
Apr-2015	0.000837 J	ND	0.0467	ND	0.000153 J	2.5	2.56	ND	0.0049 J	0.0027 J	0.371	0.101	ND	2.19	2.21
Nov-2015	ND	ND	0.0444	ND	0.000201 J	2.45	2.52	ND	0.0049 J	0.0022 J	ND	ND	ND	2.13	2.2
May-2016	ND	ND	0.0444	0.000079 J	ND	2.34	2.37	ND	0.0052	0.002 J	ND	ND	ND	2.15	2.17
Oct-2016	ND	ND	0.0422	ND	ND	2.44	2.37	ND	0.0051	0.0022 J	ND	ND	ND	1.98	2.16
May-2017	ND	ND	0.0461	ND	ND	2.42	2.49	0.00069 J	0.0054	0.0022 J	ND	ND	ND	2.29	2.39
Oct-2017	ND	ND	0.0494	0.000072 J	ND	2.64	2.59	ND	0.0058	0.0024 J	ND	ND	ND	2.34	2.34
May-2018	0.000084 J	ND	0.053	0.000074 J	0.00015 J	2.8	2.6	0.0025 J	0.0056	0.003 B	ND	ND	0.000018 J	2.5	2.3
Nov-2018	ND	ND	0.06	0.000089 J	0.00017 J	3.1	3	0.0024 J	0.0062	0.0038	ND	ND	0.00014 JB	2.8	2.9

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24***													
May-2019	*ND*	*ND*	0.068	*ND*	*ND*	3.4	3.6	*ND*	0.0075	0.0031	*ND*	*ND*	*ND*	3.1	3.3
Oct-2019	*0.00011 J*	*ND*	0.072	*0.00012 J*	*0.00044 J*	3.8	3.7	*0.0034 J*	0.0082	0.0067	*ND*	*ND*	*0.000058 J*	3.5	3.4
May-2020	*0.000059 J*	*ND*	0.059	*ND*	*ND*	3.4	3.1	*0.0054 J*	0.0069	0.0027	*ND*	*ND*	*ND*	3.2	3
Oct-2020	*ND*	*ND*	0.045	*ND*	*ND*	3.2	3.1	*0.0034 J*	0.0054	*ND*	*ND*	*ND*	*ND*	2.9	2.9
Apr-2021	*ND*	*ND*	0.074	*ND*	*ND*	3.5	3.5	*ND*	0.0086	*0.0049 J*	*ND*	*ND*	*ND*	3.3	3.4
Oct-2021	*ND*	*ND*	0.071	*ND*	*ND*	3.6	3.7	*ND*	0.009	0.0038	*ND*	*ND*	*ND*	3.3	3.4
May-2022	*ND*	*ND*	0.075	*ND*	*ND*	4	4.1	*0.00084 J*	0.0097	0.004	*ND*	*ND*	*ND*	3.8	3.8
Oct-2022	0.00054	*ND*	0.088	*0.00016 J*	*0.0002 J*	4.6	4.5	*0.00066 J*	0.011	0.0052	*ND*	*ND*	*ND*	4.2	4.3
May-2023	*ND*	*ND*	0.1	*0.00014 J*	*0.00026 J*	5.1	5.1	*0.00078 J*	0.013	0.0049	*ND*	*ND*	*ND*	4.9	4.9
Oct-2023	*ND*	*ND*	0.092	*0.00017 J*	*0.0002 J*	4.7	4.7	*0.00071 J*	0.013	0.0045	*0.014 J*	*ND*	*ND*	4.4	4.5

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-24*												
Apr-1995	0.1	NA	ND	ND	4.6	NA	ND	ND	2.8	NA	ND	ND	0.07
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	2.6	2.7	ND	ND	0.023
Apr-1997	ND	0.011	**0.0023**	ND	ND	1.3	ND	ND	2.5	2.6	ND	ND	ND
Oct-1997	ND	ND	0.0007	ND	1.47	1.28	ND	ND	2.09	2.09	ND	ND	0.013
Apr-1998	0.01	0.011	0.0006	ND	1.13	ND	ND	ND	2.19	2.18	ND	ND	0.011
Apr-1999	ND	ND	NA	ND	ND	1.44	ND	ND	1.94	1.9	ND	ND	ND
Oct-1999	ND	ND	NA	ND	1.03	1.26	ND	ND	2.14	1.97	ND	ND	ND
Apr-2000	0.032	0.011	NA	ND	0.764	ND	ND	ND	2.49	2.14	ND	ND	ND
Oct-2000	ND	ND	NA	ND	0.887	0.986	ND	ND	2.27	2.33	ND	ND	ND
Apr-2001	0.017	NA	NA	ND	1.51	NA	ND	ND	2.57	NA	ND	ND	ND
Sep-2001	0.011	0.01	NA	ND	0.638	2.07	ND	ND	2.97	2.99	ND	ND	ND
Mar-2002	0.011	0.011	NA	ND	1.65	1.54	ND	ND	3.09	2.93	ND	ND	ND
Sep-2002	0.012	0.011	NA	ND	1.06	1.12	ND	ND	3.57	3.34	ND	ND	ND
Mar-2003	0.011	0.01	NA	ND	2.14	1.47	ND	ND	3.11	3.07	ND	ND	ND
Oct-2003	0.012	ND	NA	ND	0.645	0.609	ND	ND	4.39	3.25	ND	ND	0.015
Apr-2004	0.026	0.015	0.0012	ND	2.08	1.14	ND	ND	3.57	3.42	ND	ND	ND
Oct-2004	0.016	0.015	0.0007	ND	1.48	1.3	ND	ND	3.6	3.55	ND	ND	ND
Apr-2005	0.036	0.016	0.0002	ND	1.17	1.08	ND	ND	3.72	3.35	ND	ND	ND
Oct-2005	ND	ND	0.0002	ND	0.827	0.771	ND	ND	2.84	2.96	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.774	0.75	ND	ND	3.4	3.19	ND	ND	ND
Sep-2006	ND	ND	0.0002	ND	0.908	1.02	ND	ND	3.02	3.22	ND	ND	ND
Mar-2007	ND	ND	0.0012	0.057 J	1.02	1.04	ND	ND	3.14	3.36	ND	ND	0.102 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-24*												
Sep-2007	ND	ND	0.0016	ND	1.09	1.03	ND	ND	3.73	3.74	ND	ND	ND
Mar-2008	0.027	0.017	0.0008	ND	1.2	1.12	ND	ND	3.85	3.24	ND	ND	ND
Sep-2008	0.012	0.012	0.0003	ND	0.999	0.976	ND	ND	3.75	3.75	ND	ND	ND
Mar-2009	0.02	0.019	0.0008	ND	1.47	1.42	ND	ND	5.32	5.22	ND	ND	ND
Oct-2009	0.018	0.016	0.0002	ND	1.15	1.04	ND	ND	4.82	4.62	ND	ND	ND
Mar-2010	0.018	0.016	ND	ND	1.44	1.31	ND	ND	5.88	6.35	ND	ND	ND
Oct-2010	0.018	0.019	ND	ND	1.3	1.3	ND	ND	7.13	7.13	ND	ND	ND
Apr-2011	0.016	0.016	0.0002	ND	1.03	0.997	ND	ND	6.32	6.2	ND	ND	ND
Sep-2011	0.018	0.018	ND	ND	1.25	1.22	ND	ND	6.48	6.42	ND	ND	ND
Mar-2012	0.02	0.019	ND	ND	1.25	1.2	ND	ND	6	5.87	ND	ND	ND
Sep-2012	0.0197	0.0208	ND	0.0044 J	1.14	1.23	ND	ND	5.64	5.82	ND	ND	0.0074 J
Mar-2013	0.0165	0.0195	0.000081 J	0.0035 J	0.848	1.07	ND	ND	4.31	5.26	ND	ND	0.0123
Oct-2013	0.0225	0.0215	ND	0.0049 J	1.15	1.09	ND	ND	6.2	5.73	0.0004 J	0.000639 J	0.0189
Mar-2014	0.0238	0.0219	ND	0.0049 J	1.15	1.15	ND	ND	5.94	5.79	0.000109 J	0.000843 J	0.0051 J
Oct-2014	0.0236	0.0234	0.000564	0.0054 J	1.31	1.29	ND	ND	7.18	7.14	ND	ND	0.0085 J
Apr-2015	0.025	0.0252	0.000477	0.0055 J	1.24	1.27	ND	ND	7.05	7.19	ND	ND	0.0112
Nov-2015	0.0252	0.0259	0.000072 J	0.0056 J	1.26	1.31	ND	ND	7.23	7.46	ND	ND	0.0126
May-2016	0.0243	0.024	0.00015 J	0.005	1.24	1.22	ND	ND	7.02	7.03	ND	ND	0.0076 J
Oct-2016	0.0232	0.0284	0.00036	0.0059	1.15	1.25	ND	ND	6.59	7.01	ND	ND	0.0064 J
May-2017	0.0264	0.0264	0.00046	0.0061	1.18	1.24	ND	ND	6.51	6.79	ND	ND	0.008 J
Oct-2017	0.0278	0.0283	0.00089	0.0051	1.27	1.33	ND	ND	6.67 J-	6.66	ND	ND	0.0078 J
May-2018	0.026	0.027	0.00076	0.0066	ND	ND	0.0012 JB	ND	7.9	7.3	ND	0.0044	0.01
Nov-2018	0.038	0.032	0.00057	0.0071	1.4 J	1.9 J	0.00019 J	ND	6.5	8.1 B	ND	0.003	0.011
May-2019	0.041	0.041	**0.0023**	0.0084	ND	ND	ND	ND	7.9	8.2	ND	0.0042 B	0.011

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-24***												
Oct-2019	0.041	0.04	0.0019 M1	0.0083	*1.5 J*	*1.5 J*	*ND*	*ND*	8.8	8.7	*ND*	*ND*	0.02
May-2020	0.038	0.35	0.00039	0.0074	*ND*	*ND*	*0.00036 J*	*ND*	7.7	7.4	*ND*	0.011	0.0082
Oct-2020	0.038	0.037	0.00042	0.0056	*ND*	*1.1 J*	*ND*	*ND*	7.3	6.7	*ND*	*0.00082 J*	*ND*
Apr-2021	0.044	0.045	0.00057	0.01	1.3	1.2	*ND*	*ND*	10.1	9.9	*ND*	*ND*	0.01
Oct-2021	0.045	0.046	0.00054	0.0089	1.3	1.3	*ND*	*ND*	12	12.7	*0.000027 J*	*ND*	0.01
May-2022	0.049	0.049	0.00053	0.01	1.3	1.3	*ND*	*ND*	12.2	12	*ND*	*ND*	0.012
Oct-2022	0.058	0.056	0.0016	0.011	1.5	1.6	*ND*	0.003	13.3	13.3	*ND*	*ND*	0.013
May-2023	0.065	0.067	0.00069	0.014	1.4	1.4	*ND*	*ND*	13.7	13.8	*ND*	*ND*	0.016
Oct-2023	0.064	0.064	0.00066	0.013	1.4	1.3	*ND*	*ND*	13.5	13.4	*ND*	*ND*	0.016

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24*																
Oct-1996	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	0.6 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	1.5	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7 J	ND
Apr-2004	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24*																
Mar-2007	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	5.8	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Jun-2009	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.8	ND
Mar-2010	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	6.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	6.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	4.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	5.59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	6.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	7.35	ND	ND	ND	ND	ND	ND	0.27 J	0.55 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	6.96	ND	ND	ND	ND	ND	ND	0.27 J	0.47 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	6.14	ND	ND	ND	ND	ND	ND	0.25 J	0.44 J	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	7.87	ND	ND	ND	ND	ND	ND	0.29 J	0.32 J	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	6.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	6.7	0.1 J	ND	ND	ND	ND	0.1 J	0.3 J	0.3 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	7	0.1 J	ND	ND	ND	ND	0.1 J	0.2 J	0.3 J	1.4 J	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	0.1 J	0.2 J	0.3 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24*																
Oct-2017	*ND*	*ND*	*ND*	*ND*	4.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.3 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	3.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	5.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	5.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	2.07	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.126 J*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	2.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	2.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24***															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	9.5	4.4
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	9	1
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	5	6.5
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	5	2.4
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	0.9 J	NA	NA	NA	ND	0.8 J
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	1.3	1
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	1.9	NA	ND	NA	2	2
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	7.1	1.6
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	4.8	2
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	5.8	2.4
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	5.7	2.3
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	9.7	5.3
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	4.8	2.8
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	12	7.4
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3	ND	ND	ND	15	7.8
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	6.2	6.4
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2	ND	ND	ND	6.6	7.4
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	6	2.1
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	7.6	2.4
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	7.6	1.6

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24***															
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	7.2	2.5
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	15.2	2.3
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	7.2	2.9
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	10.7	7.4
Mar-2009	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	ND	ND	ND	17.6	10.4
Jun-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	17.4	8
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	9.7	6.1
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.4 J	12.2
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND	ND	ND	24.1	10
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	ND	ND	ND	ND	10
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	24	12.3
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	20.1	11.3
Sep-2012	0.27 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.39	ND	ND	ND	10.4	6.77
Mar-2013	0.28 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	12.4	9.38
Oct-2013	0.49 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.41 J,B	4.95	ND	ND	ND	11.8	10.7
Mar-2014	0.47 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	ND	ND	ND	14.9 J	10.1
Oct-2014	0.37 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.59 J,B	3.92	ND	ND	ND	9.73	7.49
Apr-2015	0.61 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.68	ND	ND	ND	9.67	9.41
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.4	ND	ND	ND	20.3 J	8.2
May-2016	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	3.5	ND	ND	ND	9.4	9.3
Oct-2016	0.3 J	ND	ND	ND	ND	ND	ND	ND	0.1 J	0.2 J	0.8 J	2.3	ND	ND	ND	9.2	9.9
May-2017	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J,B	ND	1.7	ND	ND	ND	5.8	5.6

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24***															
Oct-2017	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	1.5	*ND*	*ND*	*ND*	5.1	4.9
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	9.2	4.7
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*0.86 JN3*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2 CL	2.2 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.7	2.1
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*	*ND*	*ND*	7.3	4.5
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	9	4.7
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.282 J*	*ND*	*ND*	*ND*	*1.54 J*	*1.49 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*1 J*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.5	*0.9 J*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	1.3
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	1.1
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	1.2

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24***															
Oct-1996	ND	ND	NA	NA	ND	NA	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	2.5	ND	ND	ND	ND	0.9 J	0.7 J	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	1.9	ND	ND	ND	ND	0.8 J	0.7 J	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	0.7 J	ND	ND	NA	NA	ND	0.5 J	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	0.6 J	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	1.6	ND	ND	NA	NA	0.6 J	0.9 J	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	2.1	ND	ND	ND	ND	0.6 J	0.6 J	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	2.8	ND	ND	ND	ND	0.7 J	0.7 J	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	2.7	ND	ND	ND	ND	0.6 J	0.6 J	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	4.4	ND	ND	ND	ND	1.2	1.2	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	2.8	ND	ND	ND	ND	0.6 J	0.6 J	ND	ND	NA
Oct-2003	ND	ND	ND	NA	1.1	ND	ND	4.6	ND	ND	ND	ND	1.6	1.1	ND	ND	NA
Apr-2004	ND	ND	ND	NA	2.3	ND	ND	5	ND	ND	ND	ND	1.8	1.1	ND	0.9 J	NA
Oct-2004	ND	ND	ND	NA	1.6	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	0.6 J	ND	ND	4.2	ND	ND	ND	ND	1.5	1.1	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	3.4	ND	ND	ND	ND	0.8 J	0.7 J	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	ND	0.8 J	0.9 J	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-24*															
Sep-2006	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	3.6	ND	ND	ND	ND	1.2	0.9 J	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	3.7	ND	ND	ND	ND	1.5	1.9	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	1.1	1.1	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	5	ND	ND	ND	ND	3.1	5.1	ND	1.1	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	**9.2 C**	ND	ND	ND	ND	**8.4 C**	ND	ND	ND	NA
Jun-2009	ND	ND	ND	ND	ND	ND	ND	**8**	ND	ND	ND	ND	**5.9**	1.1	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	**6**	ND	ND	ND	ND	4.1	1 J	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	**11.7**	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	**11**	ND	ND	ND	ND	ND	1.5	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	**11.8**	ND	ND	ND	ND	**7.2**	1.3	ND	1.4	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	**11.8**	ND	ND	ND	ND	**7.8**	1.4	ND	ND	NA
Mar-2012	ND	ND	ND	ND	0.5 J	ND	ND	**11**	ND	ND	ND	ND	**7.1**	1.3	ND	0.8 J	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	**8.9**	ND	ND	ND	ND	**5.44**	1.04	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	**7.14**	ND	ND	ND	ND	**5.73**	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.16 J	ND	ND	ND	**8.91**	ND	ND	ND	ND	**8.32**	1.08	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	**7.46**	ND	ND	ND	ND	**7.33**	0.88 J	ND	ND	ND
Oct-2014	ND	ND	ND	0.13 J	ND	ND	ND	**6.5**	ND	ND	ND	ND	**5.75**	0.76 J	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	**6.29**	ND	ND	ND	ND	**6.48**	0.69 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	**5.1**	ND	ND	ND	ND	**5.2**	0.6 J	ND	ND	ND
May-2016	ND	ND	ND	0.1 J	0.3 J	ND	ND	4.6	ND	ND	ND	ND	4.2	0.6 J	ND	0.2 J	ND
Oct-2016	ND	ND	ND	0.1 J	0.3 J	ND	ND	3.6	ND	ND	ND	ND	3.1	0.6 J	ND	0.2 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24***															
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	1.9	*0.1 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	1.7	*0.3 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2 B	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	2.2	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*0.98 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.106 J*	*ND*	*ND*	*ND*	*0.434 J*	*ND*	*ND*	*ND*	*ND*	*0.326 J*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-24A***											
Apr-1995	33	33	ND	94.6	5	ND	ND	5.4	472	137	278	19.3
Apr-1997	ND	4	ND	ND	16	ND	ND	NA	NA	16	79	21
Oct-1997	ND	ND	0.51	ND	18	ND	ND	5.1	125.9	9.64	70	26
Apr-1998	ND	ND	0.3	ND	11.1	0.19	ND	4.71	119.6	21.7	55	24
Apr-1999	ND	ND	1.3	ND	12	ND	ND	4.29	264	47.6	170	68
Oct-1999	ND	ND	0.43	ND	19.6	ND	ND	4.67	174	43.3	120	46
Apr-2000	ND	ND	0.92	ND	16.4	ND	ND	4.55	143	55.3	82	35
Oct-2000	ND	NA	0.75	15	13.1	ND	ND	4.27	154	43.4	102	30.6
Apr-2001	ND	NA	0.9	13	11	ND	ND	NA	NA	40	96	32
Sep-2001	ND	ND	0.48	ND	13.8	ND	ND	4.06	159	35.5	91	23.5
Mar-2002	ND	ND	0.64	ND	14.6	ND	ND	4.5	180	44.4	116	26.1
Sep-2002	ND	ND	0.69	ND	11.1	ND	ND	4.4	155.6	43.6	101	25.7
Mar-2003	ND	ND	0.78	ND	17.9	ND	ND	4.3	163.9	43.5	100	30
Oct-2003	ND	ND	0.31	12	12.2	0.086	ND	4.3	133.3	26.3	45	20.8
Apr-2004	1.2	1.2	0.41	14	11.8	ND	ND	4.4	106.5	29.6	96	18.2
Oct-2004	2	2	0.34	19	10.4	ND	ND	4.56	96.9	25.9	110	18.6
Apr-2005	4.3	4.3	0.55	17	8.3	ND	ND	4.7	107.4	36.4	90	26.3
Oct-2005	9.5	9.5	0.48	ND	9.29	ND	ND	4.4	108.9	32.9	76	25.4
Mar-2006	13	13	ND	ND	8.34	ND	ND	4.8	124.6	38.8	92	31.9
Sep-2006	4.8	4.8	0.46	ND	8.04	ND	ND	4.7	104.9	31.9	78	29.1
Mar-2007	7.6	7.6	ND	ND	8.51	ND	ND	4.7	92.7	25.8	71	26.2
Sep-2007	8.6	8.6	0.21	13	7.69	ND	ND	5.5	102.1	24.3	95	31.2
Mar-2008	23	23	0.56	16	11.4	ND	ND	5.2	117	35.2	78	38.7
Sep-2008	26	26	0.63	ND	7.48	ND	ND	5.3	109.6	23.2	97	40.6
Mar-2009	35	35	0.88	ND	6.32	ND	ND	5	133.6	27.1	82	45.9
Oct-2009	31	31	0.64	ND	6.74	ND	ND	5	119.3	23.4	86	42.2
Mar-2010	28	28	0.6	11.4	6.85	ND	ND	5.4	144	21.4	82	38.8
Oct-2010	31	31	0.46	ND	6.6	ND	ND	4.9	102.6	18.7	76	40.5
Apr-2011	28	28	0.72	ND	5.81	ND	ND	5	113.1	20.2	95	35.3
Sep-2011	18	18	0.26	ND	6.49	0.08	ND	5.1	92.1	15.3	75	29.7
Mar-2012	14	14	0.42	ND	5.81	0.27	ND	4.5	88.7	18.1	55	27.6
Sep-2012	14.7	14.7	0.29	ND	5.31	0.251	ND	4	108.9	32.9	84	47.1
Mar-2013	12	12	ND	ND	5.39	0.993	ND	5.2	98.8	26.1	74	36
Oct-2013	17	17	0.187 J	12	5.7	0.88	ND	5.7	103.4	27.5	80	45.1
Mar-2014	28	28	ND	6 J	5.32	0.992	ND	5.6	118.5	24.7	57	54.2
Oct-2014	37.4	37.4	ND	5 J	5.17	1.29	ND	5.7	115	18.2	78	58.2
Apr-2015	43.2	43.2	ND	ND	4.84	1.32	ND	5	121.9	18.5	80	72.7

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-24A***											
Nov-2015	33.2	33.2	*0.108 J*	*9 J*	5.49	1.41	*ND*	5.8	143	16.7	89	57.5
May-2016	43	43	*ND*	*6 J*	4.61	1.31	*ND*	6	168.5	16.2	84	62.2
Oct-2016	44.8	44.8	*ND*	*ND*	4.63	*NA*	*NA*	5.9	183.7	14	141	62.6
May-2017	50.2	50.2	*ND*	*5 J*	4.55	1.22	*ND*	5.9	214	15.3	75	63.2
Oct-2017	46.2	46.2	*0.125 J*	*ND*	4.83	1.35	*ND*	6.1	196	14.3	93	60.3
May-2018	42	42	*ND*	*ND*	6	1.5	*ND*	5.2	141.5	13.1	30	63
Nov-2018	26	26	*ND*	*7.9 J*	10	0.95	*ND*	5.43	116.4	10.7	72	46.4
May-2019	22 H1	*NA*	*ND*	*ND*	11.5	1.3	*ND*	5.34	96.9	14.7	91	42
Oct-2019	20	*NA*	*ND*	*6 J*	9	1	0.018	4.85	118.3	16.3	25	40.1
May-2020	36	*NA*	*ND*	*ND*	6.8	1.5	*ND*	5.12	132	15.2	66	56.3
Oct-2020	36	*NA*	*ND*	*ND*	7	1.6	*ND*	5.23	132.1	17.6	71	63.7
Apr-2021	40	*NA*	*ND*	*12.6 J*	6.4	1.9	*ND*	5.79	163	12.3	91	61.8
Oct-2021	*4 J4c*	*NA*	*0.059 J*	*8.3 J*	4.7	1.6	*ND*	5.83	203.2	17.9	84	69.7
May-2022	62	*NA*	*ND*	*ND*	4	1.5	0.016	5.72	189.2	19.1	110	85.7 N3
Oct-2022	52	*NA*	*ND*	*19.8 J*	6.2	1.2	*ND*	5.74	168.5	17.1	91	66.4 N3
May-2023	42	*NA*	*ND*	*6.9 JB*	5.3	1.3	*ND*	5.76	165.1	13	83	63.1 N3
Oct-2023	40	*NA*	*ND*	*ND*	6.8	1.2	*NA*	5.7	161.4	15 MH	91	60.2 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24A***													
Apr-1995	ND	ND	ND	ND	ND	4.6	NA	**0.156**	ND	ND	1.7	1.4	ND	1.9	NA
Oct-1996	ND	ND	0.14	ND	ND	3.3	3.2	ND	ND	ND	ND	ND	ND	2.4	2.3
Apr-1997	ND	ND	0.13	ND	ND	3.7	3.5	ND	ND	0.033	1.5	0.38	ND	2.6	2.4
Oct-1997	ND	ND	0.128	ND	ND	3.14	3.21	ND	0.012	0.019	4.55	4.5	ND	2.61	2.6
Apr-1998	ND	ND	0.144	ND	ND	4.11	4.09	ND	0.019	0.013	2.07	2.08	ND	3.45	3.42
Apr-1999	ND	ND	0.222	ND	ND	12.5	11.6	ND	0.079	0.017	3.29	3.04	ND	8.85	8.24
Oct-1999	ND	ND	0.139	ND	0.004	12.7	11.8	ND	0.066	0.032	1.83	1.71	ND	6.61	6.15
Apr-2000	ND	ND	0.114	ND	ND	8.15	7.71	ND	0.033	0.027	1.25	1.22	ND	3.61	3.42
Oct-2000	ND	ND	0.105	0.003	ND	7.02	6.68	ND	0.025	0.1	3.7	3.61	ND	3.16	3.04
Apr-2001	ND	ND	0.086	**0.005**	ND	7.41	NA	ND	0.024	0.111	4.67	NA	ND	3.26	NA
Sep-2001	ND	ND	0.075	ND	ND	5.4	6.14	ND	0.021	0.065	4.79	5.02	ND	2.44	2.61
Mar-2002	ND	ND	0.063	ND	ND	6.07	6.01	ND	0.02	0.069	5.4	5.53	ND	2.66	2.7
Sep-2002	ND	ND	0.061	ND	ND	5.94	5.94	ND	0.019	0.071	5.24	5.19	ND	2.64	2.64
Mar-2003	ND	ND	0.067	ND	ND	6.92	7.04	ND	0.019	0.052	5.66	5.67	ND	3.09	3.09
Oct-2003	ND	ND	0.079	ND	ND	4.5	3.99	ND	0.014	0.045	5.75	5.55	ND	2.33	2.23
Apr-2004	ND	ND	0.079	ND	ND	3.6	3.29	ND	0.015	0.045	8.23	7.57	ND	2.23	2.06
Oct-2004	ND	ND	0.088	ND	ND	3.56	3.5	ND	0.013	0.032	8.94	8.7	ND	2.36	2.31
Apr-2005	ND	ND	0.082	ND	ND	6.09	5.65	ND	0.013	0.072	7.77	7.8	ND	2.69	2.5
Oct-2005	ND	ND	0.075	ND	ND	5.94	5.6	ND	0.014	0.061	8.83	8.31	ND	2.56	2.42
Mar-2006	ND	ND	0.064	ND	ND	8	7.68	ND	ND	0.03	6.43	6.12	ND	2.89	2.78
Sep-2006	ND	ND	0.051	ND	ND	7.39	6.99	ND	ND	0.04	5.16	4.92	ND	2.58	2.46

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24A***													
Mar-2007	ND	ND	0.046	ND	ND	6.97	6.76	ND	ND	0.051	4.1	3.98	ND	2.13	2.08
Sep-2007	ND	ND	0.053	ND	ND	8.51	7.65	ND	ND	0.031	4.5	4.23	ND	2.44	2.27
Mar-2008	ND	ND	0.04	ND	ND	10.8	10.3	ND	ND	0.012	4.73	4.57	ND	2.83	2.74
Sep-2008	ND	ND	0.035	ND	ND	11.3	10.7	ND	ND	0.023	4.65	4.41	ND	3	2.84
Mar-2009	ND	ND	0.038	ND	ND	13	13.6	ND	ND	0.018	5.66	5.47	ND	3.26	3.2
Oct-2009	ND	ND	0.042	ND	ND	12.1	11.4	ND	ND	0.033	5.54	4.9	ND	2.91	2.68
Mar-2010	ND	ND	0.053	ND	ND	10.9	10.2	ND	ND	ND	4.81	4.91	ND	2.82	2.69
Oct-2010	ND	ND	0.053	ND	ND	11.4	11.3	ND	ND	ND	5.71	5.89	ND	2.91	2.9
Apr-2011	ND	ND	0.051	ND	ND	10.4	10.1	ND	ND	ND	6.16	5.92	ND	2.27	2.21
Sep-2011	ND	ND	0.057	ND	ND	8.4	8.51	ND	ND	ND	4.29	4.25	ND	2.11	2.1
Mar-2012	ND	ND	0.048	ND	ND	7.73	7.53	ND	ND	ND	4	3.8	ND	2.01	2
Sep-2012	ND	ND	0.0636	0.00011 J	ND	13.3	13.1	ND	0.0047 J	0.0081 J	0.498	0.509	ND	3.37	3.26
Mar-2013	ND	ND	0.0452	ND	0.000734 J	10.2	10.5	0.0023 J	0.0054 J	0.0141	0.546	0.531	0.0015 J	2.56	2.54
Oct-2013	ND	ND	0.0562	ND	0.000263 J	12.5	12.3	0.0034 J	0.0049 J	0.0172	ND	ND	ND	3.38	3.35
Mar-2014	ND	ND	0.048	ND	0.000148 J	15.7	15.6	0.0013 J	0.0023 J	0.0049 J	0.0821	0.0516	ND	3.65	3.67
Oct-2014	ND	ND	0.0448	ND	0.000135 J	17.2	17.5	ND	0.0016 J	0.0069 J	0.0096 J	0.008 J	ND	3.7	3.74
Apr-2015	0.000526 J	ND	0.0497	ND	ND	21.7	21.3	0.000514 J	0.0015 J	0.011	0.0228 J	0.0095 J	ND	4.5	4.4
Nov-2015	ND	ND	0.0481	ND	0.000106 J	17.2	16.7	0.000487 J	0.0021 J	0.0168	0.0671	ND	ND	3.52	3.45
May-2016	ND	ND	0.0506	ND	ND	18.3	18.6	0.00085 J	0.0018	0.0151	ND	ND	ND	3.99	3.95
Oct-2016	ND	ND	0.0425	ND	ND	18.9	18.3	0.00098 J	0.0015	0.0097	ND	ND	ND	3.74	3.78
May-2017	ND	ND	0.0383	ND	ND	19.1	19.9	0.00099 J	0.00092 J	0.0053	ND	ND	ND	3.77	4.06
Oct-2017	ND	ND	0.0364	ND	ND	18.6	20.8	ND	0.0015	0.0033 J	ND	ND	ND	3.34	3.6
May-2018	0.000079 J	ND	0.047	ND	0.000085 J	19.5	17.4	0.0035 J	0.002	0.0037 B	0.014 J	ND	ND	3.4	3.13
Nov-2018	ND	ND	0.042	ND	0.000096 J	14.4	14.3	0.0037 J	0.0024	0.0032	0.023	0.076	0.00008 JB	2.5	2.7

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-24A***													
May-2019	*ND*	*ND*	0.065	*ND*	*ND*	12.7	13.4	0.0088	0.0061	0.0062	*ND*	*ND*	*ND*	2.5	2.6
Oct-2019	*0.00012 J*	*ND*	0.064	*0.0002 J*	*0.00047 J*	12	11.9	*0.0067 J*	0.0061	0.0086	*0.077 J*	*0.017 J*	*0.000096 J*	2.5	2.4
May-2020	*0.000074 J*	*ND*	0.059	*0.00011 J*	*ND*	16.4	16.6	*0.0064 J*	0.006	0.004	*0.02 J*	*ND*	*ND*	3.7	3.7
Oct-2020	*ND*	*ND*	0.073	*ND*	*ND*	18.9	18.2	*0.011 J*	0.0072	*ND*	0.16	*0.016 J*	*ND*	4	3.8
Apr-2021	*ND*	*ND*	0.064	*ND*	*ND*	19.2	19.3	*0.0027 J*	*0.0034 J*	*ND*	*0.067 J*	*ND*	*ND*	3.4	3.4
Oct-2021	*0.000073 J*	*ND*	0.068	*0.00018 J*	*ND*	21.5	21.5	0.0034	0.005	0.0044	0.066	*0.012 J*	*0.000033 J*	3.9	3.9
May-2022	*ND*	*ND*	0.062	*ND*	*ND*	26.2	26.9	0.0037	0.0041	0.004	0.051	*ND*	*ND*	4.9	5
Oct-2022	*0.00033 J*	*ND*	0.047	*ND*	*ND*	21.1	23.3	0.0028	*0.0025 J*	0.003	0.056	*ND*	*ND*	3.3	3.7
May-2023	*ND*	*ND*	0.041	*ND*	*ND*	20	21.3	0.0037	*0.0023 J*	*0.002 J*	0.079	*ND*	*ND*	3.2	3.4
Oct-2023	*ND*	*ND*	0.044	*ND*	*ND*	19	18.5	*0.0018 J*	0.004	*0.0019 J*	*0.018 J*	0.26	*ND*	3.1	3.2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-24A***												
Apr-1995	0.13	NA	ND	ND	135	NA	ND	0.02	18.1	NA	ND	ND	0.08
Oct-1996	0.1	0.096	NA	ND	ND	ND	ND	ND	3.4	5.1	ND	ND	0.074
Apr-1997	0.11	0.1	0.0005	ND	2	2	ND	ND	5.7	5.3	ND	ND	0.057
Oct-1997	0.13	0.131	ND	0.013	1.72	2.39	ND	ND	6.64	6.66	ND	ND	0.032
Apr-1998	0.14	0.156	0.0002	0.03	1.23	2.17	ND	ND	3.95	3.96	ND	ND	0.037
Apr-1999	0.804	0.746	NA	0.064	2.99	3.55	ND	ND	6.23	5.86	ND	ND	0.088
Oct-1999	0.862	0.805	NA	0.04	2.84	2.98	ND	ND	5.07	4.66	ND	ND	0.097
Apr-2000	0.442	0.424	NA	ND	2.65	1.56	ND	ND	4.89	4.64	ND	ND	0.061
Oct-2000	0.348	0.334	NA	ND	2.06	2.35	ND	ND	5.08	5.03	ND	ND	0.043
Apr-2001	0.357	NA	NA	0.013	2.61	NA	ND	ND	4.85	NA	ND	ND	0.038
Sep-2001	0.251	0.261	NA	0.02	1.65	2.26	ND	ND	4.65	4.61	ND	ND	0.028
Mar-2002	0.26	0.267	NA	ND	3.09	1.51	ND	ND	5.2	4.49	ND	ND	0.028
Sep-2002	0.252	0.25	NA	ND	2.85	2.46	ND	ND	4.53	4.51	ND	ND	0.023
Mar-2003	0.289	0.292	NA	ND	2.21	2.01	ND	ND	4.18	4.17	ND	ND	0.026
Oct-2003	0.211	0.202	NA	ND	1.18	1.42	ND	ND	5.56	4.31	ND	ND	0.047
Apr-2004	0.188	0.174	ND	ND	3.21	1.86	ND	ND	4.71	4.33	ND	ND	0.019
Oct-2004	0.179	0.173	0.0002	ND	2.61	1.55	ND	ND	4.64	4.36	ND	ND	0.017
Apr-2005	0.215	0.199	ND	ND	2.12	2.03	ND	ND	3.79	3.69	ND	ND	0.016
Oct-2005	0.21	0.2	0.0002	ND	2.23	2.02	ND	ND	3.62	3.38	ND	ND	0.016
Mar-2006	0.217	0.207	ND	ND	2.03	1.96	ND	ND	3.3	3.16	ND	ND	ND
Sep-2006	0.179	0.17	ND	ND	2.01	1.89	ND	ND	3.29	3.07	ND	ND	ND
Mar-2007	0.147	0.143	0.0003	ND	1.89	1.89	ND	ND	3.32	3.21	ND	ND	0.014

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-24A***												
Sep-2007	0.166	0.153	0.0006	ND	2.05	1.81	ND	ND	3.16	3.05	ND	ND	ND
Mar-2008	0.185	0.178	0.0007	ND	2.21	2.14	ND	ND	2.48	2.39	ND	ND	ND
Sep-2008	0.189	0.179	**0.0041 C**	ND	1.97	1.87	ND	ND	2.87	2.71	ND	ND	0.01
Dec-2008	NA	NA	**0.0031**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mar-2009	0.212	0.209	**0.0034**	ND	2.21	2.14	ND	ND	2.78	2.7	ND	ND	0.012
Oct-2009	0.194	0.181	**0.0144**	ND	2.16	1.97	ND	ND	2.71	2.65	ND	ND	ND
Mar-2010	0.196	0.189	0.0011	ND	2.36	2.13	ND	ND	2.8	3.1	ND	ND	ND
Oct-2010	0.187	0.183	0.0002	ND	2.76	2.68	ND	ND	2.83	2.8	ND	ND	0.012
Apr-2011	0.153	0.147	0.0008	ND	2	1.96	ND	ND	2.76	2.67	ND	ND	ND
Sep-2011	0.155	0.157	0.0004	ND	2.3	2.29	ND	ND	3.28	3.29	ND	ND	ND
Mar-2012	0.131	0.13	0.0004	ND	2.4	2.35	ND	ND	3.19	3.14	ND	ND	ND
Sep-2012	0.192	0.19	0.000044 J	0.0043 J	2.65	2.63	ND	ND	2.9	2.82	ND	ND	0.0042 J
Mar-2013	0.15	0.155	0.000091 J	0.0044 J	2.25	2.28	ND	0.000025 J	2.3	2.35	0.00035 J	ND	0.0163
Oct-2013	0.155	0.152	ND	0.0034 J	2.26	2.19	ND	ND	2.94	2.88	0.000199 J	0.000806 J	0.0133
Mar-2014	0.155	0.158	ND	0.002 J	2.26	2.22	ND	ND	2.38	2.39	0.000203 J	0.000563 J	ND
Oct-2014	0.151	0.154	0.000071 J	0.00099 J	2.61	2.64	ND	ND	2.53	2.55	ND	ND	ND
Apr-2015	0.172	0.169	0.000063 J	0.0011 J	2.95	2.93	ND	ND	2.75	2.69	ND	ND	0.0051 J
Nov-2015	0.17	0.162	0.000063 J	0.0014 J	2.77	2.74	0.000746 J	ND	2.85	2.84	ND	ND	0.0038 J
May-2016	0.16	0.153	0.000065 J	ND	2.73	2.78	ND	ND	2.51	2.47	ND	ND	ND
Oct-2016	0.142	0.148	0.00014 J	0.0012 J	2.71	2.82	ND	ND	2.34	2.34	ND	ND	ND
May-2017	0.128	0.134	0.00022	0.00099 J	2.84	3.06	ND	ND	2.32	2.37	ND	ND	ND
Oct-2017	0.117	0.126	ND	ND	3.05	3.33	ND	ND	2.55 J-	2.6	ND	ND	ND
May-2018	0.11	0.1	0.00026	0.0024	2.6 J	2.51 J	0.00076 JB	ND	3.6 J	3.34 J	ND	0.0037	0.0035 JB
Nov-2018	0.091	0.094	ND	0.0038	3.2 J	3.7 J	0.00033 J	ND	2.6 J	4.3 JB	0.000092 J	0.003	0.004 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-24A***												
May-2019	0.13	0.13	0.0008	0.0068	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0036 B	0.0089
Oct-2019	0.13	0.14	**0.0023**	0.0051	*3.8 J*	*3.7 J*	*0.00035 J*	*ND*	*4.1 J*	*4 J*	*ND*	*ND*	0.019
May-2020	0.16	0.1	0.00022	0.0033	*3 J*	*2.9 J*	*0.00056 J*	*ND*	*2.9 J*	*2.8 J*	*ND*	0.0098	*0.0045 J*
Oct-2020	0.14	0.13	**0.0026**	0.007	*3.4 J*	*3 J*	*ND*	*ND*	*3.9 J*	*3.2 J*	*ND*	*0.0014 J*	*ND*
Apr-2021	0.11	0.1	0.001	*0.0028 J*	3	3.1	*ND*	*ND*	3.2	3.3	*ND*	*ND*	*0.0034 J*
Oct-2021	0.13	0.12	0.00025	0.0036	3.4	3.4	*ND*	*ND*	3.5	3.6	*0.000078 J*	*ND*	0.0058
May-2022	0.12	0.12	0.00034	0.004	3.3	3.2	*ND*	*ND*	3	3.1	*ND*	*ND*	*0.005 J*
Oct-2022	0.086	0.089	*ND*	0.0026	3.1	3.3	*ND*	*ND*	3.7	3.9	*ND*	*ND*	*ND*
May-2023	0.084	0.083	*ND*	0.003	2.8	2.9	*ND*	*ND*	3.4	3.6	*ND*	*ND*	*ND*
Oct-2023	0.098	0.098	*ND*	0.0039	2.8	2.8	*ND*	*ND*	3.3	3.4	*ND*	*ND*	*0.004 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-24A***																
Oct-1996	ND	3.3	ND	ND	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	1	ND	ND	28	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	3	ND
Oct-1997	ND	1.8	ND	ND	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	1.2 J	ND	ND	35	ND	ND	ND	ND	ND	1.7	0.8 J	1.3 J	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	22	ND	NA	NA	NA	NA	1	ND	1.7	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	12	ND	ND	ND	ND	ND	0.6 J	ND	0.9 J	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	5.3	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	4.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24A*																
Mar-2007	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.45	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.93 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.56 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.58 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	0.33 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-24A*																
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.3 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-24A*															
Oct-1996	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	39
Apr-1997	3	ND	ND	ND	ND	ND	ND	ND	13	ND	ND	2	ND	ND	ND	17	15
Oct-1997	2.6	ND	ND	ND	ND	ND	ND	ND	8.1	ND	ND	2.8	ND	ND	ND	6.7	47
Apr-1998	2.9	ND	ND	ND	ND	1.7	ND	ND	8.8	ND	ND	5.4	ND	ND	ND	15	35
Apr-1999	1.9	NA	NA	NA	NA	ND	NA	ND	4.3	ND	NA	3.4	NA	NA	NA	4	18
Oct-1999	1.1	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	1.8	ND	ND	ND	4	12
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	1	ND	NA	0.7 J	NA	ND	NA	2.5	5.4
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	5.1
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	5.5	5
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	2.1
Mar-2002	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	7.5	3
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	0.7 J	ND	ND	ND	8.6	4.1
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	0.6 J	ND	ND	ND	5.9	3.2
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	8.3	2.1
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	0.9 J	ND	ND	ND	12	3.1
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	0.6 J	ND	ND	ND	8.9	3.5
Apr-2005	0.5 J	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	1.1	ND	ND	ND	8.4	4.7
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	0.9 J	ND	ND	ND	8.3	3.1
Mar-2006	0.7 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.2	ND	ND	ND	8	5.2
Sep-2006	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	9.5	3.5

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24A***															
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	1.5
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.6	1.2
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	3
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	0.9 J
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.9 J
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.29 J	ND	ND	ND	0.6 J	1.17
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.47 J	0.86 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43 J	0.5 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.36 J	0.43 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.41 J,B	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	0.2 J	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J,B	ND	ND	ND	ND	ND	0.2 J	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	0.2 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-24A***															
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.444 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24A***															
Oct-1996	ND	ND	NA	NA	**24**	NA	ND	3.2	ND	ND	ND	ND	3.7	ND	ND	ND	2.4
Apr-1997	ND	ND	NA	NA	**38**	NA	ND	4	ND	ND	ND	ND	5	ND	ND	**7**	4
Oct-1997	ND	ND	3.4	NA	**44**	3.5	ND	**8.3**	ND	ND	ND	ND	**7.5**	ND	ND	**4.8**	NA
Apr-1998	ND	ND	2.6	NA	**46**	4.3	ND	**8.8**	ND	ND	ND	ND	**6.2**	1.1 J	ND	**4.9**	NA
Apr-1999	ND	NA	0.7 J	NA	**15**	1	NA	3.1	ND	ND	NA	NA	3.2	ND	NA	**2.8**	NA
Oct-1999	ND	ND	ND	NA	**9.3**	ND	ND	2.3	ND	ND	ND	ND	1.7	0.5 J	ND	1.4	NA
Apr-2000	ND	NA	ND	NA	4.1	ND	NA	1.2	ND	ND	NA	NA	0.7 J	ND	ND	0.7 J	NA
Oct-2000	ND	ND	ND	NA	3.3	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	1.1	NA
Apr-2001	ND	ND	ND	NA	4.9	ND	ND	1.1	ND	ND	ND	ND	0.7 J	ND	ND	0.7 J	NA
Sep-2001	ND	ND	ND	NA	1.8	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	0.6 J	NA
Mar-2002	ND	ND	ND	NA	2.7	ND	ND	0.8 J	0.6 J	ND	ND	ND	ND	ND	ND	1.1	NA
Sep-2002	ND	ND	ND	NA	2.8	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	**2.4**	NA
Mar-2003	ND	ND	ND	NA	2.2	ND	ND	2.4	ND	ND	ND	ND	0.7 J	ND	ND	**2.2**	NA
Oct-2003	ND	ND	ND	NA	1.1	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	**2.8**	NA
Apr-2004	ND	ND	ND	NA	1.9	0.6 J	ND	3.6	ND	ND	ND	ND	1.4	ND	ND	**5.1**	NA
Oct-2004	ND	ND	ND	NA	1.1	ND	ND	3.2	ND	ND	ND	ND	1.3	ND	ND	**7.7**	NA
Apr-2005	ND	ND	ND	ND	2.2	ND	ND	4.4	ND	ND	ND	ND	1.6	ND	ND	**8.1**	NA
Oct-2005	ND	ND	ND	ND	3.2	ND	ND	4.5	ND	ND	ND	ND	1.5	ND	ND	**5.4**	NA
Mar-2006	ND	ND	ND	ND	**6.3**	ND	ND	**5.7**	ND	ND	ND	ND	2	ND	ND	**4.7**	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24A***															
Sep-2006	ND	ND	ND	ND	5	ND	ND	3.1	ND	ND	ND	ND	1.2	ND	ND	**3.7**	NA
Mar-2007	ND	ND	ND	ND	2.1 R	ND	ND	1.5	ND	ND	ND	ND	0.7 J	ND	ND	1.3	NA
Sep-2007	ND	ND	ND	ND	2.3	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	1.4	NA
Mar-2008	ND	ND	ND	ND	0.7 J	ND	ND	2.6	ND	ND	ND	ND	0.9 J	ND	ND	1.1	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	1.5	NA
Mar-2009	ND	ND	ND	ND	1.9	ND	ND	0.9 J	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	1.79	ND	ND	0.69 J	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.81 J	ND	ND	0.26 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.69 J	ND	ND	0.22 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-24A***															
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-25***											
Apr-1995	13.4	13.4	ND	ND	2.6	0.4	ND	5.8	37.3	2.5	15	11.6
Apr-1997	ND	40	ND	ND	2	0.06	ND	NA	NA	ND	51	1.9
Oct-1997	1	1	0.47	ND	1.7	ND	ND	6.83	13.71	ND	14	ND
Apr-1998	ND	ND	0.27	ND	1.86	0.1	ND	5.87	23.9	0.76	29	5.6
Apr-1999	ND	ND	0.35	ND	1.86	ND	ND	5.29	16.52	ND	ND	7
Oct-1999	ND	ND	0.11	ND	2.33	ND	ND	5.24	16.1	ND	29	5.6
Apr-2000	2	2	ND	ND	2.03	0.147	ND	5.17	12	ND	17	4.9
Oct-2000	3	NA	ND	ND	1.76	ND	ND	5.34	12.9	ND	47	4.89
Apr-2001	2.2	NA	0.2	ND	1.6	ND	ND	NA	NA	ND	28	4.4
Sep-2001	2.6	2.6	ND	ND	3.74	ND	ND	5.03	17	ND	51	4.67
Mar-2002	5.8	5.8	ND	28	3.08	ND	ND	5.1	15	ND	38	4.39
Sep-2002	2.8	2.8	ND	ND	2.15	ND	ND	5	17.3	ND	115	5.12
Mar-2003	2.8	2.8	ND	ND	2.67	0.099	ND	5.1	16.8	ND	36	4.47
Oct-2003	2.4	2.4	ND	ND	7.17	ND	ND	4.8	16.5	ND	ND	4.87
Apr-2004	2.5	2.5	ND	ND	2.18	ND	ND	4.9	13.7	ND	46	3.2
Oct-2004	2.4	2.4	ND	11	2.29	0.13	ND	4.8	14.1	ND	20	2.66
Apr-2005	2.5	2.5	ND	ND	2.36	0.13	ND	5	12.5	2.02	23	4.2
Oct-2005	3.6	3.6	0.21	ND	2.34	0.12	ND	4.7	13.9	ND	21	4.21
Mar-2006	3.6	3.6	ND	ND	2.38	0.14	ND	5	16.4	1.04	52	3.21
Sep-2006	3.4	3.4	ND	ND	2.5	0.13	ND	5	14.2	ND	48	2.9
Mar-2007	3.5	3.5	ND	ND	2.63	0.15	ND	4.9	12	ND	36	2.87
Sep-2007	3.3	3.3	ND	ND	7.59	ND	ND	6.5	13.7	ND	69	4.77
Mar-2008	3.5	3.5	ND	29	14.9	ND	ND	4.9	13.9	ND	15	3.23
Sep-2008	3.5	3.5	ND	25	3.03	0.09	ND	5.4	15.3	ND	22	4.2
Mar-2009	3.6	3.6	ND	ND	2.72	0.11	ND	4.5	15.5	ND	19	2.88
Oct-2009	3.4	3.4	ND	ND	2.71	0.13	ND	4.5	15	ND	62	3.51
Apr-2010	3.3	3.3	ND	11	2.75	0.15	ND	4.6	14.6	ND	ND	4.1
Oct-2010	3	3	ND	ND	3.31	0.12	ND	4.3	14.9	ND	24	4.16
Apr-2011	5.2	5.2	ND	ND	2.93	0.15	ND	4.7	16.5	ND	16	4.6
Sep-2011	3.5	3.5	0.22	ND	3.06	0.13	ND	4.7	16.6	ND	35	3.61
Mar-2012	3.4	3.4	ND	ND	3.26	0.13	ND	3.5	43.2	ND	19	2.85
Sep-2012	ND	ND	ND	12.2	3.39	0.15	ND	4.3	17.2	ND	16	3.57
Mar-2013	3.56	3.56	ND	ND	3.5	0.137	ND	5.1	18.1	0.482 J	14	3.65
Oct-2013	3.64	3.64	ND	ND	3.58	0.156	ND	5.8	17	0.487 J	ND	3.75
Mar-2014	3.44	3.44	ND	ND	3.75	0.154	ND	5.2	20.3	ND	ND	4.32
Oct-2014	ND	ND	ND	ND	3.96	0.126	ND	5	22.9	0.324 J	ND	4.29
Apr-2015	3.8	3.8	ND	ND	4.06	0.177	ND	4.2	20	ND	ND	4.64

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-25***											
Nov-2015	*ND*	*ND*	*ND*	*ND*	4.2	0.189	*ND*	5.2	27.7	*ND*	29	4.73
May-2016	*ND*	*ND*	*ND*	*5 J*	4.27	0.2	*ND*	5.2	28.4	*ND*	*ND*	4.3
Oct-2016	*ND*	*ND*	*ND*	*ND*	4.46	*NA*	*NA*	5.4	31.8	*0.627 J*	26	4.7
May-2017	2.4	2.4	*ND*	*ND*	4.73	0.21	*ND*	4.9	34.6	*ND*	*9 J*	4.9
Oct-2017	2	2	*ND*	*ND*	4.88	0.229	*ND*	5	40	*ND*	*21 J*	5.2
May-2018	*2 J*	*ND*	*0.052 J*	*ND*	4.9	0.22	*ND*	5.1	46.3	*ND*	*ND*	5.7
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	5.6	0.22	*ND*	4.64	29.5	*ND*	73	6.2
May-2019	*ND*	*NA*	*ND*	*ND*	6.2	0.18	*ND*	4.56	23.4	*ND*	*ND*	5.7
Oct-2019	*ND*	*NA*	*ND*	*ND*	4.8	0.23	*ND*	4.34	29.5	*ND*	14	5.8
May-2020	*ND*	*NA*	*ND*	*ND*	6.3	0.22	*ND*	4.28	33.7	*ND*	26	6.5
Oct-2020	*ND*	*NA*	*ND*	*ND*	6.2	0.23	*ND*	4.44	31.4	*ND*	11	6.9
Apr-2021	*ND*	*NA*	*ND*	*6.1 J*	7.3	0.26	*ND*	4.81	40.7	*ND*	14	7.3
Oct-2021	*ND*	*NA*	*ND*	*ND*	6.2	0.28	*ND*	4.95	72	*ND*	*ND*	7.9
May-2022	*ND*	*NA*	*ND*	*ND*	5.1	0.23	*ND*	4.74	54.9	*ND*	19	7.2 N3
Oct-2022	*3 J3c*	*NA*	*ND*	*ND*	7.4	0.28	*ND*	4.83	58.4	*ND*	39	8.4 N3
May-2023	*2 J2cB*	*NA*	*ND*	*ND*	7.3	0.3	*ND*	4.75	65.9	*ND*	22	8.3 N3
Oct-2023	*2 J2c*	*NA*	*ND*	*ND*	8.5	0.278	*NA*	4.88	73.7	*ND*	31	8.2 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25***													
Apr-1995	ND	ND	ND	ND	ND	3.6	NA	ND	ND	ND	0.46	0.33	ND	0.63	NA
Oct-1996	ND	ND	0.03	ND	ND	1.6	2.2	0.041	ND	ND	5.5	0.52	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	0.7	0.69	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	0.034	ND	ND	0.921	0.827	ND	ND	ND	3.92	0.075	ND	0.487	0.309
Apr-1998	ND	ND	0.055	ND	ND	1.18	1.07	0.019	ND	ND	8.41	ND	ND	0.649	0.334
Apr-1999	ND	ND	0.04	ND	ND	1.63	0.995	0.019	ND	0.013	7.21	ND	ND	0.706	0.32
Oct-1999	ND	ND	0.023	ND	ND	1.21	0.802	0.012	ND	0.011	4.98	ND	ND	0.505	0.303
Apr-2000	ND	ND	0.018	ND	ND	1.18	0.708	ND	ND	ND	3.2	ND	ND	0.481	0.288
Oct-2000	ND	ND	0.012	ND	ND	1.25	0.778	ND	ND	0.012	1.39	ND	ND	0.432	0.312
Apr-2001	ND	ND	0.012	ND	ND	1.13	NA	ND	ND	0.011	0.753	NA	ND	0.381	NA
Sep-2001	ND	ND	0.02	ND	ND	1.04	0.703	0.011	ND	ND	4.31	ND	0.003	0.504	0.293
Mar-2002	ND	ND	0.016	ND	ND	1.04	0.78	ND	ND	ND	2.44	ND	0.002	0.436	0.308
Sep-2002	ND	ND	0.02	ND	ND	1.28	0.724	ND	ND	ND	3.66	0.073	0.003	0.468	0.294
Mar-2003	ND	ND	0.012	ND	ND	1.14	0.609	ND	ND	ND	0.374	ND	ND	0.397	0.303
Oct-2003	ND	ND	0.022	ND	ND	1.1	0.607	0.012	ND	ND	5.65	ND	0.004	0.518	0.299
Apr-2004	ND	ND	0.011	ND	ND	0.704	0.608	ND	ND	ND	0.408	ND	ND	0.351	0.298
Oct-2004	ND	ND	ND	ND	ND	0.543	0.531	ND	ND	ND	0.231	ND	ND	0.319	0.31
Apr-2005	ND	ND	0.018	ND	ND	0.963	0.614	ND	ND	ND	3.85	ND	ND	0.446	0.302
Oct-2005	ND	ND	0.021	ND	ND	0.94	0.602	0.012	ND	0.011	4.8	ND	0.003	0.452	0.273
Mar-2006	ND	ND	0.022	ND	ND	0.668	0.373	ND	ND	ND	6.83	ND	0.005	0.374	0.179
Sep-2006	ND	ND	ND	ND	ND	0.633	0.505	ND	ND	ND	0.496	ND	ND	0.321	0.292

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25***													
Mar-2007	ND	ND	0.012	ND	ND	0.586	0.543	ND	ND	ND	1.17	ND	ND	0.343	0.296
Sep-2007	ND	0.004	0.012	ND	ND	1.16	0.531	ND	ND	ND	1.08	ND	ND	0.455	0.302
Mar-2008	ND	ND	0.014	ND	ND	0.726	0.615	ND	ND	ND	2.29	ND	ND	0.344	0.291
Sep-2008	ND	ND	0.021	0.002 R	ND	0.814	0.49	0.018	ND	ND	5.7	ND	0.003	0.536	0.337
Mar-2009	ND	ND	ND	ND	ND	0.629	0.538	ND	ND	ND	0.268	ND	ND	0.318	0.326
Oct-2009	ND	ND	0.016	ND	ND	0.712	0.561	ND	ND	ND	2.95	ND	ND	0.419	0.319
Apr-2010	ND	ND	0.02	ND	ND	0.806	0.527	0.014	ND	ND	7.96	ND	0.003	0.521	0.306
Oct-2010	ND	0.003	0.017	ND	ND	0.757	0.676	0.014	ND	ND	5.19	ND	0.003	0.551	0.385
Apr-2011	ND	ND	0.011	ND	ND	1.25	0.907	ND	ND	ND	0.355	ND	ND	0.357	0.294
Sep-2011	ND	ND	ND	ND	ND	0.781	0.797	ND	ND	ND	ND	ND	ND	0.402	0.426
Mar-2012	ND	ND	0.011	ND	ND	0.485	0.477	ND	ND	ND	ND	ND	ND	0.399	0.385
Sep-2012	ND	ND	0.0103	ND	ND	0.736	0.698	ND	0.0015 J	0.0018 J	0.0253 J	0.0118 J	ND	0.421	0.411
Mar-2013	ND	ND	0.0103	ND	ND	0.829	0.792	0.0034 J	0.0015 J	0.0022 J	0.0107 J	0.0049 J	0.0017 J	0.384	0.367
Oct-2013	ND	ND	0.0119	ND	ND	0.777	0.857	0.0012 J	0.0016 J	0.0016 J	ND	ND	ND	0.439	0.453
Mar-2014	ND	ND	0.011	ND	ND	1.02	0.921	0.0013 J	0.0012 J	0.0016 J	0.0546	0.041 J	ND	0.431	0.388
Oct-2014	0.001 J	ND	0.0136	ND	ND	0.932	0.924	0.000551 J	0.0019 J	0.0017 J	ND	0.0119 J	ND	0.482	0.488
Apr-2015	0.000883 J	ND	0.0135	ND	ND	0.986	0.959	0.000597 J	0.0019 J	0.0018 J	ND	ND	ND	0.53	0.528
Nov-2015	ND	ND	0.0127	ND	0.000095 J	1.06	0.908	0.000538 J	0.0018 J	0.0015 J	ND	ND	ND	0.506	0.521
May-2016	ND	ND	0.0168	0.000072 J	ND	0.86	0.85	0.0013 J	0.0021	0.0016 J	ND	ND	ND	0.53	0.553
Oct-2016	ND	ND	0.0131	ND	ND	0.985	0.841	0.00085 J	0.002	0.0021 J	ND	ND	ND	0.533	0.567
May-2017	ND	ND	0.0159	ND	ND	0.946	1.02	0.0014 J	0.002	0.0018 J	ND	ND	ND	0.606	0.609
Oct-2017	ND	ND	0.0159	0.000081 J	ND	1.01	1.12	ND	0.0023	0.0018 J	ND	ND	ND	0.648	0.674
May-2018	0.000052 J	ND	0.017	0.000075 J	0.000042 J	1.2	1.07	0.0027 J	0.0022	0.0052 B	ND	ND	0.000068 J	0.67 J	0.644 J
Nov-2018	ND	ND	0.016	0.000086 J	0.000056 J	1.3	1.2	0.0027 JB	0.0022	0.0065	ND	ND	0.00019 JB	0.72 J	0.7 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25***													
May-2019	*ND*	*ND*	0.017	*ND*	*ND*	1.2	1.2	*ND*	0.0046	0.0068	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*0.00011 J*	*ND*	0.017	*0.000096 J*	*0.00027 J*	1.2	1.2	*0.0045 J*	0.0029	0.0058	*0.0085 J*	*ND*	*0.0001 J*	0.68	*0.67 J*
May-2020	*0.000052 J*	*ND*	0.018	*ND*	*ND*	1.4	1.3	*0.0054 J*	0.0028	0.0056	*ND*	*0.0098 J*	*ND*	0.76	*0.72 J*
Oct-2020	*ND*	*ND*	0.015	*ND*	*ND*	1.4	1.4	*0.0056 J*	0.0038	*ND*	*0.016 J*	*ND*	*ND*	0.8	*0.74 J*
Apr-2021	*ND*	*ND*	0.024	*ND*	*ND*	1.5	1.6	*0.0025 J*	0.0051	*ND*	*ND*	*ND*	*ND*	0.85	0.93
Oct-2021	*0.00007 J*	*ND*	0.023	*ND*	*ND*	1.7	1.8	0.0044	0.0074	0.0085	*0.025 JB*	*0.02 J*	*0.00011 J*	0.88	0.91
May-2022	*ND*	*ND*	0.022	*ND*	*ND*	1.5	1.4	*0.0024 J*	0.0051	0.0034	*ND*	*ND*	*ND*	0.86	0.84
Oct-2022	*ND*	*ND*	0.022	*0.0001 J*	*ND*	1.8	1.7	*0.0015 J*	0.0039	0.0032	*ND*	*ND*	*ND*	0.97	1
May-2023	*ND*	*ND*	0.026	*0.00012 J*	*ND*	1.7	1.8	*0.0019 J*	0.0045	0.0049	*ND*	*ND*	*ND*	0.98	1
Oct-2023	*ND*	*ND*	0.024	*ND*	*ND*	1.8	1.8	0.0036	0.0063	0.0066	*0.031 J*	*0.021 J*	*ND*	0.91	0.95

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-25*												
Apr-1995	0.03	NA	ND	ND	0.1	NA	ND	0.01	1.5	NA	ND	ND	0.1
Oct-1996	0.017	0.023	NA	ND	ND	ND	ND	ND	2	1.7	ND	ND	0.32
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	1.8	1.6	ND	ND	0.035
Oct-1997	0.014	ND	ND	ND	1.08	0.735	ND	ND	1.16	1.09	ND	0.016	0.01
Apr-1998	0.019	0.012	ND	ND	2.34	ND	ND	ND	1.21	1.11	ND	0.03	0.013
Apr-1999	0.017	0.01	NA	0.013	1.25	ND	ND	ND	1.49	1.09	ND	0.022	0.032
Oct-1999	0.015	0.01	NA	ND	1.38	0.661	ND	ND	1.52	1.05	ND	0.019	0.013
Apr-2000	0.012	ND	NA	ND	0.957	ND	ND	ND	2.46	1.02	ND	0.012	0.011
Oct-2000	0.013	ND	NA	ND	0.642	ND	ND	ND	1.73	1.14	ND	ND	0.011
Apr-2001	ND	NA	NA	ND	1.23	NA	ND	ND	1.92	NA	ND	ND	0.017
Sep-2001	0.012	ND	NA	ND	0.652	ND	ND	ND	2.5	1.1	ND	0.016	ND
Mar-2002	0.01	ND	NA	ND	1.14	0.988	ND	ND	2.27	1.23	ND	0.01	ND
Sep-2002	0.014	ND	NA	ND	0.738	ND	ND	ND	1.44	1.16	ND	0.017	ND
Mar-2003	ND	ND	NA	ND	0.517	ND	ND	ND	1.6	1.14	ND	ND	ND
Oct-2003	0.011	ND	NA	ND	ND	ND	ND	ND	2.43	1.09	ND	0.022	0.014
Apr-2004	ND	ND	ND	ND	1.22	ND	ND	ND	1.23	1.17	ND	ND	ND
Oct-2004	ND	ND	ND	ND	1.07	ND	ND	ND	1.03	0.936	ND	ND	ND
Apr-2005	0.011	ND	ND	ND	0.83	0.43	ND	ND	2	1.09	ND	0.016	0.011
Oct-2005	0.013	ND	ND	ND	0.757	ND	ND	ND	1.94	0.997	ND	0.02	0.012
Mar-2006	ND	ND	ND	ND	0.699	ND	ND	ND	1.19	0.939	ND	0.015	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	1.44	1.08	ND	ND	ND
Mar-2007	ND	ND	ND	ND	0.559	ND	ND	ND	1.17	1.13	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-25***												
Sep-2007	ND	ND	ND	0.014	0.547	ND	ND	ND	1.41	1.12	ND	ND	0.028
Mar-2008	ND	ND	0.0004	ND	0.798	0.536	ND	ND	1.29	1.05	ND	ND	ND
Sep-2008	0.013	ND	ND	ND	0.754	ND	ND	ND	1.25	1.11	ND	ND	0.022
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.17	1.17	ND	ND	0.016
Oct-2009	ND	ND	ND	ND	0.665	ND	ND	ND	1.33	1.06	ND	0.012	0.012
Apr-2010	0.013	ND	ND	ND	0.896	ND	ND	ND	1.53	1.25	ND	0.023	0.013
Oct-2010	0.016	ND	ND	ND	0.995	ND	ND	ND	1.44	1.4	ND	0.023	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.46	1.45	ND	ND	0.014
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.58	1.58	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	1.44	1.41	ND	ND	ND
Sep-2012	0.0085 J	0.008 J	ND	0.0016 J	0.41 J	0.387 J	ND	ND	1.48	1.48	ND	ND	0.005 J
Mar-2013	0.0083 J	0.0081 J	0.000044 J	0.0019 J	0.412 J	0.392 J	ND	0.000026 J	1.42	1.36	ND	ND	0.0153
Oct-2013	0.0089 J	0.0089 J	ND	0.0017 J	0.399 J	0.398 J	ND	ND	1.56	1.61	0.0001525 J	0.000873 J	0.013
Mar-2014	0.0084 J	0.0082 J	ND	0.0018 J	0.452 J	0.412 J	ND	ND	1.53	1.4	ND	ND	ND
Oct-2014	0.0102	0.0103	ND	0.002 J	0.535	0.536	0.0021	ND	1.92	1.92	ND	ND	0.0069 J
Apr-2015	0.0106	0.0104	ND	0.0024 J	0.503	0.496 J	ND	ND	1.94	1.93	ND	ND	0.0096 J
Nov-2015	0.0102	0.0106	ND	0.0021 J	0.51	0.523	ND	ND	1.88	1.93	ND	ND	0.0064 J
May-2016	0.0091	0.0111	ND	0.003 J	0.483	0.483	ND	ND	1.83	1.85	ND	ND	ND
Oct-2016	0.01	0.0131	ND	0.0026 J	0.478	0.499	ND	ND	1.76	1.89	ND	ND	ND
May-2017	0.0118	0.0119	ND	0.0026 J	0.528	0.529	ND	ND	1.94	1.9	ND	ND	0.0036 JB
Oct-2017	0.0117	0.0126	ND	0.0016 J	0.543	0.607	ND	ND	1.99 J-	2.13	ND	ND	0.0058 J
May-2018	0.011	0.01	ND	0.0027	ND	ND	0.00028 JB	ND	2.5 J	2.24 J	ND	0.0034	0.0053 B
Nov-2018	0.013	0.012	ND	0.0028	ND	1.3 J	0.00013 JB	ND	0.95 J	2.7 JB	ND	0.0034 B	0.0077
May-2019	0.014	0.013	ND	0.0037	ND	ND	ND	ND	ND	ND	ND	0.0039 B	0.0072

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-25***												
Oct-2019	0.014	0.012	*ND*	0.0031	*ND*	*ND*	*ND*	*ND*	*2.2 J*	*2.1 J*	*ND*	*ND*	0.015
May-2020	0.014	0.013	*ND*	0.0027	*ND*	*ND*	*ND*	*ND*	*2.3 J*	*2.2 J*	*ND*	0.0084	0.0051
Oct-2020	0.015	0.015	*ND*	0.0045	*ND*	*ND*	*ND*	*ND*	*2.4 J*	*2.1 J*	*ND*	*0.001 J*	*ND*
Apr-2021	0.017	0.017	*ND*	*0.0036 J*	0.64	0.68	*ND*	*ND*	2.6	3.1	*ND*	*ND*	*0.0051 J*
Oct-2021	0.017	0.018	*ND*	0.0051	0.59	0.605	*ND*	*0.00027 J*	2.8	2.8	*ND*	*ND*	0.0061
May-2022	0.017	0.017	*ND*	0.0039	0.58	0.63	*ND*	*ND*	2.6	2.6	*ND*	*ND*	0.0057
Oct-2022	0.018	0.018	*ND*	0.0034	0.65	0.74	*ND*	*ND*	3	3.1	*ND*	*ND*	0.006
May-2023	0.018	0.019	*ND*	0.004	0.58	0.59	*ND*	*ND*	2.9	3	*ND*	*ND*	0.0071
Oct-2023	0.019	0.018	*ND*	0.0049	0.66	0.76	*ND*	*ND*	2.8	2.9	*ND*	*ND*	0.0067

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25*																
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25*																
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	1 R	1 R	1 R	1 R	7.4 R	1 R	1 R	**1 R**	**1 R**	1 R	0.7 R	1 R	1 R	5 R	5 R	5 R	5 R	5 R
Dec-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*0.42 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*0.45 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*0.42 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*0.66 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25*																
Oct-2017	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.7 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*0.94 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	2.07	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25***															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25***															
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	0.9 R	1 R	1 R	1 R	1 R	11.4 R
Dec-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.6 J
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.7 J
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.05	0.46 J
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.11	0.62 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	1.25	0.84 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.19 J	ND	ND	ND	ND	ND	1.83 J	0.77 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	0.5 J,B	ND	ND	ND	ND	1.67	0.83 J
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	1.11
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8 J	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	2.7	1.9
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	3	2.4
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J,B	ND	ND	ND	ND	ND	2.7	2

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25***															
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	3	2.2
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.5	2.5
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	**3 D6**	2.2 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3 CL	2.2 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	1.4
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.8	1.7
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	5.8	2.5
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.235 J*	*ND*	*0.674 J*	*ND*	*ND*	*ND*	*3.6 J*	*3.7 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	5	2.9
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	6.4	2.4
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	5.7	3
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	4.2	2.9
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	4.9	3.2

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25***															
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25***															
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	1 R	1 R	1 R	1.5 R	**9 R**	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1.1 R	1 R	1 R	1 R	*NA*
Dec-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.27 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.31 J*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.27 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.36 J*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.34 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.34 J*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.39 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.4 J*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.5 J*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.4 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.4 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.41	*ND*	*ND*	*ND*	*ND*	*0.343 J*	*0.446 J*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-25A***											
Apr-1995	52.5	52.5	ND	59.7	2.7	ND	ND	8.9	100	3.2	70	99.7
Apr-1997	ND	36	ND	ND	3	0.06	ND	NA	NA	ND	82	33
Oct-1997	21	21	ND	ND	2.33	ND	ND	8.38	50.7	ND	ND	18
Apr-1998	37	37	ND	ND	2.64	0.22	ND	6.65	110.9	2.25	50	41
Apr-1999	25	25	0.8	ND	2.64	ND	ND	5.89	91.2	1.44	35	32
Oct-1999	32	32	0.07	ND	4.37	ND	ND	5.72	44.9	2.75	35	18
Apr-2000	16	16	ND	ND	3	ND	ND	6.32	43	2.16	45	19
Oct-2000	16	NA	ND	ND	2.03	ND	ND	5.77	42.4	4.37	33	21.7
Apr-2001	20	NA	ND	ND	2.85	ND	ND	NA	NA	1.57	33	23
Sep-2001	5.9	5.9	0.32	ND	5.01	ND	ND	5.71	43	7.52	28	15
Mar-2002	8	8	ND	ND	3.88	ND	ND	5.5	36	2.16	13	12
Sep-2002	5.2	5.2	ND	ND	3.55	ND	ND	5.4	34	3.13	20	8.49
Mar-2003	22	22	ND	ND	14.4	ND	ND	5.8	59.9	5.65	30	22.6
Oct-2003	14	14	ND	ND	4.24	0.118	ND	5.2	56.1	1.43	11	98.6
Apr-2004	12	12	ND	ND	4.85	ND	ND	5.5	48.6	1.34	50	17.5
Oct-2004	15	15	ND	ND	5.7	ND	ND	3.2	50.8	1.43	41	19.6
Apr-2005	18	18	ND	ND	5.64	ND	ND	5.2	49.8	3.51	ND	22.6
Oct-2005	11	11	0.22	ND	5.94	ND	ND	4.7	42.8	2.62	43	13.5
Mar-2006	11	11	ND	ND	6.33	ND	ND	5.3	51.5	2.99	26	13
Sep-2006	7.1	7.1	ND	ND	6.05	ND	ND	4.9	37.7	2.83	42	10.7
Mar-2007	6.9	6.9	ND	ND	5.9	ND	ND	4.9	37.5	2.17	42	9.64
Sep-2007	11	11	0.23	ND	5.45	ND	ND	6.2	42.6	1.87	38	14.1
Mar-2008	17	17	ND	11	17.5	ND	ND	6.2	52.7	5.13	53	18.2
Sep-2008	7.5	7.5	0.27	ND	5.59	ND	ND	5.7	33.5	2.25	30	9.2
Mar-2009	6	6	ND	ND	5.78	ND	ND	5.1	35.8	1.52	ND	8.57
Oct-2009	5.2	5.2	ND	ND	5.98	ND	ND	4.9	31.8	1.6	34	7.53
Mar-2010	8.8	8.8	ND	ND	6.41	ND	ND	4.59	45	2.01	14	9.74
Oct-2010	1.8	1.8	ND	ND	6.58	ND	ND	3.6	37.8	2.54	22	7.13
Apr-2011	3	3	ND	ND	6.57	ND	0.04	4.1	41.5	1.8	42	6.4
Sep-2011	4.7	4.7	0.22	ND	7.04	ND	0.03	4.3	40.7	1.56	44	8.48
Mar-2012	4.3	4.3	ND	ND	7.23	0.06	0.04	3.6	41	1.98	24	8.01
Sep-2012	4.2	4.2	ND	ND	7.96	0.104	ND	3.5	42.8	2.47	28	8.53
Mar-2013	3.8	3.8	ND	ND	8.59	0.103	0.0377 J	4.5	48.8	1.79	31	8.47
Oct-2013	3.64	3.64	ND	ND	8.62	0.127	0.134	5.3	46.9	2.29	ND	9.02
Mar-2014	3.52	3.52	ND	ND	8.88	0.131	ND	4.6	48.2	2.66	26	8.9
Oct-2014	ND	ND	ND	ND	9.57	0.106	ND	4.5	46	3.2	25	9.8
Apr-2015	3.72	3.72	ND	ND	8.62	0.116	ND	3.6	46	1.75	ND	8.86

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-25A***											
Nov-2015	*ND*	*ND*	*ND*	*5 J*	9.48	0.125	0.0657	4.7	60.8	1.9	*22 J*	9.15
May-2016	*ND*	*ND*	*ND*	*ND*	8.67	0.132	0.0891	4.5	61.3	3.23	*13 J*	8.7
Oct-2016	*ND*	*ND*	*ND*	*ND*	9.05	*NA*	*NA*	4.6	69.9	2.81	42	9.7
May-2017	*ND*	*ND*	*ND*	13	9.61	0.235	0.106	4.5	76.2	3.52	*13 J*	9.8
Oct-2017	*ND*	*ND*	*ND*	*ND*	8.92	0.244	0.0755	4.6	84.6	2.31	33	11.3
May-2018	*ND*	*ND*	*ND*	*5.8 J*	8.4	0.24	0.023	4.8	67.3	*ND*	23	11.2
Nov-2018	18	18	*ND*	*ND*	10.1	0.16	0.04	5.03	87.7	*6.2 J*	90	30.8
May-2019	*ND*	*NA*	*ND*	*ND*	10.4	0.23	0.066	4.67	53.8	*ND*	48	18.3
Oct-2019	*6 J*	*NA*	*ND*	*6 J*	62.8	0.58	0.093	4.33	70.1	*ND*	44	17.2
May-2020	*4 J*	*NA*	*ND*	*ND*	11.2	0.77	0.11	4.32	76.5	*5 J*	46	19.4
Oct-2020	*2 J*	*NA*	*ND*	*ND*	10.5	0.76	0.096	4.62	74.3	4	35	21.4
Apr-2021	20	*NA*	*ND*	*ND*	10.7	0.71	0.12	5.29	113.9	*ND*	55	36.5
Oct-2021	12	*NA*	*ND*	*ND*	9.4	0.82	0.1	4.98	116.8	*ND*	22	22.1
May-2022	*ND*	*NA*	*ND*	*ND*	8.5	0.73	0.086	4.63	97.5	*ND*	33	19.1 N3
Oct-2022	*6 J4c*	*NA*	*ND*	*8.4 J*	11.7	0.77	0.12	4.78	101.7	*ND*	50	23 N3
May-2023	*3 J3cB*	*NA*	*ND*	*18.3 JB*	9.7	0.73	0.066	4.68	105.6	*ND*	39	18 N3
Oct-2023	*2 J2c*	*NA*	*ND*	*ND*	11.2	0.724	*NA*	4.76	107.1	*5.2 J*	53	16.6 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25A***													
Apr-1995	ND	ND	ND	ND	ND	38.8	NA	ND	ND	ND	0.82	0.05	ND	0.68	NA
Oct-1996	ND	ND	0.041	ND	ND	8	7.7	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	0.048	ND	ND	12	NA	ND	ND	ND	ND	NA	ND	ND	ND
Oct-1997	ND	ND	0.028	ND	ND	7.09	6.38	ND	ND	ND	0.108	ND	ND	0.491	0.47
Apr-1998	ND	ND	0.06	ND	ND	15	15.7	ND	ND	ND	ND	ND	ND	0.743	0.732
Apr-1999	ND	ND	0.048	ND	ND	11.6	11.1	ND	ND	ND	0.104	ND	ND	0.629	0.567
Oct-1999	ND	ND	0.028	ND	ND	1.23	1.09	ND	ND	0.017	0.057	ND	ND	0.643	0.589
Apr-2000	ND	ND	0.043	ND	ND	6.43	5.88	ND	ND	ND	ND	ND	ND	0.729	0.691
Oct-2000	ND	ND	0.029	ND	ND	7.46	7.78	ND	ND	0.02	0.065	ND	ND	0.758	0.614
Apr-2001	ND	ND	0.044	ND	ND	7.78	NA	ND	ND	0.012	ND	NA	ND	0.812	NA
Sep-2001	ND	ND	0.029	ND	ND	4.89	4.23	ND	ND	0.014	0.067	ND	ND	0.679	0.585
Mar-2002	ND	ND	0.031	ND	ND	3.67	3.47	ND	ND	0.019	0.051	ND	ND	0.702	0.678
Sep-2002	ND	ND	0.034	ND	ND	2.2	2.05	ND	ND	0.013	0.097	ND	ND	0.728	0.715
Mar-2003	ND	ND	0.051	ND	ND	7.8	5.8	ND	ND	0.012	0.08	ND	ND	0.753	0.708
Oct-2003	ND	ND	0.213	ND	0.005	32.3	5.95	ND	0.02	0.094	0.252	ND	ND	4.37	0.762
Apr-2004	ND	ND	0.047	ND	ND	5.54	4.82	ND	ND	0.02	ND	ND	ND	0.901	0.887
Oct-2004	ND	ND	0.053	ND	ND	6.17	5.84	ND	ND	0.021	ND	ND	ND	1.03	1.03
Apr-2005	ND	ND	0.055	ND	ND	7.35	6.71	ND	ND	0.017	ND	ND	ND	1.04	0.995
Oct-2005	ND	ND	0.052	ND	ND	3.81	3.58	ND	ND	0.024	ND	ND	ND	0.97	0.913
Mar-2006	ND	ND	0.047	ND	ND	3.85	3.77	ND	ND	0.013	ND	ND	ND	0.812	0.778
Sep-2006	ND	ND	0.049	ND	ND	2.7	2.69	ND	ND	0.021	ND	ND	ND	0.964	0.915

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25A***													
Mar-2007	ND	ND	0.046	ND	ND	2.35	2.36	ND	ND	0.023	ND	ND	ND	0.916	0.878
Sep-2007	ND	ND	0.045	ND	ND	4.12	3.41	ND	ND	0.022	ND	ND	ND	0.932	0.873
Mar-2008	ND	ND	0.048	ND	ND	5.75	5	ND	ND	0.02	ND	ND	ND	0.922	0.87
Sep-2008	ND	ND	0.047	0.002	ND	2.03	2.02	ND	ND	0.023	ND	ND	0.003	1.01	0.977
Mar-2009	ND	ND	0.05	ND	ND	1.65	1.34	ND	ND	0.025	ND	ND	ND	1.08	0.968
Oct-2009	ND	ND	0.048	ND	ND	1.35	1.24	ND	ND	0.025	0.052	ND	ND	1.01	0.997
Mar-2010	ND	ND	0.054	ND	ND	2.25	2.4	ND	ND	0.021	0.069	ND	ND	1	0.981
Oct-2010	ND	ND	0.049	ND	ND	0.845	0.803	ND	ND	0.024	ND	ND	ND	1.22	1.2
Apr-2011	ND	ND	0.058	ND	ND	0.744	0.756	ND	ND	0.016	ND	ND	ND	1.09	1.16
Sep-2011	ND	ND	0.056	ND	ND	1.3	1.32	ND	ND	0.022	ND	ND	ND	1.27	1.28
Mar-2012	ND	ND	0.062	ND	ND	1.08	1.19	ND	ND	0.024	ND	ND	ND	1.29	1.26
Sep-2012	ND	ND	0.0669	0.0011 J	ND	0.993	1.18	ND	0.007 J	0.0276	0.0538	0.0413 J	ND	1.47	1.41
Mar-2013	ND	ND	0.0556	0.000842 J	0.000248 J	1.33	1.46	0.0017 J	0.0065 J	0.0231	0.0754	0.0186 J	0.0015 J	1.25	1.3
Oct-2013	ND	ND	0.0704	ND	0.000199 J	1.19	1.16	0.004 J	0.0075 J	0.0262	ND	ND	ND	1.47	1.43
Mar-2014	ND	ND	0.0629	0.000979 J	0.000205 J	1.32	1.4	0.0013 J	0.0056 J	0.0243	0.0595	0.0542	ND	1.36	1.43
Oct-2014	0.000772 J	ND	0.078	0.0011 J	0.000284 J	1.47	1.47	0.000361 J	0.0075 J	0.0309	0.0403 J	0.0371 J	0.0011 J	1.49	1.49
Apr-2015	0.00058 J	ND	0.0698	0.0011 J	0.000246 J	1.12	1.13	0.000575 J	0.0071 J	0.0328	0.239	0.0264 J	ND	1.47	1.5
Nov-2015	ND	ND	0.0647	0.0011 J	0.000276 J	1.18	1.21	0.000316 J	0.0071 J	0.0265	0.0234 J	ND	ND	1.5	1.57
May-2016	ND	ND	0.0645	0.001 J	0.0002 J	1.05	1.24	ND	0.0067	0.0232	ND	ND	ND	1.49	1.48
Oct-2016	ND	ND	0.0683	0.001	ND	1.27	1.28	ND	0.0075	0.0248	ND	ND	ND	1.58	1.68
May-2017	ND	ND	0.0625	0.00092 J	0.00022 J	1.15	1.1	ND	0.0073	0.0225	ND	ND	ND	1.67	1.71
Oct-2017	ND	ND	0.0661	0.00097 J	0.00026 J	1.73	1.66	ND	0.0078	0.0258	0.0551 J	ND	0.00028 J	1.71	1.77
May-2018	0.000062 J	ND	0.072	0.00099	0.00027 J	1.3	1.21	0.002 J	0.0065	0.02	0.012 J	ND	0.000018 J	1.9	1.76
Nov-2018	ND	ND	0.063	0.00074	0.00023 J	9.9	9.9	0.0019 JB	0.0056	0.046	0.017 J	ND	0.000088 JB	1.5	1.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-25A***													
May-2019	*ND*	*ND*	0.066	0.001	*ND*	4.7	4.8	*ND*	0.0059	0.035	*ND*	*ND*	*ND*	1.6	1.6
Oct-2019	*0.0002 J*	*0.00016 J*	0.066	0.0012	*0.00049 J*	4	3.8	*0.0029 J*	0.0059	0.039	*0.015 J*	*0.013 J*	*0.000086 J*	1.8	1.7
May-2020	*0.000059 J*	*ND*	0.067	0.00086	*0.00014 J*	4.8	4.6	*0.0049 J*	0.0076	0.048	*0.017 J*	*0.016 J*	*ND*	1.8	1.8
Oct-2020	*ND*	*ND*	0.058	*0.00068 J*	*ND*	5.5	5.2	*0.0035 J*	0.0063	0.03	*ND*	*ND*	*ND*	1.9	1.8
Apr-2021	*ND*	*ND*	0.073	*0.00061 J*	*ND*	11.8	11.8	*0.00036 J*	0.0073	0.026	*ND*	*ND*	*ND*	1.7	1.9
Oct-2021	*0.000079 J*	*ND*	0.076	0.0012	*0.0001 J*	5.6	5.7	*0.0011 J*	0.0085	0.055	0.076	*0.011 J*	*0.000082 J*	2	2
May-2022	*ND*	*ND*	0.082	0.0011	*0.00017 J*	4.2	3.9	*0.001 J*	0.011	0.056	*0.045 J*	*0.038 J*	*ND*	2.1	2.1
Oct-2022	*ND*	*ND*	0.075	0.00094	*0.00022 J*	5.5	5.2	*0.0011 J*	0.0093	0.061	*ND*	*ND*	*ND*	2.2	2.2
May-2023	*ND*	*ND*	0.078	0.00091	*0.0002 J*	3.6	3.5	*0.0012 J*	0.0094	0.04	*0.044 J*	*ND*	*ND*	2.2	2.3
Oct-2023	*ND*	*ND*	0.076	0.00096	*0.00022 J*	3.3	3.5	*0.0015 J*	0.01	0.048	*0.022 J*	*0.021 J*	*ND*	2.1	2.2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-25A*												
Apr-1995	0.01	NA	ND	ND	2.8	NA	ND	0.02	2.1	NA	ND	ND	0.05
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	1.6	1.8	ND	ND	0.04
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	2	2	ND	ND	0.03
Oct-1997	ND	ND	ND	ND	0.821	ND	ND	ND	1.37	1.35	ND	ND	0.013
Apr-1998	ND	ND	ND	0.015	0.799	0.749	ND	ND	1.48	1.46	ND	ND	0.024
Apr-1999	ND	ND	NA	ND	ND	ND	ND	ND	1.5	1.39	ND	ND	ND
Oct-1999	ND	ND	NA	ND	1.04	ND	ND	ND	1.37	1.29	ND	ND	0.01
Apr-2000	ND	ND	NA	ND	1.02	0.621	ND	ND	1.47	1.34	ND	ND	ND
Oct-2000	ND	ND	NA	ND	0.759	0.625	ND	ND	2.35	1.47	ND	ND	0.011
Apr-2001	NA	NA	NA	ND	1.23	NA	ND	ND	1.6	NA	ND	ND	ND
Sep-2001	ND	ND	NA	ND	0.504	0.935	ND	ND	1.55	1.42	ND	ND	ND
Mar-2002	ND	ND	NA	ND	1.61	0.754	ND	ND	1.65	1.5	ND	ND	ND
Sep-2002	ND	ND	NA	ND	0.682	ND	ND	ND	1.6	1.57	ND	ND	ND
Mar-2003	ND	ND	NA	ND	0.768	ND	ND	ND	1.65	1.62	ND	ND	ND
Oct-2003	0.039	ND	NA	0.032	ND	ND	ND	ND	13.7	1.84	ND	ND	0.074
Apr-2004	0.011	0.011	**0.0036**	ND	0.833	0.931	ND	ND	2.19	2.1	ND	ND	ND
Oct-2004	0.012	0.011	0.002	ND	1.62	1.11	ND	ND	2.39	2.12	ND	ND	0.012
Apr-2005	0.011	ND	ND	ND	0.75	0.68	ND	ND	2.23	2.11	ND	ND	ND
Oct-2005	0.011	0.01	**0.0037**	ND	0.521	ND	ND	ND	2.25	2.11	ND	ND	0.012
Mar-2006	ND	ND	**0.0033**	ND	ND	ND	ND	ND	2.19	2.12	ND	ND	ND
Sep-2006	0.011	0.01	**0.0042**	ND	0.657	0.666	ND	ND	2.3	2.17	ND	ND	ND
Mar-2007	ND	ND	**0.0065**	ND	0.671	0.646	ND	ND	2.26	2.19	ND	ND	0.011

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-25A***												
Sep-2007	0.01	*ND*	**0.0089**	*ND*	0.632	0.545	*ND*	*ND*	2.1	2.07	*ND*	*ND*	0.01
Mar-2008	0.012	0.011	**0.0065**	*ND*	0.815	0.778	*ND*	*ND*	2.06	1.94	*ND*	*ND*	*ND*
Sep-2008	0.013	0.013	**0.0036**	*ND*	0.617	0.62	*ND*	*ND*	2.12	2.05	*ND*	*ND*	0.015
Mar-2009	0.014	0.012	**0.0021**	*ND*	0.652	0.646	*ND*	*ND*	2.29	2.4	*ND*	*ND*	*ND*
Oct-2009	0.013	0.013	**0.0024**	*ND*	0.516	*ND*	*ND*	*ND*	1.96	2.1	*ND*	*ND*	*ND*
Mar-2010	0.013	0.013	0.0019	*ND*	0.742	0.695	*ND*	*ND*	2.07	2.36	*ND*	*ND*	0.011
Oct-2010	0.017	0.017	0.0012	*ND*	0.71	0.689	*ND*	*ND*	2.53	2.5	*ND*	*ND*	*ND*
Apr-2011	0.016	0.016	0.0011	*ND*	0.513	*ND*	*ND*	*ND*	2.26	2.24	*ND*	*ND*	*ND*
Sep-2011	0.018	0.018	0.0011	*ND*	0.848	0.872	*ND*	*ND*	2.69	2.69	*ND*	*ND*	*ND*
Mar-2012	0.019	0.019	0.0011	*ND*	0.719	0.726	*ND*	*ND*	2.57	2.56	*ND*	*ND*	*ND*
Sep-2012	0.0236	0.0231	0.00087	*0.0067 J*	0.835	0.793	*ND*	*ND*	2.88	2.94	*0.000481 J*	*ND*	0.0105
Mar-2013	0.0224	0.0223	0.000742	*0.0065 J*	0.748	0.754	*ND*	*0.000028 J*	2.52	2.58	*ND*	*ND*	0.0192
Oct-2013	0.0257	0.0241	0.000652	*0.007 J*	0.833	0.776	*0.00058 J*	*ND*	3.02	2.95	*0.000124 J*	*0.00095 J*	0.02
Mar-2014	0.024	0.0269	0.000517	*0.006 J*	0.851	0.897	*0.000457 J*	*ND*	2.72	2.86	*0.000144 J*	*0.000758 J*	*0.0056 J*
Oct-2014	0.0284	0.0285	0.000379	*0.0075 J*	0.996	0.991	*0.0019 J*	*0.003 J*	3.37	3.37	*ND*	*ND*	0.0112
Apr-2015	0.0277	0.0283	0.000377	*0.0071 J*	0.937	0.934	*ND*	*ND*	3.29	3.22	*ND*	*ND*	0.0107
Nov-2015	0.0284	0.0298	0.000269	*0.007 J*	1.02	1.06	*0.000731 J*	*ND*	3.34	3.48	*ND*	*ND*	*0.0083 J*
May-2016	0.0294	0.0284	0.00023	0.0064	0.969	0.966	*ND*	*ND*	3.1	3.09	*ND*	*ND*	*0.0094 J*
Oct-2016	0.0319	0.0365	*0.00015 J*	0.0071	1.02	1.09	*ND*	*ND*	3.15	3.32	*ND*	*ND*	*0.007 J*
May-2017	0.0343	0.0346	*0.00016 J*	0.0065	1.02	1.04	*ND*	*ND*	3.2	3.13	*ND*	*ND*	*0.0085 J*
Oct-2017	0.0335	0.0408	*0.000059 J*	0.0056	1.06	1.13	*ND*	*ND*	*3.2 J-*	3.36	*0.00013 J*	*ND*	*0.0105 J*
May-2018	0.032	0.031	*0.00018 J*	0.0061	*ND*	*ND*	*0.00094 JB*	*ND*	*3.9 J*	*3.54 J*	*0.00008 J*	0.0036	0.0082 B
Nov-2018	0.028	0.028	0.00027	0.0061	*1.1 J*	*1.4 J*	*0.00066 J*	*ND*	*1.7 J*	*3.7 JB*	*0.000078 J*	0.0029 B	0.0091
May-2019	0.034	0.034	*ND*	0.0062	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0041 B	0.0086

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-25A***												
Oct-2019	0.032	0.036	*ND*	0.0053	*1.2 J*	*1.2 J*	*0.00053 J*	*ND*	*4.1 J*	*4 J*	*ND*	*ND*	0.064
May-2020	0.041	0.04	*ND*	0.0077	*ND*	*1.1 J*	*0.00064 J*	*ND*	*4.4 J*	*3.9 J*	*ND*	0.01	0.011
Oct-2020	0.043	0.042	*ND*	0.0059	*ND*	*ND*	*ND*	*ND*	*4.1 J*	*3.7 J*	*ND*	*0.00092 J*	*ND*
Apr-2021	0.041	0.042	*0.00011 J*	*0.0078 J*	1	1	*ND*	*ND*	3.9	4	*ND*	*ND*	*0.0093 J*
Oct-2021	0.046	0.045	*0.00009 J*	0.008	1.1	0.977	*ND*	*ND*	4.2	4.1	*0.00014 J*	*ND*	0.012
May-2022	0.047	0.048	*ND*	0.01	1	1.1	*ND*	*ND*	4.1	4	*0.00017 J*	*ND*	0.014
Oct-2022	0.051	0.049	*ND*	0.0091	1.1	1.2	*0.001 J*	*ND*	4.3	4.4	*0.00014 J*	*ND*	0.016
May-2023	0.05	0.051	*ND*	0.0092	0.99	1	*ND*	*ND*	3.9	4.1	*0.0001 J*	*ND*	0.014
Oct-2023	0.051	0.05	*ND*	0.0099	1	1.1	*0.0012 J*	*ND*	3.8	4	*0.00011 J*	*ND*	0.014

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-25A***																
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	0.5 J	NA	NA	0.7 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	1	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	0.7 J	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	0.7 J	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	0.9 J	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	0.5 J	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	0.7 J	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	0.9 J	ND	ND	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	0.8 J	ND	ND	4.4	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	1	ND	ND	5.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	0.9 J	ND	ND	6.4	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	0.7 J	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	1.2	ND	ND	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25A*																
Mar-2007	ND	1.1	ND	ND	13.1	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	2	ND	ND	20	0.7 J	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	0.6 J	ND	ND	6.8	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Sep-2008	1 R	1 R	1 R	1 R	1 R	1 R	1 R	**1 R**	**1 R**	1 R	1 R	1 R	1 R	5 R	5 R	5 R	5 R	5 R
Dec-2008	ND	ND	ND	ND	12.5	ND	ND	ND	ND	ND	1.1	ND	0.6 J	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	7.4	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	9.6	ND	ND	ND	ND	ND	0.9 J	ND	0.6 J	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	21.3	ND	ND	ND	ND	ND	ND	ND	0.97 J	ND	ND	ND	ND	ND
Oct-2010	ND	1.4	ND	ND	27.5	ND	ND	ND	ND	ND	1.4	0.8 J	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	14.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	34.1	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	24.8	1.1	ND	ND	ND	ND	2.4	1	1.6	ND	ND	ND	ND	ND
Sep-2012	ND	1.16	ND	ND	35	0.95 J	ND	ND	ND	ND	2.01	1.16	1.69	ND	ND	ND	ND	ND
Mar-2013	ND	1.14	ND	ND	42.1	1.28	ND	ND	ND	ND	2.9	1.12	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	41.9	1.14	ND	ND	ND	ND	2.5	1.34	2.17	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	39.7	1.2	ND	ND	ND	ND	2.47	1.1	2.13	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	40.1	1.16	ND	ND	ND	ND	2.35	1.36	2.17	ND	ND	ND	ND	ND
Apr-2015	ND	0.94 J	ND	ND	37.3	1.17	ND	ND	ND	ND	2.28	1.26	1.7	ND	ND	ND	ND	ND
Nov-2015	ND	1 J	ND	ND	35.1	1.4	ND	ND	ND	ND	2.3	1.3	1.9	ND	ND	ND	ND	ND
May-2016	ND	0.8 J	ND	ND	27	1.2	ND	ND	ND	ND	2	1.2	1.8	ND	ND	ND	ND	ND
Oct-2016	ND	0.8 J	ND	ND	32	1	ND	ND	ND	ND	2.4	1.2	1.9	ND	ND	ND	ND	ND
May-2017	ND	0.6 J	ND	ND	33	1 J	ND	ND	ND	ND	2.2	1	1.7	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-25A*																
Oct-2017	ND	0.6 J	ND	ND	28	1.2	ND	ND	ND	ND	2	1.2	1.7	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	37.4	1.3	ND	ND	ND	ND	2.4	1.4	2.2	ND	ND	ND	2.5 JB	ND
Nov-2018	ND	0.59 J	ND	ND	30.3	1 J	ND	ND	ND	ND	1.8	1.1	1.3	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	19.5	ND	ND	ND	ND	ND	1.2	ND	1.4	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	23.3	ND	ND	ND	ND	ND	1.4	ND	1.3	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	18.4	ND	ND	ND	ND	ND	1.4	ND	1.4	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	24.2	0.7 J	ND	ND	ND	ND	1.5	1	ND	ND	ND	ND	ND	ND
Apr-2021	ND	0.295 J	ND	ND	28	0.718 J	ND	ND	ND	ND	1.95	1.02	1.01	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	30.6	0.8 J	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	25.5	0.7 J	ND	ND	ND	ND	1.6	1.1	1.5	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	27.3	0.8 J	ND	ND	ND	ND	1.7	1.1	1.5	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	27.4	0.8 J	ND	ND	ND	ND	1.6	1.3	1.9	ND	ND	ND	ND	ND
Oct-2023	ND	ND	ND	ND	27.8	0.8 J	ND	ND	ND	ND	1.8	1.1	1.7	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25A***															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	1.4
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	2.6
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	1.4	2.8
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.2	5.7
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.4	5.3
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	4.3
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	5.5
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	9.8
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19	5.4
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	28	12
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	61	11
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	24	14
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	36	18
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	32.3	22.2
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21.9	16.9
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	22.1	21.9

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25A***															
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	0.8 J	ND	ND	ND	16.1	31.7
Sep-2007	0.5 J	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	1	ND	ND	ND	24.2	23.6
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	1	15.4
Sep-2008	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1.8 R	3 R
Dec-2008	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	1	16.2
Mar-2009	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	7.5
Oct-2009	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	12.8	2.5
Mar-2010	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	30.5 J	46.9
Oct-2010	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	ND	ND	ND	33.5	47.9
Apr-2011	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7	ND	ND	ND	43.7	42.7
Sep-2011	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	28.8	57.6
Mar-2012	3	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	ND	ND	ND	25.6	59.1
Sep-2012	3.57	ND	ND	ND	ND	ND	ND	ND	0.83 J	ND	ND	5.6	ND	ND	ND	15.2	42
Mar-2013	3.82	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.5	ND	ND	ND	19.6	60.8
Oct-2013	4.24	0.24 J	ND	ND	ND	ND	ND	ND	0.94 J	0.23 J	ND	6.43	ND	ND	ND	16.7	61.4
Mar-2014	3.79	ND	ND	ND	ND	ND	ND	ND	0.8 J	0.24 J	ND	5.87	ND	ND	ND	22 J	62.3
Oct-2014	3.98	ND	ND	ND	ND	ND	ND	ND	0.53 J	0.24 J	ND	6.16	ND	ND	ND	19.3	57.7
Apr-2015	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.79	ND	ND	ND	16.9	51.4
Nov-2015	3.4	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	6.4	ND	ND	ND	32.3 J	48.4
May-2016	3.3	ND	ND	ND	ND	ND	ND	ND	0.5 J	0.2 J	ND	6.1	ND	ND	ND	17	41
Oct-2016	3.3	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.3 J	ND	5.5	ND	ND	ND	16	53
May-2017	3	ND	ND	ND	ND	ND	ND	ND	0.4 J	0.2 J,B	ND	5.5	ND	ND	ND	13	47

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-25A***															
Oct-2017	3.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*0.2 J*	*ND*	5.9	*ND*	*ND*	*ND*	13	48
May-2018	3.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.2	*ND*	*ND*	*ND*	26.9	52.3
Nov-2018	2.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.1	*ND*	*ND*	*ND*	11.7	44.3 N3
May-2019	1.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	8.5 CL	32 N3
Oct-2019	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.9	*ND*	*ND*	*ND*	12.2	20.4
May-2020	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	7.6	15.5
Oct-2020	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.1	*ND*	*ND*	*ND*	12.9	21.4
Apr-2021	1.88	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.233 J*	*0.187 J*	*ND*	4.75	*ND*	*ND*	*ND*	6.82	35.8
Oct-2021	2.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.1	*ND*	*ND*	*ND*	9.1	26
May-2022	2.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5	*ND*	*ND*	*ND*	12.9	22.7
Oct-2022	2.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.3	*ND*	*ND*	*ND*	10.4	25.2
May-2023	2.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.4	*ND*	*ND*	*ND*	9.6	25.5
Oct-2023	2.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.2	*ND*	*ND*	*ND*	12.3	27.2

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25A***															
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	1.4	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	1.6	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	NA
Apr-2000	ND	NA	ND	NA	1.6	ND	NA	ND	ND	ND	NA	NA	ND	0.7 J	ND	ND	NA
Oct-2000	ND	ND	ND	NA	2	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	NA
Apr-2001	ND	ND	ND	NA	1.4	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	NA
Sep-2001	ND	ND	ND	NA	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	NA
Mar-2002	ND	ND	ND	NA	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	NA
Sep-2002	ND	ND	ND	NA	1.2	ND	ND	ND	ND	ND	ND	ND	0.7 J	1.8	ND	ND	NA
Mar-2003	ND	ND	ND	NA	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	NA
Oct-2003	ND	ND	ND	NA	1.1	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	NA
Apr-2004	ND	ND	ND	NA	1	ND	ND	0.6 J	ND	ND	ND	ND	0.8 J	2.3	ND	ND	NA
Oct-2004	ND	ND	ND	NA	2.4	ND	ND	ND	ND	ND	ND	ND	ND	3.1	ND	ND	NA
Apr-2005	ND	ND	ND	ND	2.3	ND	ND	0.9 J	ND	ND	ND	ND	1.2	2.7	ND	ND	NA
Oct-2005	ND	ND	ND	ND	3.3	ND	ND	1.6	ND	ND	ND	ND	1.4	2.5	ND	ND	NA
Mar-2006	ND	ND	ND	ND	2.5	ND	ND	1.4	ND	ND	ND	ND	1.1	1.8	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-25A*															
Sep-2006	ND	ND	ND	ND	**5.4**	ND	ND	1.4	ND	ND	ND	ND	1.7	3.9	ND	ND	NA
Mar-2007	ND	ND	ND	1	6.1 J	ND	ND	1.9	ND	ND	ND	ND	2.6	3	ND	ND	NA
Sep-2007	ND	ND	ND	1.5	**12.1**	ND	ND	2.1	ND	ND	ND	ND	3.6	3.9	ND	ND	NA
Mar-2008	ND	ND	ND	1.6	**9**	ND	ND	1.1	ND	ND	ND	ND	1.8	ND	ND	0.6 J	NA
Sep-2008	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	1 R	NA
Dec-2008	ND	ND	0.6 J	2.2	**14.1**	ND	ND	0.9 J	0.5 J	ND	ND	ND	2	ND	ND	ND	NA
Mar-2009	ND	ND	ND	2.4	**11.4**	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA
Oct-2009	ND	ND	0.7 J	ND	**12.1**	0.6 J	ND	0.8 J	ND	ND	ND	ND	1.8	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	**20.7**	ND	ND	ND	ND	ND	ND	ND	ND	3.6	ND	ND	NA
Oct-2010	ND	ND	1.1	3.4	**25.9**	1.2	ND	3.5	ND	ND	ND	ND	ND	3.6	ND	1.2	NA
Apr-2011	ND	ND	1.1	2.8	**22.9**	1.2	ND	3.7	ND	ND	ND	ND	**5.4 C**	3	ND	**5.5 R,C**	NA
May-2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**5.5**	NA	NA	1	NA
Sep-2011	ND	ND	1.1	5.3	**30.9**	1.2	ND	4.7	ND	ND	ND	ND	**6.8**	4	ND	1.4	NA
Mar-2012	ND	ND	1.2	4.8	**34.3**	1.4	ND	4.5	ND	ND	ND	ND	**6.5**	3.6	ND	**4.3 R,C**	NA
May-2012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5	NA
Sep-2012	ND	ND	1.9	5.97	**36.1**	1.88	ND	**5.06 C**	ND	ND	ND	ND	**6.71**	3.53	ND	1.36	3.78
Nov-2012	NA	NA	NA	NA	NA	NA	NA	**5.44**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mar-2013	ND	ND	1.73	6.33	**44**	1.94	ND	**5.14**	ND	ND	ND	ND	**7.31**	ND	ND	1.55	3.67
Oct-2013	ND	ND	2.07	6.05	**43**	2.28	ND	**6.05**	ND	0.18 J	ND	ND	**7.97**	3.34	ND	1.66	4.35
Mar-2014	ND	ND	1.9	6.01	**40.8**	2.26	ND	**5.68**	ND	ND	ND	ND	**7.69**	3.2	ND	1.52	4.16
Oct-2014	ND	ND	0.94 J	5.65	**41.7**	2.17	ND	**6.1**	ND	ND	ND	ND	**8.14**	3.64	ND	1.45	3.11
Apr-2015	0.28 J	ND	ND	5.65	**41.1**	1.94	ND	**5.08**	ND	ND	ND	ND	**7.43**	3.61	ND	1.42	1.94

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-25A***															
Nov-2015	*ND*	*ND*	*ND*	5.5	**40.8**	1.8	*ND*	4.9	*ND*	*ND*	*ND*	*ND*	**7.5**	3.3	*ND*	2	1.8
May-2016	*ND*	*ND*	*0.1 J*	4.6	**33**	1.7	*ND*	5	*ND*	*0.1 J*	*ND*	*ND*	**7.1**	3.7	*ND*	1.3	1.8
Oct-2016	*ND*	*ND*	*ND*	4	**35**	1.2	*ND*	4.3	*ND*	*0.2 J*	*ND*	*ND*	**6.4**	4	*ND*	1.5	1.2
May-2017	*ND*	*ND*	*ND*	4.6	**37**	1.6	*ND*	4.3	*ND*	*0.1 J*	*ND*	*ND*	**6**	1.5	*ND*	1.2	1.6
Oct-2017	*ND*	*ND*	*ND*	4.6	**32**	1.6	*ND*	4.5	*ND*	*0.1 J*	*ND*	*ND*	**6.4**	3.4	*ND*	1.3	1.6
May-2018	*ND*	*ND*	*ND*	5.2	**42.1**	2.1	*ND*	**5.6**	*ND*	*ND*	*ND*	*ND*	**8.9**	4.4	*ND*	1.7	*NA*
Nov-2018	*ND*	*ND*	*ND*	4.4	**26.3**	1	*ND*	2.6 CL	*ND*	*ND*	*ND*	*ND*	**5.7**	3.4	*ND*	*0.98 J*	*NA*
May-2019	*ND*	*ND*	*ND*	2.8	**16.7**	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	3.8	2.2	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	2.9	**18.8**	*ND*	*ND*	3.1	*ND*	*ND*	*ND*	*ND*	4	1.6	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	2.2	**15.2**	*ND*	*ND*	2.7	*ND*	*ND*	*ND*	*ND*	2.9	1.2	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	3.1	**16.4**	*0.6 J*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	3.2	1.7	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	3.98	**19.5**	*0.526 J*	*ND*	2.62	*ND*	*ND*	*ND*	*ND*	3.84	*2.1 J*	*ND*	*0.693 J*	*NA*
Oct-2021	*ND*	*ND*	*ND*	4.1	**23.6**	*0.7 J*	*ND*	3	*ND*	*ND*	*ND*	*ND*	4.1	1.9	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	3.9	**22.4 L**	*0.8 J*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	4.7	1.8	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	4.2	**23.4 L**	*0.9 J*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	4.5	1.8	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	4.7	**25.7 L**	1.1	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	5	1.8	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	4	**26.5**	*1 J*	*ND*	3.7	*ND*	*ND*	*ND*	*ND*	4.8	1.8	*ND*	1.2	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-27***											
Mar-2013	4.24	4.24	*0.0847 J*	*ND*	3.16	0.0583	*ND*	6.2	17.5	*0.63 J*	*ND*	3.43
Oct-2013	4.36	4.36	*ND*	*ND*	3.03	0.0804	*ND*	5.8	18.4	*0.615 J*	32	3.37
Mar-2014	4.28	4.28	*ND*	*ND*	2.96	0.0592	*ND*	5.5	20.1	*ND*	*ND*	3.56
Oct-2014	24.2	24.2	*ND*	*ND*	3.09	0.0724	*ND*	5.8	18.2	*ND*	*ND*	3.72
Apr-2015	4.48	4.48	*ND*	*5 J*	2.92	0.0554	*ND*	3.9	18.6	*ND*	31	3.57
Nov-2015	*ND*	*ND*	*ND*	*ND*	3.16	0.053	*ND*	5.4	23.2	*ND*	32	4.25
May-2016	3.6	3.6	*ND*	*ND*	3.93	0.0614	*ND*	5.3	22.9	*ND*	*20 J*	3.6
Oct-2016	*ND*	*ND*	*ND*	*ND*	3.72	*NA*	*NA*	5.2	26.9	*0.701 J*	*23 J*	3.3
May-2017	*ND*	*ND*	*ND*	*ND*	3.1	0.0707	*ND*	5.1	37.8	*ND*	*ND*	3.6
Oct-2017	*ND*	*ND*	*ND*	*ND*	3.63	0.0788	*ND*	5.3	31.3	*ND*	*21 J*	3.5
May-2018	*6 J*	*ND*	*ND*	*ND*	3.3	*0.063 J*	*ND*	6.5	225	*ND*	15	*3.4 J*
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	4.7	*0.076 J*	*ND*	4.7	24	*ND*	80	*3.7 J*
May-2019	*ND*	*NA*	*ND*	*ND*	4.7	*ND*	*ND*	4.45	19.7	*ND*	*ND*	*ND*
Oct-2019	*2.5 J*	*NA*	*ND*	*ND*	4	*0.095 J*	*ND*	4.5	25.3	*ND*	24	3.5
May-2020	*ND*	*NA*	*ND*	*ND*	4.7	*0.056 J*	*ND*	4.5	22	*ND*	25	3.5
Oct-2020	*ND*	*NA*	*ND*	*ND*	4.4	*0.068 J*	*ND*	4.69	22.1	*ND*	20	3.8
Apr-2021	20	*NA*	*ND*	*ND*	4.3	*0.089 J*	*ND*	6.08	25.1	*ND*	*ND*	3.7
Oct-2021	20	*NA*	*ND*	*ND*	3.8	*0.055 J*	*ND*	5.48	21.1	*ND*	*ND*	3.5
May-2022	*2 J2c*	*NA*	*ND*	*ND*	3.8	*ND*	*ND*	6.2	92.4	*ND*	*ND*	3.5 N3
Oct-2022	*ND*	*NA*	*ND*	*8.4 J*	10	*0.055 J*	*ND*	5.25	84.8	*ND*	*ND*	3.9 N3
May-2023	*1 J2c*	*NA*	*ND*	29.6	5.1	*0.06 J*	*ND*	5.09	52	*ND*	17	4.2 N3
Oct-2023	*ND*	*NA*	*ND*	*ND*	5.6	*ND*	*NA*	5.07	54.4	*ND*	24	4.1 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-27***													
Mar-2013	ND	ND	0.006 J	ND	ND	0.877	0.928	0.0074 J	0.000939 J	0.0023 J	0.0538	0.0056	ND	0.302	0.311
Oct-2013	ND	ND	0.006 J	ND	ND	0.835	0.803	0.0034 J	0.00098 J	0.0019 J	0.0606	ND	0.000286 J	0.313	0.307
Mar-2014	0.0017 J	0.000343 J	0.007 J	ND	ND	0.869	0.872	0.0039 J	0.000823 J	0.0025 J	0.287	0.0077 J	ND	0.337	0.328
Oct-2014	0.0012 J	0.000421 J	0.0173	ND	ND	0.915	0.82	0.0062 J	0.000869 J	0.0024 J	0.737	ND	0.0012 J	0.348	0.273
Apr-2015	0.000396 J	ND	0.0065 J	ND	ND	0.899	0.887	0.0015 J	0.000804 J	0.0019 J	0.0623	ND	ND	0.323	0.326
Nov-2015	ND	ND	0.0065 J	ND	0.00008 J	1.13	0.872	0.0014 J	0.000764 J	0.0023 J	0.0973	ND	ND	0.346	0.337
May-2016	ND	ND	0.0065	ND	ND	0.875	0.926	0.0024 J	0.00078 J	0.0023 J	0.385	ND	ND	0.34	0.34
Oct-2016	ND	ND	0.0073	ND	ND	0.77	0.8	0.00062 J	0.0008 J	0.0022 J	ND	ND	ND	0.332	0.35
May-2017	ND	ND	0.0064	ND	ND	0.902	0.721	0.0015 J	0.00084 J	0.0025 J	0.0661 J	ND	ND	0.338	0.327
Oct-2017	ND	ND	0.006	ND	ND	0.8	0.764	0.00092 J	0.00075 J	0.0023 J	ND	ND	ND	0.358	0.305
May-2018	0.000039 J	ND	0.0065	ND	0.000025 J	0.8 J	0.76 J	0.0027 J	0.00077	0.0048 B	ND	ND	ND	0.34 J	0.32 J
Nov-2018	ND	ND	0.0064	0.000027 J	0.000046 J	0.88 J	0.86 J	0.0033 J	0.00082	0.0068	0.026	ND	0.00018 J	0.37 J	0.34 J
May-2019	ND	ND	0.0069	ND	ND	ND	ND	ND	0.00091	0.0074	ND	ND	ND	ND	ND
Oct-2019	0.00011 J	ND	0.0067	ND	0.00025 J	0.8	0.79 J	0.0055 J	0.00093	0.021	0.035 J	0.0088 J	0.000054 J	0.36	0.34 J
May-2020	0.000078 J	ND	0.0064	ND	0.0001 J	0.8	0.82 J	0.0068 J	0.00097	0.022	0.039 J	0.014 J	ND	0.36	0.36 J
Oct-2020	0.00052 J	ND	0.028	ND	ND	0.92	0.78 J	0.054	0.0084	ND	4.2	0.06	ND	0.38	0.36 J
Apr-2021	ND	ND	0.011	ND	ND	0.85 J	0.72 J	0.013	0.0018 J	0.02	0.76	ND	ND	0.38	0.33
Oct-2021	ND	ND	0.0074	ND	ND	0.81	0.84	0.0022 J	0.0011 J	0.0146	0.54	0.014 J	0.00011 J	0.36 J	0.37 J
May-2022	ND	0.0015 JB	0.0077	ND	ND	0.79	0.9	0.0018 J	0.00091 J	0.0071	0.036 J	ND	ND	0.37 J	0.4 J
Oct-2022	ND	ND	0.0079	ND	ND	0.88	0.85	0.0028	0.001 J	0.0058	ND	0.14	ND	0.4 J	0.4 J
May-2023	ND	ND	0.0077	ND	ND	0.95	0.9	0.0031	0.0012 J	0.0024 J	0.04 J	ND	ND	0.44 J	0.41 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-27***													
Oct-2023	*ND*	*ND*	0.0077	*ND*	*ND*	0.94	1.1	0.0062	*0.0013 J*	0.0026	0.074	*ND*	*ND*	*ND*	*0.43 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-27*												
Mar-2013	0.0078 J	0.0079 J	0.000098 J	0.0045 J	0.437 J	0.45	ND	ND	1.41	1.46	ND	ND	0.0177
Oct-2013	0.0079 J	0.0073 J	ND	0.0031 J	0.377 J	0.344 J	ND	ND	1.45	1.43	ND	0.000916 J	0.0184
Mar-2014	0.0078 J	0.0071 J	ND	0.0028 J	0.491 J	0.441 J	ND	ND	1.53	1.63	0.000579 J	0.0011 J	0.0086 J
Oct-2014	0.0111	0.0087 J	ND	0.0035 J	0.58	0.372 J	ND	ND	1.62	1.65	ND	0.003 J	0.0089 J
Apr-2015	0.0078 J	0.0078 J	ND	0.0018 J	0.377 J	0.389 J	ND	ND	1.51	1.6	ND	ND	0.0094 J
Nov-2015	0.0074 J	0.007 J	ND	0.0017 J	0.444 J	0.422 J	ND	ND	1.64	1.64	ND	0.000256 J	0.0086 J
May-2016	0.007	0.0067	ND	0.0022 J	0.383 J	0.363 J	ND	ND	1.49	1.48	ND	0.00039 J	0.008 J
Oct-2016	0.0067	0.006	ND	0.0013 J	0.427	0.415	ND	ND	1.71	1.76	ND	ND	0.0037 J
May-2017	0.0073	0.0054	ND	0.005	0.418	0.38 J	ND	ND	1.52	1.36	ND	0.00024 J	0.0049 JB
Oct-2017	0.0062	0.0056	ND	0.0016 J	0.444	0.416	ND	ND	1.82	1.86	ND	ND	0.0051 J
May-2018	0.0053	0.0049	ND	0.0024	ND	ND	0.00045 JB	ND	1.7 J	1.9 J	ND	0.0041	0.0061 B
Nov-2018	0.0073	0.0054	ND	0.0028	ND	ND	0.00013 J	ND	2.5 JB	2.2 J	ND	0.0028	0.0069
May-2019	0.0062	0.0051	ND	0.0028	ND	ND	ND	ND	ND	ND	ND	0.0038	0.0053
Oct-2019	0.0051	0.0046	ND	0.0033	ND	ND	ND	ND	2.2 J	2 J	ND	0.0008 J	0.014
May-2020	0.005	0.0045	ND	0.0044	ND	ND	ND	ND	2.1 J	2.1 J	ND	0.003	0.0077
Oct-2020	0.024	0.012	ND	0.045	ND	ND	ND	ND	ND	ND	ND	0.0065	ND
Apr-2021	0.0077	0.0058	ND	0.013	0.53	0.41 J	ND	ND	2.4	2.3	ND	0.0012 J	0.0033 J
Oct-2021	0.0067	0.0074	ND	0.0042	0.51	0.446 J	ND	ND	2.2	2.2	ND	0.00036 J	0.0028 J
May-2022	0.0052	0.0057	ND	0.0026	0.44 J	0.37 J	ND	ND	2.2	2.5	ND	0.00066 JB	ND
Oct-2022	0.006	0.0056	ND	0.0062	0.51	0.49 J	ND	ND	2.4	2.4	ND	ND	0.0071
May-2023	0.0066	0.0059	ND	0.0039	0.56 B	0.43 J	ND	ND	2.5 B	2.4	ND	ND	0.031
Oct-2023	0.0075	0.0071	ND	0.0064	0.52	0.51	ND	ND	2.6	2.7	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-27*																
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-27*																
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-27***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.18 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.206 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-27***															
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-27***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-27***															
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-28***											
Mar-2013	4.52	4.52	*0.0847 J*	*ND*	4.04	0.0805	*ND*	6.2	20	*0.533 J*	*ND*	4.82
Oct-2013	4.4	4.4	*ND*	*ND*	3.95	0.112	*ND*	5.6	21.4	*0.517 J*	46	4.9
Mar-2014	4.32	4.32	*ND*	*ND*	4.19	0.0818	*ND*	5.4	23.5	*ND*	*ND*	5.44
Oct-2014	*ND*	*ND*	*0.106 J*	*ND*	4.85	0.0941	*ND*	4.7	28.3	*ND*	36	5.31
Apr-2015	4.64	4.64	*ND*	*ND*	5.29	0.0508	*ND*	4.1	25.7	*ND*	*ND*	6
Nov-2015	3.72	3.72	*ND*	*ND*	6.06	0.0781	*ND*	5.2	47.9	*ND*	*12 J*	6.59
May-2016	2.24	2.24	*ND*	*ND*	6.46	0.0791	*ND*	5.2	39	*ND*	27	6.4
Oct-2016	*ND*	*ND*	*ND*	*ND*	7.83	*NA*	*NA*	5.3	47.6	*0.717 J*	31	6.8
May-2017	2.68	2.68	*ND*	*5 J*	9.52	0.16	*ND*	5	58.6	*0.545 J*	*22 J*	7.7
Oct-2017	*ND*	*ND*	*ND*	*ND*	12.3	0.101	*ND*	5	79.6	*0.542 J*	29	9.6
May-2018	*2 JB*	*ND*	*0.066 J*	*ND*	14.6	*0.086 J*	*ND*	5.4	79.2	*ND*	37	10.7
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	19.5	*0.079 J*	*ND*	4.68	70.1	*ND*	83	13.2
May-2019	*ND*	*NA*	*ND*	*ND*	28.6	*ND*	*ND*	4.28	78.8	*ND*	67	16.8
Oct-2019	*2.5 J*	*NA*	*ND*	*ND*	40.6	*0.098 J*	*ND*	4.29	139.3	*ND*	85	22.3
May-2020	*ND*	*NA*	*ND*	*ND*	45.1	*0.087 J*	*ND*	4.44	141.9	*ND*	94	20.3
Oct-2020	*ND*	*NA*	*ND*	*6.1 J*	43.5	*0.058 J*	*ND*	5.03	170.4	*ND*	90	23.8
Apr-2021	*1 J3c*	*NA*	*ND*	*ND*	54.5	*0.076 J*	*ND*	4.63	204.2	*ND*	80	25
Oct-2021	*1 J2c*	*NA*	*ND*	*ND*	51.6	*0.075 J*	*ND*	4.82	235.9	*ND*	86	25.4
May-2022	*1 J2c*	*NA*	*ND*	*ND*	48.5	*0.061 J*	*ND*	4.66	213.3	*ND*	100	26.7 N3
Oct-2022	*2 JB3c*	*NA*	*ND*	*ND*	50.3	*0.08 J*	*ND*	4.73	204.2	*ND*	116	26.3 N3
May-2023	*ND*	*NA*	*ND*	34.2	56.4	*0.077 J*	*ND*	4.85	221.8	*ND*	114	31 N3
Oct-2023	*ND*	*NA*	*ND*	*ND*	58.8	*ND*	*NA*	4.77	235.8	*ND*	126	30.4 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-28***													
Mar-2013	ND	ND	0.0103	ND	ND	1.16	1.27	0.0017 J	0.0025 J	0.0013 J	0.0052 J	0.0051 J	ND	0.466	0.522
Oct-2013	ND	ND	0.0118	ND	ND	1.16	1.14	0.0013 J	0.0027 J	0.000921 J	ND	ND	ND	0.487	0.485
Mar-2014	0.000945 J	ND	0.0116	ND	ND	1.26	1.23	0.000968 J	0.0028 J	0.0013 J	0.0131 J	0.0044 J	ND	0.56	0.549
Oct-2014	0.000718 J	ND	0.0125	ND	ND	1.28	1.29	0.0021 J	0.0027 J	0.000985 J	0.0179 J	ND	ND	0.515	0.499
Apr-2015	0.000611 J	ND	0.0142	ND	ND	1.41	1.42	0.0027 J	0.0028 J	0.0013 J	0.0482 J	ND	ND	0.602	0.611
Nov-2015	ND	0.000252 J	0.0154	ND	ND	1.51	1.51	0.000811 J	0.0029 J	0.0011 J	ND	ND	0.000474 J	0.683	0.695
May-2016	ND	ND	0.0181	0.000071 J	ND	1.4	1.59	0.002 J	0.0026	0.0011 J	ND	ND	ND	0.695	0.716
Oct-2016	ND	ND	0.0175	ND	ND	1.54	1.54	0.003 J	0.0029	0.0013 J	0.0662 J	ND	ND	0.726	0.756
May-2017	ND	ND	0.0172	ND	ND	1.71	1.7	0.0018 J	0.003	0.0013 J	ND	ND	ND	0.829	0.832
Oct-2017	ND	ND	0.0216	0.000092 J	ND	2.19	1.9	0.0014 J	0.003	0.001 J	ND	ND	ND	1.01	0.986
May-2018	0.000045 J	ND	0.028	0.0001 J	0.000029 J	2.4	2.4	0.0039 J	0.003	0.0025 B	0.044	ND	ND	1.1	1.1
Nov-2018	ND	ND	0.029	0.00012 J	0.000039 J	3	2.9	0.0098	0.0028	0.0015 J	0.072	0.029	0.00014 J	1.4	1.4
May-2019	ND	ND	0.041	ND	ND	3.8	3.9	0.0087	0.0038	0.0025	ND	0.021	ND	1.8	1.8
Oct-2019	0.000099 J	ND	0.052	0.00021 J	0.00026 J	5.1	5	0.011	0.0045	0.0057	0.098 J	0.048	0.000073 J	2.3	2.3
May-2020	0.000088 J	ND	0.05	0.00018 J	ND	4.6	3.2	0.0071	0.0045	0.0026	0.062 J	ND	ND	2.2	3
Oct-2020	ND	ND	0.068	0.00029 J	ND	5.3	5.1	0.081	0.013	0.0062	2.2	0.29	ND	2.6	2.5
Apr-2021	ND	ND	0.064	0.00018 J	ND	5.6	5.8	0.0085	0.006	ND	0.11	0.06 J	ND	2.7	2.8
Oct-2021	0.000063 J	ND	0.066	0.0002 J	ND	5.6	6.2	0.0043	0.0059	0.0018 J	0.2	0.036 J	0.000051 J	2.8	3
May-2022	ND	ND	0.07	0.00016 J	ND	5.8	5.9	0.0063	0.0076	0.002 J	0.18	0.067	ND	2.9	3.1
Oct-2022	ND	ND	0.067	ND	ND	5.8	6.5	0.01	0.022	0.0025 J	0.72	0.14	ND	2.9	3.1
May-2023	ND	ND	0.077	0.0002 J	ND	6.7	6.4	0.025	0.019	0.0043	0.67	0.09	ND	3.4	3.2

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-28***													
Oct-2023	*ND*	*ND*	0.078	*0.00024 J*	*ND*	6.6	6.9	0.018	0.011	0.013	0.94	0.12	*ND*	3.4	3.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-28***												
Mar-2013	0.0077 J	0.0086 J	0.000105 J	0.0014 J	0.39 J	0.412 J	ND	ND	1.47	1.7	ND	ND	0.0154
Oct-2013	0.0074 J	0.0071 J	ND	0.0019 J	0.36 J	0.349 J	ND	ND	1.7	1.71	ND	0.001 J	0.0136
Mar-2014	0.0072 J	0.0072 J	ND	0.0018 J	0.477 J	0.469 J	ND	ND	1.86	1.81	ND	ND	0.0087 J
Oct-2014	0.0072 J	0.0069 J	ND	0.0028 J	0.431 J	0.43 J	ND	ND	1.98	1.97	ND	ND	0.0093 J
Apr-2015	0.013	0.0077 J	ND	0.0032 J	0.452 J	0.464 J	ND	ND	2.19	2.24	ND	ND	0.0079 J
Nov-2015	0.0085 J	0.0087 J	ND	0.0023 J	0.497 J	0.497 J	ND	ND	2.6	2.69	0.000168 J	ND	0.0065 J
May-2016	0.0087	0.0089	ND	0.0027 J	0.465	0.454	ND	ND	2.62	2.69	ND	ND	0.0075 J
Oct-2016	0.0091	0.0083	ND	0.0036 J	0.504	0.533	ND	ND	3.2	3.24	ND	ND	ND
May-2017	0.0098	0.0092	ND	0.0033 J	0.537	0.577	ND	ND	3.8	3.62	ND	ND	0.0045 JB
Oct-2017	0.0096	0.0107	ND	0.003 J	0.613	0.641	ND	ND	4.85	4.65	ND	ND	0.0049 J
May-2018	0.012	0.011	ND	0.0047	ND	ND	0.00018 JB	ND	5.9	6.2	ND	0.0036	0.007 B
Nov-2018	0.015	0.014	ND	0.0087	0.84 J	ND	0.00012 J	ND	8	7.5	ND	0.0024	0.0081
May-2019	0.02	0.019	ND	0.0079	ND	ND	ND	ND	9.5	9.2	ND	0.0056	0.0092
Oct-2019	0.03	0.024	ND	0.011	ND	1.1 J	ND	ND	16.7	16.2	ND	ND	0.017
May-2020	0.026	0.023	ND	0.0084	ND	1.2 J	ND	ND	15.3	7.3	ND	0.0029	0.011
Oct-2020	0.037	0.032	ND	0.072	1.5	1.1	ND	ND	20	19.1	ND	0.007	0.02
Apr-2021	0.027	0.028	0.00006 J	0.015	1.1	1.1	ND	ND	23.2	24.2	ND	ND	0.009 J
Oct-2021	0.026	0.028	ND	0.0097	1.1	1.12	ND	ND	24.4	26.2	ND	ND	0.0082
May-2022	0.028	0.029	ND	0.013	1	1.2	ND	ND	22.7	23.7	ND	ND	0.0085
Oct-2022	0.03	0.03	ND	0.018	1.1	1.2	ND	ND	20.9	23.7	ND	ND	0.014
May-2023	0.036	0.034	ND	0.027	1.3 B	1.1	ND	0.00082 J	23.4	22.9	ND	0.0018 J	0.024
Oct-2023	0.036	0.036	ND	0.027	1.1	1.2	ND	ND	26.5	27.1	ND	ND	0.018

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-28***																
Mar-2013	ND	ND	ND	ND	1.08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	2.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	0.1 J	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	0.1 J	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	0.1 J	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2 JB	ND
Nov-2018	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.63	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-28*																
May-2023	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-28***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.42 J*	*ND*	*ND*	*ND*	*ND*	*ND*	8.46	6.37
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.41 J*	*ND*	*ND*	*ND*	*ND*	*ND*	5.9	6.23
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*9.82 J*	7.38
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.39 J*	*ND*	*ND*	*ND*	*ND*	*ND*	6.82	7.55
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.37 J*	*ND*	*ND*	*ND*	*ND*	*ND*	8.14	8.59
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*18.1 J*	9
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	4.2	4.5
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	4.5	4.7
May-2017	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	3.8	4.6
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	4	4.8
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	8.3	5.1
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4 CL	4.4 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7 CL	4.6 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.3	3.6
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.3	3.4
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	2.3
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.22 J*	*ND*	*0.213 J*	*ND*	*ND*	*ND*	*3.49 J*	5.5
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.1	4.4
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.7	3.5
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5	4.1

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-28***															
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3	3.4
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4	4.4

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-28***															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.3	0.16 J	ND	ND	ND	0.29 J	3.88	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	1.58	ND	ND	ND	ND	0.33 J	3.32	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.56	ND	ND	ND	ND	0.34 J	4.15	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	0.33 J	3.09	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	2.04	ND	ND	ND	ND	0.43 J	3.43	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	0.5 J	3.9	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	0.2 J	1.8	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	0.8 J	0.1 J	ND	ND	ND	0.2 J	1.9	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	0.2 J	1.8	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	0.2 J	1.6	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	2.3	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	1.4	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	0.6 J	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.481 JB	ND	ND	0.849 J	0.563 J	ND	ND	ND	0.227 J	1.31 J	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	1.7	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	1.3	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-28***															
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-29***											
Mar-2013	3.68	3.68	*0.0847 J*	*ND*	7.45	0.345	*ND*	6.1	39.4	1.38	19	7.56
Oct-2013	3.84	3.84	*ND*	*ND*	7.1	0.338	*ND*	5.8	39.2	*0.95 J*	44	8.02
Mar-2014	3.64	3.64	*0.108 J*	*ND*	7.5	0.378	*ND*	5.1	40	*0.635 J*	*ND*	8.99
Oct-2014	*ND*	*ND*	*ND*	*ND*	7.85	0.352	*ND*	4.5	37.1	*ND*	32	8.22
Apr-2015	4.76	4.76	*ND*	*ND*	7.91	0.401	*ND*	4.9	39.6	*ND*	27	8.83
Nov-2015	*ND*	*ND*	*ND*	*ND*	8.47	0.453	*ND*	5.1	66.3	*ND*	28	10
May-2016	*ND*	*ND*	*ND*	*ND*	9.01	0.442	*ND*	5	57.4	*0.644 J*	29	9
Oct-2016	*ND*	*ND*	*ND*	*ND*	8.1	*NA*	*NA*	4.9	57.9	*0.951 J*	28	7.9
May-2017	*ND*	*ND*	*ND*	*ND*	8.33	0.438	*ND*	4.9	59.4	*0.855 J*	25	8.3
Oct-2017	*ND*	*ND*	*ND*	*ND*	9.03	0.498	*ND*	5.3	69.4	*0.69 J*	26	8.6
May-2018	*2 JB*	*ND*	*ND*	*ND*	8.6	0.49	*ND*	5.7	59.2	*ND*	27	9.1
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	9.8	0.51	*ND*	4.64	43.1	*ND*	33	10.1
May-2019	*ND*	*NA*	*ND*	*ND*	9.4	0.54	*ND*	4.44	38.1	*ND*	81	9.3
Oct-2019	*ND*	*NA*	*ND*	161 ML	10.1	0.58	*ND*	4.35	48.8	*ND*	44	9.2
May-2020	*ND*	*NA*	*ND*	*ND*	10.5	0.57	*ND*	4.4	49.7	*ND*	30	9.8
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	9.4	0.55	*ND*	4.83	48.3	*ND*	39	9.9
Apr-2021	*1 J3c*	*NA*	*ND*	*ND*	10.7	0.58	*ND*	4.73	62.4	*ND*	21	9.5
Oct-2021	*ND*	*NA*	*ND*	*ND*	9.1	0.66	*ND*	4.84	89.8	*ND*	*ND*	10.4
May-2022	*ND*	*NA*	*ND*	*ND*	9.8	0.6	*ND*	4.64	80.8	*ND*	14	10.2 N3
Oct-2022	*2 JB3c*	*NA*	*ND*	*ND*	11.3	0.61	*ND*	4.74	79.4	*ND*	39	10.1 N3
May-2023	*ND*	*NA*	*ND*	27.4	11.5	0.63	*ND*	4.8	84.7	*ND*	43	10.4 N3
Oct-2023	*2 J2c*	*NA*	*ND*	*ND*	11.4	0.691 O-04	*NA*	4.86	140.4	*ND*	20	10.5 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-29***													
Mar-2013	ND	ND	0.0168	0.000171 J	ND	1.73	2.1	0.0039 J	0.0172	0.004 J	0.0493 J	0.0085 J	ND	0.786	0.903
Oct-2013	ND	ND	0.0214	ND	ND	1.77	1.86	0.0018 J	0.0117	0.0024 J	ND	ND	ND	0.874	0.936
Mar-2014	0.000625 J	0.00023 J	0.0219	ND	ND	1.96	1.99	0.0044 J	0.0078 J	0.0026 J	0.11	0.0084 J	ND	0.992	0.996
Oct-2014	0.000547 J	ND	0.0225	ND	ND	1.86	1.88	0.000879 J	0.0057 J	0.0018 J	0.0223 J	ND	ND	0.867	0.869
Apr-2015	0.000537 J	ND	0.0258	0.000165 J	ND	1.96	1.98	0.000867 J	0.0047 J	0.0019 J	0.0169 J	ND	ND	0.955	0.983
Nov-2015	ND	ND	0.0276	0.000158 J	ND	2.14	1.96	0.00074 J	0.0051 J	0.0022 J	0.0248 J	0.0151 J	0.000367 J	1.13	1.07
May-2016	ND	ND	0.0237	0.00014 J	ND	1.99	1.87	0.0015 J	0.0035	0.0018 J	ND	ND	0.00025 J	0.985	0.93
Oct-2016	ND	ND	0.0209	0.00013 J	ND	1.66	1.71	0.00068 J	0.0032	0.0015 J	ND	ND	ND	0.919	0.971
May-2017	ND	ND	0.0228	0.00013 J	ND	1.7	1.74	0.0017 J	0.0024	0.0017 J	0.0474 J	ND	0.000095 J	0.975	0.988
Oct-2017	ND	ND	0.0241	0.00016 J	ND	1.68	1.84	ND	0.0024	0.0016 J	ND	ND	ND	1.07	1.04
May-2018	0.000048 J	ND	0.028	0.00014 J	0.000033 J	2	1.9	0.0022 J	0.0018	0.0024 B	ND	ND	0.000018 J	1	1
Nov-2018	ND	ND	0.028	0.00017 J	0.000042 J	2.1	2.1	0.0057 J	0.0019	0.0071	0.041	0.019 J	0.00009 J	1.2	1.1
May-2019	ND	ND	0.027	ND	ND	2	2	ND	0.0018	0.0045	ND	ND	ND	1	1.1
Oct-2019	0.00009 J	ND	0.026	0.00016 J	0.00022 J	2	2	0.0047 J	0.0018	0.009	0.013 J	0.0068 J	0.000065 J	1	1.1
May-2020	0.000068 J	ND	0.027	0.00014 J	ND	2.1	1.4	0.0047 J	0.0018	0.0072	0.015 J	ND	ND	1.1	0.75 J
Oct-2020	ND	ND	0.028	ND	ND	2.1	2	0.012 J	0.0019 J	0.0076 J	0.02 J	0.0063 J	ND	1.2	1.1
Apr-2021	ND	ND	0.029	ND	ND	2	2	0.002 J	0.0015 J	ND	ND	ND	ND	1.1	1.1
Oct-2021	ND	ND	0.031	0.00019 J	ND	2.2	2.3	0.002 J	0.002 J	0.0016 J	0.015 J	ND	0.000033 J	1.2	1.2
May-2022	ND	ND	0.03	ND	ND	2.1	2.3	0.0026	0.0019 J	0.0019 J	ND	ND	ND	1.2	1.3
Oct-2022	ND	ND	0.036	0.0002 J	ND	2.1	2.3	0.013	0.0019 J	0.0018 J	0.037 J	ND	ND	1.2	1.2
May-2023	ND	ND	0.031	0.00014 J	ND	2.2	2.2	0.004	0.0021 J	0.0022 J	ND	ND	ND	1.2	1.2

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-29***													
Oct-2023	*ND*	*ND*	0.03	*0.00014 J*	*ND*	2.2	2.2	0.0066 B	*0.002 J*	*ND*	*ND*	*ND*	*ND*	1.2	1.2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-29*												
Mar-2013	0.0086 J	0.0094 J	0.000099 J	0.0165	0.594	0.681	ND	ND	2.65	3.01	ND	ND	0.0155
Oct-2013	0.0075 J	0.0078 J	ND	0.0081 J	0.569	0.588	ND	ND	2.93	3.13	ND	ND	0.0127
Mar-2014	0.0073 J	0.0072 J	ND	0.0079 J	0.775	0.729	ND	ND	3.09	3.18	ND	ND	0.006 J
Oct-2014	0.0072 J	0.0072 J	ND	0.0041 J	0.672	0.653	0.00076 J	ND	3.14	3.14	ND	ND	ND
Apr-2015	0.0078 J	0.008 J	ND	0.0037 J	0.683	0.703	ND	ND	3.63	3.73	ND	ND	0.0072 J
Nov-2015	0.0085 J	0.0082 J	ND	0.0041 J	0.744	0.686	ND	ND	3.98	3.76	ND	ND	0.0111
May-2016	0.0075	0.0067	ND	0.0032 J	0.688	0.655	ND	ND	3.29	3.28	ND	ND	ND
Oct-2016	0.0069	0.0068	ND	0.0027 J	0.655	0.688	ND	ND	3.23	3.34	ND	ND	ND
May-2017	0.0074	0.0069	ND	0.0032 J	0.731	0.711	ND	ND	3.38	3.18	ND	0.00044 J	ND
Oct-2017	0.0068	0.0074	ND	0.0025 J	0.716	0.741	ND	ND	3.79	3.68	ND	ND	ND
May-2018	0.0071	0.007	ND	0.0031	ND	ND	0.00037 JB	ND	3.7 J	3.9 J	ND	0.0033	0.0044 JB
Nov-2018	0.0097	0.009	ND	0.0054	ND	ND	0.00022 J	ND	4.2 J	4.2 J	ND	0.0024	0.0049 J
May-2019	0.0085	0.008	ND	0.0034	ND	ND	ND	ND	ND	ND	ND	0.0054	ND
Oct-2019	0.008	0.0079	ND	0.003	ND	ND	ND	ND	3.8 J	3.9 J	ND	ND	0.011
May-2020	0.0092	0.0079	ND	0.0036	1.1 J	ND	ND	ND	3.2 J	2.2 J	ND	0.0032	0.0053
Oct-2020	0.0089	0.0085	ND	0.0038	ND	ND	ND	ND	4.2 J	3.7 J	ND	0.0039 J	ND
Apr-2021	0.0089	0.0087	0.00007 J	0.0042 J	0.8	0.75	ND	ND	4.2	4.3	ND	ND	ND
Oct-2021	0.0095	0.0089	ND	0.0031	0.79	0.743	ND	ND	4.5	4.5	ND	ND	0.002 J
May-2022	0.0098	0.011	ND	0.0032	0.76	0.84	ND	ND	4.4	4.8	ND	ND	ND
Oct-2022	0.0097	0.0096	ND	0.0034	0.79	0.83	ND	ND	4.5	5	ND	ND	0.0054 B
May-2023	0.01	0.0095	ND	0.0041	0.79	0.77	ND	ND	4.6	4.4	ND	ND	ND
Oct-2023	0.01	0.011	ND	0.0056 B	0.79	0.8	ND	ND	4.5	4.6	ND	ND	0.0045 J

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-29*																
Mar-2013	ND	ND	ND	ND	1.48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.96	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.68	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.51	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.6	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	0.1 J	ND	ND	1.7	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	0.1 J	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8 J	ND
Nov-2018	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-29*																
May-2023	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-29***															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.88 J	ND	0.45 J	ND	ND	ND	9.31	4.23
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.99 J	ND	0.66 J	ND	ND	ND	6.72	4.54
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.97 J	0.45 J,B	0.54 J	ND	ND	ND	9.34 J	4.81
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.86 J	ND	0.51 J	ND	ND	ND	6.19	3.62
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.72 J	ND	0.53 J	ND	ND	ND	5.59	3.13
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J,B	ND	0.9 J	ND	ND	ND	12.1 J	3.4
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	0.8 J	ND	ND	ND	5.6	3.7
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	0.7 J	ND	ND	ND	6.4	3.9
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	0.9 J	ND	ND	ND	5.3	3.7
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	0.9 J	ND	ND	ND	5	3.5
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	9.1	3.2
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.54 J	ND	0.71 J	ND	ND	ND	4.3 CL	2.3 N3
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3 CL	2.4 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	1.9
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	1.4
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	0.7 J	ND	ND	ND	5.1	1.6
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.571 J	ND	0.751 J	ND	ND	ND	3.23 J	2.34 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	0.7 J	ND	ND	ND	3.9	1.5
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	1
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	0.6 J	ND	ND	ND	3.1	1.1

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-29***															
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.1	*1 J*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.5	*0.9 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-29***															
Mar-2013	ND	ND	ND	ND	ND	ND	ND	3.78	0.36 J	ND	ND	ND	0.5 J	0.92 J	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	4.65	ND	ND	ND	ND	0.6 J	0.79 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	4.04	ND	ND	ND	ND	0.57 J	0.94 J	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	3.8	ND	ND	ND	ND	0.51 J	0.48 J	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	3.29	ND	ND	ND	ND	0.44 J	0.45 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND
May-2016	ND	ND	ND	0.1 J	ND	ND	ND	3.1	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	0.5 J	0.6 J	ND	ND	ND
May-2017	ND	ND	ND	0.1 J	ND	ND	ND	2.9	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
Oct-2017	ND	ND	ND	0.2 J	ND	ND	ND	2.5	ND	ND	ND	ND	0.4 J	0.4 J	ND	ND	ND
May-2018	ND	ND	ND	ND	1.2	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	0.75 J	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	**1.9 D6**	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	0.274 J	0.46 JB	ND	ND	1.36	ND	ND	ND	ND	0.326 J	0.277 J	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-29***															
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-30***											
Mar-2013	13.4	13.4	*0.107 J*	*ND*	20.6	1.75	*ND*	6.2	108.6	4.07	71	25.2
Oct-2013	12.5	12.5	*ND*	*ND*	21	1.71	*ND*	6.6	99.2	1.24	72	25.2
Mar-2014	8.92	8.92	*ND*	*ND*	21.8	1.8	*ND*	5.8	94.7	*0.863 J*	58	24.2
Oct-2014	3.3	3.3	*ND*	*ND*	21.3	1.82	*ND*	5.5	83	*ND*	70	21.4
Apr-2015	6.52	6.52	*ND*	*ND*	21.5	1.88	*ND*	4.6	84.5	*ND*	68	20.9
Nov-2015	2.84	2.84	*ND*	*ND*	20.9	1.93	*ND*	5.4	129.7	*ND*	45	18.4
May-2016	2.72	2.72	*ND*	*ND*	22.8	1.86	*ND*	5	114.9	*ND*	77	18.9
Oct-2016	*ND*	*ND*	*ND*	*ND*	22.9	*NA*	*NA*	5.3	126.3	1.03	88	17.4
May-2017	*ND*	*ND*	*ND*	*6 J*	23.5	1.84	*ND*	5.1	133.9	*0.765 J*	50	17.3
Oct-2017	*ND*	*ND*	*ND*	*7 J*	23.1	2.02	*ND*	5.3	146.2	*0.73 J*	73	17.5
May-2018	*2 JB*	*ND*	*ND*	*ND*	21.5	2	*ND*	5	131.8	28.6	*ND*	18
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	23.5	2.1	*ND*	4.78	98.3	*ND*	69	18.8
May-2019	*ND*	*NA*	*ND*	*ND*	23.2	2.2	*ND*	4.77	75.9	*ND*	55	18.3
Oct-2019	*2 JH1*	*NA*	*ND*	*ND*	22.7	2.1	*ND*	4.76	100.1	*ND*	72	19.7
May-2020	*2 J*	*NA*	*ND*	*ND*	25.6	2.2	0.01	4.42	99.5	*ND*	73	19.6
Oct-2020	*ND*	*NA*	*ND*	*ND*	23.6	1.9	*ND*	4.77	102.4	*ND*	86	18.3
Apr-2021	*4 J4c*	*NA*	*ND*	*ND*	26	2.2	*ND*	4.84	121.2	*ND*	56	19.3
Oct-2021	*2 J3c*	*NA*	*0.047 J*	*ND*	22.1	2.3	*ND*	4.97	151.4	*ND*	56	18.9
May-2022	*2 J3c*	*NA*	*ND*	*ND*	22.8	2.1	*ND*	4.82	138.6	*ND*	61	20 N3
Oct-2022	*2 J3c*	*NA*	*ND*	*ND*	26.4	2.1	*ND*	4.89	140.8	*ND*	50	19.9 N3
May-2023	*2 J2c*	*NA*	*ND*	25.1	27.3	2.2	*ND*	4.94	140	*ND*	80	19.5 N3
Oct-2023	*ND*	*NA*	*ND*	*0.9 JMH*	27.7	2.28 O-04	*NA*	4.92	140.4	*ND*	54	20 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-30***													
Mar-2013	*ND*	*ND*	0.026	*ND*	*ND*	7.64	7.6	*0.007 J*	*0.0023 J*	*0.0013 J*	0.29	*0.0067 J*	*ND*	1.48	1.48
Oct-2013	*ND*	*ND*	0.0302	*ND*	*ND*	7.39	7.55	*0.0022 J*	*0.0019 J*	*0.000525 J*	*0.0226 J*	*ND*	*ND*	1.63	1.69
Mar-2014	*0.000575 J*	*0.000086 J*	0.0279	*ND*	*ND*	7	7.06	*0.0013 J*	*0.0017 J*	*0.0013 J*	0.0734	*0.0057 J*	*ND*	1.64	1.63
Oct-2014	*0.0004 J*	*ND*	0.0289	*ND*	*ND*	5.96	5.94	*0.0011 J*	*0.0018 J*	*0.000821 J*	0.0747	*ND*	*ND*	1.57	1.4
Apr-2015	*0.000927 J*	*ND*	0.031	*ND*	*ND*	5.79	5.78	*0.000877 J*	*0.0019 J*	*0.0015 J*	*0.0312 J*	*0.0135 J*	*ND*	1.57	1.57
Nov-2015	*ND*	*ND*	0.0284	*0.000066 J*	*0.000064 J*	4.82	4.68	*0.000609 J*	*0.0017 J*	*0.0016 J*	*0.0353 J*	*ND*	*0.00038 J*	1.55	1.53
May-2016	*ND*	*ND*	0.0307	*0.00012 J*	*ND*	4.89	4.64	*0.0015 J*	0.002	*0.002 J*	*ND*	*ND*	*ND*	1.61	1.58
Oct-2016	*ND*	*ND*	0.0274	*ND*	*ND*	4.41	4.47	*0.0017 J*	0.002	*0.0014 J*	*ND*	*ND*	*ND*	1.55	1.54
May-2017	*ND*	*ND*	0.0317	*0.00011 J*	*ND*	4.28	4.33	*0.00079 J*	0.002	*0.002 J*	*ND*	*ND*	*ND*	1.61	1.6
Oct-2017	*ND*	*ND*	0.0263	*0.00011 J*	*ND*	4.27	4.48	*ND*	0.0018	*0.0014 J*	*ND*	*ND*	*ND*	1.66	1.58
May-2018	*0.000036 JB*	*ND*	0.032	*0.0001 J*	*0.000058 J*	4.5	4.5	*0.0027 JB*	0.0019	0.0026 B	*0.013 J*	*ND*	*ND*	1.6	1.7
Nov-2018	*ND*	*ND*	0.032	*0.00012 J*	*0.000064 J*	4.6	4.6	*0.0032 J*	0.002	*0.0018 J*	*0.016 J*	*ND*	*0.000033 J*	1.8	1.7
May-2019	*ND*	*ND*	0.032	*ND*	*ND*	4.5	4.5	*ND*	0.0021	0.0033	*ND*	*ND*	*ND*	1.7	1.7
Oct-2019	*0.000094 JB*	*ND*	0.031	*0.000099 J*	*0.00028 JB*	4.9	4.5	*0.0042 J*	0.0021	0.0039	*0.021 J*	*0.018 J*	*0.000075 JB*	1.8	1.7
May-2020	*0.000061 J*	*ND*	0.033	*0.0001 J*	*ND*	4.8	4.8	*0.0047 J*	0.0022	0.014	*0.024 J*	*0.011 J*	*ND*	1.8	1.8
Oct-2020	*ND*	*ND*	0.033	*ND*	*ND*	4.5	4.5	*0.0073 JB*	*0.0025 J*	*ND*	*0.0093 J*	*ND*	*ND*	1.7	1.8
Apr-2021	*ND*	*ND*	0.034	*ND*	*ND*	4.7	4.3	*0.00081 J*	*0.0023 J*	0.0053	*ND*	*ND*	*ND*	1.9	1.7
Oct-2021	*ND*	*ND*	0.036	*ND*	*ND*	4.6	4.7	*0.0019 J*	*0.0025 J*	*0.0015 J*	*0.012 J*	*ND*	*ND*	1.8	1.8
May-2022	*ND*	*ND*	0.036	*ND*	*ND*	4.8	5.4	*0.0018 J*	*0.0023 J*	*0.0015 J*	*ND*	*ND*	*ND*	1.9	2.1
Oct-2022	*ND*	*ND*	0.035	*0.00012 J*	*ND*	4.8	5.3	*0.002 J*	*0.0025 J*	*0.0019 J*	*ND*	*ND*	*ND*	1.9	2
May-2023	*ND*	*ND*	0.037	*0.0001 J*	*ND*	4.8	5	*0.0015 J*	0.0026	*0.0015 J*	*ND*	*ND*	*ND*	1.9	1.9

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-30***													
Oct-2023	*ND*	*ND*	0.036	*0.00015 J*	*ND*	4.9	4.9	0.0039 B	0.0026	*ND*	*ND*	*0.037 J*	*ND*	1.9	2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-30*												
Mar-2013	0.0145	0.0146	0.000097 J	0.0055 J	1.45	1.35	ND	ND	12.1	12.3	0.000257 J	ND	0.019
Oct-2013	0.0106	0.0108	ND	0.0032 J	1.18	1.2	ND	ND	10.4	10.6	ND	ND	0.0156
Mar-2014	0.0087 J	0.0085 J	ND	0.0031 J	1.39	1.4	ND	ND	10.3	10.4	0.000698 J	ND	0.0077 J
Oct-2014	0.0086 J	0.0083 J	ND	0.003 J	1.38	1.37	ND	ND	10.2	10.1	ND	ND	0.0073 J
Apr-2015	0.009 J	0.0092 J	ND	0.0031 J	1.35	1.35	ND	ND	10.8	10.8	ND	ND	0.0106
Nov-2015	0.0086 J	0.0088 J	ND	0.0029 J	1.32	1.31	ND	ND	10.6	10.5	ND	ND	0.0071 J
May-2016	0.0097	0.0096	ND	0.0035 J	1.26	1.25	ND	ND	10.8	10.5	ND	ND	ND
Oct-2016	0.0114	0.0087	ND	0.0042	1.35	1.34	ND	ND	10.5	10.7	ND	ND	0.0049 J
May-2017	0.0096	0.0092	ND	0.0032 J	1.37	1.36	ND	ND	10.5	10.4	ND	ND	0.0051 JB
Oct-2017	0.0089	0.0095	ND	0.0032 J	1.34	1.38	ND	ND	10.9	10.4	ND	ND	ND
May-2018	0.009	0.0093	ND	0.004	1.4 J	0.88 J	ND	ND	10.2	10.7	0.00023 J	0.0032 B	0.0061
Nov-2018	0.01	0.0099	ND	0.0043	1.5 J	1 J	0.00016 J	ND	9.9	10.7	ND	0.0025	0.0062
May-2019	0.01	0.01	ND	0.006	ND	ND	ND	ND	9.6	9	ND	0.0051	0.0057
Oct-2019	0.011	0.01	ND	0.005	1.6 J	1.6 J	ND	ND	10.9	10.5	ND	ND	0.011 B
May-2020	0.012	0.01	ND	0.0054	1.6 J	1.4 J	ND	ND	9.8	10.6	ND	0.0033	0.007
Oct-2020	0.01	0.01	ND	0.004	1.4 J	1.3 J	ND	ND	10.2	10.3	ND	0.0032 JB	ND
Apr-2021	0.011	0.01	ND	0.0041 J	1.5	1.4	ND	ND	12.4	11.8	ND	ND	0.0042 J
Oct-2021	0.011	0.011	ND	0.0043	1.5	1.41	ND	ND	11.8	11.5	ND	ND	0.0036 J
May-2022	0.012	0.013	ND	0.0042	1.4	1.6	ND	ND	11.1	12	ND	ND	ND
Oct-2022	0.012	0.012	ND	0.0047	1.5	1.7	ND	ND	11.3	12.9	ND	ND	0.0054
May-2023	0.012	0.011	ND	0.0046	1.5	1.6	ND	ND	11	11.3	ND	ND	0.0047 J
Oct-2023	0.012	0.013	ND	0.005 B	1.6	1.6	ND	ND	11.8	11.9	ND	ND	0.0052

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-30*																
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-30*																
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-30***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.34 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*0.39 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.181 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-30*															
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-30***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*0.89 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-30***															
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

HISTORICAL TABLES –
COMAR Wells

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-07***											
Nov-1993	10	10	0.1	ND	2.9	0.3	ND	5.75	31.5	ND	ND	3.38
Apr-1994	10	10	0.1	ND	3	0.3	ND	5.61	22.3	3	20	3.4
Apr-1995	ND	ND	ND	ND	2.7	0.3	ND	5.2	21.6	2.1	33	2.3
Apr-1997	ND	8	ND	ND	2.5	0.17	ND	NA	NA	ND	80	9.6
Oct-1997	2	2	0.23	ND	ND	ND	ND	6.17	39.7	ND	40	6.5
Apr-1998	ND	ND	0.21	ND	2.17	0.38	ND	6.37	41.9	0.65	12	3.1
Apr-1999	ND	ND	0.74	ND	3.88	0.34	ND	5.32	25.7	ND	28	3.7
Oct-1999	ND	ND	0.08	ND	3.12	0.433	ND	5.12	23.1	ND	47	3.1
Apr-2000	2	2	ND	ND	2.3	0.4	ND	5.85	20	ND	19	4.2
Oct-2000	3	NA	ND	ND	2.61	ND	ND	5.41	27.5	ND	ND	3.45
Apr-2001	3.3	NA	ND	ND	1.49	ND	ND	NA	NA	ND	22	3.49
Sep-2001	6	6	ND	ND	4.04	1.3	ND	5.17	24	ND	25	4.7
Mar-2002	4	4	ND	ND	1.49	0.282	ND	5.6	28.1	ND	21	3.79
Sep-2002	5	5	ND	ND	3.19	ND	ND	5.6	28.3	ND	32	5.2
Mar-2003	5	5	ND	ND	3.37	ND	ND	5.5	31.2	ND	21	5.64
Oct-2003	4.3	4.3	ND	ND	2.69	0.289	ND	5.3	25.7	ND	42	4.97
Apr-2004	3.2	3.2	ND	ND	2.69	0.27	ND	5.5	22.3	ND	41	3.71
Oct-2004	8.1	8.1	ND	ND	2.94	0.32	ND	5.7	22.4	ND	19	11
Apr-2005	3.6	3.6	ND	ND	2.63	0.32	ND	5.7	22.4	ND	36	4.3
Oct-2005	11	11	ND	ND	3.06	0.3	ND	4.8	34.5	ND	34	10
Mar-2006	7.1	7.1	ND	ND	2.84	0.32	ND	5.1	28.9	0.58	22	5.45
Sep-2006	4.3	4.3	ND	ND	2.9	0.41	ND	5.5	25.5	ND	27	3.85
Mar-2007	5.1	5.1	ND	ND	3.03	0.38	ND	5.2	23.3	ND	ND	3.98
Sep-2007	6.3	6.3	ND	ND	7.78	ND	ND	5.2	25.6	ND	21	5.54
Mar-2008	6.3	6.3	ND	ND	7.05	ND	ND	5.4	27.1	ND	31	5.67
Sep-2008	7.3	7.3	ND	ND	3.16	ND	ND	5.2	24.2	ND	31	4.4
Mar-2009	20	20	ND	ND	2.44	0.11	ND	5.6	31.9	ND	11	13.9
Oct-2009	35	35	ND	ND	2.29	0.08	ND	5.1	26	ND	49	24.9
Apr-2010	22.5	22.5	ND	ND	3.07	0.08	ND	4.8	21.7	ND	39	18.2
Oct-2010	30	30	ND	ND	2.91	ND	ND	4.5	25.4	ND	27	27.6
Apr-2011	24	24	ND	ND	2.82	0.1	ND	4.3	26.6	ND	34	27.4
Sep-2011	26	26	ND	ND	2.58	ND	ND	5.7	24.9	ND	28	18.8
Mar-2012	32	32	ND	ND	2.51	ND	ND	4.7	24.8	ND	42	22.4
Sep-2012	7.04	7.04	ND	ND	2.93	0.285	ND	4.1	24.4	ND	20	4.27
Mar-2013	11.4	11.4	0.159 J	79.5	3.17	0.245	ND	4.8	38.7	0.983 J	42	7.08
Oct-2013	7.2	7.2	ND	ND	3.38	0.278	ND	6.2	29.8	0.521 J	ND	4.86
Mar-2014	8.8	8.8	ND	ND	3.88	0.193	ND	5.9	30.5	ND	32	4.85

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-07***											
Oct-2014	*ND*	*ND*	*ND*	*5 J*	4.4	0.261	*ND*	5.3	27.1	*ND*	*ND*	4.89
Apr-2015	7.56	7.56	*ND*	*ND*	3.93	0.33	*ND*	4.5	31.5	*ND*	*ND*	5.34
Nov-2015	5.56	5.56	*ND*	10	5.09	0.342	*ND*	5.9	55.3	*ND*	*20 J*	5.1
May-2016	8.16	8.16	*ND*	*ND*	6.53	*ND*	*ND*	5.9	68.3	*ND*	28	7.2
Oct-2016	5.6	5.6	*ND*	*ND*	6.47	*NA*	*NA*	5.7	61.3	*0.538 J*	30	7.2
May-2017	17.3	17.3	*ND*	*ND*	4.48	0.0902	*ND*	5.9	84.5	*0.515 J*	30	19.1
Oct-2017	8.2	8.2	*0.0707 J*	*ND*	11.2	0.378	*ND*	6.1	89.2	*ND*	35	9.3
May-2018	10 B	10	*ND*	*ND*	14	*ND*	0.029	5.8	95.4	*ND*	53	10.7
Nov-2018	10 B	10	*ND*	*ND*	14.4	*ND*	0.1	6.09	92.5	*ND*	*ND*	10.1
May-2019	*ND*	*NA*	*ND*	*ND*	11.2	*ND*	0.16	5.72	59	*ND*	18	11.4
Oct-2019	*2.5 JH1*	*NA*	*ND*	*6 J*	10.5	0.25	0.032 H1	5.86	78.4	*ND*	68	11.4
May-2020	24	*NA*	*ND*	*6.9 J*	11.1	*ND*	0.012	5.57	111.6	*ND*	57	14.2
Oct-2020	28	*NA*	*ND*	*4.8 J*	11.2	0.16	*0.0094 J*	5.61	99.7	*ND*	65	18
Apr-2021	20	*NA*	*ND*	*ND*	12.3	0.17	*ND*	6.19	123	*ND*	*ND*	17.2
Oct-2021	20	*NA*	*ND*	*ND*	9.3	0.13	*ND*	6.22	112.7	*ND*	51	17.1
May-2022	24	*NA*	*ND*	*ND*	8.7	*0.063 J*	0.017	6.2	130.2	*ND*	38	21.2 N3
Oct-2022	24	*NA*	*ND*	*6.1 J*	12.4	0.12	*ND*	6.14	126.2	*ND*	41	18.8 N3
May-2023	24	*NA*	*ND*	*ND*	12.2	0.17	0.015	6.02	120.2	*ND*	48	17.9 N3
Oct-2023	12	*NA*	0.14	*6.8 J*	15	*ND*	*NA*	5.85	112.4	*ND*	54	15.3 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-07*													
Nov-1993	NA	ND	ND	NA	ND	0.94	NA	ND	NA	ND	25.5	0.82	ND	0.25	NA
Apr-1994	NA	ND	ND	NA	ND	0.9	NA	ND	NA	ND	1.79	0.26	ND	0.28	NA
Apr-1995	ND	ND	0.7	ND	ND	0.54	NA	ND	ND	ND	5.3	0.41	ND	0.24	NA
Oct-1996	ND	ND	0.011	ND	ND	0.7	0.7	ND	ND	ND	0.55	0.22	ND	ND	0.17
Apr-1997	ND	ND	0.034	ND	ND	3	1.4	ND	ND	ND	4.3	2.1	ND	0.56	ND
Oct-1997	ND	ND	0.014	ND	ND	0.842	0.83	ND	ND	ND	23.9	0.846	ND	0.239	0.234
Apr-1998	ND	ND	0.014	ND	ND	0.841	0.821	ND	ND	ND	23.1	0.767	ND	0.249	0.246
Apr-1999	ND	ND	0.014	ND	ND	1.03	1.01	ND	ND	ND	22	0.77	ND	0.268	0.26
Oct-1999	ND	ND	0.017	ND	ND	1.35	0.995	ND	ND	ND	45	0.831	ND	0.323	0.251
Apr-2000	ND	ND	0.015	ND	ND	1.11	0.823	ND	ND	0.011	33.1	0.885	ND	0.357	0.262
Oct-2000	ND	ND	0.014	ND	ND	0.911	0.869	ND	ND	ND	24.3	0.718	ND	0.284	0.286
Apr-2001	ND	ND	0.014	ND	ND	0.916	NA	ND	ND	ND	20.7	NA	ND	0.292	NA
Sep-2001	ND	ND	0.027	ND	ND	1.38	0.964	ND	ND	ND	97.5	0.65	0.003	0.305	0.276
Mar-2002	ND	ND	0.015	ND	ND	1.11	1.04	ND	ND	ND	22.5	1.11	ND	0.249	0.26
Sep-2002	ND	ND	0.021	ND	ND	1.6	1.11	ND	ND	ND	59.5	1.35	0.002	0.296	0.244
Mar-2003	ND	ND	0.019	ND	ND	1.81	0.994	ND	ND	ND	23.3	0.984	0.002	0.275	0.242
Oct-2003	ND	ND	0.018	ND	ND	1.47	1.08	ND	ND	0.012	10.8	0.173	0.003	0.314	0.267
Apr-2004	ND	ND	0.014	ND	ND	1.01	0.894	ND	ND	ND	8.44	0.651	ND	0.286	0.266
Oct-2004	ND	ND	0.051	ND	ND	3.81	0.928	ND	ND	ND	152	0.561	0.011	0.349	0.267
Apr-2005	ND	ND	0.022	ND	ND	1.29	1.04	ND	ND	ND	30.6	1.14	0.004	0.271	0.258
Oct-2005	ND	ND	0.013	ND	ND	3.47	3.53	ND	ND	ND	1.25	0.248	ND	0.333	0.306

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-07***													
Mar-2006	ND	ND	0.01	ND	ND	1.86	1.86	ND	ND	ND	0.886	0.886	ND	0.2	0.2
Sep-2006	ND	ND	0.012	ND	ND	1.13	1.37	ND	ND	ND	6.85	0.43	ND	0.249	0.257
Mar-2007	ND	ND	0.016	ND	ND	1.16	1.37	ND	ND	ND	12.6	0.521	ND	0.261	0.252
Sep-2007	ND	0.003	0.013	ND	ND	1.79	1.71	ND	ND	ND	0.933	0.662	ND	0.261	0.258
Mar-2008	ND	ND	0.015	ND	ND	1.85	1.78	ND	ND	ND	9.16	0.848	ND	0.255	0.23
Sep-2008	ND	ND	0.013	ND	ND	1.35	1.25	ND	ND	ND	4.05	0.759	ND	0.251	0.247
Mar-2009	ND	ND	0.012	ND	ND	5.02	4.37	ND	ND	ND	8.26	4.53	ND	0.33	0.298
Oct-2009	ND	ND	0.018	ND	ND	9.1	1.41	ND	ND	ND	14.3	1.06	ND	0.532	0.259
Apr-2010	ND	ND	0.024	ND	ND	6.56	5.83	ND	ND	ND	10.4	7.39	ND	0.444	0.396
Oct-2010	ND	0.002	0.018	ND	ND	9.96	9.5	ND	ND	0.018	11.4	9.55	ND	0.644	0.573
Apr-2011	ND	ND	0.016	ND	ND	6.14	5.15	ND	ND	ND	8.2	6.96	ND	0.516	0.4
Sep-2011	ND	ND	0.017	ND	ND	6.66	5.28	ND	ND	ND	10.3	8.49	ND	0.526	0.424
Mar-2012	ND	ND	0.019	ND	ND	7.91	8.26	ND	ND	ND	7.03	6.67	ND	0.634	0.652
Sep-2012	ND	ND	0.0161	0.000286 J	ND	1.24	1.39	ND	0.0018 J	0.0045 J	16.6	1.6	0.000551 J	0.285	0.29
Mar-2013	ND	ND	0.243	**0.0092 R,C**	0.0025 J	2.41	2.33	0.0533	0.0095 J	0.146	1940	2.71	0.0067	0.259	0.338
Jun-2013	NA	NA	NA	0.00015 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2013	0.000272 J	ND	0.0273	0.000789 J	0.000091 J	1.53	1.31	0.0069 J	0.0022 J	0.0085 J	103	1.37	0.000725 J	0.253	0.228
Mar-2014	0.000677 J	ND	0.0137	0.000208 J	ND	1.49	1.22	0.0013 J	0.0015 J	0.000861 J	3.46	1.62	ND	0.273	0.275
Oct-2014	0.00029 J	ND	0.0199	0.000316 J	ND	1.36	1.55	0.000384 J	0.0019 J	0.0035 J	8.18	1.76	ND	0.364	0.34
Apr-2015	0.000734 J	ND	0.0175	0.000333 J	ND	1.59	1.52	0.000813 J	0.0017 J	0.0026 J	5.64	1.98	ND	0.33	0.326
Nov-2015	0.000416 J	ND	0.0193	0.000401 J	0.000074 J	1.37	1.3	0.000686 J	0.0026 J	0.0039 J	3.67	1.07	0.000705 J	0.406	0.405
May-2016	ND	ND	0.0228	0.00034 J	ND	2.07	2	0.0011 J	0.0026	0.0038 J	6.63	2.68	0.00032 J	0.499	0.449
Oct-2016	ND	ND	0.0228	0.00039 J	ND	2.14	2.17 J+	0.0012 J	0.0022	0.004 J	9.41	2.92 J+	0.00052 J	0.44	0.44 J+
May-2017	ND	ND	0.0384	0.00043 J	ND	6.49	6.38	0.0151	0.0018	0.0216	30.2	10.3	0.00051 J	0.692	0.608

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-07***													
Oct-2017	*ND*	*ND*	0.0387	*0.00049 J*	*ND*	2.56	3.06	0.0334	0.0048	0.0255	10.3	5.47	*0.00033 J*	0.704	0.695
May-2018	*ND*	*ND*	*0.0439 J*	*0.00063 J*	*ND*	2.8	2.7	*0.0021 J*	*0.0023 J*	*ND*	25.8	5.1	*ND*	*0.89 J*	*0.93 J*
Nov-2018	*ND*	*ND*	0.051	0.001	*0.0001 J*	2.6	2.5	*0.0024 J*	0.0033	0.0082	70.1	6	*0.00038 J*	*0.91 J*	*0.98 J*
May-2019	*ND*	*ND*	0.046	0.00044	*ND*	3.3	3.3	*ND*	0.0029	0.0068	82.2	7.7	*ND*	*ND*	*ND*
Oct-2019	*0.00033 J*	*0.0005 J*	0.042	0.00074	*0.00038 J*	3.3	3.3	0.0072	0.0039	0.0077	42.7	5.4	*0.00058 J*	0.79	*0.78 J*
May-2020	*ND*	*ND*	0.046	*0.00038 J*	*0.00046 J*	4.2	4.5	0.014	*0.0026 J*	0.0088	32.9	17.4	*ND*	0.91	1
Oct-2020	*ND*	*ND*	0.038	*ND*	*ND*	5.6	5.5	*0.0021 J*	0.0025	*ND*	11.6	11.4	*ND*	0.98	*0.96 J*
Apr-2021	*ND*	*ND*	0.043	*0.00018 J*	*ND*	5.2	4.9	*0.0015 J*	*0.0023 J*	*0.0033 J*	16.1	12.3	*ND*	1	0.94
Oct-2021	*0.000051 J*	*ND*	0.042	*0.00035 J*	*ND*	5.4	5.7	*0.0019 J*	0.0036	0.0032	12.4	8.7	*0.000035 J*	0.88	0.91
May-2022	*ND*	*ND*	0.052	*0.00043 J*	*ND*	6.8	6.9	0.0056	0.0032	0.0077	17.6	12.3	*ND*	1.1	1.1
Oct-2022	*ND*	*ND*	0.049	*0.0004 J*	*ND*	6.1	6.3	*0.0013 J*	0.0044	0.003	29.3	10.4	*ND*	0.87	1.1
May-2023	*0.00032 J*	*0.00086 J*	0.057	0.0008	*ND*	5.1	5.2	0.012	0.0067	0.0068	49.4	7.3	*0.00043 J*	1.3	1.3
Oct-2023	*ND*	*0.0014 J*	0.067	0.0014	*ND*	4.2	4.6	0.092	0.0076	0.014 B	87.7	7.8	*ND*	1.2	1.3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-07*												
Nov-1993	0.06	NA	ND	NA	1.2	NA	ND	NA	1.5	NA	NA	NA	0.05
Apr-1994	0.03	NA	ND	NA	1.46	NA	ND	NA	1.69	NA	NA	NA	0.05
Apr-1995	ND	NA	ND	ND	1.3	NA	ND	ND	1.3	NA	ND	ND	0.03
Oct-1996	0.015	0.011	NA	ND	ND	ND	ND	ND	2.2	2.4	ND	ND	0.035
Apr-1997	0.099	0.048	ND	ND	4.4	3	ND	ND	2.3	2.3	ND	ND	0.082
Oct-1997	0.024	0.024	NA	0.011	1.3	0.83	ND	ND	1.36	1.37	ND	ND	ND
Apr-1998	0.025	0.04	NA	ND	1.15	1.06	ND	ND	1.56	1.58	ND	ND	0.03
Apr-1999	0.027	0.029	NA	ND	1.82	1.09	ND	ND	1.65	1.61	ND	ND	ND
Oct-1999	0.029	0.026	NA	ND	0.847	1.17	ND	ND	2.14	1.51	ND	ND	0.011
Apr-2000	0.019	0.025	NA	ND	1.2	1.22	ND	ND	2.42	1.56	ND	ND	0.031
Oct-2000	0.022	0.02	NA	ND	1.64	1.23	ND	ND	1.69	1.65	ND	ND	ND
Apr-2001	0.022	NA	NA	ND	1.09	NA	ND	ND	1.61	NA	ND	ND	ND
Sep-2001	0.016	0.02	NA	ND	1.1	1.19	ND	ND	1.59	1.57	ND	ND	ND
Mar-2002	0.03	0.027	NA	ND	1.51	1.66	ND	ND	1.63	1.6	ND	ND	ND
Sep-2002	0.024	0.031	NA	ND	1.74	1.77	ND	ND	2.06	1.47	ND	ND	ND
Mar-2003	0.029	0.021	NA	ND	1.99	0.928	ND	ND	1.54	1.46	ND	ND	ND
Oct-2003	0.014	0.013	NA	ND	2.58	1.25	ND	ND	2.16	1.54	ND	ND	ND
Apr-2004	0.019	0.017	ND	1.58	1.89	1.09	ND	ND	1.58	1.48	ND	ND	ND
Oct-2004	0.082	0.018	ND	ND	1.35	1.13	ND	ND	1.97	1.23	ND	ND	0.023
Apr-2005	0.046	0.022	ND	ND	0.92	0.9	ND	ND	1.6	1.58	ND	ND	ND
Oct-2005	0.032	0.033	ND	ND	0.731	0.761	ND	ND	1.34	1.3	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.662	0.662	ND	ND	1.18	1.18	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-07***												
Sep-2006	0.014	0.015	ND	ND	0.953	1.01	ND	ND	1.31	1.34	ND	ND	ND
Mar-2007	0.014	0.015	ND	ND	0.945	1	ND	ND	1.36	1.37	ND	ND	0.011
Sep-2007	0.02	0.02	ND	ND	0.97	0.977	ND	ND	1.31	1.32	ND	ND	0.018
Mar-2008	0.025	0.022	ND	ND	1.17	1.01	ND	ND	1.47	1.27	ND	ND	ND
Sep-2008	0.023	0.021	ND	ND	1.04	1	ND	ND	1.29	1.25	ND	ND	0.014
Mar-2009	0.125	0.1	ND	ND	1.98	1.76	ND	ND	1.69	1.64	ND	ND	ND
Oct-2009	0.177	0.024	ND	0.012	3.98	0.878	ND	ND	2.62	1.23	ND	ND	ND
Apr-2010	0.321	0.247	ND	ND	2.21	2.08	ND	ND	1.77	1.75	ND	ND	ND
Oct-2010	0.142	0.155	ND	0.019	3.26	3.13	ND	ND	2.19	1.96	ND	ND	ND
Apr-2011	0.119	0.125	ND	ND	3.54	2.78	ND	ND	2.09	1.8	ND	ND	ND
Sep-2011	0.146	0.138	ND	ND	3.59	2.62	ND	ND	2.43	1.92	ND	ND	ND
Mar-2012	0.109	0.092	ND	ND	4.12	4.26	ND	ND	2.51	2.63	ND	ND	ND
Sep-2012	0.0289	0.0286	0.000023 J	0.0032 J	0.949	1.03	ND	ND	1.31	1.35	ND	ND	0.0044 J
Mar-2013	0.32	0.0668	0.00014 J	0.04 J	1.09	1.38	ND	0.000269 J	1.16	1.66	ND	ND	0.109
Oct-2013	0.0542	0.0314	0.000077 J	0.0043 J	0.955	0.85	ND	0.0022 J	1.27	1.15	0.00018 J	0.006 J	0.0175 J
Mar-2014	0.0393	0.0307	ND	0.0027 J	1.28	1.2	ND	0.000154 J	1.79	1.82	ND	ND	0.0071 J
Oct-2014	0.0309	0.0354	0.000025 J	0.0032 J	1.38	1.42	ND	ND	1.95	1.88	ND	ND	0.0118
Apr-2015	0.0384	0.0367	0.000029 J	0.003 J	1.3	1.28	0.000802 J	0.000065 J	1.99	1.98	ND	ND	0.0068 J
Nov-2015	0.0277	0.0259	ND	0.0047 J	1.22	1.21	ND	ND	2.44	2.46	0.000251 J	ND	0.0073 J
May-2016	0.0571	0.0497	ND	0.0049	1.54	1.23	ND	0.00012 J	3.33	3.09	ND	ND	ND
Oct-2016	0.0502 J+	0.0477 J+	ND	0.0051	1.43	1.43	ND	0.00025 J	3.18	3.13	ND	ND	0.0046 J
May-2017	0.184	0.171	ND	0.0518	2.44	2.42	ND	0.0117	2.59	2.41	ND	ND	0.0181 J
Oct-2017	0.0857	0.0849	ND	0.0889	1.72	1.77	ND	0.0312	5.21	5.09	ND	ND	0.0289 J
May-2018	0.0801	0.0711	ND	0.0139 J	2.2 J	1.7 J	ND	ND	7 B	6.7	ND	ND	0.009 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-07***												
Nov-2018	0.09	0.083	*ND*	0.0069	*1.6 J*	*2.5 J*	*0.00011 J*	*ND*	6.8	7.8	*ND*	*ND*	0.014
May-2019	0.12	0.14 M1	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	6.6	5.5	*ND*	*ND*	0.01
Oct-2019	0.099	0.096	*ND*	0.0086	*1.8 J*	*ND*	*0.00043 J*	*0.00046 J*	5.8	6.1	*0.00015 J*	0.0073	0.023
May-2020	0.15	0.16	*ND*	0.028	1.7	1.6	*ND*	0.0077	5.8	6	*ND*	*ND*	*0.01 J*
Oct-2020	0.11	0.11	*ND*	0.0061	*1.6 J*	*1.6 J*	*ND*	*ND*	6	5.8	*ND*	*0.00083 J*	*ND*
Apr-2021	0.14	0.12	*0.00005 J*	*0.0059 J*	1.8	1.7	*ND*	*ND*	6.5	6.2	*ND*	*ND*	*0.0037 J*
Oct-2021	0.12	0.12	*ND*	0.0072	1.7	1.6	*ND*	*ND*	4.7	4.9	*ND*	*ND*	0.0058
May-2022	0.17	0.17	*ND*	0.0078	2.1	2.2	*ND*	*ND*	5	5.2	*ND*	*ND*	0.0054
Oct-2022	0.15	0.16	*ND*	0.0062	2.1	2	*ND*	*ND*	5.9	6	*ND*	*ND*	0.0072
May-2023	0.15	0.14	*ND*	0.019	1.9	1.9	*ND*	*0.0012 J*	6.8	6.8	*ND*	*ND*	0.012
Oct-2023	0.14	0.14	*ND*	0.08	1.7	1.8	*ND*	*0.0018 J*	6.7	7	*ND*	*ND*	0.02

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.7 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.5 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-07*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-07***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.37 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-07***															
May-2017	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-07*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-07*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	4.3 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-07***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.583 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-07A***											
Nov-1993	ND	ND	ND	ND	3.3	ND	ND	4.43	51	7.4	ND	5.54
Apr-1994	5	5	0.1	ND	3	ND	ND	5.11	34.7	5.1	27	3.18
Apr-1995	ND	ND	ND	ND	3.8	ND	ND	4.7	46.1	9.1	45	8.8
Apr-1997	ND	ND	ND	ND	4	0.04	ND	NA	NA	12	58	23
Oct-1997	2	2	0.24	ND	2.73	ND	ND	5.66	46.6	13.7	33	12
Apr-1998	ND	ND	0.21	ND	4.39	ND	ND	6.07	40.7	9.48	16	11
Apr-1999	ND	ND	0.2	ND	4.49	ND	ND	4.47	47.3	6.03	43	12
Oct-1999	ND	ND	0.08	ND	5.12	0.128	ND	4.45	53.6	9.36	40	14
Apr-2000	2	2	ND	ND	3.34	ND	ND	5.01	37	7.01	38	10
Oct-2000	3	NA	ND	ND	3.37	ND	ND	4.74	41.9	6.71	38	10.6
Apr-2001	1.4	NA	ND	ND	3.54	ND	ND	NA	NA	5.02	45	10.1
Sep-2001	ND	ND	0.33	ND	6.41	1.19	ND	4.1	46	12.8	35	9.4
Mar-2002	2.2	2.2	ND	ND	3.85	ND	ND	4.9	44.3	7.58	31	9.01
Sep-2002	1.8	1.8	ND	ND	3.2	ND	ND	4.8	44.1	8.01	26	9.24
Mar-2003	2.3	2.3	ND	ND	3.57	ND	ND	4.8	47.2	6.71	27	9.41
Oct-2003	2	2	ND	ND	2.73	0.135	ND	5.4	54.5	8.97	64	11.8
Apr-2004	2.1	2.1	ND	ND	3.21	0.11	ND	4.9	44.2	11.2	54	14
Oct-2004	2.4	2.4	ND	14	3.49	0.15	ND	4.6	46	9.99	35	13.5
Apr-2005	1.9	1.9	ND	10	3.24	0.17	ND	4.6	46	11.2	54	12.5
Oct-2005	3.3	3.3	ND	ND	3.78	0.3	ND	4.3	41.4	13.3	45	11.7
Mar-2006	3.5	3.5	ND	ND	3.57	0.3	ND	4.3	51.8	11.4	36	11.3
Sep-2006	3	3	ND	ND	3.6	0.3	ND	4.6	40.8	9.94	32	11.4
Mar-2007	2.6	2.6	ND	ND	3.67	0.21	ND	4.8	44.3	9.24	16	9.95
Sep-2007	2.4	2.4	0.21	ND	7.81	ND	ND	4.7	42.4	10.9	43	11.1
Mar-2008	3	3	0.24	ND	8.04	ND	ND	4.7	43.9	8.72	29	10.4
Sep-2008	2.6	2.6	ND	ND	3.48	ND	ND	4.8	38	6.93	61	9.7
Mar-2009	2.5	2.5	ND	ND	3.2	0.15	ND	4.3	40.5	8.29	35	9.12
Oct-2009	2.4	2.4	ND	ND	3.2	0.16	ND	4.3	40.6	11.8	38	10.4
Apr-2010	2.6	2.6	ND	ND	3.5	0.31	ND	4	41	10.6	12	12
Oct-2010	1.6	1.6	ND	ND	3.76	0.52	ND	4.1	41.3	8.51	30	13.3
Apr-2011	14	14	ND	ND	3.3	0.2	ND	4.4	40.6	7.49	65	26
Sep-2011	2	2	0.23	ND	3.45	0.38	ND	4.7	41.8	8.03	48	11.6
Mar-2012	2.1	2.1	ND	ND	3.7	0.58	ND	3.8	44.2	10.3	18	12.8
Sep-2012	2.04	2.04	ND	ND	3.69	0.58	ND	3.8	41.6	11.1	60	12.4
Mar-2013	2.56	2.56	0.07 J	ND	4.28	0.458	ND	4.1	48	12.1	24	12.3
Oct-2013	2.64	2.64	ND	ND	5	0.3	ND	5.6	46.4	9.52	ND	11.5
Mar-2014	2.28	2.28	ND	ND	5.67	0.234	ND	4.8	43.6	9.91	47	9.82

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-07A***											
Oct-2014	*ND*	*ND*	*ND*	*6 J*	4.67	0.428	*ND*	4.3	42.5	9.81	37	12
Apr-2015	2.84	2.84	*ND*	*ND*	5.25	0.336	*ND*	3.8	48.2	8.7	*ND*	11.8
Nov-2015	2.64	2.64	*ND*	11	4.8	0.397	*ND*	4.8	59.7	11.2	*16 J*	13.3
May-2016	*ND*	*ND*	*ND*	*ND*	6.04	*ND*	*ND*	4.8	80.1	10.9	28	13.3
Oct-2016	*ND*	*ND*	*ND*	*7 J*	7.07	*NA*	*NA*	5	79.7	9.27	28	12.1
May-2017	*ND*	*ND*	*ND*	*ND*	7.33	0.348	*ND*	4.7	823	8.89	36	13
Oct-2017	*ND*	*ND*	*ND*	*ND*	8.52	0.369	*ND*	4.8	87	9.63	30	12.7
May-2018	*2 JB*	*ND*	*ND*	*ND*	8.2	*0.06 J*	*ND*	4.6	81.6	*8.6 J*	42	13.3
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	3.9	0.33	*ND*	4.39	47.4	*9.9 J*	*ND*	12.9
May-2019	*ND*	*NA*	*ND*	*ND*	3.6	0.24	*ND*	4.46	39.5	*ND*	15	13.2
Oct-2019	*2.5 JH1*	*NA*	*ND*	*ND*	3.5	0.29	*ND*	4.3	48.1	*6.8 J*	24	11.7
May-2020	*ND*	*NA*	*ND*	*ND*	4.5	0.31	*ND*	4.32	48.1	*9.9 J*	21	11.7
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	4.3	0.31	*ND*	4.26	48	9.9	46	12.1
Apr-2021	*ND*	*NA*	*ND*	*ND*	3.4	0.24	*ND*	4.51	54.2	*8.5 J*	*ND*	11.9
Oct-2021	*ND*	*NA*	*ND*	*ND*	3.1	0.23	*ND*	4.66	67.2	*8.3 J*	36	12.5
May-2022	*2 J3c*	*NA*	*ND*	*ND*	3.4	0.23	*ND*	4.49	72.1	*7.5 J*	31	13.5 N3
Oct-2022	*ND*	*NA*	*ND*	*8.4 J*	5.3	0.26	*ND*	4.42	74.2	10.5	36	13.1 N3
May-2023	*ND*	*NA*	*ND*	*ND*	6	0.31	*ND*	4.62	82.1	*8 J*	29	15.2 N3
Oct-2023	*ND*	*NA*	0.1	*6.8 J*	9	0.154 O-04R-01	*NA*	4.6	86.4	*8.7 J*	35	14.4 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-07A*													
Nov-1993	NA	ND	ND	NA	ND	0.46	NA	0.009	NA	ND	3.7	0.09	ND	1.2	NA
Apr-1994	NA	ND	ND	NA	ND	1.24	NA	ND	NA	ND	0.34	0.1	ND	1.09	NA
Apr-1995	ND	ND	0.8	ND	ND	1.2	NA	ND	ND	ND	0.16	0.09	ND	1.4	NA
Oct-1996	ND	ND	0.048	ND	ND	2	2	ND	ND	ND	ND	ND	ND	1.7	1.7
Apr-1997	ND	ND	0.055	ND	ND	2.4	2.6	ND	ND	ND	ND	ND	0.003	1.7	1.9
Oct-1997	ND	ND	0.057	ND	ND	2.49	2.44	ND	ND	ND	ND	ND	ND	1.7	1.71
Apr-1998	ND	ND	0.046	ND	ND	1.88	1.92	ND	ND	ND	ND	ND	ND	1.46	1.48
Apr-1999	ND	ND	0.053	ND	ND	2.14	1.92	ND	ND	ND	ND	ND	ND	1.72	1.55
Oct-1999	ND	ND	0.05	ND	ND	1.8	1.61	ND	ND	ND	ND	ND	ND	1.54	1.38
Apr-2000	ND	ND	0.044	ND	ND	1.7	1.68	ND	ND	ND	ND	ND	ND	1.44	1.42
Oct-2000	ND	ND	0.043	ND	ND	1.88	1.86	ND	ND	ND	ND	ND	ND	1.45	1.46
Apr-2001	ND	ND	0.044	ND	ND	1.63	NA	ND	ND	ND	ND	NA	ND	1.47	NA
Sep-2001	ND	ND	0.037	ND	ND	1.46	1.36	ND	ND	ND	0.037	ND	ND	1.39	1.26
Mar-2002	ND	ND	0.037	ND	ND	1.57	1.36	ND	ND	0.011	ND	ND	ND	1.23	1.2
Sep-2002	ND	ND	0.043	ND	ND	1.43	1.47	ND	ND	ND	0.055	ND	ND	1.38	1.36
Mar-2003	ND	ND	0.041	ND	ND	1.56	1.42	ND	ND	ND	ND	ND	ND	1.34	1.25
Oct-2003	ND	ND	0.05	ND	ND	2.06	2.02	ND	ND	ND	ND	ND	ND	1.61	1.54
Apr-2004	ND	ND	0.056	ND	ND	2.81	2.58	ND	ND	ND	0.121	ND	ND	1.7	1.62
Oct-2004	ND	ND	0.056	ND	ND	2.75	2.64	ND	ND	ND	ND	ND	ND	1.61	1.57
Apr-2005	ND	ND	0.054	ND	ND	2.49	2.24	ND	ND	ND	ND	ND	ND	1.52	1.39
Oct-2005	ND	ND	0.048	ND	ND	2.36	2.27	ND	ND	ND	ND	ND	ND	1.42	1.34

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-07A***													
Mar-2006	ND	ND	0.047	ND	ND	2.14	2.02	ND	ND	ND	ND	ND	ND	1.45	1.39
Sep-2006	ND	ND	0.045	ND	ND	2.12	2.11	ND	ND	ND	ND	ND	ND	1.48	1.45
Mar-2007	ND	ND	0.044	ND	ND	1.78	1.77	ND	ND	ND	ND	ND	ND	1.34	1.31
Sep-2007	ND	ND	0.048	ND	ND	2.15	2.16	ND	ND	ND	ND	ND	ND	1.39	1.4
Mar-2008	ND	ND	0.046	ND	ND	1.62	1.56	ND	ND	ND	ND	ND	ND	1.55	1.47
Sep-2008	ND	ND	0.04	ND	ND	1.41	1.35	ND	ND	ND	0.062	ND	ND	1.5	1.49
Mar-2009	ND	ND	0.037	ND	ND	1.31	1.3	ND	ND	ND	ND	ND	ND	1.42	1.38
Oct-2009	ND	ND	0.04	ND	ND	1.36	1.33	ND	ND	ND	0.069	ND	ND	1.71	1.67
Apr-2010	ND	ND	0.052	ND	ND	2.22	2.14	ND	ND	ND	ND	ND	ND	1.59	1.5
Oct-2010	ND	ND	0.054	ND	ND	2.66	2.58	ND	ND	ND	0.067	ND	ND	1.62	1.59
Apr-2011	ND	ND	0.046	ND	ND	7.67	4.47	ND	ND	ND	0.283	ND	ND	1.65	1.58
Sep-2011	ND	ND	0.049	ND	ND	2.26	2.22	ND	ND	ND	ND	ND	ND	1.44	1.44
Mar-2012	ND	ND	0.055	ND	ND	2.46	2.55	ND	ND	ND	0.15	ND	ND	1.62	1.66
Sep-2012	ND	ND	0.0542	0.000101 J	ND	2.49	2.47	ND	0.0037 J	0.0038 J	0.023 J	0.0225 J	ND	1.5	1.49
Mar-2013	ND	ND	0.0477	0.000121 J	ND	2.27	2.42	0.0012 J	0.003 J	0.003 J	0.0153 J	ND	ND	1.6	1.71
Oct-2013	ND	ND	0.0501	0.00013 J	0.000118 J	2.32	2.13	0.0072 J	0.0031 J	0.0028 J	0.0514	0.0672	ND	1.39	1.15
Mar-2014	0.000707 J	ND	0.039	0.000209 J	ND	1.85	1.97	0.0019 J	0.0026 J	0.0012 J	0.0071 J	0.0049 J	ND	1.26	1.35
Oct-2014	0.000751 J	ND	0.0542	ND	0.000186 J	2.4	2.49	0.0014 J	0.0036 J	0.0036 J	0.0178 J	ND	ND	1.47	1.52
Apr-2015	0.000315 J	ND	0.0521	ND	0.000144 J	2.29	2.43	0.0014 J	0.0036 J	0.0037 J	0.014 J	0.0178 J	ND	1.47	1.53
Nov-2015	0.000487 J	ND	0.056	0.000112 J	0.000199 J	2.85	2.85	0.000928 J	0.0041 J	0.0041 J	0.0983	0.04 J	0.000348 J	1.5	1.51
May-2016	ND	ND	0.0543	0.00014 J	0.0002 J	2.63	2.17	0.0016 J	0.0036	0.0036 J	ND	ND	ND	1.64	1.51
Oct-2016	ND	ND	0.0553	0.00012 J	ND	2.28	2.54 J+	0.0021 J	0.0032	0.0032 J	ND	ND	ND	1.57	1.77 J+
May-2017	ND	ND	0.0512	0.00013 J	ND	2.28	2.47	0.0015 J	0.003	0.0034 J	ND	ND	ND	1.77	1.83
Oct-2017	ND	ND	0.0491	0.000096 J	0.00015 J	2.28	2.26	ND	0.0032	0.0031 J	ND	ND	ND	1.71	1.68

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-07A***													
May-2018	*ND*	*ND*	*0.0524 J*	*ND*	*ND*	2.5	2.5	*0.0018 J*	*0.0029 J*	*0.0026 J*	*0.012 J*	*ND*	*ND*	1.7	1.7
Nov-2018	*ND*	*ND*	0.052	*0.00018 J*	*0.00021 J*	2.8	2.6	*0.0038 J*	0.0038	0.004	*0.016 J*	*ND*	*0.000016 J*	1.5	1.5
May-2019	*ND*	*ND*	0.055	*ND*	*ND*	2.8	2.6	*ND*	0.0041	0.0053	*ND*	*ND*	*ND*	1.5	1.4
Oct-2019	*0.00019 J*	*0.00047 J*	0.052	*0.00018 J*	*0.00041 J*	2.6	2.6	*0.0065 J*	0.0039	0.0051	*0.015 J*	*0.0096 J*	*0.00009 J*	1.3	1.3
May-2020	*ND*	*ND*	0.058	*ND*	*ND*	2.5	2.5	*0.0036 J*	*0.004 J*	0.0056	*ND*	*ND*	*ND*	1.3	1.4
Oct-2020	*ND*	*ND*	0.049	*ND*	*ND*	2.5	2.5	*0.0031 J*	0.0041	*ND*	*0.014 J*	*0.018 J*	*ND*	1.4	1.4
Apr-2021	*ND*	*ND*	0.053	*ND*	*0.00041 J*	2.5	2.4	*0.0024 J*	*0.0045 J*	*0.0045 J*	*ND*	*ND*	*ND*	1.4	1.3
Oct-2021	*ND*	*ND*	0.054	*0.00017 J*	*0.000082 J*	2.6	2.7	*0.0025 J*	0.005	0.0044	*0.012 J*	*ND*	*ND*	1.4	1.4
May-2022	*ND*	*ND*	0.055	*0.00018 J*	*0.00017 J*	2.7	2.6	0.0051	0.005	0.0054	0.069	*ND*	*ND*	1.6	1.5
Oct-2022	*ND*	*ND*	0.06	*0.00019 J*	*ND*	2.7	2.9	*0.0016 J*	0.005	0.0049	*ND*	*ND*	*ND*	1.5	1.6
May-2023	*ND*	*ND*	0.062	*0.00019 J*	*ND*	3.1	3	0.0027	0.0055	0.005	*ND*	*ND*	*0.00029 J*	1.8	1.8
Oct-2023	*ND*	*ND*	0.063	*0.00012 J*	*0.00017 J*	3	2.8	*0.0023 J*	0.0055	0.0067 B	*ND*	*0.015 J*	*ND*	1.7	1.7

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-07A*												
Nov-1993	ND	NA	ND	NA	1.6	NA	ND	NA	1.5	NA	NA	NA	0.01
Apr-1994	0.02	NA	ND	NA	1.26	NA	ND	NA	1.67	NA	NA	NA	0.03
Apr-1995	ND	NA	ND	ND	1.4	NA	ND	ND	1.3	NA	ND	ND	0.02
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	2.3	2.6	ND	ND	0.13
Apr-1997	0.015	0.014	0.0011	ND	1.1	2.5	ND	ND	2	1.5	ND	ND	ND
Oct-1997	0.017	0.017	NA	ND	0.733	0.589	ND	ND	1.51	1.47	ND	ND	0.01
Apr-1998	0.012	0.012	NA	0.011	0.918	0.928	ND	ND	1.52	1.51	ND	ND	ND
Apr-1999	0.013	0.013	NA	ND	1.51	0.878	ND	ND	1.86	1.68	ND	ND	ND
Oct-1999	0.011	0.012	NA	ND	0.597	0.869	ND	ND	1.88	1.63	ND	ND	ND
Apr-2000	0.011	0.011	NA	0.014	1.74	1.21	ND	ND	1.77	1.75	ND	ND	ND
Oct-2000	0.01	0.011	NA	ND	1.26	1.07	ND	ND	1.89	1.81	ND	ND	ND
Apr-2001	0.011	NA	NA	ND	1.1	NA	ND	ND	1.76	NA	ND	ND	ND
Sep-2001	0.011	0.01	NA	ND	1.32	0.875	ND	ND	1.72	1.53	ND	ND	ND
Mar-2002	0.011	ND	NA	ND	2.68	1.5	ND	ND	2.48	1.51	ND	ND	ND
Sep-2002	0.01	0.011	NA	ND	1.05	1.04	ND	ND	1.63	1.6	ND	ND	ND
Mar-2003	ND	ND	NA	ND	0.707	0.588	ND	ND	1.47	1.44	ND	ND	ND
Oct-2003	0.011	0.015	NA	ND	1.52	1.53	ND	ND	1.52	1.45	ND	ND	ND
Apr-2004	0.021	0.021	0.0005	ND	1.26	1.23	ND	ND	1.61	1.51	ND	ND	ND
Oct-2004	0.022	0.021	0.0007	ND	1.01	0.89	ND	ND	1.57	1.27	ND	ND	ND
Apr-2005	0.019	0.016	0.0006	ND	0.82	0.71	ND	ND	1.67	1.55	ND	ND	ND
Oct-2005	0.017	0.016	0.0008	ND	0.83	0.912	ND	ND	1.41	1.38	ND	ND	ND
Mar-2006	ND	ND	0.00093	ND	0.801	0.779	ND	ND	1.28	1.18	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-07A*												
Sep-2006	0.014	0.015	0.0009	ND	1.19	1.2	ND	ND	1.39	1.35	ND	ND	ND
Mar-2007	0.011	0.011	0.0004	ND	1.05	1.03	ND	ND	1.36	1.34	ND	ND	0.03
Sep-2007	0.017	0.017	0.0007	ND	0.989	0.951	ND	ND	1.37	1.37	ND	ND	0.011
Mar-2008	0.016	0.015	0.0004	ND	1.11	0.958	ND	ND	1.49	1.3	ND	ND	ND
Sep-2008	0.016	0.016	ND	ND	0.92	0.941	ND	ND	1.31	1.28	ND	ND	ND
Mar-2009	0.016	0.015	ND	ND	1.05	1.04	ND	ND	1.32	1.3	ND	ND	ND
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	0.019	0.018	ND	ND	0.834	0.801	ND	ND	1.33	1.3	ND	ND	ND
Apr-2010	0.017	0.016	ND	ND	0.85	0.792	ND	ND	1.57	1.53	ND	ND	ND
Oct-2010	0.021	0.021	0.0002	ND	0.784	0.75	ND	ND	1.43	1.45	ND	ND	ND
Apr-2011	0.022	0.02	ND	ND	1.69	1.6	ND	ND	1.97	1.87	ND	ND	0.016
Sep-2011	0.02	0.02	ND	ND	0.84	0.785	ND	ND	1.66	1.63	ND	ND	ND
Mar-2012	0.024	0.024	ND	ND	0.74	0.727	ND	ND	1.57	1.57	ND	ND	ND
Sep-2012	0.0227	0.0228	0.000199 J	0.0037 J	0.8	0.795	ND	ND	1.41	1.44	ND	ND	0.006 J
Mar-2013	0.0217	0.0225	0.000197 J	0.0028 J	0.892	0.95	0.000665 J	ND	1.8	1.93	ND	ND	0.0139
Oct-2013	0.0226	0.0217	ND	0.0029 J	0.775	0.695	0.000413 J	ND	1.79	1.49	0.000154 J	0.0062 J	0.0146
Mar-2014	0.02	0.0214	ND	0.0031 J	0.894	0.94	ND	ND	2.27	2.4	ND	ND	0.0077 J
Oct-2014	0.0229	0.0241	0.000077 J	0.0041 J	0.833	0.839	0.0013 J	ND	1.81	1.83	ND	ND	0.0069 J
Apr-2015	0.0241	0.0252	0.000047 J	0.004 J	0.898	0.906	0.0014 J	ND	2.26	2.29	ND	ND	0.0113
Nov-2015	0.0261	0.0264	ND	0.004 J	0.824	0.811	0.00099 J	ND	2.11	2.04	0.000247 J	ND	0.0124
May-2016	0.0267	0.0243	ND	0.004	0.936	0.772	ND	ND	3.03	2.75	ND	ND	ND
Oct-2016	0.0258 J+	0.0285 J+	ND	0.0044	0.935	0.979	0.00057	ND	3.56	3.63	ND	ND	0.0052 J
May-2017	0.0272	0.0289	ND	0.0034 J	0.981	1	0.00054 J	ND	3.5	3.38	ND	ND	0.0051 J
Oct-2017	0.0265	0.0286	ND	0.0031 J	0.932	0.919	0.00057 J	ND	4.1	4.17	ND	ND	0.0041 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-07A***												
May-2018	0.0284	0.0273	*0.00012 JB*	*0.0102 J*	*1.2 J*	*ND*	*ND*	*ND*	5.1 B	*4.5 J*	*0.0061 J*	*ND*	*0.0061 J*
Nov-2018	0.026	0.028	*ND*	0.005	*ND*	*1.1 J*	*0.00058 J*	*ND*	*1.8 J*	*2.6 JB*	*ND*	*0.00005 J*	0.0095
May-2019	0.025	0.025	*ND*	0.006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.01
Oct-2019	0.028	0.028	*ND*	0.0057	*ND*	*ND*	*0.00079 J*	*ND*	*1.8 J*	*2 J*	*ND*	0.0074 D6	0.017
May-2020	0.025	0.026	*ND*	*0.0064 J*	0.82	0.71	*ND*	*ND*	1.9	2.2	*ND*	*ND*	*0.0094 J*
Oct-2020	0.026	0.027	*ND*	0.0052	*ND*	*ND*	*ND*	*ND*	*2.3 J*	*2.1 J*	*ND*	*0.00068 J*	*ND*
Apr-2021	0.029	0.027	*0.00006 J*	*0.0055 J*	0.65	0.65	*ND*	*ND*	1.7	1.5	*ND*	*ND*	*0.008 J*
Oct-2021	0.029	0.029	*ND*	0.0057	0.64	0.6	*0.00089 J*	*ND*	1.6 B	1.7	*0.000049 J*	*ND*	0.0099
May-2022	0.035	0.032	*ND*	0.007	0.8	0.77	*ND*	*ND*	1.9	1.8	*ND*	*ND*	0.0096
Oct-2022	0.032	0.033	*ND*	0.0055	0.77	0.81	*ND*	*ND*	2.2	2.3	*ND*	*ND*	0.012
May-2023	0.034	0.034	*ND*	0.0063	0.96	0.92	*ND*	*ND*	2.7	2.7	*ND*	*ND*	0.012
Oct-2023	0.033	0.032	*ND*	0.0059	0.93	1	*ND*	*ND*	4	4.4	*ND*	*ND*	0.0092

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Oct-1996	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	3.9	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	4.6	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07A*																
Mar-2006	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.32 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.82 J	ND	ND	1.63 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-07A*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.8 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.7 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-07A*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	4.7
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	14
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	2.2
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	1 J	NA	NA	NA	1.5	5.9
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	1.1	5.5
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	1.3	NA	ND	NA	1.3	6.6
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	4.8	6.7
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	2.7	5.8
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	1.7	4.3
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.7 J
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	3
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	1.7
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	1.9
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	2.5
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.4	4.5
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	1.8
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.1	2.5

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-07A***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	1.9
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	0.6 J
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	0.9 J
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	1.3
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.68 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	ND	ND	ND	ND	0.77 J	0.37 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	ND	ND	ND	ND	0.41 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.24 J	ND	ND	ND	ND	ND	0.42 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.34 J	ND	ND	ND	ND	ND	0.6 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	0.34 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J,B	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	0.4 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	0.3 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-07A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.13 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.481 J*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-07A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	**6.6**	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	**5.1**	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	3.6	*ND*	*ND*	*NA*	*NA*	1.1	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.5	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	4.7	*ND*	*ND*	*NA*	*NA*	1.5	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.9	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*0.6 J*	*ND*	*ND*	2.9	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	2.5	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	2.2	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-07A***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	2.4	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.8 R	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	0.38 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	0.22 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-07A***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.507 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-08***										
Nov-1993	8	8	ND	33.8	6.2	0.4	ND	6.34	49	5.4	ND	6.55
Apr-1994	9	9	0.1	ND	6.5	0.4	ND	5.57	20.4	5.4	28	48.2
Apr-1995	5	5	ND	ND	7.1	0.5	ND	5.3	49.6	5.7	26	7.8
Apr-1997	ND	2	ND	ND	6	0.35	ND	NA	NA	5.7	42	7.6
Oct-1997	4	4	0.44	ND	5.05	0.195	ND	5.55	83.2	4.4	34	11
Apr-1998	4	4	0.2	ND	4.82	0.3	ND	6.14	45.7	3.58	31	9.5
Apr-1999	4	4	0.17	ND	10.1	ND	ND	5.05	45.6	5.74	64	12
Oct-1999	5	5	0.1	ND	5.83	0.334	ND	5.25	47.1	5.12	36	11
Apr-2000	7	7	ND	ND	3.92	0.39	ND	5.99	39	5.81	33	11
Oct-2000	7	NA	ND	ND	4.11	ND	ND	5.83	51.8	6.75	17	11.6
Apr-2001	5.2	NA	ND	ND	4.59	ND	ND	NA	NA	6.13	35	12.1
Sep-2001	5.3	5.3	ND	ND	5.67	ND	ND	5.16	52	11	37	11.9
Mar-2002	6.9	6.9	ND	ND	6.38	0.317	ND	5.3	46.3	6.43	35	13
Sep-2002	5.2	5.2	ND	ND	4.5	0.49	ND	5.4	46.8	8.3	36	11.2
Mar-2003	7.5	7.5	ND	ND	46.9	0.881	ND	5.3	55.2	46	ND	12.1
Oct-2003	6.1	6.1	ND	ND	4.33	0.168	ND	5.5	54.3	5.5	59	13.5
Apr-2004	7.8	7.8	ND	ND	4.12	0.17	ND	5.4	45	5.7	56	13
Oct-2004	6.6	6.6	ND	10	4.44	0.23	ND	5.5	45.8	5.08	37	16.9
Apr-2005	5.9	5.9	ND	ND	4.42	0.3	ND	5.1	40.6	4.95	66	12.1
Oct-2005	8.3	8.3	ND	ND	4.98	0.29	ND	4.9	38.3	4.73	40	10.2
Mar-2006	7	7	ND	ND	4.89	0.2	ND	4.7	41	5.72	40	10
Sep-2006	6.8	6.8	ND	ND	4.87	0.34	ND	5.2	42.6	4.57	27	10.8
Mar-2007	7.3	7.3	ND	ND	4.74	0.22	ND	5.2	46.7	5.12	18	10.7
Sep-2007	6.6	6.6	ND	ND	9.98	ND	ND	5.9	48.3	8.74	38	10.9
Mar-2008	9.5	9.5	ND	ND	9.91	0.79	ND	5.2	43.9	4.42	36	11.2
Sep-2008	11	11	ND	ND	5.84	0.32	ND	5.1	45.3	4.54	39	10.8
Mar-2009	12	12	ND	ND	6.71	0.35	ND	4.8	47.1	3.21	41	10.8
Oct-2009	8.2	8.2	ND	ND	5.79	0.21	ND	4.8	47.1	4.48	37	13
Apr-2010	10	10	ND	ND	6.69	0.29	ND	4.3	56.9	4.16	ND	13.1
Oct-2010	14	14	ND	ND	8.15	0.43	ND	4.2	50.3	3.63	35	14.8
Apr-2011	7.2	7.2	ND	ND	9.96	0.53	ND	5	61.9	7.95	63	16.7
Sep-2011	6.3	6.3	ND	ND	10.4	0.6	ND	5.1	64.9	7.82	58	17.6
Mar-2012	6.8	6.8	ND	ND	16	0.93	ND	4.6	82.4	10.5	52	20.2
Sep-2012	11.7	11.7	ND	ND	16.6	0.931	ND	4.9	83.9	11.3	64	21.4
Mar-2013	11.8	11.8	0.128 J	ND	16.6	1.05	ND	4.5	100.2	10.9	58	22.2
Oct-2013	9.24	9.24	ND	ND	19.6	1.29	ND	6.1	105.1	10.8	59	21.3
Mar-2014	10.4	10.4	ND	ND	17.9	1.24	ND	5.7	105	12.5	85	21.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-08***											
Oct-2014	37.4	37.4	*0.141 J*	14	17.3	0.07	*ND*	5.7	107.9	1.82	56	30.8
Apr-2015	22.9	22.9	0.33	12	16.6	*ND*	*ND*	4.7	115.1	*ND*	28	21.2
Nov-2015	11.4	11.4	*ND*	10	24.7	1.13	*ND*	5.7	174.3	6.94	72	27.3
May-2016	8.92	8.92	1.17	*ND*	22.3	*ND*	*ND*	5.7	205	*ND*	66	12
Oct-2016	11.2	11.2	1.09	13	22.4	*NA*	*NA*	5.7	228	*0.93 J*	69	14.1
May-2017	15.8	15.8	0.852	24	21.3	*ND*	*ND*	5.5	233	*0.612 J*	52	18.3
Oct-2017	16	16	0.699	16	25.7	*ND*	*ND*	5.9	275	*ND*	58	16.8
May-2018	30	30	0.34	27.2	34.8	*ND*	0.035	5.4	243	*ND*	49	24.6
Nov-2018	46	46	0.12	*ND*	44.6	*0.038 J*	0.028	6.21	257.7	*ND*	88	34
May-2019	50	*NA*	*ND*	*ND*	50.5	0.13	0.03	6.14	224.3	*ND*	146	37.4
Oct-2019	20 H1	*NA*	*0.08 J*	*14.8 J*	47.2	0.18	0.028	6.15	282.5	*ND*	97	34.8
May-2020	36	*NA*	0.2	*11.3 J*	43.5	*ND*	0.023	5.64	257.4	*ND*	137	31.5
Oct-2020	110	*NA*	0.14	*11.6 J*	43.5	*0.084 J*	0.021	5.9	249.7	3.8	147	32.8
Apr-2021	14	*NA*	0.18	*10.5 J*	47.3	0.22	*ND*	6.37	325.7	*ND*	93	35.7
Oct-2021	36	*NA*	0.17	*10.5 J*	50.7	*0.075 J*	0.014	6.57	357.8	*ND*	130	34.4
May-2022	30	*NA*	0.14	*5.6 J*	45.9	0.1	0.032	6.32	322.5	*ND*	121	35.9 N3
Oct-2022	38	*NA*	*0.099 J*	*8.4 J*	52.7	*0.086 J*	0.049	6.34	317.4	*ND*	128	29.6 N3
May-2023	38	*NA*	0.25	*ND*	51.2	0.16	0.037	6.33	323	*ND*	125	30.4 N3
Oct-2023	36	*NA*	*ND*	*9 J*	55.3	*ND*	*NA*	6.29	308.5	*5.1 J*	134	33.4 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-08*													
Nov-1993	NA	ND	ND	NA	ND	0.81	NA	ND	NA	ND	14.2	2.2	ND	1.1	NA
Apr-1994	NA	ND	ND	NA	ND	1.17	NA	ND	NA	ND	3.23	2.24	ND	1.49	NA
Apr-1995	ND	ND	0.7	ND	ND	0.82	NA	ND	0.03	ND	2.2	2	ND	1.4	NA
Oct-1996	ND	ND	0.053	ND	ND	1.7	1.6	ND	ND	ND	3.7	1.8	ND	1.2	1.2
Apr-1997	ND	ND	0.059	ND	ND	2.1	1.8	ND	ND	ND	0.89	0.63	ND	1.5	1.2
Oct-1997	ND	ND	0.047	ND	ND	1.68	1.73	ND	ND	ND	3.91	1.3	ND	1.39	1.4
Apr-1998	ND	ND	0.049	ND	ND	1.62	1.68	ND	ND	0.014	19	1.33	ND	1.32	1.38
Apr-1999	ND	ND	0.052	ND	ND	1.97	1.93	ND	ND	ND	6.45	4.05	ND	1.64	1.59
Oct-1999	ND	ND	0.059	ND	ND	1.87	1.7	ND	ND	ND	9.14	1.44	ND	1.56	1.42
Apr-2000	ND	ND	0.055	ND	ND	1.89	1.84	ND	ND	ND	4.64	1.94	ND	1.56	1.49
Oct-2000	ND	ND	0.057	ND	ND	1.99	2.01	ND	ND	ND	6.68	2.52	ND	1.62	1.63
Apr-2001	ND	ND	0.066	ND	ND	2.02	NA	ND	ND	ND	11.3	NA	ND	1.7	NA
Sep-2001	ND	ND	0.065	ND	ND	1.98	1.89	ND	ND	ND	4.89	3.36	ND	1.7	1.6
Mar-2002	ND	ND	0.065	ND	ND	2.3	1.93	ND	ND	0.016	10.5	2.21	ND	1.77	1.7
Sep-2002	ND	ND	0.066	ND	ND	1.83	1.88	ND	ND	0.013	13.4	2.13	ND	1.61	1.67
Mar-2003	ND	ND	0.067	ND	ND	2.02	1.96	ND	ND	ND	3.26	2.24	ND	1.72	1.63
Oct-2003	ND	ND	0.07	ND	ND	2.39	2.06	ND	ND	0.011	7.7	2.2	ND	1.84	1.79
Apr-2004	ND	ND	0.068	ND	ND	2.16	2.11	ND	ND	ND	3.16	1.75	ND	1.84	1.83
Oct-2004	ND	ND	0.073	ND	ND	3.5	2.13	ND	ND	0.015	13.1	2.67	ND	1.98	1.84
Apr-2005	ND	ND	0.076	ND	ND	2.11	1.95	ND	ND	ND	13.2	1.82	ND	1.67	1.55
Oct-2005	ND	ND	0.064	ND	ND	1.8	1.7	ND	ND	ND	4.74	1.86	ND	1.38	1.31

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-08***													
Mar-2006	ND	ND	0.054	ND	ND	1.91	1.6	ND	ND	ND	11.7	2.29	ND	1.28	1.31
Sep-2006	ND	ND	0.059	ND	ND	1.97	1.89	ND	ND	0.021	19.1	1.92	ND	1.43	1.45
Mar-2007	ND	ND	0.064	ND	ND	1.91	1.87	ND	ND	ND	4.12	2.64	ND	1.45	1.45
Sep-2007	ND	0.003	0.068	ND	ND	1.91	1.86	ND	ND	ND	10.2	2.06	ND	1.49	1.44
Mar-2008	ND	ND	0.074	ND	ND	1.93	1.82	ND	ND	ND	3.68	1.89	ND	1.54	1.42
Sep-2008	ND	ND	0.068	ND	ND	1.9	1.79	ND	ND	ND	5.49	2.41	ND	1.48	1.47
Mar-2009	ND	ND	0.073	ND	ND	2	1.84	ND	ND	ND	4.88	2.66	ND	1.41	1.38
Oct-2009	ND	ND	0.08	ND	ND	2.19	2.06	ND	ND	ND	11.7	4.86	ND	1.84	1.72
Apr-2010	ND	ND	0.089	ND	ND	2.49	2.31	ND	ND	ND	9.78	5.06	ND	1.68	1.65
Oct-2010	ND	ND	0.102	ND	ND	2.58	2.47	ND	ND	ND	7.8	5.13	ND	2.04	1.94
Apr-2011	ND	ND	0.108	ND	ND	2.89	2.69	ND	0.015	0.023	19.6	2.12	ND	2.3	2.1
Sep-2011	ND	ND	0.106	ND	ND	3.01	2.91	0.013	0.016	0.028	26.1	2.12	ND	2.44	2.34
Mar-2012	ND	0.005	0.132	ND	ND	3.41	3.57	0.076	0.041	0.168	132	2	ND	2.83	3.08
Sep-2012	ND	ND	0.116	0.000371 J	0.000301 J	3.67	3.81	0.0031 J	0.0146	0.007 J	5.82	4.27	ND	2.98	3.1
Mar-2013	ND	ND	0.144	0.00032 J	ND	3.93	3.93	0.0023 J	0.01	0.0067 J	8.35	7.68	ND	3.01	3.03
Oct-2013	ND	ND	0.155	0.00045 J	0.000277 J	4.02	4.06	0.0108	0.0128	0.0094 J	11.5	6.37	ND	2.73	2.59
Mar-2014	0.000428 J	0.000546 J	0.135	ND	0.000305 J	3.91	3.9	0.0049 J	0.0141	0.0165	15.1	8.32	ND	2.87	2.8
Oct-2014	0.000647 J	0.0013 J	0.147	ND	0.000338 J	5.49	5.45	0.0056 J	0.0111	0.0102	48.1	27.9	0.0012 J	4.16	4.14
Apr-2015	0.000966 J	0.0016 J	0.0912	0.000178 J	0.000209 J	3.74	3.87	0.0031 J	0.0064 J	0.0176	48.9	19.2	0.0011 J	2.87	3.08
Nov-2015	0.000355 J	0.000813 J	0.175	0.000355 J	0.000252 J	5.16	5.3	0.0016 J	0.0123	0.0089 J	15	10.6	0.000386 J	3.51	3.65
May-2016	ND	0.00064 J	0.0467	ND	ND	2.18	2.12	0.0024 J	0.0018	0.0028 J,B	3.81	0.392	0.00056 J	1.59	1.67
Oct-2016	0.00058 J	0.004	0.0573	ND	ND	2.57	2.44	0.0035 J+	0.0035	0.0125 J+	23.5	2.98	0.00084 J	1.85 J+	1.85
May-2017	ND	0.0023 J	0.0693	ND	ND	3.8	3.41	0.0036 J	0.0049	0.0098	17.9	10.2	0.0008 J	2.13	2.27
Oct-2017	ND	0.001 J	0.0619	ND	0.00032 J	3.23	3.22	0.0028 J	0.0039	0.0027 J	13.6	9.96	0.0005 J	2.11	2.17

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-08***													
May-2018	0.00068	0.0028	0.1	*0.00012 J*	*0.00044 J*	4.9	4.8	*0.0044 JB*	0.0059	0.012	27.7	23	0.0014	3	3
Nov-2018	*0.000056 J*	*0.00011 J*	0.19	*0.00022 J*	*0.00012 J*	6.3	6.2	*0.0029 J*	0.0047	0.0068	33.2	31.4	*0.00004 J*	4.4	4.6
May-2019	*ND*	*ND*	0.23	0.00038	*ND*	7	6.6	*ND*	0.0068	0.0087	35.6	31.2	*ND*	4.9	4.6
Oct-2019	*0.00021 J*	*0.00042 J*	0.22	*0.00023 J*	*0.00026 J*	6.6	6.7	*0.0054 J*	0.0053	0.0041	36.1	35.3	*0.000081 J*	4.4	4.5
May-2020	*ND*	*ND*	0.22	*0.00032 J*	*0.00037 J*	5.9	6.1	*0.0021 J*	*0.0048 J*	0.0098	40.5	36.4	*ND*	4.1	4.5
Oct-2020	*ND*	*ND*	0.19	*0.00028 J*	*ND*	6.3	6.2	*0.0033 J*	0.0047	*0.0072 J*	36.1	32	*ND*	4.2	4.2
Apr-2021	*ND*	*ND*	0.2	*0.00024 J*	*ND*	6.7	6.4	*ND*	0.0056	*0.0049 J*	36	30.1	*ND*	4.6	4.3
Oct-2021	*ND*	*ND*	0.2	*0.00024 J*	*ND*	6.5	7	*ND*	0.0056	0.0045	33.5	31.9	*ND*	4.4	4.7
May-2022	*ND*	*ND*	0.2	*0.00029 J*	*ND*	6.7	6.5	*0.00098 J*	0.0051	0.0043	39.1	33	*ND*	4.6	4.4
Oct-2022	*ND*	*ND*	0.18	*0.00029 J*	*ND*	5.4	6.6	*0.00089 J*	0.0048	0.0046	33.9	31	*ND*	3.9	4.3
May-2023	*ND*	*0.00054 J*	0.17	*0.00021 J*	*ND*	6	6.5	*0.0013 J*	0.0052	0.0055	34.6	30.7	*ND*	3.7	4.1
Oct-2023	*ND*	*ND*	0.17	*0.00044 J*	*ND*	6.6	6.2	*0.0017 J*	0.006	0.0081 B	35.7	26.3	*ND*	4.1	3.8

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-08*												
Nov-1993	0.08	NA	ND	NA	0.73	NA	ND	NA	2.5	NA	NA	NA	ND
Apr-1994	0.1	NA	ND	NA	0.9	NA	ND	NA	3.28	NA	NA	NA	0.06
Apr-1995	ND	NA	ND	ND	1.1	NA	ND	ND	2.7	NA	ND	ND	0.03
Oct-1996	0.075	0.068	NA	ND	ND	ND	ND	ND	3.2	3.3	ND	ND	0.082
Apr-1997	0.054	0.053	ND	ND	2.4	ND	ND	ND	2.5	2.9	ND	ND	0.037
Oct-1997	0.087	0.087	NA	ND	ND	0.748	ND	ND	2.65	2.77	ND	ND	0.014
Apr-1998	0.101	0.081	NA	0.013	ND	0.719	ND	ND	2.68	2.44	ND	ND	0.017
Apr-1999	0.148	0.143	NA	ND	0.763	0.544	ND	ND	2.21	2.13	ND	ND	ND
Oct-1999	0.099	0.092	NA	0.013	0.564	0.714	ND	ND	2.85	2.53	ND	ND	0.011
Apr-2000	0.138	0.132	NA	ND	1.53	1.13	ND	ND	2.69	2.63	ND	ND	ND
Oct-2000	0.136	0.133	NA	ND	0.887	1.05	ND	ND	2.67	2.6	ND	ND	ND
Apr-2001	0.148	NA	NA	ND	0.545	NA	ND	ND	2.67	NA	ND	ND	ND
Sep-2001	0.133	0.143	NA	0.01	0.639	0.947	ND	ND	2.66	2.62	ND	ND	ND
Mar-2002	0.119	0.116	NA	ND	1.64	ND	ND	ND	3.74	2.66	ND	ND	0.012
Sep-2002	0.113	0.109	NA	ND	1.81	1.43	ND	ND	2.34	2.35	ND	ND	ND
Mar-2003	0.128	0.119	NA	ND	1.2	1.28	ND	ND	2.5	2.36	ND	ND	ND
Oct-2003	0.134	0.131	NA	ND	1.95	2	ND	ND	2.82	2.22	ND	ND	0.01
Apr-2004	0.13	0.12	ND	ND	0.636	ND	ND	ND	2.36	2.25	ND	ND	ND
Oct-2004	0.142	0.138	ND	ND	0.94	0.81	ND	ND	3.22	2.32	ND	ND	0.073
Apr-2005	0.127	0.116	ND	ND	0.7	0.62	ND	ND	2.83	2.7	ND	ND	0.01
Oct-2005	0.111	0.104	ND	ND	0.833	0.717	ND	ND	2.4	2.27	ND	ND	ND
Mar-2006	0.104	0.088	ND	ND	ND	ND	ND	ND	2.05	2.11	ND	ND	0.019

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-08***												
Sep-2006	0.127	0.117	ND	0.011	0.84	0.839	ND	ND	2.48	2.34	ND	ND	0.017
Mar-2007	0.137	0.13	ND	ND	0.782	0.785	ND	ND	2.33	2.33	ND	ND	0.011
Sep-2007	0.144	0.121	ND	ND	0.744	0.683	ND	ND	2.67	2.76	ND	ND	0.015
Mar-2008	0.123	0.111	ND	ND	0.781	0.703	ND	ND	2.84	2.5	ND	ND	0.01
Sep-2008	0.125	0.121	ND	ND	0.758	0.734	ND	ND	2.71	2.6	ND	ND	0.034
Mar-2009	0.127	0.12	ND	ND	0.943	0.853	ND	ND	3.17	3.11	ND	ND	0.021
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	0.21	0.181	ND	ND	0.632	0.642	ND	ND	2.74	2.76	ND	ND	0.016
Apr-2010	0.163	0.162	ND	ND	0.765	0.747	ND	ND	3.29	3.17	ND	ND	0.019
Oct-2010	0.178	0.169	ND	ND	0.789	0.77	ND	ND	3.66	3.66	ND	ND	0.015
Apr-2011	0.143	0.123	ND	0.016	0.742	0.691	ND	ND	4.44	4.34	ND	ND	0.052
Sep-2011	0.15	0.132	ND	0.019	0.86	0.777	ND	ND	4.63	4.51	ND	ND	0.051
Mar-2012	0.24	0.152	0.0003	0.088	0.824	0.855	ND	ND	7.75	8.15	ND	ND	0.141
Sep-2012	0.173	0.178	0.000044 J	0.0146	0.875	0.931	0.000466 J	ND	7.63	7.82	ND	ND	0.0343
Mar-2013	0.193	0.191	0.000079 J	0.0108 J	0.933	0.919	ND	ND	7.9	7.86	ND	ND	0.0408
Oct-2013	0.195	0.189	ND	0.0112	0.812	0.798	ND	ND	7.68	7.21	0.000106 J	0.0082 J	0.0383
Mar-2014	0.202	0.213	ND	0.0139	0.952	0.962	ND	ND	7.38	7.52	ND	ND	0.0488
Oct-2014	0.715	0.58	0.000082 J	0.0217	1.18	1.22	0.000855 J	ND	10.9	11.2	ND	ND	0.0362
Apr-2015	0.396	0.348	0.000074 J	0.0146	1.19	1.21	ND	0.000058 J	10.7	10.7	ND	ND	0.0262
Nov-2015	0.306	0.31	ND	0.0111	1.14	1.2	0.000756 J	ND	12.1	12.6	0.000181 J	ND	0.0366
May-2016	0.152	0.102	ND	0.0066	1.13	1.09	ND	ND	11.7	11.9	ND	ND	0.0162 J
Oct-2016	0.231 R	0.152	ND	0.008 J+	1.17	1.14	ND	ND	11.9 J+	11	ND	ND	0.0131 J
May-2017	0.363	0.337	ND	0.0112	1.17	1.16	ND	ND	12.7	12.7	ND	ND	0.0177 J
Oct-2017	0.305	0.289	ND	0.0075	1.15	1.17	ND	ND	13.1	12.9	ND	ND	0.0175 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-08***												
May-2018	0.58	0.52	*ND*	0.011	*ND*	*0.86 J*	*0.00045 J*	*ND*	17.1	16.1	*ND*	0.002	0.03
Nov-2018	0.53	0.52	*ND*	0.0049	*1.1 J*	*1.6 J*	*0.0002 J*	*ND*	22.2	23.8	*ND*	*ND*	0.015
May-2019	0.61	0.62	*ND*	0.005	*ND*	*ND*	*ND*	*ND*	24.4	23.9	*ND*	*ND*	0.02
Oct-2019	0.64	0.63	*ND*	0.0044	*1.5 J*	*ND*	*ND*	*ND*	25	26.4	*ND*	0.0088	0.019
May-2020	0.59	0.62	*ND*	*0.0068 J*	1.5	1.4	*ND*	*ND*	22.6	22.1	*ND*	*ND*	0.016
Oct-2020	0.62	0.57	*ND*	0.0045	*1.3 J*	*1.3 J*	*ND*	*ND*	21.6	21.6	*ND*	*0.00092 J*	*0.014 J*
Apr-2021	0.72	0.66	*0.00006 J*	*0.0042 J*	1.4	1.4	*ND*	*ND*	25.9	24.3	*ND*	*ND*	0.014
Oct-2021	0.66	0.71	*ND*	0.0038	1.3	1.3	*ND*	*ND*	25.7	27.5	*ND*	*ND*	0.013
May-2022	0.72	0.67	*ND*	0.0053	1.5	1.4	*ND*	*ND*	25.3	24.3	*ND*	*ND*	0.011
Oct-2022	0.61	0.64	*ND*	0.0042	1.4	1.5	*ND*	*ND*	26.8	28.9	*ND*	*ND*	0.013
May-2023	0.59	0.62	*ND*	0.0046	1.3	1.4	*ND*	*ND*	24.9	27.9	*ND*	*ND*	0.013
Oct-2023	0.62	0.58	*ND*	0.0051	1.4	1.4	*ND*	*ND*	27.8	26	*ND*	*ND*	0.013

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	23	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08*																
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.59 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.8 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.94 J*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.7 J*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.2 J*	*ND*	*ND*	5.2	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.5 B	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.8 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-08*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-08***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	0.58 J	ND	ND	ND	ND	0.64 J,B	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	0.45 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-08***															
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-08***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-08*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-08***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.551 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-08A***											
Nov-1993	ND	ND	ND	ND	3.5	ND	ND	4.61	51.3	11.8	18	10.4
Apr-1994	10	10	0.1	67.6	3.5	ND	ND	4.74	50.5	12.1	34	13.46
Apr-1995	ND	ND	ND	ND	4.2	ND	ND	4.4	54.9	13.1	ND	10.2
Apr-1997	ND	2	ND	ND	4.5	0.07	ND	NA	NA	13	96	29
Oct-1997	ND	ND	0.24	ND	2.76	ND	ND	5.62	50.7	11.7	45	15
Apr-1998	ND	ND	ND	ND	3.8	ND	ND	5.38	47.9	11.9	26	14
Apr-1999	ND	ND	0.19	ND	3.8	ND	ND	4.16	54.1	9.69	67	15
Oct-1999	ND	ND	0.2	ND	3.98	ND	ND	4.82	78.5	11	38	15
Apr-2000	ND	ND	ND	ND	2.42	ND	ND	5.39	44	11	45	13
Oct-2000	2.8	NA	ND	ND	4.56	ND	ND	5.29	59.2	14.6	45	14.5
Apr-2001	ND	NA	ND	ND	3.62	ND	ND	NA	NA	12.1	20	15.1
Sep-2001	ND	ND	ND	ND	4.78	ND	ND	4.32	60	17.1	41	15.4
Mar-2002	ND	ND	ND	ND	4.39	ND	ND	4.7	57	17.8	58	16.3
Sep-2002	ND	ND	ND	ND	4	ND	ND	4.8	56.5	17.9	27	16.2
Mar-2003	ND	ND	ND	ND	39.5	ND	ND	4.7	64.8	128	23	14.9
Oct-2003	ND	ND	ND	ND	3.93	0.086	ND	4.7	79.2	18.3	72	18.8
Apr-2004	ND	ND	ND	ND	3.32	ND	ND	4.8	53.9	16.6	66	19.4
Oct-2004	1.1	1.1	ND	ND	2.78	ND	ND	4.7	42.5	11.6	41	17
Apr-2005	ND	ND	ND	ND	3.92	0.1	ND	4.6	42.6	16.3	81	17.4
Oct-2005	1.7	1.7	ND	ND	3.74	0.09	ND	4.6	41.9	15.8	51	13.3
Mar-2006	1.8	1.8	ND	ND	5.66	0.16	ND	4.1	54.8	18.8	40	14.9
Sep-2006	1.7	1.7	ND	ND	4.79	0.23	ND	4.5	53.5	16.7	49	16.6
Mar-2007	1.1	1.1	0.3	ND	17.6	2.22	ND	4.6	93.6	15.8	47	26.8
Sep-2007	ND	ND	0.23	ND	10	ND	ND	4.8	63.1	19	51	16.3
Mar-2008	ND	ND	ND	ND	24.2	3.29	ND	4.4	77.1	19	73	22.8
Sep-2008	1.5	1.5	ND	12	8.63	0.83	ND	4.4	77.3	21.4	54	18.2
Mar-2009	1.1	1.1	ND	ND	11.8	0.57	ND	4.2	77	18	60	18.1
Oct-2009	1	1	ND	ND	27.5	1.14	ND	4.1	119.2	18.4	87	25.3
Apr-2010	1.2	1.2	ND	ND	34.6	1.18	ND	3.9	129.1	19.7	58	27.6
Oct-2010	ND	ND	ND	ND	56.8	2.15	ND	4	121.8	19.1	166	37.4
Apr-2011	1.4	1.4	ND	ND	23	2	ND	4.3	130	20.8	109	21
Sep-2011	ND	ND	0.21	ND	45.6	4.16	ND	4.5	179.2	20.4	142	37.1
Mar-2012	ND	ND	ND	ND	43.7	2.89	ND	3.5	183.8	27.1	101	36.4
Sep-2012	ND	ND	ND	ND	18.9	0.982	ND	3.9	95.4	23.3	62	21.7
Mar-2013	1.16	1.16	0.167 J	ND	42.1	2.72	ND	3.7	177.1	25	108	33.7
Oct-2013	1.16 J	1.16 J	ND	ND	62	4.01	ND	5.3	352	25.1	176	36.6
Mar-2014	ND	ND	ND	6 J	66.7	3.38	ND	4.5	308	30.3	173	31.1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-08A***										
Oct-2014	*ND*	*ND*	*ND*	*6 J*	63	3.52	*ND*	4.3	353	30.7	152	35.7
Apr-2015	1.92	1.92	*ND*	*7 J*	33.8	2.36	*ND*	3.9	157.2	24.7	90	26.6
Nov-2015	*ND*	*ND*	*ND*	*5 J*	55.6	3.65	*ND*	4.6	292	24.6	132	38.8
May-2016	*ND*	*ND*	*ND*	*ND*	57.3	2.11	*ND*	4.6	383	27	160	32.8
Oct-2016	*ND*	*ND*	*ND*	*ND*	83.9	*NA*	*NA*	4.5	416	20.9	177	44.7
May-2017	*ND*	*ND*	*ND*	*5 J*	109	4.81	*ND*	4.4	590	33.1	237	47.1
Oct-2017	*ND*	*ND*	*0.103 J*	*5 J+*	181	5.05	*ND*	4.7	625	27.9	271	47.6
May-2018	*4 JB*	*ND*	0.12	*5.8 J*	94	1.5	*ND*	4.2	494	25.4	190	44.5
Nov-2018	*1 JB*	*ND*	*ND*	*ND*	76.1	5.3	*ND*	4.3	342.1	24.4	157	42.8
May-2019	*ND*	*NA*	*ND*	*ND*	30.6	0.58	*ND*	4.25	116.4	14.9	73	31.1
Oct-2019	*2.5 JH1*	*NA*	*ND*	*6 J*	15.5	0.62	*ND*	4.31	97	10.9	33	19.5
May-2020	*ND*	*NA*	*ND*	*6.9 J*	63	1.5	*ND*	4.24	261.7	18.4	143	28.7
Oct-2020	240	*NA*	*ND*	*ND*	58.8	3.1	*ND*	4.36	246.4	19.4	160	39.1
Apr-2021	*ND*	*NA*	*ND*	*ND*	46.1	2.7	*ND*	4.34	271.6	26.3	132	35.9
Oct-2021	*ND*	*NA*	*ND*	*ND*	30.2	0.85	*ND*	4.54	200	12.9	71	26
May-2022	*ND*	*NA*	*ND*	*ND*	25.6	1.4	*ND*	4.44	182.4	12.5	84	25 N3
Oct-2022	*ND*	*NA*	*ND*	*8.4 J*	88.9	4.6	*ND*	4.42	419.2	19.5	193	45.8 N3
May-2023	*ND*	*NA*	*ND*	*ND*	111	5	*ND*	4.38	472.4	22.8	250	44.5 N3
Oct-2023	*ND*	*NA*	*ND*	*11.3 J*	95.4	3.86 O-04R-01	*NA*	4.43	424.1	27.2	211	43.7 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-08A*													
Nov-1993	NA	ND	ND	NA	ND	1.7	NA	0.005	NA	ND	0.99	0.06	ND	1.5	NA
Apr-1994	NA	ND	ND	NA	ND	2.8	NA	ND	NA	ND	1.15	0.15	ND	1.57	NA
Apr-1995	ND	ND	ND	ND	0.005	1.3	NA	ND	0.02	ND	0.84	0.06	0.006	1.7	NA
Oct-1996	ND	ND	0.055	ND	ND	2.3	2.6	ND	ND	ND	0.31	ND	ND	1.5	1.4
Apr-1997	ND	ND	0.074	ND	ND	5.4	4	ND	ND	ND	ND	ND	0.006	2	1.7
Oct-1997	ND	ND	0.06	ND	ND	3.15	3.19	ND	ND	0.015	1.31	ND	ND	1.72	1.67
Apr-1998	ND	ND	0.066	ND	ND	2.61	2.56	0.011	ND	0.017	4.87	ND	ND	1.93	1.76
Apr-1999	ND	ND	0.063	ND	ND	2.79	2.65	ND	ND	0.01	1.47	ND	ND	1.95	1.8
Oct-1999	ND	ND	0.06	ND	ND	2.84	2.5	ND	ND	0.011	0.894	ND	ND	1.96	1.77
Apr-2000	ND	ND	0.056	ND	ND	2.57	2.43	ND	ND	ND	ND	ND	ND	1.7	1.6
Oct-2000	ND	ND	0.049	ND	ND	2.79	2.6	ND	ND	0.018	2.39	ND	ND	1.84	1.74
Apr-2001	ND	ND	0.055	ND	ND	2.91	NA	ND	ND	ND	0.562	NA	ND	1.89	NA
Sep-2001	ND	ND	0.054	ND	ND	2.85	2.54	ND	ND	ND	0.924	ND	ND	2.01	1.97
Mar-2002	ND	ND	0.053	ND	ND	3.06	2.68	ND	ND	0.011	0.434	ND	ND	2.11	1.96
Sep-2002	ND	ND	0.057	ND	ND	3.18	2.53	ND	ND	0.015	2.22	ND	ND	1.99	1.86
Mar-2003	ND	ND	0.054	ND	ND	2.58	2.49	ND	ND	ND	0.094	ND	ND	2.05	1.94
Oct-2003	ND	ND	0.066	ND	ND	3.53	3.12	ND	ND	0.012	0.305	ND	ND	2.42	2.28
Apr-2004	ND	0.002	0.067	ND	ND	3.59	3.04	ND	ND	0.015	2.43	ND	ND	2.54	2.26
Oct-2004	ND	ND	0.055	ND	ND	3.77	2.53	ND	ND	ND	0.797	0.365	ND	1.83	1.67
Apr-2005	ND	ND	0.067	ND	ND	3.69	3.14	ND	ND	0.014	1.01	ND	ND	1.99	1.87
Oct-2005	ND	ND	0.054	ND	ND	2.69	2.34	ND	ND	0.011	0.57	ND	ND	1.59	1.48

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-08A***													
Mar-2006	ND	ND	0.058	ND	ND	2.91	2.89	ND	ND	ND	1.43	ND	ND	1.86	1.95
Sep-2006	ND	ND	0.063	ND	ND	3.29	3.27	ND	ND	ND	0.834	ND	ND	2.03	2.04
Mar-2007	ND	ND	0.106	ND	ND	5.05	4.62	ND	0.011	ND	0.384	ND	ND	3.46	2.92
Sep-2007	ND	0.002	0.068	ND	ND	3.18	3.24	ND	ND	0.011	1.89	ND	ND	2.04	2.07
Mar-2008	ND	ND	0.095	ND	ND	4.15	4.18	ND	ND	0.01	1.05	ND	ND	3.02	3.03
Sep-2008	ND	0.003	0.071	ND	ND	3.3	3.22	ND	ND	ND	1.33	ND	ND	2.41	2.37
Mar-2009	ND	ND	0.071	ND	ND	3.36	3.3	ND	ND	0.011	0.553	ND	ND	2.35	2.32
Oct-2009	ND	ND	0.097	ND	ND	4.58	4.51	ND	ND	ND	2.32	0.053	ND	3.38	3.58
Apr-2010	ND	ND	0.117	ND	ND	5.07	4.86	ND	0.01	0.013	2.89	ND	ND	3.62	3.53
Oct-2010	ND	ND	0.142	ND	ND	6.65	6.27	ND	0.013	ND	1.17	ND	ND	5.05	4.78
Apr-2011	ND	ND	0.112	ND	ND	5.25	5.16	ND	ND	0.01	1.71	ND	ND	4	3.85
Sep-2011	ND	ND	0.15	ND	ND	6.9	6.93	ND	0.012	0.015	0.292	ND	ND	4.84	4.87
Mar-2012	ND	ND	0.145	ND	ND	6.61	6.6	ND	0.011	0.015	0.319	ND	ND	4.84	4.85
Sep-2012	ND	ND	0.0894	0.00034 J	0.000282 J	3.9	3.86	0.0013 J	0.0071 J	0.0144	0.0248 J	0.0324 J	ND	2.91	2.84
Mar-2013	ND	ND	0.127	0.000413 J	0.0003 J	6.11	5.96	0.0091 J	0.0099 J	0.0132	0.0782	0.0589	ND	4.48	4.44
Oct-2013	ND	ND	0.16	0.000546 J	0.000533 J	7.32	7.19	0.0176	0.0113	0.0125	0.133	0.0672	ND	4.45	4.03
Mar-2014	0.000446 J	ND	0.124	0.000413 J	0.000432 J	6.16	6.15	0.0028 J	0.0092 J	0.01	0.0305 J	0.0142 J	ND	3.83	3.82
Oct-2014	0.000379 J	0.000519 J	0.15	0.000413 J	0.000427 J	6.79	6.68	0.0026 J	0.0099 J	0.013	0.0319 J	0.0146 J	ND	4.55	4.47
Apr-2015	0.000529 J	0.000397 J	0.096	0.000215 J	0.000305 J	4.91	5.3	0.003 J	0.0078 J	0.0086 J	0.0457 J	0.018 J	ND	3.48	3.76
Nov-2015	0.000371 J	0.000482 J	0.145	0.000405 J	0.000439 J	7.77	7.73	0.002 J	0.0111	0.0124	0.0202 J	0.0164 J	0.000371 J	4.72	4.75
May-2016	ND	ND	0.117	0.0003 J	0.0003 J	6.21	5.79	0.0019 J	0.0102	0.009	ND	ND	ND	4.2	4
Oct-2016	ND	0.0017 J	0.167	0.00044 J	0.00055 J	8.84	8.77 J+	0.0044	0.0135	0.0146	0.058 J	ND	ND	5.5	5.77 J+
May-2017	ND	0.0012 J	0.159	0.00039 J	0.00045 J	9.1	8.72	0.0084	0.0147	0.0156	0.379	ND	0.00026 J	5.93	5.98
Oct-2017	ND	ND	0.166	0.00033 J	0.00059 J	9.29	8.97	0.0021 J	0.0151	0.0119	ND	ND	ND	5.92	6.25

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-08A***													
May-2018	*ND*	*ND*	*0.157 J*	*ND*	*0.00052 J*	8.7	8.8	*0.0026 J*	*0.0129 J*	*0.0106 J*	0.024	*0.011 J*	*ND*	5.5	5.6
Nov-2018	*ND*	*ND*	0.13	0.00041	*0.00058 J*	8.3	8.1	0.0076	0.011	0.009	0.052	0.032	*0.000046 J*	5.3	5.5
May-2019	*ND*	*ND*	0.099	0.00032	*ND*	6.1	5.7	0.0081	0.0076	0.015	*ND*	*ND*	*ND*	3.8	3.6
Oct-2019	*0.00016 J*	*ND*	0.074	*0.00027 J*	*0.00041 J*	3.7	3.8	0.0094	0.0064	0.012	*0.034 J*	*0.015 J*	*0.00007 J*	2.5	2.5
May-2020	*ND*	*ND*	0.11	*0.00031 J*	*0.00051 J*	5.6	5.9	0.0079	0.0089	0.0091	0.086	*ND*	*ND*	3.6	3.9
Oct-2020	*ND*	*ND*	0.13	*0.0003 J*	*ND*	7.4	7.3	*0.0066 J*	0.011	*0.0099 J*	*0.059 J*	0.029	*ND*	5	4.9
Apr-2021	*ND*	*ND*	0.14	*0.00028 J*	*0.00067 J*	6.8	6.6	*0.0036 J*	0.011	0.0096	*ND*	*ND*	*ND*	4.6	4.2
Oct-2021	*ND*	*ND*	0.12	*0.00042 J*	*0.00018 J*	4.6	5.1	0.0039	0.01	0.019	*0.024 J*	*0.024 J*	*ND*	3.5	3.8
May-2022	*ND*	*ND*	0.086	*0.00024 J*	*0.00014 J*	4.7	4.9	0.0048	0.0074	0.007	0.094	0.27	*ND*	3.2	3.4
Oct-2022	*ND*	*ND*	0.17	*0.00042 J*	*0.00046 J*	9	9.1	0.0052	0.015	0.011	0.07	*0.045 J*	*ND*	5.6	5.8
May-2023	*ND*	*ND*	0.19	*0.00049 J*	0.00058	8.6	9.4	0.014	0.015	0.015	0.12	*0.043 J*	*ND*	5.6	6
Oct-2023	*ND*	*ND*	0.15	*0.00047 J*	*0.00044 J*	8.7	8.5	0.015	0.013	0.014	0.15	0.051	*ND*	5.4	5.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-08A*												
Nov-1993	0.1	NA	ND	NA	0.87	NA	ND	NA	2.1	NA	NA	NA	ND
Apr-1994	0.07	NA	ND	NA	0.78	NA	ND	NA	1.51	NA	NA	NA	0.03
Apr-1995	0.03	NA	ND	ND	0.89	NA	ND	ND	1.5	NA	ND	ND	0.06
Oct-1996	0.054	0.056	NA	ND	ND	ND	ND	ND	2.2	2	ND	ND	0.034
Apr-1997	0.081	0.064	0.0009	ND	2.3	1.6	ND	ND	2.1	2.6	ND	ND	0.032
Oct-1997	0.066	0.063	NA	ND	ND	ND	ND	ND	1.47	1.54	ND	ND	0.021
Apr-1998	0.055	0.055	NA	0.016	2.17	ND	ND	ND	1.73	1.63	ND	0.015	0.031
Apr-1999	0.069	0.068	NA	ND	1.43	1.06	ND	ND	2.02	1.75	ND	ND	0.018
Oct-1999	0.062	0.06	NA	ND	0.97	1.05	ND	ND	2.16	1.72	ND	ND	0.021
Apr-2000	0.068	0.064	NA	ND	ND	ND	ND	ND	1.82	1.7	ND	ND	0.014
Oct-2000	0.056	0.06	NA	ND	1.18	1.24	ND	ND	4.19	2.8	ND	ND	0.016
Apr-2001	0.068	NA	NA	ND	1.32	NA	ND	ND	3.02	NA	ND	ND	0.016
Sep-2001	0.058	0.055	NA	0.018	1.06	0.662	ND	ND	2.62	1.81	ND	ND	0.019
Mar-2002	0.066	0.066	NA	ND	1.43	1.7	ND	ND	2.51	1.61	ND	ND	0.015
Sep-2002	0.072	0.062	NA	ND	1.21	ND	ND	ND	2.14	1.75	ND	ND	0.015
Mar-2003	0.055	0.054	NA	ND	1.52	ND	ND	ND	1.89	1.8	ND	ND	0.01
Oct-2003	0.086	0.081	NA	ND	1.64	1.56	ND	ND	3.23	2.72	ND	ND	0.019
Apr-2004	0.082	0.078	ND	ND	1.81	0.922	ND	ND	2.26	1.77	ND	ND	0.044
Oct-2004	0.091	0.083	ND	ND	0.817	ND	ND	ND	1.78	1.25	ND	ND	0.063
Apr-2005	0.1	0.093	ND	ND	0.72	0.62	ND	ND	2.26	1.86	ND	ND	0.046
Oct-2005	0.066	0.058	ND	ND	0.979	0.922	ND	ND	2.38	1.47	ND	ND	0.015
Mar-2006	0.041	0.038	ND	ND	0.672	0.637	ND	ND	1.75	1.7	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-08A***												
Sep-2006	0.091	0.091	ND	ND	0.991	0.975	ND	ND	2.13	2.09	ND	ND	0.021
Mar-2007	0.134	0.124	ND	ND	1.26	1.13	ND	ND	8.06	6.5	ND	ND	0.032
Sep-2007	0.091	0.091	ND	ND	0.922	0.759	ND	ND	2.61	2.71	ND	ND	0.024
Mar-2008	0.105	0.106	ND	ND	1.13	1.02	ND	ND	7.26	6.57	ND	ND	0.023
Sep-2008	0.088	0.09	ND	ND	1	0.896	ND	ND	3.38	3.57	ND	ND	0.035
Mar-2009	0.084	0.085	ND	ND	1.13	1.02	ND	ND	4.71	4.77	ND	ND	0.022
Jun-2009	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct-2009	0.105	0.11	ND	ND	1.12	1	ND	ND	11.2	12.1	ND	ND	0.049
Apr-2010	0.119	0.116	ND	ND	1.3	1.08	ND	ND	16.3	15.4	ND	ND	0.036
Oct-2010	0.16	0.153	ND	ND	1.54	1.29	ND	ND	29.3	27.7	ND	ND	0.032
Apr-2011	0.131	0.118	ND	ND	1.16	0.97	ND	ND	13.3	13	ND	ND	0.024
Sep-2011	0.182	0.183	ND	ND	1.5	1.4	ND	ND	22.8	22.8	ND	ND	0.036
Mar-2012	0.181	0.18	ND	0.012	1.38	1.34	ND	ND	22.9	23	ND	ND	0.033
Sep-2012	0.1	0.0963	0.000033 J	0.006 J	1.06	1.07	0.000578 J	ND	9.79	9.35	ND	ND	0.0168
Mar-2013	0.161	0.155	0.000077 J	0.0119	1.3	1.32	0.000678 J	ND	23	22.6	ND	ND	0.0394
Oct-2013	0.186	0.184	ND	0.0086 J	1.3	1.25	ND	ND	33.2	33	0.000098 J	ND	0.0371
Mar-2014	0.173	0.174	ND	0.0072 J	1.27	1.25	ND	ND	28.8	28.8	ND	ND	0.0272
Oct-2014	0.166	0.163	ND	0.0088 J	1.51	1.49	0.0038	ND	33	31.9	ND	ND	0.0289
Apr-2015	0.129	0.139	0.000032 J	0.0068 J	1.19	1.28	0.0021	ND	18.5	19.8	ND	ND	0.0201
Nov-2015	0.194	0.197	ND	0.0088 J	1.53	1.52	0.0036	ND	34.3	34.2	0.000192 J	ND	0.0356
May-2016	0.185	0.177	ND	0.0071	1.4	1.44	ND	ND	38.9	36.8	ND	ND	0.024 J,B
Oct-2016	0.252 J+	0.254 J+	ND	0.0117	1.75	1.84	ND	ND	45.8	46.6	ND	ND	0.0382
May-2017	0.259	0.265	ND	0.0135	1.9	1.84	0.00058 J	ND	65	64.1	ND	0.0011	0.0329
Oct-2017	0.275	0.273	ND	0.0099	1.74	1.88	ND	ND	65.9	72.2	ND	ND	0.0335

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-08A***												
May-2018	0.248	0.25	*ND*	*0.0163 J*	*2 J*	*1.7 J*	*ND*	*ND*	53.3	54.3	*0.0038 J*	*ND*	0.0395
Nov-2018	0.19	0.26	*ND*	0.0098	*1.6 J*	*2.5 J*	*0.00077 J*	*ND*	46.2	46.7	*ND*	0.0014	0.029
May-2019	0.077	0.081	*ND*	0.0098	*ND*	*ND*	*ND*	*ND*	15	14.5	*ND*	*ND*	0.014
Oct-2019	0.083	0.082	*ND*	0.008	*1.4 J*	*ND*	*0.0005 J*	*ND*	7.2	7.8	*ND*	0.0081	0.023
May-2020	0.15	0.16	*ND*	0.011	1.7	1.6	*ND*	*ND*	37.1	36.2	*ND*	*ND*	0.026
Oct-2020	0.17	0.17	*ND*	0.0095	*1.8 J*	*1.7 J*	*ND*	*ND*	30.8	30.5	*ND*	*0.00091 J*	0.033
Apr-2021	0.18	0.17	*0.00005 J*	*0.009 J*	1.7	1.7	*ND*	*ND*	29.7	27.2	*ND*	*ND*	0.03
Oct-2021	0.068	0.076	*ND*	0.01	1.5	1.6	*0.0015 J*	*ND*	15	16.5	*0.000026 J*	*ND*	0.015
May-2022	0.13	0.14	*ND*	0.0074	1.4	1.4	*ND*	*ND*	17.6	18.4	*ND*	*ND*	0.02
Oct-2022	0.23	0.22	*ND*	0.012	2.1	2	*0.0022 J*	*ND*	56.4	55.8	*ND*	*ND*	0.038
May-2023	0.22	0.23	*ND*	0.019	1.9	2.1	*0.0019 J*	*ND*	57.8	64.6	*ND*	*ND*	0.041
Oct-2023	0.22	0.21	*ND*	0.018	2	2.1	*0.0012 J*	*ND*	56.4	56	*ND*	*ND*	0.033

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-08A***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	33	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5 J	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08A*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-08A*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.7 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-08A*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.1	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	63	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	1
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	2.3	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	25	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.3	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.4	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-08A***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.23	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.63	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.16 J	ND	ND	ND	ND	ND	1.83	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.21	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.38 J,B	ND	ND	ND	ND	1.45	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.19 J	ND	ND	ND	ND	ND	1.13	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	0.56 J	ND	ND	ND	ND	ND	ND	0.64 J	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.9 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-08A***															
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.518 J	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-08A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-08A*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	0.7 J,B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.16 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	0.13 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-08A***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.4 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.538 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-09B***											
Nov-1993	ND	ND	ND	26.8	17.3	2	ND	4.61	78.9	2.8	ND	7.38
Apr-1994	ND	ND	ND	74.5	1.4	2	ND	4.88	81.2	2.5	41	10.47
Apr-1995	ND	ND	ND	ND	17.9	2.2	ND	4.6	87.2	2.4	37	2.7
Apr-1997	ND	13	ND	24	13	1.7	ND	NA	NA	ND	74	11
Oct-1997	ND	ND	0.6	ND	22.5	2.48	ND	5.62	95.1	ND	85	11
Apr-1998	ND	ND	0.21	ND	20.1	2	ND	5.91	86.2	ND	67	13
Apr-1999	ND	ND	0.24	ND	22.4	2.07	ND	4.52	89.2	ND	74	20
Oct-1999	ND	ND	0.14	ND	17.7	1.97	ND	4.99	94.2	0.883	390	17
Apr-2000	ND	3	ND	ND	19.3	1.9	ND	5.62	73	ND	71	14
Oct-2000	ND	NA	ND	32	21.9	2.52	ND	4.86	91.2	ND	92	15.1
Apr-2001	ND	NA	ND	ND	18.9	1.96	ND	NA	NA	ND	62	13.4
Sep-2001	ND	ND	ND	ND	18.7	2.59	ND	6.78	103	ND	166	12
Mar-2002	ND	ND	ND	45	20.9	2.32	ND	4.9	97.3	ND	356	16.6
Sep-2002	1	1	ND	11	23.3	2.11	ND	4.9	139.3	ND	124	15.4
Mar-2003	1.3	1.3	ND	ND	23.1	2.18	ND	4.9	114.3	ND	114	14.5
Oct-2003	1.9	1.9	ND	ND	22.6	2.25	ND	5.1	115.1	1.06	114	15.6
Apr-2004	1.6	1.6	ND	ND	21	1.98	ND	4.8	94.9	1.38	116	15.1
Oct-2004	1.6	1.6	ND	ND	21	2.01	ND	4.9	90.5	ND	72	12.9
Apr-2005	ND	ND	ND	39	22.7	2.1	ND	4.8	91.3	2.12	212	18.3
Oct-2005	2	2	ND	54	24	2.15	ND	5	92.5	1.65	155	18.1
Mar-2006	3	3	ND	ND	21.8	2.2	ND	6	95.1	2.01	96	11
Sep-2006	2	2	ND	ND	19.7	2.31	ND	4.8	88.4	1.66	152	16.3
Mar-2007	3.3	3.3	ND	ND	19.3	2.36	ND	5.4	90	1.58	71	14.1
Sep-2007	2.1	2.1	ND	ND	21.8	2.77	ND	5	89.6	ND	101	12.4
Mar-2008	2.1	2.1	ND	ND	25.1	3.26	ND	4.9	87.1	1.19	155	12.4
Sep-2008	3.1	3.1	ND	34	20.4	2.55	ND	4.7	81.6	2.03	109	12.5
Mar-2009	2.6	2.6	ND	ND	19.6	2.56	ND	4.7	87.5	2.01	42	11.3
Oct-2009	2.4	2.4	ND	23	20.1	2.34	ND	4.6	80.8	1.35	173	15.1
Apr-2010	2.9	2.9	ND	35	19.7	2.26	ND	4.3	80.1	1.97	200	16.7
Oct-2010	3	3	ND	ND	17.8	2.06	ND	4.3	76.2	2.3	72	11.4
Apr-2011	10	10	ND	ND	17.2	1.72	ND	4.5	79.7	2.65	73	18.3
Sep-2011	3.4	3.4	ND	ND	20.6	2.36	ND	5	68.1	ND	60	12.1
Mar-2012	3.2	3.2	ND	ND	14.7	1.54	ND	4	79.5	10.6	24	17.4
Sep-2012	3.4	3.4	ND	ND	19.7	2.23	ND	3.7	84.1	1.79	66	12.1
Mar-2013	3.56	3.56	ND	ND	19.3	2.39	ND	4.1	87.8	1.6	44	11.9
Oct-2013	3.8	3.8	ND	ND	19.7	2.43	ND	3.6	89.8	1.51	54	12
Mar-2014	3.44	3.44	ND	6 J	20.3	2.4	ND	5	81.3	1.56	75	14.4

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-09B***										
Oct-2014	*ND*	*ND*	*ND*	*ND*	21.3	2.39	*ND*	4.8	85.7	2.11	72	13.7
Apr-2015	3.76	3.76	*ND*	*ND*	21.1	2.53	*ND*	4.4	89.8	*0.855 J*	42	13.6
Nov-2015	*ND*	*ND*	*ND*	*ND*	20.8	2.37	*ND*	5.1	134.8	3	33	14.2
May-2016	3.16	3.16	*ND*	*ND*	19.7	2.23	*ND*	5.1	145.9	3.53	62	14.7
Oct-2016	3.72	3.72	*ND*	*ND*	21.3	*NA*	*NA*	5.1	140.5	2.91	82	14.5
May-2017	2.24	2.24	*ND*	*7 J*	22.3	2.69	*ND*	5.1	143.8	2.85	76	21
Oct-2017	*ND*	*ND*	*ND*	*ND*	22	2.96	*ND*	5.1	139.9	2.84	52	14.7
May-2018	*3 JB*	*ND*	*ND*	*ND*	23	0.52	*ND*	4.8	143.8	*ND*	62	17.2
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	21.4	2.5	*ND*	4.85	106.3	*ND*	57	16.2
May-2019	*ND*	*NA*	*ND*	*ND*	22.6	2.4	*ND*	4.75	86	*ND*	53	17.5
Oct-2019	*ND*	*NA*	*ND*	*6 J*	18.7	2.3	*ND*	4.66	103.2	*5.3 J*	67	16.4
May-2020	*6 J*	*NA*	*ND*	*ND*	20.2	2.2	*ND*	5.36	107.7	*5.2 J*	64	18.3
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	20.5	2.1	*ND*	5.24	110.2	6.4	86	22.5
Apr-2021	*2 J3c*	*NA*	*ND*	*6.1 J*	23.7	2.5	*ND*	6.43	136.2	*ND*	62	23.3
Oct-2021	12	*NA*	0.12	*ND*	20.9	2.4	*ND*	5.53	161.5	*ND*	63	22.7
May-2022	*8 J4c*	*NA*	*ND*	*ND*	17.4	2.1	*ND*	5.2	156.1	*5.6 J*	49	26.7 N3
Oct-2022	*4 J3c*	*NA*	*ND*	*ND*	26.8	2.8	*ND*	5.04	153.6	*7.1 J*	126	23 N3
May-2023	*2 J2c*	*NA*	*ND*	*ND*	21.5	2.2	*0.0076 J*	5.26	138.6	*5.9 J*	72	18.7 N3
Oct-2023	*2 J4c*	*NA*	*ND*	*ND*	24	1.68 O-04R-01	*NA*	5.1	145.01	*6.1 J*	57	18.4 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-09B*													
Nov-1993	NA	0.005	ND	NA	ND	0.15	NA	0.018	NA	ND	4.6	0.13	ND	1.7	NA
Apr-1994	NA	ND	ND	NA	ND	1.72	NA	ND	NA	ND	0.27	ND	ND	1.5	NA
Apr-1995	ND	ND	0.7	ND	ND	1	NA	ND	ND	ND	0.25	ND	ND	1.5	NA
Oct-1996	ND	ND	0.09	0.001	ND	2.5	2.3	ND	0.021	ND	3.3	0.46	ND	1.7	1.6
Apr-1997	ND	ND	0.05	ND	ND	5.4	6.9	ND	ND	ND	ND	ND	0.003	1.5	1.6
Oct-1997	ND	ND	0.063	ND	ND	2.21	2.08	ND	0.01	ND	1.58	ND	ND	1.92	1.69
Apr-1998	ND	ND	0.057	ND	ND	2.21	2.12	ND	ND	ND	1.1	ND	ND	1.74	1.56
Apr-1999	ND	ND	0.182	ND	ND	3	2.07	0.047	0.02	0.052	9.09	ND	ND	2.97	1.52
Oct-1999	ND	ND	0.087	ND	ND	2.73	1.93	0.028	0.017	0.056	5.02	ND	ND	1.91	1.38
Apr-2000	ND	ND	0.055	ND	ND	2.54	1.92	ND	0.012	0.022	1.6	0.219	ND	1.77	1.52
Oct-2000	ND	ND	0.067	ND	ND	2.77	2.22	0.014	0.015	0.028	2.54	ND	ND	1.98	1.67
Apr-2001	ND	ND	0.046	ND	ND	2.49	NA	ND	0.012	ND	0.856	NA	ND	1.75	NA
Sep-2001	ND	ND	0.097	ND	ND	2.92	2.21	0.031	0.015	0.053	7.62	ND	0.013	2.19	1.65
Mar-2002	ND	ND	0.079	ND	ND	3.01	2.23	0.023	0.017	0.043	4.51	0.059	0.009	2.2	1.71
Sep-2002	ND	ND	0.073	ND	ND	2.9	2.14	0.015	0.012	0.038	3.78	ND	0.007	1.98	1.63
Mar-2003	ND	0.002	0.051	ND	ND	2.63	2.3	ND	0.017	0.039	0.907	0.118	0.003	1.92	1.67
Oct-2003	ND	0.004	0.074	ND	ND	2.85	2.19	0.015	0.012	0.066	3.45	ND	0.008	2.07	1.7
Apr-2004	ND	0.004	0.069	ND	ND	2.74	2.03	0.014	0.01	0.024	3.02	ND	0.006	2.01	1.65
Oct-2004	ND	ND	0.042	ND	ND	2.31	1.86	ND	ND	ND	0.71	ND	ND	1.73	1.62
Apr-2005	ND	0.009	0.123	0.002	ND	3.35	2.22	0.047	0.02	0.085	9.19	ND	**0.018**	2.41	1.78
Oct-2005	ND	**0.014**	0.149	ND	0.004	3.09	1.86	0.064	0.025	0.116	11.5	ND	**0.028**	2.52	1.49

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09B***													
Mar-2006	ND	ND	0.031	ND	ND	2.07	1.93	ND	ND	ND	0.277	ND	ND	1.42	1.49
Sep-2006	ND	ND	0.081	ND	ND	3.1	2.21	0.039	0.019	0.079	7.79	ND	**0.016**	2.05	1.55
Mar-2007	ND	0.003	0.058	ND	ND	2.66	2.48	ND	0.012	0.021	1.4	ND	0.003	1.81	1.59
Sep-2007	ND	ND	0.046	ND	ND	2.26	2.2	ND	ND	ND	0.88	ND	0.003	1.65	1.56
Mar-2008	ND	0.004	0.062	ND	ND	2.27	2.1	0.013	0.011	0.023	2.38	ND	0.006	1.64	1.5
Sep-2008	ND	0.003	0.063	ND	ND	2.17	1.92	0.018	0.014	0.02	2.31	ND	0.005	1.71	1.48
Mar-2009	ND	ND	0.046	ND	ND	2.09	1.88	ND	ND	0.017	1.51	ND	0.003	1.48	1.35
Oct-2009	ND	0.005	0.09	ND	ND	2.82	1.93	0.031	0.016	0.061	4.87	0.052	0.011	1.96	1.52
Apr-2010	ND	0.006	0.094	ND	ND	3.34	2.45	0.039	0.017	0.066	11	ND	0.014	2.05	1.38
Oct-2010	ND	ND	0.037	ND	ND	1.94	1.97	ND	ND	ND	0.516	ND	ND	1.59	1.59
Apr-2011	ND	ND	0.034	ND	ND	4.56	4.07	ND	0.022	ND	4.41	ND	ND	1.67	1.53
Sep-2011	ND	ND	0.04	ND	ND	2.12	2.05	ND	ND	ND	0.211	ND	ND	1.65	1.61
Mar-2012	ND	ND	0.066	ND	ND	2.82	2.86	ND	ND	ND	ND	ND	ND	2.51	2.54
Sep-2012	ND	ND	0.0335	0.000191 J	ND	2.09	2.03	ND	0.0068 J	0.0015 J	0.0749	0.0223 J	ND	1.66	1.67
Mar-2013	ND	ND	0.0379	0.000152 J	ND	2.13	2.19	0.0029 J	0.0069 J	0.0016 J	0.0186 J	0.0078 J	ND	1.61	1.62
Oct-2013	ND	ND	0.0414	0.000199 J	ND	2.39	2.43	0.0095 J	0.0074 J	0.0012 J	0.101	0.0559	0.000275 J	1.47	1.42
Mar-2014	0.000599 J	ND	0.0436	0.000386 J	ND	2.67	2.23	0.0046 J	0.0069 J	0.00041 J	0.194	0.003 J	ND	1.87	1.58
Oct-2014	0.000623 J	ND	0.0454	0.00016 J	0.000098 J	2.39	2.4	0.0025 J	0.0074 J	0.0017 J	0.0974	ND	ND	1.89	1.89
Apr-2015	0.000723 J	ND	0.0449	0.00016 J	0.000093 J	2.42	2.49	0.002 J	0.0079 J	0.0022 J	0.137	ND	0.00099 J	1.83	1.9
Nov-2015	0.000329 J	ND	0.041	0.000183 J	0.0001 J	2.56	2.52	0.000845 J	0.0068 J	0.0023 J	0.054	ND	0.000315 J	1.89	1.95
May-2016	ND	ND	0.0411	0.00021 J	ND	2.43	2.18	0.0014 J	0.0065	0.003 J	0.265	ND	ND	2.11	1.89
Oct-2016	ND	ND	0.0474	0.00017 J	ND	2.5	2.55 J+	0.0021 J	0.0066	0.0022 J	0.128 J	ND	0.00017 J	2	2.23 J+
May-2017	ND	ND	0.0508	0.0002 J	ND	2.83	2.32	0.0024 J	0.0085	0.0068	0.177 J	ND	0.00054 J	3.39	2.14
Oct-2017	ND	ND	0.0464	0.00014 J	ND	2.47	2.45	ND	0.0075	0.0017 J	ND	ND	ND	2.07	2.14

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09B***													
May-2018	*ND*	*ND*	*0.0507 J*	*ND*	*ND*	2.9	2.9	*ND*	*0.0078 J*	*ND*	*0.017 J*	*ND*	*ND*	2.4	2.4
Nov-2018	*ND*	*ND*	0.043	*0.00014 JM1*	*0.000091 J*	2.9	2.8	*0.0041 J*	0.0057	0.0029	*0.014 J*	*ND*	*0.000081 J*	2.2	2.2
May-2019	*ND*	*ND*	0.048	*ND*	*ND*	2.8	2.6	*ND*	0.0058	0.0035	*ND*	*ND*	*ND*	2.6	2.4
Oct-2019	*0.00014 J*	*0.00044 J*	0.05	*0.00012 J*	*0.0002 J*	2.5	2.5	*0.0056 J*	0.0056	0.0022	*0.017 J*	*ND*	*ND*	2.5	2.5
May-2020	*0.000061 J*	*ND*	0.047	*0.000093 J*	*ND*	3.1	3	*0.0041 J*	0.0046	0.0023	*0.017 J*	*0.013 J*	*ND*	2.5	2.4
Oct-2020	*ND*	*ND*	0.045	*ND*	*ND*	4.6	4.3	*0.0031 J*	0.0045	*ND*	*0.021 J*	*0.01 J*	*ND*	2.7	2.5
Apr-2021	*ND*	*ND*	0.052	*ND*	*ND*	4.9	4.8	*0.0014 J*	*0.0046 J*	*ND*	*0.053 J*	*ND*	*ND*	2.7	2.8
Oct-2021	*ND*	*ND*	0.051	*ND*	*ND*	4.3	4.6	0.0034	0.0051	*0.002 J*	*0.031 J*	*0.013 J*	*0.000034 J*	2.9	3.1
May-2022	*ND*	*ND*	0.048	*ND*	*ND*	5.6	5	0.0031	0.0048	0.0026	*ND*	*ND*	*ND*	3.1	2.5
Oct-2022	*ND*	*ND*	0.056	*0.00011 J*	*ND*	4.2	3.8	*0.0018 J*	0.0078	*0.0019 J*	0.083	*ND*	*ND*	3	2.8
May-2023	*ND*	*ND*	0.049	*0.00011 J*	*ND*	3.7	4.1	0.0038	0.0079	0.0028	0.18	*ND*	*ND*	2.3	2.6
Oct-2023	*ND*	*ND*	0.039	*0.00015 J*	*ND*	3.7	3.7	*0.0018 J*	0.007	0.0034 B	0.052	0.053	*ND*	2.2	2.4

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-09B*												
Nov-1993	0.05	NA	ND	NA	4.7	NA	ND	NA	8	NA	NA	NA	0.04
Apr-1994	0.03	NA	ND	NA	1.2	NA	ND	NA	8.28	NA	NA	NA	0.08
Apr-1995	ND	NA	ND	ND	1.7	NA	ND	ND	7.2	NA	ND	ND	0.03
Oct-1996	0.019	0.017	NA	ND	ND	ND	ND	ND	8.9	9.1	ND	0.026	0.16
Apr-1997	0.019	0.017	ND	ND	2.3	4.4	ND	ND	8.4	9.2	ND	ND	0.031
Oct-1997	0.02	0.018	NA	0.018	1.49	ND	ND	ND	11.1	10.9	ND	0.012	0.025
Apr-1998	0.019	0.017	NA	0.018	2.09	1.85	ND	ND	10.2	10.2	ND	ND	0.026
Apr-1999	0.03	0.018	NA	0.025	8.15	1.24	ND	ND	11.8	10.5	ND	0.079	0.056
Oct-1999	0.02	0.017	NA	0.035	2.97	1.29	ND	ND	10.3	9.04	ND	0.055	0.06
Apr-2000	0.02	0.017	NA	0.018	1.88	1.31	ND	ND	10.9	9.63	ND	0.017	0.033
Oct-2000	0.021	0.017	NA	0.025	2.6	1.53	ND	ND	12.6	11.1	ND	0.025	0.036
Apr-2001	0.02	NA	NA	0.012	1.92	NA	ND	ND	12.3	NA	ND	ND	0.015
Sep-2001	0.026	0.018	NA	0.036	3.42	1.42	ND	ND	13.2	11.7	ND	0.061	0.038
Mar-2002	0.025	0.02	NA	0.019	3.42	2.01	ND	ND	14.3	12.2	ND	0.047	0.038
Sep-2002	0.025	0.018	NA	0.015	2.03	1.56	ND	ND	13.2	12.3	ND	0.034	0.028
Mar-2003	0.021	0.018	NA	0.019	2.98	1.45	ND	ND	13.4	12.5	ND	0.025	0.027
Oct-2003	0.028	0.02	NA	0.016	3.2	2.95	ND	ND	14.1	12.9	ND	0.036	0.047
Apr-2004	0.026	0.02	ND	0.016	3.46	2.34	ND	ND	13.3	12.8	ND	0.028	0.108
Oct-2004	0.021	0.02	ND	ND	2.49	ND	ND	ND	13.6	13.1	ND	ND	0.02
Apr-2005	0.03	0.019	ND	0.033	3.31	1.33	ND	ND	15.2	15.1	ND	0.086	0.1
Oct-2005	0.031	0.016	ND	0.034	4.29	1.35	ND	ND	14.3	11.9	ND	0.12	0.069
Mar-2006	ND	ND	ND	ND	1.25	1.15	ND	ND	11	11.8	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09B***												
Sep-2006	0.027	0.017	0.0002	0.024	2.93	1.41	ND	ND	11.4	10.9	ND	0.07	0.046
Mar-2007	0.02	0.016	ND	0.014	2.3	1.48	ND	ND	10.5	10.7	ND	0.019	0.02
Sep-2007	0.02	0.019	ND	0.012	1.66	1.23	ND	ND	11.5	11.6	ND	ND	0.017
Mar-2008	0.021	0.017	ND	0.015	2.29	1.26	ND	ND	11.9	11.4	ND	0.019	0.023
Sep-2008	0.022	0.017	ND	0.019	2.63	1.24	ND	ND	10.2	10.1	ND	0.016	0.049
Mar-2009	0.019	0.016	ND	ND	2.08	1.36	ND	ND	10.6	10.3	ND	ND	0.018
Oct-2009	0.031	0.017	ND	0.023	2.9	1.16	ND	ND	10.7	11	ND	0.058	0.062
Apr-2010	0.029	0.014	ND	0.023	3.54	1.37	ND	ND	11	10.9	ND	0.08	0.043
Oct-2010	0.024	0.02	ND	ND	1.91	1.49	ND	ND	11.1	11.3	ND	ND	0.015
Apr-2011	0.239	0.012	ND	0.011	1.56	1.42	ND	ND	10.6	10.2	ND	ND	0.022
Sep-2011	0.019	0.018	ND	ND	1.71	1.52	ND	ND	11.7	11.3	ND	ND	0.01
Mar-2012	0.045	0.045	ND	ND	1.5	1.51	ND	ND	8.98	9.28	ND	ND	ND
Sep-2012	0.0202	0.02	ND	0.0083 J	1.47	1.37	ND	ND	11.6	11.5	ND	ND	0.0074 J
Mar-2013	0.0199	0.0206	0.000063 J	0.0091 J	1.33	1.36	ND	ND	11	10.9	ND	ND	0.0167
Oct-2013	0.0238	0.0241	ND	0.0081 J	1.24	1.21	ND	ND	9.63	9.33	0.000127 J	0.0052 J	0.0169
Mar-2014	0.0211	0.0218	ND	0.0091 J	1.85	1.44	ND	ND	12.7	10.6	ND	0.000972 J	0.0119
Oct-2014	0.0233	0.0232	0.000034 J	0.0099 J	1.65	1.6	0.00081 J	ND	12.6	12.6	ND	ND	0.0117
Apr-2015	0.0251	0.0248	ND	0.0097 J	1.66	1.61	0.0014 J	ND	12.9	13.2	0.000871 J	ND	0.0152
Nov-2015	0.0223	0.0226	ND	0.0087 J	1.68	1.71	0.000537 J	ND	12.5	12.7	0.00018 J	ND	0.0133
May-2016	0.0235	0.0224	ND	0.0081	1.84	1.65	ND	ND	14.9	12.3	ND	ND	0.0088 J,B
Oct-2016	0.0236 J+	0.0256 J+	ND	0.0099	1.83	1.79	ND	ND	13.1	14.1	ND	0.00068 J	0.0122 J
May-2017	0.0309	0.0254	ND	0.0127	2.25	1.69	ND	ND	50.3	13.2	ND	0.00067 J	0.0208 J
Oct-2017	0.0261	0.0267	ND	0.0084	1.56	1.63	ND	ND	12.9	13.3	ND	ND	0.0092 J
May-2018	0.0293	0.0279	ND	0.0178 J	1.9 J	1.4 J	ND	ND	14.8	14	ND	ND	0.0124 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09B***												
Nov-2018	0.022	0.02	*ND*	0.0093	*1.9 J*	*1.7 J*	*0.0004 J*	*ND*	13.4	13.4	*ND*	0.002	0.011 D6
May-2019	0.026	0.024	*ND*	0.008	*ND*	*ND*	*ND*	*ND*	13.3	12.8	*ND*	*ND*	0.0086
Oct-2019	0.029	0.03	*ND*	0.0073	*1.9 J*	*ND*	*0.00065 J*	*ND*	12.5	13	*ND*	0.0087	0.015
May-2020	0.021	0.02	*ND*	0.0098	*2.2 J*	*1.3 J*	*0.00043 J*	*ND*	15.2	11.8	*ND*	0.0044	0.01
Oct-2020	0.023	0.022	*ND*	0.0084	*ND*	*1.5 J*	*ND*	*ND*	13	12.9	*ND*	*0.0012 J*	*0.015 J*
Apr-2021	0.026	0.029	*ND*	*0.0084 J*	1.7	1.8	*ND*	*ND*	14.5	15.1	*ND*	*0.00073 J*	*0.0078 J*
Oct-2021	0.026	0.028	*ND*	0.0098	1.6	1.6	*0.0011 J*	*ND*	13.1	14	*0.000034 J*	*ND*	0.0097
May-2022	0.031	0.027	*ND*	0.012	1.7	1.5	*ND*	*ND*	15.4	13	*ND*	*ND*	0.017
Oct-2022	0.038	0.036	*ND*	0.012	1.9	1.8	*ND*	*ND*	16.6	16.6	*ND*	*ND*	0.014
May-2023	0.03	0.033	*ND*	0.014	1.5	1.7	*ND*	*ND*	13.4	15.8	*ND*	*0.0013 J*	0.018
Oct-2023	0.028	0.032	*ND*	0.012	1.4	1.6	*ND*	*ND*	13.7	14.4	*ND*	*ND*	0.018

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09B*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	6	5	4	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	17	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09B*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09B*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.6 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-09B*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	2.1	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	0.6 J	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.1	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.3	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09B***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.49 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	0.39 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.32 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.4 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.3 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09B***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	5.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-09B*															
Oct-2005	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	0.5 J	0.5 J	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.44 J	ND	ND	ND	0.18 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	0.34 J	ND	ND	ND	0.21 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	0.38 J	ND	ND	ND	0.19 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	0.29 J	ND	ND	ND	0.19 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	0.3 J	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09B***															
Oct-2016	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.455 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-09C***											
Nov-1993	9	9	ND	ND	13.3	1.6	ND	5.05	78.9	3.5	38	14.7
Apr-1994	57	31	0.2	ND	14.1	1.5	ND	8.94	143	3.3	71	91.14
Apr-1995	19.6	19.6	ND	17.6	17.6	2.1	ND	5.6	114	3	68	28
Apr-1997	ND	1	ND	ND	18	2.1	ND	NA	NA	ND	68	8
Oct-1997	6	6	0.42	ND	17.2	1.74	ND	5.8	94.5	1.1	59	17
Apr-1998	15	15	0.23	ND	15	1.45	ND	6.66	86.2	1.26	63	25
Apr-1999	ND	ND	0.17	ND	18.2	1.52	ND	5.07	87.3	2.12	88	17
Oct-1999	5	5	0.1	ND	15.6	1.73	ND	5.37	111.2	2.12	110	21
Apr-2000	3	4	ND	ND	17.1	1.8	ND	5.73	79	4.23	83	20
Oct-2000	10.2	NA	ND	ND	17	1.94	ND	5.49	98	5.69	91	26.1
Apr-2001	3.1	NA	ND	ND	15.2	1.36	ND	NA	NA	6.39	68	18.7
Sep-2001	5.1	5.1	ND	ND	16.9	2.63	ND	6.91	100	10.5	90	20.5
Mar-2002	2.8	2.8	ND	ND	17	2.16	ND	5.2	88.3	4.78	95	17.5
Sep-2002	2.8	2.8	ND	ND	17.3	1.85	ND	5.1	99.2	6.62	197	17.8
Mar-2003	5.7	5.7	ND	ND	20.8	1.82	ND	5.4	111.5	11.2	94	18.9
Oct-2003	29	29	ND	ND	17.9	1.98	ND	5.9	113.3	4.71	105	42.5
Apr-2004	7.2	7.2	ND	ND	18.4	1.91	ND	5.4	95.1	2.6	112	18.9
Oct-2004	9.6	9.6	ND	ND	17.9	1.83	ND	5.3	86.8	2.45	74	26.9
Apr-2005	23	23	ND	ND	17.1	1.84	ND	5	92.8	2.97	120	30.5
Oct-2005	5.4	5.4	ND	ND	19.3	1.96	ND	5.4	82.8	4.26	78	14.6
Mar-2006	4.8	4.8	ND	ND	15.5	1.6	ND	5.2	97.9	8.46	72	16.3
Sep-2006	3.8	3.8	ND	ND	16.5	1.83	ND	4.9	92.6	8.75	91	17.6
Mar-2007	4	4	ND	ND	17.2	1.97	ND	5.2	94.1	7.75	73	17.6
Sep-2007	3.2	3.2	ND	ND	18.4	2.35	ND	5.1	85	10.8	80	16.2
Mar-2008	3.5	3.5	ND	ND	19.9	2.49	ND	5.2	84.3	9.06	88	15.3
Sep-2008	4.2	4.2	ND	ND	15.2	1.76	ND	4.9	82.5	9.79	67	15.1
Mar-2009	3.5	3.5	ND	ND	14.4	1.87	ND	4.8	83.5	10	35	14.2
Oct-2009	3.4	3.4	ND	ND	15	1.66	ND	4.9	79.7	9.35	86	16.2
Apr-2010	6.1	6.1	ND	ND	17.5	2.2	ND	4.6	81.1	5.77	62	18.9
Oct-2010	3	3	ND	ND	15.9	2.11	ND	4.2	608	5.13	131	14.5
Apr-2011	33	33	ND	ND	16.1	1.88	0.03	4.5	81.2	5.33	110	38
Sep-2011	2.7	2.7	0.29	ND	16.7	1.77	ND	4.9	72.6	6.5	59	15.4
Mar-2012	3.1	3.1	ND	ND	19.5	2.25	ND	15.4	80.7	ND	76	12
Sep-2012	3.04	3.04	ND	ND	14.3	1.46	ND	4.1	86.3	12.8	72	18
Mar-2013	2.84	2.84	ND	ND	16.7	1.54	ND	3.9	97.1	11.9	65	16.4
Oct-2013	3.32	3.32	ND	ND	16.2	1.6	ND	3.6	94.3	12.5	65	18.1
Mar-2014	2.68	2.68	ND	ND	16.6	1.55	ND	5	91.3	13.5	63	17.1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-09C***										
Oct-2014	*ND*	*ND*	*ND*	11	17	1.57	*ND*	4.7	90.7	12.4	62	20.6
Apr-2015	2.84	2.84	*ND*	*ND*	18.1	2.11	*ND*	4.2	95.2	11.2	50	19.3
Nov-2015	*ND*	*ND*	*ND*	*8 J*	19.6	2.29	*ND*	5	129.4	10.2	58	18.7
May-2016	*ND*	*ND*	*ND*	*ND*	18.1	2.15	*ND*	5	151	9.71	66	18.4
Oct-2016	*ND*	*ND*	*ND*	*ND*	19.3	*NA*	*NA*	4.9	149.5	8.32	64	17.5
May-2017	*ND*	*ND*	*ND*	*7 J*	18.7	2.23	*ND*	4.9	147.7	10.4	64	24.3
Oct-2017	*ND*	*ND*	*ND*	*7 J+*	16.7	2.14	*ND*	4.9	138.3	11.9	50	20
May-2018	*4 JB*	*ND*	*0.088 J*	*ND*	17.4	0.39	*ND*	4.6	139.4	12.7	68	22.1
Nov-2018	*4 JB*	*ND*	*ND*	*ND*	22.5	2.8	*ND*	4.69	125.1	12	31	23.6
May-2019	20	*NA*	*ND*	*ND*	19.9	2.6	*ND*	5.6	112.6	11.7	84	39.4
Oct-2019	*ND*	*NA*	*ND*	*8.2 J*	16.7	2.3	*ND*	4.77	121.8	15.4	60	25.3
May-2020	*ND*	*NA*	*ND*	*ND*	19.4	2.6	*ND*	4.56	123	13.1	89	25.5
Oct-2020	*ND*	*NA*	*ND*	*ND*	20	2.7	*ND*	4.53	124.4	13.4	93	27.5
Apr-2021	22	*NA*	*ND*	*6.1 J*	23.3	2.9	*ND*	4.88	155.3	12.9	80	27.4
Oct-2021	*6 J2c*	*NA*	*ND*	*ND*	25.5	3.5	*ND*	4.85	201.4	10.1	67	26.3
May-2022	*4 J3c*	*NA*	*ND*	*ND*	22.6	3.1	*ND*	4.62	190.7	*9.6 J*	61	27.7 N3
Oct-2022	*ND*	*NA*	*ND*	*6.1 J*	24.1	2.5	*ND*	4.72	166.4	15.6	66	25.4 N3
May-2023	*ND*	*NA*	*ND*	*ND*	18.6	2.4	*ND*	4.77	157	14.6	65	24.3 N3
Oct-2023	*2 J4c*	*NA*	*ND*	*6.8 J*	22.3	2.08 O-04R-01	*NA*	4.79	162.5	16.1	72	27.5 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-09C*													
Nov-1993	NA	ND	ND	NA	ND	2.6	NA	0.015	NA	ND	6.4	0.14	ND	2	NA
Apr-1994	NA	ND	ND	NA	ND	33.5	NA	ND	NA	ND	0.25	1.59	ND	1.82	NA
Apr-1995	ND	ND	ND	ND	ND	7.9	NA	ND	ND	ND	ND	ND	ND	2	NA
Oct-1996	ND	ND	0.065	ND	ND	10	6.4	ND	ND	ND	ND	ND	ND	1.7	1.8
Apr-1997	ND	ND	0.042	ND	ND	2.3	2.2	ND	ND	ND	0.22	ND	0.002	1.5	1.5
Oct-1997	ND	ND	0.049	ND	ND	4.65	3.92	ND	0.013	ND	0.49	ND	ND	1.59	1.48
Apr-1998	ND	ND	0.053	ND	ND	7.37	6.97	ND	ND	ND	0.338	ND	ND	1.6	1.48
Apr-1999	ND	ND	0.06	ND	ND	3.68	3	ND	0.016	0.016	0.881	ND	ND	1.99	1.59
Oct-1999	ND	ND	0.061	ND	ND	3.2	2.57	ND	0.013	0.015	0.387	ND	ND	2.24	2.19
Apr-2000	ND	ND	0.072	ND	ND	3.92	3.13	ND	0.015	0.017	1.27	0.11	ND	2.37	2.11
Oct-2000	ND	ND	0.071	ND	ND	6.62	5.77	ND	0.012	0.013	0.777	ND	ND	2.32	2.08
Apr-2001	ND	ND	0.067	ND	ND	3.39	NA	ND	0.012	ND	0.154	NA	ND	2.5	NA
Sep-2001	ND	ND	0.071	ND	ND	4.36	3.13	ND	0.011	0.012	0.366	ND	ND	2.33	2.19
Mar-2002	ND	ND	0.063	ND	ND	3.27	2.67	ND	0.01	ND	0.54	ND	ND	2.26	2.16
Sep-2002	ND	ND	0.072	ND	ND	3.47	2.66	ND	ND	0.017	1.42	0.329	0.002	2.23	2.1
Mar-2003	ND	ND	0.061	ND	ND	4.11	3.51	ND	0.013	ND	0.059	ND	ND	2.09	2.14
Oct-2003	ND	ND	0.07	ND	ND	13.5	8.39	ND	ND	0.012	0.43	ND	ND	2.13	2.09
Apr-2004	ND	0.002	0.059	ND	ND	4.28	3.25	ND	ND	ND	0.312	ND	ND	1.98	1.86
Oct-2004	ND	ND	0.054	ND	ND	7.84	3.16	ND	0.016	0.016	0.676	ND	0.002	1.76	1.61
Apr-2005	ND	0.005	0.091	ND	ND	8.6	3.38	0.023	0.035	0.049	5.71	ND	0.011	2.18	1.56
Oct-2005	ND	ND	0.047	ND	ND	3.15	2.53	ND	0.011	0.012	0.965	ND	0.002	1.65	1.55

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09C***													
Mar-2006	ND	ND	0.053	ND	ND	3.13	3.08	ND	0.011	ND	0.608	ND	ND	2.06	2.12
Sep-2006	ND	ND	0.059	ND	ND	3.21	2.94	ND	0.011	ND	0.373	ND	ND	2.32	2.31
Mar-2007	ND	0.003	0.076	ND	ND	3.32	2.92	ND	0.016	0.014	1.44	ND	0.002	2.25	2.13
Sep-2007	ND	ND	0.066	ND	ND	2.87	2.71	ND	0.011	ND	0.377	ND	ND	2.2	2.18
Mar-2008	ND	0.002	0.066	ND	ND	2.74	2.6	ND	0.01	ND	0.477	ND	ND	2.05	2.1
Sep-2008	ND	0.002	0.06	ND	ND	2.68	2.46	ND	ND	ND	0.492	ND	ND	2.04	2.12
Mar-2009	ND	ND	0.062	ND	ND	2.53	2.35	ND	ND	0.015	1.53	ND	ND	1.91	1.87
Oct-2009	ND	ND	0.063	ND	ND	3.08	2.62	ND	0.012	0.013	1.35	ND	ND	2.06	2.22
Apr-2010	ND	ND	0.069	ND	ND	4	3.41	ND	0.014	0.012	2.1	ND	ND	2.15	1.91
Oct-2010	ND	ND	0.056	ND	ND	2.49	2.42	ND	ND	ND	0.207	ND	ND	2.01	1.91
Apr-2011	ND	ND	0.061	ND	ND	11.3	8.91	ND	0.019	0.014	0.202	ND	ND	2.38	1.85
Sep-2011	ND	ND	0.064	ND	ND	2.56	2.56	ND	ND	ND	0.177	ND	ND	2.18	2.15
Mar-2012	ND	ND	0.036	ND	ND	1.93	1.93	ND	ND	ND	ND	ND	ND	1.75	1.75
Sep-2012	ND	ND	0.0637	0.000327 J	ND	2.89	2.96	0.0023 J	0.0081 J	0.0042 J	0.227	0.0343 J	ND	2.62	2.65
Mar-2013	ND	ND	0.0686	0.00029 J	ND	2.6	3.15	0.0023 J	0.0071 J	0.0027 J	0.0286 J	0.0103 J	ND	2.41	2.82
Oct-2013	ND	ND	0.0751	0.000345 J	0.00013 J	2.72	2.76	0.0028 J	0.008 J	0.0031 J	ND	ND	ND	2.75	2.73
Mar-2014	0.000518 J	ND	0.0717	0.000333 J	0.000115 J	2.95	3.05	0.0025 J	0.008 J	0.0015 J	0.241	0.0045 J	ND	2.37	2.44
Oct-2014	0.001 J	ND	0.0893	0.000437 J	0.000143 J	3.42	3.31	0.0011 J	0.0086 J	0.0042 J	0.102	ND	ND	2.94	2.86
Apr-2015	0.000486 J	ND	0.0873	0.000482 J	0.000129 J	3.26	3.17	0.0016 J	0.0089 J	0.0034 J	0.0461 J	0.009 J	ND	2.72	2.67
Nov-2015	0.000371 J	0.000239 J	0.0776	0.00042 J	0.000141 J	3.3	3.29	0.0013 J	0.0082 J	0.0042 J	0.17	ND	0.000519 J	2.53	2.55
May-2016	ND	ND	0.0732	0.00041 J	ND	3.11	2.77	0.0013 J	0.0081	0.0034 J	0.036 J	ND	ND	2.59	2.32
Oct-2016	ND	ND	0.0711	0.00041 J	ND	3.03	2.97 J+	0.0017 J	0.0084	0.0036 J	0.0493 J	ND	ND	2.4	2.55 J+
May-2017	ND	ND	0.085	0.00039 J	ND	3.62	3.25	0.0017 J	0.01	0.0079	0.159 J	ND	0.00054 J	3.7	2.73
Oct-2017	ND	ND	0.0807	0.00033 J	ND	3.46	3.31	ND	0.0096	0.0031 J	ND	ND	ND	2.76	2.93

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09C***													
May-2018	*ND*	*ND*	*0.0871 J*	*ND*	*0.00014 J*	3.8	3.7	*0.0022 J*	*0.0097 J*	*0.0032 J*	*0.02 J*	*ND*	*ND*	3.1	3
Nov-2018	*ND*	*ND*	0.086	0.0004	*0.00017 J*	4.2	4.1	*0.0064 J*	0.0086	0.0043	0.026	*0.014 J*	*0.000046 J*	3.2	3.2
May-2019	*ND*	*ND*	0.075	*ND*	*ND*	10.3	9.4	*ND*	0.0071	0.0031	*ND*	*ND*	*ND*	3.3	3.1
Oct-2019	*0.00013 J*	*ND*	0.083	*0.00029 J*	*0.00028 J*	4.5	4.7	0.0074	0.0082	0.0033	*0.018 J*	*0.011 J*	*ND*	3.4	3.4
May-2020	*0.000054 J*	*ND*	0.089	*0.0003 J*	*0.00017 J*	4.2	4.2	0.0094	0.011	0.0037	*0.06 J*	*0.019 J*	*ND*	3.7	3.6
Oct-2020	*0.00026 J*	*ND*	0.11	*0.00038 J*	*0.0007 J*	4.5	4.3	0.099	0.0098	0.57	*0.028 J*	*0.014 J*	*0.0014 J*	4	3.7
Apr-2021	*ND*	*0.0029 J*	0.1	*0.00028 J*	*0.00035 J*	4.8	5	*0.0035 J*	0.011	*0.0044 J*	*ND*	*ND*	*ND*	3.7	3.9
Oct-2021	*ND*	*ND*	0.1	*0.00032 J*	*ND*	4.3	4.6	0.0037	0.013	0.0033	*0.016 J*	*0.01 J*	*ND*	3.8	4
May-2022	*ND*	*ND*	0.12	*0.00039 J*	*0.00017 J*	4.6	4.4	0.0059	0.015	0.0044	*0.036 J*	*ND*	*ND*	3.9	3.8
Oct-2022	*ND*	*ND*	0.097	*0.00032 J*	*ND*	4.3	4.9	0.0033	0.012	0.0038	*ND*	*ND*	*ND*	3.5	4
May-2023	*ND*	*ND*	0.1	*0.00024 J*	*ND*	4.2	4.6	0.0035	0.012	0.0041	0.051	*ND*	*ND*	3.4	3.7
Oct-2023	*ND*	*ND*	0.12	*0.00025 J*	*ND*	5	4.9	*0.0024 J*	0.014	0.0062 B	*0.016 J*	*0.007 J*	*ND*	3.7	3.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-09C*												
Nov-1993	0.06	NA	ND	NA	4.3	NA	ND	NA	6.5	NA	NA	NA	0.04
Apr-1994	0.03	NA	ND	NA	3.26	NA	ND	NA	8.87	NA	NA	NA	0.05
Apr-1995	0.01	NA	ND	ND	7.8	NA	ND	ND	7.3	NA	ND	ND	0.02
Oct-1996	0.024	0.023	NA	ND	ND	ND	ND	ND	8	8.1	ND	ND	0.096
Apr-1997	0.018	0.015	ND	ND	2.6	2.3	ND	ND	9.5	10	ND	ND	0.043
Oct-1997	0.023	0.02	NA	0.016	1.74	0.969	ND	ND	9.14	8.95	ND	ND	0.02
Apr-1998	0.019	0.015	NA	ND	1.99	1.61	ND	ND	9.25	8.96	ND	ND	0.017
Apr-1999	0.029	0.02	NA	ND	3.16	1.65	ND	ND	10	9.15	ND	ND	0.028
Oct-1999	0.032	0.031	NA	0.025	1.91	1.78	ND	ND	9.38	8.42	ND	ND	0.033
Apr-2000	0.039	0.035	NA	0.017	1.39	0.689	ND	ND	10.6	9.28	ND	ND	0.032
Oct-2000	0.041	0.032	NA	ND	1.94	1.58	ND	ND	11.5	9.91	ND	ND	0.024
Apr-2001	0.045	NA	NA	ND	1.86	NA	ND	ND	10.7	NA	ND	ND	0.012
Sep-2001	0.042	0.036	NA	0.02	1.79	1.44	ND	ND	11.5	9.26	ND	ND	0.023
Mar-2002	0.039	0.036	NA	ND	1.98	1.34	ND	ND	10.4	9.3	ND	ND	0.019
Sep-2002	0.041	0.034	NA	ND	2.08	1.79	ND	ND	9.83	9.67	ND	ND	0.021
Mar-2003	0.032	0.034	NA	0.012	2.47	1.03	ND	ND	10.1	9.64	ND	ND	0.017
Oct-2003	0.036	0.029	NA	ND	2.86	1.49	ND	ND	12.7	11.9	ND	ND	0.018
Apr-2004	0.032	0.03	ND	ND	2.5	1.95	ND	ND	12.2	12.4	ND	ND	0.01
Oct-2004	0.027	0.022	ND	0.045	3.34	2.15	ND	ND	12.9	11.5	ND	ND	0.086
Apr-2005	0.045	0.018	ND	0.044	3.36	1.23	ND	ND	13.5	11.9	ND	0.035	0.096
Oct-2005	0.023	0.019	ND	0.013	1.79	1.45	ND	ND	11.1	9.58	ND	ND	0.022
Mar-2006	ND	ND	ND	0.012	1.69	1.42	ND	ND	8.26	8.69	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09C***												
Sep-2006	0.047	0.044	ND	ND	1.83	1.69	ND	ND	9.88	9.84	ND	ND	0.017
Mar-2007	0.045	0.042	ND	0.016	2.37	1.51	ND	ND	10.3	9.87	ND	0.012	0.029
Sep-2007	0.046	0.047	ND	ND	1.61	1.41	ND	ND	9.72	9.14	ND	ND	0.018
Mar-2008	0.043	0.044	ND	ND	1.64	1.43	ND	ND	9.61	8.98	ND	ND	0.022
Sep-2008	0.041	0.043	ND	0.012	1.54	1.43	ND	ND	7.7	7.86	ND	ND	0.038
Mar-2009	0.04	0.039	ND	ND	2.02	1.57	ND	ND	8	7.76	ND	ND	0.02
Oct-2009	0.044	0.043	ND	0.017	1.6	1.42	ND	ND	8.01	8.5	ND	ND	0.055
Apr-2010	0.039	0.031	ND	0.016	1.9	1.47	ND	ND	10.5	10	ND	ND	0.03
Oct-2010	0.038	0.035	ND	ND	1.68	1.51	ND	ND	10.1	10.3	ND	ND	0.014
Apr-2011	0.076	0.032	ND	0.014	1.62	1.46	ND	ND	10.2	9.47	ND	ND	0.033
Sep-2011	0.041	0.04	ND	ND	1.77	1.66	ND	ND	9.56	9.44	ND	ND	ND
Mar-2012	0.018	0.019	ND	ND	1.35	1.34	ND	ND	11.8	11.8	ND	ND	ND
Sep-2012	0.0536	0.0546	0.000045 J	0.0081 J	1.6	1.65	ND	ND	8.42	8.5	ND	ND	0.0075 J
Mar-2013	0.0558	0.0621	0.000083 J	0.0074 J	1.38	1.68	0.000739 J	ND	8.32	9.93	ND	ND	0.0144
Oct-2013	0.0658	0.066	ND	0.0076 J	1.6	1.62	0.000585 J	ND	9.71	9.88	0.00019 J	0.0016 J	0.018
Mar-2014	0.0707	0.0719	ND	0.0074 J	1.59	1.57	ND	ND	8.71	8.98	ND	0.000889 J	0.0108
Oct-2014	0.0739	0.0722	ND	0.0079 J	1.76	1.72	0.0016 J	ND	10.2	10.2	ND	ND	0.0176
Apr-2015	0.0757	0.0749	0.000028 J	0.0085 J	1.66	1.61	0.0013 J	ND	10.8	10.6	ND	ND	0.0286
Nov-2015	0.0616	0.0611	ND	0.0079 J	1.75	1.71	0.0012 J	ND	11.5	11.9	0.000156 J	0.000737 J	0.018
May-2016	0.0629	0.0571	ND	0.0084	1.81	1.76	ND	ND	13.3	11.2	ND	ND	0.0099 J,B
Oct-2016	0.0504 J+	0.0559 J+	ND	0.0096	1.81	1.86	ND	ND	12.2	12.7	ND	0.0002 J	0.0108 J
May-2017	0.0644	0.064	ND	0.0112	2.21	1.73	0.00046 J	ND	43	11	ND	0.0005 J	0.0211 J
Oct-2017	0.0721	0.0727	ND	0.0093	1.74	1.82	ND	ND	9.91	10.3	ND	ND	0.0104 J
May-2018	0.0804	0.0772	ND	0.0163 J	2 J	1.4 J	ND	ND	11.2	10.4	ND	ND	0.0128 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09C***												
Nov-2018	0.067	0.065	*ND*	0.011	*1.8 J*	*2.4 J*	*0.00065 J*	*ND*	13.5	14.4	*ND*	0.0021	0.012
May-2019	0.055	0.058	*ND*	0.01	*ND*	*ND*	*ND*	*ND*	12.2	11.9	*ND*	0.01	0.0097
Oct-2019	0.068	0.065	*ND*	0.0095	*2 J*	*ND*	*0.00086 J*	*ND*	11.2	12.1	*ND*	0.0044	0.015
May-2020	0.074	0.069	*ND*	0.013	*2.5 J*	*1.6 J*	*0.00086 J*	*ND*	13.7	11.3	*ND*	*ND*	0.012
Oct-2020	0.6	0.068	*ND*	0.1	*ND*	*2 J*	*ND*	*ND*	11.6	11.9	*ND*	*ND*	0.93
Apr-2021	0.078	0.08	*ND*	0.012	2.1	2.2	*ND*	*ND*	13.8	14.7	*ND*	*ND*	*0.009 J*
Oct-2021	0.079	0.084	*ND*	0.014	1.8	1.9	*ND*	*ND*	15.1	16	*0.00004 J*	*ND*	0.013
May-2022	0.091	0.086	*ND*	0.017	2.1	2	*0.0016 J*	*ND*	16.1	15.6	*ND*	*ND*	0.02
Oct-2022	0.089	0.097	*ND*	0.012	2	2.2	*0.00097 J*	*ND*	14	15.2	*ND*	*ND*	0.019
May-2023	0.1	0.1	*ND*	0.012	1.8	2	*0.0013 J*	*ND*	11.5	13.1	*ND*	*ND*	0.02
Oct-2023	0.13	0.13	*ND*	0.012	2.1	1.9	*ND*	*ND*	12.5	13	*ND*	*ND*	0.018

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09C*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	1	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09C*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09C*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.1 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-09C*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.1	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.6	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.4	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	2.9	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	2	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.5	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.6	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.9	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.5	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.2	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.2	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.6	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09C***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.77 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.44 J	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	0.61 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.21 J	ND	ND	ND	ND	ND	0.34 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	0.34 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.16 J	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	0.3 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	0.2 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09C***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.324 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09C***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-09C*															
Oct-2005	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	4.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	1.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	0.89 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.78 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	0.55 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	0.69 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	0.37 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	0.48 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	0.4 J	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09C***															
Oct-2016	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.51 J*	*0.561 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-15***											
Nov-1993	7	7	0.2	ND	3	ND	ND	5.12	24.4	ND	34	2.43
Apr-1994	ND	ND	0.1	ND	3.1	ND	ND	4.89	20.5	1.8	ND	0.33
Aug-1994	ND	ND	ND	ND	2.9	0.3	ND	4.7	21.8	2.6	ND	2.51
Sep-1994	ND	ND	ND	ND	3.2	0.3	ND	5.4	21.8	3.9	46	2.4
Nov-1994	ND	ND	ND	ND	3.1	0.2	ND	5.1	21.6	1.8	27	2.6
Apr-1995	ND	ND	ND	ND	2.9	0.4	ND	5.1	19.3	2.9	7	2.3
Apr-1997	ND	ND	ND	ND	2	0.15	ND	NA	NA	ND	26	1.8
Oct-1997	ND	ND	0.26	ND	2.75	ND	ND	5.68	22.8	7.77	18	ND
Apr-1998	ND	ND	0.24	ND	1.71	0.133	ND	7.32	20	ND	ND	2.6
Apr-1999	ND	ND	0.14	ND	3.45	ND	ND	4.94	19.59	ND	13	2.9
Oct-1999	ND	ND	0.07	ND	3.03	ND	ND	4.85	24.3	ND	29	2.9
Apr-2000	2	2	ND	ND	3.31	ND	ND	5.29	17	ND	ND	3.3
Oct-2000	24	NA	ND	13	2.48	ND	ND	5.17	20.6	ND	41	3.59
Apr-2001	2.2	NA	ND	ND	2.51	ND	ND	NA	NA	ND	26	3.2
Sep-2001	2.2	2.2	ND	ND	11.7	ND	ND	5.07	22	ND	29	3.61
Mar-2002	2	2	ND	ND	2.72	ND	ND	5.3	173.6	ND	42	3.38
Sep-2002	2.8	2.8	ND	ND	3.05	ND	ND	5.2	19.4	ND	16	2.87
Mar-2003	2.5	2.5	ND	ND	31.7	ND	ND	5.1	24.3	8.11	58	2.94
Oct-2003	4	4	ND	ND	3	0.124	ND	5.3	25.7	ND	30	4.33
Apr-2004	2.7	2.7	ND	ND	2.71	0.148	ND	5.1	20.2	ND	28	3.59
Oct-2004	2.7	2.7	ND	ND	2.69	0.113	ND	5.3	17.2	ND	25	4.2
Apr-2005	2.5	2.5	ND	ND	2.86	0.16	ND	5	16.7	ND	32	3
Oct-2005	4.4	4.4	0.21	ND	3.08	0.14	ND	4.4	17.8	ND	37	3.33
Mar-2006	4.2	4.2	ND	ND	2.85	0.16	ND	7.2	21	1.05	83	1.85
Sep-2006	3.4	3.4	ND	ND	2.97	0.16	ND	5	20.7	ND	22	2.8
Mar-2007	4.4	4.4	0.62	ND	3.07	0.16	ND	4.9	18.6	ND	ND	2.82
Sep-2007	4.2	4.2	0.33	ND	9.64	ND	ND	5.6	21.2	ND	33	2.96
Mar-2008	6.7	6.7	0.47	ND	8.02	0.48	ND	4.9	24.8	1.69	56	3.33
Sep-2008	4.4	4.4	ND	ND	3.11	ND	ND	4.9	20.2	ND	22	2.9
Mar-2009	5.2	5.2	ND	ND	3.11	0.11	ND	4.5	21.9	ND	ND	3.16
Oct-2009	5.2	5.2	ND	ND	2.85	0.1	ND	4.6	20.1	ND	37	3.31
Mar-2010	5.5	5.5	ND	ND	2.85	0.1	ND	5.54	42	ND	28	2.81
Oct-2010	4.8	4.8	ND	ND	3.4	0.07	ND	4.8	19.4	ND	18	3.11
Apr-2011	4	4	ND	ND	2.98	0.14	ND	4.8	19.5	ND	49	2.9
Sep-2011	3.9	3.9	0.24	ND	2.97	0.13	ND	4.8	31.9	ND	14	3.32
Mar-2012	3.4	3.4	ND	ND	3.05	0.16	ND	4.8	21.9	ND	ND	3.27
Sep-2012	3.48	3.48	ND	ND	3.07	0.157	ND	3.9	19.6	ND	ND	3.16

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-15***											
Mar-2013	4.36	4.36	*ND*	*ND*	3.38	0.193	*ND*	3.8	16.8	*0.601 J*	23	2.59
Oct-2013	3.8	3.8	*ND*	*ND*	3.25	0.165	*ND*	3.1	18.9	*ND*	*ND*	2.92
Mar-2014	3.64	3.64	*ND*	22	3.3	0.174	*ND*	5.4	23.8	*ND*	*ND*	2.74
Oct-2014	*ND*	*ND*	*ND*	*7 J*	3.59	0.158	*ND*	4.9	19.6	*ND*	*ND*	3.32
Apr-2015	4.64	4.64	*ND*	*ND*	3.25	0.168	*ND*	4.2	21.5	*ND*	*ND*	3.24
Nov-2015	3.48	3.48	*ND*	*ND*	3.48	0.169	*ND*	5.3	27.6	*ND*	*ND*	3.68
May-2016	*ND*	*ND*	*ND*	*ND*	3.37	0.197	*ND*	5.3	33.8	*ND*	*15 J*	3.3
Oct-2016	*ND*	*ND*	*ND*	*ND*	3.27	*NA*	*NA*	5.7	30.3	*0.742 J*	32	3.2
May-2017	2.68	2.68	*ND*	*ND*	3.18	0.192	*ND*	5.2	81.3	*0.512 J*	*ND*	3.2
Oct-2017	3.88	3.88	*ND*	*7 J*	3.23	0.209	*ND*	5.5	36.8	*ND*	*15 J*	3
May-2018	*8 J*	*ND*	*ND*	*ND*	3.3	*ND*	*ND*	4.3	97.4	*ND*	39	*3.6 J*
Nov-2018	24	24	*0.052 J*	*ND*	3.4	*0.038 J*	*ND*	6.01	65.5	*ND*	39	*3.7 J*
May-2019	40	*NA*	*ND*	*ND*	3.4	*ND*	*ND*	6.14	72.3	*ND*	20	*ND*
Oct-2019	*2.5 JH1*	*NA*	*ND*	*14.8 J*	3.1	0.13	0.011	5.83	67.3	*ND*	34	3.8
May-2020	12	*NA*	*ND*	*ND*	3.4	*ND*	*ND*	5.98	74.1	*ND*	*ND*	4.1
Oct-2020	*ND*	*NA*	*ND*	*ND*	3.4	*ND*	0.07	6.07	66.2	*ND*	21	3.9
Apr-2021	*ND*	*NA*	*ND*	*10.5 J*	3.5	0.14	*ND*	6.32	106.8	*ND*	25	3.8
Oct-2021	14	*NA*	*ND*	*ND*	3.5	*ND*	*ND*	6.49	126.3	*ND*	*ND*	3.85
May-2022	10	*NA*	*ND*	*ND*	3.4 ML	0.15	0.016	6.32	114.2	*ND*	39	4.3 N3
Oct-2022	26	*NA*	*ND*	*8.4 J*	4.6	0.11	*ND*	6.35	116.1	*ND*	33	3.9 N3
May-2023	24	*NA*	*ND*	*ND*	4.1	0.13	*0.009 J*	6.22	96.2	*ND*	30	4.6 N3
Oct-2023	36	*NA*	*ND*	*6.8 J*	5.1	*ND*	*NA*	6.4	124.3	*ND*	48	4.6 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15***													
Nov-1993	NA	ND	ND	NA	ND	0.38	NA	ND	NA	ND	67	3	ND	0.36	NA
Apr-1994	NA	ND	ND	NA	ND	0.38	NA	ND	NA	ND	1.5	1	ND	0.25	NA
Aug-1994	NA	ND	ND	NA	ND	0.46	NA	ND	NA	ND	7.1	0.31	ND	0.33	NA
Sep-1994	NA	ND	ND	NA	ND	0.34	NA	ND	NA	ND	6.5	1.7	ND	0.37	NA
Nov-1994	NA	ND	ND	NA	ND	0.45	NA	ND	NA	0.02	4.8	1.6	ND	0.35	NA
Apr-1995	ND	ND	0.7	ND	ND	0.36	NA	ND	ND	ND	8.1	ND	ND	0.35	NA
Oct-1996	ND	ND	0.015	ND	ND	0.55	0.62	ND	ND	ND	26	0.94	0.002	ND	ND
Apr-1997	ND	ND	ND	ND	ND	0.6	0.69	ND	ND	ND	0.6	0.45	ND	ND	ND
Oct-1997	ND	ND	0.011	ND	ND	0.495	0.587	ND	ND	ND	5.37	0.273	ND	0.328	0.322
Apr-1998	ND	ND	0.01	ND	ND	0.5	0.491	ND	ND	ND	26.2	0.201	ND	0.331	0.326
Apr-1999	ND	ND	0.011	ND	ND	0.551	0.543	ND	ND	ND	7.77	0.245	ND	0.372	0.355
Oct-1999	ND	ND	ND	ND	ND	0.508	0.471	ND	ND	ND	12.1	0.396	ND	0.345	0.318
Apr-2000	ND	ND	ND	ND	ND	0.716	0.452	ND	ND	ND	9.48	0.476	ND	0.378	0.304
Oct-2000	ND	ND	ND	ND	ND	0.728	0.667	ND	ND	ND	23.5	16.8	ND	0.43	0.425
Apr-2001	ND	ND	0.012	ND	ND	0.602	NA	ND	ND	ND	7.97	NA	ND	0.401	NA
Sep-2001	ND	ND	0.012	ND	ND	0.738	0.569	ND	ND	ND	24	0.88	ND	0.431	0.386
Mar-2002	ND	ND	0.012	ND	ND	0.713	0.552	ND	ND	ND	15.3	1.81	ND	0.388	0.376
Sep-2002	ND	ND	0.011	ND	ND	0.544	0.513	ND	ND	ND	12.2	0.425	ND	0.366	0.351
Mar-2003	ND	ND	0.012	ND	ND	0.565	0.528	ND	ND	ND	7.18	0.178	ND	0.373	0.349
Oct-2003	ND	ND	0.013	ND	ND	0.956	0.603	ND	ND	0.012	21.5	1.12	ND	0.47	0.408
Apr-2004	ND	ND	ND	ND	ND	0.754	0.548	ND	ND	ND	11.4	0.306	ND	0.415	0.359

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15***													
Oct-2004	*ND*	*ND*	0.013	*ND*	*ND*	0.978	0.536	*ND*	*ND*	*ND*	50.2	0.81	*ND*	0.426	0.366
Apr-2005	*ND*	*ND*	0.012	*ND*	*ND*	0.574	0.566	*ND*	*ND*	*ND*	13.1	0.214	*ND*	0.384	0.371
Oct-2005	*ND*	*ND*	0.012	*ND*	*ND*	0.758	0.559	*ND*	*ND*	*ND*	18.4	0.378	*ND*	0.35	0.324
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	0.271	0.26	*ND*	*ND*	*ND*	10.8	0.27	*ND*	0.285	0.302
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	0.542	0.532	*ND*	*ND*	*ND*	6.1	0.274	*ND*	0.353	0.351
Mar-2007	*ND*	*ND*	0.011	*ND*	*ND*	0.543	0.512	*ND*	*ND*	*ND*	14.6	1.12	*ND*	0.354	0.345
Sep-2007	*ND*	*ND*	0.011	*ND*	*ND*	0.563	0.527	*ND*	*ND*	*ND*	19.1	0.483	*ND*	0.379	0.364
Mar-2008	*ND*	*ND*	0.015	*ND*	*ND*	0.649	0.626	*ND*	*ND*	*ND*	28.5	3.92	*ND*	0.416	0.393
Sep-2008	*ND*	*ND*	0.011	*ND*	*ND*	0.507	0.466	*ND*	*ND*	*ND*	16.8	0.914	*ND*	0.386	0.389
Mar-2009	*ND*	*ND*	0.013	*ND*	*ND*	0.655	0.562	*ND*	*ND*	*ND*	44	2.06	*ND*	0.37	0.352
Oct-2009	*ND*	*ND*	0.012	*ND*	*ND*	0.605	0.558	*ND*	*ND*	*ND*	29.2	12	*ND*	0.436	0.385
Mar-2010	*ND*	*ND*	0.013	*ND*	*ND*	0.541	0.504	*ND*	*ND*	0.011	28	4.21	*ND*	0.354	0.335
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	0.581	0.526	*ND*	*ND*	*ND*	5.14	1.88	*ND*	0.404	0.391
Apr-2011	*ND*	*ND*	0.012	*ND*	*ND*	0.543	0.528	*ND*	*ND*	*ND*	8.19	0.312	*ND*	0.362	0.369
Sep-2011	*ND*	*ND*	0.012	*ND*	*ND*	0.693	0.692	*ND*	*ND*	*ND*	20.6	0.252	*ND*	0.387	0.383
Mar-2012	*ND*	*ND*	0.011	*ND*	*ND*	0.574	0.567	*ND*	*ND*	*ND*	7.42	0.296	*ND*	0.448	0.434
Sep-2012	*ND*	*ND*	0.0117	*0.000263 J*	*ND*	0.636	0.606	*ND*	*0.0042 J*	*0.0053 J*	10.3	0.217	*ND*	0.381	0.372
Mar-2013	*ND*	*ND*	0.0114	*0.000278 J*	*ND*	0.537	0.614	*ND*	*0.004 J*	*0.0076 J*	27.6	0.115	*0.0014 J*	0.303	0.335
Oct-2013	*ND*	*ND*	0.0115	*0.000213 J*	*ND*	0.573	0.508	*0.0025 J*	*0.0044 J*	*0.0033 J*	0.449	0.118	*ND*	0.362	0.345
Mar-2014	*0.000418 J*	*ND*	0.0109	*ND*	*ND*	0.534	0.538	*0.0017 J*	*0.0044 J*	*0.0074 J*	28.4	0.123	*ND*	0.341	0.343
Oct-2014	*0.00056 J*	*ND*	0.0125	*0.000239 J*	*ND*	0.672	0.69	*0.000523 J*	*0.0043 J*	*0.0044 J*	6.7	0.216	*ND*	0.399	0.412
Apr-2015	*0.000993 J*	*ND*	0.0126	*0.000209 J*	*0.000102 J*	0.638	0.648	*0.001 J*	*0.0047 J*	*0.0044 J*	11.6	0.175	*ND*	0.4	0.412
Nov-2015	*ND*	*ND*	0.0132	*0.000321 J*	*0.000099 J*	0.781	0.752	*0.00054 J*	*0.0044 J*	0.0124	26.7	0.234	*0.000304 J*	0.421	0.446
May-2016	*ND*	*ND*	0.0114	*0.00021 J*	*ND*	0.613	0.6	*0.001 J*	0.0042	0.0045	15.5	*0.151 J*	*ND*	0.424	0.381

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15***													
Oct-2016	ND	ND	0.0129	0.00022 J	ND	0.644	0.573	0.0011 J	0.0041	0.0044	10.6	0.19 J+	ND	0.378	0.409
May-2017	ND	ND	0.0124	0.00019 J	ND	0.58	0.711	0.0006 J	0.0044	0.0032 J	1.08	0.892	ND	0.415	0.428
Oct-2017	ND	ND	0.0116	0.00018 J	ND	0.527	0.648	ND	0.0042	0.003 J	1.43	1.08	ND	0.414	0.426
May-2018	0.000047 J	ND	0.013	0.0002 J	0.000068 J	0.73 J	0.68 J	0.00059 J	0.0039	0.0056	1.8	1.6	0.000031 JB	0.44 J	0.43 J
Nov-2018	ND	ND	0.012	0.000097 J	0.000034 J	0.71 J	0.74 J	0.0018 J	0.0028	0.0022	15.3	13.6	0.000079 J	0.46 J	0.46 J
May-2019	ND	ND	0.014	ND	ND	ND	ND	ND	0.0037	ND	22	21	ND	ND	ND
Oct-2019	0.00012 J	ND	0.014	0.0002 J	0.00015 J	0.75	0.78 J	0.0074	0.0031	0.0028	24.1	13.8	0.000074 J	0.48	0.49 J
May-2020	0.00022 J	0.00032 J	0.017	0.00034	0.00011 J	0.78	0.78 J	0.0046 J	0.0032	0.0066	52.2	16.9	ND	0.51	0.52 J
Oct-2020	0.00046 J	ND	0.019	0.00062 J	ND	0.76	0.72 J	0.0048 J	0.0044	0.012	60.9	9.5	ND	0.49	0.47 J
Apr-2021	ND	ND	0.016	ND	ND	0.73 J	0.72 J	0.00041 J	0.0029 J	ND	25	24.9	ND	0.48	0.5
Oct-2021	0.000049 JB	ND	0.015	ND	ND	0.75	0.79	0.0017 J	0.0027	0.001 J	22.9	20.6	ND	0.48 J	0.51
May-2022	ND	ND	0.015	ND	ND	0.83	0.87	0.0015 J	0.0029	0.0023 J	31.7	21.3	ND	0.54	0.57
Oct-2022	ND	ND	0.014	ND	ND	0.75	0.87	0.0012 J	0.0025	0.0019 J	42.4	23.8	ND	0.49 J	0.55
May-2023	ND	ND	0.016	0.0001 J	ND	0.89	0.83	0.0019 J	0.0037	0.0022 J	20.9	17	ND	0.57	0.55
Oct-2023	ND	ND	0.017	ND	ND	0.91	0.87	0.0025 J	0.0035 J	0.0032 JB	30.8	24.7	ND	0.56	0.52

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-15*												
Nov-1993	0.08	NA	ND	NA	0.58	NA	ND	NA	1.6	NA	NA	NA	ND
Apr-1994	0.05	NA	ND	NA	0.34	NA	ND	NA	1.2	NA	NA	NA	ND
Aug-1994	0.01	NA	ND	NA	0.49	NA	ND	NA	1.1	NA	NA	NA	ND
Sep-1994	0.02	NA	ND	NA	0.4	NA	ND	NA	1.3	NA	NA	NA	0.03
Nov-1994	0.04	NA	ND	NA	0.47	NA	ND	NA	1.2	NA	NA	NA	0.02
Apr-1995	0.04	NA	ND	ND	0.06	NA	ND	ND	1.2	NA	ND	ND	0.02
Oct-1996	0.02	0.01	NA	ND	ND	ND	ND	ND	1.9	1.8	ND	ND	0.049
Apr-1997	0.011	ND	ND	ND	ND	2	ND	ND	1.9	1.4	ND	ND	ND
Oct-1997	ND	0.011	NA	ND	0.922	ND	ND	ND	1.29	1.36	ND	ND	ND
Apr-1998	ND	0.011	NA	ND	1.64	ND	ND	ND	1.4	1.33	ND	ND	0.03
Apr-1999	ND	ND	NA	ND	0.972	0.732	ND	ND	1.52	1.45	ND	ND	ND
Oct-1999	ND	ND	NA	ND	ND	0.831	ND	ND	1.43	1.32	ND	ND	ND
Apr-2000	0.012	0.01	NA	ND	ND	ND	ND	ND	2.95	1.33	ND	ND	ND
Oct-2000	0.184	0.176	NA	ND	0.782	0.661	ND	ND	1.69	1.69	ND	ND	ND
Apr-2001	0.014	NA	NA	ND	1.08	NA	ND	ND	1.62	NA	ND	ND	ND
Sep-2001	0.01	0.013	NA	ND	0.816	0.478	ND	ND	2.38	1.5	ND	ND	ND
Mar-2002	0.022	0.024	NA	ND	1.95	1.06	ND	ND	2.33	1.47	ND	ND	ND
Sep-2002	ND	ND	NA	ND	0.583	0.568	ND	ND	1.48	1.44	ND	ND	ND
Mar-2003	ND	ND	NA	ND	1.16	1.1	ND	ND	1.5	1.4	ND	ND	ND
Oct-2003	0.016	0.015	NA	ND	2.54	1	ND	ND	2.4	1.52	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.67	1	ND	ND	1.33	1.43	ND	ND	ND
Oct-2004	ND	0.014	0.0002	ND	1.26	0.739	ND	ND	2	1.52	ND	ND	0.014

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-15***												
Apr-2005	ND	ND	ND	ND	0.74	0.74	ND	ND	1.46	1.43	ND	ND	ND
Oct-2005	0.01	ND	ND	ND	0.712	0.665	ND	ND	1.85	1.23	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	1.14	1.11	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.633	0.694	ND	ND	1.29	1.27	ND	ND	ND
Mar-2007	0.016	0.013	ND	ND	0.621	0.563	ND	ND	1.3	1.24	ND	ND	ND
Sep-2007	ND	ND	ND	ND	0.574	ND	ND	ND	1.48	1.38	ND	ND	ND
Mar-2008	0.031	0.041	ND	ND	0.809	0.745	ND	ND	1.59	1.43	ND	ND	ND
Sep-2008	ND	ND	ND	ND	0.567	0.557	ND	ND	1.32	1.3	ND	ND	0.023
Mar-2009	0.018	0.019	ND	ND	0.665	0.684	ND	ND	1.48	1.36	ND	ND	0.047
Oct-2009	0.152	0.135	ND	ND	0.576	0.573	ND	ND	1.47	1.57	ND	ND	ND
Mar-2010	0.086	0.052	0.0002	0.018	0.806	0.714	ND	ND	1.21	1.47	ND	ND	ND
Oct-2010	0.017	0.023	ND	ND	0.592	0.542	ND	ND	1.42	1.38	ND	ND	0.014
Apr-2011	0.01	ND	ND	ND	ND	ND	ND	ND	1.33	1.28	ND	ND	ND
Sep-2011	0.013	ND	ND	ND	0.753	0.735	ND	ND	1.64	1.58	ND	ND	0.012
Mar-2012	ND	ND	ND	ND	0.65	0.63	ND	ND	1.45	1.39	ND	ND	ND
Sep-2012	0.01 J	0.0077 J	ND	0.0062 J	0.692	0.666	ND	ND	1.43	1.37	ND	ND	0.0068 J
Mar-2013	0.0122	0.0069 J	0.000141 J	0.0059 J	0.546	0.605	ND	ND	1.18	1.27	ND	ND	0.0155
Oct-2013	0.0074 J	0.0068 J	ND	0.0065 J	0.686	0.644	ND	ND	1.36	1.31	0.000103 J	0.0011 J	0.014
Mar-2014	0.0137	0.007 J	ND	0.0066 J	0.646	0.666	ND	ND	1.35	1.39	ND	ND	0.0084 J
Oct-2014	0.0095 J	0.008 J	0.000027 J	0.0061 J	0.711	0.721	ND	ND	1.65	1.69	ND	ND	0.009 J
Apr-2015	0.0101	0.0079 J	ND	0.0067 J	0.764	0.774	0.001 J	ND	1.59	1.63	ND	ND	0.0125
Nov-2015	0.0151	0.009 J	ND	0.0065 J	0.739	0.779	ND	ND	1.61	1.67	0.000123 J	ND	0.0148
May-2016	0.0109	0.0071	ND	0.0067	0.901	0.764	ND	ND	1.57	1.38	ND	ND	0.0075 J,B
Oct-2016	0.0101	0.0083 J+	ND	0.0061	0.688	0.757	ND	ND	1.44	1.57	ND	ND	0.009 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-15***												
May-2017	0.0119	0.0149	*ND*	0.006	0.794	0.801	*ND*	*ND*	1.48	1.5	*ND*	*ND*	*0.006 J*
Oct-2017	0.0175	0.0191	*ND*	0.006	0.81	0.815	*ND*	*ND*	1.53	1.57	*ND*	*ND*	*0.006 J*
May-2018	0.022	0.023	*ND*	0.007	*0.94 J*	*ND*	*0.00012 J*	*0.0008 J*	*1.8 J*	*1.5 J*	*ND*	0.0025	0.012
Nov-2018	0.16	0.16	*ND*	0.005	*ND*	*ND*	*0.00014 J*	*ND*	*1.5 J*	*1.6 J*	*ND*	*ND*	0.012
May-2019	0.17	0.16	*ND*	0.0052	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.011
Oct-2019	0.19	0.16	*ND*	0.0057	*ND*	*ND*	*ND*	*ND*	*ND*	*2 J*	*ND*	0.006	0.011
May-2020	0.25	0.22	*ND*	0.0053	*ND*	*ND*	*ND*	*ND*	*1.7 J*	*1.8 J*	0.00059	0.0034	0.0099
Oct-2020	0.18	0.15	*ND*	0.0074	*ND*	*ND*	*ND*	*ND*	*1.8 J*	*ND*	*ND*	*0.00064 J*	*0.013 J*
Apr-2021	0.17	0.18	*ND*	*0.0027 J*	0.79	0.88	*ND*	*ND*	2	2	*ND*	*0.00061 J*	*ND*
Oct-2021	0.22	0.234	*ND*	0.005	0.75	0.81	*ND*	*ND*	1.7	1.9	*ND*	*ND*	*0.0019 J*
May-2022	0.25	0.25	*ND*	0.0047	0.94	0.83	*ND*	*ND*	2.1	2	*ND*	*ND*	*ND*
Oct-2022	0.24	0.27	*ND*	0.0042	0.76	0.92	*ND*	*ND*	2	2.2	*ND*	*ND*	0.005
May-2023	0.2	0.2	*ND*	0.006	1	0.89	*ND*	*ND*	2.3	2.1	*ND*	*ND*	*0.0044 J*
Oct-2023	0.24	0.24	*ND*	0.0058	0.86	0.84	*ND*	*ND*	2.2	2	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.7	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.7	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	5.1	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	7.2	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	37	ND
Apr-2005	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7	ND
Mar-2006	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.48 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.51 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.51 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	0.67 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*0.74 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.368 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-15*															
Nov-1993	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	1.5	NA	1.2	NA	ND	ND	ND	NA	ND	NA	0.7 J	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	0.7 J
Sep-2001	ND	ND	ND	0.9 J	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.5 J
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15***															
Oct-2004	ND	ND	ND	1.5	ND	1.4	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	0.8 J	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	1.3
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	1
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.9 J
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	1.1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	0.8 J
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	1.4
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	1.9
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	1.1
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	1.2
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	0.9 J
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.68 J	0.44 J
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.77 J	0.58 J
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	0.73 J	0.59 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.85 J	0.57 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.73 J	0.76 J
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.69 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15***															
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43 J	0.78 J
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.6 J	0.6 J
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.6 J	0.6 J
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.8 J	0.6 J
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	0.6 J	0.6 J
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	1.3 N3
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	2.1 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.463 J	0.419 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	0.5 J

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15***															
Nov-1993	*ND*	*ND*	3.7	*ND*	*ND*	3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Aug-1994	*0.5 J*	*ND*	3.1	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*0.8 J*	*NA*	*ND*	*0.9 J*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15***															
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	1.7 R	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	2	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.74 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.52 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.68 J*	*ND*	*ND*	*ND*	*ND*	*0.22 J*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.84 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.61 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.611 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-15B***											
Nov-1993	ND	ND	0.3	75.6	5.3	ND	ND	4.53	39.5	6.6	46	5.78
Apr-1994	ND	ND	ND	ND	5.1	ND	ND	4.8	30.3	1.6	7	0.8
Aug-1994	ND	ND	0.1	ND	6.3	0.3	ND	4.5	42.7	5.8	40	5.9
Sep-1994	ND	ND	ND	ND	5.5	0.3	ND	4.9	32.6	5.1	36	4.4
Nov-1994	ND	ND	ND	ND	6.1	ND	ND	4.6	43.3	6.6	12	5.6
Apr-1995	ND	ND	0.2	ND	6.2	ND	ND	4.7	37.3	4.4	5	4.8
Apr-1997	ND	5	ND	ND	5	0.06	ND	NA	NA	6.7	51	7.7
Oct-1997	ND	ND	0.92	ND	4.17	ND	ND	5.48	50.3	7.77	37	7.5
Apr-1998	ND	ND	ND	ND	4.2	ND	ND	6.72	51.3	1.35	29	5.7
Apr-1999	ND	ND	0.17	ND	7.53	ND	ND	4.38	40.2	1.18	41	6.8
Oct-1999	ND	ND	0.14	ND	5.43	ND	ND	4.32	44.8	5.53	33	6.1
Apr-2000	2	2	ND	ND	8.41	ND	ND	5.55	38	ND	35	7.9
Oct-2000	30	NA	ND	ND	8.09	ND	ND	4.69	40.5	4.93	36	7.36
Apr-2001	2.6	NA	ND	ND	9.2	ND	ND	NA	NA	ND	39	9.4
Sep-2001	2.2	2.2	ND	ND	16	ND	ND	4.89	71	7.37	53	13.1
Mar-2002	ND	ND	ND	ND	20.6	ND	ND	4.9	72.8	1.15	35	13.9
Sep-2002	3.2	3.2	ND	ND	16	ND	ND	5.5	64.1	1.57	57	12
Mar-2003	5.4	5.4	ND	ND	161	ND	ND	5.8	74.9	14.5	73	12.3
Oct-2003	2.9	2.9	ND	ND	10.4	ND	ND	5.4	54.8	1.98	14	9.25
Apr-2004	3.3	3.3	ND	ND	7.79	ND	ND	4.6	46.3	1.97	37	6.99
Oct-2004	2	2	ND	ND	7.13	ND	ND	4.8	46.1	5	47	7.2
Apr-2005	4.1	4.1	ND	ND	9.37	ND	ND	4.4	50.1	5.11	59	9.2
Oct-2005	3.7	3.7	ND	ND	8.61	ND	ND	4.2	41.9	2.79	48	6.13
Mar-2006	5.2	5.2	ND	ND	12.3	ND	ND	7.1	51.7	4.13	47	8.93
Sep-2006	4.4	4.4	ND	ND	10.2	ND	ND	7.1	51.7	4.11	26	8.95
Mar-2007	4.5	4.5	ND	ND	9.49	ND	ND	4.3	49.6	3.44	14	8.09
Sep-2007	1.3	1.3	0.31	ND	9.97	ND	ND	5.3	45.8	8.48	41	6.17
Mar-2008	3.9	3.9	0.47	ND	11.7	ND	ND	4.2	51.2	14.4	20	8.23
Sep-2008	3.8	3.8	ND	ND	8.06	ND	ND	4.3	52.7	8.14	40	8.1
Mar-2009	4.6	4.6	ND	ND	10	ND	ND	4.2	57.5	8.04	ND	7.71
Oct-2009	2.8	2.8	ND	ND	11.2	ND	ND	4.3	60.7	4.44	35	9.12
Mar-2010	2.8	2.8	ND	ND	14.8	ND	ND	4.42	83	5.87	53	9.44
Oct-2010	1.6	1.6	ND	ND	9.94	ND	ND	4.2	58.9	8.79	30	9.04
Apr-2011	3.2	3.2	ND	ND	7.25	0.18	0.08	4	51.3	5.24	31	8
Sep-2011	3.1	3.1	ND	ND	11.9	ND	ND	4.1	58.7	4.46	46	8.71
Mar-2012	1.9	1.9	ND	ND	13.5	ND	ND	3.5	71.4	7.38	38	8.96
Sep-2012	1.4	1.4	ND	ND	10.7	ND	ND	3.2	57.5	5.83	42	8.62

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-15B***											
Mar-2013	3.8	3.8	*ND*	*ND*	8.6	0.731	*0.0348 J*	3.1	46.3	3	37	7.63
Oct-2013	3.56	3.56	*ND*	*ND*	14.8	0.072	*ND*	3	66.4	3.33	*ND*	10.9
Mar-2014	3.6	3.6	*ND*	21	13	0.119	*ND*	4.8	77.2	3.59	46	9.57
Oct-2014	*ND*	*ND*	*ND*	*ND*	9.14	*ND*	*ND*	4.3	47.3	6.05	*ND*	7.47
Apr-2015	1	1	*ND*	*ND*	13.3	0.0959	*ND*	3.5	65.7	7.62	37	8.89
Nov-2015	*ND*	*ND*	*ND*	*8 J*	15.5	*ND*	*ND*	4.6	90.5	7.22	26	10.4
May-2016	*ND*	*ND*	*ND*	*ND*	14	0.107	*ND*	4.6	105	7.39	44	9.9
Oct-2016	*ND*	*ND*	*ND*	*ND*	16.8	*NA*	*NA*	4.6	109.3	4.72	48	10.7
May-2017	*ND*	*ND*	*ND*	*ND*	14.9	0.157	*ND*	4.5	111.2	5.24	38	11.2
Oct-2017	*ND*	*ND*	*0.0868 J*	*ND*	15.8	0.0769	*ND*	4.7	118.5	6.26	46	13.4
May-2018	*1 J*	*ND*	*0.086 J*	*ND*	15.7	*ND*	*ND*	5	33.9	*5.1 J*	60	13.6
Nov-2018	*2 JB*	*ND*	*0.071 J*	*7.9 J*	15.5	*0.083 J*	*ND*	4.31	76.9	*ND*	44	10.4
May-2019	*ND*	*NA*	*ND*	*ND*	17.2	*ND*	*ND*	4.21	62.6	*ND*	20	9
Oct-2019	*ND*	*NA*	*ND*	*6 J*	12.8	0.2	*0.0074 J*	4.11	74.2	*5.5 J*	42	8.9
May-2020	*ND*	*NA*	*ND*	*6.9 J*	30.5	0.56	*ND*	3.97	126	*ND*	48	20.8
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	23.7	0.25	*0.0065 J*	3.99	107.1	5.4	66	16.7
Apr-2021	*ND*	*NA*	*ND*	*6.1 J*	14.7	0.34	*ND*	4.36	90	*ND*	19	9.9
Oct-2021	*ND*	*NA*	*ND*	*ND*	18.7	0.27	*ND*	4.35	137.7	*ND*	29	12.2
May-2022	*ND*	*NA*	*ND*	*5.6 J*	47.9	0.56	*ND*	4.02	252.8	*ND*	113	27.9 N3
Oct-2022	*ND*	*NA*	*ND*	*13 J*	58.1	0.68	*ND*	4.15	248.7	*7.7 J*	109	27.5 N3
May-2023	*ND*	*NA*	*0.097 J*	*22.8 J*	60.8	0.93	*ND*	4.2	263.1	*5.6 J*	109	35.5 N3
Oct-2023	*ND*	*NA*	*ND*	*ND*	55.8	0.706 R-01	*NA*	4.2	236	*ND*	104	29.8 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15B***													
Nov-1993	NA	ND	ND	NA	ND	0.5	NA	ND	NA	ND	1.3	0.08	ND	1.1	NA
Apr-1994	NA	ND	ND	NA	ND	0.6	NA	ND	NA	ND	ND	ND	ND	ND	NA
Aug-1994	NA	ND	ND	NA	ND	0.75	NA	ND	NA	ND	ND	ND	ND	0.97	NA
Sep-1994	NA	ND	ND	NA	ND	0.51	NA	ND	NA	ND	ND	ND	ND	0.75	NA
Nov-1994	NA	ND	ND	NA	ND	0.61	NA	ND	NA	0.03	ND	ND	ND	1	NA
Apr-1995	ND	ND	0.8	ND	ND	0.36	NA	ND	ND	ND	0.23	ND	ND	0.95	NA
Oct-1996	ND	ND	0.13	0.002	ND	1.2	1.2	ND	ND	ND	ND	ND	ND	0.87	0.87
Apr-1997	ND	ND	0.086	0.002	ND	1.4	1	ND	ND	ND	ND	ND	ND	0.96	0.75
Oct-1997	ND	ND	0.157	0.004	ND	1.19	1.21	ND	0.013	0.015	ND	ND	ND	1.26	1.26
Apr-1998	ND	ND	0.031	ND	ND	1.09	1.09	ND	ND	ND	0.124	0.226	ND	0.72	0.831
Apr-1999	ND	ND	0.032	ND	ND	1.22	1.2	ND	ND	0.018	0.303	0.3	ND	0.913	0.891
Oct-1999	ND	ND	0.028	ND	ND	0.906	0.902	ND	ND	0.012	0.445	0.263	ND	0.849	0.817
Apr-2000	ND	ND	0.027	ND	ND	1.77	1.57	ND	ND	0.012	0.054	0.053	ND	0.835	0.906
Oct-2000	ND	ND	0.052	ND	ND	1.13	1.12	ND	ND	0.123	0.083	0.077	ND	1.1	1.06
Apr-2001	ND	ND	0.038	ND	ND	1.64	NA	ND	0.01	ND	0.234	NA	ND	1.28	NA
Sep-2001	ND	ND	0.051	ND	ND	2.16	1.96	ND	0.013	0.011	0.556	0.326	ND	1.86	1.76
Mar-2002	ND	ND	0.052	ND	ND	2.3	2.21	ND	0.019	0.013	0.48	0.469	ND	1.99	1.91
Sep-2002	ND	ND	0.045	ND	ND	2.01	1.97	ND	0.015	ND	0.505	0.447	ND	1.69	1.69
Mar-2003	ND	ND	0.046	ND	ND	2.19	2.18	ND	0.015	0.01	0.24	0.245	ND	1.65	1.72
Oct-2003	ND	ND	0.038	ND	ND	1.69	1.41	ND	0.011	0.011	0.242	0.171	ND	1.22	1.21
Apr-2004	ND	ND	0.041	ND	ND	1.15	1.12	ND	ND	0.013	0.088	0.075	ND	1	1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15B***													
Oct-2004	ND	ND	0.061	ND	ND	1.13	1.06	ND	0.01	ND	0.089	ND	ND	1.06	1.05
Apr-2005	ND	ND	0.056	ND	ND	1.54	1.48	ND	0.011	ND	0.126	0.108	ND	1.3	1.26
Oct-2005	ND	ND	0.034	ND	ND	1.01	0.974	ND	ND	ND	0.098	0.095	ND	0.874	0.819
Mar-2006	ND	ND	0.037	ND	ND	1.34	1.22	ND	0.01	ND	ND	ND	ND	1.35	1.29
Sep-2006	ND	ND	0.034	ND	ND	1.44	1.39	ND	0.013	ND	0.214	0.214	ND	1.3	1.29
Mar-2007	ND	ND	0.042	ND	ND	1.31	1.27	ND	0.012	0.012	0.174	0.17	ND	1.17	1.17
Sep-2007	ND	ND	0.035	ND	ND	0.839	0.801	0.012	ND	ND	0.561	0.498	ND	0.991	0.967
Mar-2008	ND	ND	0.034	ND	ND	1.2	1.1	ND	0.011	ND	0.943	0.85	ND	1.27	1.16
Sep-2008	ND	ND	0.037	ND	ND	1.18	1.04	ND	0.01	ND	1.49	1.36	ND	1.26	1.22
Mar-2009	ND	ND	0.032	ND	ND	1.19	1.17	ND	ND	0.013	1.52	1.58	ND	1.15	1.24
Oct-2009	ND	ND	0.037	ND	ND	1.23	1.2	ND	0.01	ND	1.87	1.74	ND	1.47	1.43
Mar-2010	ND	ND	0.059	ND	ND	1.34	1.3	ND	0.012	0.019	1.82	1.54	ND	1.48	1.43
Oct-2010	ND	ND	0.069	0.002	ND	1.23	1.16	ND	0.011	0.012	1.44	1.38	ND	1.45	1.36
Apr-2011	ND	ND	0.05	ND	ND	1.16	1.15	ND	0.011	ND	1.16	1.17	ND	1.24	1.26
Sep-2011	ND	ND	0.057	ND	ND	1.33	1.35	ND	0.012	ND	1.58	1.54	ND	1.31	1.35
Mar-2012	ND	ND	0.08	0.003	ND	1.13	1.16	ND	0.012	0.011	1.22	1.22	ND	1.49	1.5
Sep-2012	ND	ND	0.0504	0.0018 J	ND	1.21	1.19	0.0012 J	0.0122	0.0087 J	1.29	1.3	ND	1.36	1.38
Mar-2013	ND	ND	0.039	0.000838 J	ND	1.11	1.21	ND	0.0114	0.0078 J	0.125	0.126	0.0013 J	1.18	1.24
Oct-2013	ND	ND	0.0564	0.000901 J	0.000222 J	1.35	1.3	0.0115	0.0157	0.0089 J	0.104	0.0962	ND	1.83	1.76
Mar-2014	0.000563 J	ND	0.0422	ND	0.000177 J	1.27	1.32	0.0013 J	0.0143	0.0103	0.116	0.108	ND	1.55	1.59
Oct-2014	0.000751 J	ND	0.0443	0.000845 J	0.000166 J	1.07	1.04	0.000391 J	0.0109	0.0084 J	0.55	0.551	ND	1.17	1.16
Apr-2015	0.0011 J	ND	0.0609	0.0013 J	0.000297 J	1.25	1.25	0.000321 J	0.0144	0.0095 J	1.13	1.16	ND	1.4	1.45
Nov-2015	0.000315 J	ND	0.0639	0.0018 J	0.000282 J	1.48	1.46	0.000671 J	0.0158	0.0109	1.35	1.34	0.000298 J	1.63	1.63
May-2016	ND	ND	0.0709	0.0017	0.00024 J	1.41	1.24	ND	0.0165	0.0093	1.21	1.18	ND	1.56	1.51

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-15B***													
Oct-2016	*ND*	*ND*	0.0517	*0.00095 J*	*0.00025 J*	1.47	1.37	*0.00062 J*	0.0178	0.0082	0.731	*0.738 J+*	*ND*	1.71	1.76
May-2017	*ND*	*ND*	0.0556	*0.00068 J*	*0.00026 J*	1.38	1.67	*0.0017 J*	0.0181	0.0075	*0.116 J*	*0.103 J*	*ND*	1.89	1.87
Oct-2017	*ND*	*ND*	0.0613	*0.00069 J*	*0.00025 J*	1.69	1.67	*ND*	0.0187	0.0075	*ND*	*ND*	*ND*	2.22	2.2
May-2018	*0.00011 J*	*ND*	0.06	0.00065	*0.00029 J*	1.9	1.8	*0.00051 J*	0.0136	0.0068	*0.013 J*	*ND*	*0.00014 JB*	2.1	2
Nov-2018	*ND*	*ND*	0.052	0.00073	*0.00022 J*	1.3	1.4	*0.0018 J*	0.013	0.0049	0.022	*0.018 J*	*0.000077 J*	1.7	1.8
May-2019	*ND*	*ND*	0.045	0.00088	*ND*	1.3	1.4	*ND*	0.011	0.0056	*ND*	0.042	*ND*	1.4	1.4
Oct-2019	*0.0001 J*	*ND*	0.046	0.00091	*0.00032 J*	1.3	1.3	*0.0049 J*	0.01	0.007	*0.02 J*	*0.011 J*	*0.000095 J*	1.4	1.3
May-2020	*0.000085 J*	*ND*	0.078	0.0011	*0.00037 J*	2.8	2.7	*0.0055 J*	0.024	0.011	*0.015 J*	0.063	*ND*	3.4	3.2
Oct-2020	*ND*	*ND*	0.087	*0.0011 JM1*	*ND*	2.2	2.1	*0.0034 JM1*	0.021	*0.0095 J*	*0.017 JB*	*0.02 J*	*ND*	2.7	2.6
Apr-2021	*ND*	*ND*	0.054	*0.00056 J*	*ND*	1.2	1.3	*0.00054 J*	0.013	0.0052	*ND*	*ND*	*ND*	1.7	1.7
Oct-2021	*0.000053 JB*	*ND*	0.075	0.0013	*0.00007 J*	1.5	1.6	*0.0015 J*	0.017	0.011	*0.011 J*	*0.016 J*	*0.000046 J*	2	2.1
May-2022	*ND*	*ND*	0.15	0.0015	0.00057	3.8	4	0.0026	0.038	0.014	*ND*	*ND*	0.0019	4.5	4.7
Oct-2022	*ND*	*ND*	0.16	0.002	0.00053	4	4.6	*0.0014 J*	0.033	0.012	*ND*	0.055	*ND*	4.3	4.9
May-2023	*ND*	*ND*	0.2	0.0017	0.00063	5	4.7	*0.0015 J*	0.051	0.014	*ND*	0.054	*ND*	5.6	5.3
Oct-2023	*ND*	*ND*	0.18	0.0014	0.0006	4.3	4.3	0.0032	0.042	0.014	*0.045 JB*	0.063	*ND*	4.6	4.9

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-15B*												
Nov-1993	0.18	NA	ND	NA	0.82	NA	ND	NA	2.1	NA	NA	NA	0.03
Apr-1994	0.06	NA	ND	NA	0.85	NA	ND	NA	2.9	NA	NA	NA	0.01
Aug-1994	0.1	NA	ND	NA	0.98	NA	ND	NA	2.3	NA	NA	NA	0.06
Sep-1994	0.11	NA	ND	NA	0.67	NA	ND	NA	2.2	NA	NA	NA	0.05
Nov-1994	0.14	NA	ND	NA	0.72	NA	ND	NA	2.1	NA	NA	NA	0.05
Apr-1995	ND	NA	ND	ND	1	NA	ND	ND	2	NA	ND	ND	0.05
Oct-1996	0.25	0.23	NA	ND	ND	ND	ND	ND	2.5	2.4	ND	ND	0.082
Apr-1997	0.095	0.079	ND	ND	ND	ND	ND	ND	3.1	2.3	ND	ND	0.05
Oct-1997	0.271	0.272	NA	0.011	ND	ND	ND	ND	1.96	1.9	ND	ND	0.079
Apr-1998	0.013	0.033	NA	0.013	0.811	1.07	ND	ND	2.54	2.55	ND	ND	0.023
Apr-1999	0.015	0.018	NA	ND	1.07	1.59	ND	ND	3.18	2.92	ND	ND	0.016
Oct-1999	ND	0.01	NA	ND	ND	0.839	ND	ND	3.1	2.89	ND	ND	0.019
Apr-2000	ND	ND	NA	ND	0.814	0.739	ND	ND	3.15	3.18	ND	ND	0.012
Oct-2000	0.041	0.039	NA	ND	1.37	1.26	ND	ND	3.58	3.38	ND	ND	0.027
Apr-2001	0.012	NA	NA	ND	1.18	NA	ND	ND	4.07	NA	ND	ND	0.021
Sep-2001	0.021	0.018	NA	0.025	1.4	1.14	ND	ND	7.22	5.84	ND	ND	0.028
Mar-2002	0.02	0.019	NA	0.023	1.69	1.17	ND	ND	7.55	7.17	ND	ND	0.034
Sep-2002	0.017	0.017	NA	0.02	1.23	1.12	ND	ND	7.03	6.93	ND	ND	0.025
Mar-2003	0.018	0.018	NA	0.018	1.27	1.41	ND	ND	7.33	7.02	ND	ND	0.026
Oct-2003	0.018	0.015	NA	ND	2.98	1.34	ND	ND	6.29	5.35	ND	ND	0.024
Apr-2004	0.034	0.044	ND	ND	1.57	1.55	ND	ND	4.37	4.11	ND	ND	0.019
Oct-2004	0.095	0.108	0.0003	ND	1.5	1.43	ND	ND	3.97	3.44	ND	ND	0.033

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-15B***												
Apr-2005	0.054	0.074	ND	ND	1.21	1.16	ND	ND	4.38	4.11	ND	ND	0.027
Oct-2005	0.02	0.031	ND	ND	0.945	0.886	ND	ND	3.35	3.04	ND	ND	0.017
Mar-2006	ND	ND	ND	0.014	0.917	0.9	ND	ND	5	4.67	ND	ND	ND
Sep-2006	0.018	0.019	ND	0.015	1.04	1.03	ND	ND	4.26	4.19	ND	ND	0.018
Mar-2007	0.025	0.029	ND	0.014	0.933	0.866	ND	ND	3.9	3.78	ND	ND	0.025
Sep-2007	0.035	0.034	ND	ND	0.564	0.521	ND	ND	2.6	2.52	ND	ND	0.022
Mar-2008	0.024	0.022	0.0004	ND	0.877	0.808	ND	ND	3	2.74	ND	ND	0.023
Sep-2008	0.03	0.029	ND	0.013	0.678	0.678	ND	ND	3.02	2.95	ND	ND	0.031
Mar-2009	0.017	0.018	0.0008	ND	0.799	0.807	ND	ND	3.36	3.59	ND	ND	0.029
Oct-2009	0.035	0.032	ND	0.011	0.618	0.641	ND	ND	4.09	3.99	ND	ND	0.026
Mar-2010	0.052	0.049	ND	0.014	0.912	0.839	ND	ND	4.64	4.99	ND	ND	0.033
Oct-2010	0.128	0.126	ND	0.017	0.628	0.549	ND	ND	4.3	4.05	ND	ND	0.049
Apr-2011	0.049	0.049	ND	0.011	0.552	0.536	ND	ND	3.05	3.09	ND	ND	0.028
Sep-2011	0.051	0.05	ND	0.012	0.82	0.796	ND	ND	4.91	4.99	ND	ND	0.033
Mar-2012	0.07	0.071	ND	0.013	0.728	0.707	ND	ND	5.61	5.52	ND	ND	0.037
Sep-2012	0.0504	0.0502	ND	0.0129	0.757	0.733	ND	ND	4.49	4.55	ND	ND	0.032
Mar-2013	0.0289	0.0296	0.000082 J	0.012	0.649	0.672	ND	ND	2.93	3.15	ND	ND	0.0331
Oct-2013	0.0302	0.0294	ND	0.0167	0.862	0.828	ND	ND	5.82	5.49	0.000162 J	0.004 J	0.0442
Mar-2014	0.0259	0.0257	ND	0.0144	0.765	0.789	ND	ND	4.44	4.48	ND	ND	0.0281
Oct-2014	0.0562	0.0563	0.00004 J	0.012	0.663	0.649	0.0012 J	ND	3.91	3.89	ND	ND	0.0331
Apr-2015	0.0585	0.0623	ND	0.0141	0.788	0.811	0.0013 J	ND	4.81	4.97	ND	ND	0.0382
Nov-2015	0.0561	0.0561	0.00007 J	0.0146	0.84	0.82	0.000647 J	ND	5.71	5.55	0.000173 J	ND	0.0375
May-2016	0.0698	0.0652	ND	0.0134	0.893	0.892	ND	ND	5.76	5.46	ND	ND	0.0361
Oct-2016	0.0398	0.0409 J+	0.000073 J	0.0156	0.898	1.01	ND	ND	6.46	6.52	ND	ND	0.0299 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-15B***												
May-2017	0.0311	0.033	*0.00012 J*	0.0155	0.989	1.03	*ND*	*ND*	6.21	6.24	*ND*	*ND*	*0.0286 J*
Oct-2017	0.0336	0.0361	*ND*	0.0161	1.05	1.1	*ND*	*ND*	6.86	6.73	*ND*	*ND*	*0.0288 J*
May-2018	0.028	0.026	*0.00017 JB*	0.014	*1.2 J*	*ND*	*0.0005 J*	*ND*	7.5	6.6	*0.000073 J*	0.0032	0.024
Nov-2018	0.028	0.025	*0.00016 J*	0.011	*1 J*	*1 J*	*0.00021 J*	*ND*	6.5	6.8	*ND*	*ND*	0.02
May-2019	0.027	0.028	*ND*	0.0087	*ND*	*ND*	*ND*	*ND*	7.1	6.8	*ND*	*ND*	0.039
Oct-2019	0.04	0.036	0.00046	0.012	*ND*	*ND*	*0.00039 J*	*ND*	5.8	6	*ND*	0.0061	0.024
May-2020	0.053	0.049	0.00045	0.022	*1.4 J*	*1.4 J*	*0.00041 J*	*ND*	11.6	11.2	*ND*	0.004	0.035
Oct-2020	0.052	0.043	0.0003	0.019	*ND*	*1.1 J*	*ND*	*ND*	10	9	*ND*	*0.00052 JM1*	0.04 M1
Apr-2021	0.026	0.029	0.00086	0.012	1.1	1.1	*ND*	*ND*	7.3	7.6	*ND*	*ND*	0.016
Oct-2021	0.055	0.0579	0.00022	0.016	1	1.1	*ND*	*ND*	8.1	8.4	*0.000078 J*	*ND*	0.029
May-2022	0.076	0.078	*ND*	0.038	1.4	1.4	*ND*	*ND*	22.8	22.7	*0.00011 J*	*ND*	0.069
Oct-2022	0.073	0.083	*ND*	0.031	1.4	1.6	*0.0022 J*	*ND*	21.4	23.7	*0.000099 J*	*ND*	0.069
May-2023	0.089	0.087	*ND*	0.049	1.8	1.7	*0.00088 J*	*ND*	24.9	23.3	*0.0001 J*	*ND*	0.1
Oct-2023	0.081	0.081	0.00026	0.041	1.5	1.6	*0.0011 J*	*ND*	21.9	22.8	*ND*	*ND*	0.091

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-15B***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	3.3	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	1.8	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	6.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	9.2	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	9.9	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	6.7	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	6.3	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	5.3	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15B*																
Oct-2004	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	7	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2007	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	5.7	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	3.4	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	2.71	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.92	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	4.79	ND	ND	ND	ND	ND	ND	0.72 J	0.81 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	2.87	ND	ND	ND	ND	ND	ND	0.34 J	0.52 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-15B*																
Apr-2015	ND	ND	ND	ND	1.71	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.23	ND	ND	ND	ND	ND	ND	0.26 J	0.31 J	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	0.2 J	0.3 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	0.2 J	0.2 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4 JB	ND
Nov-2018	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9 JBIH	ND
May-2019	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	1.23	ND	ND	ND	ND	ND	ND	ND	0.131 J	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2023	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.7
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	2.4
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	0.6 J	ND	ND	ND	ND	ND	3.2	4.2
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	3.4
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	4.8	16
Apr-1998	0.8 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	4.1	4.8
Apr-1999	0.8 J	NA	NA	NA	NA	ND	NA	ND	0.8 J	ND	NA	ND	NA	NA	NA	2.7	4.3
Oct-1999	2.3	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	1.5	ND	ND	ND	2	6.3
Apr-2000	0.5 J	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	1.2	1.9
Oct-2000	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	4
Apr-2001	2	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	4.6	6.5
Sep-2001	3.2	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	1.1	ND	ND	ND	6.9	8.3
Mar-2002	4.3	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	1.5	ND	ND	ND	8.9	9
Sep-2002	2.8	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	1.2	ND	ND	ND	11	8.9
Mar-2003	2.7	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.3	ND	ND	ND	8.4	6.7
Oct-2003	2	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	0.6 J	0.8 J	ND	ND	ND	2.8	5.2
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3	2.7

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15B***															
Oct-2004	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	0.7 J	ND	ND	ND	4.7	3.3
Apr-2005	2.4	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.5	ND	ND	ND	7.9	7.1
Oct-2005	0.6 J	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	2.9
Mar-2006	3.3	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.7	ND	ND	ND	8.4	7
Sep-2006	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	8.4	6.2
Mar-2007	2.5	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	1.8	ND	ND	ND	5.9	6.3
May-2007	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	5.8	6.1
Sep-2007	2.8	ND	ND	ND	ND	ND	ND	ND	0.7 J	1.2	ND	1.8	ND	ND	ND	5.8	2.2
Mar-2008	2.2	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	5.2	7
Sep-2008	3.7	ND	ND	ND	ND	ND	ND	ND	1.5	1	ND	2.5	ND	ND	ND	6.6	6.9
Mar-2009	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND	ND	3.2	3.5
Oct-2009	3	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	2.1	ND	ND	ND	6.1	6.2
Mar-2010	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	1.5	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	1.1	ND	ND	ND	4.6	2.6
Apr-2011	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	1.9	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	1.5	ND	ND	ND	9.5	3.5
Mar-2012	1.9	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	1.7	ND	ND	ND	7.4	3.7
Sep-2012	1.45	ND	ND	ND	ND	ND	ND	ND	ND	0.81 J	ND	1.16	ND	ND	ND	3.04	2.08
Mar-2013	1.04	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	0.74 J	ND	ND	ND	3.04	2.01
Oct-2013	2.39	ND	ND	ND	ND	ND	ND	ND	0.51 J	0.33 J	ND	1.89	ND	ND	ND	3.83	3.94
Mar-2014	1.34	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	1.02	ND	ND	ND	4.14	2.7
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	1.87	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-15B***															
Apr-2015	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.38 J*	*ND*	*0.55 J*	*ND*	*ND*	*ND*	2.42	*ND*
Nov-2015	*0.82 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.47 B	*ND*	*0.61 J*	*ND*	*ND*	*ND*	1.48	1.87
May-2016	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.6 J*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	2.2	1.6
Oct-2016	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.5 J*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	2.8	2.4
May-2017	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	2.5	1.8
Oct-2017	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	2.5	1.6
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5	1.6
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.1	1.9 N3
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.9	1.9 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.8	*0.7 J*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.123 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.76 J*	*0.881 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	2.1	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	**6**	ND	ND	3	ND	ND	ND	ND	1.1	0.6 J	ND	1.3	NA
Apr-1998	ND	ND	0.5 J	NA	**7.6**	ND	ND	2.3	ND	ND	ND	ND	1	ND	ND	1.1	NA
Apr-1999	ND	NA	0.6 J	NA	**8.5**	ND	NA	2	ND	ND	NA	NA	0.9 J	ND	NA	1	NA
Oct-1999	ND	ND	0.6 J	NA	**22**	1	ND	4.1	ND	ND	ND	ND	2.1	ND	ND	1.5	NA
Apr-2000	ND	NA	ND	NA	2.6	ND	NA	1.2	ND	ND	NA	NA	0.7 J	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	**6.3**	ND	ND	3.1	ND	ND	ND	ND	1.4	ND	ND	1.1	NA
Apr-2001	ND	ND	1.2	NA	**5.6**	0.6 J	ND	4.9	ND	ND	ND	ND	2.4	ND	ND	1.7	NA
Sep-2001	ND	ND	0.9 J	NA	**12**	1.3	ND	**8.9**	ND	ND	ND	ND	3.9	0.6 J	ND	**3.3**	NA
Mar-2002	ND	ND	1.1	NA	**18**	2	ND	**9.1**	ND	ND	ND	ND	4.2	0.6 J	ND	**3.8**	NA
Sep-2002	ND	ND	ND	NA	**12**	2.2	ND	**7.2**	ND	ND	ND	ND	3	0.7 J	ND	**3.4**	NA
Mar-2003	ND	ND	ND	NA	**12**	0.8 J	ND	**6.3**	ND	ND	ND	ND	2.8	ND	ND	**2.4**	NA
Oct-2003	ND	ND	1.6	NA	**8.5**	2	ND	3.8	ND	ND	ND	ND	1.9	ND	ND	1.1	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-15B*															
Apr-2004	ND	ND	ND	NA	2.6	ND	ND	2.5	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	3.6	ND	ND	2.8	ND	ND	ND	ND	1.1	ND	ND	0.8 J	NA
Apr-2005	ND	ND	ND	ND	**12**	0.6 J	ND	4.9	ND	ND	ND	ND	2.4	ND	ND	**2.6**	NA
Oct-2005	ND	ND	ND	ND	2.2	ND	ND	3	ND	ND	ND	ND	1	ND	ND	0.9 J	NA
Mar-2006	ND	ND	ND	ND	**15**	0.8 J	ND	**6.8**	ND	ND	ND	ND	2.8	0.5 J	ND	**3.3**	NA
Sep-2006	ND	ND	ND	ND	**18.7**	0.6 J	ND	**5.8**	ND	ND	ND	ND	2.4	ND	ND	**3.9**	NA
Mar-2007	ND	ND	ND	ND	**13.3 R**	0.7 J	ND	**5.3**	ND	ND	ND	ND	2.4	ND	ND	**2.3**	NA
May-2007	ND	ND	ND	ND	**11.4**	0.7 J	ND	**5.7**	ND	ND	ND	ND	2.2	ND	ND	**2.3**	NA
Sep-2007	ND	ND	ND	ND	**12.1**	1.1	ND	4.3	ND	ND	ND	ND	2.2	ND	ND	1.9	NA
Mar-2008	ND	ND	ND	ND	**15.4**	1.3	ND	**6.6**	ND	ND	ND	ND	3.1	0.5 J	ND	ND	NA
Sep-2008	ND	ND	ND	ND	**17.6**	3.7	ND	**7.8**	ND	ND	ND	ND	3.4	4.5	ND	**3.7**	NA
Mar-2009	ND	ND	ND	ND	**14.6**	1.3	ND	**5.6**	ND	ND	ND	ND	2.8	ND	ND	**2.9**	NA
Oct-2009	ND	ND	ND	ND	**12.7**	1.1	ND	**5.3**	ND	ND	ND	ND	2.5	ND	ND	**3.2**	NA
Mar-2010	ND	ND	ND	ND	**12.5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**3**	NA
Oct-2010	ND	ND	ND	ND	**5.3**	0.8 J	ND	3.3	ND	ND	ND	ND	ND	ND	ND	1.5	NA
Apr-2011	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	NA
Sep-2011	ND	ND	ND	ND	**5.3**	0.8 J	ND	3.9	ND	ND	ND	ND	1.5	ND	ND	**2.1**	NA
Mar-2012	ND	ND	ND	ND	**5.2**	1 J	ND	4.3	ND	ND	ND	ND	1.9	ND	ND	2	NA
Sep-2012	ND	ND	ND	ND	3.86	ND	ND	3.35	ND	ND	ND	ND	1.39	ND	ND	1.08	ND
Mar-2013	ND	ND	ND	ND	2.65	0.43 J	ND	1.57	ND	ND	ND	ND	0.8 J	ND	ND	0.66 J	ND
Oct-2013	ND	ND	0.48 J	ND	**5.49**	1.52	ND	3.65	ND	ND	ND	ND	2.01	ND	ND	1.75	2
Mar-2014	ND	ND	ND	ND	3.24	0.8 J	ND	3.53	ND	ND	ND	ND	1.34	ND	ND	1.05	0.8 J

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-15B***															
Oct-2014	ND	ND	ND	ND	ND	ND	ND	1.01	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.97	0.33 J	ND	1.76	ND	ND	ND	ND	0.71 J	ND	ND	0.55 J	ND
Nov-2015	ND	ND	ND	ND	1.68	0.46 J	ND	2.25	ND	ND	ND	ND	0.88 J	ND	ND	0.46 J	0.46 J
May-2016	ND	ND	ND	ND	1.6	0.2 J	ND	1.8	ND	ND	ND	ND	0.7 J	ND	ND	0.5 J	0.2 J
Oct-2016	ND	ND	ND	ND	1.6	0.2 J	ND	2	ND	ND	ND	ND	0.7 J	0.1 J	ND	0.6 J	0.2 J
May-2017	ND	ND	ND	ND	1.4	0.1 J	ND	1.9	ND	ND	ND	ND	0.6 J	ND	ND	0.5 J	0.1 J
Oct-2017	ND	ND	ND	ND	1.1	0.2 J	ND	1.8	ND	ND	ND	ND	0.6 J	ND	ND	0.4 J	0.2 J
May-2018	ND	ND	ND	ND	1.9 B	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	1.6 CH	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	1	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.641 JB	ND	ND	1.02	ND	ND	ND	ND	0.254 J	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2023	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2023	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-16***											
Nov-1993	ND	ND	0.2	31.5	18.3	0.4	0.3	3.7	20.4	74.6	60	37.9
Apr-1994	ND	ND	0.1	ND	14.9	ND	ND	3.6	311	64.9	128	32.56
Aug-1994	ND	ND	0.2	ND	13.6	0.3	ND	3.4	252	59.1	163	25.6
Sep-1994	ND	ND	ND	ND	11.2	0.3	ND	3.7	233	53.5	93	22.5
Nov-1994	ND	ND	0.2	ND	19.5	ND	ND	3.6	326	87.3	148	27.5
Apr-1995	ND	ND	ND	ND	16.6	0.3	ND	3.6	298	74.9	ND	27.7
Apr-1997	ND	ND	ND	ND	18	0.05	ND	NA	NA	78	172	52
Oct-1997	ND	ND	0.49	ND	14.5	ND	ND	5.62	285	60.4	128	47
Apr-1998	ND	ND	ND	ND	14.2	0.114	ND	5.79	229	68.3	120	36
Apr-1999	ND	ND	0.25	ND	14.7	ND	ND	3.4	287	67.1	150	42
Oct-1999	ND	ND	0.12	ND	18	ND	ND	3.52	284	75.1	141	42
Apr-2000	ND	ND	ND	ND	22.2	ND	ND	3.6	315	96.7	211	66
Oct-2000	ND	NA	ND	ND	14.9	ND	ND	3.64	326	80	162	56.7
Apr-2001	ND	NA	ND	ND	16	ND	ND	NA	NA	74	148	54
Sep-2001	ND	ND	0.24	ND	16.4	1.28	ND	3.47	330	72.7	146	46.4
Mar-2002	ND	ND	ND	ND	16	ND	ND	3.8	308	75.7	155	54.1
Sep-2002	ND	ND	ND	ND	20.2	ND	ND	3.8	364	97.7	176	58.9
Mar-2003	ND	ND	ND	ND	25.8	ND	ND	3.7	413	90.4	215	71.6
Oct-2003	ND	ND	ND	ND	12.8	0.146	ND	4.2	295	69.1	97	41.3
Apr-2004	ND	ND	ND	ND	15.8	ND	ND	3.7	395	91.5	149	53.2
Oct-2004	ND	ND	ND	ND	11.2	0.111	ND	3.7	246	63.2	112	38.7
Apr-2005	ND	ND	ND	ND	13.1	0.13	ND	3.7	295	58.4	133	36.6
Oct-2005	ND	ND	0.21	ND	6.61	0.13	ND	3.4	116.1	26.4	84	20.8
Mar-2006	5.1	5.1	ND	ND	6.63	0.16	ND	5.1	83.1	25.4	61	18.1
Sep-2006	4.1	4.1	ND	ND	6.41	0.16	ND	5.1	83.1	22.8	68	20
Mar-2007	2.8	2.8	ND	ND	9.81	0.14	ND	4.7	114.8	43.4	109	30.4
Sep-2007	3.1	3.1	0.3	ND	12.5	ND	ND	5.9	86.2	24.1	57	21.1
Mar-2008	5.2	5.2	ND	ND	5.76	0.16	ND	5.2	72.8	15.6	55	15.4
Sep-2008	4.7	4.7	ND	ND	6.5	0.13	ND	4.8	65.4	20.7	69	19.8
Mar-2009	5.5	5.5	ND	ND	6.25	0.12	ND	4.4	89.3	19.1	65	17.4
Oct-2009	5	5	ND	ND	5.77	0.11	ND	4.6	66	16.6	54	19.9
Apr-2010	5	5	ND	ND	7.36	0.1	ND	4.1	734	25.8	102	22.8
Oct-2010	2.8	2.8	ND	ND	8.61	0.08	ND	4.6	90.7	30.1	77	25.5
Apr-2011	5.5	5.5	ND	ND	6	0.13	ND	4.7	88.4	15.1	61	16.9
Sep-2011	6.1	6.1	0.27	ND	5.61	0.13	ND	4.8	57.6	11.9	40	15
Mar-2012	5.3	5.3	ND	ND	8.01	0.11	ND	4.5	111.4	25	106	27.1
Sep-2012	6.08	6.08	ND	ND	5.34	0.115	ND	4.6	68.9	11.1	55	14.7

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-16***											
Mar-2013	6.72	6.72	*ND*	*ND*	7.78	0.122	*ND*	3.9	78.7	22.4	78	20.6
Oct-2013	6.92	6.92	*ND*	*ND*	5.55	0.122	*ND*	3.9	69.6	12.2	36	17.4
Mar-2014	7.68	7.68	*ND*	21	5.95	0.114	*ND*	5.6	73.3	14.3	44	17.6
Oct-2014	2.2	2.2	*ND*	*6 J*	6.01	0.134	*ND*	5.1	57.4	13.4	29	16.9
Apr-2015	4.64	4.64	*ND*	*ND*	9.61	0.0957	*ND*	4.1	115.7	36.5	76	31.4
Nov-2015	3.48	3.48	*ND*	*ND*	9.77	0.0997	*ND*	5.2	124.9	35	77	31.9
May-2016	4.44	4.44	*ND*	*ND*	7.85	0.104	*ND*	5.3	157.7	23.8	59	23.8
Oct-2016	4.56	4.56	*ND*	*ND*	6.98	*NA*	*NA*	5.6	98.3	16.9	78	18.5
May-2017	4.52	4.52	*ND*	*ND*	6.67	0.126	*ND*	5.2	102.4	15.5	38	20.3
Oct-2017	4.64	4.64	*ND*	*ND*	7	0.127	*ND*	5.5	119.3	18.8	68	21.4
May-2018	*4 J*	*ND*	*ND*	*ND*	10.4	*ND*	*0.0062 J*	4.8	248	40.2	114	37.4
Nov-2018	*ND*	*ND*	*ND*	*5.7 J*	23.4	*0.044 J*	*ND*	4.05	275.7	87.6	193	67.2
May-2019	*ND*	*NA*	*ND*	*ND*	24.8	*ND*	*ND*	4.1	227.9	84.4	153	66.7
Oct-2019	*ND*	*NA*	*ND*	*8.2 J*	23.4	*0.045 J*	*ND*	4.07	326.3	158	224	74.5
May-2020	*ND*	*NA*	*ND*	*9.1 J*	24	*ND*	*ND*	3.82	294.7	92.5	182	75.5
Oct-2020	*ND*	*NA*	*ND*	*9.3 J*	22.2	*0.055 J*	*ND*	3.94	283.7	95.2	182	72.4
Apr-2021	*ND*	*NA*	*ND*	*6.1 J*	25.7	*0.026 J*	*ND*	3.99	348.7	81.5 MH	190	72.2
Oct-2021	*ND*	*NA*	*ND*	*6.1 J*	23.6	*ND*	*ND*	4.05	396.7	99.1	195	71.5
May-2022	*ND*	*NA*	*ND*	*ND*	21.6	*ND*	*ND*	3.96	363.4	129	219	77.3 N3
Oct-2022	*ND*	*NA*	*ND*	*8.4 J*	25	*ND*	*ND*	4.12	353.1	105	204	70.7 N3
May-2023	*ND*	*NA*	*ND*	*ND*	24.7	*ND*	*ND*	4.11	348.3	102	204	80 N3
Oct-2023	*ND*	*NA*	*ND*	*ND*	25.8	*ND*	*NA*	4.3	334.7	106	206	74.6 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-16*													
Nov-1993	NA	ND	ND	NA	ND	4.8	NA	0.008	NA	ND	1.2	1.3	ND	6.3	NA
Apr-1994	NA	ND	ND	NA	ND	2.98	NA	ND	NA	ND	0.46	0.14	ND	6.1	NA
Aug-1994	NA	ND	ND	NA	ND	3	NA	ND	NA	ND	0.21	0.04	ND	4.4	NA
Sep-1994	NA	ND	ND	NA	ND	2.1	NA	ND	NA	ND	0.86	0.08	ND	4.2	NA
Nov-1994	NA	ND	ND	NA	ND	3.1	NA	ND	NA	ND	ND	1	ND	4.8	NA
Apr-1995	ND	ND	0.8	ND	ND	2.2	NA	ND	ND	ND	0.11	0.03	ND	5.4	NA
Oct-1996	ND	ND	0.013	ND	ND	4.1	4.2	ND	ND	ND	0.23	0.21	ND	4	4.2
Apr-1997	ND	ND	0.013	ND	ND	7	6.7	ND	0.18	ND	8.3	7.4	ND	6.9	6.6
Oct-1997	ND	ND	0.012	ND	ND	6.43	5.58	ND	0.163	ND	9.98	7.88	ND	6.56	5.64
Apr-1998	ND	ND	0.01	ND	ND	5.54	5.49	ND	0.13	ND	8.98	2.65	ND	5.5	5.42
Apr-1999	ND	ND	0.014	ND	ND	6.45	6.64	ND	0.143	ND	1.99	0.075	ND	6.2	6.29
Oct-1999	ND	ND	0.01	ND	ND	5.53	5	ND	0.125	ND	0.589	0.077	ND	5.55	5.01
Apr-2000	ND	ND	0.017	ND	ND	9.8	9.27	ND	0.236	ND	0.881	0.078	ND	10	9.46
Oct-2000	ND	ND	0.014	ND	ND	8.67	8.03	ND	0.2	ND	1.02	0.125	ND	8.51	7.91
Apr-2001	ND	ND	0.016	ND	ND	8.09	NA	ND	0.187	ND	2.89	NA	ND	8.12	NA
Sep-2001	ND	ND	0.013	ND	ND	7.02	6.93	ND	0.163	ND	1.6	0.051	ND	7.03	7.06
Mar-2002	ND	ND	0.016	ND	ND	8.37	8.21	ND	0.183	0.01	0.337	0.076	ND	8.05	8.09
Sep-2002	ND	ND	0.021	ND	ND	9.1	8.56	ND	0.199	ND	5.45	0.1	ND	8.79	8.64
Mar-2003	ND	ND	0.023	ND	ND	10.8	10.6	ND	0.256	ND	0.816	0.126	ND	10.8	10.6
Oct-2003	ND	ND	0.015	ND	ND	6.46	6.24	ND	0.142	ND	6.58	0.185	0.003	6.12	6.16
Apr-2004	ND	0.002	0.017	ND	ND	8.41	8.92	ND	0.182	ND	1.29	0.081	ND	7.82	8.29

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-16***													
Oct-2004	*ND*	*ND*	0.014	*ND*	*ND*	6.13	5.54	*ND*	0.14	*ND*	1.48	0.267	*ND*	5.69	5.18
Apr-2005	*ND*	*ND*	0.014	*ND*	*ND*	5.83	5.59	*ND*	0.134	*ND*	1.53	0.203	*ND*	5.36	5.11
Oct-2005	*ND*	*ND*	0.016	*ND*	*ND*	4.03	3.17	0.022	0.08	*ND*	10.7	0.421	0.003	2.61	1.99
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	3.87	4.26	*ND*	0.045	*ND*	0.706	*ND*	*ND*	2.04	2.43
Sep-2006	*ND*	*ND*	0.011	*ND*	*ND*	4.91	4.79	*ND*	0.044	*ND*	0.6	*ND*	*ND*	1.86	2.59
Mar-2007	*ND*	*ND*	0.016	*ND*	*ND*	6.47	5.73	*ND*	0.078	*ND*	2.12	0.066	*ND*	3.46	3.16
Sep-2007	*ND*	*ND*	0.012	*ND*	*ND*	4.49	4.16	*ND*	0.053	*ND*	0.535	0.066	*ND*	2.4	2.08
Mar-2008	*ND*	*ND*	0.014	*ND*	*ND*	3.88	3.75	*ND*	0.028	*ND*	0.721	*ND*	*ND*	1.39	1.52
Sep-2008	*ND*	*ND*	0.015	*ND*	*ND*	4.28	4.02	*ND*	0.048	*ND*	1.09	*ND*	*ND*	2.21	1.89
Mar-2009	*ND*	*ND*	0.013	*ND*	*ND*	4.18	4.09	*ND*	0.037	*ND*	0.806	0.101	*ND*	1.71	1.8
Oct-2009	*ND*	*ND*	0.015	*ND*	*ND*	4.49	4.18	*ND*	0.045	*ND*	1.23	0.232	*ND*	2.12	2.13
Apr-2010	*ND*	*ND*	0.015	*ND*	*ND*	5.49	5.41	*ND*	0.046	*ND*	1.86	0.184	*ND*	2.22	2.34
Oct-2010	*ND*	*ND*	0.01	*ND*	*ND*	5.59	5.83	*ND*	0.058	*ND*	0.998	0.853	*ND*	2.8	2.93
Apr-2011	*ND*	*ND*	0.017	*ND*	*ND*	4.16	3.84	*ND*	0.031	*ND*	1.96	0.487	*ND*	1.57	1.28
Sep-2011	*ND*	*ND*	0.019	*ND*	*ND*	3.93	3.47	*ND*	0.023	*ND*	2.41	0.192	*ND*	1.27	1.03
Mar-2012	*ND*	*ND*	0.019	*ND*	*ND*	5.79	5.15	*ND*	0.061	*ND*	1.99	0.475	*ND*	3.07	2.41
Sep-2012	*ND*	*ND*	0.0168	*0.000142 J*	*ND*	3.82	3.97	*0.0066 J*	0.0228	*0.0012 J*	1.94	0.593	*0.000893 J*	1.26	1.21
Mar-2013	*ND*	*ND*	0.0183	*0.000163 J*	*ND*	4.91	4.69	*0.0075 J*	0.0469	*0.0021 J*	1.97	0.542	*0.002 J*	2.03	1.83
Oct-2013	*ND*	*ND*	0.0174	*0.000136 J*	*ND*	4	3.89	*0.0047 J*	0.0341	*ND*	1.38	1.2	*0.000314 J*	1.81	1.77
Mar-2014	*0.000507 J*	*0.0001 J*	0.0158	*ND*	*ND*	4.23	3.97	*0.0034 J*	0.0311	*0.0027 J*	1.1	0.765	*ND*	1.71	1.5
Oct-2014	*0.000763 J*	*0.000465 J*	0.0185	*0.000205 J*	*ND*	4.29	4.34	*0.0032 J*	0.0265	*0.000607 J*	1.52	0.604	*ND*	1.51	1.53
Apr-2015	*0.000937 J*	*ND*	0.0205	*0.000285 J*	*ND*	6.36	6.7	*0.0021 J*	0.0749	*0.000363 J*	1.21	0.91	*ND*	3.77	3.91
Nov-2015	*0.000322 J*	*ND*	0.0214	*0.000315 J*	*ND*	6.8	6.75	*0.0024 J*	0.0721	*0.00064 J*	0.889	0.43	*0.000521 J*	3.61	3.38
May-2016	*ND*	*ND*	0.0201	*0.00025 J*	*ND*	5.29	5.21	0.0045	0.0439	*0.0007 J*	1.27	0.546	*0.00032 J*	2.58	2.42

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-16***													
Oct-2016	*ND*	*ND*	0.0207	*0.00022 J*	*ND*	4.29	4.92	0.0077	0.0309	*0.00059 J*	2.1	*1.07 J+*	*0.00025 J*	1.89	2.19
May-2017	*ND*	*ND*	0.0195	*0.0002 J*	*ND*	4.6	5.47	*0.003 J*	0.0319	*ND*	0.769	0.473	*ND*	2.13	2.01
Oct-2017	*ND*	*ND*	0.0184	*0.00025 J*	*ND*	4.79	4.7	0.0179	0.0343	*ND*	0.767	0.519	*ND*	2.29	2.3
May-2018	*0.000091 J*	*ND*	0.019	0.00033	*0.00007 J*	7.2	6.6	*0.0026 J*	0.0685	*0.0013 J*	1.3	0.14	*0.00021 J*	4.7	4.2
Nov-2018	*ND*	*ND*	0.022	*0.00058 J*	*0.000038 J*	11.5	11.4	0.024	0.18	*0.001 J*	1.3	0.81	*0.000064 J*	9.4	9.3
May-2019	*ND*	*ND*	0.028	0.00035	*ND*	11.9	11.9	0.0073	0.19	*ND*	3.7	0.9	*ND*	9	9
Oct-2019	*0.0001 J*	*ND*	0.028	0.00046	*0.00013 J*	13	12.2	*0.0053 J*	0.21	*ND*	2.7	1	*ND*	10.2	9.3
May-2020	*0.000091 J*	*ND*	0.027	0.00057	*ND*	13.1	12.4	0.0075	0.2	0.0025	3.6	0.67	*ND*	10.4	9.8
Oct-2020	*ND*	*ND*	0.028	*0.00078 J*	*ND*	12.3	11.7	*0.011 J*	0.22	*ND*	2.3	0.68	*ND*	10.1	9.5
Apr-2021	*ND*	*ND*	0.028	*0.0009 J*	*ND*	12.3	12.1	*0.0034 J*	0.21	*ND*	4.3	1.2	*ND*	10.1	10
Oct-2021	*0.000057 JB*	*ND*	0.027	0.00058	*ND*	12.2	13.1	0.0049	0.24	*ND*	3	0.95	*0.000031 J*	10	10.8
May-2022	*ND*	*ND*	0.028	0.00073	*ND*	12.8	13.5	0.0062	0.24	*ND*	6.3	0.89	*ND*	11	11.5
Oct-2022	*ND*	*ND*	0.025	0.00078	*ND*	12.2	12	0.0046	0.23	*ND*	0.46	0.2	*ND*	9.7	9.6
May-2023	*ND*	*ND*	0.028	0.00091	*ND*	13.5	12.3	0.007	0.26	*ND*	1.6	0.24	*ND*	11.3	10.2
Oct-2023	*ND*	*ND*	0.025	0.00074	*ND*	12.8	13.1	0.0079	0.23	*0.001 JB*	7	*0.025 J*	*ND*	10.4	10.8

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-16*												
Nov-1993	1.4	NA	ND	NA	6.7	NA	ND	NA	21.8	NA	NA	NA	0.42
Apr-1994	0.8	NA	ND	NA	4.22	NA	ND	NA	11.37	NA	NA	NA	0.28
Aug-1994	0.68	NA	ND	NA	4.7	NA	ND	NA	8.8	NA	NA	NA	0.26
Sep-1994	0.66	NA	ND	NA	3.6	NA	ND	NA	8.7	NA	NA	NA	0.24
Nov-1994	0.97	NA	ND	NA	5.5	NA	ND	NA	10.7	NA	NA	NA	0.24
Apr-1995	0.08	NA	ND	0.06	4.9	NA	ND	0.01	9.5	NA	ND	ND	0.28
Oct-1996	0.56	0.57	NA	0.085	ND	ND	ND	ND	8.7	8.5	ND	ND	0.2
Apr-1997	1.2	1.1	ND	0.31	5.3	5.1	ND	ND	14	14	ND	ND	0.29
Oct-1997	1.04	0.91	NA	0.157	4.16	3.04	ND	ND	13.3	11.4	ND	ND	0.267
Apr-1998	0.804	0.811	NA	0.125	5.25	5.07	ND	ND	10.7	10.6	ND	ND	0.337
Apr-1999	0.858	0.871	NA	0.142	4.23	4.05	ND	ND	11.8	12.1	ND	ND	0.286
Oct-1999	0.751	0.677	NA	0.116	4.88	3.62	ND	ND	10.4	9.32	ND	ND	0.242
Apr-2000	1.42	1.34	NA	0.222	5.86	6.21	ND	ND	20.2	19.2	ND	ND	0.454
Oct-2000	1.2	1.11	NA	0.188	6	5.56	ND	ND	16.4	15.1	ND	ND	0.403
Apr-2001	1.12	NA	NA	0.183	6.01	NA	ND	ND	15.6	NA	ND	ND	0.365
Sep-2001	0.962	0.963	NA	0.161	5.66	5.25	ND	ND	14.6	13.3	ND	ND	0.313
Mar-2002	1.09	1.1	NA	0.173	7.03	6.6	ND	ND	16.4	15.4	ND	ND	0.34
Sep-2002	1.19	1.17	NA	0.198	5.89	6.09	ND	ND	18.1	17.9	ND	ND	0.382
Mar-2003	1.52	1.49	NA	0.251	6.94	7.24	ND	ND	21.5	20.9	ND	ND	0.491
Oct-2003	0.84	0.841	NA	0.143	5.97	5.21	ND	ND	12.5	11.8	ND	ND	0.314
Apr-2004	1.09	1.16	ND	0.188	6.55	5.88	ND	ND	15	16.3	ND	ND	0.322
Oct-2004	0.823	0.756	ND	0.141	5.11	4.74	ND	ND	11	9.79	ND	ND	0.241

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-16***												
Apr-2005	0.785	0.749	*ND*	0.132	4.43	4.01	*ND*	*ND*	10.1	9.66	*ND*	*ND*	0.225
Oct-2005	0.466	0.338	*ND*	0.072	2.51	1.93	*ND*	*ND*	5.64	3.89	*ND*	*ND*	0.132
Mar-2006	0.26	0.308	*ND*	0.053	1.84	2.04	*ND*	*ND*	4.3	4.88	*ND*	*ND*	0.058
Sep-2006	0.241	0.358	*ND*	0.048	1.92	2.4	*ND*	*ND*	4.15	5.25	*ND*	*ND*	0.123
Mar-2007	0.458	0.419	*ND*	0.082	2.97	2.71	*ND*	*ND*	6.86	6.32	*ND*	*ND*	0.154
Sep-2007	0.316	0.267	*ND*	0.054	2.02	1.7	*ND*	*ND*	5.22	4.59	*ND*	*ND*	0.1
Mar-2008	0.158	0.174	*ND*	0.034	1.64	1.6	*ND*	*ND*	3.19	3.47	*ND*	*ND*	0.067
Sep-2008	0.259	0.22	*ND*	0.057	1.82	1.63	*ND*	*ND*	4.49	3.98	*ND*	*ND*	0.091
Mar-2009	0.204	0.222	*ND*	0.043	1.77	1.74	*ND*	*ND*	3.97	4.18	*ND*	*ND*	0.075
Oct-2009	0.25	0.254	*ND*	0.052	1.79	1.63	*ND*	*ND*	4.5	4.42	*ND*	*ND*	0.088
Apr-2010	0.258	0.279	*ND*	0.053	2	1.99	*ND*	*ND*	4.88	5.04	*ND*	*ND*	0.09
Oct-2010	0.326	0.343	*ND*	0.061	2.15	2.2	*ND*	*ND*	5.88	6.18	*ND*	*ND*	0.092
Apr-2011	0.174	0.135	*ND*	0.039	1.49	1.16	*ND*	*ND*	3.55	3.06	*ND*	*ND*	0.06
Sep-2011	0.118	0.096	*ND*	0.038	1.69	1.04	*ND*	*ND*	3.13	2.87	*ND*	*ND*	0.055
Mar-2012	0.367	0.275	*ND*	0.068	2.46	1.94	*ND*	*ND*	6.41	5.25	*ND*	*ND*	0.104
Sep-2012	0.121	0.12	*ND*	0.0333	1.34	1.27	*ND*	*ND*	3.06	3.02	*0.0015 J*	*ND*	0.0492
Mar-2013	0.272	0.224	*0.000048 J*	0.0554	1.73	1.52	*ND*	*ND*	4.33	3.89	*ND*	*ND*	0.0989
Oct-2013	0.177	0.174	*ND*	0.0424	1.72	1.54	*ND*	*ND*	3.97	3.86	*0.000104 J*	*0.0028 J*	0.0741
Mar-2014	0.181	0.154	*ND*	0.0407	1.55	1.33	*ND*	*ND*	3.59	3.27	*ND*	*0.000622 J*	0.0629
Oct-2014	0.152	0.155	*ND*	0.0353	1.59	1.47	*ND*	*ND*	3.62	3.78	*ND*	*0.0013 J*	0.063
Apr-2015	0.435	0.458	*ND*	0.0863	2.79	2.84	*0.000895 J*	*ND*	7.45	7.8	*ND*	*ND*	0.139
Nov-2015	0.407	0.378	*ND*	0.0833	2.72	2.51	*ND*	*ND*	7.24	6.83	*0.00011 J*	*0.000842 J*	0.133
May-2016	0.258	0.257	*ND*	0.0549	2.19	1.92	*ND*	*ND*	5.36	4.96	*ND*	0.0012	0.0855
Oct-2016	0.191	0.223	*ND*	0.0439	1.62	1.86	*ND*	*ND*	4.42	4.9	*ND*	0.0011	0.0652

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-16***												
May-2017	0.176	0.169	*ND*	0.048	1.72	1.75	*ND*	*ND*	4.39	4.28	*ND*	*0.00034 J*	0.0754
Oct-2017	0.19	0.196	*ND*	0.0503	1.84	1.87	*ND*	*ND*	4.63	4.67	*ND*	*0.00037 J*	0.0795
May-2018	0.34	0.33	*ND*	0.099	*3.3 J*	*2.6 J*	*0.000095 J*	*ND*	9.4	7.8	*ND*	0.0036	0.17
Nov-2018	1.2	0.93	*ND*	0.21	6	6	*0.00012 J*	*ND*	18.5	18.6	*ND*	0.0056	0.34
May-2019	1.3	1.2	*ND*	0.21	5.9	5.4	*ND*	*ND*	17.6	17.2	*ND*	*ND*	0.34
Oct-2019	1.5	1.3	*ND*	0.22	6	5.9	*ND*	*ND*	19.3	18.6	*ND*	0.0068	0.34
May-2020	1.3	1.3	*ND*	0.21	6.4	6.4	*ND*	*ND*	19.6	18.8	*ND*	*ND*	0.35
Oct-2020	1.3	1.2	*ND*	0.23	6.1	6	*ND*	*ND*	19.6	18.1	*ND*	*0.00092 J*	0.37
Apr-2021	1.4	1.4	*ND*	0.24	6.3	6.2	*0.0055 J*	*ND*	19.6	19.5	*ND*	*ND*	0.35
Oct-2021	1.4	1.54	*ND*	0.24	6.2	6.9	*ND*	*ND*	19.6	21.5	*0.000044 J*	*ND*	0.36
May-2022	1.5	1.5	*ND*	0.25	6.7	6.5	*ND*	*ND*	20.8	20.6	*ND*	*ND*	0.39
Oct-2022	1.3	1.3	*ND*	0.24	6.6	5.9	*ND*	*ND*	20.2	18.4	*ND*	*ND*	0.36
May-2023	1.4	1.3	*ND*	0.29	7.3	6.7	*ND*	*ND*	22	19.9	*ND*	*ND*	0.43
Oct-2023	1.3	1.3	*ND*	0.26	6.6	6.9	*ND*	*ND*	19.9	20.7	*ND*	*ND*	0.38

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	33	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.3 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.4 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-16***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-16***															
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-16***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16***															
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.1 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-17***											
Nov-1993	62	62	0.2	24.8	6.7	ND	ND	5.94	172	15.4	45	63.1
Apr-1994	64	64	0.1	62.3	6.1	ND	ND	5.96	183	18.9	103	58.75
Apr-1995	58.7	58.7	ND	74.7	7.1	ND	ND	6	186	22.5	88	43.9
Apr-1997	ND	20	ND	ND	5	0.04	ND	NA	NA	14	88	15
Oct-1997	35	35	0.24	ND	4.39	ND	ND	6.48	170.5	14.3	107	46
Apr-1998	32	32	0.26	ND	4.22	ND	ND	7.6	164.7	19	64	39
Apr-1999	28	28	0.82	16	5.33	ND	ND	5.61	143.1	19.5	110	48
Oct-1999	38	38	0.08	ND	7.13	ND	ND	5.68	132	17.1	140	32
Apr-2000	31	31	ND	ND	3.42	ND	ND	6.01	74	29	117	48
Oct-2000	23	NA	0.22	56	6.06	ND	ND	5.88	137.9	27.3	87	37.8
Apr-2001	29	NA	ND	10	6	ND	ND	NA	NA	28.4	108	45
Sep-2001	26	26	ND	ND	8.69	ND	ND	5.74	165	34.4	105	36.7
Mar-2002	25	25	ND	38	4.51	ND	ND	5.8	68.5	27.1	122	37
Sep-2002	17	17	ND	ND	5.88	ND	ND	5.7	167.5	43.5	108	36.2
Mar-2003	22	22	ND	ND	15.2	ND	ND	5.8	157.9	33.9	110	42
Oct-2003	27	27	ND	ND	5.19	ND	ND	5.6	164.7	34.6	106	46.2
Apr-2004	31	31	ND	27	5.06	ND	ND	5.6	151.5	28.1	106	51.8
Oct-2004	45	45	ND	ND	5.21	0.08	ND	5.6	164.6	30.7	123	51.7
Apr-2005	33	33	ND	ND	5.68	ND	ND	5.7	127.4	26.3	113	41.8
Oct-2005	29	29	ND	ND	1.03	ND	ND	5.5	296	2.32	92	35.2
Mar-2006	27	27	ND	ND	5.6	ND	ND	7.7	104.8	21.9	105	26.3
Sep-2006	13	13	ND	ND	5.22	ND	ND	7.7	104.8	20.3	210	33.3
Mar-2007	8.2	8.2	0.6	ND	5.44	ND	ND	5.5	107.9	20	58	17.6
Sep-2007	6.1	6.1	ND	82	9.89	ND	ND	6.1	104.6	20.5	87	14
Mar-2008	13	13	0.25	ND	10.1	ND	ND	5.3	107.2	33.7	39	17.2
Sep-2008	13	13	ND	36	9.93	ND	ND	5.3	101.1	15	67	18
Mar-2009	10	10	ND	ND	5.52	ND	ND	5	113.4	31.4	85	19.4
Oct-2009	7	7	ND	ND	5.35	ND	ND	5.1	97.3	23.2	62	12.7
Apr-2010	6.2	6.2	ND	ND	5.67	ND	ND	4.8	119.7	25.7	133	13.6
Oct-2010	14	14	ND	ND	5.7	ND	ND	5.2	89.3	24.9	73	24.3
Apr-2011	106	106	ND	ND	5.38	ND	ND	5.1	103.4	22.5	70	16.7
Sep-2011	9.2	9.2	ND	ND	5.65	ND	ND	5.1	95.5	20.7	59	14.7
Mar-2012	15	15	ND	ND	5.53	ND	ND	5	111.4	26.6	72	27.4
Sep-2012	8.44	8.44	ND	ND	5.83	ND	ND	4.5	100.4	24.1	95	16.6
Mar-2013	8.72	8.72	ND	10.2	5.86	ND	ND	5.3	113	23	83	11.2
Oct-2013	14	14	ND	10.3	5.78	ND	ND	4.1	110.6	28.6	77	24.3
Mar-2014	6.8	6.8	ND	19	5.56	ND	ND	5.5	108.5	27.1	58	13.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-17***											
Oct-2014	2.2	2.2	*ND*	33	5.75	*ND*	*ND*	5.3	100.3	26.5	108	22.3
Apr-2015	13.2	13.2	*ND*	13	5.52	*ND*	*ND*	4.5	102.1	28.7	71	21.1
Nov-2015	5.56	5.56	*ND*	*ND*	5.95	0.0536	*ND*	5.5	122.9	25.5	53	14.9
May-2016	12.6	12.6	0.274	*7 J*	5.87	0.0852	*ND*	5.6	182.9	28.9	81	24.1
Oct-2016	18.3	18.3	*0.185 J*	45	5.86	*NA*	*NA*	5.5	190.5	34.1	140	29.6
May-2017	2.6	2.6	*ND*	*ND*	5.56	0.076	*ND*	5.2	162.4	30.6	64	17
Oct-2017	*ND*	*ND*	*0.0838 J*	*ND*	5.58	*ND*	*ND*	5.1	160.4	34.5	96	17.3
May-2018	*ND*	*ND*	*ND*	*ND*	5.9	*ND*	0.024	4.4	191.5	62.5	139	38.2
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	5.9	*0.038 J*	*ND*	4.63	169.6	63.6	95	39.3
May-2019	*ND*	*NA*	*ND*	*ND*	4.8	*ND*	*ND*	5.06	128.2	50.6	82	34.2
Oct-2019	*ND*	*NA*	*ND*	*ND*	5.4	*0.047 J*	*ND*	5.05	164	52.5	108	30
May-2020	*1 J*	*NA*	*ND*	*ND*	5.7	*ND*	*ND*	4.69	143.9	45.2	68	26.9
Oct-2020	*8 J*	*NA*	*ND*	*ND*	5.4	*ND*	*0.0064 J*	4.79	143.4	43.3	75	25.4
Apr-2021	*2 J3c*	*NA*	*ND*	38.6	5.7	*0.025 J*	*ND*	5.29	166.1	36.9	87	25.9
Oct-2021	*6 J5c*	*NA*	*ND*	*ND*	5	*ND*	*ND*	5.45	190.6	36.8	65	20.9
May-2022	10	*NA*	*ND*	*ND*	4.7	*ND*	*ND*	4.97	160.2	40.6	73	22.9 N3
Oct-2022	*6 J4c*	*NA*	*ND*	*10.7 J*	7.6	*ND*	*ND*	4.99	155.9	34.9	73	23.5 N3
May-2023	*1 J2c*	*NA*	*ND*	*ND*	5.3	*ND*	0.013	4.94	142.6	32.8	66	19.4 N3
Oct-2023	*4 J7c*	*NA*	*ND*	*ND*	6.2	*ND*	*NA*	4.62	144.1	41.6	216	21.1 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17***													
Nov-1993	*NA*	*ND*	*ND*	*NA*	*ND*	22.5	*NA*	0.012	*NA*	*ND*	10	6.7	*ND*	1.7	*NA*
Apr-1994	*NA*	*ND*	*ND*	*NA*	*ND*	20.4	*NA*	*ND*	*NA*	*ND*	8.53	3.14	*ND*	1.89	*NA*
Apr-1995	*ND*	*ND*	1	*ND*	*ND*	14.6	*NA*	*ND*	*ND*	*ND*	7.6	7.6	*ND*	1.8	*NA*
Oct-1996	*ND*	*ND*	0.035	*ND*	*ND*	8.8	8.4	*ND*	*ND*	*ND*	6	8	*ND*	1.4	1.3
Apr-1997	*ND*	*ND*	0.016	*ND*	*ND*	8.4	8.7	*ND*	*ND*	*ND*	4.2	2.1	0.003	1.1	1.1
Oct-1997	*ND*	*ND*	0.053	*ND*	*ND*	12.2	10.9	0.014	0.019	0.053	14.3	7.52	*ND*	1.9	1.55
Apr-1998	*ND*	*ND*	0.116	*ND*	*ND*	11.5	2.12	0.031	0.018	0.033	23.9	4.46	*ND*	2.45	0.453
Apr-1999	*ND*	*ND*	0.179	*ND*	*ND*	13.7	10.1	0.054	0.026	0.042	38.5	7.9	*ND*	3.41	1.65
Oct-1999	*ND*	*ND*	0.025	*ND*	*ND*	6.94	6.54	*ND*	*ND*	0.011	6.29	1.08	*ND*	1.51	1.38
Apr-2000	*ND*	*ND*	0.034	*ND*	*ND*	15.9	15	*ND*	0.012	0.012	11.6	4.76	*ND*	2.04	1.89
Oct-2000	*ND*	*ND*	0.031	*ND*	*ND*	12	9.46	*ND*	0.011	0.018	17.2	6.64	*ND*	1.91	1.6
Apr-2001	*ND*	*ND*	0.084	*ND*	*ND*	14	*NA*	0.02	0.019	0.02	35.7	*NA*	0.004	2.32	*NA*
Sep-2001	*ND*	*ND*	0.04	*ND*	*ND*	11.5	10.4	0.011	0.011	0.012	24.1	6.29	0.003	1.91	1.61
Mar-2002	*ND*	*ND*	0.037	*ND*	*ND*	11.4	10.1	0.01	0.018	0.011	16.2	5.94	*ND*	2.08	1.85
Sep-2002	*ND*	*ND*	0.044	*ND*	*ND*	11.2	10.6	*ND*	0.027	0.014	22.6	15	0.003	1.98	1.8
Mar-2003	*ND*	*ND*	0.045	*ND*	*ND*	13.5	11.8	*ND*	0.05	0.01	47.7	3.79	0.002	2.02	1.85
Oct-2003	*ND*	0.005	0.05	*ND*	*ND*	14.9	12	0.016	0.04	0.025	24.7	4.81	0.006	2.15	1.69
Apr-2004	*ND*	**0.011**	0.088	*ND*	*ND*	16.8	14.2	0.041	0.056	0.045	45.1	3.94	0.01	2.37	1.9
Oct-2004	*ND*	0.003	0.041	*ND*	*ND*	17.2	15.7	0.012	0.037	0.017	16.3	3.7	0.004	2.11	1.94
Apr-2005	*ND*	0.002	0.04	*ND*	*ND*	13.6	12.8	0.012	0.03	0.02	12.4	4.46	0.002	1.9	1.74
Oct-2005	*ND*	*ND*	0.019	*ND*	*ND*	11.6	10.7	*ND*	0.011	*ND*	0.798	1.86	*ND*	1.54	1.49

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17***													
Mar-2006	*ND*	*ND*	0.016	*ND*	*ND*	8.36	8.68	*ND*	0.01	*ND*	2.02	3.39	*ND*	1.3	1.37
Sep-2006	*ND*	*ND*	0.042	*ND*	*ND*	10.8	9.11	*ND*	0.019	0.016	9.22	4.96	0.003	1.54	1.43
Mar-2007	*ND*	0.005	0.043	*ND*	*ND*	4.73	6.14	0.04	0.033	0.029	18.5	4.58	0.007	1.4	1.37
Sep-2007	*ND*	0.009	0.045	*ND*	*ND*	3.5	3.39	0.045	0.034	0.031	21.4	5.09	0.008	1.28	1.11
Mar-2008	*ND*	0.003	0.026	*ND*	*ND*	4.7	4.37	0.013	0.012	*ND*	8.65	3.43	0.002	1.33	1.28
Sep-2008	*ND*	0.003	0.03	*ND*	*ND*	4.66	4.35	0.013	0.01	*ND*	8.02	3.63	*ND*	1.56	1.41
Mar-2009	*ND*	0.005	0.051	*ND*	*ND*	5.16	3.43	0.049	0.038	0.029	38.5	4.56	0.008	1.57	1.25
Oct-2009	*ND*	0.003	0.03	*ND*	*ND*	3.16	3.27	0.023	0.014	0.016	17.6	4.26	0.003	1.16	1.21
Apr-2010	*ND*	0.006	0.034	*ND*	*ND*	3.26	2.33	0.023	0.022	0.018	20	5.97	0.005	1.33	1.07
Oct-2010	*ND*	0.003	0.031	*ND*	*ND*	6.87	6.32	0.02	0.02	0.012	12.3	3.91	0.003	1.73	1.54
Apr-2011	*ND*	*ND*	0.019	*ND*	*ND*	4.46	4.49	*ND*	*ND*	*ND*	3.83	4.49	*ND*	1.36	1.39
Sep-2011	*ND*	0.002	0.034	*ND*	*ND*	3.55	2.45	0.016	*ND*	0.014	11.5	5.9	0.003	1.42	1.16
Mar-2012	*ND*	0.002	0.038	*ND*	*ND*	7.74	5.95	0.014	*ND*	0.017	11.1	4.72	0.003	1.96	1.61
Sep-2012	*ND*	0.0036	0.035	*0.000401 J*	*ND*	4.15	4.04	0.0266	0.0172	0.0152	26.3	4.65	0.0042	1.52	1.47
Mar-2013	*ND*	*ND*	0.0298	*0.000333 J*	*ND*	2.73	3.13	0.0217	0.0158	0.0148	30.9	4.77	0.0052	1.07	1.19
Oct-2013	*ND*	*0.0018 J*	0.0414	*0.000309 J*	*0.000155 J*	6.69	5.28	*0.0154 J*	*0.0081 J*	*0.0089 J*	16	4.38	0.0025	1.84	1.65
Jan-2014	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	0.0252	*NA*	*NA*	*NA*	*NA*	0.0059	*NA*	*NA*
Mar-2014	*0.000701 J*	*0.0015 J*	0.0326	*0.000238 J*	*ND*	3.06	3.26	*0.0074 J*	*0.0048 J*	*0.0005 J*	8.91	4.5	*0.0018 J*	1.45	1.46
Oct-2014	*0.0012 J*	*0.0261 J*	0.166	*ND*	*0.000168 J*	5.24	4.81	*0.112 J*	*0.0474 J*	*0.0591 J*	78.3	4.4	**0.0239**	2.25	1.57
Apr-2015	*0.0013 J*	**0.013**	0.133	*0.000895 J*	*0.000127 J*	5.13	5.14	0.075	*0.0326 J*	*0.0353 J*	55.6	4.01	**0.0181**	2	1.63
Nov-2015	*0.00073 J*	0.0042	0.0658	*0.000416 J*	*0.000064 J*	3.51	4.08	0.022	0.0111	0.0124	16.4	5.09	0.0061	1.5	1.56
May-2016	*ND*	0.0099	0.064	*0.00059 J*	*ND*	6.17	5.41	0.0461	0.0247	0.0239	39.9	8.98	0.0082	2.11	1.83
Oct-2016	*ND*	*0.0024 J*	0.0367	*0.00028 J*	*ND*	8.2	7.35	0.0168	0.0074	0.0063	11.9	7.49	0.0021	2.23	2.19
May-2017	*ND*	*0.001 J*	0.0263	*0.00015 J*	*ND*	4.03	4.4	0.0067	0.0041	*0.0026 J*	8.35	4.65	*0.00079 J*	1.67	1.6

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17***													
Oct-2017	*ND*	*0.0016 J*	0.0297	*0.00017 J*	*ND*	4.22	3.55	0.0068	0.0057	*0.0022 J*	14.2	4.78	*0.00065 J*	1.65	1.64
May-2018	*0.00011 J*	*0.00026 J*	0.053	0.00086	*0.00049 J*	10.1	9.9	0.025	0.0433	0.0023	9.6	0.96	*0.00024 J*	3.1	3.1
Nov-2018	*ND*	*0.0007 J*	0.032	0.00044	*0.00025 J*	11.5	11.3	0.038	0.021	0.0029	7	0.79	*0.0006 J*	2.6	2.6
May-2019	*ND*	*ND*	0.026	*ND*	*ND*	9.8	9.9	0.049	0.029	*ND*	9.2	6.1	*ND*	2.4	2.4
Oct-2019	*0.00011 J*	*0.0005 J*	0.025	*0.000094 J*	*0.0002 J*	8.3	7.7	0.024	0.041	*ND*	8	6.3	*0.00014 J*	2.2	2
May-2020	*0.000083 J*	*0.0005 J*	0.024	*0.00014 J*	*ND*	7.2	7	0.063	0.036	0.003	13.5	3.6	*0.00024 J*	2.2	2.1
Oct-2020	*ND*	*ND*	0.021	*ND*	*ND*	6.8	6.8	*0.03 J*	0.022	*ND*	9.8	3.7	*ND*	2	2
Apr-2021	*ND*	*ND*	0.023	*ND*	*ND*	7	7	0.0088	0.019	*ND*	10	7.3	*ND*	2.1	2
Oct-2021	*0.000051 JB*	*ND*	0.022	*ND*	*ND*	5.6	6	0.0044	0.023	*0.00036 J*	8.2	7.3	*0.000042 J*	1.7	1.9
May-2022	*ND*	*0.00058 J*	0.023	*ND*	*ND*	6	6.3	0.022	0.019	*0.0014 J*	10	2.5	*ND*	2	2.2
Oct-2022	*ND*	*0.0008 J*	0.023	*ND*	*ND*	6	6.1	0.016	0.013	*ND*	20.6	3.3	*ND*	2	2.1
May-2023	*ND*	*0.0006 J*	0.022	*0.00014 J*	*ND*	4.7	4.5	0.012	0.0069	*0.0012 J*	19.7	1.4	*ND*	1.8	1.7
Oct-2023	*ND*	*0.001 J*	0.031	*0.00017 J*	*ND*	5	4.7	0.032	0.015	*0.0024 JB*	18.7	0.34	*0.00029 J*	2.1	2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-17*												
Nov-1993	0.27	NA	ND	NA	2	NA	ND	NA	11	NA	NA	NA	0.01
Apr-1994	0.31	NA	ND	NA	1.69	NA	ND	NA	12.97	NA	NA	NA	0.06
Apr-1995	0.28	NA	ND	ND	2.1	NA	ND	ND	8.4	NA	ND	ND	0.03
Oct-1996	0.21	0.19	NA	ND	ND	ND	ND	ND	9	8.4	ND	ND	0.27
Apr-1997	0.18	0.19	ND	ND	1.8	1.8	ND	ND	7.2	7.3	ND	ND	0.025
Oct-1997	0.259	0.244	NA	0.064	3.88	0.695	ND	ND	10.2	9.61	ND	0.018	0.08
Apr-1998	0.262	0.048	NA	0.1	6.8	1.61	ND	ND	10.6	1.99	ND	0.051	0.076
Apr-1999	0.348	0.243	NA	0.03	8.91	ND	ND	ND	13.1	10.6	ND	0.088	0.106
Oct-1999	0.214	0.204	NA	ND	1.78	1.28	ND	ND	10.8	10.2	ND	ND	0.032
Apr-2000	0.231	0.225	NA	ND	1.89	1.25	ND	ND	12.8	11.2	ND	ND	0.037
Oct-2000	0.237	0.21	NA	0.018	2.16	1.5	ND	ND	13.1	10.8	ND	0.011	0.041
Apr-2001	0.25	NA	NA	0.015	4.25	NA	ND	ND	12.5	NA	ND	0.037	0.059
Sep-2001	0.212	0.199	NA	0.022	2.82	1.91	ND	ND	13.4	10.4	ND	0.015	0.048
Mar-2002	0.255	0.236	NA	0.018	2.87	1.53	ND	ND	12	11.1	ND	0.014	0.046
Sep-2002	0.249	0.234	NA	0.029	2.39	2.13	ND	ND	12.4	11.6	ND	0.018	0.064
Mar-2003	0.236	0.233	NA	0.046	2.32	1.33	ND	ND	12.4	11.5	ND	ND	0.084
Oct-2003	0.22	0.209	NA	0.041	2.74	1.76	ND	ND	12.9	10.8	ND	0.03	0.08
Apr-2004	0.234	0.211	ND	0.055	4.63	2.15	ND	ND	12.6	11.9	ND	0.065	0.226
Oct-2004	0.244	0.232	ND	0.025	2.76	1.76	ND	ND	12.7	12	ND	0.017	0.079
Apr-2005	0.263	0.253	ND	0.03	2.66	1.68	ND	ND	11.9	11.5	ND	0.02	0.061
Oct-2005	0.216	0.216	ND	0.017	1.58	1.43	ND	ND	9.66	8.61	ND	ND	0.04
Mar-2006	0.174	0.194	ND	0.015	1.34	1.29	ND	ND	9.53	9.45	ND	ND	0.015

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-17***												
Sep-2006	0.244	0.221	ND	0.027	1.92	1.49	ND	ND	9.55	9.87	ND	0.01	0.096
Mar-2007	0.218	0.205	ND	0.04	2.2	1.36	ND	ND	9.08	9.56	ND	0.033	0.085
Sep-2007	0.183	0.172	ND	0.039	1.96	1.1	ND	ND	8.21	8.9	ND	0.038	0.088
Mar-2008	0.196	0.183	ND	0.019	1.69	1.36	ND	ND	9.11	9.26	ND	ND	0.052
Sep-2008	0.202	0.186	ND	0.017	1.84	1.32	ND	ND	9.74	9.32	ND	ND	0.043
Mar-2009	0.201	0.175	ND	0.045	2.36	1.38	ND	ND	9.67	9.75	ND	0.036	0.1
Oct-2009	0.157	0.176	ND	0.018	1.56	1.13	ND	ND	8.17	8.59	ND	0.019	0.05
Apr-2010	0.174	0.155	ND	0.022	2.05	1.18	ND	ND	8.91	8.64	ND	0.033	0.064
Oct-2010	0.224	0.204	ND	0.026	2.2	1.44	ND	ND	11.7	11.6	ND	0.013	0.052
Apr-2011	0.171	0.17	ND	0.016	1.26	1.24	ND	ND	10.4	10.3	ND	ND	0.032
Sep-2011	0.181	0.166	ND	0.017	2.44	1.28	ND	ND	9.96	9.42	ND	0.011	0.044
Mar-2012	0.276	0.252	0.0002	0.024	2.87	1.52	ND	ND	12.2	11.1	ND	0.012	0.065
Sep-2012	0.196	0.184	ND	0.0238	1.9	1.44	ND	ND	10.4	10.8	0.000409 J	0.0179	0.0513
Mar-2013	0.153	0.174	0.000142 J	0.0182	1.37	1.15	ND	0.000022 J	7.37	8.92	ND	0.0191	0.0512
Oct-2013	0.227	0.192	ND	0.015	2.27 J	1.52	ND	0.000018 J	10.8	11.4	0.000198 J	0.0205 J	0.0491
Mar-2014	0.157	0.17	ND	0.0106 J	1.8	1.37	ND	ND	9.13	10.1	0.000637 J	0.0083 J	0.0257
Oct-2014	0.203	0.17	0.000121 J	0.0665 J	5.72 J	1.61	ND	0.000089 J	9.92 J	11.6	ND	0.0981 J	0.104
Apr-2015	0.187	0.182	ND	0.0425 J	4.91	1.57	ND	0.00008 J	10.2	11.8	ND	0.0674	0.0674
Nov-2015	0.158	0.184	ND	0.0161	2.82	1.56	0.000942 J	ND	8.92	11.2	0.000327 J	0.0234	0.0383
May-2016	0.2	0.188	ND	0.0294	3.22	1.8	ND	ND	12.3	12	0.00017 J	0.0438	0.0732
Oct-2016	0.265	0.262	ND	0.019	2.11	1.94	ND	ND	13.7	13.8	ND	0.0106	0.0647
May-2017	0.2	0.191	ND	0.0091	1.67	1.62	ND	ND	11.3	11.2	ND	0.0044	0.039
Oct-2017	0.213	0.203	ND	0.0104	1.58	1.56	ND	ND	11	11	ND	0.0033	0.0382
May-2018	0.33	0.34	ND	0.062	2.1 J	1.7 J	0.00046 J	ND	15.1	13.8	0.000071 J	0.0041	0.15

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-17***												
Nov-2018	0.22	0.23	*ND*	0.048	*2.1 J*	*2 J*	*0.00019 J*	*ND*	13.8	13.9	*ND*	0.0055	0.089
May-2019	0.5	0.47	*ND*	0.04	*ND*	*ND*	*ND*	*ND*	13.5	13.4	*ND*	*ND*	0.077
Oct-2019	0.7	0.63	*ND*	0.034	*1.4 J*	*ND*	*ND*	*ND*	13.4	13.1	*ND*	0.0073	0.066
May-2020	0.57	0.58	*ND*	0.026	*1.8 J*	*1.8 J*	*ND*	*ND*	13.4	13.1	*ND*	*ND*	0.048
Oct-2020	0.42	0.4	*ND*	0.02	*ND*	*1.7 J*	*ND*	*ND*	13.4	12.9	*ND*	*0.0015 J*	0.041
Apr-2021	0.43	0.42	*ND*	0.016	1.8	1.7	*0.0056 J*	*ND*	13.6	13.4	*ND*	*0.00068 J*	0.034
Oct-2021	0.45	0.482	*ND*	0.016	1.6	1.7	*ND*	*ND*	12.2	13.5	*0.000029 J*	*ND*	0.035
May-2022	0.41	0.43	*ND*	0.016	1.8	1.8	*ND*	*ND*	13.3	13.9	*ND*	*0.0011 JB*	0.035
Oct-2022	0.35	0.34	*ND*	0.015	1.9	1.7	*ND*	*ND*	14.3	13.5	*ND*	*ND*	0.03
May-2023	0.23	0.23	*ND*	0.01	2.1	1.8	*ND*	*ND*	13.4	12.6	*ND*	*0.0012 J*	0.027
Oct-2023	0.32	0.29	*ND*	0.036	1.9	1.7	*ND*	*ND*	13	12.2	*ND*	*0.0021 J*	0.055

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	35	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.96 J	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 J	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 J	ND	11	22 J+	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.4 J*	7.9	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.4 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.6 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.5 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17***															
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-17A***											
Nov-1993	ND	ND	ND	21.3	2.6	0.3	ND	4.76	19.2	2.5	ND	2.47
Apr-1994	5	5	0.2	ND	2.4	0.3	ND	5	19	ND	20	3.79
Apr-1995	ND	ND	0.4	ND	2.7	0.3	ND	4.8	19.1	2.3	18	2
Apr-1997	ND	2	ND	ND	1.5	0.29	ND	NA	NA	ND	66	4.1
Oct-1997	2	2	0.33	30	2.6	0.294	ND	5.99	19.7	ND	22	ND
Apr-1998	3	ND	ND	ND	1.79	0.301	ND	7.35	18.75	ND	ND	3
Apr-1999	ND	ND	0.45	ND	2.04	0.18	ND	4.95	48.5	ND	20	3.2
Oct-1999	ND	ND	0.07	ND	2.76	0.563	ND	4.69	20.8	1.35	19	3.1
Apr-2000	ND	ND	ND	ND	1.62	0.26	ND	6.88	103	0.87	24	3.2
Oct-2000	1	NA	ND	ND	2.03	ND	ND	6.08	29.8	ND	33	3.31
Apr-2001	1.3	NA	ND	ND	2.23	0.292	ND	NA	NA	ND	25	3.3
Sep-2001	ND	ND	ND	ND	3.42	1.27	ND	5.04	19	ND	21	3.16
Mar-2002	ND	ND	ND	ND	3.6	0.426	ND	5.1	14.2	0.821	21	3.08
Sep-2002	1.8	1.8	ND	ND	2.62	0.3	ND	5	20.8	ND	16	2.97
Mar-2003	1.6	1.6	ND	ND	1.34	ND	ND	5.2	16.2	ND	36	3.15
Oct-2003	1.5	1.5	ND	ND	4.03	0.214	ND	4.8	20.9	ND	19	4.09
Apr-2004	1.7	1.7	ND	ND	2.44	0.189	ND	4.8	17.9	ND	21	3.39
Oct-2004	1.5	1.5	ND	ND	2.45	0.266	ND	4.8	15.7	ND	30	3.05
Apr-2005	1.8	1.8	ND	ND	2.63	0.3	ND	4.8	15.5	1.45	38	3.2
Oct-2005	2.7	2.7	ND	ND	2.68	0.27	ND	4.1	15.9	1.21	35	3.07
Mar-2006	2.8	2.8	ND	ND	2.51	0.29	ND	4.9	17.5	1.51	24	2.14
Sep-2006	2.7	2.7	ND	ND	2.54	0.3	ND	4.9	17.5	1.2	20	2.92
Mar-2007	2.8	2.8	ND	ND	2.73	0.29	ND	4.7	15.2	ND	ND	2.89
Sep-2007	2.4	2.4	ND	ND	2.5	0.3	ND	6.4	16.6	ND	17	2.7
Mar-2008	2.2	2.2	ND	ND	7.48	ND	ND	4.8	14.8	2.92	11	2.8
Sep-2008	2.9	2.9	0.22	ND	2.61	0.26	ND	4.5	14.6	ND	23	3
Mar-2009	2.6	2.6	ND	ND	2.69	0.3	ND	4.3	16.7	2.38	ND	2.97
Oct-2009	2.6	2.6	ND	ND	2.59	0.24	ND	4.5	15.5	ND	14	2.66
Apr-2010	2.5	2.5	ND	ND	2.98	0.22	ND	3.7	16.4	ND	54	3.1
Oct-2010	2.3	2.3	ND	ND	2.97	0.2	ND	4.8	12.2	ND	16	3.24
Apr-2011	2.6	2.6	ND	ND	2.55	0.26	ND	4.4	16.2	ND	16	2.8
Sep-2011	2.8	2.8	ND	ND	2.59	0.26	ND	4.6	16.2	ND	ND	3.57
Mar-2012	2.6	2.6	ND	ND	2.77	0.26	ND	4.5	21.3	ND	ND	2.68
Sep-2012	2.28	2.28	ND	ND	2.81	0.246	ND	3.9	16.3	ND	36	3.26
Mar-2013	3.08	3.08	0.0641	ND	2.94	0.253	ND	5	16.1	0.742 J	16	3.25
Oct-2013	2.76	2.76	ND	ND	2.89	0.246	ND	3.1	15.8	0.63 J	ND	3.12
Mar-2014	2.72	2.72	ND	18	2.89	0.251	ND	5.2	16.6	0.725 J	ND	3.08

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-17A***										
Oct-2014	ND	ND	ND	ND	3.23	0.197	ND	4.7	16	ND	ND	3.14
Apr-2015	3.72	3.72	ND	ND	2.93	0.214	ND	3.8	16.6	ND	ND	3.26
Nov-2015	ND	ND	ND	7 J	2.99	0.223	ND	5.2	56.1	ND	23 J	3.73
May-2016	ND	ND	ND	ND	2.97	0.233	ND	5.3	26.6	ND	12 J	3.4
Oct-2016	ND	ND	ND	6 J	2.87	NA	NA	5.3	24.2	0.922 J	23 J	3
May-2017	ND	ND	ND	ND	2.75	0.255	ND	4.9	26.9	ND	ND	3.1
Oct-2017	ND	ND	0.0677 J	ND	2.84	0.221	ND	4.9	30.4	ND	15 J	3.1
May-2018	2 J	ND	ND	ND	3.1	ND	ND	4.4	24.4	ND	60	3.2 J
Nov-2018	2 JB	ND	ND	ND	3	0.18	ND	4.64	19.4	ND	ND	3.2 J
May-2019	ND	NA	ND	ND	ND	0.17	ND	4.63	15.4	ND	ND	ND
Oct-2019	2.5 JH1	NA	ND	ND	2.6 J	0.2	ND	4.53	20.6	ND	38	3.5
May-2020	ND	NA	ND	ND	2.7 J	0.19	ND	4.4	20.7	ND	ND	3.5
Oct-2020	ND	NA	ND	ND	2.8 J	0.21	ND	4.48	19.4	ND	ND	3.4
Apr-2021	ND	NA	ND	ND	2.9 J	0.17	ND	4.86	22.4	ND	ND	3.4
Oct-2021	4 J4c	NA	ND	ND	2.4 J	0.25	ND	5.01	51.9	ND	ND	3.28 J
May-2022	4 J4c	NA	ND	ND	2.4 J	0.21	ND	4.8	48.5	ND	10	3.5 N3
Oct-2022	3 J3c	NA	ND	10.7 J	3.4	0.22	ND	4.83	40	ND	15	3.6 N3
May-2023	ND	NA	ND	ND	2.6 J	0.23	ND	4.89	45.9	ND	ND	3.8 N3
Oct-2023	2 J6c	NA	ND	ND	3.1	ND	NA	4.91	40.9	5.2 J	11	3.7 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17A***													
Nov-1993	NA	ND	ND	NA	ND	0.46	NA	ND	NA	ND	0.37	0.08	ND	0.32	NA
Apr-1994	NA	ND	ND	NA	ND	0.76	NA	ND	NA	ND	0.24	0.93	ND	0.46	NA
Apr-1995	ND	ND	0.8	ND	ND	0.27	NA	ND	ND	ND	0.03	ND	ND	0.33	NA
Oct-1996	ND	ND	0.013	ND	ND	0.65	0.61	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	**0.007**	ND	0.025	ND	ND	1.4	0.55	ND	ND	ND	ND	ND	ND	0.66	ND
Oct-1997	ND	ND	0.011	ND	ND	0.646	0.542	ND	ND	ND	0.115	ND	ND	0.338	0.279
Apr-1998	ND	ND	0.01	ND	ND	0.648	0.608	ND	ND	ND	0.097	ND	ND	0.341	0.315
Apr-1999	ND	ND	0.01	ND	ND	0.686	0.638	ND	ND	ND	0.196	ND	ND	0.369	0.34
Oct-1999	ND	ND	0.01	ND	ND	0.668	0.619	ND	ND	ND	ND	ND	ND	0.36	0.335
Apr-2000	ND	ND	ND	ND	ND	0.699	0.628	ND	ND	ND	0.361	ND	ND	0.346	0.317
Oct-2000	ND	ND	ND	ND	ND	0.722	0.682	ND	ND	ND	ND	ND	ND	0.366	0.347
Apr-2001	ND	ND	ND	ND	ND	0.699	NA	ND	ND	ND	ND	NA	ND	0.366	NA
Sep-2001	ND	ND	ND	ND	ND	0.675	0.677	ND	ND	ND	0.092	ND	ND	0.358	0.347
Mar-2002	ND	ND	0.011	ND	ND	0.661	0.662	ND	ND	ND	ND	ND	ND	0.348	0.349
Sep-2002	ND	ND	0.011	ND	ND	0.631	0.619	ND	ND	ND	0.067	ND	ND	0.341	0.337
Mar-2003	ND	ND	ND	ND	ND	0.657	0.621	ND	ND	ND	ND	ND	ND	0.368	0.341
Oct-2003	ND	ND	0.011	ND	ND	0.979	0.622	ND	ND	ND	0.086	ND	ND	0.401	0.349
Apr-2004	ND	ND	ND	ND	ND	0.723	0.711	ND	ND	ND	0.166	ND	ND	0.385	0.369
Oct-2004	ND	ND	ND	ND	ND	0.649	0.643	ND	ND	ND	ND	ND	ND	0.347	0.354
Apr-2005	ND	ND	0.011	ND	ND	0.674	0.664	ND	ND	ND	ND	ND	ND	0.367	0.36
Oct-2005	ND	ND	0.011	ND	ND	0.676	0.645	ND	ND	ND	ND	ND	ND	0.334	0.319

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17A***													
Mar-2006	ND	ND	ND	ND	ND	0.373	0.356	ND	ND	ND	ND	ND	ND	0.293	0.291
Sep-2006	ND	ND	ND	ND	ND	0.619	0.614	ND	ND	ND	ND	ND	ND	0.333	0.327
Mar-2007	ND	ND	ND	ND	ND	0.617	0.599	ND	ND	ND	ND	ND	ND	0.327	0.323
Sep-2007	ND	ND	ND	ND	ND	0.568	0.55	ND	ND	ND	ND	ND	ND	0.312	0.308
Mar-2008	ND	ND	0.01	ND	ND	0.603	0.606	ND	ND	ND	ND	ND	ND	0.313	0.316
Sep-2008	ND	ND	0.011	ND	ND	0.629	0.62	ND	ND	ND	ND	ND	ND	0.35	0.334
Mar-2009	ND	ND	ND	ND	ND	0.663	0.594	ND	ND	ND	ND	ND	ND	0.317	0.306
Oct-2009	ND	ND	ND	ND	ND	0.566	0.564	ND	ND	ND	ND	ND	ND	0.303	0.325
Apr-2010	ND	ND	ND	ND	ND	0.695	0.49	ND	ND	ND	ND	ND	ND	0.341	0.298
Oct-2010	ND	ND	ND	ND	ND	0.681	0.61	ND	ND	ND	ND	0.11	ND	0.373	0.349
Apr-2011	ND	ND	0.01	ND	ND	0.619	0.578	ND	ND	ND	ND	ND	ND	0.326	0.323
Sep-2011	ND	ND	ND	ND	ND	0.756	0.745	ND	ND	ND	ND	ND	ND	0.408	0.364
Mar-2012	ND	ND	0.011	ND	0.004	0.476	0.456	ND	0.016	0.029	ND	ND	ND	0.363	0.327
Sep-2012	ND	ND	0.0106	0.00024 J	ND	0.714	0.707	0.0012 J	0.0033 J	0.0019 J	0.0251 J	0.0327 J	ND	0.358	0.354
Mar-2013	ND	ND	0.0105	0.000213 J	ND	0.77	0.725	0.0017 J	0.0034 J	0.0018 J	0.0127 J	0.0068 J	0.0016 J	0.323	0.294
Oct-2013	ND	ND	0.0106	ND	ND	0.755	0.729	0.0024 J	0.0029 J	0.0017 J	ND	ND	ND	0.3	0.317
Mar-2014	0.000468 J	ND	0.0096 J	0.000304 J	ND	0.642	0.537	0.0012 J	0.0028 J	0.0025 J	0.0127 J	0.0046 J	ND	0.358	0.286
Oct-2014	0.000907 J	ND	0.0105	0.000251 J	ND	0.689	0.703	0.000956 J	0.0031 J	0.0017 J	0.0108 J	ND	ND	0.345	0.351
Apr-2015	0.000929 J	ND	0.0108	0.000254 J	ND	0.705	0.702	0.000605 J	0.0033 J	0.0017 J	0.011 J	0.0739	ND	0.365	0.357
Nov-2015	0.000479 J	ND	0.0113	0.000303 J	ND	0.854	0.817	0.000597 J	0.0033 J	0.0017 J	ND	0.0179 J	ND	0.389	0.389
May-2016	ND	ND	0.0108	0.00027 J	ND	0.725	0.626	0.0011 J	0.0029	0.0016 J	ND	ND	ND	0.381	0.347
Oct-2016	ND	ND	0.0097	0.00026 J	ND	0.653	0.688	ND	0.0028	0.0015 J	ND	ND	ND	0.335	0.356
May-2017	ND	ND	0.0108	0.00027 J	ND	0.666	0.649	0.0017 J	0.0031	0.0016 J	ND	ND	ND	0.354	0.35
Oct-2017	ND	ND	0.0095	0.00024 J	ND	0.673	0.699	0.0013 J	0.003	0.0016 J	ND	ND	ND	0.339	0.327

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-17A***													
May-2018	*0.00004 J*	*ND*	0.011	*0.00027 J*	*0.000032 J*	*0.71 J*	*0.74 J*	*0.0025 J*	0.0035	*0.002 J*	0.028	*0.011 J*	*0.000043 JB*	*0.35 J*	*0.38 J*
Nov-2018	*ND*	*ND*	0.011	0.0003	*0.000034 J*	*0.7 J*	*0.7 J*	0.015	0.0065	0.0024	0.13	0.11	*0.000027 J*	*0.36 J*	*0.36 J*
May-2019	*ND*	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	0.017	0.0068	0.0022	0.13	0.094	*ND*	*ND*	*ND*
Oct-2019	*0.00011 J*	*ND*	0.01	*0.00027 J*	*0.00014 J*	0.76	*0.72 J*	*0.0062 J*	0.0032	*0.0019 J*	*0.03 J*	0.022	*ND*	0.39	*0.37 J*
May-2020	*0.000053 J*	*ND*	0.01	*0.00022 J*	*ND*	0.75	*0.72 J*	0.01	0.0043	0.0036	*0.055 J*	0.035	*ND*	0.39	*0.38 JB*
Oct-2020	*ND*	*ND*	*0.0087 J*	*ND*	*ND*	0.75	*0.72 J*	*0.0058 J*	0.0033	*ND*	*0.07 JB*	0.022	*ND*	0.37	*0.38 J*
Apr-2021	*ND*	*ND*	0.012	*0.00028 J*	*ND*	*0.75 J*	*0.72 J*	*0.0033 J*	*0.0035 J*	*0.0032 J*	*ND*	*ND*	*ND*	0.38	0.4
Oct-2021	*ND*	*ND*	0.011	*0.00021 J*	*ND*	0.71	0.77	0.0058	0.0049	*0.0022 J*	0.061	*0.031 J*	*ND*	*0.37 J*	*0.39 J*
May-2022	*ND*	*ND*	0.011	*0.00024 J*	*ND*	0.75	0.83	0.0043	0.0044	*0.0022 J*	*0.04 J*	*ND*	*ND*	*0.4 J*	*0.43 J*
Oct-2022	*ND*	*ND*	0.012	*0.00023 J*	*ND*	0.78	0.79	0.0064	0.0052	*0.0013 J*	0.06	*0.036 J*	*ND*	*0.41 J*	*0.39 J*
May-2023	*ND*	*ND*	0.012	*0.00028 J*	*ND*	0.83	0.78	0.004	0.0042	*0.0023 J*	*0.044 J*	*ND*	*ND*	*0.43 J*	*0.42 J*
Oct-2023	*ND*	*ND*	0.011	*0.00032 J*	*ND*	0.8	0.77	0.0034	0.0045	0.0027 B	0.086	*0.019 J*	*ND*	*0.4 J*	*0.38 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-17A*												
Nov-1993	ND	NA	ND	NA	0.49	NA	ND	NA	1.2	NA	NA	NA	ND
Apr-1994	0.01	NA	ND	NA	0.57	NA	ND	NA	1.39	NA	NA	NA	0.19
Apr-1995	ND	NA	ND	ND	0.59	NA	ND	ND	0.96	NA	ND	ND	0.02
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	1.8	1.7	ND	ND	0.054
Apr-1997	0.011	ND	ND	0.044	1.9	1.4	ND	ND	1.2	1.6	ND	ND	0.065
Oct-1997	ND	ND	NA	ND	ND	ND	ND	ND	0.99	0.658	ND	ND	0.012
Apr-1998	ND	0.023	NA	ND	0.889	0.711	ND	ND	1.13	1.17	ND	ND	ND
Apr-1999	ND	ND	NA	ND	ND	ND	ND	ND	1.22	1.1	ND	ND	ND
Oct-1999	ND	ND	NA	ND	ND	ND	ND	ND	1.21	1.13	ND	ND	ND
Apr-2000	ND	ND	NA	ND	ND	ND	ND	ND	1.11	1.07	ND	ND	0.011
Oct-2000	ND	ND	NA	ND	0.771	0.842	ND	ND	1.35	1.15	ND	ND	ND
Apr-2001	ND	NA	NA	ND	1.05	NA	ND	ND	1.19	NA	ND	ND	ND
Sep-2001	ND	ND	NA	ND	ND	ND	ND	ND	1.16	1.14	ND	ND	ND
Mar-2002	ND	ND	NA	ND	ND	ND	ND	ND	1.2	1.15	ND	ND	ND
Sep-2002	ND	ND	NA	ND	0.837	ND	ND	ND	1.17	1.15	ND	ND	ND
Mar-2003	ND	ND	NA	ND	ND	ND	ND	ND	1.16	1.1	ND	ND	ND
Oct-2003	ND	ND	NA	ND	1.3	ND	ND	ND	2.06	1.12	ND	ND	0.012
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	1.18	1.22	ND	ND	ND
Oct-2004	ND	ND	ND	ND	0.83	ND	ND	ND	1.28	1.24	ND	ND	ND
Apr-2005	ND	ND	ND	ND	0.65	0.59	ND	ND	1.18	1.14	ND	ND	ND
Oct-2005	ND	ND	ND	ND	0.602	0.607	ND	ND	1.09	1.03	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	0.859	0.818	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-17A***												
Sep-2006	ND	ND	ND	ND	0.526	0.514	ND	ND	1.03	1.03	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	1.01	0.996	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	0.355	ND	ND	1.08	1.01	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.53	0.549	ND	ND	1.07	1.07	ND	ND	ND
Sep-2008	ND	ND	ND	ND	0.525	ND	ND	ND	1.13	1.08	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.07	1.04	ND	ND	0.018
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	0.995	0.944	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.2	1.04	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.2	1.08	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.03	1.01	ND	ND	ND
Sep-2011	ND	ND	ND	ND	0.517	ND	ND	ND	1.3	1.27	ND	ND	ND
Mar-2012	0.016	ND	ND	0.024	0.521	ND	ND	ND	1.18	1.12	ND	0.03	0.011
Sep-2012	0.0064 J	0.006 J	ND	0.0052 J	0.481 J	0.474 J	ND	ND	1.16	1.15	0.000259 J	ND	0.0074 J
Mar-2013	0.0065 J	0.0057 J	0.000048 J	0.0053 J	0.421 J	0.394 J	ND	ND	1.05	0.984	ND	ND	0.0197
Oct-2013	0.0057 J	0.0058 J	ND	0.0052 J	0.427 J	0.454 J	ND	ND	1.05	1.13	ND	ND	0.0169
Mar-2014	0.0056 J	0.0047 J	ND	0.0046 J	0.494 J	0.512	ND	ND	1.05	1.1	0.000376 J	ND	0.0071 J
Oct-2014	0.0059 J	0.0061 J	ND	0.0051 J	0.468 J	0.474 J	ND	ND	1.26	1.29	0.0012 J	ND	0.0088 J
Apr-2015	0.0063 J	0.0065 J	ND	0.0052 J	0.507	0.492 J	0.000917 J	ND	1.29	1.28	ND	ND	0.0093 J
Nov-2015	0.0065 J	0.0068 J	ND	0.0052 J	0.526	0.527	ND	ND	1.34	1.39	0.000182 J	ND	0.0081 J
May-2016	0.0058	0.0057	ND	0.0049	0.504	0.465	ND	ND	1.26	1.13	ND	ND	0.0083 J,B
Oct-2016	0.0056	0.0062 J+	ND	0.0048	0.439	0.507	ND	ND	1.13	1.22	ND	ND	0.0063 J
May-2017	0.0059	0.006	ND	0.0054	0.486	0.49	ND	ND	1.1	1.12	ND	ND	0.0066 J
Oct-2017	0.0062	0.0053	ND	0.0057	0.444	0.464	ND	ND	1.05	1.09	ND	ND	0.0059 J
May-2018	0.0064	0.0056	ND	0.0086	ND	ND	ND	ND	1.5 J	1.2 J	ND	0.0039	0.0077 B

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-17A***												
Nov-2018	0.0083	0.0069	*ND*	0.025	*ND*	*ND*	*0.00012 J*	*ND*	*1.1 J*	*1.2 J*	*ND*	0.0023	0.0098
May-2019	0.013	0.0073	*ND*	0.027	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.014
Oct-2019	0.0073	0.0065	*ND*	0.0074	*ND*	*ND*	*ND*	*ND*	*ND*	*1.4 J*	*ND*	0.0073	0.012
May-2020	0.009	0.0063	*ND*	0.013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0099	0.0073
Oct-2020	0.0068	0.0062	*ND*	0.008	*ND*	*ND*	*ND*	*ND*	*1.3 J*	*ND*	*ND*	*0.00063 J*	*ND*
Apr-2021	0.0068	0.006	*ND*	*0.0081 J*	*0.49 J*	0.5	*ND*	*ND*	1.2	1.2	*ND*	*ND*	*0.0058 J*
Oct-2021	0.0068	0.0069	*ND*	0.013	*0.44 J*	*0.46 J*	*ND*	*ND*	1.2	1.4 B	*ND*	*ND*	0.0061
May-2022	0.0073	0.0072	*ND*	0.01	0.56	*0.48 J*	*ND*	*ND*	1.3	1.3	*ND*	*ND*	0.0076
Oct-2022	0.0073	0.0072	*ND*	0.014	0.55	*0.42 J*	*ND*	*ND*	1.4	1.3	*ND*	*ND*	0.007
May-2023	0.0074	0.0074	*ND*	0.0096	0.63	0.56	*ND*	*ND*	1.4	1.4	*ND*	*ND*	0.0089
Oct-2023	0.008	0.0072	*ND*	0.0099	0.52	0.52	*ND*	*ND*	1.3	1.2	*ND*	*ND*	0.0073

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	22	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17A*																
Feb-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-17A*																
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.2 J*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.5 B	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17A***															
Feb-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-17A***															
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17A***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-17A*															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	NA
Feb-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-17A***															
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.5 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1 BCH	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-21***											
Nov-1993	ND	ND	0.2	ND	14.9	0.8	0.2	4.76	116.2	19.6	34	12.8
Apr-1994	ND	ND	0.2	ND	14.5	1	ND	4.47	126	21.9	50	17.15
Apr-1995	ND	ND	ND	ND	17.4	0.9	ND	4.4	125	23.9	44	14.5
Apr-1997	ND	ND	ND	22	15	0.62	ND	NA	NA	22	71	11
Oct-1997	ND	ND	0.2	ND	15	0.382	ND	5.58	117.4	24.5	80	20
Apr-1998	ND	ND	ND	ND	14.8	0.52	ND	4.61	124.2	19.8	69	31
Apr-1999	ND	ND	0.19	ND	17.9	0.392	ND	4.03	125.6	23.3	83	22
Oct-1999	ND	ND	0.06	ND	14.4	0.374	ND	4.5	152.3	19.5	79	19
Apr-2000	ND	ND	ND	ND	19.3	0.95	ND	5.01	113	32.8	82	21
Oct-2000	ND	NA	ND	ND	12.1	0.37	ND	6.12	136.3	23.2	83	21.3
Apr-2001	ND	NA	ND	ND	15.4	0.785	ND	NA	NA	27.4	84	23
Sep-2001	ND	ND	ND	ND	16.8	1.83	ND	4.45	150	28.5	87	23.9
Mar-2002	ND	ND	ND	ND	19.1	0.896	ND	4.5	155	28.4	89	24.4
Sep-2002	ND	ND	ND	ND	20	1.04	ND	4.5	152.3	31.1	73	21.1
Mar-2003	ND	ND	ND	ND	22.8	1.01	ND	4.4	153.8	29.4	103	23.7
Oct-2003	ND	ND	ND	ND	12.8	1.69	ND	4.3	128.3	20.8	78	20.2
Apr-2004	ND	ND	ND	ND	16.1	0.575	ND	4.3	120.1	28.4	77	22.9
Oct-2004	ND	ND	ND	ND	11.3	0.504	ND	3.7	107.7	25.9	71	19
Apr-2005	ND	ND	ND	11	16.8	0.74	ND	4.4	108.9	24.1	85	21.2
Oct-2005	ND	ND	ND	ND	13.4	0.48	ND	3.9	103.8	32.5	74	17.3
Mar-2006	ND	ND	ND	ND	16	0.53	ND	4.5	125.8	36.2	71	19.4
Sep-2006	ND	ND	ND	ND	16	0.46	ND	4.3	119.1	28.6	75	20.1
Mar-2007	ND	ND	0.46	ND	16.5	0.51	ND	4.2	111.2	30.5	83	19.4
Sep-2007	ND	ND	ND	ND	16.4	0.96	ND	4.5	103.7	30.4	94	17.4
Mar-2008	ND	ND	0.47	ND	23.1	ND	ND	4.1	118.5	33.3	91	20.7
Sep-2008	ND	ND	ND	ND	21.8	0.74	ND	4.3	121.5	34.9	88	19
Mar-2009	ND	ND	ND	ND	23.7	0.89	ND	4	132.3	33.8	97	20.8
Oct-2009	ND	ND	ND	ND	29.7	0.83	ND	4.1	133	32.4	115	19.5
Apr-2010	ND	ND	ND	ND	30.5	1	ND	3.6	142.7	33	58	20.8
Oct-2010	ND	ND	ND	ND	21.4	0.88	ND	3.6	114.2	26.4	77	20.2
Apr-2011	2.9	2.9	ND	ND	23.9	0.75	ND	3.9	144.2	21	89	19.5
Sep-2011	ND	ND	0.26	ND	26.3	1.05	ND	4.5	126.1	27.2	95	20.7
Mar-2012	ND	ND	ND	ND	22	0.68	ND	3.6	125.4	30	100	20.3
Sep-2012	ND	ND	ND	ND	19.2	0.654	ND	4.2	115.1	29.6	97	20.1
Mar-2013	0.52 J	0.52 J	ND	ND	29.9	0.931	ND	4.3	147.6	26.8	102	18.5
Oct-2013	0.4	0.4	ND	ND	22.1	0.731	ND	3.2	103.7	26.6	86	19.6
Mar-2014	ND	ND	ND	10	24.4	0.754	ND	4.5	146.1	33.8	92	20.8

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-21***											
Oct-2014	*ND*	*ND*	*ND*	*ND*	17.2	0.523	*ND*	4.3	113.2	28.7	50	19.2
Apr-2015	0.96	0.96	*ND*	*ND*	23.7	0.887	*ND*	3.9	123.8	29.6	78	22.5
Nov-2015	*ND*	*ND*	*ND*	*8 J*	19.1	0.769	*ND*	4.5	156.8	27.4	62	22.8
May-2016	*ND*	*ND*	*ND*	*6 J*	22	1	*ND*	4.5	216	30.8	78	22.5
Oct-2016	*ND*	*ND*	*ND*	*ND*	21.7	*NA*	*NA*	4.5	181.9	24.2	93	21.1
May-2017	*ND*	*ND*	*ND*	*5 J*	24	1.27	*ND*	4.4	227	27	98	22
Oct-2017	*ND*	*ND*	*ND*	*7 J*	26.9	1.63	*ND*	4.5	262	30.4	89	23.8
May-2018	*ND*	*ND*	*ND*	*7.9 J*	32	0.46	*ND*	4.2	246	26.9	80	28.9
Nov-2018	*ND*	*ND*	*ND*	*ND*	32	2.2	*ND*	4.26	170.1	24.9	98	27.4
May-2019	*ND*	*NA*	*ND*	*ND*	22.8	1.6	*ND*	3.96	116.5	23.7	96	25.3
Oct-2019	*ND*	*NA*	*ND*	*6 J*	17.5	1.4	*ND*	4.06	138.7	24.3	73	22.8
May-2020	*ND*	*NA*	*ND*	*ND*	28.2	1.9	*ND*	4.1	158.5	26.6	74	27
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	28.1	2	*ND*	4.13	163.4	29.2	81	26.3
Apr-2021	*ND*	*NA*	*ND*	*ND*	23	1.9	*ND*	4.33	184.6	26.7	78	25.6
Oct-2021	*ND*	*NA*	*ND*	*6.1 J*	17.1	1.5	*ND*	4.44	196.8	26	84	23
May-2022	*1 J2c*	*NA*	*ND*	*ND*	22.6	2.1	*ND*	4.19	217.1	31	118	29.6 N3
Oct-2022	*ND*	*NA*	*ND*	*10.7 J*	33.4	2.4	*ND*	4.28	232.3	29.5	116	30.7 N3
May-2023	*ND*	*NA*	*ND*	34.2	37.9	2.4	*ND*	4.34	247.3	30.3	108	37.1 N3
Oct-2023	*ND*	*NA*	*ND*	*ND*	42.7	2.2 R-01	*NA*	4.36	258.6	29.5	126	34.1 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-21***													
Nov-1993	NA	ND	ND	NA	ND	2	NA	ND	NA	ND	0.03	0.12	ND	1.9	NA
Apr-1994	NA	ND	ND	NA	ND	2.91	NA	ND	NA	ND	0.24	ND	ND	2.4	NA
Apr-1995	ND	ND	0.6	ND	ND	2	NA	ND	ND	ND	0.35	0.05	ND	2.3	NA
Oct-1996	ND	ND	0.12	ND	ND	4.5	4.9	ND	ND	ND	ND	ND	ND	2	2
Apr-1997	0.006	ND	0.11	ND	ND	4	4.1	ND	ND	ND	ND	ND	ND	1.8	2.1
Oct-1997	ND	ND	0.114	ND	ND	3.99	4.02	ND	0.014	ND	ND	ND	ND	2.07	2.09
Apr-1998	ND	ND	0.194	ND	ND	6.7	4.7	ND	0.019	ND	0.246	ND	ND	3.43	2.38
Apr-1999	ND	ND	0.13	ND	ND	4.66	4.35	ND	0.012	ND	0.179	ND	ND	2.39	2.24
Oct-1999	ND	ND	0.127	ND	ND	4.3	3.98	ND	0.014	0.031	0.068	ND	ND	2.25	2.08
Apr-2000	ND	ND	0.115	ND	ND	4.75	4.55	ND	0.012	ND	ND	ND	ND	2.3	2.2
Oct-2000	ND	ND	0.106	ND	ND	4.9	4.83	ND	0.012	ND	0.101	ND	ND	2.21	2.18
Apr-2001	ND	ND	0.115	ND	ND	5.22	NA	ND	0.014	ND	0.166	NA	ND	2.39	NA
Sep-2001	ND	ND	0.121	ND	ND	5.4	5.39	ND	0.012	ND	0.079	ND	ND	2.52	2.45
Mar-2002	ND	ND	0.11	ND	ND	5.71	5.39	ND	0.013	ND	0.078	ND	ND	2.47	2.43
Sep-2002	ND	ND	0.119	ND	ND	4.72	4.76	ND	0.01	ND	0.091	ND	ND	2.26	2.27
Mar-2003	ND	ND	0.123	ND	ND	5.42	5.3	ND	0.012	ND	ND	ND	ND	2.49	2.41
Oct-2003	ND	ND	0.105	ND	ND	4.72	4.45	ND	ND	ND	0.065	ND	ND	2.04	2
Apr-2004	ND	ND	0.105	ND	ND	5.53	5.53	ND	ND	ND	0.123	ND	ND	2.21	2.19
Oct-2004	ND	ND	0.102	ND	ND	4.2	4.19	ND	0.011	ND	0.128	ND	ND	2.06	2.05
Apr-2005	ND	ND	0.112	ND	ND	4.84	4.6	ND	ND	ND	0.122	ND	ND	2.21	2.17
Oct-2005	ND	0.002	0.099	ND	ND	4.04	3.74	ND	ND	ND	2.38	ND	ND	1.74	1.66

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-21***													
Mar-2006	ND	ND	0.103	ND	ND	4.46	4.36	ND	ND	ND	ND	ND	ND	2.01	1.94
Sep-2006	ND	ND	0.097	ND	ND	4.77	4.76	ND	0.011	ND	ND	ND	ND	1.98	1.99
Mar-2007	ND	ND	0.092	ND	ND	4.68	4.76	ND	0.012	ND	ND	ND	ND	1.86	1.87
Sep-2007	ND	0.002	0.084	ND	ND	4.13	4.07	ND	ND	ND	ND	ND	ND	1.72	1.71
Mar-2008	ND	ND	0.101	ND	ND	4.85	4.35	ND	0.012	ND	0.074	ND	ND	2.09	1.84
Sep-2008	ND	ND	0.086	ND	ND	4.38	4.37	ND	0.011	ND	0.067	ND	ND	1.97	1.96
Mar-2009	ND	ND	0.096	ND	ND	4.95	4.8	ND	ND	ND	0.078	ND	ND	2.05	2.01
Oct-2009	ND	ND	0.089	ND	ND	4.65	4.9	ND	ND	ND	0.898	ND	ND	1.91	2.01
Apr-2010	ND	ND	0.087	ND	ND	5.06	4.92	ND	0.01	ND	0.11	ND	ND	1.99	1.98
Oct-2010	ND	ND	0.086	ND	ND	4.73	4.72	ND	0.013	ND	1.28	ND	ND	2.03	2
Apr-2011	ND	ND	0.09	ND	ND	4.79	4.7	ND	ND	ND	0.165	ND	ND	1.83	1.82
Sep-2011	ND	ND	0.092	ND	ND	4.9	4.86	ND	ND	ND	ND	ND	ND	2.07	2.02
Mar-2012	ND	ND	0.088	ND	ND	4.69	4.62	ND	ND	ND	ND	ND	ND	2.08	2.05
Sep-2012	ND	ND	0.0898	0.000585 J	0.000276 J	4.72	4.71	0.0024 J	0.0096 J	0.0024 J	0.0469 J	0.0228 J	ND	2.03	1.98
Mar-2013	ND	ND	0.0813	0.000462 J	0.000305 J	4.47	5.23	0.0017 J	0.009 J	0.0025 J	0.0121 J	0.007 J	0.0013 J	1.78	2.01
Oct-2013	ND	ND	0.0899	0.000545 J	0.000395 J	4.8	4.87	0.0048 J	0.0098 J	0.0024 J	ND	ND	ND	1.85	1.94
Mar-2014	0.000344 J	0.00009 J	0.0884	0.000622 J	0.000346 J	4.93	4.93	0.0011 J	0.0089 J	0.0024 J	0.009 J	0.0072 J	ND	2.06	2.11
Oct-2014	0.000961 J	0.000473 J	0.0834	0.000457 J	0.000301 J	4.62	4.63	0.0016 J	0.0089 J	0.0023 J	0.0101 J	0.0082 J	ND	1.86	1.86
Apr-2015	0.000744 J	ND	0.0981	0.000598 J	0.000275 J	5.42	5.47	0.000653 J	0.0102	0.0025 J	ND	0.0108 J	ND	2.19	2.25
Nov-2015	0.000487 J	0.000599 J	0.0931	0.000635 J	0.000341 J	5.65	5.69	0.000609 J	0.0091 J	0.0024 J	ND	ND	ND	2.12	2.14
May-2016	ND	0.00086 J	0.0875	0.00053 J	0.00037 J	5.47	5.38	0.00086 J	0.0103	0.0025 J	ND	ND	ND	2.15	2.18
Oct-2016	ND	0.0016 J	0.0821	0.00049 J	0.00031 J	5.02	4.84	0.00085 J	0.01	0.0028 J	ND	ND	ND	2.08	2.04
May-2017	ND	0.0013 J	0.0866	0.0005 J	0.00024 J	5.27	5.76	0.0015 J	0.0088	0.0026 J	ND	ND	ND	2.14	2.26
Oct-2017	ND	0.00099 J	0.087	0.00053 J	0.00031 J	5.68	6.29	0.0014 J	0.0103	0.0026 J	ND	ND	ND	2.34	2.53

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-21***													
May-2018	*0.000059 J*	*ND*	0.076	0.00053	*0.00053 J*	7.2	6.8	*0.0019 JB*	0.0092	*0.00069 J*	*ND*	*ND*	*0.00011 JB*	2.7	2.5
Nov-2018	*ND*	*ND*	0.071	0.00054	*0.00042 J*	6.8	6.8	*0.0054 J*	0.0076	0.0024	0.04	*0.016 J*	*0.000092 J*	2.5	2.5
May-2019	*ND*	*ND*	0.068	0.00046	*ND*	6.3	6.1	*ND*	0.004	*ND*	*ND*	*ND*	*ND*	2.4	2.2
Oct-2019	*0.00011 J*	*ND*	0.074	0.00043	*0.00048 J*	5.6	5.4	*0.0058 J*	0.0084	0.0024	*0.014 J*	*0.0098 J*	*0.000069 J*	2.1	2
May-2020	*0.000068 J*	*ND*	0.084	0.00053	*0.00038 J*	6.6	6.4	*0.0052 J*	0.0093	*ND*	*0.015 J*	*0.012 J*	*ND*	2.6	2.5
Oct-2020	*ND*	*ND*	0.068	*0.00041 J*	*ND*	6.5	6.3	*0.0049 J*	0.0077	*ND*	*ND*	*ND*	*ND*	2.5	2.4
Apr-2021	*ND*	*ND*	0.077	*0.00054 J*	*ND*	6.4	6.5	*0.0011 J*	0.0083	*0.0035 J*	*ND*	*ND*	*ND*	2.3	2.4
Oct-2021	*0.0001 J*	*0.00032 J*	0.077	*0.00044 J*	*0.000081 J*	5.8	6.1	*0.0012 J*	0.0086	*0.0023 J*	*ND*	*0.021 JB*	*0.000055 J*	2.1	2.2
May-2022	*ND*	*ND*	0.089	0.00051	*0.00023 J*	7.3	7.9	*0.0018 J*	0.01	0.0028	*ND*	*ND*	*ND*	2.8	3
Oct-2022	*ND*	*0.00048 J*	0.086	0.00051	*0.00027 J*	7.8	8.2	*0.0021 J*	0.011	*0.0021 J*	*ND*	*ND*	*ND*	2.8	3
May-2023	*ND*	*0.0006 J*	0.092	0.00054	*0.00024 J*	9.2	9.1	0.0034	0.013	0.0033	*0.037 J*	*ND*	*ND*	3.4	3.4
Oct-2023	*ND*	*0.00048 J*	0.084	*0.00041 J*	*0.00019 J*	8.7	9	*0.0014 J*	0.011	0.0038 B	*0.015 JB*	*0.015 J*	*ND*	3	3.1

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-21***												
Nov-1993	0.17	NA	ND	NA	2	NA	ND	NA	3	NA	NA	NA	0.04
Apr-1994	0.17	NA	ND	NA	2.59	NA	ND	NA	11.2	NA	NA	NA	0.09
Apr-1995	0.16	NA	ND	ND	2.2	NA	ND	ND	9.3	NA	ND	ND	0.08
Oct-1996	0.12	0.13	NA	ND	ND	ND	ND	ND	9.8	9.9	ND	ND	0.18
Apr-1997	0.13	0.13	ND	ND	3.7	3.1	ND	ND	8	9.1	0.002	ND	0.23
Oct-1997	0.149	0.151	NA	0.013	1.81	2.46	ND	ND	8.32	8.35	ND	ND	0.051
Apr-1998	0.22	0.153	NA	0.011	3.52	2.33	ND	ND	16	10.9	ND	ND	0.084
Apr-1999	0.158	0.149	NA	ND	1.58	2.01	ND	ND	11.5	10.8	ND	ND	0.05
Oct-1999	0.155	0.146	NA	0.018	2.71	2.75	ND	ND	10.8	9.99	ND	ND	0.062
Apr-2000	0.133	0.128	NA	ND	1.91	2.1	ND	ND	10.9	10.4	ND	ND	0.041
Oct-2000	0.134	0.131	NA	ND	2.3	1.94	ND	ND	10	9.79	ND	ND	0.039
Apr-2001	0.147	NA	NA	ND	3.52	NA	ND	ND	11.3	NA	ND	ND	0.044
Sep-2001	0.145	0.146	NA	ND	3.01	2.66	ND	ND	13.1	12.1	ND	ND	0.044
Mar-2002	0.137	0.139	NA	ND	3.65	3.48	ND	ND	14.2	13.1	ND	ND	0.047
Sep-2002	0.139	0.141	NA	ND	2.12	2.07	ND	ND	12.8	12.7	ND	ND	0.044
Mar-2003	0.147	0.145	NA	ND	2.47	2.14	ND	ND	13.4	12.7	ND	ND	0.045
Oct-2003	0.16	0.164	NA	ND	2.24	2.76	ND	ND	8.91	8.29	ND	ND	0.045
Apr-2004	0.154	0.152	ND	ND	2.12	2.14	ND	ND	10.3	10.7	ND	ND	0.043
Oct-2004	0.188	0.187	ND	ND	1.88	1.87	ND	ND	7.81	7.63	ND	ND	0.048
Apr-2005	0.175	0.176	ND	ND	2.21	1.86	ND	ND	10.5	9.96	ND	ND	0.053
Oct-2005	0.148	0.142	ND	ND	1.83	1.59	ND	ND	8.39	7.29	ND	0.013	0.044
Mar-2006	0.141	0.138	ND	ND	1.64	1.58	ND	ND	9.97	9.69	ND	ND	0.02

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-21***												
Sep-2006	0.154	0.156	ND	ND	1.79	1.82	ND	ND	9.83	9.95	ND	ND	0.039
Mar-2007	0.139	0.139	ND	ND	1.68	1.69	ND	ND	9.37	9.39	ND	ND	0.043
Sep-2007	0.137	0.137	ND	ND	1.42	1.33	ND	ND	8.11	8.01	ND	ND	0.05
Mar-2008	0.154	0.136	ND	ND	1.95	1.66	ND	ND	11.6	10.3	ND	ND	0.047
Sep-2008	0.137	0.136	ND	ND	1.63	1.6	ND	ND	11.7	11.6	ND	ND	0.038
Mar-2009	0.146	0.144	ND	ND	1.81	1.72	ND	ND	13.7	13.3	ND	ND	0.043
Oct-2009	0.135	0.141	ND	ND	1.56	1.5	ND	ND	14.6	14.9	ND	ND	ND
Apr-2010	0.132	0.131	ND	ND	1.71	1.66	ND	ND	17	16.8	ND	ND	0.038
Oct-2010	0.143	0.142	ND	ND	1.63	1.61	ND	ND	13	13.1	ND	ND	0.047
Apr-2011	0.127	0.124	ND	ND	1.35	1.29	ND	ND	14.2	14	ND	ND	0.049
Sep-2011	0.137	0.136	ND	ND	1.73	1.73	ND	ND	15.9	16	ND	ND	0.037
Mar-2012	0.13	0.128	ND	ND	1.6	1.57	ND	ND	13.3	13.3	ND	ND	0.036
Sep-2012	0.125	0.126	0.000024 J	0.0057 J	1.57	1.6	0.000692 J	ND	13.8	13.5	ND	ND	0.0393
Mar-2013	0.12	0.138	0.000061 J	0.0049 J	1.46	1.65	0.000602 J	ND	14.8	16.3	ND	ND	0.0415
Oct-2013	0.127	0.128	ND	0.0052 J	1.57	1.59	0.000675 J	ND	12.3	12.9	ND	0.002 J	0.0484
Mar-2014	0.111	0.113	ND	0.0043 J	1.66	1.69	ND	ND	13.1	13.4	ND	ND	0.033
Oct-2014	0.112	0.112	0.000023 J	0.0056 J	1.59	1.58	0.0028	ND	9.32	9.39	ND	ND	0.035
Apr-2015	0.133	0.135	ND	0.0051 J	1.71	1.77	0.0029	ND	12.9	13.2	ND	ND	0.0376
Nov-2015	0.124	0.127	ND	0.0048 J	1.73	1.74	0.0039	ND	11.1	11.2	0.000151 J	ND	0.0369
May-2016	0.123	0.125	ND	0.0048	1.75	1.75	ND	ND	13.4	14	ND	ND	0.04
Oct-2016	0.118	0.124	ND	0.0054	1.67	1.7	ND	ND	12.6	12.9	ND	ND	0.0371
May-2017	0.116	0.118	ND	0.0049	1.76	1.86	ND	ND	14.5	14.6	ND	ND	0.0347
Oct-2017	0.117	0.123	ND	0.005	1.9	2.07	ND	ND	13.3 J-	16.9	ND	ND	0.0361
May-2018	0.1	0.1	ND	0.00071 B	1.5 J	1.6 J	0.0013 J	ND	21.6	19.5	ND	0.0023	0.0066

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-21***												
Nov-2018	0.094	0.095	*ND*	0.0062	*2.1 J*	*2.1 J*	*0.00064 J*	*ND*	19.6	19.9	*ND*	0.002	0.026
May-2019	0.098	0.095	*ND*	0.0031	*ND*	*ND*	*ND*	*ND*	14.8	14.1	*ND*	*ND*	0.013
Oct-2019	0.11	0.1	*ND*	0.0054	*2.2 J*	*2 J*	*0.00062 J*	*ND*	14.2	12.6	*ND*	0.0075	0.036
May-2020	0.13	0.12	*ND*	0.0052	*2 J*	*2.1 J*	*ND*	*ND*	18	18	*ND*	0.0098	0.032
Oct-2020	0.13	0.11	*ND*	0.0039	*ND*	*1.9 J*	*ND*	*ND*	18.8	17.3	*ND*	0.016	0.025
Apr-2021	0.1	0.1	*ND*	*0.0036 J*	1.9	1.9	*ND*	*ND*	15.6	15.8	*ND*	*0.0008 J*	0.024
Oct-2021	0.1	0.11	*ND*	0.0044	1.7	1.8	*0.0016 J*	*ND*	13.5	14.4	*ND*	*ND*	0.028
May-2022	0.13	0.13	*ND*	0.0053	2	2	*0.0012 J*	*ND*	19.4	19.9	*ND*	*ND*	0.033
Oct-2022	0.13	0.13	*ND*	0.0053	2	2	0.0032	*ND*	22	22.1	*ND*	*ND*	0.031
May-2023	0.13	0.13	*ND*	0.0064	2.2	2.3	0.0031	*ND*	24	23.9	*ND*	*ND*	0.03
Oct-2023	0.12	0.13	*ND*	0.005	2.1	2.1	*0.0018 J*	*ND*	23.8	24.1	*ND*	*ND*	0.03

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-21*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	25	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-21*																
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.3 J*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-21*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.5 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-21***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.5	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*0.6 J*	*ND*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-21***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.44 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.37 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.39 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*0.49 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.36 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-21***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.416 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-21***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	1.4	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	0.7 J	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-21***															
Oct-2005	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*0.29 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.29 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-21***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.1 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.4 BCH	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-22***											
Nov-1993	5	5	0.2	ND	7.1	0.8	ND	5.44	40.4	2.6	ND	5.18
Apr-1994	ND	ND	0.1	ND	4.6	0.8	ND	5.28	172	ND	22	63.1
Apr-1995	ND	ND	ND	4	4	0.7	ND	4.6	29.3	2.6	15	2.9
Apr-1997	ND	ND	ND	ND	5	0.79	ND	NA	NA	ND	78	6.2
Oct-1997	ND	ND	0.2	ND	4.85	0.733	ND	5.98	51.3	ND	30	5
Apr-1998	ND	ND	ND	ND	5.12	0.93	ND	6.28	28.3	0.7	28	5.1
Apr-1999	ND	ND	0.5	ND	3.51	0.591	ND	4.62	29.6	ND	14	4.6
Oct-1999	ND	ND	0.09	ND	4.81	0.987	ND	4.86	39.5	ND	32	4.5
Apr-2000	ND	ND	ND	ND	2.96	ND	ND	5.11	29	ND	30	4.2
Oct-2000	ND	NA	ND	ND	5.77	1.08	ND	5.3	24.1	ND	32	6.57
Apr-2001	1.2	NA	ND	ND	5.47	0.561	ND	NA	NA	ND	35	6.5
Sep-2001	ND	ND	ND	ND	7.55	1.84	ND	4.93	28	ND	32	6.77
Mar-2002	2.1	2.1	ND	13	6.11	1.15	ND	4.9	36.5	ND	54	6.65
Sep-2002	ND	ND	ND	ND	6.2	0.93	ND	4.9	35.3	ND	62	6.75
Mar-2003	ND	ND	ND	ND	15.6	1.07	ND	4.8	38.1	ND	48	5.84
Oct-2003	ND	ND	ND	ND	5.15	0.783	ND	5	44.3	ND	17	6.29
Apr-2004	ND	ND	ND	ND	4.93	0.709	ND	4.6	31.5	1.54	31	4.98
Oct-2004	ND	ND	ND	ND	4.68	0.71	ND	4.9	32.6	ND	23	4.81
Apr-2005	ND	ND	ND	ND	5.01	0.76	ND	4.6	29.4	3.61	45	5.7
Oct-2005	1.7	1.7	ND	ND	5.4	0.78	ND	4.6	28.7	1.77	43	4.51
Mar-2006	1.9	1.9	ND	ND	5.16	0.77	ND	5.1	33.3	3.93	18	3.88
Sep-2006	1.7	1.7	ND	ND	5.05	0.75	ND	5.1	33.3	1.78	21	5.56
Mar-2007	1.7	1.7	ND	ND	5.32	0.81	ND	4.8	32.3	1.33	ND	5.04
Sep-2007	1.6	1.6	ND	ND	5.14	0.81	ND	6.1	32.7	1.28	47	4.9
Mar-2008	1.4	1.4	ND	ND	16.6	1.72	ND	4.4	33.5	4.72	13	4.84
Sep-2008	1.6	1.6	0.25	ND	5.79	0.86	ND	4.5	35.6	ND	23	5.3
Mar-2009	1.9	1.9	ND	ND	5.91	0.85	ND	4.5	36.7	1.58	31	5.11
Oct-2009	2	2	ND	ND	5.94	0.76	ND	4.1	34.8	1.38	14	5.39
Apr-2010	1.8	1.8	ND	ND	6.68	0.81	ND	3.7	38.4	2.68	70	5
Oct-2010	1.8	1.8	ND	ND	7.32	0.82	ND	4.2	38.7	1.61	23	6.5
Apr-2011	1.8	1.8	ND	ND	7.03	0.81	ND	4.3	41	1.66	42	5.8
Sep-2011	1.6	1.6	ND	ND	7.71	0.86	ND	4.5	39	1.24	23	6.37
Mar-2012	1.6	1.6	ND	ND	8.18	0.86	ND	3.9	42.8	2.3	53	6.54
Sep-2012	1.32	1.32	ND	ND	8.79	0.849	ND	4.1	43.1	3.6	29	6.8
Mar-2013	1.92	1.92	ND	ND	9.97	1.03	ND	4.7	49.4	1.19	31	7.32
Oct-2013	1.96 J	1.96 J	0.134 J	ND	9.55	0.986	ND	5.8	48.3	1.19	37	7.05
Mar-2014	1.88	1.88	ND	ND	10.2	0.904	ND	4.9	54.1	2.71	29	7.67

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-22***											
Oct-2014	*ND*	*ND*	*ND*	*ND*	12.3	0.952	*ND*	4.8	54.5	2.86	29	8.6
Apr-2015	1.92	1.92	*ND*	*ND*	14.3	1.21	*ND*	3.7	61.4	2.75	32	10.3
Nov-2015	*ND*	*ND*	*ND*	*6 J*	14.6	1.19	*ND*	4.8	98.9	3.48	37	10.4
May-2016	*ND*	*ND*	*ND*	*ND*	13.9	1.14	*ND*	4.9	102.6	2.63	36	9.2
Oct-2016	*ND*	*ND*	*ND*	*ND*	14.2	*NA*	*NA*	4.7	95.7	1.88	41	8.4
May-2017	*ND*	*ND*	*ND*	*ND*	14.9	1.11	*ND*	4.6	98.6	2.56	29	8.9
Oct-2017	2.8	2.8	*ND*	*7 J*	16.2	1.2	*ND*	4.7	116.5	4.97	50	11.8
May-2018	16 B	16	*ND*	*10.1 J*	15.2	0.48	*ND*	4.6	94.6	29.8	79	54.2
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	14.7	0.97	*ND*	4.56	70.6	*5.6 J*	*ND*	9.1
May-2019	*ND*	*NA*	*ND*	*ND*	21.6	1.2	*ND*	4.47	74.7	*ND*	57	12.7
Oct-2019	*ND*	*NA*	*ND*	*6 J*	22.4	1.3	*ND*	4.16	113.4	*ND*	53	14.9
May-2020	*ND*	*NA*	*ND*	*ND*	22	1.2	*ND*	4.11	98.1	*ND*	48	13
Oct-2020	*ND*	*NA*	*ND*	*ND*	21.1	1	*ND*	4.36	91.7	2.8	38	11.9
Apr-2021	*ND*	*NA*	*0.072 J*	*ND*	21.5	1.1	*ND*	4.59	103.4	*ND*	35	12.1
Oct-2021	*2 J3c*	*NA*	*ND*	*ND*	21.6	1.2	*ND*	4.67	154.6	*ND*	45	14
May-2022	*ND*	*NA*	*ND*	*ND*	18.4	1.1	*ND*	4.34	129.7	*ND*	65	14.5 N3
Oct-2022	*2 J4c*	*NA*	*ND*	*10.7 J*	22.6	1.1	*ND*	4.55	123.2	*ND*	41	14 N3
May-2023	*2 J3c*	*NA*	*ND*	31.9	24	1	*ND*	4.63	131.3	*ND*	53	13.9 N3
Oct-2023	*ND*	*NA*	*ND*	*ND*	25.3	0.851	*NA*	4.63	145.6	*ND*	74	14.3 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22***													
Nov-1993	NA	ND	ND	NA	ND	0.82	NA	0.009	NA	ND	3.8	0.29	ND	0.76	NA
Apr-1994	NA	ND	ND	NA	ND	1.64	NA	ND	NA	ND	0.16	0.12	ND	0.68	NA
Apr-1995	ND	ND	0.9	ND	ND	0.41	NA	ND	ND	ND	ND	ND	ND	0.45	NA
Oct-1996	ND	ND	0.011	ND	ND	0.79	0.83	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	0.041	ND	ND	2.2	0.72	ND	0.023	ND	0.43	ND	ND	0.79	ND
Oct-1997	ND	ND	0.013	ND	ND	0.877	0.806	ND	ND	ND	0.656	ND	ND	0.49	0.465
Apr-1998	ND	ND	0.029	ND	ND	1.01	0.956	ND	ND	ND	1.7	ND	ND	0.613	0.506
Apr-1999	ND	ND	0.015	ND	ND	0.947	0.807	ND	ND	ND	0.482	ND	ND	0.546	0.502
Oct-1999	ND	ND	0.013	ND	ND	0.907	0.833	ND	ND	ND	ND	ND	ND	0.541	0.502
Apr-2000	ND	ND	0.011	ND	ND	0.81	0.773	ND	ND	ND	ND	ND	ND	0.529	0.495
Oct-2000	ND	ND	0.013	ND	ND	1.54	1.09	ND	ND	0.011	0.268	ND	ND	0.662	0.594
Apr-2001	ND	ND	0.02	ND	ND	1.46	NA	ND	ND	ND	2.25	NA	ND	0.686	NA
Sep-2001	ND	ND	0.014	ND	ND	1.42	1.11	ND	ND	ND	0.575	ND	ND	0.782	0.607
Mar-2002	ND	ND	0.016	ND	ND	1.49	1.09	ND	ND	ND	0.624	ND	ND	0.71	0.629
Sep-2002	ND	ND	0.016	ND	ND	1.59	1.08	ND	ND	ND	0.408	ND	ND	0.675	0.598
Mar-2003	ND	ND	0.015	ND	ND	1.21	1.1	ND	ND	ND	ND	ND	ND	0.686	0.636
Oct-2003	ND	ND	0.02	ND	ND	1.42	0.984	ND	ND	ND	1.14	ND	ND	0.668	0.612
Apr-2004	ND	ND	0.013	ND	ND	0.95	0.958	ND	ND	ND	ND	ND	ND	0.633	0.606
Oct-2004	ND	ND	0.013	ND	ND	0.878	0.886	ND	ND	ND	0.067	ND	ND	0.636	0.62
Apr-2005	ND	ND	0.018	ND	ND	1.22	0.874	ND	ND	ND	1.47	ND	ND	0.645	0.594
Oct-2005	ND	ND	0.013	ND	ND	0.911	0.862	ND	ND	ND	ND	ND	ND	0.544	0.534

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22***													
Mar-2006	ND	ND	0.01	ND	ND	0.736	0.66	ND	ND	ND	ND	ND	ND	0.496	0.486
Sep-2006	ND	ND	0.013	ND	ND	1.2	0.88	ND	ND	ND	ND	ND	ND	0.622	0.658
Mar-2007	ND	ND	0.015	ND	ND	0.931	0.874	ND	ND	ND	ND	ND	ND	0.661	0.64
Sep-2007	ND	ND	0.014	ND	ND	0.863	0.825	ND	ND	ND	ND	ND	ND	0.668	0.648
Mar-2008	ND	ND	0.015	ND	ND	0.936	0.846	ND	ND	ND	ND	ND	ND	0.608	0.617
Sep-2008	ND	ND	0.016	ND	ND	0.934	0.926	ND	ND	ND	ND	ND	ND	0.722	0.704
Mar-2009	ND	ND	0.014	ND	ND	0.913	0.893	ND	ND	ND	ND	ND	ND	0.688	0.666
Oct-2009	ND	ND	0.016	ND	ND	0.938	0.916	ND	ND	ND	ND	ND	ND	0.741	0.726
Apr-2010	ND	ND	0.014	ND	ND	0.878	0.881	ND	ND	ND	ND	ND	ND	0.684	0.688
Oct-2010	ND	ND	0.014	ND	ND	1.15	1.12	ND	ND	ND	ND	ND	ND	0.881	0.878
Apr-2011	ND	ND	0.018	ND	ND	1.04	1.01	ND	ND	ND	ND	ND	ND	0.768	0.754
Sep-2011	ND	ND	0.018	ND	ND	1.24	1.25	ND	ND	ND	ND	ND	ND	0.794	0.788
Mar-2012	ND	ND	0.019	ND	ND	1.12	1.13	ND	ND	ND	ND	ND	ND	0.908	0.902
Sep-2012	ND	ND	0.0187	0.000215 J	ND	1.23	1.26	ND	0.008 J	0.0037 J	0.0364 J	0.0396 J	ND	0.906	0.997
Mar-2013	ND	ND	0.0202	0.000232 J	ND	1.41	1.32	0.003 J	0.0088 J	0.0071 J	0.0383 J	0.0062 J	0.0016 J	0.923	0.759
Oct-2013	ND	ND	0.0223	0.000213 J	ND	1.4	1.46	0.0016 J	0.0087 J	0.004 J	ND	ND	ND	0.863	0.943
Mar-2014	ND	ND	0.0235	0.00026 J	0.000094 J	1.52	1.7	0.0027 J	0.0073 J	0.0054 J	0.073	0.0562	ND	0.94	1.08
Oct-2014	0.000768 J	ND	0.0281	0.000346 J	0.000097 J	1.55	1.62	0.0013 J	0.01	0.0051 J	0.0143 J	ND	ND	1.15	1.18
Apr-2015	0.000774 J	ND	0.0332	0.00028 J	0.00012 J	1.86	1.79	0.0012 J	0.0109	0.0058 J	0.0177 J	0.0262 J	ND	1.37	1.34
Nov-2015	0.000428 J	ND	0.0325	0.00035 J	0.000131 J	1.86	2.04	0.000665 J	0.0104	0.005 J	ND	ND	0.000458 J	1.41	1.38
May-2016	ND	ND	0.0304	0.0003 J	ND	1.56	1.78	ND	0.011	0.0051	ND	ND	ND	1.28	1.3
Oct-2016	ND	ND	0.0291	0.00026 J	ND	1.5	1.49	0.00075 J	0.0101	0.0052	ND	ND	ND	1.13	1.18
May-2017	ND	ND	0.0285	0.00025 J	ND	1.46	1.64	0.00087 J	0.0087	0.0044	ND	ND	ND	1.27	1.35
Oct-2017	ND	ND	0.0267	0.00026 J	0.00024 J	2.4	2.05	0.0013 J	0.0094	0.0191	0.539	0.0811 J	0.0044	1.41	1.37

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22***													
May-2018	*0.0001 J*	*ND*	0.036	*ND*	*0.0001 J*	15.9	1.6	*0.0066 JB*	0.0029	0.0043	0.24	*0.015 J*	*0.000079 JB*	3.5	1.4
Nov-2018	*ND*	*ND*	0.03	*0.00028 J*	*0.00011 J*	1.5	1.7	0.022	0.007	0.0037	0.13	0.079	*0.0001 J*	1.3	1.4
May-2019	*ND*	*ND*	0.04	0.00038	*ND*	2.1	2.1	0.017	0.0098	0.0051	*ND*	0.054	*ND*	1.8	1.8
Oct-2019	*0.00019 J*	*ND*	0.049	0.00037	*0.00063 J*	2.3	2.3	0.0094	0.0094	0.011	*0.046 J*	0.032	*0.00017 J*	2.2	2.1
May-2020	*0.000058 J*	*ND*	0.041	*0.00028 J*	*ND*	2.1	2.1	0.021	0.011	0.0066	0.11	0.042	*ND*	1.9	1.8
Oct-2020	*ND*	*ND*	0.032	*0.00027 J*	*ND*	2.1	2	*0.031 J*	0.01	*0.0098 J*	0.19	0.099	*ND*	1.6	1.6
Apr-2021	*ND*	*ND*	0.043	*0.00038 J*	*ND*	2	2	0.015	0.01	0.014	0.088	*0.05 J*	*ND*	1.7	1.7
Oct-2021	*0.000076 J*	*ND*	0.052	*0.00035 J*	*ND*	2.2	2.3	0.01	0.012	0.014	0.096	0.054 B	*ND*	2	2
May-2022	*ND*	*ND*	0.051	*0.00032 J*	*ND*	2.3	2.4	0.0043	0.013	0.011	*ND*	*ND*	*ND*	2.1	2.1
Oct-2022	*ND*	*ND*	0.047	*0.00029 J*	*ND*	2.3	2.4	0.011	0.012	0.013	0.092	*0.039 J*	*ND*	2	2
May-2023	*ND*	*ND*	0.045	*0.00032 J*	*ND*	2.3	2.2	0.013	0.013	0.044	0.15	*0.04 J*	*ND*	2	1.8
Oct-2023	*ND*	*ND*	0.053	*0.00036 J*	*ND*	2.3	2.6	0.019	0.013	0.013	0.19	0.052	*ND*	2.1	2.2

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-22*												
Nov-1993	ND	NA	ND	NA	1.6	NA	ND	NA	3.3	NA	NA	NA	0.01
Apr-1994	0.02	NA	ND	NA	0.85	NA	ND	NA	2.6	NA	NA	NA	0.04
Apr-1995	ND	NA	ND	ND	1	NA	ND	ND	1.8	NA	ND	ND	0.01
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	3.2	3.3	ND	ND	0.068
Apr-1997	0.012	ND	0.0014	ND	2.4	1.6	ND	ND	2.7	2.6	ND	ND	0.084
Oct-1997	ND	ND	NA	ND	0.802	0.886	ND	ND	2	1.98	ND	ND	0.014
Apr-1998	ND	0.018	NA	ND	2	0.939	ND	ND	2.23	2.25	ND	ND	0.014
Apr-1999	ND	ND	NA	ND	0.588	0.71	ND	ND	2.19	2.09	ND	ND	0.015
Oct-1999	ND	ND	NA	0.012	0.947	1.66	ND	ND	2.41	2.16	ND	ND	0.011
Apr-2000	ND	ND	NA	ND	0.605	ND	ND	ND	2.4	2.28	ND	ND	0.01
Oct-2000	ND	ND	NA	ND	1.2	0.734	ND	ND	3.23	2.67	ND	ND	0.019
Apr-2001	ND	NA	NA	ND	1.81	NA	ND	ND	3.35	NA	ND	ND	0.017
Sep-2001	ND	ND	NA	0.014	1.1	0.794	ND	ND	3.83	2.64	ND	ND	0.023
Mar-2002	ND	ND	NA	ND	0.932	0.822	ND	ND	4.13	2.84	ND	ND	0.017
Sep-2002	0.01	ND	NA	0.011	0.434	1.02	ND	ND	3.12	2.76	ND	ND	0.019
Mar-2003	ND	ND	NA	ND	0.908	0.713	ND	ND	3.04	2.88	ND	ND	0.013
Oct-2003	ND	ND	NA	0.014	0.771	ND	ND	ND	3.63	2.68	ND	ND	0.023
Apr-2004	ND	ND	ND	ND	1.4	1.28	ND	ND	2.5	2.47	ND	ND	ND
Oct-2004	ND	ND	ND	ND	1.23	0.7	ND	ND	2.41	2.24	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.26	1.03	ND	ND	3.27	2.38	ND	ND	0.015
Oct-2005	ND	ND	ND	0.011	0.933	0.89	ND	ND	2.43	2.25	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.644	0.584	ND	ND	2.54	2.36	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22***												
Sep-2006	ND	ND	ND	ND	0.893	0.959	ND	ND	2.31	2.4	ND	ND	0.042
Mar-2007	ND	ND	ND	ND	0.874	0.852	ND	ND	2.43	2.39	ND	ND	0.019
Sep-2007	ND	ND	ND	ND	0.778	0.729	ND	ND	2.57	2.44	ND	ND	ND
Mar-2008	ND	ND	ND	ND	1.06	1.02	ND	ND	2.57	2.21	ND	ND	ND
Sep-2008	ND	ND	ND	ND	0.847	0.819	ND	ND	2.66	2.53	ND	ND	ND
Mar-2009	ND	ND	ND	ND	0.951	0.933	ND	ND	2.73	2.68	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.705	0.627	ND	ND	2.69	2.52	ND	ND	ND
Apr-2010	ND	ND	ND	ND	0.79	0.783	ND	ND	3.02	2.96	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.907	0.926	ND	ND	3.43	3.64	ND	ND	0.012
Apr-2011	ND	ND	ND	ND	0.673	0.645	ND	ND	3.27	3.17	ND	ND	0.012
Sep-2011	ND	ND	ND	ND	0.909	0.928	ND	ND	3.9	3.84	ND	ND	0.011
Mar-2012	ND	ND	ND	ND	0.876	0.851	ND	ND	3.96	3.86	ND	ND	0.01
Sep-2012	0.0318	0.0101	0.000022 J	0.0099 J	0.877	0.879	ND	ND	3.96	4.02	ND	ND	0.009 J
Mar-2013	0.0101	0.0089 J	0.00003 J	0.0123	0.9	0.878	ND	0.000033 J	4.54	4.54	0.00046 J	ND	0.0264
Oct-2013	0.01 J	0.0111	ND	0.0109 J	0.881	0.908	ND	ND	4.39	4.49	ND	0.0014 J	0.0199
Mar-2014	0.0111	0.0117	ND	0.0136	0.923	0.966	ND	0.000054 J	4.34	4.81	0.000268 J	0.000699 J	0.0103
Oct-2014	0.0131	0.0136	ND	0.0138	1.03	1.02	ND	ND	6.03	5.97	ND	ND	0.0169
Apr-2015	0.0156	0.0153	ND	0.015	1.13	1.09	ND	ND	7.58	7.28	ND	ND	0.0202
Nov-2015	0.0153	0.015	ND	0.0137	1.19	1.17	0.000479 J	ND	7.46	7.24	0.000174 J	ND	0.0177
May-2016	0.0146	0.0158	ND	0.0145	1.07	1.15	ND	ND	7.28	7	ND	ND	0.0164 J
Oct-2016	0.0122	0.0146	ND	0.0133	1.03	1.06	ND	ND	6.75	6.99	ND	ND	0.0143 J
May-2017	0.0152	0.0157	ND	0.0121	1.06	1.09	ND	ND	7.54	7.91	ND	ND	0.0122 J
Oct-2017	0.0211	0.0231	0.000051 J	0.0229	1.09	1.09	ND	ND	9.27	9.11	ND	ND	0.134
May-2018	0.041	0.017	ND	0.0056	3.4 J	ND	0.0014 J	ND	11.9	8	ND	0.0021	0.0043 JB

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22***												
Nov-2018	0.018	0.017	*ND*	0.023	*0.99 J*	*1.2 J*	*0.00028 J*	*ND*	7.5	7.7	*ND*	0.0029	0.012
May-2019	0.024	0.024	*ND*	0.022	*ND*	*ND*	*ND*	*ND*	10.5	10	*ND*	*ND*	0.014
Oct-2019	0.026	0.029	*ND*	0.016	*1.7 J*	*1.5 J*	*0.00062 J*	*ND*	13.4	12.1	*ND*	0.0029	0.03
May-2020	0.028	0.027	*ND*	0.024	*ND*	*1.3 J*	*0.00062 JM1*	*ND*	11.6	10.1	*ND*	0.013 D6M1	0.015
Oct-2020	0.024	0.025	*ND*	0.031	*ND*	*1.1 J*	*ND*	*ND*	10.7	9.4	*ND*	*0.0023 J*	*0.015 J*
Apr-2021	0.027	0.025	*ND*	0.024	1.2	1.1	*ND*	*ND*	11.3	11	*ND*	*ND*	0.013
Oct-2021	0.035	0.036	*ND*	0.022	1.2	1.2	*ND*	*ND*	12.8	13	*0.000053 J*	*ND*	0.015
May-2022	0.034	0.034	*ND*	0.018	1.2	1.1	*ND*	*ND*	12.6	12.4	*ND*	*ND*	0.016
Oct-2022	0.034	0.035	*ND*	0.023	1.2	1.1	*0.00096 J*	*ND*	12.4	11.9	*ND*	*ND*	0.016
May-2023	0.033	0.031	*ND*	0.024	1.3 B	1.1	*0.001 J*	*ND*	12.2	11.2	*ND*	*ND*	0.016
Oct-2023	0.038	0.041	*ND*	0.03	1.1	1.3	*ND*	*ND*	12.7	13.6	*ND*	*ND*	0.02

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-22***																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5 J	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.9 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.3 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22***															
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.25 J*	*0.37 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.6 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.401 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.23 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-22A***											
Nov-1993	50	50	0.2	ND	30	ND	ND	5.25	217	9.3	90	15.9
Apr-1994	69	69	2.2	20.2	61.7	ND	ND	5.62	341	7.5	182	30.36
Apr-1995	99.9	99.9	1.4	ND	44.4	ND	ND	5.5	379	16.6	ND	28.6
Apr-1997	ND	10	ND	ND	6	0.14	ND	NA	NA	5.6	113	15
Oct-1997	47	47	0.59	ND	7.36	0.228	ND	6.37	96.9	7.1	80	26
Apr-1998	92	92	1.2	15	16.8	ND	ND	6.24	75.2	7.17	150	28
Apr-1999	67	67	1.5	ND	15.2	ND	ND	5.14	57.1	4.99	96	17
Oct-1999	57	57	1.2	ND	21.3	ND	ND	5.89	92.7	8.3	140	21
Apr-2000	21	21	1.7	ND	32.3	ND	ND	6.31	131	10.4	102	17
Oct-2000	23	NA	2.8	16	31.8	ND	ND	6.07	98	10.1	108	17
Apr-2001	14	NA	1.9	ND	14.6	ND	ND	NA	NA	2.59	91	14
Sep-2001	11	11	4.8	14	83.3	1.21	ND	5.27	209	29.4	205	28.8
Mar-2002	12	12	2.6	ND	50.6	0.264	ND	5	58.7	25.2	137	21.4
Sep-2002	7	7	2	ND	42.4	0.76	ND	5	48.1	22.6	112	16.6
Mar-2003	2.5	2.5	ND	ND	14	ND	ND	4.9	52.1	12.7	52	14.1
Oct-2003	2.2	2.2	0.55	15	4.38	0.49	ND	5.4	66.4	8.49	17	15.3
Apr-2004	5.3	5.3	0.43	19	28.3	ND	ND	6	71.2	8.39	84	18.1
Oct-2004	4.8	4.8	0.55	ND	21.9	0.11	ND	4.3	67.4	10.4	72	14.1
Apr-2005	2.2	2.2	ND	ND	10.1	0.55	ND	4.6	78.8	11.6	55	13.6
Oct-2005	2.6	2.6	ND	ND	6	0.67	ND	4.9	46.6	10.4	55	12.2
Mar-2006	3	3	ND	ND	5.48	0.65	ND	5.1	48.1	11.4	31	11.2
Sep-2006	3	3	ND	ND	4.61	0.35	ND	4.7	44.5	8.85	31	11.7
Mar-2007	3.1	3.1	ND	ND	4.54	0.35	ND	4.5	38.9	8.38	19	10.8
Sep-2007	2.8	2.8	ND	ND	4.22	0.28	ND	6.1	40.5	7.67	55	10.8
Mar-2008	3.2	3.2	ND	ND	16.2	1.12	ND	4.5	43.5	16	22	10.5
Sep-2008	3.2	3.2	ND	ND	4.75	0.21	ND	4.6	41.9	10.7	25	11.2
Mar-2009	3.4	3.4	ND	ND	5.57	0.35	ND	4.4	46	7.32	36	11.5
Oct-2009	3.4	3.4	ND	ND	10.4	0.8	ND	4.3	61.1	7.43	43	14
Apr-2010	2.8	2.8	ND	ND	19.5	1.33	ND	3.9	86.7	8.81	113	16.9
Oct-2010	2.7	2.7	ND	ND	29.8	1.66	ND	4.6	113.5	7.86	84	21.2
Apr-2011	2.4	2.4	ND	ND	32.5	1.48	ND	4.3	129.1	8.18	94	18.9
Sep-2011	2.6	2.6	ND	ND	30.6	1.31	ND	4.4	115.3	10.1	83	21
Mar-2012	2.6	2.6	ND	ND	16.6	0.73	ND	3.6	80.8	10.5	84	18.4
Sep-2012	2.12	2.12	ND	ND	18.8	0.747	ND	4.1	79.8	11.1	62	18.9
Mar-2013	2.96	2.96	ND	ND	31.2	1.1	ND	4.7	121	8.15	77	18.5
Oct-2013	2.8	2.8	ND	ND	27.3	0.953	ND	6	110.7	9.18	67	19.5
Mar-2014	2.68	2.68	ND	ND	31.1	1.08	ND	4.9	129.8	9.94	91	22.3

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-22A***										
Oct-2014	*ND*	*ND*	*ND*	*ND*	44.4	1.37	*ND*	4.8	146.5	11.9	88	25
Apr-2015	2.84	2.84	*ND*	*ND*	49.8	1.68	*ND*	3.9	157.1	12.7	106	27.9
Nov-2015	*ND*	*ND*	*ND*	*6 J*	45.2	1.55	*ND*	4.9	205	13.1	96	26.2
May-2016	*ND*	*ND*	*ND*	*ND*	32.5	1.16	*ND*	4.8	203	12.6	74	21.9
Oct-2016	*ND*	*ND*	*ND*	*ND*	40.4	*NA*	*NA*	4.6	221	9.36	97	22.8
May-2017	*ND*	*ND*	*ND*	10	40.5	1.17	*ND*	4.7	240	10.8	76	24.4
Oct-2017	*ND*	*ND*	*ND*	*ND*	45.4	1.36	*ND*	4.8	264	11.1	96	27
May-2018	*2 JB*	*ND*	*ND*	*ND*	42.6	0.24	*ND*	4.4	228	10.4	78	27.1
Nov-2018	*1 JB*	*ND*	*ND*	*5.7 J*	57.2	1.6	*ND*	4.44	232.1	*9.3 J*	99	27.4
May-2019	*ND*	*NA*	*ND*	*ND*	56.8	1.7	*ND*	4.48	213.4	*ND*	135	32.7
Oct-2019	*ND*	*NA*	*ND*	*6 J*	61.4	1.9	*ND*	4.16	260.8	12.9	142	32.2
May-2020	*ND*	*NA*	*ND*	*6.9 J*	95.5	2.3	*ND*	4.03	350	12.6	182	33.8
Oct-2020	*ND*	*NA*	*ND*	*4.8 J*	94.5	2.4	*ND*	4.19	350.2	19	178	39.7
Apr-2021	*ND*	*NA*	*ND*	*8.3 J*	82.2	1.8	*ND*	4.42	339.7	15.7	160	34.8
Oct-2021	*ND*	*NA*	*ND*	*6.1 J*	65.4	1.4	*ND*	4.53	341.6	11.9	142	30.1
May-2022	*ND*	*NA*	*ND*	*ND*	71.1	1.7	*ND*	4.25	343.5	13.4	171	34.6 N3
Oct-2022	*ND*	*NA*	*ND*	*17.5 J*	87.5	2.1	*ND*	4.42	377.3	17.6 MH	163	40.9 N3
May-2023	*2 J3c*	*NA*	*ND*	36.5	74	1.9	*ND*	4.81	333.6	21.8	162	45.2 N3
Oct-2023	*ND*	*NA*	*ND*	*ND*	81.3	1.93	*NA*	4.55	377.1	22.4	170	41.8 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-22A*													
Nov-1993	NA	ND	ND	NA	ND	3.4	NA	ND	NA	ND	18.4	18.3	ND	1.8	NA
Apr-1994	NA	ND	ND	NA	ND	5.89	NA	ND	NA	ND	27.7	22.7	ND	3.8	NA
Apr-1995	ND	ND	0.6	ND	ND	5.2	NA	ND	ND	ND	50.1	47	ND	3.8	NA
Oct-1996	ND	**0.12**	0.054	ND	ND	8.1	8.6	ND	ND	ND	40	37	ND	3.6	3.7
Apr-1997	ND	ND	0.055	ND	ND	3.4	2.4	ND	ND	ND	16	11	ND	2	1.5
Oct-1997	ND	**0.065**	0.043	ND	ND	2.76	2.44	ND	ND	ND	20	15	ND	1.69	1.61
Apr-1998	ND	ND	0.058	ND	ND	6.16	6.1	ND	ND	ND	57	56	ND	3.06	3.05
Apr-1999	ND	ND	0.04	ND	ND	3.66	3.55	ND	ND	ND	38.5	36.7	ND	1.82	1.78
Oct-1999	ND	ND	0.033	ND	ND	2.82	2.44	ND	ND	ND	0.597	0.083	ND	1.5	1.36
Apr-2000	ND	ND	0.042	ND	ND	3.55	3.3	ND	ND	ND	0.894	0.472	ND	1.95	1.81
Oct-2000	ND	ND	0.041	ND	ND	3.65	3.68	ND	ND	ND	4.38	4.02	ND	1.92	1.92
Apr-2001	ND	ND	0.039	ND	ND	2.83	NA	ND	ND	ND	1.01	NA	ND	1.77	NA
Sep-2001	ND	ND	0.069	ND	ND	5.81	6.18	ND	ND	ND	8.81	1.55	ND	3.47	3.64
Mar-2002	ND	ND	0.054	ND	ND	4.35	2.24	ND	ND	ND	3.46	ND	ND	2.55	1.83
Sep-2002	ND	ND	0.056	ND	ND	3.09	2.14	ND	ND	ND	1.44	ND	ND	2.15	1.78
Mar-2003	ND	ND	0.073	ND	ND	2.23	2.1	ND	ND	ND	1.58	ND	ND	2.08	1.97
Oct-2003	ND	ND	0.07	ND	ND	2.78	3.28	ND	ND	ND	1.13	1.71	ND	2.04	1.95
Apr-2004	ND	ND	0.066	ND	ND	3.66	3.05	ND	ND	ND	1.61	2.01	ND	2.18	1.95
Oct-2004	ND	ND	0.062	ND	ND	2.76	2.55	ND	ND	ND	1.6	0.842	ND	1.75	1.72
Apr-2005	ND	ND	0.073	ND	ND	2.26	2.12	ND	ND	ND	0.366	0.118	ND	1.93	1.88
Oct-2005	ND	ND	0.066	ND	ND	2.04	1.77	ND	ND	ND	0.222	ND	ND	1.72	1.63

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22A***													
Mar-2006	ND	ND	0.065	ND	ND	1.69	1.66	ND	ND	ND	ND	ND	ND	1.7	1.68
Sep-2006	ND	ND	0.062	ND	ND	1.85	1.87	ND	ND	ND	0.113	ND	ND	1.71	1.72
Mar-2007	ND	ND	0.059	ND	ND	1.68	1.66	ND	ND	ND	ND	ND	ND	1.61	1.6
Sep-2007	ND	0.002	0.058	ND	ND	1.62	1.57	ND	ND	ND	0.14	ND	ND	1.63	1.58
Mar-2008	ND	ND	0.061	ND	ND	1.65	1.56	ND	ND	ND	0.232	ND	ND	1.55	1.46
Sep-2008	ND	ND	0.061	ND	ND	1.65	1.58	ND	ND	ND	ND	ND	ND	1.72	1.62
Mar-2009	ND	ND	0.064	ND	ND	1.77	1.7	ND	ND	ND	ND	ND	ND	1.73	1.67
Oct-2009	ND	ND	0.81	ND	ND	2.18	2.11	ND	ND	ND	ND	ND	ND	2.08	2.02
Apr-2010	ND	ND	0.095	ND	ND	2.8	2.67	ND	ND	ND	0.051	ND	ND	2.41	2.33
Oct-2010	ND	ND	0.116	ND	ND	3.45	3.25	ND	ND	ND	ND	ND	ND	3.06	2.93
Apr-2011	ND	ND	0.125	ND	ND	3.13	3.09	ND	ND	ND	0.171	ND	ND	2.7	2.67
Sep-2011	ND	ND	0.131	ND	ND	3.59	3.54	ND	ND	ND	0.083	ND	ND	2.93	2.91
Mar-2012	ND	ND	0.118	ND	ND	3.12	3.05	ND	ND	ND	0.22	0.132	ND	2.57	2.5
Sep-2012	ND	ND	0.115	0.00023 J	0.000299 J	3.24	3.24	0.002 J	0.0069 J	0.0031 J	0.0642	0.0258 J	ND	2.62	2.52
Mar-2013	ND	ND	0.113	0.000199 J	0.00036 J	3.22	3.78	0.0041 J	0.0073 J	0.004 J	0.0516	0.0259 J	0.0014 J	2.54	3.03
Oct-2013	ND	ND	0.132	0.00029 J	0.000255 J	3.38	3.34	0.0099 J	0.008 J	0.0036 J	0.0763	0.0189 J	ND	2.69	2.8
Mar-2014	ND	ND	0.148	0.00036 J	0.00034 J	3.8	3.81	0.0017 J	0.0073 J	0.0043 J	0.0757	0.0336 J	ND	3.1	3.16
Oct-2014	0.000489 J	ND	0.155	0.000342 J	0.000317 J	4.03	4.11	0.000798 J	0.0094 J	0.0044 J	0.04 J	ND	ND	3.63	3.67
Apr-2015	0.000647 J	ND	0.171	0.000472 J	0.000416 J	4.42	4.28	0.0013 J	0.01	0.0061 J	0.0228 J	0.0465 J	ND	4.09	4.04
Nov-2015	0.000376 J	0.000221 J	0.17	0.000477 J	0.000345 J	4.75	5.01	0.0052 J	0.01	0.006 J	0.331	0.0372 J	0.000558 J	3.48	3.57
May-2016	ND	ND	0.136	0.00044 J	0.0003 J	3.67	3.91	0.0015 J	0.0087	0.0056	ND	ND	ND	3.1	3.17
Oct-2016	ND	ND	0.144	0.00041 J	0.00032 J	3.65	4.08	0.0011 J	0.0098	0.0056	0.038 J	ND	ND	3.32	3.49
May-2017	ND	ND	0.14	0.00038 J	0.00029 J	3.65	3.45	0.0012 J	0.009	0.0052	ND	ND	ND	3.71	3.59
Oct-2017	ND	ND	0.148	0.00035 J	0.0003 J	3.97	4.13	0.0027 J	0.0105	0.0049	0.372	ND	0.00016 J	4.15	4.28

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22A***													
May-2018	*0.00005 J*	*ND*	0.13	0.00045	*0.00036 J*	3.9	3.7	*0.0013 JB*	0.0084	0.0055	*ND*	*ND*	*0.000069 JB*	4.2	4
Nov-2018	*ND*	*ND*	0.15	0.00066	*0.00043 J*	4.2	4.2	*0.0058 J*	0.0094	0.0065	0.22	0.07	*0.000079 J*	4.1	4.2
May-2019	*ND*	*ND*	0.18	0.00067	*ND*	5.5	5.2	0.0071	0.0078	0.0048	0.16	0.095	*ND*	4.6	4.2
Oct-2019	*0.00014 J*	*ND*	0.17	0.00069	*0.00084 J*	5.4	5.2	*0.0065 J*	0.012	0.012	0.1	0.084	*0.00012 J*	4.5	4.3
May-2020	*0.000075 J*	*ND*	0.18	0.00071	*0.00055 J*	5.9	5.7	0.0091	0.013	*0.0095 J*	0.32	0.078	*ND*	4.6	4.4
Oct-2020	*ND*	*ND*	0.15	*0.00052 J*	*ND*	6.7	6.2	*0.0062 J*	0.013	*0.0077 J*	0.12	0.077	*ND*	5.6	5.2
Apr-2021	*ND*	*ND*	0.17	*0.00067 J*	*0.00034 J*	5.9	5.7	0.0067	0.017	0.011	0.19	0.11	*ND*	4.9	4.7
Oct-2021	*0.000077 J*	*0.00027 J*	0.15	0.00054	*0.0002 J*	5	5	*0.0022 J*	0.025	0.0072	0.089	0.075 B	*ND*	4.3	4.3
May-2022	*ND*	*ND*	0.17	0.00068	*0.00035 J*	5.9	5.9	*0.0022 J*	0.022	0.0098	0.057	*0.046 J*	*ND*	4.8	4.7
Oct-2022	*ND*	*0.00046 J*	0.18	*0.00035 J*	*0.00029 J*	6.5	6.7	*0.002 J*	0.02	0.0072	0.062	*0.04 J*	*ND*	6	6.3
May-2023	*ND*	*0.00058 J*	0.18	*0.00044 J*	*0.00035 J*	6.5	6.3	0.0069	0.024	0.0073	0.32	0.066	*ND*	7	6.6
Oct-2023	*ND*	*ND*	0.15	*0.00044 J*	*0.0004 J*	6.1	6.5	0.0046	0.019	0.007	0.27	*0.037 J*	*ND*	6.5	6.7

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22A***												
Nov-1993	0.08	NA	ND	NA	3.3	NA	ND	NA	35.8	NA	NA	NA	ND
Apr-1994	0.15	NA	ND	NA	3.69	NA	ND	NA	50.2	NA	NA	NA	0.06
Apr-1995	0.11	NA	ND	ND	3.7	NA	ND	ND	19.4	NA	ND	ND	0.02
Oct-1996	0.085	0.09	NA	ND	ND	ND	ND	ND	23	24	ND	ND	0.035
Apr-1997	0.053	0.037	ND	ND	3	2.1	ND	ND	4.2	4.1	ND	ND	0.16
Oct-1997	0.04	0.04	NA	ND	0.955	0.623	ND	ND	3.31	2.89	ND	ND	ND
Apr-1998	0.075	0.095	NA	ND	2.15	2.62	ND	ND	9.73	9.68	ND	ND	ND
Apr-1999	0.04	0.039	NA	ND	1.94	1.84	ND	ND	10.7	10.4	ND	ND	ND
Oct-1999	0.043	0.039	NA	ND	2.17	2.61	ND	ND	11.1	8.85	ND	ND	ND
Apr-2000	0.062	0.058	NA	ND	2.67	2.18	ND	ND	24.7	22.7	ND	ND	ND
Oct-2000	0.077	0.083	NA	ND	4.34	4.61	ND	ND	23	23.5	ND	ND	ND
Apr-2001	0.066	NA	NA	ND	4	NA	ND	ND	17.8	NA	ND	ND	ND
Sep-2001	0.159	0.172	NA	ND	6.76	7.11	ND	ND	70.2	68.7	ND	ND	ND
Mar-2002	0.103	0.061	NA	ND	4.88	1.97	ND	ND	30.2	7.09	ND	ND	ND
Sep-2002	0.079	0.061	NA	ND	2.91	2.05	ND	ND	20.4	6.92	ND	ND	ND
Mar-2003	0.065	0.062	NA	ND	1.46	0.736	ND	ND	2.74	2.41	ND	ND	ND
Oct-2003	0.07	0.084	NA	ND	0.914	2.92	ND	ND	6.56	16.5	ND	ND	0.021
Apr-2004	0.081	0.079	ND	ND	3.84	2.04	ND	ND	18.1	14.8	ND	ND	ND
Oct-2004	0.052	0.051	ND	ND	1.66	1.55	ND	ND	16.7	13.9	ND	ND	ND
Apr-2005	0.059	0.057	ND	ND	1.09	1.04	ND	ND	5.98	4.73	ND	ND	0.012
Oct-2005	0.052	0.049	ND	ND	1.01	0.935	ND	ND	3.18	2.44	ND	ND	0.012
Mar-2006	0.04	0.039	ND	ND	0.526	0.548	ND	ND	2.51	2.47	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22A***												
Sep-2006	0.054	0.056	ND	ND	0.808	0.82	ND	ND	2.14	2.1	ND	ND	ND
Mar-2007	0.044	0.043	ND	0.012	0.809	0.804	ND	ND	2.06	2.02	ND	ND	0.018
Sep-2007	0.044	0.043	ND	ND	0.743	0.604	ND	ND	2	1.94	ND	ND	0.01
Mar-2008	0.042	0.04	ND	ND	1	0.935	ND	ND	1.84	1.73	ND	ND	0.011
Sep-2008	0.044	0.041	ND	ND	0.843	0.804	ND	ND	2.08	1.96	ND	ND	0.01
Mar-2009	0.046	0.044	ND	ND	0.947	0.908	ND	ND	2.49	2.37	ND	ND	0.011
Oct-2009	0.055	0.053	ND	ND	0.736	0.703	ND	ND	4.58	4.31	ND	ND	0.012
Apr-2010	0.066	0.064	ND	ND	1	0.973	ND	ND	9.49	9.43	ND	ND	0.019
Oct-2010	0.1	0.094	ND	ND	1.1	1.12	ND	ND	16	16	ND	ND	0.029
Apr-2011	0.096	0.094	ND	ND	0.87	0.878	ND	ND	16.9	16.6	ND	ND	0.029
Sep-2011	0.119	0.117	ND	ND	1.07	1.13	ND	ND	16	15.7	ND	ND	0.034
Mar-2012	0.107	0.103	0.0002	0.026	1.02	1.01	ND	ND	7.66	7.5	ND	ND	0.029
Sep-2012	0.106	0.104	0.00005 J	0.0078 J	1.01	1.01	0.000507 J	ND	8.23	8.19	ND	ND	0.0338
Mar-2013	0.1	0.117	0.00009 J	0.0103 J	0.997	1.13	ND	0.000027 J	12.3	14.5	ND	ND	0.0439
Oct-2013	0.101	0.102	ND	0.012	1.19	1.16	0.000502 J	ND	12.4	12.9	ND	0.0024 J	0.0388
Mar-2014	0.117	0.11	ND	0.0083 J	1.26	1.28	0.000771 J	ND	13.4	13.6	0.000178 J	0.000816 J	0.0331
Oct-2014	0.116	0.117	0.000127 J	0.0092 J	1.42	1.43	0.0016 J	ND	20.2	20.5	ND	ND	0.0393
Apr-2015	0.126	0.124	0.000219	0.0107 J	1.36	1.36	0.0021	ND	26.2	25.7	ND	ND	0.0529
Nov-2015	0.129	0.131	0.000393	0.014	1.42	1.46	0.0021	ND	22.8	23.2	0.000133 J	ND	0.0427
May-2016	0.117	0.117	0.0001 J	0.009	1.24	1.3	ND	ND	15.6	15.8	ND	ND	0.0467
Oct-2016	0.115	0.127	0.000051 J	0.0095	1.28	1.34	0.00044 J	ND	18	19.2	ND	ND	0.0445
May-2017	0.114	0.109	ND	0.0082	1.52	1.43	0.00048 J	ND	21.5	20.3	ND	ND	0.0379
Oct-2017	0.117	0.119	ND	0.009	1.62	1.66	0.00057 J	ND	18.6 J-	22.9	ND	0.00038 J	0.0376
May-2018	0.078	0.078	0.00014 J	0.0069	0.97 J	1 J	0.00078 J	ND	23.4	21.8	ND	0.0022	0.016

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22A***												
Nov-2018	0.12	0.12	0.00054	0.011	*1.4 J*	*1.7 J*	*0.00071 J*	*ND*	27.5	28.3	*ND*	0.003	0.034
May-2019	0.13	0.15	0.00062	0.0095	*ND*	*ND*	*ND*	*ND*	33.9	31.1	*ND*	0.0017	0.03
Oct-2019	0.14	0.11	0.00046	0.012	*2 J*	*2 J*	*0.00097 J*	*ND*	34.3	32.6	*ND*	0.0025	0.056
May-2020	0.15	0.15	0.00056	0.014	*ND*	*1.9 J*	*0.0019 JM1*	*ND*	47.6	40.7	*ND*	0.0099	0.047
Oct-2020	0.18	0.15	*0.00013 J*	0.012	*ND*	*1.8 J*	*ND*	*ND*	52.6	45.6	*ND*	*0.0012 J*	0.037
Apr-2021	0.14	0.13	*0.00018 J*	0.017	1.8	1.7	*ND*	*ND*	41	40.8	*ND*	*ND*	0.038
Oct-2021	0.12	0.12	0.00027	0.012	1.6	1.6	0.0025	*ND*	37.6	38.9	*0.00003 J*	*ND*	0.037
May-2022	0.14	0.13	0.00034 M1	0.014	1.7	1.7	*0.002 J*	*ND*	40.3	38.8	*ND*	*ND*	0.044
Oct-2022	0.16	0.15	*ND*	0.012	2.1	2.1	0.0039	*ND*	48.1	47.4	*ND*	*ND*	0.038
May-2023	0.14	0.13	*ND*	0.016	2.1 B	1.9	0.0039	*ND*	38.7	37.9	*ND*	*ND*	0.032
Oct-2023	0.14	0.14	0.00031	0.013	1.9	2.1	0.0035	*ND*	46.6	48	*ND*	*ND*	0.024

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-22A***																
Nov-1993	ND	ND	ND	ND	39	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	33	ND
Apr-1994	ND	ND	ND	ND	21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	54	ND
Oct-1996	ND	ND	ND	ND	86	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	57	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	34	ND	ND	ND	ND	ND	ND	0.7 J	0.9 J	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	27	ND	ND	ND	ND	ND	ND	0.5 J	0.6 J	2.3 J	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	31	ND	NA	NA	NA	NA	ND	0.7 J	0.6 J	ND	NA	NA	7.6	NA
Oct-1999	ND	ND	ND	ND	19	ND	ND	ND	ND	0.6 J	ND	0.6 J	1.1	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	8.3	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	12	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	6.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	6.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	6.4	ND
Apr-2005	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22A*																
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22A*																
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.6 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-22A*															
Nov-1993	**9.6**	ND	ND	ND	ND	1.2	ND	ND	4.4	ND	ND	15	ND	ND	ND	8	33
Apr-1994	3.9	ND	ND	ND	ND	ND	ND	ND	1.9 J	ND	ND	6.8	ND	ND	ND	3.5	18
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	ND	ND	ND	9	51
Apr-1997	**17**	ND	ND	ND	2	ND	ND	ND	4	ND	2	ND	15	ND	ND	54	28
Oct-1997	**8.3**	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	7.5	ND	ND	ND	6.1	42
Apr-1998	**6.4**	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	6.6	ND	ND	ND	5.4	16
Apr-1999	4.4	NA	NA	NA	NA	ND	NA	ND	1 J	ND	NA	5.8	NA	NA	NA	1.7	17
Oct-1999	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	ND	ND	ND	1.4	8.9
Apr-2000	1.4	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	1.5	NA	ND	NA	0.9 J	4
Oct-2000	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.1	5.7
Apr-2001	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	5.1	4.9
Sep-2001	0.8 J	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	1.1	ND	ND	ND	1.6	2.5
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	1
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	1
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.3
Oct-2004	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	3.9	6.7
Apr-2005	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	2.7	3.5
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22A***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.9 J
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.37 J	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	0.52 J,B	ND	ND	ND	ND	0.4 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.36 J	0.4 J,B	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	0.2 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	0.2 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22A***															
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*0.2 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.252 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22A***															
Nov-1993	ND	ND	5.2	ND	ND	ND	ND	**9**	ND	ND	ND	ND	**7.5**	ND	ND	**2.2**	NA
Apr-1994	ND	ND	1.3 J	ND	ND	ND	ND	3.2	ND	ND	ND	ND	5	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	**11**	ND	1.5	ND	ND	**11**	ND	ND	**3.8**	ND
Apr-1997	ND	ND	NA	NA	1	NA	ND	**8**	ND	ND	1	ND	**11**	ND	ND	**7**	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	3.7	ND	0.9 J	ND	ND	**7.9**	ND	ND	2	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	4.5	ND	0.7 J	ND	ND	**6.7**	ND	ND	1.9	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	3.8	ND	0.6 J	NA	NA	**6**	ND	NA	1.2	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	3	ND	ND	ND	ND	3.7	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	2.8	ND	ND	NA	NA	2.3	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	4.6	ND	ND	ND	ND	4.2	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	4.3	ND	ND	ND	ND	1.8	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	3.5	ND	ND	ND	ND	2.4	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	1.4	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	0.7 J	ND	ND	3.4	ND	ND	ND	ND	2.1	ND	ND	0.8 J	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22A***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*0.45 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.21 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*0.14 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22A***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-22B***											
Nov-1993	69	69	1.5	ND	20	ND	ND	5.31	227	9.6	142	15.2
Apr-1994	367	367	19.6	109.6	524	ND	ND	6.06	2.1	5.6	948	125.86
Apr-1995	216	216	10.8	27.1	133	ND	ND	5.8	823	8.9	376	35.6
Apr-1997	ND	26	ND	ND	4.5	0.02	ND	NA	NA	9.1	141	16
Oct-1997	95	95	0.87	ND	5.06	ND	ND	6.07	208	7.36	114	42
Apr-1998	102	102	6.7	14	28.6	ND	ND	5.96	319	7.08	160	30
Apr-1999	80	80	5.1	20	81.4	0.61	ND	6.32	545	30	560	36
Oct-1999	52	58	0.88	ND	4.35	ND	ND	5.18	152.1	9.13	91	13
Apr-2000	65	65	5.2	ND	1.05	ND	ND	6.27	253	12.7	131	29
Oct-2000	33	NA	4.4	15	47.4	ND	ND	5.34	425	15	148	25.9
Apr-2001	25	NA	11	55	239	ND	ND	NA	NA	75.4	631	78
Sep-2001	39	39	8.4	24	77.1	ND	ND	5.86	657	45.3	247	31.8
Mar-2002	38	38	6.3	16	30.4	ND	ND	5.9	419	24.6	242	30
Sep-2002	8.2	8.2	2.3	13	54.4	ND	ND	5.9	310	22	146	12.3
Mar-2003	11	11	1.1	ND	36.2	ND	ND	5.7	253	13.5	111	13.2
Oct-2003	2	2	ND	13	30	1.15	ND	4.8	168.3	12.2	63	16.5
Apr-2004	7.8	7.8	ND	16	22.3	2.81	ND	4.8	120.8	7.45	97	31.7
Oct-2004	21	21	ND	ND	8.79	2.27	ND	5.1	69.6	6.68	76	27.1
Apr-2005	4	4	ND	ND	5.31	0.48	ND	5	65.8	7.66	50	10.3
Oct-2005	2.7	2.7	ND	ND	3.91	3.04	ND	4.8	47.8	3.43	47	12.1
Mar-2006	4.5	4.5	ND	ND	4.14	0.42	ND	5.2	36.4	6.42	28	4.87
Sep-2006	4.8	4.8	0.54	ND	12.8	1.21	ND	4.6	71.7	9.5	74	10.6
Mar-2007	8.7	8.7	0.97	ND	20.1	0.21	ND	3.1	674	18.6	69	15.4
Sep-2007	1.7	1.7	ND	ND	4.76	6.67	ND	6	80.1	2.82	87	20.4
Mar-2008	5.3	5.3	0.52	ND	28.3	2.82	ND	4.6	102	22.9	63	17.5
Sep-2008	4.1	4.1	0.72	13	18.4	1.61	ND	4.7	108.1	20.1	79	17
Mar-2009	5.3	5.3	0.99	ND	16.4	0.12	ND	4.7	133.7	34.9	95	17
Oct-2009	4.3	4.3	0.41	10	17.9	0.21	ND	4.6	112.9	27.5	87	14.9
Apr-2010	1.6	1.6	ND	ND	9.26	6.17	ND	4.1	98.2	10.9	113	22.8
Oct-2010	2.8	2.8	0.22	ND	6.07	6.15	ND	5.3	84.1	5.63	71	25
Apr-2011	3.5	3.5	ND	ND	9.27	2.43	ND	4.4	97.8	17.3	77	23.3
Sep-2011	2.2	2.2	ND	ND	14.4	2.09	ND	4.4	95.3	20.2	74	23.4
Mar-2012	1.4	1.4	ND	ND	8.89	5.28	ND	3.5	93.6	10.3	80	22.9
Sep-2012	1.24	1.24	ND	ND	8.83	4.42	ND	4.1	88.9	15.9	80	22.8
Mar-2013	2.96	2.96	ND	ND	12.6	1.43	ND	4.8	115.4	28	84	26.5
Oct-2013	3.2	3.2	ND	13.1	13	0.803	ND	5.3	104.6	25.2	69	21.9
Mar-2014	3.8	3.8	ND	8 J	18.5	1.17	ND	5	123.9	25.6	76	23.8

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-22B***										
Oct-2014	*ND*	*ND*	*ND*	*ND*	9.18	4.44	*ND*	4.5	96.3	16.2	58	22.2
Apr-2015	2.8	2.8	*ND*	*ND*	8.54	1.66	*ND*	4	103	33.8	63	28.6
Nov-2015	*ND*	*ND*	*ND*	*6 J*	7.57	3.95	*ND*	4.2	110	18.9	58	25.7
May-2016	*ND*	*ND*	*ND*	*ND*	8.05	2.18	*ND*	4.9	166.3	25.6	67	22.3
Oct-2016	*ND*	*ND*	*ND*	*ND*	7.44	*NA*	*NA*	4.9	144.3	26.2	80	26
May-2017	10	10	*ND*	13	7.53	1.39	*ND*	5.4	174.5	29.3	61	40.5
Oct-2017	14	14	*ND*	*ND*	13.7	2.63	*ND*	5.7	194.1	27.1	97	48.6
May-2018	*1 JB*	*ND*	*ND*	*10.1 J*	15.8	0.19	*ND*	4.9	87.1	*ND*	*ND*	10
Nov-2018	28	28	*ND*	*14.3 J*	7.9	1.8	*ND*	5.47	163.7	33.8	88	57.7
May-2019	*ND*	*NA*	*ND*	*ND*	10	3.5	*ND*	4.78	118.9	33.2	103	50.1
Oct-2019	*ND*	*NA*	*ND*	*6 J*	5.2	3.6	*ND*	4.71	100.1	14.6	54	28.7
May-2020	*4 J*	*NA*	*ND*	*6.9 J*	8.9	2.4	*ND*	4.54	123.2	23.9	63	32.6
Oct-2020	*4 J*	*NA*	*ND*	*7 J*	21.7	4.4	*ND*	4.87	165.7	18	93	49.5
Apr-2021	*ND*	*NA*	*ND*	*8.3 J*	9.3	5.1	*ND*	4.88	3.26	15.4	64	34.3
Oct-2021	22	*NA*	*ND*	*8.3 J*	6.1	2.4	*ND*	5.39	143.6	21.3	67	36.8
May-2022	28	*NA*	*0.062 J*	*ND*	4.9	2.5	*ND*	5.42	174.1	21.4	90	52.4 N3
Oct-2022	38	*NA*	*ND*	*17.5 JMH*	10.9	3.3	*0.0088 J*	5.65	191	19.5	92	65.5 N3
May-2023	*ND*	*NA*	*ND*	38.7	11.1	2.3	*ND*	5.74	196.9	19.4	108	58 N3
Oct-2023	52	*NA*	*ND*	*9 J*	9.9	1.78	*NA*	5.87	246.7	23.8	126	78.6 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22B***													
Nov-1993	NA	**0.018**	ND	NA	0.001	2.3	NA	ND	NA	ND	31.8	28.2	ND	2.3	NA
Apr-1994	NA	**0.014**	ND	NA	ND	20.7	NA	ND	NA	ND	125	126	ND	18	NA
Apr-1995	ND	ND	ND	ND	ND	5.7	NA	ND	ND	0.03	69.6	60.7	ND	5.2	NA
Oct-1996	ND	ND	0.032	ND	ND	3.5	3.2	ND	ND	ND	23	20	ND	1.9	1.7
Apr-1997	ND	ND	0.051	ND	ND	3.9	2.9	ND	0.021	ND	27	20	ND	2	1.7
Oct-1997	ND	ND	0.049	ND	ND	6.18	6.26	ND	ND	ND	43.1	43.6	ND	3.23	3.27
Apr-1998	ND	ND	0.056	ND	ND	6.96	6.64	ND	ND	ND	45.3	45.5	ND	3.05	3.05
Apr-1999	ND	ND	0.073	ND	ND	7.26	6.71	ND	ND	ND	70	67.2	ND	4.25	4.04
Oct-1999	ND	ND	0.073	ND	ND	8.7	8.09	ND	ND	ND	66.7	41.7	ND	4.27	3.92
Apr-2000	ND	ND	0.04	ND	ND	8.02	6.3	ND	ND	ND	34.9	29.9	ND	2.17	1.98
Oct-2000	ND	ND	0.049	ND	ND	5.84	5.26	ND	ND	ND	58.1	55.2	ND	2.75	2.65
Apr-2001	ND	ND	0.128	ND	ND	18.4	NA	ND	ND	ND	88.2	NA	ND	7.73	NA
Sep-2001	ND	ND	0.062	ND	ND	6.28	6.29	ND	ND	ND	52.2	52.1	ND	3.89	3.94
Mar-2002	ND	ND	0.054	ND	ND	6.76	6.05	ND	ND	ND	44.9	43.2	ND	3.18	3.21
Sep-2002	ND	ND	0.031	ND	ND	2.73	3.56	ND	ND	ND	25.8	23.4	ND	1.34	1.3
Mar-2003	ND	ND	0.021	ND	ND	3.84	6.09	ND	ND	ND	4.82	1.51	ND	0.867	0.812
Oct-2003	ND	ND	0.038	ND	ND	3.57	3.12	ND	ND	ND	0.742	ND	ND	1.83	1.72
Apr-2004	ND	ND	0.059	ND	ND	9.48	3.68	ND	ND	ND	0.233	ND	ND	1.95	1.87
Oct-2004	ND	ND	0.049	ND	ND	8.19	5.74	ND	ND	ND	0.343	ND	ND	1.6	1.5
Apr-2005	ND	ND	0.031	ND	ND	2.42	2.37	ND	ND	ND	0.99	0.05	ND	1.04	0.989
Oct-2005	ND	ND	0.041	ND	ND	2.71	2.31	0.03	ND	0.013	1.23	0.073	ND	1.29	1.19

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22B***													
Mar-2006	ND	ND	0.017	ND	ND	1.09	1.04	ND	ND	ND	0.34	ND	ND	0.519	0.487
Sep-2006	ND	ND	0.031	ND	ND	2.63	2.79	ND	ND	ND	0.27	0.219	ND	0.987	1.06
Mar-2007	ND	0.002	0.042	ND	ND	3.97	3.58	0.011	ND	ND	1.91	1.09	ND	1.33	1.28
Sep-2007	ND	0.003	0.063	ND	ND	4.49	4.06	0.017	0.011	0.012	1.38	0.054	ND	2.24	2.12
Mar-2008	ND	ND	0.055	ND	ND	4.12	3.83	ND	ND	0.013	0.161	ND	ND	1.74	1.63
Sep-2008	ND	0.002	0.058	ND	ND	3.68	3.45	0.014	ND	ND	1.92	1.04	ND	1.89	1.8
Mar-2009	ND	0.002	0.048	ND	ND	4.19	3.88	0.019	ND	ND	5.94	2.84	ND	1.57	1.49
Oct-2009	ND	ND	0.041	ND	ND	3.45	3.34	ND	ND	ND	3.17	2.83	ND	1.53	1.48
Apr-2010	ND	ND	0.062	ND	ND	5.13	4.97	0.017	ND	ND	1.46	0.063	ND	2.44	2.39
Oct-2010	ND	ND	0.068	ND	ND	5.83	5.81	0.01	0.011	0.025	0.615	ND	ND	2.52	2.53
Apr-2011	ND	ND	0.078	ND	ND	5.5	5.39	0.021	0.011	0.029	1.5	ND	ND	2.33	2.3
Sep-2011	ND	ND	0.082	ND	ND	5.14	5.04	0.025	0.013	0.042	2.64	ND	ND	2.57	2.53
Mar-2012	ND	ND	0.077	ND	ND	4.95	4.82	ND	0.011	0.043	0.909	ND	ND	2.55	2.46
Sep-2012	ND	ND	0.0823	0.000583 J	0.000553 J	5.05	4.81	0.0218	0.0129	0.0585	2.34	0.0587	0.000532 J	2.48	2.68
Mar-2013	ND	ND	0.0858	0.000419 J	0.000611 J	6.08	6.07	0.0213	0.016	0.0655	1.7	0.0317 J	0.0018 J	2.76	2.76
Oct-2013	ND	0.000692 J	0.0652	0.000203 J	0.000316 J	5.35	5.48	0.0081 J	0.0131	0.0273	0.323	ND	0.000304 J	2.07	2.11
Mar-2014	ND	ND	0.0552	0.000163 J	0.000285 J	5.99	6.09	0.012	0.0171	0.0324	1.59	0.103	ND	2.15	2.13
Oct-2014	0.00035 J	0.0011 J	0.0743	0.000259 J	0.000421 J	5.15	5.41	0.0149	0.0092 J	0.0221	1.75	0.0281 J	0.000845 J	2.28	2.34
Apr-2015	0.000643 J	0.000575 J	0.0723	0.000279 J	0.000368 J	7.01	6.97	0.0121	0.0102	0.0245	0.887	0.129	ND	2.68	2.62
Nov-2015	0.000394 J	0.0012 J	0.0753	0.000384 J	0.000372 J	6.29	6.92	0.0098 J	0.009 J	0.024	1.37	0.0313 J	0.001 J	2.44	2.6
May-2016	ND	ND	0.0561	0.00032 J	0.00038 J	5.43	5.63	0.0037 J	0.0088	0.0241	0.3	0.0419 J	ND	2.12	2.16
Oct-2016	ND	0.00094 J	0.0501	0.00018 J	0.00022 J	6.58	6.7	0.0039 J	0.0062	0.0102	0.654	0.0793 J	0.00017 J	2.32	2.46
May-2017	ND	0.0009 J	0.0418	ND	ND	11.2	10.4	0.0089	0.0036	0.0066	0.887	ND	0.00026 J	3.04	3.01
Oct-2017	ND	ND	0.0407	ND	ND	13.9	15.7	0.0024 J	0.0086	0.0045	0.0558 J	1.7	ND	3.35	3.75

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-22B***													
May-2018	*0.000038 J*	*ND*	0.036	*0.00026 J*	*0.00011 J*	1.6	14.5	*0.0049 JB*	0.009	0.0042	0.044	*ND*	*0.000037 JB*	1.5	3.2
Nov-2018	*0.000032 J*	*0.0002 J*	0.037	*ND*	*0.0001 J*	16.8	16.6	0.042	0.004	0.0048	0.67	0.076	*0.00012 J*	3.8	3.8
May-2019	*ND*	*ND*	0.051	*ND*	*ND*	13.6	12.8	0.014	0.0044	0.0088	0.28	0.04	*ND*	3.9	3.6
Oct-2019	0.00054	*0.00042 J*	0.044	*0.00017 J*	*0.00053 J*	7.5	7	0.013	0.0053	0.016	0.38	0.026	*0.00039 J*	2.4	2.3
May-2020	*0.000094 J*	*ND*	0.042	*0.000095 J*	*0.0001 J*	8.7	7.8	0.016	0.014	0.0074	0.46	0.026	*ND*	2.6	2.4
Oct-2020	*ND*	*ND*	0.038	*ND*	*ND*	13.8	12.7	*0.022 J*	0.0094	*ND*	0.73	0.05	*ND*	3.6	3.4
Apr-2021	*ND*	*ND*	0.044	*0.00022 J*	*ND*	9.7	9.8	0.011	0.0084	0.018	0.42	*ND*	*ND*	2.5	2.6
Oct-2021	*0.000091 J*	*ND*	0.044	*ND*	*ND*	10	9.5	0.006	0.0089	0.0053	0.14	*0.04 JB*	*0.000033 J*	2.9	2.9
May-2022	*ND*	*0.00049 J*	0.042	*ND*	*ND*	14.8	14.9	0.012	0.01	0.0058	0.54	0.079	*ND*	3.7	3.7
Oct-2022	*ND*	*0.0019 J*	0.046	*ND*	*ND*	19.4	20.7	0.021	0.02	0.01	2.7	*ND*	*0.0004 J*	4.1	4.5
May-2023	*ND*	*0.00089 J*	0.039	*ND*	*ND*	17	16.7	0.017	0.021	0.0033	0.71	*0.036 J*	*ND*	3.8	3.6
Oct-2023	*ND*	*ND*	0.043	*ND*	*ND*	23.7	25.2	0.0077	0.011	0.0043	1.4	*ND*	*ND*	4.7	5

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-22B*												
Nov-1993	0.13	NA	ND	NA	2.5	NA	ND	NA	18.2	NA	NA	NA	ND
Apr-1994	0.66	NA	ND	NA	17.95	NA	ND	NA	375	NA	NA	NA	0.03
Apr-1995	0.27	NA	ND	ND	10.1	NA	ND	ND	75.2	NA	ND	ND	0.04
Oct-1996	0.077	0.068	NA	ND	ND	ND	ND	ND	5.1	5	ND	ND	0.19
Apr-1997	0.064	0.047	**0.0031**	ND	3.2	2.5	ND	ND	3.1	3.2	ND	ND	0.027
Oct-1997	0.065	0.064	NA	ND	2.49	2.42	ND	ND	2.76	2.84	ND	ND	ND
Apr-1998	0.147	0.145	NA	ND	7.13	6.77	ND	ND	20.2	19.9	ND	ND	ND
Apr-1999	0.231	0.218	NA	ND	6.9	6.16	ND	ND	48.2	46	ND	ND	ND
Oct-1999	0.29	0.267	NA	ND	11.9	11.2	ND	ND	52.8	49.1	ND	ND	ND
Apr-2000	0.144	0.132	NA	ND	6.73	6.12	ND	ND	17.9	16.2	ND	ND	0.015
Oct-2000	0.208	0.202	NA	ND	5.69	5.34	ND	ND	30.9	30.1	ND	ND	ND
Apr-2001	0.481	NA	NA	ND	12.5	NA	ND	ND	199	NA	ND	ND	0.029
Sep-2001	0.202	0.206	NA	ND	9.37	8.75	ND	ND	58.1	54.3	ND	ND	ND
Mar-2002	0.178	0.181	NA	ND	8.72	9.26	ND	ND	39.6	39.6	ND	ND	ND
Sep-2002	0.098	0.094	NA	ND	3.93	5.05	ND	ND	30.9	30.8	ND	ND	ND
Mar-2003	0.072	0.067	NA	ND	4.66	3.82	ND	ND	26.9	24.9	ND	ND	0.013
Oct-2003	0.12	0.123	NA	ND	2.92	3.27	ND	ND	20.9	18.9	ND	ND	0.022
Apr-2004	0.129	0.126	ND	ND	3.66	2.91	ND	ND	16.2	15.9	ND	ND	0.019
Oct-2004	0.115	0.109	ND	ND	2.69	2.43	ND	ND	6.47	5.89	ND	ND	0.013
Apr-2005	0.072	0.065	ND	ND	1.9	1.77	ND	ND	3.32	3.52	ND	ND	ND
Oct-2005	0.06	0.054	ND	0.029	1.62	1.33	ND	ND	3.34	2.43	ND	ND	0.014
Mar-2006	0.012	0.01	ND	ND	0.981	0.85	ND	ND	2.34	2.23	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22B***												
Sep-2006	0.051	0.055	ND	ND	1.56	1.75	ND	ND	8.01	8.42	ND	ND	ND
Mar-2007	0.075	0.071	ND	0.016	2.84	2.7	ND	ND	13.9	13.4	ND	ND	0.015
Sep-2007	0.085	0.079	ND	0.021	2.16	1.95	ND	ND	3.58	3.55	ND	ND	0.016
Mar-2008	0.067	0.067	ND	ND	2.29	2.09	ND	ND	8.64	8.12	ND	ND	0.015
Sep-2008	0.081	0.078	ND	0.016	2.48	2.43	ND	ND	11.5	11.1	ND	ND	0.018
Mar-2009	0.105	0.102	ND	ND	3.41	3.39	ND	ND	12.9	12.8	ND	ND	0.012
Oct-2009	0.112	0.108	ND	ND	3.32	3.24	ND	ND	12.3	11.7	ND	ND	ND
Apr-2010	0.137	0.134	ND	0.017	3.16	3.05	ND	ND	6.23	6.02	ND	ND	0.014
Oct-2010	0.088	0.087	ND	0.014	2.04	2.16	ND	ND	4.27	4.55	ND	ND	0.016
Apr-2011	0.106	0.104	ND	0.018	2.26	2.16	ND	ND	6.75	6.67	ND	ND	0.013
Sep-2011	0.12	0.117	ND	0.02	2.76	2.54	ND	ND	10.4	10.3	ND	ND	0.015
Mar-2012	0.093	0.09	0.0002	0.014	2.34	2.24	ND	ND	6.23	5.9	ND	ND	0.013
Sep-2012	0.0894	0.0852	0.000076 J	0.0185	2.32	2.19	0.000538 J	ND	6.34	6.97	ND	ND	0.0138
Mar-2013	0.131	0.133	0.000096 J	0.0176	3.12	3.08	ND	0.000087 J	8.97	9.08	ND	ND	0.0275
Oct-2013	0.132	0.136	ND	0.0086 J	3.71	3.69	ND	0.000069 J	9.02	9.25	0.000169 J	0.0026 J	0.0152
Mar-2014	0.127	0.128	ND	0.0095 J	3.88	3.93	ND	0.00019 J	10.6	10.8	0.000166 J	0.0012 J	0.0048 J
Oct-2014	0.0756	0.0787	0.000077 J	0.0141	2.6	2.55	0.000825 J	ND	6.02	6.25	ND	0.003 J	0.0125
Apr-2015	0.113	0.112	0.000027 J	0.0153	3.81	3.79	0.000966 J	ND	8.21	8.08	ND	0.0012 J	0.0194
Nov-2015	0.0686	0.0749	ND	0.0111	2.87	2.92	0.0012 J	ND	5.56	5.95	0.00017 J	0.0039 J	0.0099 J
May-2016	0.0743	0.0756	0.000053 J	0.0089	3.1	2.97	ND	ND	6.96	6.43	ND	0.00071 J	0.0095 J
Oct-2016	0.0725	0.0807	ND	0.007	3.41	3.73	ND	ND	6.19	6.52	ND	0.00093 J	0.0054 J
May-2017	0.0811	0.0733	ND	0.005	4.28	4.09	0.00052 J	ND	6.01	5.56	ND	0.0014	0.0047 JB
Oct-2017	0.0631	0.0706	ND	0.0084	4.09	4.76	0.00052 J	ND	7.57 J-	8.44	ND	ND	0.0045 J
May-2018	0.019	0.042	ND	0.015	0.93 J	3.5 J	0.00088 J	ND	8.6	10.9	ND	0.0022	0.013

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-22B***												
Nov-2018	0.037	0.034	*ND*	0.028	*4 J*	*4 J*	*0.00091 J*	*ND*	7.4	7.6	*ND*	0.0034	*0.0049 J*
May-2019	0.029	0.033	*ND*	0.0093	*ND*	*ND*	*ND*	*ND*	8	7.7	*ND*	0.0043	*ND*
Oct-2019	0.026	0.028	*ND*	0.0096	*2.5 J*	*2.2 J*	*0.00069 J*	*0.00045 J*	*4.8 J*	*4 J*	0.00051	0.0023	0.016
May-2020	0.046	0.044	*ND*	0.0097	*2.8 J*	*3.2 J*	*0.00062 J*	*ND*	7.5	6.4	*ND*	0.01	*0.0038 J*
Oct-2020	0.037	0.037	*ND*	0.013	*3.7 J*	*3.3 J*	*ND*	*ND*	12.8	11.5	*ND*	*0.0017 J*	*ND*
Apr-2021	0.021	0.022	*ND*	*0.0097 J*	2.2	2.2	*ND*	*ND*	6.8	7.6	*ND*	*0.00063 J*	*0.0037 J*
Oct-2021	0.037	0.042	*0.00003 J*	0.0064	3.2	3	*ND*	*ND*	7.6	9.3	*0.000089 J*	*ND*	*0.0022 J*
May-2022	0.026	0.026	*ND*	0.012	3.5	3.4	*ND*	*ND*	6.4	6.6	*0.00011 J*	*0.0013 J*	*ND*
Oct-2022	0.021	0.031	*ND*	0.0095	4.2	4.5	*0.0015 J*	*ND*	6.8	7.6	*ND*	0.004	*ND*
May-2023	0.014	0.014	*ND*	0.01	4.1	4	*0.0011 J*	*ND*	8.7	8.8	*ND*	*0.0013 J*	*ND*
Oct-2023	0.012	0.013	*ND*	0.0042	4.4	4.8	*ND*	*ND*	8.3	8.8	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-22B***																
Nov-1993	ND	ND	ND	ND	75	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	72	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	47	ND
Oct-1996	ND	ND	ND	ND	97	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND
Apr-1997	ND	ND	9	ND	66	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	39	ND	ND	ND	ND	ND	ND	ND	1.1 J	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	80	ND	ND	ND	ND	ND	ND	1.8 J	1.9 J	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	24	ND	NA	NA	NA	NA	ND	ND	1	ND	NA	NA	7.3	NA
Oct-1999	ND	ND	ND	ND	21	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	6.7	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	20	ND	ND	ND	ND	ND	ND	0.7 J	1.7	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	16	ND	ND	ND	ND	ND	ND	0.5 J	0.8 J	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	15	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	7.1	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	8.4	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22B*																
Feb-2006	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2006	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	ND	NA	0.8 J	NA	NA	NA	ND	NA
Dec-2006	NA	ND	NA	NA	3.1	NA	NA	NA	NA	NA	ND	NA	ND	NA	NA	NA	ND	NA
Mar-2007	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.62 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.86 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	0.42 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.11 J	ND
Apr-2015	ND	ND	ND	ND	0.34 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-22B*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.9 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.152 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-22B*															
Nov-1993	**19**	ND	ND	ND	ND	ND	ND	ND	7.7	ND	ND	28	ND	ND	ND	9.9	70
Apr-1994	**43**	ND	ND	ND	ND	ND	ND	ND	10	ND	ND	18	ND	ND	ND	5.9	47
Oct-1996	**49**	ND	ND	ND	ND	ND	ND	ND	3.4	ND	ND	18	ND	ND	ND	8	58
Apr-1997	**21**	ND	ND	ND	ND	ND	ND	ND	5	ND	ND	13	ND	ND	ND	39	33
Oct-1997	**12**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10	ND	ND	ND	4.9	56
Apr-1998	**45**	ND	ND	ND	ND	ND	ND	ND	4.1	ND	ND	16	ND	ND	ND	10	35
Apr-1999	**9.2**	NA	NA	NA	NA	ND	NA	0.5 J	ND	ND	NA	5	NA	NA	NA	3.3	17
Oct-1999	**5.5**	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	4.8	ND	ND	ND	2.6	15
Apr-2000	1.8	NA	NA	ND	NA	ND	NA	ND	0.5 J	ND	NA	1.2	NA	ND	NA	1.5	4.6
Oct-2000	4.2	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	2.4	ND	ND	ND	7	9.2
Apr-2001	**15**	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	2.7	ND	ND	ND	2.3	8
Sep-2001	**7.2**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	2.5	5.8
Mar-2002	**7.3**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	3.6	5.8
Sep-2002	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	1.5	2.7
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.6 J
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	1.6	2.1
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	1.1	1.4
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.6 J
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22B***															
Feb-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.2
Dec-2006	ND	NA	NA	ND	NA	NA	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND
Dec-2006	ND	NA	NA	ND	NA	NA	NA	ND	NA	ND	NA	ND	NA	ND	NA	1.3	1.4
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.9 J
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.9 J
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.6 J
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.32 J	0.27 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-22B***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.129 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22B***															
Nov-1993	ND	ND	7.2	ND	**6.3**	ND	ND	**18**	ND	ND	ND	ND	**16**	ND	ND	**4.2**	NA
Apr-1994	13	ND	ND	ND	3.4	ND	ND	4.5	ND	ND	ND	ND	**6.6**	ND	ND	**3**	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	**16**	ND	1.7	ND	ND	**12**	ND	ND	**4**	2.1
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	2	ND	ND	ND	9	ND	**6**	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	**7.8**	ND	ND	ND	ND	**7.7**	ND	ND	1.9 J	NA
Apr-1998	ND	ND	1.5	NA	ND	ND	ND	**6.7**	ND	1.9 J	ND	ND	**7.3**	ND	ND	**2.9**	NA
Apr-1999	0.6 J	NA	ND	NA	ND	ND	NA	1.3	ND	0.8 J	NA	NA	1.6	ND	NA	1.6	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	1.3	ND	0.7 J	ND	ND	1.9	ND	ND	1.4	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	1.4	ND	ND	NA	NA	1	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	1.2	ND	ND	ND	ND	2.4	ND	ND	1.1	NA
Apr-2001	1.1	ND	0.5 J	NA	ND	ND	ND	0.5 J	ND	0.5 J	ND	ND	2.3	ND	ND	0.8 J	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	0.5 J	ND	ND	ND	ND	1.9	ND	ND	0.6 J	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	0.8 J	ND	ND	ND	ND	1.7	ND	ND	0.7 J	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	1.1	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22B***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	34.7	ND	ND	ND	ND	ND	ND	ND	NA
Feb-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Dec-2006	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Dec-2006	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	0.6 J	ND	NA	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-22B***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.9 BCH	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.438 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

HISTORICAL TABLES –
On-site Non-regulated Wells

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-02***											
Nov-1993	ND	ND	ND	ND	2.5	ND	ND	4.9	14.8	ND	18	1.36
Apr-1994	13	13	ND	ND	2.2	0.9	ND	4.68	16.9	ND	19	ND
Apr-1995	ND	ND	ND	ND	2.3	ND	ND	4.9	17.2	1.9	12	1.3
Apr-1997	ND	2	ND	24	2	0.02	ND	NA	NA	ND	82	4
Apr-1998	5	5	0.24	ND	1.69	ND	ND	6.56	51.6	ND	ND	1.8
Apr-1999	ND	ND	0.14	ND	2.64	ND	ND	4.99	17.57	ND	18	1.8
Apr-2001	ND	NA	ND	ND	33.5	ND	ND	NA	NA	ND	ND	2.3
Mar-2002	ND	ND	ND	16	3.79	ND	ND	6.1	34.8	1.62	22	1.91
Mar-2003	1.9	1.9	ND	ND	12.8	ND	ND	5.3	16	ND	42	1.36
Apr-2004	2	2	ND	ND	2.1	ND	ND	5.5	13.3	ND	ND	2.19
Apr-2005	2.2	2.2	ND	ND	2.18	ND	ND	5.9	22.9	ND	45	3.12
Mar-2006	4.3	4.3	ND	ND	2.45	ND	ND	5.3	14.4	ND	29	2.01
Mar-2007	3.4	3.4	ND	ND	2.83	ND	ND	5	12.9	ND	26	1.69
Mar-2008	2.8	2.8	ND	ND	2.63	ND	ND	4.6	16	ND	14	2.6
Mar-2009	3.5	3.5	ND	ND	2.65	ND	ND	4.8	15.2	ND	29	2.4
Apr-2010	4.3	4.3	ND	ND	2.28	ND	ND	4.5	14.5	ND	18	1.6
Apr-2011	4.2	4.2	ND	ND	2.4	ND	ND	4.8	12.4	ND	ND	2.25
Mar-2012	3.3	3.3	ND	ND	2.46	ND	ND	4.1	12.1	ND	ND	2.38
Sep-2012	3.52	3.52	ND	ND	2.73	ND	ND	5.4	14.6	ND	35	2.73
Mar-2013	3.76	3.76	0.0847 J	ND	2.95	0.0243 J	ND	6	15.7	0.72 J	ND	2.84
Oct-2013	4.84	4.84	ND	ND	2.9	0.0353 J	ND	5.8	15.4	0.577 J	ND	2.28
Mar-2014	4.68	4.68	ND	ND	3.04	ND	ND	5.8	21.3	0.56 J	ND	2.33
Oct-2014	ND	ND	ND	ND	3.15	ND	ND	5	17.4	ND	ND	2.32
Apr-2015	7.8	7.8	ND	5 J	2.76	ND	ND	5	25.1	ND	ND	2.26
Nov-2015	2.76	2.76	ND	ND	2.54	ND	ND	5.8	28.6	ND	29	2.54
May-2016	4.8	4.8	ND	198	3.03 B	ND	ND	5.3	24.3	ND	93	3.5
Oct-2016	3.36	3.36	ND	8 J	3.2	NA	NA	5.4	27.1	1.03	37	3
May-2017	4.64	4.64	ND	ND	3.38	ND	ND	5.3	28.9	0.703 J	14 J	3.7
Oct-2017	22.6	22.6	ND	13	2.97	ND	ND	5.6	31.7	ND	30	3.2
May-2018	6 JB	ND	ND	5.8 J	3.7	0.063 J	ND	4.9	39.1	ND	ND	4.7
Nov-2018	18	18	0.099 J	ND	3.9	0.093 J	ND	6.05	42.6	ND	14	4.9
May-2019	ND	NA	ND	ND	ND	0.22	ND	5.72	26.5	ND	63	ND
Oct-2019	10 H1	NA	ND	ND	3.6	0.18	ND	5.79	51.7	ND	40	4.1
May-2020	14	NA	ND	6.9 J	4.6	ND	0.01	5.8	62.2	ND	11	4.1
Oct-2020	12	NA	ND	7 J	3.3	ND	ND	5.92	50.8	ND	46	3.3
Apr-2021	12	NA	ND	ND	3.5	0.065 J	ND	6.41	60.8	ND	16	2.8 J
Oct-2021	8 J3c	NA	ND	ND	2.8 J	ND	ND	6.21	75.4	ND	ND	3.17 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-02***										
May-2022	12	*NA*	*ND*	*ND*	*2.7 J*	*ND*	*ND*	6.23	71.1	*ND*	*ND*	*2.2 JN3*
Oct-2022	24	*NA*	*ND*	*6.1 J*	3.3	*0.056 J*	*ND*	6.36	79.8	*ND*	15	*2.8 JN3*
May-2023	15	*NA*	*ND*	34.2	3.3	*ND*	*ND*	6.44	89.2	*ND*	30	*3 JN3*
Oct-2023	22	*NA*	*ND*	*ND*	3.1	*ND*	*NA*	6.45	82.9	*ND*	26	*3.3 JN3*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-02***													
Nov-1993	NA	ND	ND	NA	ND	0.15	NA	ND	NA	ND	0.55	0.25	ND	0.24	NA
Apr-1994	NA	ND	ND	NA	ND	ND	NA	ND	NA	ND	0.11	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	0.14	NA	ND	ND	ND	0.62	1.8	ND	0.24	NA
Apr-1997	ND	ND	0.015	ND	ND	0.7	0.54	ND	ND	ND	0.26	0.24	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	0.296	0.317	ND	ND	ND	5.76	2.06	ND	0.266	0.266
Apr-1999	ND	ND	ND	ND	ND	0.263	0.285	ND	ND	ND	9.7	0.976	ND	0.268	0.276
Apr-2001	ND	ND	0.011	ND	ND	0.407	NA	0.019	ND	0.055	11.2	NA	0.002	0.311	NA
Mar-2002	ND	ND	0.011	ND	ND	0.455	0.17	ND	ND	0.015	20.2	1.69	ND	0.309	0.266
Mar-2003	ND	ND	ND	ND	ND	0.175	0.15	ND	ND	ND	0.609	0.421	ND	0.225	0.19
Apr-2004	ND	ND	ND	ND	ND	0.402	0.158	ND	ND	ND	3.89	0.572	ND	0.289	0.195
Apr-2005	ND	ND	0.011	ND	ND	0.695	0.247	ND	ND	ND	5.82	0.502	0.002	0.335	0.278
Mar-2006	ND	0.002	0.012	ND	ND	0.259	0.14	0.01	ND	0.013	18.5	ND	0.003	0.332	0.269
Mar-2007	ND	ND	0.013	ND	ND	0.165	0.158	ND	ND	0.02	3.08	0.175	ND	0.311	0.293
Mar-2008	ND	0.004	0.011	ND	ND	0.377	0.224	ND	ND	ND	2.93	0.165	ND	0.403	0.31
Mar-2009	ND	ND	ND	ND	ND	0.367	0.256	ND	ND	ND	4.14	0.325	ND	0.36	0.273
Apr-2010	ND	ND	ND	ND	ND	0.12	ND	ND	ND	ND	23.9	0.187	ND	0.32	0.213
Apr-2011	ND	ND	ND	ND	ND	0.257	0.227	ND	ND	ND	19.9	0.145	ND	0.391	0.264
Mar-2012	ND	ND	ND	ND	ND	0.226	0.223	ND	ND	ND	14.3	0.236	ND	0.441	0.411
Sep-2012	ND	ND	0.009 J	ND	ND	0.35	0.33	0.0016 J	0.000481 J	0.0028 J	5.6	0.278	0.000853 J	0.45	0.453
Mar-2013	ND	ND	0.0093 J	ND	ND	0.418	0.281	0.0017 J	0.000427 J	0.0031 J	5.84	0.18	ND	0.436	0.314
Oct-2013	ND	ND	0.0093	ND	ND	0.265	0.27	ND	0.000352 J	ND	1.11	0.371	ND	0.393	0.412

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-02***													
Mar-2014	0.000324 J	ND	0.0081 J	ND	ND	0.222	0.188	0.000473 J	0.000339 J	0.000538 J	1.18	0.422	ND	0.431	0.347
Oct-2014	0.000908 J	0.000509 J	0.0099 J	ND	ND	0.287	0.257	0.0024 J	0.000575 J	0.0077 J	11.2	0.255	ND	0.39	0.321
Apr-2015	0.000544 J	ND	0.0105	ND	ND	0.275	0.247	0.0022 J	0.000408 J	0.0024 J	8.26	0.743	ND	0.382	0.337
Nov-2015	0.000654 J	0.000454 J	0.0108	ND	ND	0.321	0.35	0.0048 J	0.000604 J	0.0047 J	11.9	0.395	0.000883 J	0.423	0.34
May-2016	0.0004 J	0.0017 J	0.0114	ND	ND	0.588	0.584	0.0046	0.003	0.0203	11.6	3.49	0.00099 J	0.49	0.498
Oct-2016	0.00058 J	0.0023 J	0.0095	ND	ND	0.382 J	0.368 J	0.008 J+	0.0029	0.035 J+	19.7	1.73	0.00036 J	0.498 J+	0.475
May-2017	ND	0.002 J	0.0088	ND	ND	0.546	0.42	0.0105	0.0025	0.0459	15	10.4	0.0006 J	0.568	0.555
Oct-2017	0.00059 J	0.0035 J	0.007	ND	ND	0.433	0.418	0.0161	0.0035	0.0677	19.8	12.2	0.00068 J	0.504	0.466
May-2018	0.00011 J	ND	0.014	0.000038 J	0.00005 J	0.51 J	0.52 J	0.0016 JB	0.00054	0.003	1.2	1.2	0.000091 JB	0.83 J	0.85 J
Nov-2018	ND	ND	0.011	ND	ND	0.52 J	0.49 J	0.0041 J	0.00049 J	0.00078 J	8.8	7.8	0.00016 J	0.87 J	0.82 J
May-2019	ND	ND	0.011	ND	ND	ND	ND	ND	0.00052	ND	4.4	3.9	ND	ND	ND
Oct-2019	0.000089 JB	ND	0.012	ND	0.00018 JB	0.41	0.41 J	0.0029 J	0.00056	0.0035	9.7	8.3	0.00014 JB	0.75	0.77 J
May-2020	0.000067 J	ND	0.01	ND	ND	0.51	0.51 J	0.0032 J	0.00064	0.002 J	16.2	13.9	ND	0.7	0.69 J
Oct-2020	0.00039 J	ND	0.011	ND	ND	0.36	0.31 J	0.01 JB	0.00064 J	ND	12.2	9.9	ND	0.59	0.53 J
Apr-2021	ND	ND	0.0085 J	ND	ND	0.26 J	0.27 J	0.0017 J	0.00062 J	ND	11.2	10.2	ND	0.53	0.53
Oct-2021	0.000084 JB	ND	0.0089	ND	ND	0.32 J	0.37 J	0.0027	0.00051 J	ND	8.2	7.3	ND	0.58	0.57
May-2022	ND	0.0014 JB	0.0085	ND	ND	0.29 J	0.43 J	0.0025 J	0.00049 J	ND	7.8	10.2	ND	0.35 J	0.48 J
Oct-2022	ND	ND	0.0083	ND	ND	0.33 J	0.32 J	0.0011 J	ND	ND	13.3	13.2	ND	0.48 J	0.48 J
May-2023	ND	ND	0.0082	ND	ND	0.36 J	0.39 J	0.00076 J	ND	ND	12.4	10.6	ND	0.52	0.5 J
Oct-2023	ND	ND	0.0082	ND	ND	ND	0.42 J	0.002 J	ND	ND	16.2 M1	14.7	ND	0.56	0.56

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-02*												
Nov-1993	0.06	NA	ND	NA	0.62	NA	ND	NA	1.3	NA	NA	NA	ND
Apr-1994	0.007	NA	ND	NA	0.8	NA	ND	NA	1.6	NA	NA	NA	ND
Apr-1995	ND	NA	ND	ND	0.73	NA	ND	ND	1.2	NA	ND	ND	0.01
Apr-1997	ND	0.012	ND	ND	2.1	1.8	ND	ND	1.1	1.9	ND	ND	0.039
Apr-1998	0.066	0.083	NA	ND	1.2	0.689	ND	ND	1.21	1.27	ND	ND	0.012
Apr-1999	0.036	0.037	NA	ND	ND	ND	ND	ND	1.19	1.21	ND	ND	ND
Apr-2001	0.039	NA	NA	0.026	1.57	NA	ND	ND	2.73	NA	ND	ND	0.031
Mar-2002	0.059	0.036	NA	ND	0.702	0.507	ND	ND	1.8	1.22	ND	ND	0.026
Mar-2003	0.015	0.017	NA	ND	1.09	ND	ND	ND	1.28	1.27	ND	ND	0.106
Apr-2004	0.044	0.024	ND	ND	0.983	ND	ND	ND	1.74	1.19	ND	ND	0.042
Apr-2005	0.028	0.013	ND	ND	0.8	0.72	ND	ND	1.52	1.29	ND	ND	0.064
Mar-2006	ND	ND	ND	ND	0.687	0.509	ND	ND	1.42	0.923	ND	ND	ND
Mar-2007	0.016	ND	ND	ND	ND	ND	ND	ND	1.13	1.06	ND	ND	0.019
Mar-2008	0.015	0.011	ND	ND	0.808	0.673	ND	ND	1.38	1.23	ND	ND	0.025
Mar-2009	0.017	ND	ND	ND	0.552	0.599	ND	ND	1.41	1.61	ND	ND	0.019
Apr-2010	0.021	ND	ND	ND	0.706	0.627	ND	ND	1.23	1.29	ND	ND	0.02
Apr-2011	0.018	ND	ND	ND	0.706	0.653	ND	ND	1.33	1.38	ND	ND	0.019
Mar-2012	0.018	ND	ND	ND	0.564	0.581	ND	ND	1.26	1.26	ND	ND	0.017
Sep-2012	0.0103	0.0076 J	ND	0.0016 J	0.656	0.635	ND	ND	1.33	1.3	0.000582 J	ND	0.0142
Mar-2013	0.0082 J	0.0054 J	0.000085 J	0.0014 J	0.66	0.591	ND	ND	1.33	1.25	ND	ND	0.0303
Oct-2013	0.0158	0.0143	ND	0.0014 J	0.616	0.619	ND	ND	1.38	1.44	0.000112 J	0.000996 J	0.0216
Mar-2014	0.0154	0.0099 J	ND	0.00098 J	0.652	0.703	ND	ND	1.38	1.46	ND	ND	0.0151

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-02***												
Oct-2014	0.0176	0.0112	*0.00005 J*	*0.0028 J*	0.691	0.717	*0.0013 J*	*ND*	1.41	1.48	*ND*	*ND*	0.0234
Apr-2015	0.0283	0.0204	*ND*	*0.0017 J*	0.76	0.721	*0.00072 J*	*ND*	1.42	1.46	*ND*	*0.000969 J*	0.0236
Nov-2015	0.0355	0.0112	*ND*	*0.004 J*	0.792	0.736	*0.000487 J*	*ND*	1.5	1.72	*ND*	*0.0011 J*	0.0201
May-2016	0.0867	0.0433	*ND*	0.0273	0.827	0.766	*ND*	*ND*	1.5	1.41	*ND*	0.001	0.13
Oct-2016	0.0331 R	0.0178	*ND*	*0.031 J+*	0.745	0.73	*ND*	*ND*	*1.63 J+*	1.59	*ND*	*0.00022 J*	*0.0191 J*
May-2017	0.109	0.0891	*ND*	0.029	0.755	0.763	*ND*	*ND*	1.38	1.63	*ND*	*ND*	*0.0162 J*
Oct-2017	0.14	0.117	*ND*	0.0432	0.739	0.685	*ND*	*ND*	1.32	1.27	*ND*	*ND*	*0.0241 J*
May-2018	0.016	0.017	*ND*	0.0023	*ND*	*ND*	*0.00046 J*	*ND*	*1.8 J*	*1.7 JB*	*ND*	0.0021	0.013
Nov-2018	0.15	0.18	*ND*	0.0043	*1.2 J*	*ND*	*0.00014 J*	*ND*	*1.8 J*	*1.8 J*	*ND*	*ND*	*0.0033 J*
May-2019	0.093	0.083	*ND*	0.0047	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	0.15	0.14	*ND*	0.0027	*ND*	*1.1 J*	*ND*	*ND*	*1.8 J*	*2.2 J*	*ND*	*ND*	0.0091 B
May-2020	0.19	0.19	*ND*	0.0031	*ND*	*ND*	*ND*	*ND*	*2.2 J*	*2.2 J*	*ND*	*0.00027 J*	*0.0047 J*
Oct-2020	0.17	0.15	*ND*	0.0032	*ND*	*ND*	*ND*	*ND*	*2.2 J*	*1.7 J*	*ND*	*0.0029 JB*	*ND*
Apr-2021	0.15	0.15	*ND*	*0.0019 J*	0.63	0.63	*ND*	*ND*	2.1	2	*ND*	*ND*	*ND*
Oct-2021	0.12	0.11	*ND*	*0.0023 J*	0.66	0.65	*ND*	*ND*	2	2	*0.000024 J*	*ND*	*ND*
May-2022	0.13	0.16	*ND*	*0.0021 J*	*0.45 J*	0.6	*ND*	*ND*	1.3	1.9	*ND*	*ND*	*ND*
Oct-2022	0.18	0.18	*ND*	*0.001 J*	0.63	0.65	*ND*	*ND*	1.7	1.6	*ND*	*ND*	*ND*
May-2023	0.17	0.15	*ND*	*0.00093 J*	0.6	*0.5 J*	*ND*	*ND*	1.9	1.4	*ND*	*ND*	*ND*
Oct-2023	0.2	0.19	*ND*	*0.0017 J*	0.57	0.58	*ND*	*ND*	1.5	1.5	*ND*	*ND*	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-02*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.21 J	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.99 J,B	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-02*																
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.24 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.6 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.7 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-02***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.76 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.68 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-02***															
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.89 J*	*0.41 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.35 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.28 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.164 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-02***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-02***															
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	1 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-03A***											
Nov-1993	ND	ND	0.5	ND	21.6	ND	ND	5.15	88.3	4.2	64	2.75
Apr-1994	ND	18	0.1	31.9	5.5	ND	ND	5.12	28.7	1.1	22	ND
Apr-1995	5.2	5.2	ND	ND	13.8	ND	ND	6	49.3	3.5	ND	2.8
Apr-1997	ND	5	ND	ND	38	0.07	ND	NA	NA	ND	91	12
Apr-1998	4	4	0.22	ND	14	0.15	ND	6.85	52.7	ND	43	2.5
Apr-1999	ND	ND	0.16	ND	8.58	0.13	ND	4.97	44.1	ND	44	3
Apr-2000	1	1	0.76	ND	190	0.28	ND	5.1	298	4.99	379	37
Apr-2001	ND	NA	ND	ND	22.8	ND	ND	NA	NA	4.16	42	6.97
Mar-2002	1.2	1.2	0.34	ND	219	ND	ND	5	711	9.53	353	31.8
Mar-2003	ND	ND	ND	ND	189	ND	ND	4.9	970	13.2	191	40.7
Apr-2004	3	3	ND	ND	32.7	0.07	ND	5.7	120.2	2.07	67	8.7
Apr-2005	2.3	2.3	ND	16	35.6	0.08	ND	5.1	114.5	3.25	88	5.45
Mar-2006	3.8	3.8	ND	ND	17.2	0.1	ND	5.1	74.3	3.54	ND	3.72
Mar-2007	1.1	1.1	ND	ND	233	0.17	ND	5.1	845	8.42	373	34.3
Mar-2008	4.8	4.8	ND	ND	12.8	0.09	ND	5.2	64.7	2.96	29	3.84
Mar-2009	17	17	0.23	ND	20.1	ND	ND	5.1	90.7	3.22	53	4.42
Apr-2010	11.4	11.4	ND	ND	45.5	ND	ND	4.8	188.5	1.11	91	10.3
Apr-2011	8.3	8.3	ND	ND	19.6	ND	ND	4.7	60	1.58	55	3.69
Mar-2012	8.3	8.3	ND	ND	42	ND	ND	4.8	134.7	2.09	78	9.69
Sep-2012	11.1	11.1	ND	ND	30.3	ND	ND	5.9	111.2	3.08	93	6.68
Mar-2013	4.72	4.72	0.0887 J	ND	7.13	0.0421 J	ND	5.7	38.9	2.13	ND	3.36
Oct-2013	17.1	17.1	ND	10.1	45.6	0.0428 J	ND	5.5	159.8	6.59	96	8.13
Mar-2014	6.32	6.32	ND	ND	56.8	0.0633	ND	5.4	166.3	10.5	115	9.28
Oct-2014	26.4	26.4	ND	9 J	51.8	0.0908	ND	5.5	176.8	4.91	104	8.6
Apr-2015	4.68	4.68	0.155 J	ND	6.83	0.0594	ND	4	41.9	3.66	25	3.93
Nov-2015	ND	ND	ND	5 J	62.5	ND	ND	5.7	328	2.14	112	11.5
May-2016	ND	ND	ND	6 J	168	0.0605	ND	5.1	491	2.36	254	19.6
Oct-2016	1.88	1.88	ND	17	155	NA	NA	6.1	524	1.92	254	16.9
May-2017	ND	ND	ND	ND	105	0.103	ND	5.1	487	5.61	185	15.6
Oct-2017	3.72	3.72	ND	ND	207	0.0842	ND	6	663	8.01	257	20.8
May-2018	8 JB	ND	ND	7.9 J	119	ND	ND	NA	NA	9 J	184	18.2
Nov-2018	8 JB	ND	ND	12.2 J	101	ND	0.046	6.7	386.2	ND	161	15.6
May-2019	14	NA	0.31 ML	ND	61.7	ND	0.019	6.14	229.1	ND	121	6.5
Oct-2019	4 JH1	NA	ND	8.2 J	45.8	0.064 J	0.012	6.1	260.6	ND	100	5.4
May-2020	2 J	NA	ND	11.3 J	39.6	ND	0.027	5.97	197.3	ND	61	4.4
Oct-2020	2 J	NA	ND	9.3 J	48.6	ND	ND	5.98	228.1	ND	113	4.6
Apr-2021	2 J3c	NA	ND	10.5 J	54.6	0.068 J	ND	7	328.6	ND	102	3.8

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-03A***											
Oct-2021	*ND*	*NA*	*ND*	*10.5 J*	40.6	*ND*	*ND*	6.88	309.9	*ND*	64	4.02
May-2022	*8 J3c*	*NA*	*ND*	*12.4 J*	48.3	0.15	*0.008 J*	6.87	322.3	*ND*	82	4.5 N3
Oct-2022	22	*NA*	*ND*	*19.8 J*	171	*0.09 J*	*0.0079 J*	6.77	590.4	*ND*	204	12.2 N3
May-2023	14	*NA*	*ND*	52.4	172	*ND*	*ND*	6.64	749	*ND*	314	21.4 N3
Oct-2023	22	*NA*	*ND*	*15.8 J*	191	*ND*	*NA*	6.79	804	*ND*	349	25.9 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-03A***													
Nov-1993	NA	ND	ND	NA	ND	0.36	NA	ND	NA	ND	3.7	2.4	ND	0.45	NA
Apr-1994	NA	ND	ND	NA	ND	ND	NA	ND	NA	ND	0.32	0.08	ND	7.3	NA
Apr-1995	ND	ND	ND	ND	ND	0.45	NA	ND	ND	ND	0.6	0.56	ND	0.4	NA
Apr-1997	ND	ND	0.057	ND	ND	1.8	1.3	ND	ND	ND	4.5	2.8	ND	1.4	1.2
Apr-1998	ND	ND	0.016	ND	ND	0.46	0.465	ND	ND	ND	7.02	3.87	ND	0.34	0.339
Apr-1999	ND	ND	0.014	ND	ND	0.587	0.591	ND	ND	ND	4.69	1.27	ND	0.361	0.334
Apr-2000	ND	ND	0.195	ND	ND	8.12	7.98	ND	ND	ND	4.54	3	ND	3.96	3.89
Apr-2001	ND	ND	0.039	ND	ND	1.47	NA	ND	ND	ND	8.19	NA	ND	0.802	NA
Mar-2002	ND	ND	0.183	ND	ND	7.3	7.51	ND	ND	ND	3.22	1.4	ND	3.3	3.33
Mar-2003	ND	ND	0.31	ND	ND	8.68	8.46	ND	ND	ND	2.32	1.61	ND	4.61	4.43
Apr-2004	ND	ND	0.038	ND	ND	1.83	1.62	ND	ND	ND	3.39	1.07	ND	1.01	0.924
Apr-2005	ND	ND	0.036	ND	ND	1.02	1.02	ND	ND	ND	5.4	2.96	ND	0.704	0.685
Mar-2006	ND	ND	0.014	ND	ND	0.898	0.683	ND	ND	ND	6.28	0.653	ND	0.36	0.343
Mar-2007	ND	ND	0.176	ND	ND	9.17	8.74	ND	ND	ND	3.13	1.55	ND	2.78	2.62
Mar-2008	ND	ND	0.017	ND	ND	0.878	0.84	ND	ND	ND	2.98	1.72	ND	0.399	0.377
Mar-2009	ND	ND	0.018	ND	ND	1.04	0.964	ND	ND	ND	14.6	7.91	ND	0.443	0.419
Apr-2010	ND	ND	0.031	ND	ND	0.654	1.77	ND	ND	ND	13.7	9.24	ND	1.02	0.971
Apr-2011	ND	ND	0.015	ND	ND	0.812	0.751	ND	ND	ND	15.9	14	ND	0.402	0.377
Mar-2012	ND	ND	0.033	ND	ND	2.13	1.97	ND	ND	ND	11.1	2.3	ND	1.06	0.98
Sep-2012	ND	ND	0.0218	0.000066 J	ND	1.6	1.49	0.0018 J	0.0012 J	0.0019 J	7.83	3.83	ND	0.651	0.6
Mar-2013	ND	ND	0.0133	0.000107 J	ND	0.784	0.638	0.0015 J	0.0011 J	0.0014 J	3.34	1.27	ND	0.34	0.278

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-03A***													
Oct-2013	ND	ND	0.0286	ND	ND	1.95	1.91	0.000793 J	0.0025	0.0014 J	16.3	17.6	0.000568 J	0.791	0.747
Mar-2014	ND	0.001 J	0.0289	ND	0.000177 J	2.63	2.43	0.0051 J	0.0021 J	0.0041 J	14.9	2.44	0.0024	0.658	0.799
Oct-2014	0.000393 J	0.0013 J	0.0271	ND	0.00013 J	2.02	1.97	0.000888 J	0.0014 J	0.0033 J	27.7	14.9	0.0011 J	0.865	0.848
Apr-2015	0.0016 J	0.000766 J	0.0135	ND	0.000106 J	0.858	0.839	0.000666 J	0.0013 J	0.0033 J	5.19	1.13	ND	0.434	0.393
Nov-2015	0.000548 J	0.000437 J	0.0321	ND	0.000323 J	2.79	2.71	0.000539 J	0.0015 J	0.0027 J	28.6	24.5	0.00049 J	1.1	1.06
May-2016	ND	0.00058 J	0.0897	0.00024 J,B	0.00024 J	4.38	4.07	0.00088 J	0.0043	0.0015 J,B	3.55	2.24	0.0011 J	2.1	2.09
Oct-2016	ND	0.0021 J	0.0614	ND	ND	4.02	4.19	0.0027 J+	0.0034	0.0093 J+	55.5	34.8	0.0022	1.68 J+	1.68
May-2017	ND	0.00098 J	0.0824	0.00016 J	ND	3.66	3.71	0.0013 J	0.0061	0.0046	7.74	2.93	0.00075 J	1.57	1.63
Oct-2017	ND	ND	0.0982	0.00014 J	ND	5.44	5.13	0.0046	0.0025	0.00065 J	3.11	2.21	0.00021 J	1.75	1.89
May-2018	0.000066 J	ND	0.079	0.00012 J	0.000094 J	4.5	4.4	0.0026 JB	0.0018	0.0017 J	2.7	2.8	0.00018 J	1.7	1.6
Nov-2018	ND	0.00017 J	0.056	ND	0.000022 J	3.5	3.4	0.0026 J	0.00044 J	0.0019 J	52	48.2	0.00013 J	1.6	1.5
May-2019	ND	ND	0.025	ND	ND	1.4	1.6	ND	ND	ND	54.2	53.4	ND	ND	ND
Oct-2019	0.00011 JB	ND	0.014	ND	0.00025 JB	1.2	1.2	0.002 JB	0.0002 J	0.0016 J	52	47.4	0.000067 JB	0.58	0.59 J
May-2020	0.00025 J	ND	0.011	ND	ND	1	1	0.0027 J	0.0002 J	0.0014 J	29.5	27.6	ND	0.44	0.44 J
Oct-2020	0.00042 J	ND	0.011	ND	ND	1.1	0.97 J	0.0078 JB	ND	ND	36.8	33	ND	0.46	0.4 J
Apr-2021	ND	ND	0.014	ND	ND	0.84 J	0.88 J	0.00071 J	ND	ND	64	62.9	ND	0.42	0.42
Oct-2021	0.00007 JB	ND	0.011	ND	ND	0.94	0.87	0.00094 J	0.00017 J	ND	59.3	52.9	ND	0.41 J	0.38 J
May-2022	ND	0.0023 JB	0.012	ND	ND	1	1.1	0.00097 J	0.00045 J	0.001 J	56.3	59	ND	0.45 J	0.48 J
Oct-2022	0.00033 JB	ND	0.028	ND	ND	3	3.1	0.00089 J	ND	0.00074 J	76.3	77	ND	1.1	1.2
May-2023	ND	0.0012 J	0.054	ND	ND	5.4	5.5	0.0017 J	ND	0.004 J	74.3	62.5 P6	0.00054 J	2	2
Oct-2023	ND	ND	0.083	ND	ND	6.6	6.6	0.0024 J	ND	ND	74.7	65.1	ND	2.3	2.3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-03A*												
Nov-1993	0.12	NA	ND	NA	1.1	NA	ND	NA	26.1	NA	NA	NA	0.02
Apr-1994	0.038	NA	ND	NA	0.79	NA	ND	NA	4.1	NA	NA	NA	0.009
Apr-1995	0.02	NA	ND	ND	0.99	NA	ND	ND	5.7	NA	ND	ND	0.03
Apr-1997	0.13	0.095	ND	ND	2.8	2.8	ND	ND	26	26	ND	ND	ND
Apr-1998	0.099	0.099	NA	ND	0.643	1.57	ND	ND	6.95	7.43	ND	ND	0.01
Apr-1999	0.064	0.063	NA	ND	ND	1.09	ND	ND	4.03	4.01	ND	ND	ND
Apr-2000	0.195	0.201	NA	ND	2	2.15	ND	ND	114	112	ND	ND	0.01
Apr-2001	0.92	NA	NA	ND	1.35	NA	ND	ND	19.2	NA	ND	ND	ND
Mar-2002	0.134	0.131	NA	ND	2.72	2.54	ND	ND	108	103	ND	ND	0.015
Mar-2003	0.192	0.184	NA	ND	2.02	1.02	ND	ND	161	154	ND	ND	0.015
Apr-2004	0.061	0.057	ND	ND	1.31	ND	ND	ND	20.8	19.7	ND	ND	0.011
Apr-2005	0.09	0.084	ND	ND	1.19	1.19	ND	ND	21	20.2	ND	ND	ND
Mar-2006	0.01	ND	ND	ND	0.552	0.565	ND	ND	9.06	8.7	ND	ND	ND
Mar-2007	0.103	0.099	ND	ND	1.27	1.18	ND	ND	100	107	ND	ND	0.032
Mar-2008	0.046	0.037	ND	ND	0.776	0.728	ND	ND	8.12	7.66	ND	ND	ND
Mar-2009	0.125	0.104	ND	0.015	0.649	0.69	ND	ND	10.9	11.4	ND	ND	0.012
Apr-2010	0.736	0.233	ND	ND	1.35	1.16	ND	ND	26.4	37.7	ND	ND	ND
Apr-2011	0.184	0.157	ND	ND	0.895	0.887	ND	ND	12.6	12.4	ND	ND	0.013
Mar-2012	0.178	0.076	ND	ND	1.06	0.933	ND	ND	26.7	25.3	ND	ND	ND
Sep-2012	0.0886	0.0681	ND	0.0027 J	0.789	0.738	ND	ND	20	18.9	ND	ND	0.0048 J
Mar-2013	0.0367	0.0268	0.000069 J	0.0071 J	0.674	0.541	ND	ND	4.59	3.96	ND	ND	0.0143
Oct-2013	0.162	0.164	ND	0.0124	0.886	0.806	ND	ND	31.9	34.2	ND	0.0011 J	0.0143

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-03A***												
Mar-2014	0.0648	0.0499	ND	0.0078 J	1.07	0.939	ND	ND	38.7	38.3	ND	0.0122	0.0105
Oct-2014	0.24	0.193	ND	0.0045 J	1.17	1.14	0.0018 J	ND	32.8	32.5	ND	ND	0.0107
Apr-2015	0.0551	0.0339	ND	0.007 J	0.763	0.771	ND	ND	5.44	5.33	ND	ND	0.0076 J
Nov-2015	0.359	0.312	ND	0.0048 J	1.06	1.07	ND	ND	35.6	35.5	ND	ND	0.0084 J
May-2016	0.124	0.103	ND	0.0109	1.52	1.36	ND	ND	71.1	67.1	ND	0.00041 J	0.0163 J
Oct-2016	0.382 R	0.304	ND	0.0199 J+	1.22	1.23	ND	ND	68.1	62.4	ND	0.00053 J	0.0124 J
May-2017	0.111	0.0807	ND	0.0373	1.21	1.23	ND	ND	57.9	58.4	ND	ND	0.0075 J
Oct-2017	0.102	0.093	ND	0.0057 B	1.26	1.38	ND	ND	72.9	82	ND	ND	ND
May-2018	0.079	0.081	ND	0.0034	ND	0.95 J	0.00098 J	ND	81.7	74.2	0.00018 J	0.002	0.0073
Nov-2018	0.76	0.75	ND	0.0025	ND	ND	0.00012 J	ND	47.2	47.9	ND	ND	0.0032 J
May-2019	0.64	0.61	ND	0.00082	ND	ND	ND	ND	21	22.2	ND	ND	ND
Oct-2019	0.49	0.48	ND	0.00068	ND	ND	ND	ND	19.4	19.6	ND	ND	0.0088 B
May-2020	0.36	0.34	ND	0.0012	ND	ND	ND	ND	19.5	19.6	ND	ND	0.0044 J
Oct-2020	0.39	0.35	ND	ND	ND	ND	ND	ND	23	19	ND	0.0039 JB	ND
Apr-2021	0.45	0.46	ND	ND	0.54	0.57	ND	ND	16	16.8	ND	ND	ND
Oct-2021	0.51	0.47	ND	0.00071 J	0.57	0.53	ND	ND	15.4	14.7	ND	ND	ND
May-2022	0.53	0.55	ND	0.0025 J	0.68	0.65	ND	ND	21.6	24	ND	ND	ND
Oct-2022	0.66	0.67	ND	0.0009 J	1.1	1.2	ND	ND	58.7	61.7	ND	ND	0.0042 J
May-2023	0.75	0.68	ND	0.011	1.4	1.5	ND	ND	77.8	79.1 P6	ND	ND	ND
Oct-2023	0.71	0.68	ND	0.0081	1.5	1.5	ND	ND	105	105	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-03A*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	18	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	5.8	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.14 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-03A*																
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.03 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.26 J	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-03A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*ND*
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*0.6 J*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.55 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.51 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-03A***															
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.76 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.68 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.36 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.48 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.22 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-03A***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-03A***															
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.278 J*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05B***											
Nov-1993	ND	ND	0.1	ND	1.6	0.2	ND	3.73	44.6	3.8	32	1.54
Apr-1994	ND	ND	ND	ND	1.3	ND	ND	4.95	24.4	2.7	ND	ND
Aug-1994	ND	ND	ND	ND	1.6	0.4	ND	4.9	20.4	4.3	ND	2.61
Sep-1994	ND	ND	ND	ND	1.6	0.3	ND	4.8	19.3	4.8	10	2.8
Nov-1994	ND	ND	ND	ND	1.5	0.2	ND	4.5	19.5	4.3	42	1.7
Apr-1995	ND	ND	ND	ND	1.4	ND	ND	4.7	18.7	4.2	ND	1.3
Apr-1997	ND	ND	ND	ND	ND	0.15	ND	NA	NA	ND	35	3.8
Oct-1997	ND	ND	0.2	ND	1.06	ND	ND	5.58	19.8	1.86	21	ND
Apr-1998	3	3	0.22	ND	1.42	ND	ND	5.71	17.86	3.05	15	3.4
Apr-1999	ND	ND	0.27	ND	2.2	ND	ND	4.52	19.24	1.52	32	1.7
Oct-1999	ND	ND	0.06	ND	1.69	ND	ND	4.79	18.92	1.83	32	1.8
Apr-2000	ND	ND	ND	ND	2.52	0.15	ND	4.99	15	1.13	23	1.8
Oct-2000	ND	NA	ND	ND	1.54	ND	ND	4.57	15.62	5.31	14	2.71
Apr-2001	ND	NA	ND	ND	1.2	ND	ND	NA	NA	ND	10	1.92
Sep-2001	ND	ND	ND	ND	2.62	ND	ND	4.61	20	7.5	26	1.99
Mar-2002	ND	ND	ND	ND	1.34	ND	ND	4.7	18	1.9	ND	1.55
Sep-2002	ND	ND	ND	ND	1.34	ND	ND	4.4	19.8	3.95	27	2.95
Mar-2003	ND	ND	ND	ND	2.17	ND	ND	4.8	18.2	2.69	17	2.53
Oct-2003	ND	ND	ND	ND	1.51	0.142	ND	3.8	19.4	2.74	49	10.5
Apr-2004	ND	ND	ND	ND	1.7	0.12	ND	5	15.2	3.17	ND	3.01
Oct-2004	ND	ND	ND	15	1.61	0.11	ND	4.5	19.9	2.56	31	1.77
Apr-2005	3.2	3.2	ND	ND	2.53	0.09	ND	5.2	18.4	ND	44	3.32
Oct-2005	1.1	1.1	ND	ND	1.83	0.12	ND	4.7	14.7	4.29	33	1.76
Mar-2006	1.4	1.4	ND	ND	1.68	0.13	ND	4	16.1	4.73	ND	0.971
Sep-2006	1.2	1.2	ND	ND	1.78	0.12	ND	4.6	16.2	4.13	18	1.42
Mar-2007	1.8	1.8	ND	ND	1.91	0.14	ND	4.8	15.4	3.74	12	1.61
Sep-2007	ND	ND	0.31	ND	1.68	0.13	ND	4.2	14.6	3.39	28	1.33
Mar-2008	ND	ND	ND	10	1.9	0.12	ND	4.4	15.6	4.55	28	1.51
Sep-2008	1.8	1.8	ND	ND	1.74	0.06	ND	4.7	15	5.72	21	1.7
Mar-2009	1.2	1.2	ND	ND	1.65	0.1	ND	4.7	16.8	6.58	16	1.96
Oct-2009	1.4	1.4	ND	ND	1.58	0.14	ND	3.9	15.5	2.74	19	1.47
Apr-2010	1.5	1.5	ND	ND	1.53	0.12	ND	4.6	17.2	2.94	22	1.2
Oct-2010	ND	ND	ND	ND	1.95	0.08	ND	3.8	15.6	2.67	ND	1.62
Apr-2011	1.1	1.1	ND	ND	1.84	0.13	ND	4.1	16.8	2.11	27	1.54
Sep-2011	1.3	1.3	0.21	ND	1.62	0.1	ND	4.5	15.8	2.25	32	1.44
Mar-2012	1.2	1.2	ND	ND	1.82	0.1	ND	3.8	15.8	3.4	ND	1.72
Sep-2012	1	1	ND	ND	1.84	0.12	ND	3.8	16.4	1.9	22	1.59

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-05B***											
Mar-2013	1.6	1.6	*ND*	*ND*	2.02	0.117	*ND*	4.8	16.6	2.39	12	1.75
Oct-2013	1.72	1.72	*ND*	*ND*	1.88	0.12	*ND*	4.8	16.4	2.52	*ND*	2.23
Mar-2014	1.4	1.4	*ND*	*ND*	1.87	0.115	*ND*	5.1	16.2	2.72	*ND*	1.59
Oct-2014	*ND*	*ND*	*ND*	*9 J*	2.1	0.129	*ND*	4.1	16.1	2.36	*ND*	1.61
Apr-2015	1.92	1.92	*ND*	*ND*	1.94	0.122	*ND*	4.4	15.3	2.86	*ND*	1.89
Nov-2015	*ND*	*ND*	*ND*	*ND*	1.93	0.144	*ND*	4.9	27.7	2.94	*ND*	1.52
May-2016	2.76	2.76	*ND*	*ND*	2.13 B	0.158	*ND*	4.7	26	3.66	57	3
Oct-2016	1.04	1.04	*ND*	*ND*	1.99	*NA*	*NA*	4.8	28.4	4.36	28	2.8
May-2017	2.6	2.6	*ND*	35	2.29	0.211	*ND*	4.5	32.1	4.68	*22 J*	3.5
Oct-2017	*ND*	*ND*	*ND*	*ND*	1.91	0.182	*ND*	4.9	33.5	2.97	*ND*	1.5
May-2018	*1 JB*	*ND*	*ND*	*7.9 J*	*2 J*	*ND*	*ND*	4.5	26.8	*ND*	*ND*	*1.8 J*
Nov-2018	*2 JB*	*ND*	*ND*	*ND*	*1.8 J*	0.17	*ND*	4.27	18.5	*ND*	*ND*	*1.6 J*
May-2019	*ND*	*NA*	*ND*	*ND*	*ND*	0.18	*ND*	4.23	14.5	*ND*	27	*ND*
Oct-2019	*ND*	*NA*	*ND*	*ND*	*1.5 J*	0.19	*ND*	4.34	19.5	*ND*	20	1.2
May-2020	*ND*	*NA*	*ND*	*ND*	*1.7 J*	0.17	*ND*	4.4	18.9	*ND*	19	*1.8 J*
Oct-2020	*ND*	*NA*	*ND*	*ND*	*1.6 J*	0.18	*ND*	4.26	17.6	*ND*	11	1.6
Apr-2021	14	*NA*	*ND*	*ND*	*1.8 J*	0.2	*ND*	4.96	22.7	*ND*	*ND*	3.45
Oct-2021	*ND*	*NA*	*ND*	*ND*	*1.5 J*	0.22	*ND*	4.95	51.6	*ND*	*ND*	*1.78 J*
May-2022	*ND*	*NA*	*ND*	*ND*	*1.8 J*	0.18	*ND*	4.52	42.2	*ND*	*ND*	*2 JN3*
Oct-2022	*ND*	*NA*	*ND*	*ND*	*2.2 J*	0.2	*ND*	4.28	39.4	*ND*	*ND*	*1.6 JN3*
May-2023	*ND*	*NA*	*ND*	*ND*	*1.6 J*	0.22	*ND*	4.67	39.4	*ND*	*ND*	*2.2 JN3*
Oct-2023	*ND*	*NA*	*ND*	*ND*	*2.2 J*	0.208	*NA*	4.69	45.6	*ND*	12	*1.6 JN3*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-05B*													
Nov-1993	NA	ND	ND	NA	ND	0.32	NA	ND	NA	ND	0.03	ND	ND	0.18	NA
Apr-1994	NA	ND	ND	NA	ND	0.011	NA	ND	NA	ND	67	3	ND	0.036	NA
Aug-1994	NA	ND	ND	NA	ND	0.78	NA	ND	NA	ND	ND	ND	ND	0.16	NA
Sep-1994	NA	ND	ND	NA	ND	0.82	NA	ND	NA	ND	0.11	0.04	**0.038**	0.19	NA
Nov-1994	NA	ND	ND	NA	ND	0.4	NA	ND	NA	0.03	ND	ND	ND	0.17	NA
Apr-1995	ND	ND	0.8	ND	ND	0.24	NA	ND	ND	ND	3.2	ND	ND	0.18	NA
Oct-1996	ND	ND	0.006	ND	ND	0.58	0.49	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	0.72	0.48	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	0.572	0.507	ND	ND	0.013	0.652	ND	ND	0.208	0.166
Apr-1998	ND	ND	ND	ND	ND	1.01	3.15	ND	ND	ND	0.378	0.019	ND	0.213	0.545
Apr-1999	ND	ND	ND	ND	ND	0.441	0.495	ND	ND	ND	ND	ND	ND	0.169	0.163
Oct-1999	ND	ND	ND	ND	ND	0.48	0.497	ND	ND	ND	0.11	ND	ND	0.176	0.168
Apr-2000	ND	ND	ND	ND	ND	0.451	0.457	ND	ND	ND	ND	ND	ND	0.169	0.157
Oct-2000	ND	ND	ND	ND	ND	0.716	0.417	ND	ND	0.015	0.104	ND	ND	0.224	0.16
Apr-2001	ND	ND	ND	ND	ND	0.471	NA	ND	ND	ND	0.075	NA	ND	0.18	NA
Sep-2001	ND	ND	ND	ND	ND	0.476	0.432	ND	ND	0.023	58.1	0.079	**0.02**	0.193	0.157
Mar-2002	ND	ND	ND	ND	ND	0.363	0.442	ND	ND	ND	0.144	ND	ND	0.157	0.168
Sep-2002	ND	ND	ND	ND	ND	0.829	0.368	ND	ND	0.014	0.136	ND	ND	0.214	0.159
Mar-2003	ND	ND	ND	ND	ND	0.699	0.673	ND	ND	ND	ND	ND	ND	0.192	0.178
Oct-2003	ND	ND	ND	ND	ND	0.807	0.504	ND	ND	0.028	0.194	ND	0.01	0.204	0.168
Apr-2004	ND	ND	ND	ND	ND	0.808	0.591	ND	ND	0.012	0.103	ND	ND	0.239	0.177

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05B***													
Oct-2004	ND	ND	ND	ND	ND	0.429	0.423	ND	ND	ND	0.094	ND	ND	0.169	0.157
Apr-2005	ND	ND	0.011	ND	ND	0.78	0.816	ND	ND	ND	30.5	0.897	0.007	0.333	0.342
Oct-2005	ND	ND	ND	ND	ND	0.431	0.428	ND	ND	ND	0.286	ND	ND	0.166	0.167
Mar-2006	ND	ND	ND	ND	ND	0.233	0.226	ND	ND	ND	ND	ND	ND	0.095	0.099
Sep-2006	ND	ND	ND	ND	ND	0.332	0.338	ND	ND	ND	0.158	ND	ND	0.144	0.138
Mar-2007	ND	ND	ND	ND	ND	0.417	0.409	ND	ND	ND	0.058	ND	ND	0.138	0.165
Sep-2007	ND	0.002	ND	ND	ND	0.319	0.327	ND	ND	ND	ND	ND	ND	0.13	0.126
Mar-2008	ND	0.003	ND	ND	ND	0.363	0.391	ND	ND	ND	0.082	ND	ND	0.147	0.153
Sep-2008	ND	ND	ND	ND	ND	0.42	0.263	ND	ND	ND	0.176	ND	ND	0.163	0.152
Mar-2009	ND	ND	ND	ND	ND	0.497	0.31	ND	ND	ND	0.175	ND	ND	0.175	0.125
Oct-2009	ND	ND	ND	ND	ND	0.323	0.35	ND	ND	ND	0.157	ND	ND	0.16	0.161
Apr-2010	ND	ND	ND	ND	ND	0.296	0.212	ND	ND	ND	0.165	ND	ND	0.113	0.094
Oct-2010	ND	ND	ND	ND	ND	0.392	0.289	ND	ND	ND	0.213	ND	ND	0.156	0.1
Apr-2011	ND	ND	ND	ND	ND	0.362	0.302	ND	ND	ND	0.101	ND	ND	1.55	0.123
Sep-2011	ND	ND	ND	ND	ND	0.356	0.381	ND	ND	ND	0.148	ND	ND	0.133	0.165
Mar-2012	ND	ND	ND	ND	ND	0.323	0.337	ND	ND	ND	0.062	ND	ND	0.222	0.216
Sep-2012	ND	ND	0.0043 J	0.000281 J	ND	0.381	0.372	ND	0.0035 J	0.0077 J	0.0666	0.0131 J	0.000497 J	0.154	0.16
Mar-2013	ND	ND	0.0059 J	0.000283 J	ND	0.468	0.464	0.0049 J	0.0034 J	0.0107	0.947	0.0082 J	0.0014 J	0.141	0.115
Oct-2013	0.000873 J	ND	0.0049 J	0.000283 J	ND	0.684	0.602	0.0084 J	0.0035 J	0.0072 J	0.253	0.0668	0.000971 J	0.126	0.11
Mar-2014	0.000335 J	ND	0.0036 J	0.000313 J	ND	0.371	0.336	0.000381 J	0.0031 J	0.0064 J	0.0871 J	0.0073 J	0.000355 J	0.161	0.142
Oct-2014	0.000609 J	ND	0.0077 J	0.00036 J	ND	0.374	0.308	0.0029 J	0.0033 J	0.008 J	0.828	0.0991	0.0011 J	0.165	0.101
Apr-2015	0.0013 J	ND	0.0047 J	0.00023 J	0.000094 J	0.479	0.324	0.000635 J	0.0035 J	0.0075 J	0.157	0.0084 J	ND	0.169	0.105
Nov-2015	0.000506 J	ND	0.0042 J	0.000288 J	ND	0.357	0.221	0.00062 J	0.0037 J	0.0093 J	0.0924	ND	0.000591 J	0.153	0.0846
May-2016	0.00052 J	ND	0.0051	0.00026 J,B	ND	0.857	0.608	0.0011 J	0.0031	0.0058	0.557	ND	0.0025	0.201	0.185 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-05B***													
Oct-2016	*0.00069 J*	*ND*	0.0059	*0.00025 J*	*0.00074 J*	0.767	0.658	*0.0014 J+*	0.0033	*0.0044 J+*	0.734	*ND*	0.0027	*0.216 J+*	*0.191 J*
May-2017	*0.00076 J*	*ND*	0.0055	*0.00023 J*	*ND*	0.976	0.705	*0.0011 J*	0.0031	0.0043	0.423	*ND*	0.0027	0.264	0.209
Oct-2017	*ND*	*ND*	0.0045	*0.00023 J*	*ND*	*0.366 J*	*0.37 J*	*0.0015 J*	0.0035	*0.0031 J*	*ND*	*ND*	*ND*	*0.15 J*	*0.164 J*
May-2018	*0.000066 J*	*ND*	0.0044	*0.00022 J*	*0.000056 J*	*0.38 J*	*0.36 J*	*0.0047 J*	0.0033	0.0034 B	*0.017 J*	*ND*	*0.000041 J*	*0.22 J*	*0.17 J*
Nov-2018	*ND*	*0.000041 J*	0.0039	*0.00024 J*	*0.000062 J*	*0.47 J*	1.6	0.011	0.0034	**0.0037 D6**	0.086	0.026	*0.00014 J*	*0.11 J*	*0.19 J*
May-2019	*ND*	*ND*	0.0042	*ND*	*ND*	*ND*	*ND*	0.011	0.0041	0.004	*ND*	0.033	*ND*	*ND*	*ND*
Oct-2019	*0.000052 J*	*ND*	0.0041	*0.00022 J*	*0.0002 J*	0.31	*0.75 J*	0.017	0.0052	0.0086	0.11	0.058	*0.00011 J*	*0.11 J*	*0.17 J*
May-2020	*ND*	*ND*	*0.0049 J*	*0.00028 J*	*ND*	*0.49 J*	*0.68 J*	0.0073	*0.0034 J*	0.0085	0.072	*ND*	*ND*	*0.15 J*	*0.17 J*
Oct-2020	*0.0005 J*	*ND*	*0.0045 J*	*ND*	*ND*	0.48	*0.65 J*	*0.013 J*	0.0042	*ND*	*0.061 J*	0.03	*ND*	*0.11 J*	*0.18 J*
Apr-2021	*ND*	*ND*	*0.0043 J*	*0.00023 J*	*ND*	1	1.1	*0.0049 J*	*0.0034 J*	0.0059	*0.053 J*	*ND*	*ND*	0.23	0.23
Oct-2021	*0.000053 JB*	*ND*	0.0044	*0.00024 J*	*ND*	*0.44 J*	0.509	0.013	0.0048	0.011	0.14	0.0576	*0.000061 J*	*0.16 J*	*0.186 J*
May-2022	*ND*	*ND*	0.0056	*0.00033 J*	*ND*	*0.49 J*	0.61	0.011	0.0051	0.016	0.07	0.064	*ND*	*0.19 J*	*0.2 J*
Oct-2022	*ND*	*ND*	0.0044	*0.00024 J*	*ND*	*0.39 J*	*0.43 J*	0.01	0.0044	0.012	0.1	0.062	*ND*	*0.15 J*	*0.18 J*
May-2023	*ND*	*ND*	0.0044	*0.00026 J*	*ND*	0.56	0.61	0.0078	0.0043	0.0067	0.071	0.056	*ND*	*0.2 J*	*0.21 J*
Oct-2023	*ND*	*ND*	0.0043	*0.00018 J*	*ND*	*0.38 J*	*0.41 J*	0.012	0.005	0.0072	0.16	0.066	*ND*	*0.15 J*	*0.18 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-05B*												
Nov-1993	0.05	NA	ND	NA	0.47	NA	ND	NA	1.1	NA	NA	NA	0.01
Apr-1994	0.08	NA	ND	NA	0.58	NA	ND	NA	1.6	NA	NA	NA	ND
Aug-1994	0.01	NA	ND	NA	0.58	NA	ND	NA	0.76	NA	NA	NA	0.05
Sep-1994	0.01	NA	ND	NA	0.37	NA	ND	NA	0.85	NA	NA	NA	1.1
Nov-1994	ND	NA	ND	NA	0.3	NA	ND	NA	0.75	NA	NA	NA	0.02
Apr-1995	ND	NA	ND	ND	0.53	NA	ND	0.01	0.82	NA	ND	ND	0.04
Oct-1996	ND	ND	NA	ND	ND	ND	ND	ND	2.2	1.7	ND	ND	0.13
Apr-1997	ND	ND	0.0018	ND	1.1	1.8	ND	ND	1.9	1	ND	ND	0.039
Oct-1997	ND	ND	NA	0.015	ND	ND	ND	ND	0.971	0.907	ND	ND	0.049
Apr-1998	ND	0.012	NA	0.022	1.16	ND	ND	ND	0.898	1.11	ND	ND	0.107
Apr-1999	ND	ND	NA	ND	ND	1.05	ND	ND	0.93	0.926	ND	ND	0.024
Oct-1999	ND	ND	NA	ND	ND	ND	ND	ND	0.95	0.91	ND	ND	0.027
Apr-2000	ND	ND	NA	ND	ND	ND	ND	ND	0.96	0.974	ND	ND	0.019
Oct-2000	ND	ND	NA	ND	0.712	0.457	ND	ND	1.74	0.939	ND	ND	0.023
Apr-2001	ND	NA	NA	ND	1.28	NA	ND	ND	0.993	NA	ND	ND	0.018
Sep-2001	0.125	ND	NA	ND	0.573	0.733	ND	ND	0.963	0.909	ND	ND	2.11
Mar-2002	ND	ND	NA	ND	0.773	ND	ND	ND	0.936	0.975	ND	ND	0.022
Sep-2002	ND	ND	NA	ND	1.26	ND	ND	ND	1.58	0.873	ND	ND	0.023
Mar-2003	ND	ND	NA	ND	ND	ND	ND	ND	0.92	0.941	ND	ND	0.033
Oct-2003	ND	ND	NA	ND	1.93	1.06	ND	ND	1.54	0.922	ND	ND	0.025
Apr-2004	ND	ND	ND	ND	0.668	ND	ND	ND	1.37	0.976	ND	ND	0.058
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	0.914	0.604	ND	ND	0.024

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05B***												
Apr-2005	0.018	0.016	ND	ND	ND	0.54	ND	ND	1.36	1.35	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	0.845	0.812	ND	ND	0.013
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	0.63	0.588	ND	ND	ND
Sep-2006	ND	ND	ND	ND	0.52	0.51	ND	ND	0.783	0.777	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	0.764	0.695	ND	ND	0.02
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	0.804	0.778	ND	ND	0.015
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	0.834	0.829	ND	ND	0.01
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	0.831	0.753	ND	ND	0.057
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.12	0.887	ND	ND	0.02
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	0.81	0.791	ND	ND	0.015
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	0.847	0.841	ND	ND	0.021
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	0.857	0.87	ND	ND	0.018
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	0.907	0.899	ND	ND	0.02
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	0.983	0.947	ND	ND	0.013
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	0.9	0.901	ND	ND	0.013
Sep-2012	0.0039 J	0.0036 J	ND	0.0055 J	0.39 J	0.321 J	ND	ND	0.948	0.903	ND	ND	0.0168
Mar-2013	0.0044 J	0.0027 J	0.000072 J	0.0068 J	0.48 J	0.435 J	ND	ND	0.909	1.02	ND	ND	0.0321
Oct-2013	0.0043 J	0.0035 J	ND	0.005 J	0.347 J	0.302 J	ND	ND	0.753	0.744	0.000122 J	0.0084 J	0.0276
Mar-2014	0.0032 J	0.003 J	ND	0.0052 J	0.396 J	0.401 J	ND	ND	0.903	0.932	ND	ND	0.02
Oct-2014	0.0046 J	0.0027 J	ND	0.0064 J	0.551	0.443 J	0.0012 J	ND	0.984	1.1	ND	0.0018 J	0.0197
Apr-2015	0.0039 J	0.0021 J	ND	0.0059 J	0.47 J	0.453 J	ND	ND	1.05	1.09	ND	ND	0.023
Nov-2015	0.004 J	0.002 J	ND	0.0062 J	0.414 J	0.42 J	ND	ND	1.09	1.15	ND	ND	0.0205
May-2016	0.0064	0.0043 B	ND	0.0062	0.464	0.451	ND	ND	2.4	1.98	ND	0.0003 J	0.809
Oct-2016	0.0079 R	0.0042	ND	0.0057 J+	0.515	0.52	ND	ND	2.49 J+	2.44	ND	0.00037 J	0.55

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-05B***												
May-2017	0.008	*0.004 J*	*ND*	0.0055	0.488	0.477	*ND*	*ND*	4	3.23	*ND*	*0.00028 J*	0.835
Oct-2017	0.0042	*0.0035 J*	*ND*	0.0074	0.427	*0.395 J*	*ND*	*ND*	1.01	1.04	*ND*	*ND*	*0.0091 J*
May-2018	0.0036 B	0.0031	*ND*	0.008	*ND*	*ND*	*0.00048 JB*	*ND*	*1.5 J*	*1.2 J*	*ND*	*ND*	0.0088 B
Nov-2018	0.0037	0.0041	*ND*	0.015	*ND*	*ND*	*0.00013 J*	*ND*	*1.2 J*	*1.2 J*	*0.000076 J*	*0.00045 J*	0.0086 D6
May-2019	0.0048	0.0057	*ND*	0.013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	0.0026	0.023
Oct-2019	0.006	0.0064	*ND*	0.018	*ND*	*ND*	*0.00054 J*	*0.00049 J*	*ND*	*ND*	*ND*	0.005	0.034
May-2020	*0.0041 J*	*0.0045 JB*	*ND*	0.011	*0.5 J*	*0.45 J*	*ND*	*ND*	1.2	1.3	*ND*	*ND*	0.017
Oct-2020	0.0049	0.0034	*ND*	0.011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.0035 J*	*ND*
Apr-2021	*0.0045 J*	*0.0042 J*	*0.00005 J*	*0.0092 J*	*0.47 J*	*0.49 J*	*ND*	*ND*	1.1	*0.98 J*	*ND*	*ND*	0.051
Oct-2021	0.0053	0.0062	*ND*	0.018	*0.4 J*	*0.424 J*	*ND*	*0.0003 J*	1.1	1.29 B	*0.000079 J*	*ND*	0.012
May-2022	*0.0048 J*	0.0065	*ND*	0.015	*0.44 J*	0.52	*ND*	*ND*	1.3	1.5	*0.00011 J*	*ND*	0.025
Oct-2022	0.0054	0.0075	*ND*	0.014	*0.39 J*	*0.47 J*	*ND*	*ND*	1.3	1.4	*ND*	*ND*	0.01
May-2023	0.005	0.0087	*ND*	0.012	0.52	0.53	*ND*	*ND*	1.4	1.4	*ND*	*ND*	0.016
Oct-2023	0.0056	0.013	*ND*	0.016	*0.42 J*	0.51	*ND*	*ND*	1.2	1.3	*ND*	*ND*	0.012

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05B*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05B*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-05B*																
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.8 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.5	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05B***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05B***															
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.16 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.18 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-05B***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05B***															
Nov-1993	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Aug-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-05B*															
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.1 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-05B***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*0.705 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-06B***											
Apr-2010	1.3	1.3	ND	ND	2.76	0.33	ND	3.8	22.1	3.09	26	1.9
Oct-2010	1.2	1.2	ND	ND	2.81	0.32	ND	3.6	22.4	3.58	10	2.24
Apr-2011	ND	ND	ND	ND	2.82	0.35	ND	4	24.1	1.7	17	2
Sep-2011	ND	ND	0.21	ND	2.69	0.34	ND	4.5	23.5	2.22	28	2.4
Mar-2012	ND	ND	ND	ND	3.17	0.35	ND	3.8	20.8	3.55	14	2.51
Sep-2012	ND	ND	ND	ND	2.95	0.335	ND	3.1	23.6	3.24	20	2.23
Mar-2013	0.92 J	0.92 J	ND	ND	3.22	0.341	ND	3.9	25.7	1.98	15	2.52
Oct-2013	1.56	1.56	ND	ND	3.09	0.324	ND	5.4	24.9	2.33	ND	2.77
Mar-2014	ND	ND	ND	ND	3.32	0.291	ND	4.6	24.1	2.84	ND	2.02
Oct-2014	ND	ND	ND	11	3.31	0.314	ND	4.4	23	2.8	ND	2.26
Apr-2015	0.96	0.96	ND	ND	3.16	0.357	ND	4.2	23.3	3.1	ND	2.28
Nov-2015	ND	ND	ND	ND	3.06	0.352	ND	4.8	37.5	1.95	20 J	2.2
May-2016	ND	ND	ND	ND	3.19	ND	ND	4.6	40.8	3.11	15 J	2.3
Oct-2016	ND	ND	ND	ND	3.36	NA	NA	4.8	36.1	2.17	31	2.1
May-2017	2.64	2.64	ND	ND	2.99	0.336	ND	4.5	43.8	2.15	13 J,B	3
Oct-2017	ND	ND	0.0676 J	ND	3.3	0.399	ND	4.4	44.2	2.88	25	2.3
May-2018	1 JB	ND	ND	5.8 J	2.7 J	0.073 J	ND	4.4	34.7	ND	ND	2.3 J
Nov-2018	1 JB	ND	ND	ND	2.9 J	0.31	ND	4.1	24.8	ND	ND	2.2 J
May-2019	ND	NA	ND	ND	ND	0.35	ND	3.86	20.3	ND	21	ND
Oct-2019	ND	NA	ND	ND	2.6 J	0.35	ND	4.14	24.6	ND	10	2.2
May-2020	ND	NA	ND	ND	2.9 J	0.33	ND	4.17	24.6	ND	ND	2.2 J
Oct-2020	ND	NA	ND	ND	3.2	0.35	ND	5.01	24.4	1.2	35	2.3
Apr-2021	ND	NA	ND	ND	3.1	0.34	ND	4.51	29.1	ND	17	2.3 J
Oct-2021	ND	NA	ND	ND	3 J	0.35	ND	4.57	38.5	ND	ND	2.5 J
May-2022	ND	NA	ND	ND	2.9 J	0.32	ND	4.45	49.4	ND	ND	2.3 JN3
Oct-2022	ND	NA	ND	6.1 J	3.7 J	0.34	ND	4.44	44.7	ND	ND	2.5 JN3
May-2023	ND	NA	ND	ND	2.8 J	0.39	ND	4.58	47.3	ND	ND	2.9 JN3
Oct-2023	ND	NA	ND	ND	3.5	0.351	NA	4.51	48.2	ND	14	2.7 JN3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06B***													
Apr-2010	ND	ND	ND	ND	ND	0.431	0.353	ND	ND	ND	ND	ND	ND	0.188	0.157
Oct-2010	ND	ND	ND	ND	ND	0.521	0.514	ND	ND	ND	0.052	ND	ND	0.229	0.226
Apr-2011	ND	ND	ND	ND	ND	0.446	0.484	ND	ND	ND	ND	ND	ND	0.216	0.236
Sep-2011	ND	ND	ND	ND	ND	0.578	0.606	ND	ND	ND	ND	ND	ND	0.233	0.233
Mar-2012	ND	ND	ND	ND	ND	0.507	0.501	ND	ND	ND	ND	ND	ND	0.301	0.299
Sep-2012	ND	ND	0.0065 J	0.000303 J	ND	0.522	0.602	0.0011 J	0.005 J	0.0032 J	0.0367 J	0.0319 J	ND	0.225	0.245
Mar-2013	ND	ND	0.0069 J	0.000275 J	ND	0.613	0.481	0.0016 J	0.0052 J	0.0028 J	0.011 J	0.0147 J	ND	0.241	0.195
Oct-2013	ND	ND	0.0066 J	0.000312 J	ND	0.801	0.791	0.0124 J	0.0049 J	0.0022 J	0.0756	0.0724	0.000335 J	0.186	0.215
Mar-2014	0.0025	ND	0.0056 J	0.000252 J	ND	0.481	0.501	0.0015 J	0.0044 J	0.0015 J	ND	ND	ND	0.199	0.207
Oct-2014	0.0012 J	ND	0.0067 J	0.000301 J	0.000074 J	0.526	0.553	0.000384 J	0.0048 J	0.003 J	ND	ND	ND	0.231	0.244
Apr-2015	0.000346 J	ND	0.0066 J	0.000287 J	0.000071 J	0.523	0.551	0.000417 J	0.0049 J	0.0029 J	0.143	0.0882	ND	0.237	0.241
Nov-2015	ND	ND	0.0062 J	0.000327 J	0.000108 J	0.504	0.567	0.000703 J	0.0049 J	0.0028 J	ND	ND	0.000426 J	0.229	0.238
May-2016	ND	ND	0.0068	0.00029 J	ND	0.522	0.455	0.00096 J	0.0048	0.0025 J	ND	ND	ND	0.249	0.227
Oct-2016	ND	ND	0.0069	0.00028 J	ND	0.439	0.451	0.00095 J	0.0053	0.0028 J	ND	ND	0.00011 J	0.236	0.244
May-2017	ND	0.00077 J	0.0053 B	0.00027 J	ND	0.738	0.78	0.00084 J,B	0.0053	0.0051	0.134 J	ND	0.001 J	0.283	0.256
Oct-2017	ND	ND	0.0067	0.0003 J	ND	0.512	0.509	ND	0.0051	0.0027 J	ND	ND	0.00012 J	0.24	0.247
May-2018	0.000054 J	ND	0.0068	0.00025 J	0.000078 J	0.51 J	0.49 J	0.0022 J	0.0048	0.0034 B	0.028	ND	0.00012 J	0.24 J	0.25 J
Nov-2018	ND	ND	0.0062	0.00028 J	0.00011 J	0.5 J	0.85 J	0.0018 J	0.0049	0.0087	ND	0.014 J	0.00039 J	0.24 J	0.24 J
May-2019	ND	ND	0.0063	ND	ND	ND	ND	ND	0.005	0.011	ND	ND	ND	ND	ND
Oct-2019	0.000055 J	ND	0.0065	0.00027 J	0.00022 J	0.52	0.5 J	0.0046 J	0.0054	0.0098	0.016 J	0.015 J	0.00017 J	0.23	0.23 J
May-2020	ND	ND	0.0067 J	0.00029 J	ND	0.5 J	0.5 J	0.004 J	0.0045 J	0.02	ND	ND	ND	0.22	0.23

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-06B***													
Oct-2020	*ND*	*ND*	*0.0064 J*	*0.00031 J*	*ND*	0.52	*0.5 J*	*0.0039 J*	0.0066	0.016	*0.023 J*	0.03 D6	*ND*	0.24	*0.24 J*
Apr-2021	*ND*	*ND*	*0.007 J*	*0.00039 J*	*ND*	*0.52 J*	*0.54 J*	*0.0033 J*	0.0055	0.018	*ND*	*ND*	*ND*	0.24	0.24
Oct-2021	*ND*	*ND*	0.0064	*0.00023 J*	*ND*	0.56	0.58	0.0026	0.0058	0.015	*0.013 J*	*0.014 J*	*0.00014 J*	*0.27 J*	*0.28 J*
May-2022	*ND*	*ND*	0.0071	*0.00025 J*	*ND*	*0.49 J*	0.54	*0.0024 J*	0.0065	0.019	*ND*	*ND*	*ND*	*0.27 J*	*0.28 J*
Oct-2022	*ND*	*ND*	0.0077	*0.0003 J*	*ND*	0.57	0.62	0.0036	0.0063	0.017	*ND*	*ND*	*ND*	*0.26 J*	*0.32 J*
May-2023	*ND*	*ND*	0.0072	*0.00029 J*	*ND*	0.64	0.64	*0.0017 J*	0.0063	0.013	*ND*	*ND*	0.00063	*0.31 J*	*0.32 J*
Oct-2023	*ND*	*ND*	0.0073	*0.00034 J*	*ND*	0.61	0.57	0.0038	0.0068	0.011	*0.023 J*	*0.012 J*	*ND*	*0.28 J*	*0.29 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-06B*												
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.27	1.23	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.17	1.15	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.28	1.25	ND	ND	ND
Sep-2011	ND	ND	ND	ND	0.534	ND	ND	ND	1.4	1.42	ND	ND	ND
Mar-2012	ND	ND	ND	ND	0.533	0.514	ND	ND	1.36	1.3	ND	ND	ND
Sep-2012	0.006 J	0.0065 J	ND	0.0076 J	0.465 J	0.493 J	ND	ND	1.32	1.32	ND	ND	0.0088 J
Mar-2013	0.0061 J	0.0047 J	0.000106 J	0.0075 J	0.53	0.521	ND	ND	1.53	1.57	ND	ND	0.018
Oct-2013	0.0064 J	0.0072 J	ND	0.0069 J	0.405 J	0.407 J	ND	ND	1.04	1.12	0.000409 J	0.004 J	0.0202
Mar-2014	0.0056	0.0058	ND	0.0069 J	0.556	0.545	ND	ND	1.68	1.64	0.000593 J	ND	0.0104
Oct-2014	0.0057 J	0.0061 J	ND	0.0077 J	0.529	0.516	0.0015 J	ND	1.45	1.41	ND	ND	0.0104
Apr-2015	0.0061 J	0.0064 J	ND	0.0076 J	0.523	0.502	0.000966 J	ND	1.47	1.49	ND	ND	0.0133
Nov-2015	0.0057 J	0.0061 J	ND	0.0082 J	0.517	0.496 J	0.000419 J	ND	1.55	1.53	0.000183 J	ND	0.01
May-2016	0.01	0.0053	ND	0.008	0.651	0.439	ND	ND	1.53	1.35	ND	ND	0.0091 J,B
Oct-2016	0.0055	0.006	ND	0.0086	0.529	0.535	ND	ND	1.49	1.55	ND	ND	0.0073 J
May-2017	0.0072	0.0068	ND	0.0095	0.564	0.599	ND	ND	2.54	2.45	ND	ND	0.0156 JB
Oct-2017	0.0063	0.0057	ND	0.0079	0.516	0.539	ND	ND	1.54	1.56	ND	ND	0.0076 J
May-2018	0.0058	0.0051	ND	0.0088	ND	ND	0.00044 JB	ND	1.8 J	1.6 J	ND	0.003	0.0092 B
Nov-2018	0.0091	0.0099	ND	0.0072	ND	ND	0.00019 J	ND	1.5 J	1.5 J	0.000069 J	0.0019	0.011
May-2019	0.0061	0.0058	ND	0.0096	ND	ND	ND	ND	ND	ND	ND	0.0049	0.01
Oct-2019	0.011	0.0078	ND	0.0099	ND	ND	0.00041 J	ND	1.5 J	ND	ND	0.0056	0.018
May-2020	0.0058	0.0061 B	ND	0.012	0.56	0.49 J	ND	ND	1.4	1.6	ND	ND	0.0094 J
Oct-2020	0.0095	0.0088	ND	0.0093	ND	ND	ND	ND	ND	ND	ND	0.00081 J	0.011 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-06B***												
Apr-2021	0.0067	0.0061	*ND*	*0.0094 J*	0.52	0.53	*ND*	*ND*	1.5	1.8	*ND*	*ND*	*0.0078 J*
Oct-2021	0.0059	0.0065	*ND*	0.0094	0.52	*0.47 J*	*ND*	*ND*	1.6 B	1.7	*0.000062 J*	*ND*	0.0089
May-2022	0.0078	0.0075	*ND*	0.0099	0.52	0.53	*ND*	*ND*	1.6	1.6	*ND*	*ND*	0.0092
Oct-2022	0.0074	0.0076	*ND*	0.01	*0.45 J*	0.52	*0.00089 J*	*ND*	1.6	1.9	*ND*	*ND*	0.011
May-2023	0.0075	0.0076	*ND*	0.01	0.59	0.59	*0.0009 J*	*ND*	1.8	1.8	*ND*	*ND*	0.0099
Oct-2023	0.0078	0.0082	*ND*	0.012	0.53	0.6	*ND*	*ND*	1.6	1.7	*ND*	*ND*	0.012

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06B*																
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-06B*																
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-06B*															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-06B***															
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-06B***															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-06B***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-09***											
Nov-1993	ND	ND	ND	22.8	2.1	ND	ND	4.73	36.8	11.9	44	2.72
Apr-1994	10	10	ND	ND	1.6	ND	ND	6.8	39.4	8.6	43	2.3
Apr-1995	ND	ND	ND	ND	1.8	ND	ND	4.5	38.8	11.3	19	1.8
Apr-1997	ND	2	ND	ND	1.5	0.02	ND	NA	NA	7.3	88	7.7
Apr-1998	7	7	0.21	ND	1.35	ND	ND	6.41	79.7	7.32	40	2.6
Apr-1999	ND	ND	0.15	ND	2.09	ND	ND	5.56	49.3	7.28	39	2.8
Apr-2000	ND	ND	ND	ND	ND	ND	ND	6.24	38	9.45	36	2.4
Apr-2001	ND	NA	ND	ND	1.12	ND	ND	NA	NA	10.2	33	2.59
Mar-2002	7.1	7.1	ND	ND	2.12	ND	ND	5.9	44.5	11.6	54	3.28
Mar-2003	ND	ND	ND	ND	14.8	0.961	ND	5.5	52.3	14.9	49	2.47
Apr-2004	ND	ND	ND	ND	1.47	ND	ND	5.8	43.7	11.4	58	2.5
Apr-2005	5.3	5.3	ND	ND	1.42	ND	ND	5.5	39.8	7.73	68	4.6
Mar-2006	ND	ND	ND	ND	1.58	ND	ND	5.7	41.8	16.2	23	1.84
Mar-2007	9.2	9.2	ND	ND	1.76	ND	ND	5.9	41.1	7.1	ND	2.25
Mar-2008	1.3	1.3	ND	ND	5.71	ND	ND	5.7	39.5	20.2	29	2.28
Mar-2009	1.2	1.2	ND	ND	1.47	ND	ND	5.8	40.7	18.2	19	2.56
Oct-2009	2.5	2.5	ND	ND	1.41	ND	ND	5.4	40.8	8.11	49	1.04
Apr-2010	1.8	1.8	ND	ND	1.35	ND	ND	5	39.1	11.7	ND	1.7
Oct-2010	11	11	ND	ND	1.76	ND	ND	5	38	7.69	40	2.47
Apr-2011	8.4	8.4	ND	ND	1.64	ND	ND	5.3	37.8	6.64	42	2.2
Sep-2011	4.7	4.7	ND	ND	1.42	ND	ND	5.8	39.2	6.7	29	2.26
Mar-2012	5.2	5.2	ND	ND	1.61	ND	ND	5	37.2	7.33	17	2.55
Sep-2012	6.16	6.16	ND	ND	1.6	ND	ND	4.9	37.9	6.8	28	2.33
Mar-2013	11.5	11.5	0.0707	ND	1.8	ND	ND	4.8	41.1	7.24	ND	2.53
Oct-2013	8.52	8.52	ND	ND	1.66	ND	ND	6.7	39.8	6.81	ND	2.68
Mar-2014	14.4	14.4	ND	ND	1.72	ND	ND	6	39.1	7.15	ND	2.21
Oct-2014	22	ND	ND	10	1.84	ND	ND	5.8	37.4	6.72	29	2.25
Apr-2015	9.4	9.4	ND	8 J	1.77	ND	ND	5	38.9	6.21	ND	2.33
Nov-2015	4	4	ND	ND	1.64	ND	ND	6.2	69.6	6.03	21 J	2.36
May-2016	4.64	4.64	ND	13	1.67 B	ND	ND	6	60.8	0.832 J	85	6.1
Oct-2016	ND	ND	ND	16	1.65	NA	NA	6.1	65.6	4.4	33	3.7
May-2017	5.32	5.32	ND	14	1.64	ND	ND	6.4	88.9	4.49	17 J	8
Oct-2017	27.3	27.3	ND	15	1.57	ND	ND	6.5	119.4	1.66	29	2.4
May-2018	4 J	ND	ND	18.7 J	3.2	ND	ND	5.7	59.2	ND	10	2.9 J
Nov-2018	18	18	ND	7.9 J	1.4 J	ND	ND	6.33	76.6	ND	12	2.1 J
May-2019	22	NA	ND	ND	ND	ND	0.017	5.87	62	ND	22	ND
Oct-2019	2.5 JH1	NA	ND	8.2 J	1.3 J	0.34 J	0.014	6.15	81.9	ND	13	2.1

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-09***											
May-2020	12	*NA*	*ND*	*6.9 J*	*1.5 J*	*ND*	*ND*	5.76	75.2	*ND*	41	2.2
Oct-2020	*4 J*	*NA*	*ND*	*7 J*	*1.6 J*	*ND*	*ND*	5.32	74.2	1.4	59	2
Apr-2021	*8 J4c*	*NA*	*ND*	*17 J*	*1.6 J*	*0.14 J*	*ND*	6.77	94.5	*ND*	17	*2 J*
Oct-2021	20	*NA*	*ND*	*6.1 J*	*1.4 J*	*ND*	*ND*	6.85	125.2	*ND*	29	*2.1 J*
May-2022	20	*NA*	*ND*	*ND*	*1.5 JML*	*ND*	*ND*	6.7	117.5	*ND*	*ND*	*2 JN3*
Oct-2022	*6 J4c*	*NA*	*ND*	*10.7 J*	*1.8 J*	*0.065 J*	*ND*	6.55	107.5	*ND*	28	*2 JN3*
May-2023	*6 J3c*	*NA*	*ND*	*ND*	*2.6 J*	*0.058 J*	*0.0084 J*	6.54	107.3	*ND*	20	*1.9 JN3*
Oct-2023	22	*NA*	*ND*	*ND*	*1.8 J*	*ND*	*NA*	6.51	106.2	*ND*	29	*2 JN3*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*TW-09*													
Nov-1993	NA	ND	ND	NA	ND	0.58	NA	ND	NA	ND	8.2	4	ND	0.31	NA
Apr-1994	NA	ND	0.56	NA	ND	0.51	NA	ND	NA	ND	3	9.22	ND	0.25	NA
Apr-1995	ND	ND	0.7	0.003	ND	0.19	NA	ND	ND	ND	3.4	2.7	ND	0.32	NA
Apr-1997	ND	ND	0.023	0.002	ND	0.68	0.79	ND	ND	ND	14	12	ND	ND	ND
Apr-1998	ND	ND	0.016	ND	ND	0.516	0.571	ND	ND	ND	8.83	7.96	ND	0.3	0.293
Apr-1999	ND	ND	0.016	ND	ND	0.615	0.637	ND	ND	ND	3.24	2.74	ND	0.295	0.27
Apr-2000	ND	ND	0.014	0.003	ND	0.522	0.506	ND	ND	ND	2.37	2.35	ND	0.271	0.257
Apr-2001	ND	ND	0.013	ND	ND	0.555	NA	ND	ND	ND	3.14	NA	ND	0.292	NA
Mar-2002	ND	ND	0.015	0.002	ND	0.774	1.41	ND	ND	ND	10.3	8.16	ND	0.327	0.38
Mar-2003	ND	ND	0.015	ND	ND	0.537	0.511	ND	ND	ND	3.16	2.67	ND	0.274	0.259
Apr-2004	ND	0.002	0.013	0.004	ND	0.55	0.542	ND	ND	ND	4.38	2.8	ND	0.276	0.272
Apr-2005	ND	ND	0.015	ND	ND	1.34	0.685	ND	ND	ND	9.81	8.11	ND	0.316	0.398
Mar-2006	ND	ND	0.012	ND	ND	0.385	0.358	ND	ND	ND	3.01	1.96	ND	0.214	0.183
Mar-2007	ND	ND	0.013	ND	ND	0.488	0.508	ND	ND	ND	11.7	9.23	ND	0.249	0.26
Mar-2008	ND	ND	0.013	0.003	ND	0.501	0.501	ND	ND	ND	4.74	4.29	ND	0.251	0.233
Mar-2009	ND	ND	0.012	ND	ND	0.617	0.434	ND	ND	ND	5.2	3.49	ND	0.248	0.215
Oct-2009	ND	ND	0.013	ND	ND	ND	ND	ND	ND	ND	9.66	8.16	ND	2.53	0.243
Apr-2010	ND	ND	0.012	ND	ND	0.351	0.374	ND	ND	ND	3.29	2.28	ND	0.203	0.205
Oct-2010	ND	ND	ND	ND	ND	0.538	0.495	ND	ND	ND	9.58	7.81	ND	0.274	0.264
Apr-2011	ND	ND	0.014	ND	ND	0.464	0.5	ND	ND	ND	9.56	8.44	ND	0.252	0.286
Sep-2011	ND	ND	0.014	0.002	ND	0.491	0.483	ND	ND	ND	10.4	7.33	ND	0.25	0.237

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09***													
Mar-2012	ND	ND	0.014	0.002	ND	0.47	0.467	ND	ND	ND	9.88	8.15	ND	0.336	0.323
Sep-2012	ND	ND	0.0141	0.0017 J	ND	0.52	0.472	ND	0.0058 J	0.000562 J	9.77	8.43	0.000735 J	0.25	0.251
Mar-2013	ND	ND	0.0132	0.002	ND	0.569	0.565	0.0018 J	0.0067 J	ND	11.4	8.56	ND	0.269	0.255
Oct-2013	ND	ND	0.0149	0.0021	ND	0.695	0.681	0.0068 J	0.0062 J	ND	10	8.6	0.000338 J	0.229	0.207
Mar-2014	0.000232 J	0.00068 J	0.0122	0.0021	0.000096 J	0.456	0.455	0.000821 J	0.0061 J	0.000268 J	10.9	8.75	0.000593 J	0.261	0.261
Oct-2014	0.000345 J	0.000869 J	0.0146	0.0021	ND	0.507	0.556	0.00094 J	0.0059 J	0.0011 J	10.8	9.4	ND	0.24	0.249
Apr-2015	0.000374 J	0.000603 J	0.0146	0.0018 J	0.000074 J	0.512	0.571	0.000714 J	0.0058 J	0.000342 J	11.5	10.7	ND	0.256	0.259
Nov-2015	0.00038 J	0.000334 J	0.0139	0.0016 J	ND	0.515	0.544	0.000373 J	0.0042 J	0.000839 J	11.6	11.9	ND	0.261	0.263
May-2016	ND	0.0007 J	0.0147	0.0019	0.00033 J	1.24	1.23	0.0012 J	0.0066	0.00068 J,B	27.6	14.3	0.0011 J	0.734	0.724
Oct-2016	ND	0.0069	0.0174	0.0027	0.00031 J	0.989	0.616	0.0031 J+	0.0156	0.0064 J+	38.3	14.2	0.002 J	0.291 J+	0.253
May-2017	ND	0.0031 J	0.0145	0.0022	0.00024 J	0.866	0.62	0.003 J	0.0085	0.0076	29.1	16.6	0.0053	1.42	0.268
Oct-2017	ND	0.001 J	0.0163	0.0022	ND	0.531	0.421	0.0014 J	0.0031	ND	33.6	22.5	0.00054 J	0.256	0.234
May-2018	0.00053	0.0043	0.013	0.0019	0.00016 J	0.79 J	0.63 J	0.0034 JB	0.0081	0.0061	41.5	24.4	0.0017	0.23 J	0.26 J
Nov-2018	ND	0.00045 J	0.012	0.0016	0.000048 J	0.47 J	0.47 J	0.0046 J	0.0024	0.0009 J	24.2	22.7	0.00012 JM1	0.23 J	0.24 J
May-2019	ND	ND	0.012	0.0012	ND	ND	ND	ND	0.0016	ND	27.2	24.8	ND	ND	ND
Oct-2019	0.00014 J	0.00065 J	0.013	0.0015	0.00018 J	0.47	0.49 J	0.0068 J	0.0015	ND	25.6	24.9	0.000099 J	0.23	0.23 J
May-2020	0.00023 J	0.00092 J	0.012	0.0015	0.00014 J	0.49	0.46 JB	0.0058 J	0.014	ND	38.8	23.9	ND	0.25	0.22 JB
Oct-2020	ND	ND	0.012	0.0014 J	ND	0.45	0.43 J	0.0033 J	0.0017 J	ND	24.9	23.6	ND	0.22	0.22 J
Apr-2021	ND	ND	0.013	0.0011	ND	0.43 J	0.38 J	0.00092 J	0.0014 J	ND	25.2	24.8	ND	0.23	0.21
Oct-2021	0.000047 J	0.00089 J	0.012	0.0014	ND	0.46 J	0.47 J	0.0015 J	0.0015 J	0.00062 J	25.7	26	ND	0.23 J	0.24 J
May-2022	ND	0.00099 J	0.012	0.0011	ND	0.41 J	0.53	0.001 J	0.0011 J	ND	27.5	26	ND	0.24 J	0.24 J
Oct-2022	ND	0.00087 J	0.012	0.0012	ND	0.45 J	0.49 J	0.00093 J	0.0012 J	0.0015 J	27.4	29.3 M1	ND	0.23 J	0.23 J
May-2023	ND	0.0012 J	0.012	0.0014	ND	0.4 J	0.45 J	0.0014 J	0.0016 J	ND	25.2	25.8	ND	0.21 J	0.23 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-09***													
Oct-2023	*ND*	*0.0011 J*	0.012	0.0014	*ND*	*0.45 J*	*0.43 J*	*0.0015 J*	*0.0012 J*	*0.0013 JB*	27.6	25.1	*ND*	*0.19 J*	*0.22 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-09*												
Nov-1993	0.07	NA	ND	NA	0.59	NA	ND	NA	0.95	NA	NA	NA	ND
Apr-1994	0.01	NA	ND	NA	0.29	NA	ND	NA	0.74	NA	NA	NA	ND
Apr-1995	0.09	NA	ND	ND	0.75	NA	ND	ND	0.98	NA	ND	ND	0.04
Apr-1997	0.073	0.064	ND	ND	1.9	1.4	ND	ND	1	1.3	ND	ND	0.034
Apr-1998	0.049	0.048	NA	ND	0.847	0.796	ND	ND	0.833	0.825	ND	ND	0.042
Apr-1999	0.02	0.019	NA	ND	0.677	0.81	ND	ND	0.995	0.831	ND	ND	0.041
Apr-2000	0.02	0.019	NA	0.016	ND	ND	ND	ND	0.788	0.746	ND	ND	0.039
Apr-2001	0.019	NA	NA	0.014	ND	NA	ND	ND	0.905	NA	ND	ND	0.03
Mar-2002	0.055	0.051	NA	0.012	1.16	0.947	ND	ND	1.81	0.891	ND	ND	0.055
Mar-2003	0.017	0.016	NA	0.015	ND	ND	ND	ND	0.888	0.861	ND	ND	0.04
Apr-2004	0.019	0.019	ND	0.022	1.33	1.08	ND	ND	0.889	0.87	ND	ND	0.081
Apr-2005	0.056	0.051	ND	0.018	0.52	ND	ND	ND	1.33	0.984	ND	ND	0.305
Mar-2006	ND	ND	ND	0.019	ND	ND	ND	ND	0.613	0.547	ND	ND	0.043
Mar-2007	0.061	0.056	ND	0.015	0.582	0.576	ND	ND	0.748	0.738	ND	ND	0.059
Mar-2008	0.025	0.025	ND	0.017	0.561	ND	ND	ND	0.792	0.677	ND	ND	0.026
Mar-2009	0.027	0.022	ND	0.016	0.819	0.618	ND	ND	1.2	0.803	ND	ND	0.039
Oct-2009	0.057	0.058	ND	0.015	ND	ND	ND	ND	0.749	0.672	ND	ND	0.031
Apr-2010	0.017	0.014	ND	0.013	ND	ND	ND	ND	0.806	0.758	ND	ND	0.025
Oct-2010	0.054	0.05	ND	0.018	ND	ND	ND	ND	0.784	0.72	ND	ND	0.032
Apr-2011	0.058	0.056	ND	0.01	ND	ND	ND	ND	0.766	0.792	ND	ND	0.026
Sep-2011	0.052	0.046	ND	0.016	0.53	ND	ND	ND	0.91	0.873	ND	ND	0.03
Mar-2012	0.054	0.053	ND	0.016	ND	ND	ND	ND	0.855	0.846	ND	ND	0.034

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-09***												
Sep-2012	0.0572	0.0538	ND	0.0137	0.504	0.446 J	ND	ND	0.836	0.827	ND	ND	0.0362
Mar-2013	0.0543	0.0505	0.00009 J	0.0157	0.51	0.49 J	ND	ND	0.932	0.945	ND	ND	0.0424
Oct-2013	0.0597	0.0587	ND	0.0132	0.436 J	0.406 J	ND	ND	0.726	0.672	0.000144 J	0.0056 J	0.0406
Mar-2014	0.0552	0.0545	ND	0.0159	0.516	0.511	ND	ND	0.826	0.836	ND	0.0011 J	0.0372
Oct-2014	0.0531	0.055	ND	0.0153	0.528	0.522	0.000836 J	ND	0.9	0.938	ND	0.0013 J	0.0363
Apr-2015	0.0626	0.0655	0.000032 J	0.0137	0.558	0.54	ND	ND	0.899	0.917	ND	0.0013 J	0.0355
Nov-2015	0.0713	0.0691	ND	0.0102	0.568	0.569	ND	ND	1.11	1.01	ND	0.000282 J	0.0408
May-2016	0.398	0.358	ND	0.0285	0.887	0.845	ND	ND	1.3	1.2	ND	0.0014	0.0547
Oct-2016	0.226 R	0.116	ND	0.045 J+	0.739	0.6	ND	ND	1.05 J+	0.919	ND	0.0021	0.0587
May-2017	0.145	0.104	ND	0.0294	0.955	0.59	ND	ND	33.9	0.915	ND	0.002	0.0505
Oct-2017	0.144	0.132	ND	0.0162	0.526	0.516	ND	ND	0.84	0.84	ND	0.0013	0.0255 J
May-2018	0.22	0.15	ND	0.023	ND	ND	0.00042 J	ND	1.3 J	1 JB	ND	0.0029	0.028
Nov-2018	0.12	0.12	ND	0.0072	ND	ND	0.0001 JM1	ND	0.84 J	0.88 J	ND	0.0017	0.013 D6
May-2019	0.14	0.14	ND	0.004	ND	ND	ND	ND	ND	ND	ND	ND	0.0068
Oct-2019	0.13	0.13	ND	0.0054	ND	ND	ND	ND	ND	ND	ND	0.0096	0.018
May-2020	0.14	0.14	ND	0.036	1.3 J	ND	ND	ND	4.4 J	ND	0.00043	0.0059	0.02
Oct-2020	0.13	0.13	ND	0.0042	ND	ND	ND	ND	ND	ND	ND	0.0018 J	0.012 J
Apr-2021	0.13	0.13	ND	0.0031 J	0.5	0.51	ND	ND	0.85 J	0.99 J	ND	0.0011 J	ND
Oct-2021	0.14	0.14	ND	0.0037	0.48 J	0.44 J	ND	ND	0.85 B	0.93	ND	0.00092 J	0.0071
May-2022	0.15	0.14	ND	0.0026	0.49 J	0.49 J	ND	ND	0.86	0.87	ND	ND	0.0057
Oct-2022	0.14	0.16	ND	0.0031	0.56	0.59	ND	ND	1	1.1	ND	ND	0.0065
May-2023	0.14	0.15	ND	0.0035	0.43 J	0.46 J	ND	ND	0.83	0.91	ND	0.0014 J	0.0079
Oct-2023	0.15	0.14	ND	0.0029	0.51	0.49 J	ND	ND	0.88	0.86	ND	ND	0.007

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09*																
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	22	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09*																
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.6 JB*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-09*																
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-09*															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09***															
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-09***															
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09***															
Nov-1993	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.5 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*TW-09*															
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.578 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-09***															
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:		***TW-14B***										
Apr-2010	ND	ND	ND	ND	1.71	0.17	ND	4	27.7	6.92	11	2.8
Oct-2010	ND	ND	ND	ND	1.82	0.18	ND	3.5	21.6	4.72	11	2.62
Apr-2011	ND	ND	ND	ND	1.61	0.2	ND	4	21	3.35	18	1.9
Sep-2011	ND	ND	ND	ND	1.56	0.2	ND	4.4	20.5	4.28	22	2.41
Mar-2012	ND	ND	ND	ND	1.74	0.21	ND	3.5	20.7	5.11	ND	2.36
Sep-2012	ND	ND	ND	ND	1.69	0.193	ND	3.4	21	5.08	ND	1.96
Mar-2013	0.92 J	0.92 J	ND	ND	1.88	0.202	ND	3.1	20.8	3.24	15	2.11
Oct-2013	1.72 J	1.72 J	ND	ND	1.8	0.196	ND	2.9	20.1	3.64	ND	2.16
Mar-2014	0.72	0.72	ND	24	1.75	0.208	ND	5.4	27.3	3.75	ND	1.85
Oct-2014	ND	ND	ND	ND	1.9	0.212	ND	4.1	20.7	4.02	ND	2.2
Apr-2015	5.64	5.64	ND	ND	1.92	0.234	ND	3.9	21.4	4.35	36	4.51
Nov-2015	1.92	1.92	ND	ND	1.78	0.221	ND	4.8	33.2	4.39	21 J	2.79
May-2016	ND	ND	ND	5 J	1.89 B	0.187	ND	4.7	28.3	3.78	73	2.9
Oct-2016	1.8	1.8	ND	5 J	1.77	NA	NA	4.6	34.4	3.98	133	2.6
May-2017	2.56	2.56	ND	12	1.72	0.227	ND	4.5	34.7	3.56	13 J	3.1
Oct-2017	ND	ND	ND	ND	1.71	0.243	ND	4.7	35.7	4.29	11 J	2.1
May-2018	ND	ND	ND	ND	1.5 J	0.24	ND	6.1	29.3	ND	ND	2.3 J
Nov-2018	ND	ND	ND	ND	1.5 J	0.25	ND	4.28	22.3	ND	ND	2.3 J
May-2019	ND	NA	ND	ND	ND	0.25	ND	4.31	17.8	ND	16	ND
Oct-2019	ND	NA	ND	ND	1.4 J	0.29	ND	3.6	23.9	ND	ND	2.3
May-2020	ND	NA	ND	ND	1.5 J	0.28	ND	4.02	22.8	ND	20	2.4
Oct-2020	ND	NA	ND	ND	1.9 J	0.27	ND	3.98	22.3	2.2	ND	2.3
Apr-2021	ND	NA	ND	ND	1.7 J	0.32	ND	4.43	26.4	ND	26	2.2 J
Oct-2021	ND	NA	ND	ND	1.3 J	0.34	ND	4.56	52.8	ND	ND	2.24 J
May-2022	ND	NA	ND	ND	1.6 J	0.32	ND	4.27	47.2	ND	ND	2.5 JN3
Oct-2022	ND	NA	ND	ND	2 J	0.35	ND	4.49	42.4	5.9 J	14	2.5 JN3
May-2023	ND	NA	ND	41	1.7 J	ND	NA	4.49	42.3	ND	ND	2.3 JN3
Oct-2023	ND	NA	ND	ND	1.9 J	0.38	NA	4.55	44.6	ND	17	2.4 JN3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14B***													
Apr-2010	ND	ND	ND	ND	ND	0.674	0.553	ND	0.022	0.01	ND	ND	ND	0.271	0.225
Oct-2010	ND	ND	ND	ND	ND	0.62	0.551	ND	0.015	ND	ND	ND	ND	0.26	0.235
Apr-2011	ND	ND	ND	ND	ND	0.445	0.466	ND	0.011	ND	ND	ND	ND	0.205	0.23
Sep-2011	ND	ND	ND	ND	ND	0.608	0.61	ND	ND	ND	ND	ND	ND	0.216	0.262
Mar-2012	ND	ND	ND	ND	ND	0.462	0.445	ND	ND	ND	0.064	ND	ND	0.295	0.283
Sep-2012	ND	ND	0.0054 J	0.000317 J	ND	0.44	0.591	0.0023 J	0.0082 J	0.0051 J	0.0352 J	0.0702	ND	0.21	0.245
Mar-2013	ND	ND	0.0055 J	0.000399 J	ND	0.518	0.516	0.0022 J	0.008 J	0.0047 J	0.0052 J	0.0174 J	ND	0.199	0.202
Oct-2013	ND	ND	0.0053 J	0.000313 J	0.000151 J	0.586	0.483	0.0072 J	0.0071 J	0.0036 J	0.0542	ND	ND	0.169	0.225
Mar-2014	0.000742 J	ND	0.0047 J	ND	0.00012 J	0.428	0.342	0.0018 J	0.0071 J	0.0063 J	ND	ND	ND	0.19	0.133
Oct-2014	0.00092 J	0.000584 J	0.0055 J	0.000383 J	0.000144 J	0.531	0.523	0.000633 J	0.0071 J	0.0048 J	0.0109 J	0.0173 J	ND	0.213	0.224
Apr-2015	0.0026	0.000676 J	0.0083 J	0.000399 J	0.000295 J	1.27	0.831	0.000584 J	0.0089 J	0.0422	0.317	0.0251 J	0.0037	0.323	0.227
Nov-2015	0.000636 J	0.000194 J	0.0067 J	0.000425 J	0.000178 J	0.688	0.907	0.000423 J	0.0079 J	0.008 J	0.18	ND	0.000607 J	0.26	0.282
May-2016	ND	ND	0.007	0.00034 J,B	0.00021 J	0.762	0.654	ND	0.0071	0.0062	0.114 J	0.0412 J	0.0015 J	0.25	0.248
Oct-2016	ND	0.00075 J	0.0066	0.00036 J	ND	0.62	0.606	0.00086 J+	0.0069	0.0068 J+	0.176 J	ND	0.0016 J	0.26 J+	0.241
May-2017	0.0015 J	0.00076 J	0.006	0.00035 J	ND	0.766	0.732	0.00074 J	0.0068	0.007	0.107 J	ND	0.0012 J	0.279	0.25
Oct-2017	ND	ND	0.0052	0.00026 J	0.00021 J	0.48	0.465	0.0011 J	0.0058	0.0034 J	ND	ND	ND	0.209	0.221
May-2018	ND	ND	0.0055	0.00032	0.00017 J	0.5 J	0.48 J	0.0029 J	0.0052	0.0069	0.02 J	ND	0.000047 JB	0.24 J	0.23 J
Nov-2018	ND	ND	0.0056	0.00031	0.00016 J	0.52 J	0.5 J	0.0064 J	0.0049	0.005	0.035	0.02 J	0.00011 J	0.23 J	0.23 J
May-2019	ND	ND	0.0058	ND	ND	ND	ND	0.009	0.0052	0.0063	ND	0.026	ND	ND	ND
Oct-2019	0.0001 J	ND	0.0058	0.00029 J	0.00026 J	0.52	0.5 J	0.007 J	0.0051	0.0087	0.025 J	0.019 J	0.000056 J	0.25	0.2 J
May-2020	ND	ND	0.0055	0.00026 J	0.00013 J	0.53	0.49 JB	0.0065 J	0.0054	0.0047	0.02 J	0.016 J	ND	0.25	0.22 JB

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-14B***													
Oct-2020	*ND*	*ND*	*0.0061 J*	*0.00029 J*	*ND*	0.5	*0.48 J*	*0.0063 J*	0.0057	0.013	*0.034 JB*	*0.019 J*	*ND*	0.25	*0.24 J*
Apr-2021	*ND*	*ND*	*0.0091 J*	*0.00026 J*	*ND*	*0.49 J*	*0.48 J*	*0.0029 J*	0.0055	*0.005 J*	*ND*	*ND*	*ND*	0.23	0.24
Oct-2021	*ND*	*ND*	0.006	*0.00032 J*	*ND*	*0.5 J*	0.53	0.0038	0.0058	0.0091	*0.021 J*	*0.014 J*	*0.000046 J*	*0.24 J*	*0.25 J*
May-2022	*ND*	*ND*	0.0064	*0.0003 J*	*ND*	0.51	*0.49 J*	0.0035	0.0064	0.0088	*ND*	*ND*	*ND*	*0.29 J*	*0.26 J*
Oct-2022	*ND*	*ND*	0.006	*0.00027 J*	*ND*	0.55	0.55	*0.0024 J*	0.0057	0.0079	*ND*	*ND*	*ND*	*0.28 J*	*0.27 J*
May-2023	*ND*	*ND*	0.0056	*0.00022 J*	*ND*	0.57	0.5	0.0032	0.0052	0.0081	*0.042 J*	*ND*	*ND*	*0.22 J*	*0.24 J*
Oct-2023	*ND*	*ND*	0.0061	*0.00028 J*	*0.00014 J*	0.54	0.52	0.0052	0.0066	0.012	*0.041 J*	*0.021 J*	*ND*	*0.25 J*	*0.27 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-14B*												
Apr-2010	0.013	0.012	ND	0.028	ND	ND	ND	ND	0.89	0.777	ND	ND	0.071
Oct-2010	ND	ND	ND	0.019	ND	ND	ND	ND	0.835	0.817	ND	ND	0.037
Apr-2011	ND	ND	ND	0.015	ND	ND	ND	ND	0.758	0.741	ND	ND	0.025
Sep-2011	ND	ND	ND	0.015	0.51	ND	ND	ND	1.07	1.03	ND	ND	0.021
Mar-2012	ND	ND	ND	0.012	ND	ND	ND	ND	0.907	0.862	ND	ND	0.016
Sep-2012	0.0072 J	0.0086 J	ND	0.0128	0.387 J	0.419 J	ND	ND	0.861	0.908	ND	ND	0.0148
Mar-2013	0.0068 J	0.007 J	0.00006 J	0.0115	0.385 J	0.345 J	ND	ND	0.799	0.755	ND	ND	0.025
Oct-2013	0.0065 J	0.0073 J	ND	0.0089 J	0.351 J	0.412 J	ND	0.000036 J	0.653	0.851	0.000443 J	0.002 J	0.0563
Mar-2014	0.0064 J	0.0039 J	ND	0.0111	0.382 J	0.41 J	ND	ND	0.859	1.03	ND	ND	0.0151
Oct-2014	0.007 J	0.0073 J	ND	0.0108 J	0.423 J	0.409 J	0.0012 J	ND	0.958	0.942	0.00071 J	ND	0.0206
Apr-2015	0.0118	0.0068 J	ND	0.0135	0.59	0.58	ND	ND	3.48	3.31	ND	ND	0.0647
Nov-2015	0.0088 J	0.0097 J	ND	0.0125	0.524	0.618	ND	ND	1.75	2.98	ND	ND	0.0276
May-2016	0.0093	0.0093 B	ND	0.0117	0.496	0.516	ND	ND	1.63	1.37	ND	ND	0.0262 J
Oct-2016	0.0082 R	0.0069	ND	0.0112 J+	0.508	0.519	ND	ND	2.09 J+	1.82	ND	ND	0.045
May-2017	0.0094	0.0088	ND	0.0107	0.528	0.477	ND	ND	1.96	1.47	ND	ND	0.0591
Oct-2017	0.0061	0.0059	ND	0.0093	0.401	0.455	ND	ND	0.859	0.876	ND	ND	0.0104 J
May-2018	0.0059	0.0053	ND	0.0091	ND	ND	0.00012 J	ND	0.84 J	0.81 J	ND	ND	0.013
Nov-2018	0.015	0.0061	ND	0.012	ND	ND	0.00022 J	ND	0.81 J	0.91 J	ND	ND	0.014
May-2019	0.0073	0.0084	ND	0.013	ND	ND	ND	ND	ND	ND	ND	0.0024	0.013
Oct-2019	0.0078	0.0068	ND	0.011	ND	ND	ND	ND	ND	ND	ND	0.0068	0.016
May-2020	0.0077	0.0071	ND	0.01	ND	ND	ND	ND	ND	ND	ND	ND	0.011
Oct-2020	0.0079	0.0071	ND	0.012	ND	ND	ND	ND	ND	ND	ND	0.0014 J	0.013 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-14B***												
Apr-2021	0.0074	0.0073	*ND*	0.01	*0.42 J*	*0.41 J*	*ND*	*ND*	*0.86 J*	1.1	*ND*	*ND*	0.01
Oct-2021	0.0075	0.008	*ND*	0.011	*0.38 J*	*0.4 J*	*ND*	*ND*	0.89	1 B	*0.000068 J*	*ND*	0.015
May-2022	0.0097	0.0086	*ND*	0.012	*0.49 J*	*0.44 J*	*ND*	*ND*	1.1	0.95	*ND*	*ND*	0.012
Oct-2022	0.0084	0.0087	*ND*	0.01	*0.49 J*	0.5	*ND*	*ND*	1.2	1.2	*ND*	*ND*	0.012
May-2023	0.0072	0.0076	*ND*	0.01	*0.35 J*	*0.45 J*	*ND*	*ND*	1	0.99	*ND*	*ND*	0.01
Oct-2023	0.009	0.0089	*ND*	0.013	*0.42 J*	0.53	*0.00093 J*	*ND*	1	1	*ND*	*ND*	0.013

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***TW-14B***																
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-14B*																
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-14B*															
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-14B***															
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14B***															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-14B***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***TW-16A***											
Oct-2009	2.9	2.9	ND	ND	2.93	0.2	ND	4.6	18.3	0.81	16	3.39
Apr-2010	2.9	2.9	ND	ND	3.33	0.2	ND	4.1	18.4	ND	44	3.1
Oct-2010	2.5	2.5	ND	ND	3.27	0.16	ND	4.6	18.2	ND	14	3.86
Apr-2011	2.9	2.9	ND	ND	3.06	0.2	ND	4.6	17	ND	12	3.5
Sep-2011	3.1	3.1	ND	ND	3.05	0.19	ND	4.6	17.5	ND	13	4
Mar-2012	3	3	ND	ND	3.13	0.2	ND	4.2	23.3	ND	39	3.9
Sep-2012	2.64	2.64	ND	ND	3.27	0.174	ND	3.8	18.3	ND	49	3.67
Mar-2013	3.32	3.32	ND	ND	3.44	0.19	ND	3.7	417.6	0.868 J	19	3.74
Oct-2013	3.72	3.72	ND	ND	3.38	0.169	ND	3.4	18.9	0.747 J	28	3.62
Mar-2014	3.08	3.08	ND	17	3.27	0.178	ND	5.4	20.5	0.581 J	ND	3.41
Oct-2014	ND	ND	ND	8 J	3.44	0.186	ND	5.1	17.9	0.224 J	ND	3.86
Apr-2015	3.76	3.76	ND	ND	3.3	0.173	ND	4.3	20.9	ND	ND	3.88
Nov-2015	2.56	2.56	ND	6 J	3.4	0.19	ND	5.1	44.9	1.08	ND	3.99
May-2016	2.56	2.56	ND	ND	3.37	0.187	ND	5.2	30.7	ND	14 J	4
Oct-2016	ND	ND	ND	ND	3.2	NA	NA	5.1	32.7	1.06	31	3.4
May-2017	ND	ND	ND	ND	3.07	0.19	ND	5	28.6	0.899 J	ND	3.3
Oct-2017	ND	ND	0.0787 J	ND	3.05	0.203	ND	5.2	34.5	0.501 J	33	3.8
May-2018	2 J	ND	0.056 J	ND	3.1	ND	ND	4.8	33.9	ND	45	4 J
Nov-2018	2 JB	ND	ND	ND	2.9 J	0.18	ND	4.66	20.4	ND	17	59.7
May-2019	ND	NA	ND	ND	ND	0.19	ND	4.7	14.9	ND	ND	ND
Oct-2019	ND	NA	ND	ND	2.6 J	0.19	ND	4.59	20.8	ND	21	3.9
May-2020	ND	NA	ND	ND	2.8 J	0.15	ND	4.38	19.2	ND	ND	4.1
Oct-2020	ND	NA	ND	ND	2.9 J	0.17	ND	4.45	20	ND	ND	4
Apr-2021	ND	NA	ND	ND	3 J	0.18	ND	4.91	25.6	ND	12	4
Oct-2021	2 J3c	NA	ND	ND	2.4 J	0.18	ND	5.02	52.4	ND	ND	3.79
May-2022	2 J3c	NA	ND	ND	2.4 J	0.17	ND	4.81	44.9	ND	16	3.9 N3
Oct-2022	3 J3c	NA	ND	8.4 J	3.3	0.17	ND	4.83	45.2	ND	ND	4.1 N3
May-2023	2 J3c	NA	ND	ND	2.6 J	0.17	ND	4.93	43.9	ND	15	4.3 N3
Oct-2023	ND	NA	ND	ND	2.9 J	ND	NA	4.94	40.3	ND	19	4 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-16A***													
Oct-2009	ND	ND	ND	ND	ND	0.828	0.795	ND	ND	ND	ND	ND	ND	0.32	0.329
Apr-2010	ND	ND	ND	ND	ND	0.746	0.735	ND	ND	ND	0.152	ND	ND	0.299	0.296
Oct-2010	ND	ND	ND	ND	ND	0.92	0.864	ND	ND	ND	ND	ND	ND	0.378	0.359
Apr-2011	ND	ND	ND	ND	ND	0.833	0.811	ND	ND	ND	ND	ND	ND	0.348	0.329
Sep-2011	ND	ND	ND	ND	ND	0.973	0.98	ND	ND	ND	ND	ND	ND	0.381	0.382
Mar-2012	ND	ND	ND	ND	ND	0.86	0.85	ND	ND	ND	ND	ND	ND	0.424	0.409
Sep-2012	ND	ND	0.0064 J	0.000091 J	ND	0.889	0.905	ND	0.0034 J	0.0012 J	0.024 J	0.0281 J	ND	0.351	0.356
Mar-2013	ND	ND	0.0066 J	0.000067 J	ND	0.981	0.898	0.0021 J	0.0038 J	0.000806 J	0.0113 J	0.0061 J	0.0014 J	0.313	0.291
Oct-2013	ND	ND	0.0067 J	ND	ND	0.991	0.878	0.0088 J	0.0037 J	0.000741 J	0.062	ND	ND	0.279	0.35
Mar-2014	0.00052 J	ND	0.0057 J	ND	ND	0.845	0.875	0.0018 J	0.0034 J	0.0022 J	ND	ND	ND	0.315	0.319
Oct-2014	0.000784 J	ND	0.0069 J	ND	ND	0.966	0.975	0.000635 J	0.003 J	0.000772 J	ND	ND	ND	0.351	0.348
Apr-2015	0.0011 J	0.000376 J	0.007 J	ND	ND	0.945	0.93	0.00071 J	0.0038 J	0.001 J	ND	0.0106 J	ND	0.369	0.363
Nov-2015	0.000344 J	ND	0.0065 J	0.000083 J	0.000101 J	0.999	1.01	0.000304 J	0.0031 J	0.0012 J	0.0175 J	ND	0.000283 J	0.362	0.371
May-2016	ND	ND	0.0067	ND	ND	0.982	0.825	0.00082 J	0.0032	0.00098 J	ND	ND	ND	0.37	0.34
Oct-2016	ND	ND	0.0068	ND	ND	0.816	0.904	ND	0.003	0.00098 J	ND	ND	ND	0.339	0.366
May-2017	ND	ND	0.0074	ND	ND	0.749	0.796	0.001 J	0.003	0.00088 J	ND	ND	ND	0.35	0.344
Oct-2017	ND	ND	0.0055	0.000077 J	ND	0.944	0.901	0.00091 J	0.0041	0.0018 J	ND	ND	ND	0.352	0.344
May-2018	0.000063 J	ND	0.0067	0.0001 J	0.000079 J	0.97 J	0.96 J	0.00085 J	0.0053	0.0017 J	0.011 J	ND	0.000068 JB	0.38 J	0.37 J
Nov-2018	ND	ND	0.0058	0.000055 J	0.000072 J	13.4	1.1	0.0087	0.026	0.0061	0.31	0.04	0.00026 J	6.4	0.46 J
May-2019	ND	ND	0.0058	ND	ND	ND	1.4	0.0099	0.029	0.0024	ND	0.04	ND	ND	ND
Oct-2019	0.000096 J	ND	0.0059	0.000078 J	0.00016 J	0.96	0.93 J	0.012	0.032	0.0031	0.068 J	0.041	ND	0.37	0.37 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***TW-16A***													
May-2020	*0.000058 J*	*ND*	0.006	*ND*	*ND*	1	*0.97 J*	0.014	0.045	0.0032	*0.095 J*	0.054	*ND*	0.38	*0.37 JB*
Oct-2020	*ND*	*ND*	*0.0065 J*	*ND*	*ND*	0.97	*0.93 J*	*0.0094 J*	0.034	*ND*	*0.057 JB*	0.042	*ND*	0.37	*0.36 J*
Apr-2021	*ND*	*ND*	*0.0071 J*	*0.00021 J*	*ND*	*0.98 J*	*0.93 J*	0.0061	0.028	*0.0045 J*	*0.051 J*	*ND*	*ND*	0.38	0.37
Oct-2021	*ND*	*ND*	0.0065	*ND*	*ND*	0.94	1	0.0025	0.017	*0.002 J*	*0.024 J*	*0.017 J*	*ND*	*0.35 J*	*0.38 J*
May-2022	*ND*	*ND*	0.0067	*ND*	*ND*	0.95	1	*0.0014 J*	0.024	*0.0022 J*	*ND*	*0.036 J*	*ND*	*0.37 J*	*0.4 J*
Oct-2022	*ND*	*ND*	0.0062	*ND*	*ND*	0.99	1.1	0.0034	0.013	*0.0016 J*	*ND*	*ND*	*ND*	*0.4 J*	*0.39 J*
May-2023	*ND*	*ND*	0.0063	*ND*	*ND*	1.1	1	0.0031	0.015	0.0027	*0.035 J*	*ND*	*ND*	*0.4 J*	*0.38 J*
Oct-2023	*ND*	*ND*	0.0059	*ND*	*ND*	0.99	1	0.0026	0.0094	0.0047 B	*0.02 JB*	*0.0085 J*	*ND*	*0.37 J*	*0.36 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*TW-16A*												
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	1.1	1.04	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	1.17	1.16	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.52	ND	ND	ND	1.28	1.21	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	1.21	1.16	ND	ND	ND
Sep-2011	ND	ND	ND	ND	0.525	0.536	ND	ND	1.48	1.45	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	1.3	1.27	ND	ND	ND
Sep-2012	0.0042 J	0.0043 J	ND	0.0046 J	0.472 J	0.464 J	ND	ND	1.28	1.33	0.000679 J	ND	0.0065 J
Mar-2013	0.0045 J	0.0042 J	0.000054 J	0.0048 J	0.424 J	0.376 J	ND	ND	1.19	1.12	ND	ND	0.0163
Oct-2013	0.0047 J	0.0045 J	ND	0.0038 J	0.409 J	0.489 J	ND	ND	1.01	1.32	0.001 J	0.0022 J	0.0123
Mar-2014	0.0036 J	0.0037 J	ND	0.0046 J	0.45 J	0.423 J	ND	ND	1.26	1.23	ND	ND	0.0064 J
Oct-2014	0.0039 J	0.0041 J	0.000024 J	0.0052 J	0.502	0.489 J	0.000965 J	ND	1.47	1.41	ND	ND	0.0095 J
Apr-2015	0.0045 J	0.0045 J	ND	0.005 J	0.529	0.516	0.0013 J	0.000034 J	1.51	1.48	0.000888 J	ND	0.0118
Nov-2015	0.004 J	0.0041 J	ND	0.0046 J	0.508	0.521	ND	ND	1.39	1.43	0.000103 J	ND	0.0044 J
May-2016	0.0046	0.0041	ND	0.0046	0.529	0.492	ND	ND	1.43	1.26	ND	ND	0.0076 J,B
Oct-2016	0.003 J	0.0038 J+	ND	0.0043	0.446	0.49	ND	ND	1.29	1.36	ND	ND	0.006 J
May-2017	0.0042	0.0032 J	ND	0.0051	0.484	0.485	ND	ND	1.21	1.23	ND	ND	0.0055 J
Oct-2017	0.0046	0.004	ND	0.0044	0.482	0.506	ND	ND	1.25	1.29	ND	ND	0.006 J
May-2018	0.0048	0.0034	ND	0.0062	ND	ND	ND	ND	1.6 J	1.2 J	ND	0.0039	0.0084 B
Nov-2018	0.0098	0.015	ND	0.009	2.3 J	ND	0.0002 J	ND	22.4	1.4 J	ND	ND	0.021
May-2019	0.025	0.064	ND	0.01	ND	ND	ND	ND	ND	ND	ND	ND	0.015
Oct-2019	0.0074	0.0091	ND	0.01	ND	ND	ND	ND	ND	1.4 J	ND	0.0072	0.011
May-2020	0.0093	0.0074	ND	0.011	ND	ND	ND	ND	ND	ND	ND	0.0081	0.0075

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***TW-16A***												
Oct-2020	0.0071	0.0067	*ND*	0.01	*ND*	*ND*	*ND*	*ND*	*1.3 J*	*ND*	*ND*	*0.00089 J*	*ND*
Apr-2021	0.0066	0.0058	*ND*	*0.0095 J*	0.51	*0.5 J*	*0.0058 J*	*ND*	1.3	1.1	*ND*	*ND*	*0.005 J*
Oct-2021	*0.0045 J*	*0.0048 J*	*ND*	0.0068	*0.44 J*	*0.49 J*	*ND*	*ND*	1.2	1.4 B	*0.000053 J*	*ND*	0.0051
May-2022	0.0054	0.0057	*ND*	0.0083	0.56	*0.47 J*	*ND*	*ND*	1.2	1.3	*ND*	*ND*	0.006
Oct-2022	*0.0048 J*	0.0052	*ND*	0.0066	0.55	*0.47 J*	*ND*	*ND*	1.5	1.4	*ND*	*ND*	0.0078
May-2023	*0.005 J*	*0.0049 J*	*ND*	0.0072	0.64	0.55	*ND*	*ND*	1.4	1.4	*ND*	*ND*	0.0057
Oct-2023	*0.0047 J*	*0.0041 J*	*ND*	0.0067	*0.48 J*	0.54	*ND*	*ND*	1.2	1.2	*ND*	*ND*	0.0063

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16A*																
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6 JB	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*TW-16A*																
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*TW-16A*															
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***TW-16A***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.123 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16A***															
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.2 B	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***TW-16A***															
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

HISTORICAL TABLES –
Off-site Non-regulated Wells

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID: MW-P4	
Nov-2005	*ND*
Mar-2009	*ND*
Oct-2009	*ND*
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000031 J*
Mar-2013	*0.000056 J*
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*ND*
Apr-2015	*ND*
Nov-2015	*ND*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.000058 J*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00005 J*
Oct-2021	*ND*
May-2022	*ND*
Oct-2022	*ND*
May-2023	*ND*
Oct-2023	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P4*																
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P4*																
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P4***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.27 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.28 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.26 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.36 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P4***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.23 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.404 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P4***															
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*MW-P4*															
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical Total Mercury (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	*MW-P9*
Jun-1994	*ND*
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	0.0013
Apr-1997	*ND*
Apr-2004	*ND*
Oct-2004	*ND*
Mar-2009	0.0012
Oct-2009	*ND*
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	0.0002
Sep-2012	0.00024
Mar-2013	0.000223
Oct-2013	0.000384
Mar-2014	0.000259
Oct-2014	0.00022
Apr-2015	*0.000126 J*
Nov-2015	*0.000117 J*
May-2016	*0.00013 J*
Oct-2016	*0.00016 J*
May-2017	0.00033
Oct-2017	*0.00013 J*
May-2018	0.00041 B
Nov-2018	0.00038
May-2019	0.00024
Oct-2019	*0.0002 J*

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	*MW-P9*
May-2020	0.00026
Oct-2020	*ND*
Apr-2021	0.00022
Oct-2021	*0.00014 J*
May-2022	*ND*
Oct-2022	*ND*
May-2023	*ND*
Oct-2023	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Millersville Landfill and Resource Recovery Facility

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***MW-P9***																
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	35	91	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	139	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	1 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	1 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P9*																
Oct-2004	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	*0.6 J*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	*0.8 J*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.45	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.53	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.36	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P9*																
Nov-2015	ND	ND	ND	ND	1.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	0.818 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2023	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P9***															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	1 J	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND
Sep-1994	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	3
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	2.2
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	1.4
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	0.7 J	2.2
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	1.8
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	0.6 J	1.8
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	2.5
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	2
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	2.1
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	2.2
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	3.5
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	2
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	3
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	3.2

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P9***															
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	3
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	2.6
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	2
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	3.1
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	2.3
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	2.1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	1.3
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	1.8
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	2.4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	2
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	2.1
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	2.3
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	2.8
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	2	ND	ND	ND	6.3	3.2
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.9	0.8 J
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	0.38 J	ND	ND	ND	1.14	1.56
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31 J	ND	0.32 J	ND	ND	ND	1.8	1.62
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.29 J	0.37 J,B	0.34 J	ND	ND	ND	2.09	1.86
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	0.25 J	ND	ND	ND	2.3	1.65
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	0.24 J	ND	ND	ND	2.09	1.73
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.22 J	ND	0.25 J	ND	ND	ND	2	1.26

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P9***															
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.47	1.47
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.2 J	ND	ND	ND	1.9	1.8
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.2 J	ND	ND	ND	1.5	1.5
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.2 J	ND	ND	ND	1.5	1.3
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.2 J	ND	ND	ND	1.7	1.6
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	1.6
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	1.4 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.9 J
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.806 J	0.982 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	0.9 J
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	0.6 J
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	0.7 J
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	0.5 J
Oct-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	0.6 J

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P9***															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	0.5 J	ND	0.6 J	ND	ND	0.6 J	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	0.8 J	ND	2.1	ND	ND	1	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	1	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	1.5	ND	NA	0.6 J	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	1.5	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	1.5	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	1.6	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	1.4	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	1.1	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	0.8 J	ND	ND	1.4	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P9***															
Apr-2004	ND	ND	ND	NA	0.9 J	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	1.1	ND	ND	1.7	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	0.9 J	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	0.9 J	ND	ND	1.8	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	0.5 J	ND	ND	1.3	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	1	ND	ND	2.7	ND	ND	ND	ND	1.8	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	0.86 J	ND	ND	2.44	ND	ND	ND	ND	0.68 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	0.66 J	ND	ND	1.75	ND	ND	ND	ND	0.59 J	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.71 J	ND	ND	1.62	ND	ND	ND	ND	0.62 J	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	0.61 J	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	2.06	ND	ND	ND	ND	0.58 J	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P9***															
Apr-2015	ND	ND	ND	ND	ND	ND	ND	1.51	ND	ND	ND	ND	0.46 J	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	1.43	ND	ND	ND	ND	0.51 J	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	0.4 J	ND	ND	1.6	ND	ND	ND	ND	0.5 J	0.2 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	0.3 J	ND	ND	1.3	ND	ND	ND	ND	0.4 J	0.1 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	0.5 J	0.2 J	ND	ND	ND
May-2018	ND	ND	ND	ND	1.3	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	ND	ND	ND	1.13	ND	ND	ND	ND	0.284 J	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2023	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2023	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical Total Mercury (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	*MW-P106*
Sep-1994	*ND*
Oct-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	**0.0027**
Apr-1997	0.0009
Apr-2004	0.001
Oct-2004	0.0005
Apr-2005	0.0005
Mar-2009	0.0003
Oct-2009	0.0002
Mar-2010	*ND*
Oct-2010	0.0004
Apr-2011	0.0002
Sep-2011	0.0004
Mar-2012	0.0002
Sep-2012	0.00029
Mar-2013	*0.000178 J*
Oct-2013	*0.000097 J*
Mar-2014	*0.000064 J*
Oct-2014	*0.000109 J*
Apr-2015	*0.000152 J*
Nov-2015	0.00043
May-2016	0.00024
Oct-2016	*0.00012 J*
May-2017	*0.00015 J*
Oct-2017	*0.00011 J*
May-2018	*0.00018 JB*
Nov-2018	*0.00016 J*
May-2019	*ND*
Oct-2019	*ND*

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	*MW-P106*
May-2020	0.00071
Oct-2020	0.0004
Apr-2021	0.00021
Oct-2021	*0.00011 J*
May-2022	*ND*
Oct-2022	*ND*
May-2023	0.00026
Oct-2023	0.0002

MCLs and Results are in mg/L unless indicated otherwise

Millersville Landfill and Resource Recovery Facility

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***MW-P106***																
Oct-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	0.7 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	1.5	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	1.7	NA	NA	6.5	0.5 J	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	1.4	ND	ND	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	1.3	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	0.5 J	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	0.6 J	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	0.6 J	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	0.7 J	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	0.6 J	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P106*																
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.78	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	0.23 J	ND	ND	7.16	ND	ND	ND	ND	ND	ND	ND	0.44 J	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	11.1	0.34 J	ND	ND	ND	ND	ND	0.34 J	0.56 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	9	0.27 J	ND	ND	ND	ND	ND	ND	0.54 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	0.58 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	3.43	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	0.1 J	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P106*																
Oct-2016	*ND*	*0.1 J*	*ND*	*ND*	5.1	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	4.5	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*0.1 J*	*ND*	*ND*	5	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	3.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.7 J*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	2.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	1.64	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	2.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	2.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	2.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	2.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*MW-P106*															
Oct-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	0.6 J	NA	NA	NA	2.5	1.2
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	5.7	ND	ND	ND	11	10
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	1 J	ND	NA	6.5	NA	ND	NA	10	11
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.9	ND	ND	ND	34	9.6
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	3.3	ND	ND	ND	16	6.9
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	6.3	1.8
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.7	1.4
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.7	1.8
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	14	3.3
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	6.3	3.1
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	8.6	2.1
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	0.9 J
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P106***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	6.4	4.7
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	7	8.1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	2.4	3.3
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	3.4	4.7
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	5.3
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.4	7.2
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.9	5
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	2.1
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.58 J	ND	ND	ND	1.81	1.93
Mar-2013	0.34 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.01	ND	ND	ND	6.99	8.26
Oct-2013	0.66 J	ND	ND	ND	ND	ND	ND	ND	0.7 J	0.28 J	ND	4.75	ND	ND	ND	8.57	13.1
Mar-2014	0.41 J	ND	ND	ND	ND	ND	ND	ND	0.36 J	ND	ND	3.44	ND	ND	ND	8.47	11.6
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.21 J	ND	ND	ND	0.51 J	0.76 J
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.16	ND	ND	ND	3.11	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.68 J	ND	ND	ND	1.17	2.59
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	3.8	4.7

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P106***															
Oct-2016	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.1 J*	*ND*	1.6	*ND*	*ND*	*ND*	5.5	6.6
May-2017	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*0.1 J*	*ND*	1.5	*ND*	*ND*	*ND*	4.4	5.4
Oct-2017	*0.1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*0.2 J*	*ND*	1.6	*ND*	*ND*	*ND*	6.4	6.3
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	6.4	3.8
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.5	1.3
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	3.3	2.3
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.588 J*	*ND*	*ND*	*ND*	*1.35 J*	*1.71 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	2.3	2
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	1.2	1.2
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	1.6	1.8
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	1.3	1.7
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	1	1.5

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P106***															
Oct-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	1 J	ND	ND	NA	NA	ND	0.8 J	NA	ND	NA
Oct-1999	ND	ND	ND	NA	1.1	ND	ND	**5.4**	ND	ND	ND	ND	2	2.8	ND	ND	NA
Apr-2000	ND	NA	ND	NA	1.9	ND	NA	**5.3**	ND	ND	NA	NA	2	2.9	ND	0.7 J	NA
Oct-2000	ND	ND	ND	NA	1.5	ND	ND	3.4	ND	ND	ND	ND	1.2	2.6	ND	ND	NA
Apr-2001	ND	ND	ND	NA	1.3	ND	ND	3	ND	ND	ND	ND	1	1.9	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	1.1	ND	ND	ND	ND	ND	0.9 J	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	1	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	1	ND	ND	NA
Mar-2003	ND	ND	ND	NA	0.9 J	ND	ND	1.5	ND	ND	ND	ND	ND	1.2	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	0.9 J	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	0.7 J	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P106***															
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	0.6 J	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.9 R	ND	ND	3.9	ND	ND	ND	ND	1.3	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	1.5	ND	ND	1.8	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	1	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	ND	1.5	1 J	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	1.1	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	0.51 J	ND	ND	1.11	ND	ND	ND	ND	0.93 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	2.45	ND	ND	3.21	ND	ND	ND	ND	2.58	ND	ND	ND	ND
Oct-2013	ND	ND	0.42 J	ND	**5.11**	0.24 J	ND	3.68	ND	ND	ND	ND	2.56	1.07	ND	0.42 J	0.66 J
Mar-2014	ND	ND	0.31 J	ND	3.21	ND	ND	4.64	ND	ND	ND	ND	2.81	0.92 J	ND	ND	0.31 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	0.78 J	ND	ND	1.81	ND	ND	ND	ND	1.36	0.51 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	1.11	ND	ND	ND	ND	0.91 J	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P106***															
May-2016	ND	ND	ND	ND	0.7 J	ND	ND	2.1	ND	ND	ND	ND	1.5	0.6 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	1.5	ND	ND	2.2	ND	ND	ND	ND	1.5	0.7 J	ND	0.1 J	ND
May-2017	ND	ND	ND	ND	1.1	ND	ND	1.8 J+	ND	ND	ND	ND	1.2	0.5 J	ND	0.1 J	ND
Oct-2017	ND	ND	ND	ND	1.1	ND	ND	2.1	ND	ND	ND	ND	1.5	0.8 J	ND	0.1 J	ND
May-2018	ND	ND	ND	ND	1.5	ND	ND	1.4	ND	ND	ND	ND	1.5	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	0.608 JB	ND	ND	0.622 J	ND	ND	ND	ND	0.515 J	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
May-2023	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Oct-2023	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical Total Mercury (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	*MW-P417*
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	*ND*
Apr-1997	0.0012
Apr-2004	*ND*
Oct-2004	*ND*
Mar-2009	*ND*
Oct-2009	*ND*
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000035 J*
Mar-2013	*0.000077 J*
Oct-2013	*0.000173 J*
Mar-2014	*0.000171 J*
Oct-2014	*0.000136 J*
Apr-2015	*0.00014 J*
Nov-2015	0.000344
May-2016	0.00026
Oct-2016	0.00054
May-2017	0.00055
Oct-2017	0.00081
May-2018	0.0018
Nov-2018	0.001
May-2019	0.0011
Oct-2019	0.00021
May-2020	*0.00018 J*

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	*MW-P417*
Oct-2020	0.00035
Apr-2021	0.00023
Oct-2021	*0.00006 J*
May-2022	*ND*
Oct-2022	*ND*
May-2023	*ND*
Oct-2023	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Millersville Landfill and Resource Recovery Facility

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P417*																
Aug-1994	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	31	4.9 J	ND
Sep-1994	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	75	109	ND
Nov-1994	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	43	203 E	ND
Apr-1995	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	66	ND
Oct-1996	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	0.5 J	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	5.2	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	8.3	ND	NA	NA	NA	NA	ND	ND	0.5 J	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	4.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P417*																
Apr-2005	ND	ND	ND	ND	6.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	7.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	9.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	7.2	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
May-2007	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	7.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	5.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	5.86	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	7.47	ND	ND	ND	ND	ND	ND	ND	0.53 J	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	5.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	4.08	ND	ND	ND	ND	ND	ND	ND	0.29 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	4.15	ND	ND	ND	ND	ND	ND	ND	0.28 J	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	3.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P417*																
Nov-2015	ND	ND	ND	ND	3.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.6 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	0.309 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P417***															
Aug-1994	*0.6 J*	*ND*	1.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	18	*ND*	*ND*	*ND*	*ND*	*ND*	2.9	3.2
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	3.3	2.9
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	3.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.4	2.7
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.2	2
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.1	3
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	6	5
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.7	8.9
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	9.8	7.1
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	1.1	*ND*	*NA*	1.4	*NA*	*NA*	*NA*	5.9	10
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	1	*ND*	*ND*	*ND*	2.9	8.6
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	1.5	*ND*	*NA*	1.6	*NA*	*ND*	*NA*	2.9	13
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	16	16
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	1	*ND*	*ND*	*ND*	6.9	7
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	1	*ND*	*ND*	*ND*	8.9	5.2
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	6.5	3.8
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	7.1	4.6
Mar-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	8.7	4.3
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.2	6
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	9.1	6.7
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	11	7.2

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P417***															
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	1.7	ND	ND	ND	12	12
Oct-2005	ND	0.9 J	ND	ND	ND	ND	ND	ND	3	ND	ND	1.7	ND	ND	ND	7.4	8.4
Mar-2006	0.7 J	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	1.6	ND	ND	ND	8.9	19.7
Sep-2006	0.8 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.9	ND	ND	ND	11.2	12
Mar-2007	0.7 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	1.8	ND	ND	ND	7.5	9.6
May-2007	0.9 J	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	2	ND	ND	ND	9.7	12
Sep-2007	0.8 J	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	1.9	ND	ND	ND	10.5	7
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	10.8	8.4
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	1.4	ND	ND	ND	12.9	8.6
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.1	5.9
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	11.7	7.5
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.8 J	6.4
Oct-2010	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	21.7	7.2
Apr-2011	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND	ND	ND	17.5	8.4
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5	ND	ND	ND	15.5	9.9
Mar-2012	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	18.7	7.6
Sep-2012	0.64 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.75	ND	ND	ND	7.99	6.5
Mar-2013	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.15	ND	ND	ND	9.09	9.12
Oct-2013	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.84	ND	ND	ND	6.28	6.28
Mar-2014	0.32 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.89	ND	ND	ND	5.88	5.01
Oct-2014	0.31 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.94	ND	ND	ND	3.11	4.78
Apr-2015	0.23 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	3.5	3.08

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P417***															
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.27	ND	ND	ND	1.72	2.86
May-2016	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	2.2	2.7
Oct-2016	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	2.1	2.2
May-2017	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	1.8	2.2
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	1.3	1.2
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	1.2
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	1.4
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.229 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.6 J
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	0.5 J
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P417***															
Aug-1994	ND	ND	1.1	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	1	NA	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND
Oct-1997	ND	ND	ND	NA	1.5	ND	ND	1.2	ND	ND	ND	ND	0.6 J	0.8 J	ND	ND	NA
Apr-1998	ND	ND	ND	NA	2.9	ND	ND	1.6	ND	ND	ND	ND	0.9 J	1.2	ND	ND	NA
Apr-1999	ND	NA	ND	NA	3.4	ND	NA	2.6	ND	ND	NA	NA	1.3	0.9 J	NA	ND	NA
Oct-1999	ND	ND	ND	NA	2.7	ND	ND	3.3	ND	ND	ND	ND	1.2	0.6 J	ND	ND	NA
Apr-2000	ND	NA	ND	NA	**5.3**	ND	NA	3.9	ND	ND	NA	NA	1.7	0.8 J	ND	0.5 J	NA
Oct-2000	ND	ND	ND	NA	**9.6**	ND	ND	4.6	ND	ND	ND	ND	2	1.5	ND	1.2	NA
Apr-2001	ND	ND	ND	NA	3.9	ND	ND	2.7	ND	ND	ND	ND	1	0.8 J	ND	ND	NA
Sep-2001	ND	ND	ND	NA	2.6	ND	ND	2.3	ND	ND	ND	ND	0.9 J	0.8 J	ND	ND	NA
Mar-2002	ND	ND	ND	NA	1.8	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	1.5	ND	ND	1.5	ND	ND	ND	ND	0.6 J	0.6 J	ND	ND	NA
Mar-2003	ND	ND	ND	NA	4.1	ND	ND	1.3	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	3.7	ND	ND	1.5	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	2.6	ND	3.2	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*MW-P417*															
Oct-2004	ND	ND	ND	NA	2.9	ND	ND	4	ND	ND	ND	ND	1.4	0.7 J	ND	ND	NA
Apr-2005	ND	ND	ND	ND	4.7	ND	ND	**6.7**	ND	ND	ND	ND	2.3	1.1	ND	0.9 J	NA
Oct-2005	ND	ND	ND	ND	**6.2**	ND	ND	**10.3**	ND	ND	ND	ND	3.1	0.7 J	ND	1.5	NA
Mar-2006	ND	ND	ND	ND	**9.7**	1.2	ND	**14**	ND	ND	ND	ND	4.1	0.9 J	ND	**2.7**	NA
Sep-2006	ND	ND	ND	ND	**10.9**	ND	ND	**15.3**	ND	ND	ND	ND	5	ND	ND	**3.2**	NA
Mar-2007	ND	ND	ND	ND	**7.1 R**	ND	ND	**10.8**	ND	ND	ND	ND	3.6	ND	ND	**3**	NA
May-2007	ND	ND	ND	0.9 J	**6.5**	ND	ND	**11.3**	ND	ND	ND	ND	3.2	0.7 J	ND	**3.6**	NA
Sep-2007	ND	ND	ND	ND	**9.2**	ND	ND	**8.6**	ND	ND	ND	ND	3.5	0.8 J	ND	**2.8**	NA
Mar-2008	ND	ND	ND	ND	4.1	ND	ND	**7.6**	ND	ND	ND	ND	2.3	1 J	ND	1.7	NA
Sep-2008	ND	ND	ND	ND	**6**	ND	ND	**5.1**	ND	ND	ND	ND	2	1.1	ND	1.5	NA
Mar-2009	ND	ND	ND	ND	4.4	ND	ND	5	ND	ND	ND	ND	1.7	0.7 J	ND	ND	NA
Oct-2009	ND	ND	ND	ND	4	ND	ND	4	ND	ND	ND	ND	1.9	0.9 J	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	3.3	ND	ND	4.9	ND	ND	ND	ND	ND	0.6 J	ND	0.7 J	NA
Apr-2011	ND	ND	ND	ND	3	ND	ND	**5.6**	ND	ND	ND	ND	**6.4 C**	ND	ND	0.6 J	NA
May-2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**8.5**	NA	NA	NA	NA
Sep-2011	ND	ND	ND	ND	4.1	ND	ND	3.5	ND	ND	ND	ND	**5.9**	ND	ND	0.8 J	NA
Mar-2012	ND	ND	ND	ND	2.6	ND	ND	3.9	ND	ND	ND	ND	4.9	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	2.27	ND	ND	**6.84**	ND	ND	ND	ND	**7.36**	0.63 J	ND	0.3 J	ND
Mar-2013	ND	ND	ND	ND	1.95	0.26 J	ND	**7.97**	ND	ND	ND	ND	**9.29**	ND	ND	0.34 J	ND
Oct-2013	ND	ND	ND	0.17 J	2.64	ND	ND	3.17	ND	ND	ND	ND	4.37	0.42 J	ND	0.36 J	ND
Mar-2014	ND	ND	ND	0.16 J	2.02	ND	ND	3.17	ND	ND	ND	ND	3.31	0.26 J	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P417***															
Oct-2014	ND	ND	ND	0.13 J	2.03	ND	ND	3.24	ND	ND	ND	ND	3.37	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.74	ND	ND	2.04	ND	ND	ND	ND	2.35	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	1.4	ND	ND	1.49	ND	ND	ND	ND	1.78	ND	ND	ND	ND
May-2016	ND	ND	ND	0.1 J	1.5	ND	ND	1.4	ND	ND	ND	ND	1.4	0.1 J	ND	0.1 J	ND
Oct-2016	ND	ND	ND	ND	0.9 J	ND	ND	1.2	ND	ND	ND	ND	1.3	0.1 J	ND	ND	ND
May-2017	ND	ND	ND	ND	1	ND	ND	1.1 J+	ND	ND	ND	ND	1.1	ND	ND	0.1 J	ND
Oct-2017	ND	ND	ND	ND	0.7 J	ND	ND	0.5 J	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical Total Mercury (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	*MW-P440*
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	*ND*
Apr-1997	*ND*
Apr-2004	*ND*
Oct-2004	*ND*
Mar-2009	*ND*
Oct-2009	*ND*
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000092 J*
Mar-2013	*0.000085 J*
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*ND*
Apr-2015	*ND*
Nov-2015	*ND*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.000065 J*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	*MW-P440*
Oct-2020	*ND*
Apr-2021	*0.00006 J*
Oct-2021	*ND*
May-2022	*ND*
Oct-2022	*ND*
May-2023	*ND*
Oct-2023	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Millersville Landfill and Resource Recovery Facility

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P440*																
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	36	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	0.7 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P440*																
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.43 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	0.32 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*MW-P440*																
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.1 J	ND
Nov-2018	ND	ND	ND	ND	1.1 L2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P440***															
Aug-1994	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1996	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*
Apr-1998	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1999	*ND*	*NA*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*0.8 J*	*NA*	*ND*	*NA*	*NA*	*NA*	*ND*	*0.7 J*
Oct-1999	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	1.2
Apr-2000	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	1.3	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	3.8	7
Oct-2000	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	20	9.4
Feb-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.7	*0.4 J*	*ND*	*ND*	*ND*	*ND*	*ND*	13	10
Apr-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	*ND*	4.1	4.5
Sep-2001	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.9	5.3
Mar-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	5.9	3.7
Sep-2002	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	2.4	1.8
Mar-2003	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	9	5.9
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.7	*0.6 J*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P440***															
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	3.2	0.9 J
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	5	1.6
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3	0.9 J
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.7	1.3
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	4.1	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	0.7 J
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	0.8 J
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	0.5 J
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.6	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.79 J	ND	ND	ND	ND	ND	1.21	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND	0.54 J	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	ND	ND	ND	ND	1.62	0.56 J
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND	ND	1.48	0.29 J
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.91 J	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.71 J	ND	0.44 J	ND	ND	ND	2.3	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***MW-P440***															
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*0.1 J*	*ND*	*ND*	*ND*	*0.4 J*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.3 J*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.96 JN3*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.383 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P440***															
Aug-1994	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	3.9	*ND*	*ND*	*NA*	*NA*	*0.6 J*	*0.9 J*	*ND*	**2.8**	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.7	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	**4.4**	*NA*
Feb-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	**6.4**	*ND*	*ND*	*ND*	*ND*	1.4	1.1	*ND*	**3.6**	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*0.5 J*	*ND*	1.1	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.4	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*0.6 J*	*ND*	1.6	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*0.9 J*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.4	*ND*	*ND*	*ND*	*ND*	1.3	*0.6 J*	*ND*	**2.4**	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P440***															
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.42 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.37 J*	*ND*	*ND*	*ND*	*ND*	*0.21 J*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.31 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***MW-P440***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.77 J*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*0.37 J*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.96 J*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P109***
Apr-2004	0.0003
Oct-2004	0.0006
Mar-2009	0.0003
Oct-2009	0.0005
Mar-2010	0.0003
Oct-2010	*ND*
Apr-2011	0.0005
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000086 J*
Mar-2013	*0.000088 J*
Oct-2013	*0.000084 J*
Mar-2014	*0.000066 J*
Oct-2014	*0.000101 J*
Apr-2015	*0.000071 J*
Nov-2015	*0.000081 J*
May-2016	*0.000051 J*
Oct-2016	*ND*
May-2017	*0.00013 J*
Oct-2017	*ND*
May-2018	0.00021 B
Nov-2018	*0.00013 J*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00007 J*
Oct-2021	*ND*
May-2022	*ND*
Oct-2022	*ND*
May-2023	*ND*
Oct-2023	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P109*																
Jan-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P109*																
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	2.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.91	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	0.1 J	0.1 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9 J	ND
Nov-2018	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P109*																
Apr-2021	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P109*															
Jan-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.5 J
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	0.6 J
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	1.1
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	0.9 J
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.1	2.2
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	3.7
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	6.3	4.5
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	5.6	3.7
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	3.2	4.1
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	7.8	4
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	3.8	2.9
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	5.8	2.1
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P109***															
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	1.8
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	0.7 J
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	0.5 J	ND	ND	ND	2.87	1.85
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	0.56 J	ND	ND	ND	2.89	2.11
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	0.83 J	ND	ND	ND	3.54	2.55
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.28 J	ND	0.8 J	ND	ND	ND	3.84	2.52
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.32 J	ND	0.9 J	ND	ND	ND	2.95	2.61
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	0.84 J	ND	ND	ND	2.86	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.28	ND	ND	ND	1.8	2.21
May-2016	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	1.6	ND	ND	ND	3	2.9
Oct-2016	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	1.9	ND	ND	ND	3.4	3.2
May-2017	0.2 J	ND	ND	ND	ND	ND	ND	ND	0.1 J	0.3 J	ND	1.7	ND	ND	ND	3.2	3.5
Oct-2017	0.2 J	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	2	ND	ND	ND	3.3	3.3
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	5.5	2.7
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5 CL	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	1.3 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	0.7 J

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P109***															
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.302 J*	*ND*	*ND*	*ND*	*1.27 J*	*1.01 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.5	*0.9 J*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.6	*0.7 J*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2	*0.7 J*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*0.6 J*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.8	*0.8 J*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P109***															
Jan-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Feb-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	0.8 J	2.1	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	0.5 J	ND	ND	1.7	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P109***															
Oct-2009	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	2.09	ND	ND	ND	ND	1.42	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.86	ND	ND	ND	ND	1.56	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	1.45	ND	ND	ND	ND	1.73	0.36 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	2.16	0.29 J	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	2.05	ND	ND	ND	ND	2.57	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	1.41	ND	ND	ND	ND	2.46	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	1.41	ND	ND	ND	ND	2.99	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	3.7	0.3 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	4.2	0.3 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	1.7 J+	ND	ND	ND	ND	4	0.3 J	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	4	0.3 J	ND	ND	ND
May-2018	ND	ND	ND	ND	1.3	ND	ND	1.2	ND	ND	ND	ND	3.2	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P109***															
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.823 J*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	1.1	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P165***
Oct-2009	*ND*
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000047 J*
Mar-2013	*0.000073 J*
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*0.000033 J*
Apr-2015	*ND*
Nov-2015	*0.00003 J*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.0001 J*
Oct-2017	*0.000064 J*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00007 J*
Oct-2021	*ND*
May-2022	*ND*
Oct-2022	*ND*
May-2023	*ND*
Oct-2023	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P165*																
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.46	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	1.54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.76	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	2.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3 J	ND
Nov-2018	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P165*																
Oct-2019	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	3.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2023	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P165*															
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.7 J
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	0.9 J
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.57	1.34
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	ND	ND	ND	ND	2.17	1.97
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	2.48	2.33
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND	3.11	2.41
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.29 J	ND	ND	ND	ND	ND	2.5	2.7
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.23 J	ND	ND	ND	2.72	2.47
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.64	2.81
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	2.9	3.3
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	3.4	3.6
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4 J	0.3 J
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	0.3 J	ND	ND	ND	4.8	4.2
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8	5
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8 CL	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	4.1 N3

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P165***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.4	3.2
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.3	2.9
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	6.4	3.8
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.292 J*	*ND*	*0.728 J*	*ND*	*ND*	*ND*	*3.94 J*	5.51
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	6.3	5
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	7	3.7
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	5.4	4
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	4	4.1
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	4.5	3.8

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P165***															
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	0.46 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	0.16 J	ND	ND	ND	0.42 J	ND	ND	ND	ND	0.22 J	0.43 J	ND	ND	ND
Mar-2014	ND	ND	ND	0.17 J	ND	ND	ND	0.61 J	ND	ND	ND	ND	0.24 J	0.4 J	ND	ND	ND
Oct-2014	ND	ND	ND	0.21 J	ND	ND	ND	0.78 J	ND	ND	ND	ND	0.32 J	0.38 J	ND	ND	ND
Apr-2015	ND	ND	ND	0.17 J	ND	ND	ND	0.75 J	ND	ND	ND	ND	0.28 J	0.36 J	ND	ND	ND
Nov-2015	ND	ND	ND	0.26 J	ND	ND	ND	0.66 J	ND	ND	ND	ND	0.29 J	0.36 J	ND	ND	ND
May-2016	ND	ND	ND	0.2 J	ND	ND	ND	0.8 J	ND	ND	ND	ND	0.3 J	0.4 J	ND	ND	ND
Oct-2016	ND	ND	ND	0.2 J	ND	ND	ND	1 J	ND	ND	ND	ND	0.4 J	0.5 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	0.2 J	ND	ND	ND	1.1	ND	ND	ND	ND	0.4 J	0.6 J	ND	ND	ND
May-2018	ND	ND	ND	ND	1.3	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P165***															
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*0.202 J*	*ND*	*ND*	*ND*	2.39	*ND*	*ND*	*ND*	*ND*	*0.719 J*	*0.429 J*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.4	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.6 J*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.7	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.5	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.5 J*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.5	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.9	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P171-1***
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000071 J*
Mar-2013	*0.000076 J*
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*0.000025 J*
Apr-2015	*ND*
Nov-2015	*ND*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.00015 J*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00005 J*
Oct-2021	*ND*
May-2022	*ND*
Oct-2022	*ND*
May-2023	*ND*
Oct-2023	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P171-1*																
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P171-1*																
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P171-1***															
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.54 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.47 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.48 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.51 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.43 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J,B*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P171-1***															
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 JB*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.405 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P171-1***															
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P171-1***															
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P264***
Apr-2004	0.0003
Oct-2004	0.0003
Mar-2009	*ND*
Oct-2009	*ND*
Apr-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000109 J*
Mar-2013	*0.000094 J*
Oct-2013	*0.000065 J*
Mar-2014	*0.000056 J*
Oct-2014	*0.000083 J*
Apr-2015	*ND*
Nov-2015	*0.000059 J*
May-2016	*0.000068 J*
Oct-2016	*0.000059 J*
May-2017	0.00021
Oct-2017	*0.00013 J*
May-2018	*0.00019 JB*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00007 J*
Oct-2021	*ND*
May-2022	*ND*
Oct-2022	*ND*
May-2023	*ND*
Oct-2023	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P264*																
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	0.91 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.55	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P264*																
Mar-2014	ND	ND	ND	ND	1.61	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	1.85	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 J	ND
Nov-2018	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	3.02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2023	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P264*															
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	0.7 J
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	0.8 J
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.8 J
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	1.1
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	1.1
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	0.7
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	1.1
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	3.8
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	1
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.3
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	1.3
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	0.6 J
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.76	1.57
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	ND	ND	ND	ND	2.33	2.28
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND	0.22 J	ND	ND	ND	2.69	2.79

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P264***															
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	0.22 J	ND	ND	ND	3.3	3.41
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.24 J	ND	0.22 J	ND	ND	ND	2.27	3.23
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.24 J	ND	0.22 J	ND	ND	ND	2.64	2.76
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.61	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	2.6	3.4
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	3	3.8
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	0.3 J	0.2 J	ND	ND	ND	3	4.2
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.3 J	ND	ND	ND	3.2	4.3
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.3	5
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 CL	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	4.9 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	3.6
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	2.5
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	6	3.5
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.464 J	ND	0.343 J	ND	ND	ND	4.29 J	5.38
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	6.4	4.6
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	7.1	3.6
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	6	4.1
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	0.6 J	ND	ND	ND	5.7	4
Oct-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	5.4	4

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P264***															
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.61 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.44 J*	*ND*	*ND*	*ND*	*ND*	*0.28 J*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P264***															
Oct-2013	ND	ND	ND	ND	ND	ND	ND	0.55 J	ND	ND	ND	ND	0.35 J	0.37 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	0.74 J	ND	ND	ND	ND	0.39 J	0.43 J	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	0.91 J	ND	ND	ND	ND	0.47 J	0.36 J	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	0.65 J	ND	ND	ND	ND	0.37 J	0.31 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	0.74 J	ND	ND	ND	ND	0.36 J	0.28 J	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	0.4 J	0.4 J	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	1 J+	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	ND
May-2018	ND	ND	ND	ND	1.2	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	0.5 J	0.5 J	ND	ND	NA
Apr-2021	ND	ND	ND	0.164 J	0.543 JB	ND	ND	2.27	ND	ND	ND	ND	0.789 J	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	0.7 J	0.6 J	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	0.7 J	ND	ND	ND	NA
May-2023	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Oct-2023	ND	ND	ND	ND	ND	ND	ND	2.4	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical Total Mercury (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	*RW-P440*
Jun-1994	*ND*
Jun-1994	*ND*
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	0.001
Apr-1997	*ND*
Apr-2004	0.001
Oct-2004	0.0005
Mar-2009	*ND*
Oct-2009	*ND*
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000056 J*
Mar-2013	0.000101
Oct-2013	*ND*
Mar-2014	*ND*
Oct-2014	*0.000051 J*
Apr-2015	*ND*
Nov-2015	*0.000036 J*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*0.00012 J*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	*RW-P440*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00006 J*
Oct-2021	*ND*
May-2022	*ND*
Oct-2022	*ND*
May-2023	*ND*
Oct-2023	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Millersville Landfill and Resource Recovery Facility

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P440*																
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	ND
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	0.7 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jan-2001	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2 J	ND
Apr-2001	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P440*																
Mar-2003	ND	ND	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	*1.6 J*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	*0.7 J*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	*0.98 J*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P440*																
Mar-2014	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	1.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	1.56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	0.512 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2023	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P440*															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	1.2	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	1 J	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	1.3	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	1.5	NA	ND	NA	NA	NA	1.1	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	1.3	0.7 J
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	1	NA	ND	NA	ND	NA	1.9	2.4
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	12	7.5
Jan-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	0.67 J	ND	ND	ND	ND	14	9
Feb-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.3	0.5 J	ND	ND	ND	ND	ND	10	7.7
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	7.4	7
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.1	0.7 J	ND	ND	ND	ND	ND	9.5	6.4
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	1	1.6	ND	ND	ND	ND	ND	8.6	6.2
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	0.7 J	ND	ND	ND	ND	ND	8.7	5.3

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P440***															
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	0.6 J	ND	ND	ND	ND	ND	7.3	5.2
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	5.5	4.4
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	8.1	4.8
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	4.3	3.4
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	4.1	2.8
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	2.6	1.6
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	4.5	4.8
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	6.3	2.7
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND	4.5 J	3 J
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	5.3	1.7
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	3.4	2.2
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	6.3	4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.3	2.6
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	4.8	3.8
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	6.7	1.9
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	6.1	3
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND	ND	ND	ND	ND	ND	2.9
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.88 J	ND	ND	ND	ND	ND	2.14	1.1
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.95 J	ND	0.45 J	ND	ND	ND	3.92	2.15
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.22	ND	0.36 J	ND	ND	ND	3.25	1.54

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P440***															
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.85 J	ND	0.31 J	ND	ND	ND	4.18 J	1.92
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.91 J	ND	0.34 J	ND	ND	ND	2.39	1.52
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.86 J	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.89 J,B	ND	0.78 J	ND	ND	ND	1.42	1.57
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	0.5 J	ND	ND	ND	1.4	0.9 J
Oct-2016	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	0.9 J	ND	ND	ND	2.3	1.6
May-2017	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	0.9 J	ND	ND	ND	2.2	1.7
Oct-2017	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	0.8 J	ND	ND	ND	2	1.4
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	1.2	ND	ND	ND	3.6	1.6
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.2 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	0.7 J	ND	ND	ND	2	0.8 J
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.09 J	ND	0.134 J	ND	ND	ND	0.433 J	0.398 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 JB	ND	ND	ND	ND	ND	1.4	0.6 J
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	1.6	0.6 J
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	0.5 J	ND	ND	ND	1	0.7 J
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	0.6 J	ND
Oct-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.6 J

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P440***															
Jun-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jun-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Aug-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	1.2	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.7	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	**2.3**	*NA*
Jan-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.6	*ND*	*ND*	*ND*	*ND*	1.1	*0.78 J*	*ND*	**3.2**	*NA*
Feb-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.2	*ND*	*ND*	*ND*	*ND*	1	*0.7 J*	*ND*	**2.6**	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	4.4	*ND*	*ND*	*ND*	*ND*	1	*0.7 J*	*ND*	**2.3**	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.8	*ND*	*ND*	*ND*	*ND*	1	*0.8 J*	*ND*	**2.2**	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	3.2	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*0.6 J*	*ND*	1.7	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*RW-P440*															
Sep-2002	ND	ND	ND	NA	ND	ND	ND	2.9	ND	ND	ND	ND	0.9 J	ND	ND	1.5	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	3.1	ND	ND	ND	ND	0.9 J	0.5 J	ND	1.4	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	2.2	ND	ND	ND	ND	0.7 J	ND	ND	1	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	1.3	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	0.7 J	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	0.6 J	ND	ND	0.9 J	NA
Mar-2007	ND	ND	ND	ND	ND	ND	ND	2.2 J	ND	ND	ND	ND	0.7 J	ND	ND	0.8 J	NA
Sep-2007	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.5 J	ND	ND	1.1	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	0.8 J	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	0.5 J	ND	ND	2.4	ND	ND	ND	ND	0.6 J	ND	ND	1.6	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	0.6 J	ND	ND	**2.1**	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	1.8	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	1.1	ND	ND	1.3	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	0.7 J	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	1.13	ND	ND	ND	ND	0.6 J	ND	ND	0.51 J	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.28	ND	ND	ND	ND	0.93 J	ND	ND	0.55 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P440***															
Oct-2013	ND	ND	ND	ND	ND	ND	ND	0.92 J	ND	ND	ND	ND	0.73 J	0.24 J	ND	0.54 J	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.23	ND	ND	ND	ND	0.55 J	0.23 J	ND	0.32 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	1.17	ND	ND	ND	ND	0.65 J	ND	ND	0.46 J	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	1.05	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	0.6 J	ND	ND	0.1 J	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	1.2	ND	ND	0.2 J	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	1.3	0.1 J	ND	0.3 J	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	1	ND	ND	0.2 J	ND
May-2018	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	1.9	NA
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.272 J	ND	ND	0.867 J	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	1.1	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	1.9	NA
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Historical Total Mercury (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	*RW-P441*
Jun-1994	*ND*
Aug-1994	*ND*
Sep-1994	*ND*
Nov-1994	*ND*
Apr-1995	*ND*
Oct-1996	0.0017
Apr-1997	0.0008
Apr-2004	0.0018
Oct-2004	0.0007
Mar-2009	0.0003
Oct-2009	0.0003
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	0.0005
Sep-2011	0.0002
Mar-2012	0.0006
Sep-2012	0.00086
Mar-2013	0.0013
Oct-2013	*0.000198 J*
Mar-2014	*ND*
Oct-2014	*0.00006 J*
Apr-2015	*0.000081 J*
Nov-2015	0.000206
May-2016	*ND*
Oct-2016	*0.000071 J*
May-2017	0.00032
Oct-2017	*0.000061 J*
May-2018	0.00042 B
Nov-2018	0.00022
May-2019	*ND*
Oct-2019	*ND*

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	*RW-P441*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	*0.00014 J*
Oct-2021	*ND*
May-2022	*ND*
Oct-2022	*ND*
May-2023	*ND*
Oct-2023	*ND*

MCLs and Results are in mg/L unless indicated otherwise

Millersville Landfill and Resource Recovery Facility

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P441*																
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	0.9 J	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P441*																
Oct-2004	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2005	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	1.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	1.44	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	1.58	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	2.14	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	2.12	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	2.01	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	1.74	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P441*																
Nov-2015	ND	ND	ND	ND	2.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5 J	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	0.332 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	0.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2023	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P441*															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	1	ND
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	0.6 J	ND
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	0.7 J	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	4.1	1.5
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	2	1
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	ND	ND	ND	1.4	1.8
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	1.6	0.9 J
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	0.5 J	NA	ND	NA	NA	NA	0.9 J	1
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	1.7
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	2.7	3.1
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	2.9
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	1.9
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.7	2.8
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.4	2.2
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.6	3.2
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	3.1
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	7.3	5.5
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.1	3.2

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P441***															
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.1	3.6
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.7	1.7
Oct-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	4.6	2
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	5.6	4.4
Sep-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.5	1.9
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*5.6 J*	*3.3 J*
Sep-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.6	1.6
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.6	1.8
Sep-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	8.7	3
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.3	1.8
Oct-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.6	3
Mar-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.1	2.2
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	10.6	1.6
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.5	1.9
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	11.3	1.7
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	4.4	1.8
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	3.06	1.02
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.34 J*	*ND*	*ND*	*ND*	*ND*	*ND*	3.54	1.31
Oct-2013	*0.28 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.27 J*	*ND*	*ND*	*ND*	4.49	1.8
Mar-2014	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.17 J*	*ND*	*0.33 J*	*ND*	*ND*	*ND*	*5.54 J*	1.91
Oct-2014	*0.17 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.4 J*	*ND*	*ND*	*ND*	3.67	1.8
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*0.34 J*	*ND*	*ND*	*ND*	3.41	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P441***															
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	2.18	1.32
May-2016	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.4 J	ND	ND	ND	2.7	1.3
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.5 J	ND	ND	ND	3.5	1.5
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	ND	0.4 J	ND	ND	ND	2.9	1.3
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	0.5 J	ND	ND	ND	3.7	1.5
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	1.4
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6 CL	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	1.1 N3
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.412 J	0.223 J
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	0.5 J
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND
May-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND
Oct-2023	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P441***															
Jun-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Aug-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nov-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	1.3	ND	ND	NA	NA	ND	0.7 J	ND	0.5 J	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	0.5 J	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	1	ND	ND	1.5	ND	ND	ND	ND	0.5 J	0.5 J	ND	0.5 J	NA
Mar-2002	ND	ND	ND	NA	0.7 J	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	1.3	ND	ND	1.9	ND	ND	ND	ND	0.6 J	ND	ND	1.1	NA
Mar-2003	ND	ND	ND	NA	1.3	ND	ND	2.1	ND	ND	ND	ND	0.7 J	ND	ND	1.2	NA
Oct-2003	ND	ND	ND	NA	2.4	ND	ND	3.3	ND	ND	ND	ND	1.1	ND	ND	1.9	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P441***															
Apr-2004	ND	ND	ND	NA	1.4	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	1.1	ND	ND	2.2	ND	ND	ND	ND	0.7 J	ND	ND	0.9 J	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2005	ND	ND	ND	ND	ND	ND	ND	1.5	0.8 J	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2006	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	0.5 J	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.3 R	ND	ND	2.3 J	ND	ND	ND	ND	0.7 J	ND	ND	1.2 J	NA
Sep-2007	ND	ND	ND	ND	1.3	ND	ND	2	ND	ND	ND	ND	0.6 J	ND	ND	0.9 J	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2008	ND	ND	ND	ND	0.9 J	ND	ND	2.5	ND	ND	ND	ND	0.5 J	ND	ND	1.3	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2009	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	1.3	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	0.6 J	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	0.5 J	ND	ND	0.6 J	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	1.69	ND	ND	ND	ND	0.54 J	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	1.07	ND	ND	ND	ND	0.36 J	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	0.5 J	0.26 J	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	0.6 J	0.35 J	ND	0.33 J	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	2.22	ND	ND	ND	ND	0.91 J	ND	ND	0.28 J	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P441***															
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.32	*ND*	*ND*	*ND*	*ND*	*0.63 J*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.34	*ND*	*ND*	*ND*	*ND*	*0.69 J*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.2 J*	*ND*	*0.1 J*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.3	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*0.1 J*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*0.2 J*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	1.6	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Mercury
MCL/GWPS	0.002
Location ID:	***RW-P584***
Apr-1995	*ND*
Oct-1996	0.0013
Apr-1997	0.0017
Apr-2004	*ND*
Oct-2004	*ND*
Mar-2009	*ND*
Oct-2009	*ND*
Mar-2010	*ND*
Oct-2010	*ND*
Apr-2011	*ND*
Sep-2011	*ND*
Mar-2012	*ND*
Sep-2012	*0.000119 J*
Mar-2013	0.000103
Oct-2013	*0.000073 J*
Mar-2014	*ND*
Oct-2014	*0.000041 J*
Apr-2015	*ND*
Nov-2015	*0.000043 J*
May-2016	*ND*
Oct-2016	*ND*
May-2017	*ND*
Oct-2017	*ND*
May-2018	*ND*
Nov-2018	*ND*
May-2019	*ND*
Oct-2019	*ND*
May-2020	*ND*
Oct-2020	*ND*
Apr-2021	0.00028
Oct-2021	*0.00005 J*
May-2022	0.00045
Oct-2022	*ND*
May-2023	0.00028
Oct-2023	0.00015 I

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P584*																
Apr-1995	ND	ND	ND	ND	0.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	0.6 J	NA	NA	3.2	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	0.7 J	NA	NA	4	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	9.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jan-2001	ND	0.76 J	ND	ND	9.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb-2001	ND	0.9 J	ND	ND	13	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND
Apr-2001	ND	1	ND	ND	16	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2001	ND	0.7 J	ND	ND	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	0.7 J	ND	ND	15	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND
Sep-2002	ND	0.6 J	ND	ND	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	ND
Mar-2003	ND	ND	ND	ND	9.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	7.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	5.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P584*																
Oct-2005	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2006	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	4.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2007	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2008	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2009	ND	ND	ND	ND	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	5.49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	6.76	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	6.59	0.24 J	ND	ND	ND	ND	ND	ND	0.38 J	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	5.01	ND	ND	ND	ND	ND	ND	ND	0.32 J	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	4.26	ND	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	3.91	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	4.74	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	4.2	0.1 J	ND	ND	ND	ND	ND	0.1 J	0.2 J	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*RW-P584*																
Oct-2016	ND	ND	ND	ND	3.4	ND	ND	ND	ND	ND	0.1 J+	0.1 J	0.2 J	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	3.7	ND	ND	ND	ND	ND	ND	0.1 J	0.2 J	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	3.4	ND	ND	ND	ND	ND	ND	0.1 J	0.2 J	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2 J	ND
Nov-2018	ND	ND	ND	ND	1.7 L2M0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2019	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	2.64	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2023	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*RW-P584*															
Apr-1995	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	2.1
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	4
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	4.7
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	2.3
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	0.9 J	NA	NA	NA	1.3	6.7
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6 J	ND	ND	ND	1.6	4.4
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	0.8 J	ND	NA	0.8 J	NA	ND	NA	4.5	11
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	1.7	ND	ND	ND	22	20
Jan-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	1.7	ND	ND	ND	ND	21
Feb-2001	0.7 J	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND	2.2	ND	ND	ND	18	23
Apr-2001	1	ND	ND	ND	ND	ND	ND	ND	2.8	ND	ND	2.6	ND	ND	ND	12	25
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	1.9	ND	ND	ND	8.8	16
Mar-2002	0.9 J	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	3.1	ND	ND	ND	12	20
Sep-2002	0.7 J	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	2.7	ND	ND	ND	13	18
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	2.1	ND	ND	ND	7.9	12
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	0.8 J	ND	ND	1.2	ND	ND	ND	12	11
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	15	9.2
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	14	8.4
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	15	9

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P584***															
Oct-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	12.4	5.5
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	9	5.8
Sep-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	13.2	5.3
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 J	ND	ND	ND	10 J	6.8 J
Sep-2007	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND	ND	1.4	ND	ND	ND	11.8	3.9
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	9.4	5.2
Sep-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	9.9	5.4
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	9.4	5.5
Oct-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	11.6	6.5
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.9 J	6.3
Oct-2010	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	18.7	7.2
Apr-2011	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.1	ND	ND	ND	20.7	9.4
Sep-2011	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5	ND	ND	ND	25.4	9.1
Mar-2012	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND	ND	ND	22.7	9.3
Sep-2012	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.59	ND	ND	ND	8.55	5.98
Mar-2013	0.55 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.11	ND	ND	ND	10.7	8.85
Oct-2013	0.58 J	ND	ND	ND	ND	ND	ND	ND	0.34 J	ND	ND	4.36	ND	ND	ND	10.4	8.15
Mar-2014	0.37 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.16	ND	ND	ND	10.6	8.31
Oct-2014	0.34 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.55	ND	ND	ND	7.23	6.15
Apr-2015	0.32 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.36	ND	ND	ND	6.98	4.91
Nov-2015	0.31 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.74	ND	ND	ND	3.83	5.33
May-2016	0.3 J	ND	ND	ND	ND	ND	ND	ND	ND	0.1 J	ND	3	ND	ND	ND	6.4	5.7

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***RW-P584***															
Oct-2016	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.1	*ND*	*ND*	*ND*	4.9	4.6
May-2017	*0.3 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	2.3	*ND*	*ND*	*ND*	5.6	4.6
Oct-2017	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.1 J*	*ND*	2.1	*ND*	*ND*	*ND*	5.1	4.4
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2	*ND*	*ND*	*ND*	9	4.5
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	2.3 CL	2.1 N3M1
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	5	3.8 N3
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	5.7	2.5
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	4.8	2.2
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	6.2	2.6
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.886 J*	*ND*	*ND*	*ND*	*2.74 J*	*2.5 J*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1 J*	*ND*	*ND*	*ND*	4.4	2.3
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	3.1	1.1
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.9 J*	*ND*	*ND*	*ND*	3.7	2
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.8 J*	*ND*	*ND*	*ND*	2.3	1.3
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1.2	*ND*	*ND*	*ND*	3.8	2.2

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P584***															
Apr-1995	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	1.1	*ND*	*NA*	2	*ND*	*ND*	*NA*	*NA*	*0.8 J*	1.3	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*0.7 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	1.8	*ND*	*NA*	4.4	*ND*	*ND*	*NA*	*NA*	1.2	1.4	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	**8.3**	*ND*	*ND*	**10**	*ND*	*ND*	*ND*	*ND*	3.1	2.1	*ND*	*ND*	*NA*
Jan-2001	*ND*	*ND*	*ND*	*NA*	**9.8**	*ND*	*ND*	**6.3**	*ND*	*ND*	*ND*	*ND*	2.5	1.6	*ND*	*0.73 J*	*NA*
Feb-2001	*0.6 J*	*ND*	*0.9 J*	*NA*	**14**	*1 J*	*ND*	**15**	*ND*	*ND*	*ND*	*ND*	4.7	1.8	*ND*	1.4	*NA*
Apr-2001	*ND*	*ND*	1.2	*NA*	**19**	1.4	*ND*	**18**	*ND*	*ND*	*ND*	*ND*	**5.8**	1.6	*ND*	1.5	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	**12**	*ND*	*ND*	3.3	*ND*	*ND*	*ND*	*ND*	2.2	1.2	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*0.8 J*	*NA*	**16**	*0.9 J*	*ND*	**15**	*ND*	*ND*	*ND*	*ND*	4.9	1.3	*ND*	1.7	*NA*
Sep-2002	*ND*	*ND*	*0.5 J*	*NA*	**11**	*ND*	*ND*	**11**	*ND*	*ND*	*ND*	*ND*	3.5	1.2	*ND*	1.2	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	**7**	*ND*	*ND*	4.7	*ND*	*ND*	*ND*	*ND*	2.5	1	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	**7.1**	*ND*	*ND*	4.8	*ND*	*ND*	*ND*	*ND*	1.7	1	*ND*	*0.6 J*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	4.8	*ND*	*ND*	4.9	*ND*	*ND*	*ND*	*ND*	1.8	1.1	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	4.4	*ND*	*ND*	2.8	*ND*	*ND*	*ND*	*ND*	1.4	1.4	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*RW-P584*															
Apr-2005	ND	ND	ND	ND	3.9	ND	ND	4.6	ND	ND	ND	ND	1.7	1.5	ND	ND	NA
Oct-2005	ND	ND	ND	ND	1.6	ND	ND	3.9	ND	ND	ND	ND	1.8	1	ND	0.6 J	NA
Mar-2006	ND	ND	ND	ND	1.8	ND	ND	**5.4**	ND	ND	ND	ND	2.1	1.1	ND	ND	NA
Sep-2006	ND	ND	ND	ND	0.6 J	ND	ND	4.9	ND	ND	ND	ND	2.4	1.9	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.6 R	ND	ND	6.8 J	ND	ND	ND	ND	3 J	ND	ND	0.7 J	NA
Sep-2007	ND	ND	ND	ND	2.5	ND	ND	**8.6**	0.5 J	ND	ND	ND	2.9	1.2	ND	1.5	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	**9.5**	ND	ND	ND	ND	2.5	0.9 J	ND	1.8	NA
Sep-2008	ND	ND	ND	ND	1.8	ND	ND	**7.7**	ND	ND	ND	ND	2.6	1.1	ND	1.7	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	**7.6**	ND	ND	ND	ND	2.7	0.9 J	ND	ND	NA
Oct-2009	ND	ND	ND	ND	1.6	ND	ND	**7.2**	ND	ND	ND	ND	3.7	0.9 J	ND	1.3	NA
Mar-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	NA
Oct-2010	ND	ND	ND	ND	2.5	ND	ND	**5.5**	ND	ND	ND	ND	ND	ND	ND	0.9 J	NA
Apr-2011	ND	ND	ND	ND	2.5	ND	ND	**5.4**	ND	ND	ND	ND	**5.6**	ND	ND	0.8 J	NA
Sep-2011	ND	ND	ND	ND	2.3	ND	ND	**5.1**	ND	ND	ND	ND	**6.6**	ND	ND	0.7 J	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	**5.1**	ND	ND	ND	ND	**7.2**	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	1.33	ND	ND	**6.13**	ND	ND	ND	ND	**7.44**	0.85 J	ND	0.29 J	ND
Mar-2013	ND	ND	ND	ND	1.02	ND	ND	**6.48**	ND	ND	ND	ND	**8.3**	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	0.84 J	ND	ND	**5.5**	ND	ND	ND	ND	**7.22**	0.88 J	ND	0.32 J	ND
Mar-2014	ND	ND	ND	ND	0.58 J	ND	ND	**6.17**	ND	ND	ND	ND	**5.89**	0.74 J	ND	0.23 J	ND
Oct-2014	ND	ND	ND	0.13 J	ND	ND	ND	**6.23**	ND	ND	ND	ND	4.83	0.6 J	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	ND	3.56	0.53 J	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	ND	3.54	0.42 J	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***RW-P584***															
May-2016	ND	ND	ND	0.1 J	0.4 J	ND	ND	4.5	ND	ND	ND	ND	3.9	0.5 J	ND	0.2 J	ND
Oct-2016	ND	ND	ND	0.1 J	0.3 J	ND	ND	3.3	ND	ND	ND	ND	2.8	0.4 J	ND	0.1 J	ND
May-2017	ND	ND	ND	ND	0.3 J	ND	ND	3.6	ND	ND	ND	ND	3	0.2 J	ND	0.1 J	ND
Oct-2017	ND	ND	ND	ND	0.3 J	ND	ND	3.4	ND	ND	ND	ND	2.6	0.4 J	ND	0.1 J	ND
May-2018	ND	ND	ND	ND	1.7	ND	ND	2.7	ND	ND	ND	ND	2.6	ND	ND	ND	NA
Nov-2018	ND	ND	ND	ND	ND	ND	ND	1.3 M1	ND	ND	ND	ND	0.99 JM1	ND	ND	ND	NA
May-2019	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND	ND	ND	1.8	ND	ND	ND	NA
Oct-2019	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	1.5	ND	ND	ND	NA
May-2020	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	ND	1.8	ND	ND	ND	NA
Oct-2020	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	1.3	ND	ND	ND	NA
Apr-2021	ND	ND	ND	ND	ND	ND	ND	2.34	ND	ND	ND	ND	1.23	ND	ND	ND	NA
Oct-2021	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	1 J	ND	ND	ND	NA
May-2022	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	0.6 J	ND	ND	ND	NA
Oct-2022	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	1 J	ND	ND	ND	NA
May-2023	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA
Oct-2023	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	0.9 J	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

HISTORICAL TABLES –
Surface Water Monitoring Locations

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-1***											
Nov-1993	17	17	0.2	30.9	21.7	8.3	ND	NA	192	15.8	146	58
Apr-1994	42	42	0.1	ND	25.3	3.6	ND	5.9	233	28.8	135	71.77
Apr-1995	12.4	12.4	ND	ND	18	3.1	ND	6	157	17.2	95	36.2
Apr-1997	ND	84	ND	ND	32	0.63	ND	NA	NA	37	229	120
Oct-1997	10	10	0.64	ND	8.4	0.255	ND	6.76	146	ND	80	33
Apr-1998	ND	ND	0.2	ND	2	ND	ND	6.4	242	4.71	22	1.8
Apr-1999	21	21	0.16	ND	125	0.901	ND	5.92	573	27.6	340	111
Oct-1999	30	30	0.1	32	13.6	2.34	ND	5.92	150.3	23.6	99	49
Oct-2000	13	NA	ND	10	67.6	2.21	ND	6.32	302	27.2	184	50.5
Apr-2001	7.5	NA	ND	ND	90.3	1.9	ND	NA	NA	15.3	206	60
Sep-2001	6	6	0.35	ND	63.4	3.51	ND	5.8	176	21.9	156	44.2
Mar-2002	8.5	8.5	ND	26	32.7	ND	ND	5.8	302	21.1	254	46.4
Sep-2002	15	15	ND	ND	55	2.09	ND	5.9	355	14.1	165	46.1
Mar-2003	18	18	ND	ND	93.9	2.02	ND	5.8	469	19.6	244	73.6
Oct-2003	22	22	ND	16	168	1.7	ND	6	691	20.8	378	101
Apr-2004	26	26	ND	ND	130	1.28	ND	6.6	619	18.9	350	73.4
Oct-2004	45	45	ND	19	37.6	1.03	ND	6.8	256	15.5	147	69.8
Apr-2005	23	23	ND	10	102	1.85	ND	6.2	399	15.6	274	65.8
Mar-2006	11	11	ND	ND	109	1.94	ND	5.7	421	17.4	224	51.9
Mar-2007	21	21	ND	ND	133	2.11	ND	6.2	606	18.3	298	59.4
Mar-2008	11	11	ND	12	126	2.23	ND	6	586	16.6	280	55.3
Mar-2009	12	12	ND	ND	118	1.16	ND	5.7	489	13.6	257	42.5
Apr-2010	27	27	ND	ND	115	1.5	ND	7.6	523	27.8	279	64.3
Oct-2010	43	43	0.27	11	42.4	0.55	ND	7	271	16.9	151	51
Apr-2011	24	24	ND	17	167	1.73	ND	7.2	532	16.2	311	57.4
Sep-2011	27	27	0.22	ND	15.1	0.57	ND	7.2	89.8	3.49	75	33.5
Mar-2012	21	21	ND	16	95.9	1.48	ND	6.1	417	18.1	213	50.9
Sep-2012	12.8	12.8	ND	ND	90.3	1.79	ND	5.6	412	13.2	191	41
Mar-2013	14.8	14.8	ND	ND	82.2	1.81	ND	7.1	386	15.1	188	43.1
Oct-2013	14.5	14.5	ND	ND	99.2	1.52	ND	6.7	459	15.4	238	44.5
Mar-2014	25.7	25.7	ND	18	489	1.62	ND	6.1	1139	19	710	60.5
Oct-2014	37.4	37.4	ND	14	187	1.58	ND	6.3	514	16	307	61.9
Apr-2015	21.9	21.9	ND	13	157	1.59	ND	6.5	501	17.1	263	61.3
Nov-2015	23.8	23.8	ND	ND	158	1.36	ND	6.5	482	15.4	285	63.3
May-2016	25.3	25.3	ND	19	109	1.32	ND	6.9	558	14.8	250	51.9
Oct-2016	13.2	13.2	ND	8 J	108	NA	NA	6.9	540	14.1	242	42.4
May-2017	11.7	11.7	ND	9 J	136	1.78	ND	6.8	650	13.3	286	50.4

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-1***											
Oct-2017	14.9	14.9	*ND*	*6 J*	106	2.12	*ND*	6.5	521	13.2	223	42
May-2018	20	20	*ND*	*20.8 J*	109	0.33	*ND*	6.9	474	15.2	187	53.5
Nov-2018	30	30	*ND*	*7.9 J*	120	1.3	*ND*	6.37	610	17.9	270	63.7
May-2019	60	*NA*	*ND*	28.4	35.8	0.2	*ND*	7.2	393	10.3	157	73.3
Oct-2019	16	*NA*	*ND*	*19.3 J*	143	1.3	*ND*	6.92	631	21.8	296	60.5
May-2020	12	12	*ND*	31.4	63.6	1.9	*ND*	6.8	406	11.6	185	48.3
Oct-2020	26	*NA*	*ND*	*ND*	61.7	1.9	*ND*	6.21	375	14.7	146	43.6
Apr-2021	40	*NA*	*ND*	*6.1 J*	69.3	1.6	*ND*	6.61	321	16.4	152	59.8
Oct-2021	*8 J5c*	*NA*	*ND*	*12.6 J*	74.7	2	*ND*	7.02	436	12	177	46.1
May-2022	20	*NA*	*ND*	*ND*	65.9	2	*ND*	6.96	362	13.5	173	46.8 N3
Oct-2022	22	*NA*	*ND*	*10.7 J*	71.4	1.9	*ND*	6.3	643	12.8	154	47.9 N3
May-2023	20	*NA*	*ND*	*6.9 JB*	71	2	*ND*	6.21	643	13.8	179	48.1 N3
Oct-2023	22	*NA*	*ND*	*9 J*	76.5	2.06 O-07	*NA*	7.17	336	13.8	189	44.7 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-1***													
Nov-1993	NA	ND	ND	NA	0.002	14	NA	ND	NA	ND	1.2	NA	**0.034**	5.6	NA
Apr-1994	NA	ND	ND	NA	ND	20	NA	ND	NA	ND	0.42	NA	**0.034**	5.3	NA
Apr-1995	ND	ND	0.5	ND	ND	9.4	NA	ND	ND	ND	0.31	NA	ND	3.1	NA
Oct-1996	ND	ND	0.1	ND	ND	66	58	ND	ND	ND	6.5	1.1	ND	12	11
Apr-1997	ND	ND	0.038	ND	ND	36	35	ND	ND	ND	0.74	0.52	ND	8.8	8.4
Oct-1997	ND	ND	0.041	ND	ND	8.89	NA	ND	ND	ND	0.292	NA	ND	2.77	NA
Apr-1998	ND	ND	0.044	ND	ND	23.7	NA	ND	ND	ND	1.04	NA	ND	6.21	NA
Apr-1999	ND	ND	0.086	ND	ND	31.3	NA	ND	ND	ND	0.345	NA	ND	7.97	NA
Oct-1999	ND	ND	0.067	ND	ND	11.9	NA	ND	ND	ND	0.337	NA	ND	3.67	NA
Oct-2000	ND	ND	0.043	ND	ND	14.2	NA	ND	ND	ND	0.366	NA	ND	3.65	NA
Apr-2001	ND	ND	0.084	ND	ND	16.1	NA	ND	ND	ND	0.546	NA	ND	4.78	NA
Sep-2001	ND	ND	0.056	ND	ND	10.1	NA	ND	ND	ND	1.82	NA	0.003	4.59	NA
Mar-2002	ND	ND	0.044	ND	ND	12.8	NA	ND	ND	ND	0.573	NA	ND	3.51	NA
Sep-2002	ND	ND	0.052	ND	ND	13.2	NA	ND	ND	ND	0.171	NA	ND	3.19	NA
Mar-2003	ND	ND	0.094	ND	ND	19.9	NA	ND	ND	ND	0.258	NA	ND	5.8	NA
Oct-2003	ND	ND	0.126	ND	ND	28.1	NA	ND	ND	ND	0.594	NA	ND	7.54	NA
Apr-2004	ND	ND	0.072	ND	ND	21	NA	ND	ND	ND	0.701	NA	ND	5.11	NA
Oct-2004	ND	ND	0.032	ND	ND	20.1	NA	ND	ND	ND	1.23	NA	0.003	4.73	NA
Apr-2005	ND	0.004	0.058	ND	ND	18.6	NA	ND	ND	ND	1.12	NA	ND	4.69	NA
Mar-2006	ND	ND	0.056	ND	ND	14.4	NA	ND	ND	ND	0.471	NA	ND	3.84	NA
Mar-2007	ND	ND	0.055	ND	ND	17.7	NA	ND	ND	ND	0.116	NA	ND	3.68	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-1***													
Mar-2008	ND	0.002	0.071	ND	ND	15.4	NA	ND	ND	ND	0.208	NA	ND	4.07	NA
Mar-2009	ND	ND	0.055	ND	ND	11.7	NA	ND	ND	ND	0.496	NA	ND	3.22	NA
Apr-2010	ND	ND	0.049	ND	ND	18.7	NA	ND	ND	ND	ND	NA	ND	4.27	NA
Oct-2010	ND	ND	0.02	ND	ND	15	NA	ND	ND	ND	0.339	NA	ND	3.5	NA
Apr-2011	ND	ND	0.054	ND	ND	16.8	NA	ND	ND	ND	0.657	NA	ND	3.77	NA
Sep-2011	ND	ND	0.014	ND	ND	10.4	NA	ND	ND	ND	0.519	NA	ND	1.82	NA
Mar-2012	ND	ND	0.044	ND	ND	14.2	NA	ND	ND	ND	ND	NA	ND	3.74	NA
Sep-2012	ND	ND	0.0428	0.000066 J	ND	11.3	NA	ND	0.000981 J	ND	0.0847	NA	ND	3.1	NA
Mar-2013	ND	ND	0.0436	ND	ND	11.8	NA	0.0022 J	0.0011 J	0.00083 J	0.0408 J	NA	0.0012 J	3.31	NA
Oct-2013	0.000594 J	ND	0.0516	ND	ND	13.1	NA	0.0065 J	0.0012 J	0.00074 J	0.142	NA	0.000333 J	2.86	NA
Mar-2014	0.000455 J	0.000116 J	0.0655	ND	ND	18.1	NA	0.0009 J	0.001 J	0.0012 J	0.185	NA	0.000482 J	3.73	NA
Oct-2014	0.000432 J	0.000397 J	0.0661	ND	ND	17.5	NA	0.000625 J	0.0008 J	0.000969 J	0.169	NA	ND	4.41	NA
Apr-2015	0.000634 J	0.000521 J	0.0611	ND	ND	17.3	NA	0.0013 J	0.0017 J	0.0013 J	0.496	NA	0.0012 J	4.4	NA
Nov-2015	0.000471 J	0.000477 J	0.0549	ND	ND	18.7	NA	0.0012 J	0.0013 J	0.000996 J	0.682	NA	0.000705 J	4.02	NA
May-2016	ND	0.00074 J	0.0542	ND	ND	14.5	NA	0.00081 J	0.00063 J	0.0014 J	0.19 J	NA	0.00055 J	3.81	NA
Oct-2016	ND	ND	0.0552	ND	ND	11.5	NA	0.00074 J	0.0021	0.00078 J	0.34	NA	0.001 J	3.31	NA
May-2017	ND	ND	0.0641	ND	ND	13.8	NA	0.0018 J	0.002	0.0012 J,B	0.248	NA	0.00094 J	3.88	NA
Oct-2017	ND	ND	0.0482	ND	ND	11.8	NA	ND	0.00081 J	ND	ND	NA	ND	3.02	NA
May-2018	0.0001 J	ND	0.057	0.000038 J	0.000065 J	15.1	NA	0.0052 J	0.001	0.003 B	0.42	NA	0.00071 J	3.8	NA
Nov-2018	0.00033 J	0.000072 J	0.04	0.000047 J	0.000054 J	18.3	NA	0.0035 J	0.0016	0.0033	0.91	NA	0.0013	4.4	NA
May-2019	ND	ND	0.021	ND	ND	24.6	NA	ND	0.00069	0.0024	2.5	NA	0.0018	2.9	NA
Oct-2019	0.00016 J	0.00018 J	0.056	0.000096 J	0.00032 J	16.9	NA	0.004 J	0.0016	0.0039	0.92	NA	0.0018	4.4	NA
May-2020	0.00036 J	0.00034 J	0.044	0.00011 J	0.00012 J	13.4	NA	0.0079	0.0022	**0.0026 D6**	0.84	NA	0.0021	3.6	NA
Oct-2020	ND	ND	0.037	ND	ND	12.4	NA	0.0095 J	0.00053 J	ND	0.037 J	NA	ND	3.1	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-1***													
Apr-2021	*ND*	*ND*	0.038	*ND*	*ND*	17.7	*NA*	*0.00043 J*	*ND*	*ND*	0.2	*NA*	*ND*	3.8	*NA*
Oct-2021	*0.000076 J*	*ND*	0.042	*ND*	*ND*	13.1	*NA*	*ND*	*0.00037 J*	*0.00042 J*	0.076	*NA*	*0.00012 J*	3.2	*NA*
May-2022	*ND*	*ND*	0.047	*ND*	*ND*	13.4	*NA*	*0.00054 J*	*0.00054 J*	*ND*	*0.046 J*	*NA*	*ND*	3.3	*NA*
Oct-2022	*ND*	*ND*	0.042	*ND*	*ND*	13.8	*NA*	*0.0006 J*	*ND*	*ND*	*0.048 J*	*NA*	*ND*	3.3	*NA*
May-2023	*ND*	*ND*	0.042	*ND*	*ND*	13.6	*NA*	*0.00065 J*	*ND*	*0.00069 J*	*0.038 J*	*NA*	*ND*	3.4	*NA*
Oct-2023	*ND*	*ND*	0.041	*ND*	*ND*	12.6	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*	*ND*	3.2	*NA*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*SW-1*												
Nov-1993	0.2	NA	ND	NA	4.1	NA	ND	NA	16.9	NA	NA	NA	0.02
Apr-1994	0.064	NA	ND	NA	2.7	NA	ND	NA	11	NA	NA	NA	0.022
Apr-1995	0.05	NA	ND	ND	1.7	NA	ND	ND	7.1	NA	ND	ND	0.04
Oct-1996	0.57	0.076	NA	ND	ND	ND	ND	ND	7.7	8.7	ND	ND	0.43
Apr-1997	0.14	0.13	ND	ND	4.2	4	ND	ND	19	18	ND	ND	0.047
Oct-1997	0.049	NA	NA	ND	1.98	NA	ND	ND	13.6	NA	ND	ND	ND
Apr-1998	0.041	NA	ND	3.09	ND	NA	ND	17.5	ND	NA	ND	0.025	NA
Apr-1999	0.07	NA	NA	ND	3.91	NA	ND	ND	67.9	NA	ND	ND	0.01
Oct-1999	0.076	NA	NA	ND	2.93	NA	ND	ND	44.8	NA	ND	ND	ND
Oct-2000	0.036	NA	NA	ND	3.15	NA	ND	ND	40.6	NA	ND	ND	ND
Apr-2001	0.1	NA	NA	ND	2.48	NA	ND	ND	46.3	NA	ND	ND	ND
Sep-2001	0.052	NA	NA	0.023	3.79	NA	ND	ND	37.4	NA	ND	ND	0.015
Mar-2002	0.025	NA	NA	ND	2.64	NA	ND	ND	66.9	NA	ND	ND	0.012
Sep-2002	0.059	NA	NA	ND	2.4	NA	ND	ND	35.1	NA	ND	ND	0.012
Mar-2003	0.116	NA	NA	ND	2.77	NA	ND	ND	62.9	NA	ND	ND	ND
Oct-2003	0.182	NA	NA	ND	2.28	NA	ND	ND	91.7	NA	ND	ND	0.021
Apr-2004	0.116	NA	ND	ND	2.42	NA	ND	ND	103	NA	ND	ND	0.035
Oct-2004	0.042	NA	ND	ND	3.49	NA	ND	ND	28.5	NA	ND	ND	0.048
Apr-2005	0.063	NA	ND	ND	3.17	NA	ND	ND	66.4	NA	ND	ND	0.011
Mar-2006	0.026	NA	ND	ND	2.28	NA	ND	ND	52.1	NA	ND	ND	0.048
Mar-2007	0.039	NA	ND	ND	2.78	NA	ND	ND	73	NA	ND	ND	ND
Mar-2008	0.051	NA	ND	ND	2.96	NA	ND	ND	79.3	NA	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-1***												
Mar-2009	0.06	NA	0.0002	ND	2.26	NA	ND	ND	63	NA	ND	ND	0.01
Apr-2010	0.038	NA	ND	ND	2.52	NA	ND	ND	62	NA	ND	ND	ND
Oct-2010	0.014	NA	ND	ND	2.74	NA	ND	ND	29.2	NA	ND	ND	ND
Apr-2011	0.049	NA	ND	ND	2.46	NA	ND	ND	76.7	NA	ND	ND	ND
Sep-2011	0.015	NA	ND	ND	1.16	NA	ND	ND	10.1	NA	ND	ND	ND
Mar-2012	0.038	NA	ND	ND	2.41	NA	ND	ND	55.8	NA	ND	ND	ND
Sep-2012	0.0339	NA	ND	0.0014 J	2.43	NA	0.000504 J	ND	51.5	NA	ND	ND	0.0053 J
Mar-2013	0.0335	NA	0.000055 J	0.0015 J	2.4	NA	0.000445 J	0.00002 J	41.3	NA	ND	ND	0.0172
Oct-2013	0.0329	NA	ND	0.0017 J	2.19	NA	ND	0.000026 J	58.8	NA	0.000724 J	ND	0.0162
Mar-2014	0.0326	NA	ND	0.0016 J	2.34	NA	0.0011 J	ND	216	NA	ND	0.000342 J	0.0106
Oct-2014	0.0244	NA	0.00004 J	0.0033 J	2.62	NA	0.0014 J	ND	82.5	NA	ND	ND	0.0073 J
Apr-2015	0.0572	NA	ND	0.0034 J	2.76	NA	0.0013 J	ND	76.8	NA	ND	0.0011 J	0.0153
Nov-2015	0.0414	NA	ND	0.0027 J	2.95	NA	0.0012 J	ND	74.5	NA	0.000195 J	0.00091 J	0.0067 J
May-2016	0.0216	NA	ND	0.0021 J	2.66	NA	0.0006 J	ND	64.3	NA	ND	0.00049 J	0.0123 J
Oct-2016	0.0512	NA	ND	0.0025 J	2.34	NA	0.0006 J	ND	66.7	NA	ND	0.00064 J	0.0079 J
May-2017	0.0382	NA	ND	0.0019 J,B	2.47	NA	0.00068 J	ND	76	NA	ND	0.00047 J	0.0144 JB
Oct-2017	0.0203	NA	ND	0.0013 JB	2.31	NA	0.00059 J	ND	59.6	NA	ND	ND	0.0062 J
May-2018	0.043	NA	ND	0.0034	2.2 J	NA	0.0013 JB	ND	73.2	NA	ND	ND	0.0092 B
Nov-2018	0.057	NA	ND	0.0035	1.9 J	NA	0.00075 J	ND	80.2	NA	0.000095 J	0.0041	0.01
May-2019	0.063	NA	ND	0.0035	ND	NA	ND	ND	24.1	NA	ND	0.0059	0.019
Oct-2019	0.05	NA	ND	0.0037	2.6 J	NA	0.0013 J	ND	96.3	NA	ND	ND	0.015
May-2020	0.056	NA	ND	0.0054	2.3 J	NA	0.001 J	ND	38.6	NA	ND	0.0012 D6	0.011 D6
Oct-2020	0.011	NA	ND	ND	2.3 J	NA	ND	ND	39.7	NA	ND	0.0027 J	ND
Apr-2021	0.013	NA	ND	ND	2.3	NA	ND	ND	43.4	NA	ND	ND	0.0066 J

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-1***												
Oct-2021	0.009	*NA*	*ND*	*0.0012 J*	2.2	*NA*	*ND*	*ND*	48.4	*NA*	*ND*	*0.00028 J*	*0.0035 J*
May-2022	0.012	*NA*	*ND*	*0.0014 J*	2.3	*NA*	*ND*	*ND*	42.6	*NA*	*ND*	*ND*	0.0055
Oct-2022	0.01	*NA*	*ND*	*0.0014 J*	2.5	*NA*	*ND*	*ND*	42.6	*NA*	*ND*	*ND*	0.006
May-2023	0.012	*NA*	*ND*	*0.0014 J*	2.2	*NA*	*0.00092 JB*	*ND*	48.5	*NA*	*ND*	*ND*	0.0071
Oct-2023	0.009	*NA*	*ND*	*0.0012 J*	2.2	*NA*	*ND*	*ND*	47.6	*NA*	*ND*	*ND*	*0.005 J*

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***SW-1***																
Nov-1993	NA	ND	ND	ND	ND	ND	NA	NA	NA	NA	ND	ND	NA	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	23	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.5	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-1*																
Jun-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.46 J*	*ND*	*ND*	*4.84 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.09 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.25 J,B*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-1*																
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.4 JBIH*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	5.3	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-1***															
Nov-1993	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA	NA	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-1***															
Jun-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-1***															
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-1***															
Nov-1993	ND	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND	ND
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-1996	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1998	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-1999	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	NA	ND	NA
Oct-1999	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2000	ND	NA	ND	NA	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA
Oct-2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2001	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2002	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-1***															
May-2005	*ND*	*ND*	*ND*	1.4	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jun-2005	*ND*	*ND*	*ND*	*0.6 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2006	*ND*	*ND*	*ND*	1.5	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2007	*ND*	*ND*	*ND*	1.7	2.1 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*0.19 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*0.15 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1 R	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		*SW-1*															
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-2***											
Nov-1993	28	28	ND	39.3	18.4	1.3	ND	5.8	306	80	200	104
Apr-1994	30	30	0.2	22.7	8.6	0.5	ND	6.15	164	26.1	107	61.88
Apr-1995	23.7	23.7	ND	ND	13.7	0.7	ND	6.5	140	23.7	70	47
Apr-1997	ND	24	ND	ND	11	0.21	ND	NA	NA	32	192	54
Apr-1997	ND	17	ND	ND	14	0.22	ND	NA	NA	27	164	21
Oct-1997	23	23	0.39	ND	25.8	2.54	ND	6.83	92.2	15.1	17	36
Apr-1998	13	13	0.33	11	6.7	0.2	ND	6.29	164.7	18.4	72	37
Apr-1999	31	31	0.29	14	20.4	0.503	ND	5.99	296	46.6	480	89
Oct-1999	4	4	0.2	ND	4.95	ND	ND	5.62	62.2	13.8	40	15
Oct-2000	30	NA	ND	16	18.1	ND	ND	6.69	130.4	10.5	90	50.3
Apr-2001	36	NA	ND	17	14.9	ND	ND	NA	NA	15.5	151	77.2
Sep-2001	45	45	0.25	22	16.2	ND	ND	7.2	202	22.2	121	70.5
Mar-2002	46	46	ND	28	13.7	ND	ND	7.1	388	116	256	104
Sep-2002	80	80	ND	21	10.3	ND	ND	7.4	327	49.2	206	140
Mar-2003	45	45	ND	25	19	0.254	ND	7.1	212	23.6	133	71.6
Oct-2003	39	39	ND	23	29.4	0.358	ND	6.7	233	10.3	174	59.6
Apr-2004	110	110	ND	46	30	1.63	ND	7.7	372	31	248	143
Oct-2004	35	35	ND	26	23.1	0.53	ND	6.95	160.2	15.7	121	60.4
Apr-2005	42	42	ND	21	13.9	0.36	ND	6.5	131.7	14.2	185	61.9
Mar-2006	30	30	ND	ND	31.7	0.42	ND	6.9	192.3	24.6	146	58.6
Mar-2007	49	49	ND	19	54.6	0.44	ND	6.9	401	20.1	165	72.8
Mar-2008	43	43	ND	26	60.8	0.29	ND	7.1	392	25.3	199	74.3
Mar-2009	28	28	ND	ND	45.5	0.26	ND	6	320	19.3	160	51
Apr-2010	32	32	ND	23	42.9	0.39	ND	7	188.5	16.9	132	50.6
Oct-2010	59	59	ND	26	45.7	0.15	ND	7.6	309	26.2	214	96.1
Apr-2011	37	37	ND	20	53.7	0.47	ND	6.8	210	19.8	160	59.4
Sep-2011	89	89	ND	43	26	0.44	0.03	7.2	279	21.3	208	109
Mar-2012	23	23	ND	ND	56.6	0.43	0.02	6.1	202	12.9	140	45.7
Sep-2012	32.8	32.8	ND	81.1	24.5	0.212	ND	5.7	146.9	11.4	116	50.3
Mar-2013	31.9	31.9	ND	19.5	43.9	0.229	ND	6.9	310	19.7	162	52.6
Oct-2013	48.6	48.6	ND	42.8	11.4	0.293	ND	7.2	174.5	29.7	161	74.3
Mar-2014	33.2	33.2	ND	37	73.9	0.246	ND	6.5	354	22.7	204	62.1
Oct-2014	44	44	ND	23	45.2	0.0948	ND	6.9	177.5	11.7	131	49.9
Apr-2015	108	108	0.195 J	53	81.9	0.987	ND	6.4	528	25.1	338	137
Nov-2015	60	60	ND	33	37.5	0.362	ND	7.4	310	27.7	250	95.2
May-2016	53.8	53.8	ND	21	56.4	0.104	ND	6.2	354	12.8	194	77.4
Oct-2016	112	112	ND	97	32.6	NA	NA	7.1	565	55	356	154

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-2***											
May-2017	51.8	51.8	*ND*	20	37.4	0.504	*ND*	6.9	368	15	151	74
Oct-2017	63.2	63.2	*ND*	30	4.97	*ND*	*ND*	6.9	238	9.23	102	71.5
May-2018	60	60	0.16	42.3	33.2	*ND*	0.021	6	234	13.7	68	81.7
Nov-2018	88	88	*0.052 J*	*20.8 J*	24.2	0.21	*0.0069 J*	7.99	328	17.1	147	104
May-2019	78	*NA*	*ND*	*ND*	53.6	0.38	0.013	7.49	374	15.8	206	93.8
Oct-2019	122	*NA*	*ND*	*12.6 J*	8.9	0.29	*ND*	7.24	872	*5.1 J*	122	134
May-2020	68	68	*ND*	55.9	46.9	0.46	*0.0057 J*	7.25	530	10.9	199	84.5
Oct-2020	92	*NA*	*ND*	29.6	15.1	0.21	*ND*	6.93	327	16.1	146	121
Apr-2021	80	*NA*	*ND*	*14.8 J*	41	0.44	*ND*	8.19	304	16.6	150	97.8
Oct-2021	20	*NA*	*ND*	*17 J*	27.8	0.61	*ND*	6.55	365	10.5	164	113
May-2022	72	*NA*	*ND*	26	38.8	*0.095 J*	*ND*	7.11	362	12.8	172	99.3 N3
Oct-2022	74	*NA*	*ND*	26.7	35.9	*0.065 J*	*ND*	6.82	362	19	131	95.5 N3
May-2023	64	*NA*	*ND*	36.5	24.9	*0.096 J*	*ND*	7.41	325	11.8	139	88.3 N3
Oct-2023	34	*NA*	0.33	52.2	5.9	*ND*	*NA*	6.35	144	*6.2 J*	78	44.5 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-2***													
Nov-1993	NA	ND	ND	NA	ND	32.3	NA	ND	NA	ND	0.2	NA	ND	5.8	NA
Apr-1994	NA	ND	0.008	NA	ND	20	NA	ND	NA	ND	0.37	NA	ND	2.9	NA
Apr-1995	ND	ND	ND	ND	ND	14.7	NA	ND	ND	ND	0.6	NA	0.006	2.5	NA
Oct-1996	ND	ND	0.028	ND	ND	15	14	ND	ND	ND	1.1	1.1	ND	3.1	2.8
Apr-1997	ND	ND	0.029	ND	ND	15	16	ND	ND	ND	0.71	0.7	ND	3.2	3.5
Apr-1997	ND	ND	0.035	ND	ND	11	12	ND	ND	ND	0.79	0.56	ND	3	3.1
Oct-1997	ND	ND	0.031	ND	ND	9.35	NA	ND	ND	ND	1.46	NA	ND	2.19	NA
Apr-1998	ND	ND	0.03	ND	ND	10.4	NA	ND	ND	ND	1.01	NA	ND	2.63	NA
Apr-1999	ND	ND	0.066	ND	ND	25.4	NA	0.03	0.013	0.015	12.5	NA	ND	6.09	NA
Oct-1999	ND	ND	0.045	ND	ND	22.5	NA	ND	ND	ND	1.03	NA	ND	5.03	NA
Oct-2000	ND	ND	0.036	ND	ND	14.4	NA	ND	ND	ND	0.311	NA	ND	3.48	NA
Apr-2001	ND	ND	0.03	ND	ND	22.7	NA	ND	ND	ND	0.326	NA	ND	4.98	NA
Sep-2001	ND	ND	0.031	ND	ND	21.1	NA	ND	ND	ND	0.502	NA	ND	4.35	NA
Mar-2002	ND	ND	0.039	ND	ND	31	NA	ND	ND	ND	0.68	NA	ND	6.53	NA
Sep-2002	ND	ND	0.025	ND	ND	43.8	NA	ND	ND	ND	0.286	NA	ND	7.55	NA
Mar-2003	ND	ND	0.026	ND	ND	21.9	NA	ND	ND	0.01	0.257	NA	ND	4.11	NA
Oct-2003	ND	ND	0.04	ND	ND	17.2	NA	ND	ND	ND	0.8	NA	ND	4.06	NA
Apr-2004	ND	0.002	0.034	ND	ND	44.5	NA	ND	ND	0.012	0.378	NA	0.003	7.88	NA
Oct-2004	ND	ND	0.041	ND	ND	17.5	NA	ND	ND	ND	0.271	NA	ND	4.06	NA
Apr-2005	ND	0.003	0.03	ND	ND	18.9	NA	ND	ND	ND	1.69	NA	0.003	3.57	NA
Mar-2006	ND	ND	0.038	ND	ND	16.2	NA	ND	ND	ND	0.071	NA	ND	4.41	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-2***													
Mar-2007	ND	ND	0.029	ND	ND	23.7	NA	ND	ND	ND	0.478	NA	ND	4.1	NA
Mar-2008	ND	0.003	0.032	ND	ND	22	NA	ND	ND	ND	0.399	NA	ND	4.7	NA
Mar-2009	ND	ND	0.028	ND	ND	14.5	NA	ND	ND	ND	0.391	NA	ND	3.59	NA
Apr-2010	ND	ND	0.039	ND	ND	14.8	NA	ND	ND	ND	0.329	NA	ND	3.31	NA
Oct-2010	ND	ND	0.038	ND	ND	29	NA	ND	ND	ND	0.311	NA	ND	6.09	NA
Apr-2011	ND	ND	0.041	ND	ND	17.5	NA	ND	ND	ND	0.436	NA	ND	3.82	NA
Sep-2011	ND	0.003	0.035	ND	ND	33.8	NA	ND	ND	ND	1.18	NA	ND	5.94	NA
Mar-2012	ND	ND	0.046	ND	ND	12.5	NA	ND	ND	ND	0.727	NA	ND	3.51	NA
Sep-2012	ND	0.0013 J	0.0369	0.00007 J	ND	14.3	NA	ND	0.0016 J	0.0013 J	1.13	NA	ND	3.55	NA
Mar-2013	ND	ND	0.0303	ND	ND	15.1	NA	0.0027 J	0.0017 J	0.0018 J	0.671	NA	0.0014 J	3.62	NA
Oct-2013	0.000546 J	ND	0.033	ND	0.000306 J	23.5	NA	0.0066 J	0.0013 J	0.0045 J	1.03	NA	0.004	3.79	NA
Mar-2014	0.000427 J	0.000355 J	0.0333	ND	ND	18.2	NA	0.0014 J	0.0017 J	0.002 J	0.43	NA	ND	4.04	NA
Oct-2014	0.00048 J	0.000872 J	0.0412	ND	ND	13.6	NA	0.001 J	0.000988 J	0.000866 J	0.549	NA	ND	3.88	NA
Apr-2015	0.000938 J	0.0022	0.039	ND	0.000074 J	42.4	NA	0.002 J	0.0015 J	0.0053 J	0.66	NA	0.0012 J	7.44	NA
Nov-2015	0.000754 J	0.0036	0.0675	0.000225 J	0.000081 J	30.1	NA	0.0201	0.0017 J	0.0051 J	6.97	NA	0.0079	4.86	NA
May-2016	ND	0.0011 J	0.0403	ND	ND	22.7	NA	0.0015 J	0.0014	0.00071 J	1.93	NA	0.00028 J	5.06	NA
Oct-2016	0.00066 J	0.0036 J	0.0535	ND	ND	41.8	NA	0.0021 J	0.0009 J	0.0042	1.14	NA	0.00083 J	12.1	NA
May-2017	ND	0.0013 J	0.0195	ND	ND	22.5	NA	0.0017 J	0.00081 J	0.0016 J	1.44	NA	0.00055 J	4.3	NA
Oct-2017	ND	0.0017 J	0.0128	ND	ND	21.6	NA	0.0012 J	0.00043 J	0.0012 J	0.619	NA	0.00046 J	4.28	NA
May-2018	0.0003 J	0.00094 JB	0.02	ND	0.000022 J	24.4	NA	0.0042 J	0.0012	0.0038 B	1.3	NA	0.00042 J	5.1	NA
Nov-2018	0.00015 J	0.00032 J	0.026	0.00003 J	ND	32	NA	0.0025 J	0.00058	0.0027	0.93	NA	0.00032 J	5.8	NA
May-2019	ND	ND	0.035	ND	ND	28.2	NA	ND	0.0011	ND	1.2	NA	ND	5.7	NA
Oct-2019	0.00014 J	0.00036 J	0.033	ND	0.00019 J	38.1	NA	0.0018 J	0.0004 J	0.0062	0.84	NA	0.0002 J	9.4	NA
May-2020	0.00013 J	ND	0.033	ND	ND	24.8	NA	0.0043 J	0.00092	0.0017 J	0.9	NA	ND	5.5	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-2***													
Oct-2020	*0.00031 J*	*ND*	0.032	*ND*	*ND*	37.5	*NA*	*0.0092 J*	*0.00061 J*	*ND*	0.84	*NA*	*ND*	6.6	*NA*
Apr-2021	*ND*	*ND*	0.035	*ND*	*ND*	29.2	*NA*	*0.0011 J*	*0.00087 J*	*ND*	1.1	*NA*	*ND*	6	*NA*
Oct-2021	*0.00012 J*	*0.00067 J*	0.039	*ND*	*ND*	32.1	*NA*	*ND*	*0.00032 J*	*0.00031 J*	0.43	*NA*	*0.000066 J*	7.9	*NA*
May-2022	*ND*	*0.0013 J*	0.03	*ND*	*ND*	29.7	*NA*	*0.0014 J*	*0.00074 J*	*0.0015 J*	1.5	*NA*	0.00056	6.1	*NA*
Oct-2022	*ND*	*0.00094 J*	0.033	*ND*	*ND*	28	*NA*	*0.00097 J*	*ND*	*0.00096 J*	0.83	*NA*	*ND*	6.2	*NA*
May-2023	*ND*	*0.0011 J*	0.025	*ND*	*ND*	26	*NA*	*0.0013 J*	*0.00091 J*	*0.0017 J*	1.3	*NA*	*0.00034 J*	5.7	*NA*
Oct-2023	*ND*	0.0058	0.05	*0.0003 J*	*ND*	12.2	*NA*	*0.0045 J*	0.0098	*0.0022 J*	20.3	*NA*	*0.00098 J*	3.4	*NA*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-2***												
Nov-1993	0.1	NA	ND	NA	6.2	NA	ND	NA	6.7	NA	NA	NA	ND
Apr-1994	0.061	NA	ND	NA	3.3	NA	ND	NA	4.8	NA	NA	NA	0.014
Apr-1995	0.02	NA	ND	ND	3.6	NA	ND	ND	4.7	NA	ND	ND	0.03
Oct-1996	0.062	0.047	NA	ND	ND	ND	ND	ND	4.9	4.7	ND	ND	0.04
Apr-1997	0.062	0.065	ND	ND	3.1	3.6	ND	ND	5.7	6.3	ND	ND	0.037
Apr-1997	0.059	0.065	ND	ND	3.4	3.5	ND	ND	6.1	7.2	ND	ND	ND
Oct-1997	0.105	NA	NA	ND	2.16	NA	ND	ND	1.65	NA	ND	ND	0.017
Apr-1998	0.069	NA	ND	2.16	ND	NA	ND	3.59	ND	NA	ND	0.05	NA
Apr-1999	0.141	NA	NA	0.047	5.54	NA	ND	ND	11.7	NA	ND	0.046	0.11
Oct-1999	0.138	NA	NA	0.016	11.3	NA	ND	ND	8.72	NA	ND	ND	0.011
Oct-2000	0.057	NA	NA	ND	3.63	NA	ND	ND	8.6	NA	ND	ND	ND
Apr-2001	0.071	NA	NA	0.011	4.57	NA	ND	ND	17.6	NA	ND	ND	0.015
Sep-2001	0.059	NA	NA	ND	4.39	NA	ND	ND	11.1	NA	ND	ND	0.012
Mar-2002	0.054	NA	NA	ND	5.48	NA	ND	ND	37.7	NA	ND	ND	0.012
Sep-2002	0.023	NA	NA	0.022	6.52	NA	ND	ND	5.22	NA	ND	ND	0.032
Mar-2003	0.063	NA	NA	0.014	5.32	NA	ND	ND	14	NA	ND	ND	0.023
Oct-2003	0.052	NA	NA	ND	4.41	NA	ND	ND	17	NA	ND	ND	0.012
Apr-2004	0.029	NA	ND	ND	14	NA	ND	ND	25.6	NA	ND	ND	0.023
Oct-2004	0.028	NA	ND	ND	7.12	NA	ND	ND	14.8	NA	ND	ND	ND
Apr-2005	0.048	NA	ND	ND	3.92	NA	ND	ND	10.2	NA	ND	ND	0.039
Mar-2006	ND	NA	ND	ND	2.75	NA	ND	ND	17	NA	ND	ND	ND
Mar-2007	0.039	NA	ND	ND	3.53	NA	ND	ND	27.7	NA	ND	ND	0.014

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-2***												
Mar-2008	0.048	NA	ND	ND	3.57	NA	ND	ND	34.8	NA	ND	ND	ND
Mar-2009	0.052	NA	ND	ND	2.57	NA	ND	ND	21.4	NA	ND	ND	ND
Apr-2010	0.03	NA	ND	ND	3.25	NA	ND	ND	23.2	NA	ND	ND	0.011
Oct-2010	0.026	NA	ND	ND	6.05	NA	ND	ND	25.2	NA	ND	ND	ND
Apr-2011	0.044	NA	ND	ND	2.7	NA	ND	ND	26.1	NA	ND	ND	ND
Sep-2011	0.037	NA	ND	ND	9.74	NA	ND	ND	16.3	NA	ND	ND	ND
Mar-2012	0.043	NA	ND	ND	3.2	NA	ND	ND	29.9	NA	ND	ND	ND
Sep-2012	0.06	NA	ND	0.0027 J	5.93	NA	0.000415 J	ND	14.2	NA	ND	ND	0.0057 J
Mar-2013	0.0394	NA	0.000056 J	0.0039 J	3.39	NA	ND	ND	22.6	NA	ND	ND	0.0193
Oct-2013	0.0259	NA	ND	0.0071 J	8.3	NA	ND	0.000018 J	6.88	NA	ND	0.0079 J	0.0186
Mar-2014	0.0396	NA	ND	0.0036 J	3.26	NA	ND	ND	38.9	NA	ND	0.0021 J	0.0106
Oct-2014	0.0312	NA	0.000022 J	0.0019 J	4.19	NA	ND	ND	23.2	NA	ND	0.0011 J	0.0051 J
Apr-2015	0.0453	NA	ND	0.0067 J	12.1	NA	ND	ND	58.6	NA	ND	0.0043 J	0.0131
Nov-2015	0.0381	NA	ND	0.0051 J	6.95	NA	0.0013 J	ND	19.4	NA	0.000222 J	0.0234	0.0103
May-2016	0.058	NA	ND	0.0018 J	2.7	NA	ND	ND	30.6	NA	ND	0.0011	0.0129 J
Oct-2016	0.0327	NA	ND	0.0061	23.1	NA	ND	ND	19.4	NA	ND	0.0033	0.0059 J
May-2017	0.0309	NA	ND	0.0019 J,B	3.42	NA	ND	ND	21.6	NA	ND	0.0018	0.0072 JB
Oct-2017	0.0125	NA	ND	0.0012 JB	4.86	NA	ND	ND	3.68	NA	ND	0.0021	ND
May-2018	0.062	NA	ND	0.005	3.9 J	NA	0.0011 JB	ND	19.7	NA	ND	0.00034 J	0.007 B
Nov-2018	0.026	NA	ND	0.0039	4 J	NA	0.00019 J	ND	14.8	NA	ND	0.0048	0.0052
May-2019	0.067	NA	ND	0.0021	ND	NA	ND	ND	29.4	NA	ND	0.0045	0.0051
Oct-2019	0.026	NA	ND	0.00074	2.4 J	NA	ND	ND	5.9	NA	ND	0.0032	0.011
May-2020	0.042	NA	ND	0.0016	2.8 J	NA	ND	ND	25.5	NA	ND	0.0027	0.0029 J
Oct-2020	0.019	NA	ND	0.0029	4.8 J	NA	ND	ND	9.9	NA	ND	0.0051	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-2***												
Apr-2021	0.032	*NA*	*ND*	*0.0016 J*	4	*NA*	*ND*	*ND*	24.6	*NA*	*ND*	*0.0021 J*	*0.0043 J*
Oct-2021	0.017	*NA*	*ND*	*0.00075 J*	4.9	*NA*	*ND*	*ND*	17.8	*NA*	*ND*	*0.00056 J*	*ND*
May-2022	0.031	*NA*	*ND*	*0.0018 J*	6.3	*NA*	*ND*	*ND*	28.1	*NA*	*ND*	*0.0024 J*	*ND*
Oct-2022	0.067	*NA*	*ND*	*0.0015 J*	7.4	*NA*	*0.00086 J*	*ND*	18.9	*NA*	*ND*	*ND*	*ND*
May-2023	0.043	*NA*	*ND*	0.0056	4	*NA*	*ND*	*ND*	16.8	*NA*	*ND*	*0.0021 J*	0.0067
Oct-2023	0.24	*NA*	*ND*	0.0053	3.5	*NA*	*ND*	*ND*	3.7	*NA*	*ND*	0.0057	0.017

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		***SW-2***																
Nov-1993	NA	ND	ND	ND	ND	ND	NA	NA	NA	NA	ND	ND	NA	ND	ND	ND	ND	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5 J	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2002	ND	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jan-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-2*																
Apr-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2003	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2004	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2005	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.93 J*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*1.72 J*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.67 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.47 J*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.36 J,B*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-2*																
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.5	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2 JBIH	ND
May-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2023	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2023	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	15.5	ND

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*SW-2*															
Nov-1993	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA	NA	NA
Apr-1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jan-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-2***															
Apr-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-2***															
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-2***															
Nov-1993	*ND*	*NA*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*
Apr-1994	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jul-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jun-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Dec-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jan-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-2***															
Mar-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2003	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2004	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	2.1 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 R	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-2***															
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.5 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*0.2 J*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

Historical General Chemistry

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-3***											
Apr-1995	10.3	10.3	*ND*	*ND*	14.4	0.8	*ND*	6.2	157	18.5	66	19.2
Apr-1997	*ND*	15	*ND*	*ND*	22	0.35	*ND*	*NA*	*NA*	13	109	35
Oct-1997	12	12	0.44	17	4.53	*ND*	*ND*	6.7	121	15.4	41	28
Apr-1998	43	43	0.25	26	3.22	*ND*	*ND*	7.23	212	36.3	140	88
Apr-1999	20	20	0.14	*ND*	103	0.416	*ND*	6.18	369	13.6	260	51
Oct-2000	23	*NA*	*ND*	27	39.4	*ND*	*ND*	7.2	170.6	21	105	42.5
Apr-2001	15	*NA*	*ND*	12	18.9	0.395	*ND*	*NA*	*NA*	6.13	131	40
Sep-2001	28	28	0.26	33	35.3	1.38	*ND*	7.1	318	13.3	123	48
Mar-2002	88	88	*ND*	29	187	3.74	*ND*	7.1	444	61.7	353	210
Sep-2002	14	14	*ND*	*ND*	29.8	*ND*	*ND*	6.4	231	14.6	111	44.1
Mar-2003	13	13	*ND*	14	49.1	0.239	*ND*	5.8	209	14.1	118	34.7
Oct-2003	26	26	*ND*	21	47.4	0.398	*ND*	6.3	268	9	131	51.5
Apr-2004	15	15	*ND*	11	53.7	0.49	*ND*	7.1	252	11.3	130	40.1
Oct-2004	20	20	*ND*	18	45.4	0.61	*ND*	7	179.6	8.04	128	45
Apr-2005	13	13	*ND*	12	45.4	0.48	*ND*	6.5	176	11.5	150	39.1
Mar-2006	13	13	*ND*	*ND*	59.5	0.65	*ND*	6.7	209	12.1	148	38.2
Mar-2007	14	14	0.51	11	131	0.56	*ND*	5.9	544	13.3	220	45.9
Mar-2008	15	15	0.38	12	104	0.35	*ND*	6.5	445	12.6	210	40.2
Mar-2009	13	13	*ND*	*ND*	85.8	0.26	*ND*	6.1	387	9.7	206	39.7
Apr-2010	21	21	*ND*	17	62.4	0.44	*ND*	7.4	359	14.8	157	39.6
Oct-2010	116	116	*ND*	45	22.7	0.26	*ND*	7.4	375	56.3	294	174
Apr-2011	104	104	*ND*	38	6.96	*ND*	*ND*	8.1	301	46.7	244	65.5
Sep-2011	130	130	*ND*	57	18.4	0.51	0.05	7.3	311	27.5	277	139
Mar-2012	20	20	*ND*	*ND*	90.2	0.45	0.03	6.3	400	13.8	206	48.1
Sep-2012	131	131	*ND*	32.9	17.7	0.304	*ND*	6.4	440	27.6	258	167
Mar-2013	94.2	94.2	*ND*	93.1	1.78	*ND*	*ND*	8.4	323	45.1	196	126
Oct-2013	55.2	55.2	*0.113 J*	46.7	4.53	0.522	*ND*	7.4	151.7	23.1	172	77
Mar-2014	15	15	*ND*	25	162	0.415	*ND*	6.2	543	22.2	274	48.3
Oct-2014	30.8	30.8	*ND*	21	88.6	0.123	*ND*	6.9	356	14	201	59.3
Apr-2015	24.6	24.6	*ND*	12	107	0.332	*ND*	6.1	404	17	250	56.5
Nov-2015	46.3	46.3	*ND*	18	108	0.299	*ND*	7.4	510	15.6	275	98
May-2016	50.6	50.6	*ND*	15	100	0.323	*ND*	6.8	515	18.7	258	87.4
Oct-2016	81.3	81.3	*ND*	47	7.37	*NA*	*NA*	7.1	332	25.8	213	107
May-2017	43.8	43.8	*ND*	14	80.8	0.357	0.132	7	547	23.5	218	82.1
Oct-2017	30.2	30.2	*ND*	13	12.2	0.063	*ND*	6.5	167.7	14.1	74	41.8
May-2018	30	30	*0.045 J*	27.2	49.1	*ND*	*ND*	5.3	275	25.6	68	62.4
Nov-2018	114	114	*ND*	31.5	3	*0.063 J*	*ND*	8.58	313	19.8	63	124

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Alkalinity	Alkalinity Bicarbonate	Ammonia Nitrogen As N	Chemical Oxygen Demand	Chloride	Nitrate as N	Nitrite as N	pH (SU)	Specific Conductivity (umhos/cm)	Sulfate	Total Dissolved Solids	Total Hardness
MCL/GWPS						10	1					
Location ID:	***SW-3***											
May-2019	70	*NA*	*ND*	*ND*	71.3	*ND*	*ND*	7.06	433	18.4	228	93.1
Oct-2019	100	*NA*	*ND*	30.3	53.5	0.11	0.014	7.35	439	17.2	226	131
May-2020	98	98	*ND*	29.1	4.9	1.2	**0.017 D6D8**	7.61	354	17.4	181	120
Oct-2020	140	*NA*	*ND*	36.4	*1.8 J*	0.1	*ND*	7.96	380	20.6	146	138
Apr-2021	100	*NA*	*ND*	27.8	4.1	0.42	*0.0095 J*	9.55	232	12	119	111
Oct-2021	110	*NA*	*ND*	*ND*	77.1 ML	0.87	*ND*	7.07	562	*9.8 J*	241	107
May-2022	116	*NA*	0.17	28.3	4	0.53	*0.0078 J*	7.1	352	15.9	159	138 N3
Oct-2022	56	*NA*	*ND*	47.2	63.4	*ND*	*ND*	6.34	438	43.6	223	102 N3
May-2023	80	*NA*	*ND*	47.8	19.7	0.11	*0.0056 J*	6.79	376	11.9	153	105 N3
Oct-2023	102	*NA*	*ND*	107	59.3	*ND*	*NA*	6.34	444	30.8	267	139 N3

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		*SW-3*													
Apr-1995	ND	ND	ND	ND	ND	4.4	NA	ND	ND	ND	0.44	NA	ND	2	NA
Oct-1996	ND	ND	0.037	ND	ND	9.5	8.8	ND	ND	ND	0.7	0.42	ND	2.8	2.8
Apr-1997	ND	ND	0.049	ND	ND	9.1	7.9	ND	ND	ND	1.6	0.34	0.008	2.8	2.5
Oct-1997	ND	ND	0.04	ND	ND	7.1	NA	ND	ND	ND	0.784	NA	ND	2.63	NA
Apr-1998	ND	ND	0.017	ND	ND	27	NA	ND	0.041	ND	1.2	NA	ND	4.94	NA
Apr-1999	ND	ND	0.052	ND	ND	14.3	NA	ND	ND	ND	1.64	NA	ND	3.68	NA
Oct-1999	ND	ND	0.059	ND	ND	11.9	NA	ND	ND	ND	1.18	NA	ND	3.71	NA
Oct-2000	ND	ND	0.038	ND	ND	11.3	NA	ND	ND	ND	0.687	NA	ND	3.49	NA
Apr-2001	ND	ND	0.044	ND	ND	10.4	NA	ND	ND	ND	0.287	NA	ND	3.41	NA
Sep-2001	ND	ND	0.044	ND	ND	13.1	NA	ND	ND	ND	0.495	NA	ND	3.7	NA
Mar-2002	ND	ND	0.043	ND	ND	63.2	NA	ND	ND	ND	0.974	NA	ND	12.7	NA
Sep-2002	ND	ND	0.046	ND	ND	11.8	NA	ND	ND	ND	0.141	NA	ND	3.58	NA
Mar-2003	ND	ND	0.038	ND	ND	9.34	NA	ND	ND	ND	0.171	NA	ND	2.78	NA
Oct-2003	ND	ND	0.049	ND	ND	13.9	NA	ND	ND	ND	1.5	NA	ND	4.04	NA
Apr-2004	ND	ND	0.047	ND	ND	10.5	NA	ND	ND	ND	0.536	NA	ND	3.35	NA
Oct-2004	ND	ND	0.045	ND	ND	11.7	NA	ND	ND	ND	0.28	NA	ND	3.8	NA
Apr-2005	ND	0.003	0.043	ND	ND	10.2	NA	ND	ND	ND	0.411	NA	ND	3.3	NA
Mar-2006	ND	ND	0.051	ND	ND	9.61	NA	ND	ND	ND	0.145	NA	ND	3.46	NA
Mar-2007	ND	ND	0.056	ND	ND	13.2	NA	ND	ND	ND	0.139	NA	ND	3.62	NA
Mar-2008	ND	ND	0.046	ND	ND	10.5	NA	ND	ND	ND	0.161	NA	ND	3.39	NA
Mar-2009	ND	ND	0.045	ND	ND	10.3	NA	ND	ND	ND	0.124	NA	ND	3.4	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-3***													
Apr-2010	ND	ND	0.044	ND	ND	10.8	NA	ND	ND	ND	0.39	NA	ND	3.05	NA
Oct-2010	ND	ND	0.023	ND	ND	55.6	NA	ND	ND	ND	0.251	NA	ND	8.88	NA
Apr-2011	ND	ND	ND	ND	ND	43.2	NA	ND	ND	ND	0.695	NA	ND	6.06	NA
Sep-2011	ND	0.003	0.026	ND	ND	44	NA	ND	ND	ND	0.298	NA	ND	7.07	NA
Mar-2012	ND	ND	0.061	ND	ND	12.5	NA	ND	ND	ND	0.639	NA	ND	4.11	NA
Sep-2012	ND	ND	0.0583 J	ND	ND	53.8	NA	0.0111 J	0.011 J	0.009 J	2.96	NA	ND	8.01	NA
Mar-2013	ND	0.0012 J	0.293	0.000214 J	ND	40.5	NA	0.0029 J	0.0112	0.0044 J	0.811	NA	0.0022	5.97	NA
Oct-2013	0.000514 J	ND	0.0183	ND	ND	25.6	NA	0.0053 J	0.0024 J	0.0056 J	0.67	NA	0.000659 J	3.17	NA
Mar-2014	0.000334 J	ND	0.0506	ND	ND	12.4	NA	0.000922 J	0.0029 J	0.000955 J	0.116	NA	ND	4.23	NA
Oct-2014	0.000416 J	0.000399 J	0.0703	ND	ND	15.5	NA	0.000492 J	0.0042 J	0.000492 J	0.469	NA	ND	5.02	NA
Apr-2015	0.000671 J	0.0004 J	0.0576	ND	ND	15.2	NA	0.000947 J	0.0028 J	0.0014 J	0.557	NA	0.000675 J	4.48	NA
Nov-2015	0.000352 J	0.000599 J	0.0701	ND	ND	28.8	NA	0.000715 J	0.0065 J	0.000868 J	0.758	NA	0.000331 J	6.3	NA
May-2016	ND	0.0006 J	0.059	ND	ND	25	NA	ND	0.0006 J	0.0005 J	0.255	NA	0.00017 J	6.09	NA
Oct-2016	ND	0.0012 J	0.0232	ND	ND	35.3	NA	0.00086 J	0.0012	0.0052	0.395	NA	0.00022 J	4.56	NA
May-2017	ND	ND	0.0512	ND	ND	23.2	NA	0.0012 J,B	0.0061	ND	0.773	NA	0.00012 J	5.88	NA
Oct-2017	ND	ND	0.0392	ND	ND	11	NA	ND	0.0044	ND	1.14	NA	0.00027 J	3.46	NA
May-2018	0.00011 J	ND	0.045	ND	ND	16.8	NA	0.0029 J	0.0017	0.0018 JB	0.39	NA	0.000067 J	4.9	NA
Nov-2018	0.00036 J	ND	0.02	0.00011 J	0.000033 J	41.4	NA	0.0025 J	0.0011	0.0048	0.35	NA	0.00035 J	5	NA
May-2019	ND	ND	0.027	ND	ND	28.1	NA	ND	0.0018	0.0021	0.38	NA	ND	5.6	NA
Oct-2019	0.00018 J	0.00054 J	0.063	ND	0.00023 J	39.9	NA	0.0023 J	0.0021	0.0051	0.85	NA	0.00082 J	7.6	NA
May-2020	0.00017 J	0.00019 J	0.028	ND	ND	35.4	NA	0.0042 J	0.00057	0.0039	0.2	NA	ND	7.7	NA
Oct-2020	0.00026 J	ND	0.033	ND	ND	42.9	NA	0.0092 J	0.00046 J	ND	0.26	NA	ND	7.6	NA
Apr-2021	ND	ND	0.023	0.00018 J	ND	31.7	NA	0.00079 J	ND	0.0027 J	0.33	NA	ND	7.7	NA
Oct-2021	0.00009 J	ND	0.053	ND	ND	32.4	NA	ND	0.0013 J	ND	0.47	NA	0.00006 J	6.3	NA

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Calcium Dissolved	Chromium	Cobalt	Copper	Iron	Iron Dissolved	Lead	Magnesium	Magnesium Dissolved
MCL/GWPS	0.006	0.01	2	0.004	0.005			0.1		1.3			0.015		
Location ID:		***SW-3***													
May-2022	*ND*	*0.00069 J*	0.026	*ND*	*ND*	41.5	*NA*	*0.00067 J*	*0.00086 J*	0.0044	0.26	*NA*	*0.00049 J*	8.3	*NA*
Oct-2022	*ND*	*0.001 J*	0.05	*ND*	*ND*	30.2	*NA*	*0.0018 J*	0.0038	*0.0024 J*	0.88	*NA*	0.00089	6.5	*NA*
May-2023	*ND*	*0.0011 J*	0.025	*ND*	*ND*	31.2	*NA*	*0.0019 J*	*0.0015 J*	0.0045	0.76	*NA*	0.00077	6.5	*NA*
Oct-2023	*ND*	0.006	0.12	*ND*	*ND*	40.3	*NA*	0.0092	0.008	0.0058	17.3	*NA*	0.0077	9.3	*NA*

MCLs and Results are in mg/L unless indicated otherwise

Historical Metals (mg/L)

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	*SW-3*												
Apr-1995	0.1	NA	ND	ND	1.2	NA	ND	ND	4.6	NA	ND	ND	0.04
Oct-1996	0.045	0.027	NA	ND	ND	ND	ND	ND	7.8	8	ND	ND	0.23
Apr-1997	0.047	ND	ND	ND	2.3	2.3	ND	ND	11	11	ND	ND	0.028
Oct-1997	0.038	NA	NA	ND	1.85	NA	ND	ND	10.4	NA	ND	ND	ND
Apr-1998	0.295	NA	**0.102**	3.58	ND	NA	ND	2.21	ND	NA	ND	0.248	NA
Apr-1999	0.028	NA	NA	ND	4.72	NA	ND	ND	49.2	NA	ND	ND	0.014
Oct-1999	0.083	NA	NA	0.013	3.49	NA	ND	ND	15.2	NA	ND	ND	ND
Oct-2000	0.026	NA	NA	ND	2.76	NA	ND	ND	19.9	NA	ND	ND	ND
Apr-2001	0.022	NA	NA	ND	2.5	NA	ND	ND	24.9	NA	ND	ND	ND
Sep-2001	0.03	NA	NA	ND	2.7	NA	ND	ND	21.5	NA	ND	ND	ND
Mar-2002	0.128	NA	NA	0.028	10.8	NA	ND	ND	7.24	NA	ND	ND	0.045
Sep-2002	0.011	NA	NA	ND	3.09	NA	ND	ND	19.4	NA	ND	ND	ND
Mar-2003	ND	NA	NA	ND	2.84	NA	ND	ND	31.3	NA	ND	ND	0.013
Oct-2003	0.075	NA	NA	ND	2.35	NA	ND	ND	26.4	NA	ND	ND	0.014
Apr-2004	0.025	NA	ND	ND	2.26	NA	ND	ND	33.2	NA	ND	ND	0.016
Oct-2004	0.011	NA	ND	ND	3.49	NA	ND	ND	27.4	NA	ND	ND	ND
Apr-2005	0.028	NA	ND	ND	2.15	NA	ND	ND	28.9	NA	ND	ND	ND
Mar-2006	ND	NA	ND	ND	1.94	NA	ND	ND	29.4	NA	ND	ND	ND
Mar-2007	0.018	NA	ND	ND	2.15	NA	ND	ND	67.7	NA	ND	ND	ND
Mar-2008	0.012	NA	ND	ND	2.18	NA	ND	ND	54.1	NA	ND	ND	ND
Mar-2009	ND	NA	ND	ND	2.21	NA	ND	ND	46.4	NA	ND	ND	ND
Apr-2010	0.022	NA	ND	ND	2.32	NA	ND	ND	31	NA	ND	ND	ND

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-3***												
Oct-2010	0.021	NA	ND	ND	13.1	NA	ND	ND	14	NA	ND	ND	ND
Apr-2011	0.125	NA	ND	0.026	3.67	NA	ND	ND	4.63	NA	ND	ND	0.023
Sep-2011	0.029	NA	ND	ND	13.4	NA	ND	ND	13.8	NA	ND	0.01	ND
Mar-2012	0.042	NA	ND	ND	3.44	NA	ND	ND	48.2	NA	ND	ND	ND
Sep-2012	0.237	NA	ND	0.0209 J	18.5	NA	ND	ND	13.2	NA	ND	ND	0.0519 J
Mar-2013	0.0573	NA	0.000088 J	0.0265	3.23	NA	ND	0.000031 J	2.2	NA	ND	0.0043 J	0.0718
Oct-2013	0.0343	NA	ND	0.0114	6.69	NA	ND	0.000019 J	2.15	NA	ND	0.00094 J	0.0261
Mar-2014	0.115	NA	ND	0.0015 J	2.81	NA	ND	ND	74.8	NA	ND	ND	0.0064 J
Oct-2014	0.219	NA	ND	0.0022 J	4.18	NA	0.000787 J	ND	44.4	NA	ND	ND	0.0051 J
Apr-2015	0.136	NA	ND	0.0022 J	3.19	NA	ND	ND	61.8	NA	ND	0.0011 J	0.0093 J
Nov-2015	0.333	NA	ND	0.0024 J	4.25	NA	0.000606 J	ND	61.7	NA	0.000161 J	0.000718 J	0.0035 J
May-2016	0.0913	NA	ND	0.0015 J	3.04	NA	ND	ND	55.5	NA	ND	0.00025 J	0.0152 J
Oct-2016	0.0153	NA	ND	0.0162	9.17	NA	ND	ND	4.53	NA	ND	0.002	0.0073 J
May-2017	0.532	NA	ND	0.0011 J,B	2.76	NA	ND	ND	42.5	NA	ND	ND	ND
Oct-2017	0.45	NA	ND	ND	2.67	NA	ND	ND	8.68	NA	ND	0.00042 J	ND
May-2018	0.35	NA	ND	0.0019	2.1 J	NA	0.00066 JB	ND	27.6	NA	ND	0.0048	0.0035 JB
Nov-2018	0.015	NA	ND	0.014	2.9 J	NA	0.00014 J	ND	1.6 J	NA	ND	0.0047	0.013
May-2019	0.08	NA	ND	0.0044	ND	NA	ND	ND	40.1	NA	ND	0.0068	0.0067
Oct-2019	0.37	NA	ND	0.003	5.8	NA	0.00055 J	ND	31.4	NA	ND	0.0046	0.013
May-2020	0.015	NA	ND	0.0022	5.5	NA	ND	ND	5.1	NA	ND	0.0014	0.003 J
Oct-2020	0.01	NA	ND	0.0043	5.5	NA	ND	ND	2.6 J	NA	ND	0.0056	ND
Apr-2021	0.0095	NA	ND	0.0018 J	4.4	NA	ND	ND	4.2	NA	ND	0.0021 J	0.0033 J
Oct-2021	0.4	NA	ND	ND	4	NA	ND	ND	45.8	NA	ND	ND	ND
May-2022	0.019	NA	ND	0.0026	4.1	NA	ND	ND	5.6	NA	ND	0.0018 J	0.0053

MCLs and Results are in mg/L unless indicated otherwise

Event Date	Manganese	Manganese Dissolved	Mercury	Nickel	Potassium	Potassium Dissolved	Selenium	Silver	Sodium	Sodium Dissolved	Thallium	Vanadium	Zinc
MCL/GWPS			0.002				0.05				0.002		
Location ID:	***SW-3***												
Oct-2022	0.24	*NA*	*ND*	0.0041	4.9	*NA*	*0.001 J*	*ND*	37.2	*NA*	*ND*	0.0037	0.014
May-2023	0.03	*NA*	*ND*	0.0047	4.1	*NA*	*ND*	*ND*	13.8	*NA*	*ND*	0.0042	0.0068
Oct-2023	0.52	*NA*	*ND*	0.016	4.2	*NA*	*ND*	*ND*	45.8	*NA*	*ND*	0.013	0.045

MCLs and Results are in mg/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-3*																
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	ND	NA
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7 J	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-3*																
Mar-2006	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2007	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2008	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2009	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2010	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2011	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Mar-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Sep-2012	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.15 J*	*ND*
Mar-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.65 J*	*ND*
Oct-2013	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.47 J*	*ND*
Mar-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2014	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.14 J*	*ND*
Apr-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2015	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*2.25 J,B*	*ND*
May-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2016	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*4.3 J*	*ND*
May-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	6.4	*ND*
Oct-2017	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.6 J*	*ND*
May-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*3.1 JBIH*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Event Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	2-Butanone	2-Hexanone	4-Methyl-2-pentanone	Acetone	Acrylonitrile
MCL/GWPS		200		5	1370	7		0.2	0.05	600	5	5	75					
Location ID:		*SW-3*																
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	10	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	7.7	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	10	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		*SW-3*															
Oct-1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-1999	ND	NA	NA	NA	NA	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND	ND
Oct-1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2000	ND	NA	NA	ND	NA	ND	NA	ND	ND	ND	NA	ND	NA	ND	NA	ND	ND
Oct-2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec-2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-3***															
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

MCLs and Results are in ug/L unless indicated otherwise

Event Date	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Dichlorofluoromethane
MCL/GWPS	5		80	80			5	100		80		70		80		1000	550
Location ID:		***SW-3***															
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

MCLs and Results are in ug/L unless indicated otherwise

Historical VOC Concentrations (µg/L)

Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-3***															
Oct-1996	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Apr-1997	*ND*	*ND*	*NA*	*NA*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Oct-1997	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1998	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-1999	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*NA*	*ND*	*NA*
Oct-1999	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2000	*ND*	*NA*	*ND*	*NA*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*NA*	*NA*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2000	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jul-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2001	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Jun-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Sep-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Dec-2002	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Mar-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2003	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2004	*ND*	*ND*	*ND*	*NA*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

MCLs and Results are in ug/L unless indicated otherwise

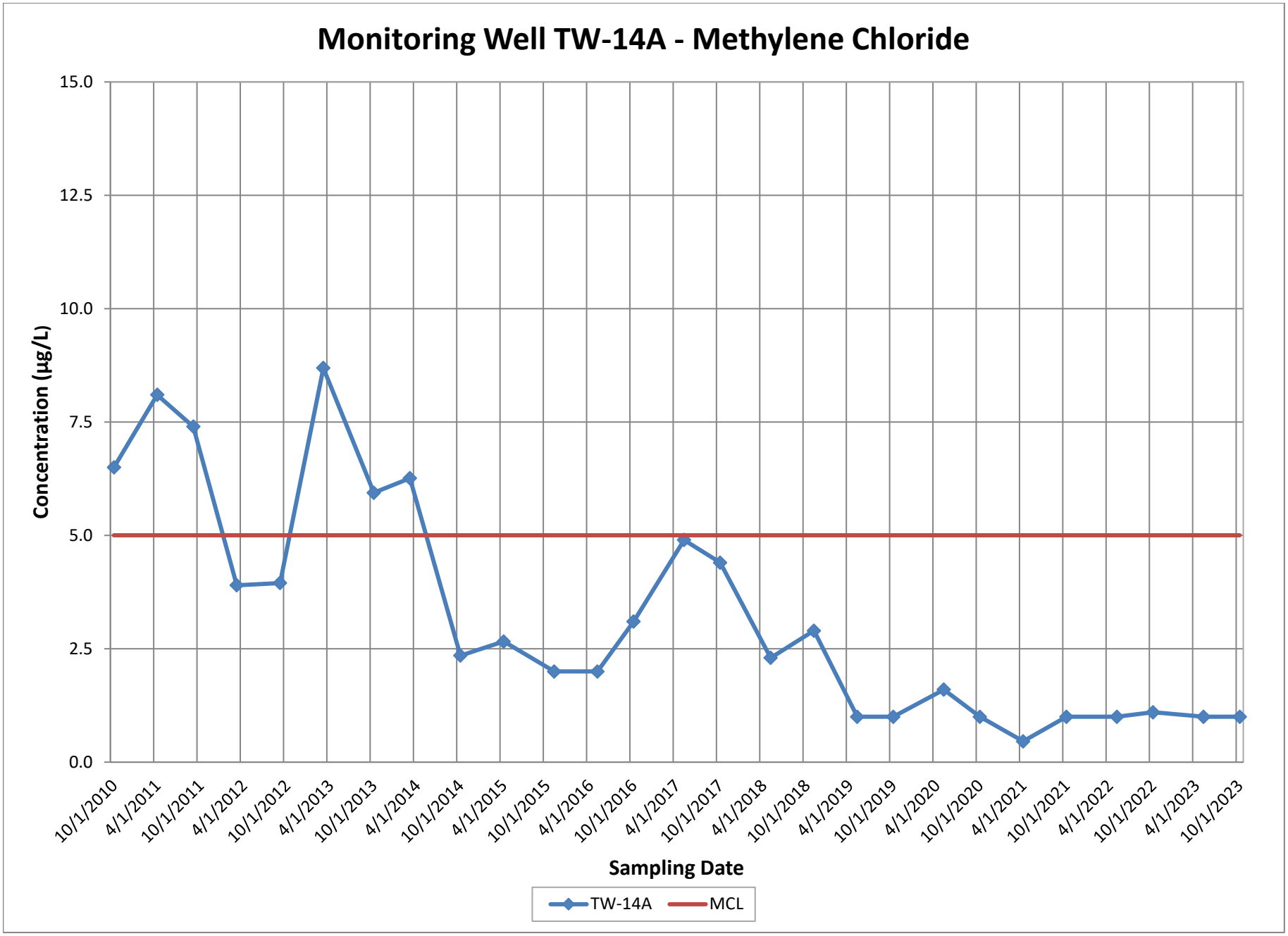
Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-3***															
Apr-2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2007	ND	ND	ND	ND	1.5 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Oct-2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Apr-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Mar-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sep-2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov-2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 R	ND	ND	ND	ND	ND	ND
May-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct-2017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May-2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA

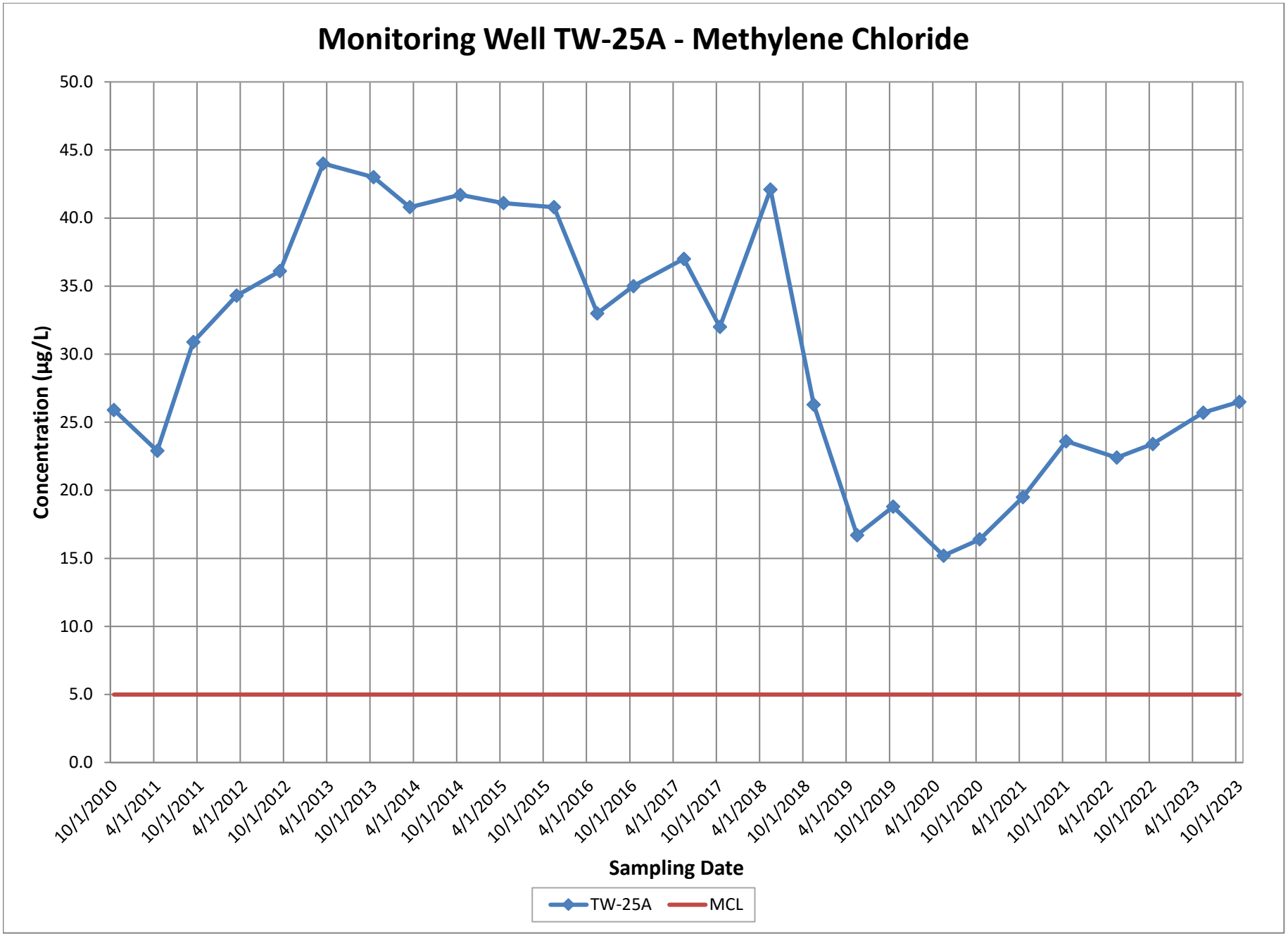
MCLs and Results are in ug/L unless indicated otherwise

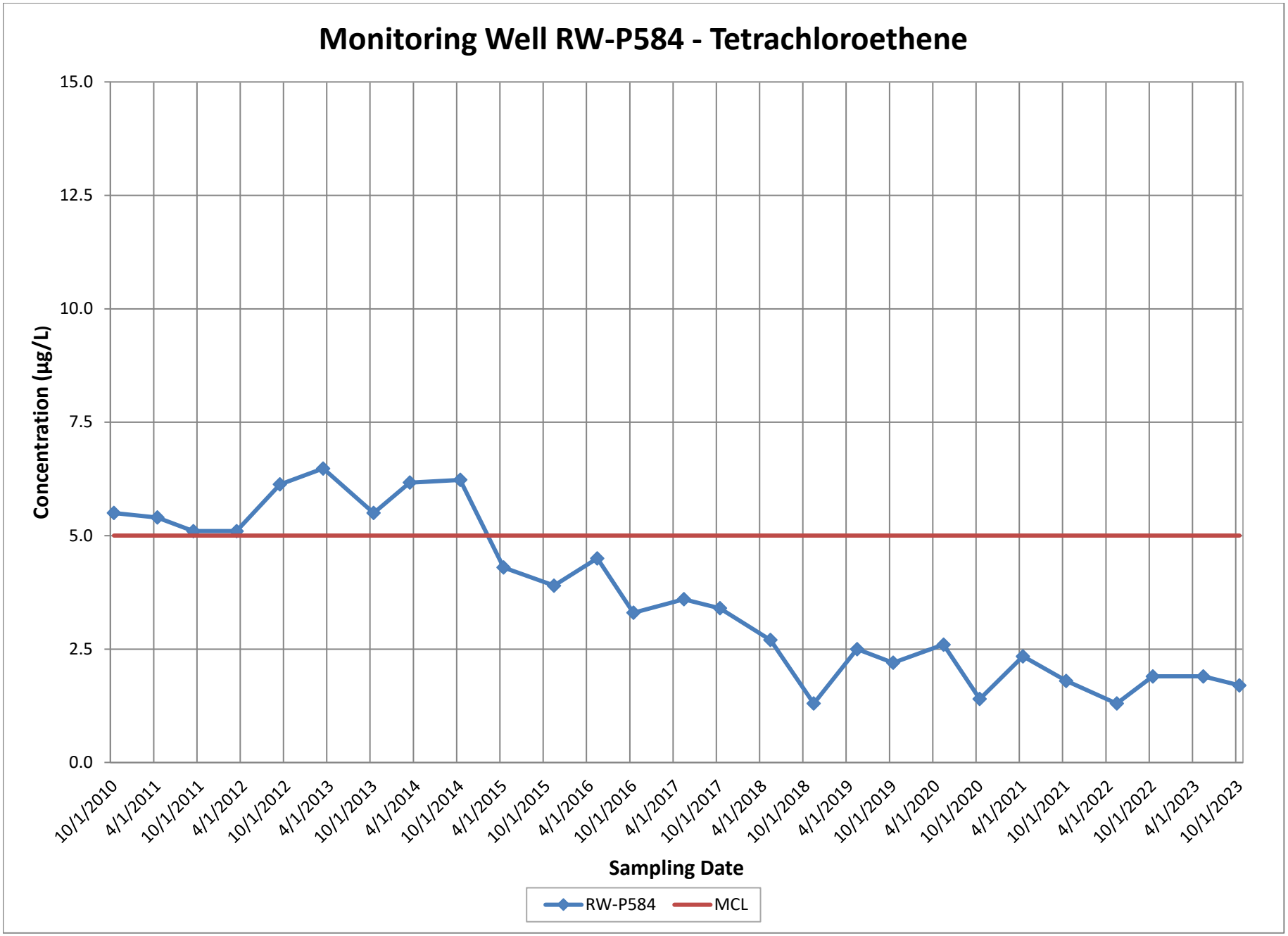
Event Date	Ethyl Benzene	Iodomethane	mp-Xylenes	Methyl Tertiary Butyl Ether	Methylene Chloride	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	trans-1,4-Dichloro-2-butene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Xylenes (Total)
MCL/GWPS	700		10000	20	5	10000	100	5	1000	100			5	1920		2	10000
Location ID:		***SW-3***															
Nov-2018	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2019	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2020	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Apr-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2021	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2022	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
May-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*
Oct-2023	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*NA*

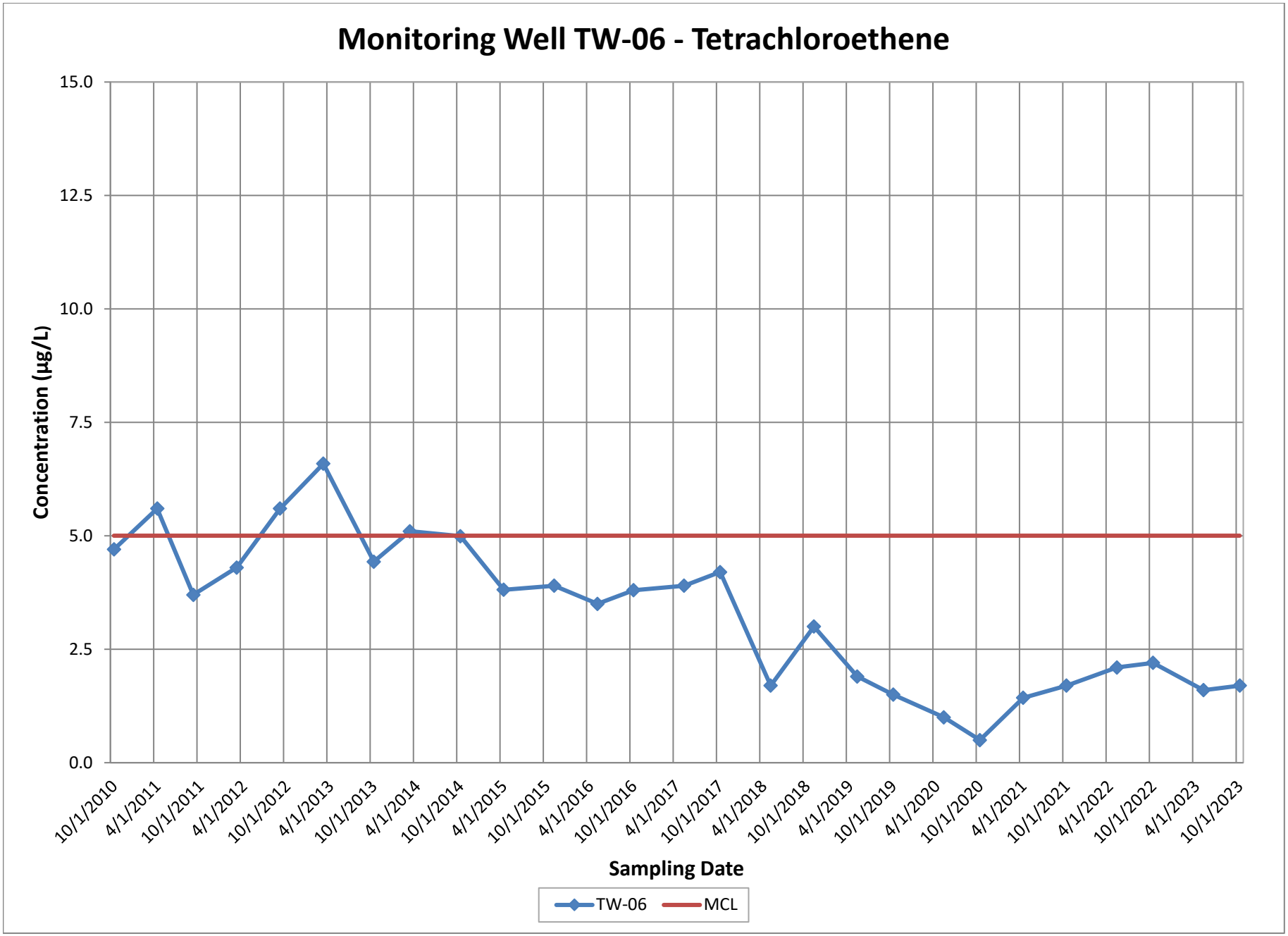
MCLs and Results are in ug/L unless indicated otherwise

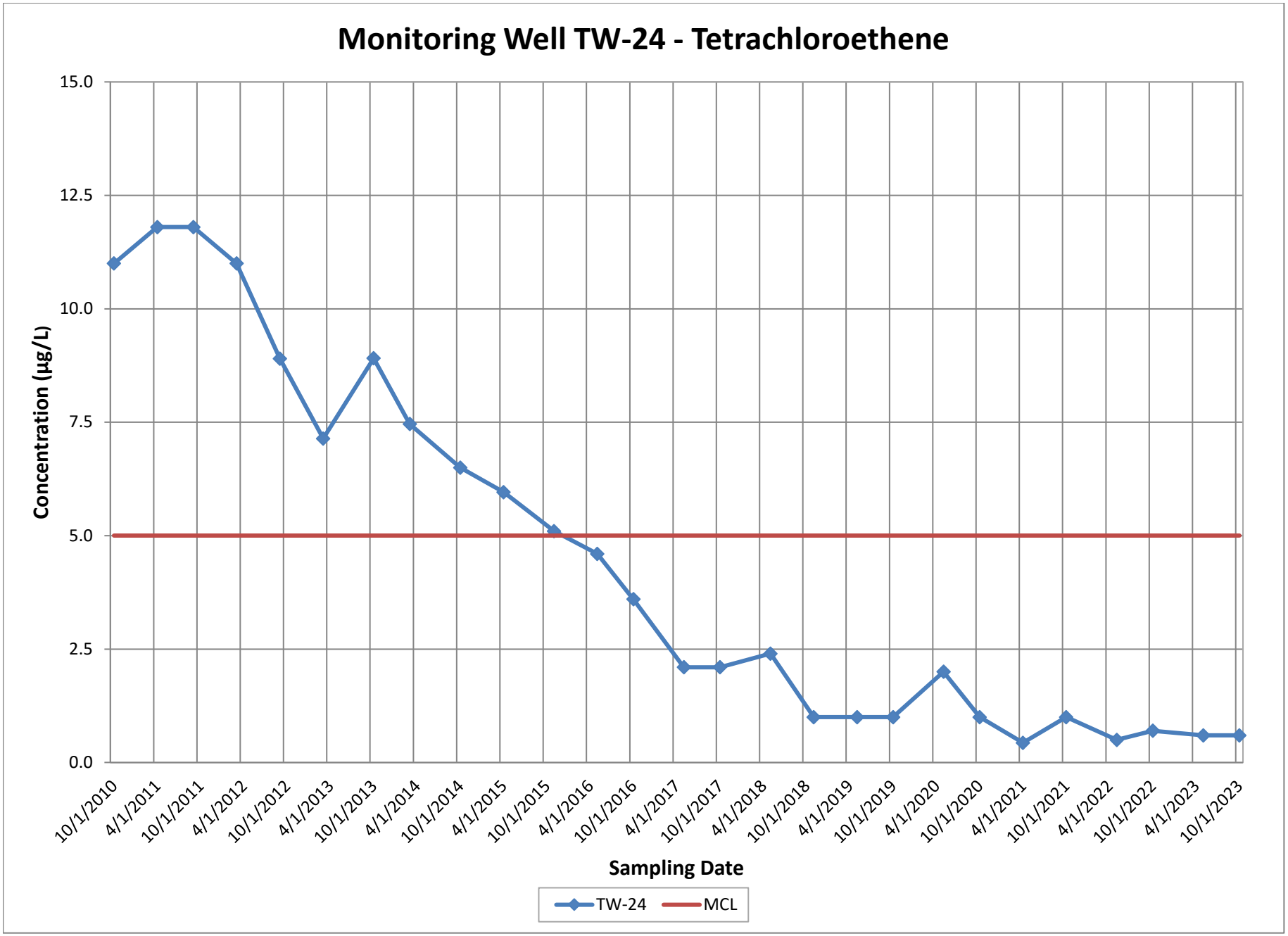
APPENDIX B
Historical MCL Exceedance
Time-Series Plots

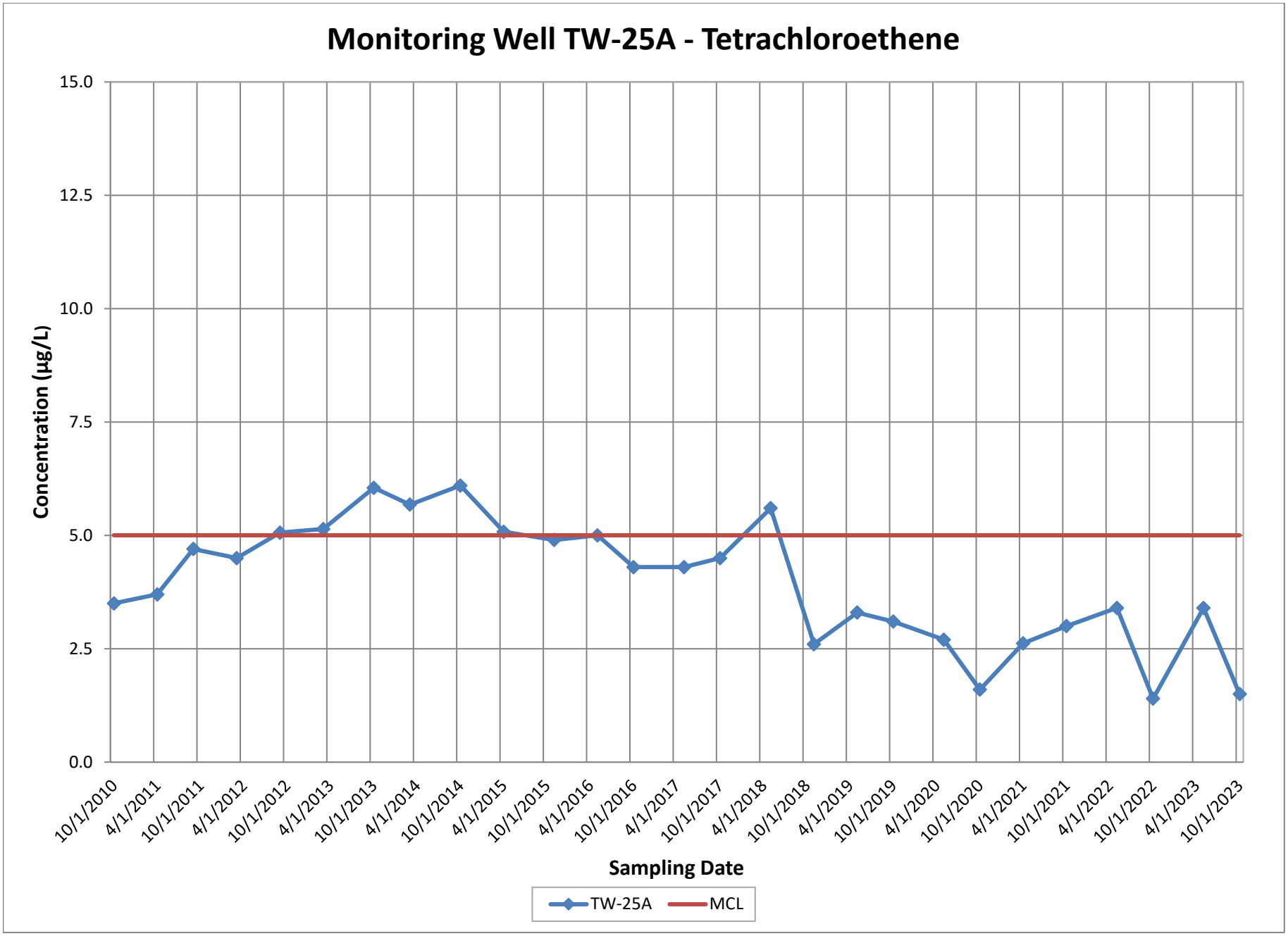

Monitoring Well TW-14A - Methylene Chloride
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
4/1/2023
10/1/2023
Sampling Date
TW-14A
MCL

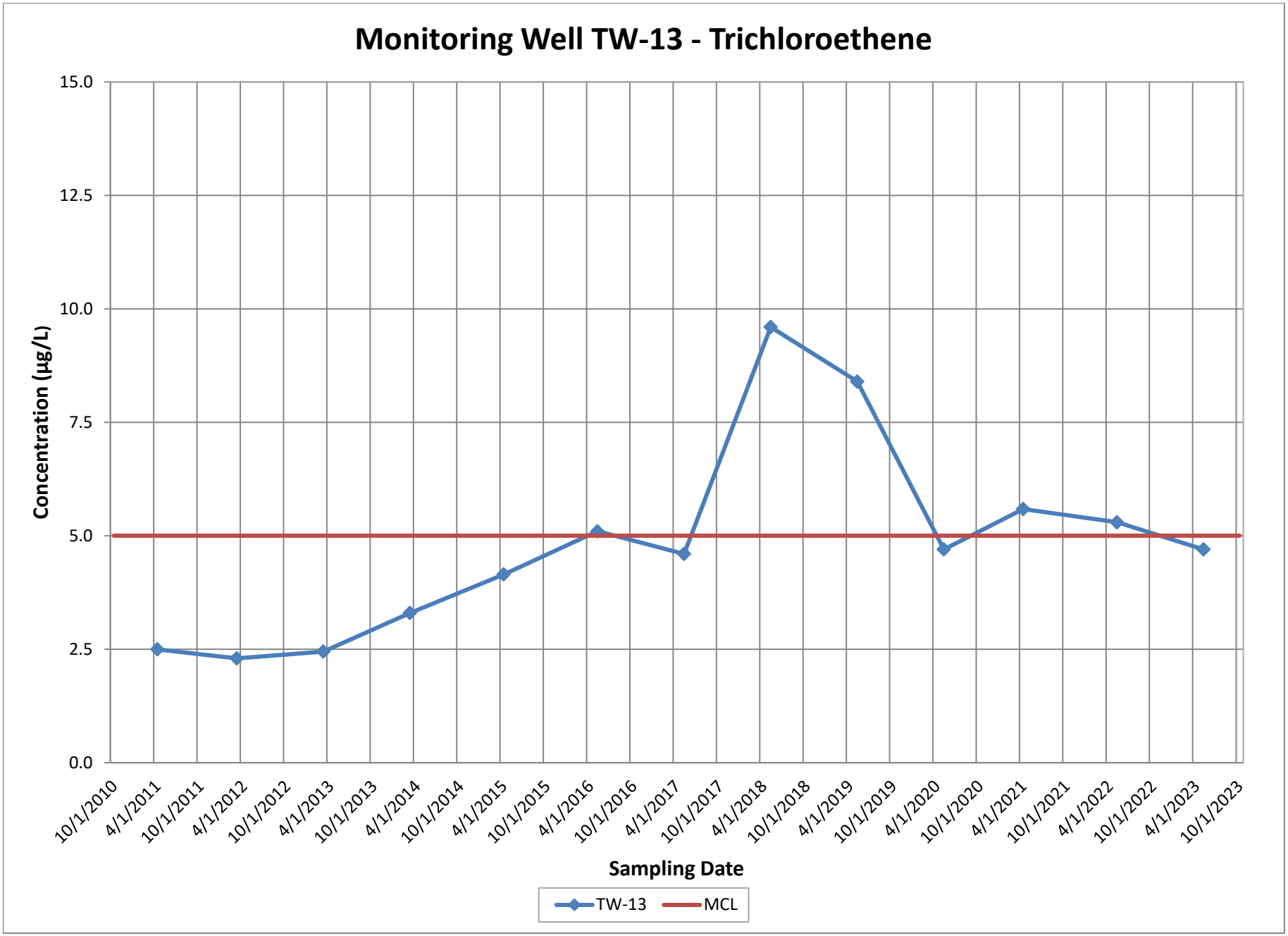

Monitoring Well TW-25A - Methylene Chloride
Concentration (µg/L)
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
4/1/2023
10/1/2023
Sampling Date
TW-25A
MCL

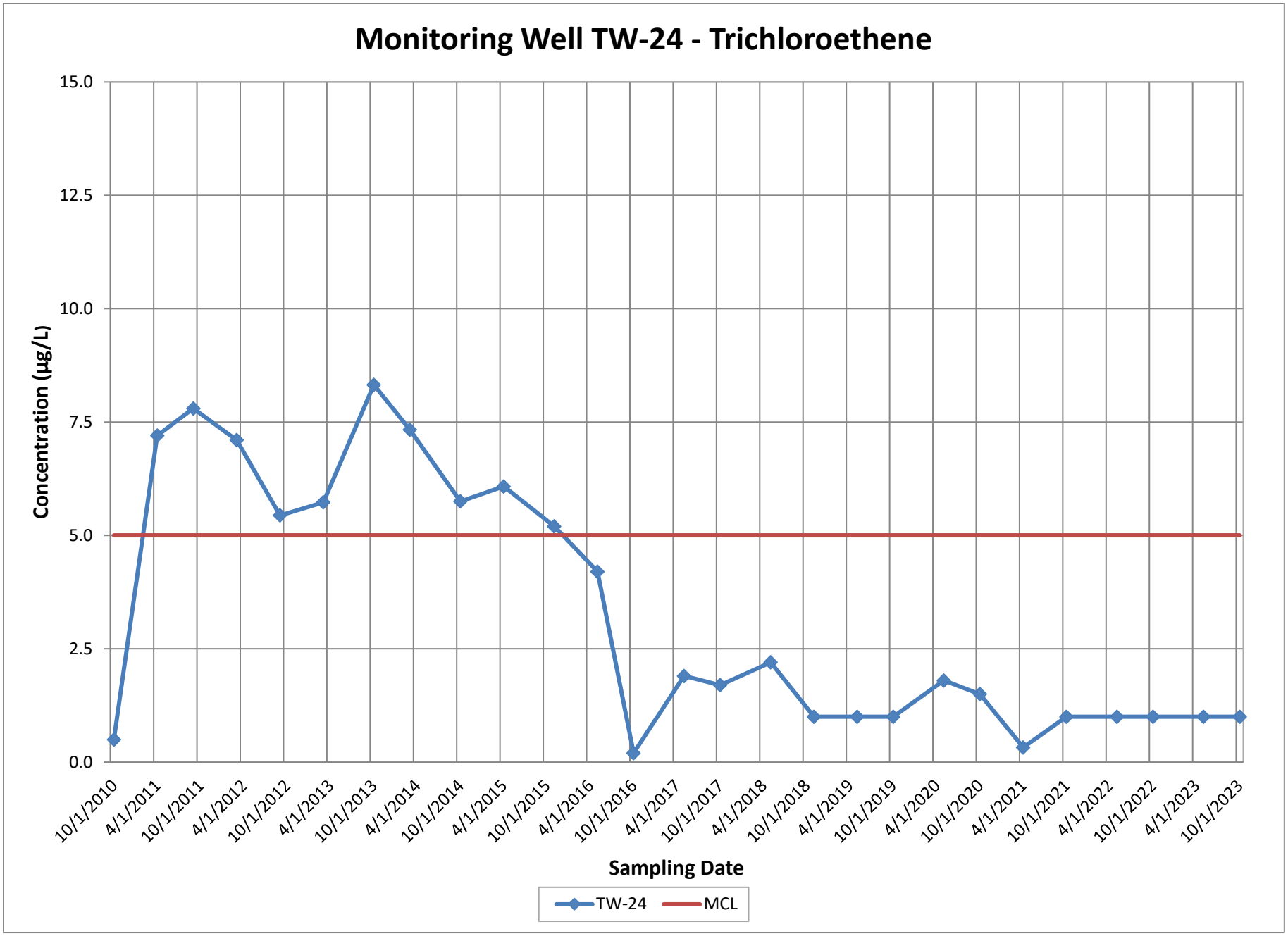

Monitoring Well RW-P584 - Tetrachloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
4/1/2023
10/1/2023
Sampling Date
RW-P584
MCL

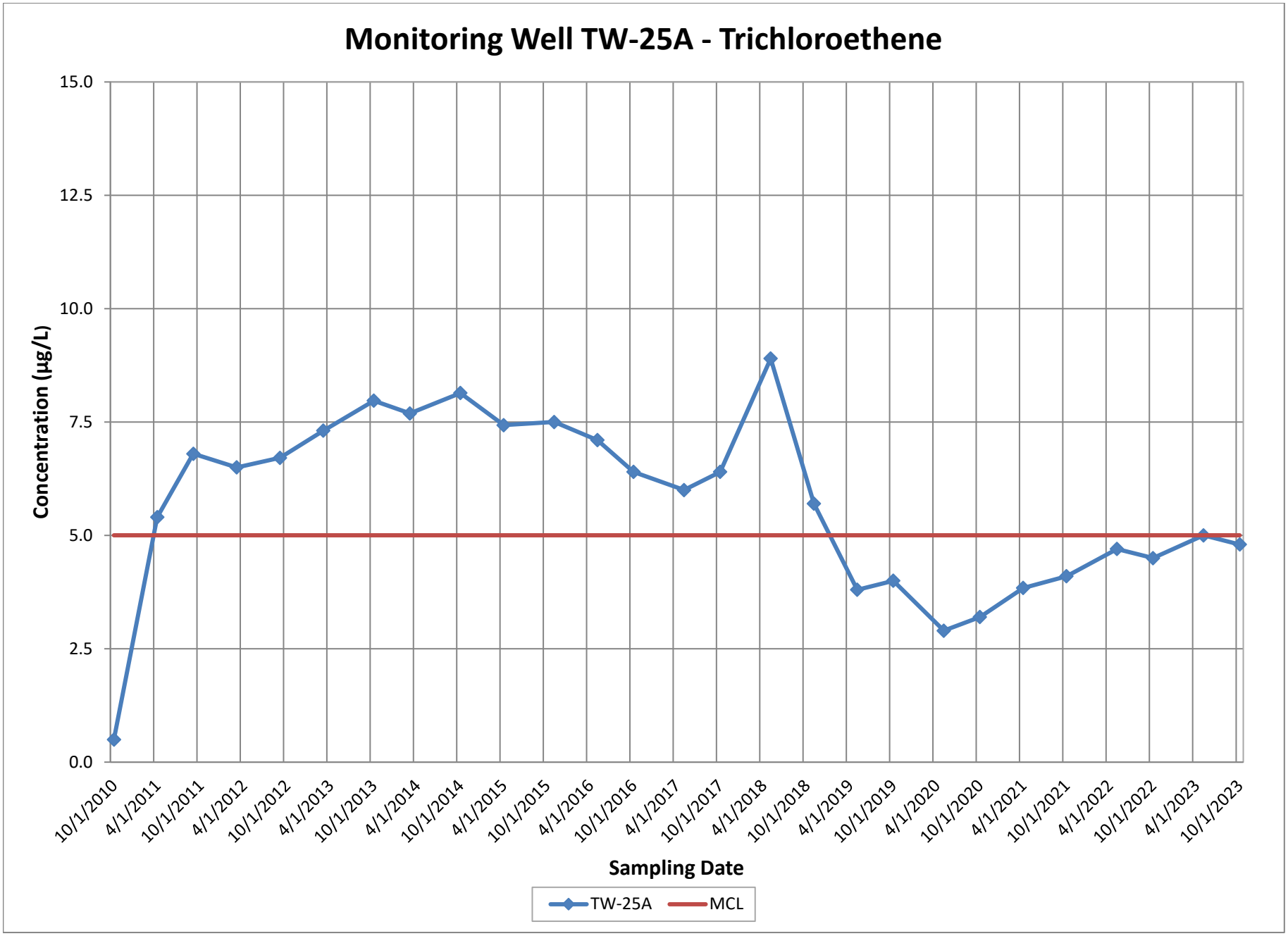

Monitoring Well TW-06 - Tetrachloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
4/1/2023
10/1/2023
Sampling Date
TW-06
MCL

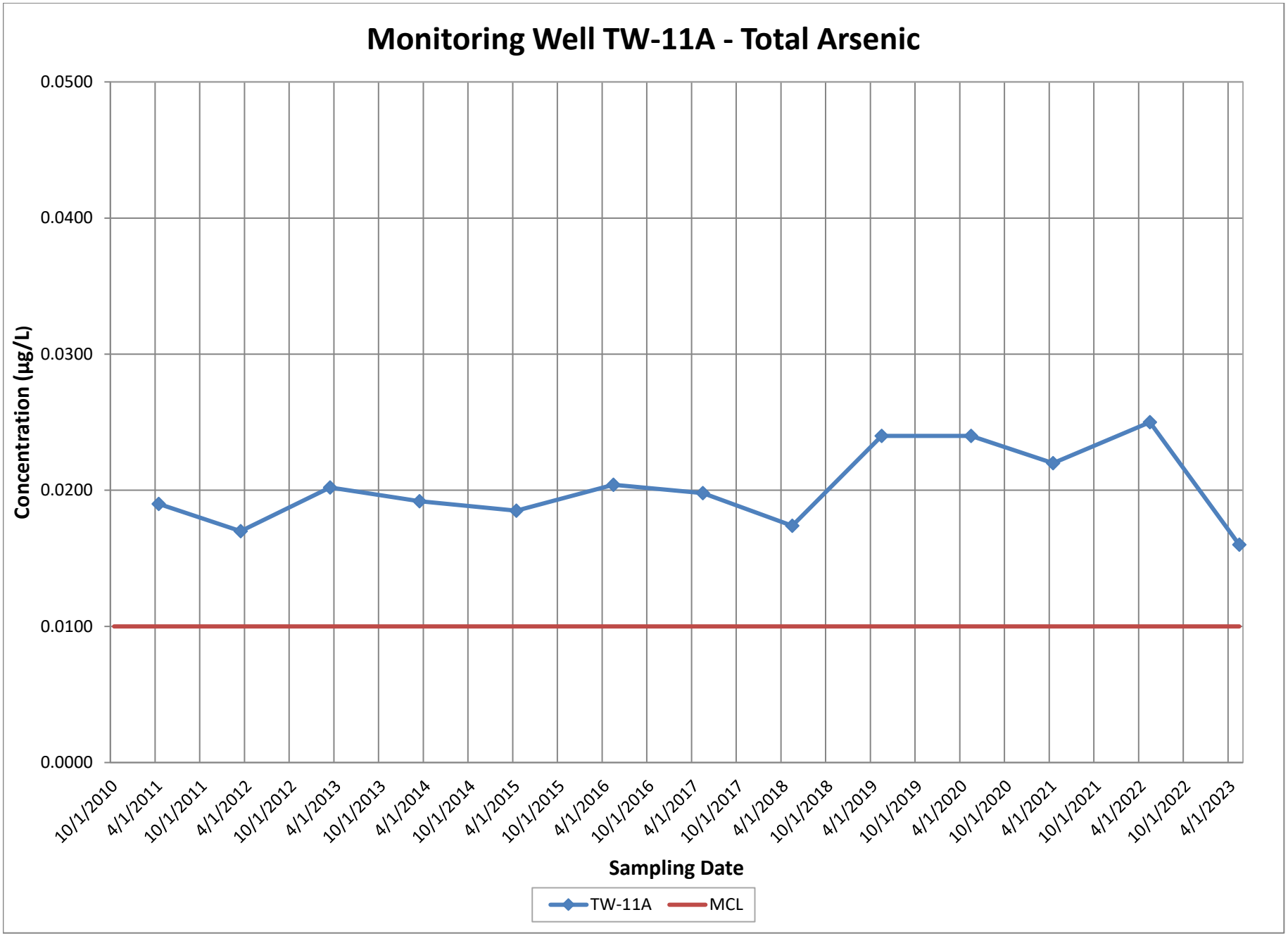

Monitoring Well TW-24 - Tetrachloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
4/1/2023
10/1/2023
Sampling Date
TW-24
MCL

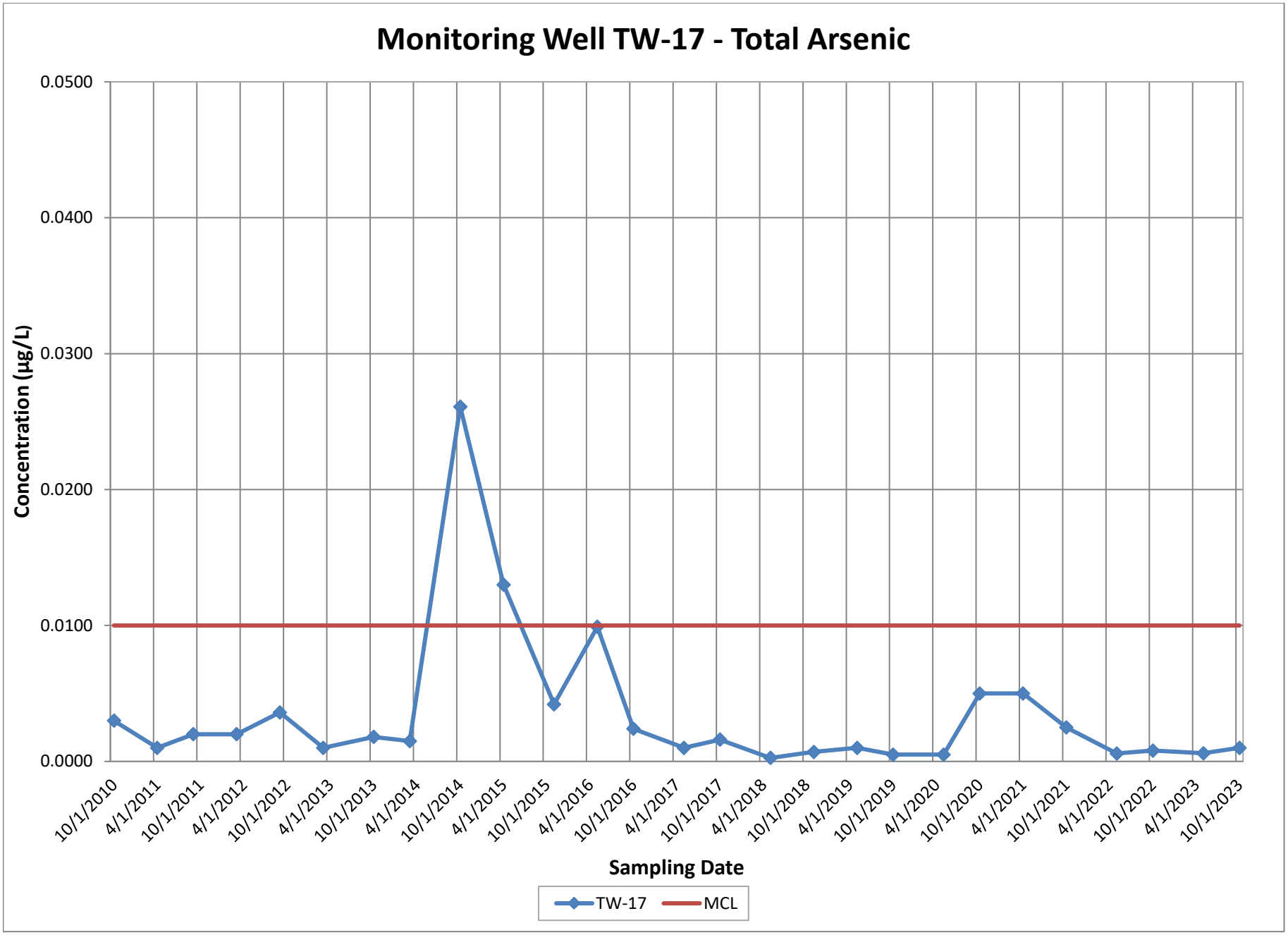

Monitoring Well TW-25A - Tetrachloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
4/1/2023
10/1/2023
Sampling Date
TW-25A
MCL

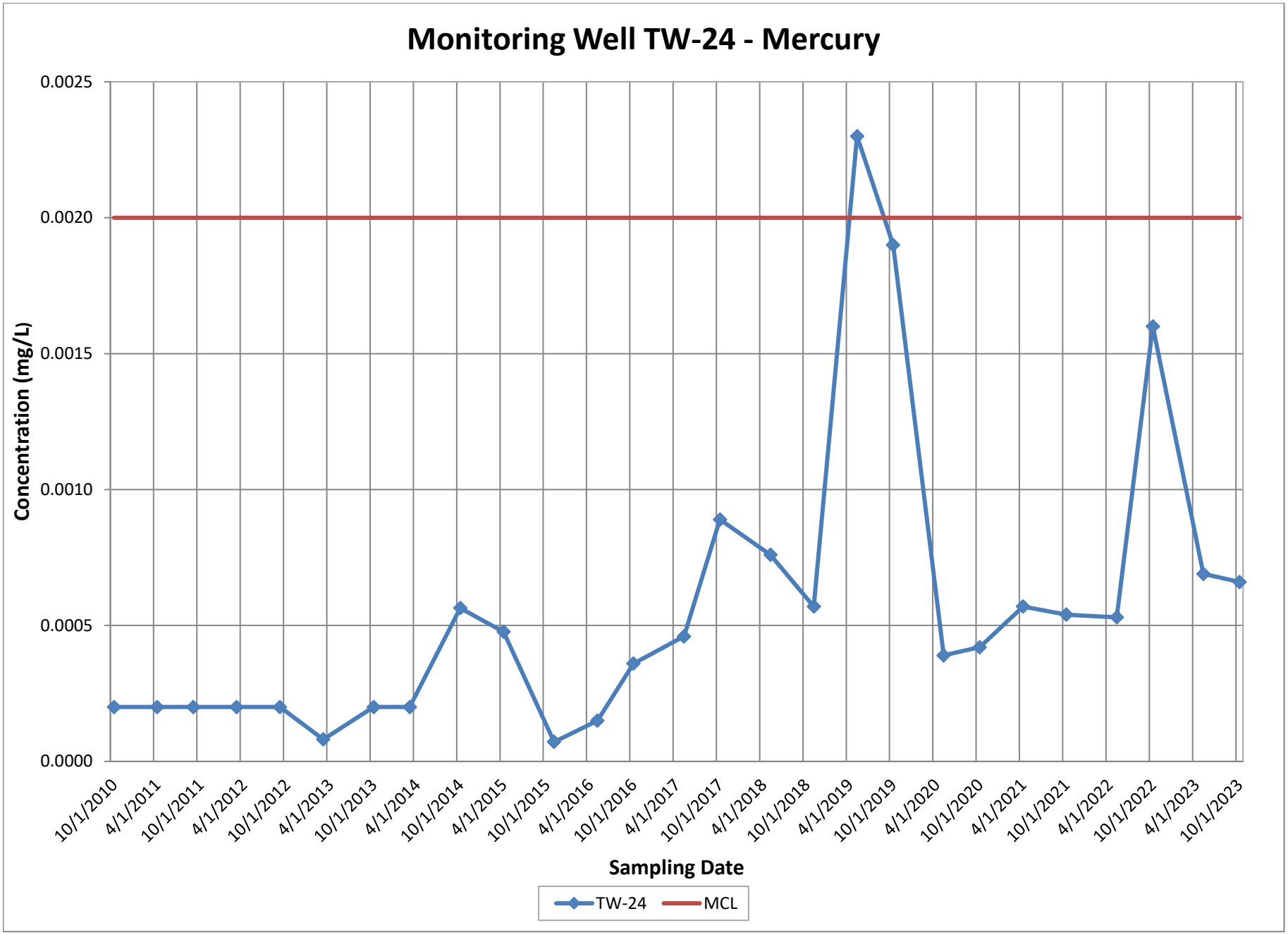

Monitoring Well TW-13 - Trichloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
4/1/2023
10/1/2023
Sampling Date
TW-13
MCL

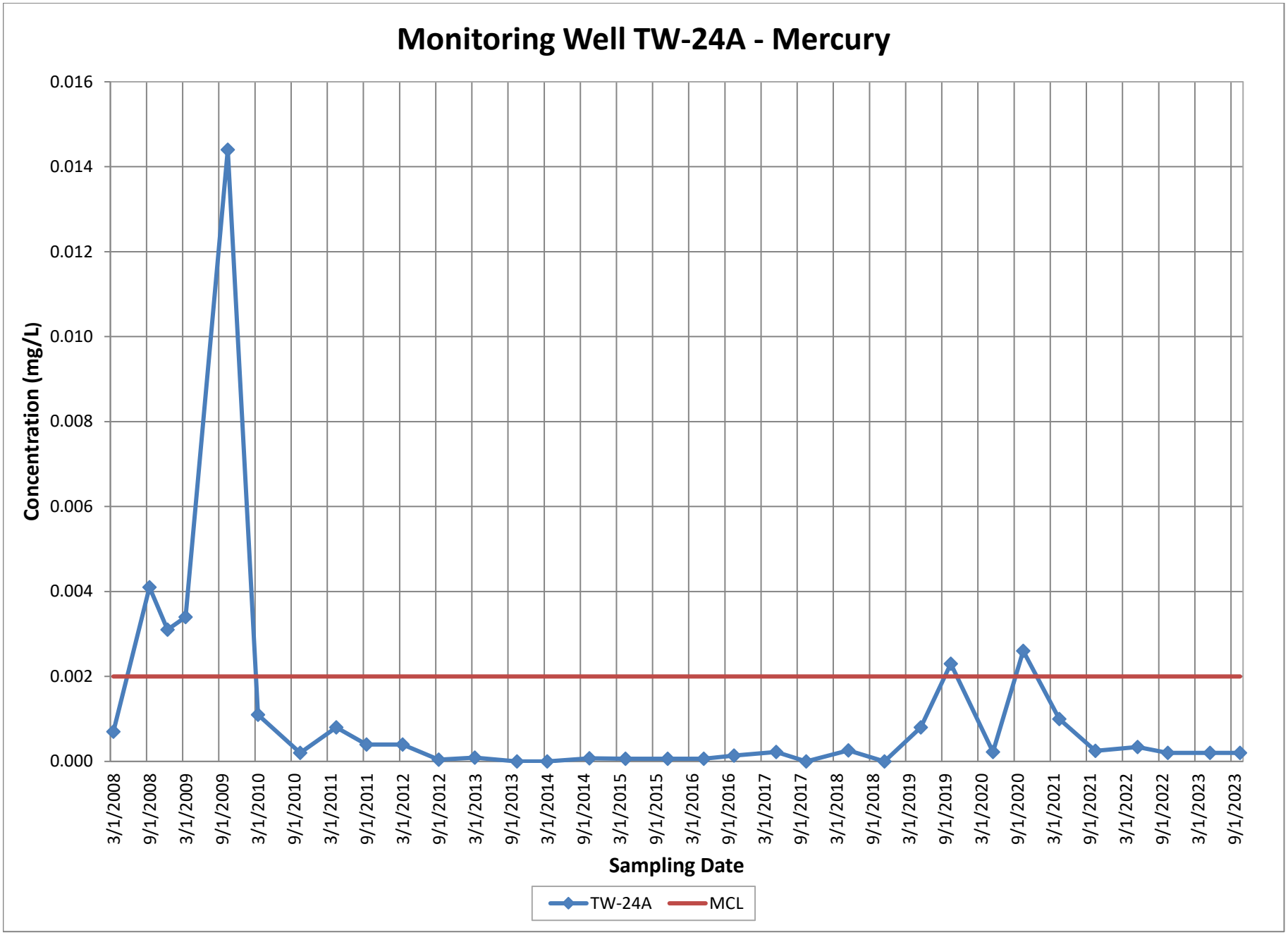

Monitoring Well TW-24 - Trichloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
4/1/2023
10/1/2023
Sampling Date
TW-24
MCL


Monitoring Well TW-25A - Trichloroethene
Concentration (µg/L)
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
4/1/2023
10/1/2023
Sampling Date
TW-25A
MCL


Monitoring Well TW-11A - Total Arsenic
Concentration (µg/L)
0.0500
0.0400
0.0300
0.0200
0.0100
0.0000
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
4/1/2023
Sampling Date
TW-11A
MCL


Monitoring Well TW-17 - Total Arsenic
Concentration (µg/L)
0.0500
0.0400
0.0300
0.0200
0.0100
0.0000
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
4/1/2023
10/1/2023
Sampling Date
TW-17
MCL


Monitoring Well TW-24 - Mercury
Concentration (mg/L)
0.0025
0.0020
0.0015
0.0010
0.0005
0.0000
10/1/2010
4/1/2011
10/1/2011
4/1/2012
10/1/2012
4/1/2013
10/1/2013
4/1/2014
10/1/2014
4/1/2015
10/1/2015
4/1/2016
10/1/2016
4/1/2017
10/1/2017
4/1/2018
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
10/1/2022
4/1/2023
10/1/2023
Sampling Date
TW-24
MCL


Monitoring Well TW-24A - Mercury
Concentration (mg/L)
0.016
0.014
0.012
0.010
0.008
0.006
0.004
0.002
0.000
3/1/2008
9/1/2008
3/1/2009
9/1/2009
3/1/2010
9/1/2010
3/1/2011
9/1/2011
3/1/2012
9/1/2012
3/1/2013
9/1/2013
3/1/2014
9/1/2014
3/1/2015
9/1/2015
3/1/2016
9/1/2016
3/1/2017
9/1/2017
3/1/2018
9/1/2018
3/1/2019
9/1/2019
3/1/2020
9/1/2020
3/1/2021
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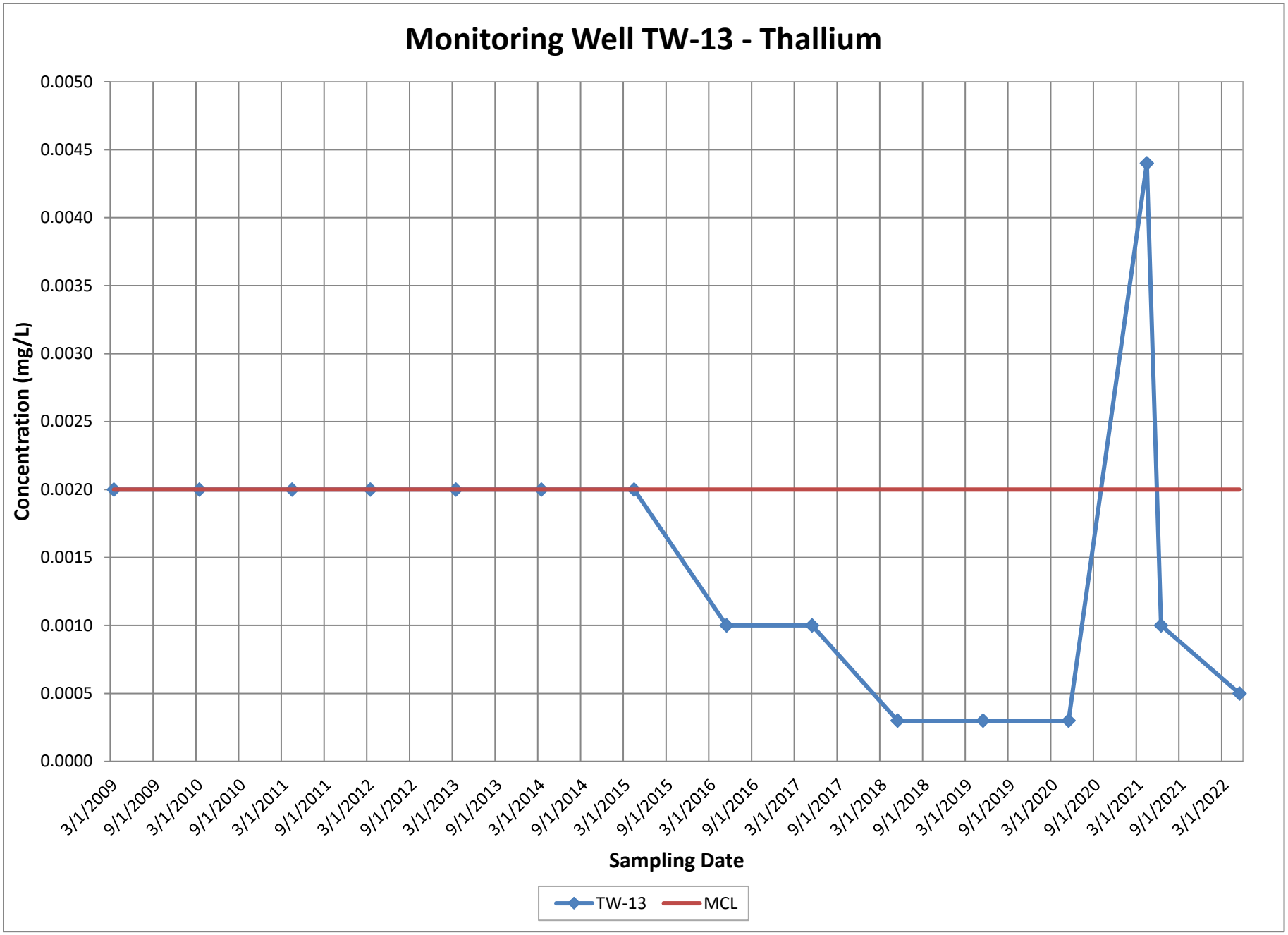
9/1/2023
Sampling Date
TW-24A
MCL


Monitoring Well TW-13 - Thallium
Concentration (mg/L)
0.0050
0.0045
0.0040
0.0035
0.0030
0.0025
0.0020
0.0015
0.0010
0.0005
0.0000
3/1/2009
9/1/2009
3/1/2010
9/1/2010
3/1/2011
9/1/2011
3/1/2012
9/1/2012
3/1/2013
9/1/2013
3/1/2014
9/1/2014
3/1/2015
9/1/2015
3/1/2016
9/1/2016
3/1/2017
9/1/2017
3/1/2018
9/1/2018
3/1/2019
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3/1/2021
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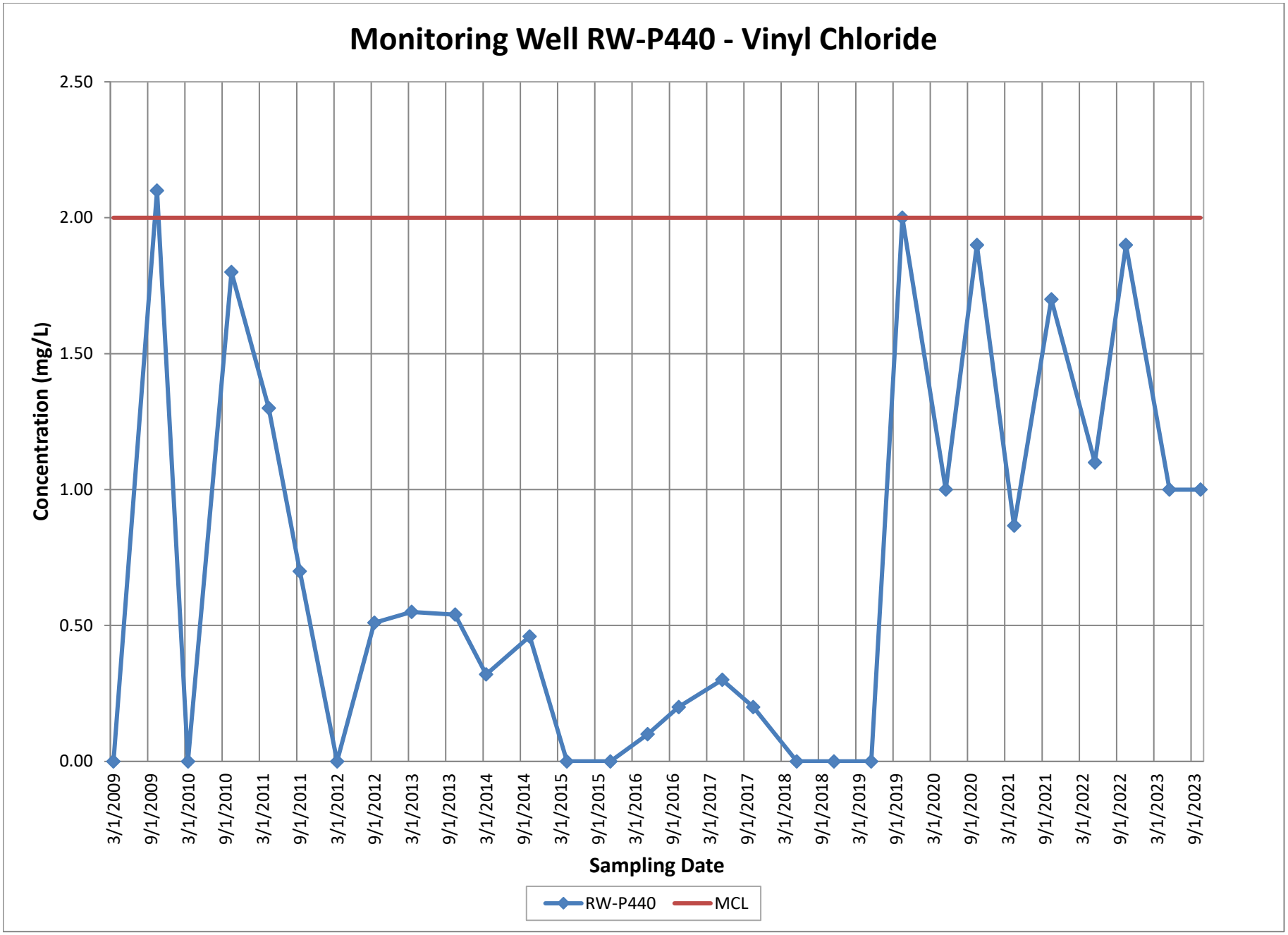
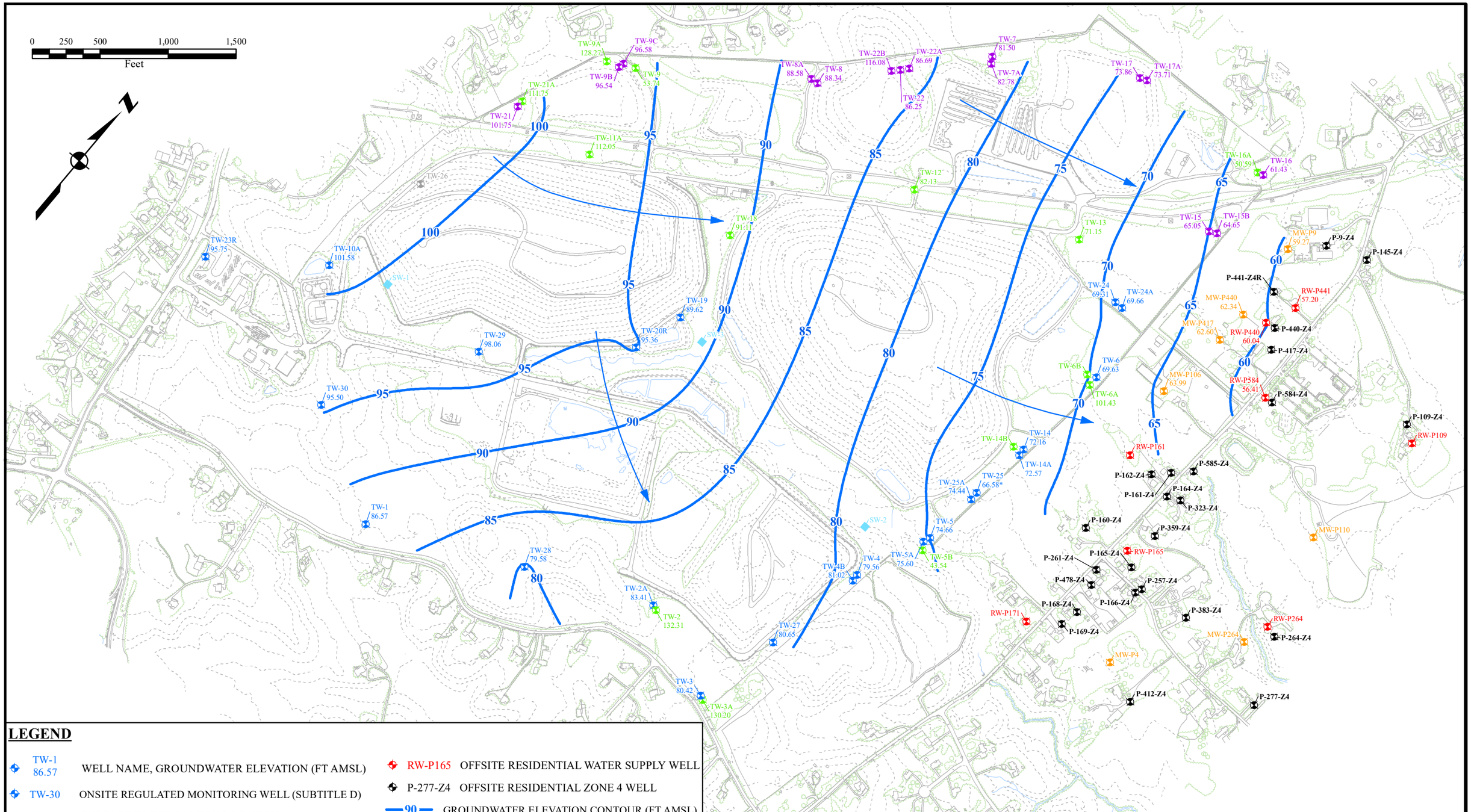
3/1/2022
Sampling Date
TW-13
MCL


Monitoring Well RW-P440 - Vinyl Chloride
Concentration (mg/L)
2.50
2.00
1.50
1.00
0.50
0.00
3/1/2009
9/1/2009
3/1/2010
9/1/2010
3/1/2011
9/1/2011
3/1/2012
9/1/2012
3/1/2013
9/1/2013
3/1/2014
9/1/2014
3/1/2015
9/1/2015
3/1/2016
9/1/2016
3/1/2017
9/1/2017
3/1/2018
9/1/2018
3/1/2019
9/1/2019
3/1/2020
9/1/2020
3/1/2021
9/1/2021
3/1/2022
9/1/2022
3/1/2023
9/1/2023
Sampling Date
RW-P440
MCL

APPENDIX C
Groundwater Elevations



LEGEND

- TW-1 86.57 — WELL NAME, GROUNDWATER ELEVATION (FT AMSL)
- TW-30 — ONSITE REGULATED MONITORING WELL (SUBTITLE D)
- SW-1 — SURFACE WATER SAMPLE LOCATION
- TW-26 — ONSITE REGULATED MONITORING WELL (RPD)
- TW-06 — ONSITE REGULATED MONITORING WELL (COMAR)
- TW-02 — ONSITE NON-REGULATED MONITORING WELL
- MW-417 — OFFSITE NON-REGULATED MONITORING WELL
- RW-P165 — OFFSITE RESIDENTIAL WATER SUPPLY WELL
- P-277-Z4 — OFFSITE RESIDENTIAL ZONE 4 WELL
- 90 — GROUNDWATER ELEVATION CONTOUR (FT AMSL)
- GROUNDWATER FLOW DIRECTION

GROUNDWATER ELEVATIONS MEASURED NOVEMBER 2023

CONTOURS DEVELOPED BASED ON ZONE 3 WELL GROUNDWATER ELEVATIONS

ANOMALOUS GROUNDWATER MEASUREMENTS ARE MARKED WITH AN ASTERISK AND IGNORED FOR CONTOURS

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ARM Group LLC
Engineers and Scientists

GROUNDWATER CONTOUR MAP

MILLERSVILLE LANDFILL
ANNE ARUNDEL COUNTY, MD

January 2024

23011471

Figure C-1

C:\Users\LParker\Desktop\Millersville GIS\MLF GW Contour Map - LPF23.mxd

APPENDIX C - MILLERSVILLE LANDFILL GROUNDWATER LEVEL MEASUREMENTS (November 2023)

WELL ID	DATE	MEASURING POINT ELEV. (FEET)	DEPTH TO WATER (FEET)	ELEV. (FEET)
MW-MB		236.81	---	NA
MW-P106	11/16	107.62	43.63	63.99
MW-P417	11/15	112.75	50.15	62.60
MW-P440	11/15	115.25	52.91	62.34
MW-P9	11/15	112.32	53.05	59.27
N	11/30	195.48	107.51	87.97
P-564	11/30	176.31	100.81	75.50
RW-P440	11/17	117.11	57.07	60.04
RW-P441	11/30	117.58	60.38	57.20
RW-P584	11/15	118.56	62.15	56.41
TW1	11/15	193.42	106.85	86.57
TW10A	11/30	194.52	92.94	101.58
TW10B	11/30	195.96	96.01	99.95
TW11A	11/30	138.52	26.47	112.05
TW12	11/30	141.99	59.86	82.13
TW13	11/30	117.71	46.56	71.15
TW14	11/30	123.07	50.91	72.16
TW14A	11/30	123.26	50.69	72.57
TW15	11/2	116.98	51.93	65.05
TW15B	11/2	116.30	51.65	64.65
TW16	11/2	115.07	53.64	61.43
TW16A	11/2	115.44	64.85	50.59
TW17	11/2	131.99	58.13	73.86
TW17A	11/2	131.55	57.84	73.71
TW18	11/30	128.09	36.98	91.11
TW19	11/2	116.19	26.57	89.62
TW2	11/9	197.71	65.40	132.31
TW20R	11/30	129.97	34.61	95.36
TW21	11/2	158.75	57.00	101.75
TW21A	11/30	158.83	47.08	111.75
TW22	11/8	189.15	102.90	86.25
TW22A	11/8	188.24	101.55	86.69
TW22B	11/8	189.58	73.50	116.08
TW23R	11/1	236.64	140.89	95.75
TW24	11/30	109.19	39.88	69.31
TW24A	11/30	108.69	39.03	69.66
TW25	11/30	117.42	50.84	66.58
TW25A	11/30	117.05	42.61	74.44
TW27	11/9	182.90	102.25	80.65
TW28	11/8	211.73	132.15	79.58

APPENDIX C - MILLERSVILLE LANDFILL GROUNDWATER LEVEL MEASUREMENTS (November 2023)

WELL ID	DATE	MEASURING POINT ELEV. (FEET)	DEPTH TO WATER (FEET)	ELEV. (FEET)
TW29	11/15	143.89	45.83	98.06
TW2A	11/9	197.92	114.51	83.41
TW3	11/9	180.75	100.33	80.42
TW30	11/15	221.00	125.50	95.50
TW31	11/30	186.47	102.11	84.36
TW32	11/30	190.09	74.14	115.95
TW3A	11/9	181.45	51.25	130.20
TW4	11/9	112.56	33.00	79.56
TW4B	11/9	113.60	32.58	81.02
TW5	11/30	104.77	30.11	74.66
TW5A	11/30	105.31	29.71	75.60
TW5B	11/30	103.98	60.44	43.54
TW6	11/30	107.41	37.78	69.63
TW6A	11/30	106.29	4.86	101.43
TW7	11/1	126.85	45.35	81.50
TW7A	11/1	127.56	44.78	82.78
TW8	11/1	139.49	51.15	88.34
TW8A	11/1	139.67	51.09	88.58
TW9	11/1	131.24	77.50	53.74
TW9A	11/30	134.68	6.41	128.27
TW9B	11/1	133.81	37.27	96.54
TW9C	11/1	133.95	37.37	96.58
W	11/30	203.57	115.46	88.11

Note: MW-MB was abandoned following the May 2023 measurement attempt.

APPENDIX D
Data Validation

APPENDIX D
LABORATORY DATA VALIDATION

1.1 INTRODUCTION

This document presents the summary of data validation performed on the laboratory analytical data associated with the 2nd semi-annual 2023 groundwater monitoring event at the Millersville Landfill and Resource Recovery Facility (MLFRRF) in Anne Arundel County, Maryland. Groundwater samples were collected pursuant to the Annotated Code of Maryland (COMAR) Title 26, Chapter 4; the Code of Federal Regulations (CFR) Title 40, Chapter Part 258; and the MLFRRF Environmental Monitoring Plan (EMP).

Groundwater and surface water sampling for the 2nd semi-annual 2023 event was performed on October 30-31, November 1-2, November 7-9, November 15-17, and November 20, 2023. Environmental Monitoring and Assessment (EMA), LLC of Lititz, Pennsylvania conducted the sampling. Laboratory analysis for volatile organic compounds (VOCs) was performed by Maryland Spectral Services (MSS) of Baltimore, Maryland and for laboratory analysis for inorganic compounds was performed by Pace Analytical Service (Pace) of Greensburg, Pennsylvania.

Quality Assurance/Quality Control (QA/QC) protocols employed during this event included the analysis of matrix spike (MS) and matrix spike duplicate (MSD) samples, laboratory control samples (LCS), laboratory method blanks, and laboratory preparation blanks. These protocols also included the analysis of two blind duplicate samples obtained from TW-24 (DUP-1) and TW-25A (DUP-2). In addition, the QA/QC protocols included the preparation of four trip blanks and one field blank.

Samples were analyzed for VOCs, total and dissolved metals, and general chemistry parameters.

1.2 SAMPLE PACKAGE COMPLETENESS AND DELIVERABLES

Chains of custody were present in the data packages for all samples, along with statements from the laboratory attesting to the validity of the data. All requested analyses were accounted for in the data report. Sample receipt forms were present for all samples.

1.3 VOLATILE ORGANIC COMPOUND ANALYSES

1.3.1 General Information

<u>Groundwater Sampling Locations (56):</u>

TW-01, TW-02, TW-02A, TW-03, TW-03A, TW-04, TW-04B, TW-05, TW-05A, TW-05B, TW-06, TW-06B, TW-07, TW-07A, TW-08, TW-08A, TW-09, TW-09B, TW-09C, TW-10A,

TW-14, TW-14A, TW-14B, TW-15, TW-15B, TW-16, TW-16A, TW-17, TW-17A, TW-19, TW-20R, TW-21, TW-22, TW-22A, TW-22B, TW-23R, TW-24, TW-24A, TW-25, TW-25A, TW-27, TW-28, TW-29, TW-30, MW-P4, MW-P9, MW-P106, MW-P417, MW-P440, RW-P109, RW-P165, RW-P171-1, RW-P264, RW-P440, RW-P441, and RW-P584.

Surface Water Sampling Locations (3):

SW-1, SW-2, and SW-3.

QA/QC Samples:

Field blank, all trip blanks, laboratory control samples, laboratory method blanks, and laboratory MS/MSDs.

1.3.2 **Analytical Method**

The samples were analyzed for VOCs following the United States Environmental Protection Agency (USEPA) Methods 8260B and 8011. The target analyte list was that established as Appendix I by 40 CFR Part 258, "Constituents for Detection Monitoring" and Appendix II (40 CFR Part 258) parameters – dichlorodifluoromethane and dichlorofluoromethane, and methyl tertiary-butyl ether (MTBE).

Field and Trip Blanks

One field blank and six trip blanks were prepared and analyzed for this sampling event. There were no VOC parameters detected in any of the six trip blanks or in the field blank. Therefore, no concentrations were flagged with "B" qualifiers.

Blind Duplicate Samples

The blind duplicate samples were collected from wells TW-24 (DUP-1) and TW-25A (DUP-2). Analyses were performed to calculate the RPD of duplicate samples in obtaining an estimate of laboratory method precision. Table D-1 summarizes the RPD of constituents detected above the RL. The highest RPD was 28.6% for concentrations of dichlorofluoromethane in TW-24 and DUP-1. There were two other parameters with RPD over 20% in TW-24 and DUP-1: dichlorodifluoromethane at 23.5% and 1,1-dichloroethane at 23.7%. The agreement between the remaining detected VOCs in the duplicates and corresponding samples were within QC standards.

Quality Control Sample Review

Quality Control samples for each laboratory report were reviewed to verify proper documentation of any analysis issues. Notable observations from the quality control samples are summarized below.

- Surrogates: For most projects, all surrogates were within quality control limits, with a few exceptions. The following projects had surrogate recoveries below control limits, meaning the results may be biased low: 30636257 and 30636586. Proper qualification was added for the associated sample results.
- Method Blanks: For most projects, there were no analytes detected in method blanks. In project 3110220, methylene chloride was detected in a laboratory method blank as well as in the sample. Proper qualification was added for the associated sample results.
- Holding Time: Most VOC samples in all projects were prepared and analyzed within the method required holding times, except for the analysis of 1,2-dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (EDB) using method 8011 in projects 30636257 and 30636586. Concentrations for all impacted results were below detection limits. Proper qualification was added for the associated sample results.
- Continuing Calibration: For most projects, all criteria were within method requirements, with the exception of the analysis of DBCP in projects 30635401, 30640354, and 30640766, and both DBCP and EDB in projects 30636257 and 30636586. The results were flagged with a “CH” qualifier if the continuing calibration for the compound was outside of laboratory acceptance limits. The results might be biased high.
- Laboratory Control Spike: For most projects, recoveries in the laboratory control samples were within quality control limits, with a few exceptions. For the following projects, recoveries in some of the laboratory control samples were outside quality control limits: 3103124, 30636257, 30636586, and 30640354. Proper qualification was added where appropriate.
- Matrix Spikes: For most projects, recoveries in matrix spikes and matrix spike duplicates were within quality control limits, with a few exceptions. The following projects had matrix spike or matrix spike duplicate recoveries that were outside control limits: 3103124, 3110220, 3110918, 3111616, 30636257, and 30636586. No additional qualification was necessary. For projects 30636257 and 30636586, the laboratory was unable to perform a matrix spike/matrix spike duplicate due to insufficient sample volume. Proper qualification was added where appropriate.
- Laboratory Duplicate: For all projects, the precision between the sample and laboratory sample duplicate was within control limits.

1.4 INORGANIC ANALYSIS

1.4.1 General Information

Groundwater Sampling Locations (56):

TW-01, TW-02, TW-02A, TW-03, TW-03A, TW-04, TW-04B, TW-05, TW-05A, TW-05B, TW-06, TW-06B, TW-07, TW-07A, TW-08, TW-08A, TW-09, TW-09B, TW-09C, TW-10A, TW-14, TW-14A, TW-14B, TW-15, TW-15B, TW-16, TW-16A, TW-17, TW-17A, TW-19, TW-20R, TW-21, TW-22, TW-22A, TW-22B, TW-23R, TW-24, TW-24A, TW-25, TW-25A, TW-27, TW-28, TW-29, TW-30, MW-P106, MW-P4, MW-P417, MW-P440, MW-P9, RW-P109, RW-P165, RW-P171-1, RW-P264, RW-P440, RW-P441, and RW-P584.

Surface Water Sampling Locations (3):

SW-1, SW-2, and SW-3.

QA/QC Samples:

Field Blank, laboratory control samples, laboratory method blanks, laboratory duplicates, and laboratory MS/MSDs.

1.4.2 Analytical Methods

On-site samples were analyzed for antimony, arsenic, barium, beryllium, cadmium, calcium (total and dissolved), chromium, cobalt, copper, iron (total and dissolved), lead, magnesium (total and dissolved), manganese (total and dissolved), mercury, nickel, potassium (total and dissolved), selenium, silver, sodium (total and dissolved), thallium, vanadium, and zinc using the Inductively Coupled Plasma Optical Emission Spectrometry/Mass Spectrometer (ICP/MS) (USEPA Method 6010D and 6020B). Mercury was analyzed using the Cold Vapor Atomic Absorption Spectrometry method (CVAA) (USEPA Method 7470A).

Additionally, samples were analyzed for chloride (Standard Method [SM]4500CIE), nitrate and nitrite (SM4500NO3-F and SM4500NO2-B), ammonia (USEPA Method 350.1), chemical oxygen demand (USEPA Method 410.4), hardness (SM2340B), alkalinity (SM2320B), sulfate (USEPA Method 9038), total dissolved solids (SM2540C), and turbidity (SM2130B).

Off-site samples (MW and RW) were analyzed for mercury (total) only. All QC data were compared with quality control criteria for drinking water analysis in the USEPA Analytical Procedures for Determination of Metals under 40 CFR Part 136.

Field Blank

One field blank was prepared and analyzed for this sampling event as part of work order 30638286. There were no parameters detected in the field blank, so no sample detections were flagged with a "B" qualifier for comparable field blank detections.

Blind Duplicate Samples

Table D1 summarizes the RPD of the detected inorganic constituents in duplicate samples. RPD's were generally within control limits. The highest RPD was 56.3% for concentrations of mercury in TW-24 and DUP-1. There was one other parameter with RPD over 20%: total dissolved solids in TW-25 and DUP-2 at 20.8%. The RPDs for the remaining analytes were less than 15%.

Charge-Balance Error

The charge-balance error of samples collected in the field can be used to evaluate whether all ionic species that exist in the groundwater sample have been identified. Table D2 provides a summary of the calculated charge-balance errors. Eight out of 47 samples had a charge-balance error greater than the 20%. Charge-balance errors greater than 20% may indicate that ions are present in the groundwater sample that were not used in the calculations.

Project Narrative Review

Project narratives for each data package were reviewed to verify proper documentation of any analysis issues. Notable observations from the project narratives are summarized below.

- Holding Time: Most samples in all projects were prepared and analyzed within the method required holding times, except for 16 samples analyzed for nitrate using method EPA 300 in projects 3103124, 3110220, 3110918, and 3111616. Proper qualification was added for the associated sample results.
- Initial Calibration: For all projects, all criteria were within method requirements.
- Continuing Calibration: For all projects, all criteria were within method requirements.
- Internal Standards: For all projects, all internal standards were within quality control limits.
- Method Blanks: The following projects had at least one analyte detected above the reporting limit in the associated method blank: 30636257, 30636586, and 30640354. The results were flagged with a "B" qualifier if an analyte was detected above the reporting limit in a method blank.
- Laboratory Control Spike: For all projects, all analytes in the lab control spike were recovered within the quality control limits.
- Matrix Spikes: For the following projects, the RPD value for at least one analyte in a matrix spike or matrix spike duplicate was outside the quality control limits: 30635401, 30636257, 30636586, 30637219, 30638010, 30638286, 30640354, 30641025, and 3103124. The associated batch was either accepted based on LCS recovery or proper

qualification was added for the associated sample results. For the following projects, the analyte concentration for the matrix spike or matrix spike duplicate exceeded calibration range, so the reported result was estimated: 30637219 and 30638010. Proper qualification was added for the associate sample results.

- Laboratory Duplicate: For all projects, the precision between the sample and laboratory sample duplicate was within control limits.

TABLE D1
MLFRRF LABORATORY DATA VALIDATION - FALL 2023
Duplicate Comparison - Detected Parameters

Parameter	Unit	TW-24 Result		Dup 1 Result		Relative Percent Difference	TW-25A Result		Dup 2 Result		Relative Percent Difference
1,1-Dichloroethane	µg/L	2.6		3.3		23.7%	27.8		27.8		0.0%
1,2-Dichloroethane	µg/L	1	U	1	U	NA	1.8		1.6		11.8%
1,2-Dichloropropane	µg/L	1	U	1	U	NA	1.1		1.1		0.0%
1,4-Dichlorobenzene	µg/L	1	U	1	U	NA	1.7		1.7		0.0%
Benzene	µg/L	1	U	1	U	NA	2.5		2.5		0.0%
cis-1,2-Dichloroethene	µg/L	1	U	1	U	NA	5.2		5.3		1.9%
Dichlorodifluoromethane	µg/L	1.5		1.9		23.5%	12.3		12.1		1.6%
Dichlorofluoromethane	µg/L	1.2		1.6		28.6%	27.2		27.7		1.8%
Methylene chloride	µg/L	1	U	1	U	NA	26.5		27.3		3.0%
Methyl-tert-butyl ether	µg/L	1	U	1	U	NA	4		4.2		4.9%
Tetrachloroethene	µg/L	0.6	J	0.5	J	NA	3.7		3.4		8.5%
Trichloroethene	µg/L	1	U	1	U	NA	4.8		5		4.1%
Trichlorofluoromethane	µg/L	1	U	1	U	NA	1.8		1.7		5.7%
Vinyl chloride	µg/L	1	U	1	U	NA	1.2		1.2		0.0%
Barium	mg/L	0.092		0.096		4.3%	0.076		0.078		2.6%
Beryllium	mg/L	0.00017	J	0.0005	U	NA	0.00096		0.00097		1.0%
Calcium	mg/L	4.7		4.7		0.0%	3.3		3.3		0.0%
Calcium, Dissolved	mg/L	4.7		4.9		4.2%	3.5		3.5		0.0%
Chloride	mg/L	31.5		31.1		1.3%	11.2		11.4		1.8%
Cobalt	mg/L	0.013		0.014		7.4%	0.01		0.01		0.0%
Copper	mg/L	0.0045		0.0048		6.5%	0.048		0.049		2.1%
Magnesium	mg/L	4.4		4.3		2.3%	2.1		2.1		0.0%
Magnesium, Dissolved	mg/L	4.5		4.6		2.2%	2.2		2.2		0.0%
Manganese	mg/L	0.064		0.065		1.6%	0.051		0.052		1.9%
Manganese, Dissolved	mg/L	0.064		0.064		0.0%	0.05		0.051		2.0%
Mercury	mg/L	0.00066		0.00037		56.3%	0.0002	U	0.0002	U	NA
Nickel	mg/L	0.013		0.014		7.4%	0.0099		0.01		1.0%
Nitrate as N	mg/L	1.13		1.15		1.8%	0.724		0.727		0.4%
Potassium	mg/L	1.4		1.4		0.0%	1		1.1		9.5%
Potassium, Dissolved	mg/L	1.3		1.5		14.3%	1.1		1.2		8.7%
Sodium	mg/L	13.5		13.4		0.7%	3.8		4		5.1%
Sodium, Dissolved	mg/L	13.4		14.2		5.8%	4		4		0.0%
Sulfate	mg/L	11.8		11.1		6.1%	5.2	J	5	J	NA
Total Dissolved Solids	mg/L	88		80		9.5%	53		43		20.8%
Total Hardness	mg/L	29.7	N3	29.3	N3	1.4%	16.6	N3	16.9	N3	1.8%
Zinc	mg/L	0.016		0.015		6.5%	0.014		0.015		6.9%

TABLE D2
MLFRRF DATA EVALUATION - FALL 2023
Cation/Anion Balance Worksheet

	ION	M.W. (g/mol)	*Subtite D Regulated Wells*														
			Concentration (mg/L)														
			TW-01	TW-02A	TW-03	TW-04	TW-04B	TW-05	TW-05A	TW-06	TW-10A	TW-14	TW-14A	TW-19	TW-20R	TW-23	TW-24
CATIONS	Ca^{2+}	40.08	17.9	6	1.1	3	3.1	3.5	1.7	4.5	5.7	1.7	5.7	18.9	14.5	2.6	4.7
	Mg^{2+}	24.31	1.7	3.3	0.58	1.5	2.6	1.1	0.82	2.7	3.6	1.4	5.6	4.9	3.8	0.96	4.5
	K^{+}	39.10	0.75	1.2	0.5	0.93	1.1	0.83	0.7	1.6	2.4	0.83	1.7	4.5	3.5	0.98	1.3
	Na^{+}	22.99	3.5	19	2.5	5.9	2.8	3.6	2.6	6.8	25.9	4.9	8.7	11.6	14.5	3.9	13.4
Cations (meq/L)			**1.20**	**1.43**	**0.22**	**0.55**	**0.52**	**0.44**	**0.28**	**0.78**	**1.77**	**0.43**	**1.17**	**1.97**	**1.76**	**0.40**	**1.22**
ANIONS	HCO_3^-	61.01	35.4	19.5	8.5	20.7	1.2	20.7	14.6	23.2	0	1.2	19.5	17.1	0.0	1.22	1.2
	Cl^-	35.45	7.7	43.2	5.2	16.3	5.8	11.2	5.6	16.5	49.6	13.8	15.8	19.8	16.6	8	31.5
	NO_3^-	62.00	0	0	0.19	0	1.2	0	0	0.37	9.6	0.25	0	4.9	5.8	6.7	5.0
	SO_4^{2-}	96.06	0	0	0	0	11.4	0	0	10.6	11.4	0	17.9	24.9	55.2	0	11.8
Anions (meq/L)			**0.80**	**1.54**	**0.29**	**0.80**	**0.44**	**0.66**	**0.40**	**1.07**	**1.79**	**0.41**	**1.14**	**1.44**	**1.71**	**0.35**	**1.23**
CBE (%)			***20.4***	*3.7*	*12.8*	*18.2*	*8.1*	*19.4*	*16.7*	*15.6*	*0.6*	*2.5*	*1.2*	*15.6*	*1.3*	*6.6*	*0.6*

	ION	M.W. (g/mol)	*Subtite D Regulated Wells*							*On-site Non-Regulated Wells*						
			Concentration (mg/L)													
			TW-24A	TW-25	TW-25A	TW-27	TW-28	TW-29	TW-30	TW-02	TW-03A	TW-05B	TW-06B	TW-09	TW-14B	TW-16A
CATIONS	Ca^{2+}	40.08	18.5	1.8	3.5	1.1	6.9	2.2	4.9	0.42	6.6	0.41	0.57	0.43	0.52	1
	Mg^{2+}	24.31	3.2	0.95	2.2	0.43	3.4	1.2	2	0.56	2.3	0.18	0.29	0.22	0.27	0.36
	K^{+}	39.10	2.8	0.76	1.1	0.51	1.2	0.8	1.6	0.59	1.5	0.51	0.6	0.49	0.53	0.54
	Na^{+}	22.99	3.4	2.9	4	2.7	27.1	4.6	11.9	1.5	105	1.3	1.7	0.86	1	1.2
Cations (meq/L)			**1.41**	**0.31**	**0.56**	**0.22**	**1.83**	**0.43**	**0.97**	**0.15**	**5.12**	**0.10**	**0.14**	**0.09**	**0.11**	**0.15**
ANIONS	HCO_3^-	61.01	24.4	1.2	1.2	0	0	1.2	0	13.42	13.42	0	0	13.4	0	0.0
	Cl^-	35.45	6.8	8.5	11.2	5.6	58.8	11.4	27.7	3.1	191	2.2	3.5	1.8	1.9	2.9
	NO_3^-	62.00	5.3	1.2	3.2	0	0	3.1	10.1	0	0	0.92	1.6	0	1.7	0
	SO_4^{2-}	96.06	15	0	5.2	0	0	0	0	0	0	0	0	0	0	0
Anions (meq/L)			**0.99**	**0.28**	**0.50**	**0.16**	**1.66**	**0.39**	**0.94**	**0.31**	**5.61**	**0.08**	**0.12**	**0.27**	**0.08**	**0.08**
CBE (%)			*17.4*	*5.7*	*5.9*	*16.6*	*5.0*	*4.6*	*1.2*	***35.2***	*4.5*	*15.4*	*6.7*	***50.3***	*13.2*	***28.0***

TABLE D2
MLFRRF DATA EVALUATION - FALL 2023
Cation/Anion Balance Worksheet

	ION	M.W. (g/mol)	*COMAR Regulated Wells* Concentration (mg/L)														
			TW-07	TW-07A	TW-08	TW-08A	TW-09B	TW-09C	TW-15	TW-15B	TW-16	TW-17	TW-17A	TW-21	TW-22	TW-22A	TW-22B
CATIONS	Ca^{2+}	40.08	4.6	2.8	6.2	8.5	3.7	4.9	0.87	4.3	13.1	4.7	0.77	9	2.6	6.5	25.2
	Mg^{2+}	24.31	1.3	1.7	3.8	5.4	2.4	3.9	0.52	4.9	10.8	2	0.38	3.1	2.2	6.7	5
	K^{+}	39.10	1.8	1.0	1.4	2.1	1.6	1.9	0.84	1.6	6.9	1.7	0.52	2.1	1.3	2.1	4.8
	Na^{+}	22.99	7	4.4	26	56	14.4	13	2	22.8	20.7	12.2	1.2	24.1	13.6	48	8.8
Cations (meq/L)			**0.69**	**0.50**	**1.79**	**3.36**	**1.05**	**1.18**	**0.19**	**1.65**	**2.62**	**0.97**	**0.14**	**1.81**	**0.94**	**3.02**	**2.17**
ANIONS	HCO_3^-	61.01	7.3	0	22.0	0	1.2	1.22	22.0	0	0	2.4	1.2	0	0.0	0	31.7
	Cl^-	35.45	15	9	55.3	95.4	24	22.3	5.1	55.8	25.8	6.2	3.1	42.7	25.3	81.3	9.9
	NO_3^-	62.00	0	0.68	0	17.1	7.4	9.2	0	3.1	0	0	0	9.7	3.8	8.5	7.9
	SO_4^{2-}	96.06	0	8.7	5.1	27.2	6.1	16.1	0	0	106	41.6	5.2	29.5	0	22.4	23.8
Anions (meq/L)			**0.54**	**0.45**	**2.03**	**3.53**	**0.94**	**1.13**	**0.50**	**1.62**	**2.93**	**1.08**	**0.22**	**1.98**	**0.77**	**2.90**	**1.42**
CBE (%)			*11.7*	*5.4*	*6.2*	*2.5*	*5.3*	*2.0*	***44.3***	*0.8*	*5.7*	*5.2*	***22.9***	*4.5*	*9.4*	*2.0*	***20.9***

	ION	M.W. (g/mol)	*Surface Water* Concentration (mg/L)		
			SW-1	SW-2	SW-3
CATIONS	Ca^{2+}	40.08	12.6	12.2	40.3
	Mg^{2+}	24.31	3.2	3.4	9.3
	K^{+}	39.10	2.2	3.5	4.2
	Na^{+}	22.99	47.6	3.7	45.8
Cations (meq/L)			**3.02**	**1.14**	**4.88**
ANIONS	HCO_3^-	61.01	13.4	20.7	62.2
	Cl^-	35.45	76.5	5.9	59.3
	NO_3^-	62.00	9.1	0	0
	SO_4^{2-}	96.06	13.8	6.2	30.8
Anions (meq/L)			**2.81**	**0.64**	**3.33**
CBE (%)			*3.5*	***28.4***	*18.8*

APPENDIX E
Laboratory Analytical Data Packages

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

November 16, 2023

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-2023
Pace Project No.: 30635401

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on October 31, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alaina Deitch

Alaina R. Deitch
alaina.deitch@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: MLF-2023
Pace Project No.: 30635401

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572023-03
New Hampshire/TNI Certification #: 297622
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad

Pace Analytical Services Beaver

225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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Greensburg, PA 15601
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SAMPLE SUMMARY

Project: MLF-2023
Pace Project No.: 30635401

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30635401001	**TW-5**	Water	10/30/23 13:50	10/31/23 22:15
30635401002	**TW-5A**	Water	10/30/23 13:10	10/31/23 22:15
30635401003	**TW-5B**	Water	10/30/23 12:30	10/31/23 22:15
30635401004	**TW-6**	Water	10/31/23 11:00	10/31/23 22:15
30635401005	**TW-6B**	Water	10/31/23 10:20	10/31/23 22:15
30635401006	**TW-14**	Water	10/31/23 13:15	10/31/23 22:15
30635401007	**TW-14A**	Water	10/31/23 12:40	10/31/23 22:15
30635401008	**TW-14B**	Water	10/31/23 12:00	10/31/23 22:15
30635401009	**TW-24**	Water	10/30/23 16:00	10/31/23 22:15
30635401010	**TW-24A**	Water	10/31/23 09:40	10/31/23 22:15
30635401011	**TW-25**	Water	10/30/23 15:15	10/31/23 22:15
30635401012	**TW-25A**	Water	10/30/23 14:40	10/31/23 22:15
30635401013	**DUP-1**	Water	10/30/23 00:00	10/31/23 22:15
30635401014	**DUP-2**	Water	10/30/23 00:00	10/31/23 22:15

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SAMPLE ANALYTE COUNT

Project: MLF-2023
Pace Project No.: 30635401

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30635401001	**TW-5**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30635401002	**TW-5A**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30635401003	**TW-5B**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30635401004	**TW-6**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF-2023
Pace Project No.: 30635401

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30635401005	**TW-6B**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30635401006	**TW-14**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30635401007	**TW-14A**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-2023
Pace Project No.: 30635401

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30635401008	**TW-14B**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30635401009	**TW-24**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30635401010	**TW-24A**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30635401011	**TW-25**	EPA 6010D	AGB	7	PASI-BV

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SAMPLE ANALYTE COUNT

Project: MLF-2023
Pace Project No.: 30635401

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30635401012	**TW-25A**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30635401013	**DUP-1**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30635401014	**DUP-2**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA

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SAMPLE ANALYTE COUNT

Project: MLF-2023
Pace Project No.: 30635401

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: MLF-2023
Pace Project No.: 30635401

Date: November 16, 2023

TW-5 (Lab ID: 30635401001)
- Sample pH for 8011 is 6

TW-5A (Lab ID: 30635401002)
- Sample pH for 8011 is 6

TW-5B (Lab ID: 30635401003)
- Sample pH for 8011 is 6

TW-6 (Lab ID: 30635401004)
- Sample pH for 8011 is 6

TW-6B (Lab ID: 30635401005)
- Sample pH for 8011 is 5

TW-14 (Lab ID: 30635401006)
- Sample pH for 8011 is 5

TW-14A (Lab ID: 30635401007)
- Sample pH for 8011 is 6

TW-14B (Lab ID: 30635401008)
- Sample pH for 8011 is 6

TW-24 (Lab ID: 30635401009)
- Sample pH for 8011 is 5

TW-24A (Lab ID: 30635401010)
- Sample pH for 8011 is 6

TW-25 (Lab ID: 30635401011)
- Sample pH for 8011 is 5

TW-25A (Lab ID: 30635401012)
- Sample pH for 8011 is 5

DUP-1 (Lab ID: 30635401013)
- Sample pH for 8011 is 5

DUP-2 (Lab ID: 30635401014)
- Sample pH for 8011 is 5

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PROJECT NARRATIVE

Project: MLF-2023
Pace Project No.: 30635401

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 16, 2023

General Information:
14 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 627042

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30635673001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3056489)
  - Calcium
  - Iron
  - Magnesium
  - Sodium
- MSD (Lab ID: 3056490)
  - Calcium
  - Iron
  - Magnesium

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PROJECT NARRATIVE

Project: MLF-2023
Pace Project No.: 30635401

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 16, 2023

QC Batch: 627042

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30635673001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- Potassium
- Sodium

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-2023
Pace Project No.: 30635401

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 16, 2023

General Information:
14 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-2023
Pace Project No.: 30635401

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: November 16, 2023

General Information:
14 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 627033

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30635401003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3056460)
  - Thallium
- MSD (Lab ID: 3056461)
  - Thallium

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-2023
Pace Project No.: 30635401

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: November 16, 2023

General Information:
14 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-2023
Pace Project No.: 30635401

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 16, 2023

General Information:
14 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 627451

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- BLANK (Lab ID: 3058343)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- DUP-1 (Lab ID: 30635401013)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- DUP-2 (Lab ID: 30635401014)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- LCS (Lab ID: 3058344)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- MS (Lab ID: 3058345)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- MSD (Lab ID: 3058346)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- TW-14 (Lab ID: 30635401006)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- TW-14A (Lab ID: 30635401007)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- TW-14B (Lab ID: 30635401008)
  - 1,1,1,2-Tetrachloroethane (S)

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PROJECT NARRATIVE

Project: MLF-2023
Pace Project No.: 30635401

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 16, 2023

QC Batch: 627451

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- 1,2-Dibromo-3-chloropropane
- TW-24 (Lab ID: 30635401009)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- TW-24A (Lab ID: 30635401010)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- TW-25 (Lab ID: 30635401011)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- TW-25A (Lab ID: 30635401012)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- TW-5 (Lab ID: 30635401001)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- TW-5A (Lab ID: 30635401002)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- TW-5B (Lab ID: 30635401003)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- TW-6 (Lab ID: 30635401004)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
- TW-6B (Lab ID: 30635401005)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-2023
Pace Project No.: 30635401

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: November 16, 2023

General Information:
14 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 627444

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30635401001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 3058328)
  - Alkalinity,Total (CaCO3 pH4.5)
- MSD (Lab ID: 3058329)
  - Alkalinity,Total (CaCO3 pH4.5)

Additional Comments:

Analyte Comments:

QC Batch: 627444

1c: Alkalinity TV: 0.00 mg/L

- TW-14B (Lab ID: 30635401008)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-5B (Lab ID: 30635401003)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-6B (Lab ID: 30635401005)
  - Alkalinity,Total (CaCO3 pH4.5)

2c: Alkalinity TV: 2.00 mg/L

- DUP-1 (Lab ID: 30635401013)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-14 (Lab ID: 30635401006)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-24 (Lab ID: 30635401009)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-2023
Pace Project No.: 30635401

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: November 16, 2023

Analyte Comments:

QC Batch: 627444

2c: Alkalinity TV: 2.00 mg/L

- TW-25 (Lab ID: 30635401011)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-25A (Lab ID: 30635401012)
  - Alkalinity,Total (CaCO3 pH4.5)

3c: Alkalinity TV: 4.00 mg/L

- DUP-2 (Lab ID: 30635401014)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-2023
Pace Project No.: 30635401

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: November 16, 2023

General Information:
14 samples were analyzed for SM 2540C-2015 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-2023
Pace Project No.: 30635401

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: November 16, 2023

General Information:
14 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-2023
Pace Project No.: 30635401

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: November 16, 2023

General Information:
14 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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(724)850-5600

PROJECT NARRATIVE

Project: MLF-2023
Pace Project No.: 30635401

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: November 16, 2023

General Information:
14 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-2023
Pace Project No.: 30635401

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: November 16, 2023

General Information:
14 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 626793

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30635401010,30635401014

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 3055355)
  - Sulfate
- MSD (Lab ID: 3055356)
  - Sulfate

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-2023
Pace Project No.: 30635401

Sample: TW-5 **Lab ID: 30635401001** Collected: 10/30/23 13:50 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**3.4**	mg/L	0.50	0.054	1	11/03/23 11:02	11/06/23 09:37	7440-70-2	
Iron	**30.0**	mg/L	0.050	0.0056	1	11/03/23 11:02	11/06/23 09:37	7439-89-6	
Magnesium	**1.1**	mg/L	0.50	0.021	1	11/03/23 11:02	11/06/23 09:37	7439-95-4	
Manganese	**0.18**	mg/L	0.0050	0.00055	1	11/03/23 11:02	11/06/23 09:37	7439-96-5	
Potassium	**0.82**	mg/L	0.50	0.20	1	11/03/23 11:02	11/06/23 09:37	7440-09-7	
Sodium	**3.5**	mg/L	0.50	0.11	1	11/03/23 11:02	11/06/23 09:37	7440-23-5	
Total Hardness	**13.0**	mg/L	3.3	0.22	1	11/03/23 11:02	11/06/23 09:37		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**3.5**	mg/L	0.50	0.054	1	11/07/23 13:39	11/08/23 16:33	7440-70-2	
Iron, Dissolved	**29.7**	mg/L	0.050	0.0056	1	11/07/23 13:39	11/08/23 16:33	7439-89-6	
Magnesium, Dissolved	**1.1**	mg/L	0.50	0.021	1	11/07/23 13:39	11/08/23 16:33	7439-95-4	
Manganese, Dissolved	**0.19**	mg/L	0.0050	0.00055	1	11/07/23 13:39	11/08/23 16:33	7439-96-5	
Potassium, Dissolved	**0.83**	mg/L	0.50	0.20	1	11/07/23 13:39	11/08/23 16:33	7440-09-7	
Sodium, Dissolved	**3.6**	mg/L	0.50	0.11	1	11/07/23 13:39	11/08/23 16:33	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.0010 U**	mg/L	0.0010	0.00059	2	11/03/23 09:34	11/03/23 12:46	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.00088	2	11/03/23 09:34	11/03/23 12:46	7440-38-2	
Barium	**0.026**	mg/L	0.0050	0.0020	2	11/03/23 09:34	11/03/23 12:46	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00020	2	11/03/23 09:34	11/03/23 12:46	7440-41-7	
Cadmium	**0.0010 U**	mg/L	0.0010	0.00027	2	11/03/23 09:34	11/03/23 12:46	7440-43-9	
Chromium	**0.0031J**	mg/L	0.0050	0.0010	2	11/03/23 09:34	11/03/23 12:46	7440-47-3	
Cobalt	**0.0050 U**	mg/L	0.0050	0.0016	2	11/03/23 09:34	11/03/23 12:46	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0013	2	11/03/23 09:34	11/03/23 12:46	7440-50-8	
Lead	**0.0010 U**	mg/L	0.0010	0.00050	2	11/03/23 09:34	11/03/23 12:46	7439-92-1	
Nickel	**0.0032J**	mg/L	0.0050	0.0013	2	11/03/23 09:34	11/03/23 12:46	7440-02-0	
Selenium	**0.0050 U**	mg/L	0.0050	0.0017	2	11/03/23 09:34	11/03/23 12:46	7782-49-2	
Silver	**0.0050 U**	mg/L	0.0050	0.0011	2	11/03/23 09:34	11/03/23 12:46	7440-22-4	
Thallium	**0.0010 U**	mg/L	0.0010	0.00016	2	11/03/23 09:34	11/03/23 12:46	7440-28-0	
Vanadium	**0.0050 U**	mg/L	0.0050	0.0024	2	11/03/23 09:34	11/03/23 12:46	7440-62-2	
Zinc	**0.010 U**	mg/L	0.010	0.0080	2	11/03/23 09:34	11/03/23 12:46	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/03/23 14:30	11/06/23 15:45	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/06/23 09:25	11/06/23 13:54	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/06/23 09:25	11/06/23 13:54	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	103	%.	60-140		1	11/06/23 09:25	11/06/23 13:54	630-20-6	CH

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-2023
Pace Project No.: 30635401

Sample: TW-5 **Lab ID: 30635401001** Collected: 10/30/23 13:50 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**34.0**	mg/L	10.0	1.0	1		11/06/23 12:45		ML
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**59.0**	mg/L	10.0	10.0	1		11/02/23 15:32		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 07:57		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/03/23 11:45	11/03/23 15:03		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**11.2**	mg/L	3.0	0.67	1		11/07/23 11:13	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/01/23 13:40	14808-79-8	

Sample: TW-5A **Lab ID: 30635401002** Collected: 10/30/23 13:10 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**1.7**	mg/L	0.50	0.054	1	11/03/23 11:02	11/06/23 09:53	7440-70-2	
Iron	**51.5**	mg/L	0.050	0.0056	1	11/03/23 11:02	11/06/23 09:53	7439-89-6	
Magnesium	**0.84**	mg/L	0.50	0.021	1	11/03/23 11:02	11/06/23 09:53	7439-95-4	
Manganese	**0.22**	mg/L	0.0050	0.00055	1	11/03/23 11:02	11/06/23 09:53	7439-96-5	
Potassium	**0.73**	mg/L	0.50	0.20	1	11/03/23 11:02	11/06/23 09:53	7440-09-7	
Sodium	**2.5**	mg/L	0.50	0.11	1	11/03/23 11:02	11/06/23 09:53	7440-23-5	
Total Hardness	**7.6**	mg/L	3.3	0.22	1	11/03/23 11:02	11/06/23 09:53		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**1.7**	mg/L	0.50	0.054	1	11/07/23 13:39	11/08/23 16:39	7440-70-2	
Iron, Dissolved	**57.5**	mg/L	0.050	0.0056	1	11/07/23 13:39	11/08/23 16:39	7439-89-6	
Magnesium, Dissolved	**0.82**	mg/L	0.50	0.021	1	11/07/23 13:39	11/08/23 16:39	7439-95-4	
Manganese, Dissolved	**0.24**	mg/L	0.0050	0.00055	1	11/07/23 13:39	11/08/23 16:39	7439-96-5	

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ANALYTICAL RESULTS

Project: MLF-2023
Pace Project No.: 30635401

Sample: TW-5A **Lab ID: 30635401002** Collected: 10/30/23 13:10 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Potassium, Dissolved	**0.74**	mg/L	0.50	0.20	1	11/07/23 13:39	11/08/23 16:39	7440-09-7	
Sodium, Dissolved	**2.6**	mg/L	0.50	0.11	1	11/07/23 13:39	11/08/23 16:39	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.0010 U**	mg/L	0.0010	0.00059	2	11/03/23 09:34	11/03/23 12:49	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.00088	2	11/03/23 09:34	11/03/23 12:49	7440-38-2	
Barium	**0.018**	mg/L	0.0050	0.0020	2	11/03/23 09:34	11/03/23 12:49	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00020	2	11/03/23 09:34	11/03/23 12:49	7440-41-7	
Cadmium	**0.0010 U**	mg/L	0.0010	0.00027	2	11/03/23 09:34	11/03/23 12:49	7440-43-9	
Chromium	**0.0023J**	mg/L	0.0050	0.0010	2	11/03/23 09:34	11/03/23 12:49	7440-47-3	
Cobalt	**0.0050 U**	mg/L	0.0050	0.0016	2	11/03/23 09:34	11/03/23 12:49	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0013	2	11/03/23 09:34	11/03/23 12:49	7440-50-8	
Lead	**0.0010 U**	mg/L	0.0010	0.00050	2	11/03/23 09:34	11/03/23 12:49	7439-92-1	
Nickel	**0.0050 U**	mg/L	0.0050	0.0013	2	11/03/23 09:34	11/03/23 12:49	7440-02-0	
Selenium	**0.0050 U**	mg/L	0.0050	0.0017	2	11/03/23 09:34	11/03/23 12:49	7782-49-2	
Silver	**0.0050 U**	mg/L	0.0050	0.0011	2	11/03/23 09:34	11/03/23 12:49	7440-22-4	
Thallium	**0.0010 U**	mg/L	0.0010	0.00016	2	11/03/23 09:34	11/03/23 12:49	7440-28-0	
Vanadium	**0.0050 U**	mg/L	0.0050	0.0024	2	11/03/23 09:34	11/03/23 12:49	7440-62-2	
Zinc	**0.010 U**	mg/L	0.010	0.0080	2	11/03/23 09:34	11/03/23 12:49	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/03/23 14:30	11/06/23 15:47	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/06/23 09:25	11/06/23 14:34	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/06/23 09:25	11/06/23 14:34	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	102	%.	60-140		1	11/06/23 09:25	11/06/23 14:34	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**24.0**	mg/L	10.0	1.0	1		11/06/23 12:52		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**48.0**	mg/L	10.0	10.0	1		11/02/23 15:32		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 08:03		

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ANALYTICAL RESULTS

Project: MLF-2023
Pace Project No.: 30635401

Sample: TW-5A **Lab ID: 30635401002** Collected: 10/30/23 13:10 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
	Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**9.0J**	mg/L	25.0	4.7	1	11/03/23 11:45	11/03/23 15:03		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
	Pace Analytical Services - Greensburg								
Chloride	**5.6**	mg/L	3.0	0.67	1		11/07/23 11:16	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/01/23 13:42	14808-79-8	

Sample: TW-5B **Lab ID: 30635401003** Collected: 10/30/23 12:30 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Calcium	**0.38J**	mg/L	0.50	0.054	1	11/03/23 11:02	11/06/23 09:55	7440-70-2	
Iron	**0.16**	mg/L	0.050	0.0056	1	11/03/23 11:02	11/06/23 09:55	7439-89-6	
Magnesium	**0.15J**	mg/L	0.50	0.021	1	11/03/23 11:02	11/06/23 09:55	7439-95-4	
Manganese	**0.0056**	mg/L	0.0050	0.00055	1	11/03/23 11:02	11/06/23 09:55	7439-96-5	
Potassium	**0.42J**	mg/L	0.50	0.20	1	11/03/23 11:02	11/06/23 09:55	7440-09-7	
Sodium	**1.2**	mg/L	0.50	0.11	1	11/03/23 11:02	11/06/23 09:55	7440-23-5	
Total Hardness	**1.6J**	mg/L	3.3	0.22	1	11/03/23 11:02	11/06/23 09:55		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.41J**	mg/L	0.50	0.054	1	11/09/23 10:28	11/13/23 15:01	7440-70-2	
Iron, Dissolved	**0.066**	mg/L	0.050	0.0056	1	11/09/23 10:28	11/13/23 15:01	7439-89-6	
Magnesium, Dissolved	**0.18J**	mg/L	0.50	0.021	1	11/09/23 10:28	11/13/23 15:01	7439-95-4	
Manganese, Dissolved	**0.013**	mg/L	0.0050	0.00055	1	11/09/23 10:28	11/13/23 15:01	7439-96-5	
Potassium, Dissolved	**0.51**	mg/L	0.50	0.20	1	11/09/23 10:28	11/13/23 15:01	7440-09-7	
Sodium, Dissolved	**1.3**	mg/L	0.50	0.11	1	11/09/23 10:28	11/13/23 15:01	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/03/23 09:34	11/03/23 12:52	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/03/23 09:34	11/03/23 12:52	7440-38-2	
Barium	**0.0043**	mg/L	0.0025	0.00098	1	11/03/23 09:34	11/03/23 12:52	7440-39-3	
Beryllium	**0.00018J**	mg/L	0.00050	0.00010	1	11/03/23 09:34	11/03/23 12:52	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/03/23 09:34	11/03/23 12:52	7440-43-9	
Chromium	**0.012**	mg/L	0.0025	0.00050	1	11/03/23 09:34	11/03/23 12:52	7440-47-3	
Cobalt	**0.0050**	mg/L	0.0025	0.00081	1	11/03/23 09:34	11/03/23 12:52	7440-48-4	
Copper	**0.0072**	mg/L	0.0025	0.00064	1	11/03/23 09:34	11/03/23 12:52	7440-50-8	

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ANALYTICAL RESULTS

Project: MLF-2023
Pace Project No.: 30635401

Sample: TW-5B **Lab ID: 30635401003** Collected: 10/30/23 12:30 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/03/23 09:34	11/03/23 12:52	7439-92-1	
Nickel	**0.016**	mg/L	0.0025	0.00065	1	11/03/23 09:34	11/03/23 12:52	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/03/23 09:34	11/03/23 12:52	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/03/23 09:34	11/03/23 12:52	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/03/23 09:34	11/03/23 12:52	7440-28-0	M1
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/03/23 09:34	11/03/23 12:52	7440-62-2	
Zinc	**0.012**	mg/L	0.0050	0.0040	1	11/03/23 09:34	11/03/23 12:52	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/03/23 14:30	11/06/23 15:50	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/06/23 09:25	11/06/23 14:47	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/06/23 09:25	11/06/23 14:47	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	84	%.	60-140		1	11/06/23 09:25	11/06/23 14:47	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		11/06/23 12:56		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**12.0**	mg/L	10.0	10.0	1		11/02/23 15:32		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 08:05		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/03/23 11:45	11/03/23 15:03		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**2.2J**	mg/L	3.0	0.67	1		11/07/23 11:17	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/01/23 13:42	14808-79-8	

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ANALYTICAL RESULTS

Project: MLF-2023
Pace Project No.: 30635401

Sample: TW-6 **Lab ID: 30635401004** Collected: 10/31/23 11:00 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**4.5**	mg/L	0.50	0.054	1	11/03/23 11:02	11/06/23 09:57	7440-70-2	
Iron	**20.5**	mg/L	0.050	0.0056	1	11/03/23 11:02	11/06/23 09:57	7439-89-6	
Magnesium	**2.7**	mg/L	0.50	0.021	1	11/03/23 11:02	11/06/23 09:57	7439-95-4	
Manganese	**0.27**	mg/L	0.0050	0.00055	1	11/03/23 11:02	11/06/23 09:57	7439-96-5	
Potassium	**1.7**	mg/L	0.50	0.20	1	11/03/23 11:02	11/06/23 09:57	7440-09-7	
Sodium	**7.0**	mg/L	0.50	0.11	1	11/03/23 11:02	11/06/23 09:57	7440-23-5	
Total Hardness	**22.1**	mg/L	3.3	0.22	1	11/03/23 11:02	11/06/23 09:57		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**4.5**	mg/L	0.50	0.054	1	11/07/23 13:39	11/08/23 16:43	7440-70-2	
Iron, Dissolved	**19.2**	mg/L	0.050	0.0056	1	11/07/23 13:39	11/08/23 16:43	7439-89-6	
Magnesium, Dissolved	**2.7**	mg/L	0.50	0.021	1	11/07/23 13:39	11/08/23 16:43	7439-95-4	
Manganese, Dissolved	**0.25**	mg/L	0.0050	0.00055	1	11/07/23 13:39	11/08/23 16:43	7439-96-5	
Potassium, Dissolved	**1.6**	mg/L	0.50	0.20	1	11/07/23 13:39	11/08/23 16:43	7440-09-7	
Sodium, Dissolved	**6.8**	mg/L	0.50	0.11	1	11/07/23 13:39	11/08/23 16:43	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/03/23 09:34	11/03/23 13:14	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/03/23 09:34	11/03/23 13:14	7440-38-2	
Barium	**0.12**	mg/L	0.0025	0.00098	1	11/03/23 09:34	11/03/23 13:14	7440-39-3	
Beryllium	**0.00022J**	mg/L	0.00050	0.00010	1	11/03/23 09:34	11/03/23 13:14	7440-41-7	
Cadmium	**0.00041J**	mg/L	0.00050	0.00013	1	11/03/23 09:34	11/03/23 13:14	7440-43-9	
Chromium	**0.0046**	mg/L	0.0025	0.00050	1	11/03/23 09:34	11/03/23 13:14	7440-47-3	
Cobalt	**0.017**	mg/L	0.0025	0.00081	1	11/03/23 09:34	11/03/23 13:14	7440-48-4	
Copper	**0.0078**	mg/L	0.0025	0.00064	1	11/03/23 09:34	11/03/23 13:14	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/03/23 09:34	11/03/23 13:14	7439-92-1	
Nickel	**0.0084**	mg/L	0.0025	0.00065	1	11/03/23 09:34	11/03/23 13:14	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/03/23 09:34	11/03/23 13:14	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/03/23 09:34	11/03/23 13:14	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/03/23 09:34	11/03/23 13:14	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/03/23 09:34	11/03/23 13:14	7440-62-2	
Zinc	**0.019**	mg/L	0.0050	0.0040	1	11/03/23 09:34	11/03/23 13:14	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00036**	mg/L	0.00020	0.00020	1	11/03/23 14:30	11/06/23 15:52	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/06/23 09:25	11/06/23 15:01	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/06/23 09:25	11/06/23 15:01	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	94	%.	60-140		1	11/06/23 09:25	11/06/23 15:01	630-20-6	CH

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-2023
Pace Project No.: 30635401

Sample: TW-6 **Lab ID: 30635401004** Collected: 10/31/23 11:00 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**38.0**	mg/L	10.0	1.0	1		11/06/23 13:07		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**103**	mg/L	10.0	10.0	1		11/02/23 15:32		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 08:07		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/03/23 11:45	11/03/23 15:04		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**16.5**	mg/L	3.0	0.67	1		11/07/23 11:18	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.6**	mg/L	10.0	4.7	1		11/01/23 13:44	14808-79-8	

Sample: TW-6B **Lab ID: 30635401005** Collected: 10/31/23 10:20 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.61**	mg/L	0.50	0.054	1	11/03/23 11:02	11/06/23 09:59	7440-70-2	
Iron	**0.023J**	mg/L	0.050	0.0056	1	11/03/23 11:02	11/06/23 09:59	7439-89-6	
Magnesium	**0.28J**	mg/L	0.50	0.021	1	11/03/23 11:02	11/06/23 09:59	7439-95-4	
Manganese	**0.0078**	mg/L	0.0050	0.00055	1	11/03/23 11:02	11/06/23 09:59	7439-96-5	
Potassium	**0.53**	mg/L	0.50	0.20	1	11/03/23 11:02	11/06/23 09:59	7440-09-7	
Sodium	**1.6**	mg/L	0.50	0.11	1	11/03/23 11:02	11/06/23 09:59	7440-23-5	
Total Hardness	**2.7J**	mg/L	3.3	0.22	1	11/03/23 11:02	11/06/23 09:59		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.57**	mg/L	0.50	0.054	1	11/09/23 10:28	11/13/23 15:03	7440-70-2	
Iron, Dissolved	**0.012J**	mg/L	0.050	0.0056	1	11/09/23 10:28	11/13/23 15:03	7439-89-6	
Magnesium, Dissolved	**0.29J**	mg/L	0.50	0.021	1	11/09/23 10:28	11/13/23 15:03	7439-95-4	
Manganese, Dissolved	**0.0082**	mg/L	0.0050	0.00055	1	11/09/23 10:28	11/13/23 15:03	7439-96-5	

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ANALYTICAL RESULTS

Project: MLF-2023
Pace Project No.: 30635401

Sample: TW-6B **Lab ID: 30635401005** Collected: 10/31/23 10:20 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Potassium, Dissolved	**0.60**	mg/L	0.50	0.20	1	11/09/23 10:28	11/13/23 15:03	7440-09-7	
Sodium, Dissolved	**1.7**	mg/L	0.50	0.11	1	11/09/23 10:28	11/13/23 15:03	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/03/23 09:34	11/03/23 13:17	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/03/23 09:34	11/03/23 13:17	7440-38-2	
Barium	**0.0073**	mg/L	0.0025	0.00098	1	11/03/23 09:34	11/03/23 13:17	7440-39-3	
Beryllium	**0.00034J**	mg/L	0.00050	0.00010	1	11/03/23 09:34	11/03/23 13:17	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/03/23 09:34	11/03/23 13:17	7440-43-9	
Chromium	**0.0038**	mg/L	0.0025	0.00050	1	11/03/23 09:34	11/03/23 13:17	7440-47-3	
Cobalt	**0.0068**	mg/L	0.0025	0.00081	1	11/03/23 09:34	11/03/23 13:17	7440-48-4	
Copper	**0.011**	mg/L	0.0025	0.00064	1	11/03/23 09:34	11/03/23 13:17	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/03/23 09:34	11/03/23 13:17	7439-92-1	
Nickel	**0.012**	mg/L	0.0025	0.00065	1	11/03/23 09:34	11/03/23 13:17	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/03/23 09:34	11/03/23 13:17	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/03/23 09:34	11/03/23 13:17	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/03/23 09:34	11/03/23 13:17	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/03/23 09:34	11/03/23 13:17	7440-62-2	
Zinc	**0.012**	mg/L	0.0050	0.0040	1	11/03/23 09:34	11/03/23 13:17	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/03/23 14:30	11/06/23 15:54	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/06/23 09:25	11/06/23 15:14	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/06/23 09:25	11/06/23 15:14	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	104	%.	60-140		1	11/06/23 09:25	11/06/23 15:14	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		11/06/23 13:08		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**14.0**	mg/L	10.0	10.0	1		11/02/23 15:32		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 08:09		

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ANALYTICAL RESULTS

Project: MLF-2023
Pace Project No.: 30635401

Sample: TW-6B **Lab ID: 30635401005** Collected: 10/31/23 10:20 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
	Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/03/23 11:45	11/03/23 15:04		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
	Pace Analytical Services - Greensburg								
Chloride	**3.5**	mg/L	3.0	0.67	1		11/07/23 11:20	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/01/23 13:45	14808-79-8	

Sample: TW-14 **Lab ID: 30635401006** Collected: 10/31/23 13:15 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Calcium	**1.7**	mg/L	0.50	0.054	1	11/03/23 11:02	11/06/23 10:01	7440-70-2	
Iron	**20.3**	mg/L	0.050	0.0056	1	11/03/23 11:02	11/06/23 10:01	7439-89-6	
Magnesium	**1.4**	mg/L	0.50	0.021	1	11/03/23 11:02	11/06/23 10:01	7439-95-4	
Manganese	**0.18**	mg/L	0.0050	0.00055	1	11/03/23 11:02	11/06/23 10:01	7439-96-5	
Potassium	**0.82**	mg/L	0.50	0.20	1	11/03/23 11:02	11/06/23 10:01	7440-09-7	
Sodium	**4.9**	mg/L	0.50	0.11	1	11/03/23 11:02	11/06/23 10:01	7440-23-5	
Total Hardness	**9.7**	mg/L	3.3	0.22	1	11/03/23 11:02	11/06/23 10:01		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Calcium, Dissolved	**1.7**	mg/L	0.50	0.054	1	11/07/23 13:39	11/08/23 16:47	7440-70-2	
Iron, Dissolved	**11.4**	mg/L	0.050	0.0056	1	11/07/23 13:39	11/08/23 16:47	7439-89-6	
Magnesium, Dissolved	**1.4**	mg/L	0.50	0.021	1	11/07/23 13:39	11/08/23 16:47	7439-95-4	
Manganese, Dissolved	**0.18**	mg/L	0.0050	0.00055	1	11/07/23 13:39	11/08/23 16:47	7439-96-5	
Potassium, Dissolved	**0.83**	mg/L	0.50	0.20	1	11/07/23 13:39	11/08/23 16:47	7440-09-7	
Sodium, Dissolved	**4.9**	mg/L	0.50	0.11	1	11/07/23 13:39	11/08/23 16:47	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Antimony	**0.0010 U**	mg/L	0.0010	0.00059	2	11/03/23 09:34	11/03/23 13:21	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.00088	2	11/03/23 09:34	11/03/23 13:21	7440-38-2	
Barium	**0.036**	mg/L	0.0050	0.0020	2	11/03/23 09:34	11/03/23 13:21	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00020	2	11/03/23 09:34	11/03/23 13:21	7440-41-7	
Cadmium	**0.0010 U**	mg/L	0.0010	0.00027	2	11/03/23 09:34	11/03/23 13:21	7440-43-9	
Chromium	**0.0039J**	mg/L	0.0050	0.0010	2	11/03/23 09:34	11/03/23 13:21	7440-47-3	
Cobalt	**0.0079**	mg/L	0.0050	0.0016	2	11/03/23 09:34	11/03/23 13:21	7440-48-4	
Copper	**0.0086**	mg/L	0.0050	0.0013	2	11/03/23 09:34	11/03/23 13:21	7440-50-8	

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ANALYTICAL RESULTS

Project: MLF-2023
Pace Project No.: 30635401

Sample: TW-14 **Lab ID: 30635401006** Collected: 10/31/23 13:15 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Lead	**0.0010 U**	mg/L	0.0010	0.00050	2	11/03/23 09:34	11/03/23 13:21	7439-92-1	
Nickel	**0.012**	mg/L	0.0050	0.0013	2	11/03/23 09:34	11/03/23 13:21	7440-02-0	
Selenium	**0.0050 U**	mg/L	0.0050	0.0017	2	11/03/23 09:34	11/03/23 13:21	7782-49-2	
Silver	**0.0050 U**	mg/L	0.0050	0.0011	2	11/03/23 09:34	11/03/23 13:21	7440-22-4	
Thallium	**0.0010 U**	mg/L	0.0010	0.00016	2	11/03/23 09:34	11/03/23 13:21	7440-28-0	
Vanadium	**0.0050 U**	mg/L	0.0050	0.0024	2	11/03/23 09:34	11/03/23 13:21	7440-62-2	
Zinc	**0.010 U**	mg/L	0.010	0.0080	2	11/03/23 09:34	11/03/23 13:21	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/03/23 14:30	11/06/23 15:56	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/06/23 09:25	11/06/23 15:27	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/06/23 09:25	11/06/23 15:27	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	102	%.	60-140		1	11/06/23 09:25	11/06/23 15:27	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		11/06/23 13:12		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**43.0**	mg/L	10.0	10.0	1		11/02/23 15:32		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 08:11		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/03/23 11:45	11/03/23 15:05		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**13.8**	mg/L	3.0	0.67	1		11/07/23 11:21	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/01/23 13:47	14808-79-8	

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ANALYTICAL RESULTS

Project: MLF-2023
Pace Project No.: 30635401

Sample: TW-14A **Lab ID: 30635401007** Collected: 10/31/23 12:40 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**5.3**	mg/L	0.50	0.054	1	11/03/23 11:02	11/06/23 10:03	7440-70-2	
Iron	**51.9**	mg/L	0.050	0.0056	1	11/03/23 11:02	11/06/23 10:03	7439-89-6	
Magnesium	**5.1**	mg/L	0.50	0.021	1	11/03/23 11:02	11/06/23 10:03	7439-95-4	
Manganese	**0.68**	mg/L	0.0050	0.00055	1	11/03/23 11:02	11/06/23 10:03	7439-96-5	
Potassium	**1.6**	mg/L	0.50	0.20	1	11/03/23 11:02	11/06/23 10:03	7440-09-7	
Sodium	**8.1**	mg/L	0.50	0.11	1	11/03/23 11:02	11/06/23 10:03	7440-23-5	
Total Hardness	**34.2**	mg/L	3.3	0.22	1	11/03/23 11:02	11/06/23 10:03		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**5.7**	mg/L	0.50	0.054	1	11/07/23 13:39	11/08/23 16:49	7440-70-2	
Iron, Dissolved	**60.4**	mg/L	0.050	0.0056	1	11/07/23 13:39	11/08/23 16:49	7439-89-6	
Magnesium, Dissolved	**5.6**	mg/L	0.50	0.021	1	11/07/23 13:39	11/08/23 16:49	7439-95-4	
Manganese, Dissolved	**0.77**	mg/L	0.0050	0.00055	1	11/07/23 13:39	11/08/23 16:49	7439-96-5	
Potassium, Dissolved	**1.7**	mg/L	0.50	0.20	1	11/07/23 13:39	11/08/23 16:49	7440-09-7	
Sodium, Dissolved	**8.7**	mg/L	0.50	0.11	1	11/07/23 13:39	11/08/23 16:49	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.0010 U**	mg/L	0.0010	0.00059	2	11/03/23 09:34	11/03/23 13:24	7440-36-0	
Arsenic	**0.0014J**	mg/L	0.0050	0.00088	2	11/03/23 09:34	11/03/23 13:24	7440-38-2	
Barium	**0.16**	mg/L	0.0050	0.0020	2	11/03/23 09:34	11/03/23 13:24	7440-39-3	
Beryllium	**0.00022J**	mg/L	0.0010	0.00020	2	11/03/23 09:34	11/03/23 13:24	7440-41-7	
Cadmium	**0.0010 U**	mg/L	0.0010	0.00027	2	11/03/23 09:34	11/03/23 13:24	7440-43-9	
Chromium	**0.0024J**	mg/L	0.0050	0.0010	2	11/03/23 09:34	11/03/23 13:24	7440-47-3	
Cobalt	**0.013**	mg/L	0.0050	0.0016	2	11/03/23 09:34	11/03/23 13:24	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0013	2	11/03/23 09:34	11/03/23 13:24	7440-50-8	
Lead	**0.0010 U**	mg/L	0.0010	0.00050	2	11/03/23 09:34	11/03/23 13:24	7439-92-1	
Nickel	**0.015**	mg/L	0.0050	0.0013	2	11/03/23 09:34	11/03/23 13:24	7440-02-0	
Selenium	**0.0050 U**	mg/L	0.0050	0.0017	2	11/03/23 09:34	11/03/23 13:24	7782-49-2	
Silver	**0.0050 U**	mg/L	0.0050	0.0011	2	11/03/23 09:34	11/03/23 13:24	7440-22-4	
Thallium	**0.0010 U**	mg/L	0.0010	0.00016	2	11/03/23 09:34	11/03/23 13:24	7440-28-0	
Vanadium	**0.0050 U**	mg/L	0.0050	0.0024	2	11/03/23 09:34	11/03/23 13:24	7440-62-2	
Zinc	**0.015**	mg/L	0.010	0.0080	2	11/03/23 09:34	11/03/23 13:24	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/03/23 14:30	11/06/23 15:58	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/06/23 09:25	11/06/23 15:40	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/06/23 09:25	11/06/23 15:40	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	101	%.	60-140		1	11/06/23 09:25	11/06/23 15:40	630-20-6	CH

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-2023
Pace Project No.: 30635401

Sample: TW-14A **Lab ID: 30635401007** Collected: 10/31/23 12:40 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**32.0**	mg/L	10.0	1.0	1		11/06/23 13:14		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**138**	mg/L	10.0	10.0	1		11/02/23 15:32		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.29**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 08:13		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**13.6J**	mg/L	25.0	4.7	1	11/03/23 11:45	11/03/23 15:05		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**15.8**	mg/L	3.0	0.67	1		11/07/23 11:22	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**17.9**	mg/L	10.0	4.7	1		11/01/23 13:47	14808-79-8	

Sample: TW-14B **Lab ID: 30635401008** Collected: 10/31/23 12:00 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.54**	mg/L	0.50	0.054	1	11/03/23 11:02	11/06/23 10:05	7440-70-2	
Iron	**0.041J**	mg/L	0.050	0.0056	1	11/03/23 11:02	11/06/23 10:05	7439-89-6	
Magnesium	**0.25J**	mg/L	0.50	0.021	1	11/03/23 11:02	11/06/23 10:05	7439-95-4	
Manganese	**0.0090**	mg/L	0.0050	0.00055	1	11/03/23 11:02	11/06/23 10:05	7439-96-5	
Potassium	**0.42J**	mg/L	0.50	0.20	1	11/03/23 11:02	11/06/23 10:05	7440-09-7	
Sodium	**1.0**	mg/L	0.50	0.11	1	11/03/23 11:02	11/06/23 10:05	7440-23-5	
Total Hardness	**2.4J**	mg/L	3.3	0.22	1	11/03/23 11:02	11/06/23 10:05		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.52**	mg/L	0.50	0.054	1	11/09/23 10:28	11/13/23 15:05	7440-70-2	
Iron, Dissolved	**0.021J**	mg/L	0.050	0.0056	1	11/09/23 10:28	11/13/23 15:05	7439-89-6	
Magnesium, Dissolved	**0.27J**	mg/L	0.50	0.021	1	11/09/23 10:28	11/13/23 15:05	7439-95-4	
Manganese, Dissolved	**0.0089**	mg/L	0.0050	0.00055	1	11/09/23 10:28	11/13/23 15:05	7439-96-5	

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ANALYTICAL RESULTS

Project: MLF-2023
Pace Project No.: 30635401

Sample: TW-14B **Lab ID: 30635401008** Collected: 10/31/23 12:00 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Potassium, Dissolved	**0.53**	mg/L	0.50	0.20	1	11/09/23 10:28	11/13/23 15:05	7440-09-7	
Sodium, Dissolved	**1.0**	mg/L	0.50	0.11	1	11/09/23 10:28	11/13/23 15:05	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/03/23 09:34	11/03/23 13:27	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/03/23 09:34	11/03/23 13:27	7440-38-2	
Barium	**0.0061**	mg/L	0.0025	0.00098	1	11/03/23 09:34	11/03/23 13:27	7440-39-3	
Beryllium	**0.00028J**	mg/L	0.00050	0.00010	1	11/03/23 09:34	11/03/23 13:27	7440-41-7	
Cadmium	**0.00014J**	mg/L	0.00050	0.00013	1	11/03/23 09:34	11/03/23 13:27	7440-43-9	
Chromium	**0.0052**	mg/L	0.0025	0.00050	1	11/03/23 09:34	11/03/23 13:27	7440-47-3	
Cobalt	**0.0066**	mg/L	0.0025	0.00081	1	11/03/23 09:34	11/03/23 13:27	7440-48-4	
Copper	**0.012**	mg/L	0.0025	0.00064	1	11/03/23 09:34	11/03/23 13:27	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/03/23 09:34	11/03/23 13:27	7439-92-1	
Nickel	**0.013**	mg/L	0.0025	0.00065	1	11/03/23 09:34	11/03/23 13:27	7440-02-0	
Selenium	**0.00093J**	mg/L	0.0025	0.00084	1	11/03/23 09:34	11/03/23 13:27	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/03/23 09:34	11/03/23 13:27	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/03/23 09:34	11/03/23 13:27	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/03/23 09:34	11/03/23 13:27	7440-62-2	
Zinc	**0.013**	mg/L	0.0050	0.0040	1	11/03/23 09:34	11/03/23 13:27	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/03/23 14:30	11/06/23 16:01	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/06/23 09:25	11/06/23 15:54	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/06/23 09:25	11/06/23 15:54	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	108	%.	60-140		1	11/06/23 09:25	11/06/23 15:54	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		11/06/23 13:16		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**17.0**	mg/L	10.0	10.0	1		11/06/23 17:17		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 08:15		

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ANALYTICAL RESULTS

Project: MLF-2023
Pace Project No.: 30635401

Sample: TW-14B **Lab ID: 30635401008** Collected: 10/31/23 12:00 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
	Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/03/23 11:45	11/03/23 15:05		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
	Pace Analytical Services - Greensburg								
Chloride	**1.9J**	mg/L	3.0	0.67	1		11/07/23 11:23	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/01/23 13:49	14808-79-8	

Sample: TW-24 **Lab ID: 30635401009** Collected: 10/30/23 16:00 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Calcium	**4.7**	mg/L	0.50	0.054	1	11/03/23 11:02	11/06/23 10:07	7440-70-2	
Iron	**0.014J**	mg/L	0.050	0.0056	1	11/03/23 11:02	11/06/23 10:07	7439-89-6	
Magnesium	**4.4**	mg/L	0.50	0.021	1	11/03/23 11:02	11/06/23 10:07	7439-95-4	
Manganese	**0.064**	mg/L	0.0050	0.00055	1	11/03/23 11:02	11/06/23 10:07	7439-96-5	
Potassium	**1.4**	mg/L	0.50	0.20	1	11/03/23 11:02	11/06/23 10:07	7440-09-7	
Sodium	**13.5**	mg/L	0.50	0.11	1	11/03/23 11:02	11/06/23 10:07	7440-23-5	
Total Hardness	**29.7**	mg/L	3.3	0.22	1	11/03/23 11:02	11/06/23 10:07		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Calcium, Dissolved	**4.7**	mg/L	0.50	0.054	1	11/07/23 13:39	11/08/23 16:53	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.0056	1	11/07/23 13:39	11/08/23 16:53	7439-89-6	
Magnesium, Dissolved	**4.5**	mg/L	0.50	0.021	1	11/07/23 13:39	11/08/23 16:53	7439-95-4	
Manganese, Dissolved	**0.064**	mg/L	0.0050	0.00055	1	11/07/23 13:39	11/08/23 16:53	7439-96-5	
Potassium, Dissolved	**1.3**	mg/L	0.50	0.20	1	11/07/23 13:39	11/08/23 16:53	7440-09-7	
Sodium, Dissolved	**13.4**	mg/L	0.50	0.11	1	11/07/23 13:39	11/08/23 16:53	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/03/23 09:34	11/03/23 13:30	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/03/23 09:34	11/03/23 13:30	7440-38-2	
Barium	**0.092**	mg/L	0.0025	0.00098	1	11/03/23 09:34	11/03/23 13:30	7440-39-3	
Beryllium	**0.00017J**	mg/L	0.00050	0.00010	1	11/03/23 09:34	11/03/23 13:30	7440-41-7	
Cadmium	**0.00020J**	mg/L	0.00050	0.00013	1	11/03/23 09:34	11/03/23 13:30	7440-43-9	
Chromium	**0.00071J**	mg/L	0.0025	0.00050	1	11/03/23 09:34	11/03/23 13:30	7440-47-3	
Cobalt	**0.013**	mg/L	0.0025	0.00081	1	11/03/23 09:34	11/03/23 13:30	7440-48-4	
Copper	**0.0045**	mg/L	0.0025	0.00064	1	11/03/23 09:34	11/03/23 13:30	7440-50-8	

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ANALYTICAL RESULTS

Project: MLF-2023
Pace Project No.: 30635401

Sample: TW-24 **Lab ID: 30635401009** Collected: 10/30/23 16:00 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/03/23 09:34	11/03/23 13:30	7439-92-1	
Nickel	**0.013**	mg/L	0.0025	0.00065	1	11/03/23 09:34	11/03/23 13:30	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/03/23 09:34	11/03/23 13:30	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/03/23 09:34	11/03/23 13:30	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/03/23 09:34	11/03/23 13:30	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/03/23 09:34	11/03/23 13:30	7440-62-2	
Zinc	**0.016**	mg/L	0.0050	0.0040	1	11/03/23 09:34	11/03/23 13:30	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00066**	mg/L	0.00020	0.00020	1	11/03/23 14:30	11/06/23 16:08	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/06/23 09:25	11/06/23 16:07	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/06/23 09:25	11/06/23 16:07	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	101	%.	60-140		1	11/06/23 09:25	11/06/23 16:07	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		11/06/23 12:58		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**88.0**	mg/L	10.0	10.0	1		11/02/23 15:32		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 08:17		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/03/23 11:45	11/03/23 15:05		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**31.5**	mg/L	3.0	0.67	1		11/07/23 11:24	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**11.8**	mg/L	10.0	4.7	1		11/01/23 13:52	14808-79-8	

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ANALYTICAL RESULTS

Project: MLF-2023
Pace Project No.: 30635401

Sample: TW-24A **Lab ID: 30635401010** Collected: 10/31/23 09:40 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**19.0**	mg/L	0.50	0.054	1	11/03/23 11:02	11/06/23 10:09	7440-70-2	
Iron	**0.018J**	mg/L	0.050	0.0056	1	11/03/23 11:02	11/06/23 10:09	7439-89-6	
Magnesium	**3.1**	mg/L	0.50	0.021	1	11/03/23 11:02	11/06/23 10:09	7439-95-4	
Manganese	**0.098**	mg/L	0.0050	0.00055	1	11/03/23 11:02	11/06/23 10:09	7439-96-5	
Potassium	**2.8**	mg/L	0.50	0.20	1	11/03/23 11:02	11/06/23 10:09	7440-09-7	
Sodium	**3.3**	mg/L	0.50	0.11	1	11/03/23 11:02	11/06/23 10:09	7440-23-5	
Total Hardness	**60.2**	mg/L	3.3	0.22	1	11/03/23 11:02	11/06/23 10:09		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**18.5**	mg/L	0.50	0.054	1	11/07/23 13:39	11/08/23 16:55	7440-70-2	
Iron, Dissolved	**0.26**	mg/L	0.050	0.0056	1	11/07/23 13:39	11/08/23 16:55	7439-89-6	
Magnesium, Dissolved	**3.2**	mg/L	0.50	0.021	1	11/07/23 13:39	11/08/23 16:55	7439-95-4	
Manganese, Dissolved	**0.098**	mg/L	0.0050	0.00055	1	11/07/23 13:39	11/08/23 16:55	7439-96-5	
Potassium, Dissolved	**2.8**	mg/L	0.50	0.20	1	11/07/23 13:39	11/08/23 16:55	7440-09-7	
Sodium, Dissolved	**3.4**	mg/L	0.50	0.11	1	11/07/23 13:39	11/08/23 16:55	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/03/23 09:34	11/03/23 13:33	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/03/23 09:34	11/03/23 13:33	7440-38-2	
Barium	**0.044**	mg/L	0.0025	0.00098	1	11/03/23 09:34	11/03/23 13:33	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	11/03/23 09:34	11/03/23 13:33	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/03/23 09:34	11/03/23 13:33	7440-43-9	
Chromium	**0.0018J**	mg/L	0.0025	0.00050	1	11/03/23 09:34	11/03/23 13:33	7440-47-3	
Cobalt	**0.0040**	mg/L	0.0025	0.00081	1	11/03/23 09:34	11/03/23 13:33	7440-48-4	
Copper	**0.0019J**	mg/L	0.0025	0.00064	1	11/03/23 09:34	11/03/23 13:33	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/03/23 09:34	11/03/23 13:33	7439-92-1	
Nickel	**0.0039**	mg/L	0.0025	0.00065	1	11/03/23 09:34	11/03/23 13:33	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/03/23 09:34	11/03/23 13:33	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/03/23 09:34	11/03/23 13:33	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/03/23 09:34	11/03/23 13:33	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/03/23 09:34	11/03/23 13:33	7440-62-2	
Zinc	**0.0040J**	mg/L	0.0050	0.0040	1	11/03/23 09:34	11/03/23 13:33	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/03/23 14:30	11/06/23 16:10	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/06/23 09:25	11/06/23 16:21	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/06/23 09:25	11/06/23 16:21	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	107	%.	60-140		1	11/06/23 09:25	11/06/23 16:21	630-20-6	CH

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-2023
Pace Project No.: 30635401

Sample: TW-24A **Lab ID: 30635401010** Collected: 10/31/23 09:40 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**40.0**	mg/L	10.0	1.0	1		11/06/23 13:17		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**91.0**	mg/L	10.0	10.0	1		11/06/23 17:17		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 08:19		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/03/23 11:45	11/03/23 15:06		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**6.8**	mg/L	3.0	0.67	1		11/07/23 11:25	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**15.0**	mg/L	10.0	4.7	1		11/01/23 13:54	14808-79-8	MH

Sample: TW-25 **Lab ID: 30635401011** Collected: 10/30/23 15:15 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**1.8**	mg/L	0.50	0.054	1	11/03/23 11:02	11/06/23 10:11	7440-70-2	
Iron	**0.021J**	mg/L	0.050	0.0056	1	11/03/23 11:02	11/06/23 10:11	7439-89-6	
Magnesium	**0.91**	mg/L	0.50	0.021	1	11/03/23 11:02	11/06/23 10:11	7439-95-4	
Manganese	**0.019**	mg/L	0.0050	0.00055	1	11/03/23 11:02	11/06/23 10:11	7439-96-5	
Potassium	**0.66**	mg/L	0.50	0.20	1	11/03/23 11:02	11/06/23 10:11	7440-09-7	
Sodium	**2.8**	mg/L	0.50	0.11	1	11/03/23 11:02	11/06/23 10:11	7440-23-5	
Total Hardness	**8.2**	mg/L	3.3	0.22	1	11/03/23 11:02	11/06/23 10:11		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**1.8**	mg/L	0.50	0.054	1	11/09/23 10:28	11/13/23 15:07	7440-70-2	
Iron, Dissolved	**0.031J**	mg/L	0.050	0.0056	1	11/09/23 10:28	11/13/23 15:07	7439-89-6	
Magnesium, Dissolved	**0.95**	mg/L	0.50	0.021	1	11/09/23 10:28	11/13/23 15:07	7439-95-4	
Manganese, Dissolved	**0.018**	mg/L	0.0050	0.00055	1	11/09/23 10:28	11/13/23 15:07	7439-96-5	

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ANALYTICAL RESULTS

Project: MLF-2023
Pace Project No.: 30635401

Sample: TW-25 **Lab ID: 30635401011** Collected: 10/30/23 15:15 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Potassium, Dissolved	**0.76**	mg/L	0.50	0.20	1	11/09/23 10:28	11/13/23 15:07	7440-09-7	
Sodium, Dissolved	**2.9**	mg/L	0.50	0.11	1	11/09/23 10:28	11/13/23 15:07	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/03/23 09:34	11/03/23 13:36	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/03/23 09:34	11/03/23 13:36	7440-38-2	
Barium	**0.024**	mg/L	0.0025	0.00098	1	11/03/23 09:34	11/03/23 13:36	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	11/03/23 09:34	11/03/23 13:36	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/03/23 09:34	11/03/23 13:36	7440-43-9	
Chromium	**0.0036**	mg/L	0.0025	0.00050	1	11/03/23 09:34	11/03/23 13:36	7440-47-3	
Cobalt	**0.0063**	mg/L	0.0025	0.00081	1	11/03/23 09:34	11/03/23 13:36	7440-48-4	
Copper	**0.0066**	mg/L	0.0025	0.00064	1	11/03/23 09:34	11/03/23 13:36	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/03/23 09:34	11/03/23 13:36	7439-92-1	
Nickel	**0.0049**	mg/L	0.0025	0.00065	1	11/03/23 09:34	11/03/23 13:36	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/03/23 09:34	11/03/23 13:36	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/03/23 09:34	11/03/23 13:36	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/03/23 09:34	11/03/23 13:36	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/03/23 09:34	11/03/23 13:36	7440-62-2	
Zinc	**0.0067**	mg/L	0.0050	0.0040	1	11/03/23 09:34	11/03/23 13:36	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/03/23 14:30	11/06/23 16:12	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/06/23 09:25	11/06/23 16:34	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/06/23 09:25	11/06/23 16:34	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	101	%.	60-140		1	11/06/23 09:25	11/06/23 16:34	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		11/06/23 13:00		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**31.0**	mg/L	10.0	10.0	1		11/02/23 15:32		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 08:25		

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ANALYTICAL RESULTS

Project: MLF-2023
Pace Project No.: 30635401

Sample: TW-25 **Lab ID: 30635401011** Collected: 10/30/23 15:15 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
	Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/03/23 11:45	11/03/23 15:06		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
	Pace Analytical Services - Greensburg								
Chloride	**8.5**	mg/L	3.0	0.67	1		11/07/23 11:26	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/01/23 13:57	14808-79-8	

Sample: TW-25A **Lab ID: 30635401012** Collected: 10/30/23 14:40 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Calcium	**3.3**	mg/L	0.50	0.054	1	11/03/23 11:02	11/06/23 10:49	7440-70-2	
Iron	**0.021J**	mg/L	0.050	0.0056	1	11/03/23 11:02	11/06/23 10:49	7439-89-6	
Magnesium	**2.1**	mg/L	0.50	0.021	1	11/03/23 11:02	11/06/23 10:49	7439-95-4	
Manganese	**0.051**	mg/L	0.0050	0.00055	1	11/03/23 11:02	11/06/23 10:49	7439-96-5	
Potassium	**1.0**	mg/L	0.50	0.20	1	11/03/23 11:02	11/06/23 10:49	7440-09-7	
Sodium	**3.8**	mg/L	0.50	0.11	1	11/03/23 11:02	11/06/23 10:49	7440-23-5	
Total Hardness	**16.6**	mg/L	3.3	0.22	1	11/03/23 11:02	11/06/23 10:49		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Calcium, Dissolved	**3.5**	mg/L	0.50	0.054	1	11/09/23 10:28	11/13/23 15:09	7440-70-2	
Iron, Dissolved	**0.022J**	mg/L	0.050	0.0056	1	11/09/23 10:28	11/13/23 15:09	7439-89-6	
Magnesium, Dissolved	**2.2**	mg/L	0.50	0.021	1	11/09/23 10:28	11/13/23 15:09	7439-95-4	
Manganese, Dissolved	**0.050**	mg/L	0.0050	0.00055	1	11/09/23 10:28	11/13/23 15:09	7439-96-5	
Potassium, Dissolved	**1.1**	mg/L	0.50	0.20	1	11/09/23 10:28	11/13/23 15:09	7440-09-7	
Sodium, Dissolved	**4.0**	mg/L	0.50	0.11	1	11/09/23 10:28	11/13/23 15:09	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/03/23 09:34	11/03/23 13:40	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/03/23 09:34	11/03/23 13:40	7440-38-2	
Barium	**0.076**	mg/L	0.0025	0.00098	1	11/03/23 09:34	11/03/23 13:40	7440-39-3	
Beryllium	**0.00096**	mg/L	0.00050	0.00010	1	11/03/23 09:34	11/03/23 13:40	7440-41-7	
Cadmium	**0.00022J**	mg/L	0.00050	0.00013	1	11/03/23 09:34	11/03/23 13:40	7440-43-9	
Chromium	**0.0015J**	mg/L	0.0025	0.00050	1	11/03/23 09:34	11/03/23 13:40	7440-47-3	
Cobalt	**0.010**	mg/L	0.0025	0.00081	1	11/03/23 09:34	11/03/23 13:40	7440-48-4	
Copper	**0.048**	mg/L	0.0025	0.00064	1	11/03/23 09:34	11/03/23 13:40	7440-50-8	

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ANALYTICAL RESULTS

Project: MLF-2023
Pace Project No.: 30635401

Sample: TW-25A **Lab ID: 30635401012** Collected: 10/30/23 14:40 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/03/23 09:34	11/03/23 13:40	7439-92-1	
Nickel	**0.0099**	mg/L	0.0025	0.00065	1	11/03/23 09:34	11/03/23 13:40	7440-02-0	
Selenium	**0.0012J**	mg/L	0.0025	0.00084	1	11/03/23 09:34	11/03/23 13:40	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/03/23 09:34	11/03/23 13:40	7440-22-4	
Thallium	**0.00011J**	mg/L	0.00050	0.000081	1	11/03/23 09:34	11/03/23 13:40	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/03/23 09:34	11/03/23 13:40	7440-62-2	
Zinc	**0.014**	mg/L	0.0050	0.0040	1	11/03/23 09:34	11/03/23 13:40	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/03/23 14:30	11/06/23 16:15	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/06/23 09:25	11/06/23 16:47	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/06/23 09:25	11/06/23 16:47	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	95	%.	60-140		1	11/06/23 09:25	11/06/23 16:47	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		11/06/23 13:01		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**53.0**	mg/L	10.0	10.0	1		11/02/23 15:32		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 08:31		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/03/23 11:45	11/03/23 15:06		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**11.2**	mg/L	3.0	0.67	1		11/07/23 11:31	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**5.2J**	mg/L	10.0	4.7	1		11/01/23 13:59	14808-79-8	

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ANALYTICAL RESULTS

Project: MLF-2023
Pace Project No.: 30635401

Sample: DUP-1 **Lab ID: 30635401013** Collected: 10/30/23 00:00 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**4.7**	mg/L	0.50	0.054	1	11/03/23 11:02	11/06/23 10:51	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.0056	1	11/03/23 11:02	11/06/23 10:51	7439-89-6	
Magnesium	**4.3**	mg/L	0.50	0.021	1	11/03/23 11:02	11/06/23 10:51	7439-95-4	
Manganese	**0.065**	mg/L	0.0050	0.00055	1	11/03/23 11:02	11/06/23 10:51	7439-96-5	
Potassium	**1.4**	mg/L	0.50	0.20	1	11/03/23 11:02	11/06/23 10:51	7440-09-7	
Sodium	**13.4**	mg/L	0.50	0.11	1	11/03/23 11:02	11/06/23 10:51	7440-23-5	
Total Hardness	**29.3**	mg/L	3.3	0.22	1	11/03/23 11:02	11/06/23 10:51		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**4.9**	mg/L	0.50	0.054	1	11/09/23 10:28	11/13/23 15:11	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.0056	1	11/09/23 10:28	11/13/23 15:11	7439-89-6	
Magnesium, Dissolved	**4.6**	mg/L	0.50	0.021	1	11/09/23 10:28	11/13/23 15:11	7439-95-4	
Manganese, Dissolved	**0.064**	mg/L	0.0050	0.00055	1	11/09/23 10:28	11/13/23 15:11	7439-96-5	
Potassium, Dissolved	**1.5**	mg/L	0.50	0.20	1	11/09/23 10:28	11/13/23 15:11	7440-09-7	
Sodium, Dissolved	**14.2**	mg/L	0.50	0.11	1	11/09/23 10:28	11/13/23 15:11	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/03/23 09:34	11/03/23 13:49	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/03/23 09:34	11/03/23 13:49	7440-38-2	
Barium	**0.096**	mg/L	0.0025	0.00098	1	11/03/23 09:34	11/03/23 13:49	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	11/03/23 09:34	11/03/23 13:49	7440-41-7	
Cadmium	**0.00026J**	mg/L	0.00050	0.00013	1	11/03/23 09:34	11/03/23 13:49	7440-43-9	
Chromium	**0.0044**	mg/L	0.0025	0.00050	1	11/03/23 09:34	11/03/23 13:49	7440-47-3	
Cobalt	**0.014**	mg/L	0.0025	0.00081	1	11/03/23 09:34	11/03/23 13:49	7440-48-4	
Copper	**0.0048**	mg/L	0.0025	0.00064	1	11/03/23 09:34	11/03/23 13:49	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/03/23 09:34	11/03/23 13:49	7439-92-1	
Nickel	**0.014**	mg/L	0.0025	0.00065	1	11/03/23 09:34	11/03/23 13:49	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/03/23 09:34	11/03/23 13:49	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/03/23 09:34	11/03/23 13:49	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/03/23 09:34	11/03/23 13:49	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/03/23 09:34	11/03/23 13:49	7440-62-2	
Zinc	**0.015**	mg/L	0.0050	0.0040	1	11/03/23 09:34	11/03/23 13:49	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00037**	mg/L	0.00020	0.00020	1	11/03/23 14:30	11/06/23 16:17	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/06/23 09:25	11/06/23 17:01	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/06/23 09:25	11/06/23 17:01	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	106	%.	60-140		1	11/06/23 09:25	11/06/23 17:01	630-20-6	CH

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-2023
Pace Project No.: 30635401

Sample: DUP-1 **Lab ID: 30635401013** Collected: 10/30/23 00:00 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		11/06/23 13:03		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**80.0**	mg/L	10.0	10.0	1		11/02/23 15:32		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 08:32		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/03/23 11:45	11/03/23 15:06		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**31.1**	mg/L	3.0	0.67	1		11/07/23 11:34	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**11.1**	mg/L	10.0	4.7	1		11/01/23 13:59	14808-79-8	

Sample: DUP-2 **Lab ID: 30635401014** Collected: 10/30/23 00:00 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**3.3**	mg/L	0.50	0.054	1	11/03/23 11:02	11/06/23 10:54	7440-70-2	
Iron	**0.022J**	mg/L	0.050	0.0056	1	11/03/23 11:02	11/06/23 10:54	7439-89-6	
Magnesium	**2.1**	mg/L	0.50	0.021	1	11/03/23 11:02	11/06/23 10:54	7439-95-4	
Manganese	**0.052**	mg/L	0.0050	0.00055	1	11/03/23 11:02	11/06/23 10:54	7439-96-5	
Potassium	**1.1**	mg/L	0.50	0.20	1	11/03/23 11:02	11/06/23 10:54	7440-09-7	
Sodium	**4.0**	mg/L	0.50	0.11	1	11/03/23 11:02	11/06/23 10:54	7440-23-5	
Total Hardness	**16.9**	mg/L	3.3	0.22	1	11/03/23 11:02	11/06/23 10:54		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**3.5**	mg/L	0.50	0.054	1	11/09/23 10:28	11/13/23 15:17	7440-70-2	
Iron, Dissolved	**0.025J**	mg/L	0.050	0.0056	1	11/09/23 10:28	11/13/23 15:17	7439-89-6	
Magnesium, Dissolved	**2.2**	mg/L	0.50	0.021	1	11/09/23 10:28	11/13/23 15:17	7439-95-4	
Manganese, Dissolved	**0.051**	mg/L	0.0050	0.00055	1	11/09/23 10:28	11/13/23 15:17	7439-96-5	

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ANALYTICAL RESULTS

Project: MLF-2023
Pace Project No.: 30635401

Sample: DUP-2 **Lab ID: 30635401014** Collected: 10/30/23 00:00 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Potassium, Dissolved	**1.2**	mg/L	0.50	0.20	1	11/09/23 10:28	11/13/23 15:17	7440-09-7	
Sodium, Dissolved	**4.0**	mg/L	0.50	0.11	1	11/09/23 10:28	11/13/23 15:17	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/03/23 09:34	11/03/23 13:52	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/03/23 09:34	11/03/23 13:52	7440-38-2	
Barium	**0.078**	mg/L	0.0025	0.00098	1	11/03/23 09:34	11/03/23 13:52	7440-39-3	
Beryllium	**0.00097**	mg/L	0.00050	0.00010	1	11/03/23 09:34	11/03/23 13:52	7440-41-7	
Cadmium	**0.00026J**	mg/L	0.00050	0.00013	1	11/03/23 09:34	11/03/23 13:52	7440-43-9	
Chromium	**0.0016J**	mg/L	0.0025	0.00050	1	11/03/23 09:34	11/03/23 13:52	7440-47-3	
Cobalt	**0.010**	mg/L	0.0025	0.00081	1	11/03/23 09:34	11/03/23 13:52	7440-48-4	
Copper	**0.049**	mg/L	0.0025	0.00064	1	11/03/23 09:34	11/03/23 13:52	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/03/23 09:34	11/03/23 13:52	7439-92-1	
Nickel	**0.010**	mg/L	0.0025	0.00065	1	11/03/23 09:34	11/03/23 13:52	7440-02-0	
Selenium	**0.00084J**	mg/L	0.0025	0.00084	1	11/03/23 09:34	11/03/23 13:52	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/03/23 09:34	11/03/23 13:52	7440-22-4	
Thallium	**0.00011J**	mg/L	0.00050	0.000081	1	11/03/23 09:34	11/03/23 13:52	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/03/23 09:34	11/03/23 13:52	7440-62-2	
Zinc	**0.015**	mg/L	0.0050	0.0040	1	11/03/23 09:34	11/03/23 13:52	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/03/23 14:30	11/06/23 16:19	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/06/23 09:25	11/06/23 17:14	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/06/23 09:25	11/06/23 17:14	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	105	%.	60-140		1	11/06/23 09:25	11/06/23 17:14	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**4.0J**	mg/L	10.0	1.0	1		11/06/23 13:04		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**43.0**	mg/L	10.0	10.0	1		11/02/23 15:32		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 08:34		

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ANALYTICAL RESULTS

Project: MLF-2023
Pace Project No.: 30635401

Sample: DUP-2 **Lab ID: 30635401014** Collected: 10/30/23 00:00 Received: 10/31/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/03/23 11:45	11/03/23 15:07		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**11.4**	mg/L	3.0	0.67	1		11/07/23 11:34	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**5.0J**	mg/L	10.0	4.7	1		11/01/23 14:01	14808-79-8	

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QUALITY CONTROL DATA

Project: MLF-2023
Pace Project No.: 30635401

QC Batch: 627042
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30635401001, 30635401002, 30635401003, 30635401004, 30635401005, 30635401006, 30635401007, 30635401008, 30635401009, 30635401010, 30635401011, 30635401012, 30635401013, 30635401014

METHOD BLANK: 3056475
Matrix: Water
Associated Lab Samples: 30635401001, 30635401002, 30635401003, 30635401004, 30635401005, 30635401006, 30635401007, 30635401008, 30635401009, 30635401010, 30635401011, 30635401012, 30635401013, 30635401014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.054	11/06/23 09:19	
Iron	mg/L	0.050 U	0.050	0.0056	11/06/23 09:19	
Magnesium	mg/L	0.50 U	0.50	0.021	11/06/23 09:19	
Manganese	mg/L	0.0050 U	0.0050	0.00055	11/06/23 09:19	
Potassium	mg/L	0.50 U	0.50	0.20	11/06/23 09:19	
Sodium	mg/L	0.50 U	0.50	0.11	11/06/23 09:19	

LABORATORY CONTROL SAMPLE: 3056476

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	38.8	97	80-120	
Iron	mg/L	2	2.0	100	80-120	
Magnesium	mg/L	20	19.6	98	80-120	
Manganese	mg/L	2	2.0	100	80-120	
Potassium	mg/L	20	19.3	97	80-120	
Sodium	mg/L	20	19.3	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3056489 3056490

Parameter	Units	30635673001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	9400000 ug/L	40	40	8990	9630	-1030	571	80-120	7	20	M1
Iron	mg/L	112000 ug/L	2	2	108	117	-175	266	80-120	8	20	M1
Magnesium	mg/L	748000 ug/L	20	20	731	783	-87	174	80-120	7	20	M1
Manganese	mg/L	7600 ug/L	2	2	9.6	10	98	119	80-120	4	20	
Potassium	mg/L	500000 U ug/L	20	20	500 U	500 U	90	58	80-120		20	M1
Sodium	mg/L	23700000 ug/L	20	20	22500	24100	-6100	1940	80-120	7	20	M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: MLF-2023
Pace Project No.: 30635401

QC Batch: 627878
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30635401001, 30635401002, 30635401004, 30635401006, 30635401007, 30635401009, 30635401010

METHOD BLANK: 3060490 Matrix: Water
Associated Lab Samples: 30635401001, 30635401002, 30635401004, 30635401006, 30635401007, 30635401009, 30635401010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.054	11/08/23 16:17	
Iron, Dissolved	mg/L	0.019J	0.050	0.0056	11/08/23 16:17	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.021	11/08/23 16:17	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.00055	11/08/23 16:17	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.20	11/08/23 16:17	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.11	11/08/23 16:17	

LABORATORY CONTROL SAMPLE: 3060491

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	39.9	100	80-120	
Iron, Dissolved	mg/L	2	2.1	104	80-120	
Magnesium, Dissolved	mg/L	20	20.6	103	80-120	
Manganese, Dissolved	mg/L	2	2.1	106	80-120	
Potassium, Dissolved	mg/L	20	19.7	99	80-120	
Sodium, Dissolved	mg/L	20	19.9	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3060495 3060496

Parameter	Units	30635181001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	133000 ug/L	40	40	178	171	116	97	80-120	4	20	
Iron, Dissolved	mg/L	0.064	2	2	2.3	2.2	110	106	80-120	3	20	
Magnesium, Dissolved	mg/L	18000 ug/L	20	20	41.0	39.7	114	108	80-120	3	20	
Manganese, Dissolved	mg/L	0.23	2	2	2.5	2.4	112	107	80-120	4	20	
Potassium, Dissolved	mg/L	1960 ug/L	20	20	24.0	23.2	111	107	80-120	3	20	
Sodium, Dissolved	mg/L	11800 ug/L	20	20	34.5	33.3	113	107	80-120	4	20	

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QUALITY CONTROL DATA

Project: MLF-2023
Pace Project No.: 30635401

QC Batch: 628454
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30635401003, 30635401005, 30635401008, 30635401011, 30635401012, 30635401013, 30635401014

METHOD BLANK: 3063649 Matrix: Water
Associated Lab Samples: 30635401003, 30635401005, 30635401008, 30635401011, 30635401012, 30635401013, 30635401014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.054	11/13/23 14:39	
Iron, Dissolved	mg/L	0.050 U	0.050	0.0056	11/13/23 14:39	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.021	11/13/23 14:39	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.00055	11/13/23 14:39	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.20	11/13/23 14:39	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.11	11/13/23 14:39	

LABORATORY CONTROL SAMPLE: 3063650

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	41.9	105	80-120	
Iron, Dissolved	mg/L	2	2.2	108	80-120	
Magnesium, Dissolved	mg/L	20	21.4	107	80-120	
Manganese, Dissolved	mg/L	2	2.2	109	80-120	
Potassium, Dissolved	mg/L	20	21.2	106	80-120	
Sodium, Dissolved	mg/L	20	21.0	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3063651 3063652

Parameter	Units	30635181001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	133000 ug/L	40	40	175	176	105	108	80-120	1	20	
Iron, Dissolved	mg/L	0.064	2	2	2.2	2.2	107	108	80-120	1	20	
Magnesium, Dissolved	mg/L	18000 ug/L	20	20	39.4	39.9	107	110	80-120	1	20	
Manganese, Dissolved	mg/L	0.23	2	2	2.4	2.4	108	109	80-120	1	20	
Potassium, Dissolved	mg/L	1960 ug/L	20	20	23.9	24.2	110	111	80-120	1	20	
Sodium, Dissolved	mg/L	11800 ug/L	20	20	33.3	33.8	108	110	80-120	1	20	

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QUALITY CONTROL DATA

Project: MLF-2023
Pace Project No.: 30635401

QC Batch: 627033
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30635401001, 30635401002, 30635401003, 30635401004, 30635401005, 30635401006, 30635401007, 30635401008, 30635401009, 30635401010, 30635401011, 30635401012, 30635401013, 30635401014

METHOD BLANK: 3056458
Matrix: Water
Associated Lab Samples: 30635401001, 30635401002, 30635401003, 30635401004, 30635401005, 30635401006, 30635401007, 30635401008, 30635401009, 30635401010, 30635401011, 30635401012, 30635401013, 30635401014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00030	11/03/23 12:33	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	11/03/23 12:33	
Barium	mg/L	0.0025 U	0.0025	0.00098	11/03/23 12:33	
Beryllium	mg/L	0.00050 U	0.00050	0.00010	11/03/23 12:33	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	11/03/23 12:33	
Chromium	mg/L	0.0025 U	0.0025	0.00050	11/03/23 12:33	
Cobalt	mg/L	0.0025 U	0.0025	0.00081	11/03/23 12:33	
Copper	mg/L	0.0025 U	0.0025	0.00064	11/03/23 12:33	
Lead	mg/L	0.00050 U	0.00050	0.00025	11/03/23 12:33	
Nickel	mg/L	0.0025 U	0.0025	0.00065	11/03/23 12:33	
Selenium	mg/L	0.0025 U	0.0025	0.00084	11/03/23 12:33	
Silver	mg/L	0.0025 U	0.0025	0.00053	11/03/23 12:33	
Thallium	mg/L	0.00050 U	0.00050	0.000081	11/03/23 12:33	
Vanadium	mg/L	0.0025 U	0.0025	0.0012	11/03/23 12:33	
Zinc	mg/L	0.0050 U	0.0050	0.0040	11/03/23 12:33	

LABORATORY CONTROL SAMPLE: 3056459

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.020	101	80-120	
Arsenic	mg/L	0.1	0.10	104	80-120	
Barium	mg/L	0.1	0.097	97	80-120	
Beryllium	mg/L	0.02	0.020	101	80-120	
Cadmium	mg/L	0.02	0.019	96	80-120	
Chromium	mg/L	0.1	0.11	112	80-120	
Cobalt	mg/L	0.1	0.11	109	80-120	
Copper	mg/L	0.1	0.11	109	80-120	
Lead	mg/L	0.02	0.020	99	80-120	
Nickel	mg/L	0.1	0.11	111	80-120	
Selenium	mg/L	0.1	0.096	96	80-120	
Silver	mg/L	0.1	0.096	96	80-120	
Thallium	mg/L	0.02	0.020	98	80-120	
Vanadium	mg/L	0.1	0.11	108	80-120	
Zinc	mg/L	0.2	0.21	105	80-120	

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QUALITY CONTROL DATA

Project: MLF-2023
Pace Project No.: 30635401

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3056460 3056461

Parameter	Units	30635401003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00050 U	0.02	0.02	0.020	0.020	100	101	75-125	0	20	
Arsenic	mg/L	0.0025 U	0.1	0.1	0.10	0.10	101	102	75-125	1	20	
Barium	mg/L	0.0043	0.1	0.1	0.10	0.10	96	97	75-125	1	20	
Beryllium	mg/L	0.00018J	0.02	0.02	0.020	0.020	100	101	75-125	1	20	
Cadmium	mg/L	0.00050 U	0.02	0.02	0.019	0.019	96	96	75-125	0	20	
Chromium	mg/L	0.012	0.1	0.1	0.12	0.12	110	108	75-125	2	20	
Cobalt	mg/L	0.0050	0.1	0.1	0.11	0.11	109	107	75-125	2	20	
Copper	mg/L	0.0072	0.1	0.1	0.12	0.12	110	108	75-125	2	20	
Lead	mg/L	0.00050 U	0.02	0.02	0.020	0.020	99	99	75-125	0	20	
Nickel	mg/L	0.016	0.1	0.1	0.13	0.12	109	108	75-125	1	20	
Selenium	mg/L	0.0025 U	0.1	0.1	0.095	0.097	94	97	75-125	3	20	
Silver	mg/L	0.0025 U	0.1	0.1	0.095	0.096	95	96	75-125	1	20	
Thallium	mg/L	0.00050 U	0.02	0.02	0.013	0.014	65	69	75-125	7	20	M1
Vanadium	mg/L	0.0025 U	0.1	0.1	0.11	0.11	107	105	75-125	2	20	
Zinc	mg/L	0.012	0.2	0.2	0.22	0.22	103	103	75-125	0	20	

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QUALITY CONTROL DATA

Project: MLF-2023
Pace Project No.: 30635401

QC Batch: 627148
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30635401001, 30635401002, 30635401003, 30635401004, 30635401005, 30635401006, 30635401007, 30635401008, 30635401009, 30635401010, 30635401011, 30635401012, 30635401013, 30635401014

METHOD BLANK: 3056959
Matrix: Water
Associated Lab Samples: 30635401001, 30635401002, 30635401003, 30635401004, 30635401005, 30635401006, 30635401007, 30635401008, 30635401009, 30635401010, 30635401011, 30635401012, 30635401013, 30635401014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	11/06/23 15:27	

LABORATORY CONTROL SAMPLE: 3056960

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.011	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3056961 3056962

Parameter	Units	30632618001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.01	0.01	0.011	0.011	109	108	80-120	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3056963 3056964

Parameter	Units	30635401014 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00020 U	0.01	0.01	0.011	0.011	107	106	80-120	1	20	

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QUALITY CONTROL DATA

Project: MLF-2023
Pace Project No.: 30635401

QC Batch: 627451
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30635401001, 30635401002, 30635401003, 30635401004, 30635401005, 30635401006, 30635401007, 30635401008, 30635401009, 30635401010, 30635401011, 30635401012, 30635401013, 30635401014

METHOD BLANK: 3058343
Matrix: Water
Associated Lab Samples: 30635401001, 30635401002, 30635401003, 30635401004, 30635401005, 30635401006, 30635401007, 30635401008, 30635401009, 30635401010, 30635401011, 30635401012, 30635401013, 30635401014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	11/06/23 13:27	CH
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	11/06/23 13:27	
1,1,1,2-Tetrachloroethane (S)	%.	94	60-140		11/06/23 13:27	CH

LABORATORY CONTROL SAMPLE: 3058344

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.24	95	85-115	CH
1,2-Dibromoethane (EDB)	ug/L	0.25	0.23	91	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			97	60-140	CH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3058345 3058346

Parameter	Units	30635401001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.041 U	0.41	0.41	0.38	0.41	95	100	60-140	6	25	CH
1,2-Dibromoethane (EDB)	ug/L	0.041 U	0.41	0.41	0.36	0.37	88	92	60-140	4	25	
1,1,1,2-Tetrachloroethane (S)	%.						96	99	60-140			CH

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-2023
Pace Project No.: 30635401

QC Batch: 627444
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30635401001, 30635401002, 30635401003, 30635401004, 30635401005, 30635401006, 30635401007, 30635401008, 30635401009, 30635401010, 30635401011, 30635401012, 30635401013, 30635401014

METHOD BLANK: 3058326
Matrix: Water
Associated Lab Samples: 30635401001, 30635401002, 30635401003, 30635401004, 30635401005, 30635401006, 30635401007, 30635401008, 30635401009, 30635401010, 30635401011, 30635401012, 30635401013, 30635401014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	11/06/23 12:42	

LABORATORY CONTROL SAMPLE: 3058327

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3058328 3058329

Parameter	Units	30635401001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	34.0	50	50	62.0	66.0	56	64	85-115	6	20	ML

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-2023
Pace Project No.: 30635401

QC Batch: 626802
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30635401001, 30635401002, 30635401003, 30635401004, 30635401005, 30635401006, 30635401007, 30635401009, 30635401011, 30635401012, 30635401013, 30635401014

METHOD BLANK: 3055382
Matrix: Water
Associated Lab Samples: 30635401001, 30635401002, 30635401003, 30635401004, 30635401005, 30635401006, 30635401007, 30635401009, 30635401011, 30635401012, 30635401013, 30635401014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	11/02/23 15:32	

LABORATORY CONTROL SAMPLE: 3055383

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	990	99	85-115	

SAMPLE DUPLICATE: 3055384

Parameter	Units	30635401003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	12.0	12.0	0	5	

SAMPLE DUPLICATE: 3055385

Parameter	Units	30635401007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	138	141	2	5	

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QUALITY CONTROL DATA

Project: MLF-2023
Pace Project No.: 30635401

QC Batch: 627398
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30635401008, 30635401010

METHOD BLANK: 3058158 Matrix: Water
Associated Lab Samples: 30635401008, 30635401010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	11/06/23 17:17	

LABORATORY CONTROL SAMPLE: 3058159

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	988	99	85-115	

SAMPLE DUPLICATE: 3058160

Parameter	Units	30635401010 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	91.0	89.0	2	5	

SAMPLE DUPLICATE: 3058161

Parameter	Units	30635290001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	525	547	4	5	

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QUALITY CONTROL DATA

Project: MLF-2023
Pace Project No.: 30635401

QC Batch: 629359
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30635401001, 30635401002, 30635401003, 30635401004, 30635401005, 30635401006, 30635401007, 30635401008, 30635401009, 30635401010, 30635401011, 30635401012, 30635401013, 30635401014

METHOD BLANK: 3068230
Matrix: Water
Associated Lab Samples: 30635401001, 30635401002, 30635401003, 30635401004, 30635401005, 30635401006, 30635401007, 30635401008, 30635401009, 30635401010, 30635401011, 30635401012, 30635401013, 30635401014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	11/15/23 07:53	

LABORATORY CONTROL SAMPLE: 3068231

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.1	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3068232 3068233

Parameter	Units	30635401001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.0	4.0	99	100	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3068234 3068235

Parameter	Units	30635401011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.0	4.0	99	99	90-110	1	20	

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QUALITY CONTROL DATA

Project: MLF-2023
Pace Project No.: 30635401

QC Batch: 626996
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30635401001, 30635401002, 30635401003

METHOD BLANK: 3056347
Matrix: Water
Associated Lab Samples: 30635401001, 30635401002, 30635401003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/03/23 14:57	

LABORATORY CONTROL SAMPLE: 3056348

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	311	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3056349 3056350

Parameter	Units	30634940001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	ND	150	150	173	166	106	102	90-110	4	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3056351 3056352

Parameter	Units	30635401001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	25.0 U	150	150	159	164	103	106	90-110	3	10	

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QUALITY CONTROL DATA

Project: MLF-2023
Pace Project No.: 30635401

QC Batch: 626998
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30635401004, 30635401005, 30635401006, 30635401007, 30635401008, 30635401009, 30635401010, 30635401011, 30635401012, 30635401013, 30635401014

METHOD BLANK: 3056355
Matrix: Water
Associated Lab Samples: 30635401004, 30635401005, 30635401006, 30635401007, 30635401008, 30635401009, 30635401010, 30635401011, 30635401012, 30635401013, 30635401014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/03/23 15:04	

LABORATORY CONTROL SAMPLE: 3056356

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	314	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3056357 3056358

Parameter	Units	30635401004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	25.0 U	150	150	168	166	109	108	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3056359 3056360

Parameter	Units	30635787001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	ND	150	150	177	175	106	105	90-110	1	10	

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QUALITY CONTROL DATA

Project: MLF-2023
Pace Project No.: 30635401

QC Batch: 627701 | Analysis Method: SM 4500-Cl-E-2011
QC Batch Method: SM 4500-Cl-E-2011 | Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30635401001, 30635401002, 30635401003, 30635401004, 30635401005, 30635401006, 30635401007, 30635401008, 30635401009, 30635401010, 30635401011

METHOD BLANK: 3059704 | Matrix: Water

Associated Lab Samples: 30635401001, 30635401002, 30635401003, 30635401004, 30635401005, 30635401006, 30635401007, 30635401008, 30635401009, 30635401010, 30635401011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	11/07/23 11:04	

LABORATORY CONTROL SAMPLE: 3059705

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.4	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3059706 3059707

Parameter	Units	30635401004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	16.5	20	20	38.2	37.4	108	105	85-115	2	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-2023
Pace Project No.: 30635401

QC Batch: 627702
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30635401012, 30635401013, 30635401014

METHOD BLANK: 3059710 Matrix: Water
Associated Lab Samples: 30635401012, 30635401013, 30635401014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	11/07/23 11:28	

METHOD BLANK: 3059711 Matrix: Water
Associated Lab Samples: 30635401012, 30635401013, 30635401014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	11/07/23 11:30	

LABORATORY CONTROL SAMPLE: 3059712

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.5	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3059713 3059714

Parameter	Units	30635401012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	11.2	20	20	32.9	32.8	109	108	85-115	0	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-2023
Pace Project No.: 30635401

QC Batch: 626793 | Analysis Method: EPA 9038
QC Batch Method: EPA 9038 | Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30635401001, 30635401002, 30635401003, 30635401004, 30635401005, 30635401006, 30635401007, 30635401008, 30635401009, 30635401010, 30635401011, 30635401012, 30635401013, 30635401014

METHOD BLANK: 3055353 | Matrix: Water

Associated Lab Samples: 30635401001, 30635401002, 30635401003, 30635401004, 30635401005, 30635401006, 30635401007, 30635401008, 30635401009, 30635401010, 30635401011, 30635401012, 30635401013, 30635401014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	11/01/23 13:38	

LABORATORY CONTROL SAMPLE: 3055354

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	32.0	107	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3055355 3055356

Parameter	Units	30635401010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	15.0	20	20	40.5	41.5	128	133	85-115	2	20	MH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3055357 3055358

Parameter	Units	30635401014 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	5.0J	20	20	27.6	26.9	113	109	85-115	3	20	

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QUALIFIERS

Project: MLF-2023
Pace Project No.: 30635401

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30635401001
[1] Sample pH for 8011 is 6

Sample: 30635401002
[1] Sample pH for 8011 is 6

Sample: 30635401003
[1] Sample pH for 8011 is 6

Sample: 30635401004
[1] Sample pH for 8011 is 6

Sample: 30635401005
[1] Sample pH for 8011 is 5

Sample: 30635401006
[1] Sample pH for 8011 is 5

Sample: 30635401007
[1] Sample pH for 8011 is 6

Sample: 30635401008
[1] Sample pH for 8011 is 6

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QUALIFIERS

Project: MLF-2023
Pace Project No.: 30635401

SAMPLE QUALIFIERS

Sample: 30635401009
[1] Sample pH for 8011 is 5
Sample: 30635401010
[1] Sample pH for 8011 is 6
Sample: 30635401011
[1] Sample pH for 8011 is 5
Sample: 30635401012
[1] Sample pH for 8011 is 5
Sample: 30635401013
[1] Sample pH for 8011 is 5
Sample: 30635401014
[1] Sample pH for 8011 is 5

ANALYTE QUALIFIERS

1c	Alkalinity TV: 0.00 mg/L
2c	Alkalinity TV: 2.00 mg/L
3c	Alkalinity TV: 4.00 mg/L
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-2023
Pace Project No.: 30635401

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30635401001	**TW-5**	EPA 3010A	627042	EPA 6010D	627397
30635401002	**TW-5A**	EPA 3010A	627042	EPA 6010D	627397
30635401003	**TW-5B**	EPA 3010A	627042	EPA 6010D	627397
30635401004	**TW-6**	EPA 3010A	627042	EPA 6010D	627397
30635401005	**TW-6B**	EPA 3010A	627042	EPA 6010D	627397
30635401006	**TW-14**	EPA 3010A	627042	EPA 6010D	627397
30635401007	**TW-14A**	EPA 3010A	627042	EPA 6010D	627397
30635401008	**TW-14B**	EPA 3010A	627042	EPA 6010D	627397
30635401009	**TW-24**	EPA 3010A	627042	EPA 6010D	627397
30635401010	**TW-24A**	EPA 3010A	627042	EPA 6010D	627397
30635401011	**TW-25**	EPA 3010A	627042	EPA 6010D	627397
30635401012	**TW-25A**	EPA 3010A	627042	EPA 6010D	627397
30635401013	**DUP-1**	EPA 3010A	627042	EPA 6010D	627397
30635401014	**DUP-2**	EPA 3010A	627042	EPA 6010D	627397
30635401001	**TW-5**	EPA 3010A	627878	EPA 6010D	628288
30635401002	**TW-5A**	EPA 3010A	627878	EPA 6010D	628288
30635401003	**TW-5B**	EPA 3010A	628454	EPA 6010D	629223
30635401004	**TW-6**	EPA 3010A	627878	EPA 6010D	628288
30635401005	**TW-6B**	EPA 3010A	628454	EPA 6010D	629223
30635401006	**TW-14**	EPA 3010A	627878	EPA 6010D	628288
30635401007	**TW-14A**	EPA 3010A	627878	EPA 6010D	628288
30635401008	**TW-14B**	EPA 3010A	628454	EPA 6010D	629223
30635401009	**TW-24**	EPA 3010A	627878	EPA 6010D	628288
30635401010	**TW-24A**	EPA 3010A	627878	EPA 6010D	628288
30635401011	**TW-25**	EPA 3010A	628454	EPA 6010D	629223
30635401012	**TW-25A**	EPA 3010A	628454	EPA 6010D	629223
30635401013	**DUP-1**	EPA 3010A	628454	EPA 6010D	629223
30635401014	**DUP-2**	EPA 3010A	628454	EPA 6010D	629223
30635401001	**TW-5**	EPA 3010A	627033	EPA 6020B	627126
30635401002	**TW-5A**	EPA 3010A	627033	EPA 6020B	627126
30635401003	**TW-5B**	EPA 3010A	627033	EPA 6020B	627126
30635401004	**TW-6**	EPA 3010A	627033	EPA 6020B	627126
30635401005	**TW-6B**	EPA 3010A	627033	EPA 6020B	627126
30635401006	**TW-14**	EPA 3010A	627033	EPA 6020B	627126
30635401007	**TW-14A**	EPA 3010A	627033	EPA 6020B	627126
30635401008	**TW-14B**	EPA 3010A	627033	EPA 6020B	627126
30635401009	**TW-24**	EPA 3010A	627033	EPA 6020B	627126
30635401010	**TW-24A**	EPA 3010A	627033	EPA 6020B	627126
30635401011	**TW-25**	EPA 3010A	627033	EPA 6020B	627126
30635401012	**TW-25A**	EPA 3010A	627033	EPA 6020B	627126
30635401013	**DUP-1**	EPA 3010A	627033	EPA 6020B	627126
30635401014	**DUP-2**	EPA 3010A	627033	EPA 6020B	627126
30635401001	**TW-5**	EPA 7470A	627148	EPA 7470A	627479
30635401002	**TW-5A**	EPA 7470A	627148	EPA 7470A	627479

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-2023
Pace Project No.: 30635401

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30635401003	**TW-5B**	EPA 7470A	627148	EPA 7470A	627479
30635401004	**TW-6**	EPA 7470A	627148	EPA 7470A	627479
30635401005	**TW-6B**	EPA 7470A	627148	EPA 7470A	627479
30635401006	**TW-14**	EPA 7470A	627148	EPA 7470A	627479
30635401007	**TW-14A**	EPA 7470A	627148	EPA 7470A	627479
30635401008	**TW-14B**	EPA 7470A	627148	EPA 7470A	627479
30635401009	**TW-24**	EPA 7470A	627148	EPA 7470A	627479
30635401010	**TW-24A**	EPA 7470A	627148	EPA 7470A	627479
30635401011	**TW-25**	EPA 7470A	627148	EPA 7470A	627479
30635401012	**TW-25A**	EPA 7470A	627148	EPA 7470A	627479
30635401013	**DUP-1**	EPA 7470A	627148	EPA 7470A	627479
30635401014	**DUP-2**	EPA 7470A	627148	EPA 7470A	627479
30635401001	**TW-5**	EPA 8011	627451	EPA 8011	627519
30635401002	**TW-5A**	EPA 8011	627451	EPA 8011	627519
30635401003	**TW-5B**	EPA 8011	627451	EPA 8011	627519
30635401004	**TW-6**	EPA 8011	627451	EPA 8011	627519
30635401005	**TW-6B**	EPA 8011	627451	EPA 8011	627519
30635401006	**TW-14**	EPA 8011	627451	EPA 8011	627519
30635401007	**TW-14A**	EPA 8011	627451	EPA 8011	627519
30635401008	**TW-14B**	EPA 8011	627451	EPA 8011	627519
30635401009	**TW-24**	EPA 8011	627451	EPA 8011	627519
30635401010	**TW-24A**	EPA 8011	627451	EPA 8011	627519
30635401011	**TW-25**	EPA 8011	627451	EPA 8011	627519
30635401012	**TW-25A**	EPA 8011	627451	EPA 8011	627519
30635401013	**DUP-1**	EPA 8011	627451	EPA 8011	627519
30635401014	**DUP-2**	EPA 8011	627451	EPA 8011	627519
30635401001	**TW-5**	SM 2320B-2011	627444		
30635401002	**TW-5A**	SM 2320B-2011	627444		
30635401003	**TW-5B**	SM 2320B-2011	627444		
30635401004	**TW-6**	SM 2320B-2011	627444		
30635401005	**TW-6B**	SM 2320B-2011	627444		
30635401006	**TW-14**	SM 2320B-2011	627444		
30635401007	**TW-14A**	SM 2320B-2011	627444		
30635401008	**TW-14B**	SM 2320B-2011	627444		
30635401009	**TW-24**	SM 2320B-2011	627444		
30635401010	**TW-24A**	SM 2320B-2011	627444		
30635401011	**TW-25**	SM 2320B-2011	627444		
30635401012	**TW-25A**	SM 2320B-2011	627444		
30635401013	**DUP-1**	SM 2320B-2011	627444		
30635401014	**DUP-2**	SM 2320B-2011	627444		
30635401001	**TW-5**	SM 2540C-2015	626802		
30635401002	**TW-5A**	SM 2540C-2015	626802		
30635401003	**TW-5B**	SM 2540C-2015	626802		
30635401004	**TW-6**	SM 2540C-2015	626802		
30635401005	**TW-6B**	SM 2540C-2015	626802		
30635401006	**TW-14**	SM 2540C-2015	626802		
30635401007	**TW-14A**	SM 2540C-2015	626802		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-2023
Pace Project No.: 30635401

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30635401008	**TW-14B**	SM 2540C-2015	627398		
30635401009	**TW-24**	SM 2540C-2015	626802		
30635401010	**TW-24A**	SM 2540C-2015	627398		
30635401011	**TW-25**	SM 2540C-2015	626802		
30635401012	**TW-25A**	SM 2540C-2015	626802		
30635401013	**DUP-1**	SM 2540C-2015	626802		
30635401014	**DUP-2**	SM 2540C-2015	626802		
30635401001	**TW-5**	EPA 350.1	629359	EPA 350.1	629740
30635401002	**TW-5A**	EPA 350.1	629359	EPA 350.1	629740
30635401003	**TW-5B**	EPA 350.1	629359	EPA 350.1	629740
30635401004	**TW-6**	EPA 350.1	629359	EPA 350.1	629740
30635401005	**TW-6B**	EPA 350.1	629359	EPA 350.1	629740
30635401006	**TW-14**	EPA 350.1	629359	EPA 350.1	629740
30635401007	**TW-14A**	EPA 350.1	629359	EPA 350.1	629740
30635401008	**TW-14B**	EPA 350.1	629359	EPA 350.1	629740
30635401009	**TW-24**	EPA 350.1	629359	EPA 350.1	629740
30635401010	**TW-24A**	EPA 350.1	629359	EPA 350.1	629740
30635401011	**TW-25**	EPA 350.1	629359	EPA 350.1	629740
30635401012	**TW-25A**	EPA 350.1	629359	EPA 350.1	629740
30635401013	**DUP-1**	EPA 350.1	629359	EPA 350.1	629740
30635401014	**DUP-2**	EPA 350.1	629359	EPA 350.1	629740
30635401001	**TW-5**	EPA 410.4	626996	EPA 410.4	627092
30635401002	**TW-5A**	EPA 410.4	626996	EPA 410.4	627092
30635401003	**TW-5B**	EPA 410.4	626996	EPA 410.4	627092
30635401004	**TW-6**	EPA 410.4	626998	EPA 410.4	627093
30635401005	**TW-6B**	EPA 410.4	626998	EPA 410.4	627093
30635401006	**TW-14**	EPA 410.4	626998	EPA 410.4	627093
30635401007	**TW-14A**	EPA 410.4	626998	EPA 410.4	627093
30635401008	**TW-14B**	EPA 410.4	626998	EPA 410.4	627093
30635401009	**TW-24**	EPA 410.4	626998	EPA 410.4	627093
30635401010	**TW-24A**	EPA 410.4	626998	EPA 410.4	627093
30635401011	**TW-25**	EPA 410.4	626998	EPA 410.4	627093
30635401012	**TW-25A**	EPA 410.4	626998	EPA 410.4	627093
30635401013	**DUP-1**	EPA 410.4	626998	EPA 410.4	627093
30635401014	**DUP-2**	EPA 410.4	626998	EPA 410.4	627093
30635401001	**TW-5**	SM 4500-Cl-E-2011	627701		
30635401002	**TW-5A**	SM 4500-Cl-E-2011	627701		
30635401003	**TW-5B**	SM 4500-Cl-E-2011	627701		
30635401004	**TW-6**	SM 4500-Cl-E-2011	627701		
30635401005	**TW-6B**	SM 4500-Cl-E-2011	627701		
30635401006	**TW-14**	SM 4500-Cl-E-2011	627701		
30635401007	**TW-14A**	SM 4500-Cl-E-2011	627701		
30635401008	**TW-14B**	SM 4500-Cl-E-2011	627701		
30635401009	**TW-24**	SM 4500-Cl-E-2011	627701		
30635401010	**TW-24A**	SM 4500-Cl-E-2011	627701		

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-2023
Pace Project No.: 30635401

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30635401011	**TW-25**	SM 4500-Cl-E-2011	627701		
30635401012	**TW-25A**	SM 4500-Cl-E-2011	627702		
30635401013	**DUP-1**	SM 4500-Cl-E-2011	627702		
30635401014	**DUP-2**	SM 4500-Cl-E-2011	627702		
30635401001	**TW-5**	EPA 9038	626793		
30635401002	**TW-5A**	EPA 9038	626793		
30635401003	**TW-5B**	EPA 9038	626793		
30635401004	**TW-6**	EPA 9038	626793		
30635401005	**TW-6B**	EPA 9038	626793		
30635401006	**TW-14**	EPA 9038	626793		
30635401007	**TW-14A**	EPA 9038	626793		
30635401008	**TW-14B**	EPA 9038	626793		
30635401009	**TW-24**	EPA 9038	626793		
30635401010	**TW-24A**	EPA 9038	626793		
30635401011	**TW-25**	EPA 9038	626793		
30635401012	**TW-25A**	EPA 9038	626793		
30635401013	**DUP-1**	EPA 9038	626793		
30635401014	**DUP-2**	EPA 9038	626793		

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WO#: 30635401

30635401

of 2

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF-2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	TOTAL METALS (1)	TOTAL + DISS. METALS (2)	ALKALINITY, TDS	HARDNESS, Cl	AMMONIA	SO4, COD		METHOD 8011 - DBCP + EDB					
1	TW-5	7	10.30.23	1350	✓		GW	✓	✓	✓	✓	✓	✓		✓					001
2	TW-5A		↓	1310																002
3	TW-5B			1230																003
4	TW-6		10-31-23	1100																004
5	TW-6B		10-31-23	1020																005
6	TW-14			1315																006
7	TW-14A			1240																007
8	TW-14B			1200																008
9	TW-24		10.30.23	1600																009
10	TW-24A		10-31-23	940																010
11	TW-25		10.30.23	1515																011
12	TW-25A		10.30.23	1440																012

Received by Pace Beaver
Therm ID 9 Corr Factor +/- 0
Receipt Temp 1.3
Corrected Temp 1.3
Correct Preservation (Y) N

LB 11-1-23
Received by Pace Greensburg
Therm ID 19 Corr Factor +0.2
Receipt Temp 4.4
Corrected Temp 4.2
Correct Preservation (Y) N

	Signature	Date	Time	Comments
Relinquished by	DABrown	10.31.23		(1) 6020 - Sb, As, Ba, Be, Cd, Cr, Cu, Co, Pb, Ni, Se, Ag, Tl, V, Zn
Received by	TB/Pace	10-31-23	1453	(1) 7470 - Hg
Relinquished by	TB/Pace	10-31-23		(2) 6010 - Ca, Fe, Mg, Mn, K, Na
Received by	Randy D. Shirly - Pace	10.31.23	1830	PACE - WV - METALS - UNITS - mg/L
Relinquished by	Randy D. Shirly - Pace	10.31.23	2215	PACE - G-BURG - WET CHEM + 8011
Received by	Amy Burow Pace	~~11-1-23~~ 10-31-23	22:15	LEVEL 2 REPORT

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

RBL [signature] 11-1-23 1700 Nicely's Del. Service

Nicely's Del. Service 11.2.23 0456

RBC Nicely's Del. Service 11-1-23 2300

CWilson 11.2.23 0400

WO# : 30835401 of 2

PM: ARG Due Date: 11/15/23

CLIENT: ENV MONITOR

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - FALL 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	TOTAL METALS ①	TOTAL + DISS. METALS ②	ALKALINITY, TDS	HARDNESS, Cl	AMMONIA	SO4, COD		METHOD 8011 - DBCP, EDB				
1	DUP-1	7	10.30.23	—	✓		QA	✓	✓	✓	✓	✓	✓		✓				
2	DUP-2	7	10.30.23	—	✓		QA	✓	✓	✓	✓	✓	✓		✓				
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

OB
OM

	Signature	Date	Time	Comments
Relinquished by	[signature]	10.31-23		① 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn
Received by	TB/Pace	10-31-23	1453	② 6010 - Ca, Fe, Mg, Mn, K, Na
Relinquished by	TB/Pace	10-31-23		① 7470 - Hg,
Received by	Randy D. Shirly - Pace	10-31-23	1830	PACE - WV - METALS - UNITS - mg/L
Relinquished by	Randy D. Shirly - Pace	10-31-23	3315	PACE - G. BURN - WET CHEM + 8011
Received by	Lucy Burman Pace	~~11-1-23~~ 10-31-23	2215	LEVEL 2 REPORT

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-GBUR-0088 v06_Sample Condition Upon Receipt Pittsburgh

Effective Date: 09/20/2023

WO#: 30635401

Due Date: 11/15/23

PM: ARG

CLIENT: ENV MONITOR

Client Name: EMA

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace ☐ Other

Tracking Number: Dropoff

Initial / Date

Examined By: LB 11-1-23

Labeled By: LB 11-1-23

Temped By: LB 11-1-23

Custody Seal on Cooler/Box Present: ☐ Yes ☒ No Seals Intact: ☐ Yes ☒ No

Thermometer Used: 19 Type of Ice: (Wet) Blue None

Cooler Temperature: Observed Temp 4.4 °C Correction Factor: -0.2 °C Final Temp: 4.2 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	NA	pH paper Lot# LRS-4801	D.P.D. Residual Chlorine Lot #
Chain of Custody Present	X			1.	
Chain of Custody Filled Out:	X			2.	
-Were client corrections present on COC		X			
Chain of Custody Relinquished	X			3.	
Sampler Name & Signature on COC:		X		4.	
Sample Labels match COC: -Includes date/time/ID Matrix: WT	X			5.	
Samples Arrived within Hold Time:	X			6.	
Short Hold Time Analysis (<72hr remaining):		X		7.	
Rush Turn Around Time Requested:		X		8.	
Sufficient Volume:	X			9.	
Correct Containers Used:	X			10.	
-Pace Containers Used	X				
Containers Intact:	X			11.	
Orthophosphate field filtered:			X	12.	
Hex Cr Aqueous samples field filtered:			X	13.	
Organic Samples checked for dechlorination			X	14:	
Filtered volume received for dissolved tests:			X	15:	
All containers checked for preservation: exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix		X		16.	
All containers meet method preservation requirements:	X			Initial when completed LA / Lot# of added Preservative	Date/Time of Preservation
8260C/D: Headspace in VOA Vials (> 6mm)			X	17.	
624.1: Headspace in VOA Vials (0mm)			X	18.	
Trip Blank Present:			X	Trip blank custody seal present? YES or NO	
Rad Samples Screened <.05 mrem/hr.	X			Initial when completed LB	Date: 11-1-23 / Survey Meter SN: 25014380

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Client

Site MLF-2023

Page 1 of 1

Profile Number 8469

Notes

Sample Line Item	Matrix	Amber Glass					Plastic								Vials					Other									
		AG1H	AG3S	AG3U	AG5U	AG5T	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	VG9H	VG9T	VG9U	VOAK	WGFU	WGKU	ZPLC	GCUB	GJN	12GN	GN	BG1U		
001	WT							1	1			2					3												
014																													

Container Codes

Glass

GJN	1 Gallon Jug with HNO3	DG9S	40mL amber VOA vial H2SO4
AG5U	100mL amber glass unpreserved	VG9U	40mL clear VOA vial
AG5T	100mL amber glass Na Thiosulfate	VG9T	40mL clear VOA vial Na Thiosulfate
GJN	1 Gallon Jug	VG9H	40mL clear VOA vial HCl
AG1S	1L amber glass H2SO4	JGFU	4oz amber wide jar
AG1H	1L amber glass HCl	WGFU	4oz wide jar unpreserved
AG1T	1L amber glass NA Thiosulfate	BG2U	500mL clear glass unpreserved
BG1U	1L clear glass unpreserved	AG2U	500mL amber glass unpreserved
AG3S	250mL amber glass H2SO4	WGKU	8oz wide jar unpreserved
AG3U	250mL amber glass unpreserved	GN	General

Plastic/Misc.

GCUB	1 gallon cubitainer
12GN	1/2 gallon cubitainer
SP5T	120mL coliform Na Thiosulfate
BP1N	1L plastic HNO3
BP1U	1L plastic unpreserved
BP3S	250mL plastic H2SO4
BP3N	250mL plastic HNO3
BP3U	250mL plastic unpreserved
[illegible]	250mL plastic NAOH
[illegible]	00mL plastic H2SO4
[illegible]	00mL plastic unpreserved

EZI	5g Encore
VOAK	Kit Volatile Solid
I	Wipe/Swab
ZPLC	Siploc Bag

WT	Water
SL	Solid
OL	Non-Aq Liquid
WP	Wipe

WO# : 30635401

PM: ARG **Due Date: 11/15/23**

CLIENT: ENV MONITOR

Qualtrax ID: 55678

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

November 20, 2023

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-FALL 2023
Pace Project No.: 30636257

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on November 02, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alaina Deitch

Alaina R. Deitch
alaina.deitch@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
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(724)850-5600

CERTIFICATIONS

Project: MLF-FALL 2023
Pace Project No.: 30636257

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572023-03
New Hampshire/TNI Certification #: 297622
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad

Pace Analytical Services Beaver

225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: MLF-FALL 2023
Pace Project No.: 30636257

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30636257001	**TW-7**	Water	11/01/23 12:50	11/02/23 22:00
30636257002	**TW-7A**	Water	11/01/23 12:15	11/02/23 22:00
30636257003	**TW-8**	Water	11/01/23 13:40	11/02/23 22:00
30636257004	**TW-8A**	Water	11/01/23 14:15	11/02/23 22:00
30636257005	**TW-9B**	Water	11/01/23 14:50	11/02/23 22:00
30636257006	**TW-9C**	Water	11/01/23 15:25	11/02/23 22:00
30636257007	**TW-10A**	Water	10/31/23 15:30	11/02/23 22:00
30636257008	**TW-20R**	Water	10/31/23 14:40	11/02/23 22:00
30636257009	**TW-23R**	Water	11/01/23 11:30	11/02/23 22:00

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SAMPLE ANALYTE COUNT

Project: MLF-FALL 2023
Pace Project No.: 30636257

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30636257001	**TW-7**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	TAW	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30636257002	**TW-7A**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	TAW	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30636257003	**TW-8**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	TAW	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30636257004	**TW-8A**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF-FALL 2023
Pace Project No.: 30636257

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8011	TAW	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30636257005	**TW-9B**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	TAW	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30636257006	**TW-9C**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	TAW	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30636257007	**TW-10A**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	TAW	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA

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Greensburg, PA 15601
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SAMPLE ANALYTE COUNT

Project: MLF-FALL 2023
Pace Project No.: 30636257

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30636257008	**TW-20R**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	TAW	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30636257009	**TW-23R**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	TAW	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30636257

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 20, 2023

General Information:
9 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 627741

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30633508003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 3059876)
  - Calcium
  - Iron
  - Magnesium

Additional Comments:

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(724)850-5600

PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30636257

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 20, 2023

General Information:
9 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30636257

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: November 20, 2023

General Information:
9 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 628158

B: Analyte was detected in the associated method blank.
- BLANK for HBN 628158 [BMPR/142 (Lab ID: 3062091)
  - Copper

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 628158

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30636586001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 3062117)
  - Thallium
- MSD (Lab ID: 3062118)
  - Thallium

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PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30636257

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: November 20, 2023

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30636257

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: November 20, 2023

General Information:
9 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30636257

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 20, 2023

General Information:
9 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H2: Extraction or preparation conducted outside EPA method holding time.
- TW-10A (Lab ID: 30636257007)
- TW-20R (Lab ID: 30636257008)
- TW-23R (Lab ID: 30636257009)
- TW-7 (Lab ID: 30636257001)
- TW-8 (Lab ID: 30636257003)
- TW-8A (Lab ID: 30636257004)
- TW-9B (Lab ID: 30636257005)
- TW-9C (Lab ID: 30636257006)

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 627896

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
- BLANK (Lab ID: 3060558)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- LCS (Lab ID: 3060559)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MS (Lab ID: 3060560)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MSD (Lab ID: 3060561)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-10A (Lab ID: 30636257007)

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PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30636257

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 20, 2023

QC Batch: 627896

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- 1,1,1,2-Tetrachloroethane (S)
- 1,2-Dibromo-3-chloropropane
- 1,2-Dibromoethane (EDB)

- TW-20R (Lab ID: 30636257008)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-23R (Lab ID: 30636257009)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-7 (Lab ID: 30636257001)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-7A (Lab ID: 30636257002)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-8 (Lab ID: 30636257003)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-8A (Lab ID: 30636257004)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-9B (Lab ID: 30636257005)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-9C (Lab ID: 30636257006)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

QC Batch: 627896

SR: Surrogate recovery was below laboratory control limits. Results may be biased low.

- BLANK (Lab ID: 3060558)
  - 1,1,1,2-Tetrachloroethane (S)
- LCS (Lab ID: 3060559)
  - 1,1,1,2-Tetrachloroethane (S)

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PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30636257

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 20, 2023

QC Batch: 627896

SR: Surrogate recovery was below laboratory control limits. Results may be biased low.

- MS (Lab ID: 3060560)
  - 1,1,1,2-Tetrachloroethane (S)
- MSD (Lab ID: 3060561)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-23R (Lab ID: 30636257009)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-7 (Lab ID: 30636257001)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-7A (Lab ID: 30636257002)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-8 (Lab ID: 30636257003)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-8A (Lab ID: 30636257004)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-9B (Lab ID: 30636257005)
  - 1,1,1,2-Tetrachloroethane (S)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 627896

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

- LCS (Lab ID: 3060559)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 627896

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30636257002

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 3060560)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MSD (Lab ID: 3060561)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

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PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30636257

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 20, 2023

QC Batch: 629109

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

Analyte Comments:

QC Batch: 627896

1c: 8011 SAMPLE pH IS 7

- TW-10A (Lab ID: 30636257007)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-20R (Lab ID: 30636257008)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-23R (Lab ID: 30636257009)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-7 (Lab ID: 30636257001)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-7A (Lab ID: 30636257002)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-8 (Lab ID: 30636257003)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-8A (Lab ID: 30636257004)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-9B (Lab ID: 30636257005)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-9C (Lab ID: 30636257006)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

P2: Re-extraction or re-analysis could not be performed due to insufficient sample amount.

- TW-7A (Lab ID: 30636257002)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

QC Batch: 629109

2c: A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

- TW-10A (Lab ID: 30636257007)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

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PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30636257

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 20, 2023

Analyte Comments:

QC Batch: 629109

2c: A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

- TW-20R (Lab ID: 30636257008)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-23R (Lab ID: 30636257009)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-7 (Lab ID: 30636257001)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-8 (Lab ID: 30636257003)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-8A (Lab ID: 30636257004)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-9B (Lab ID: 30636257005)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-9C (Lab ID: 30636257006)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

5c: pH is 7

- TW-10A (Lab ID: 30636257007)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-20R (Lab ID: 30636257008)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-23R (Lab ID: 30636257009)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-7 (Lab ID: 30636257001)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-8 (Lab ID: 30636257003)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-8A (Lab ID: 30636257004)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-9B (Lab ID: 30636257005)
  - 1,2-Dibromo-3-chloropropane

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PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30636257

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 20, 2023

Analyte Comments:

QC Batch: 629109

5c: pH is 7

- TW-9B (Lab ID: 30636257005)
  - 1,2-Dibromoethane (EDB)
- TW-9C (Lab ID: 30636257006)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

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PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30636257

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: November 20, 2023

General Information:
9 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 628054

3c: Alkalinity TV: 0.00 mg/L
- TW-10A (Lab ID: 30636257007)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-20R (Lab ID: 30636257008)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-7A (Lab ID: 30636257002)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-8A (Lab ID: 30636257004)
  - Alkalinity,Total (CaCO3 pH4.5)

4c: Alkalinity TV: 2.00 mg/L
- TW-23R (Lab ID: 30636257009)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-9B (Lab ID: 30636257005)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-9C (Lab ID: 30636257006)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30636257

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: November 20, 2023

General Information:
9 samples were analyzed for SM 2540C-2015 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30636257

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: November 20, 2023

General Information:
9 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 629365

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30635630001,30636257003

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MSD (Lab ID: 3068262)
  - Ammonia, Distilled

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30636257

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: November 20, 2023

General Information:
9 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 628446

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30636257007,30637055001

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MSD (Lab ID: 3063711)
  - Chemical Oxygen Demand

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30636257

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: November 20, 2023

General Information:
9 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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(724)850-5600

PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30636257

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: November 20, 2023

General Information:
9 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-FALL 2023
Pace Project No.: 30636257

Sample: TW-7 **Lab ID: 30636257001** Collected: 11/01/23 12:50 Received: 11/02/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**4.2**	mg/L	0.50	0.054	1	11/06/23 15:30	11/08/23 16:15	7440-70-2	
Iron	**87.7**	mg/L	0.050	0.0056	1	11/06/23 15:30	11/08/23 16:15	7439-89-6	
Magnesium	**1.2**	mg/L	0.50	0.021	1	11/06/23 15:30	11/08/23 16:15	7439-95-4	
Manganese	**0.14**	mg/L	0.0050	0.00055	1	11/06/23 15:30	11/08/23 16:15	7439-96-5	
Potassium	**1.7**	mg/L	0.50	0.20	1	11/06/23 15:30	11/08/23 16:15	7440-09-7	
Sodium	**6.7**	mg/L	0.50	0.11	1	11/06/23 15:30	11/08/23 16:15	7440-23-5	
Total Hardness	**15.3**	mg/L	3.3	0.22	1	11/06/23 15:30	11/08/23 16:15		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**4.6**	mg/L	0.50	0.054	1	11/07/23 13:39	11/08/23 17:16	7440-70-2	
Iron, Dissolved	**7.8**	mg/L	0.050	0.0056	1	11/07/23 13:39	11/08/23 17:16	7439-89-6	
Magnesium, Dissolved	**1.3**	mg/L	0.50	0.021	1	11/07/23 13:39	11/08/23 17:16	7439-95-4	
Manganese, Dissolved	**0.14**	mg/L	0.0050	0.00055	1	11/07/23 13:39	11/08/23 17:16	7439-96-5	
Potassium, Dissolved	**1.8**	mg/L	0.50	0.20	1	11/07/23 13:39	11/08/23 17:16	7440-09-7	
Sodium, Dissolved	**7.0**	mg/L	0.50	0.11	1	11/07/23 13:39	11/08/23 17:16	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.0010 U**	mg/L	0.0010	0.00059	2	11/08/23 11:52	11/09/23 12:06	7440-36-0	
Arsenic	**0.0014J**	mg/L	0.0050	0.00088	2	11/08/23 11:52	11/09/23 12:06	7440-38-2	
Barium	**0.067**	mg/L	0.0050	0.0020	2	11/08/23 11:52	11/09/23 12:06	7440-39-3	
Beryllium	**0.0014**	mg/L	0.0010	0.00020	2	11/08/23 11:52	11/09/23 12:06	7440-41-7	
Cadmium	**0.0010 U**	mg/L	0.0010	0.00027	2	11/08/23 11:52	11/09/23 12:06	7440-43-9	
Chromium	**0.092**	mg/L	0.0050	0.0010	2	11/08/23 11:52	11/09/23 12:06	7440-47-3	
Cobalt	**0.0076**	mg/L	0.0050	0.0016	2	11/08/23 11:52	11/09/23 12:06	7440-48-4	
Copper	**0.014**	mg/L	0.0050	0.0013	2	11/08/23 11:52	11/09/23 12:06	7440-50-8	B
Lead	**0.0010 U**	mg/L	0.0010	0.00050	2	11/08/23 11:52	11/09/23 12:06	7439-92-1	
Nickel	**0.080**	mg/L	0.0050	0.0013	2	11/08/23 11:52	11/09/23 12:06	7440-02-0	
Selenium	**0.0050 U**	mg/L	0.0050	0.0017	2	11/08/23 11:52	11/09/23 12:06	7782-49-2	
Silver	**0.0018J**	mg/L	0.0050	0.0011	2	11/08/23 11:52	11/09/23 12:06	7440-22-4	
Thallium	**0.0010 U**	mg/L	0.0010	0.00016	2	11/08/23 11:52	11/09/23 12:06	7440-28-0	
Vanadium	**0.0050 U**	mg/L	0.0050	0.0024	2	11/08/23 11:52	11/09/23 12:06	7440-62-2	
Zinc	**0.020**	mg/L	0.010	0.0080	2	11/08/23 11:52	11/09/23 12:06	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/06/23 12:37	11/06/23 16:38	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/07/23 13:22	11/09/23 10:32	96-12-8	1c,CH, L2
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/11/23 12:20	11/11/23 17:25	96-12-8	2c,5c, H2

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-FALL 2023
Pace Project No.: 30636257

Sample: TW-7 **Lab ID: 30636257001** Collected: 11/01/23 12:50 Received: 11/02/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/07/23 13:22	11/09/23 10:32	106-93-4	1c,CH, L2
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/11/23 12:20	11/11/23 17:25	106-93-4	2c,5c, H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	90	%.	60-140		1	11/11/23 12:20	11/11/23 17:25	630-20-6	
1,1,1,2-Tetrachloroethane (S)	38	%.	60-140		1	11/07/23 13:22	11/09/23 10:32	630-20-6	CH,SR
2320B Alkalinity	Analytical Method: SM 2320B-2011								
	Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**12.0**	mg/L	10.0	1.0	1		11/08/23 09:24		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015								
	Pace Analytical Services - Greensburg								
Total Dissolved Solids	**54.0**	mg/L	10.0	10.0	1		11/07/23 15:44		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1								
	Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.14**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 11:26		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
	Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.8J**	mg/L	25.0	4.7	1	11/07/23 09:30	11/07/23 15:30		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
	Pace Analytical Services - Greensburg								
Chloride	**15.0**	mg/L	3.0	0.67	1		11/07/23 11:48	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/03/23 12:06	14808-79-8	

Sample: TW-7A **Lab ID: 30636257002** Collected: 11/01/23 12:15 Received: 11/02/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Iron	**0.015J**	mg/L	0.050	0.0056	1	11/09/23 11:30	11/10/23 08:57	7439-89-6	
Manganese	**0.033**	mg/L	0.0050	0.00055	1	11/09/23 11:30	11/10/23 08:57	7439-96-5	
Calcium	**3.0**	mg/L	0.50	0.054	1	11/09/23 11:30	11/10/23 08:57	7440-70-2	
Magnesium	**1.7**	mg/L	0.50	0.021	1	11/09/23 11:30	11/10/23 08:57	7439-95-4	
Sodium	**4.0**	mg/L	0.50	0.11	1	11/09/23 11:30	11/10/23 08:57	7440-23-5	

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ANALYTICAL RESULTS

Project: MLF-FALL 2023
Pace Project No.: 30636257

Sample: TW-7A **Lab ID: 30636257002** Collected: 11/01/23 12:15 Received: 11/02/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Potassium	**0.93**	mg/L	0.50	0.20	1	11/09/23 11:30	11/10/23 08:57	7440-09-7	
Total Hardness	**14.4**	mg/L	3.3	0.22	1	11/09/23 11:30	11/10/23 08:57		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.036	1	11/09/23 10:28	11/13/23 15:25	7439-89-6	
Manganese, Dissolved	**0.032**	mg/L	0.0050	0.0027	1	11/09/23 10:28	11/13/23 15:25	7439-96-5	
Calcium, Dissolved	**2.8**	mg/L	0.50	0.083	1	11/09/23 10:28	11/13/23 15:25	7440-70-2	
Magnesium, Dissolved	**1.7**	mg/L	0.50	0.047	1	11/09/23 10:28	11/13/23 15:25	7439-95-4	
Sodium, Dissolved	**4.4**	mg/L	0.50	0.34	1	11/09/23 10:28	11/13/23 15:25	7440-23-5	
Potassium, Dissolved	**1.0**	mg/L	0.50	0.26	1	11/09/23 10:28	11/13/23 15:25	7440-09-7	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/08/23 11:52	11/09/23 12:09	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/08/23 11:52	11/09/23 12:09	7440-38-2	
Barium	**0.063**	mg/L	0.0025	0.00098	1	11/08/23 11:52	11/09/23 12:09	7440-39-3	
Beryllium	**0.00012J**	mg/L	0.00050	0.00010	1	11/08/23 11:52	11/09/23 12:09	7440-41-7	
Cadmium	**0.00017J**	mg/L	0.00050	0.00013	1	11/08/23 11:52	11/09/23 12:09	7440-43-9	
Chromium	**0.0023J**	mg/L	0.0025	0.00050	1	11/08/23 11:52	11/09/23 12:09	7440-47-3	
Cobalt	**0.0055**	mg/L	0.0025	0.00081	1	11/08/23 11:52	11/09/23 12:09	7440-48-4	
Copper	**0.0067**	mg/L	0.0025	0.00064	1	11/08/23 11:52	11/09/23 12:09	7440-50-8	B
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/08/23 11:52	11/09/23 12:09	7439-92-1	
Nickel	**0.0059**	mg/L	0.0025	0.00065	1	11/08/23 11:52	11/09/23 12:09	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/08/23 11:52	11/09/23 12:09	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/08/23 11:52	11/09/23 12:09	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/08/23 11:52	11/09/23 12:09	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/08/23 11:52	11/09/23 12:09	7440-62-2	
Zinc	**0.0092**	mg/L	0.0050	0.0040	1	11/08/23 11:52	11/09/23 12:09	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/06/23 12:37	11/06/23 16:40	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/07/23 13:22	11/09/23 10:45	96-12-8	1c,CH, L2,ML, P2
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/07/23 13:22	11/09/23 10:45	106-93-4	1c,CH, L2,ML, P2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	36	%.	60-140		1	11/07/23 13:22	11/09/23 10:45	630-20-6	CH,P2, SR

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ANALYTICAL RESULTS

Project: MLF-FALL 2023
Pace Project No.: 30636257

Sample: TW-7A **Lab ID: 30636257002** Collected: 11/01/23 12:15 Received: 11/02/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		11/08/23 09:27		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**35.0**	mg/L	10.0	10.0	1		11/07/23 15:44		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 11:28		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.8J**	mg/L	25.0	4.7	1	11/07/23 09:30	11/07/23 15:30		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**9.0**	mg/L	3.0	0.67	1		11/07/23 11:48	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**8.7J**	mg/L	10.0	4.7	1		11/03/23 12:10	14808-79-8	

Sample: TW-8 **Lab ID: 30636257003** Collected: 11/01/23 13:40 Received: 11/02/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**6.6**	mg/L	0.50	0.054	1	11/07/23 10:38	11/08/23 14:02	7440-70-2	
Iron	**35.7**	mg/L	0.050	0.0056	1	11/07/23 10:38	11/08/23 14:02	7439-89-6	
Magnesium	**4.1**	mg/L	0.50	0.021	1	11/07/23 10:38	11/08/23 14:02	7439-95-4	
Manganese	**0.62**	mg/L	0.0050	0.00055	1	11/07/23 10:38	11/08/23 14:02	7439-96-5	
Potassium	**1.4**	mg/L	0.50	0.20	1	11/07/23 10:38	11/08/23 14:02	7440-09-7	
Sodium	**27.8**	mg/L	0.50	0.11	1	11/07/23 10:38	11/08/23 14:02	7440-23-5	
Total Hardness	**33.4**	mg/L	3.3	0.22	1	11/07/23 10:38	11/08/23 14:02		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**6.2**	mg/L	0.50	0.054	1	11/07/23 15:00	11/08/23 17:36	7440-70-2	
Iron, Dissolved	**26.3**	mg/L	0.050	0.0056	1	11/07/23 15:00	11/08/23 17:36	7439-89-6	
Magnesium, Dissolved	**3.8**	mg/L	0.50	0.021	1	11/07/23 15:00	11/08/23 17:36	7439-95-4	
Manganese, Dissolved	**0.58**	mg/L	0.0050	0.00055	1	11/07/23 15:00	11/08/23 17:36	7439-96-5	

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ANALYTICAL RESULTS

Project: MLF-FALL 2023
Pace Project No.: 30636257

Sample: TW-8 **Lab ID: 30636257003** Collected: 11/01/23 13:40 Received: 11/02/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Potassium, Dissolved	**1.4**	mg/L	0.50	0.20	1	11/07/23 15:00	11/08/23 17:36	7440-09-7	
Sodium, Dissolved	**26.0**	mg/L	0.50	0.11	1	11/07/23 15:00	11/08/23 17:36	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.0010 U**	mg/L	0.0010	0.00059	2	11/08/23 11:52	11/09/23 12:12	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.00088	2	11/08/23 11:52	11/09/23 12:12	7440-38-2	
Barium	**0.17**	mg/L	0.0050	0.0020	2	11/08/23 11:52	11/09/23 12:12	7440-39-3	
Beryllium	**0.00044J**	mg/L	0.0010	0.00020	2	11/08/23 11:52	11/09/23 12:12	7440-41-7	
Cadmium	**0.0010 U**	mg/L	0.0010	0.00027	2	11/08/23 11:52	11/09/23 12:12	7440-43-9	
Chromium	**0.0017J**	mg/L	0.0050	0.0010	2	11/08/23 11:52	11/09/23 12:12	7440-47-3	
Cobalt	**0.0060**	mg/L	0.0050	0.0016	2	11/08/23 11:52	11/09/23 12:12	7440-48-4	
Copper	**0.0081**	mg/L	0.0050	0.0013	2	11/08/23 11:52	11/09/23 12:12	7440-50-8	B
Lead	**0.0010 U**	mg/L	0.0010	0.00050	2	11/08/23 11:52	11/09/23 12:12	7439-92-1	
Nickel	**0.0051**	mg/L	0.0050	0.0013	2	11/08/23 11:52	11/09/23 12:12	7440-02-0	
Selenium	**0.0050 U**	mg/L	0.0050	0.0017	2	11/08/23 11:52	11/09/23 12:12	7782-49-2	
Silver	**0.0050 U**	mg/L	0.0050	0.0011	2	11/08/23 11:52	11/09/23 12:12	7440-22-4	
Thallium	**0.0010 U**	mg/L	0.0010	0.00016	2	11/08/23 11:52	11/09/23 12:12	7440-28-0	
Vanadium	**0.0050 U**	mg/L	0.0050	0.0024	2	11/08/23 11:52	11/09/23 12:12	7440-62-2	
Zinc	**0.013**	mg/L	0.010	0.0080	2	11/08/23 11:52	11/09/23 12:12	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/06/23 12:37	11/06/23 16:43	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/07/23 13:22	11/09/23 11:25	96-12-8	1c,CH, L2
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/11/23 12:20	11/11/23 17:38	96-12-8	2c,5c, H2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/07/23 13:22	11/09/23 11:25	106-93-4	1c,CH, L2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/11/23 12:20	11/11/23 17:38	106-93-4	2c,5c, H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	97	%.	60-140		1	11/11/23 12:20	11/11/23 17:38	630-20-6	
1,1,1,2-Tetrachloroethane (S)	41	%.	60-140		1	11/07/23 13:22	11/09/23 11:25	630-20-6	CH,SR
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**36.0**	mg/L	10.0	1.0	1		11/08/23 09:28		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**134**	mg/L	10.0	10.0	1		11/07/23 15:44		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-FALL 2023
Pace Project No.: 30636257

Sample: TW-8 **Lab ID: 30636257003** Collected: 11/01/23 13:40 Received: 11/02/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 11:34		MH
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**9.0J**	mg/L	25.0	4.7	1	11/07/23 09:30	11/07/23 15:30		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**55.3**	mg/L	3.0	0.67	1		11/07/23 11:49	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**5.1J**	mg/L	10.0	4.7	1		11/03/23 12:10	14808-79-8	

Sample: TW-8A **Lab ID: 30636257004** Collected: 11/01/23 14:15 Received: 11/02/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**8.7**	mg/L	0.50	0.054	1	11/09/23 11:30	11/10/23 08:59	7440-70-2	
Iron	**0.15**	mg/L	0.050	0.0056	1	11/09/23 11:30	11/10/23 08:59	7439-89-6	
Magnesium	**5.4**	mg/L	0.50	0.021	1	11/09/23 11:30	11/10/23 08:59	7439-95-4	
Manganese	**0.22**	mg/L	0.0050	0.00055	1	11/09/23 11:30	11/10/23 08:59	7439-96-5	
Potassium	**2.0**	mg/L	0.50	0.20	1	11/09/23 11:30	11/10/23 08:59	7440-09-7	
Sodium	**56.4**	mg/L	0.50	0.11	1	11/09/23 11:30	11/10/23 08:59	7440-23-5	
Total Hardness	**43.7**	mg/L	3.3	0.22	1	11/09/23 11:30	11/10/23 08:59		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**8.5**	mg/L	0.50	0.054	1	11/09/23 10:28	11/13/23 15:27	7440-70-2	
Iron, Dissolved	**0.051**	mg/L	0.050	0.0056	1	11/09/23 10:28	11/13/23 15:27	7439-89-6	
Magnesium, Dissolved	**5.4**	mg/L	0.50	0.021	1	11/09/23 10:28	11/13/23 15:27	7439-95-4	
Manganese, Dissolved	**0.21**	mg/L	0.0050	0.00055	1	11/09/23 10:28	11/13/23 15:27	7439-96-5	
Potassium, Dissolved	**2.1**	mg/L	0.50	0.20	1	11/09/23 10:28	11/13/23 15:27	7440-09-7	
Sodium, Dissolved	**56.0**	mg/L	0.50	0.11	1	11/09/23 10:28	11/13/23 15:27	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/08/23 11:52	11/09/23 12:15	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/08/23 11:52	11/09/23 12:15	7440-38-2	
Barium	**0.15**	mg/L	0.0025	0.00098	1	11/08/23 11:52	11/09/23 12:15	7440-39-3	
Beryllium	**0.00047J**	mg/L	0.00050	0.00010	1	11/08/23 11:52	11/09/23 12:15	7440-41-7	

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ANALYTICAL RESULTS

Project: MLF-FALL 2023
Pace Project No.: 30636257

Sample: TW-8A **Lab ID: 30636257004** Collected: 11/01/23 14:15 Received: 11/02/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Cadmium	**0.00044J**	mg/L	0.00050	0.00013	1	11/08/23 11:52	11/09/23 12:15	7440-43-9	
Chromium	**0.015**	mg/L	0.0025	0.00050	1	11/08/23 11:52	11/09/23 12:15	7440-47-3	
Cobalt	**0.013**	mg/L	0.0025	0.00081	1	11/08/23 11:52	11/09/23 12:15	7440-48-4	
Copper	**0.014**	mg/L	0.0025	0.00064	1	11/08/23 11:52	11/09/23 12:15	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/08/23 11:52	11/09/23 12:15	7439-92-1	
Nickel	**0.018**	mg/L	0.0025	0.00065	1	11/08/23 11:52	11/09/23 12:15	7440-02-0	
Selenium	**0.0012J**	mg/L	0.0025	0.00084	1	11/08/23 11:52	11/09/23 12:15	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/08/23 11:52	11/09/23 12:15	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/08/23 11:52	11/09/23 12:15	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/08/23 11:52	11/09/23 12:15	7440-62-2	
Zinc	**0.033**	mg/L	0.0050	0.0040	1	11/08/23 11:52	11/09/23 12:15	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/06/23 12:37	11/06/23 16:45	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/07/23 13:22	11/09/23 11:38	96-12-8	1c,CH, L2
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.022	1	11/11/23 12:20	11/11/23 17:52	96-12-8	2c,5c, H2
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.030	1	11/07/23 13:22	11/09/23 11:38	106-93-4	1c,CH, L2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	11/11/23 12:20	11/11/23 17:52	106-93-4	2c,5c, H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	101	%.	60-140		1	11/11/23 12:20	11/11/23 17:52	630-20-6	
1,1,1,2-Tetrachloroethane (S)	32	%.	60-140		1	11/07/23 13:22	11/09/23 11:38	630-20-6	CH,SR
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		11/08/23 09:31		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**211**	mg/L	10.0	10.0	1		11/07/23 15:44		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 11:40		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**11.3J**	mg/L	25.0	4.7	1	11/07/23 09:30	11/07/23 15:31		

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ANALYTICAL RESULTS

Project: MLF-FALL 2023
Pace Project No.: 30636257

Sample: TW-8A **Lab ID: 30636257004** Collected: 11/01/23 14:15 Received: 11/02/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**95.4**	mg/L	3.0	0.67	1		11/07/23 11:50	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**27.2**	mg/L	10.0	4.7	1		11/03/23 12:12	14808-79-8	

Sample: TW-9B **Lab ID: 30636257005** Collected: 11/01/23 14:50 Received: 11/02/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**3.7**	mg/L	0.50	0.054	1	11/09/23 11:30	11/10/23 09:01	7440-70-2	
Iron	**0.052**	mg/L	0.050	0.0056	1	11/09/23 11:30	11/10/23 09:01	7439-89-6	
Magnesium	**2.2**	mg/L	0.50	0.021	1	11/09/23 11:30	11/10/23 09:01	7439-95-4	
Manganese	**0.028**	mg/L	0.0050	0.00055	1	11/09/23 11:30	11/10/23 09:01	7439-96-5	
Potassium	**1.4**	mg/L	0.50	0.20	1	11/09/23 11:30	11/10/23 09:01	7440-09-7	
Sodium	**13.7**	mg/L	0.50	0.11	1	11/09/23 11:30	11/10/23 09:01	7440-23-5	
Total Hardness	**18.4**	mg/L	3.3	0.22	1	11/09/23 11:30	11/10/23 09:01		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**3.7**	mg/L	0.50	0.054	1	11/09/23 10:28	11/13/23 15:29	7440-70-2	
Iron, Dissolved	**0.053**	mg/L	0.050	0.0056	1	11/09/23 10:28	11/13/23 15:29	7439-89-6	
Magnesium, Dissolved	**2.4**	mg/L	0.50	0.021	1	11/09/23 10:28	11/13/23 15:29	7439-95-4	
Manganese, Dissolved	**0.032**	mg/L	0.0050	0.00055	1	11/09/23 10:28	11/13/23 15:29	7439-96-5	
Potassium, Dissolved	**1.6**	mg/L	0.50	0.20	1	11/09/23 10:28	11/13/23 15:29	7440-09-7	
Sodium, Dissolved	**14.4**	mg/L	0.50	0.11	1	11/09/23 10:28	11/13/23 15:29	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/08/23 11:52	11/09/23 12:18	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/08/23 11:52	11/09/23 12:18	7440-38-2	
Barium	**0.039**	mg/L	0.0025	0.00098	1	11/08/23 11:52	11/09/23 12:18	7440-39-3	
Beryllium	**0.00015J**	mg/L	0.00050	0.00010	1	11/08/23 11:52	11/09/23 12:18	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/08/23 11:52	11/09/23 12:18	7440-43-9	
Chromium	**0.0018J**	mg/L	0.0025	0.00050	1	11/08/23 11:52	11/09/23 12:18	7440-47-3	
Cobalt	**0.0070**	mg/L	0.0025	0.00081	1	11/08/23 11:52	11/09/23 12:18	7440-48-4	
Copper	**0.0034**	mg/L	0.0025	0.00064	1	11/08/23 11:52	11/09/23 12:18	7440-50-8	B
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/08/23 11:52	11/09/23 12:18	7439-92-1	
Nickel	**0.012**	mg/L	0.0025	0.00065	1	11/08/23 11:52	11/09/23 12:18	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/08/23 11:52	11/09/23 12:18	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/08/23 11:52	11/09/23 12:18	7440-22-4	

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ANALYTICAL RESULTS

Project: MLF-FALL 2023
Pace Project No.: 30636257

Sample: TW-9B **Lab ID: 30636257005** Collected: 11/01/23 14:50 Received: 11/02/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/08/23 11:52	11/09/23 12:18	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/08/23 11:52	11/09/23 12:18	7440-62-2	
Zinc	**0.018**	mg/L	0.0050	0.0040	1	11/08/23 11:52	11/09/23 12:18	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/06/23 12:37	11/06/23 16:47	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/07/23 13:22	11/09/23 11:52	96-12-8	1c,CH, L2
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/11/23 12:20	11/11/23 18:05	96-12-8	2c,5c, H2
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/07/23 13:22	11/09/23 11:52	106-93-4	1c,CH, L2
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/11/23 12:20	11/11/23 18:05	106-93-4	2c,5c, H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	58	%.	60-140		1	11/07/23 13:22	11/09/23 11:52	630-20-6	CH,SR
1,1,1,2-Tetrachloroethane (S)	103	%.	60-140		1	11/11/23 12:20	11/11/23 18:05	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		11/08/23 09:36		4c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**57.0**	mg/L	10.0	10.0	1		11/07/23 15:44		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 11:42		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/07/23 09:30	11/07/23 15:31		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**24.0**	mg/L	3.0	0.67	1		11/07/23 11:51	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**6.1J**	mg/L	10.0	4.7	1		11/03/23 12:13	14808-79-8	

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ANALYTICAL RESULTS

Project: MLF-FALL 2023
Pace Project No.: 30636257

Sample: TW-9C **Lab ID: 30636257006** Collected: 11/01/23 15:25 Received: 11/02/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**5.0**	mg/L	0.50	0.054	1	11/09/23 11:30	11/10/23 09:03	7440-70-2	
Iron	**0.016J**	mg/L	0.050	0.0056	1	11/09/23 11:30	11/10/23 09:03	7439-89-6	
Magnesium	**3.7**	mg/L	0.50	0.021	1	11/09/23 11:30	11/10/23 09:03	7439-95-4	
Manganese	**0.13**	mg/L	0.0050	0.00055	1	11/09/23 11:30	11/10/23 09:03	7439-96-5	
Potassium	**1.9**	mg/L	0.50	0.20	1	11/09/23 11:30	11/10/23 09:03	7440-09-7	
Sodium	**12.5**	mg/L	0.50	0.11	1	11/09/23 11:30	11/10/23 09:03	7440-23-5	
Total Hardness	**27.5**	mg/L	3.3	0.22	1	11/09/23 11:30	11/10/23 09:03		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**4.9**	mg/L	0.50	0.054	1	11/09/23 10:28	11/13/23 15:31	7440-70-2	
Iron, Dissolved	**0.0070J**	mg/L	0.050	0.0056	1	11/09/23 10:28	11/13/23 15:31	7439-89-6	
Magnesium, Dissolved	**3.9**	mg/L	0.50	0.021	1	11/09/23 10:28	11/13/23 15:31	7439-95-4	
Manganese, Dissolved	**0.13**	mg/L	0.0050	0.00055	1	11/09/23 10:28	11/13/23 15:31	7439-96-5	
Potassium, Dissolved	**2.1**	mg/L	0.50	0.20	1	11/09/23 10:28	11/13/23 15:31	7440-09-7	
Sodium, Dissolved	**13.0**	mg/L	0.50	0.11	1	11/09/23 10:28	11/13/23 15:31	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/08/23 11:52	11/09/23 12:21	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/08/23 11:52	11/09/23 12:21	7440-38-2	
Barium	**0.12**	mg/L	0.0025	0.00098	1	11/08/23 11:52	11/09/23 12:21	7440-39-3	
Beryllium	**0.00025J**	mg/L	0.00050	0.00010	1	11/08/23 11:52	11/09/23 12:21	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/08/23 11:52	11/09/23 12:21	7440-43-9	
Chromium	**0.0024J**	mg/L	0.0025	0.00050	1	11/08/23 11:52	11/09/23 12:21	7440-47-3	
Cobalt	**0.014**	mg/L	0.0025	0.00081	1	11/08/23 11:52	11/09/23 12:21	7440-48-4	
Copper	**0.0062**	mg/L	0.0025	0.00064	1	11/08/23 11:52	11/09/23 12:21	7440-50-8	B
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/08/23 11:52	11/09/23 12:21	7439-92-1	
Nickel	**0.012**	mg/L	0.0025	0.00065	1	11/08/23 11:52	11/09/23 12:21	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/08/23 11:52	11/09/23 12:21	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/08/23 11:52	11/09/23 12:21	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/08/23 11:52	11/09/23 12:21	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/08/23 11:52	11/09/23 12:21	7440-62-2	
Zinc	**0.018**	mg/L	0.0050	0.0040	1	11/08/23 11:52	11/09/23 12:21	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/06/23 12:37	11/06/23 16:49	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/07/23 13:22	11/09/23 12:05	96-12-8	1c,CH, L2
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/11/23 12:20	11/11/23 18:19	96-12-8	2c,5c, H2

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ANALYTICAL RESULTS

Project: MLF-FALL 2023
Pace Project No.: 30636257

Sample: TW-9C **Lab ID: 30636257006** Collected: 11/01/23 15:25 Received: 11/02/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/07/23 13:22	11/09/23 12:05	106-93-4	1c,CH, L2
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/11/23 12:20	11/11/23 18:19	106-93-4	2c,5c, H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	93	%.	60-140		1	11/11/23 12:20	11/11/23 18:19	630-20-6	
1,1,1,2-Tetrachloroethane (S)	63	%.	60-140		1	11/07/23 13:22	11/09/23 12:05	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011								
	Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		11/08/23 09:37		4c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015								
	Pace Analytical Services - Greensburg								
Total Dissolved Solids	**72.0**	mg/L	10.0	10.0	1		11/07/23 15:44		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1								
	Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 11:44		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
	Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.8J**	mg/L	25.0	4.7	1	11/07/23 09:30	11/07/23 15:31		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
	Pace Analytical Services - Greensburg								
Chloride	**22.3**	mg/L	3.0	0.67	1		11/07/23 11:55	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**16.1**	mg/L	10.0	4.7	1		11/03/23 12:15	14808-79-8	

Sample: TW-10A **Lab ID: 30636257007** Collected: 10/31/23 15:30 Received: 11/02/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Calcium	**6.0**	mg/L	0.50	0.054	1	11/09/23 11:30	11/10/23 09:05	7440-70-2	
Iron	**0.030J**	mg/L	0.050	0.0056	1	11/09/23 11:30	11/10/23 09:05	7439-89-6	
Magnesium	**3.6**	mg/L	0.50	0.021	1	11/09/23 11:30	11/10/23 09:05	7439-95-4	
Manganese	**0.068**	mg/L	0.0050	0.00055	1	11/09/23 11:30	11/10/23 09:05	7439-96-5	
Potassium	**2.3**	mg/L	0.50	0.20	1	11/09/23 11:30	11/10/23 09:05	7440-09-7	

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ANALYTICAL RESULTS

Project: MLF-FALL 2023
Pace Project No.: 30636257

Sample: TW-10A **Lab ID: 30636257007** Collected: 10/31/23 15:30 Received: 11/02/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**26.3**	mg/L	0.50	0.11	1	11/09/23 11:30	11/10/23 09:05	7440-23-5	
Total Hardness	**29.6**	mg/L	3.3	0.22	1	11/09/23 11:30	11/10/23 09:05		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**5.7**	mg/L	0.50	0.054	1	11/09/23 10:28	11/13/23 15:33	7440-70-2	
Iron, Dissolved	**0.037J**	mg/L	0.050	0.0056	1	11/09/23 10:28	11/13/23 15:33	7439-89-6	
Magnesium, Dissolved	**3.6**	mg/L	0.50	0.021	1	11/09/23 10:28	11/13/23 15:33	7439-95-4	
Manganese, Dissolved	**0.064**	mg/L	0.0050	0.00055	1	11/09/23 10:28	11/13/23 15:33	7439-96-5	
Potassium, Dissolved	**2.4**	mg/L	0.50	0.20	1	11/09/23 10:28	11/13/23 15:33	7440-09-7	
Sodium, Dissolved	**25.9**	mg/L	0.50	0.11	1	11/09/23 10:28	11/13/23 15:33	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/08/23 11:52	11/09/23 12:34	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/08/23 11:52	11/09/23 12:34	7440-38-2	
Barium	**0.092**	mg/L	0.0025	0.00098	1	11/08/23 11:52	11/09/23 12:34	7440-39-3	
Beryllium	**0.00053**	mg/L	0.00050	0.00010	1	11/08/23 11:52	11/09/23 12:34	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/08/23 11:52	11/09/23 12:34	7440-43-9	
Chromium	**0.0018J**	mg/L	0.0025	0.00050	1	11/08/23 11:52	11/09/23 12:34	7440-47-3	
Cobalt	**0.015**	mg/L	0.0025	0.00081	1	11/08/23 11:52	11/09/23 12:34	7440-48-4	
Copper	**0.0059**	mg/L	0.0025	0.00064	1	11/08/23 11:52	11/09/23 12:34	7440-50-8	B
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/08/23 11:52	11/09/23 12:34	7439-92-1	
Nickel	**0.014**	mg/L	0.0025	0.00065	1	11/08/23 11:52	11/09/23 12:34	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/08/23 11:52	11/09/23 12:34	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/08/23 11:52	11/09/23 12:34	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/08/23 11:52	11/09/23 12:34	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/08/23 11:52	11/09/23 12:34	7440-62-2	
Zinc	**0.023**	mg/L	0.0050	0.0040	1	11/08/23 11:52	11/09/23 12:34	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/06/23 12:37	11/06/23 16:51	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/07/23 13:22	11/09/23 12:18	96-12-8	1c,CH, L2
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/11/23 12:20	11/11/23 18:32	96-12-8	2c,5c, H2
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/07/23 13:22	11/09/23 12:18	106-93-4	1c,CH, L2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/11/23 12:20	11/11/23 18:32	106-93-4	2c,5c, H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	64	%.	60-140		1	11/07/23 13:22	11/09/23 12:18	630-20-6	CH

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-FALL 2023
Pace Project No.: 30636257

Sample: TW-10A **Lab ID: 30636257007** Collected: 10/31/23 15:30 Received: 11/02/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
Surrogates									
1,1,1,2-Tetrachloroethane (S)	96	%.	60-140		1	11/11/23 12:20	11/11/23 18:32	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		11/08/23 09:21		3c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**130**	mg/L	10.0	10.0	1		11/07/23 15:44		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 13:02		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/09/23 10:50	11/09/23 15:00		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**49.6**	mg/L	3.0	0.67	1		11/07/23 11:58	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**11.4**	mg/L	10.0	4.7	1		11/03/23 12:15	14808-79-8	

Sample: TW-20R **Lab ID: 30636257008** Collected: 10/31/23 14:40 Received: 11/02/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**14.5**	mg/L	0.50	0.054	1	11/09/23 11:30	11/10/23 09:07	7440-70-2	
Iron	**0.16**	mg/L	0.050	0.0056	1	11/09/23 11:30	11/10/23 09:07	7439-89-6	
Magnesium	**3.7**	mg/L	0.50	0.021	1	11/09/23 11:30	11/10/23 09:07	7439-95-4	
Manganese	**0.037**	mg/L	0.0050	0.00055	1	11/09/23 11:30	11/10/23 09:07	7439-96-5	
Potassium	**3.4**	mg/L	0.50	0.20	1	11/09/23 11:30	11/10/23 09:07	7440-09-7	
Sodium	**14.2**	mg/L	0.50	0.11	1	11/09/23 11:30	11/10/23 09:07	7440-23-5	
Total Hardness	**51.5**	mg/L	3.3	0.22	1	11/09/23 11:30	11/10/23 09:07		N3

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ANALYTICAL RESULTS

Project: MLF-FALL 2023
Pace Project No.: 30636257

Sample: TW-20R **Lab ID: 30636257008** Collected: 10/31/23 14:40 Received: 11/02/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**14.5**	mg/L	0.50	0.054	1	11/09/23 10:28	11/13/23 15:35	7440-70-2	
Iron, Dissolved	**0.0095J**	mg/L	0.050	0.0056	1	11/09/23 10:28	11/13/23 15:35	7439-89-6	
Magnesium, Dissolved	**3.8**	mg/L	0.50	0.021	1	11/09/23 10:28	11/13/23 15:35	7439-95-4	
Manganese, Dissolved	**0.037**	mg/L	0.0050	0.00055	1	11/09/23 10:28	11/13/23 15:35	7439-96-5	
Potassium, Dissolved	**3.5**	mg/L	0.50	0.20	1	11/09/23 10:28	11/13/23 15:35	7440-09-7	
Sodium, Dissolved	**14.5**	mg/L	0.50	0.11	1	11/09/23 10:28	11/13/23 15:35	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/08/23 11:52	11/09/23 12:37	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/08/23 11:52	11/09/23 12:37	7440-38-2	
Barium	**0.044**	mg/L	0.0025	0.00098	1	11/08/23 11:52	11/09/23 12:37	7440-39-3	
Beryllium	**0.00040J**	mg/L	0.00050	0.00010	1	11/08/23 11:52	11/09/23 12:37	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/08/23 11:52	11/09/23 12:37	7440-43-9	
Chromium	**0.0035**	mg/L	0.0025	0.00050	1	11/08/23 11:52	11/09/23 12:37	7440-47-3	
Cobalt	**0.0028**	mg/L	0.0025	0.00081	1	11/08/23 11:52	11/09/23 12:37	7440-48-4	
Copper	**0.015**	mg/L	0.0025	0.00064	1	11/08/23 11:52	11/09/23 12:37	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/08/23 11:52	11/09/23 12:37	7439-92-1	
Nickel	**0.0031**	mg/L	0.0025	0.00065	1	11/08/23 11:52	11/09/23 12:37	7440-02-0	
Selenium	**0.0015J**	mg/L	0.0025	0.00084	1	11/08/23 11:52	11/09/23 12:37	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/08/23 11:52	11/09/23 12:37	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/08/23 11:52	11/09/23 12:37	7440-28-0	
Vanadium	**0.0039**	mg/L	0.0025	0.0012	1	11/08/23 11:52	11/09/23 12:37	7440-62-2	
Zinc	**0.0053**	mg/L	0.0050	0.0040	1	11/08/23 11:52	11/09/23 12:37	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/06/23 12:37	11/06/23 16:54	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/07/23 13:22	11/09/23 12:32	96-12-8	1c,CH, L2
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/11/23 12:20	11/11/23 18:45	96-12-8	2c,5c, H2
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/07/23 13:22	11/09/23 12:32	106-93-4	1c,CH, L2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/11/23 12:20	11/11/23 18:45	106-93-4	2c,5c, H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	93	%.	60-140		1	11/11/23 12:20	11/11/23 18:45	630-20-6	
1,1,1,2-Tetrachloroethane (S)	64	%.	60-140		1	11/07/23 13:22	11/09/23 12:32	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		11/08/23 09:22		3c

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ANALYTICAL RESULTS

Project: MLF-FALL 2023
Pace Project No.: 30636257

Sample: TW-20R **Lab ID: 30636257008** Collected: 10/31/23 14:40 Received: 11/02/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**118**	mg/L	10.0	10.0	1		11/07/23 15:44		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 13:04		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**13.6J**	mg/L	25.0	4.7	1	11/07/23 09:30	11/07/23 15:31		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**16.6**	mg/L	3.0	0.67	1		11/07/23 11:59	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**55.2**	mg/L	10.0	4.7	1		11/03/23 12:17	14808-79-8	

Sample: TW-23R **Lab ID: 30636257009** Collected: 11/01/23 11:30 Received: 11/02/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**2.8**	mg/L	0.50	0.054	1	11/07/23 10:38	11/08/23 14:14	7440-70-2	
Iron	**0.41**	mg/L	0.050	0.0056	1	11/07/23 10:38	11/08/23 14:14	7439-89-6	
Magnesium	**1.1**	mg/L	0.50	0.021	1	11/07/23 10:38	11/08/23 14:14	7439-95-4	
Manganese	**0.030**	mg/L	0.0050	0.00055	1	11/07/23 10:38	11/08/23 14:14	7439-96-5	
Potassium	**1.0**	mg/L	0.50	0.20	1	11/07/23 10:38	11/08/23 14:14	7440-09-7	
Sodium	**4.1**	mg/L	0.50	0.11	1	11/07/23 10:38	11/08/23 14:14	7440-23-5	
Total Hardness	**11.4**	mg/L	3.3	0.22	1	11/07/23 10:38	11/08/23 14:14		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**2.6**	mg/L	0.50	0.054	1	11/07/23 15:00	11/08/23 17:52	7440-70-2	
Iron, Dissolved	**0.39**	mg/L	0.050	0.0056	1	11/07/23 15:00	11/08/23 17:52	7439-89-6	
Magnesium, Dissolved	**0.96**	mg/L	0.50	0.021	1	11/07/23 15:00	11/08/23 17:52	7439-95-4	
Manganese, Dissolved	**0.034**	mg/L	0.0050	0.00055	1	11/07/23 15:00	11/08/23 17:52	7439-96-5	
Potassium, Dissolved	**0.98**	mg/L	0.50	0.20	1	11/07/23 15:00	11/08/23 17:52	7440-09-7	
Sodium, Dissolved	**3.9**	mg/L	0.50	0.11	1	11/07/23 15:00	11/08/23 17:52	7440-23-5	

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ANALYTICAL RESULTS

Project: MLF-FALL 2023
Pace Project No.: 30636257

Sample: TW-23R **Lab ID: 30636257009** Collected: 11/01/23 11:30 Received: 11/02/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/08/23 11:52	11/09/23 12:40	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/08/23 11:52	11/09/23 12:40	7440-38-2	
Barium	**0.015**	mg/L	0.0025	0.00098	1	11/08/23 11:52	11/09/23 12:40	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	11/08/23 11:52	11/09/23 12:40	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/08/23 11:52	11/09/23 12:40	7440-43-9	
Chromium	**0.032**	mg/L	0.0025	0.00050	1	11/08/23 11:52	11/09/23 12:40	7440-47-3	
Cobalt	**0.0062**	mg/L	0.0025	0.00081	1	11/08/23 11:52	11/09/23 12:40	7440-48-4	
Copper	**0.073**	mg/L	0.0025	0.00064	1	11/08/23 11:52	11/09/23 12:40	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/08/23 11:52	11/09/23 12:40	7439-92-1	
Nickel	**0.075**	mg/L	0.0025	0.00065	1	11/08/23 11:52	11/09/23 12:40	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/08/23 11:52	11/09/23 12:40	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/08/23 11:52	11/09/23 12:40	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/08/23 11:52	11/09/23 12:40	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/08/23 11:52	11/09/23 12:40	7440-62-2	
Zinc	**0.016**	mg/L	0.0050	0.0040	1	11/08/23 11:52	11/09/23 12:40	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/06/23 12:37	11/06/23 16:56	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/07/23 13:22	11/09/23 12:45	96-12-8	1c,CH, L2
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/11/23 12:20	11/11/23 18:59	96-12-8	2c,5c, H2
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/07/23 13:22	11/09/23 12:45	106-93-4	1c,CH, L2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/11/23 12:20	11/11/23 18:59	106-93-4	2c,5c, H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	50	%.	60-140		1	11/07/23 13:22	11/09/23 12:45	630-20-6	CH,SR
1,1,1,2-Tetrachloroethane (S)	101	%.	60-140		1	11/11/23 12:20	11/11/23 18:59	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		11/08/23 09:39		4c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**42.0**	mg/L	10.0	10.0	1		11/07/23 15:44		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 11:49		

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ANALYTICAL RESULTS

Project: MLF-FALL 2023
Pace Project No.: 30636257

Sample: TW-23R **Lab ID: 30636257009** Collected: 11/01/23 11:30 Received: 11/02/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.8J**	mg/L	25.0	4.7	1	11/07/23 09:30	11/07/23 15:31		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**8.0**	mg/L	3.0	0.67	1		11/07/23 12:00	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/03/23 12:18	14808-79-8	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30636257

QC Batch: 627546
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30636257001

METHOD BLANK: 3058815 Matrix: Water
Associated Lab Samples: 30636257001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.054	11/08/23 14:52	
Iron	mg/L	0.023J	0.050	0.0056	11/08/23 14:52	
Magnesium	mg/L	0.50 U	0.50	0.021	11/08/23 14:52	
Manganese	mg/L	0.0050 U	0.0050	0.00055	11/08/23 14:52	
Potassium	mg/L	0.50 U	0.50	0.20	11/08/23 14:52	
Sodium	mg/L	0.50 U	0.50	0.11	11/08/23 14:52	

LABORATORY CONTROL SAMPLE: 3058816

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	39.7	99	80-120	
Iron	mg/L	2	2.1	105	80-120	
Magnesium	mg/L	20	20.5	102	80-120	
Manganese	mg/L	2	2.1	107	80-120	
Potassium	mg/L	20	19.7	98	80-120	
Sodium	mg/L	20	19.7	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3058817 3058818

Parameter	Units	30632618001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	10100 ug/L	40	40	50.9	50.4	103	102	80-120	1	20	
Iron	mg/L	1790 ug/L	2	2	3.9	3.8	108	105	80-120	2	20	
Magnesium	mg/L	2740 ug/L	20	20	23.8	23.8	105	105	80-120	0	20	
Manganese	mg/L	75.8 ug/L	2	2	2.3	2.2	109	108	80-120	1	20	
Potassium	mg/L	1460 ug/L	20	20	22.0	21.8	103	102	80-120	1	20	
Sodium	mg/L	12600 ug/L	20	20	33.5	33.1	106	104	80-120	1	20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30636257

QC Batch: 627741
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30636257003, 30636257009

METHOD BLANK: 3059873 Matrix: Water
Associated Lab Samples: 30636257003, 30636257009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.054	11/08/23 13:28	
Iron	mg/L	0.019J	0.050	0.0056	11/08/23 13:28	
Magnesium	mg/L	0.50 U	0.50	0.021	11/08/23 13:28	
Manganese	mg/L	0.0050 U	0.0050	0.00055	11/08/23 13:28	
Potassium	mg/L	0.50 U	0.50	0.20	11/08/23 13:28	
Sodium	mg/L	0.50 U	0.50	0.11	11/08/23 13:28	

LABORATORY CONTROL SAMPLE: 3059874

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	40.9	102	80-120	
Iron	mg/L	2	2.2	108	80-120	
Magnesium	mg/L	20	21.6	108	80-120	
Manganese	mg/L	2	2.2	110	80-120	
Potassium	mg/L	20	20.0	100	80-120	
Sodium	mg/L	20	20.4	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3059875 3059876

Parameter	Units	30633508003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	95000 ug/L	40	40	137	144	106	122	80-120	5	20	M1
Iron	mg/L	1.5	2	2	3.9	4.0	119	125	80-120	3	20	M1
Magnesium	mg/L	16800 ug/L	20	20	39.2	41.1	112	121	80-120	5	20	M1
Manganese	mg/L	0.048	2	2	2.3	2.4	112	116	80-120	4	20	
Potassium	mg/L	2190 ug/L	20	20	24.1	25.1	110	114	80-120	4	20	
Sodium	mg/L	28600 ug/L	20	20	50.3	52.6	108	120	80-120	5	20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30636257

QC Batch: 628501
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30636257002, 30636257004, 30636257005, 30636257006, 30636257007, 30636257008

METHOD BLANK: 3063912 Matrix: Water
Associated Lab Samples: 30636257002, 30636257004, 30636257005, 30636257006, 30636257007, 30636257008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.054	11/10/23 08:28	
Iron	mg/L	0.050 U	0.050	0.0056	11/10/23 08:28	
Magnesium	mg/L	0.50 U	0.50	0.021	11/10/23 08:28	
Manganese	mg/L	0.0050 U	0.0050	0.00055	11/10/23 08:28	
Potassium	mg/L	0.50 U	0.50	0.20	11/10/23 08:28	
Sodium	mg/L	0.50 U	0.50	0.11	11/10/23 08:28	

LABORATORY CONTROL SAMPLE: 3063913

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	41.6	104	80-120	
Iron	mg/L	2	2.2	108	80-120	
Magnesium	mg/L	20	20.7	103	80-120	
Manganese	mg/L	2	2.2	108	80-120	
Potassium	mg/L	20	20.5	102	80-120	
Sodium	mg/L	20	20.4	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3063914 3063915

Parameter	Units	30632618001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	10100 ug/L	40	40	53.9	53.3	109	108	80-120	1	20	
Iron	mg/L	1790 ug/L	2	2	4.1	4.1	115	113	80-120	1	20	
Magnesium	mg/L	2740 ug/L	20	20	24.4	24.1	108	107	80-120	1	20	
Manganese	mg/L	75.8 ug/L	2	2	2.3	2.3	113	112	80-120	1	20	
Potassium	mg/L	1460 ug/L	20	20	23.3	23.0	109	108	80-120	1	20	
Sodium	mg/L	12600 ug/L	20	20	35.2	34.7	113	111	80-120	1	20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30636257

QC Batch: 627878
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30636257001

METHOD BLANK: 3060490 Matrix: Water
Associated Lab Samples: 30636257001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.054	11/08/23 16:17	
Iron, Dissolved	mg/L	0.019J	0.050	0.0056	11/08/23 16:17	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.021	11/08/23 16:17	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.00055	11/08/23 16:17	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.20	11/08/23 16:17	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.11	11/08/23 16:17	

LABORATORY CONTROL SAMPLE: 3060491

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	39.9	100	80-120	
Iron, Dissolved	mg/L	2	2.1	104	80-120	
Magnesium, Dissolved	mg/L	20	20.6	103	80-120	
Manganese, Dissolved	mg/L	2	2.1	106	80-120	
Potassium, Dissolved	mg/L	20	19.7	99	80-120	
Sodium, Dissolved	mg/L	20	19.9	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3060495 3060496

Parameter	Units	30635181001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	133000 ug/L	40	40	178	171	116	97	80-120	4	20	
Iron, Dissolved	mg/L	0.064	2	2	2.3	2.2	110	106	80-120	3	20	
Magnesium, Dissolved	mg/L	18000 ug/L	20	20	41.0	39.7	114	108	80-120	3	20	
Manganese, Dissolved	mg/L	0.23	2	2	2.5	2.4	112	107	80-120	4	20	
Potassium, Dissolved	mg/L	1960 ug/L	20	20	24.0	23.2	111	107	80-120	3	20	
Sodium, Dissolved	mg/L	11800 ug/L	20	20	34.5	33.3	113	107	80-120	4	20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30636257

QC Batch: 627904
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30636257003, 30636257009

METHOD BLANK: 3060601 Matrix: Water
Associated Lab Samples: 30636257002, 30636257003, 30636257009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.054	11/08/23 17:18	
Iron, Dissolved	mg/L	0.014J	0.050	0.0056	11/08/23 17:18	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.021	11/08/23 17:18	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.00055	11/08/23 17:18	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.20	11/08/23 17:18	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.11	11/08/23 17:18	

LABORATORY CONTROL SAMPLE: 3060602

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	39.6	99	80-120	
Iron, Dissolved	mg/L	2	2.1	104	80-120	
Magnesium, Dissolved	mg/L	20	20.4	102	80-120	
Manganese, Dissolved	mg/L	2	2.1	106	80-120	
Potassium, Dissolved	mg/L	20	19.5	98	80-120	
Sodium, Dissolved	mg/L	20	19.6	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3060603 3060604

Parameter	Units	30636257002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	2.8	40	40	45.3	41.5	107	97	80-120	9	20	
Iron, Dissolved	mg/L	0.050 U	2	2	2.2	2.0	111	100	80-120	10	20	
Magnesium, Dissolved	mg/L	1.7	20	20	23.5	21.3	109	99	80-120	10	20	
Manganese, Dissolved	mg/L	0.032	2	2	2.3	2.1	113	104	80-120	8	20	
Potassium, Dissolved	mg/L	1.0	20	20	22.0	20.2	106	97	80-120	8	20	
Sodium, Dissolved	mg/L	4.4	20	20	25.6	23.5	108	98	80-120	9	20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30636257

QC Batch: 628454
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30636257002, 30636257004, 30636257005, 30636257006, 30636257007, 30636257008

METHOD BLANK: 3063649 Matrix: Water
Associated Lab Samples: 30636257002, 30636257004, 30636257005, 30636257006, 30636257007, 30636257008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	11/13/23 14:39	
Iron, Dissolved	mg/L	0.050 U	0.050	0.036	11/13/23 14:39	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	11/13/23 14:39	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	11/13/23 14:39	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	11/13/23 14:39	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	11/13/23 14:39	

LABORATORY CONTROL SAMPLE: 3063650

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	41.9	105	80-120	
Iron, Dissolved	mg/L	2	2.2	108	80-120	
Magnesium, Dissolved	mg/L	20	21.4	107	80-120	
Manganese, Dissolved	mg/L	2	2.2	109	80-120	
Potassium, Dissolved	mg/L	20	21.2	106	80-120	
Sodium, Dissolved	mg/L	20	21.0	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3063651 3063652

Parameter	Units	30635181001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	133000 ug/L	40	40	175	176	105	108	80-120	1	20	
Iron, Dissolved	mg/L	0.064	2	2	2.2	2.2	107	108	80-120	1	20	
Magnesium, Dissolved	mg/L	18000 ug/L	20	20	39.4	39.9	107	110	80-120	1	20	
Manganese, Dissolved	mg/L	0.23	2	2	2.4	2.4	108	109	80-120	1	20	
Potassium, Dissolved	mg/L	1960 ug/L	20	20	23.9	24.2	110	111	80-120	1	20	
Sodium, Dissolved	mg/L	11800 ug/L	20	20	33.3	33.8	108	110	80-120	1	20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30636257

QC Batch: 628158
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30636257001, 30636257002, 30636257003, 30636257004, 30636257005, 30636257006, 30636257007, 30636257008, 30636257009

METHOD BLANK: 3062091
Matrix: Water
Associated Lab Samples: 30636257001, 30636257002, 30636257003, 30636257004, 30636257005, 30636257006, 30636257007, 30636257008, 30636257009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00030	11/09/23 11:56	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	11/09/23 11:56	
Barium	mg/L	0.0025 U	0.0025	0.00098	11/09/23 11:56	
Beryllium	mg/L	0.00050 U	0.00050	0.00010	11/09/23 11:56	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	11/09/23 11:56	
Chromium	mg/L	0.0025 U	0.0025	0.00050	11/09/23 11:56	
Cobalt	mg/L	0.0025 U	0.0025	0.00081	11/09/23 11:56	
Copper	mg/L	0.00089J	0.0025	0.00064	11/09/23 11:56	
Lead	mg/L	0.00050 U	0.00050	0.00025	11/09/23 11:56	
Nickel	mg/L	0.0025 U	0.0025	0.00065	11/09/23 11:56	
Selenium	mg/L	0.0025 U	0.0025	0.00084	11/09/23 11:56	
Silver	mg/L	0.0025 U	0.0025	0.00053	11/09/23 11:56	
Thallium	mg/L	0.00050 U	0.00050	0.000081	11/09/23 11:56	
Vanadium	mg/L	0.0025 U	0.0025	0.0012	11/09/23 11:56	
Zinc	mg/L	0.0050 U	0.0050	0.0040	11/09/23 11:56	

LABORATORY CONTROL SAMPLE: 3062092

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.020	99	80-120	
Arsenic	mg/L	0.1	0.10	100	80-120	
Barium	mg/L	0.1	0.097	97	80-120	
Beryllium	mg/L	0.02	0.019	96	80-120	
Cadmium	mg/L	0.02	0.019	95	80-120	
Chromium	mg/L	0.1	0.11	105	80-120	
Cobalt	mg/L	0.1	0.11	105	80-120	
Copper	mg/L	0.1	0.11	107	80-120	
Lead	mg/L	0.02	0.020	98	80-120	
Nickel	mg/L	0.1	0.10	103	80-120	
Selenium	mg/L	0.1	0.095	95	80-120	
Silver	mg/L	0.1	0.098	98	80-120	
Thallium	mg/L	0.02	0.019	97	80-120	
Vanadium	mg/L	0.1	0.10	104	80-120	
Zinc	mg/L	0.2	0.20	101	80-120	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30636257

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3062117 3062118

Parameter	Units	30636586001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00050 U	0.02	0.02	0.020	0.020	101	99	75-125	2	20	
Arsenic	mg/L	0.0011J	0.1	0.1	0.099	0.098	98	97	75-125	1	20	
Barium	mg/L	0.012	0.1	0.1	0.11	0.11	97	96	75-125	1	20	
Beryllium	mg/L	0.0014	0.02	0.02	0.022	0.021	102	100	75-125	2	20	
Cadmium	mg/L	0.00050 U	0.02	0.02	0.019	0.019	97	96	75-125	1	20	
Chromium	mg/L	0.0015J	0.1	0.1	0.11	0.11	107	107	75-125	0	20	
Cobalt	mg/L	0.0012J	0.1	0.1	0.11	0.11	109	110	75-125	1	20	
Copper	mg/L	0.0013J	0.1	0.1	0.11	0.11	109	111	75-125	1	20	
Lead	mg/L	0.00050 U	0.02	0.02	0.020	0.020	99	99	75-125	1	20	
Nickel	mg/L	0.0029	0.1	0.1	0.11	0.11	108	106	75-125	1	20	
Selenium	mg/L	0.0025 U	0.1	0.1	0.094	0.095	94	94	75-125	1	20	
Silver	mg/L	0.0025 U	0.1	0.1	0.099	0.098	99	98	75-125	1	20	
Thallium	mg/L	0.00050 U	0.02	0.02	0.013	0.013	67	65	75-125	2	20	M1
Vanadium	mg/L	0.0025 U	0.1	0.1	0.11	0.11	106	106	75-125	0	20	
Zinc	mg/L	0.0070	0.2	0.2	0.21	0.21	101	100	75-125	1	20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30636257

QC Batch: 627515
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30636257001, 30636257002, 30636257003, 30636257004, 30636257005, 30636257006, 30636257007, 30636257008, 30636257009

METHOD BLANK: 3058593
Matrix: Water
Associated Lab Samples: 30636257001, 30636257002, 30636257003, 30636257004, 30636257005, 30636257006, 30636257007, 30636257008, 30636257009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	11/06/23 16:28	

LABORATORY CONTROL SAMPLE: 3058594

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.011	112	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3058595 3058596

Parameter	Units	30636257009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00020 U	0.01	0.01	0.011	0.011	111	109	80-120	2	20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30636257

QC Batch: 627896
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30636257001, 30636257002, 30636257003, 30636257004, 30636257005, 30636257006, 30636257007, 30636257008, 30636257009

METHOD BLANK: 3060558
Matrix: Water
Associated Lab Samples: 30636257001, 30636257002, 30636257003, 30636257004, 30636257005, 30636257006, 30636257007, 30636257008, 30636257009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	11/09/23 10:05	CH
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	11/09/23 10:05	CH
1,1,1,2-Tetrachloroethane (S)	%.	47	60-140		11/09/23 10:05	CH,SR

LABORATORY CONTROL SAMPLE: 3060559

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.10	40	85-115	CH,L2
1,2-Dibromoethane (EDB)	ug/L	0.25	0.11	44	85-115	CH,L2
1,1,1,2-Tetrachloroethane (S)	%.			36	60-140	CH,SR

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3060560 3060561

Parameter	Units	30636257002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.4	0.4	0.15	0.12	38	31	60-140	21	25	CH,ML
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.4	0.4	0.16	0.13	40	33	60-140	22	25	CH,ML
1,1,1,2-Tetrachloroethane (S)	%.						36	29	60-140			CH,SR

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30636257

QC Batch: 629109
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30636257001, 30636257003, 30636257004, 30636257005, 30636257006, 30636257007, 30636257008, 30636257009

METHOD BLANK: 3067177
Matrix: Water
Associated Lab Samples: 30636257001, 30636257003, 30636257004, 30636257005, 30636257006, 30636257007, 30636257008, 30636257009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	11/11/23 16:59	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	11/11/23 16:59	
1,1,1,2-Tetrachloroethane (S)	%.	97	60-140		11/11/23 16:59	

LABORATORY CONTROL SAMPLE: 3067178

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.22	87	85-115	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.27	107	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			104	60-140	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30636257

QC Batch: 628054
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30636257001, 30636257002, 30636257003, 30636257004, 30636257005, 30636257006, 30636257007, 30636257008, 30636257009

METHOD BLANK: 3061619
Matrix: Water
Associated Lab Samples: 30636257001, 30636257002, 30636257003, 30636257004, 30636257005, 30636257006, 30636257007, 30636257008, 30636257009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	11/08/23 09:11	

LABORATORY CONTROL SAMPLE: 3061620

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3061621 3061622

Parameter	Units	30636257004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	50	50	50.0	54.0	100	108	85-115	8	20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30636257

QC Batch: 627685
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30636257001, 30636257002, 30636257003, 30636257004, 30636257005, 30636257006, 30636257007, 30636257008, 30636257009

METHOD BLANK: 3059645 Matrix: Water
Associated Lab Samples: 30636257001, 30636257002, 30636257003, 30636257004, 30636257005, 30636257006, 30636257007, 30636257008, 30636257009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	11/07/23 15:44	

LABORATORY CONTROL SAMPLE: 3059646

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	995	100	85-115	

SAMPLE DUPLICATE: 3059647

Parameter	Units	30636257003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	134	137	2	5	

SAMPLE DUPLICATE: 3059648

Parameter	Units	30635841001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	598	586	2	5	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30636257

QC Batch: 629365
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30636257001, 30636257002, 30636257003, 30636257004, 30636257005, 30636257006, 30636257007, 30636257008, 30636257009

METHOD BLANK: 3068257
Matrix: Water
Associated Lab Samples: 30636257001, 30636257002, 30636257003, 30636257004, 30636257005, 30636257006, 30636257007, 30636257008, 30636257009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	11/15/23 11:03	

LABORATORY CONTROL SAMPLE: 3068258

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.1	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3068259 3068260

Parameter	Units	30635630001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	ND	4	4	4.1	4.1	100	100	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3068261 3068262

Parameter	Units	30636257003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.4	4.9	109	121	90-110	10	20	MH

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30636257

QC Batch: 627705
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30636257001, 30636257002, 30636257003, 30636257004, 30636257005, 30636257006, 30636257008, 30636257009

METHOD BLANK: 3059731
Matrix: Water
Associated Lab Samples: 30636257001, 30636257002, 30636257003, 30636257004, 30636257005, 30636257006, 30636257008, 30636257009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/07/23 15:25	

LABORATORY CONTROL SAMPLE: 3059732

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	325	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3059733 3059734

Parameter	Units	30636184001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	13.6J	150	150	175	177	108	109	90-110	1	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30636257

QC Batch: 628446
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30636257007

METHOD BLANK: 3063610 Matrix: Water
Associated Lab Samples: 30636257007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/09/23 14:55	

METHOD BLANK: 3063702 Matrix: Water
Associated Lab Samples: 30636257007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/09/23 14:55	

METHOD BLANK: 3063703 Matrix: Water
Associated Lab Samples: 30636257007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/09/23 14:55	

LABORATORY CONTROL SAMPLE: 3063611

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	325	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3063710 3063711

Parameter	Units	30637055001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	709	150	150	870	875	108	111	90-110	1	10	MH

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3064090 3064091

Parameter	Units	30636257007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	25.0 U	150	150	159	164	106	109	90-110	3	10	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30636257

QC Batch: 627702
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30636257001, 30636257002, 30636257003, 30636257004, 30636257005

METHOD BLANK: 3059710 Matrix: Water
Associated Lab Samples: 30636257001, 30636257002, 30636257003, 30636257004, 30636257005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	11/07/23 11:28	

METHOD BLANK: 3059711 Matrix: Water
Associated Lab Samples: 30636257001, 30636257002, 30636257003, 30636257004, 30636257005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	11/07/23 11:30	

LABORATORY CONTROL SAMPLE: 3059712

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.5	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3059713 3059714

Parameter	Units	30635401012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	11.2	20	20	32.9	32.8	109	108	85-115	0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30636257

QC Batch: 627703
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30636257006, 30636257007, 30636257008, 30636257009

METHOD BLANK: 3059715 Matrix: Water
Associated Lab Samples: 30636257006, 30636257007, 30636257008, 30636257009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	11/07/23 11:54	

LABORATORY CONTROL SAMPLE: 3059716

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.9	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3059717 3059718

Parameter	Units	30636257006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	22.3	20	20	42.9	43.9	103	108	85-115	2	20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30636257

QC Batch: 627522
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30636257001, 30636257002, 30636257003, 30636257004, 30636257005, 30636257006, 30636257007, 30636257008, 30636257009

METHOD BLANK: 3058636
Matrix: Water
Associated Lab Samples: 30636257001, 30636257002, 30636257003, 30636257004, 30636257005, 30636257006, 30636257007, 30636257008, 30636257009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	11/03/23 12:03	

LABORATORY CONTROL SAMPLE: 3058637

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	31.0	103	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3058638 3058639

Parameter	Units	30636257001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.0 U	20	20	19.7	20.2	89	91	85-115	3	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: MLF-FALL 2023
Pace Project No.: 30636257

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 629109

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1c	8011 SAMPLE pH IS 7
2c	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
3c	Alkalinity TV: 0.00 mg/L
4c	Alkalinity TV: 2.00 mg/L
5c	pH is 7
B	Analyte was detected in the associated method blank.
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
H2	Extraction or preparation conducted outside EPA method holding time.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

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QUALIFIERS

Project: MLF-FALL 2023
Pace Project No.: 30636257

ANALYTE QUALIFIERS

N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.
P2	Re-extraction or re-analysis could not be performed due to insufficient sample amount.
SR	Surrogate recovery was below laboratory control limits. Results may be biased low.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-FALL 2023
Pace Project No.: 30636257

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30636257001	**TW-7**	EPA 3010A	627546	EPA 6010D	628265
30636257002	**TW-7A**	EPA 3010A	628501	EPA 6010D	628852
30636257003	**TW-8**	EPA 3010A	627741	EPA 6010D	628213
30636257004	**TW-8A**	EPA 3010A	628501	EPA 6010D	628852
30636257005	**TW-9B**	EPA 3010A	628501	EPA 6010D	628852
30636257006	**TW-9C**	EPA 3010A	628501	EPA 6010D	628852
30636257007	**TW-10A**	EPA 3010A	628501	EPA 6010D	628852
30636257008	**TW-20R**	EPA 3010A	628501	EPA 6010D	628852
30636257009	**TW-23R**	EPA 3010A	627741	EPA 6010D	628213
30636257001	**TW-7**	EPA 3010A	627878	EPA 6010D	628288
30636257002	**TW-7A**	EPA 3010A	628454	EPA 6010D	629223
30636257003	**TW-8**	EPA 3010A	627904	EPA 6010D	628290
30636257004	**TW-8A**	EPA 3010A	628454	EPA 6010D	629223
30636257005	**TW-9B**	EPA 3010A	628454	EPA 6010D	629223
30636257006	**TW-9C**	EPA 3010A	628454	EPA 6010D	629223
30636257007	**TW-10A**	EPA 3010A	628454	EPA 6010D	629223
30636257008	**TW-20R**	EPA 3010A	628454	EPA 6010D	629223
30636257009	**TW-23R**	EPA 3010A	627904	EPA 6010D	628290
30636257001	**TW-7**	EPA 3010A	628158	EPA 6020B	628500
30636257002	**TW-7A**	EPA 3010A	628158	EPA 6020B	628500
30636257003	**TW-8**	EPA 3010A	628158	EPA 6020B	628500
30636257004	**TW-8A**	EPA 3010A	628158	EPA 6020B	628500
30636257005	**TW-9B**	EPA 3010A	628158	EPA 6020B	628500
30636257006	**TW-9C**	EPA 3010A	628158	EPA 6020B	628500
30636257007	**TW-10A**	EPA 3010A	628158	EPA 6020B	628500
30636257008	**TW-20R**	EPA 3010A	628158	EPA 6020B	628500
30636257009	**TW-23R**	EPA 3010A	628158	EPA 6020B	628500
30636257001	**TW-7**	EPA 7470A	627515	EPA 7470A	627597
30636257002	**TW-7A**	EPA 7470A	627515	EPA 7470A	627597
30636257003	**TW-8**	EPA 7470A	627515	EPA 7470A	627597
30636257004	**TW-8A**	EPA 7470A	627515	EPA 7470A	627597
30636257005	**TW-9B**	EPA 7470A	627515	EPA 7470A	627597
30636257006	**TW-9C**	EPA 7470A	627515	EPA 7470A	627597
30636257007	**TW-10A**	EPA 7470A	627515	EPA 7470A	627597
30636257008	**TW-20R**	EPA 7470A	627515	EPA 7470A	627597
30636257009	**TW-23R**	EPA 7470A	627515	EPA 7470A	627597
30636257001	**TW-7**	EPA 8011	627896	EPA 8011	627957
30636257001	**TW-7**	EPA 8011	629109	EPA 8011	629114
30636257002	**TW-7A**	EPA 8011	627896	EPA 8011	627957
30636257003	**TW-8**	EPA 8011	627896	EPA 8011	627957
30636257003	**TW-8**	EPA 8011	629109	EPA 8011	629114

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-FALL 2023
Pace Project No.: 30636257

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30636257004	**TW-8A**	EPA 8011	627896	EPA 8011	627957
30636257004	**TW-8A**	EPA 8011	629109	EPA 8011	629114
30636257005	**TW-9B**	EPA 8011	627896	EPA 8011	627957
30636257005	**TW-9B**	EPA 8011	629109	EPA 8011	629114
30636257006	**TW-9C**	EPA 8011	627896	EPA 8011	627957
30636257006	**TW-9C**	EPA 8011	629109	EPA 8011	629114
30636257007	**TW-10A**	EPA 8011	627896	EPA 8011	627957
30636257007	**TW-10A**	EPA 8011	629109	EPA 8011	629114
30636257008	**TW-20R**	EPA 8011	627896	EPA 8011	627957
30636257008	**TW-20R**	EPA 8011	629109	EPA 8011	629114
30636257009	**TW-23R**	EPA 8011	627896	EPA 8011	627957
30636257009	**TW-23R**	EPA 8011	629109	EPA 8011	629114
30636257001	**TW-7**	SM 2320B-2011	628054		
30636257002	**TW-7A**	SM 2320B-2011	628054		
30636257003	**TW-8**	SM 2320B-2011	628054		
30636257004	**TW-8A**	SM 2320B-2011	628054		
30636257005	**TW-9B**	SM 2320B-2011	628054		
30636257006	**TW-9C**	SM 2320B-2011	628054		
30636257007	**TW-10A**	SM 2320B-2011	628054		
30636257008	**TW-20R**	SM 2320B-2011	628054		
30636257009	**TW-23R**	SM 2320B-2011	628054		
30636257001	**TW-7**	SM 2540C-2015	627685		
30636257002	**TW-7A**	SM 2540C-2015	627685		
30636257003	**TW-8**	SM 2540C-2015	627685		
30636257004	**TW-8A**	SM 2540C-2015	627685		
30636257005	**TW-9B**	SM 2540C-2015	627685		
30636257006	**TW-9C**	SM 2540C-2015	627685		
30636257007	**TW-10A**	SM 2540C-2015	627685		
30636257008	**TW-20R**	SM 2540C-2015	627685		
30636257009	**TW-23R**	SM 2540C-2015	627685		
30636257001	**TW-7**	EPA 350.1	629365	EPA 350.1	629743
30636257002	**TW-7A**	EPA 350.1	629365	EPA 350.1	629743
30636257003	**TW-8**	EPA 350.1	629365	EPA 350.1	629743
30636257004	**TW-8A**	EPA 350.1	629365	EPA 350.1	629743
30636257005	**TW-9B**	EPA 350.1	629365	EPA 350.1	629743
30636257006	**TW-9C**	EPA 350.1	629365	EPA 350.1	629743
30636257007	**TW-10A**	EPA 350.1	629365	EPA 350.1	629743
30636257008	**TW-20R**	EPA 350.1	629365	EPA 350.1	629743
30636257009	**TW-23R**	EPA 350.1	629365	EPA 350.1	629743
30636257001	**TW-7**	EPA 410.4	627705	EPA 410.4	627845
30636257002	**TW-7A**	EPA 410.4	627705	EPA 410.4	627845

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-FALL 2023
Pace Project No.: 30636257

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30636257003	**TW-8**	EPA 410.4	627705	EPA 410.4	627845
30636257004	**TW-8A**	EPA 410.4	627705	EPA 410.4	627845
30636257005	**TW-9B**	EPA 410.4	627705	EPA 410.4	627845
30636257006	**TW-9C**	EPA 410.4	627705	EPA 410.4	627845
30636257007	**TW-10A**	EPA 410.4	628446	EPA 410.4	628537
30636257008	**TW-20R**	EPA 410.4	627705	EPA 410.4	627845
30636257009	**TW-23R**	EPA 410.4	627705	EPA 410.4	627845
30636257001	**TW-7**	SM 4500-Cl-E-2011	627702		
30636257002	**TW-7A**	SM 4500-Cl-E-2011	627702		
30636257003	**TW-8**	SM 4500-Cl-E-2011	627702		
30636257004	**TW-8A**	SM 4500-Cl-E-2011	627702		
30636257005	**TW-9B**	SM 4500-Cl-E-2011	627702		
30636257006	**TW-9C**	SM 4500-Cl-E-2011	627703		
30636257007	**TW-10A**	SM 4500-Cl-E-2011	627703		
30636257008	**TW-20R**	SM 4500-Cl-E-2011	627703		
30636257009	**TW-23R**	SM 4500-Cl-E-2011	627703		
30636257001	**TW-7**	EPA 9038	627522		
30636257002	**TW-7A**	EPA 9038	627522		
30636257003	**TW-8**	EPA 9038	627522		
30636257004	**TW-8A**	EPA 9038	627522		
30636257005	**TW-9B**	EPA 9038	627522		
30636257006	**TW-9C**	EPA 9038	627522		
30636257007	**TW-10A**	EPA 9038	627522		
30636257008	**TW-20R**	EPA 9038	627522		
30636257009	**TW-23R**	EPA 9038	627522		

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WO# : 30636257

EMA

30636257

207 East Sixth Str ... ID ASSESSMENT, LLC ... 228-5280 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - FALL 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	TOTAL METALS ①	TOTAL + DISS. METALS ②	ALKALINITY, TDS	HARDNESS, Cl	AMMONIA, SO4, COD		METHOD 8011 - DBCP + EDB					
1	TW-7	7	11.1.23	1250	✓		GW	✓	✓	✓	✓	✓		✓					001
2	TW-7A	↓	11.1.23	1215	↓		↓	↓	↓	↓	↓	↓		↓					002
3	TW-8	↓	↓	1340	↓		↓	↓	↓	↓	↓	↓		↓					003
4	TW-8A	↓	↓	1415	↓		↓	↓	↓	↓	↓	↓		↓					004
5	TW-9B	↓	↓	1450	↓		↓	↓	↓	↓	↓	↓		↓					005
6	TW-9C	↓	↓	1525	↓		↓	↓	↓	↓	↓	↓		↓					006
7	TW-10A	↓	10.31.23	1530	↓		↓	↓	↓	↓	↓	↓		↓					007
8	TW-20R	↓	10.31.23	1440	↓		↓	↓	↓	↓	↓	↓		↓					008
9	TW-23R ~~TW3-R~~	↓	11.1.23	1130	↓		↓	↓	↓	↓	↓	↓		↓					009
10																			
11																			
12																			

Received by Pace Beaver
Therm ID 1 Corr Factor +/- 0
Receipt Temp 1.0
Corrected Temp 1.0
Correct Preservation Y N

	Signature	Date	Time	Comments
Relinquished by	[signature]	11.1.23		① 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn
Received by	TB/Pace	11.1.23	1535	② 6010 - Ca, Fe, Mg, Mn, K, Na
Relinquished by	TB/Pace	11-1-23	1616	③ 7470 - Hg
Received by	RDS PACE	11-2-23	1700	PACE-WV-METALS-UNITS-mg/L
Relinquished by	RDS PACE	11-2-23	2200	PACE-G-BULK-WET CHEM + 8011
Received by	Megan Butler	11-2-23	2200	LEVEL 2 REPORT

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

Rel. Megan Butler 11-2-23 2300 Rec. Nicely's Del. Service 11-3-23 2300 Nicely's Del. Service 11-4-23 0529 [signature] 11-6-23 0600

Pace Analytical Services	DC#_Title: ENV-FRM-GBUR-0088 v06_Sample Condition Upon Receipt-Pittsburgh
	Effective Date: 09/20/2023

Client Name: Environmental Monitoring Asses, **Project #:** 30636257

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking Number: NA

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

Thermometer Used: 17 **Type of Ice:** (Wet) Blue None

Cooler Temperature: Observed Temp 2.2 °C Correction Factor: 0 °C Final Temp: 2.2 °C

Temp should be above freezing to 6°C

Initial / Date	
Examined By:	MJB 11-3-23
Labeled By:	MJB 11-3-23
Temped By:	MJB 11-3-23

Comments:	Yes	No	NA	pH paper Lot# 10D0831	D.P.D. Residual Chlorine Lot # NA
Chain of Custody Present	✓			1.	
Chain of Custody Filled Out:	✓			2.	
-Were client corrections present on COC		✓			
Chain of Custody Relinquished	✓			3.	
Sampler Name & Signature on COC:		✓		4.	
Sample Labels match COC:	✓			5.	
-Includes date/time/ID Matrix:	WA				
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):		✓		7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used:	✓			10.	
-Pace Containers Used	✓				
Containers Intact:	✓			11.	
Orthophosphate field filtered:			✓	12.	
Hex Cr Aqueous samples field filtered:			✓	13.	
Organic Samples checked for dechlorination			✓	14:	
Filtered volume received for dissolved tests:			✓	15:	
All containers checked for preservation:	✓			16.	
exceptions: (VOA), coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix					
All containers meet method preservation requirements:	✓			Initial when completed MJB	Date/Time of Preservation
				Lot# of added Preservative	
8260C/D: Headspace in VOA Vials (> 6mm)		✓		17.	
624.1: Headspace in VOA Vials (0mm)			✓	18.	
Trip Blank Present:		✓		Trip blank custody seal present? YES or NO	
Rad Samples Screened <.05 mrem/hr.	✓			Initial when completed MJB	Date: 11-3-23 / Survey Meter SN: 25014380

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

November 21, 2023

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: Millersville Landfill
Pace Project No.: 30636586

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on November 03, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alaina Deitch

Alaina R. Deitch
alaina.deitch@pacelabs.com
(724)850-5600
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Millersville Landfill
Pace Project No.: 30636586

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572023-03
New Hampshire/TNI Certification #: 297622
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad

Pace Analytical Services Beaver

225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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(724)850-5600

SAMPLE SUMMARY

Project: Millersville Landfill
Pace Project No.: 30636586

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30636586001	**TW-9**	Water	11/01/23 16:00	11/03/23 22:15
30636586002	**TW-15**	Water	11/02/23 09:20	11/03/23 22:15
30636586003	**TW-15B**	Water	11/02/23 09:55	11/03/23 22:15
30636586004	**TW-16**	Water	11/02/23 11:35	11/03/23 22:15
30636586005	**TW-16A**	Water	11/02/23 11:00	11/03/23 22:15
30636586006	**TW-17**	Water	11/02/23 12:30	11/03/23 22:15
30636586007	**TW-17A**	Water	11/02/23 13:10	11/03/23 22:15
30636586008	**TW-19**	Water	11/02/23 14:10	11/03/23 22:15
30636586009	**TW-21**	Water	11/02/23 14:50	11/03/23 22:15

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SAMPLE ANALYTE COUNT

Project: Millersville Landfill
Pace Project No.: 30636586

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30636586001	**TW-9**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	TAW	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30636586002	**TW-15**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	TAW	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30636586003	**TW-15B**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	TAW	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30636586004	**TW-16**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV

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SAMPLE ANALYTE COUNT

Project: Millersville Landfill
Pace Project No.: 30636586

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8011	TAW	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30636586005	**TW-16A**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	TAW	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30636586006	**TW-17**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	TAW	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30636586007	**TW-17A**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	TAW	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: Millersville Landfill
Pace Project No.: 30636586

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30636586008	**TW-19**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	TAW	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30636586009	**TW-21**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	TAW	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30636586

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2023

General Information:
9 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 628236

B: Analyte was detected in the associated method blank.
- BLANK for HBN 628236 [BMPR/142 (Lab ID: 3062492)
  - Iron

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30636586

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2023

General Information:
9 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30636586

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2023

General Information:
9 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 628158

B: Analyte was detected in the associated method blank.
- BLANK for HBN 628158 [BMPR/142 (Lab ID: 3062091)
  - Copper

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 628158

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30636586001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 3062117)
  - Thallium
- MSD (Lab ID: 3062118)
  - Thallium

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30636586

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2023

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30636586

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2023

General Information:
9 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30636586

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2023

General Information:
9 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H2: Extraction or preparation conducted outside EPA method holding time.
- TW-15 (Lab ID: 30636586002)
- TW-15B (Lab ID: 30636586003)
- TW-16 (Lab ID: 30636586004)
- TW-16A (Lab ID: 30636586005)
- TW-17 (Lab ID: 30636586006)
- TW-17A (Lab ID: 30636586007)
- TW-19 (Lab ID: 30636586008)
- TW-21 (Lab ID: 30636586009)
- TW-9 (Lab ID: 30636586001)

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 627896

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
- BLANK (Lab ID: 3060558)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- LCS (Lab ID: 3060559)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MS (Lab ID: 3060560)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MSD (Lab ID: 3060561)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30636586

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2023

QC Batch: 627896

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- TW-15 (Lab ID: 30636586002)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-15B (Lab ID: 30636586003)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-16 (Lab ID: 30636586004)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-16A (Lab ID: 30636586005)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-17 (Lab ID: 30636586006)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-17A (Lab ID: 30636586007)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-19 (Lab ID: 30636586008)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-21 (Lab ID: 30636586009)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-9 (Lab ID: 30636586001)
  - 1,1,1,2-Tetrachloroethane (S)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

QC Batch: 627896

SR: Surrogate recovery was below laboratory control limits. Results may be biased low.

- BLANK (Lab ID: 3060558)
  - 1,1,1,2-Tetrachloroethane (S)
- LCS (Lab ID: 3060559)

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30636586

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2023

QC Batch: 627896

SR: Surrogate recovery was below laboratory control limits. Results may be biased low.

- 1,1,1,2-Tetrachloroethane (S)
- MS (Lab ID: 3060560)
  - 1,1,1,2-Tetrachloroethane (S)
- MSD (Lab ID: 3060561)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-15 (Lab ID: 30636586002)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-15B (Lab ID: 30636586003)
  - 1,1,1,2-Tetrachloroethane (S)
- TW-9 (Lab ID: 30636586001)
  - 1,1,1,2-Tetrachloroethane (S)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 627896

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

- LCS (Lab ID: 3060559)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 627896

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30636257002

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 3060560)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- MSD (Lab ID: 3060561)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

QC Batch: 629109

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30636586

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2023

Analyte Comments:

QC Batch: 627896

1c: 8011 SAMPLE pH IS 7

- TW-15 (Lab ID: 30636586002)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-15B (Lab ID: 30636586003)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-16 (Lab ID: 30636586004)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-16A (Lab ID: 30636586005)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-17 (Lab ID: 30636586006)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-17A (Lab ID: 30636586007)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-19 (Lab ID: 30636586008)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-21 (Lab ID: 30636586009)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-9 (Lab ID: 30636586001)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

QC Batch: 629109

2c: A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

- TW-15 (Lab ID: 30636586002)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-15B (Lab ID: 30636586003)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-16 (Lab ID: 30636586004)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-16A (Lab ID: 30636586005)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

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(724)850-5600

PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30636586

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2023

Analyte Comments:

QC Batch: 629109

2c: A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

- TW-17 (Lab ID: 30636586006)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-17A (Lab ID: 30636586007)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-19 (Lab ID: 30636586008)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-21 (Lab ID: 30636586009)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-9 (Lab ID: 30636586001)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

8c: pH is 7

- TW-15 (Lab ID: 30636586002)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-15B (Lab ID: 30636586003)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-16 (Lab ID: 30636586004)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-16A (Lab ID: 30636586005)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-17 (Lab ID: 30636586006)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-17A (Lab ID: 30636586007)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-19 (Lab ID: 30636586008)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-21 (Lab ID: 30636586009)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
- TW-9 (Lab ID: 30636586001)
  - 1,2-Dibromo-3-chloropropane

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30636586

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2023

Analyte Comments:

QC Batch: 629109

8c: pH is 7

- TW-9 (Lab ID: 30636586001)
  - 1,2-Dibromoethane (EDB)

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30636586

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2023

General Information:
9 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 628054

3c: Alkalinity TV: -1.00 mg/L
- TW-15B (Lab ID: 30636586003)
  - Alkalinity,Total (CaCO3 pH4.5)

4c: Alkalinity TV: -2.00 mg/L
- TW-16 (Lab ID: 30636586004)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-21 (Lab ID: 30636586009)
  - Alkalinity,Total (CaCO3 pH4.5)

5c: Alkalinity TV: 0.00 mg/L
- TW-16A (Lab ID: 30636586005)
  - Alkalinity,Total (CaCO3 pH4.5)

6c: Alkalinity TV: 2.00 mg/L
- TW-17A (Lab ID: 30636586007)
  - Alkalinity,Total (CaCO3 pH4.5)

7c: Alkalinity TV: 4.00 mg/L
- TW-17 (Lab ID: 30636586006)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30636586

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2023

General Information:
9 samples were analyzed for SM 2540C-2015 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30636586

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2023

General Information:
9 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 629366

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30636586001,30636653001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MSD (Lab ID: 3068268)
  - Ammonia, Distilled

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30636586

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2023

General Information:
9 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30636586

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2023

General Information:
9 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30636586

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: November 21, 2023

General Information:
9 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30636586

Sample: TW-9 **Lab ID: 30636586001** Collected: 11/01/23 16:00 Received: 11/03/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.45J**	mg/L	0.50	0.054	1	11/08/23 14:32	11/09/23 13:33	7440-70-2	
Iron	**27.6**	mg/L	0.050	0.0056	1	11/08/23 14:32	11/09/23 13:33	7439-89-6	
Magnesium	**0.22J**	mg/L	0.50	0.021	1	11/08/23 14:32	11/09/23 13:33	7439-95-4	
Manganese	**0.15**	mg/L	0.0050	0.00055	1	11/08/23 14:32	11/09/23 13:33	7439-96-5	
Potassium	**0.51**	mg/L	0.50	0.20	1	11/08/23 14:32	11/09/23 13:33	7440-09-7	
Sodium	**0.88**	mg/L	0.50	0.11	1	11/08/23 14:32	11/09/23 13:33	7440-23-5	
Total Hardness	**2.0J**	mg/L	3.3	0.22	1	11/08/23 14:32	11/09/23 13:33		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.43J**	mg/L	0.50	0.054	1	11/07/23 15:00	11/08/23 17:56	7440-70-2	
Iron, Dissolved	**25.1**	mg/L	0.050	0.0056	1	11/07/23 15:00	11/08/23 17:56	7439-89-6	
Magnesium, Dissolved	**0.19J**	mg/L	0.50	0.021	1	11/07/23 15:00	11/08/23 17:56	7439-95-4	
Manganese, Dissolved	**0.14**	mg/L	0.0050	0.00055	1	11/07/23 15:00	11/08/23 17:56	7439-96-5	
Potassium, Dissolved	**0.49J**	mg/L	0.50	0.20	1	11/07/23 15:00	11/08/23 17:56	7440-09-7	
Sodium, Dissolved	**0.86**	mg/L	0.50	0.11	1	11/07/23 15:00	11/08/23 17:56	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/08/23 11:52	11/09/23 12:43	7440-36-0	
Arsenic	**0.0011J**	mg/L	0.0025	0.00044	1	11/08/23 11:52	11/09/23 12:43	7440-38-2	
Barium	**0.012**	mg/L	0.0025	0.00098	1	11/08/23 11:52	11/09/23 12:43	7440-39-3	
Beryllium	**0.0014**	mg/L	0.00050	0.00010	1	11/08/23 11:52	11/09/23 12:43	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/08/23 11:52	11/09/23 12:43	7440-43-9	
Chromium	**0.0015J**	mg/L	0.0025	0.00050	1	11/08/23 11:52	11/09/23 12:43	7440-47-3	
Cobalt	**0.0012J**	mg/L	0.0025	0.00081	1	11/08/23 11:52	11/09/23 12:43	7440-48-4	
Copper	**0.0013J**	mg/L	0.0025	0.00064	1	11/08/23 11:52	11/09/23 12:43	7440-50-8	B
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/08/23 11:52	11/09/23 12:43	7439-92-1	
Nickel	**0.0029**	mg/L	0.0025	0.00065	1	11/08/23 11:52	11/09/23 12:43	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/08/23 11:52	11/09/23 12:43	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/08/23 11:52	11/09/23 12:43	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/08/23 11:52	11/09/23 12:43	7440-28-0	M1
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/08/23 11:52	11/09/23 12:43	7440-62-2	
Zinc	**0.0070**	mg/L	0.0050	0.0040	1	11/08/23 11:52	11/09/23 12:43	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/07/23 11:00	11/07/23 16:54	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/07/23 13:22	11/09/23 12:58	96-12-8	1c,CH, L2
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/11/23 12:20	11/11/23 19:12	96-12-8	2c,8c, H2

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30636586

Sample: TW-9 **Lab ID: 30636586001** Collected: 11/01/23 16:00 Received: 11/03/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/07/23 13:22	11/09/23 12:58	106-93-4	1c,CH, L2
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/11/23 12:20	11/11/23 19:12	106-93-4	2c,8c, H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	55	%.	60-140		1	11/07/23 13:22	11/09/23 12:58	630-20-6	CH,SR
1,1,1,2-Tetrachloroethane (S)	109	%.	60-140		1	11/11/23 12:20	11/11/23 19:12	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011								
	Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**22.0**	mg/L	10.0	1.0	1		11/08/23 09:42		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015								
	Pace Analytical Services - Greensburg								
Total Dissolved Solids	**29.0**	mg/L	10.0	10.0	1		11/08/23 15:37		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1								
	Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 13:23		ML
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
	Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/09/23 10:50	11/09/23 15:05		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
	Pace Analytical Services - Greensburg								
Chloride	**1.8J**	mg/L	3.0	0.67	1		11/09/23 10:17	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/06/23 16:36	14808-79-8	

Sample: TW-15 **Lab ID: 30636586002** Collected: 11/02/23 09:20 Received: 11/03/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Calcium	**0.91**	mg/L	0.50	0.054	1	11/08/23 14:32	11/09/23 13:35	7440-70-2	
Iron	**30.8**	mg/L	0.050	0.0056	1	11/08/23 14:32	11/09/23 13:35	7439-89-6	
Magnesium	**0.56**	mg/L	0.50	0.021	1	11/08/23 14:32	11/09/23 13:35	7439-95-4	
Manganese	**0.24**	mg/L	0.0050	0.00055	1	11/08/23 14:32	11/09/23 13:35	7439-96-5	
Potassium	**0.86**	mg/L	0.50	0.20	1	11/08/23 14:32	11/09/23 13:35	7440-09-7	

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30636586

Sample: TW-15 **Lab ID: 30636586002** Collected: 11/02/23 09:20 Received: 11/03/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**2.2**	mg/L	0.50	0.11	1	11/08/23 14:32	11/09/23 13:35	7440-23-5	
Total Hardness	**4.6**	mg/L	3.3	0.22	1	11/08/23 14:32	11/09/23 13:35		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.87**	mg/L	0.50	0.054	1	11/07/23 15:00	11/08/23 17:58	7440-70-2	
Iron, Dissolved	**24.7**	mg/L	0.050	0.0056	1	11/07/23 15:00	11/08/23 17:58	7439-89-6	
Magnesium, Dissolved	**0.52**	mg/L	0.50	0.021	1	11/07/23 15:00	11/08/23 17:58	7439-95-4	
Manganese, Dissolved	**0.24**	mg/L	0.0050	0.00055	1	11/07/23 15:00	11/08/23 17:58	7439-96-5	
Potassium, Dissolved	**0.84**	mg/L	0.50	0.20	1	11/07/23 15:00	11/08/23 17:58	7440-09-7	
Sodium, Dissolved	**2.0**	mg/L	0.50	0.11	1	11/07/23 15:00	11/08/23 17:58	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.0010 U**	mg/L	0.0010	0.00059	2	11/08/23 11:52	11/09/23 12:58	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.00088	2	11/08/23 11:52	11/09/23 12:58	7440-38-2	
Barium	**0.017**	mg/L	0.0050	0.0020	2	11/08/23 11:52	11/09/23 12:58	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00020	2	11/08/23 11:52	11/09/23 12:58	7440-41-7	
Cadmium	**0.0010 U**	mg/L	0.0010	0.00027	2	11/08/23 11:52	11/09/23 12:58	7440-43-9	
Chromium	**0.0025J**	mg/L	0.0050	0.0010	2	11/08/23 11:52	11/09/23 12:58	7440-47-3	
Cobalt	**0.0035J**	mg/L	0.0050	0.0016	2	11/08/23 11:52	11/09/23 12:58	7440-48-4	
Copper	**0.0032J**	mg/L	0.0050	0.0013	2	11/08/23 11:52	11/09/23 12:58	7440-50-8	B
Lead	**0.0010 U**	mg/L	0.0010	0.00050	2	11/08/23 11:52	11/09/23 12:58	7439-92-1	
Nickel	**0.0058**	mg/L	0.0050	0.0013	2	11/08/23 11:52	11/09/23 12:58	7440-02-0	
Selenium	**0.0050 U**	mg/L	0.0050	0.0017	2	11/08/23 11:52	11/09/23 12:58	7782-49-2	
Silver	**0.0050 U**	mg/L	0.0050	0.0011	2	11/08/23 11:52	11/09/23 12:58	7440-22-4	
Thallium	**0.0010 U**	mg/L	0.0010	0.00016	2	11/08/23 11:52	11/09/23 12:58	7440-28-0	
Vanadium	**0.0050 U**	mg/L	0.0050	0.0024	2	11/08/23 11:52	11/09/23 12:58	7440-62-2	
Zinc	**0.010 U**	mg/L	0.010	0.0080	2	11/08/23 11:52	11/09/23 12:58	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/07/23 11:00	11/07/23 17:07	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/07/23 13:22	11/09/23 13:12	96-12-8	1c,CH, L2
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/11/23 12:20	11/11/23 19:25	96-12-8	2c,8c, H2
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/07/23 13:22	11/09/23 13:12	106-93-4	1c,CH, L2
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/11/23 12:20	11/11/23 19:25	106-93-4	2c,8c, H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	100	%.	60-140		1	11/11/23 12:20	11/11/23 19:25	630-20-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30636586

Sample: TW-15 **Lab ID: 30636586002** Collected: 11/02/23 09:20 Received: 11/03/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
Surrogates									
1,1,1,2-Tetrachloroethane (S)	55	%.	60-140		1	11/07/23 13:22	11/09/23 13:12	630-20-6	CH,SR
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**36.0**	mg/L	10.0	1.0	1		11/08/23 09:48		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**48.0**	mg/L	10.0	10.0	1		11/08/23 15:37		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 13:31		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.8J**	mg/L	25.0	4.7	1	11/09/23 10:50	11/09/23 15:05		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**5.1**	mg/L	3.0	0.67	1		11/09/23 10:20	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/06/23 16:40	14808-79-8	

Sample: TW-15B **Lab ID: 30636586003** Collected: 11/02/23 09:55 Received: 11/03/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**4.3**	mg/L	0.50	0.054	1	11/08/23 14:32	11/09/23 13:37	7440-70-2	
Iron	**0.045J**	mg/L	0.050	0.0056	1	11/08/23 14:32	11/09/23 13:37	7439-89-6	B
Magnesium	**4.6**	mg/L	0.50	0.021	1	11/08/23 14:32	11/09/23 13:37	7439-95-4	
Manganese	**0.081**	mg/L	0.0050	0.00055	1	11/08/23 14:32	11/09/23 13:37	7439-96-5	
Potassium	**1.5**	mg/L	0.50	0.20	1	11/08/23 14:32	11/09/23 13:37	7440-09-7	
Sodium	**21.9**	mg/L	0.50	0.11	1	11/08/23 14:32	11/09/23 13:37	7440-23-5	
Total Hardness	**29.8**	mg/L	3.3	0.22	1	11/08/23 14:32	11/09/23 13:37		N3

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30636586

Sample: TW-15B **Lab ID: 30636586003** Collected: 11/02/23 09:55 Received: 11/03/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**4.3**	mg/L	0.50	0.054	1	11/09/23 10:28	11/13/23 15:43	7440-70-2	
Iron, Dissolved	**0.063**	mg/L	0.050	0.0056	1	11/09/23 10:28	11/13/23 15:43	7439-89-6	
Magnesium, Dissolved	**4.9**	mg/L	0.50	0.021	1	11/09/23 10:28	11/13/23 15:43	7439-95-4	
Manganese, Dissolved	**0.081**	mg/L	0.0050	0.00055	1	11/09/23 10:28	11/13/23 15:43	7439-96-5	
Potassium, Dissolved	**1.6**	mg/L	0.50	0.20	1	11/09/23 10:28	11/13/23 15:43	7440-09-7	
Sodium, Dissolved	**22.8**	mg/L	0.50	0.11	1	11/09/23 10:28	11/13/23 15:43	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/08/23 11:52	11/09/23 13:11	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/08/23 11:52	11/09/23 13:11	7440-38-2	
Barium	**0.18**	mg/L	0.0025	0.00098	1	11/08/23 11:52	11/09/23 13:11	7440-39-3	
Beryllium	**0.0014**	mg/L	0.00050	0.00010	1	11/08/23 11:52	11/09/23 13:11	7440-41-7	
Cadmium	**0.00060**	mg/L	0.00050	0.00013	1	11/08/23 11:52	11/09/23 13:11	7440-43-9	
Chromium	**0.0032**	mg/L	0.0025	0.00050	1	11/08/23 11:52	11/09/23 13:11	7440-47-3	
Cobalt	**0.042**	mg/L	0.0025	0.00081	1	11/08/23 11:52	11/09/23 13:11	7440-48-4	
Copper	**0.014**	mg/L	0.0025	0.00064	1	11/08/23 11:52	11/09/23 13:11	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/08/23 11:52	11/09/23 13:11	7439-92-1	
Nickel	**0.041**	mg/L	0.0025	0.00065	1	11/08/23 11:52	11/09/23 13:11	7440-02-0	
Selenium	**0.0011J**	mg/L	0.0025	0.00084	1	11/08/23 11:52	11/09/23 13:11	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/08/23 11:52	11/09/23 13:11	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/08/23 11:52	11/09/23 13:11	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/08/23 11:52	11/09/23 13:11	7440-62-2	
Zinc	**0.091**	mg/L	0.0050	0.0040	1	11/08/23 11:52	11/09/23 13:11	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00026**	mg/L	0.00020	0.00020	1	11/07/23 11:00	11/07/23 17:09	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/07/23 13:22	11/09/23 13:25	96-12-8	1c,CH, L2
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/11/23 12:20	11/11/23 19:39	96-12-8	2c,8c, H2
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/07/23 13:22	11/09/23 13:25	106-93-4	1c,CH, L2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/11/23 12:20	11/11/23 19:39	106-93-4	2c,8c, H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	91	%.	60-140		1	11/11/23 12:20	11/11/23 19:39	630-20-6	
1,1,1,2-Tetrachloroethane (S)	37	%.	60-140		1	11/07/23 13:22	11/09/23 13:25	630-20-6	CH,SR
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		11/08/23 09:50		3c

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30636586

Sample: TW-15B **Lab ID: 30636586003** Collected: 11/02/23 09:55 Received: 11/03/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**104**	mg/L	10.0	10.0	1		11/08/23 15:37		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 13:33		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/09/23 10:50	11/09/23 15:05		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**55.8**	mg/L	3.0	0.67	1		11/09/23 10:21	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/06/23 16:41	14808-79-8	

Sample: TW-16 **Lab ID: 30636586004** Collected: 11/02/23 11:35 Received: 11/03/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**12.8**	mg/L	0.50	0.054	1	11/08/23 14:32	11/09/23 13:39	7440-70-2	
Iron	**7.0**	mg/L	0.050	0.0056	1	11/08/23 14:32	11/09/23 13:39	7439-89-6	
Magnesium	**10.4**	mg/L	0.50	0.021	1	11/08/23 14:32	11/09/23 13:39	7439-95-4	
Manganese	**1.3**	mg/L	0.0050	0.00055	1	11/08/23 14:32	11/09/23 13:39	7439-96-5	
Potassium	**6.6**	mg/L	0.50	0.20	1	11/08/23 14:32	11/09/23 13:39	7440-09-7	
Sodium	**19.9**	mg/L	0.50	0.11	1	11/08/23 14:32	11/09/23 13:39	7440-23-5	
Total Hardness	**74.6**	mg/L	3.3	0.22	1	11/08/23 14:32	11/09/23 13:39		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**13.1**	mg/L	0.50	0.054	1	11/09/23 10:28	11/13/23 15:45	7440-70-2	
Iron, Dissolved	**0.025J**	mg/L	0.050	0.0056	1	11/09/23 10:28	11/13/23 15:45	7439-89-6	
Magnesium, Dissolved	**10.8**	mg/L	0.50	0.021	1	11/09/23 10:28	11/13/23 15:45	7439-95-4	
Manganese, Dissolved	**1.3**	mg/L	0.0050	0.00055	1	11/09/23 10:28	11/13/23 15:45	7439-96-5	
Potassium, Dissolved	**6.9**	mg/L	0.50	0.20	1	11/09/23 10:28	11/13/23 15:45	7440-09-7	
Sodium, Dissolved	**20.7**	mg/L	0.50	0.11	1	11/09/23 10:28	11/13/23 15:45	7440-23-5	

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30636586

Sample: TW-16 **Lab ID: 30636586004** Collected: 11/02/23 11:35 Received: 11/03/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/08/23 11:52	11/09/23 13:15	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/08/23 11:52	11/09/23 13:15	7440-38-2	
Barium	**0.025**	mg/L	0.0025	0.00098	1	11/08/23 11:52	11/09/23 13:15	7440-39-3	
Beryllium	**0.00074**	mg/L	0.00050	0.00010	1	11/08/23 11:52	11/09/23 13:15	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/08/23 11:52	11/09/23 13:15	7440-43-9	
Chromium	**0.0079**	mg/L	0.0025	0.00050	1	11/08/23 11:52	11/09/23 13:15	7440-47-3	
Cobalt	**0.23**	mg/L	0.0025	0.00081	1	11/08/23 11:52	11/09/23 13:15	7440-48-4	
Copper	**0.0010J**	mg/L	0.0025	0.00064	1	11/08/23 11:52	11/09/23 13:15	7440-50-8	B
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/08/23 11:52	11/09/23 13:15	7439-92-1	
Nickel	**0.26**	mg/L	0.0025	0.00065	1	11/08/23 11:52	11/09/23 13:15	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/08/23 11:52	11/09/23 13:15	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/08/23 11:52	11/09/23 13:15	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/08/23 11:52	11/09/23 13:15	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/08/23 11:52	11/09/23 13:15	7440-62-2	
Zinc	**0.38**	mg/L	0.0050	0.0040	1	11/08/23 11:52	11/09/23 13:15	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/07/23 11:00	11/07/23 17:12	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/07/23 13:22	11/09/23 13:38	96-12-8	1c,CH, L2
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/11/23 12:20	11/11/23 19:52	96-12-8	2c,8c, H2
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/07/23 13:22	11/09/23 13:38	106-93-4	1c,CH, L2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/11/23 12:20	11/11/23 19:52	106-93-4	2c,8c, H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	67	%.	60-140		1	11/07/23 13:22	11/09/23 13:38	630-20-6	CH
1,1,1,2-Tetrachloroethane (S)	102	%.	60-140		1	11/11/23 12:20	11/11/23 19:52	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		11/08/23 09:51		4c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**206**	mg/L	10.0	10.0	1		11/08/23 15:37		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 13:35		

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30636586

Sample: TW-16 **Lab ID: 30636586004** Collected: 11/02/23 11:35 Received: 11/03/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
	Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/09/23 10:50	11/09/23 15:06		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
	Pace Analytical Services - Greensburg								
Chloride	**25.8**	mg/L	3.0	0.67	1		11/09/23 10:22	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**106**	mg/L	20.0	9.3	2		11/06/23 16:57	14808-79-8	

Sample: TW-16A **Lab ID: 30636586005** Collected: 11/02/23 11:00 Received: 11/03/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Calcium	**0.99**	mg/L	0.50	0.054	1	11/08/23 14:32	11/09/23 13:41	7440-70-2	
Iron	**0.020J**	mg/L	0.050	0.0056	1	11/08/23 14:32	11/09/23 13:41	7439-89-6	B
Magnesium	**0.37J**	mg/L	0.50	0.021	1	11/08/23 14:32	11/09/23 13:41	7439-95-4	
Manganese	**0.0047J**	mg/L	0.0050	0.00055	1	11/08/23 14:32	11/09/23 13:41	7439-96-5	
Potassium	**0.48J**	mg/L	0.50	0.20	1	11/08/23 14:32	11/09/23 13:41	7440-09-7	
Sodium	**1.2**	mg/L	0.50	0.11	1	11/08/23 14:32	11/09/23 13:41	7440-23-5	
Total Hardness	**4.0**	mg/L	3.3	0.22	1	11/08/23 14:32	11/09/23 13:41		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Calcium, Dissolved	**1.0**	mg/L	0.50	0.054	1	11/09/23 12:45	11/10/23 17:32	7440-70-2	
Iron, Dissolved	**0.0085J**	mg/L	0.050	0.0056	1	11/09/23 12:45	11/10/23 17:32	7439-89-6	
Magnesium, Dissolved	**0.36J**	mg/L	0.50	0.021	1	11/09/23 12:45	11/10/23 17:32	7439-95-4	
Manganese, Dissolved	**0.0041J**	mg/L	0.0050	0.00055	1	11/09/23 12:45	11/10/23 17:32	7439-96-5	
Potassium, Dissolved	**0.54**	mg/L	0.50	0.20	1	11/09/23 12:45	11/10/23 17:32	7440-09-7	
Sodium, Dissolved	**1.2**	mg/L	0.50	0.11	1	11/09/23 12:45	11/10/23 17:32	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/08/23 11:52	11/09/23 13:18	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/08/23 11:52	11/09/23 13:18	7440-38-2	
Barium	**0.0059**	mg/L	0.0025	0.00098	1	11/08/23 11:52	11/09/23 13:18	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	11/08/23 11:52	11/09/23 13:18	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/08/23 11:52	11/09/23 13:18	7440-43-9	
Chromium	**0.0026**	mg/L	0.0025	0.00050	1	11/08/23 11:52	11/09/23 13:18	7440-47-3	
Cobalt	**0.0094**	mg/L	0.0025	0.00081	1	11/08/23 11:52	11/09/23 13:18	7440-48-4	
Copper	**0.0047**	mg/L	0.0025	0.00064	1	11/08/23 11:52	11/09/23 13:18	7440-50-8	B

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30636586

Sample: TW-16A **Lab ID: 30636586005** Collected: 11/02/23 11:00 Received: 11/03/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/08/23 11:52	11/09/23 13:18	7439-92-1	
Nickel	**0.0067**	mg/L	0.0025	0.00065	1	11/08/23 11:52	11/09/23 13:18	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/08/23 11:52	11/09/23 13:18	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/08/23 11:52	11/09/23 13:18	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/08/23 11:52	11/09/23 13:18	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/08/23 11:52	11/09/23 13:18	7440-62-2	
Zinc	**0.0063**	mg/L	0.0050	0.0040	1	11/08/23 11:52	11/09/23 13:18	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/07/23 11:00	11/07/23 17:14	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/07/23 13:22	11/09/23 13:51	96-12-8	1c,CH, L2
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/11/23 12:20	11/11/23 20:05	96-12-8	2c,8c, H2
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/07/23 13:22	11/09/23 13:51	106-93-4	1c,CH, L2
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/11/23 12:20	11/11/23 20:05	106-93-4	2c,8c, H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	64	%.	60-140		1	11/07/23 13:22	11/09/23 13:51	630-20-6	CH
1,1,1,2-Tetrachloroethane (S)	105	%.	60-140		1	11/11/23 12:20	11/11/23 20:05	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		11/08/23 09:54		5c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**19.0**	mg/L	10.0	10.0	1		11/08/23 15:37		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 13:37		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/09/23 10:50	11/09/23 15:06		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**2.9J**	mg/L	3.0	0.67	1		11/09/23 10:23	16887-00-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30636586

Sample: TW-16A **Lab ID: 30636586005** Collected: 11/02/23 11:00 Received: 11/03/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/06/23 16:43	14808-79-8	

Sample: TW-17 **Lab ID: 30636586006** Collected: 11/02/23 12:30 Received: 11/03/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Calcium	**5.0**	mg/L	0.50	0.054	1	11/08/23 14:32	11/09/23 13:43	7440-70-2	
Iron	**18.7**	mg/L	0.050	0.0056	1	11/08/23 14:32	11/09/23 13:43	7439-89-6	
Magnesium	**2.1**	mg/L	0.50	0.021	1	11/08/23 14:32	11/09/23 13:43	7439-95-4	
Manganese	**0.32**	mg/L	0.0050	0.00055	1	11/08/23 14:32	11/09/23 13:43	7439-96-5	
Potassium	**1.9**	mg/L	0.50	0.20	1	11/08/23 14:32	11/09/23 13:43	7440-09-7	
Sodium	**13.0**	mg/L	0.50	0.11	1	11/08/23 14:32	11/09/23 13:43	7440-23-5	
Total Hardness	**21.1**	mg/L	3.3	0.22	1	11/08/23 14:32	11/09/23 13:43		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Calcium, Dissolved	**4.7**	mg/L	0.50	0.054	1	11/07/23 15:00	11/08/23 18:06	7440-70-2	
Iron, Dissolved	**0.34**	mg/L	0.050	0.0056	1	11/07/23 15:00	11/08/23 18:06	7439-89-6	
Magnesium, Dissolved	**2.0**	mg/L	0.50	0.021	1	11/07/23 15:00	11/08/23 18:06	7439-95-4	
Manganese, Dissolved	**0.29**	mg/L	0.0050	0.00055	1	11/07/23 15:00	11/08/23 18:06	7439-96-5	
Potassium, Dissolved	**1.7**	mg/L	0.50	0.20	1	11/07/23 15:00	11/08/23 18:06	7440-09-7	
Sodium, Dissolved	**12.2**	mg/L	0.50	0.11	1	11/07/23 15:00	11/08/23 18:06	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/08/23 11:52	11/09/23 13:21	7440-36-0	
Arsenic	**0.0010J**	mg/L	0.0025	0.00044	1	11/08/23 11:52	11/09/23 13:21	7440-38-2	
Barium	**0.031**	mg/L	0.0025	0.00098	1	11/08/23 11:52	11/09/23 13:21	7440-39-3	
Beryllium	**0.00017J**	mg/L	0.00050	0.00010	1	11/08/23 11:52	11/09/23 13:21	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/08/23 11:52	11/09/23 13:21	7440-43-9	
Chromium	**0.032**	mg/L	0.0025	0.00050	1	11/08/23 11:52	11/09/23 13:21	7440-47-3	
Cobalt	**0.015**	mg/L	0.0025	0.00081	1	11/08/23 11:52	11/09/23 13:21	7440-48-4	
Copper	**0.0024J**	mg/L	0.0025	0.00064	1	11/08/23 11:52	11/09/23 13:21	7440-50-8	B
Lead	**0.00029J**	mg/L	0.00050	0.00025	1	11/08/23 11:52	11/09/23 13:21	7439-92-1	
Nickel	**0.036**	mg/L	0.0025	0.00065	1	11/08/23 11:52	11/09/23 13:21	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/08/23 11:52	11/09/23 13:21	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/08/23 11:52	11/09/23 13:21	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/08/23 11:52	11/09/23 13:21	7440-28-0	
Vanadium	**0.0021J**	mg/L	0.0025	0.0012	1	11/08/23 11:52	11/09/23 13:21	7440-62-2	
Zinc	**0.055**	mg/L	0.0050	0.0040	1	11/08/23 11:52	11/09/23 13:21	7440-66-6	

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30636586

Sample: TW-17 **Lab ID: 30636586006** Collected: 11/02/23 12:30 Received: 11/03/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/07/23 11:00	11/07/23 17:16	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/07/23 13:22	11/09/23 14:05	96-12-8	1c,CH, L2
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/11/23 12:20	11/11/23 20:19	96-12-8	2c,8c, H2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/07/23 13:22	11/09/23 14:05	106-93-4	1c,CH, L2
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/11/23 12:20	11/11/23 20:19	106-93-4	2c,8c, H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	106	%.	60-140		1	11/11/23 12:20	11/11/23 20:19	630-20-6	
1,1,1,2-Tetrachloroethane (S)	95	%.	60-140		1	11/07/23 13:22	11/09/23 14:05	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**4.0J**	mg/L	10.0	1.0	1		11/08/23 09:56		7c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**216**	mg/L	10.0	10.0	1		11/08/23 15:37		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 13:39		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/09/23 10:50	11/09/23 15:06		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**6.2**	mg/L	3.0	0.67	1		11/09/23 10:23	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**41.6**	mg/L	10.0	4.7	1		11/06/23 16:45	14808-79-8	

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30636586

Sample: TW-17A **Lab ID: 30636586007** Collected: 11/02/23 13:10 Received: 11/03/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.80**	mg/L	0.50	0.054	1	11/08/23 14:32	11/09/23 13:45	7440-70-2	
Iron	**0.086**	mg/L	0.050	0.0056	1	11/08/23 14:32	11/09/23 13:45	7439-89-6	
Magnesium	**0.40J**	mg/L	0.50	0.021	1	11/08/23 14:32	11/09/23 13:45	7439-95-4	
Manganese	**0.0080**	mg/L	0.0050	0.00055	1	11/08/23 14:32	11/09/23 13:45	7439-96-5	
Potassium	**0.52**	mg/L	0.50	0.20	1	11/08/23 14:32	11/09/23 13:45	7440-09-7	
Sodium	**1.3**	mg/L	0.50	0.11	1	11/08/23 14:32	11/09/23 13:45	7440-23-5	
Total Hardness	**3.7**	mg/L	3.3	0.22	1	11/08/23 14:32	11/09/23 13:45		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.77**	mg/L	0.50	0.054	1	11/09/23 12:45	11/10/23 17:47	7440-70-2	
Iron, Dissolved	**0.019J**	mg/L	0.050	0.0056	1	11/09/23 12:45	11/10/23 17:47	7439-89-6	
Magnesium, Dissolved	**0.38J**	mg/L	0.50	0.021	1	11/09/23 12:45	11/10/23 17:47	7439-95-4	
Manganese, Dissolved	**0.0072**	mg/L	0.0050	0.00055	1	11/09/23 12:45	11/10/23 17:47	7439-96-5	
Potassium, Dissolved	**0.52**	mg/L	0.50	0.20	1	11/09/23 12:45	11/10/23 17:47	7440-09-7	
Sodium, Dissolved	**1.2**	mg/L	0.50	0.11	1	11/09/23 12:45	11/10/23 17:47	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/08/23 11:52	11/09/23 13:24	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/08/23 11:52	11/09/23 13:24	7440-38-2	
Barium	**0.011**	mg/L	0.0025	0.00098	1	11/08/23 11:52	11/09/23 13:24	7440-39-3	
Beryllium	**0.00032J**	mg/L	0.00050	0.00010	1	11/08/23 11:52	11/09/23 13:24	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/08/23 11:52	11/09/23 13:24	7440-43-9	
Chromium	**0.0034**	mg/L	0.0025	0.00050	1	11/08/23 11:52	11/09/23 13:24	7440-47-3	
Cobalt	**0.0045**	mg/L	0.0025	0.00081	1	11/08/23 11:52	11/09/23 13:24	7440-48-4	
Copper	**0.0027**	mg/L	0.0025	0.00064	1	11/08/23 11:52	11/09/23 13:24	7440-50-8	B
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/08/23 11:52	11/09/23 13:24	7439-92-1	
Nickel	**0.0099**	mg/L	0.0025	0.00065	1	11/08/23 11:52	11/09/23 13:24	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/08/23 11:52	11/09/23 13:24	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/08/23 11:52	11/09/23 13:24	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/08/23 11:52	11/09/23 13:24	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/08/23 11:52	11/09/23 13:24	7440-62-2	
Zinc	**0.0073**	mg/L	0.0050	0.0040	1	11/08/23 11:52	11/09/23 13:24	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/07/23 11:00	11/07/23 17:18	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/07/23 13:22	11/09/23 14:18	96-12-8	1c,CH, L2
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/11/23 12:20	11/11/23 20:32	96-12-8	2c,8c, H2

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30636586

Sample: TW-17A **Lab ID: 30636586007** Collected: 11/02/23 13:10 Received: 11/03/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
	Pace Analytical Services - Greensburg								
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/07/23 13:22	11/09/23 14:18	106-93-4	1c,CH, L2
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/11/23 12:20	11/11/23 20:32	106-93-4	2c,8c, H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	107	%.	60-140		1	11/11/23 12:20	11/11/23 20:32	630-20-6	
1,1,1,2-Tetrachloroethane (S)	75	%.	60-140		1	11/07/23 13:22	11/09/23 14:18	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011								
	Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		11/08/23 09:57		6c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015								
	Pace Analytical Services - Greensburg								
Total Dissolved Solids	**11.0**	mg/L	10.0	10.0	1		11/08/23 15:37		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1								
	Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 13:41		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
	Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/09/23 10:50	11/09/23 15:07		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
	Pace Analytical Services - Greensburg								
Chloride	**3.1**	mg/L	3.0	0.67	1		11/09/23 10:24	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**5.2J**	mg/L	10.0	4.7	1		11/06/23 16:46	14808-79-8	

Sample: TW-19 **Lab ID: 30636586008** Collected: 11/02/23 14:10 Received: 11/03/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Calcium	**18.8**	mg/L	0.50	0.054	1	11/08/23 14:32	11/09/23 13:47	7440-70-2	
Iron	**0.014J**	mg/L	0.050	0.0056	1	11/08/23 14:32	11/09/23 13:47	7439-89-6	B
Magnesium	**5.0**	mg/L	0.50	0.021	1	11/08/23 14:32	11/09/23 13:47	7439-95-4	
Manganese	**0.013**	mg/L	0.0050	0.00055	1	11/08/23 14:32	11/09/23 13:47	7439-96-5	
Potassium	**4.5**	mg/L	0.50	0.20	1	11/08/23 14:32	11/09/23 13:47	7440-09-7	

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30636586

Sample: TW-19 **Lab ID: 30636586008** Collected: 11/02/23 14:10 Received: 11/03/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Sodium	**11.8**	mg/L	0.50	0.11	1	11/08/23 14:32	11/09/23 13:47	7440-23-5	
Total Hardness	**67.4**	mg/L	3.3	0.22	1	11/08/23 14:32	11/09/23 13:47		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**18.9**	mg/L	0.50	0.054	1	11/09/23 12:45	11/10/23 17:50	7440-70-2	
Iron, Dissolved	**0.011J**	mg/L	0.050	0.0056	1	11/09/23 12:45	11/10/23 17:50	7439-89-6	
Magnesium, Dissolved	**4.9**	mg/L	0.50	0.021	1	11/09/23 12:45	11/10/23 17:50	7439-95-4	
Manganese, Dissolved	**0.013**	mg/L	0.0050	0.00055	1	11/09/23 12:45	11/10/23 17:50	7439-96-5	
Potassium, Dissolved	**4.5**	mg/L	0.50	0.20	1	11/09/23 12:45	11/10/23 17:50	7440-09-7	
Sodium, Dissolved	**11.6**	mg/L	0.50	0.11	1	11/09/23 12:45	11/10/23 17:50	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/08/23 11:52	11/09/23 13:27	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/08/23 11:52	11/09/23 13:27	7440-38-2	
Barium	**0.053**	mg/L	0.0025	0.00098	1	11/08/23 11:52	11/09/23 13:27	7440-39-3	
Beryllium	**0.00017J**	mg/L	0.00050	0.00010	1	11/08/23 11:52	11/09/23 13:27	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/08/23 11:52	11/09/23 13:27	7440-43-9	
Chromium	**0.0024J**	mg/L	0.0025	0.00050	1	11/08/23 11:52	11/09/23 13:27	7440-47-3	
Cobalt	**0.012**	mg/L	0.0025	0.00081	1	11/08/23 11:52	11/09/23 13:27	7440-48-4	
Copper	**0.012**	mg/L	0.0025	0.00064	1	11/08/23 11:52	11/09/23 13:27	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/08/23 11:52	11/09/23 13:27	7439-92-1	
Nickel	**0.013**	mg/L	0.0025	0.00065	1	11/08/23 11:52	11/09/23 13:27	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/08/23 11:52	11/09/23 13:27	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/08/23 11:52	11/09/23 13:27	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/08/23 11:52	11/09/23 13:27	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/08/23 11:52	11/09/23 13:27	7440-62-2	
Zinc	**0.0066**	mg/L	0.0050	0.0040	1	11/08/23 11:52	11/09/23 13:27	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/07/23 11:00	11/07/23 17:20	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/07/23 13:22	11/09/23 14:58	96-12-8	1c,CH, L2
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/11/23 12:20	11/11/23 20:45	96-12-8	2c,8c, H2
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/07/23 13:22	11/09/23 14:58	106-93-4	1c,CH, L2
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/11/23 12:20	11/11/23 20:45	106-93-4	2c,8c, H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	105	%.	60-140		1	11/11/23 12:20	11/11/23 20:45	630-20-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30636586

Sample: TW-19 **Lab ID: 30636586008** Collected: 11/02/23 14:10 Received: 11/03/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
Surrogates									
1,1,1,2-Tetrachloroethane (S)	67	%.	60-140		1	11/07/23 13:22	11/09/23 14:58	630-20-6	CH
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**28.0**	mg/L	10.0	1.0	1		11/08/23 09:59		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**122**	mg/L	10.0	10.0	1		11/08/23 15:37		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 13:43		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.8J**	mg/L	25.0	4.7	1	11/09/23 10:50	11/09/23 15:07		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**19.8**	mg/L	3.0	0.67	1		11/09/23 10:25	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**24.9**	mg/L	10.0	4.7	1		11/06/23 16:48	14808-79-8	

Sample: TW-21 **Lab ID: 30636586009** Collected: 11/02/23 14:50 Received: 11/03/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**8.7**	mg/L	0.50	0.054	1	11/08/23 14:32	11/09/23 13:49	7440-70-2	
Iron	**0.015J**	mg/L	0.050	0.0056	1	11/08/23 14:32	11/09/23 13:49	7439-89-6	B
Magnesium	**3.0**	mg/L	0.50	0.021	1	11/08/23 14:32	11/09/23 13:49	7439-95-4	
Manganese	**0.12**	mg/L	0.0050	0.00055	1	11/08/23 14:32	11/09/23 13:49	7439-96-5	
Potassium	**2.1**	mg/L	0.50	0.20	1	11/08/23 14:32	11/09/23 13:49	7440-09-7	
Sodium	**23.8**	mg/L	0.50	0.11	1	11/08/23 14:32	11/09/23 13:49	7440-23-5	
Total Hardness	**34.1**	mg/L	3.3	0.22	1	11/08/23 14:32	11/09/23 13:49		N3

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30636586

Sample: TW-21 **Lab ID: 30636586009** Collected: 11/02/23 14:50 Received: 11/03/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**9.0**	mg/L	0.50	0.054	1	11/09/23 12:45	11/10/23 17:52	7440-70-2	
Iron, Dissolved	**0.015J**	mg/L	0.050	0.0056	1	11/09/23 12:45	11/10/23 17:52	7439-89-6	
Magnesium, Dissolved	**3.1**	mg/L	0.50	0.021	1	11/09/23 12:45	11/10/23 17:52	7439-95-4	
Manganese, Dissolved	**0.13**	mg/L	0.0050	0.00055	1	11/09/23 12:45	11/10/23 17:52	7439-96-5	
Potassium, Dissolved	**2.1**	mg/L	0.50	0.20	1	11/09/23 12:45	11/10/23 17:52	7440-09-7	
Sodium, Dissolved	**24.1**	mg/L	0.50	0.11	1	11/09/23 12:45	11/10/23 17:52	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/08/23 11:52	11/09/23 13:30	7440-36-0	
Arsenic	**0.00048J**	mg/L	0.0025	0.00044	1	11/08/23 11:52	11/09/23 13:30	7440-38-2	
Barium	**0.084**	mg/L	0.0025	0.00098	1	11/08/23 11:52	11/09/23 13:30	7440-39-3	
Beryllium	**0.00041J**	mg/L	0.00050	0.00010	1	11/08/23 11:52	11/09/23 13:30	7440-41-7	
Cadmium	**0.00019J**	mg/L	0.00050	0.00013	1	11/08/23 11:52	11/09/23 13:30	7440-43-9	
Chromium	**0.0014J**	mg/L	0.0025	0.00050	1	11/08/23 11:52	11/09/23 13:30	7440-47-3	
Cobalt	**0.011**	mg/L	0.0025	0.00081	1	11/08/23 11:52	11/09/23 13:30	7440-48-4	
Copper	**0.0038**	mg/L	0.0025	0.00064	1	11/08/23 11:52	11/09/23 13:30	7440-50-8	B
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/08/23 11:52	11/09/23 13:30	7439-92-1	
Nickel	**0.0050**	mg/L	0.0025	0.00065	1	11/08/23 11:52	11/09/23 13:30	7440-02-0	
Selenium	**0.0018J**	mg/L	0.0025	0.00084	1	11/08/23 11:52	11/09/23 13:30	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/08/23 11:52	11/09/23 13:30	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/08/23 11:52	11/09/23 13:30	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/08/23 11:52	11/09/23 13:30	7440-62-2	
Zinc	**0.030**	mg/L	0.0050	0.0040	1	11/08/23 11:52	11/09/23 13:30	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/07/23 11:00	11/08/23 07:08	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/07/23 13:22	11/09/23 15:11	96-12-8	1c,CH, L2
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/11/23 12:20	11/11/23 20:59	96-12-8	2c,8c, H2
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/07/23 13:22	11/09/23 15:11	106-93-4	1c,CH, L2
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/11/23 12:20	11/11/23 20:59	106-93-4	2c,8c, H2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	60	%.	60-140		1	11/07/23 13:22	11/09/23 15:11	630-20-6	
1,1,1,2-Tetrachloroethane (S)	93	%.	60-140		1	11/11/23 12:20	11/11/23 20:59	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		11/08/23 10:02		4c

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30636586

Sample: TW-21 **Lab ID: 30636586009** Collected: 11/02/23 14:50 Received: 11/03/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**126**	mg/L	10.0	10.0	1		11/08/23 15:37		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/14/23 15:54	11/15/23 13:45		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/09/23 10:50	11/09/23 15:07		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**42.7**	mg/L	3.0	0.67	1		11/09/23 10:26	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**29.5**	mg/L	10.0	4.7	1		11/06/23 16:48	14808-79-8	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30636586

QC Batch: 628236
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30636586001, 30636586002, 30636586003, 30636586004, 30636586005, 30636586006, 30636586007, 30636586008, 30636586009

METHOD BLANK: 3062492
Matrix: Water
Associated Lab Samples: 30636586001, 30636586002, 30636586003, 30636586004, 30636586005, 30636586006, 30636586007, 30636586008, 30636586009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.054	11/09/23 13:06	
Iron	mg/L	0.0064J	0.050	0.0056	11/09/23 13:06	
Magnesium	mg/L	0.50 U	0.50	0.021	11/09/23 13:06	
Manganese	mg/L	0.0050 U	0.0050	0.00055	11/09/23 13:06	
Potassium	mg/L	0.50 U	0.50	0.20	11/09/23 13:06	
Sodium	mg/L	0.50 U	0.50	0.11	11/09/23 13:06	

LABORATORY CONTROL SAMPLE: 3062493

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	40.1	100	80-120	
Iron	mg/L	2	2.1	104	80-120	
Magnesium	mg/L	20	20.1	100	80-120	
Manganese	mg/L	2	2.1	106	80-120	
Potassium	mg/L	20	20.0	100	80-120	
Sodium	mg/L	20	20.0	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3062564 3062565

Parameter	Units	30637020003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	5210 ug/L	40	40	46.1	47.0	102	104	80-120	2	20	
Iron	mg/L	424 ug/L	2	2	2.5	2.6	105	107	80-120	2	20	
Magnesium	mg/L	10000 ug/L	20	20	30.7	31.1	103	106	80-120	2	20	
Manganese	mg/L	850 ug/L	2	2	3.0	3.0	107	109	80-120	2	20	
Potassium	mg/L	1570 ug/L	20	20	22.2	22.6	103	105	80-120	2	20	
Sodium	mg/L	8700 ug/L	20	20	29.4	30.0	104	106	80-120	2	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30636586

QC Batch: 627904
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30636586001, 30636586002, 30636586006

METHOD BLANK: 3060601 Matrix: Water
Associated Lab Samples: 30636586001, 30636586002, 30636586006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.054	11/08/23 17:18	
Iron, Dissolved	mg/L	0.014J	0.050	0.0056	11/08/23 17:18	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.021	11/08/23 17:18	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.00055	11/08/23 17:18	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.20	11/08/23 17:18	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.11	11/08/23 17:18	

LABORATORY CONTROL SAMPLE: 3060602

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	39.6	99	80-120	
Iron, Dissolved	mg/L	2	2.1	104	80-120	
Magnesium, Dissolved	mg/L	20	20.4	102	80-120	
Manganese, Dissolved	mg/L	2	2.1	106	80-120	
Potassium, Dissolved	mg/L	20	19.5	98	80-120	
Sodium, Dissolved	mg/L	20	19.6	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3060603 3060604

Parameter	Units	30636257002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	2.8	40	40	45.3	41.5	107	97	80-120	9	20	
Iron, Dissolved	mg/L	0.050 U	2	2	2.2	2.0	111	100	80-120	10	20	
Magnesium, Dissolved	mg/L	1.7	20	20	23.5	21.3	109	99	80-120	10	20	
Manganese, Dissolved	mg/L	0.032	2	2	2.3	2.1	113	104	80-120	8	20	
Potassium, Dissolved	mg/L	1.0	20	20	22.0	20.2	106	97	80-120	8	20	
Sodium, Dissolved	mg/L	4.4	20	20	25.6	23.5	108	98	80-120	9	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30636586

QC Batch: 628454
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30636586003, 30636586004

METHOD BLANK: 3063649
Matrix: Water
Associated Lab Samples: 30636586003, 30636586004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.054	11/13/23 14:39	
Iron, Dissolved	mg/L	0.050 U	0.050	0.0056	11/13/23 14:39	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.021	11/13/23 14:39	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.00055	11/13/23 14:39	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.20	11/13/23 14:39	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.11	11/13/23 14:39	

LABORATORY CONTROL SAMPLE: 3063650

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	41.9	105	80-120	
Iron, Dissolved	mg/L	2	2.2	108	80-120	
Magnesium, Dissolved	mg/L	20	21.4	107	80-120	
Manganese, Dissolved	mg/L	2	2.2	109	80-120	
Potassium, Dissolved	mg/L	20	21.2	106	80-120	
Sodium, Dissolved	mg/L	20	21.0	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3063651 3063652

Parameter	Units	30635181001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	133000 ug/L	40	40	175	176	105	108	80-120	1	20	
Iron, Dissolved	mg/L	0.064	2	2	2.2	2.2	107	108	80-120	1	20	
Magnesium, Dissolved	mg/L	18000 ug/L	20	20	39.4	39.9	107	110	80-120	1	20	
Manganese, Dissolved	mg/L	0.23	2	2	2.4	2.4	108	109	80-120	1	20	
Potassium, Dissolved	mg/L	1960 ug/L	20	20	23.9	24.2	110	111	80-120	1	20	
Sodium, Dissolved	mg/L	11800 ug/L	20	20	33.3	33.8	108	110	80-120	1	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30636586

QC Batch: 628539
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30636586005, 30636586007, 30636586008, 30636586009

METHOD BLANK: 3064181 Matrix: Water
Associated Lab Samples: 30636586005, 30636586007, 30636586008, 30636586009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.054	11/10/23 17:28	
Iron, Dissolved	mg/L	0.050 U	0.050	0.0056	11/10/23 17:28	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.021	11/10/23 17:28	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.00055	11/10/23 17:28	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.20	11/10/23 17:28	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.11	11/10/23 17:28	

LABORATORY CONTROL SAMPLE: 3064182

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	42.0	105	80-120	
Iron, Dissolved	mg/L	2	2.2	110	80-120	
Magnesium, Dissolved	mg/L	20	20.8	104	80-120	
Manganese, Dissolved	mg/L	2	2.2	111	80-120	
Potassium, Dissolved	mg/L	20	20.6	103	80-120	
Sodium, Dissolved	mg/L	20	20.4	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3064183 3064184

Parameter	Units	30636586005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	1.0	40	40	42.6	43.1	104	105	80-120	1	20	
Iron, Dissolved	mg/L	0.0085J	2	2	2.2	2.2	109	110	80-120	1	20	
Magnesium, Dissolved	mg/L	0.36J	20	20	20.9	21.1	103	104	80-120	1	20	
Manganese, Dissolved	mg/L	0.0041J	2	2	2.2	2.2	110	111	80-120	1	20	
Potassium, Dissolved	mg/L	0.54	20	20	21.0	21.2	102	103	80-120	1	20	
Sodium, Dissolved	mg/L	1.2	20	20	21.6	21.7	102	103	80-120	1	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30636586

QC Batch: 628158
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30636586001, 30636586002, 30636586003, 30636586004, 30636586005, 30636586006, 30636586007, 30636586008, 30636586009

METHOD BLANK: 3062091
Matrix: Water
Associated Lab Samples: 30636586001, 30636586002, 30636586003, 30636586004, 30636586005, 30636586006, 30636586007, 30636586008, 30636586009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00030	11/09/23 11:56	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	11/09/23 11:56	
Barium	mg/L	0.0025 U	0.0025	0.00098	11/09/23 11:56	
Beryllium	mg/L	0.00050 U	0.00050	0.00010	11/09/23 11:56	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	11/09/23 11:56	
Chromium	mg/L	0.0025 U	0.0025	0.00050	11/09/23 11:56	
Cobalt	mg/L	0.0025 U	0.0025	0.00081	11/09/23 11:56	
Copper	mg/L	0.00089J	0.0025	0.00064	11/09/23 11:56	
Lead	mg/L	0.00050 U	0.00050	0.00025	11/09/23 11:56	
Nickel	mg/L	0.0025 U	0.0025	0.00065	11/09/23 11:56	
Selenium	mg/L	0.0025 U	0.0025	0.00084	11/09/23 11:56	
Silver	mg/L	0.0025 U	0.0025	0.00053	11/09/23 11:56	
Thallium	mg/L	0.00050 U	0.00050	0.000081	11/09/23 11:56	
Vanadium	mg/L	0.0025 U	0.0025	0.0012	11/09/23 11:56	
Zinc	mg/L	0.0050 U	0.0050	0.0040	11/09/23 11:56	

LABORATORY CONTROL SAMPLE: 3062092

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.020	99	80-120	
Arsenic	mg/L	0.1	0.10	100	80-120	
Barium	mg/L	0.1	0.097	97	80-120	
Beryllium	mg/L	0.02	0.019	96	80-120	
Cadmium	mg/L	0.02	0.019	95	80-120	
Chromium	mg/L	0.1	0.11	105	80-120	
Cobalt	mg/L	0.1	0.11	105	80-120	
Copper	mg/L	0.1	0.11	107	80-120	
Lead	mg/L	0.02	0.020	98	80-120	
Nickel	mg/L	0.1	0.10	103	80-120	
Selenium	mg/L	0.1	0.095	95	80-120	
Silver	mg/L	0.1	0.098	98	80-120	
Thallium	mg/L	0.02	0.019	97	80-120	
Vanadium	mg/L	0.1	0.10	104	80-120	
Zinc	mg/L	0.2	0.20	101	80-120	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30636586

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3062117 3062118

Parameter	Units	30636586001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00050 U	0.02	0.02	0.020	0.020	101	99	75-125	2	20	
Arsenic	mg/L	0.0011J	0.1	0.1	0.099	0.098	98	97	75-125	1	20	
Barium	mg/L	0.012	0.1	0.1	0.11	0.11	97	96	75-125	1	20	
Beryllium	mg/L	0.0014	0.02	0.02	0.022	0.021	102	100	75-125	2	20	
Cadmium	mg/L	0.00050 U	0.02	0.02	0.019	0.019	97	96	75-125	1	20	
Chromium	mg/L	0.0015J	0.1	0.1	0.11	0.11	107	107	75-125	0	20	
Cobalt	mg/L	0.0012J	0.1	0.1	0.11	0.11	109	110	75-125	1	20	
Copper	mg/L	0.0013J	0.1	0.1	0.11	0.11	109	111	75-125	1	20	
Lead	mg/L	0.00050 U	0.02	0.02	0.020	0.020	99	99	75-125	1	20	
Nickel	mg/L	0.0029	0.1	0.1	0.11	0.11	108	106	75-125	1	20	
Selenium	mg/L	0.0025 U	0.1	0.1	0.094	0.095	94	94	75-125	1	20	
Silver	mg/L	0.0025 U	0.1	0.1	0.099	0.098	99	98	75-125	1	20	
Thallium	mg/L	0.00050 U	0.02	0.02	0.013	0.013	67	65	75-125	2	20	M1
Vanadium	mg/L	0.0025 U	0.1	0.1	0.11	0.11	106	106	75-125	0	20	
Zinc	mg/L	0.0070	0.2	0.2	0.21	0.21	101	100	75-125	1	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30636586

QC Batch: 627806
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30636586001, 30636586002, 30636586003, 30636586004, 30636586005, 30636586006, 30636586007, 30636586008, 30636586009

METHOD BLANK: 3060104
Matrix: Water
Associated Lab Samples: 30636586001, 30636586002, 30636586003, 30636586004, 30636586005, 30636586006, 30636586007, 30636586008, 30636586009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	11/07/23 16:49	

LABORATORY CONTROL SAMPLE: 3060105

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.010	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3060106 3060107

Parameter	Units	30636586001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00020 U	0.01	0.01	0.0099	0.010	99	100	80-120	0	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30636586

QC Batch: 627896
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30636586001, 30636586002, 30636586003, 30636586004, 30636586005, 30636586006, 30636586007, 30636586008, 30636586009

METHOD BLANK: 3060558
Matrix: Water
Associated Lab Samples: 30636586001, 30636586002, 30636586003, 30636586004, 30636586005, 30636586006, 30636586007, 30636586008, 30636586009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	11/09/23 10:05	CH
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	11/09/23 10:05	CH
1,1,1,2-Tetrachloroethane (S)	%.	47	60-140		11/09/23 10:05	CH,SR

LABORATORY CONTROL SAMPLE: 3060559

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.10	40	85-115	CH,L2
1,2-Dibromoethane (EDB)	ug/L	0.25	0.11	44	85-115	CH,L2
1,1,1,2-Tetrachloroethane (S)	%.			36	60-140	CH,SR

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3060560 3060561

Parameter	Units	30636257002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.4	0.4	0.15	0.12	38	31	60-140	21	25	CH,ML
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.4	0.4	0.16	0.13	40	33	60-140	22	25	CH,ML
1,1,1,2-Tetrachloroethane (S)	%.						36	29	60-140			CH,SR

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30636586

QC Batch: 629109
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30636586001, 30636586002, 30636586003, 30636586004, 30636586005, 30636586006, 30636586007, 30636586008, 30636586009

METHOD BLANK: 3067177
Matrix: Water
Associated Lab Samples: 30636586001, 30636586002, 30636586003, 30636586004, 30636586005, 30636586006, 30636586007, 30636586008, 30636586009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	11/11/23 16:59	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	11/11/23 16:59	
1,1,1,2-Tetrachloroethane (S)	%.	97	60-140		11/11/23 16:59	

LABORATORY CONTROL SAMPLE: 3067178

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.22	87	85-115	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.27	107	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			104	60-140	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30636586

QC Batch: 628054
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30636586001, 30636586002, 30636586003, 30636586004, 30636586005, 30636586006, 30636586007, 30636586008, 30636586009

METHOD BLANK: 3061619
Matrix: Water
Associated Lab Samples: 30636586001, 30636586002, 30636586003, 30636586004, 30636586005, 30636586006, 30636586007, 30636586008, 30636586009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	11/08/23 09:11	

LABORATORY CONTROL SAMPLE: 3061620

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3061621 3061622

Parameter	Units	30636257004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	50	50	50.0	54.0	100	108	85-115	8	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30636586

QC Batch: 628038
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30636586001, 30636586002, 30636586003, 30636586004, 30636586005, 30636586006, 30636586007, 30636586008, 30636586009

METHOD BLANK: 3061575
Matrix: Water
Associated Lab Samples: 30636586001, 30636586002, 30636586003, 30636586004, 30636586005, 30636586006, 30636586007, 30636586008, 30636586009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	11/08/23 15:37	

LABORATORY CONTROL SAMPLE: 3061576

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	991	99	85-115	

SAMPLE DUPLICATE: 3061577

Parameter	Units	30636586003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	104	107	3	5	

SAMPLE DUPLICATE: 3061578

Parameter	Units	30636586009 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	126	124	2	5	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30636586

QC Batch: 629366
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30636586001, 30636586002, 30636586003, 30636586004, 30636586005, 30636586006, 30636586007, 30636586008, 30636586009

METHOD BLANK: 3068265
Matrix: Water
Associated Lab Samples: 30636586001, 30636586002, 30636586003, 30636586004, 30636586005, 30636586006, 30636586007, 30636586008, 30636586009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	11/15/23 13:29	

LABORATORY CONTROL SAMPLE: 3068266

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.3	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3068267 3068268

Parameter	Units	30636586001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	3.9	3.2	99	81	90-110	20	20	ML

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3068269 3068270

Parameter	Units	30636653001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	ND	4	4	4.1	4.0	103	100	90-110	3	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30636586

QC Batch: 628448
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30636586001, 30636586002, 30636586003, 30636586004, 30636586005, 30636586006, 30636586007, 30636586008, 30636586009

METHOD BLANK: 3063623
Matrix: Water
Associated Lab Samples: 30636586001, 30636586002, 30636586003, 30636586004, 30636586005, 30636586006, 30636586007, 30636586008, 30636586009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/09/23 15:05	

LABORATORY CONTROL SAMPLE: 3063624

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	316	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3063625 3063626

Parameter	Units	30636586006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	25.0 U	150	150	157	150	105	100	90-110	4	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30636586

QC Batch: 628233
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30636586001, 30636586002, 30636586003, 30636586004, 30636586005, 30636586006, 30636586007, 30636586008, 30636586009

METHOD BLANK: 3062475
Matrix: Water
Associated Lab Samples: 30636586001, 30636586002, 30636586003, 30636586004, 30636586005, 30636586006, 30636586007, 30636586008, 30636586009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	11/09/23 10:15	

LABORATORY CONTROL SAMPLE: 3062476

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.4	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3062477 3062478

Parameter	Units	30636586001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1.8J	20	20	22.5	22.6	103	104	85-115	0	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30636586

QC Batch: 627757
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30636586001, 30636586002, 30636586003, 30636586004, 30636586005, 30636586006, 30636586007, 30636586008, 30636586009

METHOD BLANK: 3059939
Matrix: Water
Associated Lab Samples: 30636586001, 30636586002, 30636586003, 30636586004, 30636586005, 30636586006, 30636586007, 30636586008, 30636586009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	11/06/23 16:34	

LABORATORY CONTROL SAMPLE: 3059940

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	31.4	105	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3059941 3059942

Parameter	Units	30636586001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.0 U	20	20	22.4	21.7	102	99	85-115	3	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALIFIERS

Project: Millersville Landfill
Pace Project No.: 30636586

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 629109

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1c	8011 SAMPLE pH IS 7
2c	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
3c	Alkalinity TV: -1.00 mg/L
4c	Alkalinity TV: -2.00 mg/L
5c	Alkalinity TV: 0.00 mg/L
6c	Alkalinity TV: 2.00 mg/L
7c	Alkalinity TV: 4.00 mg/L
8c	pH is 7
B	Analyte was detected in the associated method blank.
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
H2	Extraction or preparation conducted outside EPA method holding time.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

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QUALIFIERS

Project: Millersville Landfill
Pace Project No.: 30636586

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.
SR	Surrogate recovery was below laboratory control limits. Results may be biased low.

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Millersville Landfill
Pace Project No.: 30636586

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30636586001	**TW-9**	EPA 3010A	628236	EPA 6010D	628582
30636586002	**TW-15**	EPA 3010A	628236	EPA 6010D	628582
30636586003	**TW-15B**	EPA 3010A	628236	EPA 6010D	628582
30636586004	**TW-16**	EPA 3010A	628236	EPA 6010D	628582
30636586005	**TW-16A**	EPA 3010A	628236	EPA 6010D	628582
30636586006	**TW-17**	EPA 3010A	628236	EPA 6010D	628582
30636586007	**TW-17A**	EPA 3010A	628236	EPA 6010D	628582
30636586008	**TW-19**	EPA 3010A	628236	EPA 6010D	628582
30636586009	**TW-21**	EPA 3010A	628236	EPA 6010D	628582
30636586001	**TW-9**	EPA 3010A	627904	EPA 6010D	628290
30636586002	**TW-15**	EPA 3010A	627904	EPA 6010D	628290
30636586003	**TW-15B**	EPA 3010A	628454	EPA 6010D	629223
30636586004	**TW-16**	EPA 3010A	628454	EPA 6010D	629223
30636586005	**TW-16A**	EPA 3010A	628539	EPA 6010D	628963
30636586006	**TW-17**	EPA 3010A	627904	EPA 6010D	628290
30636586007	**TW-17A**	EPA 3010A	628539	EPA 6010D	628963
30636586008	**TW-19**	EPA 3010A	628539	EPA 6010D	628963
30636586009	**TW-21**	EPA 3010A	628539	EPA 6010D	628963
30636586001	**TW-9**	EPA 3010A	628158	EPA 6020B	628500
30636586002	**TW-15**	EPA 3010A	628158	EPA 6020B	628500
30636586003	**TW-15B**	EPA 3010A	628158	EPA 6020B	628500
30636586004	**TW-16**	EPA 3010A	628158	EPA 6020B	628500
30636586005	**TW-16A**	EPA 3010A	628158	EPA 6020B	628500
30636586006	**TW-17**	EPA 3010A	628158	EPA 6020B	628500
30636586007	**TW-17A**	EPA 3010A	628158	EPA 6020B	628500
30636586008	**TW-19**	EPA 3010A	628158	EPA 6020B	628500
30636586009	**TW-21**	EPA 3010A	628158	EPA 6020B	628500
30636586001	**TW-9**	EPA 7470A	627806	EPA 7470A	627912
30636586002	**TW-15**	EPA 7470A	627806	EPA 7470A	627912
30636586003	**TW-15B**	EPA 7470A	627806	EPA 7470A	627912
30636586004	**TW-16**	EPA 7470A	627806	EPA 7470A	627912
30636586005	**TW-16A**	EPA 7470A	627806	EPA 7470A	627912
30636586006	**TW-17**	EPA 7470A	627806	EPA 7470A	627912
30636586007	**TW-17A**	EPA 7470A	627806	EPA 7470A	627912
30636586008	**TW-19**	EPA 7470A	627806	EPA 7470A	627912
30636586009	**TW-21**	EPA 7470A	627806	EPA 7470A	627912
30636586001	**TW-9**	EPA 8011	627896	EPA 8011	627957
30636586001	**TW-9**	EPA 8011	629109	EPA 8011	629114
30636586002	**TW-15**	EPA 8011	627896	EPA 8011	627957
30636586002	**TW-15**	EPA 8011	629109	EPA 8011	629114
30636586003	**TW-15B**	EPA 8011	627896	EPA 8011	627957
30636586003	**TW-15B**	EPA 8011	629109	EPA 8011	629114

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Millersville Landfill
Pace Project No.: 30636586

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30636586004	**TW-16**	EPA 8011	627896	EPA 8011	627957
30636586004	**TW-16**	EPA 8011	629109	EPA 8011	629114
30636586005	**TW-16A**	EPA 8011	627896	EPA 8011	627957
30636586005	**TW-16A**	EPA 8011	629109	EPA 8011	629114
30636586006	**TW-17**	EPA 8011	627896	EPA 8011	627957
30636586006	**TW-17**	EPA 8011	629109	EPA 8011	629114
30636586007	**TW-17A**	EPA 8011	627896	EPA 8011	627957
30636586007	**TW-17A**	EPA 8011	629109	EPA 8011	629114
30636586008	**TW-19**	EPA 8011	627896	EPA 8011	627957
30636586008	**TW-19**	EPA 8011	629109	EPA 8011	629114
30636586009	**TW-21**	EPA 8011	627896	EPA 8011	627957
30636586009	**TW-21**	EPA 8011	629109	EPA 8011	629114
30636586001	**TW-9**	SM 2320B-2011	628054		
30636586002	**TW-15**	SM 2320B-2011	628054		
30636586003	**TW-15B**	SM 2320B-2011	628054		
30636586004	**TW-16**	SM 2320B-2011	628054		
30636586005	**TW-16A**	SM 2320B-2011	628054		
30636586006	**TW-17**	SM 2320B-2011	628054		
30636586007	**TW-17A**	SM 2320B-2011	628054		
30636586008	**TW-19**	SM 2320B-2011	628054		
30636586009	**TW-21**	SM 2320B-2011	628054		
30636586001	**TW-9**	SM 2540C-2015	628038		
30636586002	**TW-15**	SM 2540C-2015	628038		
30636586003	**TW-15B**	SM 2540C-2015	628038		
30636586004	**TW-16**	SM 2540C-2015	628038		
30636586005	**TW-16A**	SM 2540C-2015	628038		
30636586006	**TW-17**	SM 2540C-2015	628038		
30636586007	**TW-17A**	SM 2540C-2015	628038		
30636586008	**TW-19**	SM 2540C-2015	628038		
30636586009	**TW-21**	SM 2540C-2015	628038		
30636586001	**TW-9**	EPA 350.1	629366	EPA 350.1	629744
30636586002	**TW-15**	EPA 350.1	629366	EPA 350.1	629744
30636586003	**TW-15B**	EPA 350.1	629366	EPA 350.1	629744
30636586004	**TW-16**	EPA 350.1	629366	EPA 350.1	629744
30636586005	**TW-16A**	EPA 350.1	629366	EPA 350.1	629744
30636586006	**TW-17**	EPA 350.1	629366	EPA 350.1	629744
30636586007	**TW-17A**	EPA 350.1	629366	EPA 350.1	629744
30636586008	**TW-19**	EPA 350.1	629366	EPA 350.1	629744
30636586009	**TW-21**	EPA 350.1	629366	EPA 350.1	629744
30636586001	**TW-9**	EPA 410.4	628448	EPA 410.4	628538
30636586002	**TW-15**	EPA 410.4	628448	EPA 410.4	628538

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Millersville Landfill
Pace Project No.: 30636586

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30636586003	**TW-15B**	EPA 410.4	628448	EPA 410.4	628538
30636586004	**TW-16**	EPA 410.4	628448	EPA 410.4	628538
30636586005	**TW-16A**	EPA 410.4	628448	EPA 410.4	628538
30636586006	**TW-17**	EPA 410.4	628448	EPA 410.4	628538
30636586007	**TW-17A**	EPA 410.4	628448	EPA 410.4	628538
30636586008	**TW-19**	EPA 410.4	628448	EPA 410.4	628538
30636586009	**TW-21**	EPA 410.4	628448	EPA 410.4	628538
30636586001	**TW-9**	SM 4500-Cl-E-2011	628233		
30636586002	**TW-15**	SM 4500-Cl-E-2011	628233		
30636586003	**TW-15B**	SM 4500-Cl-E-2011	628233		
30636586004	**TW-16**	SM 4500-Cl-E-2011	628233		
30636586005	**TW-16A**	SM 4500-Cl-E-2011	628233		
30636586006	**TW-17**	SM 4500-Cl-E-2011	628233		
30636586007	**TW-17A**	SM 4500-Cl-E-2011	628233		
30636586008	**TW-19**	SM 4500-Cl-E-2011	628233		
30636586009	**TW-21**	SM 4500-Cl-E-2011	628233		
30636586001	**TW-9**	EPA 9038	627757		
30636586002	**TW-15**	EPA 9038	627757		
30636586003	**TW-15B**	EPA 9038	627757		
30636586004	**TW-16**	EPA 9038	627757		
30636586005	**TW-16A**	EPA 9038	627757		
30636586006	**TW-17**	EPA 9038	627757		
30636586007	**TW-17A**	EPA 9038	627757		
30636586008	**TW-19**	EPA 9038	627757		
30636586009	**TW-21**	EPA 9038	627757		

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WO#: 30636586

30636586

EMA ENVIRONMENTAL, LLC

207 East Sixth Street ▪ Lititz, Penn ... gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - FALL 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals ①	Total + Dis. Metals ②	Alkalinity, TDS	Hardness, Cl	Ammonia	SO_4, COD		Method 8011 - DBCP + EDB				
1	TW-9	7	11-1-23	1600	✓		GW	✓	✓	✓	✓	✓	✓		✓		Received by Pace Beaver		
2	TW-15		11-2-23	920													Therm ID 14 Corr Factor +/- 0		
3	TW-15B			955													Receipt Temp 14		
4	TW-16			1135													Corrected Temp 14		
5	TW-16A			1100													Correct Preservation Y N		
6	TW-17			1230															
7	TW-17A			1310															
8	TW-19			1410															
9	TW-21			1450															
10																			
11																			
12																			

	Signature	Date	Time
Relinquished by	[illegible]	11-2-23	
Received by	TB/PACE	11-2-23	
Relinquished by	TB PACE		
Received by	RDS PACE	11-3-23	1700
Relinquished by	RDS PACE	11-3-23	2215
Received by	[illegible]	11-3-23	2215

Comments

① 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn
① 7470 - Hg
② 6010 - Ca, Fe, Mg, Mn, K, Na
PACE - WW - METALS - UNITS - mg/L
PACE - G - BULK - WET CHEM + 8011
LEVEL 2 REPORT

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

RBC [illegible] 11-6-23 2200 RBC Nicely's Del. Service 11-6-23 2360

Nicely's Del. Service 11-7-23 0422

11-7-23 0800

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-GBUR-0088 v06_Sample Condition Upon Receipt-Pittsburgh Effective Date: 09/20/2023

WO#: 30636586
PM: ARG Due Date: 11/20/23
CLIENT: ENV MONITOR

Client Name: EMA Pro

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking Number: _____

Initial / Date
Examined By: BL 11-6
Labeled By: BL 11-6-23
Temped By: JJ 11/4/23

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No Seals Intact: ☐ Yes ☑ No
Thermometer Used: 17 Type of Ice: (Wet) Blue None
Cooler Temperature: Observed Temp 0.6 / 0.9 °C Correction Factor: -0.1 / -0.1 °C Final Temp: 0.5 / 0.8 °C
Temp should be above freezing to 6°C

Comments:	Yes	No	NA	pH paper Lot# 1020831	D.P.D. Residual Chlorine Lot # –
Chain of Custody Present	✓			1.	
Chain of Custody Filled Out:	✓			2.	
-Were client corrections present on COC		✓			
Chain of Custody Relinquished	✓			3.	
Sampler Name & Signature on COC:		✓		4.	
Sample Labels match COC:	✓			5.	
-Includes date/time/ID	✓				
Matrix: WT					
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):		✓		7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used:	✓			10.	
-Pace Containers Used	✓				
Containers Intact:	✓			11.	
Orthophosphate field filtered:			✓	12.	
Hex Cr Aqueous samples field filtered:			✓	13.	
Organic Samples checked for dechlorination			✓	14:	
Filtered volume received for dissolved tests:			✓	15:	
All containers checked for preservation:	✓			16.	
exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix					
All containers meet method preservation requirements:	✓			Initial when completed BL	Date/Time of Preservation
				Lot# of added Preservative	
8260C/D: Headspace in VOA Vials (> 6mm)			✓	17.	
624.1: Headspace in VOA Vials (0mm)			✓	18.	
Trip Blank Present:		✓		Trip blank custody seal present? YES or NO	
Rad Samples Screened <.05 mrem/hr.	✓			Initial when completed JJ	Date: 11/4/23 Survey Meter SN: 25014380

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

December 12, 2023

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on November 07, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

(Greensburg, PA) - Revision 2 - This report replaces the November 27, 2023 report. This project was revised on December, 12, 2023 to include Ca, Fe, Mg, Mn, K, and Na to 6010 metals analysis.

(Greensburg, PA) - Revision 3 - This report replaces the December 12, 2023 report. This project was revised on December, 12, 2023 to include lead analysis.

(Greensburg, PA) - Revision 4 - This report replaces the December 12, 2023 report. This project was revised on December, 12, 2023 to include update units to mg/L.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Megan A Rager

Megan A. Rager for
Alaina R. Deitch
alaina.deitch@pacelabs.com
(724)850-5600
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572023-03
New Hampshire/TNI Certification #: 297622
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad

Pace Analytical Services Beaver

225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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SAMPLE SUMMARY

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30637219001	**SW-1**	Water	11/07/23 12:15	11/07/23 22:15
30637219002	**SW-2**	Water	11/07/23 13:30	11/07/23 22:15
30637219003	**SW-3**	Water	11/07/23 13:00	11/07/23 22:15

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SAMPLE ANALYTE COUNT

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30637219001	**SW-1**	EPA 6010D	MFC	7	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		SM 2320B-2011	CMT	2	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30637219002	**SW-2**	EPA 6010D	MFC	7	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		SM 2320B-2011	CMT	2	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30637219003	**SW-3**	EPA 6010D	MFC	7	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		SM 2320B-2011	CMT	2	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

Date: December 12, 2023

(Greensburg, PA) - Revision 1 - This report replaces the November, 17, 2023 report. This project was revised on November, 20, 2023 to update the units from ug/L to mg/L.

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PROJECT NARRATIVE

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: December 12, 2023

General Information:
3 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 629212

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30638150002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3067629)
  - Sodium
- MSD (Lab ID: 3067630)
  - Sodium

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: December 12, 2023

Analyte Comments:

QC Batch: 629212

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- MS (Lab ID: 3067629)
  - Sodium
- MSD (Lab ID: 3067630)
  - Sodium

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PROJECT NARRATIVE

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: December 12, 2023

General Information:
3 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 628491

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30637008003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3063877)
  - Thallium
- MSD (Lab ID: 3063878)
  - Thallium

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: December 12, 2023

General Information:
3 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: December 12, 2023

General Information:
3 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: December 12, 2023

General Information:
3 samples were analyzed for SM 2540C-2015 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: December 12, 2023

General Information:
3 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 630176

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30637016002,30637427001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 3072419)
  - Ammonia, Distilled

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: December 12, 2023

General Information:
3 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: December 12, 2023

General Information:
3 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: December 12, 2023

General Information:
3 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

Sample: SW-1 **Lab ID: 30637219001** Collected: 11/07/23 12:15 Received: 11/07/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**12.6**	mg/L	0.50	0.083	1	11/13/23 10:10	11/15/23 01:28	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.036	1	11/13/23 10:10	11/15/23 01:28	7439-89-6	
Magnesium	**3.2**	mg/L	0.50	0.047	1	11/13/23 10:10	11/15/23 01:28	7439-95-4	
Manganese	**0.0090**	mg/L	0.0050	0.0027	1	11/13/23 10:10	11/15/23 01:28	7439-96-5	
Potassium	**2.2**	mg/L	0.50	0.26	1	11/13/23 10:10	11/15/23 01:28	7440-09-7	
Sodium	**47.6**	mg/L	0.50	0.34	1	11/13/23 10:10	11/15/23 01:28	7440-23-5	
Total Hardness	**44.7**	mg/L	3.3	0.40	1	11/13/23 10:10	11/15/23 01:28		N3
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00030	1	11/09/23 10:54	11/09/23 16:46	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00044	1	11/09/23 10:54	11/09/23 16:46	7440-38-2	
Barium	**0.041**	mg/L	0.0025	0.00098	1	11/09/23 10:54	11/09/23 16:46	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	11/09/23 10:54	11/09/23 16:46	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00013	1	11/09/23 10:54	11/09/23 16:46	7440-43-9	
Chromium	**0.0025 U**	mg/L	0.0025	0.00050	1	11/09/23 10:54	11/09/23 16:46	7440-47-3	
Cobalt	**0.0025 U**	mg/L	0.0025	0.00081	1	11/09/23 10:54	11/09/23 16:46	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.00064	1	11/09/23 10:54	11/09/23 16:46	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/09/23 10:54	11/09/23 16:46	7439-92-1	
Nickel	**0.0012J**	mg/L	0.0025	0.00065	1	11/09/23 10:54	11/09/23 16:46	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.00084	1	11/09/23 10:54	11/09/23 16:46	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/09/23 10:54	11/09/23 16:46	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.000081	1	11/09/23 10:54	11/09/23 16:46	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0012	1	11/09/23 10:54	11/09/23 16:46	7440-62-2	
Zinc	**0.0050J**	mg/L	0.0050	0.0040	1	11/09/23 10:54	11/09/23 16:46	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/13/23 12:21	11/14/23 11:50	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Bicarbonate (pH4.5)	**22.0**	mg/L	10.0	10.0	1		11/16/23 08:14		
Alkalinity,Total (CaCO3 pH4.5)	**22.0**	mg/L	10.0	1.0	1		11/16/23 08:14		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**189**	mg/L	10.0	10.0	1		11/09/23 16:23		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/16/23 13:47	11/17/23 09:14		

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Greensburg, PA 15601
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ANALYTICAL RESULTS

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

Sample: SW-1 **Lab ID: 30637219001** Collected: 11/07/23 12:15 Received: 11/07/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
	Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**9.0J**	mg/L	25.0	4.7	1	11/17/23 09:34	11/17/23 13:42		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
	Pace Analytical Services - Greensburg								
Chloride	**76.5**	mg/L	3.0	0.67	1		11/09/23 10:31	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**13.8**	mg/L	10.0	4.7	1		11/12/23 10:45	14808-79-8	

Sample: SW-2 **Lab ID: 30637219002** Collected: 11/07/23 13:30 Received: 11/07/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Calcium	**12.2**	mg/L	0.50	0.083	1	11/13/23 10:10	11/15/23 01:30	7440-70-2	
Iron	**20.3**	mg/L	0.050	0.036	1	11/13/23 10:10	11/15/23 01:30	7439-89-6	
Magnesium	**3.4**	mg/L	0.50	0.047	1	11/13/23 10:10	11/15/23 01:30	7439-95-4	
Manganese	**0.24**	mg/L	0.0050	0.0027	1	11/13/23 10:10	11/15/23 01:30	7439-96-5	
Potassium	**3.5**	mg/L	0.50	0.26	1	11/13/23 10:10	11/15/23 01:30	7440-09-7	
Sodium	**3.7**	mg/L	0.50	0.34	1	11/13/23 10:10	11/15/23 01:30	7440-23-5	
Total Hardness	**44.5**	mg/L	3.3	0.40	1	11/13/23 10:10	11/15/23 01:30		N3
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Antimony	**0.0010 U**	mg/L	0.0010	0.00059	2	11/09/23 10:54	11/09/23 16:49	7440-36-0	
Arsenic	**0.0058**	mg/L	0.0050	0.00088	2	11/09/23 10:54	11/09/23 16:49	7440-38-2	
Barium	**0.050**	mg/L	0.0050	0.0020	2	11/09/23 10:54	11/09/23 16:49	7440-39-3	
Beryllium	**0.00030J**	mg/L	0.0010	0.00020	2	11/09/23 10:54	11/09/23 16:49	7440-41-7	
Cadmium	**0.0010 U**	mg/L	0.0010	0.00027	2	11/09/23 10:54	11/09/23 16:49	7440-43-9	
Chromium	**0.0045J**	mg/L	0.0050	0.0010	2	11/09/23 10:54	11/09/23 16:49	7440-47-3	
Cobalt	**0.0098**	mg/L	0.0050	0.0016	2	11/09/23 10:54	11/09/23 16:49	7440-48-4	
Copper	**0.0022J**	mg/L	0.0050	0.0013	2	11/09/23 10:54	11/09/23 16:49	7440-50-8	
Lead	**0.00098J**	mg/L	0.0010	0.00050	2	11/09/23 10:54	11/09/23 16:49	7439-92-1	
Nickel	**0.0053**	mg/L	0.0050	0.0013	2	11/09/23 10:54	11/09/23 16:49	7440-02-0	
Selenium	**0.0050 U**	mg/L	0.0050	0.0017	2	11/09/23 10:54	11/09/23 16:49	7782-49-2	
Silver	**0.0050 U**	mg/L	0.0050	0.0011	2	11/09/23 10:54	11/09/23 16:49	7440-22-4	
Thallium	**0.0010 U**	mg/L	0.0010	0.00016	2	11/09/23 10:54	11/09/23 16:49	7440-28-0	
Vanadium	**0.0057**	mg/L	0.0050	0.0024	2	11/09/23 10:54	11/09/23 16:49	7440-62-2	
Zinc	**0.017**	mg/L	0.010	0.0080	2	11/09/23 10:54	11/09/23 16:49	7440-66-6	

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ANALYTICAL RESULTS

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

Sample: SW-2 **Lab ID: 30637219002** Collected: 11/07/23 13:30 Received: 11/07/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/13/23 12:21	11/14/23 11:52	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Bicarbonate (pH4.5)	**34.0**	mg/L	10.0	10.0	1		11/16/23 08:23		
Alkalinity,Total (CaCO3 pH4.5)	**34.0**	mg/L	10.0	1.0	1		11/16/23 08:23		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**78.0**	mg/L	10.0	10.0	1		11/09/23 16:23		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.33**	mg/L	0.10	0.090	1	11/16/23 13:47	11/17/23 09:16		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**52.2**	mg/L	25.0	4.7	1	11/17/23 09:34	11/17/23 13:43		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**5.9**	mg/L	3.0	0.67	1		11/09/23 10:32	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**6.2J**	mg/L	10.0	4.7	1		11/12/23 10:48	14808-79-8	

Sample: SW-3 **Lab ID: 30637219003** Collected: 11/07/23 13:00 Received: 11/07/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**40.3**	mg/L	0.50	0.083	1	11/13/23 10:10	11/15/23 01:32	7440-70-2	
Iron	**17.3**	mg/L	0.050	0.036	1	11/13/23 10:10	11/15/23 01:32	7439-89-6	
Magnesium	**9.3**	mg/L	0.50	0.047	1	11/13/23 10:10	11/15/23 01:32	7439-95-4	
Manganese	**0.52**	mg/L	0.0050	0.0027	1	11/13/23 10:10	11/15/23 01:32	7439-96-5	
Potassium	**4.2**	mg/L	0.50	0.26	1	11/13/23 10:10	11/15/23 01:32	7440-09-7	
Sodium	**45.8**	mg/L	0.50	0.34	1	11/13/23 10:10	11/15/23 01:32	7440-23-5	
Total Hardness	**139**	mg/L	3.3	0.40	1	11/13/23 10:10	11/15/23 01:32		N3

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ANALYTICAL RESULTS

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

Sample: SW-3 **Lab ID: 30637219003** Collected: 11/07/23 13:00 Received: 11/07/23 22:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.0010 U**	mg/L	0.0010	0.00059	2	11/09/23 10:54	11/09/23 16:52	7440-36-0	
Arsenic	**0.0060**	mg/L	0.0050	0.00088	2	11/09/23 10:54	11/09/23 16:52	7440-38-2	
Barium	**0.12**	mg/L	0.0050	0.0020	2	11/09/23 10:54	11/09/23 16:52	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00020	2	11/09/23 10:54	11/09/23 16:52	7440-41-7	
Cadmium	**0.0010 U**	mg/L	0.0010	0.00027	2	11/09/23 10:54	11/09/23 16:52	7440-43-9	
Chromium	**0.0092**	mg/L	0.0050	0.0010	2	11/09/23 10:54	11/09/23 16:52	7440-47-3	
Cobalt	**0.0080**	mg/L	0.0050	0.0016	2	11/09/23 10:54	11/09/23 16:52	7440-48-4	
Copper	**0.0058**	mg/L	0.0050	0.0013	2	11/09/23 10:54	11/09/23 16:52	7440-50-8	
Lead	**0.0077**	mg/L	0.0010	0.00050	2	11/09/23 10:54	11/09/23 16:52	7439-92-1	
Nickel	**0.016**	mg/L	0.0050	0.0013	2	11/09/23 10:54	11/09/23 16:52	7440-02-0	
Selenium	**0.0050 U**	mg/L	0.0050	0.0017	2	11/09/23 10:54	11/09/23 16:52	7782-49-2	
Silver	**0.0050 U**	mg/L	0.0050	0.0011	2	11/09/23 10:54	11/09/23 16:52	7440-22-4	
Thallium	**0.0010 U**	mg/L	0.0010	0.00016	2	11/09/23 10:54	11/09/23 16:52	7440-28-0	
Vanadium	**0.013**	mg/L	0.0050	0.0024	2	11/09/23 10:54	11/09/23 16:52	7440-62-2	
Zinc	**0.045**	mg/L	0.010	0.0080	2	11/09/23 10:54	11/09/23 16:52	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/13/23 12:21	11/14/23 11:54	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Bicarbonate (pH4.5)	**102**	mg/L	10.0	10.0	1		11/16/23 08:24		
Alkalinity,Total (CaCO3 pH4.5)	**102**	mg/L	10.0	1.0	1		11/16/23 08:24		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**267**	mg/L	10.0	10.0	1		11/09/23 16:23		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/16/23 13:47	11/17/23 09:18		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**107**	mg/L	25.0	4.7	1	11/17/23 09:34	11/17/23 13:43		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**59.3**	mg/L	3.0	0.67	1		11/09/23 10:33	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**30.8**	mg/L	10.0	4.7	1		11/12/23 10:48	14808-79-8	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

QC Batch: 629212
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30637219001, 30637219002, 30637219003

METHOD BLANK: 3067602 Matrix: Water
Associated Lab Samples: 30637219001, 30637219002, 30637219003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	11/15/23 01:18	
Iron	mg/L	0.050 U	0.050	0.036	11/15/23 01:18	
Magnesium	mg/L	0.50 U	0.50	0.047	11/15/23 01:18	
Manganese	mg/L	0.0050 U	0.0050	0.0027	11/15/23 01:18	
Potassium	mg/L	0.50 U	0.50	0.26	11/15/23 01:18	
Sodium	mg/L	0.50 U	0.50	0.34	11/15/23 01:18	

LABORATORY CONTROL SAMPLE: 3067603

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	40.9	102	80-120	
Iron	mg/L	2	2.1	105	80-120	
Magnesium	mg/L	20	20.8	104	80-120	
Manganese	mg/L	2	2.1	105	80-120	
Potassium	mg/L	20	20.9	104	80-120	
Sodium	mg/L	20	20.8	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3067629 3067630

Parameter	Units	30638150002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	19100 ug/L	40	40	60.9	59.0	105	100	80-120	3	20	
Iron	mg/L	1820 ug/L	2	2	4.1	3.8	114	99	80-120	8	20	
Magnesium	mg/L	1040 ug/L	20	20	22.5	21.8	107	104	80-120	3	20	
Manganese	mg/L	79.6 ug/L	2	2	2.2	2.2	107	105	80-120	2	20	
Potassium	mg/L	2610 ug/L	20	20	25.9	25.2	116	113	80-120	3	20	
Sodium	mg/L	231000 ug/L	20	20	210	199	-106	-162	80-120	5	20	E,M1

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QUALITY CONTROL DATA

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

QC Batch: 628491
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30637219001, 30637219002, 30637219003

METHOD BLANK: 3063875
Matrix: Water
Associated Lab Samples: 30637219001, 30637219002, 30637219003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00030	11/09/23 15:31	
Arsenic	mg/L	0.0025 U	0.0025	0.00044	11/09/23 15:31	
Barium	mg/L	0.0025 U	0.0025	0.00098	11/09/23 15:31	
Beryllium	mg/L	0.00050 U	0.00050	0.00010	11/09/23 15:31	
Cadmium	mg/L	0.00050 U	0.00050	0.00013	11/09/23 15:31	
Chromium	mg/L	0.0025 U	0.0025	0.00050	11/09/23 15:31	
Cobalt	mg/L	0.0025 U	0.0025	0.00081	11/09/23 15:31	
Copper	mg/L	0.0025 U	0.0025	0.00064	11/09/23 15:31	
Lead	mg/L	0.00050 U	0.00050	0.00025	11/09/23 15:31	
Nickel	mg/L	0.0025 U	0.0025	0.00065	11/09/23 15:31	
Selenium	mg/L	0.0025 U	0.0025	0.00084	11/09/23 15:31	
Silver	mg/L	0.0025 U	0.0025	0.00053	11/09/23 15:31	
Thallium	mg/L	0.00050 U	0.00050	0.000081	11/09/23 15:31	
Vanadium	mg/L	0.0025 U	0.0025	0.0012	11/09/23 15:31	
Zinc	mg/L	0.0050 U	0.0050	0.0040	11/09/23 15:31	

LABORATORY CONTROL SAMPLE: 3063876

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.020	100	80-120	
Arsenic	mg/L	0.1	0.10	100	80-120	
Barium	mg/L	0.1	0.097	97	80-120	
Beryllium	mg/L	0.02	0.019	96	80-120	
Cadmium	mg/L	0.02	0.019	97	80-120	
Chromium	mg/L	0.1	0.11	109	80-120	
Cobalt	mg/L	0.1	0.11	110	80-120	
Copper	mg/L	0.1	0.11	112	80-120	
Lead	mg/L	0.02	0.020	100	80-120	
Nickel	mg/L	0.1	0.11	108	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	
Silver	mg/L	0.1	0.10	100	80-120	
Thallium	mg/L	0.02	0.020	100	80-120	
Vanadium	mg/L	0.1	0.11	108	80-120	
Zinc	mg/L	0.2	0.21	106	80-120	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3063877 3063878

Parameter	Units	30637008003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.02	0.02	0.020	0.021	102	102	75-125	1	20	
Arsenic	mg/L	2.8 ug/L	0.1	0.1	0.10	0.10	102	102	75-125	0	20	
Barium	mg/L	110 ug/L	0.1	0.1	0.21	0.21	100	103	75-125	1	20	
Beryllium	mg/L	ND	0.02	0.02	0.020	0.020	101	102	75-125	0	20	
Cadmium	mg/L	ND	0.02	0.02	0.020	0.019	98	97	75-125	2	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.11	110	110	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.11	0.11	111	110	75-125	1	20	
Copper	mg/L	ND	0.1	0.1	0.11	0.11	113	110	75-125	2	20	
Lead	mg/L	ND	0.02	0.02	0.020	0.020	101	102	75-125	0	20	
Nickel	mg/L	ND	0.1	0.1	0.11	0.11	110	108	75-125	2	20	
Selenium	mg/L	ND	0.1	0.1	0.094	0.097	94	97	75-125	3	20	
Silver	mg/L	ND	0.1	0.1	0.099	0.099	99	99	75-125	0	20	
Thallium	mg/L	ND	0.02	0.02	0.013	0.014	67	71	75-125	5	20	M1
Vanadium	mg/L	ND	0.1	0.1	0.11	0.11	109	109	75-125	0	20	
Zinc	mg/L	12.7 ug/L	0.2	0.2	0.22	0.21	104	101	75-125	2	20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

QC Batch: 629170
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30637219001, 30637219002, 30637219003

METHOD BLANK: 3067451
Matrix: Water
Associated Lab Samples: 30637219001, 30637219002, 30637219003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	11/14/23 11:31	

LABORATORY CONTROL SAMPLE: 3067452

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.0099	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3067453 3067454

Parameter	Units	30638150001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	<0.20 ug/L	0.01	0.01	0.0099	0.0098	99	98	80-120	1	20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

QC Batch: 630189
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30637219001, 30637219002, 30637219003

METHOD BLANK: 3072465 Matrix: Water
Associated Lab Samples: 30637219001, 30637219002, 30637219003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Bicarbonate (pH4.5)	mg/L	10.0 U	10.0	10.0	11/16/23 08:12	
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	11/16/23 08:12	

LABORATORY CONTROL SAMPLE: 3072466

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	23.0	115	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3072467 3072468

Parameter	Units	30637219001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	22.0	50	50	68.0	70.0	92	96	85-115	3	20	

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REPORT OF LABORATORY ANALYSIS

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

QC Batch: 628394
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30637219001, 30637219002, 30637219003

METHOD BLANK: 3063438
Matrix: Water
Associated Lab Samples: 30637219001, 30637219002, 30637219003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	11/09/23 16:23	

LABORATORY CONTROL SAMPLE: 3063439

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	988	99	85-115	

SAMPLE DUPLICATE: 3063440

Parameter	Units	30636907001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	538	547	2	5	

SAMPLE DUPLICATE: 3063441

Parameter	Units	30637219002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	78.0	75.0	4	5	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

QC Batch: 630176
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30637219001, 30637219002, 30637219003

METHOD BLANK: 3072415 Matrix: Water
Associated Lab Samples: 30637219001, 30637219002, 30637219003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	11/17/23 08:59	

LABORATORY CONTROL SAMPLE: 3072416

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.3	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3072417 3072418

Parameter	Units	30637016002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	ND	4	4	4.1	4.1	102	103	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3072419 3072420

Parameter	Units	30637427001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	19.0	4	4	22.2	23.0	81	100	90-110	3	20	ML

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QUALITY CONTROL DATA

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

QC Batch: 630571
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30637219001, 30637219002, 30637219003

METHOD BLANK: 3074623 Matrix: Water
Associated Lab Samples: 30637219001, 30637219002, 30637219003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/17/23 13:37	

METHOD BLANK: 3074728 Matrix: Water
Associated Lab Samples: 30637219001, 30637219002, 30637219003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/17/23 13:37	

METHOD BLANK: 3074729 Matrix: Water
Associated Lab Samples: 30637219001, 30637219002, 30637219003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/17/23 13:38	

LABORATORY CONTROL SAMPLE: 3074624

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	325	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3074626 3074627

Parameter	Units	30635309001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	45.4	150	150	209	209	109	109	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3074730 3074731

Parameter	Units	30637219003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	107	150	150	252	252	97	97	90-110	0	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

QC Batch: 628233
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30637219001, 30637219002, 30637219003

METHOD BLANK: 3062475 Matrix: Water
Associated Lab Samples: 30637219001, 30637219002, 30637219003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	11/09/23 10:15	

LABORATORY CONTROL SAMPLE: 3062476

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.4	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3062477 3062478

Parameter	Units	30636586001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1.8J	20	20	22.5	22.6	103	104	85-115	0	20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

QC Batch: 629120
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30637219001, 30637219002, 30637219003

METHOD BLANK: 3067192 Matrix: Water
Associated Lab Samples: 30637219001, 30637219002, 30637219003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	11/12/23 10:43	

LABORATORY CONTROL SAMPLE: 3067193

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	32.1	107	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3067194 3067195

Parameter	Units	30638010004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.0 U	20	20	22.9	23.2	97	99	85-115	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3067196 3067197

Parameter	Units	30638286007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.0 U	20	20	20.7	20.4	104	102	85-115	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALIFIERS

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

WORKORDER QUALIFIERS

WO: 30637219

[1]	(Greensburg, PA) - Revision 1 - This report replaces the November, 17, 2023 report. This project was revised on November, 20, 2023 to update the units from ug/L to mg/L.

ANALYTE QUALIFIERS

E	Analyte concentration exceeded the calibration range. The reported result is estimated.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-FALL 2023-Revised Report
Pace Project No.: 30637219

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30637219001	**SW-1**	EPA 3010A	629212	EPA 6010D	629789
30637219002	**SW-2**	EPA 3010A	629212	EPA 6010D	629789
30637219003	**SW-3**	EPA 3010A	629212	EPA 6010D	629789
30637219001	**SW-1**	EPA 3010A	628491	EPA 6020B	628620
30637219002	**SW-2**	EPA 3010A	628491	EPA 6020B	628620
30637219003	**SW-3**	EPA 3010A	628491	EPA 6020B	628620
30637219001	**SW-1**	EPA 7470A	629170	EPA 7470A	629345
30637219002	**SW-2**	EPA 7470A	629170	EPA 7470A	629345
30637219003	**SW-3**	EPA 7470A	629170	EPA 7470A	629345
30637219001	**SW-1**	SM 2320B-2011	630189		
30637219002	**SW-2**	SM 2320B-2011	630189		
30637219003	**SW-3**	SM 2320B-2011	630189		
30637219001	**SW-1**	SM 2540C-2015	628394		
30637219002	**SW-2**	SM 2540C-2015	628394		
30637219003	**SW-3**	SM 2540C-2015	628394		
30637219001	**SW-1**	EPA 350.1	630176	EPA 350.1	630367
30637219002	**SW-2**	EPA 350.1	630176	EPA 350.1	630367
30637219003	**SW-3**	EPA 350.1	630176	EPA 350.1	630367
30637219001	**SW-1**	EPA 410.4	630571	EPA 410.4	630717
30637219002	**SW-2**	EPA 410.4	630571	EPA 410.4	630717
30637219003	**SW-3**	EPA 410.4	630571	EPA 410.4	630717
30637219001	**SW-1**	SM 4500-Cl-E-2011	628233		
30637219002	**SW-2**	SM 4500-Cl-E-2011	628233		
30637219003	**SW-3**	SM 4500-Cl-E-2011	628233		
30637219001	**SW-1**	EPA 9038	629120		
30637219002	**SW-2**	EPA 9038	629120		
30637219003	**SW-3**	EPA 9038	629120		

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SW

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF- FALL 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	TOTAL METALS ①	ALKALINITY	TDS	HARDNESS, Cl	AMMONIA	SO4	COD					
1	SW-1	3	11-7-23	1215	✓		SW	✓	✓	✓	✓	✓	✓	✓					001
2	SW-2	↓	↓	1330	↓		↓	↓	↓	↓	↓	↓	↓	↓					002
3	SW-3	↓	↓	1300	↓		↓	↓	↓	↓	↓	↓	↓	↓					003
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

WO#: 30637219
30637219

Received by Pace Beaver
Therm ID 14 Corr Factor +/- .0
Receipt Temp .39
Corrected Temp .39
Correct Preservation Y / N

	Signature	Date	Time
Relinquished by	[signature]	11-7-23	
Received by	TB/Pace	11-7-23	
Relinquished by	TB/Pace		
Received by	MC	11-7-23	1600
Relinquished by	[signature] Pace	11/7/23	2215
Received by	[signature] Pace	11/7/23	2100

Comments

① 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn
① 6010 - Ca, Fe, Mg, Mn, K, Na
① 7470 - Hg
PACE - ~~NE~~ WV - METALS - WWTB - mg/L
PACE - G-BULK - WET CHEM + BOIL
LEVEL 2 REPORT

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

Rec. [signature] 11-7-23 2215 RBL [signature] 11-8-23 1700 RBC Nicely's Del. Service 11-8-23 0300

Nicely's Del. Service 11-9-23 0604

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-GBUR-0088 v06_Sample Condition Upon Receipt-Pittsburgh
	Effective Date: 09/20/2023

Client Name: EMA **Project #:** 30637219

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking Number: _____

Initial / Date	
Examined By:	MJB 11-8-23
Labeled By:	MJB 11-8-23
Temped By:	MJB 11-8-23

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☐ No

Thermometer Used: 17 **Type of Ice:** (Wet) Blue None

Cooler Temperature: Observed Temp 5.3 °C Correction Factor: -0.1 °C Final Temp: 5.2 °C

Temp should be above freezing to 6°C

Comments:	Yes	No	NA	pH paper Lot# 1AD0831	D.P.D. Residual Chlorine Lot # NA
Chain of Custody Present	✓			1.	
Chain of Custody Filled Out:	✓			2.	
-Were client corrections present on COC	✗	✓		MJB 11-8-23	
Chain of Custody Relinquished	✓			3.	
Sampler Name & Signature on COC:		✓		4.	
Sample Labels match COC:	✓			5.	
-Includes date/time/ID Matrix:	Wt				
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):		✓		7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used:	✓			10.	
-Pace Containers Used	✓				
Containers Intact:	✓			11.	
Orthophosphate field filtered:			✓	12.	
Hex Cr Aqueous samples field filtered:			✓	13.	
Organic Samples checked for dechlorination			✓	14:	
Filtered volume received for dissolved tests:			✓	15:	
All containers checked for preservation: exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix	✓			16.	
All containers meet method preservation requirements:	✓			Initial when completed MJB / Lot# of added Preservative	Date/Time of Preservation
8260C/D: Headspace in VOA Vials (> 6mm)			✓	17.	
624.1: Headspace in VOA Vials (0mm)			✓	18.	
Trip Blank Present:			✓	Trip blank custody seal present? YES or NO	
Rad Samples Screened <.05 mrem/hr.	✓			Initial when completed MJB	Date: 11-8-23 / Survey Meter SN: 250/14380

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
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(724)850-5600

November 30, 2023

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-FALL 2023
Pace Project No.: 30638010

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on November 08, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alaina Deitch

Alaina R. Deitch
alaina.deitch@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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CERTIFICATIONS

Project: MLF-FALL 2023
Pace Project No.: 30638010

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572023-03
New Hampshire/TNI Certification #: 297622
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad

Pace Analytical Services Beaver

225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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SAMPLE SUMMARY

Project: MLF-FALL 2023
Pace Project No.: 30638010

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30638010001	**TW-22**	Water	11/08/23 12:40	11/08/23 22:10
30638010002	**TW-22A**	Water	11/08/23 13:20	11/08/23 22:10
30638010003	**TW-22B**	Water	11/08/23 12:00	11/08/23 22:10
30638010004	**TW-28**	Water	11/08/23 14:10	11/08/23 22:10

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(724)850-5600

SAMPLE ANALYTE COUNT

Project: MLF-FALL 2023
Pace Project No.: 30638010

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30638010001	**TW-22**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30638010002	**TW-22A**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30638010003	**TW-22B**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30638010004	**TW-28**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV

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SAMPLE ANALYTE COUNT

Project: MLF-FALL 2023
Pace Project No.: 30638010

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30638010

Date: November 30, 2023

TW-22 (Lab ID: 30638010001)

- Sample pH for 8011 is 5

TW-22A (Lab ID: 30638010002)

- Sample pH for 8011 is 5

TW-22B (Lab ID: 30638010003)

- Sample pH for 8011 is 6

TW-28 (Lab ID: 30638010004)

- Sample pH for 8011 is 5

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PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30638010

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 30, 2023

General Information:
4 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 629212

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30638150002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3067629)
  - Sodium
- MSD (Lab ID: 3067630)
  - Sodium

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30638010

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 30, 2023

Analyte Comments:

QC Batch: 629212

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- MS (Lab ID: 3067629)
  - Sodium
- MSD (Lab ID: 3067630)
  - Sodium

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PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30638010

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 30, 2023

General Information:
4 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 629597

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30638320002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3069366)
  - Sodium, Dissolved

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30638010

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: November 30, 2023

General Information:
4 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 629443

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30638150001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3068752)
  - Thallium
- MSD (Lab ID: 3068753)
  - Thallium

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30638010

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: November 30, 2023

General Information:
4 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30638010

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 30, 2023

General Information:
4 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30638010

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: November 30, 2023

General Information:
4 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 630189

1c: Alkalinity TV: 0.00 mg/L
- TW-22 (Lab ID: 30638010001)
  - Alkalinity,Total (CaCO3 pH4.5)

QC Batch: 630190

1c: Alkalinity TV: 0.00 mg/L
- TW-22A (Lab ID: 30638010002)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-28 (Lab ID: 30638010004)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30638010

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: November 30, 2023

General Information:
4 samples were analyzed for SM 2540C-2015 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30638010

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: November 30, 2023

General Information:
4 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30638010

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: November 30, 2023

General Information:
4 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30638010

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: November 30, 2023

General Information:
4 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30638010

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: November 30, 2023

General Information:
4 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: MLF-FALL 2023
Pace Project No.: 30638010

Sample: TW-22 **Lab ID: 30638010001** Collected: 11/08/23 12:40 Received: 11/08/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**2.3**	mg/L	0.50	0.083	1	11/13/23 10:10	11/15/23 01:46	7440-70-2	
Iron	**0.19**	mg/L	0.050	0.036	1	11/13/23 10:10	11/15/23 01:46	7439-89-6	
Magnesium	**2.1**	mg/L	0.50	0.047	1	11/13/23 10:10	11/15/23 01:46	7439-95-4	
Manganese	**0.038**	mg/L	0.0050	0.0027	1	11/13/23 10:10	11/15/23 01:46	7439-96-5	
Potassium	**1.1**	mg/L	0.50	0.26	1	11/13/23 10:10	11/15/23 01:46	7440-09-7	
Sodium	**12.7**	mg/L	0.50	0.34	1	11/13/23 10:10	11/15/23 01:46	7440-23-5	
Total Hardness	**14.3**	mg/L	3.3	0.40	1	11/13/23 10:10	11/15/23 01:46		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**2.6**	mg/L	0.50	0.083	1	11/14/23 12:20	11/14/23 21:48	7440-70-2	
Iron, Dissolved	**0.052**	mg/L	0.050	0.036	1	11/14/23 12:20	11/14/23 21:48	7439-89-6	
Magnesium, Dissolved	**2.2**	mg/L	0.50	0.047	1	11/14/23 12:20	11/14/23 21:48	7439-95-4	
Manganese, Dissolved	**0.041**	mg/L	0.0050	0.0027	1	11/14/23 12:20	11/14/23 21:48	7439-96-5	
Potassium, Dissolved	**1.3**	mg/L	0.50	0.26	1	11/14/23 12:20	11/14/23 21:48	7440-09-7	
Sodium, Dissolved	**13.6**	mg/L	0.50	0.34	1	11/14/23 12:20	11/14/23 21:48	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00050	1	11/14/23 03:59	11/14/23 11:57	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00078	1	11/14/23 03:59	11/14/23 11:57	7440-38-2	
Barium	**0.053**	mg/L	0.0025	0.00098	1	11/14/23 03:59	11/14/23 11:57	7440-39-3	
Beryllium	**0.00036J**	mg/L	0.00050	0.00010	1	11/14/23 03:59	11/14/23 11:57	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00020	1	11/14/23 03:59	11/14/23 11:57	7440-43-9	
Chromium	**0.019**	mg/L	0.0025	0.0011	1	11/14/23 03:59	11/14/23 11:57	7440-47-3	
Cobalt	**0.013**	mg/L	0.0025	0.00081	1	11/14/23 03:59	11/14/23 11:57	7440-48-4	
Copper	**0.013**	mg/L	0.0025	0.0021	1	11/14/23 03:59	11/14/23 11:57	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/14/23 03:59	11/14/23 11:57	7439-92-1	
Nickel	**0.030**	mg/L	0.0025	0.00075	1	11/14/23 03:59	11/14/23 11:57	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.0013	1	11/14/23 03:59	11/14/23 11:57	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/14/23 03:59	11/14/23 11:57	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.00017	1	11/14/23 03:59	11/14/23 11:57	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0019	1	11/14/23 03:59	11/14/23 11:57	7440-62-2	
Zinc	**0.020**	mg/L	0.0050	0.0043	1	11/14/23 03:59	11/14/23 11:57	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/13/23 12:21	11/14/23 11:59	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/14/23 06:54	11/14/23 13:45	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/14/23 06:54	11/14/23 13:45	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	93	%.	60-140		1	11/14/23 06:54	11/14/23 13:45	630-20-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-FALL 2023
Pace Project No.: 30638010

Sample: TW-22 **Lab ID: 30638010001** Collected: 11/08/23 12:40 Received: 11/08/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		11/16/23 09:26		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**74.0**	mg/L	10.0	10.0	1		11/13/23 17:17		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/20/23 17:32	11/21/23 10:14		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/13/23 09:53	11/14/23 07:31		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**25.3**	mg/L	3.0	0.67	1		11/14/23 10:07	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/12/23 10:50	14808-79-8	

Sample: TW-22A **Lab ID: 30638010002** Collected: 11/08/23 13:20 Received: 11/08/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**6.1**	mg/L	0.50	0.083	1	11/13/23 10:10	11/15/23 01:48	7440-70-2	
Iron	**0.27**	mg/L	0.050	0.036	1	11/13/23 10:10	11/15/23 01:48	7439-89-6	
Magnesium	**6.5**	mg/L	0.50	0.047	1	11/13/23 10:10	11/15/23 01:48	7439-95-4	
Manganese	**0.14**	mg/L	0.0050	0.0027	1	11/13/23 10:10	11/15/23 01:48	7439-96-5	
Potassium	**1.9**	mg/L	0.50	0.26	1	11/13/23 10:10	11/15/23 01:48	7440-09-7	
Sodium	**46.6**	mg/L	0.50	0.34	1	11/13/23 10:10	11/15/23 01:48	7440-23-5	
Total Hardness	**41.8**	mg/L	3.3	0.40	1	11/13/23 10:10	11/15/23 01:48		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**6.5**	mg/L	0.50	0.083	1	11/14/23 12:20	11/14/23 21:51	7440-70-2	
Iron, Dissolved	**0.037J**	mg/L	0.050	0.036	1	11/14/23 12:20	11/14/23 21:51	7439-89-6	
Magnesium, Dissolved	**6.7**	mg/L	0.50	0.047	1	11/14/23 12:20	11/14/23 21:51	7439-95-4	
Manganese, Dissolved	**0.14**	mg/L	0.0050	0.0027	1	11/14/23 12:20	11/14/23 21:51	7439-96-5	

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ANALYTICAL RESULTS

Project: MLF-FALL 2023
Pace Project No.: 30638010

Sample: TW-22A **Lab ID: 30638010002** Collected: 11/08/23 13:20 Received: 11/08/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Potassium, Dissolved	**2.1**	mg/L	0.50	0.26	1	11/14/23 12:20	11/14/23 21:51	7440-09-7	
Sodium, Dissolved	**48.0**	mg/L	0.50	0.34	1	11/14/23 12:20	11/14/23 21:51	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00050	1	11/14/23 03:59	11/14/23 12:00	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00078	1	11/14/23 03:59	11/14/23 12:00	7440-38-2	
Barium	**0.15**	mg/L	0.0025	0.00098	1	11/14/23 03:59	11/14/23 12:00	7440-39-3	
Beryllium	**0.00044J**	mg/L	0.00050	0.00010	1	11/14/23 03:59	11/14/23 12:00	7440-41-7	
Cadmium	**0.00040J**	mg/L	0.00050	0.00020	1	11/14/23 03:59	11/14/23 12:00	7440-43-9	
Chromium	**0.0046**	mg/L	0.0025	0.0011	1	11/14/23 03:59	11/14/23 12:00	7440-47-3	
Cobalt	**0.019**	mg/L	0.0025	0.00081	1	11/14/23 03:59	11/14/23 12:00	7440-48-4	
Copper	**0.0070**	mg/L	0.0025	0.0021	1	11/14/23 03:59	11/14/23 12:00	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/14/23 03:59	11/14/23 12:00	7439-92-1	
Nickel	**0.013**	mg/L	0.0025	0.00075	1	11/14/23 03:59	11/14/23 12:00	7440-02-0	
Selenium	**0.0035**	mg/L	0.0025	0.0013	1	11/14/23 03:59	11/14/23 12:00	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/14/23 03:59	11/14/23 12:00	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.00017	1	11/14/23 03:59	11/14/23 12:00	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0019	1	11/14/23 03:59	11/14/23 12:00	7440-62-2	
Zinc	**0.024**	mg/L	0.0050	0.0043	1	11/14/23 03:59	11/14/23 12:00	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00031**	mg/L	0.00020	0.00020	1	11/13/23 12:21	11/14/23 12:06	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/14/23 06:54	11/14/23 14:25	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/14/23 06:54	11/14/23 14:25	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	95	%.	60-140		1	11/14/23 06:54	11/14/23 14:25	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		11/16/23 09:45		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**170**	mg/L	10.0	10.0	1		11/13/23 17:17		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/20/23 17:32	11/21/23 10:20		

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ANALYTICAL RESULTS

Project: MLF-FALL 2023
Pace Project No.: 30638010

Sample: TW-22A **Lab ID: 30638010002** Collected: 11/08/23 13:20 Received: 11/08/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
	Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/13/23 09:53	11/14/23 07:31		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
	Pace Analytical Services - Greensburg								
Chloride	**81.3**	mg/L	3.0	0.67	1		11/14/23 10:08	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**22.4**	mg/L	10.0	4.7	1		11/12/23 10:52	14808-79-8	

Sample: TW-22B **Lab ID: 30638010003** Collected: 11/08/23 12:00 Received: 11/08/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Calcium	**23.7**	mg/L	0.50	0.083	1	11/13/23 10:10	11/15/23 01:50	7440-70-2	
Iron	**1.4**	mg/L	0.050	0.036	1	11/13/23 10:10	11/15/23 01:50	7439-89-6	
Magnesium	**4.7**	mg/L	0.50	0.047	1	11/13/23 10:10	11/15/23 01:50	7439-95-4	
Manganese	**0.012**	mg/L	0.0050	0.0027	1	11/13/23 10:10	11/15/23 01:50	7439-96-5	
Potassium	**4.4**	mg/L	0.50	0.26	1	11/13/23 10:10	11/15/23 01:50	7440-09-7	
Sodium	**8.3**	mg/L	0.50	0.34	1	11/13/23 10:10	11/15/23 01:50	7440-23-5	
Total Hardness	**78.6**	mg/L	3.3	0.40	1	11/13/23 10:10	11/15/23 01:50		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Calcium, Dissolved	**25.2**	mg/L	0.50	0.083	1	11/14/23 12:20	11/14/23 21:53	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.036	1	11/14/23 12:20	11/14/23 21:53	7439-89-6	
Magnesium, Dissolved	**5.0**	mg/L	0.50	0.047	1	11/14/23 12:20	11/14/23 21:53	7439-95-4	
Manganese, Dissolved	**0.013**	mg/L	0.0050	0.0027	1	11/14/23 12:20	11/14/23 21:53	7439-96-5	
Potassium, Dissolved	**4.8**	mg/L	0.50	0.26	1	11/14/23 12:20	11/14/23 21:53	7440-09-7	
Sodium, Dissolved	**8.8**	mg/L	0.50	0.34	1	11/14/23 12:20	11/14/23 21:53	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00050	1	11/14/23 03:59	11/14/23 12:03	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00078	1	11/14/23 03:59	11/14/23 12:03	7440-38-2	
Barium	**0.043**	mg/L	0.0025	0.00098	1	11/14/23 03:59	11/14/23 12:03	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	11/14/23 03:59	11/14/23 12:03	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00020	1	11/14/23 03:59	11/14/23 12:03	7440-43-9	
Chromium	**0.0077**	mg/L	0.0025	0.0011	1	11/14/23 03:59	11/14/23 12:03	7440-47-3	
Cobalt	**0.011**	mg/L	0.0025	0.00081	1	11/14/23 03:59	11/14/23 12:03	7440-48-4	
Copper	**0.0043**	mg/L	0.0025	0.0021	1	11/14/23 03:59	11/14/23 12:03	7440-50-8	

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ANALYTICAL RESULTS

Project: MLF-FALL 2023
Pace Project No.: 30638010

Sample: TW-22B **Lab ID: 30638010003** Collected: 11/08/23 12:00 Received: 11/08/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/14/23 03:59	11/14/23 12:03	7439-92-1	
Nickel	**0.0042**	mg/L	0.0025	0.00075	1	11/14/23 03:59	11/14/23 12:03	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.0013	1	11/14/23 03:59	11/14/23 12:03	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/14/23 03:59	11/14/23 12:03	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.00017	1	11/14/23 03:59	11/14/23 12:03	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0019	1	11/14/23 03:59	11/14/23 12:03	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0043	1	11/14/23 03:59	11/14/23 12:03	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/13/23 12:21	11/14/23 12:08	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/14/23 06:54	11/14/23 14:38	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/14/23 06:54	11/14/23 14:38	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	92	%.	60-140		1	11/14/23 06:54	11/14/23 14:38	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**52.0**	mg/L	10.0	1.0	1		11/16/23 09:51		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**126**	mg/L	10.0	10.0	1		11/13/23 17:17		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/20/23 17:32	11/21/23 10:22		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**9.0J**	mg/L	25.0	4.7	1	11/13/23 09:53	11/14/23 07:31		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**9.9**	mg/L	3.0	0.67	1		11/14/23 10:09	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**23.8**	mg/L	10.0	4.7	1		11/12/23 10:53	14808-79-8	

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ANALYTICAL RESULTS

Project: MLF-FALL 2023
Pace Project No.: 30638010

Sample: TW-28 **Lab ID: 30638010004** Collected: 11/08/23 14:10 Received: 11/08/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**6.6**	mg/L	0.50	0.083	1	11/13/23 10:10	11/15/23 01:56	7440-70-2	
Iron	**0.94**	mg/L	0.050	0.036	1	11/13/23 10:10	11/15/23 01:56	7439-89-6	
Magnesium	**3.4**	mg/L	0.50	0.047	1	11/13/23 10:10	11/15/23 01:56	7439-95-4	
Manganese	**0.036**	mg/L	0.0050	0.0027	1	11/13/23 10:10	11/15/23 01:56	7439-96-5	
Potassium	**1.1**	mg/L	0.50	0.26	1	11/13/23 10:10	11/15/23 01:56	7440-09-7	
Sodium	**26.5**	mg/L	0.50	0.34	1	11/13/23 10:10	11/15/23 01:56	7440-23-5	
Total Hardness	**30.4**	mg/L	3.3	0.40	1	11/13/23 10:10	11/15/23 01:56		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**6.9**	mg/L	0.50	0.083	1	11/14/23 12:20	11/14/23 21:59	7440-70-2	
Iron, Dissolved	**0.12**	mg/L	0.050	0.036	1	11/14/23 12:20	11/14/23 21:59	7439-89-6	
Magnesium, Dissolved	**3.4**	mg/L	0.50	0.047	1	11/14/23 12:20	11/14/23 21:59	7439-95-4	
Manganese, Dissolved	**0.036**	mg/L	0.0050	0.0027	1	11/14/23 12:20	11/14/23 21:59	7439-96-5	
Potassium, Dissolved	**1.2**	mg/L	0.50	0.26	1	11/14/23 12:20	11/14/23 21:59	7440-09-7	
Sodium, Dissolved	**27.1**	mg/L	0.50	0.34	1	11/14/23 12:20	11/14/23 21:59	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00050	1	11/14/23 03:59	11/14/23 12:06	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00078	1	11/14/23 03:59	11/14/23 12:06	7440-38-2	
Barium	**0.078**	mg/L	0.0025	0.00098	1	11/14/23 03:59	11/14/23 12:06	7440-39-3	
Beryllium	**0.00024J**	mg/L	0.00050	0.00010	1	11/14/23 03:59	11/14/23 12:06	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00020	1	11/14/23 03:59	11/14/23 12:06	7440-43-9	
Chromium	**0.018**	mg/L	0.0025	0.0011	1	11/14/23 03:59	11/14/23 12:06	7440-47-3	
Cobalt	**0.011**	mg/L	0.0025	0.00081	1	11/14/23 03:59	11/14/23 12:06	7440-48-4	
Copper	**0.013**	mg/L	0.0025	0.0021	1	11/14/23 03:59	11/14/23 12:06	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/14/23 03:59	11/14/23 12:06	7439-92-1	
Nickel	**0.027**	mg/L	0.0025	0.00075	1	11/14/23 03:59	11/14/23 12:06	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.0013	1	11/14/23 03:59	11/14/23 12:06	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/14/23 03:59	11/14/23 12:06	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.00017	1	11/14/23 03:59	11/14/23 12:06	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0019	1	11/14/23 03:59	11/14/23 12:06	7440-62-2	
Zinc	**0.018**	mg/L	0.0050	0.0043	1	11/14/23 03:59	11/14/23 12:06	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/13/23 12:21	11/14/23 12:10	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/14/23 06:54	11/14/23 14:52	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/14/23 06:54	11/14/23 14:52	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	90	%.	60-140		1	11/14/23 06:54	11/14/23 14:52	630-20-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-FALL 2023
Pace Project No.: 30638010

Sample: TW-28 **Lab ID: 30638010004** Collected: 11/08/23 14:10 Received: 11/08/23 22:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		11/16/23 09:53		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**126**	mg/L	10.0	10.0	1		11/13/23 17:17		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/20/23 17:32	11/21/23 10:24		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/13/23 09:53	11/14/23 07:31		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**58.8**	mg/L	3.0	0.67	1		11/14/23 10:10	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/12/23 10:55	14808-79-8	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30638010

QC Batch: 629212
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30638010001, 30638010002, 30638010003, 30638010004

METHOD BLANK: 3067602 Matrix: Water
Associated Lab Samples: 30638010001, 30638010002, 30638010003, 30638010004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	11/15/23 01:18	
Iron	mg/L	0.050 U	0.050	0.036	11/15/23 01:18	
Magnesium	mg/L	0.50 U	0.50	0.047	11/15/23 01:18	
Manganese	mg/L	0.0050 U	0.0050	0.0027	11/15/23 01:18	
Potassium	mg/L	0.50 U	0.50	0.26	11/15/23 01:18	
Sodium	mg/L	0.50 U	0.50	0.34	11/15/23 01:18	

LABORATORY CONTROL SAMPLE: 3067603

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	40.9	102	80-120	
Iron	mg/L	2	2.1	105	80-120	
Magnesium	mg/L	20	20.8	104	80-120	
Manganese	mg/L	2	2.1	105	80-120	
Potassium	mg/L	20	20.9	104	80-120	
Sodium	mg/L	20	20.8	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3067629 3067630

Parameter	Units	30638150002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	19100 ug/L	40	40	60.9	59.0	105	100	80-120	3	20	
Iron	mg/L	1820 ug/L	2	2	4.1	3.8	114	99	80-120	8	20	
Magnesium	mg/L	1040 ug/L	20	20	22.5	21.8	107	104	80-120	3	20	
Manganese	mg/L	79.6 ug/L	2	2	2.2	2.2	107	105	80-120	2	20	
Potassium	mg/L	2610 ug/L	20	20	25.9	25.2	116	113	80-120	3	20	
Sodium	mg/L	231000 ug/L	20	20	210	199	-106	-162	80-120	5	20	E,M1

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30638010

QC Batch: 629597
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30638010001, 30638010002, 30638010003, 30638010004

METHOD BLANK: 3069353
Matrix: Water
Associated Lab Samples: 30638010001, 30638010002, 30638010003, 30638010004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	11/14/23 21:42	
Iron, Dissolved	mg/L	0.050 U	0.050	0.036	11/14/23 21:42	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	11/14/23 21:42	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	11/14/23 21:42	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	11/14/23 21:42	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	11/14/23 21:42	

LABORATORY CONTROL SAMPLE: 3069354

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	42.0	105	80-120	
Iron, Dissolved	mg/L	2	2.2	108	80-120	
Magnesium, Dissolved	mg/L	20	21.0	105	80-120	
Manganese, Dissolved	mg/L	2	2.2	108	80-120	
Potassium, Dissolved	mg/L	20	21.1	105	80-120	
Sodium, Dissolved	mg/L	20	21.0	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3069366 3069367

Parameter	Units	30638320002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	34500 ug/L	40	40	78.8	77.1	111	106	80-120	2	20	
Iron, Dissolved	mg/L	0.037J	2	2	2.2	2.2	109	109	80-120	1	20	
Magnesium, Dissolved	mg/L	7990 ug/L	20	20	30.1	29.4	111	107	80-120	2	20	
Manganese, Dissolved	mg/L	0.026	2	2	2.2	2.2	109	108	80-120	1	20	
Potassium, Dissolved	mg/L	2260 ug/L	20	20	25.1	24.8	114	112	80-120	1	20	
Sodium, Dissolved	mg/L	90400 ug/L	20	20	118	114	137	118	80-120	3	20	M1

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30638010

QC Batch: 629443
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30638010001, 30638010002, 30638010003, 30638010004

METHOD BLANK: 3068709
Matrix: Water
Associated Lab Samples: 30638010001, 30638010002, 30638010003, 30638010004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00050	11/14/23 11:47	
Arsenic	mg/L	0.0025 U	0.0025	0.00078	11/14/23 11:47	
Barium	mg/L	0.0025 U	0.0025	0.00098	11/14/23 11:47	
Beryllium	mg/L	0.00050 U	0.00050	0.00010	11/14/23 11:47	
Cadmium	mg/L	0.00050 U	0.00050	0.00020	11/14/23 11:47	
Chromium	mg/L	0.0025 U	0.0025	0.0011	11/14/23 11:47	
Cobalt	mg/L	0.0025 U	0.0025	0.00081	11/14/23 11:47	
Copper	mg/L	0.0025 U	0.0025	0.0021	11/14/23 11:47	
Lead	mg/L	0.00050 U	0.00050	0.00025	11/14/23 11:47	
Nickel	mg/L	0.0025 U	0.0025	0.00075	11/14/23 11:47	
Selenium	mg/L	0.0025 U	0.0025	0.0013	11/14/23 11:47	
Silver	mg/L	0.0025 U	0.0025	0.00053	11/14/23 11:47	
Thallium	mg/L	0.00050 U	0.00050	0.00017	11/14/23 11:47	
Vanadium	mg/L	0.0025 U	0.0025	0.0019	11/14/23 11:47	
Zinc	mg/L	0.0050 U	0.0050	0.0043	11/14/23 11:47	

LABORATORY CONTROL SAMPLE: 3068710

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.021	107	80-120	
Arsenic	mg/L	0.1	0.10	103	80-120	
Barium	mg/L	0.1	0.10	103	80-120	
Beryllium	mg/L	0.02	0.021	107	80-120	
Cadmium	mg/L	0.02	0.021	107	80-120	
Chromium	mg/L	0.1	0.11	107	80-120	
Cobalt	mg/L	0.1	0.11	107	80-120	
Copper	mg/L	0.1	0.11	109	80-120	
Lead	mg/L	0.02	0.021	105	80-120	
Nickel	mg/L	0.1	0.11	107	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	
Silver	mg/L	0.1	0.11	105	80-120	
Thallium	mg/L	0.02	0.021	104	80-120	
Vanadium	mg/L	0.1	0.11	106	80-120	
Zinc	mg/L	0.2	0.21	104	80-120	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30638010

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3068752 3068753

Parameter	Units	30638150001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	<0.50 ug/L	0.02	0.02	0.022	0.022	109	108	75-125	1	20	
Arsenic	mg/L	2.2J ug/L	0.1	0.1	0.11	0.11	104	104	75-125	0	20	
Barium	mg/L	31.6 ug/L	0.1	0.1	0.14	0.14	105	104	75-125	1	20	
Beryllium	mg/L	<0.10 ug/L	0.02	0.02	0.022	0.021	109	107	75-125	2	20	
Cadmium	mg/L	<0.20 ug/L	0.02	0.02	0.020	0.020	101	102	75-125	1	20	
Chromium	mg/L	4.5 ug/L	0.1	0.1	0.11	0.11	107	105	75-125	1	20	
Cobalt	mg/L	<0.81 ug/L	0.1	0.1	0.11	0.11	109	107	75-125	1	20	
Copper	mg/L	4.2 ug/L	0.1	0.1	0.11	0.11	105	104	75-125	1	20	
Lead	mg/L	<0.25 ug/L	0.02	0.02	0.022	0.022	108	108	75-125	0	20	
Nickel	mg/L	<0.75 ug/L	0.1	0.1	0.11	0.11	106	107	75-125	0	20	
Selenium	mg/L	<1.3 ug/L	0.1	0.1	0.10	0.097	100	97	75-125	3	20	
Silver	mg/L	<0.53 ug/L	0.1	0.1	0.10	0.10	104	104	75-125	0	20	
Thallium	mg/L	<0.17 ug/L	0.02	0.02	0.014	0.014	69	69	75-125	1	20	M1
Vanadium	mg/L	<1.9 ug/L	0.1	0.1	0.11	0.11	107	107	75-125	0	20	
Zinc	mg/L	123 ug/L	0.2	0.2	0.33	0.33	104	102	75-125	1	20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30638010

QC Batch: 629170
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30638010001, 30638010002, 30638010003, 30638010004

METHOD BLANK: 3067451 Matrix: Water
Associated Lab Samples: 30638010001, 30638010002, 30638010003, 30638010004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	11/14/23 11:31	

LABORATORY CONTROL SAMPLE: 3067452

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.0099	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3067453 3067454

Parameter	Units	30638150001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	<0.20 ug/L	0.01	0.01	0.0099	0.0098	99	98	80-120	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30638010

QC Batch: 629458
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30638010001, 30638010002, 30638010003, 30638010004

METHOD BLANK: 3068779 Matrix: Water
Associated Lab Samples: 30638010001, 30638010002, 30638010003, 30638010004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	11/14/23 13:18	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	11/14/23 13:18	
1,1,1,2-Tetrachloroethane (S)	%.	91	60-140		11/14/23 13:18	

LABORATORY CONTROL SAMPLE: 3068780

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.23	92	85-115	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.21	85	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			90	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3068781 3068782

Parameter	Units	30638010001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.4	0.4	0.40	0.38	99	94	60-140	4	25	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.4	0.4	0.36	0.36	90	90	60-140	0	25	
1,1,1,2-Tetrachloroethane (S)	%.						94	91	60-140			

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30638010

QC Batch: 630189
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30638010001

METHOD BLANK: 3072465 Matrix: Water
Associated Lab Samples: 30638010001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	11/16/23 08:12	

LABORATORY CONTROL SAMPLE: 3072466

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	23.0	115	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3072467 3072468

Parameter	Units	30637219001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	22.0	50	50	68.0	70.0	92	96	85-115	3	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30638010

QC Batch: 630190
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30638010002, 30638010003, 30638010004

METHOD BLANK: 3072469 Matrix: Water
Associated Lab Samples: 30638010002, 30638010003, 30638010004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	11/16/23 09:42	

LABORATORY CONTROL SAMPLE: 3072470

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3072471 3072472

Parameter	Units	30638010002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	50	50	48.0	48.0	96	96	85-115	0	20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30638010

QC Batch: 629162
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30638010001, 30638010002, 30638010003, 30638010004

METHOD BLANK: 3067430 Matrix: Water
Associated Lab Samples: 30638010001, 30638010002, 30638010003, 30638010004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	11/13/23 17:17	

LABORATORY CONTROL SAMPLE: 3067431

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	985	98	85-115	

SAMPLE DUPLICATE: 3067432

Parameter	Units	30637448002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	285	288	1	5	

SAMPLE DUPLICATE: 3067433

Parameter	Units	30638010004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	126	132	5	5	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30638010

QC Batch: 630946
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30638010001, 30638010002, 30638010003, 30638010004

METHOD BLANK: 3076431
Matrix: Water
Associated Lab Samples: 30638010001, 30638010002, 30638010003, 30638010004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	11/21/23 10:09	

LABORATORY CONTROL SAMPLE: 3076432

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.3	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3076433 3076434

Parameter	Units	30638010001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.1	4.1	101	102	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3076435 3076436

Parameter	Units	30638039004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	ND	4	4	4.1	4.1	103	103	90-110	1	20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30638010

QC Batch: 629202
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30638010001, 30638010002, 30638010003, 30638010004

METHOD BLANK: 3067562
Matrix: Water
Associated Lab Samples: 30638010001, 30638010002, 30638010003, 30638010004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/14/23 07:30	

LABORATORY CONTROL SAMPLE: 3067563

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	311	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3067564 3067565

Parameter	Units	30638010001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	25.0 U	150	150	157	159	105	106	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3067566 3067567

Parameter	Units	30638286007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	25.0 U	150	150	161	157	108	105	90-110	3	10	

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30638010

QC Batch: 628991
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30638010001, 30638010002, 30638010003, 30638010004

METHOD BLANK: 3066342 Matrix: Water
Associated Lab Samples: 30638010001, 30638010002, 30638010003, 30638010004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	11/14/23 09:49	

LABORATORY CONTROL SAMPLE: 3066343

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.3	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3066344 3066345

Parameter	Units	30637755001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	0.87	20	20	20.5	20.5	98	98	85-115	0	20	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30638010

QC Batch: 629120
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30638010001, 30638010002, 30638010003, 30638010004

METHOD BLANK: 3067192 Matrix: Water
Associated Lab Samples: 30638010001, 30638010002, 30638010003, 30638010004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	11/12/23 10:43	

LABORATORY CONTROL SAMPLE: 3067193

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	32.1	107	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3067194 3067195

Parameter	Units	30638010004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.0 U	20	20	22.9	23.2	97	99	85-115	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3067196 3067197

Parameter	Units	30638286007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.0 U	20	20	20.7	20.4	104	102	85-115	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALIFIERS

Project: MLF-FALL 2023
Pace Project No.: 30638010

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30638010001

[1] Sample pH for 8011 is 5

Sample: 30638010002

[1] Sample pH for 8011 is 5

Sample: 30638010003

[1] Sample pH for 8011 is 6

Sample: 30638010004

[1] Sample pH for 8011 is 5

ANALYTE QUALIFIERS

1c	Alkalinity TV: 0.00 mg/L
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-FALL 2023
Pace Project No.: 30638010

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30638010001	**TW-22**	EPA 3010A	629212	EPA 6010D	629789
30638010002	**TW-22A**	EPA 3010A	629212	EPA 6010D	629789
30638010003	**TW-22B**	EPA 3010A	629212	EPA 6010D	629789
30638010004	**TW-28**	EPA 3010A	629212	EPA 6010D	629789
30638010001	**TW-22**	EPA 3010A	629597	EPA 6010D	629755
30638010002	**TW-22A**	EPA 3010A	629597	EPA 6010D	629755
30638010003	**TW-22B**	EPA 3010A	629597	EPA 6010D	629755
30638010004	**TW-28**	EPA 3010A	629597	EPA 6010D	629755
30638010001	**TW-22**	EPA 3010A	629443	EPA 6020B	629559
30638010002	**TW-22A**	EPA 3010A	629443	EPA 6020B	629559
30638010003	**TW-22B**	EPA 3010A	629443	EPA 6020B	629559
30638010004	**TW-28**	EPA 3010A	629443	EPA 6020B	629559
30638010001	**TW-22**	EPA 7470A	629170	EPA 7470A	629345
30638010002	**TW-22A**	EPA 7470A	629170	EPA 7470A	629345
30638010003	**TW-22B**	EPA 7470A	629170	EPA 7470A	629345
30638010004	**TW-28**	EPA 7470A	629170	EPA 7470A	629345
30638010001	**TW-22**	EPA 8011	629458	EPA 8011	629536
30638010002	**TW-22A**	EPA 8011	629458	EPA 8011	629536
30638010003	**TW-22B**	EPA 8011	629458	EPA 8011	629536
30638010004	**TW-28**	EPA 8011	629458	EPA 8011	629536
30638010001	**TW-22**	SM 2320B-2011	630189		
30638010002	**TW-22A**	SM 2320B-2011	630190		
30638010003	**TW-22B**	SM 2320B-2011	630190		
30638010004	**TW-28**	SM 2320B-2011	630190		
30638010001	**TW-22**	SM 2540C-2015	629162		
30638010002	**TW-22A**	SM 2540C-2015	629162		
30638010003	**TW-22B**	SM 2540C-2015	629162		
30638010004	**TW-28**	SM 2540C-2015	629162		
30638010001	**TW-22**	EPA 350.1	630946	EPA 350.1	631258
30638010002	**TW-22A**	EPA 350.1	630946	EPA 350.1	631258
30638010003	**TW-22B**	EPA 350.1	630946	EPA 350.1	631258
30638010004	**TW-28**	EPA 350.1	630946	EPA 350.1	631258
30638010001	**TW-22**	EPA 410.4	629202	EPA 410.4	629276
30638010002	**TW-22A**	EPA 410.4	629202	EPA 410.4	629276
30638010003	**TW-22B**	EPA 410.4	629202	EPA 410.4	629276
30638010004	**TW-28**	EPA 410.4	629202	EPA 410.4	629276
30638010001	**TW-22**	SM 4500-Cl-E-2011	628991		
30638010002	**TW-22A**	SM 4500-Cl-E-2011	628991		
30638010003	**TW-22B**	SM 4500-Cl-E-2011	628991		
30638010004	**TW-28**	SM 4500-Cl-E-2011	628991		
30638010001	**TW-22**	EPA 9038	629120		
30638010002	**TW-22A**	EPA 9038	629120		
30638010003	**TW-22B**	EPA 9038	629120		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-FALL 2023
Pace Project No.: 30638010

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30638010004	**TW-28**	EPA 9038	629120		

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF- FALL 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals (1)	Total + Diss. Metals (2)	Alkalinity, TDS	Hardness, Cl	Ammonia	SO_4, COD		Method 8011 - DBCP + EDB				
1	TW-22	7	11.8.23	1240	✓		GW	✓	✓	✓	✓	✓	✓		✓				001
2	TW-22A	↓	↓	1320	↓		↓	↓	↓	↓	↓	↓	↓		↓				002
3	TW-22B	↓	↓	1200	↓		↓	↓	↓	↓	↓	↓	↓		↓				003
4	TW-28	↓	↓	1410	↓		↓	↓	↓	↓	↓	↓	↓		↓				004
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

WO#: 30638010
30638010

	Signature	Date	Time
Relinquished by	DABrown	11-8-23	
Received by	TB/Pace	11-8-23	1545
Relinquished by	TB/Pace	11-8-23	
Received by	TB	11-8-23	1907
Relinquished by	TB	11-8-23	2210
Received by			

Comments

(1) 6020 - Sb, As, Ba, Be, Cd, Cr, Cu, Co, Pb, Ni, Se, Ag, Tl, V, Zn
(1) 7470 - Hg
(2) 6010 - Ca, Fe, Mg, Mn, K, Na
PACE - WV - METALS - UNITS - mg/L
PACE - GBURG - WET CHEM + 8011
LEVEL 2 REPORT

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-GBUR-0088 v06_Sample Condition Upon Receipt-Pittsburgh
	Effective Date: 09/20/2023

Client Name: EMA **Project #:** 30638010

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking Number: _____

Initial / Date
Examined By: MJB 11-9-23
Labeled By: MJB 11-9-23
Temped By: MJB 11-9-23

Custody Seal on Cooler/Box Present: ☐ Yes ☐No **Seals Intact:** ☐ Yes ☐No
Thermometer Used: 10 **Type of Ice:** Wet Blue None
Cooler Temperature: Observed Temp 4.1 °C Correction Factor: +0.0 °C Final Temp: 4.1 °C
Temp should be above freezing to 6°C

Comments:	Yes	No	NA	pH paper Lot# 10D0831	D.P.D. Residual Chlorine Lot # NA
Chain of Custody Present	✓			1.	
Chain of Custody Filled Out:	✓			2.	
-Were client corrections present on COC		✓			
Chain of Custody Relinquished	✓			3.	
Sampler Name & Signature on COC:	✓			4.	
Sample Labels match COC:	✓			5.	
-Includes date/time/ID					
Matrix:	Wt				
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):		✓		7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used:	✓			10.	
-Pace Containers Used	✓				
Containers Intact:	✓			11.	
Orthophosphate field filtered:			✓	12.	
Hex Cr Aqueous samples field filtered:			✓	13.	
Organic Samples checked for dechlorination			✓	14:	
Filtered volume received for dissolved tests:			✓	15:	
All containers checked for preservation:	✓			16.	
exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix					
All containers meet method preservation requirements:	✓			Initial when completed MJB	Date/Time of Preservation
				Lot# of added Preservative	
8260C/D: Headspace in VOA Vials (> 6mm)	✓	✓		17. MJB 11-9-23	
624.1: Headspace in VOA Vials (0mm)			✓	18.	
Trip Blank Present:		✓		Trip blank custody seal present? YES or NO	
Rad Samples Screened <.05 mrem/hr.	✓			Initial when completed MJB	Date: 11-9-23 / Survey Meter SN: 25014390

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

November 29, 2023

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: Millersville Landfill
Pace Project No.: 30638286

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on November 09, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alaina Deitch

Alaina R. Deitch
alaina.deitch@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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CERTIFICATIONS

Project: Millersville Landfill
Pace Project No.: 30638286

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572023-03
New Hampshire/TNI Certification #: 297622
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad

Pace Analytical Services Beaver
225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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SAMPLE SUMMARY

Project: Millersville Landfill
Pace Project No.: 30638286

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30638286001	**TW-2**	Water	11/09/23 11:35	11/09/23 22:00
30638286002	**TW-2A**	Water	11/09/23 11:00	11/09/23 22:00
30638286003	**TW-3A**	Water	11/09/23 12:30	11/09/23 22:00
30638286004	**TW-4**	Water	11/09/23 14:00	11/09/23 22:00
30638286005	**TW-4B**	Water	11/09/23 14:45	11/09/23 22:00
30638286006	**TW-27**	Water	11/09/23 13:15	11/09/23 22:00
30638286007	**Field Blank**	Water	11/09/23 12:00	11/09/23 22:00

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SAMPLE ANALYTE COUNT

Project: Millersville Landfill
Pace Project No.: 30638286

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30638286001	**TW-2**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30638286002	**TW-2A**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30638286003	**TW-3A**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30638286004	**TW-4**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV

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SAMPLE ANALYTE COUNT

Project: Millersville Landfill
Pace Project No.: 30638286

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30638286005	**TW-4B**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30638286006	**TW-27**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30638286007	**Field Blank**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	AGB	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: Millersville Landfill
Pace Project No.: 30638286

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30638286

Date: November 29, 2023

TW-2 (Lab ID: 30638286001)

- Sample pH for 8011 is 6

TW-2A (Lab ID: 30638286002)

- Sample pH for 8011 is 6

TW-3A (Lab ID: 30638286003)

- Sample pH for 8011 is 6

TW-4 (Lab ID: 30638286004)

- Sample pH for 8011 is 6

TW-4B (Lab ID: 30638286005)

- Sample pH for 8011 is 5

TW-27 (Lab ID: 30638286006)

- Sample pH for 8011 is 6

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30638286

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 29, 2023

General Information:
7 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 629226

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30638286001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3067678)
  - Iron

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30638286

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 29, 2023

General Information:
7 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 629597

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30638320002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3069366)
  - Sodium, Dissolved

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30638286

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: November 29, 2023

General Information:
7 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 629443

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30638150001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3068752)
  - Thallium
- MSD (Lab ID: 3068753)
  - Thallium

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30638286

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: November 29, 2023

General Information:
7 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30638286

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 29, 2023

General Information:
6 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30638286

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: November 29, 2023

General Information:
7 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 630190

1c: Alkalinity TV: 0.00 mg/L
- Field Blank (Lab ID: 30638286007)
  - Alkalinity,Total (CaCO3 pH4.5)
- TW-27 (Lab ID: 30638286006)
  - Alkalinity,Total (CaCO3 pH4.5)

2c: Alkalinity TV: 2.00 mg/L
- TW-4B (Lab ID: 30638286005)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30638286

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: November 29, 2023

General Information:
7 samples were analyzed for SM 2540C-2015 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30638286

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: November 29, 2023

General Information:
7 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30638286

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: November 29, 2023

General Information:
7 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30638286

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: November 29, 2023

General Information:
7 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30638286

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: November 29, 2023

General Information:
7 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30638286

Sample: TW-2 **Lab ID: 30638286001** Collected: 11/09/23 11:35 Received: 11/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.50 U**	mg/L	0.50	0.50	1	11/13/23 11:15	11/14/23 18:38	7440-70-2	
Iron	**16.2**	mg/L	0.050	0.050	1	11/13/23 11:15	11/14/23 18:38	7439-89-6	M1
Magnesium	**0.56**	mg/L	0.50	0.50	1	11/13/23 11:15	11/14/23 18:38	7439-95-4	
Manganese	**0.20**	mg/L	0.0050	0.0050	1	11/13/23 11:15	11/14/23 18:38	7439-96-5	
Potassium	**0.57**	mg/L	0.50	0.50	1	11/13/23 11:15	11/14/23 18:38	7440-09-7	
Sodium	**1.5**	mg/L	0.50	0.50	1	11/13/23 11:15	11/14/23 18:38	7440-23-5	
Total Hardness	**3.3**	mg/L	3.3	3.3	1	11/13/23 11:15	11/14/23 18:38		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.42J**	mg/L	0.50	0.083	1	11/14/23 12:20	11/14/23 22:12	7440-70-2	
Iron, Dissolved	**14.7**	mg/L	0.050	0.036	1	11/14/23 12:20	11/14/23 22:12	7439-89-6	
Magnesium, Dissolved	**0.56**	mg/L	0.50	0.047	1	11/14/23 12:20	11/14/23 22:12	7439-95-4	
Manganese, Dissolved	**0.19**	mg/L	0.0050	0.0027	1	11/14/23 12:20	11/14/23 22:12	7439-96-5	
Potassium, Dissolved	**0.58**	mg/L	0.50	0.26	1	11/14/23 12:20	11/14/23 22:12	7440-09-7	
Sodium, Dissolved	**1.5**	mg/L	0.50	0.34	1	11/14/23 12:20	11/14/23 22:12	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00050	1	11/14/23 03:59	11/14/23 12:48	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00078	1	11/14/23 03:59	11/14/23 12:48	7440-38-2	
Barium	**0.0082**	mg/L	0.0025	0.00098	1	11/14/23 03:59	11/14/23 12:48	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	11/14/23 03:59	11/14/23 12:48	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00020	1	11/14/23 03:59	11/14/23 12:48	7440-43-9	
Chromium	**0.0020J**	mg/L	0.0025	0.0011	1	11/14/23 03:59	11/14/23 12:48	7440-47-3	
Cobalt	**0.0025 U**	mg/L	0.0025	0.00081	1	11/14/23 03:59	11/14/23 12:48	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.0021	1	11/14/23 03:59	11/14/23 12:48	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/14/23 03:59	11/14/23 12:48	7439-92-1	
Nickel	**0.0017J**	mg/L	0.0025	0.00075	1	11/14/23 03:59	11/14/23 12:48	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.0013	1	11/14/23 03:59	11/14/23 12:48	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/14/23 03:59	11/14/23 12:48	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.00017	1	11/14/23 03:59	11/14/23 12:48	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0019	1	11/14/23 03:59	11/14/23 12:48	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0043	1	11/14/23 03:59	11/14/23 12:48	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/13/23 12:21	11/14/23 12:38	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/14/23 06:54	11/14/23 15:05	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/14/23 06:54	11/14/23 15:05	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	94	%.	60-140		1	11/14/23 06:54	11/14/23 15:05	630-20-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30638286

Sample: TW-2 **Lab ID: 30638286001** Collected: 11/09/23 11:35 Received: 11/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**22.0**	mg/L	10.0	1.0	1		11/16/23 09:55		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**26.0**	mg/L	10.0	10.0	1		11/13/23 17:17		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/20/23 17:32	11/21/23 10:57		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/13/23 09:53	11/14/23 07:34		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**3.1**	mg/L	3.0	0.67	1		11/14/23 10:11	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/12/23 11:00	14808-79-8	

Sample: TW-2A **Lab ID: 30638286002** Collected: 11/09/23 11:00 Received: 11/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**5.8**	mg/L	0.50	0.50	1	11/13/23 11:15	11/14/23 18:49	7440-70-2	
Iron	**36.2**	mg/L	0.050	0.050	1	11/13/23 11:15	11/14/23 18:49	7439-89-6	
Magnesium	**3.1**	mg/L	0.50	0.50	1	11/13/23 11:15	11/14/23 18:49	7439-95-4	
Manganese	**0.26**	mg/L	0.0050	0.0050	1	11/13/23 11:15	11/14/23 18:49	7439-96-5	
Potassium	**1.2**	mg/L	0.50	0.50	1	11/13/23 11:15	11/14/23 18:49	7440-09-7	
Sodium	**18.3**	mg/L	0.50	0.50	1	11/13/23 11:15	11/14/23 18:49	7440-23-5	
Total Hardness	**27.3**	mg/L	3.3	3.3	1	11/13/23 11:15	11/14/23 18:49		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**6.0**	mg/L	0.50	0.083	1	11/14/23 12:20	11/14/23 22:15	7440-70-2	
Iron, Dissolved	**36.0**	mg/L	0.050	0.036	1	11/14/23 12:20	11/14/23 22:15	7439-89-6	
Magnesium, Dissolved	**3.3**	mg/L	0.50	0.047	1	11/14/23 12:20	11/14/23 22:15	7439-95-4	
Manganese, Dissolved	**0.27**	mg/L	0.0050	0.0027	1	11/14/23 12:20	11/14/23 22:15	7439-96-5	

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30638286

Sample: TW-2A **Lab ID: 30638286002** Collected: 11/09/23 11:00 Received: 11/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Potassium, Dissolved	**1.2**	mg/L	0.50	0.26	1	11/14/23 12:20	11/14/23 22:15	7440-09-7	
Sodium, Dissolved	**19.0**	mg/L	0.50	0.34	1	11/14/23 12:20	11/14/23 22:15	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.0010 U**	mg/L	0.0010	0.0010	2	11/14/23 03:59	11/14/23 12:51	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0016	2	11/14/23 03:59	11/14/23 12:51	7440-38-2	
Barium	**0.073**	mg/L	0.0050	0.0020	2	11/14/23 03:59	11/14/23 12:51	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00021	2	11/14/23 03:59	11/14/23 12:51	7440-41-7	
Cadmium	**0.0010 U**	mg/L	0.0010	0.00040	2	11/14/23 03:59	11/14/23 12:51	7440-43-9	
Chromium	**0.0081**	mg/L	0.0050	0.0022	2	11/14/23 03:59	11/14/23 12:51	7440-47-3	
Cobalt	**0.0058**	mg/L	0.0050	0.0016	2	11/14/23 03:59	11/14/23 12:51	7440-48-4	
Copper	**0.0042J**	mg/L	0.0050	0.0041	2	11/14/23 03:59	11/14/23 12:51	7440-50-8	
Lead	**0.0010 U**	mg/L	0.0010	0.00050	2	11/14/23 03:59	11/14/23 12:51	7439-92-1	
Nickel	**0.020**	mg/L	0.0050	0.0015	2	11/14/23 03:59	11/14/23 12:51	7440-02-0	
Selenium	**0.0050 U**	mg/L	0.0050	0.0026	2	11/14/23 03:59	11/14/23 12:51	7782-49-2	
Silver	**0.0050 U**	mg/L	0.0050	0.0011	2	11/14/23 03:59	11/14/23 12:51	7440-22-4	
Thallium	**0.0010 U**	mg/L	0.0010	0.00033	2	11/14/23 03:59	11/14/23 12:51	7440-28-0	
Vanadium	**0.0050 U**	mg/L	0.0050	0.0037	2	11/14/23 03:59	11/14/23 12:51	7440-62-2	
Zinc	**0.010 U**	mg/L	0.010	0.0085	2	11/14/23 03:59	11/14/23 12:51	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/13/23 12:21	11/14/23 12:40	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/14/23 06:54	11/14/23 15:18	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/14/23 06:54	11/14/23 15:18	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	96	%.	60-140		1	11/14/23 06:54	11/14/23 15:18	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**32.0**	mg/L	10.0	1.0	1		11/16/23 09:57		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**117**	mg/L	10.0	10.0	1		11/13/23 17:17		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/20/23 17:32	11/21/23 10:59		

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30638286

Sample: TW-2A **Lab ID: 30638286002** Collected: 11/09/23 11:00 Received: 11/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
	Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.8J**	mg/L	25.0	4.7	1	11/13/23 09:53	11/14/23 07:35		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
	Pace Analytical Services - Greensburg								
Chloride	**43.2**	mg/L	3.0	0.67	1		11/14/23 10:15	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/12/23 11:02	14808-79-8	

Sample: TW-3A **Lab ID: 30638286003** Collected: 11/09/23 12:30 Received: 11/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Calcium	**6.6**	mg/L	0.50	0.50	1	11/13/23 11:15	11/14/23 18:51	7440-70-2	
Iron	**74.7**	mg/L	0.050	0.050	1	11/13/23 11:15	11/14/23 18:51	7439-89-6	
Magnesium	**2.3**	mg/L	0.50	0.50	1	11/13/23 11:15	11/14/23 18:51	7439-95-4	
Manganese	**0.71**	mg/L	0.0050	0.0050	1	11/13/23 11:15	11/14/23 18:51	7439-96-5	
Potassium	**1.5**	mg/L	0.50	0.50	1	11/13/23 11:15	11/14/23 18:51	7440-09-7	
Sodium	**105**	mg/L	0.50	0.50	1	11/13/23 11:15	11/14/23 18:51	7440-23-5	
Total Hardness	**25.9**	mg/L	3.3	3.3	1	11/13/23 11:15	11/14/23 18:51		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Calcium, Dissolved	**6.6**	mg/L	0.50	0.083	1	11/14/23 12:20	11/14/23 22:17	7440-70-2	
Iron, Dissolved	**65.1**	mg/L	0.050	0.036	1	11/14/23 12:20	11/14/23 22:17	7439-89-6	
Magnesium, Dissolved	**2.3**	mg/L	0.50	0.047	1	11/14/23 12:20	11/14/23 22:17	7439-95-4	
Manganese, Dissolved	**0.68**	mg/L	0.0050	0.0027	1	11/14/23 12:20	11/14/23 22:17	7439-96-5	
Potassium, Dissolved	**1.5**	mg/L	0.50	0.26	1	11/14/23 12:20	11/14/23 22:17	7440-09-7	
Sodium, Dissolved	**105**	mg/L	0.50	0.34	1	11/14/23 12:20	11/14/23 22:17	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Antimony	**0.0010 U**	mg/L	0.0010	0.0010	2	11/14/23 03:59	11/14/23 13:09	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0016	2	11/14/23 03:59	11/14/23 13:09	7440-38-2	
Barium	**0.083**	mg/L	0.0050	0.0020	2	11/14/23 03:59	11/14/23 13:09	7440-39-3	
Beryllium	**0.0010 U**	mg/L	0.0010	0.00021	2	11/14/23 03:59	11/14/23 13:09	7440-41-7	
Cadmium	**0.0010 U**	mg/L	0.0010	0.00040	2	11/14/23 03:59	11/14/23 13:09	7440-43-9	
Chromium	**0.0024J**	mg/L	0.0050	0.0022	2	11/14/23 03:59	11/14/23 13:09	7440-47-3	
Cobalt	**0.0050 U**	mg/L	0.0050	0.0016	2	11/14/23 03:59	11/14/23 13:09	7440-48-4	
Copper	**0.0050 U**	mg/L	0.0050	0.0041	2	11/14/23 03:59	11/14/23 13:09	7440-50-8	

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30638286

Sample: TW-3A **Lab ID: 30638286003** Collected: 11/09/23 12:30 Received: 11/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Lead	**0.0010 U**	mg/L	0.0010	0.00050	2	11/14/23 03:59	11/14/23 13:09	7439-92-1	
Nickel	**0.0081**	mg/L	0.0050	0.0015	2	11/14/23 03:59	11/14/23 13:09	7440-02-0	
Selenium	**0.0050 U**	mg/L	0.0050	0.0026	2	11/14/23 03:59	11/14/23 13:09	7782-49-2	
Silver	**0.0050 U**	mg/L	0.0050	0.0011	2	11/14/23 03:59	11/14/23 13:09	7440-22-4	
Thallium	**0.0010 U**	mg/L	0.0010	0.00033	2	11/14/23 03:59	11/14/23 13:09	7440-28-0	
Vanadium	**0.0050 U**	mg/L	0.0050	0.0037	2	11/14/23 03:59	11/14/23 13:09	7440-62-2	
Zinc	**0.010 U**	mg/L	0.010	0.0085	2	11/14/23 03:59	11/14/23 13:09	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/14/23 12:05	11/16/23 09:20	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/14/23 06:54	11/14/23 15:32	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/14/23 06:54	11/14/23 15:32	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	97	%.	60-140		1	11/14/23 06:54	11/14/23 15:32	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**22.0**	mg/L	10.0	1.0	1		11/16/23 09:59		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**349**	mg/L	10.0	10.0	1		11/14/23 16:45		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/20/23 17:32	11/21/23 11:01		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**15.8J**	mg/L	25.0	4.7	1	11/13/23 09:53	11/14/23 07:35		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**191**	mg/L	30.0	6.7	10		11/14/23 10:32	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/12/23 11:02	14808-79-8	

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30638286

Sample: TW-4 **Lab ID: 30638286004** Collected: 11/09/23 14:00 Received: 11/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**2.9**	mg/L	0.50	0.50	1	11/13/23 11:15	11/14/23 18:58	7440-70-2	
Iron	**79.8**	mg/L	0.050	0.050	1	11/13/23 11:15	11/14/23 18:58	7439-89-6	
Magnesium	**1.5**	mg/L	0.50	0.50	1	11/13/23 11:15	11/14/23 18:58	7439-95-4	
Manganese	**0.21**	mg/L	0.0050	0.0050	1	11/13/23 11:15	11/14/23 18:58	7439-96-5	
Potassium	**0.92**	mg/L	0.50	0.50	1	11/13/23 11:15	11/14/23 18:58	7440-09-7	
Sodium	**5.7**	mg/L	0.50	0.50	1	11/13/23 11:15	11/14/23 18:58	7440-23-5	
Total Hardness	**13.4**	mg/L	3.3	3.3	1	11/13/23 11:15	11/14/23 18:58		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**3.0**	mg/L	0.50	0.083	1	11/14/23 12:20	11/14/23 22:19	7440-70-2	
Iron, Dissolved	**34.2**	mg/L	0.050	0.036	1	11/14/23 12:20	11/14/23 22:19	7439-89-6	
Magnesium, Dissolved	**1.5**	mg/L	0.50	0.047	1	11/14/23 12:20	11/14/23 22:19	7439-95-4	
Manganese, Dissolved	**0.21**	mg/L	0.0050	0.0027	1	11/14/23 12:20	11/14/23 22:19	7439-96-5	
Potassium, Dissolved	**0.93**	mg/L	0.50	0.26	1	11/14/23 12:20	11/14/23 22:19	7440-09-7	
Sodium, Dissolved	**5.9**	mg/L	0.50	0.34	1	11/14/23 12:20	11/14/23 22:19	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.0010 U**	mg/L	0.0010	0.0010	2	11/14/23 03:59	11/14/23 13:12	7440-36-0	
Arsenic	**0.0050 U**	mg/L	0.0050	0.0016	2	11/14/23 03:59	11/14/23 13:12	7440-38-2	
Barium	**0.037**	mg/L	0.0050	0.0020	2	11/14/23 03:59	11/14/23 13:12	7440-39-3	
Beryllium	**0.00031J**	mg/L	0.0010	0.00021	2	11/14/23 03:59	11/14/23 13:12	7440-41-7	
Cadmium	**0.0010 U**	mg/L	0.0010	0.00040	2	11/14/23 03:59	11/14/23 13:12	7440-43-9	
Chromium	**0.0050 U**	mg/L	0.0050	0.0022	2	11/14/23 03:59	11/14/23 13:12	7440-47-3	
Cobalt	**0.0024J**	mg/L	0.0050	0.0016	2	11/14/23 03:59	11/14/23 13:12	7440-48-4	
Copper	**0.014**	mg/L	0.0050	0.0041	2	11/14/23 03:59	11/14/23 13:12	7440-50-8	
Lead	**0.0010 U**	mg/L	0.0010	0.00050	2	11/14/23 03:59	11/14/23 13:12	7439-92-1	
Nickel	**0.0025J**	mg/L	0.0050	0.0015	2	11/14/23 03:59	11/14/23 13:12	7440-02-0	
Selenium	**0.0050 U**	mg/L	0.0050	0.0026	2	11/14/23 03:59	11/14/23 13:12	7782-49-2	
Silver	**0.0050 U**	mg/L	0.0050	0.0011	2	11/14/23 03:59	11/14/23 13:12	7440-22-4	
Thallium	**0.0010 U**	mg/L	0.0010	0.00033	2	11/14/23 03:59	11/14/23 13:12	7440-28-0	
Vanadium	**0.0050 U**	mg/L	0.0050	0.0037	2	11/14/23 03:59	11/14/23 13:12	7440-62-2	
Zinc	**0.010 U**	mg/L	0.010	0.0085	2	11/14/23 03:59	11/14/23 13:12	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/14/23 12:05	11/16/23 09:27	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/14/23 06:54	11/14/23 15:45	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/14/23 06:54	11/14/23 15:45	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	97	%.	60-140		1	11/14/23 06:54	11/14/23 15:45	630-20-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30638286

Sample: TW-4 **Lab ID: 30638286004** Collected: 11/09/23 14:00 Received: 11/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**34.0**	mg/L	10.0	1.0	1		11/16/23 10:02		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**74.0**	mg/L	10.0	10.0	1		11/14/23 16:45		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/20/23 17:32	11/21/23 11:13		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**6.8J**	mg/L	25.0	4.7	1	11/13/23 09:53	11/14/23 07:35		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**16.3**	mg/L	3.0	0.67	1		11/14/23 10:19	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/12/23 11:04	14808-79-8	

Sample: TW-4B **Lab ID: 30638286005** Collected: 11/09/23 14:45 Received: 11/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**3.1**	mg/L	0.50	0.50	1	11/13/23 11:15	11/14/23 19:00	7440-70-2	
Iron	**0.082**	mg/L	0.050	0.050	1	11/13/23 11:15	11/14/23 19:00	7439-89-6	
Magnesium	**2.6**	mg/L	0.50	0.50	1	11/13/23 11:15	11/14/23 19:00	7439-95-4	
Manganese	**0.11**	mg/L	0.0050	0.0050	1	11/13/23 11:15	11/14/23 19:00	7439-96-5	
Potassium	**1.1**	mg/L	0.50	0.50	1	11/13/23 11:15	11/14/23 19:00	7440-09-7	
Sodium	**2.7**	mg/L	0.50	0.50	1	11/13/23 11:15	11/14/23 19:00	7440-23-5	
Total Hardness	**18.5**	mg/L	3.3	3.3	1	11/13/23 11:15	11/14/23 19:00		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**3.1**	mg/L	0.50	0.083	1	11/14/23 12:20	11/14/23 22:25	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.036	1	11/14/23 12:20	11/14/23 22:25	7439-89-6	
Magnesium, Dissolved	**2.6**	mg/L	0.50	0.047	1	11/14/23 12:20	11/14/23 22:25	7439-95-4	
Manganese, Dissolved	**0.11**	mg/L	0.0050	0.0027	1	11/14/23 12:20	11/14/23 22:25	7439-96-5	

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30638286

Sample: TW-4B **Lab ID: 30638286005** Collected: 11/09/23 14:45 Received: 11/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Potassium, Dissolved	**1.1**	mg/L	0.50	0.26	1	11/14/23 12:20	11/14/23 22:25	7440-09-7	
Sodium, Dissolved	**2.8**	mg/L	0.50	0.34	1	11/14/23 12:20	11/14/23 22:25	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00050	1	11/14/23 03:59	11/14/23 13:15	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00078	1	11/14/23 03:59	11/14/23 13:15	7440-38-2	
Barium	**0.068**	mg/L	0.0025	0.00098	1	11/14/23 03:59	11/14/23 13:15	7440-39-3	
Beryllium	**0.00031J**	mg/L	0.00050	0.00010	1	11/14/23 03:59	11/14/23 13:15	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00020	1	11/14/23 03:59	11/14/23 13:15	7440-43-9	
Chromium	**0.0026**	mg/L	0.0025	0.0011	1	11/14/23 03:59	11/14/23 13:15	7440-47-3	
Cobalt	**0.0072**	mg/L	0.0025	0.00081	1	11/14/23 03:59	11/14/23 13:15	7440-48-4	
Copper	**0.0034**	mg/L	0.0025	0.0021	1	11/14/23 03:59	11/14/23 13:15	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/14/23 03:59	11/14/23 13:15	7439-92-1	
Nickel	**0.0056**	mg/L	0.0025	0.00075	1	11/14/23 03:59	11/14/23 13:15	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.0013	1	11/14/23 03:59	11/14/23 13:15	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/14/23 03:59	11/14/23 13:15	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.00017	1	11/14/23 03:59	11/14/23 13:15	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0019	1	11/14/23 03:59	11/14/23 13:15	7440-62-2	
Zinc	**0.0098**	mg/L	0.0050	0.0043	1	11/14/23 03:59	11/14/23 13:15	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00034**	mg/L	0.00020	0.00020	1	11/14/23 12:05	11/16/23 09:30	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/14/23 06:54	11/14/23 15:58	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	11/14/23 06:54	11/14/23 15:58	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	99	%.	60-140		1	11/14/23 06:54	11/14/23 15:58	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		11/16/23 10:05		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**25.0**	mg/L	10.0	10.0	1		11/14/23 16:45		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/20/23 17:32	11/21/23 11:19		

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30638286

Sample: TW-4B **Lab ID: 30638286005** Collected: 11/09/23 14:45 Received: 11/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
	Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/13/23 09:53	11/14/23 07:35		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
	Pace Analytical Services - Greensburg								
Chloride	**5.8**	mg/L	3.0	0.67	1		11/14/23 10:20	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**11.4**	mg/L	10.0	4.7	1		11/12/23 11:05	14808-79-8	

Sample: TW-27 **Lab ID: 30638286006** Collected: 11/09/23 13:15 Received: 11/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Calcium	**0.94**	mg/L	0.50	0.50	1	11/13/23 11:15	11/14/23 19:02	7440-70-2	
Iron	**0.074**	mg/L	0.050	0.050	1	11/13/23 11:15	11/14/23 19:02	7439-89-6	
Magnesium	**0.50 U**	mg/L	0.50	0.50	1	11/13/23 11:15	11/14/23 19:02	7439-95-4	
Manganese	**0.0075**	mg/L	0.0050	0.0050	1	11/13/23 11:15	11/14/23 19:02	7439-96-5	
Potassium	**0.52**	mg/L	0.50	0.50	1	11/13/23 11:15	11/14/23 19:02	7440-09-7	
Sodium	**2.6**	mg/L	0.50	0.50	1	11/13/23 11:15	11/14/23 19:02	7440-23-5	
Total Hardness	**4.1**	mg/L	3.3	3.3	1	11/13/23 11:15	11/14/23 19:02		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Calcium, Dissolved	**1.1**	mg/L	0.50	0.083	1	11/14/23 12:20	11/14/23 22:28	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.036	1	11/14/23 12:20	11/14/23 22:28	7439-89-6	
Magnesium, Dissolved	**0.43J**	mg/L	0.50	0.047	1	11/14/23 12:20	11/14/23 22:28	7439-95-4	
Manganese, Dissolved	**0.0071**	mg/L	0.0050	0.0027	1	11/14/23 12:20	11/14/23 22:28	7439-96-5	
Potassium, Dissolved	**0.51**	mg/L	0.50	0.26	1	11/14/23 12:20	11/14/23 22:28	7440-09-7	
Sodium, Dissolved	**2.7**	mg/L	0.50	0.34	1	11/14/23 12:20	11/14/23 22:28	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00050	1	11/14/23 03:59	11/14/23 13:18	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00078	1	11/14/23 03:59	11/14/23 13:18	7440-38-2	
Barium	**0.0077**	mg/L	0.0025	0.00098	1	11/14/23 03:59	11/14/23 13:18	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	11/14/23 03:59	11/14/23 13:18	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00020	1	11/14/23 03:59	11/14/23 13:18	7440-43-9	
Chromium	**0.0062**	mg/L	0.0025	0.0011	1	11/14/23 03:59	11/14/23 13:18	7440-47-3	
Cobalt	**0.0013J**	mg/L	0.0025	0.00081	1	11/14/23 03:59	11/14/23 13:18	7440-48-4	
Copper	**0.0026**	mg/L	0.0025	0.0021	1	11/14/23 03:59	11/14/23 13:18	7440-50-8	

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30638286

Sample: TW-27 **Lab ID: 30638286006** Collected: 11/09/23 13:15 Received: 11/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/14/23 03:59	11/14/23 13:18	7439-92-1	
Nickel	**0.0064**	mg/L	0.0025	0.00075	1	11/14/23 03:59	11/14/23 13:18	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.0013	1	11/14/23 03:59	11/14/23 13:18	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/14/23 03:59	11/14/23 13:18	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.00017	1	11/14/23 03:59	11/14/23 13:18	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0019	1	11/14/23 03:59	11/14/23 13:18	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0043	1	11/14/23 03:59	11/14/23 13:18	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/14/23 12:05	11/16/23 09:32	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/14/23 06:54	11/14/23 16:12	96-12-8	
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/14/23 06:54	11/14/23 16:12	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	96	%.	60-140		1	11/14/23 06:54	11/14/23 16:12	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		11/16/23 10:06		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**24.0**	mg/L	10.0	10.0	1		11/14/23 16:45		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/20/23 17:32	11/21/23 11:21		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/13/23 09:53	11/14/23 07:35		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**5.6**	mg/L	3.0	0.67	1		11/14/23 10:21	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/12/23 11:07	14808-79-8	

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30638286

Sample: Field Blank **Lab ID: 30638286007** Collected: 11/09/23 12:00 Received: 11/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**0.50 U**	mg/L	0.50	0.50	1	11/13/23 11:15	11/14/23 19:04	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.050	1	11/13/23 11:15	11/14/23 19:04	7439-89-6	
Magnesium	**0.50 U**	mg/L	0.50	0.50	1	11/13/23 11:15	11/14/23 19:04	7439-95-4	
Manganese	**0.0050 U**	mg/L	0.0050	0.0050	1	11/13/23 11:15	11/14/23 19:04	7439-96-5	
Potassium	**0.50 U**	mg/L	0.50	0.50	1	11/13/23 11:15	11/14/23 19:04	7440-09-7	
Sodium	**0.50 U**	mg/L	0.50	0.50	1	11/13/23 11:15	11/14/23 19:04	7440-23-5	
Total Hardness	**3.3 U**	mg/L	3.3	3.3	1	11/13/23 11:15	11/14/23 19:04		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**0.50 U**	mg/L	0.50	0.083	1	11/14/23 12:20	11/14/23 22:30	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.036	1	11/14/23 12:20	11/14/23 22:30	7439-89-6	
Magnesium, Dissolved	**0.50 U**	mg/L	0.50	0.047	1	11/14/23 12:20	11/14/23 22:30	7439-95-4	
Manganese, Dissolved	**0.0050 U**	mg/L	0.0050	0.0027	1	11/14/23 12:20	11/14/23 22:30	7439-96-5	
Potassium, Dissolved	**0.50 U**	mg/L	0.50	0.26	1	11/14/23 12:20	11/14/23 22:30	7440-09-7	
Sodium, Dissolved	**0.50 U**	mg/L	0.50	0.34	1	11/14/23 12:20	11/14/23 22:30	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00050	1	11/14/23 03:59	11/14/23 13:00	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00078	1	11/14/23 03:59	11/14/23 13:00	7440-38-2	
Barium	**0.0025 U**	mg/L	0.0025	0.00098	1	11/14/23 03:59	11/14/23 13:00	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	11/14/23 03:59	11/14/23 13:00	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00020	1	11/14/23 03:59	11/14/23 13:00	7440-43-9	
Chromium	**0.0025 U**	mg/L	0.0025	0.0011	1	11/14/23 03:59	11/14/23 13:00	7440-47-3	
Cobalt	**0.0025 U**	mg/L	0.0025	0.00081	1	11/14/23 03:59	11/14/23 13:00	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.0021	1	11/14/23 03:59	11/14/23 13:00	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/14/23 03:59	11/14/23 13:00	7439-92-1	
Nickel	**0.0025 U**	mg/L	0.0025	0.00075	1	11/14/23 03:59	11/14/23 13:00	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.0013	1	11/14/23 03:59	11/14/23 13:00	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/14/23 03:59	11/14/23 13:00	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.00017	1	11/14/23 03:59	11/14/23 13:00	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0019	1	11/14/23 03:59	11/14/23 13:00	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0043	1	11/14/23 03:59	11/14/23 13:00	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/14/23 12:05	11/16/23 09:34	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		11/16/23 10:07		1c

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30638286

Sample: Field Blank **Lab ID: 30638286007** Collected: 11/09/23 12:00 Received: 11/09/23 22:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**10.0 U**	mg/L	10.0	10.0	1		11/14/23 16:45		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/20/23 17:32	11/21/23 11:23		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/13/23 09:53	11/14/23 07:36		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**3.0 U**	mg/L	3.0	0.67	1		11/14/23 10:21	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/12/23 11:07	14808-79-8	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30638286

QC Batch: 629226
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30638286001, 30638286002, 30638286003, 30638286004, 30638286005, 30638286006, 30638286007

METHOD BLANK: 3067625
Matrix: Water
Associated Lab Samples: 30638286001, 30638286002, 30638286003, 30638286004, 30638286005, 30638286006, 30638286007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.50	11/14/23 18:23	
Iron	mg/L	0.050 U	0.050	0.050	11/14/23 18:23	
Magnesium	mg/L	0.50 U	0.50	0.50	11/14/23 18:23	
Manganese	mg/L	0.0050 U	0.0050	0.0050	11/14/23 18:23	
Potassium	mg/L	0.50 U	0.50	0.50	11/14/23 18:23	
Sodium	mg/L	0.50 U	0.50	0.50	11/14/23 18:23	

LABORATORY CONTROL SAMPLE: 3067626

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	42.1	105	80-120	
Iron	mg/L	2	2.2	109	80-120	
Magnesium	mg/L	20	20.7	104	80-120	
Manganese	mg/L	2	2.2	108	80-120	
Potassium	mg/L	20	21.2	106	80-120	
Sodium	mg/L	20	21.1	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3067678 3067679

Parameter	Units	30638286001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	0.50 U	40	40	43.4	42.8	108	106	80-120	1	20	
Iron	mg/L	16.2	2	2	18.8	18.5	127	112	80-120	2	20	M1
Magnesium	mg/L	0.56	20	20	22.0	21.6	107	105	80-120	2	20	
Manganese	mg/L	0.20	2	2	2.4	2.4	111	109	80-120	1	20	
Potassium	mg/L	0.57	20	20	22.3	21.9	109	107	80-120	2	20	
Sodium	mg/L	1.5	20	20	23.1	22.7	108	106	80-120	2	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30638286

QC Batch: 629597
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30638286001, 30638286002, 30638286003, 30638286004, 30638286005, 30638286006, 30638286007

METHOD BLANK: 3069353 Matrix: Water
Associated Lab Samples: 30638286001, 30638286002, 30638286003, 30638286004, 30638286005, 30638286006, 30638286007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	11/14/23 21:42	
Iron, Dissolved	mg/L	0.050 U	0.050	0.036	11/14/23 21:42	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	11/14/23 21:42	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	11/14/23 21:42	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	11/14/23 21:42	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	11/14/23 21:42	

LABORATORY CONTROL SAMPLE: 3069354

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	42.0	105	80-120	
Iron, Dissolved	mg/L	2	2.2	108	80-120	
Magnesium, Dissolved	mg/L	20	21.0	105	80-120	
Manganese, Dissolved	mg/L	2	2.2	108	80-120	
Potassium, Dissolved	mg/L	20	21.1	105	80-120	
Sodium, Dissolved	mg/L	20	21.0	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3069366 3069367

Parameter	Units	30638320002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	34500 ug/L	40	40	78.8	77.1	111	106	80-120	2	20	
Iron, Dissolved	mg/L	0.037J	2	2	2.2	2.2	109	109	80-120	1	20	
Magnesium, Dissolved	mg/L	7990 ug/L	20	20	30.1	29.4	111	107	80-120	2	20	
Manganese, Dissolved	mg/L	0.026	2	2	2.2	2.2	109	108	80-120	1	20	
Potassium, Dissolved	mg/L	2260 ug/L	20	20	25.1	24.8	114	112	80-120	1	20	
Sodium, Dissolved	mg/L	90400 ug/L	20	20	118	114	137	118	80-120	3	20	M1

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30638286

QC Batch: 629443
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30638286001, 30638286002, 30638286003, 30638286004, 30638286005, 30638286006, 30638286007

METHOD BLANK: 3068709
Matrix: Water
Associated Lab Samples: 30638286001, 30638286002, 30638286003, 30638286004, 30638286005, 30638286006, 30638286007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00050	11/14/23 11:47	
Arsenic	mg/L	0.0025 U	0.0025	0.00078	11/14/23 11:47	
Barium	mg/L	0.0025 U	0.0025	0.00098	11/14/23 11:47	
Beryllium	mg/L	0.00050 U	0.00050	0.00010	11/14/23 11:47	
Cadmium	mg/L	0.00050 U	0.00050	0.00020	11/14/23 11:47	
Chromium	mg/L	0.0025 U	0.0025	0.0011	11/14/23 11:47	
Cobalt	mg/L	0.0025 U	0.0025	0.00081	11/14/23 11:47	
Copper	mg/L	0.0025 U	0.0025	0.0021	11/14/23 11:47	
Lead	mg/L	0.00050 U	0.00050	0.00025	11/14/23 11:47	
Nickel	mg/L	0.0025 U	0.0025	0.00075	11/14/23 11:47	
Selenium	mg/L	0.0025 U	0.0025	0.0013	11/14/23 11:47	
Silver	mg/L	0.0025 U	0.0025	0.00053	11/14/23 11:47	
Thallium	mg/L	0.00050 U	0.00050	0.00017	11/14/23 11:47	
Vanadium	mg/L	0.0025 U	0.0025	0.0019	11/14/23 11:47	
Zinc	mg/L	0.0050 U	0.0050	0.0043	11/14/23 11:47	

LABORATORY CONTROL SAMPLE: 3068710

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.021	107	80-120	
Arsenic	mg/L	0.1	0.10	103	80-120	
Barium	mg/L	0.1	0.10	103	80-120	
Beryllium	mg/L	0.02	0.021	107	80-120	
Cadmium	mg/L	0.02	0.021	107	80-120	
Chromium	mg/L	0.1	0.11	107	80-120	
Cobalt	mg/L	0.1	0.11	107	80-120	
Copper	mg/L	0.1	0.11	109	80-120	
Lead	mg/L	0.02	0.021	105	80-120	
Nickel	mg/L	0.1	0.11	107	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	
Silver	mg/L	0.1	0.11	105	80-120	
Thallium	mg/L	0.02	0.021	104	80-120	
Vanadium	mg/L	0.1	0.11	106	80-120	
Zinc	mg/L	0.2	0.21	104	80-120	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30638286

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3068752 3068753

Parameter	Units	30638150001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	<0.50 ug/L	0.02	0.02	0.022	0.022	109	108	75-125	1	20	
Arsenic	mg/L	2.2J ug/L	0.1	0.1	0.11	0.11	104	104	75-125	0	20	
Barium	mg/L	31.6 ug/L	0.1	0.1	0.14	0.14	105	104	75-125	1	20	
Beryllium	mg/L	<0.10 ug/L	0.02	0.02	0.022	0.021	109	107	75-125	2	20	
Cadmium	mg/L	<0.20 ug/L	0.02	0.02	0.020	0.020	101	102	75-125	1	20	
Chromium	mg/L	4.5 ug/L	0.1	0.1	0.11	0.11	107	105	75-125	1	20	
Cobalt	mg/L	<0.81 ug/L	0.1	0.1	0.11	0.11	109	107	75-125	1	20	
Copper	mg/L	4.2 ug/L	0.1	0.1	0.11	0.11	105	104	75-125	1	20	
Lead	mg/L	<0.25 ug/L	0.02	0.02	0.022	0.022	108	108	75-125	0	20	
Nickel	mg/L	<0.75 ug/L	0.1	0.1	0.11	0.11	106	107	75-125	0	20	
Selenium	mg/L	<1.3 ug/L	0.1	0.1	0.10	0.097	100	97	75-125	3	20	
Silver	mg/L	<0.53 ug/L	0.1	0.1	0.10	0.10	104	104	75-125	0	20	
Thallium	mg/L	<0.17 ug/L	0.02	0.02	0.014	0.014	69	69	75-125	1	20	M1
Vanadium	mg/L	<1.9 ug/L	0.1	0.1	0.11	0.11	107	107	75-125	0	20	
Zinc	mg/L	123 ug/L	0.2	0.2	0.33	0.33	104	102	75-125	1	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30638286

QC Batch: 629170
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30638286001, 30638286002

METHOD BLANK: 3067451
Matrix: Water
Associated Lab Samples: 30638286001, 30638286002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	11/14/23 11:31	

LABORATORY CONTROL SAMPLE: 3067452

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.0099	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3067453 3067454

Parameter	Units	30638150001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	<0.20 ug/L	0.01	0.01	0.0099	0.0098	99	98	80-120	1	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30638286

QC Batch: 629574
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30638286003, 30638286004, 30638286005, 30638286006, 30638286007

METHOD BLANK: 3069174
Matrix: Water
Associated Lab Samples: 30638286003, 30638286004, 30638286005, 30638286006, 30638286007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	11/16/23 09:06	

LABORATORY CONTROL SAMPLE: 3069175

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.0099	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3069176 3069177

Parameter	Units	30638286007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00020 U	0.01	0.01	0.0097	0.0097	97	97	80-120	0	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30638286

QC Batch: 629458
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30638286001, 30638286002, 30638286003, 30638286004, 30638286005, 30638286006

METHOD BLANK: 3068779 Matrix: Water
Associated Lab Samples: 30638286001, 30638286002, 30638286003, 30638286004, 30638286005, 30638286006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	11/14/23 13:18	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	11/14/23 13:18	
1,1,1,2-Tetrachloroethane (S)	%.	91	60-140		11/14/23 13:18	

LABORATORY CONTROL SAMPLE: 3068780

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.23	92	85-115	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.21	85	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			90	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3068781 3068782

Parameter	Units	30638010001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.4	0.4	0.40	0.38	99	94	60-140	4	25	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.4	0.4	0.36	0.36	90	90	60-140	0	25	
1,1,1,2-Tetrachloroethane (S)	%.						94	91	60-140			

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30638286

QC Batch: 630190
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30638286001, 30638286002, 30638286003, 30638286004, 30638286005, 30638286006, 30638286007

METHOD BLANK: 3072469
Matrix: Water
Associated Lab Samples: 30638286001, 30638286002, 30638286003, 30638286004, 30638286005, 30638286006, 30638286007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	11/16/23 09:42	

LABORATORY CONTROL SAMPLE: 3072470

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3072471 3072472

Parameter	Units	30638010002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	50	50	48.0	48.0	96	96	85-115	0	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30638286

QC Batch: 629162
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30638286001, 30638286002

METHOD BLANK: 3067430
Matrix: Water
Associated Lab Samples: 30638286001, 30638286002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	11/13/23 17:17	

LABORATORY CONTROL SAMPLE: 3067431

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	985	98	85-115	

SAMPLE DUPLICATE: 3067432

Parameter	Units	30637448002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	285	288	1	5	

SAMPLE DUPLICATE: 3067433

Parameter	Units	30638010004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	126	132	5	5	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30638286

QC Batch: 629474
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30638286003, 30638286004, 30638286005, 30638286006, 30638286007

METHOD BLANK: 3068819
Matrix: Water
Associated Lab Samples: 30638286003, 30638286004, 30638286005, 30638286006, 30638286007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	11/14/23 16:45	

LABORATORY CONTROL SAMPLE: 3068820

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	976	98	85-115	

SAMPLE DUPLICATE: 3068821

Parameter	Units	30638728004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	195	191	2	5	

SAMPLE DUPLICATE: 3068822

Parameter	Units	30638286004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	74.0	71.0	4	5	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30638286

QC Batch: 630946
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30638286001, 30638286002, 30638286003

METHOD BLANK: 3076431
Matrix: Water
Associated Lab Samples: 30638286001, 30638286002, 30638286003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	11/21/23 10:09	

LABORATORY CONTROL SAMPLE: 3076432

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.3	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3076433 3076434

Parameter	Units	30638010001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.1	4.1	101	102	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3076435 3076436

Parameter	Units	30638039004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	ND	4	4	4.1	4.1	103	103	90-110	1	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30638286

QC Batch: 630947
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30638286004, 30638286005, 30638286006, 30638286007

METHOD BLANK: 3076437 Matrix: Water
Associated Lab Samples: 30638286004, 30638286005, 30638286006, 30638286007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	11/21/23 11:07	

METHOD BLANK: 3076438 Matrix: Water
Associated Lab Samples: 30638286004, 30638286005, 30638286006, 30638286007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	11/21/23 11:11	

LABORATORY CONTROL SAMPLE: 3076439

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.2	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3076440 3076441

Parameter	Units	30638286004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.0	4.0	100	101	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3076442 3076443

Parameter	Units	30639579001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.13	4	4	4.1	3.8	98	92	90-110	6	20	

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30638286

QC Batch: 629202
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30638286001, 30638286002, 30638286003, 30638286004, 30638286005, 30638286006, 30638286007

METHOD BLANK: 3067562 Matrix: Water
Associated Lab Samples: 30638286001, 30638286002, 30638286003, 30638286004, 30638286005, 30638286006, 30638286007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/14/23 07:30	

LABORATORY CONTROL SAMPLE: 3067563

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	311	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3067564 3067565

Parameter	Units	30638010001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	25.0 U	150	150	157	159	105	106	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3067566 3067567

Parameter	Units	30638286007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	25.0 U	150	150	161	157	108	105	90-110	3	10	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30638286

QC Batch: 628991
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30638286001

METHOD BLANK: 3066342 Matrix: Water
Associated Lab Samples: 30638286001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	11/14/23 09:49	

LABORATORY CONTROL SAMPLE: 3066343

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.3	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3066344 3066345

Parameter	Units	30637755001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	0.87	20	20	20.5	20.5	98	98	85-115	0	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30638286

QC Batch: 628993
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30638286002, 30638286003, 30638286004, 30638286005, 30638286006, 30638286007

METHOD BLANK: 3066352 Matrix: Water
Associated Lab Samples: 30638286002, 30638286003, 30638286004, 30638286005, 30638286006, 30638286007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	11/14/23 10:14	

LABORATORY CONTROL SAMPLE: 3066353

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.4	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3066354 3066355

Parameter	Units	30638286002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	43.2	20	20	61.8	61.8	93	93	85-115	0	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30638286

QC Batch: 629120
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30638286001, 30638286002, 30638286003, 30638286004, 30638286005, 30638286006, 30638286007

METHOD BLANK: 3067192 Matrix: Water
Associated Lab Samples: 30638286001, 30638286002, 30638286003, 30638286004, 30638286005, 30638286006, 30638286007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	11/12/23 10:43	

LABORATORY CONTROL SAMPLE: 3067193

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	32.1	107	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3067194 3067195

Parameter	Units	30638010004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.0 U	20	20	22.9	23.2	97	99	85-115	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3067196 3067197

Parameter	Units	30638286007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	10.0 U	20	20	20.7	20.4	104	102	85-115	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALIFIERS

Project: Millersville Landfill
Pace Project No.: 30638286

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30638286001
[1] Sample pH for 8011 is 6

Sample: 30638286002
[1] Sample pH for 8011 is 6

Sample: 30638286003
[1] Sample pH for 8011 is 6

Sample: 30638286004
[1] Sample pH for 8011 is 6

Sample: 30638286005
[1] Sample pH for 8011 is 5

Sample: 30638286006
[1] Sample pH for 8011 is 6

ANALYTE QUALIFIERS

1c Alkalinity TV: 0.00 mg/L

2c Alkalinity TV: 2.00 mg/L

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALIFIERS

Project: Millersville Landfill
Pace Project No.: 30638286

ANALYTE QUALIFIERS

N3 Accreditation is not offered by the relevant laboratory accrediting body for this parameter.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Millersville Landfill
Pace Project No.: 30638286

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30638286001	**TW-2**	EPA 3010A	629226	EPA 6010D	629752
30638286002	**TW-2A**	EPA 3010A	629226	EPA 6010D	629752
30638286003	**TW-3A**	EPA 3010A	629226	EPA 6010D	629752
30638286004	**TW-4**	EPA 3010A	629226	EPA 6010D	629752
30638286005	**TW-4B**	EPA 3010A	629226	EPA 6010D	629752
30638286006	**TW-27**	EPA 3010A	629226	EPA 6010D	629752
30638286007	**Field Blank**	EPA 3010A	629226	EPA 6010D	629752
30638286001	**TW-2**	EPA 3010A	629597	EPA 6010D	629755
30638286002	**TW-2A**	EPA 3010A	629597	EPA 6010D	629755
30638286003	**TW-3A**	EPA 3010A	629597	EPA 6010D	629755
30638286004	**TW-4**	EPA 3010A	629597	EPA 6010D	629755
30638286005	**TW-4B**	EPA 3010A	629597	EPA 6010D	629755
30638286006	**TW-27**	EPA 3010A	629597	EPA 6010D	629755
30638286007	**Field Blank**	EPA 3010A	629597	EPA 6010D	629755
30638286001	**TW-2**	EPA 3010A	629443	EPA 6020B	629559
30638286002	**TW-2A**	EPA 3010A	629443	EPA 6020B	629559
30638286003	**TW-3A**	EPA 3010A	629443	EPA 6020B	629559
30638286004	**TW-4**	EPA 3010A	629443	EPA 6020B	629559
30638286005	**TW-4B**	EPA 3010A	629443	EPA 6020B	629559
30638286006	**TW-27**	EPA 3010A	629443	EPA 6020B	629559
30638286007	**Field Blank**	EPA 3010A	629443	EPA 6020B	629559
30638286001	**TW-2**	EPA 7470A	629170	EPA 7470A	629345
30638286002	**TW-2A**	EPA 7470A	629170	EPA 7470A	629345
30638286003	**TW-3A**	EPA 7470A	629574	EPA 7470A	629705
30638286004	**TW-4**	EPA 7470A	629574	EPA 7470A	629705
30638286005	**TW-4B**	EPA 7470A	629574	EPA 7470A	629705
30638286006	**TW-27**	EPA 7470A	629574	EPA 7470A	629705
30638286007	**Field Blank**	EPA 7470A	629574	EPA 7470A	629705
30638286001	**TW-2**	EPA 8011	629458	EPA 8011	629536
30638286002	**TW-2A**	EPA 8011	629458	EPA 8011	629536
30638286003	**TW-3A**	EPA 8011	629458	EPA 8011	629536
30638286004	**TW-4**	EPA 8011	629458	EPA 8011	629536
30638286005	**TW-4B**	EPA 8011	629458	EPA 8011	629536
30638286006	**TW-27**	EPA 8011	629458	EPA 8011	629536
30638286001	**TW-2**	SM 2320B-2011	630190		
30638286002	**TW-2A**	SM 2320B-2011	630190		
30638286003	**TW-3A**	SM 2320B-2011	630190		
30638286004	**TW-4**	SM 2320B-2011	630190		
30638286005	**TW-4B**	SM 2320B-2011	630190		
30638286006	**TW-27**	SM 2320B-2011	630190		
30638286007	**Field Blank**	SM 2320B-2011	630190		
30638286001	**TW-2**	SM 2540C-2015	629162		
30638286002	**TW-2A**	SM 2540C-2015	629162		
30638286003	**TW-3A**	SM 2540C-2015	629474		
30638286004	**TW-4**	SM 2540C-2015	629474		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Millersville Landfill
Pace Project No.: 30638286

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30638286005	**TW-4B**	SM 2540C-2015	629474		
30638286006	**TW-27**	SM 2540C-2015	629474		
30638286007	**Field Blank**	SM 2540C-2015	629474		
30638286001	**TW-2**	EPA 350.1	630946	EPA 350.1	631258
30638286002	**TW-2A**	EPA 350.1	630946	EPA 350.1	631258
30638286003	**TW-3A**	EPA 350.1	630946	EPA 350.1	631258
30638286004	**TW-4**	EPA 350.1	630947	EPA 350.1	631259
30638286005	**TW-4B**	EPA 350.1	630947	EPA 350.1	631259
30638286006	**TW-27**	EPA 350.1	630947	EPA 350.1	631259
30638286007	**Field Blank**	EPA 350.1	630947	EPA 350.1	631259
30638286001	**TW-2**	EPA 410.4	629202	EPA 410.4	629276
30638286002	**TW-2A**	EPA 410.4	629202	EPA 410.4	629276
30638286003	**TW-3A**	EPA 410.4	629202	EPA 410.4	629276
30638286004	**TW-4**	EPA 410.4	629202	EPA 410.4	629276
30638286005	**TW-4B**	EPA 410.4	629202	EPA 410.4	629276
30638286006	**TW-27**	EPA 410.4	629202	EPA 410.4	629276
30638286007	**Field Blank**	EPA 410.4	629202	EPA 410.4	629276
30638286001	**TW-2**	SM 4500-Cl-E-2011	628991		
30638286002	**TW-2A**	SM 4500-Cl-E-2011	628993		
30638286003	**TW-3A**	SM 4500-Cl-E-2011	628993		
30638286004	**TW-4**	SM 4500-Cl-E-2011	628993		
30638286005	**TW-4B**	SM 4500-Cl-E-2011	628993		
30638286006	**TW-27**	SM 4500-Cl-E-2011	628993		
30638286007	**Field Blank**	SM 4500-Cl-E-2011	628993		
30638286001	**TW-2**	EPA 9038	629120		
30638286002	**TW-2A**	EPA 9038	629120		
30638286003	**TW-3A**	EPA 9038	629120		
30638286004	**TW-4**	EPA 9038	629120		
30638286005	**TW-4B**	EPA 9038	629120		
30638286006	**TW-27**	EPA 9038	629120		
30638286007	**Field Blank**	EPA 9038	629120		

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - FALL 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals ①	Total + Diss. Metals ②	Alkalinity, TDS	Hardness, Cl	Ammonia, SO_4, COD		Method 8011 - DBCP + EDB					
1	TW-2	7	11-9-23	1135	✓		GW	✓	✓	✓	✓	✓		✓					01
2	TW-2A	↓	↓	1100	↓		↓	↓	↓	↓	↓	↓		↓					02
3	TW-3A			1230															03
4	TW-4			1400															04
5	TW-4B			1445															05
6	TW-27	✓		1315			✓	✓	✓	✓	✓	✓		✓					06
7	FIELD BLANK 4	~~4~~	✓	1200	✓		QA												07
8																			
9																			
10																			
11																			
12																			

WO#: 30638286
30638286

	Signature	Date	Time	Comments
Relinquished by	[signature]	11-9-23	1500	① 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn
Received by	TB/Pace	11-9-23	1500	6010 - Ca, Fe, Mg, Mn, K, Na
Relinquished by	TB/Pace	11-9-23	1820	7470 - Hg
Received by	MF	11-9-23	1913	PACE - W - METALS - WWTB - mg/L
Relinquished by	MF	11-9-23	2200	PACE - G - BULK - WET CHEM & 8011
Received by	[signature]	11-9-23	2200	LEVEL 2 REPORT

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-GBUR-0088 v06_Sample Condition Upon Recei Pittsburgh
	Effective Date: 09/20/2023

WO#: 30638286
Due Date: 11/28/23
PM: ARG
CLIENT: ENV MONITOR

Client Name: EMA **Project**

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking Number: _____

Custody Seal on Cooler/Box Present: ☐ Yes ☐No **Seals Intact:** ☐ Yes ☐No

Thermometer Used: 17 **Type of Ice:** (Wet) Blue None

Cooler Temperature: Observed Temp 3.4 °C Correction Factor: -0.1 °C Final Temp: 3.3 °C

Temp should be above freezing to 6°C

Initial / Date	
Examined By:	BR 11-10
Labeled By:	BR 11-10-23
Temped By:	BR 11-10

Comments:	Yes	No	NA	pH paper Lot# 1000831	D.P.D. Residual Chlorine Lot #
Chain of Custody Present	✓			1.	
Chain of Custody Filled Out:	✓			2.	
-Were client corrections present on COC		✓			
Chain of Custody Relinquished	✓			3.	
Sampler Name & Signature on COC:		✓		4.	
Sample Labels match COC:	✓			5.	
-Includes date/time/ID	✓				
Matrix: WT					
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):		✓		7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used:	✓			10.	
-Pace Containers Used	✓				
Containers Intact:	✓			11.	
Orthophosphate field filtered:			✓	12.	
Hex Cr Aqueous samples field filtered:			✓	13.	
Organic Samples checked for dechlorination			✓	14:	
Filtered volume received for dissolved tests:			✓	15:	
All containers checked for preservation: exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix	✓			16.	
All containers meet method preservation requirements:	✓			Initial when completed BR / Lot# of added Preservative	Date/Time of Preservation
8260C/D: Headspace in VOA Vials (> 6mm)			✓	17.	
624.1: Headspace in VOA Vials (0mm)			✓	18.	
Trip Blank Present:		✓		Trip blank custody seal present? YES or NO	
Rad Samples Screened <.05 mrem/hr.	✓			Initial when completed BR / Date: 11-10-23	Survey Meter SN: 25014380

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

November 28, 2023

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: Millersville Landfill
Pace Project No.: 30640354

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on November 17, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alaina Deitch

Alaina R. Deitch
alaina.deitch@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Millersville Landfill
Pace Project No.: 30640354

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572023-03
New Hampshire/TNI Certification #: 297622
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad

Pace Analytical Services Beaver

225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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SAMPLE SUMMARY

Project: Millersville Landfill
Pace Project No.: 30640354

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30640354001	**TW-1**	Water	11/15/23 12:10	11/17/23 07:00
30640354002	**TW-29**	Water	11/15/23 11:00	11/17/23 07:00
30640354003	**TW-30**	Water	11/15/23 13:00	11/17/23 07:00

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SAMPLE ANALYTE COUNT

Project: Millersville Landfill
Pace Project No.: 30640354

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30640354001	**TW-1**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	MEH	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30640354002	**TW-29**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	MEH	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA
30640354003	**TW-30**	EPA 6010D	AGB	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	MEH	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30640354

Date: November 28, 2023

TW-1 (Lab ID: 30640354001)

- Sample pH for 8011 is 6

TW-29 (Lab ID: 30640354002)

- Sample pH for 8011 is 5

TW-30 (Lab ID: 30640354003)

- Sample pH for 8011 is 6

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30640354

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 28, 2023

General Information:
3 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30640354

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: November 28, 2023

General Information:
3 samples were analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30640354

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: November 28, 2023

General Information:
3 samples were analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 631151

B: Analyte was detected in the associated method blank.

- BLANK for HBN 631151 [BMPR/145 (Lab ID: 3077244)
  - Chromium
  - Nickel

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 631151

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30640354003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3077246)
  - Thallium
- MSD (Lab ID: 3077247)

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30640354

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: November 28, 2023

QC Batch: 631151

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30640354003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- Thallium

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30640354

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: November 28, 2023

General Information:
3 samples were analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30640354

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 28, 2023

General Information:
3 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 631280

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- BLANK (Lab ID: 3077880)
  - 1,2-Dibromo-3-chloropropane
- LCS (Lab ID: 3077881)
  - 1,2-Dibromo-3-chloropropane
- MS (Lab ID: 3077882)
  - 1,2-Dibromo-3-chloropropane
- MSD (Lab ID: 3077883)
  - 1,2-Dibromo-3-chloropropane
- TW-29 (Lab ID: 30640354002)
  - 1,2-Dibromo-3-chloropropane
- TW-30 (Lab ID: 30640354003)
  - 1,2-Dibromo-3-chloropropane

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 630990

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

- LCS (Lab ID: 3076588)

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30640354

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 28, 2023

QC Batch: 630990

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

- 1,2-Dibromo-3-chloropropane
- 1,2-Dibromoethane (EDB)

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 630990

P2: Re-extraction or re-analysis could not be performed due to insufficient sample amount.

- TW-1 (Lab ID: 30640354001)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30640354

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: November 28, 2023

General Information:
3 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 631383

1c: Alkalinity TV: 0.00 mg/L
- TW-30 (Lab ID: 30640354003)
  - Alkalinity,Total (CaCO3 pH4.5)

2c: Alkalinity TV: 2.00 mg/L
- TW-29 (Lab ID: 30640354002)
  - Alkalinity,Total (CaCO3 pH4.5)

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30640354

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: November 28, 2023

General Information:
3 samples were analyzed for SM 2540C-2015 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30640354

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: November 28, 2023

General Information:
3 samples were analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30640354

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: November 28, 2023

General Information:
3 samples were analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 630987

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30640354003

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MSD (Lab ID: 3076581)
  - Chemical Oxygen Demand

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30640354

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: November 28, 2023

General Information:
3 samples were analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 630941

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30639516001

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MSD (Lab ID: 3076409)
  - Chloride

Additional Comments:

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PROJECT NARRATIVE

Project: Millersville Landfill
Pace Project No.: 30640354

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: November 28, 2023

General Information:
3 samples were analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30640354

Sample: TW-1 **Lab ID: 30640354001** Collected: 11/15/23 12:10 Received: 11/17/23 07:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**18.7**	mg/L	0.50	0.083	1	11/22/23 03:36	11/22/23 16:50	7440-70-2	
Iron	**30.8**	mg/L	0.050	0.036	1	11/22/23 03:36	11/22/23 16:50	7439-89-6	
Magnesium	**1.7**	mg/L	0.50	0.047	1	11/22/23 03:36	11/22/23 16:50	7439-95-4	
Manganese	**0.18**	mg/L	0.0050	0.0027	1	11/22/23 03:36	11/22/23 16:50	7439-96-5	
Potassium	**0.74**	mg/L	0.50	0.26	1	11/22/23 03:36	11/22/23 16:50	7440-09-7	
Sodium	**3.4**	mg/L	0.50	0.34	1	11/22/23 03:36	11/22/23 16:50	7440-23-5	
Total Hardness	**53.8**	mg/L	3.3	0.40	1	11/22/23 03:36	11/22/23 16:50		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**17.9**	mg/L	0.50	0.083	1	11/21/23 03:12	11/21/23 15:34	7440-70-2	
Iron, Dissolved	**28.6**	mg/L	0.050	0.036	1	11/21/23 03:12	11/21/23 15:34	7439-89-6	
Magnesium, Dissolved	**1.7**	mg/L	0.50	0.047	1	11/21/23 03:12	11/21/23 15:34	7439-95-4	
Manganese, Dissolved	**0.18**	mg/L	0.0050	0.0027	1	11/21/23 03:12	11/21/23 15:34	7439-96-5	
Potassium, Dissolved	**0.75**	mg/L	0.50	0.26	1	11/21/23 03:12	11/21/23 15:34	7440-09-7	
Sodium, Dissolved	**3.5**	mg/L	0.50	0.34	1	11/21/23 03:12	11/21/23 15:34	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00050	1	11/20/23 14:09	11/21/23 16:05	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00078	1	11/20/23 14:09	11/21/23 16:05	7440-38-2	
Barium	**0.014**	mg/L	0.0025	0.00098	1	11/20/23 14:09	11/21/23 16:05	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	11/20/23 14:09	11/21/23 16:05	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00020	1	11/20/23 14:09	11/21/23 16:05	7440-43-9	
Chromium	**0.0044**	mg/L	0.0025	0.0011	1	11/20/23 14:09	11/21/23 16:05	7440-47-3	B
Cobalt	**0.0025 U**	mg/L	0.0025	0.00081	1	11/20/23 14:09	11/21/23 16:05	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.0021	1	11/20/23 14:09	11/21/23 16:05	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/20/23 14:09	11/21/23 16:05	7439-92-1	
Nickel	**0.0020J**	mg/L	0.0025	0.00075	1	11/20/23 14:09	11/21/23 16:05	7440-02-0	B
Selenium	**0.0025 U**	mg/L	0.0025	0.0013	1	11/20/23 14:09	11/21/23 16:05	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/20/23 14:09	11/21/23 16:05	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.00017	1	11/20/23 14:09	11/21/23 16:05	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0019	1	11/20/23 14:09	11/21/23 16:05	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0043	1	11/20/23 14:09	11/21/23 16:05	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/20/23 13:08	11/21/23 08:07	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/20/23 08:50	11/20/23 12:34	96-12-8	L2,P2
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	11/20/23 08:50	11/20/23 12:34	106-93-4	L2,P2
Surrogates									
1,1,1,2-Tetrachloroethane (S)	96	%.	60-140		1	11/20/23 08:50	11/20/23 12:34	630-20-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30640354

Sample: TW-1 **Lab ID: 30640354001** Collected: 11/15/23 12:10 Received: 11/17/23 07:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**58.0**	mg/L	10.0	1.0	1		11/21/23 12:25		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**60.0**	mg/L	10.0	10.0	1		11/22/23 18:27		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/27/23 11:57	11/28/23 11:19		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**9.0J**	mg/L	25.0	4.7	1	11/20/23 09:50	11/20/23 14:58		B
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**7.7**	mg/L	3.0	0.67	1		11/21/23 08:57	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/17/23 11:15	14808-79-8	

Sample: TW-29 **Lab ID: 30640354002** Collected: 11/15/23 11:00 Received: 11/17/23 07:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**2.2**	mg/L	0.50	0.083	1	11/22/23 03:36	11/22/23 16:52	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.036	1	11/22/23 03:36	11/22/23 16:52	7439-89-6	
Magnesium	**1.2**	mg/L	0.50	0.047	1	11/22/23 03:36	11/22/23 16:52	7439-95-4	
Manganese	**0.011**	mg/L	0.0050	0.0027	1	11/22/23 03:36	11/22/23 16:52	7439-96-5	
Potassium	**0.79**	mg/L	0.50	0.26	1	11/22/23 03:36	11/22/23 16:52	7440-09-7	
Sodium	**4.5**	mg/L	0.50	0.34	1	11/22/23 03:36	11/22/23 16:52	7440-23-5	
Total Hardness	**10.5**	mg/L	3.3	0.40	1	11/22/23 03:36	11/22/23 16:52		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**2.2**	mg/L	0.50	0.083	1	11/21/23 03:12	11/21/23 15:36	7440-70-2	
Iron, Dissolved	**0.050 U**	mg/L	0.050	0.036	1	11/21/23 03:12	11/21/23 15:36	7439-89-6	
Magnesium, Dissolved	**1.2**	mg/L	0.50	0.047	1	11/21/23 03:12	11/21/23 15:36	7439-95-4	
Manganese, Dissolved	**0.010**	mg/L	0.0050	0.0027	1	11/21/23 03:12	11/21/23 15:36	7439-96-5	

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30640354

Sample: TW-29 **Lab ID: 30640354002** Collected: 11/15/23 11:00 Received: 11/17/23 07:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Potassium, Dissolved	**0.80**	mg/L	0.50	0.26	1	11/21/23 03:12	11/21/23 15:36	7440-09-7	
Sodium, Dissolved	**4.6**	mg/L	0.50	0.34	1	11/21/23 03:12	11/21/23 15:36	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00050	1	11/20/23 14:09	11/21/23 16:09	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00078	1	11/20/23 14:09	11/21/23 16:09	7440-38-2	
Barium	**0.030**	mg/L	0.0025	0.00098	1	11/20/23 14:09	11/21/23 16:09	7440-39-3	
Beryllium	**0.00014J**	mg/L	0.00050	0.00010	1	11/20/23 14:09	11/21/23 16:09	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00020	1	11/20/23 14:09	11/21/23 16:09	7440-43-9	
Chromium	**0.0066**	mg/L	0.0025	0.0011	1	11/20/23 14:09	11/21/23 16:09	7440-47-3	B
Cobalt	**0.0020J**	mg/L	0.0025	0.00081	1	11/20/23 14:09	11/21/23 16:09	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.0021	1	11/20/23 14:09	11/21/23 16:09	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/20/23 14:09	11/21/23 16:09	7439-92-1	
Nickel	**0.0056**	mg/L	0.0025	0.00075	1	11/20/23 14:09	11/21/23 16:09	7440-02-0	B
Selenium	**0.0025 U**	mg/L	0.0025	0.0013	1	11/20/23 14:09	11/21/23 16:09	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/20/23 14:09	11/21/23 16:09	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.00017	1	11/20/23 14:09	11/21/23 16:09	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0019	1	11/20/23 14:09	11/21/23 16:09	7440-62-2	
Zinc	**0.0045J**	mg/L	0.0050	0.0043	1	11/20/23 14:09	11/21/23 16:09	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/20/23 13:08	11/21/23 08:10	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/21/23 07:10	11/22/23 00:51	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/21/23 07:10	11/22/23 00:51	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	101	%.	60-140		1	11/21/23 07:10	11/22/23 00:51	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**2.0J**	mg/L	10.0	1.0	1		11/21/23 12:26		2c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**20.0**	mg/L	10.0	10.0	1		11/22/23 18:27		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/27/23 11:57	11/28/23 11:25		

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30640354

Sample: TW-29 **Lab ID: 30640354002** Collected: 11/15/23 11:00 Received: 11/17/23 07:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4								
	Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/20/23 09:50	11/20/23 15:00		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
	Pace Analytical Services - Greensburg								
Chloride	**11.4**	mg/L	3.0	0.67	1		11/21/23 08:57	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038								
	Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/17/23 11:15	14808-79-8	

Sample: TW-30 **Lab ID: 30640354003** Collected: 11/15/23 13:00 Received: 11/17/23 07:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Calcium	**4.9**	mg/L	0.50	0.083	1	11/22/23 03:36	11/22/23 16:54	7440-70-2	
Iron	**0.050 U**	mg/L	0.050	0.036	1	11/22/23 03:36	11/22/23 16:54	7439-89-6	
Magnesium	**1.9**	mg/L	0.50	0.047	1	11/22/23 03:36	11/22/23 16:54	7439-95-4	
Manganese	**0.013**	mg/L	0.0050	0.0027	1	11/22/23 03:36	11/22/23 16:54	7439-96-5	
Potassium	**1.6**	mg/L	0.50	0.26	1	11/22/23 03:36	11/22/23 16:54	7440-09-7	
Sodium	**11.8**	mg/L	0.50	0.34	1	11/22/23 03:36	11/22/23 16:54	7440-23-5	
Total Hardness	**20.0**	mg/L	3.3	0.40	1	11/22/23 03:36	11/22/23 16:54		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Calcium, Dissolved	**4.9**	mg/L	0.50	0.083	1	11/21/23 03:12	11/21/23 15:38	7440-70-2	
Iron, Dissolved	**0.037J**	mg/L	0.050	0.036	1	11/21/23 03:12	11/21/23 15:38	7439-89-6	
Magnesium, Dissolved	**2.0**	mg/L	0.50	0.047	1	11/21/23 03:12	11/21/23 15:38	7439-95-4	
Manganese, Dissolved	**0.012**	mg/L	0.0050	0.0027	1	11/21/23 03:12	11/21/23 15:38	7439-96-5	
Potassium, Dissolved	**1.6**	mg/L	0.50	0.26	1	11/21/23 03:12	11/21/23 15:38	7440-09-7	
Sodium, Dissolved	**11.9**	mg/L	0.50	0.34	1	11/21/23 03:12	11/21/23 15:38	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A								
	Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00050	1	11/20/23 14:09	11/21/23 16:12	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00078	1	11/20/23 14:09	11/21/23 16:12	7440-38-2	
Barium	**0.036**	mg/L	0.0025	0.00098	1	11/20/23 14:09	11/21/23 16:12	7440-39-3	
Beryllium	**0.00015J**	mg/L	0.00050	0.00010	1	11/20/23 14:09	11/21/23 16:12	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00020	1	11/20/23 14:09	11/21/23 16:12	7440-43-9	
Chromium	**0.0039**	mg/L	0.0025	0.0011	1	11/20/23 14:09	11/21/23 16:12	7440-47-3	B
Cobalt	**0.0026**	mg/L	0.0025	0.00081	1	11/20/23 14:09	11/21/23 16:12	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.0021	1	11/20/23 14:09	11/21/23 16:12	7440-50-8	

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ANALYTICAL RESULTS

Project: Millersville Landfill
Pace Project No.: 30640354

Sample: TW-30 **Lab ID: 30640354003** Collected: 11/15/23 13:00 Received: 11/17/23 07:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	11/20/23 14:09	11/21/23 16:12	7439-92-1	
Nickel	**0.0050**	mg/L	0.0025	0.00075	1	11/20/23 14:09	11/21/23 16:12	7440-02-0	B
Selenium	**0.0025 U**	mg/L	0.0025	0.0013	1	11/20/23 14:09	11/21/23 16:12	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	11/20/23 14:09	11/21/23 16:12	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.00017	1	11/20/23 14:09	11/21/23 16:12	7440-28-0	M1
Vanadium	**0.0025 U**	mg/L	0.0025	0.0019	1	11/20/23 14:09	11/21/23 16:12	7440-62-2	
Zinc	**0.0052**	mg/L	0.0050	0.0043	1	11/20/23 14:09	11/21/23 16:12	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/20/23 13:08	11/21/23 08:12	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/21/23 07:10	11/22/23 01:04	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.032	1	11/21/23 07:10	11/22/23 01:04	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	104	%.	60-140		1	11/21/23 07:10	11/22/23 01:04	630-20-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**10.0 U**	mg/L	10.0	1.0	1		11/21/23 12:28		1c
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**54.0**	mg/L	10.0	10.0	1		11/22/23 18:27		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/27/23 11:57	11/28/23 11:27		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**0.90J**	mg/L	2.5	0.47	1	11/20/23 09:50	11/20/23 15:04		MH
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**27.7**	mg/L	3.0	0.67	1		11/21/23 08:58	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/17/23 11:17	14808-79-8	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30640354

QC Batch: 631561
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30640354001, 30640354002, 30640354003

METHOD BLANK: 3079202
Matrix: Water
Associated Lab Samples: 30640354001, 30640354002, 30640354003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	11/22/23 16:01	
Iron	mg/L	0.050 U	0.050	0.036	11/22/23 16:01	
Magnesium	mg/L	0.50 U	0.50	0.047	11/22/23 16:01	
Manganese	mg/L	0.0050 U	0.0050	0.0027	11/22/23 16:01	
Potassium	mg/L	0.50 U	0.50	0.26	11/22/23 16:01	
Sodium	mg/L	0.50 U	0.50	0.34	11/22/23 16:01	

LABORATORY CONTROL SAMPLE: 3079203

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	40.5	101	80-120	
Iron	mg/L	2	2.1	105	80-120	
Magnesium	mg/L	20	20.4	102	80-120	
Manganese	mg/L	2	2.2	108	80-120	
Potassium	mg/L	20	20.3	101	80-120	
Sodium	mg/L	20	20.1	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3079204 3079205

Parameter	Units	30638339001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	230000 ug/L	40	40	268	271	93	101	80-120	1	20	
Iron	mg/L	4.1	2	2	6.1	6.2	102	107	80-120	2	20	
Magnesium	mg/L	93000 ug/L	20	20	114	116	106	113	80-120	1	20	
Manganese	mg/L	0.23	2	2	2.3	2.3	103	104	80-120	1	20	
Potassium	mg/L	3450 ug/L	20	20	25.8	26.0	112	113	80-120	1	20	
Sodium	mg/L	56900 ug/L	20	20	78.3	78.6	107	108	80-120	0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30640354

QC Batch: 631270
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30640354001, 30640354002, 30640354003

METHOD BLANK: 3077807 Matrix: Water
Associated Lab Samples: 30640354001, 30640354002, 30640354003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	11/21/23 14:38	
Iron, Dissolved	mg/L	0.050 U	0.050	0.036	11/21/23 14:38	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	11/21/23 14:38	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	11/21/23 14:38	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	11/21/23 14:38	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	11/21/23 14:38	

LABORATORY CONTROL SAMPLE: 3077808

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	39.9	100	80-120	
Iron, Dissolved	mg/L	2	2.1	104	80-120	
Magnesium, Dissolved	mg/L	20	20.7	104	80-120	
Manganese, Dissolved	mg/L	2	2.1	103	80-120	
Potassium, Dissolved	mg/L	20	19.9	100	80-120	
Sodium, Dissolved	mg/L	20	20.0	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3077809 3077810

Parameter	Units	30639954001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	16400 ug/L	40	40	56.9	56.3	101	100	80-120	1	20	
Iron, Dissolved	mg/L	156 ug/L	2	2	2.2	2.2	104	102	80-120	1	20	
Magnesium, Dissolved	mg/L	4040 ug/L	20	20	25.1	24.7	105	103	80-120	1	20	
Manganese, Dissolved	mg/L	30.8 ug/L	2	2	2.1	2.1	103	102	80-120	1	20	
Potassium, Dissolved	mg/L	1130 ug/L	20	20	21.5	21.2	102	101	80-120	1	20	
Sodium, Dissolved	mg/L	7770 ug/L	20	20	28.2	28.0	102	101	80-120	1	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30640354

QC Batch: 631151
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30640354001, 30640354002, 30640354003

METHOD BLANK: 3077244
Matrix: Water
Associated Lab Samples: 30640354001, 30640354002, 30640354003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00050	11/21/23 15:53	
Arsenic	mg/L	0.0025 U	0.0025	0.00078	11/21/23 15:53	
Barium	mg/L	0.0025 U	0.0025	0.00098	11/21/23 15:53	
Beryllium	mg/L	0.00050 U	0.00050	0.00010	11/21/23 15:53	
Cadmium	mg/L	0.00050 U	0.00050	0.00020	11/21/23 15:53	
Chromium	mg/L	0.0024J	0.0025	0.0011	11/21/23 15:53	
Cobalt	mg/L	0.0025 U	0.0025	0.00081	11/21/23 15:53	
Copper	mg/L	0.0025 U	0.0025	0.0021	11/21/23 15:53	
Lead	mg/L	0.00050 U	0.00050	0.00025	11/21/23 15:53	
Nickel	mg/L	0.00080J	0.0025	0.00075	11/21/23 15:53	
Selenium	mg/L	0.0025 U	0.0025	0.0013	11/21/23 15:53	
Silver	mg/L	0.0025 U	0.0025	0.00053	11/21/23 15:53	
Thallium	mg/L	0.00050 U	0.00050	0.00017	11/21/23 15:53	
Vanadium	mg/L	0.0025 U	0.0025	0.0019	11/21/23 15:53	
Zinc	mg/L	0.0050 U	0.0050	0.0043	11/21/23 15:53	

LABORATORY CONTROL SAMPLE: 3077245

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.021	103	80-120	
Arsenic	mg/L	0.1	0.098	98	80-120	
Barium	mg/L	0.1	0.098	98	80-120	
Beryllium	mg/L	0.02	0.021	106	80-120	
Cadmium	mg/L	0.02	0.020	99	80-120	
Chromium	mg/L	0.1	0.11	107	80-120	
Cobalt	mg/L	0.1	0.11	105	80-120	
Copper	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.02	0.020	102	80-120	
Nickel	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.095	95	80-120	
Silver	mg/L	0.1	0.10	102	80-120	
Thallium	mg/L	0.02	0.020	101	80-120	
Vanadium	mg/L	0.1	0.11	107	80-120	
Zinc	mg/L	0.2	0.19	97	80-120	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30640354

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3077246 3077247

Parameter	Units	30640354003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00050 U	0.02	0.02	0.021	0.021	104	104	75-125	0	20	
Arsenic	mg/L	0.0025 U	0.1	0.1	0.097	0.098	97	98	75-125	0	20	
Barium	mg/L	0.036	0.1	0.1	0.14	0.14	100	100	75-125	0	20	
Beryllium	mg/L	0.00015J	0.02	0.02	0.022	0.022	107	107	75-125	0	20	
Cadmium	mg/L	0.00050 U	0.02	0.02	0.020	0.020	99	100	75-125	1	20	
Chromium	mg/L	0.0039	0.1	0.1	0.11	0.11	107	106	75-125	1	20	
Cobalt	mg/L	0.0026	0.1	0.1	0.11	0.11	107	107	75-125	0	20	
Copper	mg/L	0.0025 U	0.1	0.1	0.10	0.10	102	102	75-125	0	20	
Lead	mg/L	0.00050 U	0.02	0.02	0.021	0.021	104	105	75-125	0	20	
Nickel	mg/L	0.0050	0.1	0.1	0.10	0.10	99	100	75-125	1	20	
Selenium	mg/L	0.0025 U	0.1	0.1	0.095	0.095	95	95	75-125	0	20	
Silver	mg/L	0.0025 U	0.1	0.1	0.10	0.10	101	101	75-125	0	20	
Thallium	mg/L	0.00050 U	0.02	0.02	0.014	0.014	70	70	75-125	1	20	M1
Vanadium	mg/L	0.0025 U	0.1	0.1	0.11	0.11	109	108	75-125	1	20	
Zinc	mg/L	0.0052	0.2	0.2	0.20	0.20	95	95	75-125	0	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30640354

QC Batch: 631107
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30640354001, 30640354002, 30640354003

METHOD BLANK: 3076959
Matrix: Water
Associated Lab Samples: 30640354001, 30640354002, 30640354003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	11/21/23 07:03	

LABORATORY CONTROL SAMPLE: 3076960

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.011	109	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3076961 3076962

Parameter	Units	30639316001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	<0.20 ug/L	0.01	0.01	0.011	0.011	106	106	80-120	0	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30640354

QC Batch: 630990
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30640354001

METHOD BLANK: 3076587 Matrix: Water
Associated Lab Samples: 30640354001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	11/20/23 12:08	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	11/20/23 12:08	
1,1,1,2-Tetrachloroethane (S)	%.	87	60-140		11/20/23 12:08	

LABORATORY CONTROL SAMPLE: 3076588

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.20	78	85-115	L2
1,2-Dibromoethane (EDB)	ug/L	0.25	0.20	80	85-115	L2
1,1,1,2-Tetrachloroethane (S)	%.			74	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3076589 3076590

Parameter	Units	30640354001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.041 U	0.41	0.41	0.38	0.38	94	94	60-140	0	25	
1,2-Dibromoethane (EDB)	ug/L	0.041 U	0.41	0.41	0.36	0.35	88	87	60-140	1	25	
1,1,1,2-Tetrachloroethane (S)	%.						91	91	60-140			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30640354

QC Batch: 631280
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30640354002, 30640354003

METHOD BLANK: 3077880 Matrix: Water
Associated Lab Samples: 30640354002, 30640354003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	11/21/23 21:17	CH
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	11/21/23 21:17	
1,1,1,2-Tetrachloroethane (S)	%.	95	60-140		11/21/23 21:17	

LABORATORY CONTROL SAMPLE: 3077881

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.26	102	85-115	CH
1,2-Dibromoethane (EDB)	ug/L	0.25	0.24	94	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			93	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3077882 3077883

Parameter	Units	30640766001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.4	0.41	0.42	0.42	105	104	60-140	1	25	CH
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.4	0.41	0.39	0.38	98	93	60-140	3	25	
1,1,1,2-Tetrachloroethane (S)	%.						94	93	60-140			

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30640354

QC Batch: 631383
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30640354001, 30640354002, 30640354003

METHOD BLANK: 3078157 Matrix: Water
Associated Lab Samples: 30640354001, 30640354002, 30640354003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	11/21/23 12:04	

LABORATORY CONTROL SAMPLE: 3078158

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	22.0	110	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3078159 3078160

Parameter	Units	30639954007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	62.0	50	50	110	106	96	88	85-115	4	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30640354

QC Batch: 631605
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30640354001, 30640354002, 30640354003

METHOD BLANK: 3079418
Matrix: Water
Associated Lab Samples: 30640354001, 30640354002, 30640354003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	11/22/23 18:27	

LABORATORY CONTROL SAMPLE: 3079419

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	982	98	85-115	

SAMPLE DUPLICATE: 3079420

Parameter	Units	30639882001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	216	208	4	5	

SAMPLE DUPLICATE: 3079421

Parameter	Units	30640079002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	895	892	0	5	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30640354

QC Batch: 631949
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30640354001, 30640354002, 30640354003

METHOD BLANK: 3081357 Matrix: Water
Associated Lab Samples: 30640354001, 30640354002, 30640354003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	11/28/23 11:14	

LABORATORY CONTROL SAMPLE: 3081358

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.1	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3081359 3081360

Parameter	Units	30640354001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.0	4.0	100	99	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3081361 3081362

Parameter	Units	30641019001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.15	4	4	4.2	4.2	101	102	90-110	0	20	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30640354

QC Batch: 630973
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30640354001, 30640354002

METHOD BLANK: 3076532 Matrix: Water
Associated Lab Samples: 30640354001, 30640354002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/20/23 14:52	

METHOD BLANK: 3076572 Matrix: Water
Associated Lab Samples: 30640354001, 30640354002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/20/23 14:52	

METHOD BLANK: 3076573 Matrix: Water
Associated Lab Samples: 30640354001, 30640354002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	250 U	250	46.5	11/20/23 14:53	

METHOD BLANK: 3076574 Matrix: Water
Associated Lab Samples: 30640354001, 30640354002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/20/23 14:53	

METHOD BLANK: 3076575 Matrix: Water
Associated Lab Samples: 30640354001, 30640354002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/20/23 14:53	

METHOD BLANK: 3076576 Matrix: Water
Associated Lab Samples: 30640354001, 30640354002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/20/23 14:53	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30640354

LABORATORY CONTROL SAMPLE: 3076533

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	314	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3076534 3076535

Parameter	Units	30638686001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	954	1500	1500	2520	2540	105	106	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3076536 3076537

Parameter	Units	30640354001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	9.0J	150	150	170	173	108	109	90-110	1	10	

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30640354

QC Batch: 630987
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30640354003

METHOD BLANK: 3076578 Matrix: Water
Associated Lab Samples: 30640354003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/20/23 15:01	

LABORATORY CONTROL SAMPLE: 3076579

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	327	109	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3076580 3076581

Parameter	Units	30640354003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	0.90J	150	150	166	170	110	113	90-110	3	10	MH

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QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30640354

QC Batch: 630941
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30640354001, 30640354002, 30640354003

METHOD BLANK: 3076406 Matrix: Water
Associated Lab Samples: 30640354001, 30640354002, 30640354003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	11/21/23 08:48	

LABORATORY CONTROL SAMPLE: 3076407

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.3	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3076408 3076409

Parameter	Units	30639516001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	42.1	20	20	60.4	55.3	91	66	85-115	9	20	ML

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Millersville Landfill
Pace Project No.: 30640354

QC Batch: 630644
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30640354001, 30640354002, 30640354003

METHOD BLANK: 3075101 Matrix: Water
Associated Lab Samples: 30640354001, 30640354002, 30640354003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	11/17/23 11:08	

LABORATORY CONTROL SAMPLE: 3075102

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	29.4	98	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3075103 3075104

Parameter	Units	30640366001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	55.0	20	20	73.8	73.7	94	94	85-115	0	20	

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QUALIFIERS

Project: Millersville Landfill
Pace Project No.: 30640354

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30640354001

[1] Sample pH for 8011 is 6

Sample: 30640354002

[1] Sample pH for 8011 is 5

Sample: 30640354003

[1] Sample pH for 8011 is 6

ANALYTE QUALIFIERS

1c	Alkalinity TV: 0.00 mg/L
2c	Alkalinity TV: 2.00 mg/L
B	Analyte was detected in the associated method blank.
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

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QUALIFIERS

Project: Millersville Landfill
Pace Project No.: 30640354

ANALYTE QUALIFIERS

N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.
P2	Re-extraction or re-analysis could not be performed due to insufficient sample amount.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Millersville Landfill
Pace Project No.: 30640354

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30640354001	**TW-1**	EPA 3010A	631561	EPA 6010D	631702
30640354002	**TW-29**	EPA 3010A	631561	EPA 6010D	631702
30640354003	**TW-30**	EPA 3010A	631561	EPA 6010D	631702
30640354001	**TW-1**	EPA 3010A	631270	EPA 6010D	631510
30640354002	**TW-29**	EPA 3010A	631270	EPA 6010D	631510
30640354003	**TW-30**	EPA 3010A	631270	EPA 6010D	631510
30640354001	**TW-1**	EPA 3010A	631151	EPA 6020B	631430
30640354002	**TW-29**	EPA 3010A	631151	EPA 6020B	631430
30640354003	**TW-30**	EPA 3010A	631151	EPA 6020B	631430
30640354001	**TW-1**	EPA 7470A	631107	EPA 7470A	631230
30640354002	**TW-29**	EPA 7470A	631107	EPA 7470A	631230
30640354003	**TW-30**	EPA 7470A	631107	EPA 7470A	631230
30640354001	**TW-1**	EPA 8011	630990	EPA 8011	631020
30640354002	**TW-29**	EPA 8011	631280	EPA 8011	631388
30640354003	**TW-30**	EPA 8011	631280	EPA 8011	631388
30640354001	**TW-1**	SM 2320B-2011	631383		
30640354002	**TW-29**	SM 2320B-2011	631383		
30640354003	**TW-30**	SM 2320B-2011	631383		
30640354001	**TW-1**	SM 2540C-2015	631605		
30640354002	**TW-29**	SM 2540C-2015	631605		
30640354003	**TW-30**	SM 2540C-2015	631605		
30640354001	**TW-1**	EPA 350.1	631949	EPA 350.1	632085
30640354002	**TW-29**	EPA 350.1	631949	EPA 350.1	632085
30640354003	**TW-30**	EPA 350.1	631949	EPA 350.1	632085
30640354001	**TW-1**	EPA 410.4	630973	EPA 410.4	631022
30640354002	**TW-29**	EPA 410.4	630973	EPA 410.4	631022
30640354003	**TW-30**	EPA 410.4	630987	EPA 410.4	631023
30640354001	**TW-1**	SM 4500-Cl-E-2011	630941		
30640354002	**TW-29**	SM 4500-Cl-E-2011	630941		
30640354003	**TW-30**	SM 4500-Cl-E-2011	630941		
30640354001	**TW-1**	EPA 9038	630644		
30640354002	**TW-29**	EPA 9038	630644		
30640354003	**TW-30**	EPA 9038	630644		

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project		Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	TOTAL METALS ①	TOTAL + DISS. METALS ②	ALKALINITY, TDS	HARDNESS, Cl	AMMONIA	SO4, COD		METHOD 8011 - DBCP + EDB			
1	TW-1	7	11-15-23	1210	✓		GW	✓	✓	✓	✓	✓	✓		✓			
2	TW-29	↓	↓	1100	↓		↓	↓	↓	↓	↓	↓	↓		↓			
3	TW-30	↓	↓	1300	↓		↓	↓	↓	↓	↓	↓	↓		↓			
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		

Received by Pace Beaver
Therm ID 9 Corr Factor +/- 0
Receipt Temp .9
Corrected Temp .9
Correct Preservation Y/N

WO#: 30640354

30640354

	Signature	Date	Time	Comments
Relinquished by	DA Brown TB/Pace	11-15-23	1430	① 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn
Received by		11-15-23	1430	① 7470 - Hg
Relinquished by	TB/Pace	11-15-23	1720	② 6010 - Ca, Fe, Mg, Mn, K, Na
Received by	TBJ	11-15-23	1720	PACE - WW - METALS - UNITS - mg/L
Relinquished by	TBJ	11-15-23	2015	PACE - G - BULK - WET CHEM + 8011
Received by	[illegible]	11-17-23	0700	LEVEL 2 REPORT

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

REL; [illegible] PACE 11-17-23 1700 REL; Nicely's Del. Service 11-17-23 2300

Nicely's Del. Service 11-18-23 0453 11-20-23 0800

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-GBUR-0088 v06_Sample C Pittsburgh Effective Date: 09/20/2023

WO#: 30640354
PM: ARG Due Date: 12/05/23
CLIENT: ENV MONITOR

Client Name: EMA Project #:

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other

Tracking Number: _____

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No Seals Intact: ☐ Yes ☑ No

Thermometer Used: 16 Type of Ice: (Wet) Blue None

Cooler Temperature: Observed Temp 3.2 °C Correction Factor: +0.0 °C Final Temp: 3.2 °C

Temp should be above freezing to 6°C

Initial / Date	
Examined By:	BR 11-17
Labeled By:	BR 11-17-23
Temped By:	BR 11-17

Comments:	Yes	No	NA	pH paper Lot# 1000134	D.P.D. Residual Chlorine Lot # –
Chain of Custody Present	✓			1.	
Chain of Custody Filled Out:	✓			2.	
-Were client corrections present on COC		✓			
Chain of Custody Relinquished	✓			3.	
Sampler Name & Signature on COC:		✓		4.	
Sample Labels match COC:	✓			5.	
-Includes date/time/ID	✓				
Matrix: WT					
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):		✓		7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used:	✓			10.	
-Pace Containers Used	✓				
Containers Intact:	✓			11.	
Orthophosphate field filtered:			✓	12.	
Hex Cr Aqueous samples field filtered:			✓	13.	
Organic Samples checked for dechlorination			✓	14:	
Filtered volume received for dissolved tests:			✓	15:	
All containers checked for preservation:	✓			16.	
exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix					
All containers meet method preservation requirements:	✓			Initial when completed BR Lot# of added Preservative	Date/Time of Preservation
8260C/D: Headspace in VOA Vials (> 6mm)			✓	17.	
624.1: Headspace in VOA Vials (0mm)			✓	18.	
Trip Blank Present:			✓	Trip blank custody seal present? YES or NO	
Rad Samples Screened <.05 mrem/hr.	✓			Initial when completed BR	Date: 11-17-23 / Survey Meter SN: 25014380

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

November 22, 2023

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-FALL 2023
Pace Project No.: 30640766

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on November 17, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alaina Deitch

Alaina R. Deitch
alaina.deitch@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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CERTIFICATIONS

Project: MLF-FALL 2023
Pace Project No.: 30640766

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572023-03
New Hampshire/TNI Certification #: 297622
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad

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SAMPLE SUMMARY

Project: MLF-FALL 2023
Pace Project No.: 30640766

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30640766001	**MW-P4**	Water	11/17/23 09:30	11/17/23 19:53
30640766002	**MW-P9**	Water	11/15/23 15:00	11/17/23 19:53
30640766003	**MW-P106**	Water	11/16/23 15:45	11/17/23 19:53
30640766004	**MW-P417**	Water	11/15/23 17:20	11/17/23 19:53
30640766005	**MW-P440**	Water	11/15/23 16:40	11/17/23 19:53
30640766006	**RW-P109**	Water	11/16/23 14:00	11/17/23 19:53
30640766007	**RW-P165**	Water	11/17/23 10:10	11/17/23 19:53
30640766008	**RW-P171-1**	Water	11/17/23 10:50	11/17/23 19:53
30640766009	**RW-P264**	Water	11/16/23 14:40	11/17/23 19:53
30640766010	**RW-P440**	Water	11/17/23 12:10	11/17/23 19:53
30640766011	**RW-P441**	Water	11/17/23 11:30	11/17/23 19:53
30640766012	**RW-P584**	Water	11/15/23 15:45	11/17/23 19:53

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SAMPLE ANALYTE COUNT

Project: MLF-FALL 2023
Pace Project No.: 30640766

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30640766001	**MW-P4**	EPA 8011	CTS	3	PASI-PA
30640766002	**MW-P9**	EPA 8011	CTS	3	PASI-PA
30640766003	**MW-P106**	EPA 8011	CTS	3	PASI-PA
30640766004	**MW-P417**	EPA 8011	CTS	3	PASI-PA
30640766005	**MW-P440**	EPA 8011	CTS	3	PASI-PA
30640766006	**RW-P109**	EPA 8011	CTS	3	PASI-PA
30640766007	**RW-P165**	EPA 8011	CTS	3	PASI-PA
30640766008	**RW-P171-1**	EPA 8011	CTS	3	PASI-PA
30640766009	**RW-P264**	EPA 8011	CTS	3	PASI-PA
30640766010	**RW-P440**	EPA 8011	CTS	3	PASI-PA
30640766011	**RW-P441**	EPA 8011	CTS	3	PASI-PA
30640766012	**RW-P584**	EPA 8011	CTS	3	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30640766

Date: November 22, 2023

MW-P4 (Lab ID: 30640766001)

- Sample pH for 8011 is 6

MW-P9 (Lab ID: 30640766002)

- Sample pH for 8011 is 5

MW-P106 (Lab ID: 30640766003)

- Sample pH for 8011 is 5

MW-P417 (Lab ID: 30640766004)

- Sample pH for 8011 is 5

MW-P440 (Lab ID: 30640766005)

- Sample pH for 8011 is 5

RW-P109 (Lab ID: 30640766006)

- Sample pH for 8011 is 5

RW-P165 (Lab ID: 30640766007)

- Sample pH for 8011 is 5

RW-P171-1 (Lab ID: 30640766008)

- Sample pH for 8011 is 6

RW-P264 (Lab ID: 30640766009)

- Sample pH for 8011 is 6

RW-P440 (Lab ID: 30640766010)

- Sample pH for 8011 is 6

RW-P441 (Lab ID: 30640766011)

- Sample pH for 8011 is 6

RW-P584 (Lab ID: 30640766012)

- Sample pH for 8011 is 6

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30640766

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 22, 2023

General Information:
12 samples were analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 631280

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- BLANK (Lab ID: 3077880)
  - 1,2-Dibromo-3-chloropropane
- LCS (Lab ID: 3077881)
  - 1,2-Dibromo-3-chloropropane
- MS (Lab ID: 3077882)
  - 1,2-Dibromo-3-chloropropane
- MSD (Lab ID: 3077883)
  - 1,2-Dibromo-3-chloropropane
- MW-P106 (Lab ID: 30640766003)
  - 1,2-Dibromo-3-chloropropane
- MW-P4 (Lab ID: 30640766001)
  - 1,2-Dibromo-3-chloropropane
- MW-P417 (Lab ID: 30640766004)
  - 1,2-Dibromo-3-chloropropane
- MW-P440 (Lab ID: 30640766005)
  - 1,2-Dibromo-3-chloropropane
- MW-P9 (Lab ID: 30640766002)
  - 1,2-Dibromo-3-chloropropane
- RW-P109 (Lab ID: 30640766006)
  - 1,2-Dibromo-3-chloropropane
- RW-P165 (Lab ID: 30640766007)
  - 1,2-Dibromo-3-chloropropane
- RW-P171-1 (Lab ID: 30640766008)
  - 1,2-Dibromo-3-chloropropane
- RW-P264 (Lab ID: 30640766009)
  - 1,2-Dibromo-3-chloropropane

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(724)850-5600

PROJECT NARRATIVE

Project: MLF-FALL 2023
Pace Project No.: 30640766

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: November 22, 2023

QC Batch: 631280

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- RW-P440 (Lab ID: 30640766010)
  - 1,2-Dibromo-3-chloropropane
- RW-P441 (Lab ID: 30640766011)
  - 1,2-Dibromo-3-chloropropane
- RW-P584 (Lab ID: 30640766012)
  - 1,2-Dibromo-3-chloropropane

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: MLF-FALL 2023
Pace Project No.: 30640766

Sample: MW-P4 **Lab ID: 30640766001** Collected: 11/17/23 09:30 Received: 11/17/23 19:53 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/21/23 07:10	11/21/23 21:44	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/21/23 07:10	11/21/23 21:44	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	94	%.	60-140		1	11/21/23 07:10	11/21/23 21:44	630-20-6	

Sample: MW-P9 **Lab ID: 30640766002** Collected: 11/15/23 15:00 Received: 11/17/23 19:53 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/21/23 07:10	11/21/23 22:24	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/21/23 07:10	11/21/23 22:24	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	93	%.	60-140		1	11/21/23 07:10	11/21/23 22:24	630-20-6	

Sample: MW-P106 **Lab ID: 30640766003** Collected: 11/16/23 15:45 Received: 11/17/23 19:53 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/21/23 07:10	11/21/23 22:38	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/21/23 07:10	11/21/23 22:38	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	96	%.	60-140		1	11/21/23 07:10	11/21/23 22:38	630-20-6	

Sample: MW-P417 **Lab ID: 30640766004** Collected: 11/15/23 17:20 Received: 11/17/23 19:53 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/21/23 07:10	11/21/23 22:51	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/21/23 07:10	11/21/23 22:51	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	94	%.	60-140		1	11/21/23 07:10	11/21/23 22:51	630-20-6	

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ANALYTICAL RESULTS

Project: MLF-FALL 2023
Pace Project No.: 30640766

Sample: MW-P440 **Lab ID: 30640766005** Collected: 11/15/23 16:40 Received: 11/17/23 19:53 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/21/23 07:10	11/21/23 23:04	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/21/23 07:10	11/21/23 23:04	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	85	%.	60-140		1	11/21/23 07:10	11/21/23 23:04	630-20-6	

Sample: RW-P109 **Lab ID: 30640766006** Collected: 11/16/23 14:00 Received: 11/17/23 19:53 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/21/23 07:10	11/21/23 23:18	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/21/23 07:10	11/21/23 23:18	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	101	%.	60-140		1	11/21/23 07:10	11/21/23 23:18	630-20-6	

Sample: RW-P165 **Lab ID: 30640766007** Collected: 11/17/23 10:10 Received: 11/17/23 19:53 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/21/23 07:10	11/21/23 23:31	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/21/23 07:10	11/21/23 23:31	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	104	%.	60-140		1	11/21/23 07:10	11/21/23 23:31	630-20-6	

Sample: RW-P171-1 **Lab ID: 30640766008** Collected: 11/17/23 10:50 Received: 11/17/23 19:53 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/21/23 07:10	11/21/23 23:44	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/21/23 07:10	11/21/23 23:44	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	103	%.	60-140		1	11/21/23 07:10	11/21/23 23:44	630-20-6	

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ANALYTICAL RESULTS

Project: MLF-FALL 2023
Pace Project No.: 30640766

Sample: RW-P264 **Lab ID: 30640766009** Collected: 11/16/23 14:40 Received: 11/17/23 19:53 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/21/23 07:10	11/21/23 23:57	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/21/23 07:10	11/21/23 23:57	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	101	%.	60-140		1	11/21/23 07:10	11/21/23 23:57	630-20-6	

Sample: RW-P440 **Lab ID: 30640766010** Collected: 11/17/23 12:10 Received: 11/17/23 19:53 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/21/23 07:10	11/22/23 00:11	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/21/23 07:10	11/22/23 00:11	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	100	%.	60-140		1	11/21/23 07:10	11/22/23 00:11	630-20-6	

Sample: RW-P441 **Lab ID: 30640766011** Collected: 11/17/23 11:30 Received: 11/17/23 19:53 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/21/23 07:10	11/22/23 00:24	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/21/23 07:10	11/22/23 00:24	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	99	%.	60-140		1	11/21/23 07:10	11/22/23 00:24	630-20-6	

Sample: RW-P584 **Lab ID: 30640766012** Collected: 11/15/23 15:45 Received: 11/17/23 19:53 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.040 U**	ug/L	0.040	0.021	1	11/21/23 07:10	11/22/23 00:38	96-12-8	CH
1,2-Dibromoethane (EDB)	**0.040 U**	ug/L	0.040	0.031	1	11/21/23 07:10	11/22/23 00:38	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	99	%.	60-140		1	11/21/23 07:10	11/22/23 00:38	630-20-6	

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QUALITY CONTROL DATA

Project: MLF-FALL 2023
Pace Project No.: 30640766

QC Batch: 631280
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30640766001, 30640766002, 30640766003, 30640766004, 30640766005, 30640766006, 30640766007, 30640766008, 30640766009, 30640766010, 30640766011, 30640766012

METHOD BLANK: 3077880
Matrix: Water
Associated Lab Samples: 30640766001, 30640766002, 30640766003, 30640766004, 30640766005, 30640766006, 30640766007, 30640766008, 30640766009, 30640766010, 30640766011, 30640766012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	11/21/23 21:17	CH
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	11/21/23 21:17	
1,1,1,2-Tetrachloroethane (S)	%.	95	60-140		11/21/23 21:17	

LABORATORY CONTROL SAMPLE: 3077881

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.26	102	85-115	CH
1,2-Dibromoethane (EDB)	ug/L	0.25	0.24	94	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			93	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3077882 3077883

Parameter	Units	30640766001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.4	0.41	0.42	0.42	105	104	60-140	1	25	CH
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.4	0.41	0.39	0.38	98	93	60-140	3	25	
1,1,1,2-Tetrachloroethane (S)	%.						94	93	60-140			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
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QUALIFIERS

Project: MLF-FALL 2023
Pace Project No.: 30640766

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30640766001
[1] Sample pH for 8011 is 6

Sample: 30640766002
[1] Sample pH for 8011 is 5

Sample: 30640766003
[1] Sample pH for 8011 is 5

Sample: 30640766004
[1] Sample pH for 8011 is 5

Sample: 30640766005
[1] Sample pH for 8011 is 5

Sample: 30640766006
[1] Sample pH for 8011 is 5

Sample: 30640766007
[1] Sample pH for 8011 is 5

Sample: 30640766008
[1] Sample pH for 8011 is 6

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QUALIFIERS

Project: MLF-FALL 2023
Pace Project No.: 30640766

SAMPLE QUALIFIERS

Sample: 30640766009
[1] Sample pH for 8011 is 6
Sample: 30640766010
[1] Sample pH for 8011 is 6
Sample: 30640766011
[1] Sample pH for 8011 is 6
Sample: 30640766012
[1] Sample pH for 8011 is 6

ANALYTE QUALIFIERS

CH The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-FALL 2023
Pace Project No.: 30640766

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30640766001	**MW-P4**	EPA 8011	631280	EPA 8011	631388
30640766002	**MW-P9**	EPA 8011	631280	EPA 8011	631388
30640766003	**MW-P106**	EPA 8011	631280	EPA 8011	631388
30640766004	**MW-P417**	EPA 8011	631280	EPA 8011	631388
30640766005	**MW-P440**	EPA 8011	631280	EPA 8011	631388
30640766006	**RW-P109**	EPA 8011	631280	EPA 8011	631388
30640766007	**RW-P165**	EPA 8011	631280	EPA 8011	631388
30640766008	**RW-P171-1**	EPA 8011	631280	EPA 8011	631388
30640766009	**RW-P264**	EPA 8011	631280	EPA 8011	631388
30640766010	**RW-P440**	EPA 8011	631280	EPA 8011	631388
30640766011	**RW-P441**	EPA 8011	631280	EPA 8011	631388
30640766012	**RW-P584**	EPA 8011	631280	EPA 8011	631388

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EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	PACE
Project	MLF - Fall 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Method 8011 - DBCP + EDB
1	MW-P4	3	11-17-23	930	✓		GW	✓
2	MW-P9		11-15-23	1500				
3	MW-P106		11-16-23	1545				
4	MW-P417		11-15-23	1720				
5	MW-P440		11-15-23	1640				
6	RW-P109		11-16-23	1400				
7	RW-P165		11-17-23	1010				
8	RW-P171-1		11-17-23	1050				
9	RW-P264		11-16-23	1440				
10	RW-P440		11-17-23	1210				
11	RW-P441		11-17-23	1130				
12	RW-P584	✓	11-15	1545	✓		✓	✓

	Signature	Date	Time
Relinquished by	[signature]	11-17-23	
Received by	TB/Pace	11-17-23	1510
Relinquished by	TB/Pace	11-17-23	1840
Received by	SE	11.17.23	1953
Relinquished by	SE	11.17.23	
Received by	[signature]	11.18.23	0800

Comments

WO#: 30640766

30640766

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

DC#_Title: ENV-FRM-GBUR-0088 v06_Sample Condition Upon Receipt
Pittsburgh

Effective Date: 09/20/2023

WO#: 30640766

PM: ARG **Due Date: 12/06/23**
CLIENT: ENV MONITOR

Client Name:

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☑ Other

Tracking Number: _____

Initial / Date
Examined By: ES 11.20.23
Labeled By: WT
Temped By: WT

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No
Thermometer Used: 19 **Type of Ice:** (Wet) Blue None
Cooler Temperature: Observed Temp 5.9 °C Correction Factor: -0.2 °C Final Temp: 5.7 °C
Temp should be above freezing to 6°C

Comments:	Yes	No	NA	pH paper Lot# —	D.P.D. Residual Chlorine Lot # —
Chain of Custody Present	✓			1.	
Chain of Custody Filled Out:	✓			2.	
-Were client corrections present on COC		✓			
Chain of Custody Relinquished	✓			3.	
Sampler Name & Signature on COC:		✓		4.	
Sample Labels match COC:	✓			5.	
-Includes date/time/ID	✓				
Matrix: WT					
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):		✓		7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used:	✓			10.	
-Pace Containers Used	✓				
Containers Intact:	✓			11.	
Orthophosphate field filtered:			✓	12.	
Hex Cr Aqueous samples field filtered:			✓	13.	
Organic Samples checked for dechlorination			✓	14:	
Filtered volume received for dissolved tests:			✓	15:	
All containers checked for preservation:		✓		16.	
exceptions: VOA coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix					
All containers meet method preservation requirements:	✓			Initial when completed ES	Date/Time of Preservation
				Lot# of added Preservative	
8260C/D: Headspace in VOA Vials (> 6mm)			✓	17.	
624.1: Headspace in VOA Vials (0mm)			✓	18.	
Trip Blank Present:			✓	Trip blank custody seal present? YES or NO	
Rad Samples Screened <.05 mrem/hr.	✓			Initial when completed ES	Date: 11.20.23 Survey Meter SN: 25014380

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Client EMA

Site MLF-FALL 2023

Page _____ of _____

Profile Number 8469

Notes

		Amber Glass					Plastic								Vials					Other									
Sample Line Item	Matrix	AG1H	AG3S	AG3U	AG5U	AG5T	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	VG9H	VG9T	VG9U	VOAK	WGFU	WGKU	ZPLC	GCUB	GJN	12GN	GN	BG1U		
1																	3												
2																	3												
3																	3												
4																	3												
5																	3												
6																	3												
7																	3												
8																	3												
9																	3												
10																	3												
11																	3												
12																	3												

Container Codes

Glass

GJN	1 Gallon Jug with HNO3	DG9S	40mL amber VOA vial H2SO4
AG5U	100mL amber glass unpreserved	VG9U	40mL clear VOA vial
AG5T	100mL amber glass Na Thiosulfate	VG9T	40mL clear VOA vial Na Thiosulfate
GJN	1 Gallon Jug		
AG1S	1L amber glass H2S		
AG1H	1L amber glass HCl		
AG1T	1L amber glass NA T		served
BG1U	1L clear glass unpres		eserved
AG3S	250mL amber glass H2SO4	WGKU	8oz wide jar unpreserved
AG3U	250mL amber glass unpreserved	GN	General

WO#: 30640766

PM: ARG **Due Date: 12/06/23**

CLIENT: ENV MONITOR

Plastic/Misc.

GCUB	1 gallon cubitainer
12GN	1/2 gallon cubitainer
SP5T	120mL coliform Na Thiosulfate
BP1N	1L plastic HNO3
BP1U	1L plastic unpreserved
BP3S	250mL plastic H2SO4
BP3N	250mL plastic HNO3
BP3U	250mL plastic unpreserved
BP3C	250mL plastic NAOH
BP2S	500mL plastic H2SO4
BP2U	500mL plastic unpreserved

EZI	5g Encore
VOAK	Kit Volatile Solid
I	Wipe/Swab
ZPLC	Siploc Bag

WT	Water
SL	Solid
OL	Non-Aq Liquid
WP	Wipe

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

December 12, 2023

Steve Brown
Environmental Monitoring and Assessment LLC
207 East Sixth Street
Lititz, PA 17543

RE: Project: MLF-FALL-2023
Pace Project No.: 30641025

Dear Steve Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on November 20, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Beaver
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alaina Deitch

Alaina R. Deitch
alaina.deitch@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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CERTIFICATIONS

Project: MLF-FALL-2023
Pace Project No.: 30641025

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572023-03
New Hampshire/TNI Certification #: 297622
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad

Pace Analytical Services Beaver

225 Industrial Park Road, Beaver, WV 25813
Virginia VELAP 460148
West Virginia DEP 060
West Virginia DHHR 00412CM
North Carolina DEQ 466
Kentucky Wastewater Certification KY90039
Pennsylvania DEP 68-00839

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SAMPLE SUMMARY

Project: MLF-FALL-2023
Pace Project No.: 30641025

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30641025001	**TW-3**	Water	11/20/23 13:20	11/20/23 20:20

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SAMPLE ANALYTE COUNT

Project: MLF-FALL-2023
Pace Project No.: 30641025

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30641025001	**TW-3**	EPA 6010D	MFC	7	PASI-BV
		EPA 6010D	MFC	6	PASI-BV
		EPA 6020B	WES	15	PASI-BV
		EPA 7470A	JLH1	1	PASI-BV
		EPA 8011	CTS	3	PASI-PA
		SM 2320B-2011	CMT	1	PASI-PA
		SM 2540C-2015	BM1	1	PASI-PA
		EPA 350.1	AK1	1	PASI-PA
		EPA 410.4	CMT	1	PASI-PA
		SM 4500-Cl-E-2011	AK1	1	PASI-PA
		EPA 9038	PAS	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver
PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: MLF-FALL-2023
Pace Project No.: 30641025

Date: December 12, 2023

TW-3 (Lab ID: 30641025001)

- Sample pH for 8011 is 7

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PROJECT NARRATIVE

Project: MLF-FALL-2023
Pace Project No.: 30641025

Method: **EPA 6010D**
Description: BVR 6010D ICP, Water, 3010A
Client: Environmental Monitoring and Assessment LLC
Date: December 12, 2023

General Information:
1 sample was analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL-2023
Pace Project No.: 30641025

Method: **EPA 6010D**
Description: BVR 6010D ICP, Dissolved 3010A
Client: Environmental Monitoring and Assessment LLC
Date: December 12, 2023

General Information:
1 sample was analyzed for EPA 6010D by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL-2023
Pace Project No.: 30641025

Method: **EPA 6020B**
Description: BVR 6020B MET ICPMS
Client: Environmental Monitoring and Assessment LLC
Date: December 12, 2023

General Information:
1 sample was analyzed for EPA 6020B by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 633409

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30643235001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3088158)
  - Thallium
- MSD (Lab ID: 3088159)
  - Thallium

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL-2023
Pace Project No.: 30641025

Method: **EPA 7470A**
Description: BVR 7470 Mercury
Client: Environmental Monitoring and Assessment LLC
Date: December 12, 2023

General Information:
1 sample was analyzed for EPA 7470A by Pace Analytical Services Beaver. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL-2023
Pace Project No.: 30641025

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Environmental Monitoring and Assessment LLC
Date: December 12, 2023

General Information:
1 sample was analyzed for EPA 8011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL-2023
Pace Project No.: 30641025

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Environmental Monitoring and Assessment LLC
Date: December 12, 2023

General Information:
1 sample was analyzed for SM 2320B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL-2023
Pace Project No.: 30641025

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Environmental Monitoring and Assessment LLC
Date: December 12, 2023

General Information:
1 sample was analyzed for SM 2540C-2015 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 631606

1c: Total dissolved solids results for ASTM Leach cannot be used for compliance purpose

- BLANK (Lab ID: 3079423)
  - Total Dissolved Solids

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PROJECT NARRATIVE

Project: MLF-FALL-2023
Pace Project No.: 30641025

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: Environmental Monitoring and Assessment LLC
Date: December 12, 2023

General Information:
1 sample was analyzed for EPA 350.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 350.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL-2023
Pace Project No.: 30641025

Method: **EPA 410.4**
Description: 410.4 COD
Client: Environmental Monitoring and Assessment LLC
Date: December 12, 2023

General Information:
1 sample was analyzed for EPA 410.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL-2023
Pace Project No.: 30641025

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: Environmental Monitoring and Assessment LLC
Date: December 12, 2023

General Information:
1 sample was analyzed for SM 4500-Cl-E-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: MLF-FALL-2023
Pace Project No.: 30641025

Method: **EPA 9038**
Description: 9038 Sulfate, Turbidimetric
Client: Environmental Monitoring and Assessment LLC
Date: December 12, 2023

General Information:
1 sample was analyzed for EPA 9038 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: MLF-FALL-2023
Pace Project No.: 30641025

Sample: TW-3 **Lab ID: 30641025001** Collected: 11/20/23 13:20 Received: 11/20/23 20:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D ICP, Water, 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium	**1.2**	mg/L	0.50	0.083	1	11/28/23 11:28	11/29/23 22:19	7440-70-2	
Iron	**7.2**	mg/L	0.050	0.036	1	11/28/23 11:28	11/29/23 22:19	7439-89-6	
Magnesium	**0.56**	mg/L	0.50	0.047	1	11/28/23 11:28	11/29/23 22:19	7439-95-4	
Manganese	**0.10**	mg/L	0.0050	0.0027	1	11/28/23 11:28	11/29/23 22:19	7439-96-5	
Potassium	**0.47J**	mg/L	0.50	0.26	1	11/28/23 11:28	11/29/23 22:19	7440-09-7	
Sodium	**2.6**	mg/L	0.50	0.34	1	11/28/23 11:28	11/29/23 22:19	7440-23-5	
Total Hardness	**5.2**	mg/L	3.3	0.40	1	11/28/23 11:28	11/29/23 22:19		N3
BVR 6010D ICP, Dissolved 3010A	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Calcium, Dissolved	**1.1**	mg/L	0.50	0.083	1	12/07/23 13:07	12/11/23 15:15	7440-70-2	
Iron, Dissolved	**6.3**	mg/L	0.050	0.036	1	12/07/23 13:07	12/11/23 15:15	7439-89-6	
Magnesium, Dissolved	**0.58**	mg/L	0.50	0.047	1	12/07/23 13:07	12/11/23 15:15	7439-95-4	
Manganese, Dissolved	**0.11**	mg/L	0.0050	0.0027	1	12/07/23 13:07	12/11/23 15:15	7439-96-5	
Potassium, Dissolved	**0.50**	mg/L	0.50	0.26	1	12/07/23 13:07	12/11/23 15:15	7440-09-7	
Sodium, Dissolved	**2.5**	mg/L	0.50	0.34	1	12/07/23 13:07	12/11/23 15:15	7440-23-5	
BVR 6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Beaver								
Antimony	**0.00050 U**	mg/L	0.00050	0.00050	1	12/04/23 03:25	12/04/23 12:18	7440-36-0	
Arsenic	**0.0025 U**	mg/L	0.0025	0.00078	1	12/04/23 03:25	12/04/23 12:18	7440-38-2	
Barium	**0.0077**	mg/L	0.0025	0.00098	1	12/04/23 03:25	12/04/23 12:18	7440-39-3	
Beryllium	**0.00050 U**	mg/L	0.00050	0.00010	1	12/04/23 03:25	12/04/23 12:18	7440-41-7	
Cadmium	**0.00050 U**	mg/L	0.00050	0.00020	1	12/04/23 03:25	12/04/23 12:18	7440-43-9	
Chromium	**0.0063**	mg/L	0.0025	0.0011	1	12/04/23 03:25	12/04/23 12:18	7440-47-3	
Cobalt	**0.00090J**	mg/L	0.0025	0.00081	1	12/04/23 03:25	12/04/23 12:18	7440-48-4	
Copper	**0.0025 U**	mg/L	0.0025	0.0021	1	12/04/23 03:25	12/04/23 12:18	7440-50-8	
Lead	**0.00050 U**	mg/L	0.00050	0.00025	1	12/04/23 03:25	12/04/23 12:18	7439-92-1	
Nickel	**0.0097**	mg/L	0.0025	0.00075	1	12/04/23 03:25	12/04/23 12:18	7440-02-0	
Selenium	**0.0025 U**	mg/L	0.0025	0.0013	1	12/04/23 03:25	12/04/23 12:18	7782-49-2	
Silver	**0.0025 U**	mg/L	0.0025	0.00053	1	12/04/23 03:25	12/04/23 12:18	7440-22-4	
Thallium	**0.00050 U**	mg/L	0.00050	0.00017	1	12/04/23 03:25	12/04/23 12:18	7440-28-0	
Vanadium	**0.0025 U**	mg/L	0.0025	0.0019	1	12/04/23 03:25	12/04/23 12:18	7440-62-2	
Zinc	**0.0050 U**	mg/L	0.0050	0.0043	1	12/04/23 03:25	12/04/23 12:18	7440-66-6	
BVR 7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Beaver								
Mercury	**0.00020 U**	mg/L	0.00020	0.00020	1	11/30/23 10:05	11/30/23 16:03	7439-97-6	
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Greensburg								
1,2-Dibromo-3-chloropropane	**0.041 U**	ug/L	0.041	0.021	1	11/27/23 07:04	11/28/23 13:42	96-12-8	
1,2-Dibromoethane (EDB)	**0.041 U**	ug/L	0.041	0.031	1	11/27/23 07:04	11/28/23 13:42	106-93-4	
Surrogates									
1,1,1,2-Tetrachloroethane (S)	108	%.	60-140		1	11/27/23 07:04	11/28/23 13:42	630-20-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: MLF-FALL-2023
Pace Project No.: 30641025

Sample: TW-3 **Lab ID: 30641025001** Collected: 11/20/23 13:20 Received: 11/20/23 20:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Greensburg								
Alkalinity,Total (CaCO3 pH4.5)	**14.0**	mg/L	10.0	1.0	1		11/27/23 11:37		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Greensburg								
Total Dissolved Solids	**30.0**	mg/L	10.0	10.0	1		11/22/23 18:27		
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1 Preparation Method: EPA 350.1 Pace Analytical Services - Greensburg								
Ammonia, Distilled	**0.10 U**	mg/L	0.10	0.090	1	11/27/23 11:57	11/28/23 12:18		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Greensburg								
Chemical Oxygen Demand	**25.0 U**	mg/L	25.0	4.7	1	11/29/23 10:33	11/29/23 15:55		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011 Pace Analytical Services - Greensburg								
Chloride	**5.2**	mg/L	3.0	0.67	1		11/30/23 13:30	16887-00-6	
9038 Sulfate, Turbidimetric	Analytical Method: EPA 9038 Pace Analytical Services - Greensburg								
Sulfate	**10.0 U**	mg/L	10.0	4.7	1		11/22/23 12:39	14808-79-8	

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QUALITY CONTROL DATA

Project: MLF-FALL-2023
Pace Project No.: 30641025

QC Batch: 632327
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30641025001

METHOD BLANK: 3082774 Matrix: Water
Associated Lab Samples: 30641025001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	0.50 U	0.50	0.083	11/29/23 21:57	
Iron	mg/L	0.050 U	0.050	0.036	11/29/23 21:57	
Magnesium	mg/L	0.50 U	0.50	0.047	11/29/23 21:57	
Manganese	mg/L	0.0050 U	0.0050	0.0027	11/29/23 21:57	
Potassium	mg/L	0.50 U	0.50	0.26	11/29/23 21:57	
Sodium	mg/L	0.50 U	0.50	0.34	11/29/23 21:57	

LABORATORY CONTROL SAMPLE: 3082775

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	40	47.0	117	80-120	
Iron	mg/L	2	2.1	103	80-120	
Magnesium	mg/L	20	19.8	99	80-120	
Manganese	mg/L	2	1.9	96	80-120	
Potassium	mg/L	20	18.5	92	80-120	
Sodium	mg/L	20	19.9	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3082776 3082777

Parameter	Units	30640816001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	9190 ug/L	40	40	50.5	50.5	103	103	80-120	0	20	
Iron	mg/L	222 ug/L	2	2	2.4	2.4	108	108	80-120	0	20	
Magnesium	mg/L	881 ug/L	20	20	22.0	22.0	106	105	80-120	0	20	
Manganese	mg/L	14.8 ug/L	2	2	2.1	2.1	107	106	80-120	0	20	
Potassium	mg/L	758 ug/L	20	20	22.2	22.1	107	107	80-120	0	20	
Sodium	mg/L	5600 ug/L	20	20	26.9	26.9	107	106	80-120	0	20	

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QUALITY CONTROL DATA

Project: MLF-FALL-2023
Pace Project No.: 30641025

QC Batch: 634481
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: BVR 6010D MET Dissolved
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30641025001

METHOD BLANK: 3093695 Matrix: Water
Associated Lab Samples: 30641025001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium, Dissolved	mg/L	0.50 U	0.50	0.083	12/08/23 20:53	
Iron, Dissolved	mg/L	0.050 U	0.050	0.036	12/08/23 20:53	
Magnesium, Dissolved	mg/L	0.50 U	0.50	0.047	12/08/23 20:53	
Manganese, Dissolved	mg/L	0.0050 U	0.0050	0.0027	12/08/23 20:53	
Potassium, Dissolved	mg/L	0.50 U	0.50	0.26	12/08/23 20:53	
Sodium, Dissolved	mg/L	0.50 U	0.50	0.34	12/08/23 20:53	

LABORATORY CONTROL SAMPLE: 3093696

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	mg/L	40	42.6	106	80-120	
Iron, Dissolved	mg/L	2	2.2	112	80-120	
Magnesium, Dissolved	mg/L	20	21.2	106	80-120	
Manganese, Dissolved	mg/L	2	2.3	115	80-120	
Potassium, Dissolved	mg/L	20	21.2	106	80-120	
Sodium, Dissolved	mg/L	20	21.0	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3093729 3093730

Parameter	Units	30629606001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium, Dissolved	mg/L	107000 ug/L	40	40	149	152	103	111	80-120	2	20	
Iron, Dissolved	mg/L	ND	2	2	2.2	2.2	110	110	80-120	0	20	
Magnesium, Dissolved	mg/L	21000 ug/L	20	20	42.4	42.9	107	109	80-120	1	20	
Manganese, Dissolved	mg/L	7.9 ug/L	2	2	2.3	2.3	113	113	80-120	0	20	
Potassium, Dissolved	mg/L	1890 ug/L	20	20	23.9	23.9	110	110	80-120	0	20	
Sodium, Dissolved	mg/L	10400 ug/L	20	20	32.1	32.4	108	110	80-120	1	20	

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QUALITY CONTROL DATA

Project: MLF-FALL-2023
Pace Project No.: 30641025

QC Batch: 633409
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: BVR 6020B MET ICPMS
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30641025001

METHOD BLANK: 3088154
Matrix: Water
Associated Lab Samples: 30641025001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00050 U	0.00050	0.00050	12/04/23 12:12	
Arsenic	mg/L	0.0025 U	0.0025	0.00078	12/04/23 12:12	
Barium	mg/L	0.0025 U	0.0025	0.00098	12/04/23 12:12	
Beryllium	mg/L	0.00050 U	0.00050	0.00010	12/04/23 12:12	
Cadmium	mg/L	0.00050 U	0.00050	0.00020	12/04/23 12:12	
Chromium	mg/L	0.0025 U	0.0025	0.0011	12/04/23 12:12	
Cobalt	mg/L	0.0025 U	0.0025	0.00081	12/04/23 12:12	
Copper	mg/L	0.0025 U	0.0025	0.0021	12/04/23 12:12	
Lead	mg/L	0.00050 U	0.00050	0.00025	12/04/23 12:12	
Nickel	mg/L	0.0025 U	0.0025	0.00075	12/04/23 12:12	
Selenium	mg/L	0.0025 U	0.0025	0.0013	12/04/23 12:12	
Silver	mg/L	0.0025 U	0.0025	0.00053	12/04/23 12:12	
Thallium	mg/L	0.00050 U	0.00050	0.00017	12/04/23 12:12	
Vanadium	mg/L	0.0025 U	0.0025	0.0019	12/04/23 12:12	
Zinc	mg/L	0.0050 U	0.0050	0.0043	12/04/23 12:12	

LABORATORY CONTROL SAMPLE: 3088155

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.02	0.021	105	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.10	100	80-120	
Beryllium	mg/L	0.02	0.021	106	80-120	
Cadmium	mg/L	0.02	0.020	102	80-120	
Chromium	mg/L	0.1	0.10	103	80-120	
Cobalt	mg/L	0.1	0.10	104	80-120	
Copper	mg/L	0.1	0.10	104	80-120	
Lead	mg/L	0.02	0.021	103	80-120	
Nickel	mg/L	0.1	0.10	102	80-120	
Selenium	mg/L	0.1	0.095	95	80-120	
Silver	mg/L	0.1	0.11	106	80-120	
Thallium	mg/L	0.02	0.021	104	80-120	
Vanadium	mg/L	0.1	0.10	103	80-120	
Zinc	mg/L	0.2	0.20	101	80-120	

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QUALITY CONTROL DATA

Project: MLF-FALL-2023
Pace Project No.: 30641025

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3088158 3088159

Parameter	Units	30643235001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.02	0.02	0.021	0.021	103	103	75-125	0	20	
Arsenic	mg/L	ND	0.1	0.1	0.099	0.10	99	100	75-125	1	20	
Barium	mg/L	17.3 ug/L	0.1	0.1	0.11	0.11	96	97	75-125	1	20	
Beryllium	mg/L	ND	0.02	0.02	0.021	0.021	104	106	75-125	2	20	
Cadmium	mg/L	ND	0.02	0.02	0.020	0.020	99	100	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.11	107	105	75-125	2	20	
Cobalt	mg/L	ND	0.1	0.1	0.11	0.11	107	106	75-125	2	20	
Copper	mg/L	ND	0.1	0.1	0.11	0.11	106	105	75-125	1	20	
Lead	mg/L	ND	0.02	0.02	0.021	0.020	103	102	75-125	1	20	
Nickel	mg/L	ND	0.1	0.1	0.11	0.11	105	105	75-125	0	20	
Selenium	mg/L	ND	0.1	0.1	0.097	0.093	97	93	75-125	4	20	
Silver	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	1	20	
Thallium	mg/L	ND	0.02	0.02	0.014	0.014	68	68	75-125	0	20	M1
Vanadium	mg/L	ND	0.1	0.1	0.11	0.11	105	105	75-125	1	20	
Zinc	mg/L	ND	0.2	0.2	0.20	0.20	100	100	75-125	0	20	

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QUALITY CONTROL DATA

Project: MLF-FALL-2023
Pace Project No.: 30641025

QC Batch: 632926
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: BVR 7470 Mercury
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30641025001

METHOD BLANK: 3085558 Matrix: Water
Associated Lab Samples: 30641025001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00020 U	0.00020	0.00020	11/30/23 15:59	

LABORATORY CONTROL SAMPLE: 3085559

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.01	0.010	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3085560 3085561

Parameter	Units	30642700001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.01	0.01	0.010	0.0099	100	99	80-120	1	20	

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QUALITY CONTROL DATA

Project: MLF-FALL-2023
Pace Project No.: 30641025

QC Batch: 631961
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30641025001

METHOD BLANK: 3081405 Matrix: Water
Associated Lab Samples: 30641025001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.040 U	0.040	0.021	11/28/23 13:17	
1,2-Dibromoethane (EDB)	ug/L	0.040 U	0.040	0.031	11/28/23 13:17	
1,1,1,2-Tetrachloroethane (S)	%.	116	60-140		11/28/23 13:17	

LABORATORY CONTROL SAMPLE: 3081406

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/L	0.25	0.23	92	85-115	
1,2-Dibromoethane (EDB)	ug/L	0.25	0.26	103	85-115	
1,1,1,2-Tetrachloroethane (S)	%.			113	60-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3081407 3081408

Parameter	Units	30641025001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromo-3-chloropropane	ug/L	0.041 U	0.4	0.4	0.41	0.39	103	97	60-140	6	25	
1,2-Dibromoethane (EDB)	ug/L	0.041 U	0.4	0.4	0.38	0.37	95	93	60-140	2	25	
1,1,1,2-Tetrachloroethane (S)	%.						112	115	60-140			

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QUALITY CONTROL DATA

Project: MLF-FALL-2023
Pace Project No.: 30641025

QC Batch: 632012
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30641025001

METHOD BLANK: 3081513 Matrix: Water
Associated Lab Samples: 30641025001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	10.0 U	10.0	1.0	11/27/23 10:53	

LABORATORY CONTROL SAMPLE: 3081514

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity,Total (CaCO3 pH4.5)	mg/L	20	20.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3081515 3081516

Parameter	Units	30640763011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity,Total (CaCO3 pH4.5)	mg/L	130	50	50	176	180	92	100	85-115	2	20	

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QUALITY CONTROL DATA

Project: MLF-FALL-2023
Pace Project No.: 30641025

QC Batch: 631606
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30641025001

METHOD BLANK: 3079422 Matrix: Water
Associated Lab Samples: 30641025001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	11/22/23 18:27	

METHOD BLANK: 3079423 Matrix: Water
Associated Lab Samples: 30641025001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	10.0 U	10.0	10.0	11/22/23 18:27	1c

LABORATORY CONTROL SAMPLE: 3079424

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	979	98	85-115	

SAMPLE DUPLICATE: 3079425

Parameter	Units	30641081001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	423	435	3	5	

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QUALITY CONTROL DATA

Project: MLF-FALL-2023
Pace Project No.: 30641025

QC Batch: 631950
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30641025001

METHOD BLANK: 3081363
Matrix: Water
Associated Lab Samples: 30641025001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ammonia, Distilled	mg/L	0.10 U	0.10	0.090	11/28/23 12:12	

LABORATORY CONTROL SAMPLE: 3081364

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia, Distilled	mg/L	4	4.1	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3081365 3081366

Parameter	Units	30641025001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	0.10 U	4	4	4.0	4.0	100	101	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3081367 3081368

Parameter	Units	30641124005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ammonia, Distilled	mg/L	ND	4	4	4.0	4.0	100	101	90-110	1	20	

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QUALITY CONTROL DATA

Project: MLF-FALL-2023
Pace Project No.: 30641025

QC Batch: 632589
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30641025001

METHOD BLANK: 3083891 Matrix: Water
Associated Lab Samples: 30641025001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	25.0 U	25.0	4.7	11/29/23 15:52	

LABORATORY CONTROL SAMPLE: 3083892

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	300	327	109	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3083893 3083894

Parameter	Units	30641870001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	ND	150	150	164	166	106	108	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3083895 3083896

Parameter	Units	30641134001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	31.8	150	150	191	189	106	105	90-110	1	10	

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QUALITY CONTROL DATA

Project: MLF-FALL-2023
Pace Project No.: 30641025

QC Batch: 632829
QC Batch Method: SM 4500-Cl-E-2011
Analysis Method: SM 4500-Cl-E-2011
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30641025001

METHOD BLANK: 3085222
Matrix: Water
Associated Lab Samples: 30641025001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	3.0 U	3.0	0.67	11/30/23 13:22	

LABORATORY CONTROL SAMPLE: 3085223

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.8	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3085224 3085225

Parameter	Units	30641518004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	11.0	20	20	32.4	32.1	107	105	85-115	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: MLF-FALL-2023
Pace Project No.: 30641025

QC Batch: 631698
QC Batch Method: EPA 9038
Analysis Method: EPA 9038
Analysis Description: 9038 Sulfate, Turbidimetric
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30641025001

METHOD BLANK: 3079961 Matrix: Water
Associated Lab Samples: 30641025001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	10.0 U	10.0	4.7	11/22/23 12:35	

LABORATORY CONTROL SAMPLE: 3079962

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	30	30.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3079963 3079964

Parameter	Units	30641233001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	38200	20000	20000	58900	59500	103	107	85-115	1	20	

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REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: MLF-FALL-2023
Pace Project No.: 30641025

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 30641025001

[1]	Sample pH for 8011 is 7

ANALYTE QUALIFIERS

1c	Total dissolved solids results for ASTM Leach cannot be used for compliance purpose
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MLF-FALL-2023
Pace Project No.: 30641025

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30641025001	**TW-3**	EPA 3010A	632327	EPA 6010D	632808
30641025001	**TW-3**	EPA 3010A	634481	EPA 6010D	634918
30641025001	**TW-3**	EPA 3010A	633409	EPA 6020B	633503
30641025001	**TW-3**	EPA 7470A	632926	EPA 7470A	633010
30641025001	**TW-3**	EPA 8011	631961	EPA 8011	632013
30641025001	**TW-3**	SM 2320B-2011	632012		
30641025001	**TW-3**	SM 2540C-2015	631606		
30641025001	**TW-3**	EPA 350.1	631950	EPA 350.1	632086
30641025001	**TW-3**	EPA 410.4	632589	EPA 410.4	632763
30641025001	**TW-3**	SM 4500-Cl-E-2011	632829		
30641025001	**TW-3**	EPA 9038	631698		

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TW-3

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERS VALLEY LANDFILL	Lab	PACE
Project	MLF-FALL 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	Total Metals ①	Total + Diss. Metals ②	Alkalinity, TDS	Hardness, Cl	Ammonia	SO_4, COD		Method 8011 - DBCP + EDB			
1	TW-3	7	11-20-23	1320	✓		GW	✓	✓	✓	✓	✓	✓		✓			
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		

Received by Pace Beaver
Therm ID 9 Corr Factor +/- 0
Receipt Temp 0
Corrected Temp 0
Correct Preservation (Y) N

WO#: 30641025
30641025

	Signature	Date	Time
Relinquished by	DA Brown	11-20-23	
Received by	TB/Pace	11-20-23	1433
Relinquished by	TB/Pace	11-20-23	1640
Received by	MF	11-20-23	1711
Relinquished by	MF	11-20-23	2020
Received by	Emmy Gaum	11-20-23	2020

Comments

① 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn
① 7470 - Hg
② 6010 - Ca, Fe, Mg, Mn, K, Na
PACE - WV - METALS - UNITS - mg/L
PACE - G-BUM - WET CHEM + 8011
LEVEL 2 REPORT

Cooler Temp on Arrival: _____ Deg. C

Rev. Aug. 2018

RBL: [illegible] PACE 11-21-23 1700 RBC Nicely's Del. Service 11-21-23 2300

Nicely's Del. Service 11-22-23 0730

Nicely's Del. Service 11-22-23 0423

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-GBUR-0088 v06_Sar Pittsburgh Effective Date: 09/20/2023

WO#: 30641025
PM: ARG Due Date: 12/07/23
CLIENT: ENV MONITOR

Client Name: ~~MILLENSVILLE LANDFILL~~ EMA
ES 11.21.22

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☑ Other

Tracking Number: _____

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No Seals Intact: ☐ Yes ☑ No
Thermometer Used: 16 Type of Ice: (Wet) Blue None

Cooler Temperature: Observed Temp 3.9 °C Correction Factor: 0.0 °C Final Temp: 3.9 °C
Temp should be above freezing to 6°C

Initial / Date	
Examined By:	ES 11.21.22
Labeled By:	" "
Temped By:	" "

Comments:	Yes	No	NA	pH paper Lot# 10 D 0831	D.P.D. Residual Chlorine Lot #
Chain of Custody Present	✓			1.	
Chain of Custody Filled Out:	✓			2.	
-Were client corrections present on COC		✓			
Chain of Custody Relinquished	✓			3.	
Sampler Name & Signature on COC:		✓		4.	
Sample Labels match COC:	✓			5.	
-Includes date/time/ID	✓				
Matrix: WT					
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):		✓		7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used:	✓			10.	
-Pace Containers Used	✓				
Containers Intact:	✓			11.	
Orthophosphate field filtered:			✓	12.	
Hex Cr Aqueous samples field filtered:			✓	13.	
Organic Samples checked for dechlorination			✓	14:	
Filtered volume received for dissolved tests:			✓	15:	
All containers checked for preservation:	✓			16.	
exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix					
All containers meet method preservation requirements:	✓			Initial when completed ES	Date/Time of Preservation
				Lot# of added Preservative	
8260C/D: Headspace in VOA Vials (> 6mm)			✓	17.	
624.1: Headspace in VOA Vials (0mm)			✓	18.	
Trip Blank Present:			✓	Trip blank custody seal present? YES or NO	
Rad Samples Screened <.05 mrem/hr.	✓			Initial when completed ES	Date: 11.21.22 / Survey Meter SN: 25014380

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Client EMA

Site MLF-FALL-2023

Page ____ of ____

Profile Number 84669

Notes

		Amber Glass					Plastic								Vials					Other									
Sample Line Item	Matrix	AG1H	AG3S	AG3U	AG5U	AG5T	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	VG9H	VG9T	VG9U	VOAK	WGFU	WGKU	ZPLC	GCUB	GJN	12GN	GN	BG1U		
1								1	1			2					3												

Container Codes

Glass

GJN	1 Gallon Jug with HNO3	DG9S	40mL amber VOA vial H2SO4
AG5U	100mL amber glass unpreserved	VG9U	40mL clear VOA vial
AG5T	100mL amber g		l Na Thiosulfate
GJN	1 Gallon Jug		l HCl
AG1S	1L amber glass		
AG1H	1L amber glass		erved
AG1T	1L amber glass		npreserved
BG1U	1L clear glass unpreserved	AG2U	500mL amber glass unpreserved
AG3S	250mL amber glass H2SO4	WGKU	8oz wide jar unpreserved
AG3U	250mL amber glass unpreserved	GN	General

WO#: 30641025
PM: ARG Due Date: 12/07/23
CLIENT: ENV MONITOR

Plastic/Misc.

GCUB	1 gallon cubitainer
12GN	1/2 gallon cubitainer
SP5T	120mL coliform Na Thiosulfate
BP1N	1L plastic HNO3
BP1U	1L plastic unpreserved
BP3S	250mL plastic H2SO4
BP3N	250mL plastic HNO3
BP3U	250mL plastic unpreserved
BP3C	250mL plastic NAOH
BP2S	500mL plastic H2SO4
BP2U	500mL plastic unpreserved

EZI	5g Encore
VOAK	Kit Volatile Solid
I	Wipe/Swab
ZPLC	Siploc Bag

WT	Water
SL	Solid
OL	Non-Aq Liquid
WP	Wipe

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

07 November 2023

Steve Brown
Environmental Monitoring and Assessment
207 East Sixth Street
Lititz, PA 17543
RE: MILLERSVILLE LANDFILL

Enclosed are the results of analyses for samples received by the laboratory on 10/31/23 16:15.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Will Brewington
President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TRIP BLANK		3103124-01	Nonpotable Water	10/31/23 00:00	10/31/23 16:15
TW-5		3103124-02	Nonpotable Water	10/30/23 13:50	10/31/23 16:15
TW-5A		3103124-03	Nonpotable Water	10/30/23 13:10	10/31/23 16:15
TW-5B		3103124-04	Nonpotable Water	10/30/23 12:30	10/31/23 16:15
TW-6		3103124-05	Nonpotable Water	10/31/23 11:00	10/31/23 16:15
TW-6B		3103124-06	Nonpotable Water	10/31/23 10:20	10/31/23 16:15
TW-14		3103124-07	Nonpotable Water	10/31/23 13:15	10/31/23 16:15
TW-14A		3103124-08	Nonpotable Water	10/31/23 12:40	10/31/23 16:15
TW-14B		3103124-09	Nonpotable Water	10/31/23 12:00	10/31/23 16:15
TW-24		3103124-10	Nonpotable Water	10/30/23 16:00	10/31/23 16:15
TW-24A		3103124-11	Nonpotable Water	10/31/23 09:40	10/31/23 16:15
TW-25		3103124-12	Nonpotable Water	10/30/23 15:15	10/31/23 16:15
TW-25A		3103124-13	Nonpotable Water	10/30/23 14:40	10/31/23 16:15
DUP-1		3103124-14	Nonpotable Water	10/30/23 00:00	10/31/23 16:15
DUP-2		3103124-15	Nonpotable Water	10/30/23 00:00	10/31/23 16:15
TW-10A		3103124-16	Nonpotable Water	10/31/23 15:30	10/31/23 16:15
TW-20R		3103124-17	Nonpotable Water	10/31/23 14:40	10/31/23 16:15

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

Maryland spectral Services

Analytical Chemistry Services

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Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TRIP BLANK

3103124-01 (Nonpotable Water)
Sampled on: 10/31/23 00:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 12:36	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 12:36	LL
Benzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 12:36	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 12:36	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 12:36	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 12:36	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 12:36	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 12:36	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL

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Will Brewington, President

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Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TRIP BLANK

3103124-01 (Nonpotable Water)
Sampled on: 10/31/23 00:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 12:36	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 12:36	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 12:36	LL
Styrene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
Toluene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 12:36	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 12:36	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 12:36	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 12:36	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*101 %*	*11/03/23*		*11/03/23 12:36*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*11/03/23*		*11/03/23 12:36*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*97 %*	*11/03/23*		*11/03/23 12:36*		

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Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TW-5

3103124-02 (Nonpotable Water)
Sampled on: 10/30/23 13:50

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 13:00	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 13:00	LL
Benzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 13:00	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 13:00	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 13:00	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 13:00	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 13:00	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 13:00	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
Dichlorodifluoromethane	**2.1**		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
1,1-Dichloroethane	**2.2**		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
cis-1,2-Dichloroethene	**0.8**	J	ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
Dichlorofluoromethane	**3.1**		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 13:00	LL

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Will Brewington, President

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Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TW-5

3103124-02 (Nonpotable Water)
Sampled on: 10/30/23 13:50

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 13:00	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 13:00	LL
Styrene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
Toluene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 13:00	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 13:00	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 13:00	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:00	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*101 %*	*11/03/23*		*11/03/23 13:00*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*11/03/23*		*11/03/23 13:00*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*97 %*	*11/03/23*		*11/03/23 13:00*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate (as N)	ND		mg/L	0.011	0.011	1	10/31/23	11/01/23 11:03	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TW-5A

3103124-03 (Nonpotable Water)
Sampled on: 10/30/23 13:10

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 13:24	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 13:24	LL
Benzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 13:24	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 13:24	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 13:24	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 13:24	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 13:24	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 13:24	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
1,1-Dichloroethane	**0.7**	J	ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
Dichlorofluoromethane	**0.5**	J	ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TW-5A

3103124-03 (Nonpotable Water)
Sampled on: 10/30/23 13:10

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 13:24	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 13:24	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 13:24	LL
Styrene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
Toluene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 13:24	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 13:24	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 13:24	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:24	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*	*11/03/23*		*11/03/23 13:24*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*11/03/23*		*11/03/23 13:24*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*11/03/23*		*11/03/23 13:24*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate (as N)	ND		mg/L	0.011	0.011	1	10/31/23	11/01/23 11:22	CRP

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Will Brewington, President

Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TW-5B

3103124-04 (Nonpotable Water)
Sampled on: 10/30/23 12:30

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 13:48	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 13:48	LL
Benzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 13:48	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 13:48	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 13:48	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 13:48	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 13:48	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 13:48	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TW-5B

3103124-04 (Nonpotable Water)
Sampled on: 10/30/23 12:30

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 13:48	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 13:48	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 13:48	LL
Styrene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
Toluene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 13:48	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 13:48	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 13:48	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 13:48	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*	*11/03/23*		*11/03/23 13:48*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*11/03/23*		*11/03/23 13:48*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*	*11/03/23*		*11/03/23 13:48*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate (as N)	**0.208**		mg/L	0.011	0.011	1	10/31/23	11/01/23 11:40	CRP

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Will Brewington, President

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410-247-7600
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TW-6

3103124-05 (Nonpotable Water)
Sampled on: 10/31/23 11:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 14:13	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 14:13	LL
Benzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 14:13	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 14:13	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 14:13	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 14:13	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 14:13	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 14:13	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
Dichlorodifluoromethane	**4.8**		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
1,1-Dichloroethane	**6.3**		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
cis-1,2-Dichloroethene	**4.5**		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
Dichlorofluoromethane	**4.3**		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 14:13	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TW-6

3103124-05 (Nonpotable Water)
Sampled on: 10/31/23 11:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 14:13	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 14:13	LL
Styrene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
Tetrachloroethene	**1.7**		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
Toluene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
Trichloroethene	**1.2**		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 14:13	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 14:13	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 14:13	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:13	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*	*11/03/23*		*11/03/23 14:13*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*11/03/23*		*11/03/23 14:13*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*97 %*	*11/03/23*		*11/03/23 14:13*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate (as N)	**0.084**		mg/L	0.011	0.011	1	10/31/23	11/01/23 11:59	CRP

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TW-6B

3103124-06 (Nonpotable Water)
Sampled on: 10/31/23 10:20

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 14:38	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 14:38	LL
Benzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 14:38	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 14:38	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 14:38	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 14:38	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 14:38	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 14:38	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TW-6B

3103124-06 (Nonpotable Water)
Sampled on: 10/31/23 10:20

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 14:38	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 14:38	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 14:38	LL
Styrene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
Toluene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 14:38	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 14:38	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 14:38	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 14:38	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*	*11/03/23*		*11/03/23 14:38*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*11/03/23*		*11/03/23 14:38*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*11/03/23*		*11/03/23 14:38*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate (as N)	**0.351**		mg/L	0.011	0.011	1	10/31/23	11/01/23 12:17	CRP

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TW-14

3103124-07 (Nonpotable Water)
Sampled on: 10/31/23 13:15

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 15:02	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 15:02	LL
Benzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 15:02	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 15:02	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 15:02	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 15:02	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 15:02	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 15:02	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
Dichlorodifluoromethane	**4.8**		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
1,1-Dichloroethane	**2.9**		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
cis-1,2-Dichloroethene	**1.1**		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
Dichlorofluoromethane	**3.6**		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 15:02	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TW-14

3103124-07 (Nonpotable Water)
Sampled on: 10/31/23 13:15

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 15:02	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 15:02	LL
Styrene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
Tetrachloroethene	**3.3**		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
Toluene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
Trichloroethene	**0.8**	J	ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 15:02	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 15:02	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 15:02	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:02	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*98 %*		*11/03/23*		*11/03/23 15:02*	
Surrogate: Toluene-d8			*75-120*	*96 %*		*11/03/23*		*11/03/23 15:02*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*97 %*		*11/03/23*		*11/03/23 15:02*	
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate (as N)	**0.057**		mg/L	0.011	0.011	1	10/31/23	11/01/23 12:36	CRP

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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Analytical Chemistry Services

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www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TW-14A

3103124-08 (Nonpotable Water)
Sampled on: 10/31/23 12:40

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 15:26	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 15:26	LL
Benzene	**1.2**		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 15:26	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 15:26	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 15:26	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 15:26	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 15:26	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 15:26	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
Dichlorodifluoromethane	**1.5**		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
1,1-Dichloroethane	**5.2**		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
cis-1,2-Dichloroethene	**1.5**		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
Dichlorofluoromethane	**3.7**		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 15:26	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TW-14A

3103124-08 (Nonpotable Water)
Sampled on: 10/31/23 12:40

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 15:26	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 15:26	LL
Styrene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
Tetrachloroethene	**1.3**		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
Toluene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
Trichloroethene	**1.1**		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 15:26	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 15:26	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 15:26	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:26	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*		*11/03/23*		*11/03/23 15:26*	
Surrogate: Toluene-d8			*75-120*	*98 %*		*11/03/23*		*11/03/23 15:26*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*97 %*		*11/03/23*		*11/03/23 15:26*	
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate (as N)	ND		mg/L	0.011	0.011	1	10/31/23	11/01/23 13:31	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TW-14B

3103124-09 (Nonpotable Water)
Sampled on: 10/31/23 12:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 15:50	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 15:50	LL
Benzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 15:50	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 15:50	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 15:50	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 15:50	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 15:50	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 15:50	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TW-14B

3103124-09 (Nonpotable Water)
Sampled on: 10/31/23 12:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 15:50	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 15:50	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 15:50	LL
Styrene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
Toluene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 15:50	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 15:50	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 15:50	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 15:50	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*	*11/03/23*		*11/03/23 15:50*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*11/03/23*		*11/03/23 15:50*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*97 %*	*11/03/23*		*11/03/23 15:50*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate (as N)	**0.380**		mg/L	0.011	0.011	1	10/31/23	11/01/23 13:50	CRP

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TW-24

3103124-10 (Nonpotable Water)
Sampled on: 10/30/23 16:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 16:15	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 16:15	LL
Benzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 16:15	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 16:15	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 16:15	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 16:15	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 16:15	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 16:15	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
Dichlorodifluoromethane	**1.5**		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
1,1-Dichloroethane	**2.6**		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
Dichlorofluoromethane	**1.2**		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 16:15	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TW-24

3103124-10 (Nonpotable Water)
Sampled on: 10/30/23 16:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 16:15	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 16:15	LL
Styrene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
Tetrachloroethene	**0.6**	J	ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
Toluene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 16:15	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 16:15	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 16:15	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:15	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*		*11/03/23*		*11/03/23 16:15*	
Surrogate: Toluene-d8			*75-120*	*98 %*		*11/03/23*		*11/03/23 16:15*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*		*11/03/23*		*11/03/23 16:15*	
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate (as N)	**1.13**		mg/L	0.011	0.011	1	10/31/23	11/01/23 14:08	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TW-24A

3103124-11 (Nonpotable Water)
Sampled on: 10/31/23 09:40

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 16:39	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 16:39	LL
Benzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 16:39	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 16:39	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 16:39	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 16:39	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 16:39	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 16:39	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TW-24A

3103124-11 (Nonpotable Water)
Sampled on: 10/31/23 09:40

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 16:39	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 16:39	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 16:39	LL
Styrene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
Toluene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 16:39	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 16:39	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 16:39	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 16:39	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*	*11/03/23*		*11/03/23 16:39*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*11/03/23*		*11/03/23 16:39*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*	*11/03/23*		*11/03/23 16:39*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate (as N)	**1.20**		mg/L	0.011	0.011	1	10/31/23	11/01/23 14:26	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TW-25

3103124-12 (Nonpotable Water)
Sampled on: 10/30/23 15:15

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 17:03	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 17:03	LL
Benzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 17:03	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 17:03	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 17:03	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 17:03	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 17:03	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 17:03	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
Dichlorodifluoromethane	**4.9**		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
1,1-Dichloroethane	**2.1**		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
cis-1,2-Dichloroethene	**1.1**		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
Dichlorofluoromethane	**3.2**		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 17:03	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TW-25

3103124-12 (Nonpotable Water)
Sampled on: 10/30/23 15:15

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/03/23	11/03/23 17:03	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 17:03	LL
Styrene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
Tetrachloroethene	**1.5**		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
Toluene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 17:03	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 17:03	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/03/23	11/03/23 17:03	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/03/23	11/03/23 17:03	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*		*11/03/23*		*11/03/23 17:03*	
Surrogate: Toluene-d8			*75-120*	*97 %*		*11/03/23*		*11/03/23 17:03*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*97 %*		*11/03/23*		*11/03/23 17:03*	
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate (as N)	**0.278**		mg/L	0.011	0.011	1	10/31/23	11/01/23 14:45	CRP

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TW-25A

3103124-13 (Nonpotable Water)
Sampled on: 10/30/23 14:40

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/06/23	11/06/23 11:46	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/06/23	11/06/23 11:46	LL
Benzene	**2.5**		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 11:46	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/06/23	11/06/23 11:46	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 11:46	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 11:46	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 11:46	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 11:46	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
1,4-Dichlorobenzene	**1.7**		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
Dichlorodifluoromethane	**12.3**		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
1,1-Dichloroethane	**27.8**		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
1,2-Dichloroethane	**1.8**		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
1,1-Dichloroethene	**0.8**	J	ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
cis-1,2-Dichloroethene	**5.2**		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
Dichlorofluoromethane	**27.2**		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
1,2-Dichloropropane	**1.1**		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/06/23	11/06/23 11:46	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TW-25A

3103124-13 (Nonpotable Water)
Sampled on: 10/30/23 14:40

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
Methyl tert-butyl ether (MTBE)	**4.0**		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/06/23	11/06/23 11:46	LL
Methylene chloride	**26.5**		ug/L	1.0	1.0	1	11/06/23	11/06/23 11:46	LL
Styrene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
Tetrachloroethene	**3.7**		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
Toluene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
Trichloroethene	**4.8**		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
Trichlorofluoromethane (Freon 11)	**1.8**		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 11:46	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 11:46	LL
Vinyl chloride	**1.2**		ug/L	1.0	1.0	1	11/06/23	11/06/23 11:46	LL
o-Xylene	**1.0**	J	ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 11:46	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*	*11/06/23*		*11/06/23 11:46*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*11/06/23*		*11/06/23 11:46*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*97 %*	*11/06/23*		*11/06/23 11:46*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate (as N)	**0.724**	O-08	mg/L	0.011	0.011	1	10/31/23	11/01/23 15:03	CRP

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

DUP-1

3103124-14 (Nonpotable Water)
Sampled on: 10/30/23 00:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/06/23	11/06/23 12:10	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/06/23	11/06/23 12:10	LL
Benzene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 12:10	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/06/23	11/06/23 12:10	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 12:10	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 12:10	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 12:10	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 12:10	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
Dichlorodifluoromethane	**1.9**		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
1,1-Dichloroethane	**3.3**		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
Dichlorofluoromethane	**1.6**		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/06/23	11/06/23 12:10	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

DUP-1

3103124-14 (Nonpotable Water)
Sampled on: 10/30/23 00:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/06/23	11/06/23 12:10	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 12:10	LL
Styrene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
Tetrachloroethene	**0.5**	J	ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
Toluene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 12:10	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 12:10	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 12:10	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:10	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*101 %*		*11/06/23*		*11/06/23 12:10*	
Surrogate: Toluene-d8			*75-120*	*98 %*		*11/06/23*		*11/06/23 12:10*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*		*11/06/23*		*11/06/23 12:10*	
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate (as N)	**1.15**	O-08	mg/L	0.011	0.011	1	10/31/23	11/01/23 15:22	CRP

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Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

DUP-2

3103124-15 (Nonpotable Water)
Sampled on: 10/30/23 00:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/06/23	11/06/23 12:34	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/06/23	11/06/23 12:34	LL
Benzene	**2.5**		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 12:34	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/06/23	11/06/23 12:34	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 12:34	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 12:34	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 12:34	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 12:34	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
1,4-Dichlorobenzene	**1.7**		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
Dichlorodifluoromethane	**12.1**		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
1,1-Dichloroethane	**27.8**		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
1,2-Dichloroethane	**1.6**		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
1,1-Dichloroethene	**0.8**	J	ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
cis-1,2-Dichloroethene	**5.3**		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
Dichlorofluoromethane	**27.7**		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
1,2-Dichloropropane	**1.1**		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/06/23	11/06/23 12:34	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

DUP-2

3103124-15 (Nonpotable Water)
Sampled on: 10/30/23 00:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
Methyl tert-butyl ether (MTBE)	**4.2**		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/06/23	11/06/23 12:34	LL
Methylene chloride	**27.3**		ug/L	1.0	1.0	1	11/06/23	11/06/23 12:34	LL
Styrene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
Tetrachloroethene	**3.4**		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
Toluene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
Trichloroethene	**5.0**		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
Trichlorofluoromethane (Freon 11)	**1.7**		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 12:34	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 12:34	LL
Vinyl chloride	**1.2**		ug/L	1.0	1.0	1	11/06/23	11/06/23 12:34	LL
o-Xylene	**1.1**		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:34	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*	*11/06/23*		*11/06/23 12:34*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*11/06/23*		*11/06/23 12:34*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*	*11/06/23*		*11/06/23 12:34*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate (as N)	**0.727**	O-08	mg/L	0.011	0.011	1	10/31/23	11/01/23 15:40	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TW-10A

3103124-16 (Nonpotable Water)
Sampled on: 10/31/23 15:30

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/06/23	11/06/23 12:59	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/06/23	11/06/23 12:59	LL
Benzene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 12:59	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/06/23	11/06/23 12:59	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 12:59	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 12:59	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 12:59	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 12:59	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL

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Will Brewington, President

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Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TW-10A

3103124-16 (Nonpotable Water)
Sampled on: 10/31/23 15:30

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/06/23	11/06/23 12:59	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/06/23	11/06/23 12:59	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 12:59	LL
Styrene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
Toluene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 12:59	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 12:59	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 12:59	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 12:59	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*102 %*	*11/06/23*		*11/06/23 12:59*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*11/06/23*		*11/06/23 12:59*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*	*11/06/23*		*11/06/23 12:59*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate (as N)	**2.17**		mg/L	0.011	0.011	1	10/31/23	11/01/23 15:59	CRP

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Will Brewington, President

Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TW-20R

3103124-17 (Nonpotable Water)
Sampled on: 10/31/23 14:40

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/06/23	11/06/23 14:15	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/06/23	11/06/23 14:15	LL
Benzene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 14:15	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/06/23	11/06/23 14:15	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 14:15	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 14:15	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 14:15	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 14:15	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

TW-20R

3103124-17 (Nonpotable Water)
Sampled on: 10/31/23 14:40

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/06/23	11/06/23 14:15	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/06/23	11/06/23 14:15	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 14:15	LL
Styrene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
Toluene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 14:15	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 14:15	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/06/23	11/06/23 14:15	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/06/23	11/06/23 14:15	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*103 %*	*11/06/23*		*11/06/23 14:15*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*11/06/23*		*11/06/23 14:15*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*11/06/23*		*11/06/23 14:15*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate (as N)	**1.32**		mg/L	0.011	0.011	1	10/31/23	11/01/23 16:17	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311072 - GCMS-WATER-VOLATILES										
Blank (B311072-BLK1)					Prepared & Analyzed: 11/03/23					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311072 - GCMS-WATER-VOLATILES										
Blank (B311072-BLK1)					Prepared & Analyzed: 11/03/23					
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*51.63*			ug/L	*50.00*		*103*	*70-130*		
Surrogate: Toluene-d8	*48.99*			ug/L	*50.00*		*98*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.09*			ug/L	*50.00*		*98*	*75-120*		

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311072 - GCMS-WATER-VOLATILES										
LCS (B311072-BS1)					Prepared & Analyzed: 11/03/23					
Acetone	12.2		5.0	ug/L	10.00		122	55-150		
Acrylonitrile	4.8	J	5.0	ug/L	5.000		97	50-150		
Benzene	5.0		1.0	ug/L	5.000		100	70-130		
Bromochloromethane	5.3		1.0	ug/L	5.000		105	70-130		
Bromodichloromethane	4.5		1.0	ug/L	5.000		90	70-130		
Bromoform	4.2		1.0	ug/L	5.000		83	70-130		
Bromomethane	8.4		1.0	ug/L	5.000		167	25-150		
2-Butanone (MEK)	10.3		5.0	ug/L	10.00		103	60-140		
Carbon disulfide	5.1		1.0	ug/L	5.000		102	70-130		
Carbon tetrachloride	4.1		1.0	ug/L	5.000		83	70-130		
Chlorobenzene	5.0		1.0	ug/L	5.000		99	70-130		
Chloroethane	4.9		1.0	ug/L	5.000		98	60-150		
Chloroform	4.7		1.0	ug/L	5.000		94	70-130		
Chloromethane	5.5		1.0	ug/L	5.000		110	60-150		
Dibromochloromethane	4.5		1.0	ug/L	5.000		89	70-130		
1,2-Dibromo-3-chloropropane	4.9		1.0	ug/L	5.000		98	70-130		
1,2-Dibromoethane (EDB)	4.6		1.0	ug/L	5.000		92	70-130		
Dibromomethane	4.7		1.0	ug/L	5.000		95	70-130		
1,2-Dichlorobenzene	4.8		1.0	ug/L	5.000		96	70-130		
1,4-Dichlorobenzene	5.2		1.0	ug/L	5.000		103	70-130		
1,1-Dichloroethane	5.0		1.0	ug/L	5.000		99	70-130		
1,2-Dichloroethane	4.7		1.0	ug/L	5.000		94	70-130		
1,1-Dichloroethene	4.5		1.0	ug/L	5.000		90	70-130		
cis-1,2-Dichloroethene	5.0		1.0	ug/L	5.000		99	70-130		
trans-1,2-Dichloroethene	4.7		1.0	ug/L	5.000		94	70-130		
1,2-Dichloropropane	5.0		1.0	ug/L	5.000		99	70-130		
1,3-Dichloropropane	4.8		1.0	ug/L	5.000		95	70-130		
2,2-Dichloropropane	4.6		1.0	ug/L	5.000		92	70-130		
1,1-Dichloropropene	4.8		1.0	ug/L	5.000		96	70-130		
cis-1,3-Dichloropropene	4.6		1.0	ug/L	5.000		91	70-130		
trans-1,3-Dichloropropene	4.4		1.0	ug/L	5.000		88	70-130		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311072 - GCMS-WATER-VOLATILES										
LCS (B311072-BS1)					Prepared & Analyzed: 11/03/23					
Ethylbenzene	5.2		1.0	ug/L	5.000		104	70-130		
2-Hexanone	10.6		5.0	ug/L	10.00		106	70-130		
Methyl tert-butyl ether (MTBE)	4.7		1.0	ug/L	5.000		95	70-130		
4-Methyl-2-pentanone	9.8		5.0	ug/L	10.00		98	70-130		
Methylene chloride	5.1		1.0	ug/L	5.000		101	50-200		
Methyl methacrylate	4.5	J	5.0	ug/L	5.000		89	50-150		
Styrene	4.9		1.0	ug/L	5.000		99	70-130		
1,1,1,2-Tetrachloroethane	4.2		1.0	ug/L	5.000		85	70-130		
1,1,2,2-Tetrachloroethane	5.0		1.0	ug/L	5.000		99	70-130		
Tetrachloroethene	5.0		1.0	ug/L	5.000		99	70-130		
Toluene	4.9		1.0	ug/L	5.000		97	70-130		
1,1,1-Trichloroethane	4.6		1.0	ug/L	5.000		92	70-130		
1,1,2-Trichloroethane	4.8		1.0	ug/L	5.000		96	70-130		
Trichloroethene	4.8		1.0	ug/L	5.000		97	70-130		
Trichlorofluoromethane (Freon 11)	4.6		1.0	ug/L	5.000		92	70-130		
1,2,3-Trichloropropane	4.5		1.0	ug/L	5.000		90	70-130		
Vinyl acetate	4.2		1.0	ug/L	5.000		83	70-130		
Vinyl chloride	5.4		1.0	ug/L	5.000		107	70-130		
o-Xylene	4.9		1.0	ug/L	5.000		98	70-130		
m- & p-Xylenes	10.5		1.0	ug/L	10.00		105	70-130		
Surrogate: 1,2-Dichloroethane-d4	*48.74*			ug/L	*50.00*		*97*	*70-130*		
Surrogate: Toluene-d8	*49.14*			ug/L	*50.00*		*98*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.04*			ug/L	*50.00*		*98*	*75-120*		
Duplicate (B311072-DUP1)			**Source: 3103124-05**		Prepared & Analyzed: 11/03/23					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20

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Project Manager: Steve Brown

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311072 - GCMS-WATER-VOLATILES										
Duplicate (B311072-DUP1)		**Source: 3103124-05**		Prepared & Analyzed: 11/03/23						
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	6.7		1.0	ug/L		6.3			6	20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	4.5		1.0	ug/L		4.5			1	20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20

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Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311072 - GCMS-WATER-VOLATILES										
Duplicate (B311072-DUP1)		**Source: 3103124-05**		Prepared & Analyzed: 11/03/23						
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	1.9		1.0	ug/L		1.7			8	20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	1.2		1.0	ug/L		1.2			3	20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*49.75*			ug/L	*50.00*		*100*	*70-130*		
Surrogate: Toluene-d8	*48.95*			ug/L	*50.00*		*98*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.32*			ug/L	*50.00*		*97*	*75-120*		
Matrix Spike (B311072-MS1)		**Source: 3103124-09**		Prepared & Analyzed: 11/03/23						
Acetone	14.5		5.0	ug/L	10.00	ND	145	60-120		
Acrylonitrile	10.8		5.0	ug/L	10.00	ND	108	0-200		
Benzene	10.8		1.0	ug/L	10.00	ND	108	60-120		
Bromochloromethane	10.3		1.0	ug/L	10.00	ND	103	60-120		
Bromodichloromethane	9.6		1.0	ug/L	10.00	ND	96	60-120		
Bromoform	8.4		1.0	ug/L	10.00	ND	84	60-120		
Bromomethane	14.8		1.0	ug/L	10.00	ND	148	60-120		
2-Butanone (MEK)	11.7		5.0	ug/L	10.00	ND	117	60-120		

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Project Manager: Steve Brown

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311072 - GCMS-WATER-VOLATILES										
Matrix Spike (B311072-MS1)		**Source: 3103124-09**		Prepared & Analyzed: 11/03/23						
Carbon disulfide	10.7		1.0	ug/L	10.00	ND	107	60-120		
Carbon tetrachloride	9.2		1.0	ug/L	10.00	ND	92	60-120		
Chlorobenzene	10.5		1.0	ug/L	10.00	ND	105	60-120		
Chloroethane	11.2		1.0	ug/L	10.00	ND	112	60-120		
Chloroform	10.3		1.0	ug/L	10.00	ND	103	60-120		
Chloromethane	11.1		1.0	ug/L	10.00	ND	111	60-120		
Dibromochloromethane	8.7		1.0	ug/L	10.00	ND	87	60-120		
1,2-Dibromo-3-chloropropane	9.4		1.0	ug/L	10.00	ND	94	60-120		
1,2-Dibromoethane (EDB)	9.3		1.0	ug/L	10.00	ND	93	60-120		
Dibromomethane	9.3		1.0	ug/L	10.00	ND	93	60-120		
1,2-Dichlorobenzene	10.0		1.0	ug/L	10.00	ND	100	60-120		
1,4-Dichlorobenzene	10.5		1.0	ug/L	10.00	ND	105	60-120		
1,1-Dichloroethane	10.5		1.0	ug/L	10.00	ND	105	60-120		
1,2-Dichloroethane	9.7		1.0	ug/L	10.00	ND	97	60-120		
1,1-Dichloroethene	10.6		1.0	ug/L	10.00	ND	106	60-120		
cis-1,2-Dichloroethene	10.2		1.0	ug/L	10.00	ND	102	60-120		
trans-1,2-Dichloroethene	10.4		1.0	ug/L	10.00	ND	104	60-120		
1,2-Dichloropropane	10.9		1.0	ug/L	10.00	ND	109	60-120		
1,3-Dichloropropane	10.2		1.0	ug/L	10.00	ND	102	60-120		
2,2-Dichloropropane	9.2		1.0	ug/L	10.00	ND	92	60-120		
1,1-Dichloropropene	10.4		1.0	ug/L	10.00	ND	104	60-120		
cis-1,3-Dichloropropene	9.0		1.0	ug/L	10.00	ND	90	60-120		
trans-1,3-Dichloropropene	8.7		1.0	ug/L	10.00	ND	87	60-120		
Ethylbenzene	11.0		1.0	ug/L	10.00	ND	110	60-120		
2-Hexanone	9.9		5.0	ug/L	10.00	ND	99	60-120		
Methyl tert-butyl ether (MTBE)	9.7		1.0	ug/L	10.00	ND	97	60-120		
4-Methyl-2-pentanone	9.5		5.0	ug/L	10.00	ND	95	60-120		
Methylene chloride	10.7		1.0	ug/L	10.00	ND	107	60-120		
Methyl methacrylate	9.8		5.0	ug/L	10.00	ND	98	60-120		
Styrene	10.3		1.0	ug/L	10.00	ND	103	60-120		
1,1,1,2-Tetrachloroethane	9.0		1.0	ug/L	10.00	ND	90	60-120		

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Project Manager: Steve Brown

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311072 - GCMS-WATER-VOLATILES										
Matrix Spike (B311072-MS1)		**Source: 3103124-09**		Prepared & Analyzed: 11/03/23						
1,1,2,2-Tetrachloroethane	9.6		1.0	ug/L	10.00	ND	96	60-120		
Tetrachloroethene	10.8		1.0	ug/L	10.00	ND	108	60-120		
Toluene	10.4		1.0	ug/L	10.00	ND	104	60-120		
1,1,1-Trichloroethane	9.8		1.0	ug/L	10.00	ND	98	60-120		
1,1,2-Trichloroethane	9.2		1.0	ug/L	10.00	ND	92	60-120		
Trichloroethene	10.7		1.0	ug/L	10.00	ND	107	60-120		
Trichlorofluoromethane (Freon 11)	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,2,3-Trichloropropane	9.1		1.0	ug/L	10.00	ND	91	60-120		
Vinyl acetate	10.6		1.0	ug/L	10.00	ND	106	60-120		
Vinyl chloride	12.1		1.0	ug/L	10.00	ND	121	60-120		
o-Xylene	10.4		1.0	ug/L	10.00	ND	104	60-120		
m- & p-Xylenes	22.0		1.0	ug/L	20.00	ND	110	60-120		
Surrogate: 1,2-Dichloroethane-d4	*48.40*			ug/L	*50.00*		*97*	*70-130*		
Surrogate: Toluene-d8	*49.13*			ug/L	*50.00*		*98*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.15*			ug/L	*50.00*		*96*	*75-120*		
Batch B311111 - GCMS-WATER-VOLATILES										
Blank (B311111-BLK1)				Prepared & Analyzed: 11/06/23						
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311111 - GCMS-WATER-VOLATILES										
Blank (B311111-BLK1)					Prepared & Analyzed: 11/06/23					
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311111 - GCMS-WATER-VOLATILES										
Blank (B311111-BLK1)					Prepared & Analyzed: 11/06/23					
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*51.65*			ug/L	*50.00*		*103*	*70-130*		
Surrogate: Toluene-d8	*48.64*			ug/L	*50.00*		*97*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.74*			ug/L	*50.00*		*97*	*75-120*		
LCS (B311111-BS1)					Prepared & Analyzed: 11/06/23					
Acetone	13.3		5.0	ug/L	10.00		133	55-150		
Acrylonitrile	5.1		5.0	ug/L	5.000		102	50-150		
Benzene	5.2		1.0	ug/L	5.000		104	70-130		
Bromochloromethane	5.2		1.0	ug/L	5.000		104	70-130		
Bromodichloromethane	4.7		1.0	ug/L	5.000		94	70-130		
Bromoform	4.5		1.0	ug/L	5.000		89	70-130		
Bromomethane	7.8		1.0	ug/L	5.000		155	25-150		
2-Butanone (MEK)	12.6		5.0	ug/L	10.00		126	60-140		
Carbon disulfide	5.4		1.0	ug/L	5.000		107	70-130		
Carbon tetrachloride	4.5		1.0	ug/L	5.000		91	70-130		
Chlorobenzene	5.1		1.0	ug/L	5.000		102	70-130		
Chloroethane	5.2		1.0	ug/L	5.000		104	60-150		
Chloroform	4.9		1.0	ug/L	5.000		99	70-130		
Chloromethane	5.4		1.0	ug/L	5.000		107	60-150		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311111 - GCMS-WATER-VOLATILES										
LCS (B311111-BS1)					Prepared & Analyzed: 11/06/23					
Dibromochloromethane	4.2		1.0	ug/L	5.000		84	70-130		
1,2-Dibromo-3-chloropropane	4.9		1.0	ug/L	5.000		98	70-130		
1,2-Dibromoethane (EDB)	4.6		1.0	ug/L	5.000		92	70-130		
Dibromomethane	4.7		1.0	ug/L	5.000		94	70-130		
1,2-Dichlorobenzene	5.1		1.0	ug/L	5.000		102	70-130		
1,4-Dichlorobenzene	5.2		1.0	ug/L	5.000		104	70-130		
1,1-Dichloroethane	5.0		1.0	ug/L	5.000		101	70-130		
1,2-Dichloroethane	4.9		1.0	ug/L	5.000		99	70-130		
1,1-Dichloroethene	4.8		1.0	ug/L	5.000		96	70-130		
cis-1,2-Dichloroethene	4.9		1.0	ug/L	5.000		97	70-130		
trans-1,2-Dichloroethene	5.0		1.0	ug/L	5.000		99	70-130		
1,2-Dichloropropane	5.0		1.0	ug/L	5.000		100	70-130		
1,3-Dichloropropane	4.9		1.0	ug/L	5.000		97	70-130		
2,2-Dichloropropane	4.8		1.0	ug/L	5.000		96	70-130		
1,1-Dichloropropene	4.7		1.0	ug/L	5.000		94	70-130		
cis-1,3-Dichloropropene	4.4		1.0	ug/L	5.000		88	70-130		
trans-1,3-Dichloropropene	4.6		1.0	ug/L	5.000		93	70-130		
Ethylbenzene	5.3		1.0	ug/L	5.000		106	70-130		
2-Hexanone	10.7		5.0	ug/L	10.00		107	70-130		
Methyl tert-butyl ether (MTBE)	4.8		1.0	ug/L	5.000		97	70-130		
4-Methyl-2-pentanone	10.4		5.0	ug/L	10.00		104	70-130		
Methylene chloride	5.6		1.0	ug/L	5.000		113	50-200		
Methyl methacrylate	4.8	J	5.0	ug/L	5.000		96	50-150		
Styrene	5.0		1.0	ug/L	5.000		101	70-130		
1,1,1,2-Tetrachloroethane	4.4		1.0	ug/L	5.000		87	70-130		
1,1,2,2-Tetrachloroethane	4.8		1.0	ug/L	5.000		96	70-130		
Tetrachloroethene	5.1		1.0	ug/L	5.000		101	70-130		
Toluene	4.9		1.0	ug/L	5.000		97	70-130		
1,1,1-Trichloroethane	4.8		1.0	ug/L	5.000		96	70-130		
1,1,2-Trichloroethane	4.9		1.0	ug/L	5.000		98	70-130		
Trichloroethene	4.9		1.0	ug/L	5.000		98	70-130		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/07/23 11:20

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311111 - GCMS-WATER-VOLATILES										
LCS (B311111-BS1)					Prepared & Analyzed: 11/06/23					
Trichlorofluoromethane (Freon 11)	4.9		1.0	ug/L	5.000		98	70-130		
1,2,3-Trichloropropane	4.6		1.0	ug/L	5.000		91	70-130		
Vinyl acetate	4.1		1.0	ug/L	5.000		82	70-130		
Vinyl chloride	5.4		1.0	ug/L	5.000		109	70-130		
o-Xylene	5.0		1.0	ug/L	5.000		100	70-130		
m- & p-Xylenes	10.6		1.0	ug/L	10.00		106	70-130		
Surrogate: 1,2-Dichloroethane-d4	*48.60*			ug/L	*50.00*		*97*	*70-130*		
Surrogate: Toluene-d8	*48.91*			ug/L	*50.00*		*98*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.87*			ug/L	*50.00*		*98*	*75-120*		
Duplicate (B311111-DUP1)		**Source: 3103124-13**			Prepared & Analyzed: 11/06/23					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	2.5		1.0	ug/L		2.5			2	20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311111 - GCMS-WATER-VOLATILES										
Duplicate (B311111-DUP1)		**Source: 3103124-13**		Prepared & Analyzed: 11/06/23						
1,4-Dichlorobenzene	1.7		1.0	ug/L		1.7			2	20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	27.9		1.0	ug/L		27.8			0.3	20
1,2-Dichloroethane	1.7		1.0	ug/L		1.8			3	20
1,1-Dichloroethene	0.8	J	1.0	ug/L		0.8			1	20
cis-1,2-Dichloroethene	5.4		1.0	ug/L		5.2			4	20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	1.1		1.0	ug/L		1.1			4	20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	4.1		1.0	ug/L		4.0			4	20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	27.4		1.0	ug/L		26.5			3	20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	3.3		1.0	ug/L		3.7			12	20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	5.0		1.0	ug/L		4.8			3	20
Trichlorofluoromethane (Freon 11)	1.9		1.0	ug/L		1.8			3	20

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311111 - GCMS-WATER-VOLATILES										
Duplicate (B311111-DUP1)		**Source: 3103124-13**		Prepared & Analyzed: 11/06/23						
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	1.1		1.0	ug/L		1.2			2	20
o-Xylene	1.0		1.0	ug/L		1.0			3	20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*51.40*			ug/L	*50.00*		*103*	*70-130*		
Surrogate: Toluene-d8	*48.44*			ug/L	*50.00*		*97*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*47.78*			ug/L	*50.00*		*96*	*75-120*		
Matrix Spike (B311111-MS1)		**Source: 3110235-02**		Prepared & Analyzed: 11/06/23						
Acetone	14.1		5.0	ug/L	10.00	2.8	113	60-120		
Acrylonitrile	11.0		5.0	ug/L	10.00	ND	110	0-200		
Benzene	11.0		1.0	ug/L	10.00	ND	110	60-120		
Bromochloromethane	11.1		1.0	ug/L	10.00	ND	111	60-120		
Bromodichloromethane	10.1		1.0	ug/L	10.00	ND	101	60-120		
Bromoform	9.3		1.0	ug/L	10.00	ND	93	60-120		
Bromomethane	14.8		1.0	ug/L	10.00	ND	148	60-120		
2-Butanone (MEK)	11.6		5.0	ug/L	10.00	ND	116	60-120		
Carbon disulfide	11.0		1.0	ug/L	10.00	ND	110	60-120		
Carbon tetrachloride	9.5		1.0	ug/L	10.00	ND	95	60-120		
Chlorobenzene	10.7		1.0	ug/L	10.00	ND	107	60-120		
Chloroethane	11.4		1.0	ug/L	10.00	ND	114	60-120		
Chloroform	10.8		1.0	ug/L	10.00	ND	108	60-120		
Chloromethane	11.8		1.0	ug/L	10.00	ND	118	60-120		
Dibromochloromethane	9.6		1.0	ug/L	10.00	ND	96	60-120		
1,2-Dibromo-3-chloropropane	9.3		1.0	ug/L	10.00	ND	93	60-120		
1,2-Dibromoethane (EDB)	9.8		1.0	ug/L	10.00	ND	98	60-120		
Dibromomethane	9.8		1.0	ug/L	10.00	ND	98	60-120		
1,2-Dichlorobenzene	10.3		1.0	ug/L	10.00	ND	103	60-120		
1,4-Dichlorobenzene	10.9		1.0	ug/L	10.00	ND	109	60-120		
1,1-Dichloroethane	11.1		1.0	ug/L	10.00	ND	111	60-120		
1,2-Dichloroethane	10.5		1.0	ug/L	10.00	ND	105	60-120		

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Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311111 - GCMS-WATER-VOLATILES										
Matrix Spike (B311111-MS1)		**Source: 3110235-02**		Prepared & Analyzed: 11/06/23						
1,1-Dichloroethene	10.8		1.0	ug/L	10.00	ND	108	60-120		
cis-1,2-Dichloroethene	10.7		1.0	ug/L	10.00	ND	107	60-120		
trans-1,2-Dichloroethene	10.5		1.0	ug/L	10.00	ND	105	60-120		
1,2-Dichloropropane	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,3-Dichloropropane	10.2		1.0	ug/L	10.00	ND	102	60-120		
2,2-Dichloropropane	9.6		1.0	ug/L	10.00	ND	96	60-120		
1,1-Dichloropropene	10.8		1.0	ug/L	10.00	ND	108	60-120		
cis-1,3-Dichloropropene	9.5		1.0	ug/L	10.00	ND	95	60-120		
trans-1,3-Dichloropropene	9.4		1.0	ug/L	10.00	ND	94	60-120		
Ethylbenzene	11.1		1.0	ug/L	10.00	ND	111	60-120		
2-Hexanone	10.4		5.0	ug/L	10.00	ND	104	60-120		
Methyl tert-butyl ether (MTBE)	10.0		1.0	ug/L	10.00	ND	100	60-120		
4-Methyl-2-pentanone	10.1		5.0	ug/L	10.00	ND	101	60-120		
Methylene chloride	11.0		1.0	ug/L	10.00	ND	110	60-120		
Methyl methacrylate	10.0		5.0	ug/L	10.00	ND	100	60-120		
Styrene	11.0		1.0	ug/L	10.00	ND	110	60-120		
1,1,1,2-Tetrachloroethane	9.6		1.0	ug/L	10.00	ND	96	60-120		
1,1,2,2-Tetrachloroethane	10.0		1.0	ug/L	10.00	ND	100	60-120		
Tetrachloroethene	10.7		1.0	ug/L	10.00	ND	107	60-120		
Toluene	10.6		1.0	ug/L	10.00	ND	106	60-120		
1,1,1-Trichloroethane	9.7		1.0	ug/L	10.00	ND	97	60-120		
1,1,2-Trichloroethane	10.0		1.0	ug/L	10.00	ND	100	60-120		
Trichloroethene	10.3		1.0	ug/L	10.00	ND	103	60-120		
Trichlorofluoromethane (Freon 11)	11.1		1.0	ug/L	10.00	ND	111	60-120		
1,2,3-Trichloropropane	9.5		1.0	ug/L	10.00	ND	95	60-120		
Vinyl acetate	12.5		1.0	ug/L	10.00	ND	125	60-120		
Vinyl chloride	12.4		1.0	ug/L	10.00	ND	124	60-120		
o-Xylene	10.6		1.0	ug/L	10.00	ND	106	60-120		
m- & p-Xylenes	22.1		1.0	ug/L	20.00	ND	110	60-120		
Surrogate: 1,2-Dichloroethane-d4	*50.14*			ug/L	*50.00*		*100*	*70-130*		
Surrogate: Toluene-d8	*49.00*			ug/L	*50.00*		*98*	*75-120*		

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Project Manager: Steve Brown

Reported:
11/07/23 11:20

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311111 - GCMS-WATER-VOLATILES										
Matrix Spike (B311111-MS1)		**Source: 3110235-02**		Prepared & Analyzed: 11/06/23						
Surrogate: 4-Bromofluorobenzene	*48.82*			ug/L	*50.00*		*98*	*75-120*		

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Project: MILLERSVILLE LANDFILL

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Project Manager: Steve Brown

Reported:
11/07/23 11:20

Anions by EPA 300.0 - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B310667 - 300.0 Anions Prep										
Blank (B310667-BLK1)					Prepared: 10/31/23 Analyzed: 11/01/23					
Nitrate	ND		0.050	mg/L						
Nitrate (as N)	ND		0.011	mg/L						
Blank (B310667-BLK2)					Prepared: 10/31/23 Analyzed: 11/01/23					
Nitrate	ND		0.050	mg/L						
Nitrate (as N)	ND		0.011	mg/L						
LCS (B310667-BS1)					Prepared & Analyzed: 10/31/23					
Nitrate	4.96		0.055	mg/L	5.000		99	90-110		
Nitrate (as N)	1.12		0.012	mg/L				90-110		
LCS (B310667-BS2)					Prepared: 10/31/23 Analyzed: 11/01/23					
Nitrate	4.86		0.055	mg/L	5.000		97	90-110		
Nitrate (as N)	1.10		0.012	mg/L				90-110		
Duplicate (B310667-DUP1)		**Source: 3103003-01**			Prepared & Analyzed: 10/31/23					
Nitrate	3.35		0.050	mg/L		3.42			2	200
Nitrate (as N)	0.756		0.011	mg/L		0.772			2	200
Duplicate (B310667-DUP2)		**Source: 3103124-02**			Prepared: 10/31/23 Analyzed: 11/01/23					
Nitrate	ND		0.050	mg/L		ND				200
Nitrate (as N)	ND		0.011	mg/L		ND				200
Matrix Spike (B310667-MS1)		**Source: 3103003-01**			Prepared & Analyzed: 10/31/23					
Nitrate	7.18	QM-07	0.055	mg/L	5.000	3.42	75	80-120		
Nitrate (as N)	1.62		0.012	mg/L		0.772		80-120		
Matrix Spike (B310667-MS2)		**Source: 3103124-02**			Prepared: 10/31/23 Analyzed: 11/01/23					
Nitrate	4.93		0.055	mg/L	5.000	ND	99	80-120		
Nitrate (as N)	1.11		0.012	mg/L		ND		80-120		

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Project Manager: Steve Brown

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11/07/23 11:20

Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
O-08	The original extraction of this sample yielded QC recoveries outside acceptance criteria. It was reextracted after the recommended maximum hold time.
J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MSS
Project	MLF- FALL 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260 (1)		NITRATE							3103	124	
1	TRIP BLANK	2	10.31.23	—	–		DA	✓									3103	124	-01
2	TW-5	4	10.30.23	1350	✓		GW	↓		✓									-02
3	TW-5A	↓	↓	1310	↓		↓	↓		↓									-03
4	TW-5B		↓	1230															-04
5	TW-6		10.31.23	1100															-05
6	TW-6B		↓	1020															-06
7	TW-14			1315															-07
8	TW-14A			1240															-08
9	TW-14B		↓	1200															-09
10	TW-24		10.30.23	1600															-10
11	TW-24A		10.31.23	940															-11
12	TW-25	↓	10.30.23	1515	↓		↓	↓		↓									-12

	Signature	Date	Time	Comments
Relinquished by	[signature]	10.31.23	1620	(1) APPENDIX I LIST OF 47 VOCs, MTBE, DCDFM
Received by		10.31.23	1620	+ DCFM
Relinquished by				
Received by				
Relinquished by				STANDARD REPORT
Received by	[signature]	10/31/23	1615	

Cooler Temp on Arrival: 4.3 Deg. C

Rev. Aug. 2018

T-41

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MSS
Project	MLF- FALL 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260 ①	NITRATE									
1	TW-25A	4	10.30.23	1440	✓		GW	✓	✓							3103124		-13
2	Dup-1	↓	↓	—	✓		QA	↓	↓									-14
3	Dup-2	↓	↓	—	✓		QA	↓	↓									-15
4	TW-10A	↓	10.31.23	1530	✓		GW	↓	↓									-16
5	TW-20R	↓	10.31.23	1440	✓		GW	↓	↓									-17
6																		
7																		
8																		
9																		
10																		
11																		
12																		

	Signature	Date	Time	Comments
Relinquished by	[signature]	10.31.23	1620	① APPENDIX I LIST of 47 VOCs, MTBE, DCDFM +
Received by		10.31.23	1620	DCFM
Relinquished by				
Received by				
Relinquished by				STANDARD REPORT
Received by	[signature]	10/31/23	1615	

Cooler Temp on Arrival: 4.3 Deg. C

Rev. Aug. 2018

T-41

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

13 November 2023

Steve Brown
Environmental Monitoring and Assessment
207 East Sixth Street
Lititz, PA 17543
RE: MILLERSVILLE LANDFILL

Enclosed are the results of analyses for samples received by the laboratory on 11/02/23 16:00.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Rabecka Koons
Quality Assurance Officer

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TRIP BLANK		3110220-01	Nonpotable Water	11/02/23 00:00	11/02/23 16:00
TW-7		3110220-02	Nonpotable Water	11/01/23 12:50	11/02/23 16:00
TW-7A		3110220-03	Nonpotable Water	11/01/23 12:15	11/02/23 16:00
TW-8		3110220-04	Nonpotable Water	11/01/23 13:40	11/02/23 16:00
TW-8A		3110220-05	Nonpotable Water	11/01/23 14:15	11/02/23 16:00
TW-9		3110220-06	Nonpotable Water	11/01/23 16:00	11/02/23 16:00
TW-9B		3110220-07	Nonpotable Water	11/01/23 14:50	11/02/23 16:00
TW-9C		3110220-08	Nonpotable Water	11/01/23 15:25	11/02/23 16:00
TW-15		3110220-09	Nonpotable Water	11/02/23 09:20	11/02/23 16:00
TW-15B		3110220-10	Nonpotable Water	11/02/23 09:55	11/02/23 16:00
TW-16		3110220-11	Nonpotable Water	11/02/23 11:35	11/02/23 16:00
TW-16A		3110220-12	Nonpotable Water	11/02/23 11:00	11/02/23 16:00
TW-17		3110220-13	Nonpotable Water	11/02/23 12:30	11/02/23 16:00
TW-17A		3110220-14	Nonpotable Water	11/02/23 13:10	11/02/23 16:00
TW-19		3110220-15	Nonpotable Water	11/02/23 14:10	11/02/23 16:00
TW-21		3110220-16	Nonpotable Water	11/02/23 14:50	11/02/23 16:00
TW-23R		3110220-17	Nonpotable Water	11/01/23 11:30	11/02/23 16:00

Rabecka Koons

Rabecka Koons, Quality Assurance Officer

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Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TRIP BLANK

3110220-01 (Nonpotable Water)
Sampled on: 11/02/23 00:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 12:16	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 12:16	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 12:16	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 12:16	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 12:16	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 12:16	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 12:16	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 12:16	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL

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Rabecka Koons, Quality Assurance Officer

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TRIP BLANK

3110220-01 (Nonpotable Water)
Sampled on: 11/02/23 00:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 12:16	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 12:16	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 12:16	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 12:16	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 12:16	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 12:16	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:16	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*102 %*	*11/10/23*		*11/10/23 12:16*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*11/10/23*		*11/10/23 12:16*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*	*11/10/23*		*11/10/23 12:16*		

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Rabecka Koons, Quality Assurance Officer

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Baltimore MD 21227
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-7

3110220-02 (Nonpotable Water)
Sampled on: 11/01/23 12:50

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 12:40	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 12:40	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 12:40	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 12:40	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 12:40	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 12:40	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 12:40	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 12:40	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL

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Rabecka Koons, Quality Assurance Officer

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-7

3110220-02 (Nonpotable Water)
Sampled on: 11/01/23 12:50

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 12:40	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 12:40	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 12:40	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 12:40	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 12:40	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 12:40	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 12:40	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*102 %*	*11/10/23*		*11/10/23 12:40*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*11/10/23*		*11/10/23 12:40*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*95 %*	*11/10/23*		*11/10/23 12:40*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	ND	R-01	mg/L	0.500	0.500	10	11/03/23	11/03/23 16:23	CRP
Nitrate (as N)	ND	R-01	mg/L	0.110	0.110	10	11/03/23	11/03/23 16:23	CRP

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Rabecka Koons, Quality Assurance Officer

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Baltimore MD 21227
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-7A

3110220-03 (Nonpotable Water)
Sampled on: 11/01/23 12:15

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 13:04	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 13:04	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 13:04	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 13:04	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 13:04	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 13:04	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 13:04	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 13:04	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL

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Rabecka Koons, Quality Assurance Officer

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-7A

3110220-03 (Nonpotable Water)
Sampled on: 11/01/23 12:15

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 13:04	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 13:04	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 13:04	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 13:04	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 13:04	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 13:04	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:04	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*104 %*	*11/10/23*		*11/10/23 13:04*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*11/10/23*		*11/10/23 13:04*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*95 %*	*11/10/23*		*11/10/23 13:04*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	**0.681**	O-04, R-01	mg/L	0.500	0.500	10	11/03/23	11/03/23 16:41	CRP
Nitrate (as N)	**0.154**	O-04, R-01	mg/L	0.110	0.110	10	11/03/23	11/03/23 16:41	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-8

3110220-04 (Nonpotable Water)
Sampled on: 11/01/23 13:40

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 13:29	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 13:29	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 13:29	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 13:29	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 13:29	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 13:29	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 13:29	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 13:29	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-8

3110220-04 (Nonpotable Water)
Sampled on: 11/01/23 13:40

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 13:29	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 13:29	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 13:29	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 13:29	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 13:29	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 13:29	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:29	LL
Surrogate: 1,2-Dichloroethane-d4		*70-130*		*102 %*	*11/10/23*		*11/10/23 13:29*		
Surrogate: Toluene-d8		*75-120*		*98 %*	*11/10/23*		*11/10/23 13:29*		
Surrogate: 4-Bromofluorobenzene		*75-120*		*95 %*	*11/10/23*		*11/10/23 13:29*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	ND	O-04, R-01	mg/L	0.500	0.500	10	11/03/23	11/03/23 17:00	CRP
Nitrate (as N)	ND	O-04, R-01	mg/L	0.110	0.110	10	11/03/23	11/03/23 17:00	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-8A

3110220-05 (Nonpotable Water)
Sampled on: 11/01/23 14:15

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 13:53	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 13:53	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 13:53	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 13:53	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 13:53	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 13:53	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 13:53	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 13:53	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-8A

3110220-05 (Nonpotable Water)
Sampled on: 11/01/23 14:15

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 13:53	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 13:53	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 13:53	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 13:53	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 13:53	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 13:53	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 13:53	LL
Surrogate: 1,2-Dichloroethane-d4		*70-130*		*104 %*	*11/10/23*		*11/10/23 13:53*		
Surrogate: Toluene-d8		*75-120*		*97 %*	*11/10/23*		*11/10/23 13:53*		
Surrogate: 4-Bromofluorobenzene		*75-120*		*97 %*	*11/10/23*		*11/10/23 13:53*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	**17.1**	O-04, R-01	mg/L	0.500	0.500	10	11/03/23	11/03/23 17:18	CRP
Nitrate (as N)	**3.86**	O-04, R-01	mg/L	0.110	0.110	10	11/03/23	11/03/23 17:18	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-9

3110220-06 (Nonpotable Water)
Sampled on: 11/01/23 16:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 14:17	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 14:17	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 14:17	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 14:17	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 14:17	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 14:17	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 14:17	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 14:17	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-9

3110220-06 (Nonpotable Water)
Sampled on: 11/01/23 16:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 14:17	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 14:17	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 14:17	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 14:17	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 14:17	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 14:17	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:17	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*105 %*	*11/10/23*		*11/10/23 14:17*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*11/10/23*		*11/10/23 14:17*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*95 %*	*11/10/23*		*11/10/23 14:17*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	ND	O-04, R-01	mg/L	0.500	0.500	10	11/03/23	11/03/23 17:37	CRP
Nitrate (as N)	ND	O-04, R-01	mg/L	0.110	0.110	10	11/03/23	11/03/23 17:37	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-9B

3110220-07 (Nonpotable Water)
Sampled on: 11/01/23 14:50

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 14:42	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 14:42	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 14:42	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 14:42	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 14:42	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 14:42	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 14:42	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 14:42	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-9B

3110220-07 (Nonpotable Water)
Sampled on: 11/01/23 14:50

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 14:42	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 14:42	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 14:42	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 14:42	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 14:42	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 14:42	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 14:42	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*103 %*	*11/10/23*		*11/10/23 14:42*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*11/10/23*		*11/10/23 14:42*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*11/10/23*		*11/10/23 14:42*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	**7.45**	O-04, R-01	mg/L	0.500	0.500	10	11/03/23	11/03/23 17:55	CRP
Nitrate (as N)	**1.68**	O-04, R-01	mg/L	0.110	0.110	10	11/03/23	11/03/23 17:55	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-9C

3110220-08 (Nonpotable Water)
Sampled on: 11/01/23 15:25

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 15:06	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 15:06	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 15:06	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 15:06	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 15:06	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 15:06	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 15:06	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 15:06	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL

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Rabecka Koons, Quality Assurance Officer

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-9C

3110220-08 (Nonpotable Water)
Sampled on: 11/01/23 15:25

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 15:06	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 15:06	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 15:06	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 15:06	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 15:06	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 15:06	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:06	LL
Surrogate: 1,2-Dichloroethane-d4		*70-130*		*105 %*	*11/10/23*		*11/10/23 15:06*		
Surrogate: Toluene-d8		*75-120*		*97 %*	*11/10/23*		*11/10/23 15:06*		
Surrogate: 4-Bromofluorobenzene		*75-120*		*94 %*	*11/10/23*		*11/10/23 15:06*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	**9.22**	O-04, R-01	mg/L	0.500	0.500	10	11/03/23	11/03/23 18:14	CRP
Nitrate (as N)	**2.08**	O-04, R-01	mg/L	0.110	0.110	10	11/03/23	11/03/23 18:14	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-15

3110220-09 (Nonpotable Water)
Sampled on: 11/02/23 09:20

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 15:30	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 15:30	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 15:30	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 15:30	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 15:30	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 15:30	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 15:30	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 15:30	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
Dichlorodifluoromethane	**1.0**	J	ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
1,1-Dichloroethane	**0.5**	J	ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
Dichlorofluoromethane	**0.5**	J	ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 15:30	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-15

3110220-09 (Nonpotable Water)
Sampled on: 11/02/23 09:20

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 15:30	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 15:30	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 15:30	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 15:30	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 15:30	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:30	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*102 %*	*11/10/23*		*11/10/23 15:30*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*11/10/23*		*11/10/23 15:30*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*	*11/10/23*		*11/10/23 15:30*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	ND	R-01	mg/L	0.500	0.500	10	11/03/23	11/03/23 18:32	CRP
Nitrate (as N)	ND	R-01	mg/L	0.110	0.110	10	11/03/23	11/03/23 18:32	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-15B

3110220-10 (Nonpotable Water)
Sampled on: 11/02/23 09:55

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 15:55	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 15:55	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 15:55	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 15:55	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 15:55	LL
Chloroform	**0.9**	J	ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 15:55	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 15:55	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 15:55	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
Dichlorodifluoromethane	**1.2**		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
1,1-Dichloroethane	**0.5**	J	ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 15:55	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-15B

3110220-10 (Nonpotable Water)
Sampled on: 11/02/23 09:55

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 15:55	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 15:55	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
Tetrachloroethene	**0.7**	J	ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 15:55	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 15:55	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 15:55	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 15:55	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*102 %*		*11/10/23*		*11/10/23 15:55*	
Surrogate: Toluene-d8			*75-120*	*98 %*		*11/10/23*		*11/10/23 15:55*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*94 %*		*11/10/23*		*11/10/23 15:55*	
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	**3.12**	R-01	mg/L	0.500	0.500	10	11/03/23	11/03/23 18:50	CRP
Nitrate (as N)	**0.706**	R-01	mg/L	0.110	0.110	10	11/03/23	11/03/23 18:50	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-16

3110220-11 (Nonpotable Water)
Sampled on: 11/02/23 11:35

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 16:19	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 16:19	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 16:19	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 16:19	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 16:19	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 16:19	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 16:19	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 16:19	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-16

3110220-11 (Nonpotable Water)
Sampled on: 11/02/23 11:35

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 16:19	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 16:19	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 16:19	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 16:19	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 16:19	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 16:19	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:19	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*	*11/10/23*		*11/10/23 16:19*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*11/10/23*		*11/10/23 16:19*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*95 %*	*11/10/23*		*11/10/23 16:19*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	ND	R-01	mg/L	0.500	0.500	10	11/03/23	11/03/23 20:04	CRP
Nitrate (as N)	ND	R-01	mg/L	0.110	0.110	10	11/03/23	11/03/23 20:04	CRP

Rabecka Koons

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-16A

3110220-12 (Nonpotable Water)
Sampled on: 11/02/23 11:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 16:43	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 16:43	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 16:43	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 16:43	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 16:43	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 16:43	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 16:43	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 16:43	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-16A

3110220-12 (Nonpotable Water)
Sampled on: 11/02/23 11:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 16:43	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 16:43	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 16:43	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 16:43	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 16:43	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 16:43	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 16:43	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*104 %*	*11/10/23*		*11/10/23 16:43*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*11/10/23*		*11/10/23 16:43*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*	*11/10/23*		*11/10/23 16:43*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	ND	R-01	mg/L	0.500	0.500	10	11/03/23	11/03/23 20:23	CRP
Nitrate (as N)	ND	R-01	mg/L	0.110	0.110	10	11/03/23	11/03/23 20:23	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-17

3110220-13 (Nonpotable Water)
Sampled on: 11/02/23 12:30

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 17:08	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 17:08	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 17:08	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 17:08	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 17:08	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 17:08	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 17:08	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 17:08	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-17

3110220-13 (Nonpotable Water)
Sampled on: 11/02/23 12:30

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 17:08	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 17:08	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 17:08	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 17:08	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 17:08	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 17:08	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:08	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*103 %*	*11/10/23*		*11/10/23 17:08*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*11/10/23*		*11/10/23 17:08*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*95 %*	*11/10/23*		*11/10/23 17:08*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	ND	R-01	mg/L	0.500	0.500	10	11/03/23	11/03/23 20:41	CRP
Nitrate (as N)	ND	R-01	mg/L	0.110	0.110	10	11/03/23	11/03/23 20:41	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-17A

3110220-14 (Nonpotable Water)
Sampled on: 11/02/23 13:10

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 17:32	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 17:32	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 17:32	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 17:32	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 17:32	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 17:32	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 17:32	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 17:32	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-17A

3110220-14 (Nonpotable Water)
Sampled on: 11/02/23 13:10

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 17:32	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 17:32	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 17:32	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 17:32	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 17:32	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 17:32	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:32	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*102 %*	*11/10/23*		*11/10/23 17:32*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*11/10/23*		*11/10/23 17:32*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*94 %*	*11/10/23*		*11/10/23 17:32*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	ND	R-01	mg/L	0.500	0.500	10	11/03/23	11/03/23 21:00	CRP
Nitrate (as N)	ND	R-01	mg/L	0.110	0.110	10	11/03/23	11/03/23 21:00	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-19

3110220-15 (Nonpotable Water)
Sampled on: 11/02/23 14:10

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 17:57	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 17:57	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 17:57	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 17:57	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 17:57	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 17:57	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 17:57	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 17:57	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
1,1-Dichloroethane	**0.8**	J	ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
Dichlorofluoromethane	**0.6**	J	ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-19

3110220-15 (Nonpotable Water)
Sampled on: 11/02/23 14:10

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 17:57	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 17:57	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 17:57	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 17:57	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 17:57	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 17:57	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 17:57	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*103 %*	*11/10/23*		*11/10/23 17:57*		
Surrogate: Toluene-d8			*75-120*	*96 %*	*11/10/23*		*11/10/23 17:57*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*94 %*	*11/10/23*		*11/10/23 17:57*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	**4.87**	R-01	mg/L	0.500	0.500	10	11/03/23	11/03/23 21:18	CRP
Nitrate (as N)	**1.10**	R-01	mg/L	0.110	0.110	10	11/03/23	11/03/23 21:18	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-21

3110220-16 (Nonpotable Water)
Sampled on: 11/02/23 14:50

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 18:21	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 18:21	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 18:21	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 18:21	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 18:21	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 18:21	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 18:21	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 18:21	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-21

3110220-16 (Nonpotable Water)
Sampled on: 11/02/23 14:50

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 18:21	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 18:21	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 18:21	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 18:21	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 18:21	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 18:21	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:21	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*103 %*	*11/10/23*		*11/10/23 18:21*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*11/10/23*		*11/10/23 18:21*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*93 %*	*11/10/23*		*11/10/23 18:21*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	**9.73**	R-01	mg/L	0.500	0.500	10	11/03/23	11/03/23 21:37	CRP
Nitrate (as N)	**2.20**	R-01	mg/L	0.110	0.110	10	11/03/23	11/03/23 21:37	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-23R

3110220-17 (Nonpotable Water)
Sampled on: 11/01/23 11:30

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 18:45	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 18:45	LL
Benzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 18:45	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 18:45	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 18:45	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 18:45	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 18:45	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 18:45	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

TW-23R

3110220-17 (Nonpotable Water)
Sampled on: 11/01/23 11:30

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 18:45	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/10/23	11/10/23 18:45	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 18:45	LL
Styrene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
Toluene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 18:45	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 18:45	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/10/23	11/10/23 18:45	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/10/23	11/10/23 18:45	LL
Surrogate: 1,2-Dichloroethane-d4		*70-130*		*104 %*	*11/10/23*		*11/10/23 18:45*		
Surrogate: Toluene-d8		*75-120*		*97 %*	*11/10/23*		*11/10/23 18:45*		
Surrogate: 4-Bromofluorobenzene		*75-120*		*95 %*	*11/10/23*		*11/10/23 18:45*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	**6.68**	O-04, R-01	mg/L	0.500	0.500	10	11/03/23	11/03/23 21:55	CRP
Nitrate (as N)	**1.51**	O-04, R-01	mg/L	0.110	0.110	10	11/03/23	11/03/23 21:55	CRP

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311241 - GCMS-WATER-VOLATILES										
Blank (B311241-BLK1)					Prepared & Analyzed: 11/10/23					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						

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Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311241 - GCMS-WATER-VOLATILES										
Blank (B311241-BLK1)					Prepared & Analyzed: 11/10/23					
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	1.0		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*50.78*			ug/L	*50.00*		*102*	*70-130*		
Surrogate: Toluene-d8	*49.07*			ug/L	*50.00*		*98*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.38*			ug/L	*50.00*		*97*	*75-120*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311241 - GCMS-WATER-VOLATILES										
LCS (B311241-BS1)					Prepared & Analyzed: 11/10/23					
Acetone	11.0		5.0	ug/L	10.00		110	55-150		
Acrylonitrile	5.3		5.0	ug/L	5.000		106	50-150		
Benzene	5.3		1.0	ug/L	5.000		105	70-130		
Bromochloromethane	5.6		1.0	ug/L	5.000		113	70-130		
Bromodichloromethane	4.8		1.0	ug/L	5.000		96	70-130		
Bromoform	3.8		1.0	ug/L	5.000		76	70-130		
Bromomethane	5.8		1.0	ug/L	5.000		115	25-150		
2-Butanone (MEK)	10.7		5.0	ug/L	10.00		107	60-140		
Carbon disulfide	5.6		1.0	ug/L	5.000		111	70-130		
Carbon tetrachloride	4.4		1.0	ug/L	5.000		88	70-130		
Chlorobenzene	5.3		1.0	ug/L	5.000		106	70-130		
Chloroethane	6.5		1.0	ug/L	5.000		130	60-150		
Chloroform	5.0		1.0	ug/L	5.000		100	70-130		
Chloromethane	5.2		1.0	ug/L	5.000		104	60-150		
Dibromochloromethane	4.3		1.0	ug/L	5.000		85	70-130		
1,2-Dibromo-3-chloropropane	4.9		1.0	ug/L	5.000		98	70-130		
1,2-Dibromoethane (EDB)	4.6		1.0	ug/L	5.000		91	70-130		
Dibromomethane	4.9		1.0	ug/L	5.000		97	70-130		
1,2-Dichlorobenzene	5.3		1.0	ug/L	5.000		106	70-130		
1,4-Dichlorobenzene	5.5		1.0	ug/L	5.000		110	70-130		
1,1-Dichloroethane	5.2		1.0	ug/L	5.000		105	70-130		
1,2-Dichloroethane	5.2		1.0	ug/L	5.000		104	70-130		
1,1-Dichloroethene	4.8		1.0	ug/L	5.000		97	70-130		
cis-1,2-Dichloroethene	5.0		1.0	ug/L	5.000		100	70-130		
trans-1,2-Dichloroethene	4.9		1.0	ug/L	5.000		99	70-130		
1,2-Dichloropropane	5.3		1.0	ug/L	5.000		105	70-130		
1,3-Dichloropropane	5.0		1.0	ug/L	5.000		100	70-130		
2,2-Dichloropropane	4.7		1.0	ug/L	5.000		95	70-130		
1,1-Dichloropropene	4.9		1.0	ug/L	5.000		98	70-130		
cis-1,3-Dichloropropene	4.2		1.0	ug/L	5.000		84	70-130		
trans-1,3-Dichloropropene	4.1		1.0	ug/L	5.000		82	70-130		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311241 - GCMS-WATER-VOLATILES										
LCS (B311241-BS1)					Prepared & Analyzed: 11/10/23					
Ethylbenzene	5.4		1.0	ug/L	5.000		107	70-130		
2-Hexanone	9.6		5.0	ug/L	10.00		96	70-130		
Methyl tert-butyl ether (MTBE)	4.7		1.0	ug/L	5.000		93	70-130		
4-Methyl-2-pentanone	10.0		5.0	ug/L	10.00		100	70-130		
Methylene chloride	6.6	B	1.0	ug/L	5.000		132	50-200		
Methyl methacrylate	4.8	J	5.0	ug/L	5.000		96	50-150		
Styrene	4.8		1.0	ug/L	5.000		97	70-130		
1,1,1,2-Tetrachloroethane	4.3		1.0	ug/L	5.000		85	70-130		
1,1,2,2-Tetrachloroethane	4.7		1.0	ug/L	5.000		95	70-130		
Tetrachloroethene	5.0		1.0	ug/L	5.000		99	70-130		
Toluene	4.9		1.0	ug/L	5.000		97	70-130		
1,1,1-Trichloroethane	4.7		1.0	ug/L	5.000		94	70-130		
1,1,2-Trichloroethane	4.7		1.0	ug/L	5.000		95	70-130		
Trichloroethene	5.1		1.0	ug/L	5.000		101	70-130		
Trichlorofluoromethane (Freon 11)	5.6		1.0	ug/L	5.000		111	70-130		
1,2,3-Trichloropropane	4.4		1.0	ug/L	5.000		88	70-130		
Vinyl acetate	4.0		1.0	ug/L	5.000		80	70-130		
Vinyl chloride	5.8		1.0	ug/L	5.000		115	70-130		
o-Xylene	5.0		1.0	ug/L	5.000		100	70-130		
m- & p-Xylenes	10.4		1.0	ug/L	10.00		104	70-130		
Surrogate: 1,2-Dichloroethane-d4	*51.02*			ug/L	*50.00*		*102*	*70-130*		
Surrogate: Toluene-d8	*49.08*			ug/L	*50.00*		*98*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.46*			ug/L	*50.00*		*97*	*75-120*		
Duplicate (B311241-DUP1)			**Source: 3110220-07**		Prepared & Analyzed: 11/10/23					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311241 - GCMS-WATER-VOLATILES										
Duplicate (B311241-DUP1)			**Source: 3110220-07**		Prepared & Analyzed: 11/10/23					
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	ND		1.0	ug/L		ND				20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20

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Rabecka Koons, Quality Assurance Officer

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311241 - GCMS-WATER-VOLATILES										
Duplicate (B311241-DUP1)		**Source: 3110220-07**		Prepared & Analyzed: 11/10/23						
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	ND		1.0	ug/L		ND				20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	ND		1.0	ug/L		ND				20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*51.29*			ug/L	*50.00*		*103*	*70-130*		
Surrogate: Toluene-d8	*49.13*			ug/L	*50.00*		*98*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*47.10*			ug/L	*50.00*		*94*	*75-120*		
Matrix Spike (B311241-MS1)		**Source: 3110220-11**		Prepared & Analyzed: 11/10/23						
Acetone	11.5		5.0	ug/L	10.00	1.6	99	60-120		
Acrylonitrile	11.2		5.0	ug/L	10.00	ND	112	0-200		
Benzene	11.0		1.0	ug/L	10.00	ND	110	60-120		
Bromochloromethane	10.6		1.0	ug/L	10.00	ND	106	60-120		
Bromodichloromethane	9.2		1.0	ug/L	10.00	ND	92	60-120		
Bromoform	8.3		1.0	ug/L	10.00	ND	83	60-120		
Bromomethane	10.7		1.0	ug/L	10.00	ND	107	60-120		
2-Butanone (MEK)	12.0		5.0	ug/L	10.00	ND	120	60-120		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311241 - GCMS-WATER-VOLATILES										
Matrix Spike (B311241-MS1)		**Source: 3110220-11**		Prepared & Analyzed: 11/10/23						
Carbon disulfide	10.8		1.0	ug/L	10.00	ND	108	60-120		
Carbon tetrachloride	9.6		1.0	ug/L	10.00	ND	96	60-120		
Chlorobenzene	10.5		1.0	ug/L	10.00	ND	105	60-120		
Chloroethane	11.9		1.0	ug/L	10.00	ND	119	60-120		
Chloroform	10.5		1.0	ug/L	10.00	ND	105	60-120		
Chloromethane	10.9		1.0	ug/L	10.00	ND	109	60-120		
Dibromochloromethane	8.7		1.0	ug/L	10.00	ND	87	60-120		
1,2-Dibromo-3-chloropropane	8.7		1.0	ug/L	10.00	ND	87	60-120		
1,2-Dibromoethane (EDB)	9.4		1.0	ug/L	10.00	ND	94	60-120		
Dibromomethane	9.8		1.0	ug/L	10.00	ND	98	60-120		
1,2-Dichlorobenzene	10.0		1.0	ug/L	10.00	ND	100	60-120		
1,4-Dichlorobenzene	10.6		1.0	ug/L	10.00	ND	106	60-120		
1,1-Dichloroethane	11.0		1.0	ug/L	10.00	ND	110	60-120		
1,2-Dichloroethane	10.5		1.0	ug/L	10.00	ND	105	60-120		
1,1-Dichloroethene	10.8		1.0	ug/L	10.00	ND	108	60-120		
cis-1,2-Dichloroethene	10.0		1.0	ug/L	10.00	ND	100	60-120		
trans-1,2-Dichloroethene	10.8		1.0	ug/L	10.00	ND	108	60-120		
1,2-Dichloropropane	10.3		1.0	ug/L	10.00	ND	103	60-120		
1,3-Dichloropropane	10.0		1.0	ug/L	10.00	ND	100	60-120		
2,2-Dichloropropane	9.4		1.0	ug/L	10.00	ND	94	60-120		
1,1-Dichloropropene	10.6		1.0	ug/L	10.00	ND	106	60-120		
cis-1,3-Dichloropropene	8.8		1.0	ug/L	10.00	ND	88	60-120		
trans-1,3-Dichloropropene	8.4		1.0	ug/L	10.00	ND	84	60-120		
Ethylbenzene	11.1		1.0	ug/L	10.00	ND	111	60-120		
2-Hexanone	9.1		5.0	ug/L	10.00	ND	91	60-120		
Methyl tert-butyl ether (MTBE)	9.3		1.0	ug/L	10.00	ND	93	60-120		
4-Methyl-2-pentanone	9.2		5.0	ug/L	10.00	ND	92	60-120		
Methylene chloride	10.8	B	1.0	ug/L	10.00	ND	108	60-120		
Methyl methacrylate	8.9		5.0	ug/L	10.00	ND	89	60-120		
Styrene	10.2		1.0	ug/L	10.00	ND	102	60-120		
1,1,1,2-Tetrachloroethane	9.1		1.0	ug/L	10.00	ND	91	60-120		

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Rabecka Koons, Quality Assurance Officer

1500 Caton Center Dr Suite G
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www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311241 - GCMS-WATER-VOLATILES										
Matrix Spike (B311241-MS1)			**Source: 3110220-11**		Prepared & Analyzed: 11/10/23					
1,1,2,2-Tetrachloroethane	9.9		1.0	ug/L	10.00	ND	99	60-120		
Tetrachloroethene	10.4		1.0	ug/L	10.00	ND	104	60-120		
Toluene	10.3		1.0	ug/L	10.00	ND	103	60-120		
1,1,1-Trichloroethane	9.7		1.0	ug/L	10.00	ND	97	60-120		
1,1,2-Trichloroethane	9.8		1.0	ug/L	10.00	ND	98	60-120		
Trichloroethene	10.5		1.0	ug/L	10.00	ND	105	60-120		
Trichlorofluoromethane (Freon 11)	12.2		1.0	ug/L	10.00	ND	122	60-120		
1,2,3-Trichloropropane	9.1		1.0	ug/L	10.00	ND	91	60-120		
Vinyl acetate	10.0		1.0	ug/L	10.00	ND	100	60-120		
Vinyl chloride	12.9		1.0	ug/L	10.00	ND	129	60-120		
o-Xylene	10.0		1.0	ug/L	10.00	ND	100	60-120		
m- & p-Xylenes	21.8		1.0	ug/L	20.00	ND	109	60-120		
Surrogate: 1,2-Dichloroethane-d4	*49.64*			ug/L	*50.00*		*99*	*70-130*		
Surrogate: Toluene-d8	*48.77*			ug/L	*50.00*		*98*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*47.67*			ug/L	*50.00*		*95*	*75-120*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

Anions by EPA 300.0 - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311078 - 300.0 Anions Prep										
Blank (B311078-BLK1)					Prepared & Analyzed: 11/03/23					
Nitrate	ND		0.050	mg/L						
Nitrate (as N)	ND		0.011	mg/L						
Blank (B311078-BLK2)					Prepared: 11/03/23 Analyzed: 11/04/23					
Nitrate	ND		0.050	mg/L						
Nitrate (as N)	ND		0.011	mg/L						
LCS (B311078-BS1)					Prepared & Analyzed: 11/03/23					
Nitrate	4.87		0.055	mg/L	5.000		97	90-110		
Nitrate (as N)	1.10		0.012	mg/L				90-110		
LCS (B311078-BS2)					Prepared: 11/03/23 Analyzed: 11/04/23					
Nitrate	4.48		0.055	mg/L	5.000		90	90-110		
Nitrate (as N)	1.01		0.012	mg/L				90-110		
Duplicate (B311078-DUP1)		**Source: 3110219-01**			Prepared & Analyzed: 11/03/23					
Nitrate	18.9		0.050	mg/L		18.9			0.1	200
Nitrate (as N)	4.27		0.011	mg/L		4.28			0.1	200
Duplicate (B311078-DUP2)		**Source: 3110120-01**			Prepared: 11/03/23 Analyzed: 11/04/23					
Nitrate	1.09		0.050	mg/L		1.16			6	200
Nitrate (as N)	0.247		0.011	mg/L		0.262			6	200
Matrix Spike (B311078-MS1)		**Source: 3110219-01**			Prepared & Analyzed: 11/03/23					
Nitrate	23.9		0.055	mg/L	5.000	18.9	99	80-120		
Nitrate (as N)	5.39		0.012	mg/L		4.28		80-120		
Matrix Spike (B311078-MS2)		**Source: 3110120-01**			Prepared: 11/03/23 Analyzed: 11/04/23					
Nitrate	5.88		0.055	mg/L	5.000	1.16	94	80-120		
Nitrate (as N)	1.33		0.012	mg/L		0.262		80-120		

Rabecka Koons, Quality Assurance Officer

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/13/23 16:37

Notes and Definitions

R-01	The reporting limit for this analyte has been raised to account for matrix interference.
O-04	This sample was analyzed outside the EPA recommended holding time.
J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
B	Analyte is found in the associated blank as well as in the sample (CLP B-flag).
RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

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Rabecka Koons, Quality Assurance Officer

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MSS
Project	MLF - FALL 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - 8260 (1)	NITRATE									
1	TRIP BLANK	2	11-2-23	—	✓		W	✓	✓									3110220-01 A
2	TW-7	4	11-1-23	1250													-	02
3	TW-7A			1215													-	03
4	TW-8			1340													-	04
5	TW-8A			1415													-	05
6	TW-9			1600													-	06
7	TW-9B			1450													-	07
8	TW-9C			1525													-	08
9	TW-15		11-2-23	920													-	09
10	TW-15B			955													-	10
11	TW-16			1135													-	11
12	TW-16A			1100													-	12

	Signature	Date	Time	Comments
Relinquished by	DA Brown	11-2-23	1600	(1) Appendix I List of 47 VOCs + MTBE, DCDFM + DCBM
Received by	[signature]	11-2-23	1600	
Relinquished by				
Received by				STAND AND REPORT
Relinquished by				
Received by				

Cooler Temp on Arrival: 5.5 Deg. C

Rev. Aug. 2018

T-41

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MSS
Project	MLF- FALL 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260 (1)		NITRATE									
1	TW-17	4	11.2.23	1230	✓		GW	✓		✓									3110220-13 A
2	TW-17A	↓	↓	1310	↓		↓	↓		↓								-	14
3	TW-19	↓	↓	1410	↓		↓	↓		↓								-	15
4	TW-21	↓	↓	1450	↓		↓	↓		↓								-	16
5	TW-23R	↓	11.1.23	1130	↓		↓	↓		↓								-	17
6																			
7																			
8																			
9																			
10																			
11																			
12																			

	Signature	Date	Time	Comments
Relinquished by	[signature]	11.2.23	1600	(1) APPENDIX I LIST of 47 VOCs, MTBE, DCDFM
Received by	[signature]	11.2.23	1600	+ DCFM
Relinquished by				
Received by				
Relinquished by				STANDARD REPORT
Received by				

Cooler Temp on Arrival: 5.5 Deg. C

Rev. Aug. 2018

T-41

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

20 November 2023

Steve Brown
Environmental Monitoring and Assessment
207 East Sixth Street
Lititz, PA 17543
RE: MILLERSVILLE LANDFILL

Enclosed are the results of analyses for samples received by the laboratory on 11/09/23 16:30.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Rabecka Koons
Quality Assurance Officer

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TRIP BLANK		3110918-01	Nonpotable Water	11/09/23 00:00	11/09/23 16:30
FIELD BLANK		3110918-02	Nonpotable Water	11/09/23 12:00	11/09/23 16:30
TW-2		3110918-03	Nonpotable Water	11/09/23 11:35	11/09/23 16:30
TW-2A		3110918-04	Nonpotable Water	11/09/23 11:00	11/09/23 16:30
TW-3A		3110918-05	Nonpotable Water	11/09/23 12:30	11/09/23 16:30
TW-4		3110918-06	Nonpotable Water	11/09/23 14:00	11/09/23 16:30
TW-4B		3110918-07	Nonpotable Water	11/09/23 14:45	11/09/23 16:30
TW-22		3110918-08	Nonpotable Water	11/08/23 12:40	11/09/23 16:30
TW-22A		3110918-09	Nonpotable Water	11/08/23 13:20	11/09/23 16:30
TW-22B		3110918-10	Nonpotable Water	11/08/23 12:00	11/09/23 16:30
TW-27		3110918-11	Nonpotable Water	11/09/23 13:15	11/09/23 16:30
TW-28		3110918-12	Nonpotable Water	11/08/23 14:10	11/09/23 16:30
SW-1		3110918-13	Nonpotable Water	11/07/23 12:15	11/09/23 16:30
SW-2		3110918-14	Nonpotable Water	11/07/23 13:30	11/09/23 16:30
SW-3		3110918-15	Nonpotable Water	11/07/23 13:00	11/09/23 16:30

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Rabecka Koons, Quality Assurance Officer

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

TRIP BLANK

3110918-01 (Nonpotable Water)
Sampled on: 11/09/23 00:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 12:12	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 12:12	LL
Benzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 12:12	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 12:12	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 12:12	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 12:12	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 12:12	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 12:12	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL

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Rabecka Koons, Quality Assurance Officer

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Baltimore MD 21227
410-247-7600
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

TRIP BLANK

3110918-01 (Nonpotable Water)
Sampled on: 11/09/23 00:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 12:12	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 12:12	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 12:12	LL
Styrene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
Toluene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 12:12	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 12:12	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 12:12	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:12	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*103 %*	*11/16/23*		*11/16/23 12:12*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*11/16/23*		*11/16/23 12:12*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*95 %*	*11/16/23*		*11/16/23 12:12*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

FIELD BLANK

3110918-02 (Nonpotable Water)
Sampled on: 11/09/23 12:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 12:36	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 12:36	LL
Benzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 12:36	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 12:36	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 12:36	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 12:36	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 12:36	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 12:36	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

FIELD BLANK

3110918-02 (Nonpotable Water)
Sampled on: 11/09/23 12:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 12:36	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 12:36	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 12:36	LL
Styrene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
Toluene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 12:36	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 12:36	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 12:36	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 12:36	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*104 %*		*11/16/23*		*11/16/23 12:36*	
Surrogate: Toluene-d8			*75-120*	*97 %*		*11/16/23*		*11/16/23 12:36*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*95 %*		*11/16/23*		*11/16/23 12:36*	
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	ND		mg/L	0.500	0.500	10	11/09/23	11/09/23 21:20	CRP
Nitrate (as N)	ND		mg/L	0.110	0.110	10	11/09/23	11/09/23 21:20	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

TW-2

3110918-03 (Nonpotable Water)
Sampled on: 11/09/23 11:35

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 13:00	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 13:00	LL
Benzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 13:00	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 13:00	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 13:00	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 13:00	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 13:00	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 13:00	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

TW-2

3110918-03 (Nonpotable Water)
Sampled on: 11/09/23 11:35

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 13:00	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 13:00	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 13:00	LL
Styrene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
Toluene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 13:00	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 13:00	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 13:00	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:00	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*103 %*	*11/16/23*		*11/16/23 13:00*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*11/16/23*		*11/16/23 13:00*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*97 %*	*11/16/23*		*11/16/23 13:00*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	ND		mg/L	0.500	0.500	10	11/09/23	11/09/23 21:39	CRP
Nitrate (as N)	ND		mg/L	0.110	0.110	10	11/09/23	11/09/23 21:39	CRP

Rabecka Koons

Rabecka Koons, Quality Assurance Officer

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

TW-2A

3110918-04 (Nonpotable Water)
Sampled on: 11/09/23 11:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 13:24	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 13:24	LL
Benzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 13:24	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 13:24	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 13:24	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 13:24	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 13:24	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 13:24	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
Dichlorodifluoromethane	**1.2**		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
Dichlorofluoromethane	**1.3**		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL

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Rabecka Koons, Quality Assurance Officer

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

TW-2A

3110918-04 (Nonpotable Water)
Sampled on: 11/09/23 11:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 13:24	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 13:24	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 13:24	LL
Styrene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
Toluene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 13:24	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 13:24	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 13:24	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:24	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*103 %*	*11/16/23*		*11/16/23 13:24*		
Surrogate: Toluene-d8			*75-120*	*96 %*	*11/16/23*		*11/16/23 13:24*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*97 %*	*11/16/23*		*11/16/23 13:24*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	ND		mg/L	0.500	0.500	10	11/09/23	11/09/23 21:57	CRP
Nitrate (as N)	ND		mg/L	0.110	0.110	10	11/09/23	11/09/23 21:57	CRP

Rabecka Koons

Rabecka Koons, Quality Assurance Officer

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

TW-3A

3110918-05 (Nonpotable Water)
Sampled on: 11/09/23 12:30

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 13:49	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 13:49	LL
Benzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 13:49	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 13:49	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 13:49	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 13:49	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 13:49	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 13:49	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

TW-3A

3110918-05 (Nonpotable Water)
Sampled on: 11/09/23 12:30

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 13:49	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 13:49	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 13:49	LL
Styrene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
Toluene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 13:49	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 13:49	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 13:49	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 13:49	LL
Surrogate: 1,2-Dichloroethane-d4		*70-130*		*104 %*	*11/16/23*		*11/16/23 13:49*		
Surrogate: Toluene-d8		*75-120*		*97 %*	*11/16/23*		*11/16/23 13:49*		
Surrogate: 4-Bromofluorobenzene		*75-120*		*97 %*	*11/16/23*		*11/16/23 13:49*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	ND		mg/L	0.500	0.500	10	11/09/23	11/09/23 22:16	CRP
Nitrate (as N)	ND		mg/L	0.110	0.110	10	11/09/23	11/09/23 22:16	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

TW-4

3110918-06 (Nonpotable Water)
Sampled on: 11/09/23 14:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 14:13	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 14:13	LL
Benzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 14:13	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 14:13	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 14:13	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 14:13	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 14:13	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 14:13	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
Dichlorodifluoromethane	**1.9**		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
1,1-Dichloroethane	**3.0**		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
cis-1,2-Dichloroethene	**0.6**	J	ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
Dichlorofluoromethane	**4.7**		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 14:13	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

TW-4

3110918-06 (Nonpotable Water)
Sampled on: 11/09/23 14:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 14:13	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 14:13	LL
Styrene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
Toluene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 14:13	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 14:13	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 14:13	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:13	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*104 %*	*11/16/23*		*11/16/23 14:13*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*11/16/23*		*11/16/23 14:13*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*	*11/16/23*		*11/16/23 14:13*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	ND		mg/L	0.500	0.500	10	11/09/23	11/09/23 22:34	CRP
Nitrate (as N)	ND		mg/L	0.110	0.110	10	11/09/23	11/09/23 22:34	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

TW-4B

3110918-07 (Nonpotable Water)
Sampled on: 11/09/23 14:45

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 14:38	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 14:38	LL
Benzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 14:38	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 14:38	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 14:38	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 14:38	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 14:38	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 14:38	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

TW-4B

3110918-07 (Nonpotable Water)
Sampled on: 11/09/23 14:45

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 14:38	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 14:38	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 14:38	LL
Styrene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
Toluene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 14:38	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 14:38	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 14:38	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 14:38	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*106 %*	*11/16/23*		*11/16/23 14:38*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*11/16/23*		*11/16/23 14:38*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*	*11/16/23*		*11/16/23 14:38*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	**1.23**		mg/L	0.500	0.500	10	11/09/23	11/09/23 22:53	CRP
Nitrate (as N)	**0.277**		mg/L	0.110	0.110	10	11/09/23	11/09/23 22:53	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

TW-22

3110918-08 (Nonpotable Water)
Sampled on: 11/08/23 12:40

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 15:03	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 15:03	LL
Benzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 15:03	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 15:03	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 15:03	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 15:03	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 15:03	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 15:03	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

TW-22

3110918-08 (Nonpotable Water)
Sampled on: 11/08/23 12:40

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 15:03	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 15:03	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 15:03	LL
Styrene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
Toluene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 15:03	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 15:03	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 15:03	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:03	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*104 %*	*11/16/23*		*11/16/23 15:03*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*11/16/23*		*11/16/23 15:03*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*97 %*	*11/16/23*		*11/16/23 15:03*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	**3.77**		mg/L	0.500	0.500	10	11/09/23	11/09/23 23:48	CRP
Nitrate (as N)	**0.851**		mg/L	0.110	0.110	10	11/09/23	11/09/23 23:48	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

TW-22A

3110918-09 (Nonpotable Water)
Sampled on: 11/08/23 13:20

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 15:27	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 15:27	LL
Benzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 15:27	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 15:27	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 15:27	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 15:27	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 15:27	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 15:27	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL

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Rabecka Koons, Quality Assurance Officer

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Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

TW-22A

3110918-09 (Nonpotable Water)
Sampled on: 11/08/23 13:20

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 15:27	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 15:27	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 15:27	LL
Styrene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
Toluene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 15:27	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 15:27	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 15:27	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:27	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*105 %*	*11/16/23*		*11/16/23 15:27*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*11/16/23*		*11/16/23 15:27*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*	*11/16/23*		*11/16/23 15:27*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	**8.53**		mg/L	0.500	0.500	10	11/09/23	11/10/23 00:07	CRP
Nitrate (as N)	**1.93**		mg/L	0.110	0.110	10	11/09/23	11/10/23 00:07	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

TW-22B

3110918-10 (Nonpotable Water)
Sampled on: 11/08/23 12:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 15:51	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 15:51	LL
Benzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 15:51	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 15:51	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 15:51	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 15:51	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 15:51	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 15:51	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

TW-22B

3110918-10 (Nonpotable Water)
Sampled on: 11/08/23 12:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 15:51	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 15:51	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 15:51	LL
Styrene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
Toluene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 15:51	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 15:51	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 15:51	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 15:51	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*105 %*	*11/16/23*		*11/16/23 15:51*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*11/16/23*		*11/16/23 15:51*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*	*11/16/23*		*11/16/23 15:51*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	**7.87**		mg/L	0.500	0.500	10	11/09/23	11/10/23 00:25	CRP
Nitrate (as N)	**1.78**		mg/L	0.110	0.110	10	11/09/23	11/10/23 00:25	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

TW-27

3110918-11 (Nonpotable Water)
Sampled on: 11/09/23 13:15

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 16:16	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 16:16	LL
Benzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 16:16	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 16:16	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 16:16	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 16:16	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 16:16	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 16:16	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

TW-27

3110918-11 (Nonpotable Water)
Sampled on: 11/09/23 13:15

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 16:16	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 16:16	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 16:16	LL
Styrene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
Toluene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 16:16	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 16:16	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 16:16	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:16	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*102 %*	*11/16/23*		*11/16/23 16:16*		
Surrogate: Toluene-d8			*75-120*	*96 %*	*11/16/23*		*11/16/23 16:16*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*95 %*	*11/16/23*		*11/16/23 16:16*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	ND		mg/L	0.500	0.500	10	11/09/23	11/10/23 00:44	CRP
Nitrate (as N)	ND		mg/L	0.110	0.110	10	11/09/23	11/10/23 00:44	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

TW-28

3110918-12 (Nonpotable Water)
Sampled on: 11/08/23 14:10

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 16:40	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 16:40	LL
Benzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 16:40	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 16:40	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 16:40	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 16:40	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 16:40	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 16:40	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
Dichlorodifluoromethane	**4.0**		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
1,1-Dichloroethane	**1.8**		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
Dichlorofluoromethane	**4.4**		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 16:40	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

TW-28

3110918-12 (Nonpotable Water)
Sampled on: 11/08/23 14:10

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 16:40	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 16:40	LL
Styrene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
Tetrachloroethene	**0.9**	J	ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
Toluene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
Trichlorofluoromethane (Freon 11)	**1.1**		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 16:40	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 16:40	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 16:40	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 16:40	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*104 %*	*11/16/23*		*11/16/23 16:40*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*11/16/23*		*11/16/23 16:40*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*	*11/16/23*		*11/16/23 16:40*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	ND		mg/L	0.500	0.500	10	11/09/23	11/10/23 01:02	CRP
Nitrate (as N)	ND		mg/L	0.110	0.110	10	11/09/23	11/10/23 01:02	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

SW-1

3110918-13 (Nonpotable Water)
Sampled on: 11/07/23 12:15

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	**5.3**		ug/L	5.0	5.0	1	11/16/23	11/16/23 17:04	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 17:04	LL
Benzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 17:04	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 17:04	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 17:04	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 17:04	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 17:04	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 17:04	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

SW-1

3110918-13 (Nonpotable Water)
Sampled on: 11/07/23 12:15

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 17:04	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 17:04	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 17:04	LL
Styrene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
Toluene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 17:04	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 17:04	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 17:04	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:04	LL
Surrogate: 1,2-Dichloroethane-d4		*70-130*		*107 %*	*11/16/23*		*11/16/23 17:04*		
Surrogate: Toluene-d8		*75-120*		*97 %*	*11/16/23*		*11/16/23 17:04*		
Surrogate: 4-Bromofluorobenzene		*75-120*		*97 %*	*11/16/23*		*11/16/23 17:04*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	**9.12**	O-07	mg/L	0.500	0.500	10	11/09/23	11/10/23 01:20	CRP
Nitrate (as N)	**2.06**	O-07	mg/L	0.110	0.110	10	11/09/23	11/10/23 01:20	CRP

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

SW-2

3110918-14 (Nonpotable Water)
Sampled on: 11/07/23 13:30

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	**15.5**		ug/L	5.0	5.0	1	11/16/23	11/16/23 17:29	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 17:29	LL
Benzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 17:29	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 17:29	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 17:29	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 17:29	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 17:29	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 17:29	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

SW-2

3110918-14 (Nonpotable Water)
Sampled on: 11/07/23 13:30

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 17:29	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 17:29	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 17:29	LL
Styrene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
Toluene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 17:29	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 17:29	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 17:29	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:29	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*104 %*	*11/16/23*		*11/16/23 17:29*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*11/16/23*		*11/16/23 17:29*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*95 %*	*11/16/23*		*11/16/23 17:29*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	ND	O-07	mg/L	0.500	0.500	10	11/09/23	11/10/23 01:39	CRP
Nitrate (as N)	ND	O-07	mg/L	0.110	0.110	10	11/09/23	11/10/23 01:39	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

SW-3

3110918-15 (Nonpotable Water)
Sampled on: 11/07/23 13:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	**10.0**		ug/L	5.0	5.0	1	11/16/23	11/16/23 17:53	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 17:53	LL
Benzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 17:53	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 17:53	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 17:53	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 17:53	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 17:53	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 17:53	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

SW-3

3110918-15 (Nonpotable Water)
Sampled on: 11/07/23 13:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 17:53	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/16/23	11/16/23 17:53	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 17:53	LL
Styrene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
Toluene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 17:53	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 17:53	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/16/23	11/16/23 17:53	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/16/23	11/16/23 17:53	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*104 %*	*11/16/23*		*11/16/23 17:53*		
Surrogate: Toluene-d8			*75-120*	*97 %*	*11/16/23*		*11/16/23 17:53*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*96 %*	*11/16/23*		*11/16/23 17:53*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	ND	O-07	mg/L	0.500	0.500	10	11/09/23	11/10/23 01:57	CRP
Nitrate (as N)	ND	O-07	mg/L	0.110	0.110	10	11/09/23	11/10/23 01:57	CRP

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311359 - GCMS-WATER-VOLATILES										
Blank (B311359-BLK1)					Prepared & Analyzed: 11/16/23					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						

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Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311359 - GCMS-WATER-VOLATILES										
Blank (B311359-BLK1)				Prepared & Analyzed: 11/16/23						
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*50.61*			ug/L	*50.00*		*101*	*70-130*		
Surrogate: Toluene-d8	*48.38*			ug/L	*50.00*		*97*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.84*			ug/L	*50.00*		*98*	*75-120*		

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Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311359 - GCMS-WATER-VOLATILES										
LCS (B311359-BS1)					Prepared & Analyzed: 11/16/23					
Acetone	12.1		5.0	ug/L	10.00		121	55-150		
Acrylonitrile	5.0	J	5.0	ug/L	5.000		100	50-150		
Benzene	5.1		1.0	ug/L	5.000		102	70-130		
Bromochloromethane	5.3		1.0	ug/L	5.000		106	70-130		
Bromodichloromethane	4.8		1.0	ug/L	5.000		96	70-130		
Bromoform	4.3		1.0	ug/L	5.000		86	70-130		
Bromomethane	5.8		1.0	ug/L	5.000		116	25-150		
2-Butanone (MEK)	10.7		5.0	ug/L	10.00		107	60-140		
Carbon disulfide	5.3		1.0	ug/L	5.000		106	70-130		
Carbon tetrachloride	4.6		1.0	ug/L	5.000		91	70-130		
Chlorobenzene	5.0		1.0	ug/L	5.000		99	70-130		
Chloroethane	5.4		1.0	ug/L	5.000		107	60-150		
Chloroform	5.2		1.0	ug/L	5.000		104	70-130		
Chloromethane	5.2		1.0	ug/L	5.000		104	60-150		
Dibromochloromethane	4.3		1.0	ug/L	5.000		86	70-130		
1,2-Dibromo-3-chloropropane	4.7		1.0	ug/L	5.000		94	70-130		
1,2-Dibromoethane (EDB)	4.4		1.0	ug/L	5.000		88	70-130		
Dibromomethane	4.9		1.0	ug/L	5.000		99	70-130		
1,2-Dichlorobenzene	4.9		1.0	ug/L	5.000		98	70-130		
1,4-Dichlorobenzene	5.2		1.0	ug/L	5.000		103	70-130		
1,1-Dichloroethane	5.2		1.0	ug/L	5.000		104	70-130		
1,2-Dichloroethane	5.3		1.0	ug/L	5.000		106	70-130		
1,1-Dichloroethene	4.9		1.0	ug/L	5.000		98	70-130		
cis-1,2-Dichloroethene	4.7		1.0	ug/L	5.000		93	70-130		
trans-1,2-Dichloroethene	5.1		1.0	ug/L	5.000		101	70-130		
1,2-Dichloropropane	4.9		1.0	ug/L	5.000		98	70-130		
1,3-Dichloropropane	4.5		1.0	ug/L	5.000		91	70-130		
2,2-Dichloropropane	4.9		1.0	ug/L	5.000		98	70-130		
1,1-Dichloropropene	4.8		1.0	ug/L	5.000		96	70-130		
cis-1,3-Dichloropropene	4.4		1.0	ug/L	5.000		88	70-130		
trans-1,3-Dichloropropene	4.5		1.0	ug/L	5.000		89	70-130		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311359 - GCMS-WATER-VOLATILES										
LCS (B311359-BS1)					Prepared & Analyzed: 11/16/23					
Ethylbenzene	5.0		1.0	ug/L	5.000		100	70-130		
2-Hexanone	9.2		5.0	ug/L	10.00		92	70-130		
Methyl tert-butyl ether (MTBE)	4.6		1.0	ug/L	5.000		92	70-130		
4-Methyl-2-pentanone	9.6		5.0	ug/L	10.00		96	70-130		
Methylene chloride	5.8		1.0	ug/L	5.000		116	50-200		
Methyl methacrylate	4.3	J	5.0	ug/L	5.000		86	50-150		
Styrene	4.7		1.0	ug/L	5.000		94	70-130		
1,1,1,2-Tetrachloroethane	4.1		1.0	ug/L	5.000		81	70-130		
1,1,2,2-Tetrachloroethane	4.7		1.0	ug/L	5.000		94	70-130		
Tetrachloroethene	4.7		1.0	ug/L	5.000		95	70-130		
Toluene	4.9		1.0	ug/L	5.000		98	70-130		
1,1,1-Trichloroethane	4.7		1.0	ug/L	5.000		94	70-130		
1,1,2-Trichloroethane	4.5		1.0	ug/L	5.000		89	70-130		
Trichloroethene	5.1		1.0	ug/L	5.000		102	70-130		
Trichlorofluoromethane (Freon 11)	5.3		1.0	ug/L	5.000		106	70-130		
1,2,3-Trichloropropane	4.2		1.0	ug/L	5.000		84	70-130		
Vinyl acetate	3.7		1.0	ug/L	5.000		73	70-130		
Vinyl chloride	5.5		1.0	ug/L	5.000		111	70-130		
o-Xylene	4.7		1.0	ug/L	5.000		94	70-130		
m- & p-Xylenes	10.2		1.0	ug/L	10.00		102	70-130		
Surrogate: 1,2-Dichloroethane-d4	*50.33*			ug/L	*50.00*		*101*	*70-130*		
Surrogate: Toluene-d8	*49.02*			ug/L	*50.00*		*98*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.29*			ug/L	*50.00*		*97*	*75-120*		
Duplicate (B311359-DUP1)			**Source: 3110918-06**		Prepared & Analyzed: 11/16/23					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311359 - GCMS-WATER-VOLATILES										
Duplicate (B311359-DUP1)		**Source: 3110918-06**		Prepared & Analyzed: 11/16/23						
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	3.0		1.0	ug/L		3.0			2	20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	0.6	J	1.0	ug/L		0.6			7	20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20

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Rabecka Koons, Quality Assurance Officer

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311359 - GCMS-WATER-VOLATILES										
Duplicate (B311359-DUP1)		**Source: 3110918-06**		Prepared & Analyzed: 11/16/23						
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	ND		1.0	ug/L		ND				20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	ND		1.0	ug/L		ND				20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*52.17*			ug/L	*50.00*		*104*	*70-130*		
Surrogate: Toluene-d8	*48.48*			ug/L	*50.00*		*97*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.07*			ug/L	*50.00*		*96*	*75-120*		
Matrix Spike (B311359-MS1)		**Source: 3110918-13**		Prepared & Analyzed: 11/16/23						
Acetone	16.4		5.0	ug/L	10.00	5.3	111	60-120		
Acrylonitrile	11.7		5.0	ug/L	10.00	ND	117	0-200		
Benzene	11.8		1.0	ug/L	10.00	ND	118	60-120		
Bromochloromethane	11.5		1.0	ug/L	10.00	ND	115	60-120		
Bromodichloromethane	10.7		1.0	ug/L	10.00	ND	107	60-120		
Bromoform	9.2		1.0	ug/L	10.00	ND	92	60-120		
Bromomethane	11.8		1.0	ug/L	10.00	ND	118	60-120		
2-Butanone (MEK)	12.1		5.0	ug/L	10.00	ND	121	60-120		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311359 - GCMS-WATER-VOLATILES										
Matrix Spike (B311359-MS1)		**Source: 3110918-13**		Prepared & Analyzed: 11/16/23						
Carbon disulfide	11.6		1.0	ug/L	10.00	ND	116	60-120		
Carbon tetrachloride	10.2		1.0	ug/L	10.00	ND	102	60-120		
Chlorobenzene	10.9		1.0	ug/L	10.00	ND	109	60-120		
Chloroethane	13.6		1.0	ug/L	10.00	ND	136	60-120		
Chloroform	11.1		1.0	ug/L	10.00	ND	111	60-120		
Chloromethane	11.7		1.0	ug/L	10.00	ND	117	60-120		
Dibromochloromethane	9.3		1.0	ug/L	10.00	ND	93	60-120		
1,2-Dibromo-3-chloropropane	8.5		1.0	ug/L	10.00	ND	85	60-120		
1,2-Dibromoethane (EDB)	9.8		1.0	ug/L	10.00	ND	98	60-120		
Dibromomethane	11.2		1.0	ug/L	10.00	ND	112	60-120		
1,2-Dichlorobenzene	10.4		1.0	ug/L	10.00	ND	104	60-120		
1,4-Dichlorobenzene	10.8		1.0	ug/L	10.00	ND	108	60-120		
1,1-Dichloroethane	11.7		1.0	ug/L	10.00	ND	117	60-120		
1,2-Dichloroethane	11.5		1.0	ug/L	10.00	ND	115	60-120		
1,1-Dichloroethene	11.6		1.0	ug/L	10.00	ND	116	60-120		
cis-1,2-Dichloroethene	11.1		1.0	ug/L	10.00	ND	111	60-120		
trans-1,2-Dichloroethene	11.3		1.0	ug/L	10.00	ND	113	60-120		
1,2-Dichloropropane	11.3		1.0	ug/L	10.00	ND	113	60-120		
1,3-Dichloropropane	10.8		1.0	ug/L	10.00	ND	108	60-120		
2,2-Dichloropropane	9.9		1.0	ug/L	10.00	ND	99	60-120		
1,1-Dichloropropene	10.9		1.0	ug/L	10.00	ND	109	60-120		
cis-1,3-Dichloropropene	9.3		1.0	ug/L	10.00	ND	93	60-120		
trans-1,3-Dichloropropene	9.3		1.0	ug/L	10.00	ND	93	60-120		
Ethylbenzene	11.4		1.0	ug/L	10.00	ND	114	60-120		
2-Hexanone	10.2		5.0	ug/L	10.00	ND	102	60-120		
Methyl tert-butyl ether (MTBE)	10.5		1.0	ug/L	10.00	ND	105	60-120		
4-Methyl-2-pentanone	9.9		5.0	ug/L	10.00	ND	99	60-120		
Methylene chloride	11.9		1.0	ug/L	10.00	ND	119	60-120		
Methyl methacrylate	10.2		5.0	ug/L	10.00	ND	102	60-120		
Styrene	11.0		1.0	ug/L	10.00	ND	110	60-120		
1,1,1,2-Tetrachloroethane	9.8		1.0	ug/L	10.00	ND	98	60-120		

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Rabecka Koons, Quality Assurance Officer

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311359 - GCMS-WATER-VOLATILES										
Matrix Spike (B311359-MS1)			**Source: 3110918-13**		Prepared & Analyzed: 11/16/23					
1,1,2,2-Tetrachloroethane	10.3		1.0	ug/L	10.00	ND	103	60-120		
Tetrachloroethene	10.5		1.0	ug/L	10.00	ND	105	60-120		
Toluene	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,1,1-Trichloroethane	10.3		1.0	ug/L	10.00	ND	103	60-120		
1,1,2-Trichloroethane	10.2		1.0	ug/L	10.00	ND	102	60-120		
Trichloroethene	11.4		1.0	ug/L	10.00	ND	114	60-120		
Trichlorofluoromethane (Freon 11)	12.9		1.0	ug/L	10.00	ND	129	60-120		
1,2,3-Trichloropropane	9.5		1.0	ug/L	10.00	ND	95	60-120		
Vinyl acetate	11.0		1.0	ug/L	10.00	ND	110	60-120		
Vinyl chloride	13.1		1.0	ug/L	10.00	ND	131	60-120		
o-Xylene	10.7		1.0	ug/L	10.00	ND	107	60-120		
m- & p-Xylenes	22.7		1.0	ug/L	20.00	ND	114	60-120		
Surrogate: 1,2-Dichloroethane-d4	*49.83*			ug/L	*50.00*		*100*	*70-130*		
Surrogate: Toluene-d8	*48.74*			ug/L	*50.00*		*97*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.61*			ug/L	*50.00*		*97*	*75-120*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

Anions by EPA 300.0 - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311231 - 300.0 Anions Prep										
Blank (B311231-BLK1)					Prepared & Analyzed: 11/09/23					
Nitrate	ND		0.050	mg/L						
Nitrate (as N)	ND		0.011	mg/L						
LCS (B311231-BS1)					Prepared & Analyzed: 11/09/23					
Nitrate	5.03		0.055	mg/L	5.000		101	90-110		
Nitrate (as N)	1.14		0.012	mg/L				90-110		
Duplicate (B311231-DUP1)		**Source: 3110918-02**			Prepared & Analyzed: 11/09/23					
Nitrate	ND		0.050	mg/L		0.104				200
Nitrate (as N)	ND		0.011	mg/L		0.023				200
Matrix Spike (B311231-MS1)		**Source: 3110918-02**			Prepared & Analyzed: 11/09/23					
Nitrate	5.07		0.055	mg/L	5.000	0.104	99	80-120		
Nitrate (as N)	1.15		0.012	mg/L		0.023		80-120		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-ANNUAL-ZONE 3
Project Manager: Steve Brown

Reported:
11/20/23 08:56

Notes and Definitions

O-07	This sample was received outside of the EPA recommended holding time.
J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

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Rabecka Koons, Quality Assurance Officer

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MSS
Project	MLF- FALL 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260	NITRATE									
1	TRIP BLANK	2	11-9-23	—	✓		QC	✓										3110918-01 A
2	FIELD BLANK	2	11-9-23	1200			QC										-	02
3	TW-2	4	11-9-23	1135					✓								-	03
4	TW-2A			1100													-	04
5	TW-3A			1230													-	05
6	TW-4			1400													-	06
7	TW-4B			1445													-	07
8	TW-22		11-8-23	1240													-	08
9	TW-22A			1320													-	09
10	TW-22B			1200													-	10
11	TW-27		11-9-23	1315													-	11
12	TW-28		11-8-23	1410													-	12

	Signature	Date	Time	Comments
Relinquished by	DABrown	11-9-23	1630	① APPENDIX I LIST OF 47 VOCs, MTBE, DCDFM
Received by	[signature]	11-9-23	1630	+ DCFM
Relinquished by				
Received by				
Relinquished by				
Received by				STANDARD REPORT

Cooler Temp on Arrival: 2.2 Deg. C

T- 41

Rev. Aug. 2018

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	Millersville Landfill	Lab	MSI
Project	MLF - PAH 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

3110918-13 A

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - Method 8260		Nitrate									
1	SW-1	4	11.7.23	1215	✓		SW	✓		✓									
2	SW-2	↓	↓	1330	↓		↓	✓		✓								-	14
3	SW-3	↓	↓	1300	↓		↓	✓		✓								-	15
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

	Signature	Date	Time	Comments
Relinquished by	DABrown	11.9.23	1630	① Appendix I list of 47 VOCs, MTBE,
Received by		11.9.23	1630	DCDFM + DCFM
Relinquished by				
Received by				
Relinquished by				
Received by				

Cooler Temp on Arrival: 2.2 Deg. C

T-41

Rev. Aug. 2018

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

29 November 2023

Steve Brown
Environmental Monitoring and Assessment
207 East Sixth Street
Lititz, PA 17543
RE: MILLERSVILLE LANDFILL

Enclosed are the results of analyses for samples received by the laboratory on 11/16/23 17:00.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TRIP BLANK		3111616-01	Nonpotable Water	11/16/23 00:00	11/16/23 17:00
TW-1		3111616-02	Nonpotable Water	11/15/23 12:10	11/16/23 17:00
TW-29		3111616-03	Nonpotable Water	11/15/23 11:00	11/16/23 17:00
TW-30		3111616-04	Nonpotable Water	11/15/23 13:00	11/16/23 17:00
MW-P9		3111616-05	Nonpotable Water	11/15/23 15:00	11/16/23 17:00
MW-P106		3111616-06	Nonpotable Water	11/16/23 15:45	11/16/23 17:00
MW-P417		3111616-07	Nonpotable Water	11/15/23 17:20	11/16/23 17:00
MW-P440		3111616-08	Nonpotable Water	11/15/23 16:40	11/16/23 17:00
RW-P109		3111616-09	Nonpotable Water	11/16/23 14:00	11/16/23 17:00
RW-P264		3111616-10	Nonpotable Water	11/16/23 14:40	11/16/23 17:00
RW-P584		3111616-11	Nonpotable Water	11/15/23 15:45	11/16/23 17:00

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Will Brewington, President

Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

TRIP BLANK

3111616-01 (Nonpotable Water)
Sampled on: 11/16/23 00:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 15:33	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 15:33	LL
Benzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 15:33	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 15:33	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 15:33	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 15:33	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 15:33	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 15:33	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

TRIP BLANK

3111616-01 (Nonpotable Water)
Sampled on: 11/16/23 00:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 15:33	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 15:33	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 15:33	LL
Styrene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
Toluene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 15:33	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 15:33	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 15:33	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:33	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*	*11/24/23*		*11/24/23 15:33*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*11/24/23*		*11/24/23 15:33*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*	*11/24/23*		*11/24/23 15:33*		

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

TW-1

3111616-02 (Nonpotable Water)
Sampled on: 11/15/23 12:10

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 15:57	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 15:57	LL
Benzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 15:57	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 15:57	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 15:57	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 15:57	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 15:57	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 15:57	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
Dichlorodifluoromethane	**6.9**		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
1,1-Dichloroethane	**1.6**		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
Dichlorofluoromethane	**2.3**		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 15:57	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

TW-1

3111616-02 (Nonpotable Water)
Sampled on: 11/15/23 12:10

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 15:57	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 15:57	LL
Styrene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
Toluene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
Trichloroethene	**0.6**	J	ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 15:57	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 15:57	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 15:57	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 15:57	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*		*11/24/23*		*11/24/23 15:57*	
Surrogate: Toluene-d8			*75-120*	*98 %*		*11/24/23*		*11/24/23 15:57*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*		*11/24/23*		*11/24/23 15:57*	
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	ND	O-04	mg/L	0.050	0.050	1	11/16/23	11/17/23 13:23	CRP
Nitrate (as N)	ND	O-04	mg/L	0.011	0.011	1	11/16/23	11/17/23 13:23	CRP

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Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

TW-29

3111616-03 (Nonpotable Water)
Sampled on: 11/15/23 11:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 16:21	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 16:21	LL
Benzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 16:21	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 16:21	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 16:21	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 16:21	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 16:21	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 16:21	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
Dichlorodifluoromethane	**2.5**		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
1,1-Dichloroethane	**0.8**	J	ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
Dichlorofluoromethane	**0.9**	J	ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 16:21	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

TW-29

3111616-03 (Nonpotable Water)
Sampled on: 11/15/23 11:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 16:21	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 16:21	LL
Styrene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
Tetrachloroethene	**0.9**	J	ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
Toluene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 16:21	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 16:21	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 16:21	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:21	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*		*11/24/23*		*11/24/23 16:21*	
Surrogate: Toluene-d8			*75-120*	*99 %*		*11/24/23*		*11/24/23 16:21*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*		*11/24/23*		*11/24/23 16:21*	
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	**3.06**	O-04	mg/L	0.050	0.050	1	11/16/23	11/17/23 13:41	CRP
Nitrate (as N)	**0.691**	O-04	mg/L	0.011	0.011	1	11/16/23	11/17/23 13:41	CRP

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

TW-30

3111616-04 (Nonpotable Water)
Sampled on: 11/15/23 13:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 16:45	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 16:45	LL
Benzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 16:45	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 16:45	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 16:45	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 16:45	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 16:45	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 16:45	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

TW-30

3111616-04 (Nonpotable Water)
Sampled on: 11/15/23 13:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 16:45	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 16:45	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 16:45	LL
Styrene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
Toluene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 16:45	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 16:45	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 16:45	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 16:45	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*	*11/24/23*		*11/24/23 16:45*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*11/24/23*		*11/24/23 16:45*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*11/24/23*		*11/24/23 16:45*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate	**10.1**	O-04	mg/L	0.050	0.050	1	11/16/23	11/17/23 14:00	CRP
Nitrate (as N)	**2.28**	O-04	mg/L	0.011	0.011	1	11/16/23	11/17/23 14:00	CRP

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

MW-P9

3111616-05 (Nonpotable Water)
Sampled on: 11/15/23 15:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 17:09	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 17:09	LL
Benzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 17:09	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 17:09	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 17:09	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 17:09	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 17:09	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 17:09	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
Dichlorodifluoromethane	**1.0**	J	ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
1,1-Dichloroethane	**0.8**	J	ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
Dichlorofluoromethane	**0.6**	J	ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 17:09	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

MW-P9

3111616-05 (Nonpotable Water)
Sampled on: 11/15/23 15:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 17:09	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 17:09	LL
Styrene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
Tetrachloroethene	**0.8**	J	ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
Toluene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 17:09	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 17:09	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 17:09	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:09	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*		*11/24/23*		*11/24/23 17:09*	
Surrogate: Toluene-d8			*75-120*	*99 %*		*11/24/23*		*11/24/23 17:09*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*		*11/24/23*		*11/24/23 17:09*	
EPA 245.1 Performed at Pace Analytical Services, LLC - Ormond Beach Lab									
Mercury	ND		ug/L	0.20	0.14	1	11/27/23	11/28/23 15:18	JNK

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

MW-P106

3111616-06 (Nonpotable Water)
Sampled on: 11/16/23 15:45

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 17:33	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 17:33	LL
Benzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 17:33	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 17:33	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 17:33	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 17:33	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 17:33	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 17:33	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
Dichlorodifluoromethane	**1.0**		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
1,1-Dichloroethane	**2.6**		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
cis-1,2-Dichloroethene	**1.4**		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
Dichlorofluoromethane	**1.5**		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 17:33	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

MW-P106

3111616-06 (Nonpotable Water)
Sampled on: 11/16/23 15:45

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 17:33	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 17:33	LL
Styrene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
Tetrachloroethene	**0.8**	J	ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
Toluene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
Trichloroethene	**0.6**	J	ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 17:33	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 17:33	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 17:33	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:33	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*		*11/24/23*		*11/24/23 17:33*	
Surrogate: Toluene-d8			*75-120*	*99 %*		*11/24/23*		*11/24/23 17:33*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*		*11/24/23*		*11/24/23 17:33*	
EPA 245.1 Performed at Pace Analytical Services, LLC - Ormond Beach Lab									
Mercury	**0.20**		ug/L	0.20	0.14	1	11/27/23	11/28/23 15:20	JNK

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

MW-P417

3111616-07 (Nonpotable Water)
Sampled on: 11/15/23 17:20

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 17:58	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 17:58	LL
Benzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 17:58	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 17:58	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 17:58	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 17:58	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 17:58	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 17:58	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL

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Will Brewington, President

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Baltimore MD 21227
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

MW-P417

3111616-07 (Nonpotable Water)
Sampled on: 11/15/23 17:20

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 17:58	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 17:58	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 17:58	LL
Styrene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
Toluene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 17:58	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 17:58	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 17:58	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 17:58	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*100 %*	*11/24/23*		*11/24/23 17:58*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*11/24/23*		*11/24/23 17:58*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*	*11/24/23*		*11/24/23 17:58*		
EPA 245.1 Performed at Pace Analytical Services, LLC - Ormond Beach Lab									
Mercury	ND		ug/L	0.20	0.14	1	11/27/23	11/28/23 15:27	JNK

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

MW-P440

3111616-08 (Nonpotable Water)
Sampled on: 11/15/23 16:40

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 18:22	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 18:22	LL
Benzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 18:22	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 18:22	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 18:22	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 18:22	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 18:22	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 18:22	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

MW-P440

3111616-08 (Nonpotable Water)
Sampled on: 11/15/23 16:40

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 18:22	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 18:22	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 18:22	LL
Styrene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
Toluene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 18:22	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 18:22	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 18:22	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:22	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*	*11/24/23*		*11/24/23 18:22*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*11/24/23*		*11/24/23 18:22*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*11/24/23*		*11/24/23 18:22*		
EPA 245.1 Performed at Pace Analytical Services, LLC - Ormond Beach Lab									
Mercury	ND		ug/L	0.20	0.14	1	11/27/23	11/28/23 15:29	JNK

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

RW-P109

3111616-09 (Nonpotable Water)
Sampled on: 11/16/23 14:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 18:46	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 18:46	LL
Benzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 18:46	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 18:46	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 18:46	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 18:46	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 18:46	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 18:46	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
Dichlorodifluoromethane	**1.8**		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
1,1-Dichloroethane	**1.1**		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
Dichlorofluoromethane	**0.8**	J	ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 18:46	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

RW-P109

3111616-09 (Nonpotable Water)
Sampled on: 11/16/23 14:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 18:46	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 18:46	LL
Styrene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
Tetrachloroethene	**0.7**	J	ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
Toluene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
Trichloroethene	**1.1**		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 18:46	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 18:46	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 18:46	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 18:46	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*98 %*	*11/24/23*		*11/24/23 18:46*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*11/24/23*		*11/24/23 18:46*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*11/24/23*		*11/24/23 18:46*		
EPA 245.1 Performed at Pace Analytical Services, LLC - Ormond Beach Lab									
Mercury	ND		ug/L	0.20	0.14	1	11/27/23	11/28/23 15:31	JNK

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Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

RW-P264

3111616-10 (Nonpotable Water)
Sampled on: 11/16/23 14:40

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 19:11	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 19:11	LL
Benzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 19:11	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 19:11	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 19:11	LL
Chloroform	**0.7**	J	ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 19:11	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 19:11	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 19:11	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
Dichlorodifluoromethane	**5.4**		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
1,1-Dichloroethane	**3.1**		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
Dichlorofluoromethane	**4.0**		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 19:11	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

RW-P264

3111616-10 (Nonpotable Water)
Sampled on: 11/16/23 14:40

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 19:11	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 19:11	LL
Styrene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
Tetrachloroethene	**2.4**		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
Toluene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
Trichloroethene	**0.8**	J	ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 19:11	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 19:11	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 19:11	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:11	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*	*11/24/23*		*11/24/23 19:11*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*11/24/23*		*11/24/23 19:11*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*	*11/24/23*		*11/24/23 19:11*		
EPA 245.1 Performed at Pace Analytical Services, LLC - Ormond Beach Lab									
Mercury	ND		ug/L	0.20	0.14	1	11/27/23	11/28/23 15:34	JNK

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

RW-P584

3111616-11 (Nonpotable Water)
Sampled on: 11/15/23 15:45

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 19:35	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 19:35	LL
Benzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 19:35	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 19:35	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 19:35	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 19:35	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 19:35	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 19:35	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
Dichlorodifluoromethane	**3.8**		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
1,1-Dichloroethane	**3.0**		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
cis-1,2-Dichloroethene	**1.2**		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
Dichlorofluoromethane	**2.2**		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 19:35	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

RW-P584

3111616-11 (Nonpotable Water)
Sampled on: 11/15/23 15:45

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/24/23	11/24/23 19:35	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 19:35	LL
Styrene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
Tetrachloroethene	**1.7**		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
Toluene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
Trichloroethene	**0.9**	J	ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 19:35	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 19:35	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/24/23	11/24/23 19:35	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/24/23	11/24/23 19:35	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*	*11/24/23*		*11/24/23 19:35*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*11/24/23*		*11/24/23 19:35*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*11/24/23*		*11/24/23 19:35*		
EPA 245.1 Performed at Pace Analytical Services, LLC - Ormond Beach Lab									
Mercury	**0.15**	I	ug/L	0.20	0.14	1	11/27/23	11/28/23 15:36	JNK

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311537 - GCMS-WATER-VOLATILES										
Blank (B311537-BLK1)					Prepared & Analyzed: 11/24/23					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311537 - GCMS-WATER-VOLATILES										
Blank (B311537-BLK1)					Prepared & Analyzed: 11/24/23					
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*49.81*			ug/L	*50.00*		*100*	*70-130*		
Surrogate: Toluene-d8	*49.54*			ug/L	*50.00*		*99*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.48*			ug/L	*50.00*		*99*	*75-120*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311537 - GCMS-WATER-VOLATILES										
LCS (B311537-BS1)					Prepared & Analyzed: 11/24/23					
Acetone	10.1		5.0	ug/L	10.00		101	55-150		
Acrylonitrile	4.9	J	5.0	ug/L	5.000		97	50-150		
Benzene	5.5		1.0	ug/L	5.000		109	70-130		
Bromochloromethane	5.2		1.0	ug/L	5.000		104	70-130		
Bromodichloromethane	4.7		1.0	ug/L	5.000		94	70-130		
Bromoform	4.0		1.0	ug/L	5.000		81	70-130		
Bromomethane	3.6		1.0	ug/L	5.000		72	25-150		
2-Butanone (MEK)	7.6		5.0	ug/L	10.00		76	60-140		
Carbon disulfide	5.5		1.0	ug/L	5.000		110	70-130		
Carbon tetrachloride	4.2		1.0	ug/L	5.000		85	70-130		
Chlorobenzene	4.9		1.0	ug/L	5.000		98	70-130		
Chloroethane	5.1		1.0	ug/L	5.000		102	60-150		
Chloroform	4.6		1.0	ug/L	5.000		93	70-130		
Chloromethane	4.8		1.0	ug/L	5.000		96	60-150		
Dibromochloromethane	4.3		1.0	ug/L	5.000		85	70-130		
1,2-Dibromo-3-chloropropane	4.4		1.0	ug/L	5.000		89	70-130		
1,2-Dibromoethane (EDB)	4.5		1.0	ug/L	5.000		90	70-130		
Dibromomethane	4.9		1.0	ug/L	5.000		98	70-130		
1,2-Dichlorobenzene	4.9		1.0	ug/L	5.000		99	70-130		
1,4-Dichlorobenzene	5.3		1.0	ug/L	5.000		105	70-130		
1,1-Dichloroethane	5.0		1.0	ug/L	5.000		100	70-130		
1,2-Dichloroethane	4.6		1.0	ug/L	5.000		91	70-130		
1,1-Dichloroethene	5.0		1.0	ug/L	5.000		101	70-130		
cis-1,2-Dichloroethene	5.0		1.0	ug/L	5.000		100	70-130		
trans-1,2-Dichloroethene	4.8		1.0	ug/L	5.000		96	70-130		
1,2-Dichloropropane	5.2		1.0	ug/L	5.000		104	70-130		
1,3-Dichloropropane	5.0		1.0	ug/L	5.000		100	70-130		
2,2-Dichloropropane	4.5		1.0	ug/L	5.000		90	70-130		
1,1-Dichloropropene	4.8		1.0	ug/L	5.000		96	70-130		
cis-1,3-Dichloropropene	4.4		1.0	ug/L	5.000		88	70-130		
trans-1,3-Dichloropropene	4.4		1.0	ug/L	5.000		88	70-130		

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www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311537 - GCMS-WATER-VOLATILES										
LCS (B311537-BS1)					Prepared & Analyzed: 11/24/23					
Ethylbenzene	5.2		1.0	ug/L	5.000		104	70-130		
2-Hexanone	8.7		5.0	ug/L	10.00		87	70-130		
Methyl tert-butyl ether (MTBE)	4.5		1.0	ug/L	5.000		90	70-130		
4-Methyl-2-pentanone	8.7		5.0	ug/L	10.00		87	70-130		
Methylene chloride	6.1		1.0	ug/L	5.000		122	50-200		
Methyl methacrylate	3.7	J	5.0	ug/L	5.000		75	50-150		
Styrene	4.9		1.0	ug/L	5.000		98	70-130		
1,1,1,2-Tetrachloroethane	4.0		1.0	ug/L	5.000		81	70-130		
1,1,2,2-Tetrachloroethane	4.7		1.0	ug/L	5.000		95	70-130		
Tetrachloroethene	4.5		1.0	ug/L	5.000		90	70-130		
Toluene	4.9		1.0	ug/L	5.000		98	70-130		
1,1,1-Trichloroethane	4.3		1.0	ug/L	5.000		87	70-130		
1,1,2-Trichloroethane	4.9		1.0	ug/L	5.000		97	70-130		
Trichloroethene	5.0		1.0	ug/L	5.000		100	70-130		
Trichlorofluoromethane (Freon 11)	4.3		1.0	ug/L	5.000		87	70-130		
1,2,3-Trichloropropane	4.3		1.0	ug/L	5.000		87	70-130		
Vinyl acetate	3.9		1.0	ug/L	5.000		79	70-130		
Vinyl chloride	5.2		1.0	ug/L	5.000		103	70-130		
o-Xylene	5.1		1.0	ug/L	5.000		101	70-130		
m- & p-Xylenes	10.3		1.0	ug/L	10.00		103	70-130		
Surrogate: 1,2-Dichloroethane-d4	*47.09*			ug/L	*50.00*		*94*	*70-130*		
Surrogate: Toluene-d8	*49.62*			ug/L	*50.00*		*99*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.72*			ug/L	*50.00*		*99*	*75-120*		
Duplicate (B311537-DUP1)			**Source: 3111616-03**		Prepared & Analyzed: 11/25/23					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311537 - GCMS-WATER-VOLATILES										
Duplicate (B311537-DUP1)		**Source: 3111616-03**		Prepared & Analyzed: 11/25/23						
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	0.8	J	1.0	ug/L		0.8			1	20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	0.7	J	1.0	ug/L		ND				20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311537 - GCMS-WATER-VOLATILES										
Duplicate (B311537-DUP1)		**Source: 3111616-03**		Prepared & Analyzed: 11/25/23						
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	1.0		1.0	ug/L		0.9			12	20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	ND		1.0	ug/L		ND				20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*50.68*			ug/L	*50.00*		*101*	*70-130*		
Surrogate: Toluene-d8	*49.55*			ug/L	*50.00*		*99*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.43*			ug/L	*50.00*		*99*	*75-120*		
Matrix Spike (B311537-MS1)		**Source: 3111701-02**		Prepared & Analyzed: 11/25/23						
Acetone	14.1		5.0	ug/L	10.00	1.5	126	60-120		
Acrylonitrile	10.4		5.0	ug/L	10.00	ND	104	0-200		
Benzene	11.3		1.0	ug/L	10.00	ND	113	60-120		
Bromochloromethane	10.1		1.0	ug/L	10.00	ND	101	60-120		
Bromodichloromethane	9.6		1.0	ug/L	10.00	ND	96	60-120		
Bromoform	8.8		1.0	ug/L	10.00	ND	88	60-120		
Bromomethane	7.6		1.0	ug/L	10.00	ND	76	60-120		
2-Butanone (MEK)	10.0		5.0	ug/L	10.00	ND	100	60-120		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311537 - GCMS-WATER-VOLATILES										
Matrix Spike (B311537-MS1)		**Source: 3111701-02**		Prepared & Analyzed: 11/25/23						
Carbon disulfide	10.9		1.0	ug/L	10.00	ND	109	60-120		
Carbon tetrachloride	9.0		1.0	ug/L	10.00	ND	90	60-120		
Chlorobenzene	10.8		1.0	ug/L	10.00	ND	108	60-120		
Chloroethane	10.4		1.0	ug/L	10.00	ND	104	60-120		
Chloroform	9.9		1.0	ug/L	10.00	ND	99	60-120		
Chloromethane	10.9		1.0	ug/L	10.00	ND	109	60-120		
Dibromochloromethane	8.9		1.0	ug/L	10.00	ND	89	60-120		
1,2-Dibromo-3-chloropropane	9.8		1.0	ug/L	10.00	ND	98	60-120		
1,2-Dibromoethane (EDB)	9.9		1.0	ug/L	10.00	ND	99	60-120		
Dibromomethane	9.8		1.0	ug/L	10.00	ND	98	60-120		
1,2-Dichlorobenzene	10.2		1.0	ug/L	10.00	ND	102	60-120		
1,4-Dichlorobenzene	10.5		1.0	ug/L	10.00	ND	105	60-120		
1,1-Dichloroethane	10.5		1.0	ug/L	10.00	ND	105	60-120		
1,2-Dichloroethane	9.1		1.0	ug/L	10.00	ND	91	60-120		
1,1-Dichloroethene	10.9		1.0	ug/L	10.00	ND	109	60-120		
cis-1,2-Dichloroethene	10.3		1.0	ug/L	10.00	ND	103	60-120		
trans-1,2-Dichloroethene	10.4		1.0	ug/L	10.00	ND	104	60-120		
1,2-Dichloropropane	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,3-Dichloropropane	10.3		1.0	ug/L	10.00	ND	103	60-120		
2,2-Dichloropropane	7.3		1.0	ug/L	10.00	ND	73	60-120		
1,1-Dichloropropene	10.5		1.0	ug/L	10.00	ND	105	60-120		
cis-1,3-Dichloropropene	9.2		1.0	ug/L	10.00	ND	92	60-120		
trans-1,3-Dichloropropene	8.3		1.0	ug/L	10.00	ND	83	60-120		
Ethylbenzene	11.3		1.0	ug/L	10.00	ND	113	60-120		
2-Hexanone	8.9		5.0	ug/L	10.00	ND	89	60-120		
Methyl tert-butyl ether (MTBE)	9.4		1.0	ug/L	10.00	ND	94	60-120		
4-Methyl-2-pentanone	8.5		5.0	ug/L	10.00	ND	85	60-120		
Methylene chloride	10.9		1.0	ug/L	10.00	ND	109	60-120		
Methyl methacrylate	8.6		5.0	ug/L	10.00	ND	86	60-120		
Styrene	10.8		1.0	ug/L	10.00	ND	108	60-120		
1,1,1,2-Tetrachloroethane	9.1		1.0	ug/L	10.00	ND	91	60-120		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311537 - GCMS-WATER-VOLATILES										
Matrix Spike (B311537-MS1)			**Source: 3111701-02**		Prepared & Analyzed: 11/25/23					
1,1,2,2-Tetrachloroethane	10.4		1.0	ug/L	10.00	ND	104	60-120		
Tetrachloroethene	10.2		1.0	ug/L	10.00	ND	102	60-120		
Toluene	10.6		1.0	ug/L	10.00	ND	106	60-120		
1,1,1-Trichloroethane	9.3		1.0	ug/L	10.00	ND	93	60-120		
1,1,2-Trichloroethane	10.2		1.0	ug/L	10.00	ND	102	60-120		
Trichloroethene	10.3		1.0	ug/L	10.00	ND	103	60-120		
Trichlorofluoromethane (Freon 11)	9.9		1.0	ug/L	10.00	ND	99	60-120		
1,2,3-Trichloropropane	9.7		1.0	ug/L	10.00	ND	97	60-120		
Vinyl acetate	8.8		1.0	ug/L	10.00	ND	88	60-120		
Vinyl chloride	11.3		1.0	ug/L	10.00	ND	113	60-120		
o-Xylene	10.2		1.0	ug/L	10.00	ND	102	60-120		
m- & p-Xylenes	22.3		1.0	ug/L	20.00	ND	112	60-120		
Surrogate: 1,2-Dichloroethane-d4	*47.27*			ug/L	*50.00*		*95*	*70-130*		
Surrogate: Toluene-d8	*49.54*			ug/L	*50.00*		*99*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.67*			ug/L	*50.00*		*97*	*75-120*		

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Project Manager: Steve Brown

Reported:
11/29/23 12:16

Anions by EPA 300.0 - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311378 - 300.0 Anions Prep										
Blank (B311378-BLK1)					Prepared: 11/16/23 Analyzed: 11/17/23					
Nitrate (as N)	ND		0.011	mg/L						
LCS (B311378-BS1)					Prepared: 11/16/23 Analyzed: 11/17/23					
Nitrate (as N)	1.13		0.012	mg/L				90-110		
Duplicate (B311378-DUP1)		**Source: 3110908-01**			Prepared: 11/16/23 Analyzed: 11/17/23					
Nitrate (as N)	0.020		0.011	mg/L		0.022			10	200
Matrix Spike (B311378-MS1)		**Source: 3110908-01**			Prepared: 11/16/23 Analyzed: 11/17/23					
Nitrate (as N)	1.22		0.012	mg/L		0.022		80-120		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

EPA 245.1 - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 969018 - EPA 245.1										
BLANK (5329476)					Prepared: 11/27/23	Analyzed: 11/28/23				
Mercury	<0.14		0.20	ug/L				-		
LCS (5329477)					Prepared: 11/27/23	Analyzed: 11/28/23				
Mercury	94%		0.20	ug/L	2		94	85-115		
MS (5329480)		**Source: 3111616-06**			Prepared: 11/27/23	Analyzed: 11/28/23				
Mercury	96%		0.20	ug/L	2	0.20	96	70-130		
MSD (5329481)		**Source: 3111616-06**			Prepared: 11/27/23	Analyzed: 11/28/23				
Mercury	94%		0.20	ug/L	2	0.20	94	70-130	2	20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/29/23 12:16

Notes and Definitions

O-04	This sample was analyzed outside the EPA recommended holding time.
J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
I	Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

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Will Brewington, President

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	Millersville Landfill	Lab	MSS
Project	MLF - Fall 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - Method 8260 (1)		Nitrate		Total Mercury								
1	TRIP BLANK	2	11.16.23		–		QA	✓												
2	TW-1	4	11/15/23	1210			GW			✓									–	02
3	TW-29			1100						✓									–	03
4	TW-30			1300						✓									–	04
5	MW-P9		11.15.23	1500								✓							–	05
6	MW-P106		11.16.23	1545															–	06
7	MW-P417		11.15.23	1720															–	07
8	MW-P440		11.15.23	1640															–	08
9	RW-P109		11.16.23	1400															–	09
10	RW-P264		11.16.23	1440															–	10
11	RW-P584		11.15.23	1545															–	11
12																				

3111616-01 A

	Signature	Date	Time	Comments
Relinquished by	[signature]	11.16.23	1700	(1) APPENDIX I LIST of 47 VOCs,
Received by	[signature]	11.16.23	1700	MTBE, DCDFM + DCFM
Relinquished by				
Received by				
Relinquished by				STANDARD REPORT
Received by				

Cooler Temp on Arrival: 3.9 Deg. C

Rev. Aug. 2018

SUBCONTRACT ORDER
Maryland Spectral Services

3111616

SENDING LABORATORY:

Maryland Spectral Services
1500 Caton Center Dr. Suite G
Halethorpe, MD 21227
Phone: 410.247.7600
Project Manager: Will Brewington
Reports Email: Reporting@mdspectral.com

RECEIVING LABORATORY:

Pace Labs-FL
8 East Tower Circle
Ormond Beach, FL 32174
Phone :(386) 672-5668
Fax:

WO# : 35842688

35842688

Due 4:00 PM 11/29/23

				Laboratory ID	Comments
Sample ID: 3111616-05	**MW-P9**	**Water**	**Sampled:11/15/23 13:00**		
245.1W-Hg					
Containers Supplied: Plastic, 0.25L HNO3 (D)					
Sample ID: 3111616-06	**MW-P106**	**Water**	**Sampled:11/16/23 15:45**		
245.1W-Hg					
Containers Supplied: Plastic, 0.25L HNO3 (D)					
Sample ID: 3111616-07	**MW-P417**	**Water**	**Sampled:11/15/23 17:20**		
245.1W-Hg					
Containers Supplied: Plastic, 0.25L HNO3 (D)					
Sample ID: 3111616-08	**MW-P440**	**Water**	**Sampled:11/15/23 16:40**		
245.1W-Hg					
Containers Supplied: Plastic, 0.25L HNO3 (D)	15:02				

Relinquished By	TB/Pace	11-17-23 Date	Received By	TB/Pace	11-17-23 Date 1502
Relinquished By		11-17-23 Date	Received By	BLP Pace	11/18/23 Date 1040

SUBCONTRACT ORDER
Maryland Spectral Services

3111616

Due 4:00 PM 11/29/23

Sample ID			Laboratory ID	Comments
Sample ID: 3111616-09	**RW-P109**	**Water**	**Sampled:11/16/23 14:00**	
245.1W-Hg				
Containers Supplied: Plastic, 0.25L HNO3 (D)				
Sample ID: 3111616-10	**RW-P264**	**Water**	**Sampled:11/16/23 14:40**	
245.1W-Hg				
Containers Supplied: Plastic, 0.25L HNO3 (D)				
Sample ID: 3111616-11	**RW-P584**	**Water**	**Sampled:11/15/23 15:45**	
245.1W-Hg				
Containers Supplied: Plastic, 0.25L HNO3 (D)				

15:02

Released By	11-17-23	Date	Received By	TB/Pace	11-17-23 Date 1502
Released By	TB/Pace	11-17-23 Date	Received By	Pace	11/18/23 Date 1040

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

30 November 2023

Steve Brown
Environmental Monitoring and Assessment
207 East Sixth Street
Lititz, PA 17543
RE: MILLERSVILLE LANDFILL

Enclosed are the results of analyses for samples received by the laboratory on 11/17/23 14:15.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Will Brewington
President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/30/23 16:05

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TRIP BLANK		3111731-01	Nonpotable Water	11/17/23 00:00	11/17/23 14:15
MW-P4		3111731-02	Nonpotable Water	11/17/23 09:30	11/17/23 14:15
RW-P165		3111731-03	Nonpotable Water	11/17/23 10:10	11/17/23 14:15
RW-P171-1		3111731-04	Nonpotable Water	11/17/23 10:50	11/17/23 14:15
RW-P440		3111731-05	Nonpotable Water	11/17/23 12:10	11/17/23 14:15
RW-P441		3111731-06	Nonpotable Water	11/17/23 11:30	11/17/23 14:15

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Will Brewington, President

Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/30/23 16:05

TRIP BLANK

3111731-01 (Nonpotable Water)
Sampled on: 11/17/23 00:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 15:14	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 15:14	LL
Benzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 15:14	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 15:14	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 15:14	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 15:14	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 15:14	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 15:14	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/30/23 16:05

TRIP BLANK

3111731-01 (Nonpotable Water)
Sampled on: 11/17/23 00:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 15:14	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 15:14	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 15:14	LL
Styrene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
Toluene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 15:14	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 15:14	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 15:14	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:14	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*98 %*	*11/29/23*		*11/29/23 15:14*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*11/29/23*		*11/29/23 15:14*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*	*11/29/23*		*11/29/23 15:14*		

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Will Brewington, President

Maryland spectral Services

Analytical Chemistry Services

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Baltimore MD 21227
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/30/23 16:05

MW-P4

3111731-02 (Nonpotable Water)
Sampled on: 11/17/23 09:30

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 15:38	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 15:38	LL
Benzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 15:38	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 15:38	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 15:38	LL
Chloroform	**0.5**	J	ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 15:38	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 15:38	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 15:38	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

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Baltimore MD 21227
410-247-7600
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/30/23 16:05

MW-P4

3111731-02 (Nonpotable Water)
Sampled on: 11/17/23 09:30

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 15:38	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 15:38	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 15:38	LL
Styrene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
Toluene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 15:38	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 15:38	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 15:38	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 15:38	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*	*11/29/23*		*11/29/23 15:38*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*11/29/23*		*11/29/23 15:38*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*	*11/29/23*		*11/29/23 15:38*		
EPA 245.1 Performed at Pace Analytical Services, LLC - Ormond Beach Lab									
Mercury	ND		ug/L	0.20	0.14	1	11/27/23	11/28/23 11:00	JNK

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Will Brewington, President

Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/30/23 16:05

RW-P165

3111731-03 (Nonpotable Water)
Sampled on: 11/17/23 10:10

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 16:02	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 16:02	LL
Benzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 16:02	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 16:02	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 16:02	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 16:02	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 16:02	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 16:02	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
Dichlorodifluoromethane	**4.5**		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
1,1-Dichloroethane	**2.8**		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
cis-1,2-Dichloroethene	**0.9**	J	ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
Dichlorofluoromethane	**3.8**		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 16:02	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/30/23 16:05

RW-P165

3111731-03 (Nonpotable Water)
Sampled on: 11/17/23 10:10

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 16:02	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 16:02	LL
Styrene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
Tetrachloroethene	**1.9**		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
Toluene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
Trichloroethene	**0.6**	J	ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 16:02	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 16:02	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 16:02	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:02	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*	*11/29/23*		*11/29/23 16:02*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*11/29/23*		*11/29/23 16:02*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*11/29/23*		*11/29/23 16:02*		
EPA 245.1 Performed at Pace Analytical Services, LLC - Ormond Beach Lab									
Mercury	ND		ug/L	0.20	0.14	1	11/27/23	11/28/23 11:07	JNK

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/30/23 16:05

RW-P171-1

3111731-04 (Nonpotable Water)
Sampled on: 11/17/23 10:50

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 16:27	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 16:27	LL
Benzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 16:27	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 16:27	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 16:27	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 16:27	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 16:27	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 16:27	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/30/23 16:05

RW-P171-1

3111731-04 (Nonpotable Water)
Sampled on: 11/17/23 10:50

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 16:27	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 16:27	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 16:27	LL
Styrene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
Toluene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 16:27	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 16:27	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 16:27	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:27	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*98 %*	*11/29/23*		*11/29/23 16:27*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*11/29/23*		*11/29/23 16:27*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*	*11/29/23*		*11/29/23 16:27*		
EPA 245.1 Performed at Pace Analytical Services, LLC - Ormond Beach Lab									
Mercury	ND		ug/L	0.20	0.14	1	11/27/23	11/28/23 11:09	JNK

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Maryland spectral Services

Analytical Chemistry Services

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/30/23 16:05

RW-P440

3111731-05 (Nonpotable Water)
Sampled on: 11/17/23 12:10

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 16:51	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 16:51	LL
Benzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 16:51	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 16:51	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 16:51	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 16:51	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 16:51	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 16:51	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
Dichlorodifluoromethane	**1.4**		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
1,1-Dichloroethane	**1.3**		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
Dichlorofluoromethane	**0.6**	J	ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
2-Hexanone	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 16:51	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/30/23 16:05

RW-P440

3111731-05 (Nonpotable Water)
Sampled on: 11/17/23 12:10

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
Iodomethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 16:51	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 16:51	LL
Styrene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
Toluene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
Trichloroethene	**0.5**	J	ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 16:51	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 16:51	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 16:51	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 16:51	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*98 %*		*11/29/23*		*11/29/23 16:51*	
Surrogate: Toluene-d8			*75-120*	*98 %*		*11/29/23*		*11/29/23 16:51*	
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*		*11/29/23*		*11/29/23 16:51*	
EPA 245.1 Performed at Pace Analytical Services, LLC - Ormond Beach Lab									
Mercury	ND		ug/L	0.20	0.14	1	11/27/23	11/28/23 11:11	JNK

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/30/23 16:05

RW-P441

3111731-06 (Nonpotable Water)
Sampled on: 11/17/23 11:30

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 17:15	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 17:15	LL
Benzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 17:15	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 17:15	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 17:15	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 17:15	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 17:15	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 17:15	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
Dichlorodifluoromethane	**2.0**		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
1,1-Dichloroethane	**0.9**	J	ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/30/23 16:05

RW-P441

3111731-06 (Nonpotable Water)
Sampled on: 11/17/23 11:30

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 17:15	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/29/23	11/29/23 17:15	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 17:15	LL
Styrene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
Tetrachloroethene	**0.5**	J	ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
Toluene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 17:15	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 17:15	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/29/23	11/29/23 17:15	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/29/23	11/29/23 17:15	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*98 %*	*11/29/23*		*11/29/23 17:15*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*11/29/23*		*11/29/23 17:15*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*98 %*	*11/29/23*		*11/29/23 17:15*		
EPA 245.1 Performed at Pace Analytical Services, LLC - Ormond Beach Lab									
Mercury	ND		ug/L	0.20	0.14	1	11/27/23	11/28/23 11:14	JNK

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/30/23 16:05

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311625 - GCMS-WATER-VOLATILES										
Blank (B311625-BLK1)					Prepared & Analyzed: 11/29/23					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/30/23 16:05

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311625 - GCMS-WATER-VOLATILES										
Blank (B311625-BLK1)					Prepared & Analyzed: 11/29/23					
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*48.94*			ug/L	*50.00*		*98*	*70-130*		
Surrogate: Toluene-d8	*49.10*			ug/L	*50.00*		*98*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.09*			ug/L	*50.00*		*98*	*75-120*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/30/23 16:05

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311625 - GCMS-WATER-VOLATILES										
LCS (B311625-BS1)					Prepared & Analyzed: 11/29/23					
Acetone	11.0		5.0	ug/L	10.00		110	55-150		
Acrylonitrile	4.6	J	5.0	ug/L	5.000		91	50-150		
Benzene	5.3		1.0	ug/L	5.000		105	70-130		
Bromochloromethane	5.1		1.0	ug/L	5.000		103	70-130		
Bromodichloromethane	4.6		1.0	ug/L	5.000		92	70-130		
Bromoform	3.9		1.0	ug/L	5.000		78	70-130		
Bromomethane	3.8		1.0	ug/L	5.000		76	25-150		
2-Butanone (MEK)	9.8		5.0	ug/L	10.00		98	60-140		
Carbon disulfide	5.3		1.0	ug/L	5.000		105	70-130		
Carbon tetrachloride	4.0		1.0	ug/L	5.000		81	70-130		
Chlorobenzene	5.1		1.0	ug/L	5.000		102	70-130		
Chloroethane	5.0		1.0	ug/L	5.000		101	60-150		
Chloroform	4.7		1.0	ug/L	5.000		94	70-130		
Chloromethane	4.7		1.0	ug/L	5.000		94	60-150		
Dibromochloromethane	4.4		1.0	ug/L	5.000		87	70-130		
1,2-Dibromo-3-chloropropane	4.7		1.0	ug/L	5.000		95	70-130		
1,2-Dibromoethane (EDB)	4.5		1.0	ug/L	5.000		90	70-130		
Dibromomethane	4.6		1.0	ug/L	5.000		92	70-130		
1,2-Dichlorobenzene	4.8		1.0	ug/L	5.000		96	70-130		
1,4-Dichlorobenzene	5.2		1.0	ug/L	5.000		103	70-130		
1,1-Dichloroethane	4.9		1.0	ug/L	5.000		98	70-130		
1,2-Dichloroethane	4.4		1.0	ug/L	5.000		89	70-130		
1,1-Dichloroethene	4.7		1.0	ug/L	5.000		95	70-130		
cis-1,2-Dichloroethene	4.9		1.0	ug/L	5.000		98	70-130		
trans-1,2-Dichloroethene	4.9		1.0	ug/L	5.000		98	70-130		
1,2-Dichloropropane	4.9		1.0	ug/L	5.000		97	70-130		
1,3-Dichloropropane	4.9		1.0	ug/L	5.000		99	70-130		
2,2-Dichloropropane	4.3		1.0	ug/L	5.000		86	70-130		
1,1-Dichloropropene	4.6		1.0	ug/L	5.000		91	70-130		
cis-1,3-Dichloropropene	4.4		1.0	ug/L	5.000		88	70-130		
trans-1,3-Dichloropropene	4.2		1.0	ug/L	5.000		84	70-130		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/30/23 16:05

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311625 - GCMS-WATER-VOLATILES										
LCS (B311625-BS1)					Prepared & Analyzed: 11/29/23					
Ethylbenzene	5.2		1.0	ug/L	5.000		105	70-130		
2-Hexanone	8.9		5.0	ug/L	10.00		89	70-130		
Methyl tert-butyl ether (MTBE)	4.4		1.0	ug/L	5.000		87	70-130		
4-Methyl-2-pentanone	8.7		5.0	ug/L	10.00		87	70-130		
Methylene chloride	5.4		1.0	ug/L	5.000		108	50-200		
Methyl methacrylate	4.0	J	5.0	ug/L	5.000		80	50-150		
Styrene	4.7		1.0	ug/L	5.000		94	70-130		
1,1,1,2-Tetrachloroethane	4.0		1.0	ug/L	5.000		81	70-130		
1,1,2,2-Tetrachloroethane	4.8		1.0	ug/L	5.000		96	70-130		
Tetrachloroethene	4.9		1.0	ug/L	5.000		98	70-130		
Toluene	4.9		1.0	ug/L	5.000		98	70-130		
1,1,1-Trichloroethane	4.3		1.0	ug/L	5.000		87	70-130		
1,1,2-Trichloroethane	4.9		1.0	ug/L	5.000		97	70-130		
Trichloroethene	4.8		1.0	ug/L	5.000		96	70-130		
Trichlorofluoromethane (Freon 11)	4.4		1.0	ug/L	5.000		88	70-130		
1,2,3-Trichloropropane	4.3		1.0	ug/L	5.000		87	70-130		
Vinyl acetate	3.9		1.0	ug/L	5.000		79	70-130		
Vinyl chloride	4.9		1.0	ug/L	5.000		98	70-130		
o-Xylene	4.9		1.0	ug/L	5.000		98	70-130		
m- & p-Xylenes	10.1		1.0	ug/L	10.00		101	70-130		
Surrogate: 1,2-Dichloroethane-d4	*48.62*			ug/L	*50.00*		*97*	*70-130*		
Surrogate: Toluene-d8	*49.88*			ug/L	*50.00*		*100*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*50.29*			ug/L	*50.00*		*101*	*75-120*		
Duplicate (B311625-DUP1)			**Source: 3111706-09**		Prepared & Analyzed: 11/29/23					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/30/23 16:05

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311625 - GCMS-WATER-VOLATILES										
Duplicate (B311625-DUP1)			**Source: 3111706-09**		Prepared & Analyzed: 11/29/23					
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	ND		1.0	ug/L		ND				20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	6.3		1.0	ug/L		6.3			0.8	20
trans-1,2-Dichloroethene	2.9		1.0	ug/L		2.9			0.7	20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/30/23 16:05

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311625 - GCMS-WATER-VOLATILES										
Duplicate (B311625-DUP1)		**Source: 3111706-09**		Prepared & Analyzed: 11/29/23						
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	23.2		1.0	ug/L		22.6			2	20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	24.8		1.0	ug/L		24.6			1	20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	2.1		1.0	ug/L		1.9			11	20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*48.29*			ug/L	*50.00*		*97*	*70-130*		
Surrogate: Toluene-d8	*49.42*			ug/L	*50.00*		*99*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.00*			ug/L	*50.00*		*98*	*75-120*		
Matrix Spike (B311625-MS1)		**Source: 3111731-04**		Prepared & Analyzed: 11/29/23						
Acetone	10.9		5.0	ug/L	10.00	ND	109	60-120		
Acrylonitrile	10.7		5.0	ug/L	10.00	ND	107	0-200		
Benzene	11.5		1.0	ug/L	10.00	ND	115	60-120		
Bromochloromethane	11.0		1.0	ug/L	10.00	ND	110	60-120		
Bromodichloromethane	9.3		1.0	ug/L	10.00	ND	93	60-120		
Bromoform	8.7		1.0	ug/L	10.00	ND	87	60-120		
Bromomethane	8.4		1.0	ug/L	10.00	ND	84	60-120		
2-Butanone (MEK)	10.0		5.0	ug/L	10.00	ND	100	60-120		

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Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/30/23 16:05

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311625 - GCMS-WATER-VOLATILES										
Matrix Spike (B311625-MS1)		**Source: 3111731-04**		Prepared & Analyzed: 11/29/23						
Carbon disulfide	11.0		1.0	ug/L	10.00	ND	110	60-120		
Carbon tetrachloride	9.0		1.0	ug/L	10.00	ND	90	60-120		
Chlorobenzene	10.9		1.0	ug/L	10.00	ND	109	60-120		
Chloroethane	10.6		1.0	ug/L	10.00	ND	106	60-120		
Chloroform	10.5		1.0	ug/L	10.00	ND	105	60-120		
Chloromethane	10.8		1.0	ug/L	10.00	ND	108	60-120		
Dibromochloromethane	9.1		1.0	ug/L	10.00	ND	91	60-120		
1,2-Dibromo-3-chloropropane	9.0		1.0	ug/L	10.00	ND	90	60-120		
1,2-Dibromoethane (EDB)	9.9		1.0	ug/L	10.00	ND	99	60-120		
Dibromomethane	9.2		1.0	ug/L	10.00	ND	92	60-120		
1,2-Dichlorobenzene	10.1		1.0	ug/L	10.00	ND	101	60-120		
1,4-Dichlorobenzene	10.6		1.0	ug/L	10.00	ND	106	60-120		
1,1-Dichloroethane	10.9		1.0	ug/L	10.00	ND	109	60-120		
1,2-Dichloroethane	9.3		1.0	ug/L	10.00	ND	93	60-120		
1,1-Dichloroethene	11.0		1.0	ug/L	10.00	ND	110	60-120		
cis-1,2-Dichloroethene	10.4		1.0	ug/L	10.00	ND	104	60-120		
trans-1,2-Dichloroethene	10.8		1.0	ug/L	10.00	ND	108	60-120		
1,2-Dichloropropane	10.9		1.0	ug/L	10.00	ND	109	60-120		
1,3-Dichloropropane	10.4		1.0	ug/L	10.00	ND	104	60-120		
2,2-Dichloropropane	8.7		1.0	ug/L	10.00	ND	87	60-120		
1,1-Dichloropropene	10.6		1.0	ug/L	10.00	ND	106	60-120		
cis-1,3-Dichloropropene	9.1		1.0	ug/L	10.00	ND	91	60-120		
trans-1,3-Dichloropropene	8.8		1.0	ug/L	10.00	ND	88	60-120		
Ethylbenzene	11.5		1.0	ug/L	10.00	ND	115	60-120		
2-Hexanone	8.8		5.0	ug/L	10.00	ND	88	60-120		
Methyl tert-butyl ether (MTBE)	9.4		1.0	ug/L	10.00	ND	94	60-120		
4-Methyl-2-pentanone	9.1		5.0	ug/L	10.00	ND	91	60-120		
Methylene chloride	11.5		1.0	ug/L	10.00	ND	115	60-120		
Methyl methacrylate	8.6		5.0	ug/L	10.00	ND	86	60-120		
Styrene	10.6		1.0	ug/L	10.00	ND	106	60-120		
1,1,1,2-Tetrachloroethane	9.3		1.0	ug/L	10.00	ND	93	60-120		

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Will Brewington, President

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410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/30/23 16:05

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311625 - GCMS-WATER-VOLATILES										
Matrix Spike (B311625-MS1)		**Source: 3111731-04**		Prepared & Analyzed: 11/29/23						
1,1,2,2-Tetrachloroethane	10.6		1.0	ug/L	10.00	ND	106	60-120		
Tetrachloroethene	10.6		1.0	ug/L	10.00	ND	106	60-120		
Toluene	11.3		1.0	ug/L	10.00	ND	113	60-120		
1,1,1-Trichloroethane	9.4		1.0	ug/L	10.00	ND	94	60-120		
1,1,2-Trichloroethane	10.3		1.0	ug/L	10.00	ND	103	60-120		
Trichloroethene	10.9		1.0	ug/L	10.00	ND	109	60-120		
Trichlorofluoromethane (Freon 11)	10.5		1.0	ug/L	10.00	ND	105	60-120		
1,2,3-Trichloropropane	9.6		1.0	ug/L	10.00	ND	96	60-120		
Vinyl acetate	11.1		1.0	ug/L	10.00	ND	111	60-120		
Vinyl chloride	11.5		1.0	ug/L	10.00	ND	115	60-120		
o-Xylene	10.8		1.0	ug/L	10.00	ND	108	60-120		
m- & p-Xylenes	22.3		1.0	ug/L	20.00	ND	112	60-120		
Surrogate: 1,2-Dichloroethane-d4	*47.12*			ug/L	*50.00*		*94*	*70-130*		
Surrogate: Toluene-d8	*49.85*			ug/L	*50.00*		*100*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.43*			ug/L	*50.00*		*99*	*75-120*		

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/30/23 16:05

EPA 245.1 - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 969017 - EPA 245.1										
BLANK (5329470)					Prepared: 11/27/23 Analyzed: 11/28/23					
Mercury	<0.14		0.20	ug/L				-		
LCS (5329471)					Prepared: 11/27/23 Analyzed: 11/28/23					
Mercury	102%		0.20	ug/L	2		102	85-115		

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
11/30/23 16:05

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MSS
Project	MLF - FALL 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - MERRD 8260 ①		TOTAL MERCURY									
1	TRIP BLANK	2	11.17.23	—	—		QA	✓								3111	731	-01	
2	MW - P4	4		930	✓		SW			✓								-02	
3	RW - P165			1010														-03	
4	RW - P171-1			1050														-04	
5	RW - P440			1210														-05	
6	RW - P441			1130														-06	
7																			
8																			
9																			
10																			
11																			
12																			

	Signature	Date	Time	Comments
Relinquished by	[signature]	11.17.23	1415	① APPENDIX I LIST OF 47 VOCs,
Received by	[signature]	11.17.23	1415	MTBE, DCDFM + DCEFM
Relinquished by				
Received by				
Relinquished by				STANDARD REPORT
Received by				

Cooler Temp on Arrival: 6.0 Deg. C

Rev. Aug. 2018

T-41

SUBCONTRACT ORDER
Maryland Spectral Services

3111731

SENDING LABORATORY:

Maryland Spectral Services
1500 Caton Center Dr. Suite G
Halethorpe, MD 21227
Phone: 410.247.7600
Project Manager: Will Brewington
Reports Email: Reporting@mdspectral.com

RECEIVING LABORATORY:

Pace Labs-FL
8 East Tower Circle
Ormond Beach, FL 32174
Phone :(386) 672-5668
Fax:

WO# : 35842687
35842687

Due 4:00 PM 11/28/23

				Laboratory ID	Comments
Sample ID: 3111731-02	**MW-P4**	**Water**	**Sampled: 11/17/23 09:30**		
245.1W-Hg					
Containers Supplied: Plastic, 0.25L HNO3 (D)					
Sample ID: 3111731-03	**RW-P165**	**Water**	**Sampled: 11/17/23 10:10**		
245.1W-Hg					
Containers Supplied: Plastic, 0.25L HNO3 (D)					
Sample ID: 3111731-04	**RW-P171-1**	**Water**	**Sampled: 11/17/23 10:50**		
245.1W-Hg					
Containers Supplied: Plastic, 0.25L HNO3 (D)					
Sample ID: 3111731-05	**RW-P440**	**Water**	**Sampled: 11/17/23 12:10**		
245.1W-Hg					
Containers Supplied: Plastic, 0.25L HNO3 (D)					

Released By	11-17-23 15:02 Date	Received By	TB/Pace	11-17-23 Date	1502
TB/Pace Released By	11-17-23 Date	Received By		11/18/22 Date	1040

SUBCONTRACT ORDER
Maryland Spectral Services

3111731

Due 4:00 PM 11/28/23

Sample ID: 3111731-06	RW-P441	Water	Sampled: 11/17/23 11:30	Laboratory ID	Comments
245.1W-Hg					

Containers Supplied:

Plastic, 0.25L HNO3 (D)

Released By	Date	Received By	Date
	11-17-23 15:02		11-17-23
TB/Pace		TB/Pace	
Released By	Date	Received By	Date
	11-17-23	BR Pace	11/18/23 1040

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

01 December 2023

Steve Brown
Environmental Monitoring and Assessment
207 East Sixth Street
Lititz, PA 17543
RE: MILLERSVILLE LANDFILL

Enclosed are the results of analyses for samples received by the laboratory on 11/20/23 15:00.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Will Brewington
President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
12/01/23 11:03

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TW-3		3112015-01	Nonpotable Water	11/20/23 13:20	11/20/23 15:00
TRIP BLANK		3112015-02	Nonpotable Water	11/20/23 00:00	11/20/23 15:00

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Will Brewington, President

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Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
12/01/23 11:03

TW-3

3112015-01 (Nonpotable Water)
Sampled on: 11/20/23 13:20

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/30/23	11/30/23 12:33	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/30/23	11/30/23 12:33	LL
Benzene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/30/23	11/30/23 12:33	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/30/23	11/30/23 12:33	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/30/23	11/30/23 12:33	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/30/23	11/30/23 12:33	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/30/23	11/30/23 12:33	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/30/23	11/30/23 12:33	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
12/01/23 11:03

TW-3

3112015-01 (Nonpotable Water)
Sampled on: 11/20/23 13:20

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/30/23	11/30/23 12:33	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/30/23	11/30/23 12:33	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/30/23	11/30/23 12:33	LL
Styrene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
Toluene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/30/23	11/30/23 12:33	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/30/23	11/30/23 12:33	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/30/23	11/30/23 12:33	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:33	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*	*11/30/23*		*11/30/23 12:33*		
Surrogate: Toluene-d8			*75-120*	*98 %*	*11/30/23*		*11/30/23 12:33*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*100 %*	*11/30/23*		*11/30/23 12:33*		
Anions by EPA 300.0 Prepared by 300.0 Anions Prep									
Nitrate (as N)	**0.044**		mg/L	0.011	0.011	1	11/20/23	11/21/23 01:09	CRP

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Will Brewington, President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
12/01/23 11:03

TRIP BLANK

3112015-02 (Nonpotable Water)
Sampled on: 11/20/23 00:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES									
Acetone	ND		ug/L	5.0	5.0	1	11/30/23	11/30/23 12:58	LL
Acrylonitrile	ND		ug/L	5.0	5.0	1	11/30/23	11/30/23 12:58	LL
Benzene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
Bromochloromethane	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
Bromodichloromethane	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
Bromoform	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
Bromomethane	ND		ug/L	1.0	1.0	1	11/30/23	11/30/23 12:58	LL
2-Butanone (MEK)	ND		ug/L	5.0	5.0	1	11/30/23	11/30/23 12:58	LL
Carbon disulfide	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
Carbon tetrachloride	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
Chlorobenzene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
Chloroethane	ND		ug/L	1.0	1.0	1	11/30/23	11/30/23 12:58	LL
Chloroform	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
Chloromethane	ND		ug/L	1.0	1.0	1	11/30/23	11/30/23 12:58	LL
Dibromochloromethane	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
1,2-Dibromo-3-chloropropane	ND		ug/L	1.0	1.0	1	11/30/23	11/30/23 12:58	LL
1,2-Dibromoethane (EDB)	ND		ug/L	1.0	1.0	1	11/30/23	11/30/23 12:58	LL
Dibromomethane	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
1,2-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
1,4-Dichlorobenzene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
trans-1,4-Dichloro-2-butene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
Dichlorodifluoromethane	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
1,1-Dichloroethane	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
1,2-Dichloroethane	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
1,1-Dichloroethene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
cis-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
trans-1,2-Dichloroethene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
Dichlorofluoromethane	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
1,2-Dichloropropane	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
cis-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
trans-1,3-Dichloropropene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
Ethylbenzene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
12/01/23 11:03

TRIP BLANK

3112015-02 (Nonpotable Water)
Sampled on: 11/20/23 00:00

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA 8260B (GC/MS) Prepared by GCMS-WATER-VOLATILES (continued)									
2-Hexanone	ND		ug/L	5.0	5.0	1	11/30/23	11/30/23 12:58	LL
Iodomethane	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
Methyl tert-butyl ether (MTBE)	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
4-Methyl-2-pentanone	ND		ug/L	5.0	5.0	1	11/30/23	11/30/23 12:58	LL
Methylene chloride	ND		ug/L	1.0	1.0	1	11/30/23	11/30/23 12:58	LL
Styrene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
1,1,1,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
Tetrachloroethene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
Toluene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
1,1,1-Trichloroethane	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
1,1,2-Trichloroethane	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
Trichloroethene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
Trichlorofluoromethane (Freon 11)	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
1,2,3-Trichloropropane	ND		ug/L	1.0	1.0	1	11/30/23	11/30/23 12:58	LL
Vinyl acetate	ND		ug/L	1.0	1.0	1	11/30/23	11/30/23 12:58	LL
Vinyl chloride	ND		ug/L	1.0	1.0	1	11/30/23	11/30/23 12:58	LL
o-Xylene	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
m- & p-Xylenes	ND		ug/L	1.0	0.5	1	11/30/23	11/30/23 12:58	LL
Surrogate: 1,2-Dichloroethane-d4			*70-130*	*99 %*	*11/30/23*		*11/30/23 12:58*		
Surrogate: Toluene-d8			*75-120*	*99 %*	*11/30/23*		*11/30/23 12:58*		
Surrogate: 4-Bromofluorobenzene			*75-120*	*99 %*	*11/30/23*		*11/30/23 12:58*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
12/01/23 11:03

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311651 - GCMS-WATER-VOLATILES										
Blank (B311651-BLK1)					Prepared & Analyzed: 11/30/23					
Acetone	ND		5.0	ug/L						
Acrylonitrile	ND		5.0	ug/L						
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L						
Benzene	ND		1.0	ug/L						
Bromochloromethane	ND		1.0	ug/L						
Bromodichloromethane	ND		1.0	ug/L						
Bromoform	ND		1.0	ug/L						
Bromomethane	ND		1.0	ug/L						
2-Butanone (MEK)	ND		5.0	ug/L						
Carbon disulfide	ND		1.0	ug/L						
Carbon tetrachloride	ND		1.0	ug/L						
Chlorobenzene	ND		1.0	ug/L						
Chloroethane	ND		1.0	ug/L						
Chloroform	ND		1.0	ug/L						
Chloromethane	ND		1.0	ug/L						
Chloroprene	ND		1.0	ug/L						
Dibromochloromethane	ND		1.0	ug/L						
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L						
1,2-Dibromoethane (EDB)	ND		1.0	ug/L						
Dibromomethane	ND		1.0	ug/L						
1,2-Dichlorobenzene	ND		1.0	ug/L						
1,4-Dichlorobenzene	ND		1.0	ug/L						
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L						
1,1-Dichloroethane	ND		1.0	ug/L						
1,2-Dichloroethane	ND		1.0	ug/L						
1,1-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
1,2-Dichloropropane	ND		1.0	ug/L						
1,3-Dichloropropane	ND		1.0	ug/L						
2,2-Dichloropropane	ND		1.0	ug/L						

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
12/01/23 11:03

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311651 - GCMS-WATER-VOLATILES										
Blank (B311651-BLK1)					Prepared & Analyzed: 11/30/23					
1,1-Dichloropropene	ND		1.0	ug/L						
cis-1,3-Dichloropropene	ND		1.0	ug/L						
trans-1,3-Dichloropropene	ND		1.0	ug/L						
Ethyl methacrylate	ND		5.0	ug/L						
Ethylbenzene	ND		1.0	ug/L						
2-Hexanone	ND		5.0	ug/L						
Isobutanol	ND		100	ug/L						
Iodomethane	ND		1.0	ug/L						
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L						
4-Methyl-2-pentanone	ND		5.0	ug/L						
Methylene chloride	ND		1.0	ug/L						
Methyl methacrylate	ND		5.0	ug/L						
Styrene	ND		1.0	ug/L						
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L						
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L						
Tetrachloroethene	ND		1.0	ug/L						
Toluene	ND		1.0	ug/L						
1,1,1-Trichloroethane	ND		1.0	ug/L						
1,1,2-Trichloroethane	ND		1.0	ug/L						
Trichloroethene	ND		1.0	ug/L						
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L						
1,2,3-Trichloropropane	ND		1.0	ug/L						
Vinyl acetate	ND		1.0	ug/L						
Vinyl chloride	ND		1.0	ug/L						
o-Xylene	ND		1.0	ug/L						
m- & p-Xylenes	ND		1.0	ug/L						
Surrogate: 1,2-Dichloroethane-d4	*48.73*			ug/L	*50.00*		*97*	*70-130*		
Surrogate: Toluene-d8	*49.45*			ug/L	*50.00*		*99*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.38*			ug/L	*50.00*		*99*	*75-120*		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
12/01/23 11:03

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311651 - GCMS-WATER-VOLATILES										
LCS (B311651-BS1)					Prepared & Analyzed: 11/30/23					
Acetone	11.0		5.0	ug/L	10.00		110	55-150		
Acrylonitrile	4.7	J	5.0	ug/L	5.000		94	50-150		
Benzene	5.3		1.0	ug/L	5.000		106	70-130		
Bromochloromethane	5.0		1.0	ug/L	5.000		100	70-130		
Bromodichloromethane	4.4		1.0	ug/L	5.000		88	70-130		
Bromoform	3.9		1.0	ug/L	5.000		78	70-130		
Bromomethane	4.8		1.0	ug/L	5.000		96	25-150		
2-Butanone (MEK)	9.5		5.0	ug/L	10.00		95	60-140		
Carbon disulfide	5.2		1.0	ug/L	5.000		104	70-130		
Carbon tetrachloride	4.1		1.0	ug/L	5.000		82	70-130		
Chlorobenzene	5.1		1.0	ug/L	5.000		103	70-130		
Chloroethane	5.1		1.0	ug/L	5.000		101	60-150		
Chloroform	4.8		1.0	ug/L	5.000		97	70-130		
Chloromethane	4.6		1.0	ug/L	5.000		92	60-150		
Dibromochloromethane	4.1		1.0	ug/L	5.000		82	70-130		
1,2-Dibromo-3-chloropropane	4.7		1.0	ug/L	5.000		94	70-130		
1,2-Dibromoethane (EDB)	4.6		1.0	ug/L	5.000		91	70-130		
Dibromomethane	4.7		1.0	ug/L	5.000		93	70-130		
1,2-Dichlorobenzene	4.9		1.0	ug/L	5.000		98	70-130		
1,4-Dichlorobenzene	5.1		1.0	ug/L	5.000		101	70-130		
1,1-Dichloroethane	4.9		1.0	ug/L	5.000		98	70-130		
1,2-Dichloroethane	4.5		1.0	ug/L	5.000		89	70-130		
1,1-Dichloroethene	4.8		1.0	ug/L	5.000		96	70-130		
cis-1,2-Dichloroethene	4.9		1.0	ug/L	5.000		99	70-130		
trans-1,2-Dichloroethene	5.0		1.0	ug/L	5.000		99	70-130		
1,2-Dichloropropane	5.0		1.0	ug/L	5.000		100	70-130		
1,3-Dichloropropane	4.8		1.0	ug/L	5.000		96	70-130		
2,2-Dichloropropane	4.5		1.0	ug/L	5.000		89	70-130		
1,1-Dichloropropene	4.7		1.0	ug/L	5.000		93	70-130		
cis-1,3-Dichloropropene	4.4		1.0	ug/L	5.000		88	70-130		
trans-1,3-Dichloropropene	4.1		1.0	ug/L	5.000		82	70-130		

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
12/01/23 11:03

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311651 - GCMS-WATER-VOLATILES										
LCS (B311651-BS1)					Prepared & Analyzed: 11/30/23					
Ethylbenzene	5.1		1.0	ug/L	5.000		101	70-130		
2-Hexanone	9.2		5.0	ug/L	10.00		92	70-130		
Methyl tert-butyl ether (MTBE)	4.5		1.0	ug/L	5.000		91	70-130		
4-Methyl-2-pentanone	9.0		5.0	ug/L	10.00		90	70-130		
Methylene chloride	5.5		1.0	ug/L	5.000		109	50-200		
Methyl methacrylate	4.0	J	5.0	ug/L	5.000		80	50-150		
Styrene	4.8		1.0	ug/L	5.000		95	70-130		
1,1,1,2-Tetrachloroethane	4.1		1.0	ug/L	5.000		81	70-130		
1,1,2,2-Tetrachloroethane	4.7		1.0	ug/L	5.000		94	70-130		
Tetrachloroethene	4.6		1.0	ug/L	5.000		92	70-130		
Toluene	4.9		1.0	ug/L	5.000		98	70-130		
1,1,1-Trichloroethane	4.3		1.0	ug/L	5.000		86	70-130		
1,1,2-Trichloroethane	4.6		1.0	ug/L	5.000		92	70-130		
Trichloroethene	4.8		1.0	ug/L	5.000		96	70-130		
Trichlorofluoromethane (Freon 11)	4.5		1.0	ug/L	5.000		89	70-130		
1,2,3-Trichloropropane	4.5		1.0	ug/L	5.000		91	70-130		
Vinyl acetate	3.8		1.0	ug/L	5.000		77	70-130		
Vinyl chloride	4.9		1.0	ug/L	5.000		98	70-130		
o-Xylene	4.7		1.0	ug/L	5.000		93	70-130		
m- & p-Xylenes	10.1		1.0	ug/L	10.00		101	70-130		
Surrogate: 1,2-Dichloroethane-d4	*48.31*			ug/L	*50.00*		*97*	*70-130*		
Surrogate: Toluene-d8	*49.22*			ug/L	*50.00*		*98*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.94*			ug/L	*50.00*		*98*	*75-120*		
Duplicate (B311651-DUP1)			**Source: 3112125-01**		Prepared & Analyzed: 11/30/23					
Acetone	ND		5.0	ug/L		ND				20
Acrylonitrile	ND		5.0	ug/L		ND				15
Allyl chloride (3-Chloropropylene)	ND		1.0	ug/L		ND				20
Benzene	ND		1.0	ug/L		ND				20
Bromochloromethane	ND		1.0	ug/L		ND				20
Bromodichloromethane	ND		1.0	ug/L		ND				20
Bromoform	ND		1.0	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
12/01/23 11:03

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311651 - GCMS-WATER-VOLATILES										
Duplicate (B311651-DUP1)			**Source: 3112125-01**		Prepared & Analyzed: 11/30/23					
Bromomethane	ND		1.0	ug/L		ND				20
2-Butanone (MEK)	ND		5.0	ug/L		ND				20
Carbon disulfide	ND		1.0	ug/L		ND				20
Carbon tetrachloride	ND		1.0	ug/L		ND				20
Chlorobenzene	ND		1.0	ug/L		ND				20
Chloroethane	ND		1.0	ug/L		ND				20
Chloroform	ND		1.0	ug/L		ND				20
Chloromethane	ND		1.0	ug/L		ND				20
Chloroprene	ND		1.0	ug/L		ND				20
Dibromochloromethane	ND		1.0	ug/L		ND				20
1,2-Dibromo-3-chloropropane	ND		1.0	ug/L		ND				20
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		ND				20
Dibromomethane	ND		1.0	ug/L		ND				20
1,2-Dichlorobenzene	ND		1.0	ug/L		ND				20
1,4-Dichlorobenzene	ND		1.0	ug/L		ND				20
trans-1,4-Dichloro-2-butene	ND		1.0	ug/L		ND				20
1,1-Dichloroethane	ND		1.0	ug/L		ND				20
1,2-Dichloroethane	ND		1.0	ug/L		ND				20
1,1-Dichloroethene	ND		1.0	ug/L		ND				20
cis-1,2-Dichloroethene	1.8		1.0	ug/L		1.8			4	20
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				20
1,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,3-Dichloropropane	ND		1.0	ug/L		ND				20
2,2-Dichloropropane	ND		1.0	ug/L		ND				20
1,1-Dichloropropene	ND		1.0	ug/L		ND				20
cis-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
trans-1,3-Dichloropropene	ND		1.0	ug/L		ND				20
Ethyl methacrylate	ND		5.0	ug/L		ND				20
Ethylbenzene	ND		1.0	ug/L		ND				20
2-Hexanone	ND		5.0	ug/L		ND				20
Isobutanol	ND		100	ug/L		ND				20

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Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
12/01/23 11:03

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311651 - GCMS-WATER-VOLATILES										
Duplicate (B311651-DUP1)		**Source: 3112125-01**		Prepared & Analyzed: 11/30/23						
Iodomethane	ND		1.0	ug/L		ND				20
Methyl tert-butyl ether (MTBE)	ND		1.0	ug/L		ND				20
4-Methyl-2-pentanone	ND		5.0	ug/L		ND				20
Methylene chloride	ND		1.0	ug/L		ND				20
Methyl methacrylate	ND		5.0	ug/L		ND				20
Styrene	ND		1.0	ug/L		ND				20
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L		ND				20
Tetrachloroethene	ND		1.0	ug/L		ND				20
Toluene	ND		1.0	ug/L		ND				20
1,1,1-Trichloroethane	ND		1.0	ug/L		ND				20
1,1,2-Trichloroethane	ND		1.0	ug/L		ND				20
Trichloroethene	ND		1.0	ug/L		ND				20
Trichlorofluoromethane (Freon 11)	ND		1.0	ug/L		ND				20
1,2,3-Trichloropropane	ND		1.0	ug/L		ND				20
Vinyl acetate	ND		1.0	ug/L		ND				20
Vinyl chloride	ND		1.0	ug/L		ND				20
o-Xylene	ND		1.0	ug/L		ND				20
m- & p-Xylenes	ND		1.0	ug/L		ND				20
Surrogate: 1,2-Dichloroethane-d4	*48.96*			ug/L	*50.00*		*98*	*70-130*		
Surrogate: Toluene-d8	*49.17*			ug/L	*50.00*		*98*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*48.80*			ug/L	*50.00*		*98*	*75-120*		
Matrix Spike (B311651-MS1)		**Source: 3112716-01**		Prepared & Analyzed: 11/30/23						
Acetone	10.4		5.0	ug/L	10.00	ND	104	60-120		
Acrylonitrile	10.7		5.0	ug/L	10.00	ND	107	0-200		
Benzene	11.7		1.0	ug/L	10.00	ND	117	60-120		
Bromochloromethane	11.0		1.0	ug/L	10.00	ND	110	60-120		
Bromodichloromethane	10.7		1.0	ug/L	10.00	0.8	100	60-120		
Bromoform	8.6		1.0	ug/L	10.00	ND	86	60-120		
Bromomethane	9.7		1.0	ug/L	10.00	ND	97	60-120		
2-Butanone (MEK)	10.5		5.0	ug/L	10.00	ND	105	60-120		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
12/01/23 11:03

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311651 - GCMS-WATER-VOLATILES										
Matrix Spike (B311651-MS1)		**Source: 3112716-01**		Prepared & Analyzed: 11/30/23						
Carbon disulfide	11.2		1.0	ug/L	10.00	ND	112	60-120		
Carbon tetrachloride	8.9		1.0	ug/L	10.00	ND	89	60-120		
Chlorobenzene	10.9		1.0	ug/L	10.00	ND	109	60-120		
Chloroethane	10.8		1.0	ug/L	10.00	ND	108	60-120		
Chloroform	12.9		1.0	ug/L	10.00	2.5	104	60-120		
Chloromethane	10.8		1.0	ug/L	10.00	ND	108	60-120		
Dibromochloromethane	9.2		1.0	ug/L	10.00	ND	92	60-120		
1,2-Dibromo-3-chloropropane	8.8		1.0	ug/L	10.00	ND	88	60-120		
1,2-Dibromoethane (EDB)	10.0		1.0	ug/L	10.00	ND	100	60-120		
Dibromomethane	10.0		1.0	ug/L	10.00	ND	100	60-120		
1,2-Dichlorobenzene	10.2		1.0	ug/L	10.00	ND	102	60-120		
1,4-Dichlorobenzene	10.6		1.0	ug/L	10.00	ND	106	60-120		
1,1-Dichloroethane	10.9		1.0	ug/L	10.00	ND	109	60-120		
1,2-Dichloroethane	9.7		1.0	ug/L	10.00	ND	97	60-120		
1,1-Dichloroethene	11.0		1.0	ug/L	10.00	ND	110	60-120		
cis-1,2-Dichloroethene	10.7		1.0	ug/L	10.00	ND	107	60-120		
trans-1,2-Dichloroethene	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,2-Dichloropropane	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,3-Dichloropropane	10.8		1.0	ug/L	10.00	ND	108	60-120		
2,2-Dichloropropane	8.9		1.0	ug/L	10.00	ND	89	60-120		
1,1-Dichloropropene	10.8		1.0	ug/L	10.00	ND	108	60-120		
cis-1,3-Dichloropropene	9.3		1.0	ug/L	10.00	ND	93	60-120		
trans-1,3-Dichloropropene	8.8		1.0	ug/L	10.00	ND	88	60-120		
Ethylbenzene	11.6		1.0	ug/L	10.00	ND	116	60-120		
2-Hexanone	9.2		5.0	ug/L	10.00	ND	92	60-120		
Methyl tert-butyl ether (MTBE)	10.0		1.0	ug/L	10.00	ND	100	60-120		
4-Methyl-2-pentanone	9.1		5.0	ug/L	10.00	ND	91	60-120		
Methylene chloride	11.3		1.0	ug/L	10.00	ND	113	60-120		
Methyl methacrylate	8.8		5.0	ug/L	10.00	ND	88	60-120		
Styrene	10.7		1.0	ug/L	10.00	ND	107	60-120		
1,1,1,2-Tetrachloroethane	9.1		1.0	ug/L	10.00	ND	91	60-120		

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Will Brewington, President

1500 Caton Center Dr Suite G
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410-247-7600
www.mdspectral.com
MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
12/01/23 11:03

Volatile Organics by EPA 8260B (GC/MS) - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311651 - GCMS-WATER-VOLATILES										
Matrix Spike (B311651-MS1)			**Source: 3112716-01**		Prepared & Analyzed: 11/30/23					
1,1,2,2-Tetrachloroethane	10.3		1.0	ug/L	10.00	ND	103	60-120		
Tetrachloroethene	10.5		1.0	ug/L	10.00	ND	105	60-120		
Toluene	11.0		1.0	ug/L	10.00	ND	110	60-120		
1,1,1-Trichloroethane	9.3		1.0	ug/L	10.00	ND	93	60-120		
1,1,2-Trichloroethane	10.5		1.0	ug/L	10.00	ND	105	60-120		
Trichloroethene	10.3		1.0	ug/L	10.00	ND	103	60-120		
Trichlorofluoromethane (Freon 11)	10.4		1.0	ug/L	10.00	ND	104	60-120		
1,2,3-Trichloropropane	9.3		1.0	ug/L	10.00	ND	93	60-120		
Vinyl acetate	11.8		1.0	ug/L	10.00	ND	118	60-120		
Vinyl chloride	11.7		1.0	ug/L	10.00	ND	117	60-120		
o-Xylene	10.7		1.0	ug/L	10.00	ND	107	60-120		
m- & p-Xylenes	22.9		1.0	ug/L	20.00	ND	114	60-120		
Surrogate: 1,2-Dichloroethane-d4	*47.45*			ug/L	*50.00*		*95*	*70-130*		
Surrogate: Toluene-d8	*49.74*			ug/L	*50.00*		*99*	*75-120*		
Surrogate: 4-Bromofluorobenzene	*49.59*			ug/L	*50.00*		*99*	*75-120*		

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Will Brewington, President

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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
12/01/23 11:03

Anions by EPA 300.0 - Quality Control

Analyte	Result	Notes	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B311442 - 300.0 Anions Prep										
Blank (B311442-BLK1)					Prepared & Analyzed: 11/20/23					
Nitrate	ND		0.050	mg/L						
Nitrate (as N)	ND		0.011	mg/L						
LCS (B311442-BS1)					Prepared: 11/20/23 Analyzed: 11/21/23					
Nitrate	5.27		0.055	mg/L	5.000		105	90-110		
Nitrate (as N)	1.19		0.012	mg/L				90-110		
Duplicate (B311442-DUP1)		**Source: 3112015-01**			Prepared: 11/20/23 Analyzed: 11/21/23					
Nitrate	0.193		0.050	mg/L		0.196			1	200
Nitrate (as N)	0.044		0.011	mg/L		0.044			1	200
Matrix Spike (B311442-MS1)		**Source: 3112015-01**			Prepared: 11/20/23 Analyzed: 11/21/23					
Nitrate	5.39		0.055	mg/L	5.000	0.196	104	80-120		
Nitrate (as N)	1.22		0.012	mg/L		0.044		80-120		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

1500 Caton Center Dr Suite G
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MD DW LabID 153

Project: MILLERSVILLE LANDFILL

Project Number: MLF-FALL 2023
Project Manager: Steve Brown

Reported:
12/01/23 11:03

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

EMA ENVIRONMENTAL MONITORING AND ASSESSMENT, LLC

207 East Sixth Street ▪ Lititz, Pennsylvania 17543 ▪ 717-626-9260 ▪ sbrownema@gmail.com

Site	MILLERSVILLE LANDFILL	Lab	MSS
Project	MLF - FALL 2023	Turnaround Time	☒ Normal ☐ Rush

Sample Type

GW = Groundwater SO = Soil DW = Drinking Water QC = Quality Control
SW = Surface Water LE = Leachate Other _____

Analytical Parameters

	Sample Designation	# Bottles	Sample Date	Sample Time	Grab	Composite	Sample Type	VOCs - METHOD 8260 (1)	N1 PHASE									
1	TW-3	4	11-20-23	1320	✓		GW	✓	✓									
2	TRIP BLANK	2	11-20-23	—			QA	✓										
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		

3112015-01 A

	Signature	Date	Time	Comments
Relinquished by	[signature]	11-20-23	1500	(1) APPENDIX I LIST of 47 VOCs
Received by	Rachel [signature]	11-20-23	1500	MTBE, DCDFM + DEFM
Relinquished by				
Received by				
Relinquished by				STANDARD REPORT
Received by				

Cooler Temp on Arrival: 3.1 Deg. C T-41

Rev. Aug. 2018

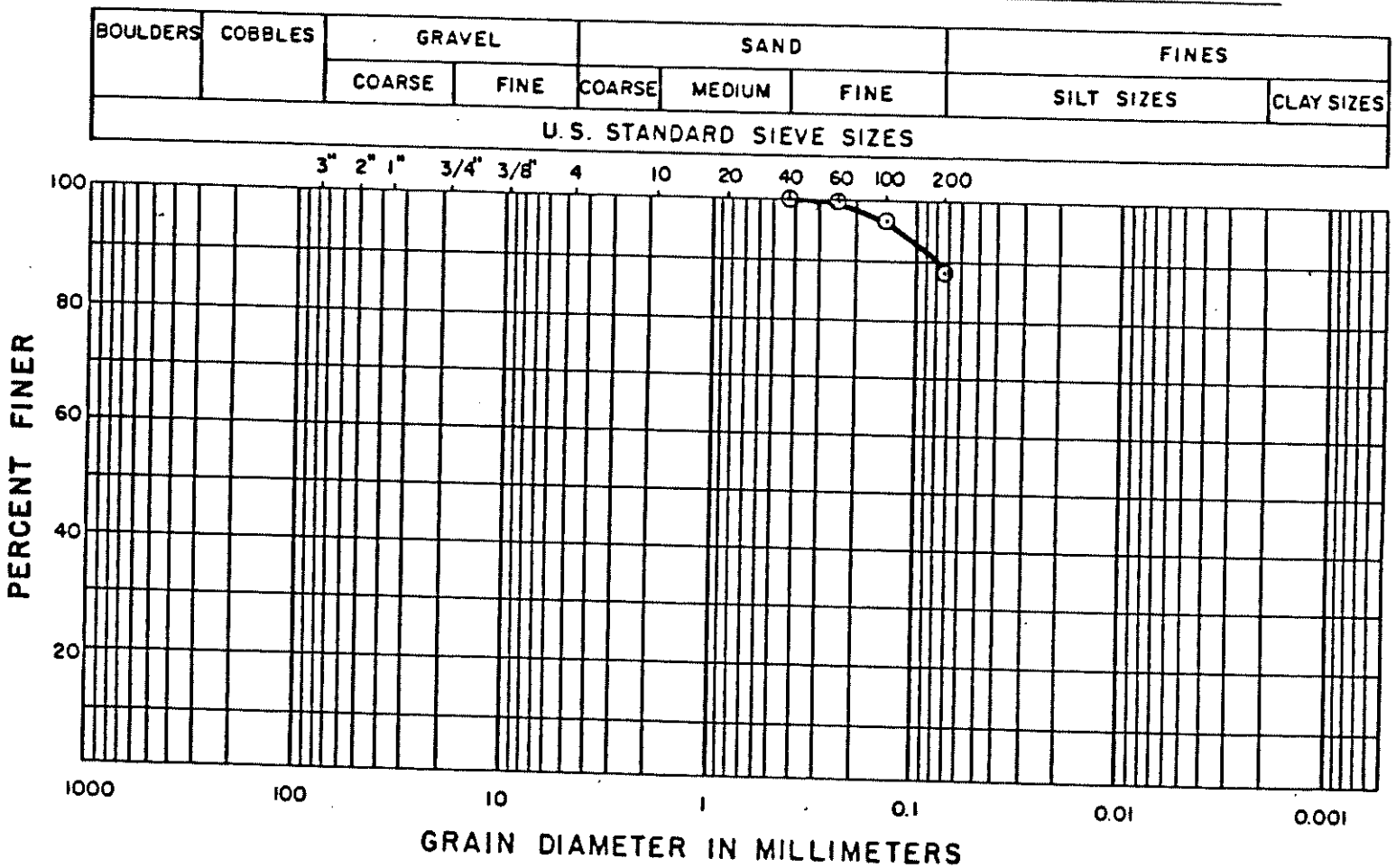
Appendix D
Soil Laboratory Reports

Appendix D.1
Cell 9 - Geoservices

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G-1 DEPTH 0-2'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_U) N/A

COEFFICIENT OF CURVATURE (C_C) N/A

UNIFIED SOIL CLASSIFICATION (USC) CL

LIQUID LIMIT (LL) 38

PLASTIC LIMIT (PL) 22

PLASTICITY INDEX (PI) 16

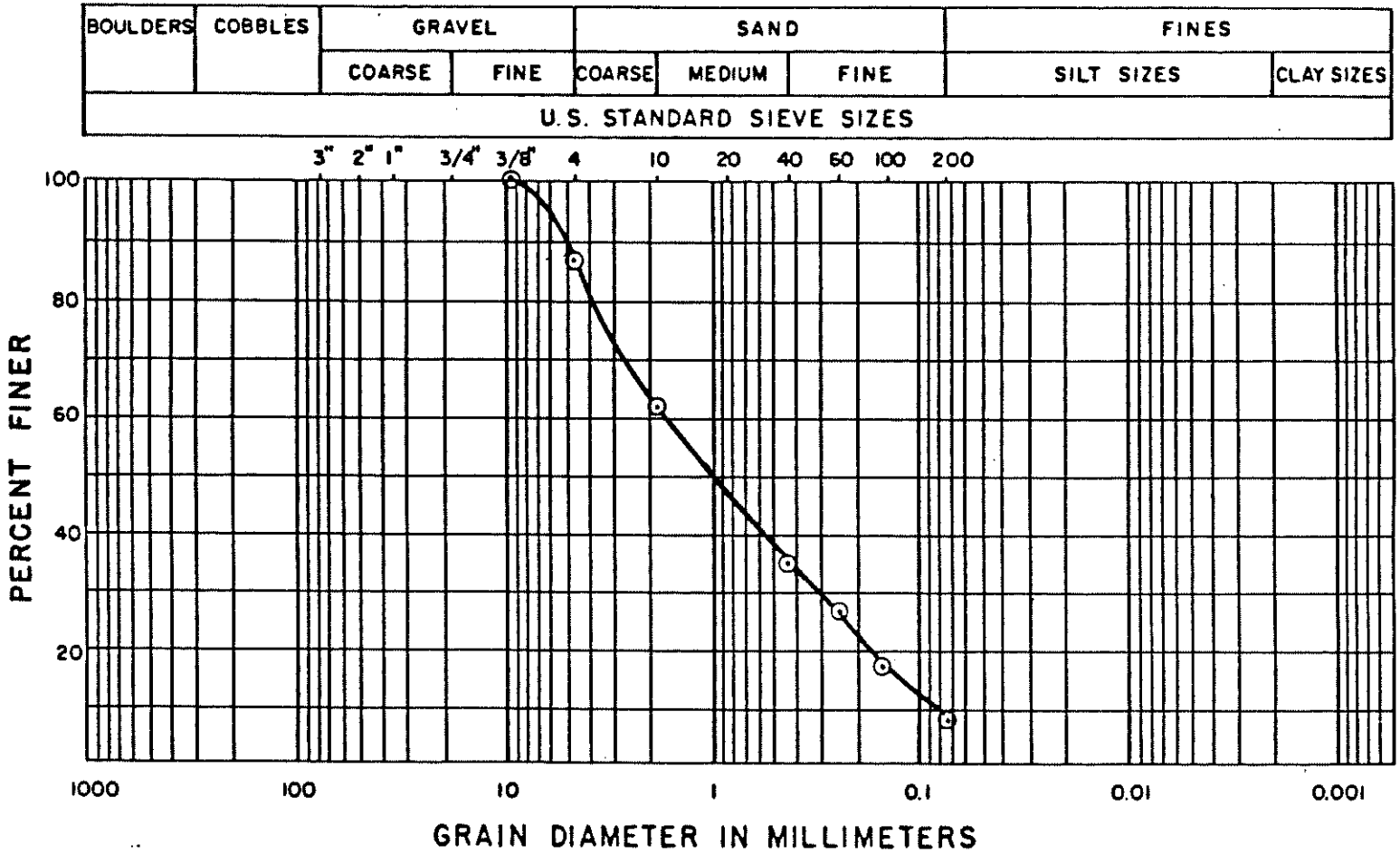
GEOSERVICES INC.
CONSULTING ENGINEERS
GEOTECHNICAL LABORATORY

FIGURE NO.
PROJECT NO. P1160
DOCUMENT NO. N890677
PAGE NO.

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G1, S-5 DEPTH 18'

SOIL DESCRIPTION _____



COEFFICIENT OF UNIFORMITY (C_u) 20.0

COEFFICIENT OF CURVATURE (C_c) 0.7

LIQUID LIMIT (LL) N/A

PLASTIC LIMIT (PL) N/A

PLASTICITY INDEX (PI) N/A

UNIFIED SOIL CLASSIFICATION (USC) POORLY-GRADED SAND WITH SILT AND GRAVEL, SP-SM

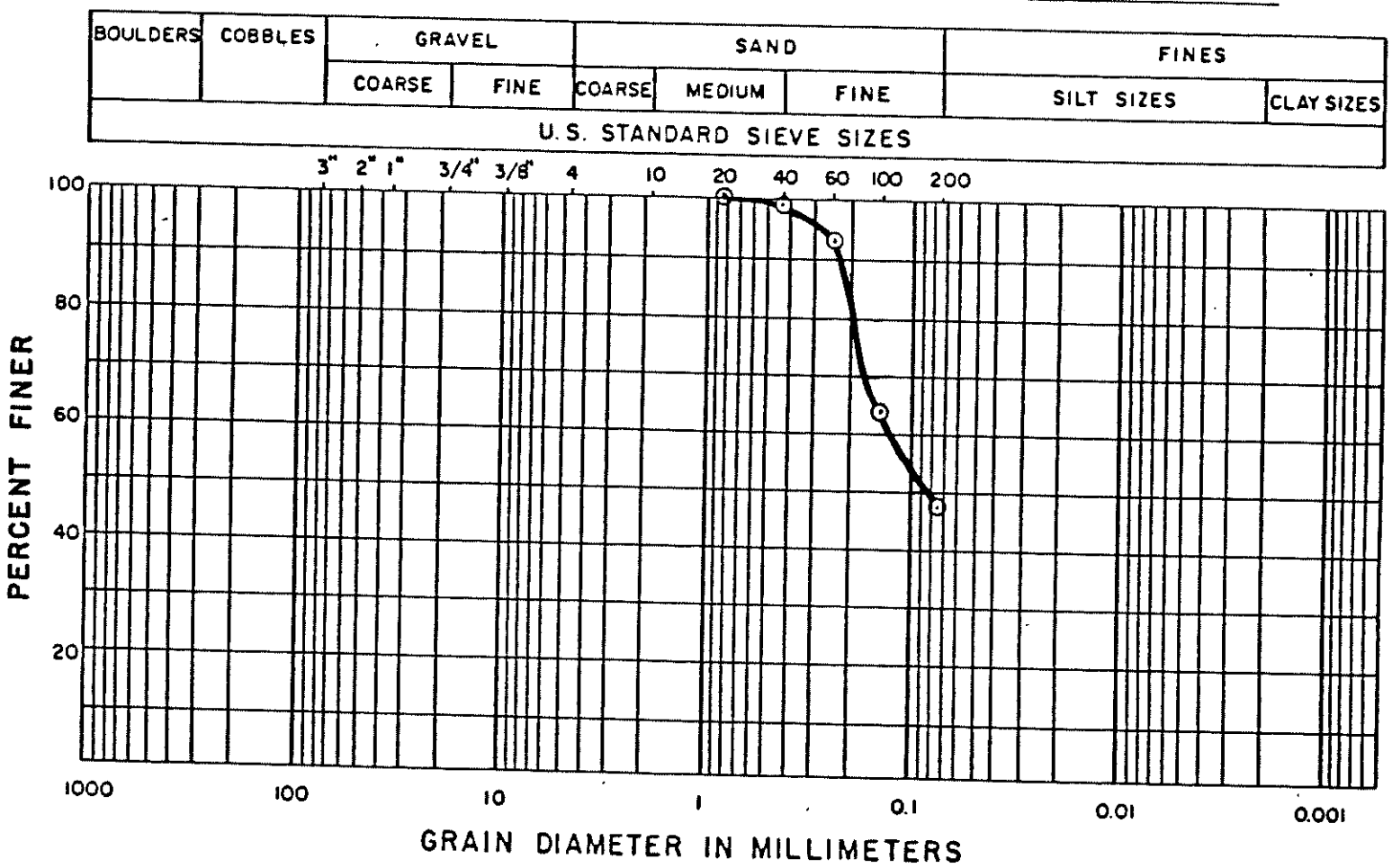
GEOSERVICES INC.
CONSULTING ENGINEERS
GEOTECHNICAL LABORATORY

FIGURE NO.
PROJECT NO. P1160
DOCUMENT NO. N890677
PAGE NO.

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G-1 DEPTH 28-30'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_u) N/A

COEFFICIENT OF CURVATURE (C_c) N/A

LIQUID LIMIT (LL) 24

PLASTIC LIMIT (PL) 16

PLASTICITY INDEX (PI) 8

UNIFIED SOIL CLASSIFICATION (USC) CL - ML

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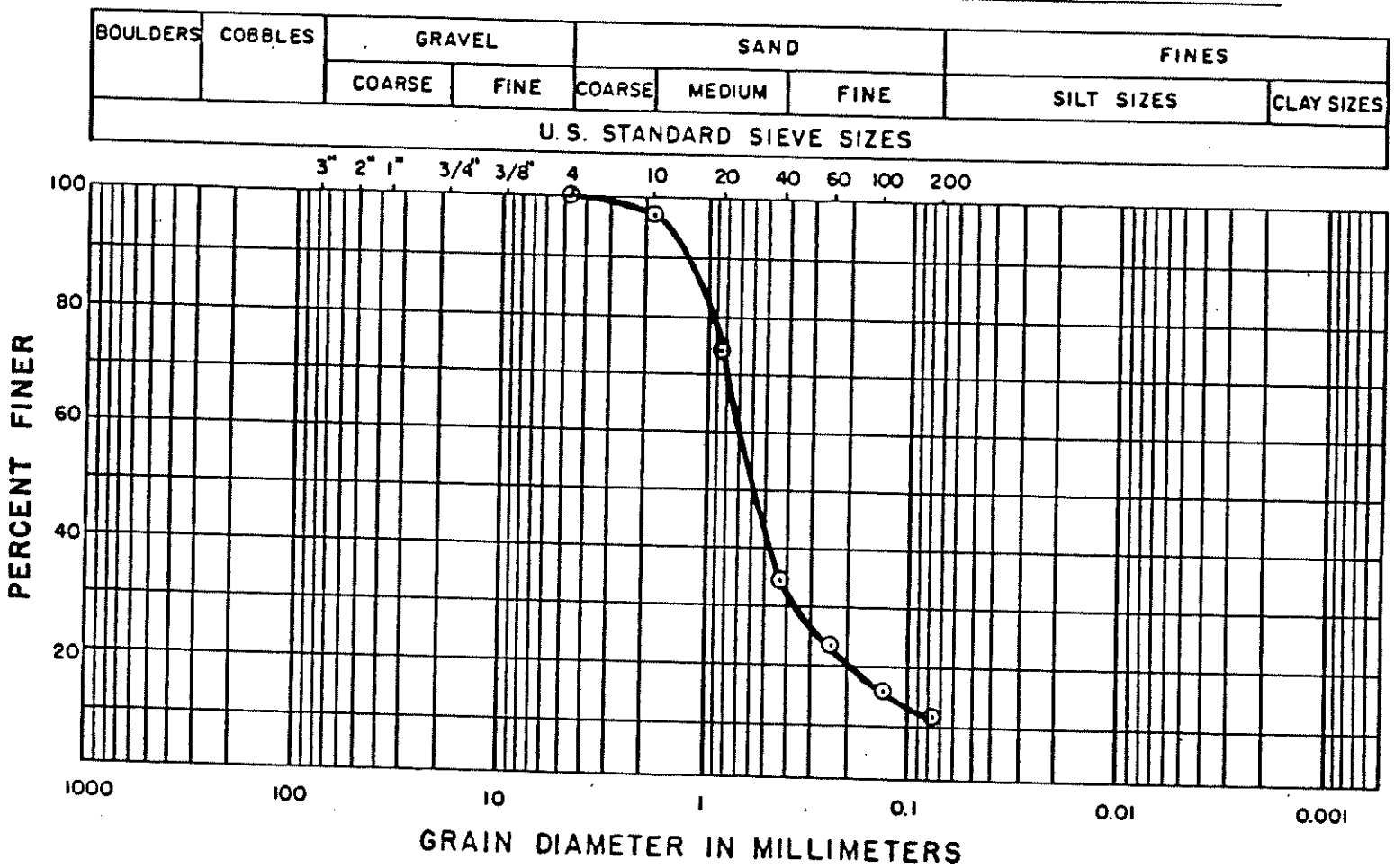
FIGURE NO.
PROJECT NO. P1160
DOCUMENT NO. N890677
PAGE NO.

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G-1 DEPTH 33-35'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_u) 14

COEFFICIENT OF CURVATURE (C_c) 4

LIQUID LIMIT (LL) N/A

PLASTIC LIMIT (PL) N/A

PLASTICITY INDEX (PI) N/A

UNIFIED SOIL CLASSIFICATION (USC) SP - SM

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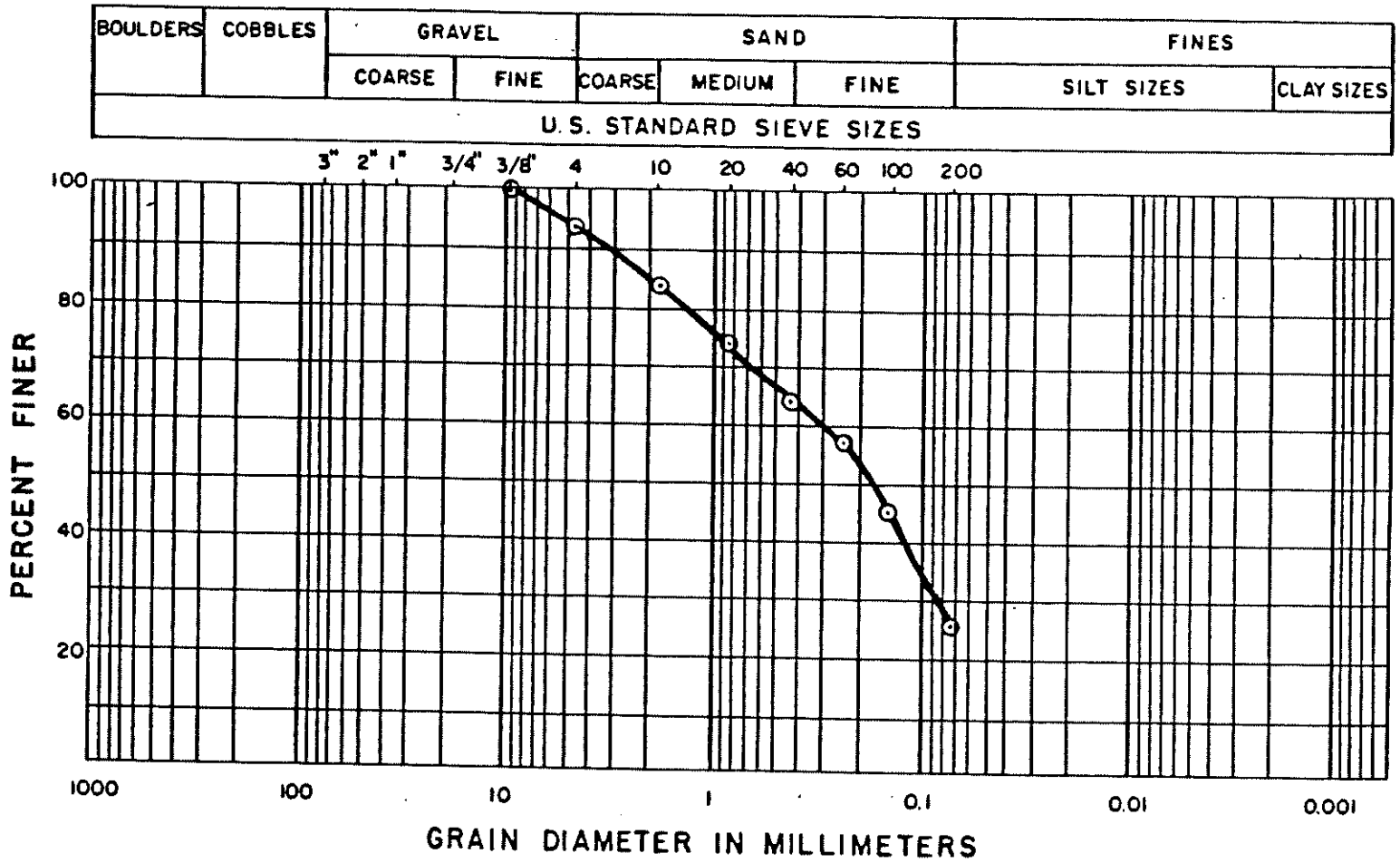
FIGURE NO.
PROJECT NO. P1160
DOCUMENT NO. N890677
PAGE NO.

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G-3 DEPTH 3-5'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_u) N/A

COEFFICIENT OF CURVATURE (C_c) N/A

LIQUID LIMIT (LL) 26

PLASTIC LIMIT (PL) 22

PLASTICITY INDEX (PI) 4

UNIFIED SOIL CLASSIFICATION (USC) SM

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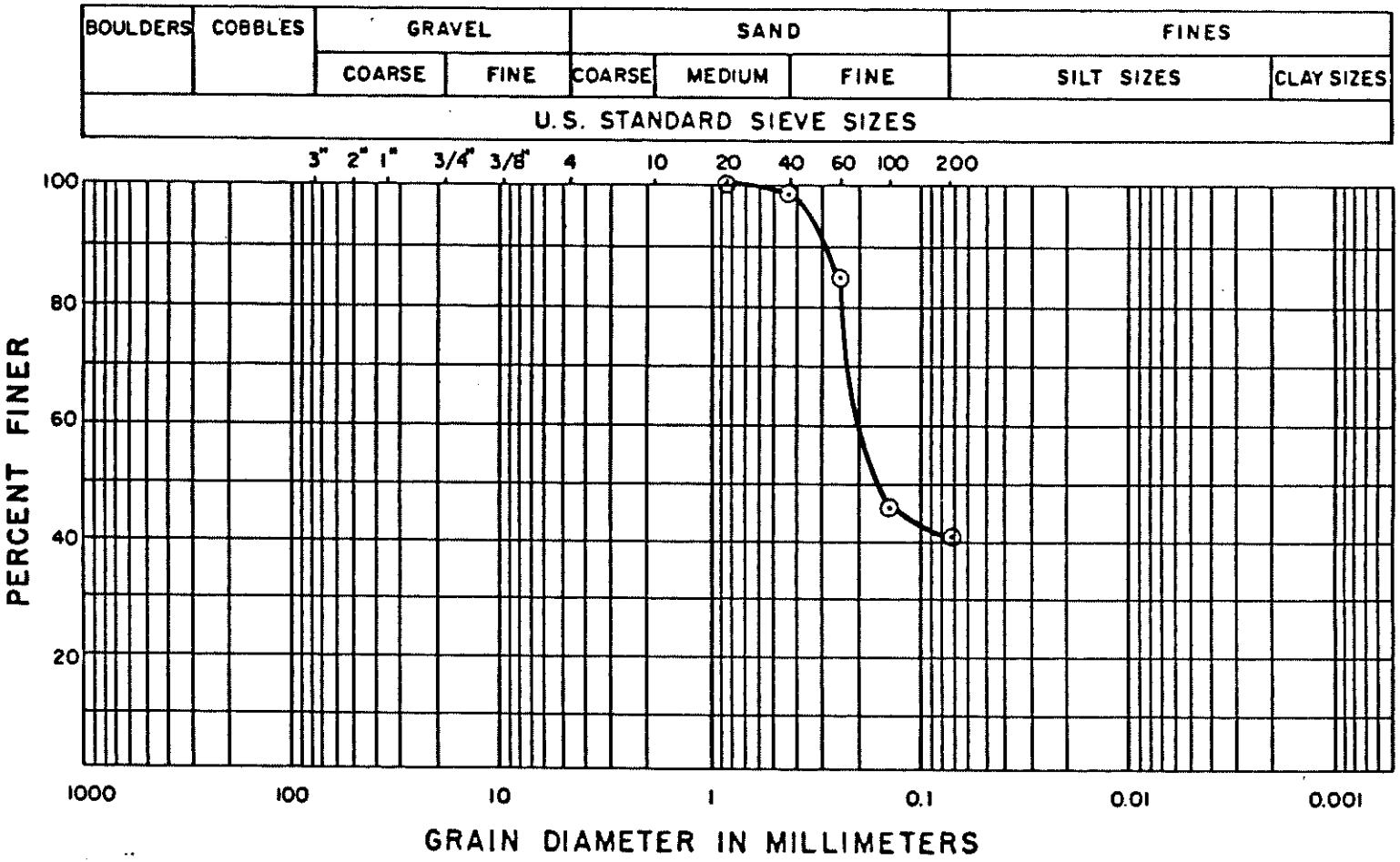
FIGURE NO.
PROJECT NO. P1160
DOCUMENT NO. N890677
PAGE NO.

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G3, S-3 DEPTH 8'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_u) N/A

COEFFICIENT OF CURVATURE (C_c) N/A

LIQUID LIMIT (LL)

PLASTIC LIMIT (PL)

PLASTICITY INDEX (PI)

UNIFIED SOIL CLASSIFICATION (USC) SILTY SAND, SM

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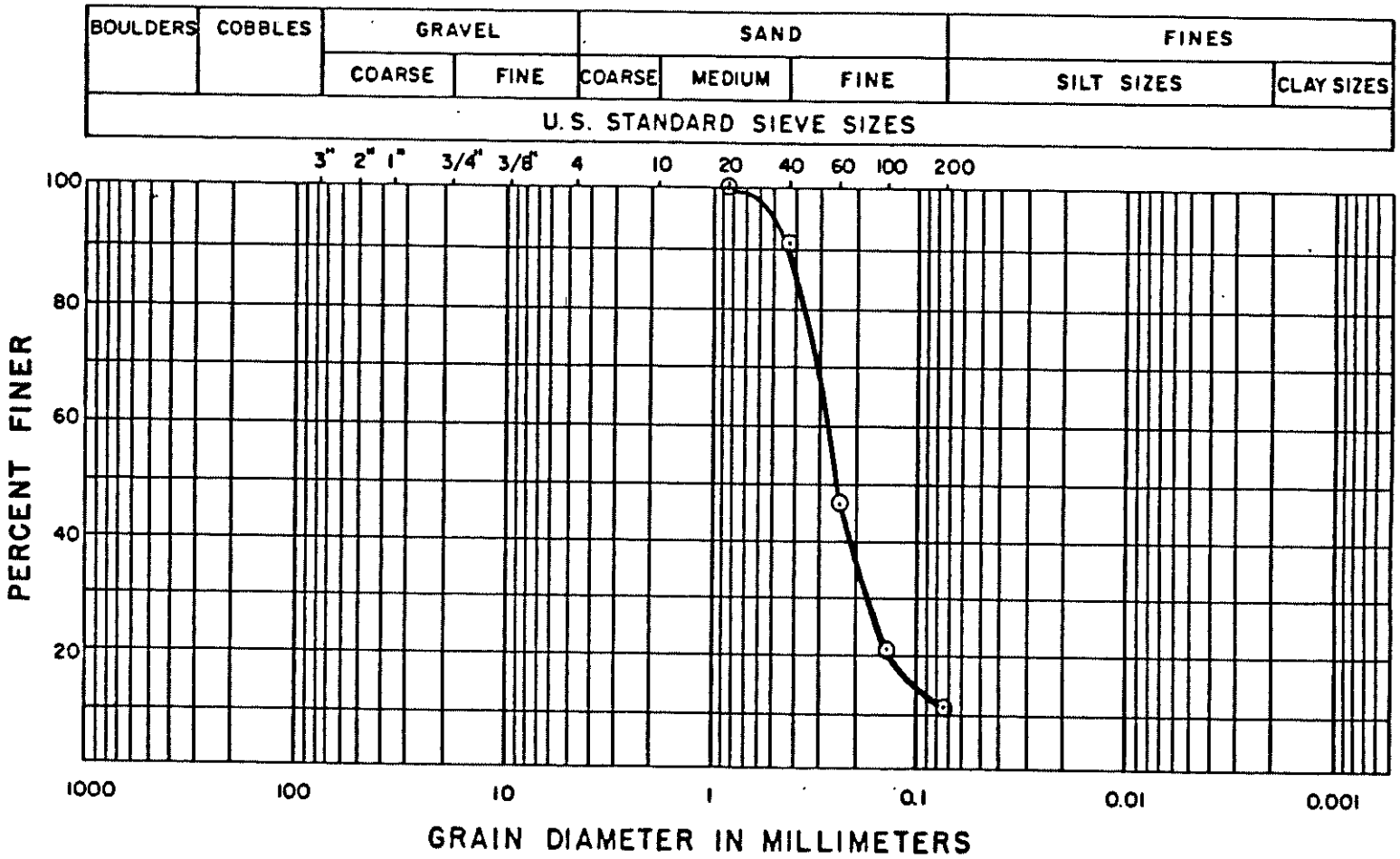
FIGURE NO.	
PROJECT NO.	P1160
DOCUMENT NO.	N890677
PAGE NO.	

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G-3 DEPTH 18-20'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_u) 5

COEFFICIENT OF CURVATURE (C_c) 2

LIQUID LIMIT (LL) —

PLASTIC LIMIT (PL) —

PLASTICITY INDEX (PI) —

UNIFIED SOIL CLASSIFICATION (USC) SP - SM

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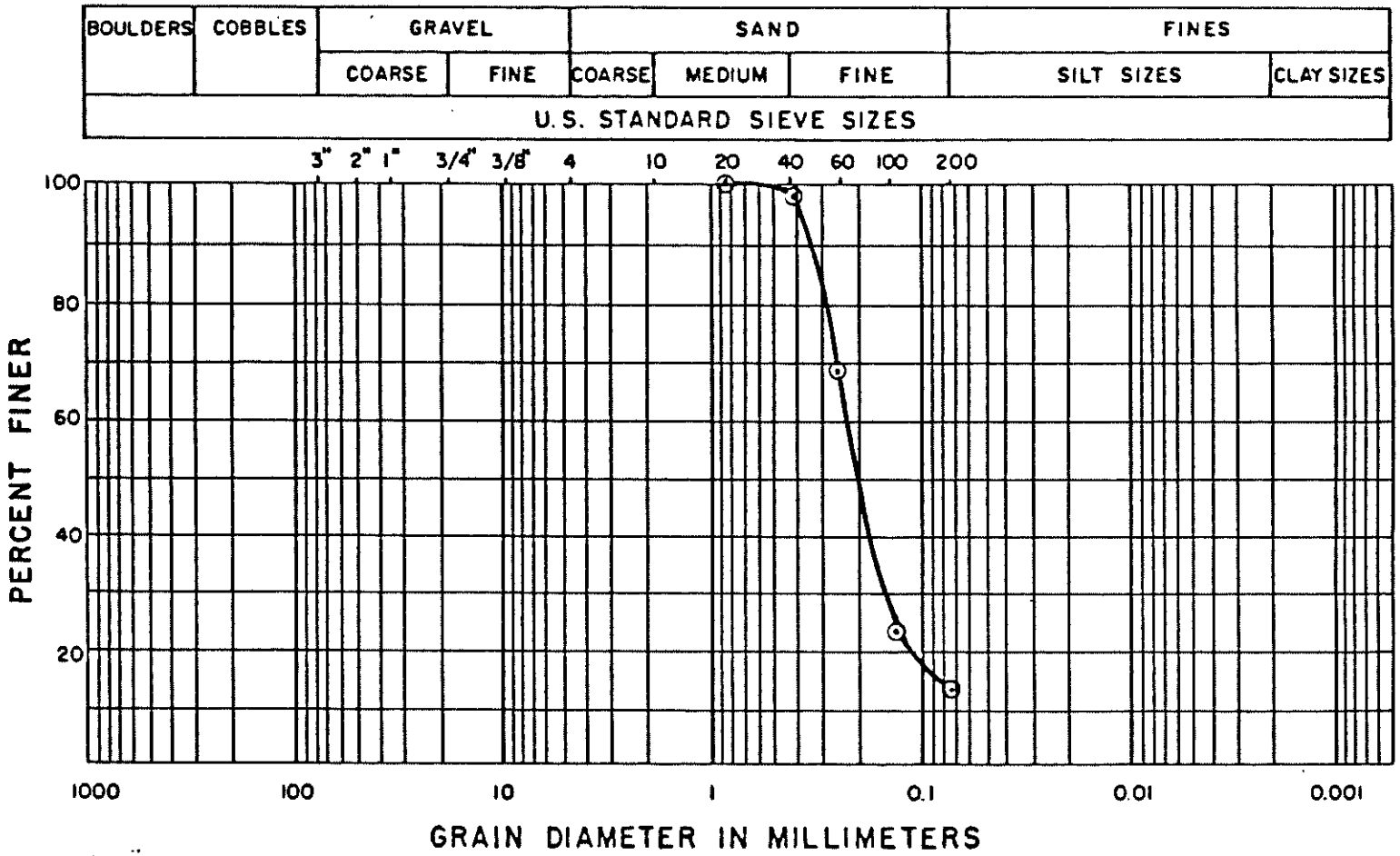
FIGURE NO.
PROJECT NO. P1160
DOCUMENT NO. N890677
PAGE NO.

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G3, S-7 DEPTH 28'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_U) N/A

COEFFICIENT OF CURVATURE (C_C) N/A

LIQUID LIMIT (LL) N/A

PLASTIC LIMIT (PL) N/A

PLASTICITY INDEX (PI) N/A

UNIFIED SOIL CLASSIFICATION (USC) SILTY SAND, SM

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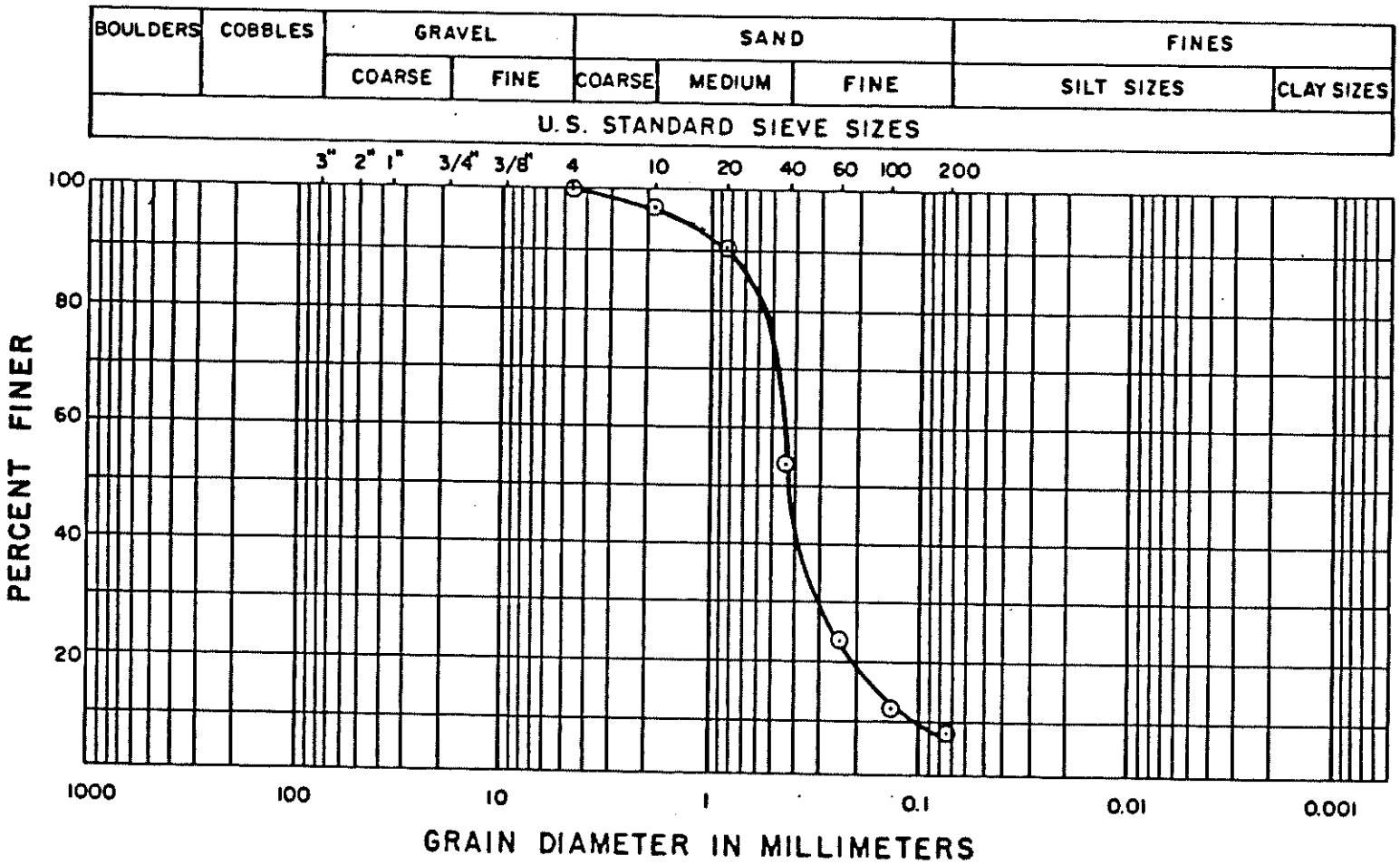
FIGURE NO.	
PROJECT NO.	P1160
DOCUMENT NO.	N890677
PAGE NO.	

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G3 DEPTH 43-45'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_u) 4

COEFFICIENT OF CURVATURE (C_c) 2

LIQUID LIMIT (LL) N/A

PLASTIC LIMIT (PL) N/A

PLASTICITY INDEX (PI) N/A

UNIFIED SOIL CLASSIFICATION (USC) SP - SM

GEOSERVICES INC.
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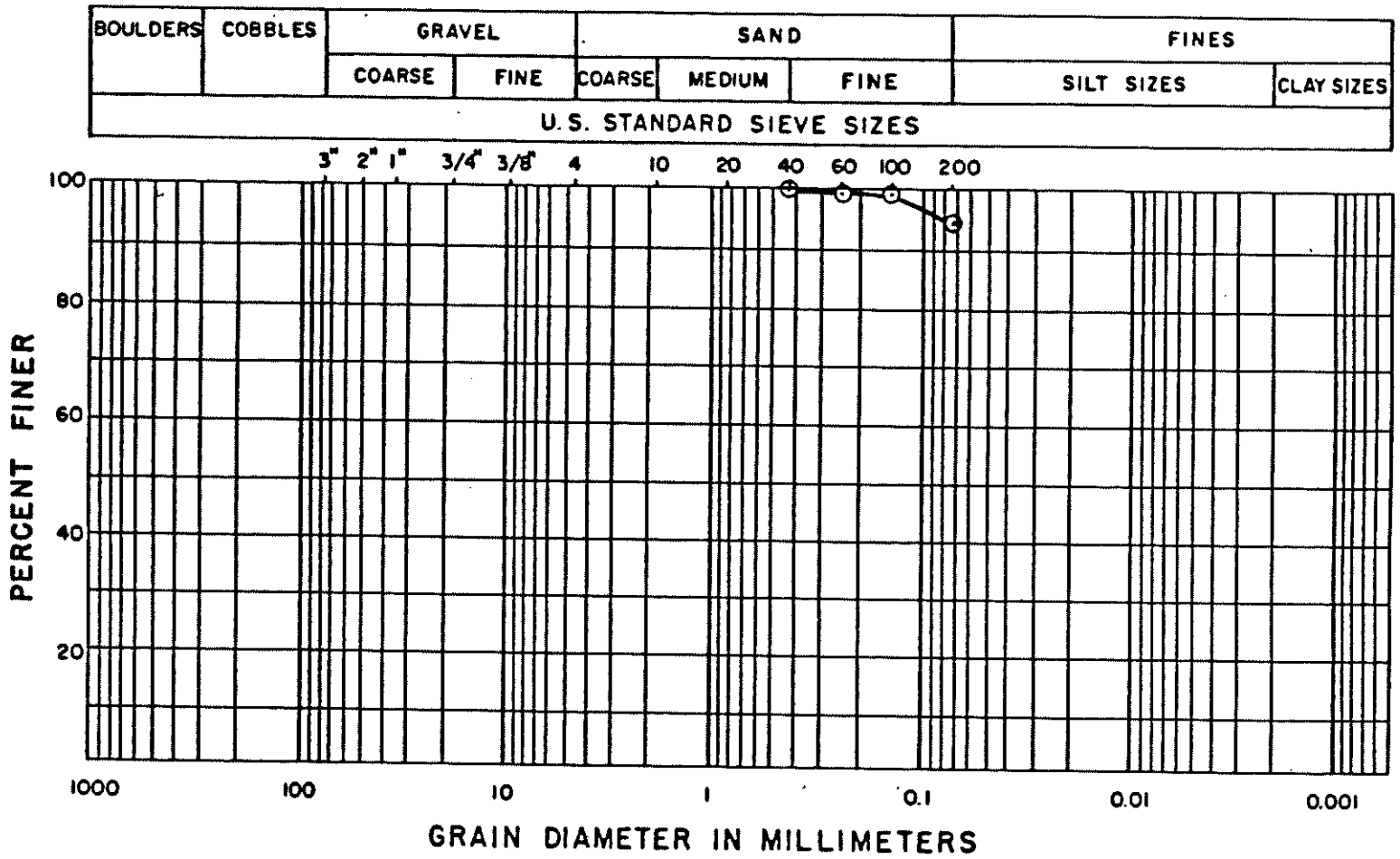
FIGURE NO.
PROJECT NO. P1160
DOCUMENT NO. N890677
PAGE NO.

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G-3 DEPTH 73-75'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_u) N/A

COEFFICIENT OF CURVATURE (C_c) N/A

LIQUID LIMIT (LL) 37

PLASTIC LIMIT (PL) 21

PLASTICITY INDEX (PI) 16

UNIFIED SOIL CLASSIFICATION (USC) CL

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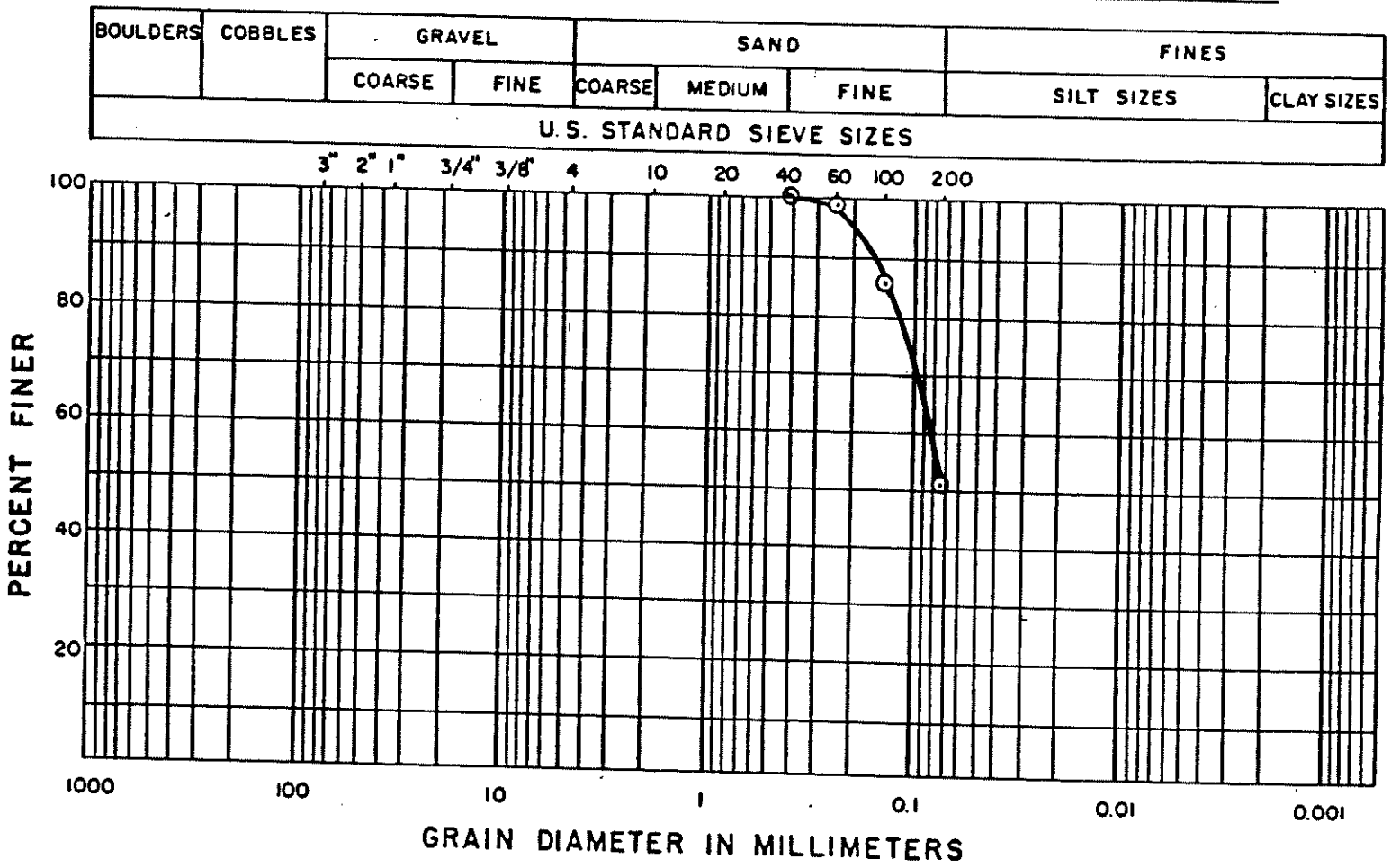
FIGURE NO.
PROJECT NO. P1160
DOCUMENT NO. N890677
PAGE NO.

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G-3 DEPTH 98-100'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_u) N/A

COEFFICIENT OF CURVATURE (C_c) N/A

UNIFIED SOIL CLASSIFICATION (USC) ML

LIQUID LIMIT (LL) —

PLASTIC LIMIT (PL) —

PLASTICITY INDEX (PI) —

GEOSERVICES INC.
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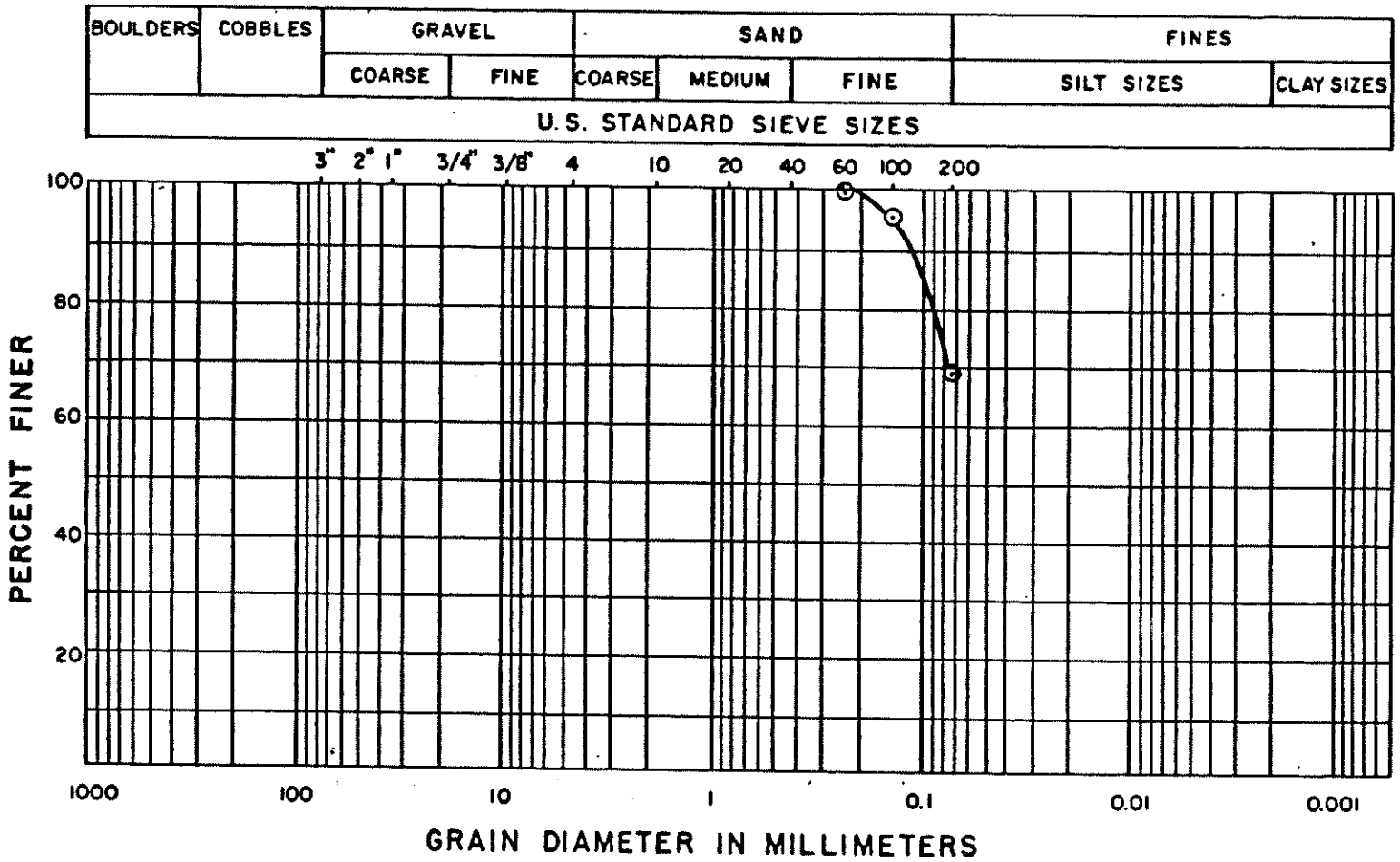
FIGURE NO.	
PROJECT NO.	P1160
DOCUMENT NO.	N890677
PAGE NO.	

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G3 DEPTH 108-110'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_u) N/A

COEFFICIENT OF CURVATURE (C_c) N/A

LIQUID LIMIT (LL) 24

PLASTIC LIMIT (PL) 17

PLASTICITY INDEX (PI) 7

UNIFIED SOIL CLASSIFICATION (USC) CL - ML

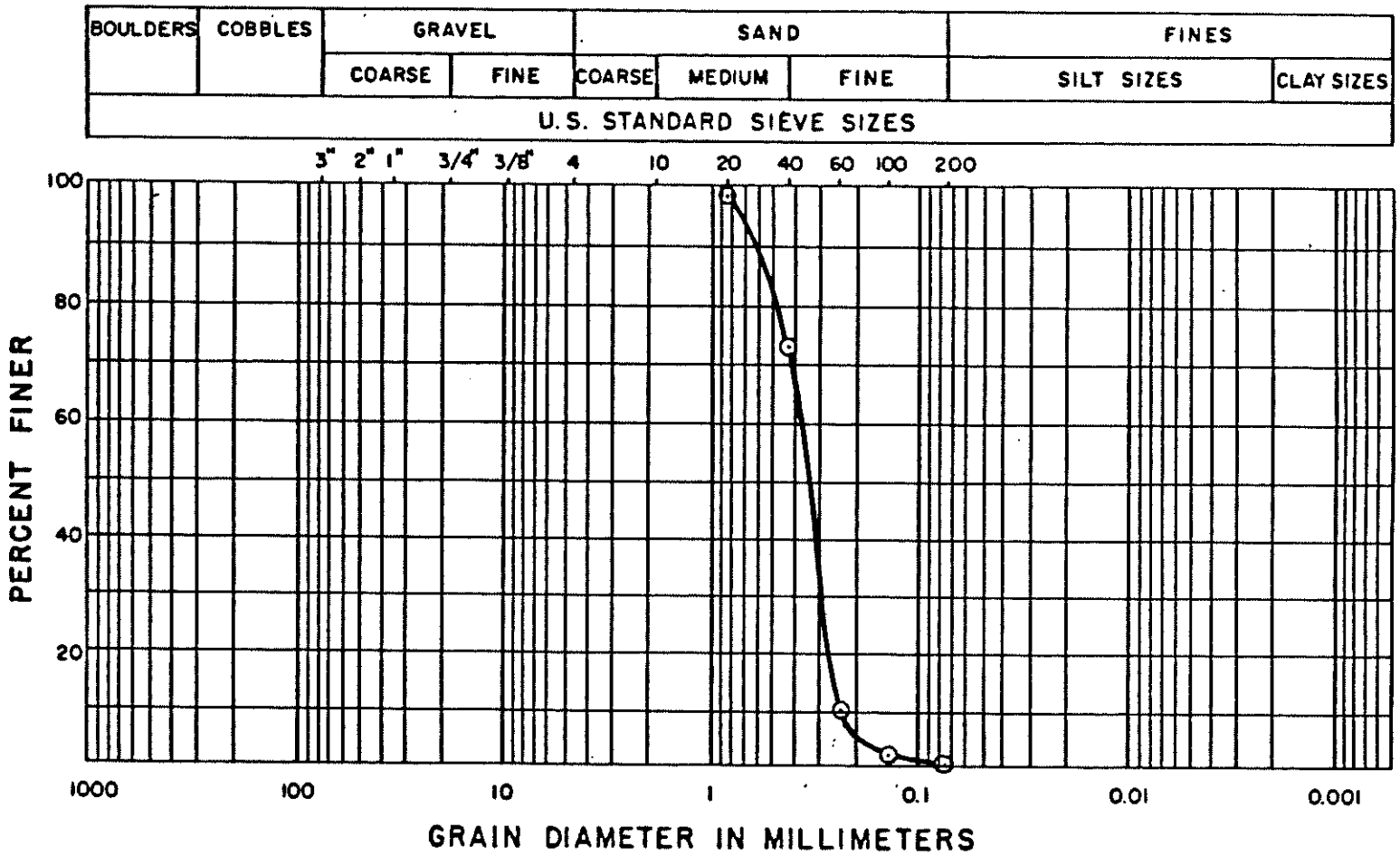
GEOSERVICES INC.
CONSULTING ENGINEERS
GEOTECHNICAL LABORATORY

FIGURE NO.
PROJECT NO. P1160
DOCUMENT NO. N890677
PAGE NO.

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G-3 DEPTH 138-140'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_U) 2

COEFFICIENT OF CURVATURE (C_C) 1

LIQUID LIMIT (LL) N/A

PLASTIC LIMIT (PL) N/A

PLASTICITY INDEX (PI) N/A

UNIFIED SOIL CLASSIFICATION (USC) SP

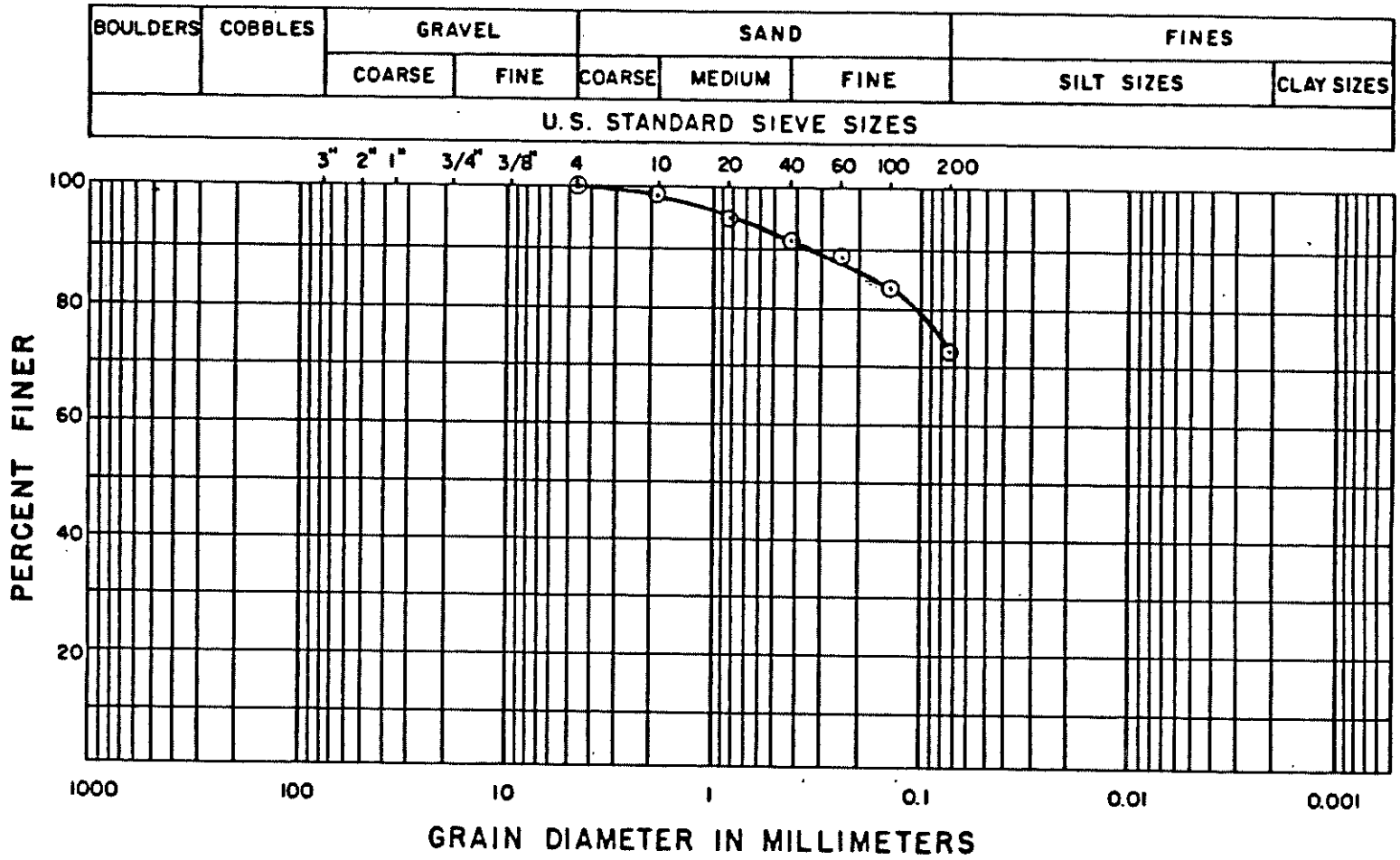
GEOSERVICES INC.
CONSULTING ENGINEERS
GEOTECHNICAL LABORATORY

FIGURE NO.
PROJECT NO. P1160
DOCUMENT NO. N890677
PAGE NO.

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G-3 DEPTH 158-160'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_u) N/A

COEFFICIENT OF CURVATURE (C_c) N/A

UNIFIED SOIL CLASSIFICATION (USC) CL

LIQUID LIMIT (LL) 26

PLASTIC LIMIT (PL) 17

PLASTICITY INDEX (PI) 9

GEOSERVICES INC.
CONSULTING ENGINEERS
GEOTECHNICAL LABORATORY

FIGURE NO.
PROJECT NO. P1160
DOCUMENT NO. N890677
PAGE NO.

TABLE 7 - SUMMARY OF GEOTECHNICAL LABORATORY DATA

Boring Number	Sample Depth (ft)	Avg. Nat. Wat. Con. (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	% Passing #200 Sieve (%)	Grain Size Data Figure
G-1	1		38	22	16	88	TBC
	18					8	yes
	28		24	16	8	49	TBC
	33					11	TBC
	43		43	25	18		
G-2	18	20	41	25	16	73	
G-3	3		26	22	4	26	TBC
	8		TBC	TBC	TBC	41	yes
	18					12	TBC
	28					13	yes
	43					8	TBC
	58	18	44	26	18		
	73		37	21	16	95	TBC
	88					83	
	98					51	TBC
	108		24	17	7	69	TBC
	138					1	TBC
	158		26	17	9	73	TBC
	168	26	61	35	26		
	178	22	62	25	37		
G-7	8		23	19	4		
	18		26	18	8		
	38					12	yes
G-8	3		TBC	TBC	TBC	28	yes
	13					9	yes
G-9	18		25	19	6		
G-13	3		22	NP	NP		
	13		24	21	3		

NP - Non-Plastic
TBA - To Be Completed

N890677

Appendix D.2
Subcell 9.1 - Geosyntec

Allan Myers
P.O. Box 278
Fallston MD 21047

TRANSMITTAL

No. TRN0021

PROJECT: Millersville Landfill Subcell 9.1

DATE: 05/07/2015

TO: GEOSYNTEC CONSULTANTS INC
10220 Old Columbia Road Suite A
Columbia MD 21046

RE: Earthwork - On Site Material Test Results

ATTN: Byran York

JOB: 1425108

WE ARE SENDING:	SUBMITTED FOR:	ACTION TAKEN:
☐ Shop Drawings	☑ Approval	☐ Approved as Submitted
☐ Letter	☐ Your Use	☐ Approved as Noted
☐ Prints	☐ As Requested	☐ Returned After Loan
☐ Change Order	☐ Review and Comment	☐ Resubmit
☐ Plans		☐ Submit
☐ Samples	**SENT VIA:**	☐ Returned
☐ Specifications	☑ Attached ☐ Separate Cover	☐ Returned for Corrections
☐ Other:	E-mail	☑ Due Date: 05/07/2015
☐ Submittal:		☐ Other:

Line	*Item*	*Package*	*Code*	*Rev.*	*Qty*	*Date*	*Description*	*Status*
1	Submittal	010	017	1		05/07/2015	Earthwork - On Site Material Test Results	Open

REMARKS: Please see the attached test results from the on site material.

CC:

Signed: _____
Philip Belmonte

Laboratory Testing Summary

Sample Source	Sample Number	Depth (feet)	MC[1] (%)	Soil Type[2]	Atterberg Limits[3]			Percent Passing No. 200 Sieve[4]	Moisture - Density (Corr.)[5]		CBR Value[6]	Other
					LL	PL	PI		Maximum Density (pcf)	Optimum Moisture (%)		
Sample 1												
	D4S-3	0.00 - 0.00	15.2	CL	34	18	16	90.2	112.5	16.0		
Sample 2												
	D4S-4	0.00 - 0.00	5.8	CL	36	19	17	87.3	109.7	17.2		

Notes: 1. ASTM D 2216, 2. ASTM D 2487, 3. ASTM D 4318, 4. ASTM D 1140, 5. See test reports for test method, 6. See test reports for test method

Definitions: MC: Moisture Content, Soil Type: USCS (Unified Soil Classification System), LL: Liquid Limit, PL: Plastic Limit, PI: Plasticity Index, CBR: California Bearing Ratio, OC: Organic Content (ASTM D 2974)

Project No. 24114
Project Name: 02 - Millersville Landfill Subcell 9.1
PM: Dung V. Tran
PE: Jason M. Joines
Printed On: Wednesday, May 06, 2015

ECS MID-ATLANTIC, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
Phone: (703) 471-8400
Fax: (703) 834-5527

ECS - Mid-Atlantic, LLC

Chantilly, Virginia

Measurement of Hydraulic Conductivity of Saturated Porous Materials

Using a Flexible Wall Permeameter

ASTM D5084-10

Project No.:	24114					Date:	4/28/15
Project Name	Millersville Landfill Subcell 9.1						
Tested By:	HNT		Reported By:	DVT		Reviewed By:	DAL
BORING #:	BS-2		SAMPLE #:	D4S-4		DEPTH:	_
DESCRIPTION:		Lean Clay Reddish Brown(CL)					
	MDD (lbs/ft3):	112.5	LL:	34		SG:	2.60
	OMC (%):	16.0	PI:	16		%Passing #200:	90.2
		LENGTH:	3.003	in	7.63	cm	
		DIAMETER	2.880	in	7.32	cm	
		AREA:	6.51	in^2	42.08	cm^2	
		VOLUME:	19.56	in^3	321.07	cm^3	
			0.011319	ft^3	0.000321	m^3	
			MOISTURE CONTENT				
			INITIAL		FINAL		
	WET WT SAMPLE + TARE:		103.70	g	756.50	g	
	DRY WT SAMPLE + TARE:		92.50	g	640.50	g	
		WT TARE:	30.50	g	95.00	g	
	MOISTURE CONTENT		18.1	%	21.3	%	
	SATURATION:		90.3	%	104.2	%	
		DENSITY DETERMINATION					
			INITIAL		FINAL		
		WET WT:	648.3	g	661.5	g	
		WET WT:	1.429	lbs	1.458	lbs	
	WET DENSITY:		126.2	lbs/ft^3	128.8	lbs/ft^3	
	DRY DENSITY:		106.9	lbs/ft^3	106.2	lbs/ft^3	
	COMPACTION:		95.0	%	94.4	%	
		PERMEABILITY DETERMINATION					
	BACK PRESSURE:		65	psi	b VALUE:	1	
		PIPETTE		ANNULUS		BOTH	
		1					
			INFLOW	OUTFLOW			TIME
	INITIAL READING:		1.00	24.00		HOURS:	
	FINAL READING:		1.50	23.50		MINUTES:	30
		FLOW:	0.5	0.5	cc	SECONDS:	1800
	ADDED AIR PRESSURE GRADIEN			5	psi =	351.5	cm
			INITIAL		FINAL		
		HEAD:	374.5		373.5		
TEMPERATURE CORRECTION:			0.931	TUBE AREA:		1	cm^2
	PERMEABILITY:			1.25E-07	cm/sec		

ECS - Mid-Atlantic, LLC

Chantilly, Virginia

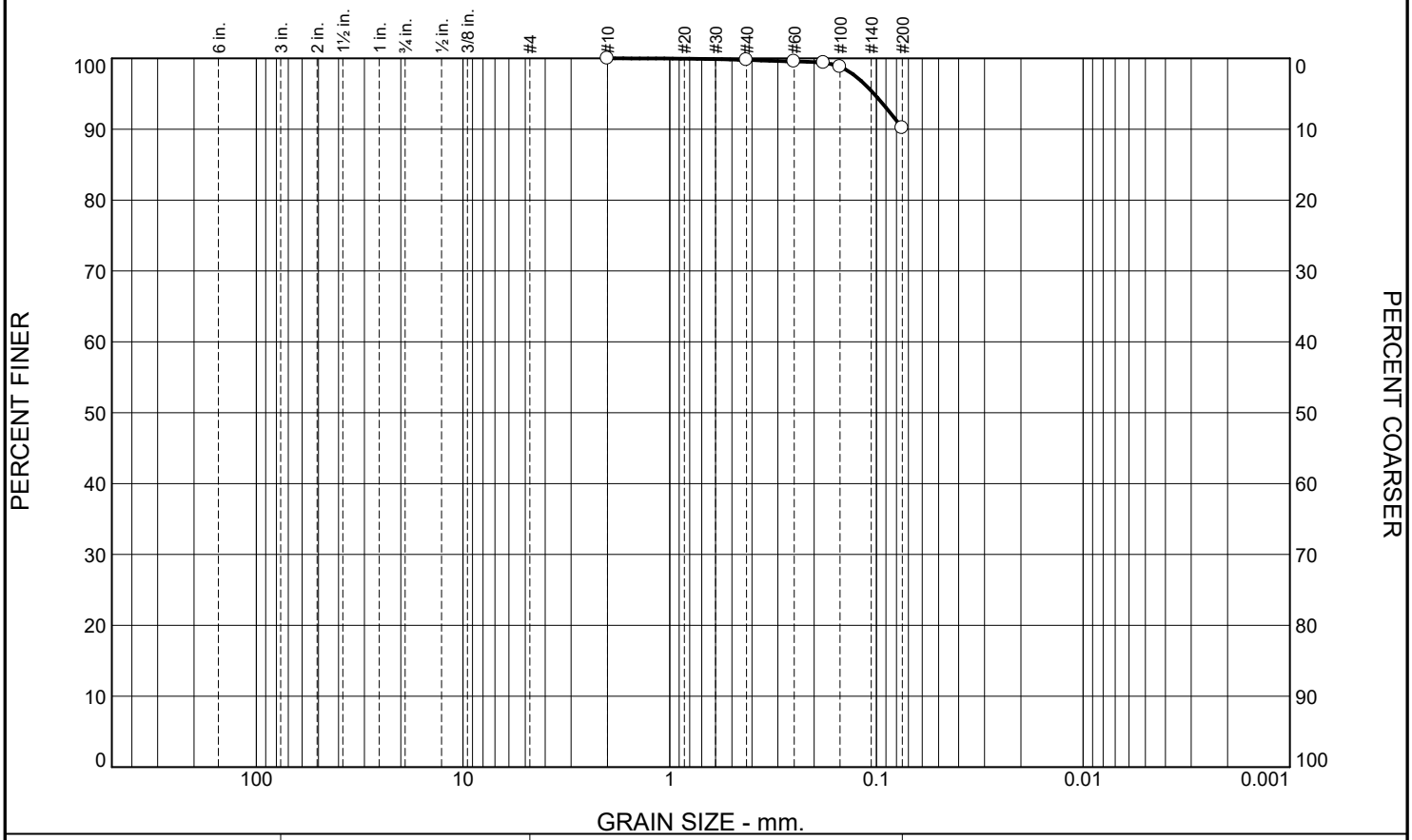
Measurement of Hydraulic Conductivity of Saturated Porous Materials

Using a Flexible Wall Permeameter

ASTM D5084-10

Project No.:	24114					Date:	4/28/15
Project Name	Millersville Landfill Subcell 9.1						
Tested By:	HNT		Reported By:	DVT		Reviewed By:	DAL
BORING #:	BS-1		SAMPLE #:	D4S-3		DEPTH:	_
DESCRIPTION:		Lean Clay Reddish Brown(CL)					
	MDD (lbs/ft3):	109.7	LL:	36		SG:	2.60
	OMC (%):	17.2	PI:	17		%Passing #200:	87.3
		LENGTH:	3.009	in	7.64	cm	
		DIAMETER	2.880	in	7.32	cm	
		AREA:	6.51	in^2	42.08	cm^2	
		VOLUME:	19.60	in^3	321.49	cm^3	
			0.011343	ft^3	0.000321	m^3	
			MOISTURE CONTENT				
			INITIAL		FINAL		
	WET WT SAMPLE + TARE:		100.22	g	749.46	g	
	DRY WT SAMPLE + TARE:		89.00	g	631.70	g	
		WT TARE:	30.98	g	94.06	g	
	MOISTURE CONTENT		19.3	%	21.9	%	
	SATURATION:		90.2	%	102.7	%	
		DENSITY DETERMINATION					
			INITIAL		FINAL		
		WET WT:	640.5	g	655.4	g	
		WET WT:	1.412	lbs	1.445	lbs	
	WET DENSITY:		124.5	lbs/ft^3	127.4	lbs/ft^3	
	DRY DENSITY:		104.3	lbs/ft^3	104.5	lbs/ft^3	
	COMPACTION:		95.1	%	95.3	%	
		PERMEABILITY DETERMINATION					
	BACK PRESSURE:		65	psi	b VALUE:	1	
		PIPETTE		ANNULUS		BOTH	
		1					
			INFLOW	OUTFLOW			TIME
	INITIAL READING:		1.00	24.00		HOURS:	
	FINAL READING:		1.60	23.40		MINUTES:	30
		FLOW:	0.6	0.6	cc	SECONDS:	1800
	ADDED AIR PRESSURE GRADIEN			5	psi =	351.5	cm
			INITIAL		FINAL		
		HEAD:	374.5		373.3		
TEMPERATURE CORRECTION:			0.931	TUBE AREA:		1	cm^2
	PERMEABILITY:			1.51E-07	cm/sec		

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	0.2	9.6	90.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#40	99.8		
#60	99.6		
#80	99.4		
#100	98.8		
#200	90.2		

* (no specification provided)

Soil Description

Lean Clay Reddish Brown (0% +4)

Atterberg Limits

PL= 18 LL= 34 PI= 16

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(14)

Remarks

Data Entered: 4/29/15

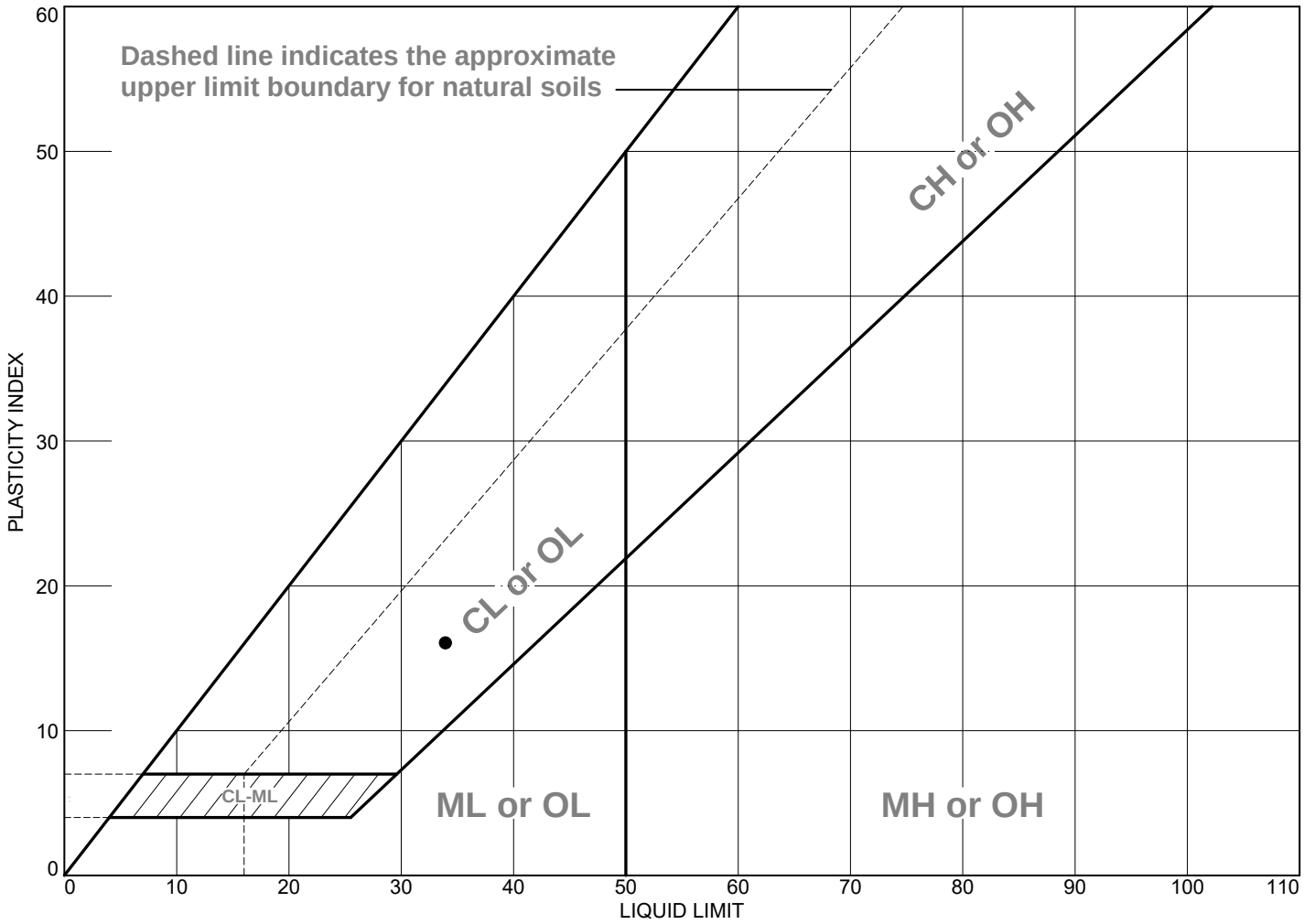
Source of Sample: Sample 1 **Depth:** 0.00-0.10
Sample Number: D4S-3 **Date:** 4/27/15

ECS MID-ATLANTIC, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
Phone: (703) 471-8400
Fax: (703) 834-5527

Client: Client Name
Project: 02 - Millersville Landfill Subcell 9.1
Project No: 24114 **Figure**

Tested By: KV **Checked By:** DVT

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Lean Clay Reddish Brown (0% +4)	34	18	16	99.8	90.2	CL

Project No. 24114 **Client:** Client Name

Project: 02 - Millersville Landfill Subcell 9.1

●**Source of Sample:** Sample 1 **Depth:** 0.00-0.10 **Sample Number:** D4S-3

Remarks:

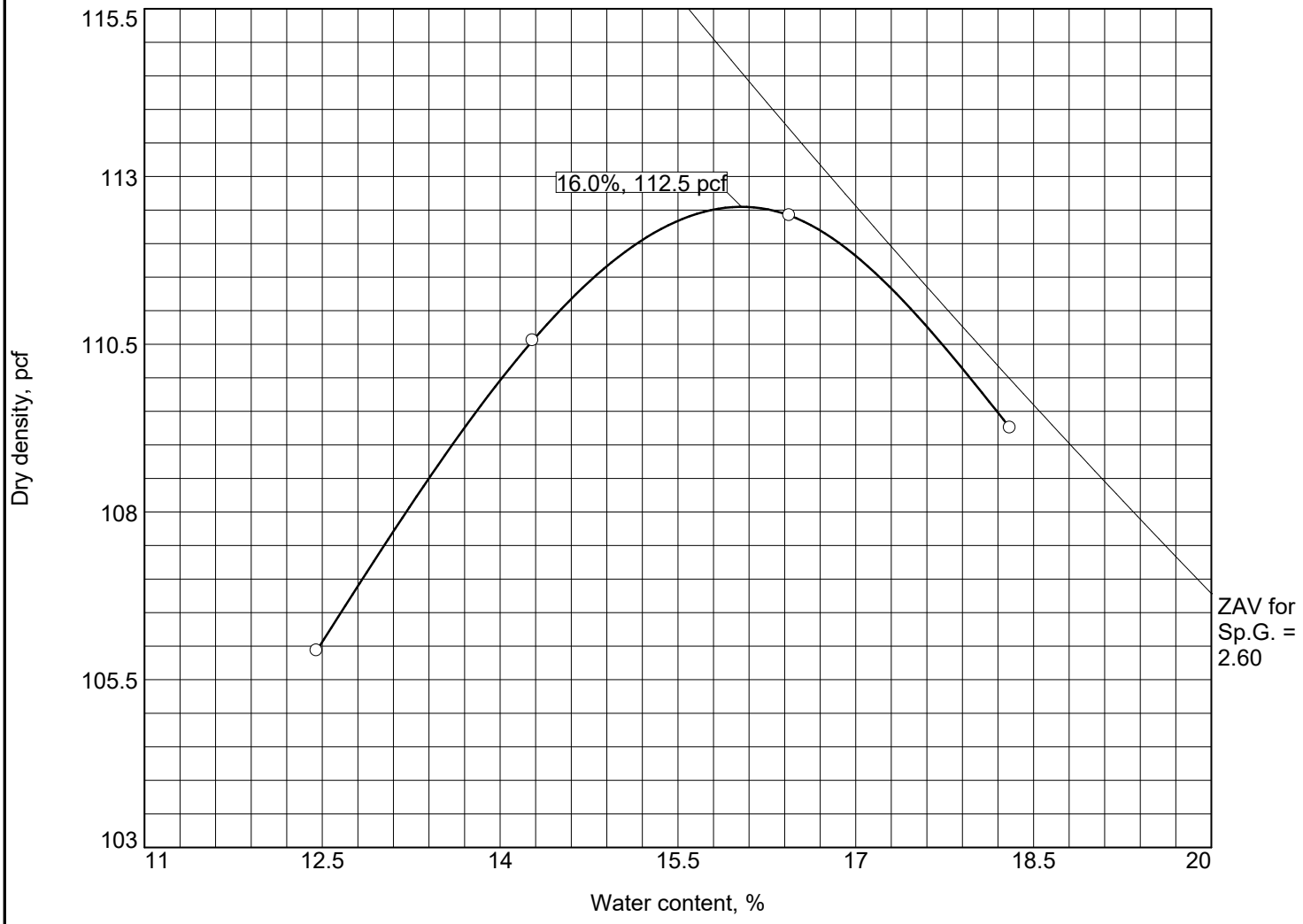
●Data Entered: 4/29/15

ECS MID-ATLANTIC, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
Phone: (703) 471-8400
Fax: (703) 834-5527

Figure

Tested By: HNT1 **Checked By:** DVT

COMPACTION TEST REPORT For Curve No. S-3



Test specification: ASTM D 698-12 Method A Standard

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > #4	% < No.200
	USCS	AASHTO						
0.00-0.10	CL	A-6(14)	15.2	2.6	34	16	0.0	90.2

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 112.5 pcf Optimum moisture = 16.0 %	Lean Clay Reddish Brown (0% +4)

Project No. 24114 **Client:** Client Name

Project: 02 - Millersville Landfill Subcell 9.1

Date: 4/27/15

○ **Source of Sample:** Sample 1 **Sample Number:** D4S-3

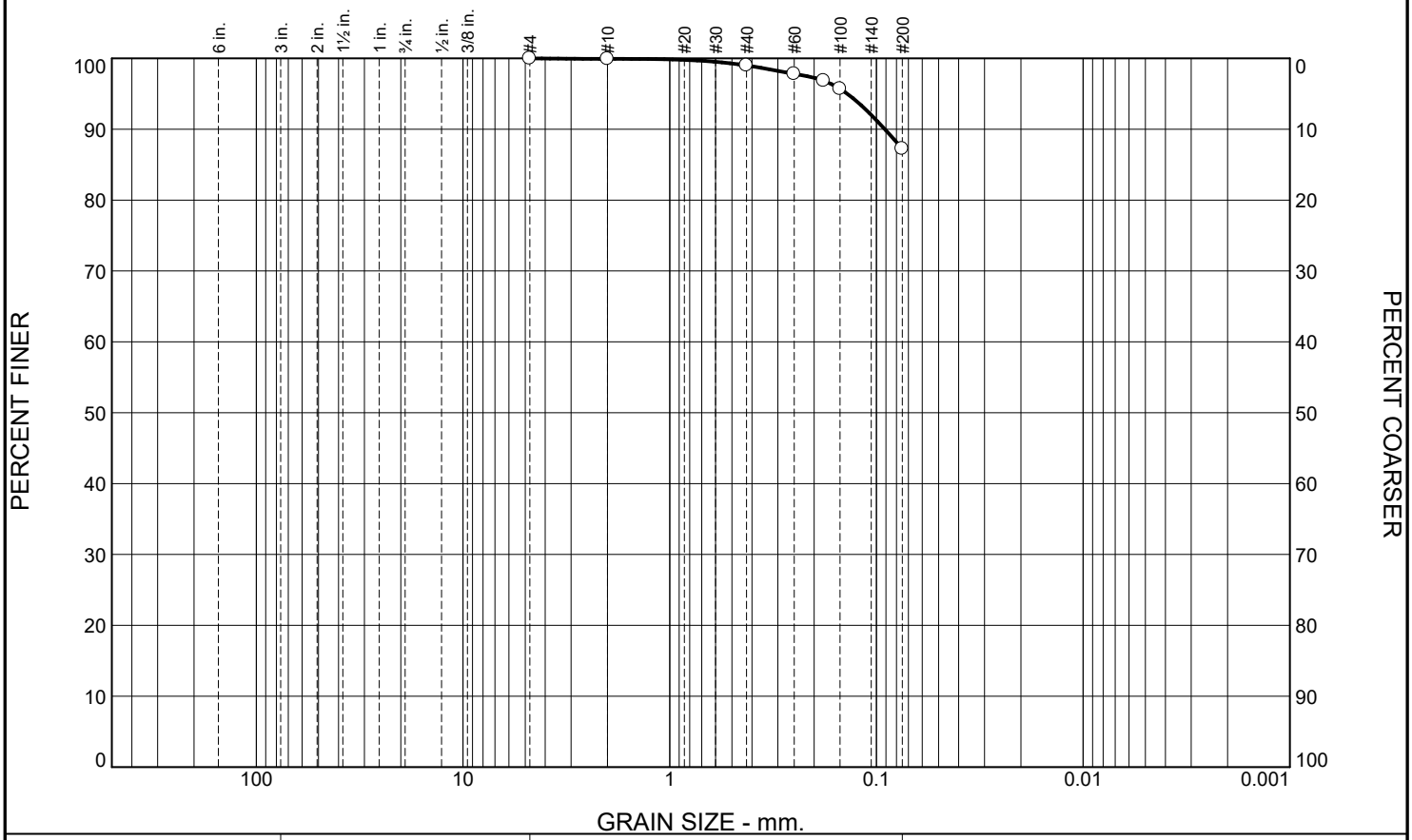
Remarks:
Data Entered: 4/29/15

ECS MID-ATLANTIC, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
Phone: (703) 471-8400
Fax: (703) 834-5527

Figure

Tested By: KV **Checked By:** DVT

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.1	0.9	11.7	87.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#40	99.0		
#60	97.8		
#80	96.8		
#100	95.7		
#200	87.3		

* (no specification provided)

Soil Description

Lean Clay Reddish Brown (0% +4)

Atterberg Limits

PL= 19 LL= 36 PI= 17

Coefficients

D_{90}= 0.0911 D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(14)

Remarks

Data Entered: 4/29/15

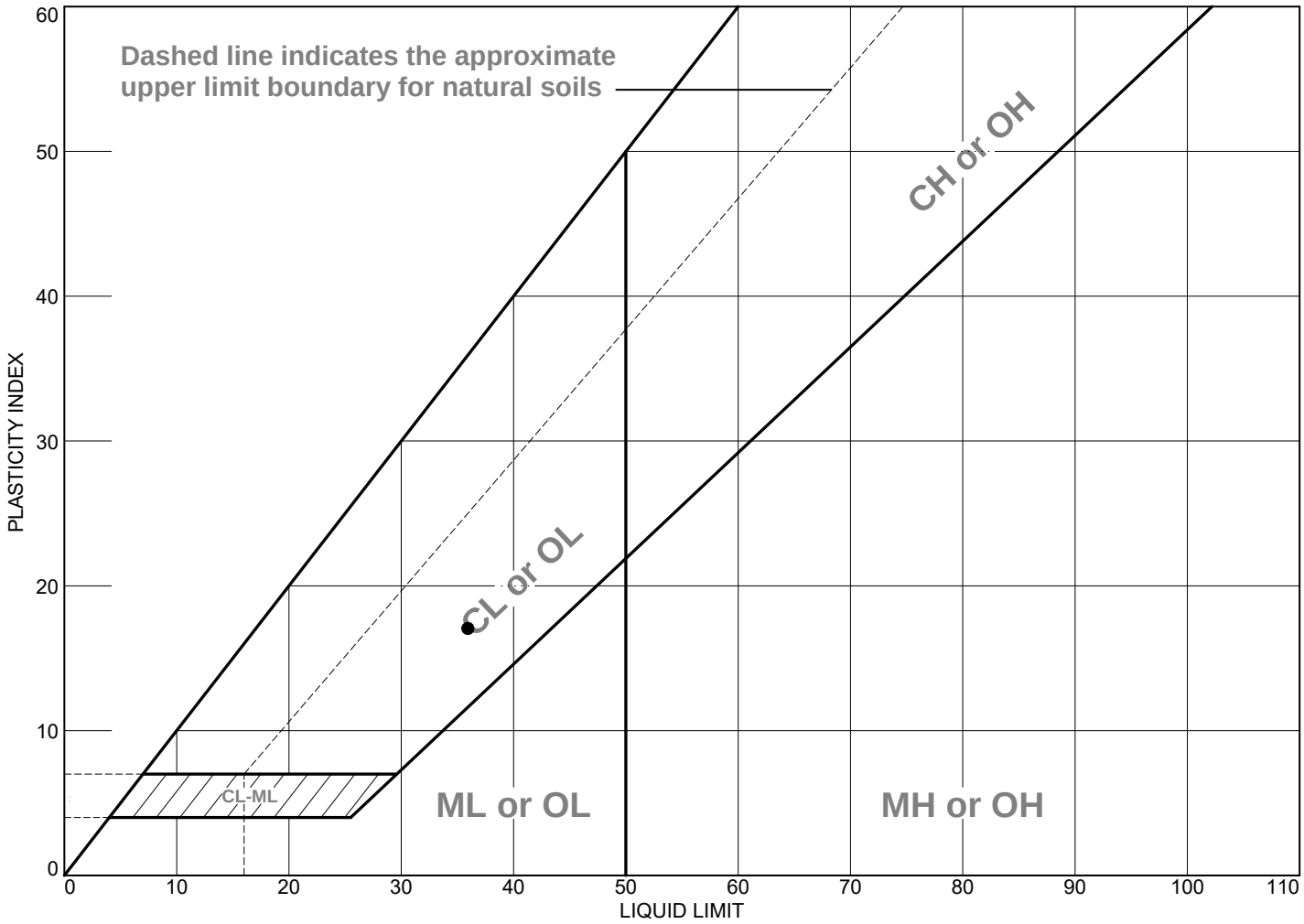
Source of Sample: Sample 2 **Depth:** 0.00-0.10
Sample Number: D4S-4 **Date:** 4/25/15

ECS MID-ATLANTIC, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
Phone: (703) 471-8400
Fax: (703) 834-5527

Client: Client Name
Project: 02 - Millersville Landfill Subcell 9.1
Project No: 24114 **Figure**

Tested By: KV **Checked By:** DVT

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Lean Clay Reddish Brown (0% +4)	36	19	17	99.0	87.3	CL

Project No. 24114 **Client:** Client Name

Project: 02 - Millersville Landfill Subcell 9.1

●**Source of Sample:** Sample 2 **Depth:** 0.00-0.10 **Sample Number:** D4S-4

Remarks:

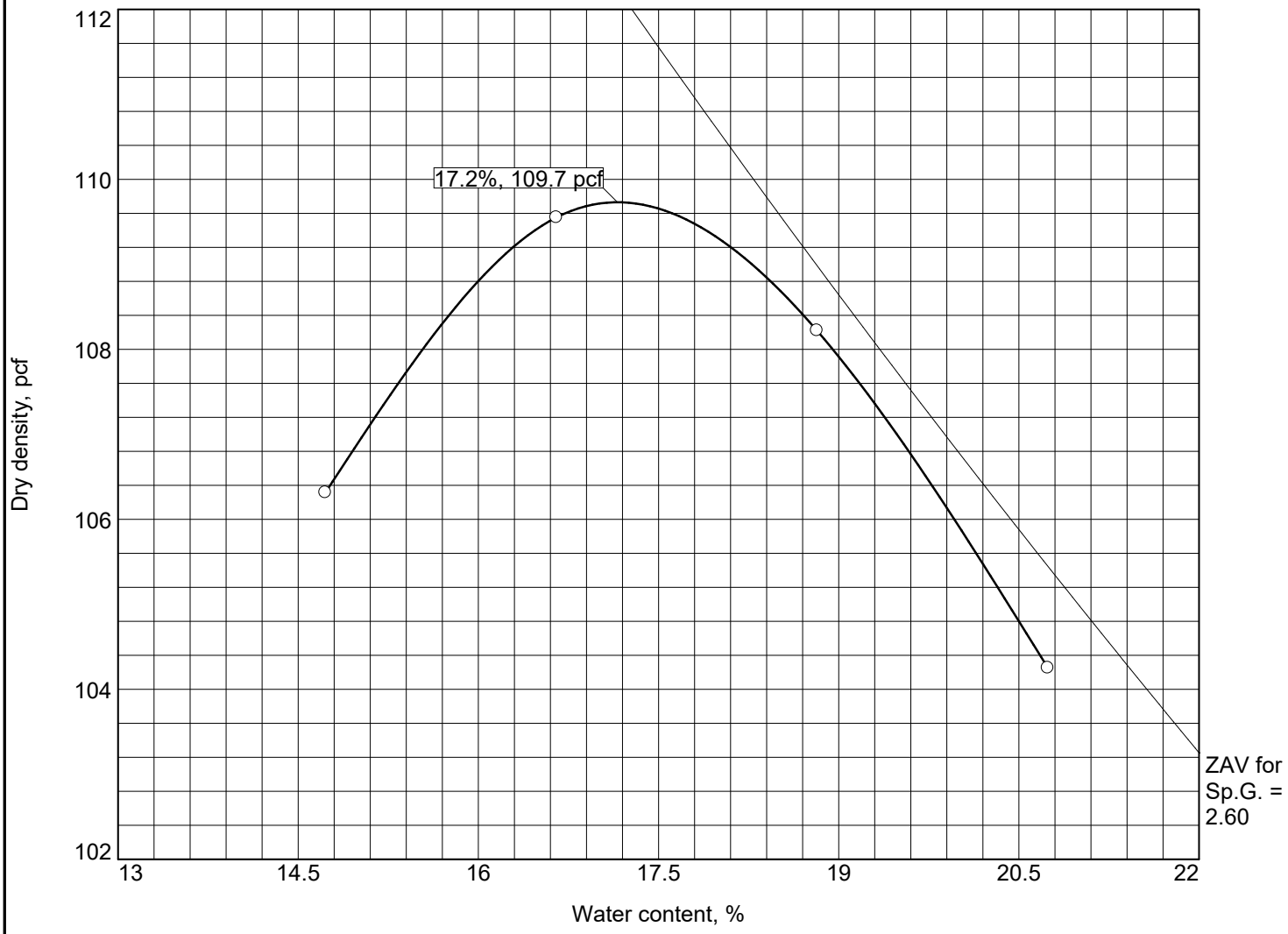
●Data Entered: 4/29/15

ECS MID-ATLANTIC, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
Phone: (703) 471-8400
Fax: (703) 834-5527

Figure

Tested By: HNT1 **Checked By:** DVT

COMPACTION TEST REPORT For Curve No. S-4



Test specification: ASTM D 698-12 Method A Standard

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > #4	% < No.200
	USCS	AASHTO						
0.00-0.10	CL	A-6(14)	5.8	2.6	36	17	0.0	87.3

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 109.7 pcf Optimum moisture = 17.2 %	Lean Clay Reddish Brown (0% +4)

Project No. 24114 **Client:** Client Name

Project: 02 - Millersville Landfill Subcell 9.1

Date: 4/27/15

○ **Source of Sample:** Sample 2 **Sample Number:** D4S-4

Remarks:
Data Entered: 4/28/15

ECS MID-ATLANTIC, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
Phone: (703) 471-8400
Fax: (703) 834-5527

Figure

Tested By: KV **Checked By:** DVT

ECS - Mid-Atlantic, LLC

Chantilly, Virginia

Measurement of Hydraulic Conductivity of Saturated Porous Materials

Using a Flexible Wall Permeameter

ASTM D5084-10

Project No.:	24114					Date:	4/28/15
Project Name	Millersville Landfill Subcell 9.1						
Tested By:	HNT		Reported By:	DVT		Reviewed By:	DAL
BORING #:	BS-1		SAMPLE #:	D4S-3		DEPTH:	_
DESCRIPTION:		Lean Clay Reddish Brown(CL)					
	MDD (lbs/ft3):	112.5	LL:	34		SG:	2.60
	OMC (%):	16.0	PI:	16		%Passing #200:	90.2
		LENGTH:	3.003	in	7.63	cm	
		DIAMETER	2.880	in	7.32	cm	
		AREA:	6.51	in^2	42.08	cm^2	
		VOLUME:	19.56	in^3	321.07	cm^3	
			0.011319	ft^3	0.000321	m^3	
			MOISTURE CONTENT				
			INITIAL		FINAL		
	WET WT SAMPLE + TARE:		103.70	g	756.50	g	
	DRY WT SAMPLE + TARE:		92.50	g	640.50	g	
		WT TARE:	30.50	g	95.00	g	
	MOISTURE CONTENT		18.1	%	21.3	%	
	SATURATION:		90.3	%	104.2	%	
		DENSITY DETERMINATION					
			INITIAL		FINAL		
		WET WT:	648.3	g	661.5	g	
		WET WT:	1.429	lbs	1.458	lbs	
	WET DENSITY:		126.2	lbs/ft^3	128.8	lbs/ft^3	
	DRY DENSITY:		106.9	lbs/ft^3	106.2	lbs/ft^3	
	COMPACTION:		95.0	%	94.4	%	
		PERMEABILITY DETERMINATION					
	BACK PRESSURE:		65	psi	b VALUE:	1	
		PIPETTE		ANNULUS		BOTH	
		1					
			INFLOW	OUTFLOW			TIME
	INITIAL READING:		1.00	24.00		HOURS:	
	FINAL READING:		1.50	23.50		MINUTES:	30
		FLOW:	0.5	0.5	cc	SECONDS:	1800
	ADDED AIR PRESSURE GRADIEN			5	psi =	351.5	cm
			INITIAL		FINAL		
		HEAD:	374.5		373.5		
TEMPERATURE CORRECTION:			0.931	TUBE AREA:		1	cm^2
	PERMEABILITY:			1.25E-07	cm/sec		

ECS - Mid-Atlantic, LLC

Chantilly, Virginia

Measurement of Hydraulic Conductivity of Saturated Porous Materials

Using a Flexible Wall Permeameter

ASTM D5084-10

Project No.:	24114					Date:	4/28/15
Project Name	Millersville Landfill Subcell 9.1						
Tested By:	HNT		Reported By:	DVT		Reviewed By:	DAL
BORING #:	BS-2		SAMPLE #:	D4S-4		DEPTH:	_
DESCRIPTION:		Lean Clay Reddish Brown(CL)					
	MDD (lbs/ft3):	109.7	LL:	36		SG:	2.60
	OMC (%):	17.2	PI:	17		%Passing #200:	87.3
		LENGTH:	3.009	in	7.64	cm	
		DIAMETER	2.880	in	7.32	cm	
		AREA:	6.51	in^2	42.08	cm^2	
		VOLUME:	19.60	in^3	321.49	cm^3	
			0.011343	ft^3	0.000321	m^3	
			MOISTURE CONTENT				
			INITIAL		FINAL		
	WET WT SAMPLE + TARE:		100.22	g	749.46	g	
	DRY WT SAMPLE + TARE:		89.00	g	631.70	g	
		WT TARE:	30.98	g	94.06	g	
	MOISTURE CONTENT		19.3	%	21.9	%	
	SATURATION:		90.2	%	102.7	%	
		DENSITY DETERMINATION					
			INITIAL		FINAL		
		WET WT:	640.5	g	655.4	g	
		WET WT:	1.412	lbs	1.445	lbs	
	WET DENSITY:		124.5	lbs/ft^3	127.4	lbs/ft^3	
	DRY DENSITY:		104.3	lbs/ft^3	104.5	lbs/ft^3	
	COMPACTION:		95.1	%	95.3	%	
		PERMEABILITY DETERMINATION					
	BACK PRESSURE:		65	psi	b VALUE:	1	
		PIPETTE		ANNULUS		BOTH	
		1					
			INFLOW	OUTFLOW			TIME
	INITIAL READING:		1.00	24.00		HOURS:	
	FINAL READING:		1.60	23.40		MINUTES:	30
		FLOW:	0.6	0.6	cc	SECONDS:	1800
	ADDED AIR PRESSURE GRADIEN			5	psi =	351.5	cm
			INITIAL		FINAL		
		HEAD:	374.5		373.3		
TEMPERATURE CORRECTION:			0.931	TUBE AREA:		1	cm^2
	PERMEABILITY:			1.51E-07	cm/sec		

Geosyntec consultants

10220 Old Columbia Road, Suite A
Columbia, Maryland, 21046 ·USA

SUBMITTAL COVER SHEET

TO:	Jake Belmonte	**Date:** 19 May 2015	**Job No.:** MQ1125
ADDRESS:	American Infrastructure	**Project:** Millersville Landfill – Subcell 9.1 Construction	
	2011 Belair Road	389 Burns Crossing Road, Severn, Maryland 21144	
	P.O. Box 2787	County Project No. – N530600	
	Fallston, Maryland 21047	County Contract No. – N530605	

Submittal I.D. No.: 10-017	Revision No.: 0	Contractor Submittal No.: 10-017
Specification Section(s): 02290		Date of Submittal Report: 19 May 2015
Submittal Subject: Prepared Subbase Material – On-Site Clay Within the Subcell 9.1 Footprint		

Notations:

- ☒ Accepted as Specified
- ☐ Accepted as Equal to Specified
- ☐ Accepted as Noted
- ☐ Revise and Resubmit
- ☐ Rejected
- ☐ Informational Purposes Only
- ☐ Reviewed, not for Approval

Remarks:

1. Sample Numbers D4S-3 & D4S-4 meet or exceed the prepared subbase material requirements presented in Section 02290 – 2.1, B of the Technical Specifications.
2. Allan Myers, Inc. will ultimately need to submit nine (9) prepared subbase soil samples (six (6) additional samples) for laboratory analysis per Table 1 – 02290, as directed by Section 02290 – 3.1, C, 2 of the Technical Specifications.

Review of this submittal does not relieve the Contractor from their responsibility for deviations from the Contract Documents nor from their responsibility for errors or omissions in the submittal. Contractor is, and Engineer is not, responsible for matters relating to fabrication, shipping, handling, storage, assembly, installation, construction (including safety), and coordination for performing the Work

19 May 2015		19 May 2015	
Prepared by- Byran York, PE Print Name/Sign Name	**Date**	**Engineer-of-Record- Thomas B. Ramsey, PE** Print Name/Sign Name	**Date**

Distribution:

- ☒ Thomas Reilly (AA County)
- ☒ Joel Saline (AA County)
- ☒ Darryl England (American Infrastructure)
- ☒ Michael Goudreau (SCS Engineers)
- ☒ David Dix (Geosyntec)
- ☒ Steve Krajcsik (AA County)
- ☒ Chandra Chithaluru (AA County)
- ☒ Jereme Vaught (American Infrastructure)
- ☒ Deji Fawole (SCS Engineers)
- ☒ File

Allan Myers
P.O. Box 278
Fallston MD 21047

TRANSMITTAL

No. TRN0021

PROJECT: Millersville Landfill Subcell 9.1

DATE: 05/07/2015

TO: GEOSYNTEC CONSULTANTS INC
10220 Old Columbia Road Suite A
Columbia MD 21046

RE: Earthwork - On Site Material Test Results

ATTN: Byran York

JOB: 1425108

WE ARE SENDING:	SUBMITTED FOR:	ACTION TAKEN:
☐ Shop Drawings	☑ Approval	☐ Approved as Submitted
☐ Letter	☐ Your Use	☐ Approved as Noted
☐ Prints	☐ As Requested	☐ Returned After Loan
☐ Change Order	☐ Review and Comment	☐ Resubmit
☐ Plans		☐ Submit
☐ Samples	**SENT VIA:**	☐ Returned
☐ Specifications	☑ Attached ☐ Separate Cover	☐ Returned for Corrections
☐ Other:	E-mail	☑ Due Date: 05/07/2015
☐ Submittal:		☐ Other:

Line	*Item*	*Package*	*Code*	*Rev.*	*Qty*	*Date*	*Description*	*Status*
1	Submittal	010	017	1		05/07/2015	Earthwork - On Site Material Test Results	Open

REMARKS: Please see the attached test results from the on site material.

CC:

Signed: _____
Philip Belmonte

Laboratory Testing Summary

Sample Source	Sample Number	Depth (feet)	MC[1] (%)	Soil Type[2]	Atterberg Limits[3]			Percent Passing No. 200 Sieve[4]	Moisture - Density (Corr.)[5]		CBR Value[6]	Other
					LL	PL	PI		Maximum Density (pcf)	Optimum Moisture (%)		
Sample 1												
	D4S-3	0.00 - 0.00	15.2	CL	34	18	16	90.2	112.5	16.0		
Sample 2												
	D4S-4	0.00 - 0.00	5.8	CL	36	19	17	87.3	109.7	17.2		

Notes: 1. ASTM D 2216, 2. ASTM D 2487, 3. ASTM D 4318, 4. ASTM D 1140, 5. See test reports for test method, 6. See test reports for test method

Definitions: MC: Moisture Content, Soil Type: USCS (Unified Soil Classification System), LL: Liquid Limit, PL: Plastic Limit, PI: Plasticity Index, CBR: California Bearing Ratio, OC: Organic Content (ASTM D 2974)

Project No. 24114
Project Name: 02 - Millersville Landfill Subcell 9.1
PM: Dung V. Tran
PE: Jason M. Joines
Printed On: Wednesday, May 06, 2015

ECS MID-ATLANTIC, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
Phone: (703) 471-8400
Fax: (703) 834-5527

ECS - Mid-Atlantic, LLC

Chantilly, Virginia

Measurement of Hydraulic Conductivity of Saturated Porous Materials

Using a Flexible Wall Permeameter

ASTM D5084-10

Project No.:	24114					Date:	4/28/15
Project Name	Millersville Landfill Subcell 9.1						
Tested By:	HNT		Reported By:	DVT		Reviewed By:	DAL
BORING #:	BS-1		SAMPLE #:	D4S-3		DEPTH:	_
DESCRIPTION:		Lean Clay Reddish Brown(CL)					
	MDD (lbs/ft3):	112.5	LL:	34		SG:	2.60
	OMC (%):	16.0	PI:	16		%Passing #200:	90.2
		LENGTH:	3.003	in	7.63	cm	
		DIAMETER	2.880	in	7.32	cm	
		AREA:	6.51	in^2	42.08	cm^2	
		VOLUME:	19.56	in^3	321.07	cm^3	
			0.011319	ft^3	0.000321	m^3	
			MOISTURE CONTENT				
			INITIAL		FINAL		
	WET WT SAMPLE + TARE:		103.70	g	756.50	g	
	DRY WT SAMPLE + TARE:		92.50	g	640.50	g	
		WT TARE:	30.50	g	95.00	g	
	MOISTURE CONTENT		18.1	%	21.3	%	
	SATURATION:		90.3	%	104.2	%	
		DENSITY DETERMINATION					
			INITIAL		FINAL		
		WET WT:	648.3	g	661.5	g	
		WET WT:	1.429	lbs	1.458	lbs	
	WET DENSITY:		126.2	lbs/ft^3	128.8	lbs/ft^3	
	DRY DENSITY:		106.9	lbs/ft^3	106.2	lbs/ft^3	
	COMPACTION:		95.0	%	94.4	%	
		PERMEABILITY DETERMINATION					
	BACK PRESSURE:		65	psi	b VALUE:	1	
		PIPETTE		ANNULUS		BOTH	
		1					
			INFLOW	OUTFLOW			TIME
	INITIAL READING:		1.00	24.00		HOURS:	
	FINAL READING:		1.50	23.50		MINUTES:	30
		FLOW:	0.5	0.5	cc	SECONDS:	1800
	ADDED AIR PRESSURE GRADIEN			5	psi =	351.5	cm
			INITIAL		FINAL		
		HEAD:	374.5		373.5		
TEMPERATURE CORRECTION:			0.931	TUBE AREA:		1	cm^2
	PERMEABILITY:			1.25E-07	cm/sec		

ECS - Mid-Atlantic, LLC

Chantilly, Virginia

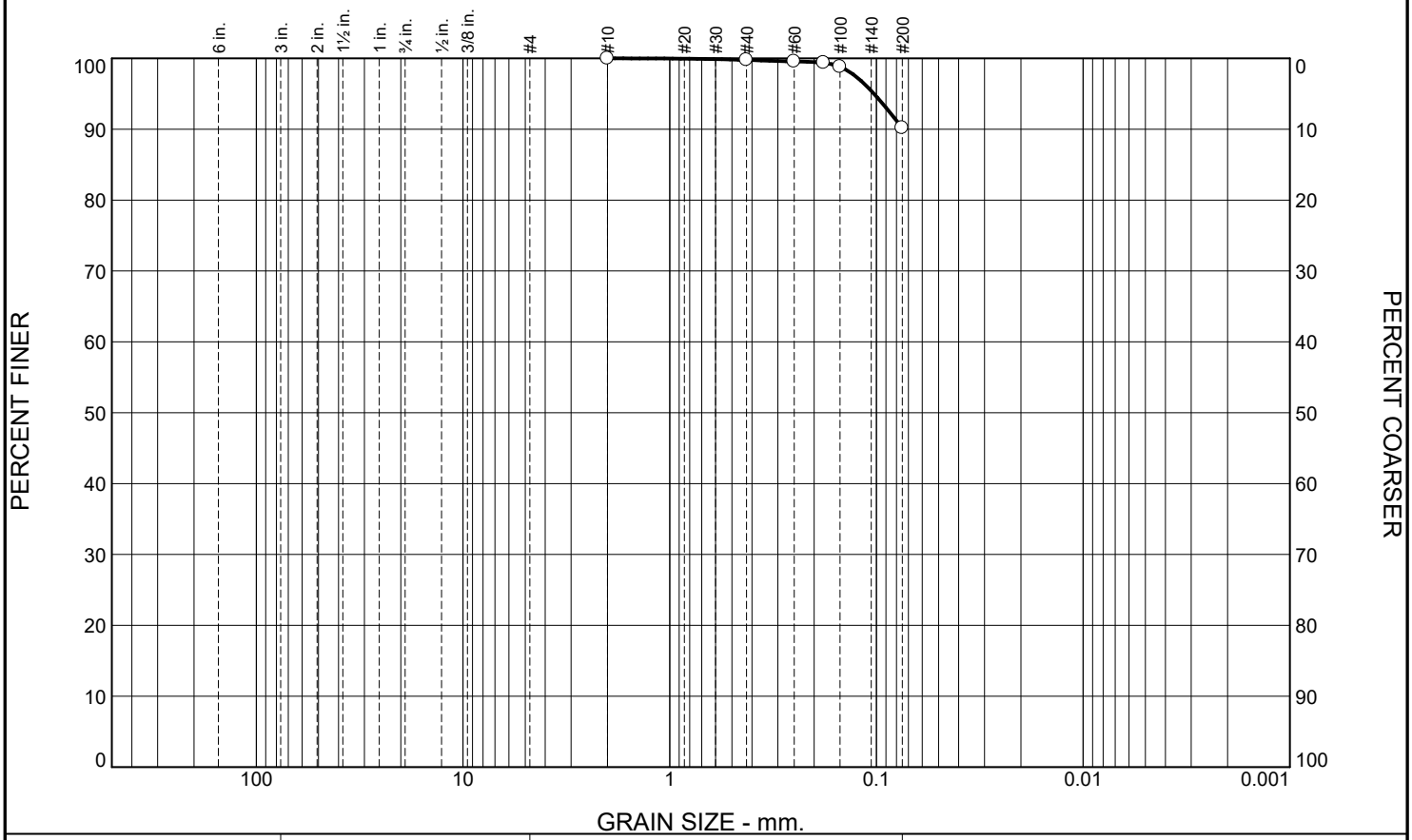
Measurement of Hydraulic Conductivity of Saturated Porous Materials

Using a Flexible Wall Permeameter

ASTM D5084-10

Project No.:	24114					Date:	4/28/15
Project Name	Millersville Landfill Subcell 9.1						
Tested By:	HNT		Reported By:	DVT		Reviewed By:	DAL
BORING #:	BS-2		SAMPLE #:	D4S-4		DEPTH:	_
DESCRIPTION:		Lean Clay Reddish Brown(CL)					
	MDD (lbs/ft3):	109.7	LL:	36		SG:	2.60
	OMC (%):	17.2	PI:	17		%Passing #200:	87.3
		LENGTH:	3.009	in	7.64	cm	
		DIAMETER	2.880	in	7.32	cm	
		AREA:	6.51	in^2	42.08	cm^2	
		VOLUME:	19.60	in^3	321.49	cm^3	
			0.011343	ft^3	0.000321	m^3	
			MOISTURE CONTENT				
			INITIAL		FINAL		
WET WT SAMPLE + TARE:			100.22	g	749.46	g	
DRY WT SAMPLE + TARE:			89.00	g	631.70	g	
		WT TARE:	30.98	g	94.06	g	
	MOISTURE CONTENT		19.3	%	21.9	%	
	SATURATION:		90.2	%	102.7	%	
			DENSITY DETERMINATION				
			INITIAL		FINAL		
		WET WT:	640.5	g	655.4	g	
		WET WT:	1.412	lbs	1.445	lbs	
	WET DENSITY:		124.5	lbs/ft^3	127.4	lbs/ft^3	
	DRY DENSITY:		104.3	lbs/ft^3	104.5	lbs/ft^3	
	COMPACTION:		95.1	%	95.3	%	
			PERMEABILITY DETERMINATION				
	BACK PRESSURE:		65	psi	b VALUE:	1	
		PIPETTE		ANNULUS		BOTH	
		1					
			INFLOW	OUTFLOW			TIME
	INITIAL READING:		1.00	24.00		HOURS:	
	FINAL READING:		1.60	23.40		MINUTES:	30
		FLOW:	0.6	0.6	cc	SECONDS:	1800
	ADDED AIR PRESSURE GRADIEN			5	psi =	351.5	cm
			INITIAL		FINAL		
		HEAD:	374.5		373.3		
TEMPERATURE CORRECTION:			0.931	TUBE AREA:		1	cm^2
	PERMEABILITY:			1.51E-07	cm/sec		

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	0.2	9.6	90.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#40	99.8		
#60	99.6		
#80	99.4		
#100	98.8		
#200	90.2		

* (no specification provided)

Soil Description

Lean Clay Reddish Brown (0% +4)

Atterberg Limits

PL= 18 LL= 34 PI= 16

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(14)

Remarks

Data Entered: 4/29/15

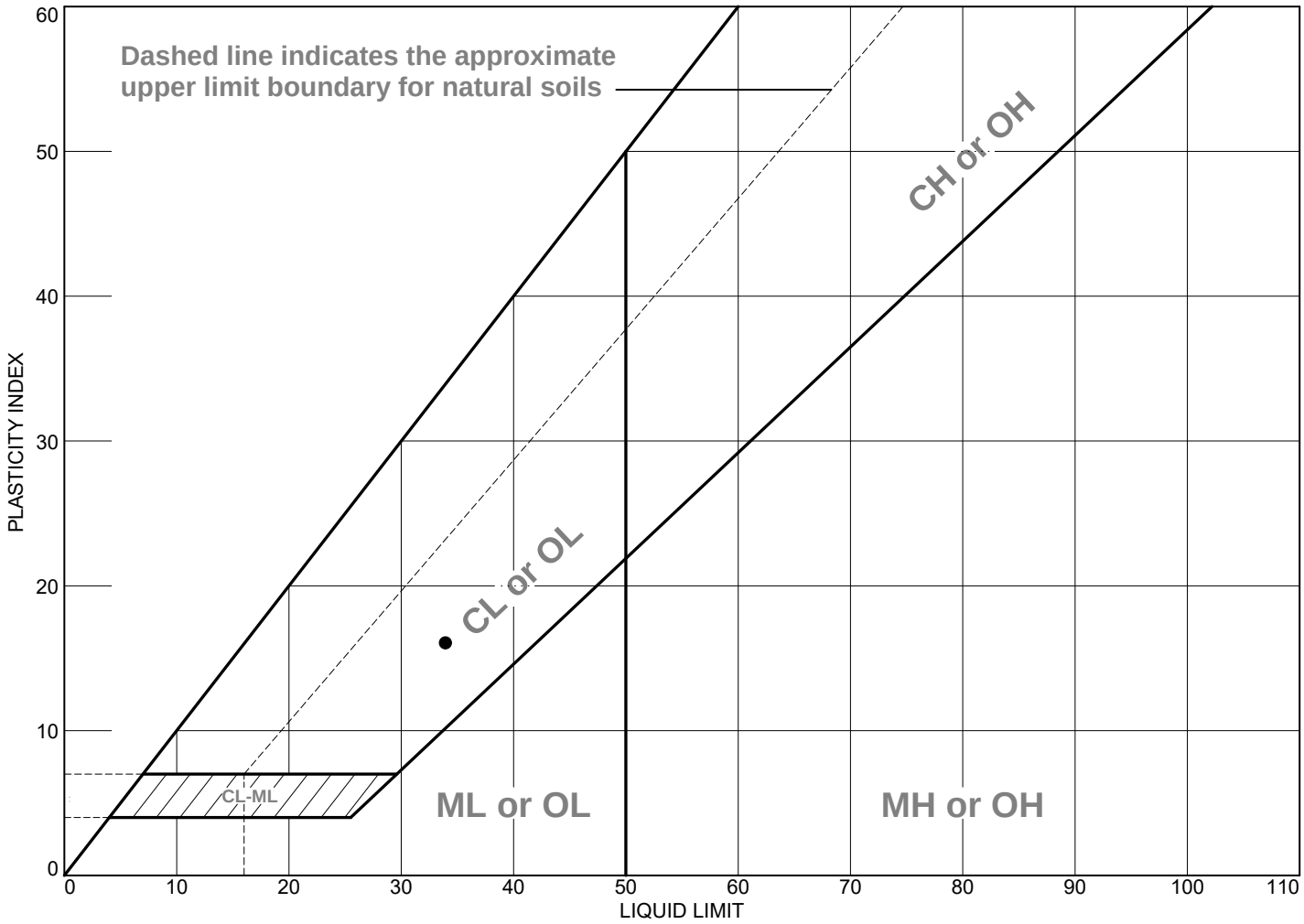
Source of Sample: Sample 1 **Depth:** 0.00-0.10
Sample Number: D4S-3 **Date:** 4/27/15

ECS MID-ATLANTIC, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
Phone: (703) 471-8400
Fax: (703) 834-5527

Client: Client Name
Project: 02 - Millersville Landfill Subcell 9.1
Project No: 24114 **Figure**

Tested By: KV **Checked By:** DVT

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Lean Clay Reddish Brown (0% +4)	34	18	16	99.8	90.2	CL

Project No. 24114 **Client:** Client Name

Project: 02 - Millersville Landfill Subcell 9.1

●**Source of Sample:** Sample 1 **Depth:** 0.00-0.10 **Sample Number:** D4S-3

Remarks:

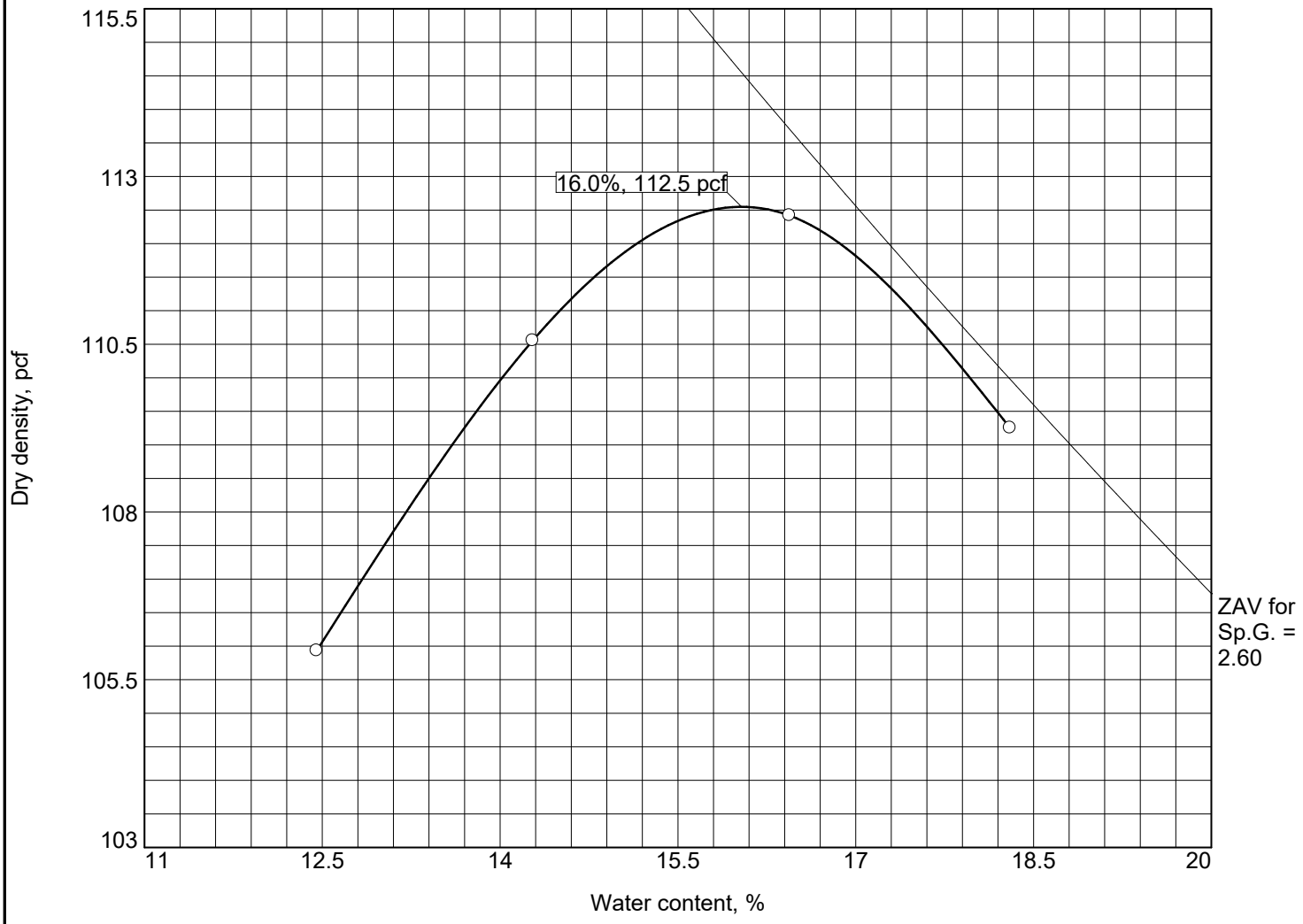
●Data Entered: 4/29/15

ECS MID-ATLANTIC, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
Phone: (703) 471-8400
Fax: (703) 834-5527

Figure

Tested By: HNT1 **Checked By:** DVT

COMPACTION TEST REPORT For Curve No. S-3



Test specification: ASTM D 698-12 Method A Standard

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > #4	% < No.200
	USCS	AASHTO						
0.00-0.10	CL	A-6(14)	15.2	2.6	34	16	0.0	90.2

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 112.5 pcf Optimum moisture = 16.0 %	Lean Clay Reddish Brown (0% +4)

Project No. 24114 **Client:** Client Name

Project: 02 - Millersville Landfill Subcell 9.1

Date: 4/27/15

○ **Source of Sample:** Sample 1 **Sample Number:** D4S-3

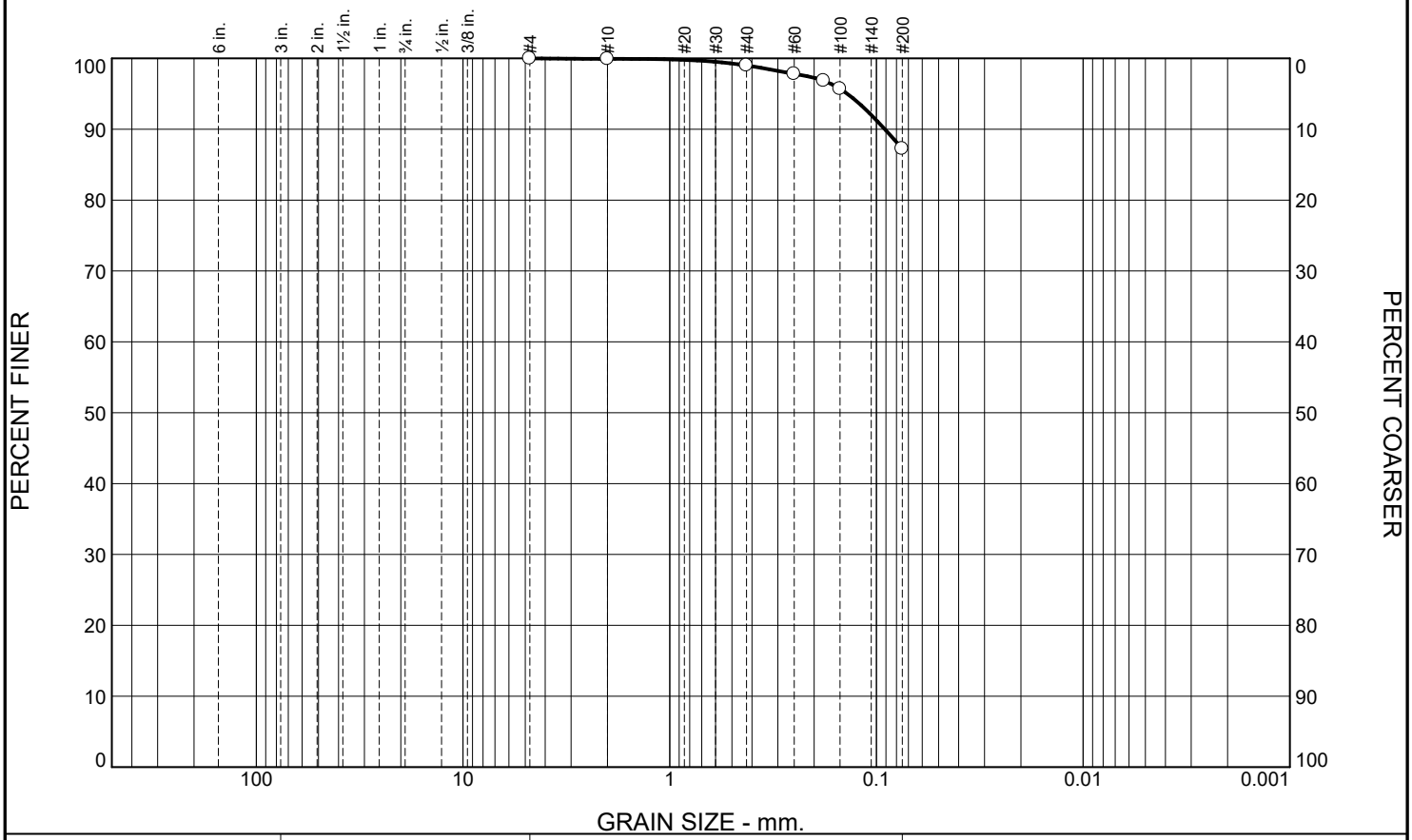
Remarks:
Data Entered: 4/29/15

ECS MID-ATLANTIC, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
Phone: (703) 471-8400
Fax: (703) 834-5527

Figure

Tested By: KV **Checked By:** DVT

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.1	0.9	11.7	87.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#40	99.0		
#60	97.8		
#80	96.8		
#100	95.7		
#200	87.3		

* (no specification provided)

Soil Description

Lean Clay Reddish Brown (0% +4)

Atterberg Limits

PL= 19 LL= 36 PI= 17

Coefficients

D_{90}= 0.0911 D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(14)

Remarks

Data Entered: 4/29/15

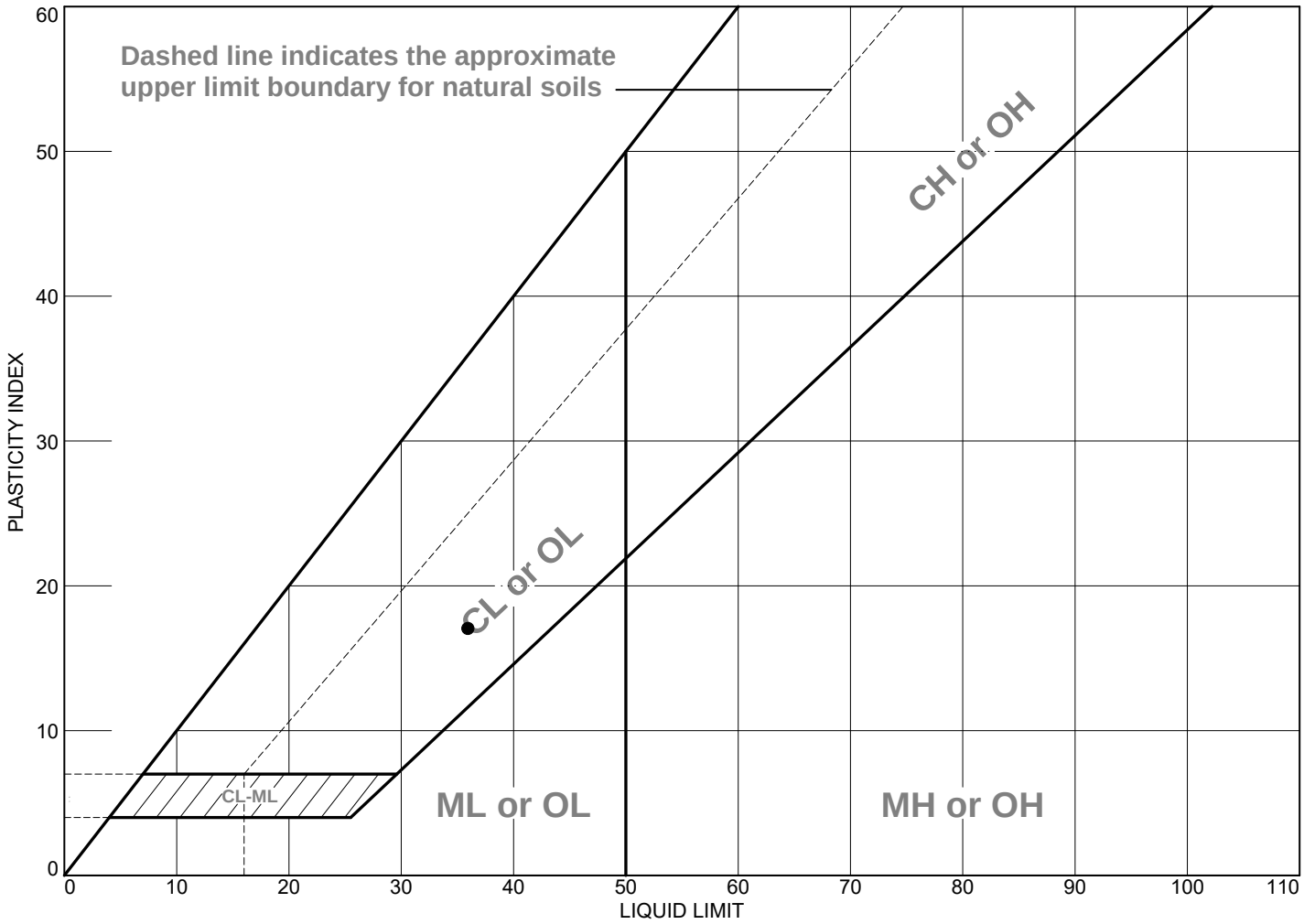
Source of Sample: Sample 2 **Depth:** 0.00-0.10
Sample Number: D4S-4 **Date:** 4/25/15

ECS MID-ATLANTIC, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
Phone: (703) 471-8400
Fax: (703) 834-5527

Client: Client Name
Project: 02 - Millersville Landfill Subcell 9.1
Project No: 24114 **Figure**

Tested By: KV **Checked By:** DVT

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Lean Clay Reddish Brown (0% +4)	36	19	17	99.0	87.3	CL

Project No. 24114 **Client:** Client Name

Project: 02 - Millersville Landfill Subcell 9.1

●**Source of Sample:** Sample 2 **Depth:** 0.00-0.10 **Sample Number:** D4S-4

Remarks:

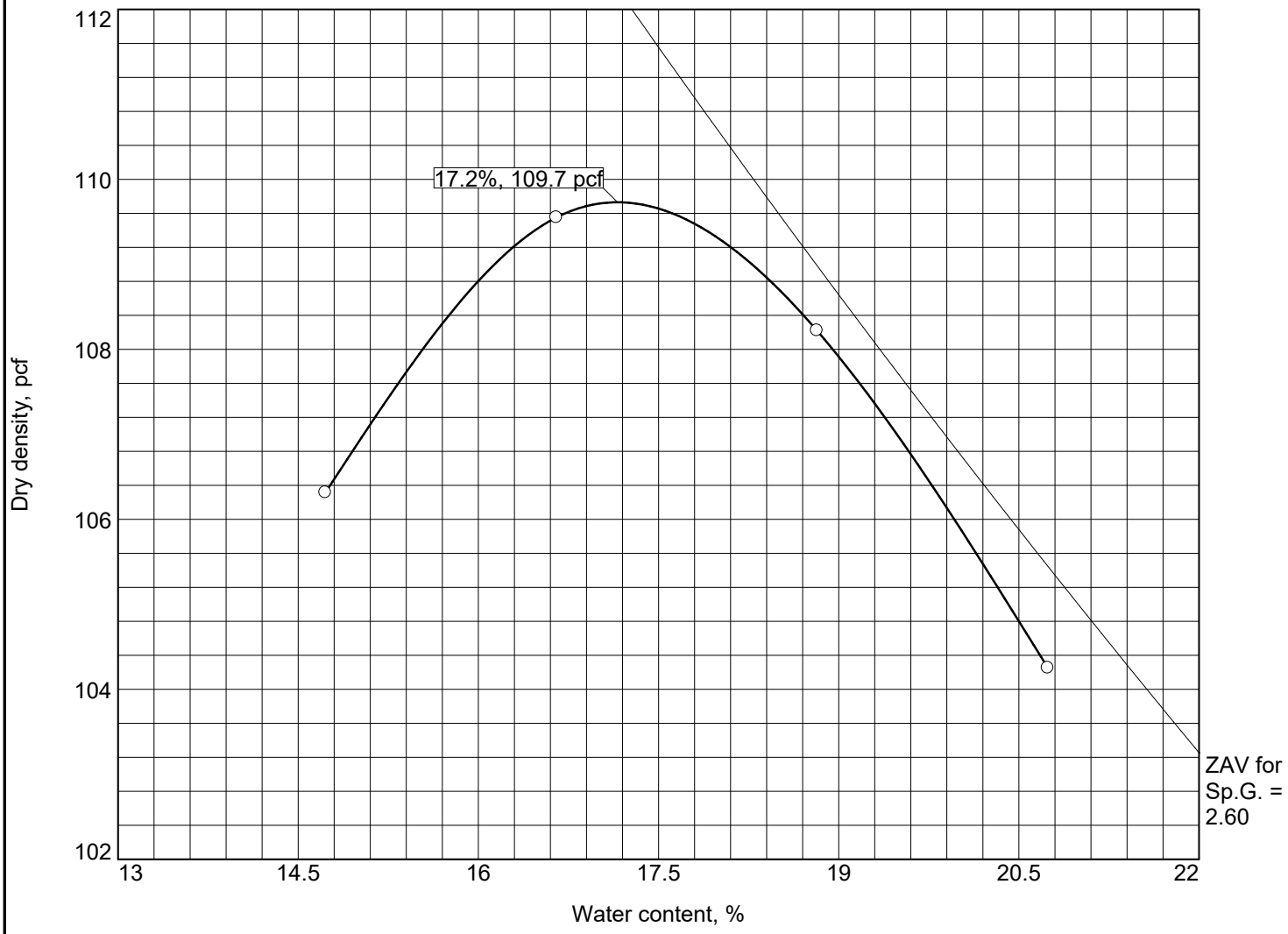
●Data Entered: 4/29/15

ECS MID-ATLANTIC, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
Phone: (703) 471-8400
Fax: (703) 834-5527

Figure

Tested By: HNT1 **Checked By:** DVT

COMPACTION TEST REPORT For Curve No. S-4



Test specification: ASTM D 698-12 Method A Standard

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > #4	% < No.200
	USCS	AASHTO						
0.00-0.10	CL	A-6(14)	5.8	2.6	36	17	0.0	87.3

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 109.7 pcf Optimum moisture = 17.2 %	Lean Clay Reddish Brown (0% +4)

Project No. 24114 **Client:** Client Name

Project: 02 - Millersville Landfill Subcell 9.1

Date: 4/27/15

○ **Source of Sample:** Sample 2 **Sample Number:** D4S-4

Remarks:
Data Entered: 4/28/15

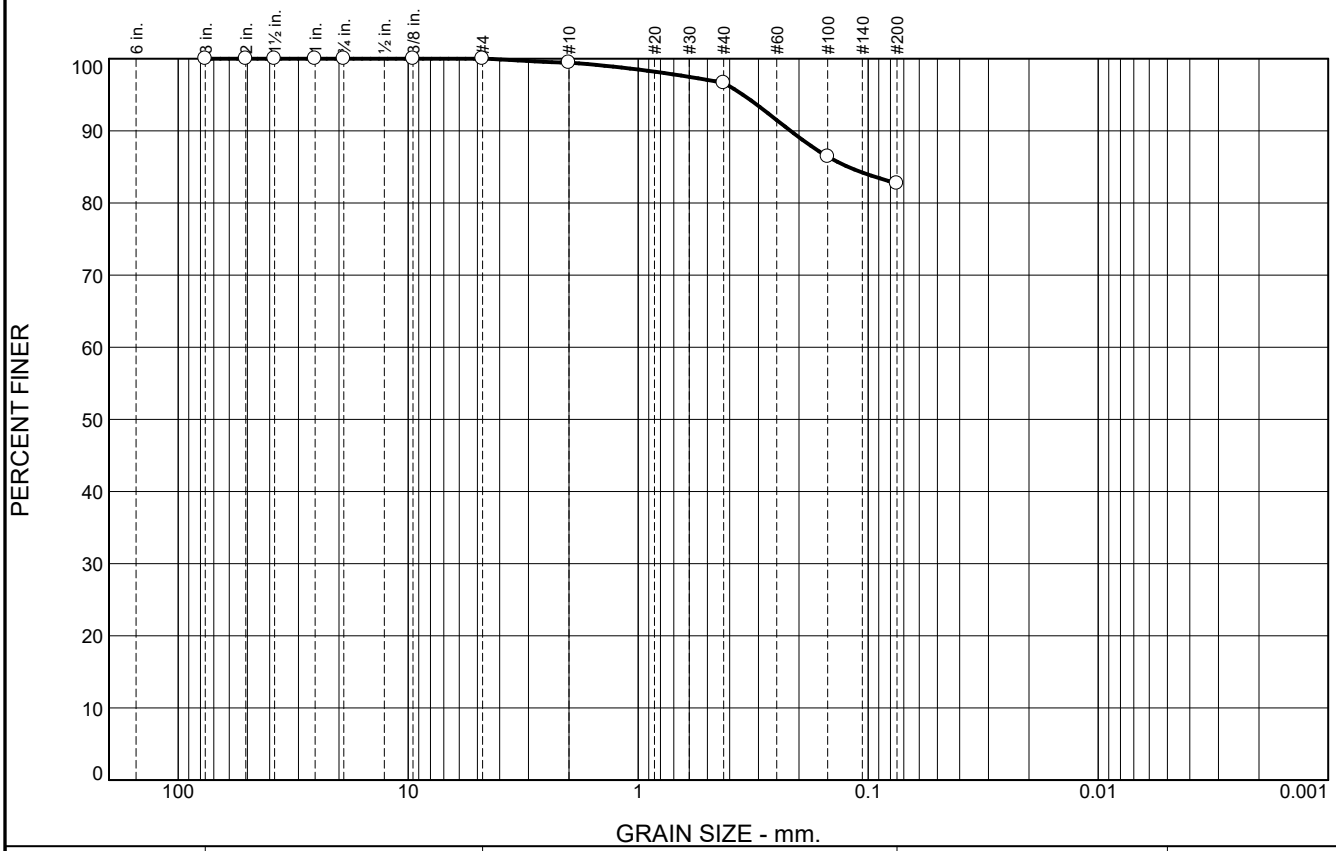
ECS MID-ATLANTIC, LLC
14026 Thunderbolt Place, Suite 100
Chantilly, VA 20151-3232
Phone: (703) 471-8400
Fax: (703) 834-5527

Figure

Tested By: KV **Checked By:** DVT

Appendix D.3
Subcell 9.2 - Geosyntec

Particle Size Distribution Report



% +3"	% Gravel	% Sand	% Silt	% Clay
0.0	0.0	17.3	82.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0		
2"	100.0		
1 - 1/2"	100.0		
1"	100.0		
3/4"	100.0		
3/8"	100.0		
#4	100.0		
#10	99.5		
#40	96.6		
#100	86.4		
#200	82.7		

* (no specification provided)

Material Description

Gray & red with brown lean clay with sand

Atterberg Limits

PL= 20 LL= 33 PI= 13

Coefficients

D_{90}= 0.2176 D_{85}= 0.1221 D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(10)

Remarks

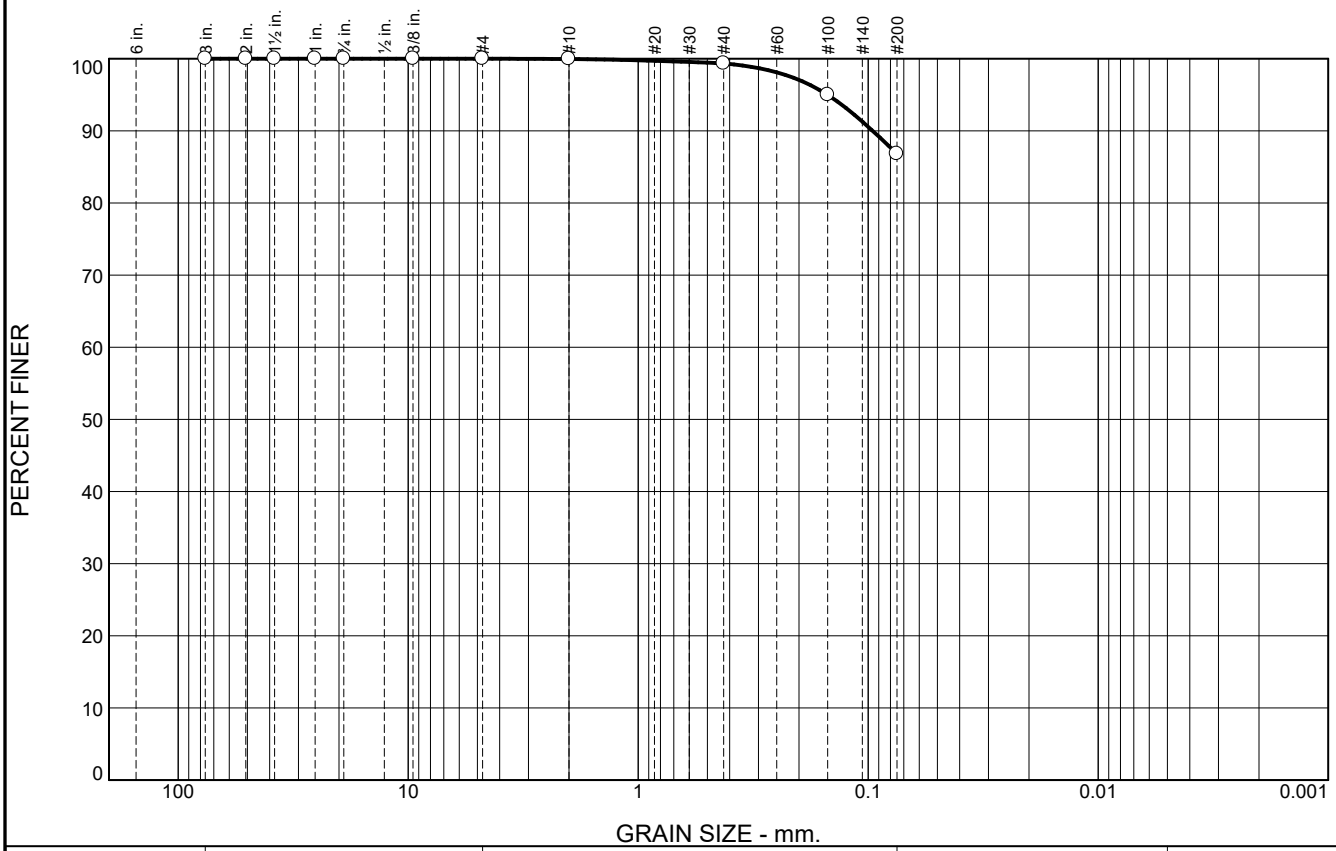
Location: Sample ID:B3C (received 02/14/17)
Sample Number: 1

Date: 02/16/17

HILLIS-CARNES ENGINEERING ASSOCIATES, INC.
Annapolis Junction, MD

Client: Geosyntec Consultants
Project: Millersville Subcell 9.2 Design
Project No: 11344W **Figure**

Particle Size Distribution Report



% +3"	% Gravel	% Sand	% Silt	% Clay
0.0	0.0	13.2	86.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0		
2"	100.0		
1 - 1/2"	100.0		
1"	100.0		
3/4"	100.0		
3/8"	100.0		
#4	100.0		
#10	100.0		
#40	99.4		
#100	95.0		
#200	86.8		

* (no specification provided)

Material Description

Gray with red & brown lean clay

Atterberg Limits

PL= 19 LL= 32 PI= 13

Coefficients

D_{90}= 0.0957 D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(10)

Remarks

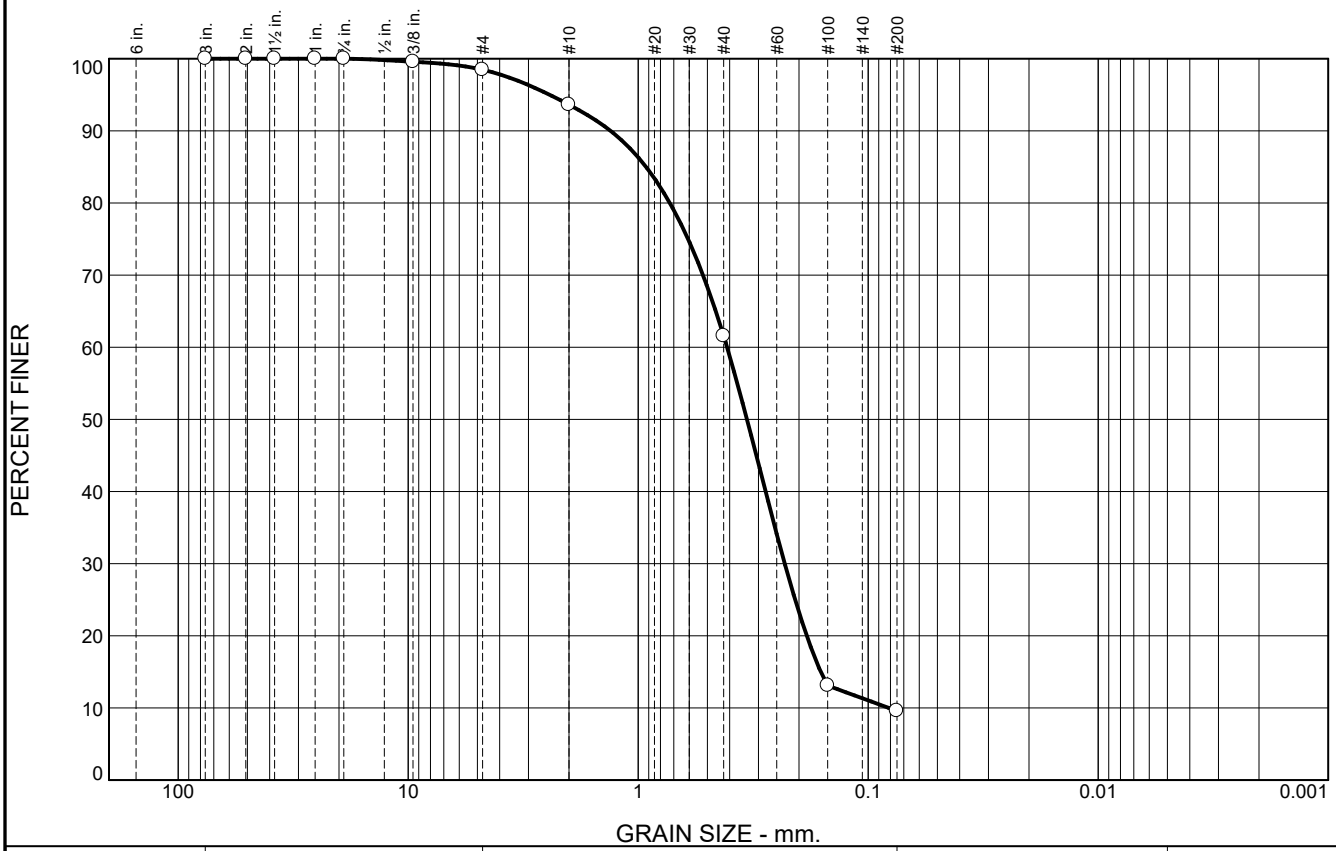
Location: Sample ID:B2B4C (received 02/14/17)
Sample Number: 2

Date: 02/16/17

HILLIS-CARNES ENGINEERING ASSOCIATES, INC.
Annapolis Junction, MD

Client: Geosyntec Consultants
Project: Millersville Subcell 9.2 Design
Project No: 11344W **Figure**

Particle Size Distribution Report



% +3"	% Gravel	% Sand	% Silt	% Clay
0.0	1.5	88.9	9.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0		
2"	100.0		
1 - 1/2"	100.0		
1"	100.0		
3/4"	100.0		
3/8"	99.6		
#4	98.5		
#10	93.6		
#40	61.6		
#100	13.1		
#200	9.6		

* (no specification provided)

Material Description

Orange brown with tan poorly graded sand with silt

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{90}= 1.3197 D_{85}= 0.9244 D_{60}= 0.4107
D_{50}= 0.3365 D_{30}= 0.2305 D_{15}= 0.1607
D_{10}= 0.0812 C_u= 5.05 C_c= 1.59

Classification

USCS= SP-SM AASHTO= A-3

Remarks

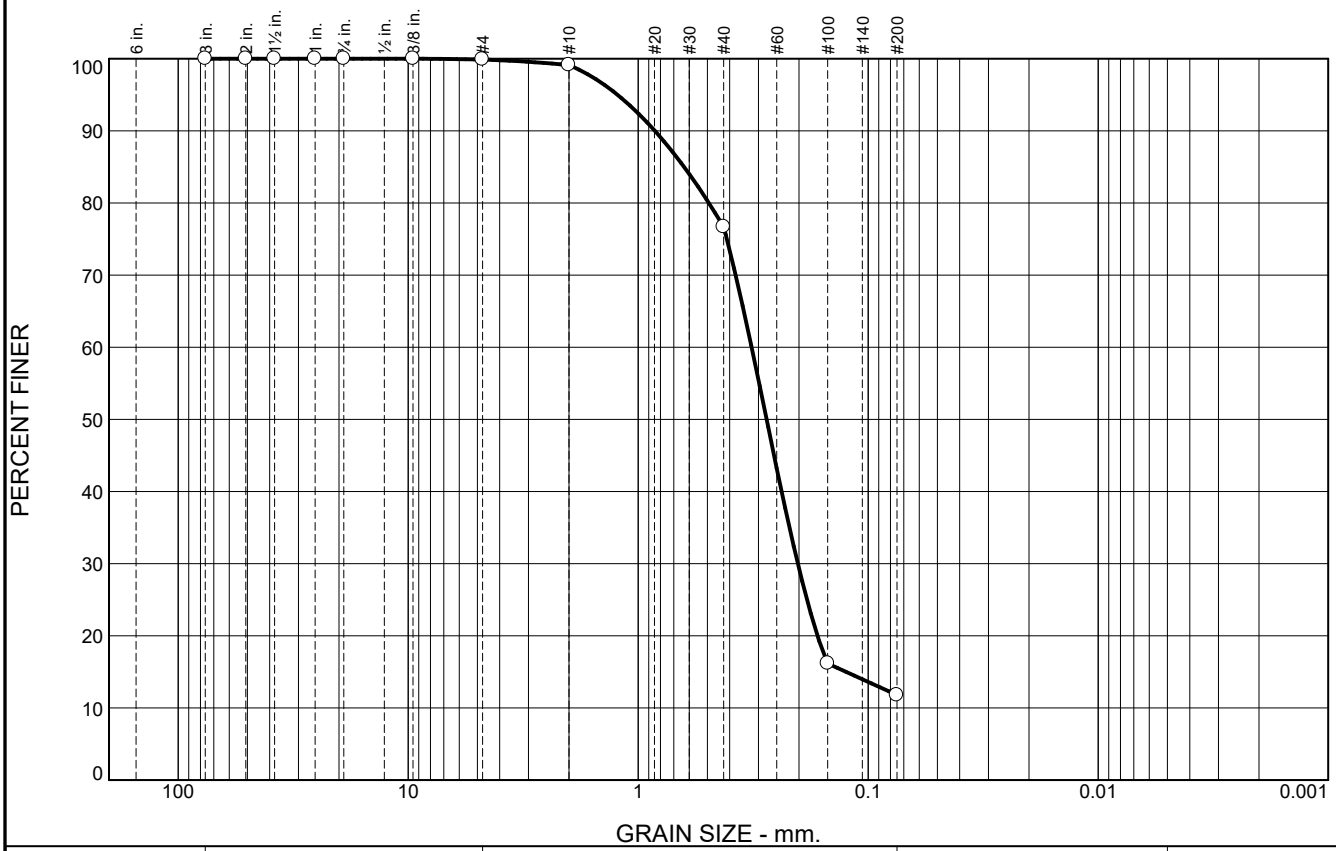
Location: Sample ID:B1S (received 02/14/17)
Sample Number: 3

Date: 02/16/17

HILLIS-CARNES ENGINEERING ASSOCIATES, INC.
Annapolis Junction, MD

Client: Geosyntec Consultants
Project: Millersville Subcell 9.2 Design
Project No: 11344W **Figure**

Particle Size Distribution Report



% +3"	% Gravel	% Sand	% Silt	% Clay
0.0	0.1	88.1	11.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0		
2"	100.0		
1 - 1/2"	100.0		
1"	100.0		
3/4"	100.0		
3/8"	100.0		
#4	99.9		
#10	99.1		
#40	76.7		
#100	16.2		
#200	11.8		

* (no specification provided)

Material Description

Brown with tanish white poorly graded sand with silt

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{90}= 0.8464 D_{85}= 0.6318 D_{60}= 0.3213
D_{50}= 0.2765 D_{30}= 0.2022 D_{15}= 0.1247
D_{10}= C_u= C_c=

Classification

USCS= SP-SM AASHTO= A-2-4(0)

Remarks

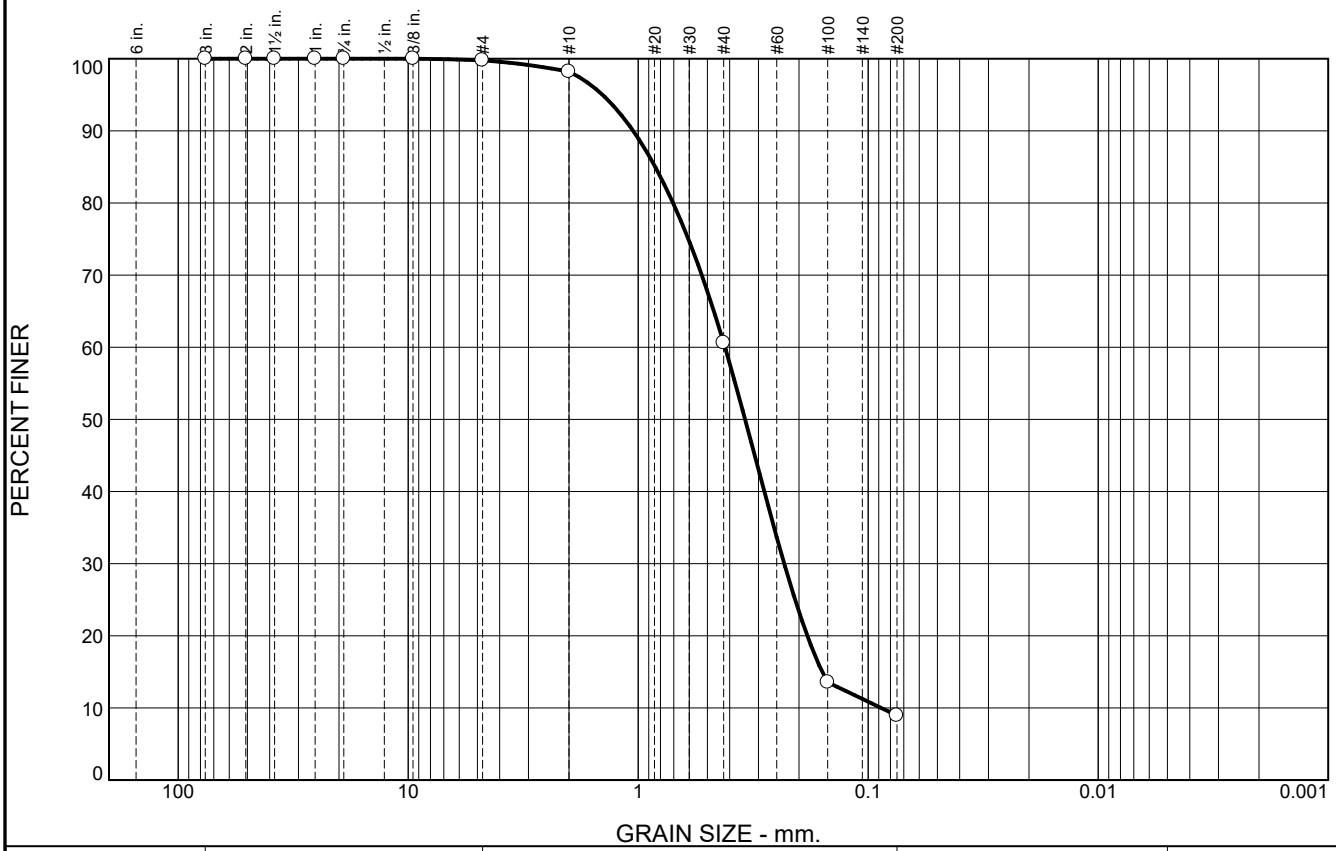
Location: Sample ID:B2S (received 02/14/17)
Sample Number: 4

Date: 02/16/17

HILLIS-CARNES ENGINEERING ASSOCIATES, INC.
Annapolis Junction, MD

Client: Geosyntec Consultants
Project: Millersville Subcell 9.2 Design
Project No: 11344W **Figure**

Particle Size Distribution Report



% +3"	% Gravel	% Sand	% Silt	% Clay
0.0	0.2	90.8	9.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0		
2"	100.0		
1 - 1/2"	100.0		
1"	100.0		
3/4"	100.0		
3/8"	100.0		
#4	99.8		
#10	98.2		
#40	60.6		
#100	13.6		
#200	9.0		

* (no specification provided)

Material Description

Orange brown poorly graded sand with silt

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{90}= 1.0517 D_{85}= 0.8431 D_{60}= 0.4194
D_{50}= 0.3429 D_{30}= 0.2317 D_{15}= 0.1584
D_{10}= 0.0878 C_u= 4.78 C_c= 1.46

Classification

USCS= SP-SM AASHTO= A-3

Remarks

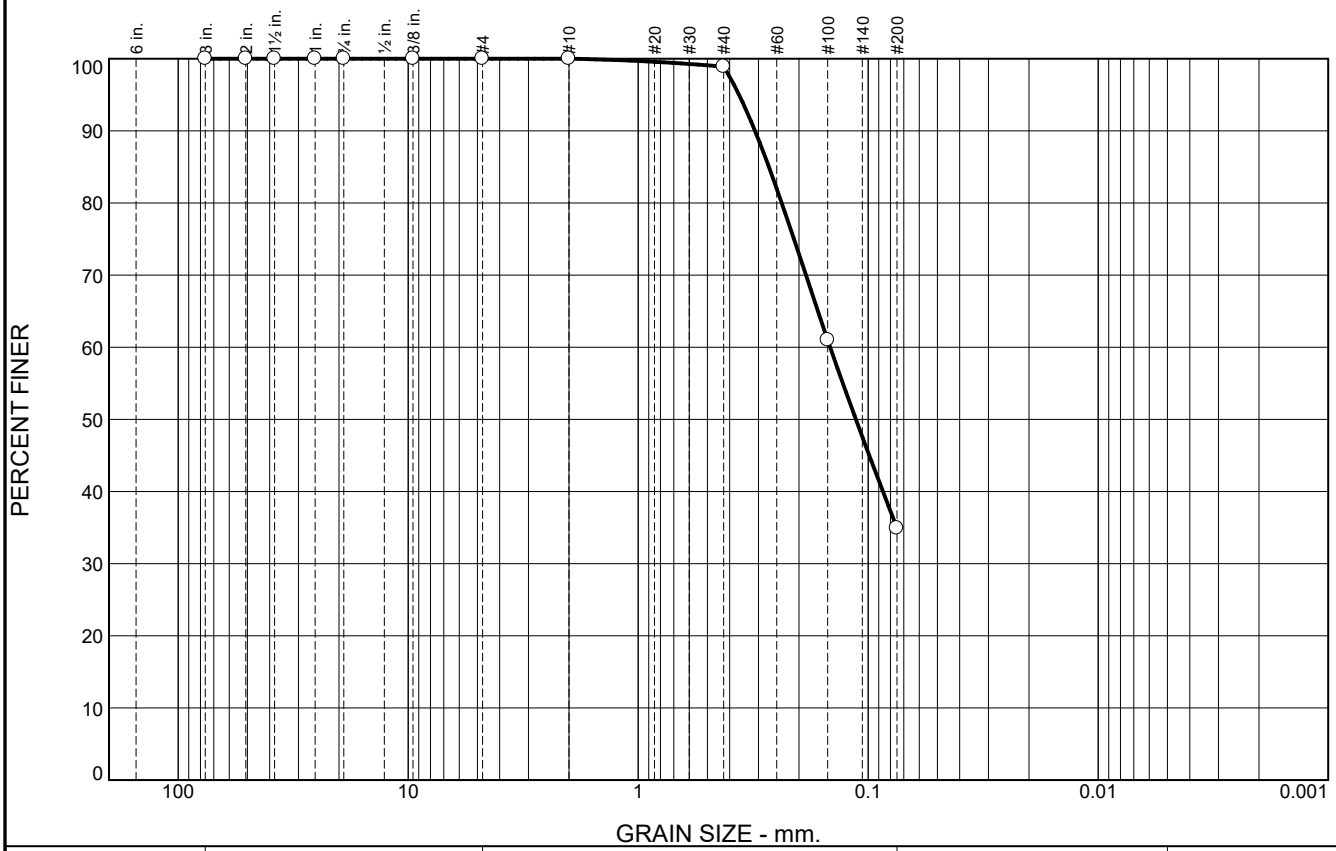
Location: Sample ID:B4S (received 02/14/17)
Sample Number: 5

Date: 02/16/17

HILLIS-CARNES ENGINEERING ASSOCIATES, INC.
Annapolis Junction, MD

Client: Geosyntec Consultants
Project: Millersville Subcell 9.2 Design
Project No: 11344W **Figure**

Particle Size Distribution Report



% +3"	% Gravel	% Sand	% Silt	% Clay
0.0	0.0	65.1	34.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0		
2"	100.0		
1 - 1/2"	100.0		
1"	100.0		
3/4"	100.0		
3/8"	100.0		
#4	100.0		
#10	100.0		
#40	98.9		
#100	61.0		
#200	34.9		

* (no specification provided)

Material Description

Tanish white with brown silty sand

Atterberg Limits

PL= 22 LL= 24 PI= 2

Coefficients

D_{90}= 0.3106 D_{85}= 0.2703 D_{60}= 0.1463
D_{50}= 0.1131 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= SM AASHTO= A-2-4(0)

Remarks

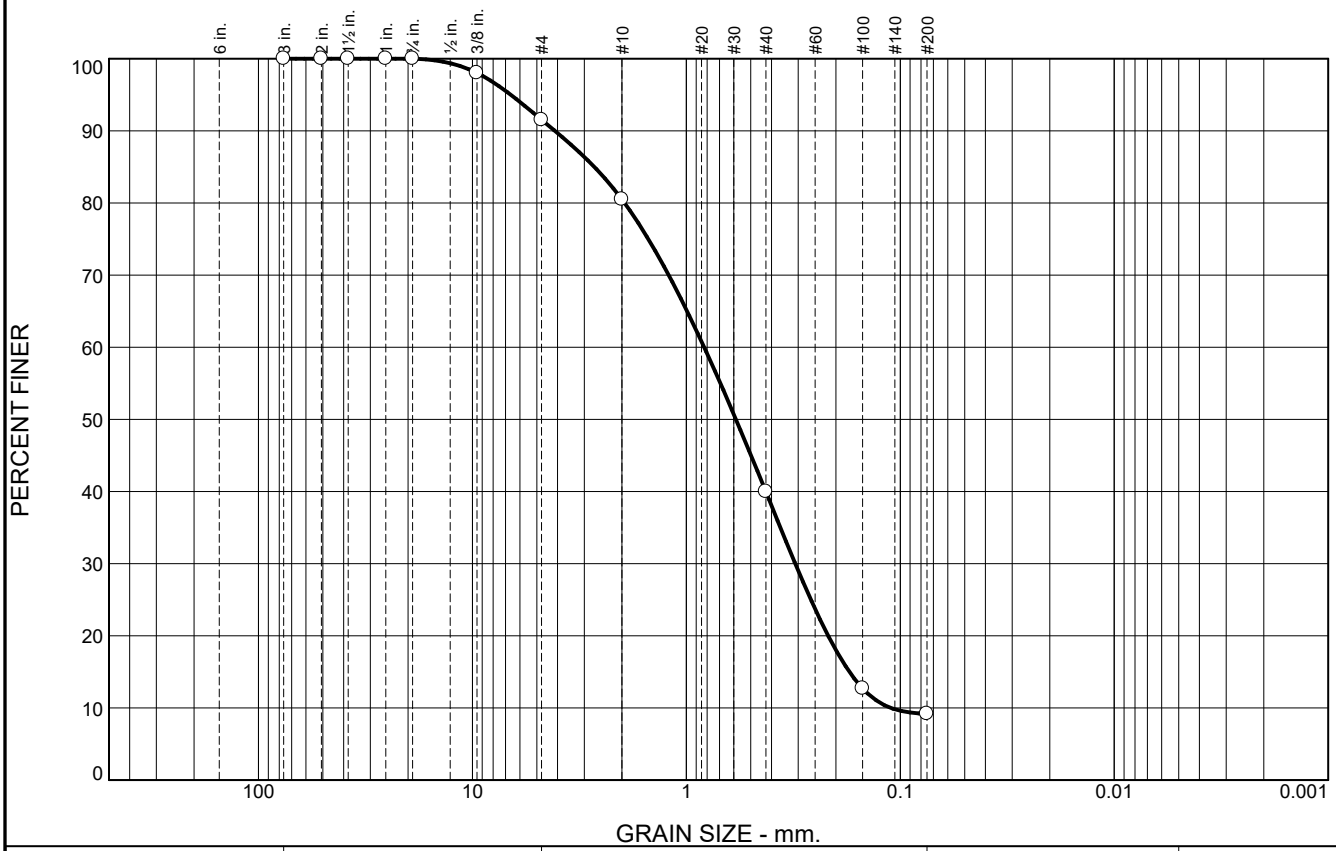
Location: Sample ID:B2B3CS (received 02/14/17)
Sample Number: 6

Date: 02/16/17

HILLIS-CARNES ENGINEERING ASSOCIATES, INC.
Annapolis Junction, MD

Client: Geosyntec Consultants
Project: Millersville Subcell 9.2 Design
Project No: 11344W **Figure**

Particle Size Distribution Report



% +3"	% Gravel	% Sand	% Silt	% Clay
0.0	8.5	82.3	9.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0		
2"	100.0		
1 - 1/2"	100.0		
1"	100.0		
3/4"	100.0		
3/8"	98.0		
#4	91.5		
#10	80.5		
#40	40.0		
#100	12.7		
#200	9.2		

* (no specification provided)

Material Description

Brown well-graded sand with silt

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{90}= 4.1184 D_{85}= 2.6934 D_{60}= 0.8256
D_{50}= 0.5866 D_{30}= 0.3097 D_{15}= 0.1729
D_{10}= 0.1106 C_u= 7.46 C_c= 1.05

Classification

USCS= SW-SM AASHTO= A-1-b

Remarks

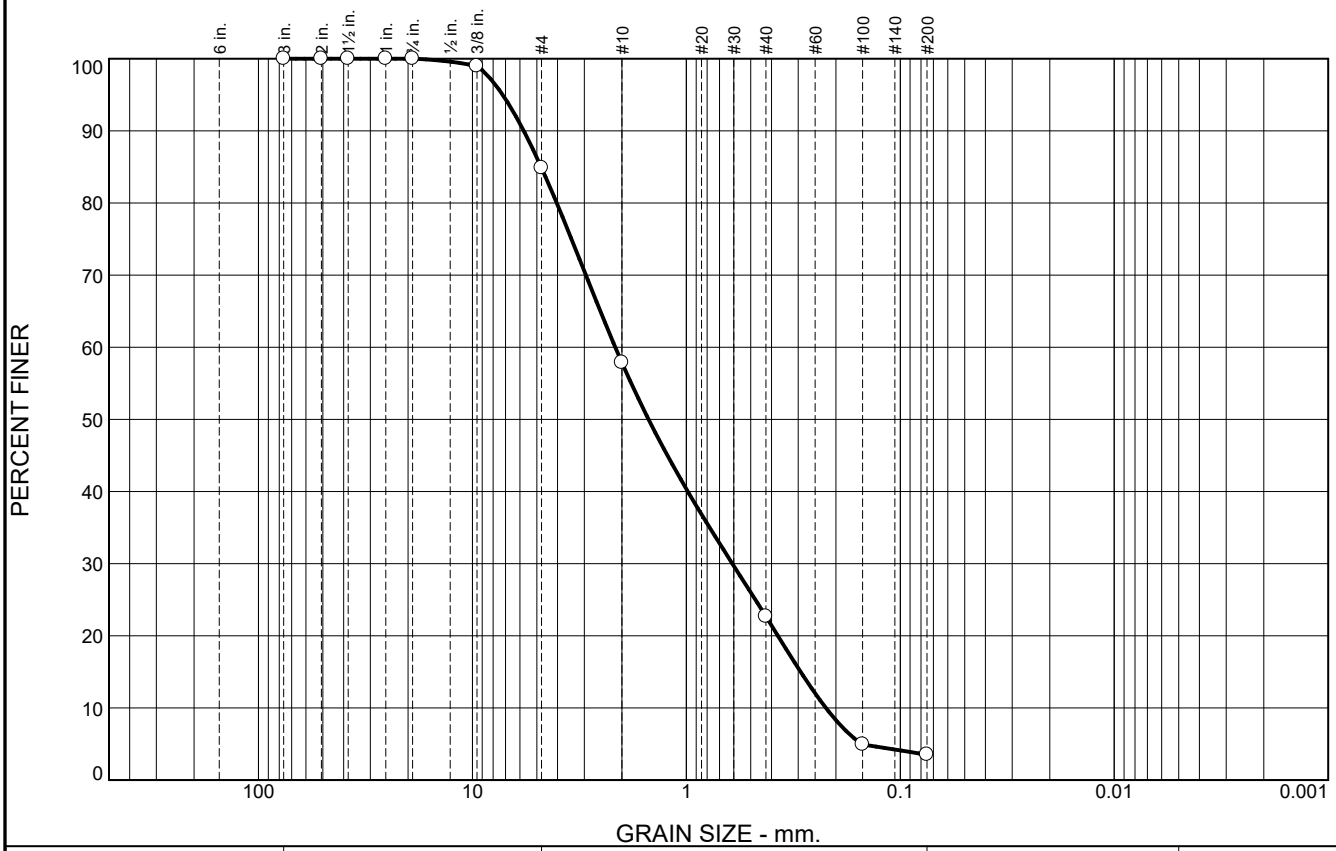
Location: New borrow area. TP#1
Sample Number: 7

Date: 09/25/17

HILLIS-CARNES ENGINEERING ASSOCIATES, INC.
Annapolis Junction, MD

Client: Geosyntec Consultants
Project: Millersville Subcell 9.2 Design
Project No: 11344W **Figure**

Particle Size Distribution Report



% +3"	% Gravel	% Sand	% Silt	% Clay
0.0	15.2	81.3	3.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0		
2"	100.0		
1 - 1/2"	100.0		
1"	100.0		
3/4"	100.0		
3/8"	99.0		
#4	84.8		
#10	57.9		
#40	22.7		
#100	4.9		
#200	3.5		

* (no specification provided)

Material Description

Brown poorly graded sand with gravel

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{90}= 5.7548 D_{85}= 4.7756 D_{60}= 2.1486
D_{50}= 1.5018 D_{30}= 0.6094 D_{15}= 0.2923
D_{10}= 0.2227 C_u= 9.65 C_c= 0.78

Classification

USCS= SP AASHTO= A-1-b

Remarks

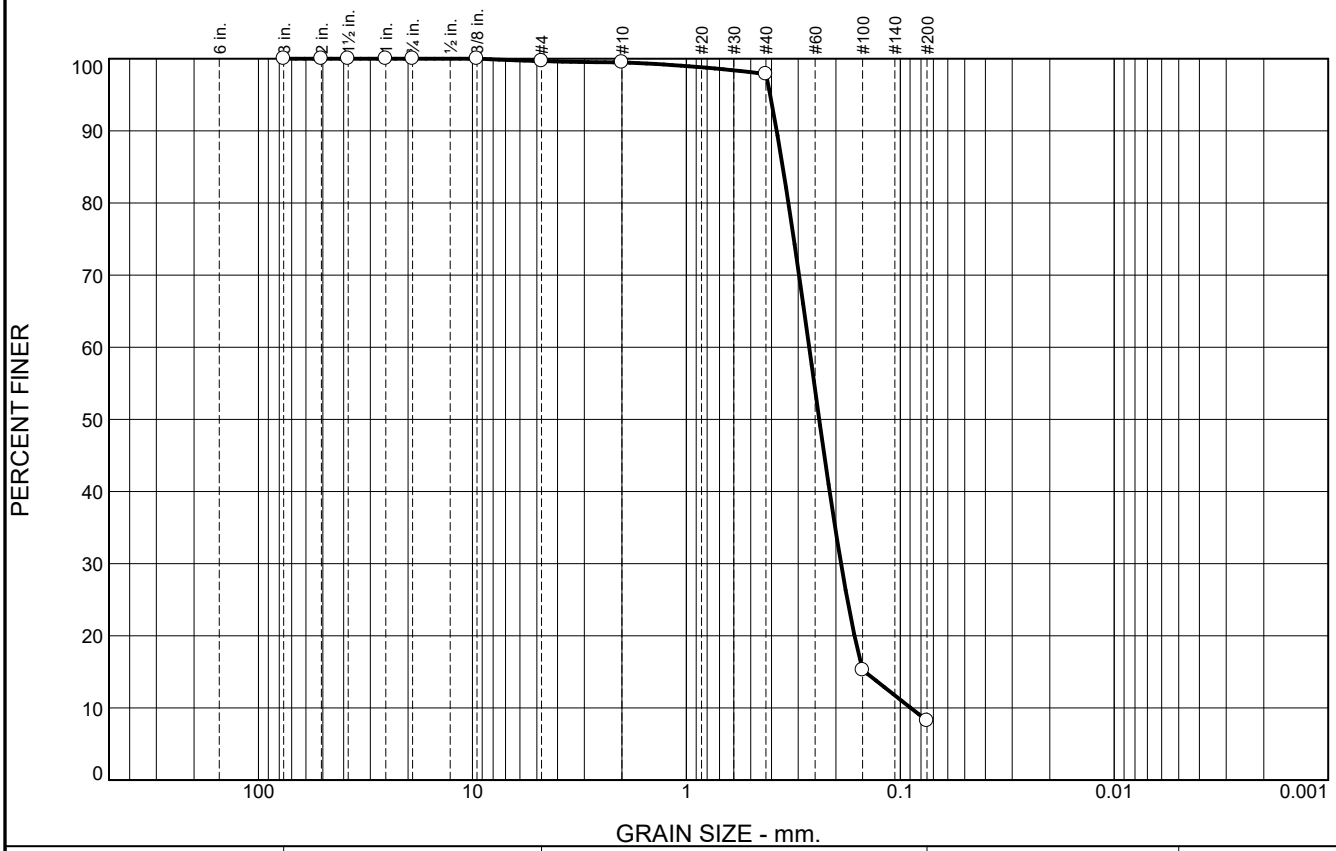
Location: New borrow area. TP#2
Sample Number: 8

Date: 09/25/17

HILLIS-CARNES ENGINEERING ASSOCIATES, INC.
Annapolis Junction, MD

Client: Geosyntec Consultants
Project: Millersville Subcell 9.2 Design
Project No: 11344W **Figure**

Particle Size Distribution Report



% +3"	% Gravel	% Sand	% Silt	% Clay
0.0	0.3	91.5	8.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0		
2"	100.0		
1 - 1/2"	100.0		
1"	100.0		
3/4"	100.0		
3/8"	100.0		
#4	99.7		
#10	99.5		
#40	97.9		
#100	15.2		
#200	8.2		

* (no specification provided)

Material Description

Light tan with brown poorly graded sand with silt

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{90}= 0.3780 D_{85}= 0.3542 D_{60}= 0.2667
D_{50}= 0.2393 D_{30}= 0.1893 D_{15}= 0.1464
D_{10}= 0.0893 C_u= 2.99 C_c= 1.50

Classification

USCS= SP-SM AASHTO= A-3

Remarks

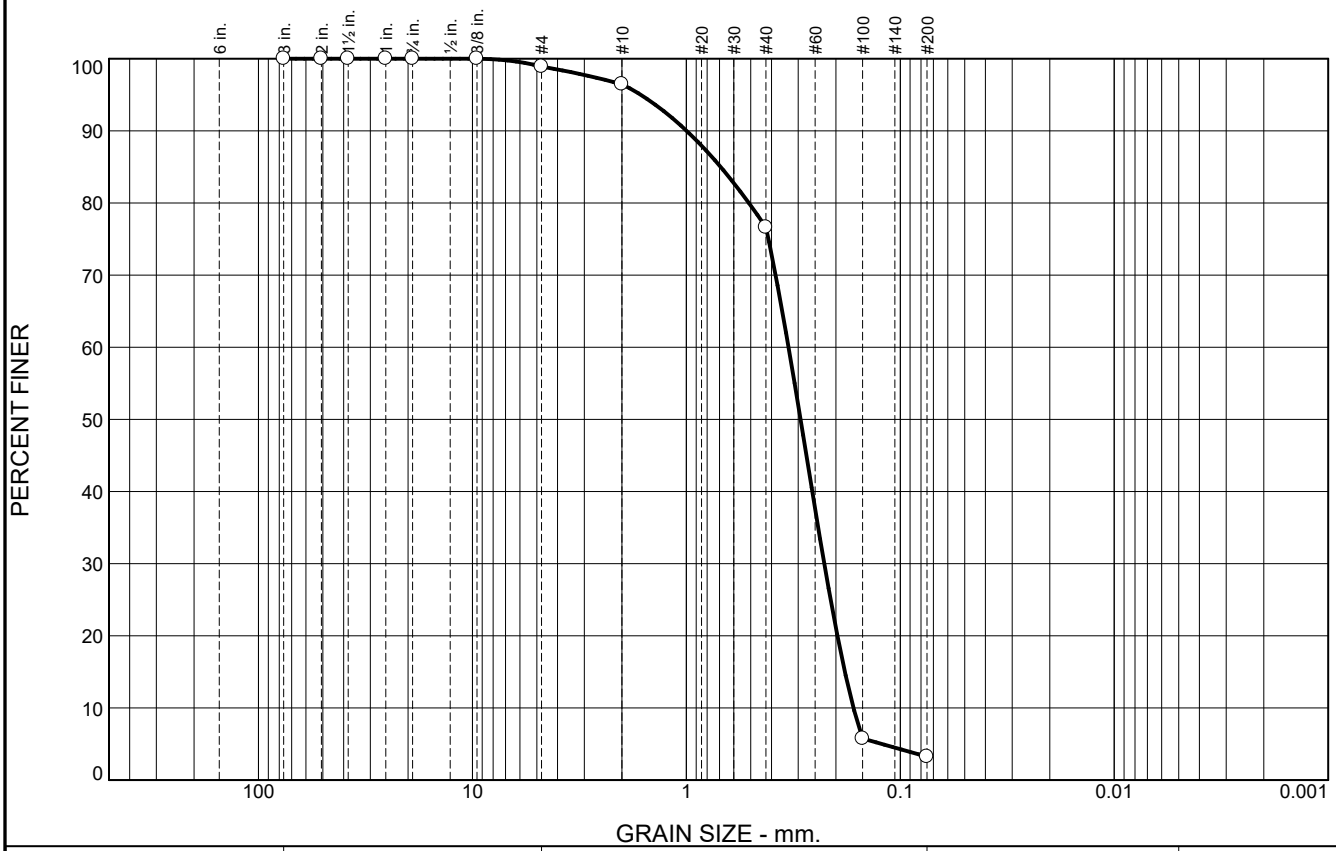
Location: New borrow area. TP#3
Sample Number: 9

Date: 09/25/17

HILLIS-CARNES ENGINEERING ASSOCIATES, INC.
Annapolis Junction, MD

Client: Geosyntec Consultants
Project: Millersville Subcell 9.2 Design
Project No: 11344W **Figure**

Particle Size Distribution Report



% +3"	% Gravel	% Sand	% Silt	% Clay
0.0	1.1	95.7	3.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0		
2"	100.0		
1 - 1/2"	100.0		
1"	100.0		
3/4"	100.0		
3/8"	100.0		
#4	98.9		
#10	96.5		
#40	76.6		
#100	5.8		
#200	3.2		

* (no specification provided)

Material Description

Light tan with brown poorly graded sand

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{90}= 0.9976 D_{85}= 0.6919 D_{60}= 0.3329
D_{50}= 0.2927 D_{30}= 0.2266 D_{15}= 0.1816
D_{10}= 0.1656 C_u= 2.01 C_c= 0.93

Classification

USCS= SP AASHTO= A-3

Remarks

Location: New borrow area. TP#4
Sample Number: 10

Date: 09/25/17

HILLIS-CARNES ENGINEERING ASSOCIATES, INC.
Annapolis Junction, MD

Client: Geosyntec Consultants
Project: Millersville Subcell 9.2 Design
Project No: 11344W **Figure**

Permeability of Granular Soil (Constant Head) ASTM D2434

Job Name:	Millersville Subcell 9.2
Job #:	11344W
Sample ID:	New Borrow Area TP #1
Date:	9/22/2017

Weight Soil g.	924.7
Length in.	4.8
Head cm.	1.2
Time sec.	3000
Discharge ml.	468
Wet Soil	571.4
Dry Soil	552.6
Tare	49.3

Permeability cm/sec:	**2.2E-02**
Moisture Content:	**3.7%**
Dry Density pcf:	**100.1**
Permeability in/hr:	**30.8**

Permeability of Granular Soil (Constant Head) ASTM D2434

Job Name:	Millersville Subcell 9.2
Job #:	11344W
Sample ID:	New Borrow Area TP #2
Date:	9/22/2017

Weight Soil g.	1013.3
Length in.	4.89
Head cm.	1.4
Time sec.	1320
Discharge ml.	842
Wet Soil	586.9
Dry Soil	565.8
Tare	49.3

Permeability cm/sec:	**7.6E-02**
Moisture Content:	**4.1%**
Dry Density pcf:	**107.3**
Permeability in/hr:	**107.9**

Permeability of Granular Soil (Constant Head) ASTM D2434

Job Name:	Millersville Subcell 9.2
Job #:	11344W
Sample ID:	New Borrow Area TP #3
Date:	9/25/2017

Weight Soil g.	904.1
Length in.	5.25
Head cm.	43.5
Time sec.	600
Discharge ml.	1217
Wet Soil	582.4
Dry Soil	557.6
Tare	71.2

Permeability cm/sec:	**7.8E-03**
Moisture Content:	**5.1%**
Dry Density pcf:	**88.3**
Permeability in/hr:	**11.0**

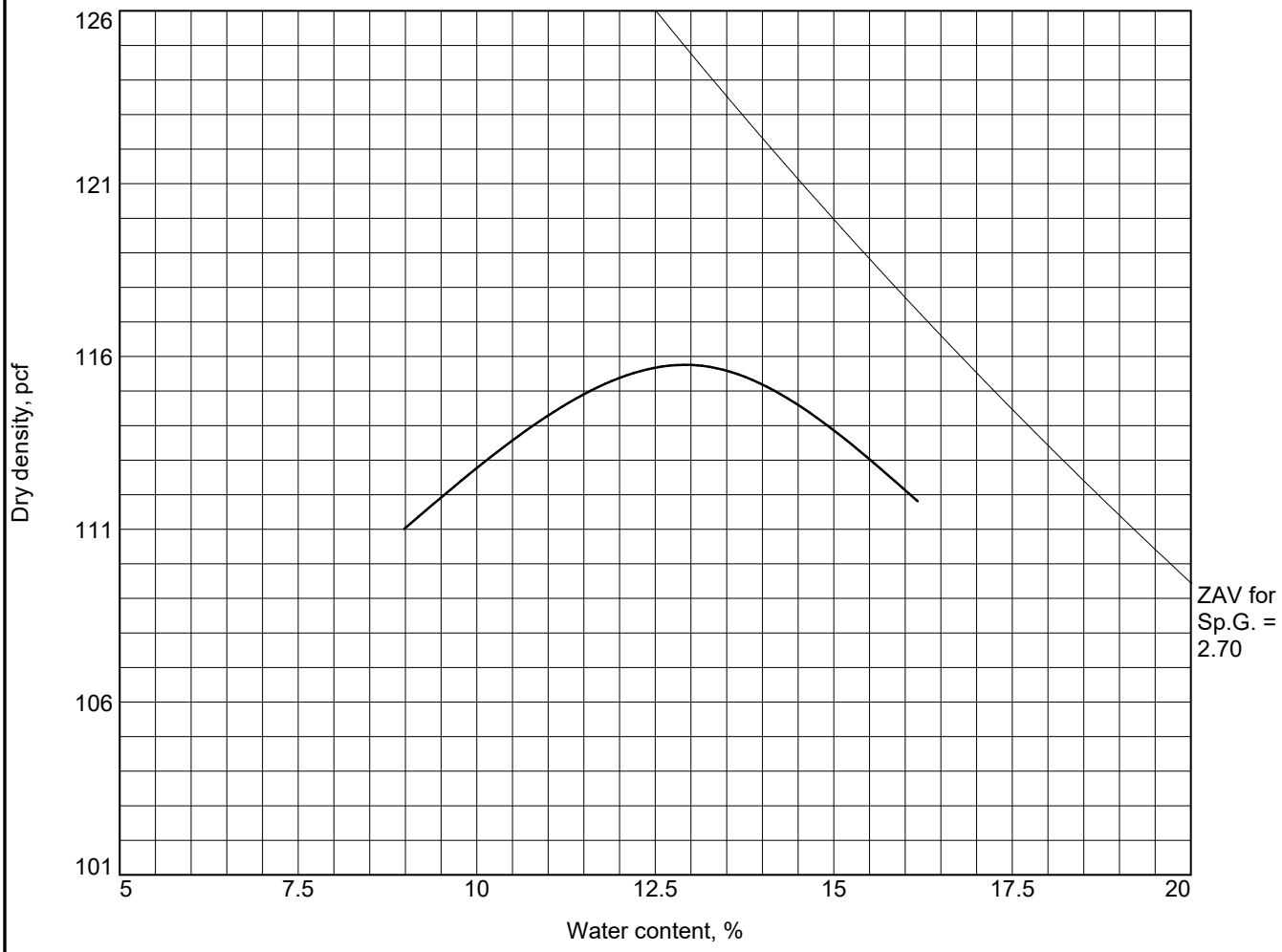
Permeability of Granular Soil (Constant Head) ASTM D2434

Job Name:	Millersville Subcell 9.2
Job #:	11344W
Sample ID:	New Borrow Area TP #4
Date:	9/25/2017

Weight Soil g.	931
Length in.	5.21
Head cm.	13.7
Time sec.	510
Discharge ml.	1476
Wet Soil	558.2
Dry Soil	543.5
Tare	49.2

Permeability cm/sec:	**3.5E-02**
Moisture Content:	**3.0%**
Dry Density pcf:	**93.5**
Permeability in/hr:	**50.0**

COMPACTION TEST REPORT



Test specification: ASTM D 698-12 Method B Standard

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
	CL	A-6(10)		2.70	33	13	0.0	82.7

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 115.8 pcf Optimum moisture = 12.9 %	Gray & red with brown lean clay with sand

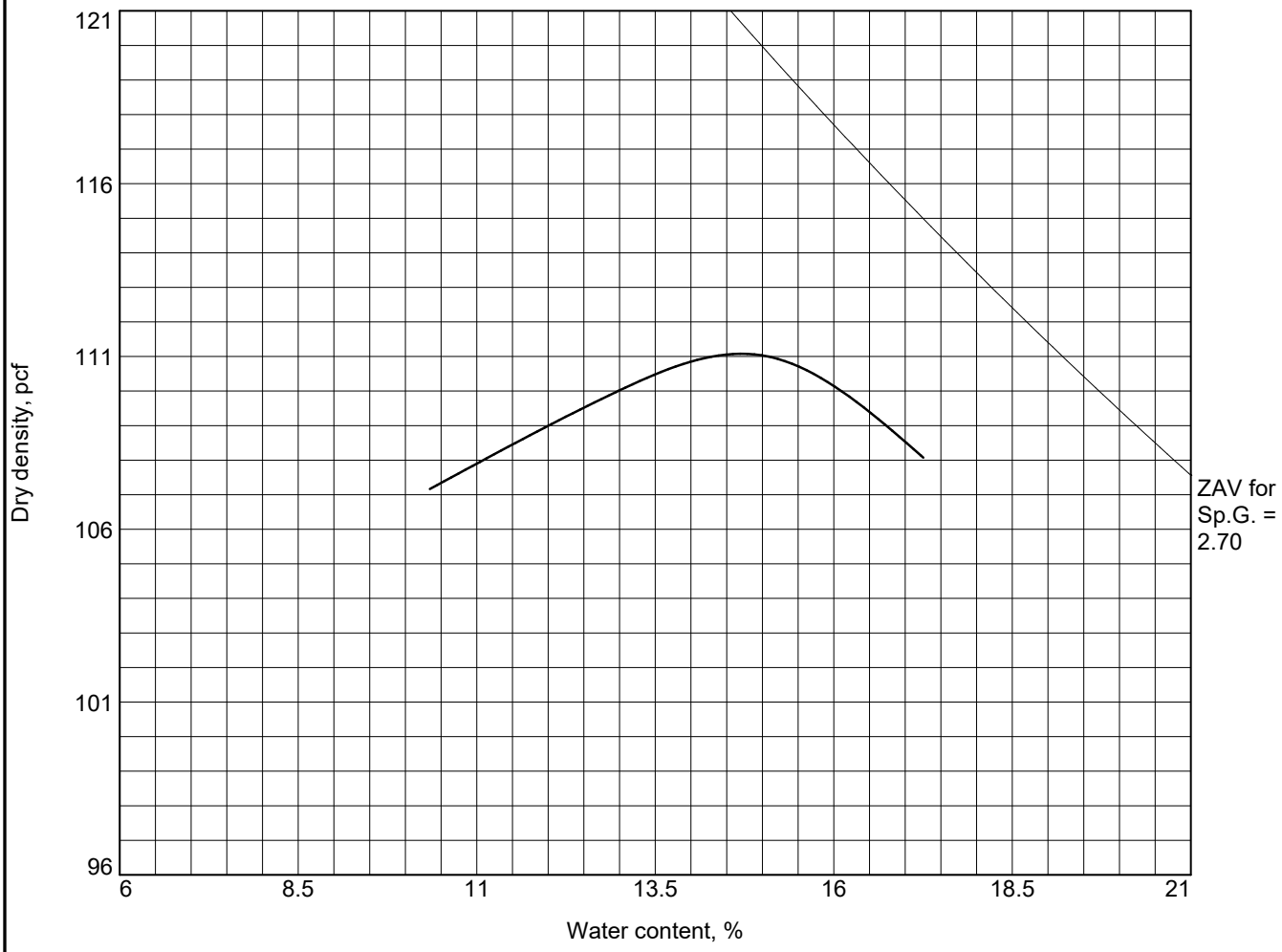
Project No. 11344W **Client:** Geosyntec Consultants
Project: Millersville Subcell 9.2 Design
Date: 02/16/17
○ **Location:** Sample ID:B3C (received 02/14/17) **Sample Number:** 1

Remarks:

HILLIS-CARNES ENGINEERING ASSOCIATES, INC.
Annapolis Junction, MD

Figure

COMPACTION TEST REPORT



Test specification: ASTM D 698-12 Method B Standard

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
	CL	A-6(10)		2.70	32	13	0.0	86.8

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 111.1 pcf Optimum moisture = 14.7 %	Gray with red & brown lean clay

Project No. 11344W **Client:** Geosyntec Consultants
Project: Millersville Subcell 9.2 Design
Date: 02/16/17
Location: Sample ID:B2B4C (received 02/14/17) **Sample Number:** 2

Remarks:

HILLIS-CARNES ENGINEERING ASSOCIATES, INC.
Annapolis Junction, MD

Figure

FLEXIBLE WALL PERMEAMETER

PROJECT:	Millersville Sub.9.2	BEFORE TEST		BEFORE TESTING			AFTER TESTING		
JOB NO.	11344W	AVE. LENGTH	2.34	CAN			CAN		
SAMPLE	Sample ID B3C	AVE. DIAMETER	2.827	WET+CAN	602.51		WET+CAN	378.5	
CHAMBER	2A	AREA	40.5	DRY+CAN	530.3		DRY+CAN	328.2	
		AFTER TEST		CAN WT.	48.8		CAN WT.	48.9	
		AVE. LENGTH	2.348	% MOIST.	15.0%		% MOIST.	18.0%	
		AVE. DIAMETER	2.841	SAM. WT.	491.9		SAM. WT.	504.7	
CTRL-D FOR		AREA	40.90	DRY DEN.	110.9	PCF	DRY DEN.	109.4	
DATE AND TIME									

DATE	TIME	LOWER BURETTE READING	UPPER BURETTE READING	CELL PRESS.	LOWER CAP PRESS.	UPPER CAP PRESS.	AVE PRESS. DIF.	GRAD i	FLOW IN	FLOW OUT	AVE FLOW	PERMEABILITY
02/20	09:59 AM	1.5	47.8	45.0	42.0	40.0	2.7	31.91				
02/20	11:25 AM	3.0	46.3	45.0	42.0	40.0	2.7	31.65	1.5	1.5	1.5	2.27E-07
02/20	12:56 PM	4.6	44.8	45.0	42.0	40.0	2.6	31.11	1.6	1.5	1.6	2.25E-07
02/20	02:18 PM	6.0	43.4	45.0	42.0	40.0	2.6	30.58	1.4	1.4	1.4	2.30E-07
02/20	04:01 PM	7.8	41.7	45.0	42.0	40.0	2.5	30.02	1.8	1.7	1.8	2.33E-07

Average Permeability: **2.2E-07** cm/sec Corrected to 20 degrees C

Tested per ASTM D5084 Method A
Permeant: Deaired Tap Water
Average Temp. during test: 21.4 degrees C
Compaction: 95.8%

FLEXIBLE WALL PERMEAMETER

PROJECT:	Millersville Sub.9.2	BEFORE TEST		BEFORE TESTING			AFTER TESTING		
JOB NO.	11344W	AVE. LENGTH	2.34	CAN			CAN		
SAMPLE	Sample ID B2B4C	AVE. DIAMETER	2.828	WET+CAN	576.21		WET+CAN	381.3	
CHAMBER	1C	AREA	40.5	DRY+CAN	500.6		DRY+CAN	323.9	
		AFTER TEST		CAN WT.	49.2		CAN WT.	49	
		AVE. LENGTH	2.348	% MOIST.	16.8%		% MOIST.	20.9%	
		AVE. DIAMETER	2.84	SAM. WT.	479.3		SAM. WT.	496.1	
CTRL-D FOR		AREA	40.87	DRY DEN.	106.4	PCF	DRY DEN.	105.0	
DATE AND TIME									

DATE	TIME	LOWER BURETTE READING	UPPER BURETTE READING	CELL PRESS.	LOWER CAP PRESS.	UPPER CAP PRESS.	AVE PRESS. DIF.	GRAD i	FLOW IN	FLOW OUT	AVE FLOW	PERMEABILITY
02/20	10:00 AM	1.3	47.6	45.0	42.0	40.0	2.7	31.90				
02/20	11:26 AM	2.4	46.6	45.0	42.0	40.0	2.7	31.71	1.1	1.0	1.1	1.58E-07
02/20	12:57 PM	3.6	45.4	45.0	42.0	40.0	2.6	31.32	1.2	1.2	1.2	1.73E-07
02/20	02:19 PM	4.7	44.4	45.0	42.0	40.0	2.6	30.92	1.1	1.0	1.1	1.70E-07
02/20	04:02 PM	6.1	43.0	45.0	42.0	40.0	2.6	30.48	1.4	1.4	1.4	1.83E-07

Average Permeability: **1.7E-07** cm/sec Corrected to 20 degrees C

Tested per ASTM D5084 Method A
Permeant: Deaired Tap Water
Average Temp. during test: 21.4 degrees C
Campaction: 95.8%

Permeability of Granular Soil (Constant Head) ASTM D2434

Job Name:	Millersville Subcell 9.2 Design
Job #:	11344W
Sample ID:	S-3, Site Sample ID B1S
Date:	2/16/2017

Weight Soil g.	897.6
Length in.	5.01
Head cm.	60.2
Time sec.	960
Discharge ml.	794
Wet Soil	577.8
Dry Soil	552.6
Tare	49.4

Permeability cm/sec:	**2.3E-03**
Moisture Content:	**5.0%**
Dry Density pcf:	**91.9**
Permeability in/hr:	**3.3**

Appendix D.4
Subcell 9.2 - SCS

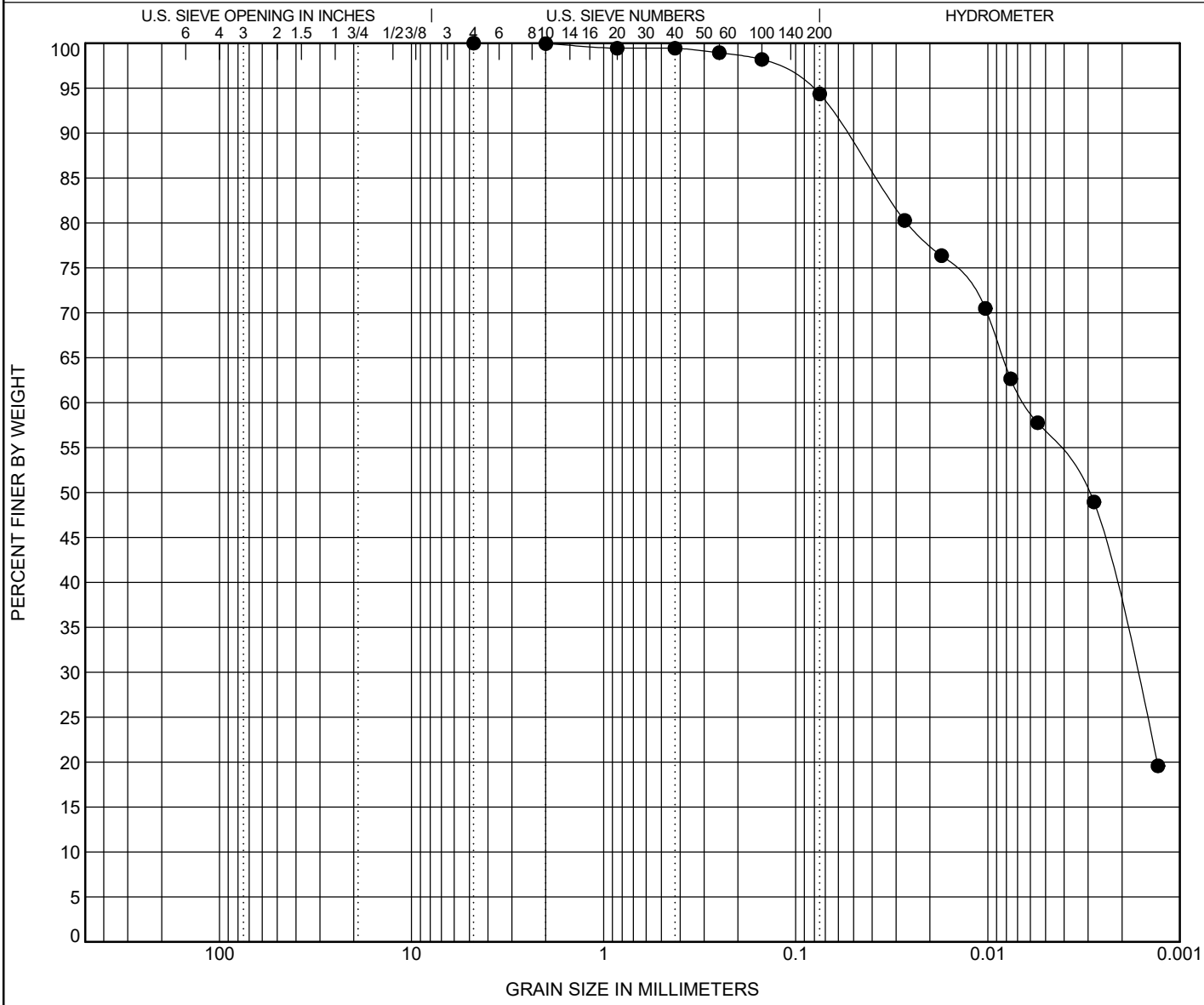
The Robert B. Balter Company
Geotechnical and Environmental Engineers
Materials and Construction Inspection and Testing
Telephone No. (410) 363-1555
www.balterco.com

GRAIN SIZE DISTRIBUTION

TEST METHOD ASTM D422

CLIENT SCS Engineers **PROJECT NAME** Millersville Landfill - Subcell 9.2

PROJECT LOCATION **PROJECT NUMBER** 17324-0 **DATE TESTED**



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen Identification	Classification	LL	PL	PI	Cc	Cu
●	**CCL, B-1 @ 0.0' - 5.0',**	**Red LEAN CLAY(CL)**	**45**	**21**	**24**		

	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**CCL, B-1 @ 0.0' - 5.0',**	**4.75**	**0.006**	**0.002**		**0.0**	**5.6**	**37.8**	**56.5**

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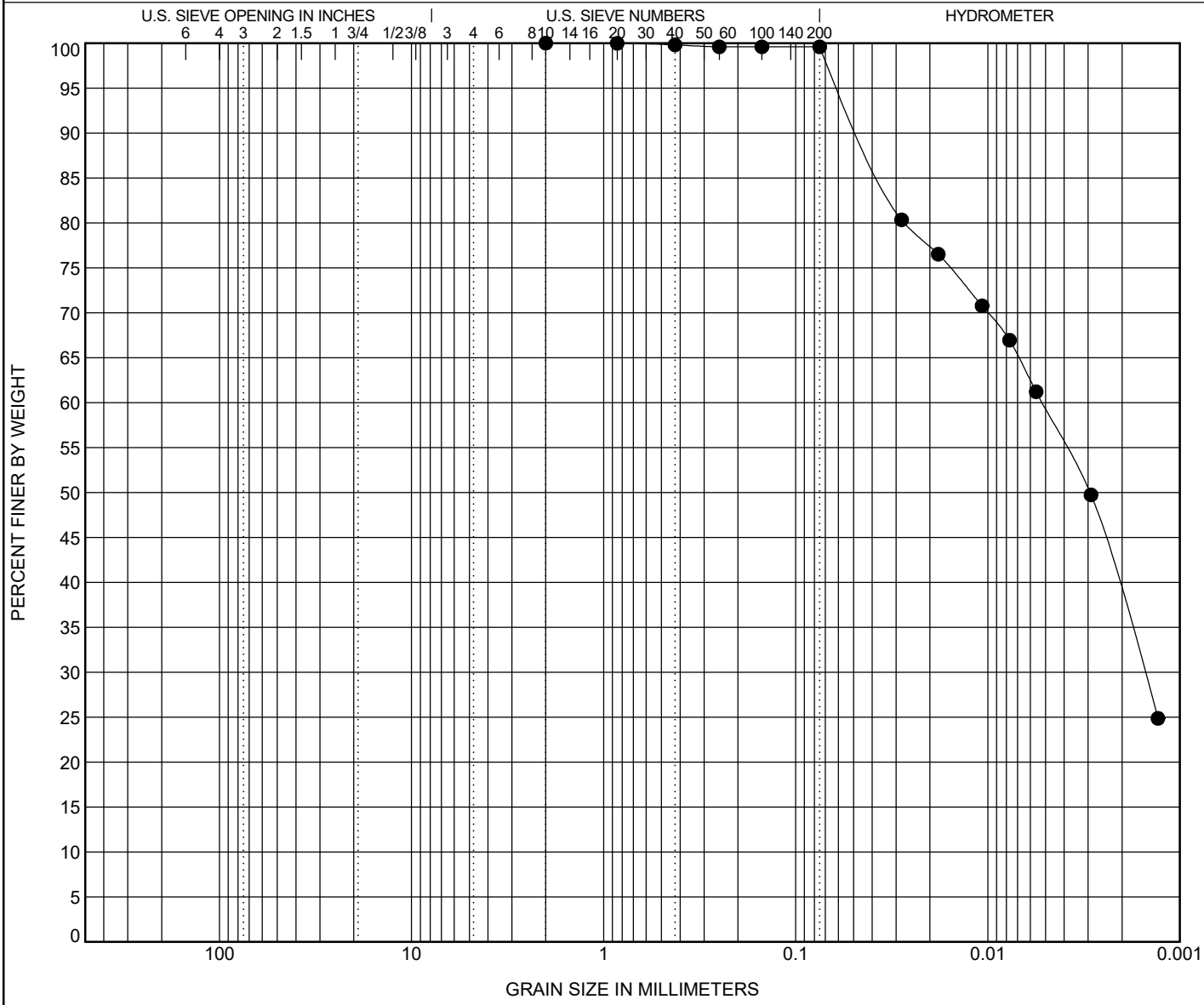
GRAIN SIZE DISTRIBUTION

TEST METHOD ASTM D422

CLIENT SCS Engineers **PROJECT NAME** Millersville Landfill - Subcell 9.2

PROJECT LOCATION **PROJECT NUMBER** 17324-0 **DATE TESTED**



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen Identification	Classification	LL	PL	PI	Cc	Cu
●	CCL, B-2 @ 0.0' - 5.0',	Red FAT CLAY(CH)	53	20	33		

	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	CCL, B-2 @ 0.0' - 5.0',	2	0.005	0.002		0.0	0.4	40.4	59.2

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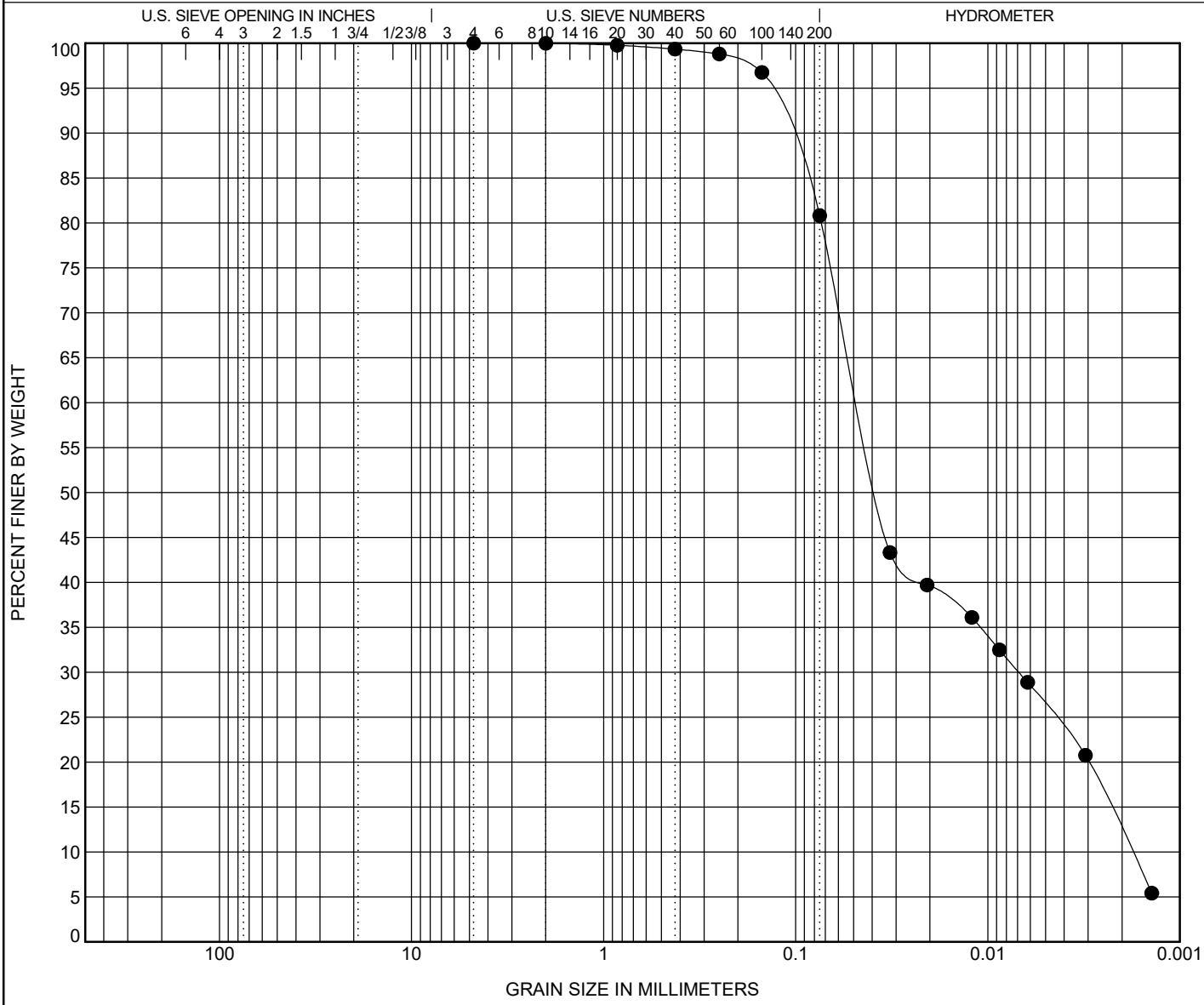
GRAIN SIZE DISTRIBUTION

TEST METHOD ASTM D422

CLIENT SCS Engineers **PROJECT NAME** Millersville Landfill - Subcell 9.2

PROJECT LOCATION **PROJECT NUMBER** 17324-0 **DATE TESTED**



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen Identification	Classification	LL	PL	PI	Cc	Cu
●	CCL, B-3 @ 0.0' - 5.0',	Red LEAN CLAY with SAND(CL)	29	15	14	0.57	26.46

	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	CCL, B-3 @ 0.0' - 5.0',	4.75	0.047	0.007	0.002	0.0	19.2	54.5	26.4

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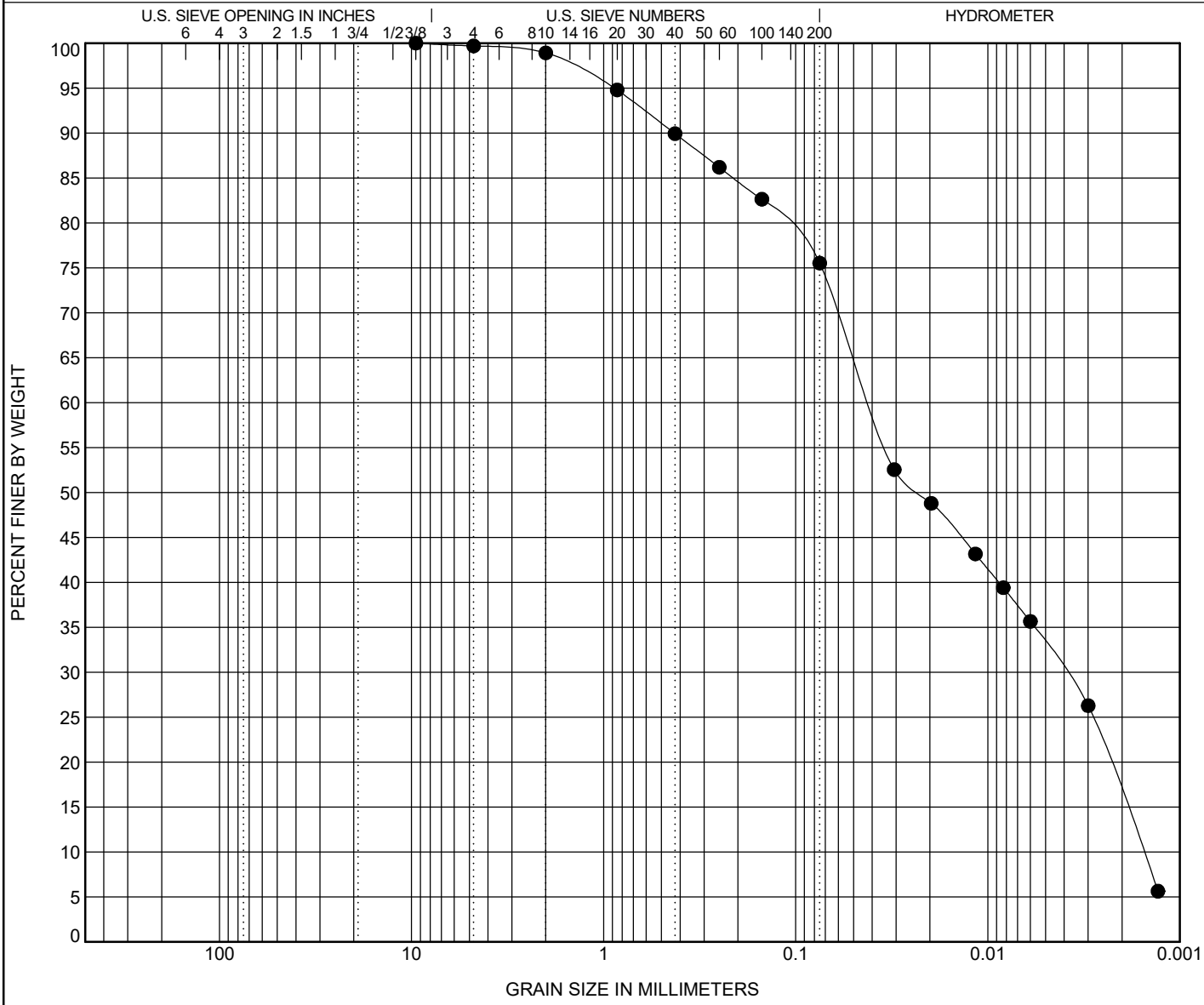
GRAIN SIZE DISTRIBUTION

TEST METHOD ASTM D422

CLIENT SCS Engineers **PROJECT NAME** Millersville Landfill - Subcell 9.2

PROJECT LOCATION **PROJECT NUMBER** 17324-0 **DATE TESTED**



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen Identification	Classification	LL	PL	PI	Cc	Cu
●	CCL, CCL-4 @ 0.0' - 5.0',	Red LEAN CLAY with SAND(CL)	29	17	12	0.25	26.44

	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	CCL, CCL-4 @ 0.0' - 5.0',	9.5	0.041	0.004	0.002	0.3	24.2	42.3	33.2

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GRAIN SIZE DISTRIBUTION

TEST METHOD ASTM D422

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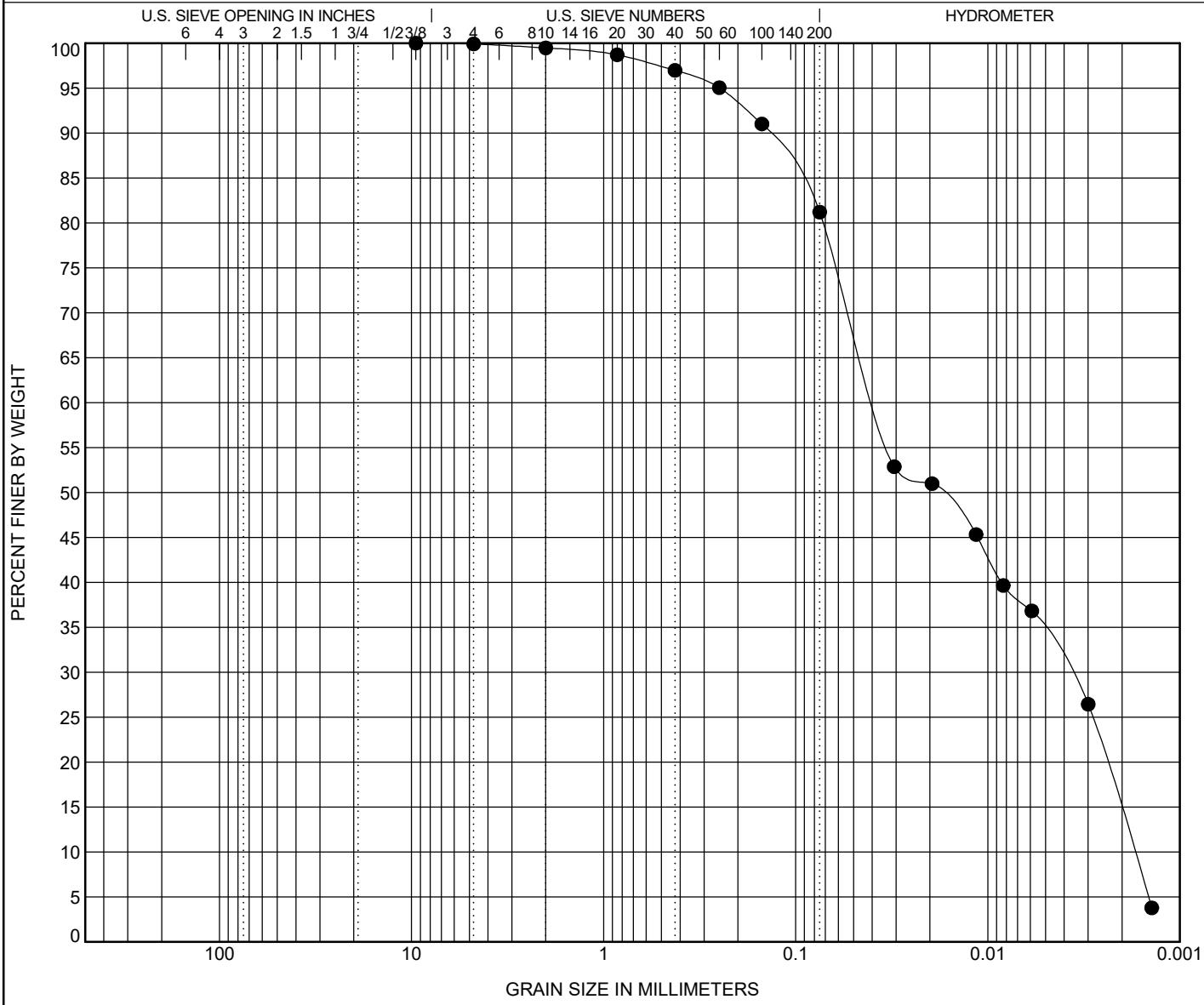

COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen Identification	Classification	LL	PL	PI	Cc	Cu
●	CCL, CCL-5 @ 0.1' - 5.0',	Red LEAN CLAY with SAND(CL)	28	17	11	0.22	22.27

	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	CCL, CCL-5 @ 0.1' - 5.0',	9.5	0.038	0.004	0.002	0.1	18.7	46.9	34.3

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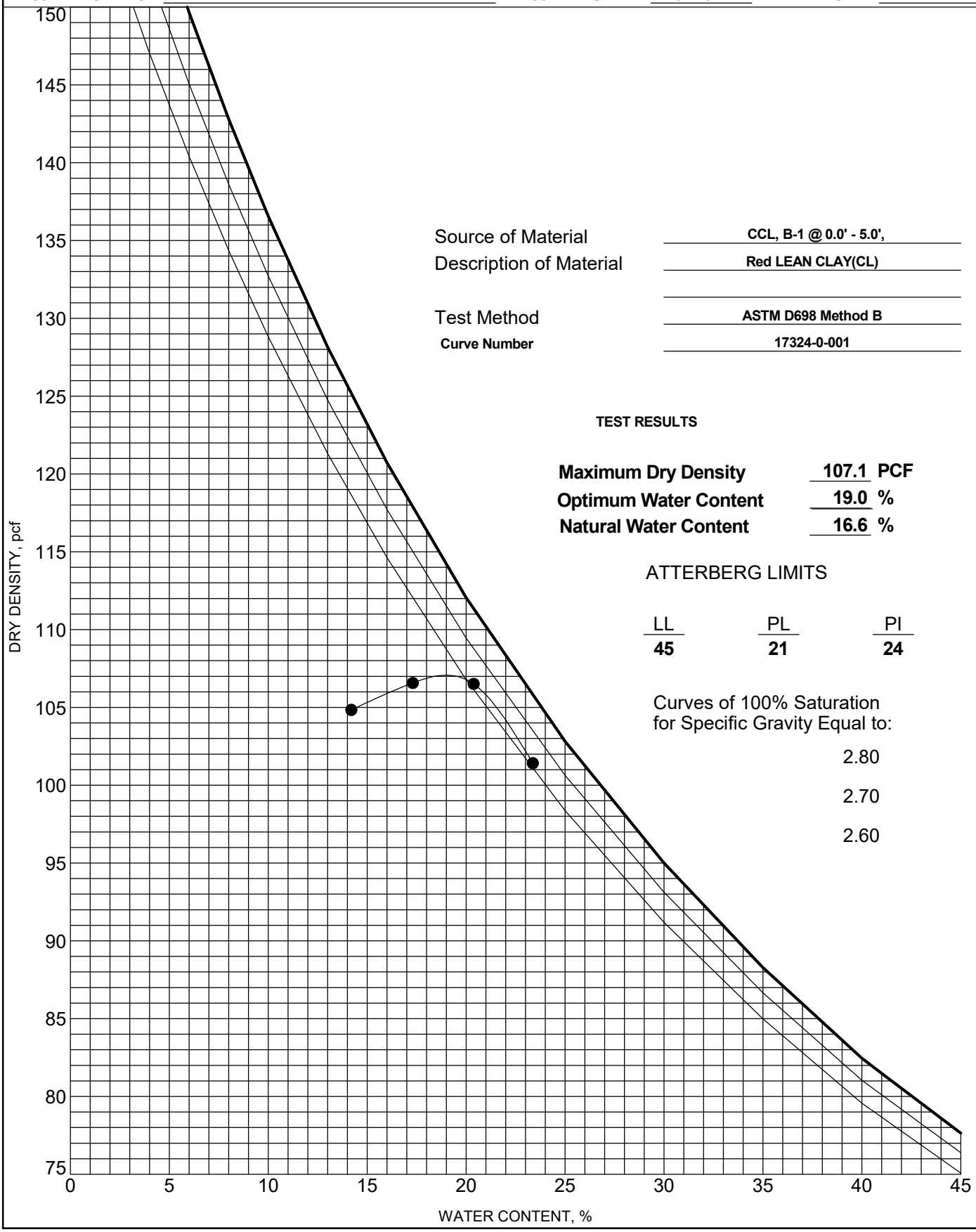
MOISTURE-DENSITY RELATIONSHIP

CLIENT SCS Engineers **PROJECT NAME** Millersville Landfill - Subcell 9.2

PROJECT LOCATION **PROJECT NUMBER** 17324-0 **DATE TESTED**



Source of Material: CCL, B-1 @ 0.0' - 5.0',

Description of Material: Red LEAN CLAY(CL)

Test Method: ASTM D698 Method B

Curve Number: 17324-0-001

TEST RESULTS

Maximum Dry Density	**107.1**	**PCF**
Optimum Water Content	**19.0**	**%**
Natural Water Content	**16.6**	**%**

ATTERBERG LIMITS

LL	PL	PI
45	**21**	**24**

Curves of 100% Saturation for Specific Gravity Equal to:

2.80

2.70

2.60

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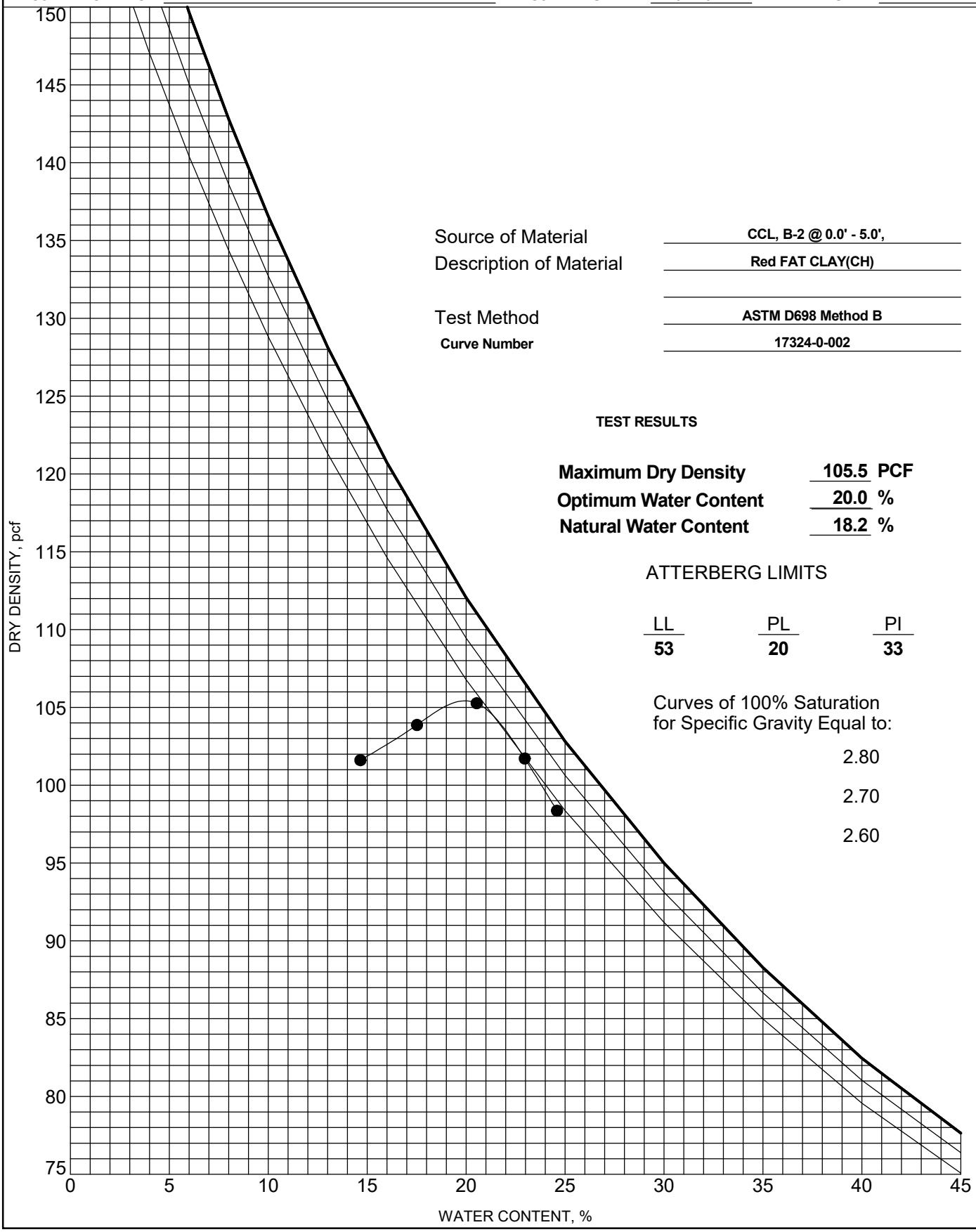
MOISTURE-DENSITY RELATIONSHIP

CLIENT SCS Engineers **PROJECT NAME** Millersville Landfill - Subcell 9.2

PROJECT LOCATION **PROJECT NUMBER** 17324-0 **DATE TESTED**



Source of Material: CCL, B-2 @ 0.0' - 5.0',

Description of Material: Red FAT CLAY(CH)

Test Method: ASTM D698 Method B

Curve Number: 17324-0-002

TEST RESULTS

Maximum Dry Density	**105.5**	**PCF**
Optimum Water Content	**20.0**	**%**
Natural Water Content	**18.2**	**%**

ATTERBERG LIMITS

LL	PL	PI
53	**20**	**33**

Curves of 100% Saturation for Specific Gravity Equal to:

2.80

2.70

2.60

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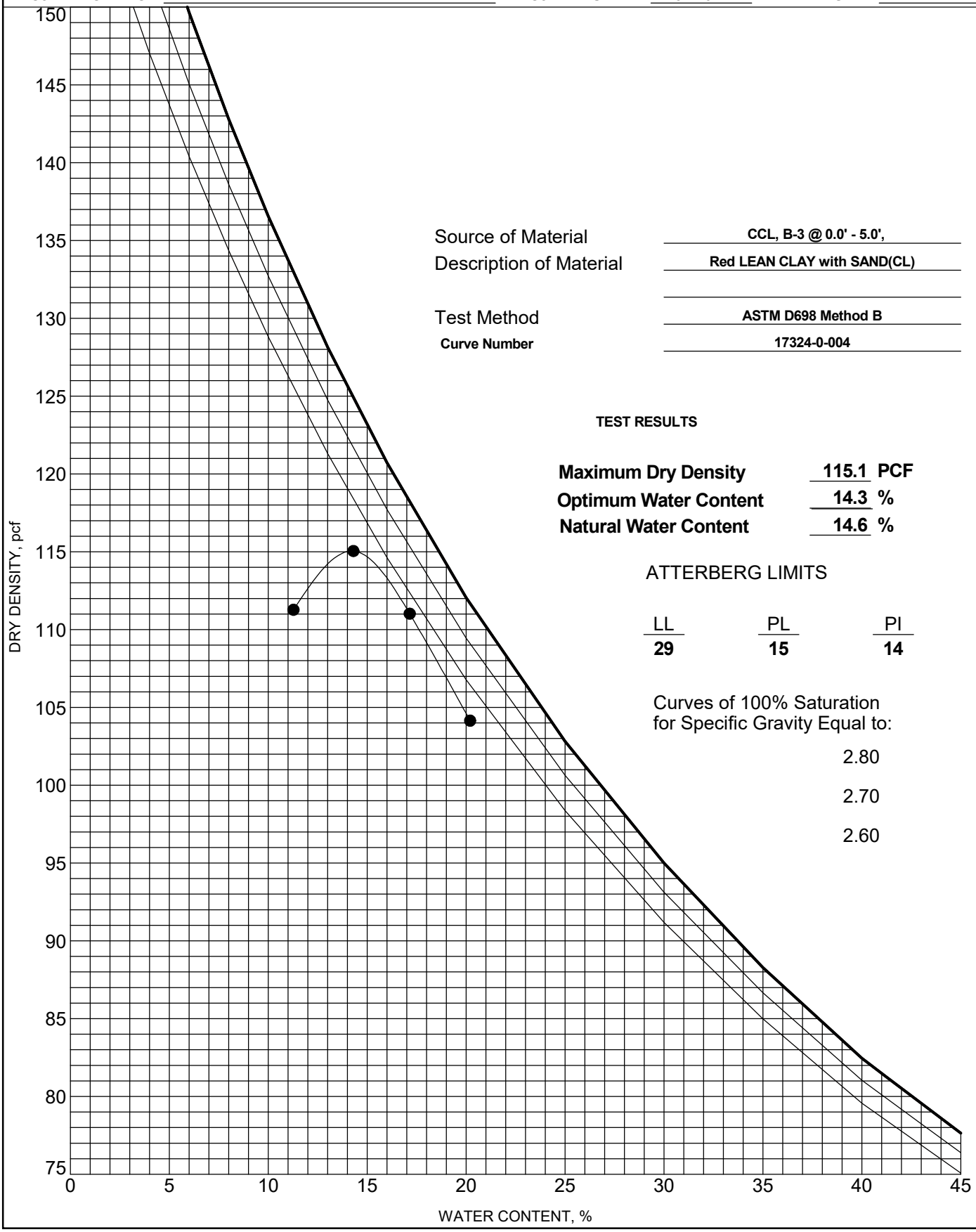
MOISTURE-DENSITY RELATIONSHIP

CLIENT SCS Engineers **PROJECT NAME** Millersville Landfill - Subcell 9.2

PROJECT LOCATION **PROJECT NUMBER** 17324-0 **DATE TESTED**



Source of Material: CCL, B-3 @ 0.0' - 5.0',

Description of Material: Red LEAN CLAY with SAND(CL)

Test Method: ASTM D698 Method B

Curve Number: 17324-0-004

TEST RESULTS

Maximum Dry Density	**115.1**	**PCF**
Optimum Water Content	**14.3**	**%**
Natural Water Content	**14.6**	**%**

ATTERBERG LIMITS

LL	PL	PI
29	**15**	**14**

Curves of 100% Saturation for Specific Gravity Equal to:

2.80

2.70

2.60

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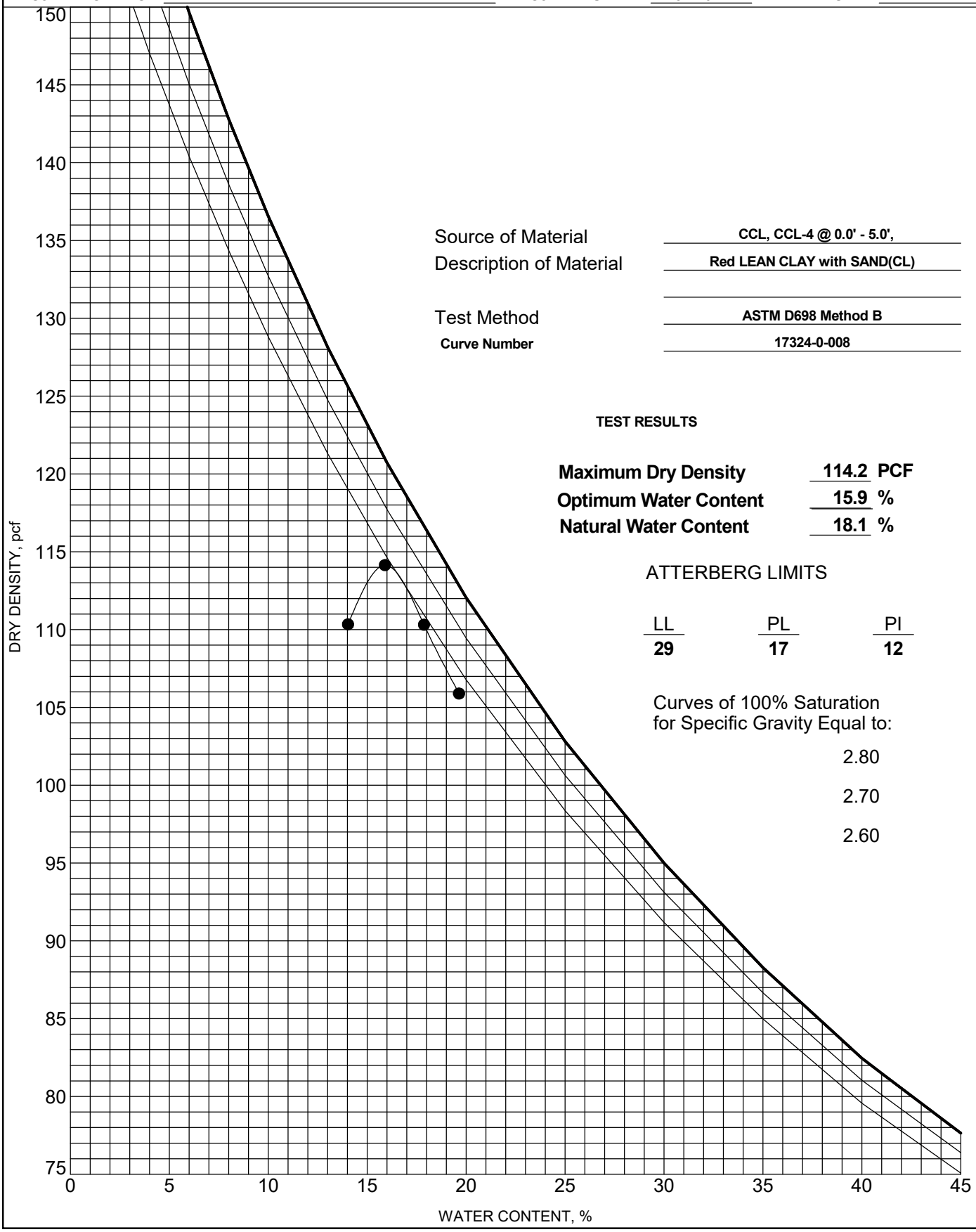
MOISTURE-DENSITY RELATIONSHIP

CLIENT SCS Engineers **PROJECT NAME** Millersville Landfill - Subcell 9.2

PROJECT LOCATION **PROJECT NUMBER** 17324-0 **DATE TESTED**



Source of Material: CCL, CCL-4 @ 0.0' - 5.0',

Description of Material: Red LEAN CLAY with SAND(CL)

Test Method: ASTM D698 Method B

Curve Number 17324-0-008

TEST RESULTS

Maximum Dry Density	**114.2**	**PCF**
Optimum Water Content	**15.9**	**%**
Natural Water Content	**18.1**	**%**

ATTERBERG LIMITS

LL	PL	PI
29	**17**	**12**

Curves of 100% Saturation for Specific Gravity Equal to:

2.80

2.70

2.60

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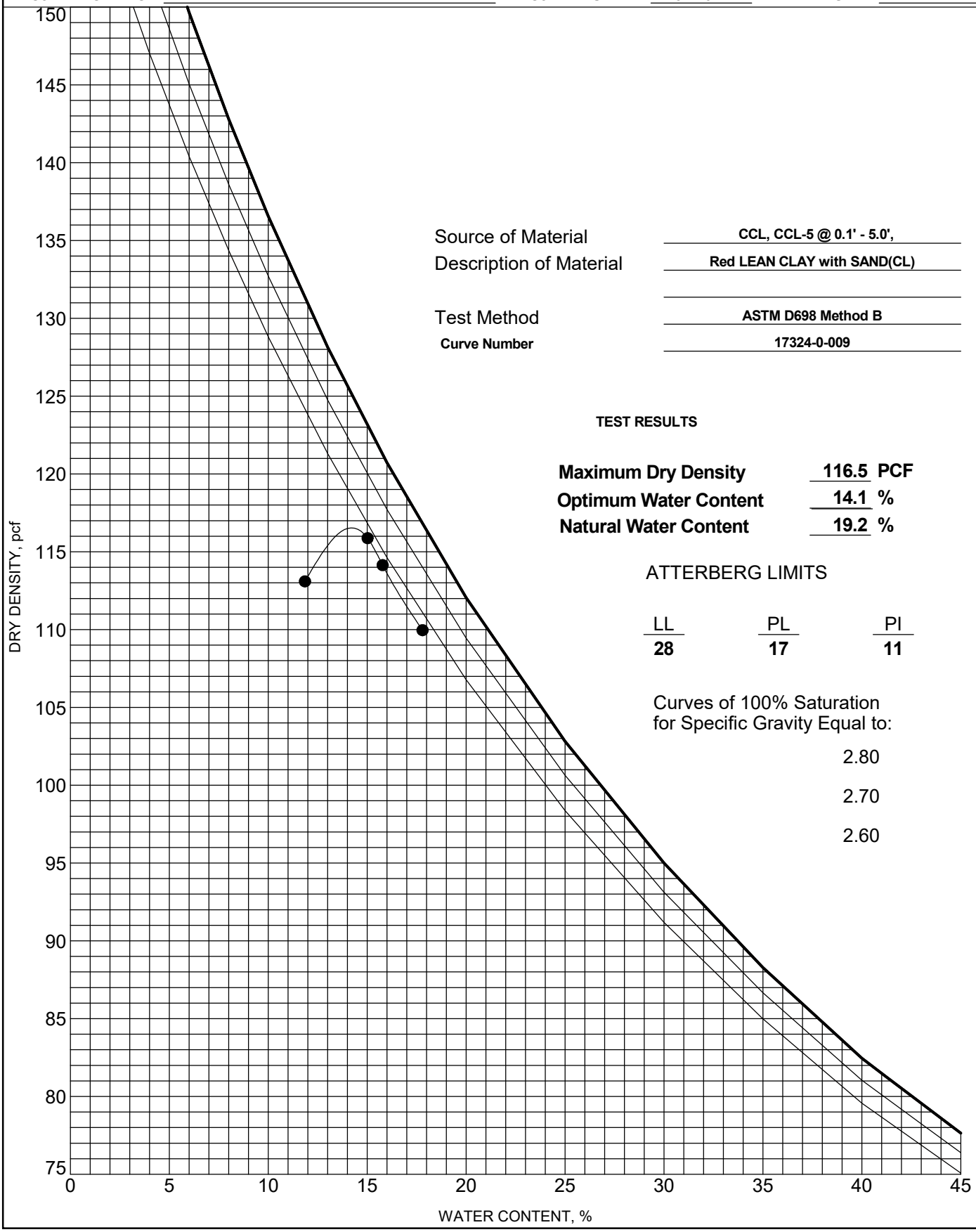
MOISTURE-DENSITY RELATIONSHIP

CLIENT SCS Engineers **PROJECT NAME** Millersville Landfill - Subcell 9.2

PROJECT LOCATION **PROJECT NUMBER** 17324-0 **DATE TESTED**



Source of Material: CCL, CCL-5 @ 0.1' - 5.0',

Description of Material: Red LEAN CLAY with SAND(CL)

Test Method: ASTM D698 Method B

Curve Number 17324-0-009

TEST RESULTS

Maximum Dry Density	**116.5**	**PCF**
Optimum Water Content	**14.1**	**%**
Natural Water Content	**19.2**	**%**

ATTERBERG LIMITS

LL	PL	PI
28	**17**	**11**

Curves of 100% Saturation for Specific Gravity Equal to:

2.80

2.70

2.60

ORGANIC CONTENT (ASTM D2974)

Project No. 17324-0

Project Name: Millersville Landfill - Subcell 9.2 - R1

BORING	CCL	CCL	SF	TS				
SAMPLE	B-1	B-2	B-1	B-1				
DEPTH	N/A	N/A	N/A	N/A				
ORGANIC CONTENT (%)	**1.46%**	**1.82%**	**0.15%**	**1.87%**				

Tested By C. Witter
LABORATORY TECHNICIAN

Date June 2nd, 2020

ORGANIC CONTENT (ASTM D2974)

Project No. 17324-0

Project Name: Millersville Landfill - Subcell 9.2 - R2

BORING	CCL	SF	SF					
SAMPLE	B-3	B-2	B-3					
DEPTH	N/A	N/A	N/A					
ORGANIC CONTENT (%)	**0.92%**	**0.26%**	**0.19%**					

Tested By C. Witter
LABORATORY TECHNICIAN

Date June 12th, 2020

ORGANIC CONTENT (ASTM D2974)

Project No. 17324-0

Project Name: Millersville Landfill - Subcell 9.2 - R3

BORING	CCL	SF						
SAMPLE	B-5	B-5						
DEPTH	N/A	N/A						
ORGANIC CONTENT (%)	**0.67%**	**0.85%**						

Tested By C. Witter
LABORATORY TECHNICIAN

Date July 11th, 2020

HYDRAULIC CONDUCTIVITY, ASTM D5084, Method A

Project:	Millersville Landfill - Subcell 9.2
Client:	SCS Engineers
Project Number:	17324-0
Sample ID:	CCL-1 / Bulk
Classification:	Red LEAN CLAY (CL)

LL= 45 PL = 21 Passing #200= 94.4

Date Tested:	6/2/2020	
Average Length	5.47	*inches*
Average Diameter	2.88	*inches*
Initial Moisture Content	20.0%	
Initial Dry Density	121.1	*pcf*
Final B-value (saturation)	>0.95	
Total Back Pressure	100.0	*psi*
Final Moisture Content	23.9%	
Effective Consolidation Pressure	13.9	*psi*
Assumed Specific Gravity	2.650	
Average Test Temp	23.3	*^{o}C*
Final Hydraulic Gradient	27	
*Measured Hydraulic Conductivity at Test Temperature	**1.55828E-07**	*cm/sec*
**Hydraulic Conductivity at Standard Temperature, 20°C	**1.44091E-07**	*cm/sec*

Testing Notes:

** Measured hydraulic conductivity at test temperature based on the last four readings in accordance with ASTM D5084-16a, section 9.5.4.1*

***Hydraulic Conductivity at Standard Temperature in accordance with ASTM D5084-16a, section 10.3*

Test performed at multiple increasing gradients. Data presented shows permeation at final gradient that meets criteria specified in section 9.5.4.2

NT = Not Tested

Submitted by: J. Taylor
Laboratory Manager

HYDRAULIC CONDUCTIVITY, ASTM D5084, Method A

Project:	Millersville Landfill - Subcell 9.2
Client:	SCS Engineers
Project Number:	17324-0
Sample ID:	CCL-2 / Bulk
Classification:	Red FAT CLAY (CL)

LL= 55 PL = 20 Passing #200= 99.6

Date Tested:	6/8/2020	
Average Length	5.43	*inches*
Average Diameter	2.88	*inches*
Initial Moisture Content	20.6%	
Initial Dry Density	120.5	*pcf*
Final B-value (saturation)	>0.95	
Total Back Pressure	97.9	*psi*
Final Moisture Content	27.8%	
Effective Consolidation Pressure	3.5	*psi*
Assumed Specific Gravity	2.650	
Average Test Temp	23.3	*^{o}C*
Final Hydraulic Gradient	27	
*Measured Hydraulic Conductivity at Test Temperature	**2.52478E-09**	*cm/sec*
**Hydraulic Conductivity at Standard Temperature, 20°C	**2.33461E-09**	*cm/sec*

Testing Notes:

** Measured hydraulic conductivity at test temperature based on the last four readings in accordance with ASTM D5084-16a, section 9.5.4.1*

***Hydraulic Conductivity at Standard Temperature in accordance with ASTM D5084-16a, section 10.3*

Test performed at multiple increasing gradients. Data presented shows permeation at final gradient that meets criteria specified in section 9.5.4.2

NT = Not Tested

Submitted by: J. Taylor
Laboratory Manager

HYDRAULIC CONDUCTIVITY, ASTM D5084, Method A

Project:	Millersville Landfill - Subcell 9.2
Client:	SCS Engineers
Project Number:	17324-0
Sample ID:	CCL-3 / Bulk
Classification:	Red LEAN CLAY with SAND (CL)

LL= 29 PL = 15 Passing #200= 80.81

Date Tested:	7/6/2020	
Average Length	5.64	*inches*
Average Diameter	2.87	*inches*
Initial Moisture Content	13.4%	
Initial Dry Density	126.0	*pcf*
Final B-value (saturation)	>0.95	
Total Back Pressure	100.0	*psi*
Final Moisture Content	16.8%	
Effective Consolidation Pressure	9.9	*psi*
Assumed Specific Gravity	2.650	
Average Test Temp	23.3	*^{o}C*
Final Hydraulic Gradient	9	
*Measured Hydraulic Conductivity at Test Temperature	**1.00654E-09**	*cm/sec*
**Hydraulic Conductivity at Standard Temperature, 20°C	**9.30728E-10**	*cm/sec*

Testing Notes:

** Measured hydraulic conductivity at test temperature based on the last four readings in accordance with ASTM D5084-16a, section 9.5.4.1*

***Hydraulic Conductivity at Standard Temperature in accordance with ASTM D5084-16a, section 10.3*

Test performed at multiple increasing gradients. Data presented shows permeation at final gradient that meets criteria specified in section 9.5.4.2

NT = Not Tested

Submitted by: J. Taylor
Laboratory Manager

HYDRAULIC CONDUCTIVITY, ASTM D5084, Method A

Project:	Millersville Landfill - Subcell 9.2
Client:	SCS Engineers
Project Number:	17324-0
Sample ID:	CCL-5 / Bulk
Classification:	Red LEAN CLAY with SAND (CL)

LL= 28 PL = 17 Passing #200= 81.2

Date Tested:	7/20/2020	
Average Length	5.64	*inches*
Average Diameter	2.85	*inches*
Initial Moisture Content	13.9%	
Initial Wet Density	129.1	*pcf*
Initial Dry Density	113.4	*pcf*
Final B-value (saturation)	>0.95	
Total Back Pressure	100.0	*psi*
Final Moisture Content	16.7%	
Effective Consolidation Pressure	10.0	*psi*
Assumed Specific Gravity	2.650	
Average Test Temp	23.3	*^{o}C*
Final Hydraulic Gradient	23	
*Measured Hydraulic Conductivity at Test Temperature	**9.22383E-10**	*cm/sec*
**Hydraulic Conductivity at Standard Temperature, 20°C	**8.52909E-10**	*cm/sec*

Testing Notes:

** Measured hydraulic conductivity at test temperature based on the last four readings in accordance with ASTM D5084-16a, section 9.5.4.1*

***Hydraulic Conductivity at Standard Temperature in accordance with ASTM D5084-16a, section 10.3*

Test performed at multiple increasing gradients. Data presented shows permeation at final gradient that meets criteria specified in section 9.5.4.2

NT = Not Tested

Submitted by: J. Taylor
Laboratory Manager

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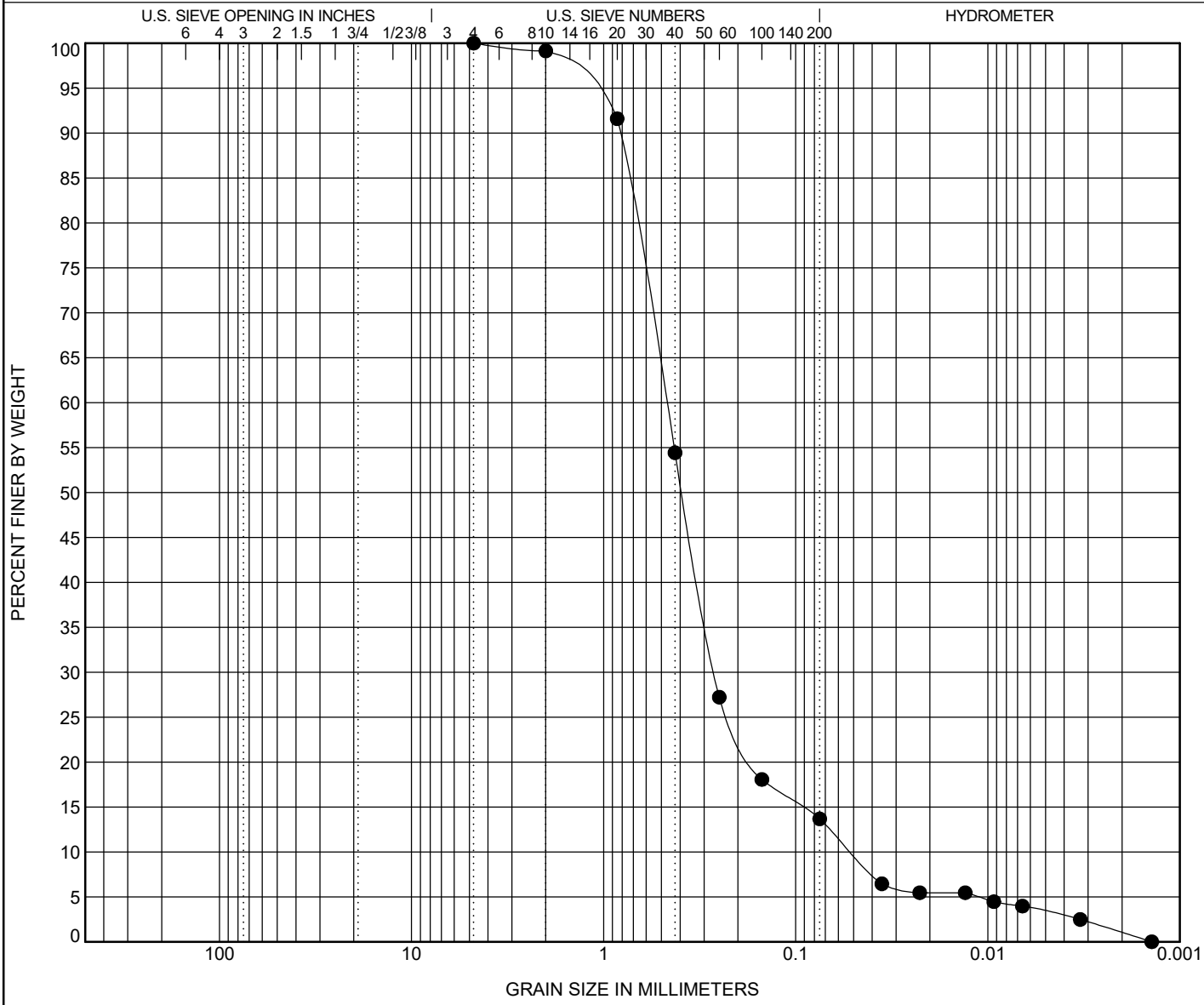
GRAIN SIZE DISTRIBUTION

TEST METHOD ASTM D422

CLIENT SCS Engineers **PROJECT NAME** Millersville Landfill - Subcell 9.2

PROJECT LOCATION **PROJECT NUMBER** 17324-0 **DATE TESTED**



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen Identification	Classification	LL	PL	PI	Cc	Cu
●	**SF, SF-1 @ 0.0' - 5.0',**	**Tan SILTY SAND(SM)**	**NP**	**NP**	**NP**	**2.88**	**9.19**

	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**SF, SF-1 @ 0.0' - 5.0',**	**4.75**	**0.472**	**0.264**	**0.051**	**0.0**	**86.3**	**10.3**	**3.4**

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GRAIN SIZE DISTRIBUTION

TEST METHOD ASTM D422

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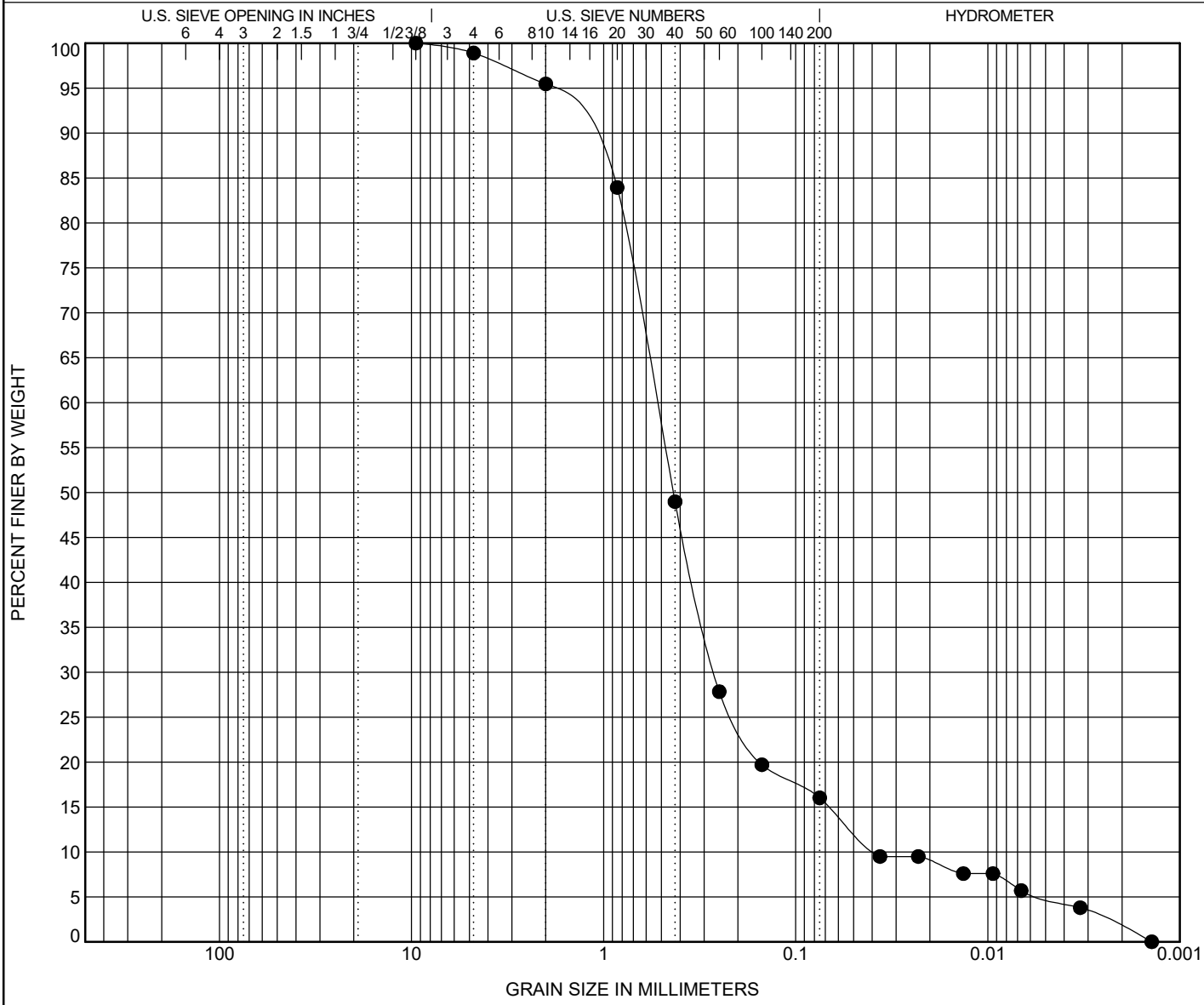
PROJECT LOCATION **PROJECT NUMBER** 17324-0 **DATE TESTED**



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen Identification	Classification	LL	PL	PI	Cc	Cu
●	SF, SF-2 @ 0.0' - 5.0',	Tan SILTY SAND(SM)	15	13	2	3.42	13.73

	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	SF, SF-2 @ 0.0' - 5.0',	9.5	0.529	0.264	0.039	1.1	82.9	11.1	4.9

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GRAIN SIZE DISTRIBUTION

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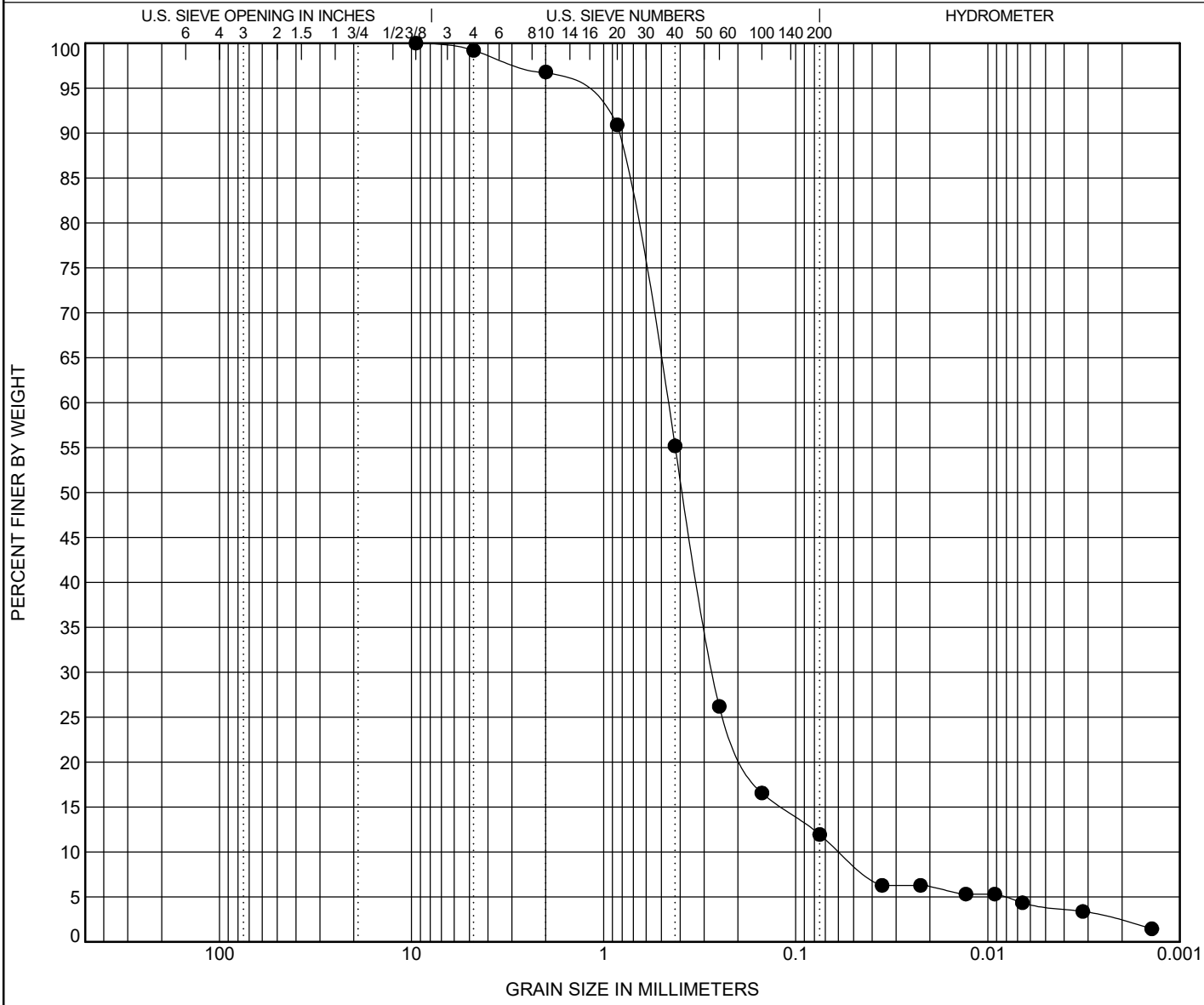
PROJECT LOCATION **PROJECT NUMBER** 17324-0 **DATE TESTED**



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen Identification	Classification	LL	PL	PI	Cc	Cu
●	SF, SF-3 @ 0.0' - 5.0',	Pale Brown WELL-GRADED SAND with SILT(SW-SM)	NP	NP	NP	2.65	8.04

	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	SF, SF-3 @ 0.0' - 5.0',	9.5	0.467	0.268	0.058	0.8	87.3	8.0	4.0

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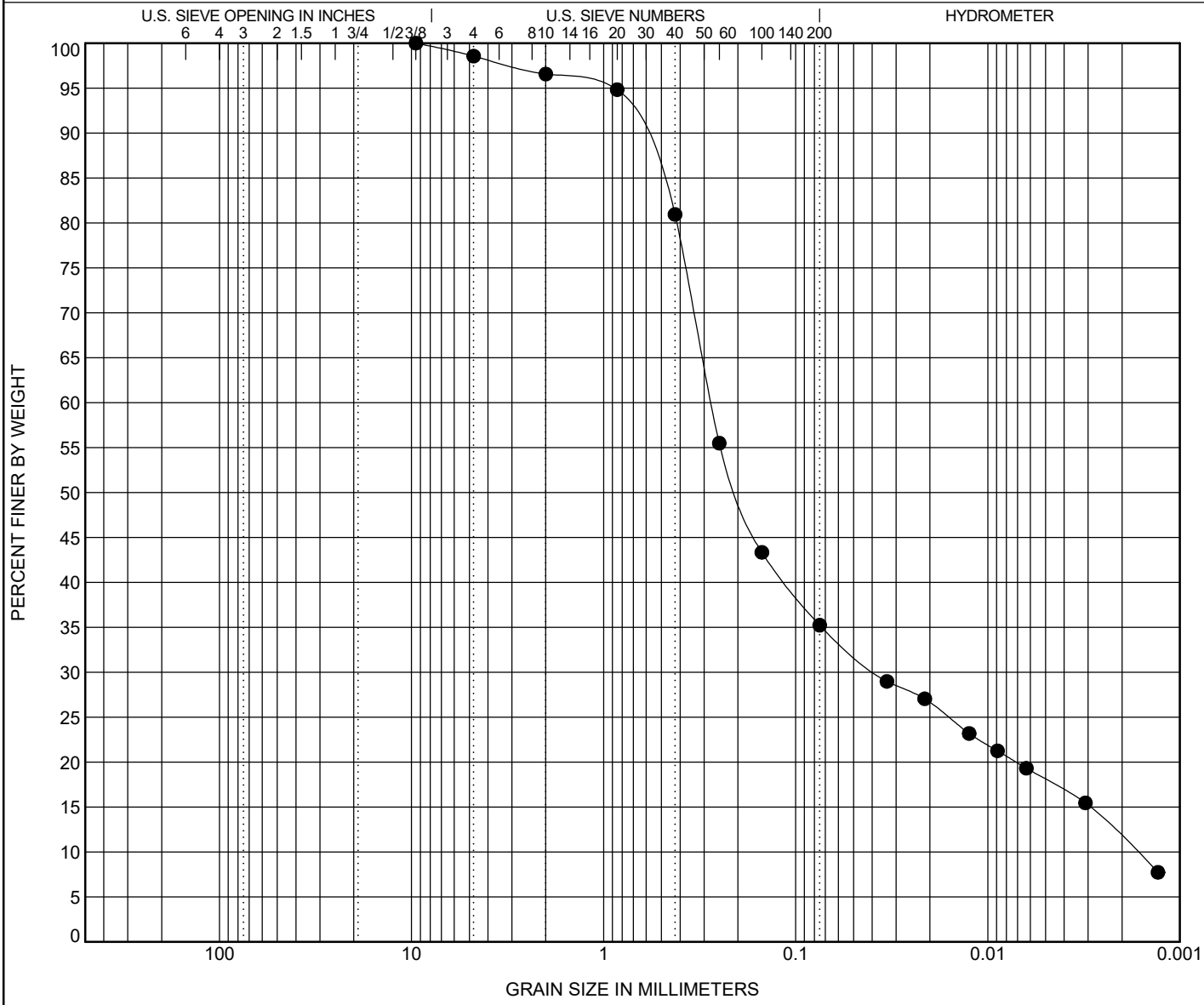

COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen Identification	Classification	LL	PL	PI	Cc	Cu
●	SF, SF-4 @ 0.0' - 5.0',	Pale Brown SILTY, CLAYEY SAND(SC-SM)	16	10	6	3.17	163.62

	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	SF, SF-4 @ 0.0' - 5.0',	9.5	0.275	0.038	0.002	1.4	63.3	17.2	18.1

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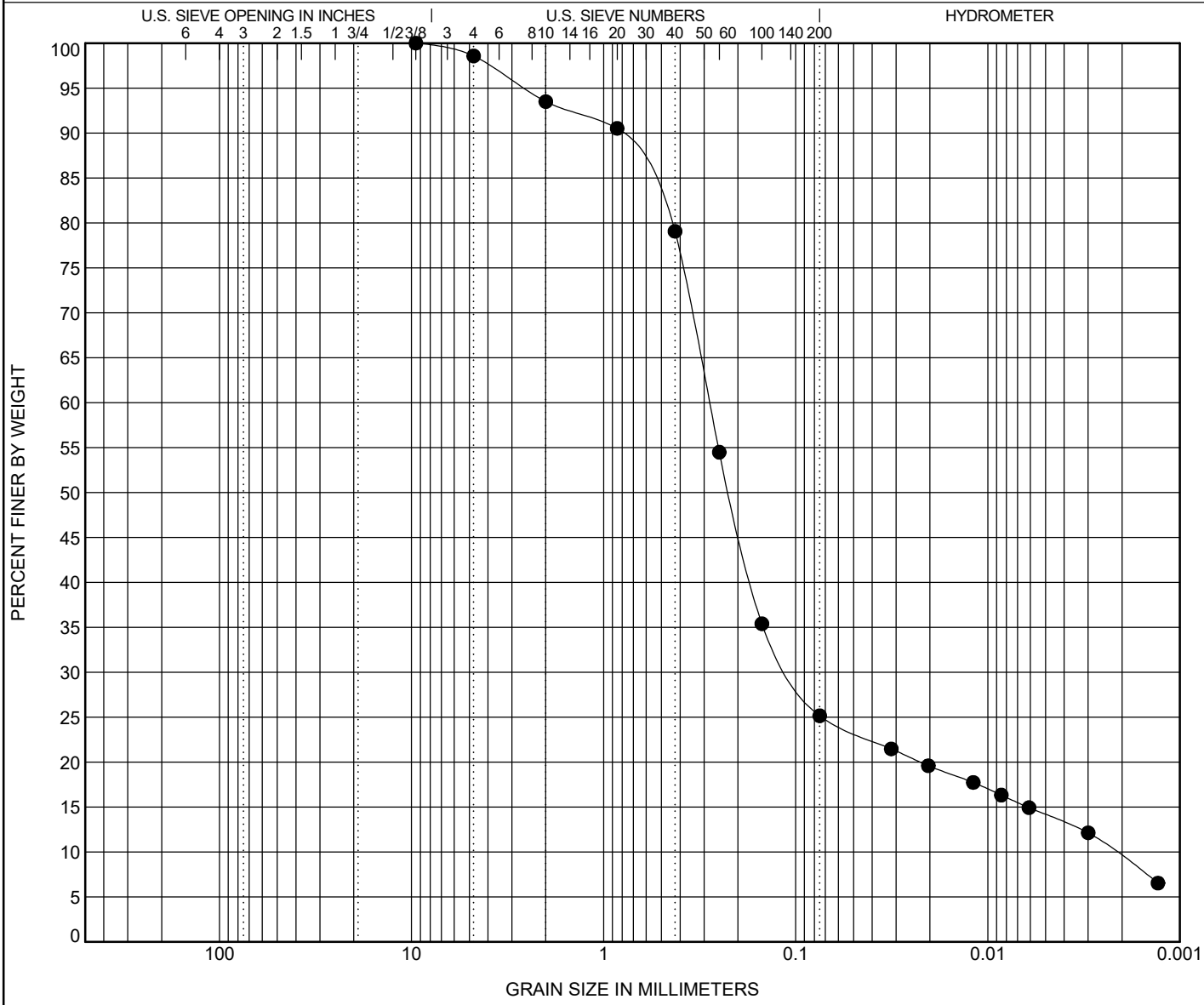
PROJECT LOCATION **PROJECT NUMBER** 17324-0 **DATE TESTED**



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen Identification	Classification	LL	PL	PI	Cc	Cu
●	SF, SF-5 @ 0.1' - 5.0',	Pale Brown SILTY SAND(SM)	NP	NP	NP	17.64	129.05

	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	SF, SF-5 @ 0.1' - 5.0',	9.5	0.282	0.104	0.002	1.4	73.4	11.0	14.1

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GRAIN SIZE DISTRIBUTION

TEST METHOD ASTM D422

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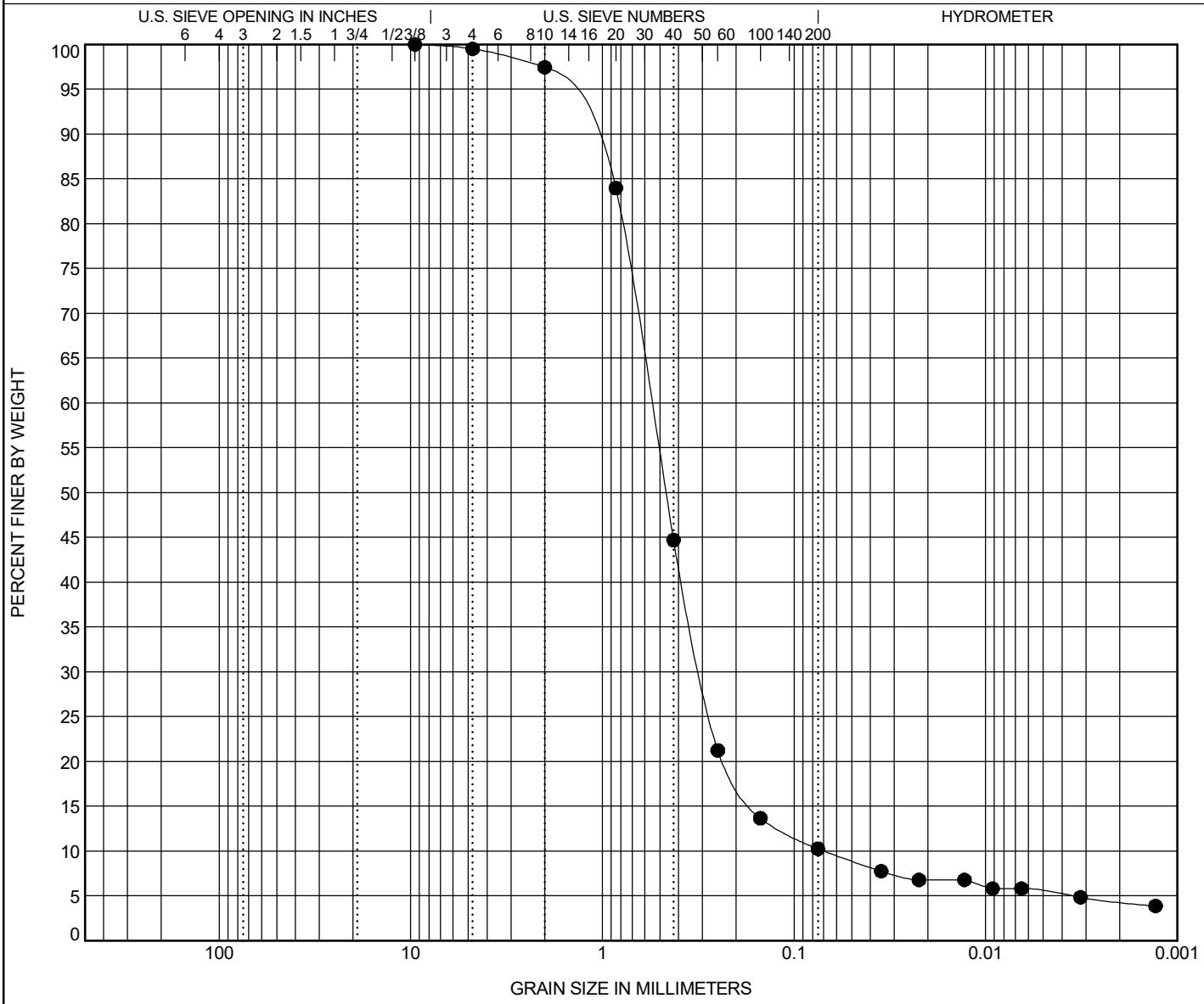
PROJECT LOCATION **PROJECT NUMBER** 17324-0 **DATE TESTED**



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen Identification	Classification	LL	PL	PI	Cc	Cu
●	SF, SF-6 @ 0.1' - 5.0',	Light Brown WELL-GRADED SAND with SILT(SW-SM)	NP	NP	NP	2.40	8.02

	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	SF, SF-6 @ 0.1' - 5.0',	9.5	0.557	0.305	0.069	0.5	89.3	4.8	5.5

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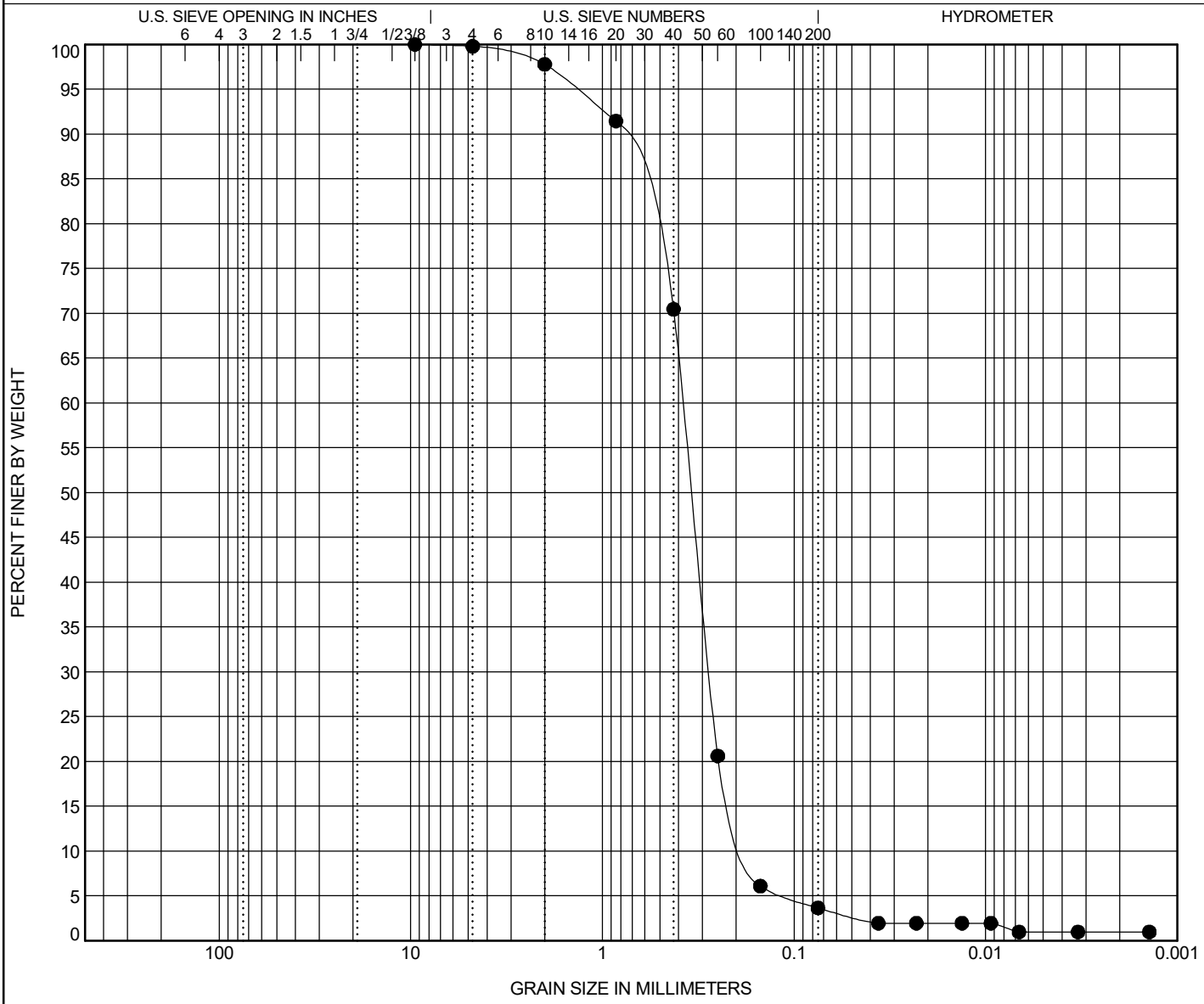
GRAIN SIZE DISTRIBUTION

TEST METHOD ASTM D422

CLIENT SCS Engineers **PROJECT NAME** Millersville Landfill - Subcell 9.2

PROJECT LOCATION **PROJECT NUMBER** 17324-0 **DATE TESTED**



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen Identification	Classification	LL	PL	PI	Cc	Cu
●	SF, SF-7 @ 0.1' - 5.0',	Light Brown POORLY GRADED SAND(SP)	NP	NP	NP	1.17	2.21

	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	SF, SF-7 @ 0.1' - 5.0',	9.5	0.38	0.276	0.172	0.2	96.1	2.7	1.0

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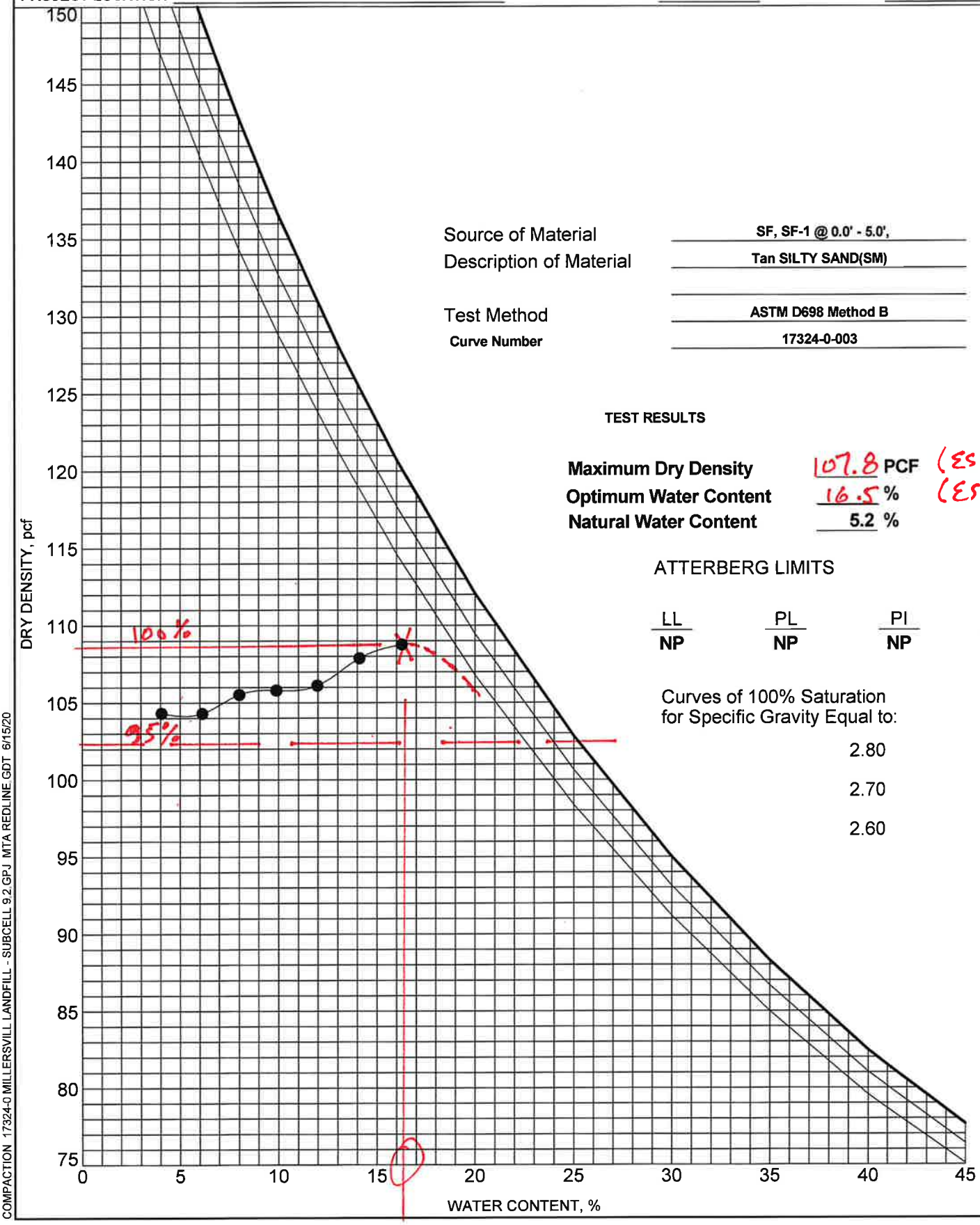
MOISTURE-DENSITY RELATIONSHIP

CLIENT SCS Engineers **PROJECT NAME** Millersville Landfill - Subcell 9.2

PROJECT LOCATION **PROJECT NUMBER** 17324-0 **DATE TESTED**



Source of Material: SF, SF-1 @ 0.0' - 5.0',

Description of Material: Tan SILTY SAND(SM)

Test Method: ASTM D698 Method B

Curve Number 17324-0-003

TEST RESULTS

Maximum Dry Density 107.8 **PCF** (EST.)

Optimum Water Content 16.5 **%** (EST.)

Natural Water Content 5.2 **%**

ATTERBERG LIMITS

LL	PL	PI
NP	NP	NP

Curves of 100% Saturation for Specific Gravity Equal to:

2.80

2.70

2.60

COMPACTION 17324-0 MILLERSVILL LANDFILL - SUBCELL 9.2.GPJ MTA REDLINE.GDT 6/15/20

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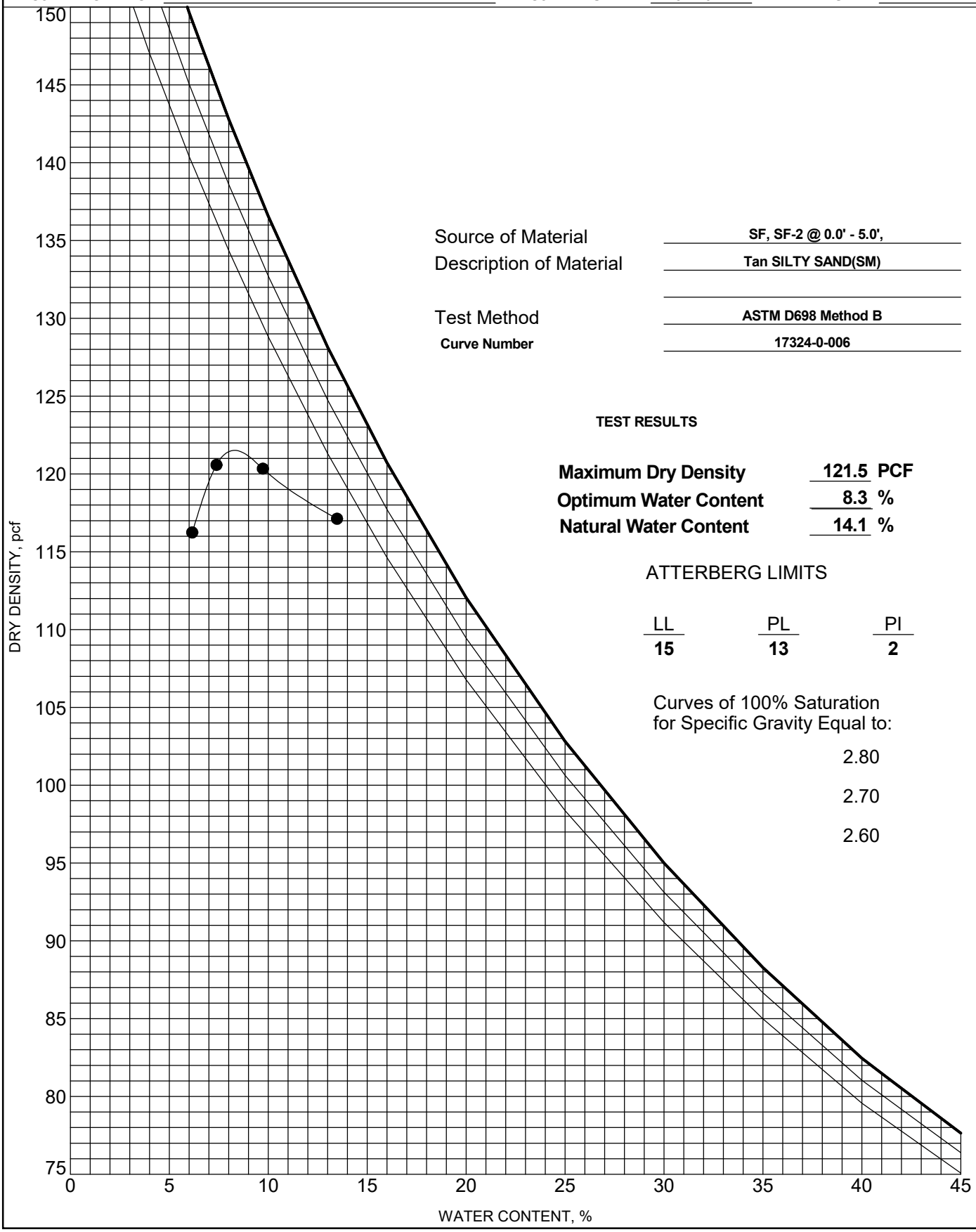
MOISTURE-DENSITY RELATIONSHIP

CLIENT SCS Engineers **PROJECT NAME** Millersville Landfill - Subcell 9.2

PROJECT LOCATION **PROJECT NUMBER** 17324-0 **DATE TESTED**



Source of Material: SF, SF-2 @ 0.0' - 5.0',

Description of Material: Tan SILTY SAND(SM)

Test Method: ASTM D698 Method B

Curve Number 17324-0-006

TEST RESULTS

Maximum Dry Density	**121.5**	**PCF**
Optimum Water Content	**8.3**	**%**
Natural Water Content	**14.1**	**%**

ATTERBERG LIMITS

LL	PL	PI
15	**13**	**2**

Curves of 100% Saturation for Specific Gravity Equal to:

2.80

2.70

2.60

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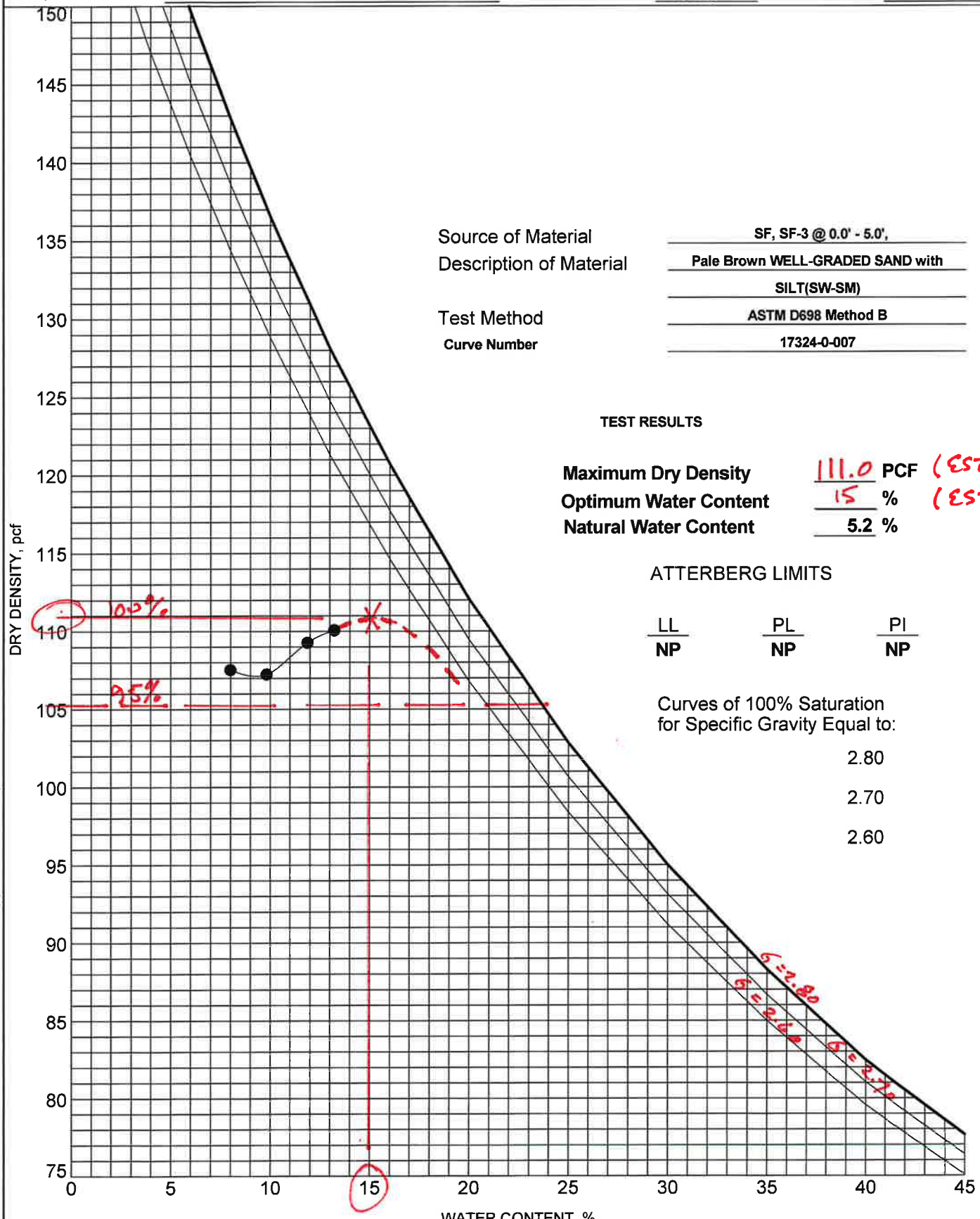
MOISTURE-DENSITY RELATIONSHIP

CLIENT SCS Engineers

PROJECT NAME Millersville Landfill - Subcell 9.2

PROJECT LOCATION

PROJECT NUMBER 17324-0 **DATE TESTED**



Source of Material	SF, SF-3 @ 0.0' - 5.0',
Description of Material	Pale Brown WELL-GRADED SAND with SILT(SW-SM)
Test Method	ASTM D698 Method B
Curve Number	17324-0-007

TEST RESULTS

Maximum Dry Density	111.0	**PCF** (EST.)
Optimum Water Content	15	**%** (EST.)
Natural Water Content	5.2	**%**

ATTERBERG LIMITS

LL	PL	PI
NP	NP	NP

Curves of 100% Saturation for Specific Gravity Equal to:

2.80

2.70

2.60

COMPACTION 17324-0 MILLERSVILL LANDFILL - SUBCELL 9.2.GPJ MTA REDLINE.GDT 6/23/20

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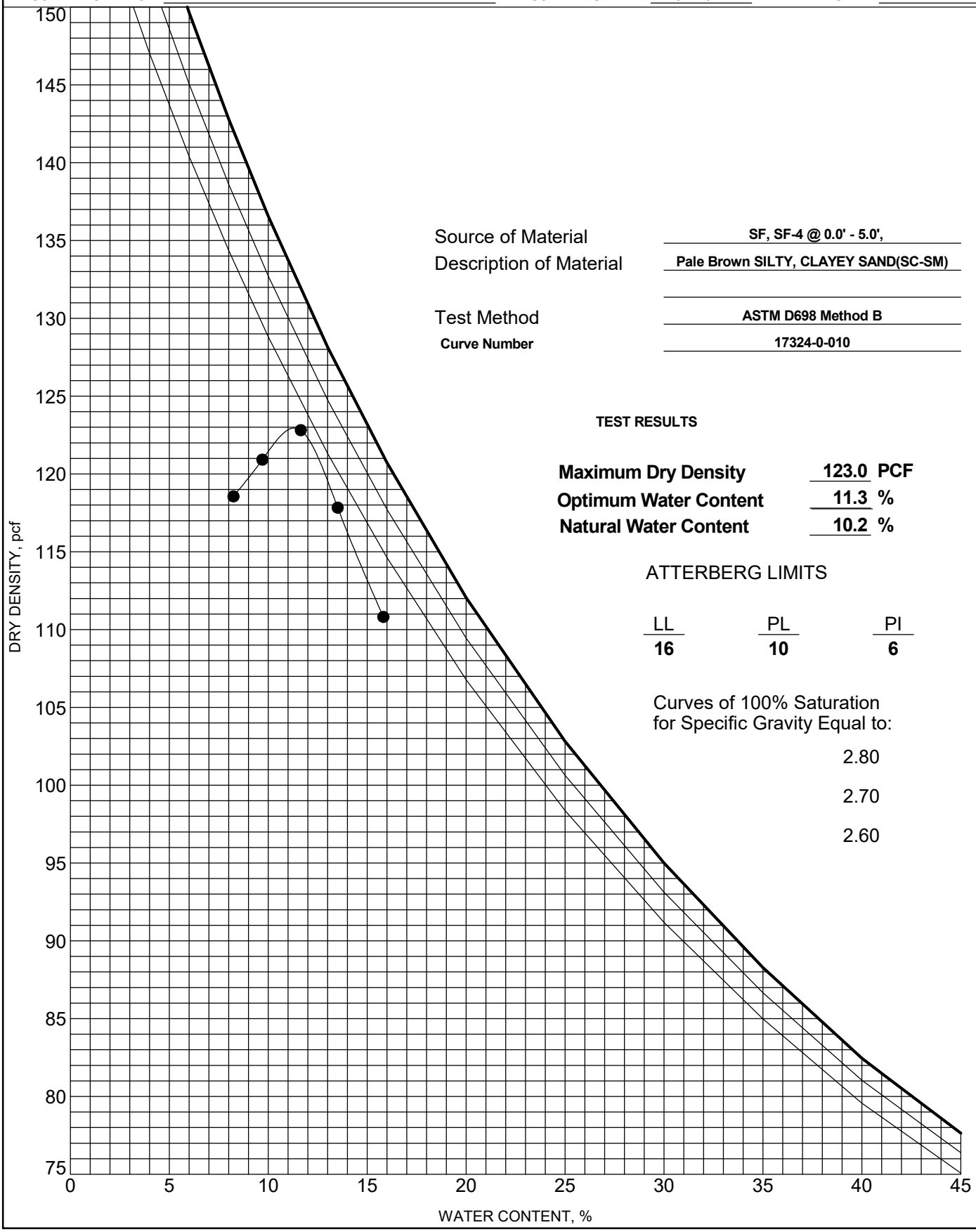
MOISTURE-DENSITY RELATIONSHIP

CLIENT SCS Engineers **PROJECT NAME** Millersville Landfill - Subcell 9.2

PROJECT LOCATION **PROJECT NUMBER** 17324-0 **DATE TESTED**



Source of Material: SF, SF-4 @ 0.0' - 5.0',

Description of Material: Pale Brown SILTY, CLAYEY SAND(SC-SM)

Test Method: ASTM D698 Method B

Curve Number: 17324-0-010

TEST RESULTS

Maximum Dry Density	**123.0**	**PCF**
Optimum Water Content	**11.3**	**%**
Natural Water Content	**10.2**	**%**

ATTERBERG LIMITS

LL	PL	PI
16	**10**	**6**

Curves of 100% Saturation for Specific Gravity Equal to:

2.80

2.70

2.60

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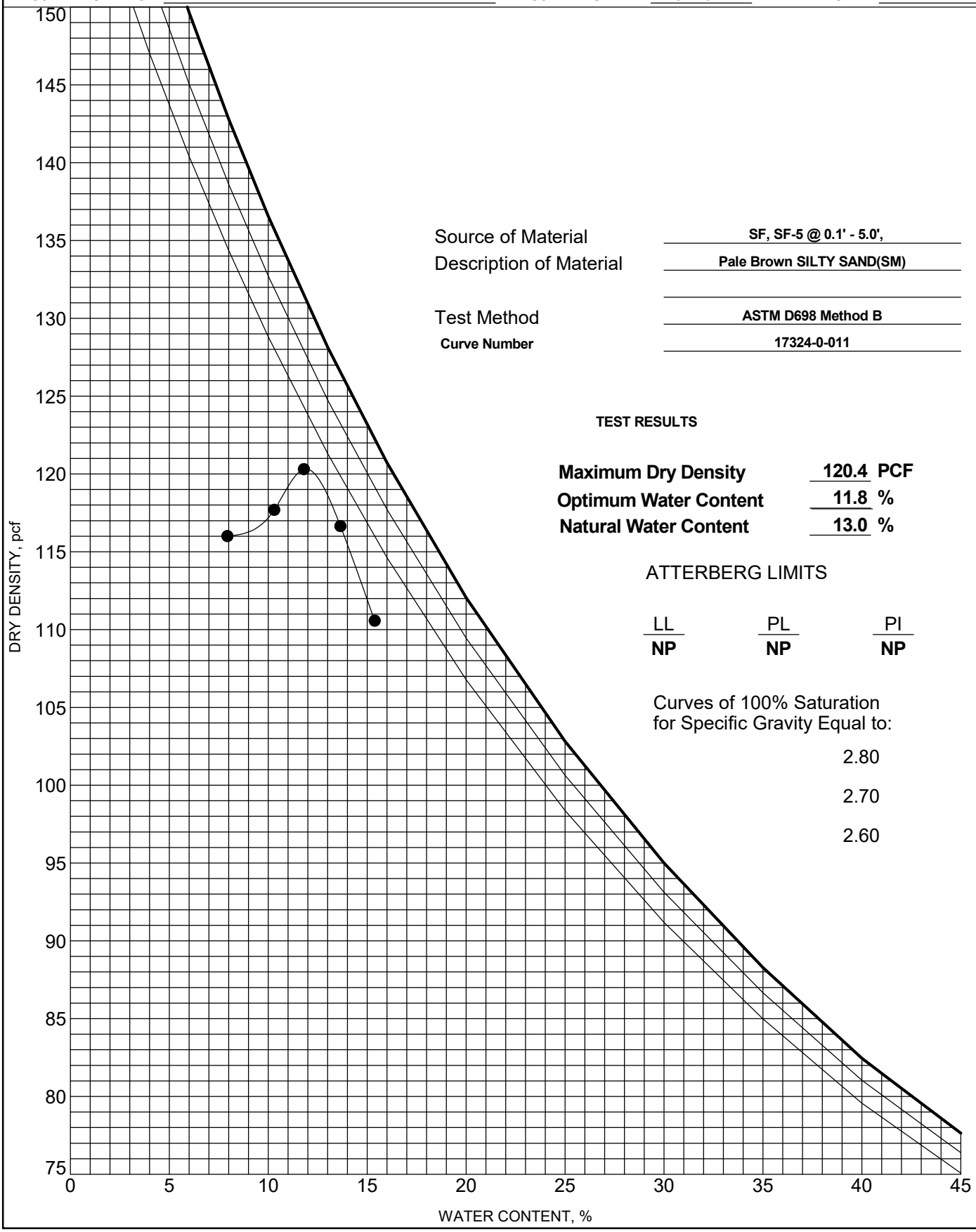
MOISTURE-DENSITY RELATIONSHIP

CLIENT SCS Engineers **PROJECT NAME** Millersville Landfill - Subcell 9.2

PROJECT LOCATION **PROJECT NUMBER** 17324-0 **DATE TESTED**



Source of Material: SF, SF-5 @ 0.1' - 5.0',

Description of Material: Pale Brown SILTY SAND(SM)

Test Method: ASTM D698 Method B

Curve Number 17324-0-011

TEST RESULTS

Maximum Dry Density	**120.4**	**PCF**
Optimum Water Content	**11.8**	**%**
Natural Water Content	**13.0**	**%**

ATTERBERG LIMITS

LL	PL	PI
NP	**NP**	**NP**

Curves of 100% Saturation for Specific Gravity Equal to:

2.80

2.70

2.60

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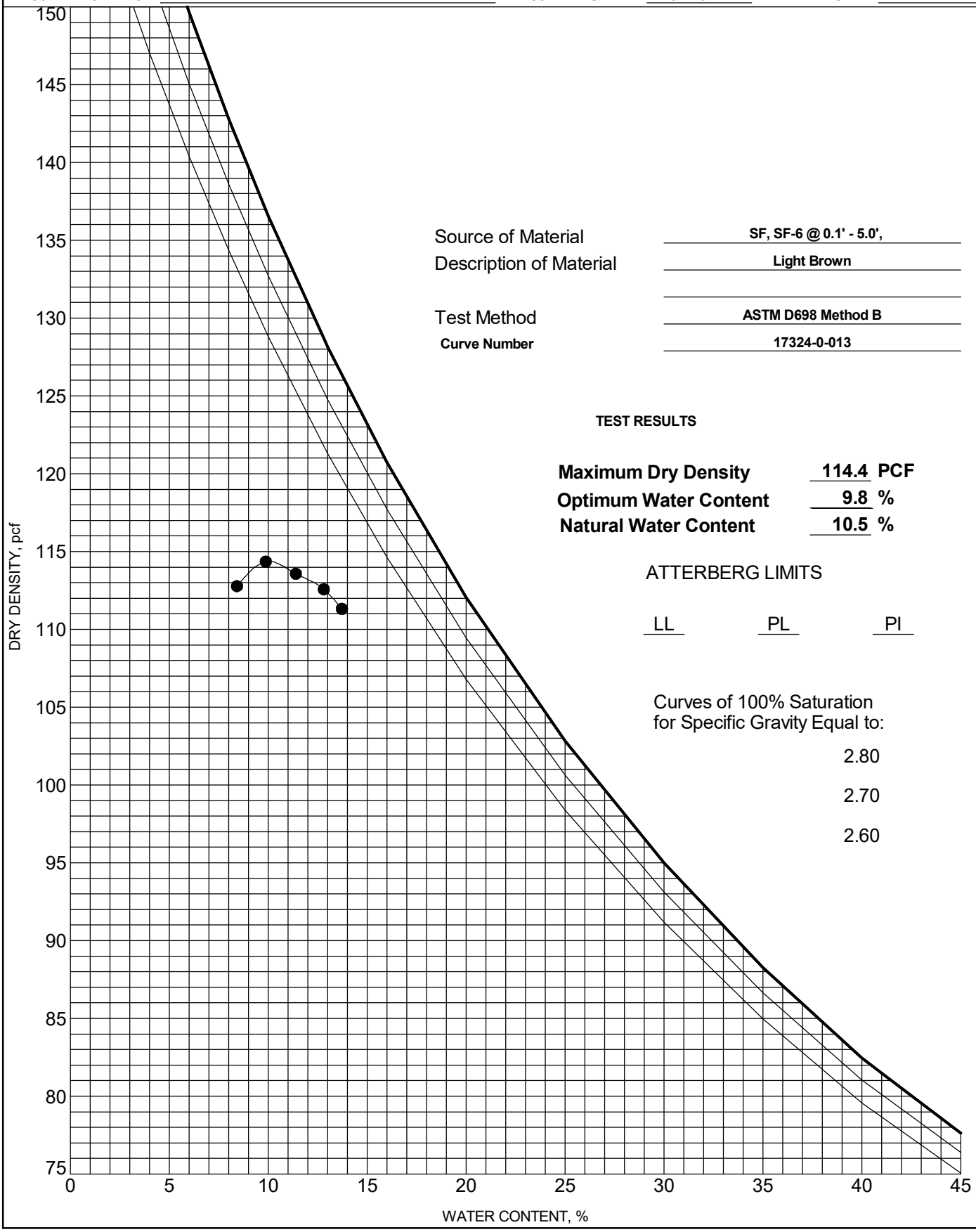
MOISTURE-DENSITY RELATIONSHIP

CLIENT SCS Engineers **PROJECT NAME** Millersville Landfill - Subcell 9.2

PROJECT LOCATION **PROJECT NUMBER** 17324-0 **DATE TESTED**



Source of Material: SF, SF-6 @ 0.1' - 5.0',

Description of Material: Light Brown

Test Method: ASTM D698 Method B

Curve Number: 17324-0-013

TEST RESULTS

Maximum Dry Density	**114.4**	**PCF**
Optimum Water Content	**9.8**	**%**
Natural Water Content	**10.5**	**%**

ATTERBERG LIMITS

LL PL PI

Curves of 100% Saturation for Specific Gravity Equal to:

2.80

2.70

2.60

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MOISTURE-DENSITY RELATIONSHIP

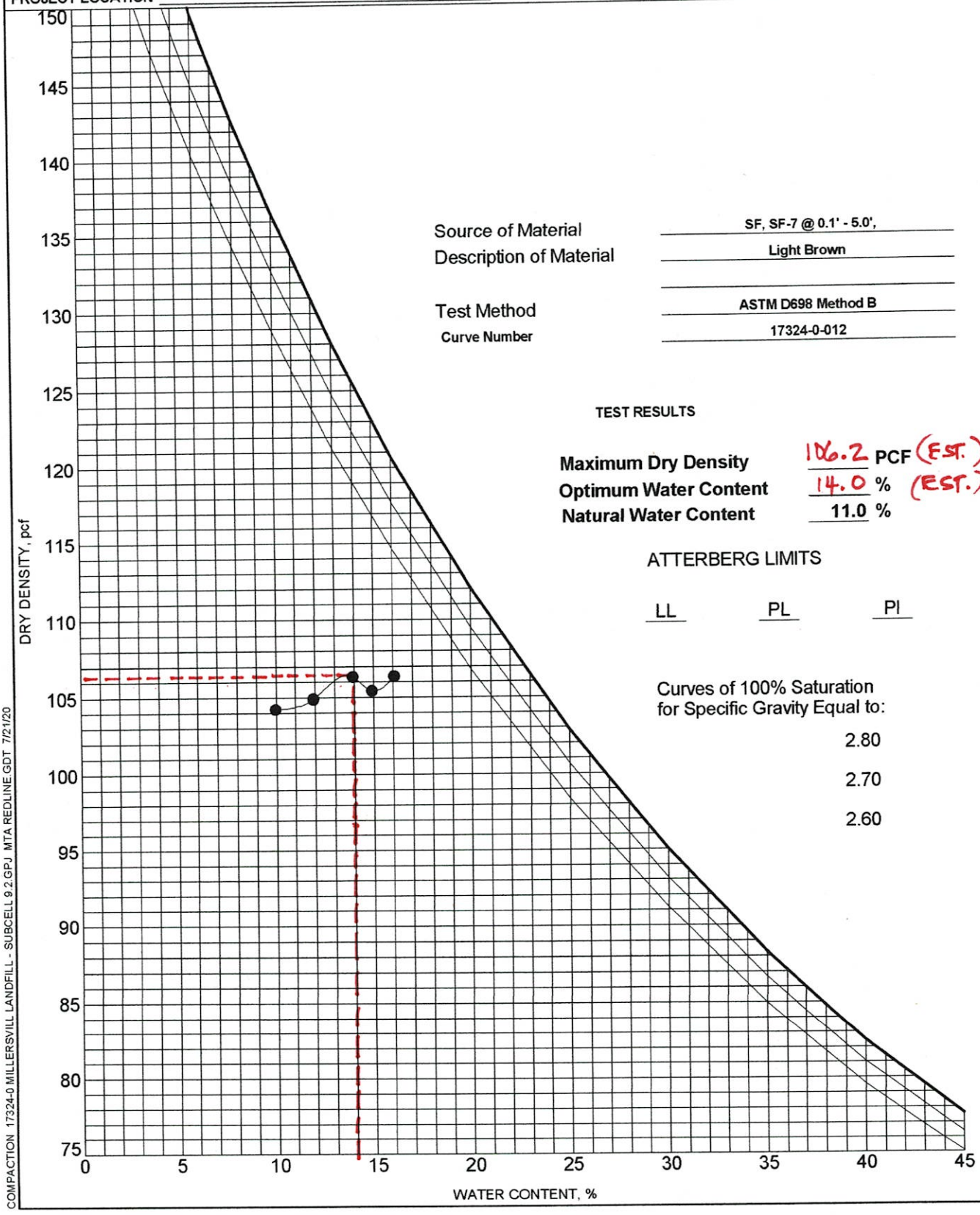
CLIENT SCS Engineers

PROJECT NAME Millersville Landfill - Subcell 9.2

PROJECT LOCATION

PROJECT NUMBER 17324-0

DATE TESTED



Source of Material: SF, SF-7 @ 0.1' - 5.0',

Description of Material: Light Brown

Test Method: ASTM D698 Method B

Curve Number: 17324-0-012

TEST RESULTS

Maximum Dry Density	106.2	PCF (EST.)
Optimum Water Content	14.0	% (EST.)
Natural Water Content	11.0	%

ATTERBERG LIMITS

LL	PL	PI

Curves of 100% Saturation for Specific Gravity Equal to:

2.80

2.70

2.60

COMPACTION 17324-0 MILLERSVILL LANDFILL - SUBCELL 9.2.GPJ MTA REDLINE.GDT 7/21/20

ORGANIC CONTENT (ASTM D2974)

Project No. 17324-0

Project Name: Millersville Landfill - Subcell 9.2 - R1

BORING	CCL	CCL	SF	TS				
SAMPLE	B-1	B-2	B-1	B-1				
DEPTH	N/A	N/A	N/A	N/A				
ORGANIC CONTENT (%)	**1.46%**	**1.82%**	**0.15%**	**1.87%**				

Tested By C. Witter
LABORATORY TECHNICIAN

Date June 2nd, 2020

ORGANIC CONTENT (ASTM D2974)

Project No. 17324-0

Project Name: Millersville Landfill - Subcell 9.2 - R2

BORING	CCL	SF	SF					
SAMPLE	B-3	B-2	B-3					
DEPTH	N/A	N/A	N/A					
ORGANIC CONTENT (%)	**0.92%**	**0.26%**	**0.19%**					

Tested By C. Witter
LABORATORY TECHNICIAN

Date June 12th, 2020

ORGANIC CONTENT (ASTM D2974)

Project No. 17324-0

Project Name: Millersville Landfill - Subcell 9.2 - R3

BORING	CCL	SF						
SAMPLE	B-5	B-5						
DEPTH	N/A	N/A						
ORGANIC CONTENT (%)	**0.67%**	**0.85%**						

Tested By C. Witter
LABORATORY TECHNICIAN

Date July 11th, 2020

THE ROBERT B. BALTER COMPANY
GEOTECHNICAL ENGINEERS

18 Music Fair Road
Owings Mills, MD 21117

ORGANIC CONTENT (ASTM D2974)

Project No. 17324-0

Project Name: Millersville Landfill - Subcell 9.2 - R4

BORING	SF	PC						
SAMPLE	7	1						
DEPTH	N/A	N/A						
ORGANIC CONTENT (%)	**0.10%**	**0.25%**						

Tested By C. Witter
LABORATORY TECHNICIAN

Date July 17th, 2020

THE ROBERT B. BALTER COMPANY
GEOTECHNICAL ENGINEERS

18 Music Fair Road
Owings Mills, MD 21117

TEST PAD

HYDRAULIC CONDUCTIVITY, ASTM D5084, Method A

Project:	Millersville Landfill - Subcell 9.2
Client:	SCS Engineers
Project Number:	17324-0
Sample ID:	TP-L1A / ST-1
Classification:	N/A

LL= N/A PL = N/A Passing #200= N/A

Date Tested:	7/29/2020	
Average Length	5.40	*inches*
Average Diameter	2.88	*inches*
Initial Moisture Content	13.9%	
Initial Wet Density	127.7	*pcf*
Initial Dry Density	112.1	*pcf*
Final B-value (saturation)	>0.95	
Total Back Pressure	84.0	*psi*
Final Moisture Content	18.6%	
Effective Consolidation Pressure	10.0	*psi*
Assumed Specific Gravity	2.650	
Average Test Temp	23.3	*^{o} C*
Final Hydraulic Gradient	34	
*Measured Hydraulic Conductivity at Test Temperature	**4.32835E-06**	*cm/sec*
**Hydraulic Conductivity at Standard Temperature, 20°C	**4.00234E-06**	*cm/sec*

Testing Notes:

** Measured hydraulic conductivity at test temperature based on the last four readings in accordance with ASTM D5084-16a, section 9.5.4.1*

***Hydraulic Conductivity at Standard Temperature in accordance with ASTM D5084-16a, section 10.3*

Test performed at multiple increasing gradients. Data presented shows permeation at final gradient that meets criteria specified in section 9.5.4.2

NT = Not Tested

Submitted by: J. Taylor
Laboratory Manager

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	7/30/2020	Tested By:	jlw
End Date:	8/3/2020	Checked By:	emm
Boring #:	1 st Lift		
Sample #:	TP-L1B		
Depth:	0-6 in		
Visual Description:	Moist, red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type: Intact

Permeant Fluid: De-aired Distilled water

Orientation: Vertical

Cell #: ---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 14.8%.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.40	2.40
Diameter, in	2.86	2.86
Area, in^2	6.42	6.42
Volume, in^3	15.4	15.4
Mass, g	532.0	543.7
Bulk Density, pcf	131.2	134.1
Moisture Content, %	14.8	17.3
Dry Density, pcf	114.3	114.3
Degree of Saturation, %	84	98

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.02	Increased Cell Pressure, psi:	95.00	Cell Pressure Increment, psi:	4.98
Sample Pressure, psi:	79.98	Corresponding Sample Pressure, psi:	83.45	Sample Pressure Increment, psi:	3.47
				B Coefficient:	0.70

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
7/31	1	90.0	80.0	8.0	7.8	0.2	40	16.5	2.3E-07	19.5	1.013	2.4E-07
7/31	2	90.0	80.0	8.0	7.8	0.2	38	16.5	2.4E-07	19.5	1.013	2.5E-07
7/31	3	90.0	80.0	8.0	7.8	0.2	35	16.5	2.7E-07	19.5	1.013	2.7E-07
7/31	4	90.0	80.0	8.0	7.8	0.2	42	16.5	2.2E-07	19.5	1.013	2.2E-07

PERMEABILITY AT 20° C: 2.4 x 10^{-7} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	7/30/2020	Tested By:	jlw
End Date:	8/3/2020	Checked By:	emm
Boring #:	2nd lift		
Sample #:	TP-L2		
Depth:	6-12 in		
Visual Description:	Moist, red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 14.6%.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.00	2.00
Diameter, in	2.86	2.85
Area, in^2	6.42	6.38
Volume, in^3	12.8	12.8
Mass, g	450.6	457.0
Bulk Density, pcf	133.3	136.2
Moisture Content, %	14.6	16.2
Dry Density, pcf	116.4	117.2
Degree of Saturation, %	88	100

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	89.98	Increased Cell Pressure, psi:	95.02	Cell Pressure Increment, psi:	5.04
Sample Pressure, psi:	80.02	Corresponding Sample Pressure, psi:	83.68	Sample Pressure Increment, psi:	3.66
				B Coefficient:	0.73

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
7/31	1	90.0	80.0	8.0	7.9	0.1	36	19.8	1.1E-07	19.5	1.013	1.1E-07
7/31	2	90.0	80.0	8.0	7.9	0.1	41	19.8	9.4E-08	19.5	1.013	9.6E-08
7/31	3	90.0	80.0	8.0	7.9	0.1	38	19.8	1.0E-07	19.5	1.013	1.0E-07
7/31	4	90.0	80.0	8.0	7.9	0.1	32	19.8	1.2E-07	19.5	1.013	1.2E-07

PERMEABILITY AT 20° C: 1.1 x 10^{-7} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	7/30/2020	Tested By:	jlw
End Date:	8/3/2020	Checked By:	emm
Boring #:	3rd Lift		
Sample #:	TP-L3A		
Depth:	6-12 in		
Visual Description:	Moist, red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type: Intact

Permeant Fluid: De-aired Distilled water

Orientation: Vertical

Cell #: ---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 13.6%.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.15	2.15
Diameter, in	2.86	2.86
Area, in^2	6.42	6.42
Volume, in^3	13.8	13.8
Mass, g	469.1	484.2
Bulk Density, pcf	129.1	133.3
Moisture Content, %	13.6	17.3
Dry Density, pcf	113.6	113.6
Degree of Saturation, %	76	97

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	89.98	Increased Cell Pressure, psi:	95.00	Cell Pressure Increment, psi:	5.02
Sample Pressure, psi:	79.98	Corresponding Sample Pressure, psi:	84.52	Sample Pressure Increment, psi:	4.54
				B Coefficient:	0.90

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
7/31	1	90.0	80.0	8.0	7.8	0.2	31	18.5	2.7E-07	19.5	1.013	2.7E-07
7/31	2	90.0	80.0	8.0	7.8	0.2	31	18.5	2.7E-07	19.5	1.013	2.7E-07
7/31	3	90.0	80.0	8.0	7.8	0.2	32	18.5	2.6E-07	19.5	1.013	2.6E-07
7/31	4	90.0	80.0	8.0	7.8	0.2	36	18.5	2.3E-07	19.5	1.013	2.3E-07

PERMEABILITY AT 20° C: 2.6 x 10^{-7} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	7/30/2020	Tested By:	jlw
End Date:	8/3/2020	Checked By:	emm
Boring #:	3rd Lift		
Sample #:	TP-L3B		
Depth:	12-18 In		
Visual Description:	Moist, red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 13.6%.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.10	2.06
Diameter, in	2.86	2.82
Area, in^2	6.42	6.25
Volume, in^3	13.5	12.9
Mass, g	432.2	447.5
Bulk Density, pcf	121.8	132.2
Moisture Content, %	13.6	17.6
Dry Density, pcf	107.2	112.4
Degree of Saturation, %	64	95

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	89.98	Increased Cell Pressure, psi:	95.04	Cell Pressure Increment, psi:	5.06
Sample Pressure, psi:	80.02	Corresponding Sample Pressure, psi:	83.67	Sample Pressure Increment, psi:	3.65
				B Coefficient:	0.72

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
7/31	1	90.0	80.0	8.0	7.9	0.1	32	19.3	1.3E-07	19.5	1.013	1.3E-07
7/31	2	90.0	80.0	8.0	7.9	0.1	38	19.3	1.1E-07	19.5	1.013	1.1E-07
7/31	3	90.0	80.0	8.0	7.9	0.1	36	19.3	1.1E-07	19.5	1.013	1.1E-07
7/31	4	90.0	80.0	8.0	7.9	0.1	37	19.3	1.1E-07	19.5	1.013	1.1E-07

PERMEABILITY AT 20° C: 1.2 x 10^{-7} cm/sec (@ 10 psi effective stress)

FIRST LIFT

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	8/3/2020	Tested By:	jlw
End Date:	8/5/2020	Checked By:	emm
Boring #:	1st Lift		
Sample #:	G-7-1L		
Depth:	0-6 In		
Visual Description:	Moist, light red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 14.9%.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.25	2.19
Diameter, in	2.86	2.82
Area, in^2	6.42	6.25
Volume, in^3	14.5	13.7
Mass, g	468.2	478.6
Bulk Density, pcf	123.1	133.0
Moisture Content, %	14.9	17.4
Dry Density, pcf	107.2	113.3
Degree of Saturation, %	70	96

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.01	Increased Cell Pressure, psi:	95.01	Cell Pressure Increment, psi:	5.00
Sample Pressure, psi:	79.99	Corresponding Sample Pressure, psi:	83.53	Sample Pressure Increment, psi:	3.54
				B Coefficient:	0.71

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
8/4	1	90.0	80.0	8.0	6.5	1.5	41	18.1	1.8E-06	19.5	1.013	1.8E-06
8/4	2	90.0	80.0	8.0	6.5	1.5	43	18.1	1.7E-06	19.5	1.013	1.7E-06
8/4	3	90.0	80.0	8.0	6.5	1.5	41	18.1	1.8E-06	19.5	1.013	1.8E-06
8/4	4	90.0	80.0	8.0	6.5	1.5	44	18.1	1.6E-06	19.5	1.013	1.7E-06

PERMEABILITY AT 20° C: 1.7 x 10^{-6} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	8/3/2020	Tested By:	jlw
End Date:	8/5/2020	Checked By:	emm
Boring #:	1st Lift		
Sample #:	G-10-1L		
Depth:	0-6 In		
Visual Description:	Moist, red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 15.3%.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.20	2.14
Diameter, in	2.84	2.82
Area, in^2	6.33	6.25
Volume, in^3	13.9	13.4
Mass, g	456.2	465.4
Bulk Density, pcf	124.4	132.4
Moisture Content, %	15.3	17.7
Dry Density, pcf	107.9	112.5
Degree of Saturation, %	74	96

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	89.98	Increased Cell Pressure, psi:	95.00	Cell Pressure Increment, psi:	5.02
Sample Pressure, psi:	79.99	Corresponding Sample Pressure, psi:	83.29	Sample Pressure Increment, psi:	3.30
				B Coefficient:	0.66

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
8/4	1	90.0	80.0	8.0	7.0	1.0	51	18.5	8.8E-07	19.5	1.013	8.9E-07
8/4	2	90.0	80.0	8.0	7.0	1.0	54	18.5	8.3E-07	19.5	1.013	8.4E-07
8/4	3	90.0	80.0	8.0	7.0	1.0	51	18.5	8.8E-07	19.5	1.013	8.9E-07
8/4	4	90.0	80.0	8.0	7.0	1.0	53	18.5	8.5E-07	19.5	1.013	8.6E-07

PERMEABILITY AT 20° C: 8.7 x 10^{-7} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	7/31/2020	Tested By:	jlw
End Date:	8/4/2020	Checked By:	emm
Boring #:	---		
Sample #:	G-15-1L		
Depth:	---		
Visual Description:	Moist, light red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type: Intact

Permeant Fluid: De-aired Distilled water

Orientation: Vertical

Cell #: ---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 13.5%.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	1.97	1.97
Diameter, in	2.86	2.86
Area, in^2	6.42	6.42
Volume, in^3	12.7	12.7
Mass, g	442.2	450.7
Bulk Density, pcf	132.8	135.4
Moisture Content, %	13.5	15.7
Dry Density, pcf	117.0	117.0
Degree of Saturation, %	83	96

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	89.99	Increased Cell Pressure, psi:	95.01	Cell Pressure Increment, psi:	5.02
Sample Pressure, psi:	79.98	Corresponding Sample Pressure, psi:	84.29	Sample Pressure Increment, psi:	4.31
				B Coefficient:	0.86

*B value did not increase with increase in pressure. Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
8/3	1	90.0	80.0	8.0	7.9	0.1	33	20.1	1.1E-07	21.7	0.960	1.1E-07
8/3	2	90.0	80.0	8.0	7.9	0.1	35	20.1	1.1E-07	21.7	0.960	1.0E-07
8/3	3	90.0	80.0	8.0	7.9	0.1	34	20.1	1.1E-07	21.7	0.960	1.1E-07
8/3	4	90.0	80.0	8.0	7.9	0.1	32	20.1	1.2E-07	21.7	0.960	1.1E-07

PERMEABILITY AT 20° C: 1.1 x 10^{-7} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	8/11/2020	Tested By:	JLW/DN
End Date:	8/14/2020	Checked By:	emm
Boring #:	0-6		
Sample #:	G-18-1L		
Depth:	1st lift		
Visual Description:	Moist, reddish yellow clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 18.2 %.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.10	2.10
Diameter, in	2.86	2.86
Area, in^2	6.42	6.42
Volume, in^3	13.5	13.5
Mass, g	463.4	468.2
Bulk Density, pcf	130.6	131.9
Moisture Content, %	18.2	19.5
Dry Density, pcf	110.5	110.5
Degree of Saturation, %	94	100

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.06	Increased Cell Pressure, psi:	95.04	Cell Pressure Increment, psi:	4.98
Sample Pressure, psi:	80.00	Corresponding Sample Pressure, psi:	83.21	Sample Pressure Increment, psi:	3.21
				B Coefficient:	0.64

*B value did not increase with increase in pressure. Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
8/12	1	90.1	80.0	8.0	7.8	0.2	44	18.9	1.8E-07	21.7	0.960	1.8E-07
8/12	2	90.1	80.0	8.0	7.8	0.2	46	18.9	1.8E-07	21.7	0.960	1.7E-07
8/12	3	90.1	80.0	8.0	7.8	0.2	45	18.9	1.8E-07	21.7	0.960	1.7E-07
8/12	4	90.1	80.0	8.0	7.8	0.2	44	18.9	1.8E-07	21.7	0.960	1.8E-07

PERMEABILITY AT 20° C: 1.7 x 10^{-7} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	8/11/2020	Tested By:	jlw/DN
End Date:	8/14/2020	Checked By:	emm
Boring #:	0"-6"		
Sample #:	G-20-1C		
Depth:	1st lift		
Visual Description:	Moist, light red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 15.8 %.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.25	2.25
Diameter, in	2.84	2.84
Area, in^2	6.33	6.33
Volume, in^3	14.3	14.3
Mass, g	493.5	498.9
Bulk Density, pcf	131.6	133.1
Moisture Content, %	15.8	17.1
Dry Density, pcf	113.6	113.6
Degree of Saturation, %	88	96

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.00	Increased Cell Pressure, psi:	94.96	Cell Pressure Increment, psi:	4.96
Sample Pressure, psi:	79.96	Corresponding Sample Pressure, psi:	83.12	Sample Pressure Increment, psi:	3.16
				B Coefficient:	0.64

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
8/12	1	90.0	80.0	8.0	7.9	0.1	56	17.6	7.8E-08	19.5	1.013	7.9E-08
8/12	2	90.0	80.0	8.0	7.9	0.1	51	17.6	8.6E-08	19.5	1.013	8.7E-08
8/12	3	90.0	80.0	8.0	7.9	0.1	48	17.6	9.1E-08	19.5	1.013	9.3E-08
8/12	4	90.0	80.0	8.0	7.9	0.1	49	17.6	9.0E-08	19.5	1.013	9.1E-08

PERMEABILITY AT 20° C: 8.7 x 10^{-8} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	8/11/2020	Tested By:	dn
End Date:	8/14/2020	Checked By:	emm
Boring #:	0"-6"		
Sample #:	G-27-1L		
Depth:	1st Lift		
Visual Description:	Moist, red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 17.6 %.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.00	2.00
Diameter, in	2.85	2.85
Area, in^2	6.38	6.38
Volume, in^3	12.8	12.8
Mass, g	388.8	413.1
Bulk Density, pcf	115.9	123.1
Moisture Content, %	17.6	25.0
Dry Density, pcf	98.5	98.5
Degree of Saturation, %	67	95

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.18	Increased Cell Pressure, psi:	95.07	Cell Pressure Increment, psi:	4.89
Sample Pressure, psi:	80.02	Corresponding Sample Pressure, psi:	83.13	Sample Pressure Increment, psi:	3.11
				B Coefficient:	0.64

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
8/12	1	90.2	80.0	8.0	5.0	3.0	40	19.8	3.7E-06	19.5	1.013	3.7E-06
8/12	2	90.2	80.0	8.0	5.0	3.0	40	19.8	3.7E-06	19.5	1.013	3.7E-06
8/12	3	90.2	80.0	8.0	5.0	3.0	43	19.8	3.4E-06	19.5	1.013	3.4E-06
8/12	4	90.2	80.0	8.0	5.0	3.0	35	19.8	4.2E-06	19.5	1.013	4.2E-06

PERMEABILITY AT 20° C: 3.8 x 10^{-6} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	8/18/2020	Tested By:	DN
End Date:	8/24/2020	Checked By:	emm
Boring #:	0"-6"		
Sample #:	G-37-1L		
Depth:	1st Lift		
Visual Description:	Moist, red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 13.6 %.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.00	2.00
Diameter, in	2.80	2.80
Area, in^2	6.16	6.16
Volume, in^3	12.3	12.3
Mass, g	415.0	431.0
Bulk Density, pcf	128.1	133.1
Moisture Content, %	13.6	17.9
Dry Density, pcf	112.8	112.8
Degree of Saturation, %	74	98

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.04	Increased Cell Pressure, psi:	95.00	Cell Pressure Increment, psi:	4.96
Sample Pressure, psi:	80.04	Corresponding Sample Pressure, psi:	84.55	Sample Pressure Increment, psi:	4.51
				B Coefficient:	0.91

*B value did not increase with increase in pressure. Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
8/20	1	90.0	80.0	8.0	7.9	0.1	140	19.8	2.9E-08	19.5	1.013	2.9E-08
8/20	2	90.0	80.0	8.0	7.9	0.1	151	19.8	2.7E-08	19.5	1.013	2.7E-08
8/20	3	90.0	80.0	8.0	7.9	0.1	138	19.8	2.9E-08	19.5	1.013	2.9E-08
8/20	4	90.0	80.0	8.0	7.9	0.1	154	19.8	2.6E-08	19.5	1.013	2.6E-08

PERMEABILITY AT 20° C: 2.8 x 10^{-8} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	8/24/2020	Tested By:	DN
End Date:	8/28/2020	Checked By:	emm
Boring #:	0-6		
Sample #:	G-44-1L		
Depth:	1st lift		
Visual Description:	Miost, red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 16.5 %.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	1.70	1.70
Diameter, in	2.80	2.80
Area, in^2	6.16	6.16
Volume, in^3	10.5	10.5
Mass, g	353.4	362.5
Bulk Density, pcf	128.3	131.6
Moisture Content, %	16.5	19.5
Dry Density, pcf	110.1	110.1
Degree of Saturation, %	84	99

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.00	Increased Cell Pressure, psi:	95.01	Cell Pressure Increment, psi:	5.01
Sample Pressure, psi:	80.04	Corresponding Sample Pressure, psi:	82.67	Sample Pressure Increment, psi:	2.63
				B Coefficient:	0.52

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
8/26	1	90.0	80.0	8.0	7.9	0.1	38	23.3	9.0E-08	20	1.000	9.0E-08
8/26	2	90.0	80.0	8.0	7.9	0.1	42	23.3	8.1E-08	20	1.000	8.1E-08
8/26	3	90.0	80.0	8.0	7.9	0.1	39	23.3	8.7E-08	20	1.000	8.7E-08
8/26	4	90.0	80.0	8.0	7.9	0.1	47	23.3	7.3E-08	20	1.000	7.3E-08

PERMEABILITY AT 20° C: 8.3 x 10^{-8} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	8/18/2020	Tested By:	jlw
End Date:	8/21/2020	Checked By:	emm
Boring #:	0"-6"		
Sample #:	G-46-1L		
Depth:	1st Lift		
Visual Description:	Moist, red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 21.2 %.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.15	2.15
Diameter, in	2.85	2.85
Area, in^2	6.38	6.38
Volume, in^3	13.7	13.7
Mass, g	423.6	444.6
Bulk Density, pcf	117.4	123.2
Moisture Content, %	21.2	27.2
Dry Density, pcf	96.9	96.9
Degree of Saturation, %	77	99

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.02	Increased Cell Pressure, psi:	95.04	Cell Pressure Increment, psi:	5.02
Sample Pressure, psi:	80.00	Corresponding Sample Pressure, psi:	83.46	Sample Pressure Increment, psi:	3.46
				B Coefficient:	0.69

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
8/19	1	90.0	80.0	8.0	7.9	0.1	55	18.5	7.6E-08	19.5	1.013	7.7E-08
8/19	2	90.0	80.0	8.0	7.9	0.1	60	18.5	6.9E-08	19.5	1.013	7.0E-08
8/19	3	90.0	80.0	8.0	7.9	0.1	64	18.5	6.5E-08	19.5	1.013	6.6E-08
8/19	4	90.0	80.0	8.0	7.9	0.1	56	18.5	7.4E-08	19.5	1.013	7.5E-08

PERMEABILITY AT 20° C: 7.2 x 10^{-8} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	9/15/2020	Tested By:	DN
End Date:	9/17/2020	Checked By:	emm
Boring #:	---		
Sample #:	G-34-1L		
Depth:	1st lift		
Visual Description:	Moist, red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type: Intact

Permeant Fluid: De-aired Distilled water

Orientation: Vertical

Cell #: ---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 15.1 %.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.00	2.00
Diameter, in	2.86	2.86
Area, in^2	6.42	6.42
Volume, in^3	12.8	12.8
Mass, g	459.0	461.3
Bulk Density, pcf	135.8	136.5
Moisture Content, %	15.1	15.7
Dry Density, pcf	118.0	118.0
Degree of Saturation, %	95	99

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.04	Increased Cell Pressure, psi:	95.09	Cell Pressure Increment, psi:	5.05
Sample Pressure, psi:	80.05	Corresponding Sample Pressure, psi:	82.12	Sample Pressure Increment, psi:	2.07
				B Coefficient:	0.41

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
9/16	1	90.0	80.1	8.0	7.9	0.1	76	19.8	5.1E-08	19.5	1.013	5.1E-08
9/16	2	90.0	80.1	8.0	7.9	0.1	73	19.8	5.3E-08	19.5	1.013	5.3E-08
9/16	3	90.0	80.1	8.0	7.9	0.1	75	19.8	5.1E-08	19.5	1.013	5.2E-08
9/16	4	90.0	80.1	8.0	7.9	0.1	77	19.8	5.0E-08	19.5	1.013	5.1E-08

PERMEABILITY AT 20° C: 5.2 x 10^{-8} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	10/6/2020	Tested By:	DN
End Date:	10/8/2020	Checked By:	emm
Boring #:	---		
Sample #:	G-48-1L		
Depth:	---		
Visual Description:	Moist, red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Tube	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 16.2 %.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.20	2.20
Diameter, in	2.86	2.86
Area, in^2	6.42	6.42
Volume, in^3	14.1	14.1
Mass, g	455.7	474.7
Bulk Density, pcf	122.6	127.7
Moisture Content, %	16.2	21.0
Dry Density, pcf	105.5	105.5
Degree of Saturation, %	73	95

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.00	Increased Cell Pressure, psi:	95.01	Cell Pressure Increment, psi:	5.01
Sample Pressure, psi:	80.02	Corresponding Sample Pressure, psi:	84.34	Sample Pressure Increment, psi:	4.32
				B Coefficient:	0.86

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
10/7	1	90.0	80.0	8.0	7.9	0.1	43	18.0	9.8E-08	20	1.000	9.8E-08
10/7	2	90.0	80.0	8.0	7.9	0.1	39	18.0	1.1E-07	21	0.976	1.1E-07
10/7	3	90.0	80.0	8.0	7.9	0.1	46	18.0	9.2E-08	21	0.976	9.0E-08
10/7	4	90.0	80.0	8.0	7.9	0.1	40	18.0	1.1E-07	21	0.976	1.0E-07

PERMEABILITY AT 20° C: 9.9 x 10^{-8} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	10/15/2020	Tested By:	jlw
End Date:	10/19/2020	Checked By:	emm
Boring #:	1st Lift		
Sample #:	G-35-1L		
Depth:	0-6 in		
Visual Description:	Moist, light red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 15.7%.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.20	2.20
Diameter, in	2.80	2.80
Area, in^2	6.16	6.16
Volume, in^3	13.5	13.5
Mass, g	481.8	484.7
Bulk Density, pcf	135.2	136.0
Moisture Content, %	15.7	16.4
Dry Density, pcf	116.9	116.9
Degree of Saturation, %	96	100

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	89.96	Increased Cell Pressure, psi:	95.00	Cell Pressure Increment, psi:	5.04
Sample Pressure, psi:	80.00	Corresponding Sample Pressure, psi:	83.52	Sample Pressure Increment, psi:	3.52
				B Coefficient:	0.70

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
10/16	1	90.0	80.0	8.0	7.8	0.2	35	18.0	2.5E-07	19.5	1.013	2.6E-07
10/16	2	90.0	80.0	8.0	7.8	0.2	34	18.0	2.6E-07	19.5	1.013	2.6E-07
10/16	3	90.0	80.0	8.0	7.8	0.2	40	18.0	2.2E-07	19.5	1.013	2.2E-07
10/16	4	90.0	80.0	8.0	7.8	0.2	39	18.0	2.3E-07	19.5	1.013	2.3E-07

PERMEABILITY AT 20° C: 2.4 x 10^{-7} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	10/15/2020	Tested By:	jlw
End Date:	10/19/2020	Checked By:	emm
Boring #:	1st Lift		
Sample #:	G-49-1L		
Depth:	0-6 In		
Visual Description:	Moist, yellowish red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 15.8%.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.40	2.40
Diameter, in	2.80	2.80
Area, in^2	6.16	6.16
Volume, in^3	14.8	14.8
Mass, g	502.2	514.8
Bulk Density, pcf	129.2	132.4
Moisture Content, %	15.8	18.7
Dry Density, pcf	111.6	111.6
Degree of Saturation, %	83	99

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.02	Increased Cell Pressure, psi:	94.98	Cell Pressure Increment, psi:	4.96
Sample Pressure, psi:	80.00	Corresponding Sample Pressure, psi:	83.97	Sample Pressure Increment, psi:	3.97
				B Coefficient:	0.80

*B value did not increase with increase in pressure. Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
10/16	1	90.0	80.0	8.0	7.9	0.1	58	16.5	8.3E-08	19.5	1.013	8.4E-08
10/16	2	90.0	80.0	8.0	7.9	0.1	57	16.5	8.4E-08	19.5	1.013	8.6E-08
10/16	3	90.0	80.0	8.0	7.9	0.1	54	16.5	8.9E-08	19.5	1.013	9.0E-08
10/16	4	90.0	80.0	8.0	7.9	0.1	55	16.5	8.8E-08	19.5	1.013	8.9E-08

PERMEABILITY AT 20° C: 8.7 x 10^{-8} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	10/15/2020	Tested By:	jlw
End Date:	10/20/2020	Checked By:	emm
Boring #:	1st Lift		
Sample #:	G-59-1L		
Depth:	0-6 In		
Visual Description:	Moist, yeloowish red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 15.5%.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.25	2.25
Diameter, in	2.80	2.80
Area, in^2	6.16	6.16
Volume, in^3	13.9	13.9
Mass, g	488.1	493.7
Bulk Density, pcf	133.9	135.5
Moisture Content, %	15.5	16.9
Dry Density, pcf	115.9	115.9
Degree of Saturation, %	92	100

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.03	Increased Cell Pressure, psi:	95.01	Cell Pressure Increment, psi:	4.98
Sample Pressure, psi:	79.99	Corresponding Sample Pressure, psi:	84.38	Sample Pressure Increment, psi:	4.39
				B Coefficient:	0.88

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
10/19	1	90.0	80.0	8.0	7.9	0.1	31	17.6	1.5E-07	19.5	1.013	1.5E-07
10/19	2	90.0	80.0	8.0	7.9	0.1	31	17.6	1.5E-07	19.5	1.013	1.5E-07
10/19	3	90.0	80.0	8.0	7.9	0.1	35	17.6	1.3E-07	19.5	1.013	1.3E-07
10/19	4	90.0	80.0	8.0	7.9	0.1	33	17.6	1.4E-07	19.5	1.013	1.4E-07

PERMEABILITY AT 20° C: 1.4 x 10^{-7} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	10/19/2020	Tested By:	jlw
End Date:	10/21/2020	Checked By:	emm
Boring #:	1st Lift		
Sample #:	G-63-1L		
Depth:	0-6 In		
Visual Description:	Moist, yellowish red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 15.5%.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.35	2.35
Diameter, in	2.80	2.80
Area, in^2	6.16	6.16
Volume, in^3	14.5	14.5
Mass, g	511.1	516.1
Bulk Density, pcf	134.3	135.6
Moisture Content, %	15.5	16.6
Dry Density, pcf	116.3	116.3
Degree of Saturation, %	93	100

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	89.99	Increased Cell Pressure, psi:	95.02	Cell Pressure Increment, psi:	5.03
Sample Pressure, psi:	80.00	Corresponding Sample Pressure, psi:	83.74	Sample Pressure Increment, psi:	3.74
				B Coefficient:	0.74

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
10/20	1	90.0	80.0	8.0	7.9	0.1	34	16.9	1.4E-07	19.5	1.013	1.4E-07
10/20	2	90.0	80.0	8.0	7.9	0.1	35	16.9	1.3E-07	19.5	1.013	1.4E-07
10/20	3	90.0	80.0	8.0	7.9	0.1	35	16.9	1.3E-07	19.5	1.013	1.4E-07
10/20	4	90.0	80.0	8.0	7.9	0.1	38	16.9	1.2E-07	19.5	1.013	1.3E-07

PERMEABILITY AT 20° C: 1.4 x 10^{-7} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	10/15/2020	Tested By:	jlw
End Date:	10/19/2020	Checked By:	emm
Boring #:	1st Lift		
Sample #:	G-65-1L		
Depth:	0-6 In		
Visual Description:	Moist, yellowish red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 15.5%.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.65	2.63
Diameter, in	2.80	2.79
Area, in^2	6.16	6.11
Volume, in^3	16.3	16.1
Mass, g	571.1	575.7
Bulk Density, pcf	133.0	136.1
Moisture Content, %	15.5	16.4
Dry Density, pcf	115.2	116.9
Degree of Saturation, %	90	100

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.04	Increased Cell Pressure, psi:	95.00	Cell Pressure Increment, psi:	4.96
Sample Pressure, psi:	80.04	Corresponding Sample Pressure, psi:	83.84	Sample Pressure Increment, psi:	3.80
				B Coefficient:	0.77

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
10/16	1	90.0	80.0	8.0	7.9	0.1	35	15.1	1.5E-07	19.5	1.013	1.5E-07
10/16	2	90.0	80.0	8.0	7.9	0.1	34	15.1	1.6E-07	19.5	1.013	1.6E-07
10/16	3	90.0	80.0	8.0	7.9	0.1	37	15.1	1.4E-07	19.5	1.013	1.5E-07
10/16	4	90.0	80.0	8.0	7.9	0.1	37	15.1	1.4E-07	19.5	1.013	1.5E-07

PERMEABILITY AT 20° C: 1.5 x 10^{-7} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	10/19/2020	Tested By:	jlw
End Date:	10/21/2020	Checked By:	emm
Boring #:	1st Lift		
Sample #:	G-69-1L		
Depth:	0-6 In		
Visual Description:	Moist, light red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 14.2%.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.40	2.36
Diameter, in	2.80	2.78
Area, in^2	6.16	6.07
Volume, in^3	14.8	14.3
Mass, g	500.4	510.5
Bulk Density, pcf	128.7	135.5
Moisture Content, %	14.2	16.5
Dry Density, pcf	112.7	116.3
Degree of Saturation, %	77	99

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	89.99	Increased Cell Pressure, psi:	94.99	Cell Pressure Increment, psi:	5.00
Sample Pressure, psi:	79.96	Corresponding Sample Pressure, psi:	82.78	Sample Pressure Increment, psi:	2.82
				B Coefficient:	0.56

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
10/20	1	90.0	80.0	8.0	7.9	0.1	31	16.8	1.5E-07	19.5	1.013	1.6E-07
10/20	2	90.0	80.0	8.0	7.9	0.1	33	16.8	1.5E-07	19.5	1.013	1.5E-07
10/20	3	90.0	80.0	8.0	7.9	0.1	35	16.8	1.4E-07	19.5	1.013	1.4E-07
10/20	4	90.0	80.0	8.0	7.9	0.1	33	16.8	1.5E-07	19.5	1.013	1.5E-07

PERMEABILITY AT 20° C: 1.5 x 10^{-7} cm/sec (@ 10 psi effective stress)

SECOND LIFT

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	8/11/2020	Tested By:	jlw/DN
End Date:	8/14/2020	Checked By:	emm
Boring #:	6"-12"		
Sample #:	G-6-2L		
Depth:	2nd Lift		
Visual Description:	Moist, red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type: Intact

Permeant Fluid: De-aired Distilled water

Orientation: Vertical

Cell #: ---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 17.6%.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.04	2.04
Diameter, in	2.87	2.87
Area, in^2	6.47	6.47
Volume, in^3	13.2	13.2
Mass, g	460.1	463.4
Bulk Density, pcf	132.5	133.5
Moisture Content, %	17.6	18.5
Dry Density, pcf	112.7	112.7
Degree of Saturation, %	96	100

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	89.96	Increased Cell Pressure, psi:	94.97	Cell Pressure Increment, psi:	5.01
Sample Pressure, psi:	80.00	Corresponding Sample Pressure, psi:	84.88	Sample Pressure Increment, psi:	4.88
				B Coefficient:	0.97

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
8/12	1	90.0	80.0	8.0	7.6	0.4	37	19.5	4.3E-07	19.5	1.013	4.3E-07
8/12	2	90.0	80.0	8.0	7.6	0.4	38	19.5	4.2E-07	19.5	1.013	4.2E-07
8/12	3	90.0	80.0	8.0	7.6	0.4	40	19.5	4.0E-07	19.5	1.013	4.0E-07
8/12	4	90.0	80.0	8.0	7.6	0.4	39	19.5	4.1E-07	19.5	1.013	4.1E-07

PERMEABILITY AT 20° C: 4.2 x 10^{-7} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	8/11/2020	Tested By:	JLW/DN
End Date:	8/14/2020	Checked By:	emm
Boring #:	6"-12"		
Sample #:	G-8-2L		
Depth:	2nd lift		
Visual Description:	Moist, red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 15.1 %

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.10	2.10
Diameter, in	2.80	2.80
Area, in^2	6.16	6.16
Volume, in^3	12.9	12.9
Mass, g	441.6	451.1
Bulk Density, pcf	129.8	132.6
Moisture Content, %	15.1	17.6
Dry Density, pcf	112.8	112.8
Degree of Saturation, %	82	96

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	89.98	Increased Cell Pressure, psi:	95.04	Cell Pressure Increment, psi:	5.06
Sample Pressure, psi:	79.93	Corresponding Sample Pressure, psi:	83.59	Sample Pressure Increment, psi:	3.66
				B Coefficient:	0.72

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
8/12	1	90.0	79.9	8.0	7.9	0.1	35	18.9	1.2E-07	19.5	1.013	1.2E-07
8/12	2	90.0	79.9	8.0	7.9	0.1	37	18.9	1.1E-07	19.5	1.013	1.2E-07
8/12	3	90.0	79.9	8.0	7.9	0.1	40	18.9	1.1E-07	19.5	1.013	1.1E-07
8/12	4	90.0	79.9	8.0	7.9	0.1	43	18.9	9.8E-08	19.5	1.013	9.9E-08

PERMEABILITY AT 20° C: 1.1 x 10^{-7} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	8/13/2020	Tested By:	dn
End Date:	8/18/2020	Checked By:	emm
Boring #:	6"-12"		
Sample #:	G-10-2L		
Depth:	2nd Lift		
Visual Description:	Moist, light brown clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 11.2 %.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.10	2.10
Diameter, in	2.85	2.85
Area, in^2	6.38	6.38
Volume, in^3	13.4	13.4
Mass, g	464.4	479.8
Bulk Density, pcf	131.8	136.2
Moisture Content, %	11.2	14.9
Dry Density, pcf	118.5	118.5
Degree of Saturation, %	72	95

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.00	Increased Cell Pressure, psi:	95.01	Cell Pressure Increment, psi:	5.01
Sample Pressure, psi:	80.05	Corresponding Sample Pressure, psi:	84.12	Sample Pressure Increment, psi:	4.07
				B Coefficient:	0.81

*B value did not increase with increase in pressure. Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
8/14	1	90.0	80.1	8.0	7.9	0.1	45	18.9	9.0E-08	19.5	1.013	9.1E-08
8/14	2	90.0	80.1	8.0	7.9	0.1	39	18.9	1.0E-07	19.5	1.013	1.1E-07
8/14	3	90.0	80.1	8.0	7.9	0.1	46	18.9	8.8E-08	19.5	1.013	8.9E-08
8/14	4	90.0	80.1	8.0	7.9	0.1	41	18.9	9.9E-08	19.5	1.013	1.0E-07

PERMEABILITY AT 20° C: 9.7 x 10^{-8} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	8/17/2020	Tested By:	dn
End Date:	8/21/2020	Checked By:	emm
Boring #:	6"-12"		
Sample #:	G-17-2L		
Depth:	---		
Visual Description:	Moist, red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 15.4 %.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.05	2.05
Diameter, in	2.75	2.75
Area, in^2	5.94	5.94
Volume, in^3	12.2	12.2
Mass, g	424.8	429.5
Bulk Density, pcf	132.6	134.1
Moisture Content, %	15.4	16.7
Dry Density, pcf	114.9	114.9
Degree of Saturation, %	89	97

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.06	Increased Cell Pressure, psi:	95.06	Cell Pressure Increment, psi:	5.00
Sample Pressure, psi:	80.02	Corresponding Sample Pressure, psi:	83.94	Sample Pressure Increment, psi:	3.92
				B Coefficient:	0.78

*B value did not increase with increase in pressure. Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
8/18	1	90.1	80.0	8.0	7.9	0.1	35	19.4	1.2E-07	19.5	1.013	1.2E-07
8/18	2	90.1	80.0	8.0	7.9	0.1	33	19.4	1.3E-07	19.5	1.013	1.3E-07
8/18	3	90.1	80.0	8.0	7.9	0.1	34	19.4	1.3E-07	19.5	1.013	1.3E-07
8/18	4	90.1	80.0	8.0	7.9	0.1	35	19.4	1.2E-07	19.5	1.013	1.2E-07

PERMEABILITY AT 20° C: 1.2 x 10^{-7} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	8/13/2020	Tested By:	dn
End Date:	8/18/2020	Checked By:	emm
Boring #:	6"-12"		
Sample #:	G-21-2L		
Depth:	2nd Lift		
Visual Description:	Moist, light brown clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 17.6 %.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.25	2.25
Diameter, in	2.84	2.84
Area, in^2	6.33	6.33
Volume, in^3	14.3	14.3
Mass, g	496.6	496.6
Bulk Density, pcf	132.4	132.4
Moisture Content, %	17.6	17.6
Dry Density, pcf	112.7	112.7
Degree of Saturation, %	96	96

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.10	Increased Cell Pressure, psi:	95.02	Cell Pressure Increment, psi:	4.92
Sample Pressure, psi:	80.02	Corresponding Sample Pressure, psi:	84.11	Sample Pressure Increment, psi:	4.09
				B Coefficient:	0.83

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
8/14	1	90.1	80.0	8.0	7.8	0.2	40	17.6	2.2E-07	19.5	1.013	2.2E-07
8/14	2	90.1	80.0	8.0	7.8	0.2	41	17.6	2.2E-07	19.5	1.013	2.2E-07
8/14	3	90.1	80.0	8.0	7.8	0.2	45	17.6	2.0E-07	19.5	1.013	2.0E-07
8/14	4	90.1	80.0	8.0	7.8	0.2	36	17.6	2.5E-07	19.5	1.013	2.5E-07

PERMEABILITY AT 20° C: 2.2 x 10^{-7} cm/sec (@ 10 psi effective stress)

Client:	SCS Enginners		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	8/28/2020	Tested By:	dn
End Date:	8/31/2020	Checked By:	emm
Boring #:	---		
Sample #:	G-39-2L		
Depth:	2nd lift		
Visual Description:	Moist, red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 19.3 %.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.01	2.01
Diameter, in	2.86	2.86
Area, in^2	6.42	6.42
Volume, in^3	12.9	12.9
Mass, g	447.3	447.7
Bulk Density, pcf	131.7	131.8
Moisture Content, %	19.3	19.4
Dry Density, pcf	110.4	110.4
Degree of Saturation, %	99	100

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.06	Increased Cell Pressure, psi:	95.08	Cell Pressure Increment, psi:	5.02
Sample Pressure, psi:	80.01	Corresponding Sample Pressure, psi:	83.52	Sample Pressure Increment, psi:	3.51
				B Coefficient:	0.70

*B value did not increase with increase in pressure. Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
8/31	1	90.1	80.0	8.0	7.9	0.1	128	19.7	3.0E-08	22.2	0.949	2.9E-08
8/31	2	90.1	80.0	8.0	7.9	0.1	165	19.7	2.3E-08	22.2	0.949	2.2E-08
8/31	3	90.1	80.0	8.0	7.9	0.1	163	19.7	2.4E-08	22.2	0.949	2.2E-08
8/31	4	90.1	80.0	8.0	7.9	0.1	131	19.7	2.9E-08	22.2	0.949	2.8E-08

PERMEABILITY AT 20° C: 2.5 x 10^{-8} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	9/1/2020	Tested By:	dn
End Date:	9/10/2020	Checked By:	emm
Boring #:	6"-12"		
Sample #:	G-30-2L		
Depth:	2nd lift		
Visual Description:	Moist, red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 12.6 %.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.40	2.40
Diameter, in	2.80	2.80
Area, in^2	6.16	6.16
Volume, in^3	14.8	14.8
Mass, g	539.9	545.0
Bulk Density, pcf	138.9	140.2
Moisture Content, %	12.1	13.2
Dry Density, pcf	123.9	123.9
Degree of Saturation, %	91	99

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.01	Increased Cell Pressure, psi:	95.05	Cell Pressure Increment, psi:	5.04
Sample Pressure, psi:	80.09	Corresponding Sample Pressure, psi:	84.12	Sample Pressure Increment, psi:	4.03
				B Coefficient:	0.80

*B value did not increase with increase in pressure. Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
9/2	1	90.0	80.1	8.0	7.9	0.1	144	16.5	3.3E-08	20.5	0.988	3.3E-08
9/2	2	90.0	80.1	8.0	7.9	0.1	162	16.5	3.0E-08	20.5	0.988	2.9E-08
9/2	3	90.0	80.1	8.0	7.9	0.1	174	16.5	2.8E-08	20.5	0.988	2.7E-08
9/2	4	90.0	80.1	8.0	7.9	0.1	170	16.5	2.8E-08	20.5	0.988	2.8E-08

PERMEABILITY AT 20° C: 2.9 x 10^{-8} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersvilee LF Cubcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	9/15/2020	Tested By:	jlw/DN
End Date:	9/17/2020	Checked By:	emm
Boring #:	---		
Sample #:	G-2-2L		
Depth:	2nd Lift		
Visual Description:	Moist, red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type: Intact

Permeant Fluid: De-aired Distilled water

Orientation: Vertical

Cell #: ---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 17.3%.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.10	2.10
Diameter, in	2.86	2.86
Area, in^2	6.42	6.42
Volume, in^3	13.5	13.5
Mass, g	472.5	475.5
Bulk Density, pcf	133.1	134.0
Moisture Content, %	17.3	18.0
Dry Density, pcf	113.5	113.5
Degree of Saturation, %	96	100

B COEFFICIENT DETERMINATION

Cell Pressure, psi: 90.02

Sample Pressure, psi: 80.02

Increased Cell Pressure, psi: 95.00

Corresponding Sample Pressure, psi: 83.59

Cell Pressure Increment, psi: 4.98

Sample Pressure Increment, psi: 3.57

B Coefficient: 0.72

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
9/16	1	90.0	80.0	8.0	7.8	0.2	32	18.9	2.5E-07	19.5	1.013	2.6E-07
9/16	2	90.0	80.0	8.0	7.8	0.2	34	18.9	2.4E-07	19.5	1.013	2.4E-07
9/16	3	90.0	80.0	8.0	7.8	0.2	35	18.9	2.3E-07	19.5	1.013	2.4E-07
9/16	4	90.0	80.0	8.0	7.8	0.2	38	18.9	2.1E-07	19.5	1.013	2.2E-07

PERMEABILITY AT 20° C: 2.4 x 10^{-7} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	9/15/2020	Tested By:	jlw
End Date:	9/17/2020	Checked By:	emm
Boring #:	---		
Sample #:	G-23-2L		
Depth:	2nd Lift		
Visual Description:	Moist, yellowish red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 14.8%.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.10	2.10
Diameter, in	2.86	2.86
Area, in^2	6.42	6.42
Volume, in^3	13.5	13.5
Mass, g	487.6	489.3
Bulk Density, pcf	137.4	137.9
Moisture Content, %	14.8	15.2
Dry Density, pcf	119.7	119.7
Degree of Saturation, %	98	100

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	89.96	Increased Cell Pressure, psi:	95.02	Cell Pressure Increment, psi:	5.06
Sample Pressure, psi:	79.97	Corresponding Sample Pressure, psi:	82.86	Sample Pressure Increment, psi:	2.89
				B Coefficient:	0.57

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
9/16	1	90.0	80.0	8.0	7.8	0.2	43	18.9	1.9E-07	19.5	1.013	1.9E-07
9/16	2	90.0	80.0	8.0	7.8	0.2	46	18.9	1.8E-07	19.5	1.013	1.8E-07
9/16	3	90.0	80.0	8.0	7.8	0.2	47	18.9	1.7E-07	19.5	1.013	1.8E-07
9/16	4	90.0	80.0	8.0	7.8	0.2	46	18.9	1.8E-07	19.5	1.013	1.8E-07

PERMEABILITY AT 20° C: 1.8 x 10^{-7} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	9/15/2020	Tested By:	DN
End Date:	9/17/2020	Checked By:	emm
Boring #:	---		
Sample #:	G-28-2L		
Depth:	2nd Lift		
Visual Description:	Moist, red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 15.2 %.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.00	2.00
Diameter, in	2.86	2.86
Area, in^2	6.42	6.42
Volume, in^3	12.8	12.8
Mass, g	447.3	453.7
Bulk Density, pcf	132.3	134.2
Moisture Content, %	15.2	16.8
Dry Density, pcf	114.9	114.9
Degree of Saturation, %	88	97

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.00	Increased Cell Pressure, psi:	95.00	Cell Pressure Increment, psi:	5.00
Sample Pressure, psi:	80.02	Corresponding Sample Pressure, psi:	83.69	Sample Pressure Increment, psi:	3.67
				B Coefficient:	0.73

*B value did not increase with increase in pressure. Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
9/16	1	90.0	80.0	8.0	7.8	0.2	75	19.8	1.0E-07	19.5	1.013	1.0E-07
9/16	2	90.0	80.0	8.0	7.8	0.2	73	19.8	1.1E-07	19.5	1.013	1.1E-07
9/16	3	90.0	80.0	8.0	7.8	0.2	80	19.8	9.7E-08	19.5	1.013	9.8E-08
9/16	4	90.0	80.0	8.0	7.8	0.2	78	19.8	9.9E-08	19.5	1.013	1.0E-07

PERMEABILITY AT 20° C: 1.0 x 10^{-7} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	10/6/2020	Tested By:	DN
End Date:	10/8/2020	Checked By:	emm
Boring #:	---		
Sample #:	G-55-2L		
Depth:	---		
Visual Description:	Moist, red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Tube	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 16.0 %.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.00	2.00
Diameter, in	2.86	2.86
Area, in^2	6.42	6.42
Volume, in^3	12.8	12.8
Mass, g	441.7	447.1
Bulk Density, pcf	130.7	132.3
Moisture Content, %	16.0	17.4
Dry Density, pcf	112.7	112.7
Degree of Saturation, %	87	95

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.05	Increased Cell Pressure, psi:	95.08	Cell Pressure Increment, psi:	5.03
Sample Pressure, psi:	80.01	Corresponding Sample Pressure, psi:	84.20	Sample Pressure Increment, psi:	4.19
				B Coefficient:	0.83

*B value did not increase with increase in pressure. Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
10/7	1	90.1	80.0	8.0	7.9	0.1	34	19.8	1.1E-07	20	1.000	1.1E-07
10/7	2	90.1	80.0	8.0	7.9	0.1	44	19.8	8.7E-08	20	1.000	8.7E-08
10/7	3	90.1	80.0	8.0	7.9	0.1	38	19.8	1.0E-07	20	1.000	1.0E-07
10/7	4	90.1	80.0	8.0	7.9	0.1	41	19.8	9.4E-08	20	1.000	9.4E-08

PERMEABILITY AT 20° C: 9.9 x 10^{-8} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	10/15/2020	Tested By:	jlw
End Date:	10/19/2020	Checked By:	emm
Boring #:	2nd Lift		
Sample #:	G-36-2L		
Depth:	6-12 In		
Visual Description:	Moist, red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 16.5%.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.35	2.35
Diameter, in	2.80	2.80
Area, in^2	6.16	6.16
Volume, in^3	14.5	14.5
Mass, g	507.7	509.7
Bulk Density, pcf	133.4	133.9
Moisture Content, %	16.5	16.9
Dry Density, pcf	114.5	114.5
Degree of Saturation, %	94	97

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.03	Increased Cell Pressure, psi:	94.98	Cell Pressure Increment, psi:	4.95
Sample Pressure, psi:	80.04	Corresponding Sample Pressure, psi:	83.35	Sample Pressure Increment, psi:	3.31
				B Coefficient:	0.67

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
10/16	1	90.0	80.0	8.0	7.9	0.1	52	16.9	9.1E-08	19.5	1.013	9.2E-08
10/16	2	90.0	80.0	8.0	7.9	0.1	54	16.9	8.7E-08	19.5	1.013	8.8E-08
10/16	3	90.0	80.0	8.0	7.9	0.1	58	16.9	8.1E-08	19.5	1.013	8.2E-08
10/16	4	90.0	80.0	8.0	7.9	0.1	55	16.9	8.6E-08	19.5	1.013	8.7E-08

PERMEABILITY AT 20° C: 8.7 x 10^{-8} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	10/15/2020	Tested By:	jlw
End Date:	10/19/2012	Checked By:	emm
Boring #:	2nd Lift		
Sample #:	G-42-2L		
Depth:	6-12 In		
Visual Description:	Moist, white clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 15.1%.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.12	2.12
Diameter, in	2.80	2.80
Area, in^2	6.16	6.16
Volume, in^3	13.1	13.1
Mass, g	460.2	465.3
Bulk Density, pcf	134.0	135.5
Moisture Content, %	15.1	16.4
Dry Density, pcf	116.4	116.4
Degree of Saturation, %	91	99

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.01	Increased Cell Pressure, psi:	95.01	Cell Pressure Increment, psi:	5.00
Sample Pressure, psi:	79.98	Corresponding Sample Pressure, psi:	83.68	Sample Pressure Increment, psi:	3.70
				B Coefficient:	0.74

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
10/16	1	90.0	80.0	8.0	7.9	0.1	31	18.7	1.4E-07	19.5	1.013	1.4E-07
10/16	2	90.0	80.0	8.0	7.9	0.1	32	18.7	1.3E-07	19.5	1.013	1.3E-07
10/16	3	90.0	80.0	8.0	7.9	0.1	32	18.7	1.3E-07	19.5	1.013	1.3E-07
10/16	4	90.0	80.0	8.0	7.9	0.1	35	18.7	1.2E-07	19.5	1.013	1.2E-07

PERMEABILITY AT 20° C: 1.3 x 10^{-7} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	10/15/2020	Tested By:	jlw
End Date:	10/21/2020	Checked By:	emm
Boring #:	2nd Lift		
Sample #:	G-51-2L		
Depth:	6-12 In		
Visual Description:	Moist, light red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 17.5%.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.37	2.37
Diameter, in	2.80	2.80
Area, in^2	6.16	6.16
Volume, in^3	14.6	14.6
Mass, g	513.0	514.8
Bulk Density, pcf	133.6	134.1
Moisture Content, %	17.5	18.0
Dry Density, pcf	113.7	113.7
Degree of Saturation, %	98	100

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.03	Increased Cell Pressure, psi:	95.00	Cell Pressure Increment, psi:	4.97
Sample Pressure, psi:	79.96	Corresponding Sample Pressure, psi:	83.76	Sample Pressure Increment, psi:	3.80
				B Coefficient:	0.76

*B value did not increase with increase in pressure. Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
10/20	1	90.0	80.0	8.0	7.9	0.1	38	16.7	1.3E-07	19.5	1.013	1.3E-07
10/20	2	90.0	80.0	8.0	7.9	0.1	37	16.7	1.3E-07	19.5	1.013	1.3E-07
10/20	3	90.0	80.0	8.0	7.9	0.1	38	16.7	1.3E-07	19.5	1.013	1.3E-07
10/20	4	90.0	80.0	8.0	7.9	0.1	39	16.7	1.2E-07	19.5	1.013	1.2E-07

PERMEABILITY AT 20° C: 1.3 x 10^{-7} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	10/19/2020	Tested By:	jlw
End Date:	10/22/2020	Checked By:	emm
Boring #:	2nd Lift		
Sample #:	G-57-2L		
Depth:	6-12 In		
Visual Description:	Moist, light red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 15.3%.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	1.90	1.88
Diameter, in	2.80	2.79
Area, in^2	6.16	6.11
Volume, in^3	11.7	11.5
Mass, g	406.5	410.6
Bulk Density, pcf	132.1	135.8
Moisture Content, %	15.3	16.5
Dry Density, pcf	114.5	116.6
Degree of Saturation, %	88	100

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.02	Increased Cell Pressure, psi:	95.00	Cell Pressure Increment, psi:	4.98
Sample Pressure, psi:	79.98	Corresponding Sample Pressure, psi:	84.02	Sample Pressure Increment, psi:	4.04
				B Coefficient:	0.81

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
10/21	1	90.0	80.0	8.0	7.9	0.1	34	21.1	1.1E-07	19.5	1.013	1.1E-07
10/21	2	90.0	80.0	8.0	7.9	0.1	38	21.1	1.0E-07	19.5	1.013	1.0E-07
10/21	3	90.0	80.0	8.0	7.9	0.1	37	21.1	1.0E-07	19.5	1.013	1.0E-07
10/21	4	90.0	80.0	8.0	7.9	0.1	35	21.1	1.1E-07	19.5	1.013	1.1E-07

PERMEABILITY AT 20° C: 1.1 x 10^{-7} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	10/19/2020	Tested By:	jlw
End Date:	10/22/2020	Checked By:	emm
Boring #:	2nd Lift		
Sample #:	G-61-2L		
Depth:	6-12 In		
Visual Description:	Moist, yellowish red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 14.1%.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.00	2.00
Diameter, in	2.80	2.80
Area, in^2	6.16	6.16
Volume, in^3	12.3	12.3
Mass, g	429.1	437.1
Bulk Density, pcf	132.5	134.9
Moisture Content, %	14.1	16.2
Dry Density, pcf	116.1	116.1
Degree of Saturation, %	84	97

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.00	Increased Cell Pressure, psi:	94.99	Cell Pressure Increment, psi:	4.99
Sample Pressure, psi:	79.96	Corresponding Sample Pressure, psi:	83.52	Sample Pressure Increment, psi:	3.56
				B Coefficient:	0.71

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
10/21	1	90.0	80.0	8.0	7.9	0.1	31	19.8	1.3E-07	19.5	1.013	1.3E-07
10/21	2	90.0	80.0	8.0	7.9	0.1	32	19.8	1.3E-07	19.5	1.013	1.3E-07
10/21	3	90.0	80.0	8.0	7.9	0.1	30	19.8	1.3E-07	19.5	1.013	1.4E-07
10/21	4	90.0	80.0	8.0	7.9	0.1	34	19.8	1.2E-07	19.5	1.013	1.2E-07

PERMEABILITY AT 20° C: 1.3 x 10^{-7} cm/sec (@ 10 psi effective stress)

THIRD LIFT

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	9/8/2020	Tested By:	dn
End Date:	9/10/2020	Checked By:	emm
Boring #:	12"-18"		
Sample #:	G-9-3L		
Depth:	3rd lift		
Visual Description:	Moist, red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 14.8 %.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	1.50	1.50
Diameter, in	2.80	2.80
Area, in^2	6.16	6.16
Volume, in^3	9.2	9.2
Mass, g	322.6	327.8
Bulk Density, pcf	132.8	134.9
Moisture Content, %	14.8	16.6
Dry Density, pcf	115.7	115.7
Degree of Saturation, %	87	98

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.04	Increased Cell Pressure, psi:	95.04	Cell Pressure Increment, psi:	5.00
Sample Pressure, psi:	80.06	Corresponding Sample Pressure, psi:	84.09	Sample Pressure Increment, psi:	4.03
				B Coefficient:	0.81

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
9/9	1	90.0	80.1	8.0	7.9	0.1	55	26.5	5.5E-08	20	1.000	5.5E-08
9/9	2	90.0	80.1	8.0	7.9	0.1	54	26.5	5.6E-08	20	1.000	5.6E-08
9/9	3	90.0	80.1	8.0	7.9	0.1	62	26.5	4.9E-08	20	1.000	4.9E-08
9/9	4	90.0	80.1	8.0	7.9	0.1	60	26.5	5.0E-08	20	1.000	5.0E-08

PERMEABILITY AT 20° C: 5.2 x 10^{-8} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	9/8/2020	Tested By:	dn
End Date:	9/10/2020	Checked By:	emm
Boring #:	12"-18"		
Sample #:	G-40-3L		
Depth:	3rd lift		
Visual Description:	Moist, red clay with sand		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 16.4 %.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.00	2.00
Diameter, in	2.86	2.86
Area, in^2	6.42	6.42
Volume, in^3	12.8	12.8
Mass, g	437.5	445.7
Bulk Density, pcf	129.4	131.9
Moisture Content, %	16.4	18.6
Dry Density, pcf	111.2	111.2
Degree of Saturation, %	86	97

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.02	Increased Cell Pressure, psi:	95.04	Cell Pressure Increment, psi:	5.02
Sample Pressure, psi:	80.04	Corresponding Sample Pressure, psi:	84.21	Sample Pressure Increment, psi:	4.17
				B Coefficient:	0.83

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
9/9	1	90.0	80.0	8.0	7.8	0.2	49	19.8	1.6E-07	19.5	1.013	1.6E-07
9/9	2	90.0	80.0	8.0	7.8	0.2	42	19.8	1.8E-07	19.5	1.013	1.9E-07
9/9	3	90.0	80.0	8.0	7.8	0.2	39	19.8	2.0E-07	19.5	1.013	2.0E-07
9/9	4	90.0	80.0	8.0	7.8	0.2	40	19.8	1.9E-07	19.5	1.013	2.0E-07

PERMEABILITY AT 20° C: 1.9 x 10^{-7} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	9/3/2020	Tested By:	dn
End Date:	9/10/2020	Checked By:	emm
Boring #:	12"-18"		
Sample #:	G-43-3L		
Depth:	3rd Lift		
Visual Description:	Moist, red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 16.1 %

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.20	2.20
Diameter, in	2.80	2.80
Area, in^2	6.16	6.16
Volume, in^3	13.5	13.5
Mass, g	468.3	476.1
Bulk Density, pcf	131.4	133.6
Moisture Content, %	16.1	18.1
Dry Density, pcf	113.2	113.2
Degree of Saturation, %	89	100

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.02	Increased Cell Pressure, psi:	95.02	Cell Pressure Increment, psi:	5.00
Sample Pressure, psi:	80.05	Corresponding Sample Pressure, psi:	84.32	Sample Pressure Increment, psi:	4.27
				B Coefficient:	0.85

*B value did not increase with increase in pressure. Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
9/4	1	90.0	80.1	9.0	8.9	0.1	30	20.3	1.3E-07	20.5	0.988	1.3E-07
9/4	2	90.0	80.1	9.0	8.9	0.1	40	20.3	9.8E-08	20.5	0.988	9.7E-08
9/4	3	90.0	80.1	9.0	8.9	0.1	31	20.3	1.3E-07	20.5	0.988	1.2E-07
9/4	4	90.0	80.1	9.0	8.9	0.1	34	20.3	1.2E-07	20.5	0.988	1.1E-07

PERMEABILITY AT 20° C: 1.2 x 10^{-7} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	9/8/2020	Tested By:	dn
End Date:	9/10/2020	Checked By:	emm
Boring #:	12"-18"		
Sample #:	G-45-3L		
Depth:	3rd lift		
Visual Description:	Moist, red clay with sand		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 18.2 %.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.00	2.00
Diameter, in	2.86	2.86
Area, in^2	6.42	6.42
Volume, in^3	12.8	12.8
Mass, g	442.6	445.7
Bulk Density, pcf	131.0	131.9
Moisture Content, %	18.2	19.0
Dry Density, pcf	110.8	110.8
Degree of Saturation, %	94	98

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.05	Increased Cell Pressure, psi:	95.09	Cell Pressure Increment, psi:	5.04
Sample Pressure, psi:	80.07	Corresponding Sample Pressure, psi:	84.44	Sample Pressure Increment, psi:	4.37
				B Coefficient:	0.87

*B value did not increase with increase in pressure. Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
9/9	1	90.1	80.1	8.0	7.5	0.5	46	19.8	4.3E-07	19.5	1.013	4.3E-07
9/9	2	90.1	80.1	8.0	7.5	0.5	45	19.8	4.4E-07	19.5	1.013	4.4E-07
9/9	3	90.1	80.1	8.0	7.5	0.5	45	19.8	4.4E-07	19.5	1.013	4.4E-07
9/9	4	90.1	80.1	8.0	7.5	0.5	45	19.8	4.4E-07	19.5	1.013	4.4E-07

PERMEABILITY AT 20° C: 4.4 x 10^{-7} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millerville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	9/8/2020	Tested By:	dn
End Date:	9/10/2020	Checked By:	emm
Boring #:	12:-18"		
Sample #:	G-52-3L		
Depth:	3rd lift		
Visual Description:	Moist, red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 19.2 %.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.30	2.30
Diameter, in	2.80	2.80
Area, in^2	6.16	6.16
Volume, in^3	14.2	14.2
Mass, g	488.4	490.9
Bulk Density, pcf	131.1	131.8
Moisture Content, %	19.2	19.8
Dry Density, pcf	110.0	110.0
Degree of Saturation, %	97	100

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.05	Increased Cell Pressure, psi:	95.05	Cell Pressure Increment, psi:	5.00
Sample Pressure, psi:	80.01	Corresponding Sample Pressure, psi:	83.24	Sample Pressure Increment, psi:	3.23
				B Coefficient:	0.65

*B value did not increase with increase in pressure. Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
9/9	1	90.1	80.0	8.0	7.5	0.5	63	17.3	3.8E-07	20	1.000	3.8E-07
9/9	2	90.1	80.0	8.0	7.5	0.5	53	17.3	4.5E-07	20	1.000	4.5E-07
9/9	3	90.1	80.0	8.0	7.5	0.5	57	17.3	4.2E-07	20	1.000	4.2E-07
9/9	4	90.1	80.0	8.0	7.5	0.5	58	17.3	4.1E-07	20	1.000	4.1E-07

PERMEABILITY AT 20° C: 4.1 x 10^{-7} cm/sec (@ 5 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	9/10/2020	Tested By:	DN
End Date:	9/14/2020	Checked By:	emm
Boring #:	12"-18"		
Sample #:	G-13-3L		
Depth:	3rd lift		
Visual Description:	Moist, light red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 15.3 %.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.10	2.10
Diameter, in	2.86	2.86
Area, in^2	6.42	6.42
Volume, in^3	13.5	13.5
Mass, g	485.3	486.1
Bulk Density, pcf	136.8	137.0
Moisture Content, %	15.3	15.5
Dry Density, pcf	118.6	118.6
Degree of Saturation, %	98	99

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.03	Increased Cell Pressure, psi:	95.07	Cell Pressure Increment, psi:	5.04
Sample Pressure, psi:	80.01	Corresponding Sample Pressure, psi:	83.85	Sample Pressure Increment, psi:	3.84
				B Coefficient:	0.76

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
9/11	1	90.0	80.0	8.0	7.9	0.1	70	18.9	5.8E-08	19.5	1.013	5.8E-08
9/11	2	90.0	80.0	8.0	7.9	0.1	76	18.9	5.3E-08	19.5	1.013	5.4E-08
9/11	3	90.0	80.0	8.0	7.9	0.1	65	18.9	6.2E-08	19.5	1.013	6.3E-08
9/11	4	90.0	80.0	8.0	7.9	0.1	68	18.9	5.9E-08	19.5	1.013	6.0E-08

PERMEABILITY AT 20° C: 5.9 x 10^{-8} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	9/10/2020	Tested By:	DN
End Date:	9/14/2020	Checked By:	emm
Boring #:	12"-18"		
Sample #:	G-26-3L		
Depth:	3rd Lift		
Visual Description:	Moist, red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 16.7 %

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.40	2.40
Diameter, in	2.86	2.86
Area, in^2	6.42	6.42
Volume, in^3	15.4	15.4
Mass, g	523.9	534.8
Bulk Density, pcf	129.2	131.9
Moisture Content, %	16.7	19.2
Dry Density, pcf	110.7	110.7
Degree of Saturation, %	86	99

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.02	Increased Cell Pressure, psi:	95.06	Cell Pressure Increment, psi:	5.04
Sample Pressure, psi:	80.07	Corresponding Sample Pressure, psi:	83.78	Sample Pressure Increment, psi:	3.71
				B Coefficient:	0.74

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
9/11	1	90.0	80.1	8.0	7.9	0.1	39	16.5	1.2E-07	19.5	1.013	1.2E-07
9/11	2	90.0	80.1	8.0	7.9	0.1	42	16.5	1.1E-07	19.5	1.013	1.1E-07
9/11	3	90.0	80.1	8.0	7.9	0.1	47	16.5	9.8E-08	19.5	1.013	9.9E-08
9/11	4	90.0	80.1	8.0	7.9	0.1	46	16.5	1.0E-07	19.5	1.013	1.0E-07

PERMEABILITY AT 20° C: 1.1 x 10^{-7} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	9/10/2020	Tested By:	DN/JLW
End Date:	9/14/2020	Checked By:	emm
Boring #:	12"-18"		
Sample #:	G-29-3L		
Depth:	3rd Lift		
Visual Description:	Moist, light red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type: Intact

Permeant Fluid: De-aired Distilled water

Orientation: Vertical

Cell #: ---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 15.2 %.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.35	2.35
Diameter, in	2.86	2.86
Area, in^2	6.42	6.42
Volume, in^3	15.1	15.1
Mass, g	518.1	528.1
Bulk Density, pcf	130.5	133.0
Moisture Content, %	15.2	17.5
Dry Density, pcf	113.2	113.2
Degree of Saturation, %	84	96

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.02	Increased Cell Pressure, psi:	95.04	Cell Pressure Increment, psi:	5.02
Sample Pressure, psi:	80.03	Corresponding Sample Pressure, psi:	83.71	Sample Pressure Increment, psi:	3.68
				B Coefficient:	0.73

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
9/10	1	90.0	80.0	8.0	7.9	0.1	62	16.9	7.3E-08	21.6	0.962	7.0E-08
9/10	2	90.0	80.0	8.0	7.9	0.1	55	16.9	8.2E-08	21.6	0.962	7.9E-08
9/10	3	90.0	80.0	8.0	7.9	0.1	54	16.9	8.4E-08	21.6	0.962	8.1E-08
9/10	4	90.0	80.0	8.0	7.9	0.1	63	16.9	7.2E-08	21.6	0.962	6.9E-08

PERMEABILITY AT 20° C: 7.5 x 10^{-8} cm/sec (@ 10 psi effective stress)

Client:	SCS Eningeers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	9/15/2020	Tested By:	jlw
End Date:	9/17/2020	Checked By:	emm
Boring #:	---		
Sample #:	G-1-3L		
Depth:	3rd Lift		
Visual Description:	Moist, yellowish red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 16.7%.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.40	2.40
Diameter, in	2.86	2.86
Area, in^2	6.42	6.42
Volume, in^3	15.4	15.4
Mass, g	517.7	525.2
Bulk Density, pcf	127.7	129.5
Moisture Content, %	17.7	19.4
Dry Density, pcf	108.4	108.4
Degree of Saturation, %	86	95

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	89.99	Increased Cell Pressure, psi:	94.98	Cell Pressure Increment, psi:	4.99
Sample Pressure, psi:	80.04	Corresponding Sample Pressure, psi:	82.98	Sample Pressure Increment, psi:	2.94
				B Coefficient:	0.59

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
9/16	1	90.0	80.0	8.0	7.9	0.1	47	16.5	9.8E-08	19.5	1.013	9.9E-08
9/16	2	90.0	80.0	8.0	7.9	0.1	48	16.5	9.6E-08	19.5	1.013	9.7E-08
9/16	3	90.0	80.0	8.0	7.9	0.1	49	16.5	9.4E-08	19.5	1.013	9.5E-08
9/16	4	90.0	80.0	8.0	7.9	0.1	52	16.5	8.9E-08	19.5	1.013	9.0E-08

PERMEABILITY AT 20° C: 9.6 x 10^{-8} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	9/15/2020	Tested By:	jlw
End Date:	9/17/2020	Checked By:	emm
Boring #:	12-18 In		
Sample #:	G-22-3L		
Depth:	3rd Lift		
Visual Description:	Moist, yellowish red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 15.4 %.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.60	2.56
Diameter, in	2.85	2.81
Area, in^2	6.38	6.20
Volume, in^3	16.6	15.9
Mass, g	549.6	556.4
Bulk Density, pcf	126.0	133.2
Moisture Content, %	15.4	16.8
Dry Density, pcf	109.2	114.1
Degree of Saturation, %	76	95

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.00	Increased Cell Pressure, psi:	95.03	Cell Pressure Increment, psi:	5.03
Sample Pressure, psi:	79.96	Corresponding Sample Pressure, psi:	84.02	Sample Pressure Increment, psi:	4.06
				B Coefficient:	0.81

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
9/16	1	90.0	80.0	8.0	7.8	0.2	38	15.5	2.7E-07	19.5	1.013	2.7E-07
9/16	2	90.0	80.0	8.0	7.8	0.2	34	15.5	3.0E-07	19.5	1.013	3.1E-07
9/16	3	90.0	80.0	8.0	7.8	0.2	34	15.5	3.0E-07	19.5	1.013	3.1E-07
9/16	4	90.0	80.0	8.0	7.8	0.2	35	15.5	2.9E-07	19.5	1.013	3.0E-07

PERMEABILITY AT 20° C: 3.0 x 10^{-7} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	9/15/2020	Tested By:	jlw
End Date:	9/17/2020	Checked By:	emm
Boring #:	12-18 In		
Sample #:	G-34-3L		
Depth:	3rd Lift		
Visual Description:	Moist, yellowish red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 18.0%.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	1.80	1.80
Diameter, in	2.86	2.86
Area, in^2	6.42	6.42
Volume, in^3	11.6	11.6
Mass, g	405.3	405.8
Bulk Density, pcf	133.2	133.4
Moisture Content, %	18.0	18.1
Dry Density, pcf	112.9	112.9
Degree of Saturation, %	99	99

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	89.97	Increased Cell Pressure, psi:	95.01	Cell Pressure Increment, psi:	5.04
Sample Pressure, psi:	79.99	Corresponding Sample Pressure, psi:	83.87	Sample Pressure Increment, psi:	3.88
				B Coefficient:	0.77

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
9/16	1	90.0	80.0	8.0	7.9	0.1	39	22.0	8.9E-08	19.5	1.013	9.0E-08
9/16	2	90.0	80.0	8.0	7.9	0.1	41	22.0	8.4E-08	19.5	1.013	8.5E-08
9/16	3	90.0	80.0	8.0	7.9	0.1	36	22.0	9.6E-08	19.5	1.013	9.7E-08
9/16	4	90.0	80.0	8.0	7.9	0.1	38	22.0	9.1E-08	19.5	1.013	9.2E-08

PERMEABILITY AT 20° C: 9.1 x 10^{-8} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	10/15/2020	Tested By:	jlw
End Date:	10/19/2020	Checked By:	emm
Boring #:	3rd Lift		
Sample #:	G-54-3L		
Depth:	---		
Visual Description:	Moist, yellowish red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 15.4%.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.00	2.00
Diameter, in	2.80	2.80
Area, in^2	6.16	6.16
Volume, in^3	12.3	12.3
Mass, g	440.2	442.1
Bulk Density, pcf	135.9	136.5
Moisture Content, %	15.4	15.9
Dry Density, pcf	117.7	117.7
Degree of Saturation, %	96	100

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.02	Increased Cell Pressure, psi:	94.99	Cell Pressure Increment, psi:	4.97
Sample Pressure, psi:	80.03	Corresponding Sample Pressure, psi:	83.93	Sample Pressure Increment, psi:	3.90
				B Coefficient:	0.78

*B value did not increase with increase in pressure. Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
10/16	1	90.0	80.0	8.0	7.9	0.1	56	19.8	7.2E-08	19.5	1.013	7.3E-08
10/16	2	90.0	80.0	8.0	7.9	0.1	54	19.8	7.4E-08	19.5	1.013	7.5E-08
10/16	3	90.0	80.0	8.0	7.9	0.1	54	19.8	7.4E-08	19.5	1.013	7.5E-08
10/16	4	90.0	80.0	8.0	7.9	0.1	57	19.8	7.0E-08	19.5	1.013	7.1E-08

PERMEABILITY AT 20° C: 7.4 x 10^{-8} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	10/19/2020	Tested By:	jlw
End Date:	10/21/2020	Checked By:	emm
Boring #:	3rd Lift		
Sample #:	G-58-3L		
Depth:	12-18 In		
Visual Description:	Moist, yellowish red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 16.6%.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.25	2.25
Diameter, in	2.80	2.80
Area, in^2	6.16	6.16
Volume, in^3	13.9	13.9
Mass, g	489.6	490.3
Bulk Density, pcf	134.4	134.5
Moisture Content, %	16.6	16.8
Dry Density, pcf	115.2	115.2
Degree of Saturation, %	97	98

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.02	Increased Cell Pressure, psi:	95.01	Cell Pressure Increment, psi:	4.99
Sample Pressure, psi:	79.99	Corresponding Sample Pressure, psi:	84.19	Sample Pressure Increment, psi:	4.20
				B Coefficient:	0.84

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
10/20	1	90.0	80.0	8.0	7.9	0.1	32	17.6	1.4E-07	19.5	1.013	1.4E-07
10/20	2	90.0	80.0	8.0	7.9	0.1	34	17.6	1.3E-07	19.5	1.013	1.3E-07
10/20	3	90.0	80.0	8.0	7.9	0.1	34	17.6	1.3E-07	19.5	1.013	1.3E-07
10/20	4	90.0	80.0	8.0	7.9	0.1	36	17.6	1.3E-07	19.5	1.013	1.3E-07

PERMEABILITY AT 20° C: 1.4 x 10^{-7} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	10/19/2020	Tested By:	jlw
End Date:	10/22/2020	Checked By:	emm
Boring #:	3rd Lift		
Sample #:	G-62-3L		
Depth:	12-18 In		
Visual Description:	Moist, yellowish red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 15.2%.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.12	2.12
Diameter, in	2.80	2.80
Area, in^2	6.16	6.16
Volume, in^3	13.1	13.1
Mass, g	471.1	471.8
Bulk Density, pcf	137.2	137.4
Moisture Content, %	15.2	15.4
Dry Density, pcf	119.1	119.1
Degree of Saturation, %	99	100

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.04	Increased Cell Pressure, psi:	95.05	Cell Pressure Increment, psi:	5.01
Sample Pressure, psi:	79.98	Corresponding Sample Pressure, psi:	83.66	Sample Pressure Increment, psi:	3.68
				B Coefficient:	0.73

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
10/21	1	90.0	80.0	8.0	7.9	0.1	34	18.7	1.3E-07	19.5	1.013	1.3E-07
10/21	2	90.0	80.0	8.0	7.9	0.1	41	18.7	1.0E-07	19.5	1.013	1.1E-07
10/21	3	90.0	80.0	8.0	7.9	0.1	37	18.7	1.1E-07	19.5	1.013	1.2E-07
10/21	4	90.0	80.0	8.0	7.9	0.1	39	18.7	1.1E-07	19.5	1.013	1.1E-07

PERMEABILITY AT 20° C: 1.2 x 10^{-7} cm/sec (@ 10 psi effective stress)

Client:	SCS Engineers		
Project Name:	Millersville LF Subcell 9.2		
Project Location:	---		
GTX #:	311991		
Start Date:	10/19/2020	Tested By:	jlw
End Date:	10/22/2020	Checked By:	emm
Boring #:	3rd Lift		
Sample #:	G-64-3L		
Depth:	12-18 In		
Visual Description:	Moist, yellowish red clay		

Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter by ASTM D5084

Constant Volume

Sample Type:	Intact	Permeant Fluid:	De-aired Distilled water
Orientation:	Vertical	Cell #:	---

Sample Preparation: Extruded from tube, cut, trimmed and placed into permeameter at as-received density and moisture content. Trimmings moisture content = 14.8%.

Assumed Specific Gravity: 2.70

Parameter	Initial	Final
Height, in	2.30	2.30
Diameter, in	2.80	2.80
Area, in^2	6.16	6.16
Volume, in^3	14.2	14.2
Mass, g	498.3	505.4
Bulk Density, pcf	133.7	135.7
Moisture Content, %	14.8	16.5
Dry Density, pcf	116.5	116.5
Degree of Saturation, %	89	99

B COEFFICIENT DETERMINATION

Cell Pressure, psi:	90.02	Increased Cell Pressure, psi:	94.97	Cell Pressure Increment, psi:	4.95
Sample Pressure, psi:	80.02	Corresponding Sample Pressure, psi:	83.31	Sample Pressure Increment, psi:	3.29
				B Coefficient:	0.66

*B value did not increase with increase in pressure.
Final degree of saturation >95%.

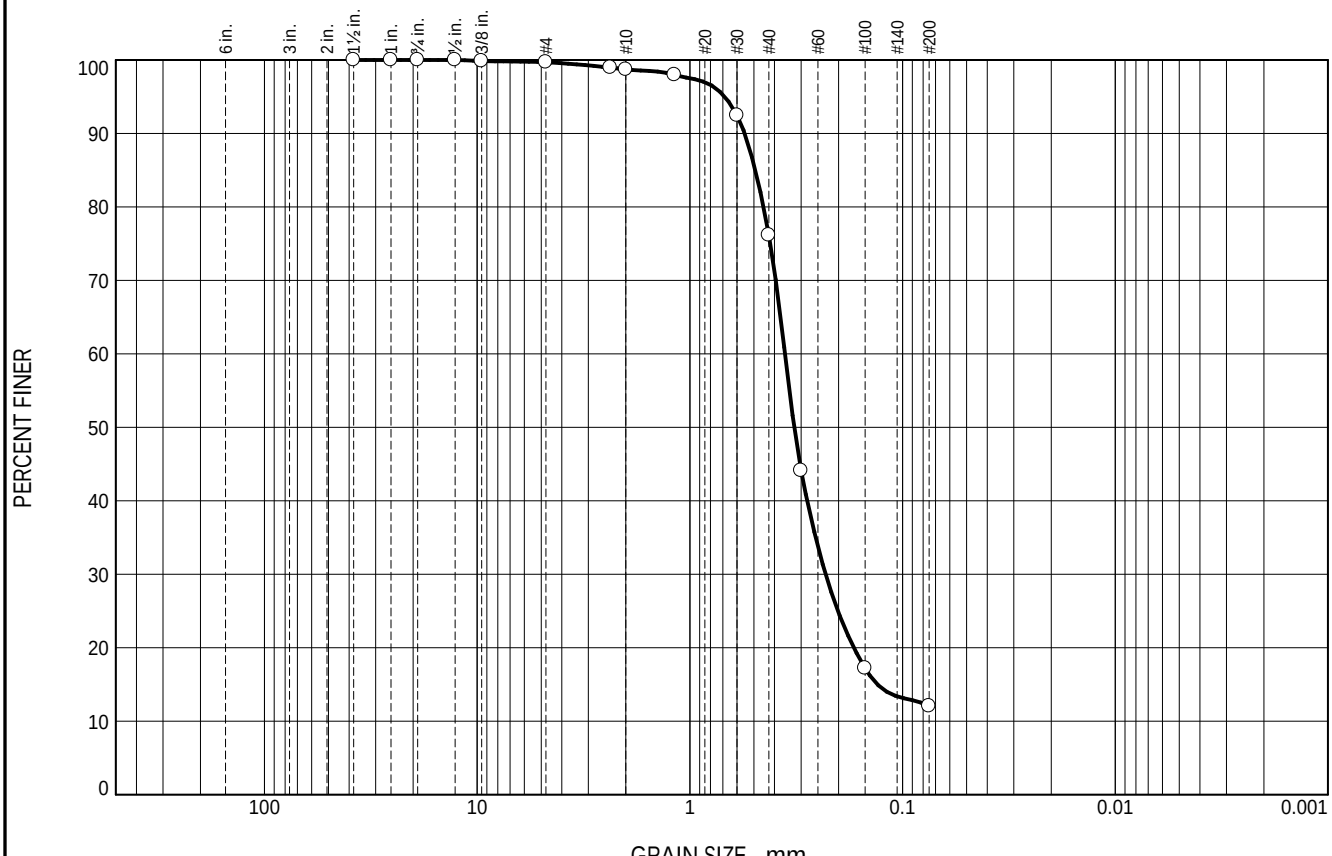
FLOW DATA

Date	Trial #	Pressure, psi Cell	Pressure, psi Sample	Manometer Readings Z_1	Manometer Readings Z_2	Manometer Readings Z_1-Z_2	Elapsed Time, sec	Gradient	Permeability K, cm/sec	Temp, °C	R_t	Permeability K @ 20 °C, cm/sec
10/21	1	90.0	80.0	8.0	7.9	0.1	57	17.3	8.1E-08	19.5	1.013	8.2E-08
10/21	2	90.0	80.0	8.0	7.9	0.1	61	17.3	7.6E-08	19.5	1.013	7.7E-08
10/21	3	90.0	80.0	8.0	7.9	0.1	65	17.3	7.1E-08	19.5	1.013	7.2E-08
10/21	4	90.0	80.0	8.0	7.9	0.1	68	17.3	6.8E-08	19.5	1.013	6.9E-08

PERMEABILITY AT 20° C: 7.5 x 10^{-8} cm/sec (@ 10 psi effective stress)

Appendix D.5
Subcell 9.3 - Geosyntec

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.3	1.0	22.5	64.1	12.1	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1-1/2"	100.0		
1"	100.0		
3/4"	100.0		
1/2"	100.0		
3/8"	99.9		
#4	99.7		
#8	99.0		
#10	98.7		
#16	98.0		
#30	92.4		
#40	76.2		
#50	44.1		
#100	17.2		
#200	12.1		

* (no specification provided)

Soil Description

Orange brown silty sand

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{90}= 0.5527 D_{85}= 0.4922 D_{60}= 0.3573
D_{50}= 0.3232 D_{30}= 0.2300 D_{15}= 0.1313
D_{10}= C_u= C_c=

Classification

USCS= SM AASHTO= A-2-4(0)

Remarks

Moisture content: 11.6%

Location: Bulk Sand (received 10/10/22)
Sample Number: 2

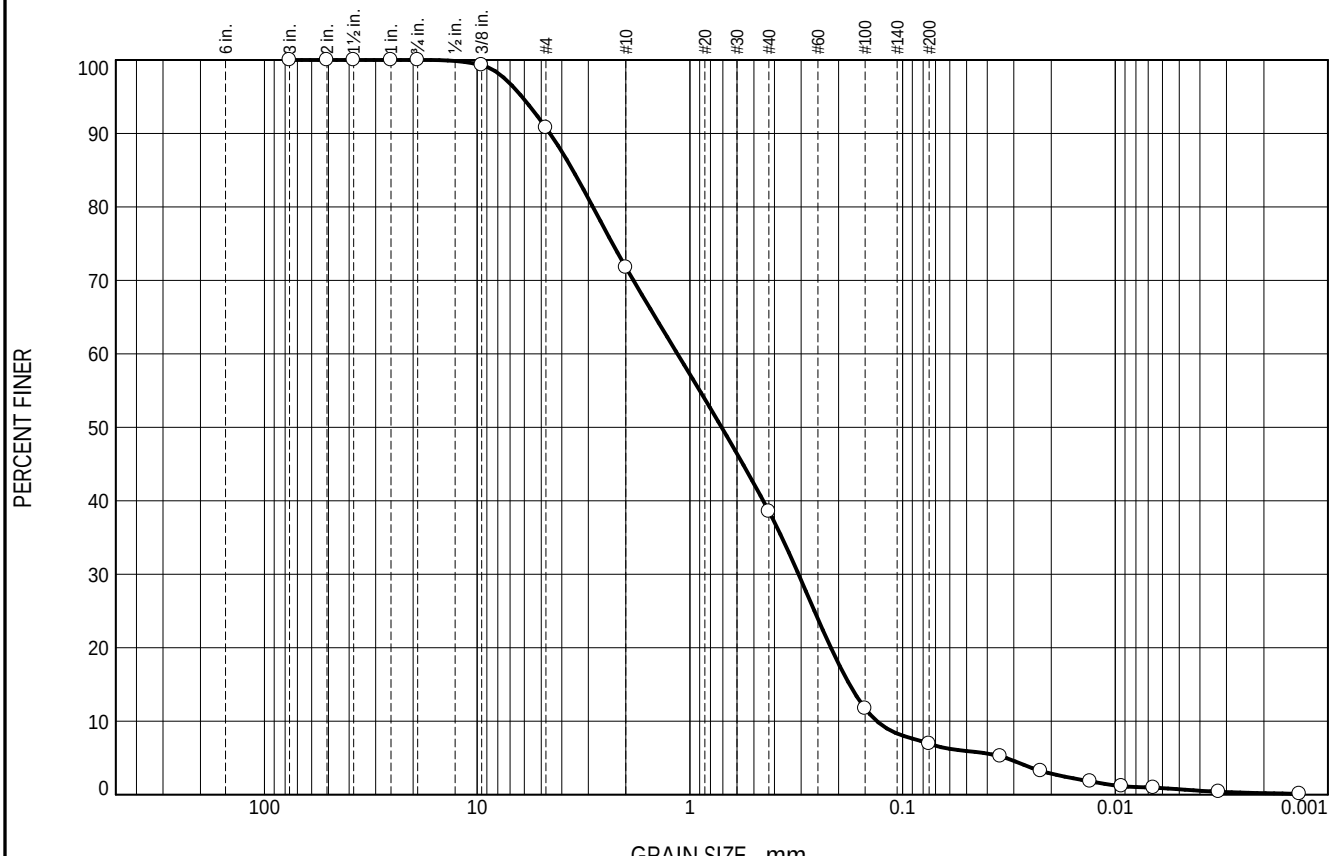
Date: 10/12/22

HILLIS-CARNES
ENGINEERING ASSOCIATES, INC.
Annapolis Junction, MD

Client: Geosyntec Consultants
Project: Millersville Subcell 9.3

Project No: 17253S Figure

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	9.2	19.0	33.2	31.7	6.2	0.7

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
3/4"	100.0		
3/8"	99.3		
#4	90.8		
#10	71.8		
#40	38.6		
#100	11.7		
#200	6.9		
0.0347 mm.	5.2		
0.0224 mm.	3.2		
0.0131 mm.	1.8		
0.0093 mm.	1.2		
0.0066 mm.	1.0		
0.0033 mm.	0.4		
0.0014 mm.	0.1		

* (no specification provided)

Soil Description

Brown with yellow poorly graded sand with silt

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{90}= 4.5460 D_{85}= 3.5530 D_{60}= 1.1433
D_{50}= 0.7090 D_{30}= 0.3086 D_{15}= 0.1775
D_{10}= 0.1320 C_u= 8.66 C_c= 0.63

Classification

USCS= SP-SM AASHTO= A-1-b

Remarks

Moisture content: 8.9%

Location: B5. 5.0'-7.0' (received 10/10/22)
Sample Number: 5

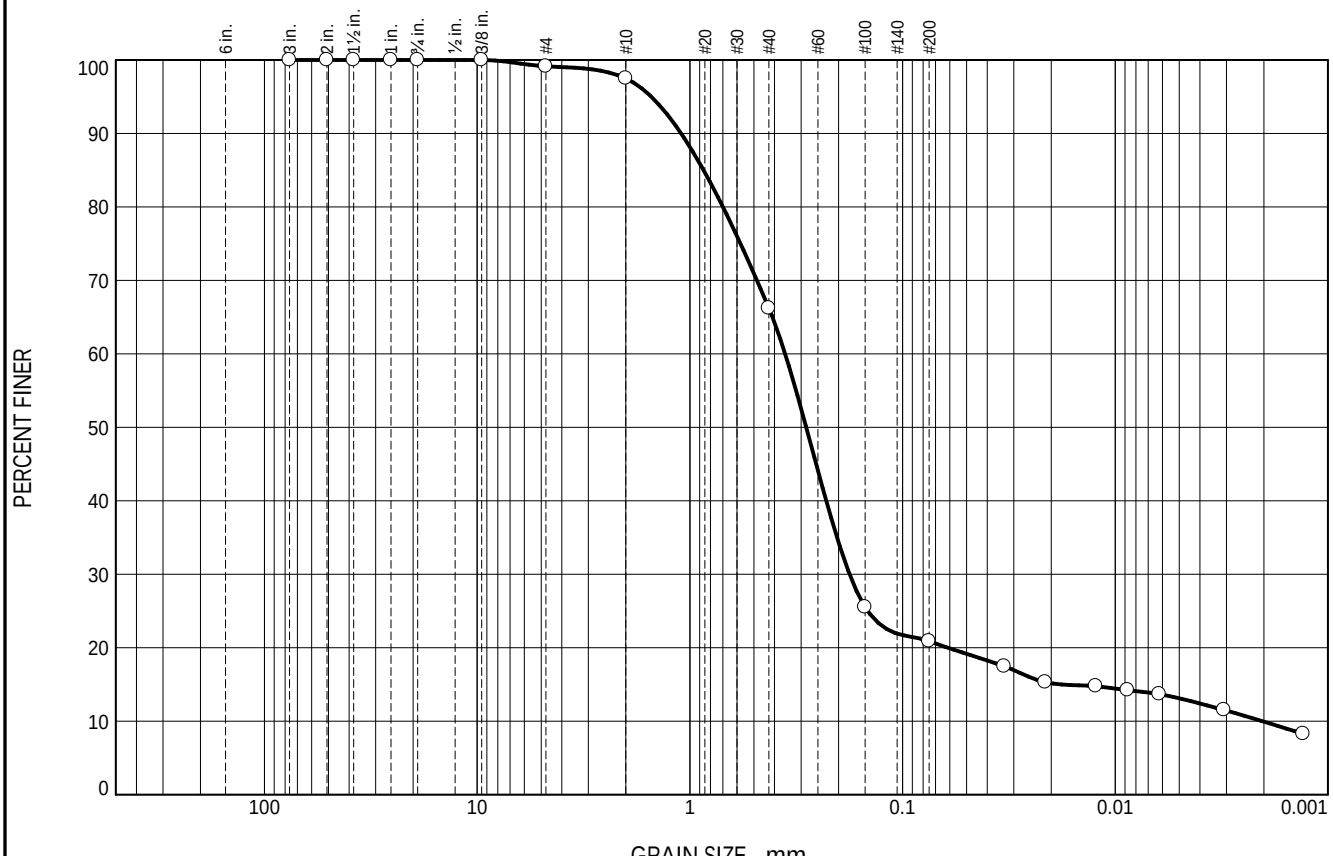
Date: 10/14/22

HILLIS-CARNES
ENGINEERING ASSOCIATES, INC.
Annapolis Junction, MD

Client: Geosyntec Consultants
Project: Millersville Subcell 9.3

Project No: 17253S Figure

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.9	1.6	31.3	45.3	7.8	13.1

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
3/4"	100.0		
3/8"	100.0		
#4	99.1		
#10	97.5		
#40	66.2		
#100	25.5		
#200	20.9		
0.0332 mm.	17.5		
0.0213 mm.	15.3		
0.0123 mm.	14.8		
0.0087 mm.	14.2		
0.0062 mm.	13.7		
0.0031 mm.	11.5		
0.0013 mm.	8.3		

* (no specification provided)

Soil Description

Yellow brown clayey sand

Atterberg Limits

PL= 18 LL= 27 PI= 9

Coefficients

D_{90}= 1.0990 D_{85}= 0.8619 D_{60}= 0.3565
D_{50}= 0.2839 D_{30}= 0.1775 D_{15}= 0.0180
D_{10}= 0.0020 C_u= 175.10 C_c= 43.41

Classification

USCS= SC AASHTO= A-2-4(0)

Remarks

Moisture content: 13.3%

Location: B3. 30.0'-32.0' (received 10/10/22)
Sample Number: 6

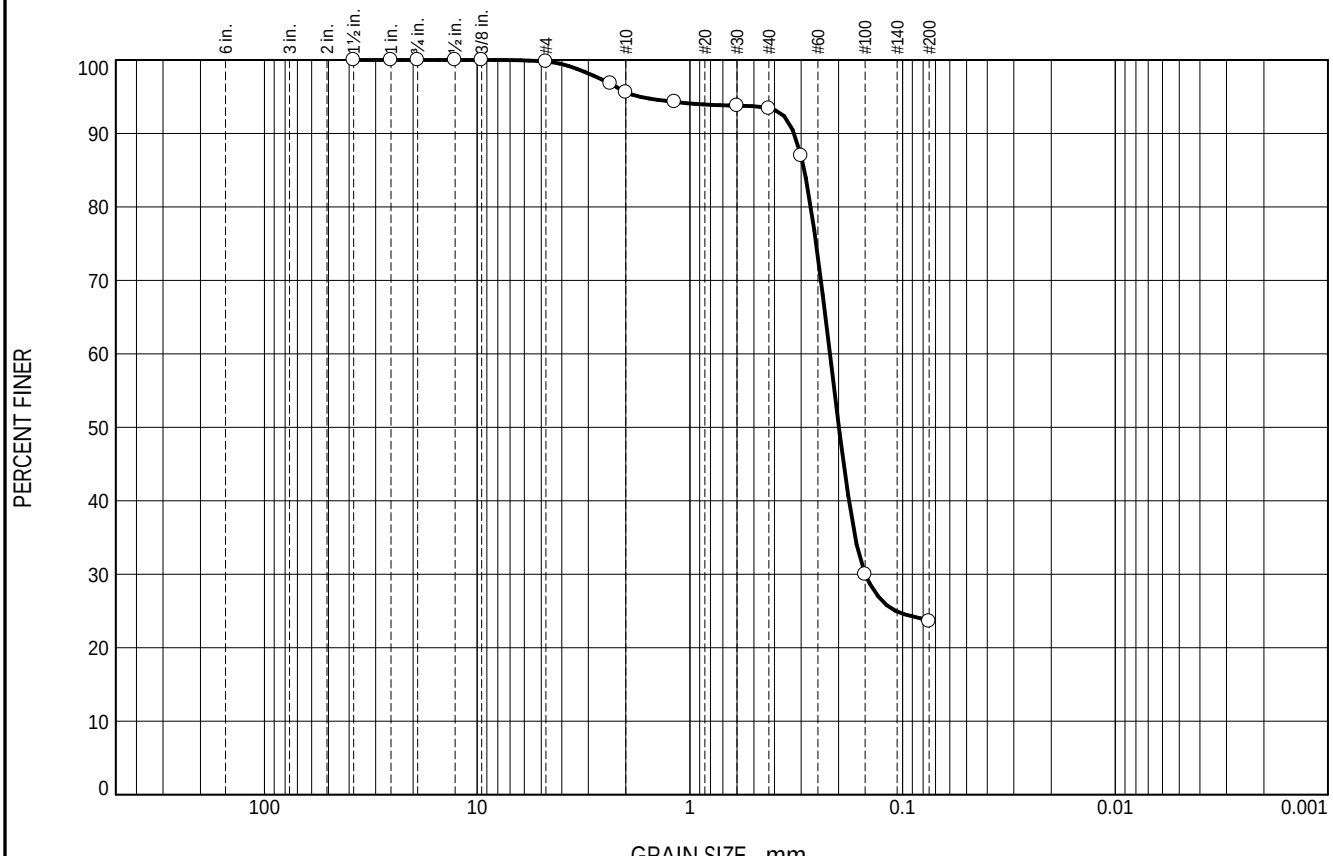
Date: 10/14/22

HILLIS-CARNES
ENGINEERING ASSOCIATES, INC.
Annapolis Junction, MD

Client: Geosyntec Consultants
Project: Millersville Subcell 9.3

Project No: 17253S Figure

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.2	4.2	2.2	69.8	23.6	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1-1/2"	100.0		
1"	100.0		
3/4"	100.0		
1/2"	100.0		
3/8"	100.0		
#4	99.8		
#8	96.8		
#10	95.6		
#16	94.3		
#30	93.8		
#40	93.4		
#50	87.0		
#100	30.0		
#200	23.6		

* (no specification provided)

Soil Description

Gray brown silty sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.3233 D_{85}= 0.2897 D_{60}= 0.2195
D_{50}= 0.1992 D_{30}= 0.1501 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Moisture content: 9.3%

Location: TP-1 (received 11/01/22)
Sample Number: 7

Date: 11/04/22

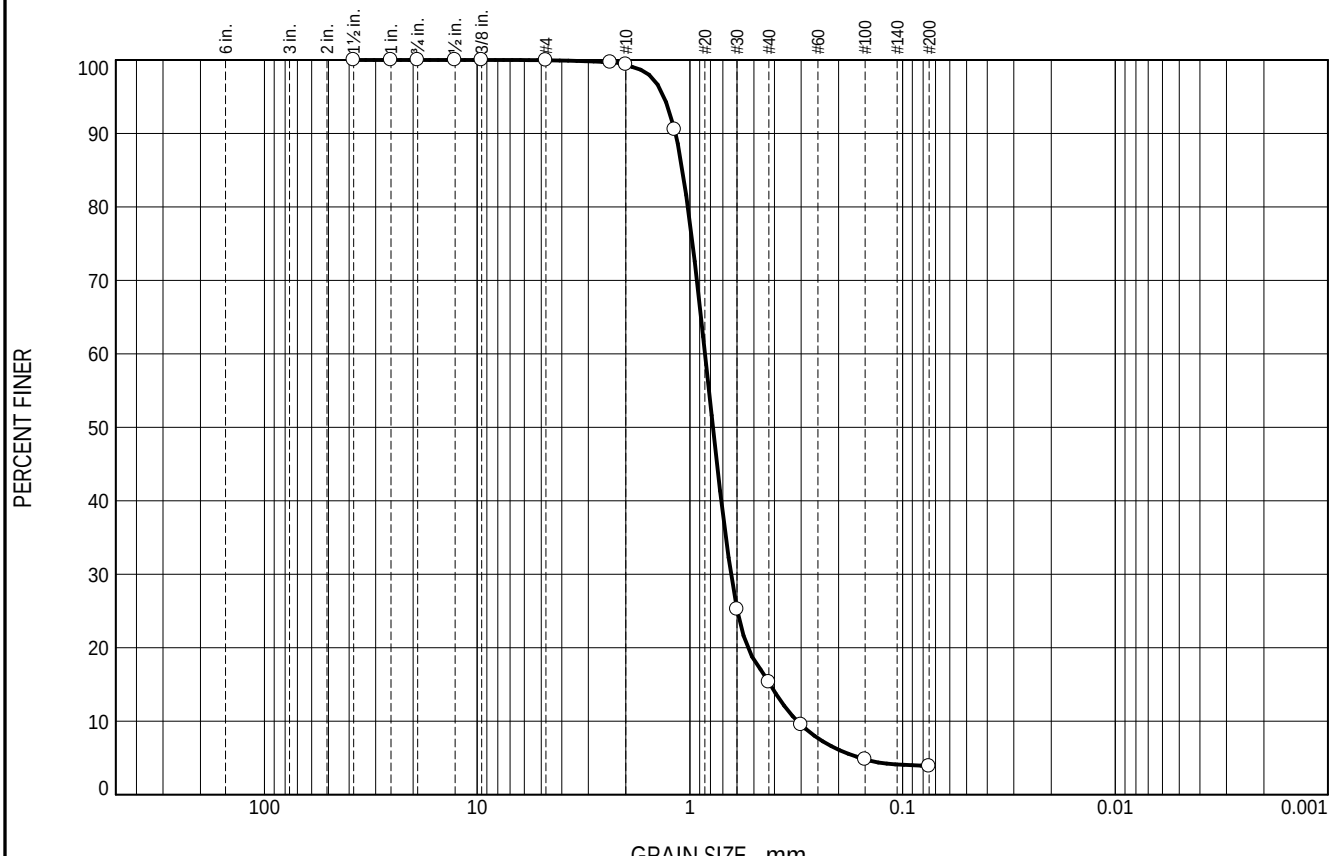
HILLIS-CARNES
ENGINEERING ASSOCIATES, INC.
Annapolis Junction, MD

Client: Geosyntec Consultants
Project: Millersville Subcell 9.3

Project No: 17253S

Figure

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.6	84.1	11.4	3.9	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1-1/2"	100.0		
1"	100.0		
3/4"	100.0		
1/2"	100.0		
3/8"	100.0		
#4	100.0		
#8	99.7		
#10	99.4		
#16	90.5		
#30	25.2		
#40	15.3		
#50	9.5		
#100	4.8		
#200	3.9		

* (no specification provided)

Soil Description

Orange brown poorly graded sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 1.1681 D_{85}= 1.0832 D_{60}= 0.8489
D_{50}= 0.7790 D_{30}= 0.6405 D_{15}= 0.4189
D_{10}= 0.3123 C_u= 2.72 C_c= 1.55

Classification

USCS= SP AASHTO=

Remarks

Moisture content: 1.7%

Location: TP-2 (received 11/03/22)
Sample Number: 8

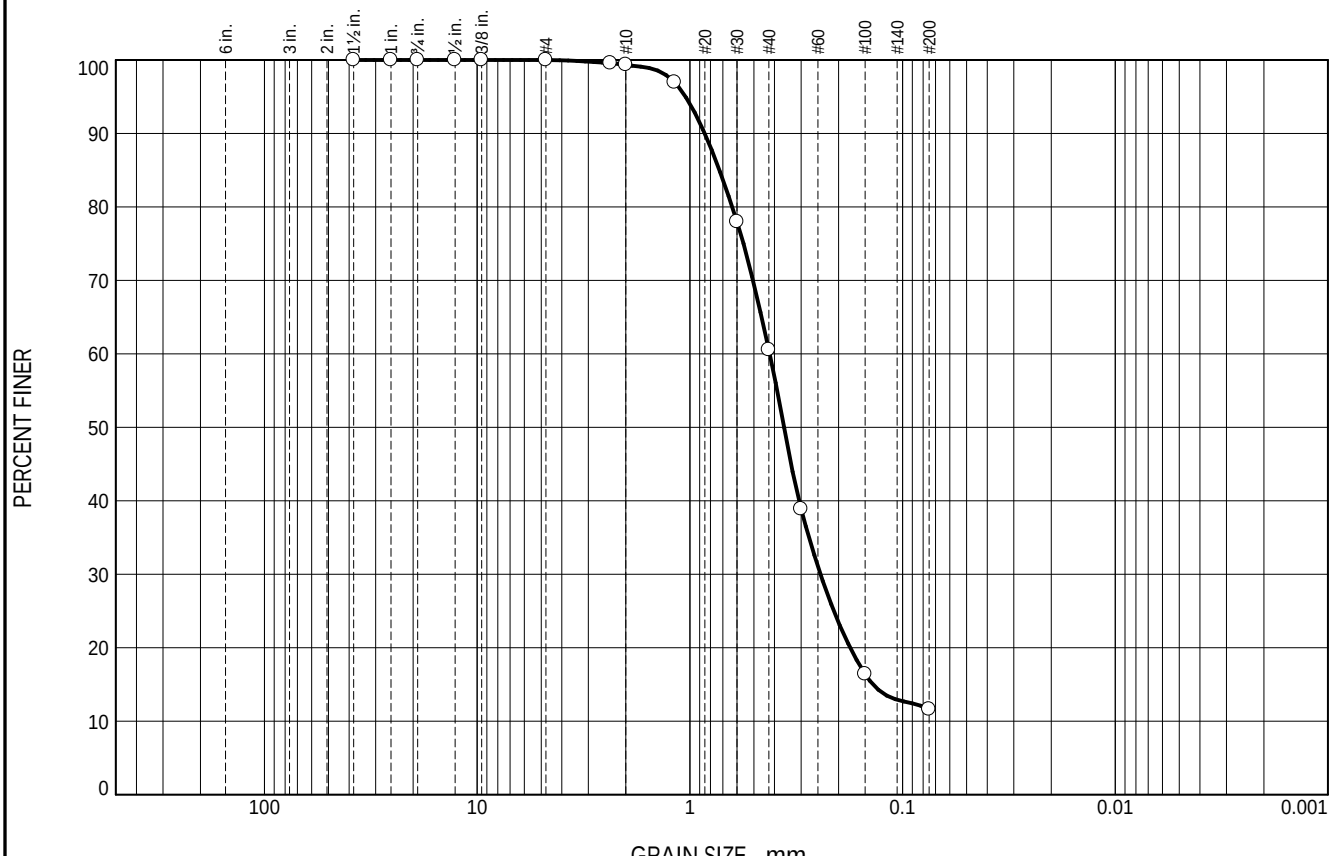
Date: 11/04/22

HILLIS-CARNES
ENGINEERING ASSOCIATES, INC.
Annapolis Junction, MD

Client: Geosyntec Consultants
Project: Millersville Subcell 9.3

Project No: 17253S Figure

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.7	38.8	48.9	11.6	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1-1/2"	100.0		
1"	100.0		
3/4"	100.0		
1/2"	100.0		
3/8"	100.0		
#4	100.0		
#8	99.6		
#10	99.3		
#16	97.0		
#30	78.0		
#40	60.5		
#50	38.9		
#100	16.4		
#200	11.6		

* (no specification provided)

Soil Description

Orange brown poorly graded sand with silt

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.8514 D_{85}= 0.7261 D_{60}= 0.4211
D_{50}= 0.3607 D_{30}= 0.2432 D_{15}= 0.1378
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Moisture content: 3.9%

Location: TP-3 (received 11/02/22)
Sample Number: 9

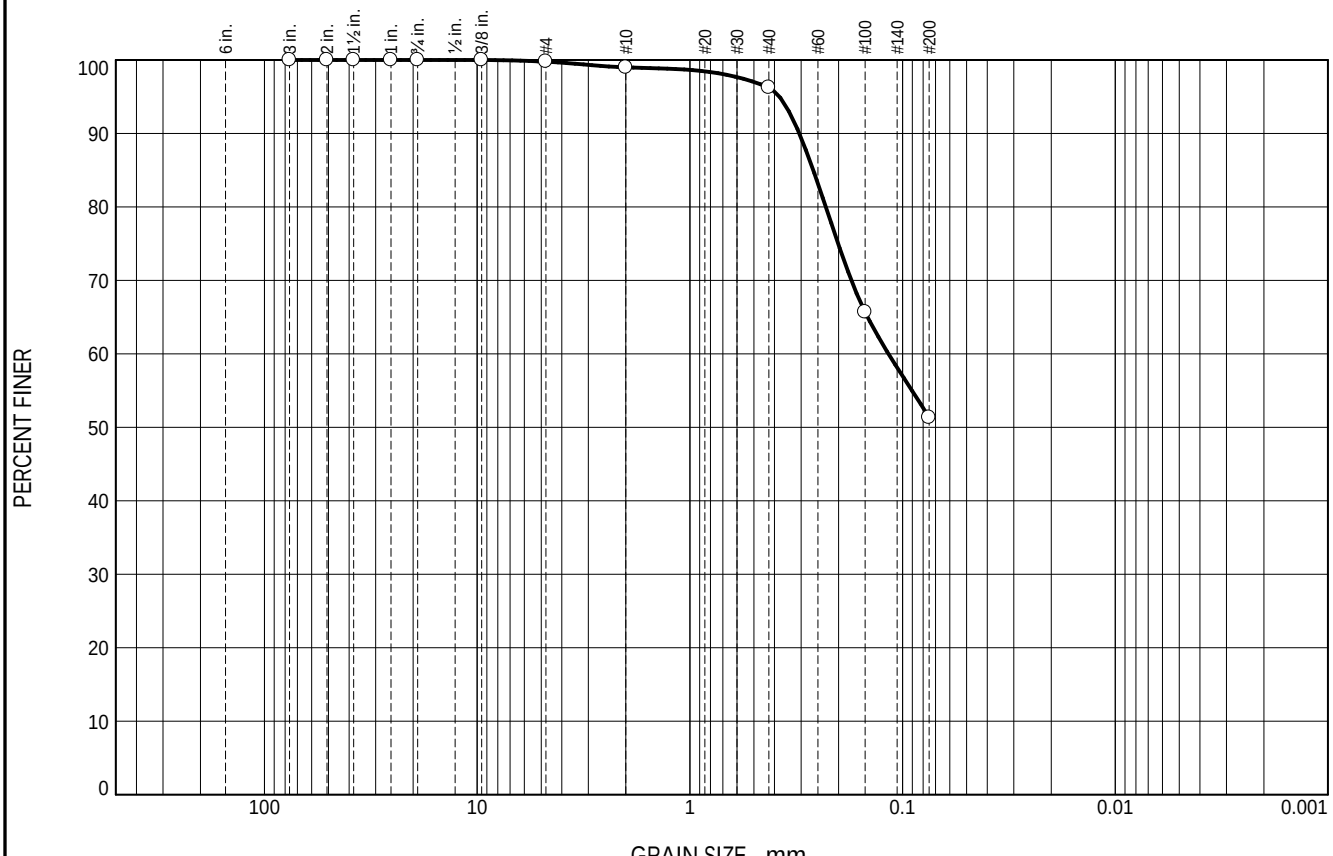
Date: 11/04/22

HILLIS-CARNES
ENGINEERING ASSOCIATES, INC.
Annapolis Junction, MD

Client: Geosyntec Consultants
Project: Millersville Subcell 9.3

Project No: 17253S Figure

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.2	0.8	2.8	44.9	51.3	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
3/4"	100.0		
3/8"	100.0		
#4	99.8		
#10	99.0		
#40	96.2		
#100	65.7		
#200	51.3		

* (no specification provided)

Soil Description

Tan with orange & gray sandy silty clay

Atterberg Limits

PL= 18 LL= 22 PI= 4

Coefficients

D_{90}= 0.3060 D_{85}= 0.2630 D_{60}= 0.1165
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL-ML AASHTO= A-4(0)

Remarks

Moisture content: 11.2%

Location: TP-4 (received 11/01/22)
Sample Number: 10

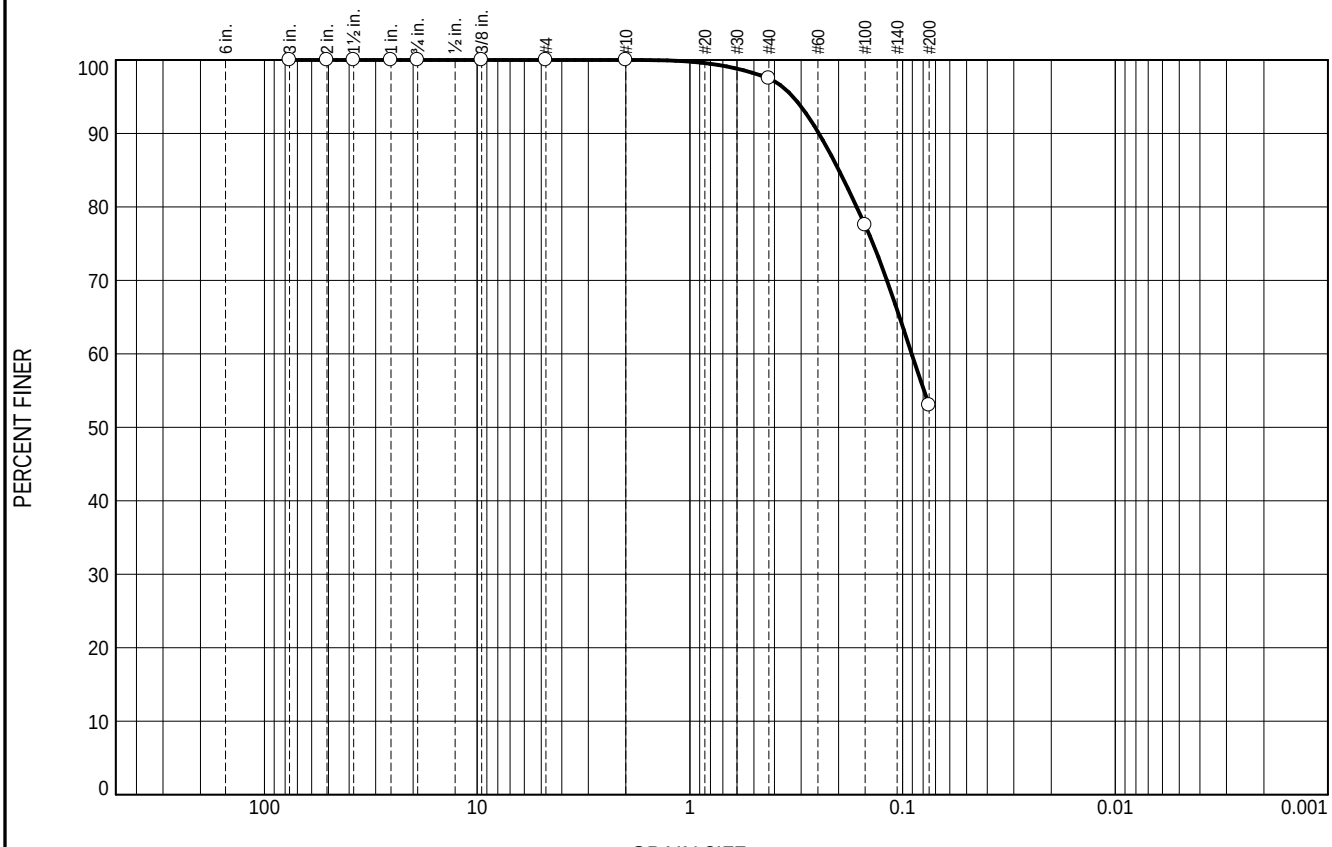
Date: 11/04/22

HILLIS-CARNES
ENGINEERING ASSOCIATES, INC.
Annapolis Junction, MD

Client: Geosyntec Consultants
Project: Millersville Subcell 9.3

Project No: 17253S Figure

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	2.5	44.5	53.0	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
3/4"	100.0		
3/8"	100.0		
#4	100.0		
#10	100.0		
#40	97.5		
#100	77.5		
#200	53.0		

* (no specification provided)

Soil Description

Yellow brown sandy silty clay

Atterberg Limits

PL= 21 LL= 28 PI= 7

Coefficients

D_{90}= 0.2474 D_{85}= 0.1994 D_{60}= 0.0906
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL-ML AASHTO= A-4(1)

Remarks

Moisture content: 16.4%

Location: B-7 (received 11/02/22)
Sample Number: 11 Depth: 9.0'-11.0'

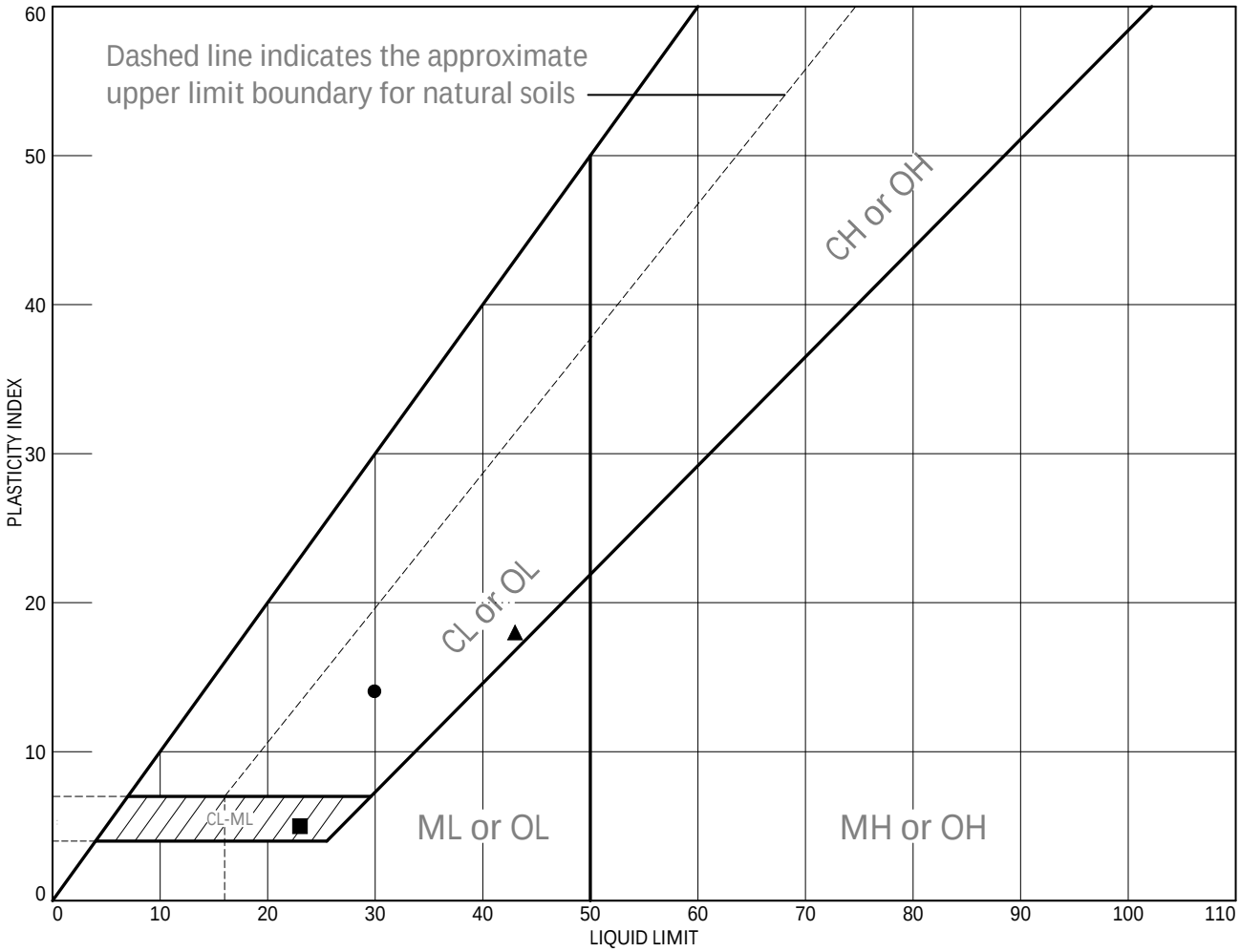
Date: 11/04/22

HILLIS-CARNES
ENGINEERING ASSOCIATES, INC.
Annapolis Junction, MD

Client: Geosyntec Consultants
Project: Millersville Subcell 9.3

Project No: 17253S Figure

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Red brown with dark gray & white lean clay	30	16	14			
■	Light gray with light red silty, clayey, sand	23	18	5			
▲	Red browm sandy clay	43	25	18			

Project No. 17253S Client: Geosyntec Consultants

Project: Millersville Subcell 9.3

●Location: Bulk Clay (received 10/10/22) Sample Number: 1

■Location: B6. 30.0'-32.0' (received 10/10/22) Sample Number: 3

▲Location: B1. 19.0'-21.0' (received 10/10/22) Sample Number: 4

Remarks:

●Moisture content: 16.4%

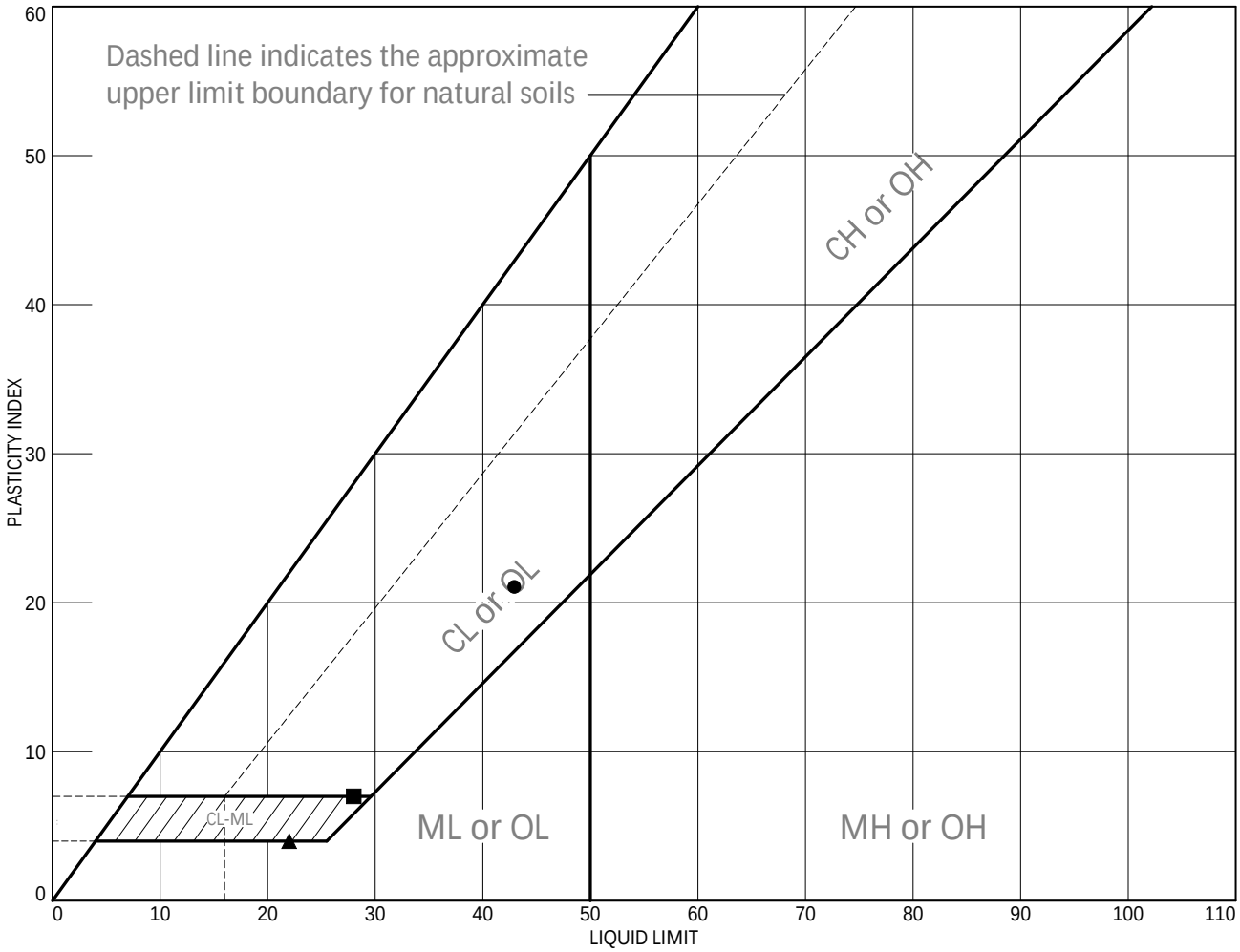
■Moisture content: 21.4%

▲Moisture content: 25.2%

HILLIS-CARNES ENGINEERING ASSOCIATES, INC.
Annapolis Junction, MD

Figure

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Red brown with gray & purple lean clay	43	22	21			
■	Yellow brown sandy silty clay	28	21	7	97.5	53.0	CL-ML
▲	Tan with orange & gray sandy silty clay	22	18	4	96.2	51.3	CL-ML

Project No. 17253S Client: Geosyntec Consultants

Project: Millersville Subcell 9.3

●Location: B-4 (received 11/02/22) Depth: 30.0'-32.0' Sample Number: 12

■Location: B-7 (received 11/02/22) Depth: 9.0'-11.0' Sample Number: 11

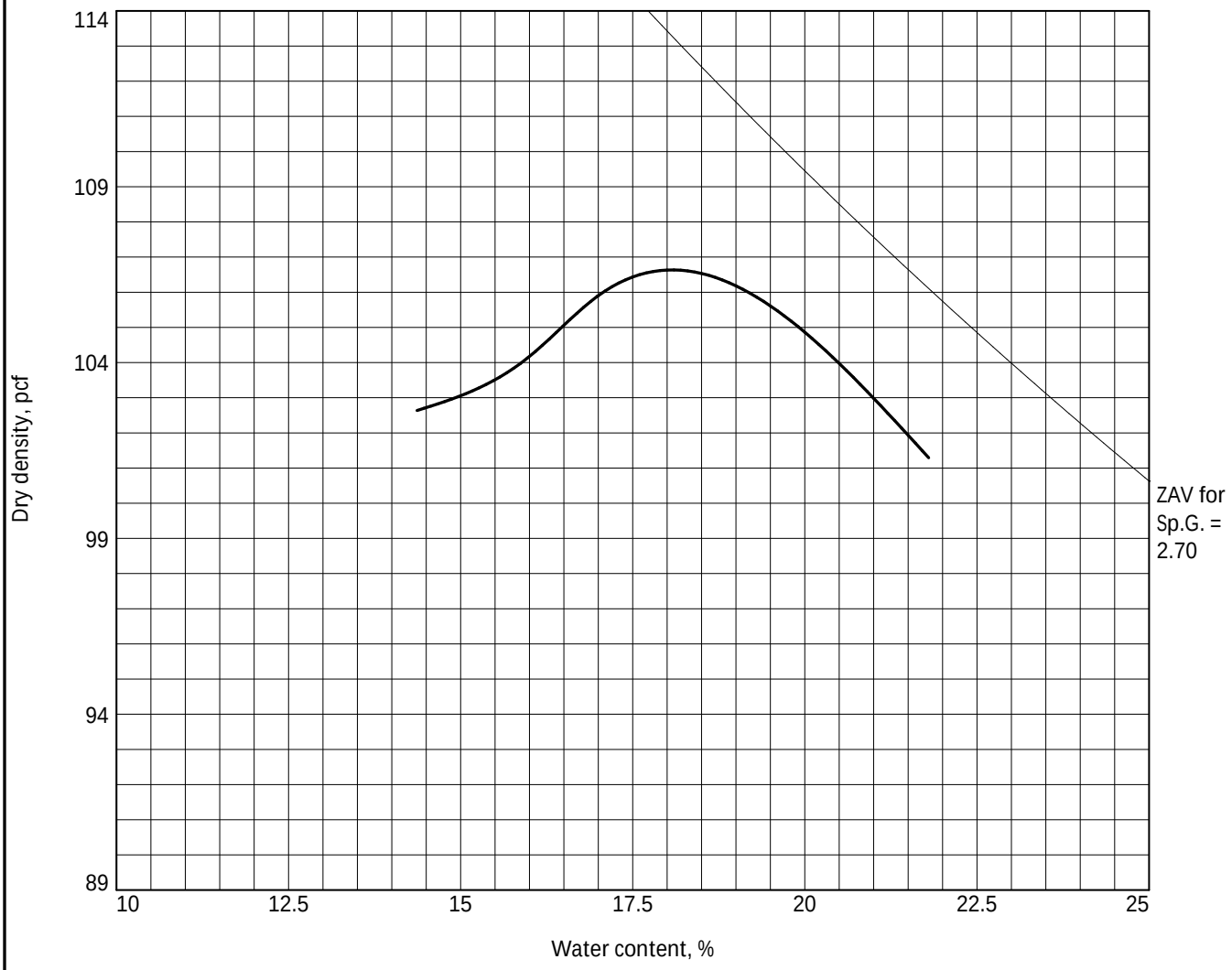
▲Location: TP-4 (received 11/01/22) Depth: Sample Number: 10

Remarks:

HILLIS-CARNES ENGINEERING ASSOCIATES, INC.
Annapolis Junction, MD

Figure

LABORATORY COMPACTION TEST REPORT



Test specification: ASTM D 698-12 Method B Standard

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
			16.4	2.70	30	14		

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 106.6 pcf Optimum moisture = 18.1 %	Red brown with dark gray & white lean clay

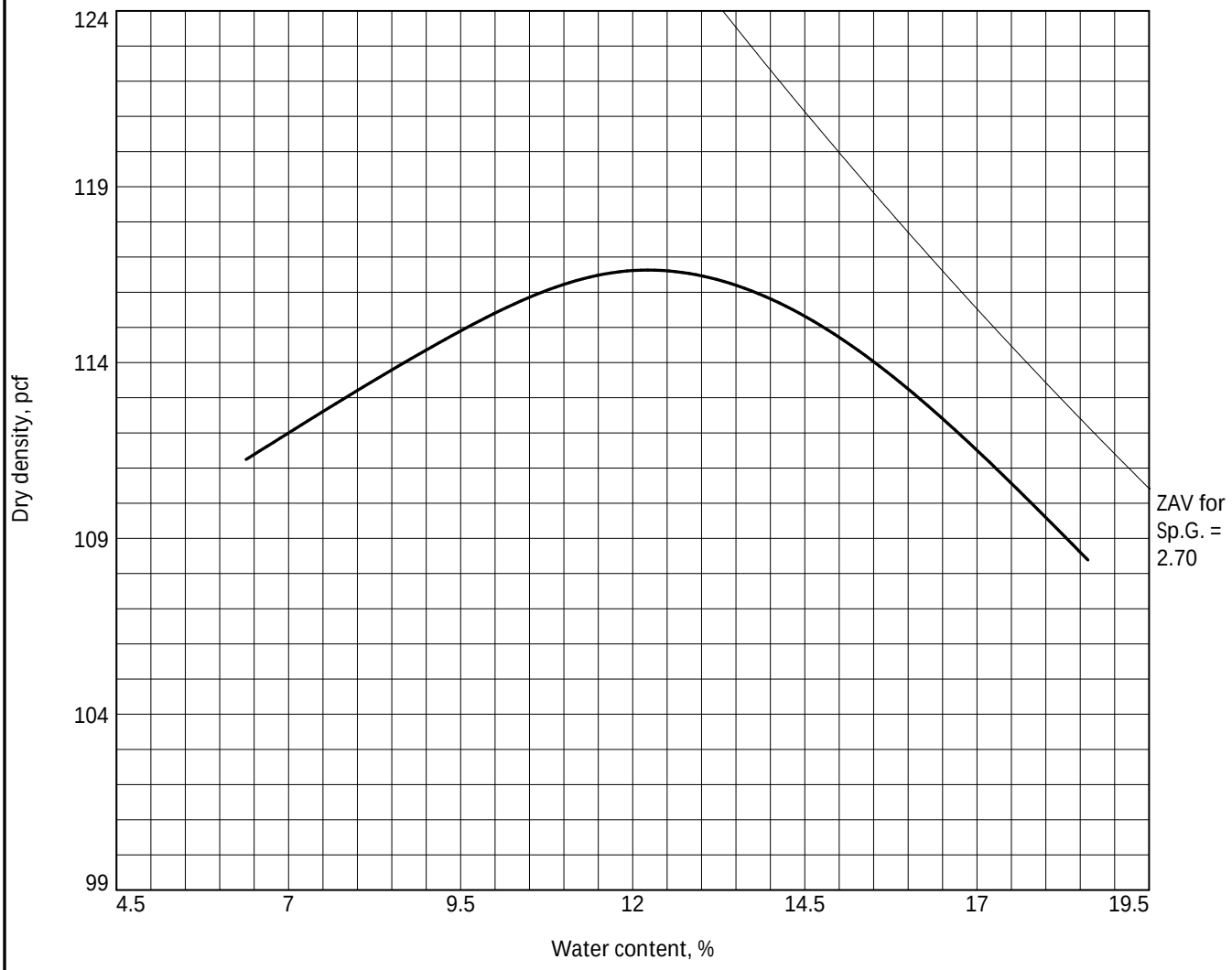
Project No. 17253S Client: Geosyntec Consultants
Project: Millersville Subcell 9.3
Date: 10/12/22
○ Location: Bulk Clay (received 10/10/22) Sample Number: 1

Remarks:

HILLIS-CARNES ENGINEERING ASSOCIATES, INC.
Annapolis Junction, MD

Figure

LABORATORY COMPACTION TEST REPORT



Test specification: ASTM D 698-12 Method B Standard

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
	CL-ML	A-4(0)	11.2	2.70	22	4	0.0	51.3

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 116.6 pcf Optimum moisture = 12.2 %	Tan with orange & gray sandy silty clay

Project No. 17253S Client: Geosyntec Consultants

Project: Millersville Subcell 9.3

Date: 11/07/22

○ Location: TP-4 (received 11/01/22) Sample Number: 10

Remarks:

HILLIS-CARNES ENGINEERING ASSOCIATES, INC.
Annapolis Junction, MD

Figure

Permeability of Granular Soil (Constant Head) ASTM D2434

Job Name:	Millersville Subcell 9.3
Job #:	17253S
Sample ID:	Bulk Sand Sample
Date:	10/18/2022

Weight Soil g.	1052.9
Length in.	5.26
Head cm.	6.3
Time sec.	1200
Discharge ml.	504
Wet Soil	628.4
Dry Soil	570.2
Tare	74.9

Permeability cm/sec:	**1.1E-02**
Moisture Content:	**11.8%**
Dry Density pcf:	**96.5**

FLEXIBLE WALL PERMEAMETER

PROJECT:	Millersville SC 9.3	BEFORE TEST		BEFORE TESTING		AFTER TESTING	
JOB NO.	17253S	AVE. LENGTH	3.42	CAN		CAN	
SAMPLE	Bulk Clay	AVE. DIAMETER	2.835	WET+CAN	578.5	WET+CAN	578.5
CHAMBER	1	AREA	40.7	DRY+CAN	493.1	DRY+CAN	485.1
		AFTER TEST		CAN WT.	75	CAN WT.	75
		AVE. LENGTH	3.418	% MOIST.	20.4%	% MOIST.	22.8%
		AVE. DIAMETER	2.858	SAM. WT.	696.9	SAM. WT.	710.5
CTRL-D FOR		AREA	41.39	DRY DEN.	102.1 PCF	DRY DEN.	100.5
DATE AND TIME							

DATE	TIME	LOWER BURETTE READING	UPPER BURETTE READING	CELL PRESS.	LOWER CAP PRESS.	UPPER CAP PRESS.	AVE PRESS. DIF.	GRAD i	FLOW IN	FLOW OUT	AVE FLOW	PERMEABILITY
10/17	10:52 AM	1.5	31.7	50.0	41.0	40.0	1.4	11.57				
10/17	11:56 AM	2.8	30.5	50.0	41.0	40.0	1.4	11.29	1.3	1.2	1.3	7.08E-07
10/17	12:59 PM	4.0	29.3	50.0	41.0	40.0	1.4	11.01	1.2	1.2	1.2	7.08E-07
10/17	02:11 PM	5.3	28.0	50.0	41.0	40.0	1.3	10.71	1.3	1.3	1.3	6.90E-07
10/17	03:19 PM	6.5	26.8	50.0	41.0	40.0	1.3	10.43	1.2	1.2	1.2	6.92E-07

Average Permeability **6.7E-07** cm/sec Corrected to 20 degrees C

Tested per ASTM D5084 Method A
Permeant: Deaired Tap Water
Average Temp. during test: 21.9 degrees C
Compaction: 95.8%

FLEXIBLE WALL PERMEAMETER

PROJECT:	Millersville SC 9.3	BEFORE TEST		BEFORE TESTING		AFTER TESTING	
JOB NO.	17253S	AVE. LENGTH	3.41	CAN		CAN	
SAMPLE	TP-4 (rec. 11/01/22)	AVE. DIAMETER	2.837	WET+CAN	599	WET+CAN	438.7
CHAMBER	2A	AREA	40.8	DRY+CAN	534.2	DRY+CAN	386.9
		AFTER TEST		CAN WT.	73.1	CAN WT.	74.4
		AVE. LENGTH	3.392	% MOIST.	14.1%	% MOIST.	16.6%
		AVE. DIAMETER	2.861	SAM. WT.	719.8	SAM. WT.	735
CTRL-D FOR		AREA	41.48	DRY DEN.	111.5 PCF	DRY DEN.	110.0
DATE AND TIME							

DATE	TIME	LOWER BURETTE READING	UPPER BURETTE READING	CELL PRESS.	LOWER CAP PRESS.	UPPER CAP PRESS.	AVE PRESS. DIF.	GRAD i	FLOW IN	FLOW OUT	AVE FLOW	PERMEABILITY
11/10	07:15 AM	0.2	28.4	50.0	41.0	40.0	1.4	11.38				
11/10	08:07 AM	1.4	27.1	50.0	41.0	40.0	1.4	11.09	1.2	1.3	1.3	8.86E-07
11/10	09:20 AM	3.1	25.4	50.0	41.0	40.0	1.3	10.70	1.7	1.7	1.7	8.90E-07
11/10	10:40 AM	4.9	23.7	50.0	41.0	40.0	1.3	10.29	1.8	1.7	1.8	8.68E-07
11/10	11:59 AM	6.6	22.0	50.0	41.0	40.0	1.2	9.90	1.7	1.7	1.7	8.88E-07

Average Permeability **8.6E-07** cm/sec Corrected to 20 degrees C

Tested per ASTM D5084 Method A
Permeant: Deaired Tap Water
Average Temp. during test: 21.2 degrees C
Compaction: 95.6%

Appendix E
Cell 9 Liner Performance Demonstration For Compliance with 40 CFR § 258.40 (Geosyntec 1994)

Prepared for

Anne Arundel County
Department of Public Works
2662 Riva Road
Annapolis, Maryland 21401

MILLERSVILLE SANITARY LANDFILL

CELL 9 LINER SYSTEM PERFORMANCE DEMONSTRATION FOR COMPLIANCE WITH 40 CFR § 258.40

ANNE ARUNDEL COUNTY, MARYLAND

Prepared by

GEOSYNTEC CONSULTANTS
5775 Peachtree Dunwoody Road
Atlanta, Georgia 30342

Project Number GE3337

March 1994

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1. INTRODUCTION

1.1 Terms of Reference

This report was prepared for the Anne Arundel County (AAC) Department of Public Works by GeoSyntec Consultants (GeoSyntec). The report was prepared by Ms. Molly Davis and Mr. Kirk Kessler, P.G., and it was reviewed by Mr. Michael Houlihan, P.E., and Dr. Rudolph Bonaparte, P.E, all of GeoSyntec.

1.2 Purpose of Report

The purpose of this report is to present the results of an evaluation of the leachate containment capabilities of the double-liner system design for Cell 9 of the Millersville Sanitary Landfill (MLF). The report demonstrates that the MLF design meets the performance standard established by the U.S. Environmental Protection Agency (USEPA) in Title 40 Code of Federal Regulations Part 258 (40 CFR § 258.40) (i.e., Subtitle D). The report is intended to provide the information necessary for the Maryland Department of the Environment (MDE) and the USEPA to make a determination of the adequacy of the liner system under the provisions of 40 CFR § 258.40(e). These provisions must be used in "unapproved" states when landfill liner system designs other than the prescriptive design of 40 CFR § 258.40(a)(2) are used. The liner system design for Cell 9 of MLF is different than, although in many ways superior to, the prescriptive liner system design in 40 CFR § 258.40(a)(2). As Maryland is presently an unapproved state, the provisions of 40 CFR § 258.40(e) must be met. These provisions are given below.

"*(e) If EPA does not promulgate a rule establishing the procedures and requirements for State compliance with RCRA section 4005(c)(1)(B) by October 9, 1993, owners and operators in unapproved States may utilize a design meeting the performance standard in § 258.40(a)(1) if the following conditions are met:*

(1) The State determines the design meets the performance standard in § 258.40(a)(1);

(2) The State petitions EPA to review its determination; and

(3) EPA approves the State determination or does not disapprove the determination within 30 days."

The information presented in the remainder of this report is intended to allow MDE to make a determination for Cell 9 under 40 CFR § 258.40(e)(1) cited above that the liner system design for Cell 9 satisfies Subtitle D requirements.

1.3 Previous MLF Double-Liner Performance Evaluation

GeoSyntec previously made a demonstration that the MLF double-liner system design satisfies 40 CFR § 258.40(e)(1). The previous demonstration was made in a May 1993 report from GeoSyntec to AAC entitled "*Millersville Sanitary Landfill - Evaluation of the Performance of the Double-Liner System Design for Cells 8 and 9 and Comparison to the USEPA Performance Standard (40 CFR § 258.40(a)(1))*" [GeoSyntec, 1993]. The report presented the results of calculations of leachate migration rates through the MLF double-liner system under assumed operating conditions intended to provide an "upper bound" estimate of leachate migration potential. Conservation assumptions and methodologies were employed in the calculations. The "upper bound" leachate migration rate calculated for the MLF double-liner system is 0.3 liters/hectare/day (lphd) (0.03 gallons/acre/day (gpad)). The May 1993 GeoSyntec report

showed that this calculated rate of leachate migration from the landfill is so small that there is no adverse impact on ground water. In fact, the calculated performance of the MLF double-liner system was found to be 1,000 times better than the performance allowed by 40 CFR § 258.40(a)(1). The May 1993 GeoSyntec report also showed that the MLF double-liner system has liquid containment capabilities superior to those of the "Subtitle D" prescriptive composite liner system described in 40 CFR § 258.40(a)(2).

In September 1993, USEPA issued the "*Interim Final Guidance, Municipal Solid Waste Landfill Liner Petition Process, 40 CFR Part 258.40(e)*" (hereafter referred to as the Interim Final Guidance). The Interim Final Guidance provides recommended procedures for evaluating the performance of liner systems and compliance with the performance criteria of 40 CFR § 258.40(a)(1). In particular, the Interim Final Guidance recommends the use of the USEPA Multimedia Exposure Assessment (MULTIMED) model for simulation of the subsurface transport of leachate constituents to the point of compliance. The approach to establishing compliance with 40 CFR § 258.40(a)(1) in the Interim Final Guidance is essentially the same as that used in the May 1993 GeoSyntec report, with the exception of the use of MULTIMED. GeoSyntec understands that MDE desires to see a demonstration of compliance with 40 CFR § 258.40(a)(1) using the MULTIMED model as described in the Interim Final Guidance. Therefore, this report presents the demonstration requested by MDE. This report compliments the May 1993 performance evaluation report previously prepared by GeoSyntec.

1.4 Contents of Report

The remainder of this report is organized as follows:

- background information on the MLF site and landfill design is presented in Section 2;

- the MLF liner system performance evaluation is described in Section 3; and
- a summary and conclusions are presented in Section 4.

2. BACKGROUND INFORMATION

2.1 Site Location and Description

The MLF site is located about 1.6 km (1 mile) due east of Fort George G. Meade and approximately 1.6 km (1 mile) northwest of Millersville in northern Anne Arundel County, Maryland (see Figure 1). The site is located in the Odenton Quadrangle of the United States Geological Survey (USGS) 7.5 minute map at a latitude of approximately N39°5′30" and a longitude of approximately E76°40′00". The site occupies approximately 567 acres (230 hectares). An intermittent stream, Wells Branch, flows across the site, generally from west to east, becoming perennial at the eastern site boundary. The stream continues to the east until meeting Severn Run, which, in turn, eventually flows into the Severn River.

The site is divided into two sections by a 120 ft-wide Baltimore Gas and Electric (BG&E) right-of-way that is oriented generally west to east across the northern quarter of the site. The northern half of the site has been developed and prior landfilling activities there are completed. The southern half of the site is the location of present and future landfilling activities. A large portion of the southern half of the site is undeveloped and densely wooded or covered with heavy brush. The major undeveloped portion of the site is south of Wells Branch. Elevations at the site range from a low of about 24 m (80 ft) above mean sea level datum at the eastern site boundary along the intermittent stream banks, to a high of about 72 m (240 ft) above mean sea level datum at the southern and western site boundaries.

2.2 Site History

AAC began operations at MLF in January 1975. The initial site development plan was prepared by Century Engineering [1974] and included

ten distinct landfill cells numbered sequentially from Cell 1 to Cell 10. Cells 1 through 4 are located in the northern portion of the site (i.e., north of the BG&E right-of-way), Cells 5 through 8 are located in the center of the site, and Cells 9 and 10 are located in the southern portion of the site.

During the period from 1989 through 1992, GeoSyntec Consultants prepared permit application and construction documents for the MLF site [GeoSyntec, 1989a,b, 1990a,b, 1991, and 1992b]. The permit application documents (i.e., Phase II and Phase III permit modification applications) [GeoSyntec, 1989a and 1991] present a modified site development plan (see Drawing 1 of 3) and a modified design that incorporates the following changes to the original site development plan and design prepared by Century Engineering [1974]:

- original Cells 9 and 10 are combined into a single cell designated as Cell 9;
- a double-liner system and a geomembrane cover system are incorporated into the design of Cells 8 and 9;
- Cells 5, 6, and 7 are combined into a single cell designated as Cell 567; and
- a geomembrane cover system is incorporated into the design of Cell 567.

Cell 9 is the primary focus of the alternative design petition for which this report provides technical support.

2.3 Description of the MLF Liner System

The double-liner system for Cell 9 of the MLF (termed MLF liner system in the remainder of this report) consists of the following components from top to bottom:

- 0.6-m (2-ft) thick protective soil cover;
- geotextile filter layer;
- leachate collection geonet drainage layer;
- 1.5-mm (60-mil) thick high density polyethylene (HDPE) geomembrane top liner;
- leakage detection geonet drainage layer;
- 1.5-mm (60-mil) thick HDPE geomembrane bottom liner; and
- 0.45-m (1.5-ft) thick compacted soil with a hydraulic conductivity of no more than 1×10^{-5} cm/s (2×10^{-5} ft/min).

The leachate collection system for Cell 9 consists of one layer of geonet covering the entire bottom of each landfill subcell and a system of perforated HDPE pipes placed in gravel blankets that overlie the geonet. Leachate is conveyed by the geonet and/or pipes to a sump, from which leachate is pumped and conveyed to an on-site leachate storage facility. The leachate collection system for Cell 9 is designed to keep a very small liquid depth on the top liner (i.e., less than 5.0 mm (220 mil), which is the thickness of the geonet drainage layer) at all locations within a subcell, except at the sump where liquid is collected for pumping. In the sump areas of the landfill, the MLF liner system is enhanced by the addition of layers of geosynthetic clay liner (GCL) below both top and bottom geomembranes. The GCLs have saturated hydraulic

conductivities of less than 1 x 10^{-9} cm/s (2 x 10^{-9} ft/min). The GCLs together with the other liner system components result in a "double-composite" liner system beneath the landfill sumps.

The double-liner system described above design differs from the prescriptive minimum construction standards of 40 CFR § 258.40. In most respects, the Cell 9 liner system design is superior to the prescriptive standards. As previously indicated, however, in unapproved states, the adequacy of any design other than the prescriptive design must be demonstrated in accordance with the provisions of 40 CFR § 258.40(e). These provisions apply even if the capabilities of a given liner system design are clearly superior to the prescriptive minimum construction standards.

2.4 Relevant Operating Scenario

The configuration of Cell 9 can be approximated as being rectangular, as shown on Figure 2. This approximation is necessary to satisfy the one- and two-dimensional flow and transport equations used by MULTIMED. Ground water in the uppermost locally perched aquifer beneath Cell 9 flows in a northerly direction. This perched system is labeled as Zone 2 to distinguish it from deeper and laterally continuous aquifers with different ground-water flow characteristics. The one-dimensional approximation of ground-water flow for the Zone 2 perched aquifer, a requirement for MULTIMED, is shown on Figure 2. The one-dimensional flow dimension is interpreted as being parallel to the short dimension of the landfill boundary.

The sand lens comprising Zone 2 pinches out to the northeast and southwest of Cell 9. This condition is illustrated by the truncation of the potentiometric surface shown on Figure 2. A clay confining unit approximately 9 to 12 m (30 to 40 ft) in thickness separates Zone 2 from the underlying Zone 3 aquifer. Zone 3 exhibits a ground-water flow

direction and gradient that is significantly different than the flow direction and gradient in Zone 2. Flow in Zone 3 is to the east, and under a much lower gradient than Zone 2 (Figure 3).

Two scenarios were considered for the MULTIMED flow and transport simulations performed in preparation of this report. The first scenario depicts the Zone 2 aquifer as being laterally continuous over the entire area of the Cell 9 waste unit. This is a conservative approach in that: (i) a maximum chemical loading is obtained by considering the entire waste management unit; and (ii) a maximum flow pathline length is considered. Zone 3 is modeled in the second MULTIMED scenario. Conservative assumptions were used for this scenario as well, including: (i) maximum chemical loading is obtained by considering the entire waste management unit; and (ii) infiltration from the waste unit is assumed to pass directly to Zone 3, without considering dilution in Zone 2 or attenuation by the clay unit overlying Zone 3.

2.5 Point of Compliance

The relevant point of compliance for a waste management unit is set by the Director of an approved state in accordance with 40 CFR § 258.40(d) or at the waste management boundary in unapproved states. Since Maryland is presently an unapproved state, the relevant point of compliance for the performance demonstration in this report is taken as the downgradient unit boundary. It is noted, however, that this point of compliance is selected for purposes of this report only. An alternative point of compliance may be selected under the provisions of 40 CFR § 258.51(b), for purposes of ground-water monitoring, if approved by MDE, once Maryland becomes an approved state.

The point of compliance utilized in the MULTIMED simulations are conceptualized as the point where the one-dimensional approximated ground-water flow pathline beneath Cell 9 intersects the cell boundary.

Figure 2 shows the point of compliance for the Zone 2 perched aquifer as the northern boundary of the waste management unit. The eastern cell boundary is the point of compliance for the Zone 3 aquifer, as shown on Figure 3.

3. PERFORMANCE EVALUATION OF CELL 9 LINER SYSTEM DESIGN

3.1 Introduction

USEPA has established specific performance criteria for municipal solid waste (MSW) landfills in 40 CFR § 258. Section 258.40(a)(1) describes performance criteria for liner system design which states "*the design must ensure that the concentration values listed in Table 1 of this section are not exceeded*". Table 1 from 40 CFR § 258 is reproduced in this report as Table 1.

The performance evaluation of a proposed liner system design may be performed in two steps. First, an estimate is made of the rate of leachate leakage through the liner system and into the subsurface environment (i.e., infiltration rate in the MULTIMED model). Second, an evaluation is performed of the transport of contaminants to the relevant point of compliance assuming the leakage rate from the first step. Mathematical models are often used in simulating these processes.

As described in Section 1.3 of this report, GeoSyntec previously performed an evaluation of the MLF liner system which included the two steps listed above. With respect to the first step, calculation of the leachate migration rate, GeoSyntec previously used an approach based on the combined application of the Hydrologic Evaluation of Landfill Performance (HELP) model, Version 2.05 [USEPA, 1984a,b], and equations for steady-state leakage through liners described in Bonaparte et al. [1989] and Giroud et al. [1992]. Version 3.0 of the HELP model, currently under development, will directly incorporate these equations for steady-state leakage through liners. Development of Version 3.0 is described in the April 1992 USEPA document "*Draft Technical Manual of Solid Waste Disposal Facility Criteria - 40 CFR Part 258" [USEPA, 1992]*. On page D-6, the report states "*Version 3.0 of the model is under revision and will include an updated method to assess leakage that is based on the research and data conducted by Giroud and Bonaparte*". Since

Version 3.0 was not available for the May 1993 performance evaluation, GeoSyntec used Version 2.05 of the HELP model and manually incorporated the equations of Giroud and Bonaparte in this analysis. Until Version 3.0 becomes available, this remains the best approach for evaluating potential leakage from a landfill unit. Details of these leakage rate calculations are presented in Section 3.2 of this report.

With respect to the second step described above, the May 1993 GeoSyntec report used simple, but conservative, mixing and flow models to simulate leachate dilution in the saturated zone and transport to the point of compliance. At the request of MDE, GeoSyntec has performed new contaminant transport calculations for this report using the Multimedia Exposure Assessment (MULTIMED) model [Salhotra and Mineart, 1988]. The USEPA Interim Final Guidance recommends the use of this particular model in evaluating liner system designs for compliance with Subtitle D performance criteria. An overview of MULTIMED is presented in Section 3.3 and a discussion of model input is given in Section 3.4.

3.2 HELP Modeling Input, Results, and Rate of Leakage

3.2.1 Overview

This section of the report describes the estimation of leachate generation rates and the evaluation of potential leakage rates through the double-liner system that will underlie Cell 9. As described above, the approach taken is to first estimate leachate generation rates using the HELP model and then to estimate potential leachate leakage rates through the MLF double-liner system using equations from the technical literature. As a final step, the calculated rate of leakage through the double-liner system is used as input into the MULTIMED model and the concentrations of leachate at the point of compliance are calculated. All calculations are based on the conservative assumption of steady-state flow conditions.

3.2.2 HELP Modeling Input and Results

The HELP model is a quasi two-dimensional hydrologic model of water movement across, into, through, and out of landfills [Schroeder et al., 1988; USEPA, 1984a,b]. The program accepts climatologic, soil, and design data and uses a solution technique that accounts for the effects of surface storage, runoff, infiltration, percolation, evaporation, soil moisture storage, and lateral drainage.

In the analysis performed for this report, the HELP model was used to estimate the flow of leachate in the LCRS drainage layer. In the model, this was accomplished by assuming that percolation through the geomembrane top liner was zero (i.e., the geomembrane top liner was modeled as an impervious layer). Two scenarios were evaluated with the HELP model based on the following assumptions:

- for the first scenario, one subcell is active; this subcell contains an 2.4-m (8-ft) thick layer of waste and an overlying 0.6-m (0.5-ft) thick daily cover layer;

- for the second scenario, four subcells are inactive; these subcells contain an 24-m (80-ft) thick layer of waste and an overlying 0.3-m (1-ft) thick intermediate cover layer;

- the daily cover is assumed to be bare ground;

- the intermediate cover is assumed to be grass in fair condition;

- for both scenarios, the climatologic data for Baltimore, Maryland, the closest city in the HELP model database to the site, was used; and

- in both scenarios, the LCRS drainage layer is modeled as a soil layer with physical and hydraulic characteristics similar to the actual geosynthetic material comprising the drainage layer.

Other assumptions used in the HELP model are described in Appendix A. Table 2 provides a tabular summary of the HELP model input parameters used in the analyses for this report.

For the scenarios evaluated, calculated peak rates of leachate flow in the LCRS drainage layer (layer 4) ranged from 0.13 to 1.9 mm/day (0.005 to 0.0734 in./day). These values equate to 1,360 lphd (136 gpad) and 19,900 lphd (1,990 gpad), respectively. The larger of these values was combined with equations described in the following section to estimate the liquid head on the geomembrane top liner and the leakage rate through the double-liner system.

3.2.3 Rate of Leakage

Empirical equations are used to estimate steady-state leachate generation rates based on the following approach:

- estimate the liquid head on the top liner;
- estimate the steady-state leakage rate through the top liner;
- estimate the liquid head on the bottom liner caused by leakage through the top liner; and
- estimate the steady-state leakage through the bottom composite liner using the results of the previous steps.

As discussed in Giroud and Bonaparte [1989a,b] and USEPA [1987], leakage through geomembranes (that are properly installed using adequate

construction quality assurance (CQA) procedures during installation), primarily occurs due to occasional, small defects (or holes) in the geomembrane. For purposes of estimating leakage, the previously mentioned references recommend a defect frequency of one to two holes per acre (two to five holes per hectare); two holes per acre (five per hectare) were assumed for purposes of this report. Also as recommended by these references, a defect size of 3.1×10^{-6} m^2 (3.3×10^{-5} ft^2) is assumed for geomembranes installed using CQA procedures in substantial conformance with USEPA [1986] guidance.

For purposes of the leakage rate calculations, the liquid head on the top liner is conservatively assumed to equal the thickness of the geonet (i.e., 5 mm (0.2 in.)). The calculated value of head on the top liner based on the leachate generation rates obtained using the HELP model is less than this values.

The rate of steady-state leakage through the geomembrane top liner (which is underlain by a drainage layer) can be estimated using the following equation [Bonaparte et al., 1989]:

$$Q = 0.6\ a\sqrt{2\ gh_w} \qquad \text{(Equation 1)}$$

where: Q = steady-state rate of leakage through a geomembrane hole (m^3/s or ft^3/s); a = hole area (3.1×10^{-6} m^2 or 3.3×10^{-5} ft^2); g = acceleration due to gravity (9.81 m/s^2 or 32.2 ft/s^2); and h_w = liquid head on top of the geomembrane (0.005 m or 0.017 ft).

The calculated steady-state leakage through a single geomembrane hole is 6×10^{-7} m^3/s (13 gallons per day (gal/day)). For two defects per acre (five per hectare), the calculated steady-state rate of leakage is 260 lphd (26 gpad) through the top liner.

The maximum head on the bottom liner, which occurs immediately below the defect in a geomembrane top liner, can be approximated using the following equation developed by Giroud [1991] and presented in USEPA [1992]:

$$h = \sqrt{Q/k} \qquad \text{(Equation 2)}$$

where: h = head on the bottom liner (m or ft); Q = steady-rate of leakage through a single defect in a geomembrane top liner (m^3/s or ft^3/s); and k = hydraulic conductivity of the leakage detection layer (m/s or ft/s).

The calculated maximum head on the bottom liner, resulting from use of Equation 2, $Q = 6.0 \times 10^{-7}$ m^3/s (2.1×10^{-5} ft^3/s), and k = 0.18 m/s (0.59 ft/s) (as specified in the MLF construction specifications) is 0.002 m (0.006 ft).

The liquid head on the bottom liner calculated using Equation 2 is a maximum value which occurs immediately below a defect in the top geomembrane liner. As the liquid spreads through the leakage detection layer, the head decreases. In fact, it is shown in Giroud [1991] and USEPA [1992] that leakage through a defect in the top liner "wets" only a portion of the leakage detection layer. Therefore, it is highly unlikely that any defect in the geomembrane component of the bottom liner (which is immediately below the leakage detection layer) would be subjected to the maximum head calculated using Equation 2. Moreover, there is a high probability that any defect in the geomembrane component of the bottom liner falls outside the wetted areas, and therefore, is subjected to no head at all. For the purpose of estimating a steady-state leakage rate through the bottom liner, it is conservatively assumed that one defect per acre (two defects per hectare) in the bottom liner is subjected to the maximum head calculated above.

The estimated rate of steady-state leakage through the bottom liner can be estimated using the following equation [Giroud and Bonaparte, 1989b; and USEPA, 1987]:

$$Q = 0.21\ a^{0.1}\ h_w^{0.9}\ k_s^{0.74} \qquad \text{(Equation 3)}$$

where: Q = steady-state rate of leakage through the bottom liner (m^3/s or ft^3/s); a = hole area (m^2 or ft^2); h_w = head on the bottom liner (m or ft); and k_s = hydraulic conductivity of the low-permeability soil component of the bottom liner (m/s or ft/s).

The calculated rate of steady-state leakage through the base slope of the bottom liner, based on a = 3.1×10^{-6} m^2 (3.3×10^{-5} ft^2), h_w = 0.002 m (0.006 ft), and k_s = 1.0×10^{-7} m/s (3.3×10^{-7} ft/s), is 1.45×10^{-9} m^3/s (0.03 gal/day). For a defect frequency of two per hectare (one per acre), the steady-state rate of leakage is 0.3 lphd (0.03 gpad). A calculated rate of leakage through the double-liner system of 0.3 lphd (0.03 gpad) was conservatively used as the infiltration rate for the transport calculations performed in MULTIMED.

3.3 MULTIMED Overview

MULTIMED is a computer model developed by USEPA as a tool for the study and design of Subtitle D land disposal facilities. The model can be used to simulate the transport and transformation of chemical constituents released from the waste disposal facility into the environment. Equations defining flow and transport mechanisms are solved analytically and semi-analytically. The simplifying assumptions required to obtain analytical and semi-analytical solutions restrict the complexity of the systems that can be represented. For example, the model does not account for site-specific spatial variability of aquifer parameters, the shape of the land disposal facility, site-specific

hydrologic boundary conditions, multiple aquifers, or hydrologic stresses (e.g., pumping wells).

The Subtitle D application mode of MULTIMED imposes several restrictions in an effort to develop a conservative approach for simulating leachate migration through the subsurface. These restrictions include:

- only the saturated and/or unsaturated ground-water flow and transport modules may be active in Subtitle D applications; validation has not yet been completed for the surface water, landfill, and air modules; accordingly, these modules may not be used in Subtitle D applications;

- only steady-state transport simulations are permitted for Subtitle D applications; no decay of the source term is allowed, and the contaminant pulse is assumed continuous and constant for the duration of the simulation; and

- the receptor is assumed to be located directly downgradient of the facility, intercepting the center and most concentrated portion of the contaminant plume.

MULTIMED may be used in the design process to evaluate whether a particular landfill design will prevent contaminant concentrations in ground water from exceeding the health-based thresholds stipulated in Subtitle D. Actual constituent concentrations, if known, may be input directly into the model. Most often, constituent concentrations are not known a priori, in which case the input concentration is specified as 1 milligram per liter (mg/l) and a dilution-attenuation factor (DAF) is calculated. This approach is based on the fact that the model estimate of concentration at the point of compliance is linear with respect to the input source concentration. Therefore, the DAF is the factor by which

the constituent concentration decreases along the ground-water flow pathline.

With the input concentration set to 1.0 mg/l, the DAF may be calculated using the constituent concentration predicted by MULTIMED at the point of compliance and the equation:

$$DAF = 1.0/\textit{concentration at the point of compliance} \qquad \text{(Equation 4)}$$

If the DAF is equal to or greater than 100, the liner system design is considered acceptable by USEPA [Sharp-Hansen et al., 1990]. USEPA uses a threshold DAF of 100 to define an acceptable design because the maximum concentrations of constituents expected to exist in Subtitle D landfill leachate is not greater than 100 times the maximum contaminant levels (MCLs) for the constituents in ground water [USEPA, 1990].

MULTIMED may be used in either a deterministic or Monte Carlo framework. In the deterministic framework, all of the ground-water flow and contaminant transport variables are assumed to have a fixed mathematical relationship with each other to completely define the hydrogeologic system. Thus, only one model result is obtained for a given set of input values. A Monte Carlo approach considers the intrinsic randomness and uncertainties inherent in a natural system. If the uncertainties of the input variables are known or can be estimated with a high degree of confidence, then the Monte Carlo method provides a means of evaluating uncertainty in the model results.

The Monte Carlo method can be a useful tool in quantifying model uncertainty, although the method is not without limitation. One difficulty arises in establishing reasonable probability distribution functions for the model parameters, which requires a large amount of data. Probability distribution functions should not merely be assumed, as the certainty of the output is a direct function of the assumed certainty of the input.

3.4 MULTIMED Modeling Input

3.4.1 Overview

Worksheets provided in the USEPA Interim Final Guidance are reproduced in this report to identify specific input parameters and assigned values for the MULTIMED modeling. The reader of this report is referred to Table 3 for input values and justification statements for each parameter discussed in this section of the report.

The deterministic solution was chosen for the MLF site as parameter uncertainty cannot be quantified from the existing database. Unsaturated zone flow and transport were not simulated, rather infiltration through the liner system was assumed to enter the ground-water system directly. This is a conservative approach as it assumes no storage, dilution, or attenuation in the unsaturated zone.

The Subtitle D application mode of MULTIMED specifies the use of a gaussian (i.e., normal distribution) contaminant distribution in the lateral direction at the source model boundary (i.e., the downgradient edge of the waste disposal unit). Uniform mixing is assumed over the vertical mixing or source depth. The maximum dissolved concentration of the contaminant at the source occurs at the center of the gaussian distribution. The standard deviation (σ) is a measure of the width of the source contaminant plume.

Input requirements for the saturated zone transport module may be categorized into three groups:

- source data group parameters;
- aquifer data group parameters; and
- chemical data group parameters.

3.4.2 Source Data Group Parameters

Source data group parameters include:

- leachate infiltration rate from the waste disposal unit;
- area of the waste disposal unit;
- spread (i.e., standard deviation) of the contaminant source;
- recharge rate outside the waste management unit; and
- initial contaminant concentrations.

Infiltration Rate

The infiltration rate is the net amount of leachate that percolates through the liner system into the underlying aquifer. Derivation of an infiltration rate for purposes of MULTIMED modeling was discussed in Section 3.2.3 of this report. As described in Section 3.2.3, the infiltration rate of leakage has been conservatively estimated to be 1.0×10^{-5} m/yr (0.03 gpad).

Area of Waste Disposal Unit

MULTIMED assumes a rectangular orientation for the waste management unit. The length of the unit is oriented by program default in the direction of ground-water flow, and the width is normal to flow. The approximate area of Cell 9 is 341,440 m^2 (85 acres). The length of the facility for the uppermost perched aquifer scenario (Zone 2) was specified as being 320 m (1,050 ft) and the width was specified as 1,067 m (3,500 ft). Flow in Zone 3 is parallel to the longest dimension of the Cell 9. Therefore, the length of the cell for the Zone 3 simulation was

specified as 1,067 m (3,500 ft) and the width was specified as 320 m (1,050 ft).

Spread of Contaminant Source

The standard deviation of the gaussian source contaminant distribution is a measure of the spread of the source [Salhotra et al., 1988]. MULTIMED derives the spread or standard deviation of the gaussian source directly from the width scale of the facility (i.e., the dimension of the facility on horizontal to the ground-water flow direction) according to the equation:

$$\sigma = W/6 \qquad \text{(Equation 5)}$$

where: σ = standard deviation, or spread of contaminant source (m); W = width scale of the facility (m); and the integer six provides a result in which that 99.86 percent of the area under the source is flanked by the width of the facility.

Recharge Rate

Recharge in the model is the net amount of water that percolates into the aquifer outside of the disposal facility. The recharge is assumed to have no contamination and hence serves to dilute the leachate concentration. Recharge was a calibration variable in a past numerical ground-water flow model for the MLF site. The calibrated model used an average recharge rate of 0.13 m/yr (5.3 in./yr) [GeoSyntec, 1990b].

Initial Contaminant Concentration

Subcell 4 of Cell 8, which began receiving waste in October 1992, is the first lined subcell to be operated at MLF. The leachate currently being collected from this subcell is dilute. None of the performance standard constituents listed in Table 1 have been detected. The current leachate quality may not be fully representative of the quality of

leachate that will be collected from lined cells at MLF throughout the life of the facility. For this reason, and to provide conservatism in the liner system evaluation, it is assumed for this report that the quality of leachate from MLF is represented by the median concentration of constituents of interest in leachate as reported in USEPA's 1988 report to Congress on solid waste disposal in the United States [USEPA, 1988a]. The median concentration of leachate constituents from the USEPA report to Congress are presented in Table 4 of this report.

It should be noted, however, that leachate from MLF is expected to have concentrations well below the median concentrations presented in Table 4. This expectation is based on the Subcell 4 leachate analyses showing "non-detects" and the low concentrations detected from samples collected in November 1992 from two wells within unlined cells at MLF (i.e., leachate wells KC1-2 and KC2-3). For comparison, the analytical results from leachate wells KC1-2 and KC2-3 are also presented in Table 4.

The expectation that leachate from MLF will have constituent concentrations below those given in Table 4 is also consistent with recent information provided by USEPA. On 9 October 1991, the agency stated in the federal register (46 FR 50982): "*Furthermore, the Agency has many reasons to believe that the quality of the leachate from MSWLFs will improve over time. Increasingly, communities are instituting household hazardous waste programs and removing toxics from waste prior to its disposal in a municipal landfill. In addition, the Agency expects there to be positive changes in leachate resulting from the 1986 lowering of the cut-off levels for small quantity generator waste and the addition of new RCRA hazardous waste listing and characteristics*".

The MULTIMED model response is linear with respect to calculating concentrations at the point of compliance from the initial leachate concentration at the facility. For this reason, an initial concentration of 1.0 mg/l was specified. As previously described, using this approach,

the model calculates the inverse of a dilution factor as the point of compliance concentration. The dilution factor may then be multiplied by the estimated leachate concentrations from Table 4, or actual analytical results from the two leachate wells KC1-2 and KC2-3.

3.4.3 Aquifer Data Group Parameters

Model Parameters

Parameters within this data group include:

- type of contaminant source geometry (only gaussian is available for Subtitle D applications);
- porosity of the aquifer;
- bulk density of the aquifer material;
- aquifer thickness;
- source thickness (i.e., mixing zone depth);
- ground-water seepage velocity;
- dispersivities (longitudinal, transverse, vertical);
- retardation coefficient; and
- radial distance from the facility to the point of compliance.

Conceptual Hydrogeologic Model

As a prelude to a discussion of specific input parameters, the following narrative provides the conceptual hydrogeologic setting and conditions.

The site geology and hydrogeology is discussed in detail in several reports prepared by GeoSyntec (e.g., [GeoSyntec, 1989a, 1990b, 1992a,c]) and is summarized herein. The MLF site is underlain by unconsolidated sediments, consisting of stratified layers of sand, gravel, silt, and clay overlying consolidated crystalline basement rocks. Four water-bearing zones, Zone 1 through Zone 4, have been identified in the upper 90 m (300 ft) of the unconsolidated sediments at the site. Potentiometric surface maps developed for the four zones were presented in a report prepared by GeoSyntec [1992c].

Ground-water monitoring wells or piezometers have been installed within each water-bearing zone in the subsurface beneath the MLF. In the uppermost zone (Zone 1), ground water is unconfined in primarily fluvial sands and perched on the upper confining layer. The areal extent of Zone 1 is restricted to the southern and southwestern boundaries of the site, north of Discus Mill Road, and along Burns Crossing Road, respectively. The second water bearing zone (Zone 2) occurs in a series of disconnected shallow sand zones within the upper confining layer at the site. In the southern part of the site, Zone 2 may be either unconfined or confined, and is recharged directly from the overlying perched aquifer (i.e., Zone 1). The third water-bearing zone (Zone 3) is a deeper sand zone within the upper confining layer that may be either semi-confined or confined across the site. Zone 3 is used as a residential water supply by some of the homes within 0.8 km (0.5 miles) of the site. This zone is recharged by leakage from the overlying zones (i.e., Zones 1 and 2). The fourth water-bearing zone (Zone 4) is the major ground-water aquifer in the vicinity of the MLF. This aquifer is confined at MLF by a basal clay unit in the upper confining layer.

The hydrogeologic conditions in the vicinity of Cell 9 are shown in Figure 4. This cross section shows the base of Cell 9 is underlain by alternating sand and clay sequences. A portion of the Zone 2 aquifer intersects the waste unit in the central and southern areas beneath Cell 9. Zone 2 is approximately 3 m (10 ft) thick at this location. A continuous clay layer, approximately 9 to 12 m (30 to 40 ft) in thickness underlies Cell 9 and the Zone 2 aquifer. This clay layer provides an effective barrier to vertical contaminant migration into the Zone 3 aquifer. However, the second MULTIMED modeling scenario assumes direct infiltration from the waste unit into Zone 3 as an absolute worst case scenario. For modeling purposes, the Zone 3 aquifer is assumed to be 21.3 m (70 ft) thick.

The direction of ground-water flow beneath Cell 9 in Zone 2 is shown on the potentiometric map for May 1992 (see Drawing 2 of 3). Based on the potentiometric surface shown in Drawing 2, the flow direction in Zone 2 beneath Cell 9 is to the north. MULTIMED can only accommodate a ground-water flow direction normal to the width of the facility (one-dimensional); accordingly, the flow direction for modeling purposes was conceptualized as being normal to the downgradient facility boundary (see Figure 2). The modeled Zone 2 flow direction closely approximates the direction interpreted from the potentiometric map. Ground water in Zone 3 flows to the east, approximately parallel to the long dimension of the Cell boundary as shown on the May 1992 potentiometric surface map (see Drawing 3). Figure 3 shows the one-dimensional MULTIMED approximation of the Zone 3 flow direction.

Aquifer Porosity

Porosity is a factor in the derivation of the contaminant retardation coefficient, although it becomes an incidental variable when modeling contaminant transport under steady-state conditions (assuming no biodegradation). Porosity is also used by MULTIMED to compute the ground-water seepage velocity, and is not considered when seepage

velocity is entered directly in the program. A value of 0.3 (i.e., 30 percent) was used to represent the fine sand aquifer of zone 2.

Bulk Density

Bulk density is another factor used in the calculation of the contamination retardation coefficient. Morris and Johnson [1967] and Mills et al. [1985a,b] report range and mean bulk density of many types of unconsolidated and consolidated geologic materials, with a reported mean bulk density of 1.55 grams per cubic centimeter (g/cc) (96.8 lb/ft^3) for fine sand.

Aquifer Thickness and Mixing Zone Depth

The aquifer thickness of Zone 2 varies within the area of the modeled disposal facility, with an assumed thickness for modeling of 3 m (10 ft). The assumed thickness of Zone 3 is 21.3 m (70 ft). Leakage of leachate through the bottom liner and into the underlying aquifer results in the development of a contaminant mixing zone beneath the waste management unit. The mixing zone depth is derived by MULTIMED using the vertical dispersivity, length scale of the facility, aquifer thickness, ground-water seepage velocity, and leachate infiltration rate.

Hydraulic Conductivity, Hydraulic Gradient, and Seepage Velocity

The average ground-water seepage velocity derived from the previously reported numerical model for Zone 2 is 0.13 m/day (0.4 ft/day) [GeoSyntec, 1990b]. A hydraulic conductivity of 7×10^{-3} cm/s (1.4×10^{-2} ft/min) was utilized in the seepage velocity derivation. The Zone 2 and Zone 3 aquifers are similar in lithology and hydrologic characteristics. Both aquifers are assigned a hydraulic conductivity of 7×10^{-3} cm/s (1.4×10^{-2} ft/min). Hydraulic gradients for Zones 2 and 3, approximated from the May 1992 potentiometric surface maps, are 0.075 and 0.005, respectively. Therefore, seepage velocity for Zone 2 is higher than

Zone 3 owing to a higher gradient. The velocities computed using the hydraulic conductivities, gradients, and porosity reported above are 550 m/yr (4.9 ft/day) for Zone 2 and 36.7 m/yr (0.3 ft/day) for Zone 3 in the region of Cell 9.

Dispersivities

The aquifer longitudinal, transverse, and vertical dispersivities create mechanical dispersion, or spreading, of the simulated contaminant plume. Values for the dispersivity coefficients are difficult to determine, and research has shown dispersivity coefficients are strongly scale dependent [EPRI, 1985]. In the absence of user-specified values, MULTIMED is capable of deriving dispersivity as a fraction of the distance to the downgradient point of compliance; the derivation option was chosen for the MLF site as dispersivity coefficient values are not known. Dispersivities (α) are calculated as follows:

$$\alpha_L = 0.1\ X_r \qquad \text{(Equation 6)}$$

$$\alpha_T = \alpha_L/3.0 \qquad \text{(Equation 7)}$$

$$\alpha_V = 0.056\ \alpha_L \qquad \text{(Equation 8)}$$

where: α_L is the longitudinal dispersivity (m); X_r is the distance to the receptor well (i.e., point of compliance) (m); α_T is the transverse dispersivity (m); and α_v is the vertical transverse dispersivity (m). In the simulations presented herein, X_r is assumed to be the length of the waste management unit in the idealized ground-water flow direction.

Retardation Coefficient

Retardation refers to the ability of a natural ground-water system to adsorb contaminants carried by ground water and thus retard plume migration. The retardation factor (R_s) is derived by MULTIMED from the following equation:

$$R_s = 1 + \rho K_d/\theta \qquad \text{(Equation 9)}$$

where: R_s = retardation factor (dimensionless); ρ = bulk density of the aquifer (g/cc); K_d = contaminant distribution coefficient (cc/g); and θ = saturation water content or porosity (dimensionless). Values for bulk density and porosity were given previously in this section of the report. The contaminant distribution coefficient is discussed subsequently in Section 3.4.4.

A retardation value of one means the contaminant is not adsorbed by the aquifer materials but migrates an a conservative tracer.

Aquifer Temperature, pH, and Organic Carbon Content

Aquifer temperature, pH, and fractional organic carbon content (f_{oc}) are utilized by MULTIMED to estimate various chemical-specific parameters discussed in the following sections. Temperature and pH within Zones 2 and 3 vary within similar ranges. Values for pH and temperature were estimated at 6.8 and 11.7°C, respectively, from well development records. The value of f_{oc} was assumed to be 0.1 percent. This value is based on soil descriptions from on-site drilling activities and on data presented in the technical literature [Dragun, 1988].

Distance to Relevant Point of Compliance

The relevant point of compliance for a waste management unit is set by the Director of an approved state in accordance with 40 CFR § 258.40(d) or at the waste management unit boundary in unapproved states. Since Maryland is an unapproved state effective 9 October 1993, it is assumed that the relevant point of compliance will be at the unit boundary. An arbitrary distance between the waste management boundary and the point of compliance equal to 1 m (0.3 ft) was used in the MULTIMED modeling. This distance was assumed for the MULTIMED

simulations because mathematical instability problems may occur in the simulations when the distance between the waste management unit boundary and the point of compliance is very small. MULTIMED simulations made with varying point of compliance distances indicate the results are insensitive with input values of approximately 5 m (1.5 ft) or less.

3.4.4 Chemical Data Group Parameters

MULTIMED requires the user to input the following coefficients for each selected chemical constituent:

- overall chemical decay coefficient;
- chemical distribution coefficient; and
- biodegradation coefficient.

Five chemicals from Table 1 were chosen, based on criteria described later in Section 3.5.2 of this report. The chosen chemicals are benzene, 1,4-dichlorobenzene, trichloroethylene, vinyl chloride, and carbon tetrachloride. These selected constituent produce the minimum DAFs in the MULTIMED analysis. An explanation of each coefficient and the values assigned for each constituent follows.

Overall Chemical Decay Coefficient

The overall chemical decay coefficient is the rate, in units of $time^{-1}$, at a which a constituent decays in a particular environment. The overall chemical decay coefficient is a function of the hydrolysis rate constants of the constituent only and does not include biological decay. For constituents which are easily biodegraded, hydrolysis may be insignificant relative to biodegradation. Values of the overall chemical decay coefficient for each constituent were not available in the

technical literature. Empirical equations are available in the technical literature to calculate the overall chemical decay coefficient based on the acid, base, and neutral hydrolysis decay coefficients, and the temperature and pH of the aquifer [Dragun, 1988].

The overall chemical decay coefficients of the selected constituents were set to zero in the respective model runs. This is a reasonable assumption as benzene and vinyl chloride do not decay into any hydrolyzable groups [Howard et al., 1991a,b]. Decay due to hydrolysis is insignificant as compared to biodegradation for carbon tetrachloride, trichloroethylene, and 1,4-dichlorobenzene [Howard, 1990].

Chemical Distribution Coefficient

The chemical distribution coefficient, K_d, is also referred to in the technical literature as the sorption coefficient [Dragun, 1988]. Sorption refers to the accumulation of a constituent in the boundary region of a solid-liquid interface [USEPA, 1990]. Sorption tends to retard the transport of a constituent in the subsurface. The value of the chemical distribution coefficient is expressed in units of milliliter per gram (ml/g) and is often calculated based on the following equation:

$$K_d = K_{oc} \times f_{oc} \qquad \text{(Equation 10)}$$

where: K_d = chemical distribution coefficient (ml/g); K_{oc} = normalized distribution coefficient for organic carbon (ml/g); and f_{oc} = fractional organic carbon content of the soil in the saturated zone (dimensionless). It should be noted that this relationship assumes that hydrophobic binding dominates the sorption process.

Values of K_{oc} are readily available in the technical literature for the selected constituents [USEPA, 1988b]. The values of K_{oc} and calculated K_d values for the five constituents are as follows:

Constituent	K_{oc} (ml/g)	K_d (ml/g)
Benzene	83	0.083
1,4-Dichlorobenzene	1,700	1.700
Trichloroethylene	126	0.126
Vinyl Chloride	57	0.057
Carbon Tetrachloride	110	0.11

Biodegradation Coefficient

The biodegradation coefficient, K, describes the rate at which an organic constituent degrades by biotic reactions. In the technical literature, the biodegradation coefficient is often related to the half-life of the constituent. The half life is defined as the time needed for half of the concentration of a constituent to react in a particular medium [Dragun, 1988]. The biodegradation coefficient is calculated based on the following equation:

$$K = 0.693 \ / \ t_{1/2} \qquad \text{(Equation 11)}$$

where: K = the biodegradation coefficient (1/yr); $t_{1/2}$ = the half life of the constituent (yr). Equation 11 is not dimensionally homogenous and must be used with the indicated units.

For the constituents of concern, data pertaining to the half life for each constituent is readily available in the technical literature [Dragun, 1988]. In a particular medium, the half life is often expressed as a range of values depending on how the data were obtained. For the five considered chemicals, the reported half lives and calculated biodegradation coefficients are as follows.

Constituent	Half Life (year)	Biodegradation Coefficient ($year^{-1}$)
Benzene	0.186 - 0.301	2.30 - 3.73
1,4-Dichlorobenzene	0.301	2.30
Trichloroethylene	0.822	0.84
Vinyl Chloride	0.077	9.00
Carbon Tetrachloride	0.019	36.50

3.5 MULTIMED Modeling Results

3.5.1 No Biodegradation

For the first scenario modeled using MULTIMED, the beneficial effects of contaminant biodegradation and retardation were conservatively neglected. These factors may have a significant effect in reducing contaminant concentrations at the point of compliance. In addition, steady-state ground-water flow and transport conditions were also assumed. The first modeling scenario therefore results in the highest predicted contaminant concentrations at the point of compliance.

Using an input concentration of 1.0 mg/l, MULTIMED predicts the point of compliance concentration for the Zone 2 simulation to be 1.547×10^{-5} mg/l. The model predicts the Zone 3 concentration to be 1.089×10^{-4} mg/l (see MULTIMED output, Appendix B). The DAFs are the reciprocals of these values. Zone 2 yields a DAF of approximately 64,600, and Zone 3 yields a DAF of approximately 9,200. Both results are substantially greater than USEPA's minimum threshold DAF of 100. On the basis of these conservative analysis results, the design of Cell 9 satisfies Subtitle D ground-water protection performance criteria.

Table 5 presents predicted concentrations of leachate constituents at the point of compliance when the DAF for the Zone 2 simulation is applied to the median leachate constituent concentrations reported in USEPA [1988a]. The resultant point of compliance concentrations are well below the MCL performance standard for each chemical, supporting the DAF conclusion of an acceptable design. Similarly, the predicted point of compliance concentrations for the Zone 3 simulation, using the USEPA median concentrations data, are shown in Table 6 to be at least several orders of magnitude below the MCL performance standards.

3.5.2 Biodegradation

The impact of chemical biodegradation on the point of compliance leachate concentrations was considered using MULTIMED. For the simulation, all input parameters, except biodegradation parameters, were duplicated from the no-biodegration case. The purpose of the simulation was to evaluate the effect of biodegradation on point of compliance concentrations of select chemicals potentially present in leachate. Five chemicals were chosen for the evaluation based on two criteria: (i) four of the chemicals have been detected on-site in inactive, unlined disposal cells; and (ii) the chemicals pose the lowest margin of safety under the no-biodegradation case. The five chemicals chosen are:

- benzene;
- 1,4-dichlorobenzene;
- trichloroethylene;
- vinyl chloride; and
- carbon tetrachloride.

The predicted chemical concentrations at the point of compliance are lower for the scenario where biodegradation is taken into account compared to the scenario with no biodegradation (see MULTIMED output, Appendix B). This result is expected since biodegradation tends to reduce the concentrations of the chemicals over time. Table 7 compares predicted point of compliance concentrations with the Zone 2 simulation from both scenarios (no-biodegradation and biodegradation), considering both median concentrations of the five chemicals from USEPA [1988a] as well as concentrations of the five chemicals from wells KC1-2 and KC2-3 completed in the older, unlined cells at MLF. The results shown in Table 7 clearly indicate the predicted concentrations are below MCLs by several orders of magnitude. Table 8 compares both cases for the Zone 3 simulation. Again, the predicted concentrations are below MCLs by several orders of magnitude.

3.5.3 Sensitivity Analysis

Analyses were performed to test the sensitivity of several MULTIMED input parameters to model output.

Recharge

The recharge was varied ±50 percent about the baseline of 0.13 m/yr (5.1 in./yr). Comparison of the DAF for the baseline and sensitivity runs is shown below:

	DAF Zone 2	DAF Zone 3
Baseline	64,600	9,200
Increased Recharge	64,600	9,200
Decreased Recharge	64,600	9,200

Results clearly indicate the lack of sensitivity of variations in recharge to the point of compliance results.

Ground-Water Seepage Velocity

Ground-water seepage velocity was also varied ±50 percent about the baseline input value of 550 m/yr (4.9 ft/day) for Zone 2 and 36.7 m/yr (0.3 ft/day) for Zone 3. Results are summarized below:

	DAF Zone 2	DAF Zone 3
Baseline	64,600	9,200
Increased Seepage Velocity	97,000	13,800
Decreased Seepage Velocity	32,300	4,600

The sensitivity analysis shows that the resulting point of compliance is directly proportional to the seepage velocity for both the Zone 2 and Zone 3 simulations. For example, a 50 percent decrease in seepage velocity results in a 50 percent decrease in the DAF. Thus, the design will be acceptable even when considering a one-order magnitude decrease in the seepage velocity, which would be an absolute lower bound for this input parameter.

Organic Carbon Content

The fractional organic carbon content is used by MULTIMED to derive the retardation coefficient. Therefore, this parameter factors into the MULTIMED solution only when biodegradation processes are considered. The chemical benzene was selected for the sensitivity analysis, which was performed by increasing and decreasing the organic carbon content by one order of magnitude about the baseline of 0.001 (0.1 percent). A summary of the sensitivity analysis results is presented below:

	DAF Zone 2	DAF Zone 3
Baseline	65,200	10,400
f_{oc} Increased 10x	66,700	14,300
f_{oc} Decreased 10x	65,000	10,000

The case considering a higher fractional organic carbon content results in a larger dilution-attenuation factor as a result of an increased retardation coefficient.

Bulk Density

Bulk density is another factor used to calculate the retardation coefficient. Benzene was again selected for the evaluation of sensitivity to bulk density. Bulk density was varied about the minimum and maximum range typical for unconsolidated sediments (1.0 g/cc and 2.0 g/cc, respectively). The baseline value used in the MULTIMED simulations was 1.55 g/cc (96.8 lb/ft^3). Results are summarized below.

	DAF Zone 2	DAF Zone 3
Baseline	65,200	10,400
Bulk Density 1.00	65,100	10,200
Bulk Density 2.00	65,200	10,500

Higher bulk density translates into a higher retardation coefficient, and thus a higher DAF.

Summary of Sensitivity Analysis

Several of the input parameters used in the MULTIMED program were varied about plausible ranges of potential values that may exist in the subsurface environment. The results of the analysis show the model is relatively insensitive to these variations. All cases considered show a large margin of safety with respect to the calculated DAF.

The computed point of compliance concentration is approximately linearly proportional to the input infiltration rate (i.e., leakage rate) from the waste management unit. Conservative assumptions were considered in the calculation of the infiltration rate used in the MULTIMED modeling exercise. Even with these conservative assumptions, the modeling demonstrates that the Cell 9 design provides a large margin of safety with respect to the calculated DAF. Less conservatism is the infiltration rate calculations would result is an even higher margin of safety.

4. SUMMARY AND CONCLUSIONS

The purpose of this report is to demonstrate that the liner system design for Cell 9 of the Millersville Sanitary Landfill meets the performance criteria established by the USEPA in 40 CFR § 258.40(a)(1). The demonstration provided in this report is consistent with the approach recommended by USEPA in the document "*Interim Final Guidance, Municipal Solid Waste Landfill Liner Petition Process, 40 CFR § 258.40(e)*". The performance evaluation included the following elements:

- using the HELP model combined with equations from the technical literature to calculate a steady-state leachate migration rate through the double-liner system beneath Cell 9;
- estimating potential leachate constituent concentrations;
- developing the conceptual hydrogeologic framework for the Cell 9 area;
- establishing the point of compliance;
- using the MULTIMED model to simulate the flow and transport of leachate contaminants in the two uppermost aquifer systems;
- calculating constituent concentrations at the point of compliance; and
- comparing the constituent concentrations at the point of compliance to established USEPA criteria.

For the Cell 9 liner system, a conservative steady-state rate of leachate migration of 0.3 lphd (0.03 gpad) was calculated. Conservative leachate constituent concentrations were assumed for the site based on

data for older landfills presented in USEPA [1988a]. The hydrogeologic framework and point of compliance were established for Cell 9 data developed from previous investigations at the site. Two aquifers, identified as Zone 2 and Zone 3, were considered separately in the analysis. Based on the foregoing, a leachate dilution factor was calculated and constituent concentrations were estimated at the point of compliance. The results of the calculations are given in Tables 5 to 8. The calculated concentrations of leachate constituents at the point of compliance are at least three orders of magnitude less than the USEPA water-quality criteria, even under the most conservative set of assumptions. Therefore, the Cell 9 liner system design satisfies the performance criteria of 40 CFR § 258.40(a)(1) with a large margin of safety.

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USEPA, "*Interim Final Guidance, Municipal Solid Waste Landfill Liner Petition Process, 40 CFR Part 258.40(e)*", 1993, 4 p.

TABLE 1

MCL CONCENTRATION VALUES OF CONSTITUENTS FROM TABLE 1 OF 40 CFR § 258.40

Chemical	MCL[1] (μg/l)
Arsenic	50
Barium	1,000
Benzene	5
Cadmium	10
Carbon tetrachloride	5
Chromium (Hexavalent)	50
2,4-Dichlorophenoxy acetic acid	100
1,4-Dichlorobenzene	75
1,2-Dichloroethane	5
1,1-Dichloroethylene	7
Endrin	0.2
Fluoride	4,000
Lindane	4
Lead	15[2]
Mercury	2
Methoxychlor	100
Nitrate	10,000
Selenium	10
Silver	50
Toxaphene	5
1,1,1-Trichloroethane	200
Trichloroethylene	5
2,4,5-Trichlorophenoxy acetic acid	10
Vinyl Chloride	2

Notes: (1) MCL - Maximum Contaminant Level

(2) The lead MCL concentration used in Table 1 is from "*Drinking Water Regulations and Health Advisories*" issued by the USEPA Office of Water in November 1992. This MCL concentration is less than the MCL concentration in 40 CFR § 258 and provides for a more conservative evaluation.

TABLE 2

ALTERNATIVE LINER DESIGN MODELING INPUT PARAMETERS
LANDFILL MODEL INPUT PARAMETERS

LANDFILL MODEL INPUT PARAMETERS	VALUE	JUSTIFICATION
CLIMATOLOGICAL DATA State of interest	Maryland	
City of interest	Baltimore	Closest city in database to the site
Source of rainfall data	HELP Model	City of interest contained in model database
Source of normal mean monthly temperature data	HELP Model	Temperature data contained in model database
Maximum leaf area index: 0.1 - Bare ground 3.3 - Good grass 2.0 - Poor grass 5.0 - Excellent grass 2.0 - Fair grass	1.0	Intermediate cover conditions
Evaporative zone depth (in.)	21	
Growing season - Enter starting day and ending day (between 1 and 365)	113-298	Growing season (julian date)
SOILS AND DESIGN DATA Source of soil characteristics data	HELP Model	HELP model default values
Number of layers in landfill	5	

TABLE 2 (continued)

LANDFILL MODEL INPUT PARAMETERS	VALUE	JUSTIFICATION
LAYER NO: (make additional copies as needed)	1	
Thickness (in.)	12	Intermediate cover (compacted soil)
Layer type: 1 - Vertical percolation layer 2 - Lateral drainage layer 3 - Barrier soil liner 4 - Barrier soil liner with an FML	1	
Soil texture:	10	
Is this layer compacted? (yes/no)	yes	
If liner layer, enter fraction of daily percolation through barrier (values range from 0.01 to 0.00001)		

SOIL TEXTURE HELP	USDA	USCS	POROSITY	FIELD CAPACITY (dimensionless)	WILTING POINT	SAT. HYD CONDUCTIVITY (cm/sec)
1	CoS	GS	0.417	0.045	0.018	1.0E-02
2	S	SW	0.437	0.062	0.024	5.8E-03
3	FS	SM	0.457	0.083	0.033	3.1E-03
4	LS	SM	0.437	0.105	0.047	1.7E-03
5	LFS	SM	0.457	0.131	0.058	1.0E-03
6	SL	SM	0.453	0.190	0.085	7.2E-04
7	FSL	SM	0.473	0.222	0.104	5.2E-04
8	L	ML	0.463	0.232	0.116	3.7E-04
9	SiL	ML	0.501	0.284	0.135	1.9E-04
10	SCL	SC	0.398	0.244	0.136	1.2E-04
11	CL	CL	0.464	0.310	0.187	6.4E-05
12	SiCL	CL	0.471	0.342	0.210	4.2E-05
13	SC	CH	0.430	0.321	0.221	3.3E-05
14	SiC	CH	0.479	0.371	0.251	2.5E-05
15	C	CH	0.475	0.378	0.265	1.7E-05
16	Liner Soil		0.430	0.366	0.280	1.0E-07
17	Liner Soil		0.400	0.356	0.290	1.0E-08
18	Mun. Waste		0.520	0.294	0.140	2.0E-04
19	User Specified					

TABLE 2 (continued)

LANDFILL MODEL INPUT PARAMETERS	VALUE	JUSTIFICATION
LAYER NO: (make additional copies as needed)	2	
Thickness (in.)	960	Average height of waste throughout cell
Layer type: 1 - Vertical percolation layer 2 - Lateral drainage layer 3 - Barrier soil liner 4 - Barrier soil liner with an FML	1	
Soil texture:	18	Appropriate for municipal waste
Is this layer compacted? (yes/no)	yes	
If liner layer, enter fraction of daily percolation through barrier (values range from 0.01 to 0.00001)		

SOIL TEXTURE HELP	USDA	USCS	POROSITY	FIELD CAPACITY (dimensionless)	WILTING POINT	SAT. HYD CONDUCTIVITY (cm/sec)
1	CoS	GS	0.417	0.045	0.018	1.0E-02
2	S	SW	0.437	0.062	0.024	5.8E-03
3	FS	SM	0.457	0.083	0.033	3.1E-03
4	LS	SM	0.437	0.105	0.047	1.7E-03
5	LFS	SM	0.457	0.131	0.058	1.0E-03
6	SL	SM	0.453	0.190	0.085	7.2E-04
7	FSL	SM	0.473	0.222	0.104	5.2E-04
8	L	ML	0.463	0.232	0.116	3.7E-04
9	SiL	ML	0.501	0.284	0.135	1.9E-04
10	SCL	SC	0.398	0.244	0.136	1.2E-04
11	CL	CL	0.464	0.310	0.187	6.4E-05
12	SiCL	CL	0.471	0.342	0.210	4.2E-05
13	SC	CH	0.430	0.321	0.221	3.3E-05
14	SiC	CH	0.479	0.371	0.251	2.5E-05
15	C	CH	0.475	0.378	0.265	1.7E-05
16	Liner Soil		0.430	0.366	0.280	1.0E-07
17	Liner Soil		0.400	0.356	0.290	1.0E-08
18	Mun. Waste		0.520	0.294	0.140	2.0E-04
19	User Specified					

TABLE 2 (continued)

LANDFILL MODEL INPUT PARAMETERS	VALUE	JUSTIFICATION
LAYER NO: (make additional copies as needed)	3	
Thickness (in.)	24	(2 ft protective soil cover)
Layer type: 1 - Vertical percolation layer 2 - Lateral drainage layer 3 - Barrier soil liner 4 - Barrier soil liner with an FML	1	
Soil texture:	7	

SOIL TEXTURE HELP	SOIL TEXTURE USDA	SOIL TEXTURE USCS	POROSITY	FIELD CAPACITY (dimensionless)	WILTING POINT	SAT. HYD CONDUCTIVITY (cm/sec)
1	CoS	GS	0.417	0.045	0.018	1.0E-02
2	S	SW	0.437	0.062	0.024	5.8E-03
3	FS	SM	0.457	0.083	0.033	3.1E-03
4	LS	SM	0.437	0.105	0.047	1.7E-03
5	LFS	SM	0.457	0.131	0.058	1.0E-03
6	SL	SM	0.453	0.190	0.085	7.2E-04
7	FSL	SM	0.473	0.222	0.104	5.2E-04
8	L	ML	0.463	0.232	0.116	3.7E-04
9	SiL	ML	0.501	0.284	0.135	1.9E-04
10	SCL	SC	0.398	0.244	0.136	1.2E-04
11	CL	CL	0.464	0.310	0.187	6.4E-05
12	SiCL	CL	0.471	0.342	0.210	4.2E-05
13	SC	CH	0.430	0.321	0.221	3.3E-05
14	SiC	CH	0.479	0.371	0.251	2.5E-05
15	C	CH	0.475	0.378	0.265	1.7E-05
16	Liner Soil		0.430	0.366	0.280	1.0E-07
17	Liner Soil		0.400	0.356	0.290	1.0E-08
18	Mun. Waste		0.520	0.294	0.140	2.0E-04
19	User Specified					

Is this layer compacted? (yes/no)	no	
If liner layer, enter fraction of daily percolation through barrier (values range from 0.01 to 0.00001)		

TABLE 2 (continued)

LANDFILL MODEL INPUT PARAMETERS	VALUE	JUSTIFICATION
LAYER NO: (make additional copies as needed)	4	
Thickness (in.)	0.157	Geonet
Layer type: 1 - Vertical percolation layer 2 - Lateral drainage layer 3 - Barrier soil liner 4 - Barrier soil liner with an FML	2	
Soil texture:	19	Porosity = 0.80 Field capacity = 0.025 Wilting point = 0.02 Saturated hydraulic conductivity = 5 cm/s
Is this layer compacted? (yes/no)	no	
If liner layer, enter fraction of daily percolation through barrier (values range from 0.01 to 0.00001)		

SOIL TEXTURE HELP	USDA	USCS	POROSITY	FIELD CAPACITY (dimensionless)	WILTING POINT	SAT. HYD CONDUCTIVITY (cm/sec)
1	CoS	GS	0.417	0.045	0.018	1.0E-02
2	S	SW	0.437	0.062	0.024	5.8E-03
3	FS	SM	0.457	0.083	0.033	3.1E-03
4	LS	SM	0.437	0.105	0.047	1.7E-03
5	LFS	SM	0.457	0.131	0.058	1.0E-03
6	SL	SM	0.453	0.190	0.085	7.2E-04
7	FSL	SM	0.473	0.222	0.104	5.2E-04
8	L	ML	0.463	0.232	0.116	3.7E-04
9	SiL	ML	0.501	0.284	0.135	1.9E-04
10	SCL	SC	0.398	0.244	0.136	1.2E-04
11	CL	CL	0.464	0.310	0.187	6.4E-05
12	SiCL	CL	0.471	0.342	0.210	4.2E-05
13	SC	CH	0.430	0.321	0.221	3.3E-05
14	SiC	CH	0.479	0.371	0.251	2.5E-05
15	C	CH	0.475	0.378	0.265	1.7E-05
16	Liner Soil		0.430	0.366	0.280	1.0E-07
17	Liner Soil		0.400	0.356	0.290	1.0E-08
18	Mun. Waste		0.520	0.294	0.140	2.0E-04
19	User Specified					

TABLE 2 (continued)

LANDFILL MODEL INPUT PARAMETERS	VALUE	JUSTIFICATION
LAYER NO: (make additional copies as needed)	5	
Thickness (in.)	0.5	Geomembrane liner
Layer type: 1 - Vertical percolation layer 2 - Lateral drainage layer 3 - Barrier soil liner 4 - Barrier soil liner with an FML	4	
Soil texture:	16	
Is this layer compacted? (yes/no)	no	
If liner layer, enter fraction of daily percolation through barrier (values range from 0.01 to 0.00001)	0	No leakage through liner; leakage calculated by alternative method

SOIL TEXTURE HELP	USDA	USCS	POROSITY	FIELD CAPACITY (dimensionless)	WILTING POINT	SAT. HYD CONDUCTIVITY (cm/sec)
1	CoS	GS	0.417	0.045	0.018	1.0E-02
2	S	SW	0.437	0.062	0.024	5.8E-03
3	FS	SM	0.457	0.083	0.033	3.1E-03
4	LS	SM	0.437	0.105	0.047	1.7E-03
5	LFS	SM	0.457	0.131	0.058	1.0E-03
6	SL	SM	0.453	0.190	0.085	7.2E-04
7	FSL	SM	0.473	0.222	0.104	5.2E-04
8	L	ML	0.463	0.232	0.116	3.7E-04
9	SiL	ML	0.501	0.284	0.135	1.9E-04
10	SCL	SC	0.398	0.244	0.136	1.2E-04
11	CL	CL	0.464	0.310	0.187	6.4E-05
12	SiCL	CL	0.471	0.342	0.210	4.2E-05
13	SC	CH	0.430	0.321	0.221	3.3E-05
14	SiC	CH	0.479	0.371	0.251	2.5E-05
15	C	CH	0.475	0.378	0.265	1.7E-05
16	Liner Soil		0.430	0.366	0.280	1.0E-07
17	Liner Soil		0.400	0.356	0.290	1.0E-08
18	Mun. Waste		0.520	0.294	0.140	2.0E-04
19	User Specified					

TABLE 2 (continued)

LANDFILL MODEL INPUT PARAMETERS	VALUE	JUSTIFICATION
LANDFILL COVER DATA Type of vegetative cover Default HELP values for type of vegetative cover: 1 - Bare ground 4 - Good grass 2 - Poor grass 5 - Excellent grass 3 - Fair grass	3	
Runoff curve number (between 0 and 100)	95	
Active (uncovered) landfill? (yes/no)	yes	
Percent of surface runoff that drains from landfill	1.0	
Surface area of landfill (ft^2)	43,560	
Slope of lateral drainage layer(s) (in percent)	3.6	
Maximum horizontal drainage distance (ft)	340	
OUTPUT Average precipitation rate (in./yr) (Use for recharge rate in ground-water transport model)	39.31	
Average percolation rate (in./yr) (Use for infiltration rate in ground-water transport model)	0	No leakage through geomembrane liner, results in 0.002 m of head on liner; therefore, one geonet layer was used to design drainage layer (thickness geonet = 0.004 m > 0.002 m (required))
Average percolation rate (in./yr)	0.4×10^{-3}	Based on 2 holes in geomembrane liner per acre using equation developed by Bonaparte et al., [1989]

TABLE 3

GROUND-WATER TRANSPORT MODEL INPUT PARAMETERS

GROUND-WATER TRANSPORT MODEL INPUT PARAMETER	VALUE	JUSTIFICATION
GENERAL - DEFINE THE OVERALL SYSTEM Run title		
Run option (deterministic or Monte Carlo)	Deter.	Insufficient data on parameter uncertainty for M.C.
Transient or steady-state scenario (Subtitle D default scenario is steady-state)	S.S.	Subtitle D application
UNSATURATED ZONE FLOW PARAMETERS (Attach additional information if appropriate)	N/A	Assume vadose zone transport is negligible
UNSATURATED ZONE TRANSPORT PARAMETERS (Attach additional information if appropriate)	N/A	---
AQUIFER/SATURATED ZONE PARAMETERS: DEPTH/PARTICLE CHARACTERISTICS OF AQUIFER Particle diameter (cm)	NA	Use of porosity data preferred
Porosity of aquifer (--)	0.3	Estimated value from GeoSyntec Ground-Water Investigation Report 7/90
Bulk density (g/cc)	1.55	Mean value for f. sand Table 6-11 MULTIMED manual
Aquifer thickness (m)	3.0 (10 ft)	Average thickness of Zone 2 in Cell 9 area
	21.3 (70 ft)	Average thickness of Zone 3 in Cell 9 area
Mixing zone depth (source thickness)	N/A	Derived from other model input
Type of source of Saturated Zone Module (Gaussian or Patch source)	G	Subtitle D application

TABLE 3 (continued)

GROUND-WATER TRANSPORT MODEL INPUT PARAMETER	VALUE	JUSTIFICATION
HYDRAULIC AND DISPERSION RELATED PARAMETERS		
Hydraulic conductivity (m/yr)	7×10^{-3} cm/sec = 2,200 m/yr	Average of reported field tested range 1.8×10^{-4} to 1.4×10^{-2} cm/sec
Hydraulic gradient (m/m)	0.075	Derived from Zone 2 May 1992 potentiometric surface map in area of Cell 9
	0.005	Derived from Zone 3 May 1992 potentiometric surface map in area of Cell 9
Seepage velocity (m/yr)	Derived	Allow MULTIMED to derive from other input
Retardation coefficient (--)	Derived	Allow MULTIMED to derive from other input
Longitudinal dispersivity (m)	Derived	Derived from flow path (X_r) length of 1 m and formula: $\alpha_L = 0.1\ X_r$ [Sec. 0.5.10, equation 6.12 MULTIMED]
Transverse dispersivity (m)	Derived	$\alpha_T = \alpha_L/3.0$
Vertical dispersivity (m)	Derived	$\alpha_V = 0.056\alpha_L$

TABLE 3 (continued)

GROUND-WATER TRANSPORT MODEL INPUT PARAMETER	VALUE	JUSTIFICATION
MISCELLANEOUS PARAMETERS - TEMPERATURE, PH, AND ORGANIC CARBON OF AQUIFER Temperature of aquifer (°C)	11.7°	Mean value from well development (final values) data wells 8A, 9A, 15B, 18, 19 in 7/90 GW Report
pH of aquifer (pH units)	6.8	Log mean from well data above
Organic carbon content (fraction) (--)	0.001	Estimated from Dragun [1988]
WELL-RELATED PARAMETERS Radial distance from site to receptor (m)	1 m	Minimum distance for program mathematical stability
Angle off plume centerline (degrees) (set to 0 by MULTIMED for Subtitle D application)	0	Subtitle D application
Z-dist, well vertical distance from the water table (m) (set by 0 to MULTIMED for Subtitle D application)	0	Subtitle D application

TABLE 3 (continued)

GROUND-WATER TRANSPORT MODEL INPUT PARAMETER	VALUE	JUSTIFICATION
SOURCE - CONTAMINANT SOURCE Infiltration rate (m/yr) (output from HELP or other landfill model)	2.8×10^{-8} m/d or 1.0×10^{-5} m/yr	Calculated liner leakage rate assumed detection frequency one per acre = 0.03 gpad: value used in previous performance evaluation
Area of waste disposal unit (m^2) (same value used in HELP or other landfill model)	341,440	Total Cell 9 = 85 ac
Spread of contaminant source (m)	Derived	
Recharge rate (m/yr) (output from HELP or other landfill model)	0.13	Average recharge rate from calibrated numerical flow model (7/90 report)
Initial concentration at landfill (mg/l) (set to 1 for Subtitle D application)	1.0	Subtitle D application

TABLE 3 (continued)

GROUND-WATER TRANSPORT MODEL INPUT PARAMETER	VALUE	JUSTIFICATION
CHEMICAL PROPERTIES OF CONTAMINANT		
Name - specify chemical to be modeled (use conservative assumption for a non-degrading chemical)	Benzene	--
DECAY COEFFICIENTS (SOLID, DISSOLVED, OVERALL)		
Solid phase decay coefficient (1/yr) (use conservative assumption for a non-degrading chemical)	N/A	Overall chemical decay calculation determined/specified directly
Dissolved phase decay coefficient (1/yr) (use conservative assumption for a non-degrading chemical)	N/A	Overall chemical decay calculation determined/specified directly
Overall chemical decay coefficient (1/yr) (use conservative assumption for a non-degrading chemical)	0	Benzene has no hydrolyzable groups
HYDROLYSIS RATE CONSTANTS AND REFERENCE TEMPERATURE		
Acid catalyzed hydrolysis rate (l/m-yr) (use conservative assumption for non-degrading chemical)	N/A	Overall chemical decay calculation determined/specified directly
Neutral hydrolysis rate constant (1/yr) (use conservative assumption for non-degrading chemical)	N/A	Overall chemical decay calculation determined/specified directly
Base catalyzed hydrolysis rate (l/m-yr) (use conservative assumption for non-degrading chemical)	N/A	Overall chemical decay calculation determined/specified directly
Reference temperature (°C)	N/A	Overall chemical decay calculation determined/specified directly
Biodegradation factor	2.30 - 3.73 (use 3.2)	$t_{1/2}$ = 68-110 days based on naturally occurring soil-ground-water system and estimate base on field observation; use 84 days as average [Dragun, 1988]

TABLE 3 (continued)

GROUND-WATER TRANSPORT MODEL INPUT PARAMETER	VALUE	JUSTIFICATION
CHEMICAL PROPERTIES OF CONTAMINANT Name - specify chemical to be modeled (use conservative assumption for a non-degrading chemical)	1,4-Dichlorobenzene	--
DECAY COEFFICIENTS (SOLID, DISSOLVED, OVERALL) Solid phase decay coefficient (1/yr) (use conservative assumption for a non-degrading chemical)	N/A	Overall chemical decay calculation determined/specified directly
Dissolved phase decay coefficient (1/yr) (use conservative assumption for a non-degrading chemical)	N/A	Overall chemical decay calculation determined/specified directly
Overall chemical decay coefficient (1/yr) (use conservative assumption for a non-degrading chemical)	0	Acid and base hydrolysis rates insignificant [Howard et al., 1991]
HYDROLYSIS RATE CONSTANTS AND REFERENCE TEMPERATURE Acid catalyzed hydrolysis rate (1/m-yr) (use conservative assumption for non-degrading chemical)	N/A	Overall chemical decay calculation determined/specified directly
Neutral hydrolysis rate constant (1/yr) (use conservative assumption for non-degrading chemical)	N/A	Overall chemical decay calculation specified directly in input
Base catalyzed hydrolysis rate (1/m-yr) (use conservative assumption for non-degrading chemical)	N/A	Overall chemical decay calculation specified directly in input
Reference temperature (°C)	N/A	Overall chemical decay calculation specified
Biodegradation coefficient (1/yr)	2.30	$t_{1/2}$ = 110 days for naturally occurring soil-ground-water systems and field observations [Dragun, 1988]

TABLE 3 (continued)

GROUND-WATER TRANSPORT MODEL INPUT PARAMETER	VALUE	JUSTIFICATION
CHEMICAL PROPERTIES OF CONTAMINANT		
Name - specify chemical to be modeled (use conservative assumption for a non-degrading chemical)	Trichloroethylene	--
DECAY COEFFICIENTS (SOLID, DISSOLVED, OVERALL)		
Solid phase decay coefficient (1/yr) (use conservative assumption for a non-degrading chemical)	N/A	Overall chemical decay calculation determined/specified directly
Dissolved phase decay coefficient (1/yr) (use conservative assumption for a non-degrading chemical)	N/A	Overall chemical decay calculation determined/specified directly
Overall chemical decay coefficient (1/yr) (use conservative assumption for a non-degrading chemical)	0	Is not hydrolyzed by water under normal conditions [Howard, 1990]
HYDROLYSIS RATE CONSTANTS AND REFERENCE TEMPERATURE		
Acid catalyzed hydrolysis rate (1/m-yr) (use conservative assumption for non-degrading chemical)	N/A	Overall chemical decay calculation determined/specified directly
Neutral hydrolysis rate constant (1/yr) (use conservative assumption for non-degrading chemical)	N/A	Overall chemical decay calculation determined/specified directly
Base catalyzed hydrolysis rate (1/m-yr) (use conservative assumption for non-degrading chemical)	N/A	Overall chemical decay calculation determined/specified directly
Reference temperature (°C)	N/A	Overall chemical decay calculation determined/specified directly
Biodegradation coefficient (1/yr)	0.843	$t_{1/2}$ = 300 days [Dragun, 1988]

TABLE 3 (continued)

GROUND-WATER TRANSPORT MODEL INPUT PARAMETER	VALUE	JUSTIFICATION
CHEMICAL PROPERTIES OF CONTAMINANT Name - specify chemical to be modeled (use conservative assumption for a non-degrading chemical)	Vinyl Chloride	--
DECAY COEFFICIENTS (SOLID, DISSOLVED, OVERALL) Solid phase decay coefficient (1/yr) (use conservative assumption for a non-degrading chemical)	N/A	Overall chemical decay calculation determined/specified directly
Dissolved phase decay coefficient (1/yr) (use conservative assumption for a non-degrading chemical)	N/A	Overall chemical decay calculation determined/specified directly
Overall chemical decay coefficient (1/yr) (use conservative assumption for a non-degrading chemical)	0	No hydroloyable groups [Howard, 1990]
HYDROLYSIS RATE CONSTANTS AND REFERENCE TEMPERATURE Acid catalyzed hydrolysis rate (1/m-yr) (use conservative assumption for non-degrading chemical)	N/A	Overall chemical decay calculation determined/specified directly
Neutral hydrolysis rate constant (1/yr) (use conservative assumption for non-degrading chemical)	N/A	Overall chemical decay calculation determined/specified directly
Base catalyzed hydrolysis rate (1/m-yr) (use conservative assumption for non-degrading chemical)	N/A	Overall chemical decay calculation determined/specified directly
Reference temperature (°C)	N/A	Overall chemical decay calculation determined/specified directly
Biodegradation coefficient (1/yr)	9.0	$t_{1/2}$ = 4 weeks based on laboratory experiments under anaerobic conditions [Howard, 1989]

TABLE 3 (continued)

GROUND-WATER TRANSPORT MODEL INPUT PARAMETER	VALUE	JUSTIFICATION
CHEMICAL PROPERTIES OF CONTAMINANT		
Name - specify chemical to be modeled (use conservative assumption for a non-degrading chemical)	Carbon Tetrachloride	--
DECAY COEFFICIENTS (SOLID, DISSOLVED, OVERALL)		
Solid phase decay coefficient (1/yr) (use conservative assumption for a non-degrading chemical)	N/A	Overall chemical decay calculation determined/specified directly
Dissolved phase decay coefficient (1/yr) (use conservative assumption for a non-degrading chemical)	N/A	Overall chemical decay calculation determined/specified directly
Overall chemical decay coefficient (1/yr) (use conservative assumption for a non-degrading chemical)	0	Hydrolysis half life in water is 7,000 years; acid base hydrolysis rates are not defined [Howard et al., 1991]
HYDROLYSIS RATE CONSTANTS AND REFERENCE TEMPERATURE		
Acid catalyzed hydrolysis rate (1/m-yr) (use conservative assumption for non-degrading chemical)	N/A	Overall chemical decay calculation determined/specified directly
Neutral hydrolysis rate constant (1/yr) (use conservative assumption for non-degrading chemical)	N/A	Overall chemical decay calculation determined/specified directly
Base catalyzed hydrolysis rate (1/m-yr) (use conservative assumption for non-degrading chemical)	N/A	Overall chemical decay calculation determined/specified directly
Reference temperature (°C)	N/A	Overall chemical decay calculation determined/specified directly
Biodegradation coefficient (1/yr)	36.5	$t_{1/2}$ = 7 days to 1 year on an estimated aqueous aerobic biodegradation half-life of acclimated anaerobic sediment/aquifer grab sample data; assume 7 days [Howard et al., 1991]

TABLE 4

DATA ON CONCENTRATIONS OF ORGANIC AND INORGANIC CONSTITUENTS IN LEACHATE FROM MUNICIPAL SOLID WASTE LANDFILLS

Chemical	Median Concentration (μg/l)[1]	KC1-2[2] (μg/l)	KC2-3[2] (μg/l)
Arsenic	13.5		
Barium	580		
Benzene	37	27	15
Cadmium	13.5		
Carbon tetrachloride	202	BDL	BDL
Chromium (Hexavalent)	60	BDL	BDL
2,4-Dichlorophenoxy acetic acid	130		
1,4-Dichlorobenzene	7	8	7
1,2-Dichloroethane	10	BDL	BDL
1,1-Dichloroethylene	-	BDL	BDL
Endrin	0.25		
Fluoride	390		
Lindane	0.02		
Lead	63		
Mercury	0.6		
Methoxychlor	-		
Nitrate	220		
Selenium	20		
Silver	12		
Toxaphene	1		
1,1,1-Trichloroethane	86	BDL	BDL
Trichloroethylene	43	10	BDL
2,4,5-Trichlorophenoxy acetic acid	-		
Vinyl Chloride	40	3	BDL

Notes: (1) USEPA report to Congress Solid Waste Disposal in the United States Vol. II, October 1988.

(2) Analytical results for leachate sample from leachate wells as reported in GeoSyntec Consultants "Millersville Sanitary Landfill North Property Boundary Ground-Water Study Report", Vol. II, 1992. BDL: Below Detection Limit

TABLE 5

CONCENTRATIONS OF CONSTITUENTS IDENTIFIED IN 40 CFR § 258.40 AT THE POINTS OF COMPLIANCE FOR CELL 9, ZONE 2

Chemical	MCL[1] (μg/l)	Concentrations at Relevant Point of Compliance[2]
		Cell 9 (μg/l)
Arsenic	50	2.1E-4
Barium	1,000	9.0E-3
Benzene	5	5.7E-4
Cadmium	10	2.1E-4
Carbon tetrachloride	5	3.1E-3
Chromium (Hexavalent)	50	9.3E-4
2,4-Dichlorophenoxy acetic acid	100	2.0E-3
1,4-Dichlorobenzene	75	1.1E-4
1,2-Dichloroethane	5	1.5E-4
1,1-Dichloroethylene	7	-
Endrin	0.2	3.9E-6
Fluoride	4,000	6.0E-3
Lindane	4	3.1E-7
Lead	15	9.7E-4
Mercury	2	9.3E-6
Methoxychlor	100	-
Nitrate	10,000	3.4E-3
Selenium	10	3.1E-4
Silver	50	1.9E-4
Toxaphene	5	1.5E-5
1,1,1-Trichloroethane	200	1.3E-3
Trichloroethylene	5	6.7E-4
2,4,5-Trichlorophenoxy acetic acid	10	-
Vinyl Chloride	2	6.2E-4

Notes: (1) 40 CFR § 258.40
(2) Concentrations at points of compliance calculated by multiplying the median concentration from Table 4 by the MULTIMED dilution factor for Cell 9.

TABLE 6

CONCENTRATIONS OF CONSTITUENTS IDENTIFIED IN 40 CFR § 258.40 AT THE POINTS OF COMPLIANCE FOR CELL 9, ZONE 3

Chemical	MCL[1] (μg/l)	Concentrations at Relevant Point of Compliance[2] Cell 9 (μg/l)
Arsenic	50	1.5E-3
Barium	1,000	6.3E-2
Benzene	5	4.0E-3
Cadmium	10	1.5E-3
Carbon tetrachloride	5	2.2E-2
Chromium (Hexavalent)	50	6.5E-3
2,4-Dichlorophenoxy acetic acid	100	1.4E-2
1,4-Dichlorobenzene	75	7.6E-4
1,2-Dichloroethane	5	1.1E-3
1,1-Dichloroethylene	7	-
Endrin	0.2	2.7E-5
Fluoride	4,000	4.2E-2
Lindane	4	2.2E-6
Lead	15	6.9E-3
Mercury	2	6.5E-5
Methoxychlor	100	-
Nitrate	10,000	2.4E-2
Selenium	10	2.2E-3
Silver	50	1.3E-3
Toxaphene	5	1.1E-4
1,1,1-Trichloroethane	200	9.4E-3
Trichloroethylene	5	4.7E-3
2,4,5-Trichlorophenoxy acetic acid	10	-
Vinyl Chloride	2	4.4E-3

Notes: (1) 40 CFR § 258.40
(2) Concentrations at points of compliance calculated by multiplying the median concentration from Table 4 by the MULTIMED dilution factor for Cell 9.

TABLE 7

POINT OF COMPLIANCE CONCENTRATIONS FOR SELECTED CONSTITUENTS; COMPARISON OF NO-BIODEGRADATION AND BIODEGRADATION CELL 9, ZONE 2

	Constituent	MCL (μg/l)	No Biodegradation (μg/l)	Biodegradation (μg/l)
Site Leachate Concentrations(1)	Benzene	5	4.2E-4	4.1E-4
	1,4-Dichlorobenzene	75	1.2E-4	1.2E-4
	Trichloroethylene	5	1.5E-4	1.5E-4
	Vinyl Chloride	2	4.6E-5	4.5E-5
	Carbon Tetrachloride	5	<1.5E-4(3)	<1.4E-4(3)
EPA Median Leachate Concentrations(2)	Benzene	5	5.7E-4	5.7E-4
	1,4-Dichlorobenzene	75	1.1E-4	1.0E-4
	Trichloroethylene	5	6.7E-4	6.6E-4
	Vinyl Chloride	2	6.2E-4	6.1E-4
	Carbon Tetrachloride	5	3.1E-3	2.8E-3

Notes: (1) Concentrations at point of compliance calculated by multiplying the leachate constituent concentration in well KC1-2 by the MULTIMED dilution factor for Cell 9.

(2) Concentrations at point of compliance calculated by multiplying the EPA median leachate constituent concentration by the MULTIMED dilution factor for Cell 9.

(3) Leachate concentration is assumed to be less than the detection limit of 10 μg/l.

TABLE 8

POINT OF COMPLIANCE CONCENTRATIONS FOR SELECTED CONSTITUENTS; COMPARISON OF NO-BIODEGRADATION AND BIODEGRADATION CELL 9, ZONE 3

	Constituent	MCL (μg/l)	No Biodegradation (μg/l)	Biodegradation (μg/l)
Site Leachate Concentrations(1)	Benzene	5	2.9E-3	2.6E-3
	1,4-Dichlorobenzene	75	8.7E-4	4.9E-4
	Trichloroethylene	5	1.1E-3	1.0E-3
	Vinyl Chloride	2	3.3E-4	2.4E-4
	Carbon Tetrachloride	5	<1.1E-3(3)	<2.8E-4(3)
EPA Median Leachate Concentrations(2)	Benzene	5	4.0E-3	3.6E-3
	1,4-Dichlorobenzene	75	7.6E-4	4.3E-4
	Trichloroethylene	5	4.7E-3	4.5E-3
	Vinyl Chloride	2	4.4E-3	3.2E-3
	Carbon Tetrachloride	5	2.2E-2	5.6E-3

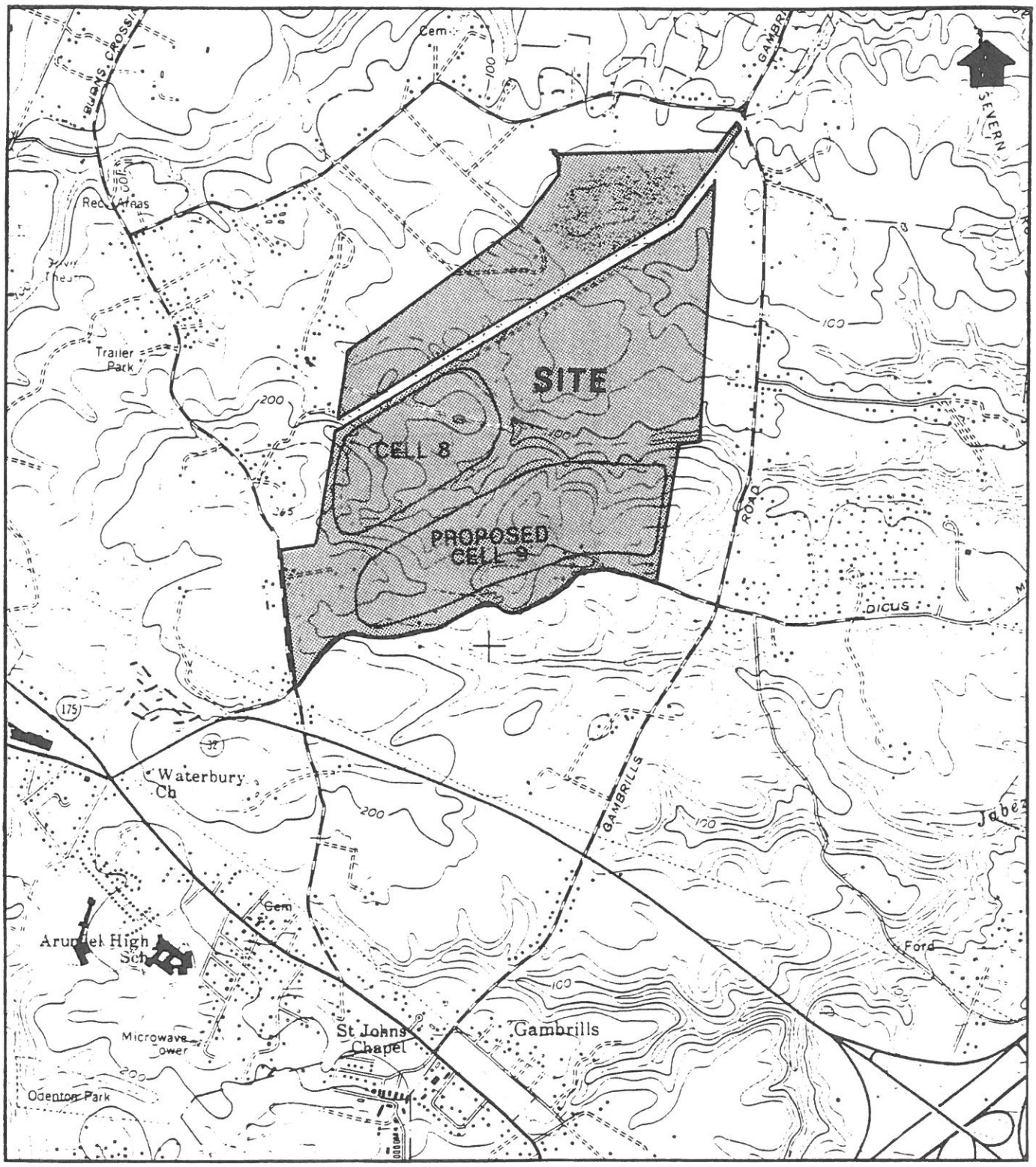
Notes: (1) Concentrations at point of compliance calculated by multiplying the leachate constituent concentration in well KC1-2 by the MULTIMED dilution factor for Cell 9.

(2) Concentrations at point of compliance calculated by multiplying the EPA median leachate constituent concentration by the MULTIMED dilution factor for Cell 9.

(3) Leachate concentration is assumed to be less than the detection limit of 10 μg/l.

327693

MILLERSVILLE LANDFILL
SITE LOCATION MAP



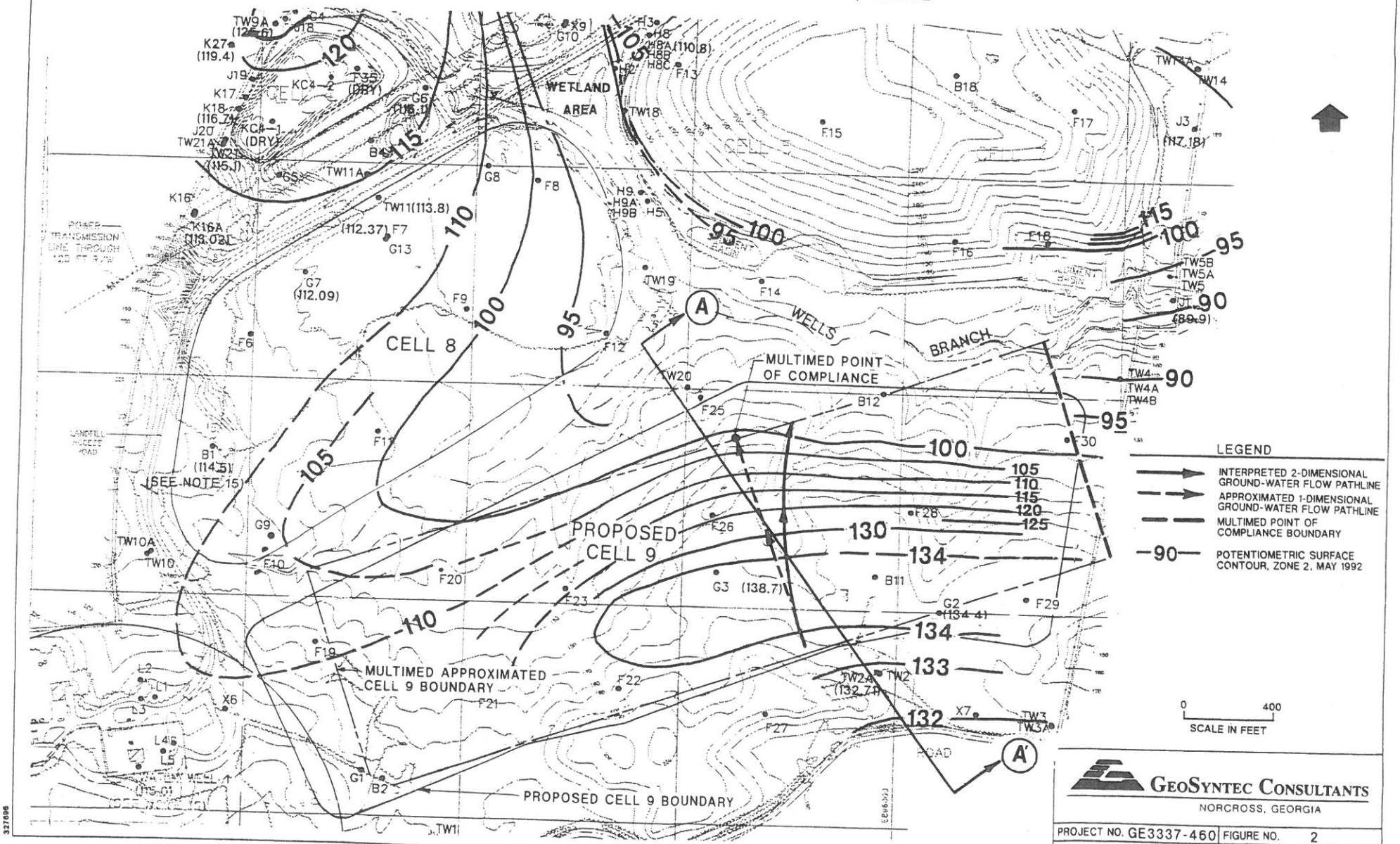
SOURCE: USGS ODENTON, MARYLAND [1979]

0 2000
SCALE IN FEET

GEOSYNTEC CONSULTANTS
ATLANTA, GEORGIA

FIGURE NO.	1
PROJECT NO.	GE3337-460
DOCUMENT NO.	GA940232
FILE NO.	DF

RELEVANT OPERATING SCENARIO CELL 9, ZONE 2

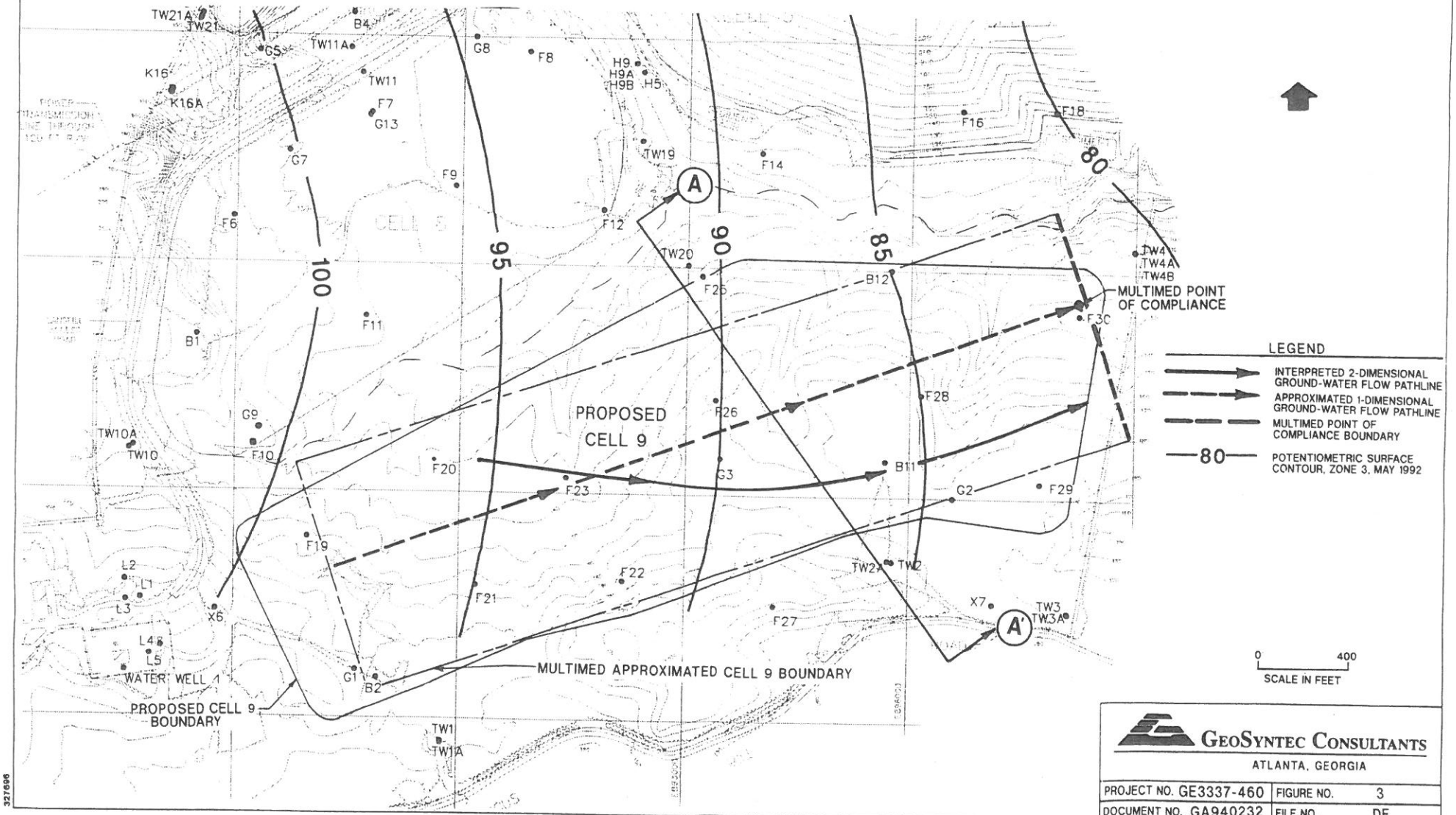


GEOSYNTEC CONSULTANTS
NORCROSS, GEORGIA

PROJECT NO. GE3337-460		FIGURE NO.	2
DOCUMENT NO. GA940332		FILE NO.	DF

327696

RELEVANT OPERATING SCENARIO CELL 9, ZONE 3

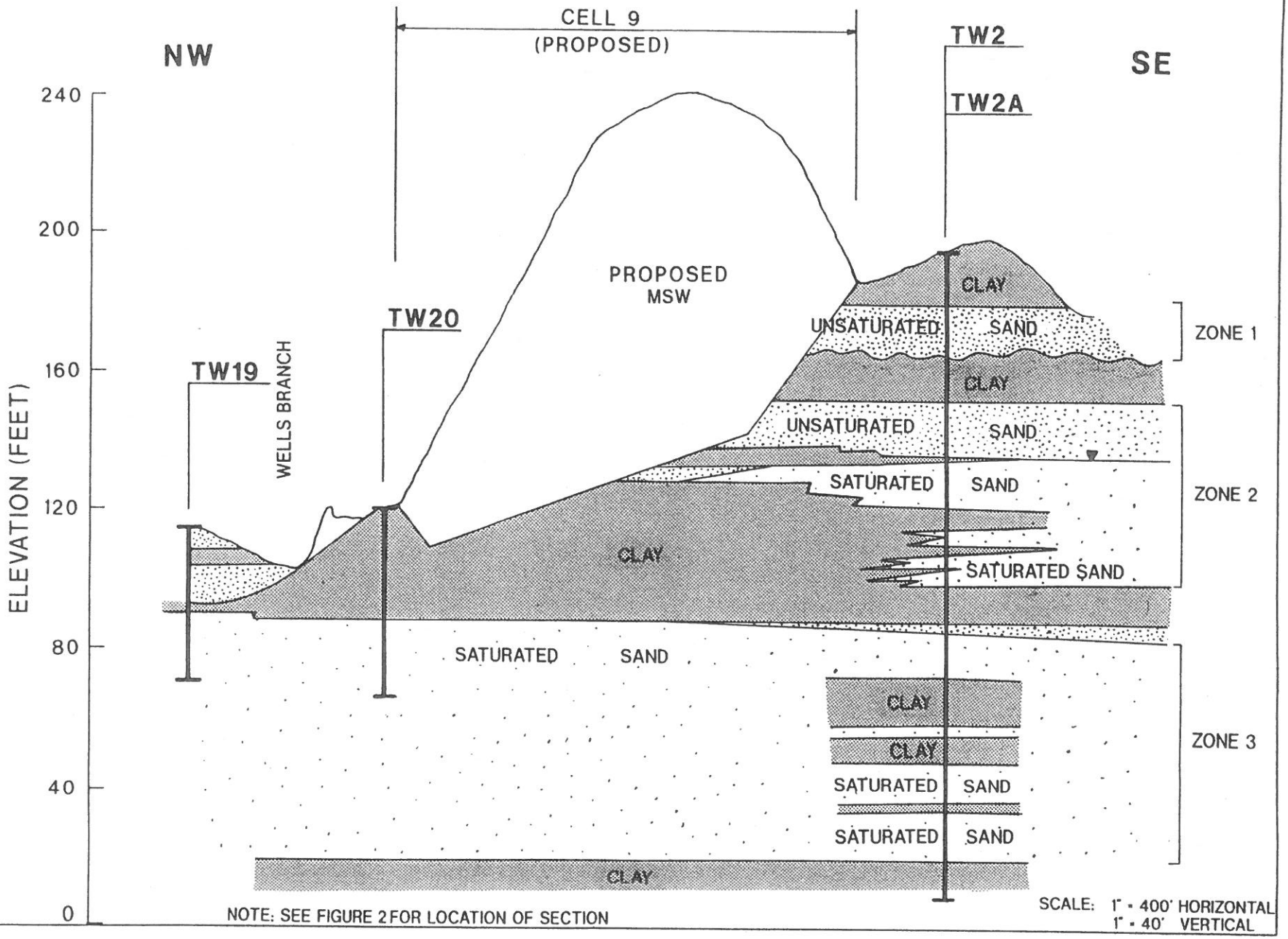


GEOSYNTEC CONSULTANTS
ATLANTA, GEORGIA

PROJECT NO. GE3337-460	FIGURE NO.	3
DOCUMENT NO. GA940232	FILE NO.	DF

327696

HYDROGEOLOGIC CONDITIONS IN THE VICINITY OF PROPOSED CELL 9
HYDROGEOLOGIC CROSS-SECTION A-A'



NOTE: SEE FIGURE 2 FOR LOCATION OF SECTION

SCALE: 1" = 400' HORIZONTAL
1" = 40' VERTICAL

GEOSYNTEC CONSULTANTS
ATLANTA, GEORGIA

FIGURE NO.	4
PROJECT NO.	GE337-460
DOCUMENT NO.	GA940232
FILE NO.	DF

327693

APPENDIX A

HELP MODEL OUTPUT

Written by: CAL Date: 89 / 11 / 09 (YY MM DD) Reviewed By: BAG Date: 90 / 1 / 9 (YY MM DD)

Client: GBB Project: Millersville Landfill Project/Proposal No.: P 1160 Task No.: 72

CALCULATE LEACHATE GENERATION RATES TO DETERMINE CAPACITY OF ON-SITE LEACHATE STORAGE TANKS

GIVEN

1. Cell acreages : Cell 8 = 60 acres
   Cell 9 = ~~100~~ 85 acres
   Total acreage = ~~160~~ 145 acres BG
2. Maximum subcell acreage = 8.5 acres

SCENARIOS CONSIDERED

Consider 2 scenarios for leachate volume calculations :

Scenario 1 (Likely Scenario)

- 1 subcell open ;
- 1 subcell with intermediate cover ; and
- Remainder of Cells 8 and 9 with final cover system.

Scenario 2 (Very Conservative Scenario Resulting in Much Greater Leachate Generation Rates than Scenario 1)

- 1 subcell open ;
- Remainder of Cells 8 and 9 with ~~final~~ intermediate cover ~~system.~~ BG

Written by: CAL Date: __/__/__ (YY MM DD) Reviewed By: BAS Date: 90/1/9 (YY MM DD)

Client: _____ Project: _____ Project/Proposal No.: _____ Task No.: _____

CALCULATIONS

- Use the HELP model, Version 2 [USEPA, 1984a; 1984b; and other unpublished documents by Schroeder et al. for Version 2] to estimate leachate generation rates for the following cases:
  - .. Open subcell (modeled as a daily cover placed over the first 8 ft thick lift of waste in the subcell, see Figure 1); and
  - .. Subcell with intermediate cover (see Figure 2).
- For the case of a subcell with final cover system incorporating a geomembrane, use empirical equations developed by Bonaparte et al. [1989] to calculate leakage through holes in the final cover system geomembrane (see Figure 3 for final cover system cross-section).
- Data pertinent to the HELP model are presented in Tables 1 and 2 and Figures 1 and 2.
- Results are as follows (see attached HELP computer outputs and leakage calculations) for the maximum average leachate generation rates
  - .. Open subcell: 0.8107 in./month (for the month of January) or 710 gallons/acre/day
  - .. Subcell with intermediate cover: 0.1049 in./month (for the months of August and October) or 92 gpad
  - .. Subcell with final cover system: ~~10~~ 1 gpad BS

Written by: CAL Date: / / YY MM DD Reviewed By: BAS Date: 90 / 1 / 9 YY MM DD

Client: Project: Project/Proposal No.: Task No.:

CAPACITY OF LEACHATE STORAGE TANKS

Scenario 1 (~~Likely~~ Ideal Scenario)

- 1 subcell open : 710 gpad × 8.5 acres = 6,035 gpd ✓
- 1 subcell with Intermediate Cover : 92 gpad × 8.5 acres = 782 gpd ✓
- Remainder of Cells 8 and 9 with Final Cover System : ~~10~~ 1 gpad × (~~160~~ 145 − (2)(8.5)) acres = ~~1,430~~ 128 gpd BS

Total = ~~8,247~~ 6,945 gpd

⟹ 30-day leachate storage volume = ~~8,247~~ 6,945 gpd × 30 days = ~~247,410~~ 208,350 gallons

Scenario 2 (Very Conservative Scenario ; calculations done for comparison)

- 1 subcell open : 710 gpad × 8.5 acres = 6,035 gpd ✓
- Remainder of Cells 8 and 9 with ~~Final~~ Intermediate Cover ~~System~~ : 92 gpad × (~~160~~ 145 − 8.5) acres = ~~13,938~~ 12,558 gpd BS

Total = ~~19,973~~ 18,593 gpd

⟹ 30-day leachate storage volume = ~~19,973~~ 18,593 gpd × 30 days = ~~599,190~~ 557,790 gallons

Conclusion = The available on-site leachate storage volume of 500,000 gallons is more than adequate to provide for 30-day leachate storage.

Written by: BAG Date: 90/1/9 (YY/MM/DD) Reviewed By: JCW Date: [illegible] (YY/MM/DD)

Client: GBB Project: Millersville Landfill Project/Proposal No.: P1160 Task No.: 72

Scenario 3 (Likely Scenario)

- 1 subcell open: 710 gpad × 8.5 acres = [illegible]
- 4 subcells with intermediate cover: 92 gpad × 8.5 acres × 4 = 3128 gpd
- remaining cells w/ final cover: 1 gpad × 128 acres = 128 gpd

9,291 gpd

⟹ 30-day leachate storage volume =

9,291 gpd × 30 days = 278,730 gallons

- Annual leachate generation
- assume Scenario 3
  - 1 subcell open:

annual leachate generation = $\sum_{Jan}^{Dec}$ average monthly lateral drainage (from HELP)

= 6.986 in./year ✓

= 520 gpad

520 gpad × 8.5 acres = 4420 gpd

- 128 acres with final cover = 128 gpd
- 4 subcells with intermediate cover = 1.22 in./yr = 91 gpad 3094 gpd

7642 gpd

365-day leachate volume = 2,798,000 gallons ✓

average 30-day leachate volume 7642 × 30 = 230,000

Written by: CAL Date: / / Reviewed By: BAS Date: 90 / 1 / 9
YY MM DD YY MM DD

Client: Project: Project/Proposal No.: Task No.:

REFERENCES

Bonaparte, R., Giroud, J.P., and Gross, B.A., "Rates of Leakage through Landfill Liners", Proceedings of Geosynthetics'89, San Diego, Feb 1989, pp. 18-29.

Giroud, J.P. and Bonaparte, R., "Leakage through Liners Constructed with Geomembranes, Part 1: Geomembrane Liners", Geotextiles and Geomembra Elsevier Applied Science Publishers Ltd., Vol. 8, No. 1, 1989, pp. 27-67.

USEPA, "The Hydrologic Evaluation of Landfill Performance (HELP) Model, Vol. I, User's Guide for Version I", EPA/530-SW-84-009, U.S. Environmental Protection Agency, Washington, DC, Jun 1984 a, 120 p.

USEPA, "The Hydrologic Evaluation of Landfill Performance (HELP) Model, Vol. II, Documentation for Version I", EPA/530-SW-84-010, U.S. Environmental Protection Agency, Washington, DC, Jun 1984 b.

Written by: CWL Date: / / Reviewed By: BWS Date: 90/1/9
YY MM DD

Client: Project: Project/Proposal No.: Task No.:

_ TABLE 1 _

LAYER TYPE

Layer Type Number	Layer Type
1	Vertical Percolation Layer
2	Lateral Drainage Layer
4	Barrier Soil Liner with Flexible Membrane Liner

Note : Layer type number corresponds to numbers used by the HELP model.

Written by: CWL Date: / / Reviewed By: BAS Date: 90 / 1 / 9
YY MM DD YY MM DD

Client: Project: Project/Proposal No.: Task No.:

- TABLE 2 -

DEFAULT SOIL CHARACTERISTICS

Soil Texture	Component	Porosity (Vol/Vol)	Field Capacity (Vol/Vol)	Wilting Point (Vol/Vol)	Hydraulic Conductivity (cm/s)
7	Protective Soil Cover; Daily Cover	0.473	0.222	0.104	5.2×10^{-4}
10 [1]	Intermediate Cover	0.398	0.244	0.136	1.2×10^{-4} after compaction 6×10^{-6}
16	Soil Liner	0.430	0.366	0.280	10^{-7}
18 [2]	Waste	0.520	0.294	0.140	2×10^{-4}
19 [3]	Geonet Drainage Layer	0.800	0.[illegible]5	0.0[illegible]	5

Notes: 1. The intermediate cover will be compacted. The effect of compaction is modeled by the HELP program by reducing the soil hydraulic conductivity by a factor of 20.

2. In addition to the values listed in the table for waste, waste initial moisture content values are entered in the program manually (See Figures 1 and 2 for these values).

3. The geonet drainage layer is modeled as a soil layer with physical and hydraulic characteristics similar to the actual "geosynthetic" geonet.

Written by: CAL Date: / / (YY MM DD) Reviewed By: BWS Date: 90 / 1 / 9 (YY MM DD)

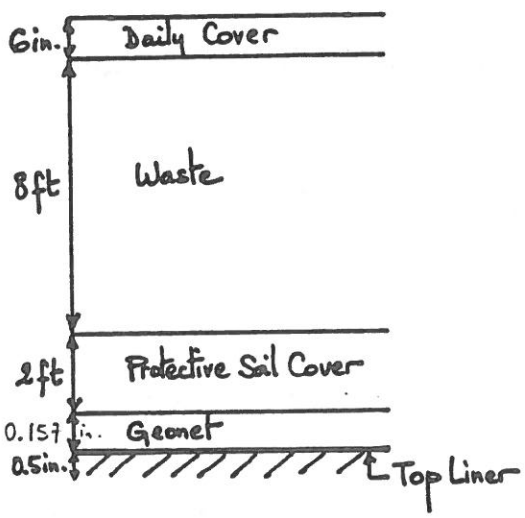
Client: Project: Project/Proposal No.: Task No.:

- FIGURE 1 -

DAILY COVER OVER FIRST LIFT OF WASTE

CROSS - SECTION

HELP MODEL DATA REQUIREMENTS



	Layer Type (See Table 1)	Soil Texture (See Table 2)
Daily Cover	1 ✓	7 ✓
Waste	1 ✓	18 ✓
Protective Soil Cover	1 ✓	7 ✓
Geonet	2 ✓	19 ✓
Top Liner	4 ✓	16 ✓

- Bare ground for daily cover
- SCS curve number for runoff = 91
- Waste initial moisture content = 0.227
- Evaporative zone depth = 9 in.
- Runoff fraction = 0.1 ✓
- Geonet drainage layer : .. slope = 3.6%
  .. drainage distance = 340 ft

Written by: CAL Date: / / (YY MM DD) Reviewed By: Date: 90/1/9 (YY MM DD)

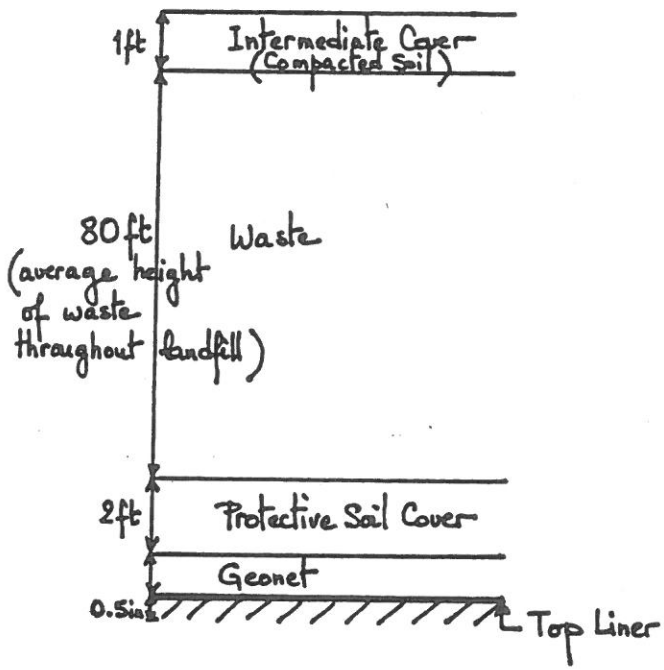
Client: Project: Project/Proposal No.: Task No.:

_ FIGURE 2 _

INTERMEDIATE COVER

CROSS - SECTION

HELP MODEL DATA REQUIREMENTS



	Layer Type (See Table 1)	Soil Texture (See Table 2)
Intermediate Cover (Compacted Soil)	1	10
Waste	1	18
Protective Soil Cover	1	7
Geonet	2	19
Top Liner	4	16

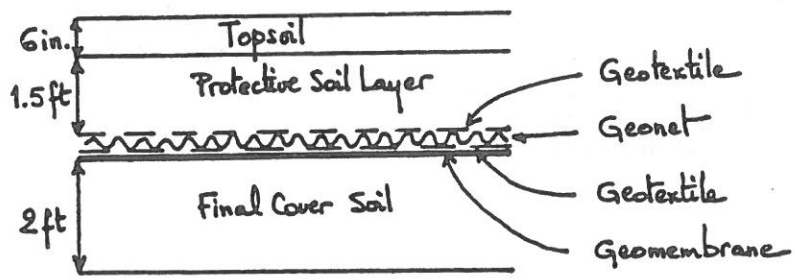
- Fair grass for intermediate cover (bare ground condition will result in greater runoff)
- SCS runoff curve number = 95
- Waste initial moisture content = 0.27
- Evaporative zone depth = 21 in.
- Runoff fraction = 1.0 ✓
- Geonet drainage layer : .. slope = 3.6%
  .. drainage distance = 340 ft

Written by: CAL Date: __/__/__ (YY MM DD) Reviewed By: BAM Date: 90/1/9 (YY MM DD)

Client: _____ Project: _____ Project/Proposal No.: _____ Task No.: _____

- FIGURE 3 -

FINAL COVER SYSTEM



For leakage calculations, assume :

- 2 - ~~0.016~~ OK BS in.^{2} (~~10~~ OK BS mm^2) holes in the geomembrane per acre [Giroud and Bonaparte, 1989 and USEPA, 1987]
- Hydraulic conductivity of final cover soil is $\leq 10^{-4}$ cm/s
- Hydraulic head on the geomembrane = 0.2 in. (5 mm). (head equals thickness of geonet layer)
- ~~Poor~~ Good contact between the geomembrane and the final cover soil (~~in reality~~, contact between geomembrane and soil ~~may be~~ will likely be good since ~~if~~ proper quality assurance ~~is~~ will be provided during construction ; ~~poor contact assumption results in greater leakage rates than good contact and is therefore more conservative~~ ; the terms "poor contact" and "good contact" are ~~then~~ defined in [Giroud and Bonaparte, 1989]).

BS

Written by: CAL Date: / / (YY MM DD) Reviewed By: BAY Date: 90 / 1 / 9 (YY MM DD)

Client: Project: Project/Proposal No.: Task No.:

HELP COMPUTER PRINTOUTS

FOR OPEN SUBCELL

****
****

MILLERSVILLE LANDFILL
DAILY COVER OVER FIRST LIFT OF WASTE
9 NOVEMBER 1989

****
****

BARE GROUND

LAYER 1

VERTICAL PERCOLATION LAYER

THICKNESS	=	6.00 INCHES
POROSITY	=	0.4730 VOL/VOL
FIELD CAPACITY	=	0.2217 VOL/VOL
WILTING POINT	=	0.1043 VOL/VOL
INITIAL SOIL WATER CONTENT	=	0.2220 VOL/VOL
SATURATED HYDRAULIC CONDUCTIVITY	=	0.000520000001 CM/SEC

LAYER 2

VERTICAL PERCOLATION LAYER

THICKNESS	=	96.00 INCHES
POROSITY	=	0.5200 VOL/VOL
FIELD CAPACITY	=	0.2942 VOL/VOL
WILTING POINT	=	0.1400 VOL/VOL
INITIAL SOIL WATER CONTENT	=	0.2270 VOL/VOL
SATURATED HYDRAULIC CONDUCTIVITY	=	0.000199999995 CM/SEC

LAYER 3

VERTICAL PERCOLATION LAYER

THICKNESS	=	24.00 INCHES
POROSITY	=	0.4730 VOL/VOL
FIELD CAPACITY	=	0.2217 VOL/VOL
WILTING POINT	=	0.1043 VOL/VOL
INITIAL SOIL WATER CONTENT	=	0.2220 VOL/VOL
SATURATED HYDRAULIC CONDUCTIVITY	=	0.000520000001 CM/SEC

LAYER 4

LATERAL DRAINAGE LAYER

THICKNESS	=	0.16 INCHES
POROSITY	=	0.8000 VOL/VOL
FIELD CAPACITY	=	0.0250 VOL/VOL
WILTING POINT	=	0.0200 VOL/VOL
INITIAL SOIL WATER CONTENT	=	0.0250 VOL/VOL
SATURATED HYDRAULIC CONDUCTIVITY	=	5.000000000000 CM/SEC
SLOPE	=	3.60 PERCENT
DRAINAGE LENGTH	=	340.0 FEET

LAYER 5

BARRIER SOIL LINER WITH FLEXIBLE MEMBRANE LINER

THICKNESS	=	0.50 INCHES
POROSITY	=	0.4300 VOL/VOL
FIELD CAPACITY	=	0.3663 VOL/VOL
WILTING POINT	=	0.2802 VOL/VOL
INITIAL SOIL WATER CONTENT	=	0.4300 VOL/VOL
SATURATED HYDRAULIC CONDUCTIVITY	=	0.000000100000 CM/SEC
LINER LEAKAGE FRACTION	=	0.00000000

GENERAL SIMULATION DATA

SCS RUNOFF CURVE NUMBER	=	91.00
TOTAL AREA OF COVER	=	43560. SQ FT
EVAPORATIVE ZONE DEPTH	=	9.00 INCHES
POTENTIAL RUNOFF FRACTION	=	0.100000
UPPER LIMIT VEG. STORAGE	=	4.3980 INCHES
INITIAL VEG. STORAGE	=	2.0130 INCHES

SOIL WATER CONTENT INITIALIZED BY USER.

CLIMATOLOGICAL DATA

SYNTHETIC RAINFALL WITH SYNTHETIC DAILY TEMPERATURES AND
SOLAR RADIATION FOR BALTIMORE MARYLAND

MAXIMUM LEAF AREA INDEX	=	0.00
START OF GROWING SEASON (JULIAN DATE)	=	113
END OF GROWING SEASON (JULIAN DATE)	=	298

NORMAL MEAN MONTHLY TEMPERATURES, DEGREES FAHRENHEIT

JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
32.70	34.70	43.30	54.00	63.40	72.20

****

AVERAGE MONTHLY VALUES IN INCHES FOR YEARS 1 THROUGH 5

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION						
TOTALS	1.46	1.73	3.24	2.84	3.21	4.42
	3.18	3.84	2.57	2.70	4.19	3.38
STD. DEVIATIONS	0.62	0.53	1.14	1.24	1.14	0.50
	0.85	0.84	1.59	1.61	2.00	2.34
RUNOFF						
TOTALS	0.000	0.002	0.017	0.014	0.010	0.036
	0.045	0.056	0.034	0.027	0.043	0.042
STD. DEVIATIONS	0.001	0.003	0.023	0.027	0.013	0.029
	0.035	0.059	0.046	0.028	0.045	0.054
EVAPOTRANSPIRATION						
TOTALS	1.266	1.513	2.580	2.462	3.347	3.707
	3.056	2.499	2.441	2.079	1.655	1.253
STD. DEVIATIONS	0.257	0.324	0.898	0.363	1.176	0.822
	1.048	1.081	1.473	1.021	0.249	0.255
LATERAL DRAINAGE FROM LAYER 4						
TOTALS	0.8107	0.6651	0.6986	0.6593	0.5990	0.4990
	0.4917	0.4921	0.4711	0.4576	0.4435	0.6986
STD. DEVIATIONS	0.8218	0.5146	0.5155	0.4932	0.3822	0.2977
	0.3139	0.3454	0.3230	0.2973	0.2842	0.5669
PERCOLATION FROM LAYER 5						
TOTALS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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AVERAGE ANNUAL TOTALS & (STD. DEVIATIONS) FOR YEARS 1 THROUGH 5

	(INCHES)		(CU. FT.)	PERCENT
PRECIPITATION	36.77	(4.040)	133475.	100.00
RUNOFF	0.327	(0.144)	1188.	0.89
EVAPOTRANSPIRATION	27.857	(2.529)	101122.	75.76

LATERAL DRAINAGE FROM LAYER 4	6.9863 (4.2209)	25360.	19.00
PERCOLATION FROM LAYER 5	0.0000 (0.0000)	0.	0.00
CHANGE IN WATER STORAGE	1.599 (6.280)	5805.	4.35

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PEAK DAILY VALUES FOR YEARS 1 THROUGH 5

	(INCHES)	(CU. FT.)
PRECIPITATION	2.69	9764.7
RUNOFF	0.150	543.9
LATERAL DRAINAGE FROM LAYER 4	0.0734	266.4
PERCOLATION FROM LAYER 5	0.0000	0.0
HEAD ON LAYER 5	0.0	
SNOW WATER	1.28	4653.8

MAXIMUM VEG. SOIL WATER (VOL/VOL)	0.4215
MINIMUM VEG. SOIL WATER (VOL/VOL)	0.1159

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FINAL WATER STORAGE AT END OF YEAR 5

LAYER	(INCHES)	(VOL/VOL)
1	1.19	0.1978
2	29.23	0.3044
3	6.03	0.2514
4	0.01	0.0426
5	0.22	0.4300
SNOW WATER	0.00	

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Written by: CRL Date: ___/___/___ (YY MM DD) Reviewed By: _____ Date: ___/___/___ (YY MM DD)

Client: _____ Project: _____ Project/Proposal No.: _____ Task No.: _____

HELP COMPUTER PRINTOUTS

FOR SUBCELL WITH INTERMEDIATE COVER

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MILLERSVILLE LANDFILL
INTERMEDIATE COVER
9 NOVEMBER 1989

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FAIR GRASS

LAYER 1

VERTICAL PERCOLATION LAYER

THICKNESS	=	12.00 INCHES
POROSITY	=	0.3325 VOL/VOL
FIELD CAPACITY	=	0.2173 VOL/VOL
WILTING POINT	=	0.1361 VOL/VOL
INITIAL SOIL WATER CONTENT	=	0.2440 VOL/VOL
SATURATED HYDRAULIC CONDUCTIVITY	=	0.000017999999 CM/SEC

LAYER 2

VERTICAL PERCOLATION LAYER

THICKNESS	=	960.00 INCHES
POROSITY	=	0.5200 VOL/VOL
FIELD CAPACITY	=	0.2942 VOL/VOL
WILTING POINT	=	0.1400 VOL/VOL
INITIAL SOIL WATER CONTENT	=	0.2700 VOL/VOL
SATURATED HYDRAULIC CONDUCTIVITY	=	0.000199999995 CM/SEC

LAYER 3

VERTICAL PERCOLATION LAYER

THICKNESS	=	24.00 INCHES
POROSITY	=	0.4730 VOL/VOL
FIELD CAPACITY	=	0.2217 VOL/VOL

WILTING POINT	=	0.1043 VOL/VOL
INITIAL SOIL WATER CONTENT	=	0.2220 VOL/VOL
SATURATED HYDRAULIC CONDUCTIVITY	=	0.000520000001 CM/SEC

LAYER 4

LATERAL DRAINAGE LAYER

THICKNESS	=	0.16 INCHES
POROSITY	=	0.8000 VOL/VOL
FIELD CAPACITY	=	0.0250 VOL/VOL
WILTING POINT	=	0.0200 VOL/VOL
INITIAL SOIL WATER CONTENT	=	0.0250 VOL/VOL
SATURATED HYDRAULIC CONDUCTIVITY	=	5.000000000000 CM/SEC
SLOPE	=	3.60 PERCENT
DRAINAGE LENGTH	=	340.0 FEET

LAYER 5

BARRIER SOIL LINER WITH FLEXIBLE MEMBRANE LINER

THICKNESS	=	0.50 INCHES
POROSITY	=	0.4300 VOL/VOL
FIELD CAPACITY	=	0.3663 VOL/VOL
WILTING POINT	=	0.2802 VOL/VOL
INITIAL SOIL WATER CONTENT	=	0.4300 VOL/VOL
SATURATED HYDRAULIC CONDUCTIVITY	=	0.000000100000 CM/SEC
LINER LEAKAGE FRACTION	=	0.00000000

GENERAL SIMULATION DATA

SCS RUNOFF CURVE NUMBER	=	95.00
TOTAL AREA OF COVER	=	43560. SQ FT
EVAPORATIVE ZONE DEPTH	=	21.00 INCHES
POTENTIAL RUNOFF FRACTION	=	1.000000
UPPER LIMIT VEG. STORAGE	=	8.6700 INCHES
INITIAL VEG. STORAGE	=	5.3580 INCHES

SOIL WATER CONTENT INITIALIZED BY USER.

CLIMATOLOGICAL DATA

SYNTHETIC RAINFALL WITH SYNTHETIC DAILY TEMPERATURES AND
SOLAR RADIATION FOR BALTIMORE MARYLAND

MAXIMUM LEAF AREA INDEX	=	1.00
START OF GROWING SEASON (JULIAN DATE)	=	113
END OF GROWING SEASON (JULIAN DATE)	=	298

NORMAL MEAN MONTHLY TEMPERATURES, DEGREES FAHRENHEIT

JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
32.70	34.70	43.30	54.00	63.40	72.20
76.80	75.60	68.90	56.90	46.30	36.50

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AVERAGE MONTHLY VALUES IN INCHES FOR YEARS 1 THROUGH 20

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION						
TOTALS	2.74	2.90	3.82	3.20	3.06	3.82
	3.26	3.86	3.21	2.41	3.97	3.08
STD. DEVIATIONS	1.30	1.97	1.74	1.44	1.69	1.30
	1.30	2.21	2.14	1.78	1.63	1.50
RUNOFF						
TOTALS	0.773	0.891	1.178	0.706	0.697	1.244
	1.057	1.455	1.125	0.772	1.377	1.039
STD. DEVIATIONS	0.705	1.172	1.042	0.713	0.696	0.988
	0.727	1.634	1.062	0.784	0.943	0.933
EVAPOTRANSPIRATION						
TOTALS	1.162	1.608	2.595	2.825	2.671	3.150
	2.444	2.284	2.061	1.600	1.368	1.186
STD. DEVIATIONS	0.176	0.253	0.510	0.786	1.260	0.827
	0.860	0.980	1.030	0.841	0.405	0.156
LATERAL DRAINAGE FROM LAYER 4						
TOTALS	0.1007	0.0920	0.1016	0.0993	0.1035	0.1009
	0.1047	0.1049	0.1016	0.1049	0.1014	0.1045
STD. DEVIATIONS	0.0290	0.0266	0.0294	0.0290	0.0303	0.0296
	0.0306	0.0306	0.0295	0.0303	0.0291	0.0299
PERCOLATION FROM LAYER 5						
TOTALS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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AVERAGE ANNUAL TOTALS & (STD. DEVIATIONS) FOR YEARS 1 THROUGH 20

	(INCHES)		(CU. FT.)	PERCENT
PRECIPITATION	39.31	(6.781)	142706.	100.00

RUNOFF	12.314 (3.980)	44700.	31.32
EVAPOTRANSPIRATION	24.957 (2.449)	90592.	63.48
LATERAL DRAINAGE FROM LAYER 4	1.2200 (0.3529)	4428.	3.10
PERCOLATION FROM LAYER 5	0.0000 (0.0000)	0.	0.00
CHANGE IN WATER STORAGE	0.822 (1.755)	2985.	2.09

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PEAK DAILY VALUES FOR YEARS 1 THROUGH 20

	(INCHES)	(CU. FT.)
PRECIPITATION	4.26	15463.8
RUNOFF	3.584	13010.1
LATERAL DRAINAGE FROM LAYER 4	0.0050	18.2
PERCOLATION FROM LAYER 5	0.0000	0.0
HEAD ON LAYER 5	0.0	
SNOW WATER	1.82	6612.6

MAXIMUM VEG. SOIL WATER (VOL/VOL)	0.3384
MINIMUM VEG. SOIL WATER (VOL/VOL)	0.1372

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FINAL WATER STORAGE AT END OF YEAR 20

LAYER	(INCHES)	(VOL/VOL)
1	3.21	0.2674
2	275.06	0.2865
3	5.64	0.2349
4	0.01	0.0326
5	0.22	0.4300
SNOW WATER	0.00	

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Written by: CAL Date: ___/___/___ (YY MM DD) Reviewed By: _____ Date: ___/___/___ (YY MM DD)

Client: _____ Project: _____ Project/Proposal No.: _____ Task No.: _____

CALCULATIONS OF LEAKAGE

THROUGH FINAL COVER SYSTEM

Written by: CAL Date: / / (YY MM DD) Reviewed By: BAS Date: 90 / 1 / 9 (YY MM DD)

Client: Project: Project/Proposal No.: Task No.:

Flow through a hole in a geomembrane placed in contact with a low-permeability soil is, for good contact between soil and geomembrane [Bonaparte et al., 1989]:

$$Q = 0.21\, a^{0.1}\, h^{0.9}\, k^{0.74}$$

where: a = area of geomembrane hole; h = hydraulic head on the geomembrane; and k = hydraulic conductivity of final cover soil. (This equation can only be used with SI units.)

For ~~poor~~ good contact between soil and geomembrane; ~~the equation becomes according to GeoServices' unpublished documents~~:

$$Q = \cancel{1.15}\ 0.21\, a^{0.1}\, h^{0.9}\, k^{0.74}$$

$$= \cancel{1.15}\ 0.21 \left(10^{-8}\right)^{0.1} \left(5 \times 10^{-3}\right)^{0.9} \left(10^{-6}\right)^{0.74}$$

$$= \cancel{1.1 \times 10^{-7}}\ 2.0 \times 10^{-8}\ m^3/s$$ ✓ BS

Assuming 2 holes / acre, the calculated leakage rate is:

$$q = \left(\cancel{1.1 \times 10^{-7}}\ 2.0 \times 10^{-8}\ m^3/s\right)\left(1000\ \ell/m^3\right)\left(\frac{\text{gallons}}{3.78\ \ell}\right)\left(\frac{86400\ s}{\text{day}}\right)\left(2\ \text{holes/acre}\right)$$

$$= \cancel{5}\ 1\ \text{gpad}$$ ✓ BS

Therefore, assume leachate generation rate for subcell with final cover system = ~~10~~ 1 gpad

APPENDIX B

MULTIMED OUTPUT

GEOSYNTEC CONSULTANTS

COMPUTATION COVER SHEET

Client: AAC **Project:** MLF **Project/Proposal #:** GE3337 **Task #:** 460

TITLE OF COMPUTATIONS MULTIMED input/output verification; Tables 5-8 calc.'s

COMPUTATIONS BY:
Signature [signature] 2/17/94 DATE
Printed Name and Title Kirk Kessler, Senior Project Hydrogeologist

ASSUMPTIONS AND PROCEDURES CHECKED BY: (Peer Reviewer)
Signature Rudolph Bonaparte 3/9/94 DATE
Printed Name and Title Rudolph Bonaparte, Principal

COMPUTATIONS CHECKED BY:
Signature Molly Davis 3/9/94 DATE
Printed Name and Title Molly Davis, Project Engineer

COMPUTATIONS BACKCHECKED BY: (Originator)
Signature [signature] 3/9/94 DATE
Printed Name and Title Kirk Kessler, Senior Project Hydrogeologist

APPROVED BY: (PM or Designate)
Signature Steven Shugart 3/9/93 DATE
Printed Name and Title Steven Shugart

APPROVAL NOTES:

REVISIONS (Number and initial all revisions)

NO.	SHEET	DATE	BY	CHECKED BY	APPROVAL

GA910096

91.01.21

CELL 9, ZONE 2

1

U. S. ENVIRONMENTAL PROTECTION AGENCY

EXPOSURE ASSESSMENT

MULTIMEDIA MODEL

MULTIMED (Version 1.01, June 1991)

1

Run options

MILLERSVILLE SANITARY LANDFILL PERFORMANCE EVALUATION CELL9 ZONE 2

CASE 1 ... NO BIODEGRADATION OF CHEMICAL (MOST CONSERVATIVE CASE)
Chemical simulated is NOT CHEMICAL SPECIFIC

Option Chosen Saturated zone model
Run was DETERMIN
Infiltration input by user
Run was steady-state
Reject runs if Y coordinate outside plume
Reject runs if Z coordinate outside plume
Gaussian source used in saturated zone model

1
1

CHEMICAL SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Solid phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Dissolved phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Overall chemical decay coefficient	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	0.100E+11
Acid catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Neutral hydrolysis rate constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Base catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Reference temperature	C	CONSTANT	-999.	-999.	0.000E+00	100.
Normalized distribution coefficient	ml/g	CONSTANT	83.0	-999.	0.000E+00	-999.
Distribution coefficient	--	DERIVED	0.000E+00	-999.	0.000E+00	0.100E+11
Biodegradation coefficient (sat. zone)	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Air diffusion coefficient	cm2/s	CONSTANT	0.000E+00	-999.	0.000E+00	10.0
Reference temperature for air diffusion	C	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Molecular weight	g/M	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Mole fraction of solute	--	CONSTANT	0.000E+00	-999.	0.100E-08	1.00

Vapor pressure of solute	mm Hg	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Henry's law constant	atm-m^3/M	CONSTANT	0.000E+00	-999.	0.100E-09	1.00
Overall 1st order decay sat. zone	1/yr	DERIVED	0.000E+00	0.000E+00	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00

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SOURCE SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Infiltration rate	m/yr	CONSTANT	0.100E-04	-999.	0.100E-09	0.100E+11
Area of waste disposal unit	m^2	CONSTANT	0.341E+06	-999.	0.100E-01	-999.
Duration of pulse	yr	CONSTANT	-999.	-999.	0.100E-08	-999.
Spread of contaminant source	m	DERIVED	-999.	-999.	0.100E-08	0.100E+11
Recharge rate	m/yr	CONSTANT	0.130	-999.	0.000E+00	0.100E+11
Source decay constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Initial concentration at landfill	mg/l	CONSTANT	1.00	-999.	0.000E+00	-999.
Length scale of facility	m	CONSTANT	320.	-999.	0.100E-08	0.100E+11
Width scale of facility	m	CONSTANT	0.107E+04	-999.	0.100E-08	0.100E+11
Near field dilution		DERIVED	1.00	0.000E+00	0.000E+00	1.00

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AQUIFER SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Particle diameter	cm	CONSTANT	0.200E-01	-999.	0.100E-08	100.
Aquifer porosity	--	CONSTANT	0.300	-999.	0.100E-08	0.990
Bulk density	g/cc	CONSTANT	1.55	-999.	0.100E-01	5.00
Aquifer thickness	m	CONSTANT	3.00	-999.	0.100E-08	0.100E+06
Source thickness (mixing zone depth)	m	DERIVED	4.60	-999.	0.100E-08	0.100E+06
Conductivity (hydraulic)	m/yr	CONSTANT	0.220E+04	-999.	0.100E-06	0.100E+09
Gradient (hydraulic)		CONSTANT	0.750E-01	-999.	0.100E-07	-999.
Groundwater seepage velocity	m/yr	DERIVED	550.	-999.	0.100E-09	0.100E+09
Retardation coefficient	--	DERIVED	1.00	-999.	1.00	0.100E+09
Longitudinal dispersivity	m	FUNCTION OF X	37.0	-999.	0.100E-02	0.100E+05
Transverse dispersivity	m	FUNCTION OF X	12.0	-999.	0.100E-02	0.100E+05
Vertical dispersivity	m	FUNCTION OF X	2.00	-999.	0.100E-02	0.100E+05
Temperature of aquifer	C	CONSTANT	11.7	-999.	0.000E+00	100.
pH	--	CONSTANT	6.80	-999.	0.300	14.0
Organic carbon content (fraction)		CONSTANT	0.100E-02	-999.	0.100E-05	1.00
Well distance from site	m	CONSTANT	1.00	-999.	1.00	-999.
Angle off center	degree	CONSTANT	0.000E+00	-999.	0.000E+00	360.
Well vertical distance	m	CONSTANT	0.000E+00	-999.	0.000E+00	1.00

CONCENTRATION AFTER SATURATED ZONE MODEL 0.1547E-04

1

U. S. E N V I R O N M E N T A L P R O T E C T I O N A G E N C Y

E X P O S U R E A S S E S S M E N T

M U L T I M E D I A M O D E L

MULTIMED (Version 1.01, June 1991)

1

Run options

MILLERSVILLE SANITARY LANDFILL PERFORMANCE EVALUATION CELL 9 ZONE 2

CASE 2A ... BIODEGRADATION COEFFICIENT SPECIFIED
Chemical simulated is BENZENE

Option Chosen Saturated zone model
Run was DETERMIN
Infiltration input by user
Run was steady-state
Reject runs if Y coordinate outside plume
Reject runs if Z coordinate outside plume
Gaussian source used in saturated zone model

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CHEMICAL SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Solid phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Dissolved phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Overall chemical decay coefficient	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	0.100E+11
Acid catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Neutral hydrolysis rate constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Base catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Reference temperature	C	CONSTANT	-999.	-999.	0.000E+00	100.
Normalized distribution coefficient	ml/g	CONSTANT	83.0	-999.	0.000E+00	-999.
Distribution coefficient	--	DERIVED	0.000E+00	-999.	0.000E+00	0.100E+11
Biodegradation coefficient (sat. zone)	1/yr	CONSTANT	3.20	-999.	0.000E+00	-999.
Air diffusion coefficient	cm2/s	CONSTANT	0.000E+00	-999.	0.000E+00	10.0
Reference temperature for air diffusion	C	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Molecular weight	g/M	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Mole fraction of solute	--	CONSTANT	0.000E+00	-999.	0.100E-08	1.00

Vapor pressure of solute	mm Hg	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Henry's law constant	atm-m^3/M	CONSTANT	0.000E+00	-999.	0.100E-09	1.00
Overall 1st order decay sat. zone	1/yr	DERIVED	0.000E+00	0.000E+00	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00

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SOURCE SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Infiltration rate	m/yr	CONSTANT	0.100E-04	-999.	0.100E-09	0.100E+11
Area of waste disposal unit	m^2	CONSTANT	0.341E+06	-999.	0.100E-01	-999.
Duration of pulse	yr	CONSTANT	-999.	-999.	0.100E-08	-999.
Spread of contaminant source	m	DERIVED	-999.	-999.	0.100E-08	0.100E+11
Recharge rate	m/yr	CONSTANT	0.130	-999.	0.000E+00	0.100E+11
Source decay constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Initial concentration at landfill	mg/l	CONSTANT	1.00	-999.	0.000E+00	-999.
Length scale of facility	m	CONSTANT	320.	-999.	0.100E-08	0.100E+11
Width scale of facility	m	CONSTANT	0.107E+04	-999.	0.100E-08	0.100E+11
Near field dilution		DERIVED	1.00	0.000E+00	0.000E+00	1.00

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AQUIFER SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Particle diameter	cm	CONSTANT	0.200E-01	-999.	0.100E-08	100.
Aquifer porosity	--	CONSTANT	0.300	-999.	0.100E-08	0.990
Bulk density	g/cc	CONSTANT	1.55	-999.	0.100E-01	5.00
Aquifer thickness	m	CONSTANT	3.00	-999.	0.100E-08	0.100E+06
Source thickness (mixing zone depth)	m	DERIVED	4.60	-999.	0.100E-08	0.100E+06
Conductivity (hydraulic)	m/yr	CONSTANT	0.220E+04	-999.	0.100E-06	0.100E+09
Gradient (hydraulic)		CONSTANT	0.750E-01	-999.	0.100E-07	-999.
Groundwater seepage velocity	m/yr	DERIVED	550.	-999.	0.100E-09	0.100E+09
Retardation coefficient	--	DERIVED	1.00	-999.	1.00	0.100E+09
Longitudinal dispersivity	m	FUNCTION OF X	37.0	-999.	0.100E-02	0.100E+05
Transverse dispersivity	m	FUNCTION OF X	12.0	-999.	0.100E-02	0.100E+05
Vertical dispersivity	m	FUNCTION OF X	2.00	-999.	0.100E-02	0.100E+05
Temperature of aquifer	C	CONSTANT	11.7	-999.	0.000E+00	100.
pH	--	CONSTANT	6.80	-999.	0.300	14.0
Organic carbon content (fraction)		CONSTANT	0.100E-02	-999.	0.100E-05	1.00
Well distance from site	m	CONSTANT	1.00	-999.	1.00	-999.
Angle off center	degree	CONSTANT	0.000E+00	-999.	0.000E+00	360.
Well vertical distance	m	CONSTANT	0.000E+00	-999.	0.000E+00	1.00

CONCENTRATION AFTER SATURATED ZONE MODEL 0.1534E-04

Point of compliance conc:

Site leachate conc = $0.1534 \times 10^{-4} \times 27 = 4.1E-4$

EPA median leachate conc = $0.1534 \times 10^{-4} \times 37 = 5.7E-4$

1

U. S. ENVIRONMENTAL PROTECTION AGENCY

EXPOSURE ASSESSMENT

MULTIMEDIA MODEL

MULTIMED (Version 1.01, June 1991)

1

Run options

MILLERSVILLE SANITARY LANDFILL PERFORMANCE EVALUATION CELL 9 ZONE 2

CASE 2B ... BIODEGRADATION COEFFICIENT SPECIFIED
Chemical simulated is 1,4-DICHLOROBENZENE

Option Chosen Saturated zone model
Run was DETERMIN
Infiltration input by user
Run was steady-state
Reject runs if Y coordinate outside plume
Reject runs if Z coordinate outside plume
Gaussian source used in saturated zone model

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CHEMICAL SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	STD DEV	LIMITS MIN	MAX
Solid phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Dissolved phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Overall chemical decay coefficient	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	0.100E+11
Acid catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Neutral hydrolysis rate constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Base catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Reference temperature	C	CONSTANT	-999.	-999.	0.000E+00	100.
Normalized distribution coefficient	ml/g	CONSTANT	0.170E+04	-999.	0.000E+00	-999.
Distribution coefficient	--	DERIVED	0.000E+00	-999.	0.000E+00	0.100E+11
Biodegradation coefficient (sat. zone)	1/yr	CONSTANT	2.30	-999.	0.000E+00	-999.
Air diffusion coefficient	cm2/s	CONSTANT	0.000E+00	-999.	0.000E+00	10.0
Reference temperature for air diffusion	C	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Molecular weight	g/M	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Mole fraction of solute	--	CONSTANT	0.000E+00	-999.	0.100E-08	1.00

Vapor pressure of solute	mm Hg	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Henry's law constant	atm-m^3/M	CONSTANT	0.000E+00	-999.	0.100E-09	1.00
Overall 1st order decay sat. zone	1/yr	DERIVED	0.000E+00	0.000E+00	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00

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SOURCE SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Infiltration rate	m/yr	CONSTANT	0.100E-04	-999.	0.100E-09	0.100E+11
Area of waste disposal unit	m^2	CONSTANT	0.341E+06	-999.	0.100E-01	-999.
Duration of pulse	yr	CONSTANT	-999.	-999.	0.100E-08	-999.
Spread of contaminant source	m	DERIVED	-999.	-999.	0.100E-08	0.100E+11
Recharge rate	m/yr	CONSTANT	0.130	-999.	0.000E+00	0.100E+11
Source decay constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Initial concentration at landfill	mg/l	CONSTANT	1.00	-999.	0.000E+00	-999.
Length scale of facility	m	CONSTANT	320.	-999.	0.100E-08	0.100E+11
Width scale of facility	m	CONSTANT	0.107E+04	-999.	0.100E-08	0.100E+11
Near field dilution		DERIVED	1.00	0.000E+00	0.000E+00	1.00

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AQUIFER SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Particle diameter	cm	CONSTANT	0.200E-01	-999.	0.100E-08	100.
Aquifer porosity	--	CONSTANT	0.300	-999.	0.100E-08	0.990
Bulk density	g/cc	CONSTANT	1.55	-999.	0.100E-01	5.00
Aquifer thickness	m	CONSTANT	3.00	-999.	0.100E-08	0.100E+06
Source thickness (mixing zone depth)	m	DERIVED	4.60	-999.	0.100E-08	0.100E+06
Conductivity (hydraulic)	m/yr	CONSTANT	0.220E+04	-999.	0.100E-06	0.100E+09
Gradient (hydraulic)		CONSTANT	0.750E-01	-999.	0.100E-07	-999.
Groundwater seepage velocity	m/yr	DERIVED	550.	-999.	0.100E-09	0.100E+09
Retardation coefficient	--	DERIVED	1.00	-999.	1.00	0.100E+09
Longitudinal dispersivity	m	FUNCTION OF X	37.0	-999.	0.100E-02	0.100E+05
Transverse dispersivity	m	FUNCTION OF X	12.0	-999.	0.100E-02	0.100E+05
Vertical dispersivity	m	FUNCTION OF X	2.00	-999.	0.100E-02	0.100E+05
Temperature of aquifer	C	CONSTANT	11.7	-999.	0.000E+00	100.
pH	--	CONSTANT	6.80	-999.	0.300	14.0
Organic carbon content (fraction)		CONSTANT	0.100E-02	-999.	0.100E-05	1.00
Well distance from site	m	CONSTANT	1.00	-999.	1.00	-999.
Angle off center	degree	CONSTANT	0.000E+00	-999.	0.000E+00	360.
Well vertical distance	m	CONSTANT	0.000E+00	-999.	0.000E+00	1.00

CONCENTRATION AFTER SATURATED ZONE MODEL 0.1485E-04

Point of compliance conc

EPA data = $0.1485 \times 10^{-4} \times 7 = 1.0 \times 10^{-4}$ µg/l

leachate = $0.1485 \times 10^{-4} \times 8 = 1.2 \times 10^{-4}$ µg/l

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U. S. ENVIRONMENTAL PROTECTION AGENCY

EXPOSURE ASSESSMENT

MULTIMEDIA MODEL

MULTIMED (Version 1.01, June 1991)

1

Run options

MILLERSVILLE SANITARY LANDFILL PERFORMANCE EVALUATION CELL 9 ZONE 2

CASE 2C ... BIODEGRADATION COEFFICIENT SPECIFIED
Chemical simulated is TRICHLOROETHYLENE

Option Chosen	Saturated zone model
Run was	DETERMIN

Infiltration input by user
Run was steady-state
Reject runs if Y coordinate outside plume
Reject runs if Z coordinate outside plume
Gaussian source used in saturated zone model

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CHEMICAL SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Solid phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Dissolved phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Overall chemical decay coefficient	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	0.100E+11
Acid catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Neutral hydrolysis rate constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Base catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Reference temperature	C	CONSTANT	-999.	-999.	0.000E+00	100.
Normalized distribution coefficient	ml/g	CONSTANT	126.	-999.	0.000E+00	-999.
Distribution coefficient	--	DERIVED	0.000E+00	-999.	0.000E+00	0.100E+11
Biodegradation coefficient (sat. zone)	1/yr	CONSTANT	0.843	-999.	0.000E+00	-999.
Air diffusion coefficient	cm2/s	CONSTANT	0.000E+00	-999.	0.000E+00	10.0
Reference temperature for air diffusion	C	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Molecular weight	g/M	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Mole fraction of solute	--	CONSTANT	0.000E+00	-999.	0.100E-08	1.00

Vapor pressure of solute	mm Hg	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Henry's law constant	atm-m^3/M	CONSTANT	0.000E+00	-999.	0.100E-09	1.00
Overall 1st order decay sat. zone	1/yr	DERIVED	0.000E+00	0.000E+00	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00

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SOURCE SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	STD DEV	LIMITS MIN	MAX
Infiltration rate	m/yr	CONSTANT	0.100E-04	-999.	0.100E-09	0.100E+11
Area of waste disposal unit	m^2	CONSTANT	0.341E+06	-999.	0.100E-01	-999.
Duration of pulse	yr	CONSTANT	-999.	-999.	0.100E-08	-999.
Spread of contaminant source	m	DERIVED	-999.	-999.	0.100E-08	0.100E+11
Recharge rate	m/yr	CONSTANT	0.130	-999.	0.000E+00	0.100E+11
Source decay constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Initial concentration at landfill	mg/l	CONSTANT	1.00	-999.	0.000E+00	-999.
Length scale of facility	m	CONSTANT	320.	-999.	0.100E-08	0.100E+11
Width scale of facility	m	CONSTANT	0.107E+04	-999.	0.100E-08	0.100E+11
Near field dilution		DERIVED	1.00	0.000E+00	0.000E+00	1.00

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AQUIFER SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	STD DEV	LIMITS MIN	MAX
Particle diameter	cm	CONSTANT	0.200E-01	-999.	0.100E-08	100.
Aquifer porosity	--	CONSTANT	0.300	-999.	0.100E-08	0.990
Bulk density	g/cc	CONSTANT	1.55	-999.	0.100E-01	5.00
Aquifer thickness	m	CONSTANT	3.00	-999.	0.100E-08	0.100E+06
Source thickness (mixing zone depth)	m	DERIVED	4.60	-999.	0.100E-08	0.100E+06
Conductivity (hydraulic)	m/yr	CONSTANT	0.220E+04	-999.	0.100E-06	0.100E+09
Gradient (hydraulic)		CONSTANT	0.750E-01	-999.	0.100E-07	-999.
Groundwater seepage velocity	m/yr	DERIVED	550.	-999.	0.100E-09	0.100E+09
Retardation coefficient	--	DERIVED	1.00	-999.	1.00	0.100E+09
Longitudinal dispersivity	m	FUNCTION OF X	37.0	-999.	0.100E-02	0.100E+05
Transverse dispersivity	m	FUNCTION OF X	12.0	-999.	0.100E-02	0.100E+05
Vertical dispersivity	m	FUNCTION OF X	2.00	-999.	0.100E-02	0.100E+05
Temperature of aquifer	C	CONSTANT	11.7	-999.	0.000E+00	100.
pH	--	CONSTANT	6.80	-999.	0.300	14.0
Organic carbon content (fraction)		CONSTANT	0.100E-02	-999.	0.100E-05	1.00
Well distance from site	m	CONSTANT	1.00	-999.	1.00	-999.
Angle off center	degree	CONSTANT	0.000E+00	-999.	0.000E+00	360.
Well vertical distance	m	CONSTANT	0.000E+00	-999.	0.000E+00	1.00

CONCENTRATION AFTER SATURATED ZONE MODEL 0.1543E-04

Point of compliance conc:

- based on leachate $= 0.1543 \times 10^{-4} \times 10 = 1.5 \times 10^{-4}$ µg/l
- based on EPA median $= 0.1543 \times 10^{-4} \times 43 = 6.6 \times 10^{-4}$ µg/l

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U. S. ENVIRONMENTAL PROTECTION AGENCY

EXPOSURE ASSESSMENT

MULTIMEDIA MODEL

MULTIMED (Version 1.01, June 1991)

1

Run options

MILLERSVILLE SANITARY LANDFILL PERFORMANCE EVALUATION CELL 9 ZONE 2

CASE 2D ... BIODEGRADATION COEFFICIENT SPECIFIED
Chemical simulated is VINYL CHLORIDE

Option Chosen Saturated zone model
Run was DETERMIN
Infiltration input by user
Run was steady-state
Reject runs if Y coordinate outside plume
Reject runs if Z coordinate outside plume
Gaussian source used in saturated zone model

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CHEMICAL SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Solid phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Dissolved phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Overall chemical decay coefficient	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	0.100E+11
Acid catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Neutral hydrolysis rate constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Base catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Reference temperature	C	CONSTANT	-999.	-999.	0.000E+00	100.
Normalized distribution coefficient	ml/g	CONSTANT	57.0	-999.	0.000E+00	-999.
Distribution coefficient	--	DERIVED	0.000E+00	-999.	0.000E+00	0.100E+11
Biodegradation coefficient (sat. zone)	1/yr	CONSTANT	9.00	-999.	0.000E+00	-999.
Air diffusion coefficient	cm2/s	CONSTANT	0.000E+00	-999.	0.000E+00	10.0
Reference temperature for air diffusion	C	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Molecular weight	g/M	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Mole fraction of solute	--	CONSTANT	0.000E+00	-999.	0.100E-08	1.00

Vapor pressure of solute	mm Hg	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Henry's law constant	atm-m^3/M	CONSTANT	0.000E+00	-999.	0.100E-09	1.00
Overall 1st order decay sat. zone	1/yr	DERIVED	0.000E+00	0.000E+00	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00

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SOURCE SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Infiltration rate	m/yr	CONSTANT	0.100E-04	-999.	0.100E-09	0.100E+11
Area of waste disposal unit	m^2	CONSTANT	0.341E+06	-999.	0.100E-01	-999.
Duration of pulse	yr	CONSTANT	-999.	-999.	0.100E-08	-999.
Spread of contaminant source	m	DERIVED	-999.	-999.	0.100E-08	0.100E+11
Recharge rate	m/yr	CONSTANT	0.130	-999.	0.000E+00	0.100E+11
Source decay constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Initial concentration at landfill	mg/l	CONSTANT	1.00	-999.	0.000E+00	-999.
Length scale of facility	m	CONSTANT	320.	-999.	0.100E-08	0.100E+11
Width scale of facility	m	CONSTANT	0.107E+04	-999.	0.100E-08	0.100E+11
Near field dilution		DERIVED	1.00	0.000E+00	0.000E+00	1.00

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AQUIFER SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Particle diameter	cm	CONSTANT	0.200E-01	-999.	0.100E-08	100.
Aquifer porosity	--	CONSTANT	0.300	-999.	0.100E-08	0.990
Bulk density	g/cc	CONSTANT	1.55	-999.	0.100E-01	5.00
Aquifer thickness	m	CONSTANT	3.00	-999.	0.100E-08	0.100E+06
Source thickness (mixing zone depth)	m	DERIVED	4.60	-999.	0.100E-08	0.100E+06
Conductivity (hydraulic)	m/yr	CONSTANT	0.220E+04	-999.	0.100E-06	0.100E+09
Gradient (hydraulic)		CONSTANT	0.750E-01	-999.	0.100E-07	-999.
Groundwater seepage velocity	m/yr	DERIVED	550.	-999.	0.100E-09	0.100E+09
Retardation coefficient	--	DERIVED	1.00	-999.	1.00	0.100E+09
Longitudinal dispersivity	m	FUNCTION OF X	37.0	-999.	0.100E-02	0.100E+05
Transverse dispersivity	m	FUNCTION OF X	12.0	-999.	0.100E-02	0.100E+05
Vertical dispersivity	m	FUNCTION OF X	2.00	-999.	0.100E-02	0.100E+05
Temperature of aquifer	C	CONSTANT	11.7	-999.	0.000E+00	100.
pH	--	CONSTANT	6.80	-999.	0.300	14.0
Organic carbon content (fraction)		CONSTANT	0.100E-02	-999.	0.100E-05	1.00
Well distance from site	m	CONSTANT	1.00	-999.	1.00	-999.
Angle off center	degree	CONSTANT	0.000E+00	-999.	0.000E+00	360.
Well vertical distance	m	CONSTANT	0.000E+00	-999.	0.000E+00	1.00

CONCENTRATION AFTER SATURATED ZONE MODEL 0.1515E-04

Point of compliance conc:

- based on leachate = $0.1515 \times 10^{-4} \times 3 = 4.5 \times 10^{-5}$ µg/L
- based on EPA median = $0.1515 \times 10^{-4} \times 40 = 6.1 \times 10^{-4}$ µg/L

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U. S. E N V I R O N M E N T A L P R O T E C T I O N A G E N C Y

E X P O S U R E A S S E S S M E N T

M U L T I M E D I A M O D E L

MULTIMED (Version 1.01, June 1991)

1

Run options

MILLERSVILLE SANITARY LANDFILL PERFORMANCE EVALUATION CELL 9 ZONE 2

CASE 2E ... BIODEGRADATION COEFFICIENT SPECIFIED
Chemical simulated is CARBON TETRACHLORIDE

Option Chosen	Saturated zone model
Run was	DETERMIN
Infiltration input by user	
Run was steady-state	
Reject runs if Y coordinate outside plume	
Reject runs if Z coordinate outside plume	
Gaussian source used in saturated zone model	

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CHEMICAL SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Solid phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Dissolved phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Overall chemical decay coefficient	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	0.100E+11
Acid catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Neutral hydrolysis rate constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Base catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Reference temperature	C	CONSTANT	-999.	-999.	0.000E+00	100.
Normalized distribution coefficient	ml/g	CONSTANT	110.	-999.	0.000E+00	-999.
Distribution coefficient	--	DERIVED	0.000E+00	-999.	0.000E+00	0.100E+11
Biodegradation coefficient (sat. zone)	1/yr	CONSTANT	36.5	-999.	0.000E+00	-999.
Air diffusion coefficient	cm2/s	CONSTANT	0.000E+00	-999.	0.000E+00	10.0
Reference temperature for air diffusion	C	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Molecular weight	g/M	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Mole fraction of solute	--	CONSTANT	0.000E+00	-999.	0.100E-08	1.00

Vapor pressure of solute	mm Hg	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Henry's law constant	atm-m^3/M	CONSTANT	0.000E+00	-999.	0.100E-09	1.00
Overall 1st order decay sat. zone	1/yr	DERIVED	0.000E+00	0.000E+00	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00

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SOURCE SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	STD DEV	LIMITS MIN	MAX
Infiltration rate	m/yr	CONSTANT	0.100E-04	-999.	0.100E-09	0.100E+11
Area of waste disposal unit	m^2	CONSTANT	0.341E+06	-999.	0.100E-01	-999.
Duration of pulse	yr	CONSTANT	-999.	-999.	0.100E-08	-999.
Spread of contaminant source	m	DERIVED	-999.	-999.	0.100E-08	0.100E+11
Recharge rate	m/yr	CONSTANT	0.130	-999.	0.000E+00	0.100E+11
Source decay constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Initial concentration at landfill	mg/l	CONSTANT	1.00	-999.	0.000E+00	-999.
Length scale of facility	m	CONSTANT	320.	-999.	0.100E-08	0.100E+11
Width scale of facility	m	CONSTANT	0.107E+04	-999.	0.100E-08	0.100E+11
Near field dilution		DERIVED	1.00	0.000E+00	0.000E+00	1.00

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AQUIFER SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	STD DEV	LIMITS MIN	MAX
Particle diameter	cm	CONSTANT	0.200E-01	-999.	0.100E-08	100.
Aquifer porosity	--	CONSTANT	0.300	-999.	0.100E-08	0.990
Bulk density	g/cc	CONSTANT	1.55	-999.	0.100E-01	5.00
Aquifer thickness	m	CONSTANT	3.00	-999.	0.100E-08	0.100E+06
Source thickness (mixing zone depth)	m	DERIVED	4.60	-999.	0.100E-08	0.100E+06
Conductivity (hydraulic)	m/yr	CONSTANT	0.220E+04	-999.	0.100E-06	0.100E+09
Gradient (hydraulic)		CONSTANT	0.750E-01	-999.	0.100E-07	-999.
Groundwater seepage velocity	m/yr	DERIVED	550.	-999.	0.100E-09	0.100E+09
Retardation coefficient	--	DERIVED	1.00	-999.	1.00	0.100E+09
Longitudinal dispersivity	m	FUNCTION OF X	37.0	-999.	0.100E-02	0.100E+05
Transverse dispersivity	m	FUNCTION OF X	12.0	-999.	0.100E-02	0.100E+05
Vertical dispersivity	m	FUNCTION OF X	2.00	-999.	0.100E-02	0.100E+05
Temperature of aquifer	C	CONSTANT	11.7	-999.	0.000E+00	100.
pH	--	CONSTANT	6.80	-999.	0.300	14.0
Organic carbon content (fraction)		CONSTANT	0.100E-02	-999.	0.100E-05	1.00
Well distance from site	m	CONSTANT	1.00	-999.	1.00	-999.
Angle off center	degree	CONSTANT	0.000E+00	-999.	0.000E+00	360.
Well vertical distance	m	CONSTANT	0.000E+00	-999.	0.000E+00	1.00

CONCENTRATION AFTER SATURATED ZONE MODEL 0.1396E-04

Point of compliance conc:

based on leachate = $0.1396 \times 10^{-4} \times$ BDL = $< 1.4 \times 10^{-4}$ µg/l

based on EPA data = $0.1396 \times 10^{-4} \times 202 = 2.8 \times 10^{-3}$ µg/l

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U. S. ENVIRONMENTAL PROTECTION AGENCY

EXPOSURE ASSESSMENT

MULTIMEDIA MODEL

MULTIMED (Version 1.01, June 1991)

1

Run options

MILLERSVILLE SANITARY LANDFILL PERFORMANCE EVALUATION CELL 9 ZONE 2

SENSITIVITY CASE ... INCREASE Foc TO .1E-1 (10X)
Chemical simulated is BENZENE

Option Chosen Saturated zone model
Run was DETERMIN
Infiltration input by user
Run was steady-state
Reject runs if Y coordinate outside plume
Reject runs if Z coordinate outside plume
Gaussian source used in saturated zone model

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CHEMICAL SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Solid phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Dissolved phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Overall chemical decay coefficient	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	0.100E+11
Acid catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Neutral hydrolysis rate constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Base catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Reference temperature	C	CONSTANT	-999.	-999.	0.000E+00	100.
Normalized distribution coefficient	ml/g	CONSTANT	83.0	-999.	0.000E+00	-999.
Distribution coefficient	--	DERIVED	0.000E+00	-999.	0.000E+00	0.100E+11
Biodegradation coefficient (sat. zone)	1/yr	CONSTANT	3.20	-999.	0.000E+00	-999.
Air diffusion coefficient	cm2/s	CONSTANT	0.000E+00	-999.	0.000E+00	10.0
Reference temperature for air diffusion	C	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Molecular weight	g/M	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Mole fraction of solute	--	CONSTANT	0.000E+00	-999.	0.100E-08	1.00

Vapor pressure of solute	mm Hg	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Henry's law constant	atm-m^3/M	CONSTANT	0.000E+00	-999.	0.100E-09	1.00
Overall 1st order decay sat. zone	1/yr	DERIVED	0.000E+00	0.000E+00	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00

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SOURCE SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Infiltration rate	m/yr	CONSTANT	0.100E-04	-999.	0.100E-09	0.100E+11
Area of waste disposal unit	m^2	CONSTANT	0.341E+06	-999.	0.100E-01	-999.
Duration of pulse	yr	CONSTANT	-999.	-999.	0.100E-08	-999.
Spread of contaminant source	m	DERIVED	-999.	-999.	0.100E-08	0.100E+11
Recharge rate	m/yr	CONSTANT	0.130	-999.	0.000E+00	0.100E+11
Source decay constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Initial concentration at landfill	mg/l	CONSTANT	1.00	-999.	0.000E+00	-999.
Length scale of facility	m	CONSTANT	320.	-999.	0.100E-08	0.100E+11
Width scale of facility	m	CONSTANT	0.107E+04	-999.	0.100E-08	0.100E+11
Near field dilution		DERIVED	1.00	0.000E+00	0.000E+00	1.00

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AQUIFER SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Particle diameter	cm	CONSTANT	0.200E-01	-999.	0.100E-08	100.
Aquifer porosity	--	CONSTANT	0.300	-999.	0.100E-08	0.990
Bulk density	g/cc	CONSTANT	1.55	-999.	0.100E-01	5.00
Aquifer thickness	m	CONSTANT	3.00	-999.	0.100E-08	0.100E+06
Source thickness (mixing zone depth)	m	DERIVED	4.60	-999.	0.100E-08	0.100E+06
Conductivity (hydraulic)	m/yr	CONSTANT	0.220E+04	-999.	0.100E-06	0.100E+09
Gradient (hydraulic)		CONSTANT	0.750E-01	-999.	0.100E-07	-999.
Groundwater seepage velocity	m/yr	DERIVED	550.	-999.	0.100E-09	0.100E+09
Retardation coefficient	--	DERIVED	1.00	-999.	1.00	0.100E+09
Longitudinal dispersivity	m	FUNCTION OF X	37.0	-999.	0.100E-02	0.100E+05
Transverse dispersivity	m	FUNCTION OF X	12.0	-999.	0.100E-02	0.100E+05
Vertical dispersivity	m	FUNCTION OF X	2.00	-999.	0.100E-02	0.100E+05
Temperature of aquifer	C	CONSTANT	11.7	-999.	0.000E+00	100.
pH	--	CONSTANT	6.80	-999.	0.300	14.0
Organic carbon content (fraction)		CONSTANT	0.100E-01	-999.	0.100E-05	1.00
Well distance from site	m	CONSTANT	1.00	-999.	1.00	-999.
Angle off center	degree	CONSTANT	0.000E+00	-999.	0.000E+00	360.
Well vertical distance	m	CONSTANT	0.000E+00	-999.	0.000E+00	1.00

CONCENTRATION AFTER SATURATED ZONE MODEL 0.1500E-04

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U. S. ENVIRONMENTAL PROTECTION AGENCY

EXPOSURE ASSESSMENT

MULTIMEDIA MODEL

MULTIMED (Version 1.01, June 1991)

1

Run options

MILLERSVILLE SANITARY LANDFILL PERFORMANCE EVALUATION CELL 9 ZONE 2

SENSITIVITY CASE ... DECREASE Foc TO .1E-3 (10X)
Chemical simulated is BENZENE

Option Chosen Saturated zone model
Run was DETERMIN
Infiltration input by user
Run was steady-state
Reject runs if Y coordinate outside plume
Reject runs if Z coordinate outside plume
Gaussian source used in saturated zone model

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CHEMICAL SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Solid phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Dissolved phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Overall chemical decay coefficient	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	0.100E+11
Acid catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Neutral hydrolysis rate constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Base catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Reference temperature	C	CONSTANT	-999.	-999.	0.000E+00	100.
Normalized distribution coefficient	ml/g	CONSTANT	83.0	-999.	0.000E+00	-999.
Distribution coefficient	--	DERIVED	0.000E+00	-999.	0.000E+00	0.100E+11
Biodegradation coefficient (sat. zone)	1/yr	CONSTANT	3.20	-999.	0.000E+00	-999.
Air diffusion coefficient	cm2/s	CONSTANT	0.000E+00	-999.	0.000E+00	10.0
Reference temperature for air diffusion	C	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Molecular weight	g/M	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Mole fraction of solute	--	CONSTANT	0.000E+00	-999.	0.100E-08	1.00

Vapor pressure of solute	mm Hg	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Henry's law constant	atm-m^3/M	CONSTANT	0.000E+00	-999.	0.100E-09	1.00
Overall 1st order decay sat. zone	1/yr	DERIVED	0.000E+00	0.000E+00	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00

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SOURCE SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Infiltration rate	m/yr	CONSTANT	0.100E-04	-999.	0.100E-09	0.100E+11
Area of waste disposal unit	m^2	CONSTANT	0.341E+06	-999.	0.100E-01	-999.
Duration of pulse	yr	CONSTANT	-999.	-999.	0.100E-08	-999.
Spread of contaminant source	m	DERIVED	-999.	-999.	0.100E-08	0.100E+11
Recharge rate	m/yr	CONSTANT	0.130	-999.	0.000E+00	0.100E+11
Source decay constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Initial concentration at landfill	mg/l	CONSTANT	1.00	-999.	0.000E+00	-999.
Length scale of facility	m	CONSTANT	320.	-999.	0.100E-08	0.100E+11
Width scale of facility	m	CONSTANT	0.107E+04	-999.	0.100E-08	0.100E+11
Near field dilution		DERIVED	1.00	0.000E+00	0.000E+00	1.00

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AQUIFER SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Particle diameter	cm	CONSTANT	0.200E-01	-999.	0.100E-08	100.
Aquifer porosity	--	CONSTANT	0.300	-999.	0.100E-08	0.990
Bulk density	g/cc	CONSTANT	1.55	-999.	0.100E-01	5.00
Aquifer thickness	m	CONSTANT	3.00	-999.	0.100E-08	0.100E+06
Source thickness (mixing zone depth)	m	DERIVED	4.60	-999.	0.100E-08	0.100E+06
Conductivity (hydraulic)	m/yr	CONSTANT	0.220E+04	-999.	0.100E-06	0.100E+09
Gradient (hydraulic)		CONSTANT	0.750E-01	-999.	0.100E-07	-999.
Groundwater seepage velocity	m/yr	DERIVED	550.	-999.	0.100E-09	0.100E+09
Retardation coefficient	--	DERIVED	1.00	-999.	1.00	0.100E+09
Longitudinal dispersivity	m	FUNCTION OF X	37.0	-999.	0.100E-02	0.100E+05
Transverse dispersivity	m	FUNCTION OF X	12.0	-999.	0.100E-02	0.100E+05
Vertical dispersivity	m	FUNCTION OF X	2.00	-999.	0.100E-02	0.100E+05
Temperature of aquifer	C	CONSTANT	11.7	-999.	0.000E+00	100.
pH	--	CONSTANT	6.80	-999.	0.300	14.0
Organic carbon content (fraction)		CONSTANT	0.100E-03	-999.	0.100E-05	1.00
Well distance from site	m	CONSTANT	1.00	-999.	1.00	-999.
Angle off center	degree	CONSTANT	0.000E+00	-999.	0.000E+00	360.
Well vertical distance	m	CONSTANT	0.000E+00	-999.	0.000E+00	1.00

CONCENTRATION AFTER SATURATED ZONE MODEL 0.1538E-04

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U. S. E N V I R O N M E N T A L P R O T E C T I O N A G E N C Y

E X P O S U R E A S S E S S M E N T

M U L T I M E D I A M O D E L

MULTIMED (Version 1.01, June 1991)

1

Run options

MILLERSVILLE SANITARY LANDFILL PERFORMANCE EVALUATION CELL 9 ZONE 2

SENSITIVITY CASE ... BULK DENSITY DECREASED TO 1.00 (35%)
Chemical simulated is BENZENE

Option Chosen Saturated zone model
Run was DETERMIN
Infiltration input by user
Run was steady-state
Reject runs if Y coordinate outside plume
Reject runs if Z coordinate outside plume
Gaussian source used in saturated zone model

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CHEMICAL SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Solid phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Dissolved phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Overall chemical decay coefficient	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	0.100E+11
Acid catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Neutral hydrolysis rate constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Base catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Reference temperature	C	CONSTANT	-999.	-999.	0.000E+00	100.
Normalized distribution coefficient	ml/g	CONSTANT	83.0	-999.	0.000E+00	-999.
Distribution coefficient	--	DERIVED	0.000E+00	-999.	0.000E+00	0.100E+11
Biodegradation coefficient (sat. zone)	1/yr	CONSTANT	3.20	-999.	0.000E+00	-999.
Air diffusion coefficient	cm2/s	CONSTANT	0.000E+00	-999.	0.000E+00	10.0
Reference temperature for air diffusion	C	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Molecular weight	g/M	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Mole fraction of solute	--	CONSTANT	0.000E+00	-999.	0.100E-08	1.00

Vapor pressure of solute	mm Hg	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Henry's law constant	atm-m^3/M	CONSTANT	0.000E+00	-999.	0.100E-09	1.00
Overall 1st order decay sat. zone	1/yr	DERIVED	0.000E+00	0.000E+00	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00

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SOURCE SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Infiltration rate	m/yr	CONSTANT	0.100E-04	-999.	0.100E-09	0.100E+11
Area of waste disposal unit	m^2	CONSTANT	0.341E+06	-999.	0.100E-01	-999.
Duration of pulse	yr	CONSTANT	-999.	-999.	0.100E-08	-999.
Spread of contaminant source	m	DERIVED	-999.	-999.	0.100E-08	0.100E+11
Recharge rate	m/yr	CONSTANT	0.130	-999.	0.000E+00	0.100E+11
Source decay constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Initial concentration at landfill	mg/l	CONSTANT	1.00	-999.	0.000E+00	-999.
Length scale of facility	m	CONSTANT	320.	-999.	0.100E-08	0.100E+11
Width scale of facility	m	CONSTANT	0.107E+04	-999.	0.100E-08	0.100E+11
Near field dilution		DERIVED	1.00	0.000E+00	0.000E+00	1.00

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AQUIFER SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Particle diameter	cm	CONSTANT	0.200E-01	-999.	0.100E-08	100.
Aquifer porosity	--	CONSTANT	0.300	-999.	0.100E-08	0.990
Bulk density	g/cc	CONSTANT	1.00	-999.	0.100E-01	5.00
Aquifer thickness	m	CONSTANT	3.00	-999.	0.100E-08	0.100E+06
Source thickness (mixing zone depth)	m	DERIVED	4.60	-999.	0.100E-08	0.100E+06
Conductivity (hydraulic)	m/yr	CONSTANT	0.220E+04	-999.	0.100E-06	0.100E+09
Gradient (hydraulic)		CONSTANT	0.750E-01	-999.	0.100E-07	-999.
Groundwater seepage velocity	m/yr	DERIVED	550.	-999.	0.100E-09	0.100E+09
Retardation coefficient	--	DERIVED	1.00	-999.	1.00	0.100E+09
Longitudinal dispersivity	m	FUNCTION OF X	37.0	-999.	0.100E-02	0.100E+05
Transverse dispersivity	m	FUNCTION OF X	12.0	-999.	0.100E-02	0.100E+05
Vertical dispersivity	m	FUNCTION OF X	2.00	-999.	0.100E-02	0.100E+05
Temperature of aquifer	C	CONSTANT	11.7	-999.	0.000E+00	100.
pH	--	CONSTANT	6.80	-999.	0.300	14.0
Organic carbon content (fraction)		CONSTANT	0.100E-02	-999.	0.100E-05	1.00
Well distance from site	m	CONSTANT	1.00	-999.	1.00	-999.
Angle off center	degree	CONSTANT	0.000E+00	-999.	0.000E+00	360.
Well vertical distance	m	CONSTANT	0.000E+00	-999.	0.000E+00	1.00

CONCENTRATION AFTER SATURATED ZONE MODEL 0.1536E-04

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U. S. E N V I R O N M E N T A L P R O T E C T I O N A G E N C Y

E X P O S U R E A S S E S S M E N T

M U L T I M E D I A M O D E L

MULTIMED (Version 1.01, June 1991)

1

Run options

MILLERSVILLE SANITARY LANDFILL PERFORMANCE EVALUATION CELL 9 ZONE 2

SENSITIVITY CASE ... BULK DENSITY INCREASED TO 2.00 (29%)
Chemical simulated is BENZENE

Option Chosen Saturated zone model
Run was DETERMIN
Infiltration input by user
Run was steady-state
Reject runs if Y coordinate outside plume
Reject runs if Z coordinate outside plume
Gaussian source used in saturated zone model

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CHEMICAL SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Solid phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Dissolved phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Overall chemical decay coefficient	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	0.100E+11
Acid catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Neutral hydrolysis rate constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Base catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Reference temperature	C	CONSTANT	-999.	-999.	0.000E+00	100.
Normalized distribution coefficient	ml/g	CONSTANT	83.0	-999.	0.000E+00	-999.
Distribution coefficient	--	DERIVED	0.000E+00	-999.	0.000E+00	0.100E+11
Biodegradation coefficient (sat. zone)	1/yr	CONSTANT	3.20	-999.	0.000E+00	-999.
Air diffusion coefficient	cm2/s	CONSTANT	0.000E+00	-999.	0.000E+00	10.0
Reference temperature for air diffusion	C	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Molecular weight	g/M	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Mole fraction of solute	--	CONSTANT	0.000E+00	-999.	0.100E-08	1.00

Vapor pressure of solute	mm Hg	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Henry's law constant	atm-m^3/M	CONSTANT	0.000E+00	-999.	0.100E-09	1.00
Overall 1st order decay sat. zone	1/yr	DERIVED	0.000E+00	0.000E+00	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00

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SOURCE SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Infiltration rate	m/yr	CONSTANT	0.100E-04	-999.	0.100E-09	0.100E+11
Area of waste disposal unit	m^2	CONSTANT	0.341E+06	-999.	0.100E-01	-999.
Duration of pulse	yr	CONSTANT	-999.	-999.	0.100E-08	-999.
Spread of contaminant source	m	DERIVED	-999.	-999.	0.100E-08	0.100E+11
Recharge rate	m/yr	CONSTANT	0.130	-999.	0.000E+00	0.100E+11
Source decay constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Initial concentration at landfill	mg/l	CONSTANT	1.00	-999.	0.000E+00	-999.
Length scale of facility	m	CONSTANT	320.	-999.	0.100E-08	0.100E+11
Width scale of facility	m	CONSTANT	0.107E+04	-999.	0.100E-08	0.100E+11
Near field dilution		DERIVED	1.00	0.000E+00	0.000E+00	1.00

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AQUIFER SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Particle diameter	cm	CONSTANT	0.200E-01	-999.	0.100E-08	100.
Aquifer porosity	--	CONSTANT	0.300	-999.	0.100E-08	0.990
Bulk density	g/cc	CONSTANT	2.00	-999.	0.100E-01	5.00
Aquifer thickness	m	CONSTANT	3.00	-999.	0.100E-08	0.100E+06
Source thickness (mixing zone depth)	m	DERIVED	4.60	-999.	0.100E-08	0.100E+06
Conductivity (hydraulic)	m/yr	CONSTANT	0.220E+04	-999.	0.100E-06	0.100E+09
Gradient (hydraulic)		CONSTANT	0.750E-01	-999.	0.100E-07	-999.
Groundwater seepage velocity	m/yr	DERIVED	550.	-999.	0.100E-09	0.100E+09
Retardation coefficient	--	DERIVED	1.00	-999.	1.00	0.100E+09
Longitudinal dispersivity	m	FUNCTION OF X	37.0	-999.	0.100E-02	0.100E+05
Transverse dispersivity	m	FUNCTION OF X	12.0	-999.	0.100E-02	0.100E+05
Vertical dispersivity	m	FUNCTION OF X	2.00	-999.	0.100E-02	0.100E+05
Temperature of aquifer	C	CONSTANT	11.7	-999.	0.000E+00	100.
pH	--	CONSTANT	6.80	-999.	0.300	14.0
Organic carbon content (fraction)		CONSTANT	0.100E-02	-999.	0.100E-05	1.00
Well distance from site	m	CONSTANT	1.00	-999.	1.00	-999.
Angle off center	degree	CONSTANT	0.000E+00	-999.	0.000E+00	360.
Well vertical distance	m	CONSTANT	0.000E+00	-999.	0.000E+00	1.00

CONCENTRATION AFTER SATURATED ZONE MODEL 0.1533E-04

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U. S. ENVIRONMENTAL PROTECTION AGENCY

EXPOSURE ASSESSMENT

MULTIMEDIA MODEL

MULTIMED (Version 1.01, June 1991)

1

Run options

MILLERSVILLE SANITARY LANDFILL PERFORMANCE EVALUATION CELL 9 ZONE 2

SENSITIVITY CASE ... INCREASE RECHARGE 50%
Chemical simulated is NOT CHEMICAL SPECIFIC

Option Chosen Saturated zone model
Run was DETERMIN
Infiltration input by user
Run was steady-state
Reject runs if Y coordinate outside plume
Reject runs if Z coordinate outside plume
Gaussian source used in saturated zone model

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CHEMICAL SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Solid phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Dissolved phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Overall chemical decay coefficient	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	0.100E+11
Acid catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Neutral hydrolysis rate constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Base catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Reference temperature	C	CONSTANT	-999.	-999.	0.000E+00	100.
Normalized distribution coefficient	ml/g	CONSTANT	83.0	-999.	0.000E+00	-999.
Distribution coefficient	--	DERIVED	0.000E+00	-999.	0.000E+00	0.100E+11
Biodegradation coefficient (sat. zone)	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Air diffusion coefficient	cm2/s	CONSTANT	0.000E+00	-999.	0.000E+00	10.0
Reference temperature for air diffusion	C	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Molecular weight	g/M	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Mole fraction of solute	--	CONSTANT	0.000E+00	-999.	0.100E-08	1.00

Vapor pressure of solute	mm Hg	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Henry's law constant	atm-m^3/M	CONSTANT	0.000E+00	-999.	0.100E-09	1.00
Overall 1st order decay sat. zone	1/yr	DERIVED	0.000E+00	0.000E+00	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00

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SOURCE SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Infiltration rate	m/yr	CONSTANT	0.100E-04	-999.	0.100E-09	0.100E+11
Area of waste disposal unit	m^2	CONSTANT	0.341E+06	-999.	0.100E-01	-999.
Duration of pulse	yr	CONSTANT	-999.	-999.	0.100E-08	-999.
Spread of contaminant source	m	DERIVED	-999.	-999.	0.100E-08	0.100E+11
Recharge rate	m/yr	CONSTANT	✓ 0.195	-999.	0.000E+00	0.100E+11
Source decay constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Initial concentration at landfill	mg/l	CONSTANT	1.00	-999.	0.000E+00	-999.
Length scale of facility	m	CONSTANT	320.	-999.	0.100E-08	0.100E+11
Width scale of facility	m	CONSTANT	0.107E+04	-999.	0.100E-08	0.100E+11
Near field dilution		DERIVED	1.00	0.000E+00	0.000E+00	1.00

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AQUIFER SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Particle diameter	cm	CONSTANT	0.200E-01	-999.	0.100E-08	100.
Aquifer porosity	--	CONSTANT	0.300	-999.	0.100E-08	0.990
Bulk density	g/cc	CONSTANT	1.55	-999.	0.100E-01	5.00
Aquifer thickness	m	CONSTANT	3.00	-999.	0.100E-08	0.100E+06
Source thickness (mixing zone depth)	m	DERIVED	4.60	-999.	0.100E-08	0.100E+06
Conductivity (hydraulic)	m/yr	CONSTANT	0.220E+04	-999.	0.100E-06	0.100E+09
Gradient (hydraulic)		CONSTANT	0.750E-01	-999.	0.100E-07	-999.
Groundwater seepage velocity	m/yr	DERIVED	550.	-999.	0.100E-09	0.100E+09
Retardation coefficient	--	DERIVED	1.00	-999.	1.00	0.100E+09
Longitudinal dispersivity	m	FUNCTION OF X	37.0	-999.	0.100E-02	0.100E+05
Transverse dispersivity	m	FUNCTION OF X	12.0	-999.	0.100E-02	0.100E+05
Vertical dispersivity	m	FUNCTION OF X	2.00	-999.	0.100E-02	0.100E+05
Temperature of aquifer	C	CONSTANT	11.7	-999.	0.000E+00	100.
pH	--	CONSTANT	6.80	-999.	0.300	14.0
Organic carbon content (fraction)		CONSTANT	0.100E-02	-999.	0.100E-05	1.00
Well distance from site	m	CONSTANT	1.00	-999.	1.00	-999.
Angle off center	degree	CONSTANT	0.000E+00	-999.	0.000E+00	360.
Well vertical distance	m	CONSTANT	0.000E+00	-999.	0.000E+00	1.00

CONCENTRATION AFTER SATURATED ZONE MODEL 0.1547E-04

1

U. S. E N V I R O N M E N T A L P R O T E C T I O N A G E N C Y

E X P O S U R E A S S E S S M E N T

M U L T I M E D I A M O D E L

MULTIMED (Version 1.01, June 1991)

1

Run options

MILLERSVILLE SANITARY LANDFILL PERFORMANCE EVALUATION CELL 9 ZONE 2

SENSITIVITY CASE ... DECREASE RECHARGE 50%
Chemical simulated is NOT CHEMICAL SPECIFIC

Option Chosen Saturated zone model
Run was DETERMIN
Infiltration input by user
Run was steady-state
Reject runs if Y coordinate outside plume
Reject runs if Z coordinate outside plume
Gaussian source used in saturated zone model

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CHEMICAL SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Solid phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Dissolved phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Overall chemical decay coefficient	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	0.100E+11
Acid catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Neutral hydrolysis rate constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Base catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Reference temperature	C	CONSTANT	-999.	-999.	0.000E+00	100.
Normalized distribution coefficient	ml/g	CONSTANT	83.0	-999.	0.000E+00	-999.
Distribution coefficient	--	DERIVED	0.000E+00	-999.	0.000E+00	0.100E+11
Biodegradation coefficient (sat. zone)	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Air diffusion coefficient	cm2/s	CONSTANT	0.000E+00	-999.	0.000E+00	10.0
Reference temperature for air diffusion	C	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Molecular weight	g/M	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Mole fraction of solute	--	CONSTANT	0.000E+00	-999.	0.100E-08	1.00

Vapor pressure of solute	mm Hg	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Henry's law constant	atm-m^3/M	CONSTANT	0.000E+00	-999.	0.100E-09	1.00
Overall 1st order decay sat. zone	1/yr	DERIVED	0.000E+00	0.000E+00	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00

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SOURCE SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Infiltration rate	m/yr	CONSTANT	0.100E-04	-999.	0.100E-09	0.100E+11
Area of waste disposal unit	m^2	CONSTANT	0.341E+06	-999.	0.100E-01	-999.
Duration of pulse	yr	CONSTANT	-999.	-999.	0.100E-08	-999.
Spread of contaminant source	m	DERIVED	-999.	-999.	0.100E-08	0.100E+11
Recharge rate	m/yr	CONSTANT	✓0.650E-01	-999.	0.000E+00	0.100E+11
Source decay constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Initial concentration at landfill	mg/l	CONSTANT	1.00	-999.	0.000E+00	-999.
Length scale of facility	m	CONSTANT	320.	-999.	0.100E-08	0.100E+11
Width scale of facility	m	CONSTANT	0.107E+04	-999.	0.100E-08	0.100E+11
Near field dilution		DERIVED	1.00	0.000E+00	0.000E+00	1.00

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AQUIFER SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Particle diameter	cm	CONSTANT	0.200E-01	-999.	0.100E-08	100.
Aquifer porosity	--	CONSTANT	0.300	-999.	0.100E-08	0.990
Bulk density	g/cc	CONSTANT	1.55	-999.	0.100E-01	5.00
Aquifer thickness	m	CONSTANT	3.00	-999.	0.100E-08	0.100E+06
Source thickness (mixing zone depth)	m	DERIVED	4.60	-999.	0.100E-08	0.100E+06
Conductivity (hydraulic)	m/yr	CONSTANT	0.220E+04	-999.	0.100E-06	0.100E+09
Gradient (hydraulic)		CONSTANT	0.750E-01	-999.	0.100E-07	-999.
Groundwater seepage velocity	m/yr	DERIVED	550.	-999.	0.100E-09	0.100E+09
Retardation coefficient	--	DERIVED	1.00	-999.	1.00	0.100E+09
Longitudinal dispersivity	m	FUNCTION OF X	37.0	-999.	0.100E-02	0.100E+05
Transverse dispersivity	m	FUNCTION OF X	12.0	-999.	0.100E-02	0.100E+05
Vertical dispersivity	m	FUNCTION OF X	2.00	-999.	0.100E-02	0.100E+05
Temperature of aquifer	C	CONSTANT	11.7	-999.	0.000E+00	100.
pH	--	CONSTANT	6.80	-999.	0.300	14.0
Organic carbon content (fraction)		CONSTANT	0.100E-02	-999.	0.100E-05	1.00
Well distance from site	m	CONSTANT	1.00	-999.	1.00	-999.
Angle off center	degree	CONSTANT	0.000E+00	-999.	0.000E+00	360.
Well vertical distance	m	CONSTANT	0.000E+00	-999.	0.000E+00	1.00

CONCENTRATION AFTER SATURATED ZONE MODEL 0.1547E-04

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U. S. E N V I R O N M E N T A L P R O T E C T I O N A G E N C Y

E X P O S U R E A S S E S S M E N T

M U L T I M E D I A M O D E L

MULTIMED (Version 1.01, June 1991)

1

Run options

MILLERSVILLE SANITARY LANDFILL PERFORMANCE EVALUATION CELL 9 ZONE 2

SENSITIVITY CASE ... DECREASE GROUNDWATER SEEPAGE VELOCITY BY 50%
Chemical simulated is NOT CHEMICAL SPECIFIC

Option Chosen	Saturated zone model
Run was	DETERMIN

Infiltration input by user
Run was steady-state
Reject runs if Y coordinate outside plume
Reject runs if Z coordinate outside plume
Gaussian source used in saturated zone model

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CHEMICAL SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Solid phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Dissolved phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Overall chemical decay coefficient	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	0.100E+11
Acid catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Neutral hydrolysis rate constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Base catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Reference temperature	C	CONSTANT	-999.	-999.	0.000E+00	100.
Normalized distribution coefficient	ml/g	CONSTANT	83.0	-999.	0.000E+00	-999.
Distribution coefficient	--	DERIVED	0.000E+00	-999.	0.000E+00	0.100E+11
Biodegradation coefficient (sat. zone)	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Air diffusion coefficient	cm2/s	CONSTANT	0.000E+00	-999.	0.000E+00	10.0
Reference temperature for air diffusion	C	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Molecular weight	g/M	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Mole fraction of solute	--	CONSTANT	0.000E+00	-999.	0.100E-08	1.00

Vapor pressure of solute	mm Hg	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Henry's law constant	atm-m^3/M	CONSTANT	0.000E+00	-999.	0.100E-09	1.00
Overall 1st order decay sat. zone	1/yr	DERIVED	0.000E+00	0.000E+00	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00

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SOURCE SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Infiltration rate	m/yr	CONSTANT	0.100E-04	-999.	0.100E-09	0.100E+11
Area of waste disposal unit	m^2	CONSTANT	0.341E+06	-999.	0.100E-01	-999.
Duration of pulse	yr	CONSTANT	-999.	-999.	0.100E-08	-999.
Spread of contaminant source	m	DERIVED	-999.	-999.	0.100E-08	0.100E+11
Recharge rate	m/yr	CONSTANT	0.130	-999.	0.000E+00	0.100E+11
Source decay constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Initial concentration at landfill	mg/l	CONSTANT	1.00	-999.	0.000E+00	-999.
Length scale of facility	m	CONSTANT	320.	-999.	0.100E-08	0.100E+11
Width scale of facility	m	CONSTANT	0.107E+04	-999.	0.100E-08	0.100E+11
Near field dilution		DERIVED	1.00	0.000E+00	0.000E+00	1.00

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AQUIFER SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Particle diameter	cm	CONSTANT	0.200E-01	-999.	0.100E-08	100.
Aquifer porosity	--	CONSTANT	0.300	-999.	0.100E-08	0.990
Bulk density	g/cc	CONSTANT	1.55	-999.	0.100E-01	5.00
Aquifer thickness	m	CONSTANT	3.00	-999.	0.100E-08	0.100E+06
Source thickness (mixing zone depth)	m	DERIVED	4.60	-999.	0.100E-08	0.100E+06
Conductivity (hydraulic)	m/yr	CONSTANT	0.220E+04	-999.	0.100E-06	0.100E+09
Gradient (hydraulic)		CONSTANT	0.750E-01	-999.	0.100E-07	-999.
Groundwater seepage velocity	m/yr	CONSTANT	275.	-999.	0.100E-09	0.100E+09
Retardation coefficient	--	DERIVED	1.00	-999.	1.00	0.100E+09
Longitudinal dispersivity	m	FUNCTION OF X	37.0	-999.	0.100E-02	0.100E+05
Transverse dispersivity	m	FUNCTION OF X	12.0	-999.	0.100E-02	0.100E+05
Vertical dispersivity	m	FUNCTION OF X	2.00	-999.	0.100E-02	0.100E+05
Temperature of aquifer	C	CONSTANT	11.7	-999.	0.000E+00	100.
pH	--	CONSTANT	6.80	-999.	0.300	14.0
Organic carbon content (fraction)		CONSTANT	0.100E-02	-999.	0.100E-05	1.00
Well distance from site	m	CONSTANT	1.00	-999.	1.00	-999.
Angle off center	degree	CONSTANT	0.000E+00	-999.	0.000E+00	360.
Well vertical distance	m	CONSTANT	0.000E+00	-999.	0.000E+00	1.00

CONCENTRATION AFTER SATURATED ZONE MODEL 0.3093E-04

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U. S. E N V I R O N M E N T A L P R O T E C T I O N A G E N C Y

E X P O S U R E A S S E S S M E N T

M U L T I M E D I A M O D E L

MULTIMED (Version 1.01, June 1991)

1

Run options

MILLERSVILLE SANITARY LANDFILL PERFORMANCE EVALUATION CELL 9 ZONE 2

SENSITIVITY CASE ... INCREASE GROUNDWATER SEEPAGE VELOCITY BY 50%
Chemical simulated is NOT CHEMICAL SPECIFIC

Option Chosen Saturated zone model
Run was DETERMIN
Infiltration input by user
Run was steady-state
Reject runs if Y coordinate outside plume
Reject runs if Z coordinate outside plume
Gaussian source used in saturated zone model

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CHEMICAL SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Solid phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Dissolved phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Overall chemical decay coefficient	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	0.100E+11
Acid catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Neutral hydrolysis rate constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Base catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Reference temperature	C	CONSTANT	-999.	-999.	0.000E+00	100.
Normalized distribution coefficient	ml/g	CONSTANT	83.0	-999.	0.000E+00	-999.
Distribution coefficient	--	DERIVED	0.000E+00	-999.	0.000E+00	0.100E+11
Biodegradation coefficient (sat. zone)	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Air diffusion coefficient	cm2/s	CONSTANT	0.000E+00	-999.	0.000E+00	10.0
Reference temperature for air diffusion	C	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Molecular weight	g/M	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Mole fraction of solute	--	CONSTANT	0.000E+00	-999.	0.100E-08	1.00

Vapor pressure of solute	mm Hg	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Henry's law constant	atm-m^3/M	CONSTANT	0.000E+00	-999.	0.100E-09	1.00
Overall 1st order decay sat. zone	1/yr	DERIVED	0.000E+00	0.000E+00	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00

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SOURCE SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Infiltration rate	m/yr	CONSTANT	0.100E-04	-999.	0.100E-09	0.100E+11
Area of waste disposal unit	m^2	CONSTANT	0.341E+06	-999.	0.100E-01	-999.
Duration of pulse	yr	CONSTANT	-999.	-999.	0.100E-08	-999.
Spread of contaminant source	m	DERIVED	-999.	-999.	0.100E-08	0.100E+11
Recharge rate	m/yr	CONSTANT	0.130	-999.	0.000E+00	0.100E+11
Source decay constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Initial concentration at landfill	mg/l	CONSTANT	1.00	-999.	0.000E+00	-999.
Length scale of facility	m	CONSTANT	320.	-999.	0.100E-08	0.100E+11
Width scale of facility	m	CONSTANT	0.107E+04	-999.	0.100E-08	0.100E+11
Near field dilution		DERIVED	1.00	0.000E+00	0.000E+00	1.00

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AQUIFER SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Particle diameter	cm	CONSTANT	0.200E-01	-999.	0.100E-08	100.
Aquifer porosity	--	CONSTANT	0.300	-999.	0.100E-08	0.990
Bulk density	g/cc	CONSTANT	1.55	-999.	0.100E-01	5.00
Aquifer thickness	m	CONSTANT	3.00	-999.	0.100E-08	0.100E+06
Source thickness (mixing zone depth)	m	DERIVED	4.60	-999.	0.100E-08	0.100E+06
Conductivity (hydraulic)	m/yr	CONSTANT	0.220E+04	-999.	0.100E-06	0.100E+09
Gradient (hydraulic)		CONSTANT	0.750E-01	-999.	0.100E-07	-999.
Groundwater seepage velocity	m/yr	CONSTANT	825.	-999.	0.100E-09	0.100E+09
Retardation coefficient	--	DERIVED	1.00	-999.	1.00	0.100E+09
Longitudinal dispersivity	m	FUNCTION OF X	37.0	-999.	0.100E-02	0.100E+05
Transverse dispersivity	m	FUNCTION OF X	12.0	-999.	0.100E-02	0.100E+05
Vertical dispersivity	m	FUNCTION OF X	2.00	-999.	0.100E-02	0.100E+05
Temperature of aquifer	C	CONSTANT	11.7	-999.	0.000E+00	100.
pH	--	CONSTANT	6.80	-999.	0.300	14.0
Organic carbon content (fraction)		CONSTANT	0.100E-02	-999.	0.100E-05	1.00
Well distance from site	m	CONSTANT	1.00	-999.	1.00	-999.
Angle off center	degree	CONSTANT	0.000E+00	-999.	0.000E+00	360.
Well vertical distance	m	CONSTANT	0.000E+00	-999.	0.000E+00	1.00

CONCENTRATION AFTER SATURATED ZONE MODEL 0.1031E-04

CELL 9, ZONE 3

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U. S. ENVIRONMENTAL PROTECTION AGENCY

EXPOSURE ASSESSMENT

MULTIMEDIA MODEL

MULTIMED (Version 1.01, June 1991)

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Run options
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MILLERSVILLE SANITARY LANDFILL PERFORMANCE EVALUATION CELL9 ZONE 3

CASE 1 ... NO BIODEGRADATION OF CHEMICAL (MOST CONSERVATIVE CASE)
Chemical simulated is NOT CHEMICAL SPECIFIC

Option Chosen Saturated zone model
Run was DETERMIN
Infiltration input by user
Run was steady-state
Reject runs if Y coordinate outside plume
Reject runs if Z coordinate outside plume
Gaussian source used in saturated zone model
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CHEMICAL SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Solid phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Dissolved phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Overall chemical decay coefficient	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	0.100E+11
Acid catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Neutral hydrolysis rate constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Base catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Reference temperature	C	CONSTANT	-999.	-999.	0.000E+00	100.
Normalized distribution coefficient	ml/g	CONSTANT	83.0	-999.	0.000E+00	-999.
Distribution coefficient	--	DERIVED	0.000E+00	-999.	0.000E+00	0.100E+11
Biodegradation coefficient (sat. zone)	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Air diffusion coefficient	cm2/s	CONSTANT	0.000E+00	-999.	0.000E+00	10.0
Reference temperature for air diffusion	C	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Molecular weight	g/M	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Mole fraction of solute	--	CONSTANT	0.000E+00	-999.	0.100E-08	1.00

Vapor pressure of solute	mm Hg	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Henry's law constant	atm-m^3/M	CONSTANT	0.000E+00	-999.	0.100E-09	1.00
Overall 1st order decay sat. zone	1/yr	DERIVED	0.000E+00	0.000E+00	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00

SOURCE SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Infiltration rate	m/yr	CONSTANT	0.100E-04	-999.	0.100E-09	0.100E+11
Area of waste disposal unit	m^2	CONSTANT	0.341E+06	-999.	0.100E-01	-999.
Duration of pulse	yr	CONSTANT	-999.	-999.	0.100E-08	-999.
Spread of contaminant source	m	DERIVED	-999.	-999.	0.100E-08	0.100E+11
Recharge rate	m/yr	CONSTANT	0.130	-999.	0.000E+00	0.100E+11
Source decay constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Initial concentration at landfill	mg/l	CONSTANT	1.00	-999.	0.000E+00	-999.
Length scale of facility	m	CONSTANT	0.107E+04	-999.	0.100E-08	0.100E+11
Width scale of facility	m	CONSTANT	320.	-999.	0.100E-08	0.100E+11
Near field dilution		DERIVED	1.00	0.000E+00	0.000E+00	1.00

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AQUIFER SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Particle diameter	cm	CONSTANT	0.200E-01	-999.	0.100E-08	100.
Aquifer porosity	--	CONSTANT	0.300	-999.	0.100E-08	0.990
Bulk density	g/cc	CONSTANT	1.55	-999.	0.100E-01	5.00
Aquifer thickness	m	CONSTANT	21.3	-999.	0.100E-08	0.100E+06
Source thickness (mixing zone depth)	m	DERIVED	4.60	-999.	0.100E-08	0.100E+06
Conductivity (hydraulic)	m/yr	CONSTANT	0.220E+04	-999.	0.100E-06	0.100E+09
Gradient (hydraulic)		CONSTANT	0.500E-02	-999.	0.100E-07	-999.
Groundwater seepage velocity	m/yr	DERIVED	550.	-999.	0.100E-09	0.100E+09
Retardation coefficient	--	DERIVED	1.00	-999.	1.00	0.100E+09
Longitudinal dispersivity	m	FUNCTION OF X	37.0	-999.	0.100E-02	0.100E+05
Transverse dispersivity	m	FUNCTION OF X	12.0	-999.	0.100E-02	0.100E+05
Vertical dispersivity	m	FUNCTION OF X	2.00	-999.	0.100E-02	0.100E+05
Temperature of aquifer	C	CONSTANT	11.7	-999.	0.000E+00	100.
pH	--	CONSTANT	6.80	-999.	0.300	14.0
Organic carbon content (fraction)		CONSTANT	0.100E-02	-999.	0.100E-05	1.00
Well distance from site	m	CONSTANT	1.00	-999.	1.00	-999.
Angle off center	degree	CONSTANT	0.000E+00	-999.	0.000E+00	360.
Well vertical distance	m	CONSTANT	0.000E+00	-999.	0.000E+00	1.00

CONCENTRATION AFTER SATURATED ZONE MODEL 0.1089E-03

Point of compliance conc:

benzene: EPA data $= 0.1089 \times 10^{-3} \times 37 = 4 \times 10^{-3}$ µg/l

leachate $= 0.1089 \times 10^{-3} \times 27 = 2.9 \times 10^{-3}$ µg/l

Vinyl chloride: EPA data $= 0.1089 \times 10^{-3} \times 40 = 0.0044$ µg/l

leachate $= 0.1089 \times 10^{-3} \times 3 = 3.3 \times 10^{-4}$ µg/l

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U. S. ENVIRONMENTAL PROTECTION AGENCY

EXPOSURE ASSESSMENT

MULTIMEDIA MODEL

MULTIMED (Version 1.01, June 1991)

1
Run options
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MILLERSVILLE SANITARY LANDFILL PERFORMANCE EVALUATION CELL 9 ZONE 3

CASE 2A ... BIODEGRADATION COEFFICIENT SPECIFIED
Chemical simulated is BENZENE

Option Chosen Saturated zone model
Run was DETERMIN
Infiltration input by user
Run was steady-state
Reject runs if Y coordinate outside plume
Reject runs if Z coordinate outside plume
Gaussian source used in saturated zone model
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CHEMICAL SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Solid phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Dissolved phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Overall chemical decay coefficient	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	0.100E+11
Acid catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Neutral hydrolysis rate constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Base catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Reference temperature	C	CONSTANT	-999.	-999.	0.000E+00	100.
Normalized distribution coefficient	ml/g	CONSTANT	83.0	-999.	0.000E+00	-999.
Distribution coefficient	--	DERIVED	0.000E+00	-999.	0.000E+00	0.100E+11
Biodegradation coefficient (sat. zone)	1/yr	CONSTANT	3.20	-999.	0.000E+00	-999.
Air diffusion coefficient	cm2/s	CONSTANT	0.000E+00	-999.	0.000E+00	10.0
Reference temperature for air diffusion	C	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Molecular weight	g/M	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Mole fraction of solute	--	CONSTANT	0.000E+00	-999.	0.100E-08	1.00

Vapor pressure of solute	mm Hg	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Henry's law constant	atm-m^3/M	CONSTANT	0.000E+00	-999.	0.100E-09	1.00
Overall 1st order decay sat. zone	1/yr	DERIVED	0.000E+00	0.000E+00	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00

SOURCE SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Infiltration rate	m/yr	CONSTANT	0.100E-04	-999.	0.100E-09	0.100E+11
Area of waste disposal unit	m^2	CONSTANT	0.341E+06	-999.	0.100E-01	-999.
Duration of pulse	yr	CONSTANT	-999.	-999.	0.100E-08	-999.
Spread of contaminant source	m	DERIVED	-999.	-999.	0.100E-08	0.100E+11
Recharge rate	m/yr	CONSTANT	0.130	-999.	0.000E+00	0.100E+11
Source decay constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Initial concentration at landfill	mg/l	CONSTANT	1.00	-999.	0.000E+00	-999.
Length scale of facility	m	CONSTANT	0.107E+04	-999.	0.100E-08	0.100E+11
Width scale of facility	m	CONSTANT	320.	-999.	0.100E-08	0.100E+11
Near field dilution		DERIVED	1.00	0.000E+00	0.000E+00	1.00

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AQUIFER SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Particle diameter	cm	CONSTANT	0.200E-01	-999.	0.100E-08	100.
Aquifer porosity	--	CONSTANT	0.300	-999.	0.100E-08	0.990
Bulk density	g/cc	CONSTANT	1.55	-999.	0.100E-01	5.00
Aquifer thickness	m	CONSTANT	21.3	-999.	0.100E-08	0.100E+06
Source thickness (mixing zone depth)	m	DERIVED	4.60	-999.	0.100E-08	0.100E+06
Conductivity (hydraulic)	m/yr	CONSTANT	0.220E+04	-999.	0.100E-06	0.100E+09
Gradient (hydraulic)		CONSTANT	0.500E-02	-999.	0.100E-07	-999.
Groundwater seepage velocity	m/yr	DERIVED	550.	-999.	0.100E-09	0.100E+09
Retardation coefficient	--	DERIVED	1.00	-999.	1.00	0.100E+09
Longitudinal dispersivity	m	FUNCTION OF X	37.0	-999.	0.100E-02	0.100E+05
Transverse dispersivity	m	FUNCTION OF X	12.0	-999.	0.100E-02	0.100E+05
Vertical dispersivity	m	FUNCTION OF X	2.00	-999.	0.100E-02	0.100E+05
Temperature of aquifer	C	CONSTANT	11.7	-999.	0.000E+00	100.
pH	--	CONSTANT	6.80	-999.	0.300	14.0
Organic carbon content (fraction)		CONSTANT	0.100E-02	-999.	0.100E-05	1.00
Well distance from site	m	CONSTANT	1.00	-999.	1.00	-999.
Angle off center	degree	CONSTANT	0.000E+00	-999.	0.000E+00	360.
Well vertical distance	m	CONSTANT	0.000E+00	-999.	0.000E+00	1.00

CONCENTRATION AFTER SATURATED ZONE MODEL 0.9632E-04

Point of compliance conc:

leachate data = $0.9632 \times 10^{-4} \times 27 = 2.6 \times 10^{-3}$ mg/l

EPA data = $0.9632 \times 10^{-4} \times 37 = 3.6 \times 10^{-3}$ mg/l

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U. S. ENVIRONMENTAL PROTECTION AGENCY

EXPOSURE ASSESSMENT

MULTIMEDIA MODEL

MULTIMED (Version 1.01, June 1991)

1
Run options
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MILLERSVILLE SANITARY LANDFILL PERFORMANCE EVALUATION CELL 9 ZONE 3

CASE 2B ... BIODEGRADATION COEFFICIENT SPECIFIED
Chemical simulated is 1,4-DICHLOROBENZENE

Option Chosen Saturated zone model
Run was DETERMIN
Infiltration input by user
Run was steady-state
Reject runs if Y coordinate outside plume
Reject runs if Z coordinate outside plume
Gaussian source used in saturated zone model
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CHEMICAL SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Solid phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Dissolved phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Overall chemical decay coefficient	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	0.100E+11
Acid catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Neutral hydrolysis rate constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Base catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Reference temperature	C	CONSTANT	-999.	-999.	0.000E+00	100.
Normalized distribution coefficient	ml/g	CONSTANT	0.170E+04	-999.	0.000E+00	-999.
Distribution coefficient	--	DERIVED	0.000E+00	-999.	0.000E+00	0.100E+11
Biodegradation coefficient (sat. zone)	1/yr	CONSTANT	2.30	-999.	0.000E+00	-999.
Air diffusion coefficient	cm2/s	CONSTANT	0.000E+00	-999.	0.000E+00	10.0
Reference temperature for air diffusion	C	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Molecular weight	g/M	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Mole fraction of solute	--	CONSTANT	0.000E+00	-999.	0.100E-08	1.00

Vapor pressure of solute	mm Hg	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Henry's law constant	atm-m^3/M	CONSTANT	0.000E+00	-999.	0.100E-09	1.00
Overall 1st order decay sat. zone	1/yr	DERIVED	0.000E+00	0.000E+00	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00

SOURCE SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Infiltration rate	m/yr	CONSTANT	0.100E-04	-999.	0.100E-09	0.100E+11
Area of waste disposal unit	m^2	CONSTANT	0.341E+06	-999.	0.100E-01	-999.
Duration of pulse	yr	CONSTANT	-999.	-999.	0.100E-08	-999.
Spread of contaminant source	m	DERIVED	-999.	-999.	0.100E-08	0.100E+11
Recharge rate	m/yr	CONSTANT	0.130	-999.	0.000E+00	0.100E+11
Source decay constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Initial concentration at landfill	mg/l	CONSTANT	1.00	-999.	0.000E+00	-999.
Length scale of facility	m	CONSTANT	0.107E+04	-999.	0.100E-08	0.100E+11
Width scale of facility	m	CONSTANT	320.	-999.	0.100E-08	0.100E+11
Near field dilution		DERIVED	1.00	0.000E+00	0.000E+00	1.00

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AQUIFER SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Particle diameter	cm	CONSTANT	0.200E-01	-999.	0.100E-08	100.
Aquifer porosity	--	CONSTANT	0.300	-999.	0.100E-08	0.990
Bulk density	g/cc	CONSTANT	1.55	-999.	0.100E-01	5.00
Aquifer thickness	m	CONSTANT	21.3	-999.	0.100E-08	0.100E+06
Source thickness (mixing zone depth)	m	DERIVED	4.60	-999.	0.100E-08	0.100E+06
Conductivity (hydraulic)	m/yr	CONSTANT	0.220E+04	-999.	0.100E-06	0.100E+09
Gradient (hydraulic)		CONSTANT	0.500E-02	-999.	0.100E-07	-999.
Groundwater seepage velocity	m/yr	DERIVED	550.	-999.	0.100E-09	0.100E+09
Retardation coefficient	--	DERIVED	1.00	-999.	1.00	0.100E+09
Longitudinal dispersivity	m	FUNCTION OF X	37.0	-999.	0.100E-02	0.100E+05
Transverse dispersivity	m	FUNCTION OF X	12.0	-999.	0.100E-02	0.100E+05
Vertical dispersivity	m	FUNCTION OF X	2.00	-999.	0.100E-02	0.100E+05
Temperature of aquifer	C	CONSTANT	11.7	-999.	0.000E+00	100.
pH	--	CONSTANT	6.80	-999.	0.300	14.0
Organic carbon content (fraction)		CONSTANT	0.100E-02	-999.	0.100E-05	1.00
Well distance from site	m	CONSTANT	1.00	-999.	1.00	-999.
Angle off center	degree	CONSTANT	0.000E+00	-999.	0.000E+00	360.
Well vertical distance	m	CONSTANT	0.000E+00	-999.	0.000E+00	1.00

CONCENTRATION AFTER SATURATED ZONE MODEL 0.6100E-04

Point of compliance conc:
EPA data = $0.61 \times 10^{-4} \times 7 = 4.3 \times 10^{-4}$ mg/l
leachate data = $0.61 \times 10^{-4} \times 8 = 4.9 \times 10^{-4}$ mg/l

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U. S. ENVIRONMENTAL PROTECTION AGENCY

EXPOSURE ASSESSMENT

MULTIMEDIA MODEL

MULTIMED (Version 1.01, June 1991)

1
Run options
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MILLERSVILLE SANITARY LANDFILL PERFORMANCE EVALUATION CELL 9 ZONE 3

CASE 2C ... BIODEGRADATION COEFFICIENT SPECIFIED
Chemical simulated is TRICHLOROETHYLENE

Option Chosen	Saturated zone model
Run was	DETERMIN
Infiltration input by user	
Run was steady-state	
Reject runs if Y coordinate outside plume	
Reject runs if Z coordinate outside plume	
Gaussian source used in saturated zone model	

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CHEMICAL SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Solid phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Dissolved phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Overall chemical decay coefficient	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	0.100E+11
Acid catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Neutral hydrolysis rate constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Base catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Reference temperature	C	CONSTANT	-999.	-999.	0.000E+00	100.
Normalized distribution coefficient	ml/g	CONSTANT	126.	-999.	0.000E+00	-999.
Distribution coefficient	--	DERIVED	0.000E+00	-999.	0.000E+00	0.100E+11
Biodegradation coefficient (sat. zone)	1/yr	CONSTANT	0.843	-999.	0.000E+00	-999.
Air diffusion coefficient	cm2/s	CONSTANT	0.000E+00	-999.	0.000E+00	10.0
Reference temperature for air diffusion	C	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Molecular weight	g/M	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Mole fraction of solute	--	CONSTANT	0.000E+00	-999.	0.100E-08	1.00

Vapor pressure of solute	mm Hg	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Henry's law constant	atm-m^3/M	CONSTANT	0.000E+00	-999.	0.100E-09	1.00
Overall 1st order decay sat. zone	1/yr	DERIVED	0.000E+00	0.000E+00	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00

SOURCE SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Infiltration rate	m/yr	CONSTANT	0.100E-04	-999.	0.100E-09	0.100E+11
Area of waste disposal unit	m^2	CONSTANT	0.341E+06	-999.	0.100E-01	-999.
Duration of pulse	yr	CONSTANT	-999.	-999.	0.100E-08	-999.
Spread of contaminant source	m	DERIVED	-999.	-999.	0.100E-08	0.100E+11
Recharge rate	m/yr	CONSTANT	0.130	-999.	0.000E+00	0.100E+11
Source decay constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Initial concentration at landfill	mg/l	CONSTANT	1.00	-999.	0.000E+00	-999.
Length scale of facility	m	CONSTANT	0.107E+04	-999.	0.100E-08	0.100E+11
Width scale of facility	m	CONSTANT	320.	-999.	0.100E-08	0.100E+11
Near field dilution		DERIVED	1.00	0.000E+00	0.000E+00	1.00

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AQUIFER SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Particle diameter	cm	CONSTANT	0.200E-01	-999.	0.100E-08	100.
Aquifer porosity	--	CONSTANT	0.300	-999.	0.100E-08	0.990
Bulk density	g/cc	CONSTANT	1.55	-999.	0.100E-01	5.00
Aquifer thickness	m	CONSTANT	21.3	-999.	0.100E-08	0.100E+06
Source thickness (mixing zone depth)	m	DERIVED	4.60	-999.	0.100E-08	0.100E+06
Conductivity (hydraulic)	m/yr	CONSTANT	0.220E+04	-999.	0.100E-06	0.100E+09
Gradient (hydraulic)		CONSTANT	0.500E-02	-999.	0.100E-07	-999.
Groundwater seepage velocity	m/yr	DERIVED	550.	-999.	0.100E-09	0.100E+09
Retardation coefficient	--	DERIVED	1.00	-999.	1.00	0.100E+09
Longitudinal dispersivity	m	FUNCTION OF X	37.0	-999.	0.100E-02	0.100E+05
Transverse dispersivity	m	FUNCTION OF X	12.0	-999.	0.100E-02	0.100E+05
Vertical dispersivity	m	FUNCTION OF X	2.00	-999.	0.100E-02	0.100E+05
Temperature of aquifer	C	CONSTANT	11.7	-999.	0.000E+00	100.
pH	--	CONSTANT	6.80	-999.	0.300	14.0
Organic carbon content (fraction)		CONSTANT	0.100E-02	-999.	0.100E-05	1.00
Well distance from site	m	CONSTANT	1.00	-999.	1.00	-999.
Angle off center	degree	CONSTANT	0.000E+00	-999.	0.000E+00	360.
Well vertical distance	m	CONSTANT	0.000E+00	-999.	0.000E+00	1.00

CONCENTRATION AFTER SATURATED ZONE MODEL 0.1049E-03

Point of compliance conc

EPA data $= 0.1049 \times 10^{-3} \times 43 = 4.5 \times 10^{-3}$ mg/l

leachate $= 0.1049 \times 10^{-3} \times 10 = 1.0 \times 10^{-3}$ mg/l

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U. S. ENVIRONMENTAL PROTECTION AGENCY

EXPOSURE ASSESSMENT

MULTIMEDIA MODEL

MULTIMED (Version 1.01, June 1991)

1
Run options
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MILLERSVILLE SANITARY LANDFILL PERFORMANCE EVALUATION CELL 9 ZONE 3

CASE 2D ... BIODEGRADATION COEFFICIENT SPECIFIED
Chemical simulated is VINYL CHLORIDE

Option Chosen Saturated zone model
Run was DETERMIN
Infiltration input by user
Run was steady-state
Reject runs if Y coordinate outside plume
Reject runs if Z coordinate outside plume
Gaussian source used in saturated zone model
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CHEMICAL SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Solid phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Dissolved phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Overall chemical decay coefficient	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	0.100E+11
Acid catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Neutral hydrolysis rate constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Base catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Reference temperature	C	CONSTANT	-999.	-999.	0.000E+00	100.
Normalized distribution coefficient	ml/g	CONSTANT	57.0	-999.	0.000E+00	-999.
Distribution coefficient	--	DERIVED	0.000E+00	-999.	0.000E+00	0.100E+11
Biodegradation coefficient (sat. zone)	1/yr	CONSTANT	9.00	-999.	0.000E+00	-999.
Air diffusion coefficient	cm2/s	CONSTANT	0.000E+00	-999.	0.000E+00	10.0
Reference temperature for air diffusion	C	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Molecular weight	g/M	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Mole fraction of solute	--	CONSTANT	0.000E+00	-999.	0.100E-08	1.00

Vapor pressure of solute	mm Hg	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Henry's law constant	atm-m^3/M	CONSTANT	0.000E+00	-999.	0.100E-09	1.00
Overall 1st order decay sat. zone	1/yr	DERIVED	0.000E+00	0.000E+00	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00

SOURCE SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Infiltration rate	m/yr	CONSTANT	0.100E-04	-999.	0.100E-09	0.100E+11
Area of waste disposal unit	m^2	CONSTANT	0.341E+06	-999.	0.100E-01	-999.
Duration of pulse	yr	CONSTANT	-999.	-999.	0.100E-08	-999.
Spread of contaminant source	m	DERIVED	-999.	-999.	0.100E-08	0.100E+11
Recharge rate	m/yr	CONSTANT	0.130	-999.	0.000E+00	0.100E+11
Source decay constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Initial concentration at landfill	mg/l	CONSTANT	1.00	-999.	0.000E+00	-999.
Length scale of facility	m	CONSTANT	0.107E+04	-999.	0.100E-08	0.100E+11
Width scale of facility	m	CONSTANT	320.	-999.	0.100E-08	0.100E+11
Near field dilution		DERIVED	1.00	0.000E+00	0.000E+00	1.00

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AQUIFER SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Particle diameter	cm	CONSTANT	0.200E-01	-999.	0.100E-08	100.
Aquifer porosity	--	CONSTANT	0.300	-999.	0.100E-08	0.990
Bulk density	g/cc	CONSTANT	1.55	-999.	0.100E-01	5.00
Aquifer thickness	m	CONSTANT	21.3	-999.	0.100E-08	0.100E+06
Source thickness (mixing zone depth)	m	DERIVED	4.60	-999.	0.100E-08	0.100E+06
Conductivity (hydraulic)	m/yr	CONSTANT	0.220E+04	-999.	0.100E-06	0.100E+09
Gradient (hydraulic)		CONSTANT	0.500E-02	-999.	0.100E-07	-999.
Groundwater seepage velocity	m/yr	DERIVED	550.	-999.	0.100E-09	0.100E+09
Retardation coefficient	--	DERIVED	1.00	-999.	1.00	0.100E+09
Longitudinal dispersivity	m	FUNCTION OF X	37.0	-999.	0.100E-02	0.100E+05
Transverse dispersivity	m	FUNCTION OF X	12.0	-999.	0.100E-02	0.100E+05
Vertical dispersivity	m	FUNCTION OF X	2.00	-999.	0.100E-02	0.100E+05
Temperature of aquifer	C	CONSTANT	11.7	-999.	0.000E+00	100.
pH	--	CONSTANT	6.80	-999.	0.300	14.0
Organic carbon content (fraction)		CONSTANT	0.100E-02	-999.	0.100E-05	1.00
Well distance from site	m	CONSTANT	1.00	-999.	1.00	-999.
Angle off center	degree	CONSTANT	0.000E+00	-999.	0.000E+00	360.
Well vertical distance	m	CONSTANT	0.000E+00	-999.	0.000E+00	1.00

CONCENTRATION AFTER SATURATED ZONE MODEL 0.8005E-04

Point of compliance conc

EPA data = $0.8005 \times 10^{-4} \times 40 = 0.0032$ µg/l

leachate = $0.8005 \times 10^{-4} \times 3 = 2.4 \times 10^{-4}$ µg/l

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U. S. ENVIRONMENTAL PROTECTION AGENCY

EXPOSURE ASSESSMENT

MULTIMEDIA MODEL

MULTIMED (Version 1.01, June 1991)

1
Run options
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MILLERSVILLE SANITARY LANDFILL PERFORMANCE EVALUATION CELL 9 ZONE 3

CASE 2E ... BIODEGRADATION COEFFICIENT SPECIFIED
Chemical simulated is CARBON TETRACHLORIDE

Option Chosen Saturated zone model
Run was DETERMIN
Infiltration input by user
Run was steady-state
Reject runs if Y coordinate outside plume
Reject runs if Z coordinate outside plume
Gaussian source used in saturated zone model
1
1

CHEMICAL SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Solid phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Dissolved phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Overall chemical decay coefficient	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	0.100E+11
Acid catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Neutral hydrolysis rate constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Base catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Reference temperature	C	CONSTANT	-999.	-999.	0.000E+00	100.
Normalized distribution coefficient	ml/g	CONSTANT	110.	-999.	0.000E+00	-999.
Distribution coefficient	--	DERIVED	0.000E+00	-999.	0.000E+00	0.100E+11
Biodegradation coefficient (sat. zone)	1/yr	CONSTANT	36.5	-999.	0.000E+00	-999.
Air diffusion coefficient	cm2/s	CONSTANT	0.000E+00	-999.	0.000E+00	10.0
Reference temperature for air diffusion	C	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Molecular weight	g/M	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Mole fraction of solute	--	CONSTANT	0.000E+00	-999.	0.100E-08	1.00

Vapor pressure of solute	mm Hg	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Henry's law constant	atm-m^3/M	CONSTANT	0.000E+00	-999.	0.100E-09	1.00
Overall 1st order decay sat. zone	1/yr	DERIVED	0.000E+00	0.000E+00	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00

SOURCE SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Infiltration rate	m/yr	CONSTANT	0.100E-04	-999.	0.100E-09	0.100E+11
Area of waste disposal unit	m^2	CONSTANT	0.341E+06	-999.	0.100E-01	-999.
Duration of pulse	yr	CONSTANT	-999.	-999.	0.100E-08	-999.
Spread of contaminant source	m	DERIVED	-999.	-999.	0.100E-08	0.100E+11
Recharge rate	m/yr	CONSTANT	0.130	-999.	0.000E+00	0.100E+11
Source decay constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Initial concentration at landfill	mg/l	CONSTANT	1.00	-999.	0.000E+00	-999.
Length scale of facility	m	CONSTANT	0.107E+04	-999.	0.100E-08	0.100E+11
Width scale of facility	m	CONSTANT	320.	-999.	0.100E-08	0.100E+11
Near field dilution		DERIVED	1.00	0.000E+00	0.000E+00	1.00

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AQUIFER SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Particle diameter	cm	CONSTANT	0.200E-01	-999.	0.100E-08	100.
Aquifer porosity	--	CONSTANT	0.300	-999.	0.100E-08	0.990
Bulk density	g/cc	CONSTANT	1.55	-999.	0.100E-01	5.00
Aquifer thickness	m	CONSTANT	21.3	-999.	0.100E-08	0.100E+06
Source thickness (mixing zone depth)	m	DERIVED	4.60	-999.	0.100E-08	0.100E+06
Conductivity (hydraulic)	m/yr	CONSTANT	0.220E+04	-999.	0.100E-06	0.100E+09
Gradient (hydraulic)		CONSTANT	0.500E-02	-999.	0.100E-07	-999.
Groundwater seepage velocity	m/yr	DERIVED	550.	-999.	0.100E-09	0.100E+09
Retardation coefficient	--	DERIVED	1.00	-999.	1.00	0.100E+09
Longitudinal dispersivity	m	FUNCTION OF X	37.0	-999.	0.100E-02	0.100E+05
Transverse dispersivity	m	FUNCTION OF X	12.0	-999.	0.100E-02	0.100E+05
Vertical dispersivity	m	FUNCTION OF X	2.00	-999.	0.100E-02	0.100E+05
Temperature of aquifer	C	CONSTANT	11.7	-999.	0.000E+00	100.
pH	--	CONSTANT	6.80	-999.	0.300	14.0
Organic carbon content (fraction)		CONSTANT	0.100E-02	-999.	0.100E-05	1.00
Well distance from site	m	CONSTANT	1.00	-999.	1.00	-999.
Angle off center	degree	CONSTANT	0.000E+00	-999.	0.000E+00	360.
Well vertical distance	m	CONSTANT	0.000E+00	-999.	0.000E+00	1.00

CONCENTRATION AFTER SATURATED ZONE MODEL 0.2761E-04

Point of compliance conc

EPA data: $0.2761 \times 10^{-4} \times 202 = 5.6 \times 10^{-3}$ µg/l

leachate: $< 2.8 \times 10^{-5}$

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U. S. ENVIRONMENTAL PROTECTION AGENCY

EXPOSURE ASSESSMENT

MULTIMEDIA MODEL

MULTIMED (Version 1.01, June 1991)

1
Run options
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MILLERSVILLE SANITARY LANDFILL PERFORMANCE EVALUATION CELL 9 ZONE 3

SENSITIVITY CASE ... INCREASE Foc TO .1E-1 (10X)
Chemical simulated is BENZENE

Option Chosen Saturated zone model
Run was DETERMIN
Infiltration input by user
Run was steady-state
Reject runs if Y coordinate outside plume
Reject runs if Z coordinate outside plume
Gaussian source used in saturated zone model
1
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CHEMICAL SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Solid phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Dissolved phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Overall chemical decay coefficient	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	0.100E+11
Acid catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Neutral hydrolysis rate constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Base catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Reference temperature	C	CONSTANT	-999.	-999.	0.000E+00	100.
Normalized distribution coefficient	ml/g	CONSTANT	83.0	-999.	0.000E+00	-999.
Distribution coefficient	--	DERIVED	0.000E+00	-999.	0.000E+00	0.100E+11
Biodegradation coefficient (sat. zone)	1/yr	CONSTANT	3.20	-999.	0.000E+00	-999.
Air diffusion coefficient	cm2/s	CONSTANT	0.000E+00	-999.	0.000E+00	10.0
Reference temperature for air diffusion	C	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Molecular weight	g/M	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Mole fraction of solute	--	CONSTANT	0.000E+00	-999.	0.100E-08	1.00

Vapor pressure of solute	mm Hg	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Henry's law constant	atm-m^3/M	CONSTANT	0.000E+00	-999.	0.100E-09	1.00
Overall 1st order decay sat. zone	1/yr	DERIVED	0.000E+00	0.000E+00	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00

SOURCE SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Infiltration rate	m/yr	CONSTANT	0.100E-04	-999.	0.100E-09	0.100E+11
Area of waste disposal unit	m^2	CONSTANT	0.341E+06	-999.	0.100E-01	-999.
Duration of pulse	yr	CONSTANT	-999.	-999.	0.100E-08	-999.
Spread of contaminant source	m	DERIVED	-999.	-999.	0.100E-08	0.100E+11
Recharge rate	m/yr	CONSTANT	0.130	-999.	0.000E+00	0.100E+11
Source decay constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Initial concentration at landfill	mg/l	CONSTANT	1.00	-999.	0.000E+00	-999.
Length scale of facility	m	CONSTANT	0.107E+04	-999.	0.100E-08	0.100E+11
Width scale of facility	m	CONSTANT	320.	-999.	0.100E-08	0.100E+11
Near field dilution		DERIVED	1.00	0.000E+00	0.000E+00	1.00

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AQUIFER SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Particle diameter	cm	CONSTANT	0.200E-01	-999.	0.100E-08	100.
Aquifer porosity	--	CONSTANT	0.300	-999.	0.100E-08	0.990
Bulk density	g/cc	CONSTANT	1.55	-999.	0.100E-01	5.00
Aquifer thickness	m	CONSTANT	21.3	-999.	0.100E-08	0.100E+06
Source thickness (mixing zone depth)	m	DERIVED	4.60	-999.	0.100E-08	0.100E+06
Conductivity (hydraulic)	m/yr	CONSTANT	0.220E+04	-999.	0.100E-06	0.100E+09
Gradient (hydraulic)		CONSTANT	0.500E-02	-999.	0.100E-07	-999.
Groundwater seepage velocity	m/yr	DERIVED	550.	-999.	0.100E-09	0.100E+09
Retardation coefficient	--	DERIVED	1.00	-999.	1.00	0.100E+09
Longitudinal dispersivity	m	FUNCTION OF X	37.0	-999.	0.100E-02	0.100E+05
Transverse dispersivity	m	FUNCTION OF X	12.0	-999.	0.100E-02	0.100E+05
Vertical dispersivity	m	FUNCTION OF X	2.00	-999.	0.100E-02	0.100E+05
Temperature of aquifer	C	CONSTANT	11.7	-999.	0.000E+00	100.
pH	--	CONSTANT	6.80	-999.	0.300	14.0
Organic carbon content (fraction)		CONSTANT	0.100E-01	-999.	0.100E-05	1.00
Well distance from site	m	CONSTANT	1.00	-999.	1.00	-999.
Angle off center	degree	CONSTANT	0.000E+00	-999.	0.000E+00	360.
Well vertical distance	m	CONSTANT	0.000E+00	-999.	0.000E+00	1.00

CONCENTRATION AFTER SATURATED ZONE MODEL 0.7003E-04

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U. S. ENVIRONMENTAL PROTECTION AGENCY

EXPOSURE ASSESSMENT

MULTIMEDIA MODEL

MULTIMED (Version 1.01, June 1991)

1
Run options
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MILLERSVILLE SANITARY LANDFILL PERFORMANCE EVALUATION CELL 9 ZONE 3

SENSITIVITY CASE ... DECREASE Foc TO .1E-3 (10X)
Chemical simulated is BENZENE

Option Chosen Saturated zone model
Run was DETERMIN
Infiltration input by user
Run was steady-state
Reject runs if Y coordinate outside plume
Reject runs if Z coordinate outside plume
Gaussian source used in saturated zone model
1
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CHEMICAL SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Solid phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Dissolved phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Overall chemical decay coefficient	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	0.100E+11
Acid catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Neutral hydrolysis rate constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Base catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Reference temperature	C	CONSTANT	-999.	-999.	0.000E+00	100.
Normalized distribution coefficient	ml/g	CONSTANT	83.0	-999.	0.000E+00	-999.
Distribution coefficient	--	DERIVED	0.000E+00	-999.	0.000E+00	0.100E+11
Biodegradation coefficient (sat. zone)	1/yr	CONSTANT	3.20	-999.	0.000E+00	-999.
Air diffusion coefficient	cm2/s	CONSTANT	0.000E+00	-999.	0.000E+00	10.0
Reference temperature for air diffusion	C	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Molecular weight	g/M	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Mole fraction of solute	--	CONSTANT	0.000E+00	-999.	0.100E-08	1.00

Vapor pressure of solute	mm Hg	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Henry's law constant	atm-m^3/M	CONSTANT	0.000E+00	-999.	0.100E-09	1.00
Overall 1st order decay sat. zone	1/yr	DERIVED	0.000E+00	0.000E+00	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00

SOURCE SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Infiltration rate	m/yr	CONSTANT	0.100E-04	-999.	0.100E-09	0.100E+11
Area of waste disposal unit	m^2	CONSTANT	0.341E+06	-999.	0.100E-01	-999.
Duration of pulse	yr	CONSTANT	-999.	-999.	0.100E-08	-999.
Spread of contaminant source	m	DERIVED	-999.	-999.	0.100E-08	0.100E+11
Recharge rate	m/yr	CONSTANT	0.130	-999.	0.000E+00	0.100E+11
Source decay constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Initial concentration at landfill	mg/l	CONSTANT	1.00	-999.	0.000E+00	-999.
Length scale of facility	m	CONSTANT	0.107E+04	-999.	0.100E-08	0.100E+11
Width scale of facility	m	CONSTANT	320.	-999.	0.100E-08	0.100E+11
Near field dilution		DERIVED	1.00	0.000E+00	0.000E+00	1.00

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AQUIFER SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Particle diameter	cm	CONSTANT	0.200E-01	-999.	0.100E-08	100.
Aquifer porosity	--	CONSTANT	0.300	-999.	0.100E-08	0.990
Bulk density	g/cc	CONSTANT	1.55	-999.	0.100E-01	5.00
Aquifer thickness	m	CONSTANT	21.3	-999.	0.100E-08	0.100E+06
Source thickness (mixing zone depth)	m	DERIVED	4.60	-999.	0.100E-08	0.100E+06
Conductivity (hydraulic)	m/yr	CONSTANT	0.220E+04	-999.	0.100E-06	0.100E+09
Gradient (hydraulic)		CONSTANT	0.500E-02	-999.	0.100E-07	-999.
Groundwater seepage velocity	m/yr	DERIVED	550.	-999.	0.100E-09	0.100E+09
Retardation coefficient	--	DERIVED	1.00	-999.	1.00	0.100E+09
Longitudinal dispersivity	m	FUNCTION OF X	37.0	-999.	0.100E-02	0.100E+05
Transverse dispersivity	m	FUNCTION OF X	12.0	-999.	0.100E-02	0.100E+05
Vertical dispersivity	m	FUNCTION OF X	2.00	-999.	0.100E-02	0.100E+05
Temperature of aquifer	C	CONSTANT	11.7	-999.	0.000E+00	100.
pH	--	CONSTANT	6.80	-999.	0.300	14.0
Organic carbon content (fraction)		CONSTANT	0.100E-03	-999.	0.100E-05	1.00
Well distance from site	m	CONSTANT	1.00	-999.	1.00	-999.
Angle off center	degree	CONSTANT	0.000E+00	-999.	0.000E+00	360.
Well vertical distance	m	CONSTANT	0.000E+00	-999.	0.000E+00	1.00

CONCENTRATION AFTER SATURATED ZONE MODEL 0.9955E-04

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U. S. E N V I R O N M E N T A L P R O T E C T I O N A G E N C Y

E X P O S U R E A S S E S S M E N T

M U L T I M E D I A M O D E L

MULTIMED (Version 1.01, June 1991)

1
Run options
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MILLERSVILLE SANITARY LANDFILL PERFORMANCE EVALUATION CELL 9 ZONE 3

SENSITIVITY CASE ... BULK DENSITY DECREASED TO 1.00 (35%)
Chemical simulated is BENZENE

Option Chosen Saturated zone model
Run was DETERMIN
Infiltration input by user
Run was steady-state
Reject runs if Y coordinate outside plume
Reject runs if Z coordinate outside plume
Gaussian source used in saturated zone model
1
1

CHEMICAL SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Solid phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Dissolved phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Overall chemical decay coefficient	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	0.100E+11
Acid catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Neutral hydrolysis rate constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Base catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Reference temperature	C	CONSTANT	-999.	-999.	0.000E+00	100.
Normalized distribution coefficient	ml/g	CONSTANT	83.0	-999.	0.000E+00	-999.
Distribution coefficient	--	DERIVED	0.000E+00	-999.	0.000E+00	0.100E+11
Biodegradation coefficient (sat. zone)	1/yr	CONSTANT	3.20	-999.	0.000E+00	-999.
Air diffusion coefficient	cm2/s	CONSTANT	0.000E+00	-999.	0.000E+00	10.0
Reference temperature for air diffusion	C	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Molecular weight	g/M	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Mole fraction of solute	--	CONSTANT	0.000E+00	-999.	0.100E-08	1.00

Vapor pressure of solute	mm Hg	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Henry's law constant	atm-m^3/M	CONSTANT	0.000E+00	-999.	0.100E-09	1.00
Overall 1st order decay sat. zone	1/yr	DERIVED	0.000E+00	0.000E+00	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00

SOURCE SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Infiltration rate	m/yr	CONSTANT	0.100E-04	-999.	0.100E-09	0.100E+11
Area of waste disposal unit	m^2	CONSTANT	0.341E+06	-999.	0.100E-01	-999.
Duration of pulse	yr	CONSTANT	-999.	-999.	0.100E-08	-999.
Spread of contaminant source	m	DERIVED	-999.	-999.	0.100E-08	0.100E+11
Recharge rate	m/yr	CONSTANT	0.130	-999.	0.000E+00	0.100E+11
Source decay constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Initial concentration at landfill	mg/l	CONSTANT	1.00	-999.	0.000E+00	-999.
Length scale of facility	m	CONSTANT	0.107E+04	-999.	0.100E-08	0.100E+11
Width scale of facility	m	CONSTANT	320.	-999.	0.100E-08	0.100E+11
Near field dilution		DERIVED	1.00	0.000E+00	0.000E+00	1.00

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AQUIFER SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Particle diameter	cm	CONSTANT	0.200E-01	-999.	0.100E-08	100.
Aquifer porosity	--	CONSTANT	0.300	-999.	0.100E-08	0.990
Bulk density	g/cc	CONSTANT	1.00	-999.	0.100E-01	5.00
Aquifer thickness	m	CONSTANT	21.3	-999.	0.100E-08	0.100E+06
Source thickness (mixing zone depth)	m	DERIVED	4.60	-999.	0.100E-08	0.100E+06
Conductivity (hydraulic)	m/yr	CONSTANT	0.220E+04	-999.	0.100E-06	0.100E+09
Gradient (hydraulic)		CONSTANT	0.500E-02	-999.	0.100E-07	-999.
Groundwater seepage velocity	m/yr	DERIVED	550.	-999.	0.100E-09	0.100E+09
Retardation coefficient	--	DERIVED	1.00	-999.	1.00	0.100E+09
Longitudinal dispersivity	m	FUNCTION OF X	37.0	-999.	0.100E-02	0.100E+05
Transverse dispersivity	m	FUNCTION OF X	12.0	-999.	0.100E-02	0.100E+05
Vertical dispersivity	m	FUNCTION OF X	2.00	-999.	0.100E-02	0.100E+05
Temperature of aquifer	C	CONSTANT	11.7	-999.	0.000E+00	100.
pH	--	CONSTANT	6.80	-999.	0.300	14.0
Organic carbon content (fraction)		CONSTANT	0.100E-02	-999.	0.100E-05	1.00
Well distance from site	m	CONSTANT	1.00	-999.	1.00	-999.
Angle off center	degree	CONSTANT	0.000E+00	-999.	0.000E+00	360.
Well vertical distance	m	CONSTANT	0.000E+00	-999.	0.000E+00	1.00

CONCENTRATION AFTER SATURATED ZONE MODEL 0.9758E-04

1

U. S. ENVIRONMENTAL PROTECTION AGENCY

EXPOSURE ASSESSMENT

MULTIMEDIA MODEL

MULTIMED (Version 1.01, June 1991)

1
Run options
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MILLERSVILLE SANITARY LANDFILL PERFORMANCE EVALUATION CELL 9 ZONE 3

SENSITIVITY CASE ... BULK DENSITY INCREASED TO 2.00 (29%)
Chemical simulated is BENZENE

Option Chosen Saturated zone model
Run was DETERMIN
Infiltration input by user
Run was steady-state
Reject runs if Y coordinate outside plume
Reject runs if Z coordinate outside plume
Gaussian source used in saturated zone model

1
1

CHEMICAL SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Solid phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Dissolved phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Overall chemical decay coefficient	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	0.100E+11
Acid catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Neutral hydrolysis rate constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Base catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Reference temperature	C	CONSTANT	-999.	-999.	0.000E+00	100.
Normalized distribution coefficient	ml/g	CONSTANT	83.0	-999.	0.000E+00	-999.
Distribution coefficient	--	DERIVED	0.000E+00	-999.	0.000E+00	0.100E+11
Biodegradation coefficient (sat. zone)	1/yr	CONSTANT	3.20	-999.	0.000E+00	-999.
Air diffusion coefficient	cm2/s	CONSTANT	0.000E+00	-999.	0.000E+00	10.0
Reference temperature for air diffusion	C	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Molecular weight	g/M	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Mole fraction of solute	--	CONSTANT	0.000E+00	-999.	0.100E-08	1.00

Vapor pressure of solute	mm Hg	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Henry's law constant	atm-m^3/M	CONSTANT	0.000E+00	-999.	0.100E-09	1.00
Overall 1st order decay sat. zone	1/yr	DERIVED	0.000E+00	0.000E+00	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00

SOURCE SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Infiltration rate	m/yr	CONSTANT	0.100E-04	-999.	0.100E-09	0.100E+11
Area of waste disposal unit	m^2	CONSTANT	0.341E+06	-999.	0.100E-01	-999.
Duration of pulse	yr	CONSTANT	-999.	-999.	0.100E-08	-999.
Spread of contaminant source	m	DERIVED	-999.	-999.	0.100E-08	0.100E+11
Recharge rate	m/yr	CONSTANT	0.130	-999.	0.000E+00	0.100E+11
Source decay constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Initial concentration at landfill	mg/l	CONSTANT	1.00	-999.	0.000E+00	-999.
Length scale of facility	m	CONSTANT	0.107E+04	-999.	0.100E-08	0.100E+11
Width scale of facility	m	CONSTANT	320.	-999.	0.100E-08	0.100E+11
Near field dilution		DERIVED	1.00	0.000E+00	0.000E+00	1.00

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AQUIFER SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Particle diameter	cm	CONSTANT	0.200E-01	-999.	0.100E-08	100.
Aquifer porosity	--	CONSTANT	0.300	-999.	0.100E-08	0.990
Bulk density	g/cc	CONSTANT	2.00	-999.	0.100E-01	5.00
Aquifer thickness	m	CONSTANT	21.3	-999.	0.100E-08	0.100E+06
Source thickness (mixing zone depth)	m	DERIVED	4.60	-999.	0.100E-08	0.100E+06
Conductivity (hydraulic)	m/yr	CONSTANT	0.220E+04	-999.	0.100E-06	0.100E+09
Gradient (hydraulic)		CONSTANT	0.500E-02	-999.	0.100E-07	-999.
Groundwater seepage velocity	m/yr	DERIVED	550.	-999.	0.100E-09	0.100E+09
Retardation coefficient	--	DERIVED	1.00	-999.	1.00	0.100E+09
Longitudinal dispersivity	m	FUNCTION OF X	37.0	-999.	0.100E-02	0.100E+05
Transverse dispersivity	m	FUNCTION OF X	12.0	-999.	0.100E-02	0.100E+05
Vertical dispersivity	m	FUNCTION OF X	2.00	-999.	0.100E-02	0.100E+05
Temperature of aquifer	C	CONSTANT	11.7	-999.	0.000E+00	100.
pH	--	CONSTANT	6.80	-999.	0.300	14.0
Organic carbon content (fraction)		CONSTANT	0.100E-02	-999.	0.100E-05	1.00
Well distance from site	m	CONSTANT	1.00	-999.	1.00	-999.
Angle off center	degree	CONSTANT	0.000E+00	-999.	0.000E+00	360.
Well vertical distance	m	CONSTANT	0.000E+00	-999.	0.000E+00	1.00

CONCENTRATION AFTER SATURATED ZONE MODEL 0.9531E-04

1

U. S. ENVIRONMENTAL PROTECTION AGENCY

EXPOSURE ASSESSMENT

MULTIMEDIA MODEL

MULTIMED (Version 1.01, June 1991)

1

Run options
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MILLERSVILLE SANITARY LANDFILL PERFORMANCE EVALUATION CELL 9 ZONE 3

SENSITIVITY CASE ... INCREASE GROUNDWATER SEEPAGE VELOCITY BY 50%
Chemical simulated is NOT CHEMICAL SPECIFIC

Option Chosen	Saturated zone model
Run was	DETERMIN

Infiltration input by user
Run was steady-state
Reject runs if Y coordinate outside plume
Reject runs if Z coordinate outside plume
Gaussian source used in saturated zone model

1
1

CHEMICAL SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Solid phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Dissolved phase decay coefficient	1/yr	DERIVED	-999.	-999.	0.000E+00	0.100E+11
Overall chemical decay coefficient	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	0.100E+11
Acid catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Neutral hydrolysis rate constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Base catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Reference temperature	C	CONSTANT	-999.	-999.	0.000E+00	100.
Normalized distribution coefficient	ml/g	CONSTANT	83.0	-999.	0.000E+00	-999.
Distribution coefficient	--	DERIVED	0.000E+00	-999.	0.000E+00	0.100E+11
Biodegradation coefficient (sat. zone)	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Air diffusion coefficient	cm2/s	CONSTANT	0.000E+00	-999.	0.000E+00	10.0
Reference temperature for air diffusion	C	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Molecular weight	g/M	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Mole fraction of solute	--	CONSTANT	0.000E+00	-999.	0.100E-08	1.00

Vapor pressure of solute	mm Hg	CONSTANT	0.000E+00	-999.	0.000E+00	100.
Henry's law constant	atm-m^3/M	CONSTANT	0.000E+00	-999.	0.100E-09	1.00
Overall 1st order decay sat. zone	1/yr	DERIVED	0.000E+00	0.000E+00	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00
Not currently used		CONSTANT	-999.	-999.	0.000E+00	1.00

SOURCE SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	STD DEV	LIMITS MIN	MAX
Infiltration rate	m/yr	CONSTANT	0.100E-04	-999.	0.100E-09	0.100E+11
Area of waste disposal unit	m^2	CONSTANT	0.341E+06	-999.	0.100E-01	-999.
Duration of pulse	yr	CONSTANT	-999.	-999.	0.100E-08	-999.
Spread of contaminant source	m	DERIVED	-999.	-999.	0.100E-08	0.100E+11
Recharge rate	m/yr	CONSTANT	0.130	-999.	0.000E+00	0.100E+11
Source decay constant	1/yr	CONSTANT	0.000E+00	-999.	0.000E+00	-999.
Initial concentration at landfill	mg/l	CONSTANT	1.00	-999.	0.000E+00	-999.
Length scale of facility	m	CONSTANT	0.107E+04	-999.	0.100E-08	0.100E+11
Width scale of facility	m	CONSTANT	320.	-999.	0.100E-08	0.100E+11
Near field dilution		DERIVED	1.00	0.000E+00	0.000E+00	1.00

1

AQUIFER SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	STD DEV	LIMITS MIN	MAX
Particle diameter	cm	CONSTANT	0.200E-01	-999.	0.100E-08	100.
Aquifer porosity	--	CONSTANT	0.300	-999.	0.100E-08	0.990
Bulk density	g/cc	CONSTANT	1.55	-999.	0.100E-01	5.00
Aquifer thickness	m	CONSTANT	21.3	-999.	0.100E-08	0.100E+06
Source thickness (mixing zone depth)	m	DERIVED	4.60	-999.	0.100E-08	0.100E+06
Conductivity (hydraulic)	m/yr	CONSTANT	0.220E+04	-999.	0.100E-06	0.100E+09
Gradient (hydraulic)		CONSTANT	0.500E-02	-999.	0.100E-07	-999.
Groundwater seepage velocity	m/yr	CONSTANT	55.0	-999.	0.100E-09	0.100E+09
Retardation coefficient	--	DERIVED	1.00	-999.	1.00	0.100E+09
Longitudinal dispersivity	m	FUNCTION OF X	37.0	-999.	0.100E-02	0.100E+05
Transverse dispersivity	m	FUNCTION OF X	12.0	-999.	0.100E-02	0.100E+05
Vertical dispersivity	m	FUNCTION OF X	2.00	-999.	0.100E-02	0.100E+05
Temperature of aquifer	C	CONSTANT	11.7	-999.	0.000E+00	100.
pH	--	CONSTANT	6.80	-999.	0.300	14.0
Organic carbon content (fraction)		CONSTANT	0.100E-02	-999.	0.100E-05	1.00
Well distance from site	m	CONSTANT	1.00	-999.	1.00	-999.
Angle off center	degree	CONSTANT	0.000E+00	-999.	0.000E+00	360.
Well vertical distance	m	CONSTANT	0.000E+00	-999.	0.000E+00	1.00

CONCENTRATION AFTER SATURATED ZONE MODEL 0.7264E-04

Appendix F
Leachate HELP File

HYDROLOGIC EVALUATION OF LANDFILL PERFORMANCE
HELP MODEL VERSION 4.0 BETA (2018)
DEVELOPED BY USEPA NATIONAL RISK MANAGEMENT RESEARCH LABORATORY

Title: Millersville Cell 9 - Open Cel... **Simulated On:** 6/9/2024 11:30

Layer 1

Type 1 - Vertical Percolation Layer (Cover Soil)
Municipal Solid Waste (MSW) (900 pcy)
Material Texture Number 18

Thickness	=	96	inches
Porosity	=	0.671	vol/vol
Field Capacity	=	0.292	vol/vol
Wilting Point	=	0.077	vol/vol
Initial Soil Water Content	=	0.2951	vol/vol
Effective Sat. Hyd. Conductivity	=	1.00E-03	cm/sec

Layer 2

Type 1 - Vertical Percolation Layer
Protective Cover/Drainage Layer
Material Texture Number 43

Thickness	=	24	inches
Porosity	=	0.437	vol/vol
Field Capacity	=	0.062	vol/vol
Wilting Point	=	0.024	vol/vol
Initial Soil Water Content	=	0.1296	vol/vol
Effective Sat. Hyd. Conductivity	=	5.00E-03	cm/sec

Layer 3

Type 2 - Lateral Drainage Layer
Geocomposite Drainage Layer
Material Texture Number 123

Thickness	=	0.25	inches
Porosity	=	0.85	vol/vol
Field Capacity	=	0.01	vol/vol
Wilting Point	=	0.005	vol/vol
Initial Soil Water Content	=	0.0331	vol/vol
Effective Sat. Hyd. Conductivity	=	8.40E+00	cm/sec
Slope	=	3	%
Drainage Length	=	750	ft

Layer 4

Type 4 - Flexible Membrane Liner

HDPE Membrane

Material Texture Number 35

Thickness	=	0.06	inches
Effective Sat. Hyd. Conductivity	=	2.00E-13	cm/sec
FML Pinhole Density	=	2	Holes/Acre
FML Installation Defects	=	2	Holes/Acre
FML Placement Quality	=	6	On geotextile

Layer 5

Type 2 - Lateral Drainage Layer

Geocomposite Drainage Layer

Material Texture Number 124

Thickness	=	0.25	inches
Porosity	=	0.85	vol/vol
Field Capacity	=	0.01	vol/vol
Wilting Point	=	0.005	vol/vol
Initial Soil Water Content	=	0.0199	vol/vol
Effective Sat. Hyd. Conductivity	=	8.40E+00	cm/sec
Slope	=	3	%
Drainage Length	=	750	ft

Layer 6

Type 4 - Flexible Membrane Liner

HDPE Membrane

Material Texture Number 35

Thickness	=	0.06	inches
Effective Sat. Hyd. Conductivity	=	2.00E-13	cm/sec
FML Pinhole Density	=	0	Holes/Acre
FML Installation Defects	=	0	Holes/Acre
FML Placement Quality	=	3	Good

Layer 7

Type 3 - Barrier Soil Liner

Prepared Subbase

Material Texture Number 44

Thickness	=	18	inches
Porosity	=	0.437	vol/vol
Field Capacity	=	0.373	vol/vol
Wilting Point	=	0.266	vol/vol

Initial Soil Water Content	=	0.437	vol/vol
Effective Sat. Hyd. Conductivity	=	1.00E-05	cm/sec

Note: Initial moisture content of the layers and snow water were computed as nearly steady-state values by HELP.

General Design and Evaporative Zone Data

SCS Runoff Curve Number	=	79	
Fraction of Area Allowing Runoff	=	0	%
Area projected on a horizontal plane	=	1	acres
Evaporative Zone Depth	=	12	inches
Initial Water in Evaporative Zone	=	3.414	inches
Upper Limit of Evaporative Storage	=	8.052	inches
Lower Limit of Evaporative Storage	=	0.924	inches
Initial Snow Water	=	0	inches
Initial Water in Layer Materials	=	39.321	inches
Total Initial Water	=	39.321	inches
Total Subsurface Inflow	=	0	inches/year

Note: SCS Runoff Curve Number was calculated by HELP.

Evapotranspiration and Weather Data

Station Latitude	=	39.12	Degrees
Maximum Leaf Area Index	=	5	
Start of Growing Season (Julian Date)	=	101	days
End of Growing Season (Julian Date)	=	302	days
Average Wind Speed	=	8	mph
Average 1st Quarter Relative Humidity	=	74	%
Average 2nd Quarter Relative Humidity	=	75	%
Average 3rd Quarter Relative Humidity	=	79	%
Average 4th Quarter Relative Humidity	=	71	%

Note: Evapotranspiration data was obtained for , Maryland

Normal Mean Monthly Precipitation (inches)

Jan/Jul	Feb/Aug	Mar/Sep	Apr/Oct	May/Nov	Jun/Dec
2.257529	2.418665	3.413312	3.239994	5.182143	3.635609
3.744875	3.882993	4.790159	3.583066	3.404002	2.486827

Note: Precipitation was simulated based on HELP V4 weather simulation for:
Lat/Long: 39.12/-76.68

Normal Mean Monthly Temperature (Degrees Fahrenheit)

Jan/Jul	Feb/Aug	Mar/Sep	Apr/Oct	May/Nov	Jun/Dec
36.6	41.2	44.3	58.7	65.7	76.1
83.2	78.6	75.4	57.2	47.3	35.2

Note: Temperature was simulated based on HELP V4 weather simulation for:
Lat/Long: 39.12/-76.68
Solar radiation was simulated based on HELP V4 weather simulation for:
Lat/Long: 39.12/-76.68

Daily Output for Year 1

Column key: Head #1: drainage from Layer 4 | Head #2: drainage from Layer 6
Drain #1: drainage from Layer 3 | Drain #2: drainage from Layer 5
Leak #1: leakage thru Layer 4 | Leak #2: leakage thru Layer 7

Title: Millersville Cell 9 - Open Cell Condition
Simulated On: 6/9/2024 11:31

Day	Freezing Status* Air	Freezing Status* Soil	Rain (inches)	Runoff (inches)	ET (inches)	Evap. Zone Water (in/in)	Head #1 (inches)	Drain #1 (inches)	Leak #1 (inches)	Head #2 (inches)	Drain #2 (inches)	Leak #2 (inches)
1		*	0.00	0.000	0.000	0.2845	0.0066	0.0125	5.82E-03	0.0030	0.0057	6.80E-09
2		*	0.00	0.000	0.000	0.2845	0.0059	0.0112	5.49E-03	0.0030	0.0056	6.80E-09
3	*	*	0.00	0.000	0.000	0.2845	0.0053	0.0101	5.21E-03	0.0028	0.0053	6.80E-09
4		*	0.00	0.000	0.000	0.2845	0.0048	0.0091	4.95E-03	0.0027	0.0051	6.80E-09
5		*	0.00	0.000	0.000	0.2845	0.0013	0.0023	1.47E-03	0.0016	0.0030	6.80E-09
6	*	*	0.03	0.000	0.023	0.2845	0.0000	0.0000	0.00E+00	0.0004	0.0007	6.80E-09
7	*	*	0.00	0.000	0.006	0.2845	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
8		*	0.00	0.000	0.000	0.2845	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
9		*	0.01	0.000	0.006	0.2849	0.0017	0.0032	2.83E-03	0.0009	0.0016	6.80E-09
10		*	0.68	0.000	0.008	0.3409	0.0045	0.0086	4.80E-03	0.0021	0.0039	6.80E-09
11		*	0.02	0.000	0.008	0.3419	0.0067	0.0127	5.86E-03	0.0028	0.0054	6.80E-09
12	*	*	0.00	0.000	0.000	0.3419	0.0080	0.0153	6.43E-03	0.0032	0.0062	6.80E-09
13	*	*	0.36	0.000	0.023	0.3419	0.0087	0.0166	6.71E-03	0.0035	0.0066	6.80E-09
14	*	*	0.08	0.000	0.021	0.3419	0.0090	0.0172	6.82E-03	0.0036	0.0068	6.80E-09
15	*	*	0.09	0.000	0.018	0.3419	0.0090	0.0172	6.81E-03	0.0036	0.0068	6.80E-09
16	*	*	0.00	0.000	0.007	0.3419	0.0088	0.0168	6.74E-03	0.0036	0.0068	6.80E-09
17		*	0.00	0.000	0.026	0.3419	0.0085	0.0163	6.63E-03	0.0035	0.0067	6.80E-09
18	*	*	0.01	0.000	0.012	0.3419	0.0082	0.0156	6.50E-03	0.0034	0.0066	6.80E-09
19	*	*	0.00	0.000	0.006	0.3419	0.0078	0.0149	6.35E-03	0.0034	0.0064	6.80E-09
20	*	*	0.00	0.000	0.008	0.3419	0.0075	0.0142	6.20E-03	0.0033	0.0063	6.80E-09
21		*	0.00	0.000	0.019	0.3464	0.0071	0.0135	6.05E-03	0.0032	0.0061	6.80E-09
22		*	0.00	0.000	0.023	0.3737	0.0068	0.0129	5.90E-03	0.0031	0.0060	6.80E-09
23		*	0.05	0.000	0.008	0.3773	0.0064	0.0122	5.75E-03	0.0031	0.0058	6.80E-09
24		*	0.11	0.000	0.008	0.3862	0.0061	0.0116	5.61E-03	0.0030	0.0057	6.80E-09
25		*	0.00	0.000	0.004	0.3863	0.0058	0.0111	5.47E-03	0.0029	0.0055	6.80E-09
26		*	0.00	0.000	0.000	0.3863	0.0055	0.0106	5.33E-03	0.0028	0.0054	6.80E-09
27			0.02	0.000	0.037	0.2676	0.0053	0.0101	5.21E-03	0.0028	0.0053	6.80E-09

28	*	0.34	0.000	0.024	0.2489	0.0050	0.0096	5.08E-03	0.0027	0.0051	6.80E-09
29		0.40	0.000	0.000	0.3066	0.0048	0.0092	4.97E-03	0.0026	0.0050	6.80E-09
30		0.17	0.000	0.113	0.2855	0.0046	0.0087	4.85E-03	0.0026	0.0049	6.80E-09
31		0.00	0.000	0.080	0.2717	0.0058	0.0110	5.43E-03	0.0027	0.0052	6.80E-09
32		0.00	0.000	0.036	0.2665	0.0046	0.0088	4.82E-03	0.0027	0.0051	6.80E-09
33		0.00	0.000	0.058	0.2617	0.0055	0.0104	5.30E-03	0.0027	0.0051	6.80E-09
34		0.00	0.000	0.032	0.2590	0.0049	0.0094	5.02E-03	0.0027	0.0051	6.80E-09
35	*	0.00	0.000	0.029	0.2566	0.0013	0.0025	2.24E-03	0.0018	0.0034	6.80E-09
36	*	0.00	0.000	0.000	0.2566	0.0034	0.0065	3.94E-03	0.0017	0.0033	6.80E-09
37		0.18	0.000	0.061	0.2638	0.0049	0.0093	5.00E-03	0.0024	0.0045	6.80E-09
38		0.00	0.000	0.060	0.2557	0.0044	0.0085	4.77E-03	0.0025	0.0049	6.80E-09
39		0.05	0.000	0.053	0.2521	0.0041	0.0077	4.56E-03	0.0024	0.0047	6.80E-09
40	*	0.18	0.000	0.036	0.2517	0.0015	0.0028	2.04E-03	0.0016	0.0031	6.80E-09
41	*	0.36	0.000	0.017	0.2500	0.0000	0.0000	2.58E-05	0.0005	0.0009	6.80E-09
42		0.00	0.000	0.011	0.2839	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
43		0.04	0.000	0.044	0.2821	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
44	*	0.13	0.000	0.017	0.2742	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.10E-09
45	*	0.02	0.000	0.028	0.2636	0.0109	0.0208	7.01E-03	0.0021	0.0040	5.10E-09
46		0.16	0.000	0.075	0.2686	0.0261	0.0497	1.16E-02	0.0050	0.0095	6.80E-09
47		0.00	0.000	0.091	0.2570	0.0334	0.0635	1.32E-02	0.0065	0.0124	6.80E-09
48		0.03	0.000	0.070	0.2487	0.0581	0.1105	1.74E-02	0.0082	0.0156	6.80E-09
49		0.01	0.000	0.089	0.2386	0.0710	0.1352	1.94E-02	0.0097	0.0185	6.80E-09
50		0.00	0.000	0.050	0.2314	0.0663	0.1262	1.87E-02	0.0100	0.0190	6.80E-09
51		0.00	0.000	0.039	0.2282	0.0579	0.1101	1.74E-02	0.0094	0.0180	6.80E-09
52	*	0.17	0.000	0.034	0.2298	0.0456	0.0868	1.54E-02	0.0086	0.0163	6.80E-09
53		0.52	0.000	0.000	0.2830	0.0568	0.1081	1.73E-02	0.0087	0.0165	6.80E-09
54		0.04	0.000	0.074	0.2781	0.0447	0.0850	1.53E-02	0.0085	0.0161	6.80E-09
55		0.00	0.000	0.056	0.2633	0.0279	0.0531	1.17E-02	0.0070	0.0133	6.80E-09
56	*	0.00	0.000	0.030	0.2577	0.0186	0.0355	9.43E-03	0.0055	0.0105	6.80E-09
57		0.00	0.000	0.045	0.2539	0.0039	0.0074	3.09E-03	0.0031	0.0058	6.80E-09
58		0.00	0.000	0.127	0.2434	0.0238	0.0454	9.94E-03	0.0037	0.0071	6.80E-09
59		0.00	0.000	0.136	0.2321	0.0521	0.0991	1.66E-02	0.0072	0.0136	6.80E-09
60		0.01	0.000	0.081	0.2266	0.0450	0.0857	1.54E-02	0.0083	0.0158	6.80E-09
61	*	0.10	0.000	0.064	0.2282	0.0344	0.0654	1.34E-02	0.0075	0.0142	6.80E-09
62	*	0.53	0.000	0.025	0.2299	0.0331	0.0630	1.30E-02	0.0069	0.0132	6.80E-09

63		0.05	0.000	0.000	0.2755	0.0134	0.0256	8.28E-03	0.0054	0.0103	6.80E-09
64		0.00	0.000	0.083	0.2682	0.0292	0.0555	1.23E-02	0.0056	0.0106	6.80E-09
65		0.00	0.000	0.089	0.2595	0.0657	0.1250	1.86E-02	0.0083	0.0159	6.80E-09
66		0.00	0.000	0.103	0.2509	0.0597	0.1136	1.77E-02	0.0095	0.0180	6.80E-09
67	*	0.15	0.000	0.055	0.2497	0.0574	0.1093	1.74E-02	0.0092	0.0176	6.80E-09
68		0.13	0.000	0.098	0.2558	0.0402	0.0766	1.44E-02	0.0083	0.0157	6.80E-09
69		0.06	0.000	0.191	0.2419	0.0301	0.0573	1.25E-02	0.0070	0.0134	6.80E-09
70		0.00	0.000	0.142	0.2294	0.0221	0.0420	1.05E-02	0.0060	0.0114	6.80E-09
71		0.00	0.000	0.086	0.2223	0.0144	0.0274	8.60E-03	0.0050	0.0095	6.80E-09
72		0.00	0.000	0.094	0.2144	0.0203	0.0386	1.03E-02	0.0050	0.0096	6.80E-09
73		0.00	0.000	0.177	0.1997	0.0218	0.0415	1.06E-02	0.0055	0.0105	6.80E-09
74		0.00	0.000	0.171	0.1854	0.0211	0.0402	1.05E-02	0.0055	0.0105	6.80E-09
75		0.00	0.000	0.229	0.1664	0.0196	0.0373	1.01E-02	0.0054	0.0103	6.80E-09
76		0.30	0.000	0.165	0.1778	0.0179	0.0341	9.64E-03	0.0052	0.0098	6.80E-09
77		0.15	0.000	0.125	0.1798	0.0163	0.0310	9.19E-03	0.0049	0.0094	6.80E-09
78	*	0.00	0.000	0.000	0.1798	0.0148	0.0282	8.76E-03	0.0047	0.0089	6.80E-09
79	*	0.00	0.000	0.000	0.1798	0.0135	0.0257	8.36E-03	0.0045	0.0085	6.80E-09
80	*	0.00	0.000	0.000	0.1798	0.0124	0.0236	7.99E-03	0.0043	0.0082	6.80E-09
81		0.00	0.000	0.096	0.1718	0.0114	0.0216	7.66E-03	0.0041	0.0078	6.80E-09
82		0.20	0.000	0.105	0.1799	0.0105	0.0199	7.35E-03	0.0039	0.0075	6.80E-09
83		0.00	0.000	0.191	0.1639	0.0097	0.0184	7.07E-03	0.0038	0.0072	6.80E-09
84		0.00	0.000	0.161	0.1505	0.0090	0.0171	6.81E-03	0.0036	0.0069	6.80E-09
85		0.13	0.000	0.157	0.1481	0.0084	0.0159	6.57E-03	0.0035	0.0067	6.80E-09
86		0.00	0.000	0.083	0.1411	0.0078	0.0149	6.35E-03	0.0034	0.0064	6.80E-09
87		0.26	0.000	0.065	0.1573	0.0073	0.0140	6.14E-03	0.0033	0.0062	6.80E-09
88		0.14	0.000	0.058	0.1640	0.0069	0.0131	5.95E-03	0.0032	0.0060	6.80E-09
89		0.00	0.000	0.076	0.1577	0.0065	0.0123	5.77E-03	0.0031	0.0058	6.80E-09
90	*	0.34	0.000	0.030	0.1593	0.0061	0.0116	5.60E-03	0.0030	0.0057	6.80E-09
91		0.27	0.000	0.000	0.1814	0.0058	0.0110	5.45E-03	0.0029	0.0055	6.80E-09
92	*	0.03	0.000	0.026	0.1831	0.0055	0.0104	5.30E-03	0.0028	0.0054	6.80E-09
93		0.04	0.000	0.080	0.2023	0.0052	0.0099	5.16E-03	0.0027	0.0052	6.80E-09
94		0.17	0.000	0.086	0.2096	0.0049	0.0094	5.03E-03	0.0027	0.0051	6.80E-09
95		0.00	0.000	0.264	0.1876	0.0047	0.0090	4.91E-03	0.0026	0.0050	6.80E-09
96		0.00	0.000	0.095	0.1797	0.0045	0.0085	4.80E-03	0.0025	0.0048	6.80E-09
97		0.04	0.000	0.133	0.1716	0.0043	0.0082	4.69E-03	0.0025	0.0047	6.80E-09

98	0.19	0.000	0.092	0.1792	0.0046	0.0087	4.84E-03	0.0025	0.0048	6.80E-09
99	0.18	0.000	0.245	0.1731	0.0043	0.0081	4.66E-03	0.0025	0.0047	6.80E-09
100	0.00	0.000	0.107	0.1642	0.0035	0.0066	4.22E-03	0.0023	0.0044	6.80E-09
101	0.00	0.000	0.143	0.1523	0.0034	0.0064	4.15E-03	0.0022	0.0042	6.80E-09
102	0.00	0.000	0.067	0.1465	0.0033	0.0062	4.09E-03	0.0022	0.0041	6.80E-09
103	0.00	0.000	0.084	0.1396	0.0036	0.0068	4.27E-03	0.0022	0.0042	6.80E-09
104	0.00	0.000	0.062	0.1344	0.0030	0.0056	3.89E-03	0.0021	0.0041	6.80E-09
105	0.03	0.000	0.058	0.1324	0.0029	0.0055	3.84E-03	0.0020	0.0039	6.80E-09
106	0.05	0.000	0.054	0.1317	0.0028	0.0053	3.79E-03	0.0020	0.0038	6.80E-09
107	0.18	0.000	0.048	0.1425	0.0031	0.0060	3.99E-03	0.0021	0.0039	6.80E-09
108	0.00	0.000	0.041	0.1391	0.0026	0.0049	3.63E-03	0.0020	0.0038	6.80E-09
109	0.00	0.000	0.038	0.1359	0.0025	0.0048	3.58E-03	0.0019	0.0036	6.80E-09
110	0.00	0.000	0.040	0.1326	0.0025	0.0047	3.54E-03	0.0019	0.0036	6.80E-09
111	0.00	0.000	0.040	0.1295	0.0024	0.0046	3.50E-03	0.0018	0.0035	6.80E-09
112	1.16	0.000	0.036	0.2235	0.0023	0.0044	3.45E-03	0.0018	0.0035	6.80E-09
113	0.10	0.000	0.131	0.2209	0.0023	0.0043	3.41E-03	0.0018	0.0034	6.80E-09
114	0.16	0.000	0.322	0.2071	0.0022	0.0042	3.37E-03	0.0018	0.0034	6.80E-09
115	0.04	0.000	0.108	0.2013	0.0022	0.0041	3.33E-03	0.0018	0.0033	6.80E-09
116	0.02	0.000	0.078	0.1966	0.0021	0.0040	3.29E-03	0.0017	0.0033	6.80E-09
117	0.12	0.000	0.139	0.1949	0.0021	0.0039	3.25E-03	0.0017	0.0033	6.80E-09
118	0.00	0.000	0.172	0.1808	0.0020	0.0038	3.21E-03	0.0017	0.0032	6.80E-09
119	0.15	0.000	0.260	0.1718	0.0020	0.0037	3.17E-03	0.0017	0.0032	6.80E-09
120	0.00	0.000	0.177	0.1570	0.0019	0.0036	3.13E-03	0.0017	0.0031	6.80E-09
121	0.00	0.000	0.164	0.1431	0.0024	0.0046	3.51E-03	0.0018	0.0033	6.80E-09
122	0.14	0.000	0.095	0.1471	0.0017	0.0033	2.98E-03	0.0017	0.0032	6.80E-09
123	0.30	0.000	0.071	0.1659	0.0017	0.0032	2.94E-03	0.0016	0.0030	6.80E-09
124	0.62	0.000	0.095	0.2098	0.0017	0.0032	2.91E-03	0.0015	0.0029	6.80E-09
125	0.00	0.000	0.202	0.1930	0.0016	0.0031	2.88E-03	0.0015	0.0029	6.80E-09
126	0.60	0.000	0.107	0.2341	0.0016	0.0030	2.86E-03	0.0015	0.0029	6.80E-09
127	0.29	0.000	0.096	0.2505	0.0016	0.0030	2.83E-03	0.0015	0.0028	6.80E-09
128	0.09	0.000	0.326	0.2304	0.0018	0.0034	3.00E-03	0.0015	0.0029	6.80E-09
129	0.00	0.000	0.326	0.2033	0.0015	0.0028	2.73E-03	0.0015	0.0028	6.80E-09
130	0.69	0.000	0.111	0.2511	0.0014	0.0027	2.71E-03	0.0014	0.0027	6.80E-09
131	0.00	0.000	0.154	0.2383	0.0014	0.0027	2.68E-03	0.0014	0.0027	6.80E-09
132	0.00	0.000	0.177	0.2235	0.0014	0.0026	2.66E-03	0.0014	0.0027	6.80E-09

133	0.10	0.000	0.428	0.1959	0.0014	0.0026	2.63E-03	0.0014	0.0026	6.80E-09
134	0.08	0.000	0.314	0.1765	0.0016	0.0030	2.80E-03	0.0014	0.0027	6.80E-09
135	1.21	0.000	0.394	0.2445	0.0013	0.0024	2.55E-03	0.0014	0.0027	6.80E-09
136	0.00	0.000	0.321	0.2178	0.0014	0.0026	2.65E-03	0.0014	0.0026	6.80E-09
137	0.00	0.000	0.231	0.1985	0.0012	0.0023	2.49E-03	0.0013	0.0026	6.80E-09
138	0.00	0.000	0.182	0.1831	0.0014	0.0026	2.64E-03	0.0014	0.0026	6.80E-09
139	0.00	0.000	0.176	0.1686	0.0012	0.0022	2.45E-03	0.0013	0.0025	6.80E-09
140	0.10	0.000	0.178	0.1623	0.0011	0.0021	2.40E-03	0.0013	0.0024	6.80E-09
141	0.99	0.000	0.069	0.2392	0.0011	0.0021	2.38E-03	0.0013	0.0024	6.80E-09
142	0.00	0.000	0.225	0.2205	0.0011	0.0021	2.36E-03	0.0012	0.0024	6.80E-09
143	0.00	0.000	0.119	0.2108	0.0011	0.0021	2.35E-03	0.0012	0.0024	6.80E-09
144	0.05	0.000	0.090	0.2071	0.0011	0.0020	2.33E-03	0.0012	0.0023	6.80E-09
145	0.39	0.000	0.196	0.2236	0.0011	0.0020	2.31E-03	0.0012	0.0023	6.80E-09
146	0.20	0.000	0.235	0.2204	0.0010	0.0020	2.30E-03	0.0012	0.0023	6.80E-09
147	0.00	0.000	0.236	0.2005	0.0014	0.0026	2.63E-03	0.0013	0.0025	6.80E-09
148	0.00	0.000	0.243	0.1802	0.0010	0.0018	2.21E-03	0.0013	0.0024	6.80E-09
149	0.04	0.000	0.260	0.1615	0.0009	0.0018	2.20E-03	0.0012	0.0022	6.80E-09
150	0.47	0.000	0.243	0.1803	0.0009	0.0018	2.18E-03	0.0012	0.0022	6.80E-09
151	0.48	0.000	0.240	0.2005	0.0009	0.0018	2.17E-03	0.0011	0.0022	6.80E-09
152	0.00	0.000	0.199	0.1841	0.0009	0.0017	2.16E-03	0.0011	0.0022	6.80E-09
153	0.00	0.000	0.237	0.1644	0.0009	0.0017	2.14E-03	0.0011	0.0022	6.80E-09
154	0.00	0.000	0.224	0.1457	0.0010	0.0020	2.29E-03	0.0012	0.0022	6.80E-09
155	0.01	0.000	0.182	0.1313	0.0009	0.0017	2.12E-03	0.0012	0.0022	6.80E-09
156	0.02	0.000	0.344	0.1041	0.0009	0.0016	2.08E-03	0.0011	0.0021	6.80E-09
157	0.03	0.000	0.138	0.0953	0.0008	0.0016	2.07E-03	0.0011	0.0021	6.80E-09
158	0.00	0.000	0.073	0.0895	0.0008	0.0016	2.06E-03	0.0011	0.0021	6.80E-09
159	0.00	0.000	0.148	0.0771	0.0008	0.0016	2.05E-03	0.0011	0.0021	6.80E-09
160	0.00	0.000	0.001	0.0770	0.0008	0.0015	2.03E-03	0.0011	0.0020	6.80E-09
161	0.00	0.000	0.000	0.0770	0.0008	0.0015	2.02E-03	0.0011	0.0020	6.80E-09
162	0.00	0.000	0.000	0.0770	0.0008	0.0015	2.01E-03	0.0011	0.0020	6.80E-09
163	0.22	0.000	0.036	0.0923	0.0008	0.0015	2.00E-03	0.0011	0.0020	6.80E-09
164	0.00	0.000	0.117	0.0826	0.0008	0.0015	1.98E-03	0.0010	0.0020	6.80E-09
165	0.00	0.000	0.049	0.0785	0.0008	0.0014	1.97E-03	0.0010	0.0020	6.80E-09
166	0.00	0.000	0.013	0.0774	0.0008	0.0014	1.96E-03	0.0010	0.0020	6.80E-09
167	0.00	0.000	0.003	0.0771	0.0007	0.0014	1.94E-03	0.0010	0.0019	6.80E-09

168	0.08	0.000	0.033	0.0812	0.0007	0.0014	1.93E-03	0.0010	0.0019	6.80E-09
169	0.00	0.000	0.021	0.0795	0.0007	0.0014	1.92E-03	0.0010	0.0019	6.80E-09
170	0.07	0.000	0.052	0.0813	0.0007	0.0014	1.91E-03	0.0010	0.0019	6.80E-09
171	0.38	0.000	0.061	0.1081	0.0007	0.0013	1.89E-03	0.0010	0.0019	6.80E-09
172	0.00	0.000	0.109	0.0990	0.0007	0.0013	1.88E-03	0.0010	0.0019	6.80E-09
173	0.16	0.000	0.068	0.1066	0.0007	0.0013	1.87E-03	0.0010	0.0019	6.80E-09
174	0.04	0.000	0.182	0.0949	0.0007	0.0013	1.86E-03	0.0010	0.0019	6.80E-09
175	0.00	0.000	0.158	0.0817	0.0007	0.0013	1.85E-03	0.0010	0.0019	6.80E-09
176	0.00	0.000	0.050	0.0775	0.0007	0.0013	1.83E-03	0.0010	0.0018	6.80E-09
177	0.06	0.000	0.040	0.0789	0.0007	0.0013	1.85E-03	0.0010	0.0018	6.80E-09
178	0.13	0.000	0.041	0.0862	0.0006	0.0012	1.81E-03	0.0010	0.0018	6.80E-09
179	0.01	0.000	0.081	0.0806	0.0006	0.0012	1.79E-03	0.0009	0.0018	6.80E-09
180	0.00	0.000	0.033	0.0778	0.0006	0.0012	1.78E-03	0.0009	0.0018	6.80E-09
181	0.59	0.000	0.143	0.1153	0.0006	0.0012	1.77E-03	0.0009	0.0018	6.80E-09
182	0.05	0.000	0.056	0.1149	0.0006	0.0012	1.76E-03	0.0009	0.0018	6.80E-09
183	0.21	0.000	0.083	0.1254	0.0006	0.0011	1.75E-03	0.0009	0.0018	6.80E-09
184	0.30	0.000	0.100	0.1419	0.0006	0.0011	1.74E-03	0.0009	0.0017	6.80E-09
185	0.33	0.000	0.215	0.1512	0.0006	0.0011	1.73E-03	0.0009	0.0017	6.80E-09
186	0.11	0.000	0.100	0.1524	0.0006	0.0011	1.72E-03	0.0009	0.0017	6.80E-09
187	0.06	0.000	0.106	0.1487	0.0006	0.0011	1.71E-03	0.0009	0.0017	6.80E-09
188	0.02	0.000	0.115	0.1407	0.0006	0.0011	1.69E-03	0.0009	0.0017	6.80E-09
189	0.00	0.000	0.362	0.1105	0.0006	0.0011	1.68E-03	0.0009	0.0017	6.80E-09
190	0.00	0.000	0.312	0.0845	0.0006	0.0010	1.67E-03	0.0009	0.0017	6.80E-09
191	0.00	0.000	0.082	0.0777	0.0005	0.0010	1.66E-03	0.0009	0.0017	6.80E-09
192	0.06	0.000	0.055	0.0778	0.0005	0.0010	1.65E-03	0.0009	0.0017	6.80E-09
193	0.66	0.000	0.075	0.1268	0.0005	0.0010	1.64E-03	0.0009	0.0016	6.80E-09
194	0.03	0.000	0.084	0.1225	0.0005	0.0010	1.63E-03	0.0009	0.0016	6.80E-09
195	0.00	0.000	0.083	0.1159	0.0005	0.0010	1.62E-03	0.0009	0.0016	6.80E-09
196	0.00	0.000	0.214	0.0981	0.0005	0.0010	1.61E-03	0.0008	0.0016	6.80E-09
197	1.02	0.000	0.070	0.1774	0.0005	0.0010	1.60E-03	0.0008	0.0016	6.80E-09
198	0.00	0.000	0.200	0.1607	0.0005	0.0009	1.59E-03	0.0008	0.0016	6.80E-09
199	0.00	0.000	0.093	0.1530	0.0005	0.0009	1.58E-03	0.0008	0.0016	6.80E-09
200	0.00	0.000	0.091	0.1455	0.0005	0.0009	1.57E-03	0.0008	0.0016	6.80E-09
201	0.08	0.000	0.088	0.1451	0.0005	0.0009	1.56E-03	0.0008	0.0016	6.80E-09
202	0.13	0.000	0.085	0.1486	0.0005	0.0009	1.55E-03	0.0008	0.0016	6.80E-09

203	0.00	0.000	0.276	0.1257	0.0005	0.0009	1.55E-03	0.0008	0.0015	6.80E-09
204	0.03	0.000	0.215	0.1106	0.0005	0.0009	1.54E-03	0.0008	0.0015	6.80E-09
205	0.47	0.000	0.117	0.1397	0.0005	0.0009	1.53E-03	0.0008	0.0015	6.80E-09
206	0.19	0.000	0.122	0.1456	0.0005	0.0009	1.52E-03	0.0008	0.0015	6.80E-09
207	0.00	0.000	0.328	0.1183	0.0004	0.0009	1.51E-03	0.0008	0.0015	6.80E-09
208	0.19	0.000	0.302	0.1090	0.0004	0.0008	1.50E-03	0.0008	0.0015	6.80E-09
209	0.71	0.000	0.245	0.1478	0.0004	0.0008	1.49E-03	0.0008	0.0015	6.80E-09
210	0.00	0.000	0.119	0.1381	0.0004	0.0008	1.48E-03	0.0008	0.0015	6.80E-09
211	0.14	0.000	0.260	0.1283	0.0004	0.0008	1.47E-03	0.0008	0.0015	6.80E-09
212	0.07	0.000	0.169	0.1198	0.0004	0.0008	1.47E-03	0.0008	0.0015	6.80E-09
213	0.00	0.000	0.091	0.1123	0.0004	0.0008	1.46E-03	0.0008	0.0015	6.80E-09
214	0.00	0.000	0.124	0.1019	0.0004	0.0008	1.45E-03	0.0008	0.0015	6.80E-09
215	0.00	0.000	0.205	0.0848	0.0004	0.0008	1.44E-03	0.0008	0.0014	6.80E-09
216	0.13	0.000	0.122	0.0851	0.0004	0.0008	1.49E-03	0.0008	0.0015	6.80E-09
217	0.00	0.000	0.067	0.0795	0.0004	0.0008	1.42E-03	0.0008	0.0014	6.80E-09
218	0.00	0.000	0.022	0.0777	0.0004	0.0007	1.41E-03	0.0007	0.0014	6.80E-09
219	0.33	0.000	0.133	0.0937	0.0004	0.0007	1.41E-03	0.0007	0.0014	6.80E-09
220	0.00	0.000	0.083	0.0868	0.0004	0.0007	1.40E-03	0.0007	0.0014	6.80E-09
221	0.00	0.000	0.082	0.0800	0.0004	0.0007	1.39E-03	0.0007	0.0014	6.80E-09
222	0.00	0.000	0.028	0.0776	0.0004	0.0007	1.38E-03	0.0007	0.0014	6.80E-09
223	0.00	0.000	0.005	0.0772	0.0004	0.0007	1.38E-03	0.0007	0.0014	6.80E-09
224	0.00	0.000	0.001	0.0770	0.0004	0.0007	1.37E-03	0.0007	0.0014	6.80E-09
225	0.00	0.000	0.000	0.0770	0.0004	0.0007	1.36E-03	0.0007	0.0014	6.80E-09
226	0.00	0.000	0.000	0.0770	0.0004	0.0007	1.35E-03	0.0007	0.0014	6.80E-09
227	0.00	0.000	0.000	0.0770	0.0004	0.0007	1.35E-03	0.0007	0.0013	6.80E-09
228	0.00	0.000	0.000	0.0770	0.0004	0.0007	1.34E-03	0.0007	0.0013	6.80E-09
229	0.13	0.000	0.043	0.0841	0.0003	0.0007	1.33E-03	0.0007	0.0013	6.80E-09
230	0.00	0.000	0.065	0.0786	0.0003	0.0007	1.33E-03	0.0007	0.0013	6.80E-09
231	0.00	0.000	0.015	0.0774	0.0003	0.0007	1.32E-03	0.0007	0.0013	6.80E-09
232	0.00	0.000	0.003	0.0771	0.0003	0.0006	1.31E-03	0.0007	0.0013	6.80E-09
233	0.00	0.000	0.001	0.0770	0.0003	0.0006	1.30E-03	0.0007	0.0013	6.80E-09
234	0.24	0.000	0.033	0.0947	0.0003	0.0006	1.30E-03	0.0007	0.0013	6.80E-09
235	0.00	0.000	0.106	0.0859	0.0003	0.0006	1.29E-03	0.0007	0.0013	6.80E-09
236	0.00	0.000	0.083	0.0790	0.0003	0.0006	1.28E-03	0.0007	0.0013	6.80E-09
237	0.00	0.000	0.018	0.0775	0.0003	0.0006	1.28E-03	0.0007	0.0013	6.80E-09

238	0.00	0.000	0.004	0.0771	0.0003	0.0006	1.27E-03	0.0007	0.0013	6.80E-09
239	0.00	0.000	0.002	0.0770	0.0003	0.0006	1.27E-03	0.0007	0.0013	6.80E-09
240	0.01	0.000	0.006	0.0770	0.0003	0.0006	1.26E-03	0.0007	0.0013	6.80E-09
241	0.12	0.000	0.050	0.0830	0.0003	0.0006	1.25E-03	0.0007	0.0013	6.80E-09
242	0.74	0.000	0.053	0.1404	0.0003	0.0006	1.25E-03	0.0007	0.0012	6.80E-09
243	0.00	0.000	0.140	0.1288	0.0003	0.0006	1.24E-03	0.0007	0.0012	6.80E-09
244	0.00	0.000	0.111	0.1195	0.0003	0.0006	1.23E-03	0.0006	0.0012	6.80E-09
245	0.00	0.000	0.075	0.1133	0.0003	0.0006	1.23E-03	0.0006	0.0012	6.80E-09
246	0.00	0.000	0.120	0.1033	0.0003	0.0006	1.22E-03	0.0006	0.0012	6.80E-09
247	0.00	0.000	0.220	0.0850	0.0003	0.0006	1.22E-03	0.0006	0.0012	6.80E-09
248	0.54	0.000	0.230	0.1105	0.0003	0.0005	1.21E-03	0.0006	0.0012	6.80E-09
249	0.06	0.000	0.161	0.1017	0.0003	0.0005	1.20E-03	0.0006	0.0012	6.80E-09
250	0.24	0.000	0.178	0.1072	0.0003	0.0005	1.20E-03	0.0006	0.0012	6.80E-09
251	0.67	0.000	0.217	0.1454	0.0003	0.0005	1.19E-03	0.0006	0.0012	6.80E-09
252	0.10	0.000	0.238	0.1340	0.0003	0.0005	1.19E-03	0.0006	0.0012	6.80E-09
253	0.40	0.000	0.302	0.1419	0.0003	0.0005	1.18E-03	0.0006	0.0012	6.80E-09
254	0.00	0.000	0.224	0.1233	0.0003	0.0005	1.18E-03	0.0006	0.0012	6.80E-09
255	0.00	0.000	0.065	0.1179	0.0003	0.0005	1.17E-03	0.0006	0.0012	6.80E-09
256	1.74	0.000	0.086	0.2557	0.0003	0.0005	1.16E-03	0.0006	0.0012	6.80E-09
257	0.01	0.000	0.175	0.2423	0.0003	0.0005	1.16E-03	0.0006	0.0012	6.80E-09
258	1.01	0.000	0.150	0.3140	0.0003	0.0005	1.15E-03	0.0006	0.0012	6.80E-09
259	0.00	0.000	0.172	0.2776	0.0003	0.0005	1.15E-03	0.0006	0.0012	6.80E-09
260	0.00	0.000	0.162	0.2506	0.0005	0.0009	1.53E-03	0.0007	0.0014	6.80E-09
261	0.00	0.000	0.219	0.2324	0.0002	0.0004	9.67E-04	0.0006	0.0012	6.80E-09
262	0.00	0.000	0.125	0.2220	0.0002	0.0004	9.90E-04	0.0005	0.0010	6.80E-09
263	0.02	0.000	0.175	0.2093	0.0003	0.0006	1.22E-03	0.0006	0.0011	6.80E-09
264	0.15	0.000	0.221	0.2034	0.0004	0.0007	1.38E-03	0.0007	0.0013	6.80E-09
265	0.18	0.000	0.177	0.2036	0.0004	0.0008	1.47E-03	0.0008	0.0014	6.80E-09
266	1.27	0.000	0.060	0.3041	0.0004	0.0008	1.46E-03	0.0008	0.0015	6.80E-09
267	0.00	0.000	0.028	0.2908	0.0004	0.0008	1.44E-03	0.0008	0.0014	6.80E-09
268	0.00	0.000	0.038	0.2707	0.0004	0.0008	1.42E-03	0.0008	0.0014	6.80E-09
269	0.00	0.000	0.033	0.2680	0.0002	0.0003	5.67E-04	0.0005	0.0009	6.80E-09
270	0.00	0.000	0.030	0.2627	0.0003	0.0005	8.45E-04	0.0004	0.0007	6.80E-09
271	0.00	0.000	0.023	0.2565	0.0002	0.0003	5.39E-04	0.0003	0.0007	6.80E-09
272	0.00	0.000	0.038	0.2534	0.0005	0.0007	1.08E-03	0.0004	0.0009	6.80E-09

273		0.00	0.000	0.032	0.2507	0.0000	0.0001	2.22E-04	0.0003	0.0006	6.80E-09
274		0.00	0.000	0.024	0.2487	0.0005	0.0010	1.65E-03	0.0006	0.0011	6.80E-09
275		1.01	0.000	0.097	0.3249	0.0005	0.0010	1.61E-03	0.0008	0.0016	6.80E-09
276		0.00	0.000	0.060	0.2809	0.0005	0.0009	1.59E-03	0.0008	0.0016	6.80E-09
277		0.00	0.000	0.033	0.2684	0.0004	0.0007	1.14E-03	0.0007	0.0013	6.80E-09
278		0.11	0.000	0.052	0.2647	0.0001	0.0002	2.64E-04	0.0003	0.0006	6.80E-09
279		0.00	0.000	0.039	0.2590	0.0000	0.0000	0.00E+00	0.0001	0.0001	6.80E-09
280		0.00	0.000	0.062	0.2538	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
281		0.15	0.000	0.099	0.2570	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
282		0.26	0.000	0.076	0.2688	0.0007	0.0013	9.81E-04	0.0003	0.0006	6.80E-09
283		0.65	0.000	0.100	0.3132	0.0000	0.0000	0.00E+00	0.0002	0.0004	6.80E-09
284		1.24	0.000	0.117	0.3429	0.0009	0.0017	1.48E-03	0.0005	0.0009	6.80E-09
285		0.00	0.000	0.047	0.2888	0.0041	0.0077	4.56E-03	0.0017	0.0032	6.80E-09
286		0.00	0.000	0.049	0.2708	0.0036	0.0068	4.27E-03	0.0023	0.0043	6.80E-09
287		0.00	0.000	0.057	0.2598	0.0000	0.0000	4.22E-05	0.0010	0.0018	6.80E-09
288	*	0.00	0.000	0.000	0.2598	0.0000	0.0000	0.00E+00	0.0000	0.0001	6.80E-09
289	*	0.00	0.000	0.020	0.2581	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
290		0.00	0.000	0.044	0.2544	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
291	*	0.00	0.000	0.037	0.2514	0.0011	0.0021	1.73E-03	0.0005	0.0010	6.80E-09
292	*	0.00	0.000	0.040	0.2480	0.0148	0.0282	8.46E-03	0.0029	0.0056	6.80E-09
293	*	1.04	0.000	0.016	0.2486	0.0217	0.0414	1.06E-02	0.0050	0.0096	6.80E-09
294	*	0.04	0.000	0.010	0.2473	0.0171	0.0326	9.41E-03	0.0052	0.0099	6.80E-09
295		0.71	0.000	0.000	0.3745	0.0029	0.0054	2.52E-03	0.0029	0.0055	6.80E-09
296		0.09	0.000	0.075	0.2857	0.0000	0.0000	0.00E+00	0.0006	0.0012	6.80E-09
297	*	0.07	0.000	0.047	0.2769	0.0050	0.0094	3.59E-03	0.0011	0.0021	6.80E-09
298	*	0.00	0.000	0.000	0.2639	0.0095	0.0181	4.84E-03	0.0022	0.0043	6.80E-09
299	*	0.00	0.000	0.037	0.2608	0.0599	0.1140	1.77E-02	0.0064	0.0122	6.80E-09
300		0.08	0.000	0.066	0.2580	0.0757	0.1440	2.00E-02	0.0099	0.0188	6.80E-09
301		0.00	0.000	0.023	0.2560	0.0851	0.1620	2.13E-02	0.0109	0.0207	6.80E-09
302		0.00	0.000	0.036	0.2530	0.0607	0.1155	1.79E-02	0.0101	0.0193	6.80E-09
303		0.00	0.000	0.041	0.2496	0.0452	0.0861	1.54E-02	0.0087	0.0165	6.80E-09
304		0.04	0.000	0.064	0.2444	0.0501	0.0954	1.62E-02	0.0084	0.0159	6.80E-09
305		0.64	0.000	0.071	0.2917	0.0313	0.0596	1.27E-02	0.0075	0.0142	6.80E-09
306		0.00	0.000	0.066	0.2844	0.0067	0.0126	4.68E-03	0.0043	0.0082	6.80E-09
307		0.00	0.000	0.037	0.2663	0.0000	0.0000	0.00E+00	0.0011	0.0021	6.80E-09

308	*	0.00	0.000	0.000	0.2655	0.0172	0.0327	9.05E-03	0.0028	0.0053	6.80E-09
309		0.00	0.000	0.058	0.2607	0.0567	0.1078	1.69E-02	0.0070	0.0134	6.80E-09
310		0.64	0.000	0.078	0.3071	0.1065	0.2027	2.38E-02	0.0109	0.0207	6.80E-09
311		0.00	0.000	0.119	0.2880	0.0937	0.1783	2.23E-02	0.0120	0.0228	6.80E-09
312		0.00	0.000	0.114	0.2660	0.0615	0.1171	1.80E-02	0.0104	0.0199	6.80E-09
313		0.00	0.000	0.077	0.2597	0.0384	0.0731	1.38E-02	0.0082	0.0157	6.80E-09
314		0.00	0.000	0.041	0.2562	0.0523	0.0995	1.64E-02	0.0081	0.0154	6.80E-09
315		0.00	0.000	0.048	0.2523	0.0885	0.1685	2.17E-02	0.0102	0.0194	6.80E-09
316		0.07	0.000	0.063	0.2529	0.0845	0.1609	2.12E-02	0.0112	0.0213	6.80E-09
317		0.13	0.000	0.074	0.2574	0.0550	0.1046	1.70E-02	0.0099	0.0188	6.80E-09
318		0.00	0.000	0.047	0.2502	0.0383	0.0729	1.42E-02	0.0081	0.0154	6.80E-09
319	*	0.00	0.000	0.024	0.2459	0.0232	0.0442	1.10E-02	0.0065	0.0124	6.80E-09
320		0.00	0.000	0.048	0.2375	0.0421	0.0801	1.48E-02	0.0070	0.0132	6.80E-09
321		0.18	0.000	0.062	0.2471	0.0491	0.0934	1.61E-02	0.0081	0.0155	6.80E-09
322		0.00	0.000	0.028	0.2437	0.0621	0.1181	1.81E-02	0.0090	0.0172	6.80E-09
323		0.00	0.000	0.034	0.2365	0.0559	0.1065	1.71E-02	0.0092	0.0175	6.80E-09
324	*	0.00	0.000	0.000	0.2332	0.0408	0.0777	1.46E-02	0.0082	0.0157	6.80E-09
325	*	0.00	0.000	0.000	0.2300	0.0473	0.0901	1.58E-02	0.0080	0.0153	6.80E-09
326	*	0.00	0.000	0.000	0.2272	0.0529	0.1007	1.67E-02	0.0086	0.0163	6.80E-09
327		0.00	0.000	0.045	0.2234	0.0497	0.0946	1.62E-02	0.0086	0.0164	6.80E-09
328		0.00	0.000	0.032	0.2207	0.0523	0.0996	1.66E-02	0.0086	0.0164	6.80E-09
329	*	0.00	0.000	0.000	0.2207	0.0476	0.0906	1.57E-02	0.0084	0.0161	6.80E-09
330	*	0.00	0.000	0.027	0.2184	0.0196	0.0373	1.01E-02	0.0066	0.0125	6.80E-09
331	*	0.29	0.000	0.025	0.2200	0.0288	0.0548	1.18E-02	0.0059	0.0112	6.80E-09
332		0.00	0.000	0.028	0.2382	0.0610	0.1160	1.79E-02	0.0080	0.0153	6.80E-09
333	*	0.00	0.000	0.027	0.2360	0.0560	0.1066	1.72E-02	0.0091	0.0174	6.80E-09
334	*	0.00	0.000	0.000	0.2344	0.0491	0.0934	1.61E-02	0.0087	0.0165	6.80E-09
335	*	0.00	0.000	0.000	0.2328	0.0361	0.0687	1.37E-02	0.0077	0.0147	6.80E-09
336	*	0.00	0.000	0.000	0.2306	0.0298	0.0567	1.25E-02	0.0069	0.0130	6.80E-09
337	*	0.00	0.000	0.000	0.2288	0.0220	0.0419	1.07E-02	0.0060	0.0115	6.80E-09
338	*	0.00	0.000	0.026	0.2262	0.0133	0.0254	8.27E-03	0.0049	0.0093	6.80E-09
339		0.00	0.000	0.032	0.2232	0.0163	0.0310	9.17E-03	0.0046	0.0088	6.80E-09
340	*	0.06	0.000	0.033	0.2248	0.0147	0.0279	8.71E-03	0.0047	0.0089	6.80E-09
341		0.00	0.000	0.060	0.2197	0.0172	0.0328	9.44E-03	0.0048	0.0091	6.80E-09
342		0.00	0.000	0.054	0.2136	0.0202	0.0384	1.02E-02	0.0052	0.0099	6.80E-09

343			0.00	0.000	0.093	0.2054	0.0130	0.0247	8.15E-03	0.0047	0.0090	6.80E-09
344			0.64	0.000	0.063	0.2534	0.0090	0.0171	6.81E-03	0.0039	0.0074	6.80E-09
345	*		0.06	0.000	0.027	0.2551	0.0101	0.0193	7.23E-03	0.0037	0.0071	6.80E-09
346	*		0.00	0.000	0.011	0.2549	0.0107	0.0204	7.44E-03	0.0039	0.0073	6.80E-09
347	*		0.00	0.000	0.000	0.2537	0.0127	0.0242	8.09E-03	0.0041	0.0078	6.80E-09
348	*	*	0.00	0.000	0.000	0.2537	0.0103	0.0196	7.26E-03	0.0040	0.0076	6.80E-09
349	*	*	0.02	0.000	0.017	0.2537	0.0086	0.0163	6.65E-03	0.0036	0.0069	6.80E-09
350	*	*	0.02	0.000	0.018	0.2537	0.0087	0.0165	6.69E-03	0.0035	0.0067	6.80E-09
351	*	*	0.27	0.000	0.016	0.2537	0.0086	0.0164	6.65E-03	0.0035	0.0067	6.80E-09
352	*	*	0.00	0.000	0.007	0.2537	0.0084	0.0160	6.57E-03	0.0035	0.0066	6.80E-09
353		*	0.00	0.000	0.020	0.2625	0.0081	0.0154	6.45E-03	0.0034	0.0065	6.80E-09
354		*	0.01	0.000	0.028	0.2718	0.0078	0.0148	6.32E-03	0.0034	0.0064	6.80E-09
355		*	0.00	0.000	0.004	0.2719	0.0074	0.0141	6.18E-03	0.0033	0.0062	6.80E-09
356		*	0.00	0.000	0.000	0.2719	0.0071	0.0135	6.04E-03	0.0032	0.0061	6.80E-09
357		*	0.33	0.000	0.010	0.2985	0.0068	0.0128	5.89E-03	0.0031	0.0060	6.80E-09
358		*	0.15	0.000	0.009	0.3099	0.0064	0.0122	5.75E-03	0.0031	0.0058	6.80E-09
359			0.00	0.000	0.050	0.2858	0.0061	0.0116	5.61E-03	0.0030	0.0057	6.80E-09
360	*		0.05	0.000	0.029	0.2757	0.0067	0.0127	5.85E-03	0.0030	0.0057	6.80E-09
361	*		0.19	0.000	0.014	0.2694	0.0056	0.0107	5.35E-03	0.0029	0.0056	6.80E-09
362	*	*	0.00	0.000	0.009	0.2694	0.0058	0.0111	5.39E-03	0.0028	0.0054	6.80E-09
363	*	*	0.07	0.000	0.011	0.2694	0.0035	0.0066	4.21E-03	0.0025	0.0047	6.80E-09
364	*	*	0.00	0.000	0.012	0.2694	0.0057	0.0109	5.38E-03	0.0026	0.0049	6.80E-09
365		*	0.00	0.000	0.015	0.2837	0.0053	0.0101	5.16E-03	0.0028	0.0052	6.80E-09

* = Frozen (air or soil)

Annual Totals for Year 1			
	inches	cubic feet	percent
Precipitation	40.65	147,554.3	100.00
Runoff	0.000	0.0000	0.00
Evapotranspiration	31.152	113,080.5	76.64
Drainage Collected from Layer 3	7.5591	27,439.6	18.60
Percolation/Leakage through Layer 4	1.947828	7,070.6	4.79
Average Head on Top of Layer 4	0.0109	---	---

Drainage Collected from Layer 5	1.9480	7,071.3	4.79
Percolation/Leakage through Layer 7	0.000002	0.0090	0.00
Average Head on Top of Layer 6	0.0028	---	---
Change in Water Storage	-0.0102	-37.1	-0.03
Soil Water at Start of Year	39.3235	142,744.3	96.74
Soil Water at End of Year	39.3133	142,707.2	96.72
Snow Water at Start of Year	0.0000	0.0000	0.00
Snow Water at End of Year	0.0000	0.0000	0.00
Annual Water Budget Balance	0.0000	0.0000	0.00

Daily Output for Year 2

Column key: Head #1: drainage from Layer 4 | Head #2: drainage from Layer 6
Drain #1: drainage from Layer 3 | Drain #2: drainage from Layer 5
Leak #1: leakage thru Layer 4 | Leak #2: leakage thru Layer 7

Title: Millersville Cell 9 - Open Cell Condition
Simulated On: 6/9/2024 11:31

Day	Freezing Status* Air	Freezing Status* Soil	Rain (inches)	Runoff (inches)	ET (inches)	Evap. Zone Water (in/in)	Head #1 (inches)	Drain #1 (inches)	Leak #1 (inches)	Head #2 (inches)	Drain #2 (inches)	Leak #2 (inches)
1		*	0.00	0.000	0.000	0.2837	0.0064	0.0122	5.73E-03	0.0029	0.0055	6.80E-09
2	*	*	0.14	0.000	0.026	0.2837	0.0057	0.0109	5.43E-03	0.0029	0.0055	6.80E-09
3	*	*	0.01	0.000	0.021	0.2837	0.0052	0.0098	5.15E-03	0.0028	0.0053	6.80E-09
4	*	*	0.00	0.000	0.022	0.2837	0.0047	0.0089	4.90E-03	0.0026	0.0050	6.80E-09
5	*	*	0.00	0.000	0.027	0.2837	0.0015	0.0028	1.84E-03	0.0017	0.0031	6.80E-09
6	*	*	0.17	0.000	0.018	0.2837	0.0000	0.0000	0.00E+00	0.0004	0.0008	6.80E-09
7	*	*	0.00	0.000	0.018	0.2837	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
8	*	*	0.00	0.000	0.023	0.2837	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
9		*	0.00	0.000	0.032	0.2954	0.0014	0.0028	2.61E-03	0.0008	0.0015	6.80E-09
10	*	*	0.00	0.000	0.000	0.2954	0.0043	0.0083	4.70E-03	0.0020	0.0038	6.80E-09
11		*	0.08	0.000	0.008	0.3015	0.0066	0.0125	5.81E-03	0.0028	0.0053	6.80E-09
12		*	0.00	0.000	0.000	0.3015	0.0080	0.0152	6.40E-03	0.0032	0.0061	6.80E-09
13		*	0.00	0.000	0.000	0.3015	0.0087	0.0166	6.70E-03	0.0034	0.0066	6.80E-09
14		*	0.09	0.000	0.008	0.3083	0.0090	0.0171	6.81E-03	0.0036	0.0068	6.80E-09
15		*	0.00	0.000	0.000	0.3083	0.0090	0.0172	6.81E-03	0.0036	0.0068	6.80E-09
16		*	0.00	0.000	0.000	0.3083	0.0088	0.0168	6.75E-03	0.0036	0.0068	6.80E-09
17			0.00	0.000	0.049	0.2794	0.0108	0.0205	7.42E-03	0.0037	0.0071	6.80E-09
18			0.00	0.000	0.057	0.2660	0.0083	0.0159	6.52E-03	0.0036	0.0069	6.80E-09
19			0.00	0.000	0.040	0.2540	0.0088	0.0167	6.68E-03	0.0035	0.0066	6.80E-09
20			0.09	0.000	0.069	0.2479	0.0086	0.0164	6.62E-03	0.0035	0.0066	6.80E-09
21			0.00	0.000	0.059	0.2429	0.0042	0.0079	4.61E-03	0.0029	0.0055	6.80E-09
22	*		0.00	0.000	0.000	0.2429	0.0047	0.0089	4.88E-03	0.0025	0.0048	6.80E-09
23	*		0.00	0.000	0.000	0.2429	0.0067	0.0127	5.76E-03	0.0028	0.0054	6.80E-09
24			0.00	0.000	0.030	0.2404	0.0064	0.0122	5.67E-03	0.0030	0.0057	6.80E-09
25			0.19	0.000	0.076	0.2502	0.0082	0.0155	6.48E-03	0.0032	0.0061	6.80E-09
26			0.03	0.000	0.065	0.2449	0.0072	0.0137	6.08E-03	0.0033	0.0062	6.80E-09
27			0.41	0.000	0.114	0.2693	0.0064	0.0121	5.72E-03	0.0031	0.0059	6.80E-09

28		0.00	0.000	0.038	0.2651	0.0057	0.0108	5.40E-03	0.0029	0.0055	6.80E-09
29		0.23	0.000	0.065	0.2772	0.0051	0.0098	5.13E-03	0.0028	0.0052	6.80E-09
30		0.05	0.000	0.038	0.2749	0.0002	0.0003	3.51E-04	0.0013	0.0024	6.80E-09
31	*	0.00	0.000	0.002	0.2689	0.0000	0.0000	0.00E+00	0.0001	0.0002	6.80E-09
32	*	0.13	0.000	0.036	0.2650	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
33	*	0.00	0.000	0.035	0.2632	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
34	*	0.20	0.000	0.009	0.2586	0.0022	0.0043	2.60E-03	0.0008	0.0015	6.80E-09
35	*	0.00	0.000	0.030	0.2543	0.0134	0.0256	8.29E-03	0.0031	0.0058	6.80E-09
36	*	0.00	0.000	0.018	0.2508	0.0162	0.0309	9.16E-03	0.0046	0.0087	6.80E-09
37	*	0.00	0.000	0.000	0.2480	0.0120	0.0229	7.84E-03	0.0044	0.0084	6.80E-09
38		0.25	0.000	0.011	0.2751	0.0157	0.0299	8.98E-03	0.0045	0.0085	6.80E-09
39		0.10	0.000	0.100	0.2722	0.0275	0.0523	1.19E-02	0.0056	0.0107	6.80E-09
40		0.08	0.000	0.121	0.2671	0.0325	0.0619	1.30E-02	0.0066	0.0125	6.80E-09
41		0.42	0.000	0.119	0.2872	0.0246	0.0467	1.12E-02	0.0063	0.0120	6.80E-09
42		0.00	0.000	0.112	0.2754	0.0233	0.0444	1.10E-02	0.0058	0.0111	6.80E-09
43		0.00	0.000	0.096	0.2610	0.0093	0.0177	6.13E-03	0.0043	0.0082	6.80E-09
44		0.00	0.000	0.058	0.2458	0.0148	0.0282	8.47E-03	0.0040	0.0075	6.80E-09
45	*	0.00	0.000	0.030	0.2360	0.0018	0.0033	2.77E-03	0.0027	0.0052	6.80E-09
46	*	0.00	0.000	0.000	0.2346	0.0107	0.0203	7.34E-03	0.0029	0.0055	6.80E-09
47	*	0.10	0.000	0.008	0.2363	0.0256	0.0488	1.15E-02	0.0051	0.0097	6.80E-09
48	*	0.10	0.000	0.006	0.2379	0.0323	0.0615	1.30E-02	0.0065	0.0123	6.80E-09
49	*	0.23	0.000	0.010	0.2395	0.0329	0.0627	1.31E-02	0.0068	0.0130	6.80E-09
50	*	0.28	0.000	0.000	0.2412	0.0308	0.0586	1.27E-02	0.0068	0.0129	6.80E-09
51		0.00	0.000	0.000	0.2591	0.0229	0.0436	1.09E-02	0.0061	0.0116	6.80E-09
52		0.01	0.000	0.003	0.2915	0.0012	0.0023	1.47E-03	0.0029	0.0055	6.80E-09
53		0.01	0.000	0.075	0.2856	0.0088	0.0167	6.18E-03	0.0023	0.0043	6.80E-09
54		0.00	0.000	0.082	0.2616	0.0197	0.0374	1.00E-02	0.0044	0.0083	6.80E-09
55		0.05	0.000	0.088	0.2542	0.0188	0.0359	9.87E-03	0.0052	0.0099	6.80E-09
56	*	0.03	0.000	0.056	0.2487	0.0231	0.0439	1.09E-02	0.0055	0.0105	6.80E-09
57		0.00	0.000	0.108	0.2353	0.0289	0.0550	1.23E-02	0.0061	0.0117	6.80E-09
58		0.00	0.000	0.086	0.2248	0.0184	0.0351	9.62E-03	0.0056	0.0107	6.80E-09
59		0.25	0.000	0.097	0.2376	0.0087	0.0165	6.51E-03	0.0041	0.0079	6.80E-09
60	*	0.01	0.000	0.010	0.2376	0.0099	0.0188	6.99E-03	0.0036	0.0068	6.80E-09
61		0.00	0.000	0.105	0.2264	0.0195	0.0371	1.00E-02	0.0046	0.0087	6.80E-09
62		0.00	0.000	0.096	0.2161	0.0176	0.0335	9.53E-03	0.0051	0.0097	6.80E-09

63		0.00	0.000	0.084	0.2069	0.0100	0.0190	7.15E-03	0.0043	0.0082	6.80E-09
64		0.00	0.000	0.077	0.1987	0.0072	0.0137	5.61E-03	0.0033	0.0063	6.80E-09
65		0.00	0.000	0.096	0.1901	0.0008	0.0015	1.11E-03	0.0016	0.0030	6.80E-09
66		0.00	0.000	0.118	0.1803	0.0000	0.0000	0.00E+00	0.0003	0.0005	6.80E-09
67		0.00	0.000	0.050	0.1761	0.0085	0.0162	6.29E-03	0.0019	0.0036	6.80E-09
68		0.00	0.000	0.076	0.1698	0.0217	0.0413	1.06E-02	0.0046	0.0087	6.80E-09
69		0.01	0.000	0.101	0.1618	0.0259	0.0492	1.16E-02	0.0058	0.0111	6.80E-09
70		0.07	0.000	0.085	0.1603	0.0254	0.0484	1.15E-02	0.0061	0.0115	6.80E-09
71	*	0.09	0.000	0.062	0.1619	0.0234	0.0446	1.10E-02	0.0059	0.0112	6.80E-09
72		0.80	0.000	0.073	0.2226	0.0211	0.0402	1.05E-02	0.0056	0.0107	6.80E-09
73		0.00	0.000	0.053	0.2182	0.0189	0.0361	9.91E-03	0.0053	0.0102	6.80E-09
74		0.08	0.000	0.126	0.2136	0.0183	0.0348	9.72E-03	0.0052	0.0098	6.80E-09
75		0.08	0.000	0.138	0.2077	0.0171	0.0324	9.38E-03	0.0050	0.0095	6.80E-09
76	*	0.21	0.000	0.071	0.2093	0.0119	0.0227	7.84E-03	0.0045	0.0085	6.80E-09
77	*	0.00	0.000	0.032	0.2110	0.0109	0.0207	7.48E-03	0.0040	0.0077	6.80E-09
78	*	0.07	0.000	0.000	0.2126	0.0105	0.0199	7.35E-03	0.0039	0.0074	6.80E-09
79		0.42	0.000	0.030	0.2549	0.0100	0.0190	7.18E-03	0.0038	0.0073	6.80E-09
80		0.06	0.000	0.107	0.2512	0.0095	0.0181	6.99E-03	0.0037	0.0071	6.80E-09
81	*	0.34	0.000	0.019	0.2524	0.0100	0.0191	7.17E-03	0.0037	0.0071	6.80E-09
82		0.01	0.000	0.026	0.2753	0.0089	0.0169	6.75E-03	0.0036	0.0069	6.80E-09
83		0.04	0.000	0.077	0.2716	0.0084	0.0160	6.57E-03	0.0035	0.0067	6.80E-09
84		0.27	0.000	0.227	0.2737	0.0071	0.0135	6.02E-03	0.0033	0.0063	6.80E-09
85		0.24	0.000	0.131	0.2788	0.0097	0.0184	7.06E-03	0.0035	0.0066	6.80E-09
86		0.00	0.000	0.150	0.2661	0.0076	0.0145	6.14E-03	0.0034	0.0065	6.80E-09
87		0.00	0.000	0.165	0.2524	0.0021	0.0040	3.28E-03	0.0024	0.0045	6.80E-09
88		0.19	0.000	0.183	0.2527	0.0029	0.0054	3.82E-03	0.0019	0.0036	6.80E-09
89		0.42	0.000	0.117	0.2732	0.0082	0.0156	6.49E-03	0.0028	0.0053	6.80E-09
90		0.03	0.000	0.094	0.2662	0.0062	0.0119	5.44E-03	0.0031	0.0058	6.80E-09
91		0.49	0.000	0.116	0.2963	0.0035	0.0065	3.38E-03	0.0022	0.0043	6.80E-09
92		0.60	0.000	0.257	0.3113	0.0014	0.0026	1.84E-03	0.0013	0.0025	6.80E-09
93		0.06	0.000	0.063	0.2822	0.0024	0.0047	3.08E-03	0.0014	0.0026	6.80E-09
94		0.02	0.000	0.118	0.2623	0.0032	0.0060	3.38E-03	0.0017	0.0032	6.80E-09
95	*	0.34	0.000	0.021	0.2551	0.0011	0.0021	2.34E-03	0.0015	0.0028	6.80E-09
96	*	0.00	0.000	0.034	0.2527	0.0024	0.0045	3.49E-03	0.0016	0.0030	6.80E-09
97		0.00	0.000	0.073	0.2675	0.0035	0.0066	4.21E-03	0.0020	0.0039	6.80E-09

98		0.00	0.000	0.049	0.2593	0.0080	0.0153	6.34E-03	0.0028	0.0054	6.80E-09
99		0.00	0.000	0.050	0.2518	0.0091	0.0173	6.83E-03	0.0035	0.0066	6.80E-09
100		0.00	0.000	0.049	0.2444	0.0058	0.0111	5.33E-03	0.0031	0.0060	6.80E-09
101		0.00	0.000	0.041	0.2393	0.0065	0.0124	5.76E-03	0.0029	0.0056	6.80E-09
102	*	0.00	0.000	0.039	0.2361	0.0005	0.0008	1.00E-03	0.0016	0.0030	6.80E-09
103	*	0.00	0.000	0.082	0.2292	0.0065	0.0123	5.71E-03	0.0020	0.0038	6.80E-09
104	*	0.28	0.000	0.015	0.2303	0.0072	0.0138	6.10E-03	0.0031	0.0059	6.80E-09
105	*	0.00	0.000	0.020	0.2290	0.0064	0.0122	5.74E-03	0.0031	0.0059	6.80E-09
106	*	0.00	0.000	0.035	0.2307	0.0017	0.0032	1.82E-03	0.0018	0.0035	6.80E-09
107		0.00	0.000	0.059	0.2386	0.0000	0.0000	0.00E+00	0.0004	0.0008	6.80E-09
108		0.26	0.000	0.212	0.2414	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
109		0.08	0.000	0.109	0.2384	0.0017	0.0032	1.82E-03	0.0006	0.0010	6.80E-09
110		0.53	0.000	0.342	0.2540	0.0000	0.0000	0.00E+00	0.0004	0.0007	6.80E-09
111		0.73	0.000	0.406	0.2814	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
112		0.00	0.000	0.303	0.2562	0.0201	0.0383	9.60E-03	0.0029	0.0055	6.80E-09
113		0.00	0.000	0.109	0.2430	0.0462	0.0880	1.56E-02	0.0068	0.0129	6.80E-09
114		0.00	0.000	0.184	0.2198	0.0442	0.0841	1.52E-02	0.0080	0.0153	6.80E-09
115		0.00	0.000	0.074	0.2136	0.0363	0.0690	1.38E-02	0.0076	0.0144	6.80E-09
116		0.00	0.000	0.114	0.2042	0.0329	0.0626	1.31E-02	0.0070	0.0134	6.80E-09
117		0.00	0.000	0.315	0.1779	0.0341	0.0649	1.34E-02	0.0070	0.0133	6.80E-09
118		0.00	0.000	0.251	0.1570	0.0215	0.0409	1.02E-02	0.0061	0.0115	6.80E-09
119		0.22	0.000	0.101	0.1672	0.0064	0.0122	5.64E-03	0.0040	0.0076	6.80E-09
120		0.20	0.000	0.070	0.1776	0.0136	0.0260	8.38E-03	0.0038	0.0073	6.80E-09
121	*	0.45	0.000	0.046	0.1793	0.0171	0.0326	9.42E-03	0.0047	0.0089	6.80E-09
122	*	0.00	0.000	0.032	0.1809	0.0180	0.0342	9.65E-03	0.0050	0.0095	6.80E-09
123	*	0.44	0.000	0.027	0.1826	0.0175	0.0333	9.52E-03	0.0050	0.0096	6.80E-09
124	*	0.20	0.000	0.000	0.1842	0.0165	0.0313	9.23E-03	0.0049	0.0094	6.80E-09
125		0.01	0.000	0.000	0.2607	0.0153	0.0291	8.89E-03	0.0047	0.0090	6.80E-09
126		0.03	0.000	0.109	0.2527	0.0141	0.0268	8.53E-03	0.0046	0.0087	6.80E-09
127		0.10	0.000	0.173	0.2460	0.0144	0.0274	8.60E-03	0.0045	0.0086	6.80E-09
128		0.57	0.000	0.071	0.2866	0.0132	0.0251	8.23E-03	0.0044	0.0084	6.80E-09
129	*	0.06	0.000	0.106	0.2827	0.0085	0.0162	6.61E-03	0.0038	0.0073	6.80E-09
130	*	0.77	0.000	0.023	0.2776	0.0098	0.0187	7.08E-03	0.0036	0.0069	6.80E-09
131		0.83	0.000	0.000	0.3727	0.0080	0.0152	6.41E-03	0.0035	0.0067	6.80E-09
132		0.00	0.000	0.083	0.2807	0.0101	0.0192	7.17E-03	0.0036	0.0069	6.80E-09

133	0.00	0.000	0.055	0.2658	0.0057	0.0108	5.41E-03	0.0032	0.0061	6.80E-09
134	0.00	0.000	0.137	0.2481	0.0061	0.0115	5.57E-03	0.0029	0.0055	6.80E-09
135	0.00	0.000	0.180	0.2331	0.0064	0.0122	5.74E-03	0.0030	0.0057	6.80E-09
136	0.00	0.000	0.086	0.2259	0.0093	0.0176	6.87E-03	0.0034	0.0064	6.80E-09
137	0.49	0.000	0.316	0.2404	0.0104	0.0198	7.32E-03	0.0037	0.0071	6.80E-09
138	0.02	0.000	0.288	0.2179	0.0046	0.0087	4.65E-03	0.0030	0.0058	6.80E-09
139	0.67	0.000	0.246	0.2529	0.0054	0.0103	5.09E-03	0.0026	0.0049	6.80E-09
140	0.07	0.000	0.093	0.2508	0.0085	0.0161	6.61E-03	0.0031	0.0060	6.80E-09
141	0.21	0.000	0.110	0.2590	0.0075	0.0142	6.20E-03	0.0033	0.0063	6.80E-09
142	0.25	0.000	0.095	0.2708	0.0066	0.0125	5.82E-03	0.0031	0.0060	6.80E-09
143	0.00	0.000	0.186	0.2541	0.0048	0.0090	4.70E-03	0.0027	0.0052	6.80E-09
144	0.61	0.000	0.132	0.2943	0.0000	0.0000	0.00E+00	0.0011	0.0020	6.80E-09
145	0.00	0.000	0.248	0.2736	0.0000	0.0000	0.00E+00	0.0000	0.0001	6.80E-09
146	0.05	0.000	0.147	0.2524	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
147	0.00	0.000	0.402	0.2183	0.0008	0.0014	1.05E-03	0.0003	0.0006	6.80E-09
148	0.05	0.000	0.162	0.2089	0.0015	0.0029	1.39E-03	0.0006	0.0012	6.80E-09
149	1.05	0.000	0.162	0.2832	0.0584	0.1111	1.74E-02	0.0055	0.0106	6.80E-09
150	0.01	0.000	0.274	0.2610	0.0710	0.1351	1.94E-02	0.0096	0.0183	6.80E-09
151	0.17	0.000	0.121	0.2551	0.0502	0.0956	1.62E-02	0.0092	0.0175	6.80E-09
152	0.00	0.000	0.332	0.2273	0.0430	0.0819	1.49E-02	0.0082	0.0155	6.80E-09
153	0.00	0.000	0.338	0.1991	0.0195	0.0372	9.67E-03	0.0063	0.0119	6.80E-09
154	0.00	0.000	0.349	0.1700	0.0535	0.1019	1.68E-02	0.0073	0.0138	6.80E-09
155	0.00	0.000	0.396	0.1370	0.0582	0.1108	1.75E-02	0.0090	0.0171	6.80E-09
156	0.00	0.000	0.234	0.1175	0.0302	0.0574	1.24E-02	0.0076	0.0145	6.80E-09
157	0.00	0.000	0.118	0.1076	0.0174	0.0332	9.37E-03	0.0056	0.0107	6.80E-09
158	0.00	0.000	0.113	0.0954	0.0532	0.1012	1.66E-02	0.0071	0.0136	6.80E-09
159	0.27	0.000	0.107	0.1086	0.0576	0.1096	1.73E-02	0.0089	0.0169	6.80E-09
160	0.03	0.000	0.097	0.1028	0.0430	0.0818	1.50E-02	0.0084	0.0160	6.80E-09
161	0.25	0.000	0.087	0.1167	0.0406	0.0773	1.46E-02	0.0078	0.0148	6.80E-09
162	0.29	0.000	0.067	0.1355	0.0352	0.0671	1.36E-02	0.0074	0.0140	6.80E-09
163	0.13	0.000	0.114	0.1372	0.0301	0.0572	1.25E-02	0.0068	0.0130	6.80E-09
164	0.00	0.000	0.251	0.1162	0.0258	0.0491	1.16E-02	0.0063	0.0120	6.80E-09
165	0.20	0.000	0.066	0.1275	0.0224	0.0425	1.08E-02	0.0059	0.0111	6.80E-09
166	0.00	0.000	0.108	0.1185	0.0196	0.0373	1.01E-02	0.0055	0.0104	6.80E-09
167	0.00	0.000	0.074	0.1124	0.0173	0.0330	9.48E-03	0.0051	0.0097	6.80E-09

168	0.00	0.000	0.116	0.1027	0.0155	0.0295	8.95E-03	0.0048	0.0092	6.80E-09
169	0.00	0.000	0.111	0.0934	0.0140	0.0266	8.49E-03	0.0046	0.0087	6.80E-09
170	0.00	0.000	0.103	0.0848	0.0127	0.0241	8.09E-03	0.0043	0.0083	6.80E-09
171	1.28	0.000	0.088	0.1840	0.0116	0.0220	7.72E-03	0.0041	0.0079	6.80E-09
172	0.01	0.000	0.289	0.1610	0.0106	0.0202	7.39E-03	0.0040	0.0075	6.80E-09
173	0.00	0.000	0.346	0.1321	0.0098	0.0186	7.09E-03	0.0038	0.0072	6.80E-09
174	0.59	0.000	0.352	0.1521	0.0090	0.0172	6.82E-03	0.0036	0.0069	6.80E-09
175	0.39	0.000	0.296	0.1599	0.0084	0.0160	6.58E-03	0.0035	0.0067	6.80E-09
176	0.16	0.000	0.346	0.1442	0.0078	0.0149	6.35E-03	0.0034	0.0065	6.80E-09
177	0.00	0.000	0.244	0.1238	0.0073	0.0140	6.14E-03	0.0033	0.0062	6.80E-09
178	0.00	0.000	0.270	0.1014	0.0069	0.0131	5.95E-03	0.0032	0.0060	6.80E-09
179	0.00	0.000	0.146	0.0892	0.0065	0.0123	5.77E-03	0.0031	0.0058	6.80E-09
180	0.39	0.000	0.142	0.1098	0.0061	0.0116	5.60E-03	0.0030	0.0057	6.80E-09
181	0.08	0.000	0.220	0.0981	0.0058	0.0110	5.44E-03	0.0029	0.0055	6.80E-09
182	0.08	0.000	0.101	0.0966	0.0055	0.0104	5.29E-03	0.0028	0.0054	6.80E-09
183	1.13	0.000	0.100	0.1827	0.0052	0.0099	5.16E-03	0.0027	0.0052	6.80E-09
184	0.05	0.000	0.101	0.1787	0.0049	0.0094	5.03E-03	0.0027	0.0051	6.80E-09
185	0.00	0.000	0.330	0.1511	0.0047	0.0089	4.90E-03	0.0026	0.0050	6.80E-09
186	0.35	0.000	0.108	0.1716	0.0045	0.0085	4.79E-03	0.0025	0.0048	6.80E-09
187	0.00	0.000	0.114	0.1621	0.0043	0.0081	4.68E-03	0.0025	0.0047	6.80E-09
188	0.00	0.000	0.131	0.1511	0.0041	0.0078	4.57E-03	0.0024	0.0046	6.80E-09
189	0.00	0.000	0.211	0.1335	0.0039	0.0074	4.47E-03	0.0024	0.0045	6.80E-09
190	0.00	0.000	0.113	0.1241	0.0037	0.0071	4.38E-03	0.0023	0.0044	6.80E-09
191	0.00	0.000	0.151	0.1115	0.0036	0.0068	4.29E-03	0.0023	0.0043	6.80E-09
192	0.00	0.000	0.197	0.0950	0.0034	0.0066	4.20E-03	0.0022	0.0042	6.80E-09
193	0.00	0.000	0.193	0.0789	0.0033	0.0063	4.12E-03	0.0022	0.0042	6.80E-09
194	0.05	0.000	0.040	0.0793	0.0036	0.0068	4.27E-03	0.0022	0.0042	6.80E-09
195	0.07	0.000	0.028	0.0830	0.0029	0.0056	3.88E-03	0.0021	0.0040	6.80E-09
196	0.61	0.000	0.048	0.1301	0.0028	0.0054	3.82E-03	0.0020	0.0038	6.80E-09
197	0.00	0.000	0.222	0.1116	0.0028	0.0053	3.76E-03	0.0020	0.0038	6.80E-09
198	0.42	0.000	0.090	0.1389	0.0027	0.0051	3.70E-03	0.0020	0.0037	6.80E-09
199	0.03	0.000	0.283	0.1178	0.0026	0.0049	3.65E-03	0.0019	0.0037	6.80E-09
200	0.31	0.000	0.099	0.1354	0.0025	0.0048	3.59E-03	0.0019	0.0036	6.80E-09
201	0.24	0.000	0.093	0.1481	0.0025	0.0047	3.54E-03	0.0019	0.0036	6.80E-09
202	0.00	0.000	0.265	0.1259	0.0024	0.0045	3.49E-03	0.0018	0.0035	6.80E-09

203	0.02	0.000	0.246	0.1070	0.0023	0.0044	3.45E-03	0.0018	0.0035	6.80E-09
204	0.09	0.000	0.281	0.0912	0.0023	0.0043	3.39E-03	0.0018	0.0034	6.80E-09
205	0.00	0.000	0.130	0.0804	0.0022	0.0042	3.34E-03	0.0018	0.0034	6.80E-09
206	0.00	0.000	0.036	0.0774	0.0021	0.0040	3.29E-03	0.0017	0.0033	6.80E-09
207	0.02	0.000	0.021	0.0771	0.0021	0.0039	3.25E-03	0.0017	0.0033	6.80E-09
208	0.01	0.000	0.011	0.0770	0.0020	0.0038	3.20E-03	0.0017	0.0032	6.80E-09
209	0.15	0.000	0.028	0.0873	0.0020	0.0037	3.16E-03	0.0017	0.0032	6.80E-09
210	0.05	0.000	0.095	0.0834	0.0019	0.0036	3.12E-03	0.0016	0.0031	6.80E-09
211	0.00	0.000	0.046	0.0795	0.0019	0.0035	3.08E-03	0.0016	0.0031	6.80E-09
212	0.18	0.000	0.051	0.0900	0.0018	0.0034	3.04E-03	0.0016	0.0031	6.80E-09
213	0.05	0.000	0.050	0.0899	0.0018	0.0034	3.00E-03	0.0016	0.0030	6.80E-09
214	0.00	0.000	0.096	0.0819	0.0017	0.0033	2.96E-03	0.0016	0.0030	6.80E-09
215	0.90	0.000	0.161	0.1432	0.0017	0.0032	2.94E-03	0.0016	0.0030	6.80E-09
216	0.21	0.000	0.073	0.1549	0.0016	0.0031	2.89E-03	0.0015	0.0029	6.80E-09
217	0.00	0.000	0.216	0.1369	0.0016	0.0030	2.85E-03	0.0015	0.0029	6.80E-09
218	0.00	0.000	0.104	0.1282	0.0016	0.0030	2.82E-03	0.0015	0.0028	6.80E-09
219	0.18	0.000	0.205	0.1260	0.0015	0.0029	2.79E-03	0.0015	0.0028	6.80E-09
220	0.52	0.000	0.164	0.1558	0.0015	0.0028	2.75E-03	0.0015	0.0028	6.80E-09
221	0.00	0.000	0.151	0.1432	0.0015	0.0028	2.72E-03	0.0014	0.0027	6.80E-09
222	0.00	0.000	0.258	0.1217	0.0014	0.0027	2.69E-03	0.0014	0.0027	6.80E-09
223	0.00	0.000	0.147	0.1094	0.0014	0.0026	2.66E-03	0.0014	0.0027	6.80E-09
224	0.00	0.000	0.121	0.0993	0.0014	0.0026	2.63E-03	0.0014	0.0026	6.80E-09
225	0.00	0.000	0.227	0.0804	0.0013	0.0025	2.60E-03	0.0014	0.0026	6.80E-09
226	0.00	0.000	0.035	0.0775	0.0013	0.0025	2.58E-03	0.0014	0.0026	6.80E-09
227	0.00	0.000	0.006	0.0770	0.0013	0.0024	2.55E-03	0.0013	0.0026	6.80E-09
228	0.35	0.000	0.049	0.1025	0.0012	0.0024	2.52E-03	0.0013	0.0025	6.80E-09
229	0.77	0.000	0.092	0.1587	0.0012	0.0023	2.49E-03	0.0013	0.0025	6.80E-09
230	0.00	0.000	0.128	0.1481	0.0012	0.0023	2.47E-03	0.0013	0.0025	6.80E-09
231	0.00	0.000	0.072	0.1421	0.0012	0.0022	2.44E-03	0.0013	0.0025	6.80E-09
232	0.00	0.000	0.187	0.1265	0.0011	0.0022	2.42E-03	0.0013	0.0024	6.80E-09
233	0.04	0.000	0.092	0.1224	0.0011	0.0021	2.39E-03	0.0013	0.0024	6.80E-09
234	0.05	0.000	0.078	0.1204	0.0011	0.0021	2.37E-03	0.0013	0.0024	6.80E-09
235	0.17	0.000	0.178	0.1194	0.0011	0.0021	2.35E-03	0.0012	0.0024	6.80E-09
236	0.11	0.000	0.074	0.1219	0.0011	0.0020	2.32E-03	0.0012	0.0023	6.80E-09
237	0.25	0.000	0.054	0.1381	0.0010	0.0020	2.30E-03	0.0012	0.0023	6.80E-09

238		0.58	0.000	0.109	0.1777	0.0010	0.0019	2.28E-03	0.0012	0.0023	6.80E-09
239		0.00	0.000	0.180	0.1627	0.0010	0.0019	2.26E-03	0.0012	0.0023	6.80E-09
240		0.00	0.000	0.172	0.1484	0.0010	0.0019	2.24E-03	0.0012	0.0022	6.80E-09
241		0.00	0.000	0.171	0.1341	0.0010	0.0018	2.22E-03	0.0012	0.0022	6.80E-09
242		0.00	0.000	0.231	0.1149	0.0009	0.0018	2.19E-03	0.0012	0.0022	6.80E-09
243		0.00	0.000	0.210	0.0974	0.0009	0.0018	2.17E-03	0.0011	0.0022	6.80E-09
244		2.55	0.000	0.076	0.3037	0.0009	0.0017	2.16E-03	0.0011	0.0022	6.80E-09
245		0.00	0.000	0.239	0.2700	0.0009	0.0017	2.14E-03	0.0011	0.0021	6.80E-09
246		0.00	0.000	0.148	0.2437	0.0010	0.0019	2.26E-03	0.0012	0.0022	6.80E-09
247		0.00	0.000	0.333	0.2159	0.0008	0.0016	2.07E-03	0.0011	0.0021	6.80E-09
248		0.00	0.000	0.361	0.1858	0.0008	0.0015	2.04E-03	0.0011	0.0021	6.80E-09
249		0.00	0.000	0.240	0.1659	0.0011	0.0020	2.30E-03	0.0011	0.0022	6.80E-09
250		0.00	0.000	0.179	0.1505	0.0013	0.0025	2.60E-03	0.0013	0.0025	6.80E-09
251		0.00	0.000	0.198	0.1340	0.0013	0.0024	2.56E-03	0.0014	0.0026	6.80E-09
252		0.00	0.000	0.251	0.1133	0.0012	0.0023	2.51E-03	0.0013	0.0025	6.80E-09
253		0.20	0.000	0.157	0.1171	0.0012	0.0023	2.46E-03	0.0013	0.0025	6.80E-09
254		0.00	0.000	0.132	0.1061	0.0006	0.0010	1.11E-03	0.0009	0.0017	6.80E-09
255		0.00	0.000	0.044	0.1024	0.0000	0.0000	0.00E+00	0.0003	0.0005	6.80E-09
256		0.00	0.000	0.092	0.0948	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
257		0.00	0.000	0.080	0.0881	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
258		0.00	0.000	0.079	0.0815	0.0000	0.0000	0.00E+00	0.0000	0.0000	4.28E-09
259		0.00	0.000	0.055	0.0770	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.00E+00
260		0.00	0.000	0.001	0.0770	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.00E+00
261		1.08	0.000	0.047	0.1634	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.00E+00
262		0.00	0.000	0.037	0.1604	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.00E+00
263		0.00	0.000	0.087	0.1531	0.0000	0.0000	2.52E-04	0.0001	0.0001	5.10E-09
264		0.00	0.000	0.037	0.1500	0.0001	0.0002	7.64E-04	0.0003	0.0005	6.80E-09
265	*	1.00	0.000	0.024	0.1516	0.0003	0.0005	1.17E-03	0.0005	0.0010	6.80E-09
266		0.14	0.000	0.000	0.2428	0.0004	0.0008	1.48E-03	0.0007	0.0013	6.80E-09
267		0.16	0.000	0.125	0.2458	0.0006	0.0011	1.74E-03	0.0009	0.0016	6.80E-09
268		0.48	0.000	0.043	0.2821	0.0007	0.0014	1.95E-03	0.0010	0.0019	6.80E-09
269		0.01	0.000	0.036	0.2793	0.0013	0.0026	2.52E-03	0.0012	0.0023	6.80E-09
270		0.00	0.000	0.028	0.2677	0.0020	0.0038	3.09E-03	0.0015	0.0028	6.80E-09
271		0.20	0.000	0.047	0.2738	0.0012	0.0023	2.37E-03	0.0014	0.0027	6.80E-09
272		0.99	0.000	0.046	0.3514	0.0017	0.0032	2.68E-03	0.0013	0.0026	6.80E-09

273	*	0.00	0.000	0.056	0.2862	0.0015	0.0028	2.51E-03	0.0014	0.0026	6.80E-09
274		0.87	0.000	0.035	0.3338	0.0023	0.0043	3.00E-03	0.0015	0.0028	6.80E-09
275		0.00	0.000	0.031	0.2917	0.0015	0.0028	1.94E-03	0.0013	0.0024	6.80E-09
276		0.00	0.000	0.111	0.2644	0.0005	0.0009	7.50E-04	0.0007	0.0013	6.80E-09
277		0.00	0.000	0.074	0.2555	0.0000	0.0000	0.00E+00	0.0002	0.0003	6.80E-09
278	*	0.00	0.000	0.000	0.2555	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
279		0.00	0.000	0.044	0.2518	0.0033	0.0062	4.06E-03	0.0012	0.0023	6.80E-09
280		0.00	0.000	0.055	0.2472	0.0035	0.0067	4.25E-03	0.0022	0.0041	6.80E-09
281		0.11	0.000	0.087	0.2484	0.0001	0.0001	1.42E-04	0.0010	0.0019	6.80E-09
282		0.00	0.000	0.058	0.2436	0.0027	0.0051	3.58E-03	0.0011	0.0022	6.80E-09
283	*	0.00	0.000	0.000	0.2436	0.0035	0.0066	4.22E-03	0.0020	0.0039	6.80E-09
284		0.00	0.000	0.059	0.2387	0.0032	0.0061	4.07E-03	0.0022	0.0041	6.80E-09
285	*	0.00	0.000	0.000	0.2387	0.0030	0.0057	3.92E-03	0.0021	0.0040	6.80E-09
286	*	0.00	0.000	0.000	0.2387	0.0019	0.0036	2.66E-03	0.0017	0.0032	6.80E-09
287	*	0.00	0.000	0.034	0.2359	0.0000	0.0000	0.00E+00	0.0006	0.0012	6.80E-09
288		0.00	0.000	0.070	0.2301	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
289		0.00	0.000	0.049	0.2260	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
290		0.00	0.000	0.067	0.2205	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.00E-09
291		0.00	0.000	0.053	0.2161	0.0044	0.0084	3.30E-03	0.0010	0.0019	5.10E-09
292		0.00	0.000	0.058	0.2112	0.0293	0.0558	1.23E-02	0.0044	0.0084	6.80E-09
293		0.08	0.000	0.064	0.2128	0.0484	0.0921	1.59E-02	0.0075	0.0142	6.80E-09
294	*	0.18	0.000	0.055	0.2145	0.0437	0.0832	1.51E-02	0.0081	0.0154	6.80E-09
295	*	0.00	0.000	0.053	0.2161	0.0611	0.1163	1.80E-02	0.0088	0.0168	6.80E-09
296	*	0.00	0.000	0.036	0.2162	0.0801	0.1525	2.06E-02	0.0102	0.0194	6.80E-09
297		0.00	0.000	0.041	0.2094	0.0788	0.1499	2.04E-02	0.0108	0.0205	6.80E-09
298		1.26	0.000	0.120	0.3046	0.0470	0.0895	1.57E-02	0.0093	0.0177	6.80E-09
299		0.00	0.000	0.070	0.2856	0.0408	0.0776	1.46E-02	0.0080	0.0151	6.80E-09
300		1.04	0.000	0.076	0.3551	0.0371	0.0706	1.39E-02	0.0075	0.0142	6.80E-09
301		0.05	0.000	0.081	0.2843	0.0353	0.0672	1.36E-02	0.0072	0.0137	6.80E-09
302		0.33	0.000	0.065	0.2952	0.0243	0.0462	1.11E-02	0.0064	0.0122	6.80E-09
303		0.00	0.000	0.020	0.2850	0.0184	0.0350	9.76E-03	0.0054	0.0104	6.80E-09
304		0.00	0.000	0.082	0.2660	0.0237	0.0450	1.10E-02	0.0055	0.0105	6.80E-09
305		0.00	0.000	0.041	0.2518	0.0164	0.0311	9.12E-03	0.0052	0.0099	6.80E-09
306		0.00	0.000	0.050	0.2400	0.0134	0.0255	8.32E-03	0.0046	0.0087	6.80E-09
307		0.00	0.000	0.053	0.2297	0.0185	0.0352	9.76E-03	0.0048	0.0092	6.80E-09

308		0.00	0.000	0.069	0.2192	0.0197	0.0375	1.01E-02	0.0052	0.0099	6.80E-09
309		0.00	0.000	0.048	0.2114	0.0147	0.0280	8.71E-03	0.0049	0.0093	6.80E-09
310		0.00	0.000	0.055	0.2051	0.0093	0.0178	6.91E-03	0.0040	0.0077	6.80E-09
311		0.06	0.000	0.047	0.2060	0.0088	0.0168	6.65E-03	0.0036	0.0068	6.80E-09
312		0.00	0.000	0.031	0.2034	0.0002	0.0002	3.44E-04	0.0016	0.0030	6.80E-09
313		0.06	0.000	0.067	0.2029	0.0110	0.0210	7.43E-03	0.0024	0.0045	6.80E-09
314		0.00	0.000	0.063	0.1957	0.0128	0.0243	8.12E-03	0.0041	0.0077	6.80E-09
315		0.00	0.000	0.075	0.1894	0.0091	0.0174	6.79E-03	0.0039	0.0073	6.80E-09
316		0.06	0.000	0.104	0.1861	0.0002	0.0003	4.30E-04	0.0017	0.0032	6.80E-09
317		0.00	0.000	0.097	0.1781	0.0000	0.0000	0.00E+00	0.0001	0.0003	6.80E-09
318		0.00	0.000	0.114	0.1686	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
319		0.00	0.000	0.084	0.1616	0.0022	0.0041	2.20E-03	0.0007	0.0013	6.80E-09
320		0.00	0.000	0.072	0.1556	0.0255	0.0486	1.14E-02	0.0039	0.0074	6.80E-09
321		0.97	0.000	0.041	0.2331	0.0482	0.0918	1.59E-02	0.0073	0.0138	6.80E-09
322	*	0.00	0.000	0.025	0.2305	0.0581	0.1106	1.75E-02	0.0088	0.0168	6.80E-09
323	*	0.04	0.000	0.030	0.2311	0.0597	0.1135	1.77E-02	0.0093	0.0176	6.80E-09
324		0.00	0.000	0.034	0.2283	0.0576	0.1097	1.74E-02	0.0092	0.0175	6.80E-09
325		0.00	0.000	0.056	0.2236	0.0532	0.1013	1.67E-02	0.0089	0.0170	6.80E-09
326	*	0.00	0.000	0.033	0.2209	0.0645	0.1228	1.85E-02	0.0093	0.0177	6.80E-09
327		0.00	0.000	0.041	0.2175	0.0824	0.1568	2.09E-02	0.0104	0.0198	6.80E-09
328		0.04	0.000	0.085	0.2136	0.0690	0.1312	1.91E-02	0.0104	0.0198	6.80E-09
329		0.26	0.000	0.044	0.2313	0.0528	0.1004	1.67E-02	0.0093	0.0177	6.80E-09
330		1.14	0.000	0.051	0.3216	0.0414	0.0789	1.47E-02	0.0082	0.0156	6.80E-09
331	*	1.17	0.000	0.018	0.2912	0.0354	0.0675	1.36E-02	0.0074	0.0141	6.80E-09
332	*	0.00	0.000	0.020	0.2756	0.0289	0.0551	1.23E-02	0.0068	0.0129	6.80E-09
333	*	0.00	0.000	0.009	0.2646	0.0240	0.0458	1.10E-02	0.0061	0.0116	6.80E-09
334		0.00	0.000	0.032	0.2577	0.0144	0.0274	8.62E-03	0.0051	0.0097	6.80E-09
335		0.00	0.000	0.021	0.2589	0.0153	0.0291	8.89E-03	0.0046	0.0088	6.80E-09
336	*	0.00	0.000	0.012	0.2572	0.0160	0.0304	9.09E-03	0.0047	0.0090	6.80E-09
337	*	0.00	0.000	0.006	0.2544	0.0187	0.0356	9.83E-03	0.0050	0.0095	6.80E-09
338	*	0.10	0.000	0.014	0.2529	0.0185	0.0351	9.78E-03	0.0051	0.0098	6.80E-09
339	*	0.00	0.000	0.008	0.2522	0.0148	0.0281	8.73E-03	0.0048	0.0092	6.80E-09
340	*	0.63	0.000	0.011	0.2504	0.0093	0.0177	6.88E-03	0.0040	0.0077	6.80E-09
341	*	0.00	0.000	0.014	0.2482	0.0064	0.0122	5.73E-03	0.0033	0.0062	6.80E-09
342	*	0.00	0.000	0.000	0.2461	0.0082	0.0156	6.50E-03	0.0033	0.0062	6.80E-09

343			0.01	0.000	0.000	0.3331	0.0032	0.0061	3.03E-03	0.0024	0.0045	6.80E-09
344			0.50	0.000	0.000	0.3442	0.0058	0.0111	5.27E-03	0.0023	0.0044	6.80E-09
345			0.00	0.000	0.062	0.2881	0.0104	0.0197	7.31E-03	0.0034	0.0064	6.80E-09
346	*		0.00	0.000	0.029	0.2728	0.0055	0.0104	4.53E-03	0.0030	0.0057	6.80E-09
347	*		0.00	0.000	0.025	0.2707	0.0000	0.0000	4.34E-19	0.0010	0.0020	6.80E-09
348			0.00	0.000	0.032	0.2680	0.0000	0.0000	0.00E+00	0.0000	0.0001	6.80E-09
349	*		0.00	0.000	0.030	0.2656	0.0029	0.0055	3.49E-03	0.0011	0.0020	6.80E-09
350	*	*	0.00	0.000	0.000	0.2656	0.0177	0.0337	9.50E-03	0.0036	0.0069	6.80E-09
351	*	*	0.29	0.000	0.013	0.2656	0.0289	0.0550	1.23E-02	0.0058	0.0110	6.80E-09
352	*	*	0.16	0.000	0.020	0.2656	0.0419	0.0798	1.48E-02	0.0072	0.0137	6.80E-09
353	*	*	0.91	0.000	0.021	0.2656	0.0314	0.0599	1.28E-02	0.0072	0.0136	6.80E-09
354	*	*	0.21	0.000	0.009	0.2656	0.0144	0.0274	8.09E-03	0.0053	0.0101	6.80E-09
355	*	*	0.20	0.000	0.010	0.2656	0.0000	0.0000	0.00E+00	0.0018	0.0035	6.80E-09
356	*	*	0.00	0.000	0.000	0.2656	0.0008	0.0014	9.81E-04	0.0004	0.0007	6.80E-09
357	*	*	0.01	0.000	0.009	0.2656	0.0233	0.0444	1.07E-02	0.0035	0.0066	6.80E-09
358	*	*	0.00	0.000	0.014	0.2656	0.0538	0.1025	1.68E-02	0.0074	0.0141	6.80E-09
359		*	0.00	0.000	0.000	0.2753	0.0677	0.1289	1.89E-02	0.0094	0.0179	6.80E-09
360	*	*	0.00	0.000	0.017	0.2756	0.0707	0.1345	1.93E-02	0.0101	0.0191	6.80E-09
361		*	0.00	0.000	0.000	0.3315	0.0695	0.1323	1.92E-02	0.0101	0.0192	6.80E-09
362	*	*	0.00	0.000	0.021	0.3315	0.0670	0.1276	1.88E-02	0.0100	0.0190	6.80E-09
363	*	*	0.05	0.000	0.020	0.3315	0.0670	0.1275	1.88E-02	0.0099	0.0188	6.80E-09
364		*	0.28	0.000	0.000	0.4286	0.0532	0.1012	1.67E-02	0.0092	0.0176	6.80E-09
365	*	*	0.00	0.000	0.000	0.4286	0.0572	0.1089	1.73E-02	0.0090	0.0171	6.80E-09

* = Frozen (air or soil)

Annual Totals for Year 2			
	inches	cubic feet	percent
Precipitation	48.12	174,665.7	100.00
Runoff	0.000	0.0000	0.00
Evapotranspiration	33.804	122,708.4	70.25
Drainage Collected from Layer 3	9.2596	33,612.3	19.24
Percolation/Leakage through Layer 4	2.404891	8,729.8	5.00
Average Head on Top of Layer 4	0.0133	---	---

Drainage Collected from Layer 5	2.3995	8,710.3	4.99
Percolation/Leakage through Layer 7	0.000002	0.0089	0.00
Average Head on Top of Layer 6	0.0035	---	---
Change in Water Storage	2.6542	9,634.7	5.52
Soil Water at Start of Year	39.3133	142,707.2	81.70
Soil Water at End of Year	41.9675	152,341.9	87.22
Snow Water at Start of Year	0.0000	0.0000	0.00
Snow Water at End of Year	0.0000	0.0000	0.00
Annual Water Budget Balance	0.0000	0.0000	0.00

Daily Output for Year 3

Column key: Head #1: drainage from Layer 4 | Head #2: drainage from Layer 6
Drain #1: drainage from Layer 3 | Drain #2: drainage from Layer 5
Leak #1: leakage thru Layer 4 | Leak #2: leakage thru Layer 7

Title: Millersville Cell 9 - Open Cell Condition
Simulated On: 6/9/2024 11:31

Day	Freezing Status* Air	Freezing Status* Soil	Rain (inches)	Runoff (inches)	ET (inches)	Evap. Zone Water (in/in)	Head #1 (inches)	Drain #1 (inches)	Leak #1 (inches)	Head #2 (inches)	Drain #2 (inches)	Leak #2 (inches)
1		*	0.00	0.000	0.000	0.4286	0.0676	0.1286	1.89E-02	0.0096	0.0182	6.80E-09
2		*	0.00	0.000	0.000	0.4286	0.0832	0.1584	2.10E-02	0.0106	0.0201	6.80E-09
3		*	0.01	0.000	0.005	0.4290	0.0676	0.1286	1.89E-02	0.0104	0.0198	6.80E-09
4	*	*	0.08	0.000	0.024	0.4290	0.0516	0.0983	1.65E-02	0.0092	0.0175	6.80E-09
5	*	*	0.05	0.000	0.008	0.4290	0.0406	0.0773	1.46E-02	0.0081	0.0154	6.80E-09
6	*	*	0.00	0.000	0.011	0.4290	0.0331	0.0629	1.31E-02	0.0072	0.0138	6.80E-09
7	*	*	0.00	0.000	0.018	0.4290	0.0276	0.0526	1.20E-02	0.0066	0.0125	6.80E-09
8		*	0.00	0.000	0.042	0.4305	0.0236	0.0448	1.11E-02	0.0060	0.0115	6.80E-09
9		*	0.00	0.000	0.000	0.4305	0.0204	0.0389	1.03E-02	0.0056	0.0106	6.80E-09
10		*	0.00	0.000	0.000	0.4305	0.0180	0.0342	9.65E-03	0.0052	0.0099	6.80E-09
11		*	0.13	0.000	0.006	0.4407	0.0160	0.0304	9.09E-03	0.0049	0.0093	6.80E-09
12	*	*	0.00	0.000	0.000	0.4407	0.0143	0.0273	8.61E-03	0.0046	0.0088	6.80E-09
13		*	0.17	0.000	0.005	0.4543	0.0130	0.0247	8.18E-03	0.0044	0.0084	6.80E-09
14		*	0.00	0.000	0.000	0.4543	0.0118	0.0224	7.80E-03	0.0042	0.0080	6.80E-09
15		*	0.00	0.000	0.000	0.4543	0.0108	0.0206	7.46E-03	0.0040	0.0076	6.80E-09
16			0.00	0.000	0.036	0.2659	0.0099	0.0189	7.16E-03	0.0038	0.0073	6.80E-09
17	*		0.00	0.000	0.031	0.2388	0.0092	0.0175	6.88E-03	0.0037	0.0070	6.80E-09
18			0.00	0.000	0.055	0.2242	0.0085	0.0162	6.63E-03	0.0035	0.0067	6.80E-09
19			0.02	0.000	0.049	0.2191	0.0079	0.0151	6.39E-03	0.0034	0.0065	6.80E-09
20			0.00	0.000	0.076	0.2130	0.0103	0.0195	7.27E-03	0.0036	0.0069	6.80E-09
21	*		0.41	0.000	0.022	0.2147	0.0059	0.0113	5.52E-03	0.0033	0.0063	6.80E-09
22			0.00	0.000	0.003	0.2451	0.0062	0.0119	5.64E-03	0.0030	0.0056	6.80E-09
23			0.00	0.000	0.050	0.2409	0.0066	0.0126	5.80E-03	0.0030	0.0057	6.80E-09
24	*		0.00	0.000	0.039	0.2356	0.0080	0.0152	6.42E-03	0.0032	0.0062	6.80E-09
25			0.00	0.000	0.050	0.2273	0.0071	0.0134	6.03E-03	0.0032	0.0062	6.80E-09
26			0.02	0.000	0.046	0.2221	0.0063	0.0119	5.67E-03	0.0031	0.0058	6.80E-09
27			0.00	0.000	0.060	0.2146	0.0017	0.0031	1.79E-03	0.0018	0.0034	6.80E-09

28	*	0.00	0.000	0.043	0.2079	0.0000	0.0000	0.00E+00	0.0004	0.0008	6.80E-09
29		0.19	0.000	0.082	0.2169	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
30	*	0.00	0.000	0.000	0.2169	0.0006	0.0011	8.59E-04	0.0003	0.0005	6.80E-09
31		0.00	0.000	0.040	0.2130	0.0210	0.0399	1.02E-02	0.0032	0.0062	6.80E-09
32	*	0.00	0.000	0.000	0.2130	0.0499	0.0949	1.62E-02	0.0071	0.0135	6.80E-09
33		0.00	0.000	0.061	0.2079	0.0704	0.1339	1.93E-02	0.0094	0.0179	6.80E-09
34	*	0.00	0.000	0.000	0.2079	0.0744	0.1416	1.99E-02	0.0103	0.0196	6.80E-09
35	*	0.00	0.000	0.041	0.2045	0.0734	0.1397	1.97E-02	0.0104	0.0198	6.80E-09
36		0.00	0.000	0.053	0.2001	0.0715	0.1361	1.95E-02	0.0103	0.0196	6.80E-09
37	*	0.00	0.000	0.046	0.1962	0.0692	0.1317	1.91E-02	0.0101	0.0193	6.80E-09
38		0.00	0.000	0.065	0.1908	0.0666	0.1268	1.88E-02	0.0099	0.0189	6.80E-09
39		0.00	0.000	0.077	0.1844	0.0663	0.1263	1.87E-02	0.0099	0.0187	6.80E-09
40		0.30	0.000	0.172	0.1948	0.0543	0.1034	1.69E-02	0.0093	0.0177	6.80E-09
41		0.14	0.000	0.101	0.1978	0.0558	0.1063	1.71E-02	0.0090	0.0170	6.80E-09
42		0.20	0.000	0.069	0.2085	0.0653	0.1244	1.86E-02	0.0094	0.0180	6.80E-09
43		0.00	0.000	0.098	0.2004	0.0804	0.1531	2.07E-02	0.0104	0.0197	6.80E-09
44		0.00	0.000	0.098	0.1922	0.0698	0.1329	1.92E-02	0.0104	0.0198	6.80E-09
45		0.00	0.000	0.109	0.1832	0.0536	0.1021	1.68E-02	0.0094	0.0178	6.80E-09
46	*	0.00	0.000	0.054	0.1783	0.0432	0.0823	1.51E-02	0.0083	0.0158	6.80E-09
47		0.00	0.000	0.063	0.1730	0.0330	0.0629	1.31E-02	0.0073	0.0140	6.80E-09
48		0.97	0.000	0.078	0.2472	0.0275	0.0523	1.20E-02	0.0066	0.0125	6.80E-09
49		0.00	0.000	0.086	0.2400	0.0238	0.0454	1.11E-02	0.0060	0.0115	6.80E-09
50		0.00	0.000	0.108	0.2310	0.0209	0.0397	1.04E-02	0.0056	0.0107	6.80E-09
51		0.00	0.000	0.193	0.2145	0.0184	0.0350	9.77E-03	0.0053	0.0100	6.80E-09
52		0.00	0.000	0.159	0.2012	0.0176	0.0336	9.53E-03	0.0051	0.0096	6.80E-09
53		0.00	0.000	0.133	0.1902	0.0137	0.0260	8.40E-03	0.0047	0.0089	6.80E-09
54		0.51	0.000	0.118	0.2230	0.0126	0.0241	8.08E-03	0.0043	0.0082	6.80E-09
55		0.00	0.000	0.069	0.2170	0.0117	0.0223	7.78E-03	0.0042	0.0079	6.80E-09
56		0.02	0.000	0.084	0.2116	0.0132	0.0251	8.25E-03	0.0042	0.0081	6.80E-09
57		0.00	0.000	0.091	0.2041	0.0093	0.0177	6.91E-03	0.0039	0.0075	6.80E-09
58		0.00	0.000	0.152	0.1914	0.0083	0.0157	6.52E-03	0.0035	0.0067	6.80E-09
59		0.50	0.000	0.202	0.2166	0.0080	0.0151	6.40E-03	0.0034	0.0065	6.80E-09
60		0.00	0.000	0.102	0.2081	0.0076	0.0145	6.26E-03	0.0033	0.0063	6.80E-09
61		0.00	0.000	0.050	0.2038	0.0078	0.0149	6.35E-03	0.0033	0.0063	6.80E-09
62	*	0.96	0.000	0.017	0.2055	0.0068	0.0129	5.90E-03	0.0032	0.0061	6.80E-09

63		0.00	0.000	0.000	0.2831	0.0064	0.0123	5.75E-03	0.0031	0.0058	6.80E-09
64		0.08	0.000	0.069	0.2834	0.0062	0.0117	5.63E-03	0.0030	0.0057	6.80E-09
65		0.00	0.000	0.077	0.2617	0.0065	0.0123	5.75E-03	0.0030	0.0057	6.80E-09
66		0.00	0.000	0.093	0.2530	0.0053	0.0100	5.20E-03	0.0029	0.0054	6.80E-09
67		0.00	0.000	0.102	0.2445	0.0057	0.0109	5.39E-03	0.0028	0.0053	6.80E-09
68		0.00	0.000	0.164	0.2308	0.0065	0.0124	5.78E-03	0.0029	0.0056	6.80E-09
69	*	0.57	0.000	0.027	0.2325	0.0072	0.0136	6.07E-03	0.0031	0.0059	6.80E-09
70		0.08	0.000	0.007	0.2820	0.0064	0.0121	5.72E-03	0.0031	0.0059	6.80E-09
71		0.00	0.000	0.103	0.2734	0.0017	0.0032	1.81E-03	0.0018	0.0035	6.80E-09
72	*	0.00	0.000	0.042	0.2663	0.0032	0.0059	3.18E-03	0.0014	0.0027	6.80E-09
73	*	0.00	0.000	0.000	0.2596	0.0016	0.0031	1.88E-03	0.0013	0.0024	6.80E-09
74	*	0.00	0.000	0.063	0.2518	0.0062	0.0118	5.64E-03	0.0021	0.0041	6.80E-09
75		0.00	0.000	0.074	0.2456	0.0017	0.0032	2.23E-03	0.0019	0.0036	6.80E-09
76		0.00	0.000	0.116	0.2360	0.0051	0.0097	5.01E-03	0.0020	0.0039	6.80E-09
77		0.00	0.000	0.107	0.2271	0.0003	0.0004	4.76E-04	0.0012	0.0024	6.80E-09
78	*	0.00	0.000	0.084	0.2201	0.0000	0.0000	0.00E+00	0.0001	0.0003	6.80E-09
79	*	0.00	0.000	0.000	0.2201	0.0003	0.0005	8.19E-04	0.0003	0.0005	6.80E-09
80		0.25	0.000	0.065	0.2355	0.0018	0.0034	2.99E-03	0.0011	0.0021	6.80E-09
81	*	0.46	0.000	0.022	0.2365	0.0050	0.0096	4.94E-03	0.0021	0.0041	6.80E-09
82	*	0.18	0.000	0.017	0.2374	0.0039	0.0074	4.46E-03	0.0024	0.0046	6.80E-09
83	*	1.16	0.000	0.000	0.2363	0.0108	0.0206	7.46E-03	0.0033	0.0062	6.80E-09
84		0.06	0.000	0.000	0.3828	0.0045	0.0085	4.47E-03	0.0030	0.0057	6.80E-09
85		0.01	0.000	0.070	0.2793	0.0040	0.0076	4.33E-03	0.0023	0.0044	6.80E-09
86		0.00	0.000	0.157	0.2535	0.0043	0.0083	4.56E-03	0.0023	0.0045	6.80E-09
87		0.25	0.000	0.100	0.2636	0.0034	0.0065	4.19E-03	0.0023	0.0043	6.80E-09
88	*	0.06	0.000	0.041	0.2615	0.0046	0.0087	4.83E-03	0.0024	0.0046	6.80E-09
89		0.00	0.000	0.124	0.2512	0.0060	0.0114	5.52E-03	0.0027	0.0052	6.80E-09
90		0.00	0.000	0.147	0.2389	0.0107	0.0204	7.44E-03	0.0035	0.0066	6.80E-09
91		0.00	0.000	0.178	0.2241	0.0063	0.0120	5.40E-03	0.0033	0.0062	6.80E-09
92		0.00	0.000	0.189	0.2083	0.0032	0.0061	3.89E-03	0.0024	0.0046	6.80E-09
93		0.00	0.000	0.275	0.1854	0.0091	0.0172	6.83E-03	0.0029	0.0056	6.80E-09
94		0.00	0.000	0.261	0.1637	0.0082	0.0157	6.50E-03	0.0035	0.0066	6.80E-09
95		0.01	0.000	0.270	0.1418	0.0072	0.0137	6.09E-03	0.0033	0.0063	6.80E-09
96		0.34	0.000	0.203	0.1535	0.0064	0.0121	5.72E-03	0.0031	0.0059	6.80E-09
97		0.00	0.000	0.083	0.1466	0.0017	0.0031	1.77E-03	0.0018	0.0035	6.80E-09

98		0.00	0.000	0.064	0.1413	0.0000	0.0000	0.00E+00	0.0004	0.0008	6.80E-09
99		0.24	0.000	0.056	0.1563	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
100	*	0.00	0.000	0.047	0.1524	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
101	*	0.16	0.000	0.021	0.1540	0.0062	0.0119	3.52E-03	0.0011	0.0020	6.80E-09
102		0.00	0.000	0.100	0.1554	0.0125	0.0239	7.98E-03	0.0032	0.0060	6.80E-09
103		0.00	0.000	0.043	0.1518	0.0369	0.0702	1.37E-02	0.0059	0.0112	6.80E-09
104		0.00	0.000	0.040	0.1485	0.0598	0.1138	1.77E-02	0.0084	0.0159	6.80E-09
105		0.04	0.000	0.039	0.1482	0.0800	0.1522	2.06E-02	0.0101	0.0193	6.80E-09
106		0.01	0.000	0.037	0.1463	0.0655	0.1247	1.86E-02	0.0102	0.0194	6.80E-09
107		0.07	0.000	0.036	0.1490	0.0504	0.0959	1.63E-02	0.0091	0.0173	6.80E-09
108		0.00	0.000	0.032	0.1448	0.0422	0.0803	1.49E-02	0.0081	0.0155	6.80E-09
109		0.00	0.000	0.031	0.1423	0.0315	0.0600	1.28E-02	0.0072	0.0137	6.80E-09
110		0.00	0.000	0.032	0.1396	0.0236	0.0450	1.11E-02	0.0062	0.0118	6.80E-09
111		0.09	0.000	0.034	0.1440	0.0219	0.0416	1.07E-02	0.0057	0.0109	6.80E-09
112		0.00	0.000	0.034	0.1411	0.0199	0.0379	1.02E-02	0.0055	0.0104	6.80E-09
113		0.00	0.000	0.032	0.1385	0.0180	0.0342	9.65E-03	0.0052	0.0099	6.80E-09
114		0.00	0.000	0.032	0.1354	0.0177	0.0336	9.54E-03	0.0050	0.0096	6.80E-09
115		0.00	0.000	0.027	0.1331	0.0137	0.0261	8.42E-03	0.0047	0.0089	6.80E-09
116		0.00	0.000	0.027	0.1309	0.0127	0.0242	8.10E-03	0.0043	0.0083	6.80E-09
117		0.00	0.000	0.027	0.1286	0.0118	0.0225	7.81E-03	0.0042	0.0079	6.80E-09
118		0.00	0.000	0.029	0.1261	0.0110	0.0209	7.53E-03	0.0040	0.0077	6.80E-09
119		0.00	0.000	0.030	0.1236	0.0102	0.0194	7.26E-03	0.0039	0.0074	6.80E-09
120		0.00	0.000	0.026	0.1215	0.0095	0.0181	7.00E-03	0.0037	0.0071	6.80E-09
121		0.00	0.000	0.027	0.1192	0.0089	0.0169	6.76E-03	0.0036	0.0069	6.80E-09
122		0.58	0.000	0.032	0.1648	0.0083	0.0158	6.54E-03	0.0035	0.0066	6.80E-09
123		0.11	0.000	0.056	0.1696	0.0078	0.0148	6.33E-03	0.0034	0.0064	6.80E-09
124		1.32	0.000	0.107	0.2706	0.0073	0.0139	6.13E-03	0.0033	0.0062	6.80E-09
125		0.24	0.000	0.110	0.2814	0.0069	0.0131	5.94E-03	0.0032	0.0060	6.80E-09
126		0.00	0.000	0.229	0.2623	0.0065	0.0123	5.77E-03	0.0031	0.0058	6.80E-09
127		0.00	0.000	0.112	0.2494	0.0072	0.0137	6.06E-03	0.0031	0.0059	6.80E-09
128		0.00	0.000	0.158	0.2363	0.0071	0.0136	6.03E-03	0.0032	0.0060	6.80E-09
129		0.49	0.000	0.132	0.2663	0.0041	0.0078	4.57E-03	0.0027	0.0052	6.80E-09
130		0.00	0.000	0.145	0.2543	0.0041	0.0077	4.57E-03	0.0024	0.0046	6.80E-09
131		0.00	0.000	0.146	0.2381	0.0063	0.0121	5.67E-03	0.0027	0.0052	6.80E-09
132		0.00	0.000	0.167	0.2223	0.0068	0.0130	5.92E-03	0.0030	0.0058	6.80E-09

133	0.05	0.000	0.148	0.2137	0.0039	0.0074	4.21E-03	0.0026	0.0049	6.80E-09
134	0.00	0.000	0.148	0.2015	0.0013	0.0024	2.53E-03	0.0017	0.0033	6.80E-09
135	0.31	0.000	0.320	0.2007	0.0018	0.0034	3.03E-03	0.0015	0.0028	6.80E-09
136	0.03	0.000	0.326	0.1756	0.0023	0.0043	3.39E-03	0.0017	0.0032	6.80E-09
137	0.00	0.000	0.252	0.1546	0.0026	0.0050	3.66E-03	0.0019	0.0035	6.80E-09
138	0.00	0.000	0.254	0.1335	0.0029	0.0055	3.85E-03	0.0020	0.0038	6.80E-09
139	0.25	0.000	0.154	0.1417	0.0031	0.0059	4.00E-03	0.0021	0.0039	6.80E-09
140	0.00	0.000	0.136	0.1304	0.0033	0.0062	4.09E-03	0.0021	0.0040	6.80E-09
141	1.12	0.000	0.087	0.2157	0.0047	0.0090	4.87E-03	0.0024	0.0045	6.80E-09
142	0.00	0.000	0.219	0.1974	0.0033	0.0062	4.08E-03	0.0023	0.0044	6.80E-09
143	0.00	0.000	0.246	0.1769	0.0031	0.0058	3.96E-03	0.0021	0.0040	6.80E-09
144	0.00	0.000	0.202	0.1601	0.0031	0.0060	4.01E-03	0.0021	0.0040	6.80E-09
145	0.00	0.000	0.175	0.1455	0.0032	0.0061	4.03E-03	0.0021	0.0040	6.80E-09
146	0.00	0.000	0.258	0.1240	0.0032	0.0061	4.05E-03	0.0021	0.0040	6.80E-09
147	0.00	0.000	0.230	0.1049	0.0032	0.0061	4.04E-03	0.0021	0.0040	6.80E-09
148	0.00	0.000	0.186	0.0861	0.0036	0.0069	4.30E-03	0.0022	0.0042	6.80E-09
149	0.05	0.000	0.127	0.0798	0.0044	0.0084	4.72E-03	0.0024	0.0045	6.80E-09
150	0.00	0.000	0.017	0.0784	0.0022	0.0042	3.36E-03	0.0021	0.0039	6.80E-09
151	0.08	0.000	0.042	0.0819	0.0023	0.0044	3.42E-03	0.0018	0.0034	6.80E-09
152	1.24	0.000	0.114	0.1759	0.0024	0.0046	3.50E-03	0.0018	0.0035	6.80E-09
153	0.02	0.000	0.217	0.1593	0.0025	0.0047	3.56E-03	0.0019	0.0035	6.80E-09
154	0.07	0.000	0.086	0.1582	0.0025	0.0048	3.60E-03	0.0019	0.0036	6.80E-09
155	0.00	0.000	0.283	0.1346	0.0026	0.0049	3.62E-03	0.0019	0.0036	6.80E-09
156	0.25	0.000	0.344	0.1265	0.0026	0.0049	3.64E-03	0.0019	0.0036	6.80E-09
157	0.00	0.000	0.356	0.0969	0.0026	0.0049	3.64E-03	0.0019	0.0036	6.80E-09
158	0.00	0.000	0.187	0.0813	0.0026	0.0049	3.64E-03	0.0019	0.0036	6.80E-09
159	0.04	0.000	0.083	0.0777	0.0026	0.0049	3.63E-03	0.0019	0.0036	6.80E-09
160	0.00	0.000	0.005	0.0772	0.0025	0.0048	3.61E-03	0.0019	0.0036	6.80E-09
161	0.00	0.000	0.002	0.0771	0.0025	0.0048	3.59E-03	0.0019	0.0036	6.80E-09
162	0.00	0.000	0.001	0.0770	0.0025	0.0047	3.56E-03	0.0019	0.0036	6.80E-09
163	0.10	0.000	0.020	0.0839	0.0024	0.0047	3.54E-03	0.0019	0.0035	6.80E-09
164	0.93	0.000	0.050	0.1569	0.0024	0.0046	3.51E-03	0.0018	0.0035	6.80E-09
165	0.20	0.000	0.066	0.1678	0.0024	0.0045	3.48E-03	0.0018	0.0035	6.80E-09
166	0.00	0.000	0.283	0.1442	0.0023	0.0044	3.44E-03	0.0018	0.0035	6.80E-09
167	0.01	0.000	0.216	0.1266	0.0023	0.0043	3.41E-03	0.0018	0.0034	6.80E-09

168	0.00	0.000	0.258	0.1051	0.0022	0.0042	3.37E-03	0.0018	0.0034	6.80E-09
169	0.59	0.000	0.087	0.1468	0.0022	0.0042	3.34E-03	0.0018	0.0034	6.80E-09
170	0.00	0.000	0.308	0.1211	0.0021	0.0041	3.30E-03	0.0017	0.0033	6.80E-09
171	0.00	0.000	0.194	0.1050	0.0021	0.0040	3.27E-03	0.0017	0.0033	6.80E-09
172	0.00	0.000	0.311	0.0791	0.0020	0.0039	3.23E-03	0.0017	0.0032	6.80E-09
173	0.00	0.000	0.021	0.0774	0.0020	0.0038	3.20E-03	0.0017	0.0032	6.80E-09
174	0.00	0.000	0.004	0.0770	0.0020	0.0037	3.16E-03	0.0017	0.0032	6.80E-09
175	0.01	0.000	0.013	0.0770	0.0019	0.0036	3.13E-03	0.0017	0.0031	6.80E-09
176	0.02	0.000	0.020	0.0770	0.0019	0.0036	3.09E-03	0.0016	0.0031	6.80E-09
177	0.14	0.000	0.022	0.0872	0.0018	0.0035	3.06E-03	0.0016	0.0031	6.80E-09
178	0.00	0.000	0.044	0.0835	0.0018	0.0034	3.02E-03	0.0016	0.0030	6.80E-09
179	0.00	0.000	0.070	0.0777	0.0017	0.0033	2.99E-03	0.0016	0.0030	6.80E-09
180	0.15	0.000	0.036	0.0876	0.0017	0.0033	2.95E-03	0.0016	0.0030	6.80E-09
181	1.92	0.000	0.237	0.2280	0.0017	0.0032	2.92E-03	0.0015	0.0029	6.80E-09
182	0.00	0.000	0.269	0.2056	0.0016	0.0031	2.89E-03	0.0015	0.0029	6.80E-09
183	0.16	0.000	0.123	0.2091	0.0016	0.0030	2.86E-03	0.0015	0.0029	6.80E-09
184	0.00	0.000	0.300	0.1841	0.0016	0.0030	2.83E-03	0.0015	0.0028	6.80E-09
185	0.21	0.000	0.348	0.1722	0.0015	0.0029	2.79E-03	0.0015	0.0028	6.80E-09
186	0.05	0.000	0.116	0.1670	0.0015	0.0029	2.76E-03	0.0015	0.0028	6.80E-09
187	0.00	0.000	0.097	0.1589	0.0015	0.0028	2.73E-03	0.0014	0.0027	6.80E-09
188	0.00	0.000	0.298	0.1339	0.0017	0.0031	2.89E-03	0.0015	0.0028	6.80E-09
189	0.00	0.000	0.337	0.1058	0.0014	0.0026	2.64E-03	0.0014	0.0027	6.80E-09
190	0.00	0.000	0.293	0.0814	0.0013	0.0026	2.62E-03	0.0014	0.0026	6.80E-09
191	0.14	0.000	0.067	0.0867	0.0017	0.0033	2.95E-03	0.0015	0.0028	6.80E-09
192	0.08	0.000	0.052	0.0893	0.0012	0.0022	2.45E-03	0.0014	0.0027	6.80E-09
193	0.12	0.000	0.067	0.0937	0.0012	0.0022	2.43E-03	0.0013	0.0024	6.80E-09
194	0.10	0.000	0.075	0.0961	0.0011	0.0022	2.42E-03	0.0013	0.0024	6.80E-09
195	0.06	0.000	0.069	0.0955	0.0011	0.0022	2.40E-03	0.0013	0.0024	6.80E-09
196	0.26	0.000	0.058	0.1121	0.0011	0.0021	2.39E-03	0.0013	0.0024	6.80E-09
197	0.13	0.000	0.150	0.1108	0.0011	0.0021	2.39E-03	0.0013	0.0024	6.80E-09
198	0.31	0.000	0.071	0.1311	0.0011	0.0021	2.36E-03	0.0012	0.0024	6.80E-09
199	0.75	0.000	0.081	0.1869	0.0011	0.0021	2.36E-03	0.0012	0.0024	6.80E-09
200	1.42	0.000	0.228	0.2863	0.0011	0.0020	2.33E-03	0.0012	0.0023	6.80E-09
201	0.12	0.000	0.240	0.2725	0.0011	0.0020	2.31E-03	0.0012	0.0023	6.80E-09
202	0.00	0.000	0.296	0.2378	0.0014	0.0027	2.65E-03	0.0013	0.0025	6.80E-09

203	0.00	0.000	0.312	0.2118	0.0013	0.0025	2.56E-03	0.0014	0.0026	6.80E-09
204	0.48	0.000	0.158	0.2389	0.0012	0.0023	2.46E-03	0.0013	0.0025	6.80E-09
205	0.45	0.000	0.125	0.2657	0.0017	0.0032	2.91E-03	0.0014	0.0027	6.80E-09
206	0.45	0.000	0.389	0.2699	0.0016	0.0030	2.84E-03	0.0015	0.0029	6.80E-09
207	0.00	0.000	0.222	0.2494	0.0008	0.0014	1.33E-03	0.0010	0.0020	6.80E-09
208	0.00	0.000	0.121	0.2393	0.0008	0.0015	1.38E-03	0.0007	0.0014	6.80E-09
209	0.00	0.000	0.348	0.2103	0.0000	0.0000	0.00E+00	0.0003	0.0006	6.80E-09
210	0.00	0.000	0.199	0.1937	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
211	0.00	0.000	0.319	0.1673	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
212	0.62	0.000	0.112	0.2099	0.0000	0.0000	9.44E-05	0.0000	0.0001	6.80E-09
213	0.00	0.000	0.248	0.1892	0.0001	0.0002	5.27E-04	0.0002	0.0003	6.80E-09
214	0.00	0.000	0.175	0.1740	0.0006	0.0011	1.35E-03	0.0005	0.0010	6.80E-09
215	0.00	0.000	0.256	0.1526	0.0002	0.0003	8.72E-04	0.0006	0.0011	6.80E-09
216	0.00	0.000	0.107	0.1438	0.0002	0.0005	1.12E-03	0.0005	0.0010	6.80E-09
217	0.03	0.000	0.117	0.1363	0.0004	0.0007	1.34E-03	0.0007	0.0012	6.80E-09
218	0.04	0.000	0.216	0.1219	0.0005	0.0009	1.52E-03	0.0008	0.0014	6.80E-09
219	0.00	0.000	0.267	0.0997	0.0006	0.0010	1.67E-03	0.0008	0.0016	6.80E-09
220	0.22	0.000	0.290	0.0941	0.0006	0.0012	1.81E-03	0.0009	0.0017	6.80E-09
221	0.21	0.000	0.162	0.0978	0.0007	0.0014	1.92E-03	0.0010	0.0019	6.80E-09
222	0.09	0.000	0.134	0.0944	0.0008	0.0015	2.02E-03	0.0010	0.0020	6.80E-09
223	0.22	0.000	0.152	0.0998	0.0009	0.0017	2.10E-03	0.0011	0.0021	6.80E-09
224	0.61	0.000	0.075	0.1441	0.0009	0.0018	2.18E-03	0.0011	0.0021	6.80E-09
225	0.22	0.000	0.251	0.1412	0.0010	0.0019	2.24E-03	0.0012	0.0022	6.80E-09
226	0.00	0.000	0.255	0.1199	0.0010	0.0020	2.29E-03	0.0012	0.0023	6.80E-09
227	0.00	0.000	0.193	0.1039	0.0011	0.0020	2.34E-03	0.0012	0.0023	6.80E-09
228	0.30	0.000	0.088	0.1212	0.0011	0.0021	2.37E-03	0.0012	0.0024	6.80E-09
229	0.14	0.000	0.200	0.1161	0.0011	0.0022	2.41E-03	0.0013	0.0024	6.80E-09
230	0.01	0.000	0.240	0.0966	0.0012	0.0022	2.43E-03	0.0013	0.0024	6.80E-09
231	0.24	0.000	0.106	0.1078	0.0012	0.0022	2.45E-03	0.0013	0.0024	6.80E-09
232	0.00	0.000	0.099	0.0995	0.0013	0.0025	2.57E-03	0.0013	0.0025	6.80E-09
233	0.00	0.000	0.089	0.0921	0.0013	0.0024	2.54E-03	0.0013	0.0025	6.80E-09
234	0.00	0.000	0.140	0.0804	0.0012	0.0023	2.47E-03	0.0013	0.0025	6.80E-09
235	0.00	0.000	0.034	0.0775	0.0012	0.0023	2.48E-03	0.0013	0.0025	6.80E-09
236	0.01	0.000	0.013	0.0771	0.0012	0.0023	2.48E-03	0.0013	0.0025	6.80E-09
237	0.05	0.000	0.041	0.0781	0.0012	0.0023	2.48E-03	0.0013	0.0025	6.80E-09

238	0.03	0.000	0.038	0.0775	0.0012	0.0023	2.48E-03	0.0013	0.0025	6.80E-09
239	0.05	0.000	0.037	0.0786	0.0012	0.0023	2.48E-03	0.0013	0.0025	6.80E-09
240	0.00	0.000	0.010	0.0778	0.0012	0.0023	2.48E-03	0.0013	0.0025	6.80E-09
241	0.01	0.000	0.013	0.0773	0.0012	0.0023	2.47E-03	0.0013	0.0025	6.80E-09
242	0.18	0.000	0.047	0.0882	0.0012	0.0023	2.47E-03	0.0013	0.0025	6.80E-09
243	0.16	0.000	0.102	0.0930	0.0012	0.0023	2.46E-03	0.0013	0.0025	6.80E-09
244	0.19	0.000	0.050	0.1042	0.0012	0.0022	2.45E-03	0.0013	0.0025	6.80E-09
245	0.26	0.000	0.122	0.1153	0.0012	0.0022	2.44E-03	0.0013	0.0024	6.80E-09
246	0.00	0.000	0.075	0.1094	0.0012	0.0022	2.43E-03	0.0013	0.0024	6.80E-09
247	0.00	0.000	0.225	0.0907	0.0011	0.0022	2.42E-03	0.0013	0.0024	6.80E-09
248	1.95	0.000	0.073	0.2469	0.0011	0.0022	2.41E-03	0.0013	0.0024	6.80E-09
249	2.89	0.000	0.293	0.4214	0.0011	0.0021	2.39E-03	0.0013	0.0024	6.80E-09
250	0.13	0.000	0.198	0.2850	0.0011	0.0021	2.38E-03	0.0013	0.0024	6.80E-09
251	0.10	0.000	0.349	0.2536	0.0011	0.0021	2.37E-03	0.0012	0.0024	6.80E-09
252	1.39	0.000	0.104	0.3532	0.0011	0.0021	2.35E-03	0.0012	0.0024	6.80E-09
253	0.00	0.000	0.064	0.2811	0.0011	0.0020	2.34E-03	0.0012	0.0023	6.80E-09
254	0.00	0.000	0.107	0.2633	0.0018	0.0035	3.06E-03	0.0014	0.0028	6.80E-09
255	0.18	0.000	0.268	0.2526	0.0013	0.0025	2.21E-03	0.0013	0.0026	6.80E-09
256	0.10	0.000	0.290	0.2332	0.0005	0.0009	7.41E-04	0.0007	0.0014	6.80E-09
257	0.03	0.000	0.176	0.2179	0.0000	0.0000	4.02E-05	0.0002	0.0004	6.80E-09
258	0.00	0.000	0.176	0.1998	0.0018	0.0034	3.02E-03	0.0009	0.0018	6.80E-09
259	0.95	0.000	0.210	0.2607	0.0018	0.0034	3.03E-03	0.0016	0.0030	6.80E-09
260	0.15	0.000	0.082	0.2667	0.0017	0.0032	2.95E-03	0.0016	0.0030	6.80E-09
261	0.19	0.000	0.181	0.2666	0.0016	0.0031	2.87E-03	0.0015	0.0029	6.80E-09
262	0.20	0.000	0.174	0.2675	0.0015	0.0029	2.80E-03	0.0015	0.0028	6.80E-09
263	0.05	0.000	0.125	0.2577	0.0007	0.0013	1.30E-03	0.0010	0.0019	6.80E-09
264	0.00	0.000	0.074	0.2469	0.0000	0.0000	0.00E+00	0.0003	0.0006	6.80E-09
265	0.00	0.000	0.075	0.2372	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
266	0.00	0.000	0.117	0.2275	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
267	0.00	0.000	0.108	0.2185	0.0140	0.0266	7.20E-03	0.0022	0.0041	6.80E-09
268	0.20	0.000	0.078	0.2290	0.0448	0.0853	1.53E-02	0.0062	0.0117	6.80E-09
269	0.00	0.000	0.035	0.2261	0.0636	0.1211	1.83E-02	0.0089	0.0169	6.80E-09
270	0.00	0.000	0.059	0.2212	0.0745	0.1418	1.99E-02	0.0101	0.0192	6.80E-09
271	0.00	0.000	0.076	0.2149	0.0787	0.1499	2.04E-02	0.0106	0.0202	6.80E-09
272	0.00	0.000	0.175	0.2003	0.0787	0.1498	2.04E-02	0.0107	0.0204	6.80E-09

273		0.00	0.000	0.038	0.1971	0.0766	0.1457	2.02E-02	0.0107	0.0203	6.80E-09
274		0.00	0.000	0.088	0.1898	0.0736	0.1400	1.97E-02	0.0105	0.0199	6.80E-09
275		0.00	0.000	0.050	0.1856	0.0703	0.1339	1.93E-02	0.0102	0.0195	6.80E-09
276		1.64	0.000	0.170	0.3080	0.0672	0.1278	1.88E-02	0.0100	0.0190	6.80E-09
277		0.01	0.000	0.189	0.2824	0.0680	0.1293	1.90E-02	0.0099	0.0189	6.80E-09
278		0.02	0.000	0.116	0.2580	0.0494	0.0941	1.61E-02	0.0091	0.0173	6.80E-09
279		0.07	0.000	0.100	0.2554	0.0615	0.1170	1.80E-02	0.0091	0.0172	6.80E-09
280		0.88	0.000	0.150	0.3162	0.0679	0.1292	1.89E-02	0.0097	0.0185	6.80E-09
281		0.00	0.000	0.101	0.2828	0.0868	0.1652	2.15E-02	0.0107	0.0204	6.80E-09
282		0.00	0.000	0.040	0.2676	0.0585	0.1113	1.75E-02	0.0101	0.0191	6.80E-09
283		0.00	0.000	0.080	0.2496	0.0451	0.0859	1.52E-02	0.0085	0.0162	6.80E-09
284		0.00	0.000	0.078	0.2427	0.0242	0.0460	1.12E-02	0.0068	0.0129	6.80E-09
285		0.00	0.000	0.053	0.2383	0.0335	0.0637	1.32E-02	0.0065	0.0124	6.80E-09
286		0.00	0.000	0.026	0.2362	0.0393	0.0747	1.43E-02	0.0073	0.0138	6.80E-09
287	*	0.00	0.000	0.000	0.2362	0.0262	0.0498	1.17E-02	0.0067	0.0128	6.80E-09
288		0.00	0.000	0.079	0.2295	0.0318	0.0604	1.29E-02	0.0065	0.0124	6.80E-09
289		0.00	0.000	0.071	0.2236	0.0291	0.0554	1.23E-02	0.0066	0.0125	6.80E-09
290		0.00	0.000	0.064	0.2182	0.0216	0.0411	1.06E-02	0.0059	0.0113	6.80E-09
291		0.00	0.000	0.051	0.2141	0.0121	0.0230	7.78E-03	0.0047	0.0090	6.80E-09
292		0.00	0.000	0.073	0.2080	0.0009	0.0016	1.20E-03	0.0021	0.0040	6.80E-09
293		0.00	0.000	0.121	0.1979	0.0041	0.0077	3.76E-03	0.0015	0.0028	6.80E-09
294		0.03	0.000	0.198	0.1841	0.0000	0.0000	0.00E+00	0.0008	0.0016	6.80E-09
295		0.05	0.000	0.088	0.1809	0.0014	0.0026	1.89E-03	0.0006	0.0011	6.80E-09
296		0.51	0.000	0.077	0.2174	0.0407	0.0774	1.43E-02	0.0047	0.0090	6.80E-09
297		0.00	0.000	0.147	0.2051	0.0617	0.1175	1.81E-02	0.0085	0.0163	6.80E-09
298		0.00	0.000	0.079	0.1985	0.0532	0.1013	1.67E-02	0.0091	0.0172	6.80E-09
299		0.21	0.000	0.079	0.2093	0.0430	0.0818	1.50E-02	0.0083	0.0158	6.80E-09
300		0.21	0.000	0.128	0.2164	0.0351	0.0668	1.35E-02	0.0075	0.0142	6.80E-09
301		0.11	0.000	0.128	0.2150	0.0293	0.0557	1.24E-02	0.0068	0.0129	6.80E-09
302		0.03	0.000	0.098	0.2090	0.0269	0.0512	1.18E-02	0.0063	0.0121	6.80E-09
303		0.05	0.000	0.075	0.2067	0.0198	0.0377	1.01E-02	0.0057	0.0109	6.80E-09
304		0.81	0.000	0.063	0.2693	0.0177	0.0337	9.57E-03	0.0052	0.0098	6.80E-09
305		0.04	0.000	0.061	0.2676	0.0161	0.0307	9.14E-03	0.0049	0.0093	6.80E-09
306		0.00	0.000	0.036	0.2621	0.0147	0.0280	8.72E-03	0.0047	0.0089	6.80E-09
307		0.00	0.000	0.070	0.2518	0.0159	0.0302	9.05E-03	0.0047	0.0089	6.80E-09

308		0.00	0.000	0.029	0.2458	0.0159	0.0302	9.05E-03	0.0048	0.0090	6.80E-09
309		0.00	0.000	0.043	0.2405	0.0136	0.0260	8.39E-03	0.0046	0.0087	6.80E-09
310		0.00	0.000	0.074	0.2344	0.0099	0.0187	7.08E-03	0.0040	0.0076	6.80E-09
311		0.00	0.000	0.082	0.2275	0.0009	0.0017	1.70E-03	0.0021	0.0040	6.80E-09
312		0.00	0.000	0.084	0.2205	0.0023	0.0043	3.36E-03	0.0014	0.0027	6.80E-09
313		0.00	0.000	0.031	0.2179	0.0046	0.0087	4.84E-03	0.0022	0.0042	6.80E-09
314		0.00	0.000	0.027	0.2157	0.0062	0.0119	5.66E-03	0.0028	0.0053	6.80E-09
315		0.00	0.000	0.045	0.2120	0.0073	0.0139	6.12E-03	0.0031	0.0059	6.80E-09
316		0.00	0.000	0.080	0.2055	0.0079	0.0150	6.36E-03	0.0033	0.0063	6.80E-09
317		0.00	0.000	0.045	0.2020	0.0081	0.0154	6.46E-03	0.0034	0.0064	6.80E-09
318		0.00	0.000	0.095	0.1941	0.0081	0.0154	6.46E-03	0.0034	0.0065	6.80E-09
319		0.00	0.000	0.074	0.1879	0.0080	0.0152	6.41E-03	0.0034	0.0064	6.80E-09
320		0.40	0.000	0.101	0.2129	0.0078	0.0148	6.32E-03	0.0033	0.0064	6.80E-09
321		0.00	0.000	0.047	0.2090	0.0075	0.0143	6.21E-03	0.0033	0.0063	6.80E-09
322		0.96	0.000	0.065	0.2837	0.0072	0.0137	6.08E-03	0.0032	0.0061	6.80E-09
323		0.85	0.000	0.122	0.3256	0.0069	0.0131	5.95E-03	0.0032	0.0060	6.80E-09
324		0.74	0.000	0.067	0.3234	0.0066	0.0125	5.82E-03	0.0031	0.0059	6.80E-09
325		0.06	0.000	0.117	0.2798	0.0086	0.0163	6.63E-03	0.0033	0.0063	6.80E-09
326		0.00	0.000	0.034	0.2639	0.0047	0.0089	4.88E-03	0.0029	0.0056	6.80E-09
327		0.21	0.000	0.094	0.2646	0.0044	0.0083	4.72E-03	0.0025	0.0048	6.80E-09
328		0.00	0.000	0.029	0.2602	0.0045	0.0086	4.81E-03	0.0025	0.0048	6.80E-09
329		0.00	0.000	0.027	0.2537	0.0070	0.0134	5.98E-03	0.0029	0.0055	6.80E-09
330		0.12	0.000	0.060	0.2551	0.0075	0.0144	6.23E-03	0.0032	0.0061	6.80E-09
331	*	0.11	0.000	0.035	0.2539	0.0061	0.0116	5.57E-03	0.0031	0.0058	6.80E-09
332	*	0.00	0.000	0.033	0.2528	0.0057	0.0109	5.42E-03	0.0029	0.0055	6.80E-09
333		0.00	0.000	0.041	0.2475	0.0055	0.0104	5.30E-03	0.0028	0.0054	6.80E-09
334	*	0.00	0.000	0.000	0.2458	0.0039	0.0074	4.25E-03	0.0025	0.0047	6.80E-09
335	*	0.26	0.000	0.010	0.2458	0.0044	0.0084	4.75E-03	0.0024	0.0046	6.80E-09
336		0.04	0.000	0.009	0.2680	0.0043	0.0082	4.70E-03	0.0025	0.0047	6.80E-09
337		0.00	0.000	0.056	0.2631	0.0039	0.0075	4.50E-03	0.0024	0.0046	6.80E-09
338		0.00	0.000	0.062	0.2541	0.0021	0.0040	2.66E-03	0.0018	0.0034	6.80E-09
339		0.00	0.000	0.078	0.2464	0.0000	0.0000	0.00E+00	0.0006	0.0012	6.80E-09
340		0.00	0.000	0.066	0.2365	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
341		0.22	0.000	0.039	0.2510	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
342		0.06	0.000	0.068	0.2480	0.0030	0.0058	1.98E-03	0.0006	0.0011	6.80E-09

343	*		0.00	0.000	0.026	0.2425	0.0120	0.0229	7.49E-03	0.0027	0.0051	6.80E-09
344	*		0.00	0.000	0.000	0.2388	0.0267	0.0509	1.18E-02	0.0052	0.0099	6.80E-09
345	*		0.00	0.000	0.023	0.2328	0.0426	0.0811	1.49E-02	0.0071	0.0135	6.80E-09
346			0.00	0.000	0.031	0.2269	0.0523	0.0996	1.66E-02	0.0083	0.0158	6.80E-09
347	*		0.00	0.000	0.028	0.2221	0.0546	0.1039	1.70E-02	0.0088	0.0168	6.80E-09
348	*		0.00	0.000	0.024	0.2181	0.0524	0.0998	1.66E-02	0.0088	0.0168	6.80E-09
349	*		0.00	0.000	0.000	0.2172	0.0474	0.0902	1.58E-02	0.0085	0.0161	6.80E-09
350			0.00	0.000	0.031	0.2146	0.0427	0.0812	1.49E-02	0.0080	0.0153	6.80E-09
351	*		0.02	0.000	0.019	0.2146	0.0392	0.0746	1.43E-02	0.0077	0.0146	6.80E-09
352	*		0.00	0.000	0.000	0.2146	0.0376	0.0716	1.39E-02	0.0074	0.0141	6.80E-09
353	*		0.00	0.000	0.000	0.2146	0.0183	0.0348	9.70E-03	0.0060	0.0115	6.80E-09
354	*		0.00	0.000	0.000	0.2146	0.0336	0.0640	1.31E-02	0.0061	0.0117	6.80E-09
355	*		0.00	0.000	0.000	0.2146	0.0671	0.1276	1.88E-02	0.0086	0.0163	6.80E-09
356			0.00	0.000	0.045	0.2109	0.0611	0.1163	1.80E-02	0.0096	0.0182	6.80E-09
357			0.53	0.000	0.056	0.2505	0.0487	0.0926	1.60E-02	0.0088	0.0168	6.80E-09
358			0.04	0.000	0.045	0.2493	0.0390	0.0743	1.43E-02	0.0079	0.0150	6.80E-09
359	*		0.24	0.000	0.026	0.2504	0.0330	0.0629	1.31E-02	0.0072	0.0136	6.80E-09
360			0.00	0.000	0.038	0.2638	0.0264	0.0502	1.17E-02	0.0065	0.0123	6.80E-09
361	*		0.00	0.000	0.024	0.2604	0.0225	0.0428	1.08E-02	0.0059	0.0112	6.80E-09
362	*		0.04	0.000	0.012	0.2615	0.0209	0.0398	1.04E-02	0.0055	0.0106	6.80E-09
363	*	*	0.18	0.000	0.023	0.2615	0.0137	0.0261	8.41E-03	0.0049	0.0092	6.80E-09
364	*	*	0.00	0.000	0.016	0.2615	0.0132	0.0252	8.27E-03	0.0044	0.0084	6.80E-09
365	*	*	0.17	0.000	0.007	0.2615	0.0131	0.0249	8.23E-03	0.0043	0.0082	6.80E-09

* = Frozen (air or soil)

Annual Totals for Year 3			
	inches	cubic feet	percent
Precipitation	46.78	169,801.3	100.00
Runoff	0.000	0.0000	0.00
Evapotranspiration	36.420	132,205.8	77.86
Drainage Collected from Layer 3	10.5284	38,218.2	22.51
Percolation/Leakage through Layer 4	2.519784	9,146.8	5.39
Average Head on Top of Layer 4	0.0152	---	---

Drainage Collected from Layer 5	2.5238	9,161.4	5.40
Percolation/Leakage through Layer 7	0.000002	0.0090	0.00
Average Head on Top of Layer 6	0.0036	---	---
Change in Water Storage	-2.6954	-9,784.2	-5.76
Soil Water at Start of Year	41.9675	152,341.9	89.72
Soil Water at End of Year	38.9623	141,433.1	83.29
Snow Water at Start of Year	0.0000	0.0000	0.00
Snow Water at End of Year	0.3098	1,124.7	0.66
Annual Water Budget Balance	0.0000	0.0000	0.00

Daily Output for Year 4

Column key: Head #1: drainage from Layer 4 | Head #2: drainage from Layer 6
Drain #1: drainage from Layer 3 | Drain #2: drainage from Layer 5
Leak #1: leakage thru Layer 4 | Leak #2: leakage thru Layer 7

Title: Millersville Cell 9 - Open Cell Condition
Simulated On: 6/9/2024 11:31

Day	Freezing Status* Air	Freezing Status* Soil	Rain (inches)	Runoff (inches)	ET (inches)	Evap. Zone Water (in/in)	Head #1 (inches)	Drain #1 (inches)	Leak #1 (inches)	Head #2 (inches)	Drain #2 (inches)	Leak #2 (inches)
1	*	*	0.00	0.000	0.007	0.2615	0.0126	0.0240	8.07E-03	0.0043	0.0081	6.80E-09
2	*	*	0.00	0.000	0.003	0.2615	0.0120	0.0228	7.86E-03	0.0042	0.0080	6.80E-09
3	*	*	0.00	0.000	0.009	0.2615	0.0113	0.0215	7.63E-03	0.0041	0.0077	6.80E-09
4	*	*	0.00	0.000	0.012	0.2615	0.0106	0.0201	7.39E-03	0.0039	0.0075	6.80E-09
5	*	*	0.00	0.000	0.006	0.2615	0.0099	0.0189	7.14E-03	0.0038	0.0073	6.80E-09
6	*	*	0.00	0.000	0.003	0.2615	0.0093	0.0177	6.91E-03	0.0037	0.0070	6.80E-09
7	*	*	0.00	0.000	0.002	0.2615	0.0087	0.0165	6.69E-03	0.0036	0.0068	6.80E-09
8	*	*	0.00	0.000	0.016	0.2615	0.0082	0.0155	6.48E-03	0.0035	0.0066	6.80E-09
9	*	*	0.00	0.000	0.014	0.2615	0.0077	0.0146	6.28E-03	0.0033	0.0064	6.80E-09
10	*	*	0.00	0.000	0.013	0.2615	0.0072	0.0137	6.09E-03	0.0032	0.0062	6.80E-09
11	*	*	0.01	0.000	0.012	0.2615	0.0068	0.0129	5.91E-03	0.0031	0.0060	6.80E-09
12	*	*	0.00	0.000	0.017	0.2615	0.0064	0.0122	5.74E-03	0.0031	0.0058	6.80E-09
13	*	*	0.00	0.000	0.023	0.2615	0.0061	0.0115	5.58E-03	0.0030	0.0057	6.80E-09
14		*	0.04	0.000	0.035	0.2770	0.0057	0.0109	5.43E-03	0.0029	0.0055	6.80E-09
15		*	0.04	0.000	0.009	0.2798	0.0055	0.0104	5.29E-03	0.0028	0.0054	6.80E-09
16	*	*	0.01	0.000	0.007	0.2798	0.0052	0.0099	5.16E-03	0.0027	0.0052	6.80E-09
17		*	0.01	0.000	0.006	0.2803	0.0049	0.0094	5.03E-03	0.0027	0.0051	6.80E-09
18		*	0.38	0.000	0.008	0.3112	0.0047	0.0089	4.91E-03	0.0026	0.0050	6.80E-09
19		*	0.00	0.000	0.000	0.3112	0.0045	0.0085	4.80E-03	0.0025	0.0048	6.80E-09
20		*	0.00	0.000	0.002	0.3112	0.0043	0.0082	4.69E-03	0.0025	0.0047	6.80E-09
21		*	0.00	0.000	0.000	0.3112	0.0041	0.0078	4.58E-03	0.0024	0.0046	6.80E-09
22			0.00	0.000	0.053	0.2830	0.0044	0.0083	4.72E-03	0.0024	0.0047	6.80E-09
23	*		0.00	0.000	0.000	0.2715	0.0042	0.0080	4.63E-03	0.0025	0.0047	6.80E-09
24	*		0.00	0.000	0.000	0.2678	0.0036	0.0069	4.26E-03	0.0023	0.0044	6.80E-09
25	*	*	0.00	0.000	0.000	0.2678	0.0032	0.0062	4.03E-03	0.0022	0.0041	6.80E-09
26	*	*	0.15	0.000	0.018	0.2678	0.0031	0.0060	3.98E-03	0.0021	0.0040	6.80E-09
27	*	*	0.00	0.000	0.009	0.2678	0.0032	0.0062	4.03E-03	0.0021	0.0040	6.80E-09

28	*	*	0.00	0.000	0.017	0.2678	0.0045	0.0086	4.82E-03	0.0024	0.0045	6.80E-09
29	*	*	0.00	0.000	0.025	0.2678	0.0043	0.0082	4.69E-03	0.0025	0.0047	6.80E-09
30		*	0.00	0.000	0.057	0.2701	0.0039	0.0075	4.49E-03	0.0024	0.0046	6.80E-09
31	*	*	0.00	0.000	0.000	0.2701	0.0036	0.0069	4.31E-03	0.0023	0.0044	6.80E-09
32	*	*	0.00	0.000	0.000	0.2701	0.0033	0.0064	4.14E-03	0.0022	0.0042	6.80E-09
33	*	*	0.08	0.000	0.032	0.2701	0.0000	0.0000	1.20E-04	0.0010	0.0018	6.80E-09
34	*	*	0.23	0.000	0.011	0.2701	0.0000	0.0000	0.00E+00	0.0001	0.0001	6.80E-09
35		*	0.00	0.000	0.022	0.2911	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
36		*	0.00	0.000	0.000	0.2911	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
37	*	*	0.00	0.000	0.000	0.2911	0.0001	0.0003	5.79E-04	0.0002	0.0003	6.80E-09
38	*	*	0.00	0.000	0.000	0.2911	0.0015	0.0029	2.77E-03	0.0010	0.0018	6.80E-09
39	*	*	0.00	0.000	0.000	0.2911	0.0033	0.0062	4.08E-03	0.0018	0.0035	6.80E-09
40		*	0.00	0.000	0.000	0.2911	0.0046	0.0088	4.86E-03	0.0024	0.0045	6.80E-09
41		*	0.00	0.000	0.000	0.2911	0.0056	0.0106	5.34E-03	0.0027	0.0051	6.80E-09
42		*	0.00	0.000	0.000	0.2911	0.0062	0.0117	5.62E-03	0.0029	0.0055	6.80E-09
43		*	0.27	0.000	0.007	0.3130	0.0065	0.0124	5.78E-03	0.0030	0.0057	6.80E-09
44		*	0.00	0.000	0.000	0.3130	0.0066	0.0126	5.84E-03	0.0031	0.0058	6.80E-09
45	*	*	0.00	0.000	0.000	0.3130	0.0067	0.0127	5.85E-03	0.0031	0.0058	6.80E-09
46	*	*	0.00	0.000	0.000	0.3130	0.0066	0.0125	5.81E-03	0.0031	0.0058	6.80E-09
47		*	0.52	0.000	0.007	0.3556	0.0064	0.0122	5.75E-03	0.0030	0.0058	6.80E-09
48	*	*	0.00	0.000	0.000	0.3556	0.0063	0.0119	5.67E-03	0.0030	0.0057	6.80E-09
49		*	0.00	0.000	0.000	0.3556	0.0060	0.0115	5.57E-03	0.0029	0.0056	6.80E-09
50	*	*	0.01	0.000	0.006	0.3556	0.0058	0.0111	5.47E-03	0.0029	0.0055	6.80E-09
51	*	*	0.00	0.000	0.000	0.3556	0.0056	0.0107	5.37E-03	0.0028	0.0054	6.80E-09
52		*	0.00	0.000	0.000	0.3556	0.0054	0.0103	5.26E-03	0.0028	0.0053	6.80E-09
53	*	*	0.00	0.000	0.000	0.3556	0.0052	0.0099	5.16E-03	0.0027	0.0052	6.80E-09
54	*	*	0.05	0.000	0.022	0.3556	0.0050	0.0095	5.05E-03	0.0027	0.0051	6.80E-09
55	*	*	0.50	0.000	0.008	0.3556	0.0048	0.0091	4.95E-03	0.0026	0.0050	6.80E-09
56	*	*	0.00	0.000	0.011	0.3556	0.0046	0.0087	4.85E-03	0.0026	0.0049	6.80E-09
57	*	*	0.00	0.000	0.013	0.3556	0.0044	0.0084	4.75E-03	0.0025	0.0048	6.80E-09
58	*	*	0.00	0.000	0.016	0.3556	0.0042	0.0080	4.65E-03	0.0025	0.0047	6.80E-09
59	*	*	0.01	0.000	0.000	0.3556	0.0041	0.0077	4.56E-03	0.0024	0.0046	6.80E-09
60		*	0.03	0.000	0.000	0.3989	0.0039	0.0074	4.47E-03	0.0024	0.0045	6.80E-09
61		*	0.66	0.000	0.006	0.4536	0.0038	0.0071	4.38E-03	0.0023	0.0044	6.80E-09
62	*	*	0.00	0.000	0.000	0.4536	0.0036	0.0069	4.30E-03	0.0023	0.0043	6.80E-09

63	*	*	0.00	0.000	0.000	0.4536	0.0035	0.0066	4.22E-03	0.0022	0.0043	6.80E-09
64		*	0.00	0.000	0.000	0.4536	0.0034	0.0064	4.14E-03	0.0022	0.0042	6.80E-09
65		*	0.66	0.000	0.006	0.5082	0.0032	0.0062	4.07E-03	0.0022	0.0041	6.80E-09
66		*	0.00	0.000	0.000	0.5082	0.0031	0.0059	4.00E-03	0.0021	0.0040	6.80E-09
67		*	0.62	0.000	0.006	0.5597	0.0030	0.0057	3.93E-03	0.0021	0.0040	6.80E-09
68		*	0.00	0.000	0.000	0.5597	0.0029	0.0055	3.86E-03	0.0020	0.0039	6.80E-09
69		*	0.00	0.000	0.000	0.5597	0.0028	0.0054	3.79E-03	0.0020	0.0038	6.80E-09
70			0.00	0.000	0.176	0.2577	0.0027	0.0052	3.73E-03	0.0020	0.0038	6.80E-09
71			0.00	0.000	0.154	0.2194	0.0026	0.0050	3.67E-03	0.0019	0.0037	6.80E-09
72			0.09	0.000	0.089	0.2183	0.0026	0.0049	3.61E-03	0.0019	0.0036	6.80E-09
73			0.00	0.000	0.048	0.2111	0.0027	0.0052	3.72E-03	0.0019	0.0037	6.80E-09
74			0.46	0.000	0.182	0.2346	0.0022	0.0043	3.39E-03	0.0019	0.0035	6.80E-09
75			0.11	0.000	0.074	0.2362	0.0032	0.0061	4.03E-03	0.0020	0.0038	6.80E-09
76			0.05	0.000	0.053	0.2361	0.0034	0.0066	4.20E-03	0.0022	0.0041	6.80E-09
77	*		0.00	0.000	0.000	0.2354	0.0032	0.0061	4.04E-03	0.0022	0.0041	6.80E-09
78	*		0.00	0.000	0.000	0.2345	0.0030	0.0056	3.90E-03	0.0021	0.0040	6.80E-09
79	*		0.06	0.000	0.040	0.2361	0.0021	0.0040	2.88E-03	0.0017	0.0033	6.80E-09
80			0.00	0.000	0.104	0.2270	0.0000	0.0000	0.00E+00	0.0007	0.0012	6.80E-09
81			0.00	0.000	0.110	0.2178	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
82	*		0.00	0.000	0.080	0.2111	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
83	*		0.00	0.000	0.035	0.2082	0.0471	0.0897	1.53E-02	0.0046	0.0088	6.80E-09
84	*		0.11	0.000	0.068	0.2098	0.0953	0.1813	2.25E-02	0.0101	0.0192	6.80E-09
85			0.28	0.000	0.038	0.2317	0.1024	0.1950	2.34E-02	0.0120	0.0229	6.80E-09
86			0.00	0.000	0.046	0.2278	0.0983	0.1871	2.29E-02	0.0121	0.0231	6.80E-09
87			0.00	0.000	0.080	0.2212	0.0926	0.1763	2.22E-02	0.0118	0.0225	6.80E-09
88			0.00	0.000	0.157	0.2075	0.0881	0.1677	2.17E-02	0.0115	0.0219	6.80E-09
89			0.00	0.000	0.097	0.1994	0.0804	0.1530	2.07E-02	0.0111	0.0211	6.80E-09
90			0.00	0.000	0.097	0.1913	0.0797	0.1517	2.06E-02	0.0108	0.0206	6.80E-09
91	*		0.00	0.000	0.096	0.1833	0.0734	0.1398	1.97E-02	0.0106	0.0201	6.80E-09
92	*		0.00	0.000	0.033	0.1806	0.0686	0.1306	1.91E-02	0.0102	0.0194	6.80E-09
93			0.00	0.000	0.068	0.1749	0.0652	0.1240	1.86E-02	0.0099	0.0188	6.80E-09
94			0.00	0.000	0.092	0.1672	0.0653	0.1243	1.86E-02	0.0098	0.0186	6.80E-09
95			0.00	0.000	0.147	0.1549	0.0475	0.0904	1.58E-02	0.0089	0.0170	6.80E-09
96			0.00	0.000	0.074	0.1488	0.0623	0.1186	1.81E-02	0.0090	0.0172	6.80E-09
97			0.00	0.000	0.130	0.1379	0.0763	0.1451	2.01E-02	0.0101	0.0192	6.80E-09

98		0.00	0.000	0.272	0.1153	0.0778	0.1481	2.03E-02	0.0106	0.0202	6.80E-09
99		0.00	0.000	0.111	0.1060	0.0601	0.1143	1.78E-02	0.0099	0.0189	6.80E-09
100		0.00	0.000	0.050	0.1019	0.0464	0.0883	1.56E-02	0.0087	0.0166	6.80E-09
101	*	0.00	0.000	0.000	0.1019	0.0371	0.0706	1.39E-02	0.0077	0.0147	6.80E-09
102		0.00	0.000	0.064	0.0965	0.0305	0.0581	1.26E-02	0.0069	0.0132	6.80E-09
103		0.00	0.000	0.054	0.0920	0.0258	0.0490	1.16E-02	0.0063	0.0120	6.80E-09
104		0.00	0.000	0.048	0.0881	0.0221	0.0421	1.07E-02	0.0058	0.0111	6.80E-09
105		0.00	0.000	0.043	0.0845	0.0193	0.0368	1.00E-02	0.0054	0.0103	6.80E-09
106		0.01	0.000	0.044	0.0819	0.0171	0.0325	9.40E-03	0.0051	0.0097	6.80E-09
107		0.17	0.000	0.041	0.0926	0.0152	0.0290	8.88E-03	0.0048	0.0091	6.80E-09
108		0.01	0.000	0.037	0.0899	0.0137	0.0261	8.42E-03	0.0045	0.0086	6.80E-09
109		0.18	0.000	0.020	0.1030	0.0124	0.0237	8.01E-03	0.0043	0.0082	6.80E-09
110		0.03	0.000	0.018	0.1039	0.0114	0.0216	7.65E-03	0.0041	0.0078	6.80E-09
111		0.83	0.000	0.025	0.1709	0.0104	0.0198	7.33E-03	0.0039	0.0075	6.80E-09
112		0.00	0.000	0.072	0.1649	0.0096	0.0183	7.04E-03	0.0038	0.0072	6.80E-09
113		0.05	0.000	0.270	0.1468	0.0089	0.0169	6.77E-03	0.0036	0.0069	6.80E-09
114		0.00	0.000	0.205	0.1297	0.0083	0.0157	6.53E-03	0.0035	0.0066	6.80E-09
115		0.00	0.000	0.185	0.1143	0.0077	0.0147	6.30E-03	0.0034	0.0064	6.80E-09
116		0.00	0.000	0.082	0.1075	0.0072	0.0138	6.09E-03	0.0033	0.0062	6.80E-09
117		0.00	0.000	0.061	0.1025	0.0068	0.0129	5.90E-03	0.0031	0.0060	6.80E-09
118		0.14	0.000	0.060	0.1093	0.0064	0.0121	5.73E-03	0.0030	0.0058	6.80E-09
119		0.03	0.000	0.053	0.1078	0.0060	0.0115	5.56E-03	0.0030	0.0056	6.80E-09
120		0.20	0.000	0.051	0.1205	0.0057	0.0108	5.41E-03	0.0029	0.0055	6.80E-09
121		0.00	0.000	0.045	0.1168	0.0054	0.0103	5.26E-03	0.0028	0.0053	6.80E-09
122		0.00	0.000	0.042	0.1133	0.0051	0.0097	5.12E-03	0.0027	0.0052	6.80E-09
123		0.11	0.000	0.040	0.1188	0.0049	0.0093	4.99E-03	0.0027	0.0051	6.80E-09
124		0.00	0.000	0.038	0.1157	0.0046	0.0088	4.87E-03	0.0026	0.0049	6.80E-09
125		0.27	0.000	0.036	0.1350	0.0044	0.0084	4.76E-03	0.0025	0.0048	6.80E-09
126		0.04	0.000	0.038	0.1352	0.0042	0.0080	4.65E-03	0.0025	0.0047	6.80E-09
127		1.60	0.000	0.041	0.2654	0.0040	0.0077	4.55E-03	0.0024	0.0046	6.80E-09
128		0.08	0.000	0.230	0.2530	0.0039	0.0074	4.45E-03	0.0024	0.0045	6.80E-09
129		0.07	0.000	0.221	0.2403	0.0037	0.0070	4.35E-03	0.0023	0.0044	6.80E-09
130		0.27	0.000	0.081	0.2543	0.0039	0.0075	4.47E-03	0.0023	0.0044	6.80E-09
131		0.00	0.000	0.173	0.2369	0.0046	0.0088	4.87E-03	0.0025	0.0047	6.80E-09
132		0.00	0.000	0.269	0.2140	0.0041	0.0079	4.56E-03	0.0025	0.0047	6.80E-09

133	0.00	0.000	0.199	0.1974	0.0019	0.0037	3.14E-03	0.0020	0.0038	6.80E-09
134	0.00	0.000	0.212	0.1797	0.0020	0.0038	3.20E-03	0.0017	0.0032	6.80E-09
135	0.00	0.000	0.137	0.1683	0.0021	0.0040	3.27E-03	0.0017	0.0032	6.80E-09
136	0.00	0.000	0.176	0.1528	0.0026	0.0050	3.64E-03	0.0018	0.0035	6.80E-09
137	0.00	0.000	0.344	0.1242	0.0020	0.0038	3.19E-03	0.0018	0.0034	6.80E-09
138	0.00	0.000	0.228	0.1052	0.0021	0.0039	3.25E-03	0.0017	0.0032	6.80E-09
139	0.00	0.000	0.095	0.0973	0.0021	0.0040	3.29E-03	0.0017	0.0033	6.80E-09
140	2.44	0.000	0.081	0.2934	0.0026	0.0050	3.64E-03	0.0018	0.0035	6.80E-09
141	0.61	0.000	0.236	0.3079	0.0020	0.0039	3.23E-03	0.0018	0.0034	6.80E-09
142	0.30	0.000	0.266	0.2922	0.0021	0.0039	3.24E-03	0.0017	0.0032	6.80E-09
143	0.58	0.000	0.118	0.3198	0.0036	0.0069	4.29E-03	0.0020	0.0038	6.80E-09
144	0.16	0.000	0.288	0.2803	0.0025	0.0048	3.54E-03	0.0020	0.0038	6.80E-09
145	0.39	0.000	0.097	0.2920	0.0024	0.0046	3.33E-03	0.0018	0.0034	6.80E-09
146	0.00	0.000	0.131	0.2749	0.0002	0.0004	1.02E-03	0.0011	0.0020	6.80E-09
147	0.22	0.000	0.133	0.2742	0.0012	0.0023	2.24E-03	0.0009	0.0018	6.80E-09
148	0.00	0.000	0.177	0.2515	0.0028	0.0053	3.43E-03	0.0015	0.0029	6.80E-09
149	0.00	0.000	0.167	0.2356	0.0000	0.0001	2.81E-04	0.0008	0.0016	6.80E-09
150	0.00	0.000	0.109	0.2265	0.0020	0.0039	2.73E-03	0.0009	0.0017	6.80E-09
151	0.00	0.000	0.237	0.2068	0.0040	0.0076	4.54E-03	0.0020	0.0037	6.80E-09
152	0.38	0.000	0.155	0.2252	0.0001	0.0001	2.02E-04	0.0011	0.0020	6.80E-09
153	0.21	0.000	0.245	0.2219	0.0030	0.0057	3.40E-03	0.0011	0.0021	6.80E-09
154	0.01	0.000	0.217	0.2046	0.0039	0.0075	4.49E-03	0.0021	0.0040	6.80E-09
155	0.13	0.000	0.083	0.2085	0.0036	0.0069	4.31E-03	0.0023	0.0044	6.80E-09
156	0.00	0.000	0.305	0.1831	0.0033	0.0064	4.14E-03	0.0022	0.0042	6.80E-09
157	0.06	0.000	0.252	0.1670	0.0031	0.0059	3.99E-03	0.0021	0.0041	6.80E-09
158	0.00	0.000	0.141	0.1552	0.0008	0.0014	1.06E-03	0.0012	0.0023	6.80E-09
159	0.07	0.000	0.276	0.1378	0.0000	0.0000	0.00E+00	0.0003	0.0005	6.80E-09
160	0.43	0.000	0.336	0.1455	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
161	0.00	0.000	0.315	0.1192	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
162	0.00	0.000	0.252	0.0983	0.0000	0.0000	0.00E+00	0.0000	0.0000	4.28E-09
163	0.04	0.000	0.141	0.0860	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.00E+00
164	0.47	0.000	0.077	0.1185	0.0384	0.0730	1.37E-02	0.0041	0.0079	5.10E-09
165	1.71	0.000	0.109	0.2523	0.0467	0.0889	1.57E-02	0.0077	0.0146	6.80E-09
166	0.10	0.000	0.183	0.2455	0.0510	0.0971	1.64E-02	0.0084	0.0160	6.80E-09
167	0.00	0.000	0.269	0.2232	0.0450	0.0856	1.54E-02	0.0083	0.0158	6.80E-09

168	0.05	0.000	0.116	0.2180	0.0376	0.0716	1.40E-02	0.0077	0.0146	6.80E-09
169	0.00	0.000	0.177	0.2033	0.0313	0.0596	1.28E-02	0.0070	0.0133	6.80E-09
170	0.00	0.000	0.146	0.1912	0.0265	0.0505	1.18E-02	0.0064	0.0122	6.80E-09
171	0.16	0.000	0.358	0.1745	0.0229	0.0435	1.09E-02	0.0059	0.0113	6.80E-09
172	0.45	0.000	0.122	0.2021	0.0201	0.0382	1.02E-02	0.0055	0.0105	6.80E-09
173	0.00	0.000	0.262	0.1803	0.0176	0.0336	9.56E-03	0.0052	0.0098	6.80E-09
174	0.00	0.000	0.286	0.1563	0.0159	0.0303	9.08E-03	0.0049	0.0093	6.80E-09
175	0.02	0.000	0.106	0.1496	0.0140	0.0266	8.50E-03	0.0046	0.0088	6.80E-09
176	0.00	0.000	0.303	0.1243	0.0126	0.0239	8.05E-03	0.0043	0.0083	6.80E-09
177	0.00	0.000	0.288	0.1003	0.0115	0.0219	7.71E-03	0.0041	0.0079	6.80E-09
178	0.00	0.000	0.280	0.0770	0.0106	0.0202	7.40E-03	0.0040	0.0075	6.80E-09
179	0.00	0.000	0.000	0.0770	0.0098	0.0187	7.11E-03	0.0038	0.0072	6.80E-09
180	0.05	0.000	0.037	0.0784	0.0091	0.0173	6.85E-03	0.0037	0.0070	6.80E-09
181	0.68	0.000	0.058	0.1301	0.0085	0.0161	6.60E-03	0.0035	0.0067	6.80E-09
182	0.10	0.000	0.196	0.1220	0.0079	0.0151	6.38E-03	0.0034	0.0065	6.80E-09
183	0.00	0.000	0.206	0.1048	0.0074	0.0141	6.17E-03	0.0033	0.0063	6.80E-09
184	0.00	0.000	0.090	0.0973	0.0070	0.0132	5.98E-03	0.0032	0.0061	6.80E-09
185	1.08	0.000	0.191	0.1712	0.0065	0.0125	5.80E-03	0.0031	0.0059	6.80E-09
186	0.74	0.000	0.086	0.2257	0.0063	0.0119	5.68E-03	0.0030	0.0057	6.80E-09
187	0.51	0.000	0.203	0.2517	0.0058	0.0110	5.46E-03	0.0029	0.0056	6.80E-09
188	0.29	0.000	0.090	0.2681	0.0055	0.0105	5.31E-03	0.0028	0.0054	6.80E-09
189	0.00	0.000	0.093	0.2604	0.0052	0.0099	5.17E-03	0.0027	0.0052	6.80E-09
190	0.00	0.000	0.184	0.2451	0.0050	0.0094	5.04E-03	0.0027	0.0051	6.80E-09
191	0.00	0.000	0.265	0.2214	0.0058	0.0110	5.42E-03	0.0028	0.0053	6.80E-09
192	0.00	0.000	0.306	0.1945	0.0061	0.0115	5.55E-03	0.0029	0.0055	6.80E-09
193	0.00	0.000	0.295	0.1700	0.0032	0.0061	4.05E-03	0.0025	0.0047	6.80E-09
194	0.16	0.000	0.307	0.1574	0.0032	0.0060	4.03E-03	0.0021	0.0041	6.80E-09
195	0.02	0.000	0.260	0.1375	0.0032	0.0061	4.04E-03	0.0021	0.0040	6.80E-09
196	0.05	0.000	0.345	0.1131	0.0032	0.0061	4.04E-03	0.0021	0.0040	6.80E-09
197	0.02	0.000	0.316	0.0884	0.0032	0.0061	4.03E-03	0.0021	0.0040	6.80E-09
198	0.00	0.000	0.135	0.0772	0.0032	0.0060	4.02E-03	0.0021	0.0040	6.80E-09
199	0.43	0.000	0.147	0.1008	0.0031	0.0059	3.99E-03	0.0021	0.0040	6.80E-09
200	0.00	0.000	0.113	0.0913	0.0031	0.0058	3.96E-03	0.0021	0.0040	6.80E-09
201	0.06	0.000	0.172	0.0822	0.0030	0.0057	3.92E-03	0.0021	0.0039	6.80E-09
202	0.13	0.000	0.073	0.0874	0.0030	0.0056	3.89E-03	0.0021	0.0039	6.80E-09

203	0.16	0.000	0.133	0.0897	0.0029	0.0055	3.85E-03	0.0020	0.0039	6.80E-09
204	0.07	0.000	0.130	0.0849	0.0028	0.0054	3.80E-03	0.0020	0.0038	6.80E-09
205	0.00	0.000	0.047	0.0810	0.0028	0.0053	3.76E-03	0.0020	0.0038	6.80E-09
206	0.00	0.000	0.037	0.0778	0.0027	0.0051	3.71E-03	0.0020	0.0037	6.80E-09
207	0.00	0.000	0.008	0.0772	0.0026	0.0050	3.67E-03	0.0019	0.0037	6.80E-09
208	0.00	0.000	0.002	0.0770	0.0026	0.0049	3.62E-03	0.0019	0.0036	6.80E-09
209	0.00	0.000	0.000	0.0770	0.0025	0.0048	3.58E-03	0.0019	0.0036	6.80E-09
210	0.00	0.000	0.000	0.0770	0.0024	0.0047	3.53E-03	0.0019	0.0036	6.80E-09
211	0.00	0.000	0.000	0.0770	0.0024	0.0045	3.49E-03	0.0018	0.0035	6.80E-09
212	0.16	0.000	0.037	0.0873	0.0023	0.0044	3.44E-03	0.0018	0.0035	6.80E-09
213	0.00	0.000	0.084	0.0803	0.0023	0.0043	3.40E-03	0.0018	0.0034	6.80E-09
214	0.02	0.000	0.044	0.0779	0.0022	0.0042	3.36E-03	0.0018	0.0034	6.80E-09
215	0.12	0.000	0.046	0.0838	0.0022	0.0041	3.31E-03	0.0018	0.0033	6.80E-09
216	0.00	0.000	0.064	0.0787	0.0021	0.0040	3.27E-03	0.0017	0.0033	6.80E-09
217	0.00	0.000	0.016	0.0774	0.0020	0.0039	3.23E-03	0.0017	0.0032	6.80E-09
218	0.81	0.000	0.066	0.1396	0.0020	0.0038	3.19E-03	0.0017	0.0032	6.80E-09
219	0.07	0.000	0.071	0.1394	0.0019	0.0037	3.15E-03	0.0017	0.0032	6.80E-09
220	0.26	0.000	0.189	0.1456	0.0019	0.0036	3.11E-03	0.0016	0.0031	6.80E-09
221	0.40	0.000	0.223	0.1600	0.0019	0.0035	3.07E-03	0.0016	0.0031	6.80E-09
222	0.00	0.000	0.099	0.1522	0.0018	0.0034	3.04E-03	0.0016	0.0031	6.80E-09
223	0.02	0.000	0.269	0.1314	0.0018	0.0034	3.00E-03	0.0016	0.0030	6.80E-09
224	0.65	0.000	0.092	0.1776	0.0018	0.0035	3.05E-03	0.0016	0.0030	6.80E-09
225	0.10	0.000	0.191	0.1703	0.0017	0.0032	2.93E-03	0.0016	0.0030	6.80E-09
226	0.10	0.000	0.132	0.1675	0.0016	0.0031	2.90E-03	0.0015	0.0029	6.80E-09
227	0.32	0.000	0.081	0.1871	0.0016	0.0030	2.84E-03	0.0015	0.0029	6.80E-09
228	0.34	0.000	0.262	0.1933	0.0015	0.0029	2.81E-03	0.0015	0.0028	6.80E-09
229	0.12	0.000	0.249	0.1827	0.0015	0.0029	2.78E-03	0.0015	0.0028	6.80E-09
230	0.00	0.000	0.201	0.1659	0.0017	0.0032	2.93E-03	0.0015	0.0029	6.80E-09
231	0.01	0.000	0.078	0.1601	0.0014	0.0027	2.69E-03	0.0015	0.0028	6.80E-09
232	0.00	0.000	0.162	0.1466	0.0014	0.0026	2.66E-03	0.0014	0.0027	6.80E-09
233	0.00	0.000	0.080	0.1399	0.0014	0.0026	2.64E-03	0.0014	0.0026	6.80E-09
234	0.01	0.000	0.086	0.1333	0.0013	0.0025	2.61E-03	0.0014	0.0026	6.80E-09
235	0.12	0.000	0.106	0.1349	0.0013	0.0025	2.58E-03	0.0014	0.0026	6.80E-09
236	0.00	0.000	0.236	0.1152	0.0013	0.0024	2.56E-03	0.0014	0.0026	6.80E-09
237	0.00	0.000	0.191	0.0993	0.0013	0.0024	2.53E-03	0.0013	0.0025	6.80E-09

238	0.00	0.000	0.218	0.0811	0.0012	0.0023	2.51E-03	0.0013	0.0025	6.80E-09
239	0.00	0.000	0.044	0.0773	0.0014	0.0027	2.66E-03	0.0014	0.0026	6.80E-09
240	0.00	0.000	0.004	0.0770	0.0012	0.0022	2.43E-03	0.0013	0.0025	6.80E-09
241	0.00	0.000	0.000	0.0770	0.0011	0.0022	2.41E-03	0.0013	0.0024	6.80E-09
242	0.00	0.000	0.000	0.0770	0.0011	0.0021	2.39E-03	0.0013	0.0024	6.80E-09
243	0.00	0.000	0.000	0.0770	0.0011	0.0021	2.37E-03	0.0012	0.0024	6.80E-09
244	0.00	0.000	0.000	0.0770	0.0011	0.0021	2.35E-03	0.0012	0.0024	6.80E-09
245	0.00	0.000	0.000	0.0770	0.0011	0.0020	2.33E-03	0.0012	0.0023	6.80E-09
246	0.09	0.000	0.039	0.0816	0.0010	0.0020	2.31E-03	0.0012	0.0023	6.80E-09
247	0.00	0.000	0.014	0.0804	0.0010	0.0020	2.29E-03	0.0012	0.0023	6.80E-09
248	0.00	0.000	0.028	0.0780	0.0010	0.0019	2.27E-03	0.0012	0.0023	6.80E-09
249	0.00	0.000	0.009	0.0773	0.0010	0.0019	2.25E-03	0.0012	0.0023	6.80E-09
250	0.00	0.000	0.002	0.0771	0.0010	0.0019	2.23E-03	0.0012	0.0022	6.80E-09
251	0.00	0.000	0.001	0.0770	0.0010	0.0018	2.21E-03	0.0012	0.0022	6.80E-09
252	0.00	0.000	0.000	0.0770	0.0009	0.0018	2.19E-03	0.0012	0.0022	6.80E-09
253	0.00	0.000	0.000	0.0770	0.0009	0.0018	2.17E-03	0.0011	0.0022	6.80E-09
254	0.00	0.000	0.000	0.0770	0.0009	0.0017	2.15E-03	0.0011	0.0022	6.80E-09
255	0.00	0.000	0.000	0.0770	0.0009	0.0017	2.13E-03	0.0011	0.0021	6.80E-09
256	0.00	0.000	0.000	0.0770	0.0009	0.0017	2.12E-03	0.0011	0.0021	6.80E-09
257	0.00	0.000	0.000	0.0770	0.0009	0.0016	2.10E-03	0.0011	0.0021	6.80E-09
258	0.00	0.000	0.000	0.0770	0.0009	0.0016	2.08E-03	0.0011	0.0021	6.80E-09
259	0.40	0.000	0.062	0.1054	0.0008	0.0016	2.07E-03	0.0011	0.0021	6.80E-09
260	0.69	0.000	0.056	0.1580	0.0008	0.0016	2.05E-03	0.0011	0.0021	6.80E-09
261	0.00	0.000	0.022	0.1562	0.0008	0.0015	2.03E-03	0.0011	0.0020	6.80E-09
262	0.31	0.000	0.066	0.1767	0.0008	0.0015	2.02E-03	0.0011	0.0020	6.80E-09
263	0.00	0.000	0.042	0.1732	0.0008	0.0015	2.00E-03	0.0011	0.0020	6.80E-09
264	0.00	0.000	0.092	0.1656	0.0008	0.0015	1.98E-03	0.0010	0.0020	6.80E-09
265	0.00	0.000	0.052	0.1613	0.0008	0.0014	1.97E-03	0.0010	0.0020	6.80E-09
266	0.00	0.000	0.053	0.1569	0.0007	0.0014	1.95E-03	0.0010	0.0020	6.80E-09
267	0.00	0.000	0.034	0.1540	0.0007	0.0014	1.94E-03	0.0010	0.0019	6.80E-09
268	0.00	0.000	0.040	0.1507	0.0007	0.0014	1.92E-03	0.0010	0.0019	6.80E-09
269	0.00	0.000	0.051	0.1464	0.0007	0.0014	1.91E-03	0.0010	0.0019	6.80E-09
270	0.00	0.000	0.048	0.1424	0.0007	0.0013	1.89E-03	0.0010	0.0019	6.80E-09
271	0.01	0.000	0.217	0.1251	0.0007	0.0013	1.88E-03	0.0010	0.0019	6.80E-09
272	0.00	0.000	0.138	0.1136	0.0007	0.0013	1.87E-03	0.0010	0.0019	6.80E-09

273		0.00	0.000	0.038	0.1104	0.0007	0.0013	1.85E-03	0.0010	0.0019	6.80E-09
274		0.00	0.000	0.017	0.1089	0.0007	0.0013	1.84E-03	0.0010	0.0018	6.80E-09
275		0.00	0.000	0.068	0.1033	0.0007	0.0012	1.82E-03	0.0010	0.0018	6.80E-09
276		0.00	0.000	0.062	0.0981	0.0006	0.0012	1.81E-03	0.0010	0.0018	6.80E-09
277		0.00	0.000	0.058	0.0933	0.0006	0.0012	1.80E-03	0.0009	0.0018	6.80E-09
278		0.00	0.000	0.023	0.0914	0.0006	0.0012	1.79E-03	0.0009	0.0018	6.80E-09
279		0.03	0.000	0.082	0.0867	0.0006	0.0012	1.77E-03	0.0009	0.0018	6.80E-09
280		0.00	0.000	0.023	0.0849	0.0006	0.0012	1.76E-03	0.0009	0.0018	6.80E-09
281		0.00	0.000	0.054	0.0804	0.0006	0.0011	1.75E-03	0.0009	0.0018	6.80E-09
282		0.00	0.000	0.024	0.0784	0.0006	0.0011	1.74E-03	0.0009	0.0017	6.80E-09
283		0.00	0.000	0.016	0.0770	0.0006	0.0011	1.72E-03	0.0009	0.0017	6.80E-09
284		0.08	0.000	0.038	0.0806	0.0006	0.0011	1.71E-03	0.0009	0.0017	6.80E-09
285		0.00	0.000	0.005	0.0802	0.0006	0.0011	1.70E-03	0.0009	0.0017	6.80E-09
286		0.00	0.000	0.019	0.0785	0.0006	0.0011	1.69E-03	0.0009	0.0017	6.80E-09
287		0.00	0.000	0.012	0.0775	0.0006	0.0011	1.68E-03	0.0009	0.0017	6.80E-09
288		0.00	0.000	0.005	0.0771	0.0005	0.0010	1.66E-03	0.0009	0.0017	6.80E-09
289		0.00	0.000	0.001	0.0770	0.0005	0.0010	1.65E-03	0.0009	0.0017	6.80E-09
290		0.00	0.000	0.000	0.0770	0.0005	0.0010	1.64E-03	0.0009	0.0016	6.80E-09
291		0.00	0.000	0.000	0.0770	0.0005	0.0010	1.63E-03	0.0009	0.0016	6.80E-09
292		0.00	0.000	0.000	0.0770	0.0005	0.0010	1.62E-03	0.0009	0.0016	6.80E-09
293		0.00	0.000	0.000	0.0770	0.0005	0.0010	1.61E-03	0.0008	0.0016	6.80E-09
294		0.00	0.000	0.000	0.0770	0.0005	0.0010	1.60E-03	0.0008	0.0016	6.80E-09
295		0.84	0.000	0.062	0.1422	0.0005	0.0009	1.59E-03	0.0008	0.0016	6.80E-09
296		0.59	0.000	0.143	0.1794	0.0005	0.0009	1.58E-03	0.0008	0.0016	6.80E-09
297		0.00	0.000	0.119	0.1694	0.0005	0.0009	1.57E-03	0.0008	0.0016	6.80E-09
298		0.12	0.000	0.134	0.1682	0.0005	0.0009	1.56E-03	0.0008	0.0016	6.80E-09
299		0.00	0.000	0.132	0.1573	0.0005	0.0009	1.55E-03	0.0008	0.0016	6.80E-09
300		0.00	0.000	0.107	0.1483	0.0005	0.0009	1.54E-03	0.0008	0.0015	6.80E-09
301		0.00	0.000	0.061	0.1433	0.0005	0.0009	1.53E-03	0.0008	0.0015	6.80E-09
302		0.00	0.000	0.084	0.1363	0.0005	0.0009	1.52E-03	0.0008	0.0015	6.80E-09
303		0.97	0.000	0.074	0.2112	0.0004	0.0009	1.51E-03	0.0008	0.0015	6.80E-09
304	*	0.62	0.000	0.025	0.2129	0.0004	0.0008	1.50E-03	0.0008	0.0015	6.80E-09
305	*	0.00	0.000	0.013	0.2145	0.0004	0.0008	1.49E-03	0.0008	0.0015	6.80E-09
306		0.00	0.000	0.000	0.2600	0.0004	0.0008	1.48E-03	0.0008	0.0015	6.80E-09
307		1.80	0.000	0.052	0.3791	0.0004	0.0008	1.47E-03	0.0008	0.0015	6.80E-09

308		0.00	0.000	0.029	0.2888	0.0005	0.0009	1.56E-03	0.0008	0.0015	6.80E-09
309		0.18	0.000	0.055	0.2881	0.0004	0.0008	1.45E-03	0.0008	0.0015	6.80E-09
310	*	0.00	0.000	0.025	0.2757	0.0004	0.0008	1.44E-03	0.0008	0.0014	6.80E-09
311		0.02	0.000	0.037	0.2684	0.0004	0.0008	1.43E-03	0.0008	0.0014	6.80E-09
312	*	0.03	0.000	0.026	0.2640	0.0005	0.0009	1.54E-03	0.0008	0.0015	6.80E-09
313	*	0.67	0.000	0.020	0.2613	0.0006	0.0012	1.75E-03	0.0009	0.0017	6.80E-09
314	*	0.00	0.000	0.009	0.2599	0.0007	0.0013	1.84E-03	0.0009	0.0018	6.80E-09
315	*	1.04	0.000	0.000	0.2559	0.0006	0.0012	1.81E-03	0.0010	0.0018	6.80E-09
316	*	0.00	0.000	0.023	0.2514	0.0006	0.0012	1.79E-03	0.0009	0.0018	6.80E-09
317	*	0.00	0.000	0.023	0.2478	0.0006	0.0012	1.76E-03	0.0009	0.0018	6.80E-09
318		0.00	0.000	0.000	0.3370	0.0006	0.0011	1.73E-03	0.0009	0.0017	6.80E-09
319		0.00	0.000	0.000	0.3193	0.0005	0.0009	1.24E-03	0.0008	0.0015	6.80E-09
320	*	0.00	0.000	0.000	0.2932	0.0006	0.0011	1.72E-03	0.0008	0.0015	6.80E-09
321		0.00	0.000	0.031	0.2758	0.0006	0.0011	1.69E-03	0.0009	0.0017	6.80E-09
322		0.00	0.000	0.025	0.2737	0.0005	0.0010	1.67E-03	0.0009	0.0017	6.80E-09
323		0.00	0.000	0.022	0.2718	0.0001	0.0002	2.79E-04	0.0005	0.0009	6.80E-09
324	*	0.00	0.000	0.000	0.2718	0.0000	0.0000	0.00E+00	0.0001	0.0001	6.80E-09
325	*	0.41	0.000	0.016	0.2723	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
326	*	0.00	0.000	0.026	0.2660	0.0007	0.0013	9.16E-04	0.0003	0.0005	6.80E-09
327		0.05	0.000	0.030	0.2864	0.0026	0.0049	3.64E-03	0.0013	0.0025	6.80E-09
328		0.01	0.000	0.097	0.2762	0.0018	0.0035	2.66E-03	0.0016	0.0030	6.80E-09
329		0.75	0.000	0.055	0.3240	0.0000	0.0000	4.34E-19	0.0006	0.0011	6.80E-09
330		0.13	0.000	0.057	0.2982	0.0019	0.0036	1.55E-03	0.0005	0.0009	6.80E-09
331		0.00	0.000	0.054	0.2759	0.0004	0.0006	5.89E-04	0.0005	0.0010	6.80E-09
332		0.00	0.000	0.063	0.2575	0.0000	0.0000	0.00E+00	0.0001	0.0003	6.80E-09
333		0.00	0.000	0.045	0.2538	0.0037	0.0070	2.85E-03	0.0009	0.0016	6.80E-09
334		0.84	0.000	0.065	0.3188	0.0421	0.0802	1.46E-02	0.0050	0.0096	6.80E-09
335		0.00	0.000	0.090	0.2864	0.0806	0.1533	2.06E-02	0.0094	0.0179	6.80E-09
336		0.00	0.000	0.033	0.2661	0.0667	0.1270	1.88E-02	0.0102	0.0195	6.80E-09
337		0.00	0.000	0.030	0.2631	0.0678	0.1290	1.88E-02	0.0099	0.0188	6.80E-09
338		0.00	0.000	0.025	0.2610	0.0150	0.0285	8.63E-03	0.0068	0.0130	6.80E-09
339		0.00	0.000	0.028	0.2587	0.0312	0.0594	1.27E-02	0.0058	0.0111	6.80E-09
340		0.00	0.000	0.034	0.2558	0.0429	0.0817	1.50E-02	0.0073	0.0139	6.80E-09
341	*	0.00	0.000	0.000	0.2558	0.0600	0.1142	1.78E-02	0.0087	0.0166	6.80E-09
342	*	0.00	0.000	0.000	0.2558	0.0363	0.0691	1.36E-02	0.0081	0.0153	6.80E-09

343	*		0.00	0.000	0.000	0.2558	0.0037	0.0069	3.07E-03	0.0040	0.0076	6.80E-09
344	*		0.00	0.000	0.000	0.2558	0.0122	0.0232	7.35E-03	0.0030	0.0057	6.80E-09
345	*		0.00	0.000	0.000	0.2558	0.0506	0.0962	1.62E-02	0.0065	0.0124	6.80E-09
346	*		0.00	0.000	0.022	0.2540	0.0777	0.1479	2.03E-02	0.0097	0.0184	6.80E-09
347	*		0.00	0.000	0.022	0.2522	0.0857	0.1632	2.14E-02	0.0109	0.0208	6.80E-09
348			0.00	0.000	0.044	0.2485	0.0851	0.1620	2.13E-02	0.0112	0.0213	6.80E-09
349	*		0.18	0.000	0.025	0.2501	0.0819	0.1558	2.09E-02	0.0111	0.0210	6.80E-09
350			0.00	0.000	0.043	0.2581	0.0780	0.1485	2.03E-02	0.0108	0.0206	6.80E-09
351	*		0.00	0.000	0.020	0.2522	0.0745	0.1417	1.99E-02	0.0105	0.0201	6.80E-09
352			0.00	0.000	0.028	0.2467	0.0662	0.1260	1.87E-02	0.0101	0.0192	6.80E-09
353	*		0.00	0.000	0.022	0.2413	0.0737	0.1402	1.98E-02	0.0102	0.0193	6.80E-09
354	*		0.00	0.000	0.021	0.2356	0.0712	0.1354	1.94E-02	0.0103	0.0195	6.80E-09
355	*		0.29	0.000	0.010	0.2372	0.0619	0.1177	1.81E-02	0.0098	0.0186	6.80E-09
356	*		0.00	0.000	0.006	0.2389	0.0648	0.1234	1.85E-02	0.0096	0.0183	6.80E-09
357	*		0.00	0.000	0.003	0.2405	0.0559	0.1064	1.72E-02	0.0093	0.0177	6.80E-09
358	*	*	0.00	0.000	0.002	0.2405	0.0350	0.0667	1.33E-02	0.0079	0.0150	6.80E-09
359	*	*	0.00	0.000	0.002	0.2405	0.0228	0.0434	1.09E-02	0.0063	0.0120	6.80E-09
360	*	*	0.00	0.000	0.006	0.2405	0.0449	0.0855	1.51E-02	0.0070	0.0133	6.80E-09
361	*	*	0.00	0.000	0.010	0.2405	0.0667	0.1269	1.88E-02	0.0090	0.0172	6.80E-09
362	*	*	0.00	0.000	0.013	0.2405	0.0565	0.1076	1.73E-02	0.0094	0.0178	6.80E-09
363		*	0.00	0.000	0.017	0.2535	0.0450	0.0857	1.54E-02	0.0085	0.0162	6.80E-09
364		*	0.00	0.000	0.000	0.2535	0.0364	0.0693	1.38E-02	0.0076	0.0145	6.80E-09
365		*	0.00	0.000	0.000	0.2535	0.0302	0.0574	1.25E-02	0.0069	0.0131	6.80E-09

* = Frozen (air or soil)

Annual Totals for Year 4			
	inches	cubic feet	percent
Precipitation	37.88	137,510.1	100.00
Runoff	0.000	0.0000	0.00
Evapotranspiration	27.430	99,570.6	72.41
Drainage Collected from Layer 3	8.5827	31,155.4	22.66
Percolation/Leakage through Layer 4	2.126535	7,719.3	5.61
Average Head on Top of Layer 4	0.0123	---	---

Drainage Collected from Layer 5	2.1251	7,714.0	5.61
Percolation/Leakage through Layer 7	0.000002	0.0090	0.00
Average Head on Top of Layer 6	0.0031	---	---
Change in Water Storage	-0.2562	-929.9	-0.68
Soil Water at Start of Year	38.9623	141,433.1	102.85
Soil Water at End of Year	39.0160	141,627.9	102.99
Snow Water at Start of Year	0.3098	1,124.7	0.82
Snow Water at End of Year	0.0000	0.0000	0.00
Annual Water Budget Balance	0.0000	0.0000	0.00

Daily Output for Year 5

Column key: Head #1: drainage from Layer 4 | Head #2: drainage from Layer 6
Drain #1: drainage from Layer 3 | Drain #2: drainage from Layer 5
Leak #1: leakage thru Layer 4 | Leak #2: leakage thru Layer 7

Title: Millersville Cell 9 - Open Cell Condition
Simulated On: 6/9/2024 11:31

Day	Freezing Status* Air	Freezing Status* Soil	Rain (inches)	Runoff (inches)	ET (inches)	Evap. Zone Water (in/in)	Head #1 (inches)	Drain #1 (inches)	Leak #1 (inches)	Head #2 (inches)	Drain #2 (inches)	Leak #2 (inches)
1		*	0.00	0.000	0.000	0.2535	0.0220	0.0419	1.07E-02	0.0058	0.0111	6.80E-09
2		*	0.00	0.000	0.000	0.2535	0.0192	0.0366	9.98E-03	0.0054	0.0103	6.80E-09
3		*	0.00	0.000	0.000	0.2535	0.0170	0.0324	9.38E-03	0.0051	0.0096	6.80E-09
4		*	0.00	0.000	0.000	0.2535	0.0152	0.0289	8.86E-03	0.0048	0.0091	6.80E-09
5	*	*	0.00	0.000	0.000	0.2535	0.0137	0.0260	8.41E-03	0.0045	0.0086	6.80E-09
6	*	*	0.00	0.000	0.000	0.2535	0.0124	0.0236	8.00E-03	0.0043	0.0082	6.80E-09
7		*	0.64	0.000	0.012	0.3058	0.0113	0.0216	7.64E-03	0.0041	0.0078	6.80E-09
8		*	0.08	0.000	0.012	0.3119	0.0104	0.0198	7.32E-03	0.0039	0.0075	6.80E-09
9	*	*	0.00	0.000	0.000	0.3119	0.0096	0.0183	7.03E-03	0.0038	0.0072	6.80E-09
10		*	0.19	0.000	0.012	0.3266	0.0089	0.0169	6.76E-03	0.0036	0.0069	6.80E-09
11	*	*	0.27	0.000	0.021	0.3266	0.0083	0.0157	6.52E-03	0.0035	0.0066	6.80E-09
12		*	0.00	0.000	0.023	0.3451	0.0077	0.0147	6.30E-03	0.0034	0.0064	6.80E-09
13	*	*	0.00	0.000	0.000	0.3451	0.0072	0.0137	6.09E-03	0.0032	0.0062	6.80E-09
14	*	*	0.01	0.000	0.005	0.3451	0.0068	0.0129	5.90E-03	0.0031	0.0060	6.80E-09
15	*	*	0.01	0.000	0.008	0.3451	0.0064	0.0121	5.72E-03	0.0030	0.0058	6.80E-09
16		*	0.13	0.000	0.011	0.3551	0.0060	0.0114	5.56E-03	0.0030	0.0056	6.80E-09
17	*	*	0.32	0.000	0.025	0.3551	0.0057	0.0108	5.40E-03	0.0029	0.0055	6.80E-09
18	*	*	0.00	0.000	0.011	0.3551	0.0054	0.0103	5.26E-03	0.0028	0.0053	6.80E-09
19	*	*	0.00	0.000	0.006	0.3551	0.0051	0.0097	5.12E-03	0.0027	0.0052	6.80E-09
20	*	*	0.00	0.000	0.000	0.3551	0.0049	0.0092	4.99E-03	0.0027	0.0050	6.80E-09
21		*	0.20	0.000	0.000	0.3950	0.0046	0.0088	4.87E-03	0.0026	0.0049	6.80E-09
22		*	0.17	0.000	0.011	0.4079	0.0044	0.0084	4.76E-03	0.0025	0.0048	6.80E-09
23		*	0.26	0.000	0.010	0.4286	0.0042	0.0080	4.65E-03	0.0025	0.0047	6.80E-09
24	*	*	0.11	0.000	0.029	0.4286	0.0040	0.0077	4.54E-03	0.0024	0.0046	6.80E-09
25	*	*	0.59	0.000	0.010	0.4286	0.0039	0.0073	4.45E-03	0.0024	0.0045	6.80E-09
26	*	*	0.25	0.000	0.017	0.4286	0.0037	0.0070	4.35E-03	0.0023	0.0044	6.80E-09
27	*	*	0.00	0.000	0.018	0.4286	0.0036	0.0068	4.26E-03	0.0023	0.0043	6.80E-09

28	*	*	0.00	0.000	0.018	0.4286	0.0034	0.0065	4.18E-03	0.0022	0.0042	6.80E-09
29	*	*	0.00	0.000	0.008	0.4286	0.0033	0.0062	4.10E-03	0.0022	0.0041	6.80E-09
30	*	*	0.16	0.000	0.011	0.4286	0.0032	0.0060	4.02E-03	0.0021	0.0041	6.80E-09
31	*	*	0.00	0.000	0.018	0.4286	0.0030	0.0058	3.95E-03	0.0021	0.0040	6.80E-09
32	*	*	0.06	0.000	0.008	0.4286	0.0029	0.0056	3.87E-03	0.0021	0.0039	6.80E-09
33	*	*	0.09	0.000	0.000	0.4286	0.0028	0.0054	3.80E-03	0.0020	0.0038	6.80E-09
34	*	*	0.51	0.000	0.000	0.4286	0.0027	0.0052	3.74E-03	0.0020	0.0038	6.80E-09
35	*	*	1.17	0.000	0.000	0.4286	0.0026	0.0050	3.68E-03	0.0019	0.0037	6.80E-09
36	*	*	0.02	0.000	0.013	0.4286	0.0026	0.0049	3.61E-03	0.0019	0.0036	6.80E-09
37	*	*	0.01	0.000	0.008	0.4286	0.0025	0.0047	3.55E-03	0.0019	0.0036	6.80E-09
38	*	*	0.19	0.000	0.010	0.4286	0.0024	0.0046	3.50E-03	0.0019	0.0035	6.80E-09
39	*	*	0.07	0.000	0.012	0.4286	0.0023	0.0044	3.44E-03	0.0018	0.0035	6.80E-09
40	*	*	0.25	0.000	0.010	0.4286	0.0022	0.0043	3.39E-03	0.0018	0.0034	6.80E-09
41		*	0.33	0.000	0.000	0.4442	0.0022	0.0042	3.34E-03	0.0018	0.0034	6.80E-09
42	*	*	0.30	0.000	0.005	0.4474	0.0021	0.0040	3.29E-03	0.0017	0.0033	6.80E-09
43		*	0.00	0.000	0.000	0.4756	0.0021	0.0039	3.24E-03	0.0017	0.0033	6.80E-09
44	*	*	0.02	0.000	0.011	0.4788	0.0020	0.0038	3.19E-03	0.0017	0.0032	6.80E-09
45	*	*	0.55	0.000	0.009	0.4788	0.0019	0.0037	3.15E-03	0.0017	0.0032	6.80E-09
46	*	*	0.00	0.000	0.020	0.4788	0.0019	0.0036	3.11E-03	0.0016	0.0031	6.80E-09
47		*	0.00	0.000	0.016	0.4871	0.0018	0.0035	3.06E-03	0.0016	0.0031	6.80E-09
48	*	*	0.00	0.000	0.014	0.4892	0.0018	0.0034	3.02E-03	0.0016	0.0030	6.80E-09
49	*	*	0.08	0.000	0.009	0.4892	0.0017	0.0033	2.98E-03	0.0016	0.0030	6.80E-09
50	*	*	0.10	0.000	0.006	0.4892	0.0017	0.0032	2.94E-03	0.0016	0.0030	6.80E-09
51	*	*	0.38	0.000	0.000	0.4892	0.0017	0.0031	2.91E-03	0.0015	0.0029	6.80E-09
52		*	0.01	0.000	0.000	0.5965	0.0016	0.0031	2.87E-03	0.0015	0.0029	6.80E-09
53		*	0.01	0.000	0.000	0.6710	0.0016	0.0030	2.83E-03	0.0015	0.0028	6.80E-09
54	*	*	0.00	0.000	0.015	0.6710	0.0015	0.0029	2.80E-03	0.0015	0.0028	6.80E-09
55	*	*	0.00	0.000	0.008	0.6710	0.0020	0.0038	3.17E-03	0.0016	0.0030	6.80E-09
56		*	0.00	0.000	0.000	0.6710	0.0022	0.0042	3.36E-03	0.0017	0.0033	6.80E-09
57		*	0.00	0.000	0.000	0.6710	0.0022	0.0042	3.34E-03	0.0018	0.0033	6.80E-09
58	*	*	0.00	0.000	0.017	0.6710	0.0016	0.0029	2.41E-03	0.0015	0.0028	6.80E-09
59	*	*	0.36	0.000	0.010	0.6710	0.0000	0.0000	9.63E-05	0.0006	0.0011	6.80E-09
60	*	*	0.25	0.000	0.019	0.6710	0.0001	0.0002	4.76E-04	0.0002	0.0003	6.80E-09
61	*	*	0.22	0.000	0.000	0.6710	0.0022	0.0041	3.31E-03	0.0011	0.0021	6.80E-09
62	*	*	0.10	0.000	0.000	0.6710	0.0002	0.0003	4.63E-04	0.0009	0.0016	6.80E-09

63	*	*	0.00	0.000	0.019	0.6710	0.0021	0.0041	3.31E-03	0.0011	0.0021	6.80E-09
64	*	*	0.00	0.000	0.010	0.6710	0.0021	0.0040	3.27E-03	0.0017	0.0032	6.80E-09
65	*	*	0.01	0.000	0.012	0.6710	0.0020	0.0038	3.18E-03	0.0017	0.0032	6.80E-09
66	*	*	0.32	0.000	0.007	0.6710	0.0019	0.0036	3.09E-03	0.0016	0.0031	6.80E-09
67	*	*	0.00	0.000	0.009	0.6710	0.0018	0.0034	3.01E-03	0.0016	0.0030	6.80E-09
68	*	*	0.14	0.000	0.010	0.6710	0.0017	0.0032	2.93E-03	0.0016	0.0030	6.80E-09
69	*	*	0.07	0.000	0.005	0.6710	0.0004	0.0007	6.61E-04	0.0009	0.0016	6.80E-09
70	*	*	0.00	0.000	0.003	0.6710	0.0000	0.0000	0.00E+00	0.0002	0.0003	6.80E-09
71	*	*	0.00	0.000	0.000	0.6710	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
72	*	*	0.43	0.000	0.000	0.6710	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
73	*	*	0.00	0.000	0.000	0.6710	0.0000	0.0000	0.00E+00	0.0000	0.0000	3.26E-09
74		*	0.00	0.000	0.021	0.6710	0.0055	0.0105	4.93E-03	0.0015	0.0028	5.10E-09
75	*	*	0.00	0.000	0.029	0.6710	0.0076	0.0145	6.12E-03	0.0029	0.0055	6.80E-09
76		*	0.00	0.000	0.000	0.6710	0.0123	0.0234	7.84E-03	0.0037	0.0071	6.80E-09
77	*	*	0.00	0.000	0.028	0.6710	0.0086	0.0163	5.99E-03	0.0035	0.0068	6.80E-09
78	*	*	0.00	0.000	0.030	0.6710	0.0045	0.0087	4.76E-03	0.0028	0.0053	6.80E-09
79	*	*	0.20	0.000	0.018	0.6710	0.0102	0.0194	7.19E-03	0.0032	0.0062	6.80E-09
80		*	0.09	0.000	0.000	0.6710	0.0190	0.0361	9.90E-03	0.0046	0.0087	6.80E-09
81		*	1.63	0.000	0.000	0.6710	0.0093	0.0176	6.72E-03	0.0042	0.0080	6.80E-09
82		*	0.08	0.000	0.005	0.6710	0.0163	0.0311	9.19E-03	0.0043	0.0082	6.80E-09
83		*	0.15	0.000	0.005	0.6710	0.0011	0.0021	1.36E-03	0.0024	0.0047	6.80E-09
84		*	0.00	0.000	0.002	0.6710	0.0035	0.0067	3.95E-03	0.0016	0.0030	6.80E-09
85		*	0.08	0.000	0.005	0.6710	0.0081	0.0154	6.38E-03	0.0028	0.0053	6.80E-09
86	*	*	0.14	0.000	0.077	0.6710	0.0210	0.0399	1.04E-02	0.0046	0.0087	6.80E-09
87	*	*	0.40	0.000	0.020	0.6710	0.0177	0.0336	9.56E-03	0.0052	0.0099	6.80E-09
88	*	*	0.00	0.000	0.024	0.6710	0.0049	0.0093	3.56E-03	0.0032	0.0061	6.80E-09
89	*	*	0.00	0.000	0.021	0.6710	0.0000	0.0000	0.00E+00	0.0008	0.0016	6.80E-09
90	*	*	0.00	0.000	0.017	0.6710	0.0174	0.0332	6.49E-03	0.0020	0.0038	6.80E-09
91		*	0.00	0.000	0.010	0.6710	0.1270	0.2417	2.60E-02	0.0092	0.0176	6.80E-09
92		*	0.65	0.000	0.005	0.6710	0.1587	0.3021	2.93E-02	0.0145	0.0276	6.80E-09
93		*	0.00	0.000	0.000	0.6710	0.1421	0.2705	2.76E-02	0.0149	0.0283	6.80E-09
94	*	*	0.00	0.000	0.000	0.6710	0.1641	0.3123	2.98E-02	0.0152	0.0289	6.80E-09
95		*	0.00	0.000	0.000	0.6710	0.1551	0.2952	2.89E-02	0.0154	0.0293	6.80E-09
96		*	0.04	0.000	0.005	0.6710	0.1129	0.2148	2.46E-02	0.0139	0.0264	6.80E-09
97		*	0.01	0.000	0.004	0.6710	0.0808	0.1538	2.07E-02	0.0118	0.0224	6.80E-09

98		0.14	0.000	0.054	0.2597	0.0518	0.0986	1.64E-02	0.0096	0.0183	6.80E-09
99		0.00	0.000	0.119	0.2407	0.0139	0.0265	7.62E-03	0.0060	0.0114	6.80E-09
100		0.00	0.000	0.151	0.2177	0.0935	0.1779	2.22E-02	0.0085	0.0161	6.80E-09
101		0.11	0.000	0.186	0.2102	0.0728	0.1385	1.88E-02	0.0105	0.0200	6.80E-09
102		0.00	0.000	0.075	0.1997	0.0964	0.1834	1.95E-02	0.0101	0.0192	6.80E-09
103		0.00	0.000	0.102	0.1882	5.2236	0.4814	1.94E-01	0.0627	0.1194	8.53E-09
104		0.03	0.000	0.325	0.1636	3.9208	0.4750	1.53E-01	0.0881	0.1676	9.99E-09
105		0.30	0.000	0.386	0.1561	2.6204	0.4486	1.12E-01	0.0683	0.1299	7.74E-09
106		0.00	0.000	0.323	0.1292	0.2273	0.4326	3.53E-02	0.0360	0.0685	6.80E-09
107		0.01	0.000	0.177	0.1151	0.2303	0.4383	3.55E-02	0.0192	0.0366	6.80E-09
108		0.00	0.000	0.199	0.0985	0.2249	0.4280	3.51E-02	0.0186	0.0353	6.80E-09
109		0.00	0.000	0.083	0.0916	0.2033	0.3868	3.33E-02	0.0179	0.0341	6.80E-09
110		0.00	0.000	0.068	0.0860	0.1820	0.3463	3.14E-02	0.0169	0.0323	6.80E-09
111		0.00	0.000	0.056	0.0813	0.1638	0.3117	2.98E-02	0.0160	0.0305	6.80E-09
112		0.00	0.000	0.050	0.0771	0.1486	0.2827	2.83E-02	0.0152	0.0290	6.80E-09
113		0.09	0.000	0.008	0.0838	0.1357	0.2582	2.70E-02	0.0145	0.0276	6.80E-09
114		1.26	0.000	0.021	0.1870	0.1247	0.2373	2.59E-02	0.0139	0.0264	6.80E-09
115		0.21	0.000	0.074	0.1980	0.1152	0.2192	2.48E-02	0.0133	0.0253	6.80E-09
116		0.04	0.000	0.059	0.1962	0.1069	0.2035	2.39E-02	0.0128	0.0243	6.80E-09
117		0.00	0.000	0.140	0.1845	0.0997	0.1897	2.31E-02	0.0123	0.0234	6.80E-09
118		0.04	0.000	0.059	0.1827	0.0933	0.1775	2.23E-02	0.0119	0.0226	6.80E-09
119	*	0.00	0.000	0.048	0.1787	0.0876	0.1666	2.16E-02	0.0115	0.0219	6.80E-09
120		0.33	0.000	0.209	0.1888	0.0824	0.1569	2.09E-02	0.0111	0.0212	6.80E-09
121		0.27	0.000	0.199	0.1949	0.0778	0.1482	2.03E-02	0.0108	0.0206	6.80E-09
122		0.11	0.000	0.071	0.1982	0.0737	0.1402	1.98E-02	0.0105	0.0200	6.80E-09
123		0.00	0.000	0.065	0.1928	0.0699	0.1331	1.92E-02	0.0102	0.0195	6.80E-09
124		0.00	0.000	0.135	0.1815	0.0665	0.1265	1.87E-02	0.0100	0.0190	6.80E-09
125		0.61	0.000	0.149	0.2203	0.0654	0.1244	1.86E-02	0.0098	0.0186	6.80E-09
126	*	0.34	0.000	0.027	0.2219	0.0488	0.0929	1.60E-02	0.0090	0.0171	6.80E-09
127		0.00	0.000	0.078	0.2398	0.0631	0.1200	1.82E-02	0.0091	0.0173	6.80E-09
128		0.00	0.000	0.169	0.2257	0.0787	0.1498	2.04E-02	0.0102	0.0195	6.80E-09
129		0.00	0.000	0.211	0.2082	0.0769	0.1463	2.02E-02	0.0106	0.0202	6.80E-09
130		0.41	0.000	0.302	0.2171	0.0590	0.1123	1.76E-02	0.0098	0.0187	6.80E-09
131		0.02	0.000	0.264	0.1967	0.0456	0.0869	1.55E-02	0.0086	0.0164	6.80E-09
132		0.00	0.000	0.187	0.1810	0.0365	0.0696	1.38E-02	0.0076	0.0146	6.80E-09

133	0.00	0.000	0.098	0.1729	0.0302	0.0574	1.25E-02	0.0069	0.0131	6.80E-09
134	0.00	0.000	0.154	0.1600	0.0255	0.0485	1.15E-02	0.0063	0.0120	6.80E-09
135	0.00	0.000	0.202	0.1432	0.0219	0.0417	1.07E-02	0.0058	0.0110	6.80E-09
136	0.03	0.000	0.200	0.1289	0.0191	0.0364	9.96E-03	0.0054	0.0103	6.80E-09
137	0.00	0.000	0.217	0.1108	0.0169	0.0322	9.36E-03	0.0051	0.0096	6.80E-09
138	0.02	0.000	0.067	0.1073	0.0151	0.0288	8.84E-03	0.0048	0.0091	6.80E-09
139	0.08	0.000	0.087	0.1067	0.0136	0.0259	8.39E-03	0.0045	0.0086	6.80E-09
140	0.36	0.000	0.097	0.1288	0.0124	0.0235	7.99E-03	0.0043	0.0082	6.80E-09
141	0.19	0.000	0.114	0.1349	0.0113	0.0215	7.63E-03	0.0041	0.0078	6.80E-09
142	0.00	0.000	0.108	0.1262	0.0104	0.0197	7.31E-03	0.0039	0.0074	6.80E-09
143	0.01	0.000	0.242	0.1067	0.0096	0.0182	7.02E-03	0.0038	0.0071	6.80E-09
144	0.00	0.000	0.108	0.0977	0.0089	0.0168	6.75E-03	0.0036	0.0069	6.80E-09
145	0.30	0.000	0.086	0.1155	0.0082	0.0157	6.51E-03	0.0035	0.0066	6.80E-09
146	0.00	0.000	0.111	0.1062	0.0077	0.0146	6.29E-03	0.0034	0.0064	6.80E-09
147	0.00	0.000	0.078	0.0998	0.0072	0.0137	6.08E-03	0.0032	0.0062	6.80E-09
148	0.12	0.000	0.117	0.0999	0.0068	0.0129	5.89E-03	0.0031	0.0060	6.80E-09
149	0.52	0.000	0.129	0.1329	0.0064	0.0121	5.71E-03	0.0030	0.0058	6.80E-09
150	0.00	0.000	0.103	0.1243	0.0060	0.0114	5.55E-03	0.0030	0.0056	6.80E-09
151	0.00	0.000	0.096	0.1163	0.0057	0.0108	5.39E-03	0.0029	0.0055	6.80E-09
152	0.00	0.000	0.152	0.1036	0.0054	0.0102	5.25E-03	0.0028	0.0053	6.80E-09
153	0.00	0.000	0.223	0.0851	0.0051	0.0097	5.11E-03	0.0027	0.0052	6.80E-09
154	0.00	0.000	0.084	0.0781	0.0048	0.0092	4.99E-03	0.0026	0.0050	6.80E-09
155	0.00	0.000	0.010	0.0773	0.0046	0.0088	4.86E-03	0.0026	0.0049	6.80E-09
156	0.48	0.000	0.047	0.1133	0.0044	0.0084	4.75E-03	0.0025	0.0048	6.80E-09
157	0.00	0.000	0.093	0.1056	0.0042	0.0080	4.64E-03	0.0025	0.0047	6.80E-09
158	0.00	0.000	0.102	0.0971	0.0040	0.0077	4.54E-03	0.0024	0.0046	6.80E-09
159	0.00	0.000	0.064	0.0922	0.0039	0.0073	4.44E-03	0.0024	0.0045	6.80E-09
160	0.16	0.000	0.152	0.0926	0.0037	0.0070	4.35E-03	0.0023	0.0044	6.80E-09
161	0.00	0.000	0.100	0.0844	0.0035	0.0067	4.26E-03	0.0023	0.0043	6.80E-09
162	0.00	0.000	0.073	0.0784	0.0034	0.0065	4.17E-03	0.0022	0.0042	6.80E-09
163	0.00	0.000	0.011	0.0774	0.0033	0.0062	4.09E-03	0.0022	0.0041	6.80E-09
164	0.02	0.000	0.029	0.0771	0.0032	0.0060	4.02E-03	0.0021	0.0040	6.80E-09
165	0.00	0.000	0.001	0.0770	0.0030	0.0058	3.94E-03	0.0021	0.0040	6.80E-09
166	0.00	0.000	0.000	0.0770	0.0029	0.0056	3.87E-03	0.0020	0.0039	6.80E-09
167	0.00	0.000	0.000	0.0770	0.0028	0.0054	3.80E-03	0.0020	0.0038	6.80E-09

168	0.00	0.000	0.000	0.0770	0.0027	0.0052	3.74E-03	0.0020	0.0038	6.80E-09
169	0.00	0.000	0.000	0.0770	0.0026	0.0050	3.67E-03	0.0019	0.0037	6.80E-09
170	0.00	0.000	0.000	0.0770	0.0026	0.0049	3.61E-03	0.0019	0.0036	6.80E-09
171	0.00	0.000	0.000	0.0770	0.0025	0.0047	3.55E-03	0.0019	0.0036	6.80E-09
172	0.00	0.000	0.000	0.0770	0.0024	0.0045	3.50E-03	0.0018	0.0035	6.80E-09
173	0.61	0.000	0.059	0.1230	0.0023	0.0044	3.44E-03	0.0018	0.0035	6.80E-09
174	0.03	0.000	0.201	0.1088	0.0022	0.0043	3.39E-03	0.0018	0.0034	6.80E-09
175	0.00	0.000	0.226	0.0900	0.0022	0.0041	3.34E-03	0.0018	0.0034	6.80E-09
176	0.21	0.000	0.165	0.0935	0.0021	0.0040	3.29E-03	0.0017	0.0033	6.80E-09
177	0.19	0.000	0.097	0.1009	0.0021	0.0039	3.24E-03	0.0017	0.0033	6.80E-09
178	0.08	0.000	0.145	0.0952	0.0020	0.0038	3.19E-03	0.0017	0.0032	6.80E-09
179	0.16	0.000	0.188	0.0927	0.0019	0.0037	3.15E-03	0.0017	0.0032	6.80E-09
180	0.00	0.000	0.131	0.0819	0.0019	0.0036	3.10E-03	0.0016	0.0031	6.80E-09
181	0.00	0.000	0.043	0.0783	0.0018	0.0035	3.06E-03	0.0016	0.0031	6.80E-09
182	0.00	0.000	0.011	0.0774	0.0018	0.0034	3.02E-03	0.0016	0.0030	6.80E-09
183	0.00	0.000	0.003	0.0771	0.0018	0.0035	3.05E-03	0.0016	0.0030	6.80E-09
184	0.00	0.000	0.001	0.0770	0.0017	0.0032	2.95E-03	0.0016	0.0030	6.80E-09
185	0.00	0.000	0.000	0.0770	0.0016	0.0031	2.89E-03	0.0015	0.0029	6.80E-09
186	0.46	0.000	0.125	0.1050	0.0016	0.0030	2.86E-03	0.0015	0.0029	6.80E-09
187	0.07	0.000	0.133	0.0996	0.0016	0.0030	2.82E-03	0.0015	0.0028	6.80E-09
188	0.00	0.000	0.187	0.0841	0.0015	0.0029	2.79E-03	0.0015	0.0028	6.80E-09
189	0.00	0.000	0.066	0.0786	0.0015	0.0028	2.75E-03	0.0015	0.0028	6.80E-09
190	0.00	0.000	0.020	0.0773	0.0015	0.0028	2.72E-03	0.0014	0.0027	6.80E-09
191	0.00	0.000	0.002	0.0771	0.0014	0.0027	2.69E-03	0.0014	0.0027	6.80E-09
192	0.19	0.000	0.030	0.0903	0.0014	0.0026	2.66E-03	0.0014	0.0027	6.80E-09
193	0.00	0.000	0.114	0.0808	0.0014	0.0026	2.63E-03	0.0014	0.0026	6.80E-09
194	0.00	0.000	0.034	0.0779	0.0013	0.0025	2.60E-03	0.0014	0.0026	6.80E-09
195	0.00	0.000	0.008	0.0772	0.0013	0.0025	2.57E-03	0.0014	0.0026	6.80E-09
196	0.00	0.000	0.002	0.0771	0.0013	0.0024	2.54E-03	0.0013	0.0026	6.80E-09
197	0.24	0.000	0.041	0.0933	0.0012	0.0024	2.52E-03	0.0013	0.0025	6.80E-09
198	0.04	0.000	0.051	0.0924	0.0012	0.0023	2.49E-03	0.0013	0.0025	6.80E-09
199	0.00	0.000	0.101	0.0839	0.0012	0.0023	2.46E-03	0.0013	0.0025	6.80E-09
200	0.00	0.000	0.065	0.0785	0.0012	0.0022	2.44E-03	0.0013	0.0024	6.80E-09
201	0.00	0.000	0.013	0.0774	0.0011	0.0022	2.41E-03	0.0013	0.0024	6.80E-09
202	0.00	0.000	0.003	0.0771	0.0011	0.0021	2.39E-03	0.0013	0.0024	6.80E-09

203	0.00	0.000	0.001	0.0770	0.0011	0.0021	2.36E-03	0.0012	0.0024	6.80E-09
204	0.39	0.000	0.056	0.1053	0.0011	0.0020	2.34E-03	0.0012	0.0024	6.80E-09
205	0.48	0.000	0.138	0.1335	0.0011	0.0020	2.32E-03	0.0012	0.0023	6.80E-09
206	0.00	0.000	0.090	0.1261	0.0010	0.0020	2.29E-03	0.0012	0.0023	6.80E-09
207	0.00	0.000	0.129	0.1153	0.0010	0.0019	2.27E-03	0.0012	0.0023	6.80E-09
208	1.17	0.000	0.096	0.2045	0.0010	0.0019	2.25E-03	0.0012	0.0023	6.80E-09
209	0.00	0.000	0.319	0.1779	0.0010	0.0019	2.23E-03	0.0012	0.0022	6.80E-09
210	0.00	0.000	0.284	0.1542	0.0010	0.0018	2.21E-03	0.0012	0.0022	6.80E-09
211	0.02	0.000	0.121	0.1461	0.0009	0.0018	2.19E-03	0.0012	0.0022	6.80E-09
212	0.00	0.000	0.218	0.1279	0.0009	0.0018	2.17E-03	0.0011	0.0022	6.80E-09
213	0.00	0.000	0.094	0.1203	0.0009	0.0017	2.15E-03	0.0011	0.0022	6.80E-09
214	0.00	0.000	0.107	0.1113	0.0009	0.0017	2.13E-03	0.0011	0.0021	6.80E-09
215	0.00	0.000	0.305	0.0859	0.0009	0.0017	2.11E-03	0.0011	0.0021	6.80E-09
216	1.27	0.000	0.235	0.1720	0.0009	0.0016	2.09E-03	0.0011	0.0021	6.80E-09
217	0.00	0.000	0.242	0.1518	0.0008	0.0016	2.07E-03	0.0011	0.0021	6.80E-09
218	0.76	0.000	0.251	0.1940	0.0008	0.0016	2.06E-03	0.0011	0.0021	6.80E-09
219	0.00	0.000	0.157	0.1809	0.0008	0.0016	2.04E-03	0.0011	0.0020	6.80E-09
220	1.21	0.000	0.099	0.2732	0.0009	0.0017	2.14E-03	0.0011	0.0021	6.80E-09
221	0.30	0.000	0.291	0.2741	0.0008	0.0015	2.00E-03	0.0011	0.0021	6.80E-09
222	0.00	0.000	0.332	0.2460	0.0009	0.0017	2.11E-03	0.0011	0.0021	6.80E-09
223	0.11	0.000	0.109	0.2445	0.0012	0.0024	2.52E-03	0.0012	0.0023	6.80E-09
224	0.00	0.000	0.307	0.2176	0.0009	0.0017	2.10E-03	0.0012	0.0023	6.80E-09
225	0.00	0.000	0.309	0.1919	0.0005	0.0010	1.61E-03	0.0010	0.0018	6.80E-09
226	0.00	0.000	0.223	0.1734	0.0005	0.0010	1.62E-03	0.0009	0.0016	6.80E-09
227	0.00	0.000	0.277	0.1503	0.0005	0.0010	1.62E-03	0.0009	0.0016	6.80E-09
228	0.00	0.000	0.316	0.1240	0.0005	0.0010	1.63E-03	0.0009	0.0016	6.80E-09
229	0.13	0.000	0.198	0.1183	0.0005	0.0010	1.64E-03	0.0009	0.0016	6.80E-09
230	0.76	0.000	0.310	0.1561	0.0005	0.0010	1.64E-03	0.0009	0.0016	6.80E-09
231	0.00	0.000	0.353	0.1242	0.0007	0.0013	1.83E-03	0.0009	0.0018	6.80E-09
232	0.11	0.000	0.225	0.1143	0.0008	0.0015	1.91E-03	0.0010	0.0019	6.80E-09
233	2.42	0.000	0.200	0.2995	0.0004	0.0007	1.41E-03	0.0009	0.0016	6.80E-09
234	0.08	0.000	0.321	0.2697	0.0004	0.0008	1.43E-03	0.0007	0.0014	6.80E-09
235	0.00	0.000	0.330	0.2268	0.0006	0.0011	1.68E-03	0.0008	0.0016	6.80E-09
236	0.10	0.000	0.301	0.2080	0.0007	0.0014	1.85E-03	0.0009	0.0018	6.80E-09
237	0.05	0.000	0.236	0.1925	0.0004	0.0007	1.34E-03	0.0008	0.0016	6.80E-09

238	0.03	0.000	0.084	0.1881	0.0007	0.0013	1.82E-03	0.0009	0.0016	6.80E-09
239	0.01	0.000	0.067	0.1831	0.0009	0.0017	2.06E-03	0.0010	0.0020	6.80E-09
240	0.01	0.000	0.228	0.1648	0.0010	0.0020	2.30E-03	0.0012	0.0022	6.80E-09
241	0.00	0.000	0.165	0.1511	0.0010	0.0019	2.26E-03	0.0012	0.0023	6.80E-09
242	0.00	0.000	0.202	0.1342	0.0010	0.0018	2.22E-03	0.0012	0.0022	6.80E-09
243	0.01	0.000	0.148	0.1225	0.0005	0.0008	9.81E-04	0.0008	0.0015	6.80E-09
244	0.00	0.000	0.053	0.1184	0.0000	0.0000	0.00E+00	0.0002	0.0004	6.80E-09
245	2.98	0.000	0.066	0.3608	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
246	0.00	0.000	0.208	0.2679	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
247	0.00	0.000	0.186	0.2438	0.0000	0.0000	0.00E+00	0.0000	0.0000	4.00E-09
248	0.00	0.000	0.207	0.2266	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.00E+00
249	0.00	0.000	0.153	0.2130	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.00E+00
250	0.02	0.000	0.106	0.2060	0.0010	0.0019	1.61E-03	0.0005	0.0009	5.10E-09
251	0.11	0.000	0.082	0.2083	0.0014	0.0027	2.31E-03	0.0010	0.0020	6.80E-09
252	0.62	0.000	0.120	0.2498	0.0000	0.0000	0.00E+00	0.0005	0.0010	6.80E-09
253	0.76	0.000	0.068	0.3070	0.0021	0.0040	3.27E-03	0.0010	0.0019	6.80E-09
254	0.01	0.000	0.231	0.2712	0.0020	0.0037	3.16E-03	0.0017	0.0032	6.80E-09
255	0.01	0.000	0.069	0.2538	0.0019	0.0035	3.08E-03	0.0016	0.0031	6.80E-09
256	0.08	0.000	0.101	0.2436	0.0018	0.0034	3.00E-03	0.0016	0.0030	6.80E-09
257	0.37	0.000	0.089	0.2672	0.0017	0.0031	2.86E-03	0.0015	0.0029	6.80E-09
258	0.00	0.000	0.192	0.2482	0.0000	0.0000	4.34E-19	0.0006	0.0012	6.80E-09
259	0.00	0.000	0.067	0.2417	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
260	0.00	0.000	0.092	0.2340	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
261	0.00	0.000	0.070	0.2281	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.13E-09
262	0.00	0.000	0.152	0.2155	0.0035	0.0067	3.88E-03	0.0012	0.0022	5.10E-09
263	0.00	0.000	0.103	0.2069	0.0067	0.0128	5.87E-03	0.0026	0.0050	6.80E-09
264	0.00	0.000	0.061	0.2019	0.0017	0.0031	2.22E-03	0.0020	0.0037	6.80E-09
265	0.73	0.000	0.075	0.2562	0.0000	0.0000	0.00E+00	0.0005	0.0010	6.80E-09
266	0.00	0.000	0.192	0.2393	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
267	0.00	0.000	0.216	0.2213	0.0079	0.0151	6.02E-03	0.0018	0.0035	6.80E-09
268	0.00	0.000	0.246	0.2008	0.0043	0.0081	4.41E-03	0.0026	0.0050	6.80E-09
269	0.00	0.000	0.050	0.1967	0.0265	0.0503	1.16E-02	0.0045	0.0086	6.80E-09
270	0.01	0.000	0.160	0.1838	0.0581	0.1106	1.74E-02	0.0078	0.0148	6.80E-09
271	0.00	0.000	0.094	0.1760	0.0718	0.1367	1.95E-02	0.0097	0.0185	6.80E-09
272	0.00	0.000	0.126	0.1655	0.0581	0.1106	1.75E-02	0.0096	0.0183	6.80E-09

273		0.00	0.000	0.091	0.1579	0.0456	0.0867	1.55E-02	0.0086	0.0164	6.80E-09
274		0.00	0.000	0.032	0.1555	0.0367	0.0698	1.38E-02	0.0077	0.0146	6.80E-09
275		0.01	0.000	0.061	0.1512	0.0303	0.0576	1.26E-02	0.0069	0.0131	6.80E-09
276		1.15	0.000	0.085	0.2399	0.0256	0.0487	1.15E-02	0.0063	0.0120	6.80E-09
277		0.27	0.000	0.120	0.2524	0.0220	0.0419	1.07E-02	0.0058	0.0111	6.80E-09
278		0.43	0.000	0.087	0.2806	0.0192	0.0366	9.99E-03	0.0054	0.0103	6.80E-09
279		1.00	0.000	0.119	0.3285	0.0170	0.0324	9.38E-03	0.0051	0.0097	6.80E-09
280		0.00	0.000	0.060	0.2838	0.0153	0.0291	8.90E-03	0.0048	0.0091	6.80E-09
281		0.15	0.000	0.072	0.2730	0.0143	0.0272	8.55E-03	0.0046	0.0087	6.80E-09
282		0.17	0.000	0.140	0.2683	0.0112	0.0213	7.61E-03	0.0042	0.0080	6.80E-09
283		0.00	0.000	0.104	0.2548	0.0107	0.0203	7.42E-03	0.0039	0.0075	6.80E-09
284		0.24	0.000	0.072	0.2643	0.0111	0.0211	7.54E-03	0.0039	0.0075	6.80E-09
285		0.00	0.000	0.101	0.2547	0.0104	0.0198	7.31E-03	0.0039	0.0074	6.80E-09
286		0.00	0.000	0.116	0.2451	0.0123	0.0233	7.96E-03	0.0040	0.0077	6.80E-09
287		0.00	0.000	0.127	0.2345	0.0080	0.0153	6.26E-03	0.0037	0.0070	6.80E-09
288		0.11	0.000	0.102	0.2349	0.0053	0.0100	5.10E-03	0.0030	0.0056	6.80E-09
289		0.00	0.000	0.069	0.2272	0.0098	0.0187	7.12E-03	0.0033	0.0063	6.80E-09
290		0.00	0.000	0.088	0.2188	0.0087	0.0165	6.68E-03	0.0036	0.0068	6.80E-09
291		0.11	0.000	0.098	0.2199	0.0076	0.0144	6.23E-03	0.0034	0.0064	6.80E-09
292		0.00	0.000	0.090	0.2113	0.0067	0.0127	5.85E-03	0.0032	0.0060	6.80E-09
293	*	0.00	0.000	0.053	0.2047	0.0038	0.0072	3.84E-03	0.0025	0.0047	6.80E-09
294	*	0.13	0.000	0.032	0.2063	0.0000	0.0000	0.00E+00	0.0009	0.0017	6.80E-09
295		0.36	0.000	0.004	0.2428	0.0000	0.0000	0.00E+00	0.0000	0.0001	6.80E-09
296		0.00	0.000	0.084	0.2354	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
297		0.00	0.000	0.059	0.2296	0.0007	0.0014	9.61E-04	0.0003	0.0006	6.80E-09
298		0.00	0.000	0.054	0.2245	0.0030	0.0056	2.71E-03	0.0010	0.0020	6.80E-09
299		0.00	0.000	0.101	0.2152	0.0128	0.0244	7.24E-03	0.0028	0.0053	6.80E-09
300		0.00	0.000	0.112	0.2059	0.0421	0.0802	1.48E-02	0.0061	0.0115	6.80E-09
301		0.00	0.000	0.064	0.2006	0.0672	0.1278	1.88E-02	0.0089	0.0170	6.80E-09
302		0.61	0.000	0.064	0.2456	0.0664	0.1263	1.87E-02	0.0098	0.0187	6.80E-09
303	*	0.00	0.000	0.027	0.2433	0.0528	0.1004	1.67E-02	0.0092	0.0175	6.80E-09
304	*	0.26	0.000	0.028	0.2447	0.0428	0.0814	1.50E-02	0.0083	0.0157	6.80E-09
305	*	0.00	0.000	0.034	0.2458	0.0349	0.0664	1.35E-02	0.0074	0.0141	6.80E-09
306		0.00	0.000	0.050	0.2541	0.0270	0.0514	1.19E-02	0.0066	0.0126	6.80E-09
307		0.00	0.000	0.110	0.2448	0.0226	0.0431	1.08E-02	0.0059	0.0113	6.80E-09

308		0.08	0.000	0.096	0.2426	0.0200	0.0381	1.02E-02	0.0055	0.0105	6.80E-09
309		0.36	0.000	0.060	0.2649	0.0230	0.0437	1.09E-02	0.0056	0.0106	6.80E-09
310		0.31	0.000	0.081	0.2835	0.0141	0.0268	8.45E-03	0.0050	0.0095	6.80E-09
311		0.09	0.000	0.053	0.2856	0.0125	0.0238	7.98E-03	0.0043	0.0082	6.80E-09
312		0.00	0.000	0.053	0.2759	0.0134	0.0255	8.27E-03	0.0043	0.0082	6.80E-09
313		0.66	0.000	0.074	0.3114	0.0073	0.0139	5.97E-03	0.0036	0.0069	6.80E-09
314		0.02	0.000	0.060	0.2837	0.0062	0.0118	5.63E-03	0.0031	0.0058	6.80E-09
315		0.00	0.000	0.059	0.2607	0.0126	0.0240	8.02E-03	0.0037	0.0070	6.80E-09
316		0.00	0.000	0.037	0.2557	0.0050	0.0094	4.97E-03	0.0033	0.0062	6.80E-09
317		0.00	0.000	0.035	0.2528	0.0054	0.0104	5.28E-03	0.0027	0.0052	6.80E-09
318		0.00	0.000	0.028	0.2505	0.0079	0.0151	6.36E-03	0.0031	0.0059	6.80E-09
319	*	0.00	0.000	0.025	0.2484	0.0114	0.0216	7.58E-03	0.0037	0.0070	6.80E-09
320	*	0.00	0.000	0.000	0.2484	0.0086	0.0164	6.59E-03	0.0037	0.0070	6.80E-09
321	*	0.00	0.000	0.029	0.2460	0.0132	0.0251	8.25E-03	0.0040	0.0076	6.80E-09
322	*	0.00	0.000	0.022	0.2442	0.0112	0.0214	7.61E-03	0.0041	0.0079	6.80E-09
323	*	0.00	0.000	0.000	0.2442	0.0095	0.0182	7.01E-03	0.0038	0.0073	6.80E-09
324		0.00	0.000	0.034	0.2413	0.0082	0.0157	6.51E-03	0.0035	0.0067	6.80E-09
325		0.90	0.000	0.089	0.3079	0.0058	0.0110	5.15E-03	0.0030	0.0057	6.80E-09
326		0.00	0.000	0.044	0.2832	0.0000	0.0000	0.00E+00	0.0012	0.0022	6.80E-09
327		0.00	0.000	0.042	0.2705	0.0000	0.0000	0.00E+00	0.0000	0.0001	6.80E-09
328		0.00	0.000	0.071	0.2588	0.0045	0.0086	3.41E-03	0.0010	0.0020	6.80E-09
329	*	0.00	0.000	0.028	0.2565	0.0010	0.0019	1.54E-03	0.0012	0.0023	6.80E-09
330	*	0.00	0.000	0.000	0.2565	0.0198	0.0376	9.92E-03	0.0034	0.0064	6.80E-09
331	*	0.00	0.000	0.025	0.2544	0.0325	0.0619	1.30E-02	0.0061	0.0116	6.80E-09
332		0.00	0.000	0.033	0.2517	0.0381	0.0725	1.41E-02	0.0071	0.0136	6.80E-09
333		0.00	0.000	0.069	0.2459	0.0336	0.0639	1.32E-02	0.0071	0.0136	6.80E-09
334		0.07	0.000	0.081	0.2446	0.0267	0.0508	1.18E-02	0.0065	0.0124	6.80E-09
335		0.00	0.000	0.085	0.2333	0.0077	0.0146	4.71E-03	0.0041	0.0077	6.80E-09
336		0.00	0.000	0.128	0.2226	0.0040	0.0076	3.69E-03	0.0022	0.0042	6.80E-09
337		0.00	0.000	0.062	0.2174	0.0014	0.0025	1.67E-03	0.0013	0.0026	6.80E-09
338		0.00	0.000	0.117	0.2077	0.0222	0.0422	1.06E-02	0.0036	0.0068	6.80E-09
339		0.00	0.000	0.086	0.2005	0.0357	0.0680	1.37E-02	0.0064	0.0122	6.80E-09
340		0.00	0.000	0.078	0.1941	0.0356	0.0677	1.36E-02	0.0071	0.0136	6.80E-09
341		0.00	0.000	0.032	0.1914	0.0317	0.0604	1.29E-02	0.0069	0.0132	6.80E-09
342	*	0.00	0.000	0.028	0.1891	0.0276	0.0526	1.20E-02	0.0065	0.0124	6.80E-09

343	*	0.03	0.000	0.032	0.1888	0.0240	0.0457	1.12E-02	0.0061	0.0115	6.80E-09
344	*	0.04	0.000	0.026	0.1898	0.0210	0.0400	1.04E-02	0.0057	0.0108	6.80E-09
345	*	0.00	0.000	0.000	0.1898	0.0186	0.0353	9.81E-03	0.0053	0.0101	6.80E-09
346	*	0.00	0.000	0.000	0.1898	0.0165	0.0315	9.25E-03	0.0050	0.0095	6.80E-09
347		0.00	0.000	0.040	0.1865	0.0148	0.0283	8.76E-03	0.0047	0.0090	6.80E-09
348		0.00	0.000	0.064	0.1806	0.0147	0.0280	8.71E-03	0.0046	0.0087	6.80E-09
349		0.00	0.000	0.062	0.1754	0.0115	0.0220	7.71E-03	0.0043	0.0081	6.80E-09
350		0.00	0.000	0.063	0.1702	0.0106	0.0201	7.38E-03	0.0040	0.0075	6.80E-09
351		0.09	0.000	0.070	0.1722	0.0099	0.0188	7.14E-03	0.0038	0.0072	6.80E-09
352		0.43	0.000	0.054	0.2034	0.0092	0.0176	6.90E-03	0.0037	0.0070	6.80E-09
353		0.00	0.000	0.047	0.1995	0.0087	0.0165	6.67E-03	0.0036	0.0068	6.80E-09
354	*	0.00	0.000	0.024	0.1975	0.0081	0.0154	6.46E-03	0.0034	0.0066	6.80E-09
355		0.00	0.000	0.031	0.1949	0.0076	0.0145	6.26E-03	0.0033	0.0063	6.80E-09
356		0.00	0.000	0.044	0.1913	0.0072	0.0136	6.07E-03	0.0032	0.0062	6.80E-09
357		0.53	0.000	0.056	0.2309	0.0068	0.0129	5.89E-03	0.0031	0.0060	6.80E-09
358	*	0.00	0.000	0.030	0.2287	0.0064	0.0121	5.72E-03	0.0030	0.0058	6.80E-09
359		0.00	0.000	0.035	0.2258	0.0060	0.0115	5.57E-03	0.0030	0.0056	6.80E-09
360		0.91	0.000	0.039	0.2988	0.0057	0.0109	5.42E-03	0.0029	0.0055	6.80E-09
361		1.28	0.000	0.073	0.3600	0.0054	0.0103	5.28E-03	0.0028	0.0053	6.80E-09
362		0.42	0.000	0.070	0.3105	0.0057	0.0108	5.38E-03	0.0028	0.0053	6.80E-09
363		0.00	0.000	0.041	0.2848	0.0054	0.0103	5.26E-03	0.0028	0.0053	6.80E-09
364		0.65	0.000	0.049	0.3226	0.0049	0.0094	4.99E-03	0.0027	0.0051	6.80E-09
365	*	0.09	0.000	0.023	0.2810	0.0050	0.0094	5.01E-03	0.0026	0.0050	6.80E-09

* = Frozen (air or soil)

Annual Totals for Year 5			
	inches	cubic feet	percent
Precipitation	48.82	177,230.7	100.00
Runoff	0.000	0.0000	0.00
Evapotranspiration	29.196	105,980.5	59.80
Drainage Collected from Layer 3	14.4277	52,372.7	29.55
Percolation/Leakage through Layer 4	3.026876	10,987.6	6.20
Average Head on Top of Layer 4	0.0510	---	---

Drainage Collected from Layer 5	3.0298	10,998.1	6.21
Percolation/Leakage through Layer 7	0.000002	0.0089	0.00
Average Head on Top of Layer 6	0.0044	---	---
Change in Water Storage	2.1706	7,879.4	4.45
Soil Water at Start of Year	39.0160	141,627.9	79.91
Soil Water at End of Year	41.1362	149,324.3	84.25
Snow Water at Start of Year	0.0000	0.0000	0.00
Snow Water at End of Year	0.0504	183.0	0.10
Annual Water Budget Balance	0.0000	0.0000	0.00

Daily Output for Year 6

Column key: Head #1: drainage from Layer 4 | Head #2: drainage from Layer 6
Drain #1: drainage from Layer 3 | Drain #2: drainage from Layer 5
Leak #1: leakage thru Layer 4 | Leak #2: leakage thru Layer 7

Title: Millersville Cell 9 - Open Cell Condition
Simulated On: 6/9/2024 11:31

Day	Freezing Status* Air	Freezing Status* Soil	Rain (inches)	Runoff (inches)	ET (inches)	Evap. Zone Water (in/in)	Head #1 (inches)	Drain #1 (inches)	Leak #1 (inches)	Head #2 (inches)	Drain #2 (inches)	Leak #2 (inches)
1	*		0.00	0.000	0.014	0.2737	0.0045	0.0085	4.74E-03	0.0025	0.0049	6.80E-09
2	*		0.00	0.000	0.017	0.2631	0.0019	0.0036	3.13E-03	0.0020	0.0038	6.80E-09
3	*		0.00	0.000	0.000	0.2554	0.0038	0.0073	4.30E-03	0.0020	0.0038	6.80E-09
4			0.00	0.000	0.031	0.2500	0.0057	0.0109	5.41E-03	0.0026	0.0049	6.80E-09
5			0.69	0.000	0.058	0.3028	0.0032	0.0062	3.47E-03	0.0023	0.0043	6.80E-09
6			0.13	0.000	0.066	0.3005	0.0002	0.0004	9.16E-04	0.0011	0.0020	6.80E-09
7			0.07	0.000	0.073	0.2810	0.0020	0.0038	2.91E-03	0.0011	0.0021	6.80E-09
8			0.00	0.000	0.052	0.2633	0.0053	0.0101	5.22E-03	0.0022	0.0042	6.80E-09
9			0.00	0.000	0.058	0.2585	0.0051	0.0097	5.12E-03	0.0027	0.0051	6.80E-09
10			0.00	0.000	0.070	0.2527	0.0029	0.0054	3.23E-03	0.0021	0.0040	6.80E-09
11			0.01	0.000	0.041	0.2500	0.0000	0.0000	0.00E+00	0.0007	0.0014	6.80E-09
12	*		0.01	0.000	0.011	0.2500	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
13	*		0.01	0.000	0.013	0.2500	0.0033	0.0062	3.84E-03	0.0012	0.0022	6.80E-09
14	*		0.63	0.000	0.015	0.2516	0.0000	0.0000	0.00E+00	0.0008	0.0016	6.80E-09
15			0.00	0.000	0.000	0.3011	0.0000	0.0000	0.00E+00	0.0000	0.0001	6.80E-09
16	*		0.00	0.000	0.000	0.2888	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
17	*		0.35	0.000	0.008	0.2774	0.0295	0.0561	1.18E-02	0.0036	0.0068	6.80E-09
18	*		0.44	0.000	0.016	0.2703	0.0659	0.1253	1.86E-02	0.0082	0.0156	6.80E-09
19	*		0.00	0.000	0.016	0.2635	0.0852	0.1622	2.13E-02	0.0105	0.0200	6.80E-09
20	*		0.00	0.000	0.007	0.2576	0.0981	0.1868	2.29E-02	0.0116	0.0222	6.80E-09
21	*		0.00	0.000	0.000	0.2531	0.0859	0.1636	2.14E-02	0.0116	0.0220	6.80E-09
22			0.00	0.000	0.000	0.2718	0.0761	0.1448	2.01E-02	0.0109	0.0207	6.80E-09
23	*		0.00	0.000	0.025	0.2712	0.0615	0.1171	1.80E-02	0.0099	0.0189	6.80E-09
24			0.00	0.000	0.004	0.2974	0.0654	0.1244	1.86E-02	0.0096	0.0184	6.80E-09
25			0.00	0.000	0.106	0.2824	0.0599	0.1139	1.77E-02	0.0095	0.0181	6.80E-09
26			0.00	0.000	0.153	0.2565	0.0371	0.0707	1.39E-02	0.0082	0.0155	6.80E-09
27			0.40	0.000	0.123	0.2698	0.0477	0.0908	1.58E-02	0.0079	0.0151	6.80E-09

28		0.07	0.000	0.091	0.2663	0.0329	0.0627	1.27E-02	0.0074	0.0140	6.80E-09
29		0.04	0.000	0.090	0.2592	0.0084	0.0160	6.05E-03	0.0047	0.0089	6.80E-09
30		0.00	0.000	0.119	0.2452	0.0275	0.0523	1.19E-02	0.0050	0.0095	6.80E-09
31		0.00	0.000	0.101	0.2326	0.0401	0.0763	1.45E-02	0.0070	0.0133	6.80E-09
32		0.02	0.000	0.058	0.2292	0.0425	0.0809	1.49E-02	0.0077	0.0147	6.80E-09
33	*	0.09	0.000	0.037	0.2308	0.0338	0.0643	1.31E-02	0.0073	0.0139	6.80E-09
34		0.13	0.000	0.023	0.2427	0.0487	0.0926	1.60E-02	0.0078	0.0148	6.80E-09
35		0.02	0.000	0.071	0.2344	0.0375	0.0713	1.39E-02	0.0078	0.0148	6.80E-09
36		0.01	0.000	0.064	0.2261	0.0155	0.0295	8.94E-03	0.0058	0.0111	6.80E-09
37		0.32	0.000	0.039	0.2499	0.0214	0.0407	1.03E-02	0.0051	0.0098	6.80E-09
38		0.01	0.000	0.061	0.2456	0.0489	0.0931	1.60E-02	0.0071	0.0136	6.80E-09
39		0.00	0.000	0.087	0.2383	0.0477	0.0908	1.58E-02	0.0083	0.0158	6.80E-09
40		0.00	0.000	0.048	0.2344	0.0431	0.0820	1.50E-02	0.0081	0.0154	6.80E-09
41		0.00	0.000	0.112	0.2250	0.0435	0.0828	1.51E-02	0.0079	0.0151	6.80E-09
42		0.00	0.000	0.056	0.2204	0.0469	0.0892	1.57E-02	0.0081	0.0154	6.80E-09
43		0.06	0.000	0.100	0.2173	0.0546	0.1039	1.69E-02	0.0086	0.0164	6.80E-09
44		0.24	0.000	0.080	0.2305	0.0388	0.0738	1.42E-02	0.0081	0.0154	6.80E-09
45		0.02	0.000	0.077	0.2258	0.0556	0.1058	1.71E-02	0.0084	0.0159	6.80E-09
46		0.22	0.000	0.042	0.2395	0.0710	0.1351	1.93E-02	0.0096	0.0183	6.80E-09
47		0.56	0.000	0.070	0.2800	0.0762	0.1450	2.01E-02	0.0104	0.0197	6.80E-09
48	*	0.00	0.000	0.056	0.2747	0.0629	0.1197	1.82E-02	0.0100	0.0190	6.80E-09
49	*	0.00	0.000	0.052	0.2684	0.0454	0.0864	1.54E-02	0.0087	0.0166	6.80E-09
50		0.00	0.000	0.049	0.2534	0.0375	0.0714	1.40E-02	0.0077	0.0147	6.80E-09
51		0.00	0.000	0.115	0.2384	0.0336	0.0639	1.32E-02	0.0071	0.0136	6.80E-09
52		0.00	0.000	0.091	0.2309	0.0233	0.0444	1.10E-02	0.0063	0.0120	6.80E-09
53		0.14	0.000	0.072	0.2367	0.0233	0.0444	1.10E-02	0.0058	0.0110	6.80E-09
54	*	0.00	0.000	0.000	0.2356	0.0233	0.0443	1.10E-02	0.0058	0.0110	6.80E-09
55	*	0.00	0.000	0.053	0.2311	0.0217	0.0413	1.06E-02	0.0057	0.0108	6.80E-09
56		0.01	0.000	0.064	0.2225	0.0169	0.0322	9.36E-03	0.0052	0.0099	6.80E-09
57	*	0.18	0.000	0.056	0.2241	0.0113	0.0215	7.40E-03	0.0043	0.0083	6.80E-09
58		0.00	0.000	0.074	0.2268	0.0001	0.0000	1.25E-04	0.0017	0.0033	6.80E-09
59		0.02	0.000	0.128	0.2142	0.0085	0.0162	5.74E-03	0.0018	0.0035	6.80E-09
60		0.07	0.000	0.061	0.2150	0.0041	0.0079	3.80E-03	0.0024	0.0045	6.80E-09
61		0.05	0.000	0.063	0.2137	0.0064	0.0121	5.63E-03	0.0026	0.0049	6.80E-09
62		0.20	0.000	0.095	0.2222	0.0125	0.0238	8.03E-03	0.0037	0.0070	6.80E-09

63		0.03	0.000	0.085	0.2180	0.0154	0.0293	8.92E-03	0.0045	0.0085	6.80E-09
64		0.00	0.000	0.078	0.2115	0.0162	0.0308	9.15E-03	0.0048	0.0090	6.80E-09
65		0.00	0.000	0.179	0.1966	0.0159	0.0302	9.07E-03	0.0048	0.0091	6.80E-09
66		0.00	0.000	0.055	0.1920	0.0151	0.0288	8.84E-03	0.0047	0.0089	6.80E-09
67	*	0.00	0.000	0.000	0.1920	0.0141	0.0269	8.55E-03	0.0046	0.0087	6.80E-09
68	*	0.00	0.000	0.000	0.1920	0.0131	0.0250	8.24E-03	0.0044	0.0084	6.80E-09
69	*	0.00	0.000	0.000	0.1920	0.0122	0.0232	7.93E-03	0.0042	0.0081	6.80E-09
70	*	0.00	0.000	0.000	0.1920	0.0113	0.0215	7.63E-03	0.0041	0.0078	6.80E-09
71		0.61	0.000	0.063	0.2378	0.0105	0.0199	7.35E-03	0.0039	0.0075	6.80E-09
72		0.22	0.000	0.096	0.2485	0.0097	0.0185	7.08E-03	0.0038	0.0072	6.80E-09
73		0.00	0.000	0.120	0.2385	0.0091	0.0172	6.83E-03	0.0036	0.0069	6.80E-09
74		0.00	0.000	0.116	0.2289	0.0085	0.0161	6.60E-03	0.0035	0.0067	6.80E-09
75		0.00	0.000	0.128	0.2182	0.0079	0.0151	6.38E-03	0.0034	0.0065	6.80E-09
76		0.00	0.000	0.163	0.2047	0.0074	0.0141	6.18E-03	0.0033	0.0063	6.80E-09
77		0.00	0.000	0.079	0.1981	0.0070	0.0133	5.99E-03	0.0032	0.0061	6.80E-09
78	*	0.00	0.000	0.000	0.1981	0.0066	0.0125	5.81E-03	0.0031	0.0059	6.80E-09
79	*	0.00	0.000	0.000	0.1981	0.0062	0.0118	5.65E-03	0.0030	0.0057	6.80E-09
80	*	0.00	0.000	0.000	0.1981	0.0059	0.0112	5.49E-03	0.0029	0.0056	6.80E-09
81	*	0.00	0.000	0.000	0.1981	0.0056	0.0106	5.34E-03	0.0028	0.0054	6.80E-09
82	*	0.00	0.000	0.000	0.1981	0.0053	0.0100	5.20E-03	0.0028	0.0053	6.80E-09
83	*	0.48	0.000	0.014	0.1997	0.0050	0.0095	5.07E-03	0.0027	0.0051	6.80E-09
84	*	0.05	0.000	0.025	0.2014	0.0048	0.0091	4.95E-03	0.0026	0.0050	6.80E-09
85	*	0.73	0.000	0.000	0.2030	0.0046	0.0087	4.83E-03	0.0026	0.0049	6.80E-09
86		0.00	0.000	0.021	0.2155	0.0043	0.0083	4.72E-03	0.0025	0.0048	6.80E-09
87	*	0.00	0.000	0.023	0.2172	0.0042	0.0079	4.62E-03	0.0024	0.0047	6.80E-09
88		0.00	0.000	0.005	0.2961	0.0040	0.0076	4.51E-03	0.0024	0.0046	6.80E-09
89		0.00	0.000	0.122	0.2825	0.0041	0.0078	4.59E-03	0.0024	0.0046	6.80E-09
90		0.00	0.000	0.122	0.2611	0.0041	0.0077	4.55E-03	0.0024	0.0046	6.80E-09
91		0.00	0.000	0.197	0.2447	0.0034	0.0064	4.15E-03	0.0023	0.0043	6.80E-09
92		0.00	0.000	0.169	0.2306	0.0039	0.0075	4.48E-03	0.0023	0.0043	6.80E-09
93		0.00	0.000	0.070	0.2248	0.0048	0.0091	4.95E-03	0.0025	0.0047	6.80E-09
94		0.00	0.000	0.204	0.2078	0.0044	0.0084	4.75E-03	0.0025	0.0048	6.80E-09
95		0.14	0.000	0.122	0.2090	0.0011	0.0021	1.39E-03	0.0015	0.0028	6.80E-09
96		0.23	0.000	0.122	0.2177	0.0001	0.0002	5.94E-04	0.0005	0.0010	6.80E-09
97		0.16	0.000	0.097	0.2233	0.0005	0.0009	1.50E-03	0.0006	0.0011	6.80E-09

98		0.05	0.000	0.123	0.2176	0.0009	0.0017	2.13E-03	0.0010	0.0018	6.80E-09
99		0.00	0.000	0.137	0.2061	0.0013	0.0025	2.58E-03	0.0012	0.0024	6.80E-09
100		0.00	0.000	0.211	0.1886	0.0017	0.0032	2.92E-03	0.0015	0.0028	6.80E-09
101		0.00	0.000	0.283	0.1650	0.0020	0.0038	3.18E-03	0.0016	0.0031	6.80E-09
102		0.15	0.000	0.204	0.1607	0.0022	0.0042	3.37E-03	0.0017	0.0033	6.80E-09
103		0.00	0.000	0.084	0.1537	0.0024	0.0046	3.52E-03	0.0018	0.0035	6.80E-09
104	*	0.00	0.000	0.063	0.1485	0.0026	0.0049	3.64E-03	0.0019	0.0036	6.80E-09
105		0.00	0.000	0.054	0.1440	0.0027	0.0051	3.72E-03	0.0019	0.0037	6.80E-09
106	*	0.03	0.000	0.033	0.1440	0.0028	0.0053	3.78E-03	0.0020	0.0038	6.80E-09
107	*	0.00	0.000	0.043	0.1404	0.0028	0.0054	3.81E-03	0.0020	0.0038	6.80E-09
108		0.00	0.000	0.043	0.1368	0.0029	0.0055	3.84E-03	0.0020	0.0038	6.80E-09
109		0.03	0.000	0.043	0.1360	0.0029	0.0055	3.84E-03	0.0020	0.0038	6.80E-09
110		0.01	0.000	0.040	0.1332	0.0029	0.0055	3.84E-03	0.0020	0.0038	6.80E-09
111		0.28	0.000	0.039	0.1534	0.0029	0.0055	3.83E-03	0.0020	0.0038	6.80E-09
112		0.17	0.000	0.038	0.1645	0.0028	0.0054	3.81E-03	0.0020	0.0038	6.80E-09
113		0.24	0.000	0.035	0.1812	0.0028	0.0053	3.79E-03	0.0020	0.0038	6.80E-09
114		0.19	0.000	0.215	0.1792	0.0028	0.0053	3.76E-03	0.0020	0.0038	6.80E-09
115		0.00	0.000	0.154	0.1663	0.0027	0.0052	3.73E-03	0.0020	0.0037	6.80E-09
116		0.00	0.000	0.161	0.1529	0.0027	0.0051	3.70E-03	0.0020	0.0037	6.80E-09
117		0.00	0.000	0.092	0.1452	0.0026	0.0050	3.66E-03	0.0019	0.0037	6.80E-09
118		0.00	0.000	0.067	0.1396	0.0026	0.0049	3.63E-03	0.0019	0.0036	6.80E-09
119		0.11	0.000	0.058	0.1439	0.0025	0.0048	3.59E-03	0.0019	0.0036	6.80E-09
120		0.28	0.000	0.053	0.1632	0.0025	0.0047	3.55E-03	0.0019	0.0036	6.80E-09
121		0.49	0.000	0.049	0.2002	0.0024	0.0046	3.51E-03	0.0019	0.0035	6.80E-09
122		0.06	0.000	0.300	0.1800	0.0024	0.0045	3.47E-03	0.0018	0.0035	6.80E-09
123		0.20	0.000	0.125	0.1862	0.0023	0.0044	3.43E-03	0.0018	0.0034	6.80E-09
124		0.00	0.000	0.088	0.1789	0.0022	0.0043	3.39E-03	0.0018	0.0034	6.80E-09
125		0.00	0.000	0.203	0.1620	0.0022	0.0042	3.35E-03	0.0018	0.0034	6.80E-09
126		0.36	0.000	0.216	0.1739	0.0021	0.0041	3.31E-03	0.0017	0.0033	6.80E-09
127		0.00	0.000	0.182	0.1587	0.0021	0.0040	3.27E-03	0.0017	0.0033	6.80E-09
128		0.00	0.000	0.099	0.1508	0.0020	0.0039	3.23E-03	0.0017	0.0032	6.80E-09
129		0.38	0.000	0.067	0.1770	0.0020	0.0038	3.19E-03	0.0017	0.0032	6.80E-09
130	*	0.51	0.000	0.026	0.1787	0.0019	0.0037	3.15E-03	0.0017	0.0032	6.80E-09
131	*	0.02	0.000	0.022	0.1803	0.0019	0.0036	3.11E-03	0.0016	0.0031	6.80E-09
132	*	0.00	0.000	0.024	0.1819	0.0019	0.0035	3.08E-03	0.0016	0.0031	6.80E-09

133	0.00	0.000	0.089	0.2080	0.0018	0.0034	3.04E-03	0.0016	0.0031	6.80E-09
134	0.00	0.000	0.181	0.1929	0.0018	0.0034	3.00E-03	0.0016	0.0030	6.80E-09
135	0.00	0.000	0.184	0.1776	0.0017	0.0033	2.97E-03	0.0016	0.0030	6.80E-09
136	0.11	0.000	0.110	0.1779	0.0017	0.0032	2.93E-03	0.0015	0.0029	6.80E-09
137	0.30	0.000	0.131	0.1922	0.0016	0.0031	2.90E-03	0.0015	0.0029	6.80E-09
138	0.00	0.000	0.115	0.1828	0.0016	0.0031	2.87E-03	0.0015	0.0029	6.80E-09
139	0.94	0.000	0.120	0.2509	0.0016	0.0030	2.83E-03	0.0015	0.0028	6.80E-09
140	0.27	0.000	0.107	0.2640	0.0017	0.0033	2.97E-03	0.0015	0.0029	6.80E-09
141	0.60	0.000	0.225	0.2952	0.0015	0.0029	2.81E-03	0.0015	0.0029	6.80E-09
142	0.00	0.000	0.125	0.2828	0.0014	0.0027	2.71E-03	0.0014	0.0028	6.80E-09
143	0.01	0.000	0.058	0.2734	0.0020	0.0039	3.22E-03	0.0016	0.0030	6.80E-09
144	0.00	0.000	0.249	0.2462	0.0020	0.0038	3.17E-03	0.0017	0.0032	6.80E-09
145	0.49	0.000	0.288	0.2566	0.0021	0.0040	3.29E-03	0.0017	0.0032	6.80E-09
146	0.00	0.000	0.268	0.2309	0.0013	0.0024	2.44E-03	0.0015	0.0028	6.80E-09
147	0.09	0.000	0.119	0.2281	0.0012	0.0023	2.29E-03	0.0012	0.0024	6.80E-09
148	0.44	0.000	0.246	0.2439	0.0015	0.0028	2.61E-03	0.0013	0.0025	6.80E-09
149	0.71	0.000	0.106	0.2942	0.0019	0.0036	3.09E-03	0.0015	0.0029	6.80E-09
150	0.43	0.000	0.184	0.3107	0.0013	0.0025	2.21E-03	0.0014	0.0026	6.80E-09
151	0.00	0.000	0.124	0.2841	0.0004	0.0007	6.91E-04	0.0007	0.0014	6.80E-09
152	0.06	0.000	0.215	0.2609	0.0010	0.0017	1.49E-03	0.0006	0.0012	6.80E-09
153	0.00	0.000	0.194	0.2371	0.0003	0.0005	5.15E-04	0.0005	0.0009	6.80E-09
154	0.04	0.000	0.176	0.2259	0.0005	0.0010	8.16E-04	0.0004	0.0007	6.80E-09
155	0.00	0.000	0.190	0.2072	0.0012	0.0023	1.76E-03	0.0007	0.0014	6.80E-09
156	0.20	0.000	0.076	0.2173	0.0012	0.0023	2.06E-03	0.0010	0.0019	6.80E-09
157	0.00	0.000	0.082	0.2098	0.0006	0.0012	9.89E-04	0.0008	0.0014	6.80E-09
158	0.00	0.000	0.198	0.1925	0.0024	0.0046	3.50E-03	0.0013	0.0024	6.80E-09
159	0.02	0.000	0.189	0.1784	0.0024	0.0045	3.48E-03	0.0018	0.0035	6.80E-09
160	0.45	0.000	0.274	0.1934	0.0022	0.0042	3.37E-03	0.0018	0.0034	6.80E-09
161	0.00	0.000	0.196	0.1770	0.0021	0.0040	3.27E-03	0.0017	0.0033	6.80E-09
162	0.00	0.000	0.188	0.1614	0.0010	0.0019	1.57E-03	0.0012	0.0023	6.80E-09
163	0.00	0.000	0.233	0.1419	0.0000	0.0000	0.00E+00	0.0004	0.0007	6.80E-09
164	0.00	0.000	0.303	0.1167	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
165	0.08	0.000	0.247	0.1031	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
166	0.00	0.000	0.187	0.0875	0.0000	0.0000	0.00E+00	0.0000	0.0000	4.89E-09
167	0.10	0.000	0.095	0.0880	0.0005	0.0010	1.14E-03	0.0003	0.0007	5.10E-09

168	0.00	0.000	0.111	0.0788	0.0031	0.0059	3.96E-03	0.0014	0.0027	6.80E-09
169	0.12	0.000	0.049	0.0847	0.0056	0.0107	5.37E-03	0.0025	0.0047	6.80E-09
170	0.01	0.000	0.046	0.0816	0.0073	0.0139	6.14E-03	0.0030	0.0058	6.80E-09
171	0.00	0.000	0.044	0.0780	0.0083	0.0158	6.54E-03	0.0033	0.0064	6.80E-09
172	0.00	0.000	0.008	0.0773	0.0088	0.0167	6.72E-03	0.0035	0.0066	6.80E-09
173	0.00	0.000	0.002	0.0771	0.0089	0.0169	6.77E-03	0.0035	0.0067	6.80E-09
174	0.00	0.000	0.001	0.0770	0.0088	0.0167	6.73E-03	0.0035	0.0067	6.80E-09
175	0.00	0.000	0.000	0.0770	0.0086	0.0163	6.64E-03	0.0035	0.0067	6.80E-09
176	0.00	0.000	0.000	0.0770	0.0083	0.0157	6.52E-03	0.0035	0.0066	6.80E-09
177	0.00	0.000	0.000	0.0770	0.0079	0.0151	6.38E-03	0.0034	0.0064	6.80E-09
178	0.00	0.000	0.000	0.0770	0.0076	0.0144	6.24E-03	0.0033	0.0063	6.80E-09
179	0.00	0.000	0.005	0.0770	0.0072	0.0137	6.09E-03	0.0032	0.0062	6.80E-09
180	0.00	0.000	0.000	0.0770	0.0069	0.0131	5.94E-03	0.0032	0.0060	6.80E-09
181	0.30	0.000	0.104	0.0936	0.0065	0.0124	5.79E-03	0.0031	0.0059	6.80E-09
182	0.04	0.000	0.060	0.0923	0.0062	0.0118	5.65E-03	0.0030	0.0057	6.80E-09
183	0.05	0.000	0.108	0.0870	0.0059	0.0113	5.51E-03	0.0029	0.0056	6.80E-09
184	0.06	0.000	0.114	0.0826	0.0056	0.0107	5.38E-03	0.0029	0.0054	6.80E-09
185	0.19	0.000	0.041	0.0951	0.0054	0.0102	5.25E-03	0.0028	0.0053	6.80E-09
186	0.03	0.000	0.056	0.0932	0.0051	0.0097	5.12E-03	0.0027	0.0052	6.80E-09
187	0.18	0.000	0.079	0.1014	0.0049	0.0093	5.01E-03	0.0027	0.0051	6.80E-09
188	0.00	0.000	0.055	0.0968	0.0047	0.0089	4.89E-03	0.0026	0.0049	6.80E-09
189	0.00	0.000	0.093	0.0890	0.0045	0.0085	4.78E-03	0.0025	0.0048	6.80E-09
190	0.00	0.000	0.086	0.0819	0.0043	0.0081	4.68E-03	0.0025	0.0047	6.80E-09
191	0.00	0.000	0.046	0.0780	0.0041	0.0078	4.58E-03	0.0024	0.0046	6.80E-09
192	0.00	0.000	0.011	0.0771	0.0039	0.0075	4.49E-03	0.0024	0.0045	6.80E-09
193	0.00	0.000	0.001	0.0770	0.0038	0.0072	4.39E-03	0.0023	0.0044	6.80E-09
194	0.00	0.000	0.000	0.0770	0.0036	0.0069	4.31E-03	0.0023	0.0043	6.80E-09
195	0.00	0.000	0.000	0.0770	0.0035	0.0066	4.22E-03	0.0022	0.0043	6.80E-09
196	0.00	0.000	0.000	0.0770	0.0034	0.0064	4.14E-03	0.0022	0.0042	6.80E-09
197	0.26	0.000	0.043	0.0950	0.0032	0.0061	4.06E-03	0.0022	0.0041	6.80E-09
198	0.01	0.000	0.053	0.0917	0.0031	0.0059	3.99E-03	0.0021	0.0040	6.80E-09
199	0.27	0.000	0.067	0.1083	0.0030	0.0057	3.92E-03	0.0021	0.0040	6.80E-09
200	0.00	0.000	0.142	0.0965	0.0029	0.0055	3.85E-03	0.0020	0.0039	6.80E-09
201	1.26	0.000	0.212	0.1836	0.0028	0.0053	3.78E-03	0.0020	0.0038	6.80E-09
202	0.10	0.000	0.279	0.1687	0.0027	0.0051	3.72E-03	0.0020	0.0037	6.80E-09

203	0.17	0.000	0.114	0.1733	0.0026	0.0050	3.67E-03	0.0019	0.0037	6.80E-09
204	0.00	0.000	0.284	0.1496	0.0025	0.0048	3.60E-03	0.0019	0.0036	6.80E-09
205	0.00	0.000	0.312	0.1236	0.0025	0.0047	3.54E-03	0.0019	0.0036	6.80E-09
206	0.00	0.000	0.156	0.1107	0.0024	0.0045	3.48E-03	0.0018	0.0035	6.80E-09
207	0.11	0.000	0.091	0.1126	0.0023	0.0044	3.43E-03	0.0018	0.0035	6.80E-09
208	0.00	0.000	0.090	0.1051	0.0022	0.0043	3.38E-03	0.0018	0.0034	6.80E-09
209	0.00	0.000	0.088	0.0978	0.0022	0.0041	3.33E-03	0.0018	0.0034	6.80E-09
210	0.00	0.000	0.198	0.0813	0.0021	0.0040	3.28E-03	0.0017	0.0033	6.80E-09
211	0.00	0.000	0.039	0.0780	0.0020	0.0039	3.23E-03	0.0017	0.0033	6.80E-09
212	0.00	0.000	0.012	0.0770	0.0020	0.0038	3.19E-03	0.0017	0.0032	6.80E-09
213	0.00	0.000	0.000	0.0770	0.0019	0.0037	3.14E-03	0.0017	0.0032	6.80E-09
214	0.02	0.000	0.021	0.0770	0.0019	0.0036	3.10E-03	0.0016	0.0031	6.80E-09
215	0.00	0.000	0.000	0.0770	0.0018	0.0035	3.06E-03	0.0016	0.0031	6.80E-09
216	0.45	0.000	0.128	0.1037	0.0018	0.0034	3.02E-03	0.0016	0.0030	6.80E-09
217	0.00	0.000	0.105	0.0949	0.0017	0.0033	2.98E-03	0.0016	0.0030	6.80E-09
218	0.00	0.000	0.150	0.0824	0.0017	0.0032	2.94E-03	0.0016	0.0030	6.80E-09
219	0.00	0.000	0.053	0.0780	0.0016	0.0031	2.90E-03	0.0015	0.0029	6.80E-09
220	0.50	0.000	0.059	0.1150	0.0016	0.0031	2.87E-03	0.0015	0.0029	6.80E-09
221	0.47	0.000	0.047	0.1505	0.0016	0.0030	2.83E-03	0.0015	0.0028	6.80E-09
222	0.00	0.000	0.067	0.1449	0.0015	0.0029	2.80E-03	0.0015	0.0028	6.80E-09
223	0.02	0.000	0.169	0.1325	0.0015	0.0028	2.76E-03	0.0015	0.0028	6.80E-09
224	0.05	0.000	0.157	0.1239	0.0015	0.0028	2.73E-03	0.0014	0.0027	6.80E-09
225	0.07	0.000	0.074	0.1237	0.0014	0.0027	2.70E-03	0.0014	0.0027	6.80E-09
226	0.07	0.000	0.090	0.1218	0.0014	0.0027	2.67E-03	0.0014	0.0027	6.80E-09
227	0.01	0.000	0.084	0.1155	0.0014	0.0026	2.64E-03	0.0014	0.0026	6.80E-09
228	0.58	0.000	0.100	0.1558	0.0013	0.0025	2.61E-03	0.0014	0.0026	6.80E-09
229	0.01	0.000	0.252	0.1355	0.0013	0.0025	2.58E-03	0.0014	0.0026	6.80E-09
230	0.00	0.000	0.240	0.1155	0.0013	0.0024	2.55E-03	0.0013	0.0026	6.80E-09
231	0.00	0.000	0.304	0.0902	0.0012	0.0024	2.52E-03	0.0013	0.0025	6.80E-09
232	0.28	0.000	0.220	0.0953	0.0012	0.0023	2.49E-03	0.0013	0.0025	6.80E-09
233	0.12	0.000	0.077	0.0991	0.0012	0.0023	2.47E-03	0.0013	0.0025	6.80E-09
234	0.51	0.000	0.090	0.1340	0.0012	0.0022	2.44E-03	0.0013	0.0025	6.80E-09
235	0.06	0.000	0.229	0.1198	0.0011	0.0022	2.42E-03	0.0013	0.0024	6.80E-09
236	0.63	0.000	0.205	0.1555	0.0011	0.0021	2.39E-03	0.0013	0.0024	6.80E-09
237	0.00	0.000	0.165	0.1418	0.0011	0.0021	2.37E-03	0.0012	0.0024	6.80E-09

238		0.07	0.000	0.255	0.1266	0.0011	0.0021	2.34E-03	0.0012	0.0024	6.80E-09
239		0.00	0.000	0.195	0.1104	0.0011	0.0020	2.32E-03	0.0012	0.0023	6.80E-09
240		0.01	0.000	0.263	0.0890	0.0010	0.0020	2.30E-03	0.0012	0.0023	6.80E-09
241		0.53	0.000	0.205	0.1162	0.0010	0.0019	2.28E-03	0.0012	0.0023	6.80E-09
242		0.00	0.000	0.149	0.1038	0.0010	0.0019	2.25E-03	0.0012	0.0023	6.80E-09
243		0.00	0.000	0.158	0.0904	0.0011	0.0022	2.39E-03	0.0012	0.0023	6.80E-09
244		0.00	0.000	0.101	0.0820	0.0009	0.0018	2.19E-03	0.0012	0.0023	6.80E-09
245		0.00	0.000	0.035	0.0791	0.0009	0.0018	2.17E-03	0.0011	0.0022	6.80E-09
246		0.00	0.000	0.021	0.0773	0.0009	0.0017	2.15E-03	0.0011	0.0022	6.80E-09
247		1.37	0.000	0.104	0.1831	0.0009	0.0017	2.13E-03	0.0011	0.0021	6.80E-09
248		0.06	0.000	0.067	0.1826	0.0009	0.0017	2.11E-03	0.0011	0.0021	6.80E-09
249		0.00	0.000	0.075	0.1765	0.0009	0.0016	2.09E-03	0.0011	0.0021	6.80E-09
250		0.61	0.000	0.243	0.2068	0.0008	0.0016	2.08E-03	0.0011	0.0021	6.80E-09
251		0.14	0.000	0.245	0.1982	0.0008	0.0016	2.06E-03	0.0011	0.0021	6.80E-09
252		0.09	0.000	0.295	0.1814	0.0008	0.0016	2.04E-03	0.0011	0.0021	6.80E-09
253		0.00	0.000	0.133	0.1703	0.0008	0.0015	2.03E-03	0.0011	0.0020	6.80E-09
254		0.00	0.000	0.087	0.1631	0.0008	0.0015	2.01E-03	0.0011	0.0020	6.80E-09
255		0.00	0.000	0.177	0.1483	0.0008	0.0015	1.99E-03	0.0011	0.0020	6.80E-09
256		0.32	0.000	0.162	0.1611	0.0008	0.0015	1.98E-03	0.0010	0.0020	6.80E-09
257		0.00	0.000	0.095	0.1532	0.0008	0.0014	1.96E-03	0.0010	0.0020	6.80E-09
258		0.00	0.000	0.120	0.1432	0.0007	0.0014	1.95E-03	0.0010	0.0020	6.80E-09
259		0.00	0.000	0.074	0.1371	0.0007	0.0014	1.94E-03	0.0010	0.0019	6.80E-09
260	*	0.99	0.000	0.029	0.1387	0.0007	0.0014	1.92E-03	0.0010	0.0019	6.80E-09
261		0.00	0.000	0.000	0.2169	0.0007	0.0014	1.90E-03	0.0010	0.0019	6.80E-09
262		0.00	0.000	0.108	0.2079	0.0007	0.0013	1.89E-03	0.0010	0.0019	6.80E-09
263		0.03	0.000	0.072	0.2040	0.0008	0.0015	2.00E-03	0.0010	0.0020	6.80E-09
264		0.30	0.000	0.182	0.2134	0.0007	0.0013	1.86E-03	0.0010	0.0019	6.80E-09
265		0.00	0.000	0.070	0.2076	0.0007	0.0013	1.83E-03	0.0010	0.0018	6.80E-09
266		0.00	0.000	0.174	0.1931	0.0007	0.0012	1.82E-03	0.0010	0.0018	6.80E-09
267		0.00	0.000	0.156	0.1801	0.0006	0.0012	1.81E-03	0.0010	0.0018	6.80E-09
268		0.00	0.000	0.075	0.1739	0.0006	0.0012	1.79E-03	0.0009	0.0018	6.80E-09
269		0.02	0.000	0.131	0.1646	0.0006	0.0012	1.78E-03	0.0009	0.0018	6.80E-09
270		1.03	0.000	0.194	0.2343	0.0006	0.0012	1.77E-03	0.0009	0.0018	6.80E-09
271		0.00	0.000	0.123	0.2240	0.0006	0.0012	1.76E-03	0.0009	0.0018	6.80E-09
272		0.15	0.000	0.080	0.2298	0.0006	0.0011	1.74E-03	0.0009	0.0017	6.80E-09

273		0.75	0.000	0.124	0.2819	0.0006	0.0011	1.73E-03	0.0009	0.0017	6.80E-09
274		0.01	0.000	0.053	0.2785	0.0006	0.0011	1.72E-03	0.0009	0.0017	6.80E-09
275		0.58	0.000	0.145	0.3052	0.0007	0.0013	1.84E-03	0.0009	0.0018	6.80E-09
276		0.00	0.000	0.134	0.2853	0.0007	0.0012	1.81E-03	0.0010	0.0018	6.80E-09
277		0.00	0.000	0.134	0.2551	0.0009	0.0018	2.19E-03	0.0011	0.0020	6.80E-09
278		0.00	0.000	0.183	0.2297	0.0006	0.0011	1.58E-03	0.0010	0.0018	6.80E-09
279		0.00	0.000	0.189	0.2111	0.0002	0.0004	1.06E-03	0.0007	0.0013	6.80E-09
280		0.00	0.000	0.197	0.1947	0.0002	0.0004	1.09E-03	0.0006	0.0011	6.80E-09
281		0.03	0.000	0.090	0.1897	0.0006	0.0011	1.65E-03	0.0007	0.0014	6.80E-09
282		0.00	0.000	0.160	0.1764	0.0004	0.0007	1.31E-03	0.0008	0.0014	6.80E-09
283		0.00	0.000	0.116	0.1667	0.0009	0.0017	2.14E-03	0.0009	0.0018	6.80E-09
284		0.00	0.000	0.070	0.1609	0.0009	0.0017	2.10E-03	0.0011	0.0021	6.80E-09
285		0.00	0.000	0.061	0.1558	0.0008	0.0016	2.07E-03	0.0011	0.0021	6.80E-09
286		0.00	0.000	0.123	0.1456	0.0008	0.0015	2.03E-03	0.0011	0.0020	6.80E-09
287		0.00	0.000	0.168	0.1316	0.0008	0.0015	2.00E-03	0.0011	0.0020	6.80E-09
288		0.43	0.000	0.153	0.1549	0.0008	0.0014	1.84E-03	0.0010	0.0019	6.80E-09
289		0.02	0.000	0.042	0.1529	0.0000	0.0000	4.34E-19	0.0004	0.0008	6.80E-09
290		1.11	0.000	0.067	0.2401	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
291		0.07	0.000	0.076	0.2395	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
292		0.00	0.000	0.048	0.2355	0.0000	0.0000	0.00E+00	0.0000	0.0000	5.07E-09
293		0.37	0.000	0.095	0.2584	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.00E+00
294		0.18	0.000	0.109	0.2643	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.00E+00
295		0.22	0.000	0.096	0.2747	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.00E+00
296		0.00	0.000	0.046	0.2696	0.0006	0.0012	9.12E-04	0.0003	0.0005	5.10E-09
297		0.00	0.000	0.039	0.2627	0.0028	0.0053	3.54E-03	0.0013	0.0024	6.80E-09
298		0.70	0.000	0.068	0.3097	0.0017	0.0032	2.46E-03	0.0015	0.0029	6.80E-09
299	*	0.00	0.000	0.000	0.2966	0.0002	0.0004	5.48E-04	0.0007	0.0014	6.80E-09
300		0.00	0.000	0.045	0.2726	0.0029	0.0056	3.63E-03	0.0012	0.0023	6.80E-09
301		0.00	0.000	0.018	0.2634	0.0032	0.0060	3.67E-03	0.0019	0.0036	6.80E-09
302	*	0.46	0.000	0.018	0.2616	0.0000	0.0000	4.34E-19	0.0008	0.0016	6.80E-09
303		0.00	0.000	0.016	0.2679	0.0013	0.0024	1.77E-03	0.0006	0.0011	6.80E-09
304		0.00	0.000	0.016	0.2791	0.0021	0.0039	2.51E-03	0.0011	0.0022	6.80E-09
305		0.02	0.000	0.067	0.2794	0.0030	0.0057	3.61E-03	0.0016	0.0031	6.80E-09
306		0.01	0.000	0.049	0.2711	0.0030	0.0056	3.06E-03	0.0017	0.0033	6.80E-09
307		0.00	0.000	0.043	0.2557	0.0012	0.0022	1.55E-03	0.0012	0.0022	6.80E-09

308			0.00	0.000	0.024	0.2537	0.0058	0.0110	5.45E-03	0.0020	0.0038	6.80E-09
309			0.00	0.000	0.030	0.2513	0.0031	0.0058	3.13E-03	0.0021	0.0041	6.80E-09
310			0.00	0.000	0.057	0.2466	0.0000	0.0000	0.00E+00	0.0007	0.0014	6.80E-09
311	*		0.75	0.000	0.027	0.2482	0.0019	0.0035	2.41E-03	0.0008	0.0014	6.80E-09
312	*		0.17	0.000	0.013	0.2498	0.0078	0.0149	6.34E-03	0.0024	0.0046	6.80E-09
313	*		0.86	0.000	0.017	0.2515	0.0067	0.0128	5.84E-03	0.0031	0.0060	6.80E-09
314			0.00	0.000	0.000	0.2967	0.0008	0.0014	1.17E-03	0.0017	0.0032	6.80E-09
315			0.00	0.000	0.000	0.3471	0.0021	0.0039	2.37E-03	0.0010	0.0019	6.80E-09
316			0.00	0.000	0.052	0.2858	0.0000	0.0000	0.00E+00	0.0005	0.0010	6.80E-09
317			0.00	0.000	0.042	0.2702	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
318			0.01	0.000	0.064	0.2609	0.0055	0.0105	3.72E-03	0.0011	0.0021	6.80E-09
319			0.74	0.000	0.108	0.3103	0.0277	0.0528	1.20E-02	0.0044	0.0084	6.80E-09
320			0.49	0.000	0.051	0.3166	0.0381	0.0725	1.41E-02	0.0069	0.0131	6.80E-09
321	*		0.11	0.000	0.025	0.2954	0.0351	0.0667	1.35E-02	0.0072	0.0137	6.80E-09
322	*		0.00	0.000	0.031	0.2752	0.0263	0.0500	1.16E-02	0.0065	0.0124	6.80E-09
323	*		0.00	0.000	0.016	0.2608	0.0143	0.0272	7.99E-03	0.0050	0.0095	6.80E-09
324	*		0.00	0.000	0.000	0.2599	0.0122	0.0233	7.86E-03	0.0042	0.0080	6.80E-09
325	*		0.00	0.000	0.021	0.2581	0.0272	0.0518	1.18E-02	0.0053	0.0102	6.80E-09
326	*		0.11	0.000	0.033	0.2554	0.0177	0.0336	9.54E-03	0.0055	0.0105	6.80E-09
327	*		0.00	0.000	0.029	0.2530	0.0211	0.0401	1.04E-02	0.0053	0.0101	6.80E-09
328	*		0.00	0.000	0.012	0.2482	0.0276	0.0525	1.20E-02	0.0059	0.0113	6.80E-09
329	*		0.00	0.000	0.000	0.2439	0.0218	0.0415	1.06E-02	0.0059	0.0112	6.80E-09
330	*		0.14	0.000	0.007	0.2425	0.0169	0.0321	9.35E-03	0.0052	0.0099	6.80E-09
331	*		1.78	0.000	0.000	0.2402	0.0015	0.0027	1.65E-03	0.0026	0.0049	6.80E-09
332	*		0.00	0.000	0.011	0.2385	0.0000	0.0000	0.00E+00	0.0004	0.0008	6.80E-09
333	*		0.00	0.000	0.006	0.2378	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
334	*	*	0.00	0.000	0.015	0.2378	0.0100	0.0190	6.41E-03	0.0019	0.0037	6.80E-09
335	*	*	0.00	0.000	0.009	0.2378	0.0324	0.0616	1.30E-02	0.0053	0.0101	6.80E-09
336		*	0.00	0.000	0.032	0.2378	0.0401	0.0762	1.45E-02	0.0072	0.0137	6.80E-09
337	*	*	0.00	0.000	0.016	0.2378	0.0534	0.1017	1.68E-02	0.0083	0.0158	6.80E-09
338	*	*	0.00	0.000	0.025	0.2378	0.0671	0.1277	1.88E-02	0.0094	0.0179	6.80E-09
339		*	0.04	0.000	0.000	0.3375	0.0743	0.1414	1.98E-02	0.0102	0.0194	6.80E-09
340	*	*	0.00	0.000	0.023	0.3375	0.0759	0.1444	2.01E-02	0.0105	0.0200	6.80E-09
341		*	0.00	0.000	0.000	0.3822	0.0746	0.1419	1.99E-02	0.0105	0.0200	6.80E-09
342		*	0.12	0.000	0.013	0.3909	0.0720	0.1371	1.95E-02	0.0103	0.0197	6.80E-09

343		*	0.00	0.000	0.000	0.3909	0.0691	0.1314	1.91E-02	0.0101	0.0193	6.80E-09
344	*	*	0.00	0.000	0.000	0.3909	0.0660	0.1257	1.87E-02	0.0099	0.0189	6.80E-09
345	*	*	0.00	0.000	0.000	0.3909	0.0658	0.1251	1.86E-02	0.0098	0.0187	6.80E-09
346		*	0.00	0.000	0.000	0.3909	0.0483	0.0919	1.59E-02	0.0090	0.0171	6.80E-09
347	*	*	0.00	0.000	0.000	0.3909	0.0629	0.1197	1.82E-02	0.0091	0.0173	6.80E-09
348		*	0.03	0.000	0.011	0.3922	0.0771	0.1467	2.02E-02	0.0102	0.0193	6.80E-09
349	*	*	0.20	0.000	0.020	0.3922	0.0776	0.1477	2.03E-02	0.0106	0.0202	6.80E-09
350		*	0.38	0.000	0.000	0.4390	0.0598	0.1138	1.78E-02	0.0099	0.0188	6.80E-09
351		*	0.00	0.000	0.000	0.4390	0.0462	0.0879	1.56E-02	0.0087	0.0165	6.80E-09
352		*	1.29	0.000	0.011	0.5457	0.0369	0.0703	1.39E-02	0.0077	0.0146	6.80E-09
353		*	0.01	0.000	0.006	0.5459	0.0304	0.0579	1.26E-02	0.0069	0.0132	6.80E-09
354	*	*	0.05	0.000	0.024	0.5459	0.0257	0.0489	1.16E-02	0.0063	0.0120	6.80E-09
355	*	*	0.00	0.000	0.023	0.5459	0.0221	0.0420	1.07E-02	0.0058	0.0111	6.80E-09
356	*	*	0.00	0.000	0.001	0.5459	0.0193	0.0367	1.00E-02	0.0054	0.0103	6.80E-09
357	*	*	0.00	0.000	0.000	0.5459	0.0170	0.0324	9.39E-03	0.0051	0.0097	6.80E-09
358	*	*	0.05	0.000	0.012	0.5459	0.0152	0.0289	8.87E-03	0.0048	0.0091	6.80E-09
359	*	*	0.17	0.000	0.018	0.5459	0.0137	0.0261	8.41E-03	0.0045	0.0086	6.80E-09
360		*	0.06	0.000	0.016	0.5646	0.0124	0.0236	8.01E-03	0.0043	0.0082	6.80E-09
361		*	0.24	0.000	0.010	0.5836	0.0113	0.0216	7.65E-03	0.0041	0.0078	6.80E-09
362		*	0.58	0.000	0.010	0.6307	0.0104	0.0198	7.32E-03	0.0039	0.0075	6.80E-09
363		*	0.00	0.000	0.000	0.6307	0.0096	0.0183	7.03E-03	0.0038	0.0072	6.80E-09
364	*	*	0.03	0.000	0.018	0.6307	0.0089	0.0169	6.76E-03	0.0036	0.0069	6.80E-09
365	*	*	0.25	0.000	0.021	0.6307	0.0083	0.0157	6.52E-03	0.0035	0.0066	6.80E-09

* = Frozen (air or soil)

Annual Totals for Year 6			
	inches	cubic feet	percent
Precipitation	43.15	156,625.8	100.00
Runoff	0.000	0.0000	0.00
Evapotranspiration	30.759	111,654.6	71.29
Drainage Collected from Layer 3	8.0773	29,320.7	18.72
Percolation/Leakage through Layer 4	2.087624	7,578.1	4.84
Average Head on Top of Layer 4	0.0116	---	---

Drainage Collected from Layer 5	2.0869	7,575.6	4.84
Percolation/Leakage through Layer 7	0.000002	0.0089	0.00
Average Head on Top of Layer 6	0.0030	---	---
Change in Water Storage	2.2245	8,074.9	5.16
Soil Water at Start of Year	41.1362	149,324.3	95.34
Soil Water at End of Year	43.1683	156,700.9	100.05
Snow Water at Start of Year	0.0504	183.0	0.12
Snow Water at End of Year	0.2428	881.4	0.56
Annual Water Budget Balance	0.0000	0.0000	0.00

Daily Output for Year 7

Column key: Head #1: drainage from Layer 4 | Head #2: drainage from Layer 6
Drain #1: drainage from Layer 3 | Drain #2: drainage from Layer 5
Leak #1: leakage thru Layer 4 | Leak #2: leakage thru Layer 7

Title: Millersville Cell 9 - Open Cell Condition
Simulated On: 6/9/2024 11:31

Day	Freezing Status* Air	Freezing Status* Soil	Rain (inches)	Runoff (inches)	ET (inches)	Evap. Zone Water (in/in)	Head #1 (inches)	Drain #1 (inches)	Leak #1 (inches)	Head #2 (inches)	Drain #2 (inches)	Leak #2 (inches)
1		*	0.00	0.000	0.017	0.6495	0.0077	0.0147	6.30E-03	0.0034	0.0064	6.80E-09
2		*	0.06	0.000	0.010	0.6534	0.0072	0.0137	6.09E-03	0.0032	0.0062	6.80E-09
3	*	*	0.24	0.000	0.014	0.6534	0.0068	0.0129	5.90E-03	0.0031	0.0060	6.80E-09
4	*	*	0.09	0.000	0.007	0.6534	0.0064	0.0121	5.72E-03	0.0030	0.0058	6.80E-09
5	*	*	0.00	0.000	0.000	0.6534	0.0060	0.0114	5.56E-03	0.0030	0.0056	6.80E-09
6	*	*	0.99	0.000	0.000	0.6534	0.0057	0.0108	5.40E-03	0.0029	0.0055	6.80E-09
7	*	*	0.00	0.000	0.017	0.6534	0.0054	0.0103	5.26E-03	0.0028	0.0053	6.80E-09
8	*	*	0.00	0.000	0.023	0.6534	0.0051	0.0097	5.12E-03	0.0027	0.0052	6.80E-09
9	*	*	0.00	0.000	0.021	0.6534	0.0049	0.0092	4.99E-03	0.0027	0.0050	6.80E-09
10		*	0.00	0.000	0.025	0.6534	0.0046	0.0088	4.87E-03	0.0026	0.0049	6.80E-09
11		*	0.00	0.000	0.000	0.6710	0.0048	0.0092	4.97E-03	0.0026	0.0049	6.80E-09
12	*	*	0.00	0.000	0.015	0.6710	0.0042	0.0081	4.66E-03	0.0025	0.0048	6.80E-09
13	*	*	0.24	0.000	0.008	0.6710	0.0053	0.0102	5.23E-03	0.0026	0.0050	6.80E-09
14	*	*	0.00	0.000	0.005	0.6710	0.0056	0.0106	5.35E-03	0.0028	0.0053	6.80E-09
15	*	*	0.00	0.000	0.008	0.6710	0.0016	0.0030	2.84E-03	0.0021	0.0039	6.80E-09
16	*	*	0.00	0.000	0.004	0.6710	0.0016	0.0031	2.89E-03	0.0015	0.0029	6.80E-09
17	*	*	0.00	0.000	0.002	0.6710	0.0019	0.0037	3.14E-03	0.0016	0.0030	6.80E-09
18	*	*	0.00	0.000	0.000	0.6710	0.0022	0.0041	3.33E-03	0.0017	0.0032	6.80E-09
19	*	*	0.03	0.000	0.000	0.6710	0.0024	0.0045	3.47E-03	0.0018	0.0034	6.80E-09
20	*	*	0.17	0.000	0.000	0.6710	0.0025	0.0048	3.58E-03	0.0019	0.0035	6.80E-09
21		*	0.05	0.000	0.000	0.6710	0.0026	0.0050	3.66E-03	0.0019	0.0036	6.80E-09
22		*	0.00	0.000	0.000	0.6710	0.0027	0.0051	3.71E-03	0.0019	0.0037	6.80E-09
23		*	0.00	0.000	0.052	0.6710	0.0028	0.0052	3.75E-03	0.0020	0.0037	6.80E-09
24		*	0.00	0.000	0.000	0.6710	0.0028	0.0053	3.77E-03	0.0020	0.0038	6.80E-09
25		*	0.00	0.000	0.000	0.6710	0.0028	0.0053	3.78E-03	0.0020	0.0038	6.80E-09
26		*	0.00	0.000	0.000	0.6710	0.0043	0.0082	4.68E-03	0.0023	0.0043	6.80E-09
27			0.46	0.000	0.053	0.2784	0.0040	0.0077	4.53E-03	0.0024	0.0046	6.80E-09

28		0.86	0.000	0.068	0.3323	0.0014	0.0026	2.62E-03	0.0018	0.0034	6.80E-09
29		0.26	0.000	0.038	0.3036	0.0014	0.0027	2.67E-03	0.0014	0.0027	6.80E-09
30		0.00	0.000	0.041	0.2862	0.0022	0.0043	3.01E-03	0.0015	0.0029	6.80E-09
31		0.00	0.000	0.060	0.2636	0.0045	0.0086	4.81E-03	0.0021	0.0040	6.80E-09
32	*	0.00	0.000	0.005	0.2586	0.0042	0.0080	4.64E-03	0.0025	0.0047	6.80E-09
33		0.00	0.000	0.042	0.2510	0.0001	0.0001	2.21E-04	0.0011	0.0021	6.80E-09
34	*	0.52	0.000	0.015	0.2516	0.0000	0.0000	0.00E+00	0.0001	0.0002	6.80E-09
35	*	0.00	0.000	0.000	0.2521	0.1230	0.2342	2.46E-02	0.0074	0.0141	6.80E-09
36		0.05	0.000	0.000	0.2765	0.2184	0.4157	3.46E-02	0.0157	0.0299	6.80E-09
37	*	0.47	0.000	0.017	0.2781	0.2179	0.4146	3.45E-02	0.0181	0.0344	6.80E-09
38		0.09	0.000	0.000	0.3355	0.2097	0.3990	3.38E-02	0.0179	0.0341	6.80E-09
39		0.07	0.000	0.059	0.2892	0.2015	0.3835	3.31E-02	0.0176	0.0334	6.80E-09
40		0.00	0.000	0.071	0.2708	0.1909	0.3633	3.22E-02	0.0171	0.0326	6.80E-09
41		0.00	0.000	0.107	0.2550	0.1910	0.3635	3.22E-02	0.0169	0.0322	6.80E-09
42		0.19	0.000	0.087	0.2617	0.1407	0.2679	2.75E-02	0.0155	0.0295	6.80E-09
43		0.00	0.000	0.128	0.2481	0.1455	0.2770	2.80E-02	0.0147	0.0279	6.80E-09
44		0.00	0.000	0.094	0.2403	0.0891	0.1696	2.17E-02	0.0128	0.0244	6.80E-09
45		0.00	0.000	0.082	0.2335	0.0732	0.1392	1.97E-02	0.0108	0.0206	6.80E-09
46		0.00	0.000	0.048	0.2296	0.0821	0.1563	2.09E-02	0.0107	0.0204	6.80E-09
47		0.00	0.000	0.049	0.2254	0.0615	0.1170	1.80E-02	0.0101	0.0192	6.80E-09
48		0.00	0.000	0.067	0.2199	0.0880	0.1675	2.16E-02	0.0106	0.0201	6.80E-09
49		0.00	0.000	0.037	0.2168	0.1156	0.2199	2.49E-02	0.0123	0.0234	6.80E-09
50		0.00	0.000	0.068	0.2111	0.1207	0.2298	2.55E-02	0.0132	0.0252	6.80E-09
51		0.00	0.000	0.076	0.2048	0.1162	0.2211	2.50E-02	0.0132	0.0252	6.80E-09
52		0.00	0.000	0.091	0.1972	0.1093	0.2080	2.42E-02	0.0129	0.0245	6.80E-09
53		0.00	0.000	0.157	0.1841	0.1023	0.1948	2.34E-02	0.0125	0.0237	6.80E-09
54		0.02	0.000	0.114	0.1760	0.0959	0.1824	2.26E-02	0.0121	0.0229	6.80E-09
55		0.00	0.000	0.064	0.1707	0.0900	0.1712	2.19E-02	0.0117	0.0222	6.80E-09
56		0.13	0.000	0.060	0.1768	0.0847	0.1611	2.12E-02	0.0113	0.0215	6.80E-09
57		0.00	0.000	0.059	0.1722	0.0799	0.1520	2.06E-02	0.0110	0.0209	6.80E-09
58	*	0.20	0.000	0.056	0.1739	0.0755	0.1438	2.00E-02	0.0107	0.0203	6.80E-09
59		0.00	0.000	0.060	0.1792	0.0716	0.1363	1.95E-02	0.0104	0.0197	6.80E-09
60		0.00	0.000	0.087	0.1719	0.0680	0.1294	1.90E-02	0.0101	0.0192	6.80E-09
61	*	0.00	0.000	0.000	0.1719	0.0680	0.1294	1.90E-02	0.0100	0.0190	6.80E-09
62	*	0.29	0.000	0.024	0.1736	0.0524	0.0996	1.66E-02	0.0092	0.0176	6.80E-09

63	*	0.03	0.000	0.015	0.1752	0.0582	0.1108	1.75E-02	0.0090	0.0171	6.80E-09
64	*	0.00	0.000	0.000	0.1769	0.0682	0.1298	1.90E-02	0.0096	0.0183	6.80E-09
65		0.12	0.000	0.024	0.2034	0.0833	0.1585	2.10E-02	0.0106	0.0201	6.80E-09
66		0.00	0.000	0.059	0.1985	0.0670	0.1275	1.88E-02	0.0104	0.0197	6.80E-09
67		1.08	0.000	0.124	0.2779	0.0512	0.0974	1.64E-02	0.0092	0.0175	6.80E-09
68		0.00	0.000	0.091	0.2701	0.0403	0.0767	1.45E-02	0.0081	0.0154	6.80E-09
69	*	0.00	0.000	0.000	0.2684	0.0355	0.0676	1.36E-02	0.0074	0.0140	6.80E-09
70		0.36	0.000	0.120	0.2861	0.0298	0.0568	1.24E-02	0.0068	0.0130	6.80E-09
71		0.00	0.000	0.104	0.2751	0.0215	0.0410	1.05E-02	0.0060	0.0113	6.80E-09
72		0.00	0.000	0.191	0.2510	0.0172	0.0328	9.38E-03	0.0052	0.0099	6.80E-09
73		0.00	0.000	0.148	0.2374	0.0108	0.0205	7.37E-03	0.0043	0.0082	6.80E-09
74		0.00	0.000	0.137	0.2260	0.0123	0.0233	7.87E-03	0.0040	0.0077	6.80E-09
75	*	0.00	0.000	0.076	0.2197	0.0177	0.0338	9.56E-03	0.0046	0.0088	6.80E-09
76		0.00	0.000	0.097	0.2115	0.0064	0.0122	4.83E-03	0.0036	0.0068	6.80E-09
77		0.00	0.000	0.116	0.2018	0.0047	0.0089	4.84E-03	0.0026	0.0049	6.80E-09
78		0.62	0.000	0.061	0.2481	0.0092	0.0174	6.86E-03	0.0032	0.0060	6.80E-09
79	*	0.00	0.000	0.002	0.2481	0.0117	0.0222	7.75E-03	0.0039	0.0073	6.80E-09
80		0.10	0.000	0.067	0.2488	0.0163	0.0311	9.14E-03	0.0045	0.0085	6.80E-09
81		0.40	0.000	0.091	0.2747	0.0125	0.0238	7.91E-03	0.0044	0.0084	6.80E-09
82		0.14	0.000	0.085	0.2785	0.0107	0.0204	7.38E-03	0.0040	0.0076	6.80E-09
83		0.00	0.000	0.055	0.2717	0.0105	0.0200	7.34E-03	0.0039	0.0074	6.80E-09
84	*	0.00	0.000	0.000	0.2617	0.0122	0.0233	7.92E-03	0.0040	0.0077	6.80E-09
85	*	0.00	0.000	0.000	0.2617	0.0082	0.0156	6.43E-03	0.0037	0.0071	6.80E-09
86	*	0.00	0.000	0.077	0.2553	0.0090	0.0171	6.76E-03	0.0035	0.0066	6.80E-09
87	*	0.00	0.000	0.000	0.2553	0.0124	0.0235	7.99E-03	0.0039	0.0075	6.80E-09
88		0.15	0.000	0.136	0.2516	0.0115	0.0219	7.70E-03	0.0041	0.0078	6.80E-09
89	*	0.19	0.000	0.042	0.2514	0.0088	0.0168	6.73E-03	0.0038	0.0071	6.80E-09
90		0.00	0.000	0.074	0.2550	0.0027	0.0050	2.65E-03	0.0023	0.0044	6.80E-09
91		0.06	0.000	0.185	0.2404	0.0034	0.0065	3.62E-03	0.0017	0.0033	6.80E-09
92		0.97	0.000	0.169	0.3075	0.0022	0.0041	2.61E-03	0.0016	0.0030	6.80E-09
93		0.08	0.000	0.152	0.2785	0.0000	0.0000	0.00E+00	0.0006	0.0011	6.80E-09
94		0.39	0.000	0.060	0.2925	0.0091	0.0173	6.72E-03	0.0020	0.0039	6.80E-09
95		0.55	0.000	0.206	0.3171	0.0075	0.0143	5.32E-03	0.0031	0.0058	6.80E-09
96		0.00	0.000	0.067	0.2869	0.0039	0.0075	3.19E-03	0.0022	0.0041	6.80E-09
97		0.03	0.000	0.097	0.2657	0.0078	0.0148	5.93E-03	0.0025	0.0048	6.80E-09

98		0.06	0.000	0.161	0.2464	0.0022	0.0041	3.07E-03	0.0022	0.0042	6.80E-09
99	*	0.03	0.000	0.053	0.2399	0.0070	0.0134	5.99E-03	0.0025	0.0048	6.80E-09
100	*	0.07	0.000	0.053	0.2412	0.0103	0.0195	7.27E-03	0.0035	0.0067	6.80E-09
101	*	0.30	0.000	0.010	0.2429	0.0154	0.0294	8.89E-03	0.0043	0.0082	6.80E-09
102	*	0.42	0.000	0.022	0.2445	0.0157	0.0298	8.88E-03	0.0047	0.0089	6.80E-09
103	*	0.40	0.000	0.000	0.2428	0.0106	0.0202	7.23E-03	0.0042	0.0079	6.80E-09
104	*	0.49	0.000	0.016	0.2400	0.0151	0.0288	8.84E-03	0.0043	0.0082	6.80E-09
105	*	0.00	0.000	0.015	0.2379	0.0125	0.0238	8.04E-03	0.0044	0.0084	6.80E-09
106		0.00	0.000	0.000	0.3585	0.0054	0.0102	4.91E-03	0.0033	0.0063	6.80E-09
107		0.05	0.000	0.181	0.2725	0.0076	0.0145	6.24E-03	0.0030	0.0057	6.80E-09
108		0.47	0.000	0.167	0.2845	0.0090	0.0172	6.82E-03	0.0034	0.0066	6.80E-09
109		0.78	0.000	0.193	0.3311	0.0005	0.0009	7.51E-04	0.0017	0.0033	6.80E-09
110		0.00	0.000	0.129	0.2773	0.0000	0.0000	0.00E+00	0.0002	0.0004	6.80E-09
111		0.00	0.000	0.155	0.2539	0.0027	0.0051	2.79E-03	0.0008	0.0016	6.80E-09
112		0.00	0.000	0.254	0.2250	0.0060	0.0114	3.93E-03	0.0018	0.0034	6.80E-09
113		0.28	0.000	0.091	0.2409	0.0302	0.0574	1.24E-02	0.0046	0.0088	6.80E-09
114		1.36	0.000	0.237	0.3312	0.0371	0.0705	1.39E-02	0.0069	0.0131	6.80E-09
115		0.70	0.000	0.258	0.3131	0.0351	0.0668	1.35E-02	0.0072	0.0136	6.80E-09
116		0.00	0.000	0.267	0.2671	0.0320	0.0610	1.28E-02	0.0069	0.0131	6.80E-09
117		0.00	0.000	0.172	0.2407	0.0318	0.0605	1.29E-02	0.0068	0.0129	6.80E-09
118	*	0.14	0.000	0.055	0.2415	0.0141	0.0268	8.09E-03	0.0053	0.0101	6.80E-09
119		0.13	0.000	0.192	0.2414	0.0001	0.0001	3.16E-04	0.0019	0.0037	6.80E-09
120		0.18	0.000	0.138	0.2454	0.0181	0.0345	9.47E-03	0.0030	0.0057	6.80E-09
121		1.40	0.000	0.275	0.3393	0.0364	0.0693	1.38E-02	0.0062	0.0118	6.80E-09
122		0.00	0.000	0.291	0.2695	0.0412	0.0784	1.47E-02	0.0075	0.0142	6.80E-09
123		0.09	0.000	0.090	0.2597	0.0338	0.0644	1.33E-02	0.0073	0.0139	6.80E-09
124		0.00	0.000	0.096	0.2472	0.0091	0.0172	5.21E-03	0.0046	0.0087	6.80E-09
125		0.26	0.000	0.097	0.2611	0.0021	0.0040	2.34E-03	0.0019	0.0037	6.80E-09
126		0.00	0.000	0.176	0.2448	0.0322	0.0613	1.28E-02	0.0044	0.0084	6.80E-09
127		0.00	0.000	0.178	0.2260	0.0611	0.1164	1.80E-02	0.0082	0.0156	6.80E-09
128		0.01	0.000	0.159	0.2096	0.0525	0.0998	1.66E-02	0.0090	0.0171	6.80E-09
129		0.24	0.000	0.059	0.2245	0.0328	0.0625	1.30E-02	0.0076	0.0146	6.80E-09
130	*	0.20	0.000	0.040	0.2259	0.0553	0.1052	1.70E-02	0.0081	0.0154	6.80E-09
131	*	0.13	0.000	0.024	0.2266	0.0633	0.1204	1.83E-02	0.0093	0.0177	6.80E-09
132		0.64	0.000	0.000	0.2776	0.0729	0.1387	1.96E-02	0.0100	0.0190	6.80E-09

133	0.19	0.000	0.000	0.3138	0.0936	0.1780	2.23E-02	0.0111	0.0212	6.80E-09
134	0.29	0.000	0.247	0.2921	0.0998	0.1900	2.31E-02	0.0119	0.0227	6.80E-09
135	0.01	0.000	0.262	0.2606	0.0926	0.1761	2.21E-02	0.0118	0.0225	6.80E-09
136	0.03	0.000	0.103	0.2471	0.0934	0.1778	2.23E-02	0.0117	0.0222	6.80E-09
137	0.00	0.000	0.161	0.2291	0.0970	0.1845	2.27E-02	0.0118	0.0225	6.80E-09
138	0.00	0.000	0.183	0.2099	0.0939	0.1787	2.24E-02	0.0118	0.0225	6.80E-09
139	0.00	0.000	0.098	0.2017	0.0815	0.1551	2.08E-02	0.0113	0.0215	6.80E-09
140	0.10	0.000	0.111	0.2007	0.0621	0.1183	1.81E-02	0.0101	0.0193	6.80E-09
141	0.00	0.000	0.307	0.1741	0.0682	0.1297	1.90E-02	0.0098	0.0186	6.80E-09
142	0.05	0.000	0.242	0.1577	0.0617	0.1174	1.80E-02	0.0097	0.0184	6.80E-09
143	0.14	0.000	0.126	0.1588	0.0379	0.0721	1.41E-02	0.0083	0.0157	6.80E-09
144	0.10	0.000	0.155	0.1539	0.0217	0.0414	1.06E-02	0.0064	0.0121	6.80E-09
145	0.17	0.000	0.184	0.1530	0.0165	0.0314	9.23E-03	0.0052	0.0099	6.80E-09
146	0.02	0.000	0.116	0.1452	0.0269	0.0512	1.18E-02	0.0056	0.0107	6.80E-09
147	0.00	0.000	0.130	0.1343	0.0433	0.0823	1.50E-02	0.0072	0.0136	6.80E-09
148	0.00	0.000	0.141	0.1226	0.0550	0.1047	1.70E-02	0.0085	0.0161	6.80E-09
149	0.08	0.000	0.105	0.1206	0.0607	0.1156	1.79E-02	0.0092	0.0175	6.80E-09
150	0.00	0.000	0.105	0.1118	0.0619	0.1178	1.81E-02	0.0095	0.0180	6.80E-09
151	0.14	0.000	0.158	0.1099	0.0652	0.1240	1.85E-02	0.0096	0.0183	6.80E-09
152	0.00	0.000	0.217	0.0918	0.0467	0.0889	1.57E-02	0.0089	0.0169	6.80E-09
153	0.15	0.000	0.183	0.0889	0.0615	0.1171	1.80E-02	0.0090	0.0170	6.80E-09
154	0.00	0.000	0.100	0.0803	0.0715	0.1361	1.94E-02	0.0099	0.0188	6.80E-09
155	0.05	0.000	0.046	0.0808	0.0793	0.1509	2.05E-02	0.0105	0.0200	6.80E-09
156	0.00	0.000	0.027	0.0786	0.0628	0.1196	1.82E-02	0.0101	0.0192	6.80E-09
157	0.01	0.000	0.018	0.0777	0.0485	0.0924	1.60E-02	0.0089	0.0170	6.80E-09
158	0.00	0.000	0.006	0.0772	0.0385	0.0733	1.42E-02	0.0079	0.0150	6.80E-09
159	0.00	0.000	0.002	0.0770	0.0316	0.0601	1.28E-02	0.0071	0.0134	6.80E-09
160	0.01	0.000	0.015	0.0770	0.0266	0.0506	1.18E-02	0.0064	0.0122	6.80E-09
161	0.09	0.000	0.031	0.0816	0.0228	0.0433	1.09E-02	0.0059	0.0113	6.80E-09
162	0.00	0.000	0.025	0.0799	0.0198	0.0377	1.01E-02	0.0055	0.0105	6.80E-09
163	0.09	0.000	0.058	0.0829	0.0175	0.0333	9.51E-03	0.0051	0.0098	6.80E-09
164	0.01	0.000	0.047	0.0797	0.0156	0.0296	8.98E-03	0.0048	0.0092	6.80E-09
165	0.01	0.000	0.035	0.0780	0.0140	0.0266	8.51E-03	0.0046	0.0087	6.80E-09
166	0.05	0.000	0.030	0.0798	0.0127	0.0241	8.09E-03	0.0043	0.0083	6.80E-09
167	0.67	0.000	0.057	0.1307	0.0116	0.0220	7.72E-03	0.0041	0.0079	6.80E-09

168	0.44	0.000	0.078	0.1610	0.0106	0.0202	7.39E-03	0.0040	0.0075	6.80E-09
169	0.16	0.000	0.107	0.1657	0.0098	0.0186	7.09E-03	0.0038	0.0072	6.80E-09
170	1.37	0.000	0.128	0.2690	0.0090	0.0172	6.82E-03	0.0036	0.0069	6.80E-09
171	0.10	0.000	0.234	0.2574	0.0084	0.0160	6.57E-03	0.0035	0.0067	6.80E-09
172	0.11	0.000	0.209	0.2492	0.0079	0.0150	6.36E-03	0.0034	0.0065	6.80E-09
173	0.02	0.000	0.110	0.2380	0.0105	0.0199	7.34E-03	0.0036	0.0069	6.80E-09
174	0.00	0.000	0.144	0.2236	0.0093	0.0178	6.94E-03	0.0037	0.0071	6.80E-09
175	0.35	0.000	0.216	0.2344	0.0033	0.0063	4.11E-03	0.0028	0.0053	6.80E-09
176	0.00	0.000	0.266	0.2122	0.0033	0.0063	4.12E-03	0.0022	0.0042	6.80E-09
177	0.00	0.000	0.205	0.1936	0.0057	0.0108	5.33E-03	0.0025	0.0048	6.80E-09
178	0.00	0.000	0.151	0.1811	0.0045	0.0085	4.69E-03	0.0026	0.0049	6.80E-09
179	0.00	0.000	0.327	0.1538	0.0031	0.0059	4.00E-03	0.0023	0.0043	6.80E-09
180	0.10	0.000	0.255	0.1406	0.0045	0.0085	4.75E-03	0.0023	0.0044	6.80E-09
181	0.13	0.000	0.253	0.1301	0.0035	0.0067	4.24E-03	0.0023	0.0044	6.80E-09
182	0.00	0.000	0.267	0.1079	0.0037	0.0070	4.34E-03	0.0023	0.0043	6.80E-09
183	0.00	0.000	0.180	0.0928	0.0039	0.0074	4.45E-03	0.0023	0.0044	6.80E-09
184	0.25	0.000	0.097	0.1053	0.0040	0.0076	4.52E-03	0.0024	0.0045	6.80E-09
185	0.14	0.000	0.106	0.1084	0.0040	0.0077	4.55E-03	0.0024	0.0045	6.80E-09
186	0.00	0.000	0.176	0.0937	0.0041	0.0077	4.56E-03	0.0024	0.0046	6.80E-09
187	0.00	0.000	0.176	0.0791	0.0041	0.0077	4.56E-03	0.0024	0.0046	6.80E-09
188	0.04	0.000	0.057	0.0780	0.0040	0.0076	4.53E-03	0.0024	0.0045	6.80E-09
189	0.00	0.000	0.008	0.0773	0.0040	0.0075	4.50E-03	0.0024	0.0045	6.80E-09
190	0.00	0.000	0.003	0.0771	0.0039	0.0074	4.46E-03	0.0024	0.0045	6.80E-09
191	0.00	0.000	0.001	0.0770	0.0038	0.0072	4.41E-03	0.0023	0.0044	6.80E-09
192	0.18	0.000	0.029	0.0895	0.0037	0.0071	4.36E-03	0.0023	0.0044	6.80E-09
193	0.04	0.000	0.113	0.0833	0.0036	0.0069	4.30E-03	0.0023	0.0043	6.80E-09
194	0.00	0.000	0.049	0.0792	0.0035	0.0067	4.25E-03	0.0022	0.0043	6.80E-09
195	0.00	0.000	0.019	0.0776	0.0034	0.0065	4.19E-03	0.0022	0.0042	6.80E-09
196	1.13	0.000	0.180	0.1570	0.0033	0.0063	4.13E-03	0.0022	0.0042	6.80E-09
197	0.51	0.000	0.238	0.1798	0.0032	0.0062	4.07E-03	0.0022	0.0041	6.80E-09
198	0.00	0.000	0.284	0.1561	0.0031	0.0060	4.01E-03	0.0021	0.0040	6.80E-09
199	0.00	0.000	0.229	0.1370	0.0030	0.0058	3.95E-03	0.0021	0.0040	6.80E-09
200	0.51	0.000	0.272	0.1571	0.0030	0.0056	3.89E-03	0.0021	0.0039	6.80E-09
201	0.00	0.000	0.294	0.1325	0.0029	0.0055	3.83E-03	0.0020	0.0039	6.80E-09
202	0.00	0.000	0.227	0.1137	0.0028	0.0053	3.78E-03	0.0020	0.0038	6.80E-09

203	0.32	0.000	0.359	0.1107	0.0027	0.0052	3.72E-03	0.0020	0.0037	6.80E-09
204	0.15	0.000	0.253	0.1020	0.0026	0.0050	3.67E-03	0.0019	0.0037	6.80E-09
205	0.04	0.000	0.108	0.0965	0.0026	0.0049	3.61E-03	0.0019	0.0036	6.80E-09
206	0.15	0.000	0.159	0.0959	0.0025	0.0047	3.56E-03	0.0019	0.0036	6.80E-09
207	0.40	0.000	0.151	0.1164	0.0024	0.0046	3.51E-03	0.0019	0.0035	6.80E-09
208	0.08	0.000	0.165	0.1094	0.0023	0.0045	3.46E-03	0.0018	0.0035	6.80E-09
209	0.02	0.000	0.066	0.1055	0.0023	0.0043	3.41E-03	0.0018	0.0034	6.80E-09
210	0.87	0.000	0.079	0.1717	0.0022	0.0042	3.36E-03	0.0018	0.0034	6.80E-09
211	0.05	0.000	0.097	0.1676	0.0022	0.0041	3.32E-03	0.0018	0.0033	6.80E-09
212	0.29	0.000	0.254	0.1706	0.0021	0.0040	3.27E-03	0.0017	0.0033	6.80E-09
213	0.55	0.000	0.246	0.1964	0.0020	0.0039	3.23E-03	0.0017	0.0032	6.80E-09
214	0.13	0.000	0.250	0.1865	0.0020	0.0038	3.18E-03	0.0017	0.0032	6.80E-09
215	0.00	0.000	0.095	0.1785	0.0019	0.0037	3.14E-03	0.0017	0.0032	6.80E-09
216	0.00	0.000	0.124	0.1682	0.0019	0.0036	3.10E-03	0.0016	0.0031	6.80E-09
217	0.00	0.000	0.228	0.1493	0.0018	0.0035	3.06E-03	0.0016	0.0031	6.80E-09
218	0.03	0.000	0.244	0.1315	0.0018	0.0034	3.02E-03	0.0016	0.0030	6.80E-09
219	0.03	0.000	0.213	0.1167	0.0017	0.0033	2.98E-03	0.0016	0.0030	6.80E-09
220	0.21	0.000	0.091	0.1263	0.0017	0.0032	2.95E-03	0.0016	0.0030	6.80E-09
221	0.51	0.000	0.262	0.1470	0.0017	0.0032	2.91E-03	0.0015	0.0029	6.80E-09
222	0.00	0.000	0.227	0.1281	0.0016	0.0031	2.88E-03	0.0015	0.0029	6.80E-09
223	0.00	0.000	0.157	0.1151	0.0016	0.0030	2.84E-03	0.0015	0.0029	6.80E-09
224	0.26	0.000	0.196	0.1206	0.0015	0.0029	2.81E-03	0.0015	0.0028	6.80E-09
225	0.00	0.000	0.105	0.1121	0.0015	0.0029	2.77E-03	0.0015	0.0028	6.80E-09
226	0.23	0.000	0.216	0.1132	0.0015	0.0028	2.74E-03	0.0014	0.0028	6.80E-09
227	0.23	0.000	0.223	0.1140	0.0016	0.0031	2.87E-03	0.0015	0.0028	6.80E-09
228	0.03	0.000	0.105	0.1080	0.0016	0.0030	2.83E-03	0.0015	0.0028	6.80E-09
229	0.28	0.000	0.242	0.1109	0.0015	0.0029	2.77E-03	0.0015	0.0028	6.80E-09
230	0.21	0.000	0.160	0.1148	0.0013	0.0025	2.58E-03	0.0014	0.0027	6.80E-09
231	0.04	0.000	0.083	0.1117	0.0012	0.0024	2.52E-03	0.0013	0.0026	6.80E-09
232	0.00	0.000	0.211	0.0941	0.0012	0.0023	2.50E-03	0.0013	0.0025	6.80E-09
233	0.40	0.000	0.208	0.1100	0.0012	0.0023	2.48E-03	0.0013	0.0025	6.80E-09
234	0.01	0.000	0.133	0.0999	0.0012	0.0022	2.45E-03	0.0013	0.0025	6.80E-09
235	0.01	0.000	0.057	0.0959	0.0012	0.0022	2.43E-03	0.0013	0.0024	6.80E-09
236	0.00	0.000	0.052	0.0916	0.0011	0.0022	2.41E-03	0.0013	0.0024	6.80E-09
237	0.00	0.000	0.063	0.0863	0.0011	0.0021	2.39E-03	0.0013	0.0024	6.80E-09

238	0.00	0.000	0.091	0.0788	0.0011	0.0021	2.37E-03	0.0012	0.0024	6.80E-09
239	0.90	0.000	0.145	0.1417	0.0011	0.0021	2.35E-03	0.0012	0.0024	6.80E-09
240	0.44	0.000	0.076	0.1725	0.0011	0.0020	2.33E-03	0.0012	0.0023	6.80E-09
241	0.00	0.000	0.074	0.1663	0.0010	0.0020	2.31E-03	0.0012	0.0023	6.80E-09
242	0.00	0.000	0.083	0.1594	0.0010	0.0020	2.29E-03	0.0012	0.0023	6.80E-09
243	0.82	0.000	0.071	0.2218	0.0010	0.0019	2.27E-03	0.0012	0.0023	6.80E-09
244	0.00	0.000	0.210	0.2046	0.0010	0.0019	2.25E-03	0.0012	0.0023	6.80E-09
245	0.00	0.000	0.233	0.1852	0.0010	0.0019	2.23E-03	0.0012	0.0022	6.80E-09
246	0.00	0.000	0.138	0.1737	0.0010	0.0018	2.21E-03	0.0012	0.0022	6.80E-09
247	0.00	0.000	0.243	0.1534	0.0010	0.0019	2.24E-03	0.0012	0.0022	6.80E-09
248	0.00	0.000	0.245	0.1330	0.0009	0.0018	2.17E-03	0.0012	0.0022	6.80E-09
249	0.00	0.000	0.135	0.1217	0.0009	0.0017	2.15E-03	0.0011	0.0022	6.80E-09
250	0.03	0.000	0.071	0.1181	0.0009	0.0017	2.13E-03	0.0011	0.0021	6.80E-09
251	0.87	0.000	0.140	0.1788	0.0009	0.0017	2.11E-03	0.0011	0.0021	6.80E-09
252	0.00	0.000	0.208	0.1614	0.0009	0.0016	2.09E-03	0.0011	0.0021	6.80E-09
253	0.00	0.000	0.113	0.1520	0.0008	0.0016	2.08E-03	0.0011	0.0021	6.80E-09
254	0.00	0.000	0.182	0.1368	0.0008	0.0016	2.06E-03	0.0011	0.0021	6.80E-09
255	0.33	0.000	0.173	0.1500	0.0008	0.0016	2.04E-03	0.0011	0.0021	6.80E-09
256	0.82	0.000	0.068	0.2125	0.0008	0.0015	2.03E-03	0.0011	0.0020	6.80E-09
257	0.00	0.000	0.087	0.2052	0.0008	0.0015	2.01E-03	0.0011	0.0020	6.80E-09
258	0.00	0.000	0.157	0.1922	0.0008	0.0015	2.00E-03	0.0011	0.0020	6.80E-09
259	0.00	0.000	0.118	0.1824	0.0008	0.0015	1.98E-03	0.0010	0.0020	6.80E-09
260	0.00	0.000	0.122	0.1722	0.0008	0.0014	1.96E-03	0.0010	0.0020	6.80E-09
261	0.00	0.000	0.105	0.1634	0.0007	0.0014	1.95E-03	0.0010	0.0020	6.80E-09
262	0.00	0.000	0.285	0.1396	0.0007	0.0014	1.93E-03	0.0010	0.0019	6.80E-09
263	0.00	0.000	0.183	0.1244	0.0007	0.0014	1.92E-03	0.0010	0.0019	6.80E-09
264	0.00	0.000	0.075	0.1181	0.0007	0.0014	1.90E-03	0.0010	0.0019	6.80E-09
265	1.49	0.000	0.052	0.2380	0.0007	0.0013	1.89E-03	0.0010	0.0019	6.80E-09
266	0.09	0.000	0.054	0.2407	0.0007	0.0013	1.88E-03	0.0010	0.0019	6.80E-09
267	0.04	0.000	0.079	0.2377	0.0007	0.0013	1.86E-03	0.0010	0.0019	6.80E-09
268	0.00	0.000	0.098	0.2296	0.0007	0.0013	1.85E-03	0.0010	0.0019	6.80E-09
269	0.00	0.000	0.143	0.2177	0.0007	0.0013	1.83E-03	0.0010	0.0018	6.80E-09
270	0.00	0.000	0.152	0.2050	0.0008	0.0015	1.96E-03	0.0010	0.0019	6.80E-09
271	0.00	0.000	0.146	0.1928	0.0007	0.0014	1.93E-03	0.0010	0.0019	6.80E-09
272	0.00	0.000	0.146	0.1805	0.0008	0.0016	2.04E-03	0.0010	0.0020	6.80E-09

273		0.00	0.000	0.197	0.1641	0.0007	0.0013	1.88E-03	0.0010	0.0019	6.80E-09
274		0.00	0.000	0.180	0.1490	0.0008	0.0015	1.99E-03	0.0010	0.0019	6.80E-09
275		0.00	0.000	0.272	0.1263	0.0006	0.0011	1.68E-03	0.0010	0.0018	6.80E-09
276		0.00	0.000	0.081	0.1196	0.0005	0.0010	1.66E-03	0.0009	0.0017	6.80E-09
277		0.00	0.000	0.095	0.1116	0.0005	0.0010	1.66E-03	0.0009	0.0017	6.80E-09
278		0.00	0.000	0.112	0.1023	0.0005	0.0010	1.65E-03	0.0009	0.0017	6.80E-09
279		0.00	0.000	0.165	0.0886	0.0005	0.0010	1.64E-03	0.0009	0.0016	6.80E-09
280		0.00	0.000	0.052	0.0842	0.0005	0.0010	1.63E-03	0.0009	0.0016	6.80E-09
281		0.00	0.000	0.061	0.0791	0.0005	0.0010	1.62E-03	0.0009	0.0016	6.80E-09
282		0.00	0.000	0.026	0.0770	0.0005	0.0010	1.61E-03	0.0008	0.0016	6.80E-09
283		0.00	0.000	0.000	0.0770	0.0005	0.0010	1.60E-03	0.0008	0.0016	6.80E-09
284		0.00	0.000	0.000	0.0770	0.0005	0.0010	1.60E-03	0.0008	0.0016	6.80E-09
285		0.00	0.000	0.000	0.0770	0.0005	0.0009	1.59E-03	0.0008	0.0016	6.80E-09
286		0.07	0.000	0.047	0.0789	0.0005	0.0009	1.58E-03	0.0008	0.0016	6.80E-09
287		0.75	0.000	0.064	0.1365	0.0005	0.0009	1.57E-03	0.0008	0.0016	6.80E-09
288		0.24	0.000	0.075	0.1505	0.0005	0.0009	1.56E-03	0.0008	0.0016	6.80E-09
289		0.24	0.000	0.141	0.1584	0.0005	0.0009	1.55E-03	0.0008	0.0016	6.80E-09
290		0.08	0.000	0.061	0.1604	0.0005	0.0009	1.55E-03	0.0008	0.0016	6.80E-09
291		0.02	0.000	0.054	0.1577	0.0005	0.0009	1.54E-03	0.0008	0.0015	6.80E-09
292		0.01	0.000	0.026	0.1561	0.0005	0.0009	1.53E-03	0.0008	0.0015	6.80E-09
293		0.00	0.000	0.084	0.1491	0.0005	0.0009	1.52E-03	0.0008	0.0015	6.80E-09
294		0.00	0.000	0.044	0.1454	0.0005	0.0009	1.51E-03	0.0008	0.0015	6.80E-09
295		0.00	0.000	0.014	0.1443	0.0004	0.0008	1.51E-03	0.0008	0.0015	6.80E-09
296		0.00	0.000	0.026	0.1421	0.0004	0.0008	1.50E-03	0.0008	0.0015	6.80E-09
297		0.00	0.000	0.019	0.1405	0.0004	0.0008	1.49E-03	0.0008	0.0015	6.80E-09
298		0.00	0.000	0.022	0.1387	0.0004	0.0008	1.48E-03	0.0008	0.0015	6.80E-09
299		0.00	0.000	0.027	0.1364	0.0004	0.0008	1.47E-03	0.0008	0.0015	6.80E-09
300	*	0.00	0.000	0.017	0.1350	0.0004	0.0008	1.47E-03	0.0008	0.0015	6.80E-09
301	*	0.00	0.000	0.018	0.1335	0.0004	0.0008	1.46E-03	0.0008	0.0015	6.80E-09
302		0.32	0.000	0.061	0.1548	0.0004	0.0008	1.45E-03	0.0008	0.0015	6.80E-09
303		0.00	0.000	0.013	0.1536	0.0004	0.0008	1.44E-03	0.0008	0.0014	6.80E-09
304		0.63	0.000	0.104	0.1971	0.0004	0.0008	1.44E-03	0.0008	0.0014	6.80E-09
305		0.00	0.000	0.028	0.1948	0.0004	0.0008	1.43E-03	0.0008	0.0014	6.80E-09
306		0.00	0.000	0.045	0.1911	0.0004	0.0008	1.42E-03	0.0007	0.0014	6.80E-09
307		0.04	0.000	0.045	0.1908	0.0004	0.0007	1.41E-03	0.0007	0.0014	6.80E-09

308		0.32	0.000	0.078	0.2110	0.0004	0.0007	1.41E-03	0.0007	0.0014	6.80E-09
309		0.41	0.000	0.055	0.2406	0.0004	0.0007	1.40E-03	0.0007	0.0014	6.80E-09
310		0.14	0.000	0.052	0.2482	0.0004	0.0007	1.39E-03	0.0007	0.0014	6.80E-09
311		0.07	0.000	0.064	0.2491	0.0004	0.0007	1.39E-03	0.0007	0.0014	6.80E-09
312	*	0.00	0.000	0.015	0.2479	0.0004	0.0007	1.38E-03	0.0007	0.0014	6.80E-09
313		0.00	0.000	0.044	0.2442	0.0004	0.0007	1.37E-03	0.0007	0.0014	6.80E-09
314		0.00	0.000	0.042	0.2403	0.0004	0.0008	1.47E-03	0.0008	0.0014	6.80E-09
315		0.00	0.000	0.017	0.2385	0.0005	0.0009	1.57E-03	0.0008	0.0015	6.80E-09
316		0.17	0.000	0.050	0.2478	0.0004	0.0008	1.40E-03	0.0008	0.0015	6.80E-09
317	*	0.01	0.000	0.005	0.2468	0.0005	0.0009	1.51E-03	0.0008	0.0015	6.80E-09
318	*	0.00	0.000	0.021	0.2448	0.0004	0.0008	1.46E-03	0.0008	0.0015	6.80E-09
319		0.34	0.000	0.054	0.2685	0.0003	0.0005	1.16E-03	0.0007	0.0013	6.80E-09
320		0.30	0.000	0.065	0.2874	0.0004	0.0008	1.45E-03	0.0007	0.0013	6.80E-09
321		0.00	0.000	0.062	0.2807	0.0002	0.0004	1.09E-03	0.0007	0.0012	6.80E-09
322		0.04	0.000	0.050	0.2765	0.0006	0.0011	1.74E-03	0.0008	0.0015	6.80E-09
323	*	0.29	0.000	0.019	0.2749	0.0005	0.0010	1.64E-03	0.0009	0.0017	6.80E-09
324		0.00	0.000	0.029	0.2703	0.0006	0.0010	1.55E-03	0.0008	0.0016	6.80E-09
325		0.00	0.000	0.058	0.2702	0.0005	0.0009	1.34E-03	0.0008	0.0014	6.80E-09
326		0.00	0.000	0.026	0.2642	0.0005	0.0010	1.64E-03	0.0008	0.0015	6.80E-09
327		0.00	0.000	0.058	0.2554	0.0005	0.0010	1.62E-03	0.0009	0.0016	6.80E-09
328		0.00	0.000	0.046	0.2516	0.0003	0.0005	7.43E-04	0.0006	0.0011	6.80E-09
329		0.00	0.000	0.040	0.2482	0.0005	0.0008	1.17E-03	0.0005	0.0010	6.80E-09
330	*	0.00	0.000	0.018	0.2467	0.0005	0.0010	1.60E-03	0.0007	0.0014	6.80E-09
331	*	0.00	0.000	0.018	0.2452	0.0005	0.0009	1.58E-03	0.0008	0.0016	6.80E-09
332		0.00	0.000	0.029	0.2428	0.0004	0.0006	1.04E-03	0.0007	0.0013	6.80E-09
333		0.00	0.000	0.037	0.2397	0.0000	0.0000	0.00E+00	0.0002	0.0005	6.80E-09
334	*	0.00	0.000	0.018	0.2381	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
335		0.00	0.000	0.024	0.2361	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
336		0.00	0.000	0.021	0.2344	0.0000	0.0000	0.00E+00	0.0000	0.0000	4.08E-09
337	*	0.00	0.000	0.019	0.2328	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.00E+00
338		0.19	0.000	0.049	0.2448	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.00E+00
339		0.12	0.000	0.072	0.2490	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.00E+00
340		0.40	0.000	0.053	0.2778	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.00E+00
341		0.00	0.000	0.026	0.2749	0.0004	0.0007	6.31E-04	0.0002	0.0004	5.10E-09
342	*	0.01	0.000	0.013	0.2722	0.0007	0.0013	1.29E-03	0.0005	0.0010	6.80E-09

343	*	0.00	0.000	0.019	0.2605	0.0004	0.0007	6.39E-04	0.0005	0.0009	6.80E-09
344		0.00	0.000	0.041	0.2488	0.0012	0.0024	2.49E-03	0.0009	0.0017	6.80E-09
345		0.00	0.000	0.067	0.2369	0.0014	0.0026	2.65E-03	0.0013	0.0026	6.80E-09
346		0.00	0.000	0.058	0.2270	0.0011	0.0022	2.40E-03	0.0013	0.0025	6.80E-09
347		0.00	0.000	0.040	0.2196	0.0011	0.0021	2.33E-03	0.0012	0.0024	6.80E-09
348		0.07	0.000	0.048	0.2210	0.0003	0.0005	5.41E-04	0.0007	0.0013	6.80E-09
349		0.23	0.000	0.040	0.2372	0.0004	0.0007	6.49E-04	0.0003	0.0006	6.80E-09
350	*	0.00	0.000	0.000	0.2372	0.0012	0.0022	2.12E-03	0.0008	0.0015	6.80E-09
351		0.00	0.000	0.031	0.2313	0.0014	0.0027	2.71E-03	0.0013	0.0024	6.80E-09
352		0.17	0.000	0.040	0.2419	0.0014	0.0026	2.65E-03	0.0014	0.0027	6.80E-09
353	*	0.00	0.000	0.000	0.2412	0.0013	0.0025	2.59E-03	0.0014	0.0026	6.80E-09
354	*	0.03	0.000	0.024	0.2383	0.0009	0.0017	1.81E-03	0.0011	0.0021	6.80E-09
355		0.00	0.000	0.036	0.2353	0.0004	0.0007	6.29E-04	0.0006	0.0011	6.80E-09
356		0.31	0.000	0.047	0.2571	0.0000	0.0000	0.00E+00	0.0002	0.0003	6.80E-09
357	*	0.00	0.000	0.000	0.2564	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
358	*	0.26	0.000	0.023	0.2572	0.0003	0.0006	5.84E-04	0.0002	0.0003	6.80E-09
359	*	0.00	0.000	0.011	0.2582	0.0003	0.0006	5.83E-04	0.0003	0.0006	6.80E-09
360	*	0.02	0.000	0.016	0.2572	0.0025	0.0048	2.50E-03	0.0009	0.0017	6.80E-09
361		0.00	0.000	0.021	0.2647	0.0052	0.0100	5.01E-03	0.0021	0.0039	6.80E-09
362		0.00	0.000	0.034	0.2577	0.0038	0.0072	4.33E-03	0.0024	0.0046	6.80E-09
363	*	0.25	0.000	0.020	0.2571	0.0010	0.0018	1.77E-03	0.0015	0.0029	6.80E-09
364	*	0.00	0.000	0.025	0.2557	0.0034	0.0064	3.39E-03	0.0014	0.0027	6.80E-09
365	*	0.00	0.000	0.031	0.2544	0.0015	0.0028	1.70E-03	0.0013	0.0024	6.80E-09

* = Frozen (air or soil)

Annual Totals for Year 7			
	inches	cubic feet	percent
Precipitation	45.57	165,414.4	100.00
Runoff	0.000	0.0000	0.00
Evapotranspiration	33.928	123,159.4	74.46
Drainage Collected from Layer 3	13.4137	48,691.7	29.44
Percolation/Leakage through Layer 4	2.501105	9,079.0	5.49
Average Head on Top of Layer 4	0.0193	---	---

Drainage Collected from Layer 5	2.5032	9,086.6	5.49
Percolation/Leakage through Layer 7	0.000002	0.0089	0.00
Average Head on Top of Layer 6	0.0036	---	---
Change in Water Storage	-4.2764	-15,523.3	-9.38
Soil Water at Start of Year	43.1683	156,700.9	94.73
Soil Water at End of Year	39.0155	141,626.3	85.62
Snow Water at Start of Year	0.2428	881.4	0.53
Snow Water at End of Year	0.1192	432.7	0.26
Annual Water Budget Balance	0.0000	0.0000	0.00

Daily Output for Year 8

Column key: Head #1: drainage from Layer 4 | Head #2: drainage from Layer 6
Drain #1: drainage from Layer 3 | Drain #2: drainage from Layer 5
Leak #1: leakage thru Layer 4 | Leak #2: leakage thru Layer 7

Title: Millersville Cell 9 - Open Cell Condition
Simulated On: 6/9/2024 11:31

Day	Freezing Status* Air	Freezing Status* Soil	Rain (inches)	Runoff (inches)	ET (inches)	Evap. Zone Water (in/in)	Head #1 (inches)	Drain #1 (inches)	Leak #1 (inches)	Head #2 (inches)	Drain #2 (inches)	Leak #2 (inches)
1			0.00	0.000	0.047	0.2564	0.0000	0.0000	0.00E+00	0.0004	0.0007	6.80E-09
2			0.00	0.000	0.029	0.2525	0.0001	0.0001	1.83E-04	0.0001	0.0001	6.80E-09
3	*		0.01	0.000	0.013	0.2525	0.0000	0.0000	0.00E+00	0.0000	0.0001	6.80E-09
4			0.32	0.000	0.046	0.2741	0.0083	0.0157	5.64E-03	0.0017	0.0032	6.80E-09
5	*		0.00	0.000	0.000	0.2741	0.0062	0.0118	5.63E-03	0.0029	0.0055	6.80E-09
6	*	*	0.00	0.000	0.000	0.2741	0.0105	0.0199	7.33E-03	0.0035	0.0066	6.80E-09
7		*	0.00	0.000	0.000	0.2741	0.0138	0.0263	8.45E-03	0.0042	0.0079	6.80E-09
8	*	*	0.00	0.000	0.000	0.2741	0.0150	0.0286	8.82E-03	0.0045	0.0086	6.80E-09
9	*	*	0.00	0.000	0.000	0.2741	0.0151	0.0287	8.83E-03	0.0046	0.0088	6.80E-09
10		*	0.00	0.000	0.000	0.2741	0.0145	0.0276	8.66E-03	0.0046	0.0087	6.80E-09
11	*	*	0.43	0.000	0.013	0.2741	0.0137	0.0261	8.42E-03	0.0045	0.0085	6.80E-09
12		*	0.00	0.000	0.000	0.3089	0.0128	0.0244	8.14E-03	0.0043	0.0083	6.80E-09
13		*	0.00	0.000	0.000	0.3089	0.0119	0.0227	7.85E-03	0.0042	0.0080	6.80E-09
14	*	*	0.00	0.000	0.000	0.3089	0.0111	0.0211	7.57E-03	0.0040	0.0077	6.80E-09
15		*	0.00	0.000	0.000	0.3089	0.0103	0.0197	7.30E-03	0.0039	0.0074	6.80E-09
16		*	0.59	0.000	0.013	0.3573	0.0096	0.0183	7.04E-03	0.0038	0.0072	6.80E-09
17	*	*	0.00	0.000	0.003	0.3573	0.0090	0.0171	6.80E-03	0.0036	0.0069	6.80E-09
18		*	0.05	0.000	0.013	0.3607	0.0084	0.0160	6.57E-03	0.0035	0.0067	6.80E-09
19	*	*	0.00	0.000	0.000	0.3607	0.0079	0.0150	6.36E-03	0.0034	0.0065	6.80E-09
20		*	0.00	0.000	0.000	0.3607	0.0074	0.0140	6.16E-03	0.0033	0.0062	6.80E-09
21		*	0.00	0.000	0.000	0.3607	0.0069	0.0132	5.97E-03	0.0032	0.0061	6.80E-09
22		*	0.37	0.000	0.012	0.3904	0.0065	0.0124	5.80E-03	0.0031	0.0059	6.80E-09
23		*	0.00	0.000	0.001	0.3904	0.0062	0.0118	5.63E-03	0.0030	0.0057	6.80E-09
24			0.00	0.000	0.041	0.2678	0.0058	0.0111	5.48E-03	0.0029	0.0055	6.80E-09
25			0.00	0.000	0.050	0.2439	0.0055	0.0105	5.33E-03	0.0028	0.0054	6.80E-09
26			0.00	0.000	0.055	0.2394	0.0053	0.0100	5.19E-03	0.0028	0.0053	6.80E-09
27			0.00	0.000	0.055	0.2348	0.0050	0.0095	5.06E-03	0.0027	0.0051	6.80E-09

28		0.00	0.000	0.057	0.2301	0.0070	0.0133	6.00E-03	0.0029	0.0056	6.80E-09
29		0.00	0.000	0.067	0.2245	0.0065	0.0123	5.76E-03	0.0031	0.0058	6.80E-09
30		0.00	0.000	0.056	0.2198	0.0027	0.0051	3.71E-03	0.0024	0.0046	6.80E-09
31		0.00	0.000	0.053	0.2153	0.0047	0.0090	4.86E-03	0.0023	0.0044	6.80E-09
32		0.00	0.000	0.066	0.2099	0.0054	0.0102	5.25E-03	0.0027	0.0051	6.80E-09
33		0.00	0.000	0.038	0.2067	0.0049	0.0092	4.99E-03	0.0027	0.0051	6.80E-09
34		0.01	0.000	0.097	0.1997	0.0044	0.0084	4.76E-03	0.0026	0.0049	6.80E-09
35		0.01	0.000	0.082	0.1939	0.0040	0.0077	4.55E-03	0.0024	0.0046	6.80E-09
36		0.31	0.000	0.080	0.2128	0.0010	0.0019	1.30E-03	0.0014	0.0027	6.80E-09
37		0.05	0.000	0.052	0.2129	0.0000	0.0000	0.00E+00	0.0003	0.0006	6.80E-09
38		0.00	0.000	0.036	0.2099	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
39		0.30	0.000	0.067	0.2295	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
40		0.00	0.000	0.134	0.2183	0.0002	0.0004	5.42E-04	0.0002	0.0003	6.80E-09
41		0.00	0.000	0.085	0.2105	0.0206	0.0391	9.86E-03	0.0031	0.0059	6.80E-09
42		0.00	0.000	0.101	0.2000	0.0265	0.0504	1.17E-02	0.0057	0.0108	6.80E-09
43		0.32	0.000	0.139	0.2149	0.0542	0.1031	1.69E-02	0.0077	0.0146	6.80E-09
44		0.00	0.000	0.096	0.2070	0.0553	0.1052	1.70E-02	0.0089	0.0169	6.80E-09
45		0.00	0.000	0.089	0.1995	0.0752	0.1431	2.00E-02	0.0098	0.0187	6.80E-09
46		0.00	0.000	0.041	0.1961	0.0692	0.1316	1.91E-02	0.0102	0.0194	6.80E-09
47		0.00	0.000	0.055	0.1914	0.0538	0.1024	1.68E-02	0.0094	0.0178	6.80E-09
48	*	0.00	0.000	0.000	0.1914	0.0423	0.0805	1.49E-02	0.0083	0.0157	6.80E-09
49	*	0.00	0.000	0.000	0.1914	0.0343	0.0653	1.34E-02	0.0074	0.0141	6.80E-09
50		0.02	0.000	0.080	0.1864	0.0286	0.0543	1.22E-02	0.0067	0.0127	6.80E-09
51		0.02	0.000	0.043	0.1844	0.0243	0.0462	1.12E-02	0.0061	0.0117	6.80E-09
52		0.00	0.000	0.062	0.1773	0.0258	0.0490	1.16E-02	0.0060	0.0114	6.80E-09
53		0.08	0.000	0.088	0.1764	0.0164	0.0312	9.14E-03	0.0053	0.0102	6.80E-09
54		0.00	0.000	0.045	0.1717	0.0141	0.0269	8.51E-03	0.0046	0.0088	6.80E-09
55	*	0.00	0.000	0.000	0.1717	0.0132	0.0251	8.19E-03	0.0044	0.0083	6.80E-09
56		0.28	0.000	0.042	0.1912	0.0102	0.0195	7.26E-03	0.0040	0.0077	6.80E-09
57		0.00	0.000	0.063	0.1859	0.0103	0.0197	7.30E-03	0.0038	0.0073	6.80E-09
58		0.00	0.000	0.066	0.1804	0.0102	0.0194	7.24E-03	0.0038	0.0073	6.80E-09
59		0.00	0.000	0.080	0.1738	0.0099	0.0188	7.13E-03	0.0038	0.0072	6.80E-09
60		0.59	0.000	0.077	0.2165	0.0094	0.0180	6.97E-03	0.0037	0.0070	6.80E-09
61		0.00	0.000	0.141	0.2047	0.0090	0.0171	6.80E-03	0.0036	0.0069	6.80E-09
62		0.00	0.000	0.193	0.1886	0.0085	0.0162	6.62E-03	0.0035	0.0067	6.80E-09

63		0.00	0.000	0.137	0.1769	0.0089	0.0168	6.73E-03	0.0035	0.0067	6.80E-09
64		0.00	0.000	0.058	0.1721	0.0076	0.0144	6.24E-03	0.0034	0.0064	6.80E-09
65		0.00	0.000	0.048	0.1681	0.0069	0.0130	5.94E-03	0.0032	0.0061	6.80E-09
66		0.00	0.000	0.058	0.1633	0.0066	0.0125	5.81E-03	0.0031	0.0059	6.80E-09
67	*	0.02	0.000	0.041	0.1619	0.0063	0.0119	5.68E-03	0.0030	0.0057	6.80E-09
68		0.65	0.000	0.068	0.2101	0.0060	0.0114	5.55E-03	0.0029	0.0056	6.80E-09
69		0.00	0.000	0.097	0.2020	0.0057	0.0109	5.42E-03	0.0029	0.0055	6.80E-09
70		0.00	0.000	0.092	0.1941	0.0061	0.0117	5.60E-03	0.0029	0.0055	6.80E-09
71		0.80	0.000	0.091	0.2535	0.0050	0.0096	5.08E-03	0.0028	0.0053	6.80E-09
72		0.10	0.000	0.174	0.2475	0.0048	0.0091	4.95E-03	0.0026	0.0050	6.80E-09
73		0.00	0.000	0.224	0.2288	0.0046	0.0088	4.86E-03	0.0026	0.0049	6.80E-09
74		0.00	0.000	0.074	0.2225	0.0047	0.0089	4.89E-03	0.0026	0.0049	6.80E-09
75		0.00	0.000	0.132	0.2110	0.0061	0.0117	5.61E-03	0.0028	0.0053	6.80E-09
76		0.00	0.000	0.129	0.2003	0.0037	0.0071	4.36E-03	0.0026	0.0049	6.80E-09
77		0.00	0.000	0.253	0.1792	0.0034	0.0065	4.19E-03	0.0022	0.0043	6.80E-09
78		0.06	0.000	0.125	0.1742	0.0033	0.0064	4.14E-03	0.0022	0.0042	6.80E-09
79		0.37	0.000	0.074	0.1991	0.0033	0.0062	4.10E-03	0.0022	0.0041	6.80E-09
80		0.13	0.000	0.097	0.2019	0.0036	0.0069	4.29E-03	0.0022	0.0042	6.80E-09
81		0.00	0.000	0.136	0.1905	0.0032	0.0060	4.02E-03	0.0022	0.0041	6.80E-09
82		0.17	0.000	0.166	0.1911	0.0030	0.0056	3.89E-03	0.0021	0.0039	6.80E-09
83		0.05	0.000	0.145	0.1828	0.0029	0.0055	3.85E-03	0.0020	0.0039	6.80E-09
84		0.07	0.000	0.058	0.1841	0.0030	0.0058	3.94E-03	0.0020	0.0039	6.80E-09
85		0.15	0.000	0.078	0.1903	0.0028	0.0053	3.77E-03	0.0020	0.0038	6.80E-09
86		0.05	0.000	0.103	0.1861	0.0027	0.0051	3.69E-03	0.0020	0.0037	6.80E-09
87		0.05	0.000	0.053	0.1857	0.0034	0.0064	4.14E-03	0.0021	0.0040	6.80E-09
88	*	0.56	0.000	0.026	0.1873	0.0024	0.0046	3.52E-03	0.0020	0.0038	6.80E-09
89	*	0.00	0.000	0.018	0.1890	0.0024	0.0045	3.47E-03	0.0018	0.0035	6.80E-09
90	*	0.15	0.000	0.010	0.1906	0.0023	0.0044	3.44E-03	0.0018	0.0035	6.80E-09
91		0.13	0.000	0.000	0.2509	0.0023	0.0043	3.41E-03	0.0018	0.0034	6.80E-09
92		0.02	0.000	0.203	0.2367	0.0022	0.0042	3.38E-03	0.0018	0.0034	6.80E-09
93		0.22	0.000	0.121	0.2447	0.0022	0.0042	3.34E-03	0.0018	0.0034	6.80E-09
94		0.00	0.000	0.184	0.2294	0.0021	0.0041	3.31E-03	0.0017	0.0033	6.80E-09
95		0.28	0.000	0.197	0.2361	0.0024	0.0045	3.47E-03	0.0018	0.0034	6.80E-09
96		0.09	0.000	0.111	0.2336	0.0027	0.0051	3.69E-03	0.0019	0.0036	6.80E-09
97		0.75	0.000	0.204	0.2790	0.0022	0.0042	3.33E-03	0.0018	0.0035	6.80E-09

98		0.02	0.000	0.072	0.2744	0.0017	0.0033	2.96E-03	0.0016	0.0031	6.80E-09
99		0.00	0.000	0.234	0.2480	0.0017	0.0032	2.95E-03	0.0016	0.0030	6.80E-09
100		0.00	0.000	0.227	0.2279	0.0020	0.0038	3.16E-03	0.0016	0.0031	6.80E-09
101		0.14	0.000	0.075	0.2331	0.0024	0.0046	3.50E-03	0.0018	0.0034	6.80E-09
102		0.00	0.000	0.110	0.2197	0.0028	0.0053	3.78E-03	0.0019	0.0037	6.80E-09
103		0.30	0.000	0.143	0.2326	0.0026	0.0050	3.66E-03	0.0019	0.0037	6.80E-09
104		0.28	0.000	0.174	0.2411	0.0000	0.0000	2.32E-05	0.0008	0.0016	6.80E-09
105		0.00	0.000	0.088	0.2329	0.0007	0.0013	1.14E-03	0.0004	0.0007	6.80E-09
106		0.00	0.000	0.184	0.2175	0.0001	0.0002	5.07E-04	0.0004	0.0008	6.80E-09
107		0.36	0.000	0.185	0.2317	0.0002	0.0004	1.02E-03	0.0004	0.0008	6.80E-09
108		0.03	0.000	0.231	0.2144	0.0004	0.0008	1.43E-03	0.0007	0.0012	6.80E-09
109		0.02	0.000	0.244	0.1944	0.0023	0.0044	3.34E-03	0.0013	0.0025	6.80E-09
110		0.39	0.000	0.166	0.2128	0.0010	0.0018	1.82E-03	0.0013	0.0024	6.80E-09
111		0.00	0.000	0.164	0.1987	0.0009	0.0018	1.89E-03	0.0010	0.0019	6.80E-09
112		0.00	0.000	0.064	0.1931	0.0010	0.0019	2.02E-03	0.0010	0.0020	6.80E-09
113		0.00	0.000	0.053	0.1884	0.0011	0.0021	2.17E-03	0.0011	0.0021	6.80E-09
114		0.00	0.000	0.120	0.1784	0.0005	0.0010	1.63E-03	0.0010	0.0019	6.80E-09
115		0.00	0.000	0.123	0.1681	0.0007	0.0014	1.93E-03	0.0010	0.0018	6.80E-09
116	*	0.00	0.000	0.000	0.1681	0.0009	0.0017	2.16E-03	0.0011	0.0021	6.80E-09
117	*	0.02	0.000	0.024	0.1681	0.0011	0.0021	2.35E-03	0.0012	0.0023	6.80E-09
118		0.00	0.000	0.168	0.1541	0.0012	0.0024	2.51E-03	0.0013	0.0024	6.80E-09
119		0.16	0.000	0.097	0.1593	0.0014	0.0026	2.64E-03	0.0014	0.0026	6.80E-09
120		0.00	0.000	0.255	0.1381	0.0015	0.0028	2.74E-03	0.0014	0.0027	6.80E-09
121		0.59	0.000	0.100	0.1793	0.0016	0.0030	2.83E-03	0.0015	0.0028	6.80E-09
122		0.30	0.000	0.207	0.1871	0.0016	0.0031	2.90E-03	0.0015	0.0029	6.80E-09
123		0.00	0.000	0.198	0.1705	0.0017	0.0033	2.95E-03	0.0015	0.0029	6.80E-09
124		0.00	0.000	0.224	0.1519	0.0018	0.0033	3.00E-03	0.0016	0.0030	6.80E-09
125		0.00	0.000	0.089	0.1445	0.0018	0.0034	3.03E-03	0.0016	0.0030	6.80E-09
126		0.54	0.000	0.100	0.1808	0.0018	0.0035	3.05E-03	0.0016	0.0030	6.80E-09
127		0.02	0.000	0.268	0.1597	0.0018	0.0035	3.07E-03	0.0016	0.0031	6.80E-09
128		0.00	0.000	0.340	0.1313	0.0019	0.0035	3.08E-03	0.0016	0.0031	6.80E-09
129		0.00	0.000	0.110	0.1220	0.0022	0.0043	3.36E-03	0.0017	0.0032	6.80E-09
130		0.00	0.000	0.096	0.1140	0.0018	0.0034	3.02E-03	0.0017	0.0032	6.80E-09
131		0.00	0.000	0.080	0.1073	0.0018	0.0034	3.02E-03	0.0016	0.0030	6.80E-09
132		0.00	0.000	0.072	0.1013	0.0018	0.0034	3.02E-03	0.0016	0.0030	6.80E-09

133	0.00	0.000	0.083	0.0943	0.0018	0.0034	3.01E-03	0.0016	0.0030	6.80E-09
134	0.00	0.000	0.086	0.0871	0.0018	0.0034	3.00E-03	0.0016	0.0030	6.80E-09
135	0.02	0.000	0.105	0.0799	0.0018	0.0033	2.99E-03	0.0016	0.0030	6.80E-09
136	0.72	0.000	0.086	0.1328	0.0017	0.0033	2.98E-03	0.0016	0.0030	6.80E-09
137	0.00	0.000	0.156	0.1198	0.0017	0.0033	2.96E-03	0.0016	0.0030	6.80E-09
138	0.21	0.000	0.108	0.1280	0.0017	0.0032	2.95E-03	0.0016	0.0030	6.80E-09
139	0.73	0.000	0.153	0.1760	0.0017	0.0032	2.93E-03	0.0015	0.0029	6.80E-09
140	0.06	0.000	0.255	0.1599	0.0017	0.0032	2.91E-03	0.0015	0.0029	6.80E-09
141	0.00	0.000	0.296	0.1353	0.0016	0.0031	2.89E-03	0.0015	0.0029	6.80E-09
142	0.46	0.000	0.107	0.1650	0.0016	0.0031	2.87E-03	0.0015	0.0029	6.80E-09
143	0.01	0.000	0.086	0.1583	0.0016	0.0030	2.84E-03	0.0015	0.0029	6.80E-09
144	0.00	0.000	0.191	0.1424	0.0016	0.0030	2.82E-03	0.0015	0.0028	6.80E-09
145	0.00	0.000	0.230	0.1232	0.0015	0.0029	2.80E-03	0.0015	0.0028	6.80E-09
146	0.00	0.000	0.231	0.1040	0.0015	0.0029	2.78E-03	0.0015	0.0028	6.80E-09
147	0.00	0.000	0.226	0.0851	0.0015	0.0028	2.75E-03	0.0015	0.0028	6.80E-09
148	1.03	0.000	0.212	0.1530	0.0015	0.0028	2.73E-03	0.0014	0.0027	6.80E-09
149	0.13	0.000	0.205	0.1471	0.0014	0.0027	2.71E-03	0.0014	0.0027	6.80E-09
150	0.49	0.000	0.082	0.1810	0.0014	0.0027	2.68E-03	0.0014	0.0027	6.80E-09
151	0.00	0.000	0.089	0.1736	0.0014	0.0026	2.66E-03	0.0014	0.0027	6.80E-09
152	0.00	0.000	0.098	0.1656	0.0014	0.0026	2.63E-03	0.0014	0.0026	6.80E-09
153	0.18	0.000	0.084	0.1733	0.0013	0.0025	2.61E-03	0.0014	0.0026	6.80E-09
154	0.00	0.000	0.193	0.1572	0.0013	0.0025	2.59E-03	0.0014	0.0026	6.80E-09
155	0.00	0.000	0.112	0.1478	0.0013	0.0025	2.56E-03	0.0014	0.0026	6.80E-09
156	0.20	0.000	0.228	0.1451	0.0013	0.0024	2.54E-03	0.0013	0.0026	6.80E-09
157	0.07	0.000	0.088	0.1433	0.0012	0.0024	2.52E-03	0.0013	0.0025	6.80E-09
158	0.03	0.000	0.208	0.1288	0.0012	0.0023	2.50E-03	0.0013	0.0025	6.80E-09
159	0.00	0.000	0.218	0.1106	0.0012	0.0023	2.47E-03	0.0013	0.0025	6.80E-09
160	0.00	0.000	0.155	0.0977	0.0012	0.0022	2.45E-03	0.0013	0.0025	6.80E-09
161	0.43	0.000	0.256	0.1121	0.0012	0.0022	2.43E-03	0.0013	0.0024	6.80E-09
162	0.77	0.000	0.205	0.1588	0.0011	0.0022	2.41E-03	0.0013	0.0024	6.80E-09
163	0.00	0.000	0.194	0.1426	0.0011	0.0021	2.39E-03	0.0013	0.0024	6.80E-09
164	0.00	0.000	0.254	0.1215	0.0011	0.0021	2.37E-03	0.0012	0.0024	6.80E-09
165	0.00	0.000	0.272	0.0988	0.0011	0.0021	2.34E-03	0.0012	0.0024	6.80E-09
166	0.01	0.000	0.104	0.0912	0.0011	0.0020	2.32E-03	0.0012	0.0023	6.80E-09
167	0.52	0.000	0.289	0.1102	0.0010	0.0020	2.30E-03	0.0012	0.0023	6.80E-09

168	0.00	0.000	0.104	0.1016	0.0010	0.0019	2.28E-03	0.0012	0.0023	6.80E-09
169	0.00	0.000	0.208	0.0843	0.0010	0.0019	2.26E-03	0.0012	0.0023	6.80E-09
170	0.00	0.000	0.070	0.0785	0.0010	0.0019	2.24E-03	0.0012	0.0023	6.80E-09
171	0.05	0.000	0.041	0.0789	0.0010	0.0018	2.22E-03	0.0012	0.0022	6.80E-09
172	0.13	0.000	0.050	0.0860	0.0010	0.0018	2.21E-03	0.0012	0.0022	6.80E-09
173	0.00	0.000	0.074	0.0799	0.0009	0.0018	2.19E-03	0.0012	0.0022	6.80E-09
174	0.05	0.000	0.068	0.0782	0.0009	0.0018	2.17E-03	0.0011	0.0022	6.80E-09
175	1.10	0.000	0.106	0.1611	0.0009	0.0017	2.15E-03	0.0011	0.0022	6.80E-09
176	0.00	0.000	0.072	0.1552	0.0009	0.0017	2.13E-03	0.0011	0.0021	6.80E-09
177	0.00	0.000	0.112	0.1459	0.0009	0.0017	2.11E-03	0.0011	0.0021	6.80E-09
178	0.16	0.000	0.090	0.1515	0.0009	0.0017	2.10E-03	0.0011	0.0021	6.80E-09
179	0.03	0.000	0.109	0.1449	0.0008	0.0016	2.08E-03	0.0011	0.0021	6.80E-09
180	0.00	0.000	0.269	0.1225	0.0008	0.0016	2.06E-03	0.0011	0.0021	6.80E-09
181	0.09	0.000	0.272	0.1073	0.0008	0.0016	2.05E-03	0.0011	0.0021	6.80E-09
182	0.00	0.000	0.178	0.0924	0.0008	0.0015	2.03E-03	0.0011	0.0020	6.80E-09
183	0.00	0.000	0.155	0.0795	0.0008	0.0015	2.01E-03	0.0011	0.0020	6.80E-09
184	0.12	0.000	0.061	0.0842	0.0008	0.0015	2.00E-03	0.0011	0.0020	6.80E-09
185	0.01	0.000	0.070	0.0788	0.0008	0.0015	1.98E-03	0.0010	0.0020	6.80E-09
186	0.05	0.000	0.064	0.0773	0.0008	0.0014	1.97E-03	0.0010	0.0020	6.80E-09
187	0.00	0.000	0.002	0.0771	0.0007	0.0014	1.95E-03	0.0010	0.0020	6.80E-09
188	0.35	0.000	0.155	0.0933	0.0007	0.0014	1.95E-03	0.0010	0.0020	6.80E-09
189	0.00	0.000	0.127	0.0827	0.0007	0.0014	1.92E-03	0.0010	0.0019	6.80E-09
190	0.37	0.000	0.212	0.0958	0.0007	0.0014	1.90E-03	0.0010	0.0019	6.80E-09
191	0.00	0.000	0.175	0.0812	0.0007	0.0013	1.89E-03	0.0010	0.0019	6.80E-09
192	0.00	0.000	0.037	0.0781	0.0007	0.0013	1.88E-03	0.0010	0.0019	6.80E-09
193	0.01	0.000	0.019	0.0773	0.0007	0.0013	1.86E-03	0.0010	0.0019	6.80E-09
194	0.02	0.000	0.027	0.0771	0.0007	0.0014	1.94E-03	0.0010	0.0019	6.80E-09
195	0.00	0.000	0.001	0.0770	0.0007	0.0012	1.83E-03	0.0010	0.0019	6.80E-09
196	0.00	0.000	0.000	0.0770	0.0006	0.0012	1.81E-03	0.0010	0.0018	6.80E-09
197	0.12	0.000	0.039	0.0842	0.0006	0.0012	1.80E-03	0.0009	0.0018	6.80E-09
198	0.01	0.000	0.060	0.0803	0.0006	0.0012	1.79E-03	0.0009	0.0018	6.80E-09
199	0.00	0.000	0.026	0.0781	0.0006	0.0012	1.78E-03	0.0009	0.0018	6.80E-09
200	0.00	0.000	0.010	0.0773	0.0006	0.0012	1.76E-03	0.0009	0.0018	6.80E-09
201	0.00	0.000	0.003	0.0771	0.0006	0.0011	1.75E-03	0.0009	0.0018	6.80E-09
202	0.00	0.000	0.001	0.0770	0.0006	0.0011	1.74E-03	0.0009	0.0017	6.80E-09

203	0.05	0.000	0.043	0.0772	0.0006	0.0011	1.73E-03	0.0009	0.0017	6.80E-09
204	0.03	0.000	0.025	0.0774	0.0006	0.0011	1.72E-03	0.0009	0.0017	6.80E-09
205	0.08	0.000	0.044	0.0802	0.0006	0.0011	1.70E-03	0.0009	0.0017	6.80E-09
206	0.01	0.000	0.026	0.0792	0.0006	0.0011	1.69E-03	0.0009	0.0017	6.80E-09
207	0.00	0.000	0.021	0.0775	0.0006	0.0011	1.68E-03	0.0009	0.0017	6.80E-09
208	0.00	0.000	0.005	0.0771	0.0005	0.0010	1.67E-03	0.0009	0.0017	6.80E-09
209	0.00	0.000	0.001	0.0770	0.0005	0.0010	1.66E-03	0.0009	0.0017	6.80E-09
210	0.13	0.000	0.057	0.0831	0.0005	0.0010	1.65E-03	0.0009	0.0017	6.80E-09
211	0.00	0.000	0.047	0.0795	0.0005	0.0010	1.64E-03	0.0009	0.0016	6.80E-09
212	0.11	0.000	0.065	0.0830	0.0005	0.0010	1.63E-03	0.0009	0.0016	6.80E-09
213	0.00	0.000	0.050	0.0789	0.0005	0.0010	1.62E-03	0.0009	0.0016	6.80E-09
214	0.00	0.000	0.018	0.0774	0.0005	0.0010	1.60E-03	0.0008	0.0016	6.80E-09
215	0.00	0.000	0.003	0.0771	0.0005	0.0010	1.59E-03	0.0008	0.0016	6.80E-09
216	0.03	0.000	0.031	0.0773	0.0005	0.0010	1.60E-03	0.0008	0.0016	6.80E-09
217	0.02	0.000	0.020	0.0771	0.0005	0.0009	1.57E-03	0.0008	0.0016	6.80E-09
218	0.00	0.000	0.001	0.0770	0.0005	0.0009	1.56E-03	0.0008	0.0016	6.80E-09
219	0.00	0.000	0.000	0.0770	0.0005	0.0009	1.55E-03	0.0008	0.0016	6.80E-09
220	0.07	0.000	0.048	0.0791	0.0005	0.0009	1.54E-03	0.0008	0.0015	6.80E-09
221	0.06	0.000	0.043	0.0808	0.0005	0.0009	1.53E-03	0.0008	0.0015	6.80E-09
222	0.00	0.000	0.021	0.0791	0.0005	0.0009	1.53E-03	0.0008	0.0015	6.80E-09
223	0.00	0.000	0.019	0.0775	0.0005	0.0009	1.52E-03	0.0008	0.0015	6.80E-09
224	0.00	0.000	0.005	0.0771	0.0004	0.0008	1.51E-03	0.0008	0.0015	6.80E-09
225	0.15	0.000	0.047	0.0858	0.0004	0.0008	1.50E-03	0.0008	0.0015	6.80E-09
226	0.00	0.000	0.075	0.0796	0.0004	0.0008	1.49E-03	0.0008	0.0015	6.80E-09
227	0.27	0.000	0.086	0.0946	0.0004	0.0008	1.48E-03	0.0008	0.0015	6.80E-09
228	0.01	0.000	0.124	0.0847	0.0004	0.0008	1.47E-03	0.0008	0.0015	6.80E-09
229	0.05	0.000	0.115	0.0795	0.0004	0.0008	1.46E-03	0.0008	0.0015	6.80E-09
230	0.00	0.000	0.020	0.0779	0.0004	0.0008	1.45E-03	0.0008	0.0015	6.80E-09
231	0.00	0.000	0.008	0.0772	0.0004	0.0008	1.49E-03	0.0008	0.0015	6.80E-09
232	0.00	0.000	0.002	0.0771	0.0004	0.0008	1.43E-03	0.0008	0.0015	6.80E-09
233	0.45	0.000	0.124	0.1042	0.0004	0.0008	1.43E-03	0.0008	0.0014	6.80E-09
234	0.00	0.000	0.079	0.0977	0.0004	0.0008	1.42E-03	0.0007	0.0014	6.80E-09
235	0.17	0.000	0.093	0.1038	0.0004	0.0007	1.41E-03	0.0007	0.0014	6.80E-09
236	0.00	0.000	0.097	0.0957	0.0004	0.0007	1.40E-03	0.0007	0.0014	6.80E-09
237	0.00	0.000	0.071	0.0898	0.0004	0.0007	1.39E-03	0.0007	0.0014	6.80E-09

238	0.00	0.000	0.120	0.0797	0.0004	0.0007	1.39E-03	0.0007	0.0014	6.80E-09
239	0.00	0.000	0.024	0.0777	0.0004	0.0007	1.38E-03	0.0007	0.0014	6.80E-09
240	0.25	0.000	0.061	0.0931	0.0004	0.0007	1.37E-03	0.0007	0.0014	6.80E-09
241	0.00	0.000	0.090	0.0856	0.0004	0.0007	1.36E-03	0.0007	0.0014	6.80E-09
242	0.00	0.000	0.084	0.0786	0.0004	0.0007	1.36E-03	0.0007	0.0014	6.80E-09
243	0.31	0.000	0.071	0.0984	0.0004	0.0007	1.35E-03	0.0007	0.0014	6.80E-09
244	0.00	0.000	0.045	0.0946	0.0004	0.0007	1.34E-03	0.0007	0.0013	6.80E-09
245	0.00	0.000	0.059	0.0897	0.0003	0.0007	1.33E-03	0.0007	0.0013	6.80E-09
246	0.00	0.000	0.109	0.0805	0.0003	0.0007	1.33E-03	0.0007	0.0013	6.80E-09
247	0.00	0.000	0.034	0.0777	0.0003	0.0007	1.32E-03	0.0007	0.0013	6.80E-09
248	0.00	0.000	0.007	0.0771	0.0003	0.0006	1.31E-03	0.0007	0.0013	6.80E-09
249	0.00	0.000	0.001	0.0770	0.0003	0.0006	1.30E-03	0.0007	0.0013	6.80E-09
250	0.00	0.000	0.000	0.0770	0.0003	0.0006	1.30E-03	0.0007	0.0013	6.80E-09
251	0.10	0.000	0.038	0.0825	0.0003	0.0006	1.29E-03	0.0007	0.0013	6.80E-09
252	0.67	0.000	0.070	0.1324	0.0003	0.0006	1.28E-03	0.0007	0.0013	6.80E-09
253	0.15	0.000	0.076	0.1382	0.0003	0.0006	1.28E-03	0.0007	0.0013	6.80E-09
254	0.00	0.000	0.202	0.1214	0.0003	0.0006	1.27E-03	0.0007	0.0013	6.80E-09
255	0.00	0.000	0.068	0.1157	0.0003	0.0006	1.26E-03	0.0007	0.0013	6.80E-09
256	0.00	0.000	0.060	0.1107	0.0003	0.0006	1.26E-03	0.0007	0.0013	6.80E-09
257	0.00	0.000	0.099	0.1025	0.0003	0.0006	1.25E-03	0.0007	0.0013	6.80E-09
258	0.40	0.000	0.204	0.1187	0.0003	0.0006	1.25E-03	0.0007	0.0012	6.80E-09
259	0.00	0.000	0.243	0.0985	0.0003	0.0006	1.24E-03	0.0007	0.0012	6.80E-09
260	0.00	0.000	0.073	0.0925	0.0003	0.0006	1.23E-03	0.0006	0.0012	6.80E-09
261	0.42	0.000	0.105	0.1184	0.0003	0.0006	1.23E-03	0.0006	0.0012	6.80E-09
262	0.00	0.000	0.129	0.1077	0.0003	0.0006	1.22E-03	0.0006	0.0012	6.80E-09
263	0.00	0.000	0.160	0.0944	0.0003	0.0006	1.21E-03	0.0006	0.0012	6.80E-09
264	0.00	0.000	0.055	0.0898	0.0003	0.0005	1.21E-03	0.0006	0.0012	6.80E-09
265	0.00	0.000	0.052	0.0855	0.0003	0.0005	1.20E-03	0.0006	0.0012	6.80E-09
266	0.00	0.000	0.029	0.0830	0.0003	0.0005	1.20E-03	0.0006	0.0012	6.80E-09
267	0.00	0.000	0.059	0.0781	0.0003	0.0005	1.19E-03	0.0006	0.0012	6.80E-09
268	0.00	0.000	0.010	0.0772	0.0003	0.0005	1.19E-03	0.0006	0.0012	6.80E-09
269	0.00	0.000	0.003	0.0770	0.0003	0.0005	1.18E-03	0.0006	0.0012	6.80E-09
270	0.00	0.000	0.000	0.0770	0.0003	0.0005	1.17E-03	0.0006	0.0012	6.80E-09
271	0.92	0.000	0.045	0.1499	0.0003	0.0005	1.17E-03	0.0006	0.0012	6.80E-09
272	0.00	0.000	0.019	0.1484	0.0003	0.0005	1.16E-03	0.0006	0.0012	6.80E-09

273		0.00	0.000	0.030	0.1459	0.0003	0.0005	1.16E-03	0.0006	0.0012	6.80E-09
274		0.00	0.000	0.056	0.1412	0.0003	0.0005	1.15E-03	0.0006	0.0012	6.80E-09
275		0.00	0.000	0.047	0.1373	0.0003	0.0005	1.15E-03	0.0006	0.0011	6.80E-09
276		0.00	0.000	0.099	0.1290	0.0003	0.0005	1.14E-03	0.0006	0.0011	6.80E-09
277		0.00	0.000	0.029	0.1266	0.0003	0.0005	1.14E-03	0.0006	0.0011	6.80E-09
278		0.00	0.000	0.047	0.1227	0.0003	0.0005	1.13E-03	0.0006	0.0011	6.80E-09
279		0.19	0.000	0.064	0.1329	0.0002	0.0005	1.12E-03	0.0006	0.0011	6.80E-09
280		0.55	0.000	0.134	0.1676	0.0002	0.0005	1.12E-03	0.0006	0.0011	6.80E-09
281		0.02	0.000	0.060	0.1643	0.0002	0.0005	1.11E-03	0.0006	0.0011	6.80E-09
282		0.25	0.000	0.089	0.1778	0.0002	0.0005	1.11E-03	0.0006	0.0011	6.80E-09
283		0.00	0.000	0.154	0.1649	0.0002	0.0005	1.10E-03	0.0006	0.0011	6.80E-09
284		0.00	0.000	0.113	0.1555	0.0002	0.0005	1.10E-03	0.0006	0.0011	6.80E-09
285		0.00	0.000	0.075	0.1492	0.0002	0.0004	1.09E-03	0.0006	0.0011	6.80E-09
286		0.00	0.000	0.042	0.1458	0.0002	0.0004	1.09E-03	0.0006	0.0011	6.80E-09
287		0.20	0.000	0.055	0.1574	0.0002	0.0004	1.08E-03	0.0006	0.0011	6.80E-09
288		0.76	0.000	0.055	0.2161	0.0002	0.0004	1.08E-03	0.0006	0.0011	6.80E-09
289	*	0.07	0.000	0.050	0.2177	0.0002	0.0004	1.07E-03	0.0006	0.0011	6.80E-09
290		0.13	0.000	0.080	0.2225	0.0002	0.0004	1.07E-03	0.0006	0.0011	6.80E-09
291		0.00	0.000	0.023	0.2205	0.0002	0.0004	1.07E-03	0.0006	0.0011	6.80E-09
292	*	0.00	0.000	0.000	0.2205	0.0002	0.0004	1.06E-03	0.0006	0.0011	6.80E-09
293		0.00	0.000	0.034	0.2177	0.0002	0.0004	1.06E-03	0.0006	0.0011	6.80E-09
294		0.68	0.000	0.152	0.2617	0.0002	0.0004	1.05E-03	0.0006	0.0011	6.80E-09
295		0.00	0.000	0.039	0.2585	0.0002	0.0004	1.05E-03	0.0006	0.0010	6.80E-09
296		0.00	0.000	0.075	0.2523	0.0002	0.0004	1.04E-03	0.0005	0.0010	6.80E-09
297		0.00	0.000	0.036	0.2493	0.0002	0.0004	1.04E-03	0.0005	0.0010	6.80E-09
298	*	0.00	0.000	0.000	0.2492	0.0002	0.0004	1.03E-03	0.0005	0.0010	6.80E-09
299	*	0.00	0.000	0.000	0.2486	0.0003	0.0005	1.18E-03	0.0006	0.0011	6.80E-09
300	*	0.00	0.000	0.000	0.2486	0.0002	0.0005	1.09E-03	0.0006	0.0011	6.80E-09
301	*	0.00	0.000	0.000	0.2486	0.0002	0.0004	9.88E-04	0.0005	0.0010	6.80E-09
302		0.00	0.000	0.038	0.2455	0.0002	0.0004	9.84E-04	0.0005	0.0010	6.80E-09
303		0.00	0.000	0.015	0.2443	0.0002	0.0004	9.81E-04	0.0005	0.0010	6.80E-09
304	*	0.00	0.000	0.000	0.2443	0.0002	0.0004	9.78E-04	0.0005	0.0010	6.80E-09
305		0.00	0.000	0.053	0.2398	0.0002	0.0004	9.75E-04	0.0005	0.0010	6.80E-09
306		0.00	0.000	0.052	0.2355	0.0002	0.0004	9.72E-04	0.0005	0.0010	6.80E-09
307		0.00	0.000	0.032	0.2329	0.0002	0.0004	9.68E-04	0.0005	0.0010	6.80E-09

308	*	0.00	0.000	0.019	0.2313	0.0002	0.0003	9.65E-04	0.0005	0.0010	6.80E-09
309	*	0.00	0.000	0.000	0.2313	0.0002	0.0003	9.62E-04	0.0005	0.0010	6.80E-09
310	*	0.00	0.000	0.030	0.2288	0.0002	0.0003	9.59E-04	0.0005	0.0010	6.80E-09
311		0.13	0.000	0.062	0.2348	0.0002	0.0003	9.56E-04	0.0005	0.0010	6.80E-09
312	*	1.02	0.000	0.022	0.2360	0.0002	0.0003	9.53E-04	0.0005	0.0010	6.80E-09
313		0.01	0.000	0.000	0.2597	0.0003	0.0006	1.22E-03	0.0006	0.0011	6.80E-09
314		0.17	0.000	0.000	0.3001	0.0003	0.0005	1.12E-03	0.0006	0.0012	6.80E-09
315		0.28	0.000	0.000	0.3189	0.0001	0.0003	8.26E-04	0.0005	0.0010	6.80E-09
316		0.12	0.000	0.067	0.2934	0.0002	0.0004	9.56E-04	0.0005	0.0009	6.80E-09
317		0.00	0.000	0.028	0.2752	0.0001	0.0003	7.56E-04	0.0004	0.0008	6.80E-09
318		0.32	0.000	0.041	0.2868	0.0001	0.0002	7.09E-04	0.0004	0.0007	6.80E-09
319		0.03	0.000	0.053	0.2834	0.0001	0.0002	7.04E-04	0.0004	0.0007	6.80E-09
320		0.00	0.000	0.055	0.2685	0.0002	0.0004	8.12E-04	0.0004	0.0008	6.80E-09
321		0.00	0.000	0.028	0.2644	0.0003	0.0005	1.01E-03	0.0005	0.0009	6.80E-09
322		0.00	0.000	0.045	0.2607	0.0002	0.0004	8.31E-04	0.0005	0.0009	6.80E-09
323		0.00	0.000	0.032	0.2580	0.0003	0.0005	1.12E-03	0.0005	0.0010	6.80E-09
324		0.00	0.000	0.028	0.2557	0.0000	0.0000	0.00E+00	0.0002	0.0005	6.80E-09
325		0.00	0.000	0.033	0.2529	0.0003	0.0006	1.05E-03	0.0003	0.0006	6.80E-09
326		0.03	0.000	0.044	0.2515	0.0003	0.0006	1.26E-03	0.0006	0.0012	6.80E-09
327	*	0.00	0.000	0.000	0.2515	0.0003	0.0006	1.24E-03	0.0007	0.0012	6.80E-09
328	*	0.00	0.000	0.000	0.2515	0.0003	0.0006	1.23E-03	0.0006	0.0012	6.80E-09
329	*	0.00	0.000	0.021	0.2497	0.0003	0.0006	1.22E-03	0.0006	0.0012	6.80E-09
330	*	0.16	0.000	0.016	0.2513	0.0003	0.0005	1.21E-03	0.0006	0.0012	6.80E-09
331	*	0.04	0.000	0.022	0.2530	0.0003	0.0005	1.19E-03	0.0006	0.0012	6.80E-09
332		0.32	0.000	0.000	0.2884	0.0001	0.0002	4.58E-04	0.0004	0.0008	6.80E-09
333		0.00	0.000	0.060	0.2810	0.0000	0.0000	0.00E+00	0.0001	0.0002	6.80E-09
334		0.00	0.000	0.059	0.2669	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
335		0.46	0.000	0.105	0.2844	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
336		0.06	0.000	0.081	0.2792	0.0000	0.0000	0.00E+00	0.0000	0.0000	2.50E-09
337		0.00	0.000	0.129	0.2595	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.00E+00
338		0.00	0.000	0.044	0.2556	0.0086	0.0163	5.57E-03	0.0017	0.0032	5.10E-09
339	*	0.00	0.000	0.000	0.2556	0.0011	0.0020	1.35E-03	0.0016	0.0031	6.80E-09
340		0.11	0.000	0.038	0.2603	0.0100	0.0191	6.71E-03	0.0024	0.0045	6.80E-09
341		0.04	0.000	0.047	0.2549	0.0228	0.0434	1.09E-02	0.0047	0.0090	6.80E-09
342		0.01	0.000	0.076	0.2464	0.0200	0.0381	1.01E-02	0.0055	0.0104	6.80E-09

343		0.00	0.000	0.029	0.2400	0.0073	0.0139	5.95E-03	0.0041	0.0077	6.80E-09
344		0.00	0.000	0.055	0.2354	0.0038	0.0073	4.20E-03	0.0026	0.0050	6.80E-09
345	*	0.00	0.000	0.026	0.2332	0.0109	0.0207	7.38E-03	0.0032	0.0061	6.80E-09
346		0.00	0.000	0.048	0.2292	0.0250	0.0475	1.14E-02	0.0051	0.0096	6.80E-09
347		0.00	0.000	0.090	0.2217	0.0031	0.0058	2.70E-03	0.0033	0.0063	6.80E-09
348		0.00	0.000	0.050	0.2176	0.0045	0.0086	3.35E-03	0.0017	0.0032	6.80E-09
349		0.00	0.000	0.039	0.2143	0.0262	0.0498	1.16E-02	0.0043	0.0081	6.80E-09
350		0.06	0.000	0.054	0.2145	0.0343	0.0653	1.34E-02	0.0066	0.0125	6.80E-09
351		0.07	0.000	0.086	0.2114	0.0364	0.0693	1.38E-02	0.0071	0.0136	6.80E-09
352		0.92	0.000	0.040	0.2849	0.0255	0.0486	1.15E-02	0.0065	0.0124	6.80E-09
353	*	0.30	0.000	0.026	0.2818	0.0216	0.0410	1.06E-02	0.0058	0.0110	6.80E-09
354		0.08	0.000	0.000	0.2965	0.0218	0.0415	1.06E-02	0.0056	0.0106	6.80E-09
355	*	0.00	0.000	0.000	0.2872	0.0224	0.0426	1.07E-02	0.0056	0.0107	6.80E-09
356	*	0.00	0.000	0.000	0.2748	0.0172	0.0328	9.41E-03	0.0052	0.0100	6.80E-09
357		0.00	0.000	0.041	0.2597	0.0209	0.0398	1.04E-02	0.0053	0.0100	6.80E-09
358		0.00	0.000	0.034	0.2484	0.0054	0.0102	5.10E-03	0.0039	0.0074	6.80E-09
359		0.36	0.000	0.060	0.2703	0.0069	0.0131	5.93E-03	0.0030	0.0057	6.80E-09
360	*	0.59	0.000	0.023	0.2705	0.0101	0.0193	7.22E-03	0.0035	0.0067	6.80E-09
361	*	0.02	0.000	0.011	0.2675	0.0178	0.0339	9.57E-03	0.0045	0.0086	6.80E-09
362	*	0.00	0.000	0.019	0.2662	0.0168	0.0319	9.32E-03	0.0049	0.0094	6.80E-09
363		0.13	0.000	0.000	0.3111	0.0047	0.0089	4.72E-03	0.0035	0.0067	6.80E-09
364		0.00	0.000	0.036	0.2944	0.0076	0.0145	5.53E-03	0.0028	0.0053	6.80E-09
365		0.00	0.000	0.044	0.2699	0.0087	0.0166	6.46E-03	0.0032	0.0061	6.80E-09

* = Frozen (air or soil)

Annual Totals for Year 8			
	inches	cubic feet	percent
Precipitation	34.13	123,878.6	100.00
Runoff	0.000	0.0000	0.00
Evapotranspiration	28.709	104,213.1	84.13
Drainage Collected from Layer 3	3.1084	11,283.7	9.11
Percolation/Leakage through Layer 4	1.256127	4,559.7	3.68
Average Head on Top of Layer 4	0.0045	---	---

Drainage Collected from Layer 5	1.2531	4,548.7	3.67
Percolation/Leakage through Layer 7	0.000002	0.0090	0.00
Average Head on Top of Layer 6	0.0018	---	---
Change in Water Storage	1.0560	3,833.2	3.09
Soil Water at Start of Year	39.0155	141,626.3	114.33
Soil Water at End of Year	40.1907	145,892.2	117.77
Snow Water at Start of Year	0.1192	432.7	0.35
Snow Water at End of Year	0.0000	0.0000	0.00
Annual Water Budget Balance	0.0000	0.0000	0.00

Daily Output for Year 9

Column key: Head #1: drainage from Layer 4 | Head #2: drainage from Layer 6
Drain #1: drainage from Layer 3 | Drain #2: drainage from Layer 5
Leak #1: leakage thru Layer 4 | Leak #2: leakage thru Layer 7

Title: Millersville Cell 9 - Open Cell Condition
Simulated On: 6/9/2024 11:31

Day	Freezing Status* Air	Freezing Status* Soil	Rain (inches)	Runoff (inches)	ET (inches)	Evap. Zone Water (in/in)	Head #1 (inches)	Drain #1 (inches)	Leak #1 (inches)	Head #2 (inches)	Drain #2 (inches)	Leak #2 (inches)
1			0.00	0.000	0.059	0.2650	0.0010	0.0018	1.23E-03	0.0023	0.0044	6.80E-09
2			0.03	0.000	0.039	0.2618	0.0034	0.0065	3.85E-03	0.0015	0.0028	6.80E-09
3	*		0.00	0.000	0.000	0.2585	0.0082	0.0156	6.40E-03	0.0028	0.0053	6.80E-09
4	*		0.00	0.000	0.000	0.2520	0.0083	0.0157	6.42E-03	0.0033	0.0064	6.80E-09
5	*		0.00	0.000	0.028	0.2473	0.0185	0.0351	9.76E-03	0.0044	0.0083	6.80E-09
6	*		0.00	0.000	0.025	0.2452	0.0073	0.0140	5.22E-03	0.0037	0.0071	6.80E-09
7			0.00	0.000	0.047	0.2414	0.0111	0.0210	7.44E-03	0.0034	0.0066	6.80E-09
8			0.06	0.000	0.044	0.2414	0.0160	0.0305	9.05E-03	0.0044	0.0083	6.80E-09
9			0.00	0.000	0.038	0.2371	0.0082	0.0156	6.30E-03	0.0039	0.0074	6.80E-09
10			0.00	0.000	0.032	0.2345	0.0003	0.0006	8.99E-04	0.0017	0.0032	6.80E-09
11	*		0.00	0.000	0.023	0.2326	0.0036	0.0068	4.18E-03	0.0015	0.0029	6.80E-09
12			0.32	0.000	0.040	0.2558	0.0106	0.0201	7.33E-03	0.0031	0.0059	6.80E-09
13	*		0.00	0.000	0.029	0.2522	0.0246	0.0468	1.12E-02	0.0050	0.0095	6.80E-09
14			0.00	0.000	0.037	0.2466	0.0187	0.0356	9.76E-03	0.0054	0.0103	6.80E-09
15	*		0.00	0.000	0.004	0.2420	0.0451	0.0859	1.53E-02	0.0068	0.0130	6.80E-09
16	*		0.00	0.000	0.000	0.2389	0.0599	0.1140	1.78E-02	0.0087	0.0166	6.80E-09
17			0.00	0.000	0.037	0.2339	0.0573	0.1091	1.74E-02	0.0092	0.0175	6.80E-09
18			0.00	0.000	0.041	0.2280	0.0430	0.0818	1.50E-02	0.0084	0.0160	6.80E-09
19			0.00	0.000	0.051	0.2231	0.0463	0.0880	1.56E-02	0.0081	0.0154	6.80E-09
20			0.00	0.000	0.055	0.2186	0.0470	0.0895	1.57E-02	0.0082	0.0156	6.80E-09
21			0.00	0.000	0.044	0.2149	0.0445	0.0847	1.53E-02	0.0081	0.0155	6.80E-09
22			0.00	0.000	0.053	0.2105	0.0381	0.0725	1.41E-02	0.0077	0.0146	6.80E-09
23			0.42	0.000	0.076	0.2395	0.0321	0.0611	1.29E-02	0.0071	0.0135	6.80E-09
24			0.00	0.000	0.079	0.2324	0.0286	0.0544	1.22E-02	0.0066	0.0125	6.80E-09
25			0.00	0.000	0.060	0.2269	0.0227	0.0431	1.08E-02	0.0060	0.0114	6.80E-09
26			0.00	0.000	0.031	0.2237	0.0229	0.0435	1.09E-02	0.0057	0.0109	6.80E-09
27			0.00	0.000	0.048	0.2184	0.0175	0.0333	9.50E-03	0.0053	0.0101	6.80E-09

28		0.00	0.000	0.044	0.2129	0.0185	0.0353	9.79E-03	0.0051	0.0097	6.80E-09
29		0.00	0.000	0.050	0.2074	0.0129	0.0246	8.16E-03	0.0047	0.0089	6.80E-09
30		0.16	0.000	0.063	0.2150	0.0073	0.0140	6.08E-03	0.0037	0.0070	6.80E-09
31	*	0.00	0.000	0.000	0.2144	0.0080	0.0152	6.39E-03	0.0033	0.0063	6.80E-09
32		0.00	0.000	0.053	0.2091	0.0085	0.0162	6.61E-03	0.0034	0.0065	6.80E-09
33	*	0.00	0.000	0.037	0.2059	0.0073	0.0138	6.02E-03	0.0033	0.0063	6.80E-09
34	*	0.50	0.000	0.011	0.2076	0.0061	0.0116	5.59E-03	0.0030	0.0058	6.80E-09
35		0.75	0.000	0.000	0.3095	0.0071	0.0136	6.06E-03	0.0031	0.0059	6.80E-09
36		0.01	0.000	0.070	0.2769	0.0077	0.0147	6.31E-03	0.0033	0.0062	6.80E-09
37		0.00	0.000	0.058	0.2581	0.0098	0.0186	7.09E-03	0.0035	0.0068	6.80E-09
38		0.00	0.000	0.095	0.2476	0.0097	0.0185	6.97E-03	0.0037	0.0070	6.80E-09
39	*	0.00	0.000	0.034	0.2448	0.0052	0.0098	5.14E-03	0.0031	0.0059	6.80E-09
40		0.00	0.000	0.057	0.2400	0.0064	0.0122	5.71E-03	0.0029	0.0055	6.80E-09
41		0.00	0.000	0.048	0.2360	0.0086	0.0164	6.57E-03	0.0033	0.0062	6.80E-09
42		0.46	0.000	0.056	0.2699	0.0089	0.0169	6.73E-03	0.0035	0.0066	6.80E-09
43		0.00	0.000	0.071	0.2605	0.0096	0.0183	7.03E-03	0.0036	0.0069	6.80E-09
44		0.55	0.000	0.174	0.2907	0.0083	0.0158	6.54E-03	0.0035	0.0067	6.80E-09
45		0.12	0.000	0.057	0.2915	0.0073	0.0138	6.11E-03	0.0033	0.0063	6.80E-09
46	*	0.02	0.000	0.018	0.2693	0.0062	0.0118	5.64E-03	0.0031	0.0058	6.80E-09
47		0.00	0.000	0.058	0.2561	0.0058	0.0110	5.44E-03	0.0029	0.0055	6.80E-09
48		0.00	0.000	0.097	0.2456	0.0006	0.0012	8.82E-04	0.0015	0.0028	6.80E-09
49	*	0.00	0.000	0.042	0.2422	0.0000	0.0000	0.00E+00	0.0002	0.0004	6.80E-09
50	*	0.03	0.000	0.033	0.2383	0.0002	0.0003	4.47E-04	0.0001	0.0003	6.80E-09
51	*	0.43	0.000	0.020	0.2400	0.0016	0.0030	2.06E-03	0.0007	0.0014	6.80E-09
52	*	0.00	0.000	0.019	0.2416	0.0050	0.0096	4.16E-03	0.0017	0.0032	6.80E-09
53		0.00	0.000	0.041	0.2679	0.0194	0.0369	1.00E-02	0.0039	0.0075	6.80E-09
54		0.00	0.000	0.095	0.2591	0.0224	0.0426	1.08E-02	0.0054	0.0104	6.80E-09
55		0.00	0.000	0.048	0.2499	0.0152	0.0290	8.80E-03	0.0051	0.0096	6.80E-09
56		0.00	0.000	0.066	0.2426	0.0082	0.0155	6.05E-03	0.0038	0.0073	6.80E-09
57	*	0.00	0.000	0.031	0.2364	0.0017	0.0032	1.97E-03	0.0020	0.0038	6.80E-09
58	*	0.28	0.000	0.021	0.2379	0.0119	0.0227	7.68E-03	0.0028	0.0053	6.80E-09
59		0.23	0.000	0.000	0.2770	0.0052	0.0099	4.19E-03	0.0029	0.0056	6.80E-09
60		0.16	0.000	0.158	0.2749	0.0282	0.0536	1.18E-02	0.0045	0.0086	6.80E-09
61		0.01	0.000	0.068	0.2680	0.0474	0.0902	1.58E-02	0.0073	0.0140	6.80E-09
62	*	0.09	0.000	0.060	0.2616	0.0375	0.0714	1.40E-02	0.0077	0.0147	6.80E-09

63		0.69	0.000	0.070	0.3095	0.0320	0.0609	1.29E-02	0.0070	0.0134	6.80E-09
64	*	0.31	0.000	0.024	0.2851	0.0260	0.0495	1.16E-02	0.0064	0.0122	6.80E-09
65	*	0.08	0.000	0.023	0.2711	0.0371	0.0706	1.39E-02	0.0068	0.0130	6.80E-09
66	*	0.04	0.000	0.024	0.2632	0.0128	0.0243	8.09E-03	0.0055	0.0105	6.80E-09
67		0.93	0.000	0.000	0.3599	0.0176	0.0334	9.53E-03	0.0047	0.0090	6.80E-09
68	*	0.00	0.000	0.000	0.2919	0.0213	0.0406	1.05E-02	0.0053	0.0101	6.80E-09
69	*	0.00	0.000	0.068	0.2770	0.0278	0.0529	1.20E-02	0.0060	0.0113	6.80E-09
70	*	0.52	0.000	0.028	0.2772	0.0106	0.0201	7.37E-03	0.0049	0.0093	6.80E-09
71		0.00	0.000	0.008	0.3061	0.0168	0.0321	9.27E-03	0.0045	0.0085	6.80E-09
72		0.11	0.000	0.046	0.2889	0.0185	0.0353	9.72E-03	0.0050	0.0095	6.80E-09
73		0.02	0.000	0.045	0.2689	0.0158	0.0300	8.87E-03	0.0048	0.0092	6.80E-09
74		0.00	0.000	0.059	0.2575	0.0209	0.0398	1.04E-02	0.0051	0.0098	6.80E-09
75	*	0.00	0.000	0.000	0.2575	0.0019	0.0036	2.40E-03	0.0030	0.0058	6.80E-09
76		0.00	0.000	0.138	0.2461	0.0096	0.0183	6.99E-03	0.0027	0.0052	6.80E-09
77		0.00	0.000	0.150	0.2335	0.0066	0.0125	5.78E-03	0.0033	0.0062	6.80E-09
78		0.00	0.000	0.069	0.2278	0.0104	0.0199	7.31E-03	0.0035	0.0067	6.80E-09
79		0.00	0.000	0.145	0.2157	0.0245	0.0465	1.12E-02	0.0050	0.0095	6.80E-09
80		0.00	0.000	0.136	0.2044	0.0234	0.0445	1.10E-02	0.0058	0.0110	6.80E-09
81		0.00	0.000	0.262	0.1826	0.0180	0.0342	9.64E-03	0.0054	0.0102	6.80E-09
82		0.00	0.000	0.194	0.1664	0.0025	0.0047	2.30E-03	0.0029	0.0054	6.80E-09
83		0.00	0.000	0.081	0.1597	0.0000	0.0000	0.00E+00	0.0006	0.0011	6.80E-09
84		0.00	0.000	0.108	0.1507	0.0007	0.0013	9.40E-04	0.0003	0.0006	6.80E-09
85		0.03	0.000	0.088	0.1457	0.0250	0.0475	1.11E-02	0.0036	0.0068	6.80E-09
86		0.05	0.000	0.052	0.1457	0.0554	0.1055	1.71E-02	0.0076	0.0144	6.80E-09
87		0.00	0.000	0.054	0.1412	0.0676	0.1287	1.89E-02	0.0095	0.0180	6.80E-09
88		0.00	0.000	0.045	0.1375	0.0695	0.1324	1.92E-02	0.0100	0.0190	6.80E-09
89		0.00	0.000	0.041	0.1341	0.0679	0.1293	1.90E-02	0.0100	0.0191	6.80E-09
90		0.00	0.000	0.039	0.1308	0.0654	0.1244	1.86E-02	0.0099	0.0187	6.80E-09
91		0.00	0.000	0.036	0.1275	0.0627	0.1193	1.81E-02	0.0096	0.0183	6.80E-09
92		0.00	0.000	0.034	0.1247	0.0508	0.0967	1.63E-02	0.0090	0.0171	6.80E-09
93		0.00	0.000	0.033	0.1220	0.0626	0.1191	1.82E-02	0.0092	0.0174	6.80E-09
94		0.00	0.000	0.031	0.1194	0.0792	0.1507	2.05E-02	0.0102	0.0195	6.80E-09
95		0.07	0.000	0.034	0.1224	0.0757	0.1441	2.00E-02	0.0106	0.0202	6.80E-09
96		0.29	0.000	0.033	0.1434	0.0581	0.1105	1.75E-02	0.0098	0.0186	6.80E-09
97		0.00	0.000	0.027	0.1411	0.0450	0.0857	1.54E-02	0.0086	0.0163	6.80E-09

98		0.00	0.000	0.026	0.1389	0.0361	0.0687	1.37E-02	0.0076	0.0145	6.80E-09
99		0.00	0.000	0.025	0.1368	0.0298	0.0568	1.25E-02	0.0069	0.0130	6.80E-09
100	*	0.00	0.000	0.000	0.1368	0.0252	0.0480	1.15E-02	0.0063	0.0119	6.80E-09
101	*	0.44	0.000	0.021	0.1385	0.0217	0.0414	1.06E-02	0.0058	0.0110	6.80E-09
102	*	0.00	0.000	0.027	0.1401	0.0190	0.0362	9.93E-03	0.0054	0.0102	6.80E-09
103	*	0.44	0.000	0.019	0.1417	0.0168	0.0320	9.33E-03	0.0050	0.0096	6.80E-09
104	*	0.01	0.000	0.000	0.1434	0.0150	0.0286	8.82E-03	0.0048	0.0090	6.80E-09
105	*	0.21	0.000	0.022	0.1450	0.0135	0.0258	8.36E-03	0.0045	0.0086	6.80E-09
106	*	0.00	0.000	0.000	0.1467	0.0123	0.0234	7.97E-03	0.0043	0.0081	6.80E-09
107		1.53	0.000	0.000	0.3483	0.0112	0.0214	7.61E-03	0.0041	0.0078	6.80E-09
108		0.02	0.000	0.222	0.2653	0.0103	0.0196	7.29E-03	0.0039	0.0074	6.80E-09
109		0.11	0.000	0.085	0.2543	0.0095	0.0181	7.00E-03	0.0037	0.0071	6.80E-09
110		0.01	0.000	0.059	0.2461	0.0088	0.0168	6.74E-03	0.0036	0.0069	6.80E-09
111	*	0.04	0.000	0.034	0.2424	0.0082	0.0156	6.50E-03	0.0035	0.0066	6.80E-09
112	*	0.01	0.000	0.009	0.2413	0.0077	0.0146	6.27E-03	0.0033	0.0064	6.80E-09
113		0.18	0.000	0.170	0.2422	0.0094	0.0179	6.95E-03	0.0035	0.0067	6.80E-09
114		0.00	0.000	0.180	0.2272	0.0086	0.0163	6.60E-03	0.0035	0.0067	6.80E-09
115		0.00	0.000	0.186	0.2117	0.0048	0.0090	4.92E-03	0.0030	0.0056	6.80E-09
116		0.17	0.000	0.078	0.2189	0.0079	0.0150	6.37E-03	0.0030	0.0058	6.80E-09
117		0.00	0.000	0.139	0.2074	0.0072	0.0137	6.07E-03	0.0032	0.0062	6.80E-09
118		0.00	0.000	0.171	0.1931	0.0064	0.0121	5.71E-03	0.0031	0.0059	6.80E-09
119	*	0.00	0.000	0.087	0.1858	0.0057	0.0108	5.40E-03	0.0029	0.0055	6.80E-09
120		0.00	0.000	0.052	0.1815	0.0051	0.0097	5.12E-03	0.0028	0.0052	6.80E-09
121	*	0.33	0.000	0.040	0.1831	0.0018	0.0034	2.12E-03	0.0018	0.0034	6.80E-09
122	*	0.00	0.000	0.026	0.1848	0.0000	0.0000	0.00E+00	0.0005	0.0009	6.80E-09
123		0.25	0.000	0.070	0.2184	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
124		0.00	0.000	0.078	0.2119	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
125		0.00	0.000	0.191	0.1960	0.0000	0.0000	0.00E+00	0.0000	0.0000	5.55E-09
126		0.00	0.000	0.114	0.1842	0.0208	0.0395	8.95E-03	0.0027	0.0051	5.10E-09
127		0.32	0.000	0.240	0.1901	0.0398	0.0757	1.44E-02	0.0063	0.0120	6.80E-09
128		0.01	0.000	0.082	0.1842	0.0415	0.0790	1.47E-02	0.0076	0.0145	6.80E-09
129		0.03	0.000	0.062	0.1813	0.0422	0.0804	1.49E-02	0.0078	0.0148	6.80E-09
130		0.15	0.000	0.208	0.1762	0.0344	0.0655	1.34E-02	0.0074	0.0140	6.80E-09
131		0.00	0.000	0.292	0.1520	0.0296	0.0563	1.24E-02	0.0068	0.0129	6.80E-09
132		0.28	0.000	0.131	0.1643	0.0259	0.0493	1.16E-02	0.0063	0.0120	6.80E-09

133	0.06	0.000	0.095	0.1617	0.0227	0.0432	1.09E-02	0.0059	0.0112	6.80E-09
134	0.00	0.000	0.331	0.1341	0.0200	0.0381	1.02E-02	0.0055	0.0105	6.80E-09
135	0.00	0.000	0.089	0.1268	0.0178	0.0338	9.59E-03	0.0052	0.0099	6.80E-09
136	0.23	0.000	0.092	0.1386	0.0159	0.0302	9.07E-03	0.0049	0.0093	6.80E-09
137	0.10	0.000	0.073	0.1405	0.0143	0.0272	8.60E-03	0.0046	0.0088	6.80E-09
138	0.03	0.000	0.066	0.1374	0.0130	0.0247	8.19E-03	0.0044	0.0084	6.80E-09
139	0.01	0.000	0.059	0.1336	0.0118	0.0225	7.81E-03	0.0042	0.0080	6.80E-09
140	0.04	0.000	0.063	0.1319	0.0108	0.0206	7.48E-03	0.0040	0.0076	6.80E-09
141	0.11	0.000	0.052	0.1368	0.0100	0.0190	7.18E-03	0.0038	0.0073	6.80E-09
142	0.00	0.000	0.061	0.1317	0.0092	0.0176	6.90E-03	0.0037	0.0070	6.80E-09
143	0.00	0.000	0.051	0.1274	0.0086	0.0163	6.65E-03	0.0036	0.0068	6.80E-09
144	0.00	0.000	0.057	0.1227	0.0080	0.0152	6.42E-03	0.0034	0.0065	6.80E-09
145	0.00	0.000	0.058	0.1179	0.0075	0.0142	6.20E-03	0.0033	0.0063	6.80E-09
146	0.00	0.000	0.047	0.1140	0.0070	0.0133	6.00E-03	0.0032	0.0061	6.80E-09
147	0.00	0.000	0.045	0.1102	0.0066	0.0125	5.82E-03	0.0031	0.0059	6.80E-09
148	0.00	0.000	0.086	0.1031	0.0062	0.0118	5.65E-03	0.0030	0.0057	6.80E-09
149	0.00	0.000	0.068	0.0974	0.0059	0.0112	5.49E-03	0.0029	0.0056	6.80E-09
150	0.00	0.000	0.084	0.0907	0.0056	0.0106	5.34E-03	0.0028	0.0054	6.80E-09
151	0.57	0.000	0.052	0.1338	0.0053	0.0100	5.20E-03	0.0028	0.0053	6.80E-09
152	0.01	0.000	0.086	0.1277	0.0050	0.0095	5.07E-03	0.0027	0.0051	6.80E-09
153	0.37	0.000	0.168	0.1441	0.0048	0.0091	4.94E-03	0.0026	0.0050	6.80E-09
154	0.00	0.000	0.200	0.1274	0.0045	0.0086	4.82E-03	0.0026	0.0049	6.80E-09
155	0.14	0.000	0.179	0.1244	0.0043	0.0082	4.71E-03	0.0025	0.0048	6.80E-09
156	0.00	0.000	0.220	0.1061	0.0041	0.0079	4.60E-03	0.0024	0.0047	6.80E-09
157	0.00	0.000	0.122	0.0959	0.0040	0.0077	4.54E-03	0.0024	0.0046	6.80E-09
158	0.22	0.000	0.185	0.0986	0.0038	0.0072	4.41E-03	0.0023	0.0045	6.80E-09
159	0.12	0.000	0.148	0.0965	0.0036	0.0069	4.31E-03	0.0023	0.0044	6.80E-09
160	1.07	0.000	0.064	0.1801	0.0035	0.0066	4.22E-03	0.0022	0.0043	6.80E-09
161	0.70	0.000	0.059	0.2335	0.0033	0.0064	4.14E-03	0.0022	0.0042	6.80E-09
162	0.08	0.000	0.097	0.2324	0.0032	0.0061	4.06E-03	0.0022	0.0041	6.80E-09
163	0.19	0.000	0.229	0.2293	0.0031	0.0059	3.98E-03	0.0021	0.0040	6.80E-09
164	0.24	0.000	0.112	0.2402	0.0030	0.0057	3.91E-03	0.0021	0.0039	6.80E-09
165	0.03	0.000	0.267	0.2205	0.0029	0.0055	3.84E-03	0.0020	0.0039	6.80E-09
166	0.00	0.000	0.255	0.1993	0.0028	0.0053	3.77E-03	0.0020	0.0038	6.80E-09
167	0.36	0.000	0.094	0.2218	0.0027	0.0051	3.71E-03	0.0020	0.0037	6.80E-09

168	0.01	0.000	0.280	0.1992	0.0026	0.0050	3.65E-03	0.0019	0.0037	6.80E-09
169	0.32	0.000	0.251	0.2046	0.0025	0.0048	3.59E-03	0.0019	0.0036	6.80E-09
170	0.00	0.000	0.224	0.1860	0.0025	0.0047	3.56E-03	0.0019	0.0036	6.80E-09
171	0.37	0.000	0.100	0.2089	0.0024	0.0045	3.47E-03	0.0018	0.0035	6.80E-09
172	0.72	0.000	0.241	0.2484	0.0023	0.0043	3.41E-03	0.0018	0.0034	6.80E-09
173	0.07	0.000	0.216	0.2359	0.0025	0.0047	3.54E-03	0.0018	0.0035	6.80E-09
174	0.01	0.000	0.303	0.2115	0.0022	0.0041	3.33E-03	0.0018	0.0034	6.80E-09
175	0.00	0.000	0.168	0.1975	0.0020	0.0039	3.23E-03	0.0017	0.0033	6.80E-09
176	0.00	0.000	0.256	0.1761	0.0020	0.0038	3.18E-03	0.0017	0.0032	6.80E-09
177	0.04	0.000	0.180	0.1642	0.0020	0.0038	3.20E-03	0.0017	0.0032	6.80E-09
178	0.06	0.000	0.129	0.1581	0.0019	0.0036	3.10E-03	0.0017	0.0031	6.80E-09
179	0.02	0.000	0.111	0.1501	0.0020	0.0038	3.20E-03	0.0017	0.0032	6.80E-09
180	0.18	0.000	0.127	0.1548	0.0017	0.0033	2.99E-03	0.0016	0.0031	6.80E-09
181	0.65	0.000	0.352	0.1793	0.0020	0.0037	3.15E-03	0.0016	0.0031	6.80E-09
182	0.00	0.000	0.257	0.1579	0.0016	0.0031	2.89E-03	0.0016	0.0030	6.80E-09
183	0.00	0.000	0.125	0.1474	0.0016	0.0030	2.85E-03	0.0015	0.0029	6.80E-09
184	0.15	0.000	0.361	0.1296	0.0016	0.0030	2.82E-03	0.0015	0.0028	6.80E-09
185	0.06	0.000	0.295	0.1098	0.0015	0.0029	2.79E-03	0.0015	0.0028	6.80E-09
186	0.02	0.000	0.287	0.0875	0.0015	0.0028	2.76E-03	0.0015	0.0028	6.80E-09
187	0.00	0.000	0.117	0.0777	0.0015	0.0028	2.73E-03	0.0014	0.0027	6.80E-09
188	0.16	0.000	0.050	0.0869	0.0014	0.0027	2.70E-03	0.0014	0.0027	6.80E-09
189	0.25	0.000	0.124	0.0972	0.0014	0.0027	2.67E-03	0.0014	0.0027	6.80E-09
190	0.00	0.000	0.103	0.0886	0.0014	0.0026	2.65E-03	0.0014	0.0027	6.80E-09
191	0.21	0.000	0.147	0.0940	0.0013	0.0026	2.62E-03	0.0014	0.0026	6.80E-09
192	0.00	0.000	0.136	0.0826	0.0013	0.0025	2.59E-03	0.0014	0.0026	6.80E-09
193	0.00	0.000	0.049	0.0786	0.0013	0.0025	2.57E-03	0.0014	0.0026	6.80E-09
194	0.15	0.000	0.046	0.0875	0.0013	0.0024	2.54E-03	0.0013	0.0026	6.80E-09
195	0.00	0.000	0.071	0.0815	0.0013	0.0025	2.60E-03	0.0014	0.0026	6.80E-09
196	0.00	0.000	0.043	0.0780	0.0012	0.0023	2.48E-03	0.0013	0.0025	6.80E-09
197	0.21	0.000	0.039	0.0919	0.0012	0.0023	2.46E-03	0.0013	0.0025	6.80E-09
198	0.31	0.000	0.054	0.1129	0.0012	0.0022	2.43E-03	0.0013	0.0024	6.80E-09
199	0.76	0.000	0.078	0.1697	0.0011	0.0022	2.41E-03	0.0013	0.0024	6.80E-09
200	0.00	0.000	0.184	0.1543	0.0011	0.0021	2.39E-03	0.0013	0.0024	6.80E-09
201	0.01	0.000	0.150	0.1428	0.0011	0.0021	2.36E-03	0.0012	0.0024	6.80E-09
202	0.00	0.000	0.164	0.1292	0.0011	0.0020	2.34E-03	0.0012	0.0024	6.80E-09

203	0.00	0.000	0.140	0.1175	0.0011	0.0020	2.32E-03	0.0012	0.0023	6.80E-09
204	0.00	0.000	0.277	0.0945	0.0010	0.0020	2.30E-03	0.0012	0.0023	6.80E-09
205	0.00	0.000	0.184	0.0791	0.0010	0.0019	2.28E-03	0.0012	0.0023	6.80E-09
206	0.00	0.000	0.025	0.0770	0.0010	0.0019	2.26E-03	0.0012	0.0023	6.80E-09
207	0.00	0.000	0.000	0.0770	0.0010	0.0019	2.24E-03	0.0012	0.0022	6.80E-09
208	0.54	0.000	0.144	0.1100	0.0010	0.0018	2.22E-03	0.0012	0.0022	6.80E-09
209	0.00	0.000	0.141	0.0982	0.0009	0.0018	2.20E-03	0.0012	0.0022	6.80E-09
210	0.00	0.000	0.135	0.0870	0.0009	0.0018	2.18E-03	0.0012	0.0022	6.80E-09
211	0.00	0.000	0.095	0.0791	0.0009	0.0017	2.16E-03	0.0011	0.0022	6.80E-09
212	0.00	0.000	0.021	0.0773	0.0009	0.0017	2.14E-03	0.0011	0.0022	6.80E-09
213	0.09	0.000	0.051	0.0808	0.0009	0.0017	2.12E-03	0.0011	0.0021	6.80E-09
214	0.01	0.000	0.032	0.0791	0.0009	0.0017	2.11E-03	0.0011	0.0021	6.80E-09
215	0.01	0.000	0.022	0.0779	0.0009	0.0016	2.09E-03	0.0011	0.0021	6.80E-09
216	0.85	0.000	0.067	0.1427	0.0008	0.0016	2.07E-03	0.0011	0.0021	6.80E-09
217	0.01	0.000	0.079	0.1368	0.0008	0.0016	2.05E-03	0.0011	0.0021	6.80E-09
218	0.90	0.000	0.178	0.1972	0.0008	0.0016	2.04E-03	0.0011	0.0020	6.80E-09
219	0.01	0.000	0.232	0.1789	0.0008	0.0015	2.02E-03	0.0011	0.0020	6.80E-09
220	0.01	0.000	0.271	0.1572	0.0008	0.0015	2.00E-03	0.0011	0.0020	6.80E-09
221	0.02	0.000	0.281	0.1358	0.0008	0.0015	1.99E-03	0.0010	0.0020	6.80E-09
222	0.04	0.000	0.159	0.1262	0.0008	0.0015	1.97E-03	0.0010	0.0020	6.80E-09
223	0.01	0.000	0.228	0.1083	0.0008	0.0014	1.96E-03	0.0010	0.0020	6.80E-09
224	0.55	0.000	0.272	0.1312	0.0007	0.0014	1.94E-03	0.0010	0.0019	6.80E-09
225	0.00	0.000	0.166	0.1174	0.0007	0.0014	1.93E-03	0.0010	0.0019	6.80E-09
226	0.00	0.000	0.231	0.0980	0.0007	0.0014	1.91E-03	0.0010	0.0019	6.80E-09
227	0.05	0.000	0.237	0.0821	0.0008	0.0016	2.03E-03	0.0010	0.0020	6.80E-09
228	0.58	0.000	0.086	0.1237	0.0007	0.0013	1.86E-03	0.0010	0.0019	6.80E-09
229	0.00	0.000	0.080	0.1170	0.0007	0.0013	1.85E-03	0.0010	0.0019	6.80E-09
230	0.00	0.000	0.176	0.1024	0.0007	0.0013	1.84E-03	0.0010	0.0018	6.80E-09
231	0.00	0.000	0.253	0.0813	0.0007	0.0012	1.82E-03	0.0010	0.0018	6.80E-09
232	0.00	0.000	0.041	0.0778	0.0006	0.0012	1.81E-03	0.0010	0.0018	6.80E-09
233	0.00	0.000	0.008	0.0772	0.0006	0.0012	1.80E-03	0.0009	0.0018	6.80E-09
234	0.10	0.000	0.053	0.0814	0.0006	0.0012	1.79E-03	0.0009	0.0018	6.80E-09
235	0.00	0.000	0.006	0.0809	0.0006	0.0012	1.77E-03	0.0009	0.0018	6.80E-09
236	0.00	0.000	0.038	0.0777	0.0006	0.0012	1.76E-03	0.0009	0.0018	6.80E-09
237	0.00	0.000	0.007	0.0772	0.0006	0.0011	1.75E-03	0.0009	0.0018	6.80E-09

238	0.92	0.000	0.051	0.1494	0.0006	0.0011	1.74E-03	0.0009	0.0017	6.80E-09
239	0.54	0.000	0.129	0.1839	0.0006	0.0011	1.73E-03	0.0009	0.0017	6.80E-09
240	0.00	0.000	0.130	0.1731	0.0006	0.0011	1.71E-03	0.0009	0.0017	6.80E-09
241	0.00	0.000	0.192	0.1571	0.0006	0.0011	1.70E-03	0.0009	0.0017	6.80E-09
242	0.09	0.000	0.188	0.1488	0.0006	0.0011	1.69E-03	0.0009	0.0017	6.80E-09
243	0.04	0.000	0.066	0.1463	0.0006	0.0011	1.68E-03	0.0009	0.0017	6.80E-09
244	0.28	0.000	0.216	0.1516	0.0005	0.0010	1.67E-03	0.0009	0.0017	6.80E-09
245	0.00	0.000	0.150	0.1394	0.0005	0.0010	1.66E-03	0.0009	0.0017	6.80E-09
246	0.04	0.000	0.071	0.1372	0.0005	0.0010	1.65E-03	0.0009	0.0017	6.80E-09
247	0.00	0.000	0.198	0.1207	0.0005	0.0010	1.64E-03	0.0009	0.0016	6.80E-09
248	0.00	0.000	0.161	0.1073	0.0005	0.0010	1.63E-03	0.0009	0.0016	6.80E-09
249	0.00	0.000	0.098	0.0991	0.0005	0.0010	1.62E-03	0.0009	0.0016	6.80E-09
250	0.00	0.000	0.160	0.0858	0.0005	0.0010	1.61E-03	0.0008	0.0016	6.80E-09
251	0.00	0.000	0.084	0.0788	0.0005	0.0010	1.60E-03	0.0008	0.0016	6.80E-09
252	0.00	0.000	0.022	0.0770	0.0005	0.0009	1.59E-03	0.0008	0.0016	6.80E-09
253	0.00	0.000	0.000	0.0770	0.0005	0.0009	1.58E-03	0.0008	0.0016	6.80E-09
254	0.00	0.000	0.000	0.0770	0.0005	0.0009	1.57E-03	0.0008	0.0016	6.80E-09
255	0.00	0.000	0.000	0.0770	0.0005	0.0009	1.56E-03	0.0008	0.0016	6.80E-09
256	0.00	0.000	0.000	0.0770	0.0005	0.0009	1.55E-03	0.0008	0.0016	6.80E-09
257	0.00	0.000	0.000	0.0770	0.0005	0.0009	1.54E-03	0.0008	0.0015	6.80E-09
258	0.00	0.000	0.000	0.0770	0.0005	0.0009	1.53E-03	0.0008	0.0015	6.80E-09
259	0.00	0.000	0.000	0.0770	0.0005	0.0009	1.52E-03	0.0008	0.0015	6.80E-09
260	0.00	0.000	0.000	0.0770	0.0004	0.0009	1.51E-03	0.0008	0.0015	6.80E-09
261	0.00	0.000	0.000	0.0770	0.0004	0.0008	1.50E-03	0.0008	0.0015	6.80E-09
262	0.00	0.000	0.000	0.0770	0.0004	0.0008	1.49E-03	0.0008	0.0015	6.80E-09
263	0.00	0.000	0.000	0.0770	0.0004	0.0008	1.48E-03	0.0008	0.0015	6.80E-09
264	0.00	0.000	0.000	0.0770	0.0004	0.0008	1.47E-03	0.0008	0.0015	6.80E-09
265	0.00	0.000	0.000	0.0770	0.0004	0.0008	1.46E-03	0.0008	0.0015	6.80E-09
266	0.34	0.000	0.056	0.1010	0.0004	0.0008	1.46E-03	0.0008	0.0015	6.80E-09
267	0.00	0.000	0.061	0.0960	0.0004	0.0008	1.45E-03	0.0008	0.0015	6.80E-09
268	0.00	0.000	0.136	0.0846	0.0004	0.0008	1.44E-03	0.0008	0.0014	6.80E-09
269	0.00	0.000	0.072	0.0787	0.0004	0.0008	1.43E-03	0.0008	0.0014	6.80E-09
270	0.03	0.000	0.046	0.0775	0.0004	0.0008	1.42E-03	0.0007	0.0014	6.80E-09
271	0.00	0.000	0.005	0.0772	0.0004	0.0007	1.41E-03	0.0007	0.0014	6.80E-09
272	0.00	0.000	0.001	0.0770	0.0004	0.0007	1.41E-03	0.0007	0.0014	6.80E-09

273		0.11	0.000	0.048	0.0818	0.0004	0.0007	1.40E-03	0.0007	0.0014	6.80E-09
274		0.00	0.000	0.011	0.0808	0.0004	0.0007	1.39E-03	0.0007	0.0014	6.80E-09
275		0.00	0.000	0.024	0.0788	0.0004	0.0007	1.38E-03	0.0007	0.0014	6.80E-09
276		0.00	0.000	0.014	0.0777	0.0004	0.0007	1.37E-03	0.0007	0.0014	6.80E-09
277		0.25	0.000	0.059	0.0940	0.0004	0.0007	1.37E-03	0.0007	0.0014	6.80E-09
278		0.00	0.000	0.027	0.0918	0.0004	0.0007	1.36E-03	0.0007	0.0014	6.80E-09
279		0.00	0.000	0.037	0.0887	0.0004	0.0007	1.35E-03	0.0007	0.0014	6.80E-09
280		0.18	0.000	0.076	0.0977	0.0004	0.0007	1.34E-03	0.0007	0.0013	6.80E-09
281		0.00	0.000	0.013	0.0967	0.0004	0.0007	1.34E-03	0.0007	0.0013	6.80E-09
282		0.00	0.000	0.039	0.0934	0.0003	0.0007	1.33E-03	0.0007	0.0013	6.80E-09
283		0.00	0.000	0.038	0.0902	0.0003	0.0007	1.32E-03	0.0007	0.0013	6.80E-09
284		0.37	0.000	0.079	0.1146	0.0003	0.0006	1.32E-03	0.0007	0.0013	6.80E-09
285		0.00	0.000	0.031	0.1120	0.0003	0.0006	1.31E-03	0.0007	0.0013	6.80E-09
286		0.00	0.000	0.033	0.1092	0.0003	0.0006	1.30E-03	0.0007	0.0013	6.80E-09
287		0.00	0.000	0.034	0.1064	0.0003	0.0006	1.30E-03	0.0007	0.0013	6.80E-09
288		0.00	0.000	0.044	0.1029	0.0003	0.0006	1.29E-03	0.0007	0.0013	6.80E-09
289		0.00	0.000	0.035	0.1001	0.0003	0.0006	1.28E-03	0.0007	0.0013	6.80E-09
290		0.37	0.000	0.080	0.1239	0.0003	0.0006	1.27E-03	0.0007	0.0013	6.80E-09
291		0.00	0.000	0.117	0.1141	0.0003	0.0006	1.27E-03	0.0007	0.0013	6.80E-09
292		0.00	0.000	0.067	0.1086	0.0003	0.0006	1.27E-03	0.0007	0.0013	6.80E-09
293		0.00	0.000	0.059	0.1037	0.0003	0.0006	1.26E-03	0.0007	0.0013	6.80E-09
294		0.00	0.000	0.014	0.1025	0.0003	0.0006	1.25E-03	0.0007	0.0013	6.80E-09
295		0.00	0.000	0.025	0.1004	0.0003	0.0006	1.24E-03	0.0007	0.0012	6.80E-09
296		0.00	0.000	0.025	0.0983	0.0003	0.0006	1.24E-03	0.0007	0.0012	6.80E-09
297		0.00	0.000	0.028	0.0960	0.0003	0.0006	1.23E-03	0.0006	0.0012	6.80E-09
298		0.09	0.000	0.050	0.0997	0.0003	0.0006	1.22E-03	0.0006	0.0012	6.80E-09
299	*	0.00	0.000	0.000	0.0997	0.0003	0.0006	1.22E-03	0.0006	0.0012	6.80E-09
300		0.00	0.000	0.017	0.0983	0.0003	0.0005	1.21E-03	0.0006	0.0012	6.80E-09
301		0.00	0.000	0.014	0.0972	0.0003	0.0005	1.21E-03	0.0006	0.0012	6.80E-09
302		0.02	0.000	0.047	0.0947	0.0003	0.0005	1.20E-03	0.0006	0.0012	6.80E-09
303		0.21	0.000	0.078	0.1059	0.0003	0.0005	1.19E-03	0.0006	0.0012	6.80E-09
304		0.01	0.000	0.025	0.1043	0.0003	0.0005	1.19E-03	0.0006	0.0012	6.80E-09
305		0.01	0.000	0.031	0.1026	0.0003	0.0005	1.18E-03	0.0006	0.0012	6.80E-09
306		0.00	0.000	0.031	0.1003	0.0003	0.0005	1.18E-03	0.0006	0.0012	6.80E-09
307		0.00	0.000	0.026	0.0982	0.0003	0.0005	1.17E-03	0.0006	0.0012	6.80E-09

308		0.00	0.000	0.026	0.0960	0.0003	0.0005	1.17E-03	0.0006	0.0012	6.80E-09
309		0.00	0.000	0.023	0.0941	0.0003	0.0005	1.16E-03	0.0006	0.0012	6.80E-09
310		0.26	0.000	0.053	0.1113	0.0003	0.0005	1.15E-03	0.0006	0.0012	6.80E-09
311	*	0.23	0.000	0.028	0.1129	0.0003	0.0005	1.15E-03	0.0006	0.0012	6.80E-09
312	*	0.05	0.000	0.014	0.1146	0.0003	0.0005	1.14E-03	0.0006	0.0011	6.80E-09
313	*	0.11	0.000	0.000	0.1162	0.0003	0.0005	1.14E-03	0.0006	0.0011	6.80E-09
314	*	0.25	0.000	0.015	0.1179	0.0003	0.0005	1.13E-03	0.0006	0.0011	6.80E-09
315		2.62	0.000	0.000	0.3778	0.0003	0.0005	1.13E-03	0.0006	0.0011	6.80E-09
316		0.02	0.000	0.044	0.2762	0.0002	0.0005	1.12E-03	0.0006	0.0011	6.80E-09
317		0.24	0.000	0.046	0.2802	0.0002	0.0005	1.12E-03	0.0006	0.0011	6.80E-09
318		0.11	0.000	0.060	0.2766	0.0002	0.0005	1.11E-03	0.0006	0.0011	6.80E-09
319	*	0.44	0.000	0.020	0.2759	0.0002	0.0005	1.11E-03	0.0006	0.0011	6.80E-09
320		0.21	0.000	0.000	0.3176	0.0004	0.0007	1.39E-03	0.0007	0.0013	6.80E-09
321		0.00	0.000	0.065	0.2847	0.0004	0.0007	1.30E-03	0.0007	0.0013	6.80E-09
322		0.00	0.000	0.047	0.2679	0.0004	0.0007	1.22E-03	0.0007	0.0013	6.80E-09
323		0.00	0.000	0.070	0.2621	0.0001	0.0001	2.21E-04	0.0003	0.0006	6.80E-09
324		0.01	0.000	0.116	0.2501	0.0003	0.0006	8.39E-04	0.0003	0.0006	6.80E-09
325		0.22	0.000	0.093	0.2550	0.0002	0.0004	6.87E-04	0.0004	0.0007	6.80E-09
326		0.00	0.000	0.027	0.2515	0.0004	0.0007	1.23E-03	0.0005	0.0010	6.80E-09
327		0.37	0.000	0.067	0.2758	0.0004	0.0008	1.43E-03	0.0007	0.0013	6.80E-09
328		0.00	0.000	0.024	0.2728	0.0004	0.0006	1.02E-03	0.0006	0.0012	6.80E-09
329		0.00	0.000	0.027	0.2687	0.0004	0.0007	1.41E-03	0.0007	0.0013	6.80E-09
330		0.00	0.000	0.031	0.2573	0.0004	0.0007	1.39E-03	0.0007	0.0014	6.80E-09
331		0.00	0.000	0.026	0.2471	0.0004	0.0007	1.38E-03	0.0007	0.0014	6.80E-09
332		0.00	0.000	0.023	0.2390	0.0004	0.0007	1.36E-03	0.0007	0.0014	6.80E-09
333	*	0.00	0.000	0.000	0.2383	0.0003	0.0004	8.74E-04	0.0006	0.0011	6.80E-09
334		0.00	0.000	0.026	0.2361	0.0000	0.0000	0.00E+00	0.0002	0.0004	6.80E-09
335	*	0.00	0.000	0.019	0.2346	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
336	*	0.00	0.000	0.019	0.2330	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
337	*	0.00	0.000	0.000	0.2330	0.0000	0.0000	0.00E+00	0.0000	0.0000	3.64E-09
338	*	0.00	0.000	0.000	0.2330	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.00E+00
339	*	0.34	0.000	0.019	0.2335	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.00E+00
340		0.00	0.000	0.014	0.2572	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.00E+00
341		0.00	0.000	0.025	0.2540	0.0063	0.0120	3.88E-03	0.0012	0.0022	5.10E-09
342	*	0.00	0.000	0.000	0.2501	0.0253	0.0481	1.14E-02	0.0043	0.0081	6.80E-09

343	*		0.00	0.000	0.000	0.2454	0.0437	0.0832	1.51E-02	0.0070	0.0134	6.80E-09
344	*		0.00	0.000	0.021	0.2412	0.0567	0.1078	1.73E-02	0.0086	0.0163	6.80E-09
345			0.00	0.000	0.025	0.2377	0.0604	0.1149	1.78E-02	0.0092	0.0176	6.80E-09
346			0.00	0.000	0.023	0.2333	0.0635	0.1209	1.83E-02	0.0095	0.0181	6.80E-09
347	*		0.00	0.000	0.020	0.2286	0.0506	0.0963	1.63E-02	0.0090	0.0171	6.80E-09
348	*		0.00	0.000	0.000	0.2263	0.0427	0.0813	1.50E-02	0.0082	0.0156	6.80E-09
349	*		0.00	0.000	0.000	0.2233	0.0430	0.0819	1.50E-02	0.0079	0.0150	6.80E-09
350	*		0.00	0.000	0.000	0.2206	0.0359	0.0684	1.37E-02	0.0075	0.0143	6.80E-09
351	*	*	0.21	0.000	0.003	0.2206	0.0344	0.0654	1.33E-02	0.0071	0.0135	6.80E-09
352	*	*	0.00	0.000	0.009	0.2206	0.0342	0.0651	1.32E-02	0.0070	0.0133	6.80E-09
353		*	0.00	0.000	0.013	0.2362	0.0540	0.1029	1.69E-02	0.0080	0.0153	6.80E-09
354		*	0.00	0.000	0.000	0.2362	0.0492	0.0937	1.61E-02	0.0086	0.0164	6.80E-09
355		*	0.00	0.000	0.000	0.2362	0.0408	0.0777	1.46E-02	0.0080	0.0153	6.80E-09
356	*	*	0.00	0.000	0.000	0.2362	0.0338	0.0643	1.33E-02	0.0073	0.0139	6.80E-09
357		*	0.00	0.000	0.000	0.2362	0.0284	0.0541	1.22E-02	0.0067	0.0127	6.80E-09
358		*	0.00	0.000	0.000	0.2362	0.0243	0.0462	1.12E-02	0.0061	0.0116	6.80E-09
359		*	0.14	0.000	0.016	0.2464	0.0211	0.0401	1.05E-02	0.0057	0.0108	6.80E-09
360		*	0.00	0.000	0.000	0.2464	0.0185	0.0352	9.79E-03	0.0053	0.0101	6.80E-09
361			0.00	0.000	0.049	0.2423	0.0164	0.0312	9.22E-03	0.0050	0.0095	6.80E-09
362			0.00	0.000	0.059	0.2363	0.0174	0.0332	9.48E-03	0.0049	0.0094	6.80E-09
363			0.17	0.000	0.060	0.2458	0.0116	0.0221	7.73E-03	0.0045	0.0085	6.80E-09
364			0.00	0.000	0.045	0.2421	0.0108	0.0205	7.45E-03	0.0040	0.0076	6.80E-09
365			0.02	0.000	0.067	0.2357	0.0125	0.0238	8.00E-03	0.0041	0.0078	6.80E-09

* = Frozen (air or soil)

Annual Totals for Year 9			
	inches	cubic feet	percent
Precipitation	35.47	128,749.4	100.00
Runoff	0.000	0.0000	0.00
Evapotranspiration	27.638	100,326.1	77.92
Drainage Collected from Layer 3	7.4535	27,056.4	21.01
Percolation/Leakage through Layer 4	2.010543	7,298.3	5.67
Average Head on Top of Layer 4	0.0107	---	---

Drainage Collected from Layer 5	2.0108	7,299.4	5.67
Percolation/Leakage through Layer 7	0.000002	0.0089	0.00
Average Head on Top of Layer 6	0.0029	---	---
Change in Water Storage	-1.6343	-5,932.4	-4.61
Soil Water at Start of Year	40.1907	145,892.2	113.31
Soil Water at End of Year	38.5564	139,959.8	108.71
Snow Water at Start of Year	0.0000	0.0000	0.00
Snow Water at End of Year	0.0000	0.0000	0.00
Annual Water Budget Balance	0.0000	0.0000	0.00

Daily Output for Year 10

Column key: Head #1: drainage from Layer 4 | Head #2: drainage from Layer 6
Drain #1: drainage from Layer 3 | Drain #2: drainage from Layer 5
Leak #1: leakage thru Layer 4 | Leak #2: leakage thru Layer 7

Title: Millersville Cell 9 - Open Cell Condition
Simulated On: 6/9/2024 11:31

Day	Freezing Status* Air	Freezing Status* Soil	Rain (inches)	Runoff (inches)	ET (inches)	Evap. Zone Water (in/in)	Head #1 (inches)	Drain #1 (inches)	Leak #1 (inches)	Head #2 (inches)	Drain #2 (inches)	Leak #2 (inches)
1			0.30	0.000	0.055	0.2561	0.0098	0.0186	7.03E-03	0.0039	0.0074	6.80E-09
2			0.36	0.000	0.068	0.2802	0.0072	0.0137	6.09E-03	0.0034	0.0065	6.80E-09
3			0.00	0.000	0.063	0.2749	0.0073	0.0139	6.12E-03	0.0032	0.0061	6.80E-09
4			0.00	0.000	0.130	0.2597	0.0082	0.0155	6.45E-03	0.0033	0.0063	6.80E-09
5			0.00	0.000	0.045	0.2460	0.0077	0.0147	6.29E-03	0.0033	0.0064	6.80E-09
6			0.00	0.000	0.059	0.2370	0.0094	0.0180	6.93E-03	0.0035	0.0067	6.80E-09
7			0.00	0.000	0.051	0.2328	0.0045	0.0086	4.81E-03	0.0030	0.0057	6.80E-09
8			0.00	0.000	0.050	0.2286	0.0064	0.0121	5.71E-03	0.0028	0.0054	6.80E-09
9			0.00	0.000	0.078	0.2221	0.0087	0.0166	6.70E-03	0.0033	0.0063	6.80E-09
10			0.00	0.000	0.048	0.2181	0.0078	0.0149	6.34E-03	0.0034	0.0065	6.80E-09
11			0.02	0.000	0.043	0.2159	0.0039	0.0073	3.56E-03	0.0025	0.0047	6.80E-09
12	*		0.17	0.000	0.017	0.2175	0.0000	0.0000	0.00E+00	0.0008	0.0016	6.80E-09
13			0.08	0.000	0.023	0.2331	0.0002	0.0004	7.48E-04	0.0003	0.0005	6.80E-09
14			0.34	0.000	0.050	0.2576	0.0016	0.0031	2.86E-03	0.0010	0.0019	6.80E-09
15			0.70	0.000	0.088	0.3090	0.0032	0.0062	4.07E-03	0.0018	0.0035	6.80E-09
16			0.18	0.000	0.082	0.2967	0.0047	0.0090	4.91E-03	0.0024	0.0045	6.80E-09
17			0.00	0.000	0.033	0.2807	0.0056	0.0106	5.34E-03	0.0027	0.0051	6.80E-09
18	*		0.00	0.000	0.000	0.2670	0.0109	0.0207	7.49E-03	0.0035	0.0066	6.80E-09
19	*		0.13	0.000	0.030	0.2603	0.0031	0.0060	3.98E-03	0.0029	0.0054	6.80E-09
20			1.07	0.000	0.000	0.3526	0.0036	0.0068	4.29E-03	0.0022	0.0042	6.80E-09
21			0.08	0.000	0.045	0.2929	0.0048	0.0092	4.96E-03	0.0025	0.0047	6.80E-09
22	*		0.07	0.000	0.026	0.2819	0.0095	0.0181	6.97E-03	0.0032	0.0061	6.80E-09
23			0.28	0.000	0.000	0.2942	0.0017	0.0033	2.95E-03	0.0024	0.0046	6.80E-09
24			0.00	0.000	0.053	0.2819	0.0030	0.0057	3.90E-03	0.0019	0.0036	6.80E-09
25			0.07	0.000	0.080	0.2705	0.0043	0.0083	4.72E-03	0.0023	0.0044	6.80E-09
26			0.07	0.000	0.078	0.2591	0.0109	0.0207	7.49E-03	0.0033	0.0063	6.80E-09
27			0.04	0.000	0.064	0.2493	0.0100	0.0191	7.19E-03	0.0038	0.0073	6.80E-09

28			0.21	0.000	0.071	0.2549	0.0079	0.0151	6.38E-03	0.0035	0.0067	6.80E-09
29			0.33	0.000	0.082	0.2756	0.0050	0.0095	5.02E-03	0.0029	0.0056	6.80E-09
30			0.00	0.000	0.074	0.2685	0.0002	0.0003	4.21E-04	0.0013	0.0024	6.80E-09
31			0.00	0.000	0.069	0.2616	0.0020	0.0037	2.23E-03	0.0008	0.0015	6.80E-09
32			0.00	0.000	0.033	0.2501	0.0003	0.0006	9.51E-04	0.0008	0.0015	6.80E-09
33	*		0.00	0.000	0.000	0.2501	0.0110	0.0210	7.54E-03	0.0025	0.0048	6.80E-09
34	*		0.16	0.000	0.016	0.2506	0.0060	0.0114	5.39E-03	0.0033	0.0062	6.80E-09
35	*		0.00	0.000	0.010	0.2477	0.0082	0.0156	6.28E-03	0.0031	0.0059	6.80E-09
36	*		0.00	0.000	0.036	0.2462	0.0001	0.0001	1.96E-04	0.0015	0.0028	6.80E-09
37	*		0.00	0.000	0.021	0.2445	0.0000	0.0000	0.00E+00	0.0001	0.0002	6.80E-09
38	*		0.00	0.000	0.000	0.2420	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
39	*		0.37	0.000	0.012	0.2409	0.0047	0.0090	4.02E-03	0.0012	0.0023	6.80E-09
40	*		0.00	0.000	0.006	0.2387	0.0258	0.0491	1.15E-02	0.0043	0.0083	6.80E-09
41	*		0.00	0.000	0.003	0.2369	0.0423	0.0804	1.49E-02	0.0070	0.0133	6.80E-09
42	*		0.07	0.000	0.000	0.2360	0.0568	0.1081	1.73E-02	0.0085	0.0162	6.80E-09
43	*		0.06	0.000	0.000	0.2354	0.0609	0.1160	1.79E-02	0.0093	0.0176	6.80E-09
44	*	*	0.20	0.000	0.011	0.2354	0.0570	0.1085	1.73E-02	0.0092	0.0176	6.80E-09
45	*	*	0.13	0.000	0.000	0.2354	0.0570	0.1085	1.73E-02	0.0091	0.0173	6.80E-09
46		*	0.00	0.000	0.000	0.2597	0.0493	0.0939	1.61E-02	0.0087	0.0166	6.80E-09
47		*	0.00	0.000	0.062	0.2881	0.0459	0.0874	1.55E-02	0.0083	0.0158	6.80E-09
48		*	0.00	0.000	0.000	0.2881	0.0474	0.0902	1.58E-02	0.0082	0.0157	6.80E-09
49		*	0.00	0.000	0.000	0.2881	0.0504	0.0960	1.63E-02	0.0084	0.0161	6.80E-09
50		*	0.01	0.000	0.005	0.2884	0.0545	0.1037	1.69E-02	0.0087	0.0166	6.80E-09
51		*	0.00	0.000	0.002	0.2884	0.0420	0.0799	1.48E-02	0.0082	0.0157	6.80E-09
52			0.77	0.000	0.153	0.3203	0.0583	0.1110	1.75E-02	0.0086	0.0164	6.80E-09
53			0.00	0.000	0.174	0.2882	0.0794	0.1512	2.05E-02	0.0101	0.0192	6.80E-09
54			0.14	0.000	0.103	0.2736	0.0763	0.1453	2.01E-02	0.0106	0.0202	6.80E-09
55			0.27	0.000	0.182	0.2723	0.0457	0.0869	1.55E-02	0.0092	0.0174	6.80E-09
56			0.00	0.000	0.068	0.2619	0.0423	0.0805	1.49E-02	0.0080	0.0152	6.80E-09
57			0.47	0.000	0.151	0.2867	0.0385	0.0732	1.42E-02	0.0076	0.0145	6.80E-09
58			0.00	0.000	0.100	0.2775	0.0355	0.0676	1.36E-02	0.0073	0.0139	6.80E-09
59			0.00	0.000	0.071	0.2627	0.0273	0.0519	1.19E-02	0.0066	0.0126	6.80E-09
60			0.10	0.000	0.076	0.2532	0.0242	0.0460	1.12E-02	0.0060	0.0115	6.80E-09
61			0.08	0.000	0.139	0.2442	0.0263	0.0501	1.17E-02	0.0060	0.0115	6.80E-09
62			1.08	0.000	0.141	0.3223	0.0205	0.0389	1.03E-02	0.0057	0.0109	6.80E-09

63		0.00	0.000	0.059	0.2856	0.0014	0.0027	1.62E-03	0.0028	0.0053	6.80E-09
64	*	0.00	0.000	0.031	0.2709	0.0141	0.0268	7.40E-03	0.0027	0.0051	6.80E-09
65		0.09	0.000	0.068	0.2638	0.0141	0.0267	8.16E-03	0.0041	0.0078	6.80E-09
66		0.02	0.000	0.079	0.2545	0.0018	0.0033	1.60E-03	0.0023	0.0044	6.80E-09
67		0.05	0.000	0.109	0.2451	0.0129	0.0246	7.75E-03	0.0027	0.0052	6.80E-09
68	*	0.20	0.000	0.048	0.2432	0.0202	0.0385	1.02E-02	0.0048	0.0091	6.80E-09
69		1.03	0.000	0.000	0.3397	0.0164	0.0312	9.18E-03	0.0050	0.0096	6.80E-09
70	*	0.00	0.000	0.000	0.2882	0.0055	0.0105	5.03E-03	0.0036	0.0068	6.80E-09
71	*	0.00	0.000	0.032	0.2727	0.0241	0.0458	1.10E-02	0.0045	0.0085	6.80E-09
72	*	0.16	0.000	0.052	0.2714	0.0131	0.0248	7.11E-03	0.0046	0.0087	6.80E-09
73	*	0.00	0.000	0.033	0.2686	0.0090	0.0171	5.83E-03	0.0034	0.0064	6.80E-09
74	*	0.00	0.000	0.021	0.2618	0.0116	0.0220	7.62E-03	0.0036	0.0069	6.80E-09
75	*	0.00	0.000	0.000	0.2571	0.0268	0.0509	1.18E-02	0.0052	0.0100	6.80E-09
76	*	0.00	0.000	0.067	0.2514	0.0291	0.0555	1.23E-02	0.0063	0.0120	6.80E-09
77		0.00	0.000	0.082	0.2446	0.0115	0.0220	7.69E-03	0.0051	0.0096	6.80E-09
78		0.00	0.000	0.044	0.2409	0.0076	0.0144	5.63E-03	0.0035	0.0066	6.80E-09
79	*	0.00	0.000	0.000	0.2409	0.0299	0.0568	1.25E-02	0.0050	0.0096	6.80E-09
80		0.00	0.000	0.064	0.2356	0.0228	0.0435	1.08E-02	0.0060	0.0114	6.80E-09
81		0.00	0.000	0.080	0.2289	0.0023	0.0043	2.18E-03	0.0031	0.0059	6.80E-09
82		0.00	0.000	0.067	0.2234	0.0000	0.0000	0.00E+00	0.0006	0.0011	6.80E-09
83		0.00	0.000	0.101	0.2149	0.0077	0.0147	5.14E-03	0.0016	0.0030	6.80E-09
84		0.00	0.000	0.189	0.1992	0.0412	0.0783	1.46E-02	0.0055	0.0105	6.80E-09
85		0.00	0.000	0.145	0.1871	0.0644	0.1226	1.84E-02	0.0088	0.0167	6.80E-09
86		0.00	0.000	0.168	0.1731	0.0719	0.1369	1.95E-02	0.0100	0.0190	6.80E-09
87		0.71	0.000	0.115	0.2225	0.0722	0.1374	1.96E-02	0.0103	0.0195	6.80E-09
88		0.06	0.000	0.257	0.2062	0.0701	0.1333	1.93E-02	0.0102	0.0194	6.80E-09
89		0.00	0.000	0.092	0.1985	0.0672	0.1280	1.89E-02	0.0100	0.0190	6.80E-09
90		0.00	0.000	0.096	0.1892	0.0660	0.1256	1.87E-02	0.0099	0.0188	6.80E-09
91		0.04	0.000	0.125	0.1821	0.0566	0.1077	1.72E-02	0.0094	0.0178	6.80E-09
92		0.00	0.000	0.108	0.1731	0.0538	0.1024	1.68E-02	0.0089	0.0170	6.80E-09
93		0.00	0.000	0.108	0.1640	0.0647	0.1232	1.85E-02	0.0093	0.0178	6.80E-09
94	*	0.00	0.000	0.084	0.1570	0.0827	0.1574	2.10E-02	0.0104	0.0199	6.80E-09
95	*	0.00	0.000	0.000	0.1570	0.0699	0.1331	1.92E-02	0.0105	0.0199	6.80E-09
96	*	0.00	0.000	0.000	0.1570	0.0534	0.1017	1.68E-02	0.0094	0.0178	6.80E-09
97	*	0.37	0.000	0.020	0.1587	0.0419	0.0797	1.48E-02	0.0082	0.0157	6.80E-09

98		0.00	0.000	0.122	0.1763	0.0339	0.0646	1.33E-02	0.0073	0.0140	6.80E-09
99		0.00	0.000	0.239	0.1564	0.0283	0.0538	1.21E-02	0.0067	0.0127	6.80E-09
100		0.17	0.000	0.068	0.1653	0.0241	0.0458	1.12E-02	0.0061	0.0116	6.80E-09
101		0.19	0.000	0.102	0.1725	0.0208	0.0396	1.04E-02	0.0056	0.0107	6.80E-09
102	*	0.00	0.000	0.039	0.1695	0.0183	0.0348	9.73E-03	0.0053	0.0100	6.80E-09
103		0.11	0.000	0.143	0.1665	0.0162	0.0309	9.16E-03	0.0049	0.0094	6.80E-09
104		0.00	0.000	0.135	0.1552	0.0145	0.0277	8.67E-03	0.0047	0.0089	6.80E-09
105	*	0.00	0.000	0.000	0.1552	0.0131	0.0250	8.24E-03	0.0044	0.0084	6.80E-09
106		0.03	0.000	0.178	0.1429	0.0119	0.0227	7.85E-03	0.0042	0.0080	6.80E-09
107	*	0.00	0.000	0.074	0.1360	0.0118	0.0225	7.80E-03	0.0041	0.0078	6.80E-09
108	*	0.26	0.000	0.030	0.1376	0.0108	0.0206	7.43E-03	0.0040	0.0076	6.80E-09
109	*	0.01	0.000	0.032	0.1392	0.0083	0.0157	6.52E-03	0.0036	0.0069	6.80E-09
110	*	0.03	0.000	0.023	0.1409	0.0079	0.0150	6.37E-03	0.0034	0.0064	6.80E-09
111		0.17	0.000	0.021	0.1656	0.0075	0.0143	6.22E-03	0.0033	0.0063	6.80E-09
112		0.21	0.000	0.097	0.1751	0.0072	0.0136	6.06E-03	0.0032	0.0061	6.80E-09
113		0.00	0.000	0.139	0.1636	0.0068	0.0129	5.91E-03	0.0031	0.0060	6.80E-09
114		0.00	0.000	0.222	0.1451	0.0065	0.0123	5.76E-03	0.0031	0.0058	6.80E-09
115		0.00	0.000	0.203	0.1282	0.0061	0.0117	5.62E-03	0.0030	0.0057	6.80E-09
116		0.26	0.000	0.091	0.1424	0.0058	0.0111	5.48E-03	0.0029	0.0055	6.80E-09
117		0.06	0.000	0.063	0.1422	0.0056	0.0106	5.35E-03	0.0028	0.0054	6.80E-09
118		0.51	0.000	0.060	0.1800	0.0053	0.0101	5.22E-03	0.0028	0.0053	6.80E-09
119		0.63	0.000	0.139	0.2206	0.0051	0.0096	5.09E-03	0.0027	0.0051	6.80E-09
120		0.02	0.000	0.124	0.2120	0.0048	0.0092	4.98E-03	0.0026	0.0050	6.80E-09
121		0.01	0.000	0.072	0.2067	0.0046	0.0088	4.86E-03	0.0026	0.0049	6.80E-09
122		0.99	0.000	0.066	0.2838	0.0044	0.0084	4.76E-03	0.0025	0.0048	6.80E-09
123	*	0.00	0.000	0.051	0.2795	0.0042	0.0080	4.65E-03	0.0025	0.0047	6.80E-09
124	*	0.00	0.000	0.000	0.2699	0.0044	0.0083	4.73E-03	0.0025	0.0047	6.80E-09
125	*	0.00	0.000	0.000	0.2663	0.0047	0.0090	4.89E-03	0.0025	0.0048	6.80E-09
126	*	0.00	0.000	0.054	0.2618	0.0038	0.0073	4.40E-03	0.0024	0.0046	6.80E-09
127		0.00	0.000	0.203	0.2449	0.0046	0.0088	4.85E-03	0.0025	0.0047	6.80E-09
128		0.00	0.000	0.082	0.2381	0.0049	0.0094	5.02E-03	0.0026	0.0049	6.80E-09
129		0.24	0.000	0.272	0.2357	0.0024	0.0045	2.70E-03	0.0019	0.0037	6.80E-09
130		0.00	0.000	0.193	0.2191	0.0002	0.0004	1.03E-03	0.0009	0.0018	6.80E-09
131		0.00	0.000	0.185	0.2003	0.0045	0.0086	4.81E-03	0.0017	0.0032	6.80E-09
132		0.00	0.000	0.345	0.1715	0.0013	0.0023	1.49E-03	0.0015	0.0028	6.80E-09

133	0.00	0.000	0.397	0.1384	0.0001	0.0001	4.21E-04	0.0005	0.0009	6.80E-09
134	0.00	0.000	0.219	0.1202	0.0005	0.0009	1.55E-03	0.0006	0.0011	6.80E-09
135	0.06	0.000	0.108	0.1163	0.0010	0.0019	2.27E-03	0.0010	0.0019	6.80E-09
136	0.17	0.000	0.093	0.1227	0.0015	0.0029	2.79E-03	0.0013	0.0026	6.80E-09
137	0.14	0.000	0.066	0.1291	0.0020	0.0037	3.17E-03	0.0016	0.0030	6.80E-09
138	0.00	0.000	0.062	0.1240	0.0023	0.0044	3.45E-03	0.0017	0.0033	6.80E-09
139	0.19	0.000	0.055	0.1354	0.0026	0.0050	3.66E-03	0.0019	0.0036	6.80E-09
140	0.55	0.000	0.062	0.1758	0.0028	0.0054	3.82E-03	0.0020	0.0037	6.80E-09
141	0.59	0.000	0.146	0.2125	0.0030	0.0057	3.93E-03	0.0020	0.0039	6.80E-09
142	0.29	0.000	0.136	0.2257	0.0031	0.0060	4.00E-03	0.0021	0.0040	6.80E-09
143	0.30	0.000	0.102	0.2423	0.0032	0.0061	4.05E-03	0.0021	0.0040	6.80E-09
144	0.00	0.000	0.349	0.2133	0.0033	0.0062	4.08E-03	0.0021	0.0041	6.80E-09
145	0.00	0.000	0.147	0.2010	0.0033	0.0062	4.09E-03	0.0021	0.0041	6.80E-09
146	0.00	0.000	0.231	0.1818	0.0033	0.0062	4.09E-03	0.0022	0.0041	6.80E-09
147	0.00	0.000	0.195	0.1654	0.0033	0.0062	4.08E-03	0.0021	0.0041	6.80E-09
148	0.00	0.000	0.164	0.1517	0.0037	0.0071	4.36E-03	0.0022	0.0042	6.80E-09
149	0.62	0.000	0.067	0.1974	0.0035	0.0066	4.19E-03	0.0022	0.0043	6.80E-09
150	0.00	0.000	0.227	0.1785	0.0030	0.0057	3.91E-03	0.0021	0.0040	6.80E-09
151	0.00	0.000	0.268	0.1563	0.0029	0.0055	3.85E-03	0.0020	0.0039	6.80E-09
152	0.00	0.000	0.249	0.1355	0.0028	0.0054	3.79E-03	0.0020	0.0038	6.80E-09
153	0.00	0.000	0.314	0.1094	0.0028	0.0053	3.77E-03	0.0020	0.0038	6.80E-09
154	0.00	0.000	0.180	0.0944	0.0027	0.0052	3.74E-03	0.0020	0.0038	6.80E-09
155	0.14	0.000	0.135	0.0949	0.0027	0.0051	3.71E-03	0.0020	0.0037	6.80E-09
156	0.00	0.000	0.122	0.0836	0.0035	0.0066	4.19E-03	0.0021	0.0040	6.80E-09
157	0.76	0.000	0.094	0.1394	0.0023	0.0043	3.41E-03	0.0020	0.0037	6.80E-09
158	0.00	0.000	0.096	0.1314	0.0022	0.0043	3.39E-03	0.0018	0.0034	6.80E-09
159	0.00	0.000	0.292	0.1071	0.0022	0.0043	3.38E-03	0.0018	0.0034	6.80E-09
160	0.00	0.000	0.310	0.0813	0.0022	0.0042	3.38E-03	0.0018	0.0034	6.80E-09
161	0.01	0.000	0.059	0.0775	0.0022	0.0042	3.36E-03	0.0018	0.0034	6.80E-09
162	0.02	0.000	0.026	0.0773	0.0022	0.0042	3.35E-03	0.0018	0.0034	6.80E-09
163	0.00	0.000	0.002	0.0771	0.0022	0.0041	3.33E-03	0.0018	0.0033	6.80E-09
164	0.04	0.000	0.024	0.0788	0.0021	0.0041	3.31E-03	0.0017	0.0033	6.80E-09
165	0.06	0.000	0.025	0.0819	0.0021	0.0040	3.28E-03	0.0017	0.0033	6.80E-09
166	0.01	0.000	0.035	0.0802	0.0021	0.0039	3.26E-03	0.0017	0.0033	6.80E-09
167	0.00	0.000	0.027	0.0781	0.0020	0.0039	3.23E-03	0.0017	0.0032	6.80E-09

168	0.05	0.000	0.027	0.0802	0.0020	0.0038	3.20E-03	0.0017	0.0032	6.80E-09
169	0.29	0.000	0.078	0.0977	0.0020	0.0037	3.17E-03	0.0017	0.0032	6.80E-09
170	0.00	0.000	0.059	0.0929	0.0019	0.0037	3.14E-03	0.0017	0.0032	6.80E-09
171	0.00	0.000	0.108	0.0838	0.0019	0.0036	3.11E-03	0.0016	0.0031	6.80E-09
172	0.46	0.000	0.147	0.1101	0.0019	0.0035	3.08E-03	0.0016	0.0031	6.80E-09
173	0.16	0.000	0.139	0.1116	0.0018	0.0035	3.05E-03	0.0016	0.0031	6.80E-09
174	0.07	0.000	0.167	0.1032	0.0018	0.0034	3.02E-03	0.0016	0.0030	6.80E-09
175	0.00	0.000	0.191	0.0872	0.0018	0.0033	2.99E-03	0.0016	0.0030	6.80E-09
176	0.00	0.000	0.092	0.0795	0.0017	0.0033	2.96E-03	0.0016	0.0030	6.80E-09
177	0.43	0.000	0.073	0.1094	0.0017	0.0032	2.93E-03	0.0015	0.0029	6.80E-09
178	0.01	0.000	0.054	0.1055	0.0017	0.0032	2.95E-03	0.0015	0.0029	6.80E-09
179	0.02	0.000	0.215	0.0893	0.0016	0.0031	2.86E-03	0.0015	0.0029	6.80E-09
180	0.10	0.000	0.143	0.0856	0.0016	0.0030	2.83E-03	0.0015	0.0028	6.80E-09
181	0.08	0.000	0.078	0.0854	0.0015	0.0029	2.80E-03	0.0015	0.0028	6.80E-09
182	0.02	0.000	0.080	0.0802	0.0015	0.0029	2.78E-03	0.0015	0.0028	6.80E-09
183	0.21	0.000	0.058	0.0930	0.0015	0.0028	2.75E-03	0.0015	0.0028	6.80E-09
184	0.35	0.000	0.134	0.1110	0.0015	0.0028	2.72E-03	0.0014	0.0027	6.80E-09
185	0.11	0.000	0.055	0.1152	0.0014	0.0027	2.69E-03	0.0014	0.0027	6.80E-09
186	0.00	0.000	0.247	0.0946	0.0014	0.0027	2.67E-03	0.0014	0.0027	6.80E-09
187	0.00	0.000	0.158	0.0814	0.0014	0.0026	2.64E-03	0.0014	0.0027	6.80E-09
188	0.00	0.000	0.040	0.0781	0.0013	0.0025	2.61E-03	0.0014	0.0026	6.80E-09
189	0.00	0.000	0.010	0.0773	0.0013	0.0025	2.59E-03	0.0014	0.0026	6.80E-09
190	0.08	0.000	0.022	0.0820	0.0013	0.0024	2.56E-03	0.0014	0.0026	6.80E-09
191	0.03	0.000	0.029	0.0817	0.0013	0.0024	2.54E-03	0.0013	0.0025	6.80E-09
192	1.26	0.000	0.144	0.1744	0.0012	0.0024	2.51E-03	0.0013	0.0025	6.80E-09
193	0.06	0.000	0.237	0.1600	0.0012	0.0023	2.49E-03	0.0013	0.0025	6.80E-09
194	0.06	0.000	0.255	0.1435	0.0012	0.0023	2.46E-03	0.0013	0.0025	6.80E-09
195	0.03	0.000	0.203	0.1287	0.0012	0.0022	2.44E-03	0.0013	0.0025	6.80E-09
196	0.00	0.000	0.275	0.1057	0.0011	0.0022	2.42E-03	0.0013	0.0024	6.80E-09
197	0.00	0.000	0.286	0.0819	0.0011	0.0021	2.39E-03	0.0013	0.0024	6.80E-09
198	0.42	0.000	0.194	0.1008	0.0011	0.0021	2.37E-03	0.0013	0.0024	6.80E-09
199	0.00	0.000	0.058	0.0960	0.0011	0.0021	2.35E-03	0.0012	0.0024	6.80E-09
200	0.05	0.000	0.070	0.0943	0.0011	0.0020	2.33E-03	0.0012	0.0023	6.80E-09
201	0.15	0.000	0.148	0.0941	0.0010	0.0020	2.31E-03	0.0012	0.0023	6.80E-09
202	0.00	0.000	0.120	0.0844	0.0010	0.0020	2.29E-03	0.0012	0.0023	6.80E-09

203	0.59	0.000	0.165	0.1198	0.0010	0.0019	2.26E-03	0.0012	0.0023	6.80E-09
204	0.04	0.000	0.123	0.1131	0.0010	0.0019	2.24E-03	0.0012	0.0023	6.80E-09
205	0.00	0.000	0.148	0.1008	0.0010	0.0019	2.27E-03	0.0012	0.0023	6.80E-09
206	0.00	0.000	0.190	0.0850	0.0010	0.0018	2.20E-03	0.0012	0.0022	6.80E-09
207	0.08	0.000	0.117	0.0819	0.0009	0.0018	2.18E-03	0.0012	0.0022	6.80E-09
208	0.00	0.000	0.039	0.0786	0.0009	0.0017	2.16E-03	0.0011	0.0022	6.80E-09
209	0.00	0.000	0.015	0.0774	0.0009	0.0017	2.14E-03	0.0011	0.0022	6.80E-09
210	0.00	0.000	0.003	0.0771	0.0009	0.0017	2.13E-03	0.0011	0.0021	6.80E-09
211	0.00	0.000	0.001	0.0770	0.0009	0.0017	2.11E-03	0.0011	0.0021	6.80E-09
212	0.00	0.000	0.000	0.0770	0.0009	0.0016	2.09E-03	0.0011	0.0021	6.80E-09
213	0.16	0.000	0.047	0.0863	0.0008	0.0016	2.07E-03	0.0011	0.0021	6.80E-09
214	0.01	0.000	0.087	0.0802	0.0008	0.0016	2.06E-03	0.0011	0.0021	6.80E-09
215	0.00	0.000	0.028	0.0779	0.0008	0.0016	2.04E-03	0.0011	0.0020	6.80E-09
216	0.00	0.000	0.008	0.0772	0.0008	0.0015	2.02E-03	0.0011	0.0020	6.80E-09
217	0.00	0.000	0.002	0.0771	0.0008	0.0015	2.01E-03	0.0011	0.0020	6.80E-09
218	0.00	0.000	0.001	0.0770	0.0008	0.0015	1.99E-03	0.0010	0.0020	6.80E-09
219	0.11	0.000	0.043	0.0825	0.0008	0.0015	1.97E-03	0.0010	0.0020	6.80E-09
220	0.01	0.000	0.035	0.0802	0.0008	0.0014	1.96E-03	0.0010	0.0020	6.80E-09
221	0.05	0.000	0.042	0.0807	0.0007	0.0014	1.94E-03	0.0010	0.0019	6.80E-09
222	0.03	0.000	0.036	0.0800	0.0007	0.0014	1.93E-03	0.0010	0.0019	6.80E-09
223	0.72	0.000	0.128	0.1293	0.0007	0.0014	1.91E-03	0.0010	0.0019	6.80E-09
224	0.10	0.000	0.081	0.1311	0.0007	0.0013	1.90E-03	0.0010	0.0019	6.80E-09
225	0.21	0.000	0.088	0.1412	0.0007	0.0013	1.88E-03	0.0010	0.0019	6.80E-09
226	0.01	0.000	0.203	0.1249	0.0007	0.0013	1.87E-03	0.0010	0.0019	6.80E-09
227	0.41	0.000	0.177	0.1447	0.0007	0.0013	1.85E-03	0.0010	0.0019	6.80E-09
228	0.01	0.000	0.161	0.1317	0.0007	0.0013	1.84E-03	0.0010	0.0018	6.80E-09
229	0.16	0.000	0.177	0.1307	0.0007	0.0012	1.83E-03	0.0010	0.0018	6.80E-09
230	0.00	0.000	0.168	0.1167	0.0007	0.0014	1.90E-03	0.0010	0.0019	6.80E-09
231	0.00	0.000	0.045	0.1129	0.0006	0.0012	1.79E-03	0.0010	0.0018	6.80E-09
232	0.22	0.000	0.169	0.1172	0.0006	0.0012	1.78E-03	0.0009	0.0018	6.80E-09
233	0.01	0.000	0.192	0.1017	0.0006	0.0012	1.77E-03	0.0009	0.0018	6.80E-09
234	0.00	0.000	0.188	0.0860	0.0006	0.0012	1.76E-03	0.0009	0.0018	6.80E-09
235	0.38	0.000	0.166	0.1041	0.0006	0.0011	1.74E-03	0.0009	0.0017	6.80E-09
236	0.17	0.000	0.066	0.1128	0.0007	0.0013	1.86E-03	0.0010	0.0018	6.80E-09
237	0.00	0.000	0.150	0.1003	0.0007	0.0013	1.84E-03	0.0010	0.0018	6.80E-09

238	0.08	0.000	0.137	0.0953	0.0006	0.0011	1.69E-03	0.0009	0.0018	6.80E-09
239	0.00	0.000	0.116	0.0856	0.0006	0.0010	1.67E-03	0.0009	0.0017	6.80E-09
240	0.00	0.000	0.070	0.0797	0.0005	0.0010	1.66E-03	0.0009	0.0017	6.80E-09
241	0.00	0.000	0.024	0.0778	0.0005	0.0010	1.65E-03	0.0009	0.0017	6.80E-09
242	0.00	0.000	0.007	0.0772	0.0006	0.0012	1.77E-03	0.0009	0.0017	6.80E-09
243	0.00	0.000	0.001	0.0770	0.0005	0.0010	1.62E-03	0.0009	0.0017	6.80E-09
244	0.36	0.000	0.074	0.1005	0.0005	0.0010	1.61E-03	0.0009	0.0016	6.80E-09
245	0.43	0.000	0.065	0.1310	0.0005	0.0010	1.60E-03	0.0008	0.0016	6.80E-09
246	0.52	0.000	0.074	0.1680	0.0005	0.0009	1.59E-03	0.0008	0.0016	6.80E-09
247	1.28	0.000	0.083	0.2677	0.0005	0.0009	1.58E-03	0.0008	0.0016	6.80E-09
248	0.15	0.000	0.109	0.2712	0.0005	0.0009	1.57E-03	0.0008	0.0016	6.80E-09
249	0.00	0.000	0.292	0.2469	0.0005	0.0009	1.56E-03	0.0008	0.0016	6.80E-09
250	0.03	0.000	0.245	0.2248	0.0007	0.0014	1.93E-03	0.0009	0.0018	6.80E-09
251	0.00	0.000	0.083	0.2150	0.0008	0.0015	2.03E-03	0.0010	0.0020	6.80E-09
252	0.00	0.000	0.075	0.2088	0.0005	0.0009	1.46E-03	0.0009	0.0017	6.80E-09
253	0.23	0.000	0.052	0.2237	0.0002	0.0004	9.86E-04	0.0006	0.0012	6.80E-09
254	0.61	0.000	0.157	0.2615	0.0002	0.0004	1.02E-03	0.0005	0.0010	6.80E-09
255	0.03	0.000	0.063	0.2585	0.0002	0.0004	1.04E-03	0.0005	0.0010	6.80E-09
256	1.10	0.000	0.177	0.3353	0.0002	0.0004	1.07E-03	0.0006	0.0011	6.80E-09
257	0.00	0.000	0.105	0.2837	0.0002	0.0004	1.09E-03	0.0006	0.0011	6.80E-09
258	0.00	0.000	0.098	0.2640	0.0006	0.0011	1.63E-03	0.0007	0.0014	6.80E-09
259	0.00	0.000	0.160	0.2507	0.0002	0.0004	9.88E-04	0.0007	0.0013	6.80E-09
260	0.00	0.000	0.151	0.2381	0.0002	0.0004	1.01E-03	0.0005	0.0010	6.80E-09
261	0.00	0.000	0.142	0.2262	0.0007	0.0013	1.78E-03	0.0008	0.0015	6.80E-09
262	0.00	0.000	0.158	0.2131	0.0003	0.0006	1.10E-03	0.0007	0.0014	6.80E-09
263	0.00	0.000	0.146	0.2010	0.0008	0.0015	2.01E-03	0.0009	0.0016	6.80E-09
264	0.00	0.000	0.173	0.1865	0.0007	0.0014	1.95E-03	0.0010	0.0020	6.80E-09
265	0.00	0.000	0.145	0.1744	0.0007	0.0014	1.92E-03	0.0010	0.0019	6.80E-09
266	0.00	0.000	0.075	0.1681	0.0007	0.0013	1.89E-03	0.0010	0.0019	6.80E-09
267	0.03	0.000	0.045	0.1670	0.0007	0.0013	1.86E-03	0.0010	0.0019	6.80E-09
268	0.00	0.000	0.162	0.1535	0.0007	0.0013	1.83E-03	0.0010	0.0018	6.80E-09
269	0.00	0.000	0.063	0.1483	0.0006	0.0011	1.68E-03	0.0009	0.0017	6.80E-09
270	0.24	0.000	0.072	0.1619	0.0000	0.0000	0.00E+00	0.0004	0.0007	6.80E-09
271	0.47	0.000	0.066	0.1954	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
272	0.09	0.000	0.062	0.1973	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09

273		0.00	0.000	0.042	0.1938	0.0000	0.0000	0.00E+00	0.0000	0.0000	4.94E-09
274		0.00	0.000	0.083	0.1869	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.00E+00
275		0.00	0.000	0.132	0.1759	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.00E+00
276		0.00	0.000	0.110	0.1667	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.00E+00
277	*	0.00	0.000	0.073	0.1606	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.00E+00
278		0.00	0.000	0.104	0.1520	0.0001	0.0003	6.69E-04	0.0002	0.0004	5.10E-09
279		0.00	0.000	0.094	0.1442	0.0008	0.0016	2.05E-03	0.0008	0.0014	6.80E-09
280	*	0.36	0.000	0.026	0.1458	0.0017	0.0032	2.90E-03	0.0013	0.0025	6.80E-09
281	*	0.00	0.000	0.018	0.1475	0.0024	0.0045	3.48E-03	0.0017	0.0032	6.80E-09
282		0.52	0.000	0.000	0.2143	0.0030	0.0056	3.89E-03	0.0019	0.0037	6.80E-09
283		1.64	0.000	0.098	0.3428	0.0034	0.0065	4.18E-03	0.0021	0.0040	6.80E-09
284		0.00	0.000	0.226	0.2698	0.0037	0.0071	4.37E-03	0.0023	0.0043	6.80E-09
285		0.00	0.000	0.173	0.2493	0.0040	0.0075	4.50E-03	0.0023	0.0044	6.80E-09
286		0.00	0.000	0.075	0.2430	0.0041	0.0078	4.59E-03	0.0024	0.0046	6.80E-09
287		0.00	0.000	0.113	0.2336	0.0042	0.0080	4.63E-03	0.0024	0.0046	6.80E-09
288		0.00	0.000	0.040	0.2303	0.0066	0.0125	5.78E-03	0.0028	0.0053	6.80E-09
289		0.00	0.000	0.069	0.2245	0.0044	0.0083	4.66E-03	0.0027	0.0051	6.80E-09
290		0.07	0.000	0.079	0.2241	0.0059	0.0113	5.51E-03	0.0027	0.0052	6.80E-09
291	*	0.00	0.000	0.000	0.2241	0.0060	0.0114	5.55E-03	0.0029	0.0055	6.80E-09
292	*	0.00	0.000	0.025	0.2183	0.0054	0.0103	5.26E-03	0.0028	0.0054	6.80E-09
293		0.00	0.000	0.070	0.2091	0.0049	0.0093	5.00E-03	0.0027	0.0051	6.80E-09
294		0.00	0.000	0.114	0.1995	0.0044	0.0084	4.76E-03	0.0026	0.0049	6.80E-09
295		0.00	0.000	0.068	0.1939	0.0041	0.0077	4.55E-03	0.0024	0.0046	6.80E-09
296	*	0.00	0.000	0.000	0.1939	0.0017	0.0032	2.31E-03	0.0017	0.0033	6.80E-09
297		0.00	0.000	0.046	0.1900	0.0013	0.0025	1.73E-03	0.0011	0.0020	6.80E-09
298		0.00	0.000	0.077	0.1836	0.0000	0.0000	0.00E+00	0.0004	0.0007	6.80E-09
299	*	0.00	0.000	0.047	0.1797	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
300		0.00	0.000	0.064	0.1744	0.0000	0.0000	0.00E+00	0.0000	0.0000	6.80E-09
301		0.00	0.000	0.058	0.1695	0.0090	0.0172	6.65E-03	0.0020	0.0038	6.80E-09
302		0.01	0.000	0.063	0.1653	0.0195	0.0371	1.00E-02	0.0045	0.0085	6.80E-09
303		0.00	0.000	0.030	0.1628	0.0230	0.0438	1.09E-02	0.0055	0.0105	6.80E-09
304		0.00	0.000	0.062	0.1576	0.0229	0.0436	1.09E-02	0.0057	0.0109	6.80E-09
305		0.00	0.000	0.031	0.1554	0.0214	0.0407	1.05E-02	0.0056	0.0107	6.80E-09
306		0.00	0.000	0.055	0.1508	0.0195	0.0371	1.01E-02	0.0054	0.0103	6.80E-09
307		0.00	0.000	0.028	0.1484	0.0177	0.0336	9.57E-03	0.0051	0.0098	6.80E-09

308		0.00	0.000	0.052	0.1441	0.0160	0.0305	9.10E-03	0.0049	0.0093	6.80E-09
309		0.00	0.000	0.056	0.1394	0.0145	0.0276	8.66E-03	0.0047	0.0089	6.80E-09
310		0.00	0.000	0.093	0.1317	0.0132	0.0252	8.27E-03	0.0044	0.0084	6.80E-09
311		0.00	0.000	0.130	0.1208	0.0121	0.0230	7.90E-03	0.0042	0.0081	6.80E-09
312		0.00	0.000	0.082	0.1140	0.0111	0.0211	7.57E-03	0.0041	0.0077	6.80E-09
313		0.00	0.000	0.079	0.1075	0.0102	0.0195	7.27E-03	0.0039	0.0074	6.80E-09
314		0.00	0.000	0.073	0.1014	0.0095	0.0180	6.99E-03	0.0037	0.0071	6.80E-09
315		0.00	0.000	0.030	0.0989	0.0088	0.0168	6.73E-03	0.0036	0.0068	6.80E-09
316		0.00	0.000	0.064	0.0936	0.0082	0.0156	6.50E-03	0.0035	0.0066	6.80E-09
317		0.07	0.000	0.058	0.0948	0.0077	0.0146	6.28E-03	0.0034	0.0064	6.80E-09
318		0.00	0.000	0.033	0.0920	0.0072	0.0137	6.08E-03	0.0032	0.0062	6.80E-09
319		0.00	0.000	0.043	0.0884	0.0068	0.0129	5.89E-03	0.0031	0.0060	6.80E-09
320		0.00	0.000	0.037	0.0853	0.0064	0.0121	5.72E-03	0.0030	0.0058	6.80E-09
321		0.00	0.000	0.036	0.0823	0.0060	0.0114	5.55E-03	0.0030	0.0056	6.80E-09
322		0.00	0.000	0.034	0.0795	0.0057	0.0108	5.40E-03	0.0029	0.0055	6.80E-09
323	*	0.18	0.000	0.029	0.0811	0.0054	0.0103	5.26E-03	0.0028	0.0053	6.80E-09
324		0.64	0.000	0.000	0.1461	0.0051	0.0097	5.12E-03	0.0027	0.0052	6.80E-09
325		0.10	0.000	0.070	0.1483	0.0049	0.0093	4.99E-03	0.0027	0.0051	6.80E-09
326		0.13	0.000	0.086	0.1522	0.0046	0.0088	4.87E-03	0.0026	0.0049	6.80E-09
327		0.00	0.000	0.088	0.1449	0.0044	0.0084	4.76E-03	0.0025	0.0048	6.80E-09
328		0.00	0.000	0.044	0.1413	0.0042	0.0080	4.65E-03	0.0025	0.0047	6.80E-09
329		0.00	0.000	0.054	0.1368	0.0040	0.0077	4.55E-03	0.0024	0.0046	6.80E-09
330	*	0.18	0.000	0.034	0.1384	0.0039	0.0074	4.45E-03	0.0024	0.0045	6.80E-09
331		0.01	0.000	0.048	0.1462	0.0037	0.0071	4.36E-03	0.0023	0.0044	6.80E-09
332		0.00	0.000	0.046	0.1424	0.0036	0.0068	4.27E-03	0.0023	0.0043	6.80E-09
333		0.00	0.000	0.037	0.1393	0.0034	0.0065	4.18E-03	0.0022	0.0042	6.80E-09
334		0.00	0.000	0.030	0.1368	0.0033	0.0063	4.10E-03	0.0022	0.0041	6.80E-09
335		0.00	0.000	0.021	0.1350	0.0032	0.0060	4.02E-03	0.0021	0.0041	6.80E-09
336		0.00	0.000	0.026	0.1328	0.0030	0.0058	3.95E-03	0.0021	0.0040	6.80E-09
337	*	0.18	0.000	0.017	0.1344	0.0029	0.0056	3.88E-03	0.0021	0.0039	6.80E-09
338		0.00	0.000	0.036	0.1433	0.0028	0.0054	3.81E-03	0.0020	0.0038	6.80E-09
339		0.00	0.000	0.046	0.1395	0.0027	0.0052	3.74E-03	0.0020	0.0038	6.80E-09
340		0.00	0.000	0.090	0.1320	0.0026	0.0050	3.68E-03	0.0019	0.0037	6.80E-09
341		0.00	0.000	0.034	0.1292	0.0026	0.0049	3.62E-03	0.0019	0.0036	6.80E-09
342		0.00	0.000	0.037	0.1261	0.0025	0.0047	3.56E-03	0.0019	0.0036	6.80E-09

343		0.00	0.000	0.054	0.1216	0.0024	0.0046	3.50E-03	0.0019	0.0035	6.80E-09
344		0.00	0.000	0.041	0.1184	0.0023	0.0044	3.45E-03	0.0018	0.0035	6.80E-09
345		0.00	0.000	0.051	0.1142	0.0023	0.0043	3.40E-03	0.0018	0.0034	6.80E-09
346		0.00	0.000	0.048	0.1101	0.0022	0.0042	3.34E-03	0.0018	0.0034	6.80E-09
347		0.00	0.000	0.057	0.1054	0.0021	0.0040	3.29E-03	0.0017	0.0033	6.80E-09
348		0.00	0.000	0.055	0.1008	0.0021	0.0039	3.24E-03	0.0017	0.0033	6.80E-09
349		0.00	0.000	0.036	0.0978	0.0020	0.0038	3.20E-03	0.0017	0.0032	6.80E-09
350	*	0.09	0.000	0.025	0.0994	0.0019	0.0037	3.15E-03	0.0017	0.0032	6.80E-09
351	*	1.32	0.000	0.021	0.1011	0.0019	0.0036	3.11E-03	0.0016	0.0031	6.80E-09
352	*	0.00	0.000	0.009	0.1027	0.0018	0.0035	3.07E-03	0.0016	0.0031	6.80E-09
353	*	0.00	0.000	0.011	0.1044	0.0018	0.0034	3.03E-03	0.0016	0.0030	6.80E-09
354	*	0.00	0.000	0.006	0.1060	0.0017	0.0033	2.99E-03	0.0016	0.0030	6.80E-09
355	*	0.00	0.000	0.000	0.1076	0.0017	0.0032	2.95E-03	0.0016	0.0030	6.80E-09
356		0.07	0.000	0.000	0.2153	0.0017	0.0032	2.91E-03	0.0015	0.0029	6.80E-09
357		0.11	0.000	0.091	0.2172	0.0016	0.0031	2.87E-03	0.0015	0.0029	6.80E-09
358		0.14	0.000	0.081	0.2224	0.0016	0.0030	2.84E-03	0.0015	0.0029	6.80E-09
359		0.00	0.000	0.035	0.2195	0.0015	0.0029	2.80E-03	0.0015	0.0028	6.80E-09
360		0.00	0.000	0.037	0.2164	0.0015	0.0029	2.77E-03	0.0015	0.0028	6.80E-09
361		1.35	0.000	0.091	0.3218	0.0015	0.0028	2.73E-03	0.0014	0.0027	6.80E-09
362		0.00	0.000	0.038	0.2884	0.0014	0.0027	2.70E-03	0.0014	0.0027	6.80E-09
363	*	0.00	0.000	0.019	0.2772	0.0020	0.0038	3.18E-03	0.0016	0.0030	6.80E-09
364	*	0.00	0.000	0.018	0.2757	0.0011	0.0022	2.42E-03	0.0014	0.0027	6.80E-09
365		0.00	0.000	0.034	0.2729	0.0011	0.0021	2.36E-03	0.0013	0.0024	6.80E-09

* = Frozen (air or soil)

Annual Totals for Year 10			
	inches	cubic feet	percent
Precipitation	39.83	144,591.7	100.00
Runoff	0.000	0.0000	0.00
Evapotranspiration	31.160	113,111.0	78.23
Drainage Collected from Layer 3	6.4585	23,444.4	16.21
Percolation/Leakage through Layer 4	1.899745	6,896.1	4.77
Average Head on Top of Layer 4	0.0093	---	---

Drainage Collected from Layer 5	1.9022	6,905.1	4.78
Percolation/Leakage through Layer 7	0.000002	0.0089	0.00
Average Head on Top of Layer 6	0.0027	---	---
Change in Water Storage	0.3116	1,131.3	0.78
Soil Water at Start of Year	38.5564	139,959.8	96.80
Soil Water at End of Year	38.8681	141,091.1	97.58
Snow Water at Start of Year	0.0000	0.0000	0.00
Snow Water at End of Year	0.0000	0.0000	0.00
Annual Water Budget Balance	0.0000	0.0000	0.00

Average Annual Totals Summary

Title: Millersville Cell 9 - Open Cell Condition
Simulated on: 6/9/2024 11:31

	Average Annual Totals for Years 1 - 10*			
	(inches)	[std dev]	(cubic feet)	(percent)
Precipitation	42.04	[5.26]	152,602.2	100.00
Runoff	0.000	[0]	0.0000	0.00
Evapotranspiration	31.020	[2.953]	112,601.0	73.79
Subprofile1				
Lateral drainage collected from Layer 3	8.8869	[3.2978]	32,259.5	21.14
Percolation/leakage through Layer 4	2.178106	[0.472863]	7,906.5	5.18
Average Head on Top of Layer 4	0.0158	[0.0129]	---	---
Subprofile2				
Lateral drainage collected from Layer 5	2.1782	[0.4742]	7,907.0	5.18
Percolation/leakage through Layer 7	0.000002	[0]	0.0089	0.00
Average Head on Top of Layer 6	0.0031	[0.0007]	---	---
Water storage				
Change in water storage	-0.0455	[2.2653]	-165.3	-0.11

* Note: Average inches are converted to volume based on the user-specified area.

Peak Values Summary

Title: Millersville Cell 9 - Open Cell Condition
Simulated on: 6/9/2024 11:32

	Peak Values for Years 1 - 10*		
	(inches)		(cubic feet)
Precipitation	2.98		10,800.2
Runoff	0.000		0.0000
Subprofile1			
Drainage collected from Layer 3	0.4814		1,747.6
Percolation/leakage through Layer 4	0.193548		702.6
Average head on Layer 4	5.2236		---
Maximum head on Layer 4	9.4734		---
Location of maximum head in Layer 3	69.29	(feet from drain)	
Subprofile2			
Drainage collected from Layer 5	0.1676		608.6
Percolation/leakage through Layer 7	0.000000		0.0000
Average head on Layer 6	0.0881		---
Maximum head on Layer 6	0.1755		---
Location of maximum head in Layer 5	2.43	(feet from drain)	
Other Parameters			
Snow water	4.2282		15,348.5
Maximum vegetation soil water	0.6710	(vol/vol)	
Minimum vegetation soil water	0.0770	(vol/vol)	

Final Water Storage in Landfill Profile at End of Simulation Period

Title: Millersville Cell 9 - Open Cell Condition
Simulated on: 6/9/2024 11:32
Simulation period: 10 years

	Final Water Storage	
Layer	(inches)	(vol/vol)
1	28.2464	0.2942
2	2.7454	0.1144
3	0.0042	0.0166
4	0.0000	0.0000
5	0.0035	0.0142
6	0.0000	0.0000
7	7.8660	0.4370
Snow water	0.0000	---

Attachment 1
Phase II Permit Modification Application, 1989

PHASE II PERMIT MODIFICATION APPLICATION (FOR EXISTING REFUSE DISPOSAL PERMIT NUMBER 86-02-04-06A) MILLERSVILLE LANDFILL ANNE ARUNDEL COUNTY, MARYLAND

Submitted to

Secretary of the Environment
Department of the Environment
2500 Broening Highway
Baltimore, Maryland 21224

Submitted by

Anne Arundel County
Bureau of Solid Waste
Department of Public Works
389 Burns Crossing Road
Severn, Maryland 21144

26 October 1989

CERTIFICATION

This Phase II report and all attached drawings were developed under the direct supervision of Mr. Steven Shugart, P.G. and Dr. Mark Evans, P.E. Mr. Shugart's qualifications meet those of COMAR 26.04.07.07 B for a geologist. Dr. Evans' qualifications meet those of COMAR 26.04.07.07 B for a geotechnical engineer registered as a professional engineer in the State of Maryland.

Steven L. Shugart

Steven L. Shugart, P.G.
GeoServices Inc. Consulting Engineers

Mark D. Evans

Mark D. Evans, Ph.D., P.E.
GeoServices Inc. Consulting Engineers

CHECKLIST FOR PHASE II REPORT FOR MUNICIPAL WASTE LANDFILL

INFORMATION REQUIRED	PROVIDED	LOCATION
COMAR 26.04.07.07. A		
• Ten copies of the Phase II Report	X	---
COMAR 26.04.07.07. B		
• Signature of Geologist or Geotechnical Engineer	X	Certification
COMAR 26.04.07.07. C (1)		
• Topographic map with a practical contour interval showing the following:		
(a) surface waters and drainage	X	DWGS. II-1, II-2A, 2B
(b) 100-year flood plain	X	DWGS. II-1, Note 4
(c) property lines	X	DWGS. II-1, II-2A, B
(d) on-site buildings and structures	X	DWGS. II-2A, 2B
(e) forested and vegetated areas	X	DWGS. II-1, II-2A, 2B
(f) power lines, utilities, tanks	X	DWGS. II-2A, 2B
COMAR 26.04.07.07. C (2)		
• Discussion of geologic formations	X	Sections 2.3, 2.4
• Discussion of formation use	X	Sections 2.3, 2.4
• Discussion of hydrogeologic relationship	X	Sections 2.3, 2.4

INFORMATION REQUIRED	PROVIDED	LOCATION
COMAR 26.04.07.07. C (3)		
• Survey of production wells	X	Section 2.6
• Located on topographic map	Note (1)	
• Table with pertinent data	X	Appendix C
COMAR 26.04.07.07. C (4)		
• Ground-water contour maps showing occurence and direction of ground-water movement for:		
(a)(i) Most elevated ground-water condition	X	DWGS. II-10 to II-13
(a)(ii) Most depressed ground-water condition	X	DWGS. II-10 to II-13
(b) Highest observed or predicted ground-water	X	DWG. II-14
COMAR 26.04.07.07. C (5)		
• Geologic cross-section	X	DWGS. II-3 to II-9
COMAR 26.04.07.07. C (6)		
• Bedrock map	Not applicable in Coastal Plain	
COMAR 26.04.07.07. C (7)		
• Isopachous map	X	DWG. II-15

Note: (1) To be provided

INFORMATION REQUIRED	PROVIDED	LOCATION
COMAR 26.04.07.07. C (8)		
• Discussion of ground-water quality	X	Section 2.5
COMAR 26.04.07.07. C (9)		
• Discussion of potential of pollutant movement	X	Section 2.5
COMAR 26.04.07.07. C (10)		
• Fracture trace analysis	Not applicable in Coastal Plain	
COMAR 26.04.07.07. C (11)		
• Test boring logs	X	Appendix D
• Well completion reports	X	Appendix C
• Piezometric measurements	X	Section 2.4.2
• Physical soil/sediment analyses	X	Section 3.4
• Geotechnical analyses	X	Sections 4.5, 4.6
• Laboratory procedures	X	Section 3.4
• Field procedures	X	Section 3.3
COMAR 26.04.07.07. C (12)		
• Preliminary conceptual design including:		
(a) Liner system		
(i) strength and thickness	X	Sections 4.7, 4.10
(ii) materials, thickness, permeability, and subbase	X	Sections 4.4, 4.9
(iii) foundation stability	X	Sections 4.5, 4.6
(iv) liner coverage	X	Section 4.4
(v) minimum slope 2%	X	Section 4.4

INFORMATION REQUIRED	PROVIDED	LOCATION
(b) Buffer between liner and ground water of at least (3 ft (1m))	X	Section 4.4
(c) Leachate collection/removal system	X	Section 4.4
(i) chemical resistance/strength	X	Section 4.11
(ii) non-clogging	X	Section 4.12
(iii) maximum leachate depth of not more than (1 ft (0.3 m))	X	Section 4.8

Report for
Phase II Permit Modification Application
(for existing refuse disposal
permit number 86-02-04-06A)
Millersville Landfill
Anne Arundel County, Maryland

Submitted to

Secretary of the Environment
Department of the Environment
2500 Broening Highway
Baltimore, Maryland 21224

Submitted by

Anne Arundel County
Bureau of Solid Waste
Department of Public Works
389 Burns Crossing Road
Severn, Maryland 21144

26 October 1989

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1. INTRODUCTION

1.1 Overview

Anne Arundel County, Maryland (AAC) currently operates two sanitary landfills: Millersville Sanitary Landfill (MLF) and Sudley Road Sanitary Landfill (SLF). MLF serves the northern portion of the county and SLF serves the southern portion. Spurred by recent developments in landfill technology, special conditions in their existing operating permit, and the passage of specific environmental regulations governing solid waste disposal in Maryland (i.e., COMAR 26), AAC has undertaken the redesign of MLF and SLF.

MLF is currently operating under the State of Maryland Refuse Disposal Permit Number 86-02-04-06A. This Report is part of a Phase II Modification Application in support of a modification to Permit Number 86-02-04-06A to reflect the redesign of MLF. The Phase II Permit Modification Application for MLF is submitted in partial fulfillment of the municipal solid waste requirements of the Annotated Code of Maryland Title 26 - Department of the Environment, Subtitle 4 - Regulation of Water Supply, Sewage Disposal, and Solid Waste, Chapter 7 - Solid Waste Management (i.e., COMAR 26.04.07).

This Phase II Permit Modification Report addresses only the redesign aspects associated with new Cells 8 and 9 and leachate handling and removal facilities at MLF. Interim waste disposal activities that will be carried out at MLF are not addressed in this Phase II Permit Modification Report. Interim waste disposal activities are described in the "Compliance Activities Schedule for Millersville Landfill" submitted by Mr. R. Waesche, Chief, Bureau of Solid Waste, Anne Arundel County, Maryland to Mr. B. Schmidt, Chief, Solid Waste Enforcement Division,

Maryland Department of the Environment (MDE) on 2 October 1989. Interim waste disposal activities addressed in the compliance schedule include:

- continued landfilling in permitted active Cells 6 and 7;
- waste disposal in combined Cells 5, 6, and 7;
- relocation of waste from Cells 2, 3, and 4 to combined Cells 5, 6, and 7;
- closure and capping of combined Cells 5, 6, and 7;
- relocation of waste from Cell 1 West to Cell 1 East; and
- closure and capping of Cell 1 East.

Interim waste disposal activities will be addressed in documents that will be submitted to MDE under separate cover from this Phase II Permit Modification Report.

This Phase II Permit Modification Report was prepared for the Anne Arundel County Department of Public Works, Bureau of Solid Waste (BSW) by GeoServices Inc. Consulting Engineers (GeoServices), Norcross, Georgia and Gershman, Brickner and Bratton (GBB), Falls Church, Virginia.

1.2 Site Location and Description

The MLF site is located about 1 mile (2 km) due east of Fort George G. Meade and approximately 1 mile (2 km) northwest of Millersville in northern Anne Arundel County, Maryland (See Figure 1). The site is located in the Odenton Quadrangle of the United States Geological Survey (USGS) 7.5 minute map at a latitude of approximately N39°5′30" and a

longitude of approximately E76°40'00". The site occupies approximately 567 acres (230 hectares). An intermittent streams run across the site, generally from west to east, becoming perennial at the eastern site boundary. The stream continues to the east until meeting the Severn Run, which, in turn, eventually flows into the Severn River.

The site is divided into two sections by a 120 ft-wide Baltimore Gas and Electric right-of-way running generally west to east at approximately the northern third of the site. The northern half of the site has been developed and prior landfilling activities there are completed. The southern half is the location of present landfill activities. A large portion of the southern half of the site is undeveloped and densely wooded or covered with heavy brush. Elevations at the site range from a low of about 100 ft (30 m) above sea level datum at the center of the site along the intermittent stream banks, to a high of about 240 ft (72 m) above sea level datum at the southern and western site boundaries.

1.3 Site History

AAC began operations at MLF in January, 1975. The initial site development plan was prepared by Century Engineering in 1974 and included 10 distinct landfill cells numbered sequentially from Cell 1 to Cell 10. Cells 1 through 4 are located in the northern portion of the site (i.e., north of the Baltimore Gas and Electric right-of-way), Cells 5 through 8 are located in the center of the site, and Cells 9 and 10 are located in the southern portion of the site.

At the present time, Cells 1 through 7 have been filled to the design limits shown on Figure 2. Waste disposal at MLF has generally proceeded along guidelines and operating procedures described in the MLF operational plan, prepared by Century Engineering [1976].

The extent of current landfill development is shown in Drawings II-1, II-2A, and II-2B. The topographic map presented in Drawings II-2A and II-2B show the major features of the MLF site (as required by COMAR 26.04.07.07.C(1)), including: ground-surface elevations (as of March 1989), buildings and structures, streams and drainage features, forested areas, roads, power transmission lines, underground storage tanks, property lines, previously filled solid waste cells, and on-site sedimentation basins.

1.4 Project Description

The Phase II Permit Modification Application, of which this Phase II Report is a part, addresses redesign of previously-permitted Cells 8, 9, and 10 at the MLF site with the following changes incorporated into the redesign:

- Cells 9 and 10 from the existing refuse disposal permit will be incorporated into a single cell, referred to as Cell 9 in this Phase II Report;

- the new cells will have basically the same footprints as those in the existing permit but the final cover slope angles and the final heights will be modified; and

- each new cell will have a double-liner system with a leachate collection system incorporated above the top liner and a leakage detection system located above the bottom liner (this modification is in compliance with special condition number I.B.1.a of the existing refuse disposal permit and exceeds the requirements of COMAR 26.04.07.07.C(12)(a)); the new cells will also incorporate engineered final cover systems to minimize leachate generation after cell closure.

The proposed conceptual landfill redesign plan for MLF is discussed in detail in Section 4 of this Report.

1.5 Organization of the Report

COMAR 26.04.07.04 requires that anyone constructing or operating a sanitary landfill, or materially altering or extending a landfill, first obtain a permit. Permit requirements for municipal sanitary landfills are presented in COMAR 26.04.07.05 through 26.04.07.10. COMAR 26.04.07.07 requires preparation and submittal of a Phase II Report that includes:

(1) an up-to-date site specific topographic map showing surface waters and natural drainage features; 100-year flood plain; property lines; on-site buildings and structures; forested and vegetated areas; and power lines, utilities, and tanks on the property;

(2) a discussion of geologic formations beneath and in close proximity to the site, the present and projected use of these formations for ground-water and mineral use, and hydrogeologic relationships between the formations;

(3) a survey of all production wells within 0.5 mile (0.8 km) of the site boundary including well depth, screen type, productivity, materials encountered, and water level;

(4) ground-water contour maps showing the occurrence and movement of ground water for: (i) the most elevated ground-water condition; (ii) the most depressed ground-water condition; and (iii) the highest observed or predicted ground-water elevation;

(5) geologic cross-sections in sufficient detail, orientation, and number to clearly identify subsurface conditions at the site;

(6) a bedrock map (except in the Coastal Plain);

(7) an isopachous map showing soil thickness above the ground water;

(8) a discussion of ground-water quality;

(9) a discussion of the potential for vertical and horizontal movement of pollutants;

(10) a fracture trace (except in the Coastal Plain);

(11) test boring logs, well completion reports, piezometric measurements, chemical and physical soil/sediments analyses, and geotechnical analyses; and

(12) a preliminary conceptual landfill design including:

(a) a liner system that is: (i) constructed of synthetic or manufactured membrane material having sufficient strength and thickness and a minimum value of permeability less than a specified maximum; (ii) placed on a stable foundation; (iii) installed to cover all surrounding earth; and (iv) installed with a minimum slope of 2%;

(b) a minimum 3-ft (1-m) thick buffer distance between the liner system and the composite high water table; and

(c) a leachate collection and removal system that is (i) constructed of materials of sufficient strength, thickness, and chemical resistance; (ii) designed to function without clogging; and (iii) designed to ensure that the leachate depth does not exceed 1 ft (1 m) over the liner.

2. HYDROLOGY, GEOLOGY, AND HYDROGEOLOGY

2.1 Introduction

Anne Arundel County (AAC) is situated roughly in the center of the State of Maryland and is bordered on the north by the City of Baltimore and Baltimore County, on the west by Howard County and Prince Georges County, on the south by Calvert County, and on the east by the Chesapeake Bay. AAC lies entirely in the Coastal Plain physiographic province. This section of the Report discusses climate and physiography (Section 2.2), regional and site specific hydrology, geology and hydrogeology (Sections 2.3 and 2.4), ground-water quality (Section 2.5), and production water wells within 0.5 mile (0.8 km) of MLF (Section 2.6).

2.2 Climate and Physiography

Anne Arundel County is in the humid temperate climatic belt of the eastern part of the United States. It has warm summers and relatively mild winters. Mean annual precipitation is 44 in. (1.1 m) [Mack, 1962]. Monthly precipitation varies from year to year, but generally ranges between 2 and 4 in. (50 and 76 mm) [Mack, 1962]. Mean precipitation is evenly distributed during the year. Maximum and minimum monthly values may vary considerably. For example, the maximum recorded monthly rainfall in August is slightly greater than 14 in. (0.3 m), while the minimum recorded monthly rainfall in August is less than 0.2 in. (5 mm). Temperatures in AAC generally range between 35° Fahrenheit (F) (1.6° Centigrade (C)) and 77°F (25°C). The average annual temperature is 56°F (13°C) [Mack, 1962].

The MLF site lies in the Coastal Plain physiographic province about 10 miles (16 km) east of the fall zone. The fall zone separates the low lying gently rolling terrain of the Coastal Plain from the higher relief of the Piedmont physiographic province. The Coastal Plain in Maryland rises from sea level to elevations greater than 300 ft (90 m) above sea level datum. Relief may range from 20 to 100 ft (6 to 30 m). The regional slope falls to the east at about 1.5 ft per mile (0.3 m per km). The topography of the region is characterized by a series of broad step-like terraces. The terraces are progressively less dissected by stream erosion from west to east. Topography in AAC consists of low rolling hills in the western portion, which gradually become flatter from west to east. Several miles inland from the Chesapeake Bay, the land is flat with poor drainage.

Topography on the site consists of hills and valleys. A small stream valley that runs generally west to east dissects the site. Several smaller valleys running north-south merge with the main valley. The highest elevation at the site is about 240 ft (72 m) near Burns Crossing Road. The lowest elevation at the site is slightly less than 80 ft (24 m) on the eastern site boundary where the stream exits.

2.3 Regional Hydrology, Geology, and Hydrogeology

2.3.1 Regional Surface-Water Hydrology

Anne Arundel County is divided into two general drainage areas. The Patuxent River drains the western portion of the county and flows to Chesapeake Bay, nearly 30 miles (48 km) south of the southern tip of Calvert County. Several small river basins drain the eastern portion of the county directly into Chesapeake Bay. The Severn River, which is in the vicinity of the MLF site, is one of these basins.

Severn Run is the primary source of fresh water for the Severn River, which, in turn, is a tidal estuary of the Chesapeake Bay. The Severn Run watershed has an area of approximately 24 square miles (62 km^2) [CH2M Hill, 1980]. The watershed boundary is roughly defined by Route 3 to the east and Route 175 in the south. Route 175 to Fort George Meade define the western boundary. The northern boundary is defined by Severn Road and Clark Station Road. The main channel of Severn Run is approximately nine miles (14 km) long, originating at Lake Marion in the northwest section of the watershed. There are six major tributaries to Severn Run. Jabez Branch in the southeast portion of the basin has the largest tributary area. The Jabez Branch flows just south of MLF. Wells Branch, another tributary of Severn Run north of Jabez Branch, has its headwaters on the MLF site where it is an intermittent stream [CH2M Hill, 1980]. Perennial flow in the Wells Branch begins near the eastern boundary of the MLF site near Gambrills Road. The distance from the eastern property boundary to Severn Run is about 1 mile (1.6 km).

2.3.2 Regional Geology and Hydrogeology

The eastern half of AAC is marked by a series of peninsulas separated by Chesapeake Bay estuaries. The estuaries are extensive but shallow, generally less than 20 ft (6 m) deep. Several of the estuaries extend inland more than half the width of the county. A few of the peninsulas are flat and low lying with irregular shorelines. However, some peninsulas, such as along the Severn River, have steep escarpments. The highest elevation in the county is about 310 ft (93 m) and is east of the town of Laurel in the northwestern part of the county. From this high point, the land surface slopes gently toward the Chesapeake Bay.

Anne Arundel County is underlain by a southeastward thickening wedge of unconsolidated sediments overlying consolidated crystalline basement rocks of Precambrian or Early Cambrian age. The unconsolidated sediments

consist of stratified layers of sand, gravel, silt, and clay. The unconsolidated sediment wedge thins to a few tens of feet near the fall zone to the northwest and is probably 2,000 ft (600 m) thick in the southeastern part of the county. Sand and gravel strata comprise the major water-bearing aquifers of the county. Within the county, the slope or dip of the aquifers vary. The deepest aquifer, the Patuxent Formation, dips to the southeast at 85 to 90 ft per mile (15 to 16 m per km), whereas the shallowest aquifer dips to the southeast at only 15 to 20 ft per mile (3 to 4 m per km).

The Potomac Group comprises the entire thickness of unconsolidated sediments in the northern part of the county. It is overlapped by younger deposits ranging in age from Late Cretaceous to Holocene in the central part of the county (Figure 3). The stratigraphy of the Potomac Group is very complex. Formations of the group were deposited in fluvial and lacustrine environments. Sand, silt, and clay layers are commonly limited in areal extent. Sand lenses 25 ft (7.5 m) thick at a specific location have been found to be thicker, thinner, or absent at distances of 25 to 100 ft (7.5 to 30 m) from that location [Mack and Achmad, 1986].

The Potomac Group is comprised of three separate formations in AAC; these are, from the base upward, the Patuxent Formation, the Arundel Clay, and the Patapsco Formation. The Patapsco Formation can be regionally divided into an upper and lower unit each consisting of a clay overlying a predominantly sand sequence. The Patapsco Formation includes all of the lithologies from the base of the overlying upper Cretaceous Magothy Formation to the top of the underlying Arundel Clay. The total thickness of the Patapsco Formation in Anne Arundel County is approximately 500 ft (150 m) [Mack and Achmad, 1986] and dips towards the southeast.

The Potomac Group contains three distinct aquifers in AAC; namely, the Patuxent, lower Patapsco and upper Patapsco. All three aquifers are

confined, except in the outcrop areas where water-table or unconfined conditions exist. Confining layers separate the aquifers in most places. Water level records from clusters of wells that tap the different aquifers indicate that the sands are hydrologically separated from one another. The water level records show that pumping of water from one of the aquifers at a specific site commonly has no immediate effect on water levels in the other aquifers [Mack and Achmad, 1986].

The Magothy Formation overlies the Potomac Group. According to Mack [1962], this aquifer is hydrologically connected in varying degrees with the underlying Patapsco aquifer. The Magothy Formation dips to the southeast at about 30 ft/mile (6 m/km) and is utilized for water supply in the Annapolis area.

2.4 Site Hydrology, Geology, and Hydrogeology

2.4.1 Site Surface-Water Hydrology

No perennial streams are located on the MLF site. As previously discussed, Wells Branch is an intermittent stream on site. Its headwaters originate on the western portion of the site near Burns Crossing Road. Flow in Wells Branch is most likely fed from shallow, perched ground water. During dry periods, perched ground water may be depleted through percolation into deeper water-bearing zones and inflow into Wells Branch. At these times, the upper reach of Wells Branch ceases to flow. Wells Branch receives stormwater flow from several intermittent tributary stream channels north and south of the main channel. Stormwater flow also comes from discharges from the sedimentation basins at MLF. There are presently six sedimentation basins at MLF; three adjacent to Cells 1, 2, and 3; and three closest to Wells Branch near Cells 5, 6, and 7 (see Drawings II-2A and II-2B).

2.4.2 Site Geology and Hydrogeology

A site subsurface investigation was conducted in the early 1970's when AAC purchased the Edgewood Farm Country Club for the purpose of constructing MLF. Twenty-five test holes were drilled as part of a routine subsurface investigation and observation wells were installed and screened in various subsurface water bearing zones.

Surface geologic mapping in the vicinity of the MLF site (see Figure 4) indicates the predominance of the silt-clay facies of the Potomac Group in the northeastern part of the site and the sand-gravel facies of the Potomac Group in the central portion of the site. The Magothy Formation, a predominantly sandy unit, outcrops along the southern boundary of the site just north of Dicus Mill Road. Ferruginous cementation is common in the fluvial facies of the Magothy Formation. Blocks of ironstone conglomerate outcrop in this area.

Ground-water studies by Mack [1962] and Mack and Achmad [1986] suggest that the silt-clay facies of the Potomac Group at MLF is part of a clay confining layer separating the overlying Magothy Formation from the underlying upper Patapsco Formation (Figure 3). The discontinuous silt-clay facies (upper confining layer) at MLF occurs at the ground surface under Cells 1, 6, 7, and part of Cell 5, and at or near the ground surface under Cell 4. The sand-gravel facies of the Potomac Group occurs at the center of MLF, from the vicinity of TW8 to TW4, roughly paralleling the existing surface drainage; this facies probably represents an old stream channel. The southern half of the site is capped by the sands of the Magothy Formation. Sand lenses occur within the silt-clay facies (i.e., within the upper confining layer) underlying the entire site.

Drawing II-3 presents a plan view showing the locations of the geologic sections presented in Drawings II-4 to II-9. These geologic sections are oriented roughly along the strike and dip directions of the formations at MLF. The geologic sections were developed from site subsurface investigation boring logs developed in 1975 and 1989, and from ground-water monitoring well completion reports.

From all of the available information reviewed for the preparation of this Report, it appears that four water-bearing zones occur in the upper 300 ft (90 m) beneath MLF (i.e., to a depth of approximately 135 ft (40.5 m) below sea level datum). The uppermost zone (Zone 1) is in the fluvial sands of the Magothy Formation. Ground water in this zone is unconfined and perched. This water-bearing zone is restricted to the southern and southwestern boundaries of the site, north of Dicus Mill Road, and along Burns Crossing Road, respectively. During all or part of the year, this zone may be dry in some areas.

The second water-bearing zone (Zone 2) occurs in a shallow sand zone within the silt-clay facies described by Glaser [1976]. (Note: The silt-clay facies described by Glaser is the same as the confining layer described by Mack and Achmad [1986] that separates the overlying Magothy Formation from the underlying upper Patapsco. The shallow sand zone in the silt-clay facies has also been described by Pittman [1982].) In the southern part of the site, this sand zone may be either unconfined or confined, and is recharged directly from precipitation or leakage from the overlying perched aquifer. The potentiometric surface of the shallow sand zone in this area shows a strong reflection of the local topography (see Drawings II-10 and II-11). North of the drainage valley that cuts through the central area of the site, water levels in the shallow sand zone are similar to those in a deeper sand zone (both sand zones have been described by Pittman [1982]), suggesting some hydrologic interconnection.

The third water-bearing zone (Zone 3) is the deep sand zone described by Pittman [1982]. This sand zone is located approximately 25 ft (7.5 m) below the shallow zone in the southern half of the site, and below the outcropping silt-clay facies in the northern half of the site. The potentiometric surface for this zone (see Drawings II-12 and II-13) indicates regional flow in an easterly to northeasterly direction. Ground water in this zone is either semi-confined or confined. The hydrostatic heads in this water-bearing zone are lower than the perched or shallow zones indicating the potential for recharge by leakage from the overlying zones.

The fourth water-bearing zone (Zone 4) is the upper Patapsco aquifer, which is the major ground-water aquifer in the vicinity of MLF. The top of the aquifer occurs at an elevation of about 10 ft (3 m) above sea level datum in the northeast corner of the site near Well TW16, and about sea level at Well TW9 (see Drawing II-4). The production well near the maintenance building (i.e., near the southwestern site boundary) is probably screened in the upper Patapsco aquifer. The upper Patapsco aquifer is confined at MLF by clays of the upper confining layer [Mack and Achmad, 1986] (i.e., the silt-clay facies described by Glaser, [1976]) separating the Magothy Formation from the upper Patapsco sands. The hydrostatic head in the upper Patapsco aquifer is lower than the head in the overlying water-bearing zones as is typical near the outcrop of a major recharge area. TW9 is the only ground-water monitoring well tapping the upper Patapsco aquifer at the site for which long-term water level data is available. Since 1984, there has been a 5 ft (1.5 m) decline in the average water level in Well TW9 (see water level data in Appendix A).

Long-term hydrographs from wells tapping Zone 2 and Zone 3 also show a 5 ft (1.5 m) decline in water levels beginning in 1982. This decline is attributed to long term leakage to the upper Patapsco Aquifer in

response to increased ground-water withdrawal from the Patapsco Aquifer. The hydrographs for wells tapping the various water-bearing zones at MLF are included in Appendix A. In the future, continued ground-water pumping will probably result in further declines in water-levels beneath the site.

As required in COMAR 26.04.07.07.C(4), the maximum ground-water elevations have been predicted for MLF. These ground-water elevations are shown on Drawing II-14. To arrive at these maximum predicted ground-water levels, a 5 ft (1.5 m) head was added to Zone 2 ground-water elevations for September 1989; the September 1989 elevations were obtained after an unusually wet summer. As previously mentioned, a decreasing trend in water levels is evident in hydrographs from on-site wells. The decreasing water levels are most likely due to regional pumpage around the site associated with ground-water usage. Since ground-water levels appear to be decreasing with time, the methodology used to obtain the maximum predicted ground-water elevations is believed to be conservative. The ground-water elevations in Drawing II-14 will be used to design landfill Cells 8 and 9 so that they meet the 3 ft (1 m) minimum ground-water separation requirements of COMAR 26.04.07.07.C(12)(b).

2.5 Ground-Water Quality

In order to monitor ground-water quality at MLF, wells were installed in 1975 and ground-water samples have been collected and analyzed since landfilling began. During the early 1980s, Well TW11 began to show low, fluctuating concentrations of organic constituents. Therefore, in 1989, AAC began investigating the nature and extent of ground-water contamination. This section of the Report discusses recent results from the site-wide water-quality monitoring program instituted in 1975 and from the recent ground-water contamination study conducted in the vicinity of TW11.

2.5.1 Site-Wide Monitoring Program

Ground-water samples from wells at MLF have been collected generally 2 or 3 times per year since 1975. Samples were collected and analyzed by MDE for the parameters listed in Table 1 of this Report. In order to characterize water quality at MLF, GeoServices evaluated generally accepted key indicator parameters from the results of MDE's analytical program. Key indicator parameters used by GeoServices are pH, nitrate, chloride, specific conductance, alkalinity, hardness, arsenic, barium, cadmium, chromium, lead, mercury, selenium, chemical oxygen demand (COD), and volatile organics. An evaluation of these parameters meets the requirements of COMAR 26.04.07.07.C(8). Analytical results tabulated from 1975 through 1988 for these parameters are presented in Appendix B. Average values for each parameter are presented in Table 2 and maximum values are presented in Table 3 (except for volatile organics, which are discussed separately, and presented in Tables 4 and 5). Each parameter is discussed below.

pH

Average pH values at MLF range from 5.7 in TW16 to 9.9 in TW1. However, these two values appear to be outside the typical range seen at MLF. All of the other average pH readings are between 5.9 and 7. The USEPA's established acceptable water quality range for pH is from 6.5 to 9. Most of the average pH values for the wells at MLF are slightly below the accepted range. Therefore, ground water at MLF may be slightly acidic due to the local geology. To evaluate pH in each MLF well, a single-sample Student's T-test was performed on the existing data. The test was performed using TW10 as the background well and the most recent pH value in each well. Average pH values and statistical results which appear to be significant are discussed in Section 2.5.3.

Nitrate

No significant nitrate concentrations are evident in any of the wells at MLF.

Chloride

Average chloride concentrations at MLF range from 1.1 milligrams per liter (mg/l) to 36.1 mg/l, with all concentrations below 7 mg/l except TW3A and TW16 with 17.1 mg/l and 36.1 mg/l, respectively. USEPA does not have water quality criteria for chloride. Average chloride concentrations and statistical evaluations of significant differences are discussed in Section 2.5.3.

Specific Conductance

Average specific conductance (SC) values range from 21 micromhos per centimeter (umhos/cm) to 345 umhos/cm. Most average values are below 100 umhos/cm with only TW1, TW7, TW13A, and TW16 having average values above 100 umhos/cm. TW1 has an average value of 279 umhos/cm. However, most of the early readings were elevated (i.e., 1980-1982 readings). Since 1983 all of the SC readings in TW1 have been below 100 except two readings (June 1987 - 156 umhos/cm; March 1988 - 120 umhos/cm). In TW7, most of the high SC readings also occurred before 1983. Since 1983, all of the readings have been below 100 umhos/cm. In TW13A, the average SC value is 116 umhos/cm, but only four readings were obtained during 1979 and 1980. Two of the readings are above 150 umhos/cm, one is just below 100 umhos/cm and one is very low at 12 umhos/cm. TW16 consistently had the highest SC concentrations; readings from this well ranged from 45 to 581 umhos/cm. Most readings were above 300 umhos/cm.

Alkalinity

No significant alkalinity concentrations are evident in any of the wells at MLF.

Hardness

No significant hardness concentrations are evident in any of the wells at MLF.

Arsenic

No significant arsenic concentrations are evident in any of the wells at MLF.

Barium

No significant barium concentrations are evident in any of the wells at MLF.

Cadmium

Average cadmium concentrations ranged from below detection levels (BDL) to 0.142 milligrams per liter (mg/l) with the highest average reading obtained in TW2A. It appears that a single cadmium reading of 1.42 mg/l in November 1983 caused the high average reading in TW2A. Since that one isolated high reading, no cadmium sample has been higher than 0.002 mg/l. It is likely that the high reading of November 1983 represents an error in sampling or analysis, and not cadmium contamination. Also, landfilling has not taken place in the vicinity of

TW2A. Therefore, it appears that there is no significant cadmium contamination at MLF.

Chromium

Average chromium concentrations at MLF range from BDL to 0.30 mg/l. However, most concentrations are below 0.02 mg/l. Only two wells exhibited significant average chromium concentrations; these wells are TW13A and TW16. In TW13A, only two samples were analyzed for chromium: in August 1975 and in September 1980. The August 1975 sample had a chromium concentration of 0.5 mg/l and the September 1980 sample had a chromium concentration of 0.03 mg/l. It is impossible to evaluate the significance of the data with only two samples. In TW16, eight samples were analyzed for chromium. The range of concentrations of the eight samples was 0.03 mg/l to 0.28 mg/l. All except one of the concentrations appear to be significant (i.e., above Federal and State drinking water standards). Chromium concentrations of significance are discussed in Section 2.5.3.

Lead

Average lead concentrations range from BDL to 0.30 mg/l. The highest average concentration was found in TW13A and significant concentrations (i.e., above Federal and State drinking water standards) are also evident in TW7, TW10, TW11, and TW16. Eleven samples from TW7 were analyzed for lead. Four samples had detectable concentrations which ranged from 0.01 to 0.35 mg/l while concentrations in the remaining seven samples were below detection limits. The most recent sample, obtained in August 1988, had a lead concentration of 0.08 mg/l. Four samples from TW10 were tested for lead. Concentrations ranged from BDL to 0.20 mg/l. TW10 is considered an upgradient well, and therefore, ground water flowing beneath the MLF site contains lead either from natural or non-landfill sources.

Concentrations of lead in TW11 ranged from BDL to .99 mg/l. Nine samples were collected between 1975 and 1988 from TW11 and only three samples had lead concentrations below the Federal and State primary drinking water standard. TW13A had significant levels of lead in each of the three samples collected during 1975 to 1980. Nine ground-water samples from TW16 were analyzed for lead. The range of concentrations for this well was BDL to 0.51 mg/l. The concentrations of four of the samples are higher than the Federal and State drinking water standard for lead. Lead concentrations of significance are discussed in Section 2.5.3.

Mercury

The average concentration of mercury in TW13A was high. However, only two ground-water samples were collected at this well. One measurement showed no mercury and the other 0.80 mg/l. Evaluation of the small data set is not meaningful. No mercury concentrations of significance were detected in any of the other wells at MLF.

Chemical Oxygen Demand (COD)

Average COD concentrations range from BDL to 18 mg/l. The highest average concentration was in TW16. Significant COD results are discussed in Section 2.5.3.

Volatile Organics

Volatile organic compounds have been detected in a few wells at MLF, but in significant levels only in TW11. Constituents present at detectable levels in TW11 include: chloromethane, dichlorofluoromethane, vinyl chloride, chloroethane, methylene chloride, trichlorotrifluoromethane, trichlorofluoromethane, 1,1-dichloroethane, 1,1-dichloroethene, chloroform, 1,1,2-trichloroethane, 1,1,1-

trichloroethane, tetrachloroethene, trichloroethene, ethylbenzene, xylene, tetrahydrofuran, ethyl ether, dichlorodifluoromethane, and chlorodifluoromethane. Maximum measured concentrations in TW11 are shown in Table 4. In order to investigate contamination in TW11, Anne Arundel County authorized GeoServices to install, develop, and sample new ground-water monitoring wells. The results of the ground-water contamination investigation are discussed in the following section.

In addition to TW11, as previously mentioned, low concentrations of organic compounds were also detected in other wells. Table 4 presents the maximum observed values of organic compounds in wells at MLF. The data show low levels of volatile organic and other organic compounds in 15 wells (excluding TW11). None of the measured concentrations in these 15 wells exceed regulatory criteria (i.e., maximum contaminant levels (MCLs), maximum contaminant level goals (MCLGs), carcinogen risk specific doses (RSDs), or systemic toxicant reference doses (RFDs)). Continued ground-water quality monitoring of these wells is planned as part of the overall site monitoring program.

2.5.2 Ground-Water Contamination Study

GeoServices performed a ground-water contamination study during 1989. The study involved installing eleven new wells (i.e., G1, G2, G4-G11, and G13) in the vicinity of TW11 to determine the extent of the ground-water contamination observed in TW11. The wells were developed and sampled (except G2) in June 1989 and analytical testing was performed to evaluate chemical constituent concentrations. A summary of the results of the analytical testing is contained in Table 5.

The results revealed that ground water at the sampled locations contains volatile organic constituents, but no significant concentrations of base/neutral extractable compounds, pesticides, polychlorinated

biphenyls (PCBs) or metals. Table 5 shows that at the time of sampling, Wells G4, G5, G7, G9, G10, G11, and TW11 had low concentrations of several volatile organic compounds. TW11 had the highest number of constituents, including trichlorofluoromethane, methylene chloride, 1,1-dichloroethane, 1,1,1-trichloroethane, and tetrachloroethene. Results indicate the following:

- Contamination in the vicinity of Cell Number 4 does not appear to have moved significantly beyond TW11, because the analytical results obtained from Well G13 did not reveal contamination.

- Analytical results from Wells G10 and G11 reveal that leachate from Cell Numbers 3 and 2, respectively, may be contaminating ground water.

In order to further define the extent of contamination in the vicinity of Cells 1 through 4, AAC is continuing its contamination study. GeoServices is currently installing nine new wells to monitor ground-water Zones 2 and 3 at MLF. The new wells will supplement overall site monitoring provided by existing wells and further characterize the nature and extent of ground-water contamination.

2.5.3 Ground-Water Assessment

To evaluate ground-water quality at MLF, GeoServices analyzed all of the data available from AAC and MDE records. Normally used indicator parameters were selected from the entire data base and tabulated data summaries were prepared. These data summaries are presented in Appendix B. Four methods of analysis were employed in the evaluation: (i) mean values of all of the data were prepared (Table 2) and values of the key indicator parameters in each well were compared against all of the other wells; (ii) mean values in each well were compared against Federal and

State water quality criteria and standards; (iii) a statistical test (a simple Students T-test) was performed using TW10 as the background well and the most recent sampling episode from each well; and (iv) analytical data from each well that showed significant differences in water quality was further evaluated to observe historical trends. Based on the preceding evaluations, the following wells show some significant differences in ground-water quality from the upgradient well TW10 during the time in which they have been monitored: TW3A, TW6A, TW11, TW14A, and TW16. Each of these wells is discussed below.

TW3A

The statistical evaluation in Table 6 comparing data from TW10 and the most recent sampling event in TW3A show differences at a 0.05 level of significance for both specific conductance and chlorides. However, no conclusive trends are evident in the record of analytical data. Subsequent analytical results from TW3A should be observed and evaluated to identify any trends that might indicate ground-water contamination at this location.

TW6A

The statistical evaluation shown in Table 6 comparing data from TW10 and the most recent sampling event in TW6A show differences at a 0.05 level of significance for both specific conductance and chlorides. No samples have been collected since November 1986. However, the last four specific conductance readings showed slight increases. No other key constituents appear to be present at levels of concern in TW6A. During future sampling events, a sample will be obtained from TW6A for testing. (Note: TW6A has been dry on some occasions and may not yield sufficient water for a sample.)

TW11

The statistical evaluation shown in Table 6 for the most recent data show differences at a 0.05 level of significance for specific conductance and chlorides. Specific conductance values have increased since 1985. Chromium and lead have also been detected at high levels (i.e., relative to Federal drinking water standards). Chlorinated organic compounds have been detected since 1985. Well TW11 ground-water samples exhibit contamination, most likely from Cell 4. However, data from other wells suggest that the contamination has not moved significantly beyond the location of Well TW11. Additional ground-water contamination studies are currently underway at MLF around TW11.

TW14A

The statistical evaluation shows differences at a 0.05 level of significance for the last pH reading in TW14A. The pH measurements show decreasing values since October 1985. No other constituents have significant concentrations in TW14A. Values of pH and other constituents should be observed periodically in this well.

TW16

The statistical evaluation shown in Table 6 for TW16 shows differences at a 0.05 level of significance for pH, specific conductance and chlorides. In addition, in TW16, the average pH values are lower than any other well and the specific conductance and chlorides values are higher than any other well. Significant levels of chromium and lead have also been detected. TW16 also had the highest COD concentration compared to all of the other wells at MLF. Considering all of the data from TW16, some ground-water contamination may be present at this location. A new

well, TW17, is currently being drilled near TW16 to further investigate potential contamination at this location.

Summary

Ground-water contamination is present at MLF near Cell Number 4 as evidenced from well data for TW11. Contamination may also be present near TW16. Further investigations are currently underway to install additional ground-water monitoring wells at key locations throughout the site. AAC plans to conduct a water-quality assessment and risk assessment of data from all of the wells (once they are available) and to then evaluate any potential future impacts on the environment and public health.

2.5.4 Potential for Contaminant Migration

The preceding sections of this Report have described the geology and hydrogeology in the region around and at MLF as well as ground-water quality beneath MLF. The hydrogeology data show four water-bearing zones at the site. Zone 1 is a perched zone and is limited to the southern and southwestern parts of the site; (i.e., the Magothy aquifer); Zones 2 and 3 are intermediate zones, and Zone 4 is the regional aquifer at the site (i.e., the upper Patapsco aquifer). Geologic cross-sections for MLF show partial hydraulic interconnection between Zones 2 and 3, which is reflected by similar water levels in wells that are screened in these two zones. Zone 4 appears to be hydraulically separated from Zone 2 and 3, which is reflected by different water levels in wells screened in these zones. However, water level measurements show the hydraulic head in Zones 2 and 3 is greater than the hydraulic head in Zone 4. Therefore, the potential for leakage through the confining layer between Zones 2 and 3, and Zone 4 is possible; leakage through the confining zone would, however, be at a slow rate.

While vertical leakage through confining layers at MLF is possible, the potential for migration of chemical constituents through layers is limited by the low permeabilities of the layers and the significant potential for the layers to attenuate the concentrations of many constituents. Generally, metals will be attenuated by cation exchange or physical adsorption on clays, with metal ions of highest charge tending to be attenuated most. Organic constituents will be attenuated by adsorption of these compounds to naturally occurring organic carbon in the confining layer. Organic compounds with high polarities, similar to the polarity of soil organics, will be attenuated most.

Potential for subsurface contaminant movement is greatest in the central portion of the site where a sand body is present along the route of the stream valleys. Less potential is likely in the northwest and south portions of the site where thick silt-clay layers are present.

The potential for vertical and horizontal movements of pollutant into the waters of Maryland are included in response to COMAR 26.04.07.07C(9) as they relate to the construction of Cells 8 and 9. The potential of any leachate migration into the ground or surface waters of Maryland from Cells 8 or 9 is extremely small because of the engineering features of the proposed redesign for each cell. The proposed redesign for each cell will incorporate a double-liner system with a leachate collection system above the top liner and a leakage detection system between the top and bottom liners. These systems, if installed properly, will effectively prevent any adverse impacts of construction of Cells 8 and 9 on ground-water quality. In the extremely unlikely event, however, that leachate escaped into the environment, ground-water Zone 2 would be the initial receptor. The direction of ground-water flow for Zone 2 is shown in Drawings II-10 and II-11. A potential vertical pathway exists where ground-water Zones 2 and 3 are in close proximity in the vicinity of the intermittent

tributaries of Severn Run in the center of the MLF. The direction of ground-water flow of Zone 3 is shown in Drawings II-12 and II-13. The principal direction of ground-water flow from Zones 2 and 3 at the site boundary is northeast and east. The quantities of leachate that might leak through the double-liner system of Cells 8 and 9 are extremely small. It is not anticipated that any measurable concentrations of contaminant will show up in the ground water because of (i) the extremely small volume of leachate that could escape from the landfill, (ii) the adsorption of metals and organics by subsurface clays and organic matter, and (iii) natural dilution.

All the deep borings at MLF indicate a clay confining layer separating Zone 3 from Zone 4. (See Drawings II-4 through Drawings II-9.) There is a potential downward vertical gradient across this confining layer. However, no measurable concentrations of contaminant are expected to migrate through the confining layer due to the cation exchanges and attenuation properties of the clays.

Additional monitoring wells have been installed in the central portion of the site along the stream valley where the greatest potential for subsurface contaminant movement exists. These wells are near the downgradient boundary of Cells 8 and 9. Therefore, the current monitoring well network should be sufficient to detect any contaminant migration from Cells 8 and 9.

Assessment studies are currently under way to evaluate existing low levels of ground-water contamination related to previously constructed and filled landfill cells. The evaluation and risk assessment will be presented to MDE in a separate report.

2.6 Production Water Wells

A survey of production wells within 0.5 mile (0.8 km) of the MLF site boundary was conducted according to the provisions of COMAR 26.04.07.07 C(3). The area of interest was defined using the Maryland State Coordinate System (Figure 8). A computer retrieval was generated for the defined area around the MLF from the Maryland Department of the Environment, Division of Residential Sanitation for well applications processed from 1969 to 1989. The computer retrieval (D130 WMA1) is included as Appendix C. The well completion reports for the wells listed in the computer retrieval were requested from the Maryland Water Resources Administration in Annapolis, Maryland. These reports are also included in Appendix C. The reports show the location of the wells, well depths, screen type, productivity, materials encountered, and water level. Wells drilled prior to 1969 were not inventoried, since it is believed that most, if not all, of the wells older than 20 years have deteriorated and been replaced by newer wells. This belief is supported by the well completion reports (i.e., a number of the well completion reports also contained well abandonment reports).

Figure 8 shows the MLF site boundary, Maryland State coordinate system grid blocks (1000 ft by 1000ft (300 m by 300 m)) within 0.5 mile (0.8 km) of the site, grid blocks in which wells were detected by the well inventory, ground-water potentiometric contours, and ground-water flow direction.

3. GEOTECHNICAL INVESTIGATION

3.1 Introduction

This section presents the results of the geotechnical investigation performed for the Millersville Landfill (MLF) site as part of the Phase II Permit Modification Application for Refuse Disposal Permit Number 86-02-04-06A. This section complies with COMAR 26.04.07.07.C(11).

3.2 Purpose and Scope

An investigation and evaluation of subsurface soils was conducted during 1989 to provide information necessary for landfill redesign. Information was required for evaluation of borrow soil, foundation stability, and ground-water levels. The 1989 geotechnical investigation was conducted to supplement already available information from previous investigations at the site. The scope of the 1989 investigation included:

- reviewing existing surface and subsurface data;
- drilling 12 new soil borings and collecting disturbed (i.e., jar) samples;
- conducting standard penetration tests (SPTs);
- classifying soils on site;
- installing ground-water monitoring wells;
- conducting laboratory tests on representative soil samples;

- evaluating the resulting data; and
- preparing this section of the report.

3.3 Subsurface Investigation

3.3.1 Existing Soil Borings

Forty-five soil borings were performed prior to 1989 at the MLF site for previous design activities and filings of previous permit applications. The information from these borings was used during the geotechnical and hydrogeological evaluations performed for this Phase II Report.

3.3.2 New Soil Borings

Twelve new soil borings were performed during 1989 as part of the preparation of this permit modification application. Boring locations are shown in Drawing II-16; boring logs are included in Appendix D. The twelve new soil borings were required to better define subsurface conditions, to confirm the results of the previous subsurface investigations, and to install new ground-water monitoring wells. The soil borings were advanced by the hollow-stem auger (HSA) method according to ASTM D1452 *Standard Practice for Soil Investigation and Sampling by Auger Borings*. One borehole, G3, was advanced by the rotary-wash method and was advanced deeper than the other borings (to a depth of 180 ft (55 m)).

Field investigation, sampling, classification, and shipping were performed in general accordance with the following ASTM standards:

- ASTM D420 Standard Guide for Investigating and Sampling Soil and Rock;
- ASTM D1452 Standard Practice for Soil Investigating and Sampling Soil by Auger Borings;
- ASTM D1586 Standard Method for Penetration Test and Split-Barrel Sampling of Soils;
- ASTM D2488 Standard Practice for Description and Identification of Soils (Visual-Manual Procedure); and
- ASTM D4220 Standard Practice for Preserving and Transporting Soil Samples.

All soil borings were logged in the field by a GeoServices' geotechnical engineer. Disturbed soil samples were collected in each boring at nominal 5 ft (1.5 m) intervals. A split-spoon sampler was used to obtain disturbed samples in conjunction with the standard penetration test (SPT). SPTs were conducted in accordance with procedures outlined in ASTM Standard D1586. The SPT uses a 140 lb (620 N) hammer falling a distance of 30 in. (76 cm) to drive a standard 2-in. (5-cm) outside diameter split-spoon sampler a distance of 18 in. (46 cm). Blows per 6 in. (15 cm) increment are recorded for each sample. The standard penetration resistance, N, is the sum of the blows from the second and third 6 in. (15 cm) increments. N values are used to characterize the engineering properties of in-situ materials.

Soil samples were obtained from the split-spoon sampler and stored in jars marked with the project number, boring number, sample number, and sample depth. The samples were shipped to GeoServices' Geomechanics and Environmental Laboratory in Norcross, Georgia for testing and storage.

The soil samples were classified in the field according to ASTM D2488. The approach and format for the field classifications conform, in most respects, to ASTM D2487. Engineering properties of the soil samples were estimated based on N-values and soil classifications. Soil sample intervals and classifications are shown in the soil boring logs presented in Appendix D.

A horizontal and vertical survey was performed to accurately locate the soil borings by Greenhorne and O'Mara, Inc. in August 1989.

3.4 Laboratory Testing

Laboratory testing was performed by GeoServices on selected disturbed soil samples obtained from the 1989 soil borings. The purpose of the testing program was to classify subsurface soils to aid in estimating their engineering properties. Laboratory test results were also used to verify the results of the visual field classification.

The laboratory testing program consisted of the following tests:

- ASTM D422 Particle Size Analysis of Soils
- ASTM D2216 Laboratory Determination of Water Content of Soil, Rock, and Soil-Aggregate Mixtures
- ASTM D2487 Standard Test Method for Classification of Soils for Engineering Purposes; and
- ASTM D4318 Liquid Limit, Plastic Limit, and Plasticity Index of Soils (Atterberg Limits).

A summary of results of the laboratory tests performed is presented in Table 7. Soil grain size distribution curves are presented in Appendix E.

3.5 Geotechnical Characterization

For the purposes of geotechnical analyses and evaluation, three cross sections were cut through the site in the vicinity of proposed Cells 8 and 9. A plan view showing where the cross sections were cut is shown in Drawing II-16 and the cross sections are shown in Drawings 11-17, II-18, and II-19. USCS soil classification and N values are shown in the cross-sections. The USCS soil classification symbols noted in these drawings include parentheses (i.e., (SM)) when based on visual field identification and are without parentheses (i.e., SM) when based on laboratory test results.

The subsurface soils generally consist of interlayered poorly-graded sands and low-plasticity silts and clays with each layer in the range of tens of feet to hundreds of feet thick. An idealized soil profile is shown in Figure 9. This soil profile was derived from two sources: soil boring G3 drilled to a depth of 180 ft (55 m); and the Nevamar soil boring as reported in Mack and Achmad [1986] (see Figure 7).

The following section of this report (Section 4) presents the geotechnical engineering and lining system evaluations required by COMAR 26.04.07.07.(11) and (12). The evaluations are based, in part, on the information collected during the geotechnical investigation described in this section of the Phase II Report, as well as all information previously collected at the site.

4. CONCEPTUAL LANDFILL REDESIGN

4.1 Introduction

This section presents the conceptual landfill redesign for Cells 8 and 9 at MLF. The elements of the redesign covered in this Phase II Report include:

- design of new Cells 8 and 9 incorporating a double-liner system with a leachate collection layer above the top geomembrane liner and a leakage detection layer between the top and bottom geomembrane liners;

- design of a final cover system for Cells 8 and 9; the cover system incorporates a geomembrane cap overlain by a drainage layer; and

- design of a leachate collection system.

This redesign plan does not cover activities related to relocation, regrading, and closure of existing Cells 1 to 7, as discussed in Section 1 of this report (i.e., it does not cover the interim waste disposal activities described in the 2 October 1989 "Compliance Activities Schedule for Millersville Landfill" submitted by AAC to MDE).

New lined landfill Cells 8 and 9 will be constructed within the general footprints of old Cells 8, 9, and 10, currently defined by the existing permit drawings. New Cell 8 (old Cell 8) will occupy approximately 60 acres (24 hectares) and its projected life is approximately five years. The cell will be divided into eight lined subcells with base elevations ranging from about 110 to 140 ft (34 to

43 m) above sea level datum. The final cover elevation will to be no higher than elevation 300 ft (91 m) sea level datum.

New Cell 9 (old Cells 9 and 10) will occupy approximately 100 (40 hectares) acres and its projected life is approximately eight to ten years. The base and final cover elevations for Cell 9 will be approximately the same as those for Cell 8.

This section of the Phase II Report is organized as follows:

- proposed cell layout and filling sequence (Section 4.2);
- access roads and site drainage (Section 4.3);
- preliminary landfill liner system and cover system (Section 4.4);
- preliminary foundation settlement (Section 4.5);
- landfill stability analyses (Section 4.6);
- liner properties (Section 4.7);
- leachate head on the top liner (Section 4.8);
- liner system permeability (Section 4.9);
- liner system resistance to chemical attack (Section 4.10);
- properties of leachate collection and leakage detection system materials (Section 4.11); and
- resistance of drainage layers to clogging (Section 4.12).

4.2 Proposed Cell Layout and Filling Sequence

The proposed cell and subcell layouts for Cells 8 and 9 are shown in Drawing II-22. Cell 8 will be divided into eight subcells, each with an approximate area of 7.5 acres (3.0 hectares). Cell 9 will be divided into about 12 subcells, each with an approximate area of 8 acres (3.2 hectares). Leachate collection sumps and pumps will be located in each subcell as shown in Drawing II-22.

Cell 8 will be the first of the newly constructed cells and will be developed from east to west. The first two subcells will have an available landfill airspace that will allow approximately 6 months of landfilling at projected waste hauling rates (1,200 tons per day). The next two subcells will add approximately 18 months capacity, for a combined capacity in the first four subcells of approximately two years. The entire cell is estimated to have an active life of approximately five years and a total volume of approximately 5 million yd^3 (4 million m^3), including volume for daily cover.

Cell 9 will be developed after Cell 8 is completed, and will also be developed from east to west. Cell 9 has an estimated active life of eight to ten years, and a total volume, including daily cover, of approximately 8 to 10 million yd^3 (6 to 8 million m^3).

4.3 Access Roads and Site Drainage

A perimeter access road will be constructed around Cell 8 to connect it with the existing main access road. The new road will provide access for construction traffic, waste hauling trucks, operations and maintenance equipment, as well as access to the leachate sumps that will be located around the perimeter of the cell. After Cell 8 is filled, an access road will be constructed along the northern edge of Cell 9 to connect it with the existing main access road. It will not be necessary to construct an access road entirely around Cell 9 since leachate sumps will be located only along the northern edge. Subcell access (in Cell 9) for landfilling will occur from the access road to the north.

Perimeter berms and surface-water drainage ditches will be constructed around the entire perimeter of both new cells. The berms and ditches will be constructed in a phased manner, in conjunction with the phased

development of the landfill subcells. The berms and drainage ditches will prevent both run-on to active construction areas (or operating subcells) and run-off from active construction areas (or operating subcells). The perimeter drainage ditches will also serve to collect run-off from landfill cover slopes.

A conceptual sedimentation basin layout is shown in Drawing II-23. Perimeter drainage ditches will drain into the sedimentation basins. Run-off will be impounded in the sedimentation basins so that suspended sediment can settle out before the impounded water discharges on-site into Wells Branch. At this preliminary design stage, four sedimentation basins are planned for development of Cells 8 and 9.

Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps for Anne Arundel County, Maryland, dated May, 1983, were reviewed to locate 100-year flood plains at MLF. It was found that no 100-year flood plains are present at the site. The nearest 100-year flood plain is about one-half mile north and one-mile east of the site boundary along the Severn Run.

4.4 Preliminary Landfill Liner System and Cover System

Preliminary landfill liner system and cover system details are shown in Drawing II-24. The proposed liner system significantly exceeds the requirements of COMAR 24.04.07.07.C(12)(a)(i), (ii), and (12)(c), and provides an extremely high level of leachate containment. The double-liner system will be installed to cover all earth that could potentially be in contact with waste or leachate (as required by COMAR 26.04.07.07.C(12)(a)(iv)) and will have a minimum slope of 2% or more (as required by COMAR 26.04.07.07.C(12)(a)(v)).

The double-liner system proposed for MLF will consist of the following components (from top to bottom):

- 2-ft (0.6-m) thick protective soil cover layer;
- 10 oz/yd^2 (140 g/m^2) nonwoven geotextile filter layer;
- leachate collection system consisting of a layer of high density polyethylene (HDPE) geonet, a system of perforated collector pipes and sumps;
- 60-mil (1.5 mm) thick HDPE geomembrane top liner;
- leakage detection system consisting of a layer of HDPE geonet, a system of geonet collector swales, and sumps; and
- 60-mil (1.5 mm) thick HDPE geomembrane bottom liner.

The liner system will be placed over an 18-in. (0.45-m) thick recompacted subbase having a hydraulic conductivity no greater than 1 x 10^{-5} cm/s. This subbase thickness is less than the 24 in. (0.6 m) required by COMAR 26.04.07.07.C(12)(a)(ii), however, as allowed by this regulation, a demonstration will be provided in the Phase III Permit Modification Application showing that the proposed double-liner system provides a level of protection to public health and the environment in excess of the requirements of COMAR 26.04.07.07. and, therefore, that the proposed design is acceptable.

The liner system will be located a minimum of 3 ft (1 m) above the composite high water table in accordance with COMAR 26.04.07.07. C(12)(b)(i). The highest predicted ground-water table is shown in Drawing II-24.

The proposed cover system for MLF is composed of the following components (from top to bottom):

- 2-ft (0.6-m) thick cover soil layer (includes top soil);
- 10 oz/yd^2 (140 g/m^2) nonwoven geotextile filter layer;
- HDPE geonet drainage layer;
- nonwoven geotextile layer; and
- 40-mil (1.0 mm) thick textured HDPE geomembrane cap.

The cover system will be placed over a of 2-ft (0.6-m) thick final soil cover (measured from the final compacted waste lift).

4.5 Foundation Settlement

4.5.1 Introduction

Foundation settlement analyses were performed to evaluate whether the foundation soils were capable of providing adequate support to the lining system, as required by COMAR 26.04.07.07.C(12)(a)(iii).

4.5.2 Settlement Analyses

An idealized soil profile for the site is presented in Figure 9. It may be seen that the subsurface soils are generally composed of relatively thick layers (tens to hundreds of feet) of poorly-graded sands and low-plasticity silts and clays. Two components of settlement were considered:

- elastic compression of the sand; and
- consolidation of the silt and clay.

Elastic compression was estimated for the top 30 ft (10 m) of sand below the cell floor. Settlement analyses and procedures are presented in Appendix F. Boring G8 indicated average N values of about 25 to a depth of about 30 ft (10 m) below the cell floor; all other borings indicated N values below the cell floor in the range of from 50 to more than 100. N values of 25 indicate medium dense soil and N values over 50 indicate very dense soil. It was considered that elastic compression of the sand layers deeper than 30 ft below the cell floor would be negligible since N values ranged from about 50 to greater than 100 in that depth range.

Consolidation settlements in the two clay layers below the site were calculated using standard geotechnical analysis techniques. Settlement analyses and procedures are presented in Appendix F. Soil properties used in the analyses were estimated from field descriptions, field testing including N values, and laboratory index tests.

4.5.3 Results

Total elastic compression and consolidation settlements were calculated to be less than 1 ft (0.3 m) in the center of Cell 8 (See Appendix F). A similar value of settlement is anticipated for Cell 9 (less settlement may actually occur for Cell 9 since the proposed excavation is deeper). This magnitude of settlement will introduce negligible changes in the slope of the base of a cell for a cell width of about 1,200 ft (400 m). Thus, cell drainage will not be adversely affected by settlements. Furthermore, the settlements will induce negligible liner strains and have virtually no effect on landfill

components such as pipes, sumps, side slope risers, etc. Therefore, the requirement of COMAR 26.04.07.07.C(12)(a)(iii) is easily met.

4.6 Stability Analyses

4.6.1 Introduction

This section presents the results of stability analyses performed for Cells 8 and 9 at MLF. Stability analyses were conducted for several individual cases: the landfill excavation prior to placement of the liner system and waste; the liner system placed on the excavated side slopes; the municipal solid waste (MSW) slopes; the cover system; and the entire landfill after final closure. Stability analyses of the landfill foundation after final closure were not deemed necessary at this preliminary design stage, given the medium dense to very dense nature of the foundation soils. The foundation of the landfill should be stable.

The organization of this section is as follows:

- Section 4.6.2 presents a discussion of the cell geometry, liner system cross section, and cover system cross section that were considered for the stability analyses;

- Section 4.6.3 presents a discussion of the material properties of the in situ soils, liner system components, and cover system components that were selected for the stability analyses;

- Section 4.6.4 presents a discussion of the methods used to evaluate stability; and

- Section 4.6.5 presents the results and conclusions of the stability analyses.

4.6.2 Description of Cells 8 and 9

4.6.2.1 Geometry

A plan view of proposed Cells 8 and 9 is shown in Drawing II-16. The base of the cells will have excavated side slopes with a maximum inclination of four horizontal to one vertical (4H:1V) and base slopes inclined between 2% and 4%. For preliminary stability analyses, the maximum height of the side slopes is estimated to be 65 ft (20 m).

The cover system side slopes will be inclined at approximately 3.7H:1V and will have a 15-ft (4.6-m) wide bench incorporated into the slope at every 25 ft (7.6 m) of vertical rise (i.e.: the average inclination of the side slopes and the benches will be 4H:1V). The cover system top slopes will have a minimum inclination of 6%.

For the stability analyses presented herein, it was assumed that the waste will be placed in lifts across an entire subcell and that the working face of the waste will be sloped at 3H:1V. The maximum height of the MSW is assumed to be 140 ft (43 m).

4.6.2.2 Liner System Cross Section

The preliminary liner system design is illustrated in Drawing II-24. The components of the lining system were described in Section 4.5.

4.6.2.3 Cover System Cross Section

The preliminary cover system design is illustrated in Drawing II-24. The components of the cover system were described in Section 4.5.

4.6.3 Material Properties

4.6.3.1 Insitu Soils

The results of the soil borings (see Appendix D) indicate that the soils underlying the base of the landfill are predominantly poorly graded sands and low plasticity silts and clays. For preliminary stability analyses, these soils were estimated to have a moist unit weight of 120 lb/ft^3 (19 kN/m^3) and an effective-stress friction angle of 26° (based on data in Lambe and Whitman [1969]). This friction angle is believed to be conservative (i.e., the actual friction angle should be larger than this value).

4.6.3.2 Municipal Solid Waste

The MSW was assumed to have an effective-stress friction angle of 25° and an effective-stress cohesion of zero. These shear strength parameters are believed to be conservative for compacted MSW,as discussed below.

A correlation between Standard Penetration Test (SPT) results and effective-stress friction angle has been established for granular soils [Peck et al., 1974]. Using this correlation and limited data from SPTs on MSW (from Sowers [1968], Frydman and Baker [1986], and GeoServices' project files), values of effective-stress friction angle ranging from 25° to 30° are obtained.

The values noted above are consistent with stable MSW slopes observed at existing landfills (i.e., waste slopes at 2H:1V or steeper). The drained strength of MSW from a landfill in Italy has been estimated by Pagotto and Rimoldi [1987] based on the results of plate load tests. From their results, they estimated an effective-stress friction angle of 22° and an effective-stress cohesion of 630 lb/ft^2 (30 kN/m^2).

Based on the foregoing values drawn from SPT and plate load test results, the assumed MSW shear strength parameters appear to be conservative. The unit weight of the combined MSW and daily cover was assumed to be 60 lb/ft^3 (9 kN/m^3). This unit weight is at the upper end of the range of values commonly assumed for stability analyses (i.e., 50 to 60 lb/ft^3 (8 to 9 kN/m^3)) and, therefore, should be conservative.

4.6.3.3 Liner System Components

The stability of the landfill liner system will be governed by the shear strength characteristics of the individual component interfaces. To evaluate stability, the weakest interface between the liner system components needs to be identified. The values of interface friction angle, δ, and interface adhesion, a, used for the stability analyses are as follows:

- protective soil cover/nonwoven geotextile, $\delta = 26°$, a = 0 [Martin et al., 1984];

- nonwoven geotextile/HDPE geonet, $\delta = 20°$, a = 0 [Williams and Luna, 1987];

- HDPE geonet/HDPE geomembrane, $\delta = 11°$, a = 20 psf (1kN/m^2) [Williams and Houlihan, 1986]; and

- HDPE geomembrane/compacted subbase, $\delta = 16°$, a = 0 [Martin et al., 1984; Koerner et al., 1986].

The properties of the protective soil cover must also be estimated to evaluate the stability of the liner system. For preliminary stability analyses, the protective soil cover is assumed to have an effective-stress

friction angle of 30°, effective-stress cohesion of zero, and moist unit weight of 120 lb/ft^3 (19 kN/m^3).

4.6.3.4 Cover System Components

The interface friction angles and interface adhesions of the cover system components used for the stability analyses are as follows:

- protective soil cover/nonwoven geotextile, δ = 26°, a = 0 [Martin et al., 1984];
- nonwoven geotextile/HDPE geonet, δ = 20°, a = 0 [Williams and Luna, 1987];
- HDPE geonet/nonwoven geotextile, δ = 20°, a = 0 [Williams and Luna, 1987];
- nonwoven geotextile/textured HDPE geomembrane, δ = 20°, a = 0 (GeoServices project files); and
- textured HDPE geomembrane/intermediate soil cover, δ = 20°, a = 0 [Koerner et al., 1986].

The properties of the soil cover must also be estimated to evaluate the stability of the cover system. For preliminary stability analyses, the soil cover is assumed to have an effective-stress friction angle of 30°, effective-stress cohesion of zero, and moist unit weight of 120 lb/ft^3 (19 kN/m^3).

4.6.4 Method of Analysis

The stability of the liner system before MSW placement and the stability of the cover system was evaluated using a classical two-part wedge analysis equation derived by GeoServices. For this analysis, the factor of safety is defined as the ratio of resisting forces and driving forces. The equation giving the factor of safety (FS) is given below:

$$FS = \frac{\dfrac{aH}{\sin\beta} + \dfrac{cT\cos\phi}{\sin\beta\,\cos(\phi+\beta)} + \dfrac{\gamma T^2\sin\phi}{\sin 2\beta\,\cos(\phi+\beta)} + \dfrac{\gamma T^2\tan\delta}{2\sin\beta} + \left(\dfrac{2H\cos\beta}{T} - 1\right)}{\gamma T\left(H - \dfrac{T}{2\cos\beta}\right)}$$

(Equation 1)

where: γ = cover soil unit weight (lb/ft^3 or kN/m^3);
c = cover soil cohesion (lb/ft^2 or kN/m^2);
ϕ = cover soil friction angle (degrees);
T = thickness of cover soil layer (ft or m);
a = interface adhesion (lb/ft^2 or kN/m^2);
δ = interface friction angle (degrees);
H = height of slope (ft or m); and
β = slope angle (degrees).

The stability of the excavated soil slopes, liner system after MSW placement, MSW working face slopes, and liner system after landfill closure was evaluated using the slope stability computer program PCSTABL5 developed at Purdue University [Carpenter, 1986]. The stability of the landfill was evaluated for circular failure surfaces using the modified

Bishop method of slices or non-circular, wedge-shape, failure surfaces using the simplified Janbu method of slices, as appropriate.

4.6.5 Results and Conclusions

The results of the landfill stability analyses are presented in Appendix G. The results of the foundation excavation stability analysis show that the excavated side slopes have a factor of safety of 2.0, which indicates that the landfill excavation should be stable.

The liner system has a minimum slope stability factor of safety of 1.3 for the time period after the protective soil cover is placed on the landfill side slopes but prior to placement of MSW against the slope. This factor of safety is adequate based on our experience. This factor of safety will increase to 1.4 or more as the MSW is placed against the liner system side slopes and across the subcell. Therefore, the preliminary analyses indicate that the liner system should be stable.

The 3H:1V slope of the landfill working face has a minimum factor of safety of 1.9 and, therefore, should be stable.

The cover system has a minimum factor of safety of 1.5 on the 3.7H:1V final landfill slopes, and, therefore, should be stable.

The landfill has a minimum factor of safety of 1.3 after placement of final cover. This factor of safety indicates that the landfill should be stable for long-term conditions.

4.7 Liner Properties

4.7.1 Introduction

This section of the Phase II Report is presented to demonstrate that the requirements of COMAR 26.04.07.07.C(12)(a)(i) and (ii) are satisfied. This section first addresses geomembrane thickness and then addresses: geomembrane resistance to tensile and concentrated stresses; effects of temperature; chemical resistance; and installation considerations.

4.7.2 Geomembrane Thickness

A 60 mil (1.5 mm) thick HDPE geomembrane is proposed for the top and bottom liners. The thickness of each of these geomembrane liners exceeds the requirement of COMAR 26.04.07.07.C(12)(a)(ii).

4.7.3 Resistance to Tensile Stresses

Geomembranes used in landfills are subjected to tensile stresses resulting from a variety of causes including: gravity stresses; settlement; thermal contraction; etc. Geomembranes must, therefore, be engineered to have adequate tensile behavior. Several aspects of tensile behavior should be considered, including tensile strength and elongation. These aspects are discussed below:

- *Tensile Strength.* Sixty-mil (1.5-mm) thick HDPE geomembranes typically exhibit tensile strengths of approximately 120 lb/in. (21 kN/m) at a uniaxial yield strain of 10%.

- *Elongation.* HDPE geomembranes exhibit yield at approximately 10% strain. Although, in many cases, HDPE geomembranes may elongate significantly beyond the yield point, there are other cases where they have failed shortly after the yield point [Giroud, 1984]. Therefore, the elongation at yield should be used as a maximum elongation when designing with HDPE geomembranes, and the design strength should be the strength at yield.

For MLF, the HDPE geomembranes will be designed for a maximum strain much less than their yield strain (i.e., a maximum design strain of less than 1%). Therefore, the resistance of the proposed HDPE geomembranes to tensile yield will be more than adequate.

4.7.4 Resistance to Concentrated Stresses

Geomembranes used in landfills are subjected to concentrated stresses when they are in contact with, or close proximity to, stones, aggregate, concrete irregularities, steel battens used for connections to appurtenances, etc. Geomembranes resistance to concentrated stresses can be evaluated using laboratory tests such as the grab, tear, puncture, and burst tests. Results of these tests depend on many parameters including: geomembrane tensile strength, geomembrane modulus, test speed, etc. Tests conducted in laboratories indicate that HDPE geomembranes have relatively high grab strength and tear resistance.

The geomembrane top liner will be in contact with a geonet layer on its top side and bottom side. The geomembrane bottom liner will be in contact with a geonet layer on its top side and compacted subgrade soil on its bottom side. It is anticipated that the compacted subgrade soil will be composed of on-site silty sand, clayey sand, or clayey silt which should be free of gravel particles. Therfore, neither the geonet nor the

subgrade soil will exert significant concentrated stresses on either the top or bottom geomembrane liner.

During construction, care will be exercised during soil placement adjacent to the geomembranes (i.e., the subgrade soil will be free of rocks and rolled smooth; the first lift of the protective soil cover will be at least 12 in. (0.3 m) thick and will be spread with a light ground-pressure dozer; construction equipment will not be allowed to drive on the geosynthetics), and a thorough construction quality assurance program will be implemented. The landfill operating plan will also require that special precautions be taken in placing the first lift of waste above the liner system. Therefore, damage to the geomembrane due to concentrated stresses is unlikely.

4.7.5 Effect of Temperature

HDPE geomembranes exhibit significant strength loss at high temperatures. For example, at 167°F (75°C), the yield strength of an HDPE geomembrane is 40% of the yield strength at 68°F (20°C) (from test results given in a Schlegel Lining Technology brochure), and the modulus is only 20% of the modulus at 68°F (20°C) [Turner, 1968].

The mechanical properties of HDPE geomembranes are very sensitive to high temperatures because the melting temperature of HDPE is rather low: 257 to 275°F (125 to 135°C). However, HDPE softening at high temperatures cannot be considered a drawback, because it is due to this characteristic that HDPE geomembranes are easily welded.

Temperatures on the order of 140°F (60°C) have been recorded in the middle of municipal waste landfills due to waste decomposition. At MLF, the presence of a 24-in. (0.6-m) thick protective soil cover layer will insulate the geomembrane liners from potentially high waste temperatures.

Therefore, temperature should not have any significant effect on the geomembranes.

4.7.6 Chemical Resistance

Since the late 1970s, extensive laboratory testing has been conducted to evaluate the chemical compatibility of several types of geomembranes with a variety of chemicals typically encountered in waste. Most of this work was sponsored by the U.S. Environmental Protection Agency (USEPA). A summary of these studies can be found in reports by Haxo et al. [1982] and Schwope et al. [1985].

The extensive testing that has taken place has shown that, among all materials tested, HDPE geomembranes have the highest degree of compatibility with almost all chemicals encountered in waste. As a result, in the past few years, there has been a tendency to automatically select HDPE geomembranes (or the closely related linear medium density polyethylene (LMDPE) geomembranes) for all liner systems used for hazardous waste containment. The use of HDPE geomembranes in the MLF liner system appears to be in agreement with the state of the art.

Specific information regarding the resistance of HDPE geomembranes to attack by municipal solid waste leachate is presented in Section 4.10.

4.7.7 Seaming

In our extensive construction quality assurance (CQA) experience, relatively thick HDPE geomembrane liners (i.e., 40 mils (1.0 mm) or greater) are required to ensure good seam quality. A 60 mil (1.5 mm) HDPE geomembrane liner can form high quality seams when constructed properly in the field. To ensure that the highest quality field seams are produced, continuous monitoring of all seaming operations will be conducted by trained, experienced construction quality assurance monitors.

In addition, 100% of all field seam will be field tested (using a vacuum box test or pressure test) as part of the liner installer's construction quality control activities.

4.7.8 Conclusions

Based on the considerations presented in this section, it is concluded that the top and bottom geomembrane liners will have the appropriate physical, chemical, mechanical, and thermal properties so as to perform as designed and be resistant to failure.

4.8 Leachate Head on the Top Liner

The leachate head above the top liner should be less than 1 ft (0.3 m), as required by COMAR 26.04.07.07.C(12)(c)(iii). This section presents calculations of the maximum leachate head above the top liner.

4.8.1 Leachate Head Calculations

The leachate head in the leachate collection system is a function of a number of parameters including: leachate impingement rate; hydraulic conductivity of the leachate collection system; and geometry of the leachate collection system. The design leachate impingement rate is taken conservatively as the rate corresponding to 25% infiltration from a 7-day storm with a 100-year recurrence interval. The 100-year, 7-day storm for Anne Arundel County, Maryland is 12 in. (30 cm) [U.S. Department of Commerce, 1964]. This highly conservative assumption of 25% infiltration will be refined in the Phase III report. However, this conservative, preliminary assumption is considered appropriate for the purpose of this Phase II report. Therefore, the design leachate impingement rate for calculation purposes is conservatively assumed to be $q_i = 1.3 \times 10^{-5}$ cm/s (1.3×10^{-7} m/s).

The minimum hydraulic conductivity of the geonet leachate collection system is estimated to be 5 cm/s (5×10^{-2} m/s), based on a review of the literature.

The most critical section of the leachate collection system is the one with a combination of flow path length and drainage slope resulting in the greatest leachate head. For preliminary design, the plan length of the flow path and the slope are considered to be 300 ft (91 m) and 4%, respectively. For this critical section, leachate heads can be calculated using Moore's equation [USEPA, 1983]:

$$h_{max} = L\ [q_i/k + \tan^2\beta)^{0.5} - \tan\beta] \qquad \text{(Equation 2)}$$

where: h_{max} = maximum leachate head above the primary liner (ft or m); L = plan length of the flow path in the leachate collection system (ft or m); q_i = design leachate impingement rate (cm/s or m/s); k = hydraulic conductivity of the geonet drainage layer (cm/s or m/s); and tan β = slope of the leachate collection system (dimensionless).

For L = 300 ft (91 m), $q_i = 1.3 \times 10^{-5}$ cm/s (1.3×10^{-7} m/s), k = 5 cm/s (0.05 m/s), and tan β = 0.04. Equation 2 gives: h_{max} = 0.01 ft (0.3 cm).

4.8.2 Conclusion

The calculated maximum leachate head is 0.01 ft (0.3 cm). Therefore, the leachate collection system will ensure that the leachate head on or above the top liner does not exceed 1 ft (0.3 m).

4.9 Liner System Permeability

4.9.1 Introduction

COMAR Section 26.04.07.07.C(12)(a)(ii) specifies that the liner system shall be constructed of "one or more unreinforced synthetic membranes with a combined thickness of 50 mil, ..., which has a permeability of less than or equal to 1×10^{-10} cm/sec". The proposed top and bottom liners are 60-mil (1.5-mm) thick high density polyethylene (HDPE) geomembranes. All polymers used to make geomembranes easily meet the maximum hydraulic conductivity requirement of 1×10^{-10} cm/s (1×10^{-12} m/s), as discussed below.

The following section first describes water vapor transmission tests (Section 4.9.2). The water vapor transmission test results are then used to calculate equivalent hydraulic conductivities of geomembranes (Section 4.9.3).

4.9.2 Water Vapor Transmission Tests

The rate of water permeation through geomembranes is typically evaluated using water vapor transmission tests.

Water vapor transmission tests have been used extensively on various types of membranes and the test procedures have been standardized (e.g., ASTM E96). In brief, the test is performed as follows: the two sides of a geomembrane specimen are subjected to two different relative humidities. Typically, one side is subjected to a 50% relative humidity while the other side is maintained at 0% relative humidity (using a desiccant) or 100% relative humidity (by having a very small head of water (at nearly zero pressure) in contact with the entire surface of the geomembrane

specimen. The relative humidity difference corresponds to a vapor pressure difference which drives vapor through the geomembrane.

The water vapor transmission rate (WVT) measured in the test is the mass of liquid permeating the geomembrane per unit area of geomembrane per unit period of time and is often reported in $g/m^2/day$. The water vapor transmission rate (WVT) depends on the vapor pressure used in the test. It also depends on the thickness of the geomembrane and therefore characterizes a given geomembrane (e.g., a 60 mil (1.5 mm) thick HDPE geomembrane).

Results from water vapor transmission tests are given in Tables 8 and 9 of this section.

4.9.3 Equivalent Hydraulic Conductivity

An equivalent hydraulic conductivity of a geomembrane can be derived from the water vapor transmission rate using the following equation established by Giroud [1984]:

$$k = \frac{g\ T\ (WVT)}{\Delta p} \qquad \text{(Equation 3)}$$

where: k = geomembrane equivalent hydraulic conductivity; g = acceleration of gravity; T = geomembrane thickness; WVT = water vapor transmission rate; and Δp = vapor pressure difference used in the test.

Equivalent hydraulic conductivities derived from water vapor transmission rates using the above equation are given in Tables 8 and 9. It appears that HDPE geomembranes have equivalent hydraulic conductivities of about 1×10^{-15} cm/s (1×10^{-17} m/s). Therefore, the requirement for a

hydraulic conductivity less than 1×10^{-10} cm/s (1×10^{-12} m/s) is met with a margin of about five orders of magnitude. It also appears that the equivalent hydraulic conductivity of HDPE geomembranes is smaller than that of any other available geomembrane.

4.9.4 Conclusion

The literature survey summarized in Tables 8 and 9 has shown that the HDPE geomembrane material selected for the top and bottom liners meets the permeability requirement of COMAR 26.04.07.07.C(12)(a)(ii) with a margin of more than five orders of magnitude. It also appears that of commercially available geomembrane materials, HDPE has the lowest hydraulic conductivity.

4.10 Liner System Resistance to Chemical Attack

4.10.1 Introduction

The liner system components proposed for Cells 8 and 9 of the MLF include:

- the HDPE geomembrane liners;
- the HDPE geonet drainage layers;
- the leachate collection and leachate detection pipes;
- the geotextile filter between the cover soil and the geonet leachate collection layer; and
- the materials used as the protective soil cover, subgrade soil, and pipe bedding aggregate.

This section presents a discussion on the resistance of the HDPE liner system components (i.e.: geomembranes and geonets) to chemical attack by municipal solid waste leachate. A discussion of the resistance of geotextiles and pipes to chemical attack is presented in Section 4.11.2. As part of the Phase III Permit Modification Application, final selection of all liner materials will be made, and the basis for the selection presented.

4.10.2 Background

HDPE is the most chemically inert material used to manufacture geomembranes and geonets for waste management applications [Haxo, et al., 1982; Schwope, et al., 1985]. The resistance of HDPE to many different chemical environments is well known. The inertness of HDPE is attributable to its molecular structure and morphology.

HDPE has a simple molecular structure, containing a six-member repeat unit consisting of two carbon and four hydrogen atoms. The hydrogen atoms are covalently bonded to the carbon atoms. Each carbon-hydrogen bond is equivalent and has the same bond energy. Most degradative reactions in hydrocarbons occur through displacement of a hydrogen atom. However, due to covalent bonding, hydrogen atoms on the HDPE repeat unit are stable; thus, HDPE is not significantly reactive under normal conditions.

HDPE, by virtue of its simple molecular structure, is a relatively linear polymer compared to other polymers such as polypropylene and polyester. This linearity enables close fitting between polymer chains and an orderly lattice structure that produces a relatively dense, semi-crystalline solid. The crystalline regions of the polymer have extremely low permeabilities, thereby minimizing penetration of chemicals into the material.

With HDPE geomembranes and geonets, carbon black is added to the polymer at percentages of about 2 to 3 percent to provide resistance to attack by ultra-violet (UV) light. Antioxidants are added at percentages of less than 0.5 percent to reduce the potential for HDPE oxidation. The antioxidants are physically bound into the polymer by their long chain molecular side groups, thereby precluding their migration out of the polymer matrix. HDPE geomembranes and geonets do not contain plasticizers, thus migration of plasticizers out of the polymer is not a factor.

4.10.3 Resistance To Long-Term Degradation

Testing sponsored by the United States Environmental Protection Agency (USEPA) has shown that among all commercially available synthetic waste management products, HDPE has the highest resistance to attack by almost all chemicals potentially encountered in municipal or hazardous solid waste landfills [Haxo, et al., 1982; Schwope et al., 1985]. There are only two degradative processes which may affect the performance of HDPE geomembranes and geonets in the long term. These are plasticization and oxidation.

Plasticization occurs when a polymer is exposed to a significant concentration of solvent which penetrates the surface of the polymer in large enough quantities to partially dissolve it. As a result, the polymer's strength and resistance to stress cracking are reduced. For HDPE geomembranes and geonets, this is rarely observed to a significant extent, since the vast majority of landfill leachates contain negligible concentrations of such solvents.

Oxidation is a process by which thermal excitation, UV excitation, or oxy acid chain scission (breaking) causes the breakage of carbon-hydrogen bonds. These broken bonds represent highly reactive radicals that readily combine with oxygen. Oxidized HDPE exhibits inferior mechanical properties compared to unoxodized HDPE. An environment conducive to oxidation of HDPE requires both a means to break the carbon-hydrogen bond (i.e., high temperature, sunlight, or high concentrations of metal ions or oxy acids) and a continuous supply of oxygen.

Current research indicates that temperatures in excess of 572°F (300°C) are required to cause significant oxidation of stabilized HDPE geomembranes or geonets. Under prolonged exposure, HDPE may oxidize at a very slow rate at temperatures as low as 212°F (100°C). Municipal solid waste (MSW) landfills develop elevated temperatures but not of this magnitude. Thus, oxidation of HDPE geomembranes or geonets due to temperatures occurring in MSW landfills is unlikely.

Ultra-violet light (UV) induced oxidation will not be a problem at the Millersville landfill because the geomembranes and geonets will not be exposed to sunlight for extended periods after they are installed. High concentrations of metal ions or oxy acids may also catalyze the oxidative process at elevated temperatures. However, the concentrations of these constituents in MSW leachates are usually very low and do not create a significant potential for oxidation of HDPE geomembranes or geonets, particularly those stabilized with antioxidant packages (all four major U.S. manufacturers use stabilizing packages).

On the basis of the foregoing, degradation of the geomembranes or geonets in the liner system of the MLF should not occur.

4.10.4 Laboratory Compatibility Testing of HDPE Geomembranes and Geonets

The approach to establishing the resistance of HDPE geonets to chemical attack by MSW landfill leachate is to carry out chemical compatibility testing. Chemical compatibility tests were carried out by Gundle Lining Systems, Inc. (Gundle) on several of its HDPE geomembrane and geonet products. [Gundle, 1985; Gundle, 1986a; Gundle, 1986b; Gundle 1986c]. Appropriate data is presented in Appendix H and the results of these tests are summarized below.

Laboratory reports #690A, 690B, and 690C indicate no significant physical property changes in Gundle's G-2 HDPE geonet during 90 days of immersion in a laboratory- prepared leachate. The leachate was maintained at a constant temperature of 73°F (23°C) throughout the duration of testing. Unfortunately, no data is available on the composition of the leachate.

Laboratory reports #690B, 690C, 690D, and 690E indicate no significant physical property changes in Gundle's 60 mil (1.5 mm) HDPE geomembrane during 90 days of immersion at 73°F (23°C) in a leachate predominantly composed of low concentrations of organic and metallic constituents. Laboratory report #1327, and 1327C indicate no significant changes in the same HDPE geomembrane after 120 days of immersion in a typical landfill leachate at 122°F (50°C). Again, no data is available on the composition of the leachate.

Laboratory reports 1370, 1370C, 1525, 1525A, and 1525B present the results of compatibility testing of Gundle's HDPE geomembrane immersed in two other MSW leachates for 120 days at both 73°F (23°C) and 122°F (50°C). The reports indicate no significant changes in the physical properties of the HDPE geomembrane.

4.10.5 Conclusions

Available chemical compatibility test data involving MSW leachates and HDPE geomembranes and geonets indicate no significant changes in material properties due to exposure. The HDPE geomembranes and geonets specified for MLF should not be adversely affected by exposure to landfill leachate.

4.11 Properties of Leachate Collection and Leakage Detection System Materials

4.11.1 Introduction

COMAR Section 26.04.07.07.C(12)(c)(i) specifies that the leachate collection and removal system shall be constructed of "materials that are chemically resistant to the waste managed in the landfill and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by the overlying wastes, waste cover materials, and by any equipment used at the landfill". Components of the MLF leachate collection system and leachate detection system are geotextiles, geonets, leachate collection and leakage detection pipes, and pipe bedding aggregate. This section addresses the resistance to chemical attack and physical and mechanical properties of the geotextiles, geonets, and pipes. The pipe bedding aggregate will be selected to function over the design life of the landfill without failure. The properties of the pipe bedding aggregate will be addressed in the Phase III Permit Modification Application.

4.11.2 Chemical Resistance

Geotextiles. The geotextiles considered for MLF will be made of either polypropylene or polyester. These polymers have good resistance

to attack by a wide range of chemicals. For this reason, these materials have been extensively used in leachate collection and leachate detection systems of hazardous waste and municipal solid waste (MSW) landfills. Inorganic constituents present in the MSW leachate will have no significant effect on either polyester or polypropylene. Organic constituents, on the other hand, can affect polyester and polypropylene if they are present in concentrations of 10 percent or more [Schwope et al., 1985]. The concentrations of the organic constituents detected in MSW leachate are typically very low. As a result of the very low concentrations of organic constituents, it is unlikely that the leachate will have a detectable effect on either polypropylene or polyester, even after a long period of exposure. Therefore, it can be concluded that polypropylene and polyester geotextiles have adequate resistance to chemical attack by leachate from MLF.

Geonets. The geonets specified for the MLF are manufactured from high density polyethylene (HDPE). This same polymer is used to manufacture the geomembranes specified for the MLF top and bottom liners. The ability of HDPE to resist chemical attack by MSW leachate was discussed in Section 4.10. HDPE was shown to have good resistance to attack from a wide range of chemicals. It may be concluded, therefore, that HDPE geonets should have adequate chemical resistance to attack by leachate from the MLF.

Pipes. The pipes to be used in the leachate collection system and leakage detection system of MLF will be made of either HDPE or unplasticized polyvinyl chloride (UPVC). As discussed in Section 4.10, HDPE has good resistance to attack from a wide range of chemicals. It may be concluded that HDPE pipes should have adequate chemical resistance to attack by MLF leachate.

UPVC pipes do not have any plasticizers which may leach out of the material in the presence of heat and/or certain chemicals. Organic

constituents may affect UPVC if they are present in high concentrations (10 percent or more) [Schwope et al., 1985]. As mentioned previously, concentrations of organic constituents in MSW leachates are typically very low. Therefore, it is unlikely that the organic constituents MLF leachate will have a detectable effect on UPVC even after a long period of exposure. It can be concluded that UPVC pipes are anticipated to have adequate resistance to chemical attack by MLF leachate.

4.11.3 Physical and Mechanical Properties

Geotextiles. The mechanical properties of the geotextiles will be selected based upon survivability (the ability to withstand stresses exerted by construction equipment during installation) and durability (the ability to withstand stresses applied during the landfill design life and post-closure care period) considerations. These mechanical properties, including grab strength, puncture strength, and tear strength, will be obtained from the Federal Highway Administration Geotextile Engineering Manual [Christopher and Holtz, 1984]. If the material specifications are adhered to, and proper construction quality assurance monitoring is implemented, the geotextiles should function properly throughout the active life and post-closure care period of the landfill.

Geonets. For landfill drainage applications, thick and relatively incompressible geonets are required to provide adequate flow capacity. These requirements will be considered in selecting the geonet physical properties.

The most important mechanical property to consider when geonets are used in drainage applications is compressibility. A geonet must be relatively incompressible so that its channels remain open under the high compressive stresses resulting from the weight of the overlying wastes waste cover materials, and equipment. A decrease in geonet thickness

results in decreased flow capacity. To account for compressive stress, the geonet hydraulic transmissivity will be established at a compressive stress equal to 1.5 times the maximum compressive stress the geonet will be subjected to in the field. This should ensure that geonets used at the MLF have adequate mechanical properties to function as drainage layers during the design life of the facility.

The tensile strength of geonets is usually not an important mechanical property in landfill design. Geonets must have sufficient tensile strength to remain stable on slopes during construction. Because geonet tensile strengths are relatively low, they are usually assumed to be zero in the portion of the design related to the stability of the lining system of the landfill side slopes. The tensile strengths of geonets have been measured in the laboratory using constant-rate-of-strain tensile tests at strain rates on the order of 2 percent per minute and at temperatures in the range of 68°F (20°C). Under these conditions, geonet tensile strengths range from 12 lb/in. (2 kN/m) to 72 lb/in. (12 kN/m). The geonet machine-direction strength is usually 50 to 100 percent larger than the cross-machine direction strength. Geonets can undergo large elongations without breaking. In the tensile tests described above, elongations at break were in the range of 40 to 100 percent. Geonet stress-strain curves from tensile tests exhibit a shape characteristic of ductile materials (i.e., the peak strength is equal to the ultimate strength and there is no strain softening). The ductile stress-strain behavior of geonets is advantageous from a design standpoint, as it allows the geonet to undergo large deformations without breaking.

Pipes: The pipes at MLF will be designed to be structurally stable under the maximum anticipated stress. Structural stability is typically evaluated by comparing three types of maximum anticipated pipe deformations to allowable pipe deformation. The three types of deformation are: (i) ring deflection; (ii) ring compression (wall

crushing); and (iii) longitudinal (beam) flexure. Each of these types of deformation will be considered in the detailed design carried out for the Phase III Permit Modification Application.

4.11.4 Conclusions

The geotextile filter layers, geonet drainage layers and pipes for MLF will be selected based on their resistance to chemical attack by MSW leachate, and their physical and mechanical properties. These properties have been described in this section. The considerations presented in this section indicate that the properties of the geotextiles, geonets, and pipes are adequate to perform their required functions at the Millersville landfill.

4.12 Resistance of Drainage Layers to Clogging

This section presents a discussion of the ability of leachate collection systems and leachate detection systems constructed with geonet drainage layers to function without clogging. Clogging is defined as the physical build-up of material in any of the components of the leachate collection system or leachate detection system to the extent that leachate flow is significantly restricted. Clogging can be caused by physical, chemical, biochemical, and biological mechanisms [Bass, et al., 1984 and Bass, 1985]. Each of these mechanisms is addressed below.

4.12.1 Physical Mechanisms of Clogging

The most common form of clogging within any landfill drainage system is physical clogging. Physical mechanisms that may lead to clogging of leachate drainage layers include inadequate flow capacity, structural failure, and sedimentation [Bass, 1985]. Inadequate capacity and structural failure specifically related to the leachate collection pipe

system is not discussed here. Sedimentation is the build-up of solid materials in a pipe, geonet drainage layer, or geotextile filter layer. Clogging by sedimentation requires both a source of solids and a mechanism by which the solids can settle out. Such a mechanism occurs at transition zones within the drainage system. A critical transition zone occurs within leachate collection systems at the junctions of the cover soil, geotextile filter layer, and geonet drainage layer.

The role of the geotextile filter is to prevent migration of cover soil particles into the geonet drainage layer. When properly designed, the geotextile filter should protect the geonet drainage layer from the build-up of potentially clogging sediment. The geotextile filter between the cover soil and the drainage layer must perform several functions: (i) the geotextile must retain the particles of soil (which implies that the size of its openings cannot exceed a maximum value); (ii) the geotextile must be permeable enough to allow free flow of leachate into the drainage layer (which implies that the size of its openings must be larger than a minimum value); and (iii) the geotextile must not clog during the design life of the facility (which implies that the porosity of the geotextile must be larger than a minimum value, i.e., it must have a large number of openings). Retention, permeability, and clogging criteria for geotextile filters have been presented in the Federal Highway Administration Geotextile Engineering Manual [Christopher and Holtz, 1984] and by Giroud [1982].

A geotextile filter layer must also be designed to withstand the stresses induced by cover soil placement such that the geotextile will not tear or puncture. Breaches in the geotextile will allow potentially clogging sediment to enter into the geonet drainage layer. Therefore, the geotextile must exhibit adequate survivability properties. The mechanical properties to be specified for survivability include grab strength, puncture strength, and tear strength.

4.12.2 Chemical Mechanisms of Clogging

Chemical mechanisms for clogging involve the formation of insoluble precipitates due to chemical reactions. Chemical reactions include precipitation of calcium carbonate, manganese carbonate, and other insoluble forms (such as sulfides and silicates). Studies sponsored by the U.S. Environmental Protection Agency (USEPA) concluded that even though chemical precipitates can form in landfill drainage systems, clogging of the systems as a result of chemical precipitation is unlikely [Bass et al., 1984; Bass, 1985]. Therefore, chemical clogging of the leachate collection system or leachate detection system of the Millersville landfill is not expected.

4.12.3 Biochemical Mechanisms of Clogging

Biochemical mechanisms that may lead to clogging involve the build-up of chemical and/or biological precipitates due to biological activity in a drainage system. Studies sponsored by USEPA indicate that no cases of biochemical clogging have ever been reported for the conventional leachate drainage systems of the municipal waste landfills investigated [Bass, 1985]. Therefore, biochemical clogging of the leachate collection system or leachate detection system of the Millersville landfill is not expected.

4.12.4 Biological Mechanisms of Clogging

Biological clogging occurs when organism growth fills the pipe or interstices of the drainage or filter layers and interferes with normal system flow. Little is know about biological clogging of drainage systems constructed with either geonet drainage layers or granular drainage layers. Intuitively, the concern may be larger for drainage systems

constructed with geonets due to their lack of thickness. On the other hand, the relatively large porosity, hydraulic conductivity, and leachate flow velocities in geonets may be perceived as advantages for the following reasons:

- geonet drainage materials have virtually zero capillary tension and hence, a low fluid storage capacity which will help curtail biological growth;

- the relatively high flow velocities in geonets should help keep geonet drainage systems flushed; and

- the large flow channels reduce the probability of flow channel blockage.

In addition, the leachate and leakage collection pipes will be constructed with cleanouts that will enable periodic pipe flushing. Flushing should virtually eliminate the potential for biological growth and associated clogging of the pipes. On the basis of the foregoing information, biological clogging of the leachate collection system or leakage detection system of MLF is not a concern.

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TABLES

Table 1 - Ground-Water Quality Parameters Analyzed by Maryland Department of Environment

pH	Mercury
Total alkalinity	Selenium
Hardness	Copper
Ammonia-N	Iron
Nitrite-N	Magnesium
Nitrate-N	Manganese
Chloride	Nickel
Turbidity	Potassium
Specific Conductance	Sodium
Sulfate	Zinc
Total Residue	COD
Arsenic	TKN
Barium	Cyanide
Cadmium	Volatile organics
Chromium	Calcium
Lead	

Table 2 - Summary of Average Monitoring Parameter Values for Test Wells 1 - 16, 1975 - 1988

TEST WELL	pH (--)	Nitrate (ppm)	Chloride (ppm)	Spec Cond (umhos/cm)	Arsenic (ppm)	Barium (ppm)	Cadmium (ppm)	Chromium (ppm)	Lead (ppm)	Mercury (ppm)	Selenium (ppm)	COD (ppm)
1	9.9	0.3	2.6	279	0	0	0.001	0.01	0.02	0.001	0	7
2	6.2	0	4.3	22	0	0	0.001	0.02	0	0	0	6
2A	7.1	0	5.2	47	0	0	0.142	0	0.01	0	0	7
3	6.8	0	3.1	42	0	0	0	0.01	0.04	0	0	4
3A	6.3	0	17.1	86	0	0	0	0	0.01	0	0	3
4	6.9	0	3.5	---	---	---	0	0	0	0	---	4
5	6.6	0	1.1	73	0	0	0	0	0	0	0	6
5A	6.4	0	1.8	38	0	0	0	0	0.01	0	0	8
6	6.0	0	1.9	21	0	0	0	0.01	0.04	0	0	3
6A	6.2	0	5.9	72	0	0	0.002	0	0	0	0	4
7	7.9	0	2.9	118	0	0	0	0.01	0.05	0	0	5
8	6.2	0	3.8	45	0	0	0	0.02	0.02	0	0	5
9	6.5	0	1.1	41	0	0	0	0	0.03	0	0	9
10	6.7	0.3	3.3	72	---	---	0	0.01	0.09	0	0	1
11	6.8	0	6.2	92	0	0	0	0.02	0.26	0	0	5
12	6.4	0	2.8	30	0	0	0	0	0.01	0	0	8
12A	5.9	0	2.3	32	---	---	0	0.01	0.03	0	---	0
13	6.1	0	3.3	30	0	0	0.001	0.01	0.01	0	0	5
13A	6.9	0	1.1	116	---	---	0	0.27	0.30	0.400	---	5
14	6.3	0	1.4	25	0	0	0.001	0	0.04	0	0	5
14A	6.0	0	2.2	25	0	0	0.001	0	0.01	0	0	9
15	6.2	0	3.0	25	0	0	0.001	0.01	0	0	0	3
16	5.7	0	36.1	345	0	0	0.002	0.10	0.13	0	0	18

Table 3 - Summary of Maximum Monitoring Parameter Values for Test Wells 1 - 16, 1975 - 1988

TEST WELL	pH (--)	Nitrate (ppm)	Chloride (ppm)	Spec Cond (umhos/cm)	Arsenic (ppm)	Barium (ppm)	Cadmium (ppm)	Chromium (ppm)	Lead (ppm)	Mercury (ppm)	Selenium (ppm)	COD (ppm)
1	11.9	1.9	7	975	0	0	0.004	0.10	0.08	0.004	0	45
2	9.0	0.2	57	56	0	0	0.004	0.12	0.02	0.003	0	39
2A	9.0	0.2	54	80	0	0	1.420	0	0.03	0	0	36
3	9.1	0	49	57	0	0	0.001	0.08	0.27	0	0	32
3A	8.9	0.2	68	248	0	0	0.003	0.01	0.02	0	0	29
4	7.6	0	4.1	---	---	---	0	0	0	0	---	7
5	7.3	0	5	592	0	0	0.001	0.03	0.02	0	0	44
5A	6.9	0	5	55	0	0	0.001	0.02	0.06	0	0	64
6	6.5	0	5	35	0	0	0	0.03	0.33	0	0	36
6A	6.8	0	21	107	0	0	0.004	0	0	0	0	20
7	11.4	0.2	6	654	0	0	0.001	0.04	0.35	0	0	35
8	6.6	0.2	11	59	0	0	0.002	0.06	0.12	0	0	59
9	8.0	0.2	6.8	82	0	0	0	0.02	0.18	0.001	0	66
10	7.3	0.7	7	122	---	---	0	0.03	0.20	0	0	5
11	9.3	0	57	163	0	0.11	0.003	0.12	0.99	0	0	37
12	7.2	0.3	12	49	0	0	0.004	0	0.08	0.001	0	70
12A	6	0	3	36	---	---	0	0.01	0.03	0	---	0
13	6.7	0.2	8	109	0	0	0.005	0.02	0.04	0.001	0	35
13A	7.4	0	3.7	187	---	---	0	0.50	0.80	0.800	---	27
14	7.2	0	4.2	38	0.01	0	0.005	0.04	0.35	0	0	68
14A	6.7	0.4	5.4	52	0	0	0.004	0.03	0.05	0	0	105
15	6.6	0.2	6.0	43	0	0	0.005	0.02	0.03	0.001	0	24
16	6.4	0	130	581	0	0	0.007	0.28	0.51	0.001	0	79

Table 4 - Summary of Maximum Observed Values for Organic Compounds in Test Wells 1 - 16, 1985 - 1988

CONSTITUENT	TW 1	TW 2	TW 3	TW 3A	TW 5	TW 5A	TW 6	TW 6A	TW 7	TW 8	TW 9	TW 11	TW 14	TW 14A	TW 15	TW 16	FED STANDARDS/CRITERIA MCL/MCLG	OTHER
	(CONCENTRATIONS IN ppb)																	
Chloroethane										1		10						
Chloromethane												7						
Chloroform												3						5.7*
1,1-Dichloroethane							1		1			44					7	
1,1-Dichloroethene										1		1						
Dichlorofluoromethane																		
Dichlorodifluoromethane												194						
Ethyl Ether												18					680	
Ethylbenzene												2						
Methylene Chloride							1		1			105	1					4.7**
Methyl Ethyl Ketone					2	2								1	4	4		2000**
Trachloroethene	1	1					1		1	1	1	24	1				5	
etrahydrofuran			22	14		17		54				9		29				
1,1,1-Trichloroethane												37					200	
Trichloroethene	1	1					1		1	1	1	24	1		1		5	
Trichlorofluoromethane												20						
Trichlorotrifluoroethane												2					2	
Vinyl Chloride												1						
Xylene												4						
1,1,2,2-Tetrachloroethane														1				1.75*
Toluene						1											2000	
Trans-1,2-Dichloroethylene							1		1				1				70	
1,1,2-Trichloroethane												1						6.1*

MCL - Maximum Contaminant Level
MCLG - Maximum Contaminant Level Goal
* Carcinogen-Risk Specific Doses (RSDs)
** Systemic Toxicant-Reference Doses (RFDs)

Table 5 - Summary of Volatile Organic Constituents Detected From Samples Obtained During June, 1989 at MLF

CONSTITUENTS	WELLS[1]						
	G4	G5	G7	G9	G10	G11	TW11
	(CONCENTRATIONS IN ppb)						
Trichlorofluoromethane	---	---	25	---	---	4	7
Dichlorodifluoromethane	---	---	---	---	---	34	---
Methylene Chloride[2]	---	---	10	---	---	---	29
1,1-Dichloroethane	---	---	---	---	---	---	20
1,1,1-Trichloroethane	---	---	---	---	---	---	5
Tetrachloroethene	---	---	---	---	60	11	14
Acetone	160	35	---	11	10	22	---

NOTE: (1) Wells G4, G5, G7, G9, G11 were installed into the first water bearing zone beneath the site.

(2) Methylene chloride is a common laboratory contaminant and measured concentrations up to 50 ppb in samples may reflect cross-contamination from laboratory procedures.

Table 6 - Summary of Statistical Analyses for Test Wells 1-16

TEST WELL 10 DATA (BACKGROUND WELL)

MON PARAM	n(b)	x(b)	s(b)	t(crit)
pH	14	6.72	0.35	2.160
SC	10	71.6	25.1	1.833
Cl	14	3.26	2.14	1.771

MON PARAM - Monitoring Parameter
n(b) = number of measurements from background well for parameter of interest
x(b) = mean of measurements from background well for parameter of interest
s(b) = standard deviation of measurements from background well for parameter of interest
t(crit) = critical value of t-statistic at 0.05 level of significance
t(c) = comparison t-statistic
SC - Specific Conductance
Cl - Chloride
SSC - Statistically Significant Change

MON PARAM	TW 1	t(c)	SSC	TW 2	t(c)	SSC	TW 2A	t(c)	SSC	TW 3	t(c)	SSC	TW 3A	t(c)	SSC	TW 4	t(c)	SSC
pH	7.2	0.785	N	6.3	0.687	N	6.5	0.360	N	6.6	0.196	N	5.6	1.832	N	6.2	0.850	N
SC	51	-3.918	N	20	-9.814	N	36	-6.771	N	38	-6.391	N	184	21.378	Y	---	---	---
Cl	0	---	---	0	---	---	0	---	---	2	-0.832	N	53	32.849	Y	3	-0.172	N

MON PARAM	TW 5	t(c)	SSC	TW 5A	t(c)	SSC	TW 6	t(c)	SSC	TW 6A	t(c)	SSC	TW 7	t(c)	SSC	TW 8	t(c)	SSC
pH	6	1.177	N	5.8	1.505	N	4.1	4.285	Y	6.2	0.850	N	6.9	0.294	N	4.3	3.958	Y
SC	18	-10.195	N	16	-10.575	N	35	-6.961	N	107	6.733	Y	81	1.788	N	43	-5.440	N
Cl	4	0.489	N	5	1.149	N	4	0.489	N	12	5.772	Y	0	---	---	3	-0.172	N

MON PARAM	TW 9	t(c)	SSC	TW 11	t(c)	SSC	TW 12	t(c)	SSC	TW 12A	t(c)	SSC	TW 13	t(c)	SSC	TW13A	t(c)	SSC
pH	6.4	0.523	N	6.4	0.523	N	6.2	0.850	N	6	1.177	N	5.5	1.995	N	6.5	0.360	N
SC	56	-2.967	N	163	17.384	Y	23	-9.244	N	24	-9.053	N	28	-8.293	N	97	4.831	Y
Cl	0	---	---	9	3.791	Y	0	---	---	2	-0.832	N	8	3.130	Y	3	-0.172	N

MON PARAM	TW 14	t(c)	SSC	TW 14A	t(c)	SSC	TW 15	t(c)	SSC	TW 16	t(c)	SSC
pH	5.4	2.159	N	4	4.448	Y	5.8	1.505	N	3.9	4.612	Y
SC	26	-8.673	N	17	-10.385	N	20	-9.814	N	251	34.122	Y
Cl	0	---	---	0	---	---	6	1.810	Y	18	9.734	Y

TABLE 7 - SUMMARY OF GEOTECHNICAL LABORATORY DATA

Boring Number	Sample Depth (ft)	Avg. Nat. Wat. Con. (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	% Passing #200 Sieve (%)	Grain Size Data Figure
G-1	1		38	22	16	88	TBC
	18					8	yes
	28		24	16	8	49	TBC
	33					11	TBC
	43		43	25	18		
G-2	18	20	41	25	16	73	
G-3	3		26	22	4	26	TBC
	8		TBC	TBC	TBC	41	yes
	18					12	TBC
	28					13	yes
	43					8	TBC
	58	18	44	26	18		
	73		37	21	16	95	TBC
	88					83	
	98					51	TBC
	108		24	17	7	69	TBC
	138					1	TBC
	158		26	17	9	73	TBC
	168	26	61	35	26		
	178	22	62	25	37		
G-7	8		23	19	4		
	18		26	18	8		
	38					12	yes
G-8	3		TBC	TBC	TBC	28	yes
	13					9	yes
G-9	18		25	19	6		
G-13	3		22	NP	NP		
	13		24	21	3		

NP - Non-Plastic
TBA - To Be Completed

N890677

Table 8 *Results of Water Vapor Transmission Tests on Geomembranes.* The water vapor transmission (WVT) rates are from Haxo et al. [1984]. From these WVT values, the values of the equivalent hydraulic conductivity (k) were derived using Equation 3. All these tests were conducted at 23°C with a relative humidity difference of 50%, which is equivalent to a vapor pressure difference, Δp, of 1.4 kPa. Definitions of polymer symbols can be found in [Giroud and Frobel, 1983].

Polymer	Geomembrane Thickness T (mm)	Water Vapor Transmission WVT ($g/m^2/day$)	Equivalent Hydraulic Conductivity k (m/s)
Butyl rubber	0.85	0.384	2.7×10^{-14}
	0.85	0.020	1.4×10^{-15}
	1.85	0.097	1.5×10^{-14}
CPE	0.53	0.643	2.8×10^{-14}
	0.79	1.400	9.0×10^{-14}
	0.79	0.320	2.1×10^{-14}
	0.85	0.264	1.8×10^{-14}
	0.94	0.305	2.3×10^{-14}
	0.97	0.643	5.1×10^{-14}
CSPE	0.74	0.333	2.0×10^{-14}
	0.76	0.663	4.1×10^{-14}
	0.89	0.438	3.2×10^{-14}
	0.91	0.748	5.5×10^{-14}
	0.94	0.422	3.2×10^{-14}
	1.07	0.252	2.2×10^{-14}

Table 8 Continued

Polymer	Geomembrane Thickness T (mm)	Water Vapor Transmission WVT ($g/m^2/day$)	Equivalent Hydraulic Conductivity k (m/s)
Elasticized Polyolefin	0.72	0.142	8.3×10^{-15}
CO	1.160	20.18	1.9×10^{-12}
	1.650	14.30	1.9×10^{-12}
EPDM	0.51	0.270	1.1×10^{-14}
	0.94	0.190	1.5×10^{-14}
	1.70	0.172	2.4×10^{-14}
Neoprene	0.51	0.304	1.3×10^{-14}
	0.91	0.473	3.5×10^{-14}
	1.27	0.429	4.4×10^{-14}
	1.59	0.237	3.1×10^{-14}
Nitrile rubber	0.76	5.51	3.4×10^{-13}
Polybutylene	0.69	0.084	4.7×10^{-15}

Table 8 Continued

Polymer k	Geomembrane Thickness T (mm)	Water Vapor Transmission WVT ($g/m^2/day$)	Equivalent Hydraulic Conductivity k (m/s)
Polyester Elastomer	0.20	10.50	1.7×10^{-13}
LDPE	0.76	0.0573	3.5×10^{-15}
HDPE	0.80	0.0172	1.1×10^{-15}
	2.44	0.0062	1.2×10^{-15}
HDPE-Alloy	0.86	0.0472	3.3×10^{-15}
PVC	0.28	4.42	1.0×10^{-13}
	0.51	2.97	1.2×10^{-13}
	0.76	1.94	1.2×10^{-13}
	0.79	1.85	1.2×10^{-13}
PVC-E	0.91	2.78	2.1×10^{-13}
PVC-OR	0.83	4.17	2.8×10^{-13}

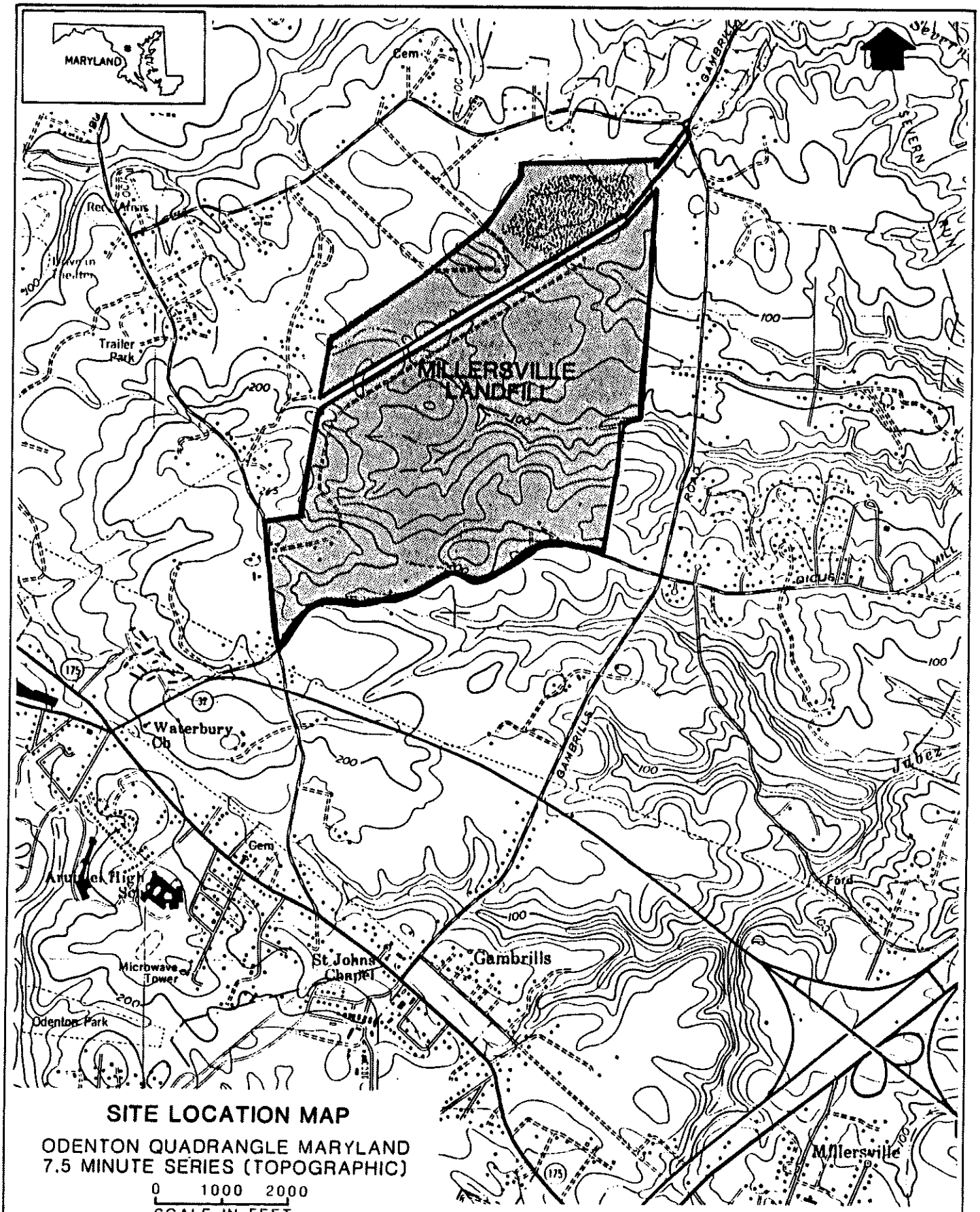
Table 9 *Results of Water Vapor Transmission Tests on Polymers.* The water vapor transmission (WVT) rates are from Rogers [1964]. From these WVT values, the values of the equivalent hydraulic conductivity (k) were derived using Equation 3.

Polymer Type	Vapor Pressure Difference	Water Vapor Transmission	Geomembrane Thickness	Equivalent Hydraulic Conductivity
	Δp	WVT	T	k
	(kPa)	($g/m^2/day$)	(mm)	(m/s)
CSPE	6.4	161	0.025	7.2×10^{-14}
Butyl	6.4	26	0.025	1.2×10^{-14}
PVC	6.1	32	0.025	1.5×10^{-14}
HDPE 0.92	6.4	28	0.025	1.2×10^{-14}
0.94	5.8	14	0.025	6.9×10^{-15}
0.95	6.1	6.7	0.025	3.1×10^{-15}
0.96	5.8	4	0.025	2.0×10^{-15}

Note: Values ranging from 0.92 to 0.96 are HDPE specific gravities.

FIGURES

308913



SITE LOCATION MAP

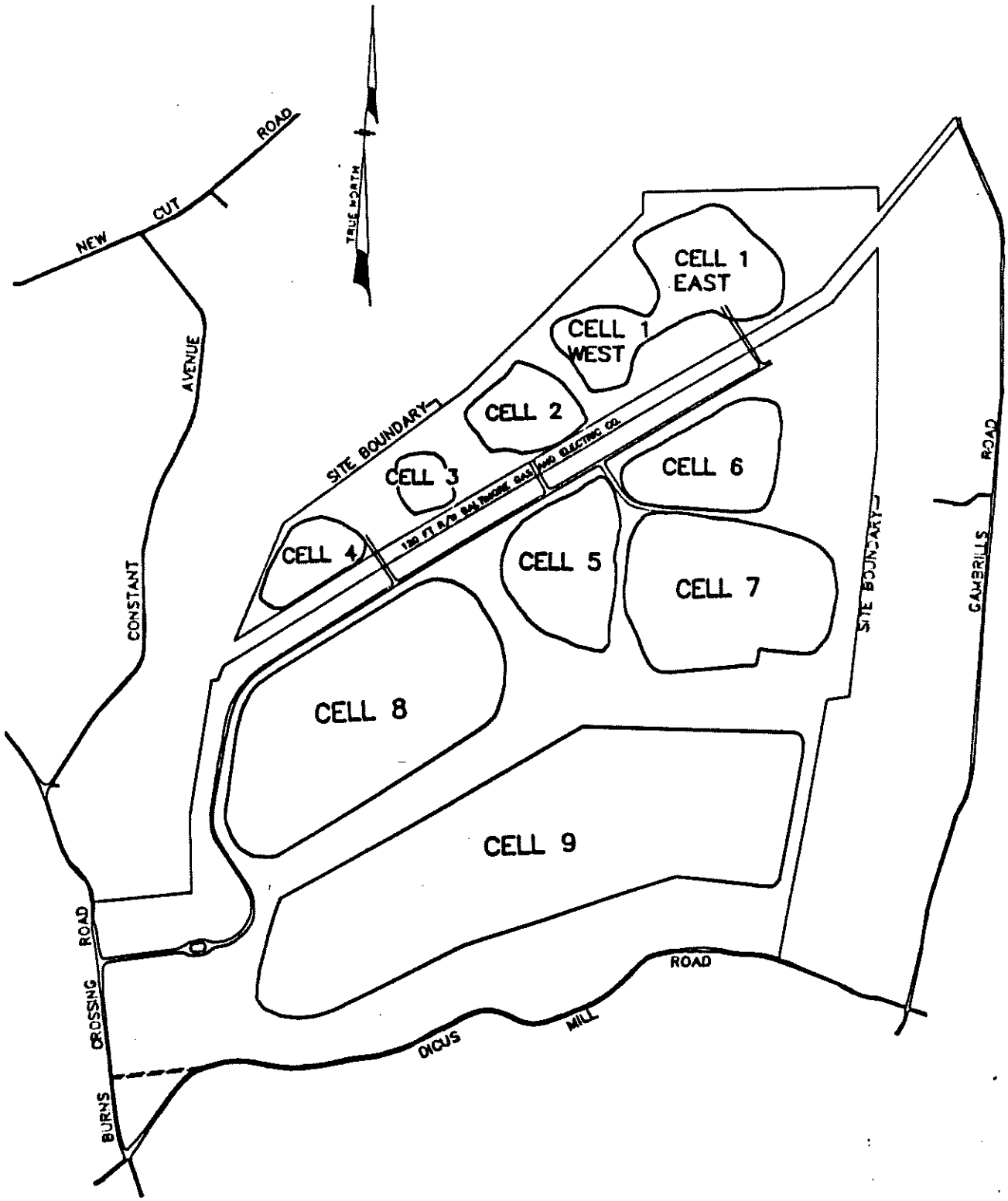
ODENTON QUADRANGLE MARYLAND
7.5 MINUTE SERIES (TOPOGRAPHIC)

0 1000 2000
SCALE IN FEET

GEOSERVICES INC.

CONSULTING ENGINEERS

FIGURE NO.	1
PROJECT NO.	P1160
DOCUMENT NO.	N890677
PAGE NO.	



MILLERSVILLE LANDFILL SITE PLAN

(No Scale)

GEOSERVICES INC.

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FIGURE NO.	2
PROJECT NO.	P1160
DOCUMENT NO.	N890677
PAGE NO.	

System	Series	Group	Formation		Average thickness (feet)	Lithologic symbol	Hydrologic character	General lithology
QUATERNARY	HOLOCENE and PLEISTOCENE		Alluvium and terrace deposits		30		Confining bed in most places. Poor aquifer in some places.	Sand, gravel, silt, and clay.
TERTIARY	EOCENE	PAMUNKEY	Nanjemoy Formation		80		Confining bed	Sand, with clayey layers, glauconitic.
			Marlboro Clay		30		Confining bed	Clay, plastic, pale-red to silvery gray.
	PALEOCENE		Aquia Formation		100		Aquifer	Glauconitic, greenish to brown sand with indurated or "rock" layers in middle and basal parts.
			Brightseat Formation		40		Confining bed in most places. Poor aquifer in some places.	Sand, silt, and clay, olive gray to black, glauconitic.
	UPPER		Severn Formation		90		Poor aquifer in places.	Sand, silty to fine, with some glauconite.
			Matawan Formation		30		Confining bed	Silt and fine sand, clayey, dark gray to black, glauconitic.
CRETACEOUS	CRETACEOUS		Magothy Formation		100		Aquifer	Sand, light gray to white, with interbedded thin layers of organic black clay.
	LOWER CRETACEOUS	POTOMAC	Patapsco Formation	Upper part	250		Confining bed	Clay, tough, variegated color.
							Aquifer	Sand, fine to medium, brown color.
				Lower part	250		Confining bed	Clay, tough, variegated color.
							Aquifer	Sand, fine to medium, brown color.
			Arundel Clay		250 (?)		Confining bed	Clay, red, brown, and gray, contains some ironstone nodules and plant remains.
			Patuxent Formation		250 (?)	? ?	Aquifer 1 Confining bed Aquifer 1	Sand, gray and yellow, with interbedded clay; kaolinized feldspar and lignite common. Locally clay layers predominate.
LOWER PALEOZOIC (?) TO PRECAMBRIAN(?)			Basement Complex 1/		Unknown		Confining bed	Probably gneiss, granite, gabbro, metagabbro, quartz diorite and granitized schist.

1/ Consolidated red shaly rocks of Triassic (?) age were drilled at Sandy Point State Park.

(NOTE: BOX ENCLOSES THE PART OF THE GEOLOGIC SECTION BENEATH MLF)

STRATIGRAPHY, HYDROLOGIC, AND LITHOLOGIC CHARACTER OF GEOLOGIC FORMATIONS IN ANNE ARUNDEL COUNTY

SOURCE: MACK AND GRUFRON, 1986.

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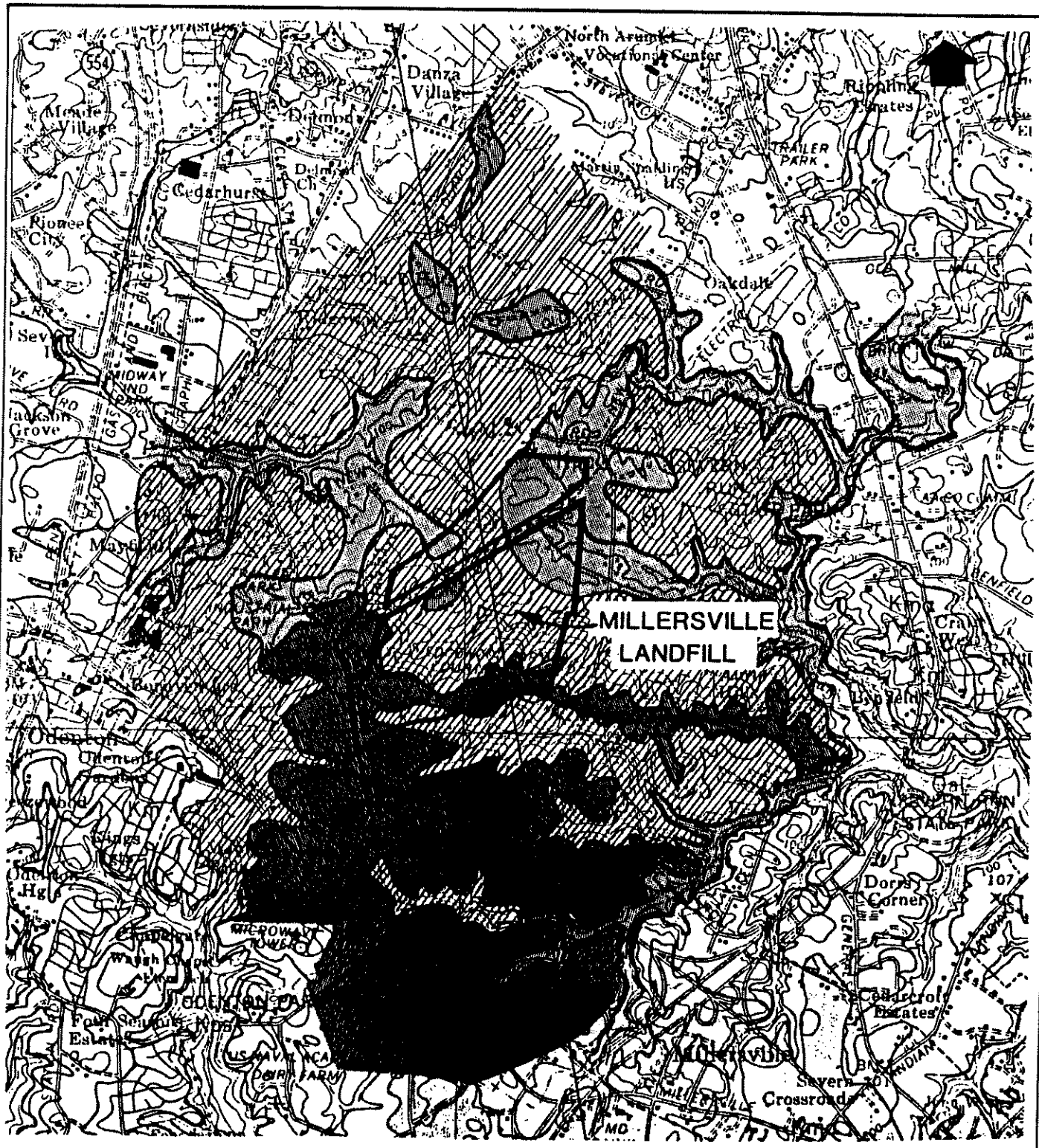
FIGURE NO.	3
PROJECT NO.	P1160
DOCUMENT NO.	N890677
PAGE NO.	



LEGEND

- MAGOTHY FORMATION
- POTOMAC GROUP:
  - SAND-GRAVEL FACIES
  - SILT-CLAY FACIES

0 — 1
SCALE IN MILES

GEOLOGIC MAP OF THE MILLERSVILLE SITE

SOURCE: MODIFIED FROM GLASER, 1976

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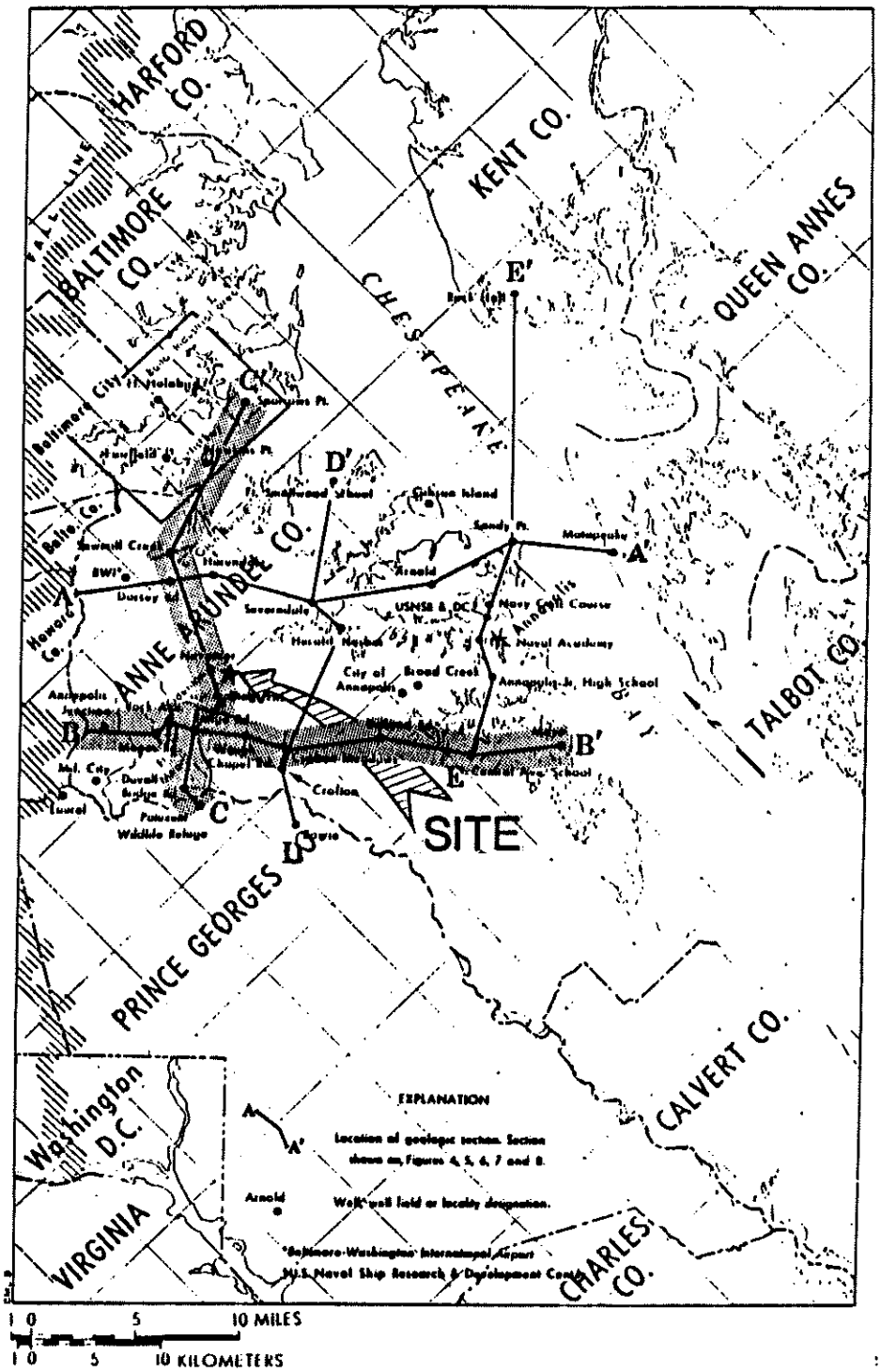
FIGURE NO.	4
PROJECT NO.	P1160
DOCUMENT NO.	N890677
PAGE NO.	

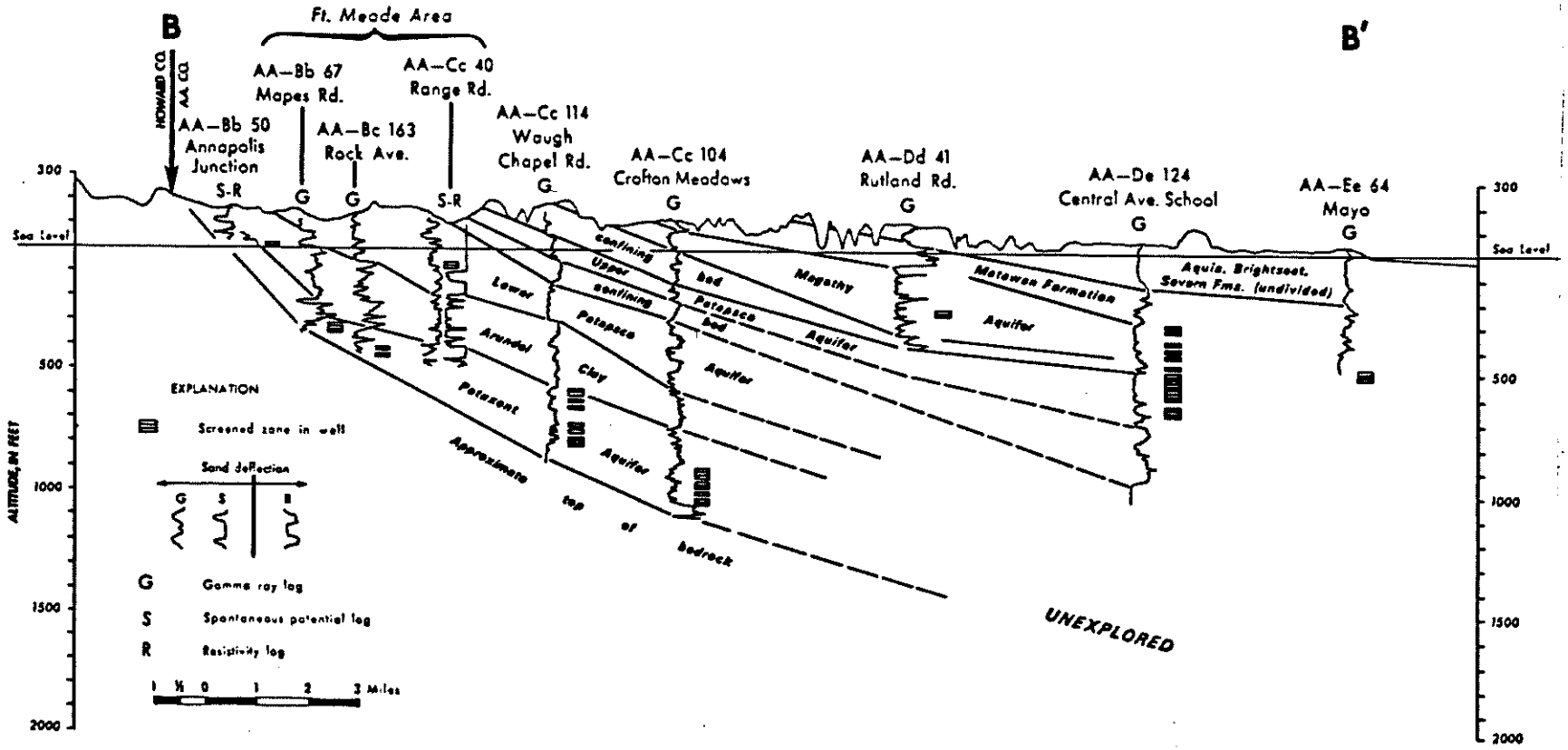


LOCATIONS OF HYDROGEOLOGIC SECTIONS

SOURCE: MACK AND GRUFRON, 1986.

GEOSERVICES INC.
CONSULTING ENGINEERS

FIGURE NO.	5
PROJECT NO.	P1160
DOCUMENT NO.	N890677
PAGE NO.	

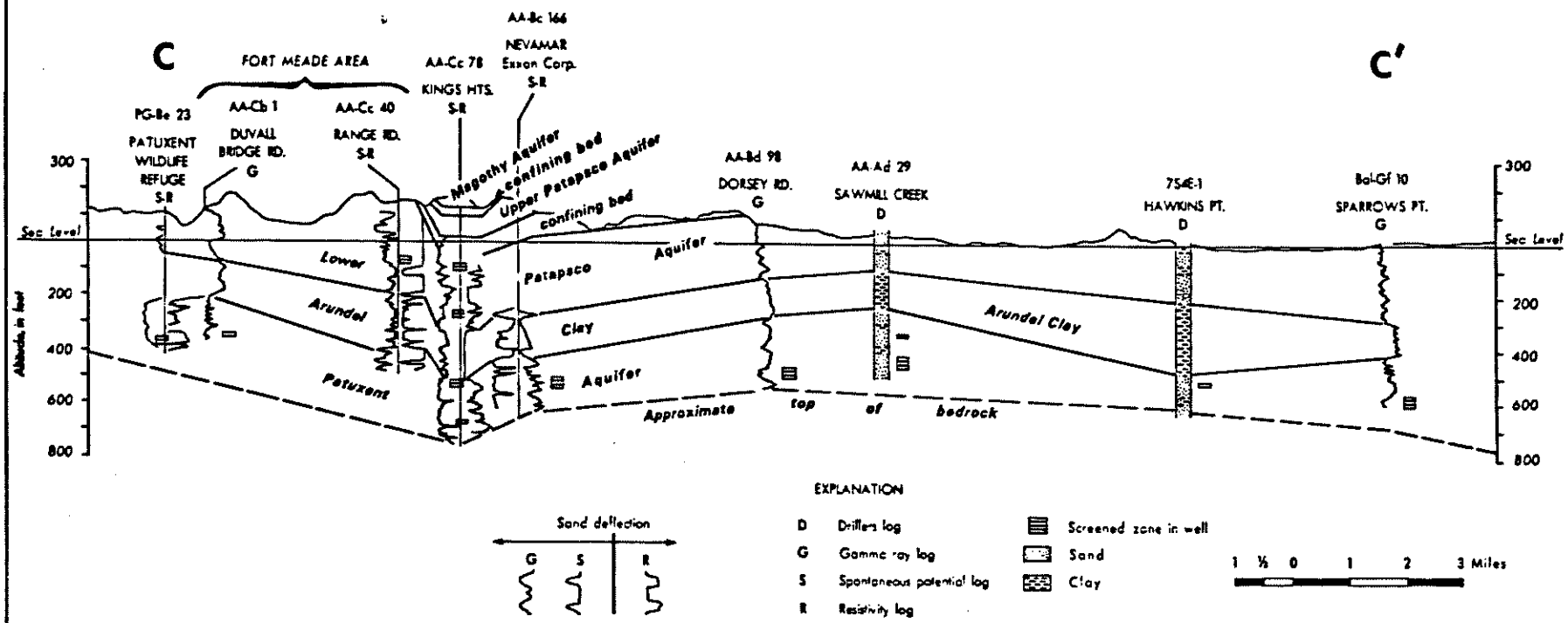


HYDROGEOLOGIC SECTION B-B'
NORTH OF ANNAPOLIS JUNCTION TO MAYO

SOURCE: MACK AND GRUFRON, 1986.

GEOSERVICES INC.
CONSULTING ENGINEERS

FIGURE NO.	6
PROJECT NO.	P1160
DOCUMENT NO.	N890677
PAGE NO.	

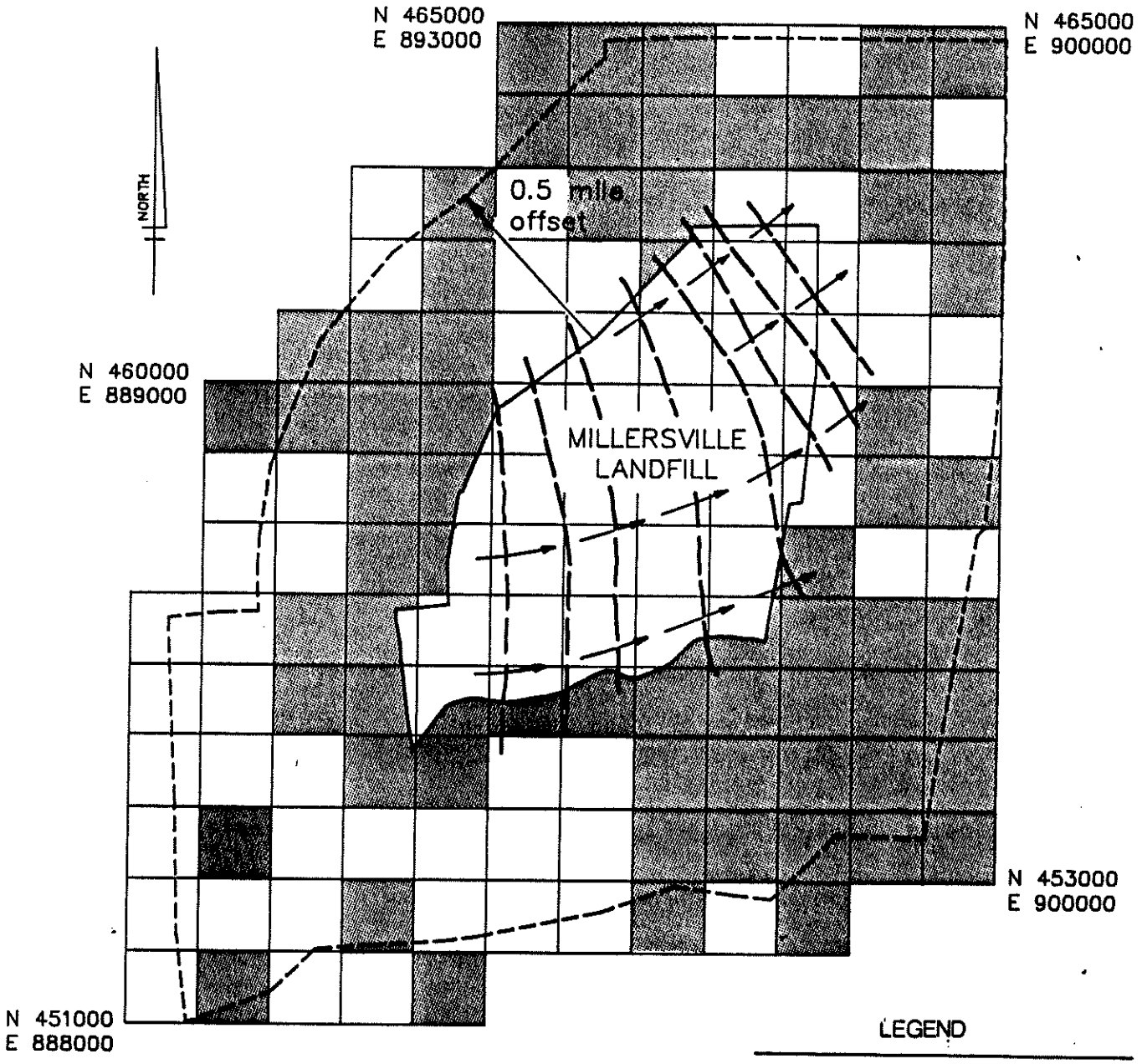


HYDROGEOLOGIC SECTION C-C'
PAFUXENT WILDLIFE REFUGE TO SPARROWS POINT

SOURCE: MACK AND GRUFRON, 1986.

GEOSERVICES INC.
CONSULTING ENGINEERS

FIGURE NO.	7
PROJECT NO.	P1160
DOCUMENT NO.	N890677
PAGE NO.	



LEGEND

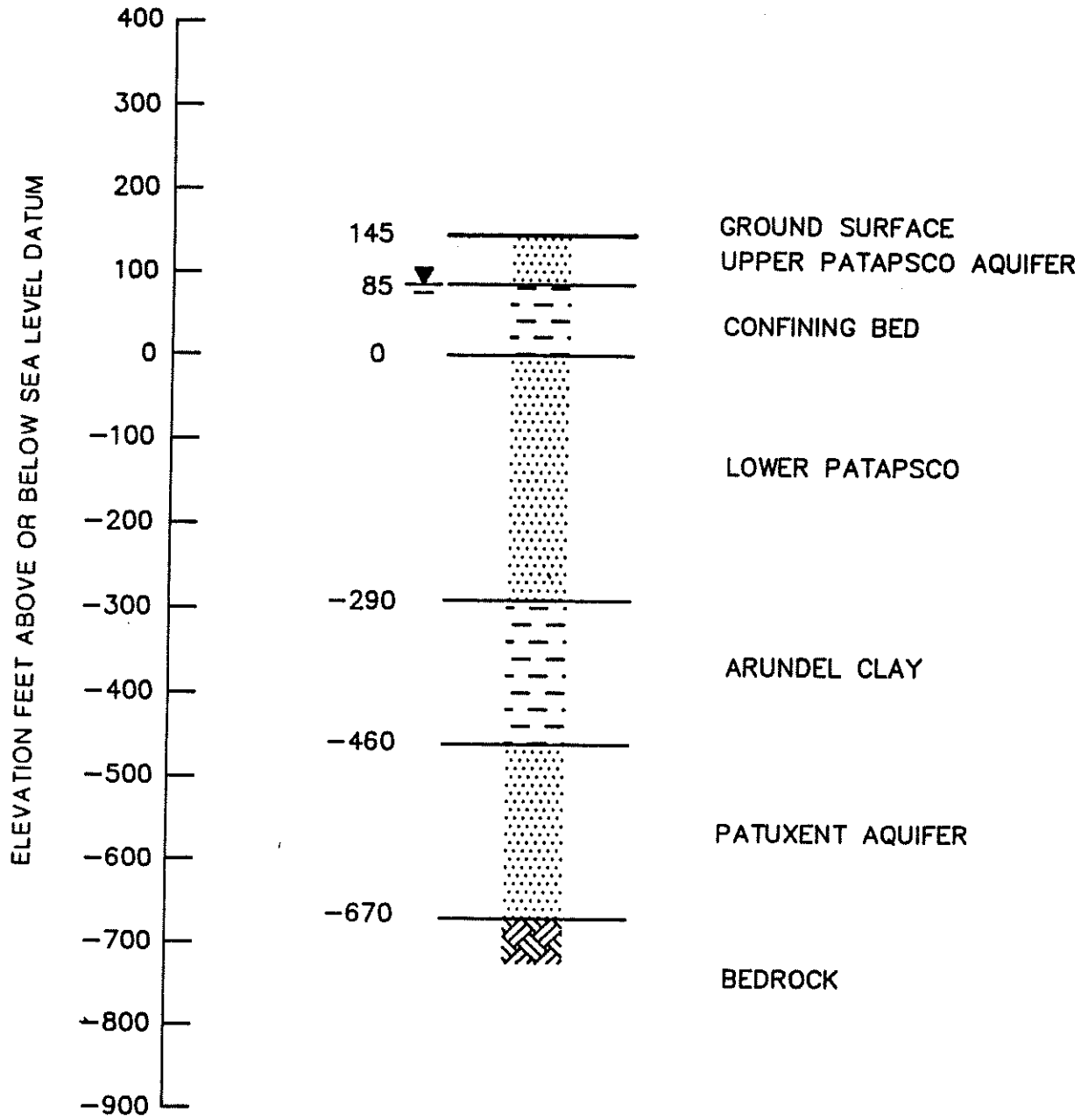
- GRID BLOCK WITH WATER SUPPLY WELLS
- WATER LEVEL CONTOUR
- GROUND-WATER FLOW

WATER WELL SURVEY AREA

GEOSERVICES INC.

CONSULTING ENGINEERS

FIGURE NO.	8
PROJECT NO.	P1160
DOCUMENT NO.	N890677
PAGE NO.	



IDEALIZED SOIL PROFILE

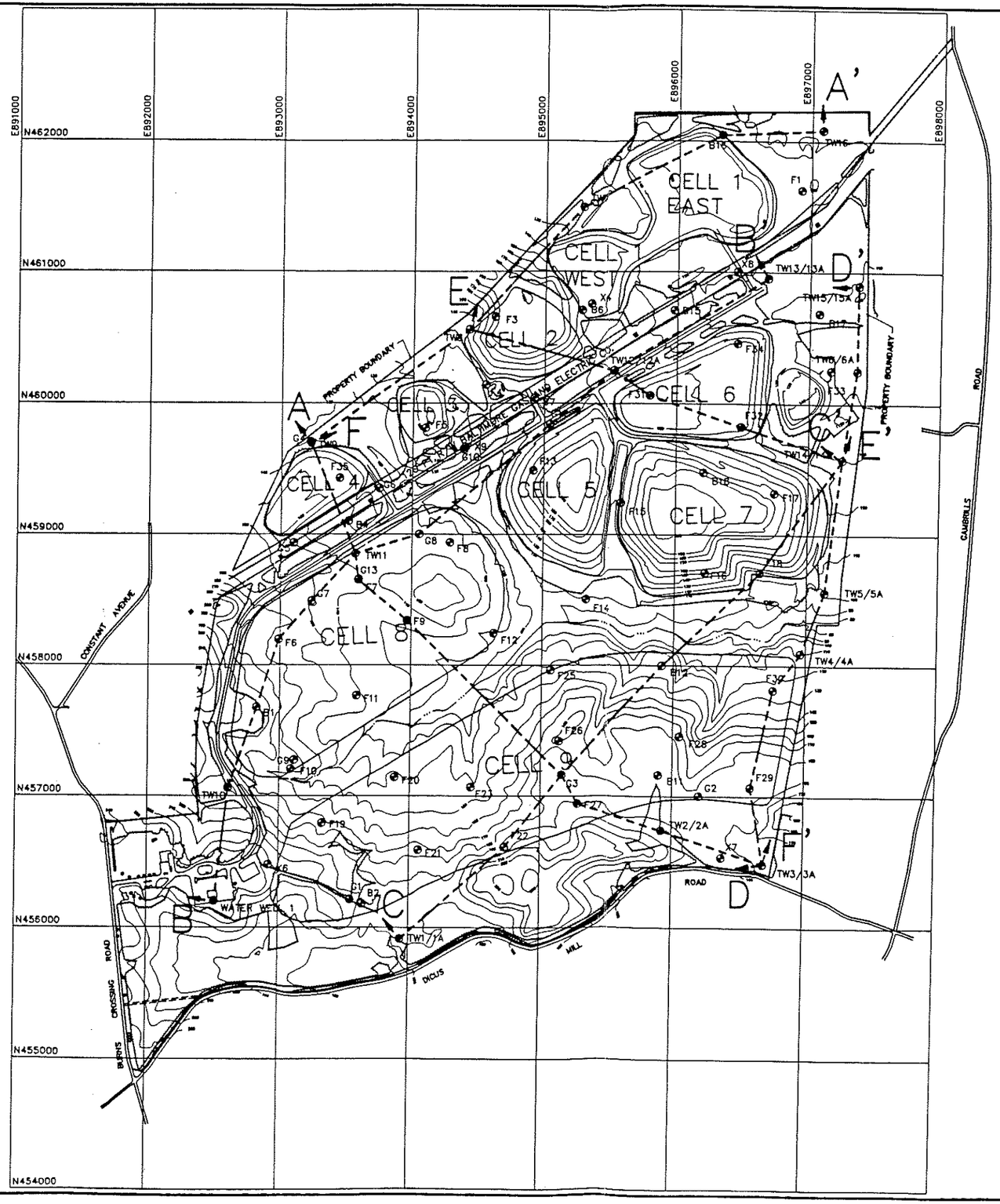
GEOSERVICES INC.
CONSULTING ENGINEERS

FIGURE NO.	9
PROJECT NO.	P1160
DOCUMENT NO.	N890677
PAGE NO.	

SELECTED DRAWINGS

DRAWING II-3
DRAWING II-16
DRAWING II-17
DRAWING II-18
DRAWING II-19

SIZE LARGE-SCALE
FLAT FILES FOR
COMPLETE SET
OF DRAWINGS



LEGEND

⊕ G5	BORING NUMBER AND LOCATION
	EXISTING GROUND ELEVATION (FEET)
	PROPERTY BOUNDARY
	TREE LINE
	INTERMITTENT STREAM

NOTES:

(1) TOPOGRAPHIC MAP BASED ON AERIAL SURVEY BY GREENHORNE & O'MARA, INC., APRIL, 1987; REFLOWN AND UPDATED, MARCH, 1989.

(2) ELEVATIONS SHOWN ARE IN FEET ABOVE SEA LEVEL DATUM (NOTE: "SEA LEVEL DATUM" REFERS TO THE NATIONAL GEODETIC VERTICAL DATUM (NGVD) OF 1929).

(3) GRID COORDINATES CORRESPOND TO THE MARYLAND STATE COORDINATE SYSTEM.

(4) X BORINGS DRILLED UNDER THE SUPERVISION OF CENTURY ENGINEERING, INC., AUGUST 1988. X BORING LOCATIONS TAKEN FROM CENTURY ENGINEERING, INC., DRAWING 2 OF 59, JULY, 1974 (REVISED).

(5) B BORINGS DRILLED BY GREENE ASSOCIATES, INC., 1971. B BORING LOCATIONS TAKEN FROM CENTURY ENGINEERING, INC., DRAWING 2 OF 59, JULY, 1974 (REVISED).

(6) F BORINGS DRILLED UNDER THE SUPERVISION OF CENTURY ENGINEERING, INC., 1974. F BORING LOCATIONS TAKEN FROM CENTURY ENGINEERING, INC., DRAWING 2 OF 59, JULY 1974 (REVISED).

(7) TW BORINGS DRILLED UNDER THE SUPERVISION OF CENTURY ENGINEERING, INC., JANUARY THROUGH JUNE, 1973. TW BORING LOCATIONS TAKEN FROM CENTURY ENGINEERING, INC., DRAWING 2 OF 59, JULY, 1974 (REVISED).

(8) G BORINGS DRILLED UNDER THE SUPERVISION OF GEOSERVICES INC., MAY, 1989. G BORING LOCATIONS SURVEYED BY GREENHORNE & O'MARA, INC., AUGUST, 1989.

(9) WATER WELL 1 DRILLED UNDER THE SUPERVISION OF CENTURY ENGINEERING, INC., NOVEMBER, 1974. WATER WELL LOCATED IN FIELD BY GEOSERVICES INC., SEPTEMBER, 1989.

0 200 400 800 1200
SCALE IN FEET

GEOSERVICES INC.
CONSULTING ENGINEERS
5950 LIVE OAK PARKWAY, SUITE 330
NORCROSS, GEORGIA 30093 USA

PREPARED FOR: BUREAU OF SOLID WASTE, ANNE ARUNDEL COUNTY

PROJECT:
MILLERSVILLE LANDFILL
ANNE ARUNDEL COUNTY

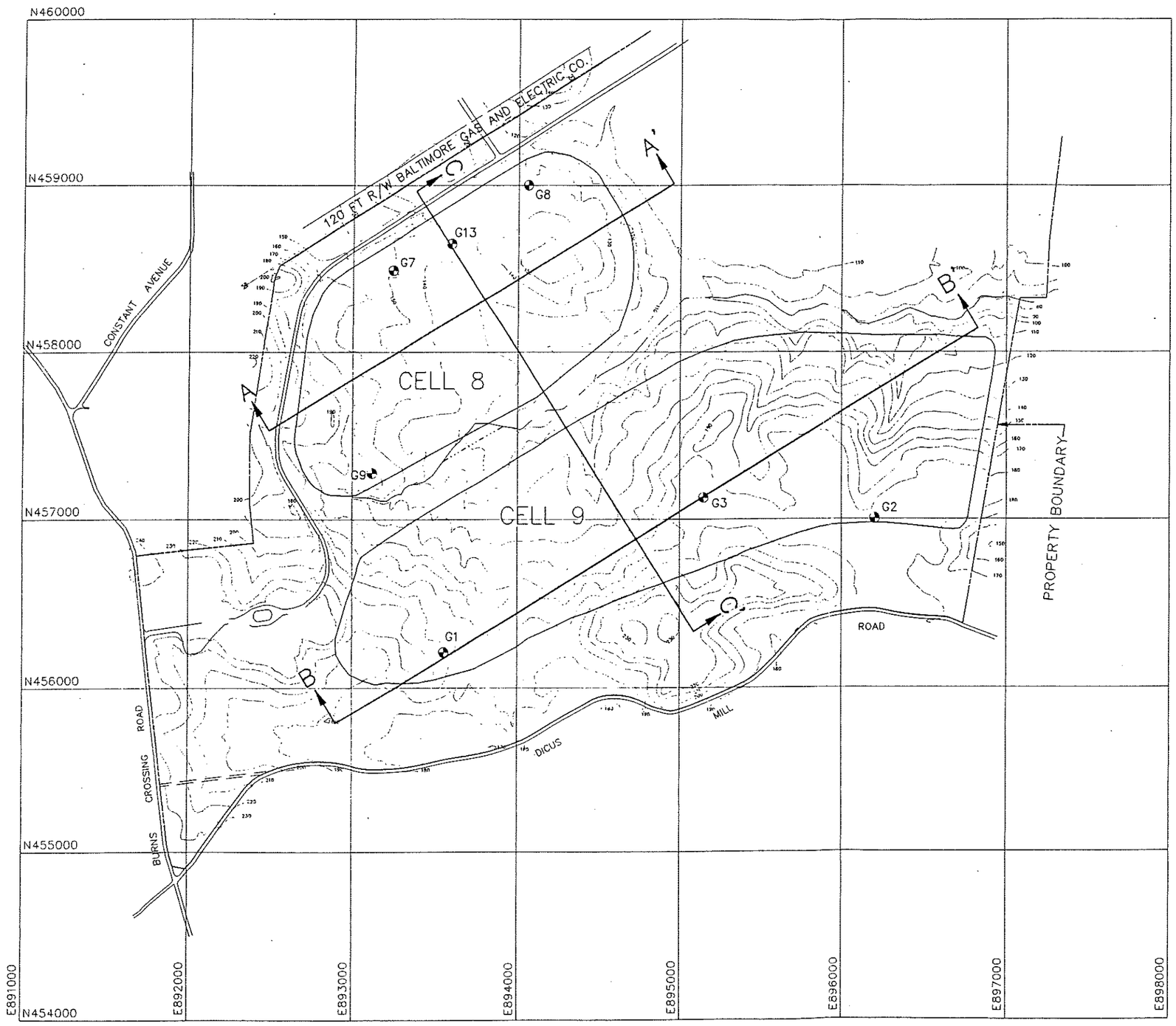
TITLE: GEOLOGICAL SECTIONS – PLAN VIEW

MARK	DATE	REVISION	BY	APPROVED

THIS DRAWING MAY NOT BE ISSUED FOR PERMIT, REVIEW, PROJECT TENDER, CONSTRUCTION, ETC., UNLESS SEALED.

SEAL

DATE: 28 OCT 1989	JOB NO.: P1160
SCALE: 1" = 400'	DRAWING NO.: 11-3
DRAWN BY: AS	
CHECKED BY: HEC	
APPROVED BY: SLS	



NORTH

LEGEND

G3	BORING NUMBER AND LOCATION
—130—	EXISTING GROUND ELEVATION (FEET)
	PROPERTY BOUNDARY
	INTERMITTENT STREAM
	PROPOSED STREAM RELOCATION

NOTES: (1) TOPOGRAPHIC MAP BASED ON AERIAL SURVEY BY GREENHORNE & O'MARA, INC., APRIL, 1987; REFLOWN AND UPDATED, MARCH, 1989.

(2) ELEVATIONS SHOWN ARE IN FEET ABOVE SEA LEVEL DATUM (NOTE: "SEA LEVEL DATUM" REFERS TO THE NATIONAL GEODETIC VERTICAL DATUM (NGVD) OF 1929).

(3) G BORINGS DRILLED UNDER THE SUPERVISION OF GEOSERVICES INC., MAY, 1989. G BORING LOCATIONS SURVEYED BY GREENHORNE & O'MARA, INC., AUGUST, 1989.

(4) GRID COORDINATES CORRESPOND TO THE MARYLAND STATE COORDINATE SYSTEM.

0 300 600 900
SCALE IN FEET

GEOSERVICES INC.
CONSULTING ENGINEERS
5950 LIVE OAK PARKWAY, SUITE 330
NORCROSS, GEORGIA 30093 USA

PREPARED FOR: BUREAU OF SOLID WASTE, ANNE ARUNDEL COUNTY

PROJECT:
MILLERSVILLE LANDFILL
ANNE ARUNDEL COUNTY

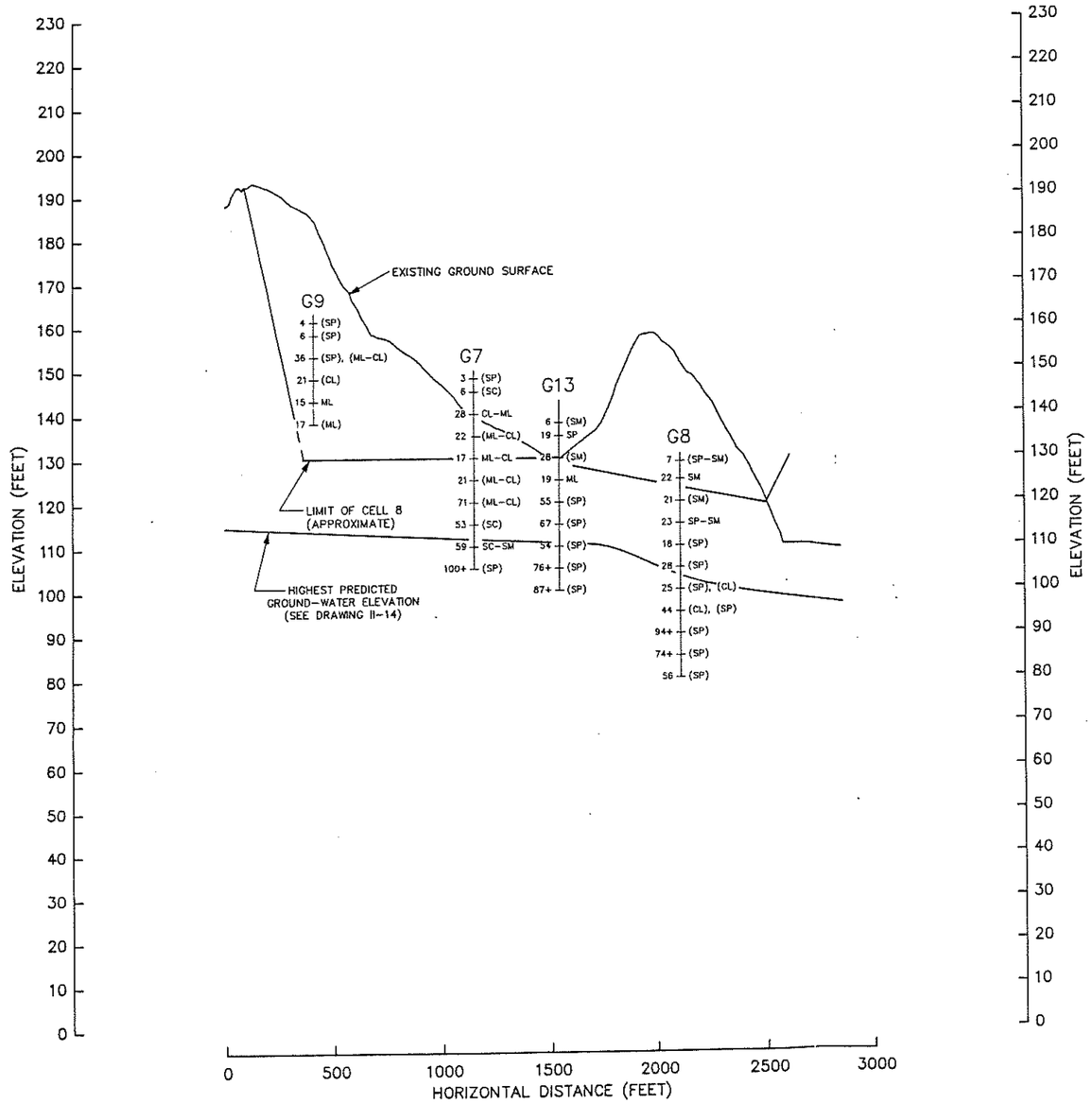
TITLE: GEOTECHNICAL SECTIONS – PLAN VIEW

MARK	DATE	REVISION	BY	APPROVED

THIS DRAWING MAY NOT BE ISSUED FOR PERMIT, REVIEW, PROJECT TENDER, CONSTRUCTION, ETC., UNLESS SEALED.

SEAL

DATE: 26 OCT 1989	JOB NO.: P1160
SCALE: 1"=300	DRAWING NO.:
DRAWN BY: AS	11—16
CHECKED BY: MDE	
APPROVED BY: SLS	



SECTION A–A'

LEGEND

G7 BORING NUMBER

N-VALUES (BLOWCOUNTS) — 59 / 100+ — SC-SM (SP) — USCS GROUP SYMBOL / LABORATORY (FIELD)

NOTES: (1) N-VALUES DETERMINED USING ASTM D-1586 (STANDARD METHOD FOR PENETRATION TEST AND SPLIT-BARREL SAMPLING OF SOILS).

(2) USCS GROUP SYMBOL DETERMINED USING ASTM D-2487 (STANDARD TEST METHOD FOR CLASSIFICATION OF SOILS FOR ENGINEERING PURPOSES) OR ASTM D-2488 (STANDARD PRACTICE FOR DESCRIPTION AND IDENTIFICATION OF SOILS (VISUAL-MANUAL PROCEDURE).

(3) ALL BORINGS PROJECTED ONTO SECTION A–A'.

(4) ELEVATIONS SHOWN ARE IN FEET ABOVE SEA LEVEL DATUM (NOTE: "SEA LEVEL DATUM" REFERS TO THE NATIONAL GEODETIC VERTICAL DATUM (NGVD OF 1929).

GEOSERVICES INC.
CONSULTING ENGINEERS
5950 LIVE OAK PARKWAY, SUITE 330
NORCROSS, GEORGIA 30093 USA

PREPARED FOR: BUREAU OF SOLID WASTE, ANNE ARUNDEL COUNTY

PROJECT: MILLERSVILLE LANDFILL
ANNE ARUNDEL COUNTY

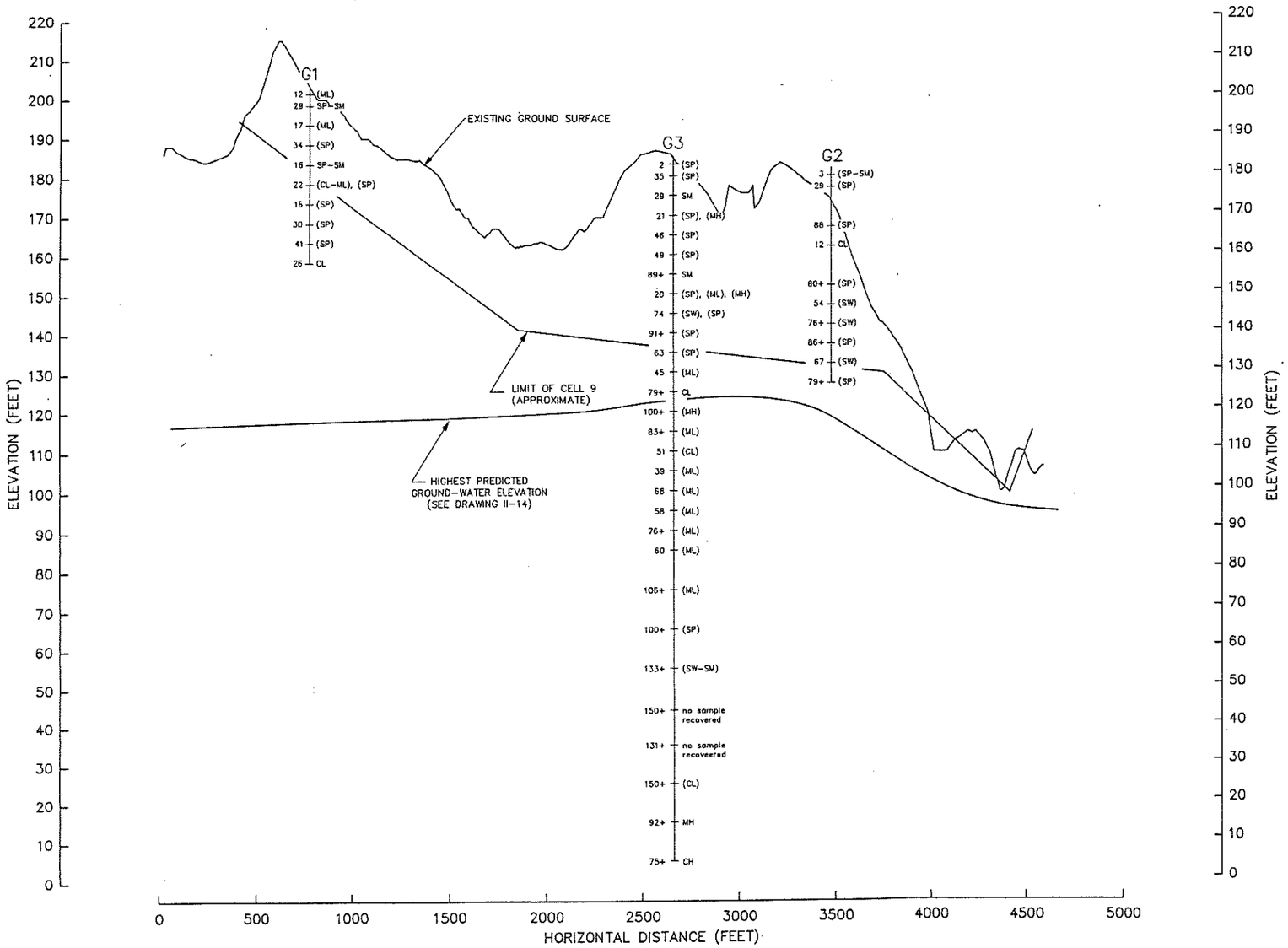
TITLE: GEOTECHNICAL SECTION A–A'

MARK	DATE	REVISION	BY	APPROVED

THIS DRAWING MAY NOT BE ISSUED FOR PERMIT, REVIEW, PROJECT TENDER, CONSTRUCTION, ETC., UNLESS SEALED.

SEAL

DATE: 26 OCT 1989	JOB NO.: P1160
SCALE: AS SHOWN	DRAWING NO.:
DRAWN BY: AS	II–17
CHECKED BY: MDE	
APPROVED BY: SLS	



SECTION B-B'

LEGEND

G3 BORING NUMBER

N-VALUES (BLOWCOUNTS): 59, 100+ | SC-SM USCS GROUP SYMBOL (LABORATORY) | (SP) (FIELD)

NOTES: (1) N-VALUES DETERMINED USING ASTM D-1586 (STANDARD METHOD FOR PENETRATION TEST AND SPLIT-BARREL SAMPLING OF SOILS).

(2) USCS GROUP SYMBOL DETERMINED USING ASTM D-2487 (STANDARD TEST METHOD FOR CLASSIFICATION OF SOILS FOR ENGINEERING PURPOSES) OR ASTM D-2488 (STANDARD PRACTICE FOR DESCRIPTION AND IDENTIFICATION OF SOILS (VISUAL-MANUAL PROCEDURE).

(3) ALL BORINGS PROJECTED ONTO SECTION B-B'.

(4) ELEVATIONS SHOWN ARE IN FEET ABOVE SEA LEVEL DATUM (NOTE: "SEA LEVEL DATUM" REFERS TO THE NATIONAL GEODETIC VERTICAL DATUM (NGVD OF 1929).

GEOSERVICES INC.
CONSULTING ENGINEERS
5950 LIVE OAK PARKWAY, SUITE 330
NORCROSS, GEORGIA 30093 USA

PREPARED FOR: BUREAU OF SOLID WASTE, ANNE ARUNDEL COUNTY

PROJECT: MILLERSVILLE LANDFILL
ANNE ARUNDEL COUNTY

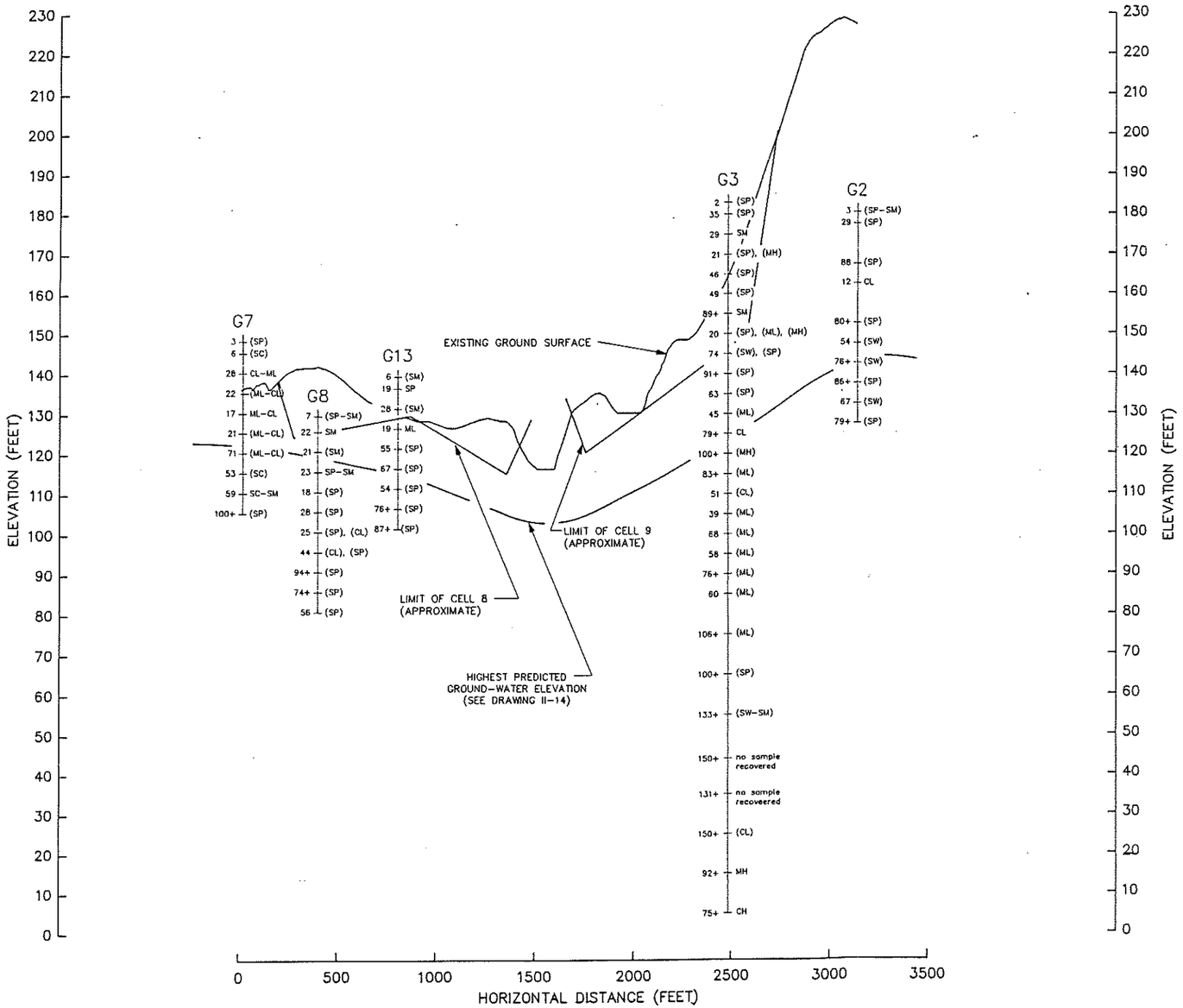
TITLE: GEOTECHNICAL SECTION B-B'

MARK	DATE	REVISION	BY	APPROVED

THIS DRAWING MAY NOT BE ISSUED FOR PERMIT, REVIEW, PROJECT TENDER, CONSTRUCTION, ETC., UNLESS SEALED.

SEAL

DATE: 26 OCT 1989	JOB NO.: P1160
SCALE: AS SHOWN	DRAWING NO.:
DRAWN BY: AS	II-18
CHECKED BY: MDE	
APPROVED BY: SLS	



SECTION C–C'

LEGEND

G3 — BORING NUMBER

N-VALUES (BLOWCOUNTS) — 59 — SC-SM — USCS GROUP SYMBOL LABORATORY

100+ — (SP) — (FIELD)

NOTES: (1) N-VALUES DETERMINED USING ASTM D-1586 (STANDARD METHOD FOR PENETRATION TEST AND SPLIT-BARREL SAMPLING OF SOILS).

(2) USCS GROUP SYMBOL DETERMINED USING ASTM D-2487 (STANDARD TEST METHOD FOR CLASSIFICATION OF SOILS FOR ENGINEERING PURPOSES) OR ASTM D-2488 (STANDARD PRACTICE FOR DESCRIPTION AND IDENTIFICATION OF SOILS (VISUAL-MANUAL PROCEDURE).

(3) ALL BORINGS PROJECTED ONTO SECTION C–C'.

(4) ELEVATIONS SHOWN ARE IN FEET ABOVE SEA LEVEL DATUM (NOTE: "SEA LEVEL DATUM" REFERS TO THE NATIONAL GEODETIC VERTICAL DATUM (NGVD OF 1929).

GEOSERVICES INC.
CONSULTING ENGINEERS
5950 LIVE OAK PARKWAY, SUITE 330
NORCROSS, GEORGIA 30093 USA

PREPARED FOR: BUREAU OF SOLID WASTE, ANNE ARUNDEL COUNTY

PROJECT: MILLERSVILLE LANDFILL
ANNE ARUNDEL COUNTY

TITLE: GEOTECHNICAL SECTION C–C'

MARK	DATE	REVISION	BY	APPROVED

THIS DRAWING MAY NOT BE ISSUED FOR PERMIT, REVIEW, PROJECT TENDER, CONSTRUCTION, ETC., UNLESS SEALED.

SEAL

DATE: 26 OCT 1989
SCALE: AS SHOWN
DRAWN BY: AS
CHECKED BY: MDE
APPROVED BY: SLS

JOB NO.: P1160
DRAWING NO.: II-19

APPENDIX A

WATER LEVEL DATA

MILLERSVILLE LANDFILL
GROUNDWATER LEVEL DATA

SUMMARY OF 1975 - 1982, TEST WELLS 1 - 7

READING DATE	WELL 1	WELL 2	WELL 2A	WELL 3	WELL 3A	WELL 4	WELL 4A	WELL 5	WELL 5A	WELL 6	WELL 6A	WELL 7
May-75	99.9	137.2	93.6	90.8								91.6
Jun-75	99.2	138.3	93.2	89.1	135.0	88.3	87.8	84.2	84.6	80.7	96.5	91.7
Oct-75	98.9	138.7	93.0	89.7	135.6	87.7	86.5	83.8	84.5	80.0	99.0	91.7
Nov-75	99.4	139.2	93.0	89.7	135.4	88.4	86.5	84.3	84.8	80.3	96.9	91.7
Dec-75	99.2	139.3	93.3	90.2	135.6	88.4	86.5	84.8	84.8	80.9	96.4	92.3
Jan-76	99.4	139.4	92.9	90.5	135.6	88.6	86.4	84.8	84.8	80.8	98.7	92.2
Feb-76	99.7	140.0	93.7	90.3	136.7	89.0	84.9	84.9	85.2	81.2	98.4	93.2
Mar-76	99.9	140.3	93.8	90.6	136.7	88.8	86.6	84.8	84.9	81.1	97.5	93.1
Apr-76	99.8	140.9	93.9	91.1	137.1	89.1	86.9	85.0	85.2	81.2	100.8	93.1
May-76	100.1	141.2	93.9	90.6	137.4	89.0	86.6	85.0	85.2	81.2	101.0	93.3
Jun-76	100.4	141.2	94.0	90.7	137.3	89.1	86.5	85.0	85.2	81.1	101.6	93.1
Jul-76	99.8	140.7	93.5	90.4	136.8	88.2	86.6	84.3	84.3	80.6	101.7	92.3
Aug-76	99.6	140.5	92.8	89.9	136.4	87.6	86.5	83.7	83.8	80.3		92.1
Dec-76	98.3	138.5	92.0	89.3	135.0	87.2		83.0	83.2	79.9	96.6	90.5
Jan-77	98.1	138.4	92.0	89.5	135.1	86.8		83.1	82.9	79.1		90.4
Feb-77	98.1	137.6	91.9	90.0	135.7	87.2	86.6	82.8	83.1	78.4	92.3	90.3
Mar-77	98.8	137.8	92.6	89.2	134.2	87.1	86.4	82.7	83.2	79.8	96.2	89.8
Apr-77	98.3	137.4	92.5	89.2	133.9	86.9	86.6	82.6	83.0	78.0	99.7	89.6
May-77		137.3	92.4	88.9	133.8	87.0	86.6	82.8	83.1	78.3	98.6	89.6
Jun-77	98.8	137.2	93.2	88.8	133.9	87.1	86.6	83.1	83.3	78.4	94.9	89.6
Jul-77	98.2	137.2	92.1	88.7	133.8	86.5	86.6	82.4	82.7	78.0	91.3	89.3
Aug-77	102.9	137.1	91.9	88.5	133.5	86.2	86.6	82.2	82.4	77.9		89.0
Sep-77	97.6	136.9	91.5	88.1	133.3	85.7	86.6	81.6	81.9	77.2		88.5
Oct-77	102.3	136.6	91.2	87.4	127.5	85.3	86.8	81.0	81.5	76.3	91.2	87.6
Nov-77	96.4	135.8	90.7	85.7	132.7	85.1	86.5	82.9	80.1	73.3	101.4	87.4
Dec-77	96.9	136.2	90.9	87.3	132.3	85.2	86.5	81.2	81.2	76.1	99.8	87.3
Jan-78	96.5	136.5	91.0	87.2	131.5	85.0	86.2	81.7	80.9	74.4	99.8	87.4
Jun-78	97.3	138.8	92.0	88.4	136.4	86.8	86.5	82.4	82.7	77.5	99.3	89.7
Jul-78	97.0	140.3	92.0	88.3	136.9	86.7	86.5	82.4	82.7	77.8	102.2	89.7
Sep-78	97.2	140.5	91.8	88.4	136.7			81.9	82.3	77.3	94.4	89.6
Oct-78	97.0	139.3		88.1	136.8			81.7	82.1	77.0		89.3
Dec-78	97.0	139.4	91.5	87.8	135.5			81.4	81.7	76.4	100.8	88.7
Jan-79	96.4	138.9	91.0	87.4	134.9			81.2	81.6	75.9	101.0	87.8
Apr-79	97.7	139.4	92.5	89.2	135.9			82.5	83.0	76.9	103.3	89.8
May-79	98.1	140.7	92.6	89.0	137.2			82.7	83.1	77.6	102.5	90.4
Jun-79	98.2	141.6	92.7	89.4	137.9			83.3	84.8	78.2	102.2	90.9
Jul-79	98.7	142.0	92.8	89.0	138.1			83.1	84.3	78.4	96.5	91.0
Oct-79	98.9	142.3	93.5	90.3	138.2			83.8	84.0	78.8	101.7	91.4
Nov-79	98.4	142.8	92.9	90.0				84.0	84.2	79.5	100.4	
Feb-80	99.5	143.3	94.0	90.7	138.7			84.4	84.6	80.5	97.8	92.6
Mar-80	100.2	142.7	94.2	90.7	138.2			84.4	84.7	80.0	96.6	92.5
Jul-80	100.3	144.9	94.2	95.6	138.4			84.4	84.5	80.7	92.7	92.6
Aug-80	99.5	142.7		90.2	138.1			84.1	84.0	80.2	91.4	92.4
Jan-81	99.3	139.6	93.0	89.3	134.9			82.1	82.4	77.8		89.5
Feb-81	98.4	139.2	92.5	89.0	134.7			82.0	82.3	77.2		89.3
Mar-81	98.5	137.6	92.1	88.3	133.6			81.8	81.4	77.8	103.2	89.0
Apr-81	97.0	139.3	91.6	88.1	136.8			81.7	82.1	77.0		89.3
Aug-82	94.1	134.6	78.8	85.3	131.5			79.4	79.8	74.4		85.2
Sep-82		134.8	88.8	85.3	131.4			79.6	79.6	74.0		84.9
Oct-82	93.4	134.8	88.6	84.8	131.4			79.0	79.4	73.8		84.7
Nov-82	93.8	135.0	88.5	85.0	131.2			78.9	79.3	73.4		84.7
AVG	98.4	139.1	92.1	89.0	135.2	87.3	86.5	82.8	83.0	78.3	98.3	90.1
MIN	93.4	134.6	78.8	84.8	127.5	85.0	84.9	78.9	79.3	73.3	91.2	84.7
MAX	102.9	144.9	94.2	95.6	138.7	89.1	87.8	85.0	85.2	81.2	103.3	93.3
FLUC	9.5	10.3	15.4	10.8	11.2	4.1	2.9	6.1	5.9	7.9	12.1	8.6
# RDGS	49	51	49	51	49	28	26	50	50	50	38	50

MILLERSVILLE LANDFILL
GROUNDWATER LEVEL DATA

SUMMARY OF 1975 - 1982, TEST WELLS 8 - 16

READING DATE	WELL 8	WELL 9	WELL 10	WELL 11	WELL 12	WELL 12A	WELL 13	WELL 13A	WELL 14	WELL 14A	WELL 15	WELL 16
May-75	98.8		114.0		93.2		85.3	81.0			76.2	71.9
Jun-75	99.6	65.7	113.8	121.0	93.5	93.9	85.4	81.1	82.7	85.0	76.6	71.4
Oct-75	99.7	63.5	113.4	121.0	93.6	94.0	81.7	84.3	82.4	83.9	75.7	70.4
Nov-75	100.2	63.3	113.5	121.3	94.0	94.3	82.0	79.3	82.2	83.9	76.0	70.7
Dec-75	99.7	64.6	113.5	121.1	94.0	94.3	81.9	84.6	82.9	84.6	76.3	70.9
Jan-76	100.9	65.3	113.8	121.2	94.1	94.4	82.2	84.7	82.7	85.0	76.3	71.4
Feb-76	102.0	65.4	114.0	122.1	94.7	95.0	82.7	85.0	83.2	85.5	77.2	71.6
Mar-76	101.5	64.3	114.4	122.2	94.7	95.2	82.5	84.9	83.2	85.1	76.9	71.6
Apr-76	101.9	64.6	114.2	122.2	94.8	94.9	82.5	85.1	83.2	85.3	77.0	71.4
May-76	102.0	64.1	114.4	122.2	94.8	95.2	82.6	85.2	83.2	85.3	77.0	71.8
Jun-76	101.8	64.6	114.6	122.1	94.9	95.2	82.8	85.0	83.6	84.0	77.0	71.7
Jul-76	100.8	62.9	114.5	121.4	94.2	94.8	82.3	84.9	82.9	84.4	76.4	71.2
Aug-76	100.1	62.1	114.1	120.9	93.8	93.7	82.1	84.9	82.4	83.4	76.0	69.9
Dec-76	98.2	64.4	112.4	119.2	92.2	92.6	80.9	77.9	81.2	82.4	74.9	65.4
Jan-77	97.3	64.6	113.0	118.7	92.3	92.5	80.1		82.2	82.1	74.8	69.4
Feb-77	97.6	64.6	112.5	118.2	92.0	91.9	80.4	83.0	80.5	82.0	74.5	69.3
Mar-77	97.5	64.2	113.1	118.0	91.6	92.0	79.7	83.0	80.8	82.1	74.6	69.5
Apr-77	97.0	63.8	112.9	117.9	91.7	92.2	79.6	82.6	80.5	81.7	74.1	69.3
May-77	97.1	63.5	112.6	118.0	91.6	91.7	79.7	82.5	80.7	82.0	74.2	69.2
Jun-77	97.1	63.7	113.0	118.5	92.0	93.0	79.8	82.5	81.1	82.3	74.4	69.7
Jul-77	96.9	62.7	112.6	118.2	91.5	92.0	79.5	82.4	80.9	81.9	74.1	69.1
Aug-77	96.6	61.7	112.1	118.1	91.2	91.8	79.2	82.2	80.2	81.3	73.8	69.0
Sep-77	96.0	61.7	111.6	117.6	90.8	91.4	78.8	81.9	79.8	80.8	73.4	68.4
Oct-77	95.3	61.5	110.4	117.3	89.8	86.9	78.1	81.5	79.1	80.2	72.2	73.8
Nov-77	93.9	61.0	105.7	116.5	90.0	90.3	77.5		78.6	79.4	72.2	68.2
Dec-77	94.7	63.5	111.3	116.2	89.5	89.5	77.3	80.6	78.6	79.4	72.2	67.7
Jan-78	94.7	62.5	107.0	116.1	89.9	89.5	77.5	80.6	79.2	79.4	72.2	69.7
Jun-78	97.6	64.0	110.2									
Jul-78	98.7	63.7	110.2	119.6	91.1	91.4	79.2	81.8	80.0	81.0	73.9	68.5
Sep-78	97.7	63.6	110.6	119.0	91.3	91.7	78.9	81.8	79.9	80.6	73.5	68.4
Oct-78	97.3	62.8	110.6	118.6	91.2	91.6	78.9	81.5	79.6	80.5	73.2	68.3
Dec-78	96.2	62.9	110.5	117.7	90.5	90.9	78.5	81.1	79.1	80.0	72.7	67.9
Jan-79	95.5	64.2	109.9	117.5	89.6	90.2	77.7	80.8	78.5	79.3	72.1	67.4
Apr-79	97.5	64.2	111.0	119.1	90.9	91.3	78.6	81.3	79.8	81.0	73.1	68.7
May-79	97.8	64.9	110.8	119.8	94.2	91.7	79.3	82.5	80.0	81.1	73.5	68.7
Jun-79	98.9	64.2	115.4	120.2	100.5	92.0	80.9	82.2	80.9	82.0	75.1	70.6
Jul-79	99.2	65.8	111.6	120.7	92.0	92.5	80.0	82.4	80.6	82.0	74.4	69.1
Oct-79	99.5	63.4	112.5									
Nov-79	100.4	64.0	112.4	121.7	93.2	93.3	81.2	83.5	81.5	82.9	75.4	69.6
Feb-80	101.7	64.4	113.7	121.8	94.1	94.6	82.8	84.4	82.5	83.2	77.0	70.7
Mar-80	101.0	64.7	114.5	121.5	94.1	94.6	82.2	84.4	82.4	84.4	75.8	70.8
Jul-80	101.3	65.8	115.0	122.5	94.4	94.9	82.8	84.9	82.8	84.2	76.9	70.2
Aug-80	101.6	63.0	114.4	122.0	93.6	94.4	83.6	84.6	82.4	83.4	76.2	70.1
Jan-81	97.1	62.7	113.7									
Feb-81												
Mar-81	96.3	63.3	113.7	117.8	90.6	91.5	79.4	81.7	79.6	79.7	72.0	68.2
Apr-81	97.3	62.8	110.6	118.6	91.1	92.3	78.9	81.5	79.6	80.5	73.2	68.3
Aug-82	92.1	61.1	107.3	115.8	87.2	87.8	75.7	79.6	76.8	79.3	70.2	65.5
Sep-82	92.0	60.4	107.3									
Oct-82	91.7	61.3	107.1									
Nov-82	91.6	62.0	107.0	115.1	86.9	87.5	75.0	79.1	76.1	76.7	69.5	65.4
AVG	98.0	63.5	112.0	119.5	92.4	92.4	80.4	82.6	80.9	82.1	74.5	69.6
MIN	91.6	60.4	105.7	115.1	86.9	86.9	75.0	77.9	76.1	76.7	69.5	65.4
MAX	102.0	65.8	115.4	122.5	100.5	95.2	85.4	85.2	83.6	85.5	77.2	73.8
FLUC	10.4	5.4	9.7	7.4	13.6	8.3	10.4	7.3	7.5	8.8	7.7	8.4
# RDGS	50	49	50	44	45	44	45	43	44	44	45	45

MILLERSVILLE LANDFILL
GROUNDWATER LEVEL DATA

SUMMARY OF 1975 DATA

READING DATE	WELL 1	WELL 2	WELL 2A	WELL 3	WELL 3A	WELL 4	WELL 4A	WELL 5	WELL 5A	WELL 6	WELL 6A	WELL 7	WELL 8	WELL 9	WELL 10	WELL 11	WELL 12	WELL 12A	WELL 13	WELL 13A	WELL 14	WELL 14A	WELL 15	WELL 16
May-75	99.9	137.2	93.6	90.8								91.6	98.8		114.0		93.2		85.3	81.0			76.2	71.9
Jun-75	99.2	138.3	93.2	89.1	135.0	88.3	87.8	84.2	84.6	80.7	96.5	91.7	99.6	65.7	113.8	121.0	93.5	93.9	85.4	81.1	82.7	85.0	76.6	71.4
Oct-75	98.9	138.7	93.0	89.7	135.6	87.7	86.5	83.8	84.5	80.0	99.0	91.7	99.7	63.5	113.4	121.0	93.6	94.0	81.7	84.3	82.4	83.9	75.7	70.4
Nov-75	99.4	139.2	93.0	89.7	135.4	88.4	86.5	84.3	84.8	80.3	96.9	91.7	100.2	63.3	113.5	121.3	94.0	94.3	82.0	79.3	82.2	83.9	76.0	70.7
Dec-75	99.2	139.3	93.3	90.2	135.6	88.4	86.5	84.8	84.8	80.9	96.4	92.3	99.7	64.6	113.5	121.1	94.0	94.3	81.9	84.6	82.9	84.6	76.3	70.9
AVG	99.3	138.5	93.2	89.9	135.4	88.2	86.8	84.3	84.7	80.5	97.2	91.8	99.6	64.3	113.6	121.1	93.7	94.1	83.3	82.1	82.6	84.3	76.2	71.1
MIN	98.9	137.2	93.0	89.1	135.0	87.7	86.5	83.8	84.5	80.0	96.4	91.6	98.8	63.3	113.4	121.0	93.2	93.9	81.7	79.3	82.2	83.9	75.7	70.4
MAX	99.9	139.3	93.6	90.8	135.6	88.4	87.8	84.8	84.8	80.9	99.0	92.3	100.2	65.7	114.0	121.3	94.0	94.3	85.4	84.6	82.9	85.0	76.6	71.9
FLUC	1.0	2.1	0.6	1.7	0.6	0.7	1.3	1.0	0.3	0.9	2.6	0.7	1.4	2.4	0.6	0.3	0.8	0.4	3.7	5.3	0.7	1.1	0.9	1.5
# RDGS	5	5	5	5	4	4	4	4	4	4	4	5	5	4	5	4	5	4	5	5	4	4	5	5

MILLERSVILLE LANDFILL
GROUNDWATER LEVEL DATA

SUMMARY OF 1976 DATA

READING DATE	WELL 1	WELL 2	WELL 2A	WELL 3	WELL 3A	WELL 4	WELL 4A	WELL 5	WELL 5A	WELL 6	WELL 6A	WELL 7	WELL 8	WELL 9	WELL 10	WELL 11	WELL 12	WELL 12A	WELL 13	WELL 13A	WELL 14	WELL 14A	WELL 15	WELL 16
Feb-76	99.7	140.0	93.7	90.3	136.7	89.0	84.9	84.9	85.2	81.2	98.4	93.2	102.0	65.4	114.0	122.1	94.7	95.0	82.7	85.0	83.2	85.5	77.2	71.6
Mar-76	99.9	140.3	93.8	90.6	136.7	88.8	86.6	84.8	84.9	81.1	97.5	93.1	101.5	64.3	114.4	122.2	94.7	95.2	82.5	84.9	83.2	85.1	76.9	71.6
Apr-76	99.8	140.9	93.9	91.1	137.1	89.1	86.9	85.0	85.2	81.2	100.8	93.1	101.9	64.6	114.2	122.2	94.8	94.9	82.5	85.1	83.2	85.3	77.0	71.4
May-76	100.1	141.2	93.9	90.6	137.4	89.0	86.6	85.0	85.2	81.2	101.0	93.3	102.0	64.1	114.4	122.2	94.8	95.2	82.6	85.2	83.2	85.3	77.0	71.8
Jun-76	100.4	141.2	94.0	90.7	137.3	89.1	86.5	85.0	85.2	81.1	101.6	93.1	101.8	64.6	114.6	122.1	94.9	95.2	82.8	85.0	83.6	84.0	77.0	71.7
Jul-76	99.8	140.7	93.5	90.4	136.8	88.2	86.6	84.3	84.3	80.6	101.7	92.3	100.8	62.9	114.5	121.4	94.2	94.8	82.3	84.9	82.9	84.4	76.4	71.2
Aug-76	99.6	140.5	92.8	89.9	136.4	87.6	86.5	83.7	83.8	80.3		92.1	100.1	62.1	114.1	120.9	93.8	93.7	82.1	84.9	82.4	83.4	76.0	69.9
Dec-76	98.3	138.5	92.0	89.3	135.0	87.2		83.0	83.2	79.9	96.6	90.5	98.2	64.4	112.4	119.2	92.2	92.6	80.9	77.9	81.2	82.4	74.9	65.4
AVG	99.7	140.4	93.4	90.4	136.7	88.5	86.4	84.5	84.6	80.8	99.7	92.6	101.0	64.0	114.1	121.5	94.3	94.6	82.3	84.1	82.9	84.4	76.5	70.6
MIN	98.3	138.5	92.0	89.3	135.0	87.2	84.9	83.0	83.2	79.9	96.6	90.5	98.2	62.1	112.4	119.2	92.2	92.6	80.9	77.9	81.2	82.4	74.9	65.4
MAX	100.4	141.2	94.0	91.1	137.4	89.1	86.9	85.0	85.2	81.2	101.7	93.3	102.0	65.4	114.6	122.2	94.9	95.2	82.8	85.2	83.6	85.5	77.2	71.8
FLUC	2.1	2.7	2.0	1.8	2.4	1.9	2.0	2.0	2.0	1.3	5.1	2.8	3.8	3.3	2.2	3.0	2.7	2.6	1.9	7.3	2.4	3.1	2.3	6.4
# RDGS	8	8	8	8	8	8	7	8	8	8	7	8	8	8	8	8	8	8	8	8	8	8	8	8

MILLERSVILLE LANDFILL
GROUNDWATER LEVEL DATA

SUMMARY OF 1977 DATA

READING DATE	WELL 1	WELL 2	WELL 2A	WELL 3	WELL 3A	WELL 4	WELL 4A	WELL 5	WELL 5A	WELL 6	WELL 6A	WELL 7	WELL 8	WELL 9	WELL 10	WELL 11	WELL 12	WELL 12A	WELL 13	WELL 13A	WELL 14	WELL 14A	WELL 15	WELL 16
Jan-77	98.1	138.4	92.0	89.5	135.1	86.8		83.1	82.9	79.1		90.4	97.3	64.6	113.0	118.7	92.3	92.5	80.1		82.2	82.1	74.8	69.4
Feb-77	98.1	137.6	91.9	90.0	135.7	87.2	86.6	82.8	83.1	78.4	92.3	90.3	97.6	64.6	112.5	118.2	92.0	91.9	80.4	83.0	80.5	82.0	74.5	69.3
Mar-77	98.8	137.8	92.6	89.2	134.2	87.1	86.4	82.7	83.2	79.8	96.2	89.8	97.5	64.2	113.1	118.0	91.6	92.0	79.7	83.0	80.8	82.1	74.6	69.5
Apr-77	98.3	137.4	92.5	89.2	133.9	86.9	86.6	82.6	83.0	78.0	99.7	89.6	97.0	63.8	112.9	117.9	91.7	92.2	79.6	82.6	80.5	81.7	74.1	69.3
May-77		137.3	92.4	88.9	133.8	87.0	86.6	82.8	83.1	78.3	98.6	89.6	97.1	63.5	112.6	118.0	91.6	91.7	79.7	82.5	80.7	82.0	74.2	69.2
Jun-77	98.8	137.2	93.2	88.8	133.9	87.1	86.6	83.1	83.3	78.4	94.9	89.6	97.1	63.7	113.0	118.5	92.0	93.0	79.8	82.5	81.1	82.3	74.4	69.7
Jul-77	98.2	137.2	92.1	88.7	133.8	86.5	86.6	82.4	82.7	78.0	91.3	89.3	96.9	62.7	112.6	118.2	91.5	92.0	79.5	82.4	80.9	81.9	74.1	69.1
Aug-77	102.9	137.1	91.9	88.5	133.5	86.2	86.6	82.2	82.4	77.9		89.0	96.6	61.7	112.1	118.1	91.2	91.8	79.2	82.2	80.2	81.3	73.8	69.0
Sep-77	97.6	136.9	91.5	88.1	133.3	85.7	86.6	81.6	81.9	77.2		88.5	96.0	61.7	111.6	117.6	90.8	91.4	78.8	81.9	79.8	80.8	73.4	68.4
Oct-77	102.3	136.6	91.2	87.4	127.5	85.3	86.8	81.0	81.5	76.3	91.2	87.6	95.3	61.5	110.4	117.3	89.8	86.9	78.1	81.5	79.1	80.2	72.2	73.8
Nov-77	96.4	135.8	90.7	85.7	132.7	85.1	86.5	82.9	80.1	73.3	101.4	87.4	93.9	61.0	105.7	116.5	90.0	90.3	77.5		78.6	79.4	72.2	68.2
Dec-77	96.9	136.2	90.9	87.3	132.3	85.2	86.5	81.2	81.2	76.1	99.8	87.3	94.7	63.5	111.3	116.2	89.5	89.5	77.3	80.6	78.6	79.4	72.2	67.7
AVG	98.8	137.1	91.9	88.4	133.3	86.3	86.6	82.4	82.4	77.6	96.2	89.0	96.4	63.0	111.7	117.8	91.2	91.3	79.1	82.2	80.3	81.3	73.7	69.4
MIN	96.4	135.8	90.7	85.7	127.5	85.1	86.4	81.0	80.1	73.3	91.2	87.3	93.9	61.0	105.7	116.2	89.5	86.9	77.3	80.6	78.6	79.4	72.2	67.7
MAX	102.9	138.4	93.2	90.0	135.7	87.2	86.8	83.1	83.3	79.8	101.4	90.4	97.6	64.6	113.1	118.7	92.3	93.0	80.4	83.0	82.2	82.3	74.8	73.8
FLUC	6.5	2.6	2.5	4.3	8.2	2.1	0.4	2.1	3.2	6.5	10.2	3.1	3.7	3.6	7.4	2.5	2.8	6.1	3.1	2.4	3.6	2.9	2.6	6.1
# RDGS	11	12	12	12	12	12	11	12	12	12	9	12	12	12	12	12	12	12	12	10	12	12	12	12

MILLERSVILLE LANDFILL
GROUNDWATER LEVEL DATA

SUMMARY OF 1978 DATA

READING DATE	WELL 1	WELL 2	WELL 2A	WELL 3	WELL 3A	WELL 4	WELL 4A	WELL 5	WELL 5A	WELL 6	WELL 6A	WELL 7	WELL 8	WELL 9	WELL 10	WELL 11	WELL 12	WELL 12A	WELL 13	WELL 13A	WELL 14	WELL 14A	WELL 15	WELL 16
Jan-78	96.5	136.5	91.0	87.2	131.5	85.0	86.2	81.7	80.9	74.4	99.8	87.4	94.7	62.5	107.0	116.1	89.9	89.5	77.5	80.6	79.2	79.4	72.2	69.7
Jun-78	97.3	138.8	92.0	88.4	136.4	86.8	86.5	82.4	82.7	77.5	99.3	89.7	97.6	64.0	110.2									
Jul-78	97.0	140.3	92.0	88.3	136.9	86.7	86.5	82.4	82.7	77.8	102.2	89.7	98.7	63.7	110.2	119.6	91.1	91.4	79.2	81.8	80.0	81.0	73.9	68.5
Sep-78	97.2	140.5	91.8	88.4	136.7			81.9	82.3	77.3	94.4	89.6	97.7	63.6	110.6	119.0	91.3	91.7	78.9	81.8	79.9	80.6	73.5	68.4
Oct-78	97.0	139.3		88.1	136.8			81.7	82.1	77.0		89.3	97.3	62.8	110.6	118.6	91.2	91.6	78.9	81.5	79.6	80.5	73.2	68.3
Dec-78	97.0	139.4	91.5	87.8	135.5			81.4	81.7	76.4	100.8	88.7	96.2	62.9	110.5	117.7	90.5	90.9	78.5	81.1	79.1	80.0	72.7	67.9
AVG	97.0	139.1	91.7	88.0	135.6	86.2	86.4	81.9	82.1	76.7	99.3	89.1	97.0	63.2	109.9	118.2	90.8	91.0	78.6	81.4	79.6	80.3	73.1	68.6
MIN	96.5	136.5	91.0	87.2	131.5	85.0	86.2	81.4	80.9	74.4	94.4	87.4	94.7	62.5	107.0	116.1	89.9	89.5	77.5	80.6	79.1	79.4	72.2	67.9
MAX	97.3	140.5	92.0	88.4	136.9	86.8	86.5	82.4	82.7	77.8	102.2	89.7	98.7	64.0	110.6	119.6	91.3	91.7	79.2	81.8	80.0	81.0	73.9	69.7
FLUC	0.8	4.0	1.0	1.2	5.4	1.8	0.3	1.0	1.8	3.4	7.8	2.3	4.0	1.5	3.6	3.5	1.4	2.2	1.7	1.2	0.9	1.6	1.7	1.8
# ROGS	6	6	5	6	6	3	3	6	6	6	5	6	6	6	6	5	5	5	5	5	5	5	5	5

MILLERSVILLE LANDFILL
GROUNDWATER LEVEL DATA

SUMMARY OF 1979 DATA

READING DATE	WELL 1	WELL 2	WELL 2A	WELL 3	WELL 3A	WELL 4	WELL 4A	WELL 5	WELL 5A	WELL 6	WELL 6A	WELL 7	WELL 8	WELL 9	WELL 10	WELL 11	WELL 12	WELL 12A	WELL 13	WELL 13A	WELL 14	WELL 14A	WELL 15	WELL 16
Jan-79	96.4	138.9	91.0	87.4	134.9			81.2	81.6	75.9	101.0	87.8	95.5	64.2	109.9	117.5	89.6	90.2	77.7	80.8	78.5	79.3	72.1	67.4
Apr-79	97.7	139.4	92.5	89.2	135.9			82.5	83.0	76.9	103.3	89.8	97.5	64.2	111.0	119.1	90.9	91.3	78.6	81.3	79.8	81.0	73.1	68.7
May-79	98.1	140.7	92.6	89.0	137.2			82.7	83.1	77.6	102.5	90.4	97.8	64.9	110.8	119.8	94.2	91.7	79.3	82.5	80.0	81.1	73.5	68.7
Jun-79	98.2	141.6	92.7	89.4	137.9			83.3	84.8	78.2	102.2	90.9	98.9	64.2	115.4	120.2	100.5	92.0	80.9	82.2	80.9	82.0	75.1	70.6
Jul-79	98.7	142.0	92.8	89.0	138.1			83.1	84.3	78.4	96.5	91.0	99.2	65.8	111.6	120.7	92.0	92.5	80.0	82.4	80.6	82.0	74.4	69.1
Oct-79	98.9	142.3	93.5	90.3	138.2			83.8	84.0	78.8	101.7	91.4	99.5	63.4	112.5									
Nov-79	98.4	142.8	92.9	90.0				84.0	84.2	79.5	100.4		100.4	64.0	112.4	121.7	93.2	93.3	81.2	83.5	81.5	82.9	75.4	69.6
AVG	98.1	141.1	92.6	89.2	137.0	ERR	ERR	82.9	83.6	77.9	101.1	90.2	98.4	64.4	111.9	119.8	93.4	91.8	79.6	82.1	80.2	81.4	73.9	69.0
MIN	96.4	138.9	91.0	87.4	134.9	ERR	ERR	81.2	81.6	75.9	96.5	87.8	95.5	63.4	109.9	117.5	89.6	90.2	77.7	80.8	78.5	79.3	72.1	67.4
MAX	98.9	142.8	93.5	90.3	138.2	ERR	ERR	84.0	84.8	79.5	103.3	91.4	100.4	65.8	115.4	121.7	100.5	93.3	81.2	83.5	81.5	82.9	75.4	70.6
FLUC	2.5	3.9	2.5	2.9	3.3	ERR	ERR	2.8	3.2	3.6	6.8	3.6	4.9	2.4	5.5	4.2	10.9	3.1	3.5	2.7	3.0	3.6	3.3	3.2
# RDGS	7	7	7	7	6	0	0	7	7	7	7	6	7	7	7	6	6	6	6	6	6	6	6	6

MILLERSVILLE LANDFILL
GROUNDWATER LEVEL DATA

SUMMARY OF 1980 DATA

READING DATE	WELL 1	WELL 2	WELL 2A	WELL 3	WELL 3A	WELL 4	WELL 4A	WELL 5	WELL 5A	WELL 6	WELL 6A	WELL 7	WELL 8	WELL 9	WELL 10	WELL 11	WELL 12	WELL 12A	WELL 13	WELL 13A	WELL 14	WELL 14A	WELL 15	WELL 16
Feb-80	99.5	143.3	94.0	90.7	138.7			84.4	84.6	80.5	97.8	92.6	101.7	64.4	113.7	121.8	94.1	94.6	82.8	84.4	82.5	83.2	77.0	70.7
Mar-80	100.2	142.7	94.2	90.7	138.2			84.4	84.7	80.0	96.6	92.5	101.0	64.7	114.5	121.5	94.1	94.6	82.2	84.4	82.4	84.4	75.8	70.8
Jul-80	100.3	144.9	94.2	95.6	138.4			84.4	84.5	80.7	92.7	92.6	101.3	65.8	115.0	122.5	94.4	94.9	82.8	84.9	82.8	84.2	76.9	70.2
Aug-80	99.5	142.7		90.2	138.1			84.1	84.0	80.2	91.4	92.4	101.6	63.0	114.4	122.0	93.6	94.4	83.6	84.6	82.4	83.4	76.2	70.1
AVG	99.9	143.4	94.1	91.8	138.3	ERR	ERR	84.3	84.5	80.3	94.6	92.5	101.4	64.5	114.4	122.0	94.1	94.6	82.8	84.6	82.5	83.8	76.5	70.4
MIN	99.5	142.7	94.0	90.2	138.1	ERR	ERR	84.1	84.0	80.0	91.4	92.4	101.0	63.0	113.7	121.5	93.6	94.4	82.2	84.4	82.4	83.2	75.8	70.1
MAX	100.3	144.9	94.2	95.6	138.7	ERR	ERR	84.4	84.7	80.7	97.8	92.6	101.7	65.8	115.0	122.5	94.4	94.9	83.6	84.9	82.8	84.4	77.0	70.8
FLUC	0.8	2.2	0.2	5.4	0.6	ERR	ERR	0.3	0.7	0.7	6.4	0.2	0.7	2.8	1.3	1.0	0.8	0.5	1.4	0.5	0.4	1.2	1.2	0.7
# RDGS	4	4	3	4	4	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

MILLERSVILLE LANDFILL
GROUNDWATER LEVEL DATA

SUMMARY OF 1981 DATA

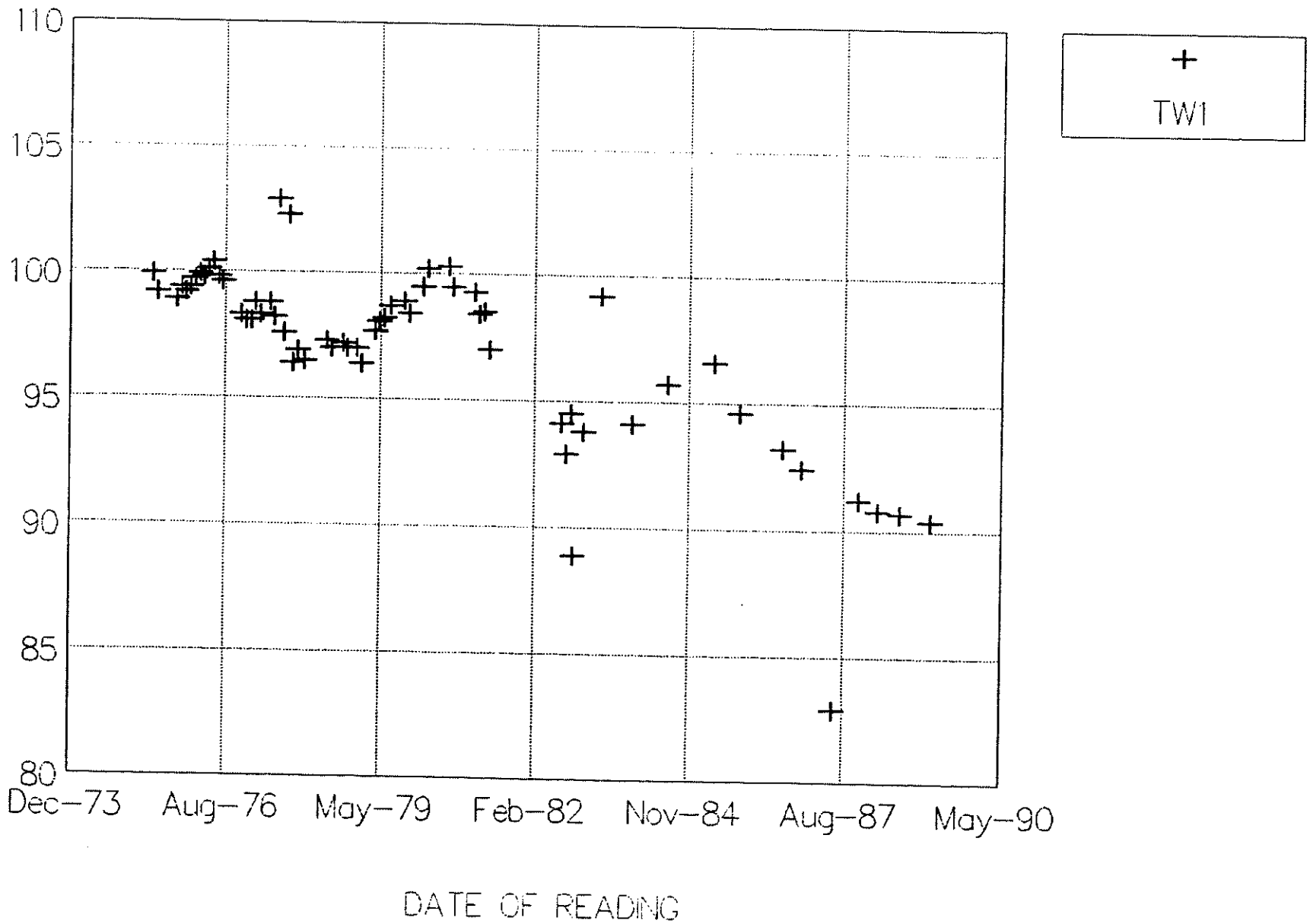
READING DATE	WELL 1	WELL 2	WELL 2A	WELL 3	WELL 3A	WELL 4	WELL 4A	WELL 5	WELL 5A	WELL 6	WELL 6A	WELL 7	WELL 8	WELL 9	WELL 10	WELL 11	WELL 12	WELL 12A	WELL 13	WELL 13A	WELL 14	WELL 14A	WELL 15	WELL 16
Jan-81	99.3	139.6	93.0	89.3	134.9			82.1	82.4	77.8		89.5	97.1	62.7	113.7									
Feb-81	98.4	139.2	92.5	89.0	134.7			82.0	82.3	77.2		89.3												
Mar-81	98.5	137.6	92.1	88.3	133.6			81.8	81.4	77.8	103.2	89.0	96.3	63.3	113.7	117.8	90.6	91.5	79.4	81.7	79.6	79.7	72.0	68.2
Apr-81	97.0	139.3	91.6	88.1	136.8			81.7	82.1	77.0		89.3	97.3	62.8	110.6	118.6	91.1	92.3	78.9	81.5	79.6	80.5	73.2	68.3
AVG	98.3	138.9	92.3	88.7	135.0	ERR	ERR	81.9	82.0	77.5	103.2	89.3	96.9	62.9	112.7	118.2	90.8	91.9	79.2	81.6	79.6	80.1	72.6	68.3
MIN	97.0	137.6	91.6	88.1	133.6	ERR	ERR	81.7	81.4	77.0	103.2	89.0	96.3	62.7	110.6	117.8	90.6	91.5	78.9	81.5	79.6	79.7	72.0	68.2
MAX	99.3	139.6	93.0	89.3	136.8	ERR	ERR	82.1	82.4	77.8	103.2	89.5	97.3	63.3	113.7	118.6	91.1	92.3	79.4	81.7	79.6	80.5	73.2	68.3
FLUC	2.3	2.0	1.4	1.2	3.2	ERR	ERR	0.4	1.0	0.8	0.0	0.5	1.0	0.6	3.1	0.8	0.5	0.8	0.5	0.2	0.0	0.8	1.2	0.1
# RDGS	4	4	4	4	4	0	0	4	4	4	1	4	3	3	3	2	2	2	2	2	2	2	2	2

MILLERSVILLE LANDFILL
GROUNDWATER LEVEL DATA

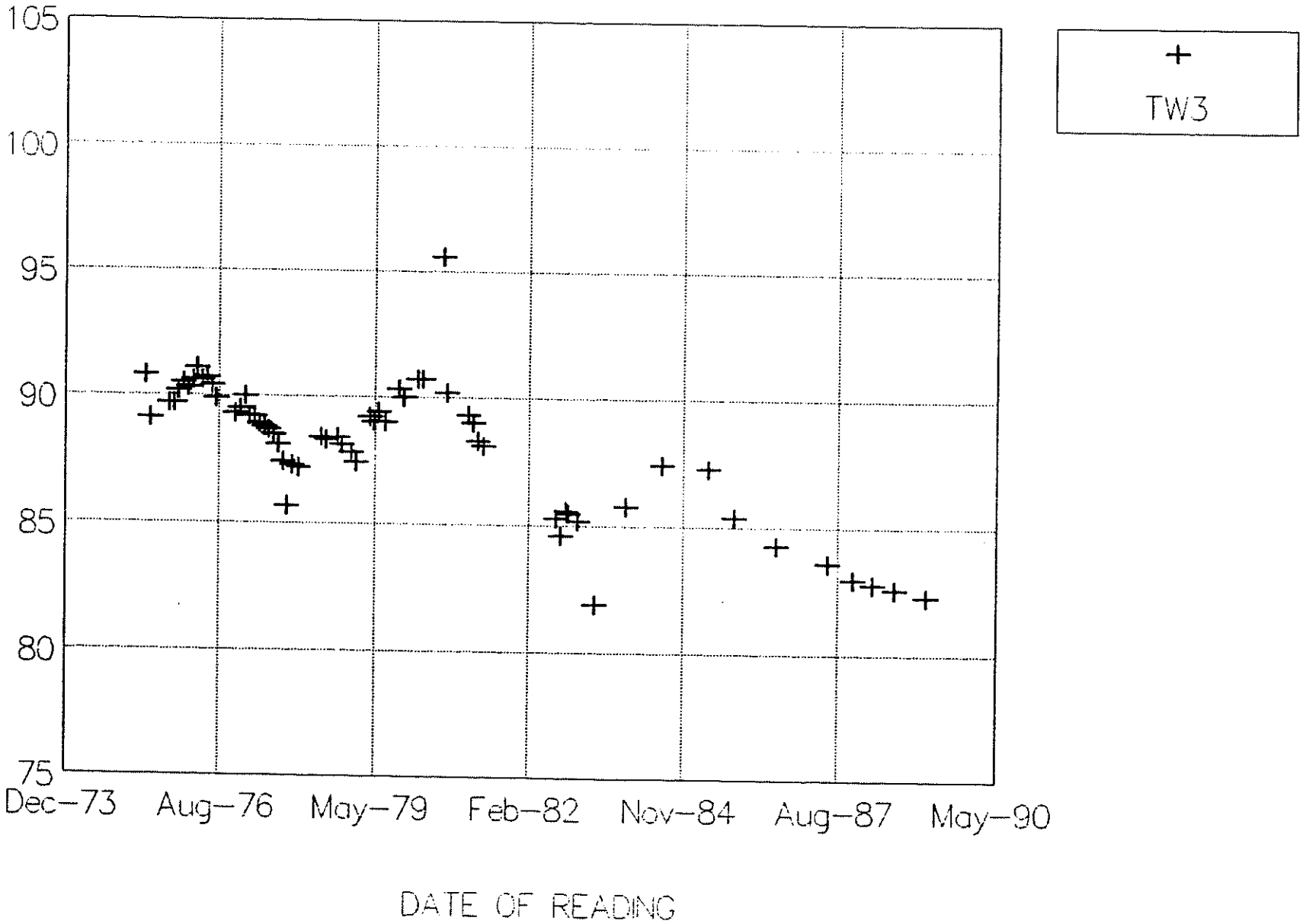
SUMMARY OF 1982 DATA

READING DATE	WELL 1	WELL 2	WELL 2A	WELL 3	WELL 3A	WELL 4	WELL 4A	WELL 5	WELL 5A	WELL 6	WELL 6A	WELL 7	WELL 8	WELL 9	WELL 10	WELL 11	WELL 12	WELL 12A	WELL 13	WELL 13A	WELL 14	WELL 14A	WELL 15	WELL 16
Aug-82	94.1	134.6	78.8	85.3	131.5			79.4	79.8	74.4		85.2	92.1	61.1	107.3	115.8	87.2	87.8	75.7	79.6	76.8	79.3	70.2	65.5
Sep-82		134.8	88.8	85.3	131.4			79.6	79.6	74.0		84.9	92.0	60.4	107.3									
Oct-82	93.4	134.8	88.6	84.8	131.4			79.0	79.4	73.8		84.7	91.7	61.3	107.1									
Nov-82	93.8	135.0	88.5	85.0	131.2			78.9	79.3	73.4		84.7	91.6	62.0	107.0	115.1	86.9	87.5	75.0	79.1	76.1	76.7	69.5	65.4
AVG	93.8	134.8	86.2	85.1	131.4	ERR	ERR	79.2	79.5	73.9	ERR	84.9	91.8	61.2	107.2	115.4	87.1	87.7	75.3	79.3	76.4	78.0	69.8	65.5
MIN	93.4	134.6	78.8	84.8	131.2	ERR	ERR	78.9	79.3	73.4	ERR	84.7	91.6	60.4	107.0	115.1	86.9	87.5	75.0	79.1	76.1	76.7	69.5	65.4
MAX	94.1	135.0	88.8	85.3	131.5	ERR	ERR	79.6	79.8	74.4	ERR	85.2	92.1	62.0	107.3	115.8	87.2	87.8	75.7	79.6	76.8	79.3	70.2	65.5
FLUC	0.7	0.4	10.0	0.5	0.3	ERR	ERR	0.7	0.5	1.0	ERR	0.5	0.5	1.6	0.3	0.7	0.3	0.3	0.7	0.5	0.7	2.6	0.7	0.1
# RDGS	3	4	4	4	4	0	0	4	4	4	0	4	4	4	4	2	2	2	2	2	2	2	2	2

MILLERSVILLE STATIC WATER LEVELS



MILLERSVILLE STATIC WATER LEVELS



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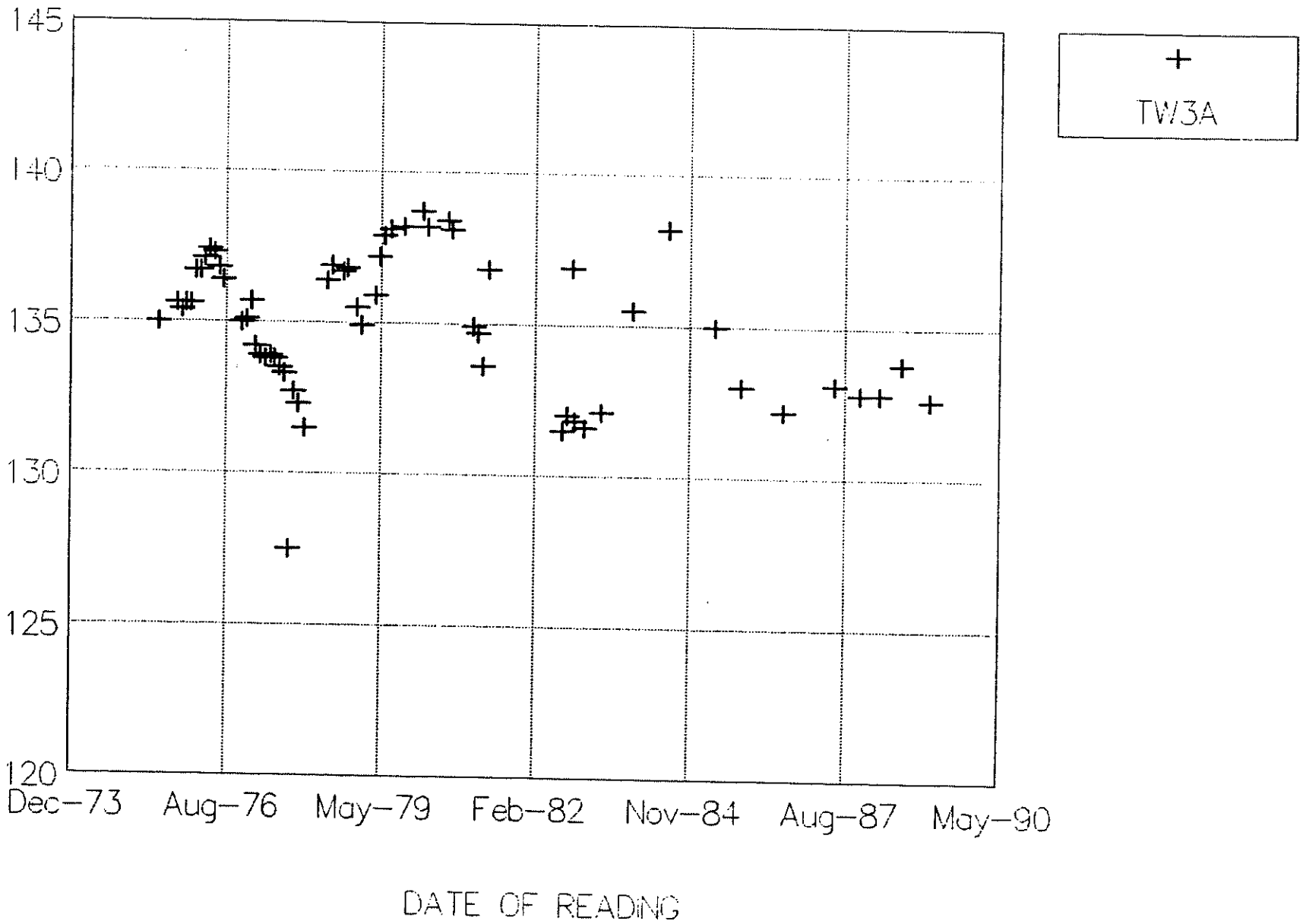

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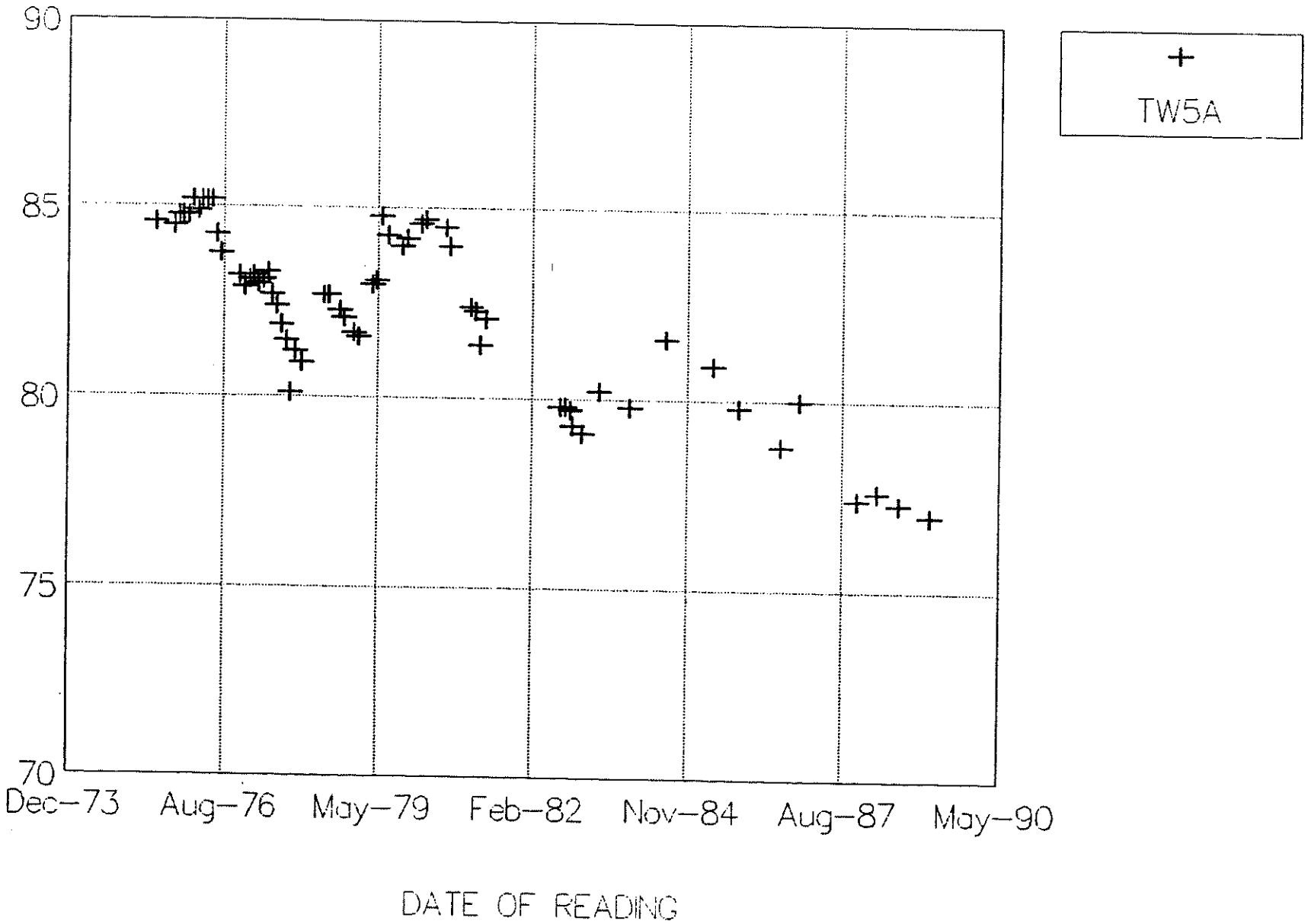

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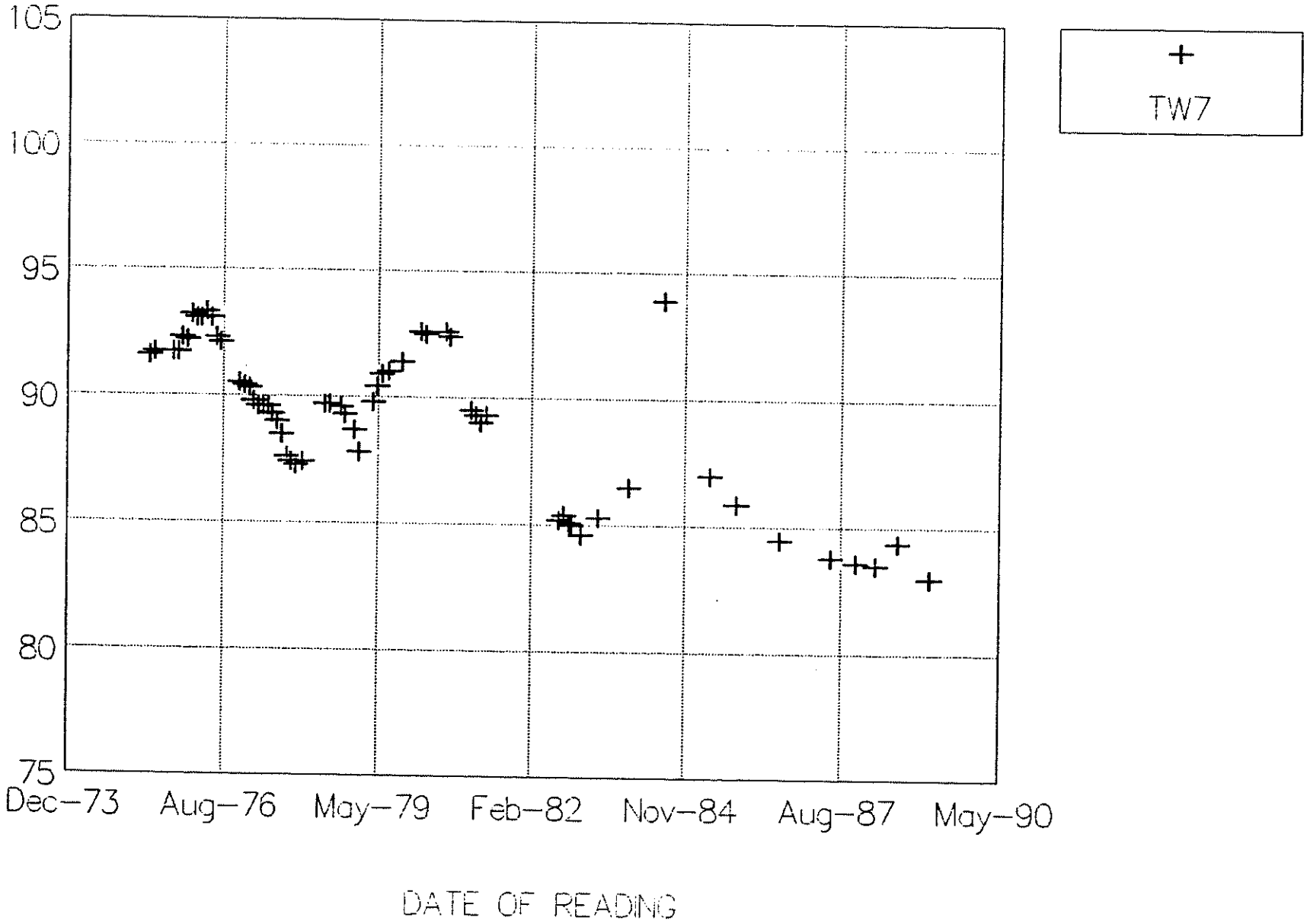

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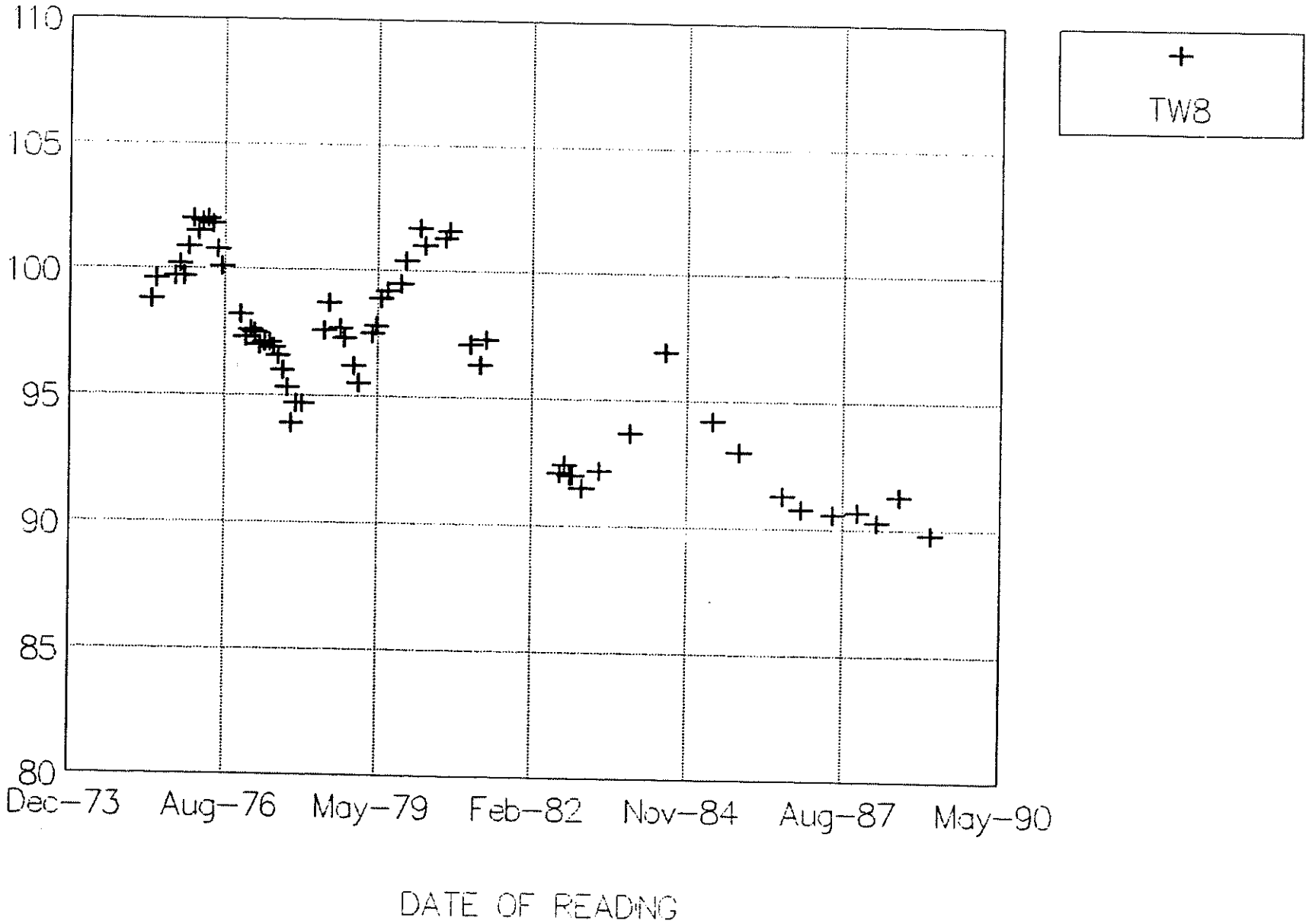

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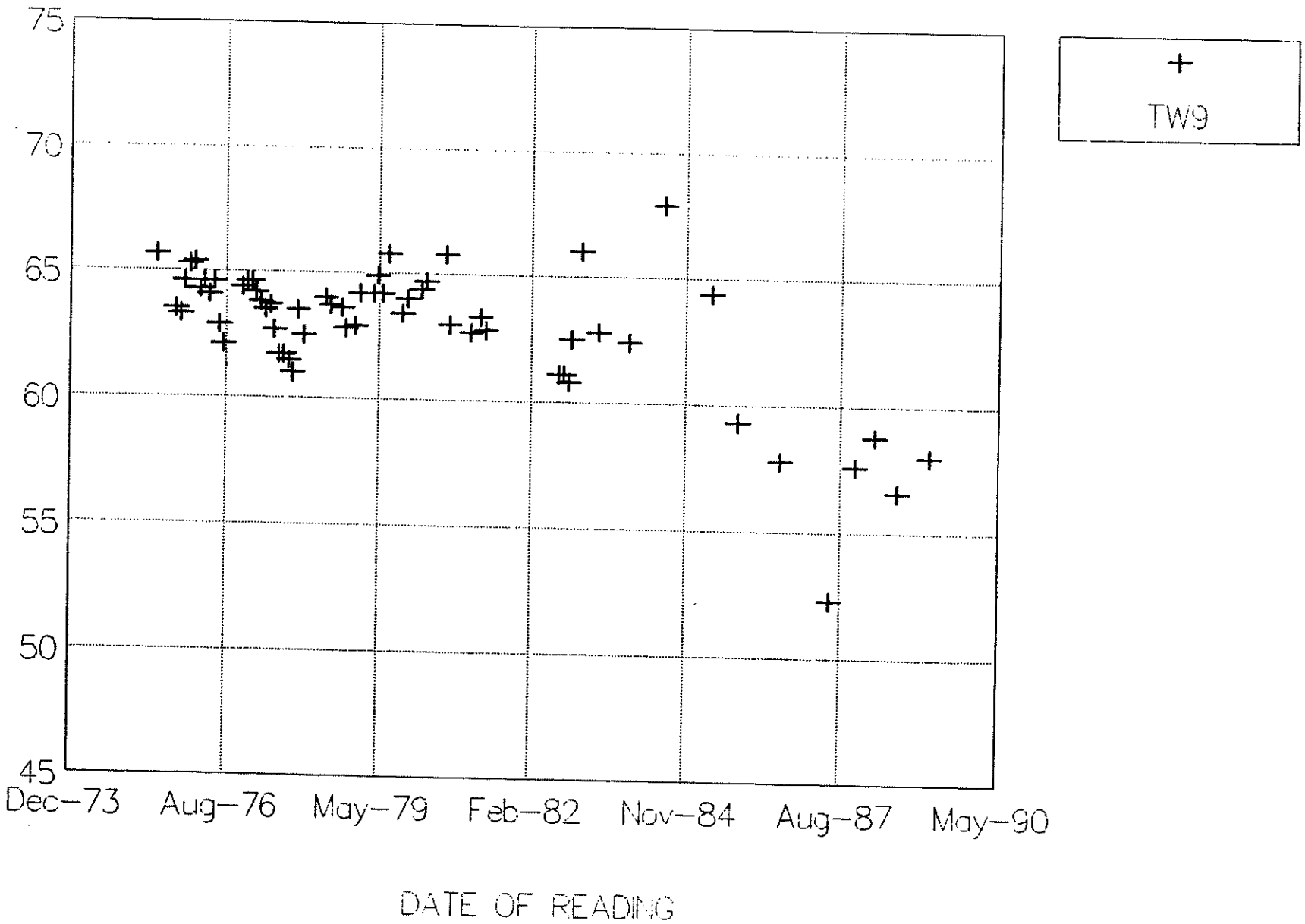

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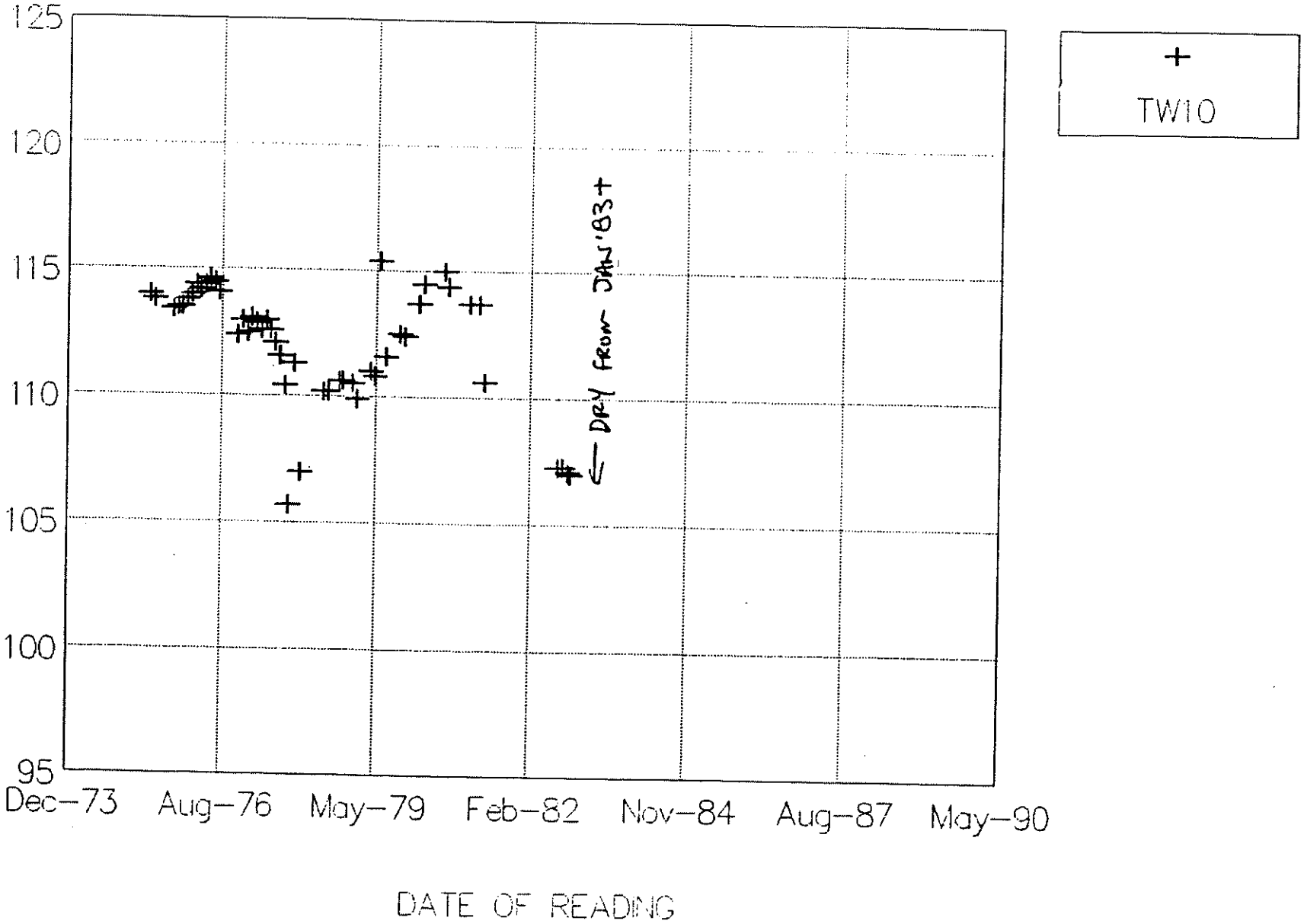

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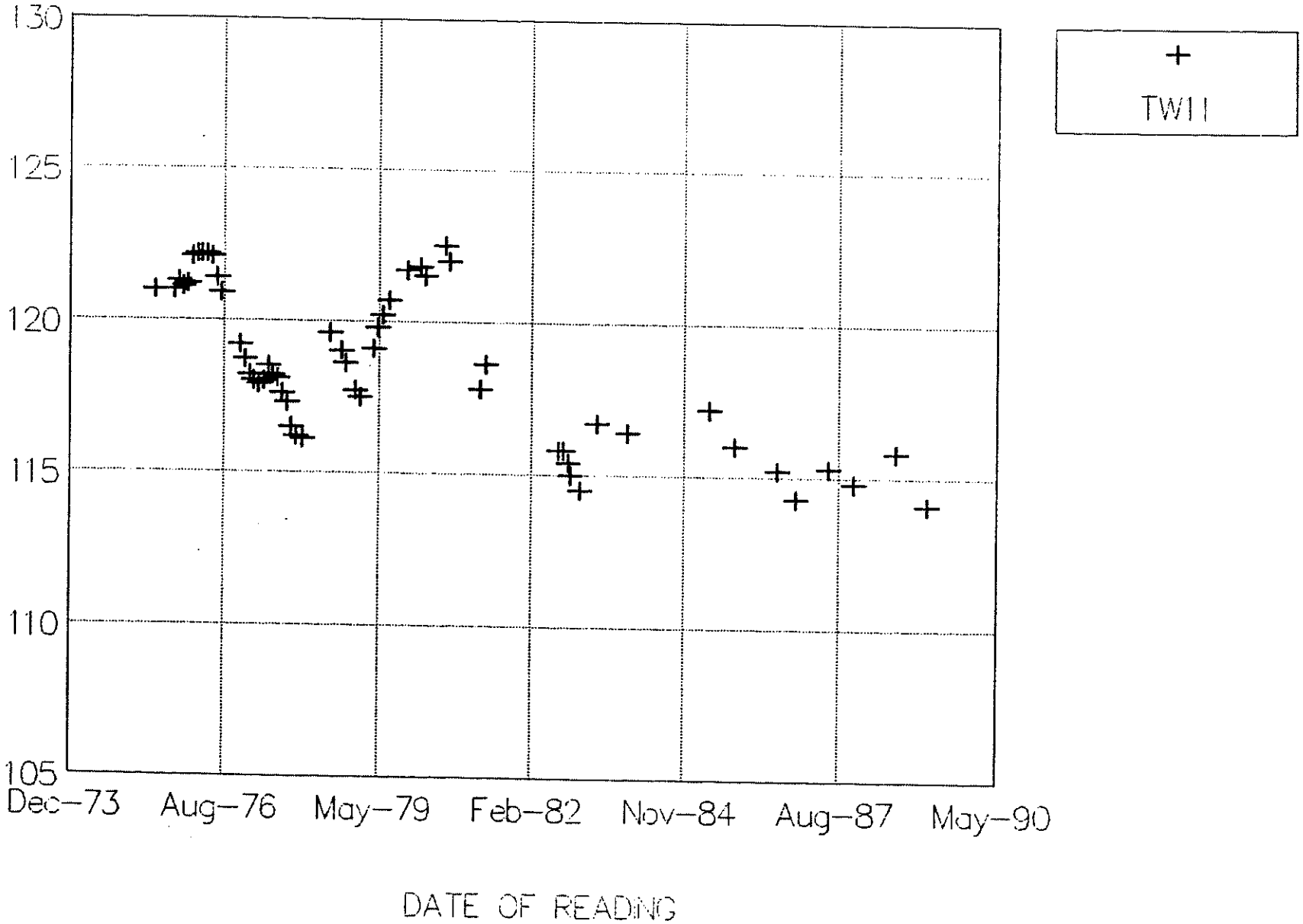

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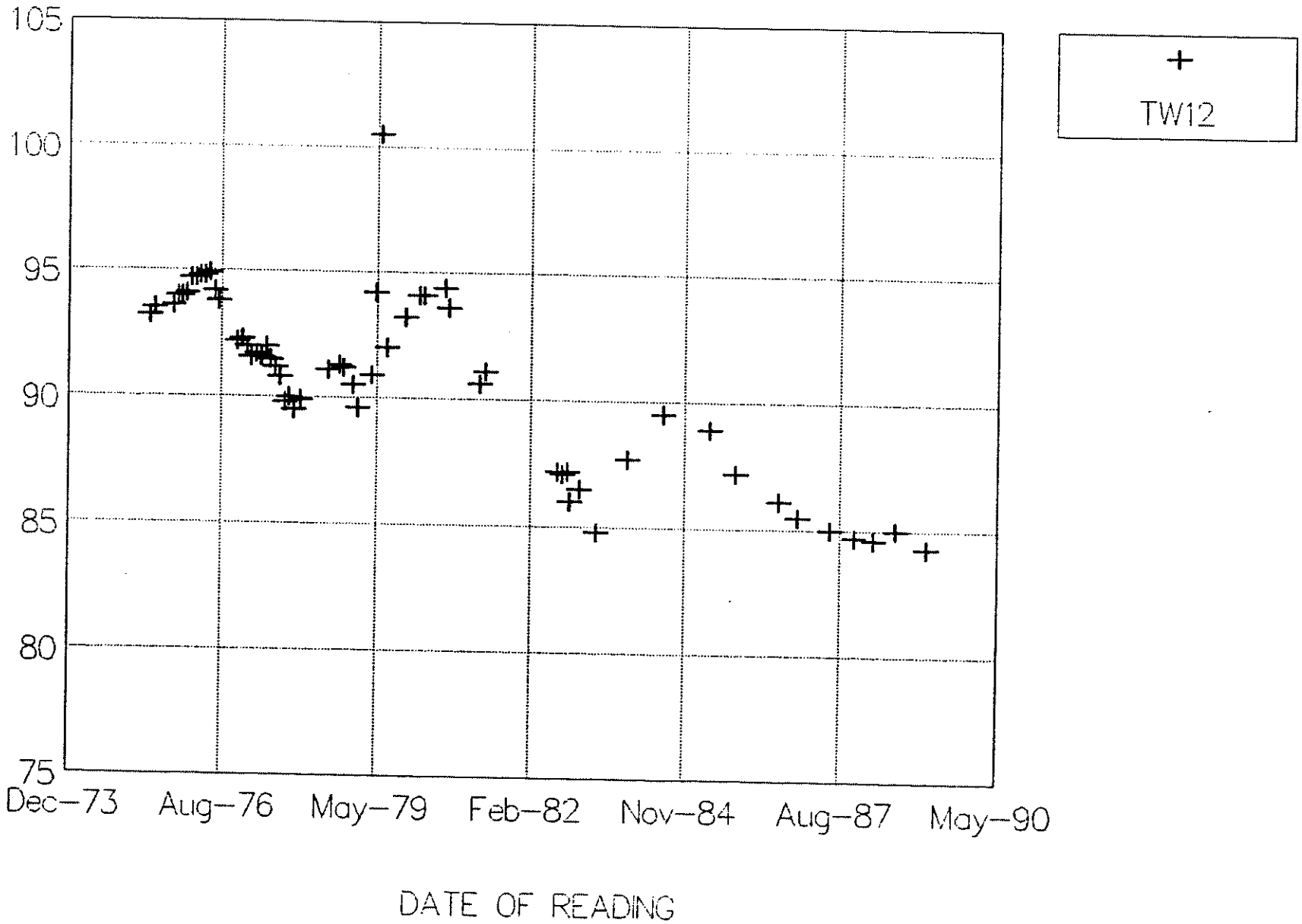
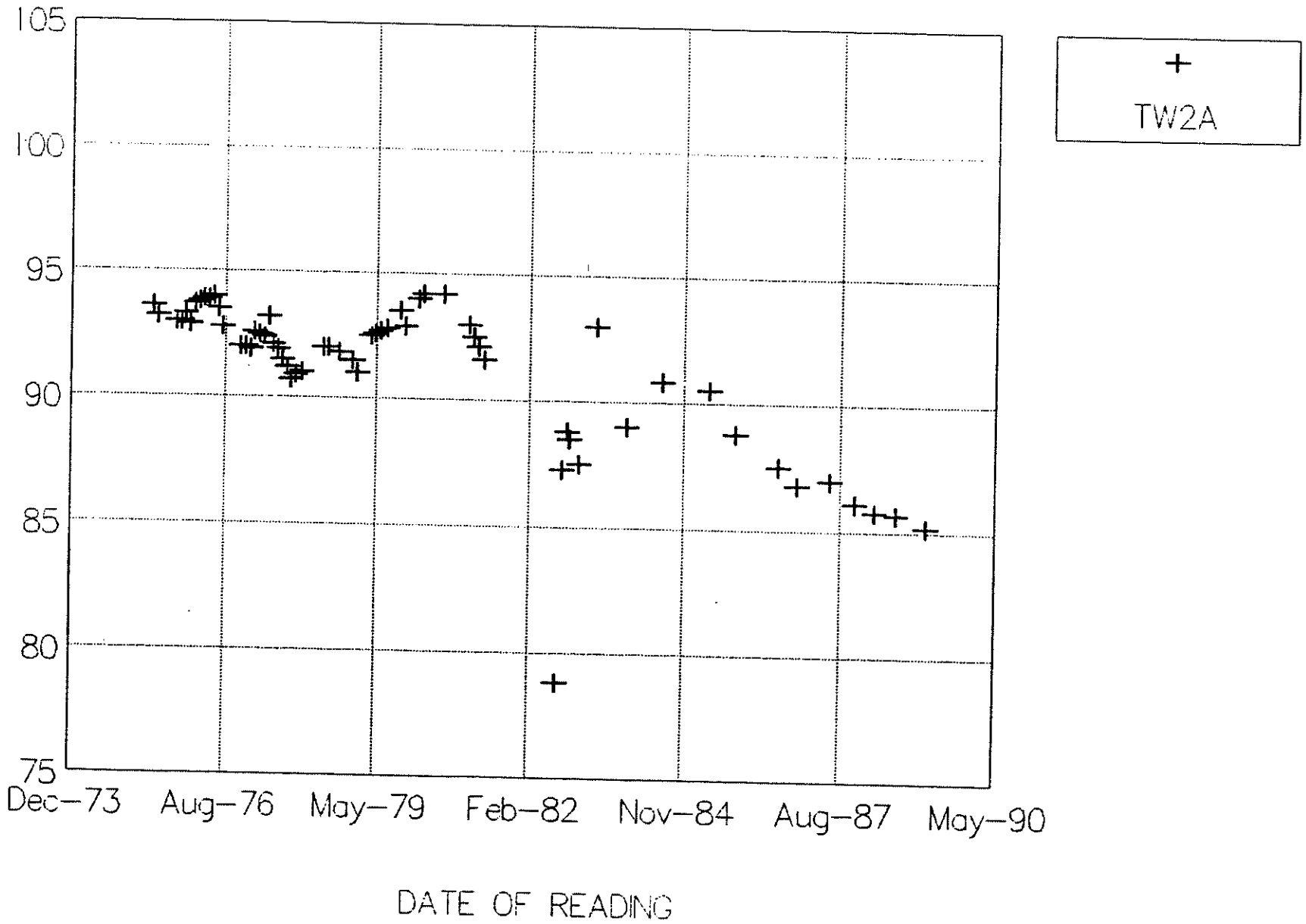
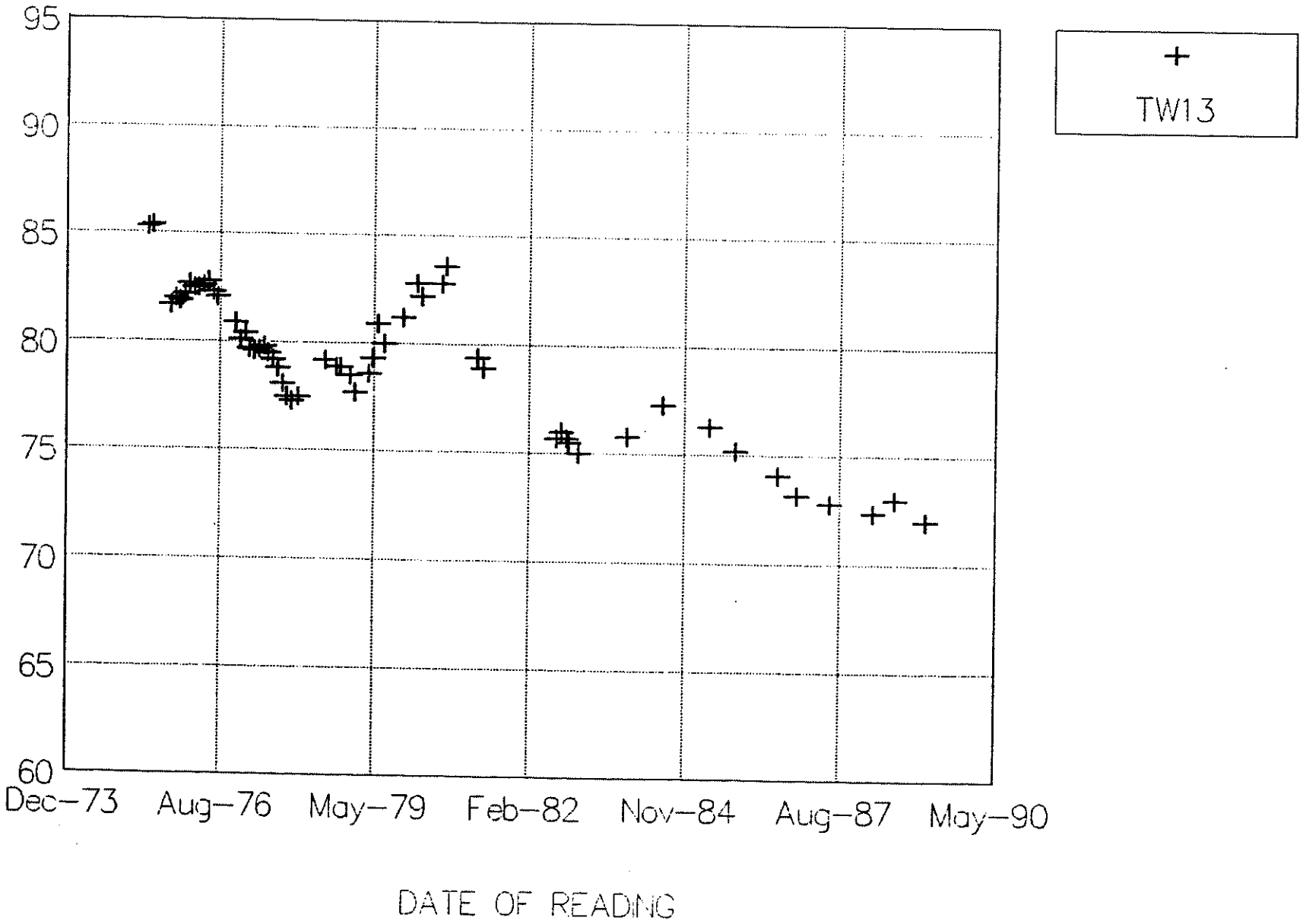


MILLERSVILLE STATIC WATER LEVELS

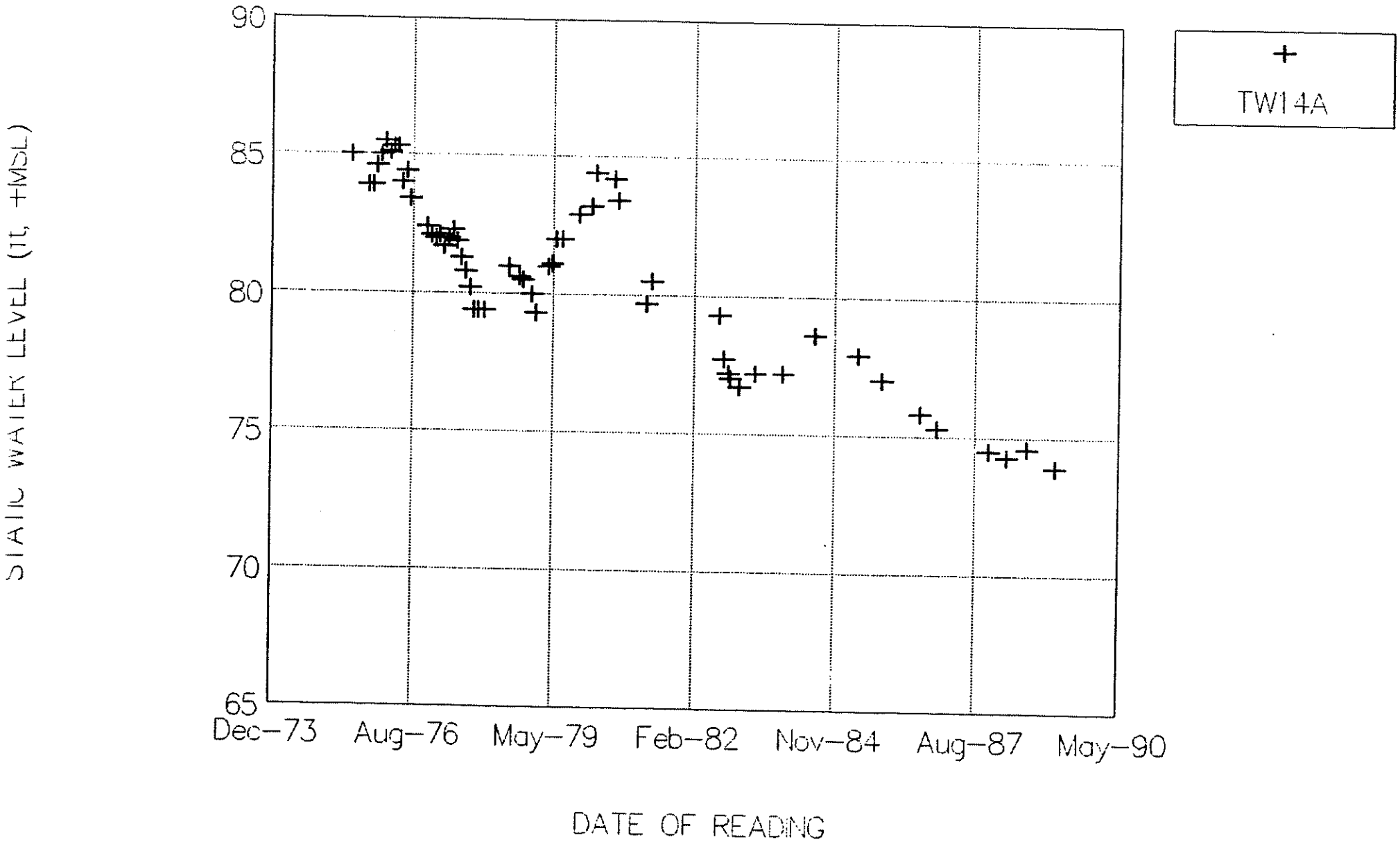


VIGNT #7 LEVEL WATER STATS

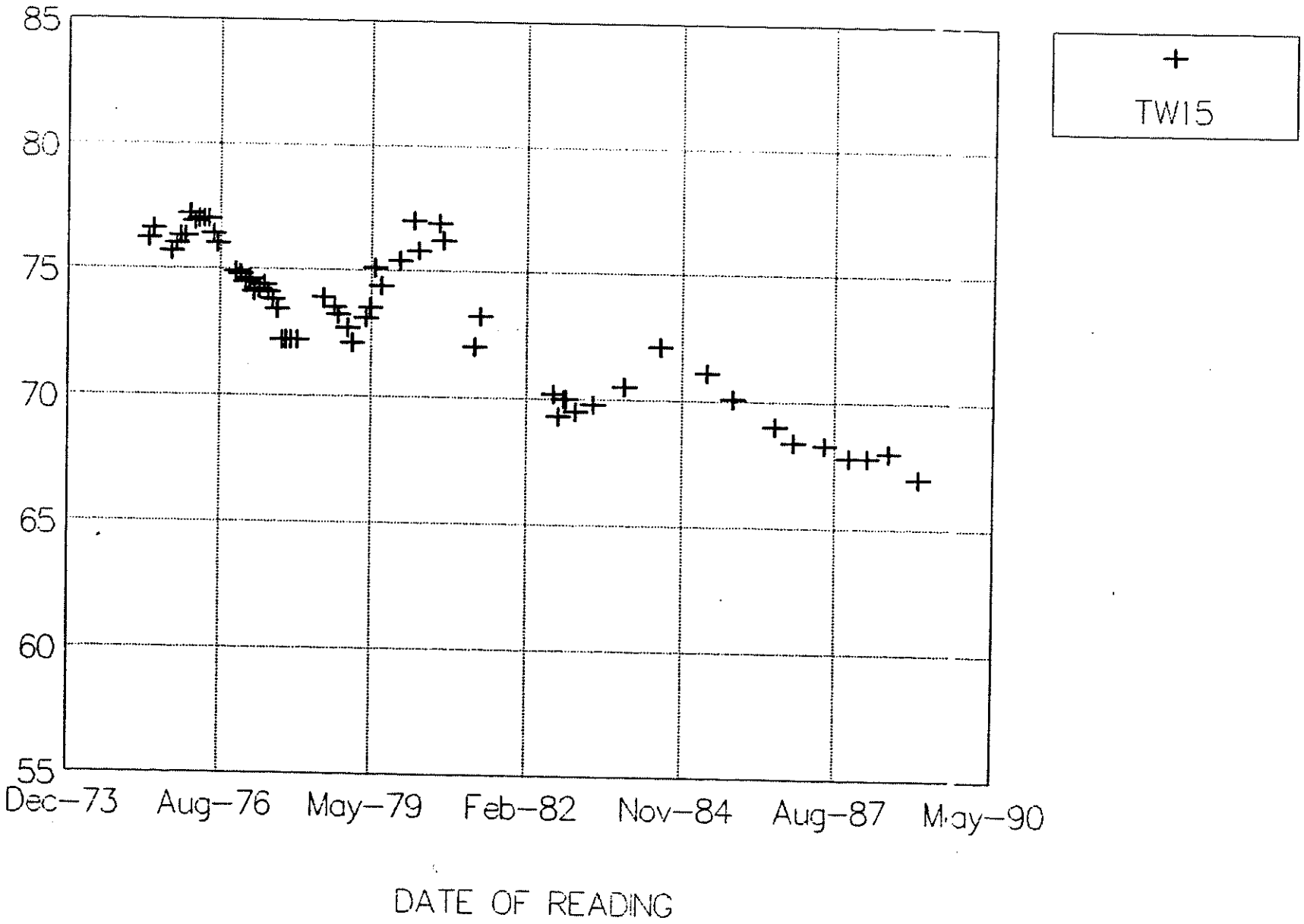
MILLERSVILLE STATIC WATER LEVELS



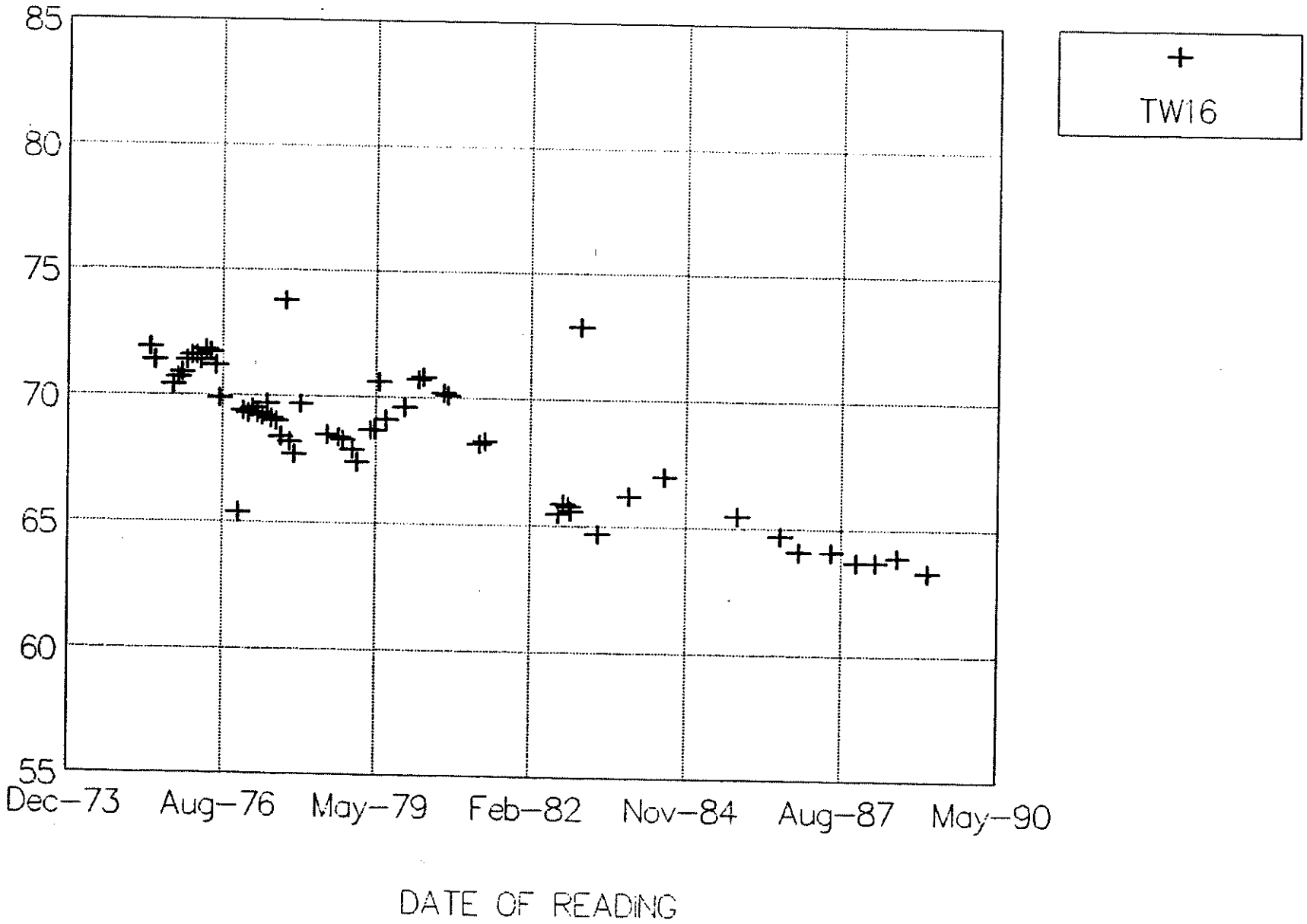
MILLERSVILLE STATIC WATER LEVELS



MILLERSVILLE STATIC WATER LEVELS



MILLERSVILLE STATIC WATER LEVELS



APPENDIX B

WATER QUALITY RESULTS

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #1

TEST DATE	pH	Nitrate	Chloride	Spec Cond	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	COD
Sep-80	11.9	0	3	975			0	0.01	0.04	0		5
Dec-80	11.4		3	706								0
Mar-81	11.3		3	506								
Jun-81	11.2		3	412								0
Sep-81	11.5	0	4	762			0	0.1	0.08	0.004		5
Dec-81	11.1		3	317								2
Mar-82	11.4		3	342								45
Jun-82	11.7		5	786								7
Sep-82	11.2	0	3	306	0		0	0	0	0		4
Feb-83	9.7		3	76								0
May-83	10.4		7	80								22
Aug-83	10.3		2	77								0
Nov-83	9.9	0	2	70	0		0.001	0.01	0.02	0		43
Jul-84	10		3	60								0
Apr-85	6.6	1.9	0	51	0	0	0.002	0	0	0	0	0
Oct-85	7.2	0	3	53	0	0	0.004	0	0	0	0	0
Jul-86	6.9		0	73								0
Nov-86	8.6		5	88								0
Jun-87	10.2	0.4	0	156	0	0	0	0	0	0	0	0
Nov-87	8		0	79								10
Mar-88	9.9			120								0
Aug-88	7.2	0	0	51	0	0	0	0	0.06	0	0	0
AVG	9.9	0.3	2.6	279	0	0	0.001	0.01	0.02	0.001	0.00	7
MIN	6.6	0	0	51	0	0	0.000	0.00	0.00	0.000	0.00	0
MAX	11.9	1.9	7	975	0	0	0.004	0.10	0.08	0.004	0.00	45
# RDGS	22	8	21	22	6	4	8	8	8	8	4	21

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #2

TEST DATE	pH	Nitrate	Chloride	Spec Cond	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	COD
Sep-80	9	0	3	56			0	0	0	0		3
Dec-80	7.2		3	45								0
Mar-81	6.8		3	39								
Jun-81	6.2		0	18								2
Sep-81	6.2	0	2	29			0	0	0	0.003		0
Dec-81	6.1		0	25								0
Mar-82	6.1		2	25								36
Jun-82	5.9		3	15								10
Sep-82	5.9	0	0	16	0		0	0.02	0	0		2
Feb-83	5.9		2	16								0
May-83	6		4	20								0
Aug-83	5.6	0	2	14								39
Nov-83	5.8	0	2	13	0		0.001	0.12	0.02	0		20
Jul-84	5.3		2	17								22
Apr-85	5.9	0	0	20	0	0	0.004	0.02	0.01	0	0	0
Oct-85	6.4	0	5	14	0	0	0	0.01	0	0	0	0
Jul-86	6		0	20								0
Nov-86	6.2		4	20								0
Jun-87	6	0.2	0	14	0	0	0	0.01	0	0	0	0
Nov-87	6.2		0	15								0
Mar-88	5.7		57	18								0
Aug-88	6.3	0	0	20	0	0	0	0	0	0	0	0
AVG	6.2	0.0	4.3	22	0	0	0.001	0.02	0.00	0.000	0.00	6
MIN	5.3	0	0	13	0	0	0.000	0.00	0.00	0.000	0.00	0
MAX	9	0.2	57	56	0	0	0.004	0.12	0.02	0.003	0.00	39
# RDGS	22	9	22	22	6	4	8	8	8	8	4	21

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #2A

TEST DATE	pH	Nitrate	Chloride	Spec Cond	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	COD
Aug-75	9	0	10	0			0	0	0	0		10
Jun-78	8.8						0		0			5
Jan-79	8.5		6									7
Apr-79	7.8		6	80								5
Aug-79	8.1		6	79								5
Dec-79	8.6		5	73								4
Mar-80	7.8		5	72								3
Jun-80	6.4		2	52								0
Sep-80	7.6	0	4	70			0	0	0.03	0		4
Dec-80	6.4		0	50								0
Mar-81	7.8		4	67								
Jun-81	7.5		4	65								0
Sep-81	6.4	0	2	60			0	0	0	0		0
Dec-81	6.4		2	47								0
Mar-82	6.6		2	53								13
Jun-82	6.4		2	42								29
Sep-82	6.6	0	0	45	0		0	0	0	0		14
Feb-83												
May-83	8		5	52								0
Aug-83	7.8		3	52								0
Nov-83	7.3	0	3	13	0		1.42	0	0.03	0		36
Jul-84	6		2	37								32
Apr-85	6.5	0		64	0	0	0.002	0	0	0	0	0
Oct-85	6.7	0	4	31	0	0	0.001	0	0	0	0	0
Jul-86	6.4		0	48								0
Nov-86	6.3		4	33								0
Jun-87	5.7	0.2	0	20	0	0	0	0	0	0	0	0
Nov-87	6		5	17								18
Mar-88	5.6		54	23								0
Aug-88	6.5	0	0	36	0	0	0	0	0	0	0	0
AVG	7.1	0.0	5.2	47	0	0	0.142	0.00	0.01	0.000	0.00	7
MIN	5.6	0	0	0	0	0	0.000	0.00	0.00	0.000	0.00	0
MAX	9	0.2	54	80	0	0	1.420	0.00	0.03	0.000	0.00	36
# RDGS	29	9	27	27	6	4	10	9	10	9	4	28

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #3

TEST DATE	pH	Nitrate	Chloride	Spec Cond	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	COD
Aug-75	9.1	0	8.6				0	0	0	0		12
Jun-78	7.3	0	3				0		0			0
Sep-78	7		2									0
Jan-79	6.9		2									2
Apr-79	6.8		2	54								0
Aug-79	7		2	51								3
Dec-79	6.9		0	51								0
Mar-80	6.9		0	51								0
Jun-80	6.8		0	50								0
Sep-80	6.8	0	0	46			0	0	0.02	0		0
Dec-80	6.7		0	44								0
Mar-81	6.7		0	43								
Jun-81	6.6		0	42								0
Sep-81	6.6	0	0	45			0	0.08	0.27	0		0
Dec-81	6.9		0	39								0
Mar-82	8.3		0	38								8
Jun-82	6.5		5	35								32
Sep-82	6.6	0	2	43	0		0	0	0.1	0		22
Jan-83	6.8		2	57								0
May-83	6.8		5	32								0
Aug-83	6.5		2	33								0
Nov-83	6.4	0	2	48	0		0.001	0	0.02	0		23
Jul-84	6.5		0	41								0
Apr-85	6.5	0	0	47	0	0	0.001	0	0	0	0	0
Oct-85	6.7	0	2	26	0	0	0	0	0	0	0	0
Jul-86	6.4		0	39								0
Nov-86												
Jun-87	7.2	0	0	31	0	0	0	0	0	0	0	0
Nov-87	6.5		3	24								0
Mar-88	6.2		49	43								0
Aug-88	6.6	0	2	38	0	0	0	0	0	0	0	0
AVG	6.8	0.0	3.1	42	0	0	0.000	0.01	0.04	0.000	0.00	4
MIN	6.2	0	0	24	0	0	0.000	0.00	0.00	0.000	0.00	0
MAX	9.1	0	49	57	0	0	0.001	0.08	0.27	0.000	0.00	32
# RDGS	30	10	30	26	6	4	10	9	10	9	4	29

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #3A

TEST DATE	pH	Nitrate	Chloride	Spec Cond	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	COD
Aug-75	8.9	0	12				0	0	0	0		12
Jun-78	6.6	0	8				0		0			3
Sep-78	6.4		14									0
Jan-79	6.2		13									0
Apr-79	6.2		14	54								3
Aug-79	6			42								2
Dec-79	6.2		7	30								0
Mar-80	6.2		5	21								0
Jun-80	6.3		4	25								0
Sep-80	6.3	0	4				0	0	0.02	0		0
Dec-80	6.2		4	239								0
Mar-81	6.2		4	18								
Jun-81	5.9		4	21								0
Sep-81	6.1	0	5	44			0	0	0	0		0
Dec-81	6.3		6	36								
Mar-82	6.3		28	123								29
Jun-82	5.8		49	196								4
Sep-82	6.2	0	33	141	0		0	0	0.02	0		13
Jan-83	6.6		11	89								0
May-83	6.6		6	71								0
Aug-83	5.7		14	63								0
Nov-83	6.1	0	38	28	0		0.003	0.01	0.02	0		17
Jul-84	5.4		8	37								13
Apr-85	6.4	0	11	94	0	0	0.001	0	0	0	0	0
Oct-85	6.7	0	4	32	0	0	0	0	0	0	0	0
Jul-86	6.5		17	88								0
Jun-87	6	0.2	17	248	0	0	0	0	0	0	0	0
Nov-87	6.1		35	120								0
Mar-88	5.8		68	98								0
Aug-88	5.6	0	53	184	0	0	0	0	0	0	0	0
AVG	6.3	0.0	17.1	86	0	0	0.000	0.00	0.01	0.000	0.00	3
MIN	5.4	0	4	18	0	0	0.000	0.00	0.00	0.000	0.00	0
MAX	8.9	0.2	68	248	0	0	0.003	0.01	0.02	0.000	0.00	29
# RDGS	30	10	29	25	6	5	10	9	10	9	4	28

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #4

TEST DATE	pH	Nitrate	Chloride	Spec Cond	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	COD
Aug-75	7.6	0	4.1				0	0	0	0		7
Jun-78	6.2	0	3				0		0			0
AVG	6.9	0.0	3.5	ERR	ERR	ERR	0.000	0.00	0.00	0.000	ERR	4
MIN	6.2	0	3	ERR	ERR	ERR	0.000	0.00	0.00	0.000	ERR	0
MAX	7.6	0	4.1	ERR	ERR	ERR	0.000	0.00	0.00	0.000	ERR	7
# RDGS	2	2	2	0	0	0	2	1	2	1	0	2

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #5

TEST DATE	pH	Nitrate	Chloride	Spec Cond	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	COD
Aug-75	6.9	0	4.1				0	0	0	0		6
Jun-78	6.5	0	0.2				0		0			0
Sep-78	6.5		0									
Dec-78	6.6		0									
Apr-79	6.4		0	48								0
Jul-79	6.8		2	60								0
Dec-79	6.9		0	70								0
Mar-80	6.9		2	102								0
Jun-80	6.9		0	73								
Sep-80	6.7	0	0	60			0	0	0.02	0		0
Dec-80	6.7		2	56								5
Mar-81	6.8		0	58								
Jun-81	7.3		0	73								0
Sep-81	6.8	0	0	68			0	0.03	0	0		0
Dec-81	7		0	69								0
Mar-82	6.9		0	65								16
Jun-82	6.9		0	68								39
Sep-82	6	0	2	32	0		0	0	0	0		0
Jan-83	6.9		2	60								0
May-83	6.8		0	592								20
Aug-83	5.7		2	20								0
Jun-84	5.7		2	19								44
Apr-85	6.6	0	0	48	0	0	0	0	0.01	0	0	0
Oct-85	6.8	0	5	32	0	0	0.001	0	0	0	0	0
Jul-86	6.4		0	42								0
Nov-86	6.4		2	35								0
Nov-87	6.2	0	0	24	0	0	0	0	0	0	0	16
Mar-88	5.6		2	21								0
Sep-88	6	0	4	18	0	0	0	0	0	0	0	0
AVG	6.6	0.0	1.1	73	0	0	0.000	0.00	0.00	0.000	0.00	6
MIN	5.6	0	0	18	0	0	0.000	0.00	0.00	0.000	0.00	0
MAX	7.3	0	5	592	0	0	0.001	0.03	0.02	0.000	0.00	44
# RDGS	29	9	29	25	5	4	9	8	9	8	5	25

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #5A

TEST DATE	pH	Nitrate	Chloride	Spec Cond	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	COD
Aug-75	6.6	0	4				0	0	0	0		23
Jun-78	6.9	0	3				0		0			4
Sep-78	6.7		4									0
Dec-78	6.8		0	25								
Apr-79	6.5		0	54								2
Jul-79	6.5		2	53								0
Dec-79	6.4		0	39								0
Mar-80	6.3		0	33								6
Jun-80	6.5		0	47								0
Sep-80	6.3	0	2	40			0	0	0	0		0
Dec-80	6.4		4	37								0
Mar-81	6.4		2	27								
Jun-81	6.4		0	40								0
Sep-81	6.4	0	2	46			0	0.02	0	0		0
Dec-81	6.4		2	44								0
Mar-82	6.6		2	48								12
Jun-82	6.6		2	47								8
Sep-82	6.5	0	2	54	0		0	0	0.02	0		0
Jan-83	6.7		2	47								0
Apr-83	6.5		0	55								50
Aug-83	5.7		2	19								64
Jun-84	5.6		2	17								55
Apr-85	6.6	0	0	45	0	0	0	0	0	0	0	0
Oct-85	6.6	0	5	28	0	0	0.001	0	0	0	0	0
Jul-86	6.1		0	48								0
Nov-86	6.4		4	37								0
Nov-87	5.9	0	0	17	0	0	0	0	0	0	0	0
Mar-88	5.4		0	19								0
Aug-88	5.8	0	5	16	0	0	0	0	0.06	0	0	0
AVG	6.4	0.0	1.8	38	0	0	0.000	0.00	0.01	0.000	0.00	8
MIN	5.4	0	0	16	0	0	0.000	0.00	0.00	0.000	0.00	0
MAX	6.9	0	5	55	0	0	0.001	0.02	0.06	0.000	0.00	64
# RDGS	29	9	29	26	5	4	9	8	9	8	4	27

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #6

TEST DATE	pH	Nitrate	Chloride	Spec Cond	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	COD
Aug-75	6.4	0	3.5				0	0	0	0		0
Jun-78	6.1	0	3				0		0			2
Sep-78	6		4									
Dec-78	6		0									
Apr-79	5.9		2	14								0
Jul-79	6.1		2	15								0
Dec-79	5.9		0	14								0
Mar-80	5.9		0	13								0
Jun-80	6		2	13								0
Sep-80	5.8	0	2				0	0.03	0.33	0		2
Dec-80	6		0	14								0
Mar-81	5.9		2	14								
Jun-81	6.1		0	21								0
Sep-81	6	0	2	24			0	0	0	0		0
Dec-81	6.2		0	27								0
Mar-82	6.5		2	35								13
Jun-82	6.2		2	25								10
Sep-82	6.2	0	3	31	0		0	0.01	0	0		0
Jan-83	6.2		2	24								0
May-83	6.2		3	22								0
Aug-83	5.4		3	16								0
Dec-83	6	0	2	21	0		0	0.02	0	0		20
Jun-84	5.4		2	16								36
Apr-85	6.1	0	0	25	0	0	0	0	0.01	0	0	0
Oct-85	6.3	0	4	21	0	0	0	0	0	0	0	0
Jul-86	6.1		0	26.5								0
Nov-86	6.1		5	24								0
Mar-88												
Sep-88	4.1	0	4	35	0	0	0	0	0.05	0	0	0
AVG	6.0	0.0	1.9	21	0	0	0.000	0.01	0.04	0.000	0.00	3
MIN	4.1	0	0	13	0	0	0.000	0.00	0.00	0.000	0.00	0
MAX	6.5	0	5	35	0	0	0.000	0.03	0.33	0.000	0.00	36
# RDGS	28	9	28	23	5	3	9	8	9	8	3	25

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #6A

TEST DATE	pH	Nitrate	Chloride	Spec Cond	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	COD
Aug-75	5.2	0	5.9				0	0	0	0		5
Jun-78	6.1	0	4				0		0			0
Sep-78	6.5		8									
Dec-78	6.1		21									
Apr-79	6.2		5	69								0
Jul-79	5.8		5	71								0
Dec-79	6.2		5	66								0
Mar-80	6		5	59								3
Jun-80	6.2		3	50								0
Mar-81	6		8	83								
Jun-81	6.2		6	84								0
Mar-82	6.5		5	79								9
Jun-82	6.2		4	73								12
Jan-83	6.7		3	77								10
May-83	6.8		3	62								0
Jan-83	6.3	0	4	68	0		0.001	0	0	0		20
Jul-84	5.9		3	50								14
Apr-85	6.5	0	0	75	0	0	0.004	0	0	0	0	0
Oct-85	6.7	0	9	84	0	0	0.003	0	0	0	0	0
Nov-86	6.2		12	107								0
AVG	6.2	0.0	5.9	72	0	0	0.002	0.00	0.00	0.000	0.00	4
MIN	5.2	0	0	50	0	0	0.000	0.00	0.00	0.000	0.00	0
MAX	6.8	0	21	107	0	0	0.004	0.00	0.00	0.000	0.00	20
# RDGS	20	5	20	16	3	2	5	4	5	4	2	17

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #8

TEST DATE	pH	Nitrate	Chloride	Spec Cond	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	COD
Aug-75	6.5	0	5.1				0	0	0	0		0
Oct-76	6.5		4.2									0
Jun-78	6.4	0	3				0		0			0
Sep-78	6.3		3									0
Dec-78	6.4		0									
Apr-79	5.8		6	45								0
Jul-79	6.3		3	33								0
Dec-79	6.5		5	35								0
Mar-80	6.3		3	39								0
Jun-80	6.1		3	40								0
Sep-80	6.2	0	3	43			0	0.01	0.12	0		0
Dec-80	6.2		3	39								0
Mar-81	6.2		4	46								
Jun-81	6.4		3	55								4
Sep-81	6.6	0	4	43			0	0.04	0.02	0		0
Dec-81	6		5	57								0
Mar-82	6.2		2	47								15
Jun-82	6.3		5	50								3
Sep-82	6.3	0	11	52	0		0	0.05	0	0		15
Feb-83	6.5		6	43								0
Apr-83	6.6		4	59								18
Aug-83	5.4		3	41								0
Dec-83	6.6	0	6	40	0		0	0.06	0.01	0		59
Jul-84	5.6		3	37								21
Apr-85	6.3	0	0	50	0	0	0.002	0	0.01	0	0	
Jul-86	6.4	0	3	50	0	0	0	0.01	0	0	0	0
Nov-86	6.4		6	44								0
Jun-87	5.5	0.2	4	44	0	0	0	0	0	0	0	0
Nov-87	6.2		0	51								0
Mar-88	5.8		4	45								0
Aug-88	4.3	0	3	43	0	0	0	0	0	0	0	0
AVG	6.2	0.0	3.8	45	0	0	0.000	0.02	0.02	0.000	0.00	5
MIN	4.3	0	0	33	0	0	0.000	0.00	0.00	0.000	0.00	0
MAX	6.6	0.2	11	59	0	0	0.002	0.06	0.12	0.000	0.00	59
# RDGS	31	10	31	26	6	4	10	9	10	9	4	28

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #7

TEST DATE	pH	Nitrate	Chloride	Spec Cond	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	COD
Aug-75	10.6	0	4.2				0	0	0	0		3
Oct-76	6.8		3.6									0
Jun-78	6.6	0	3				0		0			0
Sep-78	6.5		4									0
Dec-78	6.6		2									0
Apr-79	11.4		3	654								0
Jul-79	6.4		3	46								0
Dec-79	6.4		6	101								0
Mar-80	10.7		3	309								0
Jun-80	11		3	208								0
Sep-80	10.6	0	2	105			0	0.01	0.35	0		4
Dec-80	10.4		3	95								0
Mar-81	6.7		3	59.4								
Jun-81	6.8		2	59								0
Sep-81	7	0	3	51			0	0.03	0	0.0002		0
Dec-81	11		3	243			0		0			0
Mar-82	11.2		3	265								20
Jun-82	6.6		4	55								17
Sep-82	10.6	0	4	144	0		0	0	0.13	0		27
Feb-83	6.9		3	16								0
Apr-83	7.1		3	55								12
Aug-83	6.2		3	46								0
Dec-83	9.1	0	4	50	0		0	0	0.01	0		25
Jul-84	6.2		3	40								35
Apr-85	6.6	0	5	63	0	0	0.001	0	0	0	0	0
Jul-86	6.5	0	0	54	0	0	0	0	0	0	0	0
Jun-87	6.3	0.2	2	66	0	0	0	0	0	0	0	0
Nov-87	6.5		0	45								0
Mar-88	6		2	40								0
Aug-88	6.9	0	0	81	0	0	0	0.04	0.08	0	0	0
AVG	7.9	0.0	2.9	118	0	0	0.000	0.01	0.05	0.000	0.00	5
MIN	6	0	0	16	0	0	0.000	0.00	0.00	0.000	0.00	0
MAX	11.4	0.2	6	654	0	0	0.001	0.04	0.35	0.000	0.00	35
# RDGS	30	10	30	25	6	4	11	10	11	9	4	29

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #9

TEST DATE	pH	Nitrate	Chloride	Spec Cond	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	COD
Aug-75	6.7	0	6.8				0	0	0	0		5
Jun-78	7.2	0	3				0		0			4
Sep-78	7.2		2									66
Dec-78	8		2									4
Apr-79	6.3		2	25								3
Aug-79	7.4		0	63								5
Dec-79	6.3		0	23								0
Mar-80	6.5		0	24								0
Jun-80	6.4		4	22								0
Sep-80	6.3	0	0	20		0	0	0	0			0
Dec-80	6.3		0	19								0
Mar-81	6.4		3	26.8								
Jun-81	6.5		0	34								0
Sep-81	6.6	0	4	20			0	0.02	0	0		0
Dec-81	6.4		2	40								9
Mar-82	6.5		0	36								32
Jun-82	6.3		0	26								15
Sep-82	6.4	0	2	43	0		0	0	0	0		17
Feb-83	7.1		2	72								0
Apr-83	6.6		0	68								23
Aug-83	6		0	37								43
Dec-83	6.4		0	31	0		0	0	0.01	0		13
Jul-84	6		0	42								20
Apr-85	6.4	0	0	82	0	0	0	0	0	0	0	0
Jul-86	6.3	0	0	62	0	0	0	0	0.18	0.0006	0	0
Jun-87	5.9	0.2	0	48	0	0	0	0	0	0	0	0
Nov-87	6.3		0	46								0
Mar-88	6		0	54								0
Aug-88	6.4	0	0	56	0	0	0	0	0.11	0	0	0
AVG	6.5	0.0	1.1	41	0	0	0.000	0.00	0.03	0.000	0.00	9
MIN	5.9	0	0	19	0	0	0.000	0.00	0.00	0.000	0.00	0
MAX	8	0.2	6.8	82	0	0	0.000	0.02	0.18	0.001	0.00	66
# RDGS	29	9	29	25	6	5	10	9	10	8	5	28

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #11

TEST DATE	pH	Nitrate	Chloride	Spec Cond	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	COD
Aug-75	9.3	0	6.8				0	0	0	0		3
Jun-78	7.8	0	3				0		0.02			0
Sep-78	6.8		4									
Dec-78	6.8		0									
Apr-79	7.6		4	105								7
Aug-79	7.2		4	97								0
Dec-79	7.3		3	118								0
Mar-80	7.1		3	97								0
Jun-80	6.9		3	88								0
Sep-80	6.7	0	2	86			0	0	0.99	0		0
Dec-80	6.5		0	59								0
Mar-81	6.8		3	31								
Jun-81	7		3	86								0
Sep-81	6.5	0	3	73			0	0	0.47	0		2
Dec-81	9.2		3	93								0
Mar-82	7.1		2	86								34
Jun-82	7.2		3	93								8
Sep-82	6.6	0	7	75	0		0	0	0.27	0		6
Feb-83	6.5		3	66								0
May-83	6.7		3	84								0
Aug-83	5.9		4	61								0
Dec-83	6.2	0	4	72	0		0.003	0.12	0.46	0		37
Nov-84	5.6		4	73								21
Apr-85	6.3	0	8	138	0	0.1	0.001	0.022	0.032	0	0	0
Jul-86	5.9	0	10	102	0	0.11	0	0.003	0.07	0	0	0
Nov-86	5.8		10	99.5								0
Nov-87	6.3		11	128								10
Mar-88	5.2		57	128								0
Aug-88	6.4	0	9	163	0	0	0	0	0	0	0	0
AVG	6.8	0.0	6.2	92	0	0	0.000	0.02	0.26	0.000	0.00	5
MIN	5.2	0	0	31	0	0	0.000	0.00	0.00	0.000	0.00	0
MAX	9.3	0	57	163	0	0.11	0.003	0.12	0.99	0.000	0.00	37
# RDGS	29	9	29	25	5	3	9	8	9	8	3	26

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #10

TEST DATE	pH	Nitrate	Chloride	Spec Cond	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	COD
Aug-75	6.3	0.46	5.7				0	0	0	0		5
Jun-78	7.3	0.2	3				0		0.2			2
Sep-78	6.8		0									0
Dec-78	7.1		0									
Apr-79	7.2		3	98								
Dec-79	6.7		0	49								0
Mar-80	6.6		3	62								0
Jun-80	6.6		3	52								0
Sep-80	6.8	0	5	76			0	0	0.07	0		0
Dec-80	6.7		4	67								0
Mar-81	6.4		7	74.9								
Jun-81	6		4	35								0
Sep-81	6.7	0.7	3	80			0	0.03	0.1	0.0002		2
Dec-81	6.9		5	122								0
AVG	6.7	0.3	3.3	72	ERR	ERR	0.000	0.01	0.09	0.000	0.00	1
MIN	6	0	0	35	ERR	ERR	0.000	0.00	0.00	0.000	0.00	0
MAX	7.3	0.7	7	122	ERR	ERR	0.000	0.03	0.20	0.000	0.00	5
# RDGS	14	4	14	10	0	0	4	3	4	3	1	11

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #12

TEST DATE	pH	Nitrate	Chloride	Spec Cond	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	COD
Aug-75	6.8	0	12				0	0	0	0		1
Nov-78	7.2											6
Jun-78	6.9	0	8				0		0			4
Sep-78	7.1		11									
Dec-78	6.8		6									
Apr-79	6.3		3	28								5
Jul-79	6.8		6	45								3
Dec-79	6.3		2	26								0
Mar-80	6.4		0	26								0
Jun-80	6.3		3	24								0
Sep-80	6.4	0	0	24			0	0	0.08	0		0
Dec-80	6.3		2	24								0
Mar-81	6.4		2	28								
Jun-81	6.4		2	26								0
Sep-81	6.4	0	0	37			0	0	0	0		0
Dec-81	6.5		3	36								0
Mar-82	6.6		0	45								
Jun-82	6.4		0	28								
Sep-82	6.1	0	4	26	0		0	0	0	0		17
Jan-83	6.7		2	44								0
May-83	6.8		3	28								70
Aug-83	5.9		2	23								51
Dec-83	6.2	0	2	31	0		0.004	0	0.01	0.0006		22
Jun-84	5.8		2	20								32
Apr-85	6.5	0	0	49	0		0	0	0	0	0	0
Jul-86	6.2	0	0	32	0	0	0	0	0.01	0	0	0
Nov-86	6.2		4	33								0
Jun-87	6.1	0.3	3	37	0	0	0	0	0	0	0	0
Nov-87	6		0	18								0
Mar-88	5.8		3	23								0
Aug-88	6.2	0	0	23	0	0	0	0	0	0	0	0
AVG	6.4	0.0	2.8	30	0	0	0.000	0.00	0.01	0.000	0.00	8
MIN	5.8	0	0	18	0	0	0.000	0.00	0.00	0.000	0.00	0
MAX	7.2	0.3	12	49	0	0	0.004	0.00	0.08	0.001	0.00	70
# RDGS	31	10	30	26	6	3	10	9	10	9	4	26

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #12A

TEST DATE	pH	Nitrate	Chloride	Spec Cond	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	COD
Jun-80	5.9		2	35								0
Sep-80	5.7	0	3	36			0	0.01	0.03	0		0
Dec-80	6		2	24								0
AVG	5.9	0.0	2.3	32	ERR	ERR	0.000	0.01	0.03	0.000	ERR	0
MIN	5.7	0	2	24	ERR	ERR	0.000	0.01	0.03	0.000	ERR	0
MAX	6	0	3	36	ERR	ERR	0.000	0.01	0.03	0.000	ERR	0
# RDGS	3	1	3	3	0	0	1	1	1	1	0	3

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #13

TEST DATE	pH	Nitrate	Chloride	Spec Cond	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	COD
Aug-75	6.7	0	6.5				0	0	0	0		0
Oct-76	6.1		4.4									0
Jun-78	6.2	0	4				0		0			3
Sep-78	6.4		4									7
Dec-78	5.9		3									
Apr-79	5.9		4	22								0
Jul-79	6.3		4	23								3
Dec-79	6.1		3	19								
Mar-80	6.2		2	21								
Jun-80	6.2		3	21								0
Sep-80	6.2	0	2	22			0	0.01	0.04	0		0
Dec-80	6.3		3	21			0	0.01	0.04	0		0
Mar-81	6.3		3	24								
Jun-81	6.3		3	25								0
Sep-81	6.4	0	3	37			0	0	0	0		0
Dec-81	6.5		3	36								0
Mar-82	6.5		2	33								27
Jun-82	6.2		5	24								13
Sep-82	6.3	0	6	30	0		0	0	0	0		7
Jan-83	6.5		3	34								0
May-83	6.4		2	29								0
Aug-83	5.6		3	25								15
Nov-83	6.1	0	3	109	0		0.005	0.02	0.01	0		21
Jun-84	5.6		3	24								35
Apr-85	6	0	0	29	0	0	0.005	0.01	0	0	0	0
Jul-85	6.1	0	2	30	0	0	0	0	0	0		0
Nov-86	5.8		4	27								0
Jun-87	5.9	0.2	3	35	0	0	0	0.01	0.005	0.0005	0	0
Nov-87	5.9		0	28								0
Mar-88	5.3		2	28								0
Aug-88	5.5	0	8	28	0	0	0	0	0	0	0	0
AVG	6.1	0.0	3.3	30	0	0	0.001	0.01	0.01	0.000	0.00	5
MIN	5.3	0	0	19	0	0	0.000	0.00	0.00	0.000	0.00	0
MAX	6.7	0.2	8	109	0	0	0.005	0.02	0.04	0.001	0.00	35
# RDGS	31	10	31	26	6	4	11	10	11	10	3	27

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #13A

TEST DATE	pH	Nitrate	Chloride	Spec Cond	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	COD
Aug-75	6.7	0	3.7				0	0.5	0.8	0.8		27
Oct-76	7.1		1.7									0
Jun-78	7.3	0	0				0		0.05			4
Sep-78	7.3		0									0
Dec-78												
Apr-79	7.4		0	168								
Jul-79	7.1		0	187								2
Dec-79	5.6		0	12								0
Mar-80												
Sep-80	6.5	0	3	97			0	0.03	0.05	0		0
AVG	6.9	0.0	1.1	116	ERR	ERR	0.000	0.27	0.30	0.400	ERR	5
MIN	5.6	0	0	12	ERR	ERR	0.000	0.03	0.05	0.000	ERR	0
MAX	7.4	0	3.7	187	ERR	ERR	0.000	0.50	0.80	0.800	ERR	27
# RDGS	8	4	8	4	0	0	3	2	3	2	0	7

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #14

TEST DATE	pH	Nitrate	Chloride	Spec Cond	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	COD
Aug-75	7.2	0	4.2				0	0	0			0
Jun-78	6.3	0	0				0		0			0
Sep-78	6.5		2									
Dec-78	6.4		0									
Apr-79	6		2	21								0
Jul-79	6.2		2	22								0
Mar-80	6.2		1	18								0
Jun-80	6.2		0	18								0
Sep-80	6.2	0	0	18			0	0.04	0.35	0		0
Dec-80	6.2		2	17								0
Mar-81	6.4		2	17								
Jun-81	6.4		0	31								2
Sep-81	6.4	0	0	38			0	0	0	0		0
Dec-81	6.4		0	36								0
Mar-82	6.4		0	30								68
Jun-82	6.1		3	18								14
Sep-82	6.3	0	2	36			0	0	0.02	0		2
Jan-83	6.6		2	35								12
May-83	6.7		2	24								0
Aug-83	5.7		2	16								0
Dec-83	6.2	0	2	28	0		0.001	0	0	0		16
Jun-84	5.7		2	19								16
Apr-85	6.5	0	0	37	0.01	0	0.005	0	0	0	0	0
Oct-85	6.6	0	2	22	0	0	0	0	0	0	0	0
Jul-86	6.3		0	35	0							0
Nov-86	6.3		4	28								0
Nov-87	6.1	0	2	16	0	0	0	0	0	0	0	0
Mar-88	5.6		2	20								0
Aug-88	5.4	0	0	26	0	0	0	0	0	0	0	0
AVG	6.3	0.0	1.4	25	0	0	0.001	0.00	0.04	0.000	0.00	5
MIN	5.4	0	0	16	0	0	0.000	0.00	0.00	0.000	0.00	0
MAX	7.2	0	4.2	38	0.01	0	0.005	0.04	0.35	0.000	0.00	68
# RDGS	29	10	29	25	6	4	10	9	10	8	4	26

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #14A

TEST DATE	pH	Nitrate	Chloride	Spec Cond	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	COD
Aug-75	6.1	0	5.4				0	0	0	0		2
Jun-78	5.6	0	3				0		0			0
Sep-78	6.2		3									
Dec-78	6.1		0									
Apr-79	5.7		3	12								0
Jul-79	5.7		3	13								0
Dec-79	5.6		0	12								0
Mar-80	5.4		0.2	13								0
Jun-80	5.9		3	14								0
Sep-80	6	0	3	13			0	0	0	0		0
Dec-80	6		3	14								0
Mar-81	6.1		2	13								
Jun-81	6.1		0	22								0
Sep-81	6.5	0	2	42			0	0	0	0		0
Dec-81	6.5		3	44								0
Mar-82	6.5		2	35								21
Jun-82	5.8		3	16								13
Sep-82	6.3	0	3	48	0		0	0	0.05	0		0
May-83	6.7		4	22								10
Aug-83	5.3		2	16								105
Dec-83	6	0	2	22	0		0.003	0.03	0	0		35
Jun-84	6		3	28								39
Apr-85	6.6	0	0	46	0	0	0.004	0	0	0	0	0
Oct-85	6.6	0	3	26	0	0	0.004	0	0	0	0	0
Jul-86	6.5		0	52								0
Nov-86	6.3		4	39								0
Nov-87	6.2	0	2	24	0	0	0	0	0	0	0	0
Mar-88	5		2	16								0
Aug-88	4	0.4	0	17	0	0	0	0	0	0	0	0
AVG	6.0	0.0	2.2	25	0	0	0.001	0.00	0.01	0.000	0.00	9
MIN	4	0	0	12	0	0	0.000	0.00	0.00	0.000	0.00	0
MAX	6.7	0.4	5.4	52	0	0	0.004	0.03	0.05	0.000	0.00	105
# RDGS	29	10	29	25	6	4	10	9	10	9	4	26

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #15

TEST DATE	pH	Nitrate	Chloride	Spec Cond	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	COD
Aug-75	6.4	0	4.2				0	0	0	0		
Oct-76	6.6		3.8									0
Jun-78	6.4	0	4				0		0			0
Sep-78	6.4		4									9
Dec-78	6.3		3									
Apr-79	6.2		4	17								0
Jul-79	6.3		4	20								0
Dec-79	6.3		3	16								0
Mar-80	6.3		2	17								3
Jun-80	6.3		3	18								
Sep-80	6.2	0	2	17			0	0.02	0	0		0
Dec-80	6.4		0	18								0
Mar-81	6.1		3	20								
Jun-81	6.2		2	19								3
Sep-81	6.4	0	3	37			0	0	0	0		0
Dec-81	6.5		3	37								0
Mar-82	6.6		2	37								7
Jun-82	6.2		3	24								24
Sep-82	6.4	0	3	40	0		0	0	0.03	0		5
Jan-83	6.6		2	36								0
Aug-83	5.3		3	18								0
Dec-83	6.2	0	3	28	0		0.003	0.02	0	0		12
Jun-84	5.4		4	18								21
Apr-85	6.3	0	0	43	0	0	0	0	0	0	0	0
Oct-85	6.6	0	6	25	0	0	0.005	0.02	0	0	0	0
Jul-86	6	0	2	24	0	0	0	0	0	0	0	10
Nov-86	6.3		4	31								0
Jun-87	6	0.2	3	30	0	0	0	0	0	0.0005	0	0
Nov-87	5.9		0	18								0
Mar-88	5.3		3	20								0
Aug-88	5.8	0	6	20	0	0	0	0	0	0	0	0
AVG	6.2	0.0	3.0	25	0	0	0.001	0.01	0.00	0.000	0.00	3
MIN	5.3	0	0	16	0	0	0.000	0.00	0.00	0.000	0.00	0
MAX	6.6	0.2	6	43	0	0	0.005	0.02	0.03	0.001	0.00	24
# RDGS	31	11	31	26	7	5	11	10	11	10	5	27

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #16

TEST DATE	pH	Nitrate	Chloride	Spec Cond	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	COD
Aug-75	6.2	0	43	0			0	0.05	0	0		
Oct-76	6.4		43									
Jun-78	6.1	0	44				0.005		0.02			34
Sep-78	6		44									0
Dec-78	6.2		130									
Apr-79	6.1		64	581								0
Jul-79	6.1		43	45								0
Dec-79	6.3		37	465								0
Mar-80	6.1		42	495								5
Jun-80	6.2		29									
Sep-80	6.2	0	29	428			0	0.03	0.01	0		0
Dec-80	6.1		27	359								0
Mar-81	6		32	376								32
Jun-81	6		30	417								0
Sep-81	6.1	0	35	446			0	0	0	0.0013		3
Dec-81	5.9		30	430								0
Mar-82	5.7		30	424								63
Jun-82	5.3		32	428								41
Sep-82	5.5	0	37	424	0		0.001	0.13	0.23	0		79
Mar-83	5.4		31	491								18
Dec-83	5.4	0	35	370	0		0.007	0.28	0.29	0		65
Jul-84	5.5		8	113								48
Apr-85	6.1	0	17	185	0	0	0.005	0.05	0.12	0	0	15
Jul-86	4.6	0	16	186	0	0	0	0.25	0.51	0	0	0
Nov-87	4.3		15	235								0
Mar-88	3.7		34	449								0
Aug-88	3.9	0	18	251	0	0	0	0	0	0	0	0
AVG	5.7	0.0	36.1	345	0	0	0.002	0.10	0.13	0.000	0.00	18
MIN	3.7	0	8	0	0	0	0.000	0.00	0.00	0.000	0.00	0
MAX	6.4	0	130	581	0	0	0.007	0.28	0.51	0.001	0.00	79
# RDGS	27	10	27	22	5	3	9	8	9	8	3	23

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #1 - TRACE ORGANIC ANALYSES

CONSTITUENT	Apr-85	Oct-85	Jun-87	Aug-88
	CONCENTRATION (ppb)			
Trichloroethene	<1	<1	<1	1
Tetrachloroethene	<1	<1	<1	1

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #2 - TRACE ORGANIC ANALYSES

CONSTITUENT	Apr-85	Oct-85	Jun-87	Aug-88
	CONCENTRATION (ppb)			
Trichloroethene	<1	<1	<1	1
Tetrachloroethene	<1	<1	<1	1

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #3 - TRACE ORGANIC ANALYSES

CONSTITUENT	Apr-85	Oct-85	Jun-87	Aug-88
	CONCENTRATION (ppb)			
Tetrahydrofuran		22		

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #3A - TRACE ORGANIC ANALYSES

CONSTITUENT	Apr-85	Oct-85	Jun-87	Aug-88
	CONCENTRATION (ppb)			
Tetrahydrofuran	14			

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #5 - TRACE ORGANIC ANALYSES

CONSTITUENT	Apr-85	Oct-85	Nov-87	Aug-88
	CONCENTRATION (ppb)			
2-Butanone (MEK)	2			

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #5A - TRACE ORGANIC ANALYSES

CONSTITUENT	Apr-85	Oct-85	Nov-87	Aug-88
	CONCENTRATION (ppb)			
Toluene		1	<1	<1
Tetrahydrofuran	9	17		
2-Butanone (MEK)	2			

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #6 - TRACE ORGANIC ANALYSES

CONSTITUENT	Apr-85	Oct-85	Aug-88
	CONCENTRATION (ppb)		
Methylene Chloride	<1	<1	1
1,1-Dichloroethane	<1	<1	1
Trans-1,2-Dichloroethene	<1	<1	1
Trichloroethene	<1	<1	1
Tetrachloroethene	<1	<1	1

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #6A - TRACE ORGANIC ANALYSES

CONSTITUENT	Apr-85	Oct-85	Nov-86	Aug-88
	CONCENTRATION (ppb)			
Tetrahydrofuran	12	54		dry

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #7 - TRACE ORGANIC ANALYSES

CONSTITUENT	Apr-85	Jul-86	Jun-87	Aug-88
	CONCENTRATION (ppb)			
Methylene Chloride	<1	<1	<1	1
1,1-Dichloroethane	<1	<1	<1	1
Trans-1,2-Dichloroethene	<1	<1	<1	1
Trichloroethene	<1	<1	<1	1
Tetrachloroethene	<1	<1	<1	1

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #8 - TRACE ORGANIC ANALYSES

CONSTITUENT	Apr-85	Jul-86	Nov-86	Jun-87
	CONCENTRATION (ppb)			
Chloroethane	<1	<1	<1	<1
1,1-Dichloroethene	<1	<1	<1	<1
Trichloroethene	<1	<1	<1	<1
Tetrachloroethene	<1	<1	<1	<1

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #9 - TRACE ORGANIC ANALYSES

CONSTITUENT	Apr-85	Jul-86	Jun-87	Aug-88
	CONCENTRATION (ppb)			
Trichloroethene	<1	<1	<1	1
Tetrachloroethene	<1	<1	<1	1

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #11 - TRACE ORGANIC ANALYSES

CONSTITUENT	Apr-85	Jul-86	Nov-86	Jun-87	Nov-87	Mar-88	Aug-88
	CONCENTRATION (ppb)						
Chloromethane	<1	5	5	4	7	1	1
Dichlorodifluoromethane	78	183	138	194	83	76	48
Vinyl Chloride	<1	<1	<1	<1	<1	1	1
Chloroethane	<1	9	9	7	8	10	4
Methylene Chloride	<1	103	94	105	93	82	35
Trichlorofluoromethane	20	6	17	12	12	10	5
1,1-Dichloroethene	<1	1	<1	<1	<1	1	<1
1,1-Dichloroethane	<1	36	36	41	44	39	28
Chloroform	<1	2	1	3	3	3	<1
1,1,1-Trichloroethane	8	37	32	23	20	12	7
Trichloroethene	24	4	4	6	5	3	2
Tetrachloroethene	24	9	6	8	8	5	7
Ethylbenzene	<1	<1	1	<1	2	2	1
Total Xylenes	<2	<2	3	<2	4	4	2
Total Purgeable Hydrocarbons							2
Tetrahydrofuran		3	6	5		9	6
Methylisobutylketone			1		2	2	
1,1,2-Trichloro???						2	
Dichlorofluoromethane			obs	obs		obs	
Ethyl Ether		18	17	15	18	17	16
Trichlorotrifluoroethane			2	2	2		
Chlorodifluoromethane			obs			obs	
Dichlorofluoromethane							obs
Difluorochloromethane							obs

obs = observed

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #14 - TRACE ORGANIC ANALYSES

CONSTITUENT	Apr-85	Oct-85	Nov-87	Mar-88	Aug-88
	CONCENTRATION (ppb)				
Methylene Chloride	<1	<1	1	<1	<1
Trichloroethene	<1	<1	1	<1	1
Tetrachloroethene	<1	<1	<1	<1	1
Toluene	<1	<1	1	<1	<1

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #14A - TRACE ORGANIC ANALYSES

CONSTITUENT	Apr-85	Oct-85	Nov-87	Aug-88
	CONCENTRATION (ppb)			
1,1,2,2-Tetrachloroethane	<1	<1	1	<1
Tetrahydrofuran	29	29		
2-Butanone (MEK)	1			

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #15 - TRACE ORGANIC ANALYSES

CONSTITUENT	Apr-85	Oct-85	Jul-86	Jun-87	Aug-88
Trichloroethene	<1	<1	<1	<1	1

MILLERSVILLE LANDFILL
GROUNDWATER QUALITY DATA

TEST WELL #16 - TRACE ORGANIC ANALYSES

CONSTITUENT	Apr-85	Jul-86	Jun-87	Aug-88
	CONCENTRATION (ppb)			
2-Butanone (MEK)	4			

APPENDIX C

WATER WELL INVENTORY

DEPARTMENT OF THE ENVIRONMENT
DIVISION OF RESIDENTIAL SANITATION
WELL APPLICATIONS PROCESSED SINCE 1969
REPORT NUMBER D130WMA1

EAST GRID COORD. (1000FT)	NORTH GRID COORD. (1000 FT)	PERMIT NUMBER	OWNER NAME	ADDRESS OF OWNER	CITY AND STATE OF OWNER	SUBDIVISION	SECT.

LOT	NEAREST TOWN	DIR. TO TOWN CODE	DIST NEAR. TOWN MILES	NAME OF NEAREST ROAD	SIDE OF ROAD CODE	DIST. FROM ROAD	REPLACE-MENT CODE	WELL NO. REPLACED OR DEEPENED	WELL IND.	WELL DEPTH REAL FEET	TOTAL CASING DEPTH FEET

PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER

	885	463	AA 81 6967	S & G CONCRETE CO		2110 PHILADELPHIA RD		EDGEWOOD	MD21040	*				*
*	ODENTON		N	1.5 MI	1852 JACKSON GRV RD		N	1000FT	N	*		*	217	212
	770	35	50	40	I	AA 81GAP056								
	885	462	AA 81 0888	FITZWATER L		1868 JACKSONGROVE RD		ODENTON	MD	*		*		*
*	ODENTON		N	1.6 MI	JACKSONGROVE RD		N	140 FT	Y	S	*	*		
	885	460	AA 72 0147	CLARK, KENNETH		BOX 105 B			SEVERN MD			*		*
*	GRANDVIEW PARK		*	0 MI	BURNS CROSSING RD		W	100 FT	N	*		*	77	72
	10	35	50	8	D	*								
	885	460	AA 72 0526	WOODS, JAMES T		RFD 1 BOX 14			SEVERN MD			*		*
*	SEVERN		S	1 MI	TELEGRAPH RD		W	75 FT	Y	*		*	52	47
	20	17	25	10	D	*								
	885	460	AA 73 0627	SYKES, BILLY		14 BURNSCROSSING RD			SEVERN MD			*		*
12	SEVERN		W	4 MI	BURNSCROSSING		W	150 FT	N	*		*	90	85
	12	35	40	10	D	*								
	885	460	AA 73 1326	MYRTUE, RICHARD		4902 QUIBBY AVE			BELTSVILLE MD			RIDGEWAY		6
13	GLEN BURNIE		SW	6 MI	MARYLAND AVE		N	20 FT	N	*		*	68	63
	20	28	35	7	D	*								
	885	460	AA 73 2040	FERGUSON, CLARENCE		P O BX 263			GAMBRILLS MD			GRANDVIEW PK		*
*	SEVERN		SE	1 MI	BURNS CROSSING		W	100 FT	N	*		*	101	96
	20	35	41	14	D	*								
	885	460	AA 73 2065	BRAY, PIERCIE		248 SOUTH LONDON AVE			BALTIMORE MD			GRANDVIEW PART		*
*	SEVERN		SE	1 MI	BURNS CROSSING		W	30 FT	N	*		*	74	69
	15	30	38	14	D	*								
	885	460	AA 73 3652	CHANEY, GEORGE		P O BX 68			SEVERN MD			*		*
7A	SEVERN		SE	4 MI	RODGERS LA		N	50 FT	N	*		*	40	35
	20	6	15	15	D	*								
	885	460	AA 73 3716	CHANEY, GEORGE		P O BX 68			SEVERN MD			*		*
7B	SEVERN		SE	4 MI	ROGERS LANE		N	50 FT	N	*		*	40	35
	20	6	15	15	D	*								
	885	460	AA 73 4160	C I ASSOCIATES		1416 ANNAPOLIS RD			ODENTON MD		21113	*		*
228	SEVERN		SE	4 MI	MONARD AVE		S	50 FT	N	*		*	40	35
	15	20	28	12	D	*								
	885	460	AA 73 4248	CHANEY INC		1416 ANNAPOLIS RD			ODENTON MD			*		*
232	SEVERN		SE	4 MI	MONARD AVE		S	100 FT	N	*		*	30	25
	10	8	12	10	D	*								

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DEPARTMENT OF THE ENVIRONMENT
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REPORT NUMBER D13DWMA1

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LOT	NEAREST TOWN	DIR. TO TOWN CODE	DIST NEAR. TOWN MILES	NAME OF NEAREST ROAD	SIDE OF ROAD CODE	DIST. FROM ROAD	REPLACE-MENT CODE	WELL NO. REPLACED OR DEEPENED	WELL IND.	WELL DEPTH REAL FEET	TOTAL CASING DEPTH FEET

PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER

	885	460	AA 73 5824	SMITH, R A	GRANDE VIEW AVE				SEVERN MD	21144	*				*
*	SEVERN			SW	2	MI	GRANDE VIEW AVE	S	50	FT	N	*		*	80	75
	15	40	45	12	D	*										
	885	460	AA 73 5832	TRIAD BUILDERS INC	523 BENFIELD RD				SEVERNA PARK MD			*			*
389	CLARK STATION			S	1	MI	BURNS CROSSING RD	W	50	FT	N	*		*	60	53
	15	19	60	10	D	*										
	885	460	AA 73 6024	CHANEY INC	1416 ANNAPOLIS RD				ODENTON MD	21113	GRANDVIEW PARK					T
1-4	SEVERN			NE	2	MI	BURNS CROSSING RD	W	75	FT	N	*		*	88	83
	15	22	30	12	D	*										
	885	460	AA 73 6174	FARMER, VEVA R	1881 BETSON AVE				ODENTON MD	21113	*				*
*	ODENTON			N	2	MI	BETSON AVE	S	20	FT	Y	*		*	142	137
	10	40	52	7	D	*										
	885	460	AA 73 6487	HAYWARD BAKER CO	P O BX 3485				ONOFION MD			MAYFIELD				*
*	ODENTON			N	1	MI	MAYFIELD RD	S	100	FT	N	*		*	125	120
	10	57	65	8	I	AA 76CAP027										
	885	460	AA 73 7184	MANDRIN CONST CO	224 BEECHWOOD RD				PASADENA MD	21122	GRANDVIEW PARK					*
41	GRANDVIEW PARK		*	O	MI	WBA RD	S	20	FT	N	*		*	100	93
	15	31	100	10	D	*										
	885	460	AA 73 7447	VOIGT, PAULA	RT 3 BX 164				SEVERN MD	21144	*				*
*	SEVERN			SE	1	MI	BURNS CROSSING RD	W	40	FT	S	*		*	92	87
	20	35	40	15	D	*										
	885	460	AA 73 7920	MCKERCHER, ELVA	306 URBAN ST				ODENTON MD	21113	MAYFIELD					*
*	ODENTON			N	1	MI	URBAN ST	W	50	FT	S	*		*	129	124
	15	60	70	12	D	*										
	885	460	AA 73 7951	PEAKE, WILLIS	RT 3 BX 161				SEVERN MD	21144	GRANDE VIEW PARK					*
16	SEVERN			SE	1	MI	BURNS CROSSING RD	W	40	FT	Y	*		*	86	81
	25	35	45	20	D	*										
	885	460	AA 73 7963	BAKER, HELEN	RT 3 BX 167				SEVERN MD	21144	GRANDVIEW PARK					4
47	GRANDVIEW PARK		*	O	MI	GEORGE AVE	E	10	FT	Y	*		*	84	77
	12	32	84	10	D	*										
	885	460	AA 73 8130	KNIGHT, LEROY D	8180 TELEGRAPH RD				SEVERN MD	21144	SEVERN					*
43	SEVERN		*	O	MI	TELEGRAPH RD	W	45	FT	Y	*		*	80	73
	10	32	80	10	D	*										
	885	460	AA 73 8472	RITCHIE SWIFT HOMES	P O BX 295				GLEN BURNIE MD 21061		*					*
2	ODENTON			N	2	MI	W B & A	W	180	FT	N	*		*	120	113
	60	60	70	6	D	*										

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PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER

	885	460	AA 73 0786	W J ANDERSON & ASSOC	153 MAYD RD			EDGEWATER MD	21037	*					*
*	SEVERN			SE	7	MI	GRANDVIEW AVE	S	100 FT	N	*		C		
							D *								
	885	460	AA 73 8814	REIMILES, THOMAS	BX 140			SEVERN MD	21144	*					*
*	ODENTON			N	1	MI	SUPER 170 DR-IN RD	E	1	MI	N	*	*	80	75
	12	40	50				F *								
	885	460	AA 73 9013	BAKER, HELEN	8397 W B & A RD			SEVERN MD	21144	SEVERN					
*	SEVERN			*	0	MI	W B & A RD	W	45	FT	Y	*	*	85	78
	20	30	85		10		D *								
	885	460	AA 73 9326	BOWMAN, GEORGE	1607 WILLOW DR			SEVERN MD				*			*
*	SEVERN			*	0	MI	WILLOW DR	S	40	FT	Y	*	*	85	80
	30	30	40		7		D *								
	885	460	AA 73 9722	CAREY, BLANCHE	221 TELEGRAPH RD			ODENTON MD	21113	*					*
*	ODENTON			E	3	MI	TELEGRAPH RD	E	1500FT		Y	*	*	98	93
	15	40	45		15		D *								
	885	460	AA 73 9792	FRED PRITT BLDG	513 BENFIELD RD			SEVERNA PARK MD			SEVERN FOREST				1
2	GLEN BURNIE			SW	4	MI	SEVERN RUN CT	N	30	FT	N	*	*	107	100
	30	48	58		7		D *								
	885	460	AA 73 9793	FRED PRITT BLDG	513 BENFIELD RD			SEVERNA PARK MD			SEVERN FOREST				1
3	GLEN BURNIE			SW	4	MI	SEVERN RUN CT	N	30	FT	N	*	*	107	100
	25	48	58		7		D *								
	885	460	AA 73 9794	FRED PRITT BLDG	513 BENFIELD RD			SEVERNA PARK MD			SEVERN FOREST				1
4	GLEN BURNIE			SW	4	MI	SEVERN RUN CT	N	30	FT	N	*	*	80	73
	10	48	60		7		D *								
	885	460	AA 73 9891	ASCHERAL, S A	485 RITA DR			ODENTON MD	21113	*					*
*	SEVERN			SE	2	MI	TELEGRAPH RD	W	60	FT	N	*	*	117	110
	60	50	70		6		I AA 78GAP034								
	885	460	AA 74 0108	UNITED BUILDERS	513 BENFIELD RD			SEVERNA PARK MD			SEVERN FOREST				1
13	GLEN BURNIE			SW	3	MI	SEVERN RUN CT	W	65	FT	N	*	*	107	100
	15	50	60		7		D *								
	885	460	AA 74 0189	UNITED BUILDERS	513 BENFIELD RD			SEVERNA PARK MD			SEVERN FOREST				1
23	GLEN BURNIE			SW	3	MI	SEVERN RUN CT	S	75	FT	N	*	*	127	120
	20	50	60		9		D *								
	885	460	AA 74 0190	UNITED BUILDERS	513 BENFIELD RD			SEVERNA PARK MD			SEVERN FOREST				1
24	GLEN BURNIE			SW	3	MI	SEVERN RUN CT	S	75	FT	N	*	*	117	110
	20	50	60		9		D *								

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LOT	NEAREST TOWN	DIR. TO TOWN CODE	DIST NEAR. TOWN MILES	NAME OF NEAREST ROAD	SIDE OF ROAD CODE	DIST. FROM ROAD	REPLACE-MENT CODE	WELL NO. REPLACED OR DEEPENED	WELL IND.	WELL DEPTH REAL FEET	TOTAL CASING DEPTH FEET

PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER

	885	460	AA 74 0191	UNITED BUILDERS				513 BENFIELD RD				SEVERNA PARK MD			SEVERN FOREST		1
25	GLEN BURNIE			SW	3	MI	SEVERN RUN CT		S	75	FT	N	*		*	117	110
	20	50	60		9	D	*										
	885	460	AA 74 0207	UNITED BLDRS				513 BENFIELD RD				SEVERNA PARK MD			SEVERN FOREST		1
28	GLEN BURNIE			SW	3	MI	SEVERN RUN CT		S	75	FT	N	*		*	127	120
	20	50	60		9	D	*										
	885	460	AA 74 0208	UNITED BLDRS				513 BENFIELD RD				SEVERNA PARK MD			SEVERN FOREST		1
26	GLEN BURNIE			SW	3	MI	SEVERN RUN CT		S	75	FT	N	*		*	127	120
	15	60	70		9	D	*										
	885	460	AA 74 0387	FRED PRITT BLDG				513 BENFIELD RD				SEVERNA PARK MD21146			SEVERN FOREST		1
15	GLEN BURNIE			SW	3	MI	SEVERN RUN CT		S	75	FT	N	*		*	107	100
	20	60	70		9	D	*										
	885	460	AA 74 0388	FRED PRITT BLDG				513 BENFIELD RD				SEVERNA PK MD 21146			SEVERN FOREST		1
16	GLEN BURNIE			SW	3	MI	SEVERN RUN CT		S	75	FT	N	*		*	107	100
	20	60	70		9	D	*										
	885	460	AA 74 0389	FRED PRITT BLDG				513 BENFIELD RD				SEVERNA PK MD 21146			SEVERN FOREST		1
27	GLEN BURNIE			SW	3	MI	SEVERN RUN CT		N	75	FT	N	*		*	127	120
	20	60	80		9	D	*										
	885	460	AA 74 0393	DASOVICH, MICHAEL J				1877 BETSON AVE				ODENTON MD		21144	MAYFIELD		*
*	ODENTON			N	2	MI	BETSON AVE		S	50	FT	Y	*		*	127	122
	15	50	55		12	D	*										
	885	460	AA 74 0513	FRED PRITT BLDG				513 BENFIELD RD				SEVERNA PARK MD21146			SEVERN FOREST		1
22	GLEN BURNIE			SW	3	MI	SEVERN RUN CT		S	75	FT	N	*		*	127	120
	15	62	70		9	D	*										
	885	460	AA 74 0514	FRED PRITT BLDG				513 BENFIELD RD				SEVERNA PARK MD21146			SEVERN FOREST		1
9	GLEN BURNIE			SW	3	MI	SEVERN RUN CT		N	75	FT	N	*		*	127	120
	20	62	75		9	D	*										
	885	460	AA 74 0515	FRED PRITT BLDG				513 BENFIELD RD				SEVERNA PARK MD21146			SEVERN FOREST		1
10	GLEN BURNIE			SW	3	MI	SEVERN RUN CT		N	75	FT	N	*		*	107	100
	15	60	70		7	D	*										
	885	460	AA 74 0516	FRED PRITT BLDG				513 BENFIELD RD				SEVERNA PARK MD21146			SEVERN FOREST		1
5	GLEN BURNIE			SW	3	MI	SEVERN RUN CT		N	75	FT	N	*		*	107	100
	15	50	60		7	D	*										
	885	460	AA 74 0517	FRED PRITT BLDG				513 BENFIELD RD				SEVERNA PARK MD21146			SEVERN FOREST		1
6	GLEN BURNIE			SW	3	MI	SEVERN RUN CT		N	75	FT	N	*		*	107	100
	20	60	70		7	D	*										

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885	460	AA 74 0518	FRED PRITT BLDG	513 BENFIELD RD	SEVERNA PARK MD21146	SEVERN FOREST	1
885	460	AA 74 0519	FRED PRITT BLDG	513 BENFIELD RD	SEVERNA PARK MD21146	SEVERN FOREST	1
885	460	AA 74 0520	FRED PRITT BLDG	513 BENFIELD RD	SEVERNA PARK MD21146	SEVERN FOREST	1
885	460	AA 74 0521	FRED PRITT BLDG	513 BENFIELD RD	SEVERNA PARK MD21146	SEVERN FOREST	1
885	460	AA 74 0522	FRED PRITT BLDG	513 BENFIELD RD	SEVERNA PARK MD21146	SEVERN FOREST	1
885	460	AA 74 0523	FRED PRITT BLDG	513 BENFIELD RD	SEVERNA PARK MD21146	SEVERN FOREST	1
885	460	AA 74 0551	FRED PRITT BLDG	513 BENFIELD RD	SEVERNA PARK MD21146	SEVERN FOREST	1
885	460	AA 74 0552	FRED PRITT BLDG	513 BENFIELD RD	SEVERNA PARK MD21146	SEVERN FOREST	1
885	460	AA 74 0553	FRED PRITT BLDG	513 BENFIELD RD	SEVERNA PARK MD21146	SEVERN FOREST	1
885	460	AA 74 0554	FRED PRITT BLDG	513 BENFIELD RD	SEVERNA PARK MD21146	SEVERN FOREST	1
885	460	AA 74 0555	FRED PRITT BLDG	513 BENFIELD RD	SEVERNA PARK MD21146	SEVERN FOREST	1
885	460	AA 74 0556	FRED PRITT BLDG	513 BENFIELD RD	SEVERNA PARK MD21146	SEVERN FOREST	1

LOT	NEAREST TOWN	DIR. TO TOWN CODE	DIST NEAR. TOWN MILES	NAME OF NEAREST ROAD	SIDE OF ROAD CODE	DIST. FROM ROAD	REPLACEMENT CODE	WELL NO. REPLACED OR DEEPENED	WELL IND.	WELL DEPTH REAL FEET	TOTAL CASING DEPTH FEET
17	GLEN BURNIE	SW	3 MI	SEVERN RUN CT	S	75 FT	N	*	*	107	100
12	GLEN BURNIE	SW	3 MI	SEVERN RUN CT	N	75 FT	N	*	*	107	100
14	GLEN BURNIE	SW	3 MI	SEVERN RUN CT	N	75 FT	N	*	*	107	100
21	GLEN BURNIE	SW	3 MI	SEVERN RUN CT	S	75 FT	N	*	*	127	120
30	GLEN BURNIE	SW	3 MI	SEVERN RUN CT	S	75 FT	N	*	*	127	120
7	GLEN BURNIE	SW	3 MI	SEVERN RUN CT	N	75 FT	N	*	*	97	90
8	GLEN BURNIE	SW	3 MI	SEVERN RUN CT	N	75 FT	N	*	*	97	90
11	GLEN BURNIE	SW	3 MI	SEVERN RUN CT	*	75 FT	N	*	*	125	118
19	GLEN BURNIE	SW	3 MI	SEVERN RUN CT	S	75 FT	N	*	*	107	100
20	GLEN BURNIE	SW	3 MI	SEVERN RUN CT	S	75 FT	N	*	*	107	100
31	GLEN BURNIE	SW	3 MI	SEVERN RUN CT	S	75 FT	N	*	*	117	110
18	GLEN BURNIE	SW	3 MI	SEVERN RUN CT	S	75 FT	N	*	*	87	80

PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER
17	15	50	60	7 D *	
12	15	60	70	9 D *	
14	15	60	70	7 D *	
21	20	62	70	9 D *	
30	20	65	75	9 D *	
7	15	50	60	7 D *	
8	15	50	60	7 D *	
11	15	62	72	9 D *	
19	15	60	70	7 D *	
20	15	55	65	9 D *	
31	15	58	68	9 D *	
18	20	45	60	7 D *	

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DEPARTMENT OF THE ENVIRONMENT
DIVISION OF RESIDENTIAL SANITATION
WELL APPLICATIONS PROCESSED SINCE 1969
REPORT NUMBER D130WMA1

EAST GRID COORD. (1000FT)	NORTH GRID COORD. (1000 FT)	PERMIT NUMBER	OWNER NAME	ADDRESS OF OWNER	CITY AND STATE OF OWNER	SUBDIVISION	SECT.

LOT	NEAREST TOWN	DIR. TO TOWN CODE	DIST NEAR. TOWN MILES	NAME OF NEAREST ROAD	SIDE OF ROAD CODE	DIST. FROM ROAD	REPLACE-MENT CODE	WELL NO. REPLACED OR DEEPENED	WELL IND.	WELL DEPTH REAL FEET	TOTAL CASING DEPTH FEET

PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INSI)	WATER USE CODE	WATER APPROP. NUMBER

885 460 AA 74 1124 FRED PRITT BLDG 513 BENFIELD RD SEVERNA PK MD 21146 SEVERN FOREST *
29 GLEN BURNIE SW 3 MI SEVERN RUN CT S 75 FT N * * 107 100
15 60 70 9 D *
885 460 AA 74 1126 FRED PRITT BLDG 513 BENFIELD RD SEVERNA PARK MD21146 SEVERN FOREST *
1 GLEN BURNIE SW 3 MI SEVERN RUN CT N 75 FT N * * 107 100
15 60 70 9 D *
885 460 AA 74 1186 FORD, LESTER 78 BURNS CROSSING RD SEVERN MD 21144 * *
78 SEVERN SW 3 MI BURNS CROSSING RD W 25 FT Y * * 90 85
25 40 50 14 D *
885 460 AA 74 2382 FUTSLER, CECILE 1881 BETSON AVE ODENTON MD 21113 MAYFIELD *
* ODENTON N 2 MI BETSON AVE S 30 FT Y * * 132 127
20 60 70 10 D *
885 460 AA 81 0806 SANTANA LYDIA 1871 BETSON AVE ODENTON MD MAYFIELD *
* ODENTON NE 1 MI URBAN ST W 200 FT S * * 92 85
10 45 60 7 D *
885 460 AA 81 6956 WOODWARD CLYDE CONSU 1300 PICARD DR ROCKVILLE MD20850 MAYFIELD *
* MAYFIELD ODENTON NE 1.2 MI LOKUS W 150 FT N * C
T *
885 460 AA 81 6957 WOODWARD CLYDE CONT 1300 PICCARD DR ROCKVILLE MD20850 MAYFIELD *
* ODENTON NE 1.2 MI LOKUS RD W 100 FT N * C
T *
885 459 AA 81 6488 A A CO DEPT EU WORKS ARUNDEL CENTER ANNAPOLIS MD21401 W DISTRICT POLICE *
* ODENTON NE 1 MI TELEGRAPH RD E 250 FT N * * 133 127
30 47 90 5 I AA 86GAP030
885 459 AA 81 8699 MIDWAY INVESTMENT CO 411 TELEGRAPH ROAD ODENTON MD21113 * *
* ODENTON NW 1 MI 1872 LAMONTE AVE N 60 FT Y * *
D *
885 459 AA 81 9339 TRAMMELL CROW CO 1001 30TH ST NW 500 WASHINGTON DC20007 * *
* ODENTON * 0 MI MD RTE 170 W 2001FT N * *
T *
885 458 AA 81 9340 TRAMMELL CROW CO 1001 30TH ST NW WASHINGTON DC20007 * *
* ODENTON * 0 MI MD RTE 170 W 8001FT N * *
T *
885 457 AA 81 9337 TRAMMELL CROW CO 1001 30TH ST NW 500 WASHINGTON DC20007 * *
* ODENTON * 0 MI MD RTE 175 S 2001FT N * *
T *

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EAST GRID COORD. (1000FT)	NORTH GRID COORD. (1000 FT)	PERMIT NUMBER	OWNER NAME	ADDRESS OF OWNER	CITY AND STATE OF OWNER	SUBDIVISION	SECT.

LOT	NEAREST TOWN	DIR. TO TOWN CODE	DIST NEAR. TOWN MILES	NAME OF NEAREST ROAD	SIDE OF ROAD CODE	DIST. FROM ROAD	REPLACE-MENT CODE	WELL NO. REPLACED OR DEEPENED	WELL IND.	WELL DEPTH REAL FEET	TOTAL CASING DEPTH FEET

PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER

	885	457	AA 81 9338	TRAMMELL CROW CO	1001 30TH ST NW 500	WASHINGTON	DC20007	*						
*	ODENTON		*	0 MI	MD RTE 170	W	1600FT	N	*		*			*
					T *									
	885	457	AA 81 9345	TRAMMELL CROW CO	1001 30TH ST NW 500	WASHINGTON	DC20007	*						
*	ODENTON		*	0 MI	MD RTE 175	N	700 FT	N	*		*			*
					T *									
	885	456	AA 81 6876	SCHERER WILLIAM	24 CRAIN HWY	GLEN BURNIE	MD21061	*						
*	ODENTON		*	0 MI	MURRAY RD	S	49 FT	Y	*		*	222	212	*
	15	60	110	9	D *									
	885	456	AA 81 9343	TRAMMELL CROW CO	1001 30TH ST NW 500	WASHINGTON	DC20007	*						
*	ODENTON		*	0 MI	MD RTE 175	S	200 FT	N	*		*			*
					T *									
	885	455	AA 73 3225	MACEDONIA MC CHURCH	RT 32 RT 175	ODENTON MD	21113	*						
*	ODENTON		*	0 MI	RT 32	S	100 FT	N	*		*	282	277	*
	10	158	166	10	I AA 74GAP038									
	885	455	AA 73 3240	CHILES, EDWARD	305A BUCKLINA AVE	ODENTON MD		*						
305	ODENTON		W	0 MI	BUCKLINA AVE	N	30 FT	Y	*		*	122	117	*
	15	45	58	12	D *									
	885	455	AA 73 3553	BARTLEY, J MARY	1484 BURGER ST	ODENTON MD	21113	*						
*	ODENTON		*	0 MI	*	W	150 FT	Y	*		*	110	105	*
	15	68	78	7	D *									
	885	455	AA 73 4137	BELLS TRLR PARK INC	BX 110 BURNS XING RD	SEVERN MD		*						
*	MAYFIELD		E	1 MI	BURNS CROSSING RD	W	200 FT	Y	*		*	141	136	*
	20	58	100	25	I AA 67GAP006									
	885	455	AA 73 6223	BARTLEY, MARY	1484 BERGER ST	ODENTON MD		*						
*	ODENTON		*	0 MI	BERGER ST	N	100 FT	Y	*		*	115	110	*
	15	65	75	7	D *									
	885	455	AA 74 2156	ALLEMAN, GEORGE E	18 M DICUS MILL RD	GAMBRILLS MD	21054	*						
*	GAMBRILLS		E	4 MI	RT 32	N	300 FT	N	*		*	70	60	*
	12	47	57	7	D *									
	885	455	AA 74 2203	MIDWAY INVESTMENT CO	411 TELEGRAPH RD	ODENTON MD	21113	*						
*	ODENTON		N	3 MI	TELEGRAPH RD	W	75 FT	Y	*		*	125	120	*
	20	70	75	15	D *									
	885	450	AA 73 6380	WARMS, FRANCIS	1913 OAK DR	BALTIMORE MD	21207	*						
569	GAMBRILLS		*	0 MI	ST MARYS AVE	S	10 FT	Y	*		*	210	200	*
	8	125	210	5	D *									

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EAST GRID COORD. (1000FT)	NORTH GRID COORD. (1000 FT)	PERMIT NUMBER	OWNER NAME	ADDRESS OF OWNER	CITY AND STATE OF OWNER	SUBDIVISION	SECT.

LOT	NEAREST TOWN	DIR. TO TOWN CODE	DIST NEAR. TOWN MILES	NAME OF NEAREST ROAD	SIDE OF ROAD CODE	DIST. FROM ROAD	REPLACE-MENT CODE	WELL NO. REPLACED OR DEEPENED	WELL IND.	WELL DEPTH REAL FEET	TOTAL CASING DEPTH FEET

PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER

	885	450	AA 73 6442	CRAIG, GARY	BX 607 ST MARYS LA	GAMBRILLS MD	21054	*							*
566	GAMBRILLS			*	0 MI	ST MARYS AVE	S	10 FT	Y	*		*		210	203
	9	125	160		5	D *									
	885	450	AA 73 6536	TREUNER, HERMAN	1474 BERGER ST	ODENTON MD					*				*
*	ODENTON			*	0.25 MI	BERGER ST	N	100 FT	Y	*		*		115	110
	15	70	80		5	D *									
	885	450	AA 73 7700	CHANEY INC	1416 ANNAPOLIS RD	ODENTON MD		21113	BAKERSVILLE						*
2A	GAMBRILLS			W	5 MI	RT 32 & DICUS MILL	N	200 FT	N	*		*		195	190
	15	120	125		12	D *									
	885	450	AA 73 7934	BRANNON, EDWARD	DICUS MILL RD	SEVERN MD		21144	BAKERSVILLE						*
6A	SEVERN			N	3 MI	DICUS MILL RD	N	200 FT	Y	*		C			
						D *									
	886	464	AA 81 8400	FOGLE CHARLES	213 BURNS CROSSING R	SEVERN		MD21144	SEVERN FOREST						*
*	ODENTON			NE	3 MI	BURNS CROSSING RD	E	15 FT	Y	*		*			
						D *									
	886	463	AA 74 3811	KNIGHT, GRACE	8184 TELEGRAPH RD	SEVERN MD		21054	*						*
*	SEVERN			S	3 MI	TELEGRAPH RD	W	250 FT	Y	*		*		85	80
	10	40	55		10	D *									
	886	461	AA 74 3227	ROSE, MARGARET	226 LOKUS RD	ODENTON MD		21113	*						*
*	ODENTON			N	1 MI	LOKUS RD	W	125 FT	Y	*		*		110	105
	25	50	60		15	D *									
	886	461	AA 81 0508	DAFF CALVIN W	8233 LOKUS RD	ODENTON		MD21113	*						*
*	ODENTON			NE	1 MI	LOKUS RD	E	75 FT	Y	*		*		120	115
	20	50	60		12	D *									
	886	461	AA 81 6955	WOODWARD-CLYDE CONSU	1300 PICARD DR	ROCKVILLE		MD20850	MAYFIELD						*
*	ODENTON			NE	1.2 MI	LOKUS	W	300 FT	N	*		*		10	6
	1	1	1			T *									
	886	459	AA 86 0349	STAR ELECTRIC CO	8137 TELEGRAPH RD	SEVERN		MD21144	MAYFIELD						*
100	ODENTON			NE	1.0 MI	TELEGRAPH RD	N	15 FT	N	*		*			
						I AA 88GAP022									
	886	452	AA 88 1805	KNOLL GERRY	1518 DICUS MILL RD	ODENTON		MD21054	*						*
*	ODENTON			*	0 MI	DICUS MILL	N	60 FT	Y	*		*			
						D *									
	887	463	AA 88 1393	SHEFFIELD HOMES INC	690 RITCHIE HWY	SEVERNA PARK		MD21146	*						*
5	SEVERN			S	.1 MI	TELEGRAPH RD	E	370 FT	N	*		*			
						D *									

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WELL NO. REPLACED OR DEEPENED	WELL IND.	WELL DEPTH REAL FEET	TOTAL CASING DEPTH FEET				
PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER		

	887	462	AA 81 6700	BARTLEY MARY	1484 BERGER ST	ODENTON	MD21113	*							
*	ODENTON		*	0	MI	BERGER ST	N	200	FT	Y	AA 73 6223	C			*
						D *									
	887	461	AA 81 8522	AA COUNTY PUBLIC WKS	8273 TELEGRAPH RD	ODENTON	MD21113	*							
*	SEVERN		SE	5	MI	8273 TELEGRAPH RD	S	15	FT	Y	*	*			*
						I AA 86GAP030									
	887	457	AA 74 3513	FORD, TIMOTHY	8108 TELEGRAPH RD	SEVERN MD	21144	*							
2	SEVERN		SW	3.5	MI	RT 170	W	200	FT	Y	*	*	60	55	
	15	20	30	10		D *									
	887	454	AA 74 2859	HILL, EVELYN	1153 ODENTON RD	ODENTON MD	21113	*							
*	ODENTON		S	0	MI	ODENTON RD	S	800	FT	Y	*	*	136	131	
	10	90	100	10		D *									
	888	463	AA 81 4525	BOLTON PHILLIS	8372 WB&A BLVD	SEVERN	MD21144	GRANDVIEW PARK							*
*	SEVERN		S	2.1	MI	W B & A BLVD	W	150	FT	N	*	*	75	70	
	20	30	35	10		D *									
	888	463	AA 81 4609	BOLTON PHILLIS	8376 WB&A BLVD	SEVERN	MD21144	GRANDVIEW PARK							*
2	SEVERN		S	2.2	MI	W B & A BLVD	W	150	FT	N	*	*	70	65	
	20	30	40	10		D *									
	888	463	AA 81 4610	CHANEY GEORGE	8378 WB&A BLVD	SEVERN	MD21144	GRANDVIEW PARK							*
3	SEVERN		SE	2.2	MI	WB&A BLVD	W	150		N	*	*	110	105	
	20	30	40	10		D *									
	888	463	AA 81 4821	BOLTON PHYLLIS	8374 WB&A RD	SEVERN	MD21144	GRANDVIEW PARK							*
*	SEVERN		S	2	MI	WB&A RD	W	150	FT	N	*	*	83	78	
	20	36	45	10		D *									
	888	463	AA 81 4822	CHANEY GEORGE	1446 WATTS AVE	SEVERN	MD21144	GRANDVIEW PARK							M
4	SEVERN		S	2	MI	WB&A RD	W	150	FT	N	*	*	74	69	
	20	32	40	10		D *									
	888	463	AA 81 7279	BEEDER LOU	200 PERSHING AVE	GLEN BURNIE	MD21061	GRANDVIEW PARK							*
37	SEVERN		S	2	MI	W B A RD	E	30	FT	N	*	*	104	97	
	35	50	78	9		D *									
	888	463	AA 81 8269	SETH CAMERON INC	1415 ANNAPOLIS RD	ODENTON	MD21113	GRANDVIEW PARK							*
13	ODENTON		E	4	MI	VIRGINIA AVE	W	15	FT	N	*	*			
						D *									
	888	463	AA 81 0625	BOLTON PHYLLIS	8367 W B & A RD	SEVERN	MD21144	*							*
*	SEVERN		S	1	MI	W B & A RD	E	80	FT	Y	*	*			
						D *									

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LOT	NEAREST TOWN	DIR. TO TOWN CODE	DIST NEAR. TOWN MILES	NAME OF NEAREST ROAD	SIDE OF ROAD CODE	DIST. FROM ROAD	REPLACE-MENT CODE	WELL NO. REPLACED OR DEEPENED	WELL IND.	WELL DEPTH REAL FEET	TOTAL CASING DEPTH FEET

PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPM APPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER

	888	463	AA 81 9521	MANDRIN CONSTRUCTION	8174 RITCHIE HWY		PASADENA	MD21122	GRANDE VIEW PARK						
33	GLEN BURNIE			SW	4.5 MI	WB & A BLVD	W	15	FT	N	*	*			
						D *									
	888	462	AA 81 6634	HEISHMAN BENTLEY	1612 WILLOW DR		SEVERN	MD21144	BONNIE ACRES						
*	GLEN BURNIE			SW	4.3 MI	1612 WILLOW DR	N	15	FT	Y	*	*	110	103	
	50	33	50		10	D *									
	888	462	AA 88 2604	SETH CAMERON	1416 ANNAPOLIS RD		ODENTON	MD21113	GRANDE VIEW PARK						
37R	SEVERN			SE	2 MI	123 W VIRGINIA AVE	E	15	FT	N	*	*			
						D *									
	888	458	AA 81 1108	PRIEST RONALD A	312 NEVADA AVE		ODENTON	MD21113	*						
*	ODENTON			N	0 MI	NEVADA AVE	W	70	FT	S	*	*	120	115	
	25	70	80		10	D *									
	889	464	AA 74 3262	BASS, WILMER	1606 WILLOW DR		SEVERN MD	21144	*						
*	SEVERN			SE	2 MI	WILLOW DR	N	50	FT	Y	*	*	80	75	
	25	30	35		12	D *									
	889	464	AA 74 3319	STANTON ROBERTA	118 BRNS CROSSING RD		SEVERN	MD21054	*						
8	SEVERN			SE	2 MI	BURNS CROSSING RD	W	60	FT	Y	*	*	70	65	
	20	31	35		15	D *									
	889	464	AA 81 0763	MILES WILLIAM	108 BURNSCROSSING RD		SEVERN	MD21144	*						
*	SEVERN			SE	2.4 MI	BURNS CROSSING RD	W	40	FT	Y	*	*	110	105	
	15	60	70		10	D *									
	889	464	AA 81 4875	WESSEL THEODORE	1613 WILLOW DR		SEVERN	MD21144	*						
*	SEVERN			SE	2 MI	WILLOW DR	S	31	FT	Y	*	*	83	75	
	25	27	35		10	D *									
	889	464	AA 81 9240	MORRISON	1613 CHESTNUT DR		SEVERN	MD21144	*						
*	SEVERN			SE	2.0 MI	CHESTNUT DR	S	53	FT	Y	*	*			
						D *									
	889	463	AA 81 0277	SULIN VICTOR	85 BURNSCROSSING RD		SEVERN	MD21144	*						
*	SEVERN			SE	2.5 MI	BURNSCROSSING RD	E	550	FT	Y	*	*	75	70	
	10	37	42		10	D *									
	889	463	AA 81 2472	LERNICKER	104 BURNS CROSSING		SEVERN	MD21144	*						
*	SEVERN			SE	2.2 MI	BURNS CROSSING	E	20	FT	Y	*	*	80	60	
	15	60	65		5	D *									
	889	463	AA 81 7891	CODWIN WILLIAM A	310 7TH AVE NE		GLEN BURNIE	MD21061	GRANDVIEW PARK						
52	SEVERN			S	2.3 MI	GEORGE AVE	N	15	FT	N	*	*	90	83	
	30	30	35		10	D *									

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889	462	AA 81 9566	SETH CAMERON	1415 ANNAPOLIS RD	ODENTON MD21113	GRANDVIEW PARK	*
889	462	AA 81 9567	SETH CAMERON	1415 ANNAPOLIS RD	ODENTON MD21113	GRANDVIEW PARK	*
889	462	AA 81 9706	D&R CONTRACTORS	7411 B&A BLVD	GLEN BURNIE MD21061	GRANDVIEW PK	*
889	461	AA 81 1950	SIMPKINS FRED	8534 NEW CUT RD	SEVERN MD21144	*	*
889	461	AA 81 3625	CANFIELD JUNIOR RAY	8537 NEW CUT RD	SEVERN MD	*	*
889	461	AA 81 4292	DAVIS MARIANNE	206 BURNSCROSSING RD	SEVERN MD	*	*
889	461	AA 81 6970	BELLS TRAILER PARK	241 SHEILA K CT	SEVERN MD21144	*	*
889	461	AA 81 7305	FRENCH CLIFTON	203 MCKENDERFF AVE	ANNAPOLIS MD21401	NR SEVERN FOREST	*
889	461	AA 81 9239	MCGINTY MORRIS	211 BURNS CROSSING R	SEVERN MD21144	*	*
889	460	AA 81 2835	GENTRY MARY PHIPPS	634 CALIFORNIA TER	GAMBRILLS MD21054	PHIPPS PROPERTY	*
889	460	AA 81 8070	BELL FLOYD	218 BURNS CROSSING	SEVERN MD21144	*	*
889	459	AA 86 0228	MILLER DOUGLAS R	7886 WB&A RD	SEVERN MD21144	*	*

LOT	NEAREST TOWN	DIR. TO TOWN CODE	DIST NEAR. TOWN MILES	NAME OF NEAREST ROAD	SIDE OF ROAD CODE	DIST. FROM ROAD	REPLACEMENT CODE	WELL NO. REPLACED OR DEEPENED	WELL IND.	WELL DEPTH REAL FEET	TOTAL CASING DEPTH FEET
*	SEVERN	SE	2.5 MI	125 VIRGINIA AVE D *	W	15 FT	N	*	*		
17-	SEVERN	SE	2.5 MI	126 VIRGINIA AVE D *	W	15 FT	N	*	*		
*	GLEN BURNIE	NE	5 MI	8389 W B & A RD D *	E	15 FT	N	*	*		
*	SEVERN	SE	3 MI	NEW CUT RD D *	N	423 FT	Y	*	*	107	102
*	OVENTON	NE	1.3 MI	NEW CUT RD D *	S	10 FT	Y	*	*	110	105
*	SEVERN	SE	2.5 MI	BURN CROSSING RD D *	E	80 FT	Y	*	*	120	115
*	SEVERN	S	2.5 MI	BURNS CROSSING RD P AA 67GAP006	W	200 FT	S	*	*	256	251
*	SEVERN	SE	2.5 MI	BURNS CROSSING RD D *	E	15 FT	Y	*	*	124	117
*	SEVERN	SE	2.5 MI	BURNS CROSSING D *	E	20 FT	Y	*	*		
B	SEVERN	NW	1.8 MI	231 CARBARN D *	N	150 FT	N	*	*	131	126
*	SEVERN	S	4.7 MI	BURNS CROSSING RD D *	W	33 FT	Y	*	*	140	135
*	GAMBRILLS	NW	2.9 MI	BURNS CROSSING D *	W	840 FT	N	*	*		

PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER
889	462	AA 81 9566	SETH CAMERON		
889	462	AA 81 9567	SETH CAMERON		
889	462	AA 81 9706	D&R CONTRACTORS		
889	461	AA 81 1950	SIMPKINS FRED		
20	65	70	10	D *	
889	461	AA 81 3625	CANFIELD JUNIOR RAY		
25	30	45	10	D *	
889	461	AA 81 4292	DAVIS MARIANNE		
10	65	70	7	D *	
889	461	AA 81 6970	BELLS TRAILER PARK		
70	69	80	25		
889	461	AA 81 7305	FRENCH CLIFTON		
25	55	75	10	D *	
889	461	AA 81 9239	MCGINTY MORRIS		
889	460	AA 81 2835	GENTRY MARY PHIPPS		
25	60	80		D *	
889	460	AA 81 8070	BELL FLOYD		
60	60	70	12	D *	
889	459	AA 86 0228	MILLER DOUGLAS R		

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PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER

889	453	AA 88 1418	AMOCO		1099 ANNAPOLIS RD		ODENTON	MD21113	*				*	
* ODENTON		SE	1.0 MI	ANNAPOLIS RD	S	70 FT	N	*		*				
				T *										
889	453	AA 88 1419	AMOCO		1099 ANNAPOLIS RD		ODENTON	MD21113	*				*	
* ODENTON		SE	1.0 MI	ANNAPOLIS RD	S	70 FT	N	*		*				
				T *										
889	453	AA 88 1420	AMOCO		1099 ANNAPOLIS RD		ODENTON	MD21113	*				*	
* ODENTON		SE	1.0 MI	ANNAPOLIS RD	S	100 FT	N	*		*				
				T *										
889	453	AA 88 1421	AMOCO		1099 ANNAPOLIS RD		ODENTON	MD21113	*				*	
* ODENTON		SE	1.0 MI	ANNAPOLIS RD	S	100 FT	N	*		*				
				T *										
889	451	AA 86 0237	A A COUNTY OPZ		ARUNDEL CTR		ANNAPOLIS	MD21404	*				*	
* ODENTON		SE	2.0 MI	SCHOOL LA	S	520 FT	N	*		*				
				T *										
889	451	AA 86 0238	A A COUNTY OPZ		ARUNDEL CENTER		ANNAPOLIS	MD21404	*				*	
* ODENTON		SE	2.0 MI	SCHOOL LA	S	520 FT	N	*		*				
				T *										
889	451	AA 86 0239	A A COUNTY OPZ		ARUNDEL CTR		ANNAPOLIS	MD21404	*				*	
* ODENTON		SE	2.0 MI	SCHOOL LA	S	520 FT	N	*		*				
				T *										
889	451	AA 86 0241	A A COUNTY OPZ		ARUNDEL CTR		ANNAPOLIS	MD21404	*				*	
* ODENTON		SE	2.0 MI	SCHOOL LA	S	570 FT	N	*		*				
				T *										
889	451	AA 86 0242	A A COUNTY OPZ		ARUNDEL CTR		ANNAPOLIS	MD21404	*				*	
* ODENTON		SE	2.0 MI	SCHOOL LA	S	570 FT	N	*		*				
				T *										
889	451	AA 86 0243	A A COUNTY OPZ		ARUNDEL CTR		ANNAPOLIS	MD21404	*				*	
* ODENTON		SE	2.0 MI	SCHOOL LA	S	620 FT	N	*		*				
				T *										
889	451	AA 86 0244	A A COUNTY OPZ		ARUNDEL CTR		ANNAPOLIS	MD21404	*				*	
* ODENTON		SE	2.0 MI	SCHOOL LA	S	620 FT	N	*		*				
				T *										
889	451	AA 86 0245	ANNE ARUNDEL COUNTY		ARUNDEL CENTER		ANNAPOLIS	MD21404	*				*	
* ODENTON		SE	2.0 MI	SCHOOL LA	S	620 FT	N	*		*				
				T *										

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889	451	AA 86 0246	ANNE ARUNDEL COUNTY	ARUNDEL CENTER	ANNAPOLIS MD21404	*	*
889	451	AA 86 0247	ANNE ARUNDEL COUNTY	ARUNDEL CENTER	ANNAPOLIS MD21404	*	*
890	460	AA 71 0897	CHANEY, CECIL V	BX 180-A BURNS XING	SEVERN MD 21144	SEVERN	*
890	460	AA 72 0060	BELL, HARRY	RT 1 BOX 183	SEVERN MD 21144	*	*
890	460	AA 72 0177	BELL, FRANK	RT 1 BOX 183	SEVERN MD 21144	*	*
890	460	AA 72 0291	FLYNT, BYRON P	RT 1 BOX 192	SEVERN MD 21144	*	*
890	460	AA 72 0486	BRAUN, JOHN H	RT 1 BOX 113	SEVERN MD 21144	*	*
890	460	AA 72 1147	CAVEY, JAMES	CONSTANCE AVE	GAMBRILLS MD	GAMBRILLS	*
890	460	AA 73 1922	CLARK HEIGHTS	*	ELKTON MD	CLARK HEIGHTS	*
890	460	AA 73 2162	HUGHEL, GENE	A STREET CHELSEA BCH	PASADENA MD	*	*
890	460	AA 73 2233	LINTHICUM, A	NEW CUT RD	SEVERN MD	*	*
890	460	AA 73 2258	POLYANSKI, STANLEY	139 CONSTANT AVE	SEVERN MD	*	*

LOT	NEAREST TOWN	DIR. TO TOWN CODE	DIST NEAR. TOWN MILES	NAME OF NEAREST ROAD	SIDE OF ROAD CODE	DIST. FROM ROAD	REPLACEMENT CODE	WELL NO. REPLACED OR DEEPENED	WELL IND.	WELL DEPTH REAL FEET	TOTAL CASING DEPTH FEET
*	ODENTON	SE	2.0 MI	SCHOOL LA T *	S	400 FT	N	*	*		*
*	ODENTON	SE	2.0 MI	SCHOOL LA T *	S	450 FT	N	*	*		*
*	ODENTON	E	2 MI	BURNS CROSSING RD D *	S	900 FT	Y	*	*	100	90
*	ODENTON	E	2 MI	BURNS CROSSING RD D *	S	1 MI	N	*	*	48	40
*	MAYFIELD	S	1 MI	BURNS CROSSING D *	S	1000FT	N	*	*	50	40
*	MAYFIELD	*	0 MI	BURNSCROSSING RD D *	S	30 FT	N	*	*	115	102
*	ODENTON	NE	2 MI	BURNS CROSSING D *	E	150 FT	Y	*	*	73	66
*	GAMBRILLS	N	1 MI	CONSTANCE AVE D *	N	15 FT	N	*	*	50	45
*	CLARK HEIGHTS	*	0 MI	MILDRED RD T AA 74GAP002	S	15 FT	N	*	*	125	105
*	GAMBRILLS	NE	1 MI	CONSTAN AVE D *	E	40 FT	N	*	*	85	78
*	GAMBRILLS	NE	2 MI	NEW CUT D *	S	100 FT	N	*	*	40	35
*	SEVERN	S	3 MI	CONSTANT AVE D *	*	150 FT	Y	*	*	70	65

PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER
10	26	48			
12	23				
15	47				
10	38	73			
10	23	50			
125	32	125			
15	60	70			
15	21	27			
12	41	48			

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890	460	AA 73 3579	WISNIEWSKI, CARROLL	NEW CUT RD	SEVERN MD 21144	*	*
890	460	AA 73 3640	WISNIEWSKI, ROBERT B	289 FOREST BLVD	PARK FOREST IL 60466	*	*
890	460	AA 73 3774	AMER SECT HOMES INC	31 OLD SOLOMONS IS R	ANNAPOLIS MD 21401	*	*
890	460	AA 73 3793	BELL, L C	BX 108	SEVERN MD 21144	*	*
890	460	AA 73 3817	RUDDLE, MELVIN	CONSTANT AVE	SEVERN MD	HALON ESTS	*
890	460	AA 73 4002	ZIEGLER, BLANCHE	112 RT 1	SEVERN MD	SEVERN	*
890	460	AA 73 4122	THOMPSON, BILLY D	BX 34A RT 3	SEVERN MD	ODENTON	*
890	460	AA 73 5818	GENTILE, ROBERT	BOX 84 NEW CUT RD	SEVERN MD	*	*
890	460	AA 73 5866	LUEDINE, CHRIS J	RT 1 BOX 253	SEVERN MD 21144	*	*
890	460	AA 73 6156	PRIDEMARK ENTERPRISE	P O BX 278	MILLERSVILLE MD	STEVENSON PARK	*
890	460	AA 73 6226	BRAUN, DAVID E	RT 1 BX 56 NEW CUT	SEVERN MD 21144	*	*
890	460	AA 73 6555	SPURLIN, MACK	RT 1 BX 137	SEVERN MD 21144	*	*

LOT	NEAREST TOWN	DIR. TO TOWN CODE	DIST. NEAR. TOWN MILES	NAME OF NEAREST ROAD	SIDE OF ROAD CODE	DIST. FROM ROAD	REPLACEMENT CODE	WELL NO. REPLACED OR DEEPENED	WELL IND.	WELL DEPTH REAL FEET	TOTAL CASING DEPTH FEET
*	SEVERN	E	4 MI	NEW CUT RD	N	100 FT	Y	*	*	40	35
*	ODENTON	NW	3 MI	NEW CUT RD	N	40 FT	Y	*	*	44	37
3	GAMBRILLS	N	3 MI	NEW CUT RD	N	40 FT	N	*	*	48	43
*	ODENTON	NE	2 MI	BURNS CROSSING RD	E	900 FT	Y	*	*	135	130
1	GLEN BURNIE	S	10 MI	NEW CUT RD	N	10 FT	N	*	*	30	25
4	ODENTON	E	3 MI	BURNS CROSSING	S	300 FT	Y	*	*	66	59
3	GLEN BURNIE	SW	5 MI	NEW OUT RD	W	30 FT	N	*	*	50	43
*	SEVERN	*	0 MI	NEW CUT RD	*	1 MI	Y	*	*	116	111
*	SEVERN	*	0 MI	UPTON RD	N	40 FT	Y	*	*	150	145
6	SEVERN	SE	2 MI	HILLCREST RD	S	30 FT	N	*	*	93	86
17	GAMBRILL	N	2 MI	NEW CUT RD	S	20 FT	Y	*	*	45	38
*	SEVERN	S	2 MI	CONSTANT AVE	W	400 FT	Y	*	*	52	47

PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER
15	25	30	10 D *		
20	15	20	6 D *		
11	20	29	6 D *		
10	15	20	10 D *		
15	60	72	12 D *		
10	16	26	10 D *		
12	32		10 D *		
15	14	20	7 D *		
30	35	45	7 D *		
40	36	46	7 D *		
15	30	45	6 D *		
20	17	45	10 D *		
15	25	30	F *		

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LOT	NEAREST TOWN	DIR. TO TOWN CODE	DIST NEAR. TOWN MILES	NAME OF NEAREST ROAD	SIDE OF ROAD CODE	DIST. FROM ROAD	REPLACE-MENT CODE	WELL NO. REPLACED OR DEEPENED	WELL IND.	WELL DEPTH REAL FEET	TOTAL CASING DEPTH FEET

PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPM APPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER

	890	460	AA 73 7339	KILGORE, LARRY		RT 1 BX 117			SEVERN MD	21144	*				*
3	BELLS TRAILER PK		S	1	MI	BRAUNS AVE		S	120 FT	Y	*		*	140	133
	15	72	140	10	D	*									
	890	460	AA 73 8087	SUPRIE, RICHARD E		63 NEW CUT RD			SEVERN MD	21144	SEVERN				*
*	SEVERN		*	0	MI	NEW CUT RD		N	30 FT	N	*		*	55	48
	10	30	55	10	D	*									
	890	460	AA 73 8088	KILGORE, LARRY		RT 1 BX 117			SEVERN MD	21144	SEVERN				*
3	BELLS TRLR PK SEVERN		S	1	MI	BRAWNS AVE		S	120 FT	Y	*		*	190	183
	15	70	190	10	D	*									
	890	460	AA 73 8181	CURTIM, LEARCO		UPTON RD			SEVERN MD	21144	*				*
*	SEVERN		*	0	MI	UPTON RD		N	10 FT	Y	*		*	130	125
	20	40	50	7	D	*									
	890	460	AA 73 8182	SWEENEY, HAMILTON		UPTON RD			SEVERN MD	21144	*				*
*	SEVERN		*	0	MI	UPTON RD		W	150 FT	Y	*		*	150	125
	30	40	50	7	D	*									
	890	460	AA 73 8345	STANGE, KENNETH C		88 E NEW CUT RD			SEVERN MD	21144	*				*
*	SEVERN		SE	5	MI	NEW CUT RD		S	10 FT	Y	*		*	126	119
	60	65	75	6	D	*									
	890	460	AA 73 9031	BOYLE, PATRICK M		7834 CLARK STA RD			SEVERN MD	21144	SEVERN				C
4	SEVERN		*	0	MI	CLARK STATION RD		W	40 FT	Y	*		*	120	113
	10	75	120	10	D	*									
	890	460	AA 74 0297	REICHERT, DOUGLAS C		215 BURNSCROSSING RD			SEVERN MD	21144	*				*
*	SEVERN		SW	3	MI	BURNSCROSSING RD		E	500 FT	Y	*		*	112	107
	15	50	55	12	D	*									
	890	460	AA 74 0481	STACK, WALTER C		8491 NEW CUT RD			SEVERN MD	21144	*				*
*	SEVERN		SW	0	MI	NEW CUT RD		E	300 FT	Y	*		*	59	52
	60	40	60	5	D	*									
	890	460	AA 74 1014	RAY, WILLIAM		1132 LONG POINT TER			ANNAPOLIS MD		*				*
*	CLARK HEIGHTS		S	1	MI	NEW CUT RD		N	50 FT	Y	*		*	143	20
	15	31	143		D	*									
	890	460	AA 74 1047	C H KEITH INC		P O BX 456			MILLERSVILLE MD21108		*				*
205	SEVERN		S	4	MI	BURNS CROSSING RD		E	25 FT	N	*		*	116	111
	25	50	60	10	D	*									
	890	460	AA 74 1299	MIRAGLIUOLO, ROBERT		237 BURNSCROSSING RD			SEVERN MD	21144	*				*
*	SEVERN		SE	0	MI	BURNSCROSSING RD		E	35 FT	Y	*		*	91	86
	15	40	50	12	D	*									

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PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER

890 460 AA 74 1303 KRAMER JR. LOU 8479 NEW CUT RD SEVERN MD 21144 SEVERN *
A SEVERN * 0 MI 8465 NEW CUT RD S 180 FT N * C
D *
890 460 AA 74 1437 MCHENRY, WILLIAM K 8517 NEW CUT RD SEVERN MD 21144 SEVERN *
610 SEVERN * 0 MI 8517 NEW CUT RD E 100 FT Y * * 110 103
15 46 110 10 D *
890 460 AA 74 1879 KRAMER, LOW JR 8479 NEW CUT RD SEVERN MD 21144 SEVERN *
A SEVERN * 0 MI 8465 NEW CUT RD S 180 FT N * * 55 48
20 17 30 10 D *
890 460 AA 74 1809 CHER CHRIS CONST 10519 YORK RD COCKEYSVILLE MD21030 SEVERN *
A SEVERN * 0 MI UPTON & NEW CUT RDS S 45 FT N * * 60 53
10 14 30 10 D *
890 460 AA 74 2061 LOANE, FRANK 2605 224TH ST PASADENA MD 21122 STEVENSON PARK *
* SEVERN * 0 MI UPTON ROAD N 75 FT S * * 163 157
30 47 65 5 D *
890 460 AA 81 3672 TAYLOR JAMES 37 BURNS CROSSING RD SEVERN MD21144 * *
* SEVERN MD SE 3 MI BURNS-CROSSING RD E 300 FT Y * * 70 60
40 16 23 D *
890 459 AA 81 0845 RELIABLE CONTRACTING 332 BURNSCROSSING RD SEVERN MD21144 * *
* SEVERN SE 3.4 MI BURNS CROSSING RD W 160 FT Y * * 50 45
10 37 40 10 D *
890 459 AA 81 2215 QUILT RIGHT CORP 1223 ANNAPOLIS ROAD ODENTON MD21113 CHASE HILL *
413 SEVERN S 2.6 MI BURNS CROSSING RD S 210 FT N * * 130 120
7 65 95 7 D *
890 459 AA 81 7863 LOWMAN ROGER A 264 BURNS XING RD SEVERN MD21144 * *
* SEVERN S 3 MI 264 BURNS XING RD W 18 FT Y * * 120 115
25 60 75 10 D *
890 456 AA 81 9195 MANDRIN CONSTRUCTION 8174 RITCHIE HWY PASADENA MD21122 VILLA BELLA *
15 ODENTON E 2.0 MI 1513 ROMEO LA E 15 FT N * *
D *
890 456 AA 81 9419 MANDRIN COAST 8174 RITCHIE HWY PASADENA MD21122 VILLA BELLA *
19 ODENTON E 2.0 MI 1512 ROMEO LA N 15 FT N * *
D *
890 456 AA 86 0282 MANDRIN CONST 8174 RITCHIE HWY PASADENA MD21122 VILLA BELLA *
31 ODENTON E 2.0 MI 351 MONTE CUSKELT W 15 FT N * *
D *

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PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER

	890	456	AA 86 0290	MANDRIN COAST		8174 RITCHIE HWY		PASADENA		MD21122	VILLA BELLA				*
35	ODENTON			E	2.0 MI	359 MONTE CRISTO CT		S	15	FT	N	*		*	
						D	*								
	890	456	AA 86 0291	MANDRIN CONST		8174 RITCHIE HWY		PASADENA		MD21122	VILLA BELLA				*
33	ODENTON			E	2.0 MI	355 MONTE CRISTO CT		W	15	FT	N	*		*	
						D	*								
	890	456	AA 86 0305	MANDRIN CONST		8174 RITCHIE HWY		PASADENA		MD21122	VILLA BELLA				*
18	GAMBRILLS			NW	1.5 MI	1514 RONCO LANE		N	15	FT	N	*		*	
						D	*								
	890	456	AA 86 0497	MANDRIN CONCT		8174 RITCHIE HWY		PASADENA		MD21122	VILLA BELLA				*
17	ODENTON			E	2 MI	1516 ROMES LA		E	15	FT	N	*		*	
						D	*								
	890	455	AA 71 0702	WISCOTT, MILTON		KREGER RD					GAMBRILLS MD		*		*
*	GAMBRILLS			SW	1 MI	RT 175		S	1	MI	N	*		*	
	8	101	125		6	D	*						200		190
	890	455	AA 71 0921	LEFEVERS, CHARLES		CONSTANT AVE					SEVERN MD 21144		*		*
*	SEVERN			SE	2 MI	CONSTANT AVE		E	500	FT	N	*		*	
	12	60	65		10	D	*						90		85
	890	455	AA 72 0781	HOFMAN, JOHN C JR		10627 STANSFIELD RD					LAUREL MD		*		*
9	ODENTON			E	3 MI	RT 175		S	1	MI	N	*		*	
	8	20	35		6	D	*						72		65
	890	455	AA 73 0099	SINE, HARRY		RFD 1 BX 132					SEVERN MD 21144		*		*
*	SEVERN			SW	4 MI	CONSTANT AVE		E	100	FT	N	*		*	
	30	40	45		12	D	*						74		69
	890	455	AA 73 3777	AAPW MILRSVILE LDFL		ANNE ARUNDEL CO					MILLERSVILLE MD		*		*
*	MILLERSVILLE			NW	4 MI	DICUS MILL RD		N	200	FT	N	*		*	
	5	56	160			T	AA 74GAP008						172		157
	890	455	AA 73 3784	AAPW MILRSVILE LDFL		ANNE ARUNDEL CO					MILLERSVILLE MD21108		*		*
*	MILLERSVILLE			NW	4 MI	CONSTANT		E	2000FT		N	*		*	
	20	35	95			T	AA 74GAP008						96		81
	890	455	AA 73 3785	AAPW MILRSVILE LDFL		ANNE ARUNDEL CO					MILLERSVILLE MD21108		*		*
*	MILLERSVILLE			NW	4 MI	CONSTANT		*	1200FT		N	*		*	
	10	26	64			T	AA 74GAP008						62		47
	890	455	AA 73 3786	AAPW MILRSVILE LDFL		ANNE ARUNDEL CO					MILLERSVILLE MD21108		*		*
*	MILLERSVILLE			NW	4 MI	BURNS CROSSING		E	1000FT		N	*		*	
	50	20	91			T	AA 74GAP008						93		78

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PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER

890 455 AA 73 3787 AAFW MILRSVILE LNFL ANNE ARUNDEL CO MILLERSVILLE MD21108 * *
* MILLERSVILLE NW 4 MI CONSTANT E 1600FT N * T
T AA 74GAP008
890 455 AA 73 3788 AAFW MILRSVILE LNFL ANNE ARUNDEL CO MILLERSVILLE MD21108 * *
* MILLERSVILLE NW 4 MI CONSTANT E 2400FT N * * 158 143
12 90 158 T AA 74GAP008
890 455 AA 73 3863 ANNE ARUNDEL COUNTY MILRSVLE SAN LNDFIL GAMBRILLS MD * *
* GAMBRILLS NE 2 MI BURNS CROSSING RD E 800 FT N * * 260 221
43 127 147 40 I AA 74GAP048
890 455 AA 73 3994 WALLEN, LEWIS RT 1 BX 151 SEVERN MD 21144 * *
* GAMBRILLS E 2 MI BURNSCROSSING W 200 FT Y * * 280 275
20 130 152 15 D *
890 455 AA 73 4199 SINE, HARRY RT 1 BX 132 SEVERN MD 21144 * *
* SEVERN SW 5 MI CONSTANT AVE E 200 FT Y * * 96 91
12 42 54 12 D *
890 455 AA 73 4302 WETHERSFIELD SUBDIV BX 365 FADLI PA 19301 WEATHERFIELD *
* ODENTON N 4 MI BURNS CROSSING RD W 400 N * C
T *
890 455 AA 73 4639 ANNE ARUNDEL COUNTY SANITARY LANDFILL MILLERSVILLE MD21108 * *
1A MILLERSVILLE NW 4 MI DICUS MILL RD N 205 FT N * U
T *
890 455 AA 73 4653 ANNE ARUNDEL CO MILLERSVILLE SAN LAN MILLERSVILLE MD21108 * *
12A MILLERSVILLE NW 4 MI CONSTANT W 2405FT N * U
T *
890 455 AA 73 4745 GIBRALTOR HOMES INC 727 N POINT BLVD BALTIMORE MD * *
18 GAMBRILLS N 1 MI DICUS MILL N 50 FT N * * 100 93
5 60 80 6 D *
890 455 AA 73 6196 MCDONIGLE, CHARLES RT 1 BX 105 BURNS CR SEVERN MD 21144 * *
22 ODENTON E 2 MI BURNS CROSSING S 40 FT Y * * 65 58
20 25 65 10 D *
890 455 AA 73 8147 BRYAN, WILLIAM F 1302 ASHBURTON CT MILLERSVILLE MD21108 * *
* AURORA HILLS * 0 MI ASHBURTON RD S 25 FT Y * * 330 320
35 104 114 7 D *
890 455 AA 74 0584 C H KEITH INC P O BX 456 MILLERSVILLE MD EDGEWOOD *
244 GLEN BURNIE S 5 MI BURNS CROSSING RD E 30 FT N * * 191 186
20 140 150 10 D *

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DEPARTMENT OF THE ENVIRONMENT
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WELL APPLICATIONS PROCESSED SINCE 1969
REPORT NUMBER D130WMA1

EAST GRID COORD. (1000FT)	NORTH GRID COORD. (1000 FT)	PERMIT NUMBER	OWNER NAME	ADDRESS OF OWNER	CITY AND STATE OF OWNER	SUBDIVISION	SECT.
LOT	NEAREST TOWN	DIR. TO TOWN CODE	DIST NEAR. TOWN MILES	NAME OF NEAREST ROAD	SIDE OF ROAD CODE	DIST. FROM ROAD	REPLACEMENT CODE
WELL NO. REPLACED OR DEEPENED	WELL IND.	WELL DEPTH REAL FEET	TOTAL CASING DEPTH FEET				
PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER		

	890	455	AA 74 1116	WIGFIELD, GEORGE	1232 DICUS MILL RD	MILLERSVILLE MD21108	*							
10R	MILLERSVILLE		NW	3	MI	DICUS MILL RD	N	40	FT	Y	*	*	165	160
	15	100	105			D *								
	890	455	AA 74 1612	PRIDEMARK CUSTOM BLD	P O BX 278	MILLERSVILLE MD21108	GAMBRILLS							
*	GLEN BURNIE		S	4	MI	DICUS MILL RD	S	40	FT	N	*	*	122	115
	25	30	50		S	D *								
	890	455	AA 74 2296	DENTON, GARY & KAREN	CONSTANT AVE	SEVERN MD 21144	*							
*	SEVERN		SE	0	MI	CONSTANTA AVE	S	900	FT	N	*	*	160	155
	12	140	150		15	D *								
	890	450	AA 72 0602	MIEDZINSKI, PETER	1009 BEACH AVE	BALTIMORE MD 21237	*							
*	MILLERSVILLE		N	3	MI	DICUS MILL RD	S	150	FT	N	*	*	160	153
	12	50	80		6	D *								
	890	450	AA 72 0859	TOBIN, JOHN R	MAPLE RD	GAMBRILLS MD	*							
*	GAMBRILLS		E	1	MI	MAPLE RD	E	50	FT	N	*	*	52	51
	8	21	30		7	D *								
	890	450	AA 72 1123	MAYNORD, RICHARD V	BX 62 RT 175	GAMBRILLS MD	*							
*	GAMBRILLS		*	0	MI	RT 175	N	150	FT	N	*	*	102	97
	12	60	65		10	D *								
	890	450	AA 73 0100	BURG, DONALD M	RFD 1 BX 632	GAMBRILLS MD	*							
*	GAMBRILLS		*	0	MI	GAMBRILLS	W	300	FT	N	*	*	57	52
	12	40	45		8	D *								
	890	450	AA 73 0205	LUKENBOCH, M	2ND ST ARUNDEL VIEW	GAMBRILLS MD	ARUNDEL VIEW							
48	GAMBRILLS		W	1	MI	SECOND ST	W	40	FT	N	*	*	222	217
	12	135	140		10	D *								
	890	450	AA 73 0752	HANEKE, WILLIAM	102 SPRUCE LA	ANNAPOLIS MD	*							
*	ARUNDEL VIEW		*	0	MI	ST MARYS AVE	W	600	FT	N	*	*	183	178
	10	115	145		8	D *								
	890	450	AA 73 1031	PERRY, PAUL	2ND ST	GAMBRILLS MD	ARUNDEL VIEW							
*	GAMBRILLS		NW	1	MI	SECOND ST	S	50	FT	N	*	*	205	200
	20	110	115		12	D *								
	890	450	AA 73 2753	RYAN, DELMA	RT 175 BX 36	GAMBRILLS MD 21054	*							
*	GAMBRILLS		W	1	MI	RT 175	N	200	FT	Y	*	*	82	75
	12	62	68		6	D *								
	890	450	AA 73 2760	BOWLIN, JAMES	2602 ANNAPOLIS RD	SEVERN MD	GAMBRILS							
175	ODENTON		SE	1	MI	ANNAPOLIS RD	N	80	FT	N	*	*	178	174
	20	90	95		15	D *								

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LOT	NEAREST TOWN	DIR. TO TOWN CODE	DIST NEAR. TOWN MILES	NAME OF NEAREST ROAD	SIDE OF ROAD CODE	DIST. FROM ROAD	REPLACE-MENT CODE	WELL NO. REPLACED OR DEEPENED	WELL IND.	WELL DEPTH REAL FEET	TOTAL CASING DEPTH FEET

PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER

	890	450	AA 73 4379	MILLS, W JOHN	RT 2 BX 18		GAMBRILLS MD		*							*
*	GAMBRILLS		N	5	MI	BURNS CROSSING	N	40	FT	N	*		*	225	218	
	5	132	225	10	D	*										
	890	450	AA 73 4554	PAIGETT, MARVIN W	CENTRAL LA		GAMBRILLS MD		21054	ARUNDEL VIEW						*
26	GAMBRILLS		W	0	MI	CENTRAL LA	S	30	FT	Y	*		*	202	197	
	15	110	120	12	D	*										
	890	450	AA 73 4692	WALTER, SARAH	BX 498 ARUNDEL VIEW		GAMBRILLS MD		21054	ARUNDEL VIEW						A
22	GAMBRILLS		*	0	MI	CENTRAL LA	N	40	FT	Y	*		*	74	69	
	6	60	65	6	D	*										
	890	450	AA 73 4724	SHEPPARD, HELEN V	2602 ANNAPOLIS RD		SEVERN MD		21144	*						*
*	GAMBRILLS		E	1	MI	RT 175	N	100	FT	N	*		*	80	75	
	10	40	55	6	D	*										
	890	450	AA 73 5181	BROOKS, JANE	800 STEWARD AVE		GLEN BURNIE MD			ARUNDEL VIEW						*
35	GAMBRILLS		*	0	MI	GAMBRILLS LA	S	10	FT	N	*		*	215	210	
	15	120	125	12	D	*										
	890	450	AA 73 5192	HUNTER, MARVIN A	526 RITA DR		ODENTON MD			ARUNDEL VIEW						*
*	GAMBRILLS		W	1	MI	SECOND ST	W	300	FT	N	*		*	212	207	
	15	110	115	12	D	*										
	890	450	AA 73 5302	RAINFORD, JAMES	RT 2 BX 50E		GAMBRILLS MD			ARUNDEL VIEW						*
43	GAMBRILLS		W	1	MI	ARUNDEL LA	S	20	FT	N	*		*	218	213	
	12	125	130	10	D	*										
	890	450	AA 73 5429	MOONISPAW, ESTELLE L	CTRL LA ARUNDEL VIEW		GAMBRILLS MD		21054	ARUNDEL VIEW						A
27	GAMBRILLS		W	1	MI	CENTRAL LA	S	100	FT	Y	*		C			
						D	*									
	890	450	AA 73 5430	CHANEY INC	1416 ANNAPOLIS RD		ODENTON MD		21113	ARUNDEL ACRES						*
3	ODENTON		E	1	MI	RT 175	N	25	FT	N	*		*	51	46	
	10	40	43	7	D	*										
	890	450	AA 73 5477	TRI-AD HOME BUILDERS	2200 SOMERVILLE RD		ANNAPOLIS MD			GAMBRILLS						*
3-A	MILLERSVILLE		NW	4	MI	DICUS MILL RD	N	50	FT	N	*		*	177	170	
	20	70	90	7	D	*										
	890	450	AA 73 5782	BROOKS, JOE F	800 STEWART AVE		GLEN BURNIE MD			ARUNDEL VIEW						*
35	GAMBRILLS		W	1	MI	GAMBRILLS LA	S	25	FT	N	*		C			
						D	*									
	890	450	AA 73 5885	ADAMS, EDGAR	BX 71		GAMBRILLS MD			*						*
*	GAMBRILLS		NE	2	MI	BURNS CROSSING RD	S	1000	FT	Y	*		*	103	98	
	10	50	55			D	*									

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PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER										
	890	450	AA 73 6447	THOMAS, WALCY A		62 A ST MARYS AVE		GAMBRILLS MD			*				*
*	GAMBRILLS		N	0	MI	ST MARYS AVE	W	30	FT	Y	*		*	220	215
	15	120	125	12	D	*									
	890	450	AA 73 6466	CHANEY INC		1416 ANNAPOLIS RD		ODENTON MD		21113	ARUNDEL VIEW				*
37A	GAMBRILLS		N	1	MI	GAMBRILLS LANE	S	31	FT	N	*		*	220	215
	15	120	125	10	D	*									
	890	450	AA 73 7163	BUTLER, JAMES		ST MARYS AVE		GAMBRILLS MD			ARUNDEL VIEW				*
*	GAMBRILLS		W	2	MI	ANNAPOLIS RD	S	200	FT	N	*		C		
						D *									
	890	450	AA 73 7216	FERGURSON, CLARENCE		2ND ST & SCHOOL LA		GAMBRILLS MD		21054	ARUNDEL VIEW				*
7	GAMBRILLS		W	2	MI	2ND ST & SCHOOL LA	W	30	FT	S	*		*	66	61
	5	49	57	5	D	*									
	890	450	AA 73 7471	BOYER, CHARLES W		1304 ASHBURTON CT		MILLERSVILLE MD			*				*
5	GAMBRILLS		NW	2	MI	WATTS RD	W	25	FT	N	*		*	43	36
	15	25	28	10	D	*									
	890	450	AA 73 7679	FRITT, FRED		GAMBRILLS LA		GAMBRILLS MD		21054	ARUNDEL VIEW				*
36A	GAMBRILLS		NW	1	MI	GAMBRILLS LA	S	20	FT	N	*		C		
						D *									
	890	450	AA 73 7869	MAYNARD, DRUSILLA		RT 2 BX 2		GAMBRILLS MD			*				*
*	GAMBRILLS		*	0	MI	MD RT 175	N	200	FT	Y	*		*	124	119
	5	80	115	5	D	*									
	890	450	AA 73 7953	HUTCHINS, CATHERINE		RT 2 BX 45		GAMBRILLS MD		21054	ARUNDEL VIEW				*
19	GAMBRILLS		NW	1	MI	CENTRAL LA	N	25	FT	Y	*		C		
						D *									
	890	450	AA 73 8446	WALTER, SARAH		BX 498 ARUNDEL VIEW		GAMBRILLS MD		21054	ARUNDEL VIEW				A
22	GAMBRILLS		*	0	MI	CENTRAL LA	N	40	FT	Y	AA 73-4699		C		
						D *									
	890	450	AA 73 9094	MCHENRY, DANIEL		374 GAMBRILLS RD		GAMBRILLS MD		21054	*				*
*	GAMBRILLS		N	0	MI	GAMBRILLS RD	W	35	FT	S	*		*	137	132
	15	80	120	12	D	*									
	890	450	AA 74 0342	KINCER, RODNEY E		80 BURNS CROSSING RD		SEVERN MD		21144	*				*
80	GAMBRILLS		*	6	MI	BURNS CROSSING RD	W	10	FT	Y	*		*	87	80
	60	30	50	6	D	*									
	890	450	AA 74 0790	CHANEY INC		1416 ANNAPOLIS RD		ODENTON MD		21113	*				*
1	SEVERN		SE	4	MI	DICUS MILL RD	S	100	FT	N	*		*	135	130
	10	90	100	12	D	*									

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PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER

	890	450	AA 74 0793	CHANEY INC	1416 ANNAPOLIS RD	ODENTON MD	21113	*				*		
*	SEVERN		SE	4 MI	DICUS MILL RD	S	100 FT	N	*		*		129	124
	10	95	100	12	D *									
	890	450	AA 74 1769	CRAWFORD, SAMUEL	933 ANNAPOLIS RD	GAMBRILLS MD	21054	*				*		
276	GAMBRILLS		W	2 MI	ANNAPOLIS RD	S	75 FT	N	*		*		165	160
	15	85	90	10	D *									
	890	450	AA 74 2254	CHANEY INC	1416 ANNAPOLIS RD	ODENTON MD	21113	*				*		
9	SEVERN		SE	4 MI	DICUS MILL RD	S	150 FT	N	*		*		146	141
	15	90	100	10	D *									
	891	460	AA 81 7801	FICKETT RUTH	8527 BRAUNS AVE	SEVERN	MD21144	*				*		
*	ODENTON		S	1.4 MI	BRAUNS AVE	S	200 FT	Y	*		*		207	202
	15	100	120	10	D *									
	891	459	AA 88 2560	ANNE ARUNDEL CO	389 BURNS CROSSING	SEVERN	MD21114	*				*		
*	ODENTON		E	2 MI	CONSTANT AVE	E	1150FT	N	*		*			
					T *									
	891	459	AA 88 2561	ANNE ARUNDEL CO	389 BURNS CROSSING	SEVERN	MD21114	*				*		
*	ODENTON		E	2 MI	CONSTANT AVE	E	1450FT	N	*		*			
					T *									
	891	458	AA 88 1338	FORD MARY	348 CONSTANT AVE	SEVERN	MD21144	*				*		
*	ODENTON		NE	1.6 MI	348 CONSTANT AVE	W	75 FT	N	*		*			
					D *									
	891	457	AA 81 0294	CONSTANT NICHOLAS	345 CONSTANT AVE	SEVERN	MD21144	*				*		
*	SEVERN		SE	3.6 MI	CONSTANT AVE	E	350 FT	Y	*		*		213	208
	20	160	180	10	D *									
	891	457	AA 81 1092	CHAI SOO K	6642 ADRIAN ST	NEWCARROLLTONMD		*				*		
*	ODENTON		E	1.6 MI	349 BURNS CROSSNG RD	E	105 FT	Y	*		*		170	163
	15	139	160	10	D *									
	891	457	AA 81 8051	BIALEK RON	343 CONSTANT AVE	SEVERN	MD21144	*				*		
*	GAMBRILLS		NW	2 MI	CONSTANT AVE	E	150 FT	Y	*		*			
					D *									
	891	456	AA 74 3713	APPIAN CONSTRUCTION	P O BX 334	SEVERNA PARK MD21146		VIA BELLA				*		
7	SEVERN		SE	5 MI	ANNA CT	*	50 FT	N	*		*		186	181
	8	150	180	10	D *									
	891	456	AA 81 2873	APPIAN CONSTRUCTION	P O BX 334	SEVERNA PARK MD21146		VILLA BELLA				*		
20	SEVERN		SW	3.6 MI	364 MONTECRISTO CT	W	30 FT	N	*		*		170	165
	40	145	155	5	D *									

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	891	456	AA 81 8495	MANDRIN CONST		8174 RITCHIE HWY		PASADENA		MD21122	VILLA BELLA				*
16	ANNAPOLIS			NE	5 MI	1515 ROMEO LANE	*	15	FT	N	*	*			
					D	*									
	891	456	AA 86 0495	MANDRIN CONST		8174 RITCHIE HWY		PASADENA		MD21122	VILLA BELLA				*
25	ODENTON			E	2 MI	1514 VICOLI CT	W	15	FT	N	*	*			
					D	*									
	891	456	AA 86 0496	MANDRIN CONST		8174 RITCHIE HWY		PASADENA		MD21122	VILLA BELLA				*
22	ODENTON			E	2 MI	360 MONTE CRISTO LA	S	15	FT	N	*	*			
					D	*									
	891	456	AA 88 0007	MANDRIN CONST		8174 RITCHIE HWY		PASADENA		MD21122	VILLA BELLA				*
29	ODENTON			E	2.0 MI	MONTE CRISTO LA	N	15	FT	N	*	*			
					D	*									
	891	456	AA 88 0198	MANDRIN CONST		8174 RITCHIE HWY		PASADENA		MD21122	VILLA BELLA				*
26	GAMBRILLS			NW	1.5 MI	1512 VICOLI CT	W	15	FT	N	*	*			
					D	*									
	891	456	AA 88 0210	MANDRIN CONST		8174 RITCHIE HWY		PASADENA		MD21122	VILLA BELLA				*
32	GAMBRILLS			NW	1.5 MI	353 MONTE CRISTO CT	S	15	FT	N	*	*			
					D	*									
	891	456	AA 88 0976	MANDRIN CONSTRUCTION		8174 RITCHIE HWY		PASADENA		MD21122	VILLA BELLA				*
36	GAMBRILLS			NW	1.5 MI	361 MONTE CRISTO CT	W	15	FT	N	*	*			
					D	*									
	891	455	AA 74 3792	APPIAN CONSTRUCTION		P O BX 334		SEVERNA PARK		MD21146	VILLA BELLA				*
6	MILLERSVILLE			NW	2.2 MI	ANNA CT	W	60	FT	N	*	*	186	181	
	10	140	150		10	D	*								
	891	455	AA 81 0124	APPIAN CONSTRUCTION		P O BX 334		SEVERNA PARK		MD	VILLA BELLA				*
5	SEVERN			SE	5 MI	ANNA CT	S	90	FT	N	*	*	184	179	
	20	130	160		12	D	*								
	891	455	AA 81 0304	APPIAN CONSTRUCTION		P O BX 334		SEVERNA PARK		MD21146	VILLA BELLA				*
4	SEVERN			SE	4.2 MI	ANNA CT	S	80	FT	N	*	*	181	176	
	15	150	165		12	D	*								
	891	455	AA 81 0447	APPIAN CONSTRUCTION		P O BX 334		SEVERNA PARK		MD21146	VILLA BELLA				*
3	SEVERN			SE	4 MI	ANNAPOLIS CT	S	80	FT	N	*	*	180	175	
	10	140	150		10	D	*								
	891	455	AA 81 1017	APPIAN CONSTRUCTION		P O BX 334		SEVERNA PARK		MD2114	VILLA BELLA				*
2	SEVERN			SE	3.7 MI	ANNA CT	E	37	FT	N	*	*	180	175	
	10	130	150		10	D	*								

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	891	455	AA 81 1575	APPAIN CONSTRUCTION	P O BX 334				SEVERNA PARK	MD21146	VILLA BELLA						*
8	SEVERN			SE	4	MI	CARRACA CT		E	50	FT	N	*		*	180	175
	20	150	160		10		D	*									
	891	455	AA 81 1747	APPAIN CONSTR	P O BX 334				SEVERNA PARK	MD21146	VILLA BELLA						*
9	SEVERN			SE	5.6	MI	CARRACA CT		E	40	FT	N	*		*	195	190
	20	150	155		10		D	*									
	891	455	AA 81 1755	APPIAN CONSTRUCTION	P O BX 334				SEVERNA PARK	MD21146	VILLA BELLA						*
13	SEVERN			SE	4	MI	CARRACA CT		W	50	FT	N	*		*	195	190
	10	150	160		10		D	*									
	891	455	AA 81 1952	APPIAN CONSTRUCTION	P O BOX 334				SEVERNA PARK	MD21146	VILLA BELLA						*
10	SEVERN			SE	4	MI	CARRACA CT		S	50	FT	N	*		*	170	150
	15	140	150		5		D	*									
	891	455	AA 81 1953	APPIAN CONSTRUCTION	P O BX 334				SEVERNA PARK	MD21146	VILLA BELLA						*
12	SEVERN			SE	4	MI	CARRACA CT		W	50	FT	N	*		*	180	160
	10	140	150		5		D	*									
	891	455	AA 81 2192	APPIAN CONSTRUCTION	LOT11 CARRACA CT				SEVERN		MD21144	VILLA BELLA					*
11	SEVERN			SE	4	MI	CARRACA CT		W	50	FT	N	*		*	172	152
	10	140	150		5		D	*									
	891	455	AA 81 2389	APPIAN CONSTRUCTION	P O BX 334				SEVERNA PARK	MD21146	VILLA BELLA						*
14	SEVERN			SE	2.4	MI	CARRACA CT		W	50	FT	N	*		*	170	150
	10	140	150		5		D	*									
	891	455	AA 81 2620	APPIAN CONST	P O BX 334				SEVERN		MD21144	VILLA BELLA					*
38	SEVERN			S	3.6	MI	MONTECRISTO CT		E	30	FT	N	*		*	172	167
	10	145	150		5		D	*									
	891	455	AA 81 9132	MANDRIN CONST	8174 RITCHIE HWY				PASADENA		MD21122	VILLA BELLA					*
23	MILLERSVILLE			NW	2.5	MI	358 MONTE CRISTO CT		N	15	FT	N	*		*		
							D	*									
	891	455	AA 81 9133	MANDRIN CONST	8174 RITCHIE HWY				PASADENA		MD21122	VILLA BELLA					*
27	MILLERSVILLE			NW	2.5	MI	356 MONTE CRISTO CT		N	15	FT	N	*		*		
							D	*									
	891	455	AA 88 0363	MANDRIN CONST	8174 RITCHIE HWY				PASADENA		MD21122	VILLA BELLA					*
34	SEVERN			SW	2	MI	357 MONTE CRISTO CT		S	15	FT	N	*		*		
							D	*									
	891	454	AA 81 3590	CHALFANT GEORGE	444 BUENS CROSSNG RD				GAMBRILLS		MD21054	*					*
*	HIDDEN VILLAGE			E	.7	MI	BURNS CROSSING RD		W	90	FT	Y	*		*		
							D	*									

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PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER

	891	453	AA 81 3266	WILBURN THELMA		P O BX 272			GAMBRILLS	MD21054	BURNS CROSSING RD				*
*	GAMBRILLS			W	0 MI	RT 32		W	500 FT	Y	*		*	220	215
	10	160	170		10	D	*								
	891	452	AA 74 3998	EMORY, WILBURN		P O BX 272			GAMBRILLS MD	21054	*				*
*	GAMBRILLS			NW	1 MI	528 WATTS RD		W	15 FT	Y	*		*	75	68
	7	720	35		5	D	*								
	891	452	AA 81 0397	WATTS MARIE		527 WATTS AVE			GAMBRILLS	MD21054	*				*
*	GAMBRILLS			NW	1 MI	WATTS AVE		S	100 FT	Y	*		*	155	150
	15	80	90		10	D	*								
	892	463	AA 81 1329	RUDDLE MELVIN C		8434 NEW CUT RD			SEVERN	MD21144	*				*
*	SEVERN			NW	14.4MI	NEW CUT RD		W	300 FT	Y	*		*	140	135
	25	60	70			D	*								
	892	462	AA 81 0758	BERTLING ALBERT W		8444 NEW CUT RD			SEVERN	MD21144	*				*
*	SEVERN			SE	3 MI	NEW CUT RD		W	200 FT	Y	*		*	40	35
	15	15	20		10	D	*								
	892	462	AA 81 3028	SANDY POINT ST PARK		800 REVELL HWY			ANNAPOLIS	MD21401	SEVERN				*
*	SEVERN			SW	2.5 MI	CONSTANT AVE		W	100 FT	N	*		*	135	128
	20	50	70		20	D	*								
	892	462	AA 88 0774	LAHDELMA THOMAS		8473 NEW CUT RD			SEVERN	MD21144	*				*
*	SEVERN			SE	3.0 MI	8473 NEW CUT RD		S	80 FT	N	*		*		
						D	*								
	892	461	AA 74 3475	SCURLIN, EARL		230 CONSTANT AVE			SEVERN MD	21144	*				*
*	SEVERN			S	2.5 MI	CONSTANT AVE		S	50 FT	Y	*		*	185	180
	15	70	90		5	D	*								
	892	461	AA 81 0688	MCMAHAN WALLACE		8455 NEW CUT RD			SEVERN	MD21144	PINE VILLAGE				*
1-2	SEVERN			SE	3 MI	NEW CUT RD		E	100 FT	Y	*		*	55	50
	15	25	35		10	D	*								
	892	460	AA 81 2239	HINES JERRY		259 CONSTANT AVE			SEVERN	MD21144	*				*
*	SEVERN			SE	2.5 MI	NEW CUT		E	125 FT	S	*		*	75	55
	10	50	55		5	D	*								
	892	459	AA 74 2469	SINE HARRY		269 CONSTANT AVE			SEVERN	MD21144	*				*
*	SEVERN			SE	3 MI	CONSTANT AVE		E	250 FT	Y	*		*	74	69
	12	55	60		12	D	*								
	892	459	AA 88 2565	ANNE ARUNDEL CO		389 BURNS CROSSING			SEVERN	MD21114	*				*
*	ODENTON			E	2 MI	DICUS MILL ROAD		N	3800FT	N	*		*		
						T	*								

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PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER

	892	458	AA 88 2562	ANNE ARUNDEL CO	389 BURNS CROSSING	SEVERN	MD21114	*						*
*	ODENTON		E	2 MI	CONSTANT AVE	E	1400FT	N	*		*			
					T *									
	892	457	AA 88 2564	ANNE ARUNDEL CO	389 BURNS CROSSING	SEVERN	MD21114	*						*
*	ODENTON		E	2 MI	DICUS MILL RD	N	2000FT	N	*		*			
					T *									
	892	455	AA 81 2306	DICKINSON HEFFNER	BOX 8691	BALTIMORE	MD21240	AURORA HILLS						*
1	GAMBRILLS		NE	1.2 MI	DICUS MILLS	W	75 FT	N	*		*		160	153
	35	90	100	10	D *									
	892	454	AA 81 2976	AKERS LULA	439 BURNS CROSSING	ODENTON	MD21113	*						*
*	ODENTON		SE	1.6 MI	437 BURNS CROSSING R	E	150 FT	Y	*		*		172	167
	10	140	150	15	D *									
	892	454	AA 81 3451	SHORES CHARLES	PO BX 179	GAMBRILLS	MD21054	*						*
*	HIDDEN VILLAGE		E	.7 MI	BURNS CROSSING	W	90 FT	Y	*		*		190	170
	5	140	147		D *									
	892	454	AA 81 8073	HARNESTY ELIZABETH R	537 BURNS CROSSING	GAMBRILLS	MD21054	*						*
*	GAMBRILLS		NW	.9 MI	BURNS CROSSING RD	E	50 FT	Y	*		*		172	167
	25	89	105	10	D *									
	892	451	AA 88 1591	DEVEAUX LOUIS	531 BURNS CROSSING	GAMBRILLS	MD21054	*						*
*	GAMBRILLS		NW	0 MI	BURNS CROSSING RD	E	20 FT	N	*		*			
					D *									
	893	464	AA 81 7029	CROUSE JAMES	8400 NEW CUT RD	SEVERN	MD21144	*						*
*	SEVERN		SE	2 MI	NEW CUT RD	W	900 FT	N	*		*		128	123
	25	50	60	12	D *									
	893	463	AA 74 3933	KIESSLING, WILBERT V	1836 PINE GROVE CT	SEVERN MD	21144	*						*
*	SEVERN		SE	4 MI	NEW CUT RD	N	1 MI	N	*		*		145	140
	30	45	50	10	D *									
	893	463	AA 81 0512	KIESSLING LARRY	8412 NEW CUT RD	SEVERN	MD21144	*						*
*	SEVERN		SE	3 MI	NEW CUT RD	N	.1 MI	N	*		*		140	135
	15	40	50	10	D *									
	893	463	AA 81 2286	CADLE CLYDE	8388 NEW CUT RD	SEVERN	MD21144	*						*
*	SEVERN		SE	2.0 MI	NEW CUT	N	500 FT	Y	*		*		136	116
	10	50	60	5	D *									
	893	463	AA 81 7240	THOMPSON DAVID	8426 NEW CUT RD	SEVERN	MD21144	SHALOM ESTATES						*
38	SEVERN		SE	2.4 MI	NEW CUT RD	N	450 FT	N	*		*		110	105
	10	50	65	12	D *									

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	893	463	AA 81 9434	RUDDLE MELVIN		8434 NEW CUT RD		SEVERN		MD21144	*				*
*	SEVERN			SE	3 MI	NEW CUT RD	N	200 FT	Y	*		*			
						D *									
	893	458	AA 88 2563	ANNE ARUNDEL CO		389 BURNS CROSSING		SEVERN		MD21114	*				*
*	ODENTON			E	2 MI	CONSTANT AVE	E	2350FT	N	*		*			
						T *									
	893	458	AA 88 2568	ANNE ARUNDEL CO		389 BURNS CROSSING		SEVERN		MD21114	*				*
*	ODENTON			E	2 MI	DICUS MILL RD	N	2300FT	N	*		*			
						T *									
	893	456	AA 74 3259	CHANEY, GEORGE		898 COACHWAY		ANNAPOLIS MD		21401	KADAN				*
5	GAMBRILLS			N	1 MI	1367 DICUS MILL RD	S	140 FT	N	*		*	150	145	
	15	80	90		10	D *									
	893	456	AA 81 2049	CALLOWAY MARY		1160 DICUS MILL RD		MILLERSVILLE MD21108			*				*
*	ODENTON			E	3.6 MI	DICUS MILL RD	N	100 FT	N	*		*	40	33	
	8	14	30		7	D *									
	893	455	AA 81 1592	CHANEY GEORGE		1377 DICUS MILL RD		GAMBRILLS		MD21054	KADEN				*
10	GAMBRILLS			NW	1.1 MI	1377 DICUS MILL RD	S	75 FT	N	*		*	150	145	
	15	90	100		10	D *									
	893	455	AA 81 6236	THORPE ROBERT		1417 DICUS MILL ROAD		SEVERN		MD21144	*				*
*	SEVERN			S	2.8 MI	DICUS MILL RD	S	100 FT	Y	*		*	160	155	
	15	100	110		10	D *									
	893	455	AA 88 2297	ABARE BRUCE		1439 DICUS MILL RD		GAMBRILLS		MD21054	MILLERSVILLE				*
2	GAMBRILLS			N	2 MI	DICUS MILL RD	S	300 FT	N	*		*			
						D *									
	893	455	AA 88 2557	ANNE ARUNDEL COUNTY		389 BURNS CROSSING		SEVERN		MD21114	*				*
*	ODENTON			E	2 MI	DICUS MILL RD	N	900 FT	N	*		*			
						T *									
	893	455	AA 88 2559	ANNE ARUNDEL CO		389 BURNS CROSSING		SEVERN		MD21114	*				*
*	ODENTON			E	2 MI	CONSTANT AVE	E	1000FT	N	*		*			
						T *									
	893	455	AA 88 2868	RD CUSTOM HOME		P O BOX 689		SEVERNA PARK MD21146			COUNT GENERALS WOODS				*
3	GAMBRILLS			SW	3 MI	1437 DICUS MILL RD	S	15 FT	N	*		*			
						D *									
	893	451	AA 81 2710	HARDISTY RANDOLD		537 BURNS CROSSING		GAMBRILLS		MD21054	*				*
*	GAMBRILLS			*	0 MI	537 BURNS CROSSING	E	30 FT	Y	*		*	80	75	
	10	50	55		5	D *									

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PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER

	893	450	AA 81 5483	GIES RALPH T		218 ANNAPOLIS RD		GAMBRILLS	MD	GAMBRILLS					*
*	GAMBRILLS		*	0	MI	ANNAPOLIS RD	N	100 FT	N	*		*		165	160
	50	78	90		I	AA 85GAP051									
	893	450	AA 81 5548	BUILDERS DESIGN INC		P O BX 118		SEVERNA PARK	MD21146	GAMBRILLS					*
1	GAMBRILLS		NW	0.1	MI	ANNAPOLIS RD PRCL134	E	15 FT	N	*		*		156	148
	20	90	110	10	D	*									
	894	464	AA 81 9787	HOOD ALLAN		8338 NEW CUT RD		SEVERN	MD21144	*					*
*	SEVERN		SE	1	MI	NEW CUT RD	N	50 FT	N	*		*			
					D	*									
	894	463	AA 81 9174	WEST BRAD		8261 NEW CUT RD		SEVERN	MD21114	*					*
*	SEVERN		SE	3	MI	NEW CUT RD	N	35 FT	N	*		*			
					D	*									
	894	462	AA 80 1579	BURKHART JAMES		2426 ELM RD		LANDSDOWNE	MD21227	*					*
*	SEVERN		SE	3.0	MI	BURKHARDT LA	E	180 FT	N	*		*			
					D	*									
	894	459	AA 80 2566	ANNE ARUNDEL CO		389 BURNS CROSSING		SEVERN	MD21114	*					*
*	ODENTON		E	2	MI	CONSTANT AVE	E	3050FT	N	*		*			
					T	*									
	894	458	AA 80 2567	ANNE ARUNDEL CO		389 BURNS CROSSING		SEVERNE	MD21114	*					*
*	ODENTON		E	2	MI	CONSTANT AVE	E	3400FT	N	*		*			
					T	*									
	894	456	AA 81 9609	MCADAMS JOHN		7959 OAKWOOD RD		GLEN BURNIE	MD21061	BRETTON WOODS					II
15	MILLERSVILLE		W	3	MI	1305 DICUS MILL RD	S	15 FT	N	*		*			
					D	*									
	894	455	AA 81 8633	PACE CONSTRUCTION		1821 BLANFIELD CIRCL		LUTHERVILLE	MD21093	BRETTON WOODS					*
6	GAMBRILLS		N	1	MI	WINNERS CIRCLE	N	440 FT	N	*		*			
					D	*									
	894	451	AA 81 7034	TORIN JOHN R		867 CLAFFY AVE		GAMBRILLS	MD21054	*					*
2	GAMBRILLS		N	0	MI	304 GAMBRILLS RD	W	30 FT	N	*		*		51	46
	10	30	37	10	D	*									
	894	450	AA 81 0172	ANITA DORR		MAPLE AVE		GAMBRILLS	MD21054	*					*
*	GAMBRILLS		*	0	MI	MAPLE RD	N	500 FT	Y	*		*		86	81
	15	55	65	12	D	*									
	894	450	AA 81 2050	JAMES VITO & SONS		5636 ANNAPOLIS RD		BLADENSBURG	MD20710	GAMBRILLS					*
*	ODENTON		SE	2.5	MI	GAMBRILLS RD	E	90 FT	Y	AA -73-2345		*		145	138
	30	75	95	15	I	AA 83GAP043									

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894 450 AA 81 7830 PATTERSON EARL E P O BX 183 GAMBRILLS MD21054 * *
* GAMBRILLS * 0 MI GAMBRILLS RD W 5 FT Y * * 170 165
50 80 90 18 I AA 87GAF001
895 464 AA 74 3616 KIESSLING, CALVERT L RT 1 80A NEWCUT RD SEVERN MD 21144 * *
* GLEN BURNIE S 5 MI NEWCUT RD N 1 MI Y * A 135 128
20 55 60 D *
895 464 AA 74 3929 KIESSLING, CALVERT 8396 NEW CUT RD SEVERN MD 21144 * *
386 GLEN BURNIE S 5 MI NEW CUT RD N 1 MI Y AA 74-3616 * 115 108
20 55 60 10 D *
895 463 AA 74 2700 SANDY POINT ST PK 800 REVELL HWY ANNAPOLIS MD 21401 SEVERN *
* GLEN BURNIE SW 4 MI NEW CUT N 100 FT Y * * 110 103
30 40 50 10 D *
895 463 AA 81 1012 HABEL JOHN J 8368 NEW CUT RD SEVERN MD21144 * *
* SEVERN SE 2.7 MI NEW CUT RD N 75 FT Y * * 136 131
25 60 70 15 D *
895 463 AA 88 1569 CARDINAL IND 333 S HAMMONDS FERRY GLEN BURNIE MD21061 GRAND VIEW PARK *
* SEVERN S 3.0 MI 8364 NEWCUT RD N 15 FT N * *
D *
895 462 AA 81 3978 KRAMER ANDREW 8315 NEW CUT RD SEVERN MD21149 WILSON *
* SEVERN S 2.6 MI NEW CUT RD S 55 FT N * * 60 55
10 27 35 7 D *
895 461 AA 88 2818 OWENS KAREN 8282 NEW CUT RD SEVERN MD21144 * *
* SEVERN S 3.3 MI NEW CUT RD N 20 FT N * *
D *
895 460 AA 72 0882 LEINBECH, FRANK 1341 PONTIAC AVE BALTIMORE MD SEVERN *
6-8 SEVERN SW 4 MI WB&A RD W 50 FT N * * 62 55
8 38 49 6 D *
895 460 AA 73 0052 SHARPE, WILLIAM 1355 AVA RD SEVERN MD CHES MAR *
* CHES MAR * 0 MI 1355 AVA RD E 15 FT N * * 60 55
10 21 60 7 D *
895 460 AA 73 0278 PAUGH, ROBERT BX 179 SLEEPY HOLLOW SEVERN MD * *
* GRAMBRILLS N 4 MI SLEEPY HOLLOW RD N 60 FT Y * * 135 130
15 73 83 7 D *
895 460 AA 73 0363 SALLERS, WILLIAM E BX 190 RT 1 SEVERN SEVERN MD 21144 * *
* GAMBRILLS N 1 MI GAMBRILL RD W 60 FT Y * *
D *

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	895	460	AA 73 2759	SIEGERT, HENRY	RT 1 BX 332				SEVERN MD			*			*
*	SEVERN			E	1	MI	SANDY HILL RD	S	60	FT	Y	*		*	104	99
	15	44	54	12	D	*										
	895	460	AA 73 3610	GRAZIANO, ALFRED	RT 1 BX 196A				SEVERN MD			*			*
*	CLARK HTS			SE	2	MI	GAMBRILLS RD	W	50	FT	N	*		*	68	63
	9	48	55	8	D	*										
	895	460	AA 73 7793	MEYER JR, GEORGE H	BOX 215 NEW CUT RD				SEVERN MD		21144	*			*
*	SEVERN			E	4	MI	NEW CUT RD	E	75	FT	Y	*		*	217	212
	60	50	60	12	D	*										
	895	460	AA 74 0160	KASZUBA, EDWARD J	1339 AVA RD				SEVERN MD		21144	CHES MAR			*
BE	CHES MAR			*	0	MI	1339 AVA RD	S	25	FT	Y	*		*	47	40
	19	12	47	10	D	*										
	895	460	AA 74 1196	PHELPS, LOLA	8364 NEW CUT RD				SEVERN MD		21144	*			*
*	SEVERN			E	4	MI	NEW CUT RD	N	600	FT	Y	*		*	148	143
	20	40	50	12	D	*										
	895	460	AA 74 1273	GREGORY, RALPH	807 D CAMP MEADE RD				LINTHICUM MD		21090	SEVERN			*
*	GLEN BURNIE			S	4	MI	CONSTANT AVE	E	400	FT	N	*		*	177	170
	20	61	75	9	D	*										
	895	460	AA 74 1872	SNYDER, MARIE	8284 NEW CUT RD				SEVERN MD		21144	WASIELEWSKI EST			*
4	CLARK HEIGHTS			SE	1	MI	NEW CUT RD	N	50	FT	Y	*		*	57	52
	6	34	42	5	D	*										
	895	456	AA 81 5581	CHANEY GEORGE	1446 WATTS AVE				SEVERN		MD21144	KADAN			*
2	GAMBRILLS			N	1	MI	1361 DICUS MILL RD	S	660	FT	N	*		*	140	135
	15	90	110	10	D	*										
	895	456	AA 81 6776	COOMES DAVID	111 LAKE SHORE DR				PASADENA		MD21122	*			*
*	GAMBRILLS			N	1	MI	DICUS MILL RD	S	113	FT	N	*		*	139	132
	10	60	100	9	D	*										
	895	456	AA 81 6925	MORAN D RANDAL	333 STEVENS AVE				ARNOLD		MD21012	*			*
4	GAMBRILLS			N	1	MI	1365 DICUS MILL RD	S	300	FT	N	*		*	138	129
	10	90	101	7	D	*										
	895	455	AA 72 1160	LYDE, ELIZABETH	RT 13 BX 496				PASADENA MD 21122			*			*
*	GAMBRILLS			*	0	MI	DICUS MILL RD	N	100	FT	Y	*		*	190	183
	10	110	120	7	D	*										
	895	455	AA 72 1333	HEADCOCK, LESLIE D	RT 1 BX 145				MILLERSVILLE MD			*			*
*	MILLERSVILLE			NW	5	MI	DICUS MILL	S	50	FT	N	*		*	170	163
	12	95	99	7	D	*										

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LOT	NEAREST TOWN	DIR. TO TOWN CODE	DIST NEAR. TOWN MILES	NAME OF NEAREST ROAD	SIDE OF ROAD CODE	DIST. FROM ROAD	REPLACE-MENT CODE	WELL NO. REPLACED OR DEEPENED	WELL IND.	WELL DEPTH REAL FEET	TOTAL CASING DEPTH FEET
PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER						

	895	455	AA 73 0029	TAYLOR, DAVID T	RT 1 BX 155			SEVERN MD	21144	*				*
*	ODENTON		SW	2 MI	DICUSMILL RD	E	20 FT	N	*		*	137	130	
	12	84	137	8	D *									
	895	455	AA 73 0036	ROGERS & BROWNLEY	ASHBURTON DR AURORA			MILLERSVILLE MD		AURORA HILLS				*
2B	GAMBRILLS		S	2 MI	DICUS MILL RD	N	1 MI	N	*		*	100	93	
	12	60	85	7	D *									
	895	455	AA 73 1171	DIJULIO, CARL	P O BX 334			SEVERNA PARK MD		*				*
6	GAMBRILLS		E	1 MI	DICUS MILL	S	150 FT	N	*		*	156	151	
	20	80	85	12	D *									
	895	455	AA 73 1273	DIJULIO, CARL	P O BX 334			SEVERNA PARK MD		*				R
5	GAMBRILLS		NE	1 MI	DICUS MILL	S	200 FT	N	*		*	156	151	
	20	80	85	12	D *									
	895	455	AA 73 1274	DIJULIO, CARL	P O BX 334			SEVERNA PARK MD		*				R
4	GAMBRILLS		NE	1 MI	DICUS MILL	S	200 FT	N	*		*	160	155	
	20	80	85	10	D *									
	895	455	AA 73 1276	BURNOFF, BYNUM	RT 1 BX 187			SEVERN MD		*				*
*	GAMBRILLS		NE	1 MI	SLEEPY HOLLOW RD	N	20 FT	N	*		*	84	79	
	12	50	80	10	D *									
	895	455	AA 73 1706	DIJULIO, CARL	P O BX 334			SEVERNA PARK MD		*				*
1	GAMBRILLS		NE	1 MI	DICUS MILL	S	120 FT	N	*		*	162	157	
	20	82	84	15	D *									
	895	455	AA 73 1707	DIJULIO, CARL	P O BX 334			SEVERNA PARK MD		*				*
2	GAMBRILLS		NE	1 MI	DICUS MILL	S	200 FT	N	*		*	165	160	
	20	80	90	15	D *									
	895	455	AA 73 1708	DIJULIO, CARL	P O BX 334			SEVERNA PARK MD		*				*
3	GAMBRILLS		NE	1 MI	DICUS MILL	S	200 FT	N	*		*	162	157	
	20	80	85	15	D *									
	895	455	AA 73 1869	LEFFET, JOHN	CAMP MEADE RD			GAMBRILLS MD		*				*
*	GAMBRILLS		W	1 MI	RT 175 CAMP MEADE RD	N	40 FT	N	*		*	78	73	
	7	15	25	6	D *									
	895	455	AA 73 3471	THOMPSON, DONALD	7852 HICKORY RD			SEVERN MD	21144	*				*
*	GAMBRILLS		N	2 MI	DICUS MILL RD	N	400 FT	N	*		*	135	128	
	10	90	105	6	D *									
	895	455	AA 73 3778	AAPW MILRSVILE LNFL	ANNE ARUNDEL CO			MILLERSVILLE MD21108		*				*
*	MILLERSVILLE		NW	4 MI	DICUS MILL RD	N	300 FT	N	*		*	37	22	
	10	31		T	AA 74CAP008									

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PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER								
895	455	AA 73 3779	AAPW MILRSVILE LDFL		ANNE ARUNDEL CO			MILLERSVILLE MD21108	*				*
* MILLERSVILLE			NW	4	MI	DICUS MILL RD	N	100 FT	N	*		*	109	94
1	50				T	AA 74GAP008								
895	455	AA 73 3780	AAPW MILRSVILE LDFL		ANNE ARUNDEL CO			MILLERSVILLE MD21108	*				*
* MILLERSVILLE			NW	4	MI	GAMBRILLS RD	W	1200FT	N	*		U		
					T	AA 74GAP008								
895	455	AA 73 3781	AAPW MILRSVILE LDFL		ANNE ARUNDEL CO			MILLERSVILLE MD21108	*				*
* MILLERSVILLE			NW	4	MI	GAMBRILLS RD	W	700 FT	N	*		*	96	81
1	81	96			T	AA 74GAP008								
895	455	AA 73 3782	AAPW MILRSVILE LDFL		ANNE ARUNDEL CO			MILLERSVILLE MD21108	*				*
* MILLERSVILLE			NW	4	MI	GAMBRILLS	W	900 FT	N	*		*	163	148
25	66	165			T	AA 74GAP008								
895	455	AA 73 3783	AAPW MILRSVILE LDFL		ANNE ARUNDEL CO			MILLERSVILLE MD21108	*				*
* MILLERSVILLE			NW	4	MI	GAMBRILLS	W	3200FT	N	*		*	104	89
45	41	85			T	AA 74GAP008								
895	455	AA 73 3789	AAPW MILRSVILE LDFL		ANNE ARUNDEL CO			MILLERSVILLE MD21108	*				*
* MILLERSVILLE			NW	4	MI	GAMBRILLS	W	1700FT	N	*		C	99	84
2	60				T	AA 74GAP008								
895	455	AA 73 3889	ANNE ARUNDEL CO			SANITARY LANDFILL		GAMBRILLS MD			*			*
* GAMBRILLS			NE	2	MI	GAMBRILLS RD	W	1000FT	N	*		*	89	74
15	41	89			T	*								
895	455	AA 73 3890	ANNE ARUNDEL CTY			SANITARY LANDFILL		GAMBRILLS MD			*			*
* GAMBRILLS			NE	2	MI	GAMBRILLS	W	1000FT	N	*		*	63	47
10	42	63			T	*								
895	455	AA 73 3871	ANNE ARUNDEL CTY			SANITARY LANDFILL		GAMBRILLS MD			*			*
* GAMBRILLS			NE	2	MI	GAMBRILLS	W	1250FT	N	*		*	101	86
15	40	103			T	*								
895	455	AA 73 4033	EDWARDS, RICHARD A			430 AYRLAWN DR		MILLERSVILLE MD			AURORA HILLS			*
430 MILLERSVILLE			NW	0	MI	AYRLAWN CT	W	50 FT	Y	*		*	165	160
15	110	122		12	D	*								
895	455	AA 73 4085	APPIAN CONSTRUCTION			P O BX 334		SEVERNA PARK MD			*			*
13 GAMBRILLS			NE	1	MI	GRANADA COURT	E	30 FT	N	*		*	172	167
25	110	135		6	D	*								
895	455	AA 73 4311	AAPW MILRSVILE LDFL		ANNE ARUNDEL CO			MILLERSVILLE MD21108	*				*
* MILLERSVILLE			NW	4	MI	DICUS MILL RD	N	150 FT	N	*		*	175	160
15	107	140			T	*								

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PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER

	895	455	AA 73 4312	AAPW MILRSVILE LNFL	ANNE ARUNDEL CO		MILLERSVILLE MD21108	*						*
*	MILLERSVILLE		NW	4	MI	GAMBRILLS	W	1700FT	N	*		*	78	63
	20	35	75			T *								
	895	455	AA 73 4341	APPIAN CONSTRUCTION	P O BX 334		SEVERNA PARK MD		*					*
12	GAMBRILLS		NE	1	MI	GRANADA CT	E	30 FT	N	*		*	181	176
	25	110	135	20		D *								
	895	455	AA 73 4465	APPIAN CONST	P O BX 334		SEVERNA PARK MD		*					*
10	GAMBRILLS		NE	1	MI	GRANADA CT	S	200 FT	N	*		*	160	155
	12	90	95	10		D *								
	895	455	AA 73 4641	ANNE ARUNDEL COUNTY	SANITARY LANDFILL		MILLERSVILLE MD21108	*						*
4A	MILLERSVILLE		NW	4	MI	GAMBRILLS RD	W	1205FT	N	*		U		
						T *								
	895	455	AA 73 4642	ANNE ARUNDEL COUNTY	SANITARY LANDFILL		MILLERSVILLE MD21108	*						*
6A	MILLERSVILLE		NW	4	MI	GAMBRILLS	W	905 FT	N	*		U		
						T *								
	895	455	AA 73 4643	ANNE ARUNDEL CO	SANITARY LANDFILL		MILLERSVILLE MD21108	*						*
15A	MILLERSVILLE		NE	2	MI	GAMBRILLS	W	1005FT	N	*		U		
						T *								
	895	455	AA 73 4644	ANNE ARUNDEL COUNTY	SANITARY LANDFILL		MILLERSVILLE MD21108	*						*
14A	MILLERSVILLE		NW	4	MI	GAMBRILLS RD	W	1005FT	N	*		*	55	50
	2	38	61			T *								
	895	455	AA 73 4652	ANNE ARUNDEL CO	MILLERSVILLE SAN LAN		MILLERSVILLE MD21108	*						*
5A	MILLERSVILLE		NW	4	MI	GAMBRILLS	W	700 FT	N	*		*	49	44
	6	20	56			T *								
	895	455	AA 73 4658	APPIAN CONSTRUCTION	P O BX 334		SEVERNA PARK MD		VILLA VERDI					1
11	GAMBRILLS		NE	1	MI	GRANADA CT	E	30 FT	N	*		*	162	157
	12	98	110	12		D *								
	895	455	AA 73 4941	LIEHUMAN, SAM	P O BX 278		MILLERSVILLE MD		AURORA HILLS					11
*	MILLERSVILLE		N	1	MI	SLEEPY HOLLOW	S	350 FT	N	*		*	110	103
	12	61	75	6		D *								
	895	455	AA 73 5010	APPIAN CONST	P O BX 334		SEVERNA PARK MD		*					*
9	GAMBRILLS		NE	1	MI	GRANADA CT	E	200 FT	N	*		*	166	161
	10	110	130	8		D *								
	895	455	AA 73 5118	APPIAN CONSTR	P O BX 334		SEVERNA PARK MD		*					*
7	GAMBRILLS		NE	1	MI	GAMBRILLS RD	E	30 FT	N	*		*	157	152
	15	85	90	12		D *								

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PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER

	895	455	AA 73 5646	BLACK & & SONS	P O BX 307				SEVERNA PARK MD21146	GAMBRILLS				
*	GAMBRILLS			N	2	MI	DICUS MILL RD	S	400 FT	N	*	*	205	198
	15	82	205		10		D *							
	895	455	AA 73 6700	APPIAN CONST	P O BOX 334				SEVERNA PARK MD	VILLA VERDI				2
21	GAMBRILLS			NE	1	MI	ANTRIM DR	S	100 FT	N	*	*	105	100
	15	50	60		10		D *							
	895	455	AA 73 6701	APPAIN CONST	P O BOX 334				SEVERNA PARK MD	VILLA VERDI				2
22	GAMBRILLS			NE	1	MI	VERONA CT	E	150 FT	N	*	*	100	95
	15	50	60		10		D *							
	895	455	AA 73 6997	HEACOCK, LESLIE	BX 275 B DICUS MILL				MILLERSVILLE MD21108	*				*
*	MILLERSVILLE			N	0	MI	DICUS MILL RD	N	30 FT	S	*	*	157	150
	15	96	111				D *							
	895	455	AA 73 7136	APPIAN CONST	P O BX 334				SEVERNA PARK MD21146	VILLA VERDI				*
20	GAMBRILLS			NE	1	MI	VERONA CT	N	200 FT	N	*	*	125	120
	15	65	70		12		D *							
	895	455	AA 73 7137	APPIAN CONST	P O BX 334				SEVERNA PARK MD21146	VILLA VERDI				*
14	GAMBRILLS			NE	1	MI	VERONA CT	S	100 FT	N	*	*	110	105
	12	60	70		10		D *							
	895	455	AA 73 7138	APPIAN CONST	P O BX 334				SEVERNA PARK MD21146	VILLA VERDI				*
24	GAMBRILLS			NE	1	MI	ANTRIM DR	W	100 FT	N	*	*	98	93
	15	55	60		12		D *							
	895	455	AA 73 7389	APPIAN CONST	P O BOX 334				SEVERNA PARK MD21146	VILLA VERDI				*
19	GAMBRILLS			NE	1	MI	VERONA CT	E	100 FT	N	*	*	130	125
	15	70	80		12		D *							
	895	455	AA 73 7450	APPIAN CONST	P O BX 334				SEVERNA PARK MD21146	VILLA VERDI				2
17	GAMBRILLS			NE	1	MI	VERONA CT	S	90 FT	N	*	*	123	118
	15	55	60		12		D *							
	895	455	AA 73 7451	APPAIN CONST	P O BX 334				SEVERNA PARK MD21146	VILLA VERDI				2
18	GAMBRILLS			NE	1	MI	VERONA CT	E	100 FT	N	*	*	125	120
	15	70	80		12		D *							
	895	455	AA 73 7880	AMERICAN SECTIONAL	31 OLD SOLOMONS ISL				ANNAPOLIS MD	*				*
129	ANNAPOLIS			NW	9	MI	DICUS MILL RD	S	30 FT	N	*	*	155	148
	25	88	140		10		D *							
	895	455	AA 73 7952	APPAIN CONSTRUCTION	P O BX 334				SEVERNA PARK MD21146	VILLA VERDI				*
23	GAMBRILLS			NE	1	MI	ANTRIM DR	N	250 FT	N	*	*	68	63
	15	30	35		12		D *							

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PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER

895 455 AA 73 8155 ARPAIN CONSTRUCTION P O BX 334 SEVERNA PARK MD21146 VILLA VERDI *
25 GAMBRILLS NE 1 MI ANTRIM DR N 50 FT N * * 98 93
15 50 60 12 D *
895 455 AA 73 8156 ARPAIN CONSTRUCTION P O BX 334 SEVERNA PARK MD21146 VILLA VERDI *
15 GAMBRILLS NE 1 MI ANTRIM DR S 100 FT N * * 101 96
15 60 70 10 D *
895 455 AA 73 8291 NELSON, ATEN 1259 SLEEPY HOLLOW SEVERN MD 21144 * *
4 MILLERSVILLE N 4 MI SLEEPY HOLLOW RD S 100 FT Y * * 140 133
30 75 95 6 D *
895 455 AA 73 8327 HANKINSON, URBAN 1295 ASHBURTON DR MILLERSVILLE MD21108 AURORA HILLS 1
5 MILLERSVILLE N 3 MI ASHBURTON DR S 100 FT Y * * 74 69
15 52 57 12 D *
895 455 AA 73 8410 ARPAIN CONSTRUCTION P O BX 334 SEVERNA PARK MD21146 VILLA VERDI *
16 GAMBRILLS NE 1 MI VERONA CT W 100 FT N * * 114 109
15 65 75 10 D *
895 455 AA 73 9176 SOLLERS, WILLIAM 109 GAMBRILLS RD SEVERN MD 21144 * *
* SEVERN SE 4.5 MI GAMBRILLS RD E 250 FT Y * * 245 240
15 50 55 12 D *
895 455 AA 73 9511 PRIDEMARK ENTERPRISE P O BOX 278 MILLERSVILLE MD21108 * *
* GAMBRILLS NE 1 MI SLEEPY HOLLOW RD S 50 FT N * * 105 98
30 60 85 6 D *
895 455 AA 73 9654 JONES, JAMES R 1315 ASHBURTON DR MILLERSVILLE MD21108 AURORA HILLS *
6B GAMBRILLS NE 1 MI ASHBURTON DR W 90 FT Y * * 120 113
30 60 80 D *
895 455 AA 74 0982 STRONG, DAVID 7932 PIPERS DALE GLEN BURNIE MD 21061 * *
* MILLERSVILLE N 3 MI DICUS MILL RD N 100 FT N * * 172 122
20 90 110 10 D *
895 455 AA 74 1022 ISOM, JESSIE 2041 HILLTOP AVE JESSUP MD 20794 * *
* SEVERN SE 5 MI GAMBRILLS RD W 150 FT N * * 79 74
12 55 60 10 D *
895 455 AA 74 1394 BURNOFF, THOMAS 101 GAMBRILLS RD SEVERN MD 21144 * *
* SEVERN SE 4.5 MI GAMBRILLS E 150 FT S * * 90 85
15 50 60 12 D *
895 455 AA 74 1442 ATKINS, GEORGE 720 KUETHE RD GLEN BURNIE MD 21061 * *
* GAMBRILLS NE 3 MI SLEEPY HOLLOW S 50 FT Y * * 125 118
10 70 90 5 D *

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PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER

895 455 AA 74 1971 LOVETTE, ALAN 2041 E GOUGH ST BALTIMORE MD 21231 * *
* SEVERN SE 4 MI SLEEPY HOLLOW S 1 MI N * * 130 123
12 80 100 5 D *
895 455 AA 81 0635 BRETTON WOODS 1623 FOREST DR ANNAPOLIS MD21403 BRETTON WOODS 2
16 ODENTON E 2.6 MI CORNER OF DICUS MILL E 15 FT N * * 61 56
12 44 55 7 D *
895 454 AA 81 6447 BAY SHORE HOMES P O BX 836 GAMBRILLS MD BRETTON WOODS *
4 SEVERN SW 4.8 MI 206 ARABIAN CT W 15 FT Y AA -81-4455 * 146 139
30 76 95 10 D *
895 453 AA 81 2012 BAY SHORE HOMES 1637 FOREST DR ANNAPOLIS MD21403 BRETTON WOODS 1
5 ODENTON SE 2.7 MI WINNERS CIR S 15 FT N * * 176 169
30 70 85 10 D *
895 453 AA 81 8480 CHISUM TOM 1308 WINNERS CIR RD GAMBRILLS MD21035 BRETTON WOODS *
5 MILLERSVILLE SW 3 MI 1308 WINNERS CIR RD W 15 FT N * *
D *
895 453 AA 81 8548 PACE CONSTRUCTION 1821 BLAKEFIELD CIR LUTHERVILLE MD21093 BRETTON WOODS *
4 GAMBRILLS N 2 MI WINNERS CIRCLE N 130 FT N * *
D *
895 452 AA 74 2750 MCKAY, ROBERT H 338 GAMBRILLS RD GAMBRILLS MD 21054 * *
* GAMBRILLS * 0 MI GAMBRILLS ROAD N 75 FT Y * * 67 61
7 45 54 7 D *
895 452 AA 81 0952 GREER ELMER 308 GAMBRILLS RD GAMBRILLS MD21054 * *
* GAMBRILLS * 0 MI GAMBRILLS RD W 200 FT Y * * 65 60
20 28 39 7 D *
895 452 AA 81 2094 LASKEY H L 1313 WINNERS CIR GAMBRILLS MD21054 BRETTON WOOD *
* GAMBRILLS * 0 MI GAMBRILLS S 600 FT Y * * 145 138
30 89 110 13 F *
895 450 AA 72 0629 RITCHIE, WADE H RT 1 BOX 628 GAMBRILLS MD 21054 * *
21 GAMBRILLS N 2 MI GAMBRILLS RD E 100 FT N * * 37 32
12 15 20 12 D *
895 450 AA 72 0631 GUYTON, MERVIN GAMBRILLS RD GAMBRILLS MD 1032 * *
* GAMBRILLS N 2 MI GAMBRILLS RD E 200 FT N * * 58 53
20 30 35 10 D *
895 450 AA 72 0713 ROBINSON, ALLEN 50 M ST NE GLEN BURNIE MD 21061 * *
* GAMBRILLS W 0 MI GAMBRILLS RD W 600 FT S * * 182 177
10 120 130 7 F *

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LOT	NEAREST TOWN	DIR. TO TOWN CODE	DIST NEAR. TOWN MILES	NAME OF NEAREST ROAD	SIDE OF ROAD CODE	DIST. FROM ROAD	REPLACE-MENT CODE	WELL NO. REPLACED OR DEEPENED	WELL IND.	WELL DEPTH REAL FEET	TOTAL CASING DEPTH FEET

PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER -USE CODE	WATER APPROP. NUMBER									
895	450	AA 72 0784	KAUFMAN, ROBERT			GAMBRILLS RD			GAMBRILLS MD				*	*
*	GAMBRILLS		*	0	MI	GAMBRILLS RD		E	20	FT	N	*	*	60	55
12	34	38		10	D	*									
895	450	AA 72 0860	TOBIN, JOHN R			33 A NEW CUT RD			GAMBRILLS MD				*	*
*	GAMBRILLS		SE	1	MI	NEW CUT RD		E	50	FT	N	*	*	72	65
18	20	30		6	D	*									
895	450	AA 73 0424	KAUFMAN, KATHERINE			BX 600 GAMBRILLS RD			GAMBRILLS MD				*	*
*	GAMBRILLS		*	0	MI	GAMBRILLS RD		E	150	FT	S	*	*	62	57
20	30	35		12	D	*									
895	450	AA 73 1380	PURNHAM, JAMES			178 SLEEPY HOLLOW RD			SEVERNA MD				*	*
*	GAMBRILLS		NE	3	MI	SLEEPY HOLLOW RD		S	90	FT	Y	*	*	137	130
8	61			7	D	*									
895	450	AA 73 1629	MAYNARD, ALAN			RIVA RD			ANNAPOLIS MD		21401	GAMBRILLS		*	
*	GAMBRILLS		E	0	MI	RT 175		N	100	FT	N	*	*	124	120
15	60	120		10	D	*									
895	450	AA 73 2647	LILLY, JULIUS			RT 1 BX 171			SEVERN MD				*	*
*	GAMBRILLS		N	2	MI	GAMBRILLS RD		E	2000FT		Y	*	*	126	121
20	57	85		7	D	*									
895	450	AA 73 5537	HOFFA, JOHN M			BX 161 RT 1			SEVERN MD		21144	*			*
*	GAMBRILLS		NE	2	MI	GAMBRILLS RD		E	100	FT	Y	*	*	157	152
12	80	85		10	D	*									
895	450	AA 73 6128	MEDFORD JR. JOHN R			BX 648 RT 1			GAMBRILLS MD				*	*
*	GAMBRILLS		N	0	MI	GAMBRILLS RD		W	100	FT	S	*	*	152	147
15	58	69		12	D	*									
895	450	AA 73 7405	STOUT, ROBERT			LARRO DR			MILLERSVILLE MD			GAMBRILLS		*	
10	CROWNSVILLE		NW	6	MI	GAMBRILLS RD		N	30	FT	N	*	*	57	50
12	20	25		7	D	*									
895	450	AA 74 1277	KOSTKOWSKI, EDWARD			CECIL AVE			MILLERSVILLE MD21108			*			*
6	MILLERSVILLE		S	0	MI	CECIL AVE		W	100	FT	N	*	*	115	110
15	70	75		10	D	*									
895	450	AA 74 1555	GENTILE, ALBERT L			330 GAMBRILLS RD			GAMBRILLS MD		21054	*			*
*	GAMBRILLS		E	0	MI	GAMBRILLS RD		N	60	FT	Y	*	*	65	60
12	35	40			D	*									
895	450	AA 74 2003	KOSTKOWSKI, JOHN E			1601 HOG FARM RD			MILLERSVILLE MD21108			*			*
3	MILLERSVILLE		S	0	MI	HOG FARM RD		W	115	FT	N	*	*	103	98
12	65	70		12	D	*									

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LOT	NEAREST TOWN	DIR. TO TOWN CODE	DIST NEAR. TOWN MILES	NAME OF NEAREST ROAD	SIDE OF ROAD CODE	DIST. FROM ROAD	REPLACEMENT CODE
WELL NO. REPLACED OR DEEPENED	WELL IND.	WELL DEPTH REAL FEET	TOTAL CASING DEPTH FEET				
PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER		

	896	463	AA 74 3261	MARTIN, DIANE E		8374 NEW CUT RD		SEVERN MD	21144	*						*
*	SEVERN			SE	3 MI	NEW CUT RD		N	84 FT	Y	*		*	144	139	
	20	35	38		12	D	*									
	896	463	AA 81 0127	BRANDENBURG, FRED D		8330 NEW CUT RD		SEVERN MD	21144	*						*
*	SEVERN			SE	4.1 MI	NEW CUT RD		N	450 FT	Y	*		*	67	62	
	25	32	45		12	D	*									
	896	463	AA 81 5253	WASIELEVSKI JEROME		8282 NEW CUT RD		SEVERN	MD21144	*						*
*	SEVERN			SE	2.9 MI	NEW CUT RD		N	56 FT	Y	*		*	60	55	
	7	40	50		7	D	*									
	896	463	AA 81 6763	HOOD KEVIN		8340 NEW CUT RD		SEVERN	MD21144	*						*
A	SEVERN			SE	2.8 MI	NEW CUT RD		N	20 FT	N	*		*	115	110	
	50	40	55		10	D	*									
	896	463	AA 81 8755	CENTURY 21-DEVAN		413 TELEGRAPH RD		ODENTON	MD21113	*						*
*	SEVERN			SE	2 MI	8294 NEW CUT RD		N	250 FT	Y	*		*			
						D	*									
	896	463	AA 88 1224	BURKHARDT LEO		101 CAVEEN AVE		LANDSDOWNE	MD21227	BURKHARDT FAMILY CON						*
*	SEVERN			SE	3.2 MI	BURKHARDT LA		E	100 FT	N	*		*			
						D	*									
	896	456	AA 74 3997	ATAS TERRY		1369 DICUS MILL RD		SEVERN	MD21144	*						*
6	SEVERN			SE	5 MI	DICUS MILL RD		S	255 FT	N	*		*	155	150	
	20	60	75		12	D	*									
	896	456	AA 81 2629	BAY SHORE HOMES		1637 FOREST DR		ANNAPOLIS	MD21401	BRETTON WOODS						*
4	SEVERN			SE	4.5 MI	ARABIAN CT		W	15 FT	N	*		A	130	123	
	20	75	95		10	D	*									
	896	456	AA 81 4455	BAY SHORE HOMES		326 S MD RT 3 UNIT K		MILLERSVILLE	MD21108	BRETTON WOODS						*
4	SEVERN			SE	3.9 MI	206 ARABIAN CT		W	15 FT	Y	AA 81-2629		A	130	123	
	20	75	95		10	D	*									
	896	456	AA 81 6025	ZERBLAUT JERRI		310 TENNESSE AVE		PASADENA	MD21122	BRETTON WOODS						*
7	GAMBRILLS			NE	1.3 MI	ARABIAN COURT		E	15 FT	N	*		*	133	126	
	30	75	95		10	D	*									
	896	456	AA 81 7564	JAR CONTRACTORS INC		1717 REMINGTON DR		CROFTON	MD21114	DICUS MILL						*
9	GAMBRILLS			N	1.1 MI	201 ARABIAN CT		E	15 FT	N	*		*	170	163	
	30	100	120		10	D	*									
	896	456	AA 81 9790	REEDS DON		348 MOUNTAIN RD		PASADENA	MD21122	VILLA VERDI						*
*	GAMBRILLS			NE	3 MI	GAMBRILLS RD		W	15 FT	N	*		*			
						D	*									

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LOT	NEAREST TOWN	DIR. TO TOWN CODE	DIST NEAR. TOWN MILES	NAME OF NEAREST ROAD	SIDE OF ROAD CODE	DIST. FROM ROAD	REPLACE-MENT CODE	WELL NO. REPLACED OR DEEPENED	WELL IND.	WELL DEPTH REAL FEET	TOTAL CASING DEPTH FEET

PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER

	896	456	AA 88 2558	ANNE ARUNDEL COUNTY	389 BURNS CROSSING	SEVERN	MD21114	*							*
*	ODENTON		E	2	MI	DICUS MILL RD	N	950	FT	N	*		*		
						T	*								
	896	455	AA 81 1776	BAY SHORE HOMES	1637 FOREST DR	ANNAPOLIS	MD21401	BRETTON WOODS							*
11	ODENTON		E	3	MI	ARABIAN CT	W	200	FT	N	*		*	151	144
	20	86	105	7		D	*								
	896	455	AA 81 2014	BAY SHORE HOMES	1637 FOREST DR	ANNAPOLIS	MD21403	BRETTON WOODS							11
14	ODENTON		E	2.6	MI	ARABIAN CT	S	15	FT	N	*		*	110	103
	30	50	70	10		D	*								
	896	455	AA 81 2258	BAY SHORE HOMES	1637 FOREST DR	ANNAPOLIS	MD21401	BRETTON WOODS							*
8	SEVERN		SE	4	MI	ARABIAN CT	E	15	FT	N	*		*	155	148
	30	98	115	10		D	*								
	896	455	AA 81 2277	BAY SHORE HOMES	1637 FOREST DR	ANNAPOLIS	MD21401	BRETTON WOODS							*
6	SEVERN		SE	4.3	MI	ARABIAN CT	E	15	FT	N	*		*	124	117
	30	63	80	10		D	*								
	896	455	AA 81 2302	BAY SHORE HOMES	1637 FOREST DR	ANNAPOLIS	MD21401	BRETTON WOODS							*
2	SEVERN		SE	4.4	MI	ARABIAN CT	W	15	FT	N	*		*	146	139
	15	90	110	10		D	*								
	896	455	AA 81 2537	BAY SHORE HOMES	1637 FOREST DR	ANNAPOLIS	MD21401	BRETTON WOODS							*
3	SEVERN		S	4	MI	ARABIAN CT	W	15	FT	N	*		*	118	111
	15	80	95	10		D	*								
	896	455	AA 81 3466	COLONIAL CORP	P O DRAWER E	SEVERNA PARK	MD21146	BRETTON WOODS							*
5	MILLERSVILLE		NW	1.8	MI	ARABIAN CT	W	15	FT	N	*		*	130	123
	30	70	90	10		D	*								
	896	455	AA 81 3883	BAY SHORE HOMES	326 S MD RT 3 UNIT K	MILLERSVILLE	MD21108	BRETTON WOODS							2
1	SEVERN		SE	4.3	MI	ARABIAN CT	W	15	FT	N	*		*	149	142
	27	71	90	10		D	*								
	896	454	AA 81 1718	BAY SHORE HOMES	1637 FOREST DR	ANNAPOLIS	MD21401	BRETTON WOODS							*
12	ODENTON		SE	2.5	MI	ARABAIN CT	W	200	FT	N	*		*	150	143
	20	86	95	7		D	*								
	896	454	AA 81 4073	COLONIAL CORPORATION	P O DRAWER E	SEVERNA PARK	MD21146	BRETTON WOODS							*
2	SEVERN		SE	4.2	MI	PERCHERON CT	W	15	FT	N	*		A	162	155
	30	100	120	10		D	*								
	896	454	AA 81 6406	KEENLAND ONE INC	326 RT 3 SOUTH	MILLERSVILLE	MD21108	BLETION WOODS							*
4	GAMBRILLS		N	1	MI	PERCHERON CT	N	240	FT	N	*		*	166	159
	30	60	80	9		D	*								

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LOT	NEAREST TOWN	DIR. TO TOWN CODE	DIST NEAR. TOWN MILES	NAME OF NEAREST ROAD	SIDE OF ROAD CODE	DIST. FROM ROAD	REPLACE-MENT CODE	WELL NO. REPLACED OR DEEPENED	WELL IND.	WELL DEPTH REAL FEET	TOTAL CASING DEPTH FEET

PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROF. NUMBER

896	454	AA 81 8843	ASCHERL FRED	8137 TELEGRAPH RD	SEVERN	MD21144	BRETTON WOODS	*							
5	GAMBRILLS	NE	1	MI	WINNERS CIRCLE	W	240	FT	N	*	*				
					D *										
896	453	AA 74 2940	BAYSHORE HOMES INC	FOREST DR	ANNAPOLIS MD		BRETTON WOODS	1							
2	GAMBRILLS	NE	1	MI	WHIRL-O-WAY CT	S	30	FT	N	*	*	400	230		
12	110	130	5		D *										
896	453	AA 81 0094	QUALITY BUILDERS	1211 ST STEPHEN CH RD	CROWNSVILLE MD 21032		BRETTON WOODS	*							
3	GAMBRILLS	N	1	MI	WHIRL A WAY COURT	S	50	FT	N	*	*	190	160		
30	100	140	5		D *										
896	453	AA 81 0637	BRETTON WOODS	1623 FOREST DR	ANNAPOLIS	MD21403	BRETTON WOODS	1							
9	ODENTON	SE	2.6	MI	300 SW GAMBRILLS RD	W	15	FT	N	*	*	150	143		
20	75	95	7		D *										
896	453	AA 81 4866	IDEAL SAVINGS & LOAN	1629 DRUID HILL DR	BALTIMORE	MD21217	BRETTON WOODS	*							
*	GAMBRILLS	N	.6	MI	WHIRL A-WAY CT	S	91	FT	Y	*	*	50	40		
5	25	45	5		D *										
896	453	AA 88 0934	NORTH JACK	1313 WINNERS CIR	GAMBRILLS	MD21054	*	*							
*	GAMBRILLS	NE	.8	MI	WINNERS CIR	S	300	FT	Y	*	*				
					F *										
896	451	AA 88 0340	MANDRIN CONST	8174 RITCHIE HWY	PASADENA	MD21122	VILLA BELLA	*							
21	SEVERN	SW	2	MI	362 MONTE CRISTO CT	W	15	FT	N	*	*				
					D *										
896	451	AA 88 0341	MANDRIN CONST	8174 RITCHIE HWY	PASADENA	MD21122	VILLA BELLA	*							
37	SEVERN	SW	2	MI	363 MONTE CRISTO CT	E	15	FT	N	*	*				
					D *										
896	450	AA 81 6171	KEENLAND ONE INC	326 MD RT 3 S UNIT K	MILLERSVILLE MD21108		BRETTON WOODS	*							
12	SEVERN	SW	4	MI	224 PERCHERON CT	S	15	FT	N	*	*	167	160		
20	95	115	10		D *										
897	463	AA 74 2410	SNYDER, MARIE	8284 NEW CUT RD	SEVERN MD	21144	WASIELEWSKI ESTS	*							
*	CLARK HEIGHTS	SE	1	MI	NEW CUT RD	N	40	FT	Y	AA 74-1872	*	161	156		
10	50	60	8		D *										
897	463	AA 74 3291	HOOD, ALBERT	8342 NEW CUT RD	SEVERN MD	21144	*	*							
*	SEVERN	SE	5	MI	NEW CUT RD	N	160	FT	Y	*	*	146	141		
20	35	38	12		D *										
897	463	AA 74 3847	FIELDS, WILLIAM R	8344 NEW CUT RD	SEVERN MD	21114	*	*							
*	SEVERN	SE	4	MI	NEW CUT RD	N	160	FT	Y	*	*	131	126		
25	35	38			D *										

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WELL NO. REPLACED OR DEEPENED	WELL IND.	WELL DEPTH REAL FEET	TOTAL CASING DEPTH FEET	PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)
WATER USE CODE	WATER APPROP. NUMBER						

897 463 AA 81 0830 WATSON LINDWOOD 8286 NEW CUT RD SEVERN MD21144 * *
* SEVERN SE 3.4 MI NEW CUT RD N 50 FT Y * * 58 53
10 40 45 10 D *
897 457 AA 74 3861 HARRISON JR. JAMES GAMBRILLS RD SEVERN MD *
160 GLEN BURNIE S 3 MI GAMBRILLS W 170 FT N * * 218 208
50 42 52 7 D *
897 456 AA 81 9855 LEACH JOANNE 1306 OLD PINE CT ANNAPOLIS MD21401 VILLA VERDI *
3 GAMBRILLS NE 3 MI 134 GAMBRILLS ROAD W 15 FT N * *
D AA 87GAP105
897 456 AA 86 0175 BAYWEST DEVEL CORP 31 OLD SOLOMON ISL R ANNAPOLIS MD21401 * *
2 GAMBRILLS NE 1.7 MI GAMBRILLS RD W 15 FT N * *
D *
897 456 AA 88 2125 KING GEORGE 1514 DICUS MILL RD GAMBRILLS MD21054 * *
* ODENTON SE 1.9 MI DICUS MILL RD N 30 FT Y * *
D *
897 455 AA 81 0802 BAY SHORE HOMES INC 1637 FOREST DR ANNAPOLIS MD21403 BRETTON WOODS *
10 ODENTON E 3 MI DICUS MILL RD S 100 FT N * * 148 141
25 88 105 10 D *
897 455 AA 81 2139 BAY SHORE HOMES 1637 FOREST DR ANNAPOLIS MD21403 BRETTON WOODS II
13 ODENTON E 3 MI MUSTANG CT S 15 FT N * * 127 120
30 67 85 10 D *
897 455 AA 81 4895 YOUNG CONTRACTORS 1543 PINE WHIFF AVE EDGEWATER MD21037 BRETTON WOODS *
3 GAMBRILLS N 1 MI PERCHERON CT N 160 FT N * * 155 148
15 65 85 9 D *
897 454 AA 74 3933 BAY SHORE HOMES 1623 FOREST DR ANNAPOLIS MD 21403 BRETTON WOODS *
6 GAMBRILLS N 1 MI WHIRL A WAY COURT N 50 FT N * * 175 160
10 90 130 5 D *
897 454 AA 81 3801 BAY SHORE HOMES 326 S MD RT 3 UNIT K MILLERSVILLE MD21108 BRETTON WOODS 3
11 SEVERN SE 4.4 MI PERCHERON CT E 15 FT N * * 167 160
30 95 115 10 D *
897 454 AA 81 3814 BAY SHORE HOMES 326 S MD RT 3 UNIT K MILLERSVILLE MD21108 BRETTON WOODS 3
8 SEVERN SW 5 MI PERCHERON CT W 15 FT N * * 167 160
30 99 115 10 D *
897 454 AA 81 4925 KOCH & ASSOCS 4513 MOUNTAIN RD PASADENA MD21122 BRETTON WOODS *
11 MILLERSVILLE N 1.5 MI LOT 11 FREAKNESS DR S 15 FT N * * 245 238
40 105 130 10 D *

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PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER

	897	454	AA 81 6139	COLONIAL CORP	P O DRAWER E	SEVERNA PARK	MD21146	BRETTON WOODS	*						
2	SEVERN		SE	4.3 MI	PERCHERON CT	W	15	FT	Y	AA 81-4073	*	183	176		
	12	104	125	10	D *										
	897	454	AA 81 6779	RD CUSTOM HOME	P O BX 787	MILLERSVILLE	MD21108	BRETTON WOODS	*						
25	GAMBRILLS		NE	1 MI	1673 PREAKNESS DR	S	15	FT	N	*	*	207	200		
	40	95	115	10	D *										
	897	454	AA 81 6793	UTZ CONTRUCTION	P O BX 5687	ARNOLD	MD21012	BRETTON WOODS	*						
6	GAMBRILLS		NE	1 MI	PERCHERON CT	E	15	FT	N	*	*	167	160		
	30	90	110	25	D *										
	897	454	AA 81 7254	CAIN TOM & PAT	P O BX 306	SEVERNA PARK	MD21146	BRETTON WOODS	*						
5	GRAMBRILLS		NE	.8 MI	PERCHERON CT	W	20	FT	N	*	*	165	155		
	50	90	100	10	D *										
	897	454	AA 81 7333	BAY SHORE HOMES	P O BX 836	GAMBRILLS	MD21054	BRETTON WOODS	*						
10	MILLERSVILLE		NW	1.5 MI	1688 PREANNESS DR	N	15	FT	Y	AA 81-5088	*	182	175		
	20	118	135	10	D *										
	897	454	AA 81 7596	BAY STATE ASSOC	129 GARRETT RD	GLEN BURNIE	MD21061	BRETTON WOODS	*						
76	GAMBRILLS		N	1 MI	PREANNESS DR	S	50	FT	N	*	*	195	188		
	85	100	110	10	D *										
	897	454	AA 88 1427	PIMENTAL RICHARD	3411 RAMS GATE DR	ALEXANDRIA	VA22309	BRETON WOODS	*						
27	GAMBRILLS		NE	1.0 MI	PREANNESS DR	*	30	FT	N	*	*				
					D *										
	897	454	AA 88 2217	BUCKLEY TOM	606 MILLWRIGHT CT	MILLERSVILLE	MD21108	BRETTON WOODS	*						
28	GAMBRILLS		NE	0 MI	PREANNESS DR	S	140	FT	N	*	*				
					D *										
	897	453	AA 74 2941	QUALITY BUILDERS	ST STEPHENS RD	CROWNSVILLE	MD	BREHON WOODS	1						
3	GAMBRILLS		NE	1 MI	WHIRL-O-WAY CT	S	30	FT	N	*	C				
					D *										
	897	453	AA 81 3370	SHRINER & ASSOC INC	1939 HIGH RIDGE RD	ANNAPOLIS	MD21401	BRETTON WOODS	1						
7	GLEN BURNIE		SW	4.5 MI	WHIRL A WAY CT	N	160	FT	N	*	*	55	45		
	20	40	42	10	D *										
	897	453	AA 81 4071	COLONIAL CORP	P O DRAWER E	SEVERNA PARK	MD21146	BRETTON WOODS	III						
7	SEVERN		SE	4.3 MI	PERCHERON CT	S	15	FT	N	*	*	168	161		
	30	115	135	10	D *										
	897	453	AA 81 5601	ANTHONY HOMES	754 RIVERSIDE DR	CROWNSVILLE	MD21032	BRETTON WOODS	*						
13	GAMBRILLS		NE	1.1 MI	225 PERCHERON CT	*	15	FT	N	*	*	168	161		
	15	98	115	10	D *										

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WELL APPLICATIONS PROCESSED SINCE 1969
REPORT NUMBER D130WMA1

EAST GRID COORD. (1000FT)	NORTH GRID COORD. (1000 FT)	PERMIT NUMBER	OWNER NAME	ADDRESS OF OWNER	CITY AND STATE OF OWNER	SUBDIVISION	SECT.

LOT	NEAREST TOWN	DIR. TO TOWN CODE	DIST NEAR. TOWN MILES	NAME OF NEAREST ROAD	SIDE OF ROAD CODE	DIST. FROM ROAD	REPLACE-MENT CODE	WELL NO. REPLACED OR DEEPENED	WELL IND.	WELL DEPTH REAL FEET	TOTAL CASING DEPTH FEET

PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER

	897	453	AA 81 5725	PACE CONSTR		1821 BLAKEFIELD DR		LUTHERVILLE	MD21093	BRETTON WOODS					*
22	GAMBRILLS			NE	0.7 MI	PEGASUS CT		W	200 FT	N	*		*	265	255
	25	100	150		9	D	*								
	897	453	AA 81 8946	UTZ CONSTRUCTION		1511 RITCHIE HWY			ARNOLD		MD21012	BRETTON WOODS			*
25	MILLERSVILLE			NW	1.5 MI	1662 PREAKNESS DR		S	15 FT	N	*		*		
						D	*								
	897	453	AA 81 9255	JACOBS AL		800 CEDAR CROFT DR			MILLERSVILLE		MD21108	BLETTON WOODS			*
*	MILLERSVILLE			NW	1.5 MI	223 PERCHON CT		N	15 FT	N	*		*		
						D	*								
	897	453	AA 81 9256	JACOBS AL		800 CEDAR CROFT DR			MILLERSVILLE		MD21108	BRETTON WOODS			*
*	MILLERSVILLE			NW	1.5 MI	222 PEGASUS CT		W	15 FT	N	*		*		
						D	*								
	897	452	AA 74 2914	FIRST CAPITAL BLDRS		P O DRAWER E				BALTIMORE	MD	21225	BRETTON WOODS		*
1	GAMBRILLS			N	1 MI	WHIRLAWAY CT		S	30 FT	N	*		*	58	53
	12	45	50		7	D	*								
	897	452	AA 74 2951	BAYSHORE HOMES INC		FOREST DR				ANNAPOLIS	MD	21401	BREHON WOODS		1
4	GAMBRILLS			NE	1 MI	WHIRL-O-WAY CT		E	30 FT	N	*		C		
						D	*								
	897	452	AA 74 2952	QUALITY BUILDERS		ST STEPHENS RD				CROWNSVILLE	MD		BREHON WOODS		1
8	GAMBRILLS			NE	1 MI	WHIRL-O-WAY CT		N	30 FT	N	*		*	52	45
	7	40	45		5	D	*								
	897	452	AA 81 5991	MANDRIN CONSTRUCTION		8174 RITCHIE HWY			PASADENA		MD21122	BRETTON WOODS			*
10	GAMBRILLS			NE	.9 MI	1680 PREAKNESS DR		N	15 FT	N	*		*	167	160
	20	90	110		10	D	*								
	897	451	AA 82 0359	DUGAN ED		583 ST MARYS AVE			GAMBRILLS		MD21054	ARUNDEL VIEW			*
*	GAMBRILLS			NW	0 MI	ST MARYS AVE		E	68 FT	Y	*		*		
						D	*								
	897	450	AA 81 6196	BAY SHORE HOMES		326 S MD RT 3 UNIT K			MILLERSVILLE		MD21108	BRETTON WOODS			*
20	SEVERN			SE	5 MI	226 PEGASUS COURT		S	15 FT	N	*		*	179	172
	20	90	110		10	D	*								
	898	464	AA 74 3071	ALVARO, LARRY		8254 NEW CUT RD			SEVERN	MD	21144	*			*
*	SEVERN			SE	4 MI	NEW CUT RD		W	500 FT	N	*		*	59	54
	8	44	50		8	D	*								
	898	463	AA 81 7737	ARUNDEL CHRIST FELWS		827 JEANNETTE AVE			BALTIMORE		MD21222	*			*
*	SEVERN			SE	3 MI	20 GAMBRILLS RD		W	260 FT	N	*		*	200	195
	50	80	90		20	I	AA 86GAP091								

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LOT	NEAREST TOWN	DIR. TO TOWN CODE	DIST NEAR. TOWN MILES	NAME OF NEAREST ROAD	SIDE OF ROAD CODE	DIST. FROM ROAD	REPLACE-MENT CODE	WELL NO. REPLACED OR DEEPENED	WELL IND.	WELL DEPTH REAL FEET	TOTAL CASING DEPTH FEET

PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER

	898	463	AA 81 7744	ELLIOTT DAISY	8261 NEW CUT RD	SEVERN	MD21144	*							*
*	SEVERN			SE	3	MI	NEW CUT RD	E	29	FT	Y	*	*	143	138
	10	60	110		10	D	*								
	898	462	AA 81 9241	CROUSE IDA	61 GAMBRILLS RD	GAMBRILLS	MD21054	*							*
*	GAMBRILLS			N	1.0	MI	GAMBRILLS RD	E	200	FT	Y	*	*		
						D	*								
	898	459	AA 80 0525	CARDINAL INDUSTRIES	333 HAMMONDS FERRY	GLEN BURNIE	MD21061	SEVERN RUN							*
*	MILLERSVILLE			NW	1	MI	SLEEPY HOLLOW RD	N	147	FT	N	*	*		
						D	*								
	898	459	AA 80 1308	LYNCH WILLIAM P	99 GAMBRILLS RD	GAMBRILLS	MD21054	*							*
*	GAMBRILLS			N	2	MI	99 GAMBRILLS	E	138	FT	Y	*	*		
						D	*								
	898	458	AA 81 8537	HEATH ROBERT C	89 GAMBRILLS RD	SEVERN	MD21144	*							*
*	SEVERN			SE	3	MI	GAMBRILLS RD	E	20	FT	Y	*	*		
						D	*								
	898	456	AA 74 3967	BERGAMASCHI RICHARD	1200 DICUS MILL RD	MILLERSVILLE	MD21108	AURORA HILLS							*
*	MILLERSVILLE			N	5	MI	DICUS MILL	N	35	FT	Y	*	*	155	148
	15	70	90		5	D	*								
	899	455	AA 81 7664	UTZ CONSTRUCTION	P O BOX 9687	ARNOLD	MD21017	BRETTON WOODS							*
6	SEVERN			SW	5	MI	PERCHERON CT	E	15	FT	N	*	*	168	148
	70	90	110			D	AA 86GAP087								
	898	454	AA 74 3904	BAYSHORE HOMES INC	1623 FOREST DR	ANNAPOLIS	MD 21403	BRETTON WOODS							1-A
4	GAMBRILLS			N	1	MI	WHIRL A WAY CT	E	50	FT	N	*	*	190	170
	10	90	150		5	D	*								
	898	454	AA 81 5000	BAY SHORE HOMES	326 S MD RT 3 UNIT K	MILLERSVILLE	MD21108	BRETTON WOODS							3
12	GAMBRILLS			NE	.9	MI	1676 PREAKNESS	N	15	FT	N	*	*	180	173
	25	95	110		10	D	*								
	898	454	AA 81 5008	BAY SHORE HOMES	326 S MD RT 3 UNIT K	MILLERSVILLE	MD21108	BRETTON WOODS							3
10	MILLERSVILLE			N	1.5	MI	1688 PREAKNESS DR	N	15	FT	N	*	A	185	178
	5	118	145		10	D	*								
	898	454	AA 81 5410	MCHUGH PAUL	1686 PREAKNESS DR	GAMBRILLS	MD21054	BRETTON WOODS							*
1	MILLERSVILLE			NW	1.6	MI	1686 PREAKNESS DR	N	15	FT	Y	*	*	180	173
	5	115	135		10	D	*								
	898	454	AA 81 6719	DESROCHES BARRY	804 COACHWAY	ANNAPOLIS	MD21401	BRETTON WOODS							*
16	GAMBRILLS			N	1	MI	LASHUA CT	W	20	FT	N	*	*	139	132
	12	40	65		9	D	*								

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LOT	NEAREST TOWN	DIR. TO TOWN CODE	DIST NEAR. TOWN MILES	NAME OF NEAREST ROAD	SIDE OF ROAD CODE	DIST. FROM ROAD	REPLACE-MENT CODE	WELL NO. REPLACED OR DEEPENED	WELL IND.	WELL DEPTH REAL FEET	TOTAL CASING DEPTH FEET

PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER

898	454	AA 81 7003	GEORGE ELENGICAL	BX 418	STEVENSVILLE MD21666	BRETTON WOODS	*								
14	GAMBRILLS	SW	1 MI	216 NASHUA CT	S	15 FT	N	*	*	180	173				
30	100	120	10	D *											
898	454	AA 81 7098	TIDAL CONSTRUCTION	1160 SPA RD	ANNAPOLIS MD21403	BRETTON WOODS	*								
16	MILLERSVILLE	NW	1.4 MI	212 NASHUA CT	W	15 FT	N	*	*	156	149				
40	68	85	10	D *											
898	454	AA 81 7484	PRIDEMARK HOMES	P O BX 278	MILLERSVILLE MD21108	BRETTONWOODS	3								
16	GAMBRILLS	N	1 MI	PREAKNESS DR	N	200 FT	N	*	*	180	173				
20	115	135	7	D *											
898	454	AA 81 7740	JAR CONTRATORS INC	1717 REMINGTON DR	CROFTON MD21114	BRETTON WOODS	*								
15	GAMBRILLS	N	1.2 MI	PREAKNESS DR	S	15 FT	N	*	*	172	165				
20	110	125	10	D *											
898	454	AA 81 7919	R D CUSTOM HOMES	P O BX 787	MILLERSVILLE MD21108	BRETTON WOODS	*								
17	MILLERSVILLE	SW	1.2 MI	1617 PREAKNESS DR	N	15 FT	N	*	*	170	163				
20	95	115	10	D *											
898	454	AA 81 8529	R D CUSTOM HOMES	P O BX 787	MILLERSVILLE MD21108	BRETTON WOODS	*								
*	SEVERN	SE	5 MI	218 NASHUA CT	S	15 FT	N	*	*						
898	454	AA 81 8684	PIONEER CONSTRUCTION	875 B A A BOULEVARD	SEVERNA PARK MD21146	BRETTON WOODS	*								
21	GAMBRILLS	N	1 MI	PEGASUS CT	E	200 FT	N	*	*						
898	454	AA 81 9590	JAR CONTRACTORS INC	1654 CROFTON BLVD 4	CROFTON MD21114	BRETTON WOODS	*								
*	GAMBRILLS	NE	1.5 MI	PREAKNESS DR	N	53 FT	N	*	*						
898	454	AA 81 9595	MEYD WILLIAM	P O BX 424	GAMBRILLS MD21054	BRETTONWOODS	*								
22	GAMBRILLS	NE	1.2 MI	1668 PREAKNESS DR	N	15 FT	N	*	*						
898	454	AA 81 9897	PASOWICZ WALTER F	1837 QUEBECK ST	SEVERN MD21144	BRETTON WOODS	*								
19	GLEN BURNIE	S	4 MI	NASHUA CT	N	20 FT	N	*	*						
898	454	AA 88 0323	AL JACOBS GENERAL CO	800 CEDARCROF DR	MILLERSVILLE MD21108	BRETTON WOODS	*								
*	MILLERSVILLE	SE	3 MI	213 NASHUA CT	N	15 FT	N	*	*						
898	454	AA 88 2864	MANDRIN CONSTRUCTION	8174 RITCHIE HWY	PASADENA MD21122	BRETTON WOODS	*								
21	GAMBRILLS	SW	MI	1670 PREAKNESS DR	N	15 FT	N	*	*						

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LOT	NEAREST TOWN	DIR. TO TOWN CODE	DIST NEAR. TOWN MILES	NAME OF NEAREST ROAD	SIDE OF ROAD CODE	DIST. FROM ROAD	REPLACE-MENT CODE	WELL NO. REPLACED OR DEEPENED	WELL IND.	WELL DEPTH REAL FEET	TOTAL CASING DEPTH FEET

PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER

	898	452	AA 81 8202	SNYDER CUSTOM BUILT	2710 MOUNTAIN RD	PASADENA	MD21122	BRETTON WOODS		*				
9	GAMBRILLS		N	.50 MI	PREAKNESS DR	N	15 FT	N	*		*	170	163	
	30	65	105	7	D *									
	898	452	AA 81 8732	RD CUSTOM HOMES	301 SOUTH DR	SEVERNA PARK	MD21146	BRETTON WOODS		*				
23	GAMBRILLS		*	0 MI	223 PEGAUS CT	S	15 FT	N	*		*			
					D *									
	899	464	AA 81 2386	BENSON WILLIAM	8247 NEW CUT RD	SEVERN	MD21144	*		*				
*	GLEN BURNIE		SW	3.5 MI	GAMBRILLS RD	E	600 FT	Y	*		*	51	31	
	15	30	35	5	D *									
	899	462	AA 74 3299	DEPT OF NATURAL RES	TAWES ST OFFICE BLDG	ANNAPOLIS MD	21401	SEVERN RUN ST PK		*				
*	GLEN BURNIE		SW	4.5 MI	GAMBRILLS	E	.3 MI	N	*		*	220	210	
	50	40	200	25	I AA 81GAP006									
	899	461	AA 81 1161	CROUSE JAMES	33 GAMBRILLS RD	SEVERN	MD21144	*		*				
*	SEVERN		SE	4 MI	GAMBRILLS RD	E	.25 MI	S	*		*	100	95	
	15	75	80	15	D *									
	899	458	AA 74 3716	BREDEHOFT, ERIC	1223A SCOTTS MANOR	ODENTON MD	21113	*		*				
158	SEVERN		SE	5 MI	GAMBRILLS RD	E	125 FT	N	*		*	65	60	
	30	20	25		D *									
	899	458	AA 88 2056	DEHAVEN BETTY	115 GAMBRILLS RD	SEVERN	MD21144	*		*				
*	SEVERN		SE	3.9 MI	115 GAMBRILLS RD	E	135 FT	Y	*		*			
					D *									
	899	456	AA 81 0698	JONES ROBERT	1296 ASHBURTON DR	MILLERSVILLE	MD21108	AURORA HILLS		*				
26	MILLERSVILLE		N	1.8 MI	ASHBURTON DR	N	48 FT	Y	*		*	60	-55	
	10	45	50	10	D *									
	899	456	AA 88 2244	DUTY RON	1238 DICUS MILL RD	MILLERSVILLE	MD21108	AURORA HILLS		*				
*	MILLERSVILLE		N	0 MI	DICUS MILL RD	N	500 FT	Y	*		*			
					D *									
	899	455	AA 81 1661	CASTRUCCIO SADIE	1107 DICUES MILL RD	MILLERSVILLE	MD21108	*					2	
*	MILLERSVILLE		N	1.7 MI	DICUSS MILL RD	S	50 FT	Y	*		*	175	169	
	15	90	130	5	D *									
	899	454	AA 81 7918	R D CUSTOM HOMES	P O BX 787	MILLERSVILLE	MD21108	BRETTON WOODS		*				
18	MILLERSVILLE		N	1.2 MI	215 NASHUA CT	E	15 FT	N	*		*	185	178	
	20	85	100	10	D *									
	899	453	AA 81 5745	ROSC DIANE	7733 TELEGRAPHRD T21	SEVERN	MD21144	VILLA VERDI		*				
*	MILLERSVILLE		NW	0.9 MI	516 SKI LANE	W	15 FT	N	*		*	38	31	
	2	30	35	10	D *									

DEPARTMENT OF THE ENVIRONMENT
DIVISION OF RESIDENTIAL SANITATION
WELL APPLICATIONS PROCESSED SINCE 1949
REPORT NUMBER D130WMA1

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PUMPING RATE GPM. (TEST)	WATER LEVEL BEFORE TEST FT.	WATER LEVEL AFTER TEST FT.	RATE GPMAPPLC (INST)	WATER USE CODE	WATER APPROP. NUMBER

*	899	451	00	86	0248	ANNE ARUNDEL COUNTY	ARUNDEL CENTER		ANNAPOLIS	MD21404	*				*
	ODENTON				SE	2.0 MI SCHOOL LA		S	500 FT	N	*		*		
						T *									

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APPENDIX D

SOIL BORING LOGS

EXPLANATION OF SYMBOLS

PP	Pocket Penetrometer
TV	Torvane
tsf	tons per square foot
n.a.	not applicable
PID	Photoionization Detector
CGI	Combustible Gas Indicator
ppm	parts per million
LEL	Lower Explosive Limit
HSA	Hollow Stem Auger
S-1	SPT Sample
ST-1	Shelby Tube Sample

(ML)	USCS soil description based on visual inspection
ML	USCS soil description based on laboratory tests

N890677

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G1	SHEET 1 OF 2

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 203' (estimated)
DRILLING METHOD AND EQUIPMENT 6-in. HSA, Mobil B-61
DATES: START 13 May 89 FINISH 13 May 89 WATER LEVEL 176' W.L. DATE 25 May 89 LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
203	0	0 / 2	S-1	1.4	4-6-6-9 (12)	SILT WITH SAND, strong brown, moist, stiff, (ML)		8:15a started drilling
198	5	3 / 5	S-2	1.8	6-9-20-25 (29)	POORLY-GRADED SAND WITH SILT, reddish-yellow, moist, medium dense, SP-SM		
193	10	8 / 10	S-3	1.6	6-7-10-12 (17)	SANDY SILT, brownish-yellow, dry to moist, very stiff, (ML)		
188	15	13 / 15	S-4	0.9	15-21-13-9 (34)	POORLY-GRADED SAND WITH GRAVEL, pale yellow, dry, dense, (SP)		
183	20	18 / 20	S-5	1.0	7-7-9-9 (16)	POORLY-GRADED SAND WITH SILT AND GRAVEL, fine, pale yellow, dry, dense, gravel subangular - 1/8", SP-SM		
178	25	23 / 25	S-6	1.3	6-8-14-17 (22)	SILTY CLAY, multicolored white and purple, dry, very stiff, (CL-ML) AND POORLY-GRADED SAND, medium, multicolored white and purple, dry, medium dense, (SP)		
173	30	28 / 30	S-7	1.8	6-7-9-15 (16)	POORLY-GRADED SAND, fine to medium, multicolored white and purple, moist to wet, medium dense, with a clay seam, (SP)		

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G1	SHEET 2 OF 2

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 203' (estimated)
DRILLING METHOD AND EQUIPMENT 6-in. HSA, Mobil B-61
DATES: START 13 May 89 FINISH 13 May 89 WATER LEVEL 176' W.L. DATE 25 May 89 LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
173	30							
168	35	33 / 35	S-8	1.0	9-13-17-19 (30)	POORLY-GRADED SAND, coarse, brownish-yellow, wet, medium dense, (SP)		driller encountered water at 35' depth
163	40	38 / 40	S-9	1.5	15-22-19-15 (41)	POORLY-GRADED SAND, very fine, brownish-yellow, wet, dense, (SP)		
158	45	43 / 45	S-10	n.a.	6-12-14-17 (26)	LEAN CLAY, brownish-yellow, dry to moist, very stiff, CL		PP = 3.0, 4.0, 4.1 tsf TV = 0.9, 0.9 tsf
						end of boring at 45'		11:00a finished drilling

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G2	SHEET 1 OF 2

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 182' (estimated)
DRILLING METHOD AND EQUIPMENT 6-in. HSA, Mobil B-61
DATES: START 31 May 89 FINISH 31 May 89 WATER LEVEL n.a. W.L. DATE n.a. LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
182	0	0 / 2	S-1	0.8	1-1-2-3 (3)	POORLY-GRADED SAND WITH SILT, light yellowish-brown, moist, very loose, trace of organics, (SP-SM)		8:30a started drilling
177	5	3 / 5	S-2	1.6	7-14-15-24 (29)	POORLY-GRADED SAND, medium, yellow, dry, medium dense, (SP)		
								very difficult drilling, rock or boulder
172	10							end of difficult drilling
167	15	13 / 15	S-3	1.4	25-38-50/6" (88)	POORLY-GRADED SAND, fine, pink, dry, very dense, (SP)		
162	20	18 / 20	S-4	1.5	4-4-8-14 (12)	LEAN CLAY, white, moist, stiff, CL		driller encountered water at 18.5' depth PP = 2.8, 2.9, 2.1tsf TV = 0.5, 0.5, tsf
157	25	23 / 25	ST-1	n.a.	n.a.			attempted shelby tube at 23', pushed 6" before refusal, tube mostly sand when brought up, v. small portion of clay at top of tube
152	30	28 / 30	S-5	1.3	30-50/5½" (80+)	POORLY-GRADED SAND, fine, reddish-yellow, dry, very dense, (SP)		

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G2	SHEET 2 OF 2

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 182' (estimated)
DRILLING METHOD AND EQUIPMENT 6-in. HSA, Mobil B-61
DATES: START 31 May 89 FINISH 31 May 89 WATER LEVEL n.a. W.L. DATE n.a. LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
152	30							
147	35	33 / 35	S-6	1.3	24-26-28-25 (54)	WELL-GRADED SAND, yellow, dry, very dense, trace of clay, (SW)		
142	40	38 / 40	S-7	1.3	26-50/5½" (76+)	WELL-GRADED SAND, yellow, moist, very dense, trace of clay, (SW)		
137	45	43 / 45	S-8	1.1	36-50/4" (86+)	POORLY-GRADED SAND, fine, white, dry to moist, very dense, (SP)		
132	50	48 / 50	S-9	2.0	29-34-33-48 (67)	WELL-GRADED SAND, multicolored, wet, very dense, trace of clay, (SW)		
127	55	53 / 55	S-10	2.0	9-29-50/5½" (79+)	POORLY-GRADED SAND, fine, multicolored, wet, very dense, with a clay seam, (SP)		
						end of boring at 55'		11:30a finished drilling

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G3	SHEET 1 OF 6

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 185.0'
DRILLING METHOD AND EQUIPMENT Mud Rotary, Mobil B-61
DATES: START 18 May 89 FINISH 22 May 89 WATER LEVEL n.a. W.L. DATE n.a. LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
185.0	0	0–2	S-1	1.0	2-1-1-1 (2)	POORLY-GRADED SAND, fine, brownish-yellow, wet, very loose, trace of organics, (SP)		8:45a started drilling PID = 1.0 ppm
180.0	5	3–5	S-2	1.2	8-10-25-26 (35)	POORLY-GRADED SAND, fine, reddish-yellow, moist, dense, (SP)		CGI = 0% of LEL
175.0	10	8–10	S-3	1.4	13-13-16-18 (29)	SILTY SAND, white, moist, medium dense, SM		PID = 0 ppm
170.0	15	13–15	S-4	1.3	9-12-9-13 (21)	(A, top 0.9') POORLY-GRADED SAND WITH GRAVEL, fine sand, reddish-yellow, moist, medium dense, (SP) (B, bottom 0.4') ELASTIC SILT, white, dry, very stiff, (MH)		
165.0	20	18–20	S-5	1.7	12-20-26-33 (46)	POORLY-GRADED SAND, fine, reddish-yellow, dry to moist, dense, (SP)		PID = 0 ppm
160.0	25	23–25	S-6	1.8	15-20-29-32 (49)	POORLY-GRADED SAND, fine, pinkish-white, dry to moist, dense, (SP)		
155.0	30	28–30	S-7	1.5	18-39-50/5" (89+)	SILTY SAND, fine, very pale brown, dry, very dense, SM		

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G3	SHEET 2 OF 6

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 185.0'
DRILLING METHOD AND EQUIPMENT Mud Rotary, Mobil B-61
DATES: START 18 May 89 FINISH 22 May 89 WATER LEVEL n.a. W.L. DATE n.a. LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
155.0	30					(A, top 0.5') POORLY-GRADED SAND, coarse, reddish-yellow, wet, medium dense, (SP) (B, middle 1') SILT WITH GRAVEL, white and reddish-yellow, dry, very stiff, gravel subangular - ½ - 1", (ML) (C, bottom 0.3') ELASTIC SILT, white, dry, very stiff, (MH)		PID = 0 ppm
		33 / 35	S-8	1.8	3-8-12-18 (20)			
150.0	35					(A, top 1') WELL-GRADED SAND WITH GRAVEL, reddish-yellow, dry, very dense, gravel subangular - 1/8", (SW) (B, bottom 1') POORLY-GRADED SAND WITH GRAVEL, fine sand, pinkish-white, dry, very dense, gravel subangular - 1/8", (SP)		
		38 / 40	S-9	2.0	19-36-38-35 (74)			
145.0	40							
		43 / 45	S-10	1.2	41-50/½" (91+)	POORLY -GRADED SAND, fine, reddish-yellow, dry to moist, very dense, with a 2" silt seam, (SP)		
140.0	45							
		48 / 50	S-11	2.0	19-28-35-38 (63)	POORLY-GRADED SAND, medium, reddish-brown, wet, very dense, with a 1" clay seam, (SP)		PID = 0 ppm water level measured at 46'3" depth (11:45a)
135.0	50							
		53 / 55	S-12	2.0	19-22-23-30 (45)	SILT, brownish-yellow, wet, hard, (ML)		PP = 4.5+, 4.5+ tsf TV = 1.5, 1.5 tsf
130.0	55							
		58 / 60	S-13	2.0	18-29-50/5½" (79+)	LEAN CLAY, brown and yellow, dry, hard, CL		PP = 4.5+, 4.5+ tsf TV = 1.5, 1.5 tsf
125.0	60							

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G3	SHEET 3 OF 6

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 185.0'
DRILLING METHOD AND EQUIPMENT Mud Rotary, Mobil B-61
DATES: START 18 May 89 FINISH 22 May 89 WATER LEVEL n.a. W.L. DATE n.a. LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
125.0	60							
120.0	65	63 / 65	S-14	1.5	50/5" (≈100+)	ELASTIC SILT, red, dry, hard, (MH)		
115.0	70	68 / 70	S-15	2.0	33-50/5" (83+)	SILT, white, dry, hard, (ML)		PP = 4.5+ tsf
110.0	75	73 / 75	S-16	2.0	19-21-30-51 (51)	LEAN CLAY, reddish-brown and white, dry, hard, (CL)		PP = 4.5+ tsf
105.0	80	78 / 80	S-17	2.0	10-15-24-36 (39)	SILT, white, moist, hard, (ML)		
100.0	85	83 / 85	S-18	2.0	26-29-39-50 (68)	SILT, red, dry, hard, (ML)		PP = 4.5+, 4.5+ tsf
95.0	90	88 / 90	S-19	1.9	16-24-34-50/5" (58)	SILT, light olive gray, moist, dense, (ML)		water level measured at 32' depth (3:45p)

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G3	SHEET 4 OF 6

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 185.0'
DRILLING METHOD AND EQUIPMENT Mud Rotary, Mobil B-61
DATES: START 18 May 89 FINISH 22 May 89 WATER LEVEL n.a. W.L. DATE n.a. LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
95.0	90							
90.0	95	93 / 95	S-20	1.4	26-50/5" (76+)	SILT WITH SAND, gray, dry, hard, (ML)		
		98 / 100	S-21	2.0	19-24-36-50/5" (60)	SILT WITH SAND, gray, wet, hard, (ML)		
85.0	100							
80.0	105							
75.0	110	108 / 110	S-22	1.4	35-56-50/3" (106+)	SILT, red and white, dry, hard, (ML)		19 May 89 water level measured at 70' depth (5:30p)
70.0	115							
65.0	120	118 / 120	S-23	0.4	93/6" (≈100+)	POORLY-GRADED SAND, fine, pinkish-gray, moist, very dense, (SP)		20 May 89 water level measured at 73' depth (10:30a)

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G3	SHEET 5 OF 6

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 185.0'
DRILLING METHOD AND EQUIPMENT Mud Rotary, Mobil B-61
DATES: START 18 May 89 FINISH 22 May 89 WATER LEVEL n.a. W.L. DATE n.a. LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
65.0	120							
60.0	125							
55.0	130	128 / 130	S-24	0.2	83-50/3" (133+)	WELL-GRADED SAND WITH SILT AND GRAVEL, white, moist to wet, very dense, gravel subangular - 3/8", (SW-SM)		
50.0	135							
45.0	140	138 / 140	S-25	0	150/6" (150+)			no sample recovered, fine sand in washings
40.0	145							
35.0	150	148 / 150	S-26	0	81-50/4" (131+)			no sample recovered, fine sand in washings

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G3	SHEET 6 OF 6

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 185.0'
DRILLING METHOD AND EQUIPMENT Mud Rotary, Mobil B-61
DATES: START 18 May 89 FINISH 22 May 89 WATER LEVEL n.a. W.L. DATE n.a. LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
35.0	150							
30.0	155							
		158 / 160	S-27	0.4	150/4" (150+)	LEAN CLAY, white, dry, hard, (CL)		22 May 89 PP = 3.5 tsf TV = 1.9 tsf
25.0	160							
20.0	165							
		168 / 170	S-28	1.3	42-50/5" (92+)	ELASTIC SILT, red, dry, hard, MH		difficult drilling from 168'-169' PP = 4.5+, 4.5+ tsf TV = 2.0 tsf
15.0	170							
10.0	175							
		178 / 180	S-29	1.3	25-50/5" (75+)	FAT CLAY, red and white, dry, hard, CH		PP = 4.5+, 4.5+ tsf TV = 2.0, 2.3 tsf 6:15p finished drilling
5.0	180							

end of boring at 180'

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G4	SHEET 1 OF 1

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 131.1'
DRILLING METHOD AND EQUIPMENT 6-in. HSA, Mobil B-61
DATES: START 4 May 89 FINISH 4 May 89 WATER LEVEL 128.6' W.L. DATE 25 May 89 LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
131.1	0	0 / 2	S-1	0.8	1-2-3-2 (5)	WELL-GRADED SAND, strong brown, dry, loose, (SW)		5:30p started drilling
126.1	5	3 / 5	S-2	1.2	5-5-6-6 (11)	WELL-GRADED SAND, yellowish-red, wet, medium dense, (SW)		
121.1	10	8 / 10	S-3	1.5	7-7-4-4 (11)	WELL-GRADED SAND, reddish-yellow, wet, medium dense,(SW) AND CLAYEY SILT, gray, moist, medium dense, (ML-CL)		
116.1	15	13 / 15	S-4	0.9	3-9-11-7 (20)	POORLY-GRADED SAND, medium, reddish-yellow,wet, medium, dense, (SP)		
111.1	20	18 / 20	S-5	2.0	8-13-18-19 (31)	POORLY-GRADED SAND, medium, yellow, wet, dense, (SP)		
						end of boring at 20'		6:00p finished drilling

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G5	SHEET 1 OF 3

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 149.9'
DRILLING METHOD AND EQUIPMENT 6-in. HSA, Mobil B-61
DATES: START 2 May 89 FINISH 3 May 89 WATER LEVEL 98.9' W.L. DATE 25 May 89 LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
149.9	0	0–2	S-1	1.5	2-7-6-6 (13)	POORLY-GRADED SAND, fine, reddish-yellow, dry, medium dense, some organics at the surface, trace of clay, (SP)		3:20p started drilling
		3–5	S-2	2.0	7-9-12-14 (21)	POORLY-GRADED SAND, fine, pinkish-white, dry, medium dense, with a clayey sand seam, seam, (SP)		PID = 0.4 ppm
144.9	5							
		8–10	S-3	n.a.	9-11-13-13 (24)	POORLY-GRADED SAND, fine, reddish-yellow, dry to moist, medium dense, (SP)		PID = 0 ppm
139.9	10							
		13–15	S-4	1.5	8-7-9-12 (16)	SILTY SAND, white, dry to moist, medium dense, with a clay seam, (SM)		CGI = 0% of LEL
134.9	15							
		18–20	S-5	1.8	14-14-17-20 (31)	POORLY-GRADED SAND, fine, very pale brown, dry, dense, (SP)		
129.9	20							
		23–25	S-6	1.4	14-17-22-22 (39)	POORLY-GRADED SAND, fine, multicolored, dry, dense, (SP)		
124.9	25							
		28–30	S-7	1.8	17-30-37-35 (67)	POORLY-GRADED SAND, fine, pinkish-white, dry, very dense, (SP)		
119.9	30							

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G5	SHEET 2 OF 3

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 149.9'
DRILLING METHOD AND EQUIPMENT 6-in. HSA, Mobil B-61
DATES: START 2 May 89 FINISH 3 May 89 WATER LEVEL 98.9' W.L. DATE 25 May 89 LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
119.9	30							
114.9	35	33 / 35	S-8	2.0	10-13-33-50 (46)	FAT CLAY, mottled (red, light reddish-brown, reddish-yellow), dry, hard, (CH)		PID = 0 ppm PP = 4.5+ tsf TV = 0.9+ tsf
109.9	40	38 / 40	S-9	1.8	22-42-50/5" (92+)	FAT CLAY, mottled (white, red), dry, hard, (CH)		PP = 4.5+ tsf TV = 0.9+ tsf
104.9	45	43 / 45	S-10	1.7	32-50/5" (82+)	FAT CLAY, mottled (white, red), dry, hard, (CH)		PP = 4.5+ tsf TV = 2.3+ tsf
99.9	50	48 / 50	S-11	2.0	18-24-35-50/5" (59)	FAT CLAY, white, dry, hard, (CH)		PP = 4.5+ tsf TV = 2.3+ tsf
94.9	55	53 / 55	S-12	2.0	13-18-24-32 (42)	FAT CLAY, red, dry, hard, (CH)		PP = 4.5+ tsf TV = 2.3+ tsf
89.9	60							

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G5	SHEET 3 OF 3

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 149.9'
DRILLING METHOD AND EQUIPMENT 6-in. HSA, Mobil B-61
DATES: START 2 May 89 FINISH 3 May 89 WATER LEVEL 98.9' W.L. DATE 25 May 89 LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
89.9	60							
		63 / 65	S-13	1.8	14-35-50/5" (85+)	(A, top 0.8') SILTY SAND, white, moist, very dense, (SM) (B, bottom 1.0') SILTY SAND, strong brown, dry, very dense, (SM)		
84.9	65							
9.9	70							
		73 / 75	S-14	2.0	24-50-50/5" (100+)	POORLY-GRADED SAND, fine, very pale brown, wet, very dense, (SP)		driller encountered water at 73' depth PID = 0 ppm
74.9	75							
		76 / 78	S-15	0.8	33-50/4" (88+)	POORLY-GRADED SAND, fine, reddish-yellow, wet, very dense, (SP)		
71.9	78					end of boring at 78'		10:45a finished drilling

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G6	SHEET 1 OF 1

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 131.0'
DRILLING METHOD AND EQUIPMENT 6-in. HSA, Mobil B-61
DATES: START 2 May 89 FINISH 2 May 89 WATER LEVEL 117.7' W.L. DATE 25 May 89 LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
131.0	0	0–2	S-1	1.1	5-11-8-11 (19)	WELL-GRADED SAND WITH SILT, strong brown, dry, medium dense, (SW-SM)		9:45a started drilling
126.0	5	3–5	S-2	1.6	5-5-5-6 (10)	POORLY-GRADED SAND, medium, reddish-yellow, dry, loose, (SP)		
121.0	10	8–10	S-3	1.6	10-12-16-14 (28)	POORLY-GRADED SAND WITH SILT, reddish-yellow to very pale brown, dry, medium dense, (SP-SM)		
116.0	15	13–15	S-4	1.8	10-11-14-12 (25)	POORLY-GRADED SAND WITH CLAY, yellow to strong brown, moist, medium dense, (SP-SC)		driller encountered water
111.0	20	18–20	S-5	1.3	3-5-9-13 (14)	(A, top 0.5') POORLY-GRADED SAND, medium, white, wet, medium dense, trace of clay, (SP) (B, bottom 0.8') LEAN CLAY, red, moist, stiff, (CL)		PID = 0 ppm CGI = 3% of LEL
106.0	25	23–25	S-6	2.0	10-20-35-50/5" (55)	(A, top 0.8') LEAN CLAY, red, dry, hard, (CL) (B, bottom 1.2') SILT, very pale brown, dry, hard, (SM)		TV_A = 0.4, 0.4 tsf PP_B = 4.5 tsf
						(A, top 0.6') LEAN CLAY, red, moist, hard, (CL) (B, bottom 1.2') POORLY-GRADED SAND WITH SILT, very pale brown to yellow, moist, very dense, (SP-SM)		PP_A = 1.4 tsf TV_A = 0.3 tsf PID = 0 ppm
101.0	30	28–30	S-7	1.8	18-30-50/5" (80+)			

end of boring at 30'

10:45a finished drilling

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G7	SHEET 1 OF 2

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 150' (estimated)
DRILLING METHOD AND EQUIPMENT 6-in. HSA, Mobil B-61
DATES: START 8 May 89 FINISH 8 May 89 WATER LEVEL 110' W.L. DATE 25 May 89 LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
150	0	0–2	S-1	1.6	1-2-1-2 (3)	POORLY-GRADED SAND, very fine, reddish-yellow, dry, loose, (SP)		6:30p started drilling
		3–5	S-2	1.0	3-3-3-8 (6)	CLAYEY SAND, red, moist, loose, (SC)		
145	5							driller encountered water at 4' depth
								driller noticed clay in auger cuttings
		8–10	S-3	1.8	8-12-16-16 (28)	SANDY SILTY CLAY, pink, dry, very stiff, CL-ML		PID = 0.4 ppm
140	10							
		13–15	S-4	1.7	8-11-11-12 (22)	CLAYEY SILT, white, dry, very stiff, (ML-CL)		CGI = 0% of LEL
135	15							
		18–20	S-5	1.5	7-8-9-10 (17)	CLAYEY SILT, white, dry, very stiff, ML-CL		
130	20							
		23–25	S-6	1.8	8-10-11-13 (21)	CLAYEY SILT, white, dry, very stiff, with a clay seam, (ML-CL)		
125	25							
		28–30	S-7	1.6	16-21-50/5½" (71)	CLAYEY SILT, white, moist, hard, with a clay seam, (ML-CL)		
120	30							

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G7	SHEET 2 OF 2

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 150' (estimated)
DRILLING METHOD AND EQUIPMENT 6-in. HSA, Mobil B-61
DATES: START 8 May 89 FINISH 8 May 89 WATER LEVEL 110' W.L. DATE 25 May 89 LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
120	30							
115	35	33 / 35	S-8	1.7	15-21-32-44 (53)	CLAYEY SAND, white, dry to moist, very dense, (SC)		
110	40	38 / 40	S-9	1.6	12-26-33-31 (59)	SILTY, CLAYEY SAND, fine, pink, wet, very dense, SC-SM		
105	45	43 / 45	S-10	0.8	50/5" (≈100+)	POORLY-GRADED SAND, fine, light brown, wet, dense, (SP)		PID = 0 ppm
						end of boring at 45'		8:00p finished drilling

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G8	SHEET 1 OF 2

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 131' (estimated)
DRILLING METHOD AND EQUIPMENT 6-in. HSA, Mobil B-61
DATES: START 9 May 89 FINISH 9 May 89 WATER LEVEL 92' W.L. DATE 25 May 89 LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
131	0	0–2	S-1	1.5	1-3-4-7 (7)	POORLY-GRADED SAND WITH SILT, reddish-brown, wet, loose, (SP-SM)		2:45p started drilling
126	5	3–5	S-2	1.3	9-10-12-12 (22)	SILTY SAND, pink, moist, medium dense, SM		
121	10	8–10	S-3	1.8	8-10-11-12 (21)	SILTY SAND, white, dry, medium dense, (SM)		PID = 0.4 ppm
116	15	13–15	S-4	1.2	9-11-12-12 (23)	POORLY-GRADED SAND WITH SILT, fine, multicolored, dry, medium dense, SP-SM		CGI = 4% of LEL
111	20	18–20	S-5	1.8	6-8-10-11 (18)	POORLY-GRADED SAND, fine, white, dry, medium dense, (SP)		
106	25	23–25	S-6	1.3	9-12-16-18 (28)	POORLY-GRADED SAND, fine, weak red, dry, medium dense, (SP)		
101	30	28–30	S-7	1.3	7-10-15-16 (25)	POORLY-GRADED SAND, fine, reddish-yellow, moist, medium dense, (SP) AND LEAN CLAY, very pale brown, dry, very stiff, (CL)		

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G8	SHEET 2 OF 2

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 131' (estimated)
DRILLING METHOD AND EQUIPMENT 6-in. HSA, Mobil B-61
DATES: START 9 May 89 FINISH 9 May 89 WATER LEVEL 92' W.L. DATE 25 May 89 LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
101	30							
96	35	33–35	S-8	1.9	12-18-26-24 (44)	(A, top 0.7') SANDY LEAN CLAY, white, dry, hard, (CL) (B, bottom 1.2') POORLY-GRADED SAND, very fine, light red, moist, dense, (SP)		
91	40	38–40	S-9	1.5	30-44-50/5½" (94+)	POORLY-GRADED SAND, fine, pink, wet, very dense, (SP)		driller encountered water at 38' depth
86	45	43–45	S-10	2.0	24-50/½" (74+)	POORLY-GRADED SAND, medium, light reddish-brown, wet, very dense, (SP)		rope on hammer replaced
81	50	48–50	S-11	n.a.	30-30-26-32 (56)	POORLY-GRADED SAND, medium, strong brown, wet, very dense, (SP)		
						end of boring at 50'		5:00p finished drilling

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G9	SHEET 1 OF 1

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 163' (estimated)
DRILLING METHOD AND EQUIPMENT 6-in. HSA, Mobil B-61
DATES: START 12 May 89 FINISH 12 May 89 WATER LEVEL 142' W.L. DATE 25 May 89 LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
163	0	0 / 2	S-1	1.3	2-2-2-5 (4)	POORLY-GRADED SAND, fine, brownish-yellow, moist, very loose, (SP)		1:00p started drilling
158	5	3 / 5	S-2	1.1	2-3-3-4 (6)	POORLY-GRADED SAND, medium, strong brown, wet, loose, (SP)		
153	10	8 / 10	S-3	1.9	11-17-19-21 (36)	(A, top 0.8') POORLY-GRADED SAND, medium, reddish-yellow, wet, dense, (SP) (B, bottom 1.1') CLAYEY SILT, reddish-yellow, dry, hard, (ML-CL)		driller encountered water at 9.5' depth; PP_B = 4.5+ tsf; TV_B = 1.1, 1.3, 1.5 tsf
148	15	13 / 15	S-4	1.6	9-9-12-15 (21)	LEAN CLAY, red, moist, very stiff, (CL)		
143	20	18 / 20	S-5	1.3	5-6-9-9 (15)	SILT, pink, moist, stiff, ML		
138	25	23 / 25	S-6	1.4	8-8-9-12 (17)	SILT, light reddish-brown, moist, very stiff, (ML)		
						end of boring at 25'		2:30p finished drilling

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G10	SHEET 1 OF 2

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 136' (estimated)
DRILLING METHOD AND EQUIPMENT 6-in. HSA, Mobil B-61
DATES: START 4 May 89 FINISH 4 May 89 WATER LEVEL 92.1' W.L. DATE 25 May 89 LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
136	0	0–2	S-1	0.9	1-2-4-4 (6)	POORLY-GRADED SAND, fine, brownish-yellow, dry, loose, some organics, (SP)		8:20a started drilling
131	5	3–5	S-2	1.3	3-6-9-12 (15)	POORLY-GRADED SAND WITH GRAVEL, strong brown, dry, medium dense, (SP)		
26	10	8–10	S-3	1.3	10-16-17-17 (33)	POORLY-GRADED SAND, very fine, white, dry, dense, (SP)		
121	15	13–15	S-4	1.8	7-7-8-9 (15)	POORLY-GRADED SAND, very fine, yellow, moist, medium dense, (SP)		
116	20	18–20	S-5	1.5	20-25-28-24 (53)	POORLY-GRADED SAND, fine, reddish-yellow, dry, very dense, (SP)		
111	25	23–25	S-6	1.4	8-12-18-14 (30)	POORLY-GRADED SAND, fine, yellow, dry, dense, (SP)		lost some of sample
106	30	28–30	S-7	1.5	14-11-13-21 (24)	POORLY-GRADED SAND WITH SILT, reddish-yellow, dry to moist, medium dense, (SP-SM)		

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GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G10	SHEET 2 OF 2

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 136' (estimated)
DRILLING METHOD AND EQUIPMENT 6-in. HSA, Mobil B-61
DATES: START 4 May 89 FINISH 4 May 89 WATER LEVEL 92.1' W.L. DATE 25 May 89 LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
106	30							
101	35	33 / 35	S-8	1.2	14-18-18-18 (36)	POORLY-GRADED SAND, very fine, reddish-yellow, dry to moist, dense, (SP)		
	40	38 / 40	S-9	1.3	7-13-35-40 (48)	POORLY-GRADED SAND, very fine, reddish-yellow, moist, dense, (SP)		
91	45	43 / 45	S-10	1.3	22-48-37-27 (85)	POORLY-GRADED SAND, fine, yellow, wet, very dense, (SP)		driller encountered water at 45' depth
86	50	48 / 50	S-11	2.0	18-41-28-34 (69)	POORLY-GRADED SAND, fine, mottled (very pale brown to brownish-yellow), wet, very dense, (SP)		PID = 0.6 ppm CGI = 5% of LEL
81	55	53 / 55	S-12	1.8	10-20-50/5" (70+)	(A, top 0.7') POORLY-GRADED SAND, fine, very pale brown, wet, very dense, (SP) (B, bottom 1.1') SANDY SILT WITH LEAN CLAY, white to yellow, moist to wet, hard, (ML-CL)		10:30a finished drilling

end of boring at 55'

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CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G11	SHEET 1 OF 2

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 135' (estimated)
DRILLING METHOD AND EQUIPMENT 6-in. HSA, Mobil B-61
DATES: START 8 May 89 FINISH 8 May 89 WATER LEVEL 111' W.L. DATE 25 May 89 LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
135	0	0–2	S-1	1.1	2-5-8-10 (13)	POORLY-GRADED SAND, fine, dark gray to reddish-yellow, dry, medium dense, (SP)		10:15a started drilling
130	5	3–5	S-2	1.3	5-6-6-7 (12)	POORLY-GRADED SAND, medium to fine, reddish-yellow, dry, medium dense, (SP)		
125	10	8–10	S-3	1.5	15-16-17-20 (33)	POORLY-GRADED SAND, very fine pink, moist, dense, (SP)		PID = 0.6 ppm driller encountered water at 10.5' depth
120	15	13–15	S-4	1.6	12-13-16-18 (29)	POORLY-GRADED SAND, fine, pinkish-white, moist, medium dense, (SP)		CGI = 0% LEL
115	20	18–20	S-5	1.9	6-8-10-15 (18)	SANDY SILT, white, dry, very stiff, (ML)		PID = 0.8 ppm
110	25	23–25	S-6	1.9	12-15-19-13 (34)	POORLY-GRADED SAND, medium to fine, pink to reddish-yellow, wet, dense, (SP)		
						(A, top 1.3') POORLY-GRADED SAND, medium, pinkish-white to reddish-yellow, wet, very dense, (SP)		PID = 0.6 ppm
105	30	28–30	S-7	1.9	24-25-28-32 (53)	(B, bottom 0.6') SILT, white, dry, hard, (ML)		PP_B = 3.25 tsf TV_B = 0.3 tsf

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G11	SHEET 2 OF 2

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 135' (estimated)
DRILLING METHOD AND EQUIPMENT 6-in. HSA, Mobile B-61
DATES: START 8 May 89 FINISH 8 May 89 WATER LEVEL 111' W.L. DATE 25 May 89 LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
105	30							
		33 / 35	S-8	2.0	12-18-29-50/5" (47)	SILT, white, dry, hard, (ML)		PP = 4.5+ tsf TV = 1.3, 1.7 tsf
100	35							
		37 / 39	S-9	2.0	18-40-50/3" (90+)	SANDY SILT, white, dry, hard, (ML)		
96	39					end of boring at 39'		12:00p finished drilling

GEOSERVICES INC.
CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G13	SHEET 1 OF 2

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 140' (estimated)
DRILLING METHOD AND EQUIPMENT 6-in. HSA, Mobil B-61
DATES: START 14 May 89 FINISH 14 May 89 WATER LEVEL 111' W.L. DATE 25 May 89 LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
140	0	0–2	S-1	0.8	3-3-3-4 (6)	SILTY SAND, brownish-yellow, dry, loose, (SM)		8:45a started drilling
135	5	3–5	S-2	1.5	8-9-10-9 (19)	POORLY-GRADED SAND, very fine, pink, dry, medium dense, SP		
130	10	8–10	S-3	1.3	14-14-14-16 (28)	SILTY SAND, light, reddish-brown, dry, medium dense, (SM)		
125	15	13–15	S-4	1.7	7-9-10-12 (19)	SILT, light reddish-brown, dry, medium dense, ML		
120	20	18–20	S-5	1.6	14-25-30-34 (55)	POORLY-GRADED SAND, fine, pinkish-white, dry, very dense, (SP)		
115	25	23–25	S-6	1.7	19-29-38-50 (67)	POORLY-GRADED SAND, fine, pinkish-white, dry, very dense, (SP)		
110	30	28–30	S-7	2.0	12-16-38-50 (54)	POORLY-GRADED SAND, fine to medium, strong brown, wet, very dense, (SP)		driller encountered water at 28' depth

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CONSULTING ENGINEERS

PROJECT NUMBER	BORING NUMBER	
P1160	G13	SHEET 2 OF 2

BORING LOG

PROJECT Millersville Sanitary Landfill (MLF) LOCATION Anne Arundel County, Maryland
DRILLING CONTRACTOR ATEC, Columbia, Maryland ELEVATION 140' (estimated)
DRILLING METHOD AND EQUIPMENT 6-in. HSA, Mobil B-61
DATES: START 14 May 89 FINISH 14 May 89 WATER LEVEL 111' W.L. DATE 25 May 89 LOGGER A. Saxena

ELEVATION (FT)	DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOG	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TEST AND INSTRUMENTATION
110	30							
105	35	33 / 35	S-8	0.8	26-50/6" (76+)	POORLY-GRADED SAND, medium, yellow, wet, very dense, (SP)		
100	40	38 / 40	S-9	1.8	15-37-50/5½" (87+)	POORLY-GRADED SAND, medium, yellow, wet, very dense, (SP)		
						end of boring at 40'		1:15p finished drilling

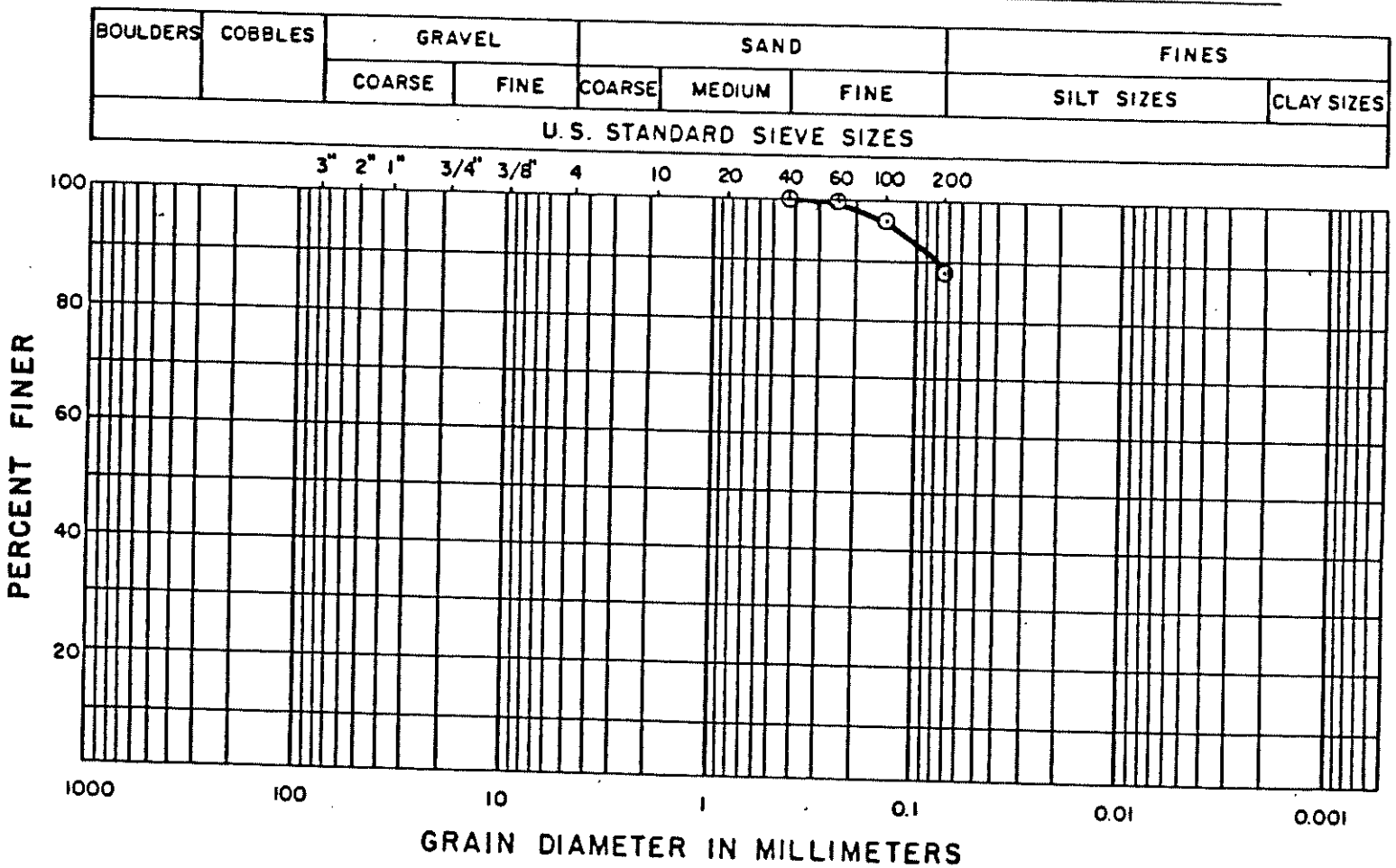
APPENDIX E

GRAIN SIZE ANALYSES

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G-1 DEPTH 0-2'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_U) N/A

COEFFICIENT OF CURVATURE (C_C) N/A

UNIFIED SOIL CLASSIFICATION (USC) CL

LIQUID LIMIT (LL) 38

PLASTIC LIMIT (PL) 22

PLASTICITY INDEX (PI) 16

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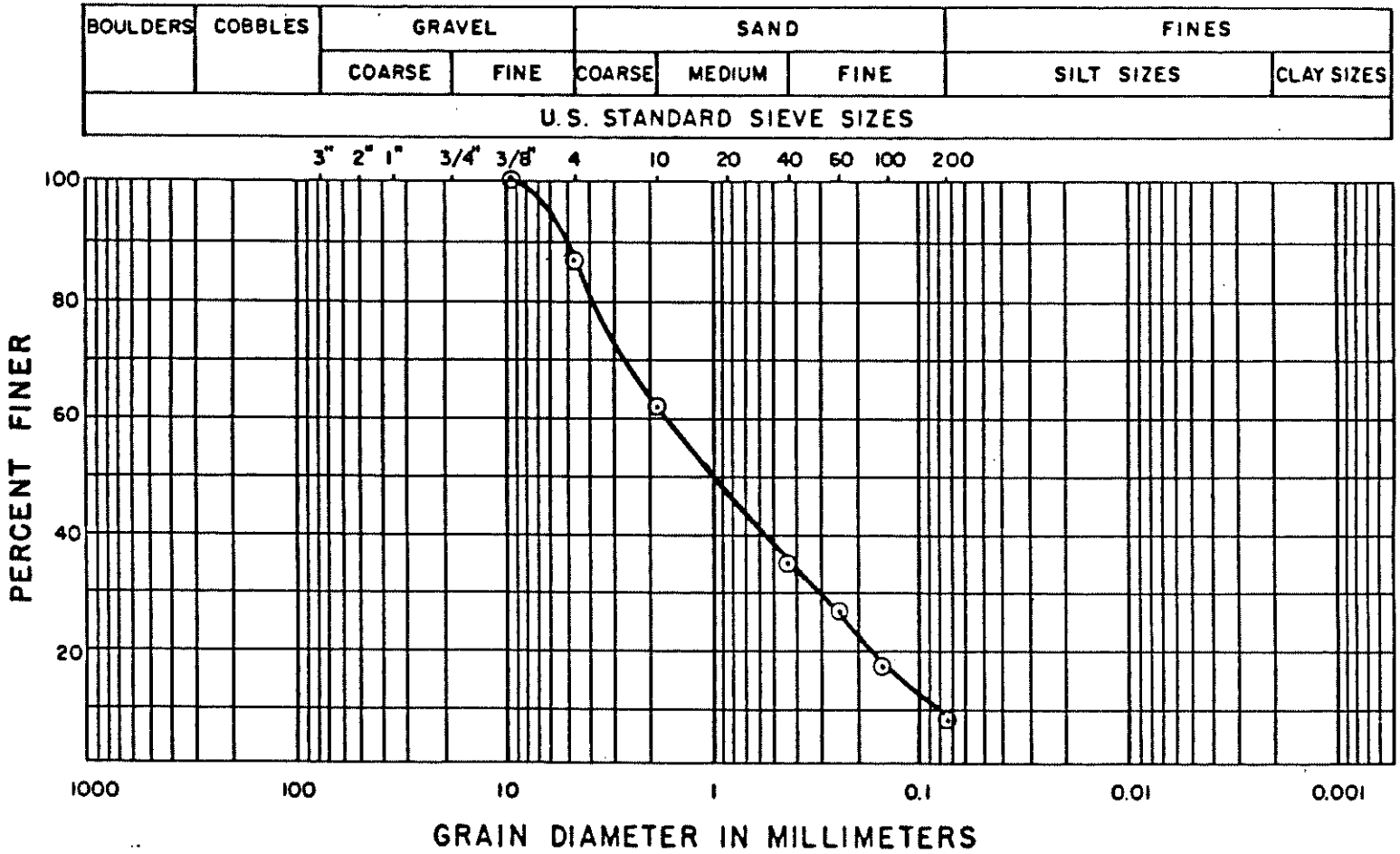
FIGURE NO.
PROJECT NO. P1160
DOCUMENT NO. N890677
PAGE NO.

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G1, S-5 DEPTH 18'

SOIL DESCRIPTION _____



COEFFICIENT OF UNIFORMITY (C_u) 20.0

COEFFICIENT OF CURVATURE (C_c) 0.7

LIQUID LIMIT (LL) N/A

PLASTIC LIMIT (PL) N/A

PLASTICITY INDEX (PI) N/A

UNIFIED SOIL CLASSIFICATION (USC) POORLY-GRADED SAND WITH SILT AND GRAVEL, SP-SM

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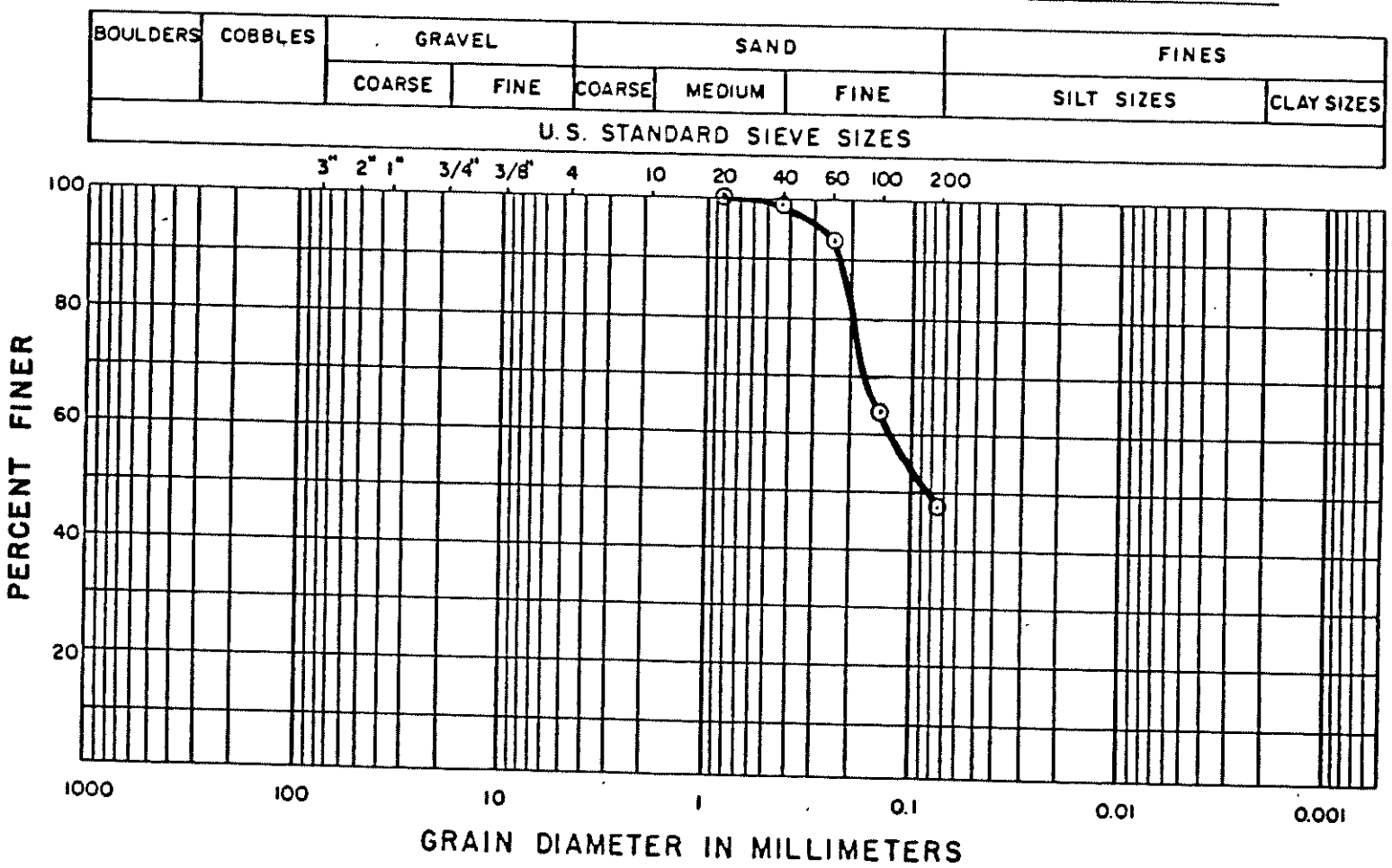
FIGURE NO.
PROJECT NO. P1160
DOCUMENT NO. N890677
PAGE NO.

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G-1 DEPTH 28-30'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_u) N/A

COEFFICIENT OF CURVATURE (C_c) N/A

LIQUID LIMIT (LL) 24

PLASTIC LIMIT (PL) 16

PLASTICITY INDEX (PI) 8

UNIFIED SOIL CLASSIFICATION (USC) CL - ML

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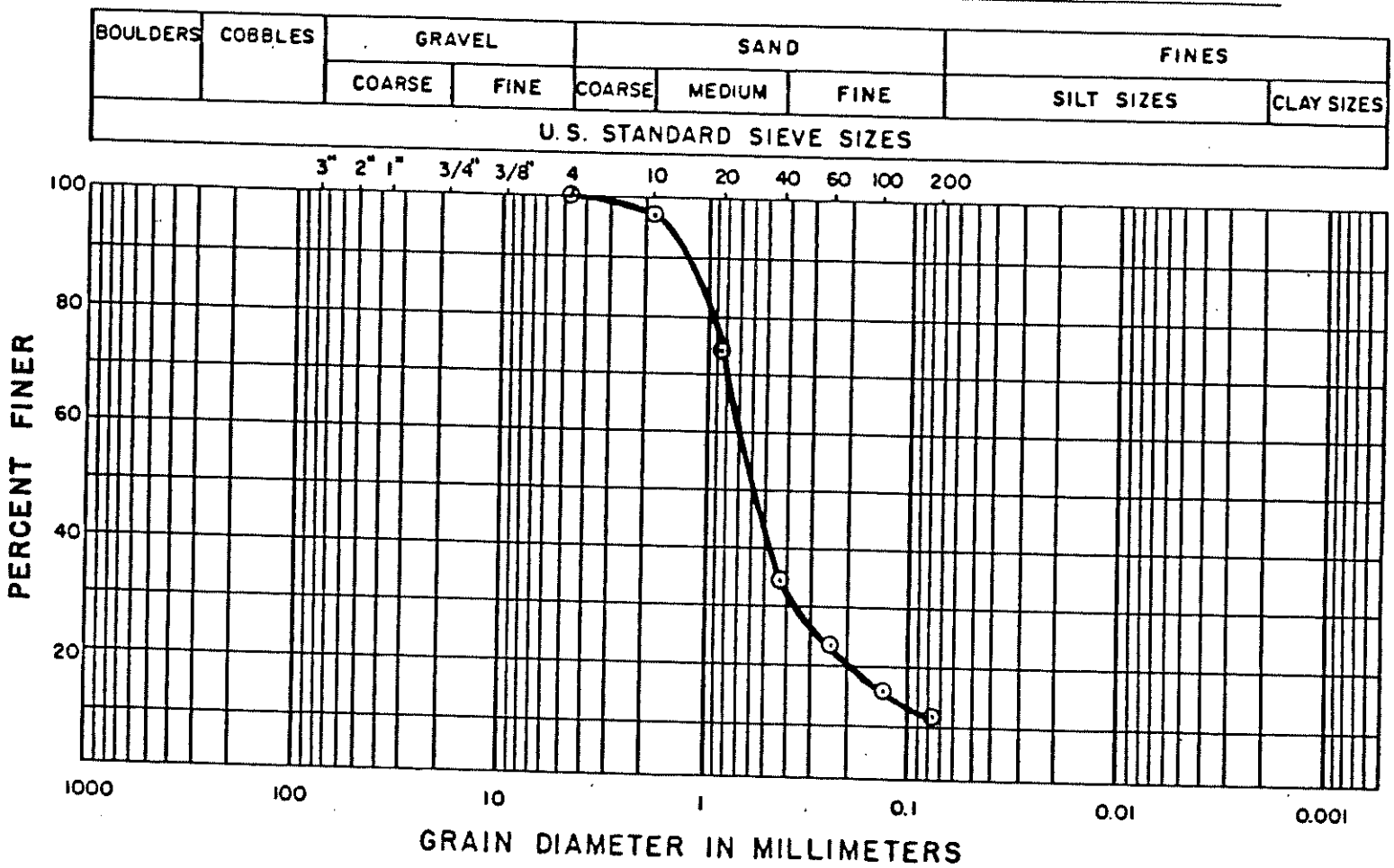
FIGURE NO.
PROJECT NO. P1160
DOCUMENT NO. N890677
PAGE NO.

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G-1 DEPTH 33-35'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_u) 14

COEFFICIENT OF CURVATURE (C_c) 4

LIQUID LIMIT (LL) N/A

PLASTIC LIMIT (PL) N/A

PLASTICITY INDEX (PI) N/A

UNIFIED SOIL CLASSIFICATION (USC) SP - SM

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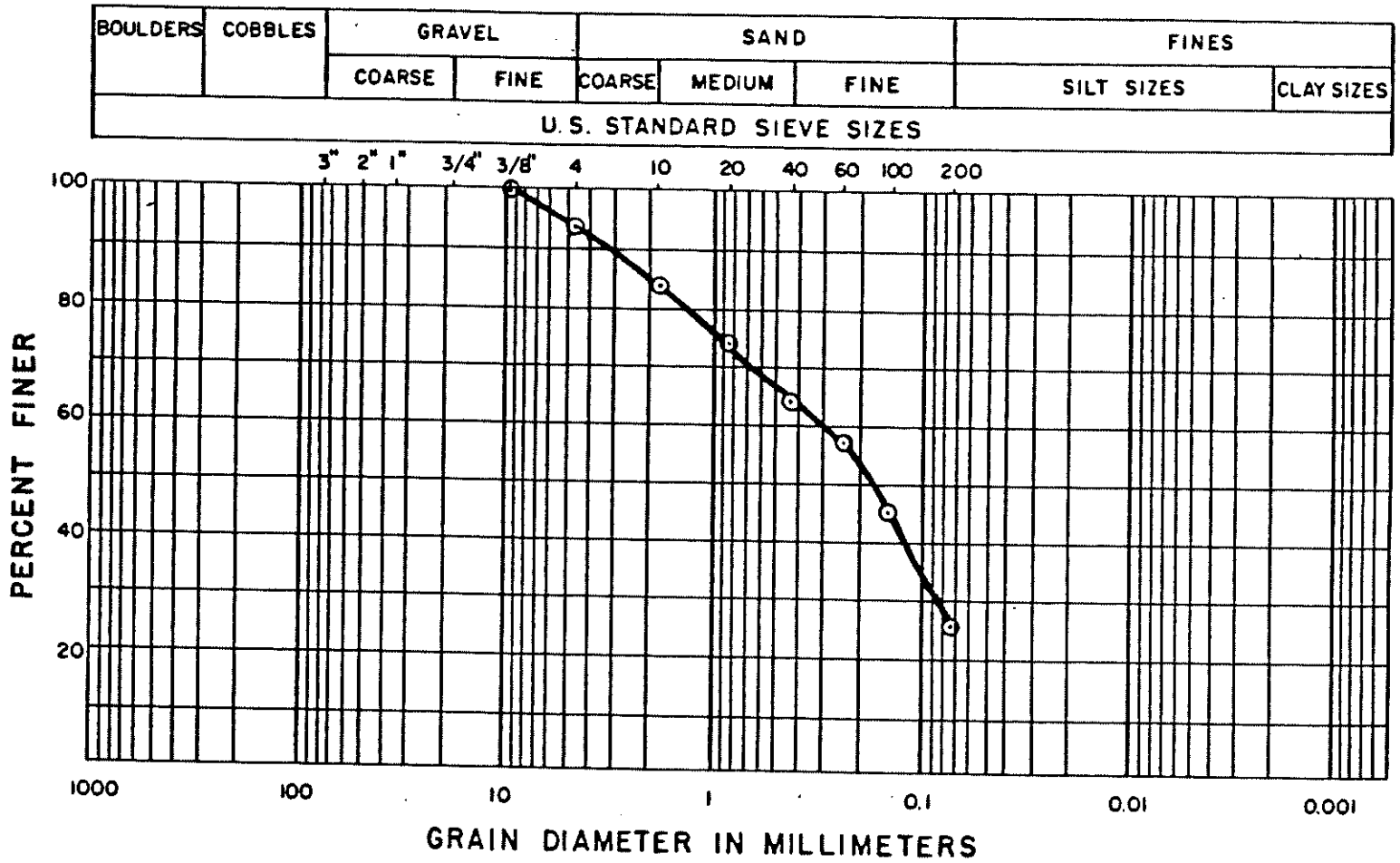
FIGURE NO.
PROJECT NO. P1160
DOCUMENT NO. N890677
PAGE NO.

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G-3 DEPTH 3-5'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_u) N/A

COEFFICIENT OF CURVATURE (C_c) N/A

LIQUID LIMIT (LL) 26

PLASTIC LIMIT (PL) 22

PLASTICITY INDEX (PI) 4

UNIFIED SOIL CLASSIFICATION (USC) SM

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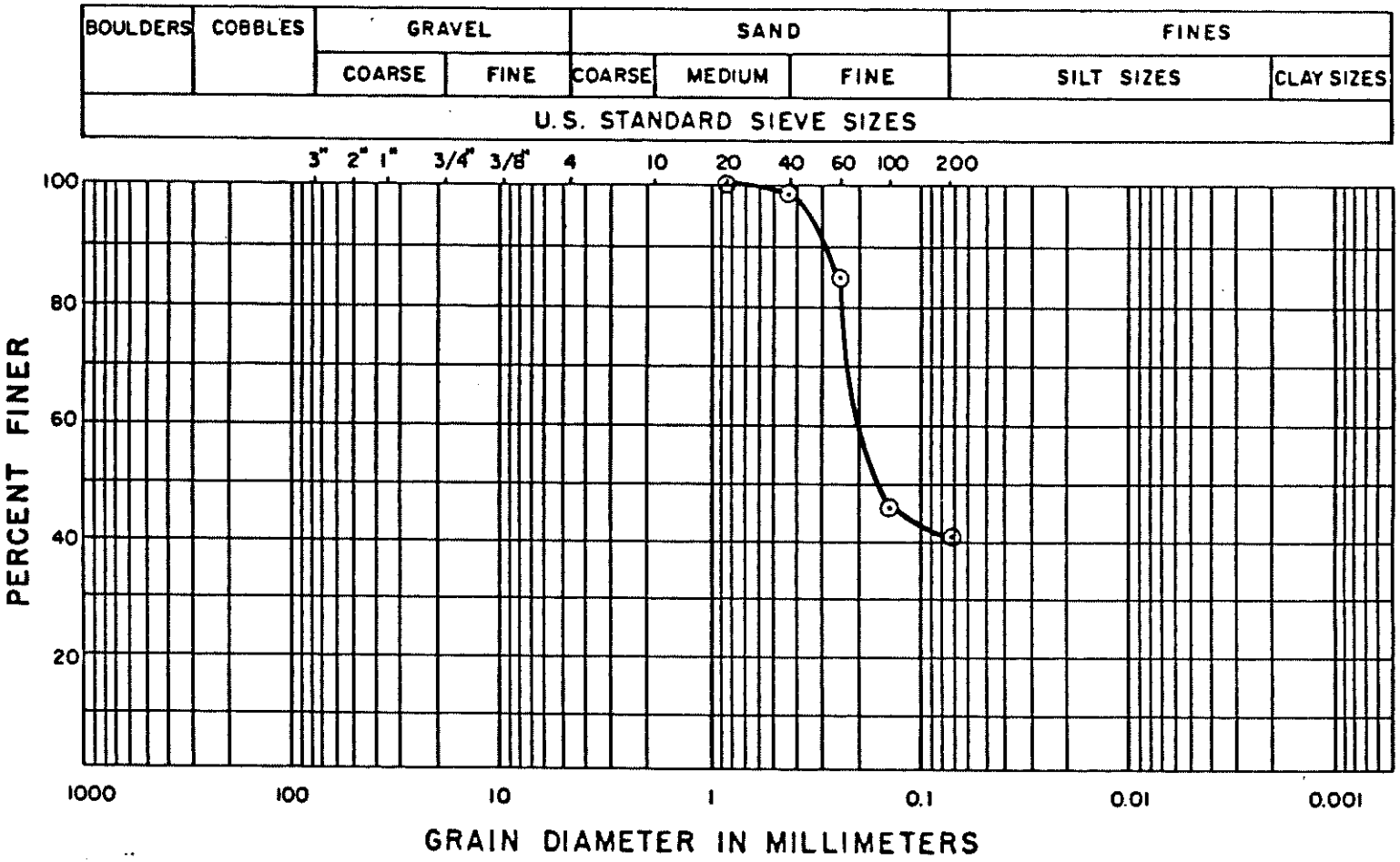
FIGURE NO.
PROJECT NO. P1160
DOCUMENT NO. N890677
PAGE NO.

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G3, S-3 DEPTH 8'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_u) N/A

COEFFICIENT OF CURVATURE (C_c) N/A

LIQUID LIMIT (LL)

PLASTIC LIMIT (PL)

PLASTICITY INDEX (PI)

UNIFIED SOIL CLASSIFICATION (USC) SILTY SAND, SM

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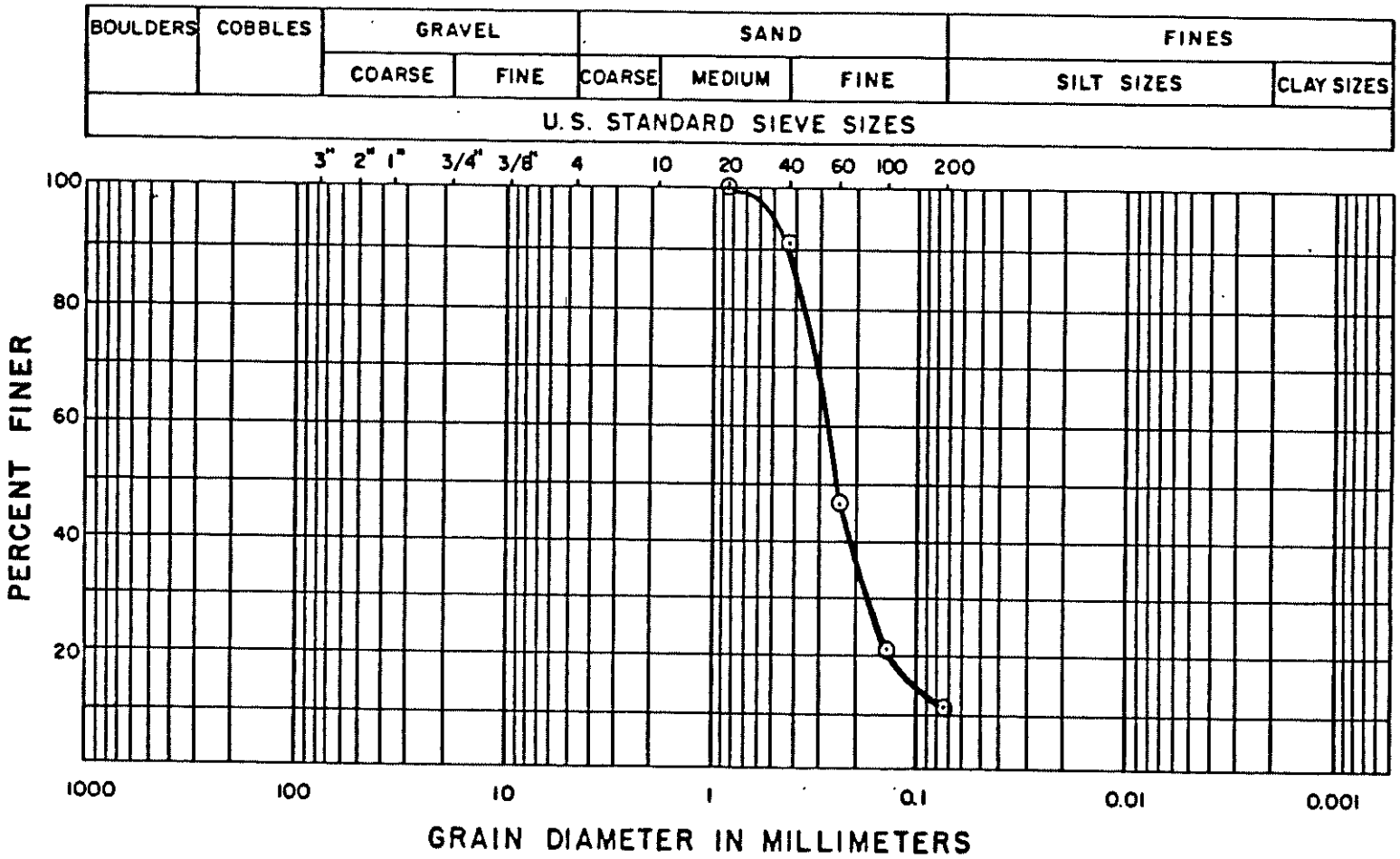
FIGURE NO.	
PROJECT NO.	P1160
DOCUMENT NO.	N890677
PAGE NO.	

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G-3 DEPTH 18-20'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_u) 5

COEFFICIENT OF CURVATURE (C_c) 2

LIQUID LIMIT (LL) —

PLASTIC LIMIT (PL) —

PLASTICITY INDEX (PI) —

UNIFIED SOIL CLASSIFICATION (USC) SP - SM

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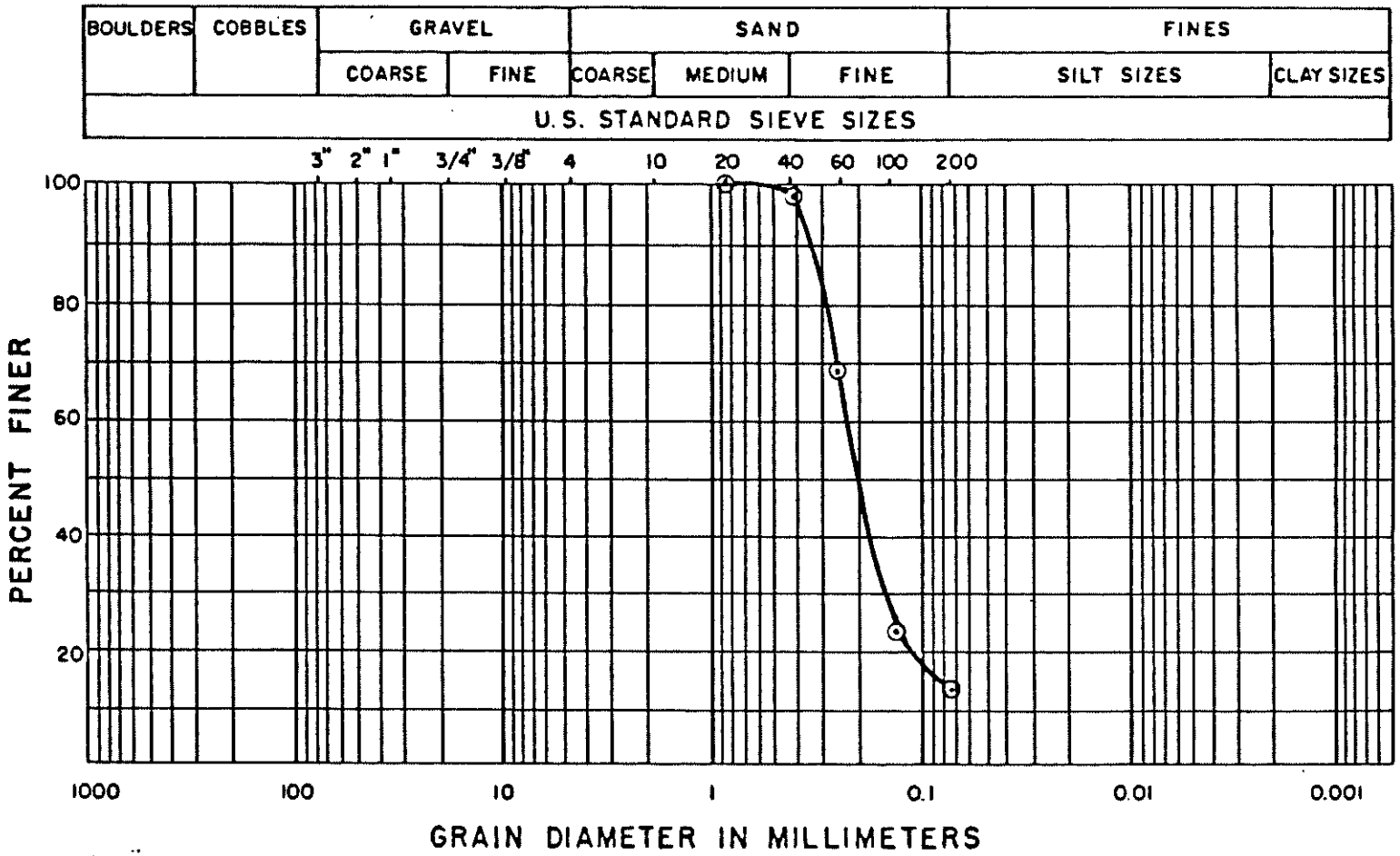
FIGURE NO.
PROJECT NO. P1160
DOCUMENT NO. N890677
PAGE NO.

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G3, S-7 DEPTH 28'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_U) N/A

COEFFICIENT OF CURVATURE (C_C) N/A

LIQUID LIMIT (LL) N/A

PLASTIC LIMIT (PL) N/A

PLASTICITY INDEX (PI) N/A

UNIFIED SOIL CLASSIFICATION (USC) SILTY SAND, SM

GEOSERVICES INC.
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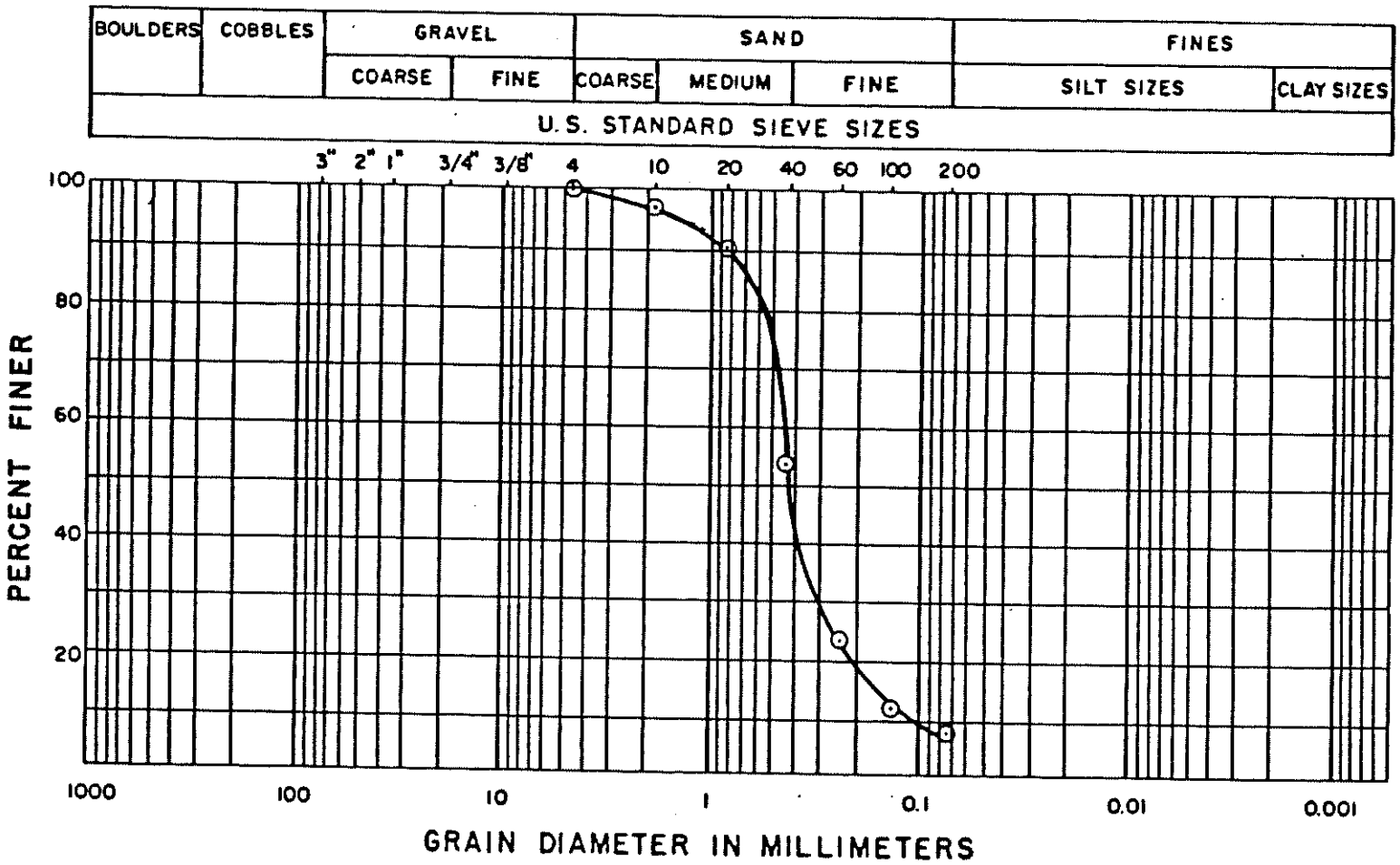
FIGURE NO.	
PROJECT NO.	P1160
DOCUMENT NO.	N890677
PAGE NO.	

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G3 DEPTH 43-45'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_u) 4

COEFFICIENT OF CURVATURE (C_c) 2

LIQUID LIMIT (LL) N/A

PLASTIC LIMIT (PL) N/A

PLASTICITY INDEX (PI) N/A

UNIFIED SOIL CLASSIFICATION (USC) SP - SM

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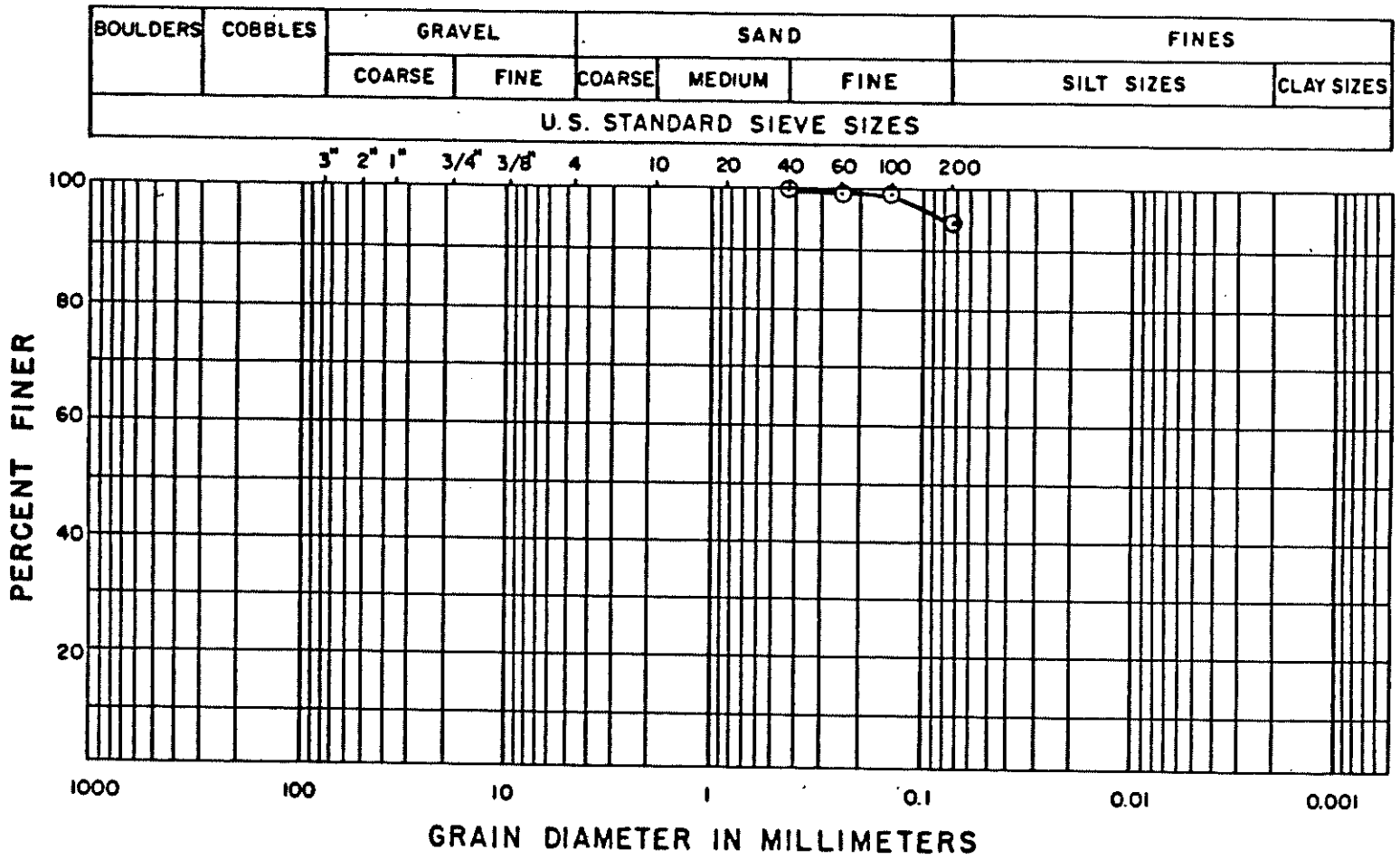
FIGURE NO.
PROJECT NO. P1160
DOCUMENT NO. N890677
PAGE NO.

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G-3 DEPTH 73-75'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_u) N/A

COEFFICIENT OF CURVATURE (C_c) N/A

LIQUID LIMIT (LL) 37

PLASTIC LIMIT (PL) 21

PLASTICITY INDEX (PI) 16

UNIFIED SOIL CLASSIFICATION (USC) CL

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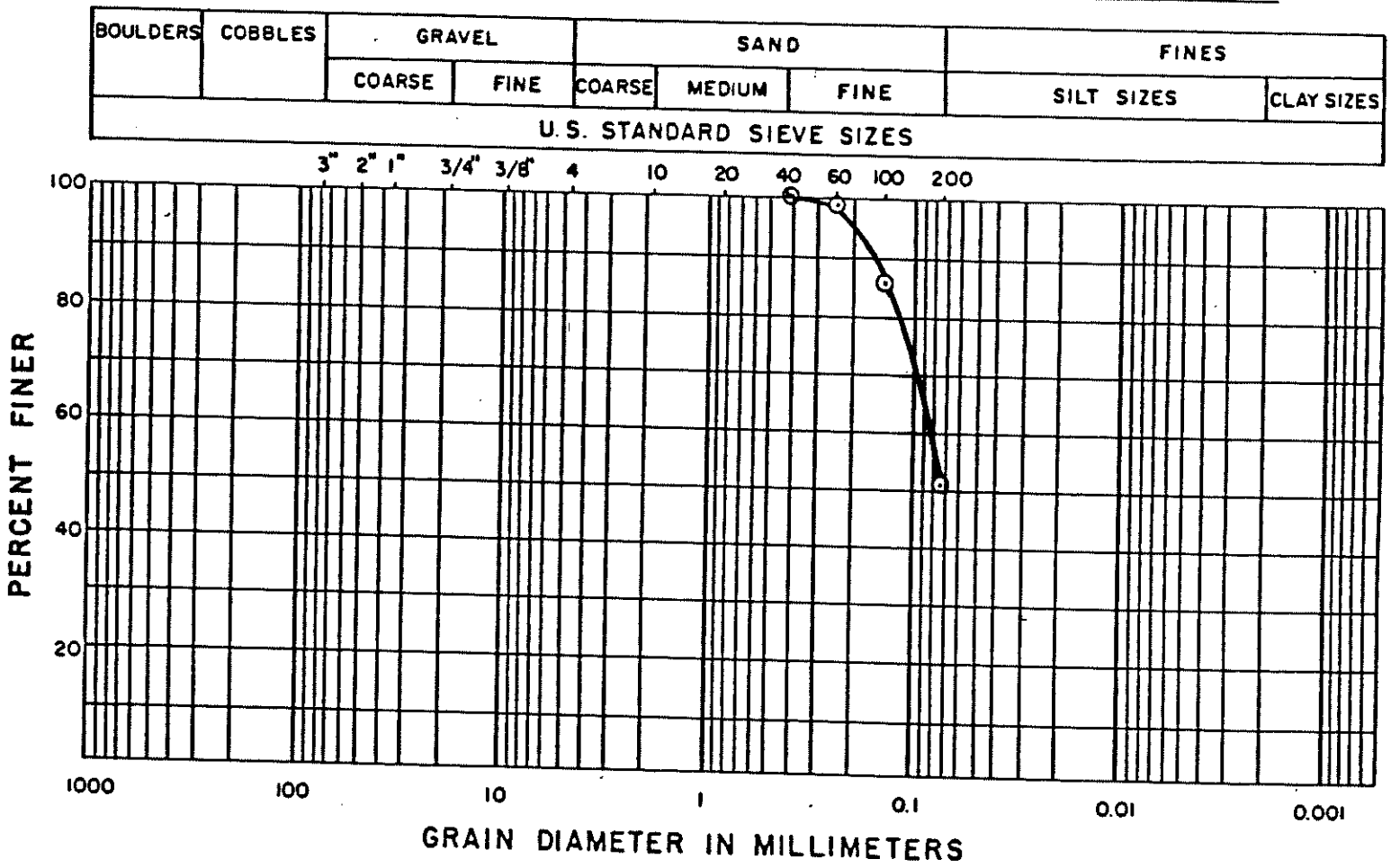
FIGURE NO.
PROJECT NO. P1160
DOCUMENT NO. N890677
PAGE NO.

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G-3 DEPTH 98-100'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_u) N/A

COEFFICIENT OF CURVATURE (C_c) N/A

UNIFIED SOIL CLASSIFICATION (USC) ML

LIQUID LIMIT (LL) —

PLASTIC LIMIT (PL) —

PLASTICITY INDEX (PI) —

GEOSERVICES INC.
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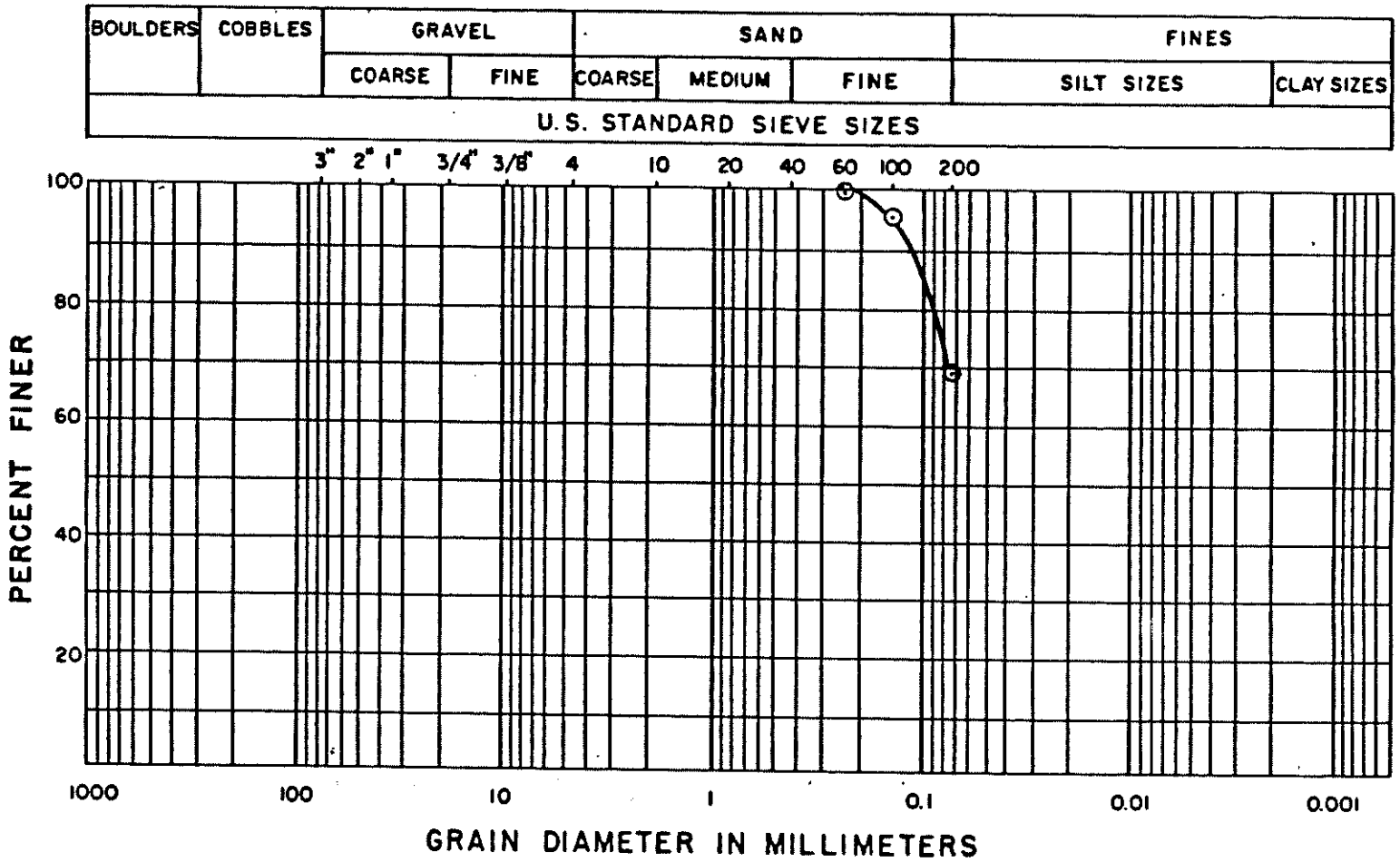
GEOTECHNICAL LABORATORY

FIGURE NO.	
PROJECT NO.	P1160
DOCUMENT NO.	N890677
PAGE NO.	

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G3 DEPTH 108-110'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_u) N/A

COEFFICIENT OF CURVATURE (C_c) N/A

LIQUID LIMIT (LL) 24

PLASTIC LIMIT (PL) 17

PLASTICITY INDEX (PI) 7

UNIFIED SOIL CLASSIFICATION (USC) CL - ML

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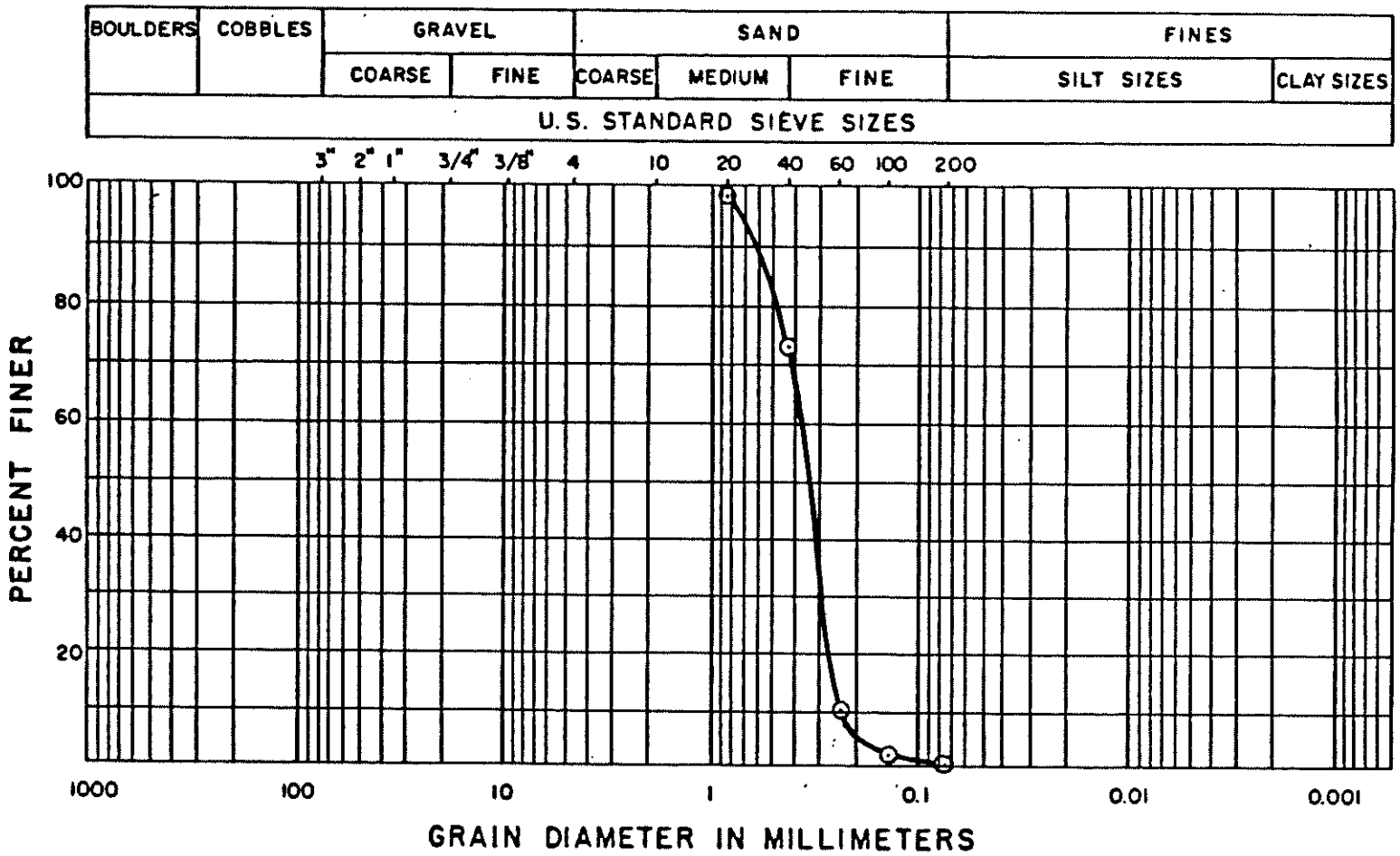
FIGURE NO.
PROJECT NO. P1160
DOCUMENT NO. N890677
PAGE NO.

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G-3 DEPTH 138-140'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_U) 2

COEFFICIENT OF CURVATURE (C_C) 1

LIQUID LIMIT (LL) N/A

PLASTIC LIMIT (PL) N/A

PLASTICITY INDEX (PI) N/A

UNIFIED SOIL CLASSIFICATION (USC) SP

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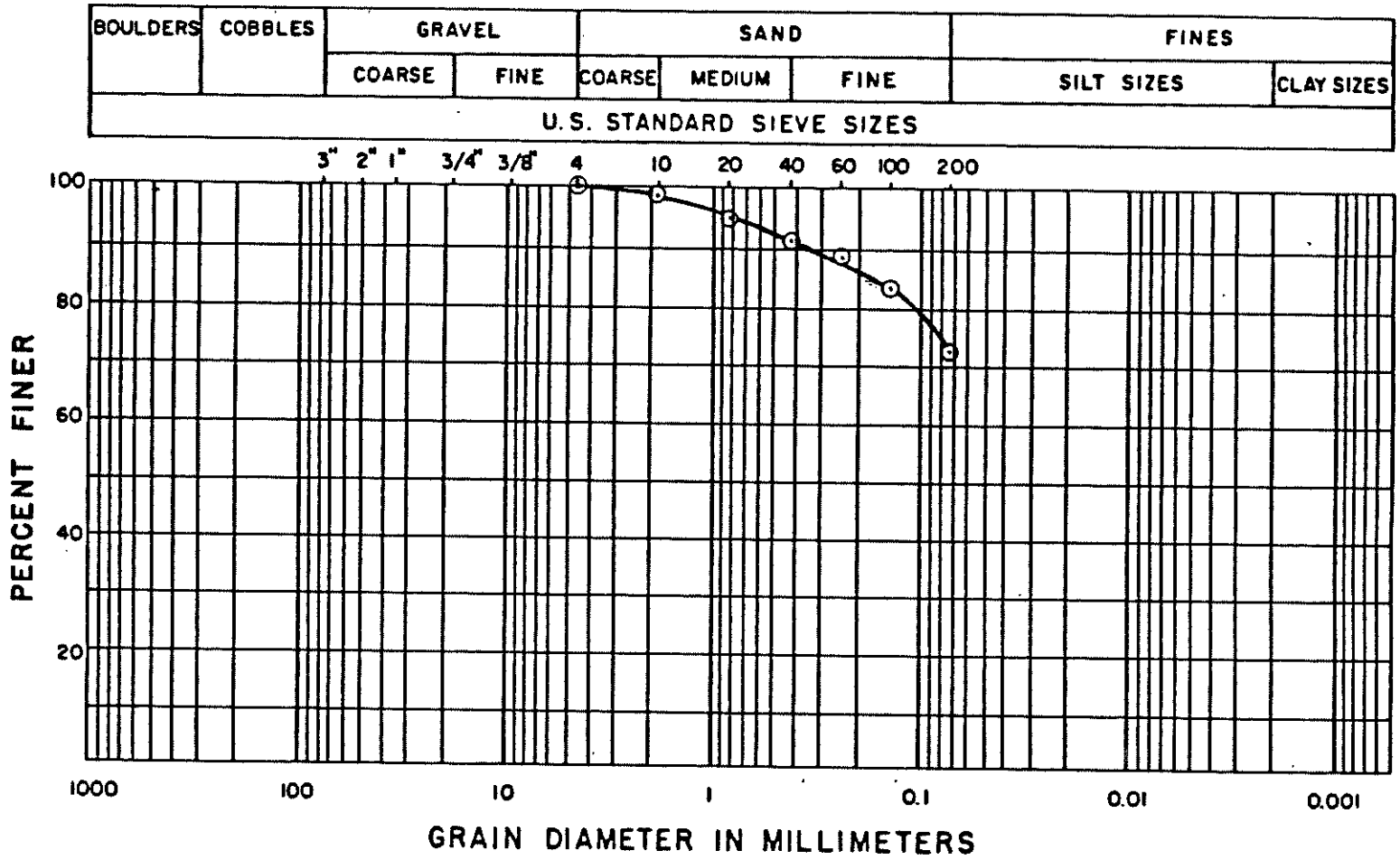
FIGURE NO.
PROJECT NO. P1160
DOCUMENT NO. N890677
PAGE NO.

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G-3 DEPTH 158-160'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_u) N/A

COEFFICIENT OF CURVATURE (C_c) N/A

UNIFIED SOIL CLASSIFICATION (USC) CL

LIQUID LIMIT (LL) 26

PLASTIC LIMIT (PL) 17

PLASTICITY INDEX (PI) 9

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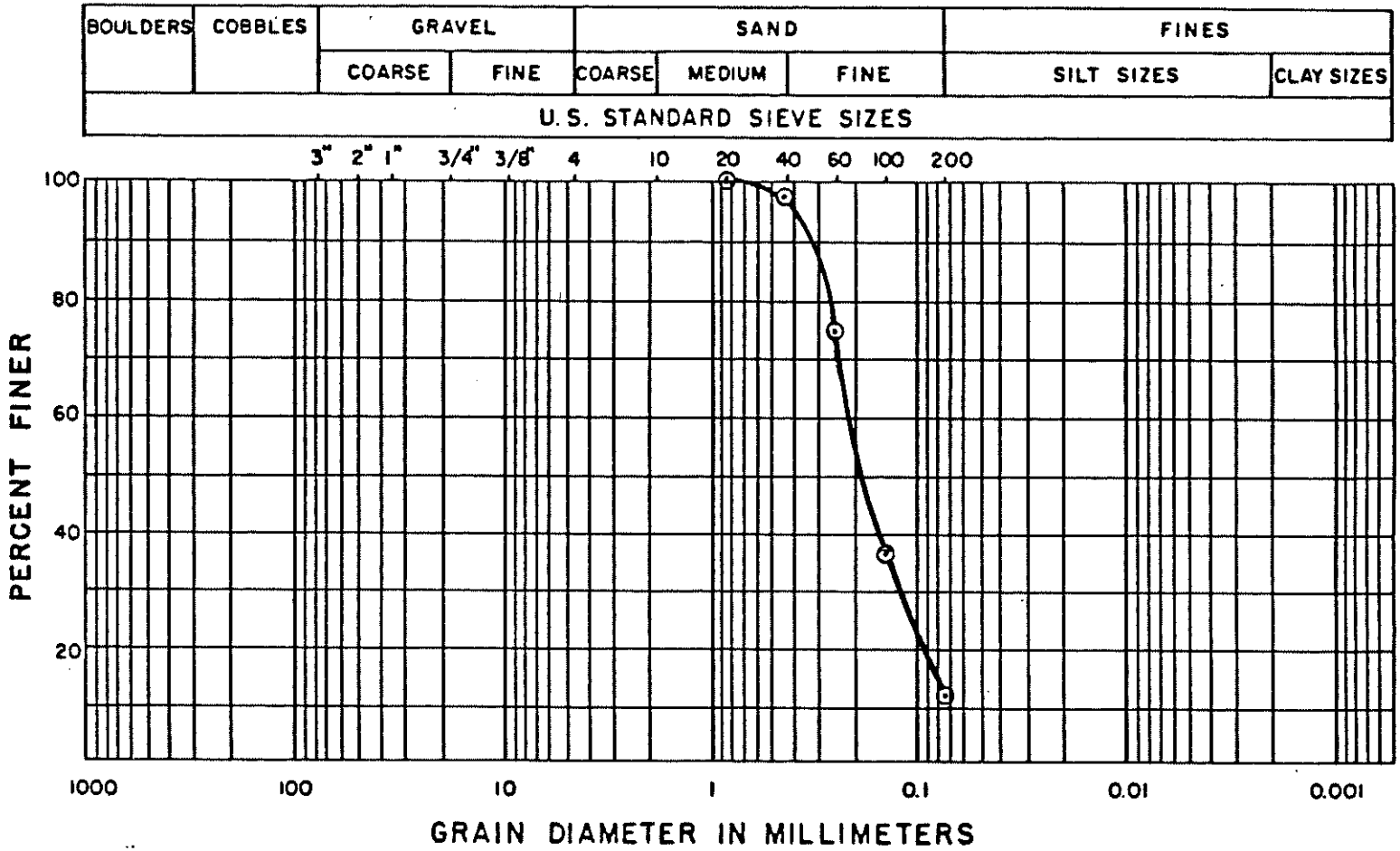
FIGURE NO.
PROJECT NO. P1160
DOCUMENT NO. N890677
PAGE NO.

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G7, S-9 DEPTH 38'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_u) N/A

COEFFICIENT OF CURVATURE (C_c) N/A

LIQUID LIMIT (LL) N/A

PLASTIC LIMIT (PL) N/A

PLASTICITY INDEX (PI) N/A

UNIFIED SOIL CLASSIFICATION (USC) SILTY, CLAYEY SAND, SC-SM

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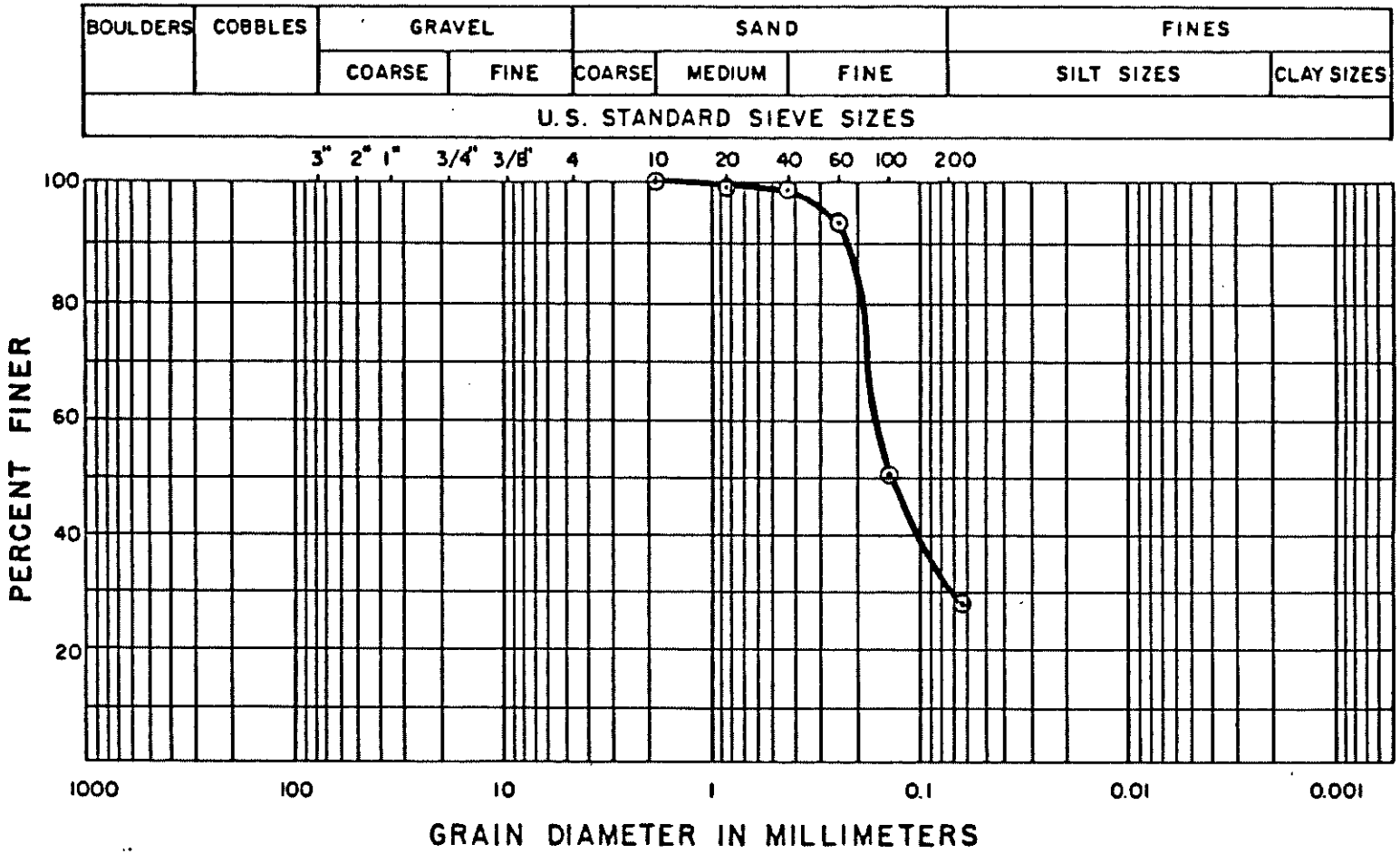
FIGURE NO.
PROJECT NO. P1160
DOCUMENT NO. N890677
PAGE NO.

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G8, S-2 DEPTH 3'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_u) N/A

COEFFICIENT OF CURVATURE (C_c) N/A

LIQUID LIMIT (LL) N/A

PLASTIC LIMIT (PL) N/A

PLASTICITY INDEX (PI) N/A

UNIFIED SOIL CLASSIFICATION (USC) SILTY SAND, SM

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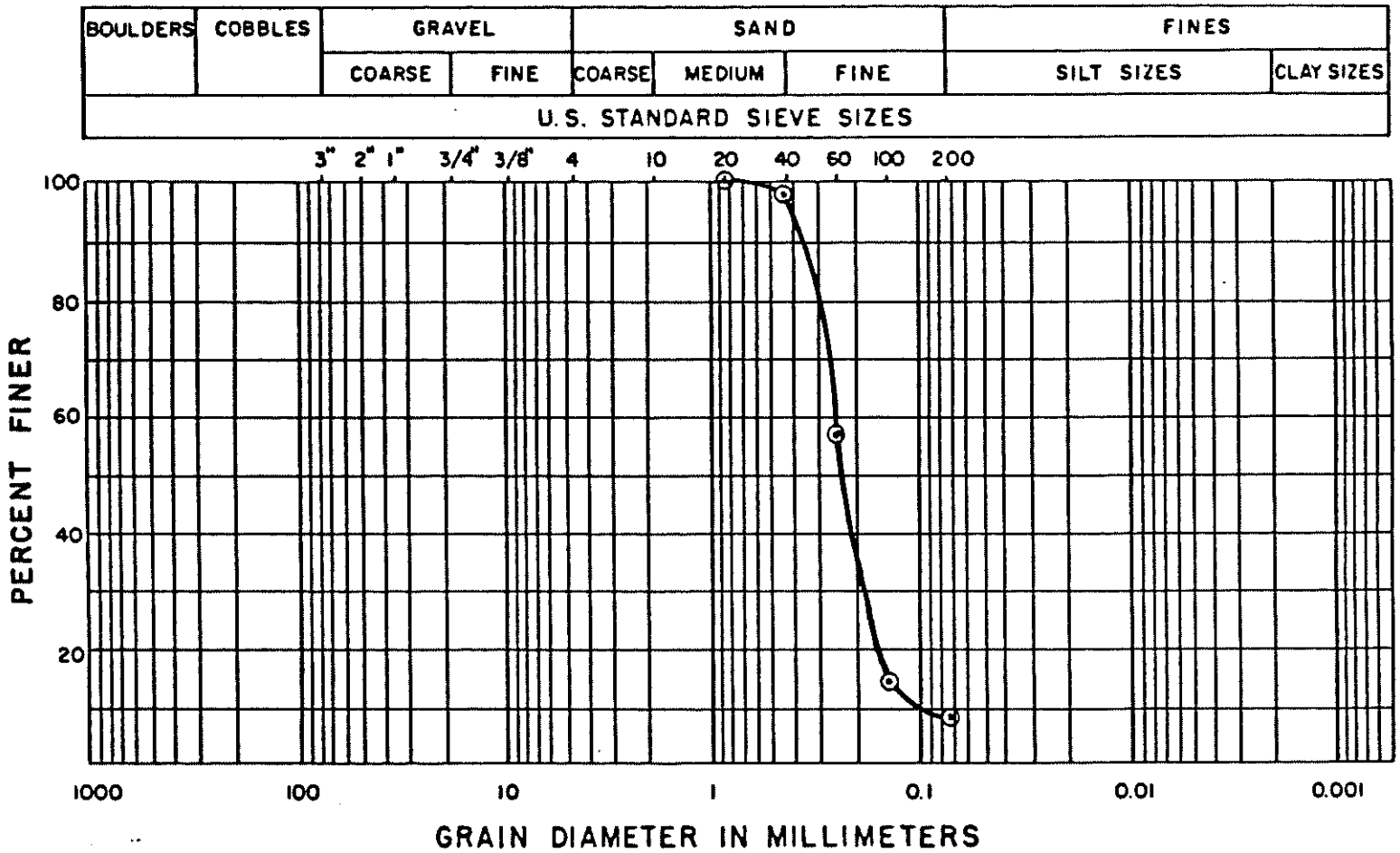
FIGURE NO.	
PROJECT NO.	P1160
DOCUMENT NO.	N890677
PAGE NO.	

SOIL CLASSIFICATION TEST RESULTS

SAMPLE NO. G8, S-4 DEPTH 13'

SOIL DESCRIPTION



COEFFICIENT OF UNIFORMITY (C_U) 2.2

COEFFICIENT OF CURVATURE (C_C) .9

LIQUID LIMIT (LL) N/A

PLASTIC LIMIT (PL) N/A

PLASTICITY INDEX (PI) N/A

UNIFIED SOIL CLASSIFICATION (USC) POORLY-GRADED SAND WITH SILT, SP-SM

GEOSERVICES INC.
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FIGURE NO.
PROJECT NO. P1160
DOCUMENT NO. N890677
PAGE NO.

APPENDIX F

SETTLEMENT ANALYSES

GEOSERVICES INC. CONSULTING ENGINEERS

COMPUTATION COVER SHEET

Client: G.B.B. Project: Millersville Landfill Project/Proposal # P1160 Task # 7.1

TITLE OF COMPUTATIONS Settlement Analyses

COMPUTATIONS BY:

Signature M. Evans — DATE 16 Oct 1989

Printed Name and Title Mark Evans, Project Engineer

ASSUMPTIONS AND PROCEDURES CHECKED BY: (Peer Reviewer)

Signature Beth Gross — DATE 16 Oct 1989

Printed Name and Title Beth Gross, Staff Engineer

COMPUTATIONS CHECKED BY:

Signature Beth Gross — DATE 16 Oct 1989

Printed Name and Title Beth Gross, Staff Engineer

COMPUTATIONS BACKCHECKED BY: (Originator)

Signature M. Evans — DATE 16 Oct 1989

Printed Name and Title Mark Evans, Project Engineer

APPROVED BY: (PM or Designate)

Signature Rudolph Bonaparte — DATE 16 Oct 1989

Printed Name and Title Rudolph Bonaparte, Principal

APPROVAL NOTES:

REVISIONS (Number and initial all revisions)

NO.	SHEET	DATE	BY	CHECKED BY	APPROVAL

88.09.20/N8800437

Written by: BAS Date: 89/10/12 (YY/MM/DD) Reviewed By: MOE Date: 89/10/16 (YY/MM/DD)

Client: GBB Project: Millersville Landfill Phase II Project/Proposal No.: 9160-6.1 Task No.:

Foundation Settlement

- Settlement of the foundation of the landfill may occur as waste is placed in the landfill due to (1) settlement of the sand from 0' to 30' below the base of the landfill (sand over 30' below the base of the landfill had standard penetration test N-values from 50 to 100+ and, therefore, should exhibit relatively negligible settlement) and (2) due to settlement of the two major clay units beneath the landfill. Settlements of the sand and clay are estimated below for Cell 8.

- Unit weight of waste and cover soils (daily and intermediate) is assumed to be 60pcf.

Written by: Evans Date: 89/10/12 (yy mm dd) Reviewed By: BAJ Date: 89/10/16 (yy mm dd)

Client: AAC/GEB Project: Millersville Project/Proposal No.: P1160-6.1 Task No.:

Subject (if Meeting: Location and Attendees): Foundation Settlement -- Applied Net Load Due to Landfill

Applied Net Load Due to Landfill

- For Cell 8: Triangular Load Distribution
  0 ft of waste @ edges to ≈ 140 ft of waste @ center.
- May be idealized to a uniform load distribution ranging from about 100 ft of waste to 140 ft of waste.
- 1.4 million cubic yards of soil will be excavated from Cell 8, over a 60 acre area.

$$\frac{1{,}400{,}000\ yd^3}{1} \times \frac{27\ ft^3}{yd^3} \times \frac{1}{60\ a \times 43{,}560\ ft^2/a}$$

= 15 feet average excavation

Say 10 ft of soil is removed at the center

- Net Load Applied = (100 to 140 ft) × 60 pcf − 10 × 125 pcf

= (6000 psf to 8400 psf) − 1250 psf

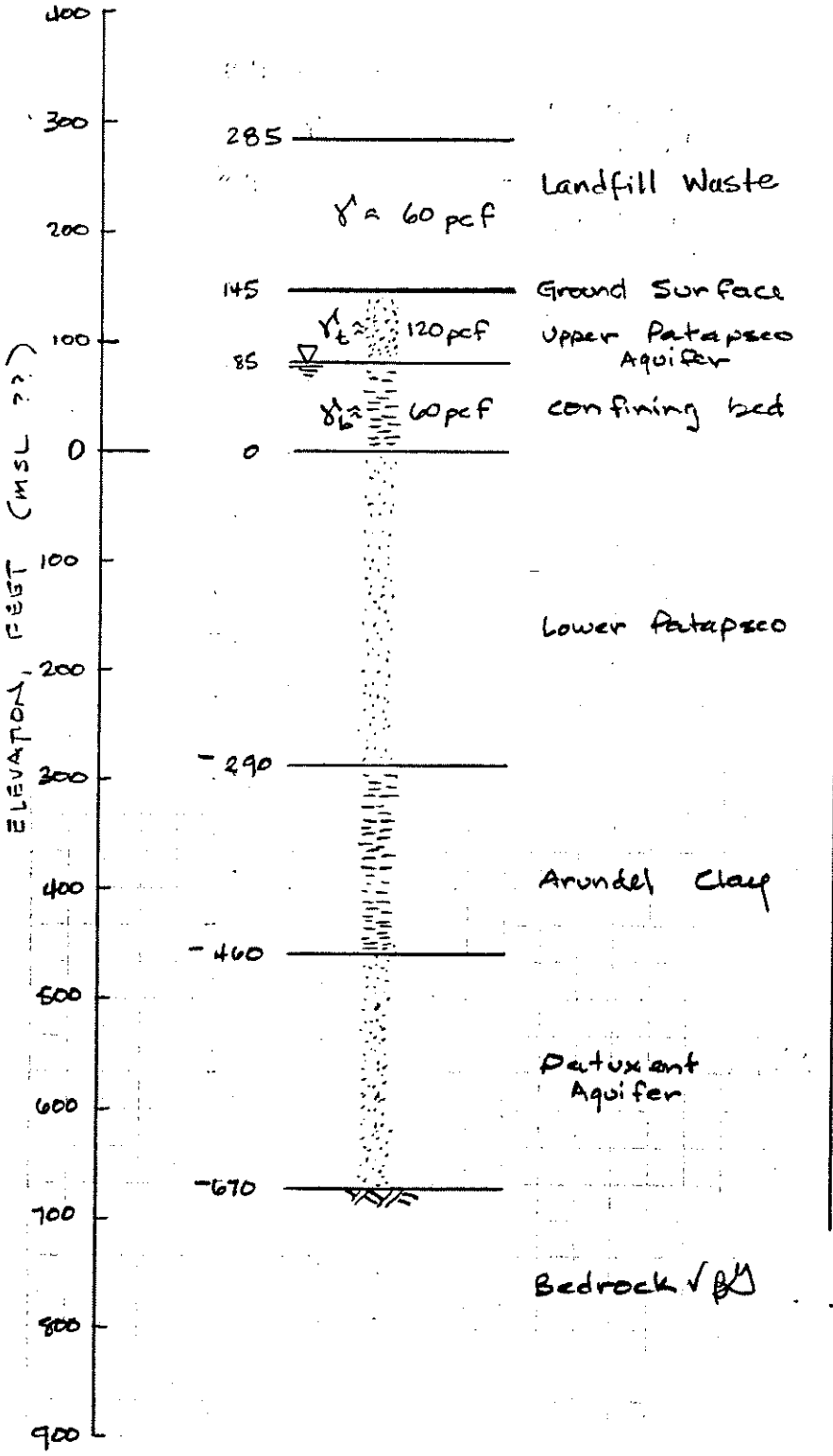
= 4750 psf to 7150 psf

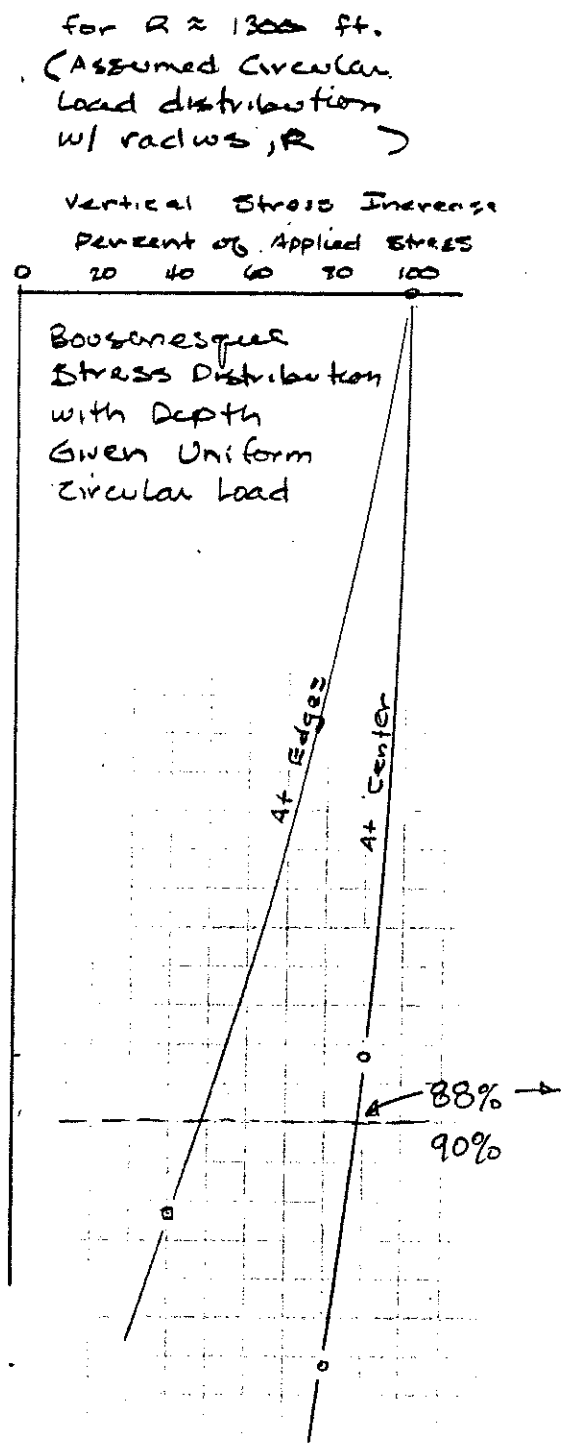
= 2.4 tsf to 3.6 tsf

Written by: Evans Date: 89/4/12 (yy mm dd) Reviewed By: BaM Date: 89/10/11 (yy mm dd)

Client: AAC Project: Millersville Project/Proposal No.: Task No.:

Subject: Generalized Soil Profile in Vicinity of Millersville Landfill (Use Nevemar profile, ≈ 1.5 miles from the site)
Profile from Mack and Achmad [1986]





Written by: B.A.b. Date: 89/10/11 (YY MM DD) Reviewed By: MDE Date: 89/10/12 (YY MM DD)

Client: G.B.B. Project: Millersville - Phase II Project/Proposal No.: P1160-7.1 Task No.:

Elastic settlement of soil layer from 0 to 30 ft below the base of Cell 8.

- Examine 2 cases: $q = \cancel{3}\ 2.4$ tsf, $\cancel{6}\ 3.6$ tsf MDE
- Estimate E from STP results for boring 68

Depth Below Ground Surface (ft)	N	N_c
4	22	33
9	21	25
14	23	24
19	18	17
24	28	25
29	25	20
34	44	34

- $N_c = 0.77 \log \frac{20}{\sigma'}, N$ (for $\sigma' \geq 0.25$ tsf)
  (σ' (tsf))

  from Peck Hansen and Thornburn [1974]

- Assume $\sigma' = 120$ pcf x depth

- Example: @ 4 ft, N = 22

$$N_c = 0.77 \log \frac{20}{4' \times 120\,pcf \times \frac{1\ ton}{2000\,lb}} (22)$$
$$= 33$$

- $N_{avg} = 25$

Written by: BAJ Date: 89/10/11 (YY/MM/DD) Reviewed By: MDE Date: 89/10/12 (YY/MM/DD)

Client: GBB Project: Millersville Project/Proposal No.: P1160-7.1 Task No.:

- Soil in 30' layer beneath base of landfill varies from sand to clayey sand

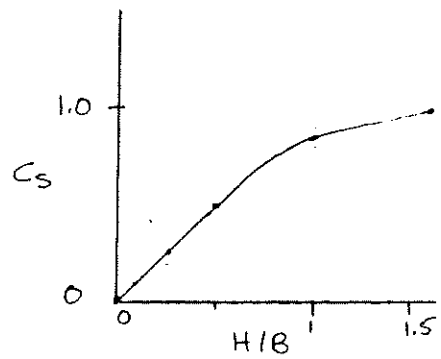
Use $E = \frac{10(N+15) + 6(N+5)}{2}$ (from Bowles [1977])

$= \frac{10(25+15) + 6(25+5)}{2}$

$= 290$ ksf

- Elastic settlement
  Perloff and Baron [1976]

- $\rho = C_s q B \left(\frac{1-\mu^2}{E}\right)$



- Assume B = width of loading = ~~2600'~~ (1200')
  L = length of loading = ~~3600'~~ (2400')
  H = thickness of soil = 30'

H/B = 0.01 L/B = 1.4 → 1.5 (2.0) C_s = 0.01

- $\rho = (0.01)(\cancel{6000}\ 4750\text{ psf})(\cancel{2600'}\ 1200')\left(\frac{1-0.5^2}{290{,}000}\right) = \cancel{0.40}$ ft 0.16

OR $\rho = \cancel{0.80}$ 0.22 ft for $q = \cancel{12000}$ 7150 psf

Written by: Evans Date: 4 / 12 / 89 (yy mm dd) Reviewed By: BOY Date: 89 / 10 / 11 (yy mm dd)

Client: ADC Project: Millersville -- Phase II Project/Proposal No.: P1160 Task No.: 6.1

Subject: Millersville Sanitary Landfill

Settlement of Clay Layers Below Base of Cell 8

- Assume compression Index $(C_c) = 0.20$ ✓ BY

  Lambe and Whitman [1969] $C_r = 0.02$ ✓ BY
- Assume uniform void ratio $e_o = 0.80$ ✓ BY

$$C_{\varepsilon c} = \frac{C_c}{1+e_o} = \frac{0.20}{1.8} = \boxed{0.11}$$ ✓

$$C_{\varepsilon r} = \frac{C_r}{1+e_o} = \frac{0.02}{1.8} = \boxed{0.01}$$ ✓

Lambe and Whitman [1969]

- Examine 2 cases: $q = 2.4$ tsf, 3.6 tsf
- Settlement calculations are performed on page 7.

BAS 89/10/16
P1160-6.1 Millersville Landfill - Phase II

7/8

COMPUTATION SHEET FOR CONSOLIDATION SETTLEMENT

CALCULATED BY BAS MDE

PROJECT Millersville Landfill

DATE 10/16/89

Clay Consolidation

(original calcs by MDE 10/12/89 revised 10/16/89)

Assumed OCR	Sublayer Depth (ft) Top	Bottom	Average	Sublayer Thickness H_o (ft)	Effective Overburden Pressure p_o (psf)	Preconsolidation Pressure p_p (psf)	Pressure Change Δp (psf)	Final Pressure p_f (psf)	Compression Ratio: Rebound Curve C_{er}	Compression Ratio: Virgin Curve C_{ec}	Vertical Strain ε_z^*	Change in Thickness $\varepsilon_z \cdot H_o = \Delta H$ (ft)
	Lower Confining Bed											
1	60	145	102	85	4.88	4.88	2.4 / 3.6	7.3 / 8.5	0.01	0.11	0.014 / 0.026	1.6 / 2.2
2	"	"	"	"	"	9.76	"	"	"	"	0.002 / 0.002	0.11 / 0.15
4	"	"	"	"	"	19.52	"	"	"	"	0.002 / 0.002	0.11 / 0.15
	Arundel Clay						90% Δp					
1	435	605	520	170	17.4	17.4	2.2 / 3.2	19.6 / 20.6	0.01	0.11	0.006 / 0.008	0.97 / 1.4
2	"	"	"	"	"	34.8	"	"	"	"	0.0005 / 0.0007	0.09 / 0.12
4	"	"	"	"	"	69.6	"	"	"	"	0.0005 / 0.0007	0.09 / 0.12

(a) $\varepsilon_z^* = C_{ec} \log \frac{p_f}{p_o}$ ..... ($p_o = p_p$ - virgin compression)

(b) $\varepsilon_z = C_{er} \log \frac{p_f}{p_o}$ ..... ($p_f < p_p$ - overconsolidation)

(c) $\varepsilon_z = C_{er} \log \frac{p_p}{p_o} + C_{ec} \log \frac{p_f}{p_p}$ ..... ($p_o < p_p < p_f$)

Total Settlement = $\Sigma \Delta H$ = 2.6 - 3.6 ft for OCR=1

0.2 - 0.3 ft for OCR = 2 to 4

TABULAR FORM FOR CALCULATING ULTIMATE SETTLEMENT

Written by: BAS Date: 89/10/16 (YY MM DD) Reviewed By: MDC Date: 89/10/16 (YY MM DD)

Client: GBB Project: Millersville Landfill Phase II Project/Proposal No.: Task No.:

REFERENCES

Bowles, J.E., "Foundation Analysis and Design", McGraw-Hill Book Company, Inc., New York, 1977, 750 p.

Lambe, T.W. and Whitman, R.V., "Soil Mechanics", John Wiley and Sons, Inc., New York, 1969, 553 p.

Mack, F.K. and Achmad, G., "Evaluation of the Water Supply Potential of Aquifers in the Potomac Group of Anne Arundel County, Maryland", Report of Investigation No. 46, USGS and Anne Arundel County Office of Planning and Zoning, 1986, 111 p.

Peck, R.B., Hanson, W.E., and Thornburn, T.H., "Foundation Engineering", John Wiley and Sons, Inc., New York, 1974, 310 p.

Perloff, W.H., and Baron, W., "Soil Mechanics, Principles and Applications", John Wiley and Sons, Inc., New York, 1976, 745 p.

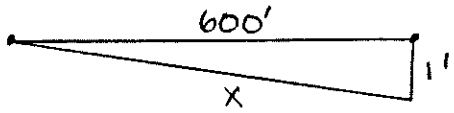
Written by: B.A.G. Date: 89/10/12 (YY/MM/DD) Reviewed By: MDE Date: 89/10/16 (YY/MM/DD)

Client: G.B.B. Project: Millersville - Phase II Project/Proposal No.: Task No.:

Lining System Strain Caused By Settlement of the Foundation Soils

- The estimated settlement of the foundation soils in the center of cells 8 and 9 is less than 1 ft. For preliminary calculations, it will conservatively be assumed that the maximum differential settlement between the edge and center of the landfill cells is 1 ft.

- The distance between the points of maximum and minimum settlement is assumed to be 600 ft. (from plan view of cells).

- 

$$X = \sqrt{600^2 + 1^2} = 600.0008 \text{ ft}$$

- $$\text{Strain} = \frac{600.0008 - 600}{600} = 0.0001\%$$

- This value of strain is very small and can be easily tolerated by the lining system.

APPENDIX G

LANDFILL STABILITY ANALYSES

GEOSERVICES INC. CONSULTING ENGINEERS

COMPUTATION COVER SHEET

Client: G.B.B. Project: Millersville Landfill Project/Proposal # P1160 Task # 7.1

TITLE OF COMPUTATIONS Stability Analyses

COMPUTATIONS BY:

Signature Beth Gross — DATE 16 Oct 1989

Printed Name and Title Beth Gross, Staff Engineer

ASSUMPTIONS AND PROCEDURES CHECKED BY: (Peer Reviewer)

Signature M. Evans — DATE 16 Oct 1989

Printed Name and Title Mark Evans, Project Engineer

COMPUTATIONS CHECKED BY:

Signature M. Evans — DATE 16 Oct 1989

Printed Name and Title Mark Evans, Project Engineer

COMPUTATIONS BACKCHECKED BY: (Originator)

Signature — DATE 16 Oct 1989

Printed Name and Title Beth Gross, Staff Engineer

APPROVED BY: (PM or Designate)

Signature Rudolph Bonaparte — DATE 16 Oct 1989

Printed Name and Title Rudolph Bonaparte, Principal

APPROVAL NOTES:

REVISIONS (Number and initial all revisions)

NO.	SHEET	DATE	BY	CHECKED BY	APPROVAL

88.09.20/N8800437

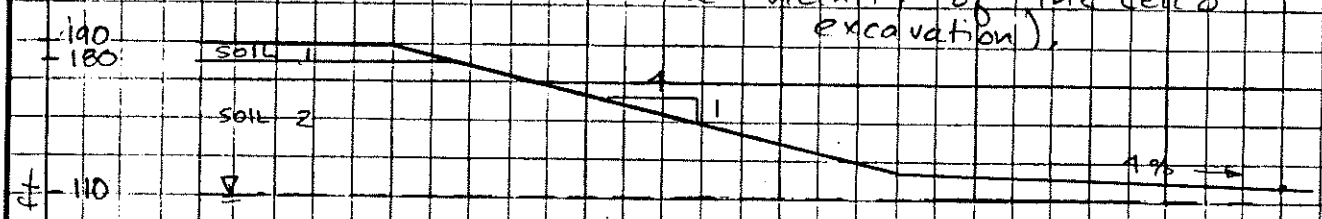
Written by: BAG Date: 89/10/10 (yy mm dd) Reviewed By: MDE Date: 89/10/23 (yy mm dd)

Client: G.B.B. Project: Millersville - Phase II Project/Proposal No.: P1160-7.1 Task No.:

Subject (if Meeting: Location and Attendees): Stability of Excavation

- Evaluate stability of Cell 8 excavation before waste is placed.

- Idealized soil profile of Cell 8 in vicinity of excavation. Based on the results of boring program (especially borings G7 and G9, which are the in the vicinity of the Cell 8 excavation).



SOIL	DESCRIPTION	EFFECTIVE STRESS FRICTION ANGLE	MOIST UNIT WEIGHT
SOIL 1	LOOSE POORLY GRADED SAND	26° (c'=0) [Lambe and Whitman, 1969]	115 pcf
SOIL 2	STIFF CLAYEY SILT PI determined from laboratory tests performed on samples from borings G7 and G9 = 4.0, 7.3, 6.0. PI avg = 6	26° (c'=0) [Lambe and Whitman, 1969]	120 pcf

- For stability analyses, model as one soil type with $\phi = 26°$ and $\gamma = 120$ pcf. The selected soil friction angle is at the low end of values given for the two soils. Therefore, the friction angle is believed to be conservative.

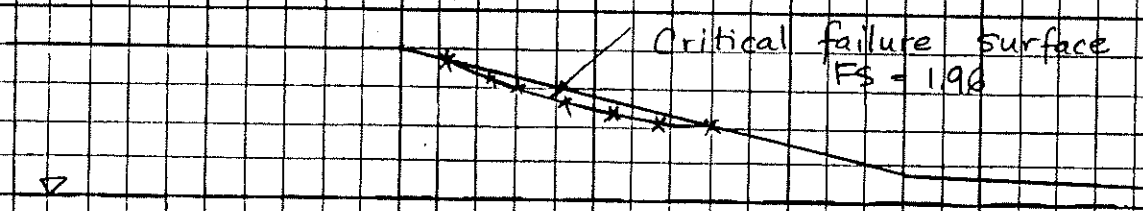
Written by: BAG Date: 89/10/10 (yy mm dd) Reviewed By: MDE Date: 89/10/23 (yy mm dd)

Client: GBB Project: Millersville - Phase II Project/Proposal No.: P1160-7.1 Task No.:

Subject (if Meeting: Location and Attendees): Stability of Excavation

- Evaluate stability using the computer program PCSTABL5 (from Purdue University) with the modified Bishop method of slices (for circular failure surfaces).

- Critical failure surface



- Supporting computer output is attached.

Written by: MDE Date: 89 / 10 / 23 (yy mm dd) Reviewed By: _____ Date: __/__/__ (yy mm dd)

Client: _____ Project: _____ Project/Proposal No.: _____ Task No.: _____

Subject: CHECK SLOPE STABILITY USING CHARTS.

HT = 65 ft

$\phi' = 26°$ $c' = 0$

$\gamma = 120$ pcf

slope = 14° (4H:1V)

[Duncan and Buchignani, Engineering Manual for Slope Stability Studies, Univ. of Calif, Dept of C.E., Berkeley Calif, 1975.]

CASE 1 $\phi = 26°$, $c' = 0$ CASE 2 $\phi' = 26°$, $c' = 200$ psf

1. circle center

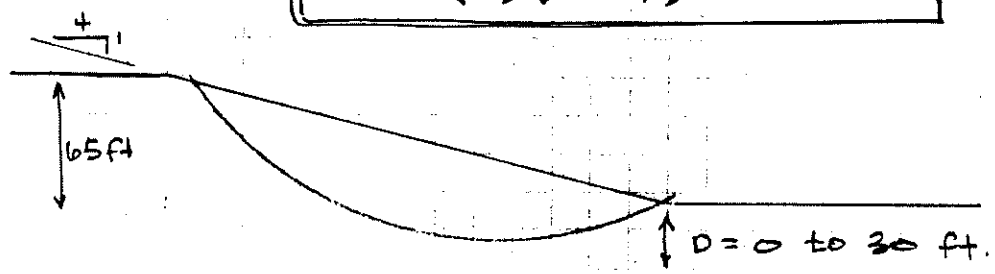
$\beta = 14°$ $b = \cot\beta = 4$

for $c = 0$; $\lambda_{c\phi} = \infty$, for $c = 200$ $\lambda_{c\phi} = 19$

$x_o = 1.4$ $y_o = 2.6$ center of critical circle

$N_{CF} = 100$ $F = N_{CF}\, c/p_d = 100\ 200/7800 = 2.6$ for $c = 200$

$F = 1(4)(0.487) = 1.95$ ✓ for $c = 0$



$d = \frac{D}{H} = 0$ to 0.5

$$p_d = \frac{\gamma H + q - \gamma_w H_w}{M_q M_w M_t} = \gamma H = 120(65) = 7800 \text{ psf}$$

** PCSTABL5 **

by
Purdue University

--Slope Stability Analysis--
Simplified Janbu, Simplified Bishop
or Spencer's Method of Slices

Run Date:	OCT. 12, 1989
Time of Run:	1:30 p.m.
Run By:	MH
Input Data Filename:	AACMEXC.DAT
Output Filename:	AACMEXC.RES

PROBLEM DESCRIPTION Ann Arundell County: Millersville LF Exc
. Slope

BOUNDARY COORDINATES

3 Top Boundaries
3 Total Boundaries

Boundary No.	X-Left (ft)	Y-Left (ft)	X-Right (ft)	Y-Right (ft)	Soil Type Below Bnd
1	.00	117.00	200.00	125.00	1
2	200.00	125.00	460.00	190.00	1
3	460.00	190.00	600.00	190.00	1

ISOTROPIC SOIL PARAMETERS

1 Type(s) of Soil

Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
1	120.0	130.0	.0	26.0	.00	.0	1

1 PIEZOMETRIC SURFACE(S) HAVE BEEN SPECIFIED

Unit Weight of Water = 62.40

Piezometric Surface No. 1 Specified by 2 Coordinate Points

Point No.	X-Water (ft)	Y-Water (ft)
1	.00	110.00
2	600.00	110.00

A Critical Failure Surface Searching Method, Using A Random Technique For Generating Circular Surfaces, Has Been Specified.

100 Trial Surfaces Have Been Generated.

10 Surfaces Initiate From Each Of 10 Points Equally Spaced Along The Ground Surface Between X = 100.00 ft.
and X = 300.00 ft.

Each Surface Terminates Between X = 410.00 ft.
and X = 510.00 ft.

Unless Further Limitations Were Imposed, The Minimum Elevation At Which A Surface Extends Is Y = .00 ft.

25.00 ft. Line Segments Define Each Trial Failure Surface.

Following Are Displayed The Ten Most Critical Of The Trial Failure Surfaces Examined. They Are Ordered - Most Critical First.

* * Safety Factors Are Calculated By The Modified Bishop Method * *

Failure Surface Specified By 7 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	300.00	150.00
2	324.72	153.71
3	349.27	158.43
4	373.61	164.15
5	397.69	170.86
6	421.48	178.55
7	436.75	184.19

Circle Center At X = 221.9 ; Y = 755.2 and Radius, 610.2

*** 1.963 ***

Failure Surface Specified By 8 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	255.56	138.89
2	280.38	141.85
3	305.04	145.95
4	329.49	151.18
5	353.67	157.53
6	377.53	164.98
7	401.03	173.51
8	411.54	177.89

Circle Center At X = 203.4 ; Y = 680.9 and Radius, 544.5

*** 1.970 ***

Failure Surface Specified By 10 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	233.33	133.33
2	258.33	133.47
3	283.27	135.27
4	308.03	138.73
5	332.50	143.83
6	356.58	150.54
7	380.16	158.85
8	403.14	168.71
9	425.40	180.07
10	429.08	182.27

Circle Center At X = 243.8 ; Y = 508.3 and Radius, 375.1

*** 2.014 ***

Failure Surface Specified By 11 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	233.33	133.33
2	258.33	133.01
3	283.31	134.13
4	308.18	136.68
5	332.86	140.67
6	357.26	146.08
7	381.32	152.89
8	404.94	161.07
9	428.05	170.61
10	450.57	181.46
11	465.96	190.00

Circle Center At X = 251.5 ; Y = 565.8 and Radius, 432.9

*** 2.027 ***

Failure Surface Specified By 10 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	233.33	133.33
2	258.33	132.76
3	283.29	134.05
4	308.09	137.20
5	332.59	142.20
6	356.64	149.01
7	380.12	157.60
8	402.89	167.92
9	424.83	179.90
10	428.11	182.03

Circle Center At X = 253.5 ; Y = 467.3 and Radius, 334.6

*** 2.031 ***

Failure Surface Specified By 9 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	277.78	144.44
2	302.70	142.47
3	327.69	143.14
4	352.47	146.46
5	376.76	152.38
6	400.29	160.84
7	422.78	171.73
8	444.00	184.95
9	445.98	186.49

Circle Center At X = 308.8 ; Y = 378.3 and Radius, 235.9

*** 2.075 ***

Failure Surface Specified By 9 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	300.00	150.00
2	324.94	151.68
3	349.78	154.51
4	374.46	158.49
5	398.94	163.61
6	423.14	169.85
7	447.04	177.21
8	470.57	185.66
9	481.09	190.00

Circle Center At X = 276.1 ; Y = 690.0 and Radius, 540.5

*** 2.110 ***

Failure Surface Specified By 9 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	255.56	138.89
2	280.28	135.22
3	305.27	134.44
4	330.18	136.57
5	354.68	141.58
6	378.42	149.40
7	401.10	159.92
8	422.40	173.00
9	436.52	184.13

Circle Center At X = 299.4 ; Y = 349.3 and Radius, 214.9

*** 2.131 ***

Failure Surface Specified By 10 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	233.33	133.33
2	258.03	129.42
3	283.00	128.29
4	307.94	129.96
5	332.54	134.41
6	356.49	141.58
7	379.49	151.39
8	401.25	163.70
9	421.49	178.38
10	424.50	181.13

Circle Center At X = 280.6 ; Y = 351.5 and Radius, 223.2

*** 2.136 ***

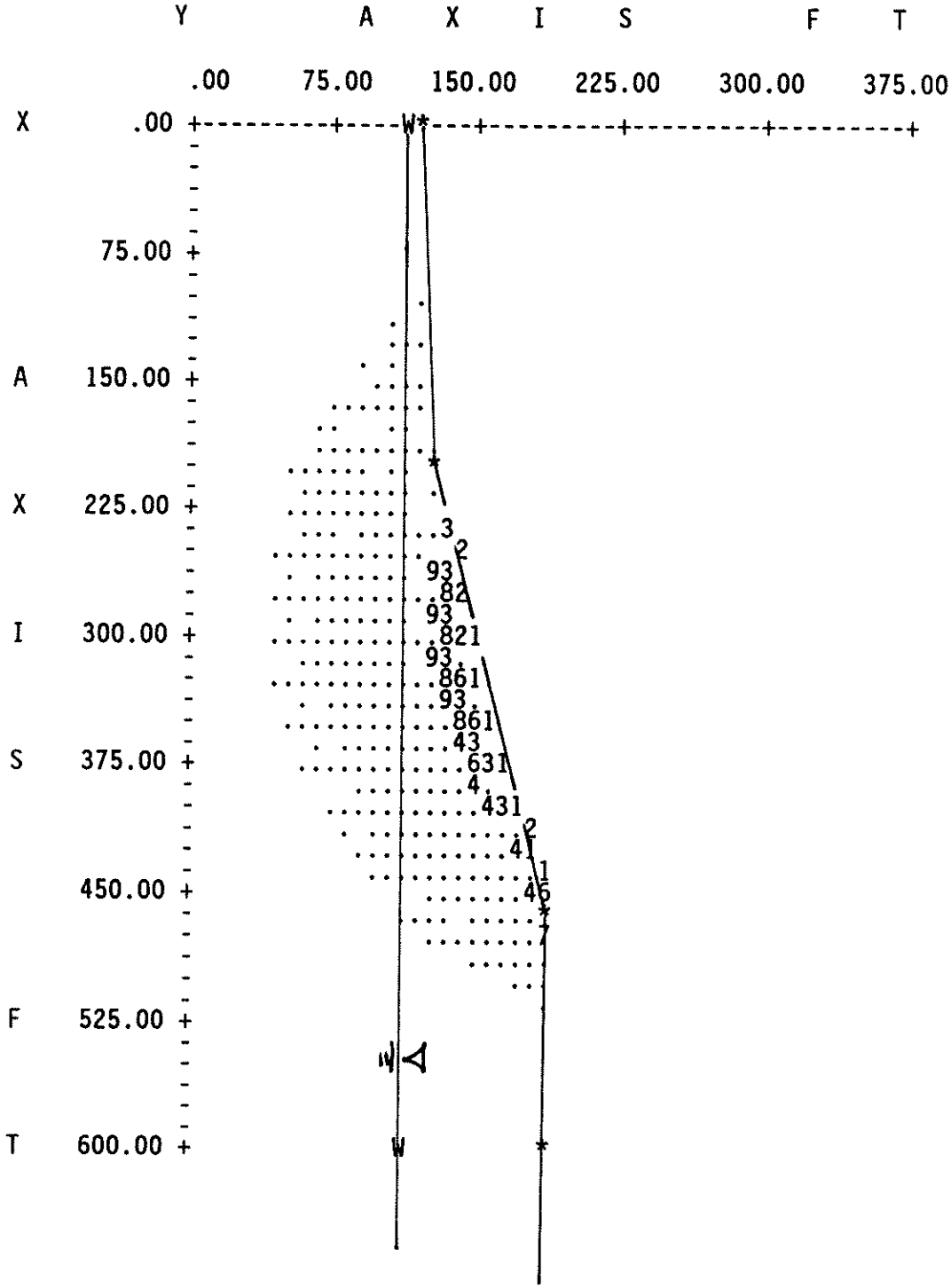
Failure Surface Specified By 7 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	300.00	150.00
2	324.80	146.86
3	349.76	148.27
4	374.05	154.20
5	396.85	164.45
6	417.42	178.67
7	418.33	179.58

Circle Center At X = 329.6 ; Y = 283.8 and Radius, 137.0

*** 2.144 ***

GeoServices Inc.
89.10.16/N890677



MDE
10/24/89

Written by: B.A.G. Date: 89/10/9 (yy mm dd) Reviewed By: MDE Date: 89/10/23 (yy mm dd)

Client: G.B.B. Project: Millersville - Phase II Project/Proposal No.: P1160-7.1 Task No.:

Subject (if Meeting: Location and Attendees): Lining System Stability -- (ON 4H:1V EXCAVATED SLOPE) Before Waste Placement

- Lining System Cross Section (top to bottom):

  2 ft thick protective cover soil layer;
  geotextile;
  high density polyethylene (HDPE) geonet;
  60 mil HDPE geomembrane;
  HDPE geonet; and
  60 mil HDPE geomembrane.

  The bottom HDPE geomembrane will be placed over a 1 ft thick compacted subbase layer.

- Lining system Interface Strength Properties

Interface	Friction Angle, δ	Adhesion, a
- Protective Cover Soil / Non-woven Geotextile [Martin et. al, 1984]	26°	0
- Non-woven Geotextile / HDPE Geonet [Williams and Luna, 1987]	20°	0
- HDPE Geonet / HDPE Geomembrane [Williams and Houlihan, 1986]	11° (to 15°)	20 psf
- HDPE Geomembrane / Compacted Subbase [Martin et al., 1984; Koerner et al, 1986]	16°	0

Written by: B.A.G. Date: 89/10/9 (yy mm dd) Reviewed By: MDE Date: 89/10/24 (yy mm dd)

Client: G.B.B. Project: Millersville - Phase II Project/Proposal No.: 1160-7.1 Task No.:

Subject (if Meeting: Location and Attendees): Lining System Stability -- Before Waste Placement

$$\text{Factor of Safety} = \frac{\text{Resisting Force}}{\text{Driving Force}}$$

$$\text{Factor of Safety} = \frac{\dfrac{aH}{\sin\beta} + \dfrac{cT\cos\phi}{\sin\beta\cos(\phi+\beta)} + \dfrac{\gamma T^2 \sin\phi}{\sin 2\beta \cos(\phi+\beta)} + \dfrac{\gamma T^2 \tan\delta}{2\sin\beta}\left(\dfrac{2H\cos\beta}{T} - 1\right)}{\gamma T\left(H - \dfrac{T}{2\cos\beta}\right)}$$

γ = soil unit weight
c = soil cohesion
ϕ = soil friction angle
T = thickness of soil layer

a = interface adhesion
δ = interface friction angle

H = height of slope
β = slope angle

Assume: $\gamma = 120$ pcf, $c = 200$ psf, $\phi = 30°$, $T = 1.5$ ft, $H = 65$ ft, $\beta = 14°$

Written by: B.A.G. Date: 89/10/9 (yy mm dd) Reviewed By: MDE Date: 89/10/24 (yy mm dd)

Client: G.B.B. Project: Millersville Phase II Project/Proposal No.: P1160-7.1 Task No.:

Subject (if Meeting: Location and Attendees): Lining System Stability -- Before Waste Placement

Interface	Factor of Safety
Protective Cover Soil / Nonwoven Geotextile	2.12
Nonwoven Geotextile / HDPE Geonet	1.62
HDPE Geonet / HDPE Geomembrane	1.41
HDPE Geomembrane / Compacted Subbase	1.31

Example: Protective Cover Soil / Nonwoven Geotextile Interface

$$\text{Factor of Safety} = \frac{\dfrac{cT\cos\phi}{\sin\beta\cos(\phi+\beta)} + \dfrac{\gamma T^2 \sin\phi}{\sin 2\beta \cos(\phi+\beta)} + \dfrac{\gamma T^2 \tan\delta}{2\sin\beta}\left(\dfrac{2H\cos\beta}{T} - 1\right)}{\gamma T\left(H - \dfrac{T}{2\cos\beta}\right)}$$

$$= \frac{\dfrac{(200)(1.5)\cos 30^\circ}{\sin 14^\circ \cos(30+14)} + \dfrac{(120)(1.5)^2 \sin 30^\circ}{\sin 2(14)\cos(30+14)} + \dfrac{(120)(1.5)^2 \tan 26^\circ}{2\sin 14^\circ}\left(\dfrac{2(65)\cos 14}{1.5} - 1\right)}{(120)(1.5)\left(65 - \dfrac{1.5}{2\cos(14)}\right)}$$

$$= \frac{24508}{11561} = 2.12$$

Written by: BAG Date: 89 / 10 / 9 (yy mm dd) Reviewed By: MDE Date: 89 / 10 / 24 (yy mm dd)

Client: GBB Project: Millersville Phase II Project/Proposal No.: P1160-7.1 Task No.:

Subject (if Meeting: Location and Attendees): Lining System Stability -- Before Waste Placement

REFERENCES

Koerner, R.M., Martin, J.P., and Koerner, G.R., "Shear Strength Parameters Between Geomembranes and Cohesive Soils", Geotextiles and Geomembranes, Elsevier Applied Science Publishers Ltd, Vol. 4, No. 1, 1986, pp. 21-30.

Martin, J.P., Koerner, R.M., and Whitty, S.E., "Experimental Friction Evaluation of Slippage Between Geomembranes, Geotextiles, and Soils", Proceedings, International Conference on Geomembranes, Denver, CO, 1984, pp. 191-196.

Williams, N.D. and Houlihan, M.F., "Evaluation of Interface Friction Properties Between Geosynthetics and Soils", Proceedings, Geosynthetics '87, New Orleans, LA, Feb 1987, pp. 616-627.

Williams, N.D. and Luna, J., "Selection of Geotextiles for Use With Synthetic Drainage Products", Geotextiles and Geomembranes, Elsevier Applied Science Publishers Ltd., Vol. 5, No. 1, 1987, pp. 45-61.

Written by: Evans Date: 89 / 10 / 24 (yy mm dd) Reviewed By: _____ Date: ___/___/___ (yy mm dd)

Client: GBB Project: Millersville Project/Proposal No.: _____ Task No.: _____

Subject: Check Lining System Stability

[Giroud and Beech, "Stability of Soil Layers on Geosynthetic Lining Systems", Geosynthetics 1989, San Diego, 1989]

Consider HDPE Geonet / Geomembrane $\phi_i = 11°$ to $15°$
[Williams & Houlihan, 1986]

$$H_{max} = \frac{T_c}{2\cos\beta}\left[1 + \frac{\sin\phi_c \cos\phi_i}{\cos(\beta+\phi_c)\sin(\beta-\phi_i)}\right]$$

$$= \frac{\overset{1.5}{\cancel{2}}\text{ ft}}{2\cos 14}\left[1 + \frac{\sin 26 \cos\phi_i}{\cos 40 \sin(14-\phi_i)}\right]$$

$= \overset{9}{\cancel{12}}$ feet for $\phi_i = 11°$ (i.e.: $(12 \times 4) = \overset{36}{\cancel{48}}$ ft upslope)

= infinite for $\phi_i = 15°$

$= \overset{25}{\cancel{34}}$ feet for $\phi_i = 13°$ (i.e.: $\overset{100}{\cancel{136}}$ ft. up slope

∴ cover soil may be placed in $\overset{35}{\cancel{50}}$ ft to $\overset{100}{\cancel{140}}$ increments up slope ahead of waste placement.

Written by: B.A.G. Date: 89/10/11 (YY MM DD) Reviewed By: MDE Date: 89/10/24 (YY MM DD)

Client: G.B.B. Project: Millersville -- Phase II Project/Proposal No.: Task No.:

- Cover System Cross Section (top to bottom):

  2 ft thick top soil and cover soil layer,
  geotextile;
  HDPE geonet;
  geotextile; and
  textured HDPE geomembrane.

  The HDPE geomembrane will be placed over a 1 ft thick intermediate soil cover layer.

- Cover System Interface Strength Properties:

Interface	Effective-Stress Friction Angle	Effective-Stress Cohesion
-Cover Soil / Nonwoven Geotextile [Martin et al., 1984]	26°	0
- Nonwoven Geotextile/Geonet [Williams and Luna, 1987]	20°	0
- Nonwoven Geotextile / Textured HDPE Geomembrane (GeoServices project files)	20°	0
- Textured HDPE Geomembrane / Intermediate Soil Cover (GeoServices project files)	>20°	0

NOTE: References are listed on page 4 of lining system stability

Written by: B.A.G. Date: 89/10/11 (YY/MM/DD) Reviewed By: MDE Date: 89/10/24 (YY/MM/DD)

Client: G.B.B. Project: Millersville -- Phase II Project/Proposal No.: Task No.:

$$\text{Factor of Safety} = \frac{\frac{aH}{\sin\beta} + \frac{cT\cos\phi}{\sin\beta\cos(\phi+\beta)} \quad \frac{\gamma T^2 \sin\phi}{\sin 2\beta \cos(\phi+\beta)} + \frac{\gamma T^2 \tan\delta}{2\sin\beta}\left(\frac{2H\cos\beta}{T} - 1\right)}{\gamma T\left(H - \frac{T}{2\cos\beta}\right)}$$

where: all variables are as defined on page 2 of Lining System Stability -- Before Waste Placement calculations

Assume: $\gamma = 120$ pcf
$c = 0$ (long-term drained conditions)
$\phi' = 30°$
$T = 2$ ft
$H = 25$ ft
$\beta = 15°$ (3.7H:1V)

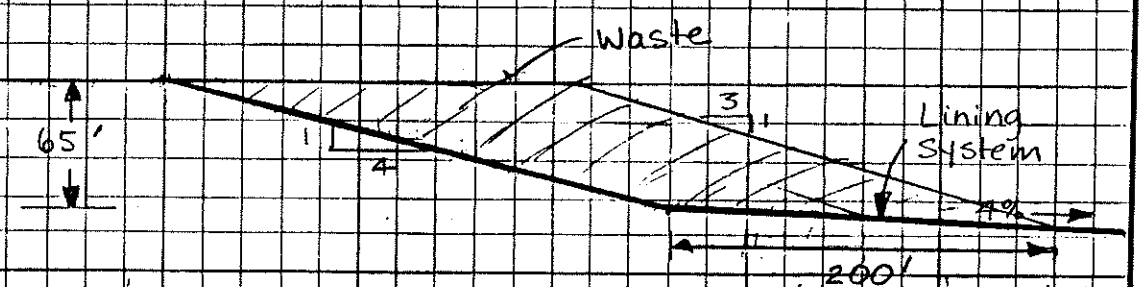
Interface	Factor of Safety
Cover Soil / Nonwoven Geotextile	1.81
Nonwoven Geotextile / Geonet	1.48
Nonwoven Geotextile / Textured HDPE Geomembrane	1.48
Textured HDPE Geomembrane / Intermediate Soil Cover	1.48

Written by: B.A.G. Date: 89/10/10 (yy mm dd) Reviewed By: MDE Date: 89/10/24 (yy mm dd)

Client: G.B.B. Project: Millersville - Phase II Project/Proposal No.: P1160-7.1 Task No.:

Subject (if Meeting: Location and Attendees): Lining System Stability - After Waste Placement

- Evaluate lining system stability after waste placement for the following preliminary landfill geometry. (This geometry may be revised as part of the final landfill design.)



Scale: 1" = 100'

(waste assumed to be placed across base of subcell)

- Assumed waste properties:

$\phi'_w = 25°$ $c'_w = 0$ (conservative assumption)

$\gamma_w = 60$ pcf

(based on a review of the literature and GeoServices project files, see discussion in text)

- Evaluate stability along the two critical interfaces within the lining system: geomembrane/subbase and geonet/geomembrane.

Written by: B.A.D. Date: 89/10/10 (yy mm dd) Reviewed By: MDE Date: 89/10/24 (yy mm dd)

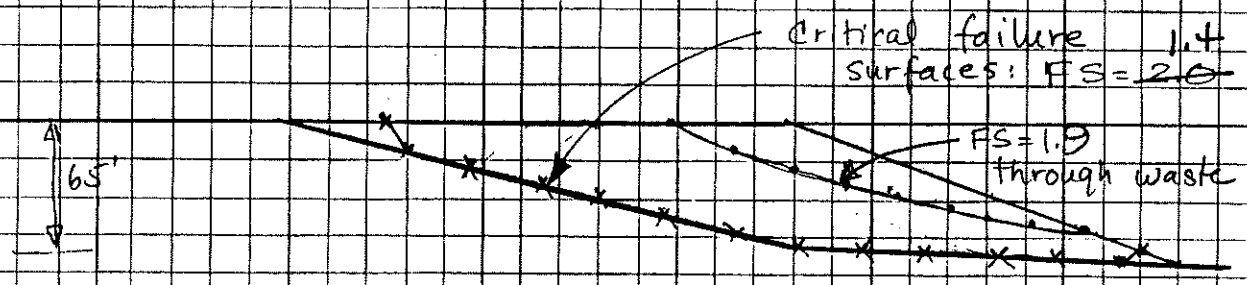
Client: G.B.B. Project: Millersville-Phase II Project/Proposal No.: P1160-7.1 Task No.:

Subject (if Meeting: Location and Attendees): Lining System Stability - After Waste Placement

- Evaluate stability using the computer program PCSTABL5 (from Purdue University) with the simplified Janbu method of slices for a wedge-shaped failure surface along a lining system interface and with the modified Bishop method of slices for a circular failure surface through the waste.
-

Interface	Factor of Safety
HDPE Geomembrane / Compacted Subbase	~~2.05~~ 1.6
HDPE Geonet / HDPE Geomembrane	~~2.00~~ 1.4
Waste Only	1.88 ✓

- Critical failure surface:



- Supporting computer output is attached.

** PCSTABL5 **

by
Purdue University

--Slope Stability Analysis--
Simplified Janbu, Simplified Bishop
or Spencer's Method of Slices

Run Date:	24 OCT 1989
Time of Run:	1:50 p.m.
Run By:	MH
Input Data Filename:	AACMW4.DAT
Output Filename:	AACMW4.RES

PROBLEM DESCRIPTION ANN ARUNDEL COUNTY: MILLERSVILLE LF, WASTE ON GEOSYN.

BOUNDARY COORDINATES

4 Top Boundaries
6 Total Boundaries

Boundary No.	X-Left (ft)	Y-Left (ft)	X-Right (ft)	Y-Right (ft)	Soil Type Below Bnd
1	.00	117.00	100.00	121.00	1
2	100.00	121.00	376.00	190.00	2
3	376.00	190.00	560.00	190.00	2
4	560.00	190.00	700.00	190.00	1
5	100.00	121.00	300.00	125.00	1
6	300.00	125.00	560.00	190.00	1

ISOTROPIC SOIL PARAMETERS

2 Type(s) of Soil

Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
1	1.0	1.0	.0	16.0	.00	.0	1
2	60.0	60.0	.0	25.0	.00	.0	1

1 PIEZOMETRIC SURFACE(S) HAVE BEEN SPECIFIED

Unit Weight of Water = 62.40

Piezometric Surface No. 1 Specified by 2 Coordinate Points

Point No.	X-Water (ft)	Y-Water (ft)
1	.00	110.00
2	600.00	110.00

A Critical Failure Surface Searching Method, Using A Random Technique For Generating Sliding Block Surfaces, Has Been Specified.

The Active And Passive Portions Of The Sliding Surfaces Are Generated According To The Rankine Theory.

50 Trial Surfaces Have Been Generated.

3 Boxes Specified For Generation Of Central Block Base

Length Of Line Segments For Active And Passive Portions Of Sliding Block Is 20.0

Box No.	X-Left (ft)	Y-Left (ft)	X-Right (ft)	Y-Right (ft)	Height (ft)
1	100.00	120.00	150.00	120.00	.50
2	300.00	124.00	300.00	124.00	.50
3	400.00	174.00	450.00	188.00	.50

Following Are Displayed The Ten Most Critical Of The Trial Failure Surfaces Examined. They Are Ordered - Most Critical First.

* * Safety Factors Are Calculated By The Modified Janbu Method * *

Failure Surface Specified By 6 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	116.97	125.24
2	122.91	121.46
3	124.94	119.93
4	300.00	123.80
5	400.47	173.93
6	410.71	190.00

*** 1.622 ***

Failure Surface Specified By 6 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	108.10	123.02
2	110.93	121.22
3	112.51	120.03
4	300.00	123.98
5	401.72	174.53
6	411.58	190.00

*** 1.626 ***

Failure Surface Specified By 6 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	112.84	124.21
2	117.33	121.35
3	119.27	119.88
4	300.00	123.92
5	404.18	175.14
6	413.65	190.00

*** 1.632 ***

Failure Surface Specified By 6 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	105.52	122.38
2	107.45	121.15
3	108.87	120.08
4	300.00	124.19
5	402.38	174.70
6	412.13	190.00

*** 1.635 ***

Failure Surface Specified By 6 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	102.91	121.73
2	103.93	121.08
3	105.62	119.80
4	300.00	123.86
5	409.68	176.71
6	418.14	190.00

*** 1.642 ***

Failure Surface Specified By 6 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	128.77	128.19
2	138.85	121.78
3	141.10	120.08
4	300.00	124.14
5	400.23	174.13
6	410.34	190.00

*** 1.646 ***

Failure Surface Specified By 6 Coordinate Points

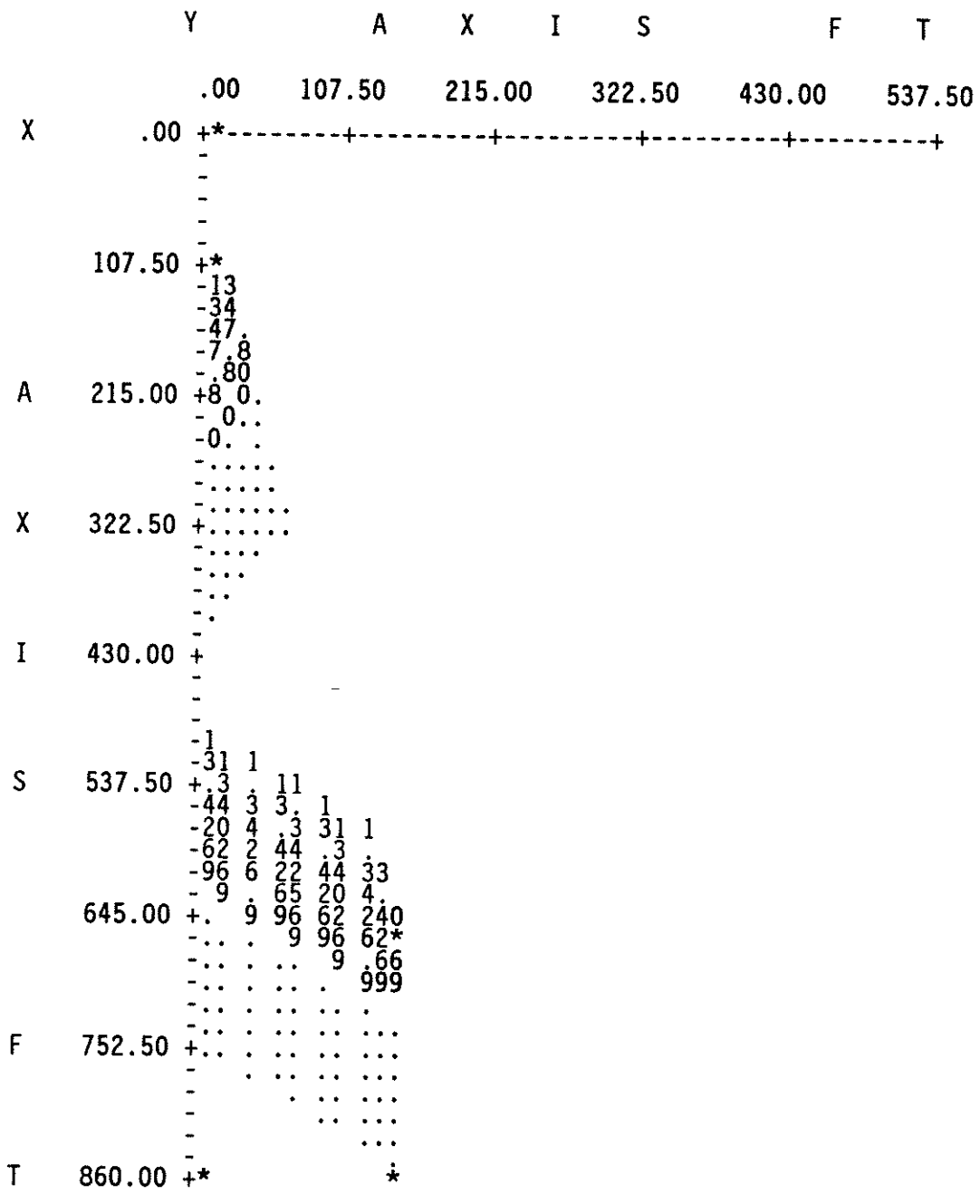
Point No.	X-Surf (ft)	Y-Surf (ft)
1	116.78	125.20
2	122.66	121.45
3	124.62	119.98
4	300.00	124.14
5	407.58	176.31
6	416.30	190.00

*** 1.652 ***

Failure Surface Specified By 16 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	205.93	36.48
2	213.77	31.49
3	230.64	20.75
4	247.50	10.00
5	248.00	9.62
6	561.69	9.51
7	562.06	10.00
8	572.80	26.87
9	583.55	43.74
10	594.30	60.60
11	605.04	77.47
12	615.79	94.34
13	626.53	111.21
14	637.28	128.07
15	648.03	144.94
16	649.59	147.40

*** 1.774 ***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X .00
107.50
A 215.00
X 322.50
I 430.00
S 537.50
645.00
F 752.50
T 860.00

ISOTROPIC SOIL PARAMETERS

2 Type(s) of Soil

Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
1	1.0	1.0	20.0	11.0	.00	.0	1
2	60.0	60.0	.0	25.0	.00	.0	1

A Critical Failure Surface Searching Method, Using A Random Technique For Generating Sliding Block Surfaces, Has Been Specified.

The Active And Passive Portions Of The Sliding Surfaces Are Generated According To The Rankine Theory.

50 Trial Surfaces Have Been Generated.

2 Boxes Specified For Generation Of Central Block Base

Length Of Line Segments For Active And Passive Portions Of Sliding Block Is 20.0

Box No.	X-Left (ft)	Y-Left (ft)	X-Right (ft)	Y-Right (ft)	Height (ft)
1	100.00	9.50	400.00	9.50	.50
2	500.00	9.50	750.00	9.50	.50

Following Are Displayed The Ten Most Critical Of The Trial Failure Surfaces Examined. They Are Ordered - Most Critical First.

* * Safety Factors Are Calculated By The Modified Janbu Method * *

Failure Surface Specified By 13 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	113.00	13.25
2	118.10	10.00
3	118.51	9.66
4	543.62	9.64
5	543.92	10.00
6	554.67	26.87
7	565.42	43.74
8	576.16	60.60
9	586.91	77.47
10	597.65	94.34
11	608.40	111.21
12	619.15	128.07
13	628.02	142.01

*** 1.334 ***

Failure Surface Specified By 13 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	100.20	10.05
2	100.27	10.00
3	100.64	9.70
4	511.15	9.59
5	511.49	10.00
6	522.24	26.87
7	532.98	43.74
8	543.73	60.60
9	554.48	77.47
10	565.22	94.34
11	575.97	111.21
12	586.71	128.07
13	589.44	132.36

*** 1.334 ***

Failure Surface Specified By 14 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	135.27	18.82
2	149.12	10.00
3	149.86	9.39
4	567.79	9.69
5	568.05	10.00
6	578.80	26.87
7	589.54	43.74
8	600.29	60.60
9	611.04	77.47
10	621.78	94.34
11	632.53	111.21
12	643.27	128.07
13	654.02	144.94
14	656.72	149.18

*** 1.341 ***

Failure Surface Specified By 15 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	144.50	21.13
2	145.10	20.75
3	161.97	10.00
4	162.75	9.35
5	570.72	9.45
6	571.18	10.00
7	581.92	26.87
8	592.67	43.74
9	603.41	60.60
10	614.16	77.47
11	624.91	94.34
12	635.65	111.21
13	646.40	128.07
14	657.14	144.94
15	660.37	150.00

*** 1.346 ***

Failure Surface Specified By 14 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	139.53	19.88
2	155.04	10.00
3	155.43	9.68
4	586.11	9.71
5	586.34	10.00
6	597.09	26.87
7	607.84	43.74
8	618.58	60.60
9	629.33	77.47
10	640.07	94.34
11	650.82	111.21
12	661.57	128.07
13	672.31	144.94
14	675.53	150.00

*** 1.350 ***

Failure Surface Specified By 14 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	146.34	21.58
2	147.66	20.75
3	164.52	10.00
4	165.09	9.53
5	525.80	9.41
6	526.29	10.00
7	537.04	26.87
8	547.78	43.74
9	558.53	60.60
10	569.27	77.47
11	580.02	94.34
12	590.77	111.21
13	601.51	128.07
14	607.05	136.76

*** 1.355 ***

Failure Surface Specified By 14 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	151.07	22.77
2	154.25	20.75
3	171.12	10.00
4	171.83	9.41
5	521.65	9.41
6	522.14	10.00
7	532.88	26.87
8	543.63	43.74
9	554.38	60.60
10	565.12	77.47
11	575.87	94.34
12	586.61	111.21
13	597.36	128.07
14	602.11	135.53

*** 1.360 ***

Failure Surface Specified By 14 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	110.00	12.50
2	113.93	10.00
3	114.41	9.60
4	622.24	9.46
5	622.68	10.00
6	633.43	26.87
7	644.17	43.74
8	654.92	60.60
9	665.67	77.47
10	676.41	94.34
11	687.16	111.21
12	697.90	128.07
13	708.65	144.94
14	711.87	150.00

*** 1.381 ***

Failure Surface Specified By 14 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	175.19	28.80
2	187.82	20.75
3	204.69	10.00
4	205.52	9.31
5	500.90	9.42
6	501.38	10.00
7	512.13	26.87
8	522.87	43.74
9	533.62	60.60
10	544.36	77.47
11	555.11	94.34
12	565.86	111.21
13	576.60	128.07
14	577.42	129.35

*** 1.405 ***

Failure Surface Specified By 16 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	190.41	32.60
2	192.15	31.49
3	209.02	20.75
4	225.88	10.00
5	226.62	9.39
6	596.60	9.53
7	596.99	10.00
8	607.74	26.87
9	618.48	43.74
10	629.23	60.60
11	639.97	77.47
12	650.72	94.34
13	661.47	111.21
14	672.21	128.07
15	682.96	144.94
16	686.18	150.00

*** 1.416 ***

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T    860.00 +*            *
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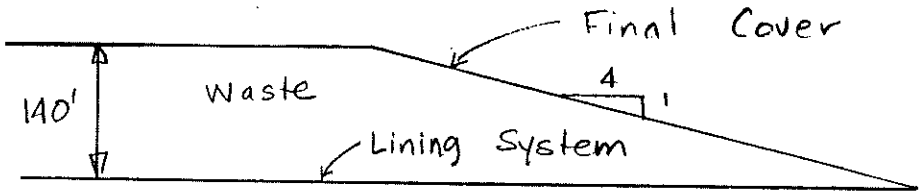
Written by: BAS Date: 89/10/16 (YY/MM/DD) Reviewed By: MDE Date: 89/10/24 (YY/MM/DD)

Client: G.B.B. Project: Millersville Landfill Phase II Project/Proposal No.: P1160 Task No.: 7.1

Lining System Stability -- After Final Cover System is Placed

- Lining system cross section and interface strength properties used for the analysis are as given in Lining System Stability -- Before Waste Placement calculations.

- Consider the following preliminary landfill geometry (may be modified as part of final landfill design)



SCALE: 1" = 200'

- Assumed waste properties:

$\phi'_w = 25°$ $\gamma_w = 60$ pcf

$c'_w = 0$

- Evaluate stability along the two critical interfaces within the lining system: geomembrane/subbase and geonet/geomembrane

Written by: B.A.M. Date: 89/10/16 (YY/MM/DD) Reviewed By: MOE Date: 89/10/24 (YY/MM/DD)

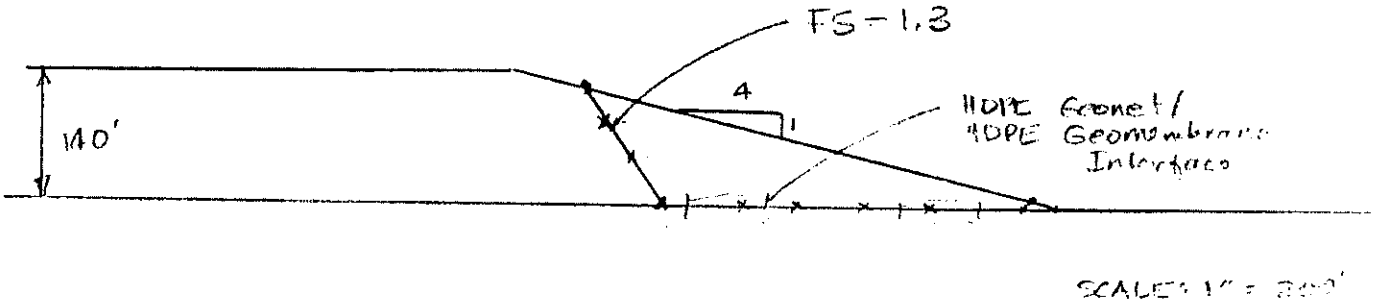
Client: G.B.B. Project: Millersville Landfill Phase II Project/Proposal No.: P1160 Task No.: 7.1

- Evaluate stability using the computer program PCSTABL5 with the simplified Janbu method of slices.

-

Interface	Factor of Safety
HDPE Geomembrane/ Compacted Subbase	1.67
HDPE Geonet / HDPE Geomembrane	1.33

- Critical failure surface:



- Supporting computer output is attached.

** PCSTABL5 **

by
Purdue University

--Slope Stability Analysis--
Simplified Janbu, Simplified Bishop
or Spencer's Method of Slices

Run Date:	16 OCT 1989
Time of Run:	4:30 p.m.
Run By:	MH
Input Data Filename:	AACMW5.DAT
Output Filename:	AACMW5.RES

PROBLEM DESCRIPTION ANN ARUNDEL COUNTY: MILLERSVILLE LF, CAP WASTE ON GEOSYN

BOUNDARY COORDINATES

3 Top Boundaries
4 Total Boundaries

Boundary No.	X-Left (ft)	Y-Left (ft)	X-Right (ft)	Y-Right (ft)	Soil Type Below Bnd
1	.00	10.00	100.00	10.00	1
2	100.00	10.00	660.00	150.00	2
3	660.00	150.00	860.00	150.00	2
4	100.00	10.00	860.00	10.00	1

ISOTROPIC SOIL PARAMETERS

2 Type(s) of Soil

Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
1	1.0	1.0	.0	16.0	.00	.0	1
2	60.0	60.0	.0	25.0	.00	.0	1

A Critical Failure Surface Searching Method, Using A Random Technique For Generating Sliding Block Surfaces, Has Been Specified.

The Active And Passive Portions Of The Sliding Surfaces Are Generated According To The Rankine Theory.

50 Trial Surfaces Have Been Generated.

2 Boxes Specified For Generation Of Central Block Base

Length Of Line Segments For Active And Passive Portions Of Sliding Block Is 20.0

Box No.	X-Left (ft)	Y-Left (ft)	X-Right (ft)	Y-Right (ft)	Height (ft)
1	100.00	9.50	400.00	9.50	.50
2	500.00	9.50	750.00	9.50	.50

Following Are Displayed The Ten Most Critical Of The Trial Failure Surfaces Examined. They Are Ordered - Most Critical First.

* * Safety Factors Are Calculated By The Modified Janbu Method * *

Failure Surface Specified By 13 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	123.57	15.89
2	132.82	10.00
3	133.75	9.30
4	501.63	9.36
5	502.12	10.00
6	512.86	26.87
7	523.61	43.74
8	534.35	60.60
9	545.10	77.47
10	555.85	94.34
11	566.59	111.21
12	577.34	128.07
13	578.29	129.57

*** 1.671 ***

Failure Surface Specified By 14 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	116.55	14.14
2	123.04	10.00
3	123.49	9.66
4	573.17	9.42
5	573.60	10.00
6	584.35	26.87
7	595.09	43.74
8	605.84	60.60
9	616.59	77.47
10	627.33	94.34
11	638.08	111.21
12	648.82	128.07
13	659.57	144.94
14	662.79	150.00

*** 1.674 ***

Failure Surface Specified By 13 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	132.35	18.09
2	145.04	10.00
3	145.47	9.68
4	527.02	9.64
5	527.29	10.00
6	538.04	26.87
7	548.78	43.74
8	559.53	60.60
9	570.28	77.47
10	581.02	94.34
11	591.77	111.21
12	602.51	128.07
13	608.24	137.06

*** 1.684 ***

Failure Surface Specified By 13 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	140.65	20.16
2	156.60	10.00
3	157.18	9.56
4	552.41	9.43
5	552.84	10.00
6	563.59	26.87
7	574.34	43.74
8	585.08	60.60
9	595.83	77.47
10	606.57	94.34
11	617.32	111.21
12	628.07	128.07
13	638.63	144.66

*** 1.686 ***

Failure Surface Specified By 15 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	148.95	22.24
2	151.29	20.75
3	168.16	10.00
4	168.90	9.44
5	577.80	9.71
6	578.02	10.00
7	588.77	26.87
8	599.51	43.74
9	610.26	60.60
10	621.00	77.47
11	631.75	94.34
12	642.50	111.21
13	653.24	128.07
14	663.99	144.94
15	667.21	150.00

*** 1.693 ***

Failure Surface Specified By 14 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	129.57	17.39
2	141.18	10.00
3	141.95	9.42
4	594.41	9.71
5	594.63	10.00
6	605.37	26.87
7	616.12	43.74
8	626.86	60.60
9	637.61	77.47
10	648.36	94.34
11	659.10	111.21
12	669.85	128.07
13	680.59	144.94
14	683.82	150.00

*** 1.694 ***

Failure Surface Specified By 15 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	153.45	23.36
2	157.56	20.75
3	174.43	10.00
4	175.05	9.53
5	584.88	9.48
6	585.28	10.00
7	596.03	26.87
8	606.77	43.74
9	617.52	60.60
10	628.26	77.47
11	639.01	94.34
12	649.76	111.21
13	660.50	128.07
14	671.25	144.94
15	674.47	150.00

*** 1.700 ***

Failure Surface Specified By 15 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	177.33	29.33
2	190.81	20.75
3	207.68	10.00
4	208.16	9.64
5	575.36	9.74
6	575.56	10.00
7	586.30	26.87
8	597.05	43.74
9	607.79	60.60
10	618.54	77.47
11	629.29	94.34
12	640.03	111.21
13	650.78	128.07
14	661.52	144.94
15	664.75	150.00

*** 1.725 ***

Failure Surface Specified By 15 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	143.08	20.77
2	143.11	20.75
3	159.98	10.00
4	160.41	9.68
5	615.65	9.49
6	616.03	10.00
7	626.77	26.87
8	637.52	43.74
9	648.27	60.60
10	659.01	77.47
11	669.76	94.34
12	680.50	111.21
13	691.25	128.07
14	702.00	144.94
15	705.22	150.00

*** 1.743 ***

Failure Surface Specified By 6 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	107.78	122.95
2	110.51	121.21
3	112.29	119.87
4	300.00	124.06
5	410.48	176.86
6	418.85	190.00

*** 1.654 ***

Failure Surface Specified By 6 Coordinate Points

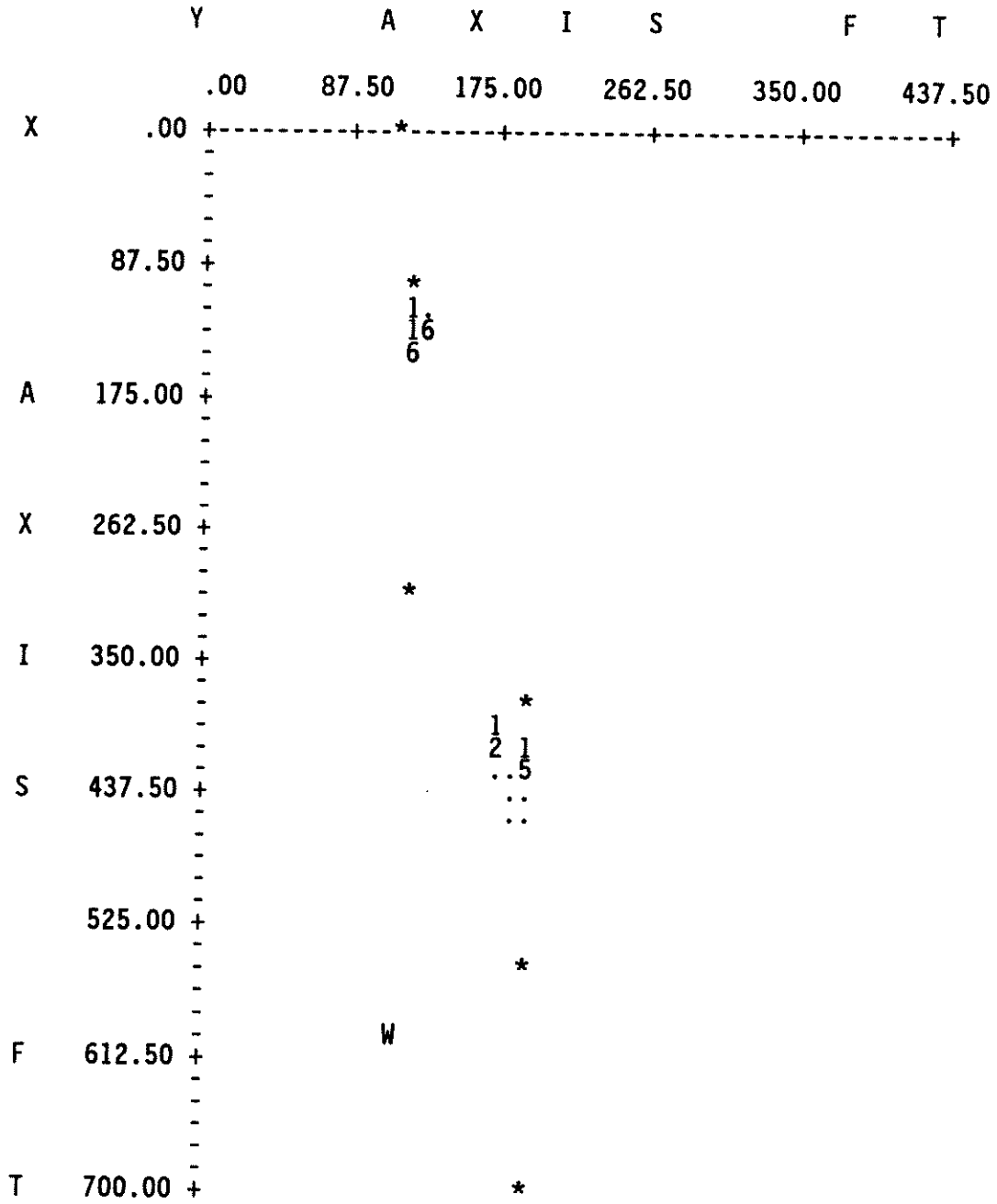
Point No.	X-Surf (ft)	Y-Surf (ft)
1	107.27	122.82
2	109.82	121.20
3	111.48	119.94
4	300.00	124.21
5	409.29	176.43
6	417.93	190.00

*** 1.657 ***

Failure Surface Specified By 6 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	122.80	126.70
2	130.78	121.62
3	132.80	120.09
4	300.00	123.81
5	409.12	176.37
6	417.80	190.00

*** 1.659 ***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S 437.50
525.00
F 612.50
T 700.00
W

ISOTROPIC SOIL PARAMETERS

2 Type(s) of Soil

Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
1	1.0	1.0	20.0	11.0	.00	.0	1
2	60.0	60.0	.0	25.0	.00	.0	1

A Critical Failure Surface Searching Method, Using A Random Technique For Generating Sliding Block Surfaces, Has Been Specified.

The Active And Passive Portions Of The Sliding Surfaces Are Generated According To The Rankine Theory.

50 Trial Surfaces Have Been Generated.

3 Boxes Specified For Generation Of Central Block Base

Length Of Line Segments For Active And Passive Portions Of Sliding Block Is 20.0

Box No.	X-Left (ft)	Y-Left (ft)	X-Right (ft)	Y-Right (ft)	Height (ft)
1	100.00	120.00	150.00	120.00	.50
2	300.00	124.00	300.00	124.00	.50
3	400.00	174.00	450.00	188.00	.50

Following Are Displayed The Ten Most Critical Of The Trial Failure Surfaces Examined. They Are Ordered - Most Critical First.

* * Safety Factors Are Calculated By The Modified Janbu Method * *

Failure Surface Specified By 6 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	102.18	121.54
2	102.94	121.06
3	104.33	119.91
4	300.00	123.81
5	400.18	173.97
6	410.39	190.00

*** 1.400 ***

Failure Surface Specified By 6 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	119.06	125.76
2	125.73	121.51
3	127.87	119.75
4	300.00	123.97
5	400.28	174.29
6	410.29	190.00

*** 1.407 ***

Failure Surface Specified By 6 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	118.76	125.69
2	125.32	121.51
3	127.26	119.91
4	300.00	124.10
5	402.40	174.78
6	412.10	190.00

*** 1.421 ***

Failure Surface Specified By 5 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	99.21	120.97
2	100.38	120.00
3	300.00	123.87
4	407.94	176.01
5	416.86	190.00

*** 1.432 ***

Failure Surface Specified By 6 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	122.19	126.55
2	129.95	121.60
3	132.19	119.76
4	300.00	123.94
5	411.24	177.35
6	419.30	190.00

*** 1.445 ***

Failure Surface Specified By 6 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	119.19	125.80
2	125.91	121.52
3	127.65	120.09
4	300.00	124.06
5	409.04	176.62
6	417.56	190.00

*** 1.446 ***

Failure Surface Specified By 6 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	127.58	127.89
2	137.23	121.74
3	139.27	120.07
4	300.00	124.03
5	406.60	176.09
6	415.46	190.00

*** 1.446 ***

Failure Surface Specified By 6 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	126.54	127.64
2	135.84	121.72
3	138.05	119.89
4	300.00	123.79
5	410.85	177.07
6	419.09	190.00

*** 1.449 ***

Failure Surface Specified By 6 Coordinate Points

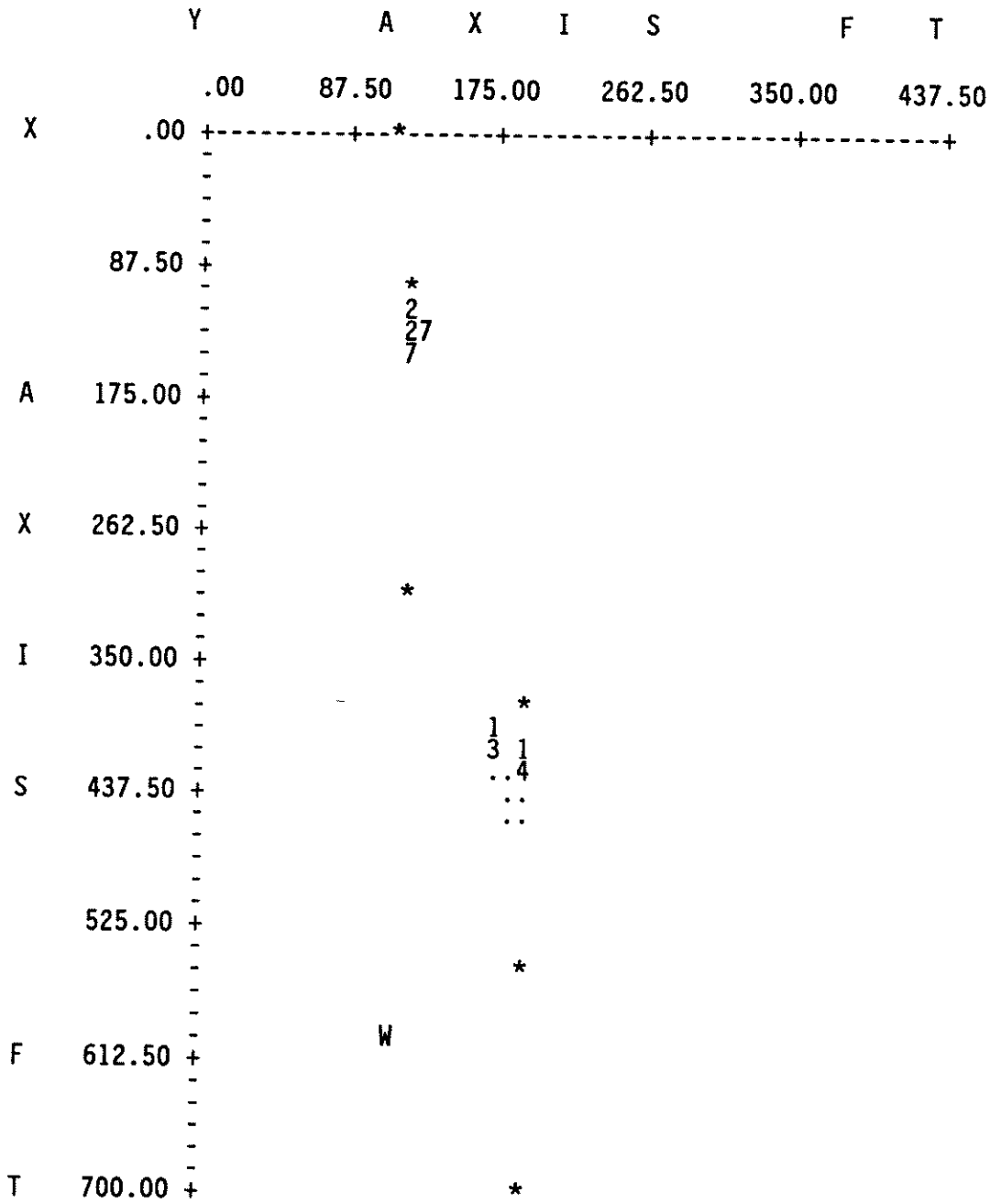
Point No.	X-Surf (ft)	Y-Surf (ft)
1	123.33	126.83
2	131.50	121.63
3	133.70	119.81
4	300.00	123.89
5	411.97	177.26
6	420.09	190.00

*** 1.451 ***

Failure Surface Specified By 6 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	134.31	129.58
2	146.31	121.93
3	148.57	120.07
4	300.00	124.20
5	402.23	174.71
6	411.97	190.00

*** 1.452 ***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** PCSTABL5 **

by
Purdue University

--Slope Stability Analysis--
Simplified Janbu, Simplified Bishop
or Spencer's Method of Slices

Run Date:	OCT. 12, 1989
Time of Run:	1:30 p.m.
Run By:	MH
Input Data Filename:	AACMW1.DAT
Output Filename:	AACMW1.RES

PROBLEM DESCRIPTION ANN ARUNDEL COUNTY: MILLERSVILLE LF, WASTE ONLY

BOUNDARY COORDINATES

4 Top Boundaries
5 Total Boundaries

Boundary No.	X-Left (ft)	Y-Left (ft)	X-Right (ft)	Y-Right (ft)	Soil Type Below Bnd
1	.00	117.00	100.00	121.00	1
2	100.00	121.00	376.00	190.00	2
3	376.00	190.00	460.00	190.00	2
4	460.00	190.00	600.00	190.00	2
5	100.00	121.00	600.00	121.00	1

ISOTROPIC SOIL PARAMETERS

2 Type(s) of Soil

Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
1	115.0	130.0	.0	26.0	.00	.0	1
2	60.0	60.0	.0	25.0	.00	.0	1

1 PIEZOMETRIC SURFACE(S) HAVE BEEN SPECIFIED

Unit Weight of Water = 62.40

Piezometric Surface No. 1 Specified by 2 Coordinate Points

Point No.	X-Water (ft)	Y-Water (ft)
1	.00	110.00
2	600.00	110.00

A Critical Failure Surface Searching Method, Using A Random Technique For Generating Circular Surfaces, Has Been Specified.

100 Trial Surfaces Have Been Generated.

10 Surfaces Initiate From Each Of 10 Points Equally Spaced Along The Ground Surface Between X = 50.00 ft.
and X = 150.00 ft.

Each Surface Terminates Between X = 326.00 ft.
and X = 426.00 ft.

Unless Further Limitations Were Imposed, The Minimum Elevation At Which A Surface Extends Is Y = .00 ft.

25.00 ft. Line Segments Define Each Trial Failure Surface.

Following Are Displayed The Ten Most Critical Of The Trial Failure Surfaces Examined. They Are Ordered - Most Critical First.

* * Safety Factors Are Calculated By The Modified Bishop Method * *

Failure Surface Specified By 10 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	150.00	133.50
2	174.72	137.21
3	199.35	141.52
4	223.86	146.44
5	248.25	151.95
6	272.49	158.06
7	296.57	164.76
8	320.49	172.05
9	344.21	179.93
10	363.66	186.91

Circle Center At X = 11.1 ; Y = 1144.0 and Radius, 1020.0

*** 1.875 ***

Failure Surface Specified By 10 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	127.78	127.94
2	152.60	130.91
3	177.31	134.73
4	201.87	139.39
5	226.25	144.90
6	250.44	151.25
7	274.38	158.43
8	298.07	166.42
9	321.47	175.23
10	328.29	178.07

Circle Center At X = 54.2 ; Y = 849.8 and Radius, 725.6

*** 1.882 ***

Failure Surface Specified By 11 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	116.67	125.17
2	141.67	125.30
3	166.62	126.83
4	191.45	129.74
5	216.08	134.03
6	240.43	139.68
7	264.43	146.67
8	288.01	154.99
9	311.09	164.61
10	333.59	175.49
11	346.42	182.61

Circle Center At X = 126.7 ; Y = 574.5 and Radius, 449.4

*** 1.923 ***

Failure Surface Specified By 13 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	116.67	125.17
2	141.67	124.84
3	166.65	125.75
4	191.56	127.90
5	216.33	131.28
6	240.90	135.88
7	265.22	141.69
8	289.21	148.70
9	312.84	156.88
10	336.02	166.23
11	358.72	176.71
12	380.87	188.30
13	383.76	190.00

Circle Center At X = 135.7 ; Y = 629.8 and Radius, 505.0

*** 1.938 ***

Failure Surface Specified By 11 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	116.67	125.17
2	141.66	124.59
3	166.64	125.58
4	191.51	128.11
5	216.18	132.20
6	240.54	137.81
7	264.50	144.93
8	287.98	153.53
9	310.87	163.58
10	333.09	175.03
11	345.31	182.33

Circle Center At X = 138.4 ; Y = 525.5 and Radius, 401.0

*** 1.938 ***

Failure Surface Specified By 11 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	138.89	130.72
2	163.81	128.75
3	188.81	128.65
4	213.75	130.42
5	238.48	134.05
6	262.88	139.53
7	286.79	146.81
8	310.09	155.87
9	332.65	166.65
10	354.34	179.09
11	367.19	187.80

Circle Center At X = 177.7 ; Y = 462.0 and Radius, 333.6

*** 1.973 ***

Failure Surface Specified By 12 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	150.00	133.50
2	174.94	135.18
3	199.82	137.67
4	224.60	140.97
5	249.26	145.08
6	273.78	149.98
7	298.12	155.68
8	322.26	162.17
9	346.18	169.44
10	369.85	177.48
11	393.25	186.29
12	402.20	190.00

Circle Center At X = 110.8 ; Y = 901.0 and Radius, 768.5

*** 1.993 ***

Failure Surface Specified By 9 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	150.00	133.50
2	174.80	130.36
3	199.80	129.87
4	224.70	132.06
5	249.23	136.88
6	273.11	144.29
7	296.06	154.20
8	317.82	166.50
9	337.05	180.26

Circle Center At X = 191.8 ; Y = 364.0 and Radius, 234.3

*** 2.017 ***

Failure Surface Specified By 11 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	127.78	127.94
2	152.51	124.27
3	177.47	122.84
4	202.45	123.65
5	227.26	126.72
6	251.70	132.00
7	275.56	139.45
8	298.66	149.03
9	320.80	160.64
10	341.80	174.20
11	355.46	184.86

Circle Center At X = 180.9 ; Y = 400.5 and Radius, 277.7

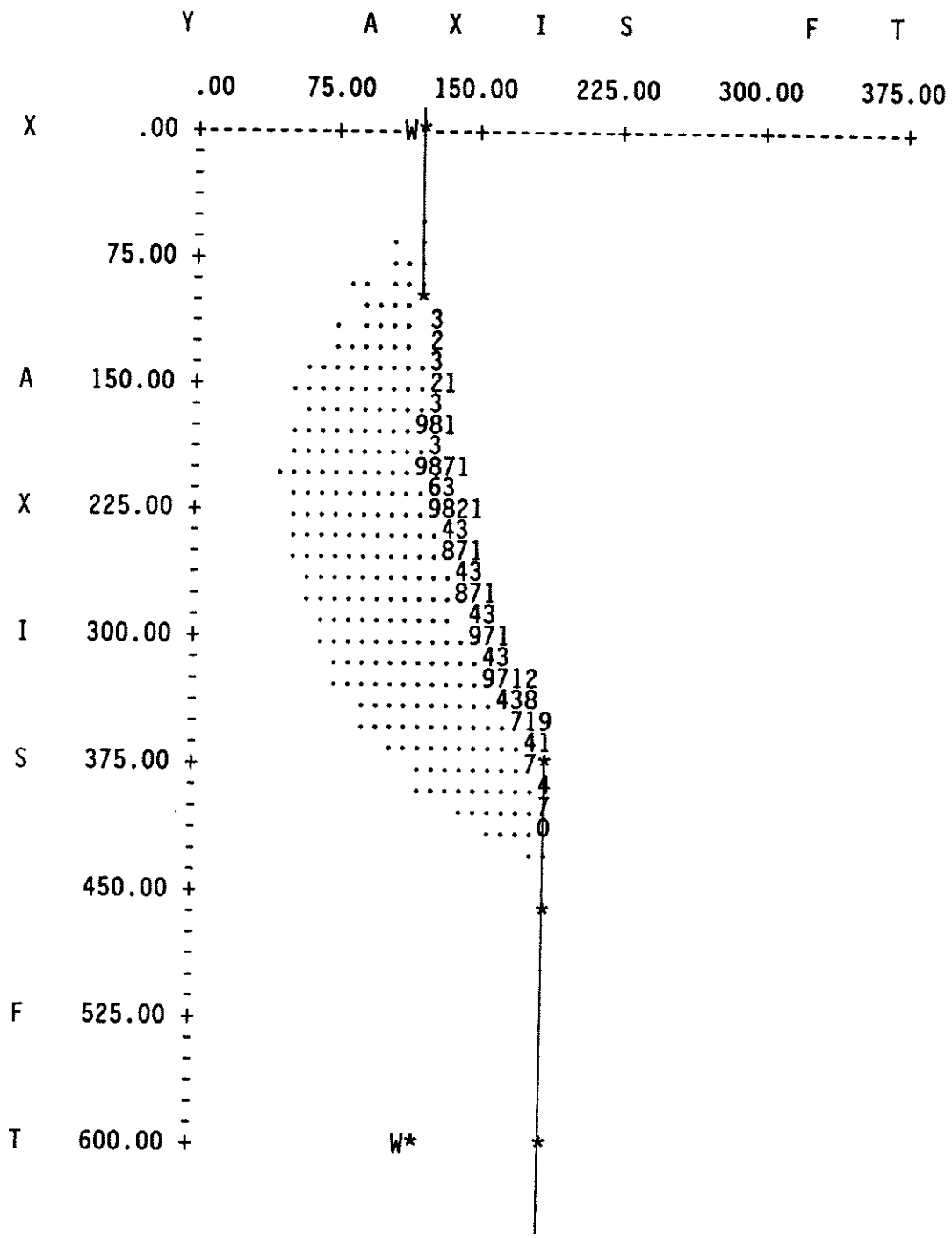
*** 2.026 ***

Failure Surface Specified By 12 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	150.00	133.50
2	174.85	136.22
3	199.64	139.47
4	224.35	143.26
5	248.98	147.57
6	273.50	152.41
7	297.92	157.78
8	322.22	163.67
9	346.38	170.09
10	370.40	177.02
11	394.26	184.46
12	410.76	190.00

Circle Center At X = 35.9 ; Y = 1291.1 and Radius, 1163.2

*** 2.050 ***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APPENDIX H

CHEMICAL COMPATIBILITY DATA

LABORATORY REPORT #690

FEBRUARY 26, 1985

CHEMICAL RESISTANCE TESTS WITH SYNTHETIC LEACHATE

TEST METHOD:

Gundnet G-2, Gundfab 014 and Gundflex 300 were prepared for immersion testing in synthetic leachate at 23°C. ASTM D638 tensile type 1½" x 5" dumb-bells and a speed of 2 ipm were used for these tests.

Upon 7-day immersion period, all samples were pressed and immediately tested after removal from the test solution.

The immersion test will be continued up to 90 days with samples being removed after 30, 60 and 90 days.

RESULTS:

Type	Control (Lbs.)	7-Day (Lbs.)	% Change
G-2	39	41	+5.1
G-014	63	99	+57.2
G-Flex-300	109	80	-27

CONCLUSION:

After 7-day immersion, G-2 did not appear to have been affected, G-014 had been increased but G-Flex-300 had been affected by synthetic leachate and decreased to 27 percent.

Lab Technician
Sengthong Phouangsavanh

LABORATORY REPORT #690A

APRIL 1, 1985

CHEMICAL RESISTANCE TESTS WITH SYNTHETIC LEACHATE

TEST METHOD:

Gundnet G-2, Gundfab 014 and Gundflex 300 were prepared for immersion testing in synthetic leachate at 23°C. ASTM D638 tensile type 1½" x 5" dumb-bells and a speed of 2 ipm were used for these tests.

Upon 30-day immersion period, all samples were pressed and immediately tested after removal from the test solution.

The immersion test will be continued up to 90 days with samples being removed after 60 and 90 days.

RESULTS:

Type	Control (Lbs.)	30-Day (Lbs.)	% Change
G-2	39	38	-3
G-014	63	95	+51
G-Flex-300	109	89	-18

USION:

After 30-day immersion, G-2 was not affected. G-014 improved 51% and G-Flex-300 decreased in strength 18 percent.

ab Technician
engthong Phouangsavanh

LABORATORY REPORT #6908

APRIL 12, 1985

CHEMICAL RESISTANCE TESTS WITH ORGANICS/METALS LEACHATE

TEST METHOD:

Gundline HD 60 mil liner was prepared for immersion testing at 23°C. ASTM D638 tensile type IV dumb-bells and a speed of 2 ipm were used for these tests. 1" x 3" strips were used for weight and dimensional change.

Samples were removed, wiped dry, and tested after 7 days. The test will be continued up to 90 days.

TEST RESULTS:

Tensile Strength & Elongation

60 mil HDPE at 23°C

MD	Yield Strength (psi)	Yield Elongation (%)	Break Strength (psi)	Break Elongation (%)
Control	3017	15	4140	800
8 Day	2830	15	4502	800
Change	-6.2	Ø	+8.7	Ø
TD				
Control	2935	15	5072	900
8 Day	2967	15	5090	905
% Change	+1.1	Ø	+.4	+.6

Weight Change (1" x 3")

	Control	8 Day	% Change
MD	2.8818	2.8822	+.01
TD	2.9614	2.9617	+.01

Thickness Change (1" x 3")

MD	.61"	.60"	-1.6
TD	.60"	.60"	Ø

CONCLUSION:

No significant change resulted from immersion in the leachate.

Technician
Sengthong Phouangsavanh

LABORATORY REPORT #6908

APRIL 19, 1985

SUBJECT:

Chemical resistance tests with synthetic leachate

TEST METHOD:

1½" x 5" samples of Fibretex 300 and Gundfab 014 geotextiles and Gundnet G2 geonet were immersed at 23°C in the synthetic leachate.

Tensile tests at a crosshead speed of 2 ipm as per ASTM D638 were performed on the samples after 60 days. The test will be continued for 90 days.

TEST RESULTS:

Type	Tensile Break		
	Control (lbs.)	60 Days (lbs.)	% Change
G-2	39	42.5	+9
G-104	63	85	+35
G-Ftex-300	109	130	+19.3

CONCLUSION:

No degradation of the samples occurred. In fact, the textiles showed significant increase in tensile strength.

Lab Technician
Sengthong Phouangsavanh

LABORATORY REPORT #690C

MAY 20, 1985

SUBJECT:

Chemical resistance tests were performed in synthetic leachate containing metals and metal salts.

TEST METHOD:

1½" x 5" samples of Fibretex 300 and Gundfab 014 geotextiles and Gundnet G2 geonet were immersed at 23°C in the synthetic leachate.

Tensile tests at a crosshead speed of 2 ipm as per ASTM D638 were performed on the samples after 90 days of immersion. 90 days concludes this test.

TEST RESULTS:

TENSILE BREAK

(After 90 Days Immersion)

Type	Control (lbs.)	90 Day (lbs.)	% Change
G-2	39	49	+26
G-014	63	98	+55.5
G-FTex-300	109	98	-10.1

CONCLUSION:

No sample degradation occurred. Significant differences from the control took place, but the break strength did not show any significant decrease and, in fact, increased in two cases.

Lab Technician
Sengthong Phouangsavanh

pp. Mark Cadwallader
Mark Cadwallader
Director - Research &
Technical Development

CHEMICAL RESISTANCE TESTS WITH ORGANICS/METALS

LEACHATE

TEST METHOD:

Gundline HD 60 mil liner was prepared for immersion testing at 23°C. ASTM D638 tensile type IV dumb-bells and a speed of 2 ipm were used for these tests. 1" x 3" strips were used for weight and dimensional change.

Samples were removed, wiped dry, and tested after 30 days. The test will be continued up to 90 days.

TEST RESULTS:

Tensile Strength & Elongation

60 mil HDPE at 23°C.

MD	Yield Strength (psi)	Yield Elongation (%)	Break Strength (psi)	Break Elongation (%)
Control	3017	15	4140	800
30 Days	2767	15	4739	865
% Change	-8.3	Ø	+14.5	+8.1
TD				
Control	2935	15	5072	900
30 Days	2800	14	4620	810
% Change	-5	-7	-9	-10

Weight Change (1" x 3")

	Control	30 Day	% Change
MD	2.8818	2.8825	+.02
TD	2.9614	2.9620	+.02

Thickness Change (1" x 3")

MD	.61"	.59"	-3.3
TD	.60"	.59"	-1.7

CONCLUSION:

No significant change resulted from immersion in leachate except break strength increase to 14.5%.

Lab Technician
Sengthong Phouangsavanh

LABORATORY REPORT #690D

JUNE 3, 1985

CHEMICAL RESISTANCE TESTS WITH ORGANICS/METALS

LEACHATE

TEST METHOD:

Gundline HD 60 mil liner was prepared for immersion testing at 23°C. ASTM D638 tensile type IV dumb-bells and a speed of 2 ipm were used for these tests. 1" x 3" strips were used for weight and dimensional change.

Samples were removed, wiped dry, and tested after 60 days. The test will be continued up to 90 days.

TEST RESULTS:

Tensile Strength & Elongation

60 mil HDPE at 23°C

	Yield Strength (psi)	Yield Elongation (%)	Break Strength (psi)	Break Elongation (%)
MD				
Control	3017	15	4140	800
60 Days	2957	15	5148	905
% Change	-2	Ø	+24	+13
TD				
Control	2935	15	5072	900
60 Days	3034	15	4997	855
% Change	+3.4	Ø	-1.5	-5

Weight Change (1" x 3")

	Control	60 Days	% Change
MD	2.8818	2.8828	+.03
TD	2.9614	2.9625	+.04

Thickness Change (1" x 3")

MD	.61"	.61"	Ø
TD	.60"	.60"	Ø

CONCLUSION:

After 60 days of immersion in leachate no significant change except break strength increase.

Lab Technician
Sengthong Phouangsavanh

LABORATORY REPORT #690E

JULY 3, 1985

CHEMICAL RESISTANCE TESTS WITH ORGANICS/METALS LEACHATE

TEST METHOD:

Gundline HD 60 mil liner was prepared for immersion testing at 23°C. ASTM D638 tensile type IV dumb-bells and a speed of 2 ipm were used for these tests. 1" x 3" strips were used for weight and dimensional change.

Samples were removed, wiped dry, and tested after 90 days.

TEST RESULTS:

Tensile Strength & Elongation
60 mil HDPE at 23°C

MD	Yield Strength (psi)	Yield Elongation (%)	Break Strength (psi)	Break Elongation (%)
Control	3017	15	4140	800
90 Days	3047	15	4227	750
% Change	+1	Ø	+2.1	-6.3
TD				
Control	2935	15	5072	900
90 Days	2999	14	4759	830
% Change	+2.2	-6.6	-6.2	-7.7

Weight Change (1" x 3")

	Control	90 Days	% Change
MD	2.8818	2.8829	+.04
TD	2.9614	2.9627	+.04

Thickness Change (1" x 3")

MD	.61"	.59"	-3.3
TD	.60"	.59"	-1.7

CONCLUSION:

After 90 days of immersion no significant change occurred.

Lab Technician, Sengthong Phouangsavanh

LABORATORY REPORT #1327

FEBRUARY 7, 1986

CHEMICAL IMMERSION TESTING OF A TYPICAL LANDFILL LEACHATE

SUBJECT:

Results of chemical compatibility (EPA Method 9090) testing of Gundline HD with a chemical waste after 30,.60 & 90 days immersion.

TEST METHOD:

Die cut ASTM test specimens were placed in a waste solution from GROWS and kept at a temperature of 50°C. Samples were removed after 30, 60 & 90 day periods and subjected to the following tests:

Test	Method
Tensile Properties	ASTM D638
Tear Initiation Resistance	ASTM D1004C
Puncture Resistance	FTMS 101B
Weight Change	-
Thickness Change	-

TEST RESULTS:

Tensile Strength & Elongation

MD	Yield Strength (psi)	Yield Elongation (%)	Break Strength (psi)	Break Elongation (%)
Control	2907	15	5005	850
30 Days	2911	15	4556	790
% Change	+.1	Ø	-9	-7.1
60 Days	2880	15	5171	893
% Change	-1	Ø	+3.3	+5.1
90 Days	3017	15	5168	910
% Change	+3.8	Ø	+3.3	+7.1
TD				
Control	2990	15	4837	880
30 Days	2979	15	5273	940
% Change	-.4	Ø	+9	+6.8
60 Days	2973	14	5126	944
% Change	-.7	-6.7	+6	+7.3
90 Days	3207	15	5440	960
% Change	+7.3	Ø	+12.5	+9.1

Tear Resistance

	Control	30 Days	% Change	60 Days	% Change	90 Days	% Change
MD	47	46	-2.1	48	+2.1	49	+4.3
TD	49	45	-8.2	46	-6.1	48	-2

Weight Change

MD	3.1720	3.1724	+.01	3.1964	+.8	3.2100	+1.2
TD	3.001	3.003	+.07	3.0073	+.2	3.0232	+.7

Thickness Change

MD	.64"	.64"	Ø	.62"	-3.1	.63"	-1.7
TD	.63"	.63"	Ø	.63"	Ø	.63"	Ø

Puncture

	69	64	-7.2	69	Ø	77	+11.6

CONCLUSION/DISCUSSION:

No significant change in the Gundline HD resulted after immersion in the leachate for 30, 60 and 90 days.

CERTIFIED BY:

Lab Technician
Sengthong Phouangsavanh

Mark Cadwallader
Director of Research &
Technical Development

LABORATORY REPORT #1327C

MAY 9, 1986

CHEMICAL IMMERSION OF GUNDLINE HD
WITH A MUNICIPAL LANDFILL LEACHATE

SUBJECT:

Results of chemical compatibility (EPA Method 9090) testing of Gundline HD with a municipal landfill leachage after 120 days immersion.

TEST METHOD:

Die-cut ASTM test specimens were placed in waste solution and kept at a temperature of 50°C. Samples were removed after the 120 day period and subjected to the following tests:

Test	Method
Tensile Properties	ASTM D638
Tear Initiation Resistance	ASTM D1004C
Puncture Resistance	FTMS 101B
Weight Change	-
Thickness Change	-

TEST RESULTS: (After 120 Days Immersion)

TENSILE STRENGTH & ELONGATION

60 MIL HDPE AT 50°C

MD	YIELD STRENGTH (PSI)	YIELD ELONGATION (%)	BREAK STRENGTH (PSI)	BREAK ELONGATION (%)
Control	2907	15	5005	850
120 Days	2933	15	5080	875
% Change	+1	Ø	+1.5	+2.9
TD				
Control	2990	15	4837	880
120 Days	3022	15	4855	873
% Change	+1	Ø	+.4	-.8

WEIGHT CHANGE AT 50°C 1" x 3"

	CONTROL	120 DAYS	% CHANGE
MD	3.1720	3.2104	+1.2
TD	3.001	3.0264	+.8

THICKNESS CHANGE AT 50°C 1" x 3"

MD	.64"	.63"	-1.6
TD	.63"	.63"	Ø

TEAR RESISTANCE AT 50°C

	CONTROL	120 DAYS	% CHANGE
MD	47	49	+4.2
TD	49	48	-2

PUNCTURE RESISTANCE AT 50°C

	69	65	-5.8

CONCLUSION:

No significant change in the Gundline HD resulted after immersion for 120 days. Gundline HD is not affected by the leachate.

CERTIFIED BY:

Lab Technician
Sengthong Phouangsavanh

Mark Cadwallader
Director of Research &
Technical Development

LABORATORY REPORT #1370

May 1, 1986

SUBJECT: CHEMICAL IMMERSION OF GUNDLINE HD IN A MUNICIPAL LANDFILL LEACHATE

Results of chemical compatibility (EPA Method 9090) testing of Gundline HD with a municipal landfill leachate from Cortland Co. landfill after 30 days immersion.

TEST METHOD:

Die-cut ASTM test specimens were placed in the waste material and kept at a temperature of both 23°C and 50°C. Samples were removed after the 30 day period and subjected to the following tests:

Test	Method
Tensile Properties	ASTM D638
Tear Initiation Resistance	ASTM D1004C
Puncture Resistance	FTMS 101B
Weight Change	-
Thickness Change	-

TENSILE STRENGTH & ELONGATION

60 mil HDPE at 23°C

MD	Yield Strength (psi)	Yield Elongation (%)	Break Strength (psi)	Break Elongation (%)
Control	3676	15	5054	870
30 Days	3593	14	4979	915
% Change	-2.3	-6.7	-1.5	+5.2
TD				
Control	3909	14	6067	1038
30 Days	3768	13	5798	1020
% Change	-3.7	-7.1	-4.4	-1.7

60 mil HDPE at 50°C

MD				
Control	3676	14	5054	870
30 Days	3669	14	5385	954
% Change	-.2	Ø	-6.5	+9.7
TD				
Control	3909	14	6067	1038
30 Days	3643	13	5576	925
% Change	-6.8	-7.1	-8.1	-11

WEIGHT CHANGE AT 23°C

	CONTROL	30 DAYS	% CHANGE
MD	3.8175	3.8175	+.03
TD	3.5990	3.6003	+.04

WEIGHT CHANGE AT 50°C

MD	3.5747	3.5765	+.05
TD	3.4345	3.4364	+.06

THICKNESS CHANGE AT 50°C

MD	.67"	.68"	+1.5
TD	.66"	.66"	Ø

THICKNEWS CHANGE AT 50°C

MD	.65"	.67"	+3.1
TD	.65"	.65"	Ø

TEAR RESISTANCE AT 23°C

MD	61	60	-1.6
TD	59	60	+1.7

TEAR RESISTANCE AT 50°C

MD	61	60	-1.6
TD	59	59	Ø

PUNCTURE AT 23°C (LBS)

87	103	+18.4

PUNCTURE AT 50°C (LBS)

87	100	-15

CONCLUSION/DISCUSSION:

No significant change in the Gundline HD has resulted after immersion for 30 days.

Lab Technician
Sengthong Phouangsavanh

Mark Cadwallader
Director of Research &
Technical Development

LABORATORY REPORT #1370

MAY 9, 1986

CHEMICAL IMMERSION OF GUNDLINE HD

WITH A MUNICIPAL LANDFILL LEACHATE

SUBJECT:

Results of chemical compatibility (EPA Method 9090) testing of Gundline HD with a municipal landfill leachate from Cortland Co. landfill after 90 days immersion.

TEST METHOD:

Die-cut ASTM test specimens were placed in the leachate and kept at temperatures of both 23°c and 50°c. Samples were removed after the 90 day period and subjected to the following tests:

Test	Method
Tensile Properties	ASTM D638
Tear Initiation Resistance	ASTM D1004C
Puncture Resistance	FTMS 101B
Weight Change	
Thickness Change	

TEST RESULTS: (After 90 days immersion).

TENSILE STRENGTH & ELONGATION

60 mil HDPE at 23°

MD	YIELD STRENGTH (psi)	YIELD ELONGATION (%)	BREAK STRENGTH (psi)	BREAK ELONGATION (%)
Control	3676	14	5054	870
90 days	3840	14	4750	835
% Change	+4.5	Ø	-6	-4
TD				
Control	3909	14	6067	1038
90 days	3815	15	6000	1000
% Change	-2.4	+7.1	-1.1	-3.7

60 mil HDPE at 50°c

MD				
Control	3676	14	5054	870
90 days	3793	14	5851	970
% Change	+3.2	Ø	+15.8	+11.5

TD

Control	3909	14	6067	1038
90 days	3859	13	5500	895
% Change	-1.3	-7.1	-9.3	-13.8

WEIGHT CHANGE at 23°c (1" x 3")

	Control	90 days	% Change
MD	3.8175	3.8201	+.07
TD	3.5990	3.6012	+.06

WEIGHT CHANGE at 50°c (1" x 3")

	Control	90 days	% Change
MD	3.5747	3.5770	+.06
TD	3.4345	3.4367	+.06

THICKNESS CHANGE at 23°c (1" x 3")

MD	.67"	.67"	Ø
TD	.66"	.67"	+1.5

THICKNESS CHANGE at 50°c (1" x 3")

MD	.65"	.65"	Ø
TD	.65"	.66"	+1.5

TEAR RESISTANCE at 23°c

MD	61	58	-4.9
TD	59	59	Ø

TEAR RESISTANCE at 50°c

MD	61	59	-3.3
TD	59	60	+1.7

PUNCTURE RESISTANCE at 23°c

	87	80	-8

PUNCTURE RESISTANCE at 50°c

87	84	-3.4

CONCLUSION/DISCUSSION:

No significant change in the Gundline HD resulted after immersion for 90 days.

CERTIFIED BY:

Sengthong Phouangsavanh

Mark Cadwallader
Director of Research &
Technical Development

LABORATORY REPORT #1370C

JUNE 11, 1986

CHEMICAL IMMERSION OF GUNDLINE HD

WITH A MUNICIPAL LANDFILL LEACHATE

(MUNICIPAL LANDFILL LEACHATE)

SUBJECT:

Results of chemical compatibility (EPA Method 9090) testing of GUNDLINE HD with a municipal landfill leachate from Cortland Co. landfill after 120 days immersion.

TEST METHOD:

Die-cut ASTM test specimens were placed in the waste material and kept at a temperature of both 23°c and 50°c. Samples were removed after the 120 day period and subjected to the following tests:

Test	Method
Tensile Properties	ASTM D638
Tear Initiation Resistance	ASTM D1004C
Puncture Resistance	FTMS 101B
Weight Change	
Thickness Change	

TENSILE STRENGTH & ELONGATION

60 mil HDPE at 23°c

MD	YIELD STRENGTH (psi)	YIELD ELONGATION (%)	BREAK STRENGTH (psi)	BREAK ELONGATION (%)
Control	3676	14	5054	870
120 days	3576	15	5144	865
% Change	-2.7	+7.1	+1.8	-.6
TD				
Control	3909	14	6067	1038
120 days	3324	14	5051	885
% Change	-15	Ø	-17	-15

60 mil HDPE at 50°c

MD				
Control	3676	14	5054	870
120 days	3620	15	4760	865
% Change	-1.5	+7.1	-5.8	-.6

TD

Control	3909	14	6067	1038
120 days	3551	14	5958	970
% Change	-9.2	Ø	-1.8	-6.6

WEIGHT CHANGE at 23°c 1" x 3"

	Control	120 days	% Change
MD	3.8175	3.8201	+.07
TD	3.5990	3.6011	+.06

WEIGHT CHANGE at 50°c 1" x 3"

MD	3.5747	3.5772	+.07
TD	3.4345	3.4374	+.08

THICKNESS CHANGE AT 23°c 1" x 3"

MD	.67"	.67"	Ø
TD	.66"	.66"	Ø

THICKNESS CHANGE AT 50°c 1" x 3"

MD	.67"	.67"	Ø
TD	.66"	.66"	Ø

TEAR RESISTANCE (lbs)

60 mil HDPE 23°c

MD	61	59	-3.3
TD	59	59	Ø

60 mil HDPE at 50°c

MD	61	60	-1.6
TD	59	62	+5.1

PUNCTURE at 23°c

	87	100	+15

PUNCTURE at 50°c

87	92	+5.7

CONCLUSION/DISCUSSION:

No significant change in the Gundline HD took place after 120 days immersion. The Small amount of ~~absorbed~~ absorption by the liner stabilized quickly as indicated by the 30, 60, 90 and 120 day weight gain being constant. All properties remained well within Gundle specifications.

CERTIFIED BY:

Lab Technician,
Sengthong Phouangsavanh

Mark Cadwallader
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LABORATORY REPORT #1525

MAY 23, 1986

CHEMICAL IMMERSION TESTING OF GUNDLINE HD IN A MUNICIPAL LANDFILL LEACHATE

SUBJECT:

Results of chemical compatibility (EPA Method 9090) testing of Gundline HD with a municipal landfill leachate after 30 days immersion.

TEST METHOD:

Die-cut ASTM test specimens were placed in the leachate and kept at a temperature of both 23°C and 50°C. Samples were removed after the 30 day period and subjected to the following tests:

Test	Method
Tensile Properties	ASTM D638
Tear Initiation Resistance	ASTM D1004C
Puncture Resistance	FTMS 101B
Weight Change	-
Thickness Change	-

TEST RESULT (AFTER 30 DAYS IMMERSION)

TENSILE STRENGTH & ELONGATION

60 mil HDPE AT 23°C

MD	YIELD STRENGTH (PSI)	YIELD ELONGATION (%)	BREAK STRENGTH (PSI)	BREAK ELONGATION (%)
Control	2600	15	4500	850
30 Days	2580	14	4301	875
% Change	-1	-6.7	-4.4	+2.9
TD				
Control	2475	15	4800	900
30 Days	2754	15	4756	865
% Change	+12.3	Ø	-1	-3.9

60 MIL HDPE AT 50°C

MD				
Control	2600	15	4500	850
30 Days	2762	14	4698	863
% Change	+6.2	-6.7	+4.4	+1.5
TD				
Control	2475	15	4949	900
30 Days	2865	15	5594	969
% Change	+16	Ø	+13	+7.7

WEIGHT CHANGE AT 23°C 1" X 3"

	CONTROL	30 DAYS	% CHANGE
MD	2.7804	2.7820	+.06
TD	2.7337	2.7351	+.05

WEIGHT CHANGE AT 50°C 1" X 3"

MD	2.6402	2.6426	+.1
TD	2.7435	2.7453	+.07

THICKNESS CHANGE AT 23°C 1" X 3"

MD	.61"	.60"	-1.6
TD	.61"	.61"	Ø

THICKNESS CHANGE AT 50°C 1" X 3"

MD	.59"	.58"	-1.7
TD	.61"	.61"	Ø

TEAR RESISTANCE AT 23°C

MD	47	53	+13
TD	46	55	+20

TEAR RESISTANCE AT 50°C

MD	47	54	+15
TD	46	53	+15

PUNCTURE RESISTANCE AT 23°C

	60	62	+3.3

PUNCTURE RESISTANCE AT 50°C

	60	67	+12

CONCLUSION/DISCUSSION:

No Significant change in the Gundline HD resulted after immersion in the leachate for 30 days.

CERTIFIED BY:

Paul Metzger

Lab Technician
Paul Metzger

Mark Cadwallader

Mark Cadwallader
Director of Research &
Technical Development

LABORATORY REPORT #1525A

CHEMICAL IMMERSION TESTING OF GUNDLINE HD WITH MUNICIPAL LANDFILL LEACH

JULY 24, 1986

SUBJECT:

Results of chemical compatibility (EPA Method 9090) testing of Gundline HD 60 mil with municipal landfill leach after 90 days immersion.

TEST METHOD:

Die-cut ASTM test specimens were placed in the waste solution and kept at a temperature of 23° and 50°C. Samples were removed after the 90 day period and subjected to the following tests:

Test	Method
Tensile Properties	ASTM D638
Tear Initiation Resistance	ASTM D1004C
Puncture Resistance	FTMS 101B
Weight Change	-
Thickness Change	-

TEST RESULTS:

Tensile Strength & Elongation

60 mil HDPE at 23°C

MD	Yield Strength (psi)	Yield Elongation (%)	Break Strength (psi)	Break Elongation (%)
Control	2600	15	4500	850
90 Days	2642	15	5329	923
% Change	+9.3	Ø	+18	+8.6
TD				
Control	2475	15	4800	900
90 Days	2910	15	5115	853
% Change	+17.6	Ø	+6.6	-5.2

60 mil HDPE at 50°C

MD				
Control	2600	15	4500	850
90 Days	2876	15	4574	845
% Change	+11	Ø	+1.6	-.6
TD				
Control	2475	15	4949	900
90 Days	2916	15	5235	908
% Change	+18	Ø	+5.8	+1

	Control	90 Days	% Change
Weight Change at 23°C, 1" x 3"			
MD	2.7804	2.7833	+.1
TD	2.7337	2.7357	+.1
Weight Change at 50°C, 1" x 3"			
MD	2.6402	2.6436	+.1
TD	2.7435	2.7455	+.1
Thickness Change at 23°C, 1" x 3"			
MD	.61"	.60"	-1.6
TD	.61"	.60"	-1.6
Thickness Change at 50°C, 1" x 3"			
MD	.59"	.60"	+1.7
TD	.61"	.59"	-3.3
Tear Resistance at 23°C			
MD	47	51	+8.5
TD	46	54	+17.4
Tear Resistance at 50°C			
MD	47	52	+11
TD	46	55	+20
Puncture at 23°C			
	60	60	Ø
Puncture at 50°C			
	60	64	+6.7

CONCLUSION:

No significant loss in physical properties occurred after 90 days immersion at 23°C and 50°C.

Lab Technician
Sengthong Phouangsavanh

Mark Cadwallader
Director of Research &
Technical Development

LABORATORY REPORT #1525B

CHEMICAL IMMERSION TESTING OF GUNDLINE HD
WITH MUNICIPAL LANDFILL LEACH

AUGUST 27, 1986

SUBJECT:

Results of chemical compatibility (EPA Method 9090) testing of Gundline HD 60 mil with municipal landfill leach after 120 days immersion.

TEST METHOD:

Die-cut ASTM test specimens were placed in the waste solution and kept at a temperature of 23°C and 50°C. Samples were removed after the 120 day period and subjected to the following tests:

Test	Method
Tensile Properties	ASTM D638
Tear Initiation Resistance	ASTM D1004C
Puncture Resistance	FTMS 101B
Weight Change	-
Thickness Change	-

TEST RESULTS:

Tensile Strength & Elongation

23°C MD	Yield Strength (psi)	Yield Elongation (%)	Break Strength (psi)	Break Elongation (%)
Control	2600	15	4500	850
120 Days	2710	15	5369	930
% Change	+4.2	Ø	+19.3	+9.4
23°C TD				
Control	2475	15	4800	900
120 Days	2660	14	5069	913
% Change	+7.5	-6.7	+6	+1.4
50°C MD				
Control	2600	15	4500	850
120 Days	2733	15	4876	850
% Change	+5.1	Ø	+8.4	Ø
50°C TD				
Control	2475	15	4949	900
120 Days	2857	15	4609	820
% Change	+15.4	Ø	-6.9	-8.9

Weight Change, 1" x 3"

		Control	120 Days	% Change
23°C	MD	2.7804	2.7833	+.1
	TD	2.7337	2.7362	+.1
50°C	MD	2.6402	2.6445	+.2
	TD	2.7435	2.7455	+.07

Thickness Change, 1" x 3"

23°C	MD	.61"	.62"	+1.6
	TD	.61"	.62"	+1.6
50°C	MD	.59"	.60"	+1.7
	TD	.61"	.60"	-1.6

Tear Resistance (lbs.)

23°C	MD	47	53	+13
	TD	46	51	+11
50°C	MD	47	50	+6.4
	TD	46	54	+17

Puncture

23°C	60	59	-1.7
50°C	60	61	+1.7

CONCLUSION:

No significant decrease in physical properties occurred after 120 days immersion at 23°C and 50°C.

CERTIFIED BY:

Lab Technician
Sengthong Phouangsavanh

Mark Cadwallader
Director of Research &
Technical Development